B757 MANUAL SUPPLEMENT - ATP 3510 SECTION 1 CHAPTER 53 CONTROL PAGE - ISSUE 2

- A. File the attached Temporary Revision/Alerts in the Manual Supplement in ATA Chapter/Section/Subject/Page sequence
- B. File this Control Page in front of the Chapter TRs/Alerts.
- C. The following list shows active TRs/Alerts together with TRs/Alerts added by this control page.

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53-36-01	401	53-523	
53-36-02	401	53-524	
53-66-01	401	53-525	

D. Remove and Destroy the following TRs/Alerts:

^{*} Indicates TRs/Alerts issued with this control page

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6 November, 2000

757 MAINTENANCE MANUAL

TEMPORARY REVISION No. 53-527

THIS TEMPORARY REVISION IS ISSUED BY BRITISH AIRWAYS ENGINEERING (TECHNICAL INFORMATION SERVICES, G2, TBA, S401, P. O. BOX 10, HEATHROW AIRPORT, HOUNSLOW, MIDDLESEX TW6 2JA). CAA DESIGN APPROVAL No. DAI/8566/78.

Manual Reference 53-12-01 Page 207

REASON FOR REVISION

To include an improved inspection check of the nose radome.

ACTION

Ignore the existing Task and read the following

TASK 53-12-01-202-028

- 5. Nose Radome Inspection/Check
 - A. Equipment
 - (1) Moisture Register, Type A8-AF, or equivalent.
 Penta Engineering, Moisture Register Products
 P.O. Box 369 La Verne, Ca. 91750-0369
 - B. References
 - (1) AMM 53-12-01/401, Nose Radome
 - (2) AMM 53-12-05/401, Glide Slope Director Element
 - (3) SRM 53-10-72, Nose Radome
 - C. Access
 - (1) Location Zone

111 Radome

More/

Originator: P.MASON

Reference: 0000006009

Workbook: 53-77

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D. Procedure

S 012-029

(1) Do the open the Nose Radome procedure in the Open and Close the Nose radome task.

s 212-030

(2) Examine the nose radome for holes, scuffs, cracks, blisters, delamination and other damages.

s 202-035

- (3) Do these steps for the inspection/check of the nose radome:
 - (a) Open the nose radome. Use a moisture register to find moisture in the honeycomb material as follows:

NOTE: To find the moisture, the moisture register measures the conductivity of the radome material. There are two primary parts in the moisture register: the gun which contains electrodes and oscillator circuits, and the case that contains an ON-OFF switch, meter zeroing control, and batteries. The meter will not adjust to ZERO if the batteries are low. It is important to read the instruction leaflet before you use the moisture register.

1) Hold the gun part of the register a minimum of 3 inches away from objects you measure.

NOTE: Objects that are less than three inches away from the gun will have an effect on the meter from adjustment to zero.

- 2) Push the ON-OFF switch button on the case of the register to the ON position.
 - a) The register must stay on during all of the check.

NOTE: Before you use the register, permit time for the register to become stable. To align the needle to "O" on the dial, use the adjustment knob to the left of the handle. Charge or replace the batteries if it is necessary.

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- 3) While the radome is open, hold the gun part of the register to get the gun electrodes to touch the inner surface of the radome. Make sure all eight electrodes touch the radome surface.
- 4) Move the gun across all of the inner surface of the radome and monitor the meter on the case.
 - a) The meter indication must stay in the GOOD (0-5) range and must be in this range before you go from the workshops. But the small areas (up to 15 sq. ins) separated by a minimum of 12 inches, edge to edge, can continue service if the meter indication is not more than 15.
- Move the gun around areas (spots) that show meter indications.
- 6) If there is an indication of moisture (above 5 on scale), dry the area and then seal it again.
- 7) If there is an indication of moisture (above 15 on the scale), you must dry the area and seal it again. For the areas where repairs are necessary, you must continue to dry those areas until you get meter indications in the GOOD (0-5) range. Before you start to work, the meter indications must be in the GOOD (0-5) range or you must cut away the wet area.
- (b) If there is moisture, dry the radome and refer to SRM 53-10-72 to remove the moisture.

