1124 AND 1124A WESTWIND SERVICE BULLETIN INDEX

SB Number	Rev	Туре	Date	SN Effective	Title
WW-24-1A		REC	09/15/1976	187, 188, 189	Improved Cooling of E.C.U. from Ram Air Inlet to E.C. Bearing (External Area) and Modifying Ram Air Exhaust Port to Different Shape
WW-24-2		REC	09/08/1976	187, 188, 189, 192	Bolts Replacement on Thrust Reverser Controls Installation
WW-24-3	1	REC	05/23/1978	154, 181, 187-201, 204,206, 208	Installation of Frame Block for External Ground to Starter-Generator
WW-24-4B	1	REC	05/23/1978	154, 181, 187-209, 215	Inspection of Generator Control Units
WW-24-5	1	REC	05/23/1978	154, 181, 187-205, 207	Engine Driven Hydraulic Pump Bypass Port Plug Replacement
WW-24-6		REC	04/11/1977	154, 181, 187-200	Chafing of Tubes in L.H. Engine Pylon and Relocation of Nitrogen Gauges and Charging Valves
WW-24-7A		REC	10/18/1977	154, 181, 187-200	Aft Engine Mount Fitting Assembly Inspection
WW-24-8A		REC	07/15/1977	154, 181, 187-194, 196	Replacement of Nuts and Washers on Forward Engine Mount Attachment Bolts
WW-24-9	1	REC	05/23/1978	154, 181, 187-212, 215	Modification of Main Landing Gear
WW-24-10	1	REC	05/23/1978	154, 181, 187-210, 215	Chafing of Tubes near R.H. Engine Pylon
WW-24-11		REC	12/30/1977	187-193	Replacement of Aileron Control Chain Assy P/N 3533516-1 and Sprocket P/N 2533049-501 in Flight Control Columns
WW-24-12		REC	10/18/1977	154, 181, 187-205, 207,209, 215	Inspection of Generator Circuit Resistors R-11 and R-12
WW-24-13		REC	08/07/1978	187-199, 201	Replacement of Throttle Retarder Feedback Control
WW-24-14	3		09/08/1989		Inspection of Horizontal Stabilizer Hinge Fitting (CANCELED)

SB Number	Rev	Туре	Date	SN Effective	Title
WW-24-15	1	REC	12/05/1978	154, 187-229, 232	Power Brake Valve - Replacement of Poppet Retainer Pin P/N 117W50D12
WW-24-16		REC	05/15/1979	152, 154, 181 & any 1123 converted to an 1124 not in compliance with SB WW-19	Aft Pressure Bulkhead Modification
WW-24-17A	1	REC	03/31/1980	152, 154, 181, 187-260, 262-264, 266-269	Installation of Additional Rivets in 25 Percent Wing Spar
WW-24-18	1	REC	03/26/1980	240-260, 262-264, 266	Installation of Bolts in Floor, Near Fus. STA 269
WW-24-19		REC	05/15/1980	240-275	Inspection of Aileron Control Pulley P/N 3533032-1
WW-24-20	1	REC	11/21/1980	239-298 except 241, 252, 257, 261, 264, 265, 290, 294, 295, 297	Part I - Inspection of Electrical Wires for Chafing Against Upper Hot Liquid Container in Galley; Part II - Rerouting of Electrical Wiring Behind Hot Liquid Container Compartments of Galley P/N CMA 521288
WW-24-21		REC	04/30/1981	152, 154, 174, 181, 187- 309, 311-316, 318, 320- 324	One Time Inspection of Forward Engine Mount Attaching Bolts for Sufficient Torque
WW-24-22		REC	09/18/1981	152, 156, 174, 181, 185- 335	Inspection of Pilot and Copilot Seat Attachment
WW-24-23		REC	03/11/1981	152, 154, 174, 181, 185, 187- 315 except 294, 296, 297, 309, 310, 314	Replacement of Audio Load Resistor, R-61
WW-24-24	2	REC	07/30/1982	219, 221, 224, 228, 230, 231, 234, 236, 238, 242, 246, 248-251, 256-261, 263, 265-267, 270-363	Rework of Ballast/Jack Adapter Mounting

SB Number	Rev	Туре	Date	SN Effective	Title
WW-24-25		REC	02/12/1982	174, 290, 295, 299-309, 315, 317-319, 322, 324, 328, 330, 334, 335, 337- 346, 351, 352	Rockwell-Collins Service Bulletin No. 3 for CTL-20, CTL-60 and CTL-90 Controls, and Service Bulletin No. 4 for CTL-30
WW-24-26		REC	06/15/1982	152, 154, 174, 181, 185- 238, 240-294, 296-298, 310-314, 316, 317, 320, 321, 323, 325-327, 329, 331-333, 336, 347, 354, 357, 360, 362, 363, 366, 367, 370-372, 375, and 378	Removal of Zener Diodes and Resistors from Air Data Power Supply Circuits
WW-24-27		REC	07/06/1982	152, 154, 174, 181, 185- 373	General Electric DC Starter Generator Model 2CM504D2D Limitations and Ammeter Markings
WW-24-28A	1	REC	06/14/1985	All	Landing Gear-Inspection of Nose Landing Gear Outer Strut-Body Forging
WW-24-29		REC	11/04/1983	All prior to 389 with FGC/APS-80 glideslope systems	Prevention of Improper Flight Director Glideslope Display
1124-22-001		OPT	02/29/1984	152, 154, 174, 181, 185- 384	Navigation - Alternate Location for G/A (Go Around) and Vertical Sync Buttons
1124-28-002	1	REC	04/12/1985	1124/1124A, s/n's 181, 226, 228, 230, 231, 235- 403, 405, 407, 409; 1124, s/n's 152 174, 185-225, 227	Inspection of Fuel Sump Check Valve Lever and Installation of Manual Lever Handle Stop
1124-27-003	1		11/21/1986		Flight Controls - Flap Vane Inspection (CANCELED)
1124-57-004	1	REC	09/09/1985	All	Drain Holes in Wing Trailing Edge Structure
1124-52-005		OPT	01/04/1985	152, 154, 174, 181, 185- 278	Doors - Improved Main Baggage Compartment Door Warning Switch Installation

SB Number	Rev	Туре	Date	SN Effective	Title
1124-25-006		REC	01/04/1985	All thru 414	Cockpit Panels - Installation/Rework
1124-52-007		OPT	01/04/1985	152, 174, 181, 185-387, 389-394	Main Cabin Door Lower Flapper Retract Spring
1124-24-008	2	REC	07/29/1985	152, 174, 181, 185-425 except 413, 416, 418, 421-424	Installation of Larger Capacity Priority Bus Diodes and Elimination of Ground Pressure Bumps
1124-32-009		OPT	01/15/1985	295 & subs	Gear Warning Horn Automatic Disable
1124-33-010	2	REC	08/12/1985	All thru 414	Emergency and Entrance Light Module Corrections
1124-39-011	1	OPT	06/14/1985	All prior to 259	Overhead Panel Access and Alignment Improvement and/or Retrofit
1124-27-012	1		02/14/1986		Flap Actuator - Improvement and Repair (CANCELED)
1124-23-013		OPT	02/11/1985	152, 154, 174, 185-391	VHF COM and Audio System Conformity
1124-29-014	1	OPT	02/18/1986	All prior to 439	Emergency Hydraulic Pump Protective Cover Installation
1124-34-015	1	OPT	08/23/1985	All	VOR/LOC Antenna Bonding and Phasing
1124-23-016	2	OPT	05/23/1986	All thru 426	Installation of Additional and Improved Static Wicks
1124-27-017		REC	10/31/1985	152, 154, 174, 181, 185- 403, 405, 407, 409	Flight Controls - Modification of Rudder Servo Trim Tab
1124-22-018		OPT	04/15/1985	295-425	Autoflight - Nuisance Autopilot Disengagement
1124-52-019A		OPT	08/12/1985	All prior to 385 except 376	Improved Cabin Entrance Door-Stay
1124-55-020	2	REC	08/08/1988	All	Horizontal Stabilizer Aft Spar Splice Fitting P/N 453005-501 (Hinge Assembly) Inspection

SB Number	Rev	Туре	Date	SN Effective	Title
1124-55-021	3	REC	10/21/1988	152, 174, 181, 185-408, 410-412, 414, 415, 417, 419, 420, 422, 425	Horizontal Stabilizer Assembly - Inspection, Repair and Improvement (AFC 2037)
1124-26-022	2	OPT	11/28/1990	152, 154, 174, 181, 185- 237, 239-253, 255-280, 282-313, 315, 318-324, 326-365, 367- 370, 382- 385, 387-408, 410 and subs	Fire Protection - Addition of Sonalert Horn to Fire Warning System
1124-34-023		REC	12/09/1985	All prior to 423	Navigation - Elimination of Improper Mach Warnings
1124-22-024	1	OPT	06/14/1985	152, 174, 181, 187-406 with Collins 590A3K-1 or 590A3J-1 ADC	Elimination of FCS 105 Altitude Mode Transition Errors
1124-22-025A	1	REC	11/17/1986	295-425, 427-437	Autoflight - Elimination of 1124A Overspeed Warning Failures
1124-53-026		OPT	04/18/1985	All prior to 426 except 413,416, 418, 421, 423, 424	Closure of Tail Cone Vent Holes
1124-34-027		OPT	04/18/1985	295-426 with Global 3B VLF Nav	Enable GNS-500A Series 3B Bank Command Option for Flight Director System
1124-21-028		OPT	08/23/1985	All prior to 427 except aircraft with AC inverters installed at sta 328-340	Reduction of Cooling Air Volume to Both DC Contactor Boxes and Closure of Air Outlet Near Battery Installation
1124-21-029		REC	04/24/1985	All prior to 427 with long range fuel tank provisions	Baggage Compartment Heat System
1124-32-030	1	OPT	09/18/1985	All prior to 428 except 413, 416, 418, 421, 423, 426	Rerouting of Nose Landing Gear Wiring Harness

SB Number	Rev	Туре	Date	SN Effective	Title
1124-22-031		OPT	06/28/1985	152, 154, 174, 181, 185- 378	Vertical Gyro Fast Erect Switch
1124-22-032		OPT	06/28/1985	295 & subs	Collins VNI-80 (), Vertical Navigation Indicator Altitude Preslave Switch
1124-23-033	1	OPT	07/05/1985	240-347	400 Cycle Hum in VHF COM Modulation
1124-33-034	1	OPT	06/14/1985	All prior to 426 except 413, 416, 418, 421, 423, 424	Logo Light Modification
1124-28-035	1	OPT	06/14/1985	All prior to 426 except 413, 416, 418, 423, 424	Elimination of Erratic Fuel Quantity Indications
1124-30-036	1	REC	12/20/1985	All	Ice and Rain - PART I-Windshield Heat Control Wiring Modification; PART II-Windshield Heat Cycling Contractor I spection and/or Replacement
1124-52-037	1	OPT	06/14/1985	All prior to 426 execpt 416, 418, 421, 423	FWD Baggage Door - Positive Hold-Open Provision
1124-23-038	1	OPT	06/09/1986	243-345, 347, 349-352, 354, 355, 357-379, 381- 391, 393, 396-401	Stereo Configuration Errors
1124-34-039		OPT	07/14/1986	All prior to 413 with FPA-80	Navigation FPA-80 Option Improvements
1124-52-040		OPT	04/22/1992	All	Doors - Door Handle Warning Switch Installation and Improved Door Wire Retract Tube Installation (AFC 2068)
1124-23-041		OPT	06/14/1985	290, 295-348, 350-375	Bypass of CTL(XX) Control Head Volume Controls
1124-56-042A		OPT	09/10/1986	All	Windows - Repair of the Inner Windshield Panel
1124-24-043	2	OPT	01/08/1992	All prior to 431 except 413, 416, 418, 421, 423, 426,428, 429	Starter/Generator - Field Circuit Wiring Modification

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1124-34-044	1	OPT	10/07/1985	All thru 411 except 187, 188, 189, 191, 192, 197, 215, 290	331A-9G HSI Distance Display Improvements
1124-32-045	1	REC	12/02/1985	All prior to 431 except 154,413, 416, 418, 421, 423, 426, 428, 429	Inspection of MLG Actuating Cylinder Inboard Rod-End Bearings and Attach Bolts
1124-23-046		OPT	09/09/1985	240-390 with flight phone R/T located in nose compartment at sta 15.00	Replacement and Relocation of Flight Telephone Antenna
1124-34-047	1	REC	12/11/1991	All	Navigation - Static Source Improvement for Copilot's Altimeter
1124-34-048	1	OPT	12/09/1985	All prior to 420	Collins VNI-80 Vertical Navigation Indicator Operation Improvement
1124-34-049		OPT	12/02/1985	All prior to 413 except 154	Navigation - Radar Waveguide Pressurization and Installation of Silica Gel Container Assembly
1124-23-050		OPT	01/03/1986	SN specified in Service Bulletin	Communications - VHF COM 3 System Improvements
1124-23-051		OPT	12/02/1985	All	Communications - Stereo System Improvements
1124-34-052		OPT	01/31/1986	All except 437 & 439	Navigation - Glideslope Raw Data Scalloping
1124-34-053		OPT	12/02/1985	All	Navigation - Compass and ADF/RMI System Improvements
1124-24-054	1	OPT	01/10/1986	All prior to 428 except 413, 416, 418, 421, 423, 426	Electrical Power - Fuel Quantity and ITT Gauges to Priority Bus
1124-34-055		REC	01/22/1986	1124, all s/n's prior to 426 with LRN-85 installed as #1 system; 1124A, s/n's 295-442	Navigation - FMS-90/LRN-85 Improvements

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1124-22-056		OPT	12/02/1985	All prior to 364	Autoflight - Correction of Flight Director Annunciator Self-Test Circuit
1124-34-057	1	ΟΡΤ	01/31/1986	251, 259 & subs with Collins 639U-1 NCS power supply; 187-250 & 252-258 with existing LT-52A power supplies	Navigation - NCS-31 Display and Logic Power Supply Improvements
1124-33-058	2	OPT	06/12/1986	All	Lights - Corrections and Improvements to Dimming System for Avionics Digital Displays
1124-21-059		OPT	05/01/1996	All except 422, 424, 425	Air Conditioning - Cabin Automatic Temperature Control System Shielded Wire Installation and Cabin Temperature Sensor Relocation
1124-33-060		OPT	12/09/1985	All	Lights - Instrument Light Intensity and Dimmer Balance
1124-27-061		OPT	05/09/1986	All	Flight Controls - Wing Flap Actuators, Improvement/Repair
1124-27-062		REC	12/23/1985	All prior to 400	Flight Controls - Speed Brake - Inadvertent Deployment
1124-25-063A		OPT	04/10/1987	All s/n's equipped with EL-M-100/28C & EL-M- 100/28EX hot liquid containers	Equipment/Furnishings - Hot Liquid Container
1124-34-064	1	OPT	02/16/1987	1124, all s/n's; 1124A, s/n's 295-390	Navigation - Repeat VOR/LOC Switching Improvements
1124-24-065		REC	01/10/1986	All prior to 437 except 418, 423, 426, 429, 431, 432, 435	DC Electrical System - Remote Circuit Breaker Random Tripping
1124-30-066A	1	REC	10/17/1986	All thru 426	Ice and Rain Protection AOA and SAT TAS Probes Heat Wiring Improvement

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1124-34-067		OPT	01/08/1986	1124, all s/n's with nose deck mounted vert. gyro(s);1124A, s/n's 295-426 without split gyro installation	Navigation - Retrofit of Collins Vertical Gyro(s) and Improved Vertical Gyro Mounting
1124-53-068		OPT	02/05/1986	All	Doors - Nose Gear Trunnion Access Door Installation
1124-33-069		OPT	01/31/1986	152, 154, 181, 187-400	Lights - Change in Power Source for Cabin Lighting System
1124-34-070		OPT	01/15/1986	All s/n's using "EField" antennas for VLF nav systems	Navigation - VLF/Omega Receiver Performance Improvement
1124-34-071	1	REC	06/30/1987	SN specified in Service Bulletin	Navigation - Copilot's Altimeter Part Number Changes
1124-22-072A		REC	09/12/1986	All prior to 437 except 418, 423, 426, 429, 431, 432, 435	Autoflight - Elevator and Rudder Servo Idler Arm - Install New Attach Bolts
1124-23-073		OPT	01/15/1986	All s/n's with optional DMQ-18-1A ELT antenna	Communications - DMQ-18-1A ELT Antenna Hum Correction During High Speed Flight
1124-23-074	1	OPT	05/23/1986	All s/n's with a Wulfsburg Flightfone III, IV, V or VI	Communications - Radio Telephone Improvements and Corrections
1124-24-075	1	REC	05/23/1986	All s/n's with a voice recorder and/or Flight Data Recorder installed	Electrical Power - Cockpit Voice and Flight Data Recorder Bus Change
1124-21-076A		OPT	06/30/1987	All s/n's prior to 438 except 418, 423, 426, 429, 431, 432, 435	Air Conditioning - Improved Cap Assembly for Unused Port on Air Gasper P/N 2708 "WEMAC"
1124-35-077		OPT	02/07/1986	All	Oxygen - Cabin Altitude Pressure Switch - Remote Test Connection Installation

SB Number	Rev	Туре	Date	SN Effective	Title
1124-28-078		OPT	06/29/1987	152, 154, 174, 181, 185 & subs	Fuel - Fuel Status System Improvements
1124-22-079		OPT	01/08/1986	295-390 with a singal or dual flight director system; 392 & subs with a singal or dual flight director system	Autoflight - Establish Linear Deviation Steering Command to Autopilot
1124-23-080		OPT	01/12/1987	349, 375-377 & 379-442	Communication - Elimination of Cross-Side Transmitter Sidetone
1124-23-081A		OPT	03/17/1986	154, 181, 187 & subs	Communications - Alternate VHF COM 1 Antenna
1124-23-082		OPT	01/31/1986	All	Communications - Replacement of Audio Selector Panel Volume Controls
1124-28-083			02/14/1990		Fuel - Modification of Fuel Transfer Pump (CANCELED)
1124-xx-084					Not Issued
1124-25-085		OPT	02/24/1986	All	Equipment/Furnishings - Crew Seat Slide Release Arm Assembly Improvement
1124-27-086		REC	04/10/1987	All thru 412, 414, 415, 417, 419, 420, 422, 424, 425, 427, 430	Flight Controls - Inspection and/or Replacement of LH and RH Elevator Reducer Tube Collars
1124-28-087		REC	04/04/1986	1124, s/n's 152, 174, 181, 185, 186, 226, 228, 230, 231, 235-294 & all s/n's post SL WW- 2434; 1124A,	Fuel - Removal of EMI Filters from Intertechnique Boost Pump Circuit
1124-11-088A		REC	03/20/1987	All prior to 438 except 239	Placards & Markings - Overwing and Single Point Fueling Filler Ports Placard Replacement
1124-21-089		OPT	04/06/1987	All	Air Conditioning - Incorporation of Refrigeration Unit Overtemperature Protection System (OPS)

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1124-30-090	1	OPT	09/08/1989	All prior to 282 post SL WW-2444, 283 & subs	Ice and Rain - NAC/ENG Anti-Ice - Switch Reliability (AFC 2071)
1124-71-091	2	MAN	06/02/1989	All prior to 441, except 432, 435, 438	Power Plant - Forward Engine Mount Fasteners - Inspection/Replacement (AFC 2065)
1124-57-092	1	REC	06/30/1987	All	Wings - Flap Hinge Fasteners - Inspection/Replacement
1124-79-093		REC	03/14/1988	All	Oil - Engine - Oil Pressure Indication Installation (AFC 2066)
1124-32-094		REC	12/16/1987	All except 432, 435, 438, 441, 442	Landing Gear - Selector Valve Arm - Secure Roll Pin (AFC 2063)
1124-27-095		REC	04/04/1988	All	Flight Controls - F44-14 Rod-Ends - Inspection/Replacement
1124-32-096		REC	04/04/1988	All	Landing Gear - F44-14 Rod-Ends - Inspection/Replacement
1124-55-097		REC	02/03/1989	All except 441	Horizontal Stabilizer Scissors Assembly P/N 453516-501 or -503 Inspection
1124-28-098		OPT	02/15/1989	All prior to 391	Fuel - Preventing Fuel Spillage through Vent System During Refueling or Transfer Operations (AFC 2074)
1124-34-099		REC	09/01/1989	All	Navigation - Pitot Head - Exchange of Certain Aero Instruments Company P/N PH1100 Pitot Heads
1124-27-100	2	MAN	04/24/1991	All	Flight Controls - Replacement of Left and Right Aileron Control Rod Assemblies P/N 513506- 503
1124-53-101	1	REC	02/04/2000	All	Fuselage - Enlarge Existing Wing Attachment Access Holes in the Aft Pressure Bulkhead at Fuselage Station 269.879 for Structural Inspection (AFC 2075)
1124-53-102		OPT	10/09/1991	All	Fuselage - Drain Valves Installation in the Fuselage Lower Skin (AFC 2076)
1124-11-103		REC	11/26/1990	All	Placards and Markings - Towing Instruction Placard Replacement (AFC 2074)

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1124-27-104	2	REC	06/17/1992	All	Flight Controls - Relocate Bonding Jumpers Between Horizontal and Vertical Stabilizers and Control Surfaces (AFC 1056)
1124-32-105	1	REC	05/08/1991	All except 152, 185, 186	Landing Gear - Nose Landing Gear Door Modification (AFC 1055)
1124-28-106		REC	05/08/1991	All	Fuel - Tip Tank - Sealing of Float Switch Wire Conduit
1124-55-107		REC	09/28/1994	All s/n's post SB 1124- 55-021	Stabilizers - Horizontal Stabilizer Lower Scissor Fitting Replacement (AFC 2073)
1124-21-108		REC	05/15/1991	All	Air Conditioning - Water Separator Duct Clamping Improvement (AFC 2077)
1124-34-109		OPT	12/11/1991	394-422, 425	Navigation - Static Port Tubing Slope Inspection and Correction
1124-32-110		OPT	03/11/1992	All	Landing Gear - Emergency Gear Down Handle
1124-78-111		OPT	05/27/1992	All	Exhaust - Thrust Reverser Fault Test Switch Reliability Improvement (AFC 2084)
1124-54-112		OPT	10/07/1992	All	Nacelles - Cowl Door Corrosion - Inspection, Prevention and Repair
1124-56-113		OPT	06/22/1994	All	Windows - Improved Cockpit Side Window Installation
1124-53-114		REC	10/28/1992	All	Fuselage - Floor Panel Insulation Removal
1124-21-115	1	OPT	08/03/1994	259 & subs	Air Conditioning - Improve Operation of Cabin Auto Temp System
1124-32-116		REC	11/23/1994	All	Landing Gear - Nose Wheel Steering System - Steering Control Cable Drum
1124-25-117		OPT	01/27/1993	All	Equipment/Furnishing - Passenger Life Vest Accessibility
1124-53-118		OPT	01/26/1994	All	Fuselage - Frame Reinforcement Repair Installation
1124-26-119		REC	06/23/1993	All	Fire Protection - Inspection of Aft Fire Extinguisher Line in Left and Right Engine Pylons
1124-24-120		OPT	06/22/1994	All	Electrical Power - Improved Ground Returns

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1124-33-121		REC	05/25/1994	All	Lights - Cabin Fluorescent Lighting Support System Improvement
1124-33-122		REC	06/15/1994	All	Lights - Tip Tank Strobe Light Wiring Conduit
1124-53-123		REC	09/21/1994	All	Fuselage - Drainage Under Cabin Deck
1124-55-124		OPT	07/12/1995	All s/n's post SB 1124-55- 021	Stabilizers - Horizontal Stabilizer Upper Scissor Fitting Replacement (AFC 2097)
1124-30-125		OPT	05/14/1997	187-285	Ice and Rain Protection - Windshield Wiper System Park Circuit Modification
1124-57-126		REC	07/26/1995	All	Wings - Leading Edge Extension Drains
1124-24-127		OPT	09/25/1996	All	Electrical Power - Replacement of Remote Control Circuit Breakers, P/N 6141H168
1124-27-128		OPT	10/30/1996	All prior to 283	Flight Controls - Replacement of Flap Comparator Gear Box Assemblies with Linear Potentiometer Assemblies
1124-27-129		MAN	06/12/1995	All	Flight Controls - Aileron Push-Pull Tube and Guide Roller Inspection
1124-55-130	1	REC	03/14/2001	All	Stabilizers - Empennage Fairing Installation
1124-33-131		OPT	01/24/1996	All	Lights - Upgrading "66" Series Fluorescent Lighting Systems with AL-"12" Series Lamps
1124-29-132		MAN	09/11/1996	All	Hydraulic Power - Hydraulic Fuse Functional Test
1124-27-133	1	MAN	05/28/1997	All	Flight Controls - Inspection of Horizontal Stabilizer Trim Actuator
1124-78A-134		MAN	09/15/1999	All	Exhaust-Thrust-Reverser-Secondary Latch Solenoid Switch Check
1124-26-135	1	OPT	10/26/1999	All	Fire Protection - Fire Detection System - Press-To-Test Switch Reliability Improvement
1124-27-136		MAN	09/01/1997	All	Flight Controls - Horizontal Stabilizer Trim Actuator Jackscrew Assembly Replacement
1124-35-137		MAN	09/23/2002	All	Oxygen -Oxygen Shut-Off Valve -Replacement of Existing Valve With Slow Opening Valve

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1124-54A-138		MAN	03/29/2001	All	Nacelle/Pylons - Engine Inlet Cowl and Aft Nacelle - Verification of Approved Installed Attachment Bolts
1124-32-139		MAN	03/05/1998	All	Landing Gear - Inspection & Modification of Upper & Lower Steering Bracket Assemblies (AFC 5613)
1124-29A-140		MAN	08/15/1998	All	Hydraulic Power-Indication-Installation of Independent Circuit Breaker for Low Pressure Warning
1124-32-141		OPT	06/11/1998	152-353, 360	Landing Gear - Steering - Replacement of 45 Degree Steering Brackets with 58 Degree Steering Brackets
1124-30A-142		MAN	05/24/2000	All	Ice and Rain Protection - Windows and Windshields - Inspection of Windshield Wiper Arm
1124-21-143		REC	09/17/2001	All	Air Conditioning - Safety Outflow Solenoid Valve - Installation of Jumper Wire for Improved Electrical Grounding
1124-27-144		MAN	03/17/2004	All	Flight Controls - Aileron - X-Ray Inspection of Left and Right Aileron Control Rod Assemblies P/N 513506-503RD and 503RE
1124-27A-145		MAN	03/24/2000	297, 304, 400-410	Flight Controls - Aileron - Radiographic Inspection of Left and Right Aileron Rib to Spar Connections
1124-35A-146		MAN	11/14/2003	All	Oxygen - Pressure Reducer/Regulator Assembly - Inspection of High Pressure Inlet Boss
1124-27A-147		MAN	08/28/2000	All	Flight Controls - Horizontal Stabilizer Trim Actuator - Inspection of the Jackscrew Assemblies
1124-55-148	1	MAN	09/17/2003	All	Stabilizers - Vertical Stabilizer - Inspection and Repair Of Aerodynamic Fairings Due to Loose or Missing Rivets
1124-32-149		REC	10/29/2001	All	Landing Gear - Main Landing Gear Assembly - Introduction of Improved Trunnion Attaching Hardware
1124-55-150	1	MAN	06/23/2003	All	Stabilizers-Rudder- Inspection For Fatigue Cracks

SB Number	Rev	Туре	Date	SN Effective	Title
1124-27-151	1	REC	09/28/2004	All	Flight Controls - Inspection of Trim Actuator Rod End Bearings and Replacement of Existing Bushings with Flanged Bushing
1124-29-152		REC	03/02/2004	All	Hydraulics - Inspection of Hydraulic Tube Assemblies Below Hydraulic Reservoir at the Drain Box Cutouts
1124-27-153	2	MAN	06/01/2015	All	Flight Controls - Inspection and Replacement of Inboard Flap Actuators P/N 193544-1
1124-24A-154		MAN	03/22/2004	All	Electrical Power Overhead Electrical Panels - One Time Inspection Of Wire Bundle Routed Above The "No Smoking - Fasten Seat Belt" Sign For Chaffing
1124-28-155	2	MAN	12/22/2008	All	Fuel - Distribution - RCCB Replacement in DC Contactor Box
1124-27-156	1	MAN	5/1/2009	All	Flight Controls - Aileron – Replacement of Left and Right Aileron Control Rod Assemblies P/N 513020-501 AND -501RE
1124-53-157		MAN	12/31/2011	All	Fuselage - Engine Mounting End Plate and Vertical Stabilizer Front and Rear Fitting Assembly - One Time Inspection for Corrosion
1124-27-158		REC	11/26/2013	Limited to aircraft with specific actuator S/Ns; see SB for detail	Stabilizers - Horizontal Stabilizer Trim Actuator P/N 543502-1/-501 - Replacement of Motors with Incorrect P/N Brushes
1124-78-159		MAN	12/30/2021	All	Exhaust - Thrust Reversers - Service Check





SERVICE BULLETIN NO: WW-24-1A

DATE: SEPT. 15, 1976

EFFECTIVITY: MODEL 1124 SERIES, SERIAL NUMBERS 187, 188, AND 189.

SUBJECT: IMPROVED COOLING OF E.C.U. FROM RAM AIR INLET TO E.C. BEARING (EXTERNAL AREA) AND MODIFYING RAM AIR EXHAUST PORT TO DIFFERENT SHAPE.

- COMPLIANCE: 1. IMMEDIATELY. (PART "A")
- 2. PART "B" MODIFIED RAM AIR EXHAUST PORT TO REPLACE EXISTING PORT. (AT NEXT 150 HOUR INSPECTION)
- APPROVAL: I.A.I. ENGINEERING.

PURPOSE: TO IMPROVE ENVIRONMENTAL COOLING FOR E.C.U. BEARING.

INSTRUCTIONS:

PART "A"

- 1. Gain access to fuselage station 383 to 403.450, through rear baggage compartment.
- 2. Remove existing 5823594-121 tube assy. located in overhead at vertical station Z-72.
- 3. Re-work 5823594-121 tube assy. to P/N 5823594-171 as shown in figure 1 by adding 5823594-173 tube assy.
- Install 5783583-23 duct to 5823594-171 tube assy. with one each 4783108-529 sleeve and two each AN737TW-46 clamps as shown in figure 2, and safety wire clamps.
- 5. Install 5783583-19 bracket assy. by picking up two existing bolts that secures 5783648-1 refrigeration unit and 5783584-1 plenum ram air duct as shown in figure 2.
- 6. Fasten 5783583-23 duct to 5783583-19 bracket assy. with one each MS21919-DG16 clamp and AN3-4A bolt.

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INSTRUCTIONS: CONT'D

7. Re-install rear baggage compartment access door.

PART "B"

- 1. Gain access to 5783018 ram air exhaust port at fuselage station 427.5 through the aft rear baggage compartment (between fuselage station 432.40 and 486.00).
- 2. Remove forward baggage door assembly CMA22206-007 at fuselage station 432.40.
- 3. Remove 5783018 ram air exhaust port, CU12-560-2-SH clamp (1 ea.), NAS221-8 screws (2 ea.), MS20365D1032 nuts (2 ea.), AN960-10L washers (2 ea.), U84-560-SH clamp (1 ea.) and 4783108-515 duct sleeve.
- 4. Retain clamps, screws, washers, nuts and duct sleeve for reinstallation.
- 5. Prior to installing ram air exhaust port, fillers and doubler, thoroughly clean and prepare surfaces for sealing (seal per I.A.I. Process Spec. 31.31).
- 6. Install seal and rivet 5783016-3 ram air exhaust port, -9-11-13-15 and -17 doubler per figure 3.
- 7. Re-install original duct sleeve, clamps, screws, washers and nuts.
- 8. Ground check out system for operation and leakage.
- 9. Re-install forward baggage door assy. CMA22206-007 at station 432.40.

SUPPLY DATA:

PART "A"

QTY	PART NUMBER	DESCRIPTION
l ea.	5823594-173	Tube Assy.
l ea.	4783108-529	Sleeve
2 ea.	AN737TW-46	Clamps
l ea.	5783583-23	Duct (Tube Assy.)
l ea.	5783583-19	Bracket Assy.
l ea.	MS21919DG16	Clamp
l ea.	AN3-4A	Bolt
6 ea.	NAS17388	Rivets

	PART "B"	
QTY	PART NUMBER	DESCRIPTION
* 1 ea. * 1 ea. * 2 ea. * 1 ea. * 1 ea. * 1 ea.	5783016-3 5783016-9 5783016-11 5783016-13 5783016-15 5783016-17	Ram Air Exhaust Port Filler Filler Filler Filler Doubler

NOTE: ABOVE PARTS * MAY BE OBTAINED AT NO CHARGE AS KIT NUMBER WW-24-18 FROM:

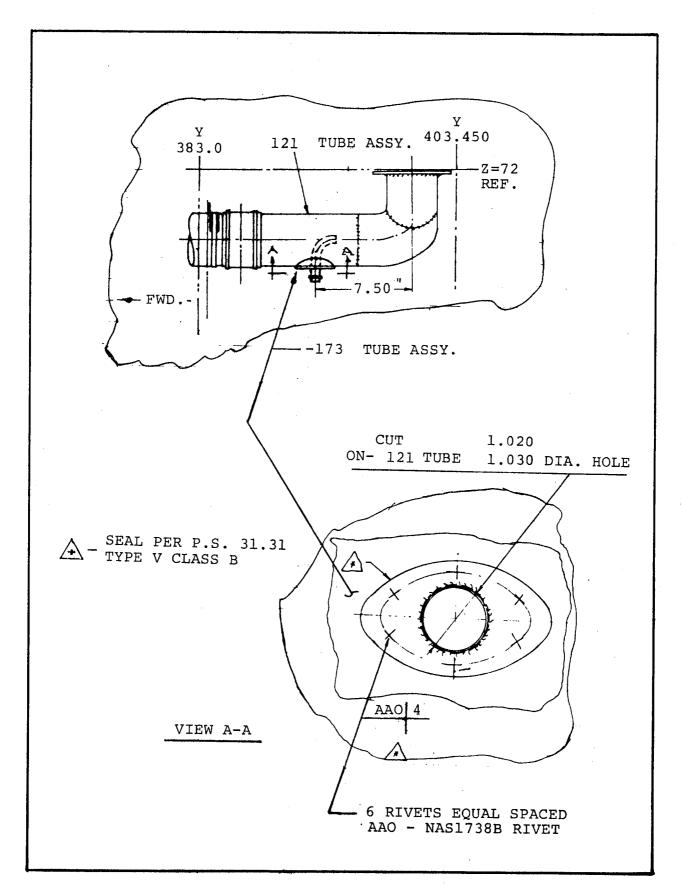
ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

WEIGHT AND BALANCE: NIL.

AIRCRAFT RECORDS:

Make appropriate entry in aircraft permanent maintenance records

- as follows: Service Bulletin No: WW-24-1A, dated entitled,
- A) "Improved Cooling of E.C.U. from Ram Air Inlet to E.C. Bearing" (External Area).
- B) "Installed Modified Ram Exhaust Port", accomplished (DATE)



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FIGURE 1

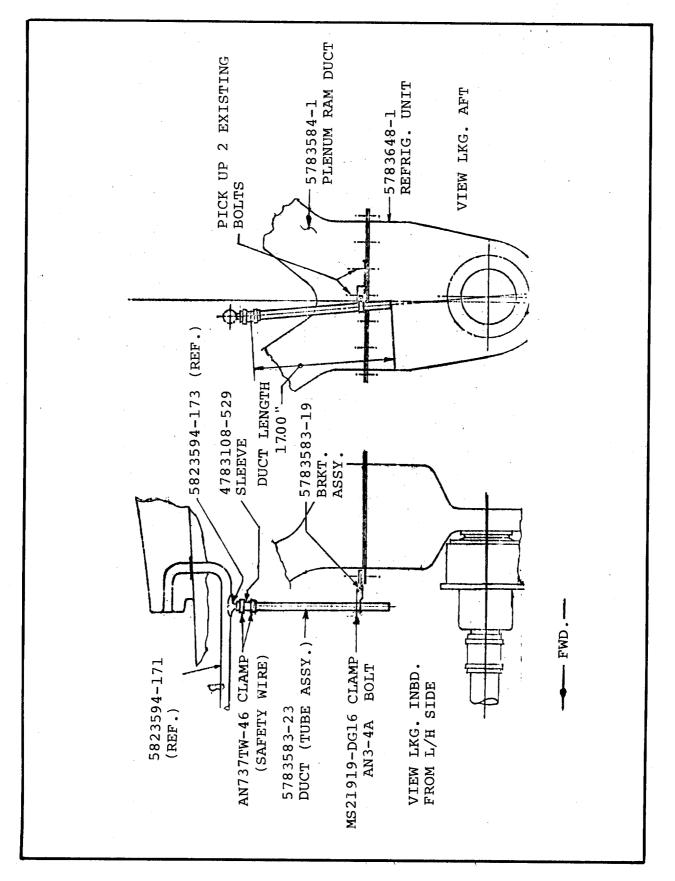
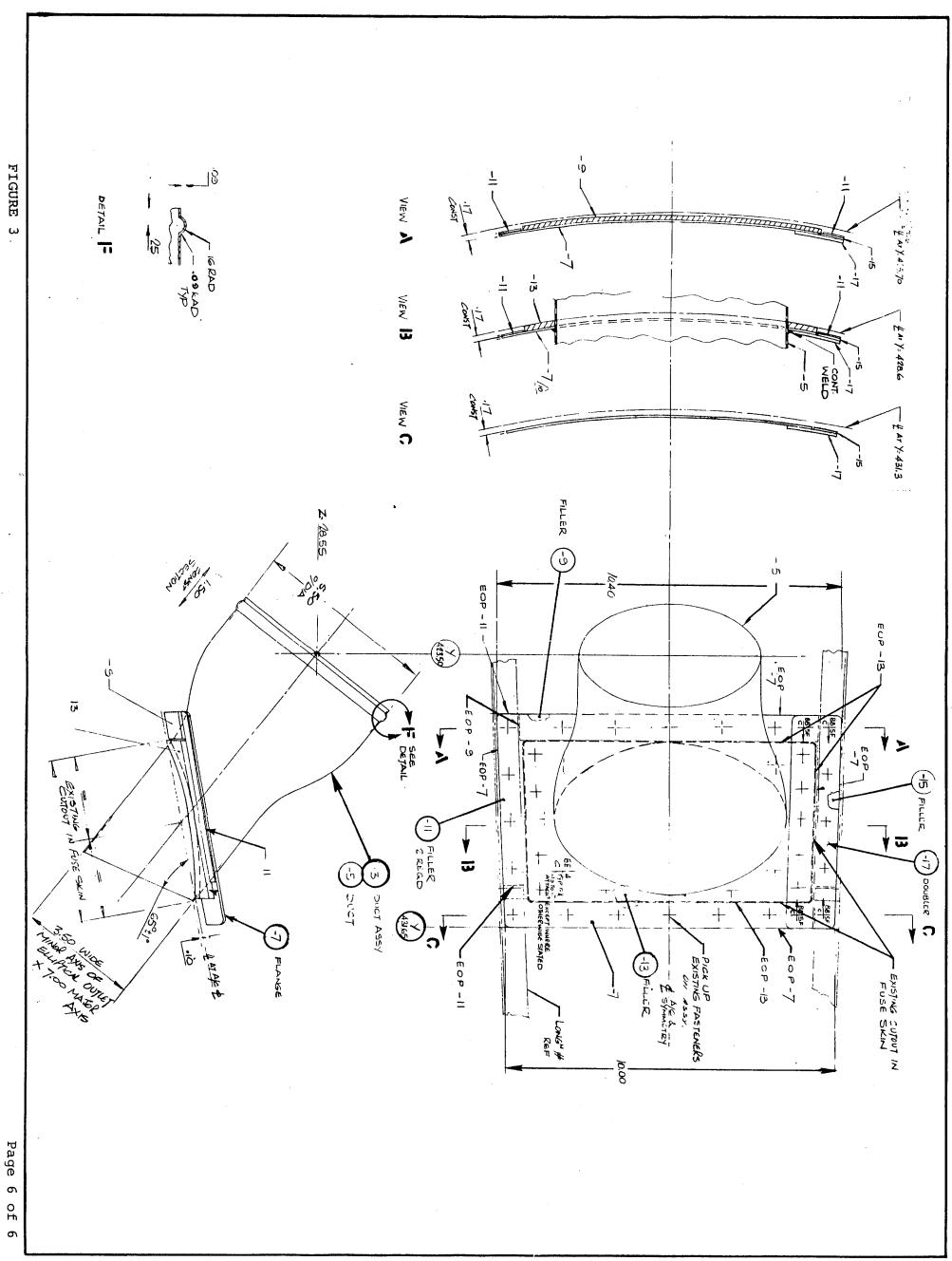


FIGURE 2



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SERVICE BULLETIN NO: WW-24-2

DATE: SEPTEMBER 8, 1976

EFFECTIVITY: 1124 MODEL AIRCRAFT, S/N 187, 188, 189 AND 192.

SUBJECT: BOLTS REPLACEMENT ON THRUST REVERSER CONTROLS INSTALLATION.

COMPLIANCE: NEXT 150 HOURS INSPECTION.

APPROVAL: I.A.I. ENGINEERING.

PURPOSE: TO UP-DATE THE SUBJECT SYSTEM DUE TO INCREASED INADVERTENT DEPLOYMENT LOADS.

INSTRUCTIONS:

- Airplane on its wheels, thrust reverser doors open, stang covers removed, battery switches off, ground electrical and hydraulic power not connected.
- 2. On idler assembly, for left and right nacelles, replace GB511DAS-15 bolt with GB511BG5-15A bolt in two places. (SEE FIGURE 1)
- 3. On actuator rod end, for left and right nacelles, replace NAS1107-15D bolt, AN960-716L washer (under bolt head) and AN960-716L washer (under nut) with GB511BG7-15A bolt, MS200002C7 countersunk washer (under bolt head) and AN960-716L washer (under nut) (2 pcs.). MS17826-7 nut and MS24665-302 cotter pin. (SEE FIGURE 1)
- 4. On door assembly push rod attachment, for left and right nacelles, replace GB511DA5-15A bolt with GB511BG5-15A bolt. (SEE FIGURE 1)
- 5. On actuator head end, for left and right nacelles, replace NAS1107-15D bolt and AN960-716L (2 pcs.) washer, with GB511BG7-15A bolt, MS20002C7 washer (under bolt head) and MS960-716L washer (under nut), MS17826-7 nut and MS24665-302 cotter pin. (SEE FIGURE 1)
- 6. Perform installation, rigging, functional checkout and inspection per applicable portions of maintenance and overhaul manual chapter 73-30-00.

INTERNATIONAL INC.

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INSTRUCTIONS: CONT'D

7. Return the aircraft to its previous status.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
8	GB511BG5-15A	Bolt
4	GB511BG7-15A	Bolt
4	MS20002C7	Washer

NOTE: THE ABOVE PARTS MAY BE OBTAINED AT NO CHARGE AS KIT WW-24-2 FROM:

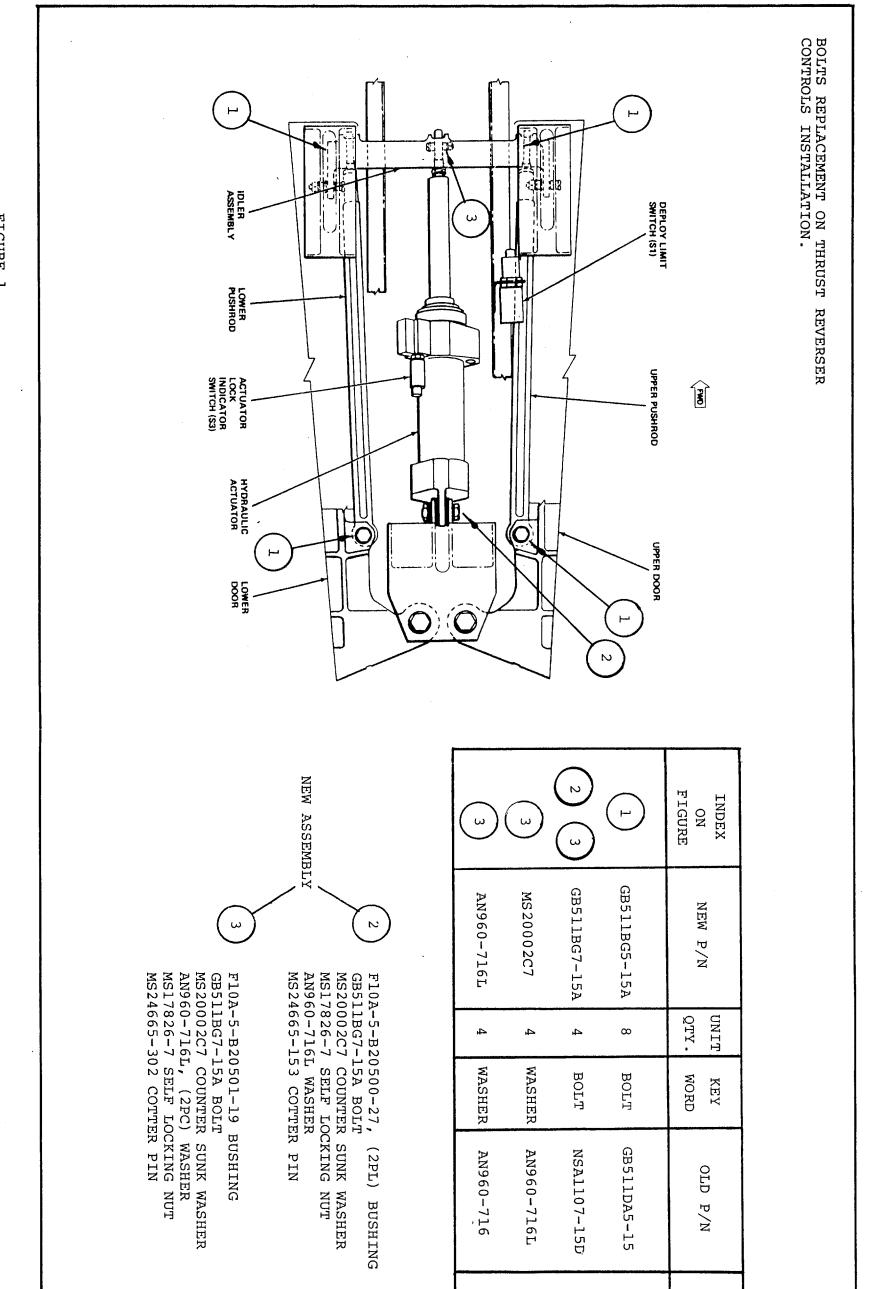
ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE. 19899

Aircraft serial number and shipping instructions must be included when requesting parts.

WEIGHT AND BALANCE: NOT APPLICABLE.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No: WW-24-2 dated , entitled "Bolts Replacement On Thrust Reverser Controls Installation", accomplished (DATE) .



FIGURE

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U	OLD P/N	DISP. INSTR.
	GB511DA5-15	SCRAP
-	NSA1107-15D	SCRAP
ĒR	AN960-716L	USE
R	AN960-716	SCRAP

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-3 Revision No. 1 DATE: MAY 23, 1978

SUBJECT:

INSTALLATION OF FRAME BLOCK FOR EXTERNAL GROUND TO STARTER-GENERATOR

REVISED EFFECTIVITY:

MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 201, 204, 206, AND 208

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S

TERNATIONAL INC.

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SERVICE BULLETIN NO: WW-24-3

DATE FEBRUARY 15, 1977

EFFECTIVITY: ALL 1124 MODEL AIRCRAFT.

SUBJECT:

T: INSTALLATION OF FRAME BLOCK FOR EXTERNAL GROUND TO STARTER-GENERATOR.

COMPLIANCE: AS SOON AS POSSIBLE.

APPROVAL: WESTWIND PRODUCT SUPPORT.

PURPOSE: TO PREVENT THE POSSIBILITY OF FIELD WINDING AND/OR ARMATURE DAMAGE DUE TO INCORRECTLY INSTALLING AN EXCESSIVELY LONG SCREW.

INSTRUCTIONS:

- 1. Open engine cowl.
- 2. Remove ground strap lead from frame of starter-generator by removing ground strap screw.
- 3. Remove paint from immediate area of ground strap screw hole with sandpaper. Clean area with xylene solvent.
- 4. Prepare Eccobond Solder 57C compound as follows:
 - WARNING: COMPOUND MAY BE IRRITATING TO SKIN. WEAR PROTEC-TIVE CLOTHING WHEN HANDLING. AVOID CONTACT WITH SKIN AND EYES. IF CONTACT OCCURS, WASH WITH SOAP AND WATER. AVOID BREATHING FUMES. OBSERVE MANUFACTURERS RECOMMENDATIONS.
 - A. Thoroughly mix equal parts by volume of the two-part compound. Pot life is about 1 hour.
 - B. Compound sets up to a gel in 2-3 hours.
- 5. Apply a generous coating of Eccobond Solder 57C to underside of frame block head.

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INSTRUCTIONS CONT'D

- 6. Apply a drop of Loctite "B" sealant to frame block screw threads. Install frame block into ground strap screw hole and torque to 22-25 pound-inches. Make sure that Eccobond Solder is in good contact with the starter-generator frame and the frame block. Solder air-cures in about 8 hours at room temperature.
- 7. Attach ground strap to frame block with screw.
- 8. Close engine cowl.
- 9. Repeat frame block installation to the other starter-generator.

SUPPLY DATA:

QTY

PART NUMBER

DESCRIPTION

2	36A228318P1	Frame Block
A/R	57C	Eccobond Solder
A/R	Grade "B"	Loctite Sealant

The above material may be obtained from Commodore Aviation, Inc. P.O. Box 280, Ronkonkoma, New York 11779 (516-567-0011).

WEIGHT AND BALANCE: NOT APPLICABLE.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin WW-24-3, dated February 15, 1977, entitled "Installation of Frame Block For External Ground to Starter-Generator's S/N and S/N accomplished (DATE).

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-4B Revision No. 1 DATE: MAY 23, 1978

SUBJECT: INSPECTION OF GENERATOR CONTROL UNITS

REVISED EFFECTIVITY:

MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 209, AND 215

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S



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SERVICE BULLETIN NO. WW-24-4B

DATE: OCTOBER 7, 1977 (This Service Bulletin supercedes Service Bulletin No. WW-24-4A, dated June 17, 1977 in its entirety. This revision contains additional installation requirements.)

EFFECTIVITY: ALL MODEL 1124 Aircraft S/N 154, 181, 187 AND SUBS.

INSPECTION OF GENERATOR CONTROL UNITS SUBJECT:

COMPLIANCE: WITHIN NEXT 150 HOURS OF OPERATION

I. A. I. ENGINEERING APPROVAL:

TO REMOVE GENERAL ELECTRIC MODEL NO. 3S2060D168D1 PURPOSE: GENERATOR CONTROL UNITS FROM SERVICE HAVING CAPAC-ITORS SUSPECTED OF BEING FAULTY.

NOTE

This Service Bulletin is to advise operators that certain General Electric Model No. 3S206DC168D1 Generator Control Units were manufactured using capacitors now suspected of being faulty due to capacitor leakage. (REF. General Electric Service Bulletin No. 3S206DC168D1-24-01 dated Dec. 20, 1976)

TO ADD INFORMATION ON IDENTIFICATION OF GCU UNITS WHICH REASON FOR WERE AFFECTED AND HAVE BEEN MADE SERVICABLE, TO **REVISION:** CHANGE THE SUPPLY SOURCE, AND TO REQUIRE ADJUSTMENT OF GCU'S WHICH HAVE BEEN CHANGED.

INSTRUCTIONS:

PART A

- Gain access to Generator Control Units (GCU) located at Station 340.00. 1.
- Examine each GCU for serial number. Compare serial number to the following 2. list of GCU's having capacitors suspected of being faulty:

S/N 6631152M1 THRU 6631164M1 S/N 6632884M1 THRU 6632900M1 S/N 6633593M1 THRU 6633621M1 S/N 6633739M1 THRU 6633751M1 S/N 6633819M1 THRU 6633844M1 S/N 6634646M1 THRU 6634674M1

GCU's with serial numbers other than those listed are acceptable. 3.



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INSTRUCTIONS (CONT'D)

- 4. GCU's with serial numbers on the GCU effectivity list, followed by the inspection code numbers 24-01 marked adjacent to the identification plate, have been previously inspected by General Electric and are satisfactory for service.
- 5. GCU's with serial numbers on the GCU effectivity list, without the inspection code numbers must be replaced with P/N 3833515-1 Generator Control Units.

PART B

- 1. Replacement GCU's must be adjusted according to the voltage adjustment procedure.
- 2. A precision voltmeter should be used when performing a voltage adjustment of the Generator Control Units. Both units should be adjusted to the identical voltage.
- 3. Voltage adjustment procedure:
 - A. Connect voltmeter to test jacks in GCU (Red positive, Black negative). Assure meter remains in same physical position during adjustment procedure.
 - B. Start engine in accordance with Aircraft Flight Manual, using battery power, and bring to idle speed. IGN ON and GEN OFF lights must be extinguished at idle speed, indicating GCU has automatically terminated starting.
 - C. Turn generator switch OFF; GEN OFF light must be illuminated. Measure generator voltage at GCU for no load condition for all ranges of engine RPM. It shall be 28.0±0.5 VDC. Adjust if necessary, at voltage adjustment point on GCU.
 - D. Turn generator switch ON; GEN OFF light must be extinguished. Measure voltage at GCU. Voltage should be approximately 1.5 VDC below adjusted voltage, if Time Delay Relay has not timed out (approximately two minutes).
 - E. Charge batteries until current flow stabilizes.
 - F. Establish a minimum load of 200 amps, measure generator voltage for all ranges of engine RPM. It shall be 28.0 ± 0.5 VDC. Adjust if necessary.
 - G. Check that voltage remains stable from IDLE to MAX RPM.
 - H. With both generators ON, check ammeters and verify they read within 10% of each other. Bring each engine to MAX RPM slowly while checking the ammeters. Ammeters must read within 10% of each other for all throttle settings.

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SERVICE BULLETIN NO. WW-24-4B

INSTRUCTIONS (CONT'D)

- I. If current unbalance exceeds 10%, remove half the error with each GCU parallel adjustment rheostat.
- J. Perform normal engine shutdown. GEN OFF lights must illuminate.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION

AR 3833515-1 Generator Control Unit

NOTE: THE ABOVE GENERATOR CONTROL UNIT(S) WILL BE EXCHANGED AT NO CHARGE FROM:

> GENERAL ELECTRIC COMPANY PRODUCT SUPPORT P.O. BOX 5000 BINGHAMTON, N.Y. 13902 ATTN: R.D'AMBROSIO PHONE: (607) 729-2511 EXT. 1847

Co-ordinate exchange with supplier. Aircraft serial number and shipping instructions must be included when requesting parts.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-4B, dated October 7, 1977 entitled, "Inspection of Generator Control Units", accomplished (DATE).

> 1124-24-01 Page 3 of 3

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-5 Revision No. 1 DATE: MAY 23, 1978

SUBJECT: ENGINE DRIVEN HYDRAULIC PUMP BYPASS PORT PLUG REPLACEMENT

REVISED EFFECTIVITY:

MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 205, AND 207

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S

INTERNATIONAL INC.

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SERVICE BULLETIN NO: WW-24-5

DATE: FEBRUARY 25, 1977

EFFECTIVITY: ALL 1124 MODEL AIRCRAFT.

SUBJECT: ENGINE DRIVEN HYDRAULIC PUMP BYPASS PORT PLUG REPLACEMENT.

COMPLIANCE: AS SOON AS POSSIBLE.

APPROVAL: WESTWIND PRODUCT SUPPORT.

PURPOSE: TO INCORPORATE STEEL PLUG IN HYDRAULIC PUMP BYPASS PORT.

INSTRUCTIONS:

- 1. Release main system hydraulic pressure per 1124 Maintenance Manual, Chapter 12-10-03.
- 2. Release hydraulic reservoir air pressure.
- 3. Open engine cowl.
- 4. Remove the aluminum bypass port plug from the pressure regulating body of the engine driven hydraulic pump. (SEE FIG. 1)
- 5. Install new o'ring P/N NAS1612-4 on plug and install steel plug P/N AN814-4JL. Tighten to 40-65 inch-pounds torque and lock wire.
- 6. Repeat other side.
- Run up engines and perform check of main hydraulic power system and inspect for leaks, per Maintenance Manual, Chapter 29-10-00.
- 8. Close engine cowls.

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SUPPLY DATA:

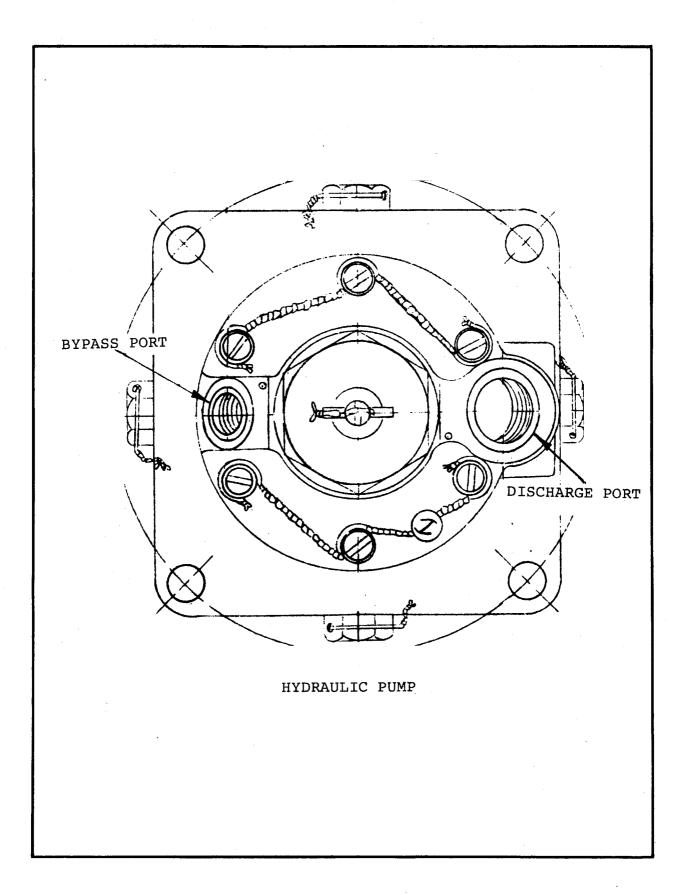
QTY	PART NUMBER	DESCRIPTION
2	AN814-4JL	Plug
2	NAS1612-4	O'Ring

The above material may be obtained from Commodore Aviation, Inc. P.O. Box 280, Ronkonkoma, New York 11779 (516-567-0011)

WEIGHT AND BALANCE: NOT APPLICABLE.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No: WW-24-5, dated February 25, 1977, entitled "Engine Driven Hydraulic Pump Bypass Port Plug Replacement," accomplished (DATE).







SERVICE BULLETIN NO. WW-24-6

DATE: APRIL 11, 1977

EFFECTIVITY: ALL MODEL 1124 AIRCRAFT S/N 154, 181, and 187 THRU 200

SUBJECT: CHAFFING OF TUBES IN L. H. ENGINE PYLON AND RELOCATION OF NITROGEN GAUGES AND CHARGING VALVES.

COMPLIANCE: AT NEXT 150 HOUR INSPECTION

APPROVAL: I. A. I. ENGINEERING

PURPOSE:

 TO PREVENT CHAFFING BETWEEN TUBES
 TO IMPROVE ACCESS TO NITROGEN PRESSURE GAUGES AND CHARGING VALVES.

INSTRUCTIONS:

PART A:

- 1. Gain access to entrance of P. T. -2 Tube, 5723589-8 hydraulic pump supply tube and 5723589-6 hydraulic pump pressure tube into airframe from the L. H. engine pylon, located at Station 385, slightly aft and above the forward baggage compartment door opening. Remove air conditioning ducting as necessary.
- Install MS21919DG4 clamp on P. T. -2 tube, MS21919DG6 clamp on -6 tube, and fasten clamps together using AN520-10R8 screw, MS21083N3 nut and AN960PD10L washer under nut; Locate these clamps as near airframe skin entrance opening as possible. (SEE FIGURE 1)
- Install MS 21919DG8 clamp on -8 tube, MS 21919DG6 clamp on -6 tube and fasten clamps together using AN520-10R8 screw, MS 21083N3 nut and AN 560PD10L washer under nut; locate these clamps adjacent to previously installed clamp on -6 tube; arrange clamps to suit spacing between tubes. (SEE FIGURE 1)
- 4. Replace air conditioning ducting removed for access.



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INSTRUCTIONS (CONT'D) PART B:

- 1. Remove access panel on underside of L. H. engine pylon to gain access to the ripple damping accumulator nitrogen pressure gauges and charging valves.
- 2. Discharge nitrogen from R. H. and L. H. sides by bleeding to atmosphere through MS28889 charging valves. (SEE FIGURE 2)
- 3. Disconnect -9 and -11 tube assemblies from R. H. and L. H. pressure gauges. Disconnect -7 and -21 tube assemblies from MS24392D4 unions installed in the 4713547-1 fitting.
- 4. Dismount the 4713547-1 fitting from the -3 mounting bracket; retain the bolts, washers and nuts for reinstallation.
- 5. Remove gauges from the -5 angle mounting bracket to prevent breakage; retain gauge mounting screws and washers for reinstallation.
- 6. Disconnect AN824-D4 tee from -251 tube; tag tube. Disconnect AN824-D4 tee from -253 tube; tag tube. Cover exposed tube ends to prevent contamination.
- Mark "Y" and "Z" location (Y=390.28, Z=60.85) of -5 angle bracket. Drill out MS20470-4 rivets securing -5 angle bracket to airframe; remove bracket. Remove -13 and -15 labels from -5 angle bracket.
- Position -5 bracket .480 inch forward of previous location. The -5 bracket must be secured by a minimum of four MS 20426AD4 rivets; drill additional #30 rivet holes as required. Plug surplus rivet holes in airframe with MS 20470AD4 rivets. (SEE FIGURE 3)
- 9. Mark "Z" elevation (Z 60.10) of -3 fitting mounting bracket. Drill out MS 202426 rivets and remove -3 bracket.
- Locate -25 bracket .150 inch aft of -5 angle bracket and upper side at Z=62.75 (2.65 inch above former -3 bottom edge). Match drill a #30 dia. four rivet pattern in airframe and -25 bracket; attach with MS 20470AD4 rivets.
- Install AN34-4D tee in R. H. and L. H. positions of 4713547-1 fitting, with S-0309-904 O-ring, S-0311-904 back up ring and AN6289-D4 nut. Mount 4713547-1 fitting to -25 bracket and secure with AN3-4 bolts, AN960PD10L washers, and MS21042-3 nuts; torque to 20-25 inch-pounds.
- 12. Connect RE-1 and RE-3 tube assemblies to -251 and -253 tube ends with AN 815 unions; connect to AN 34-4D tees. Check circuit to insure R. H. accumulator connected to R. H. charging valve.

INSTRUCTIONS (CONT'D)

- 13. Install 4-C6BX-SS elbow on each -503 gauge. Mount gauges to -5 bracket with existing fasteners. Connect L. H. gauges with -27 and -29 tube assemblies to respective L. H. and R. H. AN34-4D tees.
- 14. Clean surface of -5 bracket with solvent and apply -13 and -15 labels above R. H. and L. H. gauges. Clean surface and apply -31 label to inside pylon skin where easily seen.
- 15. Charge nitrogen accumulator systems per -31 label instructions and leak check all connections.
- 16. Replace pylon access hole cover.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
$\frac{QTY}{1}$	4713548 R E - 1	Tube Assy.
1	4713548 RE - 3	Tube Assy.
1	4713548-25	Bracket
1	4713548-27	Tube Assy.
1	4713548-29	Tube Assy.
2	4-C6BX-SS	Elbow
$\frac{-}{2}$	AN834-4D	Tee
2	AN6289-4D	Nut
2	S-0309-904	O-Ring
2	S-0311-904	Back Up Ring
-		

The above items may be obtained at no charge as Kit No. WW-24-6 from: ATLANTIC AVIATION CORP.

P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DELAWARE 19899

Aircraft serial number and shipping instructions must be included when ordering parts.

The following items may be procured from local sources:

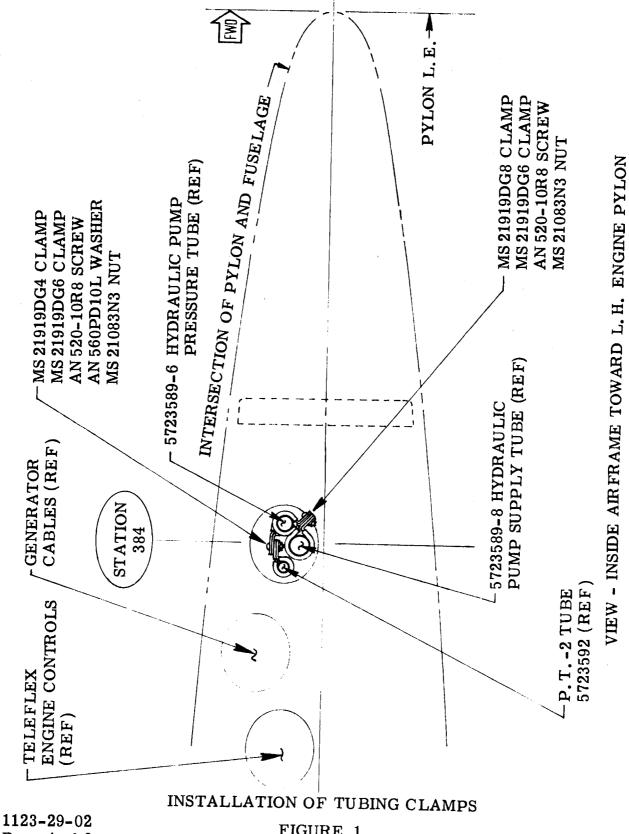
QTY	PART NUMBER	DESCRIPTION
AR	MS20426AD4	Rivet
AR	MS20470AD4	Rivet

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

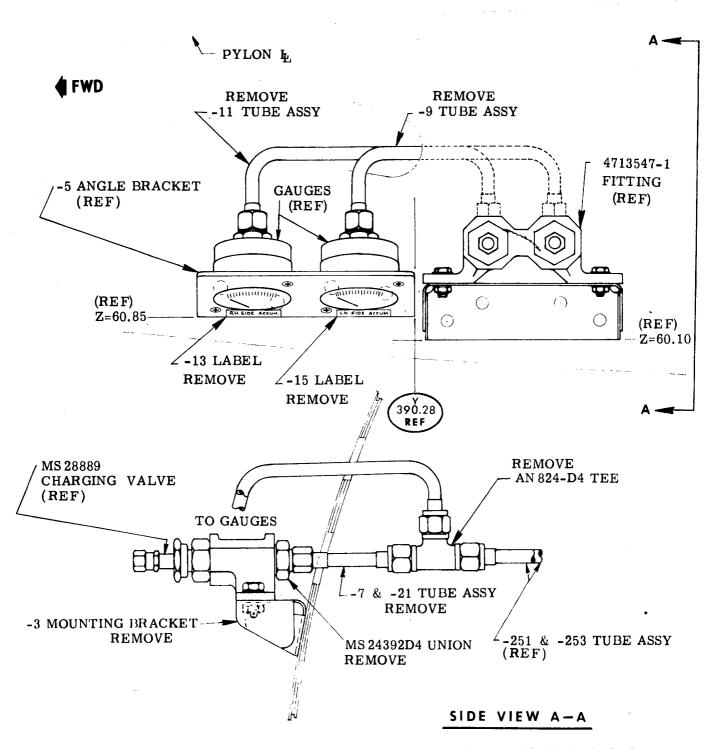
Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-6, dated April 11, 1977 entitled "Chaffing of Tubes in L. H. Engine Pylon and Relocation of Nitrogen Gauges and Charging Valves," accomplished (DATE).

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FIGURE 1



PRESENT CONFIGURATION OF NITROGEN GAUGES AND CHARGING VALVES

FIGURE 2

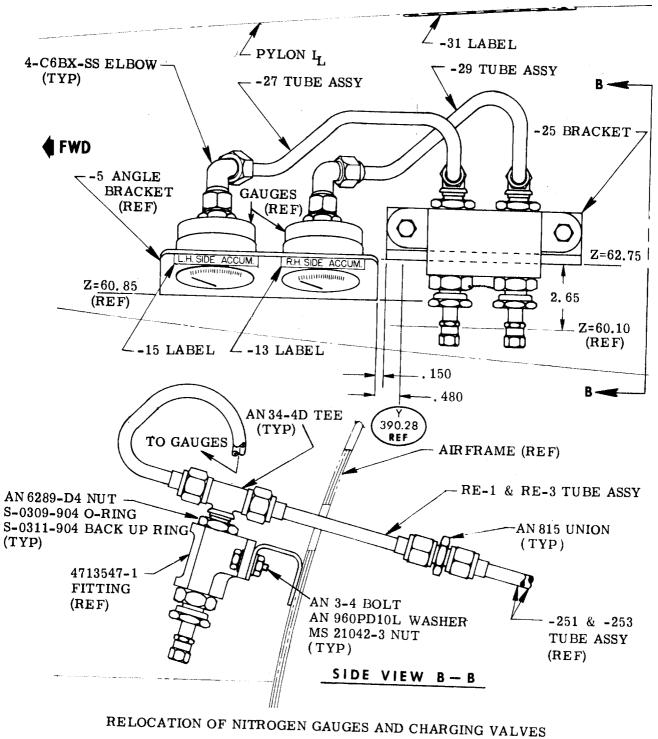


FIGURE 3

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SERVICE BULLETIN NO. WW-24-7A DATE: OCTOBER 18, 1977 (This Service Bulletin supercedes Service Bulletin No. WW-24-7, dated April 12, 1977 in its entirety. Prior compliance fulfills requirements of this revision.)

EFFECTIVITY: ALL MODEL 1124 AIRCRAFT S/N 154, 181, AND 187 THRU 200

SUBJECT: AFT ENGINE MOUNT FITTING ASSEMBLY INSPECTION

COMPLIANCE: AT NEXT ENGINE(S) REMOVAL

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO INSPECT FOR AND REPLACE AFT ENGINE MOUNT FITTING ASSEMBLIES WHICH HAVE BEARINGS WHICH MAY BE LOOSE DUE TO INSUFFICIENT CHAMFER OR SWAGING.

NOTE

BEARINGS WHICH ARE LOOSE ARE CAPTIVE BY ENGINE INSTALLA-TION AND DO NOT IMPOSE A FLIGHT SAFETY PROBLEM.

REASON FOR TO CORRECT FITTING PART NUMBER AND SIMPLIFY INSPECTION PROCEDURES

INSTRUCTIONS:

- 1. Engines should be removed per instructions of Section 71-00-00, pages 401 thru 406, of the 1124 Westwind Maintenance Manual.
- 2. The aft engine mount is located at fuselage Station 433.476 on the engine pylon. See Drawing F10A-5-B10210 in Section 71-00-00 of manual.
- 3. Remove existing hardware securing the F10A-5-B10504-1 Fitting-Aft Engine Mounts to the pylons. Mark the aft side of fittings for reference. (SEE FIGURE 1)
- 4. Examine BAN 6550S bearings (two places) and BAN 5470S bearing for defects as follows (SEE FIGURE 2):
 - A. Inspect for proper swaging. If any bearing has not been swaged, the complete fitting must be replaced. Inspect both sides of fitting.
 - B. Inspect for adequate chamfer. Fitting may have inadequate chamfer for sufficient swaging, although bearing outer rim may display slight deformation from swaging operation.

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD BEN GURION AIRPORT, ISRAEL 1124-71-01 Page 1 of 4

INSTRUCTIONS (CONT'D)

NOTE

Inadequate chamfer may be determined by measuring the O.D. of chamfer on fitting. (SEE FIGURE 2) The diameter should be no less than:

BEARING	MINIMUM CHAMFER O.D.
BAN 6550S	. 837
BAN 5470S	. 778

If diameter measures less than above minimum, the fitting assembly should be replaced.

- C. Bearing rotation. The spherical bearing section must be free to rotate in bearing seat. if any bearing is "frozen" due to improper manufacture or swaging, the fitting assembly must be replaced.
- D. The swaged bearings should be centered within the fitting within .008 inch accuracy; make a judgement if measuring equipment is not available. (SEE FIGURE 2) Replace fitting if any bearing is beyond tolerence.
- 5. Fitting assemblies having all bearings satisfying forementioned inspection procedures are satisfactory for reinstallation to pylons using existing hardware. Install and torque fasteners per call-outs on Drawing No. F10-5-B10210, Section 71-00-00 of maintenance manual.
- 6. Install engines per instructions Pages 406 thru 414 of 1124 Westwind Maintenance Manual.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
AR	F10A-5-B10504-1	Fitting-Aft, Engine Mount

NOTE: THE ABOVE PART WILL BE EXCHANGED AT NO CHARGE FROM:

COMMODORE AVIATION, INC. P.O. BOX 280 RONKONKOMA, NY 11779

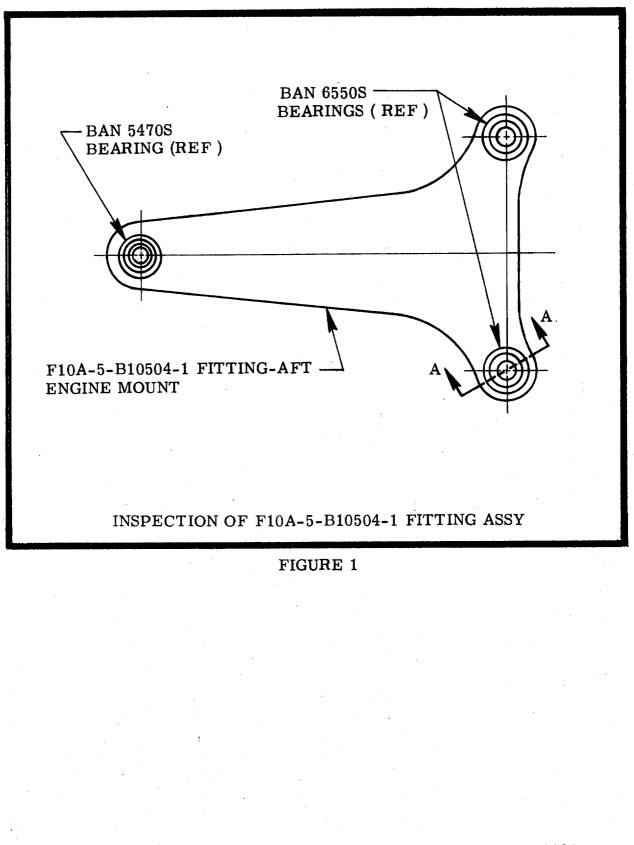
Aircraft serial number and shipping instructions must be included when ordering parts.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-7A, dated October 18, 1977, entitled "Aft Engine Mount Fitting Assembly Inspection", accomplished (DATE)

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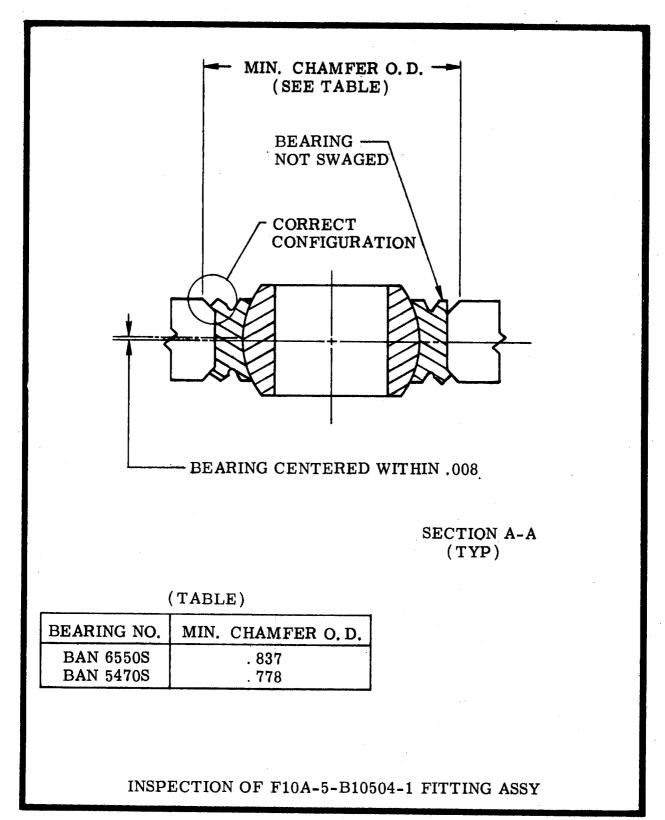


FIGURE 2

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SERVICE BULLETIN NO. WW-24-8A DATE: JULY 15, 1977 (This Service Bulletin supercedes Service Bulletin No. WW-24-8, dated April 18, 1977 in its entirety.)

EFFECTIVITY: ALL MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 194 AND 196

SUBJECT: REPLACEMENT OF NUTS AND WASHERS ON FORWARD ENGINE MOUNT ATTACHMENT BOLTS.

COMPLIANCE: AT NEXT ENGINE REMOVAL, BUT NOT LATER THAN 750 OPERATING HOURS

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO REPLACE EXISTING HARDWARE WITH HIGHER STRENGTH AND TEMPERATURE-RESISTANT FASTENERS.

REASON FOR TO CORRECT TECHNICAL ERROR IN FASTENER COMPONENTS CALL-REVISION: OUTS. KIT WW-24-8 CONTAINS CORRECT COMPONENTS.

NOTE: REPLACEMENT MAY BE ACCOMPLISHED WITHOUT ENGINE REMOVAL.

INSTRUCTIONS:

- 1. Gain access to F10A-5-B10555 forward engine mount, located at Station 200.00. (SEE FIGURE 1)
 - A. Remove access panels on underside of pylon, forward and aft of engine mount assembly.
 - B. Disconnect 5553510 Teleflex engine throttle control quick-disconnect; remove retainer nut securing quick-disconnect to fireshield.
 - C. Disconnect 5643505 fire extinguisher line. Remove retaining nuts securing fire extinguisher line to fireshield.
 - D. Remove bolts securing fireshield to pylon and remove fireshield section to gain access to pylon interior and engine mount hardware.
- 2. Use the following proceedure to replace nuts and install new Pre-Load Indicating (PLI) Washers:
 - A. Perform complete replacement and torquing proceedure at one fastener location before proceeding to another location.
 - B. Remove and dispose of existing nut and pre-load indicating washer set. USED PLI WASHERS MUST BE DESTROYED TO PREVENT RE-USE.
 - C. Do not lubricate components. Do not remove wax coating on washers, if present.



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INSTRUCTIONS CONT'D

- D. Place one flat washer over bolt, followed by the inner and outer PLI washers. Place second flat washer over bolt. (SEE FIGURE 2A)
- E. Install nut and tighten snug against PLI washer set. (SEE FIGURE 2B)
- F. Tighten nut in gradual (1/8 turn maximum) increments. Test outer washer for rotation by inserting a scribe (or equivalent) in perimeter holes. Continue until outer washer can no longer be moved by testing two perimeter holes; the desired pre-load has been obtained. (SEE FIGURES 2C AND 2D)

CAUTION

DO NOT OVERTIGHTEN. IF NUT IS TIGHTENED MORE THAN 1/8 TURN BEYOND POINT WHEN OUTER PLI WASHER BECOMES IMMOVABLE, THE ENTIRE BOLT, NUT, AND PLI WASHER ASSEMBLY MUST BE REPLACED.

- 3. Install NAS1758L7 nut with PLI 7-12.4 pre-load indicating washer set under nut at the four inner locations. (SEE FIGURE 1)
- 4. Install NAS1758L9 nut with PLI 9-21.6 pre-load indicating washer set between nut and 3313721-9 special washer at the four corner locations. (SEE FIGURE 1)
- 5. Apply tamper-proof sealant, EC-1252, white, to each torqued fastener installation:
 - A. Clean only those parts to receive sealant with Methyl Ethyl Ketone (MEK).
 - B. Apply stripe of sealant across end of exposed bolt end, down the nut and across the PLI washers so that any turning action will break the stripe seal.
- 6. Replace fireshielding inside pylon. Connect fire extinguisher fittings and line. Connect engine throttle controls. Replace access panels.
- 7. Repeat for other engine forward mount.

SUPPLY DATA: QTY PART NUMBER DESCRIPTION 8 NAS1758L7 Nut 8 NAS1758L9 Nut 8 Pre-load indicating washers PLI 7-12.4 8 PLI 9-21.6 Pre-load indicating washers

NOTE: The above items may be obtained at no charge as KIT NO. WW-24-8 from:

ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

Aircraft serial number and shipping instructions must be included when requesting parts.

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SUPPLY DATA CONT'D

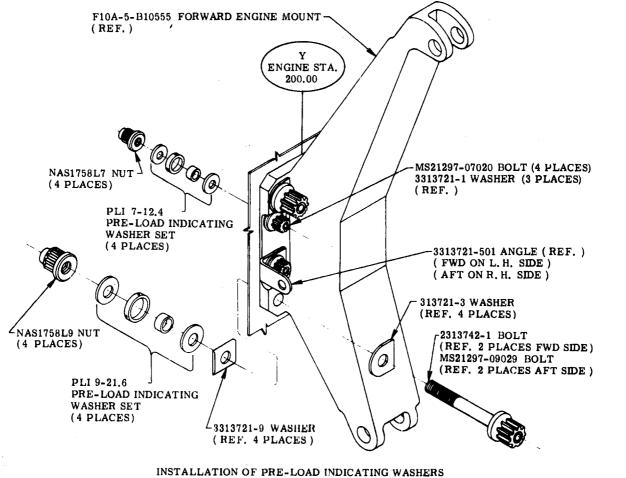
EC-1252 Tamper-proof Sealant, White, manufactured by the 3M Company, may be obtained from local sources.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

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Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-8A, dated July 15, 1977 entitled, "Replacement of Nuts and Washers on Forward Engine Mount Attachment Bolts", accomplished (DATE)



ON FORWARD ENGINE MOUNT ATTACHMENT BOLTS

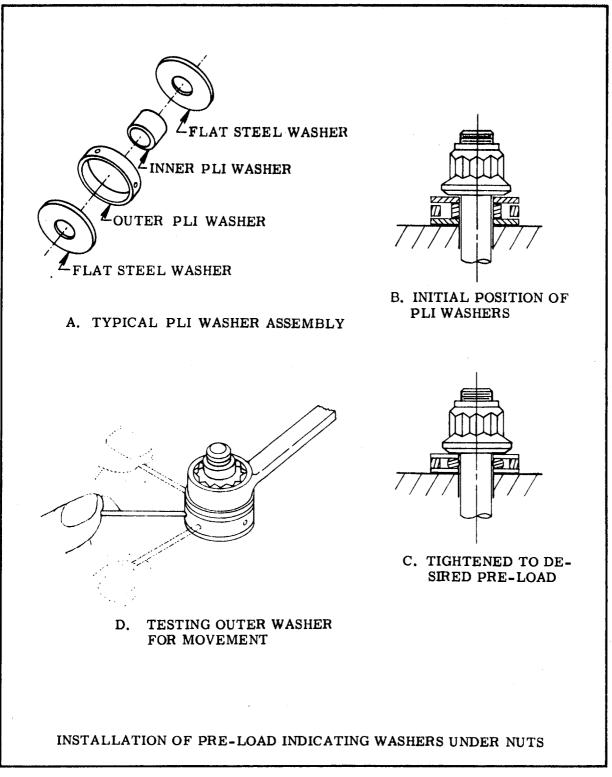
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FIGURE 2

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-9 Revision No. 1

DATE: MAY 23, 1978

SUBJECT: MODIFICATION OF MAIN LANDING GEAR

REVISED EFFECTIVITY:

MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 212, AND 215

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S

TERNATIONAL INC.

1124-32-01 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL





DATE: JULY 12, 1977

EFFECTIVITY: ALL 1124 AIRCRAFT, S/N 154, 181, 187 AND SUBS.

SUBJECT: MODIFICATION OF MAIN LANDING GEAR

COMPLIANCE: AT NEXT INSPECTION

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO UPDATE MAIN LANDING GEAR GEOMETRY

NOTE: THIS SERVICE BULLETIN SHOULD BE CO-ORDINATED WITH INSTALLATION OF NEW GOODYEAR TIRES P/N 249K83-2, WHICH SHOULD BE SERVICED TO 150 PSI UNLANDED.

INSTRUCTIONS:

- 1. Jack aircraft per Chapter 7, 1124 Aircraft Maintenance Manual.
- Remove EA1681-503 side and jury brace assembly from main gear, per Chapter 32-10-00, Page 201, of 1124 Aircraft Maintenance Manual. Use caution in removing ED12948-1 springs.
- 3. Remove both ES12850-501 lower side brace assemblies from ES12851-503 upper brace assembly. (SEE FIGURE 1)
- 4. Disconnect ED12941-1 lower jury brace from ES12851-503 upper brace assembly.
- 5. Modify ES12851-503 upper brace assembly as follows: (SEE FIGURE 2)
 - A. Make a copy of Template "A", and position to mark areas to be cut away.
 - B. Remove metal from indicated areas. Finish smooth with abrasive paper.
 - C. Brush alodine all reworked surfaces.
 - D. Modify legend on ED12977-501 nameplate to read the following assembly part number: EA1681-505
- 6. Disconnect ES12942-1 upper jury brace from ED12949-1 jury mounting pad, and ED12941-1 lower jury brace; modify parts and reassemble as follows:
 - A. Modify ES12942-1 upper jury brace and brush alodine machined surfaces. (SEE FIGURE 3)

INSTRUCTIONS (CONT'D)

- B. Install ED12946-1 bungee shaft in the modified upper jury brace; install ED12947-R1 and ED12947-R2 sleeves (in that order) on each end of the bungee shaft, and secure with former NAS670-31 retaining rings.
- C. Join modified ED12942-1 upper brace with ED12941-1 lower jury brace and ED12949-1 jury mounting pad. Use new MS24665-149 cotter pins with other original hardware.
- 7. Connect new ES12850-503 lower side brace assemblies to the modified upper brace assembly. Note the direction of reinforcement ribs, per FIGURE 1.
- 8. Connect ED12941-1 lower jury brace to the modified upper side brace as follows:
 - A. Insert ED12946-1 bungee shaft and secure with MS20392-1-29 flat head pin, AN960PD4 washer, and new MS24665-149 cotter pin.
 - B. Install ED12947-2 sleeves on bungee shaft and secure with former NAS670-31 retaining rings.
- 9. Repeat Steps 2 thru 8 on other main landing gear assembly.
- 10. Install reworked main gear and jury brace assemblies to main gear per Chapter 32-10-00, Page 201, 1124 Aircraft Maintenance Manual, with the following additions:
 - A. Install 910.003.24 jury brace pad shim under ED12949-1 jury mounting pad using AD502-416-12 screws. Original screws may be installed at any locations where new screws "bottom" before fully tightening. Torque screws to 50-70 in-lbs. and secure with safety wire.
 - B. Install ED12948-1 bungee springs. The thickness of ED12947-R1 may be reduced, if necessary, to allow spring to fit between sleeves.
- 11. Check gear retraction function.
 - A. Manually lift gear into retracted position, and check for interference between parts and for chaffing of wiring bundle.
 - B. If gear binds before uplock position, check for reversed installation of ES12850-503 lower side brace assemblies. (See Step 7)
 - C. Check clearance between main gear strut and upper link by applying putty across cut-out areas. If interference occurs, blend grind contact area of <u>upper link only</u> and finish per Steps 5B and 5C.
 - D. Check for clearance between modified ES12942-1 upper jury brace and wing fitting 4173108-505 (-506 on R. H. side). Up to .020 inch material may be removed from wing fitting in contact area to provide clearance for spring end; protect with zinc chromate paint.

INSTRUCTIONS (CONT'D)

- E. Adjust wire bundle clamps to prevent chaffing or pinching of wiring. If necessary, reroute wire bundle to inboard side of strut.
- F. Check gear under hydraulic power.
- 12. Position gears in down locked position. Clean areas of lower side brace links with solvent for new down locked reference stripe. Mask stripe in alignment with upper link stripe. Brush paint stripe with red epoxy paint per paint manufacturer's instructions.
- 13. Align main wheels, per Service Letter No. WW-2402, dated August 27, 1976.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
4	ES12850-503	Lower Side Brace Assy
4	ED12947-R1	Inner Sleeve
4	ED12947-R2	Outer Sleeve
2	910.003.24	Jury Pad Shim
8	AN502-416-12	Screw

The above items may be obtained at no charge as Kit No. WW-24-9 from:

ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

Aircraft serial number and shipping instructions must be included when ordering parts.

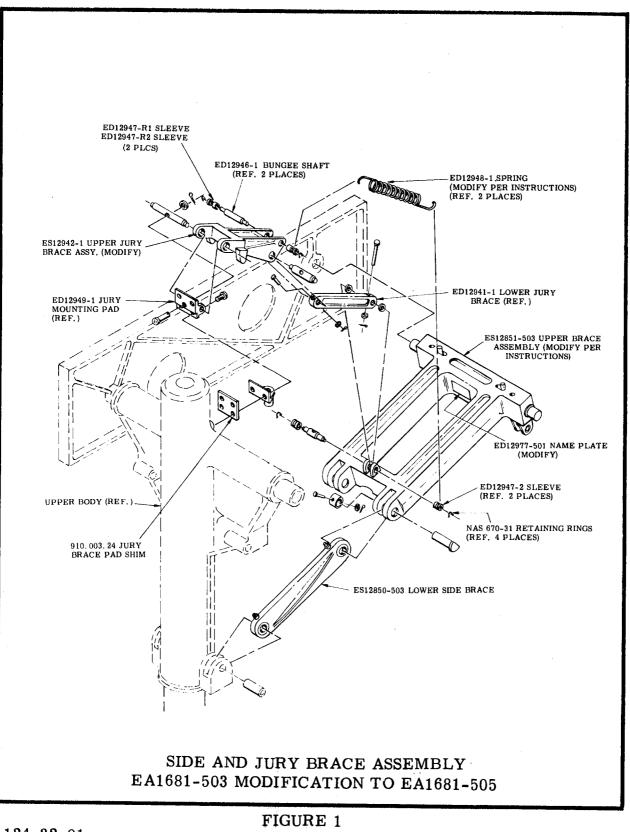
The following items may be procurred from local sources:

QTY	PART NUMBER	DESCRIPTION
6	MS24665-149	Cotter Pin

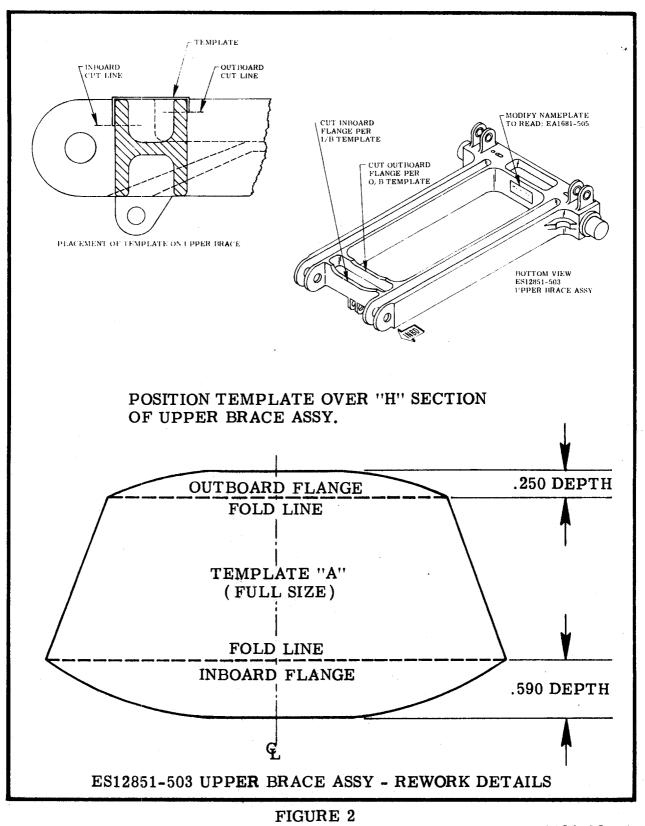
WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

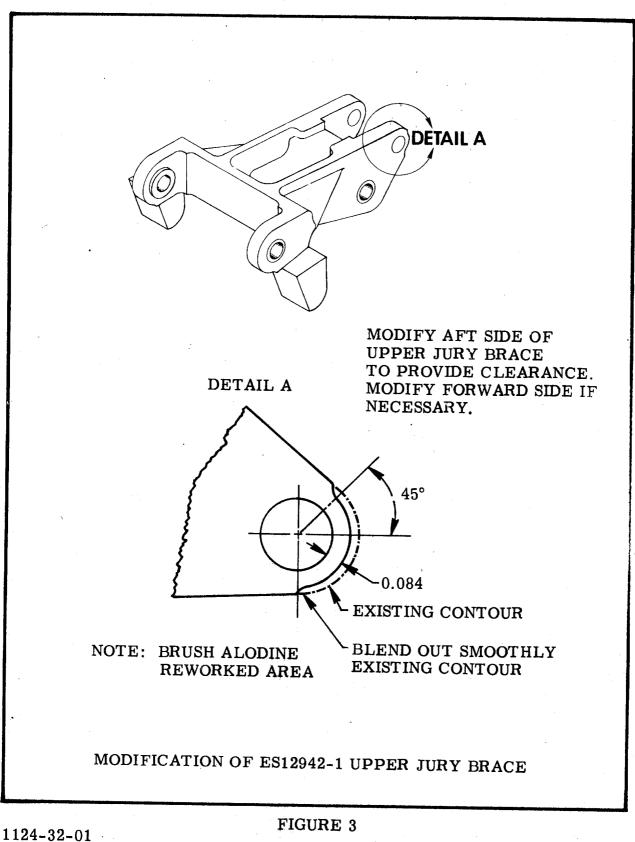
Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-9, dated July 12, 1977, entitled, "Modification of Main Landing Gear", accomplished (DATE).



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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-10 Revision No. 1 DATE: MAY 23, 1978

SUBJECT: CHAFFING OF TUBES NEAR R. H. ENGINE PYLON

REVISED EFFECTIVITY:

Y: MODEL 1124 AIRCRAFT S/N 154, 181, 187 THRU 210, AND 215

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S



1124-29-03 Page 1 of 1





DATE: JUNE 24, 1977

EFFECTIVITY: MODEL 1124 S/N 154, 181, 187 AND SUBS.

SUBJECT: CHAFFING OF TUBES NEAR R. H. ENGINE PYLON

COMPLIANCE: AS SOON AS POSSIBLE, BUT NOT LATER THAN NEXT 150 HOUR INSPECTION

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO INSPECT TUBES AND INSTALL SUPPORT CLAMPS TO PRE-VENT CHAFFING

INSTRUCTIONS:

- 1. Remove aft panel of fwd baggage compartment and remove air conditioning ducting as necessary to gain access to tubing entering aft fuselage from engine pylon at Station 385.
- 2. Inspect hydraulic supply tube P/N 3723589-395, hydraulic pressure tube P/N 3723589-237 and PT2 tube P/N 5723592-18 for evidence of chaffing. If chaffing is evident, replace tubes that are damaged beyond serviceable limits.
- 3. Commencing as near as possible to aft fuselage skin, position MS21919DG8 clamp on hydraulic supply tube, MS21919DG6 clamp on hydraulic pressure tube, and secure clamps together using AN520-10R8 screw, AN960PD10L washer and MS21083N3 nut. Position MS21919DG6 clamp on hydraulic pressure tube, MS21919DG4 clamp on PT2 tube P/N 5723592-18 and secure clamps together using AN520-10R8 screw, AN960PD10L washer and MS21083N3 nut. (SEE FIGURE 1)
- 4. Repeat clamping procedure as necessary between initial clamping, and the ripple dampening accumulator, to prevent chaffing of tubes.
- 5. Replace air conditioning ducting removed to gain access.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

SUPPLY DATA:

The following items may be procured from local sources:

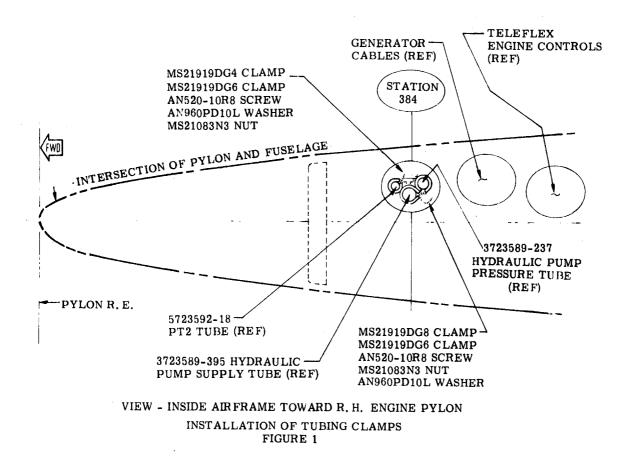
QTY	PART NUMBER	DESCRIPTION
AR	AN520-10R8	Screw
AR	AN960PD10L	Washer
AR	MS21919DG4	Clamp
AR	MS21919DG6	Clamp
AR	MS21919DG8	Clamp

WEIGHT AND

BALANCE: N. A.

AIRCRAFT RECORDS:

Make appropriate entry in aircraft permanent records as follows: Service Bulletin No. WW-24-10 dated, June 24, 1977, entitled, "Chaffing Of Tubes Near R. H. Pylon", accomplished (DATE)



1124-29-03 Page 2 of 2





DATE: DECEMBER 30, 1977

EFFECTIVITY: MODEL 1124 AIRCRAFT S/N 187 THRU 193

SUBJECT: REPLACEMENT OF AILERON CONTROL CHAIN ASSY P/N 3533516-1 AND SPROCKET P/N 2533049-501 IN FLIGHT CONTROL COLUMNS

COMPLIANCE: AS CONVENIENT, BUT NOT LATER THAN 1200 OPERATING HOURS

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO UPDATE AILERON CONTROL COMPONENTS

INSTRUCTIONS:

- 1. Remove flight compartment floor carpeting. Loosen center pedestal, and remove access panel over center aileron bellcrank at fuselage Station 49.37, and lock bellcrank in neutral position using a 3/16 inch dia. rig pin in the short arm of bellcrank. (SEE FIGURE 1)
- 2. Remove aileron control wheels from control column per Page 401, Chapter 27-10-00 of the 1124 Westwind Maintenance Manual.
- 3. Remove top wire bundle clamp from control column and pull wires through 2533022-501 shaft. (SEE FIGURE 2)
- 4. Remove control column inspection panels. Perform Steps 5 thru 13 for L. H. control column. (SEE FIGURES 1 & 2)
- 5. Remove turnbuckle safety springs, and loosen turnbuckles to provide slack in control cables.
- 6. Remove AN316-12R nut, MS27111-8 key washer, and MS20002-12 washer. Insert 3/8" dia. to 7/16" dia. shaft, approximately one foot long, through the 2533022-501 shaft to prevent components from falling inside column. Remove NAS221-6 retaining screws, and pull 3533062 bearing assembly from shaft. Carefully remove washer shims. Withdraw the shaft to release the sprocket, using care to retrieve the MS20066-183 sprocket key. Remove washers from aft side of sprocket. (SEE FIGURE 2)
- 7. Lower chain and sprocket through to inspection hole. Remove and dispose of sprocket. Pull chain through inspection hole.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

INSTRUCTIONS (CONT'D)

- 8. Omitting washer shims on aft side of sprocket, push shaft through column bearing and new 3533530-1 sprocket. DO NOT install key. With sprocket against column bearing, install sufficient AN960-D1216L washer shims between sprocket and 3533062 bearing assembly until axial play of sprocket on shaft is minimal, with bearing assembly in place.
- 9. Remove bearing assembly. Remove and divide washer shims so that an equal number (plus/minus one washer) may be installed on each side of sprocket. Withdraw shaft until sprocket is free. Place aft washers on shaft protrusion. The small shaft may be inserted to prevent washers from falling into column.
- 10. Disconnect old chain assembly, discard, and replace with new 3533529-1 chain assembly. Position new 3533530-1 sprocket in chain assembly and lift into position. Press shaft through sprocket.
- 11. Align sprocket and shaft keyways, and insert MS20066-183 key. Place remaining washer shims on shaft and install 3533062 bearing assembly; install and tighten bearing assembly retaining screws. (SEE FIGURE 2)
- 12. Install MS20002-12 washer, new MS27111-8 key washer, and AN316-12R nut. Torque nut to within 250-300 inch-pound range, checking shaft for free rotation while tightening; if shaft tightens, remove fasteners and bearing assembly to remove one washer shim. When shaft turns freely with nut properly torqued, safety the nut by bending a tab of MS27111-8 key washer over nut. If necessary, the rig pin may be temporarily removed to check shaft rotation. (SEE FIGURE 2)
- 13. Remove aft section of center pedestal, and remove floor panel for access to aileron control cable. Attach cable tension gage to aileron control cable; adjust turnbuckles until chain ends are in equal alignment when cable tension is at correct value. (REF. Table 2, Page 204, Chapter 27-00-00 of 1124 Westwind Maintenance Manual)
- 14. Repeat Steps 2 thru 13 for R. H. control column. Remove rig pin installed in Step 1.
- 15. With both columns fitted with new sprockets and chain assemblies, install control wheels, connect wiring, and perform checks per Para. 1, Page 401, Chapter 27-10-00 of 1124 Westwind Maintenance Manual. Install turnbuckle safety springs.
- 16. Perform aileron control wheel Adjustment/Test Procedures, per Para. 1, Page 501, Chapter 27-10-00 of 1124 Westwind Maintenance Manual.
- 17. Replace access panels, aft section of center pedestal, and carpeting removed for access.

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SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
2	35335291-1	Chain Assembly
2	3533530-1	Sprocket
2	MS27111-8	Key Washer
AR*	AN960-D1216L	Washer

(*Four supplied in kit)

The above items may be obtained at no charge as Kit No. WW-24-11 from:

ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

Aircraft serial number and shipping instructions must be included when ordering parts.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-11 dated December 30, 1977, entitled "Replacement of Aileron Control Chain Assy P/N 3533516-1 and Sprocket P/N 2533049-501 in Flight Control Columns," accomplished (DATE).

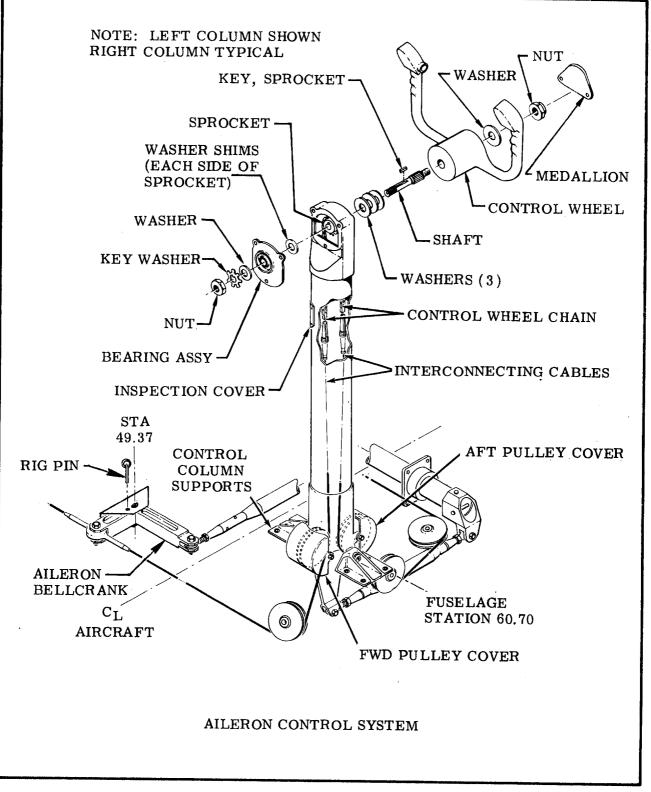


FIGURE 1

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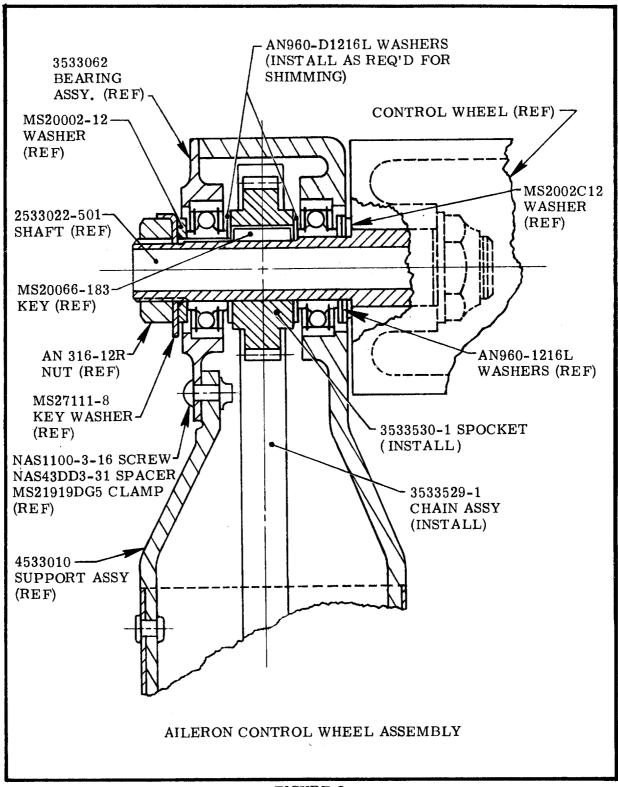


FIGURE 2





DATE: OCTOBER 18, 1977

EFFECTIVITY: MODEL 1124 S/N 154, 181, 187 THRU 205, 207, 209 AND 215

SUBJECT: INSPECTION OF GENERATOR CIRCUIT RESISTORS R-11 AND R-12

COMPLIANCE: AS SOON AS POSSIBLE, BUT NO LATER THAN NEXT 150 HOUR INSPECTION.

APPROVAL: I. A. I. ENGINEERING

PURPOSE: TO DETERMINE IF SUBJECT RESISTORS MEET SPECIFICATIONS.

INSTRUCTIONS:

- 1. Turn all electrical power off.
- 2. Gain access to No. 1 and No. 2 D. C. Contactor Boxes located in aft fuselage at Sta. 328.
- 3. Resistor R-11 is located in lower left hand sidewall of No. 1 D. C. Contactor Box. (SEE FIGURE 1, Chapter 39-30-00, of 1124 Maintenance Manual) Resistor R-12 is located in forward lower sidewall of No. 2 D. C. Contactor Box. (SEE FIGURE 2, Chapter 39-30-00, 1124 Maintenance Manual)
- 4. Inspect resistors, using magnifying glass and flashlight, for OHM rating. Resistance value should read 3 OHM.

NOTE: Verify that the reading is 3 OHM and Not .3 OHM. If value cannot be read clearly, unsolder one end of resistor connection and measure for resistance.

- 5. Resistors that are 3 OHM rated are satisfactory.
- 6. Resistors that are 0.3 OHM rated must be replaced.
- 7. Replace resistors, if required, in accordance with Chapter 20, 1124 Wiring Manual.
- 8. Secure D. C. Contactor Boxes.
- 9. If resistors were replaced per Steps 6 and 7, complete Step 10.
- 10. Functional check of generator trip relay (GTR).

1124-24-02 Page 1 of 2

INSTRUCTIONS (CONT'D)

- NOTE: This procedure will require three people, one to start and operate engines. One working at D. C. Contactor Boxes in aft fuselage and one outside the aircraft to relay messages between the cockpit and aft fuselage.
- A. Start engines and place generator switches "ON". Verify generators are operating. (Ammeter indication and annunciator panel "GENERATOR OFF" lights out.)
- B. Trip circuit breaker CB1-4 in No. 1 D. C. Contactor Box. "LEFT GEN. OFF" lights should illuminate. "LEFT GENERATOR CONTROL" circuit breaker should trip (overhead panel). This indicates normal function of GTR-1 relay and resistor R-11.
- C. Reset circuit breaker CB1-4 in No. 1 D. C. Contactor Box. Reset "LEFT GEN. CONTROL" circuit breaker(overhead panel). "LEFT GEN. OFF" light should extinguish. Left generator ammeter should indicate generator output.
- D. Trip circuit breaker CB2-4 in No. 2 D. C. Contactor Box. "RIGHT GEN. OFF" light should illuminate. "RIGHT GEN. CONTROL" circuit breaker should trip (overhead panel). This indicates normal function of GTR-2 relay and resistor R-12.
- E. Reset circuit breaker CB2-4 in No. 2 D. C. Contactor Box. Reset "RIGHT GEN. CONTROL" circuit breaker (overhead panel). "RIGHT GEN. OFF" light should extinguish. Right generator ammeter should indicate generator output.

SUPPLY DATA:

QTY

PART NUMBER

DESCRIPTION

2

RH-5

3 OHM Resistor

The required parts may be obtained at no charge as Kit No. WW-24-12 from:

ATLANTIC AVIATION CORP. P. O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE. 19899

Aircraft S/N and shipping instructions must be furnished when requesting parts.

WEIGHT AND BALANCE: N. A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-12, dated October 18, 1977, entitled "Inspection of Generator Circuit Resistors R-11 and R-12", accomplished (DATE).

1124-24-02 Page 2 of 2





DATE: AUGUST 7, 1978

EFFECTIVITY: MODEL 1124 S/N 187 THRU 199 AND 201

SUBJECT: REPLACEMENT OF THROTTLE RETARDER FEEDBACK CONTROL

COMPLIANCE: AT NEXT 300 HOUR INSPECTION

APPROVAL: ISRAEL C. A. A.

PURPOSE: TO PROVIDE AN IMPROVED THROTTLE RETARDER FEEDBACK CONTROL SYSTEM.

INSTRUCTIONS:

- 1. Gain access to the Thrust Reverser Throttle Retarder System on each engine and following procedures outlined on Page 201, Chapter 78-32-00, 1124 Westwind Maintenance Manual, remove the following components:
 - A. Antirotation Tube P/N 3387806-2 located on forward control box on each Fuel Control Unit (FCU).
 - B. Throttle Retarder Control Assembly P/N F10A-5-SCP203-1, (or -3) located on outboard side of left engine. (Save attaching hardware).
 - C. Throttle Retarder Control Assembly P/N F10A-5-SCP203-2, (or -4) located on outboard side of right engine. (Save attaching hardware).
- 2. Install new Antirotation Tube P/N 3713308-1 on each FCU Control Box, P/N F10A-5-SCP202.
- 3. Reidentify Control Box as follows:
 - A. F10A-5-SCP202-1 to F10A-5-SCP202-5.
 - B. F10A-5-SCP202-2 to F10A-5-SCP202-4

(Use Vibroetch, or equivalent marking tool, in area shown on Figure 1.)

- 4. Install new Throttle Relarder Control Assembly P/N F10A-5-SCP203-5 on left engine per Chapter 78-32-00, 1124 Westwind Maintenance Manual.
- 5. Install new Throttle Retarder Control Assembly P/N F10A-5-SCP203-6 on right engine per Chapter 78-32-00, 1124 Westwind Maintenance Manual.
- 6. Perform complete Throttle Retarder System rigging as outlined in this Service Bulletin. Special tool requirements are defined in Chapter 78-32-00, 1124 Westwind Maintenance Manual.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

INSTRUCTIONS (CONT'D)

- 7. Rigging preparations:
 - A. Remove ATR Access Door and Thrust Reverser Stang Cover on outboard side of nacelles.
 - B. Attach ground hydraulic power supply lines to corresponding T/R stow and T/R deploy quick disconnects on inboard side of nacelle.
 - NOTE: If a ground hydraulic power supply is not available, disconnect lower Thrust Reverser Bucket from its pushrod to enable free movement during rigging and checking operations.
- 8. Position check of Aft Control Box Bellcrank:
 - A. Remove hardware attaching forward telescope rod end bearing to Control Box Bellcrank. (Retain hardware for reinstallation.)
 - B. Install rigging tool P/N F10A-5-P20900-11 under heads of two aft screws of aft control box so that bottom of slots in tool are in contact with shank of screws. Tighten screws to hold tool firmly. (SEE Figure 1, Page 3, Chapter 78-32-00, 1124 Westwind Maintenance Manual.)
 - C. With lower bucket in stowed position, check that connecting hole in control box bellcrank aligns with hole in rigging tool. If not, proceed as stated in Paragraph 8.D. for coarse adjustment, and/or in Paragraph 8.E. for fine adjustment.
 - D. Remove bellcrank from control box splined shaft and reposition to improve alignment. Tighten nut and secure with cotter pin MS24665-153.
 - E. Fine adjustment operations:
 - 1) Remove spent travel tube of Aft Control Box P/N F10A-5-SCP203.
 - 2) Loosen jam nut at rod end bearing which connects aft telescope to lower bucket.
 - 3) Rotate the innerpart of aft telescope in required direction until correct alignment of holes is obtained on bellcrank and rigging tool.
 - NOTE: Threaded end of telescope must be visible through inspection hole of rod end bearing.
 - 4) Tighten rod end jam nut and safety with MS20995NC32 wire.

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INSTRUCTIONS (CONT'D)

- 5) Install spent travel tube, tighten to control box, and safety with MS20995NC32 wire.
- 9. After adjustment is complete, check that telescopic unit does not bottom in stowed position. Clearance between telescopic unit outer and inner casing should be not less than 0.125 inch. If this clearance is not obtained, move bellcrank one tooth on serration, per Paragraph 8.D., and repeat fine adjustments per Paragraph 8.E.
- 10. Remove rigging tool and tighten control box cover screws.
- 11. Preparations for 40° idle FCU retardation:
 - A. Remove rod end bearing, jam nut and hexagon connector from forward telescopic unit. (SEE FIGURE 3)
 - B. Screw in the inner telescopic part on cable rigid end up to thread end.
 Cable rigid end thread shall protrude out of telescopic part approximately
 0.70 inch. (Dimension E in Figure 3)
 - C. Install hexagon connector on cable thread and tighten against inner telescopic part; cable thread shall pass two inspection holes of the connector. (SEE FIGURE 3)

CAUTION

WHEN INSTALLING THE HEXAGON CONNECTOR ON PROTRUDING CABLE END, DO NOT ROTATE THE CABLE INSIDE THE INNER TELESCOPE.

- D. Record Dimension "C" for bottomed FWD Telescope, as shown in Figure 3.
- E. Loosely reinstall rod end bearing and jam nut (rod end bearing to pass inspection hole) and attach to control box bellcrank.
- 12. Coarse rigging for 40° idle FCU retardation:
 - A. Check T/R buckets to be locked in "stow" position.
 - B. Disconnect rigid cable casing of F10A-5-SCP203 from power lever control box. Perform coarse rigging of cable position inside the rigid casing, by rotating the complete FWD cable assy with the hexagon connector relative to the rod end bearing, so as to obtain Dimension A of 3.85 to 3.90 inch (to be measured with a depth caliper). (SEE FIGURE 2)
 - C. Release T/R buckets locking latch and slowly open buckets until FWD

INSTRUCTIONS (CONT'D)

telescope reaches minimum retracted length (buckets about half open).

D. Record Dimension "D" (Figure 3) in this position and compare with Dimension "C", recorded in Paragraph 11.D. The difference "D" minus "C" (minimum clearance before bottoming) should be 0.125 inch minimum.

CAUTION

WHILE OPENING T/R BUCKETS PER PARAGRAPH 12.C., MONITOR CONTINUOUSLY DIMENSION "D", IN ORDER THAT BOTTOMING DOES NOT OCCUR BEFORE REACHING THE TELESCOPE RETRACTED POSITION.

- E. If "D" minus "C" is less than 0.125 inch, repeat procedure from Paragraph ll.A., except that in ll.B., reduce Dimension "E" by the amount necessary to increase the clearance.
- F. Return buckets to "stow" position and lock.
- 13. Power Lever Feedback Cable Rigging:
 - A. Set engine power lever to IDLE position to obtain 20° IDLE on FCU scale.
 - B. Remove plastic screw from rig pin hole on FCU and insert a 0.125 diameter rig pin to lock the unit in 20° idle position.
 - C. Check Dimension "B" (Figure 2), using rigging tools F10A-5-P20900-13 & -15, or a depth caliper. Readjust, if necessary, to obtain a "B" Dimension of 1.99 ± 0.02 inch by rotating the feedback cable after removing the antirotation tube from the power lever control box. (SEE Paragraphs 26 and 27, Chapter 78-32-00, 1124 Westwind Maintenance Manual.)
 - NOTE: Rotation of feedback cable for rigging shall be done in 90° increments only, so as not to change antirotation tube position when reassembled.
 - D. If antirotation tube was removed in Step C above, reassemble antirotation tube with curvature in same position as before, and secure.
 - E. Remove rig pin and reinstall plastic screw.
 - F. Stroke power lever from cutoff to maximum power and record the angles obtained on FCU scale when power lever control hits its two internal stops (max. power and cutoff).

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INSTRUCTIONS (CONT'D)

- 14. Fine rigging for 40° idle FCU retardation:
 - A. Assemble Throttle Retarder rigid cable casing to power lever control box and safety with MS20995NC32 wire.
 - B. Set power lever to "Max Power" position.
 - C. Release T/R buckets locking latch. Deploy buckets slowly, and record from FCU scale the angle to which the power control has been retarded.
 - D. Perform fine rigging of T/R feedback by rotating as necessary the complete forward cable assembly, with telescope and hexagon connector attached, relative to the fixed rod end bearing. Adjust and recheck per B and C above, until retardation to $40^{\circ} \pm 2^{\circ}$ FCU idle is obtained.
 - E. Check that rod end thread is still visible through hexagon connector inspection hole.
 - F. Tighten rod end bearing jam nut and safety jam nut, hexagon connector and inner telescope with MS20995NC32 wire.
 - G. Recheck by repeating Steps B and C above.
- 15. Final operations:
 - A. Check T/R buckets to be in locked "stow" position.
 - B. Operate power lever through full range (Cutoff to Max Power) and check that angles on FCU scale coincide with the angles recorded in Paragraph 13.F.
 - C. Remove ground Hydraulic Power from Nacelle Quick Disconnects.
 - NOTE: If rigging was performed by hand operation of lower bucket only, reinstall the push rod and secure.
 - D. Assure all connections and attachments of Throttle Retarder System have been secured, and close all access panels.
 - E. Perform final check of Throttle Retarder Installation on aircraft per Paragraph 2, Page 201, Chapter 78-30-00, 1124 Westwind Maintenance Manual.

SUPPLY DATA:

QTY

2 EA.

1 EA.

1 EA.

PART NUMBER DESCRIPTION

3713308-1Antirotation TubeFl0A-5-SCP203-5Control Assy

Control Assy

THE ABOVE PARTS WILL BE EXCHANGED AT NO CHARGE AS KIT NO. WW-24-13 BY:

F10A-5-SCP203-6

ATLANTIC AVIATION CORPORATION P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

NOTE: Exchange requires advance notice and coordination. Aircraft S/N and shipping instructions must be included when requesting parts.

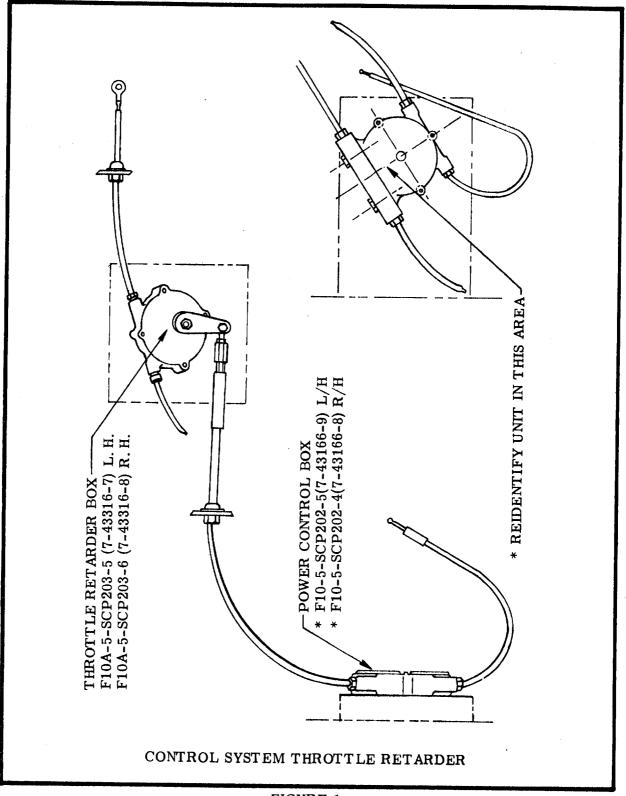
The following parts may be obtained from local sources:

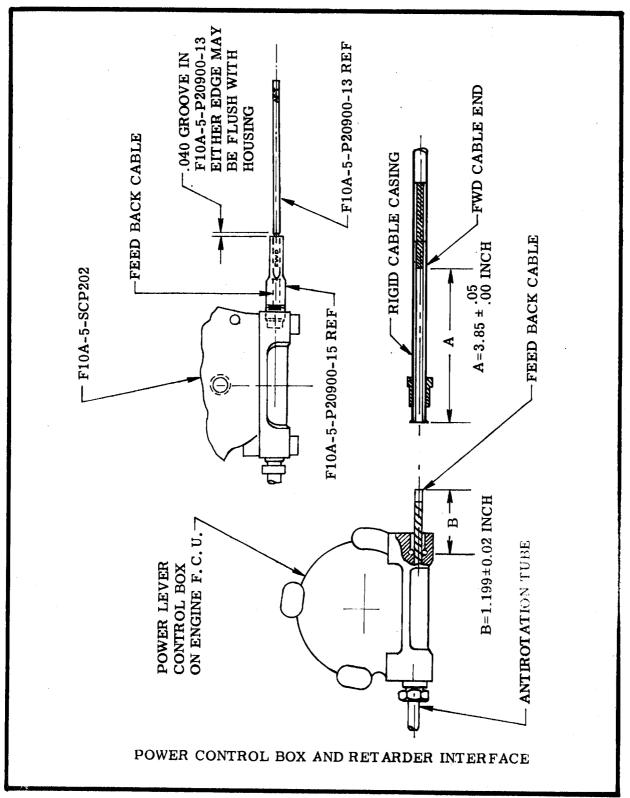
QTY	PART NUMBER	DESCRIPTION
AR	MS20995NC32	Safety Wire
AR	MS24665-153	Cotter Pin

WEIGHT AND BALANCE: N. A.

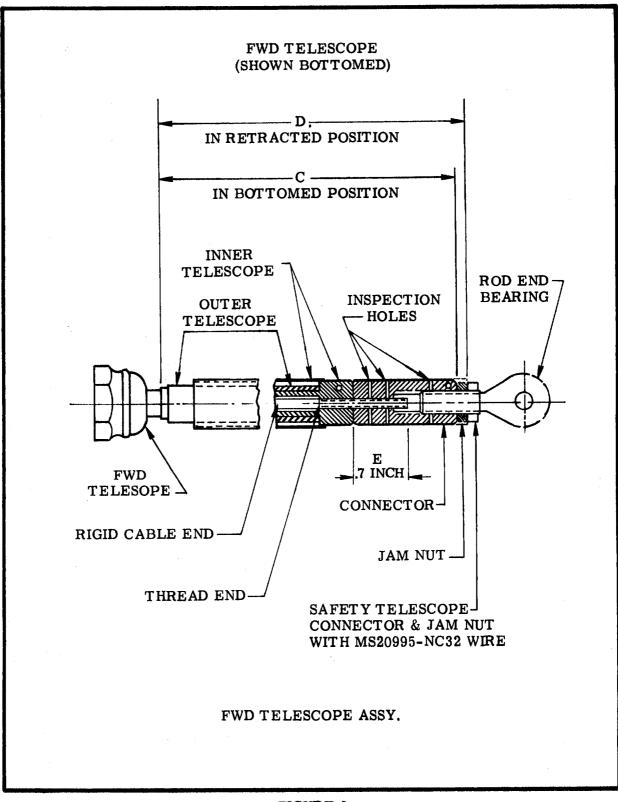
AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent records as follows: Service Bulletin No. WW-24-13, dated August 7, 1978, entitled "Replacement of Throttle Retarder Feedback Control", accomplished (Date)





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SERVICE BULLETIN NO. WW-24-14 Revision No. 3 Sept. 8, 1989

SUBJECT: INSPECTION OF HORIZONTAL STABILIZER HINGE FITTING

CANCELLATION NOTICE

This service bulletin is hereby cancelled. The information contained in this service bulletin has been revised and reissued in Service Bulletin No. 1124-55-020.

March 21, 1978 Rev. 1, April 3, 1978 Rev. 2, August 22, 1978 Rev. 3, September 8, 1989

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-14 Revision No. 1 **DATE: APRIL 3, 1978**

SUBJECT: INSPECTION OF HORIZONTAL STABILIZER HINGE FITTING

APPROVAL: ISRAEL C. A. A.

PURPOSE OF TO CHANGE HINGE PIN NUT TORQUE AND TO REVISE REVISION: CERTIFICATE OF COMPLIANCE.

INSTRUCTIONS:

- 1. Change hinge pin nut torque value in "PURPOSE" to read, 20-30 inch-pounds above run-on torque.
- 2. Change hinge pin nut torque in Step 10 to read, 20-30 inchpounds above run-on torque.
- 3. Complete the revised Certificate of Compliance.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-14 DATE: AUGUST 22, 1978 Revision No. 2

SUBJECT: INSPECTION OF HORIZONTAL STABILIZER HINGE FITTING

REASON FOR

REVISION: TO ADD HINGE PIN P/N 2453007-501 TO SUPPLY DATA

INSTRUCTIONS:

1. Add to supply data:

QTYPART NUMBERDESCRIPTIONAR2453007-501Hinge Pin

NOTE: SUBJECT HINGE PIN IS PRE-DRILLED

1124-55-01 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL





DATE: MARCH 21, 1978

EFFECTIVITY: MODEL 1124 S/N 154, 181, 187 THRU 223 AND 226

SUBJECT: INSPECTION OF HORIZONTAL STABILIZER HINGE FITTING

COMPLIANCE: AT THE NEXT 150 HOUR INSPECTION AND ONCE AGAIN 300 HOURS ATFER THE INITIAL INSPECTION

APPROVAL: ISRAEL C. A. A.

PURPOSE: TO DETERMINE IF HORIZONTAL STABILIZER HINGE LUGS ARE CRACKED. TO CHANGE HINGE PIN NUT AND TO CHANGE HINGE PIN NUT TORQUE TO 20-30 INCH-POUNDS.

NOTE: The drill jig P/N 2453007 required to accomplish Step 8, will be available on a loan basis from:

Israel Aircraft Industries International, Inc. 2025 S. Nicklas, Suite 115 Oklahoma City, OK 73128

INSTRUCTIONS:

- 1. Remove tail cone, disconnect tail light and remove empennage fairings.
- 2. Remove and discard hinge pin safety wire. Do not remove hinge pin.
- 3. Remove paint and primer from outboard lugs of hinge (See shaded area depicted in Figure 1).
- 4. Perform Dye-Penetrant inspection of outer surfaces of each outboard flange and the forward surface of each outboard flange (See Figure 1).
- 5. If hinge is cracked, arrangements must be made with an approved Service Facility for replacement of hinge fitting.
- 6. If hinge is satisfactory, repaint exposed surfaces with Zinc Chromate primer.
- 7. Remove and discard existing hinge pin nut P/N 5403001-3. Retain existing AN960-14L washer. Inspect hinge pin threads for damage due to over-torque. If damaged replace hinge pin P/N 2453007-3.



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INSTRUCTIONS (CONT'D)

- 8. Install drill jig P/N 2453007 on threaded end of hinge pin and drill cotter pin hole in hinge pin as per Figure 2. Use a right angle drill motor with a 9/64 inch diameter drill bit.
- 9. Remove drill jig and remove any burrs left from drilling operation.
- 10. Install new castellated nut P/N MS17826-14 with existing AN960-14L washer on hinge pin. Torque nut to 20-30 inch-pounds, and install MS24665-376 cotter pin in hinge pin nut.
- 11. Lubricate stabilizer hinge in accordance with lubrication charts contained in aircraft Maintenance Manual.
- 12. Replace empennage fairings, reconnect tail light and replace tail cone.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION	
1	MS17826-14	Nut	
1	MS24665-376	Cotter Pin	

The above parts may be ordered as Kit No. WW-24-14 from:

ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

Aircraft S/N and shipping instructions must be furnished when requesting parts.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-14, dated March 21, 1978, entitled "Inspection of Horizontal Stabilizer Hinge Fitting", accomplished (Date)

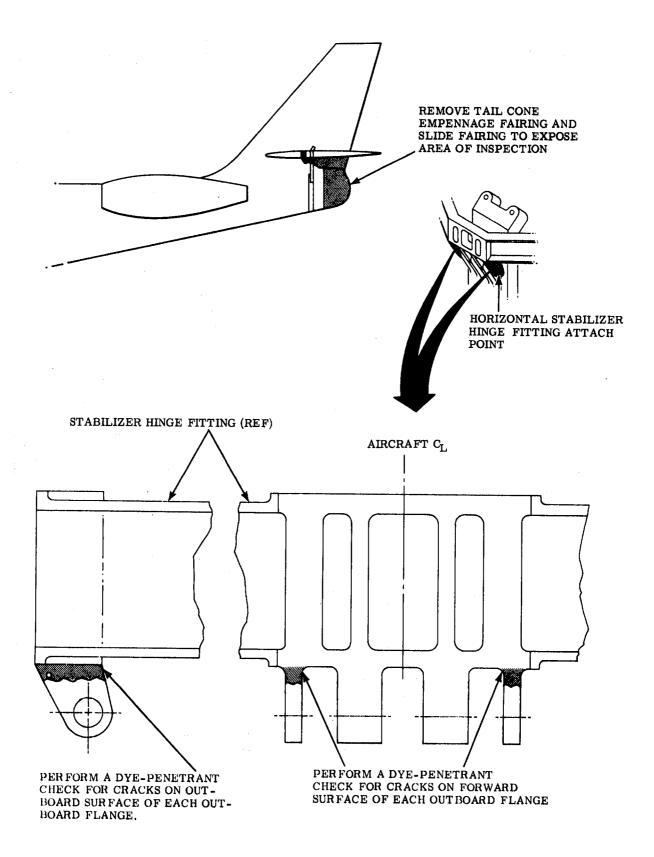
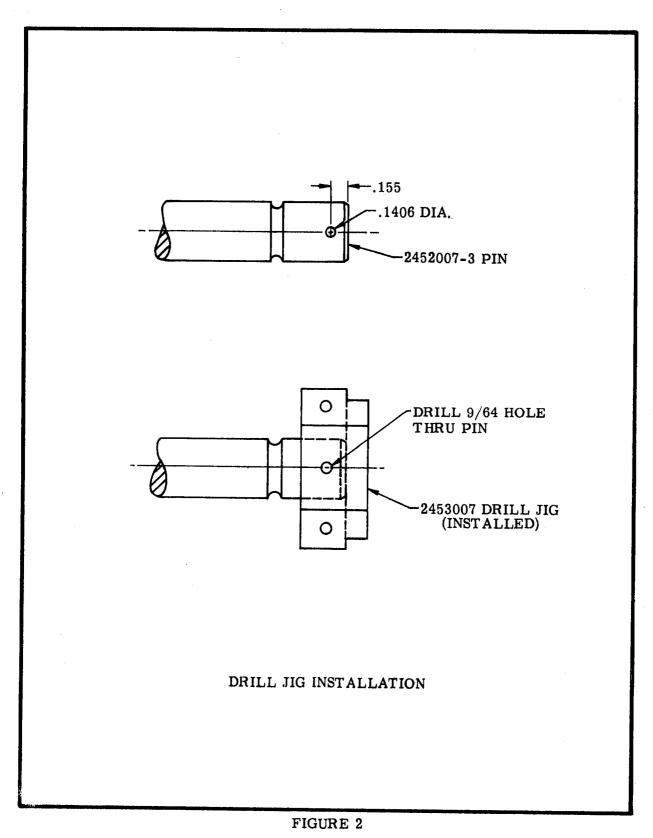


Figure 1.

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-15 DATE: DECEMBER 5, 1978 Revision No. 1

SUBJECT:POWER BRAKE VALVE - REPLACEMENT OF
POPPET RETAINING PIN P/N 117W50D12

REVISED

EFFECTIVITY: MODEL 1124 S/N 154, 187 THRU 229 AND 232

REASON FOR REVISION:

TO LIMIT EFFECTIVITY TO INCLUSIVE S/N'S

1124-32-02 Page 1 of 1





APRIL 5, 1978

EFFECTIVITY: MODEL 1124 S/N 154, 181, 187 AND SUBS.

SUBJECT: POWER BRAKE VALVE - REPLACEMENT OF POPPET RETAINER PIN P/N 117W50D12

COMPLIANCE: AT NEXT 150 HOUR INSPECTION

APPROVAL: ISRAEL C. A. A.

PURPOSE: TO INCREASE RELIABILITY OF POPPET RETAINER PIN BY REPLACING IT WITH ONE MADE FROM STRONGER MATERIAL.

INSTRUCTIONS:

NOTE: Any power brake valve, with the letter "Q" stamped on the data plate, has been modified in accordance with Consolidated Controls Corp. Service Bulletin No. 117W50 SB1, and no further action is required.

1. Bleed off primary and emergency hydraulic system pressure.

2. Gain access to power brake valve.

3. Disconnect primary and emergency hydraulic system pressure supply lines from the power brake valve. Plug and cap hydraulic fittings to prevent foreign material from entering the hydraulic system.

4. To replace pin, refer to Figure 1 and proceed as follows:

- A. Remove one of four fittings P/N 117W50D15 and associated valve subassembly from power brake valve. Discard old O-ring, backup ring, and gasket. Observe arrangement of backup ring P/N MS28774-020 and O-ring P/N ARP568-020 for reassembly purposes.
- B. Compress poppet return spring, by pressing down spring retainer P/N 117W50D11, to expose pin hole.
- C. Using a No. 61 (.039 dia.) drill blank or equivalent, push existing pin from hole.
- D. Install new pin P/N 117W50D12A.
- E. Release poppet return spring.



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INSTRUCTIONS (CONT'D)

- F. Using new O-ring, backup ring, and gasket, reinstall valve subassembly and tighten fitting P/N 117W50D15.
- G. Repeat Steps A thru F for the other three valve subassemblies.
- H. Metal stamp revision letter "Q" to the right of the serial number block on the data plate, of the power brake valve.
- 5. Reconnect primary and emergency hydraulic pressure supply lines to the power brake valve.
- 6. Apply hydraulic pressure and check valve and tubing for leaks.
- 7. Replace panels removed to gain access.
- 8. Bleed brakes in accordance with "BRAKE BLEEDING PROCEDURES" contained in Para. 7A, Chapter 32-40-00, 1124 Westwind Maintenance Manual.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
4	AR P568-020	O-ring
4	AR P568-906	Gasket
4	MS28774-020	Backup ring
4	117W50D12A	Pin

The above parts may be obtained at no charge as Kit No. WW-24-15, from:

ATLANTIC AVIATION CORP. P.O. BOX 1709 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19899

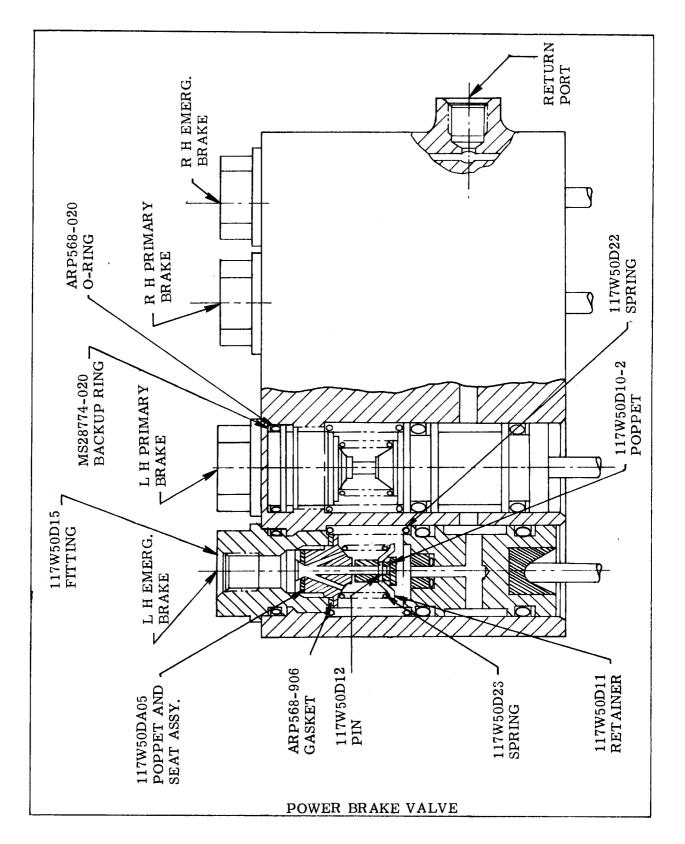
Aircraft S/N and shipping instructions must be furnished when requesting parts.

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-15, dated April 5, 1978, entitled "Power brake valve - Replacement of Poppet Retainer Pin P/N 117W50D12A", accomplished (DATE)

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DATE: MAY 15, 1979

- EFFECTIVITY: MODEL 1124 S/N 152, 154, 181 AND ANY MODEL 1123 THAT IS CON-VERTED TO MODEL 1124 PRIOR TO COMPLIANCE WITH SERVICE BULLETIN NO. WW-19
- SUBJECT: AFT PRESSURE BULKHEAD MODIFICATION

COMPLIANCE: PRIOR TO ACCUMULATION OF 5000 PRESSURIZATION CYCLES

APPROVAL: ISRAEL C. A. A.

PURPOSE: TO PREVENT CRACKING OF THE "U-CHANNEL" IN THE AFT PRESSURE BULKHEAD

INSTRUCTIONS:

- NOTE: This Service Bulletin should be accomplished in conjunction with a major airframe inspection or refurbishment of the interior.
- 1. Remove interior so as to have free access to the entire area of the Aft Pressure Bulkhead Assembly.
- 2. Remove wiring, plugs, ducting, fittings, etc., as necessary to facilitate removal of insulation and sound proofing covering the R. H. and L. H. panels. (SEE FIGURE 1)
- 3. Mark "cut line" on upper portion of R. H. and L. H. panels. Drill out rivets below "cut line" securing panels to the airframe and pull panels loose. (SEE FIGURE 2)
- NOTE: Doubler will be used during reinstallation of R. H. and L. H. panels-- so leave sufficient material to secure doubler.
- 4. Cut R. H. and L. H. panels on "cut line" and remove the panels.
- 5. Perform the following tasks within an area not exceeding 12 inches in length; complete each area before starting on another area:
 - A. Drill out the two rows of rivets inside channel.
 - B. Remove sealer, using paint remover. Check condition of rivet holes in skin, splice plate, and channel for smoothness and roundness. Holes must be free of burrs and scratches. If required, ream fastener holes to prescribed dimensions to follow (including oversize fastener where used).
 - C. Perform dye check inspection of area.



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INSTRUCTIONS (CONT'D)

- NOTE: If any cracks are found, contact your Israel Aircraft Industries International Technical Service Representative before proceeding.
 - D. Apply zinc chromate primer to area.
 - E. Measure distance between stiffeners inside channel. Cut strap(s) to measured length(s). Match drill strap(s).
 - F. Install NAS1475-06 swage locking steel pin fasteners on forward row, after reaming holes to . 1635 to . 1665 dia. if required. (MS90353-0506 fasteners may be used as alternate, if necessary).
 - G. Install MS20426AD5 aluminum rivets in Aft row. If necessary, ream holes to . 1719 (11/64) dia. and install NAS1241AD5 aluminum oversize rivets.
- NOTE: Do not mix aluminum and steel fastners on rows (except on RE-4 strap per Step 7 below).
 - H. Install all fastners wet with 890B-2 Sealer.
- 6. Repeat Step 5 until RE-1, RE-2, RE-3, RE-5, RE-6, RE-7, and RE-8 straps are installed.
- 7. To install RE-4 strap, perform the following:
 - A. Remove sections of the upper and lower wing root to fuselage fairings, approx.
 6" forward to 6" aft of the fuselage skin splice at Sta. 269.0, by drilling out existing rivets and cutting out each section. (SEE FIGURE 4)
 - B. Repeat Steps 5A thru 5E.
 - C. Ream fasteners holes to . 1635 to . 1645 diameter.
 - D. Install HL19-5-5 Pin with HL70-5 Collar in forward holes and install HL18PB-5-5 Pin with HL70-5 Collar in Aft holes; restrain pin with 5/64 hexkey wrench, and torque collar with 5/16 wrench until hex collar portion shears at the correct pre-load.
 - E. Install wet with 890B-2 Sealer.
 - F. For oversize replacement use next larger diameter Pin and Collar which requires. 1895 to . 1905 reamed hole.
 - G. Reinstall fairings removed in Step 7A using CR2248 Cherry Lock Bulk fastners, size 4 and 5, as required. Install wet with 890B-2 Sealer and fill the butt gap at each end of fairings.
- 8. Apply 890B-2 Sealer over each newly installed fastener inside the fuselage.
- 9. Fabricate doublers of . 025 2024-T4 and install behind portions of R. H. and L. H. panels which remain attached to airframe.

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INSTRUCTIONS (CONT'D)

10. Install R. H. and L. H. panels using wet NAS1398D5 rivets.

11. Reinstall sound proofing and insulation on aft pressure bulkhead panels.

12. Reinstall all ducts, wiring, plugs, etc. removed for access.

13. Install interior, and return aircraft to service.

SUPPLY DATA:

The following may be obtained from local sources:

QTY	PART NUMBER	DESCRIPTION	
150	MS20426AD5-9	Rivet	
125	NAS1475-06 or		
	MS90353-0506	Fastener	
30	HL19-5-5	Hi-Lok Bolt	
30	HL18PB-5-5	Hi-Lok Bolt	
60	HL70-5	Collar	
AR	CR2248	Cherry Lock Fasteners	
AR	PS890B-2	Sealer	
AR	EC-801	Sealer	
2	2" x 4" . 025 2024-T4	Doubler	
30'' Approx.	1.64 wide .080 2024T-3	Material for Straps	
90" Approx.	1.54 wide .080 2024T-3	Material for Straps	

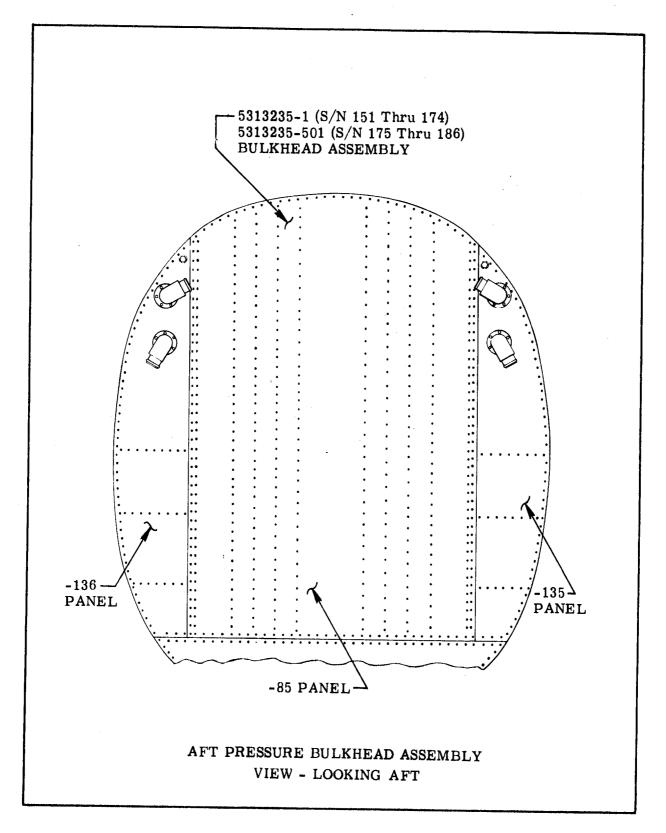
WEIGHT AND BALANCE:

Weight (LBs)	H-Arm (INCHES)	H-Mom (INCH-LBs)
1.358	269	365.26

AIRCRAFT RECORDS:

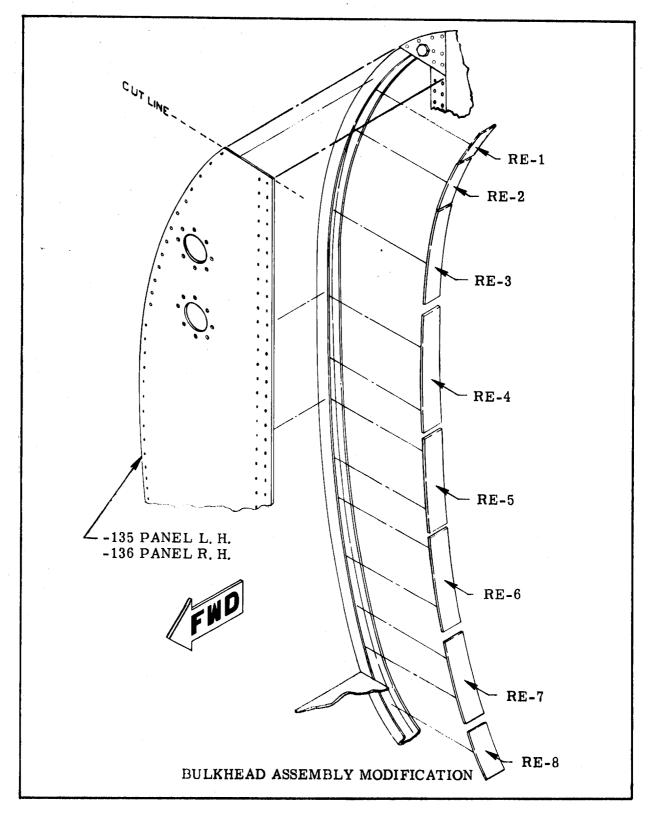
Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-16, dated May 15, 1979, entitled "Aft Pressure Bulkhead Modification", accomplished on (DATE).

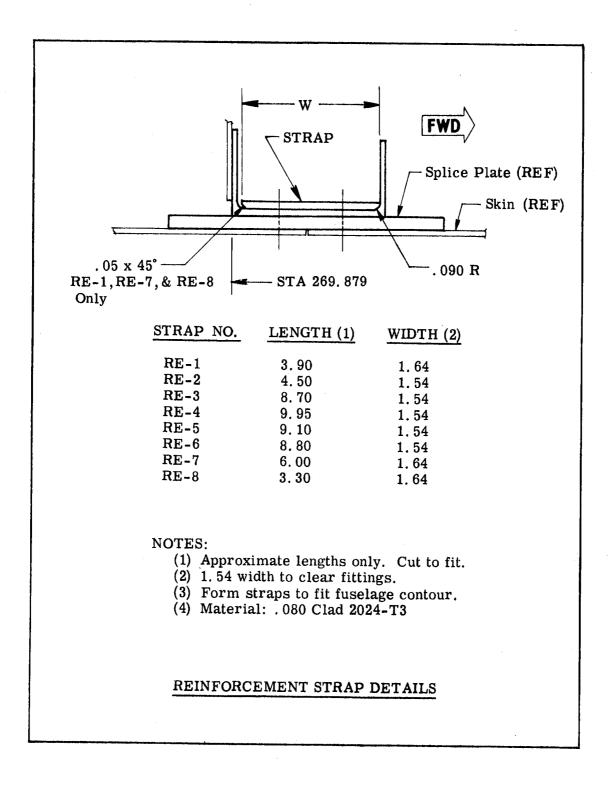




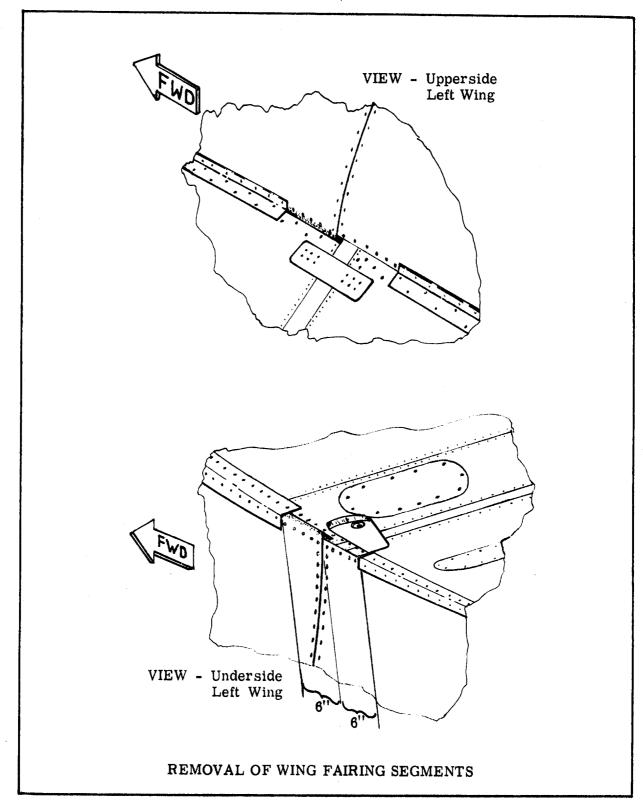


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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-17A Revision No. 1 DATE: MARCH 31, 1980

SUBJECT: INSTALLATION OF ADDITIONAL RIVETS IN 25 PERCENT WING SPAR

REASON FOR AUTHORIZE THE USE OF HI-LOK 1870 FASTNER AS AN REVISION: ALTERNATE TO MS20470AD RIVET

APPROVAL: ISRAEL CAA APPROVED

INSTRUCTIONS:

- 1. HL1870-6-5 HI-LOK Fastner may be installed in lieu of MS20470AD-6 Rivet, at Repair Facility discretion, provided the hole is reamed to . 1895 to . 1915 diameter.
- 2. If next size Fastner must be installed, use HL1870-8-5 and ream hole to . 2495 to . 2515 diameter.
- NOTE: The doubler depicted on spar web, around fuel flow through passage is . 125 thick, therefore rivets to be installed in that zone will have to be -10 length for MS20470AD Rivets or -7 length for HL1870 Fastners.

1124-57-01 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD BEN GUNION AIRPORT, ISRAEL





DATE: JANUARY 8, 1980

EFFECTIVITY: MODEL 1124 S/N 152, 154, 181, 187 THRU 260, 262 THRU 264, 266 THRU 269

SUBJECT: INSTALLATION OF ADDITIONAL RIVETS IN 25 PERCENT WING SPAR

REFERENCE: ISRAEL CAA AIRWORTHINESS DIRECTIVE NO. 1007 FAA AIRWORTHINESS DIRECTIVE (PENDING)

COMPLIANCE: PART A - INSTALL MAXIMUM OPERATING SPEED LIMIT PLACARD WITHIN 10 HOURS OF OPERATION UNLESS PART B OF THIS SERVICE BULLETIN ACCOMPLISHED

PART B - INSTALL ADDITIONAL RIVETS AS CONVENIENT, BUT NO LATER THAN NEXT 600 HOUR INSPECTION

APPROVAL: ISRAEL C. A. A.

PURPOSE: REINFORCE WEB TO SPAR CAP ATTACHMENTS

INSTRUCTIONS:

PART A: PLACARD INSTALLATION

1. The following placard must be installed in clear view of the pilots:

MAXIMUM OPERATING SPEED LIMITS (VMO/MMO)

-WITH AUTOPILOT DISENGAGED:

BELOW 22500 FT - 315 KTS CAS ABOVE 22500 FT - 0.710 M

- WITH AUTOPILOT ENGAGED:

BELOW 26000 FT - 315 KTS CAS ABOVE 26000 FT - 0.765 M

2. Mask the existing VMO/MMO speed limitation on LH Console Placard.

PART B: RIVET INSTALLATION

- 1. Defuel aircraft in accordance with Maintenance Practices, Para. 2, Chapter 12-10-01, 1124 Maintenance Manual.
- 2. Remove access plates from lower wing skin to gain access to fore and aft sides of front spar, between wing stations Xw-33 and Xw-47.5, left and right.

INSTRUCTIONS (CONT'D)

- 3. Refer to Figure 1 for rivet locations and remove existing sealant where additional rivets will be installed.
- 4. Install the additional MS20470AD6-8 rivets per Figure 1, left and right sides (27 places each wing).
- 5. Remove all metallic chips and filings from reworked areas and apply a brush coat of PR1431 Type 1 sealant and PR1005 Buna compound to reworked areas, (Refer to Chapter 28-00-00, General Maintenance Practices for sealant application techniques).
- 6. Reinstall access plates that were removed to gain access.
- 7. Refuel aircraft in accordance with Refueling Procedures, Chapter 12-10-01 and return aircraft to service.
- 8. Remove Placard, if installed per Part "A" and uncover LH Console operating speed limits Placard.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
54	MS20470AD6-8	Rivet
AR	PR1431 Type 1	Sealant
AR	PR1005 Buna	Anti-corrosive solution
1	(TBD)	Placard

The required parts may be obtained from local sources.

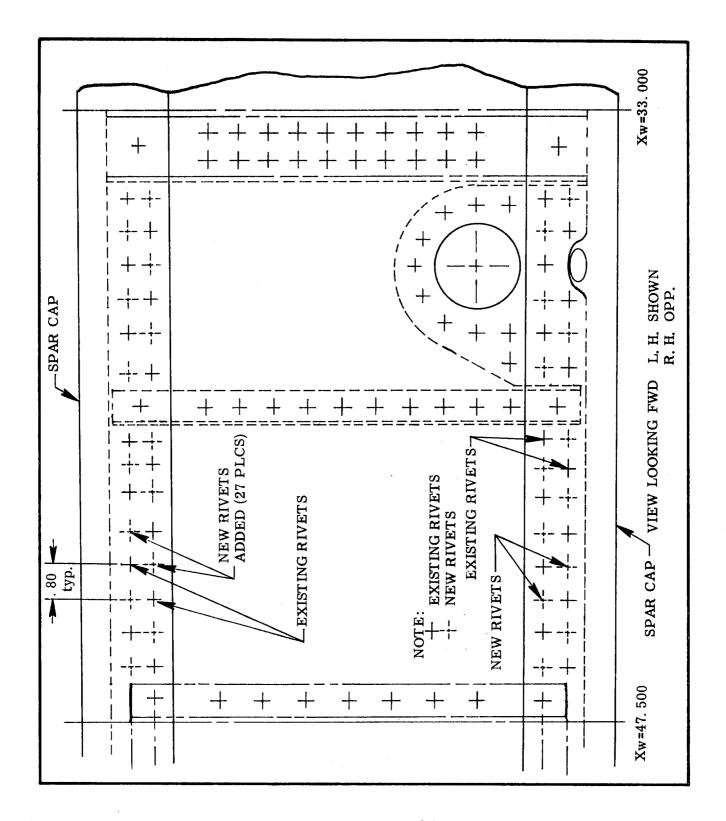
WEIGHT AND BALANCE: N. A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-17A, dated January 8, 1980, entitled "Installation of Additional Rivets in 25 Percent Wing Spar", accomplished (Date).

NOTE

OPERATORS WHO HAVE COMPLIED WITH SERVICE BULLETIN NO. WW-24-17, DATED DECEMBER 3, 1979, MEET ALL THE REQUIREMENTS OF SERVICE BULLETIN NO. WW-24-17A.



RIVET INSTALLATION-25% (FRONT) SPAR

FIGURE 1.

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-18 Revision No. 1 DATE: MARCH 26, 1980

SUBJECT: INSTALLATION OF BOLTS IN FLOOR, NEAR FUS. STA. 269

REVISED APPROVAL:

ISRAEL CAA APPROVED

REASON FOR REVISION:

AMEND APPROVAL AUTHORITY



BEN GURION AIRPORT, ISRAEL

1124-53-02 Page 1 of 1



SERVICE BULLI	ETIN NO. $WW-24-18$	DATE: FEBRUARY 12,1980
EFFECTIVITY:	MODEL 1124 S/N 240 THRU 260, 262 THRU	264 AND 266
SUBJECT:	INSTALLATION OF BOLTS IN FLOOR, NEA	AR FUS. STA. 269
COMPLIANCE:	AT NEXT 150 HOUR INSPECTION	
APPROVAL:	I A I ENGINEERING	
PURPOSE:	PROVIDE INSTRUCTIONS FOR INSTALLAT BOLTS	ION OF THE REQUIRED

INSTRUCTIONS:

- 1. Turn off electrical power and prepare aircraft for maintenance.
- 2. Remove furnishings and equipment as required to gain access to cabin floor in the lavatory compartment.
- 3. Check and determine if bolts are installed in floor frames per Figure 1. If bolts are installed no further action is required, if bolts are not installed continue with Step 4.
- 4. Remove cabin step and floor panels as required to facilitate installation of bolts.
- 5. Using Instructions and Template contained in Kit, locate and drill No. 40 pilot holes and enlarge using a No. 12 drill.
- 6. Install additional NAS 1217-3-5 bolts, AN 960-10L washers and MS 20365-1032 nuts per Figure 1, at Stations X-9L and X-9R.
- 7. Remove existing AN 173-6A bolt at Stations X-9L and X-9R and replace with NAS 1217-3-5 bolts.
- 8. Reinstall equipment and furnishings removed to gain access and return aircraft to service.

SUPPLY DATA:

QTY		PART NUMBER	DESCRIPTION
6	· · ·	NAS1217-3-5	Bolt
4		MS20365-1032	Nut
4		AN960-10L	Washer
4	ŕ	AN960D10	Washer
-			1194-53-

1124-53-02 Page 1 of 3

SUPPLY DATA (CONT'D)

Kit will contain Template and Instructions for use.

The required parts may be obtained at no charge as Kit No. S/B WW-24-18, from:

ATLANTIC AVIATION SUPPLY CORP. P. O. BOX 15000 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19850

Aircraft S/N and shipping instructions must be furnished when requesting parts.

WEIGHT AND BALANCE: N. A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent records as follows: Service Bulletin No. WW-24-18, dated February 12,1980, entitled "Installation of Bolts in Floor near Fus. Sta. 269", accomplished (Date)

1124-53-02 Page 2 of 3

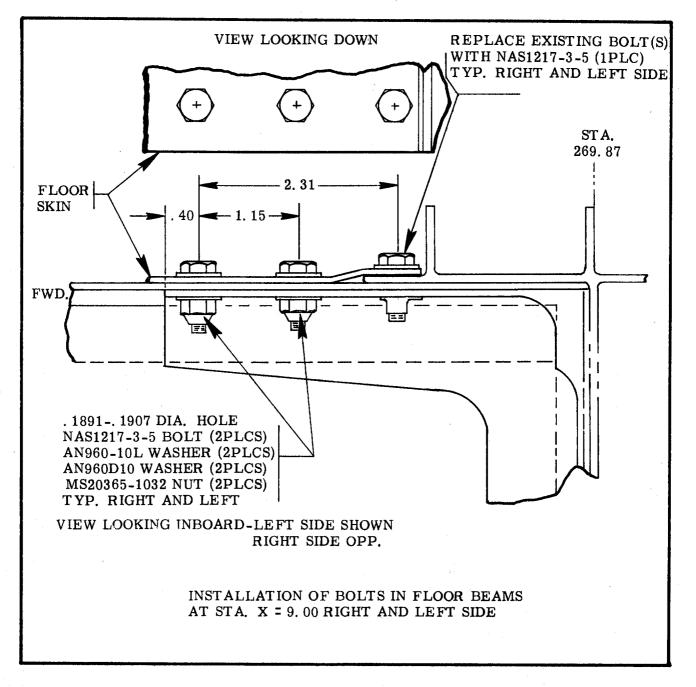


FIGURE 1.





DATE: MAY 15, 1980

EFFECTIVITY: 1124 WESTWIND S/N 240 THRU 275

SUBJECT: INSPECTION OF AILERON CONTROL PULLEY P/N 3533032-1

COMPLIANCE: AT NEXT 150 HOUR INSPECTION

APPROVAL: ISRAEL CAA APPROVED

PURPOSE: TO DETERMINE IF CABLE IS CHAFING THE LH AND RH PULLEYS, LOCATED BELOW CABIN FLOOR AFT OF FUS. STA. 44.50

INSTRUCTIONS:

- 1. Remove crew seats and lift carpet from around control columns.
- 2. Open and lift flexible boot from base of control column to provide view of pulleys to be inspected (See Figure 1).
- 3. Using a flashlight and looking through opening forward of control column, inspect LH and RH pulleys for evidence of chafing by control cable (use shop air to clean pulley groove of lint or other foreign matter).

NOTE: WHEN PERFORMING THIS INSPECTION, ROTATE AILERON CONTROL THROUGHOUT FULL TRAVEL RANGE FOR COMPLETE INSPECTION OF PULLEY.

- 4. If chafing is not evident, reinstall equipment and return aircraft to service.
- 5. If pulley(s) show evidence of chafing, proceed as follows to replace pulley(s), Refer to Figure 1.
 - A. Disconnect and remove relay boxes, located below crew seats.
 - B. Remove floor panels, located between seat rails aft of control columns.
 - NOTE: THE MOST EFFICIENT METHOD OF REPLACING PULLEY(S) IS DEPICTED IN A 5 STEP SEQUENCE ON FIGURE 1. THIS METH-OD WILL NOT CHANGE EXISTING CABLE TENSION OR CONTROL SYSTEM RIGGING. REPEAT STEPS 1, 3, 4 AND 5 TO REPLACE OPPOSITE PULLEY.
 - C. Install new improved pulley(s) P/N 3 533032-501, as required.



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INSTRUCTIONS (CONT'D)

- D. Reinstall control column(s), pulley(s) and push-pull rods in reverse order.
- 6. Operate aileron control several times from stop to stop and inspect new pulley(s) for evidence of chafing by control cable.
- 7. If chafing is evident, contact your IAI International Technical Representative for disposition.
- 8. If there is no evidence of chafing, reinstall equipment removed for access and return aircraft to service.

SUPPLY DATA:

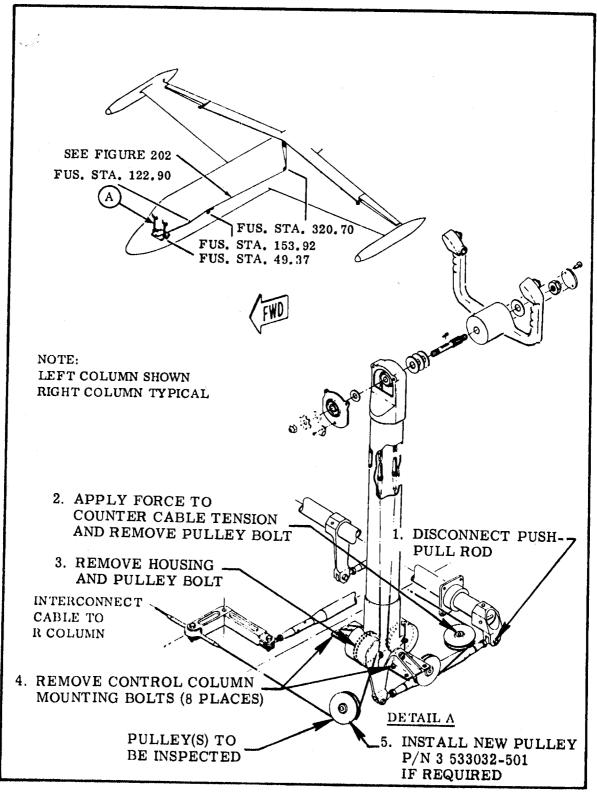
New pulley P/N 533032-501 will be provided on an exchange basis for pulley P/N 533032-1, as required.

Contact Atlantic Aviation Supply Corp. for new pulley(s) and provide aircraft S/N.

WEIGHT AND BALANCE: N. A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-19 dated May 15, 1980, entitled "Inspection of Aileron Control Pulley P/N 3533032-1" accomplished _____ (Date)



AILERON CONTROL SYSTEM

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-20 Revision No. 1

NOVEMBER 21, 1980

SUBJECT:

C: PART II - REROUTING OF ELECTRICAL WIRING BEHIND HOT LIQUID CONTAINER COMPARTMENTS OF GALLEY P/N CMA 521288

APPROVAL: ISRAEL CAA

REASON FOR
REVISION:TO REQUIRE INSTALLATION OF CABLE SUPPORT CLAMP
ON WIRE BUNDLE PASSING THROUGH FUSELAGE FRAME

INSTRUCTIONS:

- NOTE: If cable support clamp was installed on wire bundle passing through frame, during initial compliance with Service Bulletin, in accordance with FAA Advisory Circular 43.13-1A, Chapter 11 no further action is required.
- 1. Wires may be routed through existing hole in Frame at B. L. -16.50 and W. L. -66.50 if space is available (Ref. Figure 1).
- 2. Additional hole for wire passage may be drilled in Frame as depicted in Figure 1, if necessary to provide suitable passage of wire bundle through Frame.
- 3. Rerouted wire bundle passing through Frame must be supported with cable clamp as depicted in Figure 2.

SUPPLY DATA:

Contact Atlantic Aviation Supply for 1 ea. 813750-7 Angle, which will be provided at no charge. Attaching hardware may be obtained from local source.

1124-24-03 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL





DATE: SEPTEMBER 19, 1980

EFFECTIVITY: WESTWIND SERIES S/N 239 THRU 298 EXCEPT 241,252,257,261,264, 265,290,294,295 AND 297

SUBJECT: PART I - INSPECTION OF ELECTRICAL WIRES FOR CHAFING AGAINST UPPER HOT LIQUID CONTAINER IN GALLEY

> PART II - REROUTING OF ELECTRICAL WIRING BEHIND HOT LIQUID CONTAINER COMPARTMENTS OF GALLEY P/N CMA 521288

COMPLIANCE: PART I - WITHIN THE NEXT 10 HOURS TIME IN SERVICE

PART II - TO BE ACCOMPLISHED AS SOON AS PRACTICABLE BUT NO LATER THAN THE NEXT PERIODIC INSPECTION

APPROVAL: ISRAEL CAA

REASON: TO DETECT AND PREVENT CHAFING OF ELECTRICAL WIRING BE-HIND GALLEY (REF. FAA AD NO. 80-19-15)

INSTRUCTIONS:

PART I - INSPECTION

- 1. Remove upper hot liquid container in galley aft of Fus. Sta. 112, LH side.
- 2. Inspect electrical wire bundles located behind upper corner of container for evidence of chafing marks or damaged insulation.
- 3. If chafing is evident or damaged insulation is discovered, proceed to Part II of these Instructions. If chafing is not discovered, the aircraft may be continued in service at Operators discretion, provided the upper container is removed, loose electrical wiring is secured and a Placard is installed prohibiting the installation and use of the container until the proper routing and protection of electrical wiring is accomplished in accordance with Part II of these Instructions.

PART II - REROUTING OF ELECTRICAL WIRING

- 1. Remove galley in accordance with Chapter 25-30-00, 1124 Maintenance Manual, and remove upholstery panel above cabin door.
- 2. Disconnect the following wires from terminal board "AC", 1P15A6, 1P1B10, 1P2B10 and 1P3B10, (Ref. Sheet 6.20, Chapter 91, 1124 Wiring Manual).

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INSTRUCTIONS (CONT'D)

- 3. Reroute wires and install MS21919DG6 support clamp per Figure 1, and reconnect wires to terminal board "AC".
- 4. Replace or repair any wiring damaged by chafing, as determined by inspection per Part I of these Instructions.
- 5. Inspect static reference tubing located behind galley for evidence of chafing and replace and/or reroute tubing if required.
- 6. While galley is removed inspect all additional wiring behind galley at lower levels for proper routing and clearance from chafing. Reroute and secure as necessary to meet the requirements of FAA Advisory Circular No. 43-13-1A, Acceptable Methods, Techniques, and Practices Aircraft Inspection and Repair, Chapter 11.
- 7. Reroute and install protective covering and support clamps on additional wire bundles per Figure 2.
- 8. Reinstall galley and hot liquid containers. Inspect clearances between containers and aircraft structure and wiring for a minimum of 1/4 inch clearance from any surface.
- 9. Rework galley hot liquid container installation per Figure 3, if required to achieve necessary clearance between container and structure or wiring.
- 10. Reinstall any equipment or fixtures removed to gain access and return aircraft to service.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION	
1	5 723633-99	Block	
1	MS21919DG6	Clamp	
2	MS24694-S72	Screw	
2	MS20364-1032	Nut	
2	AN960-10L	Washer	
1	CMA521288-101R	Spacer	
1	CMA521288-469	Bracket	
1	MS25281-R9	Clamp	
1	MS27039-0805	Screw	
1	MS21042-08	Nut	
*4	MS3367-5	Tie	
*AR	-	Leather	

Parts marked (*) may be procured from local source.

The required parts may be obtained as Kit No. S/B WW-24-20 from:

ATLANTIC AVIATION SUPPLY CORP. P. O. BOX 15000 GREATER WILMINGTON AIRPORT WILMINGTON, DE 19850

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N. A. WEIGHT AND BALANCE:

AIRCRAFT RECORDS:

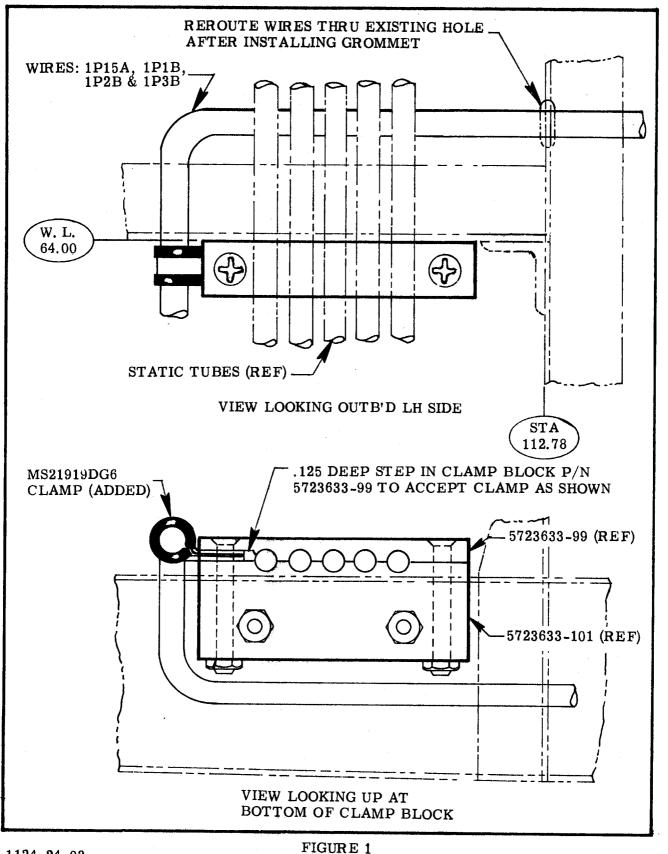
Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-20, dated September 19, 1980, entitled "Inspection and Rerouting of Electrical Wiring behind Galley" accomplished____

(Date)

NOTE:

Compliance with the requirements of this Service Bulletin satisfies the requirements of Airworthiness Directive No. 80-19-15. Therefore, compliance with A. D. may also be entered in aircraft Log Book at this time.

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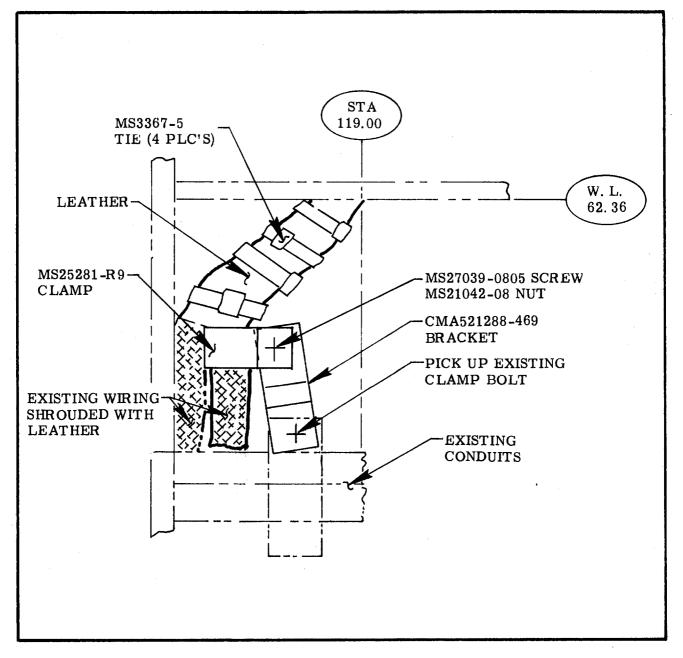


FIGURE 2

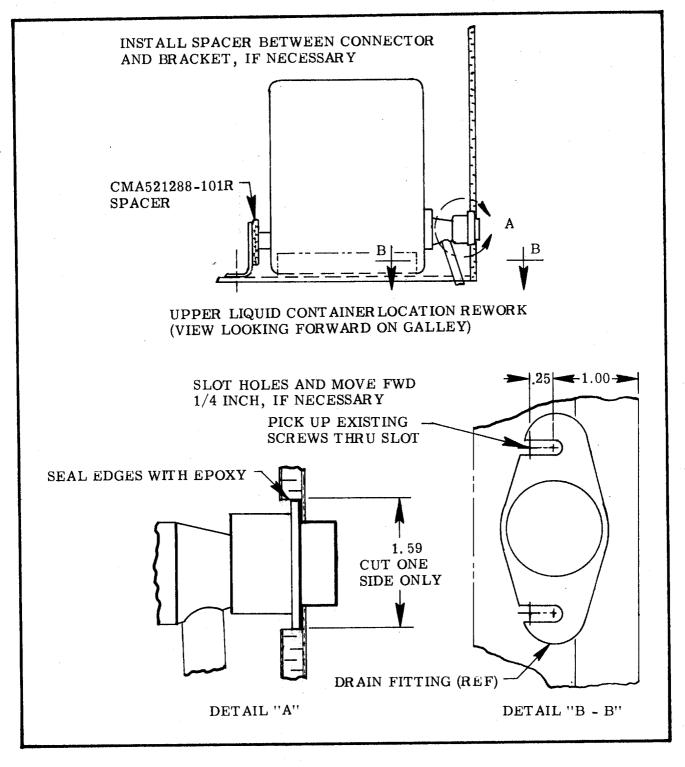


FIGURE 3

1124-24-03 Page 6 of 6





DATE: APRIL 30, 1981

EFFECTIVITY: 1124/1124A WESTWIND SERIAL NO. 152, 154, 174, 181, 187 THRU 309, 311 THRU 316, 318, 320 THRU 324

SUBJECT: ONE TIME INSPECTION OF FORWARD ENGINE MOUNT ATTACHING BOLTS FOR SUFFICIENT TORQUE

COMPLIANCE: WITHIN THE NEXT 150 FLIGHT HOURS UNLESS ALREADY ACCOMPLISHED

- APPROVAL: ISRAEL CAA
- PURPOSE:TO DETERMINE IF MOUNT BOLTS HAVE BEENADEQUATELY TORQUED DOWN ON PRELOAD WASHER

INSTRUCTIONS:

1.

Gain access to nuts attaching F10A-5-B10555 forward engine mount, located at engine station 200.00, see Figure 1.

- A. Remove access panels on underside of pylon, forward and aft of engine mount assembly.
- B. Disconnect 5553510 Teleflex engine throttle control quick-disconnect and remove retainer nut securing quick-disconnect to fireshield.
- C. Disconnect 5643505 fire extinguisher line. Remove retaining nuts securing fire extinguisher line to fireshield.
- D. Remove bolts securing fireshield to pylon and remove fireshield section to gain access to pylon interior and engine mount hardware.
- 2. Refer to Figure 2 of these instructions for details of preload indicating (PLI) washer installation.

INTERNATIONAL Israel Aircraft Industries International, Inc. SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD BEN GURION AIRPORT, ISRAEL 1124-71-03 Page 1 of 5

INSTRUCTIONS CONT'D

- 3. Test outer PLI washer for rotation by inserting a scribe (or equivalent) in perimeter holes. Repeat for each attaching bolt, 8 places on each fwd engine mount.
- 4. If PLI washer will not rotate, attaching bolt has been adequately torqued.
- 5. If PLI washer rotates, proceed as follows:
 - A. Remove nut and PLI washer assembly.
 - B. Inspect inner PLI washer to determine if it has or has not been deformed (compressed).
- NOTE: IF INNER PLI WASHER HAS BEEN DEFORMED REPLACE WASHER ASSY. USED PLI WASHERS MUST BE DESTROYED TO PREVENT RE-USE.
 - C. Install new PLI washer assembly as required and assemble per Figure 2.
- 6. Torque attaching bolt as follows:
- NOTE: DO NOT REMOVE WAX COATING FROM INNER PLI WASHER.
 - A. Tighten nut snug against PLI washer set (See Detail "B", Figure 2).
 - B. Tighten nut in gradual (1/8 turn maximum) increments. Test outer PLI washer for rotation by inserting a scribe (or equivalent) in perimeter holes. When the outer washer can no longer be moved the desired preload torque has been obtained. (See Details "C" and "D", Figure 2).
- CAUTION: DO NOT OVER TIGHTEN. IF NUT IS TIGHTENED MORE THAN 1/8 TURN BEYOND POINT WHERE OUTER PLI WASHER BECOMES IMMOVEABLE. THE ENTIRE BOLT, NUT AND WASHER ASSEMBLY MUST BE REPLACED.
- 7. Apply tamper -proof sealant, EC-1252, White, to each torqued fastener installation:

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INSTRUCTIONS CONT'D

- A. Clean only those parts to receive sealant with methyl ethyl ketone (MEK).
- B. Apply stripe of sealant across end of exposed bolt end, down the nut and across the PLI washers so that any turning action will break the stripe seal.
- 8. Replace fireshielding inside pylon. Connect fire extinguisher fitting and then reconnect engine throttle controls. Replace access panels.
- 9. Repeat for other engine forward mount.

SUPPLY DATA:

\overline{QTY}	PART NUMBER	DESCRIPTION
A/R	PLI 7-12.4	Pre-Load Indicating Washers
A/R	PLI 9-21.6	Pre-Load Indicating Washers

The above items maybe obtained from:

Atlantic Aviation Corporation P.O. Box 1709 Greater Wilmington Airport Wilmington, DE 19899

Aircraft Serial Number and shipping instructions must be included when requesting parts.

EC-1252 Tamper-proof sealant, white, manufactured by the 3M Company, may be obtained from local sources.

MANHOURS: 0.5 HOUR ARE REQUIRED TO ACCOMPLISH THIS INSPEC-TION AFTER ACCESS TO AFFECTED PART IS OBTAINED.

> 1124-71-03 Page 3 of 5

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-21, dated April 30, 1981, entitled, "One Time Inspection of Forward Engine Mount Attaching Bolts for Sufficient Torque", accomplished (DATE)

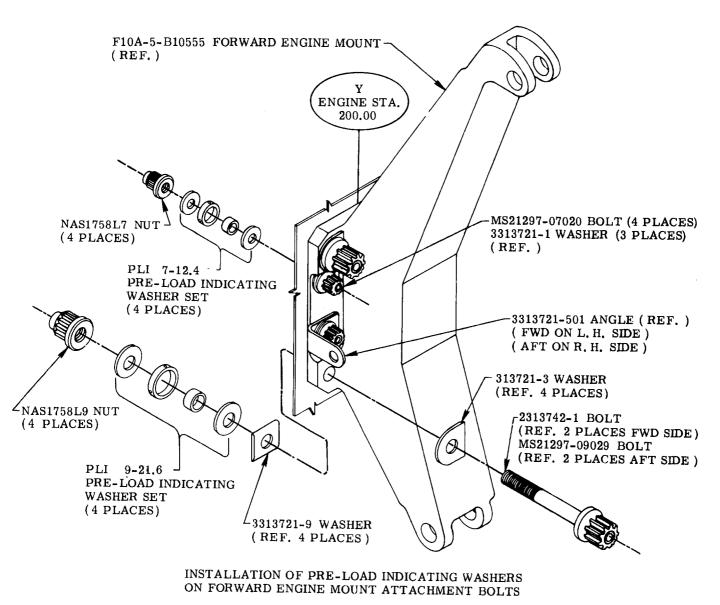


FIGURE 1

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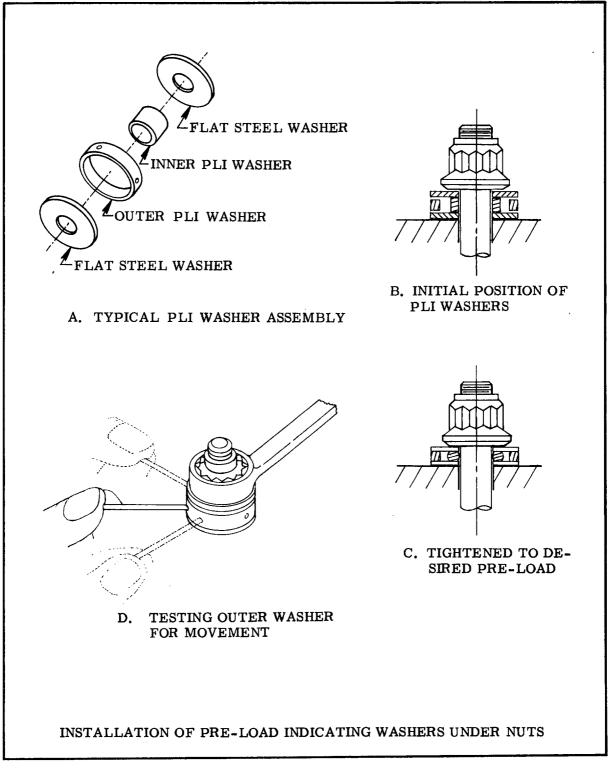


FIGURE 2

1124-71-03 Page 5 of 5





DATE: SEPTEMBER 18, 1981

EFFECTIVITY: MODEL 1124/1124A WESTWIND SERIES S/N 152, 156, 174, 181, 185, 186, 187 THRU 335

SUBJECT: INSPECTION OF PILOT AND CO-PILOT SEAT ATTACHMENT

COMPLIANCE: AT NEXT 150 HOUR INSPECTION

APPROVAL: ISRAEL CAA

REASON: A CHECK OF SEVERAL AIRPLANES REVEALED THE POSSI-BILITY OF INSUFFICIENT SEAT SUPPORT ATTACH ANGLE ENGAGEMENT. THIS SERVICE BULLETIN ESTABLISHES MAXIMUM CLEARANCE BETWEEN ANGLES.

INSTRUCTIONS:

NOTE

THE FOLLOWING PROCEDURES APPLY TO ALL ATTACH POINTS ON BOTH PILOT AND CO-PILOT SEATS. REFER TO FIGURE 1.

1. Remove both crew seats from their tracks per Chapter 25-10-01 of the 1124/ 1124A Maintenance Manual.

NOTE

IF YOU WISH TO REMOVE SEATS FROM AIRPLANE THE CABIN-FLIGHT COMPARTMENT PARTITION MUST ALSO BE REMOVED.

- 2. Tighten seat support attach angle bolts.
- 3. Measure gap between each set of seat support attach angles. Gap must not exceed .33 inches.
- 4. If gap exceeds . 33 inch remove shims P/N G.I. 1022.1.0.7 as required to reduce gap.



1124-25-01 Page 1 of 3

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

INSTRUCTIONS CONT'D

5. Reinstall both crew seats and check that each seat moves freely on its tracks through it's full travel.

SUPPLY DATA:

QTY PART NUMBER DESCRIPTION A/R 1022.1.0.7 Shim

The above parts may be obtained, at no charge from Atlantic Aviation Supply Corp.

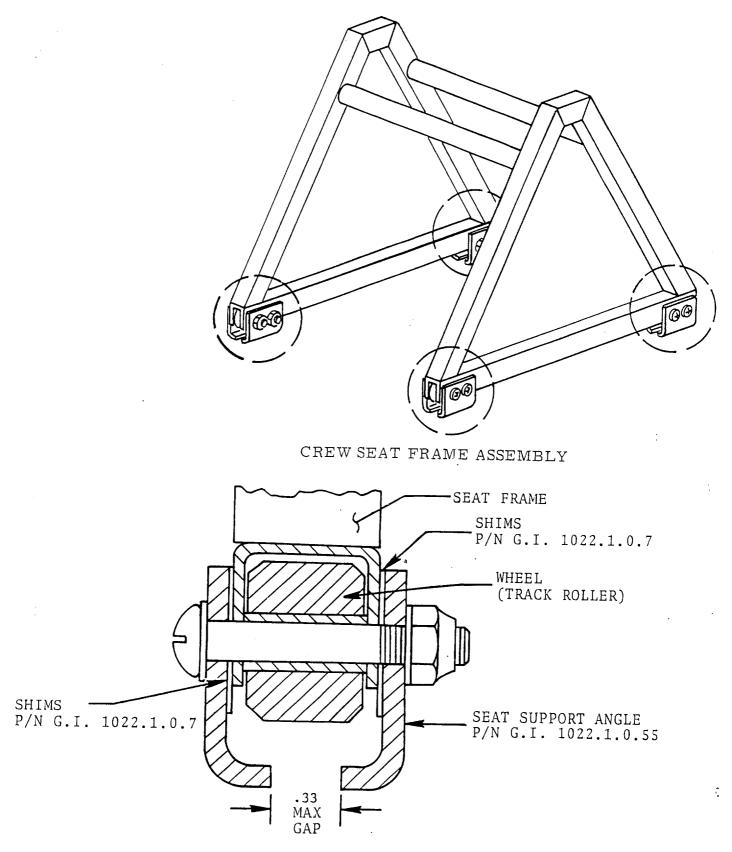
WEIGHT AND BALANCE :

N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in permanent aircraft maintenance records as follows: Service Bulletin No. WW-24-22, dated September 18, 1981, entitled "Inspection of Pilot and Co-Pilot Seat Attachment" accomplished DATE.

1124-25-01 Page 2 of 3



SEAT ATTACHMENT DETAIL

FIGURE 1 SEAT ATTACHMENT DIMENSION CHECK 1124-25-01

Sep 18/81

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DATE: MARCH 11, 1981

EFFECTIVITY: 1124/1124A WESTWIND SERIES S/N 152, 154, 174, 181, 185, 187 THRU 315, EXCEPT 294, 296, 297, 309, 310 AND 314

SUBJECT: REPLACEMENT OF AUDIO LOAD RESISTOR, R-61

COMPLIANCE: PART I - UPON RECEIPT OF THIS BULLETIN, (INSTRUCTIONS OUTLINED IN PART I, WERE PREVIOUSLY TRANSMITTED BY TELEX/MAILGRAM ON 2-26-81)

PART II - PRIOR TO OR AT NEXT 150 HOUR INSPECTION

APPROVAL: ISRAEL CAA APPROVED

PURPOSE:TO AVOID OVERHEATING OF EXISTING R-61 RESISTORWITH THE USE OF HIGH OUTPUT MICROPHONES

INSTRUCTIONS:

PART I - INSTALLATION OF TEMPORARY PLACARDS

1. Install adjacent to each Hot-Mic/Intercom switches the following Temporary Warning Placards:

WARNING

Hot-Mic switches must be either both "OFF" or both "ON" Use of "Intercom" position is prohibited.

- 2. Install adjacent to Mic Jack in aft baggage compartment the following Temporary Placard: WARNING-Use of this Mic-Jack is prohibited.
- 3. All Temporary Placards may be removed after compliance with Part II of this Service Bulletin.

1124-23-01 Page 1 of 5

INSTRUCTIONS (CONT'D)

PART II - REPLACEMENT OF R-61 RESISTOR

NOTE: Refer to Figure 1 for all S/N's prior to 240.

- 1. Remove furnishings as required behind divan to gain access to Terminal Board T-13, upon which Resistor R-61 is located.
- 2. Locate RH-25 Resistor for installation Per Figure 1, and drill mounting holes.
- 3. Install the RH-25 Resistor after applying Alumina Filler Silicone grease or equivalent between the mating surfaces.
- 4. Remove the existing R-61 Resistor from T-13, Pins 17 18, refer to Chapter 23-50-03 Audio Distribution Wiring Diagram in the 1124/1124A Westwind Wiring Manual. Wire in RH-25 Resistor using 22 gage wire. Route wires and secure as necessary to meet the requirements of FAA Advisory Circular 43-13-1A.
- 5. Reinstall furnishings removed to gain access.

NOTE: Refer to Figure 2 for S/N 240 thru 315

- 6. Remove interior-outboard wall from coat closet to gain access to Terminal Board T-13.
- 7. Fabricate the 863548-ME3 Bracket Per Figure 2.
- 8. Locate and drill mounting bracket holes in aircraft structure Per Figure 2.
- 9. Apply a coating of Alumina Filler Silicone grease or equivalent to Bracket, prior to installation of Bracket.
- 10. Install the RH-25 Resistor on bracket after applying Silicone grease between the mating surfaces.
- 11. Remove the existing R-61 Resistor from T-13, Pins 16 18 or Pins 17 - 18, refer to Chapter 23-50-03 Audio Distribution Wiring Diagram in the 1124/1124A Westwind Wiring Manual. Wire in RH-25 Resistor using 22 gage wire. Route wires and secure as necessary to meet the requirements of FAA Advisory Circular 43-13-1A.

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INSTRUCTIONS (CONT'D)

12. Reinstall equipment removed to gain access.

SUPPLY DATA:

QTY	PART NUMBER	DESCRIPTION
1	RH-25 (22 Ohm.)	Resistor (Dale)
**1	863548-ME3	Bracket
*2	MS35206-213	Screw
*2	MS21042-04	Nut
*2	AN960PD4	Washer
*2	NAS1738B4	Rivet
*As Req'd	22 Gage	Wire
*As Req'd	Alumina Filler	Dow Corning DC 4
	Silcone Grease	or Penetrox "A"
** Bracket to	be fabricated Locally.	

* Procure from Local source.

The RH-25 Resistor may be ordered as Kit No. S/B WW-24-23 from: Atlantic Aviation Supply Corp., at "No Charge".

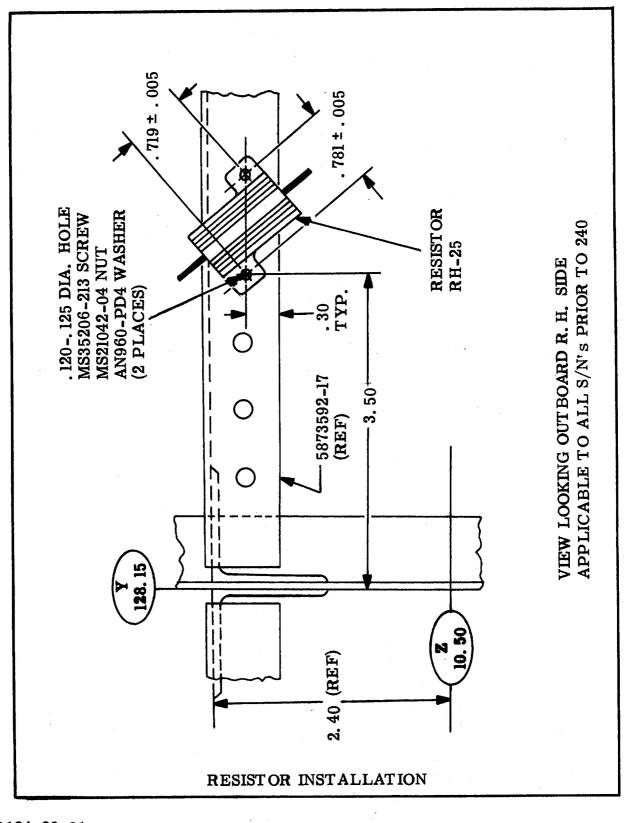
WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS:

Make an appropriate entry in aircraft permanent maintenance records as follows: Service Bulletin No. WW-24-23, dated March 11, 1981, entitled "Replacement of Audio Load Resistor, R-61" accomplished

(DATE)

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FIGURE 1

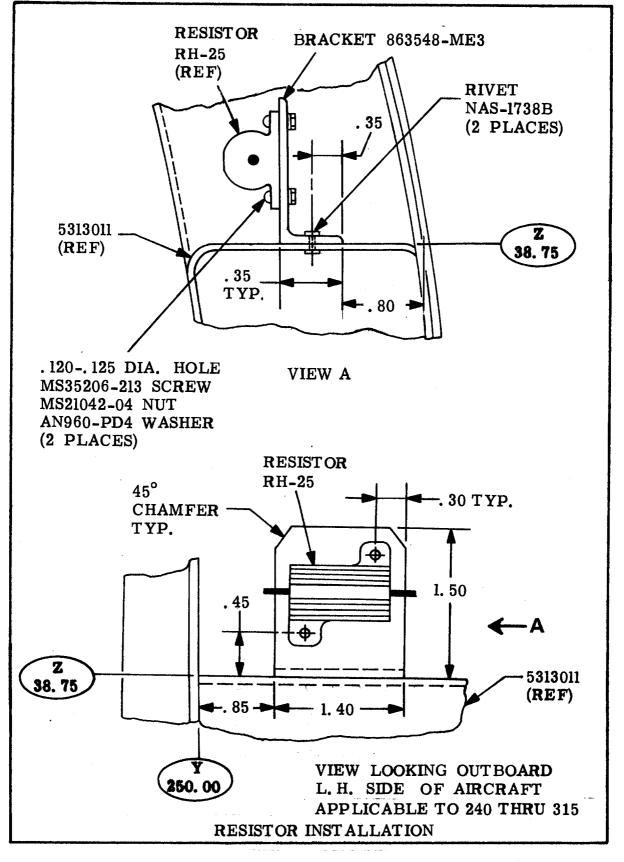


FIGURE 2

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-24 Revision No. 2

JULY 30, 1982

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SUBJECT: REWORK OF BALLAST/JACK ADAPTER MOUNTING.

REASON: TO ALLOW USE OF SHORTER BOLT IN PART A.

INSTRUCTIONS:

Change bolt part number from AN3-7A to AN3-4A in the following locations:

- 1) Step 6
- 2) Supply Data for Part A
- 3) Figure 2

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-24 Revision No. 1

DATE: APRIL 1, 1982

SUBJECT: REWORK OF BALLAST/JACK ADAPTER MOUNTING.

REASON: TO CORRECT AND CLARIFY SUPPLY DATA ON PAGE 2.

WAS

	$\mathbf{Q}\mathbf{T}\mathbf{Y}$	PART NUMBER	DESCRIPTION
Required for Part A			
	2	AN3-7A	Bolt
	2	AN960PD-316L	Washer
	2	MS21069-3	Nut Plate
	4	MS20426-3	Rivet
NOW			
	QTY	PART NUMBER	DESCRIPTION
Required for Part A			
	2	AN3-7A	Bolt
	2	AN960PD-10L	Washer
	2	MS21069-3	Nut Plate
·	* 4	MS20426AD3	Rivet

*May be purchased locally (length as required).

TERNATIONAL INC

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL Page 1 of 1





MARCH 5, 1982

SERVICE BULLETIN NO. WW-24-24

EFFECTIVITY: 1124 WESTWIND SERIES PART A-S/N'S 219, 221, 224, 228, 230, 231, 234, 236, 238, 242, 246, 248 THRU 251, 256 THRU 261, 263, 265, THRU 267 AND 270 THRU 363. PART B-ALL PART A S/N'S EXCEPT 337 THRU 363.

SUBJECT: REWORK OF BALLAST/JACK ADAPTER MOUNTING.

COMPLIANCE: AT NEXT 150 HOUR INSPECTION.

APPROVAL: ISRAEL CAA.

REASON: TO IMPROVE ATTACHMENT OF BALLAST/JACK ADAPTER MOUNTING TO AIRCRAFT STRUCTURE.

INSTRUCTIONS:

PART A

1. Remove tailcone P/N 5313034.

- 2. Locate hole on each side of angle P/N CMA71627-504-5 per Figure 1 and 2.
- 3. Drill holes, located in step 2, with #11 (.191 inch dia.) drill thru angle P/N CMA71627-504-5 and bulkhead at FS 540.
- 4. Remove bolts attaching angle P/N CMA71627-504-5 to bulkhead FS 540, angles P/N CMA71627-504-7 and -8 to tray CMA71627-504-3 and clips CMA71627-504-13. Retain hardware for reinstallation.
- 5. Install two nut plates P/N MS21069-3 to forward side of bulkhead FS 540 with rivets P/N MS20426-3.

NOTE

For all Part B affected aircraft accomplish Part B of instructions before continuing with step 6.

1124-53-03 Page 1 of 5

INSTRUCTIONS (CONT'D.)

- Reinstall all angles removed in step 4. Add two new bolts P/N AN3-7A with washers P/N AN960PD-316L, one on each side of angle P/N CMA71627-504-5.
- 7. Reinstall tailcone and return aircraft to service.

PART B

Accomplish this part on Part B affected aircraft before accomplishing steps 6 and 7 of Part A above.

- 1. Inspect all four clips P/N CMA71627-504-13 for evidence of cracks. Cracked clips must be discarded and replaced with new clips.
- 2. Drill out clip attaching rivets (16 ea.).
- 3. Enlarge holes in clips P/N CMA71627-504-13 and CMA71627-504-5 Angle with #11 (.191 inch dia.) drill and install four clips with bolts P/N AN3-4, washers P/N AN960-10L and nuts P/N MS21042-3.
- 4. Proceed with step 6 of Part A instructions.

SUPPLY DATA:

	$\mathbf{Q}\mathbf{T}\mathbf{Y}$	PART NUMBER	DESCRIPTION
Required for Part A			
	2	AN3-7A	Bolt
	2	AN960PD-316L	Washer
	2	MS21069-3	Nut Plate
	4	MS20426-3	Rivet
Required for Part B			
	16	AN3-4	Bolt
	16	MS21042-3	Nut
	16	AN960-10L	Washer
	*A/R	CMA71627-504-13	Clip

*This part may be obtained from Atlantic Aviation Supply Corp.

WEIGHT AND BALANCE: N.A.

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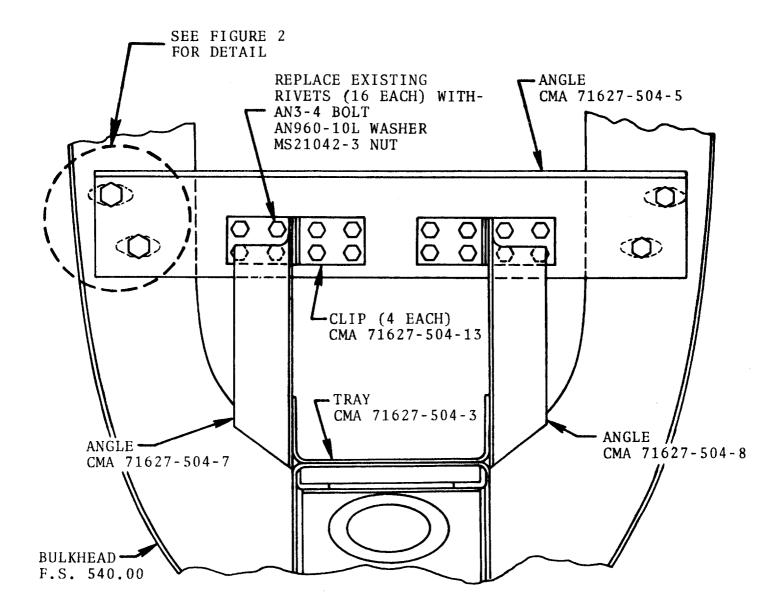
1124-53-03 Page 2 of 5

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AIRCRAFT RECORDS:

Make the following entry in the aircraft log book: Service Bulletin No. WW-24-24, dated March 1, 1982, entitled "Rework of Ballast/Jack Adapter Mounting", (Part Aonly, or Part A and B) has been accomplished this date.

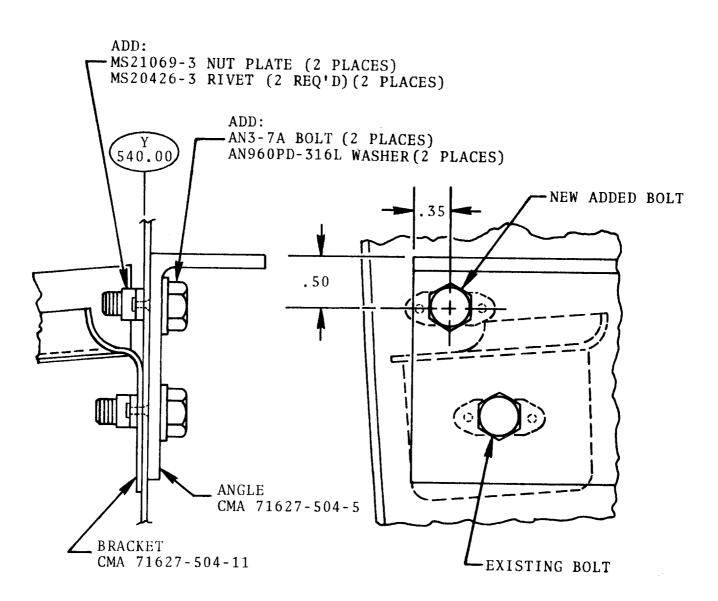
1124-53-03 Page 3 of 5



VIEW LOOKING FORWARD AT F.S. 540.00 BULKHEAD

1124-53-03 Page 4 of 5 FIGURE 1 BALLAST/JACK ADAPTER CLIP MODIFICATION

Mar 05/82





DATE: FEBRUARY 12, 1982

EFFECTIVITY: MODEL 1124 WESTWIND SERIES S/N 174, 290, 317 MODEL 1124A WESTWIND SERIES S/N 295, 299 thru 309, 315, 318, 319, 322, 324, 328, 330, 334, 335, 337 thru 346, 351* and 352*

*CTL-60 ADF CONTROL ONLY.

SUBJECT:ROCKWELL-COLLINS SERVICE BULLETIN NO. 3 FOR
CTL-20, CTL-60 AND CTL-90CONTROLS, AND SERVICE
BULLETIN NO. 4 FOR CTL-30

COMPLIANCE: WITHIN THE NEXT 50 FLIGHT HOURS OR 30 DAYS, WHICHEVER OCCURS FIRST, FROM THE EFFECTIVE DATE OF THIS SERVICE BULLETIN

APPROVAL: ISRAEL CAA APPROVED

REASON: TRANSMITTAL OF SUBJECT ROCKWELL-COLLINS SERVICE BULLETIN TO EFFECTED 1124 WESTWIND OPERATORS.

INSTRUCTIONS:

- 1. Remove the following six CTL Controls located on center instrument panel: CTL-20 COMM CONTROL (2 each)
 - CTL-30 NAV CONTROL (2 each)
 - CTL-60 ADF CONTROL CTL-90 ATL CONTROL
- 2. Inspect and/or modify affected CTL -20, -60 and 90 Units in accordance with the attached Rockwell-Collins Service Bulletin No. 3 and CTL-30 in accordance with Service Bulletin No. 4.
- 3. Reinstall CTL Controls, functional check and return aircraft to service.

1124-23-02 Page 1 of 2

SUPPLY DATA: See attached Rockwell-Collins Service Bulletin

WEIGHT AND BALANCE: N.A.

AIRCRAFT RECORDS: Standard Format

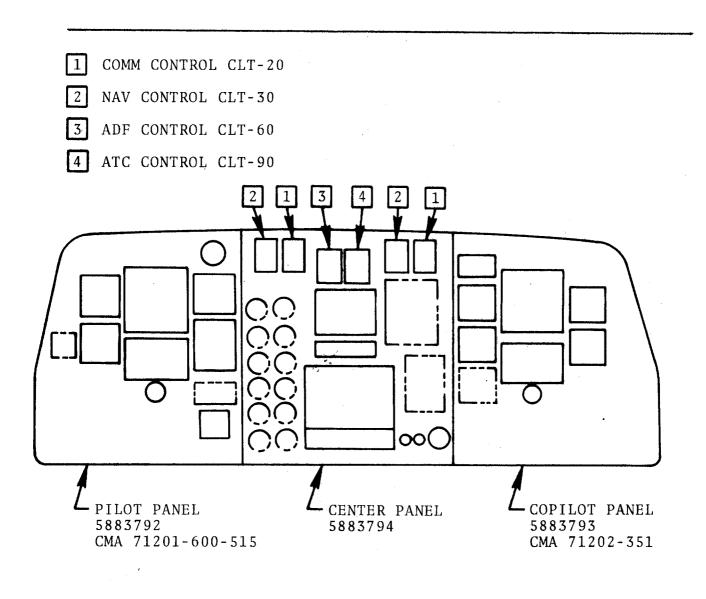


FIGURE 1 CLT-20, 30, 60 and 90 LOCATIONS

1124-23-02 Page 2 of 2 Feb./82





JUNE 15, 1982

SUBJECT: REMOVAL OF ZENER DIODES AND RESISTORS FROM AIR DATA POWER SUPPLY CIRCUITS.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND Serial Numbers 152, 154, 174, 181, 185 thru 238, 240 thru 294, 296 thru 298, 310 thru 314, 316, 317, 320, 321, 323, 235 thru 327, 329, 331 thru 333, 336, 347, 354, 357, 360, 362, 363, 366, 367, 370 thru 372, 375 and 378.

B. REASON

To avoid possible overheating of subject resistors or diodes due to inverter overvoltage protection circuit failure.

DESCRIPTION

Zener diodes and resistors installed on junction box terminal boards T-11 and T-22 for aircraft S/N's prior to 240 or T-5 and T-157 for aircraft S/N's 240 and subs are removed. The function of these elements is provided inside the inverters.

D. COMPLIANCE

It is recommended that this modification be accomplished at the next 150 hour inspection.

E. APPROVAL

The removal of zener diodes and resistors described by paragraphs 2.B. and 2.C. has been shown to comply with the applicable Federal Aviation Regulations and is Israel CAA approved.

11-24-10 Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MANPOWER

Approximately two (2) manhours will be required to accomplish the modification described in this service bulletin.

G. MATERIAL

All items required to accomplish this modification may be obtained locally.

H. SPECIAL TOOLS

None required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. PUBLICATIONS AFFECTED

1124 Wiring Manual 22-10-01 pages 1 thru 7, 10 and 11. 22-10-08 pages 1 thru 12. Mark up affected pages for the changes made on your aircraft until revised pages are issued.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Turn off battery and electric master switches and assure external power is disconnected. Disconnect aircraft batteries.
 - B. Remove zener diodes and resistors from aircraft serial numbers prior to 240 as follows:

NOTE

Reference Figures 1 and 2 Wiring Manual pages 22-10-01 (CMA07-2311-XX) and 22-1-08 (CMA07-2320-XX) for the affected aircraft.

- (1) Remove interior components on RH side of aircraft, as necessary, to gain access to T-11 and T-22 located between FUS. STA. 103.780 and FUS. STA. 139.400.
- (2) Locate terminal board T-22 and remove resistor R135
 (2.3 OHM 3W) from pins 5 and 6. Reference Figure 1.
- (3) Remove four zener diodes DI 132, DI 133, DI 134, DI 135

1124-22-01 Page 2 of 6 June 15/82

from pins 4 and 6 of T-22. Reference Figure 1.

- (4) Fabricate and install a 20AWG jumper between pins 5 and 6 of T-22.
- (5) Locate terminal board T-11 and remove resistor R18 as follows:
 - a. On S/N 152, 185 and 186 from pins 11 and 20. Reference Figure 2.
 - b. On S/N 154, 181 and 187 thru 238 from pins 11 and 17. Reference Figure 2.
 - c. On S/N 174 disconnect resistor from pin 11 (resistor is connected in line on wire number FD1B22R) and cut wire to remove resistor. Splice in 22AWG to FD1B22R and reconnect to pin 11. Reference Figure 2.
- (6) Remove zener diodes DI 30 and DI 31 from T-11 pins 11 and 12 for serial numbers 152, 154, 174, 181 and 185 thru 238.
- (7) Fabricate and install a 20AWG jumper on T-11 as follows:
 - a. On S/N 152, 185 and 186 between pins 11 and 20. Reference Figure 2.
 - b. On S/N 154, 181 and 187 thru 238 between pins 11 and 17. Reference Figure 2.
 - c. On S/N 174, jumper is not required.
- (8) Reinstall interior components removed in Step B.(1) and return aircraft to service.
- C. Remove zener diodes and resistors from aircraft serial numbers 240 and subsequent as follows:

NOTE

Reference Figures 3 and 4, Wiring Manual pages 22-10-01 (CMA07-2311-XX) and 22-10-08 (CMA07-2320-XX) for the affected aircraft.

- (1) Gain access to terminal board T-157 by removing RH interior side panel between FUS. STA. 93.78 and FUS. STA. 103.78.
- (2) Remove resistors R18 from pins 1 and 3. Remove zener diodes DI 30 and DI 31 from pins 1 and 2. Reference Figure 4.

- (3) Fabricate and install a 20AWG jumper between pins 1 and 3 of T-157.
- (4) Reinstall interior components that were removed in Step $C_{\cdot}(1)$.
- (5) Gain access to terminal board T-5 by removing outboard wall of coat closet on left side of aircraft between FUS. STA. 241.0 and FUS. STA. 250.0 (between Z 10.5 and Z 27.0).
- (6) Remove resistor R135 from pins 5 and 6 on T-5. Reference Figure 3.
- (7) Remove four zener diodes D132, D133, D134, D135 from pins 4 and 6 on T-5. Reference Figure 3.
- (8) Fabricate and install a 20AWG jumper between pins 5 and 6 on T-5.
- (9) Reinstall interior components removed in Step C.(5) and return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
*A/R	M81044-9-22-9	Wire (22AWG)
A/R	M81044-9-20-9	Wire (20AWG)
4	522731 (AMP)	Terminal
* 1	320559 (AMP)	Connector

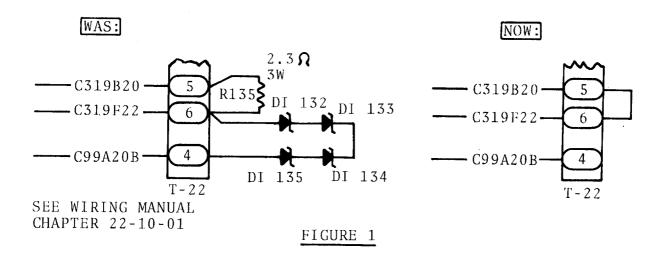
*Required for S/N 174 only.

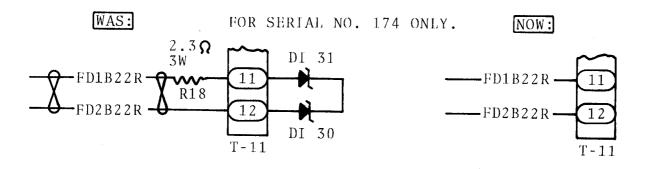
4. AIRCRAFT RECORDS

Make the following entry in the airplane log book: Service Bulletin No. WW-24-26 dated June 15, 1982, titled "Removal of Zener Diodes and Resistors From Air Data Power Supply Circuits", has been accomplished this date.

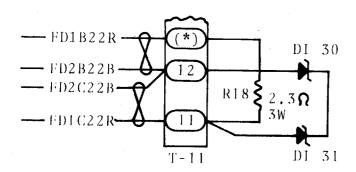
1124-22-01 Page 4 of 6

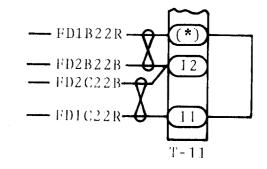
Jun 15/82





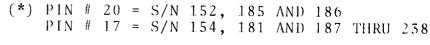
WAS:





NOW:

SEE WIRING MANUAL CHAPTER 22-10-08

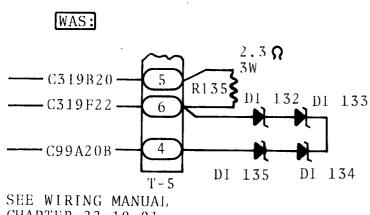


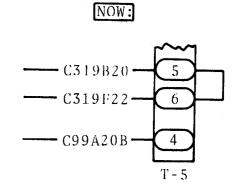


1124-22-01 Page 5 of 6

Jun 15/82

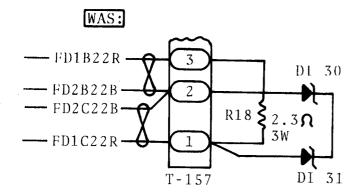
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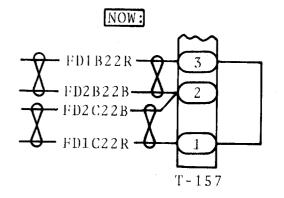




CHAPTER 22-10-01

FIGURE 3





SEE WIRING MANUAL CHAPTER 22-10-08

FIGURE 4

1124-22-01 Page 6 of 6





JULY 6, 1982

SUBJECT: GENERAL ELECTRIC DC STARTER GENERATOR MODEL 2CM504D2D LIMITATIONS AND AMMETER MARKINGS.

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND Serial Numbers 152, 154, 174, 181, 185 thru 373.

NOTE

Aircraft equipped with Lear Siegler Starter Generator P/N 23065-018-1 are not affected by this Service Bulletin.

B. REASON

It might be that some operators have implemented General Electric Service Bulletin 2CM504D2D-24-06 (Brush Kit P/N 36A228180G3 and Ball Bearing P/N 36B410756P1) titled "Use of Product-Improved Brushes and Drive End Bearing"; without reducing the DC current limitation from 275 to 260 AMPS. The reduced limitation comes to prevent overheating of starter generator brushes at high altitude.

C. DESCRIPTION

This Service Bulletin instructs inspection and proper ammeter markings and notifies correction of AFM limitation (AFC 1213).

NOTE

AFM Revision 11 for Model 1124 and 7 for Model 1124A will include these corrected limitations.

> 1124-24-04 Page 1 of 5

D. COMPLIANCE

At next 150 hour inspection.

APPROVAL Ε.

> The design content conveyed by this service bulletin as described by paragraph 2.B. has been shown to comply with the applicable FAA regulation and is Israel CAA approved.

MANPOWER F.

Approximately 1/3 manhour is required for inspection and approximately 2 manhours for marking of ammeters.

G. MATERIAL

Not applicable.

SPECIAL TOOLS Η.

None required.

WEIGHT AND BALANCE Ι.

Not applicable

ELECTRICAL LOAD DATA J.

Not applicable.

Κ. PUBLICATIONS AFFECTED

> Airplane Flight Manual 1124 Westwind Service Letter WW-2406 1124/1124A Illustrated Parts Catalog

ACCOMPLISHMENT INSTRUCTIONS 2.

- Check make of starter-generator installed. If Lear Siegler Α. P/N 23065-018-1 is installed no further action is required. Operation per AFM AFC 612.
- If G.E. starter-generator is installed check service records Β. for implementation of G.E. Service Bulletin 2CM504D2D-24-06 dated Feb. 22, 1977, Revised April 14, 1977,

1124-24-04 Page 2 of 5

ACCOMPLISHMENT INSTRUCTIONS (CONT'D.)

NOTE

In some airplanes the G.E. Service Bulletin 2CM504D2D-24-06 was factory implemented. In this case the implementation was recorded in the airplane log book. The electrical load was checked for 260 amperes, the ammeters were marked at 260 amperes and I.A.I. part number on the starter generator was changed from 4833514-1 to 4833514-1M18.

- (1) If G.E. Service Bulletin 2CM504D2D-24-06 is implemented check electrical load for compatibility with 260 AMPS per generator. Reference FAA Advisory Circular A.C. 43.13-1A, Para. 425.
- (2) If generators are compatible with Step 2.B.(1) above, assure ammeters are marked with a red line at 260 AMPS.
- (3) If generators are incompatible, revert to the original starter generators prior to Service Bulletin No. 2CM504D2D-24-06 (Brush Kit P/N. 36A228180G1 with brush assembly P/N 36B510550P1). A 275 AMP limitation is applicable, and ammeters should be marked accordingly.
- (4) If ammeter red lines do not agree with starter generator limitations, remove ammeters and remark per Figure 1.
- (5) Reidentify ammeters as follows and install:

Red line at 260 AMPS P/N 6883091-513 Red line at 275 AMPS P/N 6883091-511

C. Return aircraft to service.

NOTE

When G.E. Service Bulletin 2CM504D2D-24-06 is implemented, I.A.I. Service Letter No. WW-2406 is no longer applicable. Brush inspection intervals are extended to 150 hours.

3. MATERIAL INFORMATION

To comply with G.E. Service Bulletin 2CM504D2D-24-26 (attached) will require G.E. Brush Kit P/N 36A228180G3 and Ball Bearing P/N 36A510756P1.

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Jul 06/82

MATERIAL INFORMATION (CONT'd.)

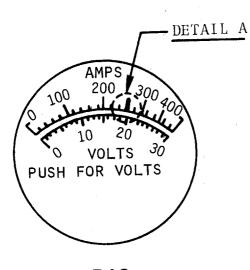
QTY	PART NUMBER	DESCRIPTION
*A/R *A/R	DL-112	Paint, Matte White
*A/R	5593 or	Paint, Matte Black Paint, Red
** A/R	202-15 or 207-13	Paint, Red (DAYGLO)

*Naz-Dar Mfg. Company, Chicago, IL **Switzel Bros., Cleveland OH

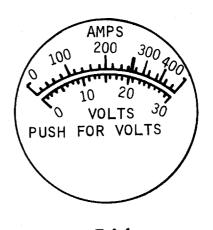
Arrangements may be made to have ammeters remarked by contacting Atlantic Aviation Supply Company at (302) 322-7408.

4. AIRCRAFT RECORDS

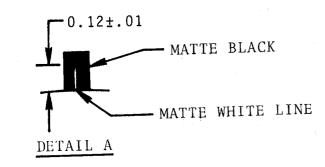
Make the following entry in the airplane log book: Service Bulletin No. WW-24-27 dated July 6, 1982, titled "General Electric DC Starter Generator Model 2CM504D2D Limitations and Ammeter Markings", has been accomplished this date.

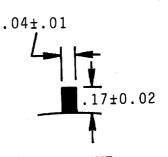


-513



-511





RED LINE

REMOVAL OF RED LINE AND REMARKING OF WHITE INDEX LINE DIMENSIONS (FOR EITHER -511 or -513 MARKING)

FIGURE 1 AMMETER MARKINGS

1124-24-04 Page 5 of 5

Jul 06/82

AIRCRAFT EQUIPMENT DIVISION GENERAL ELECTRIC COMPANY BINGHAMTON, NEW YORK

SERVICE BULLETIN

ELECTRICAL POWER MODEL 2CM504D2D STARTER-GENERATOR

USE OF PRODUCT-IMPROVED BRUSHES AND DRIVE-END BEARING

1. Planning Information.

- A. Effectivity
 - (1) This bulletin applies to the General Electric Model 2CM504D2D startergenerators (all serial numbers) used on the Westwind 1124 aircraft.
- B. Reason
 - (1) This bulletin is being issued as a product improvement notification to advise operators of the availability of brush assemblies and drive-end ball bearings having improved service life and reliability.
- C. Description
 - (1) This bulletin provides instructions for procuring and installing product-improved brush assemblies and drive-end ball bearing.
- D. Compliance
 - (1) The General Electric Company recommends that product-improved brush assemblies and drive-end ball bearing be installed at the next brush change or starter-generator overhaul period, whichever comes first.
- E. Approval
 - (1) Government approval is not required.
- F. Manpower
 - (1) No additional time is required to accomplish this bulletin if done at starter-generator overhaul.
 - (2) Approximately 4.5 manhours are required to accomplish this bulletin on an in-service starter-generator between overhaul periods.

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to the General Electric Company.

Page 1 of 4

GENERAL 🏀 ELECTRIC

ELECTRICAL POWER MODEL 2CM504D2D STARTER-GENERATOR AEROSPACE ELECTRICAL EQUIPMENT

SERVICE BULLETIN

G. Material - Cost and Availability

(1) The following parts are required to accomplish this bulletin:

GE Part No.	Nomenclature	Quantity	Unit List Price*		
36A228180G3	Brush Kit (contains four brush as- semblies, part no. 36B510550P2)	1	\$226.26		
36B510756P1	Ball Bearing (Drive-End)	1	\$217.60		

*Prices subject to change.

(2) Parts can be obtained from:

Distribution and Warehousing Operation General Electric Company 50 Fordham Road Wilmington, Massachusetts 01887

Telephone (617) 657-5400 Telėx 947406

H. Tooling

- (1) Tooling normally used at overhaul is appropriate to accomplish this bulletin.
- I. Weight and Balance

- J. References
 - Overhaul Manual ATA No. 24-31-30 (GE Publication No. GEK-34448), dated July 1, 1976.
 - (2) The requirements of this bulletin will be incorporated in the manual at the next revision.

2CM504D2D-24-06

Feb 22/77 Rev. Apr 14/77

Page 2

⁽¹⁾ No effect.

GENERAL 🍻 ELECTRIC

AEROSPACE ELECTRICAL EQUIPMENT

ELECTRICAL POWER MODEL 2CM504D2D STARTER-GENERATOR

SERVICE BULLETIN

2. Accomplishment Instructions.

- A. Refer to Figure 1, Illustrated Parts List of referenced manual for parts identification of brush assemblies (item 13) and drive-end ball bearing (item 44).
- B. Disassemble the starter-generator as described in paragraphs 1.A(1) thru (5) of the DISASSEMBLY section, page 101, of referenced manual. Discard brush assemblies, part no. 36B510550P1, and drive-end ball bearing, part no. 36A223135AAP3.
- C. Before installing product-improved brush assemblies, part no. 36B510550P2, and drive-end ball bearing, part no. 36B510756P1, the commutator shall be refinished and the armature checked for balance.
- D. Refinish the commutator as described in paragraph 2.A(1) of the REPAIR section, page 401, of referenced manual. Do not reduce commutator diameter below 2.420 inches.

CAUTION: BALANCE ARMATURE AFTER REFINISHING OR REPAIRS ARE COMPLETED.

- E. The armature shall be checked for balance after any repairs or refinishing. Check armature balance dynamically on Balancer (Type S, Size 3, Gisholt Machine Company, Madison, Wisconsin, or equivalent). Maximum allowable unbalance is 0.40 inch-gram. Correct balance by removing material from the circumference of the binding bands with a milling cutter. The cuts shall not exceed 0.020 inch deep, and 0.50 and 0.40 inch wide at the commutator-end and drive-end, respectively. The minimum dimension from the edge of the cut to the inboard side of the binding band shall be 0.24 inch. The milled cut shall have a finish 125 microinches or better. The length of any one cut shall not exceed a distance of 160 degrees around the circumference of the band.
 - CAUTION: DO NOT REMOVE MATERIAL WITH A GRINDER AS EXCESSIVE HEAT MAY DAMAGE THE INSULATION. AVOID EXCESSIVE HEAT WHEN MILLING.
 - CAUTION: AVOID TOUCHING THE COMMUTATOR WITH HANDS AS THIS WILL LEAD TO CORROSION. WRAP THE COMMUTATOR WITH CARDBOARD OR HEAVY PAPER FOR PROTECTION UNTIL ASSEMBLY.
- F. Perform all other required maintenance.
- G. Assemble the starter-generator as described in the ASSEMBLY section of referenced manual. During assembly, install drive-end bearing, part no. 36B510756P1, and brush assemblies, part no. 36B510550P2.
 - <u>NOTE</u>: Product-improved brush assembly, part no. 36B510550P2, does not have cores in the carbon material. The contract area surface is uniform in appearance.

2CM504D2D-24-06

Feb 22/77 Rev. Apr 14/77

GENERAL 🥵 ELECTRIC

ELECTRICAL POWER MODEL 2CM504D2D STARTER-GENERATOR AEROSPACE ELECTRICAL EQUIPMENT

SERVICE BULLETIN

H. Run-in brushes and test starter-generator as described in the TESTING section of referenced manual.



AIRCRAFT EQUIPMENT DIVISION

BINGHAMTON, NEW YORK 13902

2CM504D2D-24-06

Page 4 Printed in U.S.A.

Feb 22/77 Rev. Apr 14/77

SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. WW-24-28A Revision No. 1

June 14, 1985

SUBJECT: LANDING GEAR - INSPECTION OF NOSE LANDING GEAR OUTER STRUT-BODY FORGING

REASON FOR REVISION:

To change the Chapter number in paragraph 1.J. (REFERENCES) from Chapter 32-30-00 to Chapter 32-20-00.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 32-20-00, Figure 201 page 208. 1124/1124A Illustrated Parts Catalog, Chapter 32-20-00, Figure 5, page 9.

INTERNATIONAL INC.

SB 1124-32-03 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN NO. WW-24-28A (This Service Bulletin supersedes Service Bulletin NO. WW-24-28 dated July 1, 1983 in its entirety.)

SUBJECT: LANDING GEAR - INSPECTION OF NOSE LANDING GEAR OUTER STRUT-BODY FORGING

1. PLANNING INFORMATION

1

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To detect and/or relieve fatigue cracks that develop in the upper NLG outer strut-body forging.

C. COMPLIANCE

It is recommended that the inspections described in this Service Bulletin be accomplished as follows:

- On P/N ES12854-1 or struts manufactured from 7079-T6; accomplish the inspection of Areas A, B, and C at the next 300 hour inspection.
- (2) On P/N ES12854-501 or struts manufactured from 7049-T73: accomplish inspection of Areas A and B prior to the accumulation of 1500 hours.

It is recommended that the rework of Areas A and B be accomplished immediately if cracks are detected. If no cracks are evident it is advisable to accomplish the rework of Areas A and B as soon as practical.

TERNATIONAL INC

SB 1124-32-03 Page 1 of 11

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL The inspection for cracks at Areas A and B must be accomplished at 300 hour intervals until those areas are reworked in accordance with this service bulletin. Once Areas A and B have been reworked, the inspection frequency is increased to 1200 hour intervals. The inspection of Area C is a one time requirement and need not be reaccomplished.

NOTE

It is suggested that compliance with this service bulletin be coordinated with the accomplishment of Service Letter No. WW-2491.

D. DESCRIPTION

This service bulletin details the inspection and method to detect cracks at three locations on the NLG outer strutbody.

Area A - Retraction actuator lug area Area B - Retaining nut lock screw area Area C - Upper strut bearing bore shoulder

Rework instructions have been included to relieve potential crack areas and to remove any cracks that may be discovered. Cracks extending beyond rework limits will require installation of a new NLG outer strut body.

NOTES

There are two part number struts that may be installed, original P/N ES12854-1 (manufactured from 7079-T6 aluminum alloy) and replacement P/N ES12854-501 (manufactured from 7049-T73 aluminum alloy). Strut material markings will be found in raised letters on the front barrel portion of the strut body.

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SERVICE BULLETIN NO. WW-24-28A

Rework of Area A to relieve stress is not required on some replacement struts, i.e. P/N ES12854-501. Careful inspection of P/N ES12854-501 struts will be necessary to determine if rework has already been accomplished. See Figure 2 for dimensions. Reworked struts should be marked with an "A" in the area of the strut part number (strut part number should be located on the aft side of the barrel portion of the strut body). Struts which have been reworked but not marked or struts that are reworked in accordance with this service bulletin should be marked with "A"in the area of the strut part number.

Rework of Area B to relieve stress is not required on some replacement struts P/N ES12854-501. Reworked struts will not have the upper bearing retaining nut lock-screw hole threaded all the way through.

Inspection of Area C is not required on any replacement strut P/N ES12854-501 (manufactured from 7049-T73 aluminum alloy). All struts P/N ES12854-1 or struts manufactured from 7079-T6 aluminum alloy will require this inspection on a one time basis per the compliance section of this service bulletin.

> SB 1124-32-03 Page 3 of 11

February 4, 1985

E. APPROVAL

The inspection and rework procedures described in this service bulletin have been shown to comply with the applicable ICAA/FAA regulations and are ICAA approved.

F. MATERIAL

Parts may be obtained through Atlantic Aviation Supply Co. or their dealers (Some parts may also be obtained locally).

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 32-30-00, Figure 201 page 208. 1124/1124A Illustrated Parts Catalog, Chapter 32-30-00, Figure 5, page 9.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 32-20-00 Figure 5 and Revision No. 18 Parts List have been revised to comply with this service bulletin.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Turn off battery and electric master switches and assure that external power has been disconnected. Deplete hydraulic system pressure.
- B. Jack aircraft per Chapter 7 of the Maintenance Manual.
- C. Remove and disassembly nose landing gear assembly per Chapter 32 of the Maintenance Manual. Disassembly may be limited to removing outer strut-body forging from other components.

SB 1124-32-03 Page 4 of 11

- D. Clean outer strut-body and strip paint from areas to be inspected. See Figure 1.
- E. Inspect the following areas for cracks and/or corrosion using dye penetrant or fluorescent inspection method and a 10-power magnifying glass:

 - Area B The area where the upper bearing retaining nut threads meet the threaded hole for the retaining nut lock-screw.
 - Area C The upper bearing bore shoulder area. This inspection is required on P/N ES12854-1 or struts manufactured from 7079-T6 aluminum alloy only.

NOTE

The outer strut-body forging is disqualified for further flight if a crack is detected in any of the three areas unless it can be blended out in accordance with the rework limits of 2.F. of this service bulletin. Corrosion in excess of the limits of 2.F will also disqualify the outer strut-body for flight.

- F. Cracks or corrosion found in the aforementioned inspection may be blended out with a .157 inch diameter rotary file and then polished with 400 grit paper as long as they do not exceed the following limits:
 - (1) Corrosion in the bearing bore shoulder may not exceed a depth of .039 inches.
 - (2) Cracks may not exceed .118 inches in length and .039 inches in depth.
 - (3) Treat all reworked areas with Alodine 1201.
- G. Rework of Areas A and B must be accomplished to remove cracks and may also be accomplished to relieve stress that could cause cracking in the future. Reference Figure 2. (Rework will not be necessary if it has already been accomplished. Refer to NOTES in paragraph 1.C. of this bulletin).

- (1) Accomplish rework to Area A as follows:
 - a. Increase depth of cut at lug where retraction cylinder attaches by .098 inch. Root corners of cut should be a radius of .098+ .02 inch. See Figure 2.

NOTE

It may be necessary to penetrate the web portion of the strut while accomplishing the above step. Penetration into the web is allowed to a maximum depth of .062 inch.

- b. Reinspect cut area for cracks before polishing.
- c. Polish cut area with 400 grit paper.
- d. Treat bare metal with Alodine 1201.
- (2) Accomplish rework of Area B as follows:
 - a. Drill and ream lock screw hole, through outer strut body, to a diameter of .211 + .008 inch - .000

NOTE

The upper bearing retaining nut lockscrew hole may be misaligned in its boss by a maximum of .087 inch without reducing the edge distance below minimum.

- b. Rethread hole with a 1/4-28UNF bottoming tap to a depth of .177 + .02 .00 inch from outer surface. The remainder of the hole is left smooth and unthreaded.
- c. Chamfer both ends of hole (inside and outside) to a 45^o angle. Outside bevel to be .020 inches deep. Inside bevel to be .039 inches deep.

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- d. Carefully clean any burrs from hole and threads, especially at hole/thread intersection.
- e. Reinspect area for cracks.
- f. Polish hole and chamfered areas.
- g. Treat area with Alodine 1201.
- H. Repaint stripped areas of forging as follows:
 - (1) Assure that all bare areas have been treated with Alodine 1201.
 - (2) Prime areas with fluid resistant primer Cat-A-Lac No. 462-12-1A.
 - (3) Finish area with White polyurethane Cat-A-Lac top coat No. 643-3-23.
- Accomplish Service Letter No. WW-2491 before reassembling nose landing gear assembly.
- J. Reassemble NLG and install in aircraft per Chapter 32 of the Maintenance Manual.
- K. Service Nose Gear Strut per Chapter 12-10-04, page 202 of the Maintenance Manual.
- L. Accomplish landing gear retraction check per Chapter 32 of the Maintenance Manual.
- M. Remove aircraft from jacks and return to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	ES12854-501	NLG Outer Strut-Body
A/R A/R A/R	910.003.83 1201 463-12-1A	Screw Alodine Primer
	(with CA-97 catalyzer diluter)	and TL-52
A/R	643-3-23	Top Coat, White
	(with X310A catalyzer diluter)	and TL-59
A/R	ED13004-1	Plug

February 4, 1985

4. RECORD COMPLIANCE

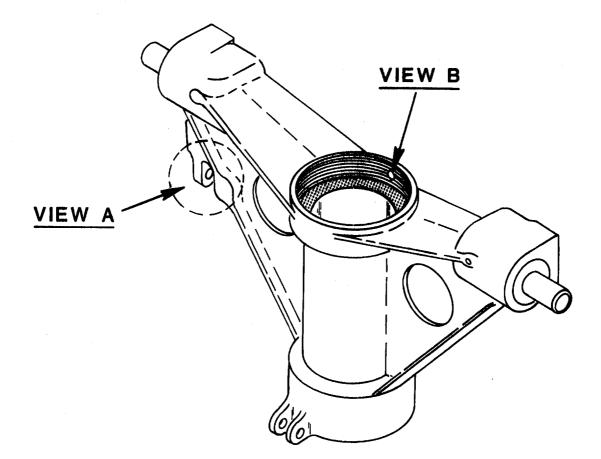
Make the following entry in the airplane log book:

Service Bulletin No. WW-24-28A, dated February 4, 1985 titled " Inspection of Nose Landing Gear Outer Strut Body Forging (Inspection Only or Inspection and Rework)" has been accomplished this date

END

February 4, 1985

SERVICE BULLETIN NO. WW-24-28A



NLG OUTER STRUT BODY P/N ES12854-1 or ES12854-501

VIEW A — INSPECTION AND REWORK (AREA A)

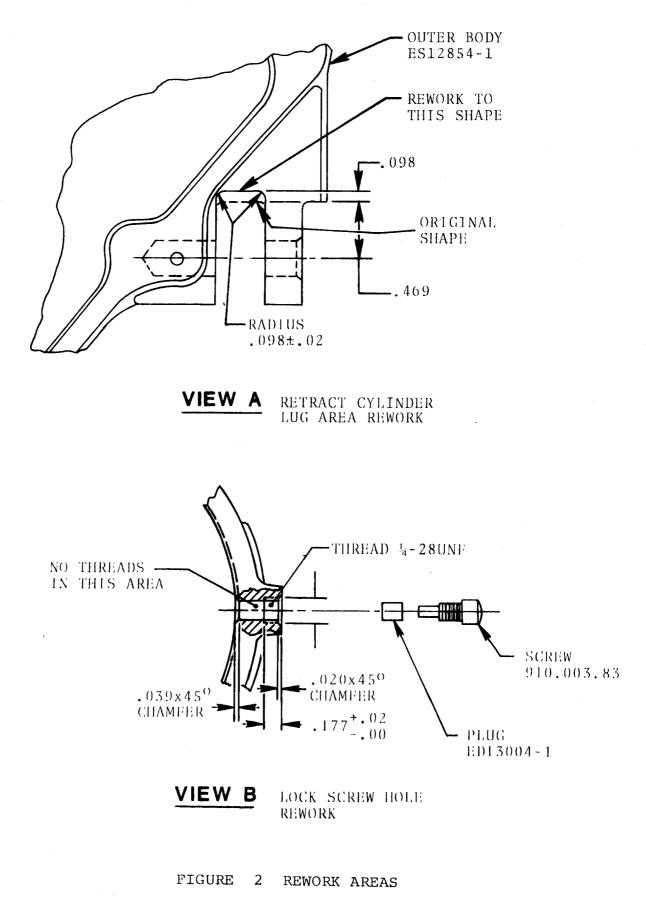
VIEW B --- INSPECTION AND REWORK (AREA B)

INSPECTION ONLY

FIGURE 1 AREAS OF INSPECTION

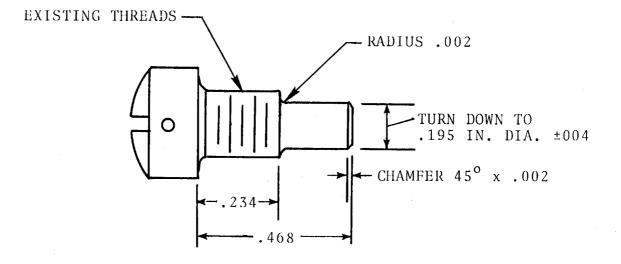
February 4, 1985

SB 1124-32-03 Page 9 of 11 SERVICE BULLETIN NO. WW-24-28A



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February 4, 1985



MAKE FROM MS35266-79 FILLISTER HEAD SCREW

CADMIUM PLATE AFTER MACHINING

FIGURE 3 REWORK OF MS35266-79 SCREW

SB 1124-32-03 Page 11 of 11

February 4, 1985



SERVICE BULLETIN NO. WW-24-29

NOVEMBER 4, 1983

SUBJECT: PREVENTION OF IMPROPER FLIGHT DIRECTOR GLIDESLOPE DISPLAY

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124A WESTWINDS prior to S/N 389 with FGC/APS-80 glideslope systems.

B. REASON

While hand flying the affected aircraft on approach the pilot could be receiving erroneous glideslope information of one degree maximum on the flight director. Accomplishment of the wiring changes described in this service bulletin will eliminate the erroneous indication.

C. DESCRIPTION

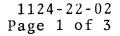
This service bulletin requires the reversing of two wires at the APP-80 (C95A24 and 2C102B24 as detailed in Step 2.B.) located in the center pedestal.

D. COMPLIANCE

It is recommended that the modification described in this service bulletin be accomplished at the next 150 hour inspection.

E. APPROVAL

The design change described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is ICAA approved.



INTERNATIONAL INC.

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

The following material may be obtained locally:

QTY	PART NUMBER	DESCRIPTION
A/R	M 81044-9-24-9	Wire
1 ea.	320559 (AMP)	Splice

G. SPECIAL TOOLS

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. PUBLICATIONS AFFECTED

1124/1124A Wiring Manual

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE

Reference drawing CMA07-2352-73 on 22-10-01 page 7 of the Wiring Manual for the following procedures.

- A. Perform the following conformity inspection before accomplishing any modification and note results:
 - (1) Check for continuity between APP-80 plug J2 (IAI Ref B35J2) pin 21 and APC-80 plug J2 (IAI Ref 38J2) pin 4.
 - (2) Check for continuity between APP-80 plug J2 (IAI Ref B35J2) pin 21 and FGC-80#1 plug J2 (IAI Ref B42J2) pin 18.
 - (3) Check for continuity between APP-80 plug J2 (IAI Ref B35J2) pin 20 and FGC-80#2 plug J2 (IAI Ref B242J2) pin 18.

NOTE

Step 2.A.3. is required only on aircraft equipped with dual flight directors.

1124-22-02 Page 2 of 3

- B. Accomplish the following wiring changes:
 - (1) Remove wire C95A24 from pin 20 of APP-80 plug J2.
 - (2) Locate where wires C276A24 and 2C102B24 are spliced coming off pin 21 of APP-80 plug J2.
 - (3) Cut wire 2C102B24 and splice on a section of #24 wire as necessary to reach pin 20 of APP-80 plug J2.
 - (4) Connect 2C102B24 extension to pin 20 of APP-80 plug J2.
 - (5) Splice wire C95A24 (removed in Step 2.B.1.) to C276A24 and wire running to pin 21 of APP-80 plug J2.
- C. Repeat conformity inspection per Step 2.A.
- D. If any open circuits are found in Step 2.A. contact IAII Avionics Technical Representative for corrective action.
- E. Make the necessary changes to Wiring Manual 22-10-01 page 7 and return aircraft to service.
- 3. MATERIAL INFORMATION

Not applicable.

4. AIRCRAFT RECORDS

Make the following entry in the airplane log book: Service Bulletin No. WW-24-29 dated November 4, 1983, titled "Prevention of Improper Flight Director Glideslope Display," has been accomplished this date.

-END-

1124-22-02 Page 3 of 3

Nov 04/83



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-22-001

FEBRUARY 29, 1984

SUBJECT: NAVIGATION - ALTERNATE LOCATION FOR G/A (GO AROUND) AND VERTICAL SYNC BUTTONS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 174, 181 and 185 through 384.

B. REASON

To relocate G/A and Vertical Sync Buttons on control wheels to a more logical and comfortable position for crew operation.

C. DESCRIPTION

This service bulletin describes the steps necessary to reverse the position of the G/A and Vertical Sync Buttons on pilot and co-pilot control wheels and the related wiring changes.

D. COMPLIANCE

Compliance with this service bulletin is optional.

LIST OF EFFECTIVE PAGES

Page 1	1. 1	Feb	29/84	Basic	Page	4	Feb	29/84	Basic
Page 2			29/84		Page	-	Feb	29/84	Basic
Page 3	3	Feb	29/84	Basic	U				

1124-22-001 Page 1 E. APPROVAL

The modification described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

None required.

G. SPECIAL TOOLS

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. PUBLICATIONS AFFECTED

Not applicable.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Turn off battery and electric master switches and assure external power is disconnected.
 - B. Locate and mark wiring to G/A and Vertical Sync switches.
 - C. Remove G/A and Vertical Sync switches from pilot and co-pilot control wheels. Reference Figure 1.
 - D. Disconnect wiring from switches and pull out of yokes. Reference Figure 2.
 - E. Re-feed wiring to opposite side of each yoke and re-attach to switches that have been moved to opposite sides of yoke.
 - F. Re-install switches in yokes and re-secure wiring as required.
 - G. Check out switches for operation and return aircraft to service.
- 3. MATERIAL INFORMATION

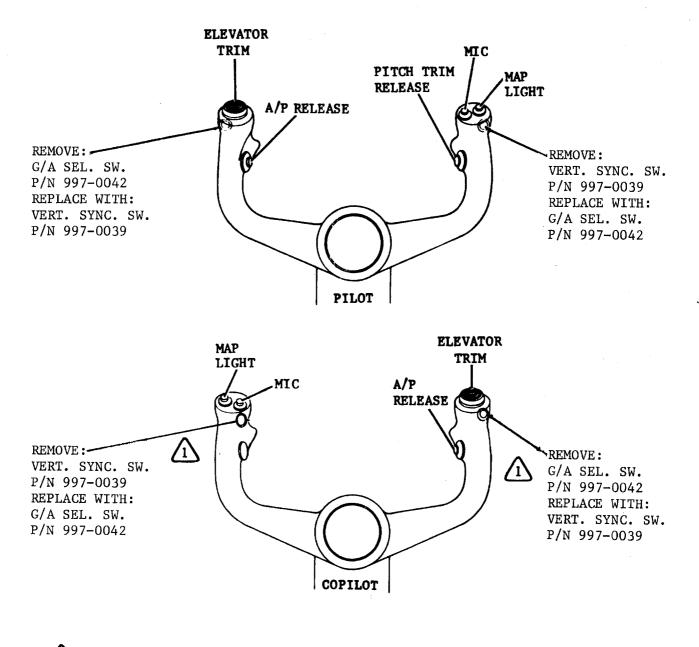
Not applicable.

1124-22-001 Page 2

4. AIRCRAFT RECORDS

Make the following entry in the airplane log book: Service Bulletin No. 1124-22-001, dated February 29, 1984, titled "Alternate Location for G/A (go around) and Vertical Sync Buttons," has been accomplished this date.

-END-



VERT SYNC AND G/A BUTTON INSTALLED ON THE COPILOT CONTROL WHEEL ONLY ON AIRCRAFT EQUIPPED WITH 2ND FLIGHT DIRECTOR

FIGURE 1 PILOT AND CO-PILOT CONTROL WHEEL SWITCH MODIFICATION 1124-22-001 Page 4

Feb 29/84

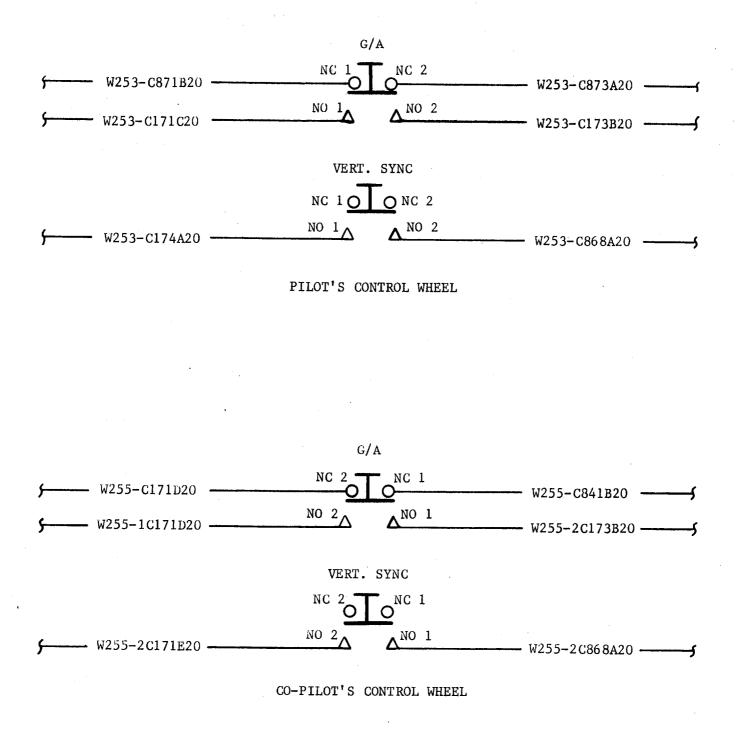


FIGURE 2 G/A AND VERTICAL SYNC SWITCH WIRING

1124-22-001 Page 5

Feb 29/84

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-28-002 Revision No. 1 April 12, 1985

- SUBJECT: PART A: INSPECTION OF FUEL SUMP CHECK VALVE LEVER AND INSTALLATION OF MANUAL LEVER HANDLE STOP.
 - PART B. REPLACEMENT OF LOWER FUEL SUMP CHECK VALVE LEVER, IF REQUIRED.

REASON FOR

REVISION: Part number correction in Paragraph 3. Material Information, Part B. Fuel Sump Lever P/N 3652764-1 should be changed to P/N 3653764-1.



SB 1124-28-002 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES LTD BEN GURION AIRPORT, ISRAEL



RECOMMENDED

SERVICE BULLETIN NO. 1124-28-002

December 27, 1984

- SUBJECT: PART A: INSPECTION OF FUEL SUMP CHECK VALVE LEVER AND INSTALLATION OF MANUAL LEVER HANDLE STOP.
 - PART B: REPLACEMENT OF LOWER FUEL SUMP CHECK VALVE LEVER, IF REQUIRED.
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY PART A & PART B
 - (1) MODEL 1124/1124A serial numbers 181, 226, 228, 230, 231, 235, thru 403, 405, 407 and 409.
 - (2) MODEL 1124 serial numbers 152, 174, 185 thru 225, 227, 229, 232 thru 234 if retrofitted with New Fuel Sump in accordance with Service Letter WW-2434 dated 12 March 1979.

REASON

B.

PART A

To inspect for damage to the flapper-type check valve lever which may occur by exerting force on the lever handle in the up or open position, beyond the sump case upper securing bolt hole. This overtravel may cause the flapper valve hold-open lever to contact the edge of the upper sump fuel passage port. A manual lever stop is to be incorporated to prevent overtravel.

INTERNATIONAL INC.

SB 1124-28-002 Page 1 of 7

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

PART B

Should any marks be noted on the P/N 3653729-1 or P/N 3653764-1 lever, the lower sump casing assembly is to be removed. A dye check is to be performed on the lever for crack indication. Suspect levers are to be replaced.

C. COMPLIANCE

PART A & PART B (If Required)

It is recommended that this inspection and lever replacement, if required, be accomplished at the next 150 hour Aircraft Inspection.

D. DESCRIPTION

PART A

This Service Bulletin provides instruction for the inspection of the Fuel Sump Flapper check valve lever in the LH & RH lower sump casing, and the installation of an external stop for the manual flap valve control lever which will prevent inadvertent overtravel.

PART B

Instruction is provided for a dye penetrant inspection and replacement of the check valve lever should it be required.

E. APPROVAL

This inspection and repair procedure described in this service bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

The material required may be obtained through Atlantic Aviation Supply Company or through their representatives.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 28-20-00.

K. PUBLICATIONS AFFECTED

1124/1124A IPC, Chapter 28-20-00, Figure 10, page 29 will be revised to reflect the addition of the Handle Stop.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A

- (1) Remove electrical power from aircraft and disconnect batteries.
- (2) Remove left and right outboard boost pumps from each sump in accordance with Par. 4A, Chapter 28-20-00. 1124 Westwind Maintenance Manual.
- (3) Using flashlight and mirror, check the lever P/N 3653764-1 or P/N 3653729-501 for score marks indicating contact with the edge of the flapper valve orifice. See Figure 1. If marks are found it will be necessary to defuel A/C (ref. M.M. Chapter 12-10-01) and remove lower sump casing assembly (ref. M.M. Chapter 28-20-00), to perform a dye penetrant inspection of the lever. If a crack is suspected, replace the lever in accordance with Part B of this Service Bulletin.
- (4) If no marks are observed proceed with the overtravel stop installation as follows:
- (5) Remove the AN4-6A bolt and AN960-416L washer from the lower sump case flange located directly above the upper special bolt P/N 2653732-1 and replace it with a AN4-10A bolt with a NAS43DD4-14 spacer and AN960-416L washer. See Figure 1.

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- (6) Reinstall the boost pumps in accordance with Par. 4B Chapter 28-20-00, 1124 Westwind Maintenance Manual.
- (7) Verify that in the normal position, (handle fixed in the upper hole), the handle should not contact the bolt head.
- (8) Return aircraft to service.
- (9) Make aircraft Log Book entry.

PART B

- A. To replace the lever P/N3653764-1 or P/N 3653729-501 the following steps should be carefully followed:
 - Position lever handle to the lower bolt hole position. Support lower case assembly. Grind off the three

 bucked monel rivet tails which secure the lever to the shaft, provide suitable support beneath the lever base and punch out the three (3) rivets.
 - (2) Remove shaft from the lower case assembly allowing the spacer and lever to become free.
 - (3) Assure shaft rivet holes have no sharp edges before installing new lever P/N 3653764-1 on shaft. Drill three (3) holes 1/16 inch dia. through the guide holes provided on the lever base. Temporarily place new lever on shaft to assure rivet hole alignment. Remove lever and then counter-sink the three (3) rivet holes to 100° on the bottom side of the lever base to prevent contact of rivets with side of lower sump case.
 - (4) Before reinstalling shaft into lower case replace the "O" Ring P/N MS29513-10.
 - (5) Lubricate the shaft and carefully reinstall, sliding the spacer and lever into place. See Figure 2.
 - (6) Rivet the lever in place using three (3) MS20427M3C-8 rivets.
 - (7) Assure bucked rivet tails do not contact the aft side of the lower case by moving the lever handle to the up, (flap valve open), position. Verify proper lever position. See Figure 2.

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- (8) Move lever handle to the lower bolt hole, (flap valve closed position).
- (9) Reinstall Lower Case Assembly.
- (10) Replace the AN4-6A bolt and AN960-416L washer located directly above the upper special bolt P/N 2653732-1 with a AN4-10A bolt with a NAS43DD4-14 spacer and AN960-416L washer. See Figure 1.
- (11) Reinstall Boost Pump in accordance with Par. 4B, Chapter 28-20-00, 1124 Westwind Maintenance Manual.
- (12) Verify that in the normal position, (Handle fixed in the upper hole), this handle should not contact the bolt head.
- 3. MATERIAL INFORMATION

PART A

QTY	PART NUMBER	DESCRIPTION
1 1 1	AN4-10A NAS43DD4-14 AN960-416L	Bolt Spacer Washer
PART B		
QTY	PART NUMBER	DESCRIPTION
1	3652764-1	Lever-Fuel Sump
3 1	MS20427M3C-8 MS29513-10	Rivet "O" Ring

4. RECORD COMPLIANCE

Make the following entry in the aircraft Log Book:

Service Bulletin No. 1124-28-002 dated December 27, 1984, titled "Inspection of Fuel Sump Check Valve Lever and Installation of Manual Lever Handle Stop" has been accomplished this date

END

SERVICE BULLETIN NO. 1124-28-002

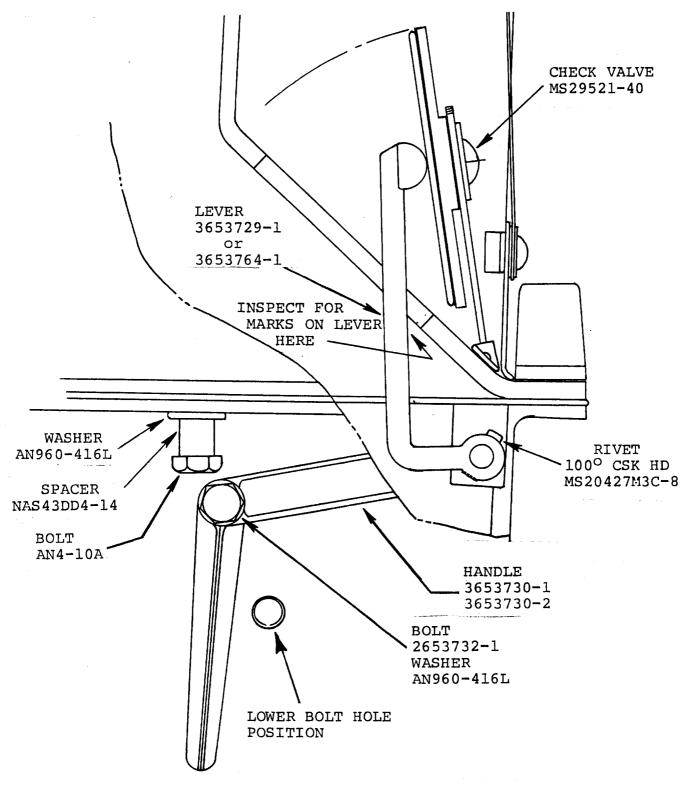
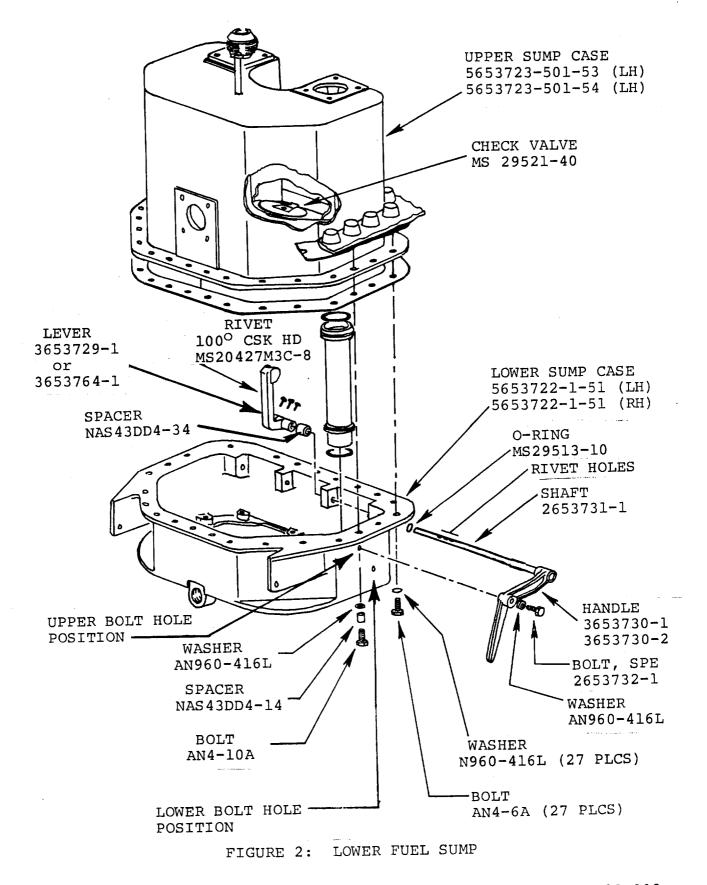


FIGURE 1

FUEL SUMP CHECK VALVE INSPECTION

SB 1124-28-002 Page 6 of 7 December 27, 1984



December 27, 1984

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SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-27-003 Revision No. 1 November 21, 1986

SUBJECT: FLIGHT CONTROLS - FLAP VANE INSPECTION

CANCELLATION NOTICE

This service bulletin is hereby cancelled. All information contained herein has been incorporated in the maintenance manual and all inspection programs.

Tom Vail, Manager Technical Services

SB 1124-27-003 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-57-004 Revision No.1 September 9, 1985

SUBJECT: DRAIN HOLES IN WING TRAILING EDGE STRUCTURE

REASON FOR REVISION: To classify this service bulletin as Recommended.

> SB 1124-57-004 Page 1 of 1

> > .



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN NO. 1124-57-004

April 5, 1985

SUBJECT: DRAIN HOLES IN WING TRAILING EDGE STRUCTURE

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

- B. REASON
 - (1) To ensure that drain holes in wing trailing edge structure are properly located and are the proper size.
 - (2) To ensure that proper drainage exists in the affected area to prevent the collection of water.
- C. COMPLIANCE

It is recommended that this service bulletin be accomplished no later than the next 150 hour inspection.

D. DESCRIPTION

This service bulletin requires an inspection of the wing lower trailing edge structure to determine the condition of existing drain paths and drain holes. It also provides instructions to locate and drill holes through the trailing edge skin that were not drilled during production, and, to drill hole to proper size where only a pilot hole exists.

TERNATIONAL INC.

SB 1124-57-004 Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

None required.

G. SPECIAL TOOLS

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE

Refer to attached illustrations (Figures 1-3) for proper location of drain holes.

A. Apply external electric and hydraulic power to aircraft per aircraft Maintenance Manual. Lower wing flaps to 40° and raise speed brakes and lift dumpers.

CAUTION

Bleed off hydraulic pressure before turning off electric power.

April 5, 1985

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WARNING

Remove electric and hydraulic power for safety of maintenance personnel.

- B. Inspect trailing edge structure to ensure that all openings between ribs and rear spar are clean and free of dirt and debris. Ensure that all drain paths along the entire trailing edge structure are clean and open.
- C. Inspect the lower skin of the trailing edge structure for the presence of three (3) drain holes and that the holes are the proper size.

NOTE

Left and right wings are typical.

If drain holes are in accordance with this service bulletin, no further action is required.

- D. If drain holes are not located, or holes are not the proper size, locate and drill holes using standard shop practices. Alodine holes after drilling.
- E. Secure area and return aircraft to service.
- 3. MATERIAL INFORMATION

Not applicable.

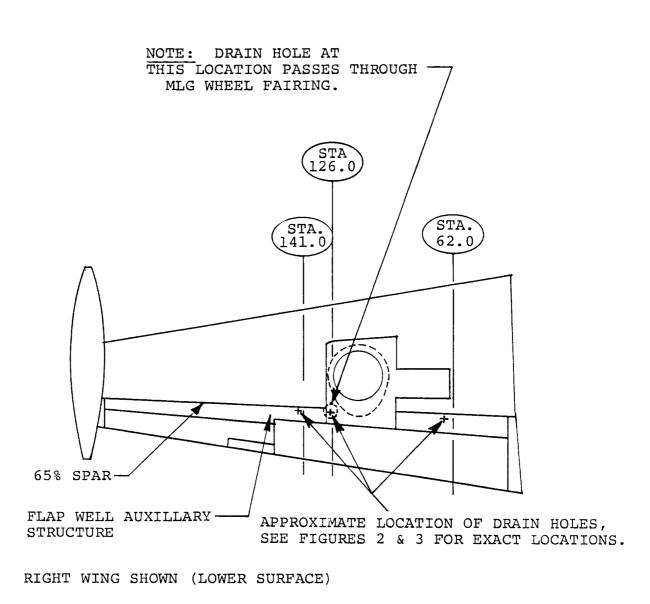
4. AIRCRAFT RECORDS

Make the following entry in the aircraft log book: Service Bulletin No. 1124-57-004 dated April 5, 1985, titled "Drain Holes In Wing Trailing Edge Structure," has been accomplished this date

END

April 5, 1985

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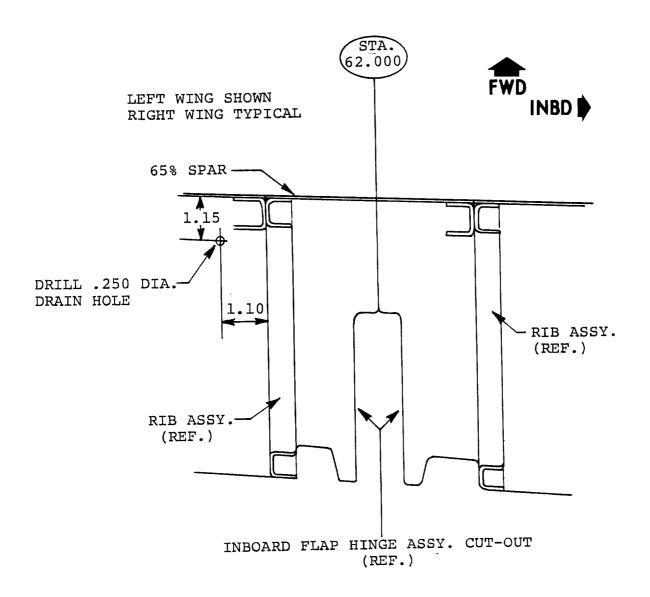


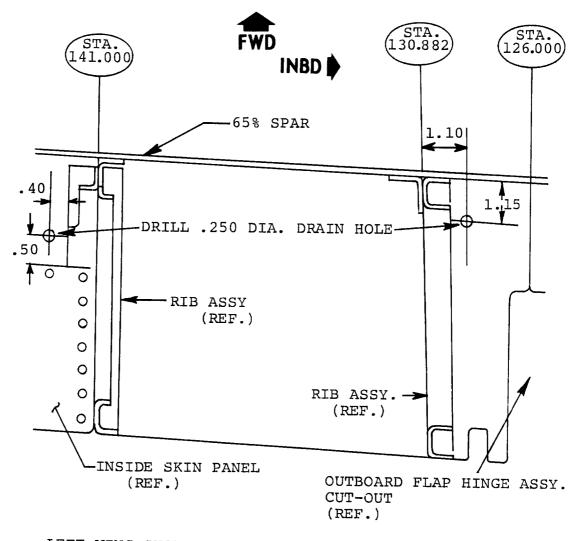
LEFT WING TYPICAL

.

FIGURE 1

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LEFT WING SHOWN RIGHT WING TYPICAL

FIGURE 3.

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April 5, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-52-005

January 4, 1985

SUBJECT: DOORS-IMPROVED MAIN BAGGAGE COMPARTMENT DOOR WARNING SWITCH INSTALLATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND aircraft, serial numbers 152, 154, 174, 181 and 185 thru 278.

B. REASON

To prevent a false forward fuselage baggage door "unlock" warning indication.

C. COMPLIANCE

At the customer's discretion.

D. DESCRIPTION

This Service Bulletin provides the information necessary to relocate the forward fuselage baggage door unlock light warning microswitch to a different position on the door latch mechanism. The change incorporates a new MS25253-1 microswitch, a JV-26 microswitch rocker, a CMA77203-039 mounting plate bracket (and two spacers) with slotted holes (for switch adjustment) and a newly designed CMA77203-034 locking lever.

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E. APPROVAL

The replacement and relocation of improved door warning switch described in this service bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized representatives.

G. TOOLING

Special tools are not required for this modification.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Maintenance Manual, Chapter 52-30-00. 1124 IPC, Chapter 52-30-00.

- K. PUBLICATIONS AFFECTED
 - A. The 1124 Maintenance Manual, Chapter 52-30-00, will be revised to reflect the installation, rigging and checkout of the baggage door latch warning switch.
 - B. The 1124 IPC, Chapter 52-30-00, will be revised to include the baggage door latch and warning switch information in this Service Bulletin.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Turn off the battery and electrical master switches and assure that external power is not applied to aircraft.
- B. Peel back fabric liner from forward baggage door to expose both latch cover plates and secure. Remove the upper and lower latch mechanism cover plates (9 screws each).

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- C. Disconnect the two wires from each microswitch and tape exposed terminals. Remove each microswitch from its mounting bracket and discard. Leave in place existing mounting brackets.
- D. Remove old P/N CMA 77203-034 locking lever from each lock tumbler assembly. Drill out the four MS20426AD3-6 rivets that mount the latching assembly to the baggage door skin.
- E. Drill out the two existing rivets in each of the upper latch mechanism hinge blocks.

NOTE

Each upper hinge block should be held in place by the latch hinge pin after removal of the two rivets.

- F. Locate and drill two holes in the new CMA 77203-039 mounting plate as shown in Figure 1.
- G. Before installing the two new mounting plates, insert a CMA 77203-041 spacer in each of the existing counterbored holes in the upper hinge blocks. Install the new CMA 77203-039 mounting plates on the two upper hinge blocks (using existing rivet holes) and rivet in place utilizing MS2042AD4-10 rivets. (See Figure 2).
- H. Reinstall both latch assemblies on the door skin with (4) each MS20426AD3-6 rivets. Shorten P/N JV-26 switch rocker arm to 11/16 inch from rocker pin before mounting on microswitch.
- I. Mount each microswitch and JV-26 switch lever assemblies on each of the new CMA 77203-039 mounting plates and secure with 2 each MS35206-219 screws, 2 each AN960PD4L washers and 2 each MS21083-004 nuts. Reconnect wires to each microswitch. Do not install cover plates at this time.
- J. Place each of the P/N CMA 77203-034 levers in the locked position. Using an ohmmeter adjust each switch down against one locking lever cam until the switch actuates (contacts open).

- K. Close the main baggage compartment door and assure latches are firmly in place. Insert baggage door key in each lock tumbler and place in the "locked" position.
- L. Apply electrical power to the aircraft (battery or APU) and place electrical master switch to the "on" position. Note the baggage door "Unlock" warning light on the cockpit annunciator panel. The warning light should not be illuminated. If the warning light is illuminated, adjust each microswitch until the warning light goes out. This may require bending of the rocker portion of the JV-26 lever. Secure each microswitch.

NOTE

Some "freeplay" exists on the new CMA 77203-034 locking levers. This freeplay must be taken into consideration when adjusting the microswitch and bending the JV-26 rocker lever.

M. Install each cover plate and secure the baggage door fabric liner.

3. MATERIAL INFORMATION

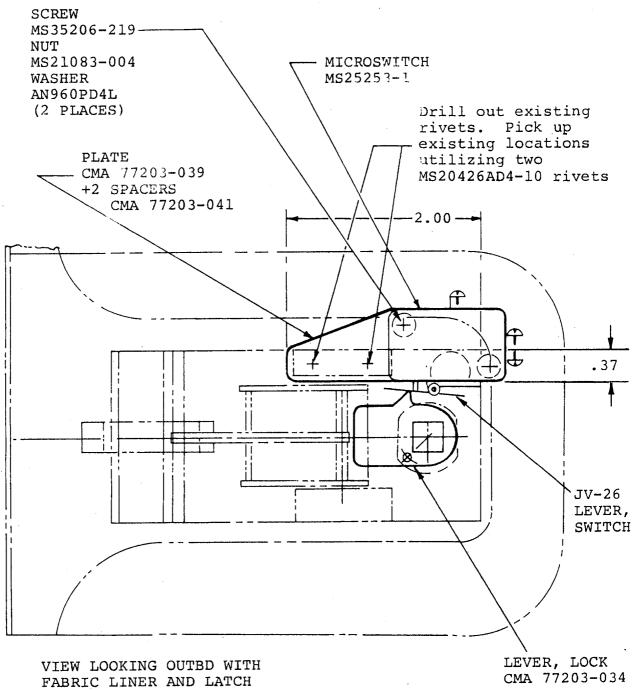
QTY	PART NUMBER	DESCRIPTION
2	MS25253-1	Switch
2 2	JV-26 CMA77203-039	Lever, Switch Plage
4	CMA77203-041	Spacer
2 4	CMA77203-034 MS35206-219	Lever, lock Screw
4	MS21082-004	Nut
4	AN960PD4L	Washer
4 8	MS20426AD4-10 MS20426AD3-6	Rivet Rivet
0	PIB20420AD3=0	NIVEL

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book: Service Bulletin No. 1124-52-005, dated January 4, 1985, titled "Doors-Improved Main Baggage Compartment Door Warning Switch Installation," has been accomplished this date

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SERVICE BULLETIN NO. 1124-52-005



VIEW LOOKING OUTBD WITH FABRIC LINER AND LATCH COVER REMOVED (2 PLACES ON EACH DOOR)

NEW MICROSWITCH INSTALLATION

FIGURE 1

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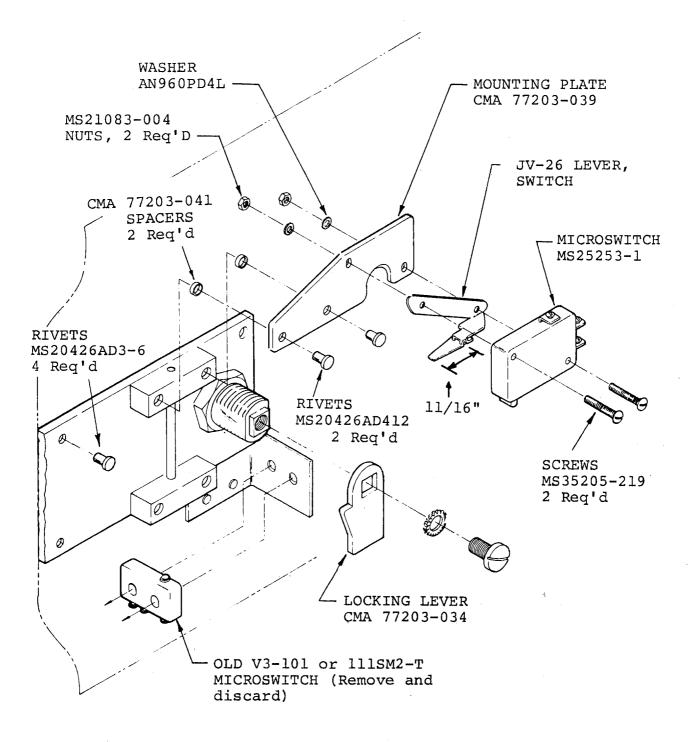


FIGURE 2

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SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-25-006

January 4, 1985

SUBJECT: COCKPIT PANELS-INSTALLATION/REWORK

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A aircraft up to and including serial number 414.

B. REASON

To inspect for and prevent penetration of adjacent wire bundle insulation by the cockpit side-panel fasteners.

C. COMPLIANCE

It is recommended that this inspection be accomplished at the next 150 hour inspection.

D. DESCRIPTION

Retention screws for the small Kydex trim panels located on the lower forward right and left side of the cockpit can possibly chafe or penetrate the wire bundle installed behind them. This Service Bulletin describes the steps necessary to inspect for wire bundle damage and to change the panel retention hardware to eliminate any possibility of chafing.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

The modification procedure described in this Service Bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized representatives.

G. TOOLING

F.

Special tools are not required for this modification.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

K. PUBLICATIONS AFFECTED

The 1124/1124A IPC, Chapter 25-10-00 will be revised to reflect this information.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Turn off battery and electrical master switches and assure that external power is not applied to the aircraft.
 - B. Remove the lower forward left and right hand panels. See Figure 1.
 - C. Inspect the cable bundles in the area immediately behind the lower forward mounting screw on both LH and RH covers for wire damage. Should damage or chafing be noted, repair wires as necessary.

- D. To prevent further damage, wrap the affected area with PVC-80 or equivalent chafe-guard and secure with tie-wraps.
- E. Remove the existing tinnerman type nut-plates from the lower forward positions on each cover and replace them with new nut-plates NAS1474A08. The new nut-plates may be located and riveted in place with MS20426AD3-4 rivets.
- F. Reinstall the left and right covers using washer NAS391-8P and screw MS24693-S48.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	NAS1474A08	Nut, self- locking, plate two-lug, cap, floating
A/R A/R A/R	NAS391-8P MS24693-S48 MS20426AD3-4	Washer Screw Rivet

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-25-006 dated January 4, 1985, titled "Inspection, Cockpit Wire Bundles - Rework Cockpit Trim Panels Left and Right Side," was accomplished this date

END

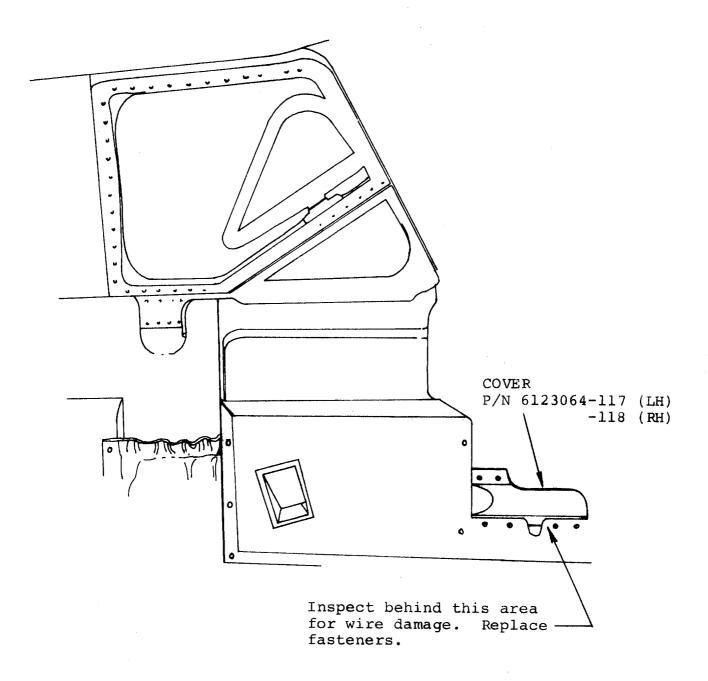


FIGURE 1

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-52-007

January 4, 1985

SUBJECT: MAIN CABIN DOOR LOWER FLAPPER RETRACT SPRING.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 174, 181, 185 thru 387, 389 thru 394.

B. REASON

To prevent lower flapper door seal from rubbing on the fuselage door frame.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

This Service Bulletin describes the steps necessary to install a retract spring on the lower flapper assembly.

E. APPROVAL

The procedures described in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

> SB 1124-52-007 Page 1 of 6

F. MATERIAL

Contact Atlantic Aviation Supply Co., Wilmington, DE or their authorized representatives for parts required to accomplish this modification.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Maintenance Manual, Chapter 52-10-00, page 1. 1124 Illustrated Parts Catalog, Chapter 52-10-00, page 1. Figure 1.

K. PUBLICATIONS AFFECTED

The 1124 IPC, and Maintenance Manual, Chapter 52-10-00 will be revised to reflect the installation of the new flapper door parts.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove cabin door interior lining, including ice chest and bar if applicable.
 - B. Using the measurements as outlined in Figure 3, locate and cut a hole in bottom door frame.
 - C. Secure clip (5333045-191) by riveting (2 pls) to the inner door structure, using the dimension outlined in Figure 2 and Figure 3.

- D. Drill a .063 diameter hole in the flapper angle to align with the hole cut in the door frame (Step B) Refer to Figure 2 for dimensions.
- E. Attach spring to the clip and flapper angle. Check for sufficient clearance between spring and door structure.
 - F. Reinstall cabin door interior which was removed in Step A.

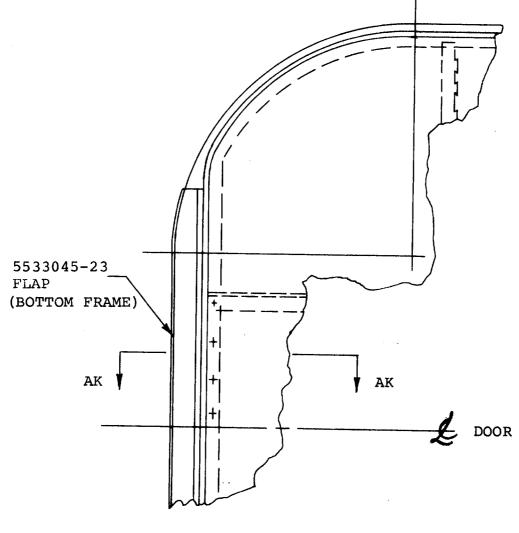
3, MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	5333045-191	Clip
1	MS24586-661	Spring
2	NAS1739B4-4	Rivet

4. RECORD COMPLIANCE

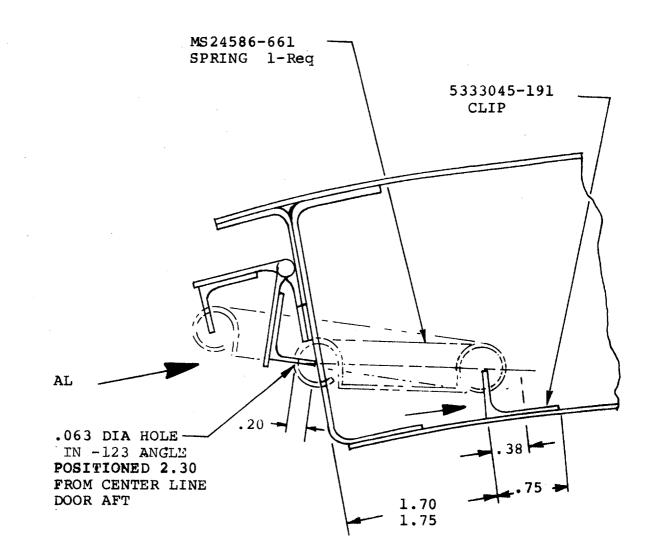
Make the following entry in the aircraft log book:

Service Bulletin No. 1124-52-007 dated January 4, 1985, entitled "Main Cabin Door Lower Flapper Retract Spring" has been accomplished on



(ROTATED 90°)



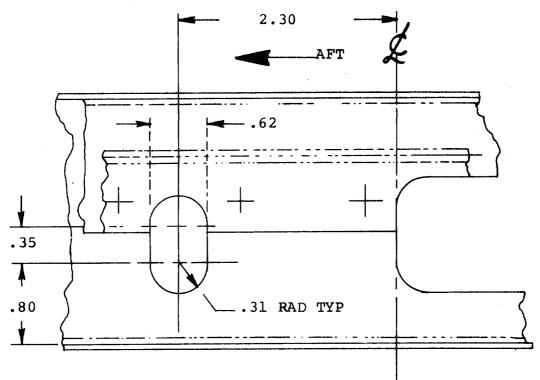


SECTION AK - AK

Figure 2

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.





SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-24-008 Revision No. 2 July 29, 1985

SUBJECT: INSTALLATION OF LARGE CAPACITY PRIORITY BUS DIODES AND ELIMINATION OF GROUND PRESSURE BUMPS.

Addendum to text:

For computation of electrical load analysis, use the following current drains:

Bleed Air leak light	0.2	Amp
Cabin Air safety/outflow valves		-
@ 0.8 Amp	1.6	Amp
Ram Air valve	1.0	Amp
LH Bleed Air pressure valve	1.0	Amp
		-

Total load

3.6 Amp

- 1. Remove 3.6 Amp from distribution bus. Caution: LH Bleed Air pressure may have been originally connected to R.H. Distribution bus in late serial number aircraft.
- 2. Increase the rating of the Priority Bus to 22 Amperes.
- 3. Add the 3.8 Amp to priority bus.
- 4. Add 1.9 Amp (1/2 priority bus) to each distribution bus.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD BEN GURION AIRPORT, ISRAEL

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-24-008 Revision No.1 July 5, 1985

SUBJECT: INSTALLATION OF LARGER CAPACITY PRIORITY BUS DIODES AND ELIMINATION OF GROUND PRESSURE BUMPS

REASON FOR

REVISION: To change the wording in paragraph 2.A.(2) under Part I.

To change paragraph 2.A.(3) under Part I to enlarge wire size used for new diodes.

2. ACCOMPLISHMENT INSTRUCTIONS

PART I

- A.(2). Mount new diodes using new teflon bushings and mica washers. New teflon bushings and mica washers are furnished with each diode.
- A.(3). Reconnect new diodes P/N 1N2784 replacing all existing attaching wires with#14AWG wire.

NOTE

This step will reduce voltage drop across existing #18AWG wires to a minimal level should the full 22 ampere priority bus load ever be reached.

> SB 1124-24-008 Page 1 of 1





RECOMMENDED

SERVICE BULLETIN NO. 1124-24-008

April 5, 1985

- SUBJECT: INSTALLATION OF LARGER CAPACITY PRIORITY BUS DIODES AND ELIMINATION OF GROUND PRESSURE BUMPS
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers 152, 174, 181, 185 through 425 except 413, 416, 418, and 421 through 424.

- B. REASON
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART I: To increase reliability of Priority Bus and systems operating from the bus.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: To eliminate ground pressure bumps after first engine start.
 - (3) ACCOMPLISHMENT INSTRUCTIONS PART III: To ensure proper, dual power sources for VLF/Omega system(s) installed in aircraft to prevent dual system failure with Single Com and ACC Bus failure.
- C. COMPLIANCE

Recommended at or before next 150 hour inspection.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

D. DESCRIPTION

- (1) ACCOMPLISHMENT INSTRUCTIONS PART I: Describes a modification procedure to install Priority Bus diodes of a higher current rating.
- (2) ACCOMPLISHMENT INSTRUCTIONS PART II: Describes steps necessary to move L.H. Cabin Pressure Valve and Ram Air circuit breakers from Distribution Bus and install on the enlarged Priority Bus.
- (3) ACCOMPLISHMENT INSTRUCTIONS PART III: Describes a conformity test to determine which aircraft bus is powering each VLF/Omega system installed, and corrective action, if necessary, to establish proper bus connections.

E. APPROVAL

The inspection and modification procedures described in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, through their authorized dealers or may be purchased locally.

G. TOOLING

Not applicable.

H. WEIGHT & BALANCE

Not applicable.

- I. ELECTRICAL LOAD DATA
 - (1) No change to total Electrical Load.
 - (2) Revise aircraft Electrical Load Analysis to reflect increased current capability, and bus tie changes. Recomputation of respective bus loads will be required: LHS Bleed Air Valve, Cabin Air Safety and Outflow valve solenoids, and LH Bleed Air Leak light.

J. REFERENCES

(1)	1124/1124A	Wiring	Manual
	Chapter:	24-50-	-01
	-	24-50-	-02
		21-00-	-01
		34-60.	-01
		34-60-	-02

- (2) Service Information Letter No. 1124-24-005 or 1124/1124A Maintenance Manual, Chapter 24-00-00.
- K. PUBLICATIONS AFFECTED
 - (1) 1124 Airplane Flight Manual, Revision 15, Section II pages 11/12 or 11.1/12.1 as applicable; OR
 - (2) 1124A Airplane Flight Manual, Revision 13, Section II pages 11/12 or 11.1/12.1 as applicable.
 - (3) 1124/1124A Wiring Manual, Chapters Chapter: 24-50-01 24-50-02 21-00-01 34-60-01 34-60-02
- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. GENERAL
 - (1) Battery Disconnect, Master, and External Power Switches OFF; Inverter switches in ALT.
 - (2) Remove external power.
 - (3) Disconnect aircraft batteries.
 - (4) Lower forward overhead circuit breaker panel.

PART I

- A. Locate Priority Bus diodes on lateral panel, right side of circuit breaker panel.
 - (1) Tag and remove wires to existing P/N 1N3890 diodes; remove both diodes and clean mounting surfaces of dirt and grease with Isopropol alcohol.

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- (a) Do not scrape or polish mounting plate as it is coated with an insulating enamel.
- (2) Mount new diodes, using new teflon bushings and mica washers furnished.
 - (a) Use heat sink compound or Dow Corning #4 Silicon grease on all metal surfaces to permit proper heat transfer.
 - (b) Ensure mica insulators are not cracked, do not overtorque mounting nuts to prevent cracking new insulators.
- (3) Reconnect wires to new P/N 1N2784 diode.
- B. Perform Priority Bus diode test as outlined in Maintenance Manual, Chapter 24-00-00 or SIL NO. 1124-24-005.

PART II

- A. Locate L/H Cabin Pressure Valve and Ram Air circuit breakers.
- B. Remove bus tie-straps from above breakers.

NOTE

- (1) Single bus ties must be insulated and stowed.
- (2) Two or more bus ties on one breaker must be spliced together, the splice and bus ties insulated and secured clear of breaker terminals and adjacent bus ties.
- C. Fabricate bus tie leads from #18 AWG wire, connect L/H Cabin Pressure Valve and Ram Air breakers to the priority bus.
 - (1) Priority Bus may be identified by the junction of the priority bus diode cathodes (banded end) and/or the bus input of the Fuel Status circuit breaker.

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NOTE

Ensure tie-screws are of sufficient length to secure bus without contacting body of circuit breaker.

D. OPERATIONAL TEST PROCEDURE

- (1) Connect batteries, external power.
- (2) Pull the 3 Distribution Bus circuit breakers RHS.
- (3) External Power, Battery Master and Disconnect Switches ON, Cabin Pressure Selector to BOTH. Allow 10 seconds for Ram Air Valve to close.
- (4) Pull the Ram Air circuit breaker.
- (5) Press the Ground Pressure Dump switch/annunciator; the annunciator lamp should illuminate.
- (6) Pull the L/H Cabin Pressure Valve circuit breaker. The Pressure Dump lamp should go OFF.
- (7) Reset Ram Air circuit breaker.
- (8) Set the Cabin Pressure Selector to RAM, allow 10 seconds for the Ram Air Valve to open.
- (9) Press the Ground Pressure Dump switch/annunciator, the annunciator should illuminate.
- (10) If above conditions are met, the system is wired and operating correctly. Reset the L/H Cabin Pressure Valve and the (3) Distribution Bus Tie circuit breakers. Pull the 3 LHS breakers, repeat the test.

PART III

- A. VLF/Omega power source conformity tests.
 - (1) Turn VLF system(s) ON; system(s) should remain OFF.

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- (2) Select #1 Avionics Master Switch ON, VLF #1 should come ON, VLF #2 remains OFF.
 - (a) Note which system(s) turn ON.
- (3) Select #1 Avionics Master Switch OFF. Turn VLF system(s) OFF, then back to ON.
- (4) Select #2 Avionics Master Switch ON, VLF #2 should come ON, VLF #1 remains OFF.

(a) Note which system(s) turn ON.

- (5) Select #2 Avionics Master Switch OFF, turn VLF system OFF.
- (6) Failure to meet above conditions will require corrective action as follows:
 - (a) From Step (1) above, remove operating VLF system from Priority Bus, connect VLF #1 to Com and Acc Bus 1, VLF #2 to Com and Acc Bus 2.
 - (b) From Step (2) above, remove VLF #2 from Com and Acc Bus 1, connect to Com and Acc Bus 2.
 - (c) From Step (4) above, remove VLF #1 from Com and Acc Bus 2, connect to Com and Acc Bus 1.
- (7) Com and Acc Bus 1 may be traced from VOR 1 DC breaker, Com and Acc Bus 2 may be traced from VOR 2 DC breaker.
- (8) Fabricate new bus ties as required from #14 AWG wire.
- (9) Observe cautions as stated in Note 1 and Note 2 of PART II instructions above.

3. MATERIAL INFORMATION

PART I

QTY	PART NUMBER	DESCRIPTION
2 ea.	lN2784	22 ampere diode,
A/R		Heat shrink tubing for diode studs,
A/R	DOW DC-4	or equivalent heat sink compound.

PART II and III

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-22759-18	#18 AWG Stranded
A/R	MIL-W-22759-14	#14 AWG Stranded wire.
A/R	AMP 320560	Terminals, or equivalent.
A/R	AMP 320554	Terminals, or equivalent.
A/R	AN526-632R	#6 screws, length as required.
A/R	MS20365-632	#6 nut, Bus tie splices.

4. RECORD COMPLIANCE

- A. Make the following entry in aircraft log book: Service Bulletin No. 1124-24-008 dated April 5, 1985, titled "Installation of Larger Capacity Priority Bus Diodes and Elimination of Ground Pressure Bumps," has been accomplished this date
- B. Enter corrections as required in the Aircraft Wiring Manual and Electrical Load Analysis to reflect changes performed in "Accomplishment Instructions" above as applicable.

END

April 5, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-32-009

January 15, 1985

SUBJECT: GEAR WARNING HORN AUTOMATIC DISABLE

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment: MODEL 1124A WESTWIND, serial numbers 295 through 384, and 392.
 - (2) Testing and Preflight Procedures: MODEL 1124A serial number 295 and subsequent.
 - B. REASON

To prevent nuisance gear warning horn activation requiring manual cutoff at speeds above 150 KIAS with throttle reduction.

C. COMPLIANCE

At operators convenience and discretion.

D. DESCRIPTION

This service bulletin describes accomplishment and testing procedures.

E. APPROVAL

The modification described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

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F. MATERIAL

Material for modification may be procurred through Atlantic Aviation Supply Company or their dealers and may also be obtained locally through your Avionics dealer.

G. SPECIAL TOOLS

Collins P/N 372-8091-010 pin extractor; and Collins P/N 372-8091-070, 623-8579-001, or equivalent crimping tool.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

- K. PUBLICATIONS AFFECTED
 - (1) 1124/1124A WIRING MANUAL
 - (a) ATA 32-30-01
 - (b) ATA 22-10-08
 - (c) ATA 22-10-09 (Aircraft Serial No. 308 and 343 only)
 - (2) 1124/1124A MAINTENANCE MANUAL
 - (a) Chapter 32; reference section 2.3 and 2.4 of this bulletin.
 - (3) 1124/1124A AIRCRAFT FLIGHT MANUAL
 - (a) Reference AFC 2004 and section 2.4 of this bulletin.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove all power from aircraft.
- B. Remove interior components:

- (1) Cockpit seats and pedestal panels as needed to gain access to Gear Warning Horn Cancel Switch.
- (2) Cabin furnishings, LH sidewall, LH kickpanels fuselage floorboards and panel near STA 95 as needed to gain access to main cable bundles.
- (3) Vanity and aft coat closet as needed to gain access to Air Data Computer ADC80 and left side terminal strip area.
- C. Mount new relay socket assembly HRCW-1M for new relay RL70. Use blank location at one of the existing relay brackets.
 - (1) Vertical bracket at Station 242, LHS.
 - (2) Horizontal bracket between Stations 250 and 259, LHS.
 - (3) Permanently identify the new relay location as "RL70."
- D. Remove ADC80. Plug static and pitot lines to prevent contamination.
- E. Dismount ADC80 rack, remove rear cover, and add following new wiring with reference to Figure 1. Aircraft S/N 308 and 343 only reference Figure 2.
 - Splice new wire C420C22 to existing wire C403C18 connected to ADC80-J3 pin 6. Do not remove existing wire C403C18.
 - (a) S/N 308, 343 above step for #1 ADC-80 only.
 - (2) Add new wire C419C22 to ADC80-J3 pin 59.
 - (a) S/N 308, 343 also add new wire 2C580A22 to #2 ADC80-J3
 - (3) Add new #22 wire jumper from ADC80-J3 pin 37 to J3 pin 60.
 - (a) S/N 308, 343 also add jumper to #2 ADC-80.

January 15, 1985

- F. Following existing cable bundles, connect new wires from 2.1.E. to new RL70 socket as follows:
 - (1) Connect new wire C420C22 to RL70-X1.
 - (2) Connect new wire C419C22 to RL70-X2.
 - (a) S/N 308, 343 to ignore above Step 2 and proceed as follows:
 - Connect new wire C419A22 to existing relay RL423-B3.
 - Connect new wire 2C580A22 to existing relay RL423-B1.
 - 3. Add new wire 2C593A22 from existing relay RL423-B2 to new relay RL70-X2.
 - (3) Before crimping above RL70 pins, add new diode 1N645 between X1 and X2 with cathode (banded) end to X1.
- G. Connect two new #22 wires from RL70, routing along existing cable bundles, to pedestal.
 - (1) Connect new wire D21E22 to RL70-A3.
 - (2) Connect new wire D38A22 to RL70-A2.
- H. Remove Gear Warning Horn cancel switch to gain access to switch wiring.
 - (1) Remove existing wires D21B22 and D21A22 from terminal 15. Use caution to prevent breaking terminals.
 - (2) Splice D21B22 and D21A22 together with new wire D21E22 from RL70-A3.
 - (3) Connect new wire D38A22 from RL70-A2 to Gear Warning Horn cancel switch terminal 15.
- I. Reassemble and remount ADC80 rack.
- 2.2 INSPECTION AND TEST
 - A. Aircraft power ON, both AVIONICS MASTER switches OFF, both throttles in "IDLE", flaps at 0°.

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- (1) Measure 28VDC at ADC80-J3 pin 6 to ensure power from Priority Bus.
- (2) Press and hold "Light and Gear Test" switch on gear control panel.
 - (a) Red "In Transit" Lamp in gear handle ON, gear warning horn ON.
 - (b) Press "Gear Horn Off" switch; switch lens lamp ON, warning horn OFF.
 - (c) Move both throttles above "Idle", press "Gear Horn Off" switch; switch lens lamp OFF, warning horn OFF, "In Transit" Lamp ON.
 - (d) Select flaps to 40°; "In Transit" Lamp and warning horn ON.
 - (e) Release Test switch, retract flaps to 0°, return throttles to "Idle".
- (3) Aircraft Power OFF.
 - (a) Apply temporary ground to ADC80-J3 pin 59.
- (4) Aircraft Power ON.
 - (a) Press and hold "Light and Gear Test" switch; In Transit lamp ON, gear warning horn OFF.
 - (b) This test will verify proper system modification. Should gear warning horn be ON, troubleshoot and correct error as required. Reference Figure 1 or 2 as required.
- (5) Aircraft Power OFF.
 - (a) Remove ground from ADC80-J3 pin 59.
 - (b) Install ADC80, reconnect pitot and static lines.
 - (c) Perform normal pitot/static leak tests. Leave pitot/static test equipment connected.

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2.3 SYSTEM INSPECTION PROCEDURE

- A. Aircraft Power On, #1 AVIONICS MASTER switch ON, flaps 0°, THROTTLES at "Idle." Allow "ADC FAIL" Lamp to go OFF, indicating ADC80 Self Test complete.
- B. Set pitot system so pilots airspeed reads 160 KIAS.
- C. Depress and hold "Light and Gear Test" Switch; "In Transit" Lamp ON, gear warning horn OFF.
- D. Slowly decrease pitot pressure; gear warning horn ON at 150 KIAS + 2 KIAS, "In Transit" Lamp ON. Gear Warning horn will stay ON at all IAS below 150 KIAS.

NOTE

Should gear warning horn come ON outside of stated + KIAS tolerance, or "ADC FAIL" Lamp not go OFF, bench testing of ADC80 and/or MSI80 will be required to determine source of error or failure.

- 2.4 SYSTEM PREFLIGHT PROCEDURE
 - A. Aircraft power ON, AVIONICS MASTERS ON or OFF. Flaps at 0°, THROTTLES at "IDLE." Allow "ADC FAIL" Lamp to go OFF, indicating ADC80 Test complete.
 - B. Press and hold "Light and Gear Test" switch; "In Transit Lamp and Gear Warning horn ON." Continue to hold test switch.
 - C. Press "ADC FAIL" switch, "ADC FAIL" Lamp will be ON, "In Transit" Lamp and horn will be ON. When "ADC FAIL" Lamp goes OFF, "In Transit" light ON, gear warning horn OFF.
 - D. Release both switches.

2.5 RETURN TO SERVICE

- A. Upon satisfactory completion of 2.1, 2.2, and 2.3 above reassemble aircraft and return to service.
- 2.6 Aircraft serial number 308 and 343 repeat steps 2.2, 2.3, and 2.4 above for #2 ADC-80 system.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l each	DJ26FL1P6ASF26	Relay, RL70
l each	HRCW-lM; or equivalent	Socket, DRL70
l each	1N645, or equivalent	Diode
100 feet	MIL-W-16878D	#22 AWG wire
l each	35653 AMP; or equivalent	Closed end splice
A/R	SST4S PANDUIT, or equivalent	Tywrap, 4 inch bundle
4 each	372-2514-010 Collins	Female Pins

4. AIRCRAFT RECORDS

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-32-009, dated January 15, 1985, titled "Gear Warning Horn Automatic Disable," has been accomplished this date.

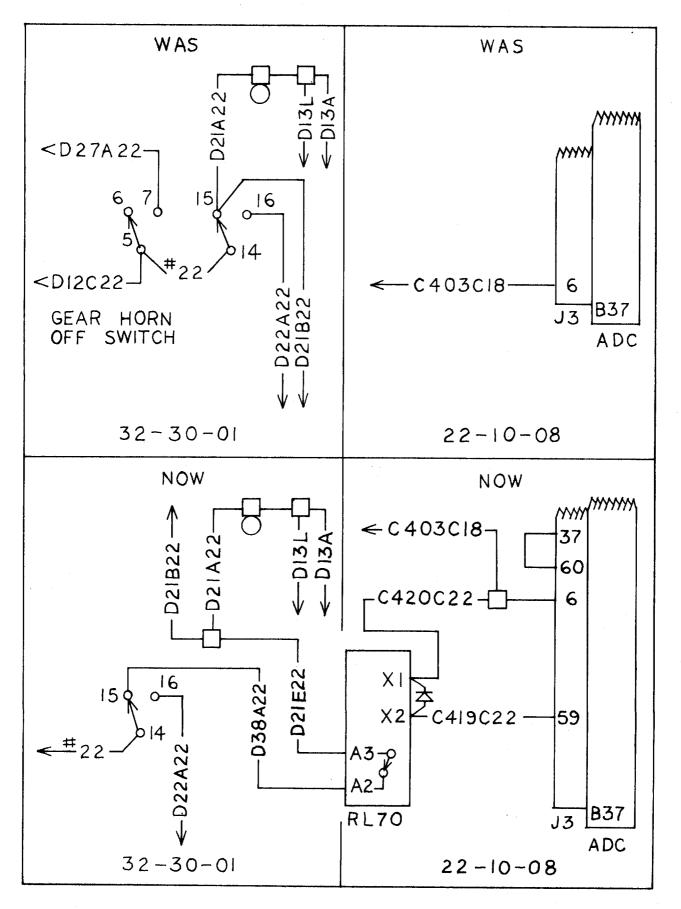
B. Revise aircraft wiring diagrams to reflect changes performed in this bulletin.

END

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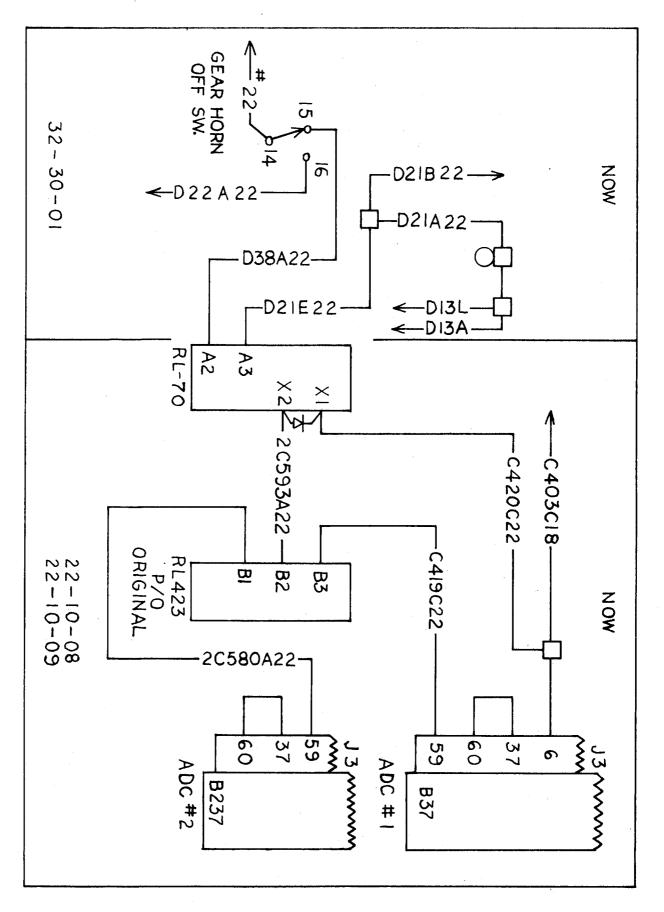
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FIGURE 2

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SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-33-010 Revision No. 2 August 12, 1985

SUBJECT: EMERGENCY AND ENTRANCE LIGHT MODULE CORRECTIONS

REASON FOR

REVISION:

To denote changes in the following three paragraphs.

Change as follows:

1.A.(3)

ACCOMPLISHMENT INSTRUCTIONS PART III: MODEL 1124/1124A equipped with entry light modules containing two switches, labeled "Entry" and "Dome" ON/OFF, through serial number 383.

2.E. NOTE

Should read "Accomplishment Instructions Part III.A.(4).(a)."

Figure 3: Final configuration should read "Chapter 33-50-01."

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-33-010 Revision No. 1 March 28, 1985

SUBJECT: EMERGENCY AND ENTRANCE LIGHT MODULE CORRECTION.

REASON FOR

REVISION:

PART NUMBER CORRECTION IN PARAGRAPH 3. MATERIAL INFORMATION, PART I.

PART NUMBER NAS1329-04-60 LISTED IN PART I SHOULD BE CHANGED TO NAS1329A04-60.

VTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-33-010

January 21, 1985

SUBJECT: EMERGENCY AND ENTRANCE LIGHT MODULE CORRECTIONS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART I: MODEL 1124/24A all serial numbers through 387 except 154, 376 and 386.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: MODEL 1124/24A all serial numbers through 414.
 - (3) ACCOMPLISHMENT INSTRUCTIONS PART III: MODEL 1124/24A equipped with "Two Switch" ("Entry" and "DOME") ON/OFF modules, through serial number 383.
 - B. REASON
 - (1) ACCOMPLISHMENT INSTRUCTIONS I: To ensure Emergency Lamp Inertial switch is properly positioned for Line of Flight.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: To prevent Emergency Lamp battery pack terminals from shorting to mounting brackets.
 - (3) ACCOMPLISHMENT INSTRUCTIONS PART III: To prevent #1 aircraft battery from discharging when cabin door is open.

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C. COMPLIANCE

- (1) Recommended at or before next 150 hour inspection.
 - (a) Compliance with Accomplishment Instructions PART III will not effect the emergency impact (inertial) lighting systems.

D. DESCRIPTION

- Accomplishment Instructions Part I: Describes a one time inspection procedure and corrective action if necessary, to ensure the inertial switch is properly mounted.
- (2) Accomplishment Instructions Part II: Describes steps necessary to add additional insulation to aft end of emergency battery housing.
- (3) Accomplishment Instructions Part III: Describes steps necessary for configuration inspections and wiring changes required for each configuration.
- E. APPROVAL

The inspection and modification procedures described in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Procure locally or contact Atlantic Aviation Supply Co.

G. TOOLING

Not applicable.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Manual, Chapter 33-50-01. 1124/1124A Maintenance Manual, Chapter 33-50-00.

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K. PUBLICATIONS AFFECTED

1124/1124A Wiring Manual, Chapter 33-50-01, will be revised to reflect the wiring changes in this service bulletin.

2. ACCOMPLISHMENT INSTRUCTIONS

A. General

- (1) Ensure Battery Disconnect and Master switches OFF.
- (2) Remove external power.
- (3) Remove Light Module lens assembly, located at Fuselage STA 98.0 left side.
- (4) Remove entranceway headliner segment and panel surrounding Light Module.
- (5) Remove and disconnect Light Module.
- (6) Disconnect and remove emergency battery.

PART I

- A. Observe inertia switch located at forward end of Light Module. Switch must be installed with arrow pointing forward, parallel with longitudinal axis of aircraft.
 - (1) Should switch be positioned as above, no corrective action is necessary.
- B. Should the switch be positioned improperly:
 - If the arrow is pointed aft, simply remove switch from mount, reverse direction so arrow points forward and remount using existing hardware.
 - (2) If the arrow is pointing 90° from line of flight remove switch and mount.
 - (a) Locate and install new rivnut NAS1329-04-60 at position shown in Figure 1.
 - (b) Remount switch with arrow pointing forward using existing screws, in new location.

PART II

A. Apply new insulating material, as shown in Figure 2, to aft end of battery compartment and adjacent stiffeners.

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- B. Trim material as required to allow approximately 1/4 inch of material showing, to prevent battery terminals from contacting thin edge of stiffeners when removing or installing battery.
- C. Reassemble Light Module.
 - (1) Should compliance with Accomplishment Instructions Part III not be required (single switch modules), reinstall emergency battery, connect Light Module and reinstall module, headliner, panels and lens assembly.
 - (a) Test Emergency Light system in accordance with procedures in 1124/1124A Maintenance Manual Chapter 33-50-00.
 - (b) Return aircraft to service.
 - (2) Should compliance with Accomplishment Instructions Part III be required, connect Light Module wiring and add a temporary ground wire from the frame of Light Module to a clean airframe ground.
 - (a) Continue Accomplishment Instructions Part III and conformity testing.

PART III

- A. Conformity test conditions:
 - (1) Aircraft power OFF, ground power OFF, #1 aircraft battery installed.
 - (2) Dome light switch OFF.
 - (3) Cabin door OPEN.
 - (4) Access emergency light module, identify relay ELR inside module.
 - (a) Entry light switch OFF, cycle cabin door switch. If ELR also cycles, omit following tests and proceed to procedures in paragraphs "B", "C", "D", and "E" following.

- (b) Entry light switch ON, cycle cabin door switch. If entry Light switch lamp does not cycle, omit following test and proceed to procedures in paragraph "C", "D", and "E", following.
- (c) Entry light switch ON, ELR and entry light switch lamp will cycle with door switch. Entry light switch OFF, no reaction will be noted. Proceed to procedure in paragraph "D", and "E", following.
- (5) Disconnect Lamp Module for modification. Reference Figure 3 for final configuration.
- B. MODIFICATION PROCEDURE 1:
 - (1) Disconnect wire L75A20 from entry light switch terminal 3 and Relay ELR-A2. Remove wire.
 - (2) Disconnect wire W106D20 Relay ELR-X1 and connect to entry light switch terminal 3.
 - (3) Disconnect #20 wire jumper from Relay ELR-Al and connect to Relay ELR-Bl with existing wire L74A20.
- C. MODIFICATION PROCEDURE 2:
 - (1) Remove wire L79A20 and ground jumper from entry light switch terminal 4, and splice these wires together.
 - (2) Add new jumper wire, #20 AWG, from entry light switch terminal 4, to Relay ELR-X2. Splice to existing wire W25E20.
- D. MODIFICATION PROCEDURE 3:
 - (1) Inspect for presence of diode (D2), 1N5552 or equivalent, from entry light switch terminal 5 in series with wire W 107 () 20 going to step light through connector PJ125 Pin V. Diode cathode (banded end) toward PJ125.
 - (a) Should diode be missing, install new diode 1N5552 or equivalent across any unused terminal board posts. Add new posts if necessary.

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- (1) Remove wire W107 () 20 from entry light switch terminal 5, splice and connect to cathode (banded) end of new diode installed above.
- (2) Connect new wire from diode anode (arrow) to entry light switch terminal 5, with existing jumper to entry light switch terminal 2 and existing wire L75A20.
- 2. Inspect for presence of diode (D3) BJE66 or equivalent, from junction of ELR-X2 and entry light switch lamp terminal 4 in series with wire W25E20 going to step light and cabin door switch through connector PJ125 pin W; diode cathode (banded end) toward wire W25E20 and PJ125.
 - (a) Should diode be missing, install new diode BJE66 (or equivalent) across any unused terminal posts. Add new posts if necessary.
 - (1) Remove wire W25E20 from junction of ELR-X2 and wire from entry light switch pin 4, splice and connect to new diode cathode (banded end).
 - (2) Add new wire W47A22 from new diode anode (arrow side) to junction of ELR-X2 and wire from entry light switch pin 4.

E. OPERATIONAL TEST CONDITIONS

- (1) Connect Lamp Module and temporary ground.
- (2) Aircraft and ground power OFF.
- (3) Dome light switch OFF.
- (4) Entry light switch ON.
 - (a) Door closed: Step Light, Dome Light and Entry switch lamp OFF.
 - (b) Door open; all above lights ON.

NOTE

The above Operational Test can be met by earlier configurations that fail conformity Test in Accomplishment Instructions Part II, A, (4) (a) above prior to modification. Failure of Conformity Test will require modification as described.

- F. Reassemble Light Module:
 - (1) Remove temporary ground wire, install emergency battery.
 - (2) Reinstall Light Module, headliner, panels and lens assembly.
 - (a) Test Emergency Light system in accordance with procedures in 1124/1124A Maintenance Manual, Chapter 33-50-00.
- G. Return aircraft to service.

3. MATERIAL INFORMATION

PART I

QTY	PART NUMBER	DESCRIPTION
1	NAS 1329-04-60	Rivnut
PART II		
QTY	PART NUMBER	DESCRIPTION
2 pieces See Figure 2 A/R	AMS 3198	Sponge Neoprene, open cell, 3/32" thick 6" x 6" Contact Cement
PART III		
QTY	PART NUMBER	DESCRIPTION
l A/R	1N5552 or equivalent MIL-W-16878	Diode, D2 #2 AWG wire

QTY	PART NUMBER	DESCRIPTION	
A/R	1841.1.56.20 (Mfg. Deutsch) or equivalent	Pin, terminal board	
1	BJE666, or equivalent	Diode, D3	

4. RECORD COMPLIANCE

A. Make the following entry in aircraft log book:

Service Bulletin No. 1124-33-010 dated January 21, 1985 titled "Emergency and Entrance Light Module Corrections," has been accomplished this date

B. Please make temporary corrections to your aircraft
 Wiring Manual to reflect changes accomplished in
 "Accomplishment Instructions, Part III" and Figure 3.

END

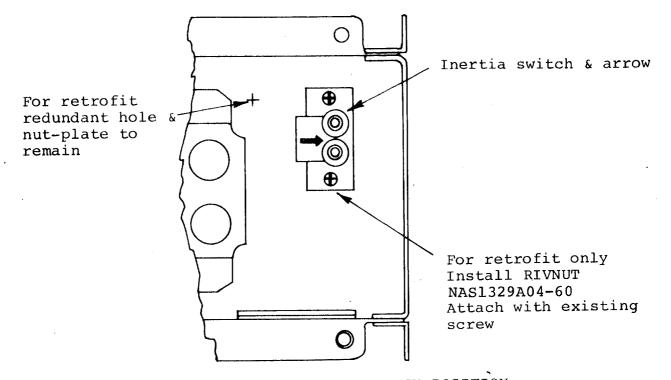


FIGURE 1A: INERTIA SWITCH POSITION

- Note: (1) If switch is installed with arrow facing aft or 180^o out of phase, remove and rotate switch so that arrow is facing forward. Reinstall switch using existing hardware.
 - (2) If switch is installed with arrow facing outboard or 90° out of phase, remove switch. Locate and install RIVNUT NAS1329A04-60. Install switch with arrow facing forward using existing screws.

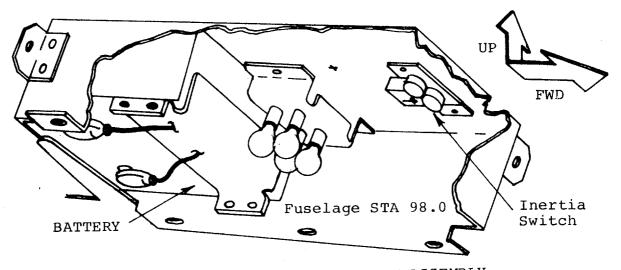


FIGURE 1B: EMERGENCY LIGHT ASSEMBLY View LKG outboard LH side

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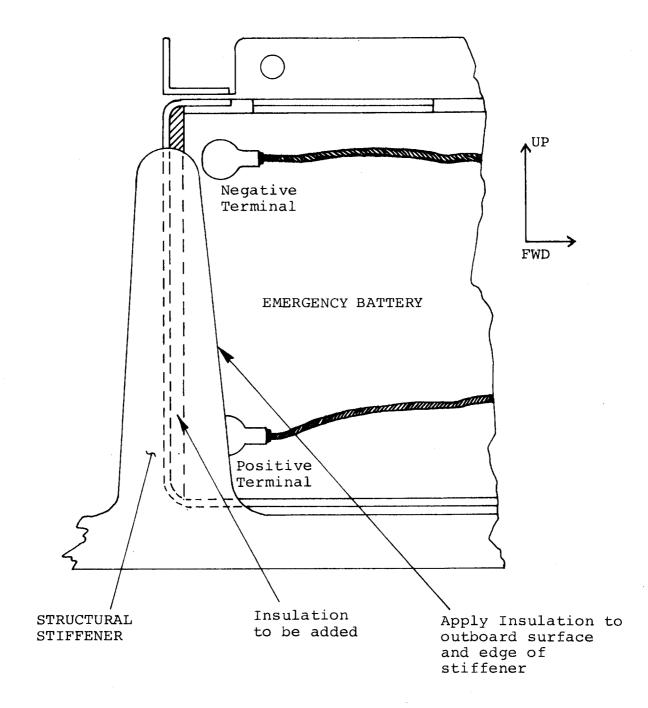


FIGURE 2

EMERGENCY LIGHT SYSTEM BATTERY INSULATION

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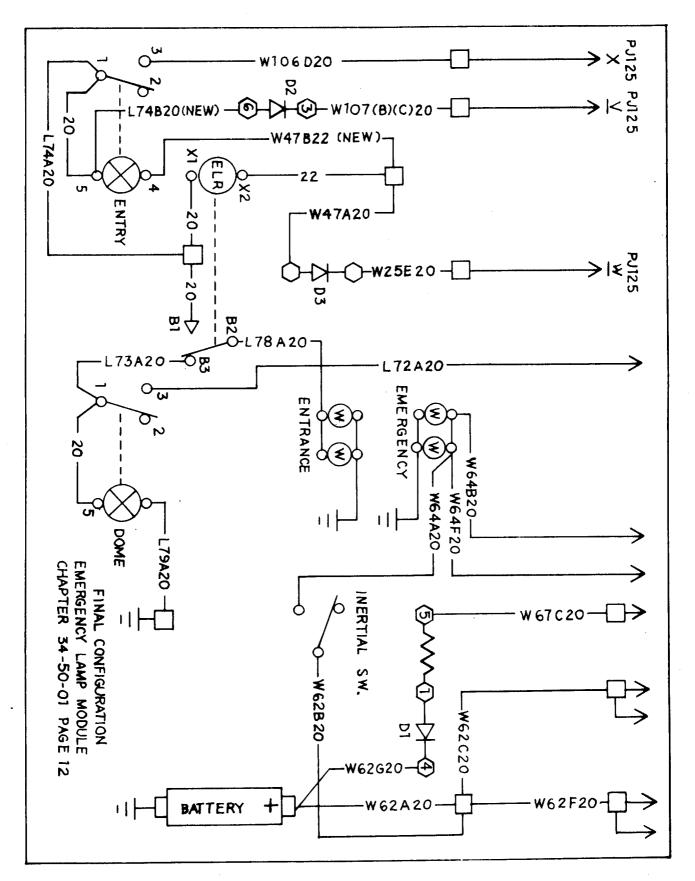


FIGURE 3

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SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-39-011 Revision No.1

June 14, 1985

SUBJECT: OVERHEAD PANEL ACCESS AND ALIGNMENT IMPROVEMENT AND/OR RETROFIT.

REASON FOR

REVISION:

To change the service bulletin sequence number and some wording in paragraph 4. Record Compliance.

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-39-011 dated February 5, 1985 titled "Overhead Panel Access and Alignment Improvement And/Or Retrofit" was accomplished



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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-39-011

February 5, 1985

SUBJECT: OVERHEAD PANEL ACCESS AND ALIGNMENT IMPROVEMENT AND/OR RETROFIT.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWINDS, all serial numbers prior to 259.

B. REASON

To alleviate the fitting alignment and to ease the opening or closing of the overhead panel. Two reinforcement parts 5883771-11 and -12 are retrofitted to stiffen the overhead panel structure to prevent flexing thereby improving panel alignment.

C. COMPLIANCE

Optional

D. DESCRIPTION

This bulletin adds a reinforcement to stiffen the overhead panel structure.

E. APPROVAL

The modification procedure described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

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F. MATERIAL

Contact Atlantic Aviation Supply Company in Wilmington Delaware or their authorized representatives.

G. TOOLING

Special tools are not required for the modification.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCE

MODEL 1124 Maintenance Manual Chapter 39-10-05, page 401.

K. PUBLICATIONS AFFECTED

MODEL 1124 IPC, Chapter 39-10-00, Figure 1, page 0 will be revised to properly identify cockpit panels.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - Gain access to station Y=75.650 by removing all overhead panel fasteners per 1124 Westwind Maintenance Manual procedure in 39-00-04, page 401.
 - (2) Layout and drill appropriate rivet holes per requirements on Figure 1 and Figure 2. Drill rivet holes for a -11 or -12 pattern as required.
 - (3) Install rivets (.125 typ.) from forward side of station Y=75.650 and rivet the -11 and -12 parts into place.
 - (4) Close the overhead panel per Westwind 1124 Maintenance Manual Section 39-10-05, page 401.

3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION	OLD P/N
1	5883771-11	Angle (LH)	None
1	5883771-12	Angle (RH)	None
20	MS20470AD4-7	Rivets	None

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

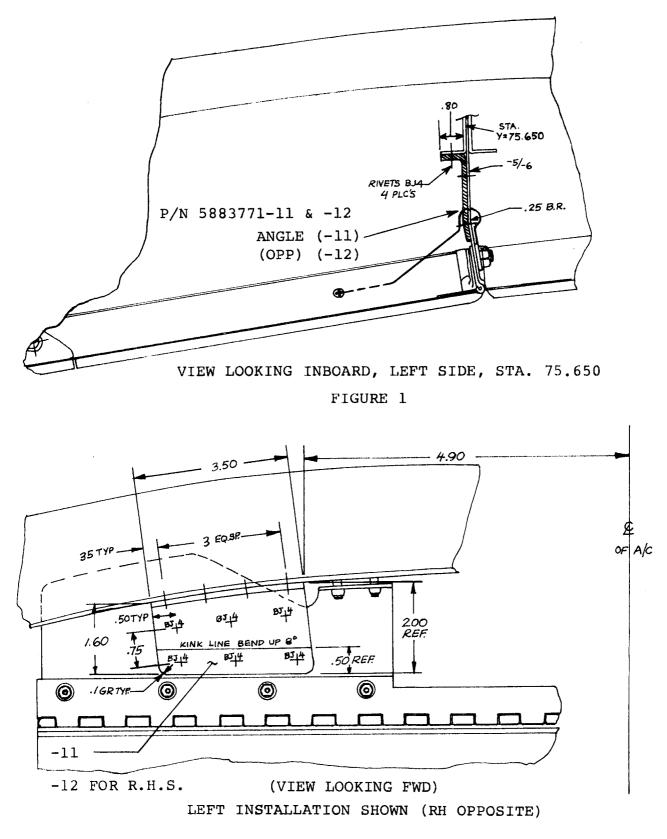
Service Bulletin No. 1124-39-010 dated February 5, 1985 titled "Overhead Panel Access and Alignment Improvement And/Or Retrofit has been accomplished this date

٠

END

February 5, 1985

SERVICE BULLETIN NO. 1124-39-011



COCKPIT OVERHEAD PANEL

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-27-012 Revision No. 1 February 14, 1986

SUBJECT: FLAP ACTUATORS - IMPROVEMENT AND REPAIR

CANCELLATION NOTICE

This service bulletin is hereby cancelled forthwith. The information contained in this service bulletin is presently being revised in its entirety and will be published at a later date.

Manager

Technical Services

INTERNATIONAL INC. ATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-23-013

February 11, 1985

SUBJECT: VHF COM AND AUDIO SYSTEM CONFORMITY

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART I: MODEL 1124 serial numbers 152, 154, 174, and 185 through 391, and MODEL 1124A serial number 239 except MODEL 1124 serial number 290 and 357.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: MODEL 1124A serial numbers 295 through 390; MODEL 1124 serial numbers 290 and 357.
 - B. REASON
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART I: To ensure operation of VHF Com-1 with backup manual frequency control head and copilot operation of Com-1 in the event of a Comm and Accessory bus failure and/or during ground operation during engine start with the Avionics Masters off.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: To ensure operation of VHF Com-2 with CTL-20 control and copilot operation of Com-2 in the event of a Comm and Accessory bus failure and/or during ground operation during engine start with the Avionics Masters off.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL C. COMPLIANCE

Optional

- D. DESCRIPTION
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART I: Describes a one time conformity inspection and corrective action, if necessary, to ensure that the aircraft busses function as required to provide the capability indicated in Par. 1.B.1.
 - (2) ACCOMPLISHMENT INSTRUCTIONS PART II: Describes a one time conformity inspection and corrective action, if necessary, to ensure that the aircraft busses function as required to provide the capability indicated in Par. 1.B.2.
- E. APPROVAL

The inspection and modification procedures described in this Service Bulletin have been shown to comply with the applicable FAA/ICAA regulations and are IAI Engineering approved.

F. MATERIAL

All material required may be procured locally.

G. TOOLING

Not applicable.

H. WEIGHT & BALANCE

Not applicable.

- I. ELECTRICAL LOAD DATA
 - (1) No change to total electrical load.
 - (2) Revision of aircraft electrical load analysis to reflect bus tie changes and recomputation of respective bus loads will be required.
- J. REFERENCES

1124/1124A Wiring Manual, Chapter 23-20-01/02; 23-50-01/02; 24-30-00/02; and 24-50-02.

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K. PUBLICATIONS EFFECTED

(1) ACCOMPLISHMENT INSTRUCTIONS PART I

- (a) 1124 Airplane Flight Manual-Revision 13 Section II pages 11/12 or 11.1/12.1 as applicable.
- (b) 1124/1124A Wiring Manual, Chapter 23- 20-01/02; 23-50-01/02; and 24-50-01/02.
- (2) ACCOMPLISHMENT INSTRUCTIONS PART II
 - (a) 1124A Airplane Flight Manual-Revision 9, Section II pages 11/12 or 11.1/12.1 as applicable.
 - (b) 1124/1124A Wiring Manual, Chapter 23-20-01/02 23-50-01/02; and 24-50-01/02.

2. ACCOMPLISHMENT INSTRUCTIONS

PART I

- A. Conformity inspection
 - (1) Apply ground power to aircraft.
 - (2) Turn ON aircraft battery switch.
 - (3) Leave both Avionics Master switches OFF.
 - (4) Pull VHF Com-2, Pilot Audio Speaker DC and Pilot Audio Phones DC circuit breakers.
 - (5) Tune Com-1 back-up manual frequency control to local VHF comm. frequency.
 - (6) Select copilot speaker or phones.
 - (7) Communicate with local ground station from copilot side. Utilize copilot hand microphone and/or copilot oxygen mask and boom mic with control wheel switch.
 - (8) Listen for received audio on the copilot's speaker and phones.
 - (9) Listen for sidetone on copilot's phones.

NOTE

Sidetone will also be heard on copilot's speaker on S/N 375, 379 and subs as a normal condition.

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(10) If the above conditions are not met, proceed to Part I.B., Modification Procedure. If they are met, return the aircraft to service as complying with the provisions of this Service Bulletin.

B. MODIFICATION PROCEDURE

- (1) Ensure that the battery switch is off.
- (2) Remove ground power.
- (3) Disconnect aircraft batteries.
- (4) Lower the forward overhead circuit breaker panel.
- (5) Locate the VHF Comml and-2 DC, Pilot Speaker and Phones Audio DC and Copilot Speaker and Phone Audio DC circuit breakers.
- (6) Trace the circuit breaker bus feeds from the circuit breakers in previous step to their respective busses.
- (7) Remove bus feeds to the above circuit breakers from the #1 or #2 Com and Acc busses with the following exceptions:
 - (a) Pilot Audio Speaker to the #1 Com and ACC bus will remain as is.
 - (b) Pilot Audio Phones to the #1 Com and ACC bus will remain as is.

NOTE

- a) Single bus ties should be insulated and stowed.
- b) Two or more bus ties on one breaker must be spliced together, the splice insulated and the cable secured clear of other breaker terminals
- (8) Locate the priority bus. The priority bus can be identified by the fuel status indicator DC breaker and the junction of two priority bus diodes, banded end, located on a laterally mounted bracket behind the right hand side of the forward overhead circuit breaker panel.

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- (9) Fabricate a bus tie lead of #14 AWG or larger wire and connect between the Com-1, Copilot Speaker Audio Copilot Phones Audio and the priority bus; as identified above.
- (10) Fabricate a bus tie lead of #14 AWG or larger wire and connect Com-2 to the #2 Com and Acc bus.
- (11) Fabricate a bus tie lead of #14 AWG or larger wire and connect between the Pilot Audio Speaker, Pilot Audio Phones and the #1 Com and Acc bus if this condition was not found to exist in par. 2.I.B.7.
- (12) Ensure that the new busy leads are secured properly into bundles and that they will clear circuit breakers and structure when the forward overhead circuit breaker panel is secured into place.
- (13) Ensure that all screw lengths are proper i.e. long enough to provide proper bond but not so long as to cause contact with electrical and metal components or the body of the circuit breaker itself.
- (14) Secure the forward overhead circuit breaker panel into place.
- (15) Perform the conformity inspection per par. 2.I.A. to ensure proper operation.
- PART II
- A. Conformity Inspection
 - (1) Apply ground power to aircraft.
 - (2) Turn ON aircraft battery switch.
 - (3) Leave both Avionics Master switches OFF.
 - (4) Pull VHF Com-1, Pilot Audio Speaker DC and Pilot Audio Phones DC circuit breakers.
 - (5) Tune Com-2 CTL-20 control to the local VHF comm. frequency.
 - (6) Select copilot speaker or phones.
 - (7) Communicate with local ground station from copilot side. Utilize copilot hand microphone and/or copilot oxygen mask and boom mic with control wheel switch.
 - (8) Listen for received audio on the copilot's speaker and phones.
 - (9) Listen for sidetone on copilot's phones.

NOTE

Sidetone will also be heard on copilot's speaker on S/N 349,376 and subs as a normal condition.

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(10) If the above conditions are not met, proceed to Part I.B. Modification Procedure. If they are met, return the aircraft to service as complying with the provisions of this Service Bulletin.

B. MODIFICATION PROCEDURE

- (1) Ensure that the battery switch is off.
- (2) Remove ground power.
- (3) Disconnect aircraft batteries.
- (4) Lower the forward overhead circuit breaker panel.
- (5) Locate the VHF Com-1 and-2 DC, Pilot Speaker and Phones Audio DC and Copilot Speaker and Phones Audio DC circuit breakers.
- (6) Trace the circuit breaker bus feeds from the circuit breakers in previous step to their respective busses.
- (7) Remove bus feeds to the above circuit breakers from the #1 or #2 Com and Acc busses with the following exceptions:
 - a) Pilot Audio Speaker to the **#1** Com and Acc bus will remain as is.
 - b) Pilot Audio Phones to the #1 Com and Acc bus will remain as is.

NOTE

- a) Single bus ties should be insulated and stowed.
- b) Two or more bus ties on one breaker must be spliced together, the splice insulated and the cable secured clear of other breaker terminals.
- (8) Locate the priority bus. The priority bus can be identified by the fuel status indicator DC breaker and the junction of two priority bus diodes, banded end, located on a laterally mounted bracket behind the right hand side of the forward overhead circuit breaker panel.

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- (9) Fabricate a bus tie lead of #14 AWG or larger wire and connect between the Com-2, Copilot Speaker Audio, Copilot Phones Audio and the priority bus.
- (10) Fabricate a bus tie lead of #14 AWG or larger wire and connect Com-1 to the #1 Com and Acc bus.
- (11) Fabricate a bus tie lead of #14 AWG or larger wire and connect between the Pilot Audio Speaker, Pilot Audio Phones and the #1 Com and Acc bus if this condition was not found to exist in par. 2.II.B.7.
- (12) Ensure that the new bus leads are secured properly into bundles and that they will clear circuit breakers and structure when the forward overhead circuit breaker panel is secured into place.
- (13) Ensure that all screw lengths are proper i.e. long enough to provide proper bond but not so long as to cause contact with electrical and metal components or the body of the circuit breaker itself.
- (14) Secure the forward overhead circuit breaker panel into place.
- (15) Perform the conformity inspection per par. 2.II.A. to ensure proper operation.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-22759/16-14	Wire
A/R	320565 (AMP)	Ring Tongue terminal
A/R	AN526-632	Screw
A/R	MS20365-632	Nut

4. RECORD COMPLIANCE

Make the following entry in aircraft log book:

Service Bulletin No. 1124-23-013 dated February 11, 1985, titled "VHF Comm and Audio System Conformity" has been accomplished this date.

Make corrections to your aircraft Wiring Manual to reflect changes accomplished in "Accomplishment Instructions Part I.B or Part II.B." as applicable.

END

February 11, 1985

SB 1124-23-013 Page 7 of 7

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-29-014 Revision No.1 February 18, 1986

SUBJECT: EMERGENCY HYDRAULIC PUMP - PROTECTIVE COVER INSTALLATION

REASON FOR

REVISION:

To postfix additional installation instructions to paragraph 2.A. and change the bolt part number in paragraph 2.B. from AN-45A to AN-4A.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove the aft bulkhead panel in the forward baggage compartment. Locate and remove the upper two bolts Part Number AN4-5A and AN960-PD416L washers from the Emergency Hydraulic Pump mounting plate P/N 5 713527-21 (on 283 and subs) just forward of Station Y403.45 (Mounting plate not installed on 187 thru 282). Drilling of the aft hole using standard shop practices for A/C 187 through 282 will be necessary in order to mount the -53 angle.
 - B. Position the 5 713526-53 angle (with 2 MS21075-3 nut plates facing down) over the two open bolt holes on the 5 713527-1 and reinstall the two AN-4A bolts and washers previously removed. Torque to 50-70 inchpounds. See Figure 1.

INTERNATIONAL INC.

SB 1124-29-014 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-29-014

April 2, 1985

- SUBJECT: EMERGENCY HYDRAULIC PUMP PROTECTIVE COVER INSTALLATION
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - MODEL 1124/1124A aircraft, all serial numbers prior to 439.
 - B. REASON

To protect the Emergency Hydraulic Pump Motor from hydraulic fluid contamination.

- C. COMPLIANCE
 - At the discretion of the operator.
- D. DESCRIPTION

This service bulletin provides instructions for the installation of a protective cover over the Emergency Hydraulic Pump Motor.

E. APPROVAL

The installation described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

> SB 1124-29-014 Page 1 of 4

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized representatives.

G. TOOLING

No special tools are required to accomplish the installation.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

None

J. REFERENCES

Illustrated Parts Catalog, Chapter 29-10-00, Figure 7, Page 72A.

K. PUBLICATIONS AFFECTED

Model 1124 IPC, Chapter 29, will be revised to reflect the new components.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove the aft bulkhead panel in the forward baggage compartment. Locate and remove the upper two bolts Part Number AN4-5A and AN960-PD416L washers from the Emergency Hydraulic Pump mounting plate P/N 5 713527-21 (on 283 and subs) just forward of Station Y403.45 (Mounting plate not installed on 187 thru 282).
 - B. Position the 5 713526-53 angle (with 2 MS21075-3 nutplates facing down) over the two open bolt holes on the 5 713527-1 and reinstall the two AN-45A bolts and washers previously removed. Torque to 50-70 inch-pounds. See Figure 1.
 - C. Install the 5 713526-49 cover utilizing two AN3-6A bolts and two AN960-PD10 washers and torque to 20-25 inchpounds. See Figure 1.

3. MATERIAL INFORMATION

\underline{QTY}	NEW P/N	DESCRIPTION	OLD P/N
1	5 713526-49 5 713526-53	COVER ANGLE (with nut- plates)	NONE NONE
2 2	AN 3-6A AN 960PD10	BOLT WASHER	NONE

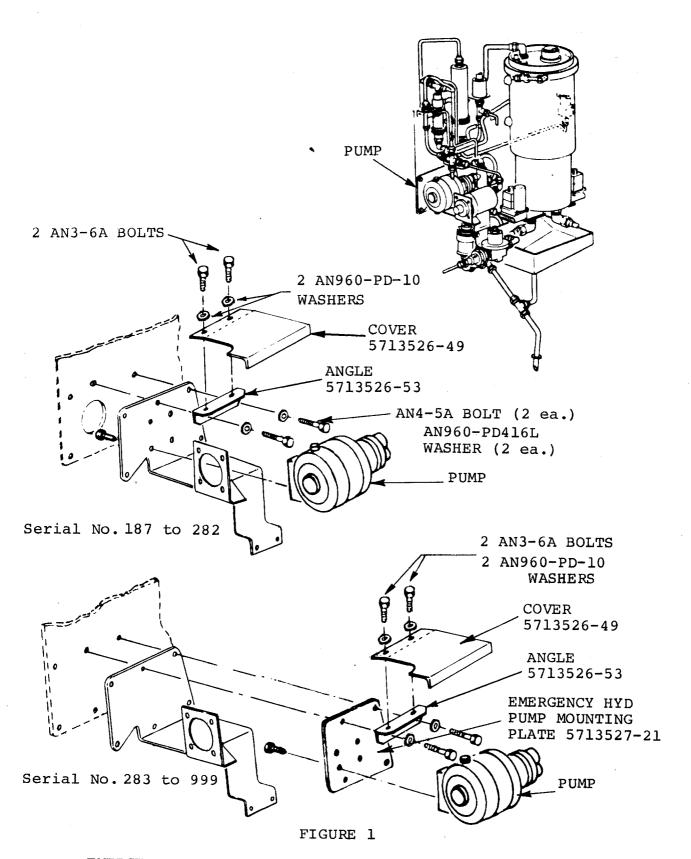
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-29-014 titled, Emergency Hydraulic Pump Protective Cover Installation, dated April 2, 1985, has been accomplished this date

END

April 2, 1985



EMERGENCY HYD. PUMP MOTOR PROTECTIVE COVER INSTALLATION

SB 1124-29-014 Page 4 of 4

April 2, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-34-015 Revision No. 1 August 23, 1985

SUBJECT: VOR/LOC ANTENNA BONDING AND PHASING

REASON FOR REVISION:

R

R

R

R

R

R

R

R

Add text to paragraph 2.A.(1).

- 2.
- ACCOMPLISHMENT INSTRUCTIONS:
 - Α.

 Check data plates for proper part numbers. Matching the DMN4-15-3 antenna requires utilizing antennas with the same serial number. However, one S/N must end with a -A and the the other must have a -B.

Antenna matching is not necessary when P/N DMN4-15-3/D is installed.

SB 1124-34-015 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-015

May 24, 1985

SUBJECT: VOR/LOC ANTENNA BONDING AND PHASING.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To eliminate VOR/LOC raw data scalloping and improve reception.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

This Service Bulletin describes procedures necessary to install a conductive gasket under VOR/LOC antenna base, ensure proper antenna radiation patterns and provide surface bonding to eliminate precipitation static.

E. APPROVAL

The modifications described in this Service Bulletin have been shown to meet applicable ICAA/FAA regulations and are IAI Engineering approved.



SB 1124-34-015 Page 1 of 6 F. MATERIAL

The material required by this Service Bulletin may be obtained through Atlantic Aviation Supply Co., their distributors or may be obtained locally through:

CHOMERICS 23839 S. Banning Blvd. Carson, CA 90745 Phone: 1-800-221-2879

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 34-50-01.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 34-50-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove both VOR/LOC antenna blades, #10 screws (8 places) and #4 screws (4 places through fillet). Tag cables for proper reassembly.
 - Check data plates for proper P/N DMN4-15-3, both blades must carry the same serial number and one blade a -A, the other a -B. This ensures you have a matched and balanced antenna.
 - (2) Inspect leading edge of each antenna blade for cracks or separation of erosion plate. Such cracks may permit water to enter blade and create internal corrosion. Obvious repair attempts at leading edge should be considered suspect.

- B. Remove P/N DMU21-2 mounting adapters. Using a wire brush clean the three mounting surfaces of each adapter, and apply Iridite P/N 14-2 or equivalent per vendor instructions.
 - (1) Clean and Iridite bottom of counterbored mounting holes.
 - (2) Retain existing sponge gasket. Ensure it is secure between the mounting surfaces using P/N 2216 or equivalent adhesive.
- C. Remove any sealant or body filler found at antenna mounting location. Clean and polish area under mounting adapter and do not remove paint within ½ inch of inside of mounting adapter outline. Iridite the exposed area.
- D. Clean and Iridite antenna mounting surfaces and countersink mounting holes of each antenna blade.
 - (1) Remove both end fillets and treat inner and upper surfaces as above.
- E. Remove all access panels on vertical stabilizer and rudder. Clean and polish each panel and surface mounting hole, including outer countersunk holes in panels. Apply Iridite 14-2 to areas exposed by cleaning.
- F. Inspect and repair as required rudder hinge bonding straps and vertical stabilizer bond strap at bottom of vertical stabilizer rear spar.
 - (1) Measure across each bond strap (not to attaching bolts), a maximum of 0.1 ohm (normal is 0.01 ohm).
 - (2) Replace bond strap if broken or frayed.
 - (3) Should a poor bond be indicated, remove strap, clean and Iridite attachment area, reassemble and retest.
- G. Reference Figure 1, detail A. This is the top view of the VOR/LOC antenna (upper blade shown RHS).
 - Inspect the coaxial cable interconnections between the blades. These cables are of critical length, and must connect as shown: forward connector of each

blade together, and aft connectors together. Inspect blade connectors for a secure connection to the coaxial cable shield braid.

- (a) Re-label connectors at blades as necessary to ensure proper connection.
- (2) Inspect the coaxial "T" forming VOR 1 and VOR 2 downleads for secure shield braid connections and ensure connectors to "T" are in turn secure.

NOTE

Properly assembled connectors will not allow connector body to twist on cable.

- H. Cut Polasheet conductive gasket material to outline of each mounting adapter footprint. Match and cut clearance holes for mounting screws.
- I. Reinstall all access panels.
- J. Reinstall antenna blade mounting adapters, with new gaskets between adapter and vertical stabilizer.
 - Use MS 35333 (-38 or -40) internal tooth lockwashers of proper size under each screwhead prior to installation. Discard original flat washers except those used as spacers between blade and mounting adapter.
 - (2) Fill counterbore with PR-1422 or equivalent sealant upon completion.
- K. Reinstall VOR/LOC antenna blades. Ensure connections are proper.
 - (1) Reinstall fillets with MS 35333-8 washers. Discard original flat washers.
 - (2) Seal screwheads with PR-1422 sealant to prevent corrosion.
- L. Should any decals such as flags or logos, have been applied to sides of vertical stabilizer, remove them. These decals generate static, and will also interfere with VHF and VLF systems installed.

SB **1124-34-0**15 Page **4** of 6 May 24, 1985

3. BILL OF MATERIAL

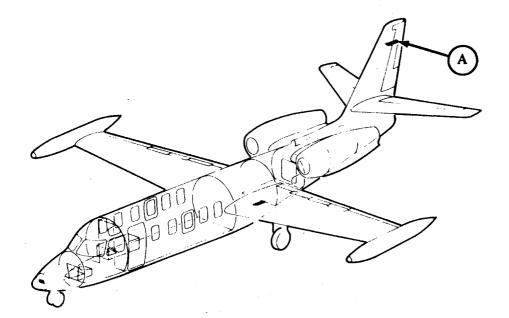
QTY	PART NUMBER	DESCRIPTION
A/R	PR-1422	Sealant (Mfg. Pro Seal) or equivalent
A/R	14-2	Iridite, or equivalent
l	07-0802-3012	Gasket material (Mfg. Chomerics)
A/R	2216	Adhesive (Mfg. 3M) or equivalent
8	MS 35333-40	Lockwasher, ¼" internal tooth
8	MS 35333-38	Lockwasher, #8 internal tooth

4. AIRCRAFT RECORDS

Make the following entry in the aircraft log book: Service Bulletin No. 1124-34-015 dated May 24, 1985, titled "VOR/LOC Antenna Bonding And Phasing," has been accomplished this date _____.

END

May 24, 1985



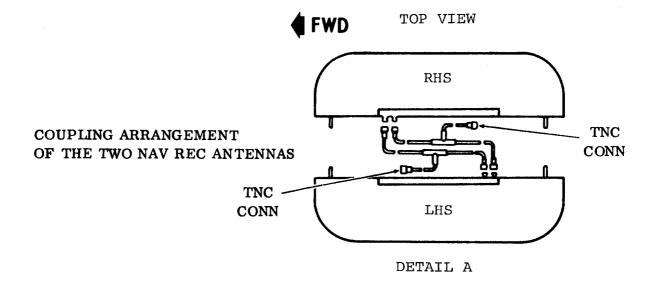


FIGURE 1

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-23-016 Revision No. 2 May 23, 1986

SUBJECT: INSTALLATION OF ADDITIONAL AND IMPROVED STATIC WICKS

REASON FOR To change quantity of P/N 16293 from 1 to 2 each in REVISION: Paragraph 3. Material Information, Part A.

- 3. MATERIAL INFORMATION
 - A. For modifications per this Service Bulletin you will require:

QTY

PART NUMBER

DESCRIPTION

2

16293

Base (Mfg. D-G)

VTERNATIONAL INC.

SB 1124-23-016 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-23-016 Revision No.1 July 12, 1985

SUBJECT: INSTALLATION OF ADDITIONAL IMPROVED STATIC WICKS

REASON FOR

REVISION:

To change the classification of this bulletin from recommended to optional.

C. COMPLIANCE

Compliance of this bulletin is optional.

TERNATIONAL INC.

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL SB 1124-23-016 Page 1 of 1

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RECOMMENDED

SERVICE BULLETIN NO. 1124-23-016

April 24, 1985

SUBJECT: INSTALLATION OF ADDITIONAL AND IMPROVED STATIC WICKS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers through 426.

B. REASON

To improve precipitation static discharge capability by introducing improved static wicks and adding additional static wicks in critical locations.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

- D. DESCRIPTION
 - (1) This Service Bulletin describes procedures necessary to test static wick and base bonding, installation of additional static wicks and bases, replacement or relocation of existing static wicks and bases; and replacement of existing static wicks with improved types.

SB 1124-23-016 Page 1 of 10 (2) This Service Bulletin also describes procedural changes that will require inspection for conformity on those aircraft having previously installed additional static wicks and bases on the elevator to prevent possible delamination of the honeycomb.

References Paragraphs 2.C.(1).(a) (b) (c); 2.C (2).(a) (b); and 2.D.(3).(4).(5). below using only those new wicks specified in Part 3.A. below.

If in doubt about possible delamination at elevator, perform the "tap" test described in the 1124/1124A Maintenance Manual Chapter 27-30-00 for suspect areas.

(3) The inspection, test, and replacement procedures described in this Service Bulletin are to be incorporated into existing procedures published in the Maintenance Manual Chapter 23-60-00.

E. APPROVAL

The inspections and modifications in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

The material required may be obtained through Atlantic Aviation Supply Co. or their distributors. Individual components may be purchased locally or through:

Dayton-Granger P.O. Box 14070 812 NW First St. Ft. Lauderdale, FL 33201 Phone: (305-436-3451)

Chelton P.O. Box 711 Lewisville, TX 75067 Phone: (214-221-1783)

G. TOOLING

None

H. WEIGHT AND BALANCE

Not applicable.

SB 1124-23-016 Page 2 of 10 I. ELECTRICAL LOAD DATA

None

J. REFERENCES

1124/1124A Maintenance Manual; Chapters: 23-60-00 24-00-00 27-00-00 27-30-00 51-00-00

K. PUBLICATIONS AFFECTED

1124/1124A Maintenance Manual, Chapter 23-60-00. 1124/1124A Illustrated Parts Catalog, Chapter 23-60-00.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Inspection Procedures
 - (1) Using a digital or bridge-type ohmmeter, measure from each existing static wick base to adjacent airframe or diverter strip to which it is attached.
 - (a) A reading in excess of 0.5 ohm will indicate a defective bond, the wick base in question must be removed and rebonded in accordance with following installation procedures.

Reference: Paragraphs 2.C.(1).(a),(b),; 2.D.(3),(5),; and 2.E below.

- (2) Measure across each control surface hinge bond braid (aileron, flap, elevator, and rudder). Do not measure from bond attach bolts, but adjacent to them.
 - (a) A reading in excess of 0.1 ohm (normal is 0.01) ohm) will indicate a poor bond. Remove bond strap (replace if broken or frayed) and clean attachment area per instructions in Maintenance Manual, Chapter 24-00-00. Reassemble and retest.
- (3) Using a low current megohmmeter, test each static wick in accordance with instructions published in 1124 Service Information Letter No. 1124-23-016. Replace defective wicks as required upon completion of modification.

- (a) For part number identification of replacement and/or equivalent static wicks, reference Paragraph 3.A. and/or 3.b. below.
- (b) Remove all static wicks to permit accomplishment of following steps.
- (c) Should P/N 16785 and P/N 15344 wicks or equivalent be installed, and test good, retain for reinstallation.
- B. Locate position of new static wick bases.
 - (1) On each aileron, using the existing outboard base at Station 234.9 as reference:
 - (a) Mark a position at Station 198.9 for a third base.
 - (b) It is recommended, but not required, to relocate the inboard base presently at Station 212.9 to a new position at Station 216.9.
 - (2) On each elevator, using the existing outboard base at Station 123.0 as a reference:
 - (a) Mark a position at Station 91.3.
 - (3) On each tip tank, measure from front of lamp lens.
 - (a) Mark a position at Station 126.8, outboard. This will be the forward end of new base.
 - (b) Mark a position at Station 133.65 on top. This will be the aft end of new base, the existing wick and base will be replaced.
 - (c) Above locations must be centered on diverter strip
- C. Prepare locations to mount new bases.
 - Remove existing tip tank upper base and, if desired the existing inboard aileron base. Remove elevator wick if required to relocate to trailing edge. Drill 4 places No. 30 each base to remove rivets.
 - (a) Crack existing seal with a sharp tool, then apply a twisting motion to wick base. This removes base without damaging airframe.

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- (b) Clean remaining adhesive and sealant from airframe and wick bases with MEK, Turco 4669, or equivalent. Wick bases may be reused.
- (c) For original control surface skin rivet holes, fill with PR-1422 sealant, and plug with MS20600AD4-2 Cherry rivets. File shank flush with head.
 - (1) Ensure elevator skin and honeycomb core is completely filled with sealant.
 - (2) Install rivets while sealant is still wet.
- (d) For trailing edge of aileron, countersink upper trailing edge 100° and plug with MS20426B4-5 rivets.
- (e) For each tip tank, countersink original rivet holes 68° and plug with MS20601AD4-3 Cherry rivets.
- For each aileron and elevator, using new base P/N 16335 as a pattern, remove all paint and primer from new locations marked above. Polish and apply Iridite P/N 14-2 to exposed metal areas.
 - (a) Locate each new base P/N 16335 with aft end of base flush with trailing edge and base centerline parallel to aircraft centerline.
 - (b) Drill each base 4 places using existing wick bases as a guide to hole placement.
 - (1) Aft hole locations MUST be parallel with existing trailing edge rivet line, and drilled through trailing edge.
 - (A) Aileron bases drill #30 each place.
 - (B) ELEVATOR BASES DRILL #30 FORWARD (2 PLACES) AND #40 AFT END (2 PLACES).
 - (2) Forward hole location to penetrate upper skin ONLY.
 - (A) USE DEPTH GAUGE AND DRILL STOP AS NEEDED.
 - (B) ELEVATOR FORWARD HOLE LOCATIONS MUST PENETRATE THROUGH HONEYCOMB. DO NOT ALLOW DRILL TO REACH OR PENETRATE BOTTOM SKIN.

April 24, 1985

- (3) Countersink all new base forward holes 68^o for NAS1739B4-2 Cherry rivets.
- (4) Countersink new aileron base aft holes and bottom of new holes in aileron to 100° for MS20426B 4-7 rivets.
 - (c) Tape new bases near proper location for riveting later.
- (3) For each tip tank, using new base P/N 16293 with forward edge of base at Station 126.8 outboard as a pattern, remove all paint and primer from diverter strip.
- (4) For each tip tank, using new base P/N 16292 with aft edge of base at Station 133.65 as a pattern, remove all paint and primer from diverter strip.
- (5) Reapply as necessary Type 1 Anti-Static coating to areas cleaned in Steps 3 and 4 above, overlapping diverter 1/4", allow to cure per vendor instructions prior to further work.
- (6) When Anti-Static coating is dry, locate new bases in Steps 3 and 4 above centered on diverter strip and parallel with tip tank centerline.
 - (a) Drill each base 4 places No. 30 through tip tank and diverter strip.
 - (b) Countersink all new base holes 68° for MS20601AD 4-4 Cherry rivets.
 - (c) Tape new bases near proper location for riveting later.
- D. Mounting of new wick bases.
 - Where Cherry rivets are to be installed, fill holes with PR-1422 sealant and install rivets while sealant is wet. Sandpaper (#400 grit) the lower surface of all new wick bases to remove dirt and oxides.

CAUTION

The following steps must be accomplished accurately and rapidly since the P/N 16307 adhesive mixture pot life is only 1 hour. Keep mixture cool for maximum pot life.

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- (2) Using instructions supplied by vendor, mix the P/N 16307 conductive adhesive.
- (3) Working with one base at a time, apply a thin layer of adhesive to bottom of each base and rivet in place.

CAUTION

When installing rivets in the control surface trailing edge, install the forward Cherry rivets first, then the aft rivets. Do not permit the trailing rivets to be driven too short. This will cause the forward edge of base to pull up and stress the skin. This can also cause elevator delamination.

- (a) On each aileron, for P/N 16335 bases, use 2 ea. MS20426B 4-7 rivets at trailing edge and 2 ea. NAS1739B4-2 Cherry rivets at forward edge.
- (b) For each elevator, use 2 ea. MS20470A3-7 rivets at trailing edge and 2 ea. NAS1739B4-2 Cherry rivets at forward edge.
- (c) For P/N 16292 and 16293 bases, use 4 each MS20601AD4-4 Cherry rivets.
 - (1) For these curved bases, apply sufficient adhesive to ensure the contour between wick base and diverter strip is filled.
- (d) Clean excessive adhesive from work area as each base is installed.
- (4) When adhesive has cured, test each base for proper bonding per Paragraph 2.A. (1) above.
- (5) Seal all new wick base and airframe joints with Pro Seal PR1422 or equivalent.
 - (a) Ensure rivet heads and airframe joints are properly sealed to prevent moisture entry and corrosion under wick base.

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April 24, 1985

- (b) Ensure control surface plug rivets are also permanently sealed.
- E. Reprime and paint as required all newly exposed areas.
 - (1) Mask wick base cavities and stubs to prevent painting over new static wick attaching points.
- F. Install new static wicks in all locations and test per instructions per Paragraph 2.A.(3).above.
- G. Rebalance elevators and ailerons per instructions in Maintenance Manual Chapter 27-00-00.
- H. Return aircraft to service.
- 3. MATERIAL INFORMATION
 - A. For modifications per this Service Bulletin you will require:

QTY	PART NUMBER	DESCRIPTION
2 1 4 1	16292 16293 16335 16307	Base (Mfg. D-G) Base (Mfg. D-G) Base (Mfg, D-G) Conductive Ad- hesive (Mfg. D-G)
14 (1124)	16785	Wick, trailing (Mfg. D-G)
16 (1124A)	or 2-16SC-1	Equivalent
7	15344	(Mfg. Chelton) Wick, tip (Mfg. D-G)
	or	
	2-14SC-1	Equivalent (Mfg. Chelton)
A/R	MS20601AD4-4	Cherry rivet (tip tank base)
A/R	MS20601AD4-3	(tip tank base)
A/R	NAS1739B4-2	Cherry rivet (forward surface
A/R	MS20600AD4-2	bases) Cherry rivet (surface plugs)

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QTY	PART NUMBER	DESCRIPTION
A/R	MS20426B4-7	Rivet (aileron base, aft)
A/R	MS20426B4-5	Rivet (aileron aft plugs)
A/R	MS20470A3-7	Rivet (elevator base aft)
A/R	4669	Solvent (Mfg. Turco) or equivalent
A/R	PR-1422-1/2	Sealant (Mfg. Pro Seal) or equivalent
A/R	14-2	Iridite (or equiv.)
A/R	528-302/910-006	Anti-Static paint (Mfg. DeSoto) or equivalent

B. For replacement component information:

BASI	E LOCATION	PART NUMBER	MODEL	MFG.
Vert. Horiz	railing edges: Stab. tip: . Stab. tip: ank upper	16297	610R-9A 611R-15A 611R-14A	D- G D-G D-G
(new) : Tip Ta	:	16292	611R-10A	D–G
-	ard (new):	16293	611R-11A	D-G
WICH	K LOCATION	PART NUMBER	MODEL	MFG.
	ing edges inal): (new): (new):	001-0320-02 or 16305 16785 2-16SC-1 80-1746-2	_ 610D-1B 510D-2A _	DG DG DG Chelton Shaw
Tips OR: OR:	(original): (new): (new):	001-0135-02, or 16310 15344 2-14SC-1 80-1828-2	611D-1B 511D-3A	DG DG DG Chelton Shaw

4. RECORD COMPLIANCE

A. Make the following entry in aircraft log book:

Service Bulletin No. 1124-23-016 dated April 24, 1985 titled "Installation of Additional and Improved Static Wicks" has been accomplished this date .

- B. Please make temporary corrections to your Illustrated Parts Catalog Chapter 23-60-00 to reflect part number and location changes described in this Service Bulletin.
- C. Please insert appropriate section of this Service Bulletin into your Maintenance Manual Chapter 23-60-00.

1



RECOMMENDED

SERVICE BULLETIN NO. 1124-27-017

October 31, 1985

SUBJECT: FLIGHT CONTROLS - MODIFICATION OF RUDDER SERVO TRIM TAB

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 174, 181, 185 through 403, 405, 407 and 409.

B. REASON

To prevent interference between the rudder trailing edge and the servo trim tab leading edge on the right-hand side, should a failure of one trim tab actuator occur.

C. COMPLIANCE

It is recommended that the modification be accomplished as soon as practical, or at next 150-hour inspection.

D. DESCRIPTION

It has become evident that interference and/or binding may occur between the trim tab leading edge and the rudder trailing edge on the right-hand side. This condition can occur should one of the two trim tab electrical actuators fail. The rudder trim is further actuated to the nose left limit. This bulletin describes a modification procedure to provide clearance by trimming spar and skin material from the trim tab right side leading edge. New rivets are installed aft of the existing rivet line. The remaining edge distances of skin-to-spar will determine the rivet pattern to be used for completing the modification.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL This modification has been successfully tested on the ground and in flight. It is not necessary to rebalance the rudder assembly following this modification.

E. APPROVAL

This service bulletin has been reviewed by Israel Civil Aviation Administration (ICAA). The modification herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, their authorized dealers or may be locally purchased.

G. SPECIAL TOOLS

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 27-20-00.

K. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove the rudder servo trim tab from the aircraft rudder in accordance with 1124/1124A Maintenance Manual, Chapter 27-20-00, removal/installation paragraph 3A.
- B. Layout area to be trimmed in accordance with Figure 1.
- C. (1) Before trimming off any material observe the proposed cutline for rivet edge distance to the spar radius and leading edge. If the edge distance on your rudder tab conforms to the measurements on Figure 1 utilize the rivet pattern reflected in Figure 1 to effect the modification.

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Make sure that a minimum of 2D (.25) edge distance from center of rivet hole shall be maintained after cutting out completely the existing 1/8 rivet holes in a straight line as shown in Figure 1.

- (2) If the remaining edge distance results in less than those measurements reflected in Figure 1, go to Figure 2.
- (3) Since edge distance determines rivet size and quantity, it is important that the number of rivets in Figures 1 and 2 be used to maintain integrity of the tab leading edge. Select the rivet pattern that will best suit the required number to accomplish the modification.

NOTE

Should you find that none of the proposed rivet patterns will be acceptable, notify your Westwind Technical Representative. Do not trim the rudder tab until a solution is determined for your aircraft.

- D. Using pilot holes and CLECO fasteners as required, trim off material assuring corners have proper radius and edge distances are maintained.
- E. Locate and install new rivets (in accordance with Figure 1 or Figure 2) that best match the edge-distance remaining after the cut is made.
- F. Touch up or repaint trim tab assembly as required.
- G. Reinstall rudder servo trim tab in accordance with 1124/1124A Maintenance Manual, Chapter 27-20-00, Installation, paragraph 3.B.

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3. MATERIAL INFORMATION

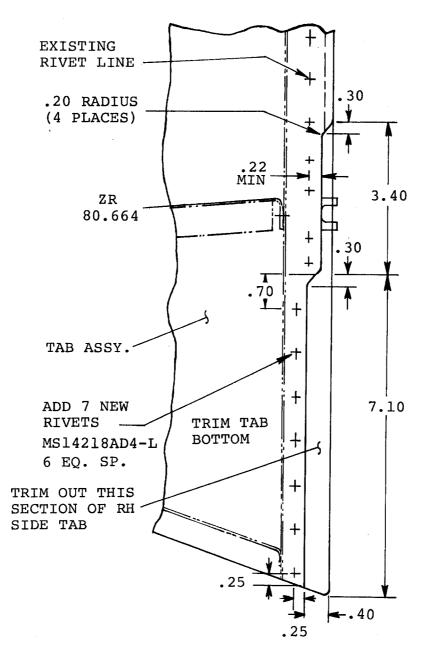
Refer to Figure 1 and 2 to determine rivet size and quantities.

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

"Flight Controls - Modification of Rudder Servo Trim Tab," was accomplished on , in accordance with the Service Bulletin No. 1124-27-017.

END



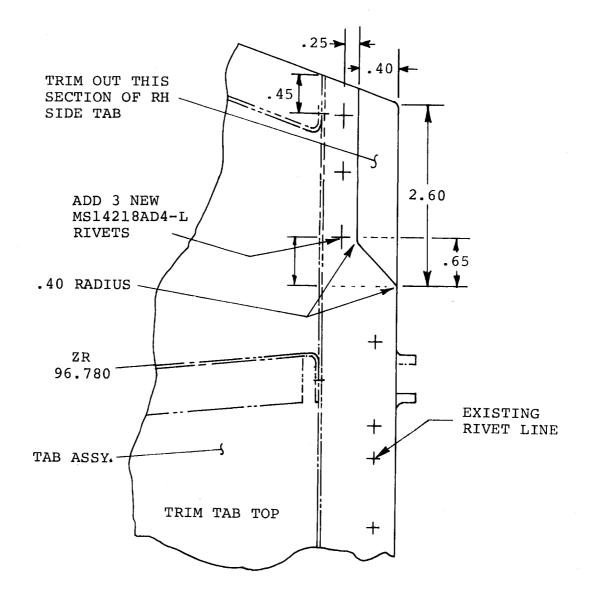
VIEW LOOKING AT RH SIDE BOTTOM OF RUDDER SERVO TRIM TAB LEADING EDGE

FIGURE 1

CUTTING OF RUDDER SERVO TRIM TAB SHEET 1 of 2

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VIEW LOOKING AT RH SIDE TOP OF RUDDER SERVO TRIM TAB LEADING EDGE

FIGURE 1 CUTTING OF RUDDER SERVO TRIM TAB

SHEET 2 of 2

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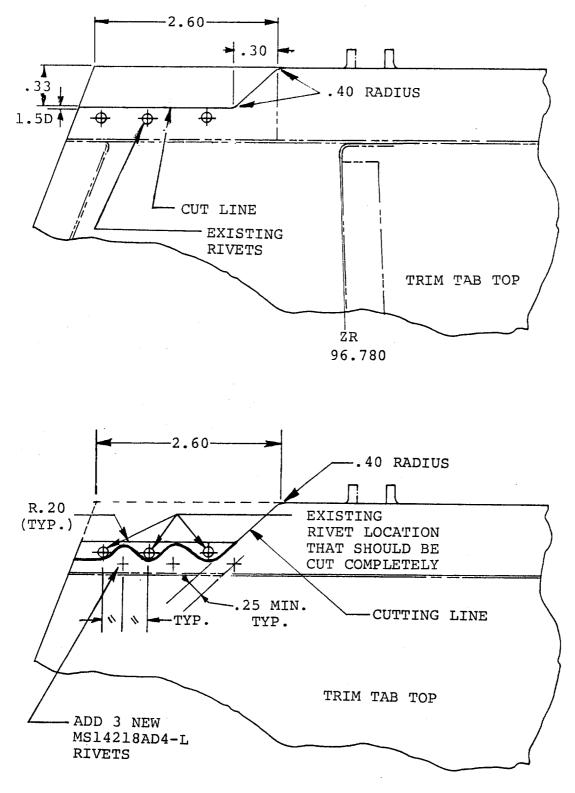


FIGURE 2 (SHEET 1 OF 2)

ALTERNATE CUTTING LINE AND RIVET PATTERN

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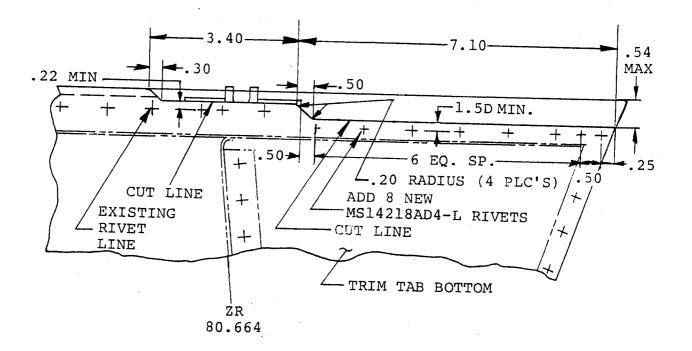


FIGURE 2 (SHEET 2 OF 2)

ALTERNATE CUTTING LINE AND RIVET PATTERN

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-22-018

April 15, 1985

SUBJECT: AUTOFLIGHT - NUISANCE AUTOPILOT DISENGAGEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part I: Model 1124A WESTWIND, serial numbers 295 through 365.
 - (2) Accomplishment Instructions Part II: Model 1124A WESTWIND, serial numbers 295 through 425.
 - B. REASON

To prevent nuisance autopilot disengagement where no failure mode is apparent.

C. COMPLIANCE

At operators convenience and discretion.

- D. DESCRIPTION
 - (1) Induced AC voltages have been determined to be a partial cause of autopilot disengagement. This Service Bulletin describes corrective action to reduce these induced voltages.
 - (2) To introduce to operators those Collins Avionics Service Bulletins necessary to prevent the remainder of the nuisance disconnects.

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INTERNATIONAL INC.

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- E. APPROVAL
 - (1) The modification described in D.(1) above has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.
 - (2) The modifications to vendor equipment described in D.(2) above are approved by vendor Service Publications applicable to the specific equipment.
- F. MATERIAL
 - (1) Material for modification described in D.(1) may be procured locally.
 - (2) Material for modification of vendor equipment described in D.(2), and ordering procedures, are described in the appropriate vendor Service Publication.
- G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124A Wiring Manual, Chapters 21-00-01 and 22-10-01.

K. PUBLICATIONS AFFECTED

1124A Wiring Manual, Chapters 21-00-01 and 22-10-01.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove all power from aircraft.
 - B. Remove the following interior components.
 - 1. RH cockpit seat and sidewall.
 - 2. RH cabin sidewall and card table.
 - 3. RH cabin lower kick panels.

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- 4. Remove carpet and floor access panels to gain access to cabin temperature sensor fan and terminal strip; fuselage STA 232.0 LHS.
- 5. Divan assembly.

PART I

- A. Remove wire H84B20 from fan terminal strip lug 2, cap and stow.
- B. Install new #20 AWG shielded wire. Connect center conductor to fan terminal strip lug 2. Connect shield to ground with White wire coming from fan motor.
- C. Route new wire under floor to right sidewall. Follow cable bundle forward to the Forward Relay Panel under copilot seat. Clamp and tie as required to prevent chafing to aircraft structure.
- D. Remove connector P8 from Forward Relay Panel, remove cap and stow wire H84A20 from P8 pin B.
- E. Connect new shielded wire center conductor to P8 pin B, shield to be insulated with no connection to other points.
- F. Wire H84A/B20 now becomes spare.
- G. Check for proper fan operations, reassemble cockpit/cabin areas.
- H. Return aircraft to service.

PART II

- A. Remove all power from aircraft.
- B. Remove following vanity area components.
 - (1) Toilet assembly.
 - (2) Vanity assembly.
 - (3) Aft toilet trim panel, to gain access to autopilot system components.
- C. Remove APA80. Dismount APA80 rack, remove rear cover to expose connectors.

April 15, 1985

- D. Carefully push back APA cable bundle cover (this may require cutting string ties) to expose spliced jumper wire from APA80 Pl pin 4 to P3 pin 6. This jumper runs from Pl, through bundle, and back to P3. Cut this jumper at splice, leaving wire C285A24R intact from Pl-4 to NAC-80, Ref: Wiring Manual ATA 22-10-01.
- E. Cut wire C285A24R 3 inches from P1-4, and jumperwire 3 inches from P3-6, strip all three open ends and splice together. Cap and stow the now open jumper that doubles back through cable bundle. Jumper should now be wired across P1 to P3 at rear of rack, with spliced wire C285A24R from P1-4 to #2 NAC-80 (DB344) pin A.
- F. Reassemble APA80 rack, remount. Reinstall APA80, check for proper system operation, in accordance with Rockwell Collins FCS 80 Ground Test Manual.
- G. Inspect the following units for vendor modification status; this step is recommended should additional disconnects continue to occur after Part 1 and Part 2A through F are accomplished.
 - (1) APA80, Collins Service Bulletins 7 and 9.
 - (2) APC80, Collins Service Bulletins 13, 20 and 21.
 - (3) For compliance with (1) and (2) above, contact your local Collins Field Service Engineer or Avionics Service Facility rated for subject equipment.
- H. Reinstall equipment removed, check for proper operation. Reassemble vanity area.
- I. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1 1 4	323287 AMP 324485 AMP 0005-049-000 Deutsch	Butt splice Wire caps Pin, female, #20
A/R A/R	SST45 Panduit SSC25-26-56 Panduit	Ty-wrap, 4" Ty-wrap, 2", bolt mount #6
A/R A/R 25 ft	6-32 x 3/4" 6-32 MIL-W-16878D	Screws, phillips ESNA nuts #20 AWG shielded wire single

conductor

NOTE

Part numbers may be replaced by equivalents from vendors other than those indicated.

4. RECORD COMPLIANCE

April 15, 1985

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-22-018, dated April 15, 1985, titled "Nuisance - Autopilot Disengagement," has been accomplished this date _____.
- B. Make corrections to the Wiring Diagram Manual to reflect changes performed by this Service Bulletin.

END



OPTIONAL

SERVICE BULLETIN NO. 1124-52-019A (This Service Bulletin supersedes Service Bulletin No. 1124-52-019, dated May 18, 1985 in its entirety)

SUBJECT: IMPROVED CABIN ENTRANCE DOOR-STAY

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 385, except 376.

B. REASON

To provide an improved method of restraining the cabin entrance door in the open position.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin provides instructions to remove the existing chain and reel installation and replace with a rigid slide-tube assembly.

E. APPROVAL

The modification described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Co. or their authorized representatives.

G. SPECIAL TOOLS

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A MAINTENANCE MANUAL

K. PUBLICATIONS AFFECTED

1124/1124A IPC Chapter 52, will be revised to reflect the new door-stay assembly.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove inside door trim panel.
 - B. Remove pilot's seat and cockpit interior trim panel just below DV window.
 - C. Move eye-bolt P/N 5123617-15 from its existing location to position shown in Figure 1. Plug old hole with screw removed to install eye-bolt in new location.
 - D. Remove chain bushing P/N 5123617-13, reel assembly P/N 5123617-7, and bracket assembly 5123617-5 from entrance door and discard.
 - E. Locate doubler P/N 5123617-RE3 per Figure 3 and drill eight #30 (.128 inch dia.) holes.
 - F. With doubler secured in place, temporarily locate and drill 1.12 inch dia. hole through door and doubler. Ref. Figure 3.
 - G. Slide door-stay assembly into door, locate and drill two #10 (.193 inch dia.) mounting holes.

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August 12, 1985

- H. Remove stay assembly, locate nut-plates and drill #40
 (.098 inch dia.) holes for mounting nut-plates with four
 (4) MS20426AD3-6 rivets. Ref. figure 3.
- I. Place packer P/N 5123617-RE5 in hole where chain bushing was removed and drill rivet hole through doubler. Bond packer with EA934 (Hysol) or EC2216 (3M).
- J. Countersink hole in door frame for nut-plate mounting.
- K. Deburr all holes in door structure and on doubler and prime with zinc chromate or epoxy primer.
- L. Rivet doubler and packer in place with MS20426AD4-5 rivets, slide stay assembly into door being sure to slip Adel clamps over tube and secure stay assembly with screws and washers (supplied with door-stay ass'y).
- M. Drill two #10 (.193 inch dia.) holes midway between lightening holes to secure Adel clamps. Ref. Figure 2.
- N. Install two MS21919DG-14 Adel clamps with MS27039-1-13 screws, NAS43DD-20 spacers, two AN960PD10L washers and MS21042-3 nuts, (supplied with door-stay Ass'y).
- O. Reinstall interior components removed in Steps 2.A and 2.B.
- P. Fill space around packer and touch up paint as required. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1 ea. *9 ea. *4 ea. *2 ea. 1 ea.	5123617-503 MS20426AD4-5 MS20426AD3-6 MS21075-3 MS21055-3 EA934 or EC2216	Stay assembly Rivets Rivets Nut-plate Nut-plate Adhesive
A/R	EA934 OI ECZZIO	Adhestve

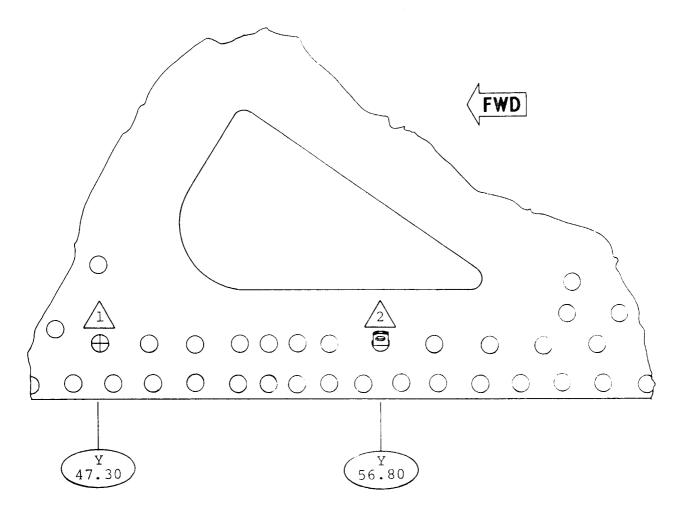
* May be obtained locally.

4. AIRCRAFT RECORDS

Make the following entry in the airplane log book: Service Bulletin No. 1124-52-019A dated August 12, 1985, titled "Improved Cabin Door Stay," has been accomplished this date _____.

August 12, 1985

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VIEW LOOKING AT PILOTS DV WINDOW

REMOVE EYE BOLT P/N5123617-15 AND RELOCATE BETWEEN STATION Y-53.00 & Y-56.80 ACCORDING TO MAXIMUM OPEN POSITION. USE ONE OF EXISTING SCREWS LOCATED BETWEEN THESE STATIONS.

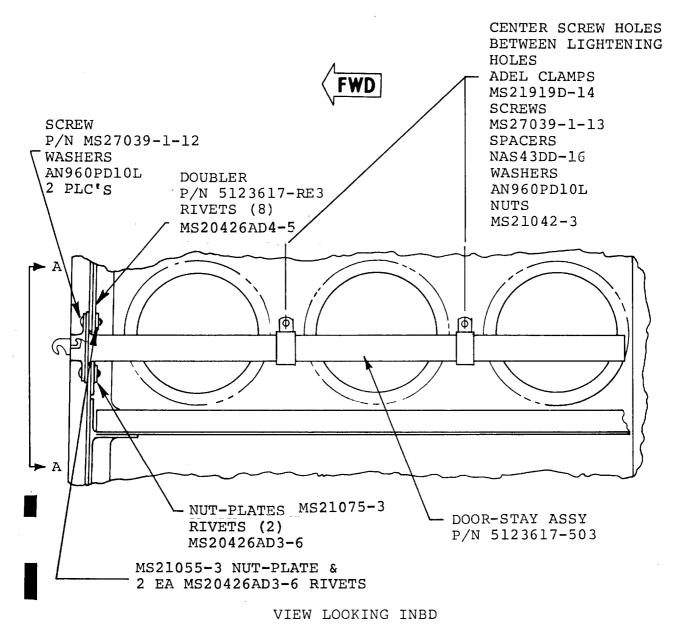
2. REMOVE SCREW AND RELOCATE TO STATION Y-47.30 WHERE EYE-BOLT WAS REMOVED

FIGURE 1 DOOR-STAY EYE-BOLT RELOCATION

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August 12, 1985

SERVICE BULLETIN NO. 1124-52-019A

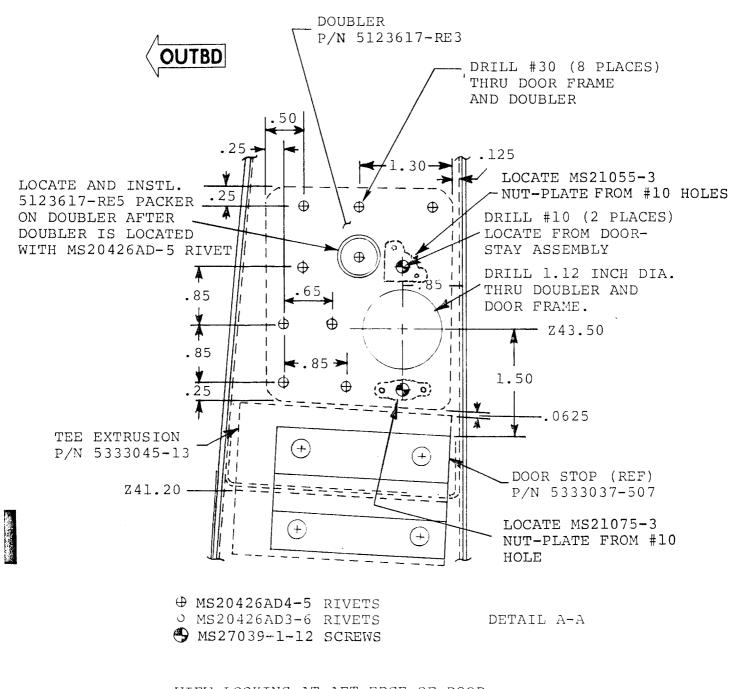


(WITH DOOR IN FIXED OPEN POSITION)

FIGURE 2 DOUBLER AND DOOR-STAY INSTALLATION

August 12, 1985

SB 1124-52-019A Page 5 of 6



VIEW LOOKING AT AFT EDGE OF DOOR FIGURE 3 DOUBLE AND DOOR-STAY INSTALLATION

SB 1124-52-019A Page 6 of 6



RECOMMENDED

SERVICE BULLETIN NO. 1124-55-020 Revision No. 2 August 8, 1988

(This Service Bulletin No. 1124-55-020 Revision No. 2 dated August 8, 1988 supersedes Service Bulletin No. 1124-55-020 dated April 2, 1985 and Revision No. 1 dated June 30, 1986 in its entirety.)

SUBJECT: HORIZONTAL STABILIZER AFT SPAR SPLICE FITTING P/N 453005-501 (HINGE ASSEMBLY) INSPECTION

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL Westwind 1124 and 1124A (Westwind I and II), all serial numbers.

B. REASON FOR REVISION 2:

Additional analysis has shown that the penetrant inspection of both 600 flight hours for aircraft without scissors and 2400 flight hours for aircraft with scissors, must be replaced by visual inspection every 300 flight hours.

C. DESCRIPTION

This service bulletin requires a periodic visual inspection of the hinge assembly for possible cracking of the hinge outer lug.

Both 600 and 2400 flight-hour interval penetrant inspections are cancelled and replaced by a 300 flight-hour visual inspection.



SB 1124-55-020 Page 1 of 4

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL D. COMPLIANCE

Accomplish hinge outer lug inspection within next 300 flight hours and every 300 flight hours thereafter.

NOTE: The 300-hour visual inspection of the outer lugs will be included in the next revision of the Maintenance Manual, Chapter 5 - "Time Limits Maintenance Checks" and is applicable to all aircraft serial numbers.

E. APPROVAL

This Service Bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA), the inspection herein complies with the applicable Civil Aviation Regulation and is ICAA approved.

F. MANHOURS REQUIRED

It is estimated that 1/2 manhour is required to accomplish this inspection. No additional time is required if performed during periodic inspection.

G. MATERIAL

Not applicable.

H. SPECIAL TOOLS

Not applicable.

I. WEIGHT AND BALANCE

Not Applicable.

J. REFERENCES

1124 Maintenance Manual Chapter 55-10-00.

K. PUBLICATIONS AFFECTED

1124 Maintenance Manual will be revised to incorporate the new 300-hour inspection requirement.

2. ACCOMPLISHMENT INSTRUCTIONS

 Remove tail cone and empennage fairings necessary to gain access to the horizontal stabilizer hinge assembly.

August 8, 1988 REVISION 2

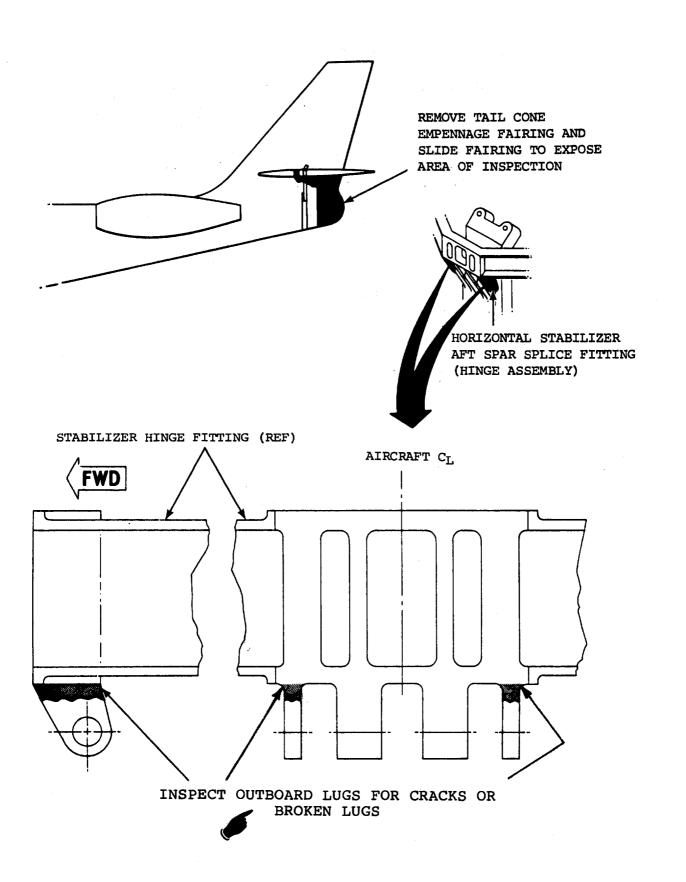
2. ACCOMPLISHMENT INSTRUCTIONS (cont.)

- (2) Inspect outboard lugs (Refer to Figure 1) for cracks with bright light and a 10X magnifying glass, or for broken lugs.
- (3) If a discrepancy is found, refer to Service Bulletin No. 1124-55-021 Revision 3 for replacement or repair of the horizontal stabilizer spar splice.
- (4) Additional information may be obtained by contacting:

Astra Jet Corporation P.O. Box 10086 Wilmington, DE 19850 U.S.A.

Telephone : (302) 322-7240 Telex : 704034

SERVICE BULLETIN NO. 1124-55-020



August 8, 1988 REVISION 2



NO. 1124-55-021

REVISION-3

OCTOBER 21, 1988

TRANSMITTAL SHEET

This sheet transmits Revision 3 to Service Bulletin No. 1124-55-021 dated AUGUST 5, 1985, titled "Horizontal Stabilizer Assembly-Inspection, Repair and Improvement" (AFC 2037).

REASON FOR REVISION:

Additional analysis has shown that the penetrant inspection of aft spar splice fitting at intervals of both 600 flight hours for aircraft without scissors and 2400 flight hours for aircraft with scissors, must be replaced by visual inspection every 300 flight hours.

This service bulletin is reissued in its entirety, to incorporate the new periodic inspection interval and incorporation of previous issue of this Service Bulletin 1124-55-021 dated August 5, 1985 with Revision Notices No. 1 dated November 18, 1985 and No. 2 dated July 11, 1986.

NOTE: This revision may require further action of inspection if in compliance of previous issue. Refer to Section 1, Compliance paragraph C(4) to determine if further inspection is required.

This is a COMPLETE REVISION. Pages revised are listed below. The letter "R" in the margin shows where changes are made. Please remove and discard all pages of previous issues and replace with pages of this revision.

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LIST OF EFFECTIVE PAGES

Page No.	Date		Page No.	Date
1	October 21,	1988	18	August 5, 1985
2	August 5,	1985	19	October 21, 1988
3	August 5,	1985	20	August 5, 1985
4	October 21,	1988	21	August 5, 1985
5	October 21,	1988	22	August 5, 1985
6	August 5,	1985	23	August 5, 1985
7	August 5,	1985	24	August 5, 1985
8	August 5,	1985	25	October 21, 1988
9	August 5,	1985	26	August 5, 1985
10	August 5,	1985	27	August 5, 1985
11	October 21,	1988	28	August 5, 1985
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14	October 21,	1988	31	August 5, 1985
15	August 5,	1985	32	October 21, 1988
16		1988	33	October 21, 1988
17	October 21,	1988	34	August 5, 1985

PREVIOUS ISSUES OF SB NO. 1124-55-021

Initial issue dated August 5, 1985 Revision 1 dated November 18, 1985 Revision 2 dated July 11, 1986

October 21, 1988

TRANSMITTAL Page 2 of 2



RECOMMENDED

SERVICE BULLETIN NO. 1124-55-021

AUGUST 5, 1985

Service letter No. WW-2479A dated August 6, 1982 and SB WW-24-14 dated March 21, 1978 are hereby cancelled and replaced by this service bulletin.

SUBJECT: HORIZONTAL STABILIZER ASSEMBLY - INSPECTION, REPAIR, AND IMPROVEMENT (AFC 2037)

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 174, 181, 185, through 408, 410 through 412, 414, 415, 417, 419, 420, 422, and 425.

B. REASON

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Some cracked outer lugs of the Horizontal Stabilizer hinge assembly have occurred in service.

- C. COMPLIANCE
 - For D.(1) below, before next flight if inspection instruction per Service Bulletin 1124-55-020 reveals any crack in a hinge lug.
 - (2) For D.(2) below, it is recommended that the installation improvements described by this service bulletin be incorporated prior to the accumulation of 2400 hours, or if aircraft total time already exceeds 2400 hours, within 600 flight hours from the effective date of this service bulletin.
 - (3) For D.(3) below, it is recommended that the radial and axial play be inspected every 600 hours until the installation improvements per paragraph D.(2) have been completed.
 - (4) After accomplishing the installation improvements herein, inspect outer lugs for cracks per Revision No. 2 of SB 1124-55-020 after 300 hours and every 300 flight hours thereafter.

AUGUST 5, 1985 R Revision 2, July 11, 1986

R Revision	З,	October	21,	1988

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D. DESCRIPTION

This service bulletin provides:

- (1) Information for replacement of the Horizontal Stabilizer spar splice, if found cracked during the inspection called for by Service Bulletin 1124-55-020 dated April 2, 1985.
- (2) Instructions to improve installation (AFC 2037).
- (2.1) Replace bearings.
- (2.2) Shot-peen the hinge outer lug roots.
- (2.3) Install new stabilizer hinge pin.
- (2.4) Install scissors assembly.
- (3) Inspection procedure for radial and axial play.
- E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The inspection and improvements herein comply with the applicable Civil Aviation Regulations and are ICAA approved.

F. WARRANTY POLICY/MATERIAL

- The improvements described herein will require a downtime of approximately one week, and are recommended to be completed at approved Westwind Service Centers only.
- (2) Installation labor and the improvement kits per Part 3.(2) and 3.(3) will be provided at no charge to the first retail purchaser of an aircraft that have not exceeded 2000 flight hours or four (4) years (whichever expires first) as of April 1, 1985.
- (3) Aircraft that do not meet the above criteria will be provided the Part 3.(2) and 3.(3) improvement kits at no charge. Kits are obtainable through approved Westwind Service Centers only.
- (4) The Part 3.(2) and 3.(3) kits are available at no charge until December 31, 1986.

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G. TOOLING

(1) SPECIAL MEASURING TOOLS

Preferred Equipment

P/N	DESCRIPTION	QTY
* GR-6121	Sunnen Dial Bore Gage	1
* GR-9121	(0.740 to 1.190 inch) Sunnen Dial Bore Gage	1
* CF-502	(1.180 to 2.000 inch) Sunnen Setting fixture (0.500 to 2.000 inch)	1
599-7031-3	Brown & Sharpe Dial Indicator (0.0005 in./	1
1/16" and 5/64' Sandbags	division) ' Radius gauges (Templates) 10 lbs each	1 25

Optional Measuring Equipment

NOTE: Following may be used in lieu of equipment noted above with an (*) asterisk.

<u>P/N</u>	DESCRIPTION	QTY
599-281-10	Brown & Sharpe Intrimik	1
599-281-12	(.8000" - 1.0000") Brown & Sharpe Intrimik (1.0000" - 1.2000")	1
599-281-20	Brown & Sharpe Intrimik (1.6000" - 2.0000")	1
599-281-880	Brown & Sharpe .8000" Ring gauge	1
599-281-1080	Brown & Sharpe 1.0000"	1
599-281-1680	Ring gauge Brown & Sharpe 1.6000" Ring gauge	1

AUGUST 5, 1985

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(2) <u>SPECIAL TOOLS & FIXTURES</u>

<u>P/N</u>		

DESCRIPTION

OTY

			$\overline{X_{11}}$
	GGN-150 3G-P20-875 UB 3G-P28-1062 VA 3G-P28-1625 WD P28-J57	Sunnen Mandrel Drive Sunnen Hone 7/8" Sunnen Hone 1 1/16" Sunnen Hone 1 5/8"	1 1 1
	P20-A-69	Honing Stones	A/R
	F20-A-09	Honing Stones	A/R
	-	Fluorescent Penetrant Insp. Kit - (Magnaflux "ZYGLO")	1
	A57QB	Honing Oil	A/R
	AJ / QB	Snap-On Bearing Puller	1
-	-	175° F Tempilstik Crayon	1
	-	194° F Tempilstik Crayon	1
	-	200° F Tempilstik Crayon	1
		250 Watt Infrared Lamps	4
	-	Shot-peening Equipment, or	A/R
	-	Flap-peening Equipment (3M Brand Roto-Peen Products) 3M Company	A/R
	-	"Scotch-Brite" Surface Conditioning Products St. Paul,	A/R
	TC330	Minnesota 55101 U.S.A Flap Assemblies (9/16" x 1 1/4")	A/R
	-	Rotary Pneumatic Tool capable of 15,000 RPM	1
	Almen "A"	Test Strip	A/R
	0.2660 inch	Reamer	1

* Available from Welding Supply Distributors

H. WEIGHT AND BALANCE

Adjust aircraft weight and balance by adding 2.3 pounds at fuselage Sta. 497.85 in the "Basic Weight Change Record", when scissors are installed.

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I. ELECTRICAL LOAD

Not applicable.

J. REFERENCES

1124 Maintenance Manual Chapter 27-40-00, Page 401, and Chapter 55-10-00, Page 2 and 3. 1124 IPC, Chapter 27-40-00, Page 2 and Chapter 55-00-00, Page 2.

- K. PUBLICATIONS AFFECTED
 - (1) Service Bulletin No. WW-24-14 dated 3-21-79 and Service Letter No. WW-2479A dated 8-6-82 are cancelled.
 - (2) 1124 Maintenance Manual will be revised to incorporate Revision 3 inspection requirement (Chapter 5) and the rework procedure. The 1124 IPC, Chapter 55-00-00 and Chapter 27-40-00 will be revised to reflect all new parts utilized in the rework of the Horizontal Stabilizer Hinge Assembly, and the addition of the scissors.
 - (3) Airplane Flight Manual Table 8-3 "Basic Weight Change Record" to be updated by operator.
- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Hinge Assembly Inspection
 - Remove tail cone and empennage fairings necessary to gain access to the Horizontal Stabilizer Hinge Assembly. See Figure 1.
 - (2) Work out as much grease as possible from the hinge assembly by applying quick movements fore and aft at the tip of the Horizontal Stabilizer. Clean up all grease before taking any measurement.
 - (3) Inspect for cracks as per Service Bulletin 1124-55-020.

AUGUST 5, 1985 R Revision 3, October 21, 1988

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R R

NOTE

If cracks are found, replace aft spar splice fitting.

If no cracks are found and:

- (4) The aircraft has exceeded 2400 hours, Part 1.D (2) of this service bulletin is to be implemented within the next 600 flight hours after the effective date of this service bulletin.
- (5) Total number of hours is less than 2400, inspect for cracks per Service Bulletin Number 1124-55-020 and axial and radial play per Part 2, Para. G. of this service bulletin.
- B. Horizontal Stabilizer repair (if crack is found):
 - (1) Removal of Horizontal Stabilizer. See Fig. 1.
 - (1.1) Remove Horizontal Stabilizer and Vertical Stabilizer fairings and tail cone.
 - (1.2) Remove rudder and elevators.
 - (1.3) Remove elevator torque tubes from rear of Horizontal Stabilizer.
 - (1.4) Disconnect wires at rear of Horizontal
 Stabilizer.
 - (1.5) Disconnect P/N 5753534 Vertical Stabilizer de-ice tube above engine fuel computers.
 - (1.6) Disconnect antenna co-ax cables, and beacon wires.
 - (1.7) Remove dorsal fin.
 - (1.8) Retract Horizontal Stabilizer actuator.

- (1.9) Attach sling to Vertical Stabilizer so that it may be raised straight up.
- (1.10) Remove Vertical Stabilizer attach bolts and remove Vertical Stabilizer.
- (1.11) Extend Horizontal Stabilizer actuator.
- (1.12) Disconnect deice lines at Horizontal Stabilizer leading edge.
- (1.13) Attach sling to Horizontal Stabilizer so that it may be lifted straight up.
- (1.14) Place sandbags weighing 200 to 250 lbs on Horizontal Stabilizer leading edge near fuselage to balance stabilizer.
- (1.15) Remove Horizontal Stabilizer trim actuator upper attach bolts.
- (1.16) Remove cotter pin and nut from hinge pin.
- (1.17) Take up slack on sling so as to remove weight from hinge pin so that it can be moved with light taps by a brass hammer. Remove hinge pin.
- (1.18) Lift Horizontal Stabilizer from fuselage and set onto dolly which holds stabilizer in a vertical position, leading edge down.
- C. Replacement of Horizontal Stabilizer Aft Spar Splice Fitting P/N 4453005-501-400.
 - (1.0) Drill out all fasteners attaching the upper and lower skins to the left or right aft spar caps, plus fasteners attaching spar web to splice fitting P/N 4453005-501, and to the end of each rib. See Figure 2.
 - (1.1) Remove spar.
 - (1.2) Remove all fasteners attaching other spar up to Horizontal Stabilizer Sta. 82.73. See Figure 2.
 - (1.3) Remove six ea MS20007-38 bolts attaching splice assembly to stabilizer frame.
 - (1.4) Spread skin and remove splice fitting.

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- (1.5) Verify that the outboard lugs of the new splice fitting P/N 4453005-501-400 have been radiused and flap or shot-peened.
- (1.6) Drill out the 6 holes for attachment bolts
 (MS20007-38) to .4370 to .4380 inch in new splice
 fitting.
 - NOTE: Holes must be exactly aligned with holes through stabilizer frame. Old splice fitting may be used as the guide.
- (1.7) Slide spar splice into place in Horizontal Stabilizer.
- (1.8) Reposition the removed spar.
- (1.9) Install the 6 ea. MS20007-38 bolts with MS20002C7 washers. Torque bolts to 450 to 500 in-lbs.
- (1.10) Reinstall all fasteners. See Figure 2 for types and sizes of fasteners.
- D. Hinge Assembly Improvement
 - (1.0) Installation of new (Kamatics) bearings.
 - (1.1) Locate 2 heat lamps on each side of the airplane, no closer than 5 inches from the outboard bearings lugs.
 - (1.2) Apply 175° F, 194° F and 200° F Tempilstik marks on each outboard lug and heat the lugs. When the 175° F mark melts, remove heat lugs.

CAUTION

Ensure that heat lamps are removed before the 200° F mark melts. If 200° F is exceeded on any part, contact Astra Jet Corporation for repair procedures.

(1.3) Remove the outboard bearings. (See Figure 3)
Use Bearing Puller.

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- (1.4) Remove middle lug bearing and then pull bearing through an outboard lug while it is still warm (175° F to 200° F).
- (1.5) Discard all three bearings.
- (1.6) Clean the three bearing lugs and visually inspect for cracks.
- (1.7) Clean attach fitting bores with crocus cloth as necessary. Locally dress any raised material. Remove no more than is absolutely necessary.
- (1.8) Remove the three (3) grease fittings and plug the holes with AN4C3A bolts and AN960C416L washers. Secure bolts in place with Loctite No. 271 or No. 08831.

<u>NOTE</u>: Ensure Loctite covers the entire surface of bolt and mating surface.

(1.9) Inspect the attach fitting bores using the dial bore gauge (.0001" per graduation). Check the measuring instrument with a precision ring gauge immediately prior to taking measurements. For every 10° F above 70° F subtract .0001" from bore measurements. For every 10° F below 70° F add .0001" to bore measurements.

Limits

For hole diameter see Table 1.

a. Out of round 0.0003" maximumb. Taper 0.0005" maximum

If any bore is out of limits, it will be necessary to hone all three bearing bores utilizing the 1-5/8" Sunnen hone.

(1.10) If the limits above are met or can be met by honing, calculate the average bore diameter for each lug. (Maximum reading + minimum reading divided by 2) and select the appropriate bearing part number for each lug from Table 1 in Part 3. Place AOG order.

- (1.11) Pack the three new bearings in dry ice for a minimum of one hour or cool with liquid nitrogen.
- (1.12) Install middle bearing so that it is centered in the lug within 0.002 inch. Lugs may be heated before bearing installation as per Paragraph D.(1.0).
- (1.13) Install the outboard bearings in their respective lugs to obtain spacing noted in Figure 7. Bearings are to be centered in lugs within 0.005 inch.
- (2.0) Peening of hinge lug roots (shot or flap).
- (2.1) Shot-peening.
- (2.1.1) Drill out rivet adjacent to each outboard hinge lug per Figure 4.
- (2.1.2) Slide a steel sheet between the hinge and the skin and trim skin to permit access to lug roots (per Figures 4 & 5).
- (2.1.3) Strip primer from outboard lug roots and area to be radiused and shot-peened. (See Figures 4 & 5).
- (2.1.4) By hand filing and sanding, dress a 1/16" to 5/64" radius or break edge (2) places each outboard lug as shown in Figure 5. The radius must be smooth, continuous and circular in cross-section. Scratches, gouges, pits, etc. are not permitted anywhere in the area.
- (2.1.5) Mask hole for MS90354-6-10 fastener.
- (2.1.6) As a minimum, glass bead peen the lug roots and break edges per MIL-S-13165 using size 331 glass beads (corresponds to Metal Improvement Company GP 234). Intensity to be .004" to .007" Almen A.

(2.2) Flap-Peening.

- NOTE: Flap-peening may be used as an alternative to shot-peening in conjunction with the following:
- (2.2.1) Prepare for peening per Paragraph (2.1.1) through (2.1.5).
- (2.2.2) Prepare surface and flap-peen lug roots using 9/16" x 1 1/4" flap assemblies in accordance with 3M Company instructions (3M Co., "Surface Conditioning Application Notes"), peen to an intensity of 0.008A, coverage 100% as follows: (Refer to Figure 6).
- (2.2.3) Before applying flap to the lug,
 - a. Test for intensity as follows:
 - b. Use a model of the area which is to be peened, a 0.100" aluminum sheet bent to the above radius.
 - c. As the radius is smaller than the usual for the flap, it will require some practice to achieve the required coverage.
 - d. It will be noticed that the area adjacent to the radius will get the required coverage (allow up to 400%) before the radius gets the full 100% coverage required. Therefore, after the adjacent area gets approximately 400% coverage, mask with aluminum tape.
 - e. It will be noticed that one side of the radius gets better coverage than the other, therefore after masking, reverse the drill direction and turn around the flap. This will enable better access to the radius side that did not get good coverage in the first application of the flap.

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- (2.2.4) Clean peened area with MEK.
- (2.2.5) Brush alodine the flap or shot-peened area and touch up with Zinc Chromate primer.
- (3.0) Inspection of Hinge Bushings.
- (3.1) Clean the four (4) bushing bores with crocus cloth as necessary. Locally dress any raised material. Remove no more material than absolutely necessary.
- (3.2) Inspect the bushing bores using the dial bore gauge (.0001" per graduation). Check the measuring instrument with a precision ring gauge immediately prior to taking measurement.