s 212-038

- (4) Do these steps to examine the glideslope director element:
 - (a) Make sure the glideslope director element is in one piece.
 - (b) Make sure the adhesion is tight.
 - (c) Make sure there is no other damages on the glideslope director element.
 - (d) Replace the element as it is necessary (AMM 53-12-05/401).

s 212-069

- (5) Do these steps for the inspection/check of the nose radome seal:
 - (a) Examine the nose radome seal for cracks, blisters, holes, or other damages.
 - (b) If there is damage, consult removal/installation of a new nose radome seal (AMM 53-12-01/401).

s 412-039

(6) Do the Close the Nose Radome procedure in the Open and Close the Nose Radome task.

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16 February, 2000

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TEMPORARY REVISION No. 53-523

THIS TEMPORARY REVISION IS ISSUED BY BRITISH AIRWAYS ENGINEERING (TECHNICAL INFORMATION SERVICES, G2, TBA, S401, P. O. BOX 10, HEATHROW AIRPORT, HOUNSLOW, MIDDLESEX TW6 2JA). CAA DESIGN APPROVAL No. DAI/8566/78.

Manual Reference 53-36-01 Page 401

REASON FOR REVISION

To revise the requirements for wing to body attaching hardware including a run down torque check on nut plates and to detail the installation of fasteners with BMS 5-95 sealant.

ACTION

TASK 53-36-01-004-001

- 2. Remove the Forward Wing-to-Body Fairing Panels
- E. Procedure

Ignore existing step (8) and read the following

- (8) Check nut plate serviceability
 - (a) Perform a function check of the self locking feature of the fairing panel attachment nut plates.
 Using torque wrench part No. MHHADS4 or equivalent, accomplish a run down torque check of the locking feature of the fairing panel attachment nut plates.
 - (b) Replace the nut plate if any of the following conditions are found.
 - 1) All nut plates which have a run down torque value of less than 5 inch pounds.
 - 2) The nut plate is missing.
 - 3) The nut plate is loose or damaged.
 - (c) The number of nut plates to be checked per panel are as follows:
 - 1) All nut plates retaining the leading edge of the panel.
 - 2) Each alternative nut plate other than at the panel leading edge.

NOTE: At nut plates common to fasteners through the fuselage pressure skin, the fastener threads will not be visible from the panel side of the nut plate. If any unserviceable nut plates are suspected/found access to the nut plate for further assessment/replacement must be accomplished.

TASK 53-36-01-404-005

3. Install the Forward Wing-to-Body Fairing Panels

Read the following additional caution

CAUTION: DO NOT USE PNEUMATIC SCREW DRIVERS CAPABLE OF DEVELOPING TORQUE THAT EXCEEDS THE MAXIMUM INSTALLATION TORQUE OF ANY SPECIFIC FASTENER, IT MAY DAMAGE THE THREADS OF THE SCREW AND/OR NUT.

Originator: P.BOURKE

Reference: 4762 Workbook: 53-72

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TEMPORARY REVISION No. 53-523 (Cont'd)

D. Procedure

Ignore existing step (8) and read the following

(8) Install the fairing to the structure with the fasteners.

NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.

- (a) Install all fasteners wet with BMS 5-95 sealant, except at stainless steel electrical bonding fastener locations.
- (b) Torque the stainless steel (bonding) fasteners to 35-45 lb-in.
- (c) Torque the other fasteners to 25-35 lb-in.

Ignore existing step (20) and read the following

- (20) Fairing fastener inspection.
 - (a) Inspect all edges of the fairing panel for missing fasteners, paying particular attention to the leading edge. The following limitations apply.
 - 1) Not more than 1 in 10 fasteners may be missing from the leading edge of the fairing panel.
 - 2) Not more than 1 in 5 fasteners may be missing from all other edges of the fairing panel.
 - 3) Any missing fasteners must be a minimum distance of 5 fasteners apart.
 - (b) If areas of missing fasteners are found, then the appropriate fasteners must be installed.
 - (c) If new or existing fasteners are found to be loose, they may be installed as a temporary measure with BMS 5-95 sealant.

NOTE: Loose fasteners indicate worn or defective nut plates, these nut plates must be replaced at the earliest opportunity.

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TEMPORARY REVISION No. 53-524

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Manual Reference 53-36-02 Page 401

REASON FOR REVISION

To revise the requirements for wing to body attaching hardware including a run down torque check on nut plates and to detail the installation of fasteners with BMS 5-95 sealant.

ACTION

TASK 53-36-02-004-001

- 2. Remove the Mid Wing-to-Body Fairing
- C. Procedure

Ignore existing step (3) and read the following

- (3) Check nut plate serviceability
 - (a) Perform a function check of the self locking feature of the fairing panel attachment nut plates. Using torque wrench part No. MHHADS4 or equivalent, accomplish a run down torque check of the locking feature of the fairing panel attachment nut plates.
 - (b) Replace the nut plate if any of the following conditions are found.
 - 1) All nut plates which have a run down torque value of less than 5 inch pounds.
 - 2) The nut plate is missing.
 - 3) The nut plate is loose or damaged.
 - (c) The number of nut plates to be checked per panel are as follows:
 - 1) All nut plates retaining the leading edge of the panel.
 - 2) Each alternative nut plate other than at the panel leading edge.

NOTE: At nut plates common to fasteners through the fuselage pressure skin, the fastener threads will not be visible from the panel side of the nut plate. If any unserviceable nut plates are suspected/found access to the nut plate for further assessment/replacement must be accomplished.

TASK 53-36-02-404-006

3. Install the Mid Wing-to-Body Fairing Panels

Read the following additional caution

CAUTION: DO NOT USE PNEUMATIC SCREW DRIVERS CAPABLE OF DEVELOPING TORQUE THAT EXCEEDS THE MAXIMUM INSTALLATION TORQUE OF ANY SPECIFIC FASTENER, IT MAY DAMAGE THE THREADS OF THE SCREW AND/OR NUT.

Originator: P.BOURKE

Reference:

4762 53 - 72

53-36-02 Page 401

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- A. Consumable Materials
 - (1) G02186 Foam Rubber BMS1-68
- (2) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
- (3) A00552 Adhesive BAC 5010 Type 60
- (4) A00553 Adhesive BAC 5010 Type 68
- (5) B00148 Sealant BMS 5-95 Class B
- C. Procedure

Ignore existing step (2) and read the following

(2) Align the fairing with the fastener holes and install the bolts and washers.

NOTE: Some fastener locations do not use a washer. Only install a washer at locations that have a hole countersunk for a washer.

- (a) Install all fasteners wet with BMS 5-95 sealant, except at stainless steel electrical bonding fastener locations.
- (b) Torque the stainless steel (bonding) fasteners to 35-45 lb-in.
- (c) Torque the other fasteners to 25-35 lb-in.

Ignore existing step (8) and read the following

- (8) Install the fasteners which attach the fairing to the structure.
 - NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

 Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.
 - (a) Install all fasteners wet with BMS 5-95 sealant, except at stainless steel electrical bonding fastener locations.
 - (b) Torque the stainless steel (bonding) fasteners to 35-45 lb-in.
 - (c) Torque the other fasteners to 25-35 lb-in.

Ignore existing step (11) and read the following

- (11) Fairing fastener inspection.
 - (a) Inspect all edges of the fairing panel for missing fasteners, paying particular attention to the leading edge. The following limitations apply.
 - 1) Not more than 1 in 10 fasteners may be missing from the leading edge of the fairing panel.
 - 2) Not more than 1 in 5 fasteners may be missing from all other edges of the fairing panel.
 - 3) Any missing fasteners must be a minimum distance of 5 fasteners apart.
 - (b) If areas of missing fasteners are found, then the appropriate fasteners must be installed.