Limits

- a. Out of round .0005".
- b. Taper .0005".
- c. Average diameter .8743"/.8750".

If the above limits are met, the bushings need not be replaced. If the above limits are exceeded, it will be necessary to replace all four (4) bushings per Paragraph D.(4.0).

NOTE: If the bushings in Horizontal Stabilizer splice are not replaced, perform axial clearances check per Paragraph G.

If clearance is less than 0.016 inch, proceed with scissors installation.

If clearance is more than 0.016 inch, fabricate shims, using AN960C-1416L washers to achieve maximum clearance of 0.016 inch. Shimming must be done prior to upper scissors fitting positioning and assembly as per Paragraph E.(1.9) through E.(1.11).

- (4.0) Replacement of Hinge Bushings.
- (4.1) Loosely wrap aluminum foil around the shot-peened area of the outboard hinge lugs, and utilize heat lamps and the Tempilstiks to heat hinge lugs to 175° F to 200° F.
- (4.2) Remove outer bushings, then the inner bushings.
- (4.3) Clean the lug bores as in D.(3.1) above.
- (4.4) Inspect the lug bores as in D.(3.2) above.

Limits

- a. Out of round 0.001".
- b. Taper 0.001".
- c. Average diameter 1.0608"/1.0618" (permits installation of standard bushings).
- d. Average diameter of one or more lugs 1.0619"/1.0750" (requires installation of oversize bushing(s).

If the above limits a, b, c are met. install 2 each P/N 4453005-11 and P/N 4453005-7 bushings. If the above limits a, b, d are met, fabricate one or more oversize bushings per Figure 7 and install. If one or more lug bores exceed 1.0750", contact Astra Jet Corporation. If limits a or b are not met, all 4 hinge bores must be honed oversize (1.0750" max.) using a 1 1/16" Sunnen hone. Oversize bushings per Figure 7 will be required.

(4.5) Apply grease to the 4 hinge bores. Protect the shot-peened area of the hinge by wrapping loosely with aluminum foil. Protect the 2 outboard lugs from overheating by wrapping loosely with aluminum foil. Heat the middle 2 lugs. Install the two P/N 4453005-7 bushings in the center lugs so as to obtain spacing noted in Figure 7. Remove the aluminum foil from the outer 2 lugs, allow them to reach temperature and install the two P/N 4453005-11 bushings such that they are flush with the outboard face of the lug.

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- (4.6) Inspect the gaps between the attach fitting bearings and hinge bushings to ensure that axial clearances will be within specification when the stabilizer is reinstalled in the aircraft. Heat the hinge fitting before attempting to adjust the position of a bushing. (See Figure 7).
- (4.7) Hone all four (4) bushings in line using 7/8"
 Sunnen hone. Break edges after honing (.010R
 approx.).

Limits

- a. Out of round .0005".
- b. Taper .0005".
- c. Diameter .8743"/.8750".
- NOTE: Hone bushings to the minimum diameter necessary to fit the P/N 2453007-7 pin.
- (4.8) Fit hinge pin with AN960-1416L (Qty. 2) washers installed under the head, through the bushings to ensure that the pin can be inserted when the stabilizer is reinstalled. Verify that the shank of the 2453007-7 pin does not protrude beyond the end of the bushing. Shank of pin should be set inside of bushing a minimum of 0.016 inch and a maximum of 0.063 inch.

CAUTION

When fitting the pin through the hinge bushings, care is required to avoid galling the bushings. If this occurs, the bushing(s) and pin may require replacement. The bushing bores and pin must be immaculately clean and lubricated with #30 weight oil (not WD-40 or equivalent). The pin must not be rotated nor driven in with more force than is exerted by tapping with a brass hammer.

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- E. Scissors Installation
 - (1.0) Drill out rivets and remove Vertical Stabilizer rib P/N 5413027-81. See Figure 8.
 - (1.1) Refer to Figures 8 and 9. Remove the two outboard AN4 bolts attaching 4413028 rib to forward spar of Vertical Stabilizer. Ream these two holes to 0.2651 - 0.2671 inch.
 - (1.2) Remove center AN4 bolt and ream hole to 0.2651 0.2671 inch.
 - (1.3) Remove remaining two AN4 bolts.
 - (1.4) Drill 5 each 0.280" holes in 5413027-247 plate to match holes in spar and rib P/N 4413028. Attach MS21063 L4-9-3 nut channel to -247 plate using 2 each MS20426-AD-3-3 rivets.
 - (1.5) Install -247 plate including nut channel on forward side of vertical spar. Secure with two each NAS6604-10X bolts through the outboard holes using MS21042-4 nuts and AN960C416L washers.
 - (1.6) Temporarily secure upper scissors attach fitting P/N 4453513 to Vertical Stabilizer using NAS6604-14 bolts through outboard holes in attach fitting. Center hole is to be left open at this time.
 - (1.7) Drill out 4 each MS90353-8-15 blind fasteners at leading edge of Horizontal Stabilizer where lower attach fitting will be secured per Figures 11 & 12.
 - (1.8) Place the Horizontal Stabilizer on the aircraft such that the fuselage frame and hinge fitting are joined.
 - (1.9) If Horizontal Stabilizer hinge bushings were replaced and gaps are as required in Figure 7, proceed per Paragraph (1.12) below. If not, insert a 0.872 inch diameter drift pin 6.5 inches long tapered on one end (may be made from old hinge pin) through hinge assembly.
 - (1.10) Using feeler gauges, measure clearance between the outer bearing and each adjacent bushing. If total clearance exceeds 0.012 inch, fabricate shims (make from AN960C-1416L washers).

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- (1.11) Retract drift pin, install shims.
- (1.12) Place the AN960C-1416L washers (Qty.2) under the P/N 2453007-7 hinge pin head and insert pin pushing out the drift pin.

- (1.13) Alternatively, pack the pin in dry ice for one hour and insert using no lubrication (pin will shrink .001").
- (1.14) Install AO2WW5403001-7 washer and the AN320C-12 nut.

NOTE: Washer (AO2WW5403001-7) should be installed flush with lube bushings.

- (1.15) Torque the nut to 150 <u>INCH</u>-lbs. Remove the nut and washer and verify that the end of the pin shank is inset from the end of the bushing. Replace washer and nut and torque to 20-30 <u>INCH</u>-lbs above run on torque.
- (1.16) If a castellation lines up with one of the holes in the hinge pin, install the MS24665-376 cotter pin.
- (1.17) If a castellation does not line up with one of the holes, grind the back face of the nut until one does and install the cotter pin.
- (1.18) Connect Horizontal Stabilizer actuator.
- (1.19) Place Vertical Stabilizer on aircraft and insert bolts through the fore and aft attach points. Do not install nuts.
- (1.20) Fully retract Horizontal Stabilizer actuator.
- (1.21) Temporarily assemble and attach scissors assembly to the upper fitting on the Vertical Stabilizer, assuring that the scissors assembly moves freely throughout its range.
- (1.22) Locate and mark the position of the lower scissors fitting on the Horizontal Stabilizer. Trim top skin of Horizontal Stabilizer if necessary to ensure that fitting fits tightly against the forward surface of the P/N 4453017 splice assembly.

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NOTE: Pin, bushing bores, and bearing bores must be clean and lubricated with #30 weight oil.

R <u>NOTE</u> : R R R R	Lower scissors fitting center line must be parallel to the aircraft center line. If necessary, loosen the two outboard bolts in the upper scissor fitting that were temporarily secured in step (1.6) to allow alignment.
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- (1.23) Remove Vertical Stabilizer.
- (1.24) Place approximately 200 lbs. of sandbags on Horizontal Stabilizer leading edge near fuselage to balance Stabilizer.
- (1.25) Disconnect Horizontal Stabilizer actuator and raise leading edge to facilitate installation of lower scissors fitting.
 - <u>CAUTION</u>: When raising Horizontal Stabilizer leading edge, ensure the bolt heads through rear spar splice do not contact fuselage banjo fitting.
- (1.26) Install lower scissors fitting on the Horizontal Stabilizer per Figures 11 and 12. Shim as required between fitting and top surface of the Horizontal Stabilizer to match the fitting to the contour of the stabilizer skin. As each fastener is installed, ensure fitting remains aligned as marked and parallel to aircraft center line.
- (1.27) Reconnect the Horizontal Stabilizer actuator.
- (2.0) Scissor Adjustment.
- (2.1) Place Vertical Stabilizer on aircraft and insert bolts through fore and aft attach points. Do not install nuts.
- (2.2) Fully retract Horizontal Stabilizer actuator.
- (2.3) Loosen the two outboard bolts in the upper scissors fitting that were temporarily secured in Step (1.6), to allow fitting to move. Connect scissors assembly.
- (2.4) Disconnect Horizontal Stabilizer actuator.
- (2.5) Lift Horizontal Stabilizer to its maximum leading edge up position, so that scissors are fully closed. Tighten or loosen bolts attaching upper fitting until GAP "G" in Figure 11 measures 0.063". Measure GAP "H" and manufacture shim or filler of 2024-T3 alum to match upper fitting forward face and to fill GAP "H".

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- (2.6) Install filler in GAP "H" and torque outboard bolts to 50 in-lbs.
- (2.7) Repeat Step 2.5 and verify GAP "G" & "H".
- (2.8) Connect Horizontal Stabilizer trim actuator.
- (2.9) Disconnect scissors at center. Slowly extend and retract trim actuator and ensure that scissors can be reassembled without binding throughout travel.
- F. Scissors Final Assembly.
 - (1.0) Remove Vertical Stabilizer
 - (1.1) Measure gap between upper fitting (P/N 4453513) and 4413028 rib (GAP "C") (should be approximately equal to GAP "H"). Manufacture filler to match upper face of 4453513 fitting of 2024-T3 alum to fill GAP "C".
 - (1.2) Ream center hole of upper fitting P/N 4453513 to match hole thru forward spar of vertical and rib P/N 4413028 (ream hole to 0.2651 - 0.2671 inch).
 - (1.3) Install NAS6604-14X bolt with AN960C416L washer in center hole - do not tighten.
 - (1.4) Loosen outboard bolts in upper attach fitting. Insert GAP "C" filler. Install MS90353-5-4 blind fasteners as shown in Figure 12, View E.
 - (1.5) Torque NAS6604-14 & -14X bolts to 50 to 70 inch-lbs.
 - (1.6) Install 5413027-81 rib in Vertical Stabilizer. See Figures 8 & 9.
 - (1.7) Install Vertical Stabilizer. Torque forward attach bolts to 200 - 300 inch-lbs. Torque aft attach bolts as follows:
 - Up to S/N 270 torque: 400-500 inch-lbs. S/N 271-415 torque: 200-400 inch-lbs. S/N 416 & subs torque: 200-300 inch-lbs.
 - (1.8) Assure that the center scissor lugs can be engaged without side loads and the bolt easily inserted with the Horizontal Stabilizer in the extreme up, down and 3 intermediate positions.

- (1.9) Connect center scissors, safety castellated nut, and lubricate all points.
 - NOTE: Tighten upper, lower and center scissor castellated nuts to 55-75 inch-lbs. Center scissor lug bushings must have a side clearance of .003" to .005" after final torque. If necessary, torque on center scissor castellated nut to be reduced to achieve the required side clearance.
- (1.10) Move the Horizontal Stabilizer slowly up and down to check clearances. Ensure when the Horizontal Stabilizer is in the maximum up position (scissors fully closed), that the gap between the scissors and the Vertical Stabilizer (GAP "G") is 0.05 inch minimum and when the Horizontal Stabilizer is in zero position, that GAP "J" between scissors and Horizontal Stabilizer is 0.20 inch minimum.
- (1.11) Complete installation of Vertical Stabilizer, rudder and elevators.
- G. INSPECTION FOR PLAY
 - (1.0) Inspection of Splice Assembly for radial play.
 - (1.1) Clamp a dial indicator (.0005" per division) to the attach fitting so that the plunger is vertical and resting against the bottom of the left hand outboard hinge lug (Location 1 in Figure 13).
 - (1.2) Gently place 100 lbs. of sandbags on the R.H. stabilizer tip.
 - (1.3) Zero dial indicator.
 - (1.4) Move all sandbags to the L.H. stabilizer tip.
 - (1.5) Record dial indicator reading.
 - (1.6) Repeat Steps (1) through (5) for the R.H. outboard hinge lug.

(1.7) If the reading of the dial indicator exceeds 0.010" on either lug, it is recommended to perform the improved installation as per Paragraph D.

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- (2.0) Inspection of Splice Assembly for axial play.
- (2.1) Clamp dial indicator to the attach fitting so that the plunger is horizontal and resting against the face of one of the outboard hinge lugs (location 2 in Figure 13).
- (2.2) Push horizontally with hand forces on the left and right stabilizer tips alternately, so that the Horizontal Stabilizer moves through its full range of motion.
- (2.3) If axial play is less than .016" the aircraft may be returned to service.
- (2.4) If axial play is between .016" and 0.040", the aircraft may be returned to service, but must be reinspected at 150 flight hour intervals.
- (2.5) If axial play is greater than 0.040 inch, it is recommended to perform the improved installation as per Para. D.
- (3.0) Check Horizontal Stabilizer trim actuator for wear and looseness by shaking Horizontal Stabilizer at the tip and observing following areas:
 - (1) Upper and lower attach points.(2) Rod ends.

If Horizontal Stabilizer hinge assembly is within the above limits, the aircraft may be returned to service.

3. MATERIAL INFORMATION

The following parts are required to complete the repairs and improvements described herein and are avaialbale only from approved Westwind Service Centers. (1) Replacement of Horizontal Stabilizer Spar Splice

	- L	
<u>P/N</u>	DESCRIPTION	QTY
4453005-501-400	Splice Assy	1
MS20426AD5-8	Rivet	322
MS20426AD6-9	Rivet	8
MS90353-0505	Fastener	52
MS90353-0506 MS90353-0606	Fastener	8
MS90353-0612	Fastener	8
MS90353-0812 MS90353-0811	Fastener	2
MS90353-0813	Fastener	32
NAS1738B5-4	Fastener Fastener	2
NAS1739B5-6	Fastener	38
NAS1739B5-7	Fastener	196
NAS1466-7.	Fastener	20
NAS1466-8	Fastener	20 4
NAS1466-9	Fastener	8
NAS1080-06	Collar	32
		52
(2) Improvement of h.	inge assembly.	
<u>P/N</u>	DESCRIPTION	QTY
See Table 1 on	Deerstand	_
Page 22	Bearing	3
4453005-5	Bushing (Use as an	1/5
	alternate for	A/R
	Bushing 4453005-11,	
	Bushing 4453005-5	
	when in need of a	
	longer bushing.)	
4453005-11	Bushing	2
4453005-7	Bushing	2
2453007-7	Hinge Pin	1
AN320C-12	Nut (Stainless Steel)	1
MS24665-376	Cotter Pin	1
A02WW 5403001-7	Washer	1
AN960C-1416L	Washers (For shimming	6
AN960C-1216L	& under pin head)	
MS90354-6-10	Washer	2
AN4C3A	Fastener	2 2 3 3
AN960C416	Bolt Washer	3
No. 08831 or	mabiler	3
No. 371	Loctite	A/R
		A/K

Note that bearings cannot be ordered until the bores of the attach fitting have been measured.

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NOTE: Above parts are supplied as Kit No. IAII-55-1A.

(3) Scissors Installation

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<u>P/N</u>	DESCRIPTION	QTY
4453516-503 5413027-247 NAS6604-14 NAS6604-14X NAS6604-10X AN960416L MS21063 L4-9-3 MS90353-8-18 MS90353-8-18 MS90353-5-4 MS20426AD-5-6 MS20426AD-3-3 NAS1466-23 NAS1466-23 NAS1080-6 MS21042-4 AN960C416L	Scissors Assembly Plate Bolt Bolt Washer Nut Channel Fasteners Fasteners Rivets Rivets Fasteners Collars Nuts Washer	1 2 1 2 5 1 4 4 10 26 2 5 5 2 3

NOTE: Above parts are supplied as Kit No. IAII 55-18.

TABLE 1 - BEARING SELECTION

Attach Fitting Bore	Order Bearing P/N	Outer Race Diameter
1.6236/1.6238 1.6239/1.6241 1.6242/1.6244 1.6245/1.6247 1.6248/1.6320	<pre>* KRP-505-14B-01 * KRP-505-14B-01-A * KRP-505-14B-01-B * KRP-505-14B-01-C KRP-505-14B-01-X</pre>	1.6245/1.6247 1.6248/1.6250 1.6251/1.6253 1.6254/1.6256 Specify to achieve .0007/.0011 inter-
1.6321/1.7000	Contact Astra Jet	ference fit. Corporation.

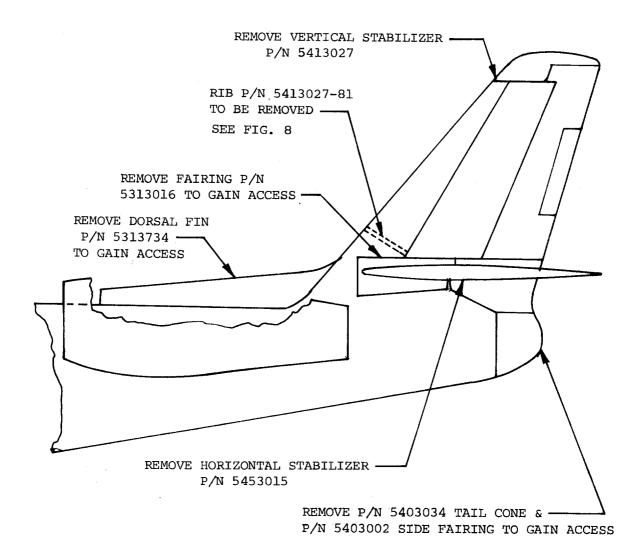
* Stock Item

4. RECORD COMPLIANCE

Make following entry in the Aircraft Log Book.

Service Bulletin 1124-55-021 dated AUGUST 5, 1985, titled "Horizontal Stabilizer Assembly - Inspection, Repair and Improvement" has been accomplished _____(date)

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VIEW SHOWING PARTS TO BE REMOVED FROM A/C

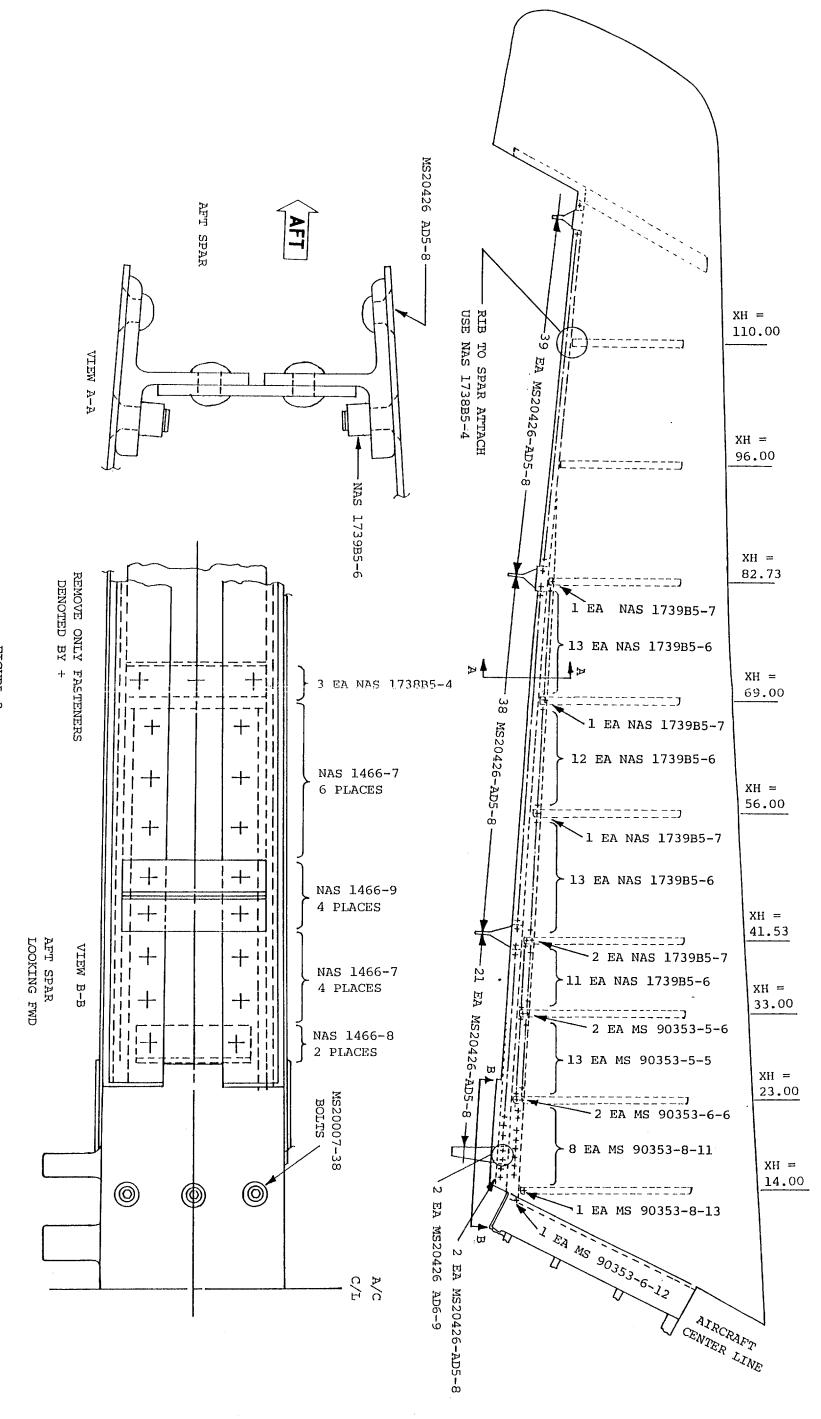
FIGURE 1

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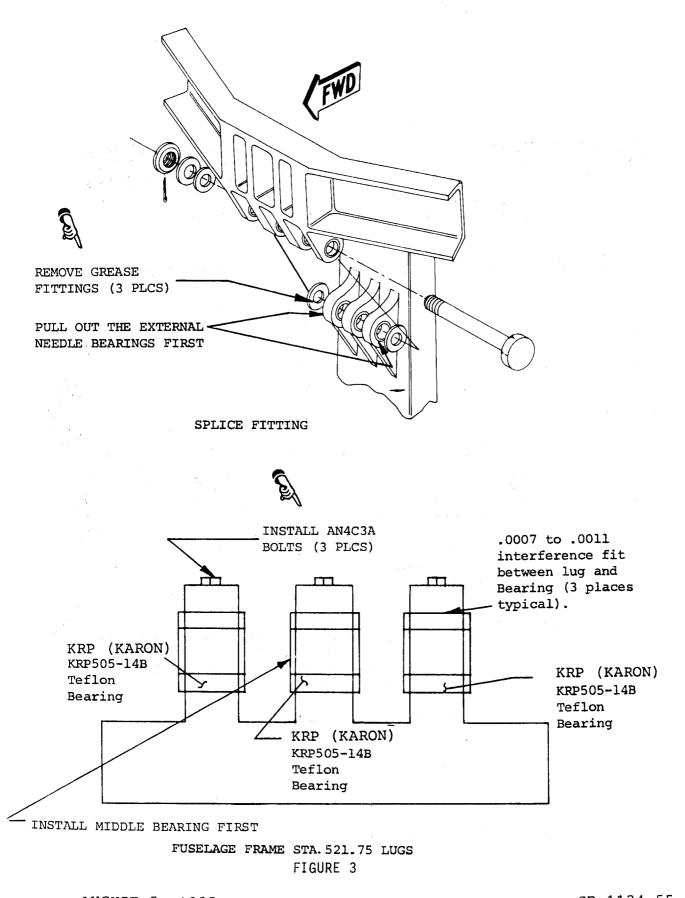
.

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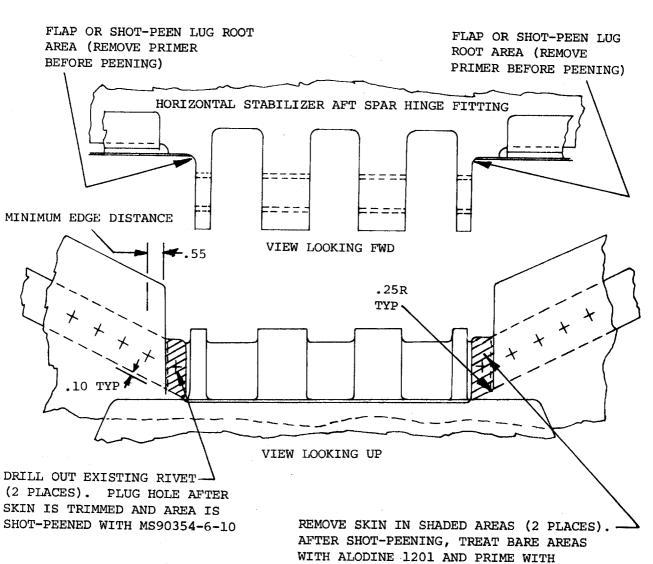


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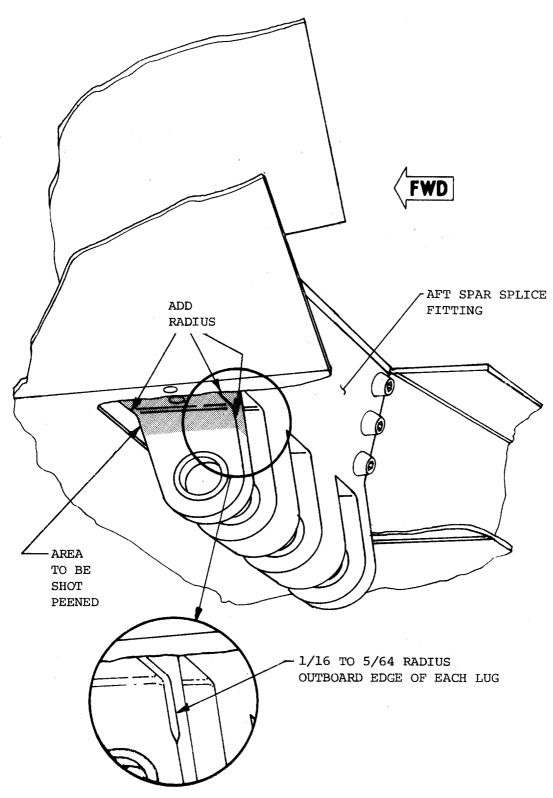
EPOXY PRIMER.

SHOT-PEEN AREA

FIGURE 4

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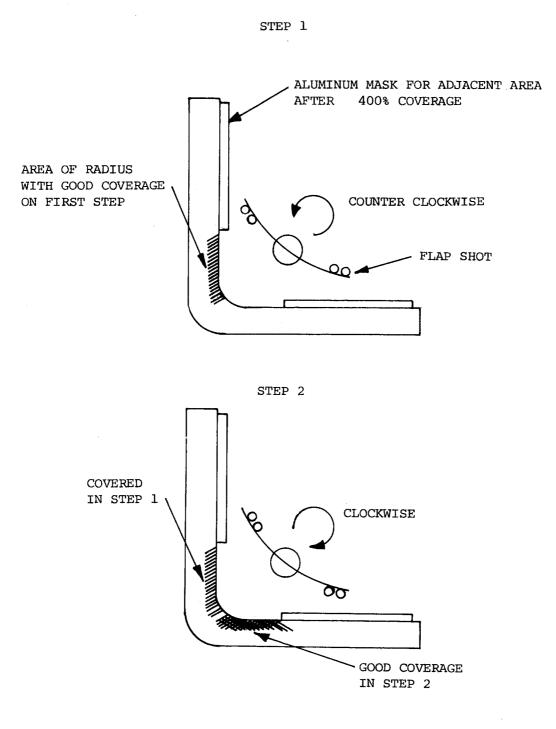
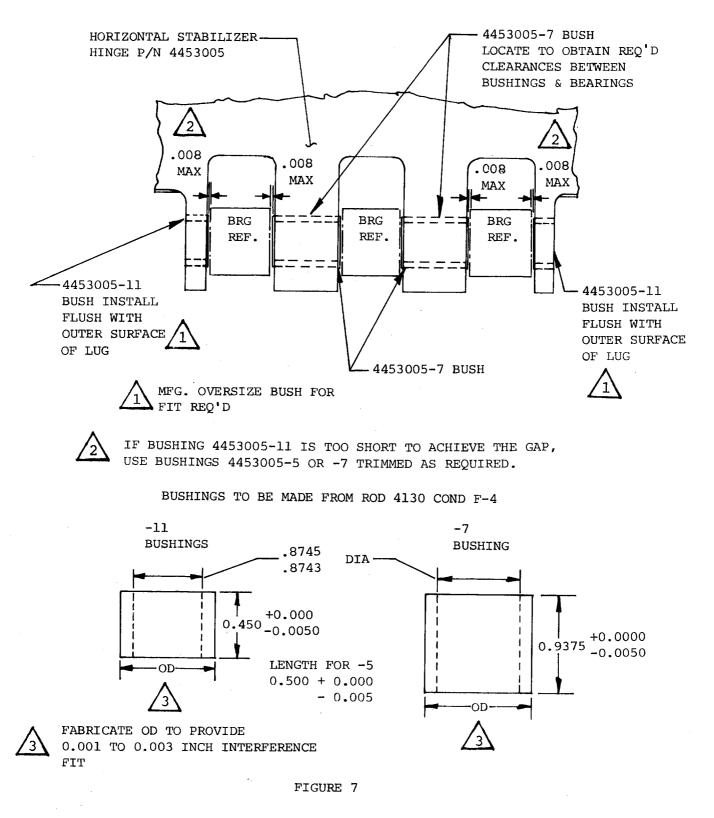


FIGURE 6

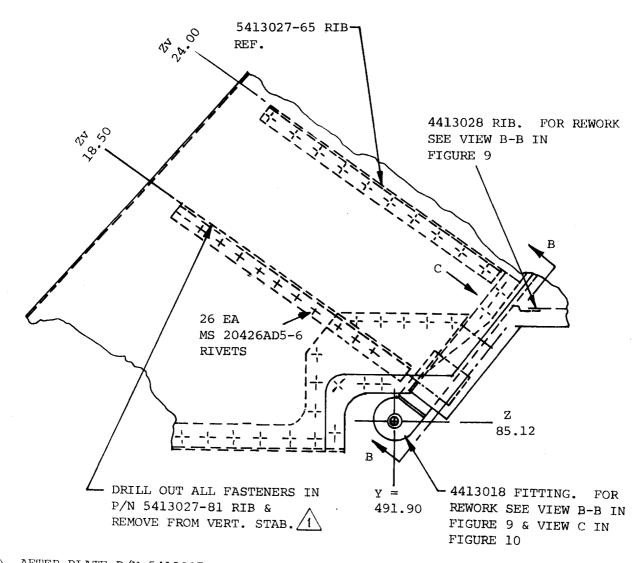
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August 5, 1985

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PREPARATION FOR INST. OF SCISSOR ASSY



1 AFTER PLATE P/N 5413027 & NUT CHANNEL MS 21063 L4-9-3 HAVE BEEN INSTALLED, RIB P/N 5413027-81 MUST BE REINSTALLED

FIGURE 8

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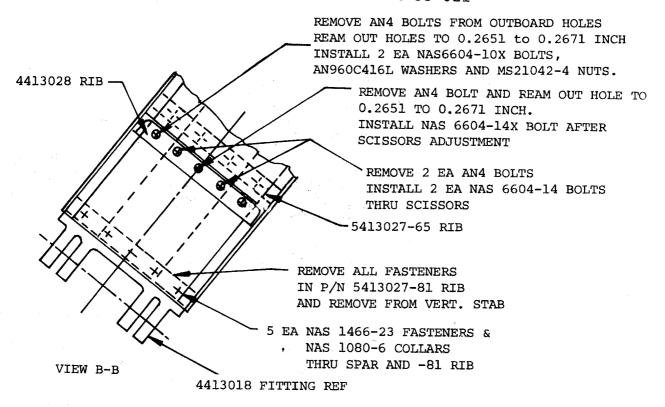
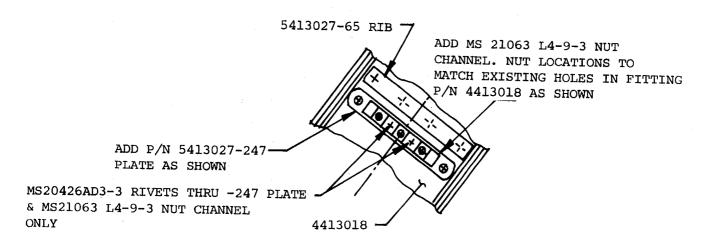


FIGURE 9

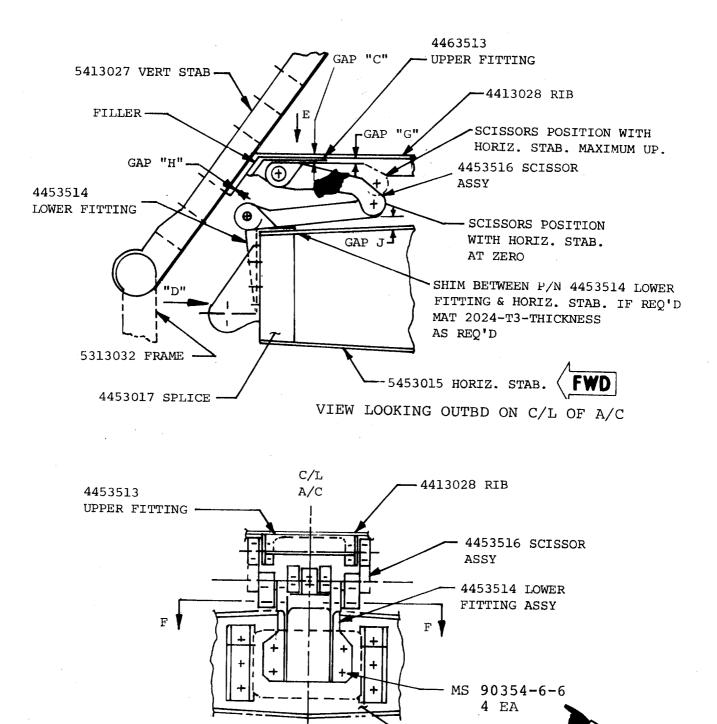


VIEW C

FIGURE 10

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INSTALLATION OF SCISSORS ASSY

VIEW D

FIGURE 11

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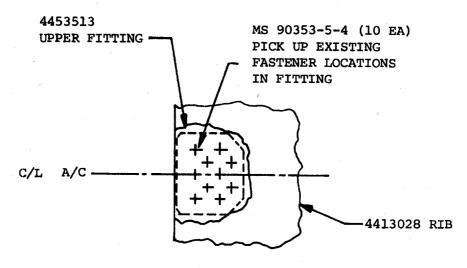
AUGUST 5, 1985 Revision 1, November 18, 1985 Revision 3, October 21, 1988

-4453017 SPLICE

REF

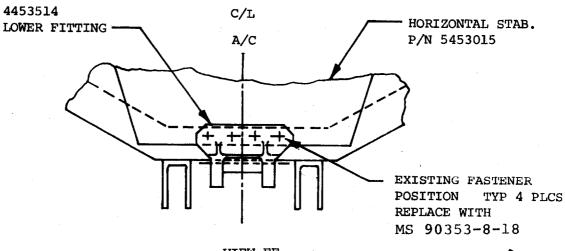
R

SERVICE BULLETIN NO. 1124-55-021



VIEW E

INSTALLATION OF UPPER FITTING



VIEW FF

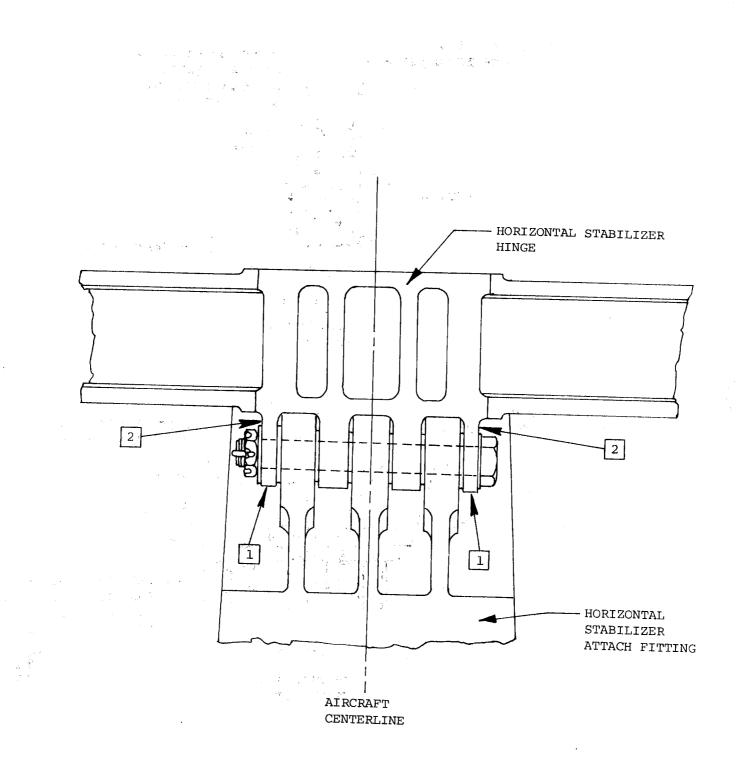
INSTALLATION OF LOWER FITTING

FIGURE 12

	AUGUST 5, 1985
R	Revision 1, November 18, 1985
R	Revision 3, October 21, 1988

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and the second SERVICE BULLETIN NO. 1124-55-021



HORIZONTAL STABILIZER HINGE INSPECTION

FIGURE 13

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- ----

AUGUST 5, 1985





SERVICE BULLETIN

SERVICE BULLETIN NO. 1124-26-022 REVISION 2 November 28, 1990

TRANSMITTAL SHEET

This sheet transmits Revision 2 to Service Bulletin No. 1124-26-022, dated April 15, 1985, and Revision 1, dated July 23, 1986, titled "Fire Protection - Addition of Sonalert Horn to Fire Warning System."

REASON FOR REVISION

It has been determined that improvements described in the original issue and Revision 1 of this service bulletin have the possibility of falsely illuminating both lights during a fire warning. Also, there were no provisions to shut off the fire warning Sonalert horn.

This service bulletin is revised to:

- (1) Provide operators with a superior installation of aural fire warning than provided by previous issues of this service bulletin. This is accomplished by installing a Sonalert horn with time-delayed shutoff for each engine fire warning system.
- (2) Improve the aural fire warning system installed in aircraft which complied with a previous issue of this service bulletin.

This is a complete revision. Please remove and discard all pages of previous issues and replace with pages of this revision.

Due to the extent of changes required by this revision, the text and figures are revised in their entirety and do not reflect where changes have been made.

SERVICE BULLETIN NO. 1124-26-022

LIST OF EFFECTIVE PAGES

PAGE NO. DATE

1 through 11 November 28, 1990

PREVIOUS ISSUES OF SB 1124-26-022

Initial issue dated April 15, 1985. Revision 1, dated July 23, 1986.





SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-26-022

November 28, 1990

SUBJECT: FIRE PROTECTION - ADDITION OF SONALERT HORN TO FIRE WARNING SYSTEM (AFC 2069)

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 174, 181, 185-237, 239-253, 255-280, 282-313, 315, 318-324, 326-365, 367-370, 372-380, 382-385, 387-408,410 and subs.

MODEL 1124/1124A WESTWINDS in compliance with a previous issue of this service bulletin.

B. REASON

1. The fire warning system is improved by the addition of aural warning.

2. Aircraft in compliance with a previous issue of Service Bulletin 1124-26-022 are improved by the addition of a time delayed shutoff of the aural fire warning.

C. DESCRIPTION

This service bulletin provides procedures to install an aural warning horn with time delayed shutoff for each fire warning system.

For aircraft in compliance with a previous issue of this service bulletin procedures are provided to improve the existing installation by adding an additional horn and time delayed shutoff.

April 15, 1985 Revision 2, November 28, 1990 563A SB 1124-26-022 Page 1 of 11

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 20
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY	PART NUMBER	DESCRIPTION
*2	SC628P	Horn, Sonalert
*4	MS35206-244	Screw
*4	AN960PD-8L	Washer
*4	MS21043-08	Nut
†* 2	101-722-50-56	Zee
2	MS27401-14	Relay
2	000-300-1195	Socket
2	TD 1651-3002	Relay (Mfg. Leach)
2	M12883/41-01	Socket
† 2	CMA71404-059	Bracket, Relay (FWR & TDR)
2	RWR89S4220FS	Resistor, 422 ohm
2	RN60D7502F	Resistor, 75K
A/R	320559	Splice
A/R	M81044-22-9	Wire
A/R	327654	Terminal

* Quantities indicated should be halved for aircraft in compliance with a previous issue of this service bulletin.

[†] Zee and Relay Bracket may be manufactured locally. See details in Figure 4.

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April 15, 1985 Revision 2, November 28, 1990 Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, authorized ASTRA/WESTWIND Service Centers, or may be procured locally.

H. TOOLING

None.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124 Wiring Diagram Manual, Chapter 26-20-01. Service Information Letter 1124-34-052.

- L. PUBLICATIONS AFFECTED
 - 1124 Maintenance Manual, Chapter 26-00-00.1124 Wiring Diagram Manual, Chapter 26-20-01.1124 Airplane Flight Manual.1124A Airplane Flight Manual.
- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Preliminary Procedures
 - (1) Select battery master switch ON.
 - (2) Perform operational check of fire warning system. (Reference Maintenance Manual, Chapter 26-00-00, "Press-To-Test operational check.)
 - (3) Select battery master switch OFF.
 - (4) Gain access to main aircraft batteries and disconnect batteries.
 - (5) Disconnect external power source to aircraft.
 - (6) Remove pilot and copilot seats. (Reference Maintenance Manual, Chapter 25-10-00.)
 - (7) Remove the cockpit glareshield from the aircraft.

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- (8) Locate terminal board on outboard side of right hand instrument panel support assembly. (Reference Figure 1 for location.)
- (9) Locate plugs J49 and J18 on shelf aft of forward pressure bulkhead.
- B. Mechanical Installation
 - (1) Locate and mount two (2) Zee brackets (P/N 101-722-50-56) on the center instrument panel support assembly (copilot side). Reference Figure 1 for location and mounting.
 - **NOTE:** If Service Bulletin 1124-26-022/Rev. 1 has been previously complied with, mount one additional Zee for second Sonalert.
 - (2) Mount the two Sonalert horns to the Zee brackets. Label one as FWLH (left) and other as FWRH (right).
 - (3) At a convenient location on the shelf forward of the center instrument panel, at the forward pressure bulkhead, mount two (2) relay brackets (P/N CMA 71404-059).
 - **NOTE:** Relay bracket is designed to mount two relays [one (1) TDR and one (1) MS27401-14] and their sockets.
 - (4) Mount the relay sockets to the brackets and label as follows:
 - (a) Time delay relays TDRR (right) and TDLR (left).
 - (b) MS relays FWRR (right) and FWLR (left).
- C. Electrical Installation
 - (1) Complete all wiring as per Figures 2 and 3 (LHS and RHS, respectively), using standard shop practices.
 - (a) Plugs J49 and J18 are located on shelf aft of forward pressure bulkhead.
 - (b) Plugs P23 and P24 are located in the overhead panel (LHS and RHS, respectively).
 - (c) The terminal block is located and identified as per Figure 1 on the instrument panel support.

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- (2) Route new # 22 AWG wires along existing cable bundles to their attach points. Label wires as required per Figures 2 and 3.
- **NOTE:** Paragraphs (a) and (b) below will have been previously complied with during performance of a previous issue of this service bulletin.
 - (a) Locate wire 1W501C20 from J49 and wire 2W501C20 from J18 routed to the left and right fire warning lights respectively.
 - (b) At a convenient location in the wire runs, splice a length of M81044-22-9 wire and route new wires to terminal board as shown in Figures 2 and 3. Use 320559 butt splices.
 - (c) Route a length of M81044-22-9 wire from each Zee to the terminal board.
 - (d) Drill a hole near the Zee in the support assembly to provide a ground location for the Sonalert horns. Reference Figure 1.
- (3) Connect four (4) resistors to unused terminals on terminal block (TB 6 or TB 160, as applicable) and label as follows. (Note terminal numbers for wiring print update.)
 - (a) R-301 (75K ohms).
 - (b) R-302 (422 ohms).
 - (c) R-303 (422 ohms).
 - (d) R-304 (75K ohms).
- **NOTE 1:** Resistors R-301 and R-304 may be connected across terminals C-1 and D-1 of their respective time delay relay sockets to avoid extra wire routing and to eliminate the need for additional terminal board space.
- **NOTE 2:** If a previous issue of this service bulletin was complied with, remove and discard diodes; remove, cap, and stow wires installed by compliance.
- **NOTE 3:** If enough terminals are not available for resistor mounting, perform modification described in SIL 1124-34-052, dated June 5, 1985.

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SERVICE BULLETIN 1124-26-022

- D. Perform an operational check of the fire warning system as follows:
 - (1) Reconnect main aircraft batteries.
 - (2) Select battery master switch ON.
 - (3) Depress the "Press-To-Test" switch on the center instrument panel.
 - (4) Four (4) lamps in the "Press-To-Test" switch should illuminate.
 - (5) Four (4) lamps in the left and right "Fire" switches should illuminate.
 - (6) Four (4) lamps in the left and right "Full/Empty" switches should illuminate.
 - (7) Sonalert horn should produce a beeping tone which will cancel after 6 seconds.
 - (8) Release "Press-To-Test" switch.
 - (9) All lamps should extinguish.
 - (10) Open right fire detector circuit breaker.
 - (11) Depress "Press-To-Test" switch.
 - (12) "Press-To-Test," left "Fire," and left and right "Full/Empty" switches should illuminate and Sonalert horn should sound. The right "Fire" switch should not illuminate.
 - (13) Release "Press-To-Test" switch.
 - (14) Close right fire detector circuit breaker and open left fire detector circuit breaker.
 - (15) Depress "Press-To-Test" switch.
 - (16) "Press-To-Test," right "Fire," right and left "Full/Empty" switches should illuminate and Sonalert horn should sound. The left "Fire" switch should not illuminate.
 - (17) Release "Press-To-Test" switch.
 - (18) Close left fire detector circuit breaker.

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- (19) Depress "Press-To-Test" switch.
- (20) All lamps should again illuminate and Sonalert horn should sound per steps D4 through D7.
- (21) Select battery master switch OFF.
- E. Reinstall glareshield.
- F. Reinstall pilot and copilot seats.
- G. Select battery master switch ON.
- H. Perform operational check of the parking brake system.
- I. Perform operational check of the glareshield floodlights.
- J. Perform operational check of the AOA indexer lights.
- K. Select battery master switch OFF.
- L. Secure aircraft and return to service.

3. RECORD OF COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-26-022 Revision No. 2 dated November 28, 1990, titled "Fire Protection - Addition of Sonalert Horn to the Fire Warning System," has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.

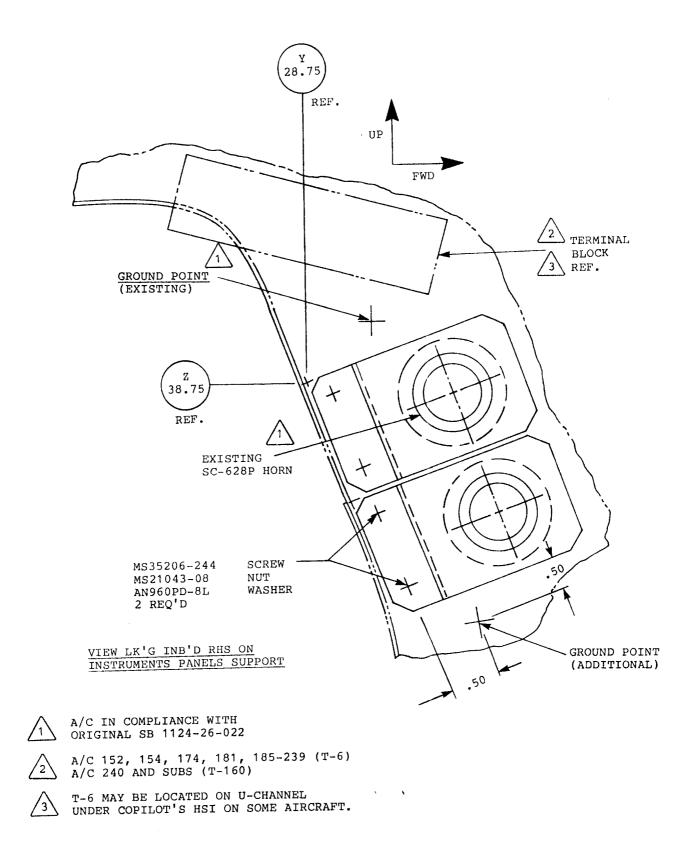
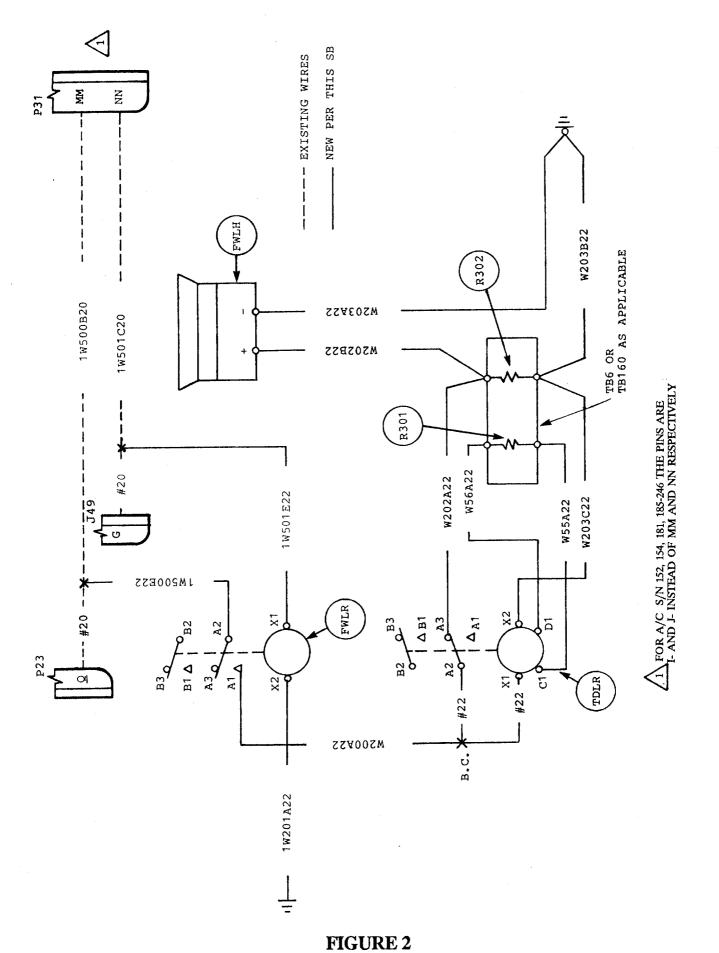


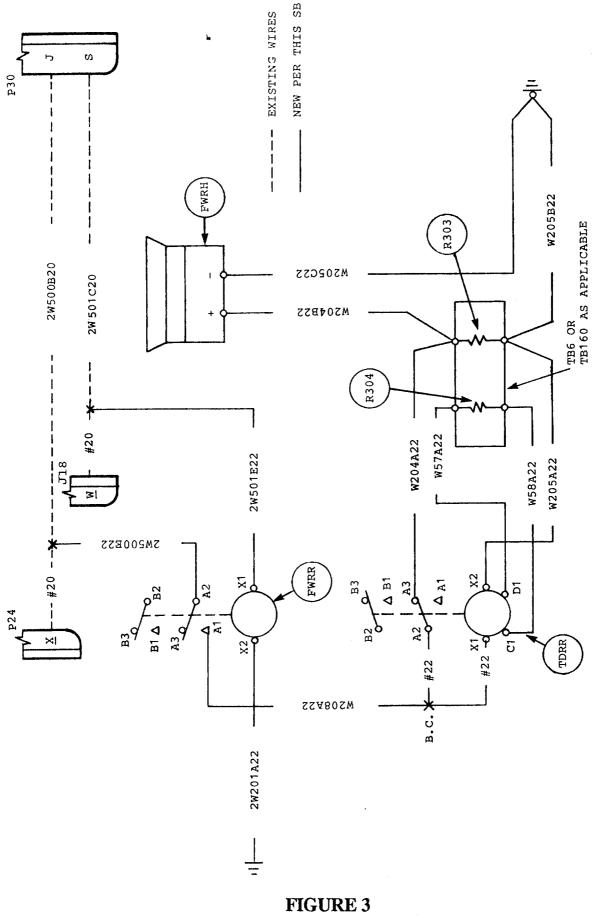
FIGURE 1

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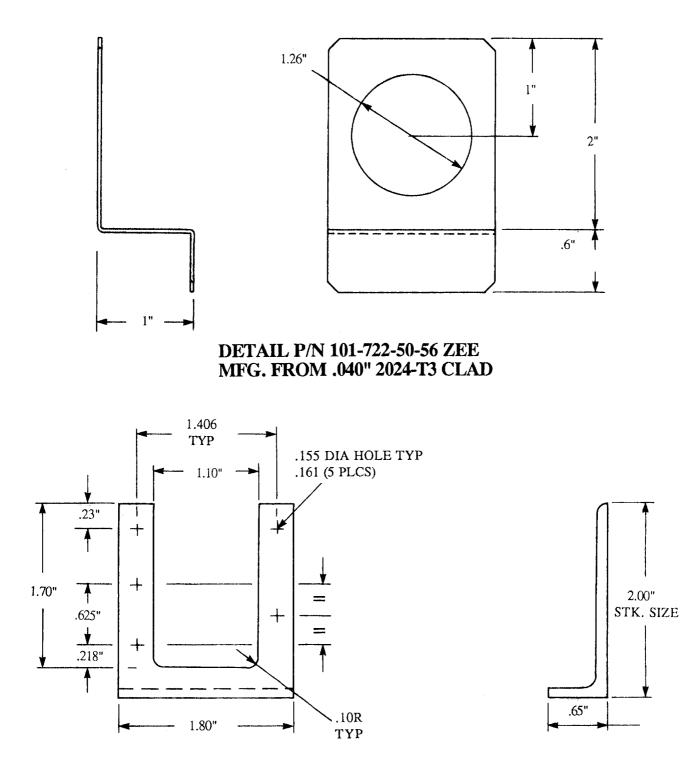


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DETAIL CMA 71704-059 RELAY BRACKET MFG. FROM AND10134-2001 2024-T3511

> FIGURE 4 PART DETAILS



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-34-023

Decemeber 9, 1985

SUBJECT: NAVIGATION - ELIMINATION OF IMPROPER MACH WARNINGS

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124 WESTWIND, all serial numbers prior to 423.

B. REASON

To eliminate misleading signals that cause the Copilot Mach Airspeed indicator to activate the Mach Warning system in normal operating airspeed ranges.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

D. DESCRIPTION

Shielded wiring is installed between the VMO/MMO TEST switch and the Copilot Mach Airspeed indicator to remove EMI from adjacent cable bundle wiring.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

> SB 1124-34-023 Page 1 of 3

F. MATERIAL

Material necessary to comply with this service bulletin may be procured locally.

G. SPECIAL TOOLS

Not applicable.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Wiring Diagram Manual, Chapter 34-10-04

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual, Chapter 34-10-04.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove copilot's instrument panel to gain access to disconnect plug P/J 20.
- B. Remove, cap and stow wires W75C22 from P250, pin 2 and W86C22 from P250, pin 5.
- C. Install a new #22 AWG twisted-pair shielded wire from P20 to P250:
 - (1) One conductor (new W75B22WH) from P20-<u>G</u> to P250-2.
 - (2) The second conductor (new W86B22BL) from P20-<u>H</u> to P250-5.
 - (3) Connect shields; one end to P20-W, the other end to P250-9 with existing wire #W84A22.
- D. Remove, cap and stow wires W75B22 to J20-G and W86B22 from J20-H.
- E. Lower the forward overhead circuit breaker panel and locate the VMO/MMO TEST switch. Identify for future reference the terminals used for wires W75A22 and W86A22. Remove, cap and stow these wires.

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- F. Install a new #22 AWG twisted-pair shielded wire from J20 to the VMO/MMO switch. Follow existing cable bundles down and across copilot's cockpit sidewall.
- G. Connect the above new shielded wire:
 - (1) One conductor (new W75A22WH) from J20-G to proper VMO/MMO switch terminal #4 with two pole or terminal #1 with one pole.
 - (2) The second conductor (new W86A22) from J20-<u>H</u> to proper VMO/MMO switch terminal #3.
 - (3) Connect shield to J20-W, terminate and insulate shield at VMO/MMO switch.
- H. Install copilot's instrument panel and reassemble aircraft.
 - (1) Perform necessary pitot and static tests to ensure copilot's system integrity.
 - (2) Perform operational tests to all systems disturbed by disassembly.
- I. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	55A1121-22-35	#22 AWG twisted-pair shielded wire (Mfg by RAYCHEM)

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-023 dated December 9, 1985 titled "Navigation - Elimination of Improper Mach Warnings" has been accomplished this date

B. Revise the Wiring Diagram Manual to reflect changes accomplished by this service bulletin.

SB 1124-34-023 Page 3 of 3

December 9, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-22-024 Revision No.1 June 14, 1985

SUBJECT: ELIMINATION OF FCS 105 ALTITUDE MODE TRANSITION ERRORS

REASON FOR

REVISION: To change a part number in EFFECTIVITY paragraph 1.A.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, serial numbers 154, 174, 181, 187 through 406; equipped with Collins 590A3K-1 or 590A3J-1 Air Data Computers. Model 1124A not affected.

INTERNATIONAL INC.

SB 1124-22-024 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-22-024

April 15, 1985

SUBJECT: ELIMINATION OF FCS 105 ALTITUDE MODE TRANSITION ERRORS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, serial numbers 154, 174, 181, 187 through 406; equipped with Collins 590A3K-1 or 590A3K-1 Air Data Computers. Model 1124A not affected.

B. REASON

To eliminate the pitch and altitude bumps during manual or automatic mode changes between ALT. PRESELECT and ALT. HOLD; and associated altitude changes.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

Compliance with this Service Bulletin will permit vertical Mode transfer at any time, without the necessity of de-selecting ALT. PRESELECT prior to engaging ALT.HOLD.

E. APPROVAL

The modification procedures described in this Service Bulletin have been shown to comply with applicable ICAA/FAA regulations and is IAI Engineering approved.

> SB 1124-22-024 Page 1 of 3

F. MATERIAL

None

G. TOOLING

None

- H. WEIGHT & BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA Not applicable.
- J. REFERENCES

1124/1124A Maintenance Manual, Chapter 22-01-00.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 22-10-02.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove and disconnect the 614E20R FCS Mode Selector.
 - B. Identify plug DB36, remove wire C313B22 from pin 8 and install in pin 30.
 - C. Add jumper wire between DB36 pin 8, pin 27, and pin 29. Do not disturb any existing wires on pin 27 or pin 29.
 - D. Reassemble connector, connect and install Mode Selector.
 - E. Perform normal FCS operational tests.
 - F. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL 16878D	#22 AWG wire
A/R	AMP 35115	Splice

4. AIRCRAFT RECORDS

- A. Make temporary revisions per above instructions in the Wiring Diagram Manual, Chapter 22-10-02
- B. Make the following entry in the aircraft log as follows: Service Bulletin No. 1124-22-024 dated April 15, 1985, titled "Elimination of FCS 105 Altitude Mode Transition Errors" complied with this date

END

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-22-025A Revision No. 1

October 13, 1986

SUBJECT: ELIMINATION OF 1124A OVERSPEED WARNING FAILURES

REASON FOR To include additional VMO test circuit protection by REVISION: adding transient voltage suppression to input circuit of ADC80K.

- 1. PLANNING INFORMATION
 - J. REFERENCES

R R

R

R

R

1124/1124A Wiring Diagram Manual, Chapter 34-10-04 and 34-10-07. Rockwell-Collins Service Bulletin No. 18 to the ADC80() Air Data Computer.

2. ACCOMPLISHMENT INSTRUCTIONS

RNOTE:Compliance with Collins Service Bulletin No. 18 datedRMarch 1985 to the ADC80() Air Data Computer will beRrequired to complete this airframe modification.

- F. Add new diode P/N 1N645 across new relay socket X1 and X2, cathode (banded) end to X1, with new wires from steps D and E above. Crimp and insert pins.
 - (1) Add new variator P/N V47MA2B from TB101-6 to nearest airframe ground stud, with cathode (banded end) connected to TB106.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL

SERVICE BULLETIN NO. 1124-22-025 Revision No. 1

3. BILL OF MATERIAL

QUANTITY	PART NUMBER	DESCRIPTION
l each	BJE66	Diode 1N4005, or equivalent
l each	HRCW-1M	Socket, relay
l each	DJ26FL1P6ASF26	Relay, or equivalent
l each	1N645	Diode, or equivalent
l each	V47MA2B	Varistor
A/R	MIL W-16878D	#22 AWG wire
A/R	MIL W-16878D	#24 AWG wire
A/R	AMP 327654	#4 ring torque terminals
A/R	AMP 320559	Splice

R

SB 1124-22-025 Page 2 of 2

October 13, 1986



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-22-025A

November 17, 1986

(This Service Bulletin No. 1124-22-025A dated November 17, 1986 supersedes Service Bulletin No. 1124-22-025 dated April 29, 1985 and Revision No. 1 dated October 13, 1986 in their entirety.)

SUBJECT: AUTOFLIGHT - ELIMINATION OF 1124A OVERSPEED WARNING FAILURES

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124A WESTWIND, S/N 295 through 425, all Section 2 paragraphs (2.A. through 2.N.) and S/N 427 through 437, paragraphs 2.I. and 2.J. only.

B. REASON

(1) To isolate the Air Data Computer overspeed warning outputs from the Mach Warning Bell to prevent internal component damage to the ADC-80K.

(2) To include additional VMO test circuit protection.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

D. DESCRIPTION

This service bulletin describes procedures necessary to install an isolation relay between the Air Data Computer and Mach Warning Bell and adding transient voltage suppression to input circuit of ADC-80K.

> SB 1124-22-025A Page 1 of 6

SERVICE BULLETIN NO. 1124-22-025A

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or their authorized representatives.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 34-10-04 and 34-10-07.

Rockwell-Collins Service Bulletin No. 18 to the ADC80() Air Data Computer.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 34-10-07.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - NOTE: Compliance with Collins Service Bulletin No. 18 dated March 1985 to the ADC80() Air Data Computer will be required to complete this airframe modification.
 - A. Gain access to TB-101, located at fuselage station 103.78 RHS behind divan above floor level.
 - B. Install new relay socket DRL701 (P/N HRCW-1M) on existing bracket with TB-101.

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November 17, 1986

- C. Remove wire W28E22 from TB-101 terminal 9, splice and connect to new relay socket pin Al.
- D. Add new wire #24AWG from TB-101-9 to new relay socket pin X1. Do not crimp new pin.
- E. Add new wire #24AWG from a convenient airframe ground to new relay socket pin X2. Do not crimp new pin.
- F. Add new diode P/N 1N645 across new relay socket X1 and X2, cathode (banded) end to X1, with new wires from Steps D and E above. Crimp and insert pins.
 - G. Add new wire #22AWG from TB-101 terminal 4 to new relay socket pin A2.
 - H. Install new relay RL701 in socket and secure.
 - I. Install terminal board TB-226 at Z Sta.=17.75 between RL 701 and T159, as shown in Figure 1.
 - J. Add new varistor P/N V47MA28 on TB-226 tag board. Connect cathode (banded end) to TB-101-6 and the other end to airframe ground stud GD 226D, as shown in Figure 2.
 - K. Locate Mach Warning Bell at forward edge of pedestal, under instrument panel.
 - L. Install new diode P/N BJE66 across Warning Bell terminals cathode (banded end) to plus (+) and anode (arrow end) to minus (-).
 - M. Perform VMO/MMO test I/A/W procedures published in 1124A Aircraft Flight Manual, chapter IV.
 - N. Upon satisfactory completion of test, reassemble aircraft and return to service.

November 17, 1986

SERVICE BULLETIN NO. 1124-22-025A

3. BILL OF MATERIAL

QTY	PART NUMBER	DESCRIPTION
1	HRCW-1M DJ26FL1P6ASF26	Socket, relay Relay or equivalent
1	1N645 BJE66	Diode or equivalent Diode or equivalent
A/R	MIL W-16878D	#22 AWG wire
A/R A/R	MIL W-16878D AMP 327654	#24 AWG wire #4 ring tongue terminals
A/R ∎ 1	AMP 320559 V47MA28	Splice Varistor
A/R A/R	MS27249-2 MIL-P3115C	Terminal Board (RE2) Phenolic Insulator (RE3)

4. RECORD COMPLIANCE

A. Make the following entry in your aircraft log book:

Service Bulletin No. 1124-22-025A dated November 17, 1986 titled "Autoflight - Elimination of 1124A Overspeed Warning Failures" has been accomplished this date _____.

B. Revise 1124/1124A Wiring Diagram Manual Chapter 34-10-07 to reflect changes accomplished by this service bulletin.

SERVICE BULLETIN NO. 1124-22-025A

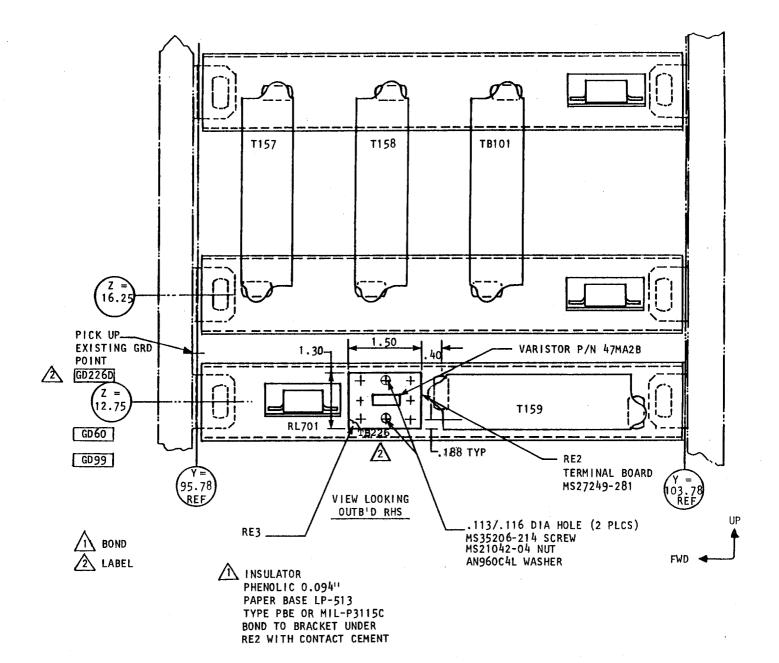
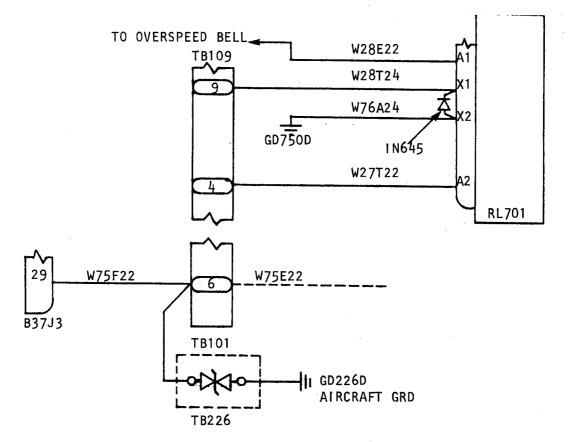


FIGURE 1

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November 17, 1986



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-53-026

April 18, 1985

SUBJECT: CLOSURE OF TAIL CONE VENT HOLES

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers prior to 426, except 413, 416, 418, 421, 423 and 424.

B. REASON

To reduce excessive airflow to electronic equipment. To eliminate the collection of rain water and/or moisture in the tail cone area.

C. COMPLIANCE

At the operators discretion.

D. DESCRIPTION

It has become evident that the vent holes located on the left and right side of the tail cone assembly are not necessary and that they are a source of rain or wash water entry. This service bulletin provides instructions for the approved method of closing these vent holes.

E. APPROVAL

The modification procedure described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

INTERNATIONAL INC.

SB 1124-53-026 Page 1 of 4

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, through their authorized dealers or may be locally purchased.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

K. PUBLICATIONS AFFECTED

None

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove tail cone assembly from the aircraft in accordance with established maintenance procedures. Disconnect wiring to tail light assembly.
 - B. Fabricate two plates per Figure 1 dimensions and material specifications. Drill No. 40 holes in each plate as shown in Figure 1 using standard shop practice for proper spacing and edge distance. Remove burrs from holes, brush Alodine and apply zinc chromate.
 - C. Prepare outside surface of tail cone assembly by sanding paint from the vent hole pattern area. Prepare inside surface by cleaning area where plate is to be installed. Remove baffle plate from vent hole area if installed.
 - D. Position plates over the vent holes on inside surface of tail cone (Figure 1). Drill #40 holes in tail cone to align with holes in plate. Remove burrs from holes, brush Alodine and apply zinc chromate.

SB 1124-53-026 Page 2 of 4

- E. Fill vent holes with epoxy and sand smooth. Touch up or repaint tail cone assembly as required.
- F. Reconnect tail light wiring and reinstall tail cone assembly.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MS20426AD-3-4	Rivets
2		Plate, (See Fig.l for details)
1 QT.	No. 01175	Epoxy-White Lightnin'

Lightnin' Marson Corp. 130 Cresent Ave. Chelsea, MA 02150

(or equivalent)

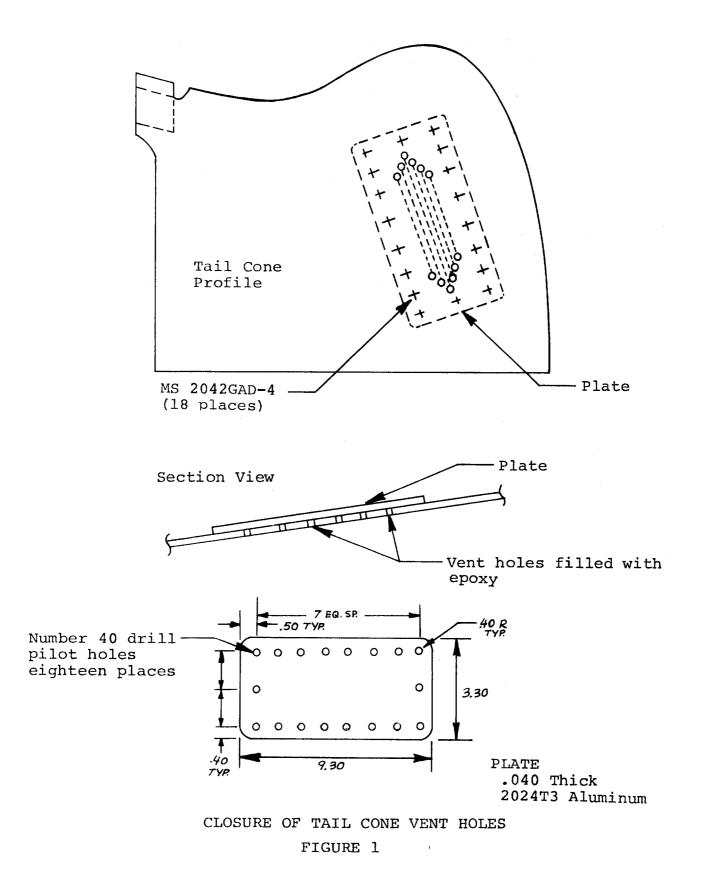
4. RECORD COMPLIANCE

Make the following entry in the aircraft log as follows:

Service Bulletin No. 1124-53-026 dated April 18, 1985, titled "Closure of Tail Cone Vent Holes" has been accomplished this date

END

April 18, 1985



SB 1124-53-026 Page 4 of 4

April 18, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-027

April 18, 1985

SUBJECT: ENABLE GNS-500A SERIES 3B BANK COMMAND OPTION FOR FLIGHT DIRECTOR SYSTEM.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124A WESTWIND aircraft equipped with Global Series 3B VLF Navigation System, serial numbers 295 through 426.

B. REASON

To allow automatic leg change operation through the coupling of Composite Steering signals from VLF NAV to Autopilot System. Incorporation of this option would eliminate the overshoot of a waypoint and allow more precise tracking of desired track.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

This Service Bulletin contains the information necessary for the addition of roll steering signals to the Autopilot System. Where possible, existing wires (previously capped and stowed) will be used. Specific wire routing is included in this bulletin.

> SB 1124-34-027 Page 1 of 6

E. APPROVAL

The modifications contained in this Service Bulletin has been shown to meet applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required for this Service Bulletin may be obtained locally.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124A Wiring Diagram Manual: Chapter: 34-60-02 22-10-05 22-10-02 34-50-05 34-50-06 34-50-18

K. PUBLICATIONS AFFECTED

1124A Wiring Diagram Manual: Chapter: 34-06-02 02-10-05 22-10-02 34-50-05 34-50-06 34-50-18

April 18, 1985

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Locate and remove Global RCU P/N 10050-3-3B(X) and OEU P/N 10600-2-2(XX) from mounts. Verify part number of RCU is 10050-3-3BF. If other than -3BF contact Global Navigation Inc., or their service centers for update procedures and/or verification of mod status.
- B. Remove and retain hardware securing mounts to airframe. Position mounts to gain access to rear of RCU and OEU connectors.
- C. Locate wire #2TR4A22R (previously capped and stowed, part of an existing shielded, twisted pair) and insert in pin 21 of RCU connector.
- D. Locate wire #2TR3A22B (previously capped and stowed, part of above shielded, twisted pair) and insert in pin 23 of RCU connector.
 - (1) Ensure shield is grounded at RCU mount.
- E. Locate wire #2TR18A22R (previously capped and stowed, part of an existing shielded, twisted pair) and insert in pin 2 of RCU connector.
 - (1) Ensure shield is grounded at RCU mount.
- F. Locate wire #2TR39A22 (previously capped and stowed) and insert in pin 45 of OEU connector).
 - (1) Ensure shield is grounded at OEU mount.

NOTE

If OEU connector pin 45 has wire #2TR170A22 inserted and connected to T-24 terminal 20 by wire #2TR170C22 (found on later installations, 1124A serial numbers 392 and subs) DO NOT REMOVE. Disregard step K and subsequent reference to wire #TR39D22.

G. Locate wire #TR4D22R in pin L of D-126P (located approximately STA 264.0 right side). Extract pin, cap and stow wire. Insert new wire #2TR4E22R (part of shielded, twisted pair) in pin L of D-126P.

April 18, 1985

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- H. Locate wire #2TR3D22B in pin M of D-126P. Extract pin, cap and stow wire. Insert new wire #2TR3E22B (second wire from step G above) in pin M of D-126P.
- I. Locate wire #2TR18D22R in pin N of D-126P (part of existing shielded, twisted pair). Extract pin, cap and stow wire. Insert new wire #2TR18E22R (center conductor of shielded, single wire) in pin N of D-126P. Remove, cap and stow wire #2TR17DB22B from pin P of D-261.
- J. Disconnect shields of wires capped and stowed in steps G, H and I. Connect shields of new wires added in steps G, H and I together and insert in pin F of D-126P with remaining existing shields.
- K. Locate wire #2TR39C22 at pin Q of D-261P (located approximately STA 264 right side). Extract pin cap and stow wire. Insert new wire #2TR39D22 in pin Q of D-261P. See Note above.
- L. Route new wires installed in steps G, H and K above along existing cable bundles to T-19 (located approximately STA 257 left side). At T-19, install new wires as follows:
 - (1) Wire #2TR4E22R to terminal #3.
 - (2) Wire #2TR3E22B to terminal #5.
 - (3) Wire #2TR39D22 to terminal #1. See Note above.
 - (4) Shield of shielded pair to terminal #7.
 - (5) Add wire #2TR170D22 from T-24 terminal 20 to T-19 terminal 1 (May already exist from S/N 392).
- M. Route new wire #2TR18E22R installed in step I above, along existing cable bundles to T-162 (located approximately STA 124 left side) and attach to terminal #3. Insulate exposed shield braid.
- N. For 1124A Model aircraft prior to serial number 392, the following wire routing changes need to be accomplished to maintain aircraft wiring conformity for the Distance and Nav Valid flag outputs of Global Series 3B systems.
 - (1) Move wire SW274B24 from T-17 terminal 17 (located approximately STA 255 left side) to T-19 terminal 1. (RNS flag input).

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- (2) Move wire UD1R22 from T-17 terminal 17 to T-19 terminal 1. (DME #1 flag input).
- (3) Move wire 2UD1R22 from T-17 terminal 17 to T-19 terminal 1. (DME #2 flag input).
- O. Using hardware removed in step B above, re-install mounts for Global OEU and RCU.
- P. Replace Global OEU and modified RCU firmly in mounts.
- Q. Verify proper operation of Composite Steering using the following procedures:
 - (1) Select VLF2 on pilot and/or co-pilot HSI.
 - (2) Generate airspeed input to Air Data Source of approximately 380 knots.
 - (3) Place VLF in primary (VLF) navigation mode and ensure valid HDG and TAS inputs to system on Nav page 2.
 - (4) Couple VLF to Auto-Pilot System (select Nav mode, both Flight Guidance Panels).
 - (5) Generate groundspeed by updating present position, on Nav page 4, in 5 arc-minute increments in rapid succession. It may take as many as 6 updates to generate a ground speed. Verify groundspeed on Nav page 2.
 - (6) Enter R7.5 miles in SXTX field on Nav page 3. Auto-pilot and Flight Director will indicate right turn.
 - (7) Enter L7.5 miles in SXTX field on Nav page 3. Auto-pilot and Flight Director will indicate left turn.
- R. Reassemble aircraft and return to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL 16878D	Wire, #22 AWG shielded

QTY	PART NUMBER	DESCRIPTION
A/R	MIL 16878D	Wire, #22 AWG, twisted pair shielded
A/R	MIL 16878D	Wire, #22 AWG
A/R	327654	Terminal, ring torque (Mfg. AMP)
A/R	320559	Butt connector (Mfg. AMP)
A/R	MS 3192A20-20A	Pin, Male

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Aircraft wiring modified per Service Bulletin No. 1124-34-027 dated April 18, 1985, titled "Enable GNS-500A Series 3B Bank Command Option for Flight Director System."
- B. Modify your Wiring Diagram Manual as required to reflect changes performed by this modification.

END

SB 1124-34-027 Page 6 of 6

April 18, 1985



OPTIONAL

SERVICE BULLETIN NO. 1124-21-028

AUGUST 23, 1985

SUBJECT: REDUCTION OF COOLING AIR VOLUME TO BOTH DC CONTACTOR BOXES, AND CLOSURE OF AIR OUTLET NEAR BATTERY INSTALLATION.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A aircraft, all serial numbers prior to S/N 427, except aircraft with AC inverters installed at Station 328-340.

B. REASON

To reduce cooling airflow and resultant cold soaking inside both DC contactor boxes and the immediate area near subject air outlet which contributes to condensation in high humidity environments following extended flights.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

This Service Bulletin describes the steps and materials required to reduce the flow of cooling air to the DC contactor boxes and surrounding area at Station 316.

E. APPROVAL

The modifications described in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company or their authorized dealers.



SB 1124-21-028 Page 1 of 4

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

No special tools are required.

- H. WEIGHT AND BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA Not applicable.
- J. REFERENCES

Not applicable.

K. PUBLICATIONS AFFECTED

None.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Gain access to battery compartment by removing forward access panel in forward baggage compartment.
 - B. Locate the vertical cooling air duct installed at the approximate aircraft center line at Station 320.0.
 - C. Locate and remove the flexible sleeve at Station 257.0.
 - D. Install restrictor plate P/N 5823594-189 on upper portion of cooling duct as shown in Figure 1.
 - E. Reinstall flexible sleeve and clamps. Tighten flexible sleeve clamps.
 - F. Locate air duct outlet installed as shown in Figure 2.
 - G. Remove existing AN3-3A bolts and associated hardware attaching duct outlet to support angle.
 - H. Insert cover plate P/N 6783198-RE5 between air duct and support bracket.
 - I. Reinstall existing hardware and tighten.

- J. Secure access panel to battery compartment.
- K. Make appropriate log book entry as stated in Record Compliance section and return aircraft to service.
- 3. MATERIAL INFORMATION

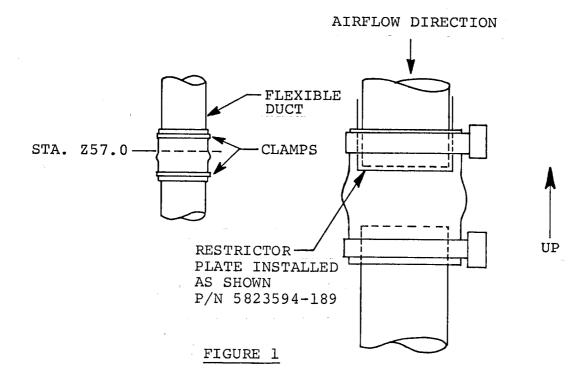
<u>P/N</u>	DESCRIPTION	QTY
5823594-189	Restrictor	l ea.
6783198-RE5	Cover Plate	1 ea.

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

•

Service Bulletin 1124-21-028 dated AUGUST 23, 1985, titled "Reduction of Cooling Air Volume to Both DC Contactor Boxes, and Closure of Air Outlet Near Battery Installation" has been accomplished this date______.



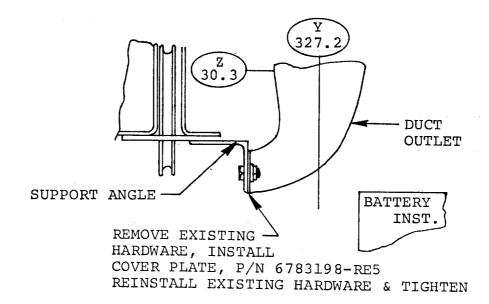


FIGURE 2

SB 1124-21-028 Page 4 of 4

AUGUST 23, 1985



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-21-029

April 24, 1985

SUBJECT: BAGGAGE COMPARTMENT HEAT SYSTEM

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, prior to serial number 427 with long range fuel tank provisions.

- B. REASON
 - (1) To verify conformity of the affected aircraft with regard to the baggage compartment heat/switch switches information placard (1124/1124A aircraft).
 - (2) To verify singular operation of baggage compartment heat system (forward or aft) when either forward or aft baggage compartment heat is selected.
- C. COMPLIANCE

It is recommended that this service bulletin be accomplished no later than the next 150 hour inspection.

D. DESCRIPTION

This Service Bulletin details conformity inspection procedures and/or corrective actions for the baggage compartment heating system.

SB 1124-21-029 Page 1 of 6 E. APPROVAL

The inspection required by this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

Contact Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized representatives.

G. TOOLING

Not required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Manual, Chapter 21. 1124/1124A Airplane Flight Manual.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Perform the following conformity inspection to determine whether corrective action is required:
 - (1) Inspect ECS panel overlay forward for the engine power levers for the presence of the information placard and confirm that the placard conforms to the drawing in Figure 1 (1124 aircraft, Figure 1.A, 1124A aircraft, Figure 1.B).

NOTE

For 1124 aircraft: if, no discrepancy is found no further action is required. For 1124A aircraft: continue the conformity inspection with Step A.2.

- (2) Select battery master switch "ON." Select main baggage compartment heat "ON." Ensure that only the main baggage compartment heat annunciator light illuminates. Select rear baggage compartment heat "OFF."
- (3) Select rear baggage compartment heat "ON." Ensure that only the rear baggage compartment heat annunciator light illuminates. Select rear baggage compartment heat "OFF."
- (4) With battery master still selected "ON", push and HOLD "Push for Volts" on either of the left or right Volt/AMP meters located in the cockpit overhead panel and note voltage reading. With "Push for Volts" still selected, select main baggage compartment heat "TEST" and observe a slight voltage drop. Ensure that only the main baggage compartment heat annunciator light illuminates.
- (5) With "Push for Volts" and main baggage compartment heat "TEST" still selected, select rear baggage compartment heat "TEST" and observe a further voltage drop. Ensure that the rear baggage compartment heat annunciator light has illuminated.
- (6) Select baggage compartment heat switches "OFF" and release "Push for Volts."

CAUTION

Limit test time to a few seconds to prevent overheating of the blankets.

Select battery master switch "OFF." If a discrepancy is found proceed to Step 2.B. If no discrepancies are found, no further action is required.

- B. Accomplish the following instructions as necessary:
 - (1) For aircraft with no information placard installed, install new placard as shown in Figure 1.
 - (2) For aircraft with a placard installed that does not conform to the drawing, remove placard and install new placard as shown in Figure 1.
 - (3) For aircraft that did not test electrically in accordance with Step "A", i.e. both annunciator lights illuminated when either main or rear baggage compartment heat was selected or tested, gain access to terminal board #18 which is located above rear baggage compartment at Fuselage Station 452.00.
 - (4) Remove wire H145L20 from stud #5 of terminal board #18.
 - (5) Reinstall hardware on terminal board #18.
 - (6) Cut terminal from wire H145L20.
 - (7) Cap and stow wire H145L20.
- C. Repeat conformity inspection in accordance with step 2.A. Secure aircraft and return to service.
- D. Make the necessary changes to the appropriate manuals as follows:
 - (1) For 1124 aircraft: make a temporary revision to the Airplane Flight Manual per instruction page of Revision included with this service bulletin.
 - (2) For 1124A aircraft: revise Airplane Flight Manual per instruction page of revision included with this service bulletin.
 - (3) For 1124A aircraft: mark the corrections in the Wiring Diagram Manual for future use, until a revision page is issued.

SERVICE BULLETIN NO. 1124-21-029

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l ea.	328307 (AMP) or equivalent	End Cap
	(may be obtained locally)	

l ea. CMA71230-505-5 Placard

A. Procurement

(1) P/N CMA 71230-505-5 placard may be obtained at no charge from:

Atlantic Aviation Supply Company, Wilmington, DE

4. AIRCRAFT RECORDS

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-21-029 dated April 24, 1985, titled "Baggage Compartment Heat System" has been accomplished this date.

END

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April 24, 1985

SERVICE BULLETIN NO. 1124-21-029

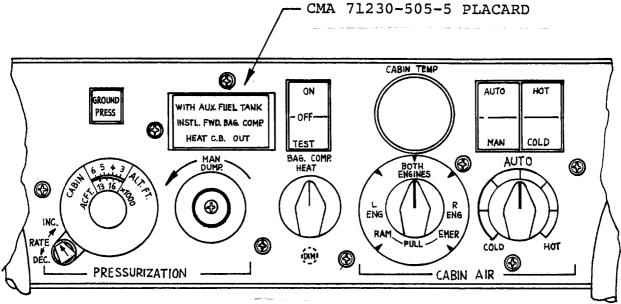
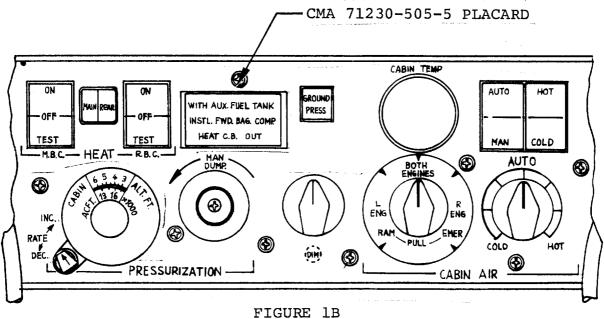


FIGURE 1A

MODEL 1124 WITH LONG RANGE FUEL TANK PROVISIONS



MODEL 1124A, ALL SERIAL NUMBERS

SB 1124-21-029 Page 6 of 6 April 24, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SB NO. 1124-32-030 Revision No. 1 September 18, 1985

SUBJECT:

REROUTING OF NOSE LANDING GEAR WIRING HARNESS

REASON FOR REVISION:

To change aircraft effectivity under paragraph 1. Planning Information.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/ 1124A WESTWINDS, all serial numbers prior to 428 except 413,416, 418, 421, 423 and 426.

> SB 1124-32-030 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-32-030

July 15, 1985

SUBJECT: REROUTING OF NOSE LANDING GEAR WIRING HARNESS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 426 except, 154, 413, 416, 418, 421 and 423.

B. REASON

D.

Reroute the nose landing gear wiring harness to prevent chafing by the nose tire.

C. COMPLIANCE

Compliance with this service bulletin is optional.

DESCRIPTION

During certain aircraft ground operations, (i.e., high gross weights, deep thrust-reverser application) the possibility exists for chafing of the nose landing gear harness. This bulletin provides rerouting instructions for the harness, eliminating chafing between tire and wire harness.

> SB 1124-32-030 Page 1 of 4

E. APPROVAL

The modification procedure described in this Service Bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

None required.

G. SPECIAL TOOLING

None required.

H. WEIGHT & BALANCE

None required.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

K. PUBLICATIONS AFFECTED

Not applicable.

- 2. ACCOMPLISHMENT INSTRUCTIONS (REFER TO FIGURES 1 & 2)
 - A. Jack aircraft in accordance with procedures outlined in aircraft Maintenance Manual, Chapter 7-10-00.
 - B. Remove aft clamp #2 and loosen the attachment of clamps #1 & #3 to facilitate rerouting of wiring harness.

NOTE

Clamp #3 installed on post S.L. WW-2413 only.

- C. Remove clamp #2 from wiring harness.
- D. Reinstall clamp #2 on the rerouted wiring harness as shown in Figure 2.

- E. Position clamps #1 & #2 in such a way as to ensure wiring harness is positioned as close as practical to the strut-body.
- F. Allow slack in wiring harness near clamp #2 for full travel of nose steering operation in both directions.
- G. Tighten clamps #1, #2, & #3. Recheck harness installation during full deflection in both directions of nose gear steering.
- H. Perform landing gear retractions in accordance with aircraft Maintenance Manual, Chapter 32-00-00. Inspect nose gear wiring harness installation for proper clearances.
- I. Extend landing gear. Lower aircraft to ground, remove jacks and jacking pads. Return aircraft to service.
- 3. MATERIAL INFORMATION

None required.

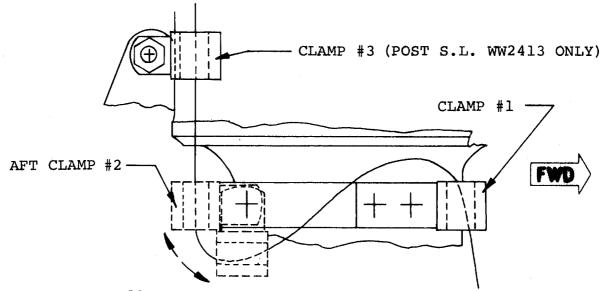
4. RECORD COMPLIANCE

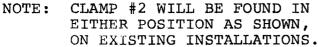
Make the following entry in the aircraft log book: Service Bulletin No. 1124-32-030 dated July 15, 1985 , titled, Rerouting of Nose Landing Gear Wiring Harness has been accomplished this date

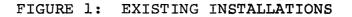
END

July 15, 1985

SERVICE BULLETIN NO. 1124-32-030







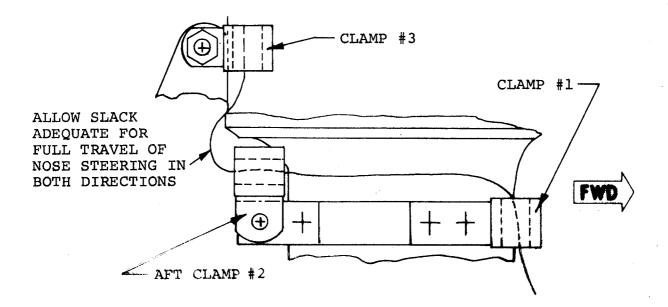


FIGURE 2: INSTALLATION AFTER MODIFICATION

SB 1124-32-030 Page 4 of 4 July 15, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-22-031

June 28, 1985

SUBJECT: VERTICAL GYRO FAST ERECT SWITCH

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

1124/1124A WESTWINDS, 152, 154, 174, 181, and 185 through 378.

B. REASON

To provide installation procedures for the vertical gyro fast erect switch in aircraft not so equipped, so that operators can correct gyro precession in flight.

C. COMPLIANCE

Compliance with this service bulletin is optional.

- D. DESCRIPTION
 - (1) Part I of this service bulletin describes instructions to install the vertical gyro fast erect switch (2 switches where dual vertical gyros are installed) in 1124 aircraft 152, 154, 174, and 185 through 222.
 - (2) Part II of this service bulletin describes instructions to install the vertical gyro fast erect switch (2 switches where dual vertical gyros are installed) in 1124 aircraft 223 through 378.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL (3) Part III of this service bulletin describes instructions to install the vertical gyro fast erect switch (2 switches where dual vertical gyros are installed) in 1124 aircraft 181, and 1124A aircraft 239, and 295 through 378.

E. APPROVAL

The procedures described in this service bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

The material required to accomplish this service bulletin may be purchased from Atlantic Aviation Supply Co., Wilmington, DE., or, their authorized representatives.

G. TOOLING

Special tooling is not required to accomplish this service bulletin.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Manual, Chapters 22-10-02 and 22-10-03.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Manual, Chapters 22-10-02, and 22-10-03.

NOTE

If the operator is planning to incorporate Service Bulletin 1124-22-032 "VNI-80() altitude preslave switch, consideration should be given to accomplishing this service bulletin in conjunction with it. Some work areas are identical in both bulletins, hence considerable manhours would be saved.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. General
 - (1) Disconnect main aircraft batteries.
 - (2) External electrical power "Off."
 - (3) Remove cockpit glareshield from instrument panel.
 - (4) Remove instruments as necessary to gain access to plug D55 on the pilots instrument panel.

NOTE

For aircraft with dual vertical gyro installations, remove instruments as necessary to gain access to plug D255 on the copilot's instrument panel as well.

- (5) Remove pilot and copilot seats.
- (6) Remove cockpit carpet.
- (7) Remove fire relay and forward relay boxes from cockpit deck.
- (8) For 1124 aircraft 152, 154, 174, and 185 through 222, perform the following steps:

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- (a) Remove access doors as necessary from cockpit deck to gain access to wire runs to aft mounted avionics equipment.
- (b) Remove cabin seats, carpet, and access doors from cabin deck along left hand side of aircraft to gain access to wire runs to aft mounted avionics equipment.
- (c) Remove deck from aft coat closet to gain access to aft mounted gyro installation.
- (9) For 1124 aircraft 181, and 223 and subs., and 1124A aircraft 239, and 295 and subs., perform the following steps:
 - (a) Remove nose access doors to gain access to equipment mounted on nose deck.
 - (b) Remove equipment as necessary to gain access to plug D2 mounted on left hand forward pressure bulkhead.

NOTE

For 1124A aircraft equipped with dual Collins vertical gyros, remove equipment as necessary to gain access to plug D200 mounted on right side of forward pressure bulkhead.

- PART I. 1124 aircraft, 152, 154, 174 and 185 through 222
 - A. Wiring and switch installation
 - (1) Route a length of cable from plug D55 on pilots instrument panel to plug DB25 on VG-1. Route a length of cable from plug D55 to vertical gyro fast erect switch location. Follow existing wire runs where possible and secure new cable using standard shop practices.

- (2) Route a length of cable from plug D255 on copilot's instrument panel to plug DB225 on VG-2. Route a length of cable from plug D255 to vertical gyro fast erect switch location. Follow existing wire runs along with cable for VG-1 where possible and secure new cable using standard shop practices.
- (3) Terminate wires as shown in Figure 3, using standard shop practices. Terminate shielding using standard shop practices. Connect plugs D55 and D255.
- (4) Locate vertical gyro fast erect switch on pilots instrument panel as shown in Figure 1, using standard shop practices. (Switch installation on copilot's panel is typical for aircraft with dual vertical gyro installations).
- (5) Terminate wires as shown in Figure 3, using standard shop practices. Cap and stow shielding as close as possible to switch, or, switches.
- (6) At plug DB25, and, DB225 for dual vertical gyro installations, verify that circuit "opens" when switch is pushed, and, that circuit "closes" when switch is released. Connect plugs DB25 and DB225.
- (7) Re-install instruments in the reverse order of removal.
- (8) Re-install fire relay and forward relay boxes.
- (9) If pitot/static system was opened, perform a pitot/static check.
- B. Operational Check
 - (1) Perform a complete operational check of all instruments and equipment removed for switch installation.

- (2) With vertical gyro, or gyros erected, (flags out of view) push pilots vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves into view. Release vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves out of view. Repeat test for copilot's vertical gyro fast erect switch if installed.
- C. Close Up
 - (1) Re-install access doors on cockpit and cabin decks.
 - (2) Re-install deck in aft coat closet.
 - (3) Re-install cockpit and cabin furnishings in the reverse order of removal.
 - (4) Perform a complete operational check of the cockpit lighting system.
 - (5) Re-connect main aircraft batteries.
 - (6) Accomplish step 4 and return aircraft to service.

PART II 1124 Aircraft 223 through 378

- A. Wiring and switch installation
 - (1) Route a length of cable from plug D55 on pilots instrument panel to plug D2 on left hand forward pressure bulkhead. Route a length of cable from plug D55 to vertical gyro fast erect switch location. Route a length of cable from plug D2 to plug DB25 on VG-1. Follow existing wire runs where possible and secure new cable using standard shop practices.
 - (2) Route a length of cable from plug D255 on copilot's instrument panel to plug D2. Route a length of cable from plug D255 to vertical gyro fast erect switch location. Route a length of cable from plug D2 to plug DB225 on VG-2. Follow existing wire runs along with cable for VG-1 where possible and secure new cable using standard practices.
 - (3) Terminate wire as shown in Figure 3, using standard shop practices. Terminate shielding using standard shop practices. Connect plugs D2, D55 and D255.

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- (4) Locate vertical gyro fast erect switch on pilot's instrument panel as shown in Figure 1, using standard shop practices. (Switch installation on copilot's panel is typical for aircraft with dual vertical gyro installations).
- (5) Terminate wire as shown in Figure 3, using standard shop practices. Cap and stow shielding as close as possible to switch, or switches.
- (6) At plug DB25, and, DB225 for dual vertical gyro installations, verify that circuit "closes" when switch is pushed, and, that circuit "opens" when switch is released. Connect plugs DB25 and DB225.
- (7) Re-install instruments in the reverse order of removal.
- (8) Re-install fire relay and forward relay boxes.
- (9) Re-install equipment removed from nose deck in the reverse order of removal.
- (10) If pitot/static system was opened, perform a pitot static check.
- B. Operational Check
 - (1) Perform a complete operational check of all instruments and equipment removed for switch installation.
 - (2) With vertical gyro, or gyros erected, (flags out of view) push pilots vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves into view, Release vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves out of view. Repeat test for copilot's vertical gyro fast erect switch, if installed.
- C. Close Up
 - (1) Re-install cockpit furnishings in the reverse order of removal.
 - (2) Perform a complete operational check of the cockpit lighting system.
 - (3) Re-install nose access doors.

- (4) Re-connect main aircraft batteries.
- (5) Accomplish step 4 and return aircraft to service.
- PART III 1124 Aircraft 181, and 1124A aircraft 289 through 378
- A. Wiring and Switch Installation
 - (1) Route a length of cable from plug D55 on pilots instrument panel to plug D2 on left hand forward pressure bulkhead. Route a length of cable from plug D55 to vertical gyro fast erect switch location. Route a length of cable from plug D2 to plug DB25 on VG-1. Follow existing wire runs where possible and secure new cable using standard shop practices.
 - (2) Route a length of cable from plug D255 on copilot's instrument panel to plug D200 on right hand forward pressure bulkhead. Route a length of cable from plug D255 to vertical gyro fast erect switch location. Route a length of cable from plug D200 to plug DB225 on VG-2. Follow existing wire runs along with cable for VG-1 where possible and secure new cable using standard shop practices.
 - (3) Terminate wires as shown in Figure 4, using standard shop practices. Terminate shielding using standard shop practices. Connect plugs D2, D200, D55, and D255.
 - (4) Locate vertical gyro fast erect switch on pilot's instrument panel as shown in Figure 1 or 2, using standard shop practices, (Switch installation on copilot's panel is typical for aircraft with dual vertical gyro installations).
 - (5) Terminate wires as shown in Figure 4, using standard shop practices. Cap and stow shielding as close as possible to switch, or, switches.
 - (6) At plug DB25, and, DB225 for dual vertical gyro installations, verify that circuit "opens" when switch is pushed, and, that circuit closes when switch is released. Connect plugs DB25 and DB225.
 - (7) Re-install instruments in the reverse order of removal.

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- (8) Re-install fire relay and forward relay boxes.
- (9) Re-install equipment removed from nose deck in the reverse order of removal.
- (10) If pitot/static system was opened, perform a pitot/static check.
- B. Operational Check
 - (1) Perform a complete operational check of all instruments and equipment removed for switch installation.
 - (2) With vertical gyro, or gyros erected, (flags out of view) push pilots vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves into view. Release vertical gyro fast erect switch, "Attitude" or "Gyro" flag moves out of view. Repeat test for copilot's vertical gyro fast erect switch, if installed.
 - C. Close Up
 - (1) Re-install cockpit furnishings in the reverse order of removal.
 - (2) Perform a complete operational check of the cockpit lighting system.
 - (3) Re-install nose access doors.
 - (4) Re-connect main aircraft batteries.
 - (5) Accomplish step 4 and return aircraft to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	Wire, shielded single conductor #22AWG for air- craft equipped with Sperry VG14 ()

vertical gyros.

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	Wire, twisted, shielded, two (2) conductor #22AWG for aircraft equipped with Collins 332D () vertical gyros.
A/R	4123615-53	Placard (IAI Mfg.)
A/R	8125	Switch (C & K Mfg.)
A/R	7527-1 (White)	Cap, switch (C & K Mfg.)

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-33-031, dated June 28, 1985, titled "Vertical Gyro Fast Erect Switch", has been accomplished this date: ______.
- B. Make copies of the appropriate wiring diagram as illustrated, and, insert copies in Chapters 22-10-02, 03 of the aircraft Wiring Manual. Reference aircraft serial number and date.

END

1124 AIRCRAFT

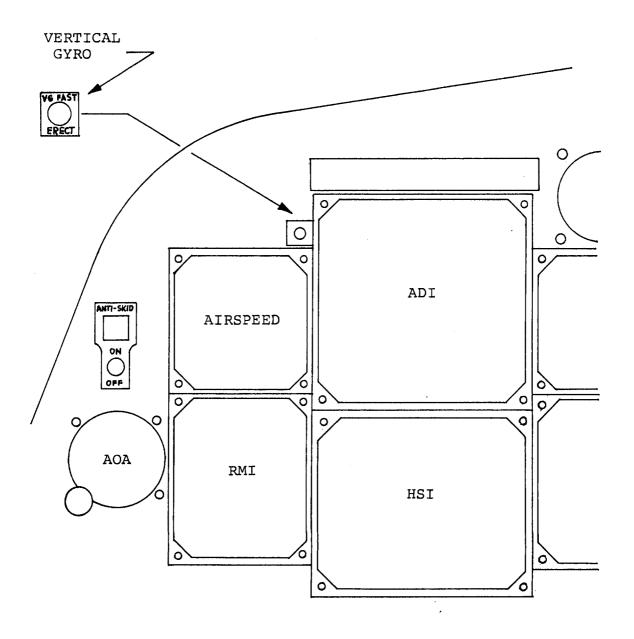
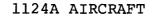


FIGURE 1

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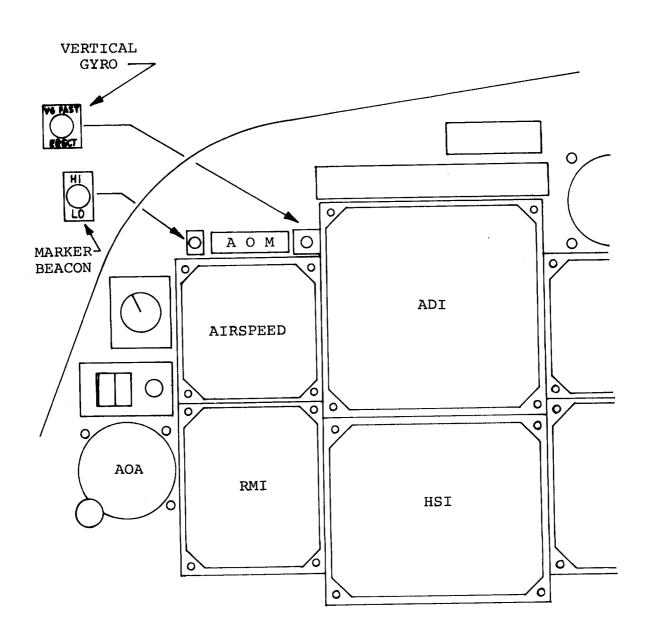
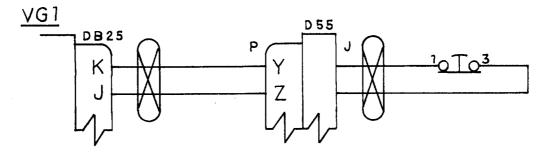
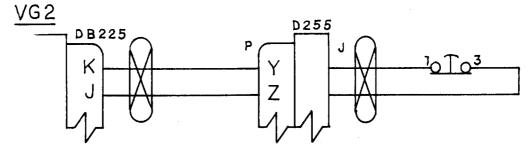


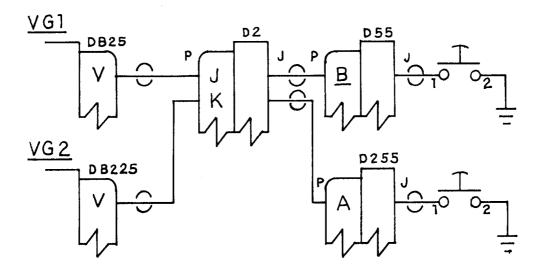
FIGURE 2

1124 AIRCRAFT





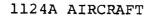
COLLINS 332D-11()

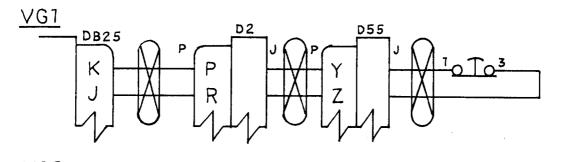


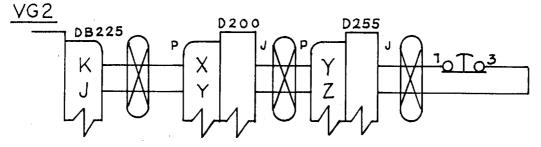
SPERRY VG-14 ()

FIGURE 3

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COLLINS 332D-11()

NOTE: THIS WIRING DIAGRAM ALSO APPLIES TO 1124 AIRCRAFT 181

FIGURE 4

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-22-032

June 28, 1985

SUBJECT: COLLINS VN1-80(), VERTICAL NAVIGATION INDICATOR ALTITUDE PRESLAVE SWITCH

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124A WESTWIND, 295 and subs.

B. REASON

To provide the flight crew with a simple alternate method to entering the aim-point altitude with the set/push select knob of the VNI-80(). When the preslave switch is pushed, the aim-point altitude for the active problem will be set to the altitude dialed into the altitude preselect (PRE-80()) provided the VNI-80() has not captured a vertical path.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin describes installation and testing procedures.

TERNATIONAL INC.

SB 1124-22-032 Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

The modification described in this service bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

The material required to accomplish this service bulletin may be purchased from Atlantic Aviation Supply Company, Wilmington, Delaware, or their authorized representatives.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Collins VNI-80(), vertical navigation indicator pilots guide.

K. PUBLICATIONS AFFECTED

Model 1124A Airplane Flight Manual, supplement 14.

1124A Wiring Diagram Manual, Chapters 34-30-01, and 22-10-05.

NOTE

If the operator is planning to incorporate service bulletin 1124-22-031, "Vertical Gyro Fast Erect Switch," consideration should be given to accomplishing this service bulletin in conjunction with it. Some work areas are identical in both bulletins, hence, considerable manhours would be saved.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. General
 - (1) Disconnect main aircraft batteries.
 - (2) External electrical power "OFF."
 - (3) Remove cockpit glareshield from instrument panel.
 - (4) Remove instruments as necessary to gain access to plug D36 on the copilots instrument panel.
 - (5) Remove equipment as necessary to gain access to plug D105 located forward of the center instrument panel, on shelf just aft of forward pressure bulkhead.
 - (6) Remove instruments as necessary to gain access to plug DN26J2 on VNI-80().
 - (7) Remove pilot and copilot seats.
 - (8) Remove cockpit carpet.
 - (9) Remove fire relay and forward relay boxes from cockpit deck.
 - B. Wiring and Switch Installation
 - (1) Route a length of shielded cable from plug D36 on copilots instrument panel to plug D105 located on shelf forward of center instrument panel. Route a length of shielded cable from plug D36 to preslave switch location. Route a length of shielded cable from plug D105 to plug DN26J2 on VNI-80(). Follow existing wire runs where possible and secure new cable using standard shop practices.
 - (2) Connect shielded wires to pins as shown in Figure 1, using standard shop practices, connect plugs D105 and D36.
 - (3) Locate and install preslave switch on coplicts instrument panel as shown in Figure 1, using standard shop practices.
 - (4) Connect shielded wires to preslave switch as per Figure 1, using standard shop practices.

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June 28, 1985

- (5) At plug DN26J2, verify that circuit "closes" when switch is pushed, and that circuit "opens" when switch is released. Connect plug DN26J2.
- (6) Reinstall instruments and equipment in the reverse order of removal.
- (7) Reinstall fire relay and forward relay boxes.
- (8) If pitot/static system was opened, perform a pitot/static check.
- C. Operational Check
 - (1) Reconnect main aircraft batteries.
 - (2) Connect external electrical power source.
 - (3) Perform a complete operational check of all instruments and equipment removed for switch installation.
 - (4) With the aircraft avionics buses and inverters still on line, verify that VNI-80() has initialized. (Bug and pointer have rotated to zero, vertical NAV functions are in standby, and vertical speed flag is out of view).
 - (5) Press the push/test knob on the VNI-80() and verify that it tests in accordance with the VNI-80() pilots guide. (Preflight, pages 1 & 2)
 - (6) With the function knob selected to "active", press and release the set/push select knob. The altitude annunciator illuminates, and the "vertical speed arm" flag comes into view. Rotate the set/push select knob to 15000 feet in the setup display to verify that an aim-point altitude can be selected.
 - (7) Press and hold the set/push select knob. The VNI-80() returns to standby. Release knob.
 - (8) Select 15000 feet in the altitude preselect. (Pre-80) press the VNI-80 altitude preslave switch. The VNI-80() "altitude" annunciator illuminates, the aim-point altitude is presented in the setup display, and the "vertical speed arm" flag moves into view.

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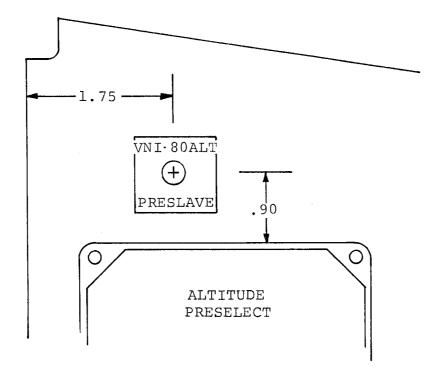
- D. Close Up
 - (1) Reinstall cockpit glareshield on instrument panel.
 - (2) Reinstall cockpit furnishings in the reverse order of removal.
 - (3) Perform a complete operational check of the cockpit lighting system.
 - (4) Disconnect external electrical power source.
 - (5) Return aircraft to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	Wire, twisted, shielded, two (2) conductor
1	5 883793-RE3	Placard (IAI Mfg.)
1	8125	Switch (C&K Mfg.)
1	7527-1 (White)	Cap, switch (C&K Mfg.)

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-22-032 dated June 28, 1985, titled "Collins VNI-80(), Vertical Navigation Indicator Altitude Preslave Switch, has been accomplished this date
- B. Make copies of the wiring diagram as illustrated and inserted copies of Chapters 34-0-01, and 22-10-05 of the aircraft Wiring Diagram Manual. Reference aircraft serial number.

END



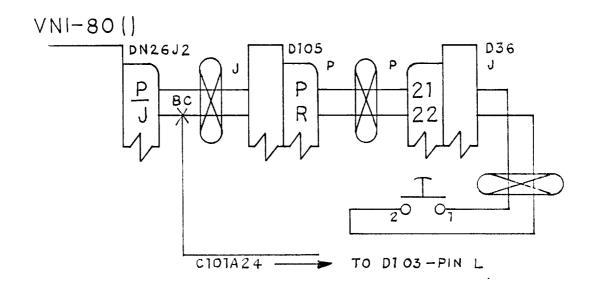


FIGURE 1

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June 28, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-23-033 Revision No. 1 July 5, 1985

SUBJECT: 400 CYCLE HUM IN VHF COM MODULATION

Reason for

Revision: To change the service bulletin from Recommended to Optional and to correct errors in paragraph 2 of Accomplishment Instruction.

- 1. PLANNING INFORMATION
 - C. Compliance is now OPTIONAL.
- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. (1) (c) and (d); and (2) (c) and (d); delete second sentence and insert: "Insulate exposed shield of new wire."
 - (3) (c). Change referenced pin BB to s and change referenced pin AA to FF.
 - (3) (d). Change referenced pin s to BB and change referenced pin FF to AA.

Add new step:

(3) (e). Ensure shield returns from step (3) (c) above are grounded at VHF Com 2 rack, and that shield returns from step (3) (d) above are grounded at VHF Com 1 rack.

NTERNATIONAL INC.

SB 1124-23-033 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-23-033

April 25, 1985

SUBJECT: 400 CYCLE HUM IN VHF COM MODULATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND S/N 240-347.

B. REASON

The 400 cycle inverter noise is very pronounced in the modulation of the VHF Com units due to the long mic audio cable runs.

C. COMPLIANCE

Compliance with this Service Bulletin is recommended.

D. DESCRIPTION

Remove, cap and stow existing shielded mic audio lines to VHF Com units and install new shielded wire from audio panels to pressure bulkhead.

E. APPROVAL

This Service Bulletin has been shown to comply with applicable ICAA/FAA regulations and is IAI Engineering approved.

SB 1124-23-033 Page 1 of 4 F. MATERIAL

Material required may be obtained through Atlantic Aviation Sypply Company in Wilmington, Delaware or procured locally.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Wiring Diagram Manual, Chapters 23-20-01, 23-20-02 and 23-50-03.

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual, Chapters 23-20-01, 23-20-02 and 23-50-03.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Reference WDM chapters 23-20-01, 23-20-02 and 23-50-03 for the following procedures:
 - (1) Locate pilots audio panel (overhead panel) and gain access to connector DB67. Revise wiring as follows:
 - (a) Remove, cap and stow wire #RZ1A24 from pin 21. Disconnect shield and stow.
 - (b) Remove, cap and stow wire #RZ2A24 from pin 22. Disconnect shield and stow.
 - (c) Insert new shielded, single wire #RZ1E24 in pin
 21. Connect shield as originally wired in (1)
 (a) above.
 - (d) Insert new shielded, single wire #RZ2E24 in pin 22. Connect shield as originally wired in (1)
 (b) above. Leave work area accessible through part (3) of these instructions.

- (2) Locate copilots audio panel (overhead panel) and gain access to connector DB68. Revise wiring as follows.
 - (a) Remove, cap and stow wire #RZ1D24 from pin 21. Disconnect shield and stow.
 - (b) Remove, cap and stow wire #RZ2D24 from pin 22. Disconnect shield and stow.
 - (c) Insert new shielded, single wire #RZ1F24 to pin
 21. Connect shield as originally wired in (2)
 (a) above.
 - (d) Insert new shielded, single wire #RZ2F24 to pin
 22. Connect shield as originally wired in (2)
 (b) above.
- (3) Route the four (4) new wires installed in steps (1) and (2) along existing cable bundles to the rear over circuit breaker panel. Follow nearest bundle to the right and down right sidewall behind copilot seat. Run wires forward to pressure bulkhead and gain access to connector D196. Revise wiring to D196 as follows:
 - (a) Remove, cap and stow wire #1RV35B24 from pin BB and shield from pin AA.
 - (b) Remove, cap and stow, wire #2RV35B24 from pin <u>S</u> and shield from pin FF.
 - (c) Splice new wires, #RZ1E24 and #RZ1F24, together and insert in pin BB. Splice shields together and insert in pin AA. Install splices as near to bulkhead connector as possible.
 - (d) Splice new wires, #RZ2E24 and #RZ2F24, together and insert in pin S. Splice shields together and insert in pin FF. Install splices as near to bulkhead connector as possible.
- (4) Reassemble work areas.
- (5) Perform complete operational check of VHF Com units.
 - (a) With full electrical power on aircraft, including inverters, check for presence of electro-magnetic interference.
- (6) Return aircraft to service.

April 25, 1985

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-16878D	#24AWG Shielded, single wire
A/R	323975	Window splice (Mfg. AMP)
A/R	324485	Window splice (Mfg. AMP)

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-24-033, dated April 25, 1985, titled 400 Cycle Hum In VHF Com Modulation, has been accomplished this date
- B. Update Wiring Diagram Manuals Chapters 23-20-01, and 23-50-03 to reflect revised wiring.

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-33-034 Revision No.1 June 14, 1985

SUBJECT: LOGO LIGHT MODIFICATION

REASON FOR REVISION: T

To change the numbers under the QTY column in paragraph 3. Material Information.

3. MATERIAL INFORMATION

> 2 4 2

SB 1124-33-034 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-33-034

April 29, 1985

SUBJECT: LOGO LIGHT MODIFICATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 426 except 413, 416, 418, 421, 423 and 424.

B. REASON

To provide the necessary information that will allow the operator to reconfigure the logo light circuitry to utilize a 14V, 50W bulb.

C. COMPLIANCE

At the operators discretion.

D. DESCRIPTION

This bulletin changes the logo light electrical circuit from a parallel to series configuration, to enable usage of 14-volt bulbs; thus increasing service life.

E. APPROVAL

The modification described in this Service Bulletin has been shown to comply with ICAA/FAA regulations and is IAI Engineering approved.

INTERNATIONAL INC.

SB 1124-33-034 Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. TOOLING

Devore Lamp tool P/N 00033098-1 or equivalent.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Electrical load will be reduced by the installation of two 14-volt 50-watt bulbs.

J. REFERENCES

Devore Aviation Corporation, Drawing #00033200.

K. PUBLICATIONS AFFECTED

1124 Maintenance Manual, Chapter 33-40-00, page 214 and 215. 1124 Illustrated Parts Catalog, Chapter 33-40-00, page 12-15.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove electrical power from aircraft.
- B. Remove logo lights from left and right horizontal stabilizer.
- C. Disassemble one bulb retainer assembly from base unit. The second bulb retainer assembly will not require modification. Ref. Figure 1.
- D. Install the following parts referenced in Figure 1. Install insulator P/N 00003048-1 around lamp holder assembly P/N 000030001-3 and install in base unit. Secure with 2 each 5609-5 shoulder washers, 2 each P/N 00003049-1 washers and 2 each MS24677-2 screws. Connect electrical wire from second bulb, to base unit of number one bulb with P/N 00003050-1 terminal and install shrinktubing. Clamp wires as shown in Figure 1. Install two 14-volt bulbs DA-15.

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NOTE

When handling lamps, do not allow skin to come in contact with lamps. Skin oil will reduce the lamps service life. Fingerprints can be removed with a greasefree solvent such as acetone.

- E. Ink stamp the base unit to read "14V" two places, reference Figure 1.
- F. Repeat these instructions for the other assembly.
- G. Install base unit on left and right horizontal stabilizers. Install lens assembly and new AS-201 O-rings (2 ea.) and tighten screws 8-9 inch-pounds. Ensure that lens are properly seated on cover.
- H. Apply electrical power to aircraft and functional test lights.

CAUTION

When operating lamps with cover glass removed, wear safety glasses or equivalent eye protection. Do not look directly at lamp.

Lamps and reflectors become extremely hot. Use extreme care while making adjustments.

- I. If adjustments are required, proceed to paragraph J.
- J. Adjustment Procedure:
 - 1. Check the system to be sure all lamps are operating properly.
 - 2. Adjustments should be made at night or in a darkened hangar.
 - 3. Before applying power accomplish steps 4 through 8.

- 4. Remove cover glass.
- 5. Loosen the two capscrews at the yoke clamp of each lamp (bottom of assembly base) to allow the reflector to be rotated around the lamp.
- 6. Loosen the two button head screws (on either side of lamp) in the reflector yoke assembly to allow the reflector to be tilted.
- 7. Open the circuit breaker for the fixture that is not being adjusted to prevent heat buildup.
- 8. Direct reflectors toward the tail surface.
 - (a) The reflector for the aft lamp should be directed toward a point near the center of the vertical surface one to two feet above the horizontal stabilizer.
 - (b) The reflector for the forward lamp should be tilted upward and aft to point toward the center of the upper portion of the vertical surface.
- 9. Turn on aircraft DC power and actuate "Tel-Tail" Recognition light switch.
- 10. Observe the light pattern and reposition reflectors if necessary.
- 11. Set the cover glass on the fixture, do not install attaching screws at this time.
- 12. Observe that the cover glass changes the light pattern to eliminate bright and dark spots.
- 13. Reposition reflectors if required to provide even coverage.

NOTE

It is easier to adjust the reflectors while the lamps are turned off.

- 14. When adjustments are complete, turn off electrical power and tighten adjustment screws. Recheck to be sure adjustment was not changed after screws are tightened.
- 15. Install cover glass.
- 16. Repeat the adjustment procedure for the fixture on the opposite side of the aircraft.

3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION
2	AS-201	O-ring
2	MS24677-2	Screw
2	5609-5	Shoulder Washer
1	00003048-1 RT-876, 3/4"dia., 5/8" long	Insulator Shrink Tubing
1	00003001-3	Lampholder Assy
1	00003050-1	Terminal
2	DA-15	Bulbs 14V, 50-Watt
1	0003049-1	Washer

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book: Service Bulletin No. 1124-33-034 dated April 29, 1985 titled "Logo Light Bulb Replacement," has been accomplished this date

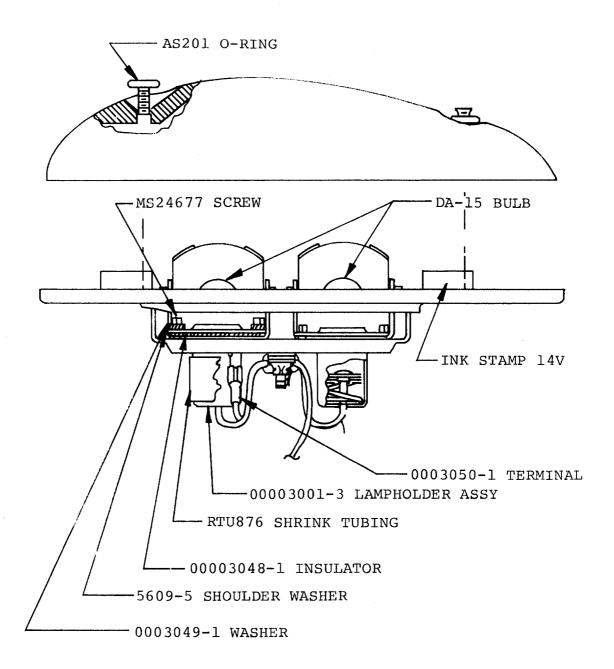


FIGURE 1

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SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-28-035 Revision No.1

June 14, 1985

SUBJECT: ELIMINATION OF ERRATIC FUEL QUANTITY INDICATIONS

REASON FOR REVISION:

To change the word "lower" to "upper" in paragraph 2.(3).

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - (3) Remove external access side panels and access side covers from upper fuselage tanks in accordance with Maintenance Manual Chapter 28-10-00.

INTERNATIONAL INC.

SB 1124-28-035 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-28-035

April 29, 1985

SUBJECT: ELIMINATION OF ERRATIC FUEL QUANTITY INDICATIONS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 426 except 413, 416, 418, 423 and 424.

B. REASON

To eliminate erratic fuel quantity indications.

C. COMPLIANCE

Optional or whenever the fuel tanks are opened for other maintenance.

D. DESCRIPTION

This service bulletin provides the means of draining moisture from the fuselage fuel probe base support and also ensures that sufficient clearance exists between the tubes and/or hoses routed along side the probes.

E. APPROVAL

The inspection and modification described in this Service Bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

VTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

F. MATERIAL

Parts may be obtained through Atlantic Aviation Supply Co., Wilmington, Delaware or their authorized representatives.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 28-40-00. 1124/1124A Illustrated Parts Catalog, Chapter 28-40-00.

K. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- (1) Defuel aircraft in accordance with Maintenance Manual, Chapter 12.
- (2) Remove electrical power from aircraft.
- (3) Remove external access side panels and access side covers from lower, fuselage tanks in accordance with Maintenance Manual, Chapter 28-10-00.
- (4) Remove external access side panels and access side covers from lower fuselage tanks in accordance with Maintenance Manual, Chapter 28-10-00.
- (5) Remove or loosen clamps securing probe to tubes.
- (6) Raise probe sufficiently to gain access to the base support.

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- (7) Cut 1/4" tapered slot at the narrow edge of the base support. Reference Figure 1.
- (8) Re-install probe and check that the lower end of the probe is properly seated in the base support.
- (9) Install or tighten clamps removed in Step 5.
- (10) Clearance between the tubes and probe should be a minimum of 1/4" inch.

NOTE

When clamping the fuel sump vent hose, the clamps should be installed so the hose is not buckled and making contact with the probe in the wing section.

- (11) Install access covers on upper and lower fuselage tanks in accordance with Maintenance Manual, Chapter 28-10-00.
- (12) Check fuel quantity indicating system in accordance with Maintenance Manual, Chapter 28-40-00.
- (13) Check fuel system for leakage.
- (14) Install external access panels.
- (15) Return aircraft to service.
- 3. MATERIAL INFORMATION

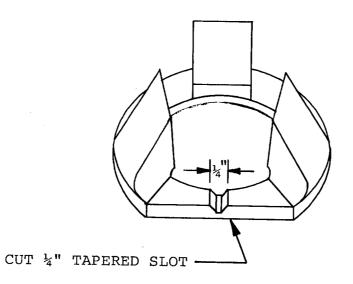
QTY	PART NUMBER	DESCRIPTION
6 ea. (3 per side)	5653054-525	Gasket

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book: Service Bulletin No. 1124-28-035 dated April 29, 1985, titled, "Elmination of Erratic Fuel Quantity Indications," has been accomplished this date

END

SB 1124-28-035 Page 3 of 4



FUEL PROBE BASE SUPPORT

FIGURE 1

SB 1124-28-035 Page 4 of 4

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-30-036 Revision No. 1 December 20, 1985

- SUBJECT: ICE AND RAIN PART I
- WINDSHIELD HEAT CONTROL WIRING MODIFICATION
- PART II WINDSHIELD HEAT CYCLING CONTACTOR INSPECTION AND/OR REPLACEMENT

REASON FOR REVISION: To revise required inspection interval in para. 1.C., Part II, revise part number in para. 3, Part I, and add new part number for a preferred WCC replacement in para. 3, Part II.

- 1. PLANNING INFORMATION
 - C. COMPLIANCE
 - PART II Immediately upon receipt of Revision 1, unless the inspection was performed upon receipt of Service Bulletin No. 1124-30-036 dated April 30, 1985 and 150 hours have not elapsed. Thereafter, at the next 150-hour inspection and at 150-hour intervals until P/N 7264-4654 WCC (Mfg. Leach) is installed, at which time the inspection interval is extended to 600 hours.
- 3. MATERIAL INFORMATION

PART I

QTYPART NUMBERDESCRIPTION100 ft.MS27500-20NK2T11Wire (2 conductor;

or 75918-222TTZ

INTERNATIONAL INC.

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shielded)

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL SERVICE BULLETIN NO. 1124-30-036, Revision No. 1

3. MATERIAL INFORMATION

PART II

\underline{QTY}	PART NUMBER	DESCRIPTION
A/R	Leach 7264-4654	WCC, preferred replacement
A/R	Cutler Hammer 6041H-215	WCC, alternate replacement
A/R	Cutler Hammer 6041H-243	WCC, original

SB 1124-30-036 Page 2 of 2



RECOMMENDED

SERVICE BULLETIN NO. 1124-30-036

April 30, 1985

SUBJECT: ICE AND RAIN - PART I

WINDSHIELD HEAT CONTROL WIRING MODIFICATION

PART II WINDSHIELD HEAT CYCLING CONTACTOR INSPECTION AND/OR REPLACEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

PART I MODEL 1124/24A WESTWINDS, serial numbers 152, 154, 174, 181, 185 through 388 and 391.

PART II MODEL 1124/24A WESTWINDS, all serial numbers.

- B. REASON
 - PART I To reduce unnecessary cycling of the windshield heat contactor by installing shielded wire between the windshield heat control switches, Temperature Control Boxes and thermostats.
 - PART II Inspection and/or replacement of the contactors located in the DC contactor boxes.
- C. COMPLIANCE

PART I The next 150 hour inspection.

SB 1124-30-036 Page 1 of 7 PART II At the next 150 hour, inspection and each subsequent 150 hour inspection thereafter.

D. DESCRIPTION

- PART I Induced voltages have been determined to be the cause of unwanted cycling of the windshield heat contactors, P/N 833044-1. This bulletin describes the steps necessary to remove un-shielded wires and replace them with shielded wires that are properly grounded at each termination point.
- PART II Inspection of the WCC-1 and WCC-2 relay contacts is necessary to determine whether unnecessary cycling has affected the surface of the contacts. This bulletin describes the procedures to make this determination.

E. APPROVAL

The modification described in this Service Bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, their dealers and through most avionics supply houses.

G. TOOLING

Digital Volt/Ohm Meter.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, IPC and Wiring Manual, Chapter 30.

K. PUBLICATIONS AFFECTED

PART I 1124/1124A WIRING MANUAL

PART II 1124/1124A MAINTENANCE MANUAL

1124/1124A ILLUSTRATED PARTS CATALOG

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Turn off battery and assure that external power is disconnected.
 - B. Remove the following interior components:
 - (1) Cockpit seats, side panels and overhead panel.
 - (2) RH cabin seat and card table in area of RH emergency exit (for access to RH sensor).
 - (3) RH & LH cabin lower kick panels.
 - (4) All cabin LH seats, bar and storage cabinets.
 - (5) Carpet and floor access panels as necessary to route new wiring (LH side).
 - C. Removal of the above components is needed to gain access to the following areas:
 - (1) Connector P/J 23 Fuselage Sta. 83.78-LH.
 - (2) W/S Temp Controller Fuselage Sta. 37.78-LH & RH.
 - (3) W/S Heat Switch Cockpit Overhead Panel.
 - (4) Thermostat Switches Fuselage Sta. 194.00-LH & RH (lower side of fuselage just aft of escape hatch).

NOTE

Refer to Wiring Manual section 30-40-02 for existing wiring.

- D. Cut and cap the existing wires as follows: (These wires will remain in the aircraft as spares).
 - (1) At LH windshield heat switch -1H161A22, 1H162B22 and 1H44A22.
 - (2) At RH windshield heat switch 2H161A22, 2H162B22 and 2H44A22.
 - (3) At LH windshield temperature controller 1H162A22 and 1H44D22.
 - (4) At RH windshield temperature controller 2H162A22 and 2H44D22.
 - (5) At LH thermostat switch -1H161B22 and 1H44B22.
 - (6) At RH thermostat switch -2H161B22 and 2H44B22.
- E. Route new sections of M27500-20NK3Tll or equivalent (shielded 3 conductor) wire from windshield heat switches in cockpit to the area of connector P/J 23. Clamp and secure new wires to existing bundles.
- F. Route a new section of M27500-20NK2Tll or equivalent (shielded 2 conductor) wire from RH thermostat switch under cabin floor to area of LH thermostat switch and then forward on the LH side of the aircraft, along with a second wire from the LH thermostat switch, to the area of connector P/J 23. Be sure to identify RH and LH thermostat switch wiring near P/J 23.
- G. Route new sections of M27500-2ONK2T11 or equivalent (shielded 2 conductor) wire from LH windshield temperature controller to the area of connector P/J 23 and from RH windshield temperature controller to the area of connector P/J 23.
- H. Connect all new wiring per Figure 1.
- I. Insulate all exposed shield braids with heat-shrink.
- J. Accomplish an electrical continuity check of new wiring to assure conformity to Figure 1 of this Service Bulletin.
- K. Secure all new wiring to existing bundles.
- L. Reinstall interior components and return aircraft to service.

PART II

- A. Gain access to both DC contactor boxes and remove their covers.
- B. Visually inspect contactor wiring for evidence of overheating. Wiring that has been overheated should be replaced.
- C. Apply external power to the aircraft and select battery master to "override" to operate the windshield heat system on "HI (to close contactor).
- D. Connect a digital voltmeter across windshield cycling contactor terminals Al and A2. Set meter to 1 Volt scale.
- E. Voltage drop should not exceed 0.2 VDC. If voltage drop exceeds 0.2 volts, erratic readings are observed, or contactors show evidence of excessive heating, replace the contactors.
- F. Reinstall DC contactor box covers and return aircraft to service.
- 3. MATERIAL INFORMATION PART I

QTY	PART NUMBER	DESCRIPTION
100 ft.	M27500-2OHK2T11 or 75918-222TTZ	Wire (2 conductor; shielded)
20 ft.	M27500-20NK3T11 or 75918-223TTZ	Wire (3 conductor; shielded)
8	32445 AMP	Knife-Disconnect Splices
8	323288 AMP	Butt Splices
2	35653 AMP	Close End Splices
14	324485 AMP	Spare Wire Caps
10	323986 AMP	Ring Tongue Terminals

SERIVCE BULLETIN NO. 1124-30-036

QTY

PART NUMBER

DESCRIPTION

A/R

SST4S Panduit

Ty-wrap, 4 inch bundle

NOTE

AMP and PANDUIT numbers shown may be replaced by equivalent number from another vendor.

PART II

QTYPART NUMBERDESCRIPTIONA/RCutler HammerWindshield6041H-243Cycling Contactor

or 6041H-215

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book: Service Bulletin 1124-30-036 dated April 30, 1985 titled, PART I: Windshield Heat Wiring Modification and/or PART II: Windshield Heat Cycling Contactor Inspection and Replacement has been accomplished this date

Should PART II be accomplished by 150 hour inspection "interval only," designate in aircraft log book as "inspection only."

Should PART II be accomplished by contactor inspection and replacement, designate in aircraft log book as "inspection and replacement."

NOTE

Maintenance personnel should make a temporary correction to their aircraft Wiring Diagram to reflect changes performed in PART I of this bulletin.

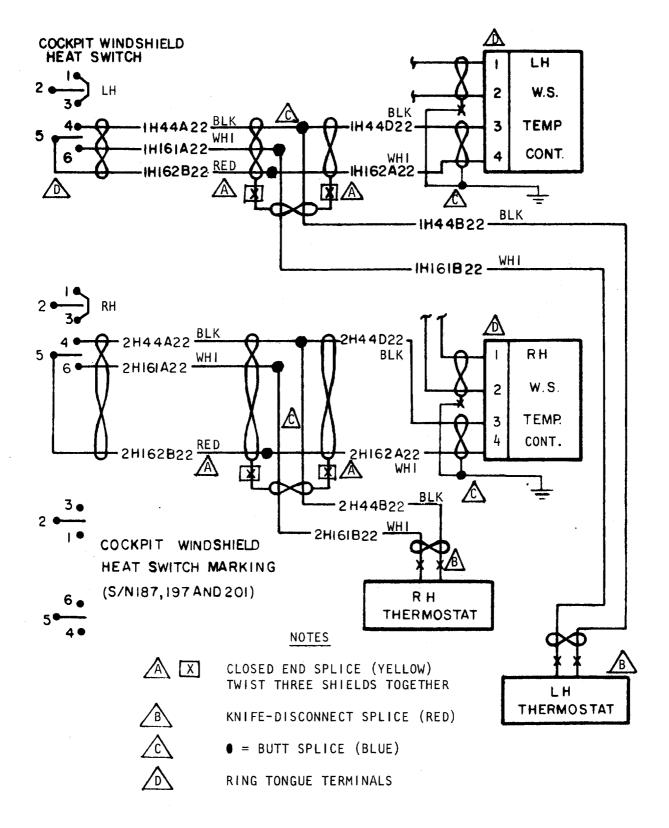


FIGURE 1 SHIELDED WIRING CONNECTIONS

April 30, 1985

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SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-52-037 Revision No.1

June 14, 1985

SUBJECT: FWD BAGGAGE DOOR - POSITIVE HOLD-OPEN PROVISION

REASON FOR REVISION:

REVISION: To change five part numbers in paragraph 3. Material Information.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l ea. l ea. l ea. l ea. l ea. l ea. l ea. l ea. l ea.	* A01WW 5313687-RE5 * A01WW 5313687-RE4 * A01WW 5313687-RE3 CR3243-4-5 NAS1739-5-4 MS17986-326 * A01WW 5313687-RE7 * A01WW 5313687-RE9 CL-73-KA-5	Retainer Angle Angle Cherry Max Rivet Blind Rivet Lockpin Caution Decal Stowage Decal Cable, Nylon (Carr Lane Mfg. Co.)

* These part numbers supersede those reflected in Figure 1, 2 and 3.

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SB 1124-52-037 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-52-037

May 27, 1985

SUBJECT: FWD BAGGAGE DOOR - POSITIVE HOLD-OPEN PROVISION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 426 except 416, 418, 421 and 423.

B. REASON

To install provisions for positive hold-open of the forward baggage door to ease loading during gusty wind conditions.

C. COMPLIANCE

Optional

D. DESCRIPTION

Two angles are installed on the forward baggage door frame at the upper hinge along with a lock-pin and a lock-pin storage bracket.

E. APPROVAL

The modification described in this Service Bulletin has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

F. MATERIAL

The material required may be obtained through Atlantic Aviation Supply Company Wilmington, DE or their authorized representatives.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCE

None

K. PUBLICATIONS AFFECTED

None

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove both aircraft battery connectors and external DC power to aircraft (if installed).
 - B. Locate and remove eight rivets installed immediately above and below cut-out for upper hinge (see figure 1). These rivets may be either solid or blind fasteners.
 - C. Using an assistant, observe angle installation on door frame from inside the forward baggage compartment with baggage door closed. Position angles to door frame, mark angles for final fit and trimming that will ensure clearance is adequate to door, door hinge bracketry and bracket hardware. Trim only that material necessary to provide clearance required with door closed.

NOTE

Install angle with one inch leg attached to door frame and 3/4" leg used for lock pin.

- D. After final trimming of both angles, drill .144 (#27) holes picking up existing fastener holes for attachment of angles to door frame with CR 3243-4-5 Cherry Max rivets.
- E. Temporarily install angles to door frame with clecos. Locate center of .1875 hole required for lock-pin installation through upper angle, upper door hinge with door in fully opened position and lower angle (Ref. Figure 3).
- F. Drill .09375 (3/32") pilot hole through both brackets and upper door hinge. Care must be taken to ensure proper alignment is maintained during drilling process.
- G. Remove angles, drill lock pin pilot holes to final size of .1875 (3/16"). Drill upper door hinge lock-pin pilot hole to final size of .1875 (3/16").
- H. Deburr all drilled holes, clean areas to be painted with MEK and apply zinc chromate primer to all bare aluminum surfaces.
- I. Install both angles to door frame using eight CR3243-4-5 Cherry Max fasteners.
- J. Install P/N MS17986-326 lock-pin. Fit of lock-pin through angles and door hinge should be a slip fit. If necessary, lock-pin holes may be reamed slightly to provide the best fit.
- K. Position lock-pin retainer, P/N 5313687-RE5, near upper left hand corner of microswitch access panel. Install channel as shown in Figure 2, picking up existing fasteners.
- L. Attach lock-pin lanyard clip to an existing fastener as shown in figure 2.
- M. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l ea. l ea. l ea. 8 ea. l ea. l ea. l ea. l ea. l ea. l ea.	5313687-RE5 5313687-RE4 5313687-RE3 CR3243-4-5 NAS1739-5-4 MS17986-326 5313687-RE7 5313687-RE9 CL-73-KA-5	Retainer Angle Angle Cherry Max Rivet Blind Rivet Lockpin Caution Decal Stowage Decal Cable, Nylon (Carr Lane Mfg. Co.)
		(Carr name mry. CO.)

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book: Service Bulletin No. 1124-52-037, date May 27, 1985, titled "FWD Baggage Door - Positive Hold-Open Provision," has been accomplished this date

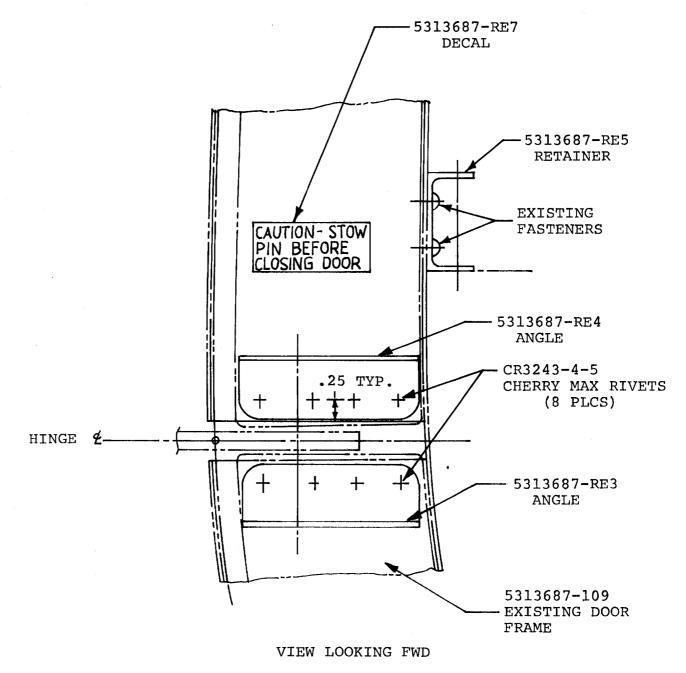
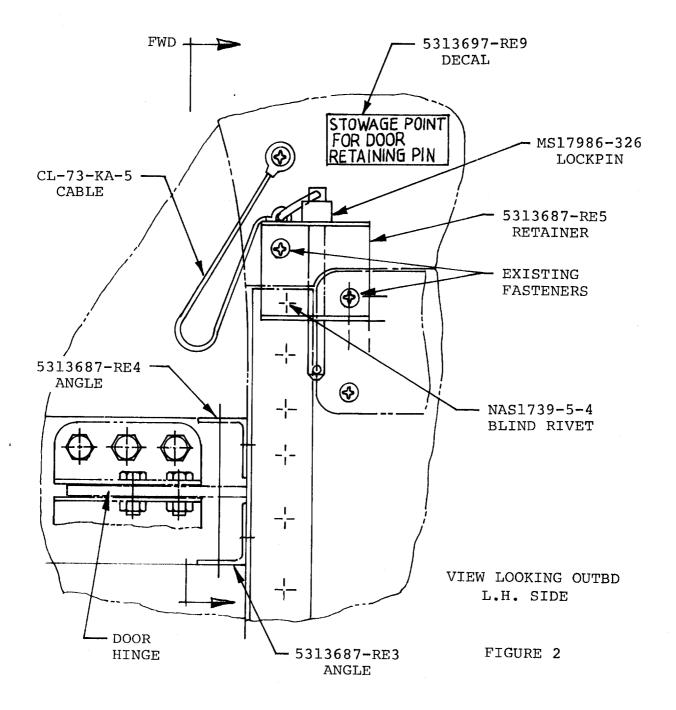
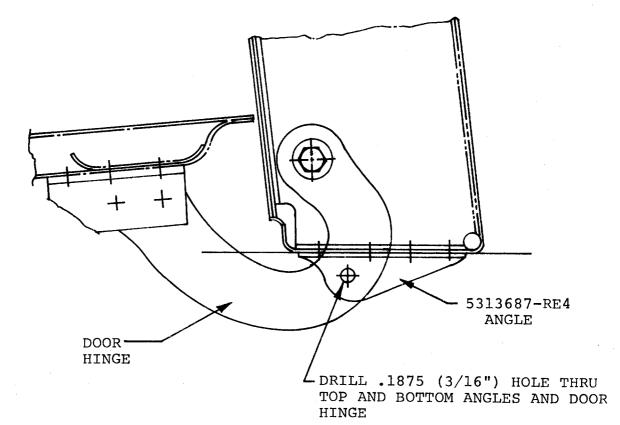


FIGURE 1



May 27, 1985



VIEW LOOKING DOWN - TOP DOOR HINGE

FIGURE 3

May 27, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-23-038 Revision No. 1

June 9, 1986

STEREO CONFIGURATION ERRORS SUBJECT:

REASON FOR

To change aircraft effectivity under paragraphs **REVISION:** 1.A.(2) and (3), and to add text to paragraph 2.E.

- PLANNING INFORMATION 1.
 - EFFECTIVITY Α.
 - Accomplishment Instructions Part B (1124 and (2) 1124A S/N's 349-393, except 1124 S/N 386, 388 and 1124A S/N 353, 356, 376, 380 and 392.
 - Accomplishment Instructions Part C (1124 S/N's (3) 388, 396-401).
- ACCOMPLISHMENT INSTRUCTIONS 2.
 - Reference Wiring Diagram Manual, Chapters 23-50-03, Ε. 23-50-05 and 23-30-01. Perform wiring changes as follows. Do not remove existing wiring unless so instructed.

Disconnect . . . (1)

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-23-038

July 15, 1985

SUBJECT: STEREO CONFIGURATION ERRORS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part A (1124 S/N's 244, 283, 326. 1124A S/N's 295, 299-309, 315, 318, 319, 322, 324, 328, 330, 334, 335, 337-345).
 - (2) Accomplishment Instructions Part B (1124 S/N's 354-363, 367-383, 391, 393. 1124A S/N's 349-374, 377-399, 402 and subs). Excepting 1124A S/N's 353, 356 and 380.
 - (3) Accomplishment Instructions Part C (1124 S/N's 388, 393-402).
 - (4) Accomplishment Instructions Part D (1124 S/N's 243, 245-282, 284-298, 310-314, 316, 317, 321, 323, 325-327, 329, 331-333, 336, 347).
 - (5) Accomplishment Instructions Part E (1124A S/N 376).
 - (6) Accomplishment Instructions Part F (1124 S/N 386).
 - (7) Accomplishment Instructions Part G (1124 S/N 320).
 - (8) Accomplishment Instructions Part J (1124 S/N 366).

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B. REASON

- (1) Accomplishment Instructions Parts (A,B,C,D and E) corrects wiring to provide PA audio to headphones when speaker/phone switch is in speaker position.
- (2) Accomplishment Instructions Part (F) corrects wiring error which allows left front and left rear speaker low outputs from stereo to short together at relay.
- (3) Accomplishment Instructions Part (G) corrects wiring error in right channel stereo speaker connections, left channel low output to headphone wired in high position and no PA audio to headphones.
- (4) Accomplishment Instructions Part (J) corrects wiring to allow control of stereo audio to speakers or phones.
- C. COMPLIANCE

Compliance with this Service Bulletin is optional.

- D. DESCRIPTION
 - Accomplishment Instructions Parts (A,B,D) adds one jumper and one wire to provide PA audio to headphones.
 - (2) Accomplishment Instructions Part (C) relocates resistor ground, adds one jumper and one wire to provide PA audio to headphones.
 - (3) Accomplishment Instructions Part (E) adds two wires to provide PA audio to headphones.
 - (4) Accomplishment Instructions Part (F) removes, caps and stows two wires and adds one wire to eliminate the shorted condition of the left channel speaker low outputs of the stereo booster.
 - (5) Accomplishment Instructions Part (G) disconnects and relocates five wires for proper operation of stereo speakers and headphones.

- (6) Accomplishment Instructions Part (J) disconnects two wires, adds one jumper and one new wire.
- E. APPROVAL

The modifications described in this service bulletin have been shown to comply with the applicable ICAA/FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Co, Wilmington, Delaware, or procured locally.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Wiring Diagram Manual, Chapters, 23-50-03, 23-50-05, 23-30-01.

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual, Chapters 23-50-03, 23-50-05, 23-03-01.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05, and 23-30-01. Add new wires as follows: Do not remove existing wires unless so instructed.
 - (1) Add jumper from relay RL-5 (located approximately STA.258 LHS Z=52) terminal F-1(socket pin 3) to terminal F-6 (socket pin 18).

- Add new wire #RZ43 () 22 from relay RL-5 terminal H-6 (socket pin 19) to TB-11 terminal 6 (located approximately STA 198 LHS Z=39).
- (3) Check for normal operation as per instructions H, below.
- B. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05, and 23-30-01. Add new wires as follows.
 Do not remove existing wiring unless so instructed.
 - (1) Add jumper from relay RL-5 (located approximately STA. 258 LHS Z=52) terminal F-6 (socket pin 18) to relay RL-500 (located approximately STA 252 LHS Z=52) terminal F-5 (socket pin 15).
 - (2) Add new wire #RZ43 () 22 from FL-500 terminal H-5 (socket pin 16) to TB-11 terminal 6 (located approximately STA 198 LHS Z=39).
 - (3) Check for normal operation as per instructions H, below.
- C. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05 and 23-30-01. Perform wiring changes as follows. Do not remove existing wiring unless so instructed.
 - (1) Disconnect ground wire and resistor (150 ohms 2W) at relay RL-500 (located approximately STA 252 LHS Z-52) terminal B-6 (socket pin 20). Reconnect ground end of resistor at nearest airframe ground terminal. Cap and stow ground wire.
 - (2) Add jumper from relay RL-500 terminal F-6 (socket pin 18) to relay RL-5 (located approximately STA 258 LHS Z-52) terminal F-6 (socket pin 18).
 - (3) Add new wire #RZ43 () 22 from relay RL-500 terminal H-6 (socket pin 19) to TB-11 terminal 6 (located approximately STA 198 LHS Z=39).
 - (4) Check for normal operation as per instructions H, below.
- D. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05 and 23-30-01. Add new wires as follows. Do not remove existing wiring unless so instructed.

SB 1124-23-038 Page 4 of 7

- (1) Add jumper from relay RL-5 (located approximately STA 258 LHS Z=52) terminal F-1 (socket pin 3) to RL-5 terminal F-6 (socket pin 18).
- (2) Add jumper from relay RL-5 terminal H-6 (socket pin 19) to RL-5 terminal B-3 (socket pin 11).
- (3) Check for normal operation as per instructions H, below.
- E. (1) Disconnect wire #RZ225X24 from relay RL-5 (located approximately STA Y=258 LHS) terminal H-6 (socket pin 19), cap and stow.
 - (2) Disconnect jumper between RL-5 terminals F-4 (pin 12) and F-2 (pin 6).
 - (3) Disconnect jumper from RL-5 terminal F-1 (pin 3) and reconnect it to terminal F-4 (pin 12).
 - (4) Add new wire #RZ225C22 from RL-5 terminal H-6 (pin 19) to TB-10 terminal 6 (located approximately STA Y=198 RHS.
 - (5) Check for normal operation as per instructions H.
- F. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05 and 23-30-01. Perform wiring changes as follows. Do not remove existing wiring unless so instructed.
 - At relay RL-5 (located approximately STA 258 LHS Z=52) remove, cap and stow wire #RZ226B24 from terminals B-4 (socket pin 14) and B-2 (socket pin 8).
 - (2) Add new wire #RZ128 () 24N from relay RL-5 terminal B-6 (socket pin 20) to nearest airframe ground terminal.
 - (3) Check for normal operation as per instructions in step H.
- G. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05 and 23-30-01. Perform wiring changes as follows. Do not remove existing wires unless so instructed.

- (1) Disconnect the following wires from relay RL-5 (located approximately STA 258 LHS Z=52):
 - (a) Wire #RZ125A22B from terminal H-1 (socket pin 4).
 - (b) Wire #RZ126A22Y from terminal H-2 (socket pin 7).
 - (c) Wire #RZ225A22R and #RZ225F24R from terminal B-3 (socket pin 11).
- (2) Reconnect above wires to following locations:
 - (a) Wire #RZ125A22B to terminal H-2 (socket pin 7).
 - (b) Wire #RZ126A22Y to terminal B-3 (socket pin 11).
 - (c) Wire #RZ225A22R and #RZ225F24R to terminal
 - H-1 (socket pin 4).
- (3) Disconnect wire #RZ40A24B and wire #RZ40B24 from splice 16 at relay RL-5 terminal B-4 (socket pin 14).
- (4) Splice wires disconnected in step 3 above together and attach to T-15 terminal 18 (located approximately STA 240 LHS Z=50).
- (5) Check for normal operation as per instructions H below.

H. Check for normal system operation as follows:

- (1) Turn stereo and audio systems ON.
- (2) If so equipped, place speaker/phone switch in speaker position and check for stereo audio distribution in speaker (left and right channels).
- (3) Place speaker/phone switch in phone position and check for stereo audio distribution to headphones (left and right channels).
- (4) Key PA and check for PA audio to one speaker channel (either left or right side), and right channel of headphones.
- I. Reassemble aircraft and return to service.

- J. Reference Wiring Diagram Manual, Chapters 23-50-03, 23-50-05 and 23-30-01. Perform wiring changes as follows. Do not remove existing wiring unless so instructed.
 - (1) Make accessible connections to SW-55 Speaker/Phone switch (located at passenger control panel).
 - (2) Remove wire #RZ225B22 from pin 2 of SW-55 and reconnect to pin 1.
 - (3) Remove wire #RZ126C22 from pin 8 of SW-55 and reconnect to pin 7.
 - (4) At relay RL-5 (located approximately STA 258 LHS connect jumper between terminals F-1 and F-6 (socket pins 3 and 18).
 - (5) Add new wire #RZ225C22 to terminal H-6 of RL-5 (socket pin 19) and route to SW-55. Connect to pin 1 of SW-55.
 - (6) Check for normal operation as per instructions H, above.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R	MIL 16878D 327654	Wire, #22 AWG Terminal, ring tongue (Mfg. AMP)
A/R	320559	Butt Connector (Mfg. AMP)
A/R	35115	End splice (Mfg. AMP)

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-23-038 dated July 15, 1985, titled "Stereo Configuration Error," has been accomplished this date
- B. Update Wiring Diagram Manual, Chapters 23-30-01, 23-50-03 and 23-50-05 as required to reflect wiring changes performed.



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-039

July 14, 1986

SUBJECT: NAVIGATION - FPA-80 OPTION IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWINDS, all serial numbers prior to 413 with FPA-80 option installed.

B. REASON

Elimination of repetitive callouts of the "CHECK BARO ALTITUDE" function of the FPA-80 system.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin provides instructions to incorporate aircraft wiring changes necessary for accomplishment of this service bulletin.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required for this service bulletin may be procured locally.

INTERNATIONAL INC.

SB 1124-34-039 Page 1 of 2

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

None.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Model 1124/1124A Wiring Diagram Manual, Chapters 34-30-05 and 22-10-08.

K. PUBLICATIONS AFFECTED

Model 1124/1124A Wiring Diagram Manual, Chapters 34-30-05 and 22-10-08.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove Alt. Preselector unit to gain access to the connector.
 - B. Remove wire SA361 from splice at altitude preselector DN27 pin N and wire FD31B. Leave wire FD31B to pin N.
 - C. Reconnect wire SA361 by splicing to existing wire FD41A going to DN27-R.
 - D. Reassemble connectors, mount Alt. Preselector unit, and perform a complete ground test to ensure system integrity.
- 3. MATERIAL INFORMATION

\underline{QTY}	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#22AWG wire

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-34-039 dated July 14, 1986 titled "Navigation - FPA-80 Option Improvements" has been accomplished this date
 - B. Revise Wiring Diagram Manual to reflect the changes performed by this service bulletin.

SB 1124-34-039 Page 2 of 2

July 14, 1986



OPTIONAL

SERVICE BULLETIN NO. 1124-52-040

April 22, 1992

- **SUBJECT:** DOORS DOOR HANDLE WARNING SWITCH INSTALLATION AND IMPROVED DOOR WIRE RETRACT TUBE INSTALLATION (AFC 2068).
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - PART A

MODEL 1124/1124A WESTWINDS, all serial numbers except 1124 S/N 421 and subsequent and 1124A, S/N 436 and subsequent.

PART B

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

PART A

To provide an additional warning switch which will provide cockpit indication of cabin door handle rotation.

PART B

To install or improve the door wire retract tube installation.

C. DESCRIPTION

PART A of this service bulletin adds a microswitch to the door handle mechanism that will work in conjunction with the existing cabin door warning system.

PART B of this service bulletin provides instruction to install or improve the door wire retract tube installation.

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

PART A

- (1) Estimated man-hours: 16
- (2) Suggested number of personnel: 1

PART B

- (1) Estimated man-hours: 16
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

PART A

QTY.	PART NUMBER	DESCRIPTION
4	AN364-832	NUT
4	AN525-832-R8	SCREW
8	AN960-8	WASHER
2	MS35206-220	SCREW
6	MS35338-43	WASHER
2	MS20427-M-4-8	RIVET
6	MS21042-3	NUT

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QTY.	PART NUMBER	DESCRIPTION
2	MS24665-151	COTTER PIN
4	M\$20470AD-4-X	RIVET
2	NAS1096-3-21	SCREW
*1	823676-5	CHANNEL
*1	823676-9	ANGLE
*1	823676-7	ANGLE
*1	823676-8	ANGLE
*1	823676-13	ARM
1	V3-1001	SWITCH
1	JV-26	ACTUATOR
A/R	55A1131-20-396-92	WIRE (RAYCHEM) OR EQUIVALENT

* Parts for PART A may be locally manufactured. Refer to Figures 4 and 5 for part details.

PART B

QTY.	PART NUMBER	DESCRIPTION
1	AN3-12A	BOLT
1	AN970-3	WASHER
5	AN960KD-10	WASHER
2	AN960KD-4	WASHER
1	AN960KD416L	WASHER
1	MS21042-4	NUT
2	MS35649-242	NUT
1	MS35207-281	BOLT
1	MS35207-266	BOLT
2	MS21919DG12	CLAMP
3	MS27039-1-08	BOLT
5	MS21042-3	NUT
2	MS25281-2	CLAMP
A/R	MS35489-134	GROMMET
2	MS35206-217	SCREW
10	MS20470AD-4-X	RIVET
2	MS20470AD-5-X	RIVET
2	MS20470AD-6-X	RIVET
1	NAS43DD3-24	SPACER

QTY.	PART NUMBER	DESCRIPTION
1	NAS75-3-26	BUSHING
†2	823676-21	ANGLE
† 1	823676-25	ANGLE
† 1	823676-29	BUNGEE ASSY
†2	823676-33	WIRE ASSY
†2	823676-37	PULLEY
†2	823676-39	ANGLE
†1	823676-43	DOUBLER
†1	823676-45	FILLER
†1	823676-47	GUARD
†1	823676-49	TUBE
A/R	AMP 326878	TERMINAL
A/R	TY523M OR EQUIV.	TY-RAP
A/R	55A1131-20-396-92	WIRE(RAYCHEM) OR EQUIVALENT

[†] Parts for **PART B** may be locally manufactured. Refer to Figure 11 for part details.

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tools are required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Wiring Manual. 1124/1124A Westwind Maintenance Manual.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapters 52-10-00 and 52-70-00, will be revised to reflect the rigging and checkout procedures of the cabin door handle warning switch.

1124/1124A Westwind Illustrated Parts Catalog, Chapter 52-70-00, has been revised to reflect all parts installed by this service bulletin.

1124/1124A Westwind Wiring Manual, Chapter 33-50-01.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A - Door Handle Warning Switch Installation

- 1. Insure that battery and external power switches are off and pull the "DOOR WARN" circuit breaker.
- 2. Remove interior furnishings from cabin door to facilitate access to door handle mechanism.
- 3. Refer to chapter 52 in the 1124/1124A Westwind Maintenance Manual and remove the cabin door assembly from the aircraft. Note the quantity and location of any shims which may be installed at the hinge points to aid in reassembly and rigging.
- 4. Mark the position of the hub crank with relation to the spindle. Disconnect forward and aft rod assemblies from the hub crank. Disconnect the upper and lower control assemblies from the hub crank. Remove bolt securing hub crank to spindle and withdraw spindle from hub crank far enough to facilitate removal of hub crank from door.
- 5. Install arm P/N 823676-13 to hub crank as illustrated in Figure 1.
- 6. Install P/N 823676-5 channel and P/N 823676-7 and P/N 823676-8 angles. After fitting and drilling, mount to existing channel as illustrated in Figures 1 and 2.
- 7. Assemble switch P/N V3-1001, actuator P/N JV-26, and shim to angle P/N 823676-9. Locate the angle/switch assembly to P/N 823676-5 channel as illustrated in Figure 1.
- 8. Reinstall hub crank to spindle and connect upper and lower control assemblies and the forward and aft rod assemblies to the hub crank, using previously removed hardware.

- 9. Adjust the switch so that it is actuated when the door handle completes its rotation to the closed position. Allow .010 clearance of actuating arm to switch body so as not to damage the switch. Fore and aft switch adjustment can be made by loosening screws retaining switch to P/N 823676-9 angle. Up and down adjustment can be accomplished with P/N NAS 1096-3-21 screws. Using an ohmmeter, verify electrical adjustment of switch. Insure all switch mounting hardware is secure.
 - **NOTE:** This switch is installed in parallel with existing door warning circuit and does not cancel existing switch function.
- 10. On aircraft not equipped with bar lighting, install wire retract tube assembly in accordance with **PART B**.
- 11. On aircraft equipped with bar lighting, remove existing wires and install new wire using P/N 55A1131-20-396-92 (Raychem) or equivalent wire. Secure new wire in the same manner that the removed wire was secured.
 - <u>NOTE</u>: If desired, the improved wire retract tube assembly described in **PART B**, should be installed before installing door on aircraft.
- 12. Install cabin door on aircraft. (Reference 1124/1124A Westwind Maintenance Manual, Chapter 52.)
- 13. Install and connect wiring from door handle warning switch to existing door warning switch circuit as per Figure 3.
- 14. Isolate bar light wires if installed to prevent short circuit. Apply electrical power to aircraft. Close "DOOR WARN" circuit breaker. Perform operation check of door operating mechanism and "DOOR WARN" system as per 1124/1124A Westwind Maintenance Manual, Chapters 52-10-00 and 52-70-00, Inspection, and check.
- 15. Re-install interior furnishings on cabin door.
- 16. Return aircraft to service.

PART B - Improved Door Wire Retract Tube Assembly

- 1. Remove cabin door in accordance with **PART A** steps 1, 2 and 3.
- 2. Remove existing wire retract tube assembly.
- 3. Install improved wire retract tube assembly in accordance with Figures 6, 7, 8, 9 and 10.

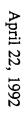
4. Install cabin door in accordance with PART A steps 12, 13, 15 and 16.

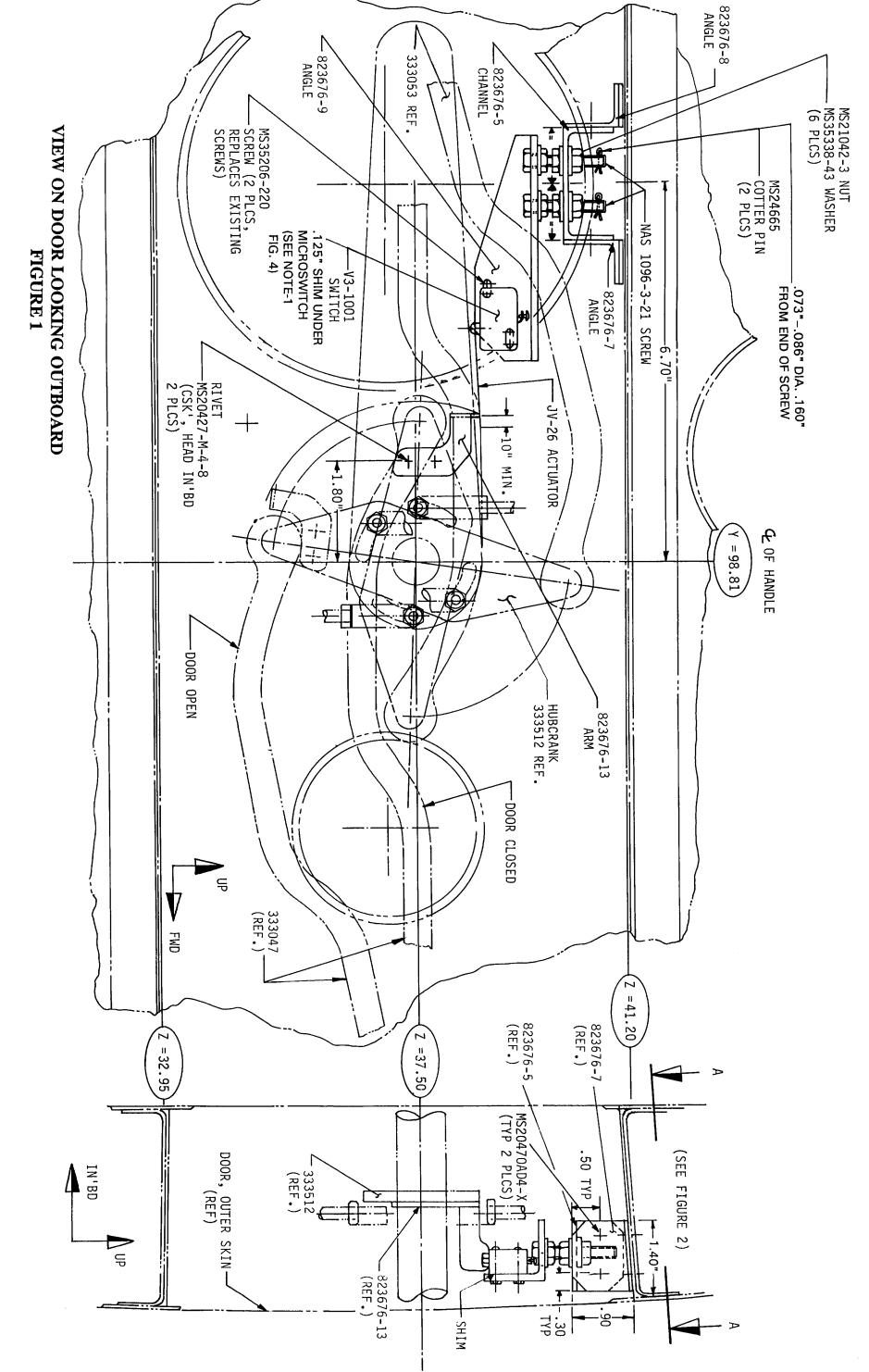
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-52-040, dated April 22, 1992, titled "Doors - Door Handle Warning Switch Installation and Improved Door Wire Retract Tube Installation (AFC 2068)," has been accomplished this date _____.

- B. Revise the 1124/1124A Westwind Wiring Diagram Manual as per Figure 4 of this service bulletin to reflect the changes made by this service bulletin.
- C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.





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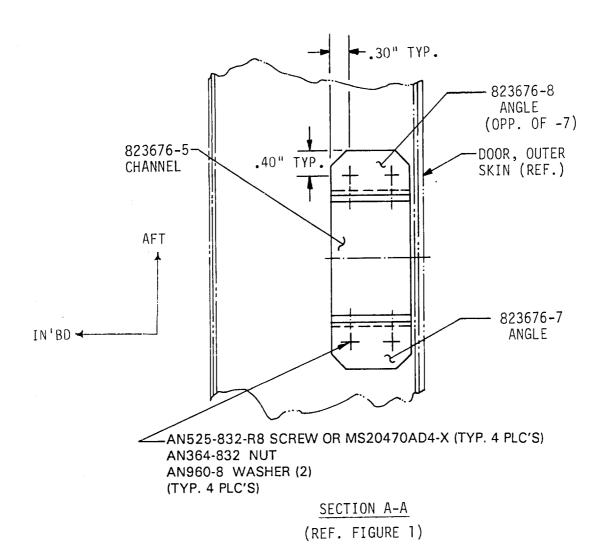
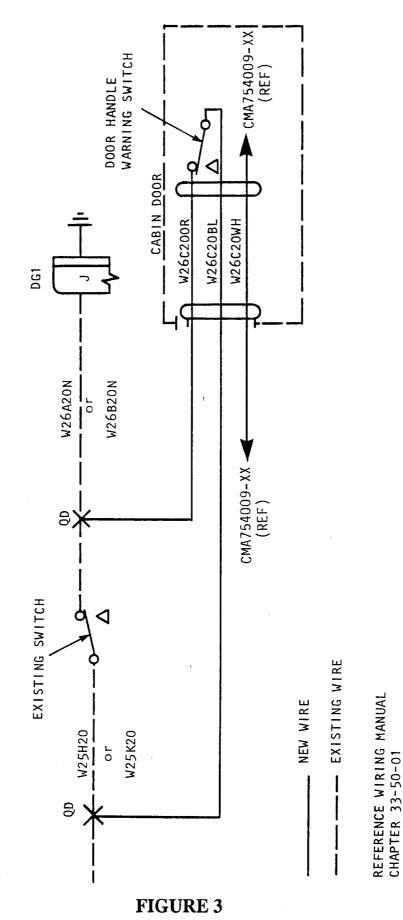


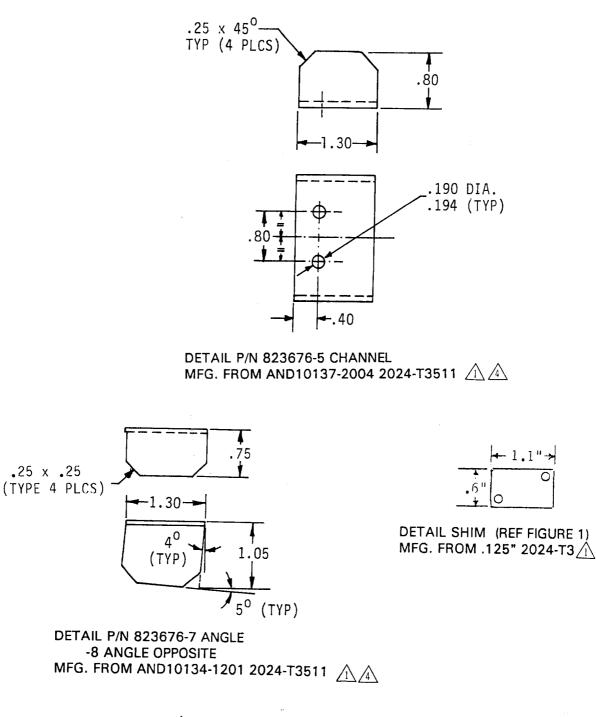
FIGURE 2

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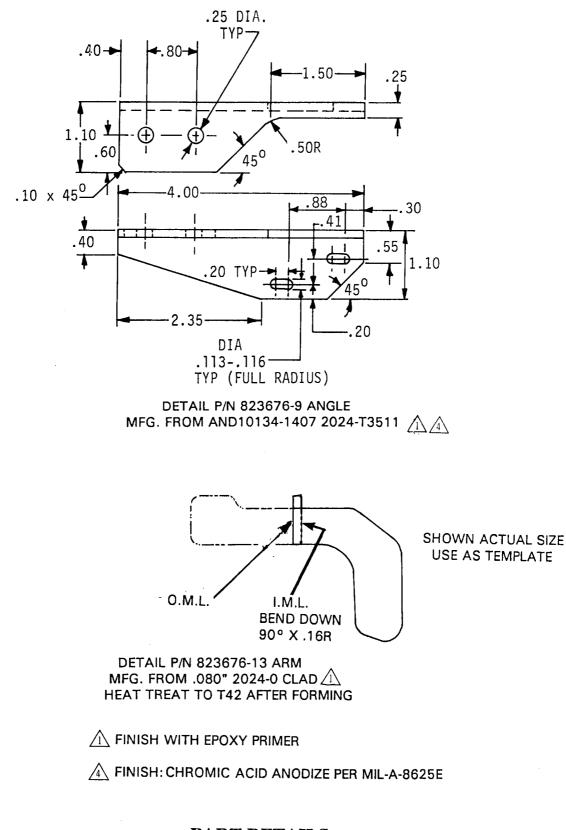


A FINISH WITH EPOXY PRIMER

FINISH: CHROMIC ACID ANODIZE PER MIL-A-8625E

PART DETAILS FIGURE 4

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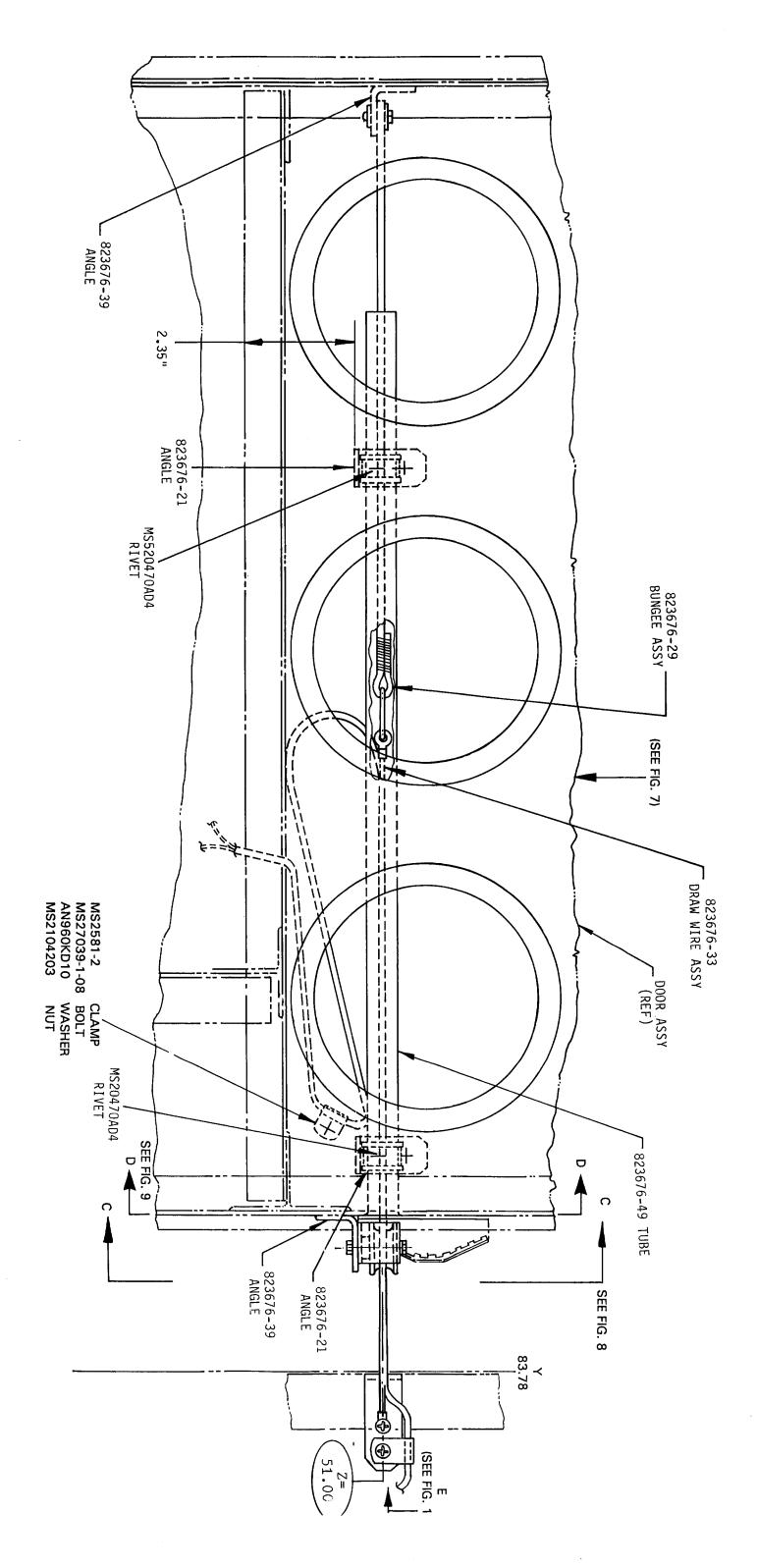


PART DETAILS FIGURE 5

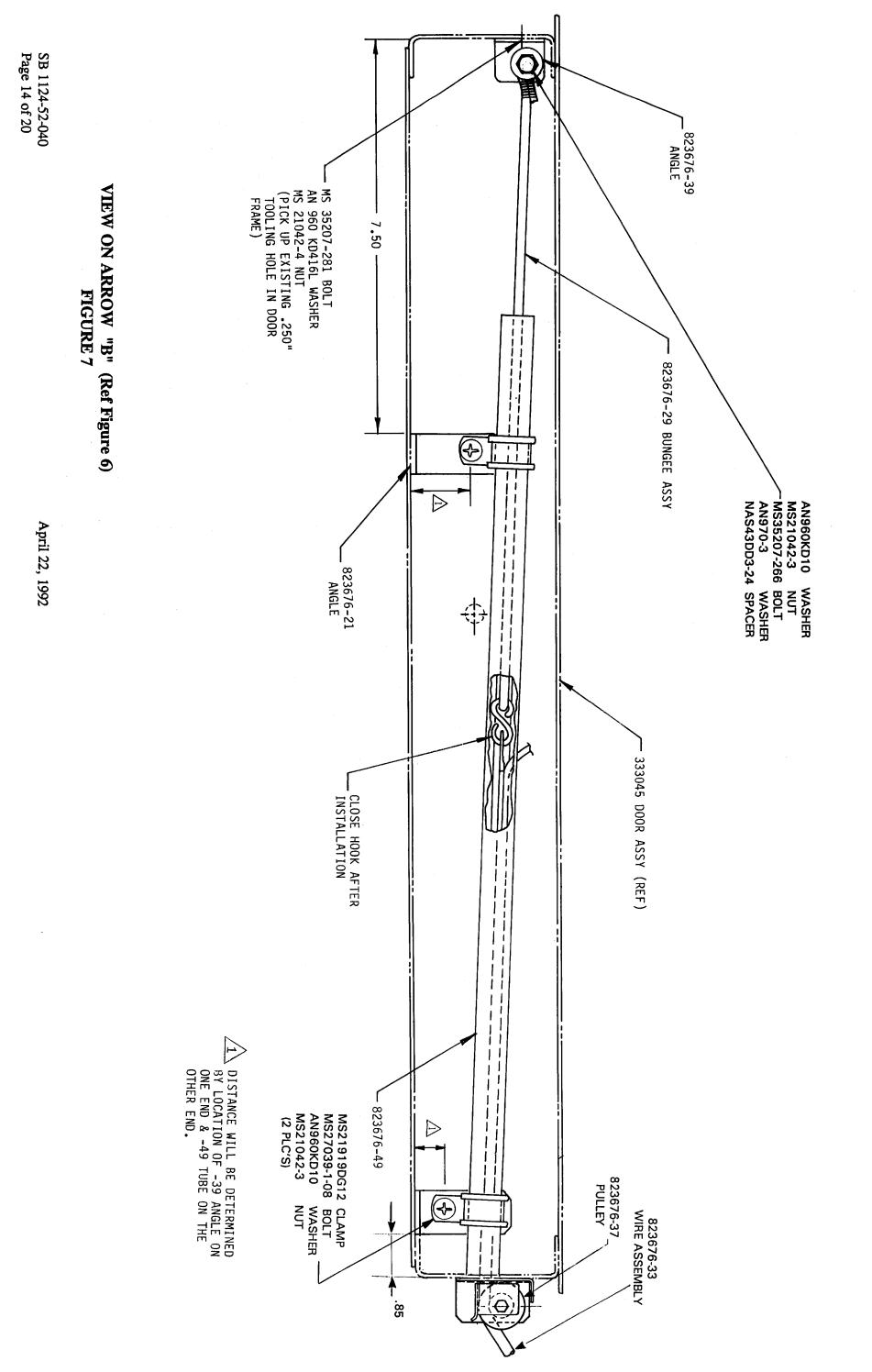


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VIEW LOOKING OUTBOARD FIGURE 6



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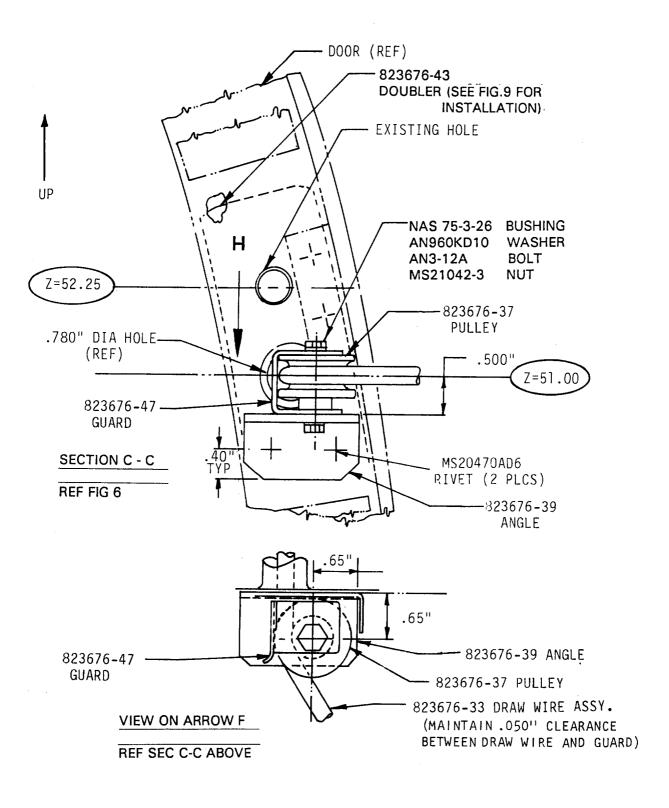
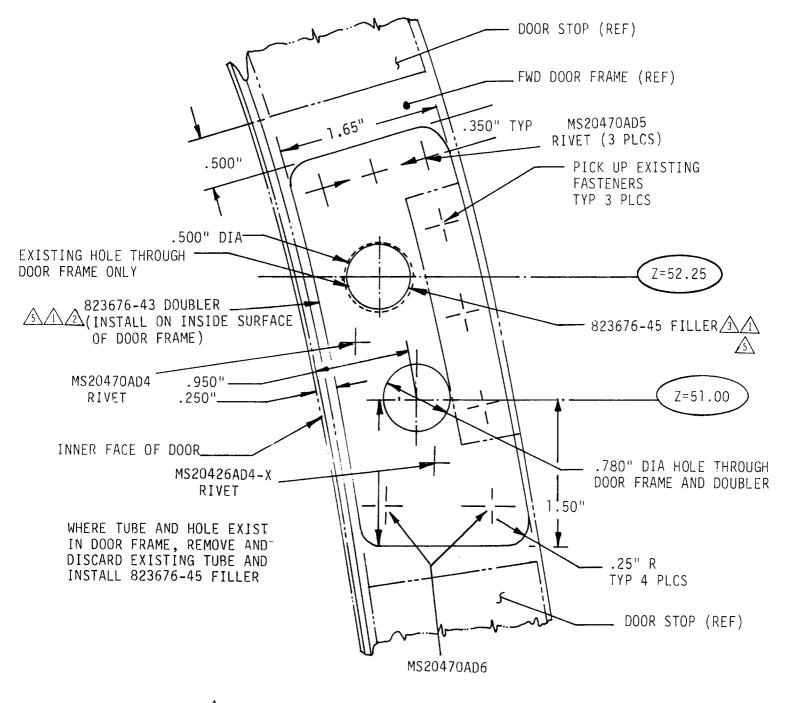


FIGURE 8

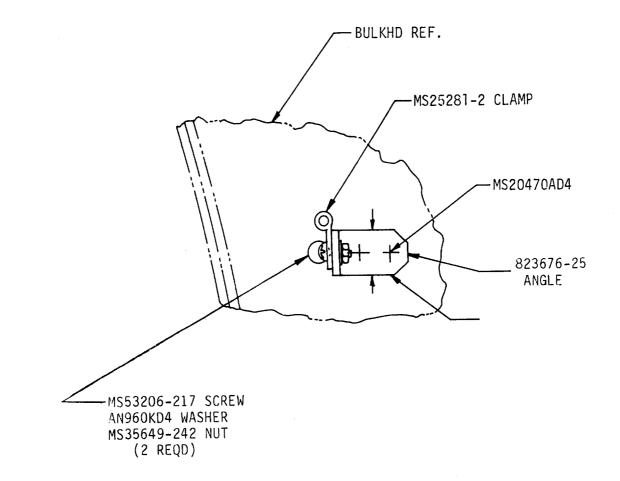


△ FINISH: EPOXY PRIMER PER MIL-P-23377
 △ P/N 823676-43 DOUBLER - Mfg. from .050" 2024T3 CLAD
 △ P/N 834676-45 FILLER - Mfg. from .050" 2024T3 CLAD
 △ FINISH: CONVERSION COATING PER MIL-C-5541

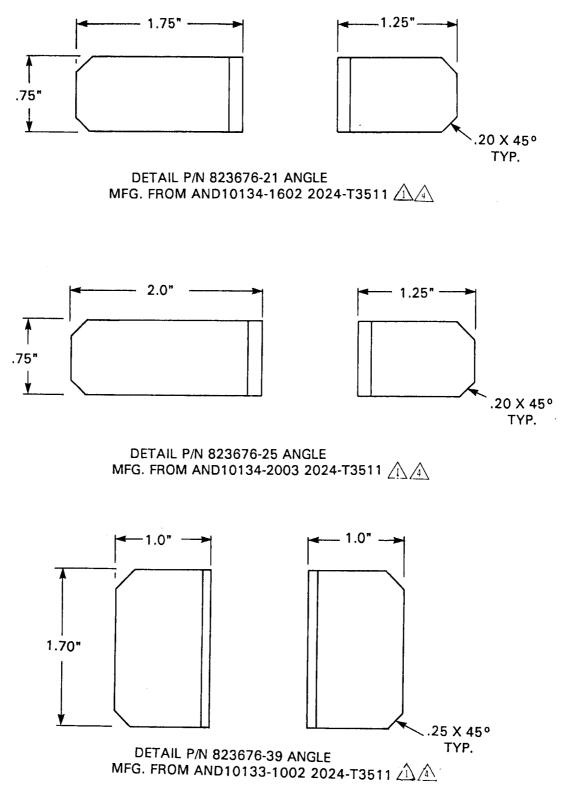
VIEW D - D (Ref Figure 6) FIGURE 9

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VIEW ON ARROW "E" (Ref Figure 6) FIGURE 10



PART DETAILS FIGURE 11 (SHEET 1 OF 3)

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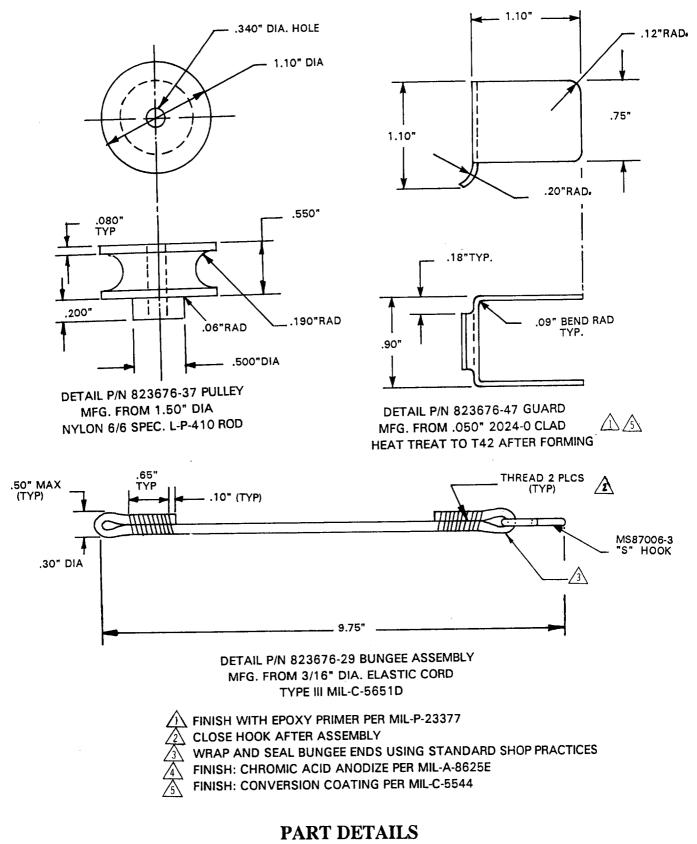
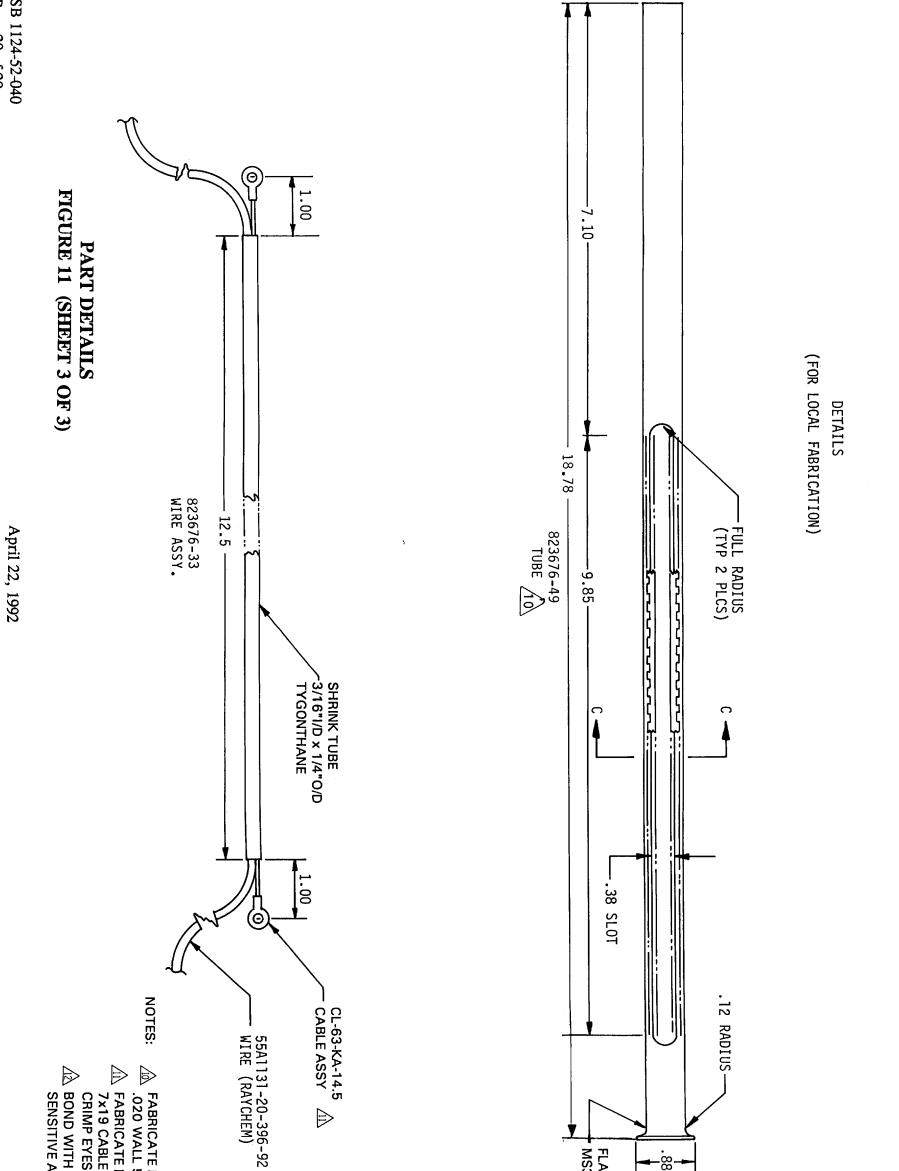


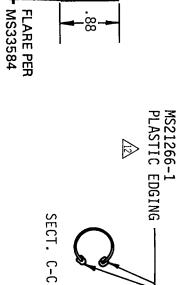
FIGURE 11 (SHEET 2 OF 3)

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FABRICATE FROM .750 OD,
 .020 WALL 5052-0 FINISH EPOXY PRIMER
 FABRICATE FROM .0625,
 7x19 CABLE
 CRIMP EYES ON ENDS
 BOND WITH E1300L PRESSURE
 SENSITIVE ADHESIVE



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SERVICE BULLETIN NO. 1124-52-040



OPTIONAL

SERVICE BULLETIN NO. 1124-23-041

June 14, 1985

SUBJECT: BYPASS OF CTL(XX) CONTROL HEAD VOLUME CONTROLS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part A: Model 1124A WESTWIND S/N 295 through 375 except 349.
 - (2) Accomplishment Instructions Part B: Model 1124 WESTWIND S/N 290, 317, 357.

B. REASON

To permit proper operation of the 346B-3 audio control center amplifier compression circuits by eliminating the separate system volume controls. All COM/NAV system volume will be controlled by the master speaker/phones volume controls in the Audio Control Panel, to eliminate multiple controls and large changes in received audio levels caused by operating the CTL(XX) at other than maximum volume.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

This Service Bulletin describes the wiring changes necessary for accomplishment of the reason stated above.

> SB 1124-23-041 Page 1 of 5

E. APPROVAL

The modification procedures described in this Service Bulletin have been show to comply with the applicable ICAA/ FAA regulations and are IAI Engineering approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or procured locally.

G. TOOLING

None

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124/1124A Wiring Diagram Manual Chapters: 23-20-01 23-20-03 23-50-03 34-50-01 34-50-03

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual Chapters: 23-20-01 23-20-03 34-50-01 34-50-03

2. ACCOMPLISHMENT INSTRUCTIONS

PART A

- A. Remove CTL controls as necessary to gain access to connectors.
 - (1) For COM 1 CTL-20:
 - (a) Remove jumper from B80J2-10 to splice connecting wires 1RV33D and 1RV33B. Leave these wires connected at splice.

- (b) Remove wire 1RV32D from B80J2-23 and wire 1RV32B from B80J2-13, splice these wires together.
- (2) For COM 2 CTL-20:
 - (a) Remove jumper from B81J2-10 to splice connecting wires 2RV33D and 2RV33B. Leave these wires connected at splice.
 - (b) Remove wire 2RV32D from B81J2-23 and wire 1RV32B from B81J2-13, splice these wires together.
- (3) For NAV 1 CTL-30:
 - (a) Remove jumper from B85J2-10 to splice connecting wires 1RN25H and 1RN25G. Leave these wires connected at splice.
 - (b) Remove wire 1RN24H from B85J2-23 and wire 1RN24G from B85J2-13, splice these wires together.
- (4) For NAV 2 CTL-30:
 - (a) Remove jumper from B86J2-10 to splice connecting wires 2RN25H and 2RN25G. Leave these wires connected at splice.
 - (b) Remove wire 2RN24H from B86J2-23 and wire 2RN24G from B86J2-13, splice these wires together.
- B. Reassemble connectors, install CTL controls, and perform complete COM/NAV operational ground tests to ensure system integrity.

PART B

- A. Remove CTL controls as necessary to gain access to connectors.
 - (1) For COM 1 CTL-20:
 - (a) Remove jumper from B209J2-10 to splice connecting wires 1RV33B and 2RD33H. Leave these wires connected at splice.

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- (b) Remove wire 2RD32H from B209J2-23 and wire 1RV32B from B209J2-13, splice these wires together.
- (2) For COM 2 CTL-20:
 - (a) Remove jumper from B221J2-10 to splice connecting wires 2RV33B and 2RV33G. Leave these wires connected at splice.
 - (b) Remove wire 2RV32B from B221J2-23 and wire 2RV32G from B221J2-13, splice these wires together.
- (3) For NAV 1 CTL-30:
 - (a) Remove jumper from B208J2-10 to splice connecting wires 1RN25A and 1RN25H. Leave these wires connected at splice.
 - (b) Remove wire 1RN24H from B208J2-23 and wire 1RN24A from B208J2-13, splice these wires together.
- (4) For NAV 2 CTL-30:
 - (a) Remove jumper from B207J2-10 to splice connecting wires 2RN25A and 2RN25H. Leave these wires connected together at splice.
 - (b) Remove wire 2RN24H from B207J2-23 and wire 2RN24A from B207J2-13, splice these wires together.
- B. Reassemble connectors, install CTL controls, and perform complete COM/NAV operational ground tests to ensure system integrity.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	35115	Closed end splice (Mfg.

AMP)

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-23-041, dated June 14, 1985, titled Bypass of CTL(XX) Control Head Volume Controls, has been accomplished this date
- B. Revise Wiring Diagram Manual to reflect the changes described by this Service Bulletin.

END

June 14, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-56-042A

September 10, 1986

This Service Bulletin No. 1124-56-042A dated September 10, 1986 supersedes Service Bulletin No. 1124-56-042 dated August 12, 1985 in its entirety.

SUBJECT: WINDOWS - REPAIR OF THE INNER WINDSHIELD PANEL

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To provide typical repair method and materials required to repair inner windshield at the windshield heat terminal feed-through locations. This repair is applicable to any of the six terminal locations.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Remove existing feed-through bushing, remove heatdamaged acrylic material, counterbore 1-inch hole through windshield at damage location and install P/N A01WW5343025-RE3, bushing assembly.



SB 1124-56-042A Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. TOOLING

None.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None.

K. PUBLICATIONS AFFECTED

1124/1124A Maintenance Manual, Chapter 56.

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE

The windshield repair procedure provided may be used on windshield heat probe feedthrough locations which have suffered localized heat damage due to arcing of the contact at that position.

The repair is approved for areas of affected surface damage one inch in diameter or less.

CAUTION

Repair to damaged areas exceeding one inch diameter is not approved.

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- A. Removal of damaged area and feed-through hole preparation (refer to Figure 1).
 - (1) Remove electrical power from aircraft.
 - (2) Remove outer windshield panel to access damaged area per instructions in 56-10-01.
 - (3) Remove electrical terminal assembly from feedthrough.
 - (4) Remove brass feed-through bushing.
 - (5) Outer surface of inner windshield may be crystallized adjacent to the brass bushing. This crystallization must be removed prior to enlarging the feed-through hole in preparation for installation of the -RE3 bushing assembly.

Remove crystallized acrylic material with an air driven rotary file operated at a low speed. DO NOT OVERHEAT SURROUNDING MATERIAL.