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TEMPORARY REVISION No. 53-524 (Cont'd)

(c) If new or existing fasteners are found to be loose, they may be installed as a temporary measure with BMS 5-95 sealant.

NOTE: Loose fasteners indicate worn or defective nut plates, these nut plates must be replaced at the earliest opportunity.

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TEMPORARY REVISION No. 53-525

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Manual Reference 53-66-01 Page 401

REASON FOR REVISION

To revise the requirements for wing to body attaching hardware including a run down torque check on nut plates and to detail the installation of fasteners with BMS 5-95 sealant.

ACTION

AFT WING-TO-BODY FAIRING PANELS - REMOVAL/INSTALLATION

- 1. General
- A. This procedure contains two tasks:
 - (1) The first task is the removal of the aft wing-to-body fairing panels.
 - (2) The second task is the installation of the aft wing-to-body fairing panels.
- B. All the installations of the aft fairing panels are almost the same, except fairing panels 195BL and 196BR on modified aircraft which are installed with 0.25 inch diameter fasteners with a higher installation torque value.
- C. The clearances between the aft fairing panels and the airplane structure (external fairing panels) are sealed for aerodynamic smoothness.

TASK 53-66-01-004-001

2. Remove the Aft Wing-to-Body Fairing Panels

E. Procedure

Ignore existing step (4) and read the following

- (4) Check nut plate serviceability
 - (a) Perform a function check of the self locking feature of the fairing panel attachment nut plates. Using torque wrench part No. MHHADS4 or equivalent, accomplish a run down torque check of the locking feature of the fairing panel attachment nut plates.
 - (b) Replace the nut plate if any of the following conditions are found.
 - 1) All nut plates which have a run down torque value of less than 5 inch pounds.
 - 2) The nut plate is missing.
 - 3) The nut plate is loose or damaged.
 - (c) The number of nut plates to be checked per panel are as follows:
 - 1) All nut plates retaining the leading edge of the panel.
 - 2) Each alternative nut plate other than at the panel leading edge.

NOTE: At nut plates common to fasteners through the fuselage pressure skin, the fastener threads will not be visible from the panel side of the nut plate. If any unserviceable nut plates are suspected/found access to the nut plate for further assessment/replacement must be accomplished.

Originator: P.BOURKE

Reference: 4762 Workbook: 53-72

53-66-01 Page 401

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TEMPORARY REVISION No. 53-525 (Cont'd)

TASK 53-66-01-404-005

3. Install the Aft Wing-to-Body Fairing Panels

Read the following additional caution

CAUTION: DO NOT USE PNEUMATIC SCREW DRIVERS CAPABLE OF DEVELOPING TORQUE THAT EXCEEDS THE MAXIMUM INSTALLATION TORQUE OF ANY SPECIFIC FASTENER, IT MAY DAMAGE THE THREADS OF THE SCREW AND/OR NUT.

D. Procedure

Ignore existing step (7) and read the following

(7) Install the fasteners which attach the fairing to the structure.

NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.

- (a) Install all fasteners wet with BMS 5-95 sealant, except at stainless steel electrical bonding fastener locations.
- (b) If 0.25 inch diameter screws are installed on panels 195BL or 196BL, torque these fasteners to 72-88 lb-in.
- (c) Torque the stainless steel (bonding) fasteners to 35-45 lb-in.
- (d) Torque the other fasteners to 25-35 lb-in.

Ignore existing step (12) and read the following

- (12) Fairing fastener inspection.
 - (a) Inspect all edges of the fairing panel for missing fasteners, paying particular attention to the leading edge. The following limitations apply.
 - 1) Not more than 1 in 10 fasteners may be missing from the leading edge of the fairing panel.
 - 2) Not more than 1 in 5 fasteners may be missing from all other edges of the fairing panel.
 - 3) Any missing fasteners must be a minimum distance of 5 fasteners apart.
 - (b) If areas of missing fasteners are found, then the appropriate fasteners must be installed.
 - (c) If new or existing fasteners are found to be loose, they may be installed as a temporary measure with BMS 5-95 sealant.

NOTE: Loose fasteners indicate worn or defective nut plates, these nut plates must be replaced at the earliest opportunity.



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FUSELAGE - DESCRIPTION AND OPERATION

1. General

- A. The fuselage is a semi-monocoque structure manufactured in five sections.
 - (1) Sections 41, 43, 44, and 46 are can be pressurized.
 - (2) Section 48 cannot be pressurized.
- 2. Component Details (Fig. 1)
 - A. Primary Structure
 - (1) Primary structure is essential to the strength of the airplane.
 - (2) The primary longitudinal structures are floor beams, keel beams, stringers, and reinforced frames around cutouts.
 - (a) Circumferential frames and longitudinal stringers reinforce the fuselage skin.
 - (3) The primary transverse structures are floor beams, spars, and bulkheads.
 - (a) These are the primary bulkheads:
 - 1) forward and aft pressure bulkhead
 - 2) front and rear spar bulkheads
 - 3) landing gear wheel well bulkheads.
 - (b) bulkheads support the largest loads placed on the fuselage.
 - B. Auxiliary Structure
 - (1) These structures improve the aerodynamics of the airplane but do not carry primary loads.
 - (2) The auxiliary structures of the fuselage are the nose radome, wing-to-body fairing, and tailcone.
 - C. Body Location Lines
 - (1) The fuselage has a coordinate system of lines in each of these directions:
 - (a) station lines (STA) in the aft direction measured from a location in front of the airplane.
 - (b) buttock lines (BL) in the left and right direction measured from the fuselage centerline.
 - (c) water lines (WL) in the up and down direction measured from a location below the airplane.
 - (2) All measurements are in inches.
 - D. Fuselage Sections
 - (1) Section 41
 - (a) Section 41 is the forward section of the airplane from station 159 to station 440.

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53-00-00



- (b) Section 41 has these primary parts:
 - 1) nose radome
 - 2) forward pressure bulkhead
 - 3) flight compartment floor
 - 4) nose gear wheel well.
- (c) The nose radome contains weather, radar, and navigational equipment.
- (d) The nose gear wheel well is a box-like structure consisting of bulkheads and wall panels.
- (e) Four doors enclose the wheel well.
- (f) The flight compartment floor divides the fuselage at water line 201.
- (g) Structural floor beams support removable floor panels and blowout panels.
- (2) Section 43
 - (a) Section 43 has these primary parts:
 - 1) the main deck
 - 2) the electrical/electronic equipment compartment
 - 3) the forward cargo compartment.
 - (b) Access to the electrical/electronic compartment during ground servicing is through a door aft of the nose gear wheel well.
 - (c) The forward cargo compartment door is approximately 42.5 by 55 inches in size and is located on the right side of the fuselage.
 - (d) The forward section of the wing-to-body fairing attaches to section 43.
 - (e) The forward section of the wing-to-body fairing attaches to section 43.
- (3) Section 44
 - (a) Section 44 is the center section of the fuselage.
 - (b) Section 44 has these primary parts:
 - 1) main deck
 - 2) front spar bulkhead
 - 3) nonpressurized main gear wheel well
 - 4) rear spar bulkhead
 - 5) keel beam
 - 6) wheel well bulkhead.