- (6) Drill 1.000" diameter hole to accept -RE3 bushing as follows (drilling is accomplished from the inside):
 - (a) Remove instruments, avionics, instrument panel components and interior furnishings as required for drilling access.
 - (b) Cover areas below work site.
 - (c) Utilize 1.000" counterbore equipped with .375" pilot installed in a portable air drill motor regulated to 400 rpm.
 - (d) Use liberal applications of cooling lubricants during boring.
 - (e) Remove cutting tool frequently to relieve binding of chips and avoid overheating.
 - (f) Dutside of windshield panel must be supported with a wood block as counterbore reaches the end of the cut to prevent chipping.
 - (g) After completion of the boring process, clean the hole and surrounding area with Aliphatic Naptha, Type II, TT-N-95.

- B. Install P/N A01WW5343025-RE3 bushing assembly (Figure 1).
 - (1) Assure proper fit of -RE3 bushing into 1.000" hole. Loose fit should be .020".

NOTE

Bushing concentric should not exceed .010 within the 1-inch diameter hole.

- (2) Assure all surfaces to be bonded are free of dirt, grease, oil, etc. Clean surfaces with Aliphatic Naptha, Type II, TT-N-95.
- (3) Install -RE3 bushing using PS-30 acrylic adhesive. Bushing is to be installed with flange of brass insert located on inner side of windshield. Remove excess PS-30 acrylic adhesive.
- (4) Support -RE3 bushing adequately during curing period to prevent any shift.
- C. Test bonding of -RE3 bushing.
 - (1) Apply 10 psi axial load to bushing.
 - (2) Install AN4-5 bolt and AN960-4 washer into inner side of brass insert. Apply 50 inch-pounds torque to -RE3 bushing.

D. Reassembly

- (1) Install outer windshield panel per 56-10-01.
- (2) Install terminal assembly per 56-10-01.
- (3) Install avionics and instrument systems previously removed.
- (4) Perform system tests of windshield heat, avionics and instrument systems as required.
- (5) Return aircraft to service.

SB 1124-56-042A Page 4 of 6

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	A01WW5343025-RE3	Bushing Assembly
A/R	PS-30	Acrylic Adhesive*

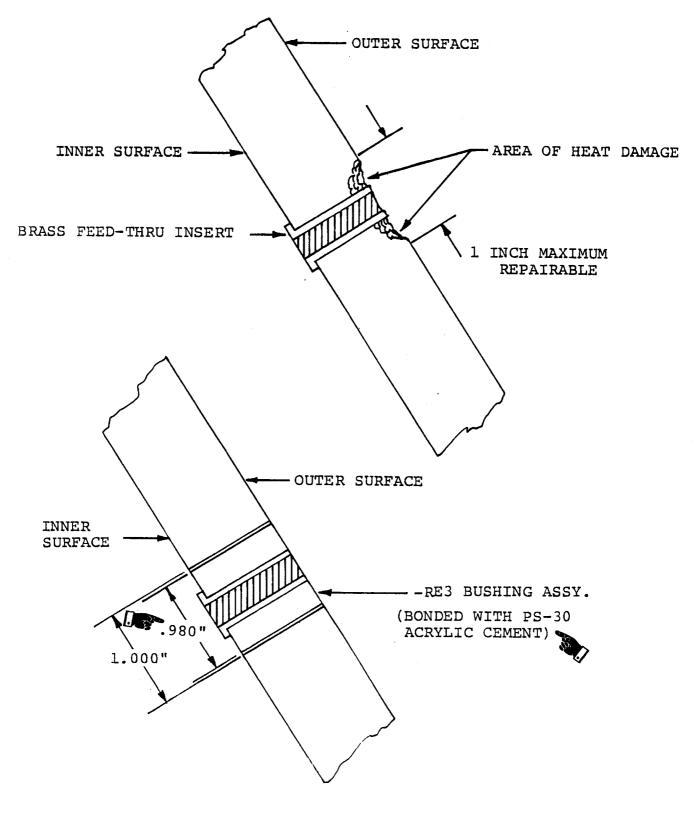
*NOTE: PS-30 acrylic cement is available from:

Cadillac Plastics & Chemical 4070 Fulton Industrial Blvd., S.W. Atlanta, GA 30336 (404) 691-0900

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-56-042A dated September 10, 1986 titled "Inner Windshield Repair" has been accomplished this date





SB 1124-56-042a Page 6 of 6



TRANSMITTAL SHEET

This sheet transmits Revision 2 to Service Bulletin No. 1124-24-043 dated August 12, 1985, titled "Starter/Generator - Field Circuit Wiring Modification.

REASON FOR REVISION

To correct part number in sections 2.F. ACCOMPLISHMENT INSTRUCTIONS and 3. MATERIAL INFORMATION.

To incorporate Revision 1 change to 1.A. EFFECTIVITY.

This is a COMPLETE REVISION. Please remove and discard all pages of previous issues and replace with the pages of this revision.

LIST OF EFFECTIVE PAGES

PAGE NO. DATE

1 through 4 January 8, 1992 5 August 12, 1985

PREVIOUS REVISIONS OF SB 1124-24-043

Revision 1, November 20, 1985

Transmittal Page 1 of 1



OPTIONAL

SERVICE BULLETIN NO. 1124-24-043

August 12, 1985

(This Service Bulletin supersedes SIL No. 04, dated December 4, 1980, in its entirety).

SUBJECT: STARTER/GENERATOR - FIELD CIRCUIT WIRING MODIFICATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers prior to 431 except 413, 416, 418, 421, 423, 426, 428 and 429.

B. REASON

R

R

(1) Rerouting and replacement of the existing starter/generator field leads will eliminate chafing and resultant short circuits.

(2) Installation of shielded leads from the starter generator will reduce EMI radiation (required if H-Field antennas are to be installed).

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

The starter/generator field circuit leads are replaced with shielded, twisted-pair wire and rerouted to avoid chafe points.

August 12, 1985 R Revision 2, January 8, 1992 531 SB 1124-24-043 Page 1 of 5

E. APPROVAL

The modification described has been shown to comply with the applicable ICAA/FAA regulations and is IAI Engineering approved.

F. MATERIAL

R Material required may be obtained through Astra Jet Corporation, New Castle,
 R Delaware, or authorized ASTRA/WESTWIND Service Centers.

G. TOOLING

Not applicable.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

MODEL 1124/1124A Wiring Manual, Chapter 24-30-01.

K. PUBLICATIONS AFFECTED

MODEL 1124/1124A Wiring Diagram Manual, Chapter 24-30-01 will be changed to reflect shielded leads from the GCU to the starter/generator field.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove electrical power from the aircraft.
- B. Remove the forward-most access panel on the bottom of the right hand pylon fairing. Remove upper engine cowling.
- C. Drill a 15/32 in. hole through the pylon skin and install one each P/N 4 823621-RE3 fitting, AN960C716 washer, AN316-7R nut, 5 313712-41 stop-plate, per Figure 1. Avoid damaging generator leads.

- D. Disconnect wires 2P16B16 and 2P17B16 from right hand starter/generator terminals A and D. Cap and stow.
- E. Pull pins A and D from right hand GCU connector. Cut off pins, cap and stow wires 2P16A16 and 2P17A16.

F. Prepare one end of a length of BELDEN #83322 or ALPHA #2826/2 Teflon jacketed, shielded twisted-pair 16AWG wire with one AMP 320564 lug and two P/N M39029/5-116 female pins for connector P/N MS3476L22-21S or two P/N M39029/32-248 female pins for connector P/N MS3126L22-21S. Insert pins in GCU connector locations A and D. Remove the rpimer from an area adjacent to the GCU (frame 340.00) with sandpaper and drill a .190/.194 inch dia. hole. Clean the area and apply Iridite 14-2 in accordance with instructions supplied with the kit. Secure the ground lug to the frame using one each P/N AN3-5P bolt, MS21042-3 nut, MS35338-43 washer and two each AN960PD10 washers. Identify ground point as "GND282" (Left side "GND 281". Spray ground point including hardware with Vikem (green) lacquer.

- G. Run the wire through the fitting installed in step 2.C. and reroute along side the main starter/generator leads. Secure with additional nylon cable ties as necessary.
- H. To maintain the integrity of the pylon firewall, seal the wire to the fitting installed in step 2.C. as follows. Apply Dow Corning 1200 primer to wire and bore and ends of fitting. Allow to dry for 1/2 hour. Mix a small quantity of Proseal 700 in accordance with the manufacturer's instructions and work as much material as possible into the fitting bore (preferably by injection). Let dry 48 hours.
- I. Trim wire to length, strip and connect the center conductors to starter/generator terminals A and D using two AMP 320552 #10 lugs. Ground the shield at the terminal block upper attach bolt using one AMP 320564 lug.

CAUTION: ENSURE THAT THE CONNECTIONS TO GCU PINS A AND D CORRESPOND TO STARTER/GENERATOR TERMINAL CONNECTIONS A AND D. REVERSED CONNECTIONS WILL DAMAGE THE GCU WHEN POWER IS APPLIED.

- J. Repeat steps 2.B through 2.I on the left hand side of the aircraft (corresponding wire numbers are 1P16B16 and 1P17B16 at the starter/generator and 1P16A16 and 1P17A16 at the GCU).
- K. Reinstall access panels and upper cowls, close cowl doors and return aircraft to service.

R R R

August 12, 1985 R Revision 2, January 8, 1992

3. MATERIAL INFORMATION

	QTY.	PART NUMBER	DESCRIPTION
	2	4 823621-RE3	Fitting
	2	* AN960C716	Washer
	2	* AN316-7R	Nut
	2	5-313712-41	Stop Plate
	4	* NAS1738M4-3	Cherry Rivets
	A/R	* Belden #83322 or	Wire, 16 AWG,
		* Alpha #2826/2	twisted pair,
			shielded
2	4	M39029/5-116	#16 Female Pins for
			Connector P/N MS3476L22-21S
•		OR	
	4	M39029/32-248	#16 Female Pins for
			Connector P/N MS3126L22-21S
	4	* AMP 320564	Terminal Lug
	4	* AMP 320552	Terminal Lug
	A/R	* Pro-Seal 700	Sealant (Mfg.
			Coast Pro-seal)
	A/R	* Vikem, green	Spray lacquer
	A/R	* Dow 1200	Primer (Mfg.
			Dow Corning)
	4	* AN960PD10	Washer
	2	* MS35338-43	Washer
	2	* AN3-5A	Bolt
	2	* MS2104203	Nut
	1	* Iridite 14-2 Brush-On	Conductive
		Kit	Coating
			(Mfg. Allied-
			Kelite)
			/

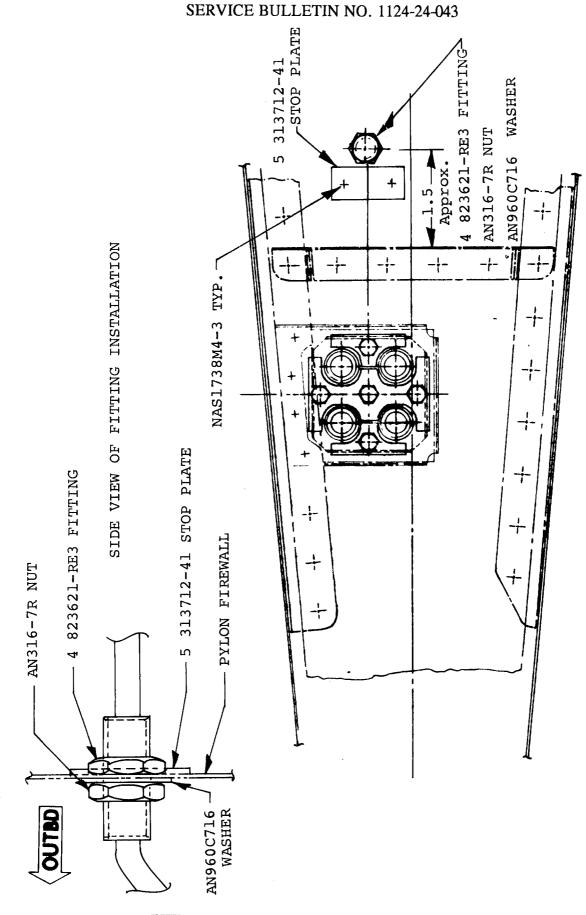
* May be obtained locally

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service bulletin No. 1124-24-043 Revision 2, dated January 8, 1992, titled "Starter/Generator Field Circuit Wiring Modification," has been accomplished this date_____.

R R R R R



VIEW LOOKING INBD., L/H PYLON FIGURE 1

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-34-044 Revision No. 1 October 7, 1985

SUBJECT: 331A-9G HSI DISTANCE DISPLAY IMPROVEMENTS

REASON FOR REVISION:

To add to Accomplishment Instructions, Part I, Step B(2) and Step C(2).

2. Accomplishment Instructions

PART I

(a) Add resistor (47K ohm 2 watt) to HSI cable bundle. Splice one lead of resistor to wire at pin 51 and splice other end of resistor to wire at pin 50. Properly insulate resistor leads to prevent shorting.

SB 1124-34-044 Page 1 of 1



SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-044

August 9, 1985

SUBJECT: 331A-9G HSI DISTANCE DISPLAY IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, all serial numbers through 411 except 187, 188, 189, 191, 192, 197, 215, 290.

B. REASON

To permit pilot and copilot HSI to display VLF distance up to 3,999 miles, and to permit proper HSI display dimming.

C. COMPLIANCE

Compliance with this Service Bulletin is optional.

D. DESCRIPTION

The 331A-9G HSI status -012 and -019 is changed per Collins 331A-9G Service Bulletin #15 to accept INS distance input. One wire is added and two wires reversed on VLF switch in aircraft for input labeling to the HSI. The circuit components on T-24 are removed and one jumper wire is added to update the display dimming circuitry, if needed.

E. APPROVAL

The modifications described in this Service Bulletin are IAI Engineering approved.

SB 1124-34-044 Page 1 of 5 F. MATERIAL

The material required for this Service Bulletin can be obtained through Atlantic Aviation Supply Co., Wilmington, Delaware or purchased locally.

G. TOOLING

None

- H. WEIGHT AND BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA Not applicable.
- J. REFERENCES

1124 Wiring Diagram Manual Chapters: 34-50-02

- 34-50-04 34-50-05 34-50-06
 - 34-50-14

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual Chapters: 34-50-02 34-50-04

34-50-04 34-50-05 34-50-06 34-50-14

2. ACCOMPLISHMENT INSTRUCTIONS

PART I.

- A. Preliminary test procedures:
 - (]) A/C and Avionics power ON.
 - (2) VLF power ON and initialization sequence completed, including flight plan selection (leg change). TO/ FROM waypoints must exceed 1,000 miles for proper distance check.

NOTE

OEU interface switch #3 must be set to position "C", "D", "E", or "F" in RCU, to enable VLF to output distance information up to 3,999 miles.

- (3) Couple VLF to pilots HSI and observe DISTANCE readout. If decimal point appears, follow modification procedures in instructions Part B. below.
- (4) Couple VLF to copilots HSI and observe DISTANCE readout. If decimal point appears, follow modification procedures in instructions Part C.
- (5) In steps (3) and (4) above, if DISTANCE readout has decimal point while coupled to VLF, a status check of the HSI (331A-9G) is required prior to aircraft wiring modification.
- (6) Turn VLF OFF. Avionics power and A/C power OFF.
- (7) Remove pilots and copilots HSI's and check status.
 - (a) Part number ending in -015 conforms to requirement. Proceed to aircraft wiring modification Part B. and/or C. as applicable.
 - (b) Part number ending in -012 or -019 require Collins 331A-9G Service Bulletin #15 for proper operation. Send unit(s) to authorized Collins Service Center for modification. Proceed to aircraft wiring modification Part B. and/or C. as applicable.
- B. Reference WDM #34-50-02 and 34-50-05. Perform aircraft wiring modification as follows for pilots HSI:
 - (1) Make accessible connectors for pilots HSI.
 - (2) Remove, cap and stow wire #UD130A22 from pin 51 of pilots HSI connector J-1. Insert new wire #UD130B22 in pin 51, J-1. Route new wire along existing cable bundles through disconnect plug (any spare pin) to S5E (VLF switch) on pilots instrument panel.
 - (3) Gain access to terminals of S5E (VLF switch) and connect new wire from step (2) to terminal #6.
 - Reverse connections to terminals #5 and #7 of switch.
 Ensure terminal #5 is to airframe ground and terminal
 #7 is to RL-92 coil, X-2 after wire change.
 - (5) Reassemble pilots instrument panel and proceed to Part C, as required.

August 9, 1985

ć

- C. Reference WDM #34-50-04 and 34-50-06. Perform aircraft wiring modification as follows for copilots HSI:
 - (1) Make accessible connectors for copilots HSI.
 - (2) Remove, cap and stow wire #2UD130A22 from pin 51 of copilots HSI connector J-1. Insert new wire #2UD130B22 in pin 51, J-1. Route new wire along existing cable bundles through disconnect plug (any spare pin) to S23E (VLF switch) on copilots instrument panel.
 - (3) Gain access to terminals of S23E (VLF switch) and connect new wire from step (2) to terminal #6.
 - (4) Reverse connections to terminals #5 and #7. Ensure terminal #5 is to airframe ground and terminal #7 is to RL-93 coil, X-2, after wire change.
 - (5) Reassemble copilots instrument panel.
 - (6) Reinstall 331A-9G HSI's in pilot and copilot instrument panels.
 - (7) Perform follow-up inspection as per Part A. "Preliminary test procedures." If decimal point is lit while HSI is coupled to VLF, recheck wiring modification and refer to appropriate equipment troubleshooting procedures.
 - (8) Perform check of display dimming function for pilots and copilots HSI.
 - (a) If display does not dim, proceed to Part II.

PART II.

- A. Perform operational test of display dimming function for pilots and copilots HSI using DAY/NITE switch on instrument panel.
 - If HSI has dim control on frontispiece, DAY/NITE switch has no effect. Use HSI dim control. If it has no effect, a fault exists within the HSI.
 - (2) If display does not dim, and HSI does not have dim control on frontispiece, follow procedures, referencing WDM, Chapters 34-50-05, 34-50-06 and 34-50-14.

SB 1124-34-044 Page 4 of 5

- (a) Remove and discard resistor(s) and diode(s) connected to T-24 (located approx. STA 251 left side) terminals #15, #16 and #17.
- (b) Install #22AWG jumper from terminal #15 to teminal #16 on T-24.
- (c) Ensure T-24 terminal #15 is connected to DAY/ NITE bus T-156 terminal #11 (located approx. STA 128 left side, A/C 240 subs) or T-35 terminal #11 (located approx. STA 142 right side, A/C prior to 240). On aircraft prior to 240, T-24 may not be used. Check for continuity between HSI J-1 pin 54 and T-35 terminal #11.
 - (1) HSI J1-54 should read 5VDC in "DAY" or "BRIGHT" condition, and approximately 2.5 VDC in "DIM" or "NIGHT" condition.
 - (2) If voltage checks properly as in step (1) above, repair or replace HSI.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R	MIL 16878D 327654	Wire, #22AWG Terminal, Ring Tongue (Mfg. AMP)

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-34-044 dated August 9, 1985 titled "331A-9G HSI Distance Display Improvements, has been accomplished this date
 - B. Update Wiring Diagram Manual, chapters 34-50-02, 34-40-04, 34-50-05, 34-50-06 and 34-50-14 as required to reflect wiring changes performed.

END

SB 1124-34-044 Page 5 of 5

August 9, 1985

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-32-045 Revision No. 1 December 2, 1985

SUBJECT: INSPECTION OF MLG ACTUATING CYLINDER INBOARD ROD-END BEARINGS AND ATTACH BOLTS

REASON FOR REVISION:

To change aircraft effectivity under paragraph 1. Planning Information.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 431 except 154, 413, 416, 418, 421, 423, 426, 428 and 429.

NTERNATIONAL INC.

SB 1124-32-045 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-32-045

August 21, 1985

SUBJECT: INSPECTION OF MLG ACTUATING CYLINDER INBOARD ROD-END BEARINGS AND ATTACH BOLTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, S/N 152, 154, 174, 181, 185 and Subs.

B. REASON

Improper torque may cause damage to the MLG actuating cylinder inboard rod-end bearings and/or attach bolts.

C. COMPLIANCE

As soon as possible, but not later than 50 hours after receipt of this service bulletin.

D. DESCRIPTION

Part I of this service bulletin provides inspection procedures for the MLG actuating cylinder inboard rod-end bearings and attach bolts.

Part II of this service bulletin provides installation and modification procedures for the MLG actuator cylinder inboard rod-end bearing attach bolts.



SB 1124-32-045 Page 1 of 5

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

E. APPROVAL

This service bulletin has been reviewed by the Israel Aviation Administration (ICAA). The inspection and improvements herein comply with the applicable Civil Aviation Regulations and are ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. SPECIAL TOOLS

Not required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 32. 1124/1124A IPC, Chapter 32.

K. PUBLICATIONS AFFECTED

1124/1124A Maintenance Manual, Chapter 32.

2. ACCOMPLISHMENT INSTRUCTIONS

Part I (Inspection)

- A. Turn off battery and electrical master switches and assure external power is disconnected.
- B. Jack aircraft in accordance with 1124 Maintenance Manual.
- C. Deplete main system hydraulic pressure.
- Remove nut and bolt securing inboard rod-end bearing of MLG actuating cylinder to the upper strut-body lugs (2 on each MLG).

SB 1124-32-045 Page 2 of 5

- E. Visually inspect the rod-end bearings for cracks and freedom of rotation. Replace defective bearings.
- F. Using a magnifying glass (X5 minimum), inspect the (NAS6210-38 or NAS464-10LA38) attach bolts for cracks. Special attention should be focused on the radius under the head. Replace defective bolts with new NAS6210-38 bolts.

Part II (Installation and Modification)

- A. If new rod-end bearings are installed, or original rod-end bearings are re-installed, accomplish preload adjustment as per Chapter 32 of 1124 Maintenance Manual.
- B. Attach actuating cylinder inboard rod-end to the MLG upper strut lugs as follows:
 - Coat the NAS6210-38 bolts and MLG upper strut-body lug holes with MIL-G-81322 grease.
 - (2) Install MS20002Cl0 countersunk washer under the bolt head with countersink toward the head.
 - (3) Install two (2) AN960-1016 washers between the rod-end and the strut-body and one (1) AN960-1016 washer under the nut.
 - (4) Secure the actuator rod-end to the strut-body with bolt, washers and nut. Torque the aluminum (MS20364D1018) nut and/or steel (MS21245-10) nut to 270-300 inch-lbs.
 - (5) After final torque of the attach bolt, 2 threads should protrude through the nut. If not, replace bolt with an NAS6210-40 bolt.
- C. Slowly retract landing gear and ensure clearance of .16-.20 inches between bolt head and forward and aft wheel well support structure (P/N 5173031-503/-504 opp.).
- D. If insufficient clearance exists, rework support structure as per Figure 1, to obtain the desired clearance.
- E. Apply brush alodine, epoxy primer and paint, as required.
- F. Accomplish gear retraction check per 1124 Maintenance Manual, Chapter 32.

G. Remove aircraft from jacks and return to service.

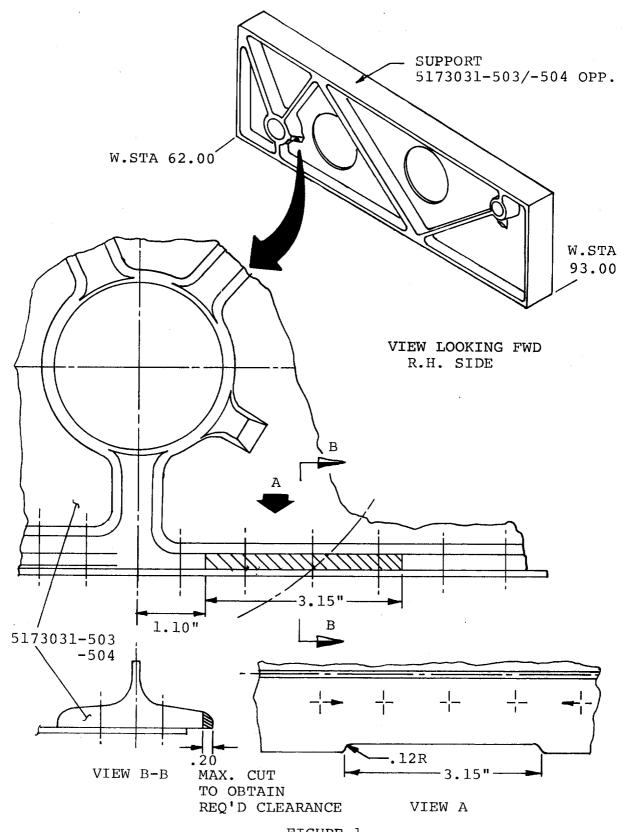
3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
4 A/R	MS20002-C10 MS21242-C-10K alt	Washer Rod-end
A/R A/R A/R	M81935-1-10K NAS6210-38 NAS6210-40 AN960-1016	Bolt Bolt Washer

4. RECORD COMPLIANCE

Make the following entry in the Aircraft Log Book:

Service Bulletin No. 1124-32-045 dated August 21, 1985 titled "Inspection of MLG Actuating Cylinder Inboard Rod-end Bearings and Attach Bolts," has been accomplished this date _____.



SB 1124-32-045 Page 5 of 5



OPTIONAL

SERVICE BULLETIN NO. 1124-23-046

September 9, 1985

- SUBJECT: REPLACEMENT AND RELOCATION OF FLIGHT TELEPHONE ANTENNA
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

1124/1124A WESTWINDS, serial numbers 240 through 390 (with Flight Telephone Receiver/Transmitter located in nose compartment near station 15.00).

B. REASON

Provides an alternate flight telephone system antenna and an alternate antenna location which will improve system operation and reduce coaxial cable problems.

C. COMPLIANCE

Optional

D. DESCRIPTION

Remove and discard original antenna, install blanking connector assembly, install AT-461 antenna at station 60.00 and reroute existing coaxial antenna lead.

E. APPROVAL

This service bulletin has been reviewed by Israel Civil Aviation Administration (ICAA). The modification herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



SB 1124-23-046 Page 1 of 7

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Materials required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, their authorized representatives or procured locally.

G. TOOLING

None

- H. WEIGHT & BALANCE
 - Not applicable.
- I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

None

K. PUBLICATIONS AFFECTED

None

- 2. ACCOMPLISHMENT INSTRUCTION
 - A. Remove existing flight telephone antenna installed near fuselage Station 420.0.
 - 1. Disconnect coaxial antenna lead.
 - 2. Remove existing flight telephone antenna.
 - 3. Install blanking plate connector assembly P/N 3873605-11 using 4 ea. screws MS24693-S271. Apply PR1422B as required. Ref. Figure 3.
 - 4. Connect the existing coaxial antenna lead to the blanking plate dummy connector and secure lead as required.
 - B. Install AT-461 antenna at station 60.00.
 - 1. Locate mounting area as shown in Figures 1 & 2.

 Using P/N 4873612-3 doubler as template, locate, drill and countersink rivet and screw holes as shown in Figures 1 and 2.

NOTE

Pick up four existing rivets on flanges at U-channels (stations 54.88 and 65.26).

- 3. Clean all bare aluminum surfaces with methyl ethyl ketone, treat with Iridite 14-2.
- 4. Install P/N 4873612-3 doubler.
- 5. Install AT-461 antenna using four screws as shown in Figures 1 & 2. Apply PR1422B as required.
- 6. Apply PR1422B sealant to doubler and antenna installation as required.
- C. Connect existing flight telephone coaxial antenna lead to AT-461 antenna.
 - 1. Locate and identify existing flight phone antenna lead routed aft from connection on left side of forward pressure bulkhead.
 - 2. Cut lead allowing adequate length to facilitate installation at new antenna location.
 - 3. Install Amphenol 82-835, Type N, 90 degree connector, install lead to antenna and secure coaxial lead as required.
 - 4. Perform system test in accordance with 1124 Maintenance Manual, 23-21-00.
 - 5. Reinstall interior furnishings and return aircraft to service.

3.	MATERIAL INFORMATION QTY	PART NUMBER	DESCRIPTION
	l ea.	AT-461	Antenna
	l ea.	4873612-3	Doubler
	4 ea.	MS24694-S50	Screw
	l ea.	3873605-11	Connector Assy

September 9, 1985

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PART NUMBER	DESCRIPTION
MS20426-5-5	Rivets
MS20426-4-4	Rivets
Amphenol 82-835,	
	Connector
PR1422B	Sealant
Iridite 14-2	Etch, treatment
	MS20426-5-5 MS20426-4-4 Amphenol 82-835, Type N, 90 ⁰ PR1422B

4. RECORD COMPLIANCE

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Make the following entry in the aircraft log book: Service Bulletin No. 1124-23-046, dated September 9, 1985, titled "Replacement and Relocation of Flight Telephone Antenna," has been accomplished this date _____.

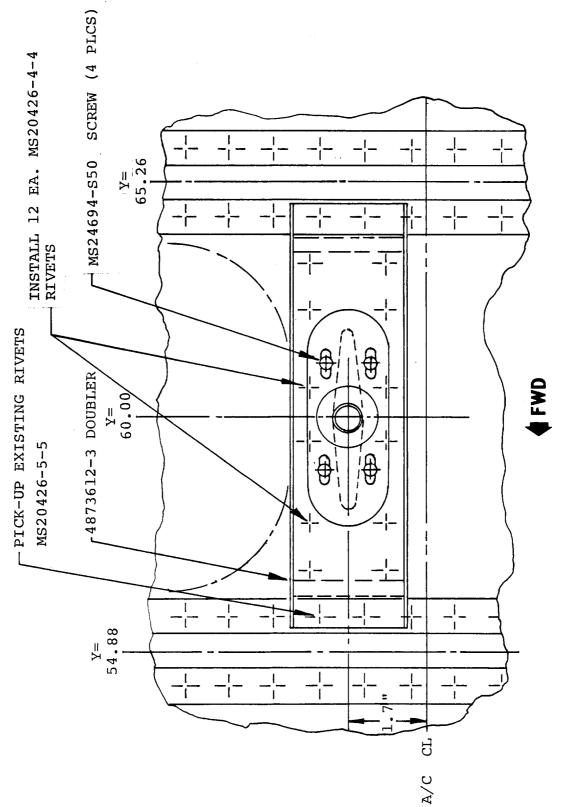
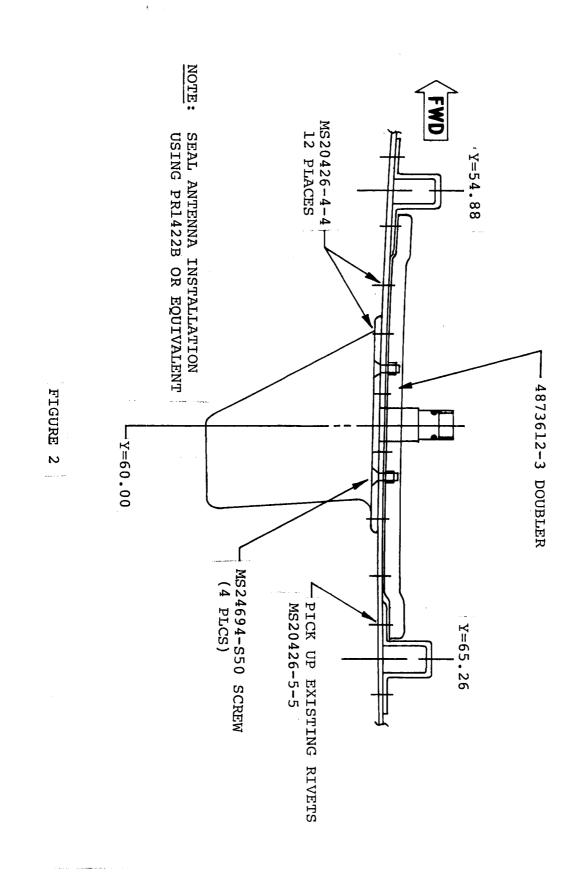
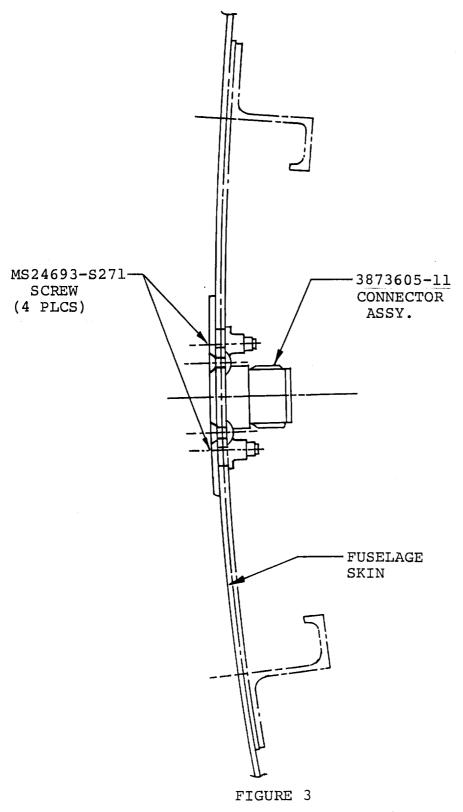


FIGURE 1



SB 1124-23-046 Page 6 of 7 SERVICE BULLETIN NO. 1124-23-046



BLANKING CONNECTOR ASSEMBLY INSTALLATION

September 9, 1985

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SERVICE BULLETIN NO. 1124-34-047

REVISION 1

December 11, 1991

TRANSMITTAL SHEET

This Sheet transmits Revision 1 to Service Bulletin No. 1124-34-047 dated February 6, 1987, titled "Navigation - Static Source Improvement for Copilot's Altimeter."

REASON FOR REVISION

To revise paragraph 1.A. EFFECTIVITY to include all 1124A Westwind aircraft.

To revise paragraph 1.B. REASON by addition of text.

This is a PARTIAL REVISION. Please remove and discard only those pages that are affected by this revision.

LIST OF EFFECTIVE PAGES

PAGE NO.

DATE

December 11, 1991
February 6, 1987
December 11, 1991
February 6, 1987

PREVIOUS REVISIONS OF SB 1124-34-047

None

Transmittal Page 1 of 1



RECOMMENDED

SERVICE BULLETIN NO. 1124-34-047

February 6, 1987

SUBJECT: NAVIGATION - STATIC SOURCE IMPROVEMENT FOR COPILOT'S ALTIMETER (AFC 2015).

1. PLANNING INFORMATION

- A. EFFECTIVITY
- R

R

R

MODEL 1124A WESTWIND, all serial numbers.

- B. REASON
- - (1) To provide an improved, independent static source for copilot's altimeter to reduce displayed altitude differential at higher altitudes.

(2) To eliminate ATC transponder altitude reporting errors, where the #2 altimeter (copilot's) is an altitude encoding altimeter.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

- D. DESCRIPTION
 - (1) This service bulletin describes the procedures necessary to install a second unheated static port system for copilot's altimeter.

February 6, 1987 R Revision 1, December 11, 1991 459.1 SB 1124-34-047 Page 1 of 20 (2) This modification is in compliance with AFC 2015 and permits use of the Altimeter Position Correction Charts in the 1124A Flight Manual, Revision 10.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Maintenance Manual, Chapter 6 (Dimensions) and Chapter 25 (Interior Furnishings).

K. PUBLICATIONS AFFECTED

1124A Aircraft Flight Manual (Ref. AFC 2015)1124 Maintenance Manual, Chapter 341124 Illustrated Parts Catalog

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Removal of interior furnishings.
 - (1) Remove interior from R/H side of aircraft to expose fuselage frames at Y-Station 37.78 to Y-Station 240.25 (cockpit rudder pedal area aft to forward bulkhead of lavatory).

- (2) Remove interior from L/H side of aircraft to expose fuselage frames at Y-Station 174 to Y-Station 240.25. (Forward frame of escape hatch aft to forward bulkhead of lavatory).
- (3) Remove aft section of headliner to expose fuselage frames at Y-Station 219.05 to Y-Station 240.25.

NOTE

Cornices do not need to be removed.

- B. Install Alternate Static Port
 - (1) Remove soundproofing material below R/H emergency hatch, between frames Y-174 and Y-184.
 - (2) Locate Y-Station 181 and mark, locate Z-Station 21.70 (water line) and mark. (Refer to Figure 1.)
 - (3) Fabricate a doubler (P/N 5723633-51) from 2024-T3 clad
 .050 thick aluminum as per dimensions in Figure 1A.
 Etch doubler and treat with Alodine 1201, finish with epoxy primer.

Cover area between frames Y-174 and Y-223.75 R/H side as necessary to catch metal shavings.

- (4) Measure, mark and cut out hole in fuselage at Y-Station 181 and Z-Station 21.70 (R/H side). Use doubler fabricated above (item 3) as a template for rivet holes and static-port retaining screw holes location (Figure 1).
- (5) Drill .250 inch holes for static-port cover as per dimensions in Figure 1. Attach (2 each) nut-plates P/N NAS1473-1/4-28 and spacers P/N CMA71704-45 to inside fuselage skin.
- (6) Countersink rivet and screw holes for port and doubler from the outside of fuselage skin. Countersink .250 holes for static port cover (Figure 1).

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(7) Cut out .750 diameter holes in R/H side frames at the following Stations:

Y-Sta.	Z-Sta.	Ref. Doubler P/N	Reference
219.05	32.70	CMA71737-503-31	Fig. 1B
210.00	31.70	5723045-67	Fig. 1B
201.75	30.75	СМА71737-503-19	Fig. 1B
194.00	30.00	CMA71737-503-29	Fig. 1C
184.00	Existing	Not applicable	-

(8) Fabricate doublers out of 2024-T3 clad .050 thick aluminum for each frame and install. Refer to Figures 1B and 1C.

NOTE

Etch doublers and treat with Alodine 1201. Finish with epoxy primer.

- (a) Install doubler on fwd side of frame 219.05, picking up existing rivet locations, and install NAS1033-A3 nut-plate on fwd side of frame (Fig. 1B).
- (b) Doubler for frame 194 must be of sufficient length to cover the existing hole at Z-Station 28.20. (See Figure 1C.)
- (c) Install NAS1033-A3 nut-plate on aft side of frames 210.00 and 201.75 (Fig. 1B). (Same as L/H side.)
- (d) Drill doublers as necessary to pick up existing rivet patterns, nut-plates, etc. Add rivets where necessary.
- (9) Coat static port doubler on the side that will be next to fuselage skin with PR1422 sealer or equivalent. Attach doubler to fuselage (inner) skin with rivets (MS20426AD3).
- (10) Install static port P/N 4883050 using laminated shim P/N 5723633-53 between port and doubler. Remove laminations from shim as necessary so outside surface of port is flush with outside skin of fuselage + .010 inch. Secure port with AN507-632R10 screws, AN960-06 washers and MS21042-06 nuts (6 each) (Fig. 1).

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- (11) Apply a coat of PR1422 sealer or equivalent over static port area, covering nut-plates, rivets, nuts and outer diameters of port and doubler.
- C. Install static line, left side
 - (1) Remove AN929-6 cap from center port of L/H static port, and retain for later use. Use 2 each AN818-6D nuts and AN819-6D sleeves and fabricate a tube from .375 OD X .035W 5052-0 aluminum tubing approximately 8.5 inches long. Bend tube as necessary to align it with the existing hole at Z-Station 29.30 (waterline) at frame Y-184 (refer to Figure 2).
 - (2) Attach fabricated tube to center port of static port, attach a reducer (AN919-6D) to the other end of tube (Fig. 2).
 - (3) Fabricate a tube from .250 OD X .035W aluminum tubing using 2 each AN818-4D nuts and AN819-4D sleeves. Attach one end to the AN919-6D reducer. Tube must be of sufficient length to be routed aft through existing holes in frames Y-184, 194, 201.74, 210 and approximately 1.5 inches past frame 219.05. Attach a 90° elbow (AN821-4D) to tube end between frame 219.05 and 223.75.

NOTE

If stereo speaker is mounted between frames 210 and 219.05 and interferes with routing of tube assembly, move speaker up approximately 1/4 inch by drilling #10 holes in bracket supporting speaker, and enlarge notch on bracket to clear frame hole.

- (4) Support tube assembly at frames 201.75 and 219.05 with MS21919WDG4 clamps by attaching to existing NAS1033-A3 nut-plates with AN3-4A bolts and AN960PD10L washers.
- (5) Install caterpillar grommet MS21266-4N or equivalent on frames not using DG clamps.

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D. Install Static Line, Overhead Section

- (1) Drill a .440-.445 diameter hole in the channel at Z-Station 56.25 (L/H side even with top of cabin windows) between frames 219.05 and 223.75. (Refer to Figure 3.) Install a bulkhead union P/N AN832-4D with 2 each, AN960PD716L washers and 1 each AN924-4D nut.
- (2) Fabricate a tube approximately 21.5 inches long from .250 OD X .035W aluminum tubing with 2 each AN818-4D nuts and AN819-4D sleeves. Bend tube as necessary to route forward and around wing inspection light housing. (Refer to Figure 4.)
- (3) Remove DG clamp holding wing inspection light wires at Z-Station 38.75 and retain (Fig. 4). Route tube fabricated in step 2 through existing hole in channel at Z-Station 38.75 and attach ends to elbow and bulkhead union.
- (4) Clamp wing inspection light wires with clamp removed in Step 3. Support tube with MS21919WDG4 clamp by attaching clamp to existing NAS1033-A3 nut-plate with a AN960PD10L washer and AN3-4A bolt.
- (5) Inspect R/H side channel at Z-Station 56.25 between frames 219.05 and 223.75, for wires routed through pilot hole. If no wires are routed, install union P/N AN832-4D as per instructions in Step 1.
- (6) If wires are routed through channel, locate butt connectors, mark and cut wires at butt connectors. Pull wires out of pilot hole at channel 56.25. Enlarge hole in channel to approximately .5 inch and install a caterpillar grommet MS21266-4N.
- (7) a. Cut a piece of .250 OD X .035W aluminum tubing (approximately 65 inches).
 - b. Flare one end of tube and install AN819-4D and AN818-4D sleeve and nut. Tube will have to be hand-formed to contour of overhead as it is being routed around fuselage.

- c. Start at L/H side by routing unflared end of tube up and behind cornice next to frame 219.05. Route tube around channel at Z-Station 66.10 assuring it is routed between channel and conditioned air duct (Fig. 5). Aft most panel of cornice may have to be removed to provide visual access to channel at Z-Station 66.10, both sides. Route tube around R/H channel (Z-66.10) in same manner as L/H side (Fig. 5).
- d. Wrap both sides of tube with anti-abrasion tape or equivalent at Z-Station 66.10.
- e. Attach flared end to L/H union at Z-Station 56.25 (Fig. 3).

NOTE

Form tube as necessary to support it with the clamping procedure shown in Figure 5. Do not clamp tube until it has been cut and fabricated to proper shape and length.

- f. If bulkhead union is used in R/H channel Z-Station 56.25, cut tube to proper length, attach end fittings (AN819-4D, AN818-4D sleeve and nut) and connect to union. (Support tube as per Figure 5.)
- g. If bulkhead union is not used, cut tube approximately 2.5 inches above channel (Z-Station 56.25), attach end fittings and connect to a union P/N AN815-4D. (Support tube as per Figure 5.)
- (8) Fabricate a tube from .375 OD X .035W aluminum tubing approximately 2.5 inches in length using 2 each AN819-6D sleeves and AN818-6D nuts.
- (9) Bend tube approximately 35° 40°, connect to center port of R/H static port.
- (10) Install AN919-6D reducer to other end of tube.

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- (11) Attach Tee P/N AN938-4D to AN919-6D reducer, with center leg of Tee facing aft; attach 2 each AN815-4D unions to other legs of Tee.
- (12) Attach 2 each AN929-4D caps to outer ports of static-pressure port (4883050).
- (13) Fabricate a tube from .250 OD X .035W aluminum tubing (approximately 44.5 inches) using 2 each AN819-4D sleeves and AN818-4D nuts.
- (14) Route tube aft through holes at frames Y-184, 194, 201.75, 210, and 219.05.
- (15) Connect one end of tube to leg facing aft of AN938-4D Tee.
- (16) Attach AN821-4D elbow to end of tube at Y-219.05.
- (17) Support tube at frames Y-201.75 and 219.05 with MS21919WDG4 clamps by attaching to nut-plates using AN3-4A bolts and AN960PD10L washers.
- (18) Install caterpillar grommets MS21266-4N or equivalent in frame holes.
- (19) Fabricate a tube from .250 OD X .035W aluminum tubing long enough to reach from union at Z-Station 56.25, down and around forward side of wing inspection light and connect to elbow between Y-frame 219.05 and 223.75 (Fig. 4). (Refer to L/H side for reference.)
- (20) If electrical wires were routed through channel at Z-Station 56.25 (R/H side), route wires through channel next to tube and connect as before.
- (21) Wrap wires and tube with spiral wrap or equivalent at Z-Station 56.25.
- (22) Support tube and wires with MS21919WDG4 clamps by attaching to existing NAS1033-A3 nut-plates at Z-Station 38.75. Use AN3-4A bolts and AN960PD10L washers (Fig. 4).

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- E. Install Static Lines, Right Side
 - (1) Cut a length of aluminum tubing, approximately 49 inches.
 - (2) Flare one end of tube and install a AN819-4D sleeve and AN818-4D nut.
 - (3) Route unflared end from frame Y-174 forward to frame 119.90, passing tube through unused holes in phenolic blocks.
 - (4) Bend flared end of tube as necessary to attach to Tee at static-port.
 - (5) Install nut and sleeve and flare opposite end of tube. Attach an AN821-4D elbow.
 - (6) Fabricate a tube and route forward to next frame following existing tubing. Terminate tube between frame 112.78 and 103.78.
 - (7) Attach an AN815-4D union to end of tube.
 - (8) Mark phenolic blocks at frames 103.78 and 83.78 where a .250 hole can be drilled.
 - (9) Remove phenolic blocks and align and drill .250 holes.
 - (10) Fabricate a tube long enough to reach from AN815-4D union at frame 112.78 to cabin deck area past frame 83.78 (follow existing tubing).
 - (11) Install phenolic blocks removed and drilled in step 9.
 - (12) Attach a Tee P/N AN824-4D to end of tube.
 - (13) Attach drain P/N 3723052-505 to lower end of Tee.
 - (14) Fabricate a support from 2024-T3 clad .071 thick aluminum (Refer to Figure 6).
 - (15) Attach support to frame 44.50 with rivets as shown in Figure 6.
 - (16) Install AN832-4D union to support using AN960PD716L washers and AN924-4D nut.

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- (17) Fabricate a tube and connect one end to center leg of Tee where drain is and other end to union at frame 44.50. Route tube with slight angle so drain at frame 83.78 is low spot.
- (18) Support tube to other tubes with MS21919WDG4 clamps using AN3-4A bolts and AN960PD10L washers.
- F. Altimeter Connection and Static Test
 - Fabricate a flex hose assembly from MIL-H-5593-4 material, long enough to reach from union at frame 44.50 through frame 37.78 and up to copilot's altimeter, using 2 each AN471-4D end fittings.
 - (2) Remove tube connected to copilot's altimeter and discard.
 - (3) Remove union from the back of the altimeter and install a AN919-6D reducer using a new SO310-906 O-ring.
 - (4) Connect flex hose to altimeter.
 - (5 Install AN929-6D cap removed in Step C.1. to other end where tube in Step 2 was removed.
 - (6) Connect a static tester to system and check for leaks and proper operation (Ref. Chapter 34-10-01, Maintenance Manual).
- G. Install soundproofing and interior furnishings.
 - Install soundproofing material around R/H static port P/N Y370 (From 3M Company).

NOTE

If cabin temperature sensor is mounted on R/H side where new static port is installed, move sensor housing as necessary to clear static port.

(2) Install cabin and cockpit interior.

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3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
3 ea.	AN919-6D	Reducer
4 ea.	AN815-4D	Union
3 ea.	AN832-4D	Union
3 ea.	AN924-4D	Nut
6 ea.	AN960-PD716L	Washer
2 ea.	A N929-4D	Cap
1 ea.	AN929-6D	Cap
1 ea.	AN824-4D	Tee
1 ea.	AN938-4D	Тее
20 ea.	AN819-4D	Sleeve
20 ea.	AN818-4D	Nut
4 ea.	AN819-6D	Sleeve
4 ea.	AN818-6D	Nut
3 ea.	AN821-4D	Elbow
2 ea.	MS27404-4D	Fitting
4 ea.	NAS1033-A3	Nut-Plate
2 ea.	NAS1473-1/4-28	Nut-Plate
2 ea.	CMA71704-053	Spacer
4 ea.	NAS43DD3-40	Spacer
1 ea.	NA\$43DD3-13	Spacer
4 ea.	AN3-IIA	Bolt
10 ea.	AN3-4A	Bolt
19 ea.	AN960PDIOL	Washer
6 ea.	AN507-632R10	Screw
6 ea.	AN960-06	Washer
6 ea.	MS21042-06	Nut
1 ea.	313765-505	Ground Cover
12 ea.	MS21266-4N	Grommet
18 ea.	MS21919WDG4	Clamp
1 ea.	5723633-53	Shim
1 ea.	5723045-65	Doubler
1 ea.	MIL-H-5593-4 40"	Flex Hose
1 ea.	CMA71737-503-13 (Fig. 6)	Support
1 ea.	4883050	Static Press Port
1 ea.	3723052-505	Drain Assy.
1 ea.	Y-370 (3M Co.) .250	12" X 12" Sheet
		(Soundproofing)
1 ea.	S0310-906	0-ring
A/R	2024-T3 clad .050	Aluminum Sheet
A/R	2024-T3 clad .071	Aluminum 2.5" X 2"
A/R	.375 OD X .035W 5052-0	Aluminum Tubing (12")
A/R	.250 OD X .035W 5052-0	Aluminum Tubing (34 ft.)

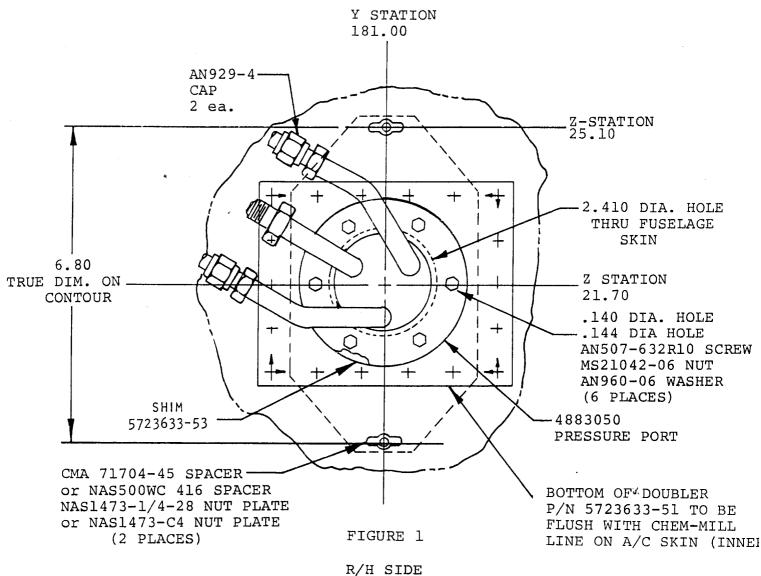
SERVICE BULLETIN NO. 1124-34-047

QTY	PART NUMBER	DESCRIPTION
A/R	Spiral Wrap	
A/R	Tie Wraps (plastic)	
	No. 5421	Tape Abrasion
		Resistant (3M Co.)
1 ea.	5723633-51 (Fig. 1A)	Doubler
1 pt.	PR1422B1/2	Sealer
1	CMA71737-503-31 (Fig. 1B)	Doubler
1	CMA71737-503-29 (Fig. 1C)	Doubler
1	CMA71737-503-19 (Fig. 1B)	Doubler
2	5723045-67 (Fig. 1B)	Doubler
A/R	MS20426AD	Rivets
A/R	MS20470AD	Rivets

4. RECORD COMPLIANCE

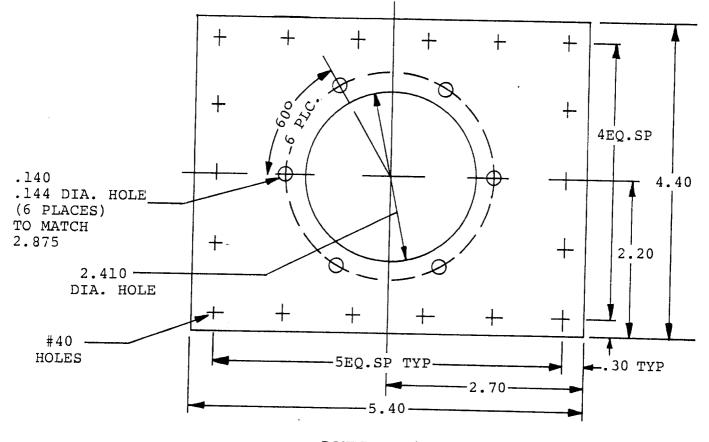
Make the following entry in the aircraft log book:

R Service Bulletin No. 1124-34-047 Revision 1, dated December 11, 1991 titled "Navigation R Static Source Improvement for Copilot's Altimeter (AFC 2015)" has been accomplished this date ______.



LOOKING OUTBD

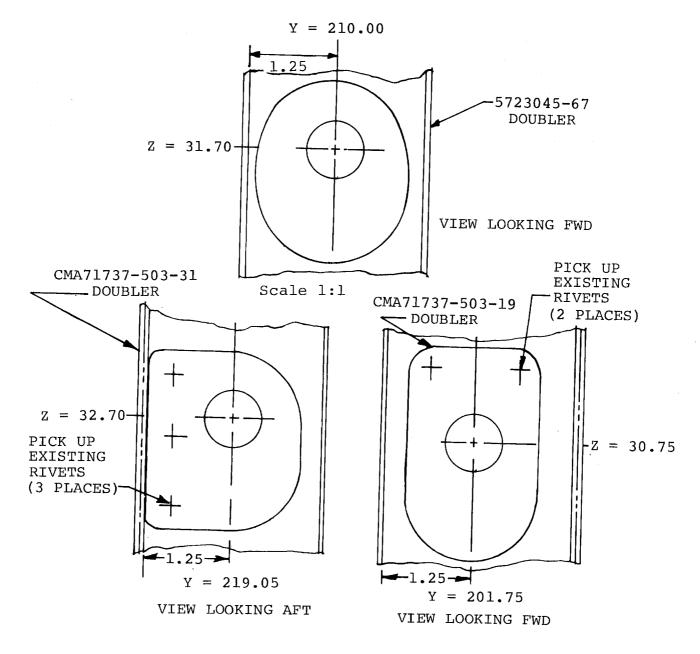
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DOUBLER P/N 5723633-51

FIGURE 1A

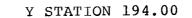
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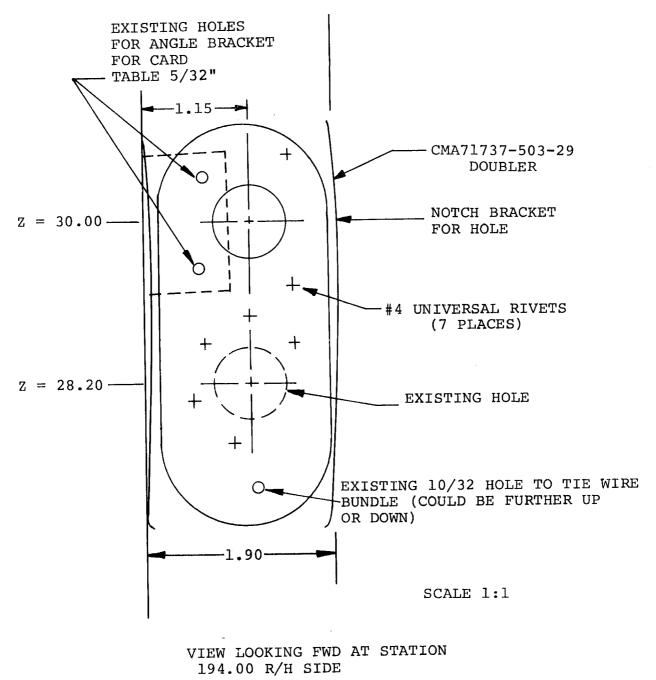


FIGURE 1C

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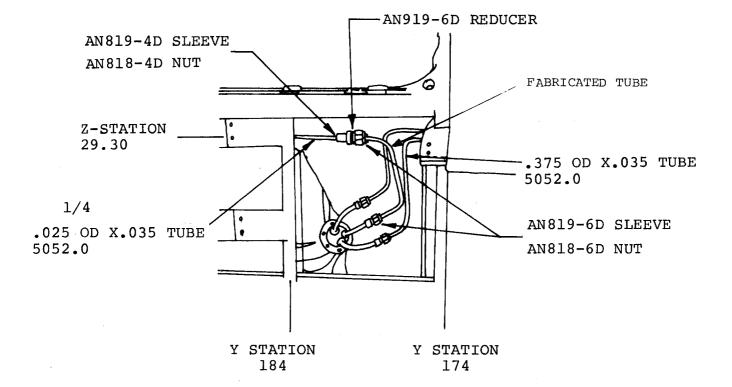
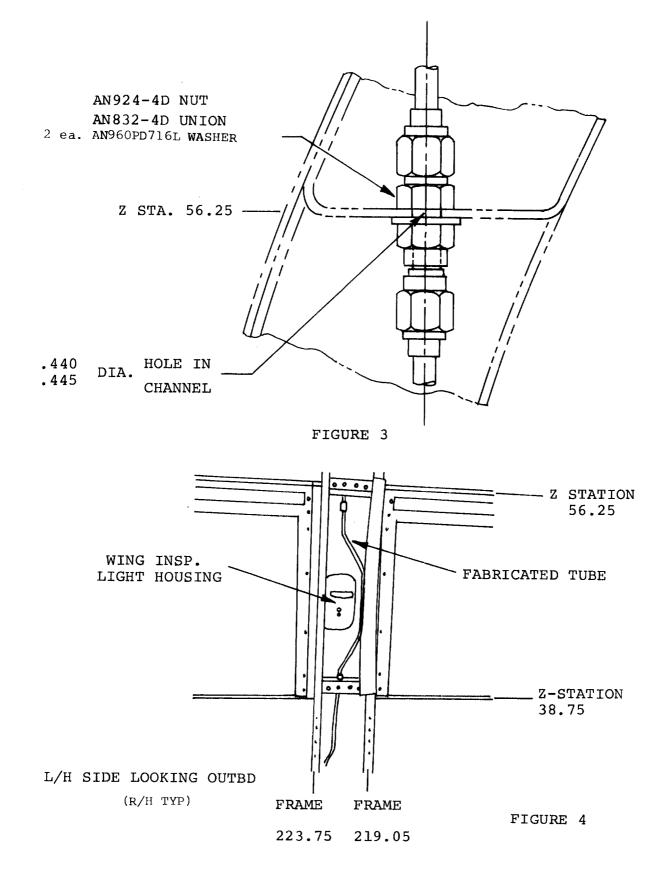




FIGURE 2

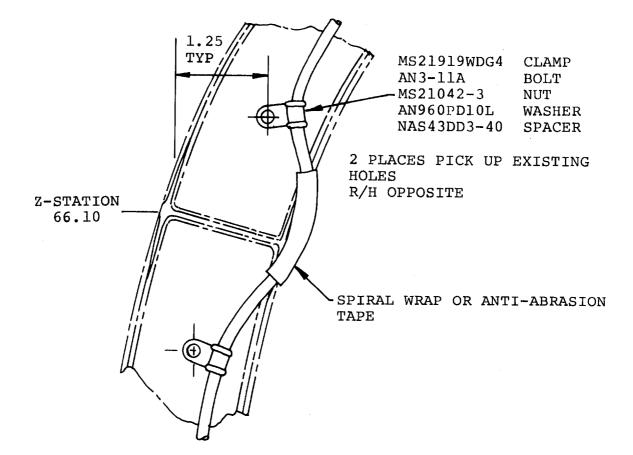
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SERVICE BULLETIN NO. 1124-34-047



VIEW LOOKING FWD STA 219.05

C/L OF A/C

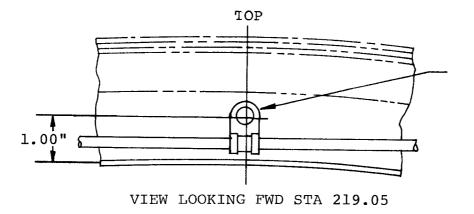
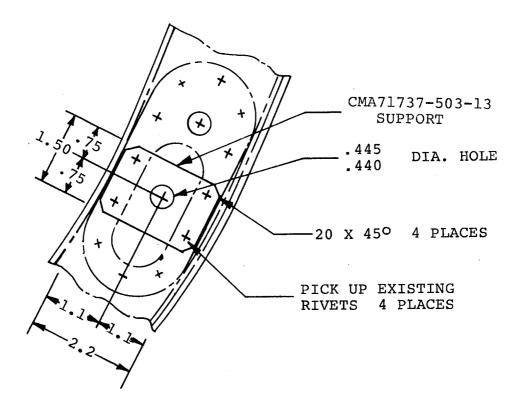


FIGURE 5

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VIEW LOOKING AFT FRAME 44.50

FIGURE 6

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SERVICE PUBLICATIONS revision notice

OPTIONAL

SB NO. 1124-34-048 Revision No. 1 December 9, 1985

SUBJECT: COLLINS VNI-80 VERTICAL NAVIGATION INDICATOR OPERATION IMPROVEMENT

REASON FOR To change aircraft effectivity in Part B. REVISION:

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (2) Accomplishment Instructions Part B: MODEL 1124A WESTWIND, serial numbers 392 through 410.

INTERNATIONAL INC.

SB 1124-34-048 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL



OPTIONAL

SERVICE BULLETIN NO. 1124-34-048

November 8, 1985

SUBJECT: COLLINS VNI-80 VERTICAL NAVIGATION INDICATOR OPERATION IMPROVEMENT

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- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part A: MODEL 1124A WESTWIND, all serial numbers prior to 420.

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- (2) Accomplishment Instructions Part B: MODEL 1124A WESTWIND, all serial numbers prior to 412.
- B. REASON
 - (1) Accomplishment Instructions Part A: To enable the Bac Loc logic input to the VNI-80 for proper Bac Loc operation.
 - (2) Accomplishment Instructions Part B: To prevent a false "ILS ON" signal when left altimeter circuit breaker is disconnected.
- C. COMPLIANCE

Compliance with this service bulletin is optional.

- D. DESCRIPTION
 - (1) Accomplishment Instructions Part A: One wire is added from terminal strip T-16 to relay RL-84.
 - (2) Accomplishment Instructions Part B: One diode is added to terminal strip T-160.

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E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (CAA). The design content conveyed herein complies with the applicable Civil Aviation Regulation and is ICAA approved.

F. MATERIAL

Material required to perform this service bulletin may be obtained from Atlantic Aviation Supply or procured locally.

G. TOOLING

None required

H. WEIGHT & BALANCE

Not affected

I. ELECTRICAL LOAD DATA

Not affected

J. REFERENCES

MODEL 1124/1124A Wiring Diagram Manual, Chapters 34-30-01 and 22-10-05.

K. PUBLICATIONS AFFECTED

MODEL 1124/1124A Wiring Diagram Manual, Chapters 34-30-01 and 22-10-05.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Reference Wiring Diagram Manual, Chapters 34-30-01 and 22-10-05. Perform conformity check prior to accomplishas follows:
 - (1) Remove power from aircraft.
 - (2) Gain access to FGC #1, Plug J2, T-16 and receptacle D103 (located near Sta. 269 LHS).
 - (3) Check continuity between FGC #1, Plug J2, Pin 16 and receptacle Dl03, Pin <u>W</u>. Resistance reading should indicate short.

- (a) If indication is short, disregard following step. Proceed to step (4).
- (b) If open condition exists, disconnect wire lRN619B22 from T16, 15, extend it as required and connect with splice to wire C90A24 that is connected to FGC #1, Plug J2, Pin 16.
- (4) Reassemble aircraft and return to service.
- B. Reference Wiring Diagram Manual, Chapter 34-30-01. Perform visual check and modification as required.
 - (1) Visually inspect terminal strip T-160 for presence of diode between terminals #8 and #9 (located behind copilot ADI on center panel support).
 - (a) If diode present, disregard following steps. If not present, proceed to end.
 - (2) On T-160 locate wire #1RN626C22 at terminal #8 and relocate to terminal #9. Do not disturb other wire at terminal #8.
 - (3) Add diode (1N645) between terminals #8 and #9. Cathode, or banded end, to terminal #8.
 - (4) Reassemble aircraft and return to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R	MIL 16878D 50534	#24 AWG Wire Terminal Ring
·		Tongue (Mfg. AMP)
1	1N645	Diode

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-048 dated November 8, 1985 titled "Collins VNI-80 Vertical Navigation Indicator Operation Improvement" has been accomplished this date

B. Update Wiring Diagram Manual, Chapters 34-30-01 and 22-10-05 to reflect changes incorporated.



OPTIONAL

SERVICE BULLETIN NO. 1124-34-049

December 2, 1985

SUBJECT: NAVIGATION - RADAR WAVEGUIDE PRESSURIZATION AND INSTALLATION OF SILICA GEL CONTAINER ASSEMBLY

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, all serial numbers prior to 413. except 154.

B. REASON

To improve radar performance at altitude.

NOTE

Aircraft serial number 223 and subs are equipped with a pressurized waveguide. These aircraft will need the silica gel container, assembly clamps, bracket and hoses.

C. COMPLIANCE

At the operators discretion.

D. DESCRIPTION

Provide cabin pressurization to the radar waveguide by installing the necessary plumbing, including the silica gel container, between forward pressure bulkhead and the waveguide.



SB 1124-34-049 Page 1 of 8 E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Sperry Installation Manual on Primus 40 and 400 series weather radar.

Collins Installation Manual on WXR-300 weather radar system.

Bendix Installation Manual RDR-1200 weather radar system.

K. PUBLICATIONS AFFECTED

1124 Illustrated Parts Catalog, Chapter 34-40-00.

1124 Maintenance Manual, Chapter 34-40-01 thru 04, and Chapter 5-20-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Reference 1124 Maintenance Manual Chapter 34-40-01 thru
 04 and install radar waveguide pressurization system
 as follows: (Aircraft employing waveguide pressurization system, follow instructions from Step A.(9)).
 - (1) Remove radome and nose access panels.

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December 2, 1985

- (2) Disconnect waveguide at antenna and install pressure window (Sperry P/N 1715530-1 or Collins P/N 355-0182-030) with O-rings. It may be necessary to install a transition waveguide section with the pressure window. (Sperry P/N 1718105-501). See Figure 1.
- (3) Reconnect waveguide to antenna.
- (4) Disconnect waveguide at radar R/T unit and install pressurization port adapter (Sperry P/N 1718170-501 or Collins P/N 629-8297-001) with O-rings. See Figure 1.
- (5) Reconnect waveguide at adapter.
- (6) Locate position on the forward pressure bulkhead
 23.43 inches right of centerline and 3.8 inches up from the shelf in the nose compartment (sta Z30.2)
 drill .453 to .463 inch diameter hole. (See Figure 3).

CAUTION

Care should be taken in regards to wire bundles and plumbing routed behind bulkhead.

- (7) Clean burrs from hole and install union P/N AN832-D4, back-up ring P/N S0311-904, O-ring P/N S0310-904 and nut P/N AN6289-D4. See detail B, Figure 2.
- (8) Connect hose assembly P/N 359-4D-0359 to union.
- (9) Install silica gel container (Collins P/N 013-1399-010) with bracket (IAI P/N 5863559-67) and clamps at fuselage station 0.0, (See detail A, Figure 2) or in line at a convenient maintenance location.
- (10) Route hose installed in Step (8) above to one end of silica gel container. Using clamps and bolts, secure hose to existing shelf nut-plates. Secure both ends of hose with clamps.
- (11) Attach the second length of hose P/N 359-4D-0300 to opposite end of container and route along shelf to radar R/T and connect to pressurization port adapter installed in Step 4. Secure both ends of hose with clamps. Secure hose to existing shelf nut-plates using clamps and bolts.

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- (12) Ensure all hose connections are secure.
- (13) Perform leak check of installation as follows:
 - (a) Connect pressure source to union at aft side of pressure bulkhead.
 - (b) Pressurize system to not more than 10 PSI. Close shutoff valve on pressure source.
 - (c) Leak check all hose fittings in nose compartment and correct any leakage.
- (14) Reassemble aircraft and return to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l (Note l l	<pre>1) 013-1399-010 (Collins) 1718170-501 (Sperry) or 629-8297-001 (Collins) 1715530-1 (Sperry) or</pre>	Silica Gel Container Pressurization Port Adapter.
Ŧ	355-0182-030 (Collins)	Pressure Window
l (Note	2) 1718105-501 (Sperry)	Transition Wave- guide
1	5863559 -67 (IAI)	Container Bracket
A/R	MS90064-13	O-Ring
A/R	MS90064-14	O-Ring
1	AN832-D4	Union
1	SO310-904	O-Ring
1 1 2 2	SO311-904	Backup ring
2	AN6289-D4	Nut
	MS21919DG-24	Clamp
A/R	MS21919DG-7	Clamp
4	AN737TW24	Clamp
A/R	AN3-4A	Bolt
A/R	AN960-PD10L	Washer
A/R	MS21042-3	Nut
1	359-4D-0359	Hose
A/R	MS35333-38	Lockwashers
A/R l	MS16995-26 359-4D-0300	Cap Screws 8-32 Hose
Note l:	Reference 1124 Service Informat 1, for information on replaceme inserts.	ion Letter 13, Rev. nt of Silica Gel

Note 2: Requirement for transition waveguide to be determined upon inspection of existing installation.

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-049 dated December 2, 1985 titled "Navigation - Radar Waveguide Pressurization and Installation of Silica Gel Container Assembly" has been accomplished this date

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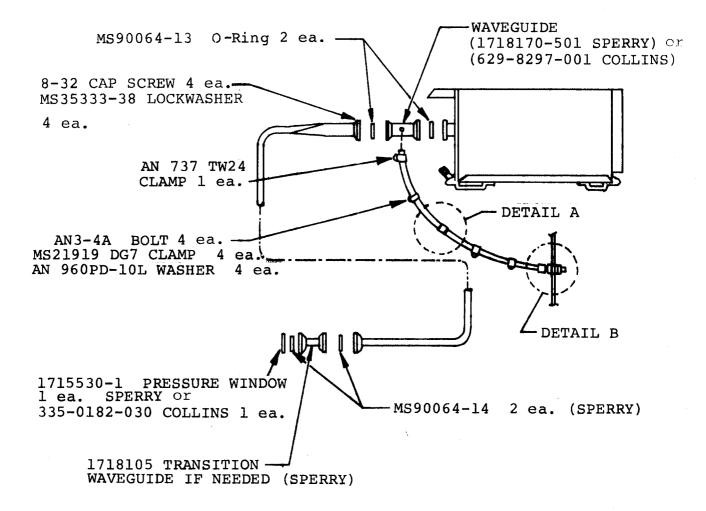
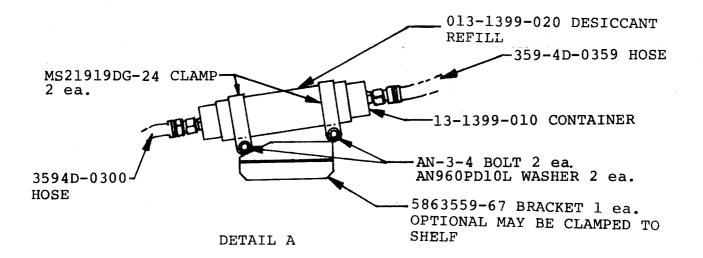
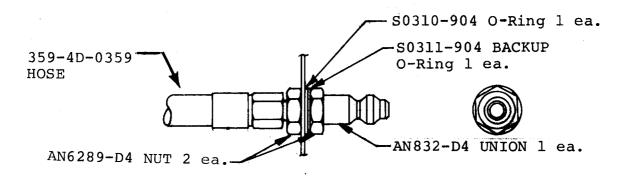


FIGURE 1

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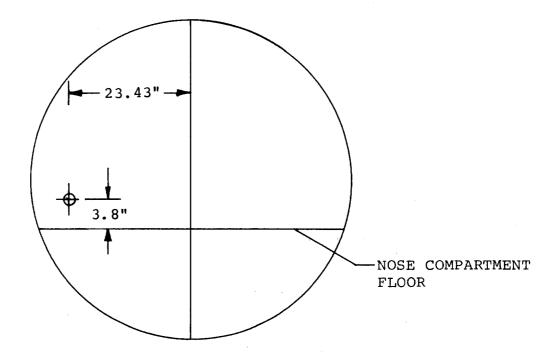


DETAIL B

FIGURE 2

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FORWARD PRESSURE BULKHEAD LOOKING AFT

FIGURE 3

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-23-050

January 3, 1986

SUBJECT: COMMUNICATIONS - VHF COM 3 SYSTEM IMPROVEMENTS

1. PLANNING INFORMATION

A. EFFECTIVITY

•

Accomplishment Instructions Part A: Model 1124 WESTWIND S/N 246 through 288 with COM 3 on/off switch S-56 in pedestal, and PS-823() installed

Accomplishment Instructions Part B: Model 1124/1124A WESTWIND S/N 290 thru 382, with PS-823() installed.

Accomplishment Instructions Part C: Model 1124/1124A WESTWIND S/N 246 thru 355, with PS-823() or PS-835() installed.

B. REASON

Accomplishment Instructions Parts A and B: To prevent VHF COM 3 battery pack from discharging through internal inverter when COM 3 not in use, therefore extending battery life.

Accomplishment Instructions Part B: To permit use of COM 3 by pilot or co-pilot independently, without the need to have "COM 3" selected by both switches.

Accomplishment Instructions Part C: To permit maximum battery pack charging by ensuring power to system at any time a distribution bus is powered.

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C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

- This Service Bulletin describes modification procedures necessary to provide corrected battery charge and logic switching circuits for the PS-823() battery pack.
- (2) Aircraft S/N 360 and subs. incorporate an interlock to prevent keying VHF COM 1 when COM 3 is selected. Inverting the antenna system from the original configuration will result in damage to VHF COM 2, and the inability to transmit on VHF COM 1, when COM 3 is selected. It is therefore mandatory to ensure that the aircraft meets the original configuration.
 - (A) Aircraft S/N 246 through 313 do not incorporate this interlock. COM 1 (or COM 2, if antennas have been reversed) must not be keyed when COM 3 is used.

Reference WDM Chapter 23-20-03 and relay RL121 for proper antenna connections between COM 1 and COM 3.

E. APPROVAL

This Service Bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material necessary to perform this Service Bulletin may be procured locally.

G. TOOLING

Not applicable.

H. WEIGHT AND BALANCE

No change.

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I. ELECTRICAL LOAD DATA

Compliance with Part C of this service bulletin will require removing the VHF COM 3 system from the COM and ACC BUS 2 and adding the current drain (1.0 Amps.) to the Priority Bus. A 1/2 Ampere will then be added to each Distribution Bus as 1/2 Priority Bus.

J. REFERENCES

Model 1124/1124A Wiring Diagram Manual, Chapter 23-20-03

Service Bulletin 1124-24-008 Service Bulletin 1124-23-013

K. PUBLICATIONS AFFECTED

Model 1124/1124A Wiring Diagram Manual Chapter 23-20-03

2. ACCOMPLISHMENT INSTRUCTIONS

Part A

- A. Reference Figure 1A for final configuration. Should you desire to eliminate the pedestal switch S-56, reference Figure 1B and Part B for final configuration, omit the following steps:
 - (1) Should S-56 contain a spare set of contacts (E.G. double pole, single throw switch), install a jumper wire from the extra normally open contact to existing wire 3RV116A20, which is an airframe ground.
 - (a) Should S-56 be a single pole switch, replace it with a DPDT type such as ALCO MST-205N, JBT type JMT-223, or equivalent.
 - (2) Add new wire, marked 3RV14B20N from the extra switch common terminal to the PS-823() power supply connector DB-147 pin 8. Remove, cap, and store any existing wire in pin 8.
 - (3) Check wiring, DB 147 pin 8 must be OPEN with COM 3 "OFF" and grounded with COM 3 "ON".

PART B

A. Reference Figure 1B for final configuration.

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- Remove existing wiring from pilot's switch S-240, contacts, 4, 5, and 6.
 - (a) Identify wire #RVA20, with series diode installed; reconnect to S-240 lug 6 (normally closed in "NORMAL").
 - (b) Relocate original wire 3RV2C20 to S-240 lug 5 (common). Should 3RV2C20 not exist, mark and install a new wire 3RV2C20 on lug 5, route across cockpit to copilot switch S-241.
 - (c) Add new wire 3RV14C20 from S-240 lug 4 and route to copilot switch S-241.
 - (d) Remove jumper, if any, across S-240 lugs 11 and 12.
 - (e) Cap and stow any remaining original wires.
- (2) Remove existing wiring from copilot's switch S-241, contacts 7, 8, and 9.
 - (a) Identify wire 3RV7C24, reconnect to S-241 lug 8 (common).
 - (b) Connect wire 3RVC20 from Step 1 to S-241 lug 9 (Normally Closed In "NORMAL").
 - (c) Connect new wire 3RV14C20 from Step 1 to S-241 lug 7, together with another new wire 3RV14B20N.
 - (d) Remove jumper, if any, across S-241 lugs 2 and 3.
 - (e) Cap and stow any remaining original wires.
- (3) Route new wire 3RV14B20N from S-241 to Power Supply PS-823() connector DB147 pin 8. Remove, cap, and stow any existing wire in pin 8.
- (4) Check wiring, DB147 pin 8 must be OPEN with S-240 or S-241 in "NORMAL," and grounded with either switch in "COM 3".

PART C

A. Conformity Test:

(1) With aircraft "ON", Avionics Master switches "OFF", and Fuel Status circuit breaker pulled, measure 28VDC

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at PS-823() or PS-835() connector DB147 pin 10 from the Priority Bus.

- (a) Ensure pins 10 and 13 and PS-823() only are connected with a jumper wire.
- B. If 28VDC is present, no further action is required. Should 28VDC be missing, proceed to Step C.
- C. Gain access to rear of forward overhead breaker panel; locate "COM 3" circuit breaker.
 - Remove existing bus tie strap(s), normally from the #2 COM and ACC Bus. Bolt the bus ties together and insulate exposed end. Should only one bus tie exist, remove, cap, and stow exposed end.
 - (2) Connect COM 3 circuit breaker to Priority Bus, identified by the priority bus diode cathodes, or the priority bus input to the Fuel Status breaker.
- D. Confirm wiring change by repeating Step A.
- 3. MATERIAL INFORMATION

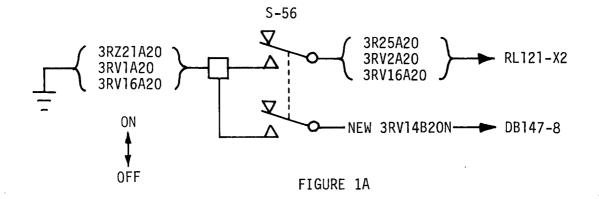
QTY	NEW P/N	DESCRIPTION	OLD P/N
A/R	MIL-W-16878D	#22 AWG Wire	
A/R	1N645	DIODE, or equivalent	

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log as follows:

Service Bulletin No. 1124-23-050 dated January 3, 1986, titled "Communications - VHF COM 3 System Improvements" has been accomplished this date

B. Revise Wiring Diagram Manual to reflect changes performed by accomplishment of this service bulletin.

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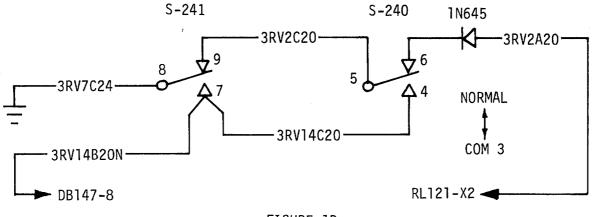


FIGURE 1B

COMM 3/NORMAL SWITCH CONFIGURATION AFTER MODIFICATION

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OPTIONAL

SERVICE BULLETIN NO. 1124-23-051

December 2, 1985

SUBJECT: COMMUNICATION - STEREO SYSTEM IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - ACCOMPLISHMENT INSTRUCTIONS PART A: Model 1124 Westwind, all serial numbers except 244, 245, 249 and 277. Model 1124A Westwind, all serial numbers.
 - 2. ACCOMPLISHMENT INSTRUCTIONS PART B: Model 1124 Westwind, all serial numbers prior to 354.
 - 3. ACCOMPLISHMENT INSTRUCTIONS PART C: Model 1124 Westwind, serial number 354 through 411. Model 1124A Westwind, serial numbers 295 through 430.

4. ACCOMPLISHMENT INSTRUCTIONS PART D: Model 1124A Westwind, all serial numbers prior to 392.

- B. REASON
 - 1. ACCOMPLISHMENT INSTRUCTIONS PART A: Existing single or dual installations of Terra or Great Western power supplies inadequate to carry loads of high power stereo or TV/VCR equipment.
 - 2. ACCOMPLISHMENT INSTRUCTIONS PART B: Resistors in use as power compensation for headphones are inadequate in power rating and the resistance is too high for proper volume levels.
 - 3. ACCOMPLISHMENT INSTRUCTIONS PART C: Resistors in use as power compensation for headphones are inadequate in power rating.

SB 1124-23-051 Page 1 of 5 4. ACCOMPLISHMENT INSTRUCTIONS PART D: Impedance matching resistors with insufficient power handling capabilities could open under high power from stereo output, causing a weak or inoperative stereo speaker.

C. COMPLIANCE

Compliance with this service bulletin is optional; however, it is recommended that the improved parts be installed whenever the existing components malfunction.

D. DESCRIPTION

- ACCOMPLISHMENT INSTRUCTIONS PART A: Removes existing power converter(s) manufactured by Terra or Great Western and installs Narco MP-20 power converter(s).
- 2. ACCOMPLISHMENT INSTRUCTIONS PART B: Removes existing resistors and replaces with new value resistors.
- 3. ACCOMPLISHMENT INSTRUCTIONS PART C: Removes existing resistors and replaces with new value resistors.
- 4. ACCOMPLISHMENT INSTRUCTIONS PART D: Removes and discards resistors and replaces with resistors capable of handling stereo output power.

E. APPROVAL

This service bulletin has been reviewed by Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation regulations and are ICAA approved.

F. MATERIAL

The material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, through their authorized dealers or may be procured locally.

G. SPECIAL TOOLS

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 23-30-01 and 23-50-05.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters 23-30-01 and 23-50-05.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Reference WDM Chapter 23-30-01.
 - Locate and gain access to original stereo power converter(s).
 - Disconnect and note wires removed from converter(s). Tag wires as 28Vdc input, 14Vdc output, and ground. Remove converter(s).
 - 3. Install Narco MP-20 converter as required. Using the tagged wires removed in step 2, connect 28V line to 28Vdc input, 14V line to 14V output, and ground wire to converter ground.
 - Remove all wiring associated with #2 power converter (if so equipped) and wire to the MP-20 as in step 3 above.
 - 5. Those aircraft without a fuse in the +14Vdc line to system components, install fuseholder and fuse (properly rated for equipment in use) to each system component from the MP-20 14Vdc output.
 - 6. Check stereo for normal operation.
 - 7. Reassemble aircraft and return to service.

NOTE

For aircraft equipped with TV/VCR systems using Terra or Great Western power converters, replacement with Narco MP-20 converters is recommended.

- B. Reference WDM Chapter 23-50-05 and follow below listed procedures for the removal and replacement of headphone resistors.
 - 1. Locate TB-10 between Sta 194 and 201 RHS.
 - Remove 6 ea. 330 ohm resistors, noting terminal location, and replace with 6 ea. 150 ohm, 2 watt resistors.
 - 3. Locate TB-11 between Sta 194 and 201 LHS.
 - Remove 6 ea. 330 ohm resistors, noting terminal location and replace with 6 ea. 150 ohm, 2 watt resistors.
 - 5. Check for proper operation of stereo in headphones.
 - 6. Reassemble aircraft and return to service.
- C. Reference WDM Chapter 23-50-05 and follow below listed procedures for the removal and replacement of headphone resistors.
 - 1. Locate TB-10 between Sta 194 and 201 RHS.
 - Remove 6 ea. resistors, 150 ohms ¼ watt or 150 ohms ½ watt, noting terminal location, and replace with 6 ea. 150 ohm 2 watt resistors.
 - 3. Locate TB-11 between Sta 194 and 201 LHS.
 - 4. Remove 6 ea. resistors, 150 ohms ½ watt or 150 ohms ½ watt, noting terminal location, and replace with 6 ea. 150 ohms 2 watt resistors.
 - 5. Check for proper operation of stereo in headphones.
 - 6. Reassemble aircraft and return to service.

- D. Reference WDM Chapters 23-30-01 and/or 23-50-05. Follow procedures listed below for the removal and replacement of resistors.
 - Locate 8 ohm impedance matching resistors for speakers (B-380 and B-381). Resistors may be located at speaker or at speaker/phone selector switch.
 - 2. Remove resistors and replace with 7.5 ohm 10 watt axial lead resistors, Ohmite Type 40F or equivalent.
 - 3. Check stereo for proper operation.
 - 4. Reassemble aircraft and return to service.
- 3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION	OLD P/N
A/R	Narco MP-20	Power Converter	Terra C-28-5/ Great Western
A/R	Ohmite Type 40F (or equivalent)	Resistor 7.5 ohms 10W	
A/R	327654	Terminal, Ring Tongue (Mfg. AMP)	
A/R	RC42GF150K (or equivalent)	Resistor 150 ohms 2W	
A/R	320559	Butt Connections (Mfg. AMP)	
A/R	320562	Butt Connections (Mfg. AMP)	
A/R	30F175	In-Line Fuseholder (Mfg. Buss)	

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-23-051, dated titled "Communication - Stereo System Improvements" has been accomplished this date
- B. Update Wiring Diagram Manual, Chapters 23-30-01 and 23-50-05 as required to reflect wiring changes performed.



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-052

January 31, 1986

SUBJECT: NAVIGATION - GLIDESLOPE RAW DATA SCALLOPING

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwinds, all serial numbers except 437 and 439.

B. REASON

To eliminate the raw data scalloping that exists when the Main Landing Gear (MLG) is extended due to signal reflection off the nose gear strut forward door.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Two couplers are added to enable NAV and glideslope receivers to use the same VOR antenna.

E. APPROVAL

This service bulletin has been reviewed by the Israel Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required to perform this service bulletin may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or procured locally.

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G. TOOLING

None required.

- H. WEIGHT AND BALANCE Not affected.
- I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 34-50-01 and 34-50-03.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters 34-50-01 and 34-50-03.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Utilizing the Wiring Diagram Manual (Chapters 34-50-01 and 34-50-03), perform antenna lead changes as described below:
 - Locate and gain access to antenna cable connectors D-13, D-14 (NAV 1 and 2) and D-52 (glideslope).
 - (2) Disconnect cable #1RN28A from connector D-13P. Replace cable connector end (TNC) with a crimp-style BNC connector.
 - (3) Disconnect cable #2RN284 from connector D-14P. Replace cable connector end (TNC) with a crimp-style BNC connector.
 - (4) Disconnect cables #1RN29A and #2RN29A from existing G/S coupler DMH-24-1 or coaxial "T" (D-56P and D-53P respectively). Replace cable connector ends (TNC) with crimp-style BNC connectors. Remove and discard coupler, either "T" or DMH-24-1 as appropriate.
 - (5) Find suitable location (near cables disconnected in steps (2), (3) and (4) above) to mount 2 each diplexers P/N DMH22-1. Label diplexers #1 and #2 for identification purposes. Diplexers may be stacked for ease of mounting by use of a 1 1/4 inch aluminum standoff, drilled for clearance of mounting screws. Clean and polish mounting areas to ensure a positive ground.

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- (A) S/N 240 and subsequent: Locate new couplers near existing "T" connectors at Fuselage STA Y=250.00, Z=75. A bracket may be manufactured (using 2024-73 Alclad, .063 thick) to mount on existing angles, located between STA 250.0 and 241.05.
- (B) S/N 349, 375, 376, 377, 379 and subsequent will find the existing DMH-24-1 glideslope coupler mounted on an existing bracket at location described in 5(A) above.

NOTE

Do not mount new couplers directly to fuselage bulkheads or stringers.

- (6) Connect cable #1RN28A to "VOR OUT" of diplexer #1. Connect cable #1RN29A to "G/S OUT" of diplexer #1.
- (7) Connect cable #2RN28A to "VOR OUT" of diplexer #2. Connect cable #2RN29A to "G/S OUT" of diplexer #2.
- (8) Fabricate 2 each cables (RG-58) with one TNC male connector on one end and one BNC male connector on opposite end (each cable). Cable lengths to be sufficient to reach from diplexers to respective disconnects noted in steps (2) and (3) above. Label cables #1RN28C and #2RN28C.
- (9) Connect cable #1RN28C from D-13J to "ANT IN" of diplexer #1. Connect cable #2RN28C from D-14J to "ANT IN" of diplexer #2.
- (10) Perform operational check of NAV1 and NAV2 systems to ensure proper reception of VOR and glideslope signals.
- (11) Reassemble and return aircraft to service.

3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION
2	DMH22-1 (or equivalent)	Coupler (Dorne-Margolin)
2	225345-2 (or equivalent)	TNC-type male connector (Mfg AMP)
6	31-351 (or equivalent)	BNC-type male connector Mfg Amplenol)
A/R	RG-58A	50 Ohm shielded coax

4. RECORD COMPLIANCE

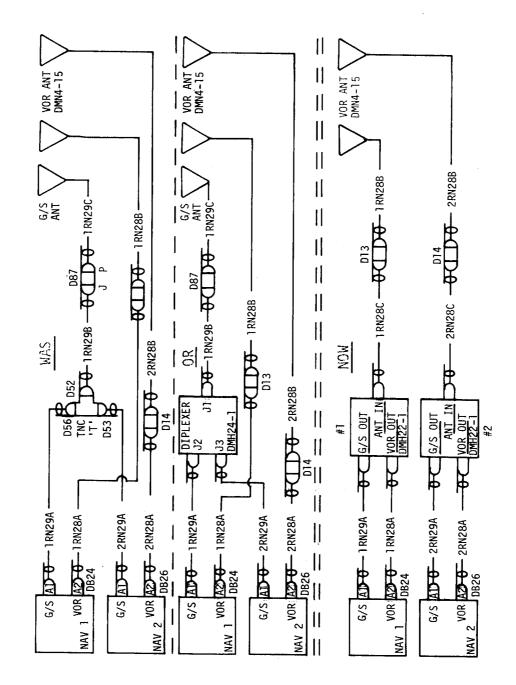
A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-052 dated January 31, 1986 titled "Navigation - Glideslope Raw Data Scalloping " complied with this date

B. Revise Wiring Diagram Manual, Chapters 34-50-01 and 34-50-03 to reflect wiring changes.

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OPTIONAL

SERVICE BULLETIN 1124-34-053

December 2, 1985

SUBJECT: NAVIGATION - COMPASS AND ADF/RMI SYSTEM IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers

B. REASON

To eliminate ground loops in the respective synchro systems causing operational and display errors. For a more complete description, refer to Parts B, C and E of Accomplishment Instructions.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Additional ground wires are installed at terminal strips. An advisory is given prior to each part to caution maintenance and inspection personnel of hidden problems and the necessary correction action to be taken should these problems occur.

E. APPROVAL

This service bulletin has been reviewed by Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and are ICAA approved.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

The material necessary to perform this service bulletin may be procured locally.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters:

34-20-01	34-20-04
34-20-02	34-50-08
34-20-03	34-50-09

1124 Maintenance Manual, Chapters:

34-20-01 34-50-03

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters:

34-20-02	34-50-08
34-20-04	34-50-09

2. ACCOMPLISHMENT INSTRUCTIONS

PART A - Preparation: Compass System #1 and #2

A. Accomplishment of Part B and/or Part C following may result in compass heading errors in the HSI or RMI cards, or both. Prior to accomplishment, position the aircraft to a quadrantal magnetic heading (45°, 135°, 225° or 315°) and record the exact heading displayed by each HSI and RMI.

A separation of the two compass systems may be considered normal when not in flight due to the proximity of large magnetic fields of unequal value near the wing-mounted flux valve transmitters.

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B. Since the pilot HSI and copilot RMI are interconnected to the #l compass system, they must agree within + 2°. The copilot HSI and pilot RMI are interconnected to the #2 compass and must likewise agree.

An error greater than $\pm 2^{\circ}$ between instruments on the same compass may be due to instrument error, or the "ground loops" addressed by Part B and Part C following.

- C. Prior to installing the described ground jumpers connect them temporarily to observe the effect, if any, on the previously recorded headings.
 - (1) Should the RMI system jumpers create an error larger than ± 2° as compared to the HSI (without accompanying HSI displacement), do not install that particular jumper as there will have been an additional ground loop created for your aircraft configuration.
 - (2) Should the HSI card jumpers create an error in excess of the ability of the compass system compensation to correct (approximately ± 10°), do not install that particular jumper.
- D. Reswing compass system(s) if required to restore the accuracy of each system to within the required $\pm 2^{\circ}$.
 - (1) Once the flux valve and compensator are properly set, use only brass screws to mount the components and the covering access panels to prevent probable magnetic interference from ferrous screws.

PART B - Compass #1: Reference Wiring Diagram Manual, Chapters 34-20-01 and 34-20-03.

- A. To minimize NCS-31 ground speed and/or VLF wind computation errors, RNS-300 heading reference line noise, and to partially correct AP105/APS80 autopilot heading mode and heading hold submode roll wallow; add a six-inch hard ground to:
 - (1) S/N 240 and subsequent, terminal strip T155-18 (HSI, RMI, NCS, VLF and Autopilot).
 - (2) S/N 239 and prior, terminal strip T38-16 (HSI, NCS) and T17-11 (RMI and Autopilot).

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- PART C Compass #2: Reference Wiring Diagram Manual, Chapters 34-20-02 and 34-20-04.
- A. To correct improper system ground returns, remove VIR-30A #2 NAV and establish aircraft power. Both RMI/ HSI card systems must remain operational. If correction is required, install hard grounds at:
 - (1) S/N 240 and subsequent, T301-1 and T301-2.
 - (2) S/N 239 and prior, T51-1 and T51-2.
- B. To minimize VLF wind compensation errors (where #2 compass drives VLF #1 and/or #2) and to partially correct AP105 autopilot heading mode and heading hold submode roll wallow (aircraft equipped with #2 FCS 105 flight director), add a hard ground to:
 - (1) S/N 240 and subsequent, T33-8.
 - (2) S/N 239 and prior, T15-6 or T15-8 as applicable.

PART D - Preparation: ADF (RMI Systems #1 and #2).

- A. Accomplishment of Part E following may result in a change of ADF display quadrantal error accuracy. Such change may increase or decrease accuracy depending upon initial ADF Quadrantal Error Correction installed in the aircraft and the aircraft wiring configuration. Prior to accomplishment, tune the ADF(s) to a strong local station (preferably in the 200 KHz to 400 KHz range) and orient the aircraft to establish an ADF bearing in any of the four quadrants relative to the nose of the aircraft (45°, 135°, 225° or 315° relative). Select all possible ADF bearing displays on each RMI and HSI and record the exact bearings.
- B. Any change noted upon installation of the following ground straps will require a minimum of a ground-based Quadrantal Error check; a flight test is recommended. Please refer to Attachment 1 for the Collins ADF-60 QEC procedures. The same procedure may be used for the earlier DF206 systems.
 - (1) Attachment 1 contains strapping requirements for revision of the ADF-60 system QEC.
 - (2) Attachment 2 reflects the alternative 582A-(X) QEC modules for the DF-206 systems. Should a revision to existing QEC be required, it will be necessary to replace this module.

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December 2, 1985

- C. Determine the amount of additional QEC necessary by noting the actual versus the required ADF RMI/HSI bearings exactly at each 45° quadrant relative to the nose of the aircraft.
 - (1) For ADF-60 systems, determine the QEC value of existing strapping in the aircraft and remove the straps from the ADF rack connectors. Compute new QEC requirement by determining the difference between the additional QEC needed with the original QEC strapping value. Example:

RMI BRNG 50°, required BRNG $45^\circ = -5^\circ$ (toward nose). Existing strapping + 14°, net QEC required + 14° - 5° = 9°. Use the 8° strapping requirements to obtain the required \pm 3° accuracy.

- (2) For DF-206 systems, determine by reference to Attachment 2 the QEC value of the existing 582A-(X) module mounted at the 137A6A loop antenna. Compute new QEC requirement by determining the difference between the additional QEC needed with the value of the original 582A-(X). See example above. Replace the original 582A-(X) module as needed.
- PART E ADF Systems: Reference Wiring Diagram Manual, Chapters 34-50-08 and 34-50-09.
- A. To eliminate ADF display wandering and the possibility of a loss of needle reversal at cardinal bearings, especially with all possible ADF displays selected.
 - (1) ADF #1 system, add a six-inch hard ground to:
 - (a) S/N 240 and subsequent, terminal strip T31-14.
 - (b) S/N 239 and prior, terminal strip T16-13 and T16-14.
 - (2) ADF #2 system (including provisions), add a six-inch hard ground to:
 - (a) S/N 240 and subsequent, terminal strip T9-3 and T9-6.
 - (b) S/N 239 and prior, terminal strip T15-13 and T15-14.
- B. Perform a Quadrantal Error test, revise QEC as outlined in Part D.

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3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#22AWG Wire
A/R A/R	50534	Ring terminal
		(Mfg. AMP)
A/R	320554	Ring terminal
		(Mfg. AMP)

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-34-053 dated December 2, 1985 titled "Navigation - Compass and ADF/RMI System Improvements" has been accomplished this date_____

- B. Revise appropriate Wiring Diagram Manual chapters to reflect the work performed by this service bulletin.
- C. Upon compliance with PART D and/or PART E of this service bulletin, cancel Service Information Letter No. 6 dated June 12, 1981.

The following text is excerpted from the Collins ADF-60 Installation Manual.

2.5 POSTINSTALLATION TESTS

These tests are to be performed with the ADF-60 system and associated equipment installed in the air-craft.

Note

Avoid testing the ADF-60 system in the hangar or close to any large metal objects that could induce magnetic interference.

2.5.1 Functional Test

- a. Apply primary power to the ADF-60 system.
- b. Position mode select switch to ANT. Observe that panel and dial lamps are lit.
- c. With aircraft audio system being driven by the ADF-60() Receiver, check that signals can be received on the following bands:

190 - 279.5 kHz	600 - 899.5 kHz
280 - 399.5 kHz	900 - 1399.5 kHz
400 - 599.5 kHz	$1400 - 1749.5 \mathrm{kHz}$

- d. Position mode select switch to ADF. Observe that panel and dial lamps remain lit.
- e. Tune the receiver to several stations, observing that the bearing indicator indicates a bearing suitable for the station received.
- f. With the receiver tuned to a station frequency, note the bearing indication as reference. Activate the self-test circuit. Pointer should rotate 90 degrees from reference and return to reference when self-test switch is released.



When the ADF-60 system receives an unusable signal, the RMI indicator will "park" horizontally.

g. Start the aircraft engines, if not already running, and other equipment likely to cause electrical interference (rotating beacons, flashing wingtip lights, deicing pumps). Repeat steps a through f, checking that ADF-60 system operation is not impaired by static and noise overriding signals. If operation of the ADF-60 system is impaired by other aircraft equipment, the source of these spurious signals must be shielded and bonded.

2.5.1.1. HF Disable Check (Customer Option)



This check is applicable only to ADF-60A with Service Bulletin 6 installed and ADF-

60B with Service Bulletin 5 installed if the hf disable option is incorporated into the interconnecting wiring.

- a. Start the aircraft engines if not already running.
- b. Position the ADF system mode select switch to ADF and tune the receiver to a nearby station that provides a good indication on the bearing indicator.
- c. Select the hf COMM system on the audio control panel and select a clear frequency on the hf COMM system.
- d. Start turning the aircraft and note that the bearing indicator continues to point to the tuned station.
- e. Continue turning the aircraft and key the hf COMM system. Note that the bearing indicator 'freezes' as the compass card continues to rotate.
- f. Unkey the hf COMM and note that the bearing indicator slews and again points to the tuned station.
- g. This completes the hf disable check.

2.5.2 Quadrantal Error Calibration

Two methods of quadrantal error calibration are described in the following paragraphs. One method is performed with the ADF-60 system installed and the airplane on the ground. Basically this is accomplished by turning the airplane to a series of predetermined headings relative to a suitable ground station and recording the indicated bearings to the station. From this information, the quadrantal error correction can be computed. The location chosen for this method should be clear of buildings, overhead or underground conductors, and other possible reflecting objects. For maximum accuracy, calibration should be done using a frequency between 200 and 400 kHz.

Note

A ground calibration should always be confirmed by a flight check.

The other method consists of collecting the calibration data during flight and then computing the adjustment that is needed. The following precautions should be taken when performing the calibration procedures:

- a. Do not attempt calibration during the period from 2 hours before sunset to 2 hours after sunrise. At this time skywaves from distant stations may induce errors.
- b. During flight, take the readings only when the aircraft is in level flight. Make all turns as smooth as possible to avoid disturbing the directional gyro.

c. Perform the flight check on a calm day to minimize drift and heading errors.

2.5.2.1 Airborne Calibration

Airborne measurement of quadrantal error requires that the aircraft fly over a fixed point at least 16.1 km (10 miles) from a low-frequency radio station while holding a fixed heading. The most convenient fixed point is an omnirange station. This is because omnirange stations are easily located from the air and their angular position with respect to a lowfrequency radio station is available from the radio navigation charts. The selected radio station should be transmitting on a frequency of 200 to 400 kHz, and the surrounding terrain should be flat. Choose a combination of an omnirange and radio station already known to give accurate ADF measurements, if such are available.

Accurate measurements cannot be made unless the aircraft is in level flight attitude. If possible, the calibration should be performed on a calm day to minimize drift and crab-angle problems.

Note

ADF measurements can be no more accurate than the magnetic portion of the radio magnetic indicator. A magnetic accuracy of 1 degree is required for highquality measurements.

The relative bearings to the station for which measurements should be made are given in figure 2-34, column 1. Construct a table as shown in figure 2-34 using the bearings in column 1 but leaving the other columns blank. The figures of column 1 are relative bearings that are applicable to all cases. Use of these bearings is recommended since they are convenient and adequate, but others may be selected if desired.

The other columns represent typical sample values for a particular situation and will be different in each aircraft. Column 2, AIRCRAFT MAGNETIC HEADING, should be calculated prior to the flight and list magnetic headings that should be flown over the calibration point. The bearings of column 2 are obtained by subtracting RELATIVE BEARING TO THE STATION (column 1) from the calibration point to station bearing, which should be obtained from a map. When RELATIVE BEARING TO THE STATION is larger than AIRCRAFT MAGNETIC HEADING, add 360 degrees to AIRCRAFT MAGNETIC HEADING before subtracting. Column 3, figure 2-34, data is taken during the flight. Column 4 is calculated after the flight.

- a. Estimate amount of quadrantal error correction (QEC) required for the installation under test. If previous QEC information is unknown, assume a required QEC (refer to paragraph 2.1.4). Refer to figure 2-38 and strap proper receiver mating connector contacts to obtain estimated QEC.
- b. Fly to the vicinity of the omnirange station or fixed point selected. Position control mode select switch to ADF, and tune the ADF-60() to the selected radio station.
- c. Fly over omnirange station (or fixed point) with first aircraft magnetic heading listed in figure 2-34. At the moment aircraft is directly over omnirange station (or fixed point), record indicated magnetic bearing to the station (the bearing on the compass card indicated by the ADF pointer).
- d. Continue to fly straight for a short time; then make a broad turn and fly over omnirange station (or fixed point) with another aircraft magnetic heading. Again, record indicated magnetic bearing to station when directly over the reference point.
- e. Repeat step d for each remaining aircraft magnetic heading. The test pattern should be flown with alternate left and right turns to prevent excessive precession of the gyros. The flight pattern of an aircraft performing this is shown in figure 2-35.
- f. Subtract each INDICATED RADIO MAGNETIC BEARING from AIRCRAFT MAGNETIC HEADING (from the omnistation). Enter results in NET QUADRANTAL ERROR CORRECTION column. Figure 2-34 shows positive NET QEC needed in first quadrant, but the correction may be negative.
- g. Plot a graph of NET QEC against relative bearing to station. Figure 2-36 shows a sample graph using the data from figure 2-34.
- h. Critically examine QEC curve to see if it is reasonably regular and symmetrical. If it is not, check antenna location for aerials, projections near the antenna, and large openings in the fuselage (doors) which could cause irregularities in the rf field. If irregularities cannot be accounted for, repeat calibration using a different station and frequency. If second calibration produces a differently shaped curve, then the installation is questionable and the cause must be sought and eliminated.

Note

If the curve begins to the left or right of the vertical NET QEC axis, the ANT-60() Antenna is not aligned with the aircraft fore-to-aft axis. If the curve is centered above or below the horizontal relative bearing axis, the ANT-60() Antenna is not

(1) RELATIVE BEARING TO THE STATION (SELECTED BEFORE CALIBRATION) (degrees)	(2) AIRCRAFT MAGNETIC HEADING (MAGNETIC BEARING TO STATION FROM CALIBRATION POINT) MINUS (COLUMN 1) (degrees)	(3) INDICATED RADIO MAGNETIC BEARING (READ FROM COMPASS CARD BENEATH ADF POINTER) (degrees)	(4) NET QUADRANTAL ERROR CORRECTION *(MAGNETIC BEARING TO STATION FROM CALIBRATION POINT) MINUS (COLUMN 3) (degrees)
0	*71	71	0
30	41	65	+6
45	26	64	+7
60	11	65	+6
90	341	71	0
120	311	77	-6
135	296	78	-7
150	281	77	-6
180	251	71	0
210	221	65	+6
225	206	64	+7
240	191	65	+6
270	161	71	0
300	131	77	-6
315	116	78	-7
330	101	77	-6
*Magnetic bearing to station from calibration point is 71 degrees.			

Sample Quadrantal Error Table (Airborne Calibration) Figure 2-34

aligned with respect to the aircraft fuselage. Refer to figure 2-37.

Any misalignment should be corrected or a noncorrectable residual error will remain after calibration.

i. Examine the peak values of the QEC curve to determine the amount of quadrantal error correction needed. If the quadrantal error correction curve is positive at relative bearings of 0 to 90 degrees, a greater amount of correction is needed. If the curve is negative at relative bearings of 0 to 90 degrees, the system has too much correction. Referring to figure 2-36, the peak value of QEC is 7°. This is the required NET QEC of the ADF-60 system as installed in the aircraft.

Note

A positive QEC will move the indicated bearing toward the wings. A negative correction moves the indicated bearing toward the foreto-aft axis of the aircraft.

I

j. If the result of the test (from preceding step i) is within 3 degrees of the estimated QEC (from step a), then the system is correctly adjusted. If the results differ by more than 3 degrees, remove the strapping on the rear connector. Refer to figure 2-38 and restrap the mating connector contacts to either increase or decrease the original estimate by the amount of QEC indicated by the flight test. (Total QEC equals initial strapping plus derived QEC.)

For sample error correction curve, figure 2-36, an additional 7 degrees of QEC are required. For an initial strapping of 10 degrees, the total required QEC is 17 degrees. Jumper wire connecting 4-8, 12-20 would be removed and 4-16 should be strapped (from figure 2-38).

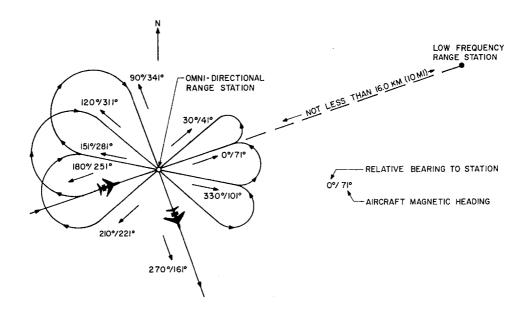
Note

Remember to remove jumpers from previously strapped receiver mating connector contacts prior to strapping to obtain total required QEC (preset QEC plus measured QEC). If total QEC does not correspond with any entry in figure 2-38, strap to within 3 degrees.

2.5.2.2 Ground Calibration

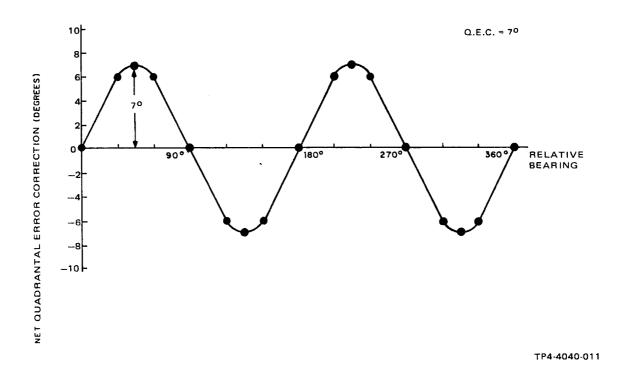
Calibration may be performed on the ground using a radio signal transmitted from a known geographic location and turning the aircraft to different relative bearings. The bearing to the selected radio station relative to the heading of the aircraft must be accurately established. That angle may be determined using the aircraft compass system (if accurately calibrated) or by using a transit or pelorus sighted on a fixed object. The station selected should provide a strong, clear-channel signal and provide good nonfluctuating bearing indications. A flight check of the ground calibration should be made using the procedures in paragraph 2.5.2.1. Perform the ground calibration as follows:

- a. Locate the aircraft in an area that is clear of buildings, overhead wires, or other possible reflecting objects.
- b. Channel the ADF-60 system to ADF mode and turn the compass system on. Tune in the selected radio station (200 to 400 kHz) and point the aircraft directly toward the station.
- c. Read and record the AIRCRAFT MAGNETIC HEADING and INDICATED RADIO MAGNETIC BEARING in a table similar to figure 2-34.
- d. Turn the aircraft 30 degrees to the left and record the AIRCRAFT MAGNETIC HEADING and INDICATED RADIO MAGNETIC BEARING.
- e. Continue this procedure by turning the aircraft to the left and recording data from each relative bearing listed in column 1 of figure 2-34.
- f. Determine the NET QEC required and adjust the QEC according to the instructions given in paragraphs 2.5.2.1, steps f through j.



TP5-2132-019

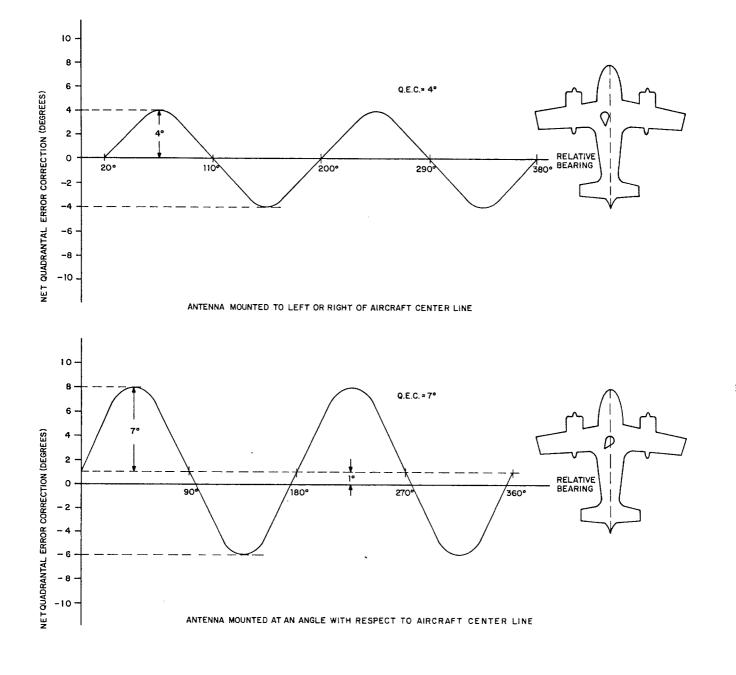
ADF-60 System, Calibration Pattern Figure 2-35



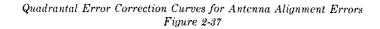
Sample Quadrantal Error Correction Curve Figure 2-36

Attachment 1 Service Bulletin No. 1124-34-053 2-51

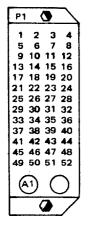
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TP4-4041-014



(3) TOTAL Q.E.C. (DEGREES)	1 STRAPPED RECEIVER TERMINALS
19	4-20
17	4-16
14	4-12, 1620
12	4-12
10	48, 1220
8	4-8, 12-16
7	48, 1620
5	48
4	8–20
3	8-16
1	8-12, 16-20
o	8-12
-1	1220
-3	16-20
4	NO JUMPERS



ADF-60 () RECEIVER REAR CONNECTOR NOTE:

- () STRAP MOUNT CONNECTOR CONTACTS TO ACHIEVE REQUIRED Q.E.C..
- KEEP JUMPER WIRES LESS THAN 127 MM (5 INCHES) IN LENGTH.
- INCREASING Q.E.C. MOVES THE INDICATED BEARING TOWARD THE WINGS.

TP4-4042-011

Quadrantal Error Adjustment Figure 2-38

ATTACHMENT 2 (SB 1124-34-053)

DF-206 QUADRANTAL ERROR CORRECTION

Correction Module Model 582A-()	QEC Value	*QEC Value with 137A6A Antenna	Collins Part No. 522-XXXX-004
-10N	-10	+ 6	-3181-
- 8N	- 8	+ 8	-3180-
- 6N	- 6	+10	-3179-
- 4N	- 4	+12	-3178-
- 2N	- 2	+14	-3177-
- 0	0	+16	-3176-
- 2	+ 2	+18	-2736-
- 4	+ 4	+20	-2737-
- 6	+ 6	+22	-2738-
- 8	+ 8	+24	-2739-
-10	+10	+26	-2740-
-12	+12	+28	-2741-
-14	+14	+30	-2742-
-16	+16	+32	-2743-
-18	+18	+33	-2744-

*317A6A Loop Antenna contains +16° QEC built in.

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-24-054 Revision No. 1 January 10, 1986

SUBJECT: ELECTRICAL POWER - FUEL QUANTITY AND ITT GAUGES TO PRIORITY BUS

REASON FOR REVISION:

To change aircraft effectivity under paragraph 1. Planning Information.

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 428 except 413, 416, 418, 421, 423 and 426.

INTERNATIONAL INC.

SB 1124-24-054 Page 1 of 1

SUBSIDIARY OF ISFIAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL



OPTIONAL

SERVICE BULLETIN NO. 1124-24-054

December 2, 1985

- SUBJECT: ELECTRICAL POWER FUEL QUANTITY AND ITT GAUGES TO PRIORITY BUS
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers prior to 428 except 416, 417, 418, 421, 423 and 426.

B. REASON

To allow operator to monitor ITT during opposite engine start and to alleviate fuel status system errors caused by loss of #1 distribution bus during right engine start.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Bus ties are removed from three circuit breakers and new bus ties are fabricated and installed on those breakers, moving them to the priority bus.

E. APPROVAL

å.

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation regulations and is ICAA approved.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company or may be purchased locally.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

- I. ELECTRICAL LOAD DATA
 - (1) No change to electrical load.
 - (2) Revision of aircraft load analysis to reflect bus tie changes and recomputation of respective bus loads will be required.
- J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters:

24-50-01 28-40-01 77-00-01 Service Bulletin No. 1124-24-008.

K. PUBLICATIONS AFFECTED

- (1) 1124/1124A Wiring Diagram Manual, Chapters: 24-50-01 28-40-01 77-00-01
- (2) 1124/1124A AIRCRAFT FLIGHT MANUAL
 - (a) Reference AFC 2041.

2. ACCOMPLISHMENT INSTRUCTIONS

Reference WDM, Chapters 24-50-01, 28-40-01 and 77-00-01 in the accomplishment of this modification.

NOTE

Westwind Service Bulletin No. 1124-24-008 titled "Installation of Larger Capacity Priority Bus Diodes and Elimination of Ground Pressure Bumps" must be accomplished prior to, or in conjunction with, this modification.

- (1) Remove all power from A/C.
- (2) Disconnect batteries.
- (3) Lower forward overhead C/B panel.
- (4) Identify LH and RH ITT and Fuel Quantity Indicator circuit breakers. Remove and isolate the distribution bus ties from these circuit breakers.
 - (a) Fuel Quantity Indicator and LH ITT are on #1 Dist. Bus.
 - (b) RH ITT is on #2 Dist. Bus.

NOTE

- Single bus ties must be properly insulated and stowed.
- (2) Two or more bus ties on one breaker must be spliced together, the splice and bus ties properly insulated and stowed clear of breaker terminals and adjacent bus ties.
- (5) Fabricate bus tie leads from #18 AWG wire, connect Fuel Quantity Indicator and ITT (LH and RH) breakers to the priority bus.
 - (a) The priority bus may be identified by the junction of the priority bus diode cathodes (banded end) and/or the bus input of the Fuel Status circuit breaker.

December 2, 1985

- (6) Ensure that the new bus tie leads are secured into bundles and adequate clearance from other circuit breakers is met. Check for proper clearance of cable bundles when closing the circuit breaker panel.
- (7) Secure the forward overhead circuit breaker panel in place.
- (8) Perform operational check as follows:
 - (a) Reconnect batteries.
 - (b) Apply power to aircraft.
 - (c) Pull circuit breakers for #1 and #2
 Distribution bus.
 - Note that normal readings are present on Fuel Quantity Indicators and OAT on ITT gauges.
- (9) Recompute Electrical Load Data as follows:
 - (a) Removed from #1 Distribution Bus: .98A (.8A for 2 each F.Q. Ind. and .18A for 1 each ITT Ind.).
 - (b) Removed from #2 Distribution Bus: .18A (for left ITT Ind.).
 - (c) Added to Priority Bus: 1.16A.
 - (d) Added to each distribution bus as 1/2 priority bus: .580A.
- (10) Return aircraft to service.

3. MATERIAL INFORMATION

QTY	NEW PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#18 AWG wire
A/R	320554	Terminal ring tongue (Mfg. AMP)

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

•

Service Bulletin No. 1124-24-054 dated December 2, 1985 titled "Electrical Power - Fuel Quantity and ITT Gauges to Priority Bus" has been accomplished this date

B. Revise Wiring Diagram Manual, Chapters 24-50-01, 28-40-01 and 77-00-01, and correct the Electrical Load Analysis to reflect changes incorporated by this service bulletin.

> SB 1124-24-054 Page 5 of 5



RECOMMENDED

SERVICE BULLETIN NO. 1124-34-055

January 22, 1986

SUBJECT: NAVIGATION - FMS-90/LRN-85 IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY:
 - (1) Accomplishment Instructions Part A: Model 1124A serial numbers 295 through 352.
 - (2) Accomplishment Instructions Part B: Model 1124A serial numbers 392 through 442 except 424 and EFIS equipped aircraft.
 - (3) Accomplishment Instructions Part C: Model 1124A serial numbers 353 through 390.
 - (4) Accomplishment Instructions Part D: Model 1124A serial numbers 295 through 442. Model 1124 all serial numbers prior to 426 with LRN-85 installed as #1 system.
 - (5) Accomplishment Instructions Part E: Models 1124 and 1124A prior to 426 with LRN-85 installed as #2 VLF/NAV system.
 - (6) Accomplishment Instructions Part F: Model 1124A serial numbers 295 through 372. Model 1124 serial numbers 284 through 423 with LRN-85 as #1 system installed.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

B. REASON

- (1) Accomplishment Instructions Part A: To illuminate FMS "WARN" Annunciator for condition of "VLF" in Approach mode", only when FMS-90 is coupled to the Flight Director and an incompatible mode of operation is selected, while retaining all other FMS "WARN" conditions. This modification eliminates an FMS "WARN" Annunciator except where operationally required.
- (2) Accomplishment Instructions Part B: To correct a wiring error disabling composite steering to flight computer that will create improper flight director tracking of the VLF course, especially after leg changes.
- (3) Accomplishment Instructions Part C: To correct wiring error of VOR #1 flag into FMS-90 to prevent improper V/D mode operation when in "RPT NAV(V/L)#2" on pilots HSI.
- (4) Accomplishment Instructions Part D and E: To modify the shield ground connections of the antenna signal lines for the FMS-90/LRN-85 VLF Systems to improve reception.
- (5) Accomplishment Instructions Part F: To place the Radio Tune Unit (FMS-90 only) and the CRU/CDU on the same ground plane to prevent data lockup due to ground loop noises.

C. COMPLIANCE

Compliance with Parts B and C of this service bulletin is recommended, other Parts A, D, E and F are optional.

D. DESCRIPTION

- Accomplishment Instructions Part A: 4 wires are added in aft avionics bay between existing relays and terminal strips.
- (2) Accomplishment Instructions Part B: One wire is removed from one terminal of T-16 and relocated to adjacent terminal.
- (3) Accomplishment Instructions Part C: One wire removed from T-17 and rerouted to T-7.

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- (4) Accomplishment Instructions Parts D and E: Previously capped and stowed wires are put back in use and shields are grounded at the CRU.
- (5) Accomplishment Instructions Part F: A ground wire is added between the Radio Tune Unit (FMS-90 only), the Computer Display Unit and airframe ground.
- E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required for this service bulletin can be obtained through Atlantic Aviation or procured locally.

G. TOOLING

None

H. WEIGHT AND BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not affected

J. REFERENCES

Model 1124 Westwind Wiring Diagram Manual, Chapters 34-60-01, 34-60-03 and 34-50-02.

K. PUBLICATIONS AFFECTED

Model 1124 Westwind Wiring Diagram Manual, Chapters 34-60-01, 34-60-03 and 34-50-02.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Reference WDM Chapter 34-60-01 and revise wiring as follows:
 - Add two new #22AWG wires, one from RL85A pin 33 to area of FGC #2 plugs and one wire from RL-85A pin 36 to area of RL-84.

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- (2) Remove wire TR-201C from terminal strip T16-2, splice and connect to RL-84B pin 20 with new wire from RL-85A pin 36.
- (3) Add a new #22AWG wire from T16-2 and connect to RL-84B pin 17.
- (4) Splice the new wire from RL-85A pin 33 with existing wire #2C349B24 to FGC #2 plug J-3 pin 13.
- (5) Perform functional test of Flight Director and FMS-90 System. It will be necessary to cancel any existing FMS-90 "WARN" alert prior to these steps:
 - (a) FMS "VLF/VD" switch in VLF position
 - (b) FMS selected on HSI
 - (c) Select APPR mode on the Flight Director control.

Starting with no "WARN" light, the above steps will turn "WARN" on. Selecting "VD" on FMS or deselecting "APPR" will cancel "WARN" light.

- B. Reference WDM Chapters 34-60-01 and 34-50-02. Revise wiring as follows:
 - (1) Remove wire #TR198D22 from T-16 terminal #7 and relocate to terminal #6 with wire #TR198C22 (in place).
 - (2) Verify proper operation of Composite Steering using the following procedures:
 - (A) Select FMS on pilot and/or co-pilot HSI.
 - (B) Place FMS-90 in Simulated Navigation mode as follows:
 - (1) Mode-switch in TEST position.
 - (2) Key in code 1015 (PSW in alphanumeric register).
 - (3) Key in code 1003 (SIM in alphanumeric register).
 - (4) Key in code 1015 (PSW in alphanumeric register).
 - (5) Key in code 1016 (STR in alphanumeric register).
 - (C) Verify valid HDG in NAV mode of operation. Manually enter TAS (350 kts) and GS (300 kts).
 - (D) Couple FMS to Flight Director System, using "NAV" mode.

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- (E) Key in parallel track of L7.5 miles. Flight Director will indicate left turn.
- (F) Key in parallel track of R 7.5 miles. Flight Director will indicate right turn.
- C. Reference WDM Chapters 34-60-01 and 34-50-02. Revise wiring as follows:
 - (1) Remove wire #TR185C22 from T-17 terminal #20 and relocate to T-7 terminal #5. Do not disturb other wire segments attached to these terminals.
 - (2) Verify proper operation of FMS coupled to pilot and co-pilot HSI.
- D. Reference WDM Chapter 34-60-01 and Figure 1 attached. Perform the following wire changes.
 - (1) Locate and gain access to the FMS-90/LRN-85 Computer Receiver Unit #1 plug DB-136C and make the following changes:
 - (a) Locate wire #TR163A (FMS-90 on Westwind II Aircraft) or #TR139A (LRN-85 a/c 386 Westwind I) or #TR137 (LRN-85 on Westwind I except s/n 386). Insert this wire in pin 'F' of DB-136C.
 - (b) Locate shield of wire in step (a) above and ensure it connects to pin "P" of DB-136C.

NOTE

In steps (a) and (b) above, these must be the only connections to pins 'F' and 'P' of DB-136C.

- (c) Locate shield of wires inserted in pins 'A" and 'B' of DB-136C and insert shield connection in pin 'N' of DB-136C. There must be no other connections to this shield or pin.
- (d) Reconnect DB-136C to CRU.
- (2) Make accessible connector to Antenna Coupler Unit plug DB-134A.

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- (A) Locate wire segment inserted in pin 'F' of DB-136C (step (1)(a) above) and insert opposite end in pin 'C' of DB-134A. Refer to Figure 1. No other connections to pin 'C' of DB-134A.
- (B) Isolate and insulate shields of wire segments to pins 'A', 'D', and 'B', 'C' of DB-134A. Shields are not connected to ground at this end, or to each other.
- (C) Ground Bonding Strap Installation: (Effective all aircraft serial numbers prior to 433).

Remove antenna and coupler. Polish and Iridite $(P/N \ 14-2)$ all unit and airframe ground attach points. Refer Figure 2, locate existing angle $P/N \ 5873606-21$, drill .190-194 diameter hole in angle to form a ground stud.

- (1) Install a 1/2" bond strap P/N 5873606-23 as shown in Figure 2 between ACU mounting bolt and angle new ground stud using AN3-4A bolt, 3 each AN960KD10L Washers, MS35338-43 spring washer and MS21042-3 nut.
- (2) Reinstall VLF antenna, assuring new screw head and antenna are properly sealed with PR-1422 sealant or equivalent.
- (3) Reinstall ACU.
- (D) Check VLF for proper VLF/OMEGA signal acquisition.
- E. Reference WDM Chapter 34-60-03 and Figure 1 attached. Perform the following wire changes:
 - (1) Locate and gain access to the LRN-85 Computer Receiver Unit #2 plug DB-1360C and made the following changes:
 - (a) Locate wire #2TR218A (LRN-85 #2 System on Westwind II) or #2TR172A (LRN-85 #2 System on Westwind I). Insert this wire in pin 'F' of DB-1360C.
 - (b) Locate shield of wire in step (a) above and ensure it connects to pin 'P' of DB-1360C.

NOTE

In steps (a) and (b) above, these must be only connections to pins 'F' and 'P' of DB-1360C.

- (c) Locate shield of wire segments inserted in pins 'A' and 'B' of DB-1360C and insert shield connection in pin 'N' of DB-1360C. There must be no other connections to this shield or pin.
- (d) Reconnect DB-1360C to CRU.
- (2) Make accessible connector to Antenna Coupler Unit plug DB-1340.
 - (a) Locate wire segment inserted in pin 'F' of DB-1360C (Step (1)(a) above) and insert opposite end in pin 'C' of DB-1340. Refer to Figure 1. No other connections to pin 'C' of DB-1340.
 - (b) Isolate and insulate shields of wire segments to pins A, D, B and pin C of DB-1340. Shields are not connected to ground at this end, or to each other.
 - (c) Perform Part D, paragraph (2)(C) and (D).
- F. Reference WDM Chapters 34-60-01 and 34-60-03. Perform the following wiring changes:
 - (1) For the FMS-90 system add new ground wire as follows:
 - (a) Locate and gain access to CDU connector DN-40.
 - (b) Add new wire #TR401B20 to pin 'G' of DN-40. Route along existing cable bundle and add to splice with existing wire TR401A20 near the RTU (Radio Tune Unit).
 - (c) Add additional length of wire #20AWG to same splice as in (b) above and connect opposite end to nearest airframe ground terminal.
 - (2) For the LRN-85 systems add new ground wire as follows:
 - (a) Locate and gain access to CDU connector.
 - (b) Add jumper from pin 'G' to 'H' with splice. Add additional length of #20AWG wire from splice to nearest airframe ground terminal.

(c) Reassemble connectors and check for proper operation of Computer Display Unit.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R 1	MIL16878D MIL16878D 873606-23	Wire, #20AWG Wire, #22AWG 1232 Braid, 1/2" (Mfg. Alpha)
2 4 2 1 A/R A/R	AN3-4A AN960KD10L MS35338-43 MS21042-3 14-2 PR-1422	Bolt Washer Spring Washer Nut Iridite Sealant (or equivalent)

4. RECORD COMPLIANCE

A. Make the following entry in aircraft log book:

Service Bulletin No. 1124-34-055 dated January 22, 1986 titled "Navigation - FMS-90/LRN-85 Improvements" has been accomplished this date.

B. Revise 1124 Wiring Diagram Manual Chapters 34-60-01, 34-60-02, 34-60-03 and 34-50-02 as required to reflect the changes performed by this service bulletin.

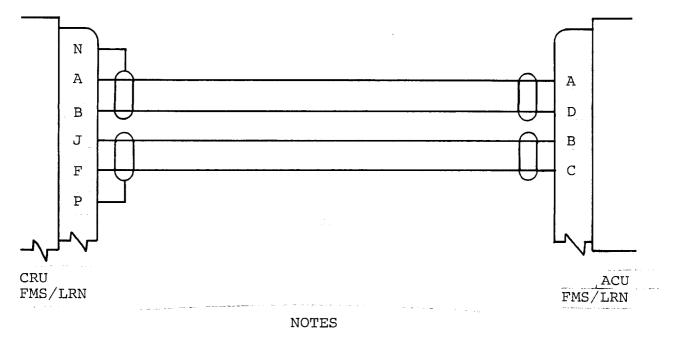
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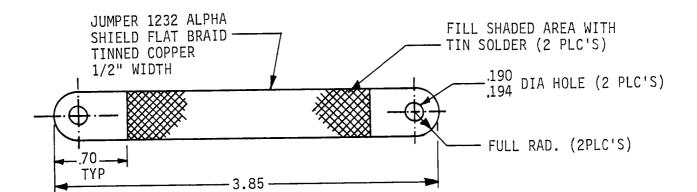


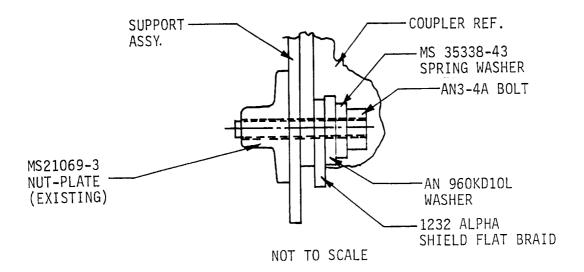
- Production breakout disconnects not illustrated.
- 2. Wire segment numbers omitted due to varied configurations.

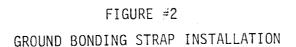
FIGURE 1

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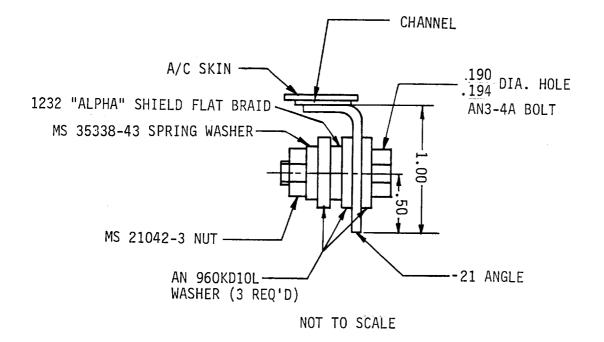


FIGURE 3

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OPTIONAL

SERVICE BULLETIN NO. 1124-22-056

December 2, 1985

SUBJECT: AUTOFLIGHT - CORRECTION OF FLIGHT DIRECTOR ANNUNCIATOR SELF-TEST CIRCUIT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124A WESTWIND, all serial numbers prior to 364.

B. REASON

To prevent false indication in anti-skid system and potential malfunction of avionics systems tests.

C. COMPLIANCE

Compliance with this service bulletin in optional.

D. DESCRIPTION

The position of diode DI303 on terminal strip T-156 is changed.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or procured locally.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

None required

- H. WEIGHT & BALANCE Not affected
- I. ELECTRICAL LOAD DATA

Not affected

J. REFERENCES

MODEL 1124/1124A Wiring Diagram Manual, Chapter 22-10-03.

K. PUBLICATIONS AFFECTED

MODEL 1124/1124A Wiring Diagram Manual, Chapter 22-10-03.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Reference Wiring Diagram Manual, Chapter 22-10-03. Perform visual inspection of terminal strip T-156, terminals #14, #15 and #16. (Located STA 128 LHS)
 - (1) If diode exists between terminals #15 and #16 (some aircraft, terminals #14 and #15) proceed to Step 2. If diode is connected only to terminal #15 and other end to wire #C605B20, disregard following steps; the aircraft is already in compliance.
 - (2) At T-156 remove diode between terminals #15 and #16. Do not disturb wires except as in step (3) below.
 - (3) Disconnect wire #C605B20 from T-156 terminal #15 and connect to anode of diode in step (2) using butt splice and appropriate sleeving.
 - (4) Connect cathode (banded end) of diode to T-156 terminal #15.
 - B. Reassemble aircraft and return to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	327654	Terminal, Ring Tongue (Mfg. AMP)
1	320559	Butt Splice (Mfg. AMP) Sleeving, Heat Shrink)

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-22-056 dated titled "Autoflight - Correction of Flight Director Annunciator Self-Test Circuit" has been accomplished this date

B. Revise 1124/1124A Wiring Diagram Manual, Chapter 22-10-03, to reflect wiring changes.

December 2, 1985

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-34-057 Revision No. 1

January 31, 1986

SUBJECT: NAVIGATION - NCS-31 DISPLAY AND LOGIC POWER SUPPLY IMPROVEMENTS

REASON FOR REVISION: To correct part numbers in paragraph 3.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
2	KPT06B-14-5S	Connectors or equivalent
A/R	2024-T3 Alclad	Mounting base

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL



OPTIONAL

SERVICE BULLETIN NO. 1124-34-057

December 2, 1985

SUBJECT: NAVIGATION - NCS-31 DISPLAY AND LOGIC POWER SUPPLY IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) ACCOMPLISHMENT INSTRUCTIONS PART A AND B:

MODEL 1124 WESTWIND, serial numbers 251, 259 and subs with Collins 639U-1 NCS power supply.

(2) ACCOMPLISHMENT INSTRUCTIONS PART C:

MODEL 1124 WESTWIND, serial numbers 187 thru 250, and 252 thru 258 including those with existing LT-52A power supplies.

- B. REASON
 - (1) To reduce display garbling due to power drain during engine start and initial system power up.
 - (2) To provide improved logic and lighting voltage source to NCS, especially under low temperature and low bus voltage conditions.
 - (3) The NCS-31 system microprocessor has an original vendor operating temperature range of +5° to +141° Fahrenheit. Ambient temperatures approaching the limits of these readings will cause the NCS to power up with garbled displays and cause the keyboard tuning to become erratic.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL It must be recognized that this maximum operating temperature range will become smaller as the microprocessor and associated components age, resulting in a different temperature range creating the problem.

- (a) It is the intent of this service bulletin to minimize the effects of reduced input voltage to the NCS system, by providing adequate power sources.
- (b) The modifications described in this service bulletin will not correct for marginal or improper system operation caused by the NCS microprocessor or internal power supply, which can cause identical symptoms to those addressed by this service bulletin.
- C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

ACCOMPLISHMENT INSTRUCTIONS PART A:

Add larger gauge parallel paths for logic and display power distribution wires and provide shorter returns. This part should be accomplished prior to Part B, and the system monitored for proper performance.

ACCOMPLISHMENT INSTRUCTIONS PART B:

Replace Collins 639U-1 NCS power supply with two (2) KGS LT-52A power supplies in the event Part A does not completely remedy the problem.

ACCOMPLISHMENT INSTRUCTIONS PART C:

Replace original EMP type PS-274 power supplies with the field repairable KGS type LT-52A.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

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F. MATERIAL

The material required for the accomplishment of this service bulletin may be obtained from Atlantic Aviation or from local sources.

G. TOOLING

None

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124 Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14. 1124 Service Letter No. WW-2452, dated February 28, 1980.

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A

Reference Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14 for the below listed procedures.

- (1) Remove all power from aircraft.
- (2) Locate and gain access to NCS-31 lighting and logic power supply, 639U-1 (located at centerline, under floor, between stations 174 and 184).
- (3) At power supply connector DB-206 locate butt splice with wire #RP21A20N (will have four (4) other wires in splice). Cut wire RP21A20N near splice, strip both ends and attach terminals.

- (a) Connect both terminals to nearest convenient airframe ground under center floor. Do not ground to access panel that mounts to the power supply.
- (4) Locate butt splice with wire #RP21A18.
 - (a) Disconnect the wire going to pin "A" from butt splice, at the butt splice.
 - (b) Connect new wire #16 AWG to pin "A" using RP21C16 for wire label.
- (5) At DB206 pin "K" splice new wire #RP29F16 #16 AWG to existing wire #RP29A20 and route to T-156 with wire added in step (4)(b). (T-156 located at station 128 left side.)
- (6) At T-156 connect wire #RP21C16 to terminal 11 and wire #RP29F16 to terminal 15.
- (7) On terminal 9 of T-156 add length of #16 AWG wire and connect opposite end to nearest airframe ground.
- (8) Reference Service Letter WW-2452 for power supply adjustment procedures. It is advisable to set the 5.0 + .1 VDC logic voltage by measuring at the NCS CDPU plug A, pins 29 or 30, with CDPU plugged in to provide the proper load. Use external power during adjustment procedures, and for the 639U-1 power supply set the voltage using the adjustment internal to the power supply.
- (9) Perform complete functional check of NCS system to include engine start from battery power with NCS ON.
- (10) Reassemble aircraft and return to service, or proceed with Part B of Accomplishment Instructions as desired.

ACCOMPLISHMENT INSTRUCTIONS

PART B

Reference Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14 for replacement of 639U-1 power supply with 2 each LT-52A power supplies, and follow below listed procedures:

(1) Remove all power from aircraft.

- (2) Locate and remove 639U-1 power supply and mounting plate (located on center line, under floor between stations 174 and 184). Discard plate and AN3-17A attaching bolts.
- (3) Modify existing mounting plate angles as shown in Figure #1 to accomodate installation of 2 each KGS LT-52A power supplies and new plate P/N 5863569-3. Install power supplies with AN3-25 bolts.
- (4) Install mount and power supplies to airframe using existing angles and hardware shown on Figure #1 to mount new plate. Label power supplies as B206 and B211 for reference and identification purposes.
- (5) At existing connector DB206, remove wires from pin 'K' and insert in new DB206 pin 'C.'
- (6) Remove twisted pair (wire #RP27(D) 18R and #RP28(D) 18B) from existing DB206 pins 'F' and 'G.' Cap and stow "B" segment of twisted pair.
- (7) Add length of #18AWG wire to wire #RP27(D) 18R using butt splice with #18AWG pigtail at other end of splice.
- (8) Install pigtail wire added in step (7) above in pin 'A' of new DB206 and other added wire in pin 'A' of new DB211.
- (9) Remove wires from pins 'D', 'E', 'L' and 'R' of old DB206.
 - (a) Insert two of removed wires in pin 'B' of DB206 (new) and two in pin 'B' of DB211.
- (10) Remove wires from pins 'A' and 'B' of old DB 206 and install in pin 'C' of DB211. Remove wire RP95A20 from pin 'M' of old DB206 and install in pin 'D' of DB211. Discard old DB206.
- (11) Insert length of #20AWG wire in pin 'D' of DB206. Attach other end of wire to one lead of resistor (5.1K ohm, ½ watt) using proper sleeving and splice. Attach opposite end of resistor to ground point with wires in step (9) above.
- (12) Reference Service Letter WW-2452 and Part C(8) of this service bulletin for power supply adjustment procedures. Set the 5.0 + .1 Vdc logic voltage by changing the value of the 5.1K ohm resistor installed in step 11 above.

- (13) Perform functional check of NCS-31 system to include dimming operation.
- (14) Reassemble aircraft and return to service.

ACCOMPLISHMENT INSTRUCTIONS

PART C

Reference Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14 for replacement of PS-274 power supplies with KGS LT-52A power supplies for the NCS logic and display functions. Follow the below listed procedures:

- (1) Remove all power from aircraft.
- (2) Locate and remove PS-274 power supplies (approximate location between stations 93 and 103 right side in side wall or under divan for older aircraft) and discard the 4 ea. AN3-17A attaching bolts.
- (3) If necessary, remove and modify the mounting plate to accomodate the LT-52A power supplies.
- (4) Reinstall mount with existing hardware and power supplies with new AN3-25 bolts in same position. Connect using existing plugs (physically and electrically the same).
- (5) Install a #16AWG jumper to nearest airframe ground:

(a) S/N 187 through 239 from terminal strip T32, lug 10. (b) S/N 240 and subsequent from terminal strip T156-9 or T157-10 as applicable. Refer to 34-50-12 for appropriate ground return for your wiring configuration.

- (6) Add a new #16 AWG wire from DB206 pin C in parallel with existing wire RP29()20 by the shortest route:
 - (a) S/N 187 through 239 to terminal strip T36-4. (b) S/N 240 and subs to terminal strip T156-15.
- (7) Add a new #16 AWG wire from DB211 pin C in parallel with existing wire RP21()18 by the shortest route:
 - (a) S/N 187 through 239 to terminal strip T35-11.
 (b) S/N 240 and subs to terminal strip T156-11.

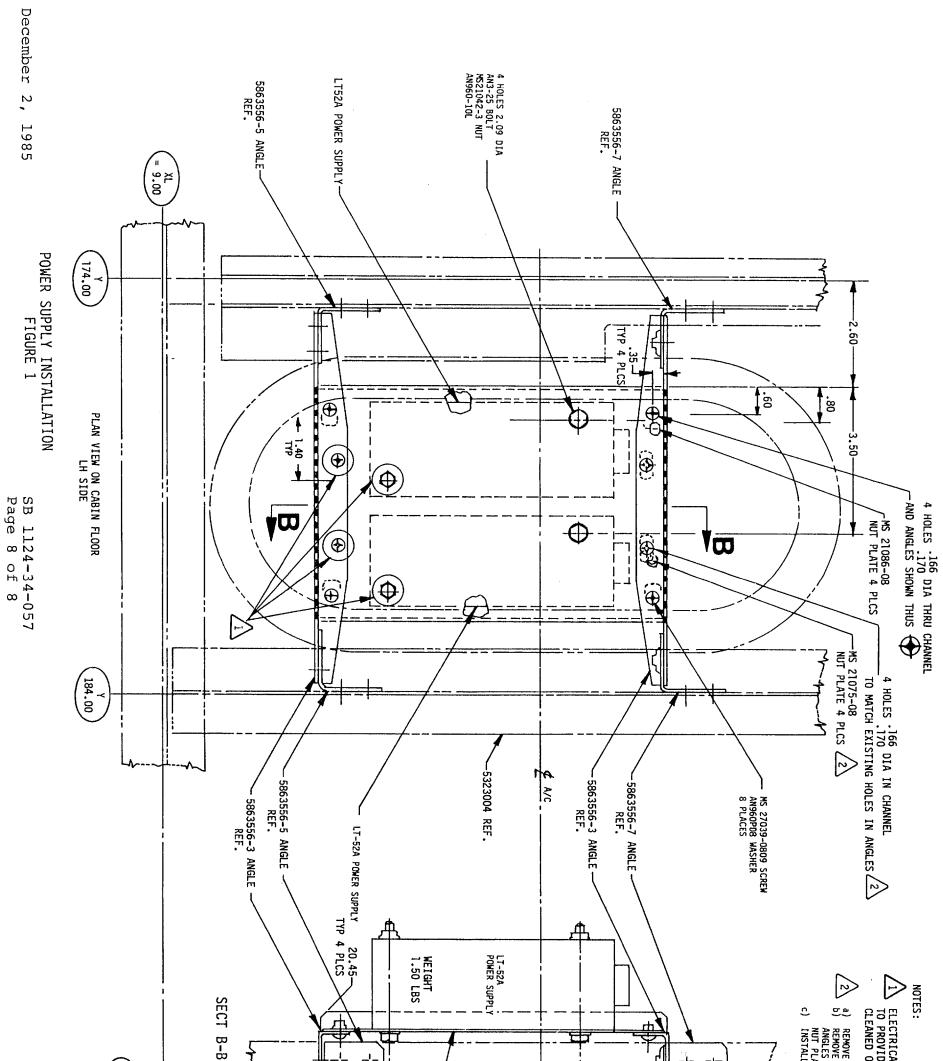
- (8) Reference Service Letter W-2452 for power supply adjustment procedures. It is advisable to set the 5.0 ± .1 Vdc voltage by measuring at the NCS DCPU plug A, pins 29 or 30, with the CDPU plugged in to provide the proper load. Use external power during adjustment procedure.
- (9) Perform complete functional test of NCS system.
- (10) Reassemble aircraft and return to service.

3. MATERIAL INFORMATION

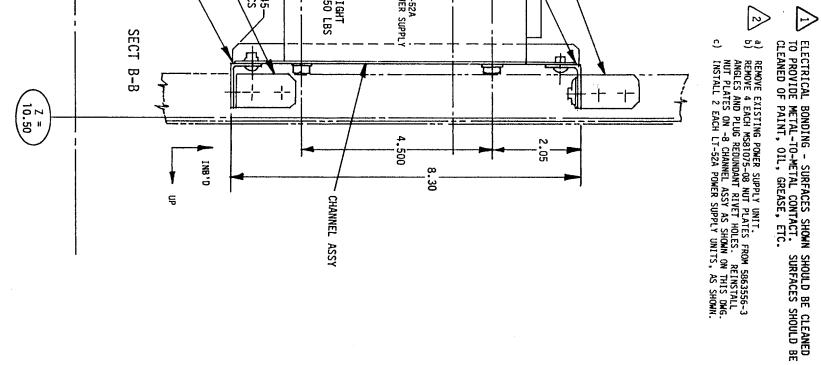
QTY	PART NUMBER	DESCRIPTION
1 2	5863569-3 LT-52A	Channel Assembly Power Supply (Mfg KGS, Inc.)
2	KPT06E-14-6S	Connectors or equivalent
1	5.1K ohm ½ watt 5%	Resistor
A/R	320559	Butt Splice (Mfg AMP)
A/R	2024-0 Alclad	Mounting base
A/R	MIL 16878D	#20AWG wire
A/R	MIL 16878D	#18AWG wire
A/R	MIL 16878D	#16AWG wire
A/R	320571	Terminal, Ring Tonque
4	AN3-25	Bolt
4	MS21042-3	Nut
4	AN960-10L	Washer
8	MS27039-0809	Screw
8	AN960PD8	Washer

4. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-34-057 dated December 2, 1985 titled "Navigation - NCS-31 Display and Logic Power Supply Improvements" has been accomplished this date
- B. Revise Wiring Diagram Manual, Chapters 34-50-12 and 34-50-14 to reflect changes in wiring configurations as appropriate.
- C. Revise Illustrated Parts Catalog and/or the Serialized Equipment List to reflect change of power supply (Part B or C).



SERVICE BULLETIN NO. 1124-34-057



SERVICE PUBLICATIONS revision notice

OPTIONAL '

SERVICE BULLETIN NO. 1124-33-058 Revision No. 2 June 12, 1986

SUBJECT: LIGHTS - CORRECTIONS AND IMPROVEMENTS TO DIMMING SYSTEM FOR AVIONICS DIGITAL DISPLAYS

REASON FOR To revise effectivity under paragraph 1.A., REVISION: Planning Information.

1. PLANNING INFORMATION

A. EFFECTIVITY

ACCOMPLISHMENT INSTRUCTIONS, PART 1: Model 1124A, all serial numbers equipped with HSI-84 copilot NAV display and optional TAI-80 TAS/SAT and/or BDI-36 DME/RMI indicators.

SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-33-058 Revision No. 1 May 23, 1986

SUBJECT: LIGHTS - CORRECTIONS AND IMPROVEMENTS TO DIMMING SYSTEM FOR AVIONICS DIGITAL DISPLAYS

REASON FOR REVISION: To revise text in paragraph 2.B.(4)(b), Part 2.

2. ACCOMPLISHMENT INSTRUCTIONS

PART 2

- B. For 1124 aircraft, reference Wiring Diagram Manual Chapter 22-10-09 for the following steps. Removal of the pilot's instrument panel is suggested, but not mandatory, for easier access.
 - (4) Install a new 500 ohm, 1/2 watt resistor:
 - (b) For aircraft with TB215 terminal board, install resistor between lugs 3 and 9 or any other adjacent unused terminal. Add a new #22 AWG wire from lug 9 to the right terminal of the new control, as viewed from the front.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



OPTIONAL

SERVICE BULLETIN NO. 1124-33-058

December 26, 1985

SUBJECT: LIGHTS - CORRECTIONS AND IMPROVEMENTS TO DIMMING SYSTEM FOR AVIONICS DIGITAL DISPLAYS

1. PLANNING INFORMATION

A. EFFECTIVITY

ACCOMPLISHMENT INSTRUCTIONS, PART 1: Model 1124A, serial numbers 295 through 422 and 425 equipped with HSI-84 copilot NAV display, and optional TAI-80 TAS/SAT and/or BDI-36 DME/RMI indicators.

ACCOMPLISHMENT INSTRUCTIONS, PART 2: Model 1124 and Model 1124A aircraft, all serial numbers.

B. REASON

ACCOMPLISHMENT INSTRUCTIONS, PART 1: To provide proper digital dimming logic to digital readout and/or dimming control.

ACCOMPLISHMENT INSTRUCTIONS, PART 2: To permit adjustment of digital readout intensity, when in "DIM" mode, to crew member requirements.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin describes the wiring and component changes necessary for compliance. All wiring is limited to work area, and no long wire runs are required.

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E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, their authorized dealers or most avionics supply houses.

G. TOOLING

Not applicable.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Service Letter No. WW-2452 dated February 28, 1980, Service Information Letter No. 1124-34-050 dated May 27, 1985 and 1124/1124A Wiring Diagram Manual, chapters:

22-10-08	34-50-06
22-10-09	34-50-08
33-10-05	

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, chapters:

22-10-08	34-50-06
22-10-09	34-50-08
33-10-05	

2. ACCOMPLISHMENT INSTRUCTIONS

PART 1

 (A) Reference Wiring Diagram Manual Chapters 22-10-08, 33-10-05, 34-50-06 and 34-50-08 as applicable for the following steps:

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December 26, 1985

- (1) For S/N 422 and subsequent; preparation, HSI-84.
 - (a) Remove wire 1C702A and 1C703A from relay RL425-F2 and H2, respectively.
 - (b) Connect wire 1C702A to T161-2. This restores the common connection between T161-1, -2 and -3. This wire connects to HSI-84, DN16J1 pin 42 through wire 2UD212A.
 - (c) Connect wire 1C703A to T161-5. This restores the common connection between T161-4, -5 and -6. This wire connects to HSI-84, DN16J1 pin 43 through wire 2UD213A.
- (2) For S/N 295 and subsequent; preparation, BDI-36.
 - (a) Remove wire 1FC62A from RL425-B1 or F3 and applicable. This wire connects to the BDI-36, DN13B, pin 25.
 - Remove, cap and stow wire lFC80A from RL425-B3, if any.
 - (2) Remove and discard the 470 ohm resistor from RL425-B3 and H3 or B3 and B2 as applicable, should it exist.
- (3) For all S/N aircraft; preparation, TAI-80.
 - (a) Remove wire 1SX51B from RL425-A3 of Bl as applicable. This wire connects to the TAI-80, DN28 pin 12.
- (4) For all aircraft; completion:
 - (a) Connect wires ISX51B and 1FC62A to RL425. This will be RL425-H2 (pin 7) for the round relay or RL425-B2 for the square relay.
 - (b) Add a new #22 AWG wire from RL425 to Tl61-3. This will be RL425-B2 (pin 8) for the round relay, or RL425-B3 for the square relay.
 - (c) Add a new #22 AWG wire from RL425 to Tl61-6. This will be RL425-F2 (pin 6) for the round relay, or RL425-Bl for the square relay.

- (5) Test system for proper operation. All instrument digits must illuminate when power is first applied. Check this with the day/night switch in both DAY (BRIGHT) and NIGHT (DIM) positions.
 - (a) The relative digit light intensity should be the same.
 - (1) Reference Service Information Letter No. 1124-34-050 as applicable to the HSI-84.

North Contraction

PART 2

- A. For 1124A aircraft, reference Wiring Diagram Manual Chapter 33-10-05 for the following steps:
 - (1) Install a 500 ohm, 2 watt potentiometer (screwdriver adjustable) on a bracket part number 5863548-503 (locally manufactured) at Y STA-43.65 (LHS) and Z STA-18.00 as shown in Figure 1 near T161 and RL425, so that the shaft is accessible through a ¼" hole drilled through the pilot's Kydex side panel.
 - (2) Remove the existing 470 ohm or 500 ohm resistor located between Tl61-7 and Tl61-4 or -6 (as applicable).
 - (3) Wire the new control as follows:
 - (a) Remove wire 1SX52B from T161-7 and connect to wiper arm of new control (center terminal).
 - (b) Remove wire 1SX50B from T161-2 and connect to T161-4 or -5.
 - (c) Add new #22 AWG wire from T161-1 or -2 and connect to RL425-B1 (pin 5) for the round relay, or RL425-A3 for the square relay.
 - (d) Add new #22 AWG wire from Tl6l-l or -2 and connect to left terminal (viewed from front) of new control.
 - (e) Add new #22 AWG wire from T161-12 and connect to the right terminal of new control.
 - (4) Test system; all digital readouts must vary in intensity with the setting of the new control in the "NIGHT/DIM" position. The "BRIGHT" condition will not be affected.

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- B. For 1124 aircraft, reference Wiring Diagram Manual Chapter 22-10-09 for the following steps. Removal of the pilot's instrument panel is suggested, but not mandatory, for easier access.
 - (1) Install a 5000 ohm, 2 watt potentiometer (screwdriver adjustable) on a bracket part number 5883776-95 (locally manufactured) behind pilot's instrument panel as shown in Figure 2 near the dimming relay RL-59 position so that the shaft is readily accessible for adjustment.
 - (2) Remove resistor R172 (1000 ohm) from RL59 or TB215 (lugs 11 and 3) as applicable and replace with a new value R172 of 33K ohm, ½ watt.
 - (3) Add a new AWG #22 wire from RL59-F2 (pin 6) or TB215 lug ll, as applicable, to the wiper arm (center terminal) of the new control.
 - (4) Install a new 500 ohm, ½ watt resistor:
 - (a) For aircraft without TB215 terminal board, splice a length of #22 AWG wire to one resistor lead. Connect one end to a convenient ground (such as wire 1FC21A connected to RL59-C2, pin 2) and the other end to the right terminal of the new control, as viewed from the front.
 - (b) For aircraft with TB215 terminal board, install resistor between lugs 3 and 10 (lug 3 should be grounded). Add a new #22 AWG wire from lug 10 to the right terminal of the new control, as viewed from the front.
 - (5) Test system; all digital readouts must vary in intensity with the setting of the new control in the "NIGHT/DIM" position. The "BRIGHT" condition will not be affected.
 - (6) Refer to Part D of Service Letter No. WW-2452 dated February 28, 1980 for procedures to use in setting a maximum of 5.0 + .1Vdc digital supply voltage for maximum intensity.

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3. MATERIAL INFORMATION

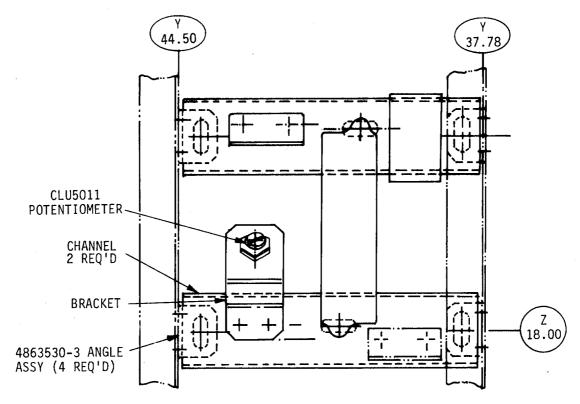
QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#22 AWG Wire
1	500 ohm, ½ watt, 5%	Carbon resistor
· 1	33 K ohm, ½ watt, 5%	Carbon resistor
1	RV 4 LAYSA50lA (1124A) or RV4LAYSA502A (1124) as required	Variable resistor, Mfg. Ohmite or equivalent
A/R	50534	Terminal (Mfg AMP)
1	5883776-95	Bracket (for 1124)
1	5863548-305	Bracket (for 1124A)

4. RECORD COMPLIANCE

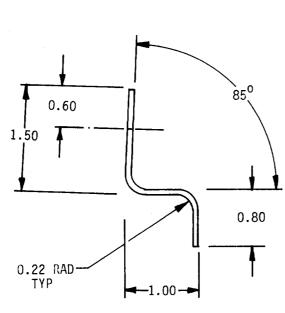
A. Make the following entry in the aircraft log book:

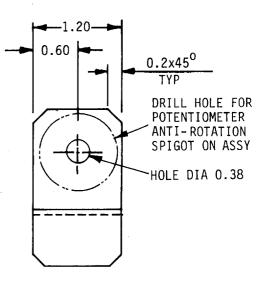
Service Bulletin No. 1124-33-058 dated December 26, 1985 titled "Lights - Corrections and Improvements to Dimming System for Avionics Digital Displays" has been accomplished this date

B. Enter changes performed by this service bulletin to the appropriate chapters in the 1124/1124A Wiring Diagram Manual.



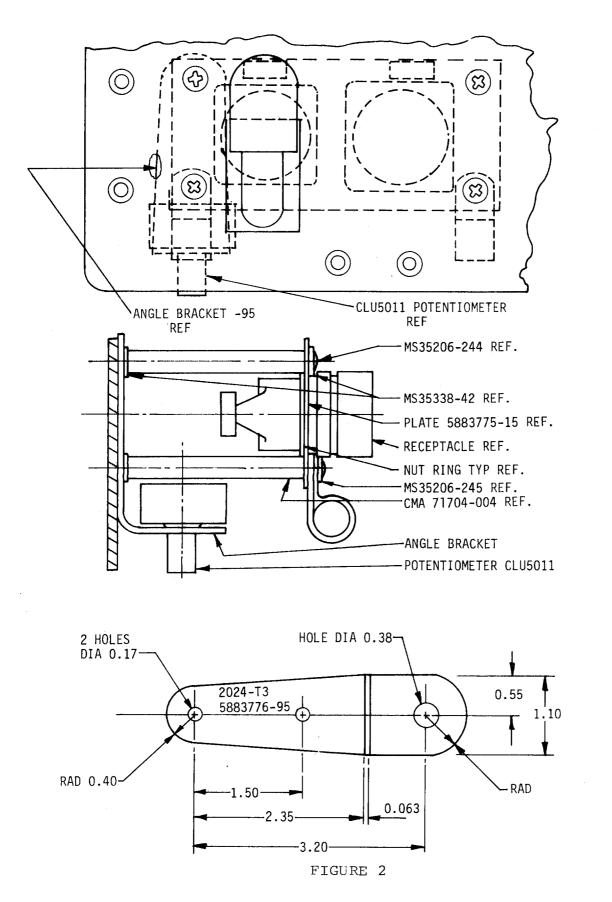
VIEW LOOKING OUTB'D L.H. SIDE







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a state a sector

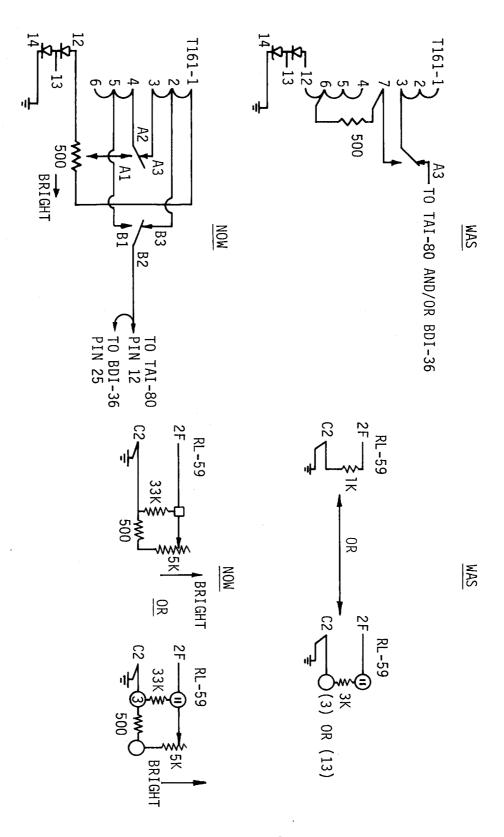


FIGURE 3

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OPTIONAL

SERVICE BULLETIN NO. 1124-21-059

May 1, 1996

SUBJECT: AIR CONDITIONING - CABIN AUTOMATIC TEMPERATURE CONTROL SYSTEM SHIELDED WIRE INSTALLATION AND CABIN TEMPERATURE SENSOR RELOCATION

1. PLANNING INFORMATION

A. EFFECTIVITY

Model 1124/1124A WESTWINDS, all serial numbers except 422, 424, and 425.

B. REASON

To provide improved response and stability of cabin automatic temperature control system.

C. DESCRIPTION

PART A - Provides instructions to replace existing wiring from cabin temperature controller to the input sensors with shielded wire to improve noise immunity.

PART B - Provides instructions to relocate cabin temperature sensor and fan assembly to improve detection of temperature changes.

D. COMPLIANCE

Compliance with this service bulletin is optional at the operator's convenience. Part A and Part B may be accomplished independently at the operators discretion.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

(1)	Estimated man-hours:		16 (after access) 10 (after access)
(2)	Suggested number of pe	rsonnel:	Part A - 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

Part B - 1

G. MATERIAL

<u>QTY</u> .	PART NUMBER	DESCRIPTION
PART A		
200 feet	MIL-W-27500 or equivalent	WIRE, 22AWG, 2 CONDUCTOR SHIELDED
25 feet	MIL-W-27500 or equivalent	WIRE, 22AWG, 3 CONDUCTOR SHIELDED
PART B		
25 feet	MIL-W-27500 or equivalent	WIRE, 20AWG,

Material required to accomplish this service bulletin may be procured locally.

2 CONDUCTOR SHIELDED

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable

J. ELECTRICAL LOAD DATA

Not applicable

K. REFERENCES

1124/1124A Westwind Maintenance Manual, 21-60-00. 1124/1124A Westwind Wiring Diagram Manual, 21-00-01.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, 21-60-00. 1124/1124A Westwind Wiring Diagram Manual, 21-00-01. 1124/1124A Westwind Illustrated Parts Catalog, 21-60-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- **PART A** Shielded wire installation for Cabin Automatic Temperature Control System.
 - NOTE: Aircraft S/N's 152, 154, 174, 181, 185-237, 240-255, 257 and 258 were equipped with an AC powered controller P/N 548482-5 located at STA. 269, top center. Refer to Figure 1 for wiring changes. Some aircraft originally equipped with an AC powered controller have been converted to a DC powered controller, P/N 625524-2-1, and should refer to Figure 2 for wiring changes.

Aircraft S/N 238, 239, 256, 259 and subsequent are equipped with a DC powered controller located at STA 265 LHS. Refer to Figure 2 for wiring changes.

- (1) Remove electrical power from aircraft.
- (2) Gain access to Cabin Temperature Controller.
- (3) Remove cockpit and cabin furnishings as necessary to gain access to wire bundles and components where shielded wire is to be routed.
 - <u>NOTE</u>: If cabin temperature sensor and fan are being relocated as described in Part B of this service bulletin, it is necessary to determine new sensor location to plan wire routing to new location.
- (4) Cap and stow original aircraft sensor and selector wiring at temperature controller connector (P108) and at each controller input connection (i.e. Cockpit Selector, Cabin Selector, Cabin Temp Sensor (P110), Duct Anticipator (P106), Skin Sensor (TB110) and Duct Sensor, as equipped).

<u>NOTE</u>: It is not necessary to remove power, ground, or valve command wiring.

- (5) Following existing cable bundles, route new shielded wires throughout aircraft from each input source to controller. Secure wire runs and protect from chafing as necessary. Note that each shield braid is independently insulated and capped at the input source.
 - <u>NOTE</u>: It is recommended to carry cockpit temperature selector wiring through connector P/J14 to permit later removal of pedestal. Use any available blank pins to carry shield from each selector segment.

Insure that each shield is connected together as illustrated at cabin temperature selector. Refer to Figure 1 or 2 as applicable.

DC powered systems require shielded three conductor wire for duct temperature sensor wiring. All other wiring changes use shielded, two conductor wire.

- (6) Ground shield of each shielded wire at controller near connector (P108).
- (7) Perform operational check of Cabin Automatic and Manual Temperature Control System.
- (8) Install interior furnishings removed.

PART B - Relocation of cabin temperature sensor.

- (1) Remove all electrical power from aircraft.
- (2) Gain access to cabin temperature sensor by loosening cabin sidewall panel (left or right, as applicable).
- (3) Remove sensor and sensor housing. Retain sensor hardware. Sensor screen and support may be left in place. Disconnect, cap and stow wires to cabin temperature sensor connector (P110). Retain connector.
- (4) Disconnect wires to fan assembly and remove fan assembly and SCAT tube connecting to sensor box. Retain for future use.
- (5) Splice new #20AWG shielded wire to original fan assembly wiring, BL to the 115VAC source wire #H84A20 (motor red) and WH to GND47 (motor white). Connect the new wire shield to a nearby airframe ground. Route wiring to new location of fan assembly.
- (6) Relocate cabin temperature sensor and fan. Refer to Figure 3 for suggested locations. Suggested location is right aft cabin bulkhead approximately 10 inches or more above cabin floor. When selecting a new location take into consideration the following:
 - <u>NOTE</u>: Due to variations in cabin configuration and materials it is not possible to describe the steps necessary to mount sensor or fan.
 - (a) Sensor should be mounted as close as practical to cabin centerline.

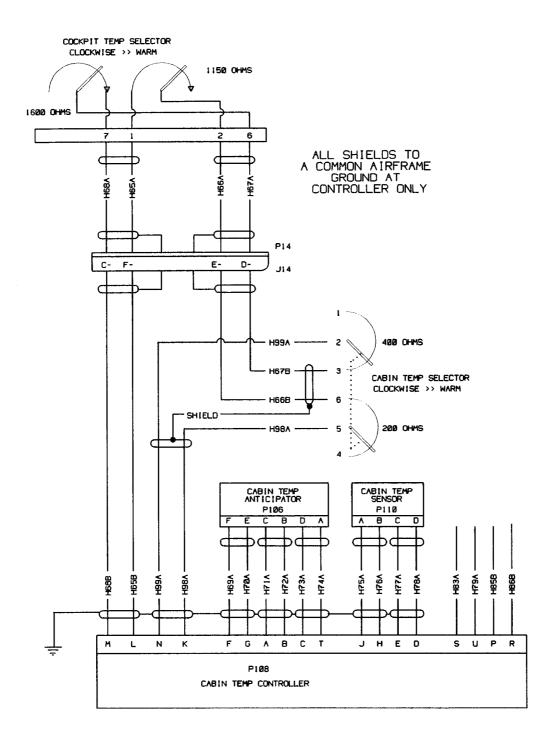
- (b) Sensor mount area should be such that passenger's coats, briefcases and other personal items will not block cabin air inlet to sensor.
- (c) Avoid mounting sensor in an area where damage may occur to sensor, wiring, or fan duct.
- (d) Avoid mounting sensor too close to either cabin floor or ceiling.
- (e) Sensor must be mounted so that probe is at right angles to airflow. Refer to Figure 4.
- (f) The preferred location for the fan assembly is under the floor, left or right of center as desired, and aft of aft cabin bulkhead. This allows access to mount fan assembly through available access panels under lavatory or avionics equipment mounted on left side of aircraft. Where possible use fan mounts from original location. Plan for unrestricted routing of duct to sensor.
 - <u>NOTE</u>: When fan is mounted under floor there will be no objectionable motor noise in cabin.
- (7) Connect new #20AWG shielded wire to the motor. Terminate the shield without a ground connection.
- (8) Perform operational check of Cabin Automatic and Manual Temperature Control Systems. Check for operation of sensor fan and proper direction of airflow. Fan must draw cabin air into sensor inlet.
- (9) Install interior components removed.

3. COMPLIANCE RECORD

A. Make the following entry in the aircraft log book:

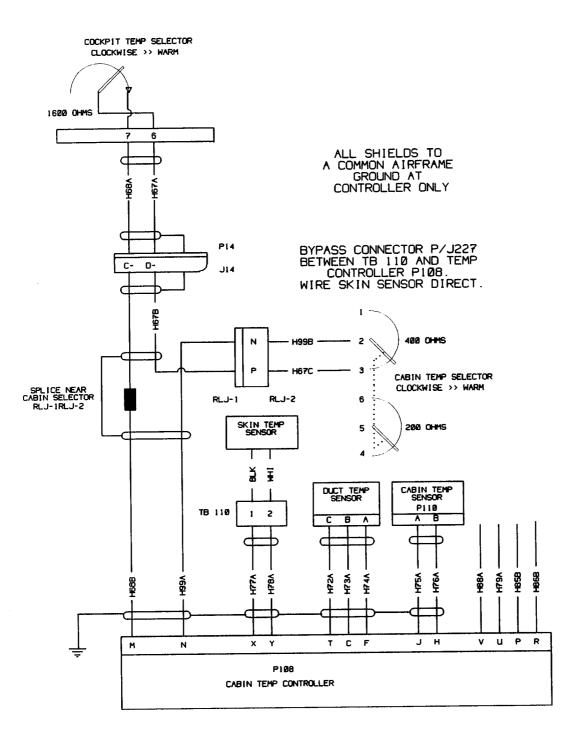
Service Bulletin No. 1124-21-059, dated May 1, 1996, titled "Air Conditioning -Cabin Automatic Temperature Control System Shielded Wire Installation and Cabin Temperature Sensor Relocation", has been accomplished this date

- B. Revise aircraft Wiring Diagram Manual to reflect changes accomplished by this service bulletin.
- C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



AC POWERED CABIN TEMPERATURE CONTROLLER S/N's 152, 154, 174, 181, 185-237, 240-255, 257 & 258 FIGURE 1

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DC POWERED CABIN TEMPERATURE CONTROLLER S/N's 238, 239, 256, 259 & SUBS. FIGURE 2

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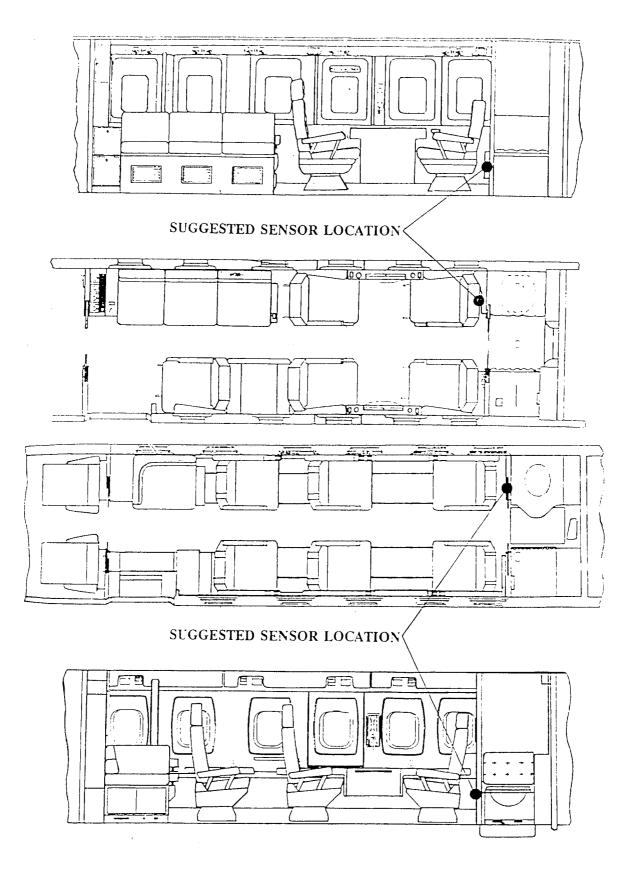
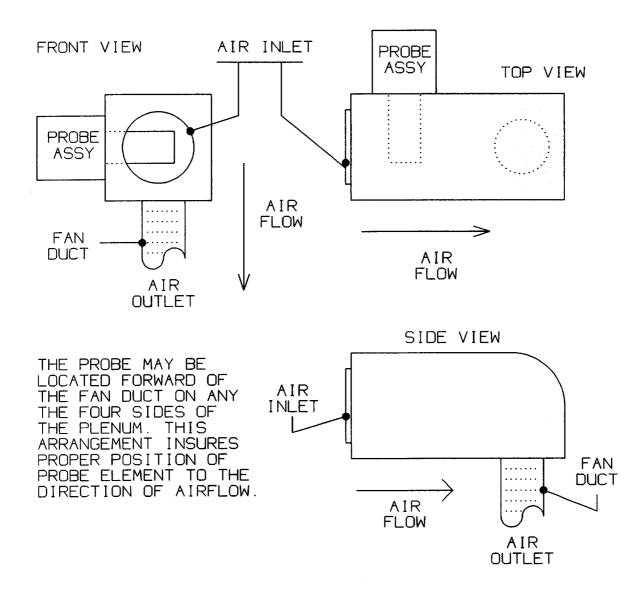


FIGURE 3



SUGGESTED CABIN TEMPERATURE SENSOR, PLENUM, & DUCT ARRANGEMENT FIGURE 4



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-33-060

December 9, 1985

SUBJECT: LIGHTS - INSTRUMENT LIGHT INTENSITY AND DIMMER BALANCE

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Accomplishment Instructions Part A: Model 1124 Westwind S/N 154, 181, 187-239.

Accomplishment Instructions Part B: Model 1124 Westwind S/N 174, 240 and subs. Model 1124A Westwind S/N 295 and subs.

B. REASON

To enhance the avionics instrument and control background lighting for better balance with other cockpit instrument lights.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

The lighting power lines are paralleled and the ground returns are shortened to reduce voltage drop and increase available dimmer power.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

- F. The material required may be obtained through Atlantic Aviation Supply Company or may be purchased locally.
- G. TOOLING

None required.

- H. WEIGHT & BALANCE Not affected.
- I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 33-10-01 and 33-10-02. 1124 Westwind Service Letter No. WW-2463.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 33-10-01 and 33-10-02.

2. ACCOMPLISHMENT INSTRUCTIONS

Part A

Reference WDM, Chapter 33-10-01 and 33-10-02. Revise wiring as follows:

NOTE

Aircraft with light protection box installed perform Service Letter #WW-2463 prior to accomplishment of these procedures.

- (1) Gain access to instrument lighting power supplies in nose compartments.
- (2) At P-231 remove wire #1L505A18 from pin C and insert a 2-inch length of #16 AWG wire. Using butt splice attach wire #1L505A18 and new #16 AWG wire #1L505AA16 #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-10 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-10, pin I.

- (3) At P-240 remove wire #2L505Al8 from pin C and insert a two-inch length of #16 AWG wire. Using butt splice, attach wire #2L505Al8 and new #16 AWG wire #2L505AAl6 to #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-10 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-10, pin J.
- (4) At P-347 remove wire #L507A18 from pin C and insert a two-inch length of #16 AWG wire. Using butt splice, attach wire #L507A18 and new #16 AWG wire #L507AA16 to #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-10 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-10, pin K.
- (5) At bulkhead connector J-10 (cabin side), add a two-inch length of #18 AWG wire to pin I. Splice to new #16 AWG wire #1L505AB16, route along existing cable bundle to TB-101 and attach to terminal #4.
 - (a) Add new #18 AWG wire #1L505()18 to TB-101 terminal #4 and route to T-11. Attach to terminal #7.
 - (b) At T-ll add length of #18 AWG wire to terminal #9 and attach to airframe ground point not more than 12 inches from T-ll.
- (6) At J-10 add a new two-inch length of #18 AWG wire to pin <u>J</u>. Splice to new #16 AWG wire #2L505AB16 and route along existing cable bundle to TB-101 and attach to terminal #5.
 - (a) Add new #18 AWG wire #2L505()18 to TB-101 terminal #5 and route to T-18. Attach to terminal #7.
 - (b) At T-18 add length of #18 AWG wire to terminal #9 and attach to airframe ground point not more than 12 inches from T-18.
- (7) At J-10 add a new two-inch length of #18 AWG wire to pin K. Splice to new #16 AWG wire #L507AB16 and route along existing cable bundle to TB-101 and attach to terminal #7.
 - (a) Add new #18 AWG wire #L507()18 to TB-101 terminal #7 and route to T-11. Attach to terminal #19.
- (8) Apply power to aircraft. Check instrument lights, bright and dim condition.

(a) At full intensity measure no less than 4.6 Vdc at TB101-4, TB101-5 and TB101-7. If voltage level is low, check for proper operation of respective power supply.

NOTE

Aircraft with KGS LT-52A power supplies installed can adjust the supply voltage to not more than 5.1 Vdc for proper light condition.

(9) Reassemble aircraft and return to service.

Part B

Reference Wiring Diagram Manual, Chapters 33-10-01 and 33-10-02. Revise wiring as follows:

NOTE

Aircraft with light protection box installed perform Service Letter #WW-2463 prior to accomplishment of these procedures.

- Gain access to instrument lighting power supplies in nose compartment.
- (2) At P-231 remove wire from pin C and insert a two-inch length of #16 AWG wire. Using butt splice, attach removed wire and new #16 AWG wire #1L505AA16 to #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-9 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-9, pin J.
- (3) At P-240 remove wire from pin C and insert a two-inch length of #16 AWG wire. Using butt splice, attach removed wire and new #16 AWG wire #2L505AA16 to #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-10 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-10, pin I.
- (4) At P-347 remove wire from pin C and insert a two-inch length of #16 AWG wire. Using butt splice, attach removed wire and new #16 AWG wire #L507AA16 to #16 AWG wire inserted in pin C. Route new wire along cable bundle to P-9 at pressure bulkhead. Using butt splice, attach a two-inch length of #18 AWG wire to new wire and insert opposite end in P-9, pin I.

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- (5) At bulkhead connector J-9 (cabin side) add a two-inch length of #18 AWG wire to pin J. Splice to new #16 AWG wire #1L505AB16 and route along existing cable bundle to TB-102 and attach to terminal #12.
 - (a) Add new #18 AWG wire #1L505()18 to TB-102 terminal #12 and route to T-156. Attach to terminal #2.
 (S/N 174 only, route new wire #1L505()18 from TB-102 terminal #12 to T-11 terminal #8).
 - (b) At T-156 (excluding S/N 174) add new #18 AWG wire to terminal #2. Route and attach to T-158 terminal #4.
- (6) At J-9 add a two-inch length of #18 AWG wire to pin <u>I</u>. Splice to new #16 AWG wire #L507AB16 and route along existing cable bundle to TB-102 and attach to terminal #7.
 - (a) Add new #18 AWG wire #L507()18 to TB-102 terminal #7 and route to T-156. Attach to terminal #17. (S/N 174 only, add two new wires #1L506()18 and #1L106()18 and route to T-11. Attach wire #1L506()18 to terminal #19, and #1L106()18 to terminal #15 of T-11).
 - (b) At T-156 (excluding S/N 174) add new wire #2L302()18 to terminal #17. Route and attach to T-158 terminal #5. Add new wire #L508()18 to terminal #18 of T-156. Route and attach to T-161 terminal #8.
- (7) At J-10 add a two-inch length of #18 AWG wire to pin I. Splice to new #16 AWG wire #2L505AB16 and route along existing cable bundle to TB-101 and attach to terminal #5.
 - (a) Add new wire #2L505()18 to TB-101 terminal #5 and route to T-158. Attach to terminal #7. (S/N 174 only, route new wire #2L505()18 to T-18 and attach to terminal #8).
- (8) Aircraft S/N 174 only.
 - (a) Add #18 AWG wire to T-11 terminal #9 and attach to nearest airframe ground.
 - (b) Add #18 AWG wire to T-18 terminal #9 and attach to nearest airframe ground.

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- (9) Aircraft S/N 240 and subs.
 - (a) Add #18 AWG wire to T-156 terminal #8 and attach to nearest airframe ground.
 - (b) Add #18 AWG wire to T-158 terminal #9 and attach to nearest airframe ground.
 - (c) Add #18 AWG wire to T-161 terminal #10 and attach to nearest airframe ground.
- (10) Apply power to aircraft. Check instrument lights on bright and dim condition.
 - (a) At full intensity, measure no less than 4.6 Vdc at TB-102-12, TB-102-7 and TB-101-5. If voltage level is low, check for proper operation of respective power supply.

NOTE

Aircraft with the KGS LT-52A power supplies installed can adjust the supply voltage to not more than 5.1 Vdc for proper light condition.

- (11) Reassemble aircraft and return to service.
- 3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION
A/R	MIL-W-16878D	#16 AWG wire
A/R	MIL-W-16878D	#18 AWG wire
A/R	327654	Terminal, Ring Tongue (Mfg AMP)
9	327638	Butt Splice (Mfg AMP)

4. RECORD COMPLIANCE

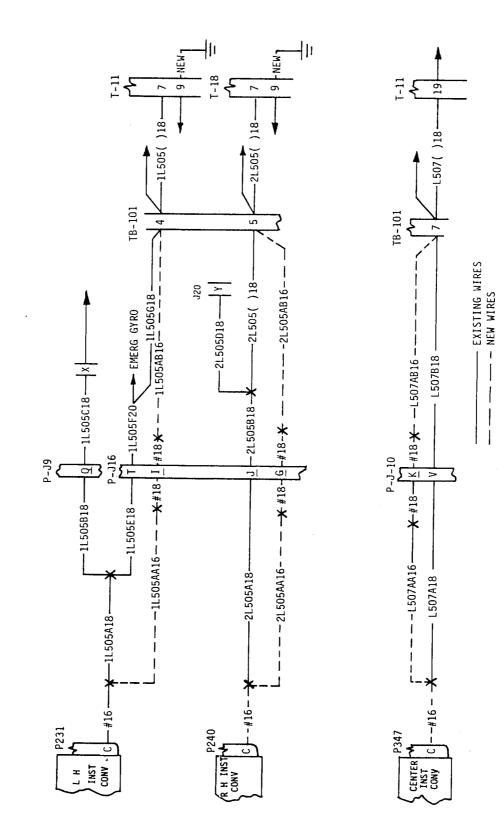
A. Make the following entry in the aircraft log book:

Service bulletin No. 1124-33-060 dated December 9, 1985 titled "Lights - Instrument Light Intensity and Dimmer Balance" complied with this date

Update the 1124/1124A Wiring Diagram Manual, Chapters 33-10-01 and 33-10-02 to reflect revised wiring.

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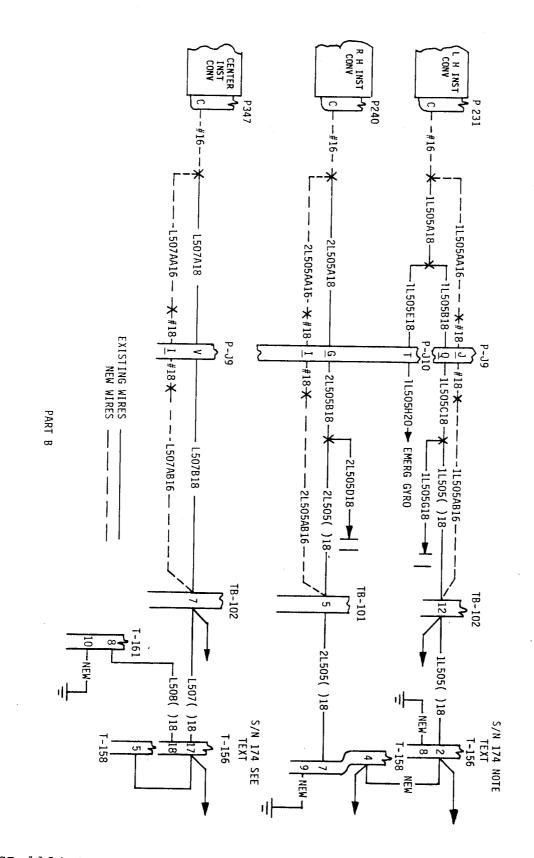
December 9, 1985



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PART A



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December 9, 1985



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-27-061

May 9, 1986

SUBJECT: FLIGHT CONTROLS - WING FLAP ACTUATORS, IMPROVEMENT/REPAIR

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwind, all serial numbers.

B. REASON

Installation of an improved Nomex/Teflon sleeve bearing in the ends of the flap actuators will reduce chattering during extension or retraction.

NOTE

Actuators with a letter "B" after the serial number de-note this improvement was previously incorporated.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

The sleeve bearings in the ends of the flap actuator tube assemblies are replaced with bearings having improved self-lubrication properties.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

The material required to comply with this service bulletin may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware.

G. TOOLING

No special tools are required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 27-50-00.

K. PUBLICATIONS AFFECTED

1124/1124A Maintenance Manual, Chapter 27-50-00. 1124/1124A Illustrated Parts Catalog, Chapter 27-50-00.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Fully extend the flaps and release the gustlock.
 - B. Examine the data plate on the four (4) flap actuators. The improvement described below has already been incorporated on units with a letter "B" following the serial number.
 - C. Remove appropriate actuators in accordance with the 1124 Maintenance Manual, Chapter 27-50-00.
 - D. Gain Access to sleeve bearings in actuators:
 - Disconnect hardware as necessary to enable actuator tube removal from actuator gear box (index hardware for reassembly).
 - (2) Carefully remove the four (4) screws at the actuator gear box and remove the tube assembly from the gear box (use caution to ensure the gear box remains clamped together).
 - (3) Remove seal and sleeve bearing from tube assembly and install new type bearing with new seal (reference Figure 1).

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NOTE

Inboard actuators incorporate two (2) bearings and both bearings should be replaced.

- (4) Reassemble actuator in the reverse order of disassembly.
- E. Stamp or scribe the letter "B" after the serial number of each modified actuator.
- F. Install actuators in accordance with the 1124 Maintenance Manual, Chapter 27-50-00.
- G. Perform an operational check of the wing flaps in accordance with the 1124 Maintenance Manual.
- H. Secure aircraft and return to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	1391154-1	Sleeve Bearing
A/R	B132-116-2	Seal

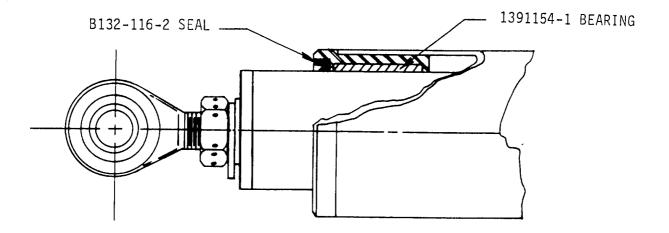
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-061 dated May 9, 1986, titled "Flight Controls - Wing Flap Actuators, Improvement/ Repair", has been accomplished this date _____.

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May 9, 1986





INBOARD ACTUATORS INCORPORATE TWO (2) SLEEVE BEARINGS IN TANDEM (INSTALLATION TYPICAL).

REPLACEMENT PARTS LOCATION FIGURE 1

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May 9, 1986



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-27-062

December 23, 1985

SUBJECT: FLIGHT CONTROLS - SPEED BRAKE - INADVERTENT DEPLOYMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers prior to 400.

B. REASON

To increase the rating of the SB EXT annunciator lamp test diodes to prevent diode failure from deploying speed brakes during annunciator lamp test.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

D. DESCRIPTION

This service bulletin describes the replacement of the SB EXT/LD EXT capsule in the master annunciator panel.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

INTERNATIONAL INC.

SB 1124-27-062 Page 1 of 3

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. SPECIAL TOOLS

None required.

- H. WEIGHT AND BALANCE Not affected.
- I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapter 33-10-04 Service Information Letter No. 1124-33-025, Revision 1

K. PUBLICATIONS AFFECTED

None.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove the master annunciator panel assembly.
 - B. Identify for reassembly the wiring connected to the LD EXT/SB EXT capsule. Remove existing capsule from assembly by desoldering the wires from the rear terminals on the capsule. Back out the screw in capsule center and remove the capsule.
 - C. Install new capsule pin 293-14859-001 into the master annunciator panel assembly in reverse manner.
 - Any varnish may be removed with MEK or similar solvents.
 - (2) Use a soldering pencil of no more than 50 watts.
 - (3) Ensure circuit board tracks are clean and that no "solder splashes" or other possible short circuits exist, including carbon tracking between tracks.
 - D. Reinstall the master annunciator panel assembly and reconnect wiring.

SB 1124-27-062 Page 2 of 3

December 23, 1985

- E. Test lamp module.
 - (1) Perform lamp test, both sections illuminate. Verify that the SB and LD remain in the stowed position.
 - (2) Extend speed brakes and lift dumpers, verify proper annunciation.
 - (3) Stow speed brakes and lift dumpers.
- G. Return aircraft to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l each	293-14859-001	Capsule (Mfg Master

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-062 dated December 23, 1985 titled "Flight Controls - Speed Brake - Inadvertent Deployment" has been accomplished this date

Specialties Company)

December 23, 1985



OPTIONAL

SERVICE BULLETIN NO. 1124-25-063A

April 10, 1987

(This Service Bulletin No. 1124-25-063A dated April 10, 1987 supersedes Service Bulletin No. 1124-25-063 dated February 13, 1987 in its entirety.)

SUBJECT: EQUIPMENT/FURNISHINGS - HOT LIQUID CONTAINER

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers equipped with EL-M-100/28C and EL-M-100/28EX Hot Liquid Containers.

B. REASON

To provide repair/modification instructions for operators that utilize hot liquid containers.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Design of the hot liquid container has been revised to eliminate the thermostat, thermal fuse and add (2) thermostats.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



SB 1124-25-063A Page 1 of 5 F. MATERIAL

The material required to comply with this service bulletin may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized dealers.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Electrotherm LTD user's manual.

K. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Disassembly Instructions:
 - (1) Disengage electrical connection.
 - (2) Remove bottom plate from container (retain screws).
 - (3) Remove thermal insulation (retain).
 - (4) Remove thermal fuse fastener and discard (retain nuts).
 - (5) Disconnect wiring from thermostat and heat fuse.
- B. Manufacture clamp and thermostat holder (Figure 1).
- C. Assembly instructions:
 - (1) Assemble thermostats 1 & 2 to holder (Figure 1).

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April 10, 1987

- (2) Assemble holder and clamp as shown in Figure 1.
- (3) Install holder and clamp assembly to container using existing nuts. Thermostats should contact bottom of container.
- (4) Connect electrical wiring as shown in Figure 2.
- (5) Reinstall thermal insulation.
- (6) Reinstall bottom plate (seal with RTV).

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	3100-4 85°C <u>+</u> 1.7°C (open)	Thermostat T-1 (DC) 3.3°C max below open point
1	3100-4 90°C <u>+</u> 1.7°C (open)	Thermostat T-2 (VAC) 3.3°C max below open point
4 1	MS-35206-239 MS-20470-AD4-6	Screw Rivet

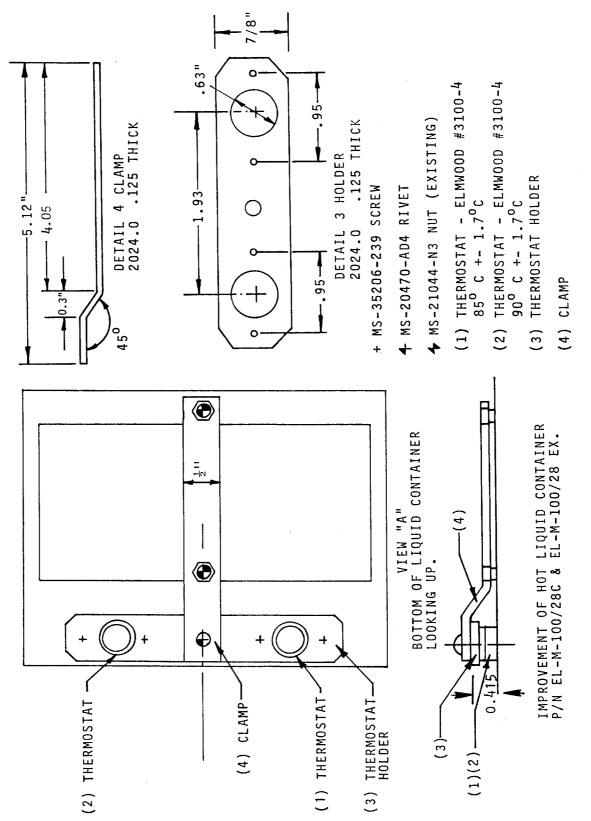
The following parts may be fabricated locally.

1	(2024-0 clad .125 thick x .750 w x 3.25 1)	Thermostat Holder
1	(2024.0 clad .125 thick x .50 w x 5.125 l)	Clamp

4. RECORD COMPLIANCE:

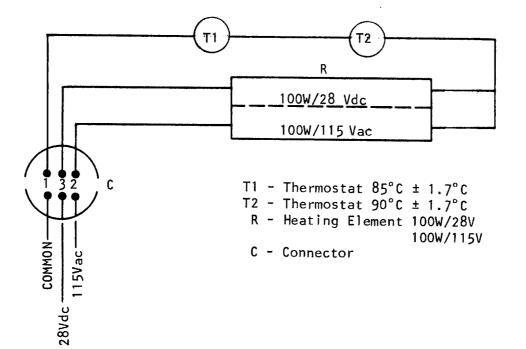
Make the following entry in the aircraft log book:

SERVICE BULLETIN NO. 1124-25-063A dated April 10, 1987 titled "Hot Liquid Container - Repair Instructions" has been accomplished this date



SB 1124-25-063A Page 4 of 5 April 10, 1987

Figure 1



Electrical Schematic Hot Liquid Container

Figure 2

April 10, 1987

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SERVICE PUBLICATIONS revision notice

SERVICE BULLETIN NO. 1124-34-064 Revision No. 1

February 16, 1987

SUBJECT: NAVIGATION - REPEAT VOR/LOC SWITCHING IMPROVEMENTS

REASON FOR REVISION:

- 1. To correct/redefine Part A of para. 2. Accomplishment Instructions.
 - 2. Change RL85B switch segments to RL85A. Many aircraft do not have RL85B segments available.
- 2. ACCOMPLISHMENT INSTRUCTIONS

PART A.

- C. Remove wire 1RN180A22 from RL84B-9 and the jumper wires from RL84B-10 and/or RL84-11. Splice these wires together.
 - (1) This will result in a pilot "RPT NAV 2" annunciation whenever "RPT NAV 2" is depressed, regardless of information displayed on the Pilot HSI. This prevents switching the HSI into a possible invalid operating condition.
- D. Remove wire 2RN48C24 from RL30B-36 (RL30A-36 for 1124A), splice to new wire 2RN48Z24, route and connect to RL85A-38.
 - (1) Aircraft for RL-30 P/N 175096-001, remove wire 2RN48C24 from DRL-30C, pin 24. Splice to new wire 2RN48Z24, route and connect to RL85A-38.
- E. Connect new wire 2RN48Y24 from RL85A-37 to RL30B-36 (RL30A-36 for 1124A).
 - (1) Connect new wire 2RN48Y24 to DRL-30C, pin 24 from RL85A-37, pin 45 if step D(1) applies.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN QURION AIRPORT, ISRAEL



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-34-064

May 5, 1986

- SUBJECT: NAVIGATION REPEAT VOR/LOC SWITCHING IMPROVEMENTS
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions PART A: Model 1124 Westwind, all serial numbers. Model 1124A Westwind, serial numbers 295 through 390.
 - (2) Accomplishment Instructions PART B: Model 1124A Westwind, serial numbers 295 through 390.
 - B. REASON
 - (1) Accomplishment Instructions PART A: To display a VOR/LOC flag in "RPT NAV" modes to alert operator of a possible invalid nagivation display when the offside HSI is not displaying VOR/LOC information. A conformity inspection test is included to determine if the aircraft has previously complied with this part.
 - (2) Accomplishment Instructions PART B: To disable "NAV TEST" functions when in "RPT NAV" modes to prevent possible Flight Guidance System errors during "NAV TEST." A conformity inspection test is included to determine if the aircraft has previously complied with this part.
 - C. COMPLIANCE

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Compliance with this service bulletin is optional.

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D. DESCRIPTION

Two wires are added for PART A and PART B between the HS1 transfer relays RL84/RL85 and the RPT NAV relays RL30/RL31.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material may be procured locally.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters:

34-50-01	34-50-03
34-50-02	34-50-04

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters:

34-50-01	34-50-03
34-50-02	34-50-04

2. ACCOMPLISHMENT INSTRUCTIONS

PART A

A. Perform preliminary check of NAV switching. Do not select any flight director modes, and the autopilot must be disengaged. Both sides must be in normal VOR/LOC mode and a valid VOR/LOC signal must be present.

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May 5, 1986

- (1) At pilot position, select "RPT NAV 2," Pilot HSI flag must be retracted. Select Copilot to a VLF mode, Pilot HSI flag is in view.
- (2) Restore Pilot HSI to Normal VOR/LOC, select Copilot "RPT NAV 1." Copilot HSI flag must be retracted. Select Pilot to VLF mode, Copilot HSI flag is in view.
- B. Conformity with the above tests indicates compliance and no further action is required. Unsatisfactory results will require modification in accordance with the remaining steps (reference Figure 1).
- C. Remove wire 1RN80A22 from RL84B-9 and the jumper wires from RL84B-10 and/or RL84B-11. Splice these wires together.
 - (1) This will result in a pilot "RPT NAV 2" annunciation whenever "RPT NAV 2" is depressed, regardless of information displayed on the Pilot HSI. This prevents switching the HSI into a possible invalid operating condition.
- D. Remove wire 2RN48C24 from RL30B-36, splice to new wire 2RN48Z24, route and connect to RL85B-46.
 - (1) Aircraft with RL-30 P/N 175096-001, remove wire 2RN48C24 from DRL-30C, pin 24. Splice to new wire 2RN48Z24, route and connect to RL85B-46.
- E. Connect a new wire 2RN48Y24 from RL85B-45 to RL30B-36.
 - (1) Connect new wire 2RN48Y24 to DRL-30C, pin 24 from RL85B, pin 45 if step D(1) applies.
- F. Remove wire 1RN48D24 from RL31A-27, splice to new wire 1RN48Z24, route and connect to RL84B-9.
 - (1) Aircraft S/N 187-215: Wire No. 1RN48D24 may connect to RL-31B, pin 9. If so, remove and splice to new wire 1RN48Z24, route and connect to RL84B-9. Double check wire number removed.
- G. Connect a new wire 1RN48¥24 from RL84B-10 to RL31A-27.
 - (1) Connect new wire lRN48Y24 from RL84B-10 to RL31B, pin 9 if step F(1) applies.
- H. Repeat Step A for test and inspection.

May 5, 1986

PART B

A. Restore Pilot and Copilot HSI to Normal VOR/LOC mode.

- (1) At pilot position, select "RPT NAV 2" and attempt VIR-30A self-test on #2 NAV CTL-30. Restore Pilot HSI to Normal VOR/LOC.
- (2) At copilot position, select "RPT NAV 1" and attempt VIR-30A self-test on #1 NAV CTL-30. Restore Copilot HSI to Normal VOR/LOC.
- B. Self-test in Step A must be inoperative, conformity indicates compliance and no further action is required. Should self-test be operational, modify in accordance with the following steps (reference Figure 2).
- C. Remove jumper wire, if any, between T21-19 and T21-18.
- D. Remove wire 1RN4C24 from T21-18, splice to new wire 1RN4Z24, route and connect to RL31A-10.
- E. Add new wire 1RN4Y24 and connect between RL31A-11 and T21-18.
- F. Remove jumper wire, if any, between T17-5 and T16-1.
- G. Add new wire:
 - (1) For dual Flight Director (#2 FGC80) systems:
 - (A) Remove wire 2Cll3A24 from Tl6-1, splice to new wire 2Cll3Z24, route and connect to RL3OA-4.
 - (2) For single Flight Director systems:
 - (A) Add new wire 2C113Z24 from T17-5 to RL30A-4.
- H. Add new wire 3C113Y24 from RL30A-5 to T16-1.
- I. Repeat Step A for test and inspection.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#24AWG Wire
A/R	50534	Terminal, Mfg. AMP
A/R	323994	Butt splice, Mfg. AMP

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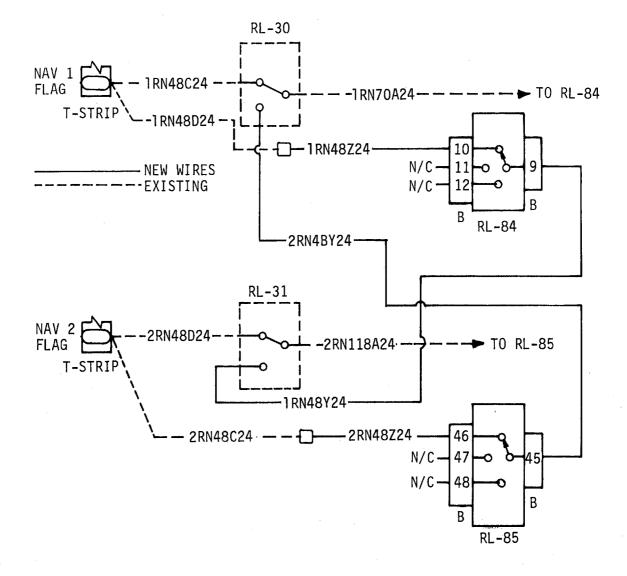
4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-064 dated May 5, 1986 titled "Navigation - Repeat VOR/LOC Switching Improvements" has been accomplished this date

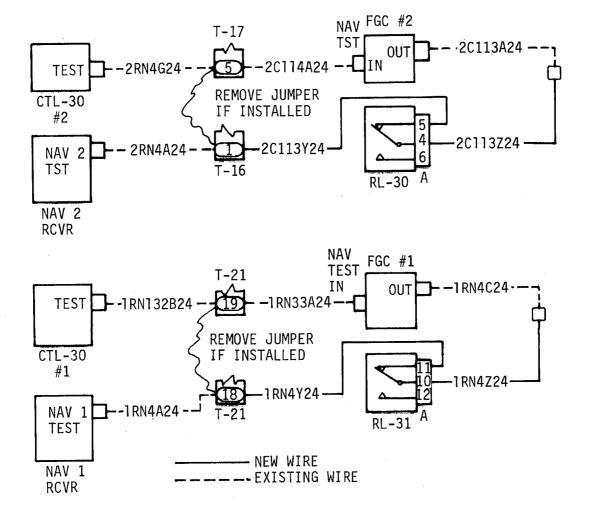
B. Revise 1124/1124A Wiring Diagram Manual as required to reflect the changes accomplished by this service bulletin.

May 5, 1986



NAV FLAG SWITCHING

FIGURE 1



NAV TEST LOCK-OUT



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SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-24-065

January 10, 1986

SUBJECT: DC ELECTRICAL SYSTEM - REMOTE CIRCUIT BREAKER RANDOM TRIPPING

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwind, all serial numbers prior to 437 except 418, 423, 426, 429, 431, 432 and 435.

B. REASON

To prevent random nuisance tripping of 1/2-amp control circuit breakers due to thermal and other environmental factors causing a change in circuit breaker ratings.

The same factor affect the associated Remote Controlled Breakers; therefore the controlled system may well be fault-free and the control breaker still trips for no apparent reason. When this occurs, a reset of the control breaker restores the system with no further indication of failures.

The system Remote Controlled Breakers affected by this service bulletin are:

Avionics (COM and ACC) Bus 1 and 2 Boost Pump Main (right and left) Boost Pump ALT (right and left) Generator Control (right and left) Inverter 1 and 2

C. COMPLIANCE

Compliance with this service bulletin is recommended.

D. DESCRIPTION

This service bulletin approves replacement of the P/N 7274-47-1/2 ampere rated circuit breakers with 1 ampere ratings for those RCB controlled systems described in paragraph B. above.

E. APPROVAL

This service bulletin has been reviewed by the Israel Aviation Administration (ICAA). The modifications herein comply with the applicable Civil Aviation Regulations and are ICAA approved.

F. MATERIAL

Material required may be procured locally.

G. SPECIAL TOOLS

Not applicable.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters as applicable to referenced systems.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual 1124/1124A Illustrated Parts Catalog

Chapters as applicable to referenced systems.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove all aircraft power.
- B. Lower the fwd overhead circuit breaker panel.
- C. Replace existing P/N 7274-47-1/2 ampere circuit breakers, as desired, with P/N 7274-47-1 ampere circuit breakers.

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January 10, 1986

- D. Carefully inspect work area for loose hardware and any potential short circuits.
- E. Function test all systems affected during performance of this modification.
- F. Raise and secure overhead circuit breaker panel.
- G. Return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	7274-47-1	Circuit Breaker (Mfg Klixon)

NOTE: To replace all referenced circuit breakers will require 10 each of new breakers.

- 4. RECORD COMPLIANCE
 - A. Make the following entry in aircraft log book:

Service Bulletin No. 1124-24-065 dated January 10, 1986 titled "DC Electrical System - Remote Circuit Breaker Random Tripping" has been accomplished this date

B. Revise as necessary the Wiring Diagram Manual and/or Illustrated Parts Catalog chapters affected by compliance with this service bulletin to reflect the changes performed.

> SB 1124-24-065 Page 3 of 3

January 10, 1986

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-30-066A Revision No. 1 October 17, 1986

SUBJECT: ICE AND RAIN PROTECTION - AOA AND SAT TAS PROBES HEAT WIRING IMPROVEMENT

REASON FOR REVISION: Wire number change in paragraph A.(5)(a) of Part C in Accomplishment Instructions.

2. ACCOMPLISHMENT INSTRUCTIONS

PART C

- A. Perform following steps with references listed:
 - (5) Reference WDM, Chapters 30-30-31, 39-30-20 and Figure 3 attached. Revise cabin relay box as follows:
- (a) Remove wire #84 from J174-W and reconnect to PHR1-B2. The WDM may show wire #12 connected to J174-W. The wire will be marked #84.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD. BEN GURION AIRPORT, ISRAEL



RECOMMENDED

SERVICE BULLETIN NO. 1124-30-066A

July 31, 1986

(This Service Bulletin No. 1124-30-066A dated July 31, 1986 supersedes Service Bulletin No. 1124-30-066 dated December 2, 1985 in its entirety.)

SUBJECT: ICE AND RAIN PROTECTION - AOA AND SAT TAS PROBES HEAT WIRING IMPROVEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part (A), Model 1124 Westwind S/N 296 through 426.
 - (2) Accomplishment Instructions Part (B), Model 1124 Westwind S/N 152, 154, 174, 181, 185 through 294, and Model 1124A, S/N 239.
 - (3) Accomplishment Instructions Part (C), Model 1124A Westwind, S/N 295-426.
 - (4) Accomplishment Instructions Part (D), Model 1124/ 1124A S/N 152, 154, 174, 181, 185 through 426.
 - B. REASON

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- (1) Accomplishment Instructions Parts (A) and (B)
 - (a) To provide AUTO TAS probe heat with pitot/static AUTO/OVRD switch in those aircraft so equipped.
 - (b) Assure control of system heaters in the event of a distribution bus failure.
 - (c) To add AOA probe heat to pitot/static on/off (AUTO/OVRD) switch.

NTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

- (2) Accomplishment Instructions Part (C)
 - (a) To provide AUTO TAS probe heat with pitot/ static AUTO/OVRD switch.
 - (b) Assure control of system heaters in the event of a distribution bus failure.
 - (c) To prevent loss of primary pitot/static heat in the event of #2 COM/ACC bus failure.
- (3) Accomplishment Instructions Part (D)
 - (a) To relabel AOA and TAS (OAT) probe heat switches to reflect proper switch operation after the modification is performed.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

- D. DESCRIPTION
 - Accomplishment Instructions Part A: (a) added STR relay and revised cabin relay box wiring, (b) added two wires to probe heat switch from aft overhead circuit breaker panel, and (c) added one wire to AOA heat switch from copilot's instrument panel.
 - Accomplishment Instructions Part B: (a) added STR relay to aft overhead circuit breaker panel, and(b) added two wires to AOA heat switch.
 - (3) Accomplishment Instructions Part C: (a) added STR relay and revised cabin relay box wiring, and (b) added two wires to probe heat switch from aft overhead circuit breaker panel.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required to accomplish this modification may be purchased from Atlantic Aviation Supply Company, Wilmington, Delaware or may be procured locally.

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July 31, 1986

- G. SPECIAL TOOLS
- H. WEIGHT & BALANCE

Not affected

I. ELECTRICAL LOAD DATA

Not affected

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters:

22-10-08	34-10-05
30-30-01	39-30-20
34-10-03	

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters:

22-10-08	34-10-05
30-30-01	39-30-20
34-10-03	

2. ACCOMPLISHMENT INSTRUCTIONS

PART A

- A. Perform following steps with references listed.
 - (1) Preliminary Test:
 - (a) A/C power and Avionics Master #2 ON.
 - (b) Should SAT/TAS probe heat switch not exist and SAT/TAS probe is installed, cycle PITOT/STATIC switch to OVRD. SAT/TAS heat OFF, annunciator should go out. (If not, then malfunction exists. Refer to WDM, Chapter 30-30-01 for troubleshooting.) Follow instructions from steps 2 through 3. (b).4.
 - (c) With temp probe heat switch installed, follow entire procedure from step 2 to end.
 - (2) Disconnect and remove cabin relay box. Mount new STR relay (P/N MS27401-14) and socket (P/N 000300-1194) on side of box forward of connector J-409 using angle mounting bracket (IAI P/N 5863558-35). Mount base should be approximately 2.20 inches aft of forward end of cabin relay box.

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- (3) Revise cabin relay box wiring as follows (reference WDM, Chapters 30-30-01 and 39-30-20):
 - (a) Remove wire #12 from J174-W and connect to PHR-B2 with existing wire.
 - (b) Connect new wire to STR relay, using #16AWG wire, as follows:
 - (1) X1 to PHR-B1, wire #115
 - (2) X2 to TB1-6, wire #116
 - (3) Al to J408-N, wire #114
 - (4) A2 to J408-P, wire #112
 - (5) Bl to J408-M, wire #107
 - (6) B2 to J409-L, wire #104
- (4) Reference WDM, Chapters 34-10-05 and 34-10-03 and Figure 1 attached. Lower the aft overhead C/B panel and add two new #14 AWG wires (FT17B14 and FT16B14) from P408-N to TAS/OAT probe heat switch.
 - (a) Add new #18 AWG wire F29C18 from P409-L to J20-U. Remove, cap and stow existing wire lH41C16 from P409-L.
 - (b) Locate existing wire F56A18 from P408-M that is capped and stowed near AOA connector J86. Splice F56A18 to existing wire F5B18 at J86-P.
 - (c) Remove copilot's instrument panel, install new wire F29B18 from P20-U to AOA probe heat switch.
- (5) Inspection
 - (a) A/C power ON, Avionics Master #2 ON.
 - (1) Measure 28 Vdc at P408-N with temp probe switch ON, 0 Vdc with switch OFF. Leave switch OFF.
 - (2) Measure 28 Vdc at P408-M with AOA switch ON, 0 Vdc with switch OFF. Leave switch OFF.
 - (b) A/C power OFF, connect cabin relay box.

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(c) A/C power ON, Avionics Master #2 ON.

CAUTION

Pitot and static heaters will be ON in the following procedures. Observe standard precautions.

- (d) Pull RH pitot static circuit breaker. DO NOT push in distribution bus tie.
- (e) Measure 28 Vdc at P408-N and P408-M with pitot static heat switch in OVRD position. #2 pitot heat annunciator lit. AOA Ammeter indicates probe heat power. Switch to AUTO, measure 0 Vdc. Leave switch in AUTO.
- (f) Reset RH pitot static circuit breaker.
- (g) Extend nose gear or otherwise release nose oleo switch.
- (h) Measure 28 Vdc at P408-N and P408-M. Both pitot heaters and AOA annunciators extinguished. AOA Ammeter indicates probe heat power. Reset oleo switch, measure 0 Vdc.
- (i) A/C power OFF.
- (j) Reinstall cabin relay panel and secure aircraft.
- (k) Install copilot's instrument panel. Perform pitot/static tests as necessary due to instrument removal.
- (1) Perform operational test of all systems disturbed by the performance of this modification.

PART B

- A. Perform following steps with references listed:
 - (1) Reference WDM, Chapter 30-30-01. Lower aft overhead circuit breaker panel and install new STR relay (P/N MS27401-14) and socket (P/N 000300-1194).
 - (a) For aircraft S/N 152, 154, 174, 181, 185-239, fabricate a new relay mounting bracket from .063 Alclad 2024-T3. Using present bracket as template, extend by .85 inch in order to support new STR relay. New bracket will mount AEL, GFR and STR relays. Finish new bracket with zinc chromate primer.

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- (b) For aircraft S/N 240-294 mount new STR relay in space directly above AEL relay. Drill .144 inch diameter hole in aft bracket for proper alignment of new relay.
- (2) Reference WDM Chapters 34-10-05 and 34-10-03 and Figure 2 attached. Connect new wires #16 AWG F29C16 and F5C16 from STR to copilot's instrument panel J20, pins U and P. Route with existing cable bundle along right sidewall. Add new #16 AWG wires FT16B16 and FT17B16 from STR to TAS/OAT probe heat switch in aft C/B panel. Add new wire 2H41E18 from STR to existing pitot/static heat switch in forward C/B panel.
 - (a) Remove copilot's instrument panel. Add new #18 AWG wire from P20-U to AOA probe.
 - (b) Provide airframe ground for connection to new STR relay pin X2.
 - Drill .194 inch diameter hole in right side of aft overhead circuit breaker panel approximately 2.0 inches forward of hinge edge, and centered between top and bottom of side rail.
 - (2) Insert screw (MS 35207-262) with washer (AN960K10, 3 places), terminal lug, lockwasher (MS 35338-43) and nut (MS21042-3) through hole. Crimp new #18 AWG H247A18N wire to lug for connection to STR relay prior to final assembly.
 - (3) Ensure contact area is clean and apply Iridite for protection. Paint screw-head same as O/H panel.
- (3) Applies to S/Ns 221, 246, 258 and 266 only.
 - (a) Locate PHR relay in circuit breaker panel and cut wire #2H40E20 (aircraft S/N 221, 246), wire #H37E20 (aircraft S/N 258, 266) from PHR-X1, allowing sufficient length to jumper to PHR-B2. Cap and stow remaining end.
 - (b) Relabel pitot static heat switch: OFF is actually "AUTO" (Automatic, from right MLG uplock) and ON is "ON" or OVRD (override).

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- (4) Inspection
 - (a) A/C power ON, Avionics Master #2 ON.
 - (b) Temp probe heat OFF, pitot/static heat ON, measure 28 Vdc at temp probe plug DBl27, pin 1. Pitot heat switch OFF, measure 0 Vdc.

- (c) AOA heat OFF, pitot/static heat ON, AOA Ammeter indicates probe heater power.
- (5) Reinstall circuit breaker panel and secure aircraft.
- (6) Install copilot's instrument panel. Perform pitot/ static tests as necessary due to instrument removal.
- (7) Perform operational tests of all systems disturbed by the performance of this modification.

PART C

- A. Perform following steps with references listed.
 - Reference WDM, Chapter 30-30-01. Locate forward circuit breaker panel and remove #16 jumper from AUTO/OVRD switch terminals 2 and 5.
 - (2) Locate and unstow wire #2H40Al6 and connect to AUTO/ OVRD switch terminal 5. Ensure opposite end connects to RH pitot static circuit breaker.
 - (3) Inspect temp probe heat circuit breaker to ensure proper connection to #1 COM/ACC bus. If connected to #2 COM/ACC bus, disconnect bus tie and reconnect to bus bar for #1 COM/ACC bus. Revise electrical load analysis accordingly if connection change is made.
 - (4) Disconnect and remove cabin relay box. Mount new STR relay (P/N MS27401-14) and socket (P/N 000300-1194) on side of box forward of connector J-409 using angle mounting bracket (IAI P/N 5863558-35). Mount base should be approximately 2.20 inches aft of forward end of cabin relay box.
 - (5) Reference WDM, Chapters 30-30-01 and 39-30-20 and Figure 3 attached. Revise cabin relay box as follows:
 - (a) Remove wire #54 from J174-W and connect to PHR1-B2. The WDM may show wire #12 connected to J174-W. The wire will be marked #84.

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- (b) Connect new wires to STR relay using #16 AWG wire as follows:
 - (1) X1 to PHR-B1, wire #115
 - (2) X2 to TB1-6, wire #116
 - (3) Al to J408-N, wire #114
 - (4) A2 to J408-P, wire #112
- (6) Add new #14 AWG wires FT17B14 and FT16B14 from P408 to TAS/OAT probe heat switch in aft overhead C/B panel. Route wiring with existing cable bundles along right sidewall next to copilot's seat to P408, cabin relay box. Revise electrical wiring per Figure 3.
- (7) Inspection
 - (a) A/C power ON, Avionics Master #1 ON.
 - (1) Measure 28 Vdc at P408-N with temp probe heat switch ON, 0 Vdc with switch OFF. Leave switch in OFF position.
 - (b) A/C power OFF, Avionics Master #1 OFF. Connect cabin relay box.
 - (c) A/C power ON, Avionics Master #1 and #2 ON, push LH and RH pitot static circuit breakers.

CAUTION

Pitot and static heaters will be ON in the following procedures. Observe standard precautions.

- (d) Measure 28 Vdc at P408-N with pitot static heat switch in OVRD position. LH and RH pitot heat and AOA annunciators will be OFF. Select switch to AUTO, measure 0 Vdc, LH and RH pitot heat and AOA annunciators will be lit.
- (e) Avionics Master #1 OFF, #2 ON. LH and RH pitot heat and AOA annunciators will be lit. Select pitot static switch to OVRD, AOA LH and RH pitot heat annunciators OFF. Select AUTO, AOA LH and RH pitot heat annunciators lit. Leave switch in AUTO.
- (f) Avionics Master #1 and #2 ON. Extend nose gear or otherwise release nose oleo switch.
- (g) Measure 28 Vdc at P408-N and M with gear extended. Both pitot heat and the AOA annunciators extinguished.

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- (h) Reset oleo switch, measure 0 Vdc at P408-N and M, the annunciators will be lit.
- (i) Aircraft power OFF.
- (j) Reinstall cabin relay panel and secure aircraft.

PART D

- A. Relabel AOA and TAS (OAT) probe heat switches.
 - (1) "OFF" becomes "AUTO" (automatic) to coincide with the primary pitot/static switch "AUTO" mode.
 - (2) "ON" becomes "OVERRIDE". This is necessary since modification does not allow the primary pitot/static switch to override the AOA or TAS systems.
 - (3) Normal operation of the modified system is based on the AOA and TAS probe heat switches remaining "OFF" (now "AUTO"), permitting control of system heaters from the primary pitot/static heat switch while it is in "AUTO" condition.

Selecting "OVERRIDE" on primary control switch will turn the AOA or TAS systems OFF unless the independent system switches are selected to "OVERRIDE".

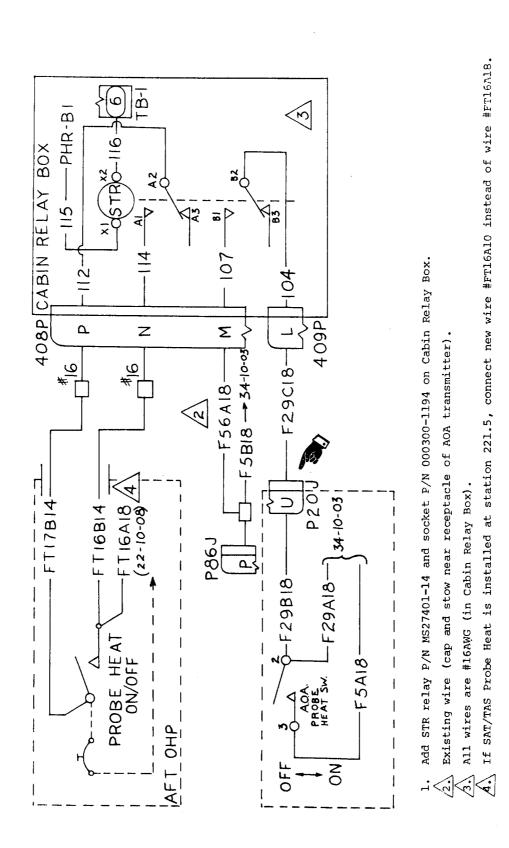
3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1 1	MS27401-14 000300-1194	Relay (Mfg. Deutsch) Socket, relay
A/R	327654	(Mfg. Deutsch) Terminal, Ring tongue
A/R A/R	MIL-W-16878D 324485	(Mfg. AMP) Wire, #16 AWG Stranded Spare wire cap
1	5863558-35	(Mfg. AMP) Angle bracket

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-30-066A dated July 31, 1986 titled "Ice and Rain Protection - AOA and SAT TAS Probes Heat Wiring Improvement" has been accomplished this date

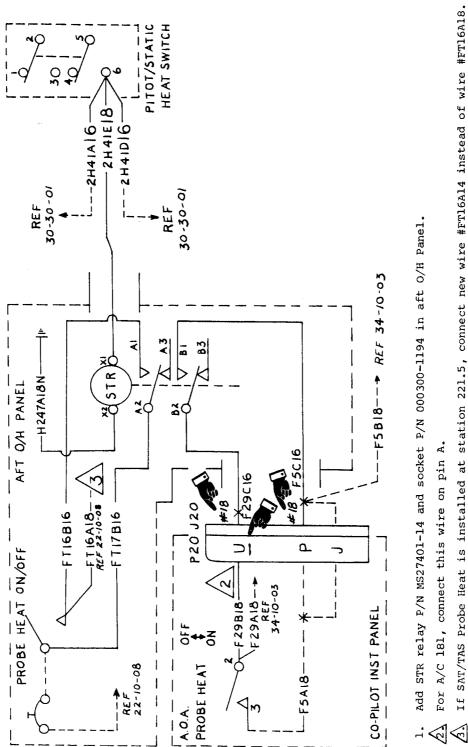
- B. Update Wiring Diagram Manual, Chapters 30-30-01, 39-30-20, 34-10-05 and 22-10-08 as required to reflect wiring changes performed.
- C. Update Illustrated Parts Catalog to reflect new parts and part numbers of items installed.

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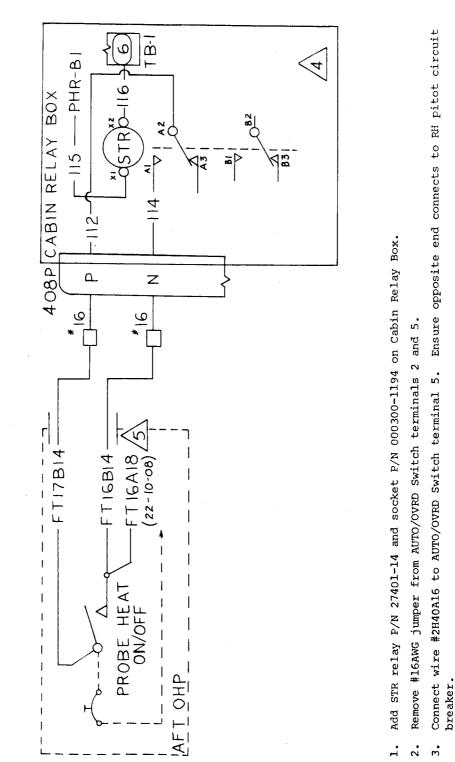


If SAT/TAS Probe Heat is installed at station 221.5, connect new wire #FT16A14 instead of wire #FT16A18. For A/C 181, connect this wire on pin A.

2

FIGURE

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All wires are #16AWG (in Cabin Relay Box).

If SAT/TAS Probe Heat is installed at station 221.5, connect new wire #FTI6Al0 instead of wire #FTI6Al8. £

July 31, 1986

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Μ FIGURE



OPTIONAL

SERVICE BULLETIN NO. 1124-34-067

January 8, 1986

- SUBJECT: NAVIGATION RETROFIT OF COLLINS VERTICAL GYRO(S) AND IMPROVED VERTICAL GYRO MOUNTING
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) MODEL 1124 WESTWINDS, all serial numbers featuring nose deck mounted vertical gyro(s).
 - (2) MODEL 1124A WESTWINDS, serial numbers 295 through 426 except those aircraft with split gyro installation.
 - B. REASON
 - (1) To authorize retrofit of Collins 332D-11A or 332D-11T vertical gyro(s) for Model 1124 aircraft equipped with Sperry VG14 and/or VG-14A units.
 - (2) To reduce radar stabilization errors, autopilot roll instability, ADI display errors and the need for aileron/rudder cross trimming by installing an adjustable "skew-plate" mount on Model 1124 aircraft (Collins vertical gyro(s) installation only).
 - (3) To improve gyro vibration isolation and "skew-plate" rigidity for Model 1124A aircraft.
 - C. COMPLIANCE

Compliance with this service bulletin is optional.

INTERNATIONAL INC.

SB 1124-34-067 Page 1 of 10

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL D. DESCRIPTION

PART A:

A "skew-plate" vertical gyro mount is installed on the nose deck of Model 1124 aircraft.

Instructions for retrofitting Collins vertical gyro(s) to Model 1124 aircraft equipped with Sperry units are provided.

PART B:

"Skew-plate" clamps and improved gyro mounting stud assemblies are installed in Model 1124A aircraft.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required to accomplish this Service Bulletin may be obtained through Atlantic Aviation Supply Company or their authorized dealers.

G. TOOLING

No special tools are required.

H. WEIGHT & BALANCE DATA

PART NO.	DESCRIPTION	<u>UNIT WT (1</u>	b) ARM (in.)
5 863559-53	Base-plate	1.6	-2.3
5 863559-89	Skew-plate(s)	0.8	-2.3
VG-14	Sperry gyro(s)	10.0	4
VG-14A	Sperry gyro(s)	7.3	-4
332D-11A, -11T	Collins gyro(s)	7.2	-2.3

I. ELECTRICAL LOAD

Not applicable

J. REFERENCES

Service Information Letter No. 1124-22-038 "Vertical Gyro Adjustment Procedure."

SB 1124-34-067 Page 2 of 10 Service Information Letter No. 1124-22-039 "Vertical Gyro Improvements."

1124/1124A Maintenance Manual, Chapter 22-01-00. 1124/1124A Wiring Diagram Manual, Chapters 22-10-02, 22-10-03, and 34-40-01.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 34-20-00 will be revised to reflect the modifications described. 1124/1124A Wiring Diagram Manual, Chapters 22-10-02, 22-10-03, and 34-40-01 will be revised to reflect the modifications described.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A: Model 1124 skew-plate installation and gyro retrofit.

- A. Gain access to the R/H nose deck and remove existing gyro(s).
- B. If Sperry gyro(s) were removed, replace mating connector(s) in aircraft with P/N MS3476L-18-32S (refer to Chart 1 for pin connection information).
- C. Drill out rivets and remove existing gyro mounting Z angles from nose deck structure. Remove any universal head rivets that will prevent the 5 863559-53 plate from laying flat on the nose deck structure. Countersink redundant holes and plug with MS14218AD rivets.
- D. Remove the #2 inverter and oxygen bottle access cover assembly. Trim the outer edges of the oxygen bottle access cover so that it fits properly into the "joggle" provided in the nose deck.
- E. Install P/N 5 863559-53 base-plate, P/N 5 863559-89 skewplate assembly(s) and P/N 5 863559-103 clamps per Figure 1. Install nut-plates through oxygen bottle access cover or nose deck structure only (not through P/N 5 863559-53 base-plate) using MS14218AD rivets.
- F. Install Collins Vertical gyro(s) P/N 332D-11A or 332D-11T. It is recommended that Collins Service Bulletins 332D-11A/T-22, 24; 332D-11A-23 be accomplished prior to installation. Reference Service Information Letter No. 1124-22-039 "Vertical Gyro Improvements."

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January 8, 1986

- G. Perform system tests per 1124/1124A Maintenance Manual, Chapter 22-01-00 to ensure proper gyro outputs.
- H. Level gyro(s) per Service Information Letter No. 1124-22-038 "Vertical Gyro Adjustment Procedure." Leveling can be accomplished by adding AN960-PD10L washers under the gyro mounts (Figure 1 Section B-B). Grind washer faces as required to achieve proper thickness.
- I. Secure P/N 5 863559-103 clamps. Install MS16562-21 pins. Torque gyro mounting nuts to 4 ft-lbs minimum. Ensure that two full threads protrude through nuts.
- J. Reinstall the #2 Inverter, secure nose deck compartment and return aircraft to service.

PART B: Model 1124A clamp and stud assembly installation.

- A. Gain access to the R/H nose deck and remove gyro(s). It is recommended that Collins Service Bulletins 332D-11A/ T-22, 24; 332D-11A-23 be accomplished before reinstallation.
- B. Measure the thickness of the skew-plate(s). If thickness is less than 1/8 inch, remove, discard and order P/N 5 863559-89 skew-plate assembly(s) for later installation (P/N 5 863559-93, 94, 95 stud assemblies will already be installed in skew-plate(s)).

If skew-plate(s) are 1/8 inch in thickness, drill out rivets securing the three stud assemblies per plate and replace them with one each P/N 5 863559-93, 94, 95 per skew-plate using MS20427-4C6 rivets (Figure 1).

- C. Measure thickness of base-plate. If less than 1/8 inch in thickness, discard and replace with P/N 5 863559-53 base-plate.
- D. Remove #2 inverter and oxygen bottle access cover assembly. Trim the outer edges of the access cover so that it fits properly in the "joggle" provided in the nose deck.
- E. Remove any universal head rivets from the nose deck structure that will prevent the P/N 5 863559-53 base-plate from laying flat on the nose deck structure. Countersink redundant holes and plug with MS14218AD rivets. Remove all rivnuts (if any) from nose deck.

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- F. Lay out and install P/N MS21075-3 nut-plates per Figure 1 using MS14218AD rivets. Install all nut-plates on bottom of nose deck structure and bottom of oxygen bottle access cover (not on P/N 5 863559-53 base-plate).
- G. Install oxygen bottle access cover base, plate P/N 5 863559-53, skew-plate(s) P/N 5 863559-89, and clamps P/N 5 863559-103. Refer to Figure 1 for hardware information as well as which base-plate holes require countersinking.
- H. Relocate desiccator assembly per Figure 1.
- I. Reinstall gyro(s) and level per Service Information Letter No. 1124-22-038 "Vertical Gyro Adjustment Procedure." Leveling can be accomplished by adding AN960-PD10L washers under the gyro mounts (Figure 1, Section B-B). Grind washer faces as required to achieve proper thickness.
- J. Secure P/N 5 863559-103 clamps. Install MS16562-21 pins. Torque gyro mounting nuts to 4 ft-lbs minimum. Ensure that two full threads protrude through nuts.
- K. Reinstall the #2 Inverter, secure the nose deck compartment and return aircraft to service.
- 3. MATERIAL INFORMATION
 - A. For MODEL 1124 Installation (See Accomplishment Instructions, Part A).

QTY (Single V.G.)	QTY (Dual V.G.)	PART NO.	DESCRIPTION
A/R 1 1	A/R 1 2	5 863559-61 5 863559-53 5 863559-89	Shim Base-plate Skew-plate
2 1 1	4 1 2	5 863559-103 5 863559-71 332D-11A or	assy. Clamp Placard **Gyro (Mfg.
2 3 7	4 6 7	332D-11T *AN3-10A *AN3-5A *MS24694-S52	Collins) Bolt Bolt Screw

8	8	*MS27039-1-10	Screw
16	27	*AN960-10L	Washer
3	6	*AN960-PD10L	Washer (alum.)
3	6	*MS35338-43	Lock washer
3	6	*MS21042-3	Nut
8	11	*MS21075-3	Nut plate
2	4	*MS16562-21	Pin
1	. 2	*MS3476L-18-32S	Connector
A/R	A/R	*MS14218AD	Rivet

* May be obtained locally.

**Verify that Collins Service Bulletins 332D-11A/T-22, 24; 332D-11A-23 have been accomplished prior to installation.

B. For MODEL 1124A Installation (see Accomplishment Instructions, Part B).

QTY	QTY		
(Single V.G.)	(Dual V.G.)	PART NO.	DESCRIPTION
2	4	5 863559-103	Clamp
1	2	**5 863559-93	Stud Assy.
1	2	**5 863559-94	Stud Assy.
1	2	**5 863559-95	Stud Assy.
1	1	5 863559-71	Placard
A/R	A/R	5 863559-61	Shim
1 .	1	5 86355 9- 67	Bracket
2	4	*AN3-10A	Bolt
2	6	*AN960-10L	Washer
2	3	*MS21075-3	Nut-plate
6	12	*MS20427-4C6	Rivet, CSK
2	4	*MS16562-21	Pin
3	6	*AN960-PD10L	Washer (alum)
A/R	A/R	*MS14218AD	Rivet, CSK
1	1	**5 863559-53	Base-plate
1	2	**5 863559-89	Skew-plate

* May be obtained locally

**Order P/N 5 863559-53 base-plate only if existing plate is less than 1/8 inch thick. Order P/N 5 863559-89 skew-plate(s) only if existing skew-plate(s) are less than 1/8 inch thick (do not order P/N 5 863559-93, 94, 95 stud assemblies in this event).

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4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-067 dated January 8, 1986 titled "Navigation - Retrofit of Collins Vertical Gyro(s) and Improved Vertical Gyro Mounting" has been accomplished this date

> SB 1124-34-067 Page 7 of 10

January 8, 1986

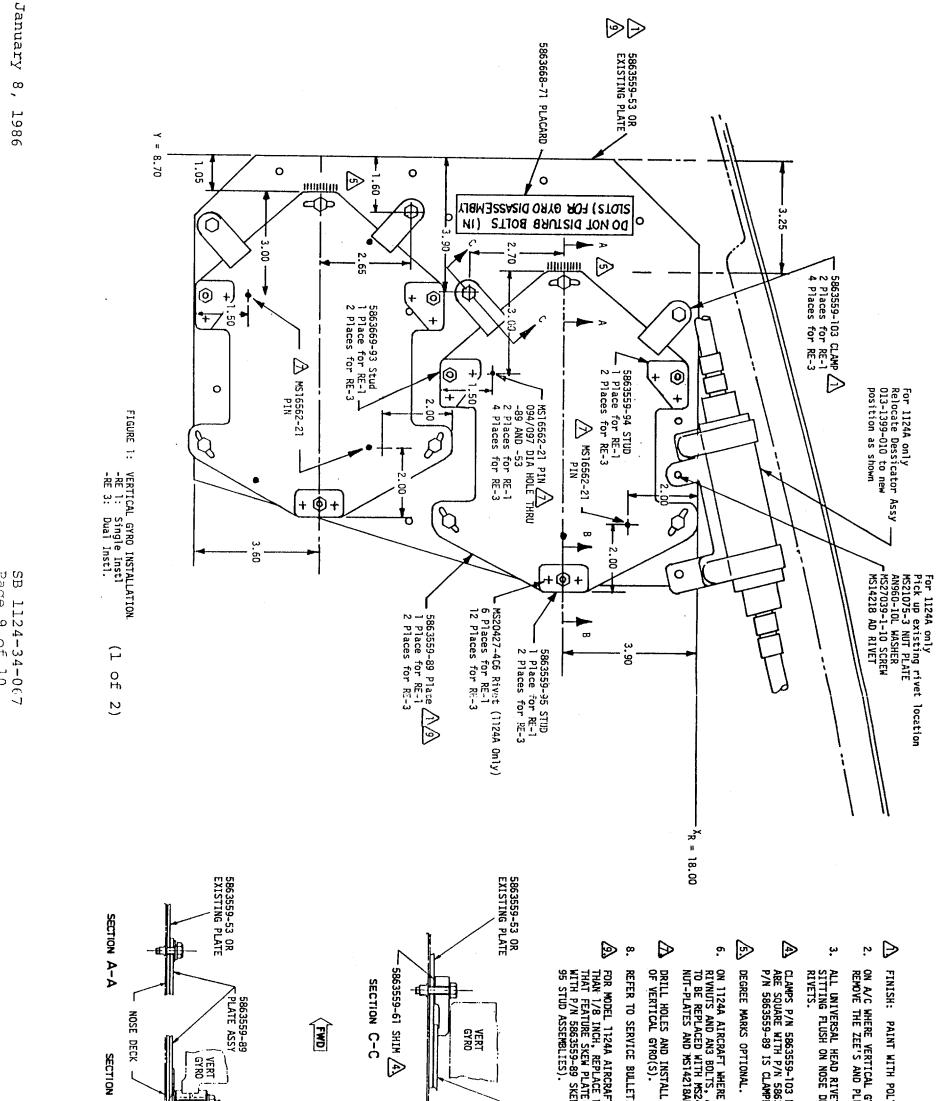
SERVICE BULLETIN NO. 1124-34-067

V.G. #1-DB25 WIRE NUMBER	V. G. #2-DB225 WIRE NUMBER	FROM VG 14/14A	то <u>332D11-а/т</u>	NOTES
C52C24R C53C24B C54C24Y	2C1553B24R 2C1559B24B 2C1556B24	$\frac{x}{y}$	A B C	1
C55G24R C56G24R C57D24Y C58F22 C801E20	2C1546B24R 2C1549B24R 3C1552B24Y 2C1543B2	x N N N N N N N N N N N N N N N N N N	D E F N	2 2
C802B2ON C802A2ON SW4A22R (or SW33A22R) SW5A22B (or SW34A22B) SW6A22R (or SW35A22R) SW7A22B (of SW36A22B)	2C11B22 2C802A2ON	C B L DD EE W V	G H b g f e d	3
NOTES:				
 Wiring Diagram Man Chapter 22-10-02 m these wires revers Vertical Gyro. Sp 	ay show ed at			4
VG14/14A pin numbe shown herein are correct.	erry rs		$\begin{bmatrix} x \\ v \end{bmatrix}$	4
2. Wiring Diagram Man Chapter 22-10-03 m these wires reverse	ay show		C ^w	4
Vertical Gyro. Spo VG14/14A pin number shown herein are co	erry rs			4
3. Splice wires C802(VG14/14A at 332D-11 connect to 322D-112 H and <u>b</u> .	lA/T and		Y	4
 Remove jumpers from install in 332D-112 additional jumpers using #22 AWG wire. 	A/T. Add as shown	НН- D		4
using #22 AwG wire.		H J	$\begin{bmatrix} R \\ L \end{bmatrix}$	4

PIN CONNECTION INFORMATION CHART 1

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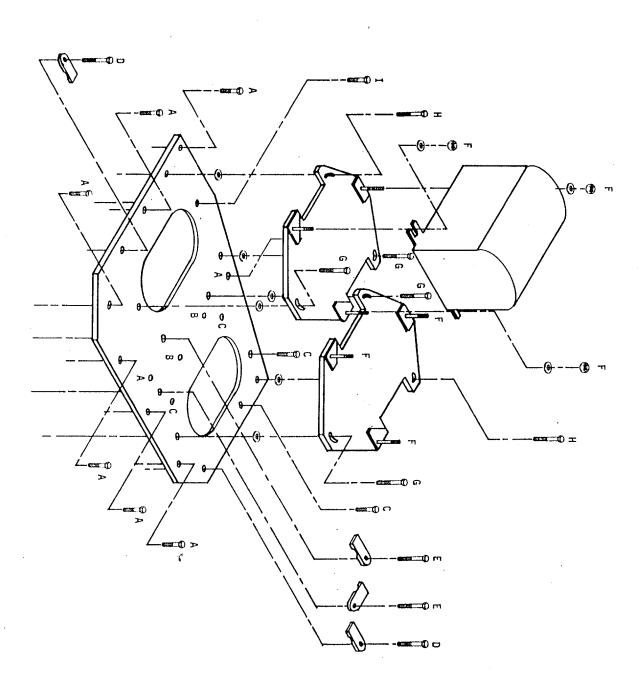
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SERVICE BULLETIN NO. 1124-34-067

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FOR MODEL 1124A AIRCRAFT THAT FEATURE A BASE PLATE OF THICKNESS LESS THAN 1/8 INCH, REPLACE WITH P/N 5863559-53. FOR MODEL 1124A AIRCRAFT THAT FEATURE SKEW PLATE(S) OF THICKNESS LESS THAN 1/8 INCH, REPLACE WITH P/N 5863559-89 SKEW PLATE ASSEMBLY(S) (INCLUDES 5863559-93, 94, 95 STUD ASSEMBLIES). ON 1124A AIRCRAFT WHERE LOWER PLATE IS MOUNTED ON NOSE DECK WITH RIVNUTS AND AN3 BOLTS, ALL BOLTS BELOW THE P/N 5863559-89 SKEW PLATE(S) TO BE REPLACED WITH MS24694-S-52 SCREWS. REPLACE RIVNUTS WITH MS21075-3 NUT-PLATES AND MS14218AD RIVETS. FINISH: PAINT WITH POLYURETHANE WHITE 17.875 PER MIL-83286 CLAMPS P/N 5863559-103 MAY BE SHIMMED AS REQUIRED TO ENSURE THAT THEY ARE SQUARE WITH P/N 5863559-53 OR EXISTING PLATE WHEN SKEW PLATE ASSY. P/N 5863559-89 IS CLAMPED. ALL UNIVERSAL HEAD RIVETS WHICH PREVENT PIN 5 863559-53 PLATE FROM SITTING FLUSH ON NOSE DECK ARE TO BE REPLACED WITH TYPE MS14218AD RIVETS. ON A/C WHERE VERTICAL GYRO(S) ARE INSTALLED ON ZEE'S P/N 5863559-11, -13, -15 REMOVE THE ZEE'S AND PLUG REDUNDANT RIVET HOLES WITH RIVETS MS14218AD. REFER TO SERVICE BULLETIN NO. 1124-34-040 FOR MODEL 1124 INSTALLATION. 8-8 8 1117 MS16562-21 PINS ONLY AFTER FINAL ADJUSTMENT - 5863559-89 PLATE ASSY GYRO MOUNT (TYP) REF. COLLINS SERVICE BULLETIN 332D-11A/T-22 GENERAL NOTES 5863559-53 OR EXISTING PLATE SHIM UNDER GYRO MOUNT TO LEVEL WITH AN960-PDIOL WASHERS AS REQUIRED. GRIND WASHER FACES IF NECESSARY TO ACHIEVE PROPER THICKNESS.



(1 place for RE-1, 2 places for RE-3). plate only. plate. 190 to 190 to .194 dia. holes thru 5863559-5

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- ср washer, MS21075-3 nut-plate (2 places deck structure.
- Ξ deck structure. AN3-5A bolt, MS35338-43 lock washer, pick up existing nut-plates (2 places). .190 to .194 dia.
- .190 to .194 dia. hole CSK .38 5863559-53 plate, MS24694-S52 hole CSK .385 to .3 screw,

.190 to .194 dia. hole thru 5863559-53 plate only to pick up existing nut-plates. MS27039-1-10 screw, AN960-10L washer (8 places). .190 to .194 dia. holes thru 5863559-53 on existing plate and nose structure. MS21075-3 nut-plate, AN3-5A bolts, MS35338-43 lock washer. MS21042-3 nut, AN960-10L washer (3 places for RE-1, 6 places for RE-3). .190 to .194 dia. holes CSK .385 to .395 dia. x 100⁰ thru 5863559-53 plate only. Pick up existing nut-plates. MS24694-S52 screws (2 places). .190 to .194 dia. holes thru 5863559-53 or existing plate and nose deck structure. AN3-5A bolt, MS35338-43 lock washer, AN960-10L washer, MS21075-3 nut-plate (2 places for RE-1, 4 places for RE-3). .194 dia. hole CSK .385 to .395 dia. x 100⁰ thru 5863559-53 MS24694-S52 screws and MS21075-3 nut-plates (4 places). AN3-5A bolt, MS35338-43 lock washer, AN960-10L HOLE AND FASTENER CODES 95 dia. x 100⁰ thru structure and MS21075-3 nut-plate (1 place). 53 on existing plate, pick up bolts, AN960-10L washers



$\frac{e^{\frac{2\pi i M_{\rm e}}{M_{\rm e}}}}{e^{\frac{2\pi i M_{\rm e}}{M_{\rm e}}}}$

OPTIONAL

SERVICE BULLETIN NO. 1124-53-068

February 5, 1986

SUBJECT: DOORS - NOSE GEAR TRUNNION ACCESS DOOR INSTALLATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To facilitate access to nose landing gear trunnion grease points.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Two access doors are installed on the fuselage L/H and R/H sides in the nose landing gear trunnion area.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized dealers.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

No special tooling required.

- H. WEIGHT AND BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA Not applicable.
- J. REFERENCE

None.

K. PUBLICATIONS AFFECTED

1124 Maintenance Manual 1124 Illustrated Parts Catalog

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Gain access to nose landing gear area by removing the radome.
 - B. Cut access hole in L/H fuselage skin and radius corners. R/H installation typical unless otherwise noted. (Refer to Figure 1.)
 - C. Using Figure 1 as a guide, fabricate doublers P/N CMA71518-501-5 out of 2024-0 cond .050 thick clad, doors P/N CMA71518-501-7 and fillers P/N CMA71518-501-9 out of 2024-T3 .050 thick clad; parts shall be true along contour. Doublers to be heat treated 365-385°F for 16 hours to T42. Alodine doublers, fillers and doors. Paint with epoxy primer.
 - D. Install doubler, hinge and filler. Hinge pin to be peened before installation. Refer to Figure 1 through 3, picking up existing rivets on forward edge. Using that as a guide for rivet spacing, drill and countersink remaining holes and install MS14218AD4 rivets, using standard shop practices and complete installation.
 - E. Install latches on door in two places, drill and countersink holes and install MS20426AD3 rivets. (Refer to Figure 1.)
 - F. Install door on hinge assembly, drill and countersink holes and install MS20426AD4 rivets. (Refer to Figure 1.)

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SERVICE BULLETIN NO. 1124-53-068

- G. To ensure L/H and R/H sides have proper drainage and to prevent the collection of water, locate and drill 0.25 diameter holes in L/H and R/H fuselage skin at Station Y = 10.80 and Z = 10.05, approximately. Refer to Figure 4 and 1124 Maintenance Manual Chapter 6-00-02, page 5, for station diagram, Alodine holes after drilling.
- H. Install radome and return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
4 2 2 4 4 16	H5000-040-064 5823001-33 5823001-31 5823001-23 MS20426AD4-X MS14218AD4-X MS20426AD3-X	Latch Hinge Half Hinge Half Hinge Pin Rivet Rivet Rivet
PARTS MAY	BE FABRICATED LOCALLY	
2	CMA71518-501-9 (.050 thick clad 2024-T3 stock size 0.70 x 1.70)	Filler
2	CMA71518-501-7 (.050 thick clad 2024-T3 stock size 3.50 x 7.00)	Door
2	CMA71518-501-5 (.050 thick clad	Doubler

4. RECORD COMPLIANCE

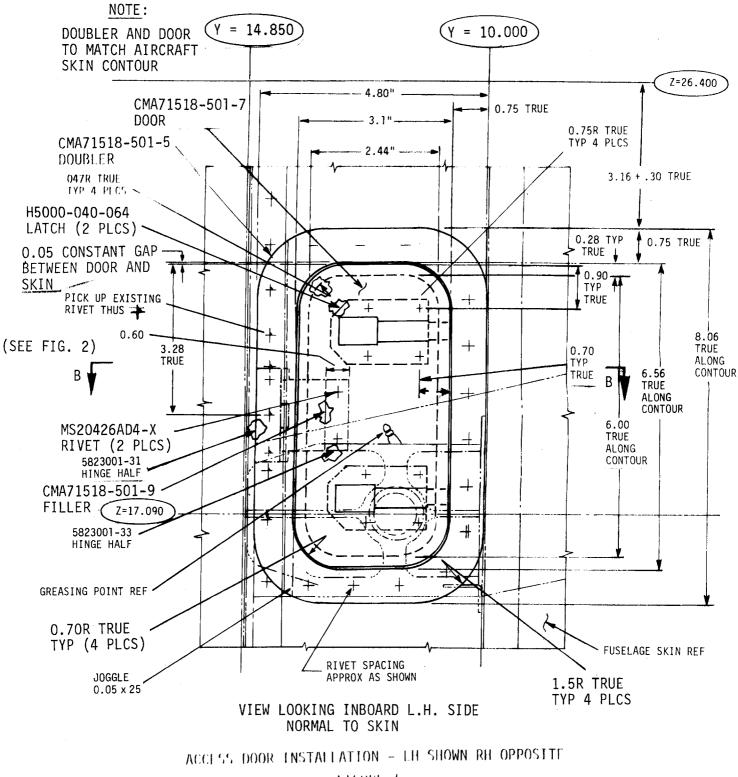
Make the following entry in the aircraft log book:

2024-0 stock size 5.50 x 8.50) Heat treated to T42.

Service Bulletin No. 1124-53-068 dated February 5, 1986 titled "Doors - Nose Gear Trunnion Access Door Installation" has been accomplished this date _____.

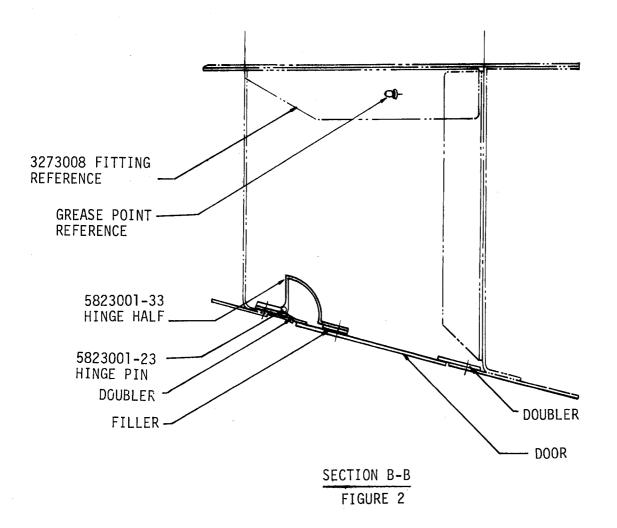
February 5, 1986

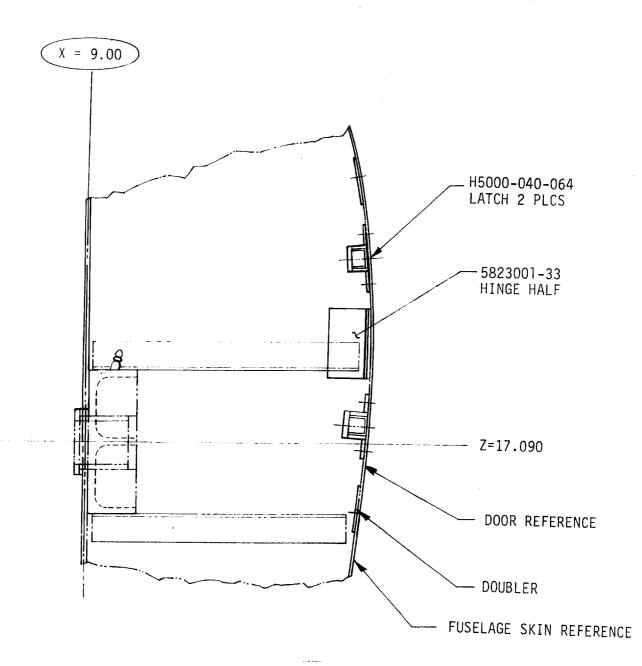
SB 1124-53-068 Page 3 of 7



TECORE E

SB 1124-53-068 Page 4 of 7



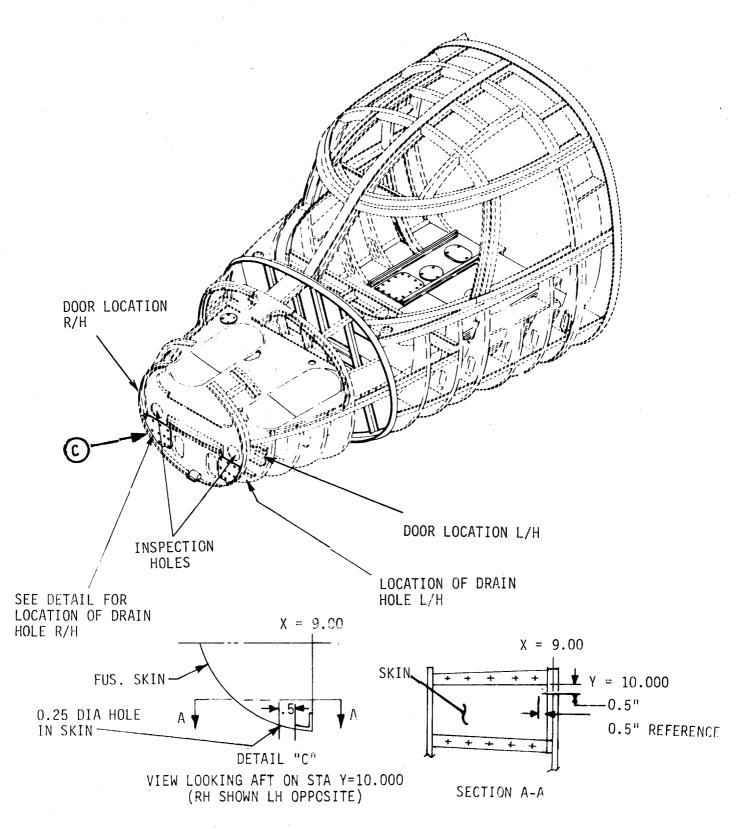


VIEW LOOKING AFT ON Y=14.85

FIGURE 3

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.



February 5, 1986

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-33-069

January 31, 1986

SUBJECT: LIGHTS - CHANGE IN POWER SOURCE FOR CABIN LIGHTING SYSTEM

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 181, 187 through 400.

B. REASON

To provide uninterrupted cabin illumination during engine start cycles.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This modification requires the installation of a 2 AMP circuit breaker, and relocates the cabin lighting power and control circuit bus ties to enable the reading or indirect lighting to stay on during engine starts.

E. APPROVAL

This service bulletin has been review by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

> SB 1124-33-069 Page 1 of 5

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representative, or may be procured locally.

G. TOOLING

None

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

None

J. REFERENCES

1124 Wiring Diagram Manual, Chapter 33-20-02, 25-30-01. 1124 Maintenance Manual, Chapter 25.

K. PUBLICATIONS AFFECTED

1124 Wiring Diagram Manual, Chapter 33-20-02.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. CONFORMITY INSPECTION

The following checks should be made first to see if your aircraft is affected:

- (1) Aircraft power ON, Avionics No. 2 Master ON.
- (2) "Indirect Reading" light switch ON.
- (3) Open No. 1 Distribution Bus breakers
- (4) Cabin fluorescent should stay ON.
- (5) Avionics No. 2 Master switch OFF, cabin fluorescent lights should stay ON.
- (6) If step (4) or (5) above fails, continue with modification procedures.

B. MODIFICATION PROCEDURES

- (1) Reference Wiring Diagram Manual, Chapter 33-20-02 and figure 1 of this text for wiring changes.
- (2) Locate TB-15 above Emergency Lamp Module and cabin door. Gain access to TB-15 and galley interconnect.
- Remove, cap and stow wire #L326T20 from TB-15 terminal
 3 and from galley interconnect pin 17 or pin T
 (determined by configuration).
- (4) Install 2 Amp circuit breaker in an open location at the galley breaker panel, reference Wiring Diagram Manual Chapter 25 for your type galley. Label the new breaker "Flood Light Control."
- (5) Remove wire #L326A20 (may be L326S20) from pin (17),
 (T) or (A) as applicable and attach to one side of new breaker.
- (6) Add new wire #L200H16 to opposite side of breaker. Using butt splice, add two short lengths (3") of #20 AWG to free end of wire #L200H16. Insert one #20 wire in pin (17) or (T) as applicable and other #20 wire in pin (18), (16), or (U) of galley interconnect, as applicable.
- (7) At TB-15 add new #16AWG wire #L200G16 to terminal #1. Route along existing cables to galley connector.
- (8) Add two short lengths (3") of #20AWG wire, using butt splice, to free end of wire #L200Gl6. Insert one #20 wire in pin (17) or (T) as applicable and other #20 wire in pin (18), (16), or (U) of galley connector plug, as applicable.
- (9) Return to Conformity Inspection in part A.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
2	327583	Step-down butt splices (Mfg AMP)
1	7274-47-2	Circuit Breaker (Mfg Klixon)
A/R	320554	Terminal (Mfg AMP)
A/R A/R	MIL-W-16878D MIL-W-16878D	Wire #20AWG Wire #16AWG

January 31, 1986

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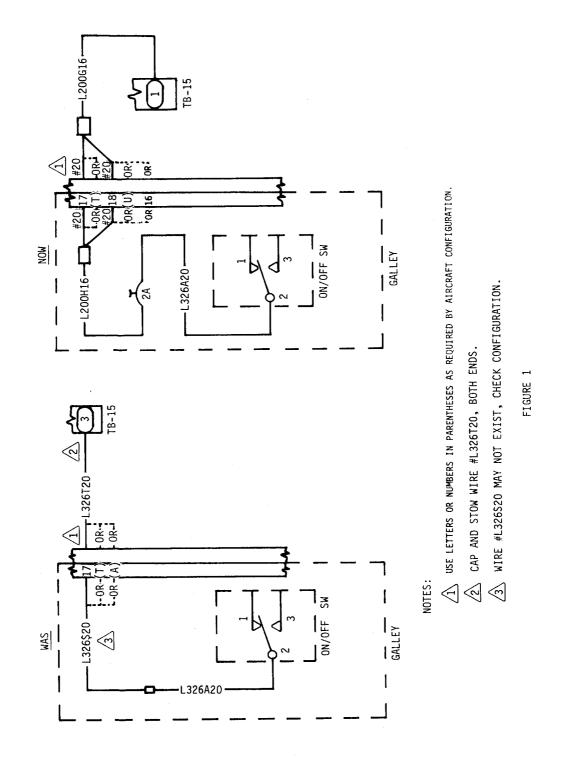
4. RECORD COMPLIANCE

.

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-33-069 dated January 31, 1986 titled "Lights - Change in Power Source for Cabin Lighting System" has been accomplished this date _____.

B. Revise the Wiring Diagram Manual to reflect changes performed per this service bulletin.



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OPTIONAL

SERVICE BULLETIN NO. 1124-34-070

January 15, 1986

SUBJECT: NAVIGATION - VLF/OMEGA RECEIVER PERFORMANCE IMPROVEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers using "E-Field" antennas for VLF navigation systems.

B. REASON

To increase VLF/Omega receiver performance in the presence of high aircraft-generated electrical noise when VLF signal is of a marginal level.

This modification will NOT reduce noise generated by P-static interference.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Replacement of existing VLF/Omega "E-Field" antenna to receiver/computer wiring with cabling containing greatly improved shielding will eliminate aircraft-generated electrical noise from degrading the VLF signals presented to the system for navigation.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, through their authorized dealers or may be procured from: Electronic Cable Specialists, 15722 W. Ryerson Road, New Berlin, WI 53151, telephone: (414) 797-8877.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 34-60-01, 34-60-02 and 34-60-03.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters 34-60-01, 34-60-02 and 34-60-03.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Reference Wiring Diagram Manual for system desired and Figure 1 attached.
- B. Measure quantity of cabling required prior to order. Cable P/N 462203 for Global GNS-500 or P/N 412204 for Collins LRN/FMS systems (see Figure 1).
- C. Disconnect, cap and stow existing wires and shields at VLF antenna and computer/receiver unit.
- D. Install new cable assembly well clear of any cable bundles presently containing 400 Hz AC or high current drain DC consumer unit wiring. Clamp as needed by physical requirements, at each bulkhead crossing as a minimum.

SB 1124-34-070 Page 2 of 4 January 15, 1986

(1) Should it be necessary to run new cabling through the aft pressure vessel bulkhead (STA 269), observe necessary precautions to prevent damage to existing wire bundles and to reseal as required by established procedures to prevent pressure leak.

NOTE

Adding a new hole in the aft pressure bulkhead is forbidden even if it can facilitate cable routing.

- E. Bypass any connectors observed between antenna and receiver/computer, permitting an uninterrupted cable run.
- F. Connect new wiring as shown on Figure 1. Shield grounds must connect as shown.
- G. Ensure antennas are properly bonded. Should rebonding be necessary, apply Iridite to bare metal contact surfaces prior to reassembling and sealing antenna.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R	412204 or 462203	Cable assembly (For LRN/FMS) Cable assembly (For GNS-500 and Marconi)
A/R A/R	14-2 PRC 1422	Iridite Sealant or equivalent

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-070 dated January 15, 1986 titled "Navigation - VLF/Omega Receiver Performance Improvement" has been accomplished this date

B. Revise the Wiring Diagram Manual to reflect the changes accomplished by this service bulletin.

SERVICE BULLETIN NO. 1124-34-070

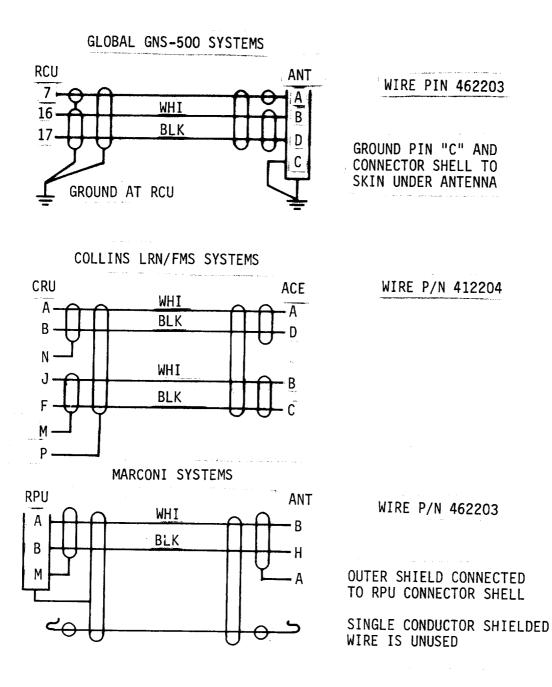
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REFERENCE WIRING MANUAL CHAPTER 34-60 FOR CONNECTOR IDENTIFICATION

FIGURE 1

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SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-34-071 Revision No. 1

June 30, 1987

SUBJECT: NAVIGATION - COPILOT'S ALTIMETER PART NUMBER CHANGES

REASON FOR REVISION:

To change the effectivity in Part A., paragraphs (1)(a) and (b), Accomplishment Instructions.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Parts A & B:
 - (a) MODEL 1124 WESTWINDS, serial numbers 181 and 211 through 253 when the copilot's altimeter P/N 4883778-1 is repaired with P/N 4883778-501.
 - (b) MODEL 1124 WESTWINDS, serial numbers 254 through 270 already equipped with copilot's altimeter P/N 4883778-501.
 - (2) Accomplishment Instructions Part B: MODEL 1124/1124A WESTWINDS, serial numbers 271 and subsequent (reference paragraph 2.B(1)).

INTERNATIONAL INC

SB 1124-34-071 Revision No. 1 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



RECOMMENDED

SERVICE BULLETIN NO. 1124-34-071

February 16, 1987

This Service Bulletin No. 1124-34-071 cancels Service Information Letter No. 35 dated May 16, 1983 in its entirety.

SUBJECT: NAVIGATION - COPILOT'S ALTIMETER PART NUMBER CHANGES

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Parts A & B:
 - (a) MODEL 1124 WESTWINDS, serial number 181 and 211
 through 258, when the copilot's altimeter P/N 4883778-1 is replaced with P/N 4883778-501.
 - (b) MODEL 1124 WESTWINDS, serial numbers 259 through 270 already equipped with copilot's altimeter P/N 4883778-501.
 - Accomplishment Instructions Part B: MODEL 1124/1124A
 WESTWINDS, serial numbers 271 and subsequent (reference paragraph 2.B(1)).
 - B. REASON
 - (1) To permit copilot's altimeter change from Kollsman P/N B44202-10-004 to B44202-10-014 (IAI P/N 4883778-1 to 4883778-501, respectively).
 - (a) Kollsman P/N B44202-10-004 no longer available.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

- (2) To provide a variable potentiometer required to control the altimeter voltage input when equipped with Kollsman Altimeter P/N B44202-10-014 (IAI pin 4883778-501).
- (3) The procedures described herein do not apply to aircraft presently equipped with altimeters of different make or part number than specified above.
- C. COMPLIANCE

Compliance with this service bulletin is recommended.

- D. DESCRIPTION
 - (1) A minor wiring change and the addition of a printed circuit board to provide a regulated vibrator voltage to allow altimeter changeover for 1124 aircraft serial numbers prior to 271.
- E. APPROVAL

The service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material for this modification may be procured through Atlantic Aviation Supply Company, Wilmington, Delaware.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124 Wiring Diagram Manual, Chapter 34-20-06.

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K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 34-20-06. 1124/1124A Illustrated Parts Catalog, Chapter 39-10-05. 1124/1124A Maintenance Manual, Chapter 34-10-01.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A:

- A. Reference Wiring Diagram Manual, Chapter 34-20-06 and Figures 1, 2 and 3 of this bulletin during modification procedures.
 - (1) Remove all power from aircraft.
 - (2) Disassemble and remove copilot's instrument panel as required to gain access to annunciator diode boards at rear of instrument panel.
 - (3) Remove existing diode board mounting brackets from stand-offs and discard brackets (retain hardware for following steps). Refer to Figure 1.
 - (a) Use brackets P/N 5883775-RE3 and 5883775-RE4 or locally fabricate new mounting brackets from standard and 10139-070-1 stock ALCLAD 2024-T3511 (two required - second (5883775-RE4) bracket opposite of Figure 1 view).
 - (b) Use bracket P/N 5883775-RE5 or locally fabricate hold-down strap from .063 ALCLAD 2024-T6 stock per Figure 1.
 - (4) Secure new brackets in place on instrument panel using hardware from step (3) above.
 - (a) Align printed circuit board (PCB) receptacles on mounting brackets as per Figure 2 and mark brackets for drilling of mounting holes. Follow same procedure for pillars used for securing regulator board.
 - (b) Drill holes in brackets and mount PCB receptacles using Loctite on screw threads. Mount pillars in same manner with screws and spring washers as shown on Figure 1.

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- (c) Install new PCB and hold-down strap. Label PCB receptacle as "J226."
- (5) Perform wiring changes per Figure 3.
- (6) Reassemble copilot's instrument panel.

PART B:

- B. Test Procedures
 - (1) Perform operations check of PCB regulator and altimeter. Check for excessive vibrator noise. If noise is excessive or needle sticking is apparent, check and adjust regulator as follows:
 - (a) Disconnect altimeter connector.
 - (b) Insert a 220 ohm, 2 watt resistor across pins P and M of aircraft cable connector. Measure voltage across the resistor. Read +18 to +20 Vdc across resistor. If voltage reads different, adjust potentiometer on PCB (P/N 4833513-9) at J-226.

NOTE

Vibrator noise level increases as voltage level increases. Sticking needle problems develop at low voltage levels and/or colder ambient temperatures. Aircraft serial number 271 and subsequent have PCB located forward of pilot's windshield temperature control box.

- (2) Perform necessary pilot and static system tests for systems affected by the removal of the instrument panel.
 - (a) If malfunction(s) exist, follow appropriate troubleshooting procedures.
 - (b) Return aircraft to service.

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February 16, 1987

3. MATERIAL INFORMATION

QTY	NEW PART NUMBER	DESCRIPTION
1	833513-9	Regulator PCB
1	143-015-01-110	PCB Receptacle
2 2	CMA71704-004 NAS43DD3-8	(Mfg Amphenol) Pillar Spacer
4	MS35206-245	Screw 8-32 x 1/2" L
4 4	MS35338-42 MS21073-06	Spring washer Nut-plate
2	MS35206-327	Screw
2	MS21042-06	Nut
2	AN960PD-6L	Washer
A/R	MIL-W-16878D	#22AWG wire
1	5883775-RE5	*Hold-down strap
A/R	320559	Butt splice
1	5883775-RE3	*Bracket
1	5883775-RE4	*Bracket
1	5883775-RE6	*Pad

*These parts may be fabricated locally.

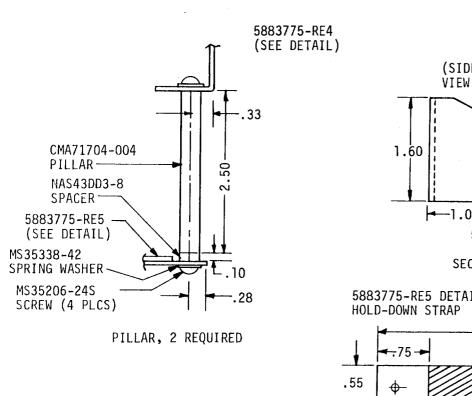
4. RECORD COMPLIANCE

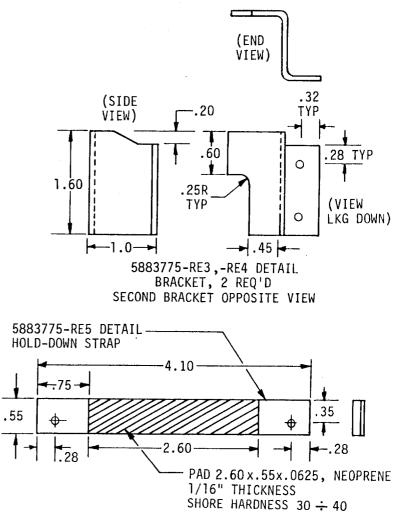
A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-34-071 dated February 16, 1987 titled "Navigation - Copilot's Altimeter Part Number Changes" accomplished this date

- B. Make appropriate changes to Wiring Diagram Manual, Chapter 34-20-06 and to the Illustrated Parts Catalog, as appropriate.
- C. Revise Aircraft Serialized Equipment list if required by replacement of altimeter.

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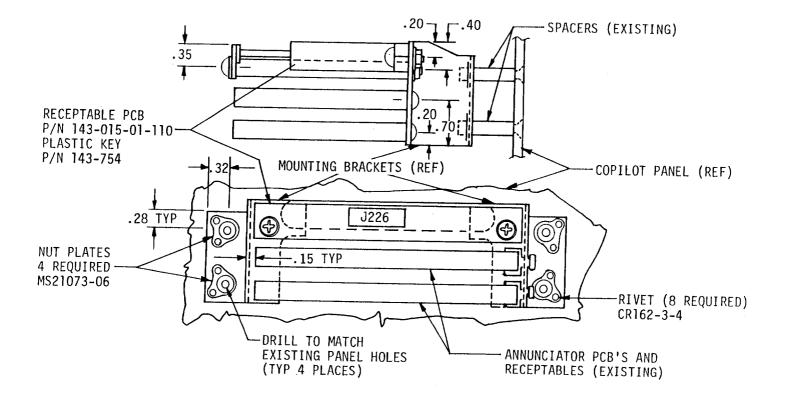


NAVIGATION - COPILOT'S ALTIMETER PART NUMBER CHANGES

Figure 1 of 3

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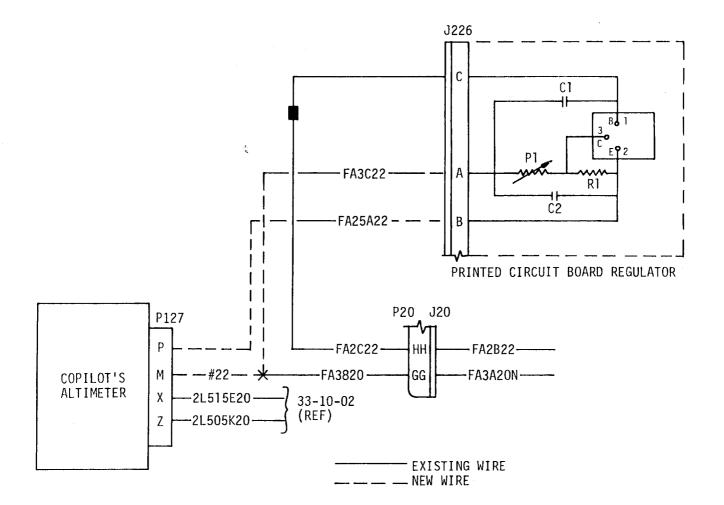


NAVIGATION - COPILOT'S ALTIMETER PART NUMBER CHANGES

Figure 2 of 3

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NAVIGATION - COPILOT'S ALTIMETER PART NUMBER CHANGES

Figure 3 of 3

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RECOMMENDED

SERVICE BULLETIN NO. 1124-22-072A

September 12, 1986

(This Service Bulletin No. 1124-22-072A dated September 12, 1986 supersedes Service Bulletin No. 1124-22-072 dated January 10, 1986 in its entirety.)

SUBJECT: AUTO FLIGHT - ELEVATOR AND RUDDER SERVO IDLER ARM -INSTALL NEW ATTACH BOLTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 437 except 418, 423, 426, 429, 431, 432 and 435.

B. REASON

Replacement of existing select hardware to minimize the possibility of elevator and/or rudder control interference.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished within 150 hours of the date of this bulletin.

D. DESCRIPTION

This service bulletin describes procedures to remove existing MS27039 screws that attach the fork to the idler arm at Station Y=454.21 and install 2 each AN3H bolts.

INTERNATIONAL INC.

SB 1124-22-072A Page 1 of 4

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company or procured locally.

G. TOOLING

No special tooling required.

H. WEIGHT AND BALANCE

No change.

I. ELECTRICAL LOAD DATA

Not applicable.

- J. REFERENCES
 - (1) 1124/1124A Maintenance Manual, Chapter 27.
 - (2) 1124/1124A IPC 27-30-00, Fig. 3, Detail K, Item 75.
- K. PUBLICATIONS AFFECTED

1124/1124A IPC 27-30-00, Fig. 3, Detail K, Item 75.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove overhead access panels in aft baggage compartment as necessary to gain access to P/N 863500-31 arm and 863500-41 fork, ref. Fig. 1.
 - B. Remove 2 each MS27039 screws and 2 each AN960-PD10 washers, discard screws and retain washers.
 - C. Install 2 each AN3H-17A bolts with AN960-PD10 washers under heads. Torque to 20-25 inch-pounds and safety wire.

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- D. Perform an operational check of the control system.
- E. Reinstall overhead access panels in aft baggage compartment previously removed to gain access.
- 3. MATERIAL INFORMATION

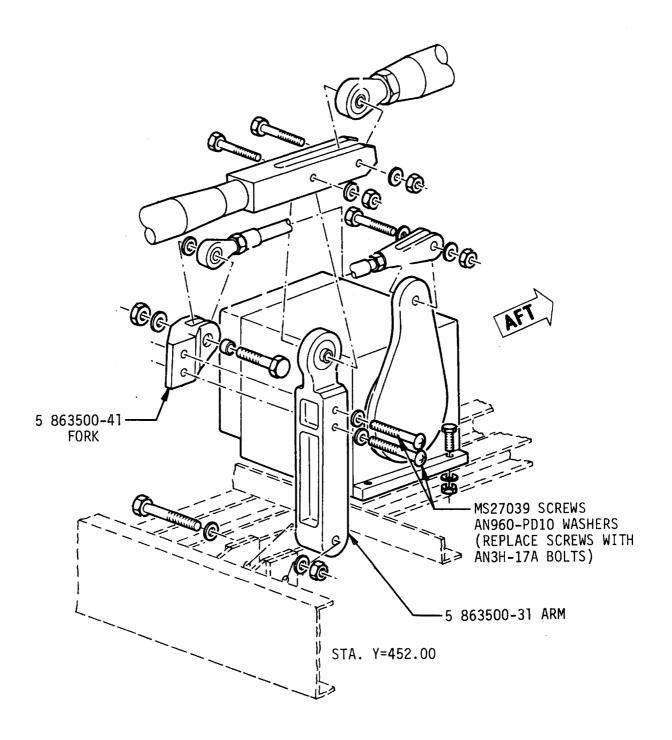
QTY	PART NUMBER	DESCRIPTION
2	AN3H-17A	Bolt
A/R	.025	Safety Wire

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-22-072A dated September 12, 1986 titled "Auto Flight - Elevator and Rudder Servo Idler Arm -Install New Attach Bolts" has been accomplished this date

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ELEVATOR CONTROL

FIGURE 1

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September 12, 1986



OPTIONAL

SERVICE BULLETIN NO. 1124-23-073

January 15, 1986

SUBJECT: COMMUNICATIONS - DMQ-18-1A ELT ANTENNA HUM CORRECTION DURING HIGH SPEED FLIGHT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwinds with optional DMQ-18-1A ELT antenna.

B REASON

To correct aural hum caused by antenna whip action.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin details replacements of DMQ-18-1A antenna with a DMQ-18-3 ELT antenna.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized dealers.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

None.

- H. WEIGHT AND BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA Not applicable.
- J. REFERENCES

Not applicable.

K. PUBLICATIONS AFFECTED

Not applicable.

- 2. ACCOMPLISHMENTS INSTRUCTIONS
 - A. Gain access to base of ELT antenna DMQ-18-1A by dropping headliner interior panel near the passenger emergency exit.
 - B. Locate existing ELT antenna.
 - C. Disconnect the ELT antenna cable.
 - D. Dismount the existing DMQ-18-1A ELT antenna. Remove and clean the area of sealant.
 - E. Treat exposed metal surfaces with Iridite 14-2.
 - F. Select doubler from Kit A, B or C as appropriate. Lay out rivet hole pattern in doubler and pre-drill from 1/8" rivets on bench. Hold doubler in place and drill from bottom through skin and doubler. Remove and attach four appropriate nut-plates to doubler for mounting bolts. Drill out clearance hole for coax connector. Install doubler with the required fillers as shown in Figure 2.
 - G. Make hole pattern template from the base of the DMQ-18-3 or use template supplied, and lay out new hole pattern on outside of fuselage using the antenna cable connector hole centerlines for locations (see Figures 1 and 2).

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January 15, 1986

- H. Drill antenna mounting holes (4) and the antenna coax connector hole (1) to size per antenna mounting instructions. Prepare and finish all metal surfaces to receive new antenna.
- I. Install new antenna in position and secure all fasteners.
- J. Connect ELT coax connector to antenna.
- K. Clean, paint and pressure seal as required and replace interior after test of antenna.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
l	DMQ-18-3	ELT Antenna

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-23-073 dated January 15, 1986 titled "Communication - DMQ-18-1A ELT Antenna Hum Correction During High Speed Flight" has been accomplished this date

January 15, 1986

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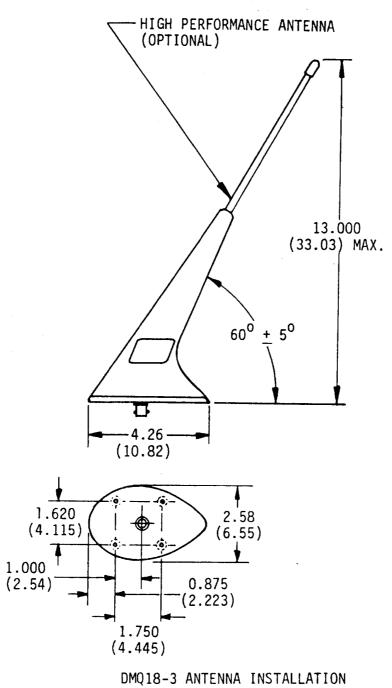


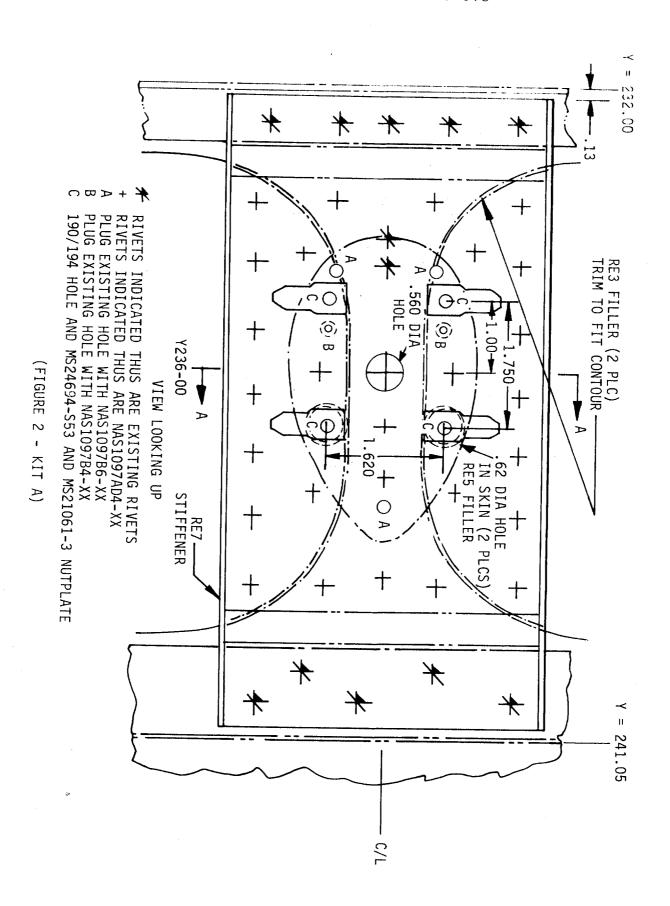
FIGURE 1

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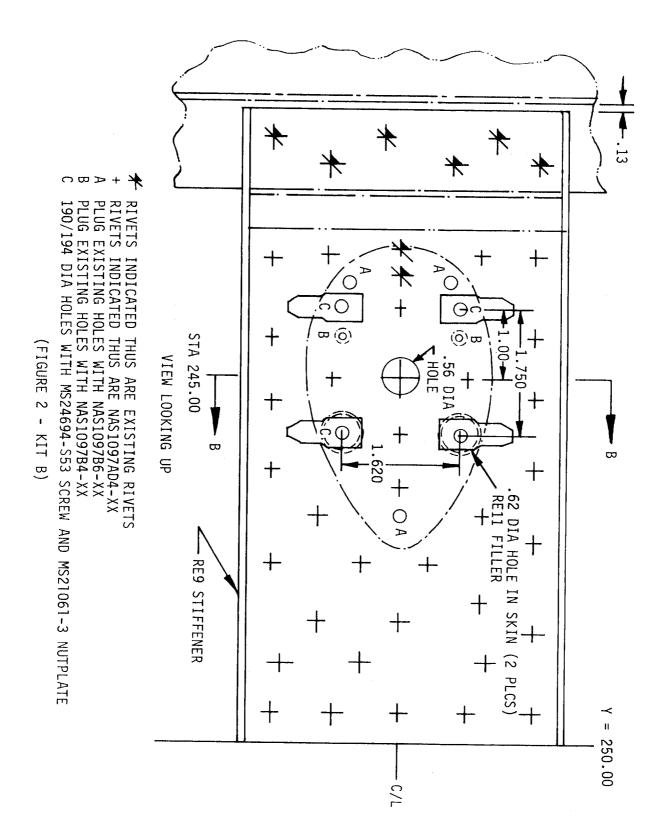
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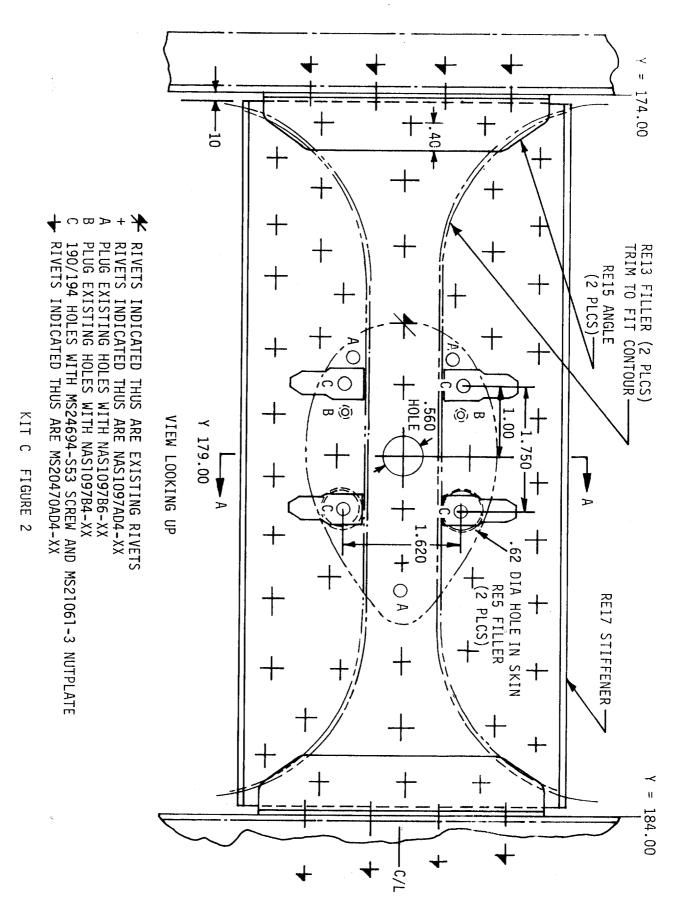
SERVICE BULLETIN NO. 1124-23-073



January 15, 1986

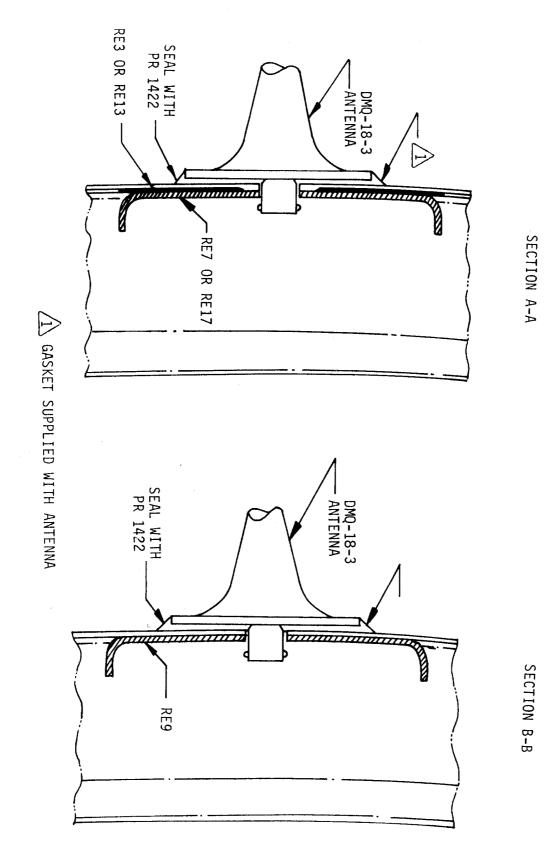
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ALL KITS - FIGURE 3

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SERVICE PUBLICATIONS revision notice

OPTIONAL

SERVICE BULLETIN NO. 1124-23-074 Revision No. 1 May 23, 1986

SUBJECT: COMMUNICATIONS - RADIO-TELEPHONE IMPROVEMENTS AND CORRECTIONS

REASON FOR To make an aircraft serial number change in Notes REVISION: to Detail 043 and to change part number in paragraph 3. Material Information.

NOTES:

- 1. ON AIRCRAFT MODEL 1124A, REPLACE EXISTING RELAY RL427 P/N ESOD4AD WITH P/N DJS12L1P6A (MFG. DEUTCH).
- 2. ON AIRCRAFT MODEL 1124 WITH FF 4, 5 OR 6, ADD NEW RELAY RL427 P/N DJSLIP6A (MFG. DEUTCH).
 - (1) USE ANGLE MEMBER P/N CMA71704-043 TO MOUNT RELAY.
 - (2) ON AIRCRAFT UP TO SERIAL NUMBER 354 WITH 2ND VLF REPLACE EXISTING MOUNTING BRACKET WITH ANGLE MEMBER P/N CMA71704-043 AS SHOWN BELOW:

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
4	MS35206-244	Screw

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



OPTIONAL

SERVICE BULLETIN NO. 1124-23-074

January 10, 1986

SUBJECT: COMMUNICATIONS - RADIO-TELEPHONE IMPROVEMENTS AND CORRECTIONS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

ACCOMPLISHMENT INSTRUCTIONS PART A: Model 1124 Westwind, all serial numbers equipped with optional Wulfsberg Flitefone III.

ACCOMPLISHMENT INSTRUCTIONS PART B: Model 1124 Westwind, all serial numbers equipped with or modified for optional Wulfsberg Flitefone IV, V or VI.

ACCOMPLISHMENT INSTRUCTIONS PART C: Model 1124A Westwind, all serial numbers equipped with optional Wulfsberg Flitefone III.

ACCOMPLISHMENT INSTRUCTIONS PART D: Model 1124A Westwind, all serial numbers equipped with or modified for optional Wulfsberg Flitefone IV, V or VI.

B. REASON

PART A: To install a cabin call bell in the pedestal for aural alert for crew members to answer passenger intercom.

PART B: To permit proper operation of intercom system by preventing ICS logic lockup through cockpit and cabin call annunciators and to install an aural alert for crew members to answer passenger intercom.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

- PART C: To replace the existing cockpit cabin call gong with a more reliable aural alert.
- PART D: To permit proper operation of intercom system by preventing ICS logic lockup through cockpit and cabin call annunciators and to replace the existing cabin call gong with a more reliable aural alert.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin contains wiring and hardware mounting instructions. It will be necessary to route new wires from the right cabin sidewall forward and into the pedestal.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material necessary for compliance with this service bulletin may be obtained from Atlantic Aviation Supply Company, Wilmington, Delaware, their representatives, or may be procured locally.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual Chapters 23-20-04 and 33-10-01.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual Chapters 23-20-04 and 33-10-01.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A: (All 1124 with FF3) See Figure 1.

- A. Mount new aural alert WB-1 mounting plate to floorboard under pedestal using 8-32 rivnuts (6 places) in any available clear area permitting access to terminal board on WB-1 bell. Mount the WB-1 to the new plate using AN960KD8L washers and MS35206-244 screws.
- B. Add new wires; #22AWG:
 - (1) TT21A22 from WB-1 "14VDC" terminal to cockpit controller Cl18 connector DB116B pin J.
 - (2) TT22A22 from WB-1 "ground to ring" terminal to cockpit controller Cll8 connector DBll6B pin K.
- C. With system turned on, depress ICS selector. Bell should ring, adjust bell tuning screw on WB-1 for desired pitch and volume.
- D. Reassemble pedestal.

PART B: (1124 with FF 4,5,6) See Figure 2.

- A. Install WB-1 aural alert by procedures in PART A, steps A and B.
- B. Locate cockpit call sonalert in cabin sidewall. Remove, cap and stow existing wires to sonalert.
- C. Add new wires, #22AWG, from sonalert to area of terminal strip T157, RHS STA 94. The wire connected to "+" will be TT40A22, the wire connected to "-" will be TT41A22.

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- D. Use angle member P/N CMA71704-043 or locally manufacture a bracket to mount new socket HRCW-IM and relay RL427. Install bracket near terminal strips at fuselage station 103, RHS. See Figure 4.
- E. Remove, cap and stow wire TT13K22 at T157, terminal 18.
- F. Add new wires #22AWG as follows:
 - (1) Wire TT40B22 from WB-1, "14 Vdc" terminal to new RL427-X1. Splice wire TT40A22 from Step C above to RL427-X1.
 - (2) Wire TT42A22 from WB-1 "ground to ring" terminal to new RL427-X2.
 - (3) From RL427-A2 and B2 to nearest airframe ground.
 - (4) Wire TT43A22 from RL427-A1 to T157-18.
- G. Connect wire TT41A22 from Step C above to RL427-Bl.
- H. Install new RL427 with 12 Vdc coil.
- I. Test system for normal intercom operation. Bell and Cabin Call annunciator must operate with ICS depressed.
 - (1) Adjust bell tuning screw on WB-1 for desired pitch and volume.
- J. Reassemble aircraft and return to service.

PART C: (1124A with FF3) See Figure 3.

- A. Locate cabin call gong above copilot's right rudder panel. Remove, cap and stow wires. Remove and discard gong.
- B. Install new WB-1 aural alert by procedures in PART A, Steps A and B.
- C. Remove, cap and stow wire TT13E22 at T157, terminal 18.
- D. Locate existing RL427 at fuselage station 103, RHS. Remove and discard existing relay.

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- (1) Should RL427 not exist, manufacture and install angle member P/N CMA71704-043 to mount new socket HRCW-1M and RL427. Install bracket near terminal strips at STA 103, RHS (see Figure 4).
- (2) Refer to PART B, Step G, to wire new RL427.
- E. Rewire original RL427 socket using #22AWG wire as follows:
 - (1) Remove existing wires TT22A22 and TT21A20 from RL427. Cap and stow both wires.
 - (2) Add new wire TT40A22 from WB-1 "14 Vdc" terminal to RL427-X1.
 - (3) Add new wire TT42A22 from WB-1 "ground to ring" terminal to RL427-X2.
- F. Install new RL427 with new Vdc coil.
- G. Test system for normal intercom operation. Bell and Cabin Call annunciator must operate with ICS depressed.
 - (1) Adjust bell tuning screw for desired pitch and volume.
- H. Reassemble aircraft and return to service.

PART D: (1124A with FF 4, 5, 6) See Figure 3.

- A. Perform PART C of this service bulletin (Steps A, B, C, D and E).
- B. Add new wire, #22AWG, from RL427-B2 to nearest airframe ground.
- C. Locate cockpit call sonalert in cabin sidewall. Remove, cap and stow existing wires to sonalert.
- D. Add new wires from sonalert to area of T157, RHS STA 94. The wire connected to the "+" will be TT40A22, the wire connected to the "-" will be TT41A22.

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- (1) New wire TT40A22 will splice to new wire on RL427-X1 ("14 Vdc" from WB-1).
- (2) New wire TT41A22 will connect to RL427-Bl.
- E. Install new RL427 with 12 Vdc coil.
- F. Test system for normal intercom operation. Bell and Cabin Call annunciator must operate with ICS depressed.
 - (1) Adjust bell tuning screw for desired pitch and volume.
- G. Reassemble aircraft and return to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	300-2070-000	Bell, Model WB-1, with mount
1	DJS 12L1P6A	(Mfg Wulfsberg) Relay (Mfg. Deutsch) or equivalent
1 A/R A/R A/R 4 1	HRCW-1M 327654 326878 320559 MIL-W-16878D AN960KD8L ME35206-244 CMA71704-043	(RL427) Socket, relay Terminal (Mfg AMP) Terminal (Mfg AMP) Splice (Mfg AMP) Wire, #22AWG Washer Screw Angle (for models 1124 FF 4, 5 or 6)

4. RECORD COMPLIANCE

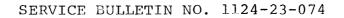
A. Make the following entry in the aircraft log book:

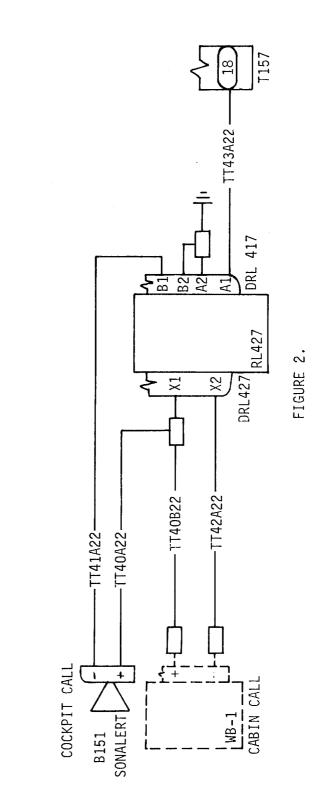
Service Bulletin No. 1124-23-074 dated January 10, 1986 titled "Communications - Radio-Telephone Improvements and Corrections" has been accomplished this date

B. Revise the Wiring Diagram Manual as applicable to reflect the changes accomplished by this service bulletin.

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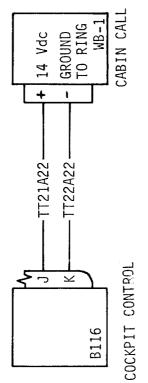
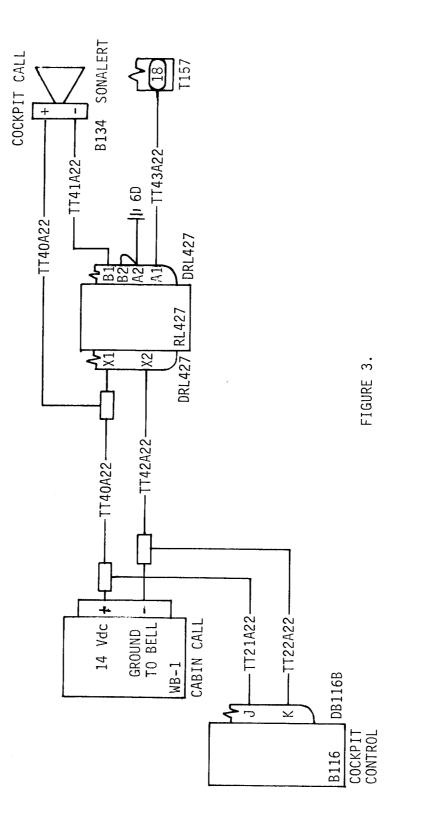
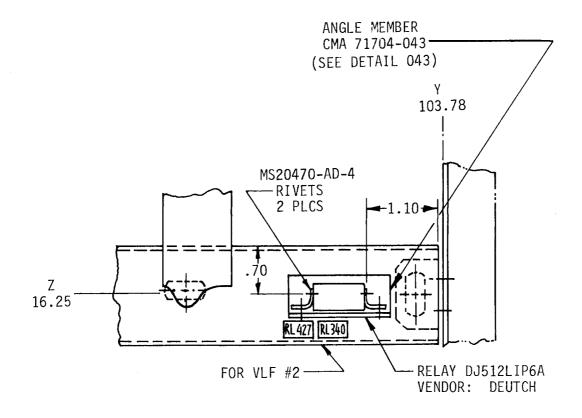


FIGURE 1.

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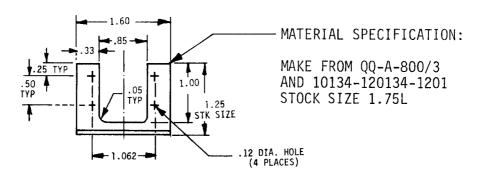
VIEW LOOKING OUTB'D R.H.S.

FIGURE 4.

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- 1. ON AIRCRAFT MODEL 1124A, REPLACE EXISTING RELAY RL427 P/N ESOD4AD WITH P/N DJS12L1P6A (MFG. DEUTCH).
- 2. ON AIRCRAFT MODEL 1124 WITH FF 4, 5 OR 6, ADD NEW RELAY RL427 P/N DJSLIP6A (MFG. DEUTCH).
 - (1) USE ANGLE MEMBER P/N CMA71704-043 TO MOUNT RELAY.
 - (2) ON AIRCRAFT UP TO SERIAL NUMBER 453 WITH 2ND VLF REPLACE EXISTING MOUNTING BRACKET WITH ANGLE MEMBER P/N CMA71704-043 AS SHOWN BELOW:



DETAIL 043

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January 10, 1986

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-24-075 Revision No. 1 May 23, 1986

SUBJECT: ELECTRICAL POWER - COCKPIT VOICE AND FLIGHT DATA RECORDER BUS CHANGE

REASON FOR To change the text in paragraph 2.A.(1)(b) and B.(6). REVISION:

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Perform preliminary conformity check as follows:
 - (1) Aircraft power on, #2 Inverter NORM, #1 Inverter OFF, #1 and #2 Avionics Master switches OFF.
 - (b) At FDR plug DB-245(B), bottom plug, pin l read 115 Vac with respect to ground.
 - B. Modification Instructions
 - (6) Fabricate new bus tie(s) from #18 AWG wire and attach one end to CVR and/or FDR circuit breaker(s). Route opposite end to #2 Avionics Master switch. At #2 Avionics Master switch connect to terminal #8 with existing wire #2X5A18.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-24-075

December 27, 1985

- SUBJECT: ELECTRICAL POWER COCKPIT VOICE AND FLIGHT DATA RECORDER BUS CHANGE
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 443 with Voice Recorder and/or Flight Data Recorder installed.

B. REASON

To comply with requirements that the Voice Recorder and Flight Data Recorder cannot be deactivated inadvertently.

C. COMPLIANCE

Compliance with this service bulletin is recommended.

D. DESCRIPTION

Bus ties are removed from two circuit breakers, new bus ties fabricated and attached to primary power.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

> SB 1124-24-075 Page 1 of 4

F. MATERIAL

The material required to comply with this service bulletin may be obtained through Atlantic Aviation Supply Co. or purchased locally.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

- I. ELECTRICAL LOAD DATA
 - (1) No change to total electrical load.
 - (2) Revise aircraft Electrical Load Analysis to reflect bus-tie changes and recomputation of respective bus loads will be required.
- J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 23-70-01, 24-50-01, 24-50-04, and 31-30-04.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters 23-70-01, 24-50-01, 24-50-04 and 31-30-04. 1124/1124A Airplane Flight Manual (AFC2042).

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Perform preliminary conformity check as follows:
 - (1) Aircraft power on, #2 Inverter NORM, #1 Inverter OFF, #1 and #2 Avionics Master switches OFF.
 - (a) At CVR plug DB-247 pin 2 read 115 Vac with respect to ground.
 - (b) At FDR plug DB-245B pin 1 read 115 Vac with respect to ground.
 - (c) If conditions of (a) and (b) above are not met, proceed with Modifications Instructions below.

- B. Modification Instructions
 - (1) Remove all power from aircraft.
 - (2) Disconnect batteries.
 - (3) Lower overhead circuit breaker panel.
 - (4) Locate and identify Cockpit Voice Recorder (CVR) and/or Flight Data Recorder (FDR) circuit breaker(s) as appropriate.
 - (5) Remove bus tie(s). Properly cap, insulate and stow to prevent inadvertent shorts.
 - (6) Fabricate new bus tie(s) from #18 AWG wire and attach one end to CVR and/or FDR circuit breaker(s). Route opposite end to #2 AC Bus before #2 Avionics Master switch. At #2 Avionics Master switch connect to terminal #8 with existing wire #2X5A18.
 - (7) Ensure new bus tie(s) are routed and secured away from possible interference with other circuit breakers and bus bars. Check for adequate clearance when circuit breaker panel is closed.
 - (8) Secure overhead circuit breaker panel in normal position.
 - (9) Use appropriate manufacturers operators manual and check for normal operation of CVR and/or FDR with #1 and #2 Avionics Master switches in OFF position or follow check procedure in step 2.(A) above.
 - (10) Recompute Electrical Load Analysis as follows:
 - (a) Cockpit Voice Recorder add 20.80 VA to #2 Main AC Bus. Remove same from #1 Main AC Bus.
 - (b) Flight Data Recorder add 45.00 VA to #2 Main AC Bus. Remove same from #1 Main AC Bus.
 - (c) Total, if both CVR and FDR installed is 65.80 VA changed to #2 Main AC Bus.
 - (11) Return aircraft to service.

December 27, 1985

3. MATERIAL INFORMATION

QTY	NEW PART NUMBER	DESCRIPTION
A/R	MIL-W-16878D	#18 AWG wire
A/R	320554	Terminal Ring Tongue (Mfg. AMP)
A/R	320559	Butt Splice (Mfg. AMP)

4. RECORD COMPLIANCE

- Make the following entry in the aircraft log book: Service Bulletin No. 1124-24-075 dated December 27, 1985 titled "Electrical Power - Cockpit Voice and Flight Data Recorder Bus Change" has been accomplished this date
- B. Revise Wiring Diagram Manual, Chapters 23-70-01, 24-50-01, 24-50-04 and 31-30-04 and enter corrections to the Electrical Load Analysis as required to reflect changes made by accomplishment of this service bulletin.



OPTIONAL

SERVICE BULLETIN NO. 1124-21-076A

June 30, 1987

SUBJECT: AIR CONDITIONING - IMPROVED CAP ASSEMBLY FOR UNUSED PORT ON AIR GASPER P/N 2708 "WEMAC"

(This Service Bulletin No. 1124-21-076A dated June 30, 1987 supersedes Service Bulletin No. 1124-21-076 dated February 5, 1987 in its entirety.)

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 438 except 418, 423, 426, 429, 431, 432 and 435.

B. REASON

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To prevent caps from coming off, allowing cold air to be blown into the sidewall.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

New style caps are installed.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

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INTERNATIONAL INC.

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or procured locally.

G. TOOLING

No special tools required

H. WEIGHT AND BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 21.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog will be revised to reflect new cap part number.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Gain access as necessary to WEMAC inlet ports suspected of leakage or to all for installation of new style cap.
- B. Remove aluminum self-adhesive tape previously installed on spare port.
- C. Install new cap P/N 25W783042-003 on unused port.
- D. Secure cap with MS3367-X-X tie-down strap (or equivalent).
- E. Repeat procedure on all other WEMACs.
- F. Reinstall interior furnishings previously removed to gain access.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R A/R	25W783042-003 MS3367-X-X	Cap Tie-down Strap (or equivalent)

SB 1124-21-076A Page 2 of 4 June 30, 1987

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

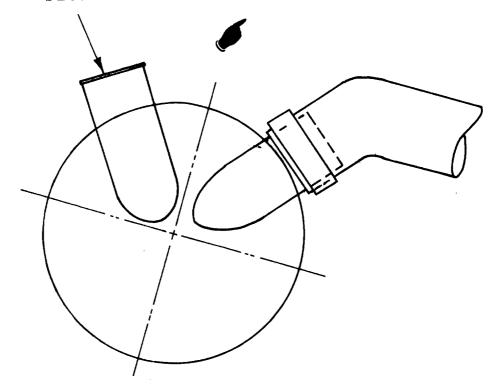
Service Bulletin No. 1124-21-076A dated June 30, 1987 titled "Air Conditioning - Improved Cap Assembly for Unused Port on Air Gasper P/N 2708 "WEMAC" has been accomplished this date ______.

June 30, 1987

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INSTALL 25W783042-003 CAP SECURE WITH MS3367-X-X TIEDOWN STRAP



REAR VIEW

P/N 2708 "WEMAC"

FIGURE 1

SB 1124-21-076A Page 4 of 4 June 30, 1987



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-35-077

February 7, 1986

SUBJECT: OXYGEN - CABIN ALTITUDE PRESSURE SWITCH - REMOTE TEST CONNECTION INSTALLATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To provide improved access for cabin altitude pressure switch test by installing a remote test connection.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This bulletin requires that a cut-out be made in the side panel, an adapter added to the altitude switch, tubing installed and an elbow installation.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



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F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or may be procured locally.

G. TOOLING

No special tooling is required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Illustrated Parts Catalog, Chapter 35-10-00 1124/1124A Maintenance Manual, Chapter 35-00-00

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 35-10-00 1124/1124A Maintenance Manual, Chapter 35-00-00

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove copilot's seat and R/H console side panel to gain access to altitude switch (P/N 101800).
 - B. Install AN816-4D adapter in the altitude switch.
 - C. Fabricate P/N 5 753004-RE3 angle as per Figure 1.
 - D. Locate and install P/N 5 753004-RE3 angle as per Figure 2 using 4 ea. MS20470AD-4-X (length as required).
 - E. Install AN833-4D bulkhead elbow with AN924-4D nut on angle.
 - F. Fabricate tube assembly (from MS20819-4D sleeves, AN818-4D couplings and ¼" x .035 wall 5052-0 tube stock) to fit between AN816-4D adapter and AN833-4D elbow and install (references Figures 2 and 3).
 - G. Drill a #30 hole in the end of an AN929-4D cap.

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- H. Paint the drilled cap red.
- I. Install the drilled cap on the AN833-4D elbow.
- J. Make a 3.5" x 3.5" cut-out in side panel so as to allow access to remote test port with side panel installed (reference Figures 4 and 5).
- K. Install 4 ea. MS21059-3 nut-plates on side panel to retain access panel (reference Figure 5).
- L. Fabricate 5.5" x 5.5" panel from Royalite or equivalent material .08 or .09 thick (reference Figure 5).
- M. Locate and drill 4 ea. holes to facilitate attachment of access panel to side panel.
- N. Install placard on access panel and install access panel using 4 ea. MS35206-263 screws.
- O. Reinstall side panel and copilot's seat.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
4 ea. 4 ea.	MS35206-263 MS21059-3	Screw Nut-plate
1 ea.	AN816-4D	Adapter
l ea.	AN833-4D	Bulkhead Elbow
l ea.	AN924-4D	Nut
l ea.	AN929-4D	Cap Assembly
2 ea.	MS20819-4D	Sleeve
2 ea.	AN818-4D	Coupling
A/R	¼" x .035 wall 5052-0	Tube
l ea.	5 753004-RE3	Angle
l ea.	5 753004-RE9	Access Cover
1 ea.	5 753004-RE11	Placard

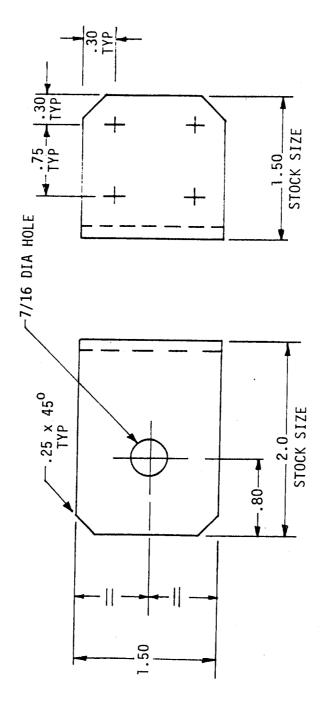
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-35-077 dated February 7, 1986 titled "Oxygen - Cabin Altitude Pressure Switch - Remote Test Connection Installation" has been accomplished this date _____.

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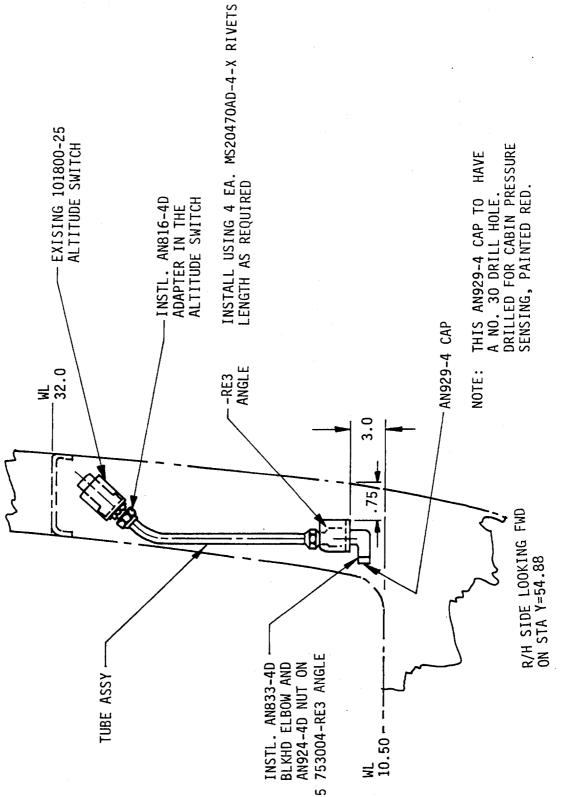
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5 753004-RE3 ANGLE FIGURE 1

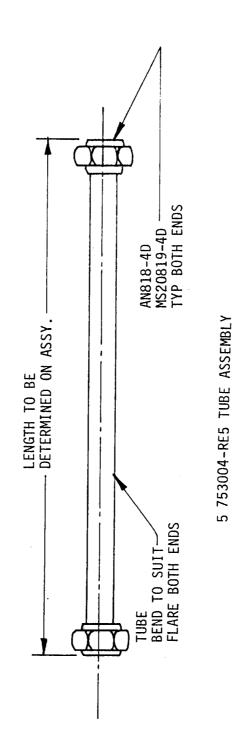
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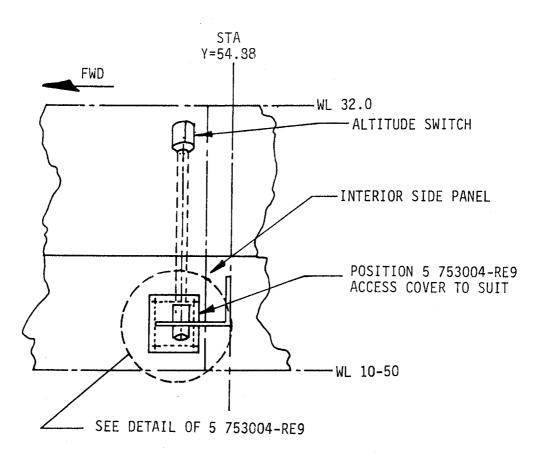


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FIGURE 2





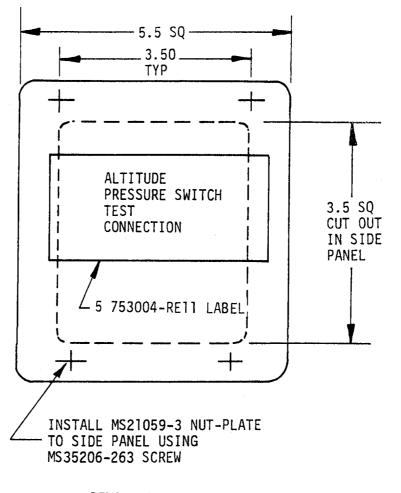


VIEW LOOKING OUTBD R/H SIDE

FIGURE 4

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DETAIL OF 5 753004-RE9 ACCESS COVER

FIGURE 5

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February 7, 1986



SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-28-078

June 29, 1987

(Compliance with Part B of this Service Bulletin will cancel Service Letter WW-2436 dated 5 December 1978.)

SUBJECT: FUEL - FUEL STATUS SYSTEM IMPROVEMENTS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Accomplishment Instructions Part A: MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 174, 181, 185, and subsequent.

Accomplishment Instructions Parts B and C: MODEL 1124/1124A WESTWINDS, serial numbers 152, 154, 174, 181, 185 through 308.

B. REASON

To increase the accuracy and reliability of the Fuel Status Systems installed on these aircraft. Reference Accomplishment Instructions for problem descriptions.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin describes the corrective action necessary to correct discrepancies in the Fuel Status System.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required by this Service Bulletin may be procured locally.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual Chapters:

33-10-03 28-40-01 29-10-01

1124 Service Letter WW-2426 1124 Service Letter WW-2436 1124 Service Letter WW-2484

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual Chapters:

33-10-03 28-40-01 29-10-01

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2. ACCOMPLISHMENT INSTRUCTIONS

PART A

- A. To reduce "Fuel Consumed" and/or "Pounds Remaining" accumulative errors.
 - Reference Service Letter WW-2484 and Wiring Diagram Manual Chapter 33-10-03 and 28-40-01. Locate the cockpit fluorescent lighting inverter and power supply at forward edge of nose equipment bay, LHS.
 - (2) Cut wire L45A22N from P44 (power unit) long enough to reach GND 310 (ref. Figure 2). Install terminal lug on power unit end and ground securely to filter unit mounting screw. Cap and stow remainder of wire from cable bundle.
 - (3) Install EMI filter, Captor P/N A4639, in series with wire L35C22. Connect load end of filter to inverter.
 - (a) Locate filter between power unit and inverter. Ensure proper ground by polishing and applying Iridite 14-2. Mount filter with 2 each "Zee" brackets RE3 and RE5 as shown in Figure 2.
 - (4) Reroute high voltage coaxial wiring L39A and L40A between pressure bulkhead (LHS) fittings PJ59/PJ60 or the pressure seals and the respective power unit or inverter.
 - (a) It is recommended that SL WW-2484 be accomplished at this time if not previously complied with.
 - (b) Remove L39A and L40A from existing cable bundle. Route along the LHS of aircraft along lower edge of access panel. Install Spirap chafe guard around both coaxial cables, clamp in 4 places using DG-5 clamps under access panel water shield hold-down strip screws.
 - (5) Install shielded twisted pair wiring between each fuel flow and fuel quantity indicator and the signal conditioner Plug P326. See Figure 1 for details.
 - (a) Remove, cap and stow all original unshielded wiring as shown.

- (b) Terminate all new shields at each connector. Connect shields together and ground under signal conditioner airframe mounting ground.
- (c) Bypass all existing interconnect plugs. See Part B, Paragraph 4 for instructions on penetrating forward pressure bulkhead.
- (d) Perform normal fuel status operational tests.
- B. To eliminate "pounds consumed" erratic errors, reference Figure 4, Wiring Diagram Manual Chapter 29-10-01 and 1124 SL WW-2426. Install new diode BJE-66 in four places, using Deutsch P/N 1841.1.56.20 pin splices on each diode lead.
 - For S/Ns 240 and subs: Terminal strip T-130 (Fuselage Station 19.0, nose avionics bay). Connect a lead from one diode cathode (banded end) from terminal 1, a lead from a second diode cathode (banded end) to terminal 3, the remaining lead from each diode to airframe ground. You may use the upper mounting screw stud for T-130.
 - For S/Ns 239 and prior: TB-130 does not exist, so it will be necessary to connect the new diodes to existing aircraft wiring.
 - (a) Cut and strip both ends of wire 3-20 leading into nose steering valve switch. Install new diode (cathode end) and splice together with both ends of wire 3-20.
 - (b) Connect anode end of the above diode to the same splice used for the anode end of the diode added to wire G4A20N in step (2) below.
 - (c) Locate wire GlC20 in wire bundle leading upward, as the bundle emerges into equipment bay from nose gear wheel well.
 - (d) Splice new diode (cathode end) to wire G1C20.
 - (e) Connect anode end of the second new diode to airframe ground to a spare pin on DG-7 (solder) or to #1 inverter ground GND 43, whichever is the nearest to wire G1C20. Secure this diode to existing cable bundle.

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- (2) Across Nose Steering Switching Valve, plug P65. Splice diode cathode lead to wire #G3A20 (28 VDC input) and second lead to wire #G4A20N (ground return).
 - (a) Cut wire G4A20N, install terminal lug on end going to P65, and ground to any convenient airframe location near the valve. Polish and Iridate attach point. Cap and stow wire end leading into bundle.
- (3) Across Nose Steering Solenoid Valve, plug P381 (or P93, if applicable). Splice diode cathode lead to wire #G48B20 (28 VDC input) and second lead to wire #G49A20 (ground return).
 - (a) Cut wire G49A20, install terminal lug on end going to P381 (or P93), and ground to any convenient airframe location near the valve. Ensure clean ground point, cap and stow wire end leading into bundle.
- (4) Install new shielded wiring between signal conditioner plug P328 and the status indicator plug P82. Reference WDM Chapter 28-40-01.
 - (a) Prefabricate the new cabling using 8 pieces of 3 conductor (twisted triple) shielded wire, approximately 8 feet long. Strip the outer insulation back 3 inches, terminate and insulate the shielded braid at this point. Install 24 each new female pins on each of the 3-inch long exposed conductors. This becomes the Status Indicator end.

NOTE

P82 may use an MS3467-XX connector, use P/N M39029/5-115 pins. For type MS3126-XX connectors, use M39029/32-242 pins.

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- (b) Locate and cut a new hole in the forward pressure bulkhead 2 inches directly below the lower pressure seal (or coaxial connector J60) located LHS between J9 and J197. Drill hole 1/8" larger in diameter than new cable bundle. If new wire is being added from Part A, include these cables in your measurement. Install doubler RE7 and nylon track chafe guard in new hole. Reference Fig. 3A.
- (C) Route the new cable bundles from Part A and/or Part B through pressure bulkhead. Route well clear of existing cable bundles in cockpit. Route down and aft of #1 inverter in nose bay, keeping close to floor line to signal conditioner. Install clamps as shown in Fig. 3B. Pressure seal the new hole with PR1422-B2, allowing proper curing time prior to pressurizing aircraft.
- (d) Remove connector body P82 from existing status indicator cabling except for pin B and install new wiring. Cap and stow all remaining ends.

NOTE

Ensure that pins T, U, and X are contained in one twisted triple conductor; and that pins V, W, C are contained in another twisted triple conductor. The remaining pins may be assigned in alphabetical order for the remainder of the wires.

(e) Prepare signal conditioner connector P328 for rewiring by removing all existing wiring. Cap and stow original ends. Prepare the cable end by stripping 3 inches of outer insulation.

> Cap all exposed shield braids, cutting them at the strip point and connect all braids together with a ground wire to attach to signal conditioner mounting bolt. Install 24 each female pins on exposed 3" conductors (in original connector). Identify each pin connector by continuity check to Status

Indicator connector. This cable runs pin-to-pin to each connector.

NOTE

P238 may use an MS 3476-XX connector, use P/N M39029/5-110 pins. For type MS3126-XX connectors, use M39029/31-223 pins.

(f) Perform Fuel Status operational tests.

NOTE:

Installing the 24 wire cable bundles will enable the system "Reset" button if such is installed in the Status Indicator for those aircraft equipped with (or modified to) -501 status Bendix/Consolidated system. Reference SL WW2436 for further details. Performance of this Part B will cancel Service Letter WW-2436.

- C. To eliminate the necessity of pulling and resetting system circuit breakers to reset the system after initial power application or engine cycles.
 - (1) Replace existing IAI P/N 883707-1 Fuel Quantity indicators (two each) manufactured by Bendix or Consolidated with P/N 218-912-001 Fuel Quantity Indicators manufactured by Gull. The IAI P/N remains the same.
 - (2) Replace existing IAI P/N 883708-1 Fuel Flow Indicators (two each) manufactured by Bendix or Consolidated with P/N 218-913-001 Fuel Flow Indicators manufactured by Gull. The IAI P/N remains the same.
 - (3) Recalibrate fuel quantity system as required.

NOTE:

Instruments manufactured by Ragen Systems do not exhibit the turn on problems and will not require replacement.

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3. MATERIAL INFORMATION

QUANTITY	PART NUMBER	DESCRIPTION
30 ft.	75918-222TTZ	#22 AWG twisted pair shielded wire (mfg. Petsche)
64 ft.	75918-223TTZ	<pre>#22 AWG twisted triple shielded wire (mfg. Petsche)</pre>
4	MS21919-DG-5	Clamp
4	BJE66	Diode (mfg Deutsch)
•		or equivalent
8	1841.1.56.20	Splice pins (mfg Deutsch)
24	M 39029/5-110	Socket pin (P328)
	or	for MS3476-XX
24	M 39029/31-223	(P238) for MS3126-XX
40	M 39029/5-115	Socket pin for MS3476-XX
	or	- · · · · ·
40	MS39029/32-242	Socket pin for MS3126-XX
A/R	PR 1422-B2	Sealant
1	A4639	Filter (mfg. Captor)
2	50534	Terminal, #4 (mfg. AMP)
4	326878	Terminal, #6 (mfg. AMP)
2	320552	Terminal, #10 (mfg. AMP)
4	320562	Splice, 16-14 (mfg. AMP)
50	35115	Splice, endcap (mfg. AMP)
1	863544-RE3	Zee
1	863544-RE5	Zee Doubler
	5863544-RE7	Nut Plate
1 3	MS21069-3 MS21069-08	Nut Plate
2 each		Clamp
2 each	AN3-4A	Bolt
2	AN960PD10L	Washer
3	AN960KD8	Washer
3	MS35338-42	Washer
A/R		Caterpillar grommet
A/R		Screw
	MS35206-247	Screw
A/R	MS20470AD4	Rivet

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-28-078 dated June 29, 1987 titled "Fuel - Fuel Status System Improvements" has been accomplished this date _____.

B. Revise the Wiring Diagram Manual as required to reflect the changes accomplished by this Service Bulletin.

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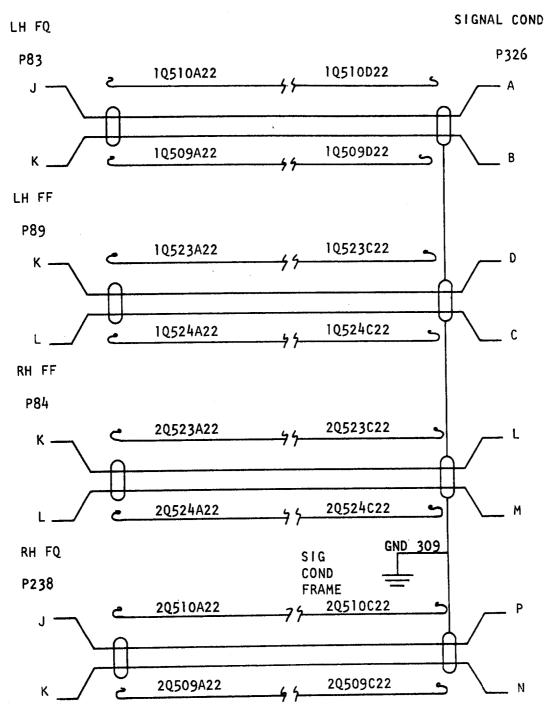


FIGURE 1. REFERENCE 28-40-01

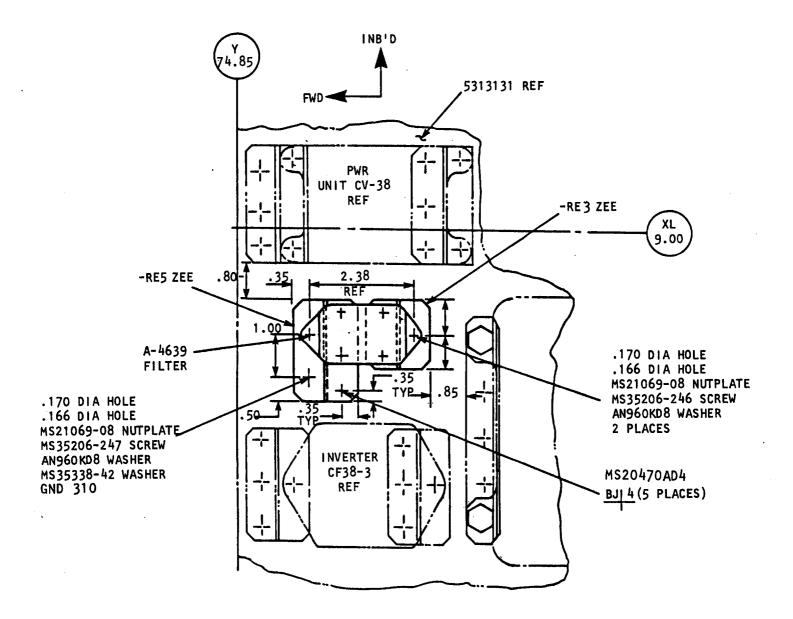
NOTE:

1

For MS 3476X connectors use new M39029/5-115 pins as required. For MS 3126X connectors use new M39029/32-242 pins as required.

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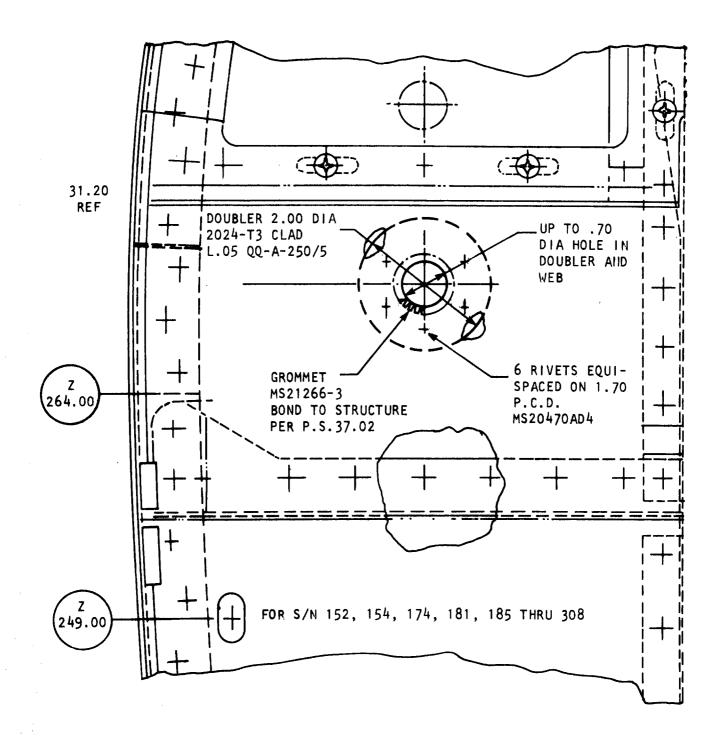


LHS NOSE DECK PLAN VIEW (not to scale)

FIGURE 2

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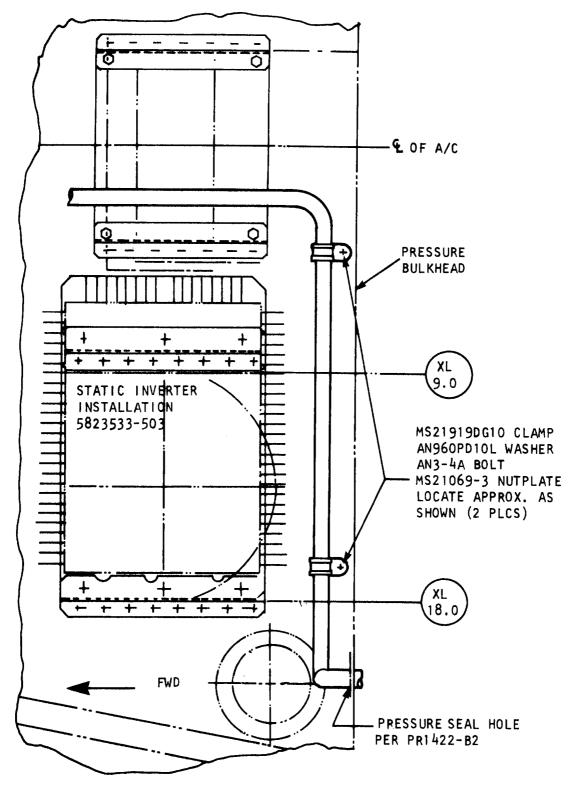


FWD PRESSURE BULKHEAD (VIEW LOOKING FORWARD)

FIGURE 3A

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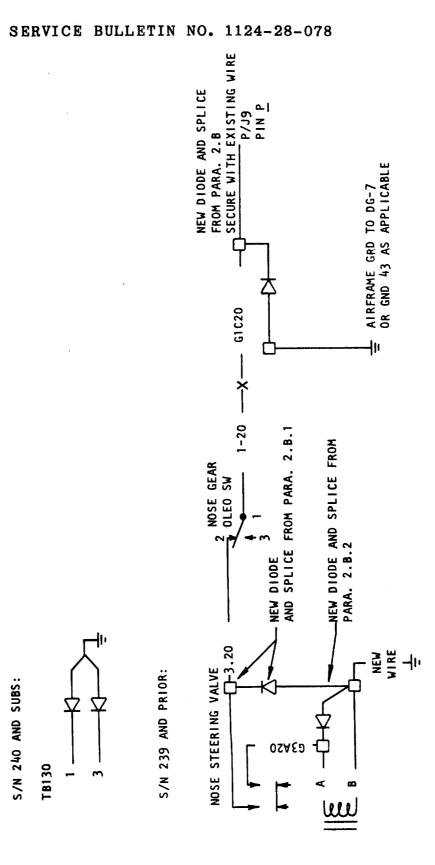
June 29, 1987



LHS NOSE DECK PLAN VIEW (not to scale)

FIGURE 3B

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OPTIONAL

SERVICE BULLETIN NO. 1124-22-079

January 8, 1986

SUBJECT: AUTOFLIGHT - ESTABLISH LINEAR DEVIATION STEERING COMMAND TO AUTOPILOT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - (1) Accomplishment Instructions Part A: Model 1124A Westwind S/N 295 through 390 with a single flight director system.
 - (2) Accomplishment Instructions Part B: Model 1124A Westwind S/N 295 through 390 with a dual flight director system.
 - (3) Accomplishment Instruction Part C: Model 1124A Westwind S/N 392 and subsequent with a single flight director system (except EFIS).
 - (4) Accomplishment Instructions Part D: Model 1124A Westwind S/N 392 and subsequent with a dual flight director system (except EFIS).
 - B. REASON

To provide linear deviation steering commands to autopilot when flying VOR/LOC in order to eliminate 'S' turns and extreme roll commands while passing VORTAC "cone of confusion".

C. COMPLIANCE

Compliance with this service bulletin is optional.

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D. DESCRIPTION

A relay mount is locally manufactured and either two (2) or four (4) relays are added (depending on A/C serial number and configuration).

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required to perform this service bulletin can be purchased through Atlantic Aviation Supply Company, Wilmington, Delaware or procured locally.

G. TOOLING

.

No special tooling required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual Chapters:

22-10-05	34-50-04
22-10-07	34-50-05
34-50-02	34-50-06

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual Chapters:

22-10-05	34-50-04
22-10-07	34-50-05
34-50-02	34-50-06

2. ACCOMPLISHMENT INSTRUCTIONS

Preliminary Procedures:

- (1) Remove power from aircraft.
- (2) Gain access to left and right-hand sides of aircraft from station 241 to station 268.
 - (a) Remove access panels at aft coat closet.
 - (b) Remove access panels at lavatory area and remove toilet.
 - (c) Remove vanity and vanity light structure.
- (3) Perform following modification procedures as required.

PART A: Modification Procedures

- (1) Locate predrilled tabs with nut-plates on stations 241.05 and 250.00 right-hand side above connectors D34 and D242.
- (2) Fabricate a single or double relay mount from .063 Alclad 2024-T3 for mounting to tabs identified in (1) above. Secure relay sockets (P/N HRCW-1M) to mount and attach mount to tabs using appropriate hardware. Label relays RL-A and RL-B (for A/C with dual F/D) for identification purposes. Remove the mount-plate to wire relays.

NOTE

Aircraft with single flight director systems will require only one (1) relay P/N MIL-M39016/6-105L. Dual flight directors will require two (2) relays.

Connect a diode (IN645 or equivalent) across the coil terminals of each new relay socket. Cathode (banded end) to X1, anode to X2.

- (3) At left-hand side of aircraft add new wires as follows: (Reference Figure 1)
 - (a) At T3-15 add new #22AWG wire #UD72()22. Route and connect to RL-30A, pin 23.
 - (b) At T3-16 add new #22AWG wire #2UD72()22. Route and connect to RL-30, pin 24.

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- (c) At B42J3 add new #22AWG wire #Cl2()22 to pin 59. Route to right side near new relay A.
- (d) At DRL-30B connect shield from shielded-pair (wire #UD65C24R and wire #UD67C24B) to pin 11.
- (e) At DRL-30B connect shield from shielded-pair (wire #2UD65A24R and wire #2UD67A24B) to pin 12.
- (f) At DRL-30B connect shield from shielded-pair (wire #UD65D24R and wire #UD67D24B) to pin 10.

NOTE

The shields addressed in Steps (d), (e) and (f) above are NOT to be connected together or to any other shields. Only connections to these shields should be to pins as stated in Steps (d), (e) and (f).

- (g) At DRL-30B, pin 19, add new #22AWG wire #UD1()22 (splice to existing wire). Route to right side near new relay A.
- (h) At DRL-30A, pin 22, add new #22AWG wire #UD72()22. Route to right side near relay A.
- At DRL-30A, pin 40, add new #22AWG wire #1RN116()22 (splice to existing wire). Route to right side near spare T-strip.
- (j) At DRL-84A, pin 51, add new #22AWG wire #1RN122()22 (splice to existing wire). Route to right side near spare T-strip.
- (k) Add new #24AWG shielded-pair wire #UD65()24R to B42J3, pin 7, and wire #UD67()24B to B42J3, pin 3. Cap and insulate shield near B42J3. Route wire to right side near T-52.
- (4) At right-hand side of aircraft connect wires added in Steps (3)(c) through (3)(k) above as follows (Reference Figure 1 in the same manner made in Step (3) above):
 - (a) Wire #Cl2()22 to new relay A, pin A-2 (relay wiper).
 - (b) Wire #UD1()22 to relay A, pin X-1 (coil +).
 - (c) Wire #UD72()22 to relay A, pin X-2 (coil -).

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- (d) Wire #1RN116()22 to spare T-strip, terminal 3.
- (e) Wire #1RN122()22 to spare T-strip, terminal 1.
- (f) Shielded-pair wire #UD65()24R to T-52 terminal 18, wire #UD67()24B to T-52 terminal 19 and connect shield to terminal 20 (T-52).
- (5) At spare T-strip add two (2) new diodes (IN645 or equivalent). Connect cathode (banded end) of both diodes of terminal 2, anode of one to terminal 1 and anode of second to terminal 3.
 - (a) Add new #22AWG wire #Cl2()22 to terminal 2 of spare T-strip. Route to new relay A and connect to terminal A-1 (normally open contact).
- (6) If second flight director system is installed, proceed to Part B, Modification Procedures.
- (7) Replace new relay mount and perform Part E, Test Procedures.
- PART B; Modification Procedures
- Perform modification procedure Part A. Add new relay RL-B and revise aircraft wiring as follows: (Reference Figure 2)
 - (a) Add new #24AWG shielded-pair wire #2UD65()24R to T-52 terminal 13 and #2UD67()24B to T-52 terminal 12. Connect shield to T-52 terminal 20. Route to DRL-31B.
 - (b) Add new #22AWG wire #2UD42()22 to T-52 terminal #3. Route to DRL-31A.
 - (c) At DRL-31B connect wire #2UD65()24R to pin 26, and wire #2UD67()24B to pin 29. Connect shield to DRL-31B, pin 41.
 - (d) At DRL-31A connect wire #2UD42()22 to pin 17.
 - (e) At DRL-31A add new #22AWG wire #2UD1()22 to pin 16 and new #22AWG wire #2UD72()22 to pin 37. Route both wires to new relay B. Connect wire #2UD1()22 to terminal X1 and wire #2UD72()22 to terminal X2 of relay B.
 - (f) At DRL-31A, pin 40, splice new #22AWG wire #2RN116()22 to existing wire and route to spare T-strip. Attach to terminal 6 of spare T-strip.

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- (g) At DRL-85A, pin 51, splice new #22AWG wire #2RN122()
)22 to existing wire and route to spare T-strip. Attach to terminal 4 of spare T-strip.
- (h) On spare T-strip add two (2) diodes (IN645 or equivalent) to terminals 4, 5 and 6. Attach cathode (banded end) of both diodes to terminal 5. Connect the anode of one diode to terminal 4 and the anode of second diode to terminal 6.
- Add new #22AWG wire #2Cl2()22 to terminal 5 of spare T-strip and route to new relay B. Attach to Al of B relay (normally open contact of relay).
- (2) On left-hand side of aircraft add wires as follows for routing to RHS:
 - (a) T3-15 add new #22AWG wire #UD72()22. Route to RL-31.
 - (b) T3-16 add new #22AWG wire #2UD72()22. Route to RL-31.
 - (c) T22-15 add new #22AWG wire #UD42()22. Route to RL-31.
 - (d) At T22 add new #24AWG shielded-pair wire #UD67()24B to terminal 12 and wire #UD65()24R to terminal 13. Connect shield to terminal 11. Route to RL-31.
 - (e) At FGC 80 #2, B242J3, add new #24AWG shielded-pair wire #2UD67()24B to pin 3 and wire #2UD65()24R to pin 7. Cap and insulate shield. Route to RL-31.
 - (f) At FGC80 #2, B242J3, add new #22AWG wire #2Cl2()22 to pin 59. Route to new relay B.
- (3) On right-hand side of aircraft connect wires routed across in Step (2) above as follows:
 - (a) Connect wire #UD72()22 to DRL-31A, pin 39.
 - (b) Connect wire #2UD72()22 to DRL-31A, pin 38.
 - (c) Connect wire #UD42()22 to DRL-31A, pin 18.
 - (d) Connect shielded-pair wire #UD65()24R to DRL-31B, pin 27, wire #UD67()24B to DRL-31B, pin 30 and shield to pin 42 of DRL-31B.

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- (e) Connect shielded-pair wire #2UD65()24R to DRL-31B, pin 25, wire #2UD67()24B to DRL-31B, pin 28 and connect shield to pin 40 of DRL-31B.
- (f) Connect wire #2Cl2()22 to new relay B terminal A-2 (relay wiper).
- (4) Replace new relay mount and perform Part E, Test Procedures.

PART C: Modification Procedures

- (1) Locate predrilled tabs with nut-plates on stations 241.05 and 250.00 right-hand side above connectors D34 and D242.
- (2) Fabricate relay mount (2 for single F/D or 4 for dual F/D) from .063 Alclad 2024-T3 for mounting to tabs identified in (1) above. Secure relay sockets (P/N HRCW-1M and P/N UN314567) to mount and attach mount to tabs using appropriate hardware. Label small relays RL-A and RL-B and larger six-pole relays RL-C and RL-D for identification purposes. Remove the mount plate to wire relays.

NOTE

Aircraft with single flight director systems will require only one (1) each relay P/N MIL-M39016-105L and P/N U26A8G18S-4. Dual flight director systems require two (2 each of both type relays.

- (a) Connect a diode (IN645 or equivalent) across the coil terminals of each new relay socket. Cathode (banded end) to X-1 (C-1), anode to X-2 (C-2).
- (3) At left-hand side of aircraft add new wires as follows (reference Figure 3):
 - (a) At connector B29J-1 (#1 DME) add new #24AWG shielded-pair, wire #UD65()24R to pin 36, wire #UD67()24B to pin 40. Connect shield to pin 33. Route to T-22 and connect wire #UD65()24R to terminal 13, wire #UD67()24B to terminal 12. Connect shield to terminal 11.
 - (b) At connector B229J-1 (#2 DME) ensure #24AWG shieldedpair, wire #2UD65B24R is connected to pin 36, wire #2UD67B24B is connected to pin 40 and shield is connected to pin 33. These wires should be connected to D130P. Wire #2UD65B24R to pin M, wire #2UD67B24B to pin K and shield to pin J. If not present, add.

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- (c) At D130J add new #24AWG shielded-pair, wire #2UD65()24R to pin M, wire #2UD67()24B to pin K and shield to pin J. Route to area of T-52 RHS to be connected in Step (4)(f).
- (d) At T-22 add new #24AWG shielded-pair, wire #UD65()24R to terminal 13, wire #UD67()24B to terminal 12 and shield to terminal 11. Route to area of new RL-C RHS.
- (e) Add new #22AWG wire #UD42()22 to T-22 terminal 15. Route to area of RL-C RHS.
- (f) Add new #22AWG wire #UD72()22 to T-3 terminal 15 and new #22AWG wire #2UD72()22 to T-3 terminal 16. Route both wires to area of relay RL-C RHS.
- (g) Add new #22AWG wire #IRN82()22 to T-1 terminal 5. Route to area of relay RL-C RHS.
- (h) Add new #22AWG wire #IRN71()22 to RL-84 J-2, pin 16 (splice to existing wire). Route to area of relay RL-C RHS.
- At RL-84 add new #22AWG wire #RN82()22 to J-1, pin 45 (splice to existing wire). Route to area of spare T-strip RHS.
- (j) At RL-84 add new #22AWG wire #IRN142()22 to J-1, pin 46 (splice to existing wire). Route to area of spare T-strip.
- (k) At FGC#1, connector B42J-3, add new #22AWG wire #C12()22 to pin 59. Route to area of new relay RL-A RHS.
- (1) Add new #24AWG shielded-pair, wire #1UD65()24R to pin 7 of B42J-3 and wire #1UD67()24B to pin 3 of B42J-3. Cap and insulate shield. Route wires to area of relay RL-C RHS.
- (4) At right-hand side of aircraft connect wires added in Step(3) above as follows (reference Figure 3):
 - (a) At RL-C connect wire #UD65()24R to pin Bl, wire #UD67()24B to pin B2 and shield to pin B5.
 - (b) Connect wire #UD42()22 to RL-C, pin B3.
 - (c) Connect wire #UD72()22 to RL-C, pin B4.
 - (d) Connect wire #2UD72()22 to RL-C, pin F4.

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- (e) At RL-C add new #24AWG shielded-pair, wire #2UD65()24R to pin F1, wire #2UD67()24B to pin F2 and connect shield to pin F5. Add new #22AWG wire #2UD42()22 to pin F3. Route to T-52.
- (f) At T-52 connect wire #2UD65()24R to terminal 13, wire #2UD67()24B to terminal 12 and shield to terminal 20. Connect wire #2UD42()22 to terminal 3 of T-52. (Include new wires added in Step (3)(c) above to same respective pins.)
- (g) At RL-C connect wire #1UD65()24R to pin H1, wire #1UD67()24B to pin H2 and shield to pin H5 (wires previously added in Step (3) above).
- (h) Connect wire #1RN82()22 to RL-C, pin Cl (with banded end of diode) and wire #1RN71()22 to pin C2 (wires previously added in Step (3) above).
- (i) Add new #22AWG wire #UD1()22 to RL-C, pin H3 and connect opposite end to new relay RL-A, pin X1 (banded end of diode).
- (j) Add new #22AWG wire #UD72()22 to RL-C, pin H4 and connect opposite end to RL-A, pin X2.
- (k) At RL-A connect wire #Cl2()22 to pin A2 (wiper) (wire previously added in Step (3) above).
- Add new #22AWG wire #Cl2()22 to pin Al (normally open contact) of RL-A. Route to area of spare T-strip and connect to terminal 2.
- (m) At spare T-strip connect previously added wires (Step (3) above). Wire #RN82()22 to terminal 1 and wire #IRN142()22 to terminal 3. Add two new diodes (IN645 or equivalent) to spare T-strip. Cathode (banded end) of both to terminal 2, anode of one to terminal 1, anode of the other to terminal 3.
- (5) If second flight director system is installed, proceed to Part D, Modification Procedures.
- (6) Replace new relay mount and proceed to Part E, Test Procedures.

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PART D: Modification Procedures

- (1) Perform Modification Procedure, Part C. At new relay RL-D add new wires as follows (reference Figure 4):
 - (a) Add new #24AWG shielded-pair, wire #UD65()24R to pin Fl, wire #UD67()24B to pin F2 and shield to pin F5 of RL-D. Route to RL-C and connect wire #UD65()24R to pin Bl, wire #UD67()24B to pin B2 and shield to pin B5 of RL-C.
 - (b) Add new #24AWG shield-pair, wire #2UD65()24R to pin B1, wire #2UD67()24B to pin B2 and shield to pin B5 of RL-D. Route to RL-C and connect wire #2UD65()24R to pin F1, wire #2UD67()24B to pin F2 and shield to pin F5 of RL-C.
 - (c) Add new #22AWG wire #2UD42()22 to RL-D, pin B3. Route to RL-C and connect to pin F3 of RL-C.
 - (d) Add new #22AWG wire #UD42()22 to RL-D, pin F3. Route to RL-C and connect to pin B3 of RL-C.
 - (e) Add new #22AWG wire #2UD72()22 to RL-D, pin B4. Route to RL-C and connect to pin F4 of RL-C.
 - (f) Add new #22AWG wire #UD72()22 to RL-D, pin F4. Route to RL-C and connect to pin B4 of RL-C.
 - (g) Add new #22AWG wire #2UD1()22 to RL-D, pin H3. Route to new relay RL-B and connect to pin X1 with cathode (banded end) of diode on RL-B.
 - (h) Add new #22AWG wire #2UD72()22 to RL-D, pin H4. Route to RL-B and connect to pin X2 on RL-B.
 - (i) Add new #22AWG wire #2Cl2()22 to RL-B, pin Al (normally open contact). Route to spare T-strip and connect to terminal 5.
 - (j) At spare T-strip add two (2) new diodes (IN645 or equivalent). Connect cathode (banded end) of both diodes to terminal 5, anode of one to terminal 4 and anode of other to terminal 6.
 - (k) Add new #22AWG wire #2RN162()22 to spare T-strip terminal 4. Route to RL-85 and connect to J1, pin 45.
 - (1) Add new #22AWG wire #2RN83()22 to spare T-strip terminal 6. Route to RL-85 and connect to J1, pin 46.

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- (m) Add new #22AWG wire #2RN71()22 to RL-85 J2, pin 16. Route to RL-D and connect to pin C2 along with diode anode.
- (2) At RHS add the following wires for routing to LHS:
 - (a) Add new #22AWG wire #2RN82()22 to RL-D, pin Cl along with cathode (banded end) of diode. Route to area of Tl LHS.
 - (b) Add new #24AWG shielded-pair to RL-D. Wire #2UD65()24R to pin H1, wire #2UD67()24B to pin H2 and shield to pin H5 (all at RL-D). Route to area of FGC-2 connector B242J3.
 - (c) Add new #22AWG wire #2Cl2()22 to RL-B, pin A2 (relay wiper). Route to area of B242J3.
- (3) At LHS of aircraft connect wires from Step (2) above as follows:
 - (a) Wire #2RN82()22 to Tl terminal 20.
 - (b) Shielded-pair wire #2UD65()24R to B242J3, pin 7, wire #2UD67()24B to B242J3, pin 3. Cap and insulate shield.
 - (c) Wire #2C12()22 to B242J3, pin 59.
- (4) Proceed to Part E, Test Procedures.
- PART E: Test Procedures
- (1) Ensure work area is free of all debris to preclude electrical shorts.
 - (a) Secure new relay mount to tabs using appropriate hardware. Install relays.
 - (b) Replace DME#1 and #2 in their respective mounts (if removed).
 - (c) Maintain accessibility to B42J3 (and B242J3 if #2 flight director is installed).
- (2) Apply power to aircraft and avionics systems.
- (3) Set DME#1 and DME#2 to an operating frequency and check for station lock-on.
 - (a) At FGC #1 J-3, pin 7 (H1) pin 3 (LO) check for analog voltage (40 mv/mi) using digital voltmeter.

January 8, 1986

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- (b) Check for flag voltage between J-3, pin 59 and ground (+28Vdc).
- (c) Depress HOLD on CTL-30 #1 and note loss of flag voltage.
- (d) At pilot's position depress RPT NAV 2 and note flag voltage returns. Also note analog voltage at pin 7 (HI), pin 3 (LO) corresponds to DME#2 distance at 40 mv/mi.
- (e) Depress HOLD on CTL-30#2 and note loss of flag voltage to J-3, pin 59.
- (4) For second flight director system, first return all switches to normal operating position.
 - (a) At FGC#2 J-3, pin 7 (HI) and pin 3 (LO) check for analog voltage corresponding to DME#2 distance.
 - (b) Check for flag voltage at pin 59.
 - (c) Depress HOLD on CTL-30#2 and note loss of flag voltage.
 - (d) At co-pilot's position depress RPT NAV 1 and note flag voltage returns. Also note analog voltage at pin 7 (HI), pin 3 (LO) corresponds to DME#1 distance at 40 mv/mi.
 - (e) Depress HOLD on CTL-30#1 and note loss of flag voltage to J-3, pin 59.
- (5) Reassemble work area and return aircraft to service.

3. MATERIAL INFORMATION

QTY	NEW P/N	DESCRIPTION
A/R A/R A/R A/R	MIL-W-16878D MIL-W-16878D 327583 50534	#24AWG shielded-pair wire #22AWG wire Butt-Splice (Mfg AMP) Terminal, ring tongue (Mfg AMP)
A/R A/R A/R A/R A/R	IN645 (or equiv) MIL-M39016/6-105L HRCW-1M U26A8G18S-4 UN314567	Diode Relay (Mfg Deutsch) Socket (Mfg Deutsch) Relay (Mfg Deutsch) Socket (Mfg Deutsch)

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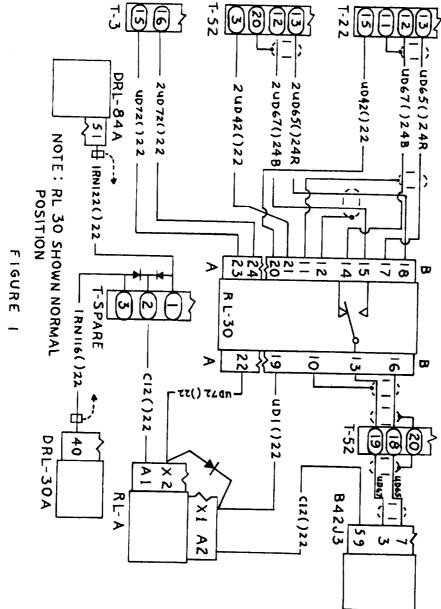
4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log:

Service Bulletin No 1124-22-079 dated January 8, 1986 titled "Autoflight - Establish Linear Deviation Steering Command to Autopilot" has been accomplished the date _____.

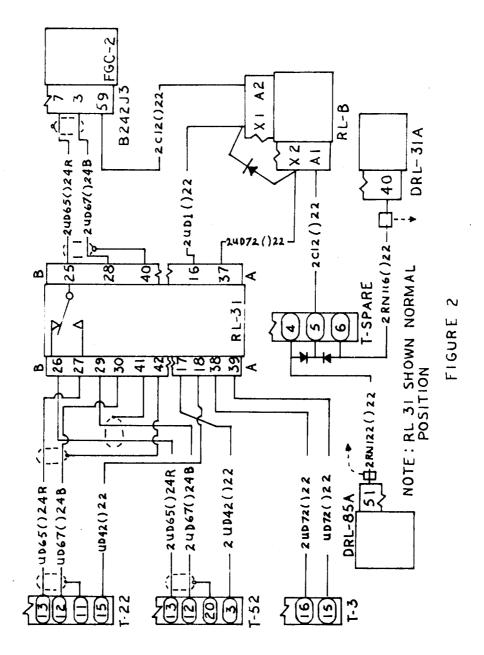
B. Update 1124/1124A Wiring Diagram Manual and IPC to reflect wiring changes and parts additions as performed per this service bulletin.

January 8, 1986



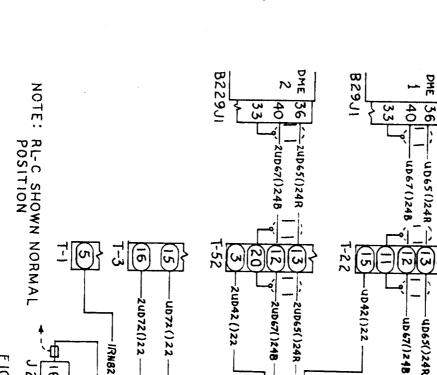
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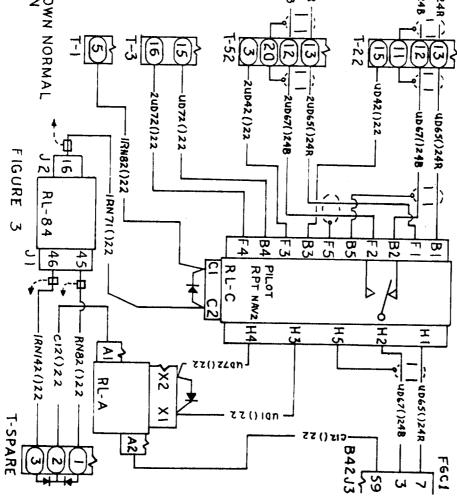
January 8, 1986



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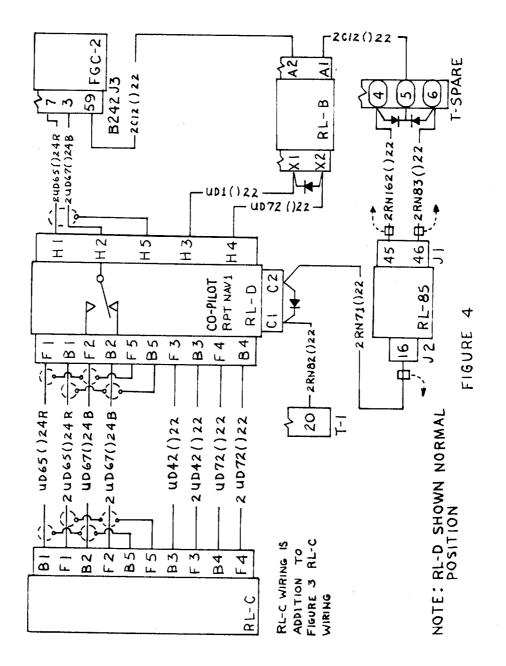
SB 1124-22-079 Page 15 of 17





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January 8, 1986



January 8, 1986



OPTIONAL

SERVICE BULLETIN NO. 1124-23-080

January 12, 1987

- SUBJECT: COMMUNICATION ELIMINATION OF CROSS-SIDE TRANSMITTER SIDETONE
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwinds, serial numbers 349, 375 through 377 and 379 through 442.

B. REASON

To eliminate cross-side transmitter sidetone caused by RFI, especially from #2 VHF and HF Com transmissions that permit the 346B-3 audio control center to sense an on-side transmitter in use.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

A terminal board containing 6 each Radio Frequency bypass capacitors is installed and wired near terminal strip T-25, LHS, outboard of aft coat closet.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

> SB 1124-23-080 Page 1 of 7

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or may be procured locally.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapter 23-50-03 Service Information Letter No. 1124-23-080.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 23-50-03

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove all power from aircraft (reference Figure 1 for the following steps).
 - B. Gain access to terminal strip T-25 and bulkhead at Fuselage Station 241.05 (LHS) by removing the rear (outboard) panel from the aft coat closet.
 - C. Drill #30 (three places) the 863548-261 angle (made from AND10134-1204-2024-T3511 stock, 1 1/4" X 1" X 2.75" long) through the center line of the 1" flat, equally spaced.
 - D. Locate the 863548-261 angle at the inside (aft) of bulkhead 241.05 immediately below the bracket containing ground plugs DGD-18 and DGD-12. Position angle with 1" drilled flat against bulkhead, the 1 1/4" flat facing inboard and aft. Mark and drill the bulkhead 3 places #30.
 - E. Trim the 863548-271 filler (made from .094" 2024T3 Alclad, 3" X 1", to fit between 863548-261 angle and the bulkhead to fill the area where bulkhead angles form a channel. When fitted, drill #30 three places using 863548-261 angle as drill guide. Set filler aside temporarily.

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- F. Locate 863548-263 "T" extrusion (made from AND10136-1401-2024-T3511 stock, 5.0" long) at upper end of 863548-261 angle, drill #30 four places and rivet to 863548-261 angle.
- G. Locate 863548-269 terminal board (made from MS27249-2B5 stock, using 6 double row terminals) on inboard side of 863548-263 extrusion. Locate mounting holes, drill #30 four places. Using 863548-263 extrusion as drill template, drill the 863548-265 phenolic insulator (made from 2" X 4" X .040" thick MK-P-15035FBG stock). Reference Figure 2.

NOTE

863548-269 terminal board with capacitors already mounted becomes a 863548-267 terminal board.

- H. Mount 4 each nut-plates MS21073-L04 to 863548-263 extrusion. Rivet 863548-263 extrusion to 863548-261 angle.
- I. Clean and polish all mating surfaces and apply Iridite 14-2 for 863548-261 angle, 863548-271 filler, and bulkhead 241.05 attach points. Rivet assembly to aft side of bulkhead 241.05. Drill #4 body hole for ground in 863548-261.
- J. Mount 6 each capacitors (0.1 Mfd, 100 Vdc ceramic) vertically across each 863548-269 board terminal pair. Connect a wire between each of the lower 6 terminals, with a 3" wire from the lower forward terminal for grounding. Attach terminal lug to the free end of this wire.
- K. Mount the 863548-269 (or 863548-267) terminal board to the 863548-263 extrusion, with the 863548-265 insulator between board and extrusion.
- L. Wire new capacitors to TB-25 as shown. Reference Figure 3.
- M. Clean, polish and Iridite the ground area at 863548-261 angle (DG225D) and bolt the 3" wire from terminal board 863548-269 or 863548-267).
- N. Check audio and transmit sidetone system (reference 1124 SIL No. 1124-23-060 for procedure).
- O. Reassemble aircraft and return to service.

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SERVICE BULLETIN NO. 1124-23-080

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
*1	863548-261	Angle
*1	863548-263	"T" Extrusion
*1	863548-265	Phenolic insulator
*1	863548-269	**Terminal board (MS27249-2B5)
6	CKR16BR104MM	<pre>**Capacitor, 0.1 mfd, 100 Vdc, ceramic</pre>
4	MS21073-L04	#4 Nut-plate
4	NAS7800-4	4-40 Bolt
4	AN960KD4L	#4 Flat Washer
1	AN4-4	1/4-28 X 1/2 Bolt
1	AN960KD16AL	1/4" Flat Washer
1	MS35338-44	1/4" Spring Washer
1	MS21042-4	1/4-28 Nut
1	34113	Terminal (AMP)
1	327654	Terminal (AMP)
A/R	MIL-W-16878D	#20 AWG Wire

*May be manufactured locally (see text).
**P/N 863548-269 terminal board with 6 each capacitors mounted
may be obtained as P/N 863548-267.

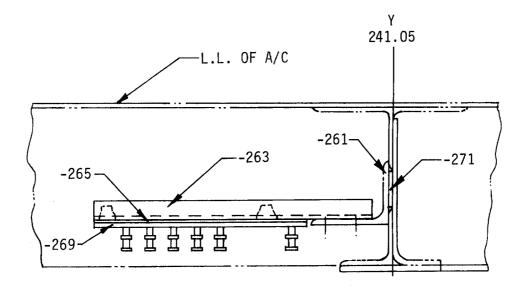
4. RECORD COMPLIANCE

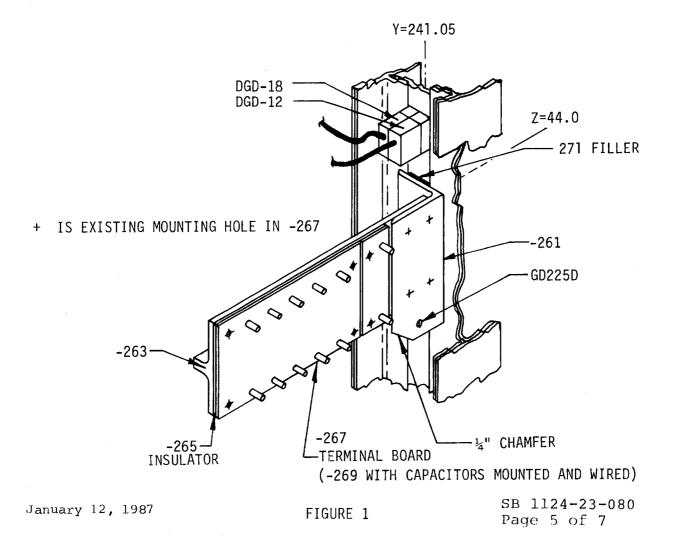
A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-23-080 dated January 12, 1987 titled "Communication - Elimination of Cross-Side Transmitter Sidetone" has been accomplished this date

B. Revise Wiring Diagram Manual, Chapter 23-50-03, to reflect wiring changes as performed in this bulletin.

SB 1124-23-080 Page 4 of 7 January 12, 1987





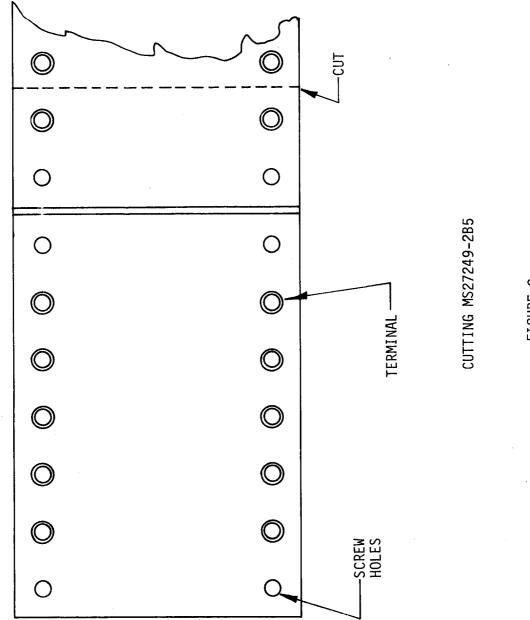
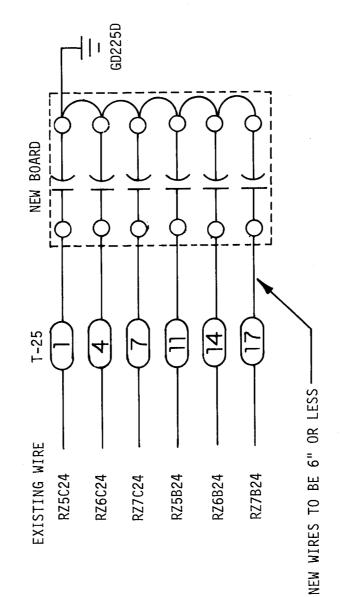


FIGURE 2

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January 12, 1987



FIGURE

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-23-081A

. March 17, 1986

(This Service Bulletin supersedes Service Bulletin No. 1124-23-081, dated January 22, 1986 in its entirety.)

SUBJECT: COMMUNICATIONS - ALTERNATE VHF COM 1 ANTENNA

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A Westwinds, serial numbers 154, 181, 187 and subsequent.

B. REASON

To make available an alternate VHF COM 1 antenna to reduce cabin noise level due to antenna vibration.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

An alternate VHF COM 1 antenna is installed in the same location as the existing antenna using the same mounting hole pattern. Two additional mounting holes and screws are added. The alternate antenna is qualified under TSO C37b, C38b.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



SB 1124-23-081A ¹ Page 1 of 4

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

The material required may be obtained from Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized dealers.

G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

SIL No. 1124-24-023 "Minimizing Precipitation Static Interference Through Proper Aircraft Bonding."

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 23-30-00 will be revised to reflect the modifications described.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove the existing Communication Component Co. (or Dayton-Granger) P/N VFS-10-90-2 COM 1 antenna (STA 103.78). Discard antenna and mounting hardware.
 - B. Install 4873509-RE3 angle and 4873509-RE5 stiffener as shown in Figure #1.
 - C. Make a template and mark and drill two .201 inch diameter holes (#7 drill) through the fuselage skin corresponding to the two blind holes in the Comant P/N CI-211-1 antenna base. Avoid damaging the cabin headliner.
 - D. Clean off the old sealing compound from the fuselage skin and install the Comant P/N CI-211-1 antenna using four MS24694-S60 screws. Seal around screw heads with Proseal PR 1422B 1/2. Run a Bead of Proseal PR 1422B 1/2 around antenna base.
 - E. Remove a cabin headliner and install two MS27039-1-07 screws and two MS35338-43 lock washers in the antenna base. Seal around the screw heads with Proseal PR 1422B 1/2 and also around the nut-plates where the screws installed in step 2.C protrude.

- F. Install connector and replace headliner.
- G. Touch up paint (do not paint the antenna), perform COM 1 ground check, and return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	*CI-211-1	VHF antenna, 118 to 150 MHz. (Mfg. Comant)
4	*MS24694-S60	Screw
2	*MS27039-1-07	Screw
2	*MS35338-43	Lock washer
A/R	*PR 1422B 1/2	Sealant (Proseal)
1	4873509-RE3	Angle
1	4873509-RE5	Stiffener

*May be purchased locally.

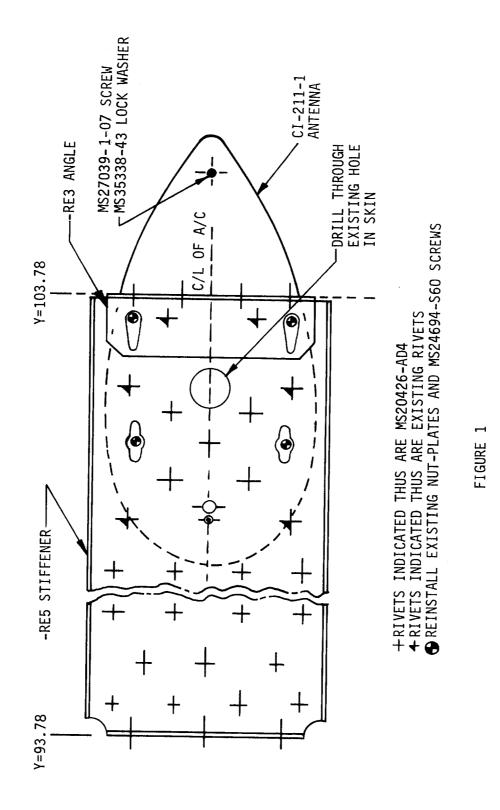
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-23-081A dated March 17, 1986 titled, "Alternate VHF COM 1 Antenna" has been accomplished this date _____.

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-23-082

January 31, 1986

SUBJECT: COMMUNICATIONS - REPLACEMENT OF AUDIO SELECTOR PANEL VOLUME CONTROLS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

- B. REASON
 - (1) To change the resistance value of the speaker, phones and ADF volume controls to permit a wider range of control which will simplify and stabilize the desired volume settings.

(2) To change the resistance material to reduce noise caused by dirty controls, and to improve the audio quality where noisy controls cause the audio control center to echo.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin describes the wiring changes necessary for accomplishment of the reasons stated above.

SB 1124-23-082 Page 1 of 3 E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or procured locally.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapter 23-50-04.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapter 23-50-04. 1124/1124A Illustrated Parts Catalog, Chapter 39-10-02.

2. ACCOMPLISHMENT INSTRUCTIONS

Reference WDM Chapter 23-50-04 and Maintenance Manual Chapter 23-50-00 in the accomplishment of this modification.

- A. Remove electrical power from aircraft.
- B. Remove pilot and copilot audio panel assembly.
- C. To replace the combined phone volume and hot mic switch control assembly R3/S23 use Allen-Bradley P/N 26M653 to replace the original P/N 15M384 or P/N 70K3G032F102U.

SB 1124-23-082 Page 2 of 3

- D. To replace the combined speaker and ADF volume control assembly, R3A/R3B, standard on pilot's side but also used on copilot's side with ADF 2 option installed, use Allen-Bradley P/N 26M652 to replace the original P/N 15M383 or P/N 70C3G032F252U. Remove and discard the parallel resistor R4 (1600 ohm), should it exist across speaker volume control R3B.
- E. To replace the single copilot's speaker volume control, use Allen-Bradley P/N 70B3G032F751W to replace original 70A3G032F102U or ASM 6664. Remove any parallel resistor found across the original control.

NOTE

You may also use the new P/N 26M652 dual control; simply use the forward section and ignore the rear section.

- F. Reassemble connectors, install audio panel and perform complete operational ground tests to ensure system integrity.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
2 *2	26M653 26M652	Switch/Pot Assembly Pot Assembly
** <u>1</u>	70B3G032F751W	Pot Assembly

*Copilot panel without ADF volume control may use P/N 70B3G032F751W.

**For copilot panel only without ADF.

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book: Service Bulletin No. 1124-23-082 dated January 31, 1986 titled "Communications - Replacement of Audio Selector Panel Volume Controls" has been accomplished this date.
 - B. Revise Wiring Diagram Manual to reflect the changes described by this service bulletin.

January 31, 1986

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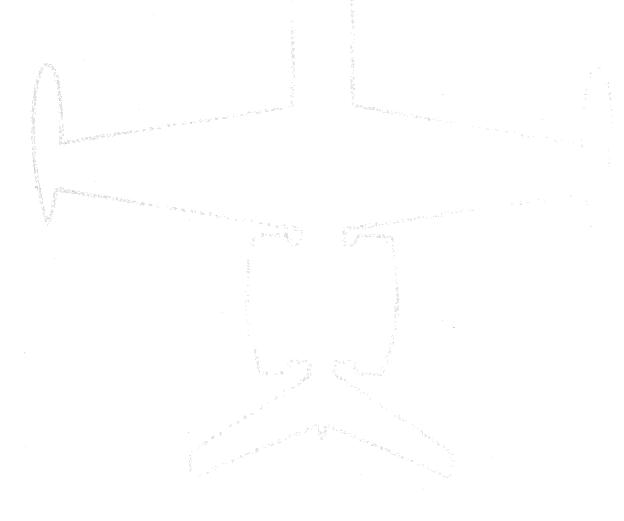
SERVICE BULLETIN NO. 1124-28-083 Revision - 1

February 14, 1990

SUBJECT: FUEL - MODIFICATION OF FUEL TRANSFER PUMP

CANCELLATION NOTICE

This service bulletin is hereby cancelled. The information contained in this service bulletin has been determined to be incompatible with the 1124/1124A Westwind Aircraft.



March 14, 1986 Revision 1, February 14, 1990



OPTIONAL

SERVICE BULLETIN NO. 1124-28-083

March 14, 1986

SUBJECT: FUEL - MODIFICATION OF FUEL TRANSFER PUMP

- 1. PLANNING
 - A. EFFECTIVITY

Model 1124/1124A Westwinds, all serial numbers.

B. REASON

To prevent unwanted fuel from entering tip tanks.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. **DESCRIPTION**

This service bulletin approves the modification of the fuel transfer pumps in tip tanks to incorporate a check valve.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Materials required may be purchased from Atlantic Aviation Supply Company or their authorized dealers.

G. TOOLING

643

No special tooling is required.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL H. WEIGHT AND BALANCE

Weight and balance is not affected.

I. ELECTRICAL LOAD

Not applicable

J. REFERENCES

Model 1124/1124A Maintenance Manual, Section 28-20-00.

K. PUBLICATIONS AFFECTED

Model 1124/1124A Illustrated Parts Catalog will be revised to reflect new part numbers.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Gain access to tip tank fuel area as shown in Maintenance Manual Section 28-20-00.
 - B. Remove P/N 5213003-13 inlet tube left and right and discard.
 - C. Disconnect P/N 5213003-17 outlet line.
 - D. Remove AN3-4A screws thru pump bracket and airframe bracket.
 - E. Remove pump from tip tank.
 - F. Remove pump head from venturi by removing AN501A10-10 screw thru pump attach bracket and pump head (see Figure 2).
 - G. Detach pump head and "O" ring and discard.
 - H. Install new pump head using AN501A10-10 screw and MS29513-029 "O" ring (see Figure 2). Reidentify transfer pump assembly to IAI Part Number 4653806-501 (VPN 616E504-2).
 - I. Safety with MS20995NC lock wire.
 - J. Reinstall modified pump.
 - K. Reconnect pump outlet line.
 - L. Install new inlet lines P/N 5213003-31 L/H and P/N 5213003-30 R/H with an AN815-6D Fitting. (see figure 1).
 - M. Close tip tank fuel area.

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3. MATERIAL INFORMATION

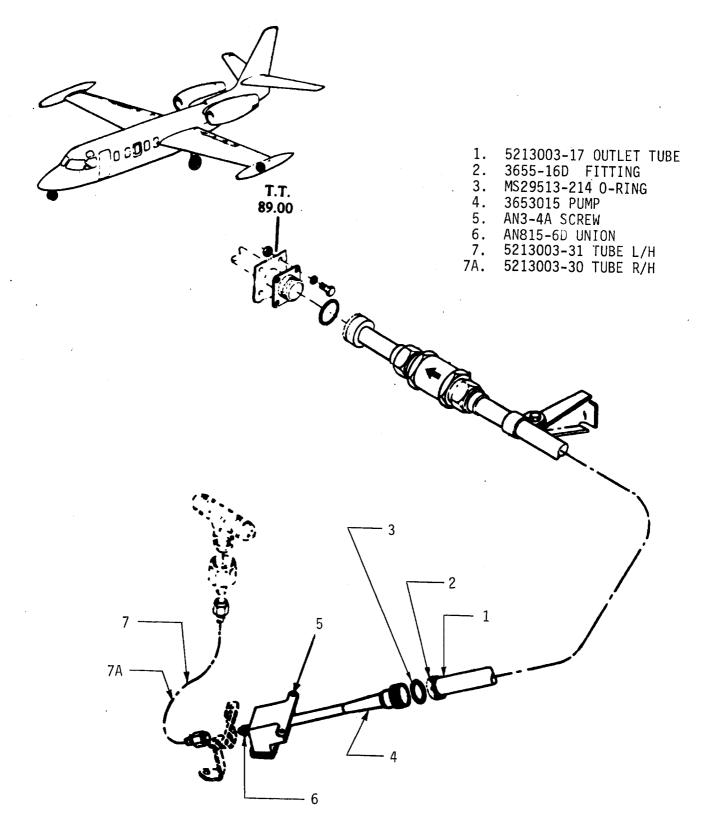
QTY	<u>P/N</u>	DESCRIPTION
2 1 1	Kit #284 5213003-31 5213003-30	Pump head Inlet line L/H Inlet line R/H
*2	AN815-6D	Fitting

*May be purchased locally

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-28-083, dated March 14, 1986 titled "Fuel - Modification of Fuel Transfer Pump" has been accomplished this date _____.

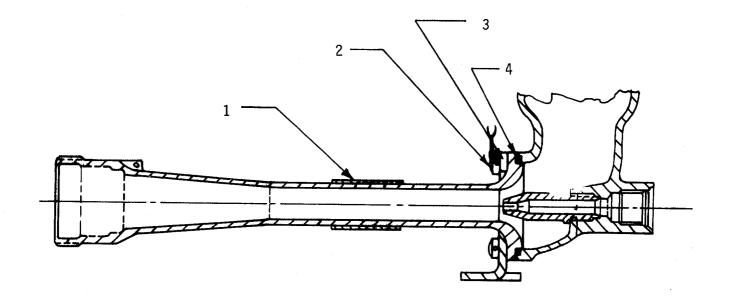


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FIGURE 1



- 1. EXISTING PUMP VENTURI
- 2. AN501A10-10 SCREW
- 3. PUMP ATTACH BRACKET
- 4. MS29513-029 "O" RING

FIGURE 2

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SERVICE BULLETIN

OPTIONAL

SERVICE BULLETIN NO. 1124-25-085

February 24, 1986

SUBJECT: EQUIPMENT/FURNISHINGS - CREW SEAT SLIDE RELEASE ARM ASSEMBLY IMPROVEMENT

1. PLANNING INFORMATION

A. EFFECTIVITY

Model 1124/1124A Westwinds, all serial numbers.

B. REASON

To provide an improved slide release arm assembly.

C. COMPLIANCE

Optional

D. DESCRIPTION

This service bulletin provides instructions to replace the existing slide release arm assembly with an improved arm assembly.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or their authorized representatives.

> SB 1124-25-085 Page 1 of 3

G. TOOLING

None required

- H. WEIGHT & BALANCE Not applicable
- I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 25-10-01, page 201 through 203.

1124/1124A Illustrated Parts Catalog, Chapter 25-10-00.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 25-10-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove pilot and copilot seat assemblies from aircraft.
- B. Gain access to and remove the slide release arm assembly, P/N G.I. 1022.1.2.0 or B.S. 1702.02.00, by removing the two (2) clevis pins attaching the left and right link assemblies to the retract pins and remove the two (2) AN3-4A bolts attaching the arm assembly to the seat frame.
- C. Install the new arm assembly, P/N G.I. 1022.11.12.10, in reverse order as per step B.
- D. Install pilot and copilot seat in aircraft, reference 1124 Maintenance Manual, Chapter 25-10-01.
- E. Check seat tracking mechanism for proper engagement in floor tracks.
- F. Return aircraft to service.
- 3. MATERIAL INFORMATION

QTY	<u>NEW P/N</u>	DESCRIPTION	OLD P/N
2 ea.	G.I. 1022.11.12.10	Arm Assembly	G.I. 1022.1.2.0 or B.S. 1702.02.00

SB 1124-25-085 Page 2 of 3

February 24, 1986

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-25-085 dated February 24, 1986 titled "Equipment/Furnishings - Crew Seat Slide Release Arm Assembly Improvement" has been accomplished this date _____.

February 24, 1986

SB 1124-25-085 Page 3 of 3



RECOMMENDED

SERVICE BULLETIN NO. 1124-27-086

April 10, 1987

- SUBJECT: FLIGHT CONTROLS INSPECTION AND/OR REPLACEMENT OF LH AND RH ELEVATOR REDUCER TUBE COLLARS
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY
 - PART I: MODEL 1124/1124A WESTWIND, all serial numbers prior to 331.
 - PART II: MODEL 1124/1124A WESTWIND, serial numbers 331 through 412, 414, 415, 417, 419, 420, 422, 424, 425, 427 and 430.
 - B. REASON (PART I & II)

Misalignment of the collar flange attachments to the elevators, if not corrected, could induce cracks in the collars, leading to structural failure of the torque tube-elevator interface.

- C. COMPLIANCE
 - PART I: At the next 150-hour inspection. At each 150-hour inspection thereafter, repeat the dye-penetrant inspection of the collars, as described in Section 2, Part I, A-C. These inspections may be terminated when new collars are installed as per Section 2, Part I, D.
 - PART II: One-time inspection at the next 150-hour inspection.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

D. DESCRIPTION

PART I of this service bulletin provides procedures to perform a dye-penetrant and alignment inspection of both elevator reducer tube collars and replacement of same, if necessary.

PART II of this service bulletin provides procedures to perform a one-time alignment inspection by checking the gap between the left and right elevator reducer tube collar flange and elevator rib and correction methods, if required.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized dealers.

G. TOOLING

1 ea. No. 1 Taper Reamer (Brown & Sharpe) 1 ea. No. 2 Taper Reamer (Brown & Sharpe)

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 27.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 27.

2. ACCOMPLISHMENT INSTRUCTIONS

PART I (150-hour Inspection)

- A. Remove fairings between the elevators to gain access to the left and right elevator torque tube assemblies.
- B. Remove the paint from both elevator reducer tube collars.
- C. Perform dye-penetrant inspection in radius of both collars (reference Figure 1).
- D. If no defects, proceed to step E. Defective collars must be replaced with a new reducer tube P/N 3533579-501 and collar P/N 3533577-1 as follows:
 - (1) Remove applicable elevator in accordance with 1124/1124A Maintenance Manual Chapter 27.
 - (2) Remove the two taper pins securing the reducer tube to the universal joint and slide the reducer tube outboard through the bearing support.
 - (3) Assemble the reducer tube and collar by positioning the tube into the collar so that the end of the tube is flush, but not recessed more than .040" from outside surface of the collar flange (reference Figure 1).
 - (4) Drill through the pilot holes in the collar and through the reducer tube.
 - (5) Ream the holes through the collar and reducer tube with a #2 taper reamer. Reamer must have a .500" taper per 12.00" length.
 - NOTE: Small end of taper pin shank shall not protrude beyond the surface of fitting by more than .060" when pin is installed.
 - (6) Install the AN386-2-14 taper pins, AN975-3 washers, AN320-3 nuts. Torque nuts to 15-20 inch-lbs. and safety with MS24665-153 cotter pins.
 - (7) Slide the reducer tube assembly into the bearing support and into the center torque tube universal joint.

April 10, 1987

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- (8) Position the elevator on stabilizer hinge points and install bolts, bonding straps and nuts. Torque the outboard nuts to 50-70 inch-lbs. and the two inboard nuts to 100-140 inch-lbs. and safety with cotter pins.
- (9) Install four bolts and washers securing the torque tube collar to the inboard elevator rib. Do not safety at this time.
- (10) The penetration of the torque tube assembly into the universal joint must be sufficient to cover the inspection hole (reference Figure 2). If not, install shims as required, P/N 5 403001-7 (max. 4 shims) between the torque tube collar and the elevator rib to achieve the proper penetration.
- (11) Align both elevators. Check that the center torque tube bellcrank is properly aligned (reference Figure 3).
 - NOTE: Maximum differential between left and right elevators is 1/2 degree.
- (12) Manufacture two bushings for the large and small holes in the universal joint to use as a centering guide when drilling the holes in the torque tube. Drill into the torque tube from both sides, using extreme care for proper alignment of the drill.
- (13) Ream the holes through the universal joint and reducer tube with a #1 taper reamer. Reamer must have a .500" taper per 12.00" length.
 - NOTE: Small end of taper pin shank shall not protrude beyond the surface of the fitting by more than .060" when pin is installed.
- (14) Install the AN386-2-10 taper pins, AN975-3 washers, AN320-3 nuts. Torque nuts to 15-20 inch-lbs. and safety with MS24665-153 cotter pins.
- (15) Torque the four bolts securing the torque tube assembly to the elevator rib (step 9) to 80-100 inch-lbs. and safety wire.
- (16) Check the elevator for proper travel in accordance with 1124/1124A Maintenance Manual, Chapter 27-30-00, paragraph 1, Adjustment/Test.

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- E. Loosen the four bolts retaining the torque tube collar to the elevator rib. DO NOT REMOVE.
- F. Measure the gap between the flange of collar and the elevator rib. A maximum gap of .010" at any point is acceptable.
- G. Remove both elevators in accordance with 1124/1124A Maintenance Manual, Chapter 27.
- H. Inspect collar flange for distortion and cracks. Any defects will necessitate replacement of the reducer tube and collar as per Part I, para. 2.D.
- I. Check the reducer tube in relation to collar flange. If the reducer tube is recessed in the collar by more than .040" (reference Figure 1), the collar and reducer tube must be replaced as per Part I, para. 2.D.
- J. If the reducer tube protrudes beyond the outer surface of the flange, the tube must be machined to be flush with the flange. Apply Alodine and Epoxy primer to the machined area.
- K. Install both elevators in accordance with 1124/1124A Maintenance Manual, Chapter 27.
- L. If the measurement taken in step F exceeds .010", install a shim manufactured from aluminum to the dimensions of the flange with thickness as required to obtain a gap of .010" or less.
- M. Install the four bolts and washers securing the torque tube assembly to the elevator; torque bolts to 80-100 inch-lbs. and safety wire.
- N. Repaint the reducer tube collars as necessary, install fairings and return aircraft to service.

PART II (One-time Inspection)

- A. Remove fairings between the elevators to gain access to the left and right elevator torque tube assemblies.
- B. Loosen the four bolts retaining the collar flange to the inboard elevator rib. DO NOT REMOVE.

April 10, 1987

- C. Measure the gap between the collar flange and elevator rib. A maximum gap of .010" at any point is acceptable.
- D. If gap exceeds .010", remove paint from the collar and perform a dye-penetrant inspection in the radius of the collar (reference Figure 1).
- E. Defective collars must be replaced with a new reducer tube P/N 3533579-501 and collar P/N 3533577-1 as per Part I, para. 2.D.
- F. If no defects, remove the four bolts loosened in step B and install a shim, manufactured from aluminum to the dimensions of the flange with thickness as required to obtain a gap of .010" or less.
- G. Install the four bolts and washers securing the torque tube assembly to the elevator; torque bolts to 80-100 inch-lbs. and safety wire.
- H. Repaint the reducer tube collars as necessary, install fairings and return aircraft to service.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	3533579-501	Reducer, Torque Tube
A/R	3533577-1	Collar
A/R	AN386-2-14	Taper Pin
A/R	AN975-3	Washer
A/R	AN320-3	Nut, castellated
A/R	AN386-2-10	Taper Pin
A/R	MS24665-153	Pin, cotter
A/R	5 403001-7	Shim

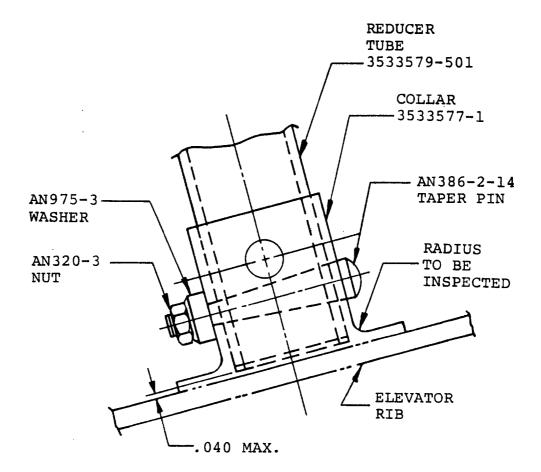
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-086 dated April 10, 1987 titled "Flight Controls - Inspection and/or Replacement of LH and RH Elevator Reducer Tube Collars" has been accomplished this date

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NOTE: DURING INSTALLATION OF TAPER PINS, NARROW END SHALL NOT PROTRUDE BEYOND THE COLLAR BY MORE THAN .060"

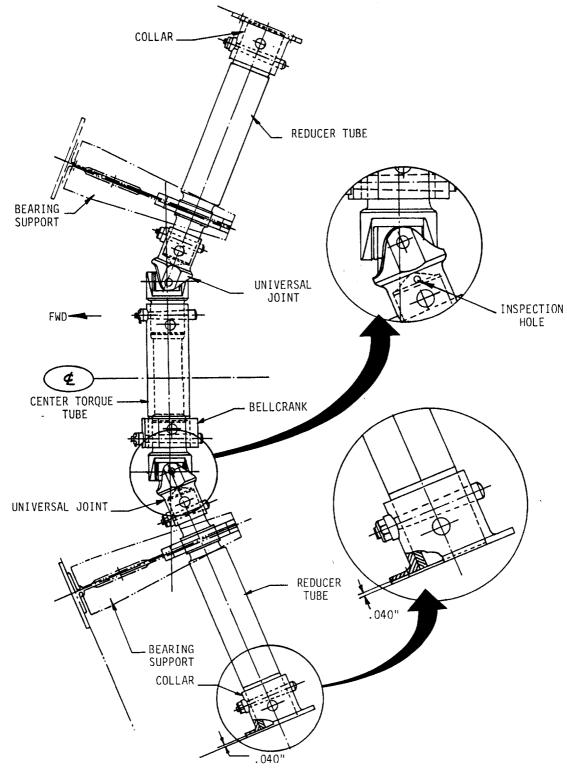


ELEVATOR TORQUE TUBE COLLAR

FIGURE 1

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April 10, 1987

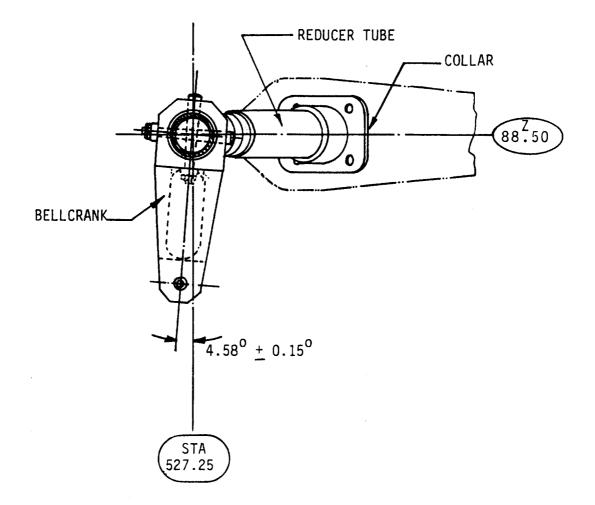


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FIGURE 2

ELEVATOR TORQUE TUBE ASSEMBLY

CAUTION: VERIFY ELEVATOR CONTROL SYSTEM RIGGING IS CORRECT BEFORE DRILLING AND REAMING NEW PARTS.



ALIGNMENT OF CENTER TORQUE TUBE BELLCRANK TO ELEVATOR TORQUE TUBE COLLAR

FIGURE 3

April 10, 1987

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SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-28-087

April 4, 1986

SUBJECT: FUEL - REMOVAL OF EMI FILTERS FROM INTERTECHNIQUE BOOST PUMP CIRCUIT

1. PLANNING INFORMATION

- A. EFFECTIVITY
 - (1) 1124 Model Westwind, serial numbers 152, 174, 181, 185, 186, 226, 228, 230, 231, and 235 through 294.
 - (2) 1124/1124A Model Westwinds, serial numbers 239, 295 through 412, 414, 415, 417, 419, 420, 422, 424, 425, 427 and 430.
 - (3) 1124 Model Westwind, post Service Letter No. WW-2434.
- B. REASON

To eliminate possibility of EMI filter dormant failure that might lead boost pump to become inoperative.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished within 150 hours of the date of this bulletin.

D. DESCRIPTION

This service bulletin authorizes removal of EMI filters from boost pump circuits.

INTERNATIONAL INC.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

None required.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapter 28-20-03. 1124/1124A Maintenance Manual, Chapter 28-20-00.

K. PUBLICATIONS AFFECTED

None.

2. ACCOMPLISHMENT INSTRUCTIONS

PART I

- A. Pull both main and alternate boost pump circuit breakers, left and right.
- B. Gain access to fuel booster pumps and EMI filters.
- C. Disconnect right main boost pump (outer) wire #2Q25A12 from TB1, terminal #2 and wire 2Q184A12 from TB2, terminal #2.
- D. Remove and discard EMI filters and associated wiring connected between TB1/2 and TB2/2.
- E. Reconnect wire #2Q25A12 from TB1, terminal #2 and wire 2Q184A12 to TB2, terminal #2.
- F. Disconnect RH alternate boost pump (inner) wire #2Q23A12 from TB1, terminal #3 and wire 2Q183A12 from TB2, terminal #3.

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- G. Remove and discard EMI filters and associated wiring connected between TB1/3 and TB2/3.
- H. Reconnect wire #2Q23A12 from TB1, Terminal #3 and wire 2Q183A12 to TB2, terminal #3.
- I. Disconnect LH main boost pump (outer) wire #1Q25A12 from TB1/2 and #1Q184A12 from TB2/2.
- J. Remove and discard EMI filters and associated wiring connected between TB1/2 and TB2/2.
- K. Reconnect 1Q25A12 from TB1, terminal #2 and wire 1Q184A12 to TB2, terminal #2.
- L. Disconnect LH alternate boost pump (inner) wires #1Q23A12 from TB1, terminal #3 and 1Q183A12 from TB2, terminal #3.
- M. Remove and discard EMI filters connected between TB1/3 and TB2/3.
- N. Reconnect 1Q23A12 from TB1, terminal #3 and wire 1Q183A12 to TB2, terminal #3
- O. Reset both main pump circuit breakers and opposites. Check both main pumps one at a time.
- P. Reset both alternate pump circuit breakers and pull both main pump circuit breakers and opposites. Check both alternate pumps one at a time.
- Q. Reset main pump circuit breakers.
- R. Install access panels.

Part II

For aircraft with filters installed on brackets attached to pumps (see Figure 5).

- A. Pull both main and alternate boost pump circuit breakers, left and right.
- B. Cut or disconnect wires from both ends of filters and splice together using 12 gauge butt splice.
- C. Remove 2 each EMI filters from bracket.
- D. Repeat Steps B and C above for remaining pumps.
- E. Secure wires as necessary with TY-Raps.