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- (4) Section 46
 - (a) Section 46 is the aft end of the airplane from station 1180 to station 1720.
 - (b) Section 46 has these primary parts:
 - 1) main deck
 - 2) aft cargo compartment
 - 3) aft pressure bulkhead.
 - (c) The cargo door is approximately 44 by 55 inches in size.
 - (d) The aft section of the wing-to-body fairing attaches to section 46.
- (5) Section 48
 - (a) Section 48 is the nonpressurized tail section of the fuselage from station 1720 to station 2005.
 - (b) Section 48 has these primary parts:
 - 1) APU
 - 2) firewall
 - 3) tailcone
 - 4) mounts for the vertical fin
 - 5) structural openings as follows:
 - a) openings for the horizontal stabilizer
 - b) a vertical fin access door
 - c) a left side service door
 - d) APU doors.
- E. Fuselage Skin
 - (1) All exterior fuselage skins are clad aluminum to provide a surface that is resistant to corrosion. Sealing and painting of the skin provides further corrosion resistance and reduces skin friction.
 - (2) Thickness of fuselage skins varies according to applicable loads. The heaviest skins are those in the lower fuselage around openings for the wing center section and main gear wheel well. Doublers and triplers around structural openings are bonded to the skin.
 - (3) Longitudinal skin splices at structural joints are lap type.
 Pressure seals are installed in pressurized sections.
 Circumferential skin splices are butt-joint type. These are either spliced through bulkhead chord or through a circumferential splice strap or doubler.

EFFECTIVITY-

53-00-00



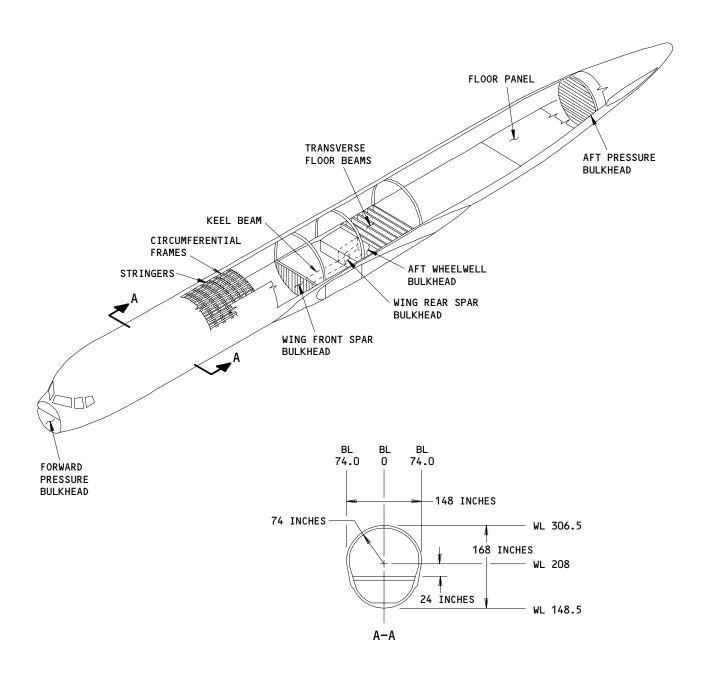
F. Main Deck Floor

- (1) The main deck floors consist of removable floor panels supported by floor beams (Ref 53-01-01).
- (2) Floor beams are oriented longitudinally and laterally along the fuselage.
- (3) Floor beams are important to the structural integrity of the fuselage.

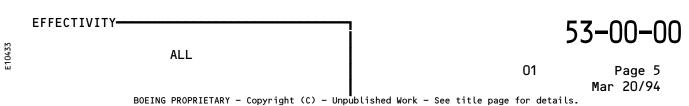
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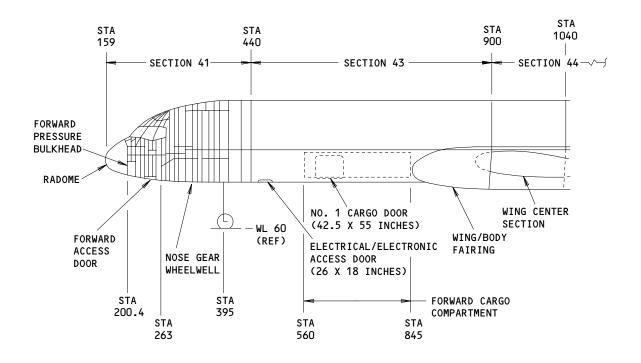