- F. Operationally check all pumps IAW PART I, Steps O, P and Q above.
- G. Install access panels.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	320570 (AMP)	Butt splice (MS 25181, Class II)

4. RECORD COMPLIANCE

Thus and the

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-28-087 dated April 4, 1986 titled "Fuel - Removal of EMI Filters for Intertechnique Boost Pump Circuit", has been accomplished this date

1

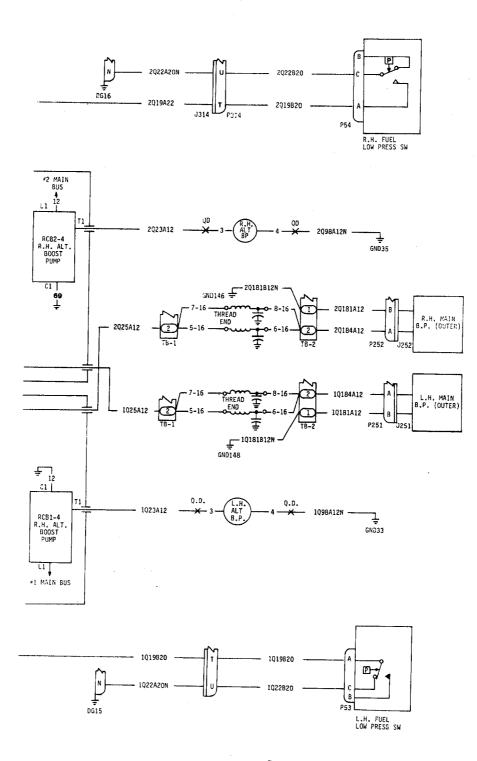
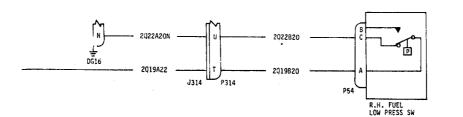


FIGURE 1 (FOR AIRCRAFT S/N 181)

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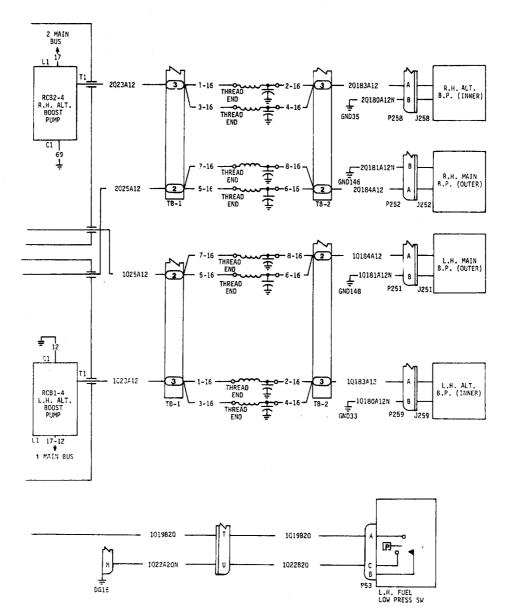


FIGURE 2 (FOR AIRCRAFT S/N 174, 244, 245, 248 AND 250 THRU 282)

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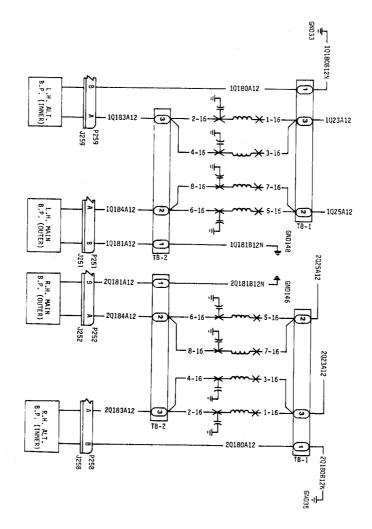
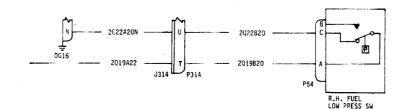


FIGURE 3 (FOR AIRCRAFT S/N 226, 228, 230, 231, 235 THRU 243, 246 AND 247 THRU 249)

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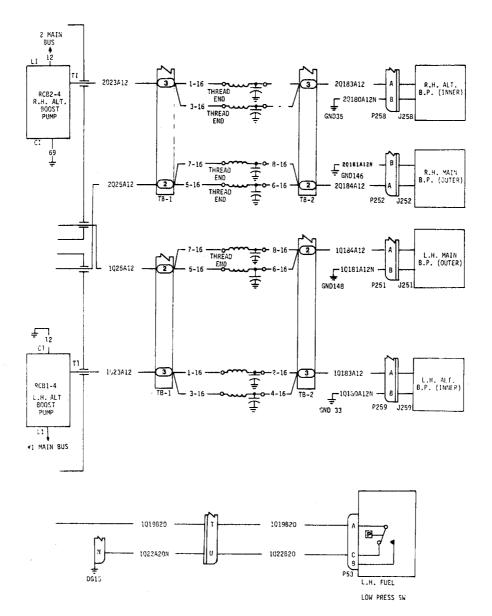
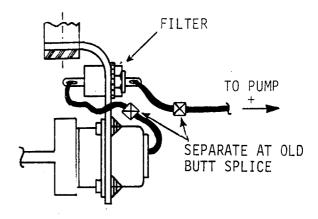


FIGURE 4 (FOR AIRCRAFT S/N 283 AND SUBS)

SB 1124-28-087 Page 8 of 10

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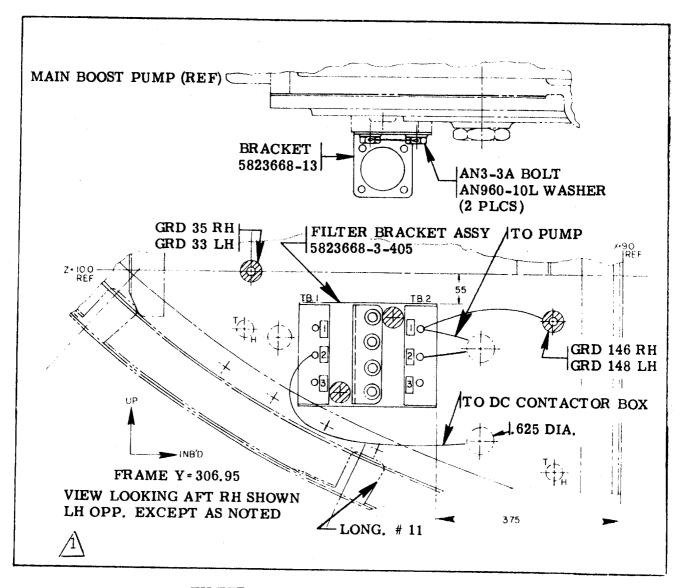
RECONNECT WIRES WITH NEW BUTT SPLICE AND DISCARD FILTER

FUEL BOOST PUMP EMI FILTER/BRACKET INSTALLATION

FIGURE 5

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SERVICE BULLETIN NO. 1124-28-087



FILTER BRACKET ASSY. INSTALLATION

FIGURE 6

(INSTALLATION AFTER COMPLIANCE WITH SL NO. WW-2434)

NOTE: 1124 AIRCRAFT, S/N 283 AND SUBS, AND 1124A AIRCRAFT, S/N 295 AND SUBS, TB1 AND TB2 LOCATED AT 277.75 (FUEL SUMP BAY)

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RECOMMENDED

SERVICE BULLETIN NO. 1124-11-088A

March 20, 1987

(This Service Bulletin No. 1124-11-088A dated March 20, 1987 supersedes Service Bulletin No. 1124-11-088 dated December 19, 1986 in its entirety.)

- SUBJECT: PLACARDS & MARKINGS OVERWING AND SINGLE POINT FUELING FILLER PORTS PLACARD REPLACEMENT
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

1124A MODEL WESTWINDS, all serial numbers prior to 438, except 239.

B. REASON

To correct fuel capacity on overwing and single point fueling filler ports placards.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operator's earliest convenience.

D. DESCRIPTION

Replace existing (3 each) placards on the overwing fuel filler ports and a section of single point refueling data placard. Install replacement placards or utilize other suitable methods of placarding.



INTERNATIONAL INC.

SB 1124-11-088A Page 1 of 7

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required to comply with this service bulletin may be obtained through Atlantic Aviation Supply Company in Wilmington, Delaware or their authorized dealers.

G. TOOLING

None

H. WEIGHT AND BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

Not applicable.

K. PUBLICATIONS AFFECTED

Model 1124 Series Illustrated Parts Catalog will be changed to reflect the correct placard information. Model 1124 Series Maintenance Manual will be revised to reflect the new capacity placard.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Remove existing placards (3 each) adjacent to the left and right overwing fuel filler ports using standard shop practices.
 - B. Utilizing available decals or other suitable placarding methods, re-placard left and right overwing fuel ports as illustrated in Figures 1, 2, and 3.
 - (1) For A/C serial numbers prior to 366, use decals: 2 each P/N 113001-189, (Figure 1); 1 each P/N 113001-188, (Figure 3).

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March 20, 1987

- (2) For A/C serial numbers 366 and subs, use decals:
 2 each P/N 113001-191, (Figure 2); 1 each P/N 113001-188, (Figure 3).
- C. Apply decal P/N 113001RWK7-RE5 over the refueling data portion of the existing single point refueling placard, located by the filler port access door as illustrated in Figure 4.

NOTE

If decals are not utilized, placarding shall be accomplished with contrasting color with letter sizes as shown in Figures 4.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	113001-188	Decal (Fig. 3)
1	113001-189	Decal (Fig. 1)
	or	
	113001-191	Decal (Fig. 2)
1	113001RWK7-RE5	Decal (Fig. 4)

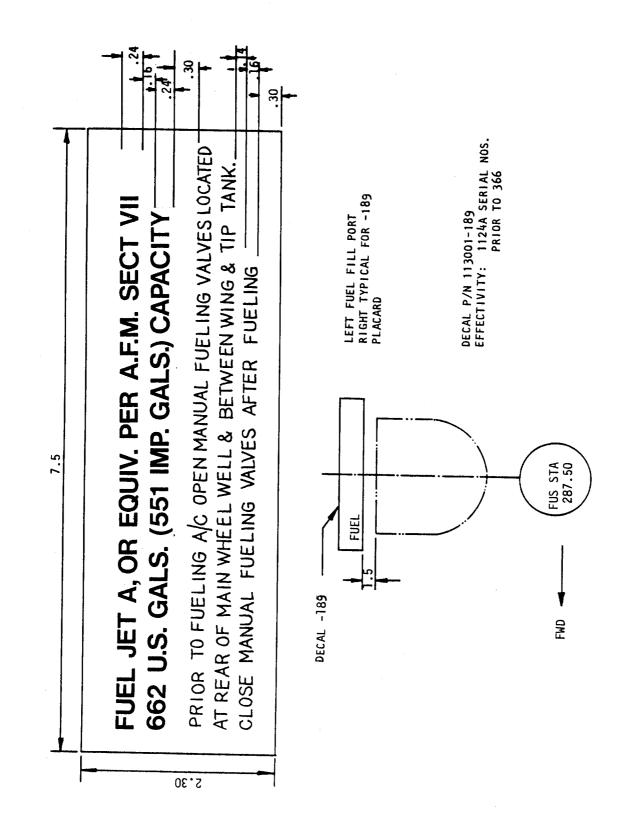
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

SERVICE BULLETIN NO. 1124-11-088A dated March 20, 1987, titled "Placards & Markings - Overwing and Single Point Fueling Filler Port Placard Replacement," has been accomplished this date _____.

March 20, 1987

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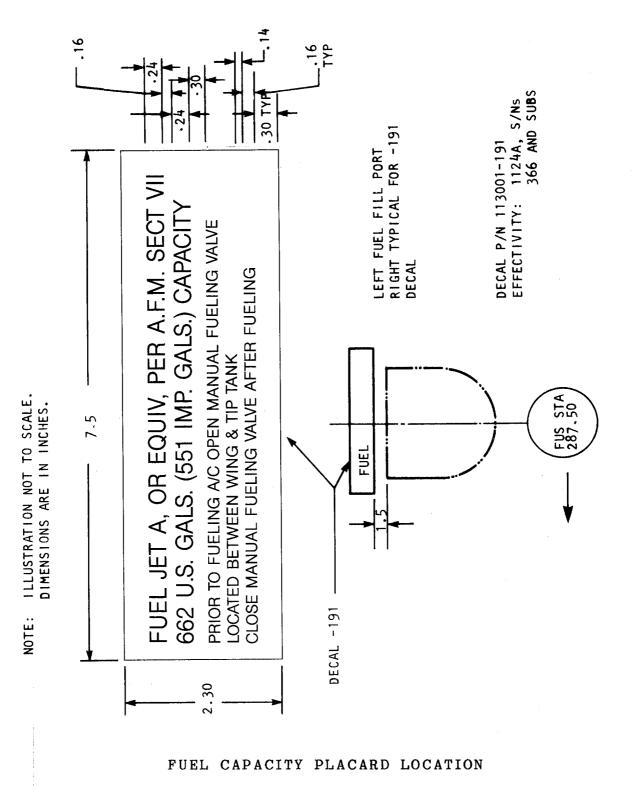
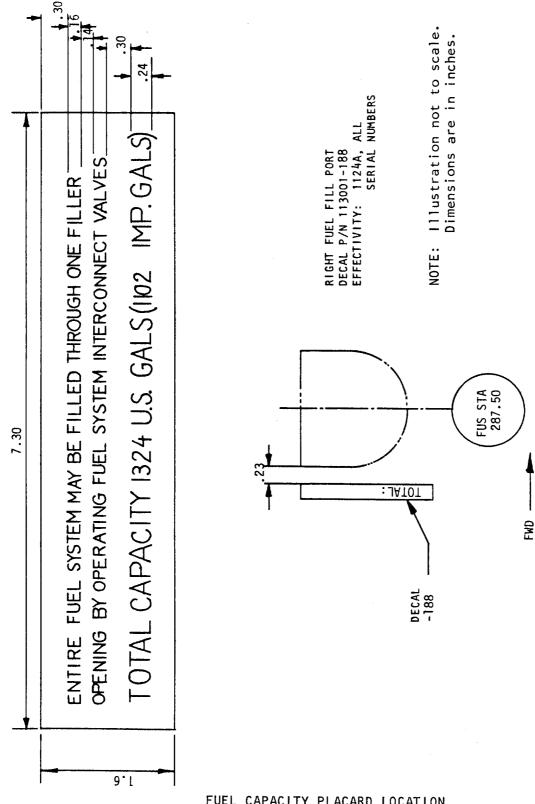


FIGURE 2

March 20, 1987

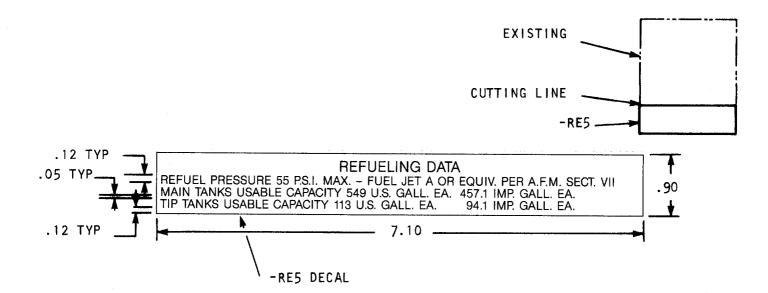
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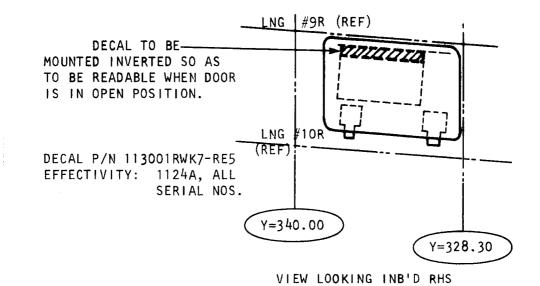


FUEL CAPACITY PLACARD LOCATION

FIGURE 3

NOTE: Illustration not to scale. Dimensions are in inches.





FUEL CAPACITY PLACARD LOCATION

Figure 4

March 20, 1987

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OPTIONAL

SERVICE BULLETIN NO. 1124-21-089

April 6, 1987

- SUBJECT: AIR CONDITIONING INCORPORATION OF REFRIGERATION UNIT OVERTEMPERATURE PROTECTION SYSTEM (OPS)
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To aid in extending the service life of 2200165-2 Series 1 and 2200165-3 Series 1 refrigeration units.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

This service bulletin describes the procedure necessary to install the OPS kit.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply Co., Wilmington, Delaware or from Garrett General Aviation Services Company.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL G. TOOLING

None required.

H. WEIGHT & BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 21-50-00 Garrett/Airesearch Service Bulletin No. 5-2402 Garrett/Airesearch Report 4-272 titled "Operation and Maintenance Instructions" for the 1124/1124A Refrigeration Units dated 1 Nov 1985

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 21-50-00, Figure 2.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Gain access to the environmental control unit by removing the aft access panel from the fwd baggage compartment and also the fwd access panel in the aft baggage compartment.
 - B. Modify affected 2200165-2 Series 1 or -3 Series 1 refrigeration units to incorporate the Overtemperature Protection System (OPS) in accordance with the attached Garrett/Airesearch Service Bulletin No. 5-2402.

NOTE

The OPS kit may be installed utilizing accomplishment instructions in Garrett/ Airesearch Service Bulletin No. 5-2402 with the environmental control unit in the aircraft.

- C. Perform leak check and operational check of the air conditioning system.
- D. Reinstall access panels in both fwd and aft baggage compartments.

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3. MATERIAL INFORMATION

In addition to the refrigeration unit modification kit called out in Garrett/Airesearch Service Bulletin No. 5-2402, the following parts will be required:

QTY	PART NUMBER	DESCRIPTION
*2	MS9068-136	Packing
**2	460-200	Peri-Seal

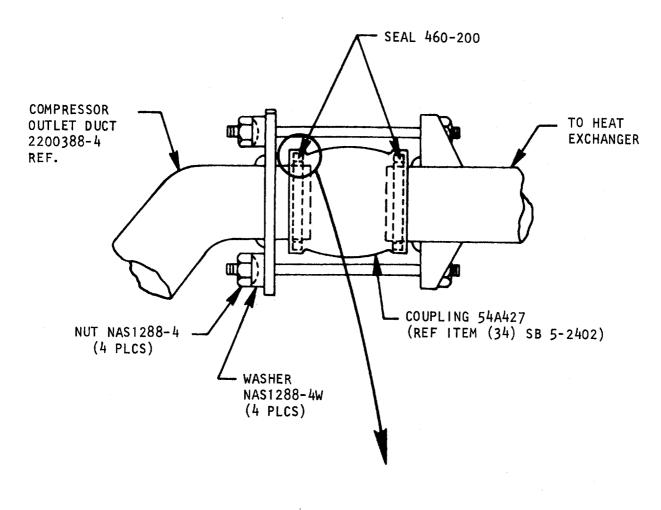
*See Garrett/Airesearch Service Bulletin No. 5-2402, para. 2.A.(5), packing (19) installation. **See Figure 1 for seal installation.

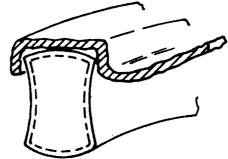
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-21-089 dated April 6, 1987, titled "Air Conditioning - Incorporation of Refrigeration Unit Overtemperature Protection System (OPS)" has been accomplished this date

April 6, 1987







COMPRESSOR OUTLET DUCT COUPLING INSTALLATION

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April 6, 1987



AIRESEARCH MANUFACTURING COMPANY OF CALIFORNIA SERVICE BULLETIN

REFRIGERATION UNIT - Conversion of 2200165-2 and 2200165-3 Refrigeration Units to 2200165-5 and 2200165-4 Refrigeration Units to incorporate an Overtemperature Protection System

1. <u>Planning Information</u>

A. Effectivity

This service bulletin is applicable to the following refrigeration units:

Part No.	Serial No.	Aircraft Application	
2200165-2 Series 1	A11	IAI-Westwind 1124	
2200165-3 Series 1	A11	IAI-Westwind 1124	

- B. Reason
 - (1) Problem. High cooling turbine failure rates have been experienced by some operators. Examination of returned turbines has revealed overheat to be responsible for over 50 percent of turbine failures.
 - (2) Background. Early in the 1124 program, high cooling turbine failure rates were reported. High bearing temperatures were responsible and this condition was addressed through incorporation of a bearing cooling modification which lowered bearing temperatures and provided increased turbine life. A further life increase is still possible. Evidence of overspeed as well as overheat was still present on some units after installation of the bearing cooling modification. Analysis indicated that reduced ram air flows in some flight regimes can produce both an overspeed condition as well as higher temperatures to the cooling turbine as a result of this reduced cooling air flow. An Overtemperature Protection System was developed and made available for field evaluation. This system was deemed successful and has been incorporated into the 1125 ASTRA Environmental Control System.

The system senses compressor discharge temperature and, if excessive, acts to reduce the inflow, simultaneously lowering speed and providing more cooling of the bleed air. This results in lower compressor outlet temperatures. Results have been verified by flight testing with an instrumented system.

A second aspect to the problem indicates the thermal reset authority of the 3213894-1 Bleed Switching Valve could be increased to provide better mixing of high-stage and low-stage bleed air at high altitude flight conditions. This will also provide lower bleed air temperatures to the refrigeration unit and is addressed in Service Bulletin 3213894-36-1421.

(3) Action. Modify the refrigeration unit to incorporate the Overtemperature Protection System.

Feb 1/87



AIRESEARCH MANUFACTURING COMPANY OF CALIFORNIA SERVICE BULLETIN

C. Description

This service bulletin provides instructions for modifying refrigeration units by replacing the fluid pressure regulating valve and compressor outlet duct, adding a supply pressure regulator and a thermostat, and making the necessary plumbing changes.

D. Approval

This Service Bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

E. Manpower

An estimated 8 man-hours are required to modify refrigeration unit on aircraft.

F. Materials

		Qty per	.
Part No.	Description	Unit	Remarks
830171-2	Modification Kit, Refrigeration Unit	1	•
898730-3	Valve, Fluid Pressure Regulating	1	•

"The 898730-1 Fluid Pressure Regulating Valve, removed for this conversion, can be modified to 898730-3 Fluid Pressure Regulating Valve. Contact Garrett General Aviation Service company, service centers for kit and valve price, delivery, and exchange information.

G. Tooling - Price and Availability

No special tooling is required.

H. Weight and Balance

Weight difference resulting from this modification is plus (+) 1.6 pounds.

I. Electrical Load Data

Not affected.

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SERVICE BULLETIN

J. References

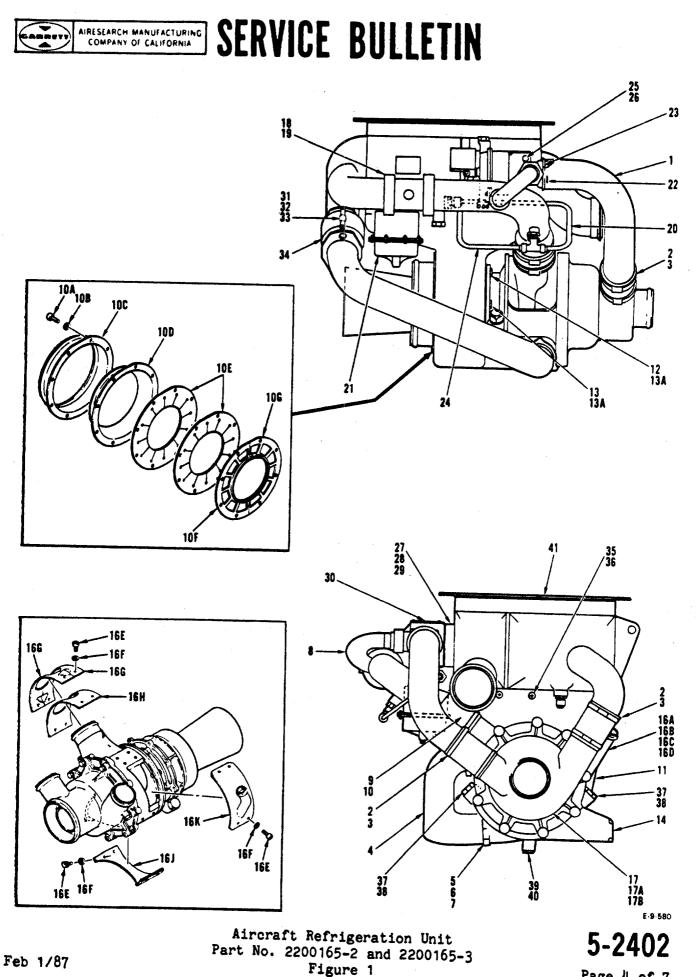
The sources of information used in the preparation of this service bulletin include AiResearch engineering and support data, and applicable maintenance manuals. The following documentation is used as reference material:

Operation and Maintenance Manual - Report No. 4-272.

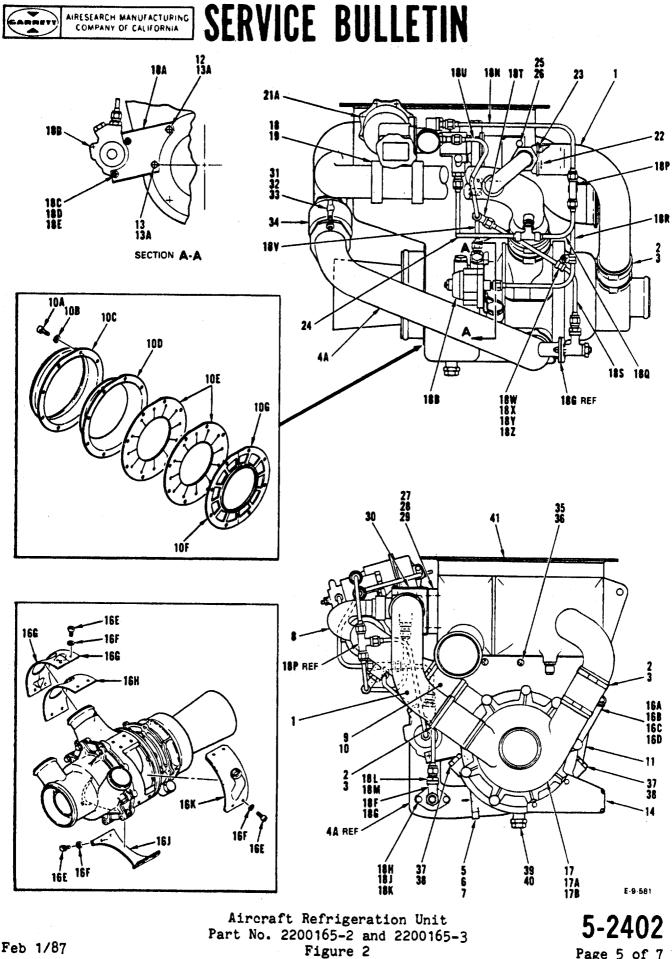
K. Other Publications Affected

None.

- 2. Accomplishment Instructions
 - A. Method of Change
 - Remove 2200392-1 Regulating Valve Supply Pressure Tube Assembly (20, figure 1).
 - (2) Remove 2200388-1 Compressor Outlet Duct Assembly (4) by removing three screws (5), nine washers (6), one packing (7), four nuts (31), four washers (32), two studs (33), and coupling (34) as shown in figure 1. Retain attaching hardware.
 - (3) Install new 2200388-4 Compressor Outlet Duct Assembly (4A, figure 2) and secure with three screws (5), nine washers (6), one packing (7), four nuts (31), four washers (32), two studs (33), and coupling (34) as shown in figure 2.
 - (4) Remove 898730-1 Fluid Pressure Regulating Valve (21, figure 1) by removing two clamps (18) and two packings (19) as shown in figure 1. Retain attaching hardware
 - (5) Install new 898730-3 Fluid Pressure Regulating Valve as shown in (21A, figure 2) and secure with two packings (19) and two clamps (18) as shown in figure 2.
 - (6) Remove one each bolt (12, 13) from positions shown in figure 2, Section A-A. Install new 2202815 Regulating Valve Mounting Bracket (18A), using washers (13A) and bolts (12, 13) as shown.
 - (7) Install new 3214102-8 Air Supply Regulating Valve (18B) to 2202815-1 Regulating Valve Mounting Bracket (18A) using four new AN960PD10L Washer (18C), two new AN3C6A Bolts (180), and two new MS21042-3 Nuts (18E) as shown in figure 2.
 - (8) Install new 129658-1 Pneumatic Thermostat (18F) and 2202718-1 Gasket (18G) to duct assembly (4A) using two new AN3C4A Bolts (18H), four new AN960PD10L Washers (18J), and two new MS21042-3 Nuts (18K) as shown in figure 2.



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SERVICE BULLETIN

- (9) Install new AN815-4D Union (18L) and new S9028A904 Packing (18M) to thermostat (18F).
- (10) Install new 2202817-1 Tube Assembly (18N) to regulating valve (21A), and to new AN824-4D Tee (18P). Install new 2202816-1 Tube Assembly (18Q), and new 2202818-1 Tube Assembly (18R) also to new AN824-4D Tee (18P) as shown in figure 2.
- (11) Install new 2202824-1 Tube Assembly (18S) to union (18L) and to new AN824-4D Tee (18T) as shown in figure 2.
- (12) Install new 2202823-1 Tube Assembly (18U) to new AN824-4D Tee (18T) and to pressure regulating valve (21A) as shown in figure 2.
- (13) Install new 2202822-1 Tube Assembly (18V) to new air supply regulating valve (18B) and to new tee (18T) as shown in figure 2.
- (14) Connect new 2202818-1 and new 2202824 Tube Assembly (18R and 18S) together with new MS21919DF4 Clamps (18W) using new MS27039-1-08 Screw (18X), two new AN960PD10L Washers (18Y), and new MS21042-3 Nut (18Z) as shown in figure 2.
- B. Reidentification Instructions
 - After modification of refrigeration unit, reidentify 2200165-2 Series

 Refrigeration Unit as 2200165-5 Series 1 Refrigeration Unit by
 transcribing all applicable data from old identification plate to the
 new 2200799-5 Identification Plate.
 - (2) After modification of refrigeration unit, reidentify 2200165-3 Series 1 Refrigeration Unit as 2200165-4 Series 1 Refrigeration Unit by transcribing all applicable data from old identification plate to the new 2200799-4 Identification Plate.
 - (3) Discard the identification plate provided in the kit for the configuration of refrigeration unit that was not modified. (The kit incorporates two identification plates, one for each configuration of refrigeration unit applicable to this service bulletin.)

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SERVICE BULLETIN

3. Material Information

The following common refrigeration unit modification kit except as listed is required for each refrigeration unit to be modified.

New Part No.	Qty	Keywords	Old Part No.	Instructions- Disposition
898730-3		Valve, Pressure Regulating	898730-1	I, L, O
830171-2	1	Modification Kit	-	
-		Refrigeration Unit		
		Consisting of:		
2200799-4	1	Identification Plate	2200799-3	D, L, O
2200799-5	1	Identification Plate	2200799-2	D, L, O
2200388-4		Duct Assembly	2200388-1	D, L, O
129658-1		Thermostat, Pneumatic		
3214102-8	1	Valve, Air Supply Regulating		
2202815-1	1	Bracket, Valve Mounting		
	1	Tube Assembly	2200392-1	D, L, O
2202816-1	1	Tube Assembly		***
2202817-1	1	Tube Assembly	***	
2202818-1	1	Tube Assembly	***	***
2202822-1	1	Tube Assembly		
2202823-1	1	Tube Assembly		
2202824-1	1	Tube Assembly		
2202718-1	1	Gasket		
S9028A904	1	Packing	S9028A904	D, L, O
AN815-4D	1	Union		***
AN824-4D	2	Тее		
MS21919DF4	2	Clamp		
AN3C4A	2	Bolt	یت جو بی	** **
AN3C6A	2	Bolt		
AN960PD10L	8	Washer		
MS21042-3	5	Nut		
MS27039-1-08	1	Screw		

Disposition Code D: Scrap removed part. Disposition Code I: Return to GGASC for exchange. Disposition Code L: Old and new parts are physically interchangeable. Disposition Code O: Old part will continue to be available for sale.

NOTE: Discard unused identification plate provided in modification kit.



SERVICE BULLETIN NO. 1124-30-090 REVISION-1

September 8, 1989

TRANSMITTAL SHEET

This sheet transmits Revision 1 to Service Bulletin No. 1124-30-090 dated April 8, 1988, titled "Ice and Rain - Nac/Eng Anti-Ice Switch Reliability (AFC 2071)."

REASON FOR REVISION

This service bulletin is revised to permit proper conformity inspection of paragraph 1.A.5. by removing parallel resistance paths.

This revision is a partial revision. Remove and discard only the affected page and replace with the attached revised page.

Paragraphs 1.A.(1) and (2) are added to eliminate parallel resistance paths.

LIST OF EFFECTIVE PAGES

Page No.	Date			Date
1	April 8,		4	April 8, 1988
2	Sept. 8,	1989	5	April 8, 1988
3	April 8,	1988	6	April 8, 1988

PREVIOUS REVISIONS OF SB 1124-30-090

None.



OPTIONAL

Service Bulletin No. 1124-30-090

April 8, 1988

SUBJECT: ICE AND RAIN - NAC/ENG ANTI-ICE - SWITCH RELIABILITY (AFC 2071)

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

Model 1124/1124A WESTWIND - S/N 283 & subsequent. S/N 282 & prior with Service Letter WW-2444 accomplished.

B. REASON

To extend the service life of the IAI P/N 6883743-72 NAC/ENG ANTI-ICE switch.

C. COMPLIANCE

Compliance with this service bulletin is optional.

D. DESCRIPTION

Diodes are added to the circuitry of both the L.H. and R.H. NAC/ENG ANTI-ICE switches and across the Bypass Valve Solenoid and Anti-Ice Valves for arc suppression. Jumper wires are added to parallel switch segments for increased current capacity.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

April 8, 1988

SB 1124-30-090 Page 1 of 6 F. MATERIAL

Parts may be procured through Atlantic Aviation Supply Company or procured locally.

G. TOOLING

No special tooling is required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Wiring Diagram Manual, Chapters 30-20-01 and 21-00-01. 1124 Service Letter WW-2444.

K. PUBLICATIONS AFFECTED

1124/1124A Wiring Diagram Manual, Chapters 30-20-01 and 21-00-01.

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE:

Prior to accomplishment of this service bulletin, total compliance with Service Letter WW-2444 must be ensured for aircraft serial numbers up to and including SN 282.

- A. Remove all electrical power from aircraft.
 - (1) Disconnect left and right PT2TT2 sensors.
 - (2) Open both RH and LH engine anti-ice circuit breakers.
- B. Reference Wiring Diagram Manual, Chapter 30-20-01 and Figures 1 and 2 of this service bulletin. Perform rewiring and diode addition as follows:
 - (Do not disturb wires unless instructed.)

- 1. Install #20 AWG wire jumper from switch segment 'B' (normally open contact) to switch segment 'C' (N/O contact) of each switch. Ensure switch segments 'B' and 'C' "common" contacts are also jumped to parallel switch. Install "common" jumper(s), if necessary (both left and right switches).
- Remove wire between switch segment 'A' (N/O contact) and terminal 1. Connect diode with cathode (banded end) to terminal 1, anode to segment 'A' (N/O) contact (both left and right switches).
- 3. For L.H. switch, remove wire #1H508A20 from terminal 2 and splice diode between wire removed and terminal 2 with cathode end to terminal 2.
- 4. For R.H. switch, remove wire #2H508B20 from terminal 2 and splice diode between wire removed and terminal 2 with cathode end to terminal 2.
- 5. Prior to performing steps 6 and 7 below, use an ohmmeter and check for the presence of a diode between switch segment 'C' (N/O contact) and terminal 3 of each switch, in turn. The cathode of this diode, if it exists, must be connected to terminal 3 of the respective switch. If a diode is not installed, follow instructions below as applicable. If diodes are installed, skip to step 8 below.
- 6. For L.H. switch, remove wire #1H528A20 from switch segment 'C' (N/O contact) and splice diode in line between wire removed and segment 'C' (N/O contact) with cathode end to removed wire.
- 7. For R.H. switch, remove wire #2H528A20 from switch segment 'C' (N/O contact) and splice diode in line between wire removed and segment 'C' (N/O contact) with cathode end to removed wire.

NOTE:

Ensure all connections and diodes are insulated to prevent inadvertent shorts.

8. Locate Bypass Valve Solenoid plug P-348 and connect diode across pins A and B with cathode end to pin A (wire #2H517C20 and #2H518A20, respectively). Ensure pin 'B' is the grounded pin. Use step-down wire splices and splice to existing wires.

April 8, 1988

- 9. Locate R.H. Nacelle Anti-Ice Valve plug P-344 and connect diode across pins A and B with cathode end to pin A (wire #2H506D20 and #2H507B20, respectively). Ensure pin B is the grounded pin. Use step-down wire splices and splice to existing wires.
- 10. Locate L.H. Nacelle Anti-Ice Valve plug P-343 and connect diode across pins A and B with cathode end to pin A (wire #1H506D20 and #1H507B20, respectively). Ensure pin B is the grounded pin. Use step-down wire splices and splice to existing wires.
- C. Replace panels in normal position.
- D. Perform operational check of NAC ANTI-ICE system.
- E. Return aircraft to service.
- 3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION	
9	1N5552	Diode	
A/R	MIL-W-16878D	#20 AWG wire	

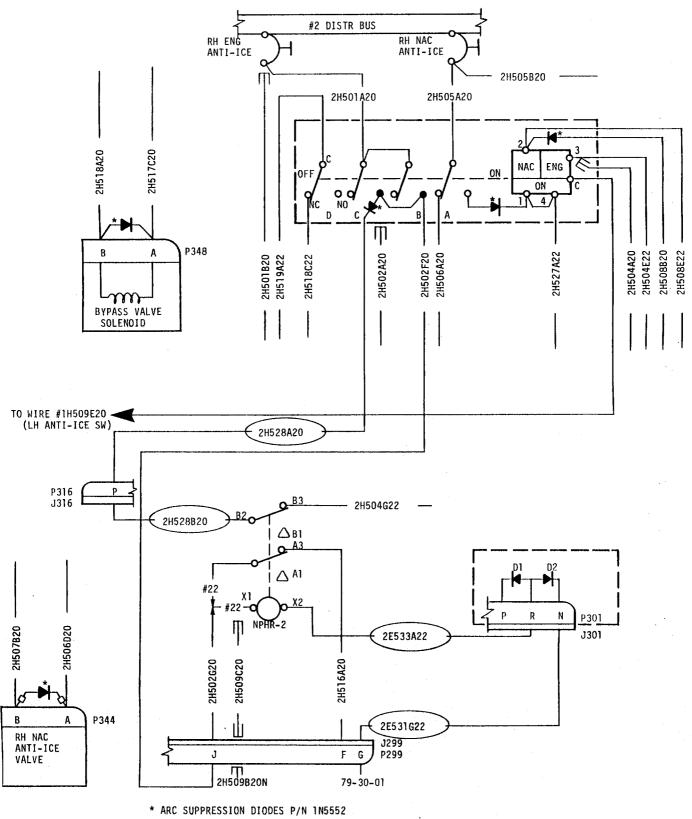
- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book:

Complied with service bulletin 1124-30-090 dated April 8, 1988, titled "ICE AND RAIN - NAC/ENG ANTI-ICE SWITCH RELIABILITY", this date

B. Revise your Wiring Diagram Manual Chapter 30-20-01 and 21-00-01 per Figures 1 and 2 of this bulletin to reflect the changes accomplished by this Service Bulletin.

April 8, 1988

SERVICE BULLETIN NO. 1124-30-090

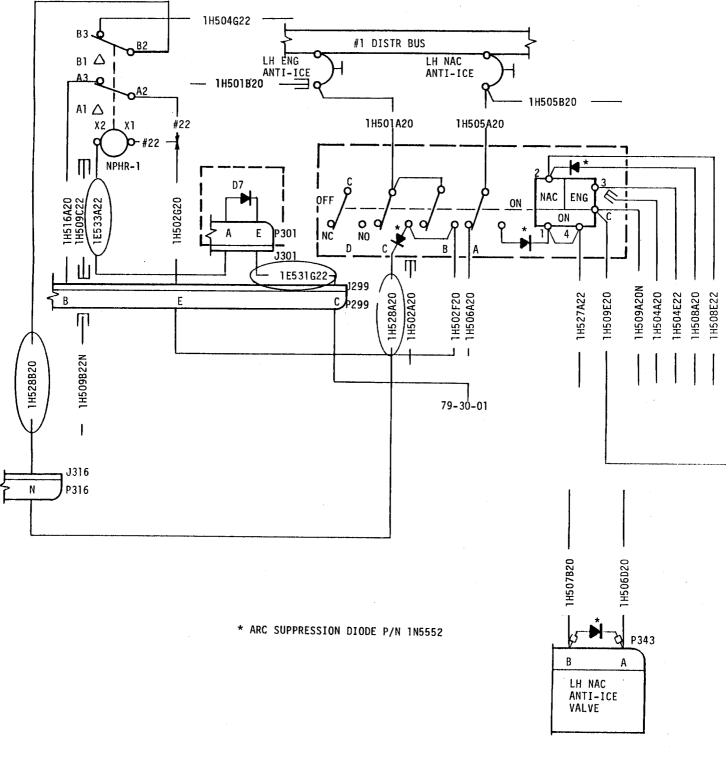


ANTI-ICE SWITCH

FIGURE 1

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April 8, 1988



ANTI-ICE SWITCH

FIGURE 2



SERVICE BULLETIN

NO. 1124-71-091

REVISION /- 2

June 2, 1989

TRANSMITTAL SHEET

This sheet transmits Revision 2 to Service Bulletin No. 1124-71-091 dated April 10, 1987, titled, "Powerplant - Forward Engine Mount Fasteners - Inspection/Replacement," (AFC 2065).

REASON FOR REVISION:

This service bulletin is revised to:

- (1) Alter its classification from RECOMMENDED to MANDATORY in order to assure the termination of inspection by accomplishing the fasteners replacement.
- (2) The fasteners replacement period was revised from 12 calendar months to "the next engine removal."
- (3) The option for installation of new H-11 fasteners is removed.

NOTE: Equipment modified utilizing the new BAC hardware in accordance with Part II of previous issue of this service bulletin does not require further rework.

This service bulletin is reissued in its entirety to revise compliance under paragraph 1.c. and to incorporate previous revision No. 1 dated Nov. 20, 1987.

Bulletin title is revised to reflect Revision 1. Title page is revised to reflect latest revision date.

This is a COMPLETE REVISION. Pages revised are listed below. The letter "R" in the margin shows where changes are made. Please remove and discard all pages of previous issues and replace with pages of this revision.

June 2, 1989 Copyright 1989 TRANSMITTAL Page 1 of 2

SECTION-1

Paragraph 1.A. EFFECTIVITY is revised to reflect Revision No. 1.

Paragraph 1.C. COMPLIANCE PART 1 is revised to eliminate calendar time limitation and to stipulate bolts replacement at next engine removal.

SECTION-2

Part I, Paragraph E is revised to stipulate corroded fasteners for repeated Part I inspection every 150 flight hours if not replaced.

Part II, Step C(1) is revised to reflect revision No. 1.

Part II, Step C(5)(a) of Revision No. 1 is removed.

SECTION-3

Material information is revised to reflect Revision No. 1.

SECTION-4

RECORD OF COMPLIANCE is revised to reflect Revision No. 1.

Figure 1 is revised to reflect Revision No. 1.

LIST OF EFFECTIVE PAGES:

Page No.	Date	Page No.	Date
1	June 2, 1989	5	June 2, 1989
2	June 2, 1989	6	June 2 , 1989
3	June 2, 1989	7	April 10, 1987
4	June 2, 1989	8	April 10, 1987

PREVIOUS ISSUES OF SB 1124-71-091

Initial issue dated Apr. 10, 1987 Revision 1, dated Nov. 20, 1987

June 2, 1989



SERVICE BULLETIN

R	R MANDATORY				
	SERVICE BU	JLLETIN NO. 1124-71-091	April 10, 1987		
R	SUBJECT:	POWER PLANT - FORWARD ENGINE MOUNT FASTENERS INSPECTION/REPLACEMENT (AFC 2065).	-		
	1. PLANNING INFORMATION				
	Α.	EFFECTIVITY			
R R		Model 1124/1124A Westwinds, all serial number except 432, 435 and 438.	rs prior to 441		
	Building to	REASON			
	the second s	To prevent potential stress corrosion failure engine mount mounting bolts and nuts made from			
	Ċ.	COMPLIANCE			
R R R		PART I - Within the next 150 hours for aircrathan 600 hours or at 600 hours for aircraft 600 hours time in service.			
R R R		Repeat PART I instructions within maximum in flight hours until compliance with the PART for replacing the fasteners is accomplished.			
R R		PART II - At next engine removal for any reas removal for the next engine major periodic in			
	D.	DESCRIPTION			
	PART I of this service bulletin provides inspection procedures for the engine mount attach fasteners.				
		PART II of this service bulletin provides ins replace the engine mount attach fasteners.	structions to		
R R	April 10, Revision 2	1987 2, June 2, 1989	SB 1124-71-091 Page 1 of 8		

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The inspection and improvements herein comply with the applicable Civil Aviation Regulations and are ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, or their authorized representatives.

G. SPECIAL TOOLS

Torque wrench adaptor (see Figure 3).

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 71 1124/1124A Illustrated Parts Catalog, Chapter 71

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 71

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - PART I: Gain access to fasteners attaching F10A-5-B10555 forward engine mount located at engine station 200.00 (see Figure 1).
 - A. Remove access panels on underside of pylon, forward and aft of engine mount assembly. Remove top and bottom engine cowling.
 - B. Disconnect P/N 26948-2 Teleflex engine throttle control quick-disconnect.

- C. Remove P/N F10A5P20230-1 fire extinguisher nozzle.
- D. Remove bolts securing fireshield to pylon and remove fireshield section to gain access to pylon interior and engine mount hardware.
- E. Visually inspect bolt heads and nuts for any signs of corrosion. If signs of corrosion are found and the fasteners are not replaced as a result of instructions given in Step F, then repeat Part I inspection every 150 flight hours instead of 300 hours.
- F. Apply torque of 180-220 in-lbs to the nuts of the 7/16-inch diameter bolts and a torque of 450-500 in-lbs to the nuts of the 9/16-inch diameter bolts. (If necessary, use extension adaptor, Figure 3, or other suitable adaptor.) If bolt or nut movement is observed while applying torque, comply with Part II of this service bulletin before further flight.

NOTE

When using an extension adaptor on a torque wrench, it is necessary to calculate the correct indicated torque.

- G. If corrosion is not detected and movement of bolts or nuts is not observed while applying torque, replace fireshielding inside pylon, connect fire extinguisher nozzle and reconnect engine throttle controls. Replace access panels.
- H. Repeat for other engine forward mount.

PART II

- A. Remove engine. Reference 1124/1124A Maintenance Manual, Chapter 71-00-00.
- B. Remove panels necessary to access forward engine mount fastener nuts. (See PART I, Steps A through D of this service bulletin.)
- C. Remove and replace forward engine mount attach fasteners, one at a time, as follows:
 - (1) Remove and discard old fasteners, bolt, nut, washers under bolt head and nut and PLI washer assy (see Figure 1).
 - (2) Check for surface defects in fastener holes such as corrosion, scratches, nicks or cuts intersecting a part surface.

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- (3) Nuts, bolts and threads shall be free of all burrs, nicks, dents and sharp edges.
- (4) No lubricant shall be used on the fastener or in the hole.
- (5) Install new bolt in hole with washers per Figure 1.
- (6) Install new PLI washer assembly as required and assembled per Figure 2.

NOTE

Do not remove wax coating from inner PLI washer.

(7) Install new nut.

CAUTION

Never continue to tighten a bolt or nut which has started to cross thread. Scrap bolt and nut if this occurs.

- (8) Torque attaching bolt as follows:
 - (a) Tighten nut snug against PLI washer set. (See Detail B, Figure 2.)
 - (b) Tighten nut in gradual (1/8 turn maximum) increments. Test outer PLI washer for rotation by inserting a scribe (or equivalent) in perimeter holes. When the outer washer can no long be moved, the desire preload torque has been obtained. (See Details C and D, Figure 2.)

CAUTION

Do not overtighten. If nut is tightened more than 1/8 turn beyond point where outer PLI washer becomes immovable, the entire bolt, nut and washer assembly must be replaced.

(9) Repeat steps 1 through 8 for remaining fasteners.

R R R R

- D. Apply tamper-proof sealant, EC-1252, White, to each torqued fastener installation.
 - Clean only those parts to receive sealant with Methyl Ethyl Ketone (MEK).
 - (2) Apply strips of sealant across end of exposed bolt end, down the nut and across the PLI washers so that any turning action will break the stripe seal.
- E. Replace fireshielding inside pylon, connect fire extinguisher nozzle and reconnect engine throttle controls. Replace access panels.
- F. Reinstall engine.
- G. Repeat for other engine forward mount.
- 3. MATERIAL INFORMATION

QTY PART NUMBER DESCRIPTION

4*	BACB3OUS9P29	Bolt
4*	BACB3OUS7P20	Bolt
4*	313721-11	Washer (under BACB3OUS9P29 BOLT HEAD)
3*	313721-13	Washer (under BACB3OUS7920 BOLT HEAD)
1*	313721-503	Angle (under BACB3OUS7P20 BOLT HEAD)
4*	BACN10HR-9CD	Nut
4*	BACN10HR-7CD	Nut
4*	PLI-9-21.6	Pre-load Indicating Washer Set
4*	PLI-7-12.4	Pre-load Indicating Washer Set
4*	313721-17	Washer (under PLI-9-21.6 Washer Set)

* Quantities for one engine mount

- 4. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book:
 - (1) If fasteners inspection complied with Part I, enter: Part I of Service Bulletin No. 1124-71-091, dated April 10, 1987, titled, "Powerplant Forward Engine Mount Fasteners - Inspection," has been accomplished this date
 - (2) If fasteners replacement complied with Part II, enter: Part II of Service Bulletin No. 1124-71-091, dated April 10, 1987, Revision No. 2, June 2, 1989, titled, "Powerplant - Forward Engine Mount Fasteners -Replacement," has been accomplished this date _____.
 - B. Complete the attached certificate of compliance and return to Astra Jet Corporation in Wilmington, Delaware.

April 10, 1987 Revision 2, June 2, 1989 SB 1124-71-091 Page 5 of 8

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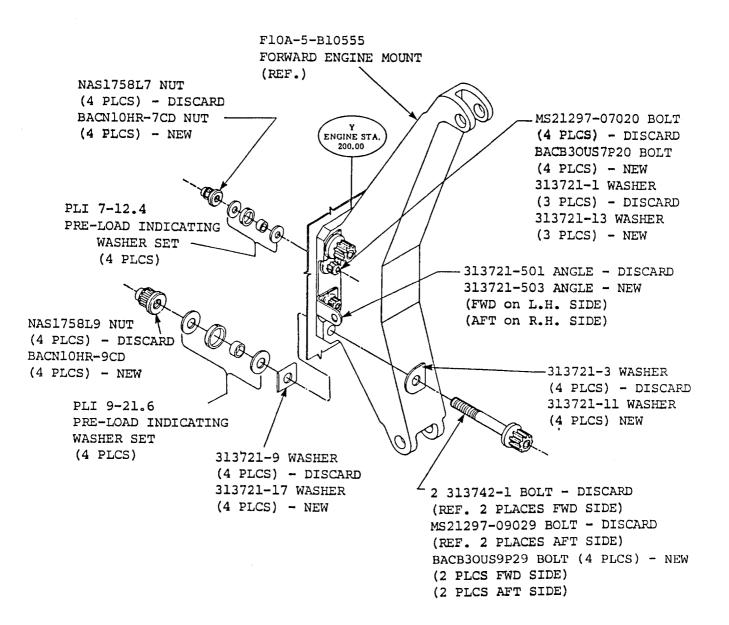
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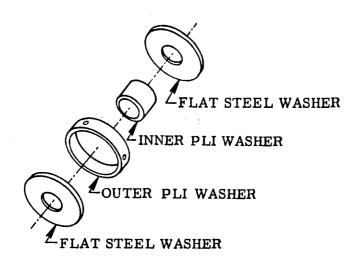


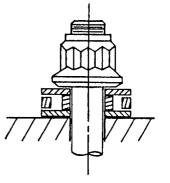
INSTALLATION OF FORWARD ENGINE MOUNT ATTACHMENT FASTENERS

FIGURE 1

April 10, 1987 Revision 2, June 2, 1989

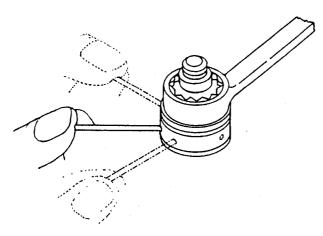
SB 1124-71-091 R Page 6 of 8

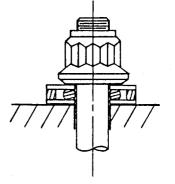




B. INITIAL POSITION OF PLI WASHERS

A. TYPICAL PLI WASHER ASSEMBLY





C. TIGHTENED TO DE-SIRED PRE-LOAD

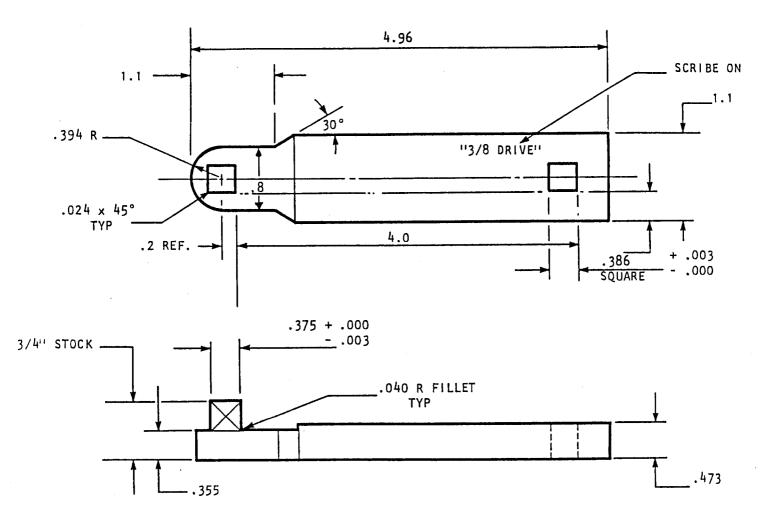
D. TESTING OUTER WASHER FOR MOVEMENT

INSTALLATION OF PRE-LOAD INDICATING WASHERS UNDER NUTS

FIGURE 2

SB 1124-71-091 Page 7 of 8

April 10, 1987



TORQUE WRENCH ADAPTOR

FIGURE 3

SB 1124-71-091 Page 8 of 8

April 10, 1987

SERVICE PUBLICATIONS revision notice

RECOMMENDED

SERVICE BULLETIN NO. 1124-57-092 Revision No. 1 June 30, 1987

SUBJECT: WINGS - FLAP HINGE FASTENERS - INSPECTION/REPLACEMENT

REASON FOR REVISION: To increase the quantity of Jo-bolts or Blind fasteners in Para. 3. Material Information and to add a part number.

3. MATERIAL INFORMATION

QTYPART NUMBERDESCRIPTION24*NAS1671-08L-6Blind FastenerororJo-Bolt6*NAS1739B5-5Rivet

*Quantities per aircraft.

RAIATIONIAL INC

SB 1124-57-092 Revision No. 1 Page 1 of 1

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES. LTD BEN GURION AIRPORT, ISRAEL



RECOMMENDED

SERVICE BULLETIN NO. 1124-57-092

April 10, 1987

SUBJECT: WINGS - FLAP HINGE FASTENERS - INSPECTION/REPLACEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To prevent potential stress corrosion failure of the flap hinge to flap fasteners made from H-11 steel.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished within the next 600 flight hours.

D. DESCRIPTION

This service bulletin requires an inspection of the outboard wing flap hinge to wing flap attach bolts to determine if H-11 alloy steel bolts have been installed and provides instructions to replace these bolts, if necessary.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The inspection and improvements herein comply with the applicable Civil Aviation Regulations and are ICAA approved.

F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

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G. SPECIAL TOOLS

Not required.

- H. WEIGHT AND BALANCE Not applicable.
- I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 27 1124/1124A Illustrated Parts Catalog, Chapter 57

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 57

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Extend wing flaps to full down position and disengage flap control circuit breaker.
 - B. Remove flaps from aircraft.
 - C. Remove outboard and center outboard flap vanes.
 - D. Remove fiberglass wheel well fairing from flap.
 - E. Remove outboard flap hinge access panels, top and bottom.
 - F. Remove 6 each rivets securing each outboard flap hinge access panel leading edge support bracket and remove brackets.
 - G. Remove 8 each EWSB-30-4-8 or NAS1104-8W bolts from each outboard flap hinge assembly to flap assembly (see Figure 1).
 - H. Remove outboard flap hinge assembly from flap. NOTE: Hinge is assembled to inboard and outboard fittings P/N 193513-1/-2 and is removed as an assembly. Shims may be installed between fittings and flap; note shim position for reassembly.

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- I. Inspect markings on bolt heads of fasteners which assemble fittings P/N 193513-1 and -2 to flap hinge.
- J. If bolts are identified as NAS1106 type bolts, proceed to Step L.
- K. If bolts are identified as EWSB22 type bolts, replace bolts, one at a time, with new replacement bolts P/N BACB30US-6-26 or NAS1106-26W. Torque bolts to 120-150 in-lbs.
- L. Reinstall hinge assembly, with shims (if removed), torque 8 each EWSB-30-4-8 or NAS1104-8W bolts to 50-60 in-lbs.
- M. Reinstall leading edge support brackets using NAS1671-08L-6 or P164A-6 fasteners.
- N. Reinstall hinge covers and wheel well fairings.
- O. Install flaps on aircraft.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
8*	BACB3OUS-6-26	Bolt
	or	
8*	NAS1106-26W	Bolt (alternate)
80*	NAS1739B4-3	Rivet
6*	NAS1739B4-4	Rivet
4*	NAS1739B4-5	Rivet
- 4*	TLP/K/429BS	Pop Rivet
8.*	MS20426B3	Rivet (length as required)
12*	NAS1671-08L-6	Blind Fasteners
	or	
12*	P164A-6 (Alt P/N)	Jo-Bolt

*Quantities per aircraft.

4. RECORD COMPLIANCE

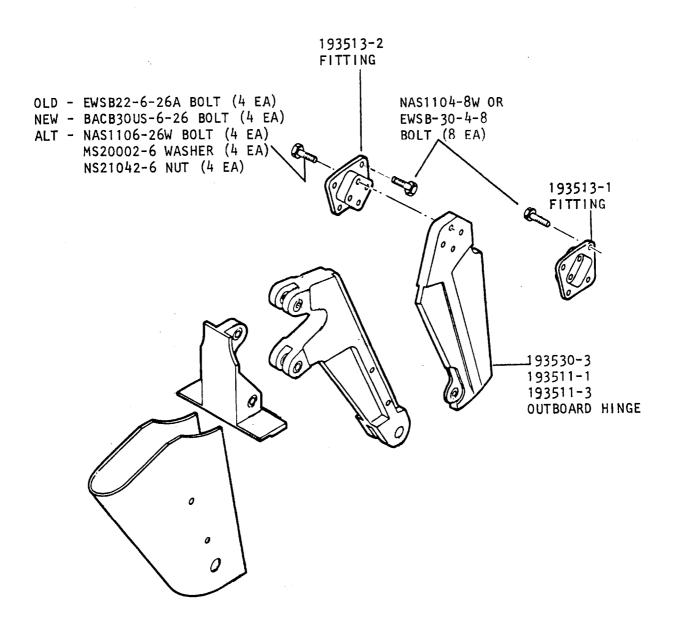
Make the following entry in the aircraft log book:

Service Bulletin No. 1124-57-092 dated April 10, 1987 titled "Wings - Flap Hinge Fasteners - Inspection/Replacement" has been accomplished this date

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SERVICE BULLETIN NO. 1124-57-092



WING-TO-FLAP ATTACH FITTING

FIGURE 1

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SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-79-093

March 14, 1988

SUBJECT: OIL - ENGINE - OIL PRESSURE INDICATION INSTALLATION (AFC 2066)

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY:

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To check for defects (chafing, leakage) in engine oil pressure line, P/N F10A-5-P20228-1, install improved and additional engine oil pressure component brackets and support clamping.

- C. COMPLIANCE
 - PART A: Within next 50 hours and each 50 hours thereafter until Part B is accomplished.

PART B: Within next 150 hours.

- D. DESCRIPTION
 - PART A: Inspection of the engine oil pressure line, P/N F10A-5-P20228-1.

PART B: Installation of improved engine oil pressure transmitter mount bracket, improved engine oil pressure line support bracket and an additional engine oil pressure line support bracket and clamp.

INTERNATIONAL INC. AFI AIRCRAFT INDUSTRIES INTERNATIONAL INC.

SB 1124-79-093 Page 1 of 6

SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware or their authorized representatives.

G. TOOLING

None

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Illustrated Parts Catalog, Chapters 71-00-00 and 79-30-00.

1124/1124A Maintenance Manual, 79-30-00.

TFE-731 Light Maintenance Manual, 79-10-01, 79-20-07.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapters 71-00-00 and 79-30-00.

1124/1124A Maintenance Manual, Chapters 71-00-01 and 79-30-00.

2. ACCOMPLISHMENT INSTRUCTIONS

A. PART A

- (1) Gain access to engine oil pressure indication system components at lower right side of left and right engines.
- (2) Inspect oil pressure line, P/N F10A-5-P20228-1, for leakage, condition, security, and clearance. Refer to Figure 1.

- (3) Replace leaking, chafed or damaged lines with new unit.
 - (a) Perform leak check as required when oil line is disturbed.
- (4) Reinspect each 50 hours until Part B is accomplished.
- B. PART B (Refer to Figures 1 and 2).
 - NOTE: Workscope is identical for left and right engine installation.
 - (1) Gain access as in A.(1).
 - (2) Remove P/N F10A-5-P20228-1, oil pressure line.
 - (a) Cap open fluid connections.
 - (3) Remove following components:
 - (a) F10A-5-P20255-5 oil pressure transmitter mount bracket.
 - (b) F10A-5-P20255-9 oil line support bracket.
 - (4) Install F10A-5-P20255-51 oil pressure transmitter mount bracket.
 - (a) Torque nuts securing transmitter mount bracket to engine oil pump housing (3 ea) to 20 inch-pounds.
 - (5) Install F10A-5-P20255-47 oil pressure line support bracket.
 - (a) Torque bolt/nut securing support bracket to oil cooler to 35 inch-pounds.
 - (6) Install MS9592-066 bracket to existing mount point of fan bypass duct stiffener as shown in Figure 2. Attach bracket to stiffener using MS35206-245 screw, MS21043-08 nut and AN960-D8L washer.
 - (7) Reinstall oil pressure line removed in step B.(2).
 - (8) Install clamp, NAS1715C4T on oil pressure line, F10A-5-P20228-1.

(9) Connect clamp to bracket using MS35206-244 screw, MS21043-08 nut, and AN960-D8L washer.

NOTE

Due to slight dimensional differences in the oil pressure line installation, final alignment between the support bracket and clamp may differ from engine to engine. It may be necessary to utilize an attachment screw of greater length in conjunction with AN960-D8L washers, as required, to achieve proper alignment between the bracket and clamp. Final installation must result in no pre-load forces being applied to the oil pressure line.

- (10) Recheck oil pressure line "B" nuts for proper torque (135-150 inch-pounds).
- (11) Perform leak check during ground engine run-up of oil pressure line installation.
- (12) Service engine oil.
- (13) Return aircraft to service.

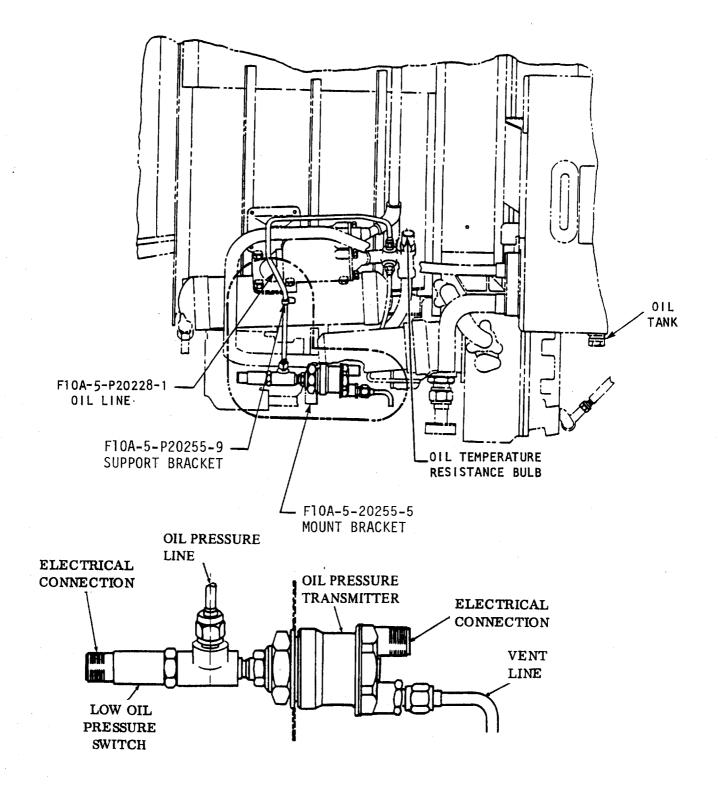
3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	F10A-5-P20228-1	Oil Line, Pressure Indicating
2	MS9592-066	Bracket
2	MS35206-244	Screw
2	MS35206-245	Screw
4	MS21043-08	Nut
4	AN960-D8L	Washer
2	NAS1715C4T	Clamp
2	F10A-5-P20255-47	Bracket Assembly, Oil line support
2	F10A-5-P20255-51	Bracket Assembly, Transmitter support

4. RECORD COMPLIANCE

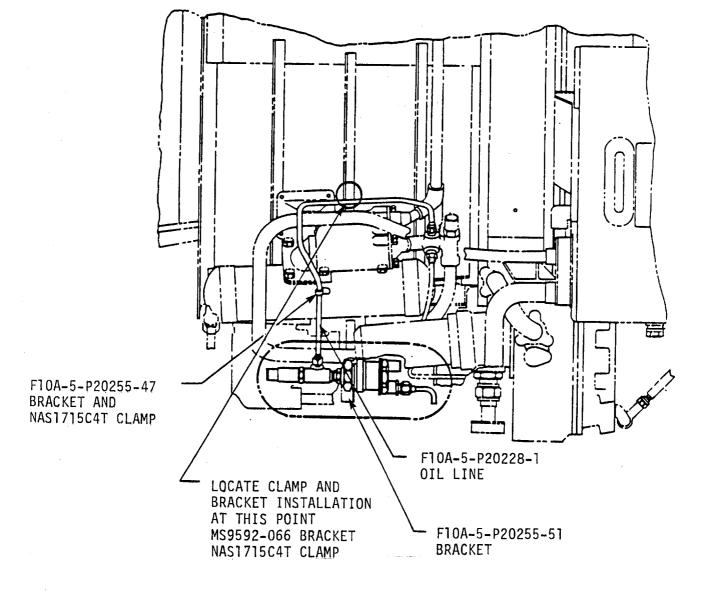
Make the following entry in the aircraft log book:

Service Bulletin No. 1124-79-093 dated March 14, 1988, titled "Oil - Engine - Oil Pressure Indication Installation", has been accomplished this date



EXISTING ENGINE OIL PRESSURE SYSTEM INSTALLATION

FIGURE 1



NEW ENGINE OIL LINE INSTALLATION

FIGURE 2



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-32-094

December 16, 1987

- SUBJECT: LANDING GEAR SELECTOR VALVE ARM SECURE ROLL PIN (AFC 2063)
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers except 432, 435, 438, 441, and 442.

B. REASON

To prevent potential loss of landing gear selector valve arm roll pin.

C. COMPLIANCE

Compliance with this service bulletin is recommended within the next 150 flight hours.

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D. DESCRIPTION

Inspection for proper installation of the selector valve arm roll pin and installation of safety wire to secure roll pin.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

The material required may be locally procured.

G. SPECIAL TOOLS

None

SB 1124-32-094 Page 1 of 3 H. WEIGHT AND BALANCE

Not affected

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124/1124A IPC Chapter 32-30-00

K. PUBLICATIONS AFFECTED

None

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - CAUTION: ENSURE ALL HYDRAULIC SYSTEM PRESSURE IS DEPLETED BEFORE MOVING THE GEAR SELECTOR HANDLE IN THE FOLLOWING STEPS.
 - A. Inspect the landing gear selector valve arm roll pin. Verify that the roll pin does not protrude from the arm.
 - B. Secure the roll pin with safety wire (MS20995 C41 or equivalent) according to figure 1.
 - C. Ascertain arm movement is free (the safety wire does not interfere with the input shaft stop pin).
 - D. Circle the letter "A" on the valve modification plate.
 - E. Return the selector handle to the down position (locking solenoid engaged).
- 3. MATERIAL INFORMATION

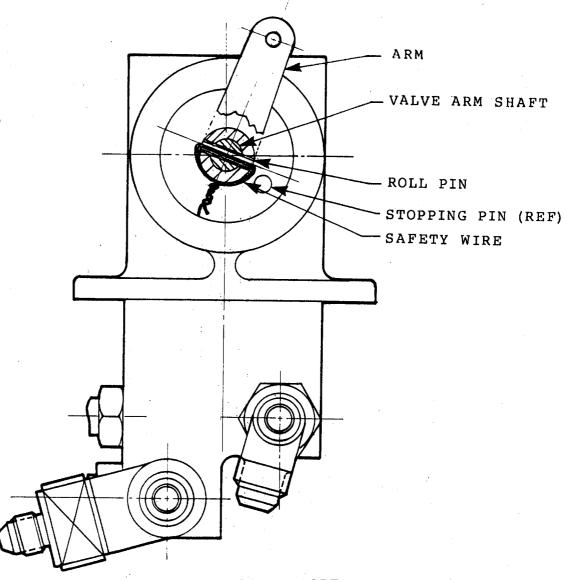
QTY	PART NUMBER	DESCRIPTION
A/R	MS20995 C41 or equivalent	Safety Wire

4. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-32-094 dated December 16, 1987 titled "Landing Gear - Selector Valve Arm - Secure Roll Pin" has been accomplished this date_____.

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GEAR UP PORT

GEAR DOWN PORT

GEAR SELECTOR VALVE

FIGURE 1

December 16, 1987

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SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-27-095

April 4, 1988

SUBJECT: FLIGHT CONTROLS - F44-14 ROD-ENDS - INSPECTION/ REPLACEMENT.

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Field experience has shown some instances of using rod-ends P/N F44-14 that do not have a witness hole.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished at the next 150 hour inspection.

D. DESCRIPTION

This service bulletin requires an inspection of rod-ends installed in the rudder pedals and aileron servo tab systems.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.



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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. SPECIAL TOOLS

Not required.

H. WEIGHT AND BALANCE

Not applicable

I. ELECTRICAL LOAD DATA

Not applicable

J. REFERENCES

1124/1124A Illustrated Parts Catalog, Chapters 27 and 57 1124/1124A Maintenance Manual, Chapter 27

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapters 27-20-00 Figure 2, and 57-50-00 Figure 2.

2. ACCOMPLISHMENT INSTRUCTIONS:

- A. Gain access to rod-ends installed in the rudder pedal installation (see Figure 1) and right aileron servo tab installation (see Figure 2).
- B. Inspect rod-ends to determine if witness holes are present.
- C. If rod-ends have witness holes, no further action is required.
- D. If rod-ends do not have witness holes, remove and replace with P/N F44-14MT in accordance with 1124/1124A Maintenance Manual chapters 27-10-00 for aileron servo tab, and 27-20-00 for rudder pedals maintenance practices.

CAUTION

Ensure that rigging of system is not altered during replacement.

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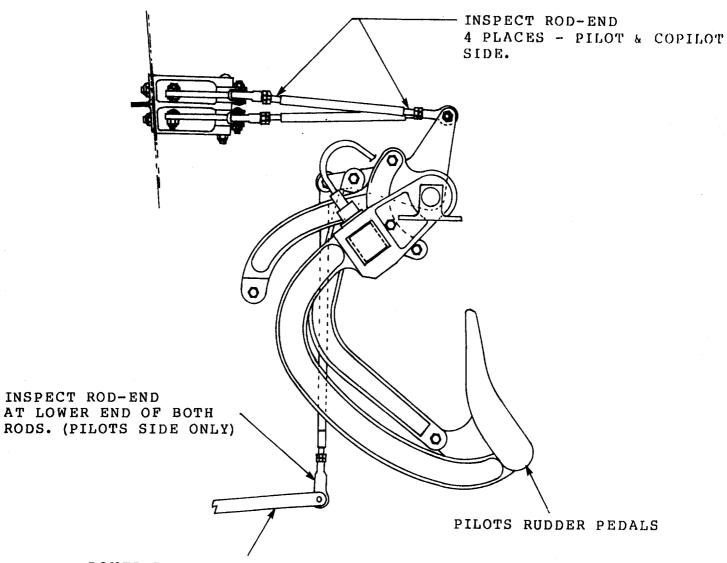
3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	F44-14MT	Rod-Ends

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

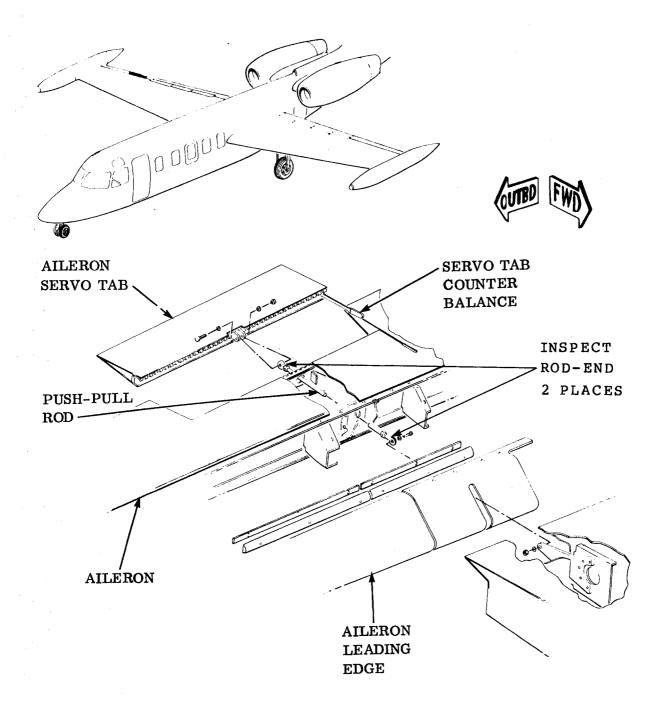
Service Bulletin No. 1124-27-095 dated April 4, 1988 titled "Flight Controls - F44-14 Rod-Ends - Inspection/Replacement," has been accomplished this date _____.



POWER BRAKE VALVE LEVER

PILOTS RUDDER PEDAL INSTALLATION

FIGURE 1



AILERON SERVO TAB

FIGURE 2



SERVICE BULLETIN

RECOMMENDED

SERVICE BULLETIN NO. 1124-32-096

April 4, 1988

SUBJECT: LANDING GEAR - F44-14 ROD-ENDS - INSPECTION/REPLACEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Field experience has shown some instances of using rod-ends P/N F44-14 that do not have a witness hole.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished at the next 150 hour inspection.

D. DESCRIPTION

This service bulletin requires an inspection of rod-ends installed in the NLG door installation.

E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

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SUBSIDIARY OF ISRAEL AIRCRAFT INDUSTRIES, LTD. BEN GURION AIRPORT, ISRAEL F. MATERIAL

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware or their authorized representatives.

G. SPECIAL TOOLS

Not required.

H. WEIGHT AND BALANCE

Not applicable.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Illustrated Parts Catalog, Chapter 32-20-00 1124/1124A Maintenance Manual, Chapter 32-20-00

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 32-20-00, Figure 7.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Gain access to rod-ends installed in NLG door system (see Figure 1).
 - B. Inspect rod-ends to determine if witness holes are present.
 - C. If rod-ends have witness holes, no further action is required.
 - D. If rod-ends do not have witness holes, remove and replace with rod-ends P/N F44-14MT in accordance with 1124/1124A Maintenance Manual chapter 32-20-00 maintenance practices.

CAUTION

Ensure that rigging of NLG doors are not altered during replacement (see Figure 1).

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SERVICE BULLETIN NO. 1124-32-096

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
A/R	F44-14MT	Rod-Ends

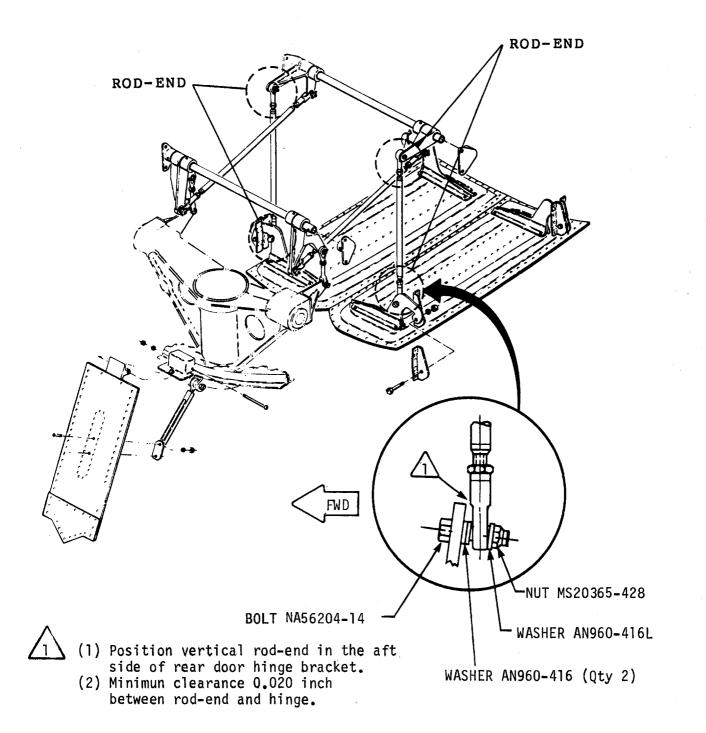
4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

Service Bulletin No. 1124-32-096 dated April 4, 1988 titled "Landing Gear - F44-14 Rod-Ends - Inspection/Replacement," has been accomplished this date_____.

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NOSE GEAR DOORS

FIGURE 1



RECOMMENDED

SERVICE BULLETIN NO. 1124-55-097

February 3, 1989

- SUBJECT: HORIZONTAL STABILIZER SCISSORS ASSY P/N 453516-501 OR -503 INSPECTION
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

WESTWIND MODELS 1124/1124A - All serial numbers, except aircraft S/N 441.

B. REASON

Several cracked and/or loosened lower fittings of scissors assembly have been detected in service.

C. DESCRIPTION

This service bulletin requires a periodic inspection of the scissors assembly in order to detect cracks or loose fittings.

D. COMPLIANCE

Perform a visual inspection of scissors assembly each 300 fight hours.

- NOTE: Chapter 5 of the 1124 series maintenance manual will be revised to reflect the new 300-hour interval.
- E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The inspection

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herein complies with the applicable Civil Aviation regulations and is ICAA approved.

F. MAN-HOURS REQUIRED

It is estimated that 1/2 man-hour is required to accomplish this inspection.

G. MATERIAL

Not applicable.

H. SPECIAL TOOLS

Not applicable.

I. WEIGHT AND BALANCE

Not applicable.

J. REFERENCE

1124 Maintenance Manual, Chapter 55-10-00.

K. PUBLICATIONS AFFECTED

1124 Maintenance Manual will be revised to incorporate the 300-hour inspection interval.

2. ACCOMPLISHMENT INSTRUCTION

- A. Remove tail cone and empennage fairings necessary to gain access to the scissors assembly.
- B. Without scissor removal, visually inspect for cracks at the following locations:

PART NUMBER	DESCRIPTION	LOCATION	FIG.
453513-501	Fitting, upper	1	1
453514-503	Fitting, lower	2, 3 & 4	2
453508-503, -505	Scissor, upper	5, 6 & 7	3
453509-503	Scissor, lower	8, 9 & 10	4

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C. If cracks are revealed, remove the scissor arms by removing the two bolts (453511-501) and bolt (453510-501).

The aircraft may remain in service. If the aircraft remains in service, inspection of the horizontal stabilizer aft spar splice fitting P/N 453005-501 should be continued according to Service Bulletin No. 1124-55-020.

For reinstallation instructions of the scissors assembly and for procurement of replacement parts, contact Astra Jet Corporation, Wilmington, Delaware.

- D. Inspect lower fitting (P/N 453514-503) for loose rivets or gaps between fitting and horizontal stabilizer skin (see Figure 5).
- E. If looseness and/or gaps between lower fitting and stabilizer skin are found, remove the scissors arms by removing the 2 bolts (P/N 453511-501) and bolt (P/N 453510-501).

The aircraft may remain in service. If the aircraft remains in service, inspection of the horizontal stabilizer aft spar splice fitting P/N 453005-501 should be continued according to Service Bulletin No. 1124-55-020.

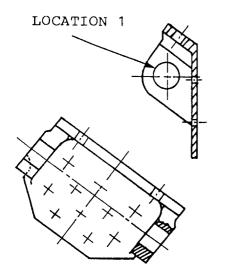
For reinstallation instructions of the scissors assembly and for procurement of replacement parts, contact Astra Jet Corporation, Wilmington, Delaware.

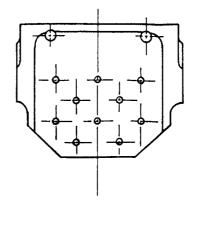
F. If additional information is needed contact:

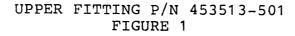
ASTRA JET CORPORATION P. O. BOX 10086 WILMINGTON, DE 19850 U.S.A.

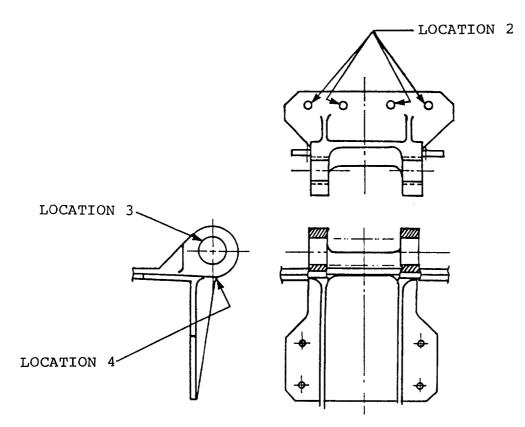
PHONE: (302) 322-7240 TELEX: 704034

February 3, 1989





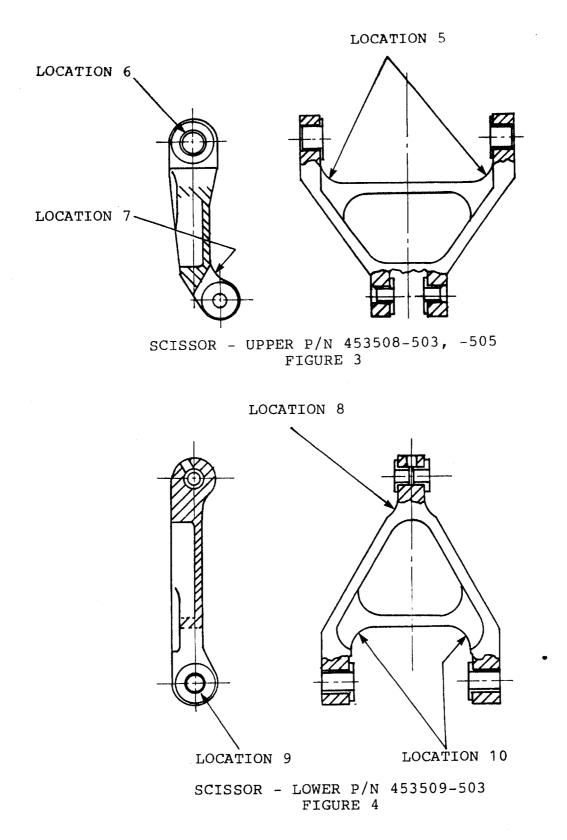




LOWER FITTING P/N 453514-503 FIGURE 2

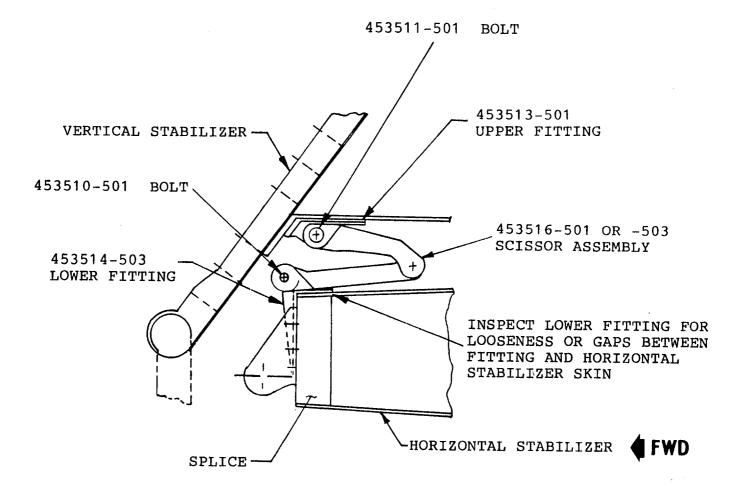
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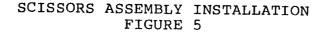


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OPTIONAL

SERVICE BULLETIN NO. 1124-28-098

February 15, 1989

- SUBJECT: FUEL PREVENTING FUEL SPILLAGE THROUGH VENT SYSTEM DURING REFUELING OR TRANSFER OPERATIONS (AFC 2074).
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers prior to 391.

B. REASON

To prevent fuel venting from fuselage tank vents resulting from operation of transfer system with over 6600 pounds on board during refueling operations when aircraft power is applied.

C. COMPLIANCE

Optional

D. DESCRIPTION

This service bulletin installs an interlock relay, Auto Transfer Defeat (ATD), to prohibit the auto transfer system operation during ground operation by opening the ATR relay holding circuit through the ATD and the right MLG oleo switch. The auto transfer system/valves will then close when fuel level rises above 6600 pounds, preventing overflow through fuselage tank vents. This permits POWER-ON refueling, when conditions dictate, without removing power to unlatch the auto transfer relay prior to take off.

All aircraft serial numbers 391 and subsequent were manufactured with this provision.

SB 1124-28-098 Page 1 of 6 E. APPROVAL

This service bulletin has been reviewed by the Israel Civil Aviation Administration (ICAA). The design content conveyed herein complies with the applicable Civil Aviation Regulations and is ICAA approved.

F. MATERIAL

Material required for this service bulletin may be obtained from Atlantic Aviation Supply, Wilmington, Delaware, or their authorized representatives.

G. TOOLING

None.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not applicable.

J. REFERENCES

1124/1124A Maintenance Manual, Chapter 28-00-00. 1124/1124A Wiring Manual, Chapters 28-30-01 and 24-30-01.

K. PUBLICATIONS AFFECTED

1124/1124A Maintenance Manual, Chapter 28-00-00. 1124/1124A Wiring Manual, Chapter 28-30-01. 1124/1124A Aircraft Flight Manual, Section IV.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Locate AFT relay panel and connector P176:
 - (1) S/N 239 and prior at fuselage STA 269.
 - (2) S/N 240 and subs at fuselage STA 316. From S/N 313 and subs, the AFT relay panel also contains flap contactor box components.
 - B. Mount new ATD relay socket P/N 000300-1194 in AFT relay box with existing mount provisions. Should none exist, refer to Figure 1 for details to manufacture a bracket, to be

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mounted on interior sidewall of relay box in any vacant position, using 6-32 screws and ESNA stop nuts.

- C. Wiring instructions, reference WDM Chapter 28-30-01 and Figure 2:
 - (1) Remove wire #82 from relay RDR-X2 or fuse XFA-4 as applicable. Splice wire #82 as necessary (#22 AWG) and connect to ATD relay A1.
 - (2) Add new #22 AWG wire #157 from ATD relay A2 to RDR-X2 or XFA-4, the point wire #82 was removed.
 - (3) Add new #22 AWG wire from ATD relay X1 to fuse XFA-3. Connect to XFA-3 with existing wire #49.
 - (4) Install diode 1N645 from ATD relay X2 (anode) to ATD-B2 (cathode) with new #22 AWG wire in B2.
 - (5) Route new wire from B2 to plug J176 pin K.
 - (6) Reference WDM Chapter 24-30-01. Locate connector P216 above RH DC contactor box. Identify wire 2P44B20 connected to P216 pin H. Cut wire 2P44B20 and splice both ends to new wire. Connect this new wire to P176 pin K.
 - (a) S/N 239 and prior: Reference WDM Chapter 24-50-03 (spare wires). Select spare 2SP2A20 or, if in use, an unused segment (RHS) from STA 316 (spare ends in bundle above P/J 216) to STA 269 (spare ends in cabin, flush with pressure bulkhead, RHS behind vanity). Connect selected spare at wire 2P44B20 (P216) and the forward end to relay box P176 pin K.
- D. Perform fuel system tests, reference MM Chapter 28-00-00:
 - (1) Fuel Dump System

Unchanged.

(2) Fuel Transfer System

Normal operation as described is accomplished only with the right MLG oleo switch extended (IN FLIGHT condition). With oleo compressed (weight on wheel),

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SB 1124-28-098 Page 3 of 6 the auto transfer relay will not latch which causes fuel transfer to shut off when above 6600 pounds. It then becomes necessary to defuel below 6600 pounds to initiate fuel transfer.

3. MATERIAL INFORMATION

QTY	PART NUMBER	DESCRIPTION
1	MS27401-14	Relay
1	000300-1194	Socket
1	1N645	Diode

- 4. RECORD COMPLIANCE
 - A. Reflect the changes accomplished by this service bulletin in the appropriate WDM chapters.
 - B. Note the changes in Fuel Transfer Test Procedure in MM Chapter 28-00-00.
 - C. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-28-098 dated February 15, 1989, titled "Fuel - Preventing Fuel Spillage Through Vent System During Refueling or Transfer Operations," has been accomplished this date _____.

February 15, 1989

SB 1124-28-098 Page 4 of 6



Material: 2024-T3 (0.040) Zinc Chromate upon completion.



Drill material holes #6 Body

3

Use socket 000300-1194 for hole pattern.

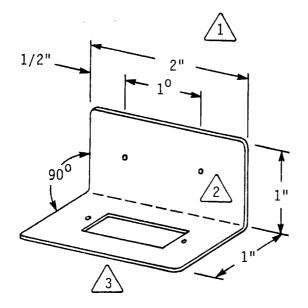
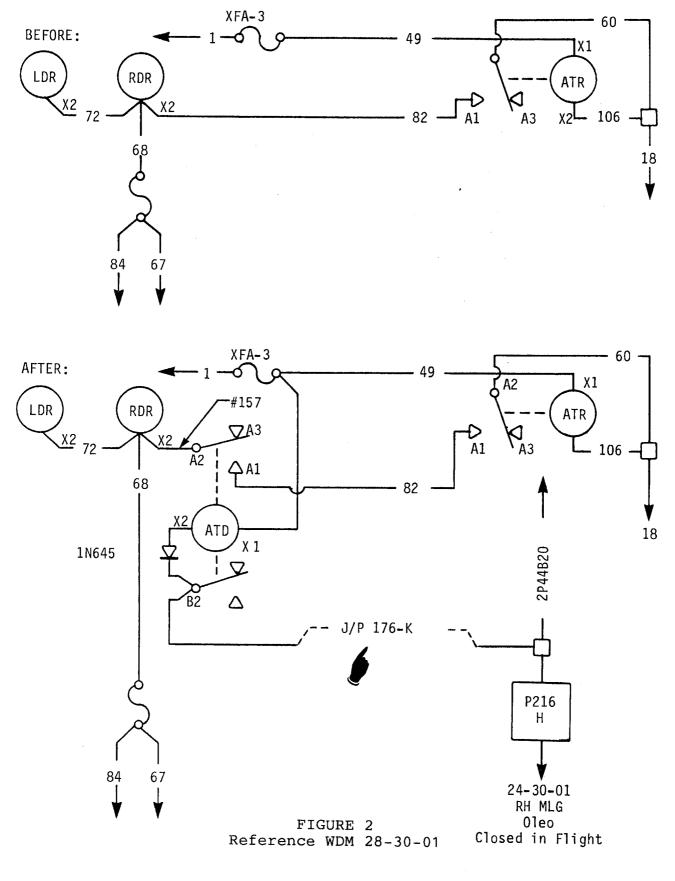


FIGURE 1 Relay Mounting Bracket

SB 1124-28-098 Page 5 of 6



February 15, 1989



RECOMMENDED

SERVICE BULLETIN NO. 1124-34-099

September 1, 1989

SUBJECT: NAVIGATION - PITOT HEAD - EXCHANGE OF CERTAIN AERO INSTRUMENTS COMPANY P/N PH1100 PITOT HEADS.

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

Certain PH1100 pitot heads (IAI P/N 4823675) incorporate a stainless steel tube material. These pitot heads do not ensure proper heat conductivity during extreme environmental operating conditions.

C. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operator's earliest convenience.

D. DESCRIPTION

The pitot heads must be checked for code "Z" adjacent to the unit serial number. Heads coded with "Z" must be exchanged for modified units. All heads with codes other than "Z" do not require modification and may remain in service.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

September 1, 1989

F. MATERIAL

Units with serial number suffix code "Z" may be exchanged for modified units through Atlantic Aviation Supply Company.

G. TOOLING

None required.

H. WEIGHT AND BALANCE

Not affected.

I. ELECTRICAL LOAD DATA

Not affected.

J. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapter 34-10-00.

K. PUBLICATIONS AFFECTED

1124/1124A Illustrated Parts Catalog, Chapter 34-10-00, Fig. 2.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Identify manufacture of pitot head as stamped on exterior of unit. If pitot head is identified as shown below, continue with steps B through F.

Aero Inst. Co., Cleveland, Ohio Mfg. Part No. PH1100-1 (LEFT) -2 (RIGHT) IAI P/N: 4823675-1 (LEFT) -2 (RIGHT)

- B. Remove pitot head per instruction found in 1124 Maintenance Manual, 34-10-00, page 401, paragraph 2.
- C. Locate shield assembly near electrical connection. Inspect shield for code "Z" stamped adjacent to unit serial number.
- D. Remove units with code "Z" present. Replace with modified units. All codes other than "Z" are acceptable.
- E. Install pitot heads per 1124 Maintenance Manual, Chapter 34-10-00, page 401, paragraph 2.
- F. Return aircraft to service.

SERVICE BULLETIN NO. 1124-34-099

3. MATERIAL INFORMATION

QTY	PARTS NUMBERS	DESCRIPTION	
*1	4823675-1	Pitot head, left	
*1	4823675-2	Pitot head, right	

* Units with serial number suffix code "Z" may be exchanged for modified units through Atlantic Aviation Supply Company.

4. RECORD COMPLIANCE

Make the following entry in the aircraft log book:

- A. Service Bulletin 1124-34-099, dated September 1, 1989, titled "Navigation - Pitot Head - Exchange of Certain Aero Instruments Company P/N PH1100 Pitot Head," has been accomplished this date _____.
- B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



SERVICE BULLETIN NO. 1124-27-100

REVISION 2

April 24, 1991

TRANSMITTAL SHEET

This sheet transmits Revision 2 to Service Bulletin No. 1124-27-100 dated March 8, 1990 titled "Flight Controls - Aileron - Inspection of LH and RH Wing Aileron Control Rod Assembly P/N 513503-503 for Possible Corrosion".

REASON FOR REVISION

Evaluation of control rod assemblies P/N 513506-503, replaced since the original issue of this bulletin indicates a need to mandate replacement of all control rod assemblies P/N 513506-503.

This is a COMPLETE REVISION. Remove and discard all previous pages affected by this revision.

LIST OF EFFECTIVE PAGES

PAGE NO. DATE

1 through 4 April 24, 1991

PREVIOUS REVISIONS OF SB 1124-27-100

Revision 1, April 25, 1990



MANDATORY

SERVICE BULLETIN NO. 1124-27-100

March 8, 1990

RSUBJECT:FLIGHT CONTROLS - REPLACEMENT OF LEFT AND RIGHT AILERONRCONTROL ROD ASSEMBLIES P/N 513506-503.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

R Evaluation of control rod assemblies, P/N 513506-503, replaced since the original issue of this bulletin indicates a need to mandate replacement of all control rod
 R assemblies P/N 513506-503.

- C. COMPLIANCE
- R This service bulletin must be accomplished within the next 150 flight hours or
 R within six months from the issue date of Revision 2 to this Service Bulletin,
 R whichever occurs first.
 - D. DESCRIPTION
- R This service bulletin provides procedures to replace the left and right aileron rod
 R assemblies P/N 513506-503 mounted horizontally in the wing trailing edge.
 - E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

March 8, 1990 R Revision 2, April 24, 1991 1017 SB 1124-27-100 Page 1 of 4

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- R (1) Estimated man-hours: 1
 - (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL INFORMATION

QTY.	PART NUMBER	DESCRIPTION
2	513506-503 RD or RE	ROD ASSEMBLY

- R Material required may be obtained through Astra Jet Corporation, New Castle,
 R Delaware, or authorized ASTRA/WESTWIND Service Centers.
 - H. TOOLING

R

None required.

I. WEIGHT AND BALANCE

Not affected.

J. ELECTRICAL LOAD DATA

Not affected.

K. REFERENCES

1124/1124A Westwind Illustrated Parts Catalog, Chapter 27-10-00, Figure 4. 1124/1124A Westwind Maintenance Manual, Chapters 5-20-03 and 27-10-00.

L. PUBLICATIONS AFFECTED

R 1124/1124A Westwind Illustrated Parts Catalog, Chapter 27-10-00, Figure 4.

SB 1124-27-100 R Page 2 of 4

SERVICE BULLETIN NO. 1124-27-100

2. ACCOMPLISHMENT INSTRUCTIONS

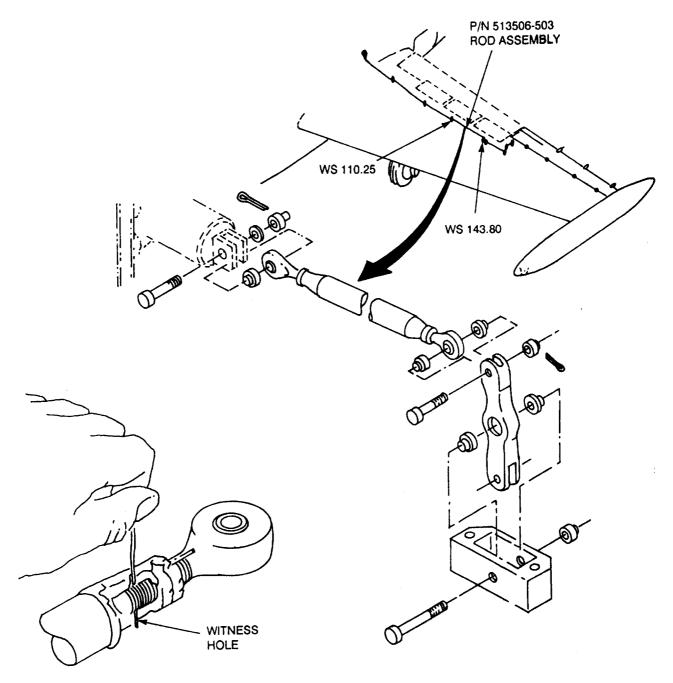
- RNOTE:Control rod assemblies P/N 513506-503 RD or RE installed by complianceRof a previous issue of this bulletin do not require replacement.
 - A. Fully extend flaps, speed brakes and lift dumpers to gain access to the left and right aileron rod assemblies.
 - B. Remove left and right aileron rod assemblies, P/N 513506-503. Tag identify left and right rod assemblies respectively. Refer to Figure 1.
- R C. Carefully measure and record distance between center of attachment holes of rod ends on old rod assembly.

CAUTION: Ensure that rigging of the system is not altered during replacement.

- R D. Position rod ends on new rod assemblies, P/N 513506-503 RD or RE, so that rod assembly length conforms to the measured distance recorded in step (C.).
 R Safety-wire rod end jam nuts to rod-end lock pins.
- R E. Install new left and right aileron rod assemblies, P/N 513506-503RD or RE. Torque nuts to 50-70 inch-pounds and secure with cotter pins. (Refer to Figure 1).
- R F. Check aileron rigging in accordance with 1124/1124A Westwind Maintenance Manual, Chapter 27-10-00. Adjustment/Test paragraphs 2.A steps 8 through 11, 2nd paragraph 3A.

3. RECORD COMPLIANCE

- A. Make the following entry in the aircraft log book:
- RService Bulletin 1124-27-100, Revision 2, dated April 24, 1991, titled "FlightRControls Replacement of Left and Right Aileron Control Rod Assemblies P/N513506-503," has been accomplished this date
 - B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



CAUTION: IF SAFETY WIRE WILL PASS THROUGH BOTH WITNESS HOLES, ROD END IS EXTENDED PAST LIMITS.

FIGURE 1

SB 1124-27-100 R Page 4 of 4

March 8, 1990 Revision 2, April 24, 1991



TRANSMITTAL SHEET

Introduction

This sheet transmits Revision 1, dated February 4, 2000, to Westwind Service Bulletin No. 1124-53-101, dated March 7, 1990, titled "Fuselage - Enlarge Existing Wing Attachment Access Holes in the Aft Pressure Bulkhead at Fuselage Station 269.879 for Structural Inspection (AFC 2075)".

Reason for Revision

This service bulletin has been divided into two parts.

Part A of this service bulletin contains the original instructions for enlarging the four wing attachment fitting access holes to a diameter of 3.20 inches to enable access to the fittings for non-destructive testing using old style structural inspection probe P/N EIAI US-501.

Part B of this service bulletin has been added to include instructions for enlarging the four wing attachment fitting access holes to a diameter of 2.0 inches to enable access to the fittings for non-destructive testing using new style structural inspection probe P/N 389-035-640.

This is a COMPLETE REISSUE of Westwind Service Bulletin No. 1124-53-101. Remove and discard all pages of the original issue of this service bulletin and replace with the new pages from this revision.

Aircraft in compliance with the original issue of this service bulletin require no further action.

List of Effective Pages

Page No. Date

1 through 9 February 4, 2000

Previous Revisions of SB 1124-53-101

None.



FUSELAGE - ENLARGE EXISTING WING ATTACHMENT ACCESS HOLES IN THE AFT PRESSURE BULKHEAD AT FUSELAGE STATION 269.879 FOR STRUCTURAL INSPECTION (AFC 2075)

PLANNING INFORMATION

1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

2. Concurrent Requirement

None.

3. Reason

To provide access for non destructive testing of the wing attachment fittings located at the aft pressure bulkhead Sta. 269.879.

4. Description

Part A of the accomplishment instructions in this service bulletin provides instructions for enlarging the four wing attachment fitting access holes to a diameter of 3.20 inches to enable access to the fittings for non-destructive testing using structural inspection probe P/N EIAI US-501 (old style inspection probe). Compliance with Part A of this service bulletin is only required if the old style inspection probe is to be used.

Part B of the accomplishment instructions in this service bulletin provides instructions for enlarging the four wing attachment fitting access holes to a diameter of 2.0 inches to enable access to the fittings for non-destructive testing using structural inspection probe P/N 389-035-640 (new style inspection probe) manufactured by Krautkramer Branson, Inc. Part B of the accomplishment instructions in this service bulletin is only required if the new style inspection probe does not fit through any of the four wing attachment fitting access holes. Compliance with this service bulletin is not required if the clearance is satisfactory.

5. <u>Compliance</u>

Compliance with this service bulletin is recommended prior to the next scheduled structural non-destructive testing of the wing attachment fittings. Aircraft in compliance with the original issue of this service bulletin require no further action.



6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: Part 1 35 Part 2 - 10
- B. Number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Maintenance Manual, Chapters 53-00-00 and 25-00-00 Israel Aircraft Industries Airframe Change 2075

12. Other Publications Affected

None.

13. Interchangeability or Intermixability of Parts

None.



MATERIAL INFORMATION

1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Galaxy Aerospace Company, LP in Fort Worth, Texas. Please contact the Product Support Group at Galaxy Aerospace Company, LP for current price and availability of these parts.

2. Industry Support Information

None.

PART A

3. Material Necessary for Each Aircraft

Part Number	Keyword	<u>Qty</u>
.050" 2024T3 clad Thickness A/R 2024T3 clad MS21069-L3 MS21073-L3 MS27039-0808 AN960-D10 CCR274SS3-2 MS20426AD3 MIL-C-5541 PR1422B2	Aluminum Aluminum (Shim Material) Nutplates Nutplates Screws Washers Rivets Rivets Alodine Sealant Zinc chromate primer	A/R A/R 36 4 40 40 12 68 A/R A/R A/R

PART B

Part Number	Keyword	<u>Qty</u>
MIL-C-5541 PR1422B2	Alodine Sealant Zinc chromate primer	A/R A/R A/R

The material required to accomplish this service bulletin may be procured locally.

4. Reidentified Parts

None.

5. Tooling

Sheet metal equipment required for Part A only.



ACCOMPLISHMENT INSTRUCTIONS

PART A For Inspection Probe P/N EIAI US-501

- <u>NOTE:</u> All reworked areas and parts fabricated from 2024T3 clad are to be treated with MIL-C-5541 alodine and coated with zinc chromate primer.
- 1. Gain access to the forward side of the aft pressure bulkhead at fuselage station 269.879 by removing the interior furnishings as required. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 25-00-00.
- 2. Remove and retain the insulating material from the pressure bulkhead as required to gain access to the area to be reworked. Refer to Figure 1.
- 3. Locate the four existing 2.0" diameter wing attachment access hole covers, P/N 313235-69.
 - A. Remove and discard the four existing covers.
 - B. Mark a 3.20" diameter circle equi-distant around the four 2.0" diameter holes. Refer to Figure 2.
 - C. Enlarge the holes to 3.20" diameter. Refer to Figure 2. Smooth the edges and remove all burrs and scratches with #240 grit paper.
- 4. Remove the following rivets from the left and right side of the aft pressure bulkhead and enlarge the existing 16 holes to .190"-.194" diameter according to Figure 2.
 - A. Three rivets from left and right rivet row at Z 48" reference.
 - B. Four rivets from left and right rivet row at Z 37.5" reference.
 - C. One rivet from the left and right angle outboard of the upper access holes at the Z 46" reference.
- 5. For aircraft that have doublers on the forward side of the pressure bulkhead above the upper access holes, fabricate two shims, P/Ns 313235-RE5 and -RE6, from 2024T3 clad aluminum, same thickness as the doublers, according to Figures 2 and 3. Install shims and nutplates per the instructions in Figure 2 as follows:
 - A. Clamp the P/Ns 313235-RE5 and -RE6 shims to the pressure bulkhead at their respective upper access holes.
 - B. Locate and mark rivet and screw holes for the nine MS21069-L3 and one MS21073-L3 nutplates each side.

7-WE17-W////

L

SERVICE BULLETIN

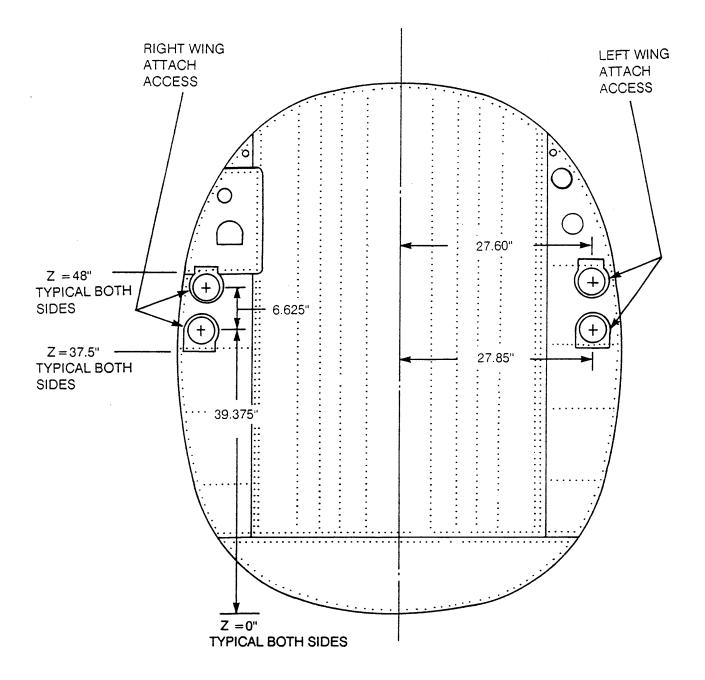
- C. Drill the holes for the nutplate rivets to .093"-.097" diameter and the nutplate screw holes to .190"-.194" diameter.
 - D. Countersink the rivet holes to 100 degrees.
 - E. Remove all burrs. Treat reworked areas with alodine and coat with zinc chromate primer.
 - F. Assemble shims P/Ns 313235-RE5 and -RE6 and nutplates P/Ns MS21069-L3 and MS21073-L3 to the pressure bulkhead with MS20426AD3 rivets and CCR274SS3-2 blind rivets according to Figure 2.
- 6. Repeat steps 5.B through 5.E to prepare the lower access holes on all aircraft and the upper access holes on aircraft without doublers for the nutplate installation. Refer to Figure 2.
 - A. Assemble nutplates P/Ns MS21069-L3 and MS21073-L3 to the upper access holes as required with MS20426AD3 rivets and CCR274SS3-2 blind rivets.
 - B. Assemble nutplates P/Ns MS21069-L3 and MS21073-L3 to the lower access holes of all aircraft with MS20426AD3 rivets.
- 7. Fabricate covers P/Ns 313235-RE1, -RE2, -RE3 and -RE4 from .050" 2024T3 clad aluminum. Drill screw attach holes .190"-.194" diameter according to Figures 2 and 3. Smooth all edges, remove all burrs, treat with alodine, and coat with zinc chromate primer.
 - 8. Install covers with screws, P/N MS27039-0808.
 - 9. Seal fraying surfaces of shims (if installed), covers and screw heads with PR1422B2 sealant.
 - 10. Install the insulating material that was removed in Step 2.
 - 11. Install the interior furnishings that were removed in Step 1. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 25-00-00.
 - Make the following entry in the aircraft log book: Part A of Westwind Service Bulletin No. 1124-53-101, Revision 1, dated February 4, 2000, titled "Fuselage - Enlarge Existing Wing Attachment Access Holes in the Aft Pressure Bulkhead at Fuselage Station 269.879 for Structural Inspection (AFC 2075)" has been accomplished this date _____.
 - 13. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.



PART B For Inspection Probe P/N 389-035-640

- 1. Gain access to the forward side of the aft pressure bulkhead at fuselage station 269.879 by removing the interior furnishings as required. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 25-00-00.
- 2. Remove and retain the insulating material from the pressure bulkhead as required to gain access to the area to be reworked. Refer to Figure 1.
- 3. Locate and remove the four existing 2.0" diameter wing attachment access hole covers, P/N 313235-69.
- 4. Measure the existing holes and identify any hole(s) with less than 2.0" diameter.
- 5. Enlarge the hole(s) with a hand file to 2.0" diameter as required. Refer to Figure 1.
- 6. Remove all burrs, scratches and smooth edges with #240 grit paper.
- 7. Treat the reworked areas with MIL-C-5541 alodine and coat with zinc chromate primer.
- 8. Reinstall the four existing covers.
- 9. Seal covers and screw heads with PR1422B2 sealant.
- 10. Install the insulating material that was removed in Step 2.
- 11. Install the interior furnishings that were removed in Step 1. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 25-00-00.
- Make the following entry in the aircraft log book: Part B of Westwind Service Bulletin No. 1124-53-101, Revision 1, dated February 4, 2000, titled "Fuselage - Enlarge Existing Wing Attachment Access Holes in the Aft Pressure Bulkhead at Fuselage Station 269.879 for Structural Inspection (AFC 2075)" has been accomplished this date _____.
- 13. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.





Aft Pressurized Bulkhead Assembly View Looking Aft, Sta. 269.879 FIGURE 1



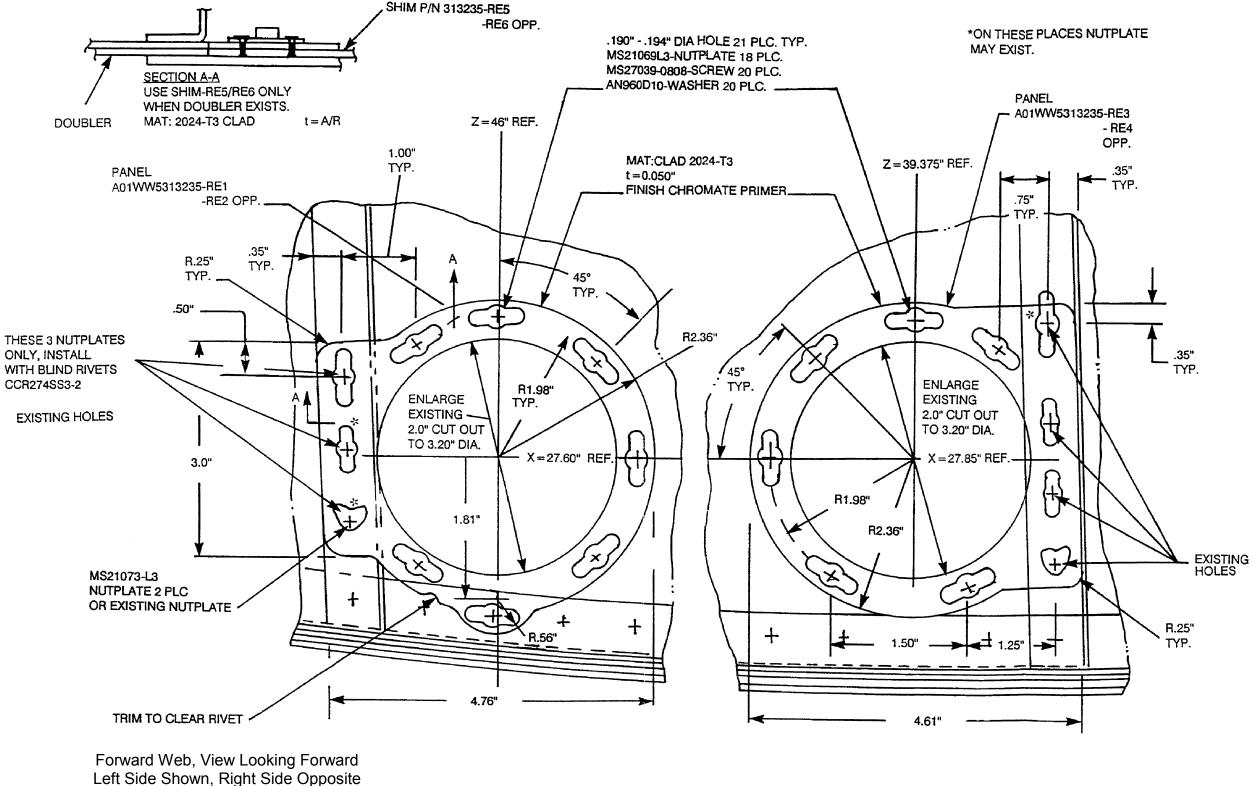
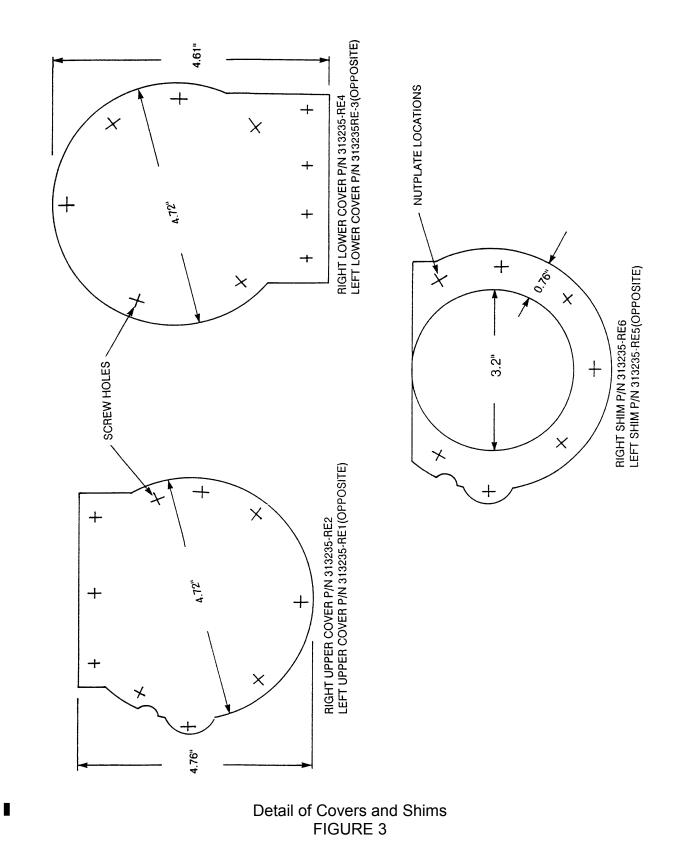


FIGURE 2

March 7, 1990 Revision 1, February 4, 2000







OPTIONAL

SERVICE BULLETIN NO. 1124-53-102

October 9, 1991

SUBJECT: FUSELAGE - DRAIN VALVES INSTALLATION IN THE FUSELAGE LOWER SKIN. (AFC 2076)

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To provide additional drains in the affected area to ensure proper and positive drainage of any fluid accumulation under the passenger compartment floor.

C. COMPLIANCE

The compliance is optional and may be accomplished at the operator's discretion.

D. DESCRIPTION

Provides instructions for installing two differential pressure drain valves and doublers.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 24
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
2	V25W784025-003	VALVE - BASIC
2	V25W784025-005	RETAINER
A/R	2024-T3 CLAD	.063" ALUMINUM
4	NAS1739B-5	RIVET
28	MS20426AD-4	RIVET
A/R	PR1422B	SEALANT
A/R	MIL-C-5541	CHROMATE COATING

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapter 21, pertaining to ground pressurization.

L. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Jack aircraft to provide sufficient ground to fuselage working clearance.
- B. Remove cockpit furnishings and floor to gain access to station 70.5.
- C. Remove cabin or lavatory furnishings and floor to gain access to station 265.0.
- D. Locate and cut out 0.90 inch ± .010 diameter holes in the fuselage skin for the two drain valve assemblies of P/N V25W784025-005 retainer and -003 basic valve as follows:
 - Locate the center of the forward hole 5.15 inches forward of station 75.65, and 3.50 inches to the right of the fuselage center line. Refer to Detail "A" of Figures 1 and 2.
 - (2) Locate the center of the aft hole at station 265.0, 0.50 inches to the right of the fuselage center line. Refer to Detail "B" of Figures 1 and 2.
- E. Fabricate two -RE3 doublers from the .063 inch 2024-T3 clad and drill fourteen (14) 0.125 inch and two (2) 0.156 inch diameter rivet holes in each doubler to the dimensions given in Detail "A" and "B" of Figure 2.
- F. Using the doublers as a template, drill fourteen (14) 0.125 inch and two (2) 0.156 inch diameter rivet holes through the fuselage skin at each doubler location. Refer to Figure 1, Details "A", "B", and "C" and Figure 2 Details"A" and "B" for doubler alignment.
- G. Countersink all the rivet holes on the outer surface of the doublers, and the four inner diameter rivet holes on the inner surface of the fuselage skin. Refer to Figure 2 Details "A" and "B".
- H. Drill two .156 inch diameter holes in each drain valve retainer P/N V25W784025-005. Refer to Figure 2 Details "A" and "B".
- I. Clean the surfaces of the doublers with MEK and wipe dry with clean cheese cloth. Coat the surfaces with MIL-C-5541 chromate coating.

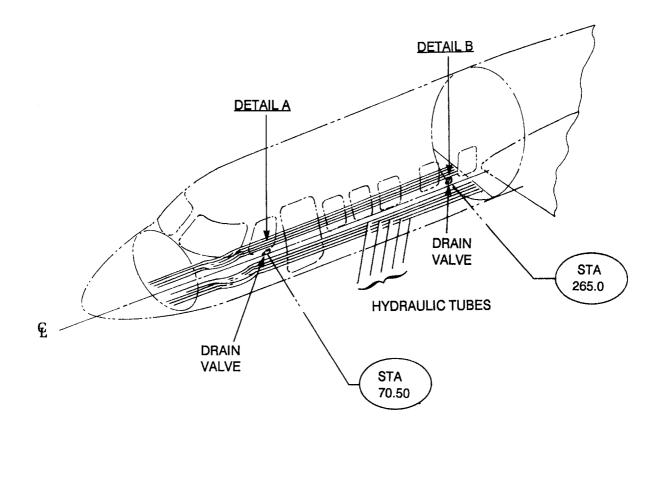
- J. Brush coat the inner surfaces of the doublers with PR1422B sealant. Assemble and rivet the -RE3 doubler and the retainer P/N V25W784025-005 to the fuselage skin. Apply a fillet of PR1422 sealant around the outer diameter of the doubler and remove the excess sealant. Refer to Figure 1 Detail "C", and Figure 2 Details "A" and "B".
- K. After the sealant has dried, finish the reworked areas with matching paint.
- L. Assemble valves, P/N V25W784025-003 into the retainers, P/N V25W784025-005.
- M. Remove aircraft from jacks.
- N. Pressurize aircraft in accordance with the 1124/1124A Westwind Maintenance Manual and check the drain valves for closure at 2 PSID.
- O. Install the floor panels and furnishings that were removed in steps 2.B. and 2.C.

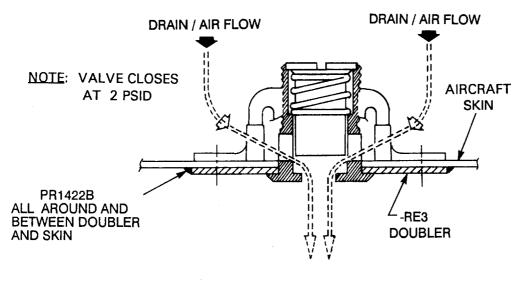
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-53-102 dated October 9, 1991, titled "Fuselage - Drain Valves Installation in the Fuselage Lower Skin (AFC 2076)," has been accomplished this date ______.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



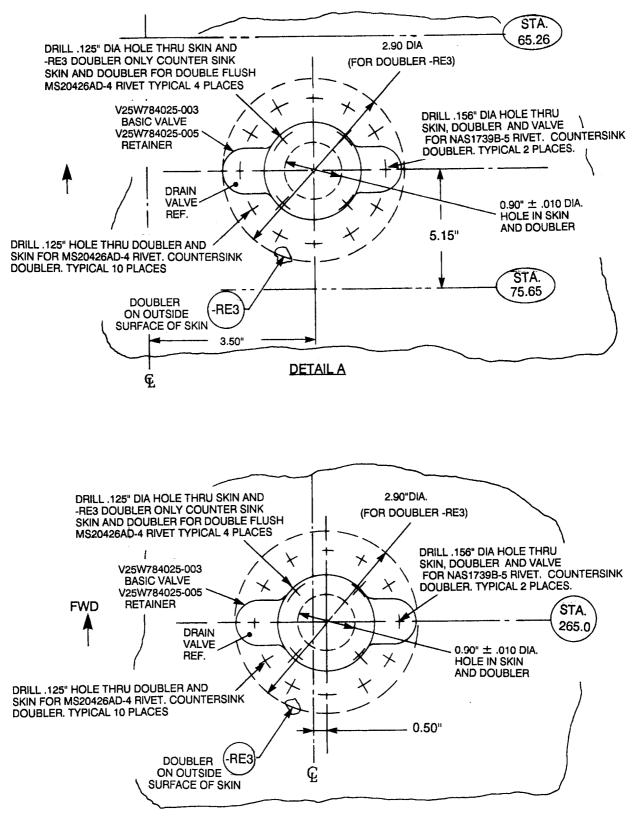


DETAIL C

FIGURE 1

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SERVICE BULLETIN NO. 1124-53-102



<u>DETAIL B</u>

FIGURE 2





RECOMMENDED

SERVICE BULLETIN NO. 1124-11-103

November 26, 1990

SUBJECT: PLACARDS AND MARKINGS - TOWING INSTRUCTION PLACARD REPLACEMENT (AFC 2074)

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To prevent damage caused by improper ground handling procedures.

C. DESCRIPTION

This service bulletin provides instructions to replace the existing towing instruction placard with a new placard.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operator's earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

SERVICE BULLETIN NO. 1124-11-103

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: .5
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
1	113001-201	PLACARD

NOTE: Because the P/N 113001-201 placard is larger than the existing instruction placard and may not fit without covering the P/N 113001-50 warning placard, the P/N 113001-201 placard ordered through Atlantic Supply Co. will contain both the -50 and -201 placards.

Material required may be obtained through Atlantic Aviation Supply Company, Wilmington, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

None.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog. Chapter 11. 1124/1124A Westwind Maintenance Manual, Chapter 11.

2. ACCOMPLISHMENT INSTRUCTIONS

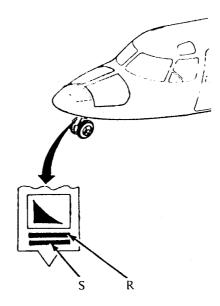
- A. Remove the existing towing instruction placard P/N 113001-51 located on the nose landing gear forward door. (Refer to Figure 1)
- B. Install new placard P/N 113001-201 in same area where old placard P/N 113001-51 was located.
 - **NOTE:** Because the P/N 113001-201 placard is larger than the existing instruction placard and may not fit without covering the P/N 113001-50 warning placard, it may be necessary to also remove the P/N 113001-50 warning placard. The P/N 113001-201 placard ordered through Atlantic Supply Co. will contain both the -50 and -201 placards.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-11-103 dated November 26, 1990, titled "Placards and Markings - Towing Instruction Placard Replacement (AFC 2074)," has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



WARNING SCISSOR ASSEMBLY MUST BE CONNECTED

DETAIL R P/N 113001-50

DETAIL S P/N 113001-51 AT <u>ALL</u> TIMES WHEN OPERATING AIRCRAFT

SCISSOR PIN MUST BE DISCONNECTED. WITH 6.80 INCHES OR MORE STRUT EXTENSION WHEN TOWING AIRCRAFT BY TOW BAR.

EXISTING INSTALLATION

DETAIL R P/N 113001-50

DETAIL S

P/N 113001-201

WARNING

SCISSOR ASSEMBLY MUST BE CONNECTED AT <u>ALL</u> TIMES WHEN OPERATING AIRCRAFT

BEFORE TOWING

EITHER BY HAND OR TOWING VEHICLE 1. SCISSOR MUST BE DISCONNECTED BY REMOVING PIP PIN AND SECURING UPPER SCISSOR IN THE UP POSITION. 2. STRUT EXTENSION MUST BE 6.80 INCHES OR MORE

AFTER TOWING PUT NOSE GEAR IN CENTER FORWARD POSITION AND RECONNECT SCISSOR FOR NORMAL FLIGHT POSITION

NEW INSTALLATION

FIGURE 1

SB 1124-11-103 Page 4 of 4



SERVICE BULLETIN NO. 1124-27-104 REVISION 2

June 17, 1992

TRANSMITTAL SHEET

This sheet transmits Revision 2 to Service Bulletin No. 1124-27-104 dated October 23, 1990, titled "Flight Controls - Relocate Bonding Jumpers Between Horizontal and Vertical Stabilizers and Control Surfaces (AFC 1056)".

REASON FOR REVISION

Change in Part Number for Jumpers in sections 1.G., 2.J. and Figure 2.

Aircraft in compliance with a previous revision to this service bulletin require no further action.

This is a COMPLETE REVISION. Please remove and discard all pages of previous issue and replace with this revision.

LIST OF EFFECTIVE PAGES

PAGE NO.	DATE
1 and 2	June 17, 1992
3	July 10, 1991
4 and 5	June 17, 1992
6	July 10, 1991
7	June 17, 1992
8 and 9	October 23, 1990

PREVIOUS REVISIONS OF SB 1124-27-104

Revision 1 July 10, 1991

June 17, 1992 5055

Transmittal Page 1 of 1



RECOMMENDED

SERVICE BULLETIN NO. 1124-27-104

October 23, 1990

SUBJECT: FLIGHT CONTROLS - RELOCATE BONDING JUMPERS BETWEEN HORIZONTAL AND VERTICAL STABILIZERS AND CONTROL SURFACES (AFC 1056).

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Existing grounding through the pin of the hinge is not suitable to discharge lightning strike.

C. DESCRIPTION

This service bulletin provides instructions for removing the bonding from the empennage flight control surface hinge bolts and attaching the bonding directly to the control surface structure.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operator's earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

October 23, 1990 R Revision 2, June 17, 1992 5055

SB 1124-27-104 Page 1 of 9

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 22 Hours
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

R

<u>QTY.</u>	PART NUMBER	DESCRIPTION
2	MS25083-2BB3	JUMPER
1	MS25083-2BC5	JUMPER
5	MS25083-2BC6	JUMPER
1	MS25083-2BC7	JUMPER
5	AN3-3A	BOLTS
5	MS21042-3	NUT
5	AN960KD10L	WASHER
*3	25W401001-007	ANGLES
*2	25W401001-005	ANGLES
*A/R	.040" 2024T3 CLAD	ALUMINUM
A/R	#320 GRIT	ALUMINUM OXIDE
		EMERY CLOTH
A/R		MEK OR ALCOHOL
A/R		ALODINE
A/R		IRIDITE
A/R		EPOXY PRIMER
A/R	MATCHING TOP-COAT	PAINT

*Angles manufactured from aluminum as described in Fig. 4.

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers, or may be procured locally.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not Applicable.

J. ELECTRICAL LOAD DATA

Not Applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapters 27-20-00 and 27-30-00.

L. PUBLICATION AFFECTED

1124/1124A Westwind Maintenance Manual, Chapters 27-20-00 and 27-30-00. 1124/1124A Westwind Illustrated Parts Catalog, Chapters 55-20-00 and 55-40-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove left and right elevator control surfaces. Refer to the 1124/1124A Westwind Maintenance Manual, Chapter 27-30-00.
- B. Remove rudder control surface. Refer to the 1124/1124A Westwind Maintenance Manual, Chapter 27-20-00.
- C. Remove and discard the bonding jumpers from each rudder and elevator hinge locations.
- D. Fabricate the following angles from .040" 2024T3 Clad Aluminum:
 - (1) Three angles P/N 25W401001-007 according Figure 4.
 - (2) Two angles P/N 25W401001-005 according to Figure 4.
 - (3) Treat angles with brush alodine and coat with epoxy primer.
- E. Remove all hinges from the rudder and elevator control surfaces.
- F. Clean an area of .500" diameter of the bonding fraying surfaces with #320 grit aluminum oxide emery cloth as indicated by \triangle in Figures 1, 2, and 3.
- G. Wipe all the cleaned areas with MEK or alcohol and dry thoroughly with a clean lint free cloth.
- H. Apply iridite to all fraying surfaces as indicated by \triangle .

October 23, 1990 Revision 1, July 10, 1991

SERVICE BULLETIN NO 1124-27-104

- I. Assemble the three rudder hinges which were removed in step 2.E. to the rudder in their proper positions. Assemble the three angles, P/N 25W401001-007 to the rudder hinges at the upper left attach bolts. Refer to Figure 1 and the 1124/1124A Westwind Illustrated Parts Catalog, Chapter 55-40-00. Torque attaching hardware in accordance with the 1124/1124A Westwind Maintenance Manual, Chapter 12-00-00, page 5, table 2. Install bondings to P/N 25W401001-007 angles as follows: P/N MS25083-2BC5 to top angle, P/N MS25083-2BC6 to middle angle and P/N MS25083-2BC7 to lower angle.
- J. Assemble left and right elevator outboard hinges, P/N 463019-503 which were removed in step 2.E. to the left and right elevators. Attach angles, P/N 25W401001-005 to the hinge outboard ears with the attach bolts. Refer to Figure 2 and the 1124/1124A Westwind Illustrated Parts Catalog, Chapter 55-20-00. Torque attaching hardware in accordance with the 1124/1124A Westwind Maintenance Manual, Chapter 12-00-00, page 5, table 2. Install bondings, P/N MS25083-2BB3 to angles, P/N 25W401001-005.
- K. Assemble the left and right elevator center and inboard hinges, P/N 463018-503 which were removed in step 2.E. to the left and right elevators. Attach the four bonding jumpers, P/N MS25083-2BC6 to the center and inboard hinges with the outboard vertical attach screws, P/N MS24694- S52. Refer to Figure 3 and 1124/1124A Westwind Illustrated Parts Catalog, Chapter 55-20-00. Torque attaching hardware in accordance with the 1124/1124A Westwind Maintenance Manual, Chapter 12-00-00, page 5, table 2.
- L. Seal all elevator hinge areas with PR1422B or Proseal 890 sealant. Clean all areas to be sealed thoroughly with MEK. Apply sealant to all faying surfaces and fastener heads to prevent moisture from entering honeycomb composites of the elevator assemblies.
- M. Check the resistance between each bonding jumper and the surface structure. Maximum allowable is .0025 ohms.
- N. Assemble the rudder control surface to the vertical stabilizer. Fasten the free ends of the bonding jumpers to their original location on the vertical stabilizer. Refer to Figure 1 and the 1124/1124A Westwind Maintenance Manual, Chapter 27-20-00.
- O. Assemble the elevator control surfaces to the horizontal stabilizers. Fasten the free ends of the bonding jumpers to their original location on the horizontal stabilizers. Refer to Figures 2 and 3, and 1124/1124A Westwind Maintenance Manual, Chapter 27-30-00.
- P. Check resistance between each control surface and stabilizer. Maximum allowable is .0025 ohms.

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October 23, 1990 Revision 2, June 17, 1992

R

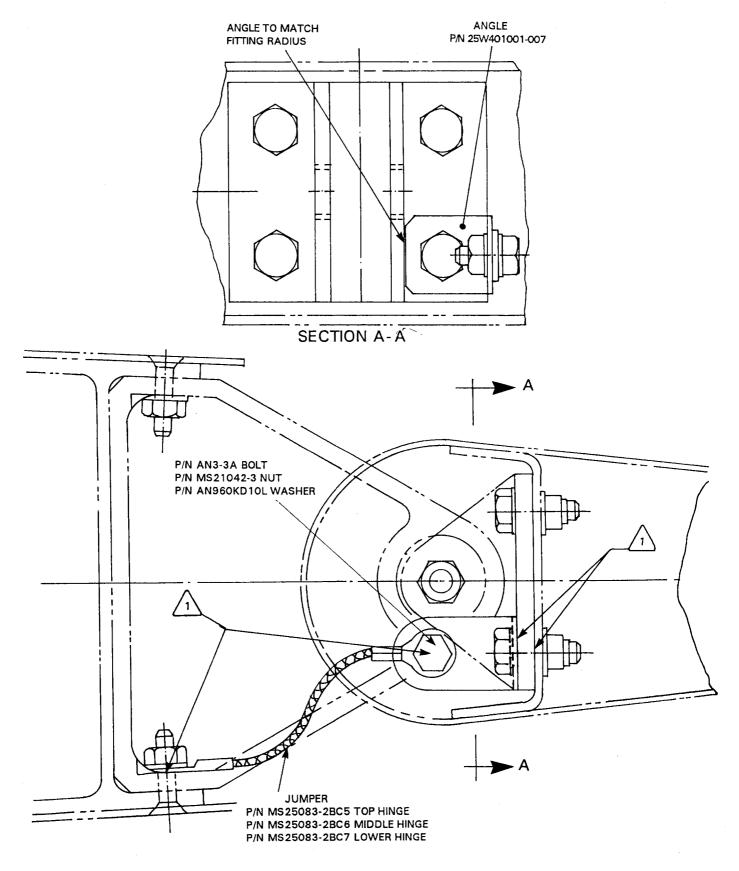
- Q. Check the travel of the elevators and elevator tab. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 27-30-00.
- R. Check the travel of the rudder and rudder tab. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 27-20-00.
- S. Apply epoxy primer and matching top coat as necessary.

3. RECORD COMPLIANCE

R

- A. Make the following entry in the aircraft log book:
- Service Bulletin 1124-27-104 Revision 2 dated June 17, 1992, titled "Flight Controls -Relocate Bonding Jumpers Horizontal and Vertical Stabilizers and Control Surfaces (AFC 1056)" has been complied with this date______.
 - B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

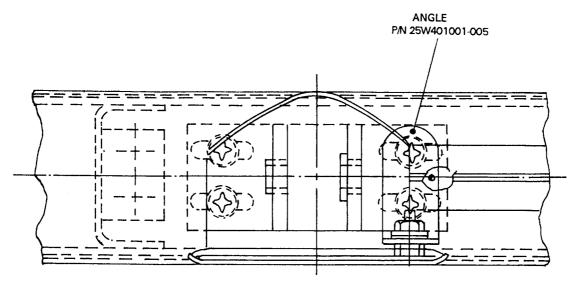
SERVICE BULLETIN NO 1124-27-104



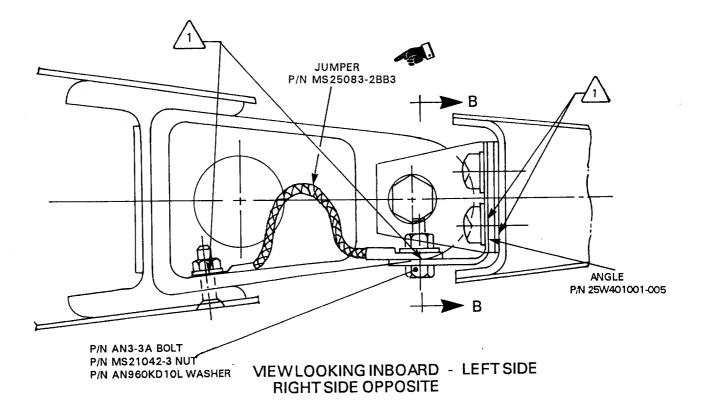
TYPICAL RUDDER HINGE - VIEW LOOKING DOWN FIGURE 1

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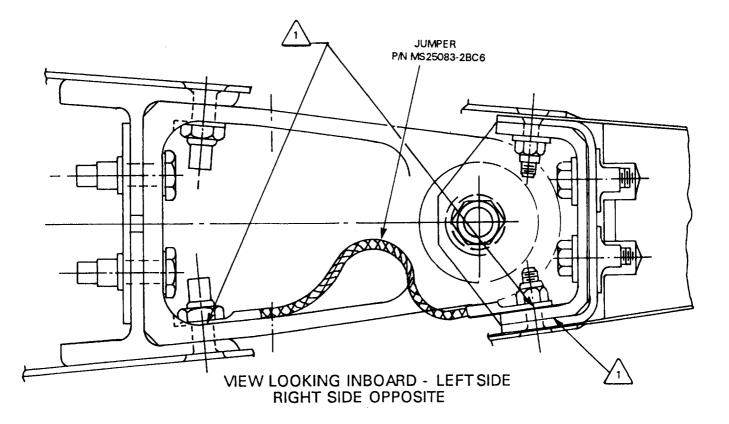


SECTION B-B



OUTBOARD ELEVATOR HINGE FIGURE 2

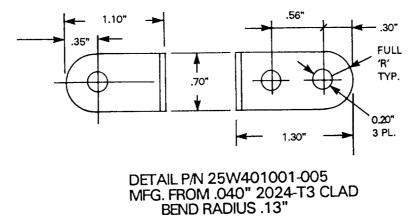
October 23, 1990 R Revision 2, June 17, 1992 SB 1124-27-104 Page 7 of 9

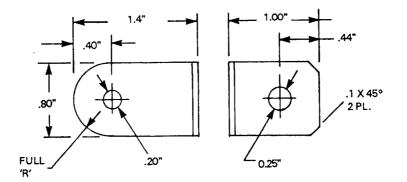


INBOARD AND CENTER ELEVATOR HINGE FIGURE 3

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DETAIL P/N 25W401001-007 MFG. FROM .040" 2024-T3 CLAD BEND RADIUS .13"

PART DETAILS FIGURE 4

SB 1124-27-104 Page 9 of 9



SERVICE BULLETIN NO. 1124-32-105 RI

REVISION 1

May 8, 1991

TRANSMITTAL SHEET

This sheet transmits Revision 1 to Service Bulletin No. 1124-32-105 dated October 17, 1990, titled " Landing Gear - Nose Landing Gear Door Modification (AFC 1055).

REASON FOR REVISION

A correction to the dimension of the cut line in Figure 2.

This is a PARTIAL REVISION. Remove and discard only those pages that are affected by this revision.

LIST OF EFFECTIVE PAGES

PAGE NO. DATE

1	May 8, 1991
2 through 6	October 17, 1990
7	May 8, 1991

PREVIOUS REVISIONS OF SB 1124-32-105

None



RECOMMENDED

SERVICE BULLETIN NO. 1124-32-105

October 17, 1990

SUBJECT: LANDING GEAR - NOSE LANDING GEAR DOOR MODIFICATION (AFC 1055).

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers except 152, 185 and 186.

B. REASON

Reports from the field revealed that there may be insufficient clearance between the nose wheel tires and the forward corners of the left and right nose landing gear doors when the nose landing gear is in transit.

C. DESCRIPTION

This service bulletin changes the aircraft maintenance manual minimum clearance requirement between the nose wheel tires and the nose landing gear doors from .125" to .600" by modifying the doors.

D. COMPLIANCE

Compliance is recommended at the next landing gear retraction inspection.

October 17, 1990 R Revision No. 1, May 8, 1991 1014

SB 1124-32-105 Page 1 of 7

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

(1) Estimated man-hours: 4

(2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

	ΟΤΥ	PART NUMBER	DESCRIPTION
A/R MATCHING PAINT	12 A/R A/R	MS20426AD4	RIVETS EMERY CLOTH

Material required to accomplish this service bulletin may be procured locally.

H. TOOLING

No special tools required.

I. WEIGHT AND BALANCE

Not applicable.

SB 1124-32-105 Page 2 of 7

October 17, 1990

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapters 7-10-00, 32-00-00, and 32-20-00.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapter 32-20-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Jack up aircraft. Reference 1124/1124A Westwind Maintenance Manual, Chapter 7-10-00.
- B. Check the nose landing gear door rigging. Adjust as necessary. Reference 1124/1124A Westwind Maintenance Manual, Chapter 32-20-00, Nose Gear Doors Adjustment/Test.
- C. Release the nose landing gear from it's down lock and raise it until the nose wheel tires are adjacent to the nose landing gear doors at their minimum clearance. Support the nose landing gear in this position.
- D. Push the right and left nose landing gear doors inboard by hand and check the minimum gap between the nose wheel tires and the doors. If the minimum clearance is 0.600", no further clearance adjustments are necessary. Proceed to step Q. If the minimum clearance is less than 0.600", proceed with steps 2.E through 3.B.
- E. With the nose landing gear supported in transit, disconnect the vertical control rods P/N 283002-401 from the left and right nose landing gear doors P/N 283019-401 and -402 by removing bolts and attaching hardware from the lower rod ends. Refer to Figure 1.
 - **NOTE:** Ensure the vertical rods are reinstalled in the same position (fwd. or aft. side of the fwd. hinge). Failure to reinstall in the same position will cause the doors to be out of adjustment.

- F. Mark and cut the forward inboard corners of the left and right nose landing gear doors to the dimensions indicated in Figure 2. Remove all burrs and scratches with #240 grit aluminum oxide emery cloth.
- G. Connect vertical control rods to the forward hinges of the left and right nose landing gear doors with the bolts and attaching hardware. Refer to Figure 1.
- H. Repeat step 2.D.
- I. Retract nose landing gear and check nose landing gear door contour. Reference 1124/1124A Westwind Maintenance Manual, Chapter 32-20-00, Nose Gear Doors Adjustment/Test.
- J. Fabricate plate P/N 283019-003 from .050" 2024-T3 clad sheet aluminum to the dimensions indicated in Figure 2.
- K. Fit the plate to the nose landing gear forward door P/N 283008-501 keeping .060" clearance between the edges of the plate and the left and right nose landing gear doors. Drill six holes .093" .097" diameter through the plate and forward nose landing gear door. Refer to Figure 2. Countersink the holes in the plate to 100°. Remove all burrs and scratches with #240 grit aluminum oxide emery cloth.
- L. Drill three holes .093" .097" diameter in the modified corners of the left and right nose landing gear doors and dimple to 100°. Refer to Figure 2. Remove burrs and scratches with #240 grit aluminum oxide emery cloth.
- M. Treat plate and all reworked surfaces with alodine and coat with zinc chromate primer.
- N. Rivet plate to forward nose landing gear door and install rivets in the forward corners of the left and right nose landing gear doors. Use rivets P/N MS20426AD4. Refer to Figure 2.
- O. Perform a landing gear retraction check. Check the nose landing gear and doors for proper clearance and contour. Reference 1124/1124A Westwind Maintenance Manual, Chapters, 32-00-00 and 32-20-00.
- P. Paint reworked areas with matching paint.
- Q. Remove aircraft from jacks. Reference 1124/1124A Westwind Maintenance Manual, Chapter 7-10-00.

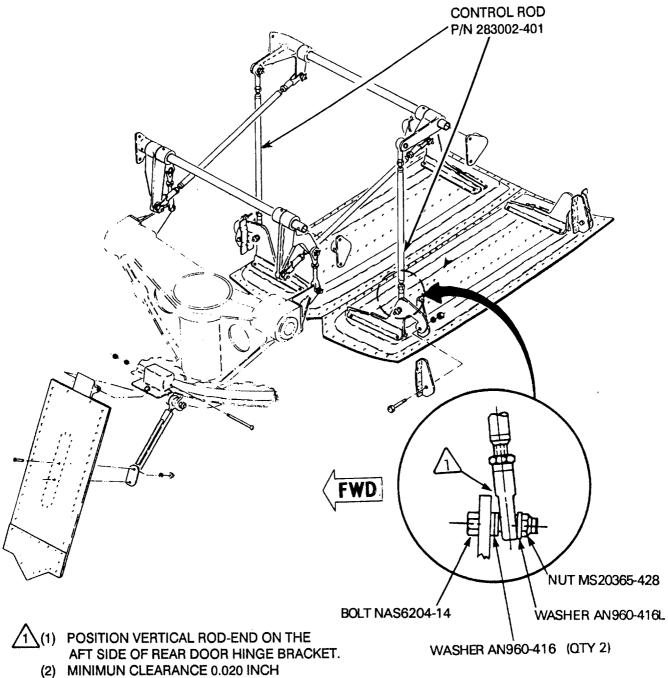
SERVICE BULLETIN NO. 1124-32-105

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

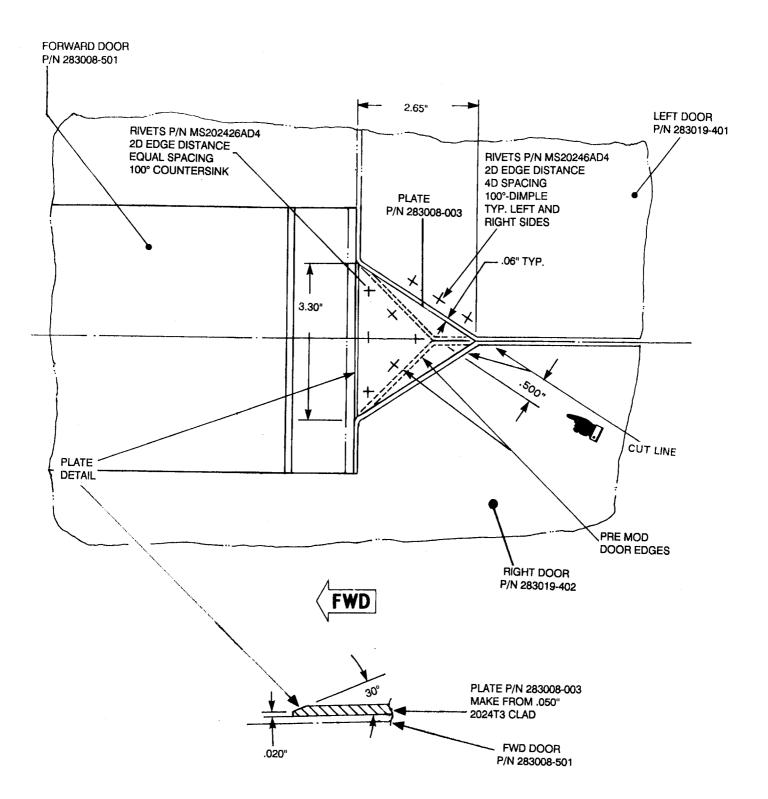
Service Bulletin 1124-32-105 dated October 17, 1990, titled "Landing Gear -Nose Landing Gear Door Modification (AFC 1055)," has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



BETWEEN ROD-END AND HINGE.

Nose Gear Doors FIGURE 1



Nose Gear Doors - View Looking Up FIGURE 2

October 17, 1990 R Revision No. 1, May 8, 1991

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RECOMMENDED

SERVICE BULLETIN NO. 1124-28-106

May 8, 1991

SUBJECT: FUEL - TIP TANK - SEALING OF FLOAT SWITCH WIRE CONDUIT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To prevent moisture from entering wiring conduit which could freeze and subsequently rupture conduit, causing fuel leakage.

C. COMPLIANCE

This service bulletin is recommended at the operators convenience.

D. DESCRIPTION

This service bulletin provides instructions for the purging of accumulated moisture and sealing of the tip tank float switch wire conduit.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

SB 1124-28-106 Page 1 of 4

SERVICE BULLETIN NO. 1124-28-106

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 4
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
A/R	PR1422	SEALER

Material required to accomplish this service bulletin may be procured locally.

H. SPECIAL TOOLS

None required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

1124/1124A Westwind Maintenance Manual, Chapter 12.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapter 28.

- 2. ACCOMPLISHMENT INSTRUCTIONS
 - A. Ensure that fuel tank interconnect valves are closed.

SB 1124-28-106 Page 2 of 4

SERVICE BULLETIN NO. 1124-28-106

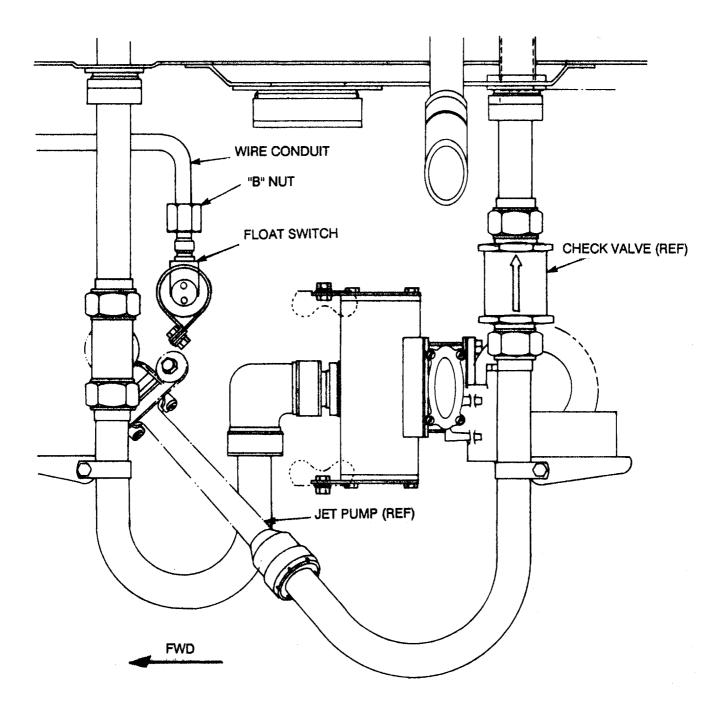
- B. Remove electrical power from aircraft.
- C. Ensure that tip tank manual fill valve is closed.
- D. Defuel tip tank, reference 1124/1124A Westwind Maintenance Manual, Chapter 12.
- E. Remove fillet between wing and tip tank to gain access to open end of conduit.
- F. Remove access panel on outboard of tip tank at T.T. Station 81.
- G. Loosen "B" nut securing wiring conduit to low level switch. Refer to Figure 1.
- H. Move conduit away from switch far enough to purge conduit with nitrogen.
- I. Purge conduit for several minutes to ensure all moisture is removed.
- J. Reinstall "B" nut on switch. Torque "B" nut, reference 1124/1124A Westwind Maintenance Manual, Chapter 12-00-00, Page 4.
- K. Reinstall access cover on tip tank.
- L. Seal the open end of conduit (in wing fillet area) with PR1422.
- M. Reinstall fillet between wing and tip tank.
- N. Return aircraft to service.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-28-106 dated, May 8, 1991, titled "Fuel - Tip Tank - Sealing of Float Switch Wire Conduit," has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



DETAIL A VIEW LOOKING DOWN THROUGH TIP TANK ACCESS OPENING - LEFT SIDE



OPTIONAL

SERVICE BULLETIN NO. 1124-55-107

September 28, 1994

SUBJECT: STABILIZERS - HORIZONTAL STABILIZER LOWER SCISSOR FITTING REPLACEMENT (AFC 2073)

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers with Service Bulletin No. 1124-55-021 previously complied with (AFC 2037).

NOTE: Aircraft serial number 441 and aircraft with P/N 453504-501 fitting assembly installed in accordance with Engineering Order A06 WW5 453015 "NEW" (AFC 2073), are in full compliance with this service bulletin.

B. REASON

Reports from the field indicate that some stabilizer lower scissor fittings P/N 453514 have loosened or cracked in service. Reference Service Bulletin No. 1124-55-097.

C. DESCRIPTION

This service bulletin provides instructions for the installation of a new combined stabilizer scissor and stabilizer actuator fitting.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

(1) Estimated man-hours: 50

(2) Suggested number of personnel: 2

.

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
*1	453504-501	FITTING ASSEMBLY
*2	453517-003	WASHER
*2	453517-005	WASHER
*2	453517-007	WASHER
*2	453517-009	WASHER
*2	25W357226-005	BUSHING
*1	453522-501	BOLT
*2	NAS336CPA25	BOLT
*2	NAS6708DU19	BOLT
*2	MS14144L8	NUT
*2	MS24665-302	PIN, COTTER
*2	AN960C816	WASHER
A/R	AN960C816L	WASHER
4	MS90353-08 OR -U08	BLIND BOLT
4	MS90354-06 OR -U06	BLIND BOLT
A/R	PR1422 B2 OR EQIV	SEALER
A/R		EPOXY (FLUID RESISTANT)
		PRIMER

* Items with asterisk are included in kit P/N 453015 (NEW) scissors kit.

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

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H. TOOLING

A special fixture, P/N AMD-1-WW4453504-501 is available on a rental basis from Astra Jet Corporation. This tool is designed to ease picking-up existing holes in the stabilizer forward spar for the new fitting.

Bridge Port or equivalent. Cobalt Drills. Carbide Reamers AMD-1-WW4 453504-501, Fixture Assembly.

I. WEIGHT AND BALANCE

Add 3.7 pounds at an arm of 492.75 inches.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapters 27-20-00, 27-30-00, 27-40-00, 30-10-00 and 55-30-00. 1124/1124A Westwind Illustrated Parts Catalog, Chapters 55-10-00. 1124 Service Bulletin 1124-55-097.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual. 1124/1124A Westwind Illustrated Parts Catalog.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Install tail support stand.
- B. Open the following circuit breakers:
 - (1) HORIZ TRIM CONTR and OVRRD.
 - (2) RUD CONTR.
 - (3) LIGHTS POS and ANTI COLL.
- C. Remove tail cone and fairings, tail cone P/N 313034, empennage P/N 403002, horizontal stabilizer P/N 403004 and horizontal side fairing installation P/N 403016. Refer to Figure 1.

September 28, 1994

- D. Pre Installation Inspection
 - (1) Connect external power to the aircraft.
 - (2) Close HORIZ TRIM CONTR circuit breaker.
 - (3) Move the horizontal stabilizer to the maximum leading edge up position. Verify that the gap between the upper scissor and the vertical stabilizer bottom rib (Gap "G") is 0.050 inch minimum. Refer to Figure 2.
 - (4) Move the horizontal stabilizer to the zero degree position. Verify that the gap between the scissor assembly and the horizontal stabilizer (Gap "J") is 0.200 inch minimum. Refer to Figure 2.
 - (5) Open HORIZ TRIM CONTR circuit breaker.
 - (6) Disconnect external power from the aircraft.
- E. Disconnect scissor assembly P/N 453516 from lower scissor fitting P/N 453514 at scissor lower hinge, by removing hinge bolt P/N 453510. Refer to Figure 2. Tie scissor assembly away from horizontal stabilizer. Save washer and nut for re-use.
- F. Remove the vertical stabilizer and rudder from the aircraft. Reference 1124/1124A Westwind Maintenance Manual, Chapter 55-30-00.
 - **NOTE:** There are two (2) screws on each side of the vertical stabilizer leading edge that are covered by the dorsal fin. To locate these screws, lay a straight edge on the exposed screws and measure forward on 2.50 inch centers, starting at the second exposed screw aft of the dorsal fin. Mark and cut .500 inch diameter holes in the dorsal fin and remove the screws. Refer to Figure 1.
- G. Preparation for lower scissor fitting, P/N 453504-501 installation.
 - (1) Disconnect deicer boot lines.
 - (2) Place a wood block between the fuselage banjo fitting and the stabilizer hinge fitting to prevent damage to these parts (fuselage station 521.75).
 - (3) Support the stabilizer.
 - (4) Disconnect stabilizer actuator by removing cotter pins, nuts, bolts, and washers. Tie actuator assembly away from horizontal stabilizer.
 - (5) Remove six (6) each bolts P/N MS20006-34 attaching actuator fittings P/N 453022 to stabilizer forward spar and remove fittings. Reference Westwind Illustrated Parts Catalog, Chapter 55-10-00 Figure 3. Save bolts for re-use.

- (6) Drill out all fasteners attaching lower scissor fitting P/N 453514 to horizontal stabilizer.
- (7) Pilot countersink four (4) holes in doubler, P/N 453015-161 on top of stabilizer. Inspect hole condition. Refer to Figure 2 View "B".
- (8) Clamp-up doubler, P/N 453015-161 and skins, P/N 453015-167, left hand and -168 right hand. Refer to Figure 2 View "B".
- (9) Install four (4) blind bolts, P/N MS90353-08 or -U08, grip as required. If necessary use first standard over size. Fasteners are to be installed wet with sealant P/N PR1422. Refer to Figure 2 View "B".
- (10) Ensure that upper and lower doublers and skins are trimmed flush with vertical plane of the forward spar, P/N 453017, to clear new scissor/actuator fitting, P/N 453504.
- H. Lower scissor fitting P/N 453504-501 set up.
 - Locate template from special fixture P/N AMD-1-WW-4453504-501 on the forward spar using "L" pin (5) in left and right center holes, as shown in Figure 3, View "A". Template (1) is indexed to fixture with letter stamp "A".
 - (2) Verify that bolts removed in step G. (5) can be installed in the four (4) remaining holes.
 - (3) Remove template (1) from aircraft.
 - (4) Clamp new fitting, P/N 453504-501 as shown in Figure 3, View "B", in fixture ③. Adjust fitting in fixture as follows:
 - (a) Lower edge on stops on fixture.
 - (b) The left and right vertical edges can be shimmed equally between the stops, gaps "A" and "B".
 - (c) Tighten clamping bolts (2) and verify that fitting position has not changed, per above requirements.
 - (5) Refer to Figure 4, View "A".
 - (a) Insert drill bushing (4) in upper left hand position and drill $\frac{3}{16}$ inch pilot.
 - (b) Remove bushing and drill hole to 23/64 inch.
 - (c) Ream hole to 0.375 inch and install "L" pin (5) through fitting and fixture, refer to Figure 4 View "B".

- (6) Repeat the above for lower right hand hole position.
- (7) Drill and ream the four (4) remaining holes.
- (8) Remove fitting from fixture.
- (9) Refer to Figure 4, View "C". Insert center punches 6 in four (4) holes "A" on vertical plane of forward spar between six (6) scissor/actuator fitting attach bolt holes.
- (10) Attach fitting to stabilizer loosely with the six (6) bolts removed in step G. (5).
 - NOTE: If bolts cannot be easily inserted to engage threads with nuts, ream holes as necessary to 0.3755, +.0000, -.0001 inch.
- (11) While holding the fitting against the four (4) punches 6, lightly tap the fitting to mark the position of the four (4) holes.

CAUTION: EXCESSIVE FORCE WILL DAMAGE THE CENTER PUNCHES.

- (12) Remove fitting from stabilizer. Drill and ream holes to .199 to .202 inch.
- (13) Spot face center and upper left and right bolt holes .70 inch diameter with a .016 inch radius in cut. Refer to Figure 5, View "A".
- (14) Chamfer the above four (4) holes one hundred degrees (100°) by .060 inches deep. Refer to Figure 5, View "B".
- (15) Counter sink the lower left and right bolt holes one hundred degrees (100°) by .750 inches in diameter. Refer to Figure 5, View "C".
- (16) De-burr all holes and break sharp edges.
- (17) Apply brush cadmium plating to machined areas with standard aero-space methods (fitting material is SAE 4340 steel per AMS 6359, heat treated 160 to 180 KSI).
- (18) Epoxy prime machined areas after plating.
- I. Lower scissor fitting P/N 453504-501 installation. Refer to Figure 5.
 - (1) Apply a thin coating of sealant, P/N PR1422 to fitting. Attach fitting to stabilizer with four (4) bolts, P/N MS20006-34, wet with sealant.

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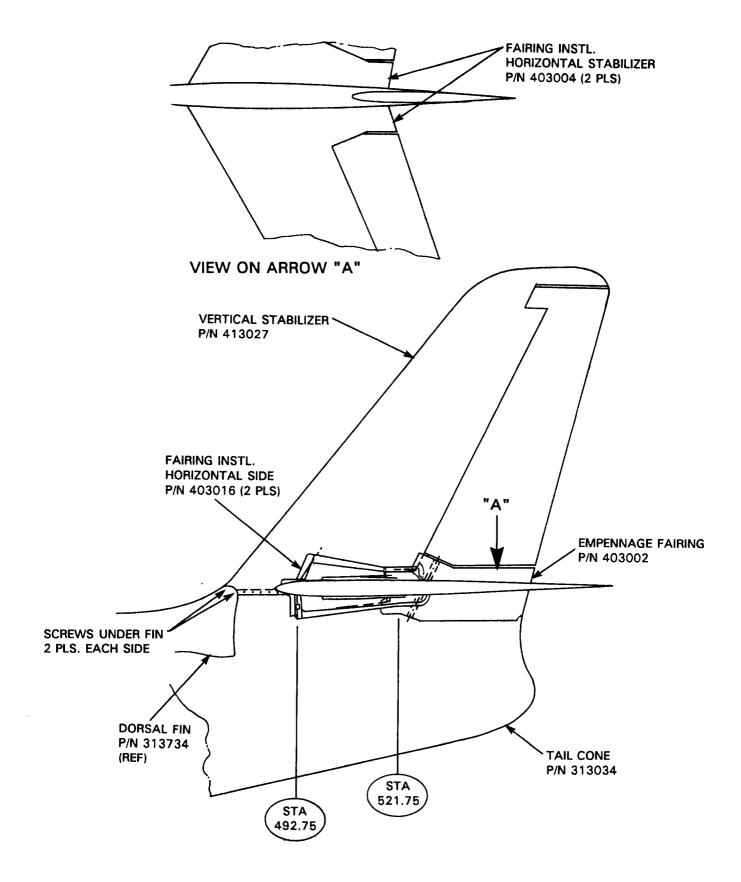
- (2) Install countersunk bolts P/N NAS336CPA25 wet with sealant in lower holes.
- (3) Torque the six (6) bolts 160 to 190 inch pounds and observe proper squeeze out of sealant around fitting.
- (4) Refer to Figure 5, View "A". Install blind bolts P/N MS90354-06 or -U06, wet with sealant. Select grip as required. If necessary, use first standard over size.
- (5) Attach horizontal stabilizer actuator jacks to the fitting as shown in Figure 6, Detail "B" with bolts P/N NAS6708DU19, nuts P/N MS14144L8, bushings P/N 25W357226-005, washers P/N AN960C816 and -816L as required and cotter pins P/N MS24665-302.
- (6) Connect deicer boot lines.
- (7) Remove wood block and stabilizer support.
- (8) Install vertical stabilizer and rudder. Reference 1124/1124A Westwind Maintenance Manual, Chapter 55-30-00.
- (9) Attach lower scissor, P/N 453509-503 to fitting. Refer to Figure 6.
 - (a) Use a combination of washers ① P/N 453517-003, -005, -007 and -009 to shim gaps as shown, compensating for misalignment of lower scissor and fitting.
 - (b) Adjust gap (2) with washers P/N AN960KD816L as required, avoiding clamp-up with bolt P/N 453522. Refer to Figure 6, Detail "A".
 - (c) Torque nut (3) 55 to 75 inch pounds and install cotter pin.
- (10) Lubricate scissor assembly with grease, Aero-Shell No. 7.
- J. Post Installation Inspection
 - (1) Connect external power to aircraft.
 - (2) Close HORIZ TRIM CONTR circuit breaker.
 - (3) Verify that scissor assembly gap "G" and gap "J" are within the limitations called out in step 2.D (3) and (4).
 - (4) Perform operational check of the deicer boots. Reference 1124/1124A Westwind Maintenance Manual, Chapter 30-10-00.
 - (5) Close HORIZ TRIM OVRRD and RUD CONTR circuit breakers.

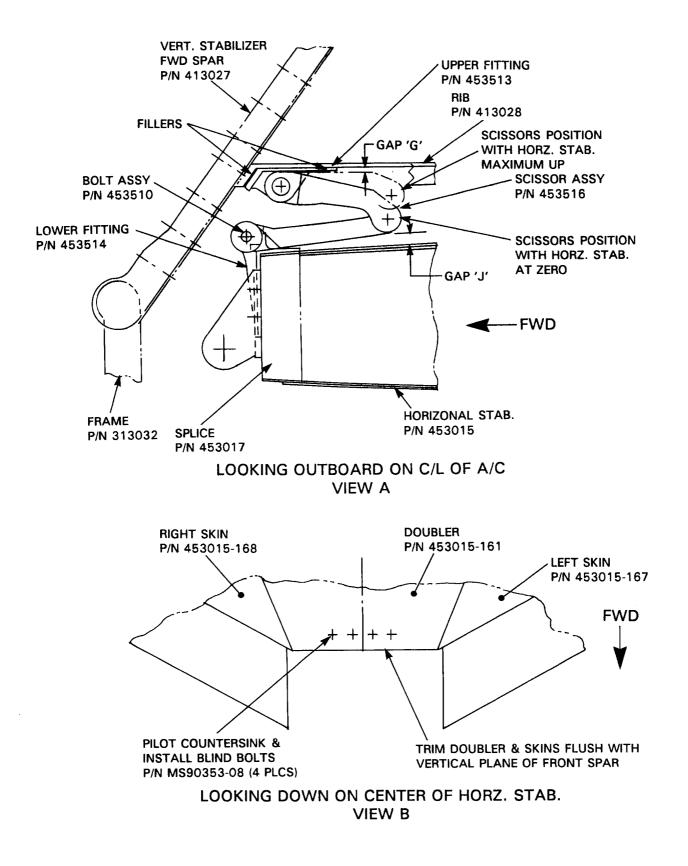
September 28, 1994

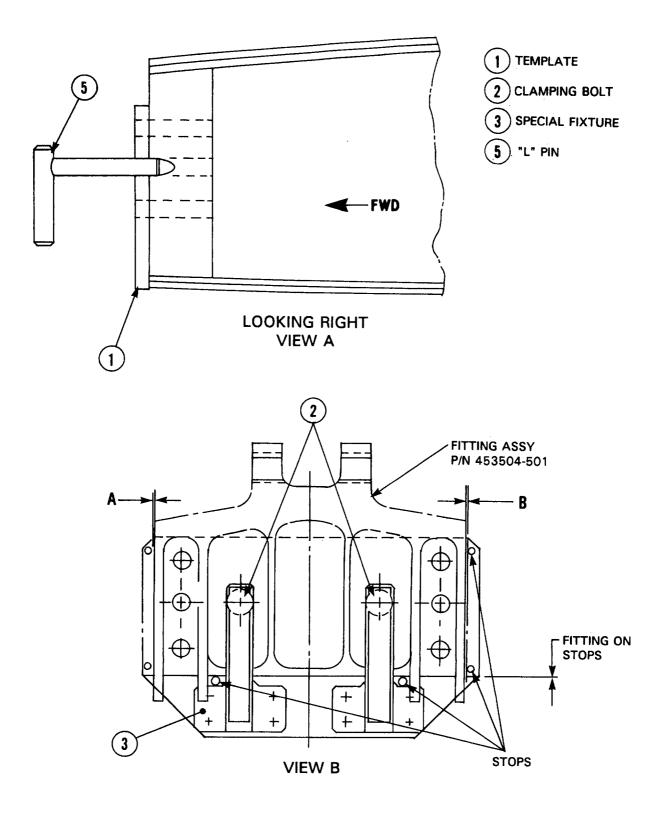
- (6) Perform operational check of rudder and rudder trim, elevators, and horizontal stabilizer. Reference 1124/1124A Westwind Maintenance Manual, Chapters 27-20-00, 27-30-00 and 27-40-00.
- (7) Install fairings and tail cone.
 - NOTE: Check for clearance between bolt P/N NAS6708DU-19 and fairing P/N 403016 installation, aircraft serial numbers 427 and subs.
- (8) Close circuit breakers LIGHTS POS and ANTI COLL.
- (9) Perform operational check of anti-collision and position light.
- (10) Perform operational checks of relevant avionics systems.
- (11) Disconnect external power from aircraft.
- K. Perform a standard fiberglass repair to holes cut in dorsal fin.
- L. Touch up paint as required.
- M. Remove tail support stand.
- 3. RECORD COMPLIANCE
 - A. Make the following entry in the aircraft log book:

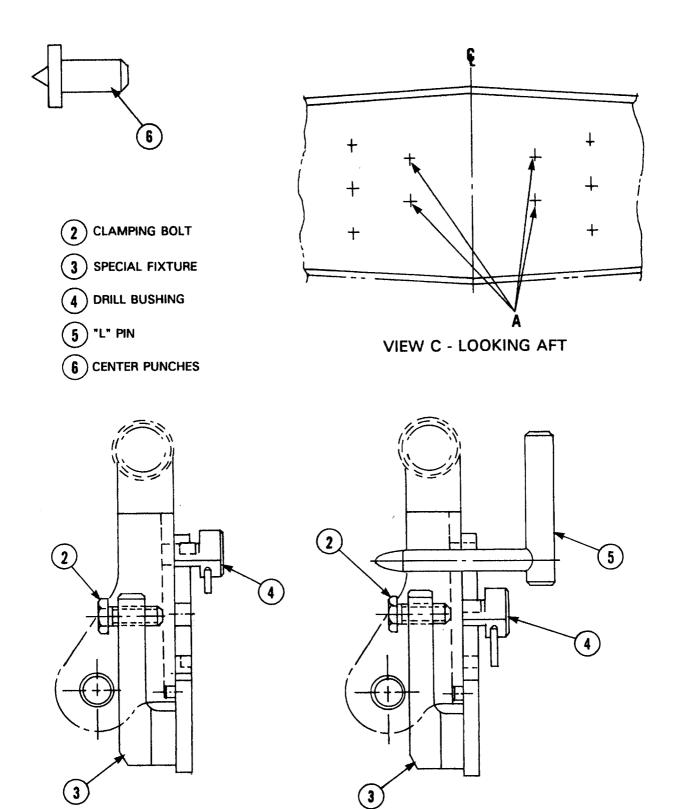
Service Bulletin No. 1124-55-107 dated September 28, 1994, titled "Stabilizers - Horizontal Stabilizer Lower Scissor Fitting Replacement (AFC 2073)", has been accomplished this date _____.

- B. Update the Airplane Flight Manual "Basic Weight Change Record", section VIII, table 8-3, in accordance with step 1.I, "Weight and Balance".
- C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.







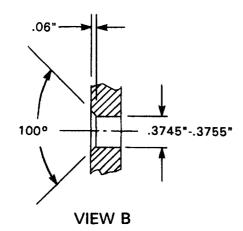


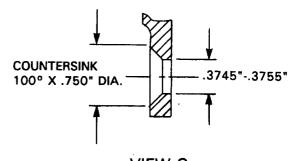
VIEW A

FIGURE 4

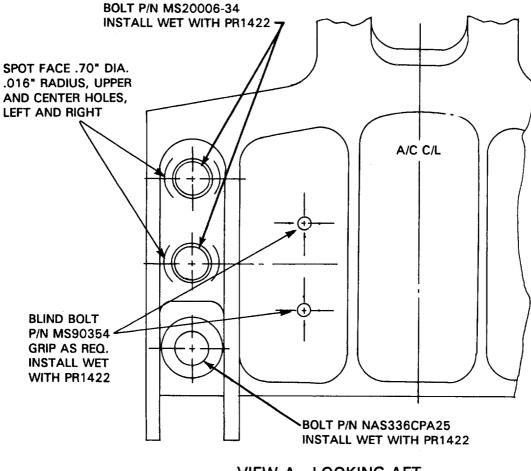
VIEW B

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VIEW C



VIEW A - LOOKING AFT

FIGURE 5

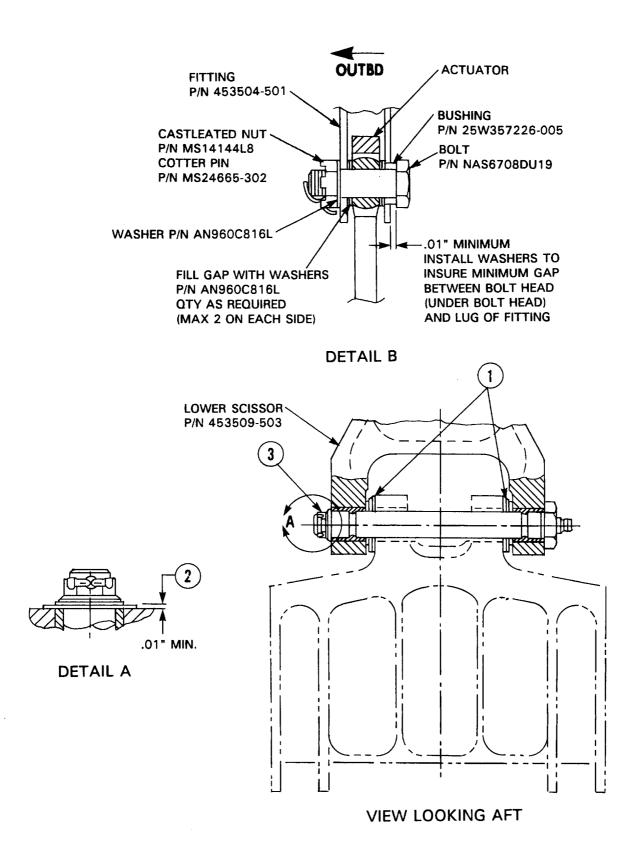


FIGURE 6



RECOMMENDED

SERVICE BULLETIN NO. 1124-21-108

May 15, 1991

SUBJECT: AIR CONDITIONING - WATER SEPARATOR DUCT CLAMPING IMPROVEMENT (AFC 2077).

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

To improve sleeve clamping on the water separator ducts.

C. DESCRIPTION

This service bulletin provides instruction for inspection, and replacement if required, of the water separator duct sleeves.

D. COMPLIANCE

Compliance is recommended at the operator's earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENT

The following information is for planning purposes only:

- (1) Estimated man-hours: 2
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
1	783108-565	Sleeve
1	783108-567	Sleeve

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124 Westwind Illustrated Parts Catalog, Chapter 21-20-00.

L. PUBLICATIONS AFFECTED

1124 Westwind Illustrated Parts Catalog, Chapter 21-20-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Gain access to forward baggage compartment and remove the rear panel.
- B. Inspect the sleeve P/N 783108-519 and clamps P/N U84-260SH that connect the water separator inlet duct P/N 783586-1 to the air cycle machine outlet port for proper installation. Clamps must be clear of the duct beads and the sleeve ends must protrude 0.350 inches minimum beyond the duct clamps. Refer to Figure 1 Detail "A". If found to be correct, check that the clamps are torqued to 20-25 inch pounds and proceed to step G. If not correct, proceed as follows:
- C. Remove clamps P/N U84-260SH from the sleeve P/N 783108-519 connecting the water separator inlet duct to the air cycle machine outlet port. Refer to Figure 1, Detail "A".
- D. Remove and discard sleeve P/N 783108-519.
- E. Install new sleeve P/N 783108-565 so that the sleeve ends are equal distance from the duct beads. Refer to Figure 1, Detail "A".
- F. Install clamps P/N U84-260SH clear of the duct beads and insure that the sleeve ends protrude a minimum of 0.350 inches from the clamps. Torque the clamps to 20-25 inch pounds. Refer to Figure 1, Detail "A".
- G. Install the rear panel in the forward baggage compartment.
- H. Gain access to rear baggage compartment and remove the forward access panel.
- Inspect the sleeve P/N 783108-509 and clamps P/N U84-410SH on the water separator outlet duct. For proper installation clamps must be clear of the duct beads. The sleeve ends must protrude 0.350 inches minimum beyond the duct clamps. Refer to Figure 1, Detail "B". If found to be correct, check that the clamps are torqued to 20-25 inch pounds and proceed to step 2.N. If not correct, proceed as follows:
- J. Remove clamps P/N U84-410SH from the sleeve P/N 783108-509 on the water separator outlet duct.
- K. Remove and discard sleeve P/N 783108-509.
- L. Install new sleeve P/N 783108-567 so that the sleeve ends are equal distance from the duct beads. Refer to Figure 1, Detail "B".

- M. Install clamps P/N U84-410SH clear of the duct beads and insure that the sleeve ends protrude a minimum of 0.350 inches from the clamps. Torque the clamps to 20-25 inch pounds. Refer to Figure 1, Detail "B".
- N. Install the forward access panel in the rear baggage compartment.

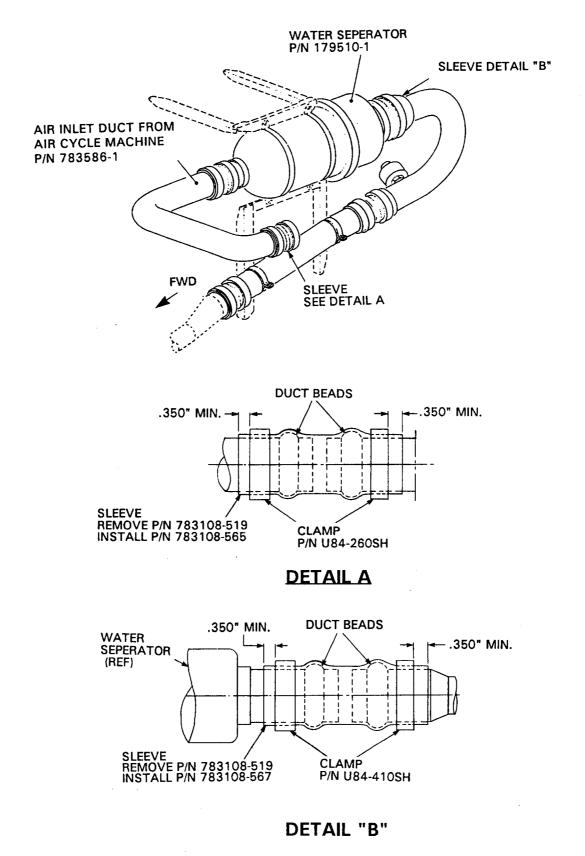
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-21-108 dated May 15, 1991, titled "Air Conditioning - Water Separator Duct Clamping Improvement (AFC 2077)," has been accomplished this date ______

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

SERVICE BULLETIN NO. 1124-21-108



WATER SEPARATOR FIGURE 1



OPTIONAL

SERVICE BULLETIN NO. 1124-34-109

December 11, 1991

SUBJECT: NAVIGATION - STATIC PORT TUBING SLOPE INSPECTION AND CORRECTION

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124A WESTWIND, serial numbers 394 through 422 and 425.

B. REASON

To prevent water accumulation in static system.

C. DESCRIPTION

This service bulletin describes procedures necessary to inspect the tube attached to the center leg of the R/H independent static source for the proper slope and reroute the tube if necessary.

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 16
- (2) Suggested Number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
3	MS20819-4D	SLEEVE
3	AN818-4D	NUT
1	AN821-4D	ELBOW
A/R	.250 OD X .035W 5052-0	ALUMINUM TUBING
*1	CMA71737-503-31	DOUBLER
*1	CMA71737-503-29	DOUBLER
*1	CMA71737-503-19	DOUBLER
*1	5723045-67	DOUBLER
2	NA\$1033-A3	NUTPLATE
A/R	MS21266-4N	GROMMET

* Doublers may be fabricated locally from .050 inch 2024-T3 Clad. Details in Figures 2 and 3.

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapters 25 and 34.

L. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Removal of interior furnishings and tube angle inspection.
 - Remove interior from right side of aircraft as necessary to expose fuselage frames at Sta. 174 to 240.25. (Forward frame of escape hatch aft to forward bulkhead of lavatory). Refer to 1124/1124A Westwind Maintenance Manual, Chapter 25.
 - (2) Inspect static tube routed from static port through frames at Sta. 184 through 219.05 for an upward angle routing. Refer to Figure 1.
 - (3) If tube slopes at an upward angle, no further work is required. Install interior items removed in step 2.A.(1) and return aircraft to service. If tube slopes at a downward angle proceed to next step.
- B. Reroute right static port tube.
 - (1) Disconnect tube at tee fitting adjacent to static port and at elbow fitting between frame Stations 219.05 and 223.75. Refer Figure 1.
 - (2) Remove clamps supporting tube and remove tube.
 - **NOTE:** Cover area between frames at Sta.184 and 223.75 as necessary to catch metal shavings.

December 11, 1991

(3) Cut out .750 diameter holes in frames at the following stations. Refer to Figures 1, 2 and 3.

<u>Y-STA.</u>	<u>Z-STA.</u>	<u>REF. DOUBLER P/N</u>	REFERENCE
219.05 210.00 201.75 194.00 184.00	32.70 31.70 30.75 30.00 EXISTING	CMA71737-503-31 5723045-67 CMA71737-503-19 CMA71737-503-29 NOT APPLICABLE	FIG. 2 FIG. 2 FIG. 2 FIG. 3

- (4) Fabricate doublers out of 2024-T3 clad .050 thick aluminum for each frame and install. Refer to Figure 2 and 3.
- NOTE: Etch doublers and treat with Alodine 1201. Finish with epoxy primer.
 - (a) Install doubler on forward side of frame at Sta. 219.05 picking up existing rivet locations, and install NAS1033-A3 nutplate on forward side of frame. Refer to Figure 2.
 - (b) Doubler for frame at Sta. 194 must be of sufficient length to cover the existing hole at Z station 28.20. Refer to Figure 3.
 - (c) Install NAS1033-A3 nutplate on aft side of frames at Sta. 210.00 and 201.75 for Adel clamp to support tube.
 - (d) Drill doublers as necessary to pick up existing rivet patterns, nutplates, etc. Add rivets where necessary using 6D to 8D spacing and maintaining 2D edge distance.
- (5) Use tube removed in step B.(1) if serviceable or fabricate a tube from .250 OD X .035W aluminum tubing (approximately 44.5 inches) using two each MS20819-4D sleeves and AN818-4D nuts.
- (6) Route tube fabricated in step (5), aft through holes at frames Sta. 184, 194, 201.75 and 219.05, connect to tee at static port.
- **NOTE:** If stereo speaker is mounted between frames at Sta. 210 and 219.05 and interferes with routing of tube assembly, move speaker up approximately 1/4 inch by drilling #10 holes in bracket supporting speaker, and enlarge notch on bracket to clear frame hole.

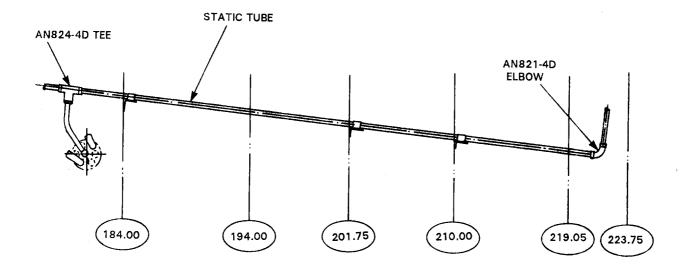
- (7) Support tube frames at Sta. 201.75, 210.00 and 219.05 with MS21919WDG4 clamps by attaching to nutplates using AN3-4A bolts and AN960PD10L washers.
- (8) Install caterpillar grommets MS21266-4N or equivalent in frame holes not using DG clamps.
- (9) Mark tube routed vertically between frames at Sta. 219.05 and 223.75 to Z-Sta. 56.10 for cutting. Remove clamps supporting tube, disconnect at Z-Sta. 56.10 and remove tube.
- (10) Cut tube, install sleeve and nut, flare tube and install using clamps removed in step 2.B.(9).
- (11) Connect tube to fitting at Z-Sta. 56.10 and use elbow P/N AN821-4D to connect tubes together at Z-Sta. 32.70
- (12) Connect a static tester to system and check for leaks and proper operation. Reference 1124/1124A Westwind Maintenance Manual, Chapter 34-10-01.
- C. Install cabin interior.

3. RECORD COMPLIANCE

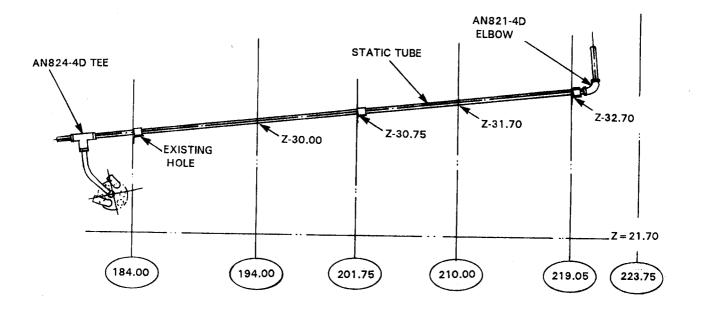
A. Make the following entry in the aircraft log book:

Service Bulletin 1124-34-109 dated December 11, 1991, titled "Navigation - Static Port Tubing Slope Inspection and Correction," has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

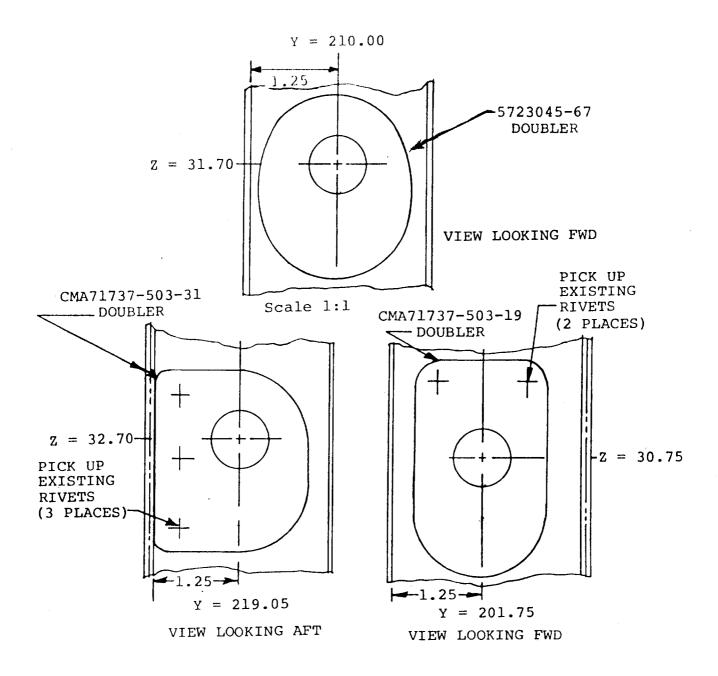


INCORRECT SLOPE



CORRECT SLOPE

VIEW LOOKING OUTB'D R.H.S. FIGURE 1

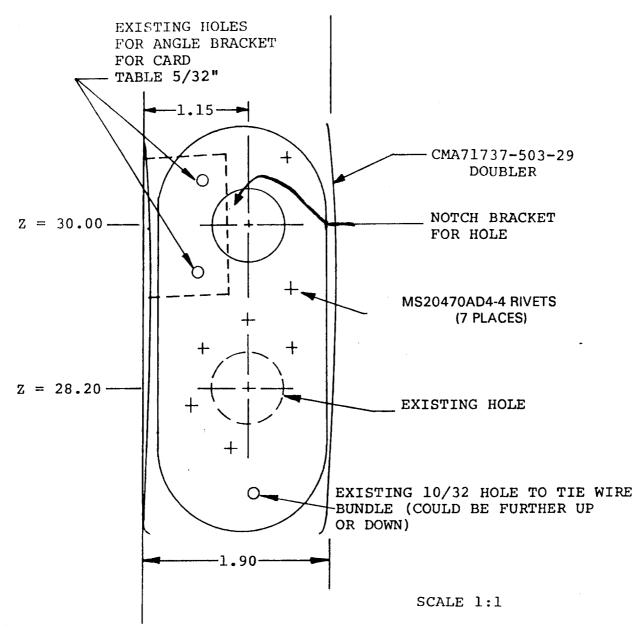


NOTE: Add P/N MS20470AD4-4 rivets as necessary at spacing of 6D to 8D maintaining 2D edge distance.

DOUBLER INSTALLATIONS FRAMES 201.75, 210.00, 219.05 FIGURE 2

December 11, 1991

SB 1124-34-109 Page 7 of 8 Y STATION 194.00



VIEW LOOKING FWD AT STATION 194.00 R/H SIDE

NOTE: Add P/N MS20470AD4-4 rivets as necessary at spacing of 6D to 8D maintaining 2D edge distance.

DOUBLER INSTALLATION FRAME 194.00 FIGURE 3

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December 11, 1991



OPTIONAL

SERVICE BULLETIN NO. 1124-32-110

March 11, 1992

SUBJECT: LANDING GEAR - EMERGENCY GEAR DOWN HANDLE

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To improve emergency gear down handle release mechanism operation.

C. DESCRIPTION

This service bulletin provides instructions to modify the existing emergency gear down handle release mechanism.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 1
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
1	A0425W358533-003	SLEEVE
1	N-5000-43-H	RETAINER RING

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Illustrated Parts Catalog, Chapter 32-30-00, Figure 4.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog, Chapter 32-30-00, Figure 4.

2. ACCOMPLISHMENT INSTRUCTIONS

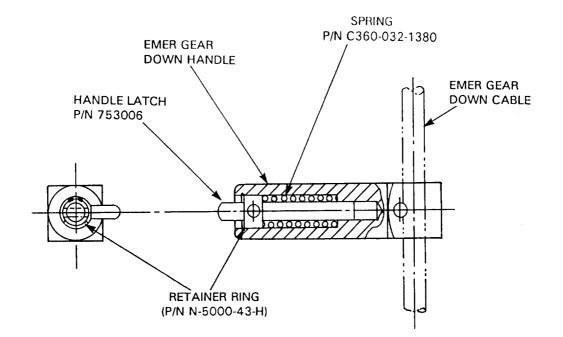
- A. Rotate emergency gear handle 90° to gain access to circlip retainer ring on end of handle/latch assembly. Refer to Figure 1.
- B. Remove circlip retainer ring, handle latch and spring from handle.
- C. Trim thumb pin length of handle latch to dimension shown in Figure 1, Detail A.
- D. Finish reworked area with matching topcoat.
- E. Insert handle latch and spring into P/N A0425W358533-003 sleeve, engaging thumb pin of handle latch into hole located at nine o'clock position of sleeve tube wall.
- F. Install latch and sleeve assembly into handle. Secure with new circlip retainer ring. Refer to Figure 2.
- G. Rotate handle to stowed position and latch.
- H. Operate handle latch to ensure smooth, positive release and secure stowage functions.

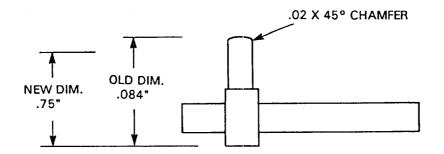
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-32-110 dated March 11, 1992, titled "Landing Gear - Emergency Gear Down Handle", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in Wilmington, Delaware.



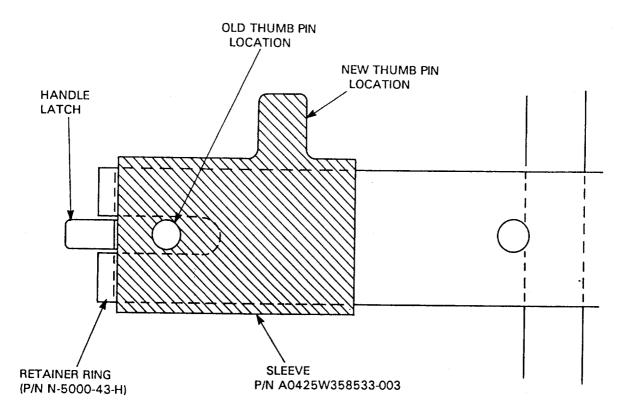


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DETAIL A (NOT TO SCALE) FIGURE 1

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March 11, 1992



P/N A0425W358533-003 SLEEVE INSTALLATION FIGURE 2



OPTIONAL

SERVICE BULLETIN NO. 1124-78-111

May 27, 1992

SUBJECT: EXHAUST - THRUST REVERSER FAULT TEST SWITCH RELIABILITY IMPROVEMENT (AFC 2084)

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To extend the service life of the thrust reverser fault test switch, Staco P/N 30271-18-N or Otto Controls P/N P4-10120-2 as applicable.

C. DESCRIPTION

Arc suppression diodes are added across the piggy back solenoid.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 4
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
2	BJE66 (OR EQUIVALENT)	DIODE (DEUTSCH)
4	327636 (AMP)	STEP DOWN SPLICE
4	1841-1-5620	PIN (DEUTSCH)

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Wiring Diagram Manual, Chapter 78-30-01. 1124/1124A Westwind Maintenance Manual, Chapter 78-30-00.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Wiring Diagram Manual, Chapter 78-30-01.

SB 1124-78-111 Page 2 of 4

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE: Reference 1124/1124A Westwind Wiring Diagram Manual, Chapter 78-30-01 and Figure 1.

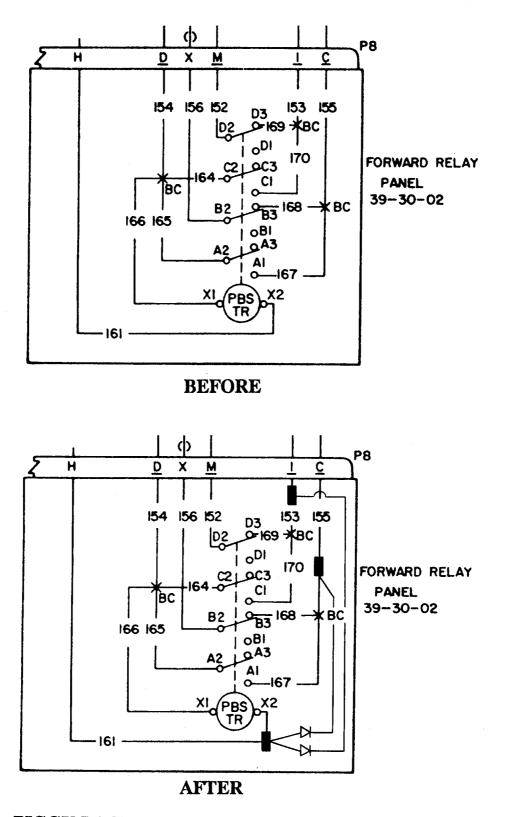
- A. Gain access to and remove forward relay panel for wiring modification of piggy back solenoid test relay (PBSTR).
- B. Locate jumper wire 155 from PBSTR contacts A1 and B3 connecting to P8 pin small C (C-).
- C. Cut wire 155, add new diode P/N BJE66 cathode (banded end) (with pin) using step down splice.
- D. Locate jumper wire 153 from PBSTR contacts C1 and D3 connecting to P8 pin small I (I-).
- E. Cut wire 153, add new diode P/N BJE66 cathode (banded end) (with pin) using step down splice.
- F. Locate wire 161 from PBSTR coil X2 connecting to P8 pin H. Splice the anode (free, unmarked) ends of both diodes above (with pins) to this wire.
- G. Reassemble forward relay panel.
- H. Perform operational check of thrust reversers. Reference 1124/1124A Westwind Maintenance Manual, Chapter 78-30-00, Maintenance Practices.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-78-111 dated May 27, 1992, titled "Exhaust - Thrust Reverser Fault Test Switch Reliability Improvement (AFC 2084)", has been accomplished this date ______.

- B. Revise 1124/1124A Westwind Wiring Diagram Manual, Chapter 78-30-01 to reflect changes accomplished by this service bulletin.
- C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



PIGGY BACK SOLENOID TEST RELAY WIRING FIGURE 1

SB 1124-78-111 Page 4 of 4

May 27, 1992



OPTIONAL

SERVICE BULLETIN NO. 1124-54-112

October 7, 1992

SUBJECT: NACELLES - COWL DOOR CORROSION - INSPECTION, PREVENTION AND REPAIR

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Grumman Aerospace has received reports from various model aircraft operators that corrosion has been found in cowl door skins in the area covered by stainless steel fire shields. Westwind engine cowlings are of similar design to those affected by corrosion.

C. DESCRIPTION

Inspect for corrosion, repair and apply preventative coating to inhibit future corrosion.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

SERVICE BULLETIN NO. 1124-54-112

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: Inspection -8 Repair - 8 Per Cowl Door
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
A/R	1124/25-B10300	SKIN/DOUBLER SET
1 pt.	GM41073B2 (PR1741C2)	SEALANT
A/R	NAS1097AD4	RIVET
A/R	1200	ALODINE
A/R		PRIMER, SKYDROL RESISTANT

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

None

L. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

PART A - CORROSION INSPECTION AND PREVENTION

- (1) Remove cowl doors from aircraft and place in a suitable cradle or other device to prevent damage to doors.
- (2) Drill out fasteners attaching outer skin to stringers as far as is necessary to gain access to the inside of the door outer skin, behind the stainless steel fire shield (approximately 12 inches from door edge). Refer to Figure 1.
- (3) Visually inspect for evidence of corrosion of the outer skin.
- (4) If no corrosion is found, proceed to step 2.A (5). If corrosion is found, proceed to Part B.
- (5) Apply P/N GM41073B2 sealant no more than .005 thick to "blind" side of CRES fire shield.
- (6) Reassemble outer skin, and fire shield with P/N NAS1097AD4 rivets. Install rivets wet with PR1422 sealer.
- (7) Paint door.
- (8) Reinstall door on aircraft, check for proper fit.
- (9) Proceed to Record Compliance.

PART B - CORROSION REPAIR

- (1) Repair door by splicing a new section of skin.
- (2) Remove stainless steel fire shield and set aside for re-use.
- (3) Pull old skin as far away from substructure as possible to prevent damage to the substructure when cutting away old skin.
- (4) Cut off old skin following a line half way between the second and third rows of rivets. Care should be taken not to damage skin as it will be used as a template to cut new skin section. Refer to Figure 1.

- (5) Use old skin as a template to mark new skin section from skin/doubler set P/N 1124/25-B10300 (use known offset equal to size of cutting tool to ensure proper fit).
- (6) Cut new skin section.
- (7) Position new skin section and clamp in place.
- (8) Locate doubler and back drill through existing structure and new door skin. Refer to Figure 1.
- (9) Drill 1/8 inch holes in doubler for two rows of P/N NAS1097AD4 rivets.

<u>CAUTION</u>: CARE SHOULD BE TAKEN NOT TO DRILL THROUGH RADII OF CHEM-MILLED AREAS OF SKIN.

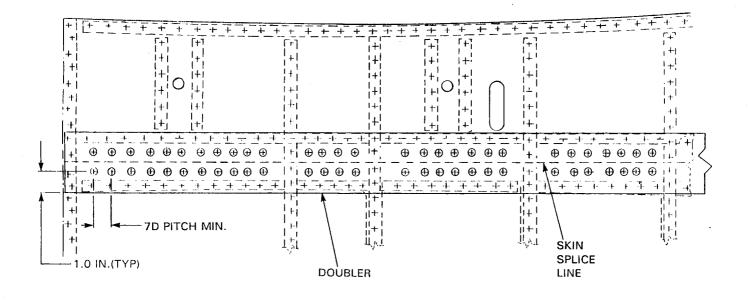
- (10) Coat external surface of doubler with Alodine 1200 and two coats epoxy primer. Coat internal surface of doubler with Alodine 1200 and two coats primer and .002 thick coat of P/N GM41073B2 sealant. Allow 24 hours to dry.
- (11) Apply P/N GM41073B2 sealant no more than .005 thick to "blind" side of CRES fire shield.
- (12) Rivet together new skin, fire shield and doubler with P/N NAS1097AD4 rivets. Install rivets wet with PR1422 sealer.
- (13) Apply aerodynamic sealer to all external air passage edges of doubler.
- (14) Paint door.
- (15) Reinstall door on aircraft, check for proper fit.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-54-112 dated October 7, 1992, titled "Nacelles - Cowl Door Corrosion - Inspection, Prevention and Repair", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



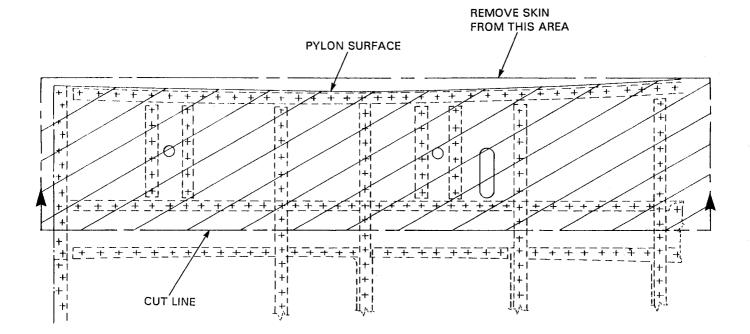


FIGURE 1

SB 1124-54-112 Page 5 of 5

October 7, 1992





SERVICE BULLETIN NO. 1124-56-113

June 22, 1994

SUBJECT: WINDOWS - IMPROVED COCKPIT SIDE WINDOW INSTALLATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

Cockpit side windows (outer) have cracked in service at random attach points.

C. DESCRIPTION

This service bulletin provides instructions to install newly designed cockpit side window assemblies. The new design incorporates features that reduce stress concentration around bolt hole attachments. Assemblies include new fuselage skins to make windows interchangeable, which eliminates drilling operation for future replacement.

D. COMPLIANCE

Compliance is optional and at the operators' convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

(1) Estimated man-hours:

Left cockpit side window: 65

Right cockpit side window: 55

(2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. Material

QTY	PART NUMBER	DESCRIPTION
1	343017-507-51	LEFT COCKPIT SIDE WINDOW
1	343003-501-52	INSTALLATION RIGHT COCKPIT SIDE WINDOW
A/R	343031	INSTALLATION SEAL, DV WINDOW
A/R A/R	PR1422B 2024-T3	SEALANT (OR EQUIVALENT) AL ALLOY SHEET FOR SHIMMING

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable

J. ELECTRICAL LOAD DATA

Not applicable

K. REFERENCES

1124/1124A Westwind Maintenance Manual, Chapter 53-00-00, 56-00-00, 56-10-03, and 56-10-04. 1124/1124A Westwind Illustrated Parts Catalog, Chapter 56-10-00. L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapter 56-10-03 and 56-10-04. 1124/1124A Westwind Illustrated Parts Catalog, Chapter 56-10-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Support aircraft to extent that structure is stable during drilling operation for side window skin replacement.
- B. Disconnect aircraft batteries.
- C. Placard aircraft: NO ELECTRICAL POWER.
 - <u>NOTE</u>: The following instructions are for left cockpit side window installation, except for direct vision (DV) window installation, right installation procedure is nearly opposite.

CAUTION: USE COLD LIGHTING EQUIPMENT ONLY, TO AVOID DAMAGE TO ACRYLICS AND PLASTICS.

- D. Prepare aircraft for window replacement as follows:
 - (1) Remove cockpit seats.
 - (2) Remove fire warning relay box (under pilot seat) and forward relay box (under co-pilot seat).
 - (3) Remove trim, upholstery, and equipment as necessary to access fasteners attaching side window skin to aircraft structure.
 - (4) Protect remaining cockpit equipment (consoles, throttle quadrant, instrument panel, windshield inner surface, etc.) from possible damage.
 - (5) Inspect DV window installation. Note fit in opening and flushness or mismatch to side window skin for reinstallation. Remove DV window, saving any shim or shims, noting position for possible reuse. Inspect condition of window seal. Replace if damaged.
 - (6) Mask off windshield outer surface and fuselage all around side window skin butt joints.
 - (7) Carefully remove sealant in butt joints all around edge of side window skin.

<u>CAUTION</u>: DO NOT USE METALLIC SCRAPERS OR WHEELS, DAMAGE TO STRUCTURE WILL LIKELY RESULT. USE PHENOLIC OR PLASTIC SCRAPERS AND CORK WHEELS FOR SEALANT REMOVAL.

- E. Remove side window and skin as an assembly. Separating window from skin is not necessary.
 - (1) Remove top row of fasteners first. Remove remaining fasteners in any convenient sequence. To aid reassembly, map fastener position (for grip length) during disassembly.
 - (2) Separate skin from aircraft, beginning with lower aft corner, by carefully forcing a cutting wedge (made from non-metallic material) between skin and structure to break sealant bond.
 - (3) Remove all remaining sealant, noting position of any shims. Save shims for possible reuse. Replace damaged shims as necessary during installation of new skin assembly.
- F. Temporarily lay up new skin assembly to opening in aircraft structure.
 - <u>NOTE</u>: All the following work steps are best accomplished, though not required, at room temperature or warmer. Airframe and window temperature should be stabilized.
 - (1) Position skin assembly to best match contour of airframe. New skin may not necessarily match contours perfectly, since temperature changes can cause acrylic materials to change shape. Gaps in contour are easily closed during fit, trim and final assembly by tightening fasteners one by one, working toward gap(s).
 - (2) From inside aircraft, inspect all around new outer window for clearance from structure. If interference exists, mask to protect new skin along window edge, trim window as necessary to achieve clearance, and restore surface finish, reference 1124/1124A Maintenance Manual, Chapter 56-00-00, Approved Repairs.
 - (3) Make from shop pattern paper a template to match old skin edges and window opening. Use template to lay out cut line on new skin.
 - (4) After initial trimming, set new window and skin in opening and hold in place. Back drill holes through new skin, beginning with bottom row, working up to but not including top row (nut strip). Clamp skin tightly in place with wing nut clecos, one by one as holes are drilled. If a gap is to great to safely close without damaging hole in structure with a cleco, use bolts P/N AN4-X, washers P/N AN960-416, and nuts P/N AN315-4 (or equivalent).

- (5) Make a template from .050 inch AL Alloy 2024-0 (or equivalent), to locate top row of holes. Use old window skin for pattern as follows:
 - (a) Back drill and bolt template to old skin in forward, center and aft holes of second row, one by one.
 - (b) Form template to match contour of old skin and back drill top row of holes.
- (6) Bolt template to forward, center, and aft holes of second row on outside of new skin and pilot drill top row with # 30 drill and drill bushing. Use drill stop to prevent damage to nut plates on blind side. Remove template and complete drilling, again using drill stop.
- (7) Clean out holes, install bolts and tighten.
- (8) With new skin clamped tightly in place, inspect gaps in butt joints. Lay out cut line on new skin to achieve .020 to .050 inch gap in butt joints, constant all around. Inspect butt joints all around for flushness. Measure any mismatch, and mark location and thickness, including taper for shims.
 - NOTE: Allowance must be made for sealant thickness (.010 to .015 inch nominal), during final assembly.
- G. Remove new skin assembly for final trimming.
 - (1) Trim new skin along cut line as laid out. Remove sharp edges and sharp corners. Chamfer inner surface of new skin edge .050" x 45°.
 - (2) Reuse or replace shims as required.
 - (3) Install skin assembly with shims and clamp tightly in place all around. Verify gap and flushness requirement of paragraph 2.F.(8). Refit as required.
 - (4) After final fit is achieved, countersink all holes with piloted cutter and adjustable stop. Thoroughly clean with MEK and Scotch-Brite type pad all skin surfaces in preparation for sealing. Alodine, rinse, and spot prime bare areas with fluid resistant epoxy primer. Alodine, rinse, and epoxy prime shims.
 - (5) Clean and spot prime surfaces of frames all around fuselage opening.

CAUTION: DO NOT ALODINE ANY AREA ON AIRCRAFT STRUCTURE. OXIDATION CAN OCCUR IN JOINTS NOT COMPLETELY RINSED AND NEUTRALIZED.

- H. Install new side window and skin assembly.
 - (1) Mix sealant P/N PR1422B in accordance with manufacturers' instructions.
 - (2) Coat shims (if any) and surfaces of frames all around fuselage opening with sealant. Set shims and new skin assembly in place. Install new fasteners wet with sealant under heads, in any convenient sequence. Torque fasteners 50-70 inch pounds, observing squeeze out of sealant in skin butt joints, and all around skin and frames inside fuselage.
 - (3) Squeegee excess sealant from skin all around butt joints and allow to cure. Sand smooth and flush to skin prior to painting.
 - (4) Transfer all brackets, supports and angles, etc., from old window assembly to new assembly, installing in same position for proper fit of window reveal and trim.
- I. Install DV window.
 - (1) Remove DV window hinge upper half P/N 343017-51. Install new hinge half P/N 343017-51 on DV window with new hinge pin and stake both ends.
 - (2) Install DV window to achieve same or better fit as in paragraph 2.D.(5).
 Mismatch tolerance of DV window outer surface to new skin outer surface is + 0.000 - 0.125 inch.
 - (3) Leak check DV window as follows:
 - (a) Direct water spray at DV window.
 - (b) Check in cockpit for water penetration.
 - (c) Open DV window and check for water dripping into cockpit from opening.
 - (4) If DV window fails leak check, verify seal is not damaged and create a form in place airframe seal around window opening as follows:
 - (a) Secure DV window in open position with hold open stud.
 - (b) Clean inner surfaces of skin and zee angle all around window opening, to provide good sealant bond.
 - (c) Mask outer surface of skin all around window opening.
 - (d) Coat inner surfaces from edge of opening to periphery of seal contact area with liberal amount of sealant P/N PR1422B.

- (e) Coat window and seal with release agent (petroleum jelly), close and latch window.
- (f) Repeat cleaning, sealant coats, and release agent application, until positive squeeze out is achieved all around window seal on inner surface and outer surface of window.
- J. Finish new installation to match aircraft colors.
- K. Install all removed furnishings and equipment.
- L. Perform operational checks of all systems affected.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-56-113 dated June 22, 1994, titled "Windows -Improved Cockpit Side Window Installation", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



RECOMMENDED

SERVICE BULLETIN NO. 1124-53-114

October 28, 1992

SUBJECT: FUSELAGE - FLOOR PANEL INSULATION REMOVAL

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To eliminate the possibility of floor panel insulation at station 103.78 from coming loose and interfering with the normal operation of the pressurization system outflow valves.

C. DESCRIPTION

This service bulletin provides instructions for removal of insulation on the bottom of the floor panels located above the outflow valves and installation of C-3201-25 insulation if desired.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operator's earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: 3
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
A/R	C-3201-25 ALPSA	INSULATION

Material required to accomplish this service bulletin may be procured locally or obtained through Astra Jet Corporation, New Castle, Delaware.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

None

L. PUBLICATIONS AFFECTED

None

SERVICE BULLETIN NO. 1124-53-114

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove center floor panels at station 103.78 above the pressurization outflow valves.
- B. Inspect the underside of the panels to determine if thin green insulation material is present.
- C. If green insulation material is installed, remove using a plastic scraper.

NOTE: Use caution to prevent damage to the corrosion protective coating on the floor panels. If coating is damaged the panel must be treated with Alodine 1201.

- D. Clean floor panels with MEK and allow panels to dry.
- E. Cut C-3201-25 insulation to match floor panel and attach to underside of panel.
- F. Reinstall floor panels.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-53-114 dated October 28, 1992, titled "Fuselage - Floor Panel Insulation Removal", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



SERVICE BULLETIN NO. 1124-21-115 REVISION 1

August 3, 1994

TRANSMITTAL SHEET

This sheet transmits Revision 1 to Service Bulletin No. 1124-21-115 dated June 23, 1993, titled "Air Conditioning - Improve Operation of Cabin Auto Temp System".

REASON FOR REVISION

To revise Material Parts List and Accomplishment Instructions to add a ground suppression diode.

Aircraft that have complied with the original issue of this service bulletin should accomplish changes added by this revision.

This is a COMPLETE REVISION. Please remove and discard all pages of previous issues and replace with the pages of this revision.

LIST OF EFFECTIVE PAGES

PAGE NO. DATE

1 through 5 August 3, 1994

PREVIOUS REVISIONS OF SB 1124-21-115

None

Transmittal Page 1 of 1



OPTIONAL

SERVICE BULLETIN NO. 1124-21-115

June 23, 1993

SUBJECT: AIR CONDITIONING - IMPROVE OPERATION OF CABIN AUTO TEMP SYSTEM

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, serial numbers 259 and subsequent.

B. REASON

To insure proper operation of the cabin temperature system when in Auto Temp mode with small temperature variations.

C. DESCRIPTION

This service bulletin outlines procedures for adding two relays in Auto Temp System for more positive control of refrigeration by-pass valve.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

R Revision 1, August 3, 1994 June 23, 1993 5183

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The following information is for planning purposes only:

- (1) Estimated man-hours: 4
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

	<u>QTY.</u>	PART NUMBER	DESCRIPTION
R	2	MS27401-14	RELAY
R	2	000300-1194	RELAY SOCKET
		OR	
R		M12883/41-01	
	A/R	MIL-W-22759/34	WIRE #22AWG
R	1	1N4005	DIODE
			0.001

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Wiring Diagram Manual, Chapter 21-00-01.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Wiring Diagram Manual, Chapter 21-00-01.

R SB 1124-21-115 Page 2 of 5

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove all electrical power from aircraft.
- B. Access right D.C. Contactor Box.
- C. Add two new relay sockets P/N 000300-1194 or M12883/41-01, directly beneath relay GTR-2. Label one socket as COOL and second socket as HEAT. Perform the following wire changes. Refer to Figure 1 and 2.
 - (1) Disconnect wire #105 from pin A1 of relay APR. Connect to pin X1 of new relay HEAT, splice as required.
 - (2) Disconnect wire #104 from pin B1 of relay APR. Connect to pin X1 of new relay COOL, splice as required.
 - (3) Connect new #22AWG wire (wire #283) to pin A1 of relay APR. Connect free end to pin A1 of new relay HEAT.
 - (4) Connect new #22AWG wire (wire #282) to pin B1 of relay APR. Connect free end to pin A1 of new relay COOL.
 - (5) Connect new #22AWG wire (wire #281) to wire #165 at pin E of plug P6 using proper splice. Connect free end to pin A2 of new relay HEAT with jumper to pin A2 of new relay COOL. Use proper splice.
 - (6) Connect new #22AWG wire (wire #284) to ground stud inside the box. Connect free end to pin X2 of new relay HEAT with jumper to pin X2 of new relay COOL. Use proper splice.
 - (7) Connect cathode (banded end) of new diode P/N 1N4005 to wire #281. Connect anode of new diode to wire #284. Use proper splices.
 - (8) Install new relays P/N MS27401-14 in new sockets HEAT and COOL. Clean work area.
 - D. Check Manual and Automatic Modes of Operation.
 - (1) Place cabin temperature selector in passenger cabin to mid range.
 - (2) Apply DC and AC electrical power to aircraft.
 - (3) With the AUTO/MANUAL temperature control switch in MAN position, press HOT switch for at least 11 seconds. Verify that refrigeration bypass valve (hot air valve) is in full open position. (See valve pointer.) Observe the cabin temperature sensor fan is operating.
 - (4) Press COLD switch for at least 11 seconds. Verify that refrigeration bypass valve is fully closed.

R Revision 1, August 3, 1994 June 23, 1993 SB 1124-21-115 Page 3 of 5

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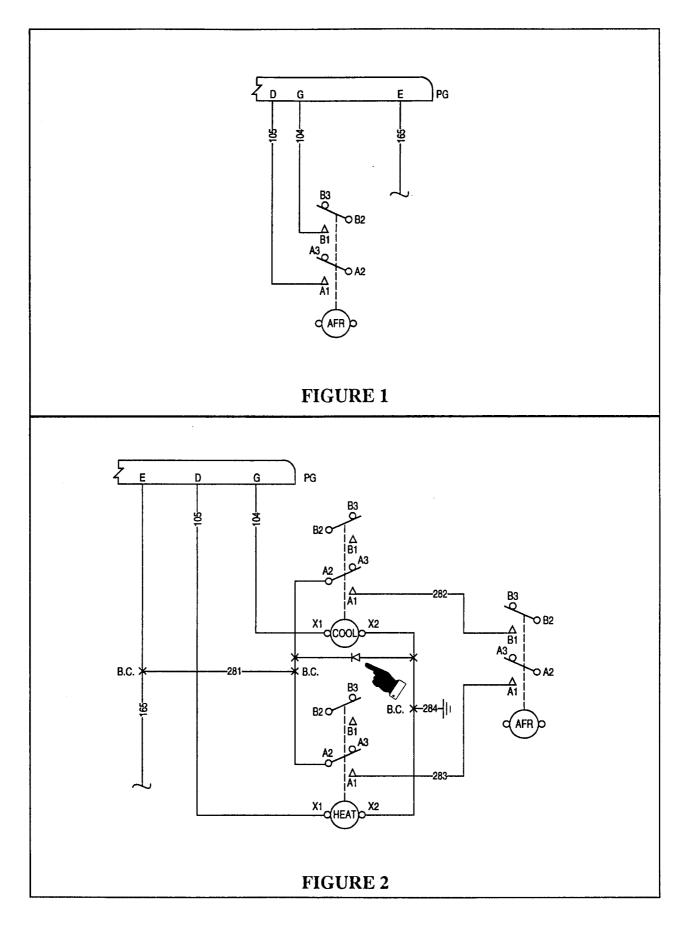
- (5) Start right engine. Reference Airplane Flight Manual.
 - **NOTE:** In the following steps, if cabin temperature fan senses ambient temperature as hot or cold, automatic temperature system will require additional time to respond to that selection.
- (6) With cabin air selector to R ENG and temperature control switch in AUTO, place cockpit temperature selector switch to HOT. Check that hot air is evident within one minute of operation.
- (7) Rotate cockpit temperature selector switch to COLD. Check that cold air is evident within one minute of operation.
- E. Close items opened to access right DC contactor box.

3. RECORD COMPLIANCE

R

- A. Make the following entry in the aircraft log book:
- Service Bulletin 1124-21-115 Revision 1, dated August 3, 1994, titled "Air Conditioning - Improve Operation of Cabin Auto Temp System", has been accomplished this date
 - B. Revise 1124/1124A Westwind Wiring Diagram Manual, Chapter 21-00-00 to reflect changes accomplished by this service bulletin.
 - C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

SERVICE BULLETIN NO. 1124-21-115



Revision 1, August 3, 1994 June 23, 1993

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RECOMMENDED

SERVICE BULLETIN NO. 1124-32-116

November 23, 1994

SUBJECT: LANDING GEAR - NOSE WHEEL STEERING SYSTEM - STEERING CONTROL CABLE DRUM

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Steering cable drums have been found incorrectly installed in the fleet.

C. DESCRIPTION

This service bulletin provides instructions for a one time inspection of the cable drum installation and necessary corrective action.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished within the next 150 flight hours.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: Inspection 2 Correction - 10
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

None.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Maual, Chapter 32-50-00.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapter 32-50-00. 1124/1124A Westwind Illustrated Parts Catalog, Chapter 32-50-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove cockpit interior furnishings as required to access steering tiller cable drum located in pilot sidewall.
- B. Inspect steering cable drum for correct installation as shown in Figure 1. Head of cable lock screw is located forward and up.
 - (1) If installation is as shown no further action is required. Proceed to D.

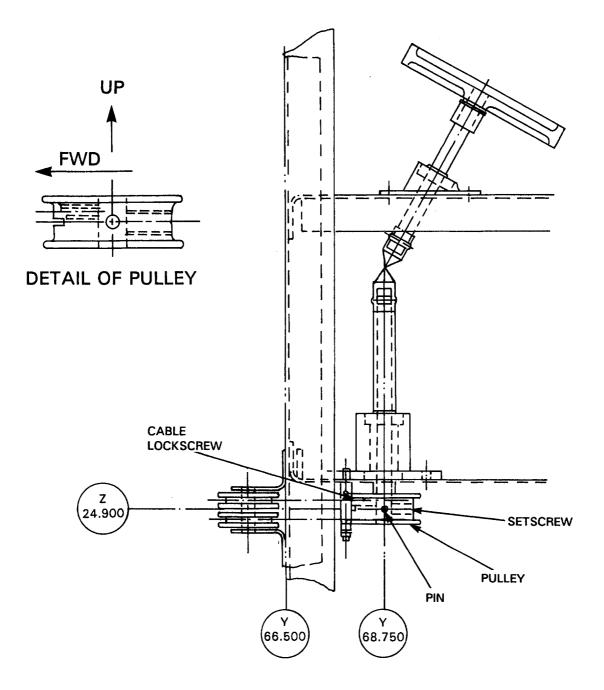
- (2) If installation is not as shown. Remove steering cable drum and assemble as shown.
- C. Perform Steering System Rigging. Reference 1124/1124A Maintenance Manual Chapter 32-50-00, Maintenance Practices.
- D. Install cockpit interior furnishings removed.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-32-116 dated November 23, 1994, titled "Landing Gear - Nose Wheel Steering System - Steering Control Cable Drum", has been accomplished this date ______.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



View Looking Inboard FIGURE 1



OPTIONAL

SERVICE BULLETIN NO. 1124-25-117

January 27, 1993

SUBJECT: EQUIPMENT/FURNISHING - PASSENGER LIFE VEST ACCESSIBILITY

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To allow operators to comply more specifically with CAR 4b.646(d), which requires life preservers within easy reach of each seated occupant during extended over water flights.

C. DESCRIPTION

This service bulletin provides instructions to install velcro straps to allow life vests to be positioned in front of passenger seats for easier access.

D. COMPLIANCE

Compliance is required for extended over water operation.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: 2
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
*.5′	190774	Velcro "HOOK", Fire Retardant, Black
* 2′	190691	Velcro "LOOP", Fire Retardant, Black
A/R	1300L	3M Scotch Grip Adhesive

*PER SEAT

Material required to accomplish this service bulletin may be procured locally or obtained through Astra Jet Corporation, New Castle, Delaware.

H. TOOLING

Sewing machine if desired.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

CAR 4b.646(d).

L. PUBLICATIONS AFFECTED

None.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove passenger seat lower cushions.
- B. Manufacture strap to secure life vest:
 - (1) Obtain 2" wide length of "Loop" velcro.
 - (2) On one end, glue or sew a 2"x3" piece of "Hook" velcro by placing both pieces backing side to backing side.
- C. Lay completed strap out, "Loop" side up.
- D. Place life vest and pouch on "Loop" strap. Wrap strap around vest and secure at "Hook", loop junction.
- E. Place life vest with strap assembly in front of seat cushion upper base and allow life vest to hang from velcro strap. Refer to Figure 1.
- F. When desired location is achieved, cut velcro "Loop" strap to appropriate length.
- G. Secure backing side of "Loop" strap to seat cushion support with 3M Scotch Grip P/N 3M 1300L. Refer to Figure 1.
- H. Perform same installation sequence with remaining cabin seats.
- I. Life vests may now be left in this position for over water flight or rolled up with strap and placed in original location under seat cushion.
- J. If desired, an additional 2"x3" piece of "Loop" velcro may be attached to upper forward seat base and a mating piece of velcro "Hook" fastened to strap where it meets seat base to prevent vest from swinging.
- K. Replace vest in receptacles under seat cushions.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-25-117 dated January 27, 1993, titled "Equipment/Furnishing -Passenger Life Vest Accessibility", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware

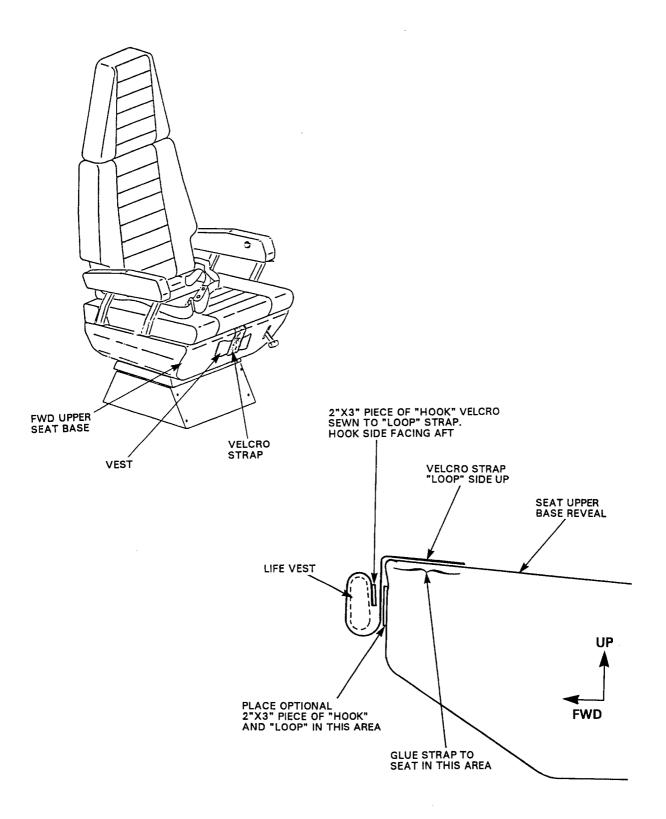


FIGURE 1

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.



OPTIONAL

SERVICE BULLETIN NO. 1124-53-118

January 26, 1994

SUBJECT: FUSELAGE - FRAME REINFORCEMENT REPAIR INSTALLATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To provide a structural repair and reinforcement installation for left and right fuselage sta. 166.25 through 219.05 frames inspected during the Structural Inspection Program.

Compliance with this service bulletin extends repetitive Structural Inspection Program intervals of reinforced frames from 600 hours to 4800 hours.

C. DESCRIPTION

Instructions are provided for the installation of repair brackets and straps applicable to left and right fuselage sta. 166.25 through 219.05 frames.

D. COMPLIANCE

Compliance is optional and at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: 150
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
1	A06-WW5313003	KIT (STA. 174 & 194 FRAMES)
5	A05-WW5313003	KIT (STA. 166, 184, 201, 210 or 219 FRAMES
A/R	MS20470AD5	RIVET
A/R	MS20426AD4	RIVET
A/R	CR3242-4	RIVET
A/R	CR3243-4	RIVET
A/R	PR1422B2	SEALANT

NOTE: One kit P/N A06-WW5313003 contains required components to repair and reinforce left and right sides of fuselage frames 174 and 194.

One kit P/N A05-WW5313003 contains required components to repair and reinforce left and right sides of one (1) fuselage frame at sta. 166.25, 184.00, 201.75, 210.00 or 219.05.

Each kit P/N A06-WW5313003 or P/N A05-WW5313003 contains blind rivets and bolts required. Additional rivets listed above as required (A/R) are not included in kits.

Refer to Table in Figure 3 for breakdown of kits.

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Overall weight increase and center of gravity change will vary based upon number and station location of kit(s) installed. Installer shall determine weight of kit(s) installed at each location and record for calculating aircraft weight and balance.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

IAI Drawing A06WW5313003 and A05WW5313003.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, Chapter 5-40-01.

2. ACCOMPLISHMENT INSTRUCTIONS

- <u>NOTE</u>: It is suggested that both left and right sides of affected frame(s) be reinforced concurrently.
- NOTE: Accomplishment instructions are for sta. 174.00 and 194.00 frames, referencing Figure 1. Refer to Figure 2 for sta. 166.25, 184.00, 201.75 210.00 and 219.05 frames using the same instructions.
- A. Remove inboard and outboard seat tracks. Remove fasteners securing floor panels from sta. 149.75 to sta. 223.75 and remove panels.
- B. Prior to installation of repair components, all cracks in frames must be stop drilled to .125", deburred and finished with epoxy primer.
- C. Place bracket (1) in place on forward side of sta. 174.00 frame and mark existing rivets requiring removal.
 - NOTE: Bracket (1) is installed on forward side of sta. 174.00, 201.75 and 219.05 frames. All other frames, bracket (1) is installed on aft side.
- D. Remove marked rivets and transfer rivet locations to bracket (1). Pay particular attention to fit of bracket (1) in radius of flange and web of frame.

E. Remove bracket and lay out additional rivet locations in reference to existing rivet holes. Drill pilot holes in bracket as required. Refer to Figure 1.

NOTE: Figure 1 is for reference only. Actual rivet pattern may differ. Adjust rivet locations as required to insure proper pitch and edge distance.

- F. Place bracket (1) on frame, secure in place and transfer new holes to frame. Drill rivet holes at transferred locations.
- G. Determine location of angle (3) and remove existing rivets through aircraft skin and frame as required. Transfer these holes to angle (3). Lay out and drill additional rivet holes in angle (3). Refer to Figure 1.
- H. Locate angles (4) and (5) in position and transfer existing holes to angles (4) and (5). Refer to Figure 1.
- I. With all components clamped in position, place filler (7) (sta. 174.00 and 194.00 frames only) and floor panels in position.
- J. Preform strap (2) to match contour of frame. Mark and drill fastener holes. Refer to Figure 1 and 3.
 - NOTE: Insure new fasteners do not interfere with existing structure.
 - NOTE: On sta. 194.00 frame only, include installation of filler (6) to compensate for floor lap joint. Refer to Figure 1.
- K. Remove all parts, deburr and finish with epoxy primer.
- L. Install bracket (1), and angles (3), (4) and (5) with fasteners indicated in Figure 1.
 - NOTE: Coat faying surfaces of angle (3) and frame flange with sealant P/N PR1422B2. Install rivets which pass through aircraft skin wet with sealant P/N PR1422B2.
- M. Install filler (7) (sta. 174.00 and 194.00 frames only), floor panels and strap (2) with fasteners indicated in Figure 3. Use existing type of fasteners, P/N MS20426AD4, CR3242-4 and CR3243, to secure remainder of floor panel.
 - NOTE: Install rivets which pass through aircraft skin wet with sealant P/N PR1422B2.
 - NOTE: Install filler (6), to compensate for floor lap joint, at sta. 194.00 frame only.

N. Install seat tracks.

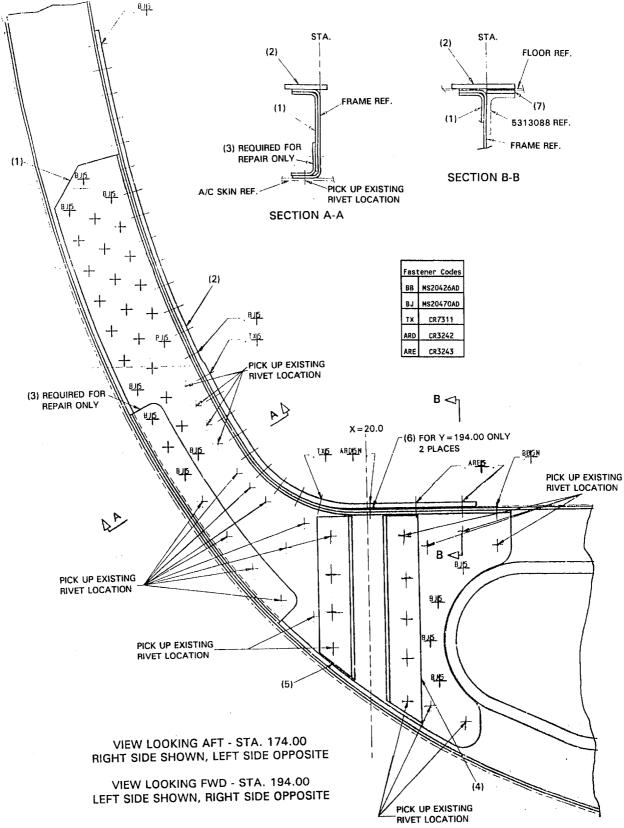
NOTE: Phenolic spacer under seat track will require notching at each repaired frame location.

3. RECORD COMPLIANCE

- A. Revise aircraft Airplane Flight Manual Weight and Balance.
- B. Make the following entry in the aircraft log book:

Service Bulletin 1124-53-118 dated January 26, 1994, titled "Fuselage - Frame Reinforcement Repair Installation", has been accomplished this date _____.

C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



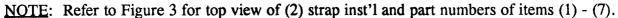
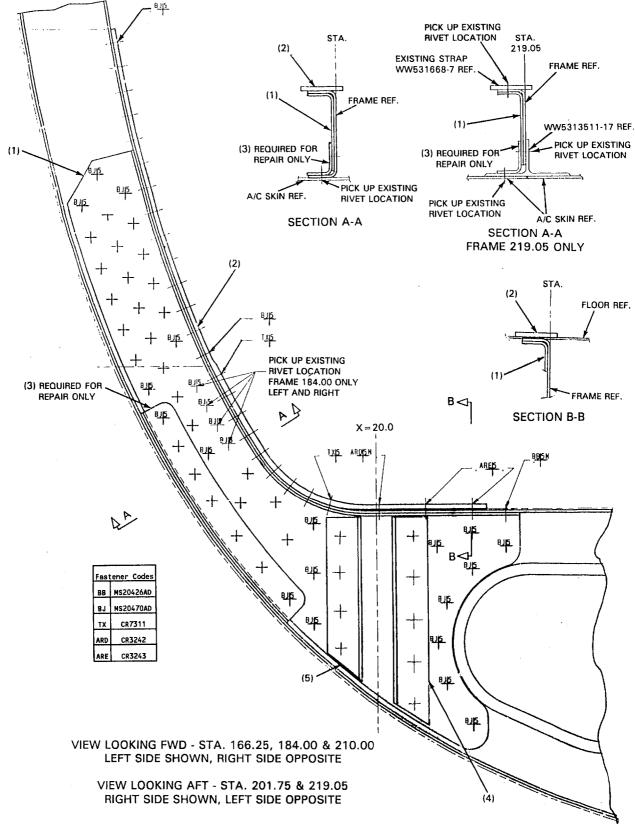


FIGURE 1

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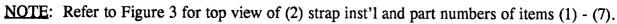
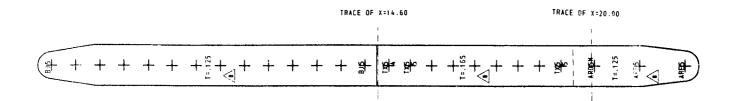


FIGURE 2

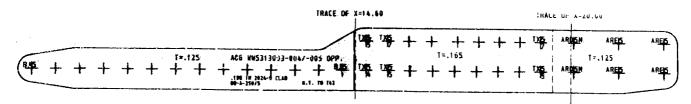
SERVICE BULLETIN NO. 1124-53-118

FRAME	166	5.25	174	.00	184	.00	194	.00	201	.75	210	0.00	219	.05
ITEM	LH	RH	LH	RH										
(1) Bracket A06-WW5313003	-002	-003	-003	-002	-002	-003	-002	-003	-003	-002	-002	-003	-003	-002
(2) Strap A06-WW5313003			-005	-004			-004	-005						
(2) Strap A05-WW5313003	-002	-002			-002	-002			-002	-002	-002	-002	* Exist	* Exist
(3) Angle A06-WW5313003	-008	-009	-009	-008	-008	-009	-008	-009	-009	-008	-008	-009	-009	-008
(4) Angle 5323006	-19	-20	-20	-19	-19	-20	-19	-20	-20	-19	-19	-20	-20	-19
(5) Angle 5323006	-21	-22	-22	-21	-21	-22	-21	-22	-22	-21	-21	-22	-22	-21
(6) Filler A06-WW5313003							-006	-006						
(7) Filler 5313011			-309	-309			-309	-309						

* P/N WW5313668-7



STA. 166.25, 184.00, 201.75, 210.00 & 219.05 FRAMES



STA. 174.00 & 194.00 FRAMES





RECOMMENDED

SERVICE BULLETIN NO. 1124-26-119

June 23, 1993

SUBJECT: FIRE PROTECTION - INSPECTION OF AFT FIRE EXTINGUISHER LINE IN LEFT AND RIGHT ENGINE PYLONS

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

Field experience has revealed that the B-nut attached to firewall fitting inside pylon may be loose.

C. DESCRIPTION

This service bulletin provides instructions for inspecting suspect line.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at next 150 hour periodic inspection or engine removal whichever occurs first.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: 1
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

None.

H. TOOLING

% inch crows foot24 inch extension

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual Chapter 26-20-00. 1124/1124A Westwind Illustrated Parts Catalog, Chapters 26-20-00 and 54-30-00.

L. PUBLICATIONS AFFECTED

None.

SB 1124-26-119 Page 2 of 5

2. ACCOMPLISHMENT INSTRUCTIONS

NOTE: Instructions are provided with either engines installed or removed.

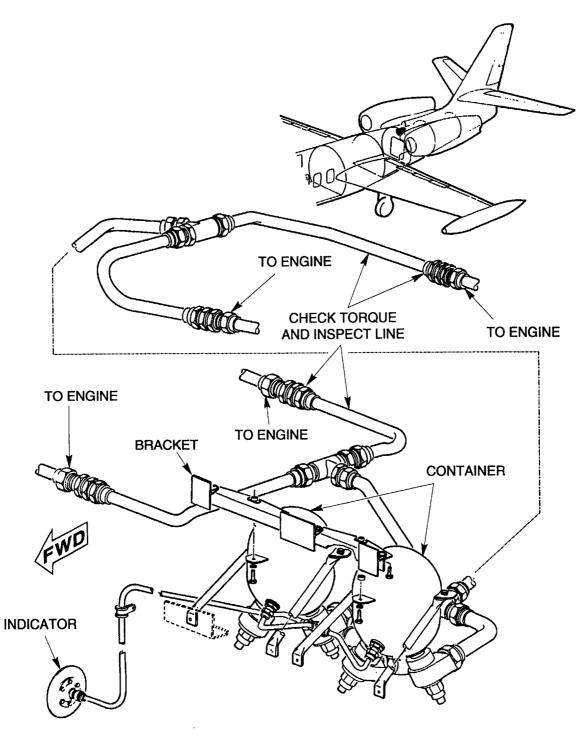
- A. Engines not removed.
 - (1) Gain access to fire extinguisher lines by removing forward wall from aft baggage area.
 - (2) Using a flashlight and mirror inspect lines for signs of external damage. Refer to Figure 1.
 - (3) Using a 7/8 inch crows foot, 24 inch extension and ratchet, verify lines are tight on bulkhead fittings.
 - (4) Install panel.
- B. Engines Removed
 - (1) Gain access to fire extinguisher lines by removing oval panels on firewall. Refer to Figure 2.
 - (2) Inspect lines for any signs of external damage. Refer to Figure 1.
 - (3) Using a 7/8 inch wrench, verify lines are tight on bulkhead fittings.
 - (4) Install panel.

3. **RECORD COMPLIANCE**

A. Make the following entry in the aircraft log book:

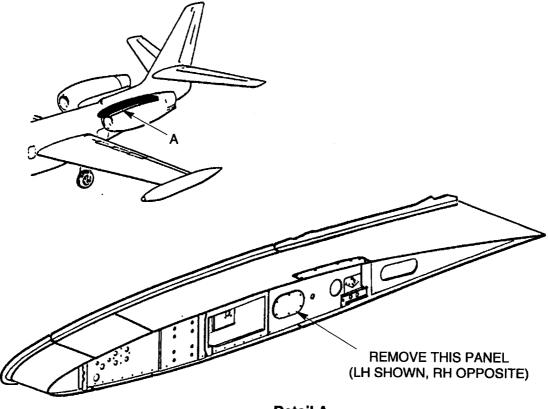
Service Bulletin 1124-26-119 dated June 23, 1993, titled "Fire Protection - Inspection of Aft Fire Extinguisher Line in Both Engine Pylons", has been accomplished this date ______.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



Extinguishing System Installation

FIGURE 1



Detail A

FIGURE 2





SERVICE BULLETIN NO. 1124-24-120

June 22, 1994

SUBJECT: ELECTRICAL POWER - IMPROVED GROUND RETURNS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To improve engine start cycle and DC generator system operation by providing improved high current ground returns.

C. DESCRIPTION

This service bulletin provides instructions for enlarging ground contact areas and installing new hardware to improve ground returns.

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

The following information is for planning purposes only:

- (1) Estimated man-hours: 8
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY	PART NUMBER	DESCRIPTION
7	AN6-6A	BOLT
7	MS35338-46	LOCK WASHER
14	MS14151-5	WASHER (CADMIUM PLATED, SPECIAL)
7	AN960-616L	WASHER
7	MS21042-L6	NUT

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual Chapter 24-30-01. 1124/1124A Westwind Airplane Flight Manual

L. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove all aircraft power. . Remove both aircraft batteries.
- B. Remove baggage partitions (Fwd, Aft, Up) as necessary to gain access to the following ground points:
 - (1) 38 GND #2 battery ground return (Sta. 340 RHS)
 - (2) 39 GND #1 battery ground return (Sta. 340 LHS)
 - (3) 87 GND, 88 GND, 89 GND and 90 GND #1 and #2 generator ground returns (Sta. 383 overhead, left and right of aircraft centerline) on aft wall of forward baggage compartment. Refer to Figure 2.
 - (4) 28 GND, external power (Sta. 403.45 lower $X_L = 4.0$ approx.)
- C. Remove and discard all hardware attaching terminal lugs to airframe.
- D. Remove any nutplates found at above locations.
 - (1) Countersink nutplate mounting rivet holes both sides of structure.
 - (2) Fill rivet holes with appropriate sized soft rivet.
 - (3) Insure both ends of fill rivets are flush with structure.
- E. For 28 GND only; enlarge hole in structure (Frame 403.45) and in terminal lug 28 GND to 0.385-.400 inches if required. Refer to Figure 3
- F. Remove all paint and primer from both sides of all terminal lugs and mating area structure.
 - (1) Enlarge contact areas of all ground attach points on both sides of structures to 1.1 inch diameter.
 - (2) Buff out any areas noted to be pitted or discolored due to arcing. Do not scratch newly prepared surfaces.
 - (3) Replace any terminal lugs with visible signs of arcing or discoloration.
- G. Lightly apply Iridite 14-2 or equivalent to all newly prepared surfaces to retain electrical conductivity and prevent corrosion. Follow manufacturers instructions to prevent over treatment.
- H. Assemble grounds using new hardware. Head of bolt on aft side of extrusion. Refer to Figure 1.

June 22, 1994

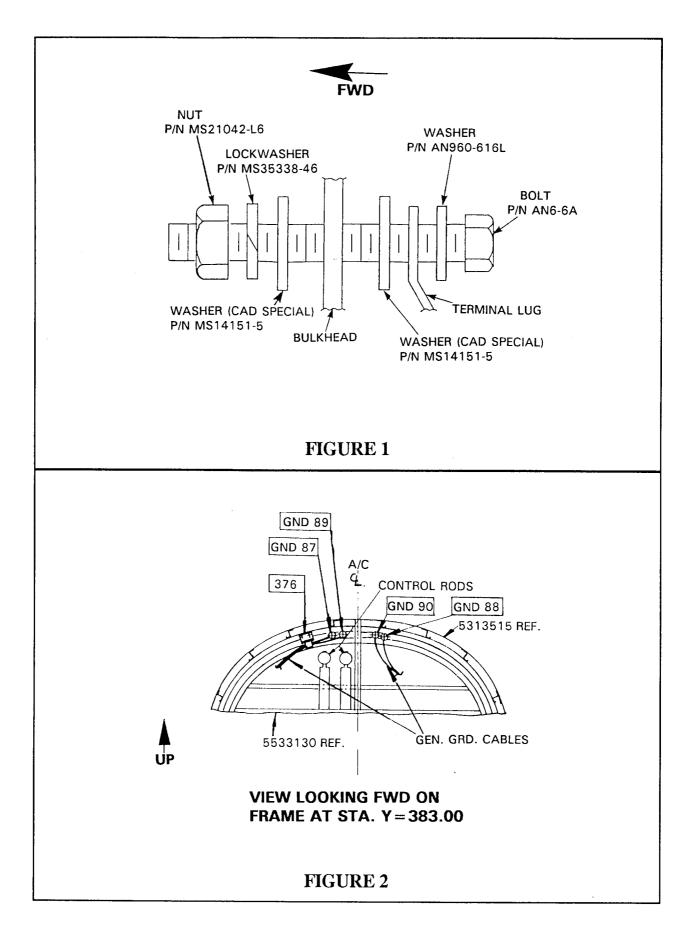
- I. Apply a coating of epoxy chromate primer to new ground assemblies.
- J. Restore aircraft power and perform engine run up to verify proper starting and generator operation. Reference Airplane Flight Manual.
- K. Install removed baggage partitions to aircraft.

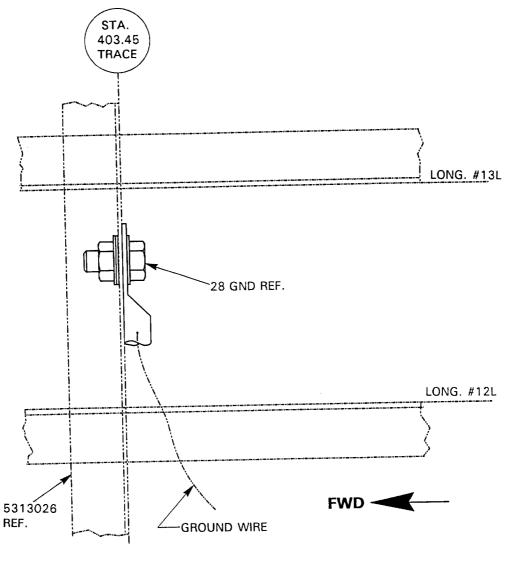
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-24-120 dated June 22, 1994, titled "Electrical Power - Improved Ground Returns", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.





VIEW LOOKING OUTBOARD

FIGURE 3





SERVICE BULLETIN NO. 1124-33-121

May 25, 1994

SUBJECT: LIGHTS - CABIN FLUORESCENT LIGHTING SUPPORT SYSTEM IMPROVEMENT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers

B. REASON

To preclude the possibility of high voltage arcing due to defective bulbs, connectors, or damaged aircraft wiring.

C. DESCRIPTION

This service bulletin provides instructions to replace existing Remote Power Units (RPU) with Protected Power Units (PPU).

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the operators earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 8
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
A/R A/R A/R	AL-5112 AL-5117 AL-11002	PROTECTED POWER UNIT PROTECTED POWER UNIT KIT (1 FOR EACH RPU-52 TO AL-5117 REPLACEMENT)

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Wiring Diagram Manual, Chapter 33-20-02 1124/1124A Westwind Maintenance Manual, Chapter 33-20-00 1124/1124A Westwind Illustrated Parts Catalog, Chapter 33-20-00 Service Information Letter 1123-33-099

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog Chapter 33-20-00

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove power from aircraft fluorescent lighting system.
- B. Remove interior as required to access remote power units for the cabin fluorescent lighting support system(s).
- C. Remove each remote power unit and replace with a protected power unit by part numbers as listed below:

NEW P/N
AL-5117
AL-5117
AL-5117
AL-5112
AL-5112

- NOTE: If replacing RPU P/N RPU-52 with PPU P/N AL-5117, a connector P/N 61193 contained in Install Kit AL-11002 must be used.
 - (1) Remove RPU P/N RPU-52. Cut wires allowing sufficient length for connection to PPU P/N AL-5117.
 - (2) Strip all 4 wires approximately 3/16" and crimp one pin to each wire (pins supplied with connector).
 - (3) Insert two wires from inverter into connector slots labeled INPUT. Polarity not a factor.
 - (4) Insert two wires to lamp(s) into connector slots labeled OUTPUT. Polarity not a factor.
 - (5) With new PPU P/N AL-5117 installed, connect to newly installed connector.
- D. Insure all fluorescent lighting components are secure and perform functional check of interior lighting system.
 - NOTE: Inoperative lights after installation of Protected Power Units are normally a fault of connectors, wiring or defective bulbs.
- E. Install removed interior items and return aircraft to service.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-33-121 dated May 25, 1994, titled "Lights - Cabin Fluorescent Lighting Support Systems Improvement", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



RECOMMENDED

SERVICE BULLETIN NO. 1124-33-122

June 15, 1994

SUBJECT: LIGHTS - TIP TANK STROBE LIGHT WIRING CONDUIT

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Field experience has revealed the possibility of the tip tank strobe light wiring conduit chaffing the inner wall of the tip tank.

C. DESCRIPTION

This service bulletin provides instructions to inspect the strobe light wire conduit located inside the tip tanks for proper clearance from surrounding structure.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the next scheduled inspection.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 4
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

<u>QTY</u>	PART NUMBER	DESCRIPTION
A/R	PR1005L	PROTECTIVE COATING

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

Westwind Maintenance Manual 12-10-01

L. PUBLICATIONS AFFECTED

None

- 2. ACCOMPLISHMENT INSTRUCTIONS (Refer to Figure 1)
 - A. Remove all fuel from tip tank, reference 1124/1124A Maintenance Manual, 12-10-01.
 - B. Remove access panel located on outboard side of tip tank.

SB 1124-33-122 Page 2 of 4

- C. Inspect routing of strobe light wire conduit (hose) from strobe light to power supply for possible contact with surrounding structure.
- D. If no contact with structure is found, proceed to step "F".
- E. If contact with surrounding structure is found, proceed as follows:
 - (1) Inspect conduit to determine if any steel strands are worn through.
 - (2) If any strands are worn through, conduit must be replaced.
 - (3) If no strands are worn through, loosen clamps securing conduit, and reposition conduit as necessary to prevent further contact with surrounding structure. Tighten clamps.
 - (4) Inspect area of tip tank skin where conduit was making contact.
 - (5) If depth of wear does not exceed .010 inch, coat exposed surface with protective coating P/N PR1005L (MIL-S-4383).

- (6) If wear exceeds .010 inch, contact Astra Jet Corporation Technical Services.
- F. Install access panel removed in step "B".

3. COMPLIANCE RECORD

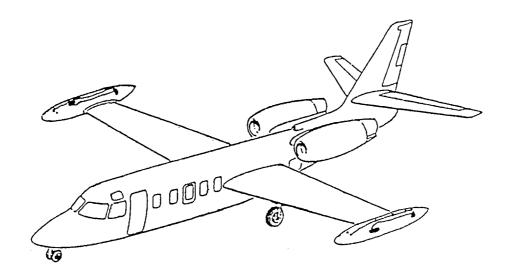
A. Make the following entry in the aircraft log book:

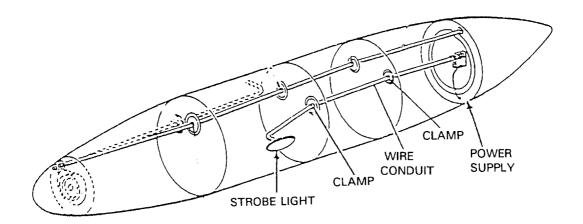
Service Bulletin No. 1124-33-122 dated June 15, 1994, titled "Lights - Tip Tank Strobe Light Wiring Conduit", has been accomplished this date

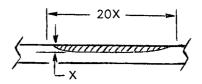
B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

NOTE: If wear is not smooth, blend out area without deepening damage. Refer to Figure 1, Detail A.

SERVICE BULLETIN NO. 1124-33-122







DETAIL A

FIGURE 1



RECOMMENDED

SERVICE BULLETIN NO. 1124-53-123

September 21, 1994

SUBJECT: FUSELAGE - DRAINAGE UNDER CABIN DECK

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

Corrosion has been found under cabin deck on some aircraft.

C. DESCRIPTION

This service bulletin provides instructions to inspect structure under cabin deck for blockage of drain paths and over-board drains, outboard of longerons X=9.00 left and right.

D. COMPLIANCE

It is recommended that this service bulletin be accomplished at the next 600 hundred hour periodic inspection.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 40
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

- **NOTE:** Man-hour estimate for inspection time only, i.e. inspect with mirror and light and open/close cabin deck where necessary.
- G. MATERIAL

PART NUMBER	DESCRIPTION
CR3213 (NOM)	CherryMax Rivet
CR3243 (O/S)	CherryMax Rivet
MEK	Methyl Ethyl Ketone
	Fluid Resistant Epoxy Primer
	(Commercial aircraft grade
	and quality)
	CR3213 (NOM) CR3243 (O/S)

Material may be obtained locally, or from authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable

J. ELECTRICAL LOAD DATA

Not applicable

K. REFERENCES

None

L. PUBLICATIONS AFFECTED

None

2. ACCOMPLISHMENT INSTRUCTIONS

A. Through access panels in cabin deck, and lightening holes in longerons X=9.00 left and right, from Y=119.00 to Y=259.00, inspect with light and mirror for evidence of debris or sealant in drain path at longeron cap/frame/skin joint. Refer Figure 1.

NOTE: Lift and tie cabin deck out of way wherever necessary for inspection.

B. Carefully remove debris or sealant found in a drain path with appropriate instrument, using caution to avoid damage to longeron cap, frame, or skin. A tool made from phenolic, wedge shaped to match opening is helpful.

NOTE: Lift and tie cabin deck out of way wherever necessary for cleaning.

- C. Flush clean with MEK and blow dry with compressed air.
- D Fluid resistant epoxy prime after cleaning, using caution to avoid blocking drain path with new primer.
- E. At aft pressure bulkhead, Y = 269.879, and longeron X = 9.00 left and right intersections, locate #29 (.136") drain hole. Lay-out and drill hole through fuselage skin, 1.90 inch outboard of longeron and 4.00 inch forward of pressure bulkhead. Refer Figure 1. Drill through skin only. Adjust hole position if necessary. Alodine and prime drain holes.
- F. Remove all debris, rivets, sealant, etc., and fasten down cabin deck.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-53-123 dated September 21, 1994, titled "Fuselage - Drainage Under Cabin Deck", has been accomplished this date

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.

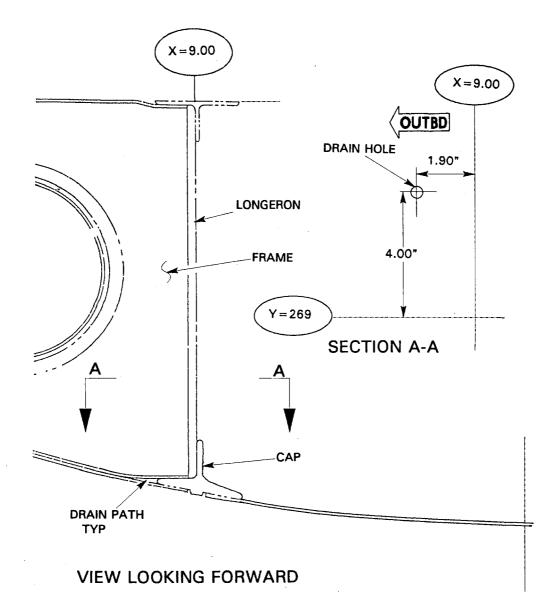


FIGURE 1

SB 1124-53-123 Page 4 of 4 September 21, 1994



OPTIONAL

SERVICE BULLETIN NO. 1124-55-124

July 12, 1995

SUBJECT: STABILIZERS - HORIZONTAL STABILIZER UPPER SCISSOR FITTING REPLACEMENT (AFC 2097)

1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers with Service Bulletin No. 1124-55-021 previously complied with (AFC 2037).

B. REASON

Reports from the field indicate some stabilizer upper scissor fittings P/N 453513-501 have loosened or cracked in service. Reference Service Bulletin No. 1124-55-021.

C. DESCRIPTION

This service bulletin provides instructions for installation of a new upper scissor fitting incorporating improved material and attachment.

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 30
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
1	453513-503	Scissor Fitting, Upper
12	MS21140U0504	Fastener, Blind
2	NAS6704U14	Bolt
1	NAS6704U14X	Bolt
2	MS21141U0614(NOM)	Fastener, Blind
26	MS20426AD5-6	Rivet
5	NAS1466-23	Pin, Swage Locking
5	NAS1080-6	Collars
2	NAS6708-34	Bolt
2	NAS6709-34H	Bolt
2	MS21045-8	Nut
2	MS21045-9	Nut
A/R	2024-T3	Aluminum, .071"
A/R	PR 1422	Sealant

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

SERVICE BULLETIN NO. 1124-55-124

K. REFERENCES

1124/1124A Westwind Maintenance Manual, 55-30-00.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog, 55-30-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove tail cone and horizontal/vertical stabilizer fairings.
- B. Remove upper scissor fitting P/N 453513-501
 - (1) Verify scissor gap "G" is .050 inch minimum and gap "J" is .200 inch minimum. Refer to Figure 1.
 - (2) Disconnect upper scissor from upper scissor fitting.
 - (3) Remove vertical stabilizer and rudder from aircraft. Reference 1124/1124A Westwind Maintenance Manual, 55-30-00, Removal/Installation.
 - (4) Remove fasteners attaching upper scissor fitting to vertical stabilizer bottom rib. Remove three (3) bolts attaching upper scissor fitting to forward spar of vertical stabilizer. Save fillers for re-use.
 - NOTE: Center bolt is over-size (NAS6604-14X), to index fitting in position after scissors adjustment during original installation.
- C. Install upper scissor fitting P/N 453513-503
 - Remove fasteners attaching rib P/N 413027-81 to leading edge skin at Zv= 18.50 inch and remove lockbolts attaching rib to spar. Remove rib. Refer to Figure 2.
 - <u>NOTE</u>: Existing holes through stabilizer fitting and forward spar may be picked up with transfer punches. Although this method eliminates rib removal, caution must be exercised to achieve correct hole position.
 - (2) Remove two (2) fasteners through fitting P/N 413018 and forward spar, (one
 (1) each left and right of center line) just below bottom rib P/N 413028.

- (3) Temporarily attach new upper scissor fitting P/N 453513-503 to vertical stabilizer with bolts (over-size in center hole), and fillers from old fitting installation.
- (4) Mount vertical stabilizer on aircraft.
- (5) Connect scissor assembly to new fitting.
- (6) Verify scissor gap "G" is .050 inch minimum and gap "J" is .200 inch minimum. Refer to Figure 1. Re-shim, with aluminum 2024-T3, if necessary to obtain required gaps.
- (7) Remove vertical stabilizer.
- (8) Drill new fitting for fasteners. Refer to Figure 3:
 - (a) Pick up existing holes from bottom rib P/N 413028.
 - (b) Locate two (2) new holes through fitting and bottom rib. Maintain minimum .360 inch edge distance and minimum .710 inch hole pitch.

- (c) Pick up existing holes (two (2) places) from fitting P/N 413018 and forward spar for new fitting.
- (9) Measure gap between new fitting and forward spar. Fabricate filler, aluminum 2024-T3, to suit gap. De-burr all holes in new fitting and filler(s).
- (10) Alodine, rinse, and epoxy prime filler(s).
- (11) Install fitting with new fasteners. Refer to Figure 3.
- (12) Install rib P/N 413027-81. Refer to Figure 2.
- (13) Install vertical stabilizer with new bolts and nuts; bolts P/N NAS6708-34 and nuts P/N MS21045-8 for forward fitting; bolts P/N NAS6709-34H and nuts P/N MS21045-9 for aft fitting. Reference 1124/1124A Westwind Maintenance Manual, 55-30-00, Removal/Installation.
- (14) Connect scissor assembly to new upper scissor fitting.
- D. Install horizontal/vertical stabilizer fairings and tail cone.

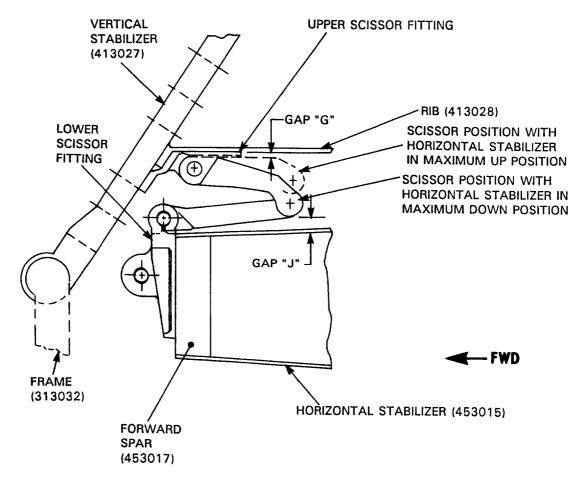
<u>NOTE</u>: Minimums may be reduced if necessary due to radius of new fitting. Refer to Figure 3 for limitations.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-55-124, dated July 12, 1995, titled "Stabilizers -Horizontal Stabilizer Upper Scissor Fitting Replacement", has been accomplished this date ______.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



VIEW LOOKING OUTBOARD ON CENTERLINE OF AIRCRAFT

FIGURE 1

SB 1124-55-124 Page 6 of 8

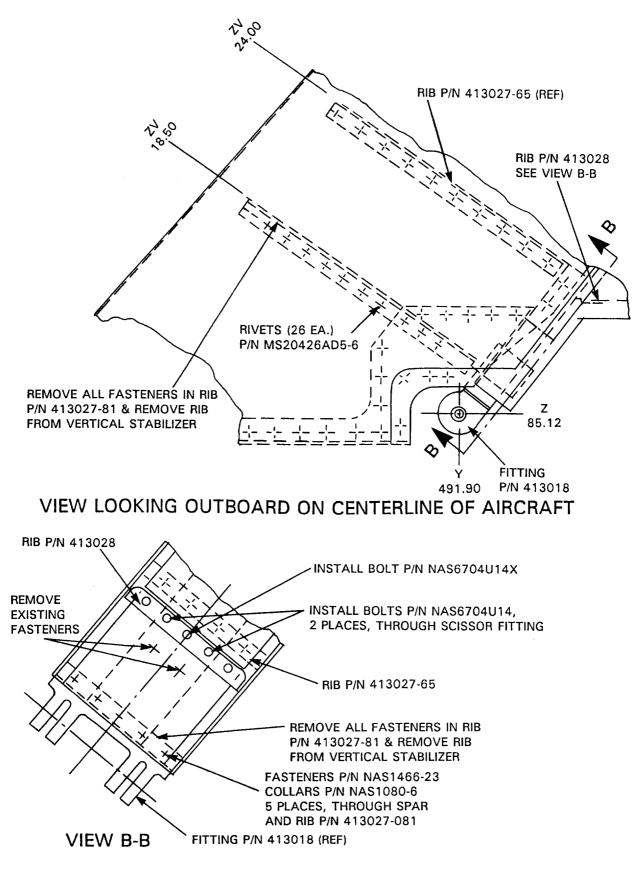
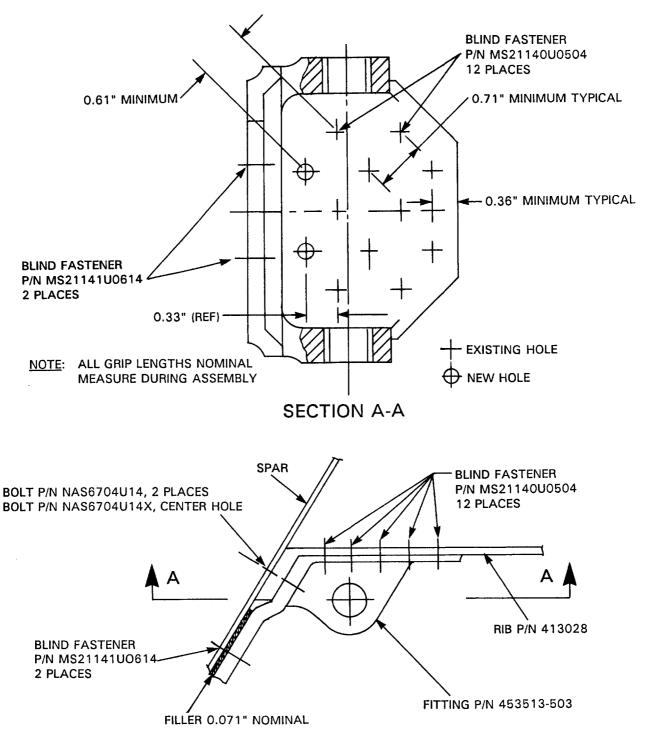


FIGURE 2



VIEW LOOKING OUTBOARD ON CENTERLINE OF AIRCRAFT

FIGURE 3

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OPTIONAL

SERVICE BULLETIN NO. 1124-30-125

May 14, 1997

SUBJECT: ICE AND RAIN PROTECTION - WINDSHIELD WIPER SYSTEM PARK CIRCUIT MODIFICATION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, serial numbers 187 through 285.

B. REASON

To reduce the possible need for constantly resetting the wiper blades to achieve proper parking position.

C. DESCRIPTION

This service bulletin provides instructions to modify the electrical control circuit for the windshield wiper system to provide improved parking characteristics.

D. COMPLIANCE

Compliance with this service bulletin is optional.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 8
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
2	MS27743-24	RELAY
2	SO-1057-8912	RELAY SOCKET
4	MS20470AD4	RIVET
2	823099-29	BRACKET

Material required may be obtained through Galaxy Aerospace Corporation, New Castle, Delaware, or through authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

Not applicable.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

1124/1124A Westwind Wiring Diagram Manual, 30-40-01.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Wiring Diagram Manual, 30-40-01.

2. ACCOMPLISHMENT INSTRUCTIONS

A. Gain access to left windshield wiper motor converter assembly located in nose compartment.

- B. Install relay bracket P/N 823099-29 with two MS20470AD4 rivets. Refer to Figure 1.
- C. Install relay socket P/N SO-1057-8912 on relay bracket with top of socket facing forward.
- D. Remove existing butt splices connecting aircraft wiring to wiper motor converter assembly.
- E. Repeat steps (A) through (D) on right side.
- F. Attach wires to left relay socket from left aircraft wiring and wiper motor assembly as follows (Refer to Figure 3):

<u>NOTE</u>: Wire length may be increased using splices.

- Splice wire 1M20C20 to wire "A" of the wiper converter assembly and using appropriate step-down splice, connect to X1 of relay socket using a short #20AWG jumper wire.
- (2) Splice wire 1M21A20 to two short #20AWG jumper wires using appropriate step-down splice. Install one jumper wire to A2 of relay socket and other jumper wire to B1.
- (3) Connect wire 1M22A20 to X2 of relay socket.
- (4) Connect wire "B" of wiper converter assembly to A1 of relay socket.
- (5) Connect wire "C" of wiper converter assembly to B2 of relay socket.
- (6) Install a #20AWG jumper wire between A3 and B3 of relay socket.
- G. Attach wires to right relay socket from right aircraft wiring and wiper motor assembly as follows (Refer to Figure 3):
 - (1) Splice wire 2M20C20 to wire "A" of wiper converter assembly and using appropriate step-down splice, connect to X1 of relay socket using a short #20 AWG jumper wire.
 - (2) Splice wire 2M21A20 to two short #20AWG jumper wires using appropriate step-down splice. Install one jumper wire to A2 of relay socket and other jumper wire to B1.
 - (3) Connect wire 2M22A20 to X2 of relay socket.
 - (4) Connect wire "B" of wiper converter assembly to A1 of relay socket.
 - (5) Connect wire "C" of wiper converter assembly to B2 of relay socket.
 - (6) Install a #20AWG jumper wire between A3 and B3 of relay socket.

- H. Install relays P/N MS27743-24 into each relay socket.
- I. Gain access to back of windshield wiper control switches by lowering cockpit forward overhead panel.
- J. Rewire windshield wiper control switches as follows (Refer to Figures 2 and 3).
 - (1) On each wiper control switch remove jumper wire from terminal 2 to 5. Do not disturb wire 1M21C20 located on terminal 2 of left wiper control switch.
 - (2) On right wiper control switch, relocate wire 2M21C20 from terminal 5 to terminal 2.
 - (3) On each wiper control switch relocate jumper wire from terminal 1 to 6 to terminal 3 to 6.
 - (4) On each wiper control switch relocate wire 1M24B20 (left), 2M24B20 (right), from terminal 1 to terminal 5.
 - (5) Add new #20AWG jumper wire from terminal 1 of speed control switch to terminal 1 on left wiper control switch.
 - (6) Add new #20AWG jumper wire from terminal 4 of speed control switch to terminal 1 on right wiper control switch.
- K. Close cockpit forward overhead panel and nose compartment.

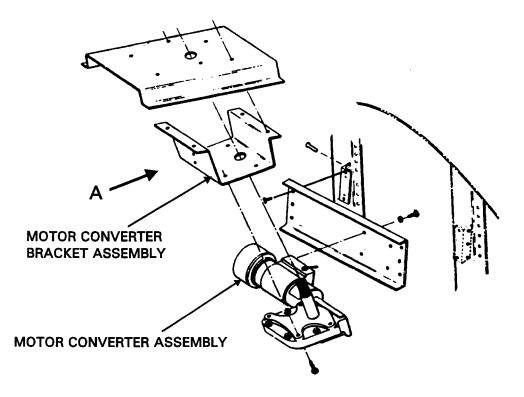
CAUTION: DO NOT OPERATE WIPERS ON A DRY WINDSHIELD.

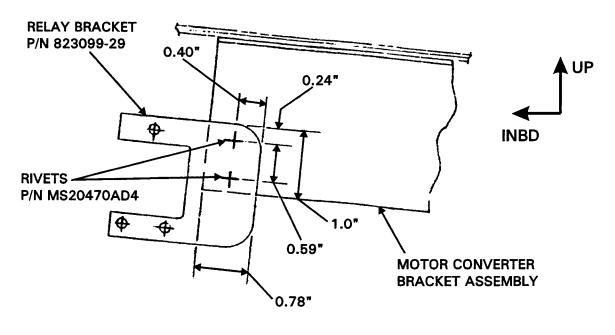
- L. Perform operational check of windshield wiper system with each wiper on a wet windshield to insure proper parking and operation at all three speeds.
- 3. COMPLIANCE RECORD
 - A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-30-125, dated May 14, 1997, titled "Ice and Rain Protection - Windshield Wiper System Park Circuit Modification", has been accomplished this date _____.

- B. Revise aircraft Wiring Diagram Manual, to reflect changes accomplished by this service bulletin.
- C. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation, New Castle, Delaware.

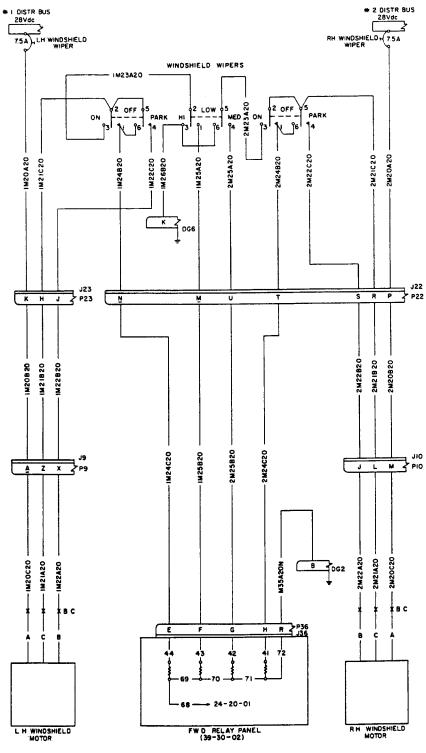
SERVICE BULLETIN NO. 1124-30-125



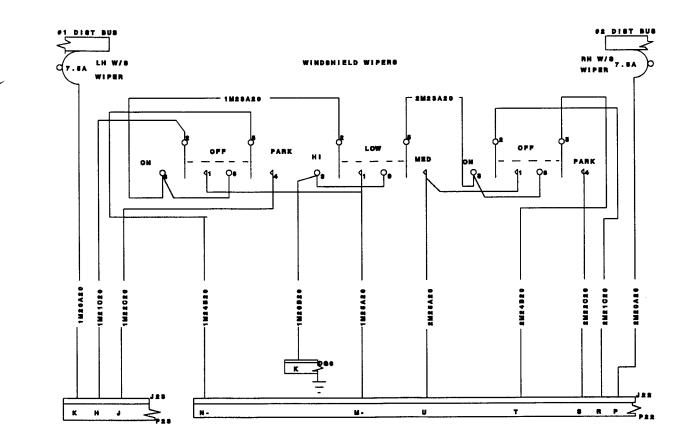


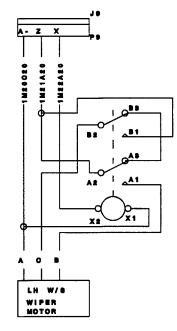
DETAIL A

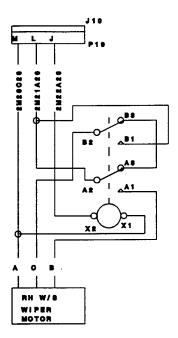




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SB 1125-30-125 Page 7 of 7



RECOMMENDED

SERVICE BULLETIN NO. 1124-57-126

July 26, 1995

SUBJECT: WINGS - LEADING EDGE EXTENSION DRAINS

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, all serial numbers.

B. REASON

Reports from the field indicate corrosion has been found on wing skin and leading edge extension (droop section) during maintenance. In addition, fuel seepage from wing integral fuel tank has caused damage to deicer boots, requiring premature replacement.

C.[®] DESCRIPTION

This service bulletin provides instructions to install drain holes in wing leading edge extension skins.

D. COMPLIANCE

Compliance is recommended at the operator's earliest convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following is for planning purposes only:

- (1) Estimated man hours: 8
- (2) Suggested number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

QTY.	PART NUMBER	DESCRIPTION
A/R		EPOXY PRIMER
4	1124-57-126	PLACARD (SILK SCREEN
		RENTAL AVAILABLE)
*A/R	MS24694S49	SCREW
*A/R	MS24694S50	SCREW
*A/R	MS24694S52	SCREW

* AN509-10R7, -10R8, -10R10 are equivalent screws, respectively (old standard).

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA Service Centers.

H. TOOLING

No special tooling is required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

None.

L. PUBLICATIONS AFFECTED

None.

SB 1124-57-126 Page 2 of 4

2. ACCOMPLISHMENT INSTRUCTIONS

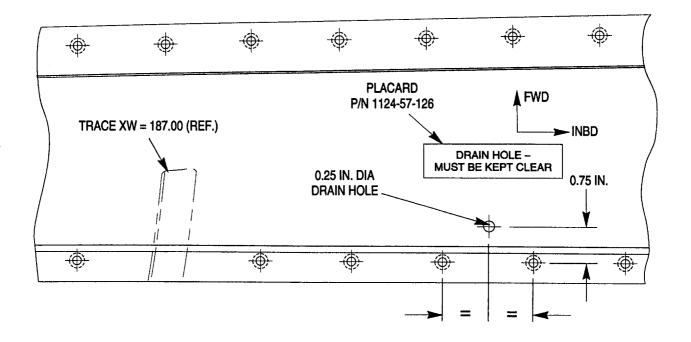
- A. Lay-out drain hole locations (2 places) on left and right wings. Refer to Figure 1.
- B. Insert wing skin protector (of suitable material) between wing skin and leading edge extension.
 - <u>NOTE</u>: Remove fasteners from aft edge of leading edge extension, inboard and outboard of wing stations XW = 103.15 and XW = 179.75, as necessary to insert skin protector.
- C. Drill .25 inch drain holes (2 places) in left and right leading edge extensions.
- D. Deburr drain holes, and epoxy prime. Finish coat to match aircraft color.
- E. Remove skin protector. Install removed fasteners.
- F. Install placard P/N 1124-57-126 in area of each drain hole. Refer to Figure 1.

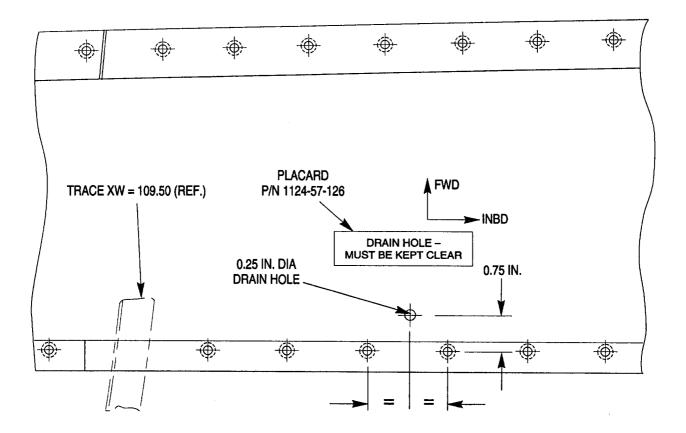
3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-57-126, dated July 26, 1995, titled "Wings - Leading Edge Extension Drains", has been accomplished this date _____.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.





Wing Leading Edge Extension View Looking Up, Right Side, Left Side Opposite FIGURE 1

SB 1124-57-126 Page 4 of 4

July 26, 1995



OPTIONAL

SERVICE BULLETIN NO. 1124-24-127

September 25, 1996

SUBJECT: ELECTRICAL POWER - REPLACEMENT OF REMOTE CONTROL CIRCUIT BREAKERS, P/N 6141H168.

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWINDS, all serial numbers.

B. REASON

Existing Remote Control Circuit Breakers (RCCB) P/N 6141H168 are no longer manufactured.

C. DESCRIPTION

This service bulletin provides instructions to replace the obsolete remote control circuit breakers with a new style RCCB and provides associated wiring changes.

D. COMPLIANCE

Compliance with this service bulletin is optional, however, the applicable accomplishment instructions in this service bulletin must be utilized when replacing P/N 6141H168 remote controlled circuit breakers.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

SERVICE BULLETIN NO. 1124-24-127

F. MAN-HOUR REQUIREMENTS

(1)	Estimated man-hours:	8 - PART A
		24 - PART B
		12 - PART C

- (2) Suggested number of personnel: 1 PART A 2 - PART B
 - 2 PARTB2 - PARTC

G. MATERIAL

<u>QTY.</u>	PART NUMBER	DESCRIPTION
PART A		
2	M83383/1-11	REMOTE CONTROL CIRCUIT BREAKER
8	M39029/1-100	PIN
A/R	7274-47-0.5	CIRCUIT BREAKER
PART B		
2	M83383/1-11	REMOTE CONTROL CIRCUIT BREAKER
8	M39029/1-100	PIN
2	M6106/27-023	RELAY
2	451120-051 OR	RELAY SOCKET
	M12883/45-01	
2	7274-47-0.5	CIRCUIT BREAKER
PART C		
1	M83383/1-11	REMOTE CONTROL CIRCUIT BREAKER
4		

4	M39029/1-100	PIN
1	7274-47-0.5	CIRCUIT BREAKER
Material	required may be obtained through	gh Astro let Companyier New C. (1

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not affected.

K. REFERENCES

1124/1124A Westwind Wiring Diagram Manual, 24-20-01, 24-50-01, 24-50-03, 27-50-01, 30-40-02, 39-30-05, 39-30-06, 39-30-07 and 39-30-08. 1124/1124A Westwind Illustrated Parts Catalog, 24-00-00, 24-20-00 and 30-40-00.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Wiring Diagram Manual, 24-20-01, 27-50-01, 30-40-02, 39-30-06 and 39-30-08. 1124/1124A Westwind Illustrated Parts Catalog, 24-00-00, 24-20-00 and 30-40-00.

2. ACCOMPLISHMENT INSTRUCTIONS

PART A - INVERTER RCB1-3 & RCB2-3 REPLACEMENT

- NOTE: Steps (1) through (7) of the following instructions are for replacement of RCB1-3 (#1 Inverter). Replacement of RCB2-3 (#2 Inverter) is similar with changes noted in step (8).
 - (1) Remove all aircraft electrical power. Disconnect aircraft batteries.
 - (2) Disconnect and remove LH DC Contactor Box to access and replace RCB1-3. Tag and identify all wires removed for ease of reassembly.
 - (3) Disconnect and remove RCB1-3. Tag and identify all wires removed for ease of reassembly. Retain mount hardware for future use.
 - (4) Install new RCB1-3 P/N M83383/1-11 as follows:
 - (a) Install RCB1-3 using one existing fastener.
 - (b) Pivot new RCB1-3 on fastener to a position that maintains clearance from other items in contactor box. Mark new mount nutplate position.
 - (c) Drill a 0.270 inch diameter hole for mount bolt.
 - (d) Drill two 0.098 inch holes for nutplate mounting.
 - (e) Rivet a new nutplate P/N MS21075-3 in place using appropriate sized rivets.

September 25, 1996

(5) Mount new RCB1-3 using existing hardware. Connect wires as follows:

NOTE: Install new pins P/N M39029/1-100 on wires that connect to pins 3, 4 and 5A.

- (a) Wire #23 to pin 3.
- (b) Wires #31 and #1V8A8 (wire #1V1A8 for aft inverter installation) to terminal A2.
- (c) Bus bar and wire removed from L1 and C3 to terminal A1 and pin 4, respectively.
- NOTE: Because of placement of the new RCB1-3, bus bar may not reach terminal A1. Fabricate a short jumper using #6AWG wire (MIL-W-22759) and appropriate terminal lugs.
- (d) Add a #22AWG wire (MIL-W-22759) to pin 5A. Connect opposite end to nearest airframe ground using appropriate hardware.
- (6) Install LH DC Contactor Box in aircraft and perform operational test of #1 inverter.
- (7) Install INV-1 control circuit breaker P/N 7274-47-0.5 if existing breaker is not 1/2 ampere rating.
- (8) For replacement of RCB2-3 (#2 inverter), perform steps (1) through (6) in RH DC Contactor Box. Substitute wires in step (5) as follows:
 - (a) Wire #5 to pin 3.
 - (b) Wires #50 and #2V8A8 (wire #2V1A8 for aft inverter installation) to terminal A2.
 - (c) Bus bar and wire removed from L1 and C3 to terminal A1 and pin 4, respectively.
 - NOTE: Install INV-2 control circuit breaker P/N 7274-47-0.5 if existing breaker is not 1/2 ampere rating. Refer to Figure 5 and 6.
- (9) Secure all work areas and restore aircraft electrical power.
- (10) Perform operational check of inverters.

PART B - WINDSHIELD HEAT RCB1-2 & RCB2-2 REPLACEMENT

- <u>NOTE</u>: Steps (1) through (6) of the following instructions are for replacement of RCB1-2 (left windshield heat). Replacement of RCB2-2 (right windshield heat) is similar with changes noted in step (7).
 - (1) Remove all aircraft electrical power. Disconnect aircraft batteries.
 - (2) Disconnect and remove LH DC Contactor Box to access and replace RCB1-2. Tag and identify all wires removed for ease of reassembly.
 - (3) Disconnect and remove RCB1-2. Tag and identify all wires removed for ease of reassembly. Retain mount hardware for future use.
 - (4) Install new RCB1-2 P/N M83383/1-11 as follows:
 - (a) Install RCB1-2 using one existing fastener.
 - (b) Pivot new RCB1-2 on fastener to a position that maintains clearance from other items in contactor box. Mark new mount nutplate position.
 - (c) Drill a 0.270 inch diameter hole for mount bolt.
 - (d) Drill two 0.098 inch holes for nutplate mounting.
 - (e) Rivet a new nutplate P/N MS21075-3 in place using appropriate sized rivets.
 - (5) Mount new RCB1-2 using existing hardware. Connect wires as follows:
 - NOTE: Install new pins P/N M39029/1-100 on wires that connect to pins 3, 4 and 5A.
 - (a) Wire #19 to pin 3.
 - (b) Wire #11 to pin 5A.
 - (c) Wire #20-4 to terminal A2.
 - (d) Bus bar removed from L1 to terminal A1 with a #22AWG jumper (MIL-W-22759) to pin 4.
 - NOTE: Due to placement of the new RCB1-2, bus bar may not reach terminal A1. Fabricate a short jumper using #2AWG wire (MIL-W-22759) and appropriate terminal lugs.
 - (6) Install LH DC Contactor Box in aircraft.

- (7) For replacement of RCB2-2 (right windshield heat), perform steps (1) through (6) for RCB2-2 in RH DC Contactor Box. Substitute wires in step (5) as follows:
 - (a) Wire #79 to pin 3.
 - (b) Wire #63 to pin 5A.
 - (c) Wire #80-4 to terminal A2.
 - (d) Bus bar removed from L1 to terminal A1 with a #22AWG jumper (MIL-W-22759) to pin 4.
- (8) Access Cabin Relay Box and install two relays P/N M6106/27-023 with sockets P/N 451120-051 (or M12883/45-01) in a convenient location. Label relays W/S HEAT #1 and W/S HEAT #2.
- (9) On aircraft S/N 295 and subsequent locate four (4) unused pins in connector J-174. On aircraft prior to S/N 295 locate and identify eight (8) unused pins in connector J-174. Perform connections between new relays and J-174 as follows using #22AWG wire (MIL-W-22759):
 - (a) On aircraft prior to S/N 295 ONLY: (Refer to Figure 1 and 2)
 - 1 Add new wire #906 from spare pin #1 to B2 of relay W/S HEAT #1
 - 2 Add new wire #905 from spare pin #2 to B1 of relay W/S HEAT #1.
 - <u>3</u> Add new wire #901 from spare pin #3 to B2 of relay W/S HEAT #2.
 - 4 Add new wire #900 from spare pin #4 to B1 of relay W/S HEAT #2.
 - 5 Add new wire #903 from spare pin #5 to pin X-1 of relay W/S HEAT #2 with jumper to pin A-1 of same relay.
 - 6 Add new wire #904 from spare pin #6 to pin X-1 of relay W/S HEAT #1 with a jumper to pin A-1 of same relay.
 - Z Add new wire #902 from spare pin #7 to pin A-2 of relay W/S HEAT #2.
 - 8 Add new wire #907 from spare pin #8 to pin A-2 of relay W/S HEAT #1.
 - (b) On aircraft S/N 295 and subsequent ONLY: Refer to Figure 3 and 4.
 - 1 Disconnect wire #70 from pin B-1 of the EDR relay and connect to pin A-2 of relay W/S HEAT #2.
 - 2 Disconnect wire #71 from pin C-1 of the EDR relay and connect to pin A-2 of relay W/S HEAT #1.

- 3 Add new wire #902 from B-1 of the EDR relay to pin X-1 of relay W/S HEAT #2 with a jumper to pin A-1.
- 4 Add new wire #905 from C-1 of EDR relay to pin X-1 of relay W/S HEAT #1 with a jumper to pin A-1.
- 5 Add new wire #900 from spare pin #1 to pin B2 of relay W/S HEAT #1.
- 6 Add new wire #901 from spare pin #3 to pin B1 of relay W/S HEAT #1
- 7 Add new wire #903 from spare pin #2 to pin B2 of relay W/S HEAT #2.
- 8 Add new wire #904 from spare pin #4 to pin B1 of relay W/S HEAT #2.
- (c) All aircraft, connect pin X-2 of both new relays to nearest airframe ground.
- (10) On aircraft S/N 295 and subsequent locate and identify four (4) unused pins in connector P-22 (near aft overhead circuit breaker panel). On aircraft prior to S/N 295 locate and identify eight (8) unused pins. Add new #22AWG wires (MIL-W-22759) as follows:
 - (a) On aircraft prior to S/N 295 ONLY: Refer to Figure 1 and 2.
 - 1 Add new wire #1H900B22 from P-22 spare pin #1 to P-174 spare pin #1 as identified in previous steps.
 - 2 Add new wire #2H900B22 from P-22 spare pin #2 to P-174 spare pin #3.
 - 3 Add new wire #1H33T22 from P-22 spare pin #3 to P-174 spare pin #2.
 - 4 Add new wire #2H33T22 from P-22 spare pin #4 to P-174 spare pin #4.
 - 5 Add new wire #1H165E22 from P-22 spare pin #5 to P-174 spare pin #6.
 - 6 Add new wire #1H165C22 from P-22 spare pin #6 to P-174 spare pin #8.
 - 7 Add new wire #2H165C22 from P-22 spare pin #7 to P-174 spare pin #7.
 - 8 Add new wire # 2H165E22 from P-22 spare pin #8 to P-174 spare pin #5.
 - (b) On aircraft S/N 295 and subsequent ONLY: Refer to Figure 3 and 4.
 - 1 Add new wire #1H900B22 from P-22 spare pin #1 to P-174 spare pin #1 as identified in previous steps.
 - 2 Add new wire #2H900B22 from P-22 spare pin #2 to P-174 spare pin #3.
 - 3 Add new wire #1H33T22 from P-22 spare pin #3 to P-174 spare pin #2.
 - 4 Add new wire #2H33T22 from P-22 spare pin #4 to P-174 spare pin #4.

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- (11) Access both Windshield Heat switches and perform the following wire changes:
 - <u>NOTE</u>: It is permissible to increase wire length using #22AWG (MIL-W-22759) wire and appropriate splices as necessary.
 - (a) Disconnect wire #1H33A22 from pin 3 of left Windshield Heat switch. Route to J-22 and connect to spare pin #3.
 - (b) Disconnect wire #2H33A22 from pin 3 of right Windshield Heat switch. Route to J-22 and connect to spare pin #4, as identified in a previous step.
- (12) On aircraft prior to S/N 295 ONLY, access aft overhead circuit breaker panel connector P-316 and perform the following wire changes:
 - NOTE: It is permissible to increase wire length using #22AWG (MIL-W-22759) wire and appropriate splices as necessary.
 - (a) Remove wire #1H165A22 from pin H- of P-316. Route to J-22 and connect to spare pin #6 as previously identified.
 - (b) Add new wire #1H165D22 to P-316 pin H-. Route to J-22 and connect to spare pin #5 as previously identified.
 - (c) Remove wire #2H165A22 from P-316 pin DD. Route to J-22 and connect to spare pin #7 as previously identified.
 - (d) Add new wire #2H165D22 to P-316 pin DD. Route to J-22 and connect to spare pin #8.
- (13) Add two new 1/2 amp circuit breakers P/N 7274-47-0.5 at a convenient location in aft overhead circuit breaker panel. Label one as W/S HEAT CONT 1 and the other as W/S HEAT CONT 2. Refer to Figure 5 and 6.
- (14) Add #22AWG wires (MIL-W-22759) as follows (all aircraft):
 - (a) Connect new wire to one terminal of each circuit breaker and connect opposite ends to nearest airframe ground attach point.
 - (b) Add new wire #1H900A22 to open terminal of W/S HEAT CONT 1 circuit breaker. Route free end to J-22 and connect to spare pin #1 as previously identified.
 - (c) Add new wire #2H900A22 to open terminal of W/S HEAT CONT 2 circuit breaker. Route free end to J-22 and connect to spare pin #2.
- (15) Clean and secure all work areas and restore aircraft electrical power.
- (16) Perform operational check of windshield heat systems.

PART C - FLAP RCCB REPLACEMENT

- (1) Remove all aircraft electrical power. Disconnect aircraft batteries.
- (2) Disconnect and remove RH DC Contactor Box to access and replace Flap RCCB. Tag and identify all wires removed for ease of reassembly.
- (3) Disconnect and remove Flap RCCB. Tag and identify all wires removed for ease of reassembly. Retain mount hardware for future use.
- (4) Install new Flap RCCB P/N M83383/1-11 as follows:
 - (a) Install Flap RCCB using one existing fastener.
 - (b) Pivot new Flap RCCB on fastener to a position that maintains clearance from other items in contactor box. Mark new mount nutplate position.
 - (c) Drill a 0.270 inch diameter hole for mount bolt.
 - (d) Drill two 0.098 inch holes for nutplate mounting.
 - (e) Rivet a new nutplate P/N MS21075-3 in place using appropriate sized rivets.
- (5) Mount new Flap RCCB using existing hardware. Connect wires as follows:
 - <u>NOTE</u>: It is permissible to increase wire length as required, by using appropriate splice and wire gauge. Install new pins P/N M39029/1-100 on wires that connect to pins 3, 4 and 5A.
 - (a) Wire #167 to pin 5A.
 - (b) Wire #109 to pin 3.
 - (c) Wire #C303A8 to terminal A2.
 - (d) Wire #108 to terminal A1 with a #22AWG jumper (MIL-W-22759) to pin 4.
- (6) Install RH DC Contactor Box. Do not connect P-4 at this time.
- (7) At connector P-4 remove, cap and stow wire #C344A22 from pin S.
 - (a) Add new #22AWG wire (MIL-W-22759) to pin S of P-4.
 - NOTE: Use of spare wire from list, ref. 1124/1124A Wiring Diagram Manual, 24-50-03, is suggested.
 - (b) Route free end along existing cable bundles to Aft Overhead Circuit Breaker Panel.
 - (c) Connect P-4 to RH DC Contactor Box.

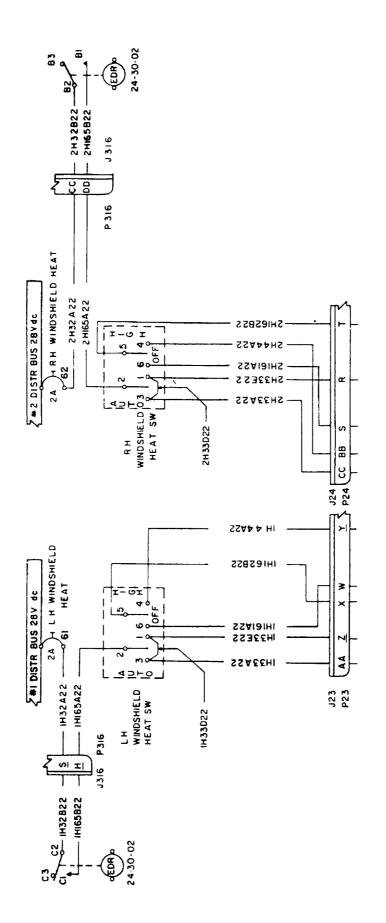
- (8) Access Aft Overhead Circuit Breaker Panel and add a new 1/2 Amp circuit breaker in a convenient location. Identify as FLAPS CONT.
 - (a) Connect new wire from pin S of P-4 to one of the circuit breaker terminals.
 - (b) Add a new #22AWG wire (MIL-W-22759) to the empty terminal on new circuit breaker and connect opposite end to nearest airframe ground.
- (9) Clean and secure all work areas and restore aircraft electrical power.
- (10) Perform operational check of flap system.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin 1124-24-127, dated September 25, 1996, titled "Electrical Power - Replacement of Remote Control Circuit Breakers, P/N 6141H168" has been accomplished this date _____.

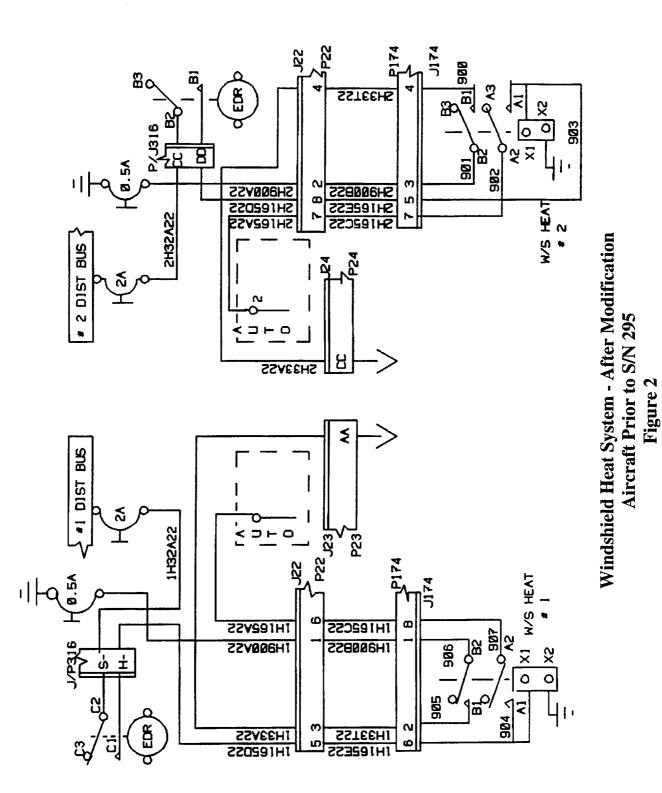
- B. Revise aircraft Wiring Diagram Manual as required to reflect wiring and part number changes incorporated by this service bulletin.
- C. Complete the attached Certificate of Compliance and return to Astra Jet Corporation, New Castle, Delaware.



Windshield Heat System - Before Modification Aircraft Prior to S/N 295 Figure 1

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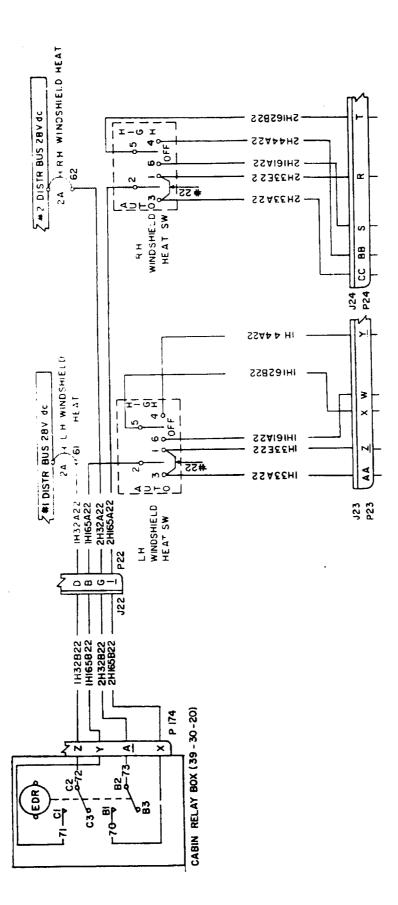
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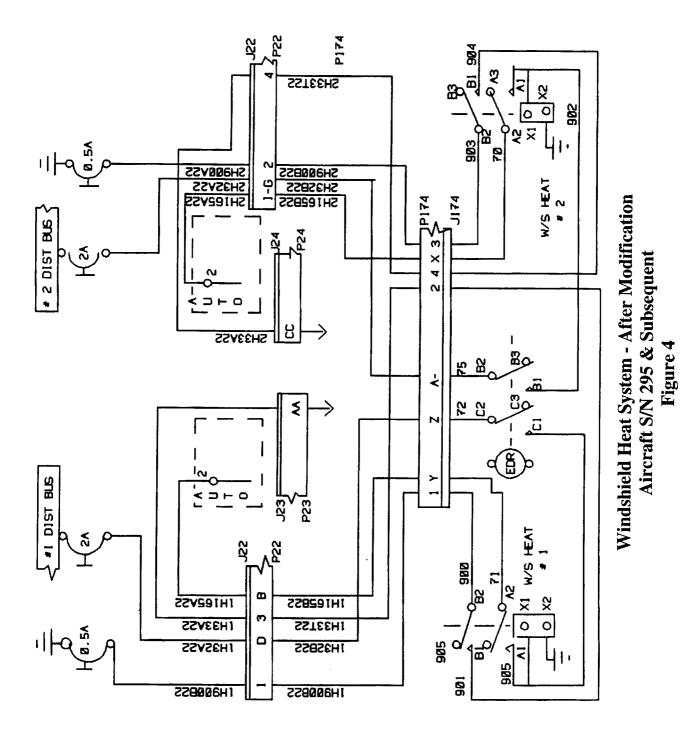
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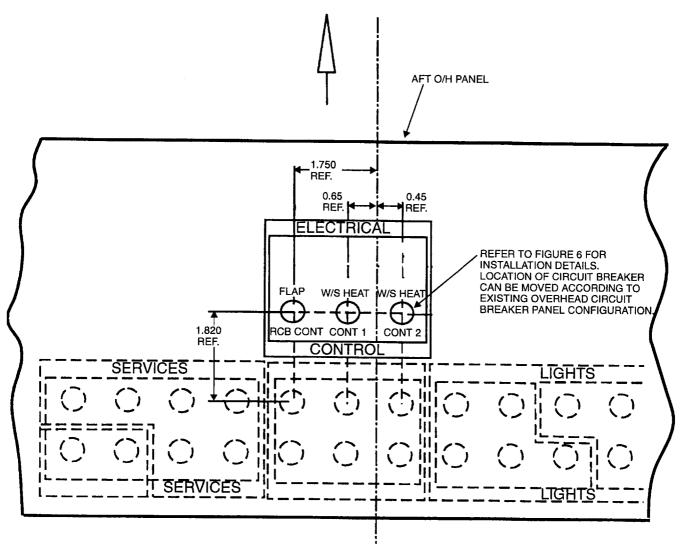
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Windshield Heat System - Before Modification Aircraft S/N 295 & Subsequent Figure 3





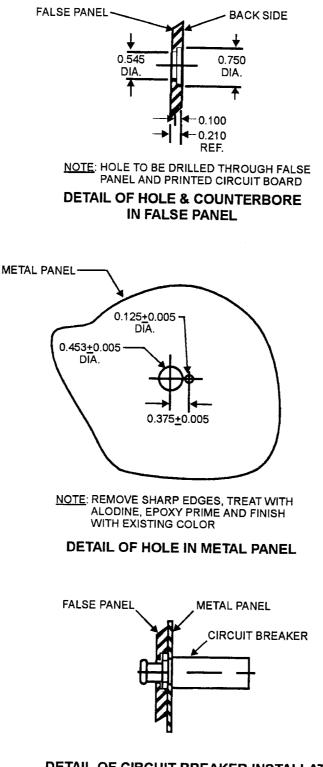
NOTE: OVERHEAD PANEL LETTERING .12" & .19" HIGH, CONDENSED GOTHIC, WHITE. ALL MARKINGS ENGRAVED OR PHOTO ETCHED TO .005" DEPTH MAXIMUM.

Aft Overhead Circuit Breaker Panel Figure 5

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DETAIL OF CIRCUIT BREAKER INSTALLATION

Figure 6

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OPTIONAL

SERVICE BULLETIN NO. 1124-27-128

October 30, 1996

- **SUBJECT:** FLIGHT CONTROLS REPLACEMENT OF FLAP COMPARATOR GEAR BOX ASSEMBLIES WITH LINEAR POTENTIOMETER ASSEMBLIES
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124 WESTWIND, all serial numbers prior to 283.

B. REASON

To improve asymmetry protection of the flap system.

C. DESCRIPTION

This service bulletin provides instructions to replace flap comparator gearbox assemblies with linear potentiometer assemblies on outboard flap actuators and other related changes.

- D. COMPLIANCE
 - Compliance with this service bulletin is optional.
- E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

(1) Estimated man-hours: 80

(2) Suggested number of personnel:

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

1

G. MATERIAL

QTY	PART NUMBER	DESCRIPTION
2	833523-501	TRANSDUCER
4	503580-503	LUG ASSEMBLY
2	503581-1	SPACER
2	503583-1	LINK
4	NH102300-0175	CLAMP
2	NAS1423-6	JAM NUT
4	NAS1423-06	JAM NUT
2	MS9276-12	WASHER
2	MS3470L10-6S	CONNECTOR
2	MS3416-10EN	BACKSHELL
1	883789-1	INDICATOR
1	MS24614F272	TEST SWITCH
1	RNC65H9090FS	RESISTOR
1	3250L-1-501M	POTENTIOMETER
A/R	MIL-W-16878D or	WIRE, #22AWG, SHIELDED,
	MIL-W-22759	TWISTED PAIR
A/R	242	LOCKTITE
A/R	PR1422B1/2	SEALANT
	OR EQUIVALENT	
A/R	MS20995-C32	SAFETY WIRE

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

1124/1124A Westwind Maintenance Manual, 27-50-00. 1124/1124A Westwind Service Information Letter No. 1124-27-002 1124/1124A Westwind Service Letter No. WW-2428 1124/1124A Westwind Wiring Manual, 27-50-01, 34-10-03, 39-30-04

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog, 27-50-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove both comparator gearbox assemblies. Reference 1124/1124A Westwind Maintenance Manual, 27-50-00, Maintenance Practices.
- B. Remove and discard nuts (2) and bracket (1). Refer to Figure 1, Detail "A".
- C. Prepare stand to support flap surface.
- D. Remove cotter pins, nuts, washers, and bolts securing both outboard and inboard actuators to flap surface and support flap surface on stand.
- E. Remove rod end, jam nut and lock washer from outboard actuator.

<u>NOTE</u>: To insure existing flap rigging is maintained, count and record number of turns required to remove rod end.

F. Install nut P/N NAS1423-6, lock washer P/N MS9276-12, link P/N 503583-1, nut P/N NAS509-6 and existing nut and washer on rod end and install rod end into actuator. Refer to Figure 1, Detail "B". Do not tighten lock nuts.

NOTE: Install rod end the same number of turns as removed.

- G. Remove knurled seal assembly and knurled nut from each new potentiometer.
- H. Assemble LH and RH potentiometer assemblies as follows: (Refer to Figure 2)
 - NOTE: If width of supplied knurled nut exceeds .20 inch, rework per Figure 3, Detail "A".
 - (1) Slide forward lug and clamp assembly and spacer over potentiometer.
 - (2) Thread on .20 inch wide knurled nut. Slide on aft lug and clamp assembly. Thread on knurled seal assembly.

- (3) Tighten knurled seal assembly. Position aft clamp in angular relation to potentiometer wires and tighten .20 inch wide knurled nut against aft clamp. Refer to Figure 2.
 - NOTE: Apply Locktite #242 to threads before tightening .20 inch knurled nut and knurled seal assembly.
- I. Install potentiometer assembly on actuator, leaving clamps loose for rigging. Refer to Figure 2.
 - <u>NOTE</u>: If clamp or lug assembly interferes with rivets on side of actuator, trim rivet heads and lug assembly. Refer to Figure 3 Detail "B". Extend and retract potentiometer rod several times and insure that no binding occurs on rod.
- J. Temporarily connect flaps to both actuators. Disconnect electrical connector P-239 from flap asymmetry box. Using the flap control circuit breaker, operate flap system, in small steps, through its full travel. Check clearance to adjacent parts for 0.12 inch minimum. (0.10 inch minimum clearance is allowed to speed brake panel.)
- K. If necessary, reposition potentiometer assembly on actuator by rotating clamps to obtain correct clearances.
- L. Insure potentiometer axis and actuator axis are parallel.
- M. Loosen actuator rod end jam nut.
- N. Position flaps to 12° position and connect potentiometer rod to link leaving nuts loose.
- O. Insure no binding occurs on potentiometer rod when cycling flap system through its complete travel.
- P. Tighten lock nut and jam nut on actuator rod end and secure jam nut with lock washer. Tighten locking nuts on potentiometer and secure with safety wire. Tighten clamps that attach potentiometer to actuator and secure with tamper proof sealant. Bond both ends of spacer to potentiometer with bead of sealant P/N PR1422B1/₂ or equivalent. Refer to Figure 2.
- Q. Disconnect flaps from both actuators and support on stand. Disconnect both aircraft batteries.
- R. On right wing, disconnect, remove and discard existing connector P-212. Install new connector P/N MS3470L10-6S and backshell P/N MS3416-10EN. Label new connector as J-212. Connect wires to new connector as follows: (Reference 1124/1124A Westwind Wiring Manual, 27-50-01.)
 - (1) Wire #C60B22 or #C60C22 or #C60D22 pin A.
 - (2) Wire #C59B22 or #C59C22 or #C59D22 pin B.

- (3) Wire #C58B22 or #C58C22 or #C58D22 pin C.
- (4) Original wire #C326C22 cap and stow.
- (5) Original wire #C321C22 cap and stow.
- (6) Original wire #C57C20 or C64B20 cap and stow.
- (7) Add new #22AWG shielded pair:
 - (a) Wire #C326C22BL pin D.
 - (b) Wire #C321C22RD pin F.
 - (c) Route shielded pair to connector P/J-242, located in cabin right side, Sta. 250.0, Z=38.0, for connection in a later step.
- S. Gain access to connector P/J-242.
 - (1) At P-242:
 - (a) Pins <u>H</u> and <u>J</u>, remove, cap and stow wires #C326C22 and #C321C22.
 - (b) Connect new #22AWG shielded pair from connector J-212;
 - 1 Wire #C326C22BL to pin H.
 - 2 Wire #C321C22RD to pin <u>J.</u>
 - 3 Shields of wires to pin U or spare pin.
 - (2) At J-242:
 - (a) Pins <u>H</u> and <u>J</u>, remove, cap and stow wires #C326B22 and #C321B22
 - (b) Add new #22AWG shielded pair:
 - 1 Wire #C326B22BL to pin <u>H</u>.
 - 2 Wire #C321B22RD to pin <u>J.</u>
 - 3 Shields of wires to pin U or spare pin used in step $S_{.}(1)(b)3$.
 - 4 Route new shielded pair to area of P/J-30, located on bracket, right side between sta. 316 and 328, for connection in a later step.

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5 Locate and remove original wire #C57D20 or #C64A20 attached to pin B. Splice to this wire to a new #20AWG wire labled as #C57E20 (or use aircraft spare) and route along existing cable bundle to J-18 located forward of center instrument panel near forward pressure bulkhead.

<u>NOTE</u>: Reference 1124/1124A Westwind Wiring Diagram Manual, 24-50-03, for spare wire numbers and locations.

- T. Connect new wire #C57E20 to pin Y of J-18 connector.
- U. Add new #20AWG wire to pin Y of P-18. Route along existing wire bundle to flap position indicator connector P-158. Label new wire as #C57F20.
- V. At P-158 perform wire changes as follows:
 - (1) Remove wire #C58A22 from pin A and insert in pin D.
 - (2) Connect new wire #C57F20 to pin A.
 - (3) Remove wire #C59A22 from pin B.
 - (4) Remove wire #C60A22 from pin C.
 - (5) Connect wire #C59A22 to pin C.
 - (6) Connect wire #C60A22 to pin B with new #22AWG wire. Label new wire as #C60D22N.
 - (7) Route new wire #C60D22N to ground block DG10 and connect to pin L or pin K.
- W. Replace flap position indicator P/N 883739-1 with new indicator P/N 883789-1.
- X. Gain access to connector P/J-30.
 - (1) At P-30:
 - (a) Pins G and H, remove, cap and stow wires #C321B22 and #326B22.
 - (b) Connect new #22AWG shielded pair from connector J-242:
 - 1 Wire #C321B22RD to pin G.
 - 2 Wire #C326B22BL to pin H.
 - 3 Shields of wires to pin c or spare pin.
 - (2) At J-30:
 - (a) Pins G and H, remove, cap and stow wires #C321A22 and #C326A22.

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- (b) Add new #22AWG shielded pair:
 - \perp Wire #C321A22RD to pin G.
 - $\underline{2}$ Wire #C326A22BL to pin H.
 - 3 Shields of wires to pin c or spare pin used in step $X_{.}(1)(b)$ 3.
 - <u>4</u> Route new shielded pair to P-200 (Flap Contactor Box).

<u>NOTE</u>: Connection to P-200 will be made in a later step.

- Y. On left wing, disconnect, remove and discard existing connector P-211. Install new connector P/N MS3470L10-6S and backshell P/N MS3416-10EN. Label new connector as J-211. Connect wires to new connector as follows: (Reference 1124/1124A Westwind Wiring Manual, 27-50-01 and 34-10-03.)
 - (1) Original wire #C320D22 cap and stow.
 - (2) Original wire #C304D22 cap and stow.
 - (3) Original wire #C71B22 or #F50B22 or #F1K22 pin A.
 - (4) Original wire #C73A22 or #F47A22 pin C.
 - (5) Add new #22AWG shielded pair:
 - (a) Wire #C320D22BL pin D.
 - (b) Wire #C304D22RD pin E.
 - (c) Route shielded pair to connector P/J-241, located on bracket, cabin left side, sta. 240, for connection in a later step.
 - (6) Add new #22AWG wire to pin B. Route free end to nearest airframe ground and connect.
 - (7) Cap and stow two remaining wires (C72A22 and #C74A22 or #F49A22 and #F46A22) from old connector.
- Z. Gain access to connector P/J-241.
 - (1) At P-241:
 - (a) Pins H and J, remove, cap and stow wires #C320D22 and #C304D22.
 - (b) Connect new #22AWG shielded pair from J-211:
 - 1 Wire #C320D22BL to pin <u>H</u>.

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- <u>2</u> Wire #C304D22RD to pin <u>J</u>.
- $\underline{3}$ Shields of wires to pin G or spare pin.
- (2) At J-241:
 - (a) Pins <u>H</u> and <u>J</u>, remove, cap and stow wires #C320C22 and #C304C22.
 - (b) Add new #22AWG shielded pair:
 - 1 Wire #C320C22BL to pin <u>H</u>.
 - <u>2</u> Wire #C304C22RD to pin <u>J</u>.
 - <u>3</u> Shields of wires to pin G or spare pin used in step $Z_{-}(1)(b)3$.
 - 4 Route new shielded pair to connector P/J-31, located on bracket, left side, sta. 316.
- AA. Gain access to P/J-31.
 - (1) At P-31:
 - (a) Pins B and C, remove, cap and stow wires #C304C22 and #C320C22.
 - (b) Connect new shielded pair from connector J-241:
 - 1 Wire #C304C22RD to pin B.
 - 2 Wire #C320C22BL to pin C.
 - 3 Shields of wires to pin A or spare pin.
 - (2) At J-31:
 - (a) Pins B and C, remove, cap and stow wires #C304B22 and #C320B22.
 - (b) Add new #22AWG shielded pair:
 - 1 Wire #C320B22BL to pin C
 - 2 Wire #C304B22RD to pin B
 - 3 Shields of wires to pin A or spare pin used in step AA.(1)(b)3.
 - 4 Route new shielded pair to connector P/J-25, located on bracket, right side, sta. 340.

- AB. Gain access to P/J-25.
 - (1) At J-25:
 - (a) Pins HH and PP, remove, cap and stow wires #C320B22 and #C304B22.
 - (b) Connect new shielded pair from connector J-31:
 - 1 Wire #C304B22RD to pin PP.
 - 2 Wire #C320B22BL to pin HH.
 - 3 Shields of wires to pin BB or spare pin.
 - (2) At P-25:
 - (a) Pins HH and PP, remove, cap and stow wires #C320A22 and #C304A22.
 - (b) Add new #22AWG shielded pair:
 - <u>1</u> Wire #C320A22BL to pin HH.
 - <u>2</u> Wire #C304A22RD to pin PP.
 - 3 Shield of wires to pin BB or spare pin used in step AB(1)(b)3.
 - 4 Route new shielded pair to connector P-200 (Flap Contactor Box).
- AC. At P-200:
 - (1) Pins A, B, C and E remove cap and stow wires #C320A22, #C326A22, #C321A22 and C304A22, respectively.
 - (2) Connect new shielded pair from connector P-25
 - (a) Wire #C320A22BL to pin A.
 - (b) Wire #C304A22RD to pin E.
 - (3) Connect new shielded pair from connector J-30:
 - (a) Wire #C326A22BL to pin B.
 - (b) Wire #C321A22RD to pin C.
 - (4) Connect shields from pairs from connectors P-25 and J-30 to ground DG12, pin P.

- AD. Gain access to aft relay panel and perform the following wire changes: (Reference 1124/1124A Westwind Wiring Manual, 27-50-01, 34-10-03, and 39-30-04).
 - (1) Disconnect, cap and stow wire #108 from pin B of J-175.
 - (2) Disconnect wire #109 from XFA-6, route wire back to connector J-175 and connect to pin B. Remove and discard fuse holder and fuse XFA-6.
 - (3) Disconnect, cap and stow wire #110 or #106 from pin L of J-176.
 - (4) Disconnect wire #107 from XFA-5, route back to connector J-176 and connect to pin M. Remove and discard fuse holder and fuse XFA-5.

- AE. Gain access to flap contactor box and perform the following wire changes: (Reference 1124/1124A Westwind Wiring Manual, 39-30-10.)
 - (1) At the terminal board, remove and discard diodes D1, D3, D4, and D5.
 - (2) Remove and discard Flap Unbalance Test Relays FUT-1 and FUT-2, and Time Delay Relays TDR-1 and TDR-2.
 - (3) Disconnect, remove and discard the following wires:
 - (a) #48 from FUT-2 pin X-1 to terminal 7 of terminal board.
 - (b) #110 from FUT-2 pin X-2 to terminal 8 of terminal board.
 - (c) #101 from FUT-2 pin B-3 to TDR-2 pin 1.
 - (d) #17 from FUT-2 pin B-2 to FUT-3 pin A-2.
 - (e) #13 from FUT-2 pin B-1 to FUT-1 pin B-1.
 - (f) #84 from FUT-2 pin B-2 to TDR-2 pin 6.
 - (g) #100 from TDR-2 pin 2 to TDR-1 pin 2.
 - (h) #104 from TDR-2 pin 8 to TDR-1 pin 4.
 - (i) #103 from TDR-2 pin 5 to TDR-1 pin 6.
 - (j) #83 from TDR-2 pin 3 to FUT-1 pin B-2.
 - (k) #102 from FUT-1 pin B-3 to TDR-1 pin 1.
 - (l) #86 from TDR-1 pin 6 to GND 2.

NOTE: Reference Service Letter WW-2448. Fuses may be in-line type and should be discarded and bypassed by in-line splice.

- (m) #88 from TDR-1 pin 4 to terminal 12 of terminal board.
- (n) #106 from TDR-1 pin 2 to Flap Control Relay (FCR) pin E-2.
- (o) #108 from FUT-3 pin X-1 to FUT-3 pin A-1.
- (p) #82 from FUT-3 pin A-3 to terminal 6 of terminal board.
- (q) #44 from FCR pin E-1 to terminal 10 of terminal board.
- (r) #85 from FCR pin F-1 to terminal 20 of terminal board.
- (s) #109 from FUT-1 pin X-2 to terminal 9 of terminal board.
- (t) #28 from FUT-1 pin X-1 to terminal 7 of terminal board.
- (u) #33 from FUT-1 pin A-2 to P-239 pin N.
- (v) #7 from FUT-1 pin A-1 to GND 2.
- (w) #5 from FUT-1 pin X-2 to J-200 pin T.
- (x) #55 from Flap Up Contactor (FUC) pin T-1 to terminal 15 of terminal board.
- (4) Make the following wire route changes:
 - (a) Add new resistor R-1 P/N RNC65H9090FS (909 ohms 1/4 watt). Connect one lead to terminal 9 of terminal board and the opposite lead to terminal 19.
 - (b) Add new potentiometer R-2 P/N 3250L-1-501M (500 ohms 3/4 watt). Connect yellow lead to terminal 10, red lead to terminal 20. Cap and stow the green lead.
 - (c) Disconnect wire #1 from P-239 pin E and connect to pin 19 of terminal board.
 - (d) Disconnect wire #46 from P-239 pin M and connect to pin 20 of terminal board.
 - (e) Add new #20AWG wire from pin 19 of terminal board to P-239 pin E. Label wire as #5.
 - (f) Add new #20AWG wire from pin 20 of terminal board to P-239 pin M. Label wire as #7.
 - (g) Disconnect wire #63 from pin 18 of terminal board and connect to J-200 pin T.
 - (h) Disconnect wire #51 from pin 15 of terminal board and connect to pin A-2 of FUC.

- (i) Disconnect wire #15 from pin E-2 of FCR and connect to pin 12 of terminal board.
- (j) Disconnect wire #61 from FUT-2 pin A-1 and connect to J-200 pin G.
- (k) Disconnect wire #6 from FUT-2 pin X-2 and connect to P239 pin N.
- (1) Disconnect wire #34 from FUT-2 pin A-2 and connect to J-200 pin F.
- (m) Disconnect wire #30 from FCR pin D-1 and connect to FCR pin C-1.
- (n) Disconnect wire #9 from FCR pin D-2 and connect to FCR pin C-2.
- (o) Disconnect wire #98 from FCR pin E-1 and connect to FCR pin D-1.
- (p) Disconnect wire #105 from FCR pin F-2 and connect to FCR pin D-2.
- (q) Add #22AWG jumper from pin 9 to pin 10 of terminal board.
- (5) Remove and discard sockets for the FUT-1, FUT-2, TDR-1 and TDR-2.
- (6) Relabel FUT-3 as FUT.
- (7) Locate two (2) spare wires near Sta. 316 RHS. Reference 1124/1124A Westwind Wiring Manual, 24-50-03.

NOTE: It is authorized to increase length of wire by splice.

- (a) Connect wire #2SP41B20 to P-200 pin F.
- (b) Connect wire #2SP42B20 to P-200 pin G.
- (8) Pick up opposite ends of both spares at Sta. 24 RHS.
 - (a) Connect wire #2SP41A20 to P-13 (Pedestal Connector) pin M.
 - (b) Connect wire #2SP42A20 to P-13 pin T.
- (9) Replace Flap Unbalance Test switch with new switch P/N MS24614-F272. Connect wires to switch as follows:
 - (a) Connect wire #C323A22N to pin 2 with #22AWG jumper to pin 8.
 - (b) Add a new 22AWG jumper from pin 3 to pin 1 of switch.
 - (c) Connect wire #C317C22 to pin 3.
 - (d) Connect wire #C325A22 to pin 9.

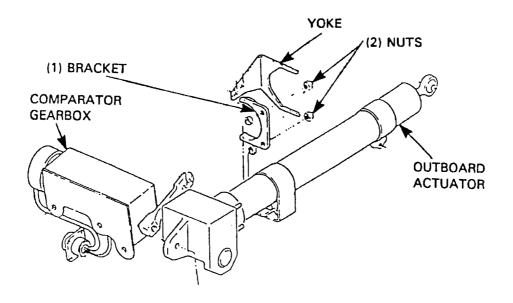
- (e) Add new #20AWG wire to pin 4 of switch and connect opposite end to J-13 pin M. Label wire as #2SP41C20.
- (f) Add new #20AWG wire to pin 5 of switch and connect opposite end to J-13 pin T. Label wire as #2SP42C20.
- AF. Position flaps to full down position. Align inboard and outboard actuators to the flap surface attach points and install bolts, washers and nuts. Secure with cotter pins.
- AG. Secure all work areas and perform Test and Adjustment of Flap Comparator System for aircraft with linear displacement potentiometer. Reference 1124/1124A Westwind Maintenance Manual, 27-50-00, Adjustment/Test.

3. COMPLIANCE RECORD

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-128, dated October 30, 1996, titled "Flight Controls -Replacement of Flap Comparator Gear Box Assemblies With Linear Potentiometer Assemblies", has been accomplished this date _____.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



DETAIL A

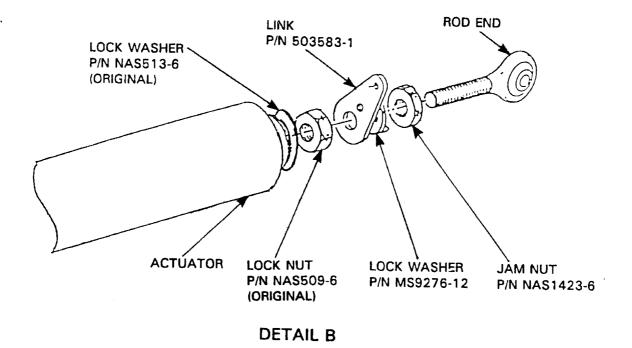
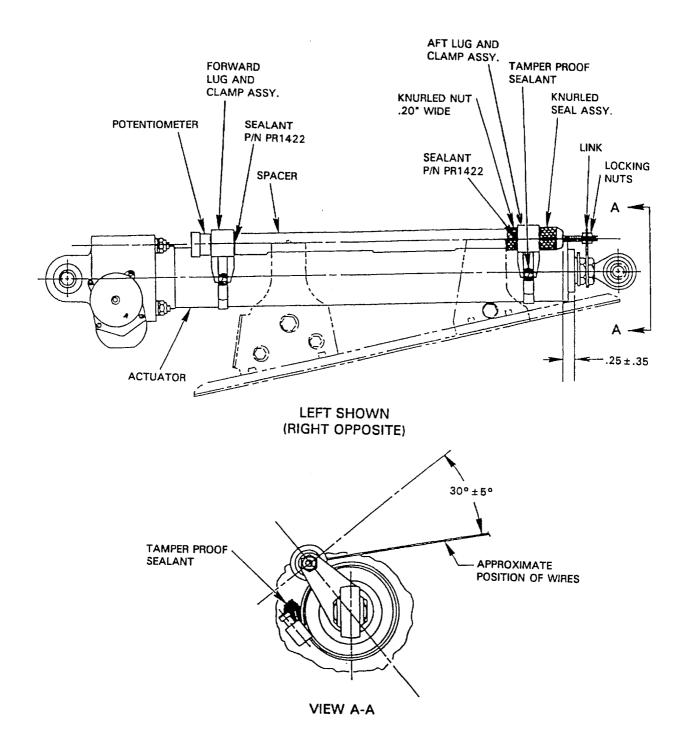
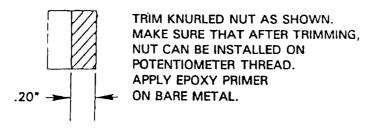


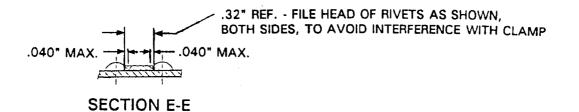
Figure 1

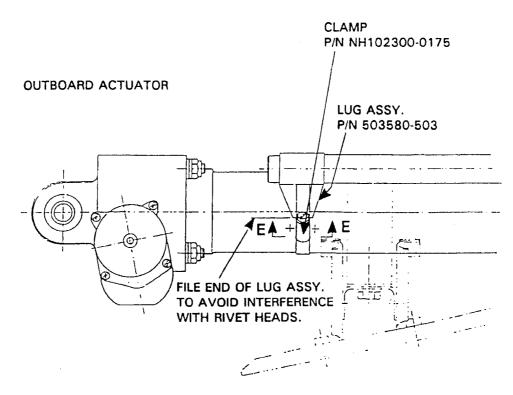
SERVICE BULLETIN NO. 1124-27-128





DETAIL A





DETAIL B

Figure 3



MANDATORY

SERVICE BULLETIN NO. 1124-27-129

June 12, 1995

SUBJECT: FLIGHT CONTROLS - AILERON PUSH-PULL TUBE AND GUIDE ROLLER INSPECTION

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Excessive wear has been found on aileron push-pull tube P/N 513512-1 in area of guide rollers.

C. DESCRIPTION

This service bulletin provides instructions to inspect the push-pull tubes for possible wear and necessary action if wear exists. Instructions are also provided to inspect guide rollers rotation.

D. COMPLIANCE

This service bulletin must be accomplished within 50 flight hours of the issue date. The inspections required by this service bulletin will be added as a 600 hour interval task in the 1124/1124A Westwind Maintenance Manual, 5-20-03, Maintenance Practices.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

June 12, 1995 1087 SB 1124-27-129 Page 1 of 3

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 1 (Inspection only)
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

<u>QTY.</u>	PART NUMBER	DESCRIPTION
A/R	513512-1/-1RE	TUBE ASSEMBLY

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, 5-20-03.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, 5-20-03.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Lower flaps to 40 degrees.
- B. Open speed brake and lift dump panels and secure in open position.

- C. Thoroughly clean left and right aileron push-pull tubes P/N 513512-1 and guide rollers.
- D. Inspect external surface of push-pull tubes for wear, particularly in guide roller contact areas. If wear on tube(s) is noted, measure depth of wear. Refer to Figure 1. If tube cross section is reduced by more than .012 inch, tube must be replaced before further flight.

NOTE: If necessary, disconnect or remove tube to obtain accurate measurement.

E. Inspect all guide rollers for smooth rotation.

<u>NOTE</u>: If guide rollers do not rotate smoothly, disassemble guide roller assembly, determine cause and repair or replace as necessary.

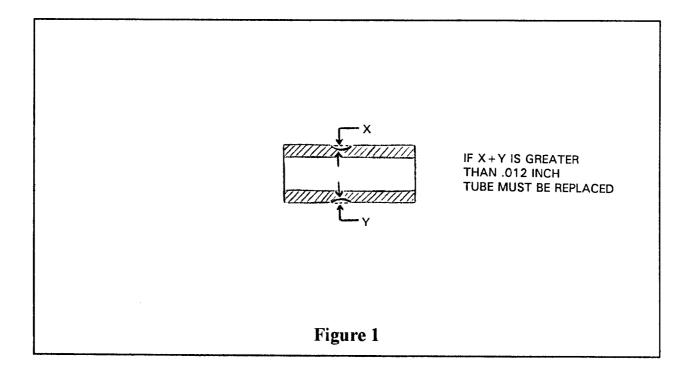
F. Check aileron system for full stop-to-stop travel.

3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-129 dated June 12, 1995, titled "Flight Controls - Aileron Push-Pull Tube and Guide Roller Inspection", has been accomplished this date ______.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation, New Castle, Delaware.





TRANSMITTAL SHEET

Introduction

This sheet transmits Revision 1, dated March 14, 2001, to Westwind Service Bulletin No. 1124-55-130, dated June 18, 1997, titled "Stabilizers - Empennage Fairing Installation".

Reason for Revision

The service bulletin accomplishment instructions have been revised to add instructions to modify the aft fairing rub plates if chafing is found and to add semi-transparent fused film to the frame. Instructions have also been removed to install screws and nutplates to the aft fairing.

Aircraft in compliance with the original issue of this service bulletin require no further action.

This is a COMPLETE REISSUE of Westwind Service Bulletin No. 1124-55-130. Remove and discard all pages of the original issue of this service bulletin and replace with the new pages from this revision.

List of Effective Pages

Page No. Date

1 through 6 March 14, 2001

Previous Revisions of SB 1124-55-130

None.



STABILIZERS - EMPENNAGE FAIRING INSTALLATION

PLANNING INFORMATION

1. Effectivity

Model 1124/1124A Westwind, all serial numbers.

2. Concurrent Requirement

None.

3. <u>Reason</u>

Chafing of aft empennage fairing on frame sta. 521.75 has been found on some aircraft. Investigation has shown that elongation of attach points in fairing can reduce clearance of fairing to fitting, and cause interference.

4. Description

This service bulletin provides instructions to blend any damage found on the frame and to modify the existing rub plates on the rear fairing to allow sufficient clearance between the rub plate and the frame.

5. <u>Compliance</u>

Compliance with this service bulletin is recommended at the next scheduled inspection.

Aircraft in compliance with the original issue of this service bulletin require no further action.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 8
- B. Number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

Not applicable.

9. Electrical Load Data

Not applicable.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Illustrated Parts Catalog, Chapter 55-10-00 Israel Aircraft Industries Aircraft Modification 1472

12. Other Publications Affected

1124/1124A Westwind Illustrated Parts Catalog, Chapter 55-10-00

13. Interchangeability or Intermixability of Parts

None.



MATERIAL INFORMATION

1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Galaxy Aerospace in Fort Worth, Texas. Please contact the Parts Sales Department at Galaxy Aerospace for current price and availability of parts.

2. Warranty Information

None.

3. Material Necessary for Each Aircraft

A. Material to be Purchased:

None

B. Material Supplied by the Operator:

<u>Qty</u>	Part Number	Description
A/R	Fine Grade	Scotch-Brite Pads
A/R	MEK	Methyl Ethyl Ketone
A/R	5490	Semi-Transparent Fused Film
A/R	Iridite 14-2	Chemical Conversion Coating
A/R	MIL-P-23377	Epoxy Primer

4. Reidentified Parts

None.

5. <u>Tooling – Price and Availability</u>

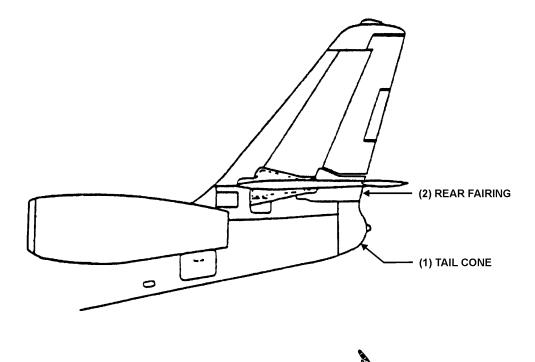
Standard Airframe Shop Equipment.

ACCOMPLISHMENT INSTRUCTIONS

- 1. Remove slide plates from the left and right empennage.
- 2. Remove tail cone (1) and rear fairing (2). Refer to Figure 1.
- 3. Inspect for chafing of fairing P/N 403002-501/-503 on left and right sides of frame sta. 521.75. Refer to Figure 2.
 - A. If no chafing is evident, proceed as follows:
 - (1) Clean and wipe both sides of the frame with Scotch Brite pad and MEK. Cut four strips of transparent fused film, P/N 5490, each at a length of 4.5 inches.
 - (2) Place two strips of film equally centered on each side of frame where the rear fairing passes over the frame. Refer to Figure 2.
 - (3) Proceed to step 4.
 - B. If chafing exists, blend out damage to frame with smooth transition and rework the rub plate mounted on the rear fairing as follows:
 - (1) Locate the area to be reworked on the rub plate. Refer to Figure 2.
 - (2) Place reference marks at the area to be reworked and trim rub plate according to the dimensions listed on Figure 2.
 - (3) Repeat steps (1) and (2) for opposite side.
 - (4) Apply chemical conversion coating, P/N Iridite 14-2 and epoxy primer, P/N MIL-P-23377 to reworked areas.
 - (5) Clean and wipe both sides of the frame with Scotch Brite pad and MEK. Cut four strips of transparent fused film, P/N 5490, each at a length of 4.5 inches.
 - (6) Place two strips of film equally centered on each side of frame where the rear fairing passes over the frame. Refer to Figure 2.
- 4. Install rear fairing and check for adequate clearance and transparent film installation.
- 5. Install tail cone.
- 6. Install sliders and retainers on the left and right side of the empennage.
- Make the following entry in the aircraft log book: Westwind Service Bulletin No. 1124-55-130, Revision 1, dated March 14, 2001, titled "Stabilizers - Empennage Fairing Installation" has been accomplished this date ______.
- 8. Complete the attached Certificate of Compliance and return to Galaxy Aerospace in Fort Worth, Texas.

June 18, 1997 Revision 1, March 14, 2001



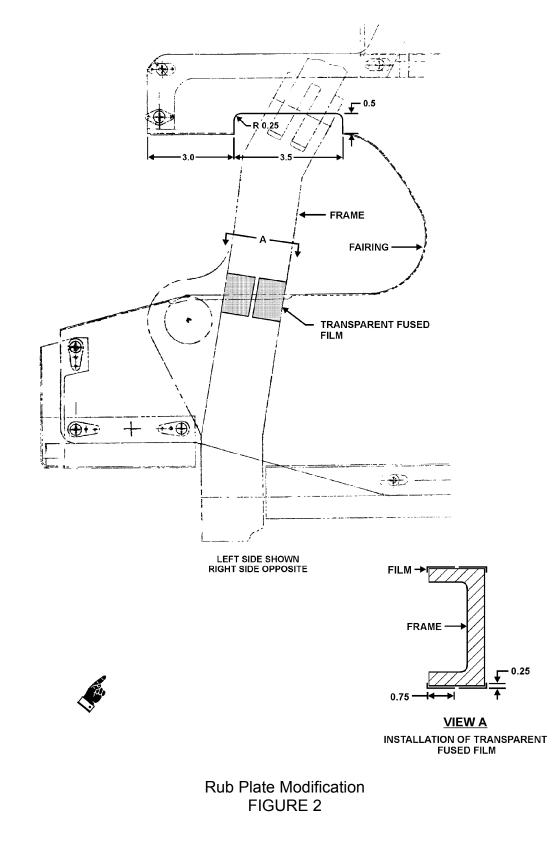


Tail Cone and Rear Fairing Location FIGURE 1

June 18, 1997 Revision 1, March 14, 2001

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OPTIONAL

SERVICE BULLETIN NO. 1124-33-131

January 24, 1996

- **SUBJECT:** LIGHTS UPGRADING "66" SERIES FLUORESCENT LIGHTING SYSTEMS WITH AL-"12" SERIES LAMPS
- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

Aerospace Lighting Corporation (ALC) no longer manufactures the "66" series fluorescent lamps. As a replacement, ALC provides AL-"12" series fluorescent lamps.

C. DESCRIPTION

This service bulletin provides instructions to replace existing ALC "66" series fluorescent lamps with AL-"12" series fluorescent lamps. Instructions include replacement of lamp connectors and lamp holders.

D. COMPLIANCE

Compliance with this service bulletin is optional at the operator's convenience.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 12
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

<u>QTY.</u>	PART NUMBER	DESCRIPTION
A/R	AL-12XX-XXX	LAMP, FLUORESCENT (See Table 1)
A/R	AL-5113	CONNECTOR, LAMP
A/R	AL-5120B	HOLDER, LAMP (2 per lamp)

Material required may be obtained from Astra Jet Corporation, New Castle, Delaware, or authorized Astra/Westwind Service Centers.

H. TOOLING

AMP Crimping Tool 90296-1, 9026-2 or equivalent.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

Service Information Letter No. 1124-33-099. Aerospace Lighting Corporation Information Bulletin No. 92-001.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Illustrated Parts Catalog, 33-20-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- NOTE: AL-"12" series lamps may be intermixed with ALC "66" series lamps.
- <u>NOTE</u>: Lamp type, color and length are described by the lamp part numbering system. Refer to Table 1 for lamp ordering information. For example, lamp P/N 6635-1090 is replaced by P/N AL-1235-1090.

AL-12		Lamp type; 12 for 12mm diameter	
3	5	Color temperature; 35 for Warm White, 45 for Cool White	
	-1090	Lamp length in millimeters	

Example - Lamp Part Number = AL-1235-1090

Table 1

A. Remove power from aircraft fluorescent lighting system.

WARNING: VOLTAGES CAPABLE OF CAUSING INJURY ARE USED TO POWER THE FLUORESCENT LIGHTING SYSTEM. INSURE POWER IS DISCONNECTED BEFORE PERFORMING ANY OF THE FOLLOWING PROCEDURES.

- B. Remove interior as required to access fluorescent lamps.
- C. Disconnect existing lamp connectors P/N 31.85.1A from the "66" series lamp(s) as follows (Refer to Figure 1):

<u>NOTE</u>: Lamp connectors may be disconnected prior to or after removal of lamp from the two lamp holders, whichever is more convenient.

- (1) Remove locking ring from lamp connector body by sliding ring away from lamp connector.
- (2) Place flat head screwdriver between lamp connector body and lamp end. Disengage lamp connector body from lamp end by carefully twisting screwdriver.
- D. Remove existing "66" series fluorescent lamp from lamp holders by gently grasping lamp with both hands immediately next to lamp holder. While rotating the lamp, gently pull it away from lamp holder. Repeat for other lamp holder.
- E. Remove existing lamp connectors P/N 31.85.1A as follows (Refer to Figure 2):
 - (1) Remove and discard contact pin by cutting wire as close as possible to start of insulation.

- (2) Remove and discard contact spring, lamp connector body and locking ring from high voltage wire.
- F. Install lamp connectors P/N AL-5113, which consist of male contact pin P/N 31019 and connector housing P/N 61183, to end of high voltage wires as follows (Refer to Figure 3):
 - (1) Strip 13/64 inch of insulation from end of wire to be connected to lamp.

<u>CAUTION</u>: TO PREVENT DAMAGE TO PINS, USE ONLY SPECIFIED CRIMPING TOOL.

- (2) Using AMP crimping tool P/N 90296-1, 90296-2 or equivalent, crimp pin P/N 31019 on wire.
- (3) Insert and lock pin into lamp connector housing P/N 61183.
- G. Replace existing lamp holders P/N AL-0519 with lamp holders P/N AL-5120B. Securely mount each lamp holder using one No. 4-40 countersunk flat head bolt, and appropriate nut or nut plate, or one optional lamp holder mounting assembly P/N AL-5123.

<u>CAUTION</u>: INSURE MOUNTING BOLT DOES NOT PROTRUDE ABOVE RECESS IN LAMP HOLDER TO AVOID DAMAGE TO LAMP WHEN INSTALLED.

- <u>NOTE</u>: Lamp connectors may be mated prior to or after installation of lamp into lamp holders, whichever is more convenient.
- H. Place lamp on top of holders. Refer to Figure 4.

<u>CAUTION</u>: INSTALL LAMP IN ONLY ONE LAMP HOLDER AT A TIME. DO NOT ATTEMPT TO PLACE LAMP INTO BOTH HOLDERS AT THE SAME TIME.

I. Gently grasp lamp by placing one hand immediately next to lamp holder and the other hand immediately on the other side of lamp holder. Refer to Figure 5.

<u>CAUTION</u>: NEVER SUBJECT LAMP TO A BENDING MOVEMENT OR FORCIBLY PUSH ON LAMP SO THAT PRESSURE CONTINUES DOWNWARD ON LAMP ONCE IT IS IN PLACE.

- J. Using a light downward pressure, rotate lamp into lamp holder until it snaps into place.
 - <u>NOTE</u>: There is no injury from gases should a fluorescent lamp be inadvertently broken. It is recommended that hands be washed with soap and water to prevent the possibility of a skin reaction to the powders used in the lamp.
- K. Insert each connector P/N AL-5113 onto lamp pigtails until locking arm of connector snaps into place over ridge at end of lamp pigtail connector.

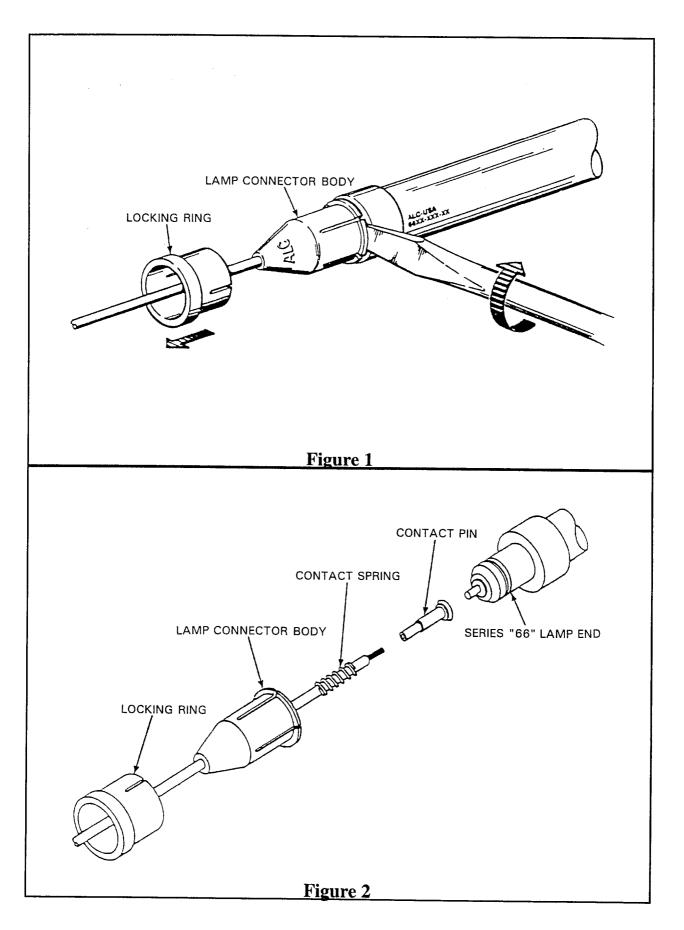
- L. Visually check all wire connections and lamp mountings for security and perform functional check of fluorescent lighting system. If any malfunction, recheck wiring.
- M. Install removed interior items.

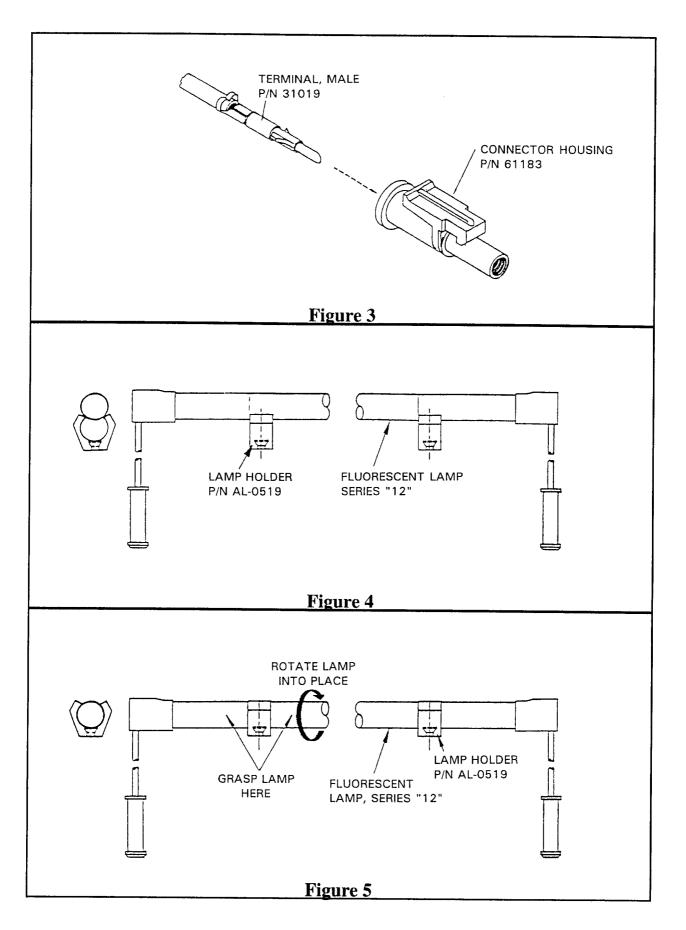
3. COMPLIANCE RECORD

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-33-131, dated January 24, 1996, titled "Lights - Upgrading "66" Series Fluorescent Lighting Systems With AL-"12" Series Lamps", has been accomplished this date _____.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation, New Castle, Delaware.





January 24, 1996

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SB 1124-33-131 Page 7 of 7



MANDATORY

SERVICE BULLETIN NO. 1124-29-132

September 11, 1996

SUBJECT: HYDRAULIC POWER - HYDRAULIC FUSE FUNCTIONAL TEST

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To check for proper operation of hydraulic fuses installed in the brake system and emergency hydraulic indicating system.

C. DESCRIPTION

This service bulletin requires performance of hydraulic fuse functional tests.

D. COMPLIANCE

Compliance with this service bulletin is mandatory within the next 250 flight hours or one (1) year, whichever occurs first.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

SERVICE BULLETIN NO. 1124-29-132

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 2 (Functional Check)6 (Hydraulic Fuse Replacement)
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

<u>QTY.</u>	PART NUMBER	DESCRIPTION
A/R	713047 (With Suffix "A" after serial number)	HYDRAULIC FUSE

Material required may be obtained through Astra Jet Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

Container capable of measuring cubic inches or cubic centimeters of fluid.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

1124/1124A Westwind Maintenance Manual, 32-43-04 and 29-30-06.

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, 32-43-04 and 29-30-06.

SB 1124-29-132 Page 2 of 3

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Perform functional test of both brake hydraulic fuses. Ref. 1124/1124A Westwind Maintenance Manual, 32-43-04, Adjustment/Test.
- B. Perform functional test of emergency hydraulic indicating system hydraulic fuse. Ref. 1124/1124A Westwind Maintenance Manual, 29-30-06, Adjustment/Test.
- C. Any hydraulic fuse that fails functional test must be replaced with new fuse P/N 713047 with suffix "A" after serial number.

3. COMPLIANCE RECORD

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-29-132, dated September 11, 1996, titled "Hydraulic Power - Hydraulic Fuse Functional Test", has been accomplished this date _____.

B. Complete the attached Certificate of Compliance and return to Astra Jet Corporation in New Castle, Delaware.



SERVICE BULLETIN NO. 1124-27-133 REVISION 1

May 28, 1997

TRANSMITTAL SHEET

This sheet transmits Revision 1 to Service Bulletin No. 1124-27-133, dated August 14, 1996, titled "Flight Controls -Inspection of Horizontal Stabilizer Trim Actuator."

REASON FOR REVISION

To add alternate sealants.

Aircraft in compliance with the original issue of this service bulletin require no additional action from this revision.

This is a COMPLETE REVISION. Please remove and discard all pages of the original issue of this service bulletin and replace with the revised pages.

LIST OF EFFECTIVE PAGES

PAGE NO.	DATE
	May 28, 1997
2	May 28, 1997
3	May 28, 1997
4	May 28, 1997
5	August 14, 1996
6	August 14, 1996

PREVIOUS REVISIONS OF SB 1124-27-133

None.



MANDATORY

SERVICE BULLETIN NO. 1124-27-133

August 14, 1996

SUBJECT: FLIGHT CONTROLS - INSPECTION OF HORIZONTAL STABILIZER TRIM ACTUATOR

- 1. PLANNING INFORMATION
 - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

During an inspection, an operator found one horizontal stabilizer actuator jackscrew sheared causing the rod end to separate from the jackscrew.

C. DESCRIPTION

This service bulletin provides instructions to inspect the jackscrew integrity and tie rod for excessive wear.

D. COMPLIANCE

Compliance is mandatory as follows:

- (1) Aircraft with 6000 or more landings on the effective date of this service bulletin must comply within 50 flight hours.
- (2) Trim actuators with 2000 or more landings on the effective date of this service bulletin must comply within 50 flight hours.
- (3) Aircraft or actuators with less than the above mentioned landings on the effective date of this service bulletin must comply at the next scheduled periodic inspection.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- Estimated man-hours: 4 Inspection only.
 8 Actuator replacement, if required.
- (2) Suggested number of personnel:

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

1

G. MATERIAL

<u>QTY.</u>	PART NUMBER	DESCRIPTION
A/R	3M-800 or PR-1422 or PR-1750	SEALANT SEALANT SEALANT
A/R	AN174C-73	TIE ROD BOLT

Material required may be obtained locally, through Galaxy Aerospace Corporation, New Castle, Delaware, or through authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCE

1124/1124A Westwind Maintenance Manual, 27-40-00.

SB 1124-27-133 R Page 2 of 6

SERVICE BULLETIN NO. 1124-27-133

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, 27-40-00 and 5-00-00.

2. ACCOMPLISHMENT INSTRUCTIONS

- A. Position leading edge of horizontal stabilizer in full up position (actuator fully extended).
- B. Disengage HORIZ TRIM CONTR, OVERRD and IND circuit breakers.
- C. Remove access panels on both sides of vertical stabilizer to allow access to trim actuator.
- D. Remove sliding panels below and above stabilizer root.
- E. Place wooden block as shown in Figure 1 or place lead shot (minimum 200 lbs.) on upper surface near leading edge to prevent stabilizer from moving.
- F. Remove cotter pins, nuts, washers and bolts securing actuator to stabilizer front spar.
- G. Remove nut from one end of tie rod and remove tie rod from actuator. (Refer to Figure 2) Inspect tie rod for wear, thread damage and straightness.

- H. Slide dust shield down to gain access to jackscrews.
- I. Inspect jackscrew, one at a time, by applying slight push pull pressure on rod ends to ensure jackscrew is not sheared.

CAUTION: DO NOT LOOSEN JAM NUT ON ROD END OR ALLOW ROD END BEARING TO ROTATE AS THIS WILL CHANGE THE ADJUSTMENT OF THE ACTUATOR TRAVEL.

- J. If jackscrew is found defective, actuator must be replaced. Report any discrepancies to a Galaxy Aerospace Corporation Field Service Representative.
- K. Repeat inspection procedure on opposite jackscrew as per step I.
- L. Slide dust shield up until tie rod holes align with holes in jackscrew. Install tie rod through dust shield and both jackscrews.
- M. Install nut on tie rod. Tighten nut so that tie rod will have a slight axial movement.

N. Apply sealant P/N 3M-800 (or P/N PR-1422 or PR-1750) around top of dust shield at each jackscrew and on inner and outer side of dust shield at tie rod holes.

R

R

NOTE: If tie rod shaft wear exceeds .040" or other discrepancies are found, tie rod must be replaced.

- O. Install bolts, washers and nuts securing actuator rod ends to stabilizer front spar.
- P. Tighten nuts to 100 to 150 inch-pounds and secure with cotter pins.
- Q. Remove wood block or lead shot from horizontal stabilizer and install access panels.
- R. Engage circuit breakers and operate horizontal trim in both directions to check for proper operation.
- 3. COMPLIANCE RECORD

R

- A. Make the following entry in the aircraft log book:
- Service Bulletin No. 1124-27-133, Revision 1, dated May 28, 1997, titled "Flight Controls Inspection of Horizontal Stabilizer Trim Actuator", has been accomplished this date _____.
 - B. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation, New Castle, Delaware.

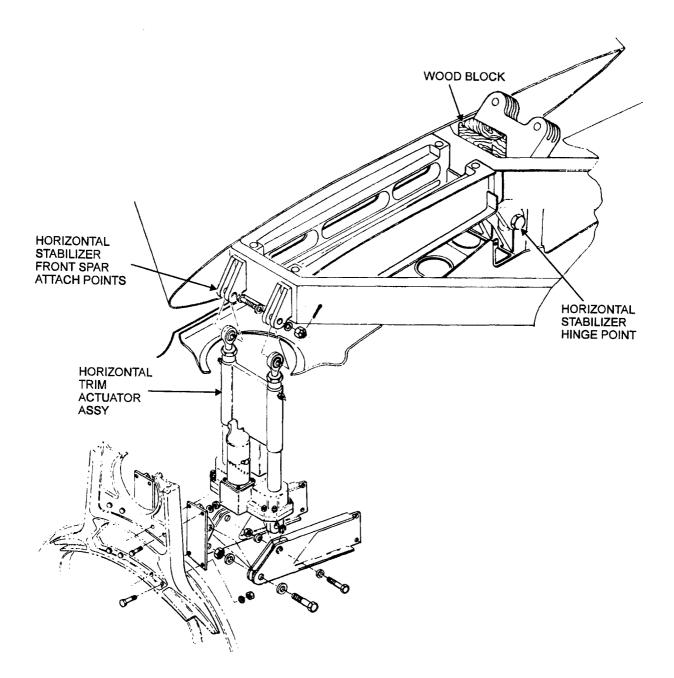
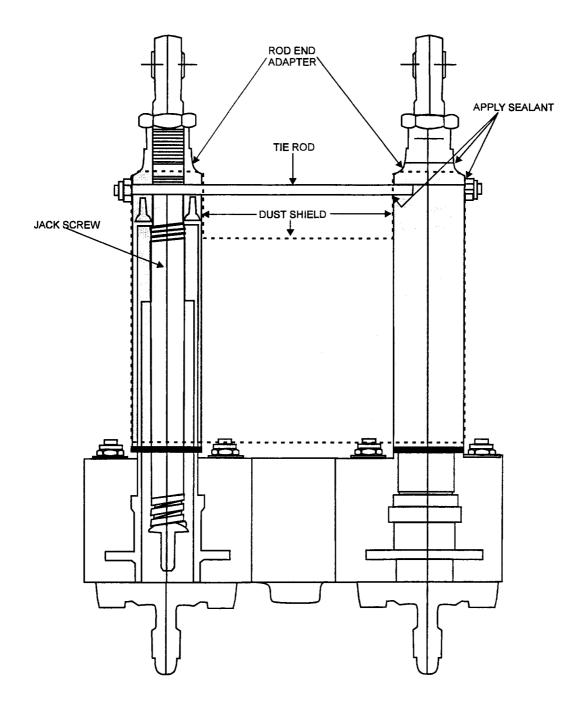


Figure 1



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24-WEJTN//N7

EXHAUST - THRUST REVERSER - SECONDARY LATCH SOLENOID SWITCH CHECK

PLANNING INFORMATION

1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

2. Concurrent Requirement

None.

3. Reason

To detect the potential failure of the thrust reverser secondary latch solenoid switches which may allow for a failure to go undetected during the thrust reverser fault test.

4. Description

This service bulletin provides instructions to perform a voltage drop check across the secondary latch solenoid switches.

5. <u>Compliance</u>

Compliance with this service bulletin is mandatory within 50 flight hours from the effective date of this service bulletin.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 4
- B. Number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.



8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Maintenance Manual, Chapter 78-30-00.

12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapters 5-20-08 and 78-30-00.

13. Interchangeability or Intermixability of Parts

None.

MATERIAL INFORMATION

1. Material - Price and Availability

The Thrust Reverser Secondary Latch Solenoid, P/N F10A-5-SCAV200-1, is available from Galaxy Aerospace Company, LP in Fort Worth, Texas, if replacement is required. The price of the solenoid as of the issue date of this service bulletin is \$2991.72 and is subject to change without notice. Please contact the Product Support Group at Galaxy Aerospace Company, LP for current price and availability of this part.

2. Industry Support Information

None.

3. Material Necessary for Each Aircraft

A. Material to be Purchased:

<u>New P/N</u>	<u>Keyword</u>	Old P/N	<u>Qty</u>
F10A-5-SCAV200-1	Solenoid	N/A	A/R

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

5. <u>Tooling – Price and Availability</u>

None.

24-WESTW//ND

ACCOMPLISHMENT INSTRUCTIONS

- 1. Perform Thrust Reverser Secondary Latch Solenoid Switch Check. Ref. 1124/1124A Westwind Maintenance Manual, Chapter 78-30-00, Maintenance Practices.
- Make the following entry in the aircraft log book: Westwind Alert Service Bulletin No. 1124-78A-134, dated September 15, 1999, titled "Exhaust - Thrust Reverser -Secondary Latch Solenoid Switch Check" has been accomplished this date ______.
- 3. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.



TRANSMITTAL SHEET

Introduction

This sheet transmits Revision 1, dated October 26, 1999, to Westwind Service Bulletin No. 1124-26-135, dated October 15, 1999, titled "Fire Protection - Fire Detection System - Press-To-Test Switch Reliability Improvement"

Reason for Revision

This service bulletin has been revised to correct the part number of the new relays to be installed in the accomplishment instructions.

This is a **PARTIAL REISSUE** of Westwind Bulletin No. 1124-26-135. Replace only the pages of the original issue of this service bulletin with the new pages from this revision.

Previous Revisions of SB 1124-26-135

None.

List of Effective Pages

Page No. Date

1 through 3	October 15, 1999
4	October 26, 1999

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FIRE PROTECTION - FIRE DETECTION SYSTEM - PRESS-TO-TEST SWITCH RELIABILITY IMPROVEMENT

PLANNING INFORMATION

1. Effectivity

Models 1124 and 1124A WESTWIND, all serial numbers

2. Concurrent Requirement

None.

3. Reason

To improve the reliability of the Fire Detection System Press-To-Test switch assembly.

4. Description

This service bulletin provides instructions to replace relays FETR-1 and FETR-2 with an approved version containing arc-suppression diodes.

5. Compliance

Compliance with this service bulletin is optional.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 1
- B. Number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.



8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

Westwind Illustrated Parts Catalog, Chapter 26-10-00

12. Other Publications Affected

Westwind Illustrated Parts Catalog, Chapter 26-10-00

13. Interchangeability or Intermixability of Parts

None.

24-WEJTN//N7

MATERIAL INFORMATION

1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Galaxy Aerospace Company, LP in Fort Worth, Texas. Please contact the Product Support Group at Galaxy Aerospace Company, LP for current price and availability of parts.

2. Industry Support Information

None.

3. Material Necessary for Each Aircraft

A. Material to be Purchased:

<u>New P/N</u>	Keyword	<u>Old P/N</u>	<u>Qty</u>
M83536/16-022M	Relay	MS27400-2	2

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

5. Tooling - Price and Availability

None.

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### ACCOMPLISHMENT INSTRUCTIONS

- 1. Gain access to the Fire Detector Relay Box located under the pilot's seat. Remove box and remove cover from box.
- 2. Remove existing relays FETR-1 and FETR-2.
- 3. Temporarily install Fire Detector Relay Box to provide an airframe power ground to unit and connect electrical connectors.
- 4. Identify FETR-1 coil terminal X1. Connect a 30Vdc voltmeter to terminal X1 and to an airframe ground.
- 5. Apply electrical power to aircraft and press Fire Detection System Press-To-Test switch. Aircraft bus power should be observed on voltmeter while switch is depressed.
- 6. Repeat Steps 4 and 5 of these accomplishment instructions for relay FETR-2.
- 7. If bus power is not observed in Step 5 and/or Step 6 of these accomplishment instructions, reverse positions of terminal X1 and X2 pins of relay socket. Repeat steps 5 and 6 of these accomplishment instructions to make sure that terminal X1 has aircraft bus power applied when switch is pressed and that terminal X2 has a hard airframe ground.
- 8. Remove aircraft power and remove Fire Detector Relay Box.
- 9. Install new relays, P/N M83536/16-022M, in the FETR-1 and FETR-2 positions.
  - 10. Install cover on Fire Detector Relay Box. Install box and connect electrical connectors.
  - 11. Perform Fire Detector preflight procedures. Refer to Airplane Flight Manual, Normal Procedures.
  - Make the following entry in the aircraft log book: Westwind Service Bulletin No. 1124-26-135 Revision 1, dated October 26, 1999, titled "Fire Protection - Fire Detection System - Press-To-Test Switch Reliability Improvement" has been accomplished this date \_\_\_\_\_.
  - 13. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.



### MANDATORY

SERVICE BULLETIN NO. 1124-27-136

September 1, 1997

SUBJECT: FLIGHT CONTROLS - HORIZONTAL STABILIZER TRIM ACTUATOR JACKSCREW ASSEMBLY REPLACEMENT

### 1. PLANNING INFORMATION

A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

The analysis of two Horizontal Stabilizer Trim Actuator Jackscrew failures has determined the necessity to replace the Actuator Jackscrew Assemblies.

C. DESCRIPTION

This service bulletin is issued to mandate replacement of the Horizontal Stabilizer Trim Actuator Jackscrews Assemblies. Jackscrew Assemblies will be replaced only in conjunction with an overhaul of the actuator.

D. COMPLIANCE

Compliance with this service bulletin is mandatory within 18 months of the issue date as specified under the replacement schedule matrix which has been developed to identify the continued airworthiness of each actuator.

E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

September 1, 1997 1098

SB 1124-27-136 Page 1 of 3

### F. MAN-HOUR REQUIREMENTS

The following information is for planning purposes only:

- (1) Estimated man-hours: 4
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

| QTY. | PART NUMBER | DESCRIPTION                               |
|------|-------------|-------------------------------------------|
| 1    | 543502-1    | 1124 Horizontal Stabilizer Trim Actuator  |
| 1    | 543502-501  | 1124A Horizontal Stabilizer Trim Actuator |

A replacement schedule matrix has been developed to identify units based on age and total time.

Material required may be obtained through Galaxy Aerospace Corporation, New Castle, Delaware, or authorized ASTRA/WESTWIND Service Centers.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, 27-40-00. Lucas Aerospace Linear Actuator, 21164-005, Component Maintenance Manual, Revision 2 (or later revision).

L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, 5-10-00.

### SERVICE BULLETIN NO. 1124-27-136

### 2. ACCOMPLISHMENT INSTRUCTIONS

- A. Remove Horizontal Stabilizer Trim Actuator, ref. 1124/1124A Westwind Maintenance Manual, 27-40-00, Maintenance Practices.
- B. Install Horizontal Stabilizer Trim Actuator with serialized replacement Jackscrew Assemblies P/N 21164-360 and -361 (as indicated on data plate). Ref. 1124/1124A Westwind Maintenance Manual, 27-40-00, Maintenance Practices.

<u>NOTE</u>: Installed actuator must be overhauled per Lucas Aerospace Linear Actuator, 21164-005, Component Maintenance Manual, Revision 2 (or later revision).

#### 3. RECORD COMPLIANCE

A. Make the following entry in the aircraft log book:

Service Bulletin No. 1124-27-136, dated September 1, 1997, titled "Flight Controls -Horizontal Stabilizer Trim Actuator Jackscrew Assembly Replacement", has been accomplished this date \_\_\_\_\_\_.

B. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation, New Castle, Delaware.



### OXYGEN - OXYGEN SHUTOFF-VALVE - REPLACEMENT OF EXISTING VALVE WITH SLOW OPENING VALVE

### PLANNING INFORMATION

### 1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

2. Concurrent Requirement

None

3. Reason

To provide operators with a slow-opening oxygen system shut-off valve that restricts the flow of oxygen to prevent overheating when the valve is opened too quickly.

4. Description

This service bulletin provides instructions to replace the existing oxygen system shut-off valve with a Scott® slow-opening oxygen shut-off valve, P/N 27550-3.

5. Compliance

Compliance is mandatory within 200 flight hours after receipt of this service bulletin.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

Estimated man-hours: 8

8. Weight and Balance

Negligible

9. Electrical Load Data

No Change



10. Software Accomplishment Summary

None

11. References

Westwind Maintenance Manual, chapters 12-10-05 and 35-00-00 Westwind Illustrated Parts Catalog, chapter 35-10-00 Israel Aircraft Industries AFC 5616

12. Other Publications Affected

Westwind Illustrated Parts Catalog, chapter 35-10-00

13. Interchangeability or Intermixability of Parts

None



### MATERIAL INFORMATION

#### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) or 214-902-1100, for current price and availability.

#### 2. Warranty Information

None

#### 3. Material Necessary for Each Aircraft

- <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
- A. Material to be Procured:

NOTE: The following parts are included in Service Bulletin Kit P/N GAC27550-3Kit.

| <u>New P/N</u>               | Keyword               | Old P/N                     | <u>Qty</u> |
|------------------------------|-----------------------|-----------------------------|------------|
| 27550-3                      | Oxygen Shut-off Valve | AN6012-1A<br>or 110115      | 1          |
| A01WW5753004-003             | Bracket Assembly      | 4723078-501<br>or 4723078-1 | 1          |
| AN3-4A                       | Bolt                  | N/A                         | 4          |
| AN3-5A                       | Bolt                  | N/A                         | 3          |
| NAS1149D0316J                | Washer                | AN960D10                    | 16*        |
| MS21042-3<br>or MS20365-1032 | Nut                   | N/A                         | 3          |

\* Seven washers are required for valve and bracket installation. Nine additional washers have been included for shimming between the valve bracket and structure, if necessary.

- B. Material Supplied by the Operator: Thread lubricant, Krytox 240 AC, per MIL-G-27617 Tape, Teflon per MIL-T-27730
- 4. <u>Reidentified Parts</u> None
- 5. <u>Special Tooling</u> None

September 23, 2002



ACCOMPLISHMENT INSTRUCTIONS

WARNING: FAILURE TO COMPLY WITH ALL OF THE FOLLOWING WARNINGS MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

SMOKING OR OPEN FLAME IS PROHIBITED WHILE MAINTENANCE IS BEING PERFORMED ON THE OXYGEN SYSTEM.

ALL ELECTRICAL POWER SHALL BE DISCONNECTED AND THE AIRCRAFT PROPERLY GROUNDED.

OIL, GREASES AND CERTAIN SOLVENTS MAY CAUSE EXPLOSION WHEN IN CONTACT WITH OXYGEN. DO NOT ALLOW OIL, GREASE OR CERTAIN SOLVENTS TO COME INTO CONTACT WITH OXYGEN OR OXYGEN SYSTEM COMPONENTS.

CHECK FOR ADEQUATE VENTILATION IN THE FLIGHT COMPARTMENT BEFORE BLEEDING OXYGEN CYLINDER.

USE ONLY AVIATION BREATHING OXYGEN OBTAINED FROM A REPUTABLE OXYGEN STATION. USE FEDERAL SPECIFICATION MIL-0-27210, TYPE 1.

A SLOW RATE OF CHARGE IS ESSENTIAL TO AVOID OVERHEATING AND EXPLOSIVE FAILURE.

- 1. Before any maintenance is performed on the aircraft, review and strictly follow all Oxygen Maintenance Procedures and Precautions in the Westwind Maintenance Manual chapter 35-00-00.
- 2. Gain access to oxygen supply cylinder and place the shutoff valve in the fully closed position.
- 3. Slowly open the pilots oxygen shutoff valve. Reduce oxygen pressure to zero (pilot's pressure gauge) by placing supply lever on pilots or co-pilots regulator panel in ON position and operating respective mask.
- 4. Return regulator supply lever to the OFF position.
- 5. Remove the interior as required to gain access to the oxygen shut-off valve, located behind the right side panel of the flight compartment. Refer to Westwind Maintenance Manual chapter 35-00-00, Removal/Installation.
- 6. Remove existing oxygen shut-off valve (1), P/N AN6012-1A or alternate P/N 110115. Refer to Westwind Maintenance Manual chapter 35-00-00, Removal/Installation, and Figure 1.
  - <u>NOTE:</u> It may be necessary to remove additional oxygen system components to gain access to the oxygen shut-off valve bracket mounting hardware.
  - <u>NOTE:</u> All openings in the oxygen system and components (regulators, valves, fittings) shall be capped (plugged) or bagged in plastic when not attached to the system.



- 7. Remove and retain line fittings installed on existing shut-off valve. Make sure fittings are free from contaminates and that existing Teflon tape is removed.
- Remove and discard the attaching hardware securing the existing oxygen shut-off valve bracket (2) P/N 4723078-501 or P/N 4723078-1. Refer to Figure 1. Remove bracket from aircraft structure.
- 9. Place the new bracket (2) P/N A01WW5753004-003, in the position of the original bracket on the aircraft structure. Refer to Figure 2.
- 10. Using the two existing bracket holes in the structure as a guide, mark the bolt hole locations on the new bracket. Refer to Figure 2.
- 11. Remove the new bracket and drill two new holes at the marked locations.
- 12. Temporarily install the new bracket (2) P/N A01WW5753004-003, in the original bracket mounting location, using bolts (3) P/N AN3-5A and nuts (5) P/N MS20365-1032.
- 13. Match drill a third bolt hole through the bracket assembly and aircraft structure. Locate the hole as shown in Figure 2.
- 14. Remove the temporarily installed bracket, clean and deburr bracket and structure for installation.

<u>CAUTION:</u> AFTER DRILLING, BE SURE TO REMOVE ALL METAL SHAVINGS FROM THE SURROUNDING AREA TO PREVENT OXYGEN SYSTEM CONTAMINATION.

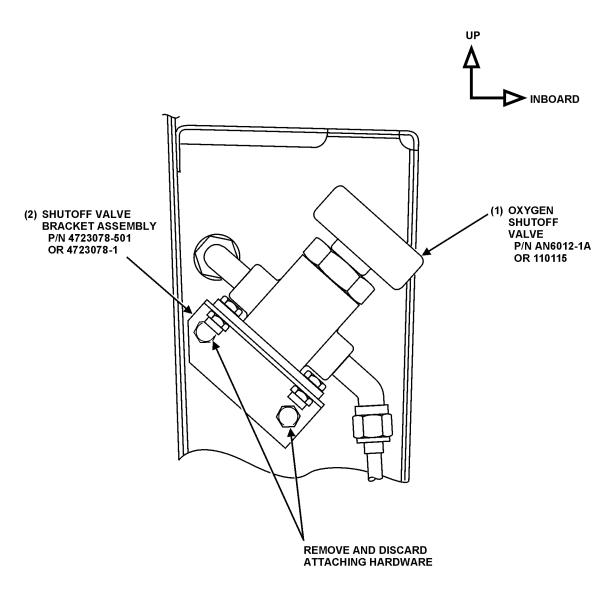
- 15. Install bracket (2) P/N A01WW5753004-003 and secure with bolts (3) P/N AN3-5A, washers (4) P/N NAS1149D0316J and nuts (5) P/N MS20365-1032. Torque to 15-20 in-lbs. Refer to Figure 2.
  - <u>NOTE:</u> Protruding rivet heads may interfere with bracket installation. If necessary, install additional washers P/N NAS1149D0316J, on each bolt between the bracket and the aircraft structure.
  - NOTE: It is permissible to trim the bracket as necessary to ensure proper fit.
- 16. Assemble the new oxygen valve to the bracket assembly as follows: (Refer to Figure 2)
  - <u>WARNING:</u> DO NOT USE ANTISEIZE OR THREAD SEALING COMPOUND ON OXYGEN LINE FITTINGS. USE ONLY TEFLON TAPE THAT CONFORMS TO MIL-T-27730 (ASG).
  - A. Install line fittings removed from original valve on new oxygen valve (1) P/N 27550-3, using Teflon tape or Krytox 240 AC on the fitting threads.
  - B. Loosen the setscrew that secures the knob to the oxygen valve. Remove the knob by pulling outward until knob separates from the oxygen valve stem.

NOTE: Tubing connection is possible only with arrow pointing downstream.



- C. Guide the oxygen valve with gasket in place, through the cutout on bracket assembly (2) P/N A01WW5753004-003. Hold valve in place and secure to bracket assembly using bolts (6) P/N AN3-4A and washers (4) P/N NAS1149D0316J. Torque bolts (6) to 50-70 in-lbs.
- 17. Connect oxygen lines to oxygen shut-off valve. Slowly open the oxygen supply cylinder shutoff valve to fully open position. Perform an operational, and leak check of the lines and fittings between the oxygen supply cylinder and the shutoff valve. Repair any leaks identified. Refer to Westwind Maintenance Manual chapter 35-00-00, Removal/Installation.
- 18. Install the oxygen valve knob to the oxygen valve stem. Tighten the setscrew to secure the knob to the oxygen valve. Refer to Figure 2.
- Service oxygen system, open new oxygen shutoff valve and perform system integrity leak check. Repair any leaks identified. Refer to Westwind Maintenance Manual, chapter 12-10-05, Oxygen System Servicing.
  - <u>NOTE:</u> Install any additional components that were removed for access and perform leak checks.
- 20. Install the flight compartment interior. Refer to Westwind Maintenance Manual chapter 35-00-00, Removal/Installation.
- 21. Record compliance of this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 22. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services in Dallas, Texas.

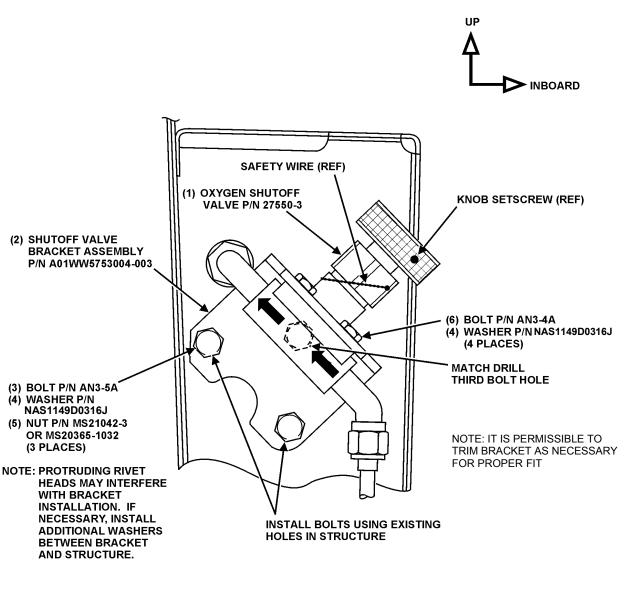




### VIEW LOOKING AFT

Original Oxygen Shutoff Valve and Bracket Assembly Figure 1





**VIEW LOOKING AFT** 

New Oxygen Shutoff Valve and Bracket Assembly Figure 2

| ×>                                                 | $\sim$                                                          |
|----------------------------------------------------|-----------------------------------------------------------------|
| SERVICE                                            | BULLETIN                                                        |
| CERTIFICATE (                                      | OF COMPLIANCE                                                   |
|                                                    | and fax this page to General Dynamics<br>Fax No. (214) 904-7797 |
|                                                    | al Number has complied with<br>n No. 1124-35-137                |
|                                                    |                                                                 |
| Airframe Total Time at Compliance: Hou             | irs Cycles                                                      |
| Compliance Date: By:                               | Print Name                                                      |
|                                                    | Signature                                                       |
| Owner and Address:                                 | Accomplishing Agency and Address:                               |
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|                                                    |                                                                 |
| Please describe below any discrepancie compliance: | es found or difficulties encountered during                     |
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24-VEJTN/ND

### NACELLES/PYLONS - ENGINE INLET COWL AND AFT NACELLE - VERIFICATION OF APPROVED INSTALLED ATTACHMENT BOLTS

## PLANNING INFORMATION

### 1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

#### 2. Concurrent Requirement

None.

#### 3. Reason

Bolt part numbers NAS1303 and NAS6603 are the only approved bolts to attach the inlet cowl and the aft nacelle to the engine flanges. On some aircraft, bolt part number AN3 have been found installed on the engine flanges. AN3 bolts are not approved and are considered as fatigue critical bolts for this application.

#### 4. Description

This service bulletin provides instructions to perform a one time visual verification of the bolts installed on the engine inlet cowl and aft nacelle attachment flanges. The purpose of the inspection is to verify approved bolt part number NAS1303 or the manufacturer approved replacement bolt part number NAS6603 are used to attach the inlet cowl and the aft nacelle to the engine attachment flanges.

#### 5. Compliance

Compliance with this service bulletin is mandatory within 50 aircraft flight hours upon receipt of this service bulletin.

### 6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

24-WEJTHIND

### 7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 1.0 For inspection of installed bolts.
  - 3.0 For replacement to approved part number bolts (if required).
- B. Number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Maintenance Manual, Chapter 54-30-00 1124/1124A Westwind Illustrated Parts Catalog, Chapters 54-20-00 and 78-30-00

12. Other Publications Affected

1124/1124A Westwind Illustrated Parts Catalog, Chapters 54-20-00 and 78-30-00

### 13. Interchangeability or Intermixability of Parts

## MATERIAL INFORMATION

### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Galaxy Aerospace in Fort Worth, Texas. Please contact the Parts Sales Department at Galaxy Aerospace for current price and availability of parts.

#### 2. Warranty Information

None.

### 3. Material Necessary for Each Aircraft

A. Material to be Purchased:

| <u>New P/N</u>                                                              | Keyword                             | <u>Old P/N</u>                                    | <u>Qty</u>                      |
|-----------------------------------------------------------------------------|-------------------------------------|---------------------------------------------------|---------------------------------|
| NAS6603-4<br>NAS6603-5<br>NAS6603-5H<br>NAS6603-6<br>NAS6603-9<br>MS21042L3 | Bolt<br>Bolt<br>Bolt<br>Bolt<br>Nut | AN3-4<br>AN3-5<br>AN3-5H<br>AN3-6<br>AN3-9<br>N/A | A/R<br>A/R<br>A/R<br>A/R<br>A/R |
| NAS620C10L<br>AN960D10                                                      | Washer<br>Washer                    | N/A<br>N/A                                        | A/R<br>A/R                      |

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

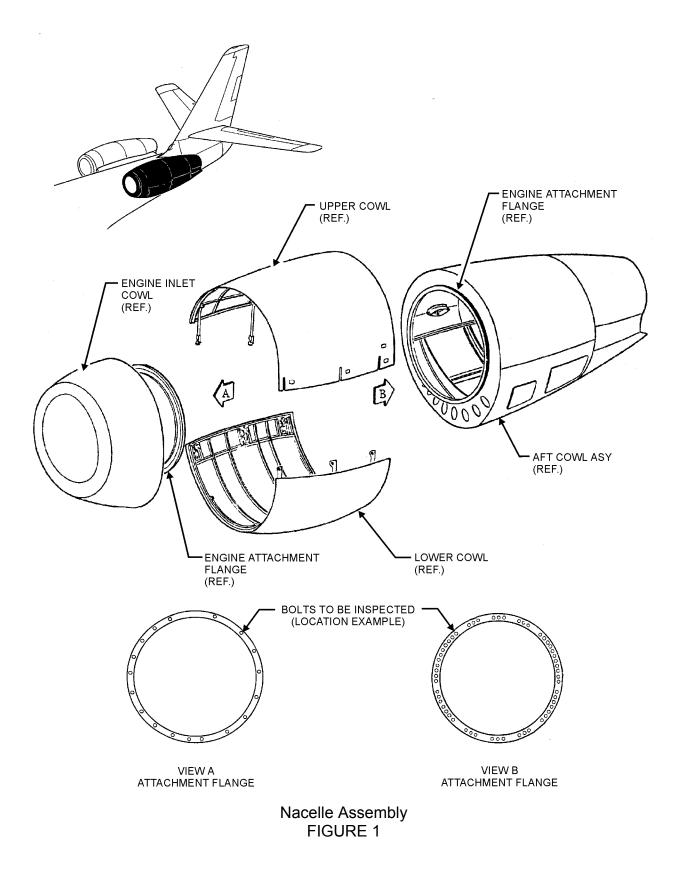
5. Tooling – Price and Availability

|27-WEJTN//ND

## ACCOMPLISHMENT INSTRUCTIONS

- 1. Remove the lower and upper cowl doors from the left and right engines. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 54-30-00, Maintenance Practices.
- 2. Locate and examine the bolt heads on the engine attachment flanges securing the engine inlet cowl and aft nacelle to both engines. Refer to Figure 1.
- 3. Verify the installed bolts are the approved part numbers NAS1303 or NAS6603. If approved bolts are installed proceed to Step 6. Refer to Figure 2.
- 4. Remove and replace any unapproved bolt part number with an approved bolt part number. Refer to 1124/1124A Westwind Illustrated Parts Catalog, Chapters 54-20-00 and 78-30-00 for proper bolt part numbers.
- 5. Install the upper and lower cowl doors on the left and right engines. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 54-30-00, Maintenance Practices.
- Make the following entry in the aircraft log book: Westwind Alert Service Bulletin No. 1124-54A-138, dated March 29, 2001, titled "Nacelles/Pylons - Engine Inlet Cowl and Aft Nacelle - Verification of Approved Installed Attachment Bolts" has been accomplished this date \_\_\_\_\_\_.
- 7. Complete the attached Certificate of Compliance and return to Galaxy Aerospace in Fort Worth, Texas.

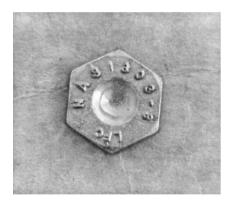
M24-WESTWIND



**A H-WESTNIND** 



AN3 BOLT UNAPPROVED PART NUMBER



NAS1303 BOLT APPROVED PART NUMBER



NAS6603 BOLT APPROVED PART NUMBER

Examples of Bolt Head Markings FIGURE 2



## MANDATORY

SERVICE BULLETIN NO. 1124-32-139

March 5, 1998

**SUBJECT:** LANDING GEAR - INSPECTION & MODIFICATION OF UPPER & LOWER STEERING BRACKET ASSEMBLIES (AFC 5613)

- 1. PLANNING INFORMATION
  - A. EFFECTIVITY

MODEL 1124/1124A WESTWIND, all serial numbers.

B. REASON

To inspect the upper and lower nose landing gear steering bracket assemblies for cracks and modify them to reduce stress concentration and prevent premature failure caused by incorrect towing procedures.

C. DESCRIPTION

Instructions are provided for inspection and modification of the upper and lower nose landing gear steering mechanism bracket assemblies.

D. COMPLIANCE

This service bulletin must be accomplished within thirty days of the issue date. New inspection and replacement intervals will be added to chapter 5 of the 1124/1124A Westwind Maintenance Manual. The new requirements are to inspect unmodified brackets at every "C" check and replace them at the fourth "C" check. Brackets of the new design configuration or existing brackets modified per this service bulletin must be inspected at every second "C" check. If the forthcoming "C" check is due within 200 hours after compliance with this service bulletin, the bracket inspection requirements may be postponed until the next "C" check.

### E. APPROVAL

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

### F. MAN-HOUR REQUIREMENTS

The following is for planning purposes only:

- (1) Estimated man-hours: 5
- (2) Suggested number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

G. MATERIAL

Not applicable.

H. TOOLING

No special tooling required.

I. WEIGHT AND BALANCE

Not applicable.

J. ELECTRICAL LOAD DATA

Not applicable.

K. REFERENCES

1124/1124A Westwind Maintenance Manual, chapters 7-10-00, 32-20-00 and 32-50-00. 1124/1124A Westwind Illustrated Parts Catalog, chapter 32-50-00.

#### L. PUBLICATIONS AFFECTED

1124/1124A Westwind Maintenance Manual, chapters 5-20-00, 5-25-00 and 32-50-00. 1124/1124A Westwind Illustrated Parts Catalog, chapter 32-50-00.

### 2. ACCOMPLISHMENT INSTRUCTIONS

- A. Jack the aircraft. Ref. 1124/1124A Westwind Maintenance Manual, 7-10-00, Maintenance Practices.
- B. Remove the nose landing gear. Ref. 1124/1124A Westwind Maintenance Manual, 32-20-00, Maintenance Practices.
- C. Remove the nose landing gear steering mechanism. Ref. 1124/1124A Westwind Maintenance Manual, 32-50-00. Prior to removing the steering brackets, loosen the attachment bolts and check for any pre-loading due to elastic deformation of the bulkhead or the steering mechanism assembly. Washers and packings that were previously placed under these attachments to relieve these loads should be recorded and replaced during reassembly.
- D. Without dismantling the steering mechanism, clean both 0.03 inch radius corners of the attachment flange and the adjacent area on each bracket assembly with rags and solvents. Remove the paint from these areas. Refer to Figures 1 and 2.
- E. Apply dye-penetrate on both 0.03 inch radius corners and the adjacent area on each bracket assembly. Inspect areas for cracks using a 6X magnifying glass. If no cracks are found, proceed to step 2.G.
- F. If cracks are found on aircraft having a 45 degree steering mechanism (serial numbers 152, 154, 174, 185 through 353 or 360, pre service letter WW-24100), proceed to step (1) or replace the bracket assembly with P/N A01 ES 12970-7 (upper bracket) or P/N A01 ES 12970-6 (lower bracket).

If cracks are found on aircraft having a 58 degree steering mechanism (serial numbers 354 through 359, 361 or subsequent, or on aircraft post service letter WW-24100), proceed to step (2) or replace the bracket assembly with P/N A01 223 60200.001 (upper bracket) or P/N A01 223 60300.001 (lower bracket).

- (1) Modify the upper and lower bracket assemblies on aircraft having a 45 degree steering mechanism (pre service letter WW-24100) as follows:
  - (a) Remove upper bracket assembly, P/N ES12970-7, and lower bracket assembly, P/N ES12970-6, from the steering mechanism.
  - (b) Mill out both 0.03 inch radius corners to a radius of 0.25 inch ( $\pm$  0.010) on each bracket assembly. Refer to Figure 2.
  - (c) Polish the machined surfaces to a high quality surface finish of  $32 \sqrt{\text{microns.}}$

- (d) Apply dye penetrant to the machined surfaces and inspect for cracks using a 6X magnifying glass. Bracket assemblies with cracks must be discarded and replaced with bracket assembly P/N A01 ES 12970-7 (upper bracket) or P/N A01 ES 12970-6 (lower bracket).
- (e) If no cracks are detected, perform surface treatment by anodizing (alodyne) and painting (primer and topcoat) the bracket assemblies.
- (f) After modification, the parts may be returned to service as if they have accumulated zero-life. With ink stamp, re-identify the upper bracket as A01 ES 12970-7 and the lower bracket as A01 ES 12970-6.
- (2) Modify the upper and lower bracket assemblies on aircraft having a 58 degree steering mechanism (post service letter WW-24100) as follows:
  - (a) Remove upper bracket assembly, P/N 223 60200.001, and lower bracket assembly, P/N 223 60300.001, from the steering mechanism.
  - (b) Mill out both 0.03 inch radius corners to a radius of 0.25 inch ( $\pm$  0.010) on each bracket assembly. Refer to Figure 2.
  - (c) Polish the machined surfaces to a high quality surface finish of  $32 \sqrt{\text{microns.}}$
  - (d) Apply dye penetrant to the machined surfaces and inspect for cracks using a 6X magnifying glass. Bracket assemblies with cracks must be discarded and replaced with bracket assembly P/N A01 223 60200.001 (upper bracket) or P/N A01 223 60300.001 (lower bracket).
  - (e) If no cracks are detected, perform surface treatment by anodizing (alodyne) and painting (primer and topcoat) the bracket assemblies.
  - (f) After modification, the parts may be returned to service as if they have accumulated zero-life. With ink stamp, re-identify the upper bracket as A01 223 60200.001 and the lower bracket as A01 223 60300.001.
- G. Ensure bracket assemblies have been properly surface treated and painted. Assemble the steering mechanism and ensure that any washers and packings that were removed are correctly replaced. The correction for misalignment of the bulkhead, requiring the use of these or additional spacing materials, should be noted in the aircraft maintenance log book.
- H. Install the nose landing gear. Ref. 1124/1124A Westwind Maintenance Manual, 32-20-00, Maintenance Practices.

### SERVICE BULLETIN 1124-32-139

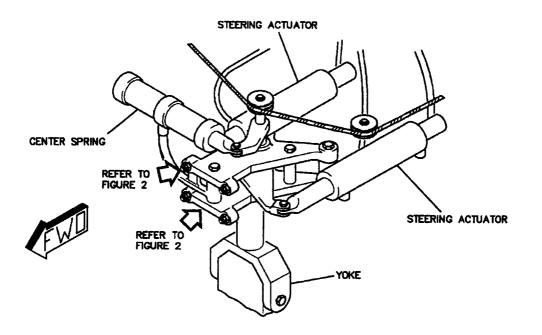
- I. Perform Landing Gear Operational Check. Ref. 1124/1124A Westwind Maintenance Manual, 32-20-00, Maintenance Practices. During retraction and extension of the nose gear, check for warping of the bulkhead due to misalignment of the retraction axis with the plane of the steering bracket attachment points at the bulkhead. If there is significant warping, the nose landing gear support structure will need further investigation. Contact Galaxy Aerospace Corporation for corrective action.
- J. Remove aircraft from jacks. Ref. 1124/1124A Westwind Maintenance Manual, 7-10-00, Maintenance Practices.

### 3. COMPLIANCE RECORD

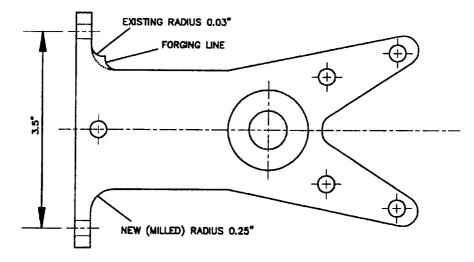
A. Make the following entry in the aircraft log book:

Service Bulletin 1124-32-139, dated March 5, 1998, titled "Landing Gear - Inspection & Modification of Upper & Lower Steering Bracket Assemblies (AFC 5613)" has been accomplished this date \_\_\_\_\_.

B. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation in Fort Worth, TX.







PLAN-VIEW OF BRACKET, SHOWING CHANGE FIGURE 2

SB 1124-32-139 Page 6 of 6



### HYDRAULIC POWER - INDICATION - INSTALLATION OF INDEPENDENT CIRCUIT BREAKER FOR LOW PRESSURE WARNING

PLANNING INFORMATION

### 1. <u>Effectivity</u>

Models 1124/1124A Westwind, all serial numbers.

### 2. Concurrent Requirement

None.

3. <u>Reason</u>

To improve the hydraulic low pressure warning system by providing its power source through its own independent circuit breaker.

4. Description

This service bulletin provides instructions to install an independent circuit breaker for the hydraulic low pressure warning lights.

5. <u>Compliance</u>

Compliance with this service bulletin is mandatory and is required to be accomplished before or at the next 400-Hour Inspection.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 6
- B. Number of personnel: 1



The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Wiring Diagram Manual, Chapter 29-10-01. Israel Aircraft Industries Airframe Change 5611.

12. Other Publications Affected

1124/1124A Westwind Wiring Diagram Manual, Chapter 29-10-01. 1124/1124A Westwind Maintenance Manual, Chapter 29-00-00.

13. Interchangeability or Intermixability of Parts



## MATERIAL INFORMATION

### 1. Material - Price and Availability

The circuit breaker can be obtained from Galaxy Aerospace Corporation in Fort Worth, Texas or from a local source. The price of the circuit breaker at Galaxy Aerospace Corporation as of the issue date of this service bulletin is \$132.28 and is subject to change without notice. Please contact the Product Support Group at Galaxy Aerospace Corporation for current price and availability.

2. Industry Support Information

None.

### 3. Material Necessary for Each Aircraft

A. Material to be purchased:

| New P/N   | Keyword         | Old P/N | <u>Qty</u> |
|-----------|-----------------|---------|------------|
| 7274-47-3 | Circuit Breaker | N/A     | 1          |

### B. Material supplied by the operator:

| <u>New P/N</u> | <u>Keyword</u> | Old P/N | <u>Qty</u> |
|----------------|----------------|---------|------------|
| MIL-W-22759    | #18 AWG Wire   | N/A     | A/R        |
| MIL-W-22759    | #22 AWG Wire   | N/A     | A/R        |

4. Material Necessary for Each Spare

None.

5. Reidentified Parts

None.

### 6. Tooling – Price and Availability



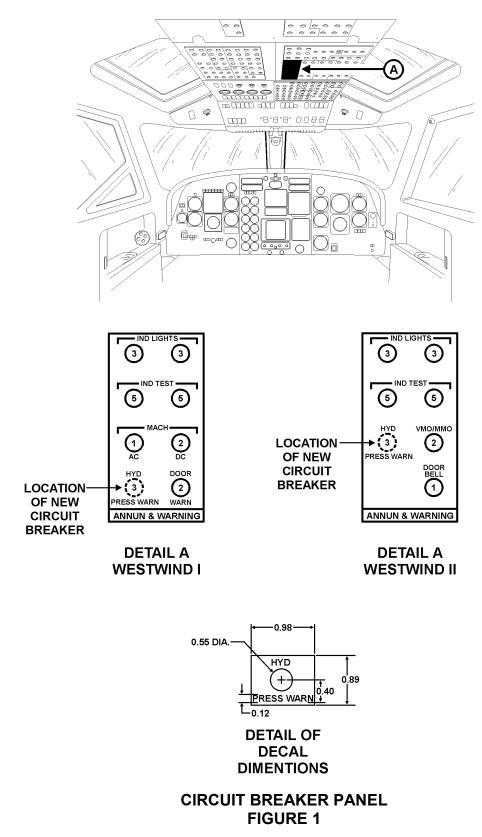
## ACCOMPLISHMENT INSTRUCTIONS

- 1. Remove all electrical power. Disconnect the aircraft main batteries.
- 2. Remove the right middle false panel from the cockpit overhead circuit breaker panel.
- 3. Drill a hole in the false panel at a location available in the ANNUN & WARNING section. Refer to Figures 1 and 2.
- 4. Label the new circuit breaker location on the false panel as HYD PRESS WARN. Refer to Figure 1.
  - <u>NOTE</u>: The false panel lettering shall be condensed gothic white, .12 inches high and centered. All markings are to be engraved or photo etched to .005" depth maximum. As an alternative to engraving, a decal can be fabricated from Scotchcal Film (thickness = 0.2mm) with self adhesive for mounting. Refer to Figure 1. Use silkscreen method for marking. The character color is to be white on a gray or black background, depending on the color of the false panel.
- 5. Lower the forward cockpit overhead circuit breaker panel.
- 6. If necessary, drill a hole through the metal panel at the new circuit breaker location. Refer to Figure 2.
- 7. Install a three ampere circuit breaker, P/N 7274-47-3, in the cockpit overhead circuit breaker panel.
- 8. Add a #18 AWG jumper wire (MIL-W-22759) from the No. 2 Distribution Bus to terminal "B" on the new circuit breaker. Refer to Figure 3.
- 9. Remove wire no. N16A22 from the NOSE STEER circuit breaker and connect to terminal "L" of the new circuit breaker. Refer to Figure 3. If necessary, splice wire as required with a #22 AWG wire (MIL-W-22759) to reach the new circuit breaker.
- 10. Install the false panel on the cockpit overhead circuit breaker panel.

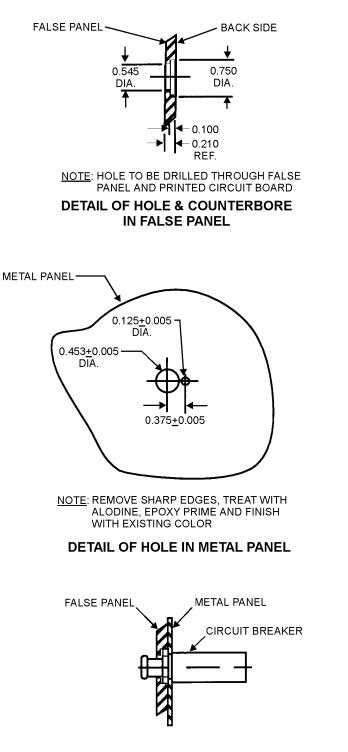
<u>CAUTION</u>: MAKE SURE WIRES ARE NOT PINCHED OR BROKEN WHEN RAISING THE FORWARD COCKPIT OVERHEAD CIRCUIT BREAKER PANEL. THE FORWARD COCKPIT OVERHEAD CIRCUIT BREAKER PANEL MUST BE PROPERLY SECURED.

11. Raise and secure the forward cockpit overhead circuit breaker panel.





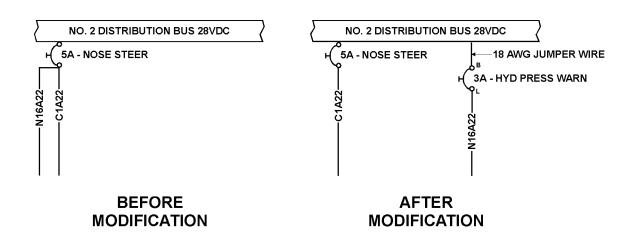




DETAIL OF CIRCUIT BREAKER INSTALLATION

### FIGURE 2





### WIRE CHANGE FIGURE 3



- 12. Clean and secure the work area and restore aircraft electrical power.
- 13. Perform an operational check of the HYD PRESS LOW warning lights.
- Make the following entry in the aircraft log book: Westwind Alert Service Bulletin No. 1124-29A-140, dated August 15, 1998, titled "Hydraulic Power - Indication -Installation of Independent Circuit Breaker for Low Pressure Warning" has been accomplished this date \_\_\_\_\_\_.
- 15. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation in Fort Worth, Texas.



## LANDING GEAR - STEERING - REPLACEMENT OF 45 DEGREE STEERING BRACKETS WITH 58 DEGREE STEERING BRACKETS

## PLANNING INFORMATION

### 1. <u>Effectivity</u>

Model 1124/1124A Westwind, serial numbers 152 through 353 and 360.

2. Concurrent Requirement

None.

3. <u>Reason</u>

To provide the 58 degree steering brackets as an alternate for the 45 degree steering brackets.

4. Description

Instructions are provided to replace the upper steering bracket, P/N ES12970-7, with P/N A01-2236-0200-000 and the lower steering bracket, P/N ES12970-6, with P/N A01-2236-0300-000. It is not necessary to replace the upper and lower brackets at the same time. The original aircraft turning radius is not affected after compliance with this service bulletin.

5. Compliance

Compliance with this service bulletin is optional.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

### 7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 5 including removal, replacement and testing.
- B. Number of personnel: 2



The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this bulletin.

8. Weight And Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Maintenance Manual, Chapters 7-10-00, 32-20-00 and 32-50-00 1124/1124A Illustrated Parts Catalog, Chapter 32-50-00.

12. Other Publications Affected

1124/1124A Maintenance Manual, Chapter 32-50-00. 1124/1124A Illustrated Parts Catalog, Chapter 32-50-00.

### 13. Interchangeability or Intermixability of Parts

P/N A01-2236-0200-000 can be used in place of P/N ES12970-7 and P/N A01-2236-0300-000 can be used in place of P/N ES12970-6 when installed in accordance with the Accomplishment Instructions of this service bulletin.

P/N ES12970-7 can not be used in place of P/N A01-2236-0200-000 and P/N ES12970-6 can not be used in place of P/N A01-2236-0300-000.



## MATERIAL INFORMATION

### 1. Material - Price and Availability

The approximate total cost of each bracket is \$2,200.00 US dollars. This price is subject to change without notice. The brackets can be obtained from Galaxy Aerospace Corporation in Fort Worth, Texas or from an authorized Galaxy Aerospace Service Center.

Shims required for installation of the brackets are to be furnished by the operator.

2. Industry Support Information

None.

### 3. Material Necessary for Each Aircraft/Engine/Component

A. Material to be Purchased

|    | <u>New P/N</u>                         | Keyword                          | <u>Old P/N</u>         | <u>Qty</u>  |
|----|----------------------------------------|----------------------------------|------------------------|-------------|
|    | A01-2236-0200-000<br>A01-2236-0300-000 | Bracket, Upper<br>Bracket, Lower | ES12970-7<br>ES12970-6 | 1<br>1      |
| В. | Material Supplied by the               | e Operator                       |                        |             |
|    | <u>New P/N</u>                         | Keyword                          | Old P/N                | <u>Qty</u>  |
|    | Not Applicable                         | Shim                             | Not Applicable         | As Required |

4. Material Necessary for Each Spare

None.

5. <u>Reidentified Parts</u>

None.

6. <u>Tooling – Price And Availability</u>

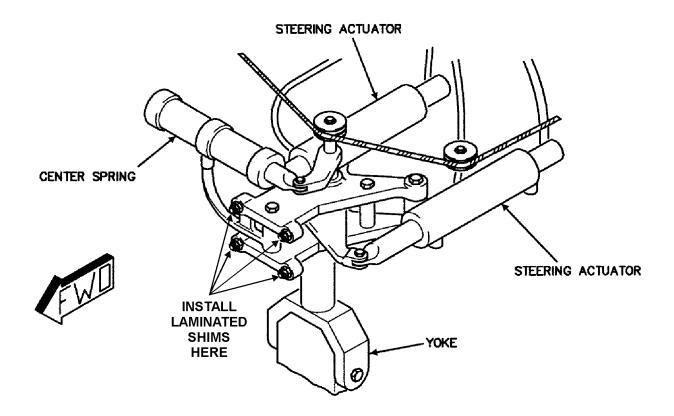


## ACCOMPLISHMENT INSTRUCTIONS

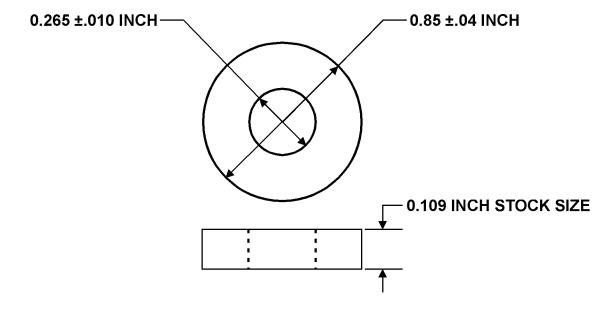
- 1. Jack aircraft. Ref. 1124/1124A Westwind Maintenance Manual, 7-10-00, Maintenance Practices.
- 2. Refer to Figure 1. Remove the nose landing gear steering mechanism. Ref. 1124/1124A Westwind Maintenance Manual, 32-50-00, Maintenance Practices. Prior to removing the steering brackets, loosen the attachment bolts and check for any pre-loading due to the elastic deformation of the bulkhead or the steering mechanism. Shims that were previously placed under these attachments to relieve these loads should be recorded and replaced during assembly.
- 3. Replace the existing upper bracket, P/N ES12970-7, with P/N A01-2236-0200-000 and/or the existing lower bracket, P/N ES12970-6, with P/N A01-2236-0300-000. After replacement of the bracket(s), reassemble the steering mechanism but do not connect the actuating cylinders and centering spring at this time to allow pivoting of the nose landing gear wheels from one side to the other by hand.
  - <u>CAUTION</u>: BRACKETS P/N A01-2236-0200-000 AND P/N A01-2236-0300-000 ARE SHORTER THAN BRACKETS P/N ES 12970-7 AND ES 12970-6 BY 1.0 MM (0.04 INCH). THE FOLLOWING STEPS ARE REQUIRED TO ENSURE THE STEERING YOKE CENTERLINE COINCIDES WITH THE LANDING GEAR INNER-BODY CENTERLINE TO ALLOW SMOOTH PIVOTING OF THE NOSE LANDING GEAR WHEELS.
- 4. Fabricate laminated shims using Aluminum Lam. 1145-H19 per MIL-S-22499, Comp 1, Type I, Class1. Refer to Figure 2. For reference only, the expected shim thickness is 1.00 mm (0.04 inch).
- 5. Install the steering mechanism with previously removed shims and additional laminated shims at each bracket attachment point between the bracket(s) and the aircraft structure until pivoting of the nose landing gear wheels is smooth. Refer to Figure 1. The hand movement required to pivot the wheel from one side to the other (±90°) and aircraft bulkhead elastic deformations should be minimal as possible. Maintain same shim thickness at both sides of the bracket(s).
- 6. Connect the steering actuating cylinders and centering spring to the steering mechanism.
- 7. Perform Steering Operational Check. Ref 1124/1124A Westwind Maintenance Manual, 32-50-00, Maintenance Practices.
- 8. Remove aircraft from jacks. Ref. 1124/1124A Westwind Maintenance Manual, 7-10-00, Maintenance Practices.

June 11, 1998









Laminated Shim Figure 2



- 9. Make the following entry in the aircraft log book: Service Bulletin 1124-32-141, dated June 11, 1998, titled "Landing Gear Steering Replacement Of 45 Degree Steering Brackets With 58 Degree Steering Brackets" has been accomplished this date
- 10. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Corporation in Fort Worth, Texas.

# ICE AND RAIN PROTECTION - WINDOWS AND WINDSHIELDS - INSPECTION OF WINDSHIELD WIPER ARM

### PLANNING INFORMATION

### 1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

2. Concurrent Requirement

None.

3. Reason

To eliminate windshield wiper arm/tip assembly separation in flight due to rivet failure.

4. Description

This service bulletin provides instructions for the inspection of the windshield wiper arm, and if applicable, the repair or replacement of the wiper arm and/or tip assembly.

5. Compliance

Compliance with this service bulletin is mandatory and is required to be accomplished within 10 flight hours upon the receipt of this service bulletin for aircraft with 4000 flight hours or more. For aircraft with less than 4000 flight hours, this service bulletin must be performed within 3 months upon the receipt of this service bulletin. Wiper units failing the inspection criteria must be repaired or replaced prior to returning the aircraft to service.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

### 7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 0.5 for visual inspection 2.5 for replacement of arm tip assembly, if required
- B. Number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

1124/1124A Westwind Maintenance Manual, Chapter 30-40-00 (Temporary Revision No. 30-3)
1124/1124A Westwind Illustrated Parts Catalog, Chapter 30-40-00 Rosemount Service Bulletin No. 2314M-36-30-01

12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapters 5-20-02 and 30-40-00 1124/1124A Westwind Illustrated Parts Catalog, Chapter 30-40-00

### 13. Interchangeability or Intermixability of Parts

``\_',`//``,

## MATERIAL INFORMATION

### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Galaxy Aerospace Company, LP in Fort Worth, Texas. Please contact the Product Support Group at Galaxy Aerospace Company, LP for current price and availability of parts.

### 2. Industry Support Information

None.

### 3. Material Necessary for Each Aircraft

A. Material to be Purchased:

| <u>New P/N</u>  | <u>Keyword</u>       | <u>Old P/N</u> | <u>Qty</u> |
|-----------------|----------------------|----------------|------------|
| 2314M-36-2      | Arm Assembly         | N/A            | A/R        |
| 02314-0154-0001 | Arm Tip Assembly Kit | N/A            | A/R        |

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

5. <u>Tooling – Price and Availability</u>

CP0341 Compression Rivet Gun or equivalent

## ACCOMPLISHMENT INSTRUCTIONS

- 1. Inspect the left and right wiper arm assemblies. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 30-40-00, Maintenance Practices.
- 2. If required, replace the wiper arm tip and rivets. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 30-40-00, Maintenance Practices.
- Make the following entry in the aircraft log book: Westwind Alert Service Bulletin No. 1124-30A-142, dated May 24, 2000, titled "Ice and Rain Protection - Windows and Windshields - Inspection of Windshield Wiper Arm" has been accomplished this date \_\_\_\_\_\_.
- 2. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.

### AIR CONDITIONING - SAFETY OUTFLOW SOLENOID VALVE - INSTALLATION OF JUMPER WIRE FOR IMPROVED ELECTRICAL GROUNDING

## PLANNING INFORMATION

### 1. <u>Effectivity</u>

Model 1124/1124A WESTWIND, all serial numbers

2. Concurrent Requirement

None.

3. Reason

The solenoid valve used to control the pressurization safety outflow valve has been found to operate intermittently due to an insufficient electrical ground.

4. <u>Description</u>

This service bulletin provides instructions to install a jumper wire from the safety outflow solenoid valve to the pedestal frame to provide improved electrical grounding.

5. <u>Compliance</u>

Compliance with this service bulletin is recommended at the earliest opportunity where manpower and facilities are available.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 3
- B. Number of personnel: 1

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.



8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

## 10. Software Accomplishment Summary

None.

11. References

1124 or 1124A Westwind Airplane Flight Manual 1124/1124A Westwind Illustrated Parts Catalog, Chapter 21-30-01

12. Other Publications Affected

1124/1124A Westwind Illustrated Parts Catalog, Chapter 21-30-01

13. Interchangeability or Intermixability of Parts

27-WEJTN/ND

### MATERIAL INFORMATION

#### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Gulfstream in Fort Worth, Texas. Please contact the Gulfstream Parts Sales department for current price and availability of parts.

#### 2. Warranty Information

None.

#### 3. Material Necessary for Each Aircraft

A. Material to be Purchased:

NOTE: The following parts are included in Service Bulletin Kit P/N 1124-21-143.

| <u>New P/N</u> | <u>Keyword</u>    | <u>Old P/N</u> | <u>Qty</u> |
|----------------|-------------------|----------------|------------|
| MS27039-0807   | Screw             | N/A            | 1          |
| MS27039-0823   | Screw             | N/A            | 1          |
| MS21043-08     | Nut               | N/A            | 2          |
| AN960KD8L      | Washer            | N/A            | 5          |
| MS25083-2BB10  | Jumper Wire Assy. | N/A            | 1          |

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

5. <u>Tooling – Price and Availability</u>

None.

/~\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### ACCOMPLISHMENT INSTRUCTIONS

- 1. Remove electrical power from aircraft.
- 2. Remove co-pilot seat.
- 3. Remove pedestal panels to gain access to the safety outflow solenoid valve. Refer to Figure 1.
- 4. Clean an area of diameter 0.560 inch on the safety outflow solenoid valve underneath washer where jumper wire lug is to attach with #320 grit aluminum oxide emery cloth. Refer to Figure 1, Detail A.
- 5. Clean surface with Girtasafe Degrease 500 cleaner or alcohol and dry thoroughly with a clean lint free cloth.
- 6. Immediately apply conductive finish Iridite 14-2 Chemical Conversion Coating to the prepared area.
- Attach one end of jumper, P/N MS25083-2BB10, to safety outflow solenoid valve using screw P/N MS27039-0823, three washers P/N AN960KD8L, and nut P/N MS21043-08. Refer to Figure 1, Detail A.
- 8. Treat exposed area with epoxy primer.
- 9. Locate the existing hole to use as attach point on the pedestal frame for the other end of the jumper, P/N MS25083-2BB10. Refer to Figure 2. If the hole shown in Figure 2 does not exist on the aircraft complying with this service bulletin, proceed as follows:

CAUTION: DO NOT DRILL INTO THE FORWARD PRESSURE BULKHEAD.

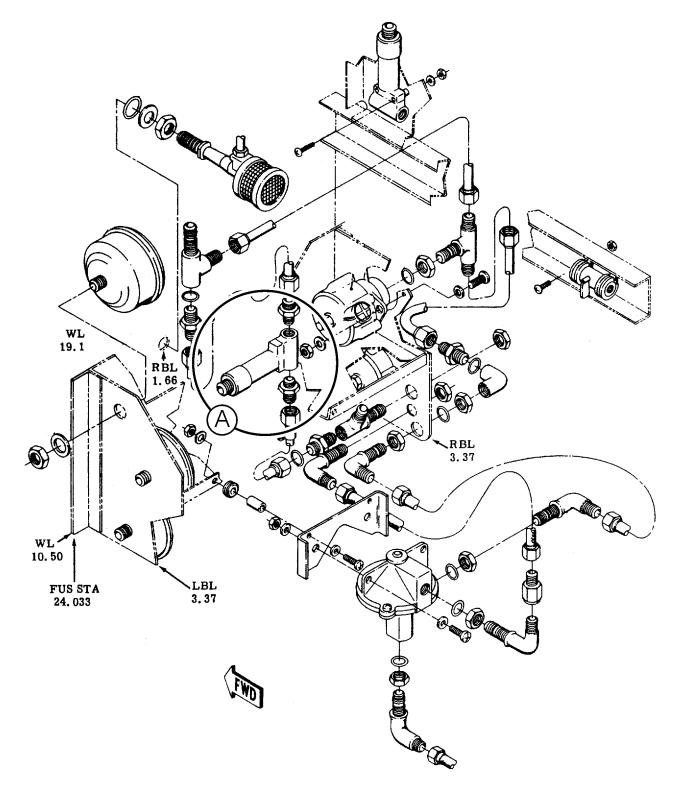
- A. If the indicated hole is not present, a new attach point may be drilled in the same location using a #21 drill bit.
- 10. Clean an area of diameter 0.560 inch on surface where jumper wire lug is to attach with #320 grit aluminum oxide emery cloth. Refer to Figure 1, Detail A.
- 11. Clean surface with Girtasafe Degrease 500 cleaner or alcohol and dry thoroughly with a clean lint free cloth.
- 12. Immediately apply conductive finish Iridite 14-2 Chemical Conversion Coating to the prepared area.
- 13. Attach the other end of jumper, P/N MS25083-2BB10, to the cleaned contact area using screw P/N MS27039-0807, two washers P/N AN960KD8L, and one nut P/N MS21043-08.

September 17, 2001

|27-NEJTN/|NJ

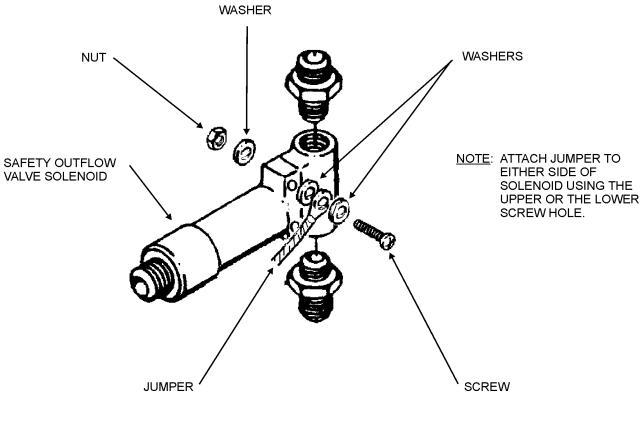
- 14. Treat exposed area with epoxy primer.
- 15. Check the resistance between the safety outflow solenoid valve and airframe ground. Maximum resistance is .0025 ohms.
- 16. Check for proper operation of the pressurization safety outflow valve by ground pressurizing the aircraft during an engine run using the GROUND PRESSURE pushbutton switch. Refer to 1124 Westwind Airplane Flight Manual.
- 17. Install pedestal panels.
- 18. Install co-pilot seat.
- Make the following entry in the aircraft log book: Westwind Service Bulletin No. 1124-21-143, dated September 17, 2001, titled "Air Conditioning - Safety Outflow Solenoid Valve - Installation of Jumper Wire for Improved Electrical Grounding" has been accomplished this date \_\_\_\_\_\_.
- 20. Complete the attached Certificate of Compliance and return to Gulfstream Aerospace LP in Fort Worth, Texas.

M24-WESTNIND



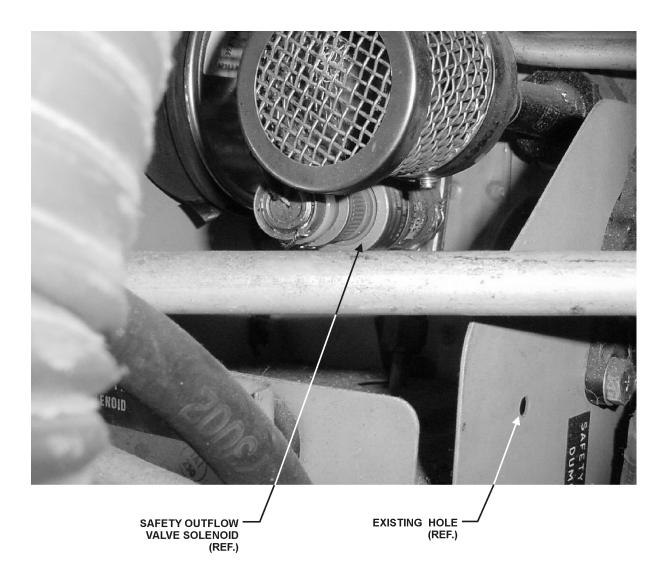
Forward Cabin Air Pressurization Installation FIGURE 1 (Sheet 1 of 2)





<u>DETAIL A</u>

Forward Cabin Air Pressurization Installation FIGURE 1 (Sheet 2 of 2)



Location of Safety Outflow Valve Solenoid and Hole on Airframe for Grounding FIGURE 2

### WESTWIND MODEL 1124 1124A

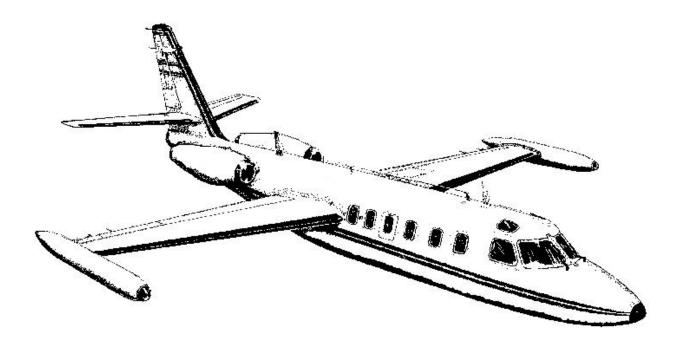
#### SERVICE BULLETIN

### NO.1124-27-144

#### SUBJECT:

FLIGHT CONTROLS (ATA 27)

AILERON - X-RAY INSPECTION OF LEFT AND RIGHT AILERON CONTROL ROD ASSEMBLIES P/N 513506-503RD AND -503RE





#### FLIGHT CONTROLS - AILERON - X-RAY INSPECTION OF LEFT AND RIGHT AILERON CONTROL ROD ASSEMBLIES P/N 513506-503RD AND -503RE

### PLANNING INFORMATION

### 1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND aircraft, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Corrosion has been discovered on aileron control rod assemblies P/N 513506-503RD and -503RE. As a result, recurring inspection of the control rod assemblies is mandated by the Inspection Program Manual. To remove this requirement, an improved stainless steel control rod is introduced.

4. <u>Description</u>

This service bulletin provides instructions to perform an x-ray inspection of the aileron control rod assembly P/N 513506-503RD and -503RE for corrosion. Additionally this service bulletin provides instructions for replacement of the control rod assembly with a new improved stainless steel control rod assembly P/N 513506-505. Incorporation of the -505 control rod assembly terminates the requirement for repeated x-ray inspection.

### 5. <u>Compliance</u>

Compliance with this service bulletin is mandatory at the next A check or within one year after the release date of this service bulletin, whichever comes first.

- NOTE: Recurrent inspection of control rod assemblies P/N 513506-503RD and -503RE shall be accomplished, every 5 years or 5,000 hours, whichever occurs first, as referenced in the Inspection Program Manual.
- 6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 8

8. <u>Weight and Balance</u>

None

9. <u>Electrical Load Data</u>

No Change

10. <u>Software Accomplishment Summary</u>

None

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapters 5 1124/1124A Westwind Illustrated Parts Catalog, Chapter 27 1124/1124A Phase Inspection Program Manual Nondestructive Testing Manual, Chapter 27 Illustrated Parts Catalog, Chapter 27 Israel Aircraft Industries MOD number AFC 2051

### 12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapters 5 1124/1124A Phase Inspection Program Manual Nondestructive Testing Manual, Part 2 Chapter 27 Illustrated Parts Catalog, Chapter 27

13. Interchangeability or Intermixability of Parts

Stainless steel control rod assembly P/N 513506-505 is interchangeable with control rod assemblies P/N 513506-503RD or -503RE. Mixing of control rod assemblies is approved.

NOTE: Replacement of the 513506-503RD and -503RE control rods with the 513506-505 control rods terminates the recurring x-ray inspection requirement.



### MATERIAL INFORMATION

#### 1. <u>Material - Price and Availability</u>

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) for price and availability.

2. <u>Warranty Information</u>

None

- 3. Material Necessary for Each Aircraft
  - <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
  - A. Material to be Procured:

| <u>New P/N</u>               | Keyword     | <u>Old P/N</u>         | <u>Qty</u> |
|------------------------------|-------------|------------------------|------------|
| ( )                          | Control Rod | 513506-503RD or -503RE | A/R        |
| or<br>513506-503RD or -503RE | Control Rod |                        | A/R        |

- <u>NOTE:</u> It is acceptable to install replacement control rods P/N 513506-503RD and -503RE provided the above mentioned x-ray inspection is accomplished on the new control rods prior to installation. Installation of control rod, P/N 513506-505 eliminates the requirement for the recurring x-ray inspection. If the -503RD and -503RE are intermixed with the -505, the -503RD and -503RE rods must be inspected in accordance with the x-ray inspection intervals in the Phase Inspection Program Manual.
- NOTE: Replacement of the 513506-503RD and -503RE control rods with the 513506-505 control rods terminates the recurring x-ray inspection requirement.
- 4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

X-ray equipment



### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Place warning tags at the flight controls in the flight compartment.

#### WARNING: WARNING TAGS SHALL BE PLACED ON CONTROL WHEELS -"DANGER - DO NOT MOVE FLIGHT CONTROLS, MAINTENANCE IN PROGRESS." FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND DAMAGE TO EQUIPMENT.

3. Fully extend flaps, speed brakes and lift dumpers to gain access to the left and right aileron assemblies.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 4. Remove external electrical power from aircraft.
- 5. Insert rig pin in the aileron control pulley located on the rear fuselage bulkhead at station 316.00. Refer to Aircraft Maintenance Manual, Chapter 27.
- Remove the left and right aileron control rod assemblies, P/N 513506-503RD and -503RE between wing stations XW=110.25 to XW=143.80. Tag and identify left and right rod assemblies respectively.
- 7. Carefully measure and record distance between center of attachment holes of rod ends, for later reference should the control rods require replacement.
- 8. Perform x-ray inspection of the left and right aileron control rod assemblies. Refer to Part 2, Chapter 27 of the Nondestructive Testing Manual.
  - <u>NOTE:</u> If any corrosion or other damage is found, it is necessary to replace the control rod.



- NOTE: It is acceptable to install replacement control rods P/N 513506-503RD and -503RE provided the above mentioned x-ray inspection is accomplished on the new control rods prior to installation. Installation of control rod, P/N 513506-505 eliminates the requirement for the recurring x-ray inspection. If the -503RD and -503RE are intermixed with the -505, the -503RD and -503RE rods must be inspected in accordance with the x-ray inspection intervals in the Phase Inspection Program Manual.
- Reinstall left and right aileron control rod assemblies between wing stations XW=110.25 to XW=143.80. Torque nuts to 50-70 inch-pounds and secure with cotter pins.
- 10. Check aileron rigging in accordance with Aircraft Maintenance Manual, Chapter 27.
- 11. Remove rig pin in the aileron control pulley located on the rear fuselage bulkhead at station 316.00. Refer to Aircraft Maintenance Manual, Chapter 27.
- 12. Ensure work area is clean and clear of foreign objects (FOD).
- 13. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 14. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services, Dallas, Texas.

| $\sim$       |                                                                   | *>                                       |
|--------------|-------------------------------------------------------------------|------------------------------------------|
|              | SERVICE B                                                         | ULLETIN                                  |
|              | CERTIFICATE OF                                                    | COMPLIANCE                               |
|              | Please fill in the required data below and Aviation Se            |                                          |
|              | Fax No. (214)                                                     | 902-7796                                 |
|              | This is to certify that Aircraft Serial Nu<br>Service Bulletin No | umber has complied with<br>. 1124-27-144 |
| Ai           | ircraft Registration No.                                          |                                          |
| Ai           | irframe Total Time at Compliance: Hours _                         | Cycles                                   |
| Co           | ompliance Date: By:                                               | Print Name                               |
|              |                                                                   | Signature                                |
| 0            | wner and Address:                                                 | Accomplishing Agency and Address:        |
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|              | lease describe below any discrepancies fo                         | und or difficulties encountered during   |
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24-VEJTNIND

### FLIGHT CONTROLS - AILERON - RADIOGRAPHIC INSPECTION OF LEFT AND RIGHT AILERON RIB TO SPAR CONNECTIONS

### PLANNING INFORMATION

#### 1. Effectivity

Models 1124/1124A WESTWIND, serial numbers 297, 304 and 400 through 410 (S/N 405, right aileron only).

2. Concurrent Requirement

None.

3. Reason

An 1124A Westwind was found to have 5 out of the 13 ribs not riveted to the spar on one of the aileron assemblies.

4. Description

This service bulletin provides instructions to perform a radiographic inspection on the left and right ailerons for possible missing rivets on the 13 aileron rib to spar connections.

5. Compliance

Compliance with this service bulletin is mandatory within 200 flight hours after receipt of this service bulletin.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

#### 7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 4
- B. Number of personnel: 1

24-VEJTNIND

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

None.

12. Other Publications Affected

None.

13. Interchangeability or Intermixability of Parts

None.

**M24-WESTWIND** 

### MATERIAL INFORMATION

- 1. <u>Material Price and Availability</u> None.
- 2. Industry Support Information

None.

3. Material Necessary for Each Aircraft

None.

4. Reidentified Parts

None.

5. Tooling - Price and Availability

None.

27-WEJTN/ND

### ACCOMPLISHMENT INSTRUCTIONS

1. Isolate aircraft to be x-rayed and post warning signs at intervals with rope barriers around the radiation area to keep unauthorized personnel at a safe distance.

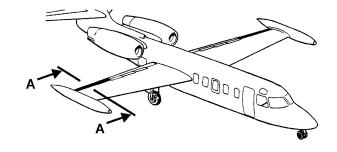
WARNING: X-RAY EQUIPMENT IN OPERATION PRODUCES RADIATION DANGEROUS TO THE HUMAN BODY. CAREFULLY FOLLOW ALL SAFETY PRECAUTIONS AND REQUIREMENTS TO PREVENT INJURY TO OPERATING PERSONNEL AND OTHER PERSONS IN THE VICINITY.

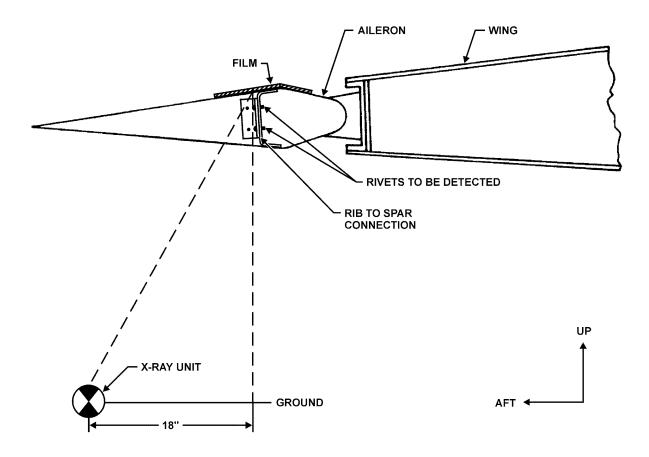
- 2. Perform an x-ray inspection on the left and right aileron ribs (WS 158.00 to WS 246.00) for possible missing rivets at the rib to spar connections using the following x-ray technical data: (Refer to Figure 1)
  - <u>NOTE:</u> Aileron removal from the aircraft is not required to perform the x-ray inspections.
  - A. Film focal distance (FFD): 115 cm (45.27 inches)
  - B. Film Size: 5 X 17.0 inch Fuji 50 or equivalent
  - C. Film density: 1.7 3.0
  - D. Voltage: 110 kV
  - E. Tube Current: 6.5 mA
  - F. Film exposure time: 1.0 minute
- 3. If any rivets are found missing, contact the Customer Support Group at Galaxy Aerospace Company, LP for repair instructions.

- Make the following entry in the aircraft log book: Westwind Alert Service Bulletin No. 1124-27A-145, dated March 24, 2000, titled "Flight Controls - Aileron - Radiographic Inspection of Left and Right Aileron Rib to Spar Connections" has been accomplished this date \_\_\_\_\_.
- 5. Complete the attached Certificate of Compliance and return to Galaxy Aerospace Company, LP in Fort Worth, Texas.

<sup>&</sup>lt;u>NOTE:</u> If rivets are found to be missing, the aircraft must be grounded until the aileron has been repaired or replaced.







#### **SECTION A-A**

Aileron X-Ray Inspection Right Aileron Shown, Left Aileron Opposite FIGURE 1

### WESTWIND MODEL 1124 & 1124A

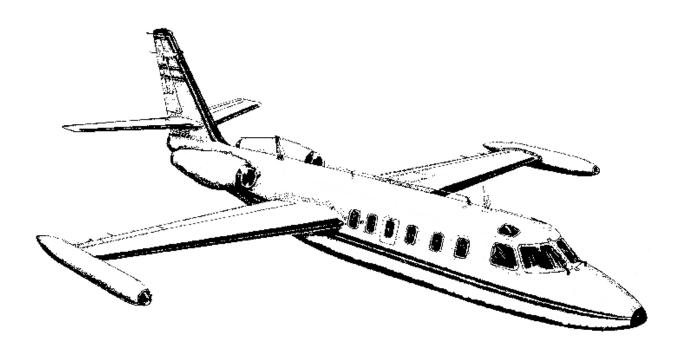
### ALERT

SERVICE BULLETIN

NUMBER 1124-35A-146

#### SUBJECT:

OXYGEN (ATA 35) PRESSURE REDUCER/REGULATOR ASSEMBLY - INSPECTION OF HIGH PRESSURE INLET BOSS





### OXYGEN – PRESSURE REDUCER REGULATOR/ASSEMBLY - INSPECTION OF HIGH PRESSURE INLET BOSS

### PLANNING INFORMATION

### 1. <u>Effectivity</u>

1124 and 1124A WESTWIND, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Cracks have been discovered in the high-pressure inlet boss of the oxygen pressure reducer/regulator assembly.

4. Description

This service bulletin provides instructions to perform a visual inspection and leakage check of the high-pressure inlet boss on the oxygen pressure reducer regulator assembly.

5. <u>Compliance</u>

Compliance with this service bulletin is mandatory not to exceed 50 flight hours after the release date of this service bulletin.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. <u>Manpower</u>

Estimated man-hours: 2

8. Weight and Balance



9. <u>Electrical Load Data</u>

No Change

10. <u>Software Accomplishment Summary</u>

None

11. <u>References</u>

Westwind Maintenance Manual, Chapters 25 and 35 Westwind Illustrated Parts Catalog, Chapter 35

12. Other Publications Affected

Westwind Maintenance Manual, Chapter 35 Westwind Illustrated Parts Catalog, Chapter 35

13. Interchangeability or Intermixability of Parts



### MATERIAL INFORMATION

### 1. <u>Material - Price and Availability</u>

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) for current price and availability.

2. <u>Warranty Information</u>

None

- 3. Material Necessary for Each Aircraft
  - <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If an equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
  - A. Material to be Procured:
    - <u>NOTE:</u> No materials are required to perform the inspection called out in this service bulletin.
  - B. Material Supplied by the Operator:

Leak Detector Solution, MIL-L-25567B Type I or equivalent

4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>



ACCOMPLISHMENT INSTRUCTIONS

WARNING: FAILURE TO COMPLY WITH ALL OF THE FOLLOWING WARNINGS MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

> SMOKING OR OPEN FLAME IS PROHIBITED WHILE MAINTENANCE IS BEING PERFORMED ON THE OXYGEN SYSTEM.ALL ELECTRICAL POWER SHALL BE DISCONNECTED AND THE AIRCRAFT PROPERLY GROUNDED.

> OIL, GREASES AND CERTAIN SOLVENTS MAY CAUSE EXPLOSION WHEN IN CONTACT WITH OXYGEN. DO NOT ALLOW OIL, GREASE OR CERTAIN SOLVENTS TO COME INTO CONTACT WITH OXYGEN OR OXYGEN SYSTEM COMPONENTS.

CHECK FOR ADEQUATE VENTILATION IN THE FLIGHT COMPARTMENT BEFORE BLEEDING OXYGEN CYLINDER.

USE ONLY AVIATION BREATHING OXYGEN OBTAINED FROM A REPUTABLE OXYGEN STATION. USE FEDERAL SPECIFICATION MIL-0-27210, TYPE 1.

A SLOW RATE OF CHARGE IS ESSENTIAL TO AVOID OVERHEATING AND EXPLOSIVE FAILURE.

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Before any maintenance is performed on the aircraft, review and strictly follow all Oxygen Maintenance Procedures and Precautions in the Aircraft Maintenance Manual, Chapter 35.
- 2. Prepare aircraft for safe maintenance.
- 3. Remove external electrical power.

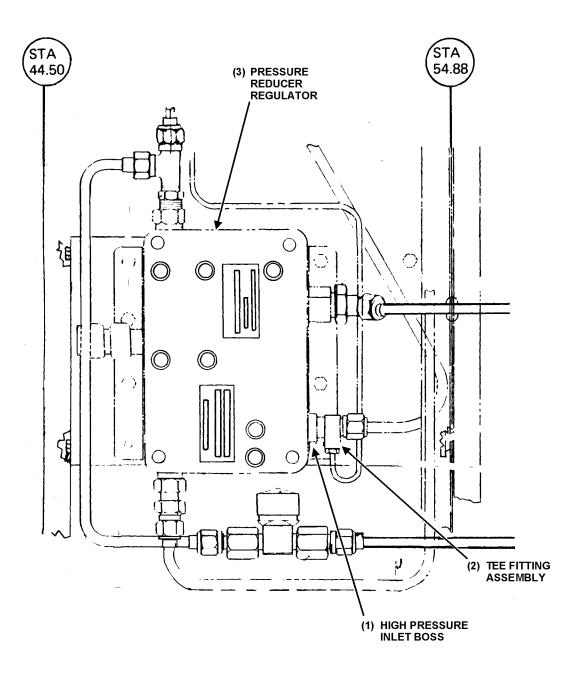
CAUTION: MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

# III 24-WESTWIND

## ALERT SERVICE BULLETIN

- 4. Remove the interior as required to gain access to the pressure reducer/regulator assembly, located behind the flight compartment right side panel. Refer to Westwind Maintenance Manual, Chapter 25.
- 5. Inspect the high pressure reducer inlet boss (1) for cracks and leaks as follows (Refer to Figure 1):
  - A. Ensure the oxygen supply pressure is normal (1850 PSIG).
  - B. Visually inspect the high-pressure inlet boss (1) with a magnifying glass for cracks at or near the tee fitting assembly (2).
  - C. Apply MIL-L-25567B Type I leak detector solution to high-pressure inlet boss (1).
  - D. If no cracks or leaks are discovered, proceed to Step 6.
  - E. If cracks or leaks are discovered, remove and replace the pressure reducer/ regulator assembly. Refer to the Aircraft Illustrated Parts Catalog, Chapter 35, and Aircraft Maintenance Manual, Chapter 35 for details.
- 6. Ensure work area is clean and clear of foreign objects (FOD).
- 7. Install flight compartment interior removed in Step 4. Refer to Aircraft Maintenance Manual, Chapter 25.
- 8. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return the aircraft to flight status.
- 9. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services, Dallas Texas.





Pressure Reducer Regulator Figure 1

Service Bulletin No. 1124-35A-146

| $\mathbf{r}$ | ~~~~~                                                                                              | »>                                |  |
|--------------|----------------------------------------------------------------------------------------------------|-----------------------------------|--|
|              | SERVICE B<br>CERTIFICATE OF                                                                        |                                   |  |
|              | Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services. |                                   |  |
|              | Fax No. (214)<br>This is to certify that Aircraft Serial Nu<br>Service Bulletin No.                | umber has complied with           |  |
| \$           | Aircraft Registration No.                                                                          |                                   |  |
|              | Airframe Total Time at Compliance: Hours _                                                         | Cycles                            |  |
| (            | Compliance Date: By:                                                                               | Print Name                        |  |
|              |                                                                                                    | Signature                         |  |
|              | Owner and Address:                                                                                 | Accomplishing Agency and Address: |  |
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|              | Please describe below any discrepancies fo compliance:                                             |                                   |  |
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|27-WEJTN//N7

# FLIGHT CONTROLS - HORIZONTAL STABILIZER TRIM ACTUATOR - INSPECTION OF THE JACKSCREW ASSEMBLIES

### PLANNING INFORMATION

#### 1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

#### 2. Concurrent Requirement

None.

3. Reason

To confirm the proper installation of the tie rod through the dust shield and both jackscrew assemblies on the Horizontal Stabilizer Trim Actuator.

4. Description

This service bulletin provides instructions to measure the distance between the dust shield and the actuator housing to verify that the tie rod is correctly assembled to both jackscrew assemblies.

5. Compliance

Compliance with this service bulletin is mandatory within 25 flight hours after receipt of this service bulletin. This is a one time inspection to be accomplished on the Horizontal Stabilizer Trim Actuator.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

#### 7. Manpower

The following information is for planning purposes only:

- A. Estimated man-hours: 1.5
- B. Number of personnel: 1

24-VETNIND

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer man-hours are required to accomplish this service bulletin.

8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

10. Software Accomplishment Summary

None.

11. References

None.

12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapter 27-40-01

13. Interchangeability or Intermixability of Parts

None.

**M24-WESTNIND** 

### MATERIAL INFORMATION

1. Material - Price and Availability

None.

2. Warranty Information

None.

3. Material Necessary for Each Aircraft

None.

4. Reidentified Parts

None.

5. Tooling - Price and Availability

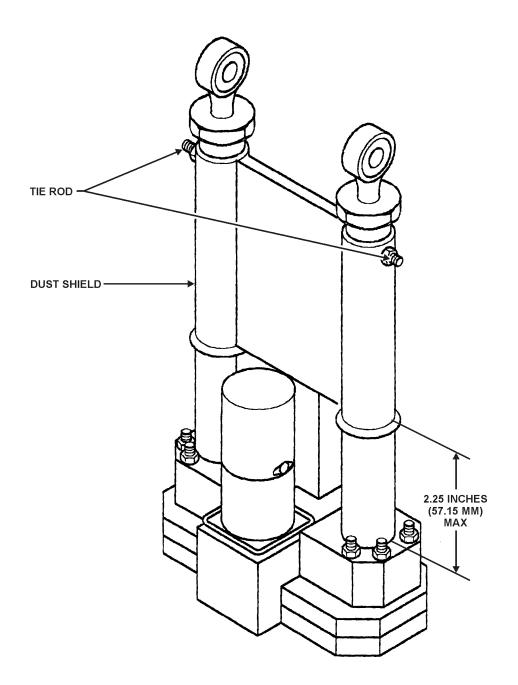
None.

27-WEJTN//N7

### ACCOMPLISHMENT INSTRUCTIONS

- 1. Remove access panels on either side of the vertical stabilizer to allow access to the horizontal stabilizer trim actuator.
- 2. Apply electrical power and position the horizontal stabilizer in the full down position to fully retract the horizontal trim actuator.
- 3. Disengage HORIZ TRIM CONTR, OVERRD and IND circuit breakers on the cockpit overhead panel and remove electrical power.
- 4. Inspect the horizontal trim stabilizer actuator as follows: (Refer to Figure 1)
  - A. Ensure the tie rod is through the dust shield.
  - B. Measure the distance between the bottom of the dust shield (not including the Teflon wiper) and the actuator housing.
    - (1) If the measurement is 2.25 inches (57.15 mm) or less, return the aircraft back to service.
    - (2) If the measurement is greater than 2.25 inches (57.15 mm) or the dust shield is not properly installed, contact the Customer Services Group at Galaxy Aerospace Company, LP in Fort Worth, Texas.
- 5. Apply electrical power and engage HORIZ TRIM CONTR, OVERRD and IND circuit breakers on the cockpit overhead panel.
- 6. Return the horizontal stabilizer back to zero position and disconnect electrical power.
- 7. Install access panels removed to gain access to the horizontal stabilizer trim actuator.
- Make the following entry in the aircraft log book: 1124 Westwind Alert Service Bulletin No. 1124-27A-147, dated August 28, 2000, titled "Flight Controls - Horizontal Stabilizer Trim Actuator - Inspection of the Jackscrew Assemblies" has been accomplished this date \_\_\_\_\_.
- 9. Complete the attached Certificate of Compliance and return to Galaxy Aerospace in Fort Worth, Texas.

M24-WESTWIND



Horizontal Stabilizer Trim Actuator Inspection FIGURE 1



### **TRANSMITTAL SHEET**

#### Introduction

This sheet transmits Revision 1, dated September 17, 2003 to 1124 Westwind Service Bulletin No. 1124-55-148, dated August 16, 2002, titled "Stabilizers – Vertical Stabilizer – Inspection and Repair of Aerodynamic Fairings Due to Loose or Missing Rivets".

#### Reason for Revision

The service bulletin accomplishment instructions have been revised to clarify the installation procedures of the repair doubler, and to delete the requirement for removal and reinstallation of the horizontal and vertical stabilizers.

Aircraft in compliance with the original issue of this service bulletin require no further action.

This is a COMPLETE REISSUE of 1124 Westwind Service Bulletin No. 1124-55-148. This revision cancels and supercedes all previous versions of this service bulletin.

#### List of Effective Pages

- Page No. Date
- 1 through 11 September 17, 2003

### WESTWIND MODEL 1124 1124A

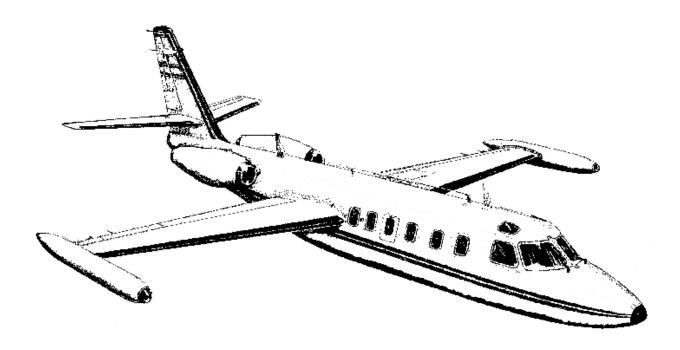
#### SERVICE BULLETIN

NO.1124-55-148 REV 1

#### SUBJECT:

STABILIZERS (ATA 55)

VERTICAL STABILIZER - INSPECTION AND REPAIR OF AERODYNAMIC FAIRINGS DUE TO LOOSE OR MISSING RIVETS





#### STABILIZERS - VERTICAL STABILIZER - INSPECTION AND REPAIR OF AERODYNAMIC FAIRINGS DUE TO LOOSE OR MISSING RIVETS

#### PLANNING INFORMATION

#### 1. Effectivity

Models 1124 and 1124A WESTWIND, all serial numbers

2. Concurrent Requirement

None

3. Reason

Loose and/or missing rivets have been found in the aft fuselage to vertical stabilizer aerodynamic fairings at fuselage station 521.75.

4. Description

Part A of this service bulletin provides instructions to inspect the aft fuselage, vertical stabilizer aerodynamic fairings at fuselage station 521.75 for rivets that are loose/missing or pulled through the skin.

Part B of this service bulletin provides instructions to repair the vertical stabilizer aerodynamic fairings if rivets are found loose/missing or pulled through the skin.

5. <u>Compliance</u>

Compliance with Part A of this service bulletin is mandatory not to exceed 50 flight hours, after the release date of this service bulletin.

If rivets are found loose/missing or pulled through skin in Part A, compliance with Part B of this service bulletin is mandatory at the next A check, not to exceed 200 flight hours after compliance with Part A.

If no rivets are found loose/missing or pulled through the skin in Part A, compliance with Part B of this service bulletin is mandatory at the next C check, not to exceed 800 flight hours after compliance with Part A.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



#### 7. Manpower

The following information is for planning purposes only:

Estimated man-hours: 1 hour for Part A (Inspection) 50 hours for Part B (Repair)

#### 8. Weight and Balance

 Doubler
 W (lb)
 Arm (in.)
 Moment (in. Lbs)

 0.33 lb (x2)
 572
 182.7

#### 9. Electrical Load Data

No Change

#### 10. Software Accomplishment Summary

None

#### 11. References

1124/1124A Westwind Maintenance Manual, Chapters 7, 12, 53 and 55 Israel Aircraft Industries (IAI) Engineering Order DDA11 WW5313105 Rev C

12. Other Publications Affected

None

#### 13. Interchangeability or Intermixability of Parts



#### **MATERIAL INFORMATION**

#### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) for availability.

2. <u>Warranty Coverage - Structure</u>

None

- 3. Material Necessary for Each Aircraft
  - <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
  - A. Material to be Procured:

None

B. Material supplied by the Operator:

| New P/N                                                                                       | <u>Keyword</u>                      | <u>Old P/N</u> | <u>Qty</u>                  |
|-----------------------------------------------------------------------------------------------|-------------------------------------|----------------|-----------------------------|
| A11WW5313105-RE7<br>A11WW5313105-RE8<br>MS20470E4-(X)<br>or CR3213-4-(X)<br>or NAS1919M04-(X) | Doubler L/H<br>Doubler R/H<br>Rivet |                | See Note<br>See Note<br>A/R |
| MS20470E5-(X)                                                                                 | Rivet                               |                | A/R                         |
| MS20470E6-(X)                                                                                 | Rivet                               |                | A/R                         |
| or HL10VBJ-6-(X)<br>or Equivalent                                                             | Hi-lok                              |                | A/R                         |
| HL70-6                                                                                        | Collar                              |                | A/R                         |
| RE13/RE14                                                                                     | Tapered filler                      |                | A/R                         |

- <u>NOTE:</u> The doublers are to be fabricated locally from 0.040 inch CLAD 2024-T3 per AMS-QQ-A250/5 or CLAD 7075-T76 per AMS-QQ-A-250/25 per the dimensions called out in Figure 2 of this service bulletin. The tapered filler can be fabricated locally using 0.040" CLAD 2024-T3 per AMS-QQ-A-250/5 as necessary per the accomplishment instructions.
- <u>NOTE:</u> If necessary, contact GDAS Customer Support for authorization to replace each respective rivet with the next rivet diameter size according to its location.
- NOTE: (X) Grip length of rivet to be determined at time of installation.



4. Reidentified Parts

None

5. Special Tooling

None



ACCOMPLISHMENT INSTRUCTIONS

### PART A

#### INSPECTION OF AERODYNAMIC FAIRINGS FOR LOOSE OR MISSING RIVETS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Disconnect external electrical power.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 3. Open circuit breakers HORZ TRIM CONTR, OVRRD and IND on the cockpit overhead panel.
- 4. Place the following warning tags on aileron control wheels: "DANGER DO NOT MOVE FLIGHT CONTROLS, MAINTENANCE IN PROGRESS".
- 5. Visually inspect the left and right vertical stabilizer aerodynamic fairings at station 521.75 between W.L. 79.00 and 67.80 for rivets that are loose/missing or pulled through the skin. Refer to Figure 1.
- 6. The most common signs of rivets that are loose/failing or pulled through the skin are black stains forming around the rivet head, damaged paint, buckling of skin, skin movement/separation or actual movement of the rivet.
- 7. If rivets are found loose/missing or pulled through the skin in Part A, compliance with Part B of this service bulletin is mandatory at the next A check, not to exceed 200 flight hours after compliance with part A.
- 8. If no rivets are found to be loose/missing or pulled through the skin in Part A, compliance with Part B of this service bulletin is mandatory at the next C check, not to exceed 800 flight hours after compliance with Part A.



- 9. Close circuit breakers HORZ TRIM CONTR, OVRRD and IND on the cockpit overhead panel.
- 10. Remove warning tags from control wheels.
- 11. Ensure work area is clean and clear of foreign objects (FOD).
- 12. Record compliance with Part A of this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 13. Complete the attached Part A Certificate of Compliance and return to General Dynamics Aviation Services in Dallas, Texas.



ACCOMPLISHMENT INSTRUCTIONS

### PART B

#### REPAIR OF LOOSE OR MISSING RIVETS ON AFT FUSELAGE AERODYNAMIC FAIRINGS

- <u>CAUTION:</u> EXTREME CARE SHOULD BE TAKEN WHEN REMOVING EXISTING FASTENERS TO AVOID DAMAGE TO EXISTING STRUCTURE. IT IS HIGHLY RECOMMENDED THAT THIS REPAIR PROCEDURE BE READ AND REVIEWED IN ITS ENTIRETY PRIOR TO PERFORMING ANY WORK.
- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Disconnect external electrical power.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 3. Fabricate two (one for each side) doublers from 0.040 inch CLAD 2024-T3 per AMS-QQ-A-250/5 or CLAD 7075-T76 per AMS-QQ-A250/25, 7.7 inches X 13.8 inches. Refer to Figure 2. Roll form both doublers to aircraft contour at installation locations.
- 4. Trim and chamfer out the edges of the doublers, break sharp edges. Identify the doublers as P/N WW5313105-RE7 for the left, and WW5313105-RE8 for the right. Refer to Figure 2, sheet 2 of 2.
- 5. Open circuit breakers HORZ TRIM CONTR, OVRRD and IND on the cockpit overhead panel.
- 6. Place the following warning tags on aileron control wheels: "DANGER DO NOT MOVE FLIGHT CONTROLS, MAINTENANCE IN PROGRESS."

<u>CAUTION:</u> EXTREME CARE SHOULD BE TAKEN WHEN REMOVING EXISTING FASTENERS TO AVOID DAMAGE TO EXISTING STRUCTURE. IT IS HIGHLY RECOMMENDED THAT THIS REPAIR PROCEDURE BE READ AND REVIEWED IN ITS ENTIRETY PRIOR TO PERFORMING ANY WORK.

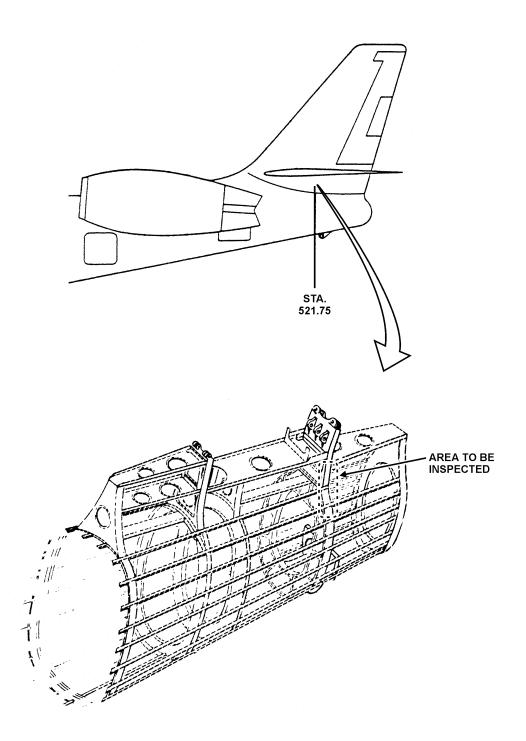
7. Remove the existing rivets as noted in Figure 2 and push out rivet shanks.

August 16, 2002 Revision 1, September 17, 2003



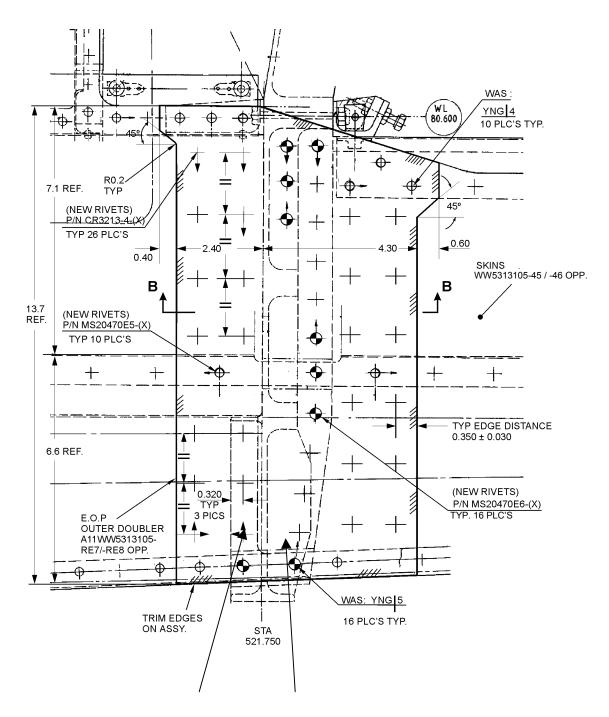
- 8. Touch up drilled holes with epoxy primer.
- 9. Locate doublers on skin and pick up existing rivet locations on frame and on edges of skins; break sharp edges. Refer to Figure 2, Sheet 1 of 2.
- 10. Attach doublers to skins with clecos, drill new holes through doublers and skins, break sharp edges. Refer to Figure 2, Sheet 1 of 2.
- 11. Shim area between skin and frame as necessary using tapered filler RE13 for left side and RE14 for right side, fabricated from 0.040 CLAD 2024-T3 per AMS-QQ-A-250/5. Refer to Figure 2, Sheet 1 of 2.
- 12. Install tapered filler, pickup existing fastener holes in 2 places. Install fasteners wet with PR1422 sealant or equivalent. Refer to Figure 2, Sheet 1 of 2.
- 13. Fay surface on outer side of skins and on inner sides of doublers using PR1422 sealant or equivalent.
- 14. Install fasteners wet with PR1422 sealant or equivalent. Refer to Figure 2 for correct locations and fastener sizes.
  - <u>NOTE:</u> It is permissible to use Hi-lok fasteners P/N HI10VBJ-6-(X) or equivalent, in place of solid rivets on the frame only.
  - NOTE: (x) Grip length of rivet to be determined at time of installation.
- 15. Touch up paint on skin as required to match aircraft paint scheme.
- 16. Remove warning tags on aileron control wheels.
- 17. Close circuit breakers HORZ TRIM CONTR, OVRRD and IND on the cockpit overhead panel.
- 18. Ensure work area is clean and clear of foreign objects (FOD).
- 19. Record compliance with Part B of this service bulletin in aircraft's permanent maintenance records and return aircraft to flight status.
- 20. Complete the attached Part B Certificate of Compliance and return to General Dynamics Aviation Services in Dallas, Texas.





Inspection of Rivets, L/H and R/H Figure 1

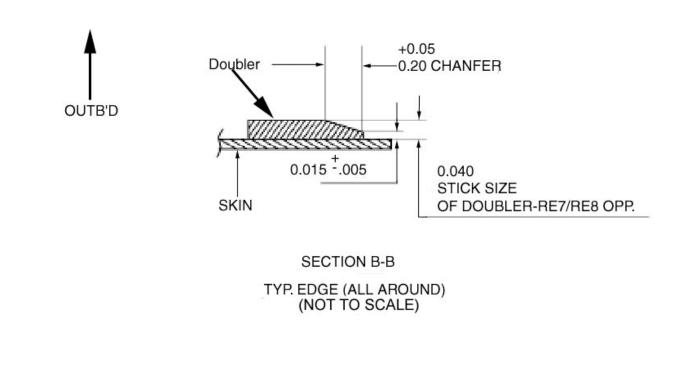




Shim this area between skin and frame as necessary using tapered filler RE13/RE14 opposite, fabricated from 0.040 CLAD 2024-T3 per AMS-QQ-A-250/5.

Doubler installation Figure 2 sheet 1 of 2





Doubler installation Figure 2 sheet 2 of 2

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|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| Y          | SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE                                                                                                   |  |  |  |  |  |
|            | Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services                                               |  |  |  |  |  |
|            | Fax No. (214) 902-7797<br>This is to certify that Aircraft Serial Number has complied with<br>Service Bulletin No. <b>1124-55-148 R1 Part A</b> |  |  |  |  |  |
|            | Aircraft Registration No.                                                                                                                       |  |  |  |  |  |
|            | Airframe Total Time at Compliance: Hours Cycles                                                                                                 |  |  |  |  |  |
|            | Compliance Date: By:<br>Print Name                                                                                                              |  |  |  |  |  |
|            | Signature                                                                                                                                       |  |  |  |  |  |
|            | Owner and Address:     Accomplishing Agency and Address:                                                                                        |  |  |  |  |  |
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|            | Please describe below any discrepancies found or difficulties encountered during compliance:                                                    |  |  |  |  |  |
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| Y                            | SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE                                                                                                   |  |  |  |  |  |
|                              | Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services                                               |  |  |  |  |  |
| Å                            | Fax No. (214) 902-7797<br>This is to certify that Aircraft Serial Number has complied with<br>Service Bulletin No. <b>1124-55-148 R1 Part B</b> |  |  |  |  |  |
|                              | Aircraft Registration No.                                                                                                                       |  |  |  |  |  |
|                              | Airframe Total Time at Compliance: Hours       Cycles         Compliance Date:       By:                                                        |  |  |  |  |  |
|                              | Compliance Date: By:<br>Print Name<br>                                                                                                          |  |  |  |  |  |
|                              | Owner and Address:     Accomplishing Agency and Address:                                                                                        |  |  |  |  |  |
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|                              | Please describe below any discrepancies found or difficulties encountered during compliance:                                                    |  |  |  |  |  |
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#### LANDING GEAR – MAIN LANDING GEAR ASSEMBLY – INTRODUCTION OF IMPROVED TRUNNION ATTACHING HARDWARE

#### PLANNING INFORMATION

#### 1. Effectivity

Models 1124/1124A WESTWIND, all serial numbers.

2. Concurrent Requirement

None.

3. Reason

There have been reported instances of main landing gear trunnion pin hardware loosening during service. New attaching hardware will prevent the trunnion bolt from backing off.

4. Description

This service bulletin provides instructions to replace the left and right main landing gear upper body assembly trunnion pin attaching hardware with new attaching hardware. New attaching hardware includes bolts, washers, castellated nuts, and cotter pins.

5. <u>Compliance</u>

Compliance with this service bulletin is recommended at the earliest opportunity where manpower and facilities are available.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. <u>Manpower</u>

The following information is for planning purposes only:

- A. Estimated man-hours: 2
- B. Number of personnel: 2

The above is an estimate only, based on experienced personnel complying with this service bulletin. It is possible, depending on individual experience levels, that additional or fewer manhours are required to accomplish this service bulletin.



8. Weight and Balance

None.

9. Electrical Load Data

Not changed.

#### 10. Software Accomplishment Summary

None.

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapters 7-10-00, 12-10-03, and 32-30-00 1124/1124A Westwind Illustrated Parts Catalog, Chapter 32-10-00 Service Letter WW-2431 Israel Aircraft Industries Airframe Change (AFC) 2102

12. Other Publications Affected

1124/1124A Westwind Illustrated Parts Catalog, Chapter 32-10-00

13. Interchangeability or Intermixability of Parts

None.



MATERIAL INFORMATION

#### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Gulfstream Aerospace LP in Fort Worth, Texas. Please contact the Parts Sales Department at Gulfstream Aerospace LP for current price and availability of parts.

#### 2. Warranty Information

None.

#### 3. Material Necessary for Each Aircraft

<u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.

#### A. Material to be Purchased:

NOTE: The following parts are included in Service Bulletin Kit P/N 1124-32-149.

| <u>New P/N</u>                    | Keyword     | <u>Old P/N</u> | <u>Qty</u> |
|-----------------------------------|-------------|----------------|------------|
| AN4-35                            | Bolt        | AN4-35A        | 2          |
| AN4-36                            | Bolt        | AN4-36A        | 2          |
| AN960PD416<br>(ALT NAS1149F0463P) | Washer      | MS35338-44     | 6          |
| MS14145-4                         | Nut         | MS21083N4      | 4          |
| MS24665-132                       | Pin, Cotter | N/A            | 4          |

B. Material Supplied by the Operator:

None.

4. Reidentified Parts

None.

#### 5. Special Tooling

None.



#### ACCOMPLISHMENT INSTRUCTIONS

- 1. Place the aircraft on jacks. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 7-10-00, Maintenance Practices.
- 2. Connect external electrical power source to the aircraft.
- Connect an external hydraulic power unit to aircraft ground service quick disconnect couplings. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 12-10-03, Description/Operation.

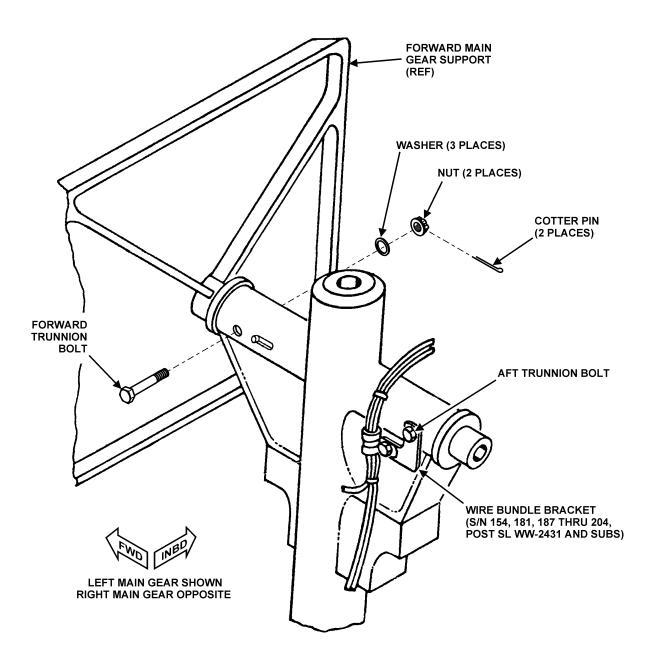
<u>NOTE:</u> The external hydraulic power unit should have an adjustable pressure source to slowly extend and retract the landing gear.

- 4. Set the landing gear lever to the UP position.
- 5. Apply low hydraulic power until the landing gear actuator locking mechanism is released and the gear begins to swing.
- 6. When the landing gear is partially retracted, reduce the hydraulic system pressure to zero.
- <u>WARNING:</u> DO NOT APPLY HYDRAULIC PRESSURE WHILE THE STAND IS BEING SET IN PLACE. MAKE SURE ALL PERSONNEL ARE CLEAR OF THE AIRCRAFT WHEN OPERATING THE LANDING GEAR. OPERATING THE LANDING GEAR WITH PERSONNEL IN THE WHEEL WELL AREA CAN CAUSE SERIOUS INJURY OR DEATH.
- WARNING: MAKE SURE PROPER SUPPORT IS USED WHEN BLOCKING THE MAIN LANDING GEAR WHEEL. IMPROPER SUPPORT CAN CAUSE SERIOUS INJURY TO PERSONNEL AND/OR CAUSE DAMAGE TO THE AIRCRAFT.
- 7. Support each main landing gear with a suitable stand.
- 8. Remove hydraulic pressure from the aircraft.
- 9. Turn the EXT PWR master switch to the OFF position.
- 10. Place proper warning tags in the flight compartment.
- 11. Depressurize the hydraulic system by operating the hydraulic pressure release valve. Refer to 1124/1124A Maintenance Manual, Chapter 12-10-03, Maintenance Practices.
- 12. Locate and remove the existing forward trunnion bolt, nut, and washer from the main landing gear upper body assembly trunnion pin. Refer to Figure 1.
- 13. Install the new bolt, P/N AN4-35, washer, P/N AN960PD416, and nut, P/N MS14145-4.
- 14. Torque the nut to 30-50 in. lbs. and secure with cotter pin, P/N MS24665-132.



- 15. Locate and remove the existing aft trunnion bolt, nut, and two washers from the main landing gear upper body assembly trunnion pin. Refer to Figure 1.
- 16. Install the new bolt, P/N AN4-36, two washers, P/N AN960PD416, and nut, P/N MS14145-4.
  - <u>NOTE:</u> Aircraft with SL WW-2431 accomplished have a wire bundle bracket attached at the aft trunnion bolt. Make sure the wire bundle bracket is in place when installing the new hardware.
- 17. Torque the nut to 30-50 in. lbs. and secure with cotter pin, P/N MS24665-132.
- 18. Repeat Steps 12 through 17 for the opposite side's main landing gear.
- 19. Remove the main landing gear supports.
- 20. Remove warning tags from the flight compartment.
- 21. Turn the EXT PWR master switch to the ON position.
- 22. Set the landing gear lever to the DOWN position.
- 23. Apply hydraulic power to the aircraft.
- 24. Do a landing gear normal system functional test. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 32-30-00, Adjustment/Test.
- WARNING: BEFORE THE AIRCRAFT IS REMOVED FROM JACKS, MAKE SURE THAT THE LANDING GEAR CONTROL LEVER IS IN DOWN POSITION, LANDING GEAR IS LOCKED DOWN AND ALL THREE (3) GREEN DOWN AND LOCKED INDICATING LIGHTS ARE ON.
- 25. Disconnect external hydraulic power unit from aircraft. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 12-10-03, Description/Operation.
- 26. Disconnect external electrical power from the aircraft.
- 27. Remove aircraft from jacks. Refer to 1124/1124A Westwind Maintenance Manual, Chapter 7-10-00, Maintenance Practices.
- Make the following entry in the aircraft log book: Westwind Service Bulletin No. 1124-32-149, dated October 29, 2001, titled "Landing Gear – Main Landing Gear Assembly – Introduction of Improved Trunnion Attaching Hardware" has been accomplished this date
- 29. Complete the attached Certificate of Compliance and return to Gulfstream Aerospace LP in Fort Worth, Texas.





Main Landing Gear Trunnion Attaching Hardware FIGURE 1



## **TRANSMITTAL SHEET**

#### Introduction

This sheet transmits Revision 1, dated June 23, 2003, to 1124 Westwind Service Bulletin No. 1124-55-150, dated November 13, 2002, titled "Stabilizers – Rudder – Inspection for Fatigue Cracks".

#### Reason for Revision

The service bulletin accomplishment instructions have been revised to include additional expanded x-ray inspection instructions.

For extended inspection of the rudder skin, ribs, front spar, aft spar, lower and upper end caps for cracks from the lower rib station Z=94.400 to Z=174.100.

Aircraft in compliance with the original issue of this service bulletin must comply with revision 1.

This is a COMPLETE REISSUE of 1124 Westwind Service Bulletin No. 1124-55-150. This revision cancels and supercedes all previous versions of this service bulletin.

#### List of Effective Pages

- Page No. Date
- 1 through 5 June 23, 2003

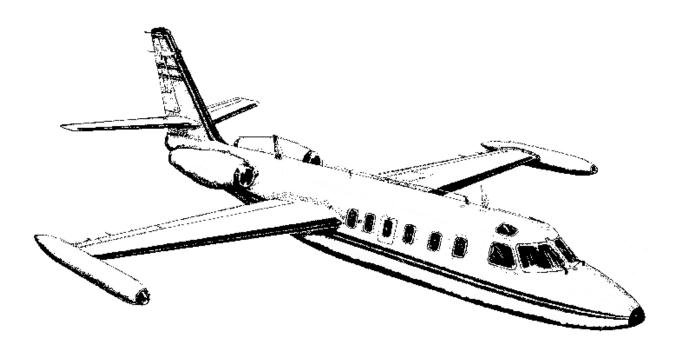
### WESTWIND MODEL 1124 1124A

#### SERVICE BULLETIN

NO.1124-55-150 Rev 1

#### SUBJECT:

STABILIZERS (ATA 55) STABILIZERS - RUDDER - INSPECTION FOR FATIGUE CRACKS





### **STABILIZERS - RUDDER - INSPECTION FOR FATIGUE CRACKS**

### **PLANNING INFORMATION**

#### 1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND, all serial numbers, having more than 4800 flight hours

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Cracks have been found on rudder skins and ribs outside of the area listed in the Structural Inspection Program.

4. Description

This service bulletin provides instructions for extended x-ray inspection of the rudder skin, ribs, front spar, aft spar, lower and upper end caps, for cracks from the lower rib station Z=94.400 to Z=174.100.

5. Compliance

Compliance with this service bulletin is mandatory at the next scheduled "C" check, not to exceed 800 flight hours.

<u>NOTE:</u> Aircraft in compliance with the original issue of this service bulletin must comply with revision 1.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



#### 7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 6 hours (not including Nondestructive Testing or repairs)

8. Weight and Balance

None

9. Electrical Load Data

No Change

10. Software Accomplishment Summary

None

11. References

Revision No. 5 to the Structural Inspection Program Revision No. 4 to the Nondestructive Testing Manual Typical Repair EO AXXWW5423026

12. Other Publications Affected

Structural Inspection Program, Chapter 5-40-03 Nondestructive Testing Manual, Part 2, Chapter 55-30-00

#### 13. Interchangeability or Intermixability of Parts

None



### **MATERIAL INFORMATION**

1. Material - Price and Availability

None

2. Warranty Information

None

3. Material Necessary for Each Aircraft

None

4. Reidentified Parts

None

5. Special Tooling

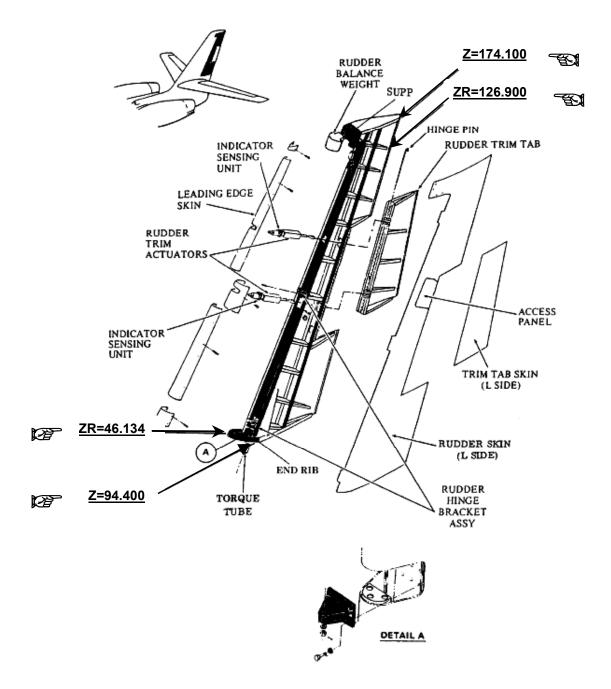
None



ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Remove rudder. Refer to the 1124 Maintenance Manual, Chapter 27.
- Visually inspect rudder assembly left and right skins and front and rear spars between stations ZR=46.134 and ZR=126.900. See Figure 1. Visually inspect both sides of rudder fwd to aft spar skins and ribs between stations ZR= 46.134 to ZR=126.900 on front spar and Z=94.400 to Z=174.100 on rear spar for loose or distorted rivet heads and cracks in skin around spar cap flange rivet holes. Refer to Revision No. 4 of the Structural Inspection Program.
- 4. Perform X-ray inspection of the rudder assembly ribs, front spar, aft spar, lower and upper end caps, between stations Z=94.400 and Z=174.100. Refer to Revision No. 4 of the Nondestructive Testing Manual.
- 5. If cracks or loose rivets are found, contact General Dynamics Aviation Services, Westwind Support at 1-866-271-GDAS (4327) or 912-965-4700 for the appropriate repair.
- 6. If no cracks or loose rivets are found reinstall rudder. Refer to the 1124 Maintenance Manual, Chapter 27.
- 7. Ensure work area is clean and clear of foreign objects (FOD).
- 8. Record compliance with this service bulletin, in the aircraft's permanent maintenance records and return the aircraft to flight status.
- 9. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services, Dallas, Texas.





#### Rudder Assembly Structure Figure 1

| $\bigotimes$ | $\succ$                                                                                                        | $\diamond$ |  |  |  |  |
|--------------|----------------------------------------------------------------------------------------------------------------|------------|--|--|--|--|
| Y            | SERVICE BULLETIN                                                                                               |            |  |  |  |  |
|              | CERTIFICATE OF COMPLIANCE                                                                                      |            |  |  |  |  |
|              | Please fill in the required data below and fax this page to Gulfstream CMP.                                    |            |  |  |  |  |
|              | Fax No. (214) 902-7797                                                                                         |            |  |  |  |  |
|              | This is to certify that Aircraft Serial Number has complied with Service Bulletin No. <b>1124-55-150 Rev 1</b> |            |  |  |  |  |
| $\mathbf{k}$ | Aircraft Registration No.                                                                                      |            |  |  |  |  |
|              | Airframe Total Time at Compliance: Hours Cycles                                                                | Ĭ          |  |  |  |  |
|              | Compliance Date: By:<br>Print Name                                                                             |            |  |  |  |  |
|              | Signature                                                                                                      |            |  |  |  |  |
|              | Owner and Address: Accomplishing Agency and Address:                                                           |            |  |  |  |  |
|              |                                                                                                                |            |  |  |  |  |
|              |                                                                                                                |            |  |  |  |  |
|              | Please describe below any discrepancies found or difficulties encountered during compliance:                   |            |  |  |  |  |
|              |                                                                                                                |            |  |  |  |  |
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#### **Introduction**

This sheet transmits Revision 1, dated September 28, 2004 to 1124 Westwind Service Bulletin No. 1124-27-151, dated March 2, 2004, titled "Flight Controls - Horizontal Stabilizer - Inspection of Trim Actuator Rod End Bearings and Replacement of Existing Bushing With Flanged Bushing".

#### Reason for Revision

The material information has been updated to include washer, P/N NAS1149C0832R, quantity as required.

The service bulletin accomplishment instructions have been revised changing the axial clearance between the actuator rod end and the fitting lug from 0.005-0.010 in. to 0.005-0.020 in.

The service bulletin accomplishment instructions have been revised to call out sealing of the actuator tie rod and sealing of the actuator rod end jam nut to the actuator jack screw adapter.

Additionally, instructions are provided to shim the horizontal stabilizer scissor assembly as required using washers, P/N, NAS1149C0816R, (0.016 thickness) and/or NAS1149C0832R (0.032 thickness), to obtain the proper axial clearance between the actuator rod end and the fitting lug of 0.005-0.020 in. (0.127-.50 mm).

Aircraft in compliance with the original issue of this service bulletin are required to accomplish Revision 1.

This is a COMPLETE REISSUE of 1124 Westwind Service Bulletin No. 1124-27-151 This revision cancels and supercedes all previous versions of this service bulletin.

List of Effective Pages

Page No.

Date

1 through 13

September 28, 2004

Transmittal

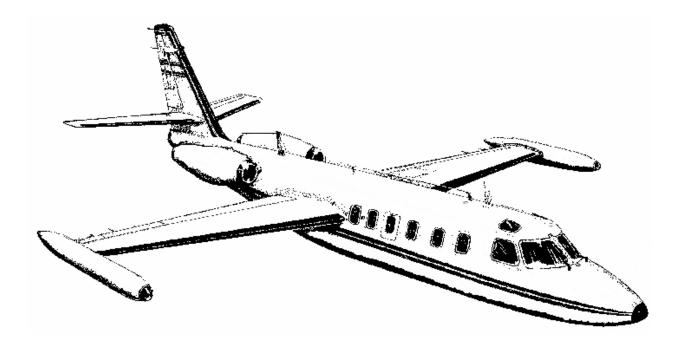
### WESTWIND MODEL 1124 1124A

#### SERVICE BULLETIN

NO.1124-27-151 Rev 1

#### SUBJECT:

FLIGHT CONTROLS (ATA 27) HORIZONTAL STABILIZER - INSPECTION OF TRIM ACTUATOR ROD END BEARINGS AND REPLACEMENT OF EXISTING BUSHING WITH FLANGED BUSHING





#### FLIGHT CONTROLS - HORIZONTAL STABILIZER - INSPECTION OF TRIM ACTUATOR ROD END BEARINGS AND REPLACEMENT OF EXISTING BUSHING WITH FLANGED BUSHING

### PLANNING INFORMATION

#### 1. <u>Effectivity</u>

WESTWIND models 1124 and 1124A, all serial numbers having service bulletin 1124-55-107 incorporated

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Reports from the field indicate some aircraft have experienced bearing migration in the horizontal stabilizer trim actuator rod ends. Investigation into this condition has revealed that the rod ends are being held too tightly in the horizontal stabilizer front spar attach points. This is causing excessive axial loads to be applied to the rod end bearings, which leads to the bearing migration.

#### 4. <u>Description</u>

This service bulletin provides instructions to inspect the horizontal stabilizer trim actuator rod end bearings, to ensure correct assembly of the actuator rod ends to the stabilizer front spar fitting, ensure correct installation of the actuator tie rod and to inspect the stabilizer scissor bushings for free play. Additionally, instructions are provided to replace defective rod ends and stabilizer scissor bushings.

#### 5. Compliance

Compliance with this service bulletin is recommended at the next "B" check.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 6.0

8. <u>Weight and Balance</u>

None

9. <u>Electrical Load Data</u>

No Change

10. <u>Software Accomplishment Summary</u>

None

11. <u>References</u>

Israel Aircraft Industries, Engineering Order DDA02 WW5543007 1124/1124A Westwind Maintenance Manual, Chapter 27 1124/1124A Westwind Illustrated Parts Catalog, Chapters 27 and 55 Israel Aircraft Industries AFC 2052

### 12. <u>Other Publications Affected</u>

1124/1124A Westwind Maintenance Manual, Chapters 27 and 55 1124/1124A Westwind Illustrated Parts Catalog, Chapter 27

13. <u>Interchangeability or Intermixability of Parts</u>

None



### MATERIAL INFORMATION

#### 1. <u>Material - Price and Availability</u>

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) for availability.

2. <u>Warranty Information</u>

None

- 3. Material Necessary for Each Aircraft
  - <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
  - A. Material to be Procured:

| Part Number          | Keyword             | <u>Qty</u> |
|----------------------|---------------------|------------|
| NAS6708DU19          | Bolt                | 2          |
| 453521-003           | Bushing             | 4          |
| MS14144L8            | Nut                 | 2          |
| MS20002C8            | Washer, Countersunk | 2          |
| MS24665-302          | Cotter Pin          | 2          |
| AN960C816L           | Washer              | 2          |
| NAS1149C0816R        | Washer (0.016")     | A/R        |
| NAS1149C0832R        | Washer (0.032")     | A/R        |
| 304426-01 (Mfg. TRW) | Rod End Assembly    | A/R        |
| 21164-1551           | Tie Rod             | A/R        |

B. Material Supplied by the Operator:

PR1422 or equivalent sealant MIL-G-81322, General Purpose Aircraft Grease

4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

None



### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Apply external electrical power to aircraft and position the horizontal stabilizer in the full up position to fully extend the horizontal trim actuator.
- 3. Open HORIZ TRIM CONTR, OVERRD and IND circuit breakers on the cockpit overhead panel.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 4. Remove external electrical power.
- 5. Place the following warning tags on aileron control wheels: "DANGER DO NOT MOVE FLIGHT CONTROLS, MAINTENANCE IN PROGRESS".
- 6. Remove the horizontal stabilizer trim actuator access panels on both sides of the vertical stabilizer.
- 7. Remove sliding panels below and above horizontal stabilizer root.
- 8. Place a wood block between the fuselage banjo fitting and the stabilizer hinge fitting to prevent stabilizer leading edge from suddenly moving up when actuator rod ends are disconnected.
- 9. Remove hardware (cotter pin, nut, washers, bolt and bushings) securing the trim actuator rod ends to the stabilizer front spar fitting and discard. Refer to Figure 2, Sheet 2 of 2, Detail A.
- 10. Visually inspect the horizontal stabilizer trim actuator rod end bearings and inner races for migration. No movement of bearing is allowed, replace rod end(s) as necessary. Adjust the rod ends to the dimensions shown in Figure 3.



<u>NOTE:</u> If rod end(s) require replacement, ensure the actuator is trimmed to its full retracted position before removing the rod end.

<u>CAUTION:</u> THE TIE ROD WILL BE DAMAGED IF PROPER COUNTER TORQUE IS NOT APPLIED WHILE LOOSENING/TIGHTENING THE JAM NUT.

- A. Loosen the jam nut by holding the flat surface of the actuator jack screw adapter with a suitable spanner, to ensure no force is transmitted to the tie rod.
- B. Remove defective rod end P/N 304426-01.
- C. Install new rod end P/N 304426-01.
- D. Adjust both rod ends to the correct length as shown in Figure 3.

<u>CAUTION:</u> THE TIE ROD WILL BE DAMAGED IF PROPER COUNTER TORQUE IS NOT APPLIED WHILE LOOSENING/TIGHTENING THE JAM NUT.

- E. Torque the jam nut to 252-312 in. lb. while holding the flat surface of the actuator jack screw adapter with a suitable spanner, to ensure no force is transmitted to the tie rod.
- F. Seal the rod end from the bottom of the jam nut to the top of the actuator jack screw adapter with PR 1422 sealant or equivalent. Refer to Figure 2, Sheet 1 of 2.
- 11. Remove nut from one end of tie rod and remove tie rod from actuator jack screw adapters. Refer to Figure 2 Sheet 1 of 2.
- 12. Inspect the tie rod for wear, thread damage and straightness. Replace tie rod if any unacceptable damage is noted.

<u>NOTE:</u> Tie rod must be straight, no damage to the threads is permitted. Maximum allowable wear is 0.040 in. (1.016 mm).

- 13. Ensure dust cover hole is aligned with jackscrew hole and reinstall tie rod.
- 14. Tighten tie rod (6) to ensure an axial movement of 0.004 0.012 in. (0.1 0.3 mm.) Refer to Figure 2, Sheet 1 of 2.
- 15. Seal tie rod and actuator with PR 1422 sealant or equivalent. Refer to Figure 2, Sheet 1 of 2.



- 16. Attach the trim actuator rod ends to the stabilizer front spar fitting using new hardware (bushings, bolt, washers, and nut) with a thin coat of MIL-G-81322 grease, in accordance with Figure 2, Sheet 2 of 2, Detail A. Tighten nut (4) to achieve the required axial clearance. Do not exceed torque of 10 in-lbs.
  - NOTE: During tightening process, ensure that deformation of the stabilizer attach lug does not occur and the axial clearance of 0.005–0.020 in (0.127–0.50 mm) is maintained between the rod end and fitting as shown in Figure 2, Sheet 2 of 2 Detail A. If axial clearance exceeds 0.020 in. shim as required with washers, P/N NAS1149C0816R (thickness 0.016 in.) and/or P/N NAS1149C0832R (thickness 0.032 in.) to achieve the proper axial clearance.
- 17. Secure with cotter pin (5), P/N MS24665-302. Refer to Figure 2, Sheet 2 of 2, Detail A.
- Inspect the horizontal stabilizer scissors assembly bushings for axial or radial free play. No radial free play is allowed. The maximum axial play shall not exceed 0.005 in. (0.127 mm). If axial play is more than 0.005 in. (0.127 mm), replace bushings in the scissors as necessary. Refer to Figure 4, Sheets 1 and 2, Aircraft Maintenance Manual and Illustrated Part Catalog, Chapter 55.
- 19. Remove wood block previously placed between fuselage banjo fitting and stabilizer hinge fitting. Refer to Figure 1.
- 20. Close HORIZ TRIM CONTR, OVERRD and IND circuit breakers on the cockpit overhead panel opened in Step 3. Apply external electrical power and operate the horizontal trim actuator in both directions to ensure proper operation.
- 21. Position the horizontal stabilizer in the full down position, this will fully retract the trim actuator.

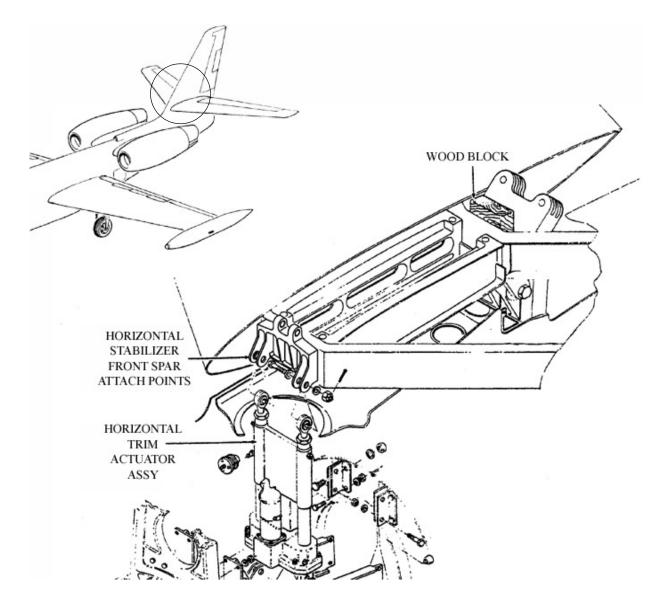
<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 22. Open HORIZ TRIM CONTR, OVERRD and IND circuit breakers and remove external electrical power from aircraft.
- 23. Measure the distance between the bottom of the horizontal stabilizer trim actuator dust shield (not including the Teflon wiper) and the actuator housing. If the measurement is 2.25 in. (57.15 mm) or less, the tie rod is installed correctly. If the measurement is greater than 2.25 in (57.15 mm), inspect the tie rod for correct installation through the dust shield and both jackscrew assemblies. Refer to Figure 2, Sheet 1 of 2.



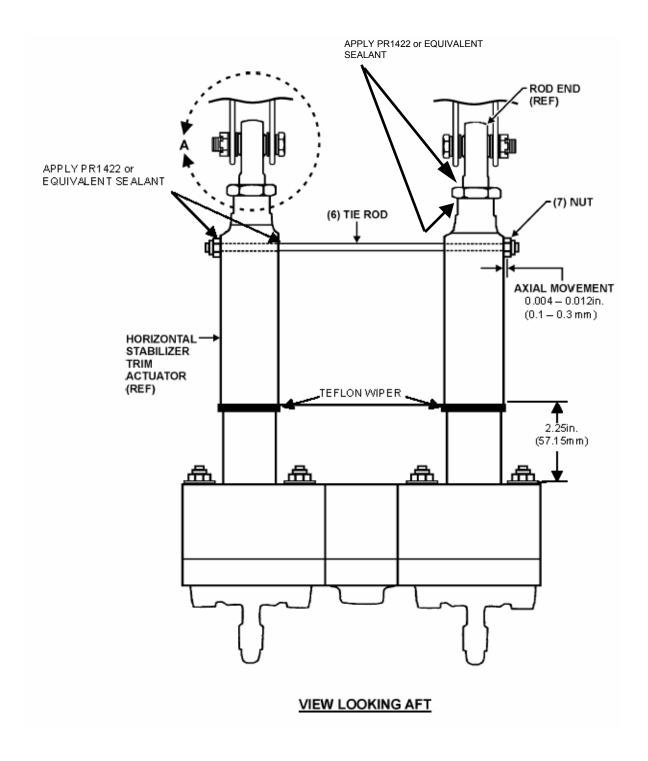
- 24. Close circuit breakers opened in Step 21. Apply external electrical power, operate the horizontal trim and set stabilizer to zero (0) position.
- 25. Disconnect external electrical power from aircraft.
- 26. Ensure work area is clean and clear of foreign objects (FOD).
- 27. Install access and sliding panels removed to gain access to the horizontal stabilizer trim actuator and stabilizer hinge.
- 28. Remove warning tags from aileron control wheels.
- 29. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return the aircraft to flight status.
- 30. Complete the attached Certificate of Compliance and return it to General Dynamics Aviation Services, Dallas, Texas.





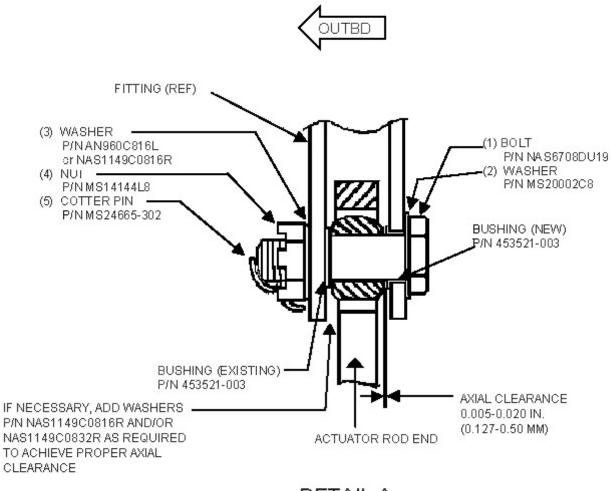
Horizontal Stabilizer Figure 1





Horizontal Stabilizer Trim Actuator Figure 2 (Sheet 1 of 2)





DETAIL A

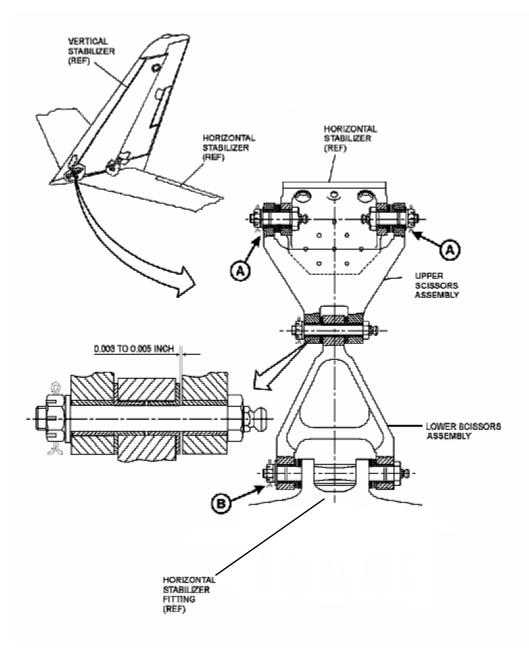
Horizontal Stabilizer Trim Actuator Figure 2 (Sheet 2 of 2)



|            | RETRACTED          | STROKE | EXTENDED                    |        |
|------------|--------------------|--------|-----------------------------|--------|
| ELECTRICAL | 14.03+.05          | 2.32   | 16.35 <sup>+.05</sup><br>00 |        |
| MECHANICAL | 13.96 <u>+</u> .01 | 2.55   | 16.51 <u>+</u> ,01          | 1124   |
| ELECTRICAL | 14.25 <u>+</u> .02 | 2.32   | 16.57 <u>+</u> .02          | 1124.4 |
| MECHANICAL | 14.13 +.01         | 2.55   | 16.68 <u>+</u> .01          | 1124A  |
| 4          |                    |        |                             |        |
|            |                    |        |                             |        |
|            |                    |        |                             |        |

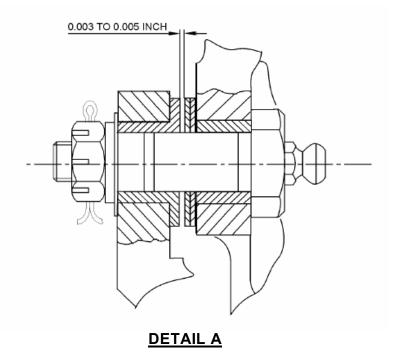
#### Horizontal Stabilizer Trim Actuator Adjustment Figure 3

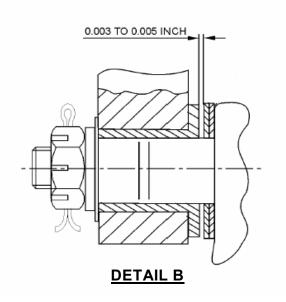


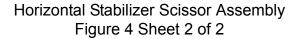


Horizontal Stabilizer Scissor Assembly Figure 4 Sheet 1 of 2









March 2, 2004 Revision 1 September 28, 2004

| $\diamond \sim \sim$      |
|----------------------------------------------------------------------------------------------------------------|
| SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE                                                                  |
| Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services.             |
| Fax No. (214) 902-7796                                                                                         |
| This is to certify that Aircraft Serial Number has complied with Service Bulletin No. <b>1124-27-151 Rev 1</b> |
| Aircraft Registration No                                                                                       |
| Airframe Total Time at Compliance: Hours Cycles                                                                |
| Compliance Date: By:<br>Print Name                                                                             |
| Signature                                                                                                      |
| Owner and Address:     Accomplishing Agency and Address:                                                       |
|                                                                                                                |
| Please describe below any discrepancies found or difficulties encountered during compliance:                   |
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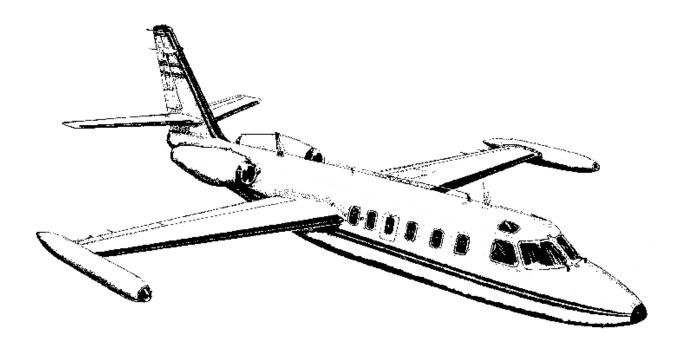
### WESTWIND MODEL 1124 1124A

SERVICE BULLETIN

NO.1124-29-152

SUBJECT:

HYDRAULICS (ATA 29) INSPECTION OF HYDRAULIC TUBE ASSEMBLIES BELOW HYDRAULIC RESERVOIR AT THE DRAIN BOX CUTOUTS





#### HYDRAULICS - INSPECTION OF HYDRAULIC TUBE ASSEMBLIES BELOW HYDRAULIC RESERVOIR AT THE DRAIN BOX CUTOUTS

#### PLANNING INFORMATION

#### 1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

The hydraulic tubes that exit the reservoir have been discovered chafed where they pass through the drain box cutouts. The chafing is the result of insufficient clearance and the absence of grommets at the drain box cutouts.

4. <u>Description</u>

This service bulletin provides instructions for a one time inspection of the drain box cutouts to ensure a minimum of 0.16 in. clearance exists between the tube assemblies and the drain box cutouts and to install grommets in the cutouts.

5. <u>Compliance</u>

Compliance with this service bulletin is recommended at the next "A" check.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 2 hours

8. <u>Weight and Balance</u>

None

March 2, 2004

# SERVICE BULLETIN

9. <u>Electrical Load Data</u>

No Change

10. <u>Software Accomplishment Summary</u>

None

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapter 5 Israel Aircraft Industries Engineering Order WW5713526

12. Other Publications Affected

None

13. <u>Interchangeability or Intermixability of Parts</u>

None



#### MATERIAL INFORMATION

1. <u>Material - Price and Availability</u>

None

2. <u>Warranty Information</u>

None

- 3. Material Necessary for Each Aircraft
  - A. Material to be procured:

None

B. Materials supplied by the Operator:

Grommet P/N MS21266-1T Epoxy Adhesive EA9396

4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

None



#### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Release main and emergency hydraulic pressure. Refer to Aircraft Maintenance Manual, Chapter 12.
- 3. Release hydraulic reservoir air pressure. Refer to Aircraft Maintenance Manual, Chapter 12.

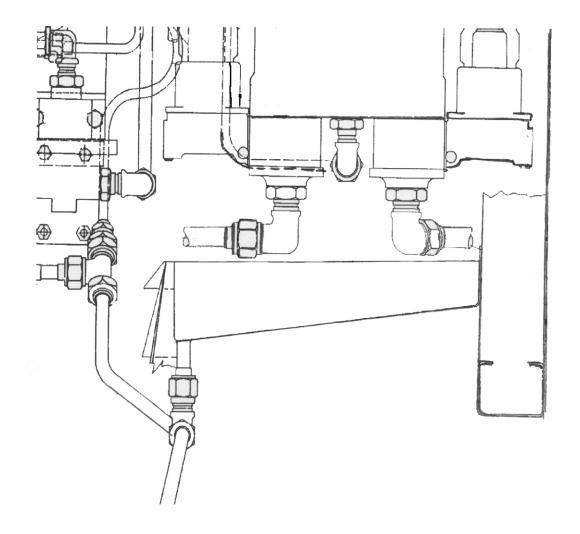
<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 4. Remove external electrical power.
- 5. Remove reservoir access panel in the main baggage compartment rear wall. Refer to Aircraft Maintenance Manual, Chapter 29.
- 6. Perform a detailed visual inspection of the hydraulic tube assemblies that pass through the hydraulic reservoir drain box cutouts for chafing, general condition, cracks, corrosion, damage, security of attachment and leakage or any other damage.
  - <u>NOTE:</u> If any of the tube assemblies are chafed or damaged, they must be repaired or replaced. Refer to AC 43.13-1B and the Aircraft Illustrated Parts Catalog, Chapter 29.
- 7. Ensure a minimum clearance of 0.16 inches exists between the tube assemblies and the drain box cutouts.
- 8. If necessary, trim drain box cutouts to ensure a minimum clearance of 0.16 inches exists between drain box cut out and hydraulic tube assemblies. Refer to Figure 1, Sheet 2 of 2.



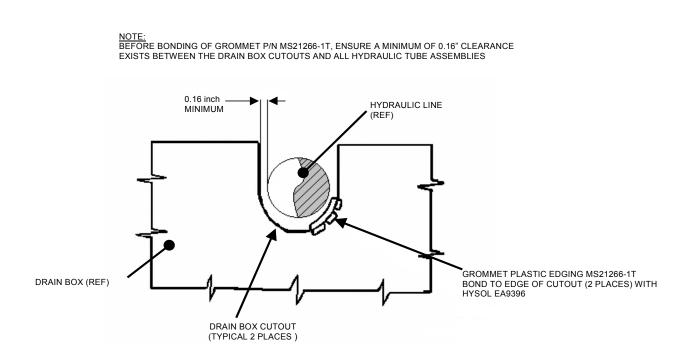
- 9. Install grommet P/N MS21266-1T on drain box cutouts using epoxy adhesive P/N EA9396.
- 10. Ensure work area is clean and clear of foreign objects (FOD).
- 11. Install reservoir access panel in the main baggage compartment rear wall. Refer to Aircraft Maintenance Manual, Chapter 29.
- 12. Record compliance with this service bulletin, in the aircraft's permanent maintenance records and return the aircraft to flight status.
- 13. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services, Dallas, Texas.





Hydraulic Reservoir and Drain Box Installation Figure 1 Sheet 1 of 2





Drain Box Cutout Figure 1 Sheet 2 of 2

| $\diamond$       | >                                                                                                        |   |
|------------------|----------------------------------------------------------------------------------------------------------|---|
| Y                | SERVICE BULLETIN                                                                                         |   |
|                  | CERTIFICATE OF COMPLIANCE                                                                                |   |
|                  | Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services.       |   |
|                  | Fax No. (214) 902-7796                                                                                   |   |
|                  | This is to certify that Aircraft Serial Number has complied with Service Bulletin No. <b>1124-29-152</b> |   |
|                  | Aircraft Registration No.                                                                                |   |
|                  | Airframe Total Time at Compliance: Hours Cycles                                                          |   |
|                  | Compliance Date: By:<br>Print Name                                                                       |   |
|                  | Signature                                                                                                |   |
|                  | Owner and Address: Accomplishing Agency and Address:                                                     |   |
|                  |                                                                                                          |   |
|                  | Please describe below any discrepancies found or difficulties encountered during                         |   |
|                  | compliance:                                                                                              |   |
| $\hat{\Diamond}$ |                                                                                                          |   |
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| <b>A</b>         |                                                                                                          |   |
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# TRANSMITTAL SHEET

#### Introduction

This sheet transmits Revision 1, dated May 25, 2006 to 1124/1124A Westwind Service Bulletin No. 1124-27-153, dated November 3, 2005, titled "Flight Controls - Inspection And Repair Of Inboard Flap Actuators P/N 193544-1".

#### Reason for Revision

The original release of this service bulletin has created a misunderstanding among operators as to whether it is Mandatory or Optional.

This revision clarifies the Mandatory requirement to accomplish this service bulletin within the compliance time stated in this document.

Aircraft in compliance with the original issue of this service bulletin require no further action.

This is a PARTIAL REISSUE of 1124/1124A Westwind Service Bulletin No. 1124-27-153. Incorporate this revision by removing the effected pages and inserting the revised pages.

List of Effective Pages

| Page No. | <u>Date</u>   |
|----------|---------------|
| 1        | June 01, 2015 |
| 3        | June 01, 2015 |
| 4        | June 01, 2015 |

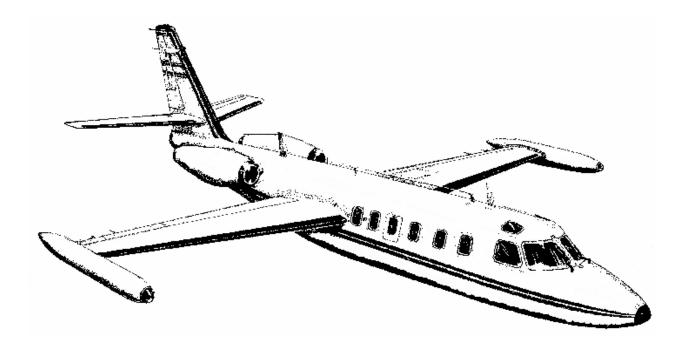
### WESTWIND MODEL 1124/1124A

#### SERVICE BULLETIN

NO.1124-27-153 Rev 2

#### SUBJECT:

FLIGHT CONTROLS (ATA 27) INSPECTION AND REPLACEMENT OF INBOARD FLAP ACTUATORS P/N 193544-1





#### FLIGHT CONTROLS – INSPECTION AND REPLACEMENT OF INBOARD FLAP ACTUATORS P/N 193544-1

#### PLANNING INFORMATION

#### 1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND, all serial numbers having inboard flap actuators, P/N 193544-1, that have accumulated more than 3,200 flight hours or 5 years of service

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Operators have experienced two inflight failures of the inboard flap actuator. Investigation has revealed the worm gear was worn beyond allowable limits due to excessive torque forces applied to the actuator. Tube assembly sleeve corrosion, ball nut dragging and/or incorrect shimming can cause the excessive torque forces on the actuator.

4. Description

This service bulletin provides instructions to remove the inboard flap actuators and replace them with vendor modified units, Telair P/N 1390T100-7 or IAI P/N 193544-3.

5. <u>Compliance</u>

Compliance with this service bulletin is mandatory. Currently installed inboard flap actuators P/N 193544-1 must be replaced with new improved inboard flap actuators P/N 193544-3 or vendor P/N V1390T100-7 by November 2007 or upon reaching the original life limit of 10,000 flight hours whichever limit is reached first. P/N 193544-1 inboard flap actuators that have been previously repaired by Telair may remain in service until the next C check not to exceed 800 flight hours or 3200 flight hours component time in service whichever comes first.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



#### 7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 30 hours

8. Weight and Balance

None

9. <u>Electrical Load Data</u>

No Change

10. Software Accomplishment Summary

None

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapter 27 Telair International Flap Actuator P/N 193544-1 Component Maintenance Manual Telair International Flap Actuator 1390T100 rework instructions REF-TES 411

12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapter 5 1124/1124A Illustrated Parts Catalog, Chapter 27

- <u>NOTE:</u> Until publication of the next revision to the Aircraft Maintenance Manual and the Illustrated Parts Catalog, this service bulletin will serve as the authority for installation of the improved actuators and the aircraft maintenance procedures.
- 13. Interchangeability or Intermixability of Parts

None



#### MATERIAL INFORMATION

#### 1. <u>Material - Price and Availability</u>

The parts required to accomplish this service bulletin are available from Worthington Aviation Parts Inc. Contact the parts department at 651-993-1600 for availability.

2. Warranty Information

None

#### 3. Material Necessary for Each Aircraft

- <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
- A. Material to be Procured:

| <u>New P/N</u>             | <u>Keyword</u> | <u>Old P/N</u>             | <u>Qty</u> |
|----------------------------|----------------|----------------------------|------------|
| V1390T100-7 or<br>193544-3 | Actuator       | V1390T100-5 or<br>193544-1 | 2          |

B. Material supplied by the Operator:

Cotter pin, P/N MS24665-285, As Required "A/R"

#### 4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

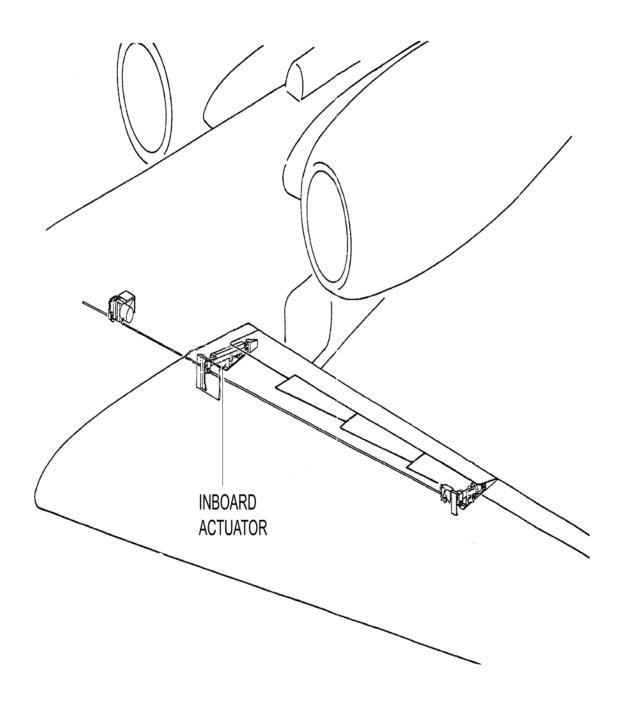
None



#### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Remove the inboard flap actuators (2 each), P/N 193544-1. Refer to Aircraft Maintenance Manual, Chapter 27.
- 3. Install serviceable, inspected and repaired inboard flap actuators (2 each), P/N V1390T100-7 or P/N 193544-3. Refer to Aircraft Maintenance Manual, Chapter 27.
- 4. Perform flap system functional check. Refer to Aircraft Maintenance Manual, Chapter 27.
- 5. Ensure work area is clean and clear of foreign objects (FOD).
- 6. Record compliance with this service bulletin, in the aircraft's permanent maintenance records and return the aircraft to flight status.
- 7. Complete the attached Certificate of Compliance and return to Worthington Aviation Parts Inc., Eagan, Minnesota.





#### Inboard Flap Actuator Figure 1

November 3, 2005 Revision 2 June 01, 2015

| ×>                                    |                                                                                                |                                                                     |  |
|---------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--|
|                                       | SERV                                                                                           | ICE BULLETIN                                                        |  |
|                                       | CERTIFICAT                                                                                     | TE OF COMPLIANCE                                                    |  |
| Plea                                  | Please fill in the required data below and fax this page to Worthington<br>Aviation Parts Inc. |                                                                     |  |
|                                       | Fax N                                                                                          | lo. (651) 393-3310                                                  |  |
| This                                  | s is to certify that Aircraft<br>Service B                                                     | Serial Numberhas complied with ulletin No. <b>1124-27-153 Rev 2</b> |  |
| Aircraft Re                           | gistration No.                                                                                 |                                                                     |  |
| Airframe T                            | otal Time at Compliance                                                                        | : HoursCycles                                                       |  |
| Complianc                             | e Date:By:                                                                                     | Print Name                                                          |  |
|                                       |                                                                                                | Signature                                                           |  |
| Owner and                             | d Address:                                                                                     | Accomplishing Agency and Address:                                   |  |
|                                       |                                                                                                |                                                                     |  |
|                                       |                                                                                                |                                                                     |  |
| Please des<br>compliance              |                                                                                                | ancies found or difficulties encountered during                     |  |
|                                       |                                                                                                |                                                                     |  |
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### WESTWIND MODEL 1124/1124A

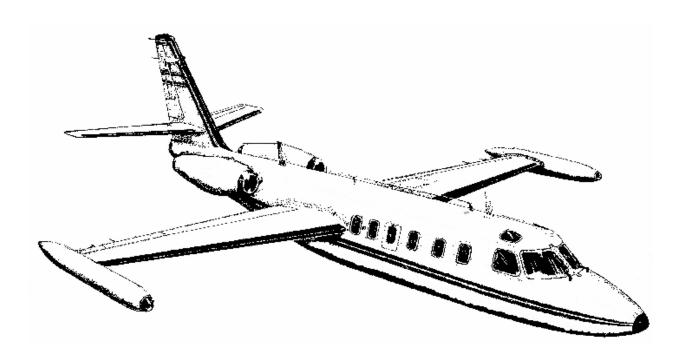
#### ALERT

#### SERVICE BULLETIN

NO.1124-24A-154

#### SUBJECT:

ELECTRICAL POWER (ATA 24) OVERHEAD ELECTRICAL PANELS - ONE TIME INSPECTION OF WIRE BUNDLE ROUTED ABOVE THE "NO SMOKING - FASTEN SEAT BELT" SIGN FOR CHAFING





#### ELECTRICAL POWER – OVERHEAD ELECTRICAL PANELS – ONE TIME INSPECTION OF WIRE BUNDLE ROUTED ABOVE THE "NO SMOKING - FASTEN SEAT BELT SIGN" FOR CHAFING

#### PLANNING INFORMATION

#### 1. Effectivity

Models 1124 and 1124A WESTWIND, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. Reason

The wire harness entering the overhead circuit breaker panel from the cabin area has the possibility of chafing at the hinge point whenever the overhead panel is lowered for other maintenance. If not corrected, it is possible for this condition to lead to the wire harness shorting out and causing extensive damage.

4. Description

This alert service bulletin provides instructions for a one-time inspection of the overhead circuit breaker panel wire harness for signs of damage caused by chafing. Additionally, instructions are provided to install protection for the wire harnesses and repair damaged harnesses as required.

5. <u>Compliance</u>

Compliance with alert service bulletin is mandatory within 50 flight hours after the release date of this service bulletin.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. Manpower

The following information is for planning purposes only:

Estimated man-hours: 5 hours



8. Weight and Balance

None

9. Electrical Load Data

No Change

#### 10. Software Accomplishment Summary

None

11. References

1124/1124A Westwind Wiring Manual, Chapter 20 1124/1124A Westwind Maintenance Manual, Chapters 24 1124 Westwind Service Letter WW-2467, dated: June 5, 1981 1124 Westwind Service Letter WW-2473, dated: October 12, 1981 WWAFC5619

12. Other Publications Affected

None

13. Interchangeability or Intermixability of Parts

None



**MATERIAL INFORMATION** 

#### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from General Dynamics Aviation Services. Contact the Parts Sales department at 1-866-271-GDAS (4327) for availability.

2. <u>Warranty Coverage - Structure</u>

None

#### 3. Material Necessary for Each Aircraft

A. Material to be Procured:

None

B. Material supplied by the Operator:

| <u>New P/N</u>              | <u>Keyword</u>    | <u>Old P/N</u> | <u>Qty</u>       |
|-----------------------------|-------------------|----------------|------------------|
| MS3367-2-9<br>Or equivalent | Cable tie         | -              | 6                |
| T25T-L<br>Or equivalent     | Spiral wrap       | -              | 2 (3 in. pieces) |
| MS20426AD3                  | Rivet             | -              | A/R              |
| NAS1739B4-3                 | Rivet, Blind      | -              | 8                |
| Or NAS1921B4-3              |                   |                |                  |
| MS21266-2N                  | Grommet           | -              | A/R              |
| MS21919WDG7                 | Clamp             | -              | 2                |
| NAS1149G0332P               | Washer            | -              | 2                |
| MS27039-1-15                | Bolt              | -              | 2                |
| MS21075L3                   | Nut Plate (3/16)  | -              | 2                |
| Or MS21042L3                | Nut               | -              | 2                |
| 3M 5490                     | Self bonding tape | -              | A/R              |

Teflon sheet commercial grade T= 0.04x4x14 in. Teflon sheet commercial grade T= 0.08x1x12 in.

NOTE: It is permissible to substitute 0.04" teflon sheet doubled up and trimmed to fit to achieve 0.080". 0.093" is an acceptable substitute if 0.080" teflon sheet is unavailable.



4. Reidentified Parts

None

5. Special Tooling

None



ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 2. Disconnect external electrical power
- 3. Gain visual access to the wiring harness on the cockpit side of the "No Smoking Fasten Seat Belt" sign located at fuselage station 83.78. Refer to Figure 1.
- 4. Lower the overhead circuit breaker panel.
- 5. If not previously accomplished, by incorporating Westwind Service Letter WW-2473, separate the wire bundle into four (4) smaller bundles with the two #6 AWG power cables separated individually. Refer to Figure 2.
- 6. Inspect the wires for chafing and adequate clearance between the fuselage frame and the "No Smoking Fasten Seat Belt" sign. Refer to Figure 1.
- 7. If evidence of chafing is found, repair damaged wires as necessary. Refer to the 1124 Wiring Manual, Chapter 20.
- 8. Ensure grommet, P/N MS21266-2N, is installed and in good condition around the edge of the cut out in frame STA. 83.78. Refer to Figure 2.
- 9. If the intent of Westwind Service Letter WW-2467 has been accomplished, a grommet, P/N MS21266-5N, has been installed on the aft edge of angle, P/N 5313148-45, above the cut out at frame STA 83.78. This grommet should be removed and the edge of the angle rounded to a 0.040" radius. Refer to Figure 3, Sheet 1 of 2.
- Attach a piece of Teflon sheet (0.08X1X12 in.) to bottom leg of angle, P/N 5313148-45, using PR1750 or equivalent on faying surfaces and attach to existing rivet holes with P/N NAS1739B4-3 or NAS1921B4-3 rivets. Refer to Figure 3, Sheet 2 of 2.

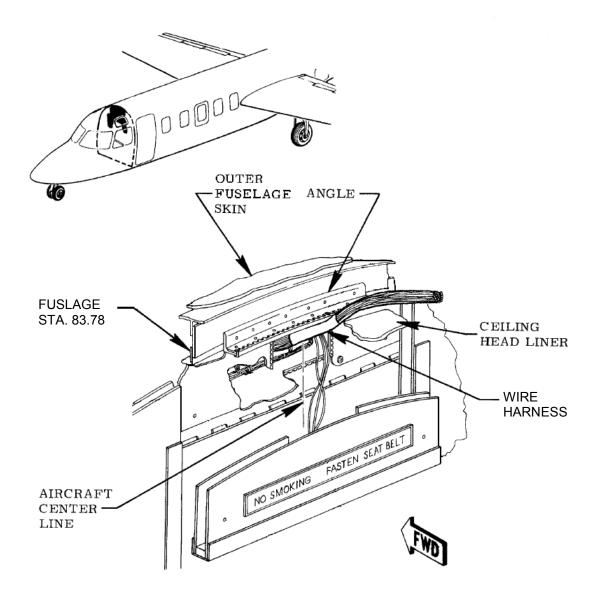


- <u>NOTE:</u> It is permissible to substitute 0.04" teflon sheet doubled up and trimmed to fit to achieve 0.080". 0.093 is an acceptable substitute if 0.080" teflon sheet is unavailable.
- 11. Wrap the #6 AWG power cables with spiral wrap, P/N T25T-L, a minimum of 3 in. long. Wrap the spiral wrap with two layers of insulated self bondable tape (3M # 5490). Secure the ends with tie wraps, P/N MS3367-2-9 or equivalent. Refer to Figure 2.
- 12. Secure the #6 AWG power cables separately, one on each side of the cut out, to angle, P/N 5313148-45 using clamp, P/N MS21919WDG7, bolt, P/N MS27039-1-15, washer, P/N NAS1149G0332P and nut plate P/N MS21075L3. A self locking nut, P/N MS21042L3, may be used as an optional installation. Refer to Figure 2.

- 13. Wrap the remaining four wire bundles together with Teflon sheet (0.04X4X4 in.). Secure with two tie wraps, P/N MS3367-2-9 or equivalent.
- 14. Ensure work area is clean and clear of foreign objects (FOD).
- 15. Close the overhead circuit breaker panel and areas opened in Step 3.
- 16. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 17. Complete the attached Certificate of Compliance and return to General Dynamics Aviation Services in Dallas, Texas.

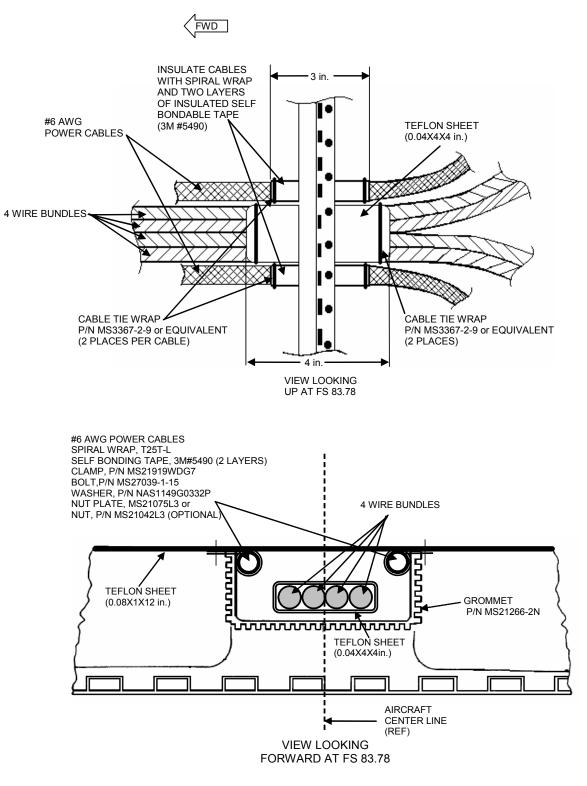
<sup>&</sup>lt;u>NOTE:</u> Ensure the #6 AWG power cables are free moving through the clamps after securing.

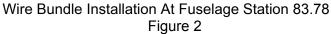




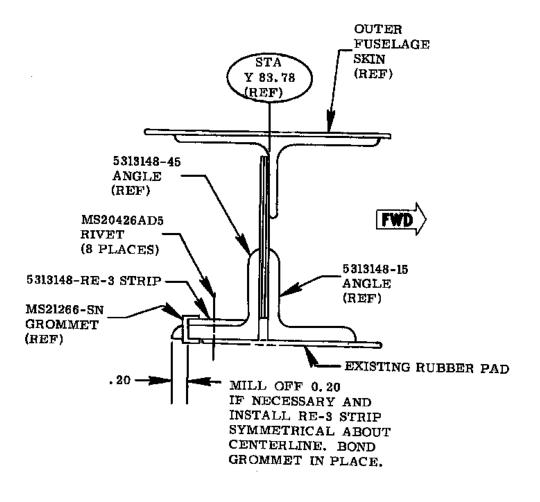
Overhead Wire Bundle Inspection Area at Fuselage Station 83.78 Figure 1







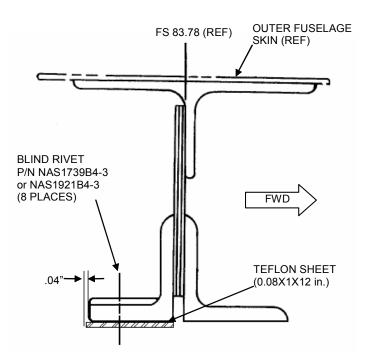




POST SERVICE INFORMATION LETTER WW-2467 (PRE SERVICE BULLETIN)

Grommet and Teflon Sheet Installation at Fuselage Station 83.78 Figure 3, Sheet 1 of 2





POST SERVICE BULLETIN

Grommet and Teflon Sheet Installation at Fuselage Station 83.78 Figure 3, Sheet 2 of 2

| $\diamond \sim \sim$       |
|-----------------------------------------------------------------------------------------------------------------|
| SERVICE BULLETIN                                                                                                |
| CERTIFICATE OF COMPLIANCE                                                                                       |
| Please fill in the required data below and fax this page to General Dynamics<br>Aviation Services.              |
| Fax No. (214) 902-7796                                                                                          |
| This is to certify that Aircraft Serial Number has complied with Alert Service Bulletin No. <b>1124-24A-154</b> |
| Aircraft Registration No                                                                                        |
| Airframe Total Time at Compliance: Hours Cycles                                                                 |
| Compliance Date: By:<br>Print Name                                                                              |
| Signature                                                                                                       |
| Owner and Address:     Accomplishing Agency and Address:                                                        |
|                                                                                                                 |
| Please describe below any discrepancies found or difficulties encountered during compliance:                    |
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### TRANSMITTAL SHEET

#### **Introduction**

This sheet transmits Revision 2, dated December 22, 2008 to 1124 Westwind Service Bulletin No. 1124-28-155, Rev 1, dated Oct 7, 2008, titled "Fuel - Distribution RCCB Replacement in Contactor Box".

#### Reason for Revision

During the Service Bulletin Installation we have found that more efficient means of installing the nut plates for the RCCB's is necessary. The 1 amp circuit breaker that may have been installed with SB 1124-24-065 needs to be replaced with to ½ amp circuit breaker. The time required to complete has also been updated to more realistic expectations.

This is a COMPLETE REISSUE of 1124 Westwind Service Bulletin No. 1124-28-155. Incorporate this revision by removing the original Service Bulletin and insert this Service Bulletin in it's entirety.

#### List of Effective Pages

| <u>Page</u> | No. Date          | Page No. | Date              |
|-------------|-------------------|----------|-------------------|
| 1           | December 22, 2008 | 18       | December 22, 2008 |
| 2           | December 22, 2008 | 19       | December 22, 2008 |
| 3           | December 22, 2008 | 20       | December 22, 2008 |
| 4           | December 22, 2008 | 21       | December 22, 2008 |
| 5           | December 22, 2008 | 22       | December 22, 2008 |
| 6           | December 22, 2008 | 23       | December 22, 2008 |
| 7           | December 22, 2008 | 24       | December 22, 2008 |
| 8           | December 22, 2008 | 25       | December 22, 2008 |
| 9           | December 22, 2008 | 26       | December 22, 2008 |
| 10          | December 22, 2008 | 27       | December 22, 2008 |
| 11          | December 22, 2008 | 28       | December 22, 2008 |
| 12          | December 22, 2008 | 29       | December 22, 2008 |
| 13          | December 22, 2008 | 30       | December 22, 2008 |
| 14          | December 22, 2008 | 31       | December 22, 2008 |
| 15          | December 22, 2008 |          |                   |
| 4.0         |                   |          |                   |

- 16 December 22, 2008
- 17 December 22, 2008



#### FUEL - DISTRIBUTION - RCCB REPLACEMENT IN DC CONTACTOR BOX

#### PLANNING INFORMATION

#### 1. Effectivity

WESTWIND aircraft models, 1124 and 1124A serial numbers 152, 154, 174, 181, & 186 through 442

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

As a result of investigation of smoke and burning of the boost pump wiring on Westwind aircraft during maintenance, it was concluded to replace existing RCCB's with units that provide better protection against overload situations.

4. <u>Reason</u>

This service bulletin provides instructions to remove and replace the existing RCCB's with improved units as follows:

- Option I: Includes rework and wiring modification inside the DC contactor boxes.
- Option II: Includes installation of new additional RCCB boxes on the LH and RH contactor boxes and wiring modification.

#### 5. Compliance

Compliance with this service bulletin is mandatory not to exceed 200 flight hours after the release date of this service bulletin.

6. Approval

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

DATE



#### 7. Manpower

The following is for planning purposes only:

Estimated man-hours: 85-95

8. Weight and Balance

Negligible

9. Electrical Load Data

No Change

10. Software Accomplishment Summary

None

#### 11. References

Westwind Maintenance Manual, Chapters 20, 21, and 24

Israel Aircraft Industries Modification AFC5618A

**NOTE:** The design of MOD AFC5618A is configured to a standard type certificated configuration aircraft. The installer must obtain approval from their local authority for any deviation from this service bulletin.

#### 12. Other Publications Affected

Westwind Illustrated Parts Catalog, Chapter 24

Westwind Maintenance Manual, 28-00-00, Page 105-106

Westwind Wiring Manual, Chapter 24

#### 13. Material Necessary for Each Aircraft

- <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
- A. Material to be Procured:
  - <u>NOTE:</u> The following parts are included in Service Bulletin Kit P/N 1124-28-155 except for parts that have a quantity of "As Required" (A/R):

DATE DEC 22, 2008

Service Bulletin No. 1124-28-155, Rev 2 Page 2 of 31



### For OPTION I Only

| New P/N                                | Keyword                            | <u>Old P/N</u>         | <u>Qty</u> |
|----------------------------------------|------------------------------------|------------------------|------------|
| M83383/2-05 or<br>EATON<br>SM600BA20A1 | RCCB                               | 6141H82 or<br>6141H171 | 4          |
| M83536/9-024                           | Relay                              |                        | 2          |
| M12883/41-11                           | Relay Base                         |                        | 2          |
| 293-14869-000                          | Diode Module No. 13                |                        | 2          |
| D436-38                                | Splice                             | -                      | A/R        |
| TC4001                                 | Wire Cap                           | -                      | A/R        |
| MS25036-119                            | Terminal Lug                       | -                      | A/R        |
| M7928/1-58                             | Terminal Lug                       | -                      | A/R        |
| M39029/1-100                           | Pin                                | -                      | A/R        |
| MS21075-08                             | Nut Plate                          |                        | 8          |
| NAS1801-08-8                           | Screw                              |                        | 8          |
| NAS1149GN832P                          | Washer                             |                        | 8          |
| MS20426AD3-2D<br>or CCR264 CS-3-(X)    | Rivet C'sk Head<br>Alt blind rivet |                        | 16         |
| Copper C12200<br>(A01WW5823641-007)    | HO2 (1/2 Hard) 0.125<br>Inch       |                        | 2          |
| 55PC0211-22-5L                         | Wire 22 A.W.G.<br>M22759/41-22-9   | -                      | A/R        |
| 55PC0213-6-9                           | Wire 6 A.W.G.<br>M22759/41-6-9     | -                      | A/R        |
| 7274-47-1/2 (or Eq.)                   | Circuit breaker ½ Amp              |                        | 4          |
| NOTE. Applicable apply if ratio        | a of size with brook area 111 MAIN |                        |            |

NOTE: Applicable only if rating of circuit breakers: LH MAIN BOOST PUMP (142), RH MAIN BOOST PUMP (143), LH ALT BOOST PUMP (152), RH ALT BOOST PUMP (153) is 1 AMP

DATE



|                                        | SERVICE DO                                                                           |                        |     |
|----------------------------------------|--------------------------------------------------------------------------------------|------------------------|-----|
| For OPTION II Only<br>New P/N          | Keyword                                                                              | Old P/N                | Qty |
| M83383/2-05 or<br>EATON<br>SM600BA20A1 | RCCB                                                                                 | 6141H82 or<br>6141H171 | 4   |
| M83536/9-024                           | Relay                                                                                |                        | 2   |
| M12883/41-11                           | Relay Base                                                                           |                        | 2   |
| A01WW5823641-5                         | •                                                                                    | SY                     | 2   |
| 293-14869-000                          | Diode Module N                                                                       | o. 13                  | 2   |
| D436-38                                | Splice                                                                               | -                      | A/R |
| TC4001                                 | Wire Cap                                                                             | -                      | A/R |
| MS25036-119                            | Terminal Lug                                                                         | -                      | A/R |
| M7928/1-58                             | Terminal Lug                                                                         | -                      | A/R |
| M39029/1-100                           | Pin                                                                                  | -                      | A/R |
| 686DM ¼" or Eq.                        | Expando                                                                              | -                      | A/R |
| MS21042L3                              | Nut                                                                                  |                        | 4   |
| NAS1801-08-8                           | Screw                                                                                |                        | 8   |
| NAS1801-3-6                            | Screw                                                                                |                        | 2   |
| NAS1801-3-8                            | Screw                                                                                |                        | 2   |
| MS35207-265                            | Screw                                                                                |                        | 4   |
| AN3-5                                  | Bolt                                                                                 |                        | 2   |
| NAS1149GN832P                          | Washer                                                                               |                        | 8   |
| NAS1149G0332P                          | Washer                                                                               |                        | 8   |
| NAS1149G0363P                          | Washer                                                                               |                        | 2   |
| TM2S6-C                                | Tie-mount                                                                            |                        | 2   |
| MS3367-1-9                             | Strap Tie-down                                                                       |                        | 2   |
| 55PC-211-22-5L                         | Wire 22 A.W.G.<br>M22759/41-22-9                                                     | -                      | A/R |
| 55PC-213-6-9                           | Wire 6 A.W.G.<br>M22759/41-6-9                                                       | -                      | A/R |
|                                        | q.) Circuit breaker 2<br>y if rating of circuit breakers<br>LH ALT BOOST PUMP (152), | LH MAIN BOOST PUMP (1  |     |
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B. Material Supplied by the Operator:

| Alodine per MIL-C-5541                                                                                                                                                                   | A/R |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Epoxy Primer per MIL-P-23377                                                                                                                                                             | A/R |
| Acetone per ASTM D329                                                                                                                                                                    | A/R |
| Cheesecloth                                                                                                                                                                              | A/R |
| Abrasive Paper, various grades                                                                                                                                                           | A/R |
| EC847 or EC1300 Adhesive Rubber Base<br>MFG.: 3M Adhesive Materials Dept.<br>Highgloss, High Solids Polyurethane Paint per<br>MIL-PRF-85285. Color, White, No. 17925 or<br>FED. STD. 595 | A/R |

### 14. Reidentified Parts

None

15. Special Tooling

None



### SERVICE BULLETIN ACCOMPLISHMENT INSTRUCTIONS

- **CAUTION:** PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance. Refer to Aircraft Maintenance Manual, Chapter 20.
- **CAUTION:** MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.
- 2. Disconnect external electrical power from aircraft and disconnect aircraft batteries. Refer to WESTWIND Maintenance Manual, Chapter 24.
- 3. Overhead Panel Modifications (Figure 1)
  - A. Open overhead panel.
  - B. Replace LH Main, LH Alt, RH Main, and RH Alt CB's with ½ amp if 1 amp is installed.
  - C. Remove bus bar located between LH ALT BOOST PUMP circuit breaker and #1 DISTRIBUTION BUS 28V. Re-terminate as required to ensure remaining CB's down line retain bussing, this may include wire replacement with longer if required.
  - D. Install new wire 1Q602A20N between LH ALT BOOST PUMP circuit breaker (the terminal that was connected to the bus) to overhead panel ground point.
  - E. Disconnect wire 1Q18A22 from MAIN LH BOOST PUMP circuit breaker.
  - F. Connect wire 1Q18A22 to LH FUEL PRESS LOW circuit breaker.
  - G. Install new wire 1Q601A20N to MAIN LH BOOST PUMP circuit breaker (the terminal that was connected to wire 1Q18A22) and overhead panel ground point.
  - H. Remove bus bar located between RH ALT BOOST PUMP circuit breaker and #2 DISTRIBUTION BUS 28V. Re-terminate as required to ensure remaining CB's down line retain bussing, this may include wire replacement with longer if required.
  - I. Install new wire 2Q602A20N between RH ALT BOOST PUMP circuit breaker (the terminal that was connected to the bus) and overhead panel ground point.

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- J. Disconnect wire 2Q18A22 from MAIN RH BOOST PUMP circuit breaker.
- K. Connect wire 2Q18A22 RH FUEL PRESS LOW circuit breaker.
- L. Install new wire 2Q601A20N to MAIN RH BOOST PUMP circuit breaker (the terminal that was connected to wire 2Q18A22) and overhead panel ground point.
- M. Close overhead panel.
- N. Add new label above existing PRESS LOW circuit breaker location stating "BOOST PUMP CONTROL"
- 4. Center Instrument Panel Modifications (Figure 2)
  - A. Remove the center instrument panel.
  - B. Remove jumper and discard wire W503F22 between pins 3 of the LH and RH ALT BOOST PUMP annunciator modules.
  - C. Remove LH and RH "ALT BOOST PUMP ON" modules from the annunciator panel. Remove by loosening center screw on back of module. Leave wire attached for disposition later.
  - D. Install Part Number: 293-14869-000 "DIODE MODULE No. 13" LH and RH "ALT BOOST PUMP ON" modules on the annunciator panel.
  - E. Remove and discard wire 1W509E22 from both pin 4 of the LH "ALT BOOST PUMP ON" module and pin 4 of the "FLAPS UNBALANCED" module.
  - F. Disconnect wire 1W509D22 from pin 4 of the LH "ALT BOOST PUMP ON" module and re-route to pin 4 of the "FLAPS UNBALANCED" module.
  - G. Install a new wire W502AF22 from pin 4 of the LH "FUEL CONTROLER MANUAL MODE" module to pin 4 of the LH "ALT BOOST PUMP ON" module.
  - H. Remove and discard wire W503E22 from both pin 3 of the LH "ALT BOOST PUMP ON" module and pin 3 of the "FLAPS UNBALANCED" module.
  - I. Install a new wire W502AG22 from pin 3 of the LH "FUEL PRESSURE LOW" module to pin 3 of the LH "ALT BOOST PUMP ON" module.
  - J. Discard removed LH "ALT BOOST PUMP ON" module No. 6.
  - K. Remove and discard wire 2W509H22 from both pin 4 of the RH "ALT BOOST PUMP ON" module and pin 4 of the "EMER AIR TEMP HIGH".

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- L. Install a new wire W502AH22 from pin 4 of the RH "FUEL CONTROLER MANUAL MODE" module to pin 4 of the RH "ALT BOOST PUMP ON" module.
- M. Install a new wire W502AJ22 from pin 3 of the RH "FUEL PRESSURE LOW" module to pin 3 of the RH "ALT BOOST PUMP ON" module.
- N. Discard removed RH "ALT BOOST PUMP ON" module No. 6.
- O. Permanently mark exterior of panel with the following "SB 1124-28-155 ACCOMPLISHED"
- P. Install the center instrument panel.
- 5. Open equipment bay door.
- 6. Remove LH and RH DC contactor boxes (IF REQUIRED).
- 7. Equipment Bay Modifications (Figures 3)
  - A. Disconnect wire 1Q16C22 from pin CC of electrical connector J29. Cap wire with Raychem cap, P/N TC4001 and stow it near connector J29.
  - B. Disconnect wire 2Q16D22 from LH DC contactor box pin A of electrical connector P3. Cap wire with Raychem cap, P/N TC4001 and stow it near contactor P3.
  - C. Install new wire 1Q603A22 from pin CC of electrical connector J29 to LH DC contactor box pin A of electrical connector P3.
  - D. Disconnect wire 2Q16C22 from pin R of electrical connector J28. Cap wire with Raychem cap, P/N TC4001 and stow it near connector J28.
  - E. Disconnect wire 1Q16D22 from RH DC contactor box pin P of electrical connector P4. Cap wire with Raychem cap, P/N TC4001 and stow it near contactor P4.
  - F. Install new wire 2Q603A22 from pin R of electrical connector J28 to RH DC contactor box pin P of electrical connector P4.
- 8. LH DC Contactor Box Modifications Option I (Figures 4)
  - A. Open LH DC contactor box cover.
  - B. Remove RCB1-4 and RCB1-5.
  - C. Remove existing nut plates of RCB1-4 and RCB1-5. Install new nut-plates, P/N MS21075-08 using rivets, P/N MS20426AD3-2D (or CCR264 CS-3-(X)) at the previous location of RCB1-5.

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Utilize appropriate spacing so as to allow Bus Bar A01WW5823641-007 to fit on the A1 terminals of both RCCB's.

**NOTE:** RCCB's 1-4 and 1-5 are to be installed with A1 terminal towards the center of the contactor box.

D. Remove electrical shields from both new RCCB's and install RCB1-4 and RCB1-5, P/N M83383/2-05 or EATON SM600BA20A1 with screws P/N NAS1801-08-8 and washers P/N NAS1149GN832P. Add placard to side of box for RCCB1-4.

**NOTE:** Route power wires apart from other electrical cables.

If necessary, lengthen the wires connected to the new RCCB as follows:

For 12 A.W.G. wires use RAYCHEM splices P/N D436-38.

For other wires use RAYCHEM splices P/N D436-36.

- E. Disconnect wire 17-12 from #1 MAIN BUS and remove it from LH DC Contactor Box.
- F. Install the Bus Bar from A1 to A1, then connect a new 6 A.W.G. wire to #1 MAIN BUS and to pin A1 of RCB1-5, use terminal lug P/N MS25036-119.
- G. Disconnect, remove, and discard wire 12 from RCB1-4 pin C1 to ground point.
- H. Connect a new 22 A.W.G. wire No 309 from the ground point to pin 5A of RCB1-4. Connect a new 22 A.W.G. wire No 311 from the ground point to pin 5A of RCB1-5. For connection to RCB use pin P/N M39029/1-100.
- I. Connect a new 22 A.W.G. jumper wire No 313 to wires 21 and 104 use Raychem splice P/N D436-36 and connect to pin 3 of RCB1-4 use pin P/N M39029/1-100.
- J. Connect existing wire 1Q23A12 to pin A2 of RCB1-4 use terminal lug P/N M7928/1-58.
- K. Connect existing wire 2Q25A12 to pin A2 of RCB1-5 use terminal lug P/N M7928/1-58.
- L. Disconnect, remove, and discard wire 25 from pin A of electrical connector J3 to RCB1-5 pin C1.
- M. Connect a new 22 A.W.G. wire No 301 to pin S1 of RCB1-4 use pin P/N M39029/1-100 and to pin A of electrical connector J3.
- N. De-pin and cap wire connected to pin X1 of relay BPCR-1 with Raychem cap, P/N TC4001.

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- O. Install a new relay base socket PN M12883/41-11 for BPCR-3 relay in an available location on the relay rack
- P. Connect a new 22 A.W.G. wire No 303 (use Raychem splice P/N D436-36) to wire No 105 with sufficient length to route to the location of the newly installed BPCR-3 relay installed above. Terminate wire No 303 to pin X2 of the BPCR-3.
- Q. Disconnect wire 103 from pin A3 of relay BPCR-1 and connect it to pin X1 of the newly installed BPCR-3 relay.
- R. Connect a new 22 A.W.G. wire No 307 (use Raychem splice P/N D436-36) to rerouted wire No 103. Terminate wire No 307 to pin A2 of the BPCR-3.
- S. Install a new wire No 305 from newly installed BPCR-3 relay pin A1 to BPCR-1 pin X1.
- T. Disconnect wire from #1 MAIN BUS (other side was connected to RCB1-5 pin L1) and remove it from LH DC Contactor Box.
- U. Install LH DC Contactor Box. Do not close the cover yet.
- 9. LH DC Contactor Box Modifications Option II (Figures 7)
  - A. Remove RCB1-4 and RCB1-5.
  - B. Produce / procure RCCB box A01WW5823641-511 for LH only according to Figure 6.
  - C. Install RCCB box A01WW5823641-511 on LH DC Contactor Box according to Figure 7.
  - D. Install bonding between box A01WW5823641-511 and LH DC Contactor Box according to Figure 7 and Figure 8.
  - E. Remove electrical shields from both new RCCB's and install new RCB1-4 and RCB1-5, P/N M83383/02-05 or EATON SM600BA20A1 with screws P/N NAS1801-08-8 and washers P/N NAS1149GN832P (Figure 6).
  - F. Install Bus Bar A01WW5823641-007 according to Figure 6 and install it on A1 connection points of RCB1-4 and RCB1-5.
  - G. Route electrical wiring through exit round accesses if required enlarge holes and install new suitable grommets.
  - H. Protect electrical wiring outside the boxes with EXPANDO 686DM 1/4" or equivalent.

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I. Route power cables apart from other electrical cables.

**NOTE:** Route power wires apart from other electrical cables.

If necessary, lengthen the wires connected to the new RCCB as follows:

For 12 A.W.G. wires use RAYCHEM splices P/N D436-38.

For other wires use RAYCHEM splices P/N D436-36.

- J. Disconnect wire 17-12 from #1 MAIN BUS and remove it from LH DC Contactor Box.
- K. Connect a new 6 A.W.G. wire to #1 MAIN BUS and to pin A1 of RCB1-5, use terminal lug P/N MS25036-119.
- L. Disconnect, remove, and discard wire 12 from RCB1-4 pin C1 to ground point.
- M. Connect a new 22 A.W.G. wire No 309 from the ground point to pin 5A of RCB1-4. Connect a new 22 A.W.G. wire No 311 from the ground point to pin 5A of RCB1-5. For connection to RCB use pin P/N M39029/1-100.
- N. Connect a new 22 A.W.G. jumper wire No 313 to wires 21 and 104 use Raychem splice P/N D436-36 and connect to pin 3 of RCB1-4 use pin P/N M39029/1-100.
- O. Connect existing wire 1Q23A12 to pin A2 of RCB1-4 use terminal lug P/N M7928/1-58.
- P. Connect existing wire 2Q25A12 to pin A2 of RCB1-5 use terminal lug P/N M7928/1-58.
- Q. Disconnect, remove, and discard wire 25 from pin A of electrical connector J3 to RCB1-5 pin C1.
- R. Connect a new 22 A.W.G. wire No 301 to pin S1 of RCB1-4 use pin P/N M39029/1-100 and to pin A of electrical connector J3.
- S. De-pin and cap wire connected to pin X1 of relay BPCR-1 with Raychem cap, P/N TC4001.
- T. Install a new relay base socket PN M12883/41-11 for BPCR-3 relay in an available location on the relay rack.
- U. Connect a new 22 A.W.G. wire No 303 (use Raychem splice P/N D436-36) to wire No 105 with sufficient length to route to the location of the newly installed BPCR-3 relay installed above. Terminate wire No 303 to pin X2 of the BPCR-3.

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- V. Disconnect wire 103 from pin A3 of relay BPCR-1 and connect it to pin X1 of the newly installed BPCR-3 relay.
- W. Connect a new 22 A.W.G. wire No 307 (use Raychem splice P/N D436-36) to rerouted wire No 103. Terminate wire No 307 to pin A2 of the BPCR-3.
- X. Install a new wire No 305 from newly installed BPCR-3 relay pin A1 to BPCR-1 pin X1.
- Y. Disconnect wire from #1 MAIN BUS (other side was connected to RCB1-5 pin L1) and remove it from LH DC Contactor Box.
- Z. Install LH DC Contactor Box. Do not close the cover yet.

10. RH DC Contactor Box Modifications OPTION I (Figures 4)

- A. Open RH DC contactor box cover.
- B. Remove RCB2-4 and RCB2-5.
- C. Remove existing nut plates of RCB2-4 and RCB2-5. Install new nut-plates, P/N MS21075-08 using rivets, P/N MS20426AD3-2D (or CCR264 CS-3-(X))at the previous location of RCB2-5. Utilize appropriate spacing so as to allow Bus Bar A01WW5823641-007 to fit on the A1 terminals of both RCCB's.

**NOTE:** RCCB's 2-4 and 2-5 are to be installed with A1 terminal towards the center of the contactor box.

D. Remove electrical shields from both new RCCB's and install new RCB2-4 and RCB2-5, P/N M83383/2-05 or EATON SM600BA20A1 with screws P/N NAS1801-08-8 and washers P/N NAS1149GN832P. Add placard to side of box for RCCB2-5.

**NOTE:** Route power wires apart from other electrical cables.

If necessary, lengthen the wires connected to the new RCCB as follows:

For 12 A.W.G. wires use RAYCHEM splices P/N D436-38.

For other wires use RAYCHEM splices P/N D436-36.

- E. Disconnect wire 17-12 from #2 MAIN BUS and remove it from RH DC Contactor Box.
- F. Install the Bus Bar from A1 to A1, then connect a new 6 A.W.G. wire to #2 MAIN BUS and to pin A1 of RCB2-4, use terminal lug P/N MS25036-119.
- G. Disconnect, remove, and discard wire 69 from RCB2-4 pin C1 to ground point.

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- H. Connect a new 22 A.W.G. wire No 310 from the ground point to pin 5A of RCB2-4. Connect a new 22 A.W.G. wire No 312 from the ground point to pin 5A of RCB2-5. For connection to RCB use pin P/N M39029/1-100.
- I. Connect a new 22 A.W.G. jumper wire No 314 to wires 51 and 76 use Raychem splice P/N D436-36 and connect to pin 3 of RCB2-4 use pin P/N M39029/1-100.
- J. Connect existing wire 2Q23A12 to pin A2 of RCB2-4 use terminal lug P/N M7928/1-58.
- K. Connect existing wire 1Q25A12 to pin A2 of RCB2-5 use terminal lug P/N M7928/1-58.
- L. Disconnect, remove, and discard wire 77 from pin P of electrical connector J4 to RCB2-5 pin C1.
- M. Connect a new 22 A.W.G. wire No 302 to pin S1 of RCB2-4 use pin P/N M39029/1-100 and to pin P of electrical connector J4.
- N. De-pin and cap wire connected to pin X1 of relay BPCR-2 with Raychem cap, P/N TC4001.
- O. Install a new relay base socket PN M12883-4-11 for BPCR-4 relay in an available location on the relay rack
- P. Connect a new 22 A.W.G. wire No 304 (use Raychem splice P/N D436-36) to wire No 121 with sufficient length to route to the location of the newly installed BPCR-4 relay installed above. Terminate wire No 304 to pin X2 of the BPCR-4.
- Q. Disconnect wire 123 from pin A3 of relay BPCR-2 and connect it to pin X1 of the newly installed BPCR-4 relay.
- R. Connect a new 22 A.W.G. wire No 308 (use Raychem splice P/N D436-36) to rerouted wire No 123. Terminate wire No 308 to pin A2 of the BPCR-4.
- S. Install a new wire No 306 from newly installed BPCR-4 relay pin A1 to BPCR-2 pin X1.
- T. Disconnect wire from #2 MAIN BUS (other side was connected to RCB2-5 pin L1) and remove it from RH DC Contactor Box.
- U. Install RH DC Contactor Box. Do not close the cover yet.
- 11. RH DC Contactor Box Modifications Option II (Figures 4)

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- A. Open RH DC contactor box cover.
- B. Remove RCB2-4 and RCB2-5.
- C. Produce RCCB box A01WW5823641-513 for RH only according to Figure 6.
- Install RCCB box A01WW5823641-513 on RH DC Contactor Box according to Figure 7.
- E. Install bonding between box A01WW5823641-513 and RH DC Contactor Box according to Figure 7 and Figure 8.
- F. Remove electrical shields from both new RCCB's and install new RCB2-4 and RCB2-5, P/N M83383/02-05 or EATON SM600BA20A1 with screws P/N NAS1801-08-8 and washers P/N NAS1149GN832P (Figure 6).
- G. Produce bus-bar A01WW5823641-007 according to Figure 6 and install it on A1 connection points of RCB2-4 and RCB2-5.
- H. Route electrical wiring through exit round accesses if required enlarge holes and install new suitable grommets.
- I. Protect electrical wiring outside the boxes with EXPANDO 686DM 1/4" or equivalent.
- J. Route power cables apart from other electrical cables.

**NOTE:** Route power wires apart from other electrical cables.

If necessary, lengthen the wires connected to the new RCCB as follows:

For 12 A.W.G. wires use RAYCHEM splices P/N D436-38.

For other wires use RAYCHEM splices P/N D436-36.

- K. Disconnect wire 17-12 from #2 MAIN BUS and remove it from RH DC Contactor Box.
- L. Connect a new 6 A.W.G. wire to #2 MAIN BUS and to pin A1 of RCB2-4, use terminal lug P/N MS25036-119.
- M. Disconnect, remove, and discard wire 69 from RCB2-4 pin C1 to ground point.
- N. Connect a new 22 A.W.G. wire No 310 from the ground point to pin 5A of RCB2-4. Connect a new 22 A.W.G. wire No 312 from the ground point to pin 5A of RCB2-5. For connection to RCB use pin P/N M39029/1-100.
- O. Connect a new 22 A.W.G. jumper wire No 314 to wires 51 and 76 use Raychem splice P/N D436-36 and connect to pin 3 of RCB2-4 use pin P/N M39029/1-100. DATE DEC 22, 2008 Service Bulletin No. **1124-28-155, Rev 2**



- P. Connect existing wire 2Q23A12 to pin A2 of RCB2-4 use terminal lug P/N M7928/1-58.
- Q. Connect existing wire 1Q25A12 to pin A2 of RCB2-5 use terminal lug P/N M7928/1-58.
- R. Disconnect, remove, and discard wire 77 from pin P of electrical connector J4 to RCB2-5 pin C1.
- S. Connect a new 22 A.W.G. wire No 302 to pin S1 of RCB2-4 use pin P/N M39029/1-100 and to pin P of electrical connector J4.
- T. De-pin and cap wire connected to pin X1 of relay BPCR-2 with Raychem cap, P/N TC4001.
- U. Install a new relay base socket PN M12883/41-11 for BPCR-4 relay in an available location on the relay rack
- V. Connect a new 22 A.W.G. wire No 304 (use Raychem splice P/N D436-36) to wire No 121 with sufficient length to route to the location of the newly installed BPCR-4 relay installed above. Terminate wire No 304 to pin X2 of the BPCR-4.
- W. Disconnect wire 123 from pin A3 of relay BPCR-2 and connect it to pin X1 of the newly installed BPCR-4 relay.
- X. Connect a new 22 A.W.G. wire No 308 (use Raychem splice P/N D436-36) to rerouted wire No 123. Terminate wire No 308 to pin A2 of the BPCR-4.
- Y. Install a new wire No 306 from newly installed BPCR-4 relay pin A1 to BPCR-2 pin X1.
- Z. Disconnect wire from #2 MAIN BUS (other side was connected to RCB2-5 pin L1) and remove it from RH DC Contactor Box.
- AA. Install RH DC Contactor Box. Do not close the cover yet.
- 12. DC Contactor Boxes Interconnection (Figure 5)
  - A. Connect a new 22 A.W.G. wire No 2Q604A22 to RCCB1-5 pin 3 in LH DC Contactor Box, use pin P/N M39029/1-100.
  - B. Connect a new 22 A.W.G. wire No 1Q604A22 to RCCB1-4 pin S3 in LH DC Contactor Box, use pin P/N M39029/1-100.
  - C. Protect wires 2Q604A22 and 1Q604A22 with EXPANDO 686DM 1/4" or equivalent.

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- D. Route the wires 2Q604A22 and 1Q604A22 through existing grommets into RH DC Contactor Box.
- E. Connect wire 2Q604A22 to RCCB2-4 pin S3 in RH DC Contactor Box, use pins P/N M39029/1-100.
- F. Connect wire 1Q604A22 to RCCB2-5 pin 3 in RH DC Contactor Box, use pins P/N M39029/1-100.
- G. Close the LH and RH DC contactor box covers.
- 13. Perform operational check of boost pumps (Ref Chapter 28).
- 14. Record compliance of this Service Bulletin in the aircraft's permanent maintenance records. State in Aircraft Log Book "Service Bulletin 1124-28-155, Rev 2, Dated JUN 20, 2008, has been completed on this aircraft on this date".
- 15. Complete the attached "SERVICE BULLETIN CERTIFICATE OF COMPLIANCE" form and FAX to Worthington Aviation Corporation in Eagan MN.



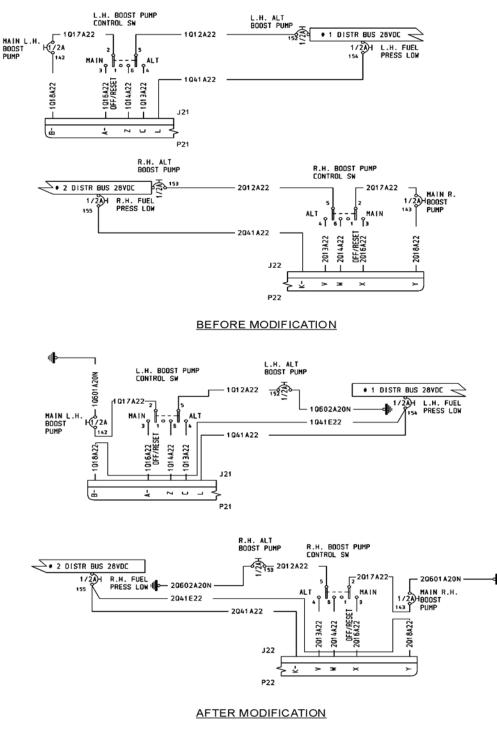


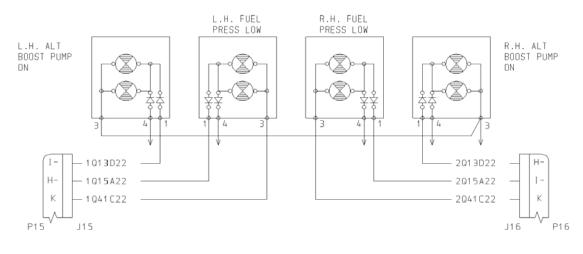
FIGURE 1

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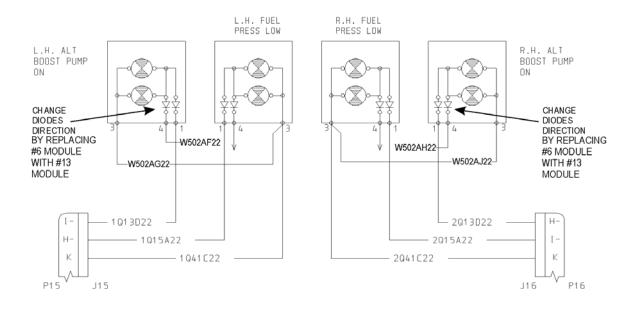
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**BEFORE MODIFICATION** 



#### AFTER MODIFICATION





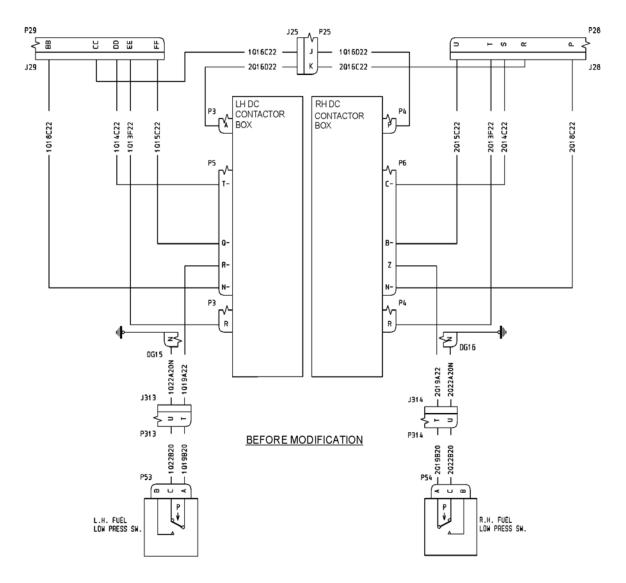


FIGURE 3 (Sheet 1 of 2)

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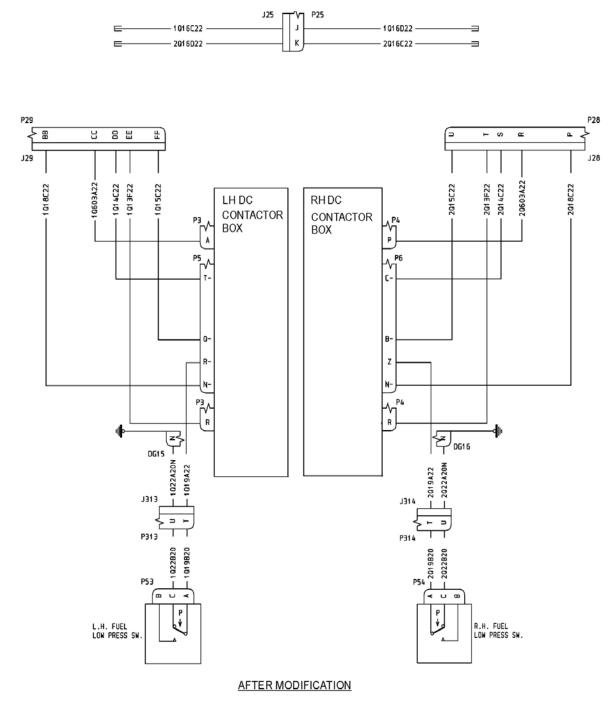


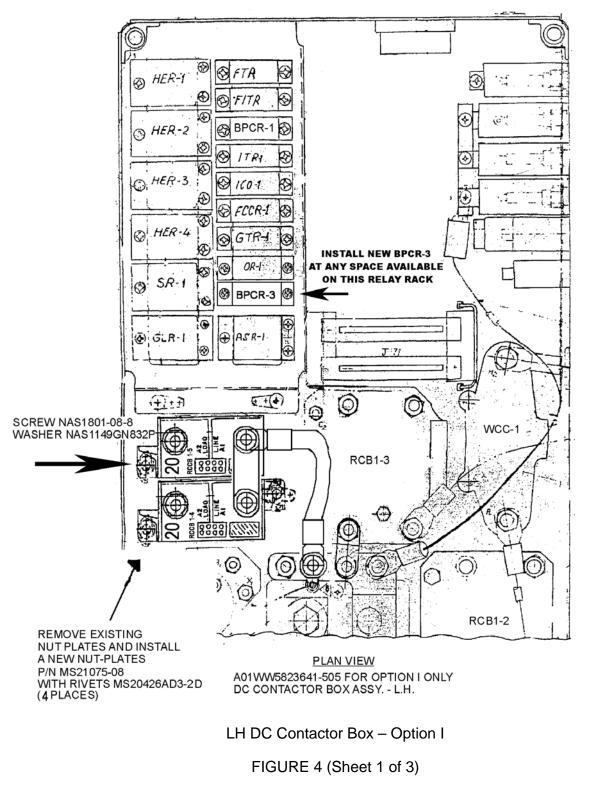
FIGURE 3 (Sheet 2 of 2)

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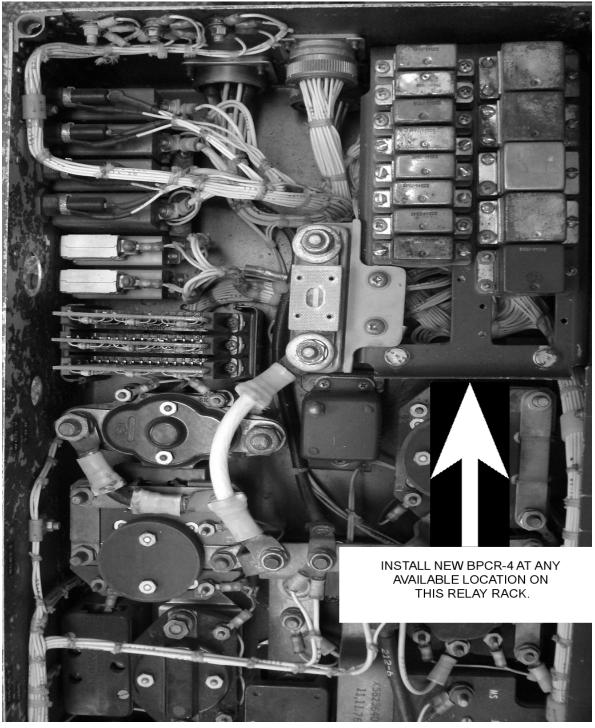


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RH DC Contactor Box - Option I

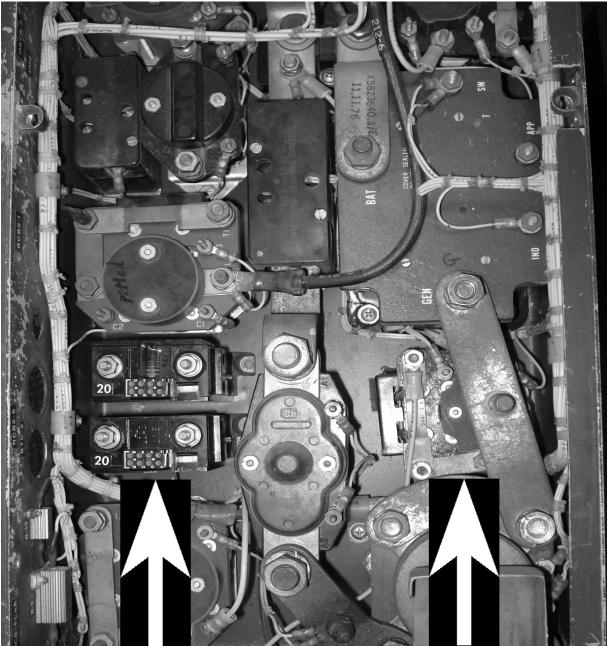
FIGURE 4 (Sheet 2 of 3)

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REMOVE EXISTING RCB2-5 THIS LOCATION INSTALL NEW RCCB2-4 AND 2-4 THIS LOCATION REMOVE EXISTING NUT PLATES AND INSTALL NEW NUT PLATES PN MS21075-08 WITH RIVETS MS20426AD3-2D (4 PLACES) REMOVE EXISTING RCB2-4 THIS LOCATION DISCARD THIS ITEM IT WILL NOT BE REUSED

RH DC Contactor Box - Option I

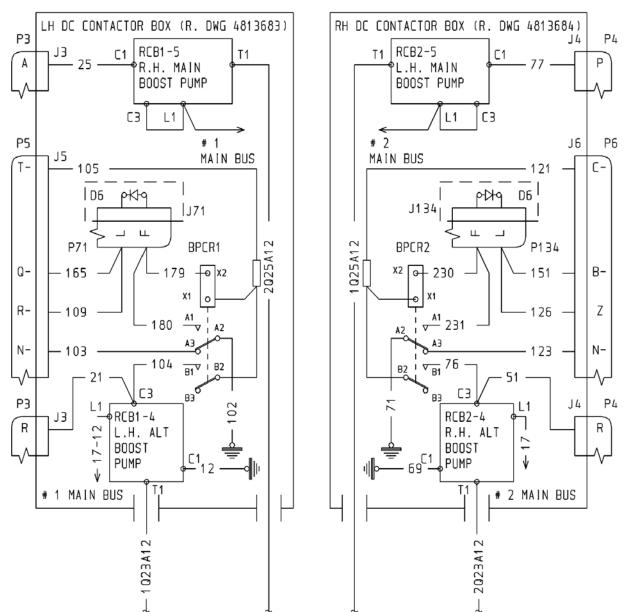
FIGURE 4 (Sheet 3 of 3)

DATE

DEC 22, 2008

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**BEFORE MODIFICATION** 

**DC** Contactor Box

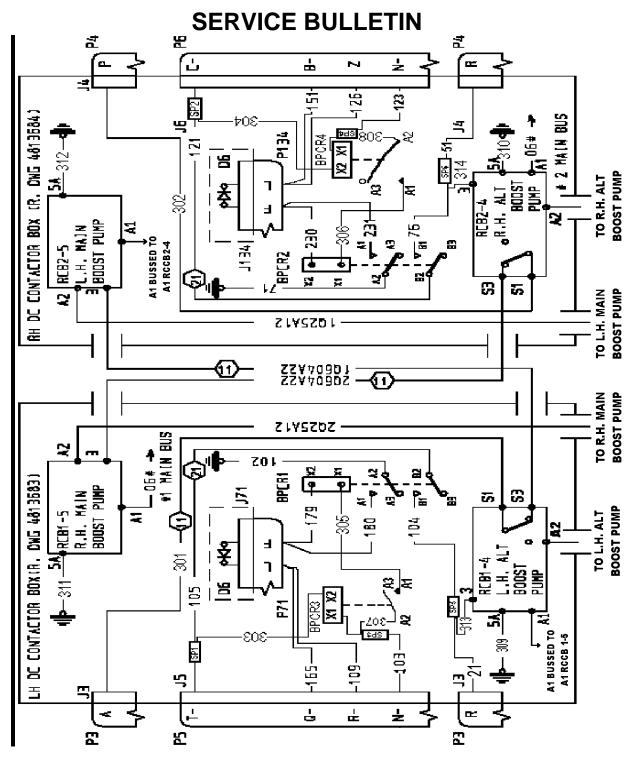
FIGURE 5 (Sheet 1 of 2)

DATE

DEC 22, 2008

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DC Contactor Box (AFTER MODIFICATION)

FIGURE 5 (Sheet 2 of 2)

DATE

DEC 22, 2008

Service Bulletin No. **1124-28-155, Rev 2** Page 25 of 31



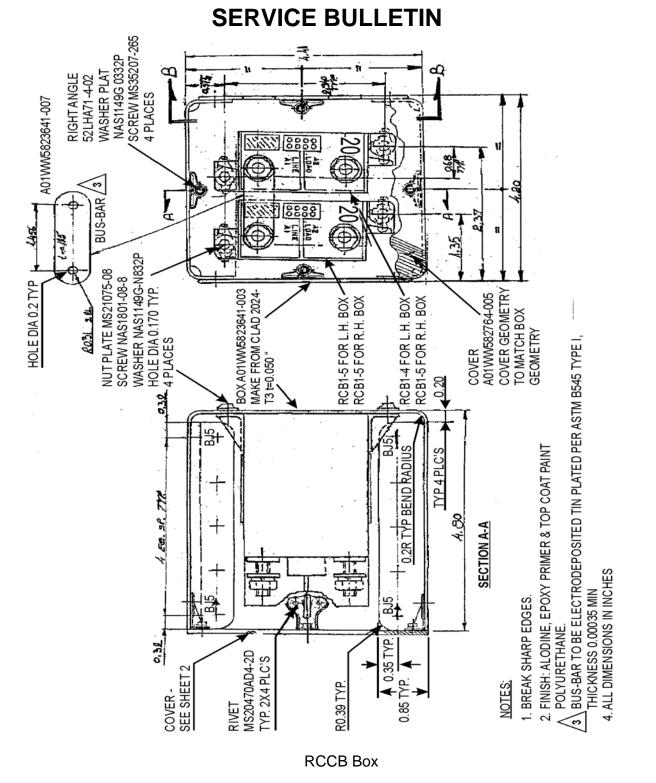


FIGURE 6 (Sheet 1 of 2)

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DEC 22, 2008

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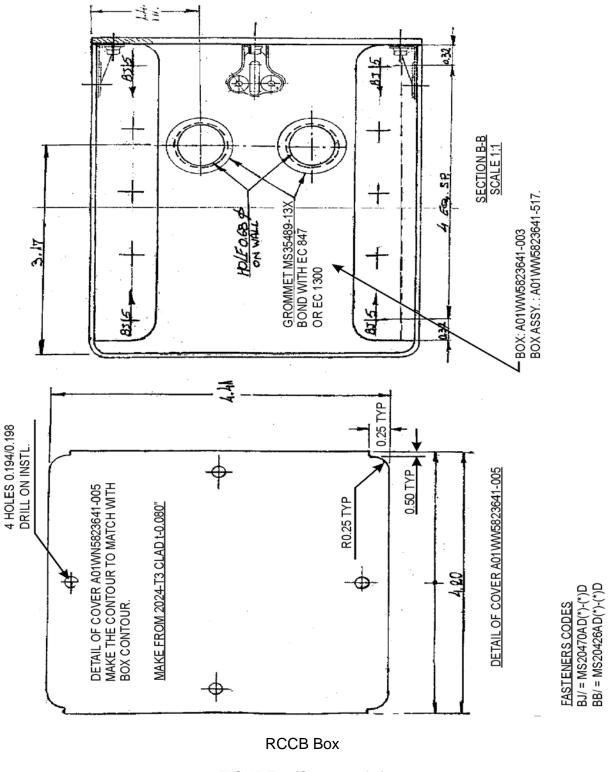


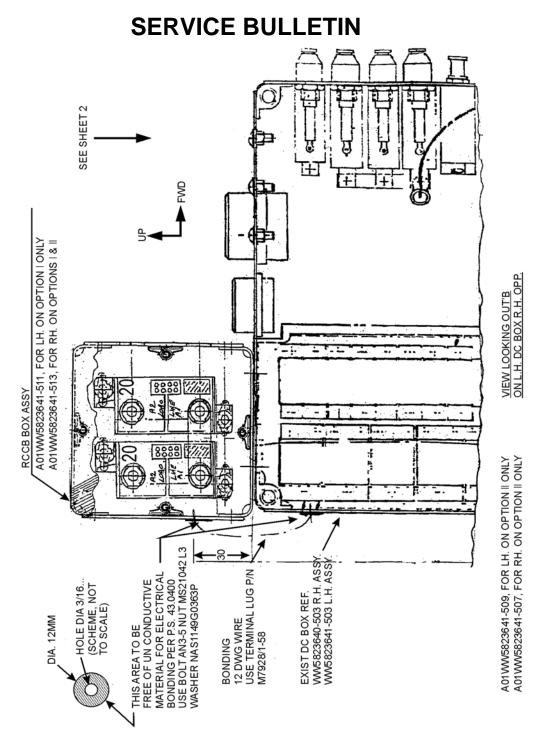
FIGURE 6 (Sheet 2 of 2)

DEC 22, 2008

DATE

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RCCB Box Installation on DC Box - Option II

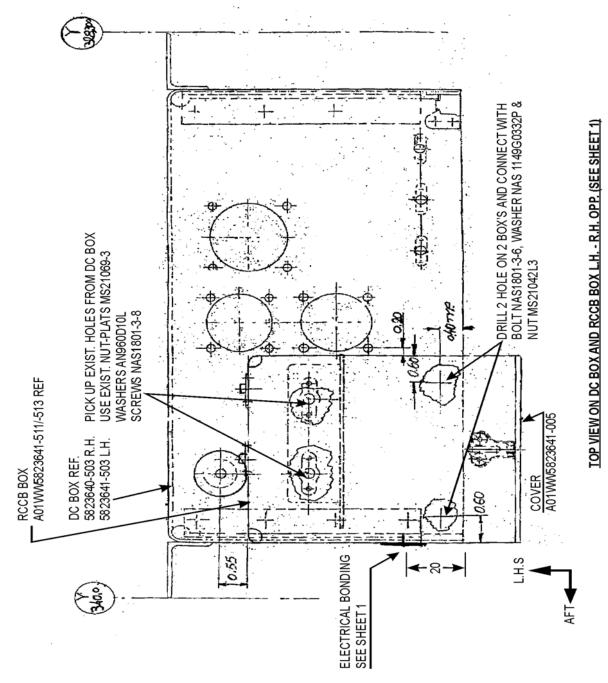
FIGURE 7 (Sheet 1 of 2)

DATE

DEC 22, 2008

Service Bulletin No. **1124-28-155, Rev 2** Page 28 of 31





RCCB Box Installation on DC Box - Option II

FIGURE 7 (Sheet 2 of 2)

DATE

DEC 22, 2008

Service Bulletin No. **1124-28-155, Rev 2** Page 29 of 31



### SERVICE BULLETIN RCCB BOX - BONDING INSTRUCTIONS

#### 1. Cleaning

a. Remove from the contact area all non-conductive materials such as oxides, anodizing, primer, and finish coatings using a stainless steel brush or aluminum oxide emery cloth (#240 or #320). Produce a fine, clean, and smooth surface without removal of excess metallic material.

#### Notes:

- <u>Caution:</u> Do not use silicon-carbide (carborundum) cloth
- For cleaning the area adjacent to small holes, use a pilot hole stainless steel brush.
- Do not remove conductive surface finishes such as cadmium, tin, zinc, nickel, silver, or gold plating
- b. Remove dirt and dust using a non-metallic brush or by means of vacuum or compressed air.
- c. Remove grease, oil, and fingerprints by wiping with a lint free cloth soaked in aliphatic naphtha or alcohol. Immediately after this treatment, clean the surface with a lint free cloth.

Caution: Do not use alkali type cleaning solutions

- 2. Conductive Finishes
  - a. Apply Alodine to the exposed aluminum areas where bonding straps will be installed.
- 3. Install Bonding strap per Figure 7.
  - a. Check bonding resistance, resistance is to be 2.5 Milli-Ohms or less.
- 4. Apply Protective Finish
  - a. Apply Epoxy primer to bonding strap termination points.

Bonding Instructions

### FIGURE 8

DATE

DEC 22, 2008

Service Bulletin No. **1124-28-155, Rev 2** Page 30 of 31



| $\diamond$ | $\rightarrow$ $\sim$                                                                                           |
|------------|----------------------------------------------------------------------------------------------------------------|
| Ŷ          | SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE                                                                  |
|            | Please fill in the required data below and fax this page to<br>Worthington Aviation.<br>Fax No. (651) 393-3310 |
| \$         | This is to certify that Aircraft Serial Number has complied with Service Bulletin No. <b>1124-28-155 Rev 2</b> |
| Ŷ          | Aircraft Registration No                                                                                       |
|            | Airframe Total Time at Compliance: Hours Cycles                                                                |
|            | Compliance Date: By:<br>Print Name                                                                             |
|            | Signature                                                                                                      |
|            | Owner and Address: Accomplishing Agency and Address:                                                           |
|            |                                                                                                                |
|            | Please describe below any discrepancies found or difficulties encountered during compliance:                   |
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DATE



#### **Introduction**

This sheet transmits Revision 1, dated May 1, 2009 to 1124 Westwind Service Bulletin No. 1124-27-156, Rev New, dated December 4, 2008, titled "Replacement of Left and Right Aileron Control Rod Assemblies".

#### Reason for Revision

It was noted that the original Service Bulletin does not give the operator that has recently had the control rods inspected or replaced an option to defer the implementation of this Service Bulletin.

This is a COMPLETE REISSUE of 1124 Westwind Service Bulletin No. 1124-27-156. Incorporate this revision by removing the original Service Bulletin and insert this Service Bulletin in its entirety.

List of Effective Pages

| <u>Page</u> | No.    | Date |
|-------------|--------|------|
| 1           | May 1, | 2009 |
| 2           | May 1, |      |
| 3           | May 1, | 2009 |
| 4           | May 1, | 2009 |
| 5           | May 1, | 2009 |
| 6           | May 1, | 2009 |

Transmittal Page 1 of 1

# **WESTWIND**

MODEL 1124 1124A

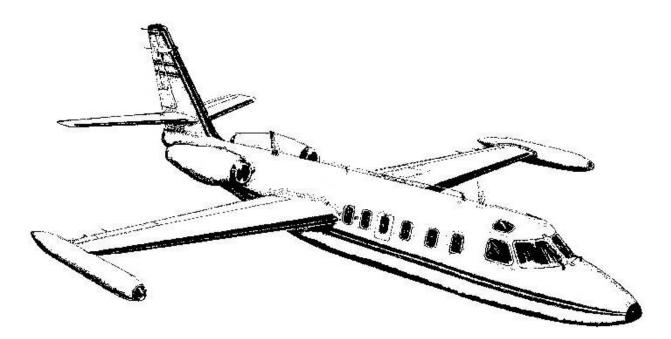
SERVICE BULLETIN

### NO.1124-27-156

#### SUBJECT:

FLIGHT CONTROLS (ATA 27)

AILERON - REPLACEMENT OF LEFT AND RIGHT AILERON CONTROL ROD ASSEMBLIES P/N 513020-501 AND -501RE



Published by Worthington Aviation Parts Inc. At the direction of Israel Aircraft Industries LTD

> Service Bulletin No. **1124-27-156** Rev 1 Page 0 of 6

May 1, 2009



### FLIGHT CONTROLS - AILERON – REPLACEMENT OF LEFT AND RIGHT AILERON CONTROL ROD ASSEMBLIES P/N 513020-501 AND -501RE

### PLANNING INFORMATION

### 1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND aircraft, all serial numbers

2. <u>Concurrent Requirement:</u>

None

3. <u>Reason</u>

Corrosion has been discovered on aileron control rod assemblies P/N 513020-501 and -501RE. An improved stainless steel control rod is introduced.

4. Description

This service bulletin provides instructions for replacement of the control rod assembly with a new improved stainless steel control rod assembly P/N 513020-503. Incorporation of the -503 control rod assembly terminates the requirement for repeated x-ray inspection referenced in AMM 5-10-00.

### 5. <u>Compliance</u>

If within the previous 18 months of the release date of this service bulletin, the component has been inspected in accordance with the Non-Destructive Manual and found to be serviceable or if the control rod assembly has been replaced with a new part, the control rod assembly may remain in service until the next "3C" check not to exceed 2400 flight hours or 5 years from the date of the last NDT inspection, whichever comes first. If the above conditions have not been met, then compliance is mandatory at the next 200 hour inspection or within one year after the release date of this service bulletin, whichever comes first.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

May 1, 2009

Service Bulletin No. 1124-27-156 Rev 1 Page 1 of 6

# III 24-WESTNIND

# SERVICE BULLETIN

### 7. <u>Manpower:</u>

The following information is for planning purposes only: Estimated man-hours: 8

8. Weight and Balance:

None

9. <u>Electrical Load Data:</u>

No Change

10. Software Accomplishment Summary:

None

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapters 5 1124/1124A Westwind Illustrated Parts Catalog, Chapter 27 1124/1124A Phase Inspection Program Manual Nondestructive Testing Manual, Chapter 27 Israel Aircraft Industries MOD number AFC 5620

### 12. Other Publications Affected

1124/1124A Westwind Maintenance Manual, Chapters 5 1124/1124A Phase Inspection Program Manual Nondestructive Testing Manual, Part 2 Chapter 27 Illustrated Parts Catalog, Chapter 27

13. Interchangeability or Inter-mixability of Parts

Stainless steel control rod assembly P/N 513020-503 supersedes P/N 513020-501 or -501RE. Mixing of control rod assemblies is approved.

<u>NOTE:</u> Replacement of the 513020-501 and -501RE control rods with the 513020-503 control rods terminates the recurring x-ray inspection requirement.

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### MATERIAL INFORMATION

### 1. Material - Price and Availability

The parts required to accomplish this service bulletin are available from Worthington Aviation Parts Inc. Contact the Parts Sales department at 651-994-1600 for price and availability.

2. Warranty Information:

None

- 3. Material Necessary for Each Aircraft
  - <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
  - A. Material to be Procured:

| New P/N     | Keyword | Old P/N | Qty  |
|-------------|---------|---------|------|
| NC VV I /IN |         |         | Gety |

- 513020-503 Control Rod Assembly 513020-501 or 501RE 2
  - <u>NOTE:</u> Replacement of the 513020-501 and -501RE control rods with the 513020-503 control rods terminates the recurring x-ray inspection requirement.
- 4 <u>Re-identified Parts:</u>

None

5 Special Tooling:

None

### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.
- 2. Place warning tags at the flight controls in the flight compartment.

### WARNING: WARNING TAGS SHALL BE PLACED ON CONTROL WHEELS – "DANGER - DO NOT MOVE FLIGHT CONTROLS, MAINTENANCE IN PROGRESS." FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND DAMAGE TO EQUIPMENT.

- 3. Fully extend flaps, speed brakes and lift dumpers to gain access to the left and right aileron assemblies.
- <u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.
- 4. Remove external electrical power from aircraft.
- 5. Insert rig pin in the aileron control pulley located on the rear fuselage bulkhead at station 316.00. Refer to Aircraft Maintenance Manual, Chapter 27-10-00.
- 6. Remove the left and right aileron control rod assemblies, P/N 513020-501 and -501RE. Tag and identify left and right rod assemblies respectively.
- 7. Carefully measure and record distance between center of attachment holes of rod ends, for later reference should the new control rods require adjustment.

/24-WEJTN//N/

- 8. Install left and right aileron control rod assemblies at wing station XW=156.8. Torque nuts to 50-70 inch-pounds and secure with cotter pins.
- 9. Check aileron rigging in accordance with Aircraft Maintenance Manual, Chapter 27.
- 10. Remove rig pin in the aileron control pulley located on the rear fuselage bulkhead at station 316.00. Refer to Aircraft Maintenance Manual, Chapter 27.
- 11. Ensure work area is clean and clear of foreign objects (FOD).
- 12. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 13. Complete the attached Certificate of Compliance and return to Worthington Aviation Parts Inc., Eagan, MN

| $\diamond\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$                               | $\hat{\mathbf{x}}$ |
|------------------------------------------------------------------------------------------------------------------|--------------------|
| SERVICE BULLETIN                                                                                                 | Y                  |
| CERTIFICATE OF COMPLIANCE                                                                                        |                    |
| Please fill in the required data below and fax this page to Worthington<br>Aviation Parts Inc.                   |                    |
| Fax No. (651) 393-3310                                                                                           |                    |
| This is to certify that Aircraft Serial Number has complied with Service Bulletin No. <b>1124-27-156 F Yj '%</b> |                    |
| Aircraft Registration No                                                                                         | Ŷ                  |
| Airframe Total Time at Compliance: Hours Cycles                                                                  |                    |
| Compliance Date: By:<br>Print Name                                                                               |                    |
| Signature                                                                                                        |                    |
| Owner and Address:     Accomplishing Agency and Address:                                                         |                    |
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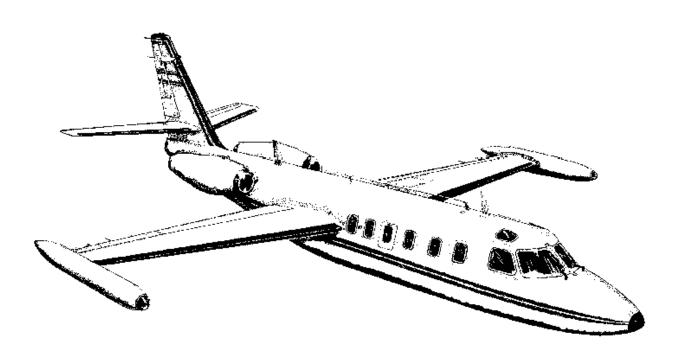
### WESTWIND MODEL 1124/1124A

### SERVICE BULLETIN

NO. 1124-53-157

#### SUBJECT:

#### FUSELAGE - ENGINE MOUNTING END PLATE AND VERTICAL STABILIZER FRONT AND REAR FITTING ASSEMBLY -ONE-TIME INSPECTION FOR CORROSION



December 31, 2011

Published by WORTHINGTON AVIATION AT THE DIRECTION OF ISRAEL AEROSPACE INDUSTRIES LTD



#### FUSELAGE - ENGINE MOUNTING END PLATE AND VERTICAL STABILIZER FRONT AND REAR FITTING ASSEMBLY -ONE-TIME INSPECTION FOR CORROSION

#### PLANNING INFORMATION

1. Effectivity

Models 1124 and 1124A WESTWIND, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Visual inspection of engine mounting end plate and vertical stabilizer front and rear fitting assembly has revealed fitting corrosion.

4. Description

This alert service bulletin provides instructions for a one-time visual inspection of the engine mounting end plate and vertical stabilizer front and rear fitting assembly.

5. <u>Compliance</u>

Compliance with service bulletin is mandatory within 12 month after the release of this service bulletin.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI).

The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 10 hours



8. Weight and Balance

None

9. <u>Electrical Load Data</u>

No Change

10. Software Accomplishment Summary

None

11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapters 54, 55, 71

12. <u>Other Publications Affected</u>

None

13. Interchangeability or Intermixability of Parts

None



#### MATERIAL INFORMATION

#### 1. <u>Material - Price and Availability</u>

Any replacement parts required as a result of accomplishing this service bulletin are available from WORTHINGTON Parts Sales department.

#### 2. <u>Warranty Coverage - Structure</u>

None

#### 3. Material Necessary for Each Aircraft

A. Material to be Procured:

None

B. Material supplied by the Operator:

None

4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

Boroscope Flashlight Mirror



#### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.

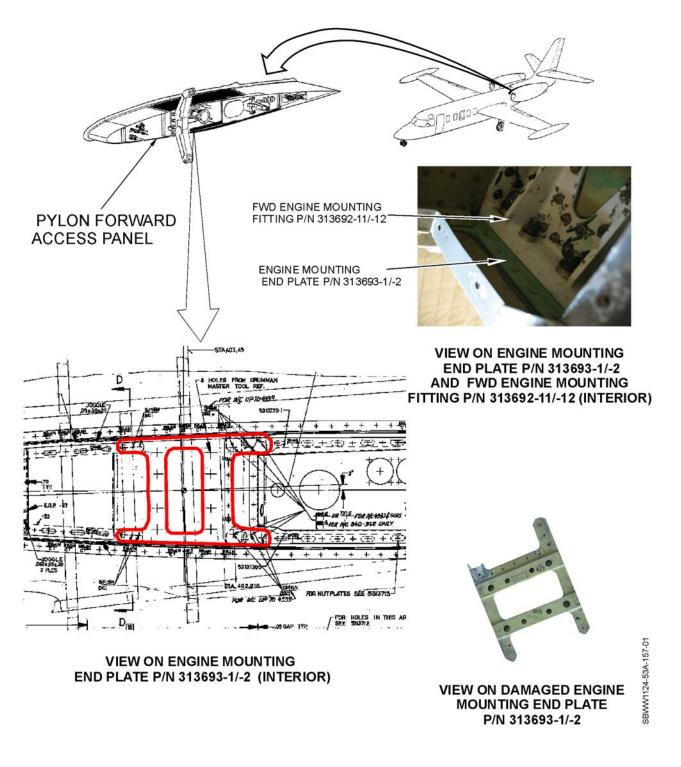
<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 2. Disconnect external electrical power
- 3. Engine Mounting and End Plates Inspection
  - A. Remove the engines pylon forward access panel from engine pylon. Refer to Figure 1.
  - B. Gain visual access to the engine mounting end plates, P/N 313693-1 and -2, on left and right pylons.
    - (1) Visually inspect, with the aid of a boroscope, flashlight and mirror for corrosion and cracks on engine mounting end plates, fwd engine mounting fitting P/N 313692-11/-12 and around fastener holes. Refer to Figure 1.
      - (a) If corrosion or cracks are found, contact WORTHINGTON technical services department.
      - (b) If no corrosion or cracks are found, no further action is required, reinstall engines pylon forward access panel. Refer to Figure 1.



- 4. Vertical Stabilizer Front and Rear Fitting Assembly Inspection
  - A. Gain visual access to the front and rear fitting assembly, P/N 413018-505 and 413017-501, by removing the access panel and the tailcone fairing. Refer to Figure 2.
    - (1) Visually inspect vertical stabilizer fwd and aft spar intersection splice fittings, at fuselage frame STA 482.75 and 521.75, for loose or distorted fastener heads, corrosion and cracks around fastener holes. Refer to Figure 2.
      - (a) If corrosion or cracks are found, contact WORTHINGTON technical services department.
      - (b) If no corrosion or cracks are found, no further action is required, reinstall access panel and tailcone fairing removed in step 4A above.
- 5. Ensure work area is clean and clear of foreign objects (FOD).
- 6. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 7. Complete the attached Certificate of Compliance and return to Worthington Aviation Services in Eagan, Minnesota, United States of America.

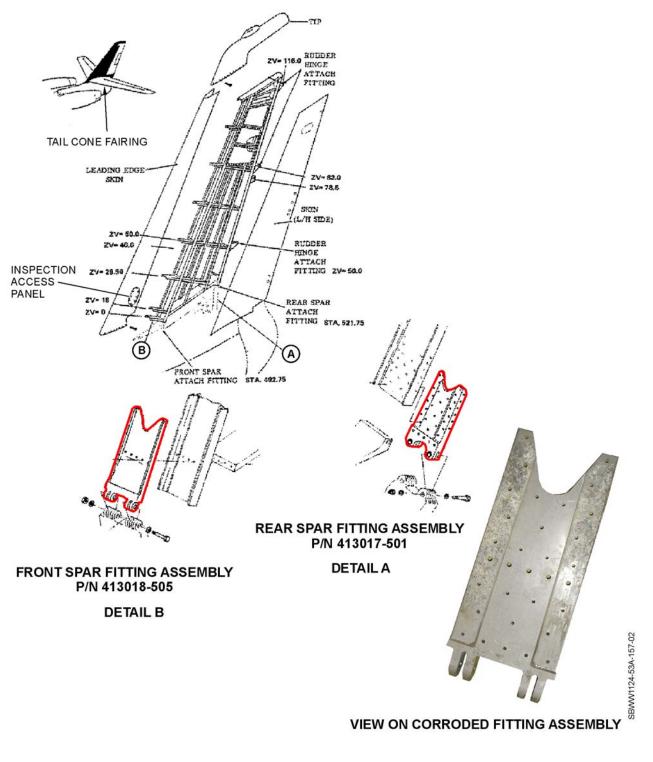




Engine Mounting End Plates Inspection Figure 1

Service Bulletin No. 1124-53-157





Vertical Stabilizer Front and Rear Fitting Assembly - Inspection Figure 2

Service Bulletin No. 1124-53-157

|                                                                                                                       | <         |
|-----------------------------------------------------------------------------------------------------------------------|-----------|
| SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE                                                                         |           |
| Please fill in the required data below and fax this page to Worthington<br>Aviation Services.<br>Fax No. 651-393-3310 |           |
| This is to certify that Aircraft Serial Number has complied<br>Alert Service Bulletin No.1124-53-157                  | with      |
| Aircraft Registration No.                                                                                             |           |
| Airframe Total Time at Compliance: Hours Cycles                                                                       | _         |
| Compliance Date: By:<br>Print Name                                                                                    |           |
| Signature                                                                                                             |           |
| Owner and Address: Accomplishing Agency and                                                                           |           |
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| Please describe below any discrepancies found or difficulties encounter compliance:                                   | ed during |
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# WESTWIND

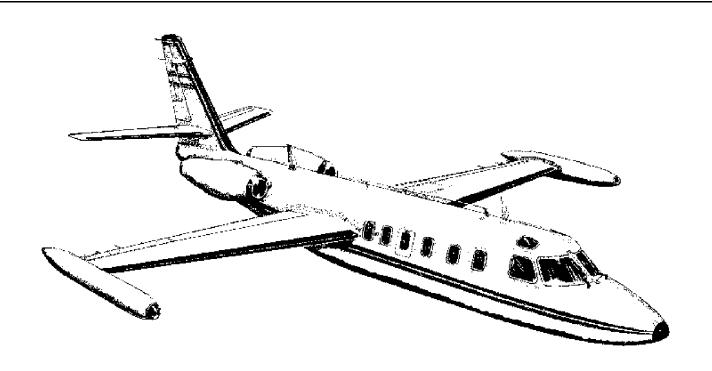
### MODEL 1124/1124A

SERVICE BULLETIN

NO. 1124-27-158

SUBJECT:

### STABILIZERS - HORIZONTAL STABILIZER TRIM ACTUATOR P/N 543502-1/-501 -REPLACEMENT OF MOTORS WITH INCORRECT PART NUMBER BRUSHES



Nov 26, 2013

Published by WORTHINGTON AVIATION AT THE DIRECTION OF ISRAEL AEROSPACE INDUSTRIES LTD



#### STABILIZERS - HORIZONTAL STABILIZER TRIM ACTUATOR P/N 543502-1/-501 -REPLACEMENT OF MOTORS WITH INCORRECT PART NUMBER BRUSHES

#### PLANNING INFORMATION

#### 1. <u>Effectivity</u>

WESTWIND aircraft models 1124 and 1124A with the following horizontal stabilizer trim actuators installed: P/N 543502-1 or -501, serial number 0877-12AA, 0278-02AA, 1079-04AA, 1082-03AA, 1279-12AA, 0982-00AA, 1179-12AA, 104-03AA, 100-11AA, 1179-13AA, 0181-13AA, 090-11AA, 1282-02AA or 0978-02AA.

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

On July 24, 2013 ONTIC, the manufacturer of the horizontal trim actuator, issued a voluntary disclosure letter notifying the FAA that 16 actuators were shipped with incorrect part number brushes during the period June 2011 to July 2013. Later, on September 10, 2013, ONTIC notified IAI that the number of affected actuators was reduced to 14 since they were able to locate and install the correct brushes in two of the actuators.

#### 4. Description

This service bulletin provides instructions to remove and replace the affected actuator IAI P/N 543502-1/-501 (Lucas P/N 21164-005) with a repaired actuator (same part number), having the correct part number brushes with identification of letter "X" as a suffix to the serial number.

#### 5. <u>Compliance</u>

Compliance with this service bulletin is recommended at the next suitable planned maintenance period within 18 months from the publication date of the service bulletin.



#### 6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI). The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.

#### 7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 5

8. Weight and Balance

No Change

9. <u>Electrical Load Data</u>

No Change

10. Software Accomplishment Summary

None

11. <u>References</u>

WESTWIND Maintenance Manual, Chapters 20, 24 and 27 ONTIC disclosure letter to the FAA, dated July 24, 2013.

12. Other Publications Affected

WESTWIND Illustrated Parts Catalog, Chapter 27



#### 13. Material Necessary for Each Aircraft

- <u>NOTE:</u> The parts listed in this section can be substituted with equivalent IAI approved parts. If equivalent part(s) is used, it must be accompanied by documentation from IAI stating equivalence.
- A. Material to be Procured:

N/A

B. Materials Supplied by the Operator

N/A

14. <u>Reidentified Parts</u>

Actuator returned after corrected part number brushes replacement will be identified by ONTIC, by adding the letter "X" as suffix to the serial number.

15. <u>Special Tooling</u>

None



#### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance. Refer to AMM, Safe Ground Maintenance Procedure, Chapter 20.
- CAUTION: MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.
- 2. Disconnect external electrical power from aircraft. Refer to WESTWIND Maintenance Manual, Chapter 24.
- 3. Applicability verification:
  - A. Verify that the horizontal stabilizer trim actuator serial number installed on aircraft is one of the following:
    - (1) 0877-12AA
    - (2) 0278-02AA
    - (3) 1079-04AA
    - (4) 1082-03AA
    - (5) 1279-12AA
    - (6) 0982-00AA
    - (7) 1179-12AA
    - (8) 104-03AA
    - (9) 100-11AA
    - (10) 1179-13AA
    - (11) 0181-13AA



- (12) 090-11AA
- (13) 1282-02AA
- (14) 0978-02AA
- B. If not, no further action is required, proceed to step 5. If yes, proceed to step 4 below.
- 4. Replacement of horizontal stabilizer trim actuator:
  - A. Remove the horizontal stabilizer trim actuator. Refer to AMM, Chapter 27.
  - B. Ship the removed horizontal stabilizer trim actuator to Worthington Aviation.

<u>NOTE:</u> Worthington Aviation will coordinate the actuator replacement with ONTIC.

- C. Check the nameplate of the returned trim actuator and verify that the trim actuator serial number is suffixed with the letter "X" (Refer to Figure 1).
- D. Install the returned horizontal stabilizer trim actuator. Refer to AMM, Chapter 27.
- 5. Record compliance of this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.
- 6. Complete the attached Certificate of Compliance and return to Worthington Aviation, Eagan, Minnesota, United States of America.





PRE SB



POST SB

Horizontal Stabilizer Trim Actuator - Identification Plate Figure 1 1124-27-158-01



| <b>&gt;</b> | $\sim$                                                                                                                                                                 |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ŷ           | SERVICE BULLETIN<br>CERTIFICATE OF COMPLIANCE<br>Please fill in the required data below and fax this page to Worthington<br>Aviation Services.<br>Fax No. 651-393-3310 |
| \$          | This is to certify that Aircraft Serial Number has complied with Service Bulletin No. 1124-27-158                                                                      |
| ¥           | Aircraft Registration No.                                                                                                                                              |
|             | Airframe Total Time at Compliance: Hours Cycles                                                                                                                        |
|             | Compliance Date: By:<br>Print Name<br>                                                                                                                                 |
|             | Owner and Address:     Accomplishing Agency and Address:                                                                                                               |
| \$          | Please describe below any discrepancies found or difficulties encountered during compliance:                                                                           |
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Date: Nov 26, 2013

Service Bulletin No. 1124-27-158



**REV NEW** 

### SERVICE BULLETIN

December 30, 2021

### EXHAUST - T<RUST REVERSERS - SYSTEM CHECK

#### PLANNING INFORMATION

1. <u>Effectivity</u>

Models 1124 and 1124A WESTWIND, all serial numbers

2. <u>Concurrent Requirement</u>

None

3. <u>Reason</u>

Left thrust reverse system malfunction due to aircraft owner/operator Inadequate maintenance that did not comply with the manufacturer maintenance instructions (Aircraft Maintenance Manual) in aspects of:

- A. Throttle retarder system lubrication and routine maintenance.
- B. System adjustment not according to manufacturer maintenance instructions as a solution for malfunction.
- 4. Description

This service bulletin provides assumed instructions per Aircraft Maintenance Manual (AMM) to lubricate and check functionality of aircraft throttle retarder system.

5. <u>Compliance</u>

Compliance with service bulletin is mandatory within 12 months from the original release of this Service Bulletin.

6. <u>Approval</u>

This service bulletin has been reviewed by the Civil Aviation Administration of Israel (CAAI).

The design content herein complies with the applicable Civil Aviation Regulations and is CAAI approved.



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#### 7. <u>Manpower</u>

The following information is for planning purposes only:

Estimated man-hours: 100 hours for both sides.

8. Weight and Balance

None

9. <u>Electrical Load Data</u>

No Change

- 10. <u>Software Accomplishment Summary</u> None
- 11. <u>References</u>

1124/1124A Westwind Maintenance Manual, Chapters 12 and 78.

- 12. <u>Other Publications Affected</u> None
- 13. Interchangeability or Intermixability of Parts

None

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#### MATERIAL INFORMATION

#### 1. <u>Material - Price and Availability</u>

The parts required to accomplish this service bulletin are available from Worthington Aviation LLC. Parts Sales department.

#### 2. <u>Warranty Coverage - Structure</u>

None

#### 3. Material Necessary for Each Aircraft

A. Material to be Procured:

None

B. Material supplied by the Operator:

Grease - MIL-G-23827 or equivalent.

Grease - Dow DC33 light consistency or equivalent.

4. <u>Reidentified Parts</u>

None

5. <u>Special Tooling</u>

None



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#### ACCOMPLISHMENT INSTRUCTIONS

- CAUTION: PROTECT WIRE BUNDLES, CONNECTORS AND SURROUNDING STRUCTURE DURING ANY MAINTENANCE PROCEDURES FROM SHAVINGS, DEBRIS AND CONTAMINATION. MAINTAIN A PROPERLY CLEANED WORK AREA THROUGHOUT THE PROCEDURE TO ENSURE THE INTEGRITY OF THE AFFECTED COMPONENT/SYSTEM. VISUALLY INSPECT WORK AREA USING ADDITIONAL LIGHT AS NECESSARY TO VERIFY ABSENCE OF ANY DEBRIS PRIOR TO COMPLETION OF PROCEDURE. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND OR SYSTEMS.
- 1. Prepare aircraft for safe maintenance.

<u>CAUTION:</u> MAKE SURE ELECTRICAL POWER IS DISCONNECTED FROM AIRCRAFT. FAILURE TO COMPLY MAY RESULT IN INJURY TO PERSONNEL AND/OR DAMAGE TO AIRCRAFT.

- 2. Disconnect external electrical power
- 3. Perform Grumman thrust reverser 5000 hour inspection. Refer to Aircraft Maintenance Manual (AMM) Chapter 78.
- 4. Perform Secondary latch solenoid switch check. Refer to AMM, Chapter 78.

<u>NOTE:</u> Exclude Thrust reverser functional check step.

- 5. Perform throttle retarder system removal/cleaning and installation. Refer to AMM, Chapter 78.
- 6. Lubricate the thrust reverser. Refer to AMM, Chapter 12.
- 7. Perform throttle retarder sytem adjustment. Refer to AMM, Chapter 78.
- 8. Perform thrust reverser operational check. Refer to AMM, Chapter 78.

<u>NOTE:</u> Exclude alternate throttle feedback cable check step.

- 9. Perform thrust reverser functional check. Refer to AMM, Chapter 78.
- 10. Ensure work area is clean and clear of foreign objects (FOD).
- 11. Record compliance with this service bulletin in the aircraft's permanent maintenance records and return aircraft to flight status.

| [[] <b>2-1-WESTWIND</b> | <b>REV NEW</b>    |
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12. Complete the attached Certificate of Compliance and return to Worthington Aviation LLC. in Eagan, MN.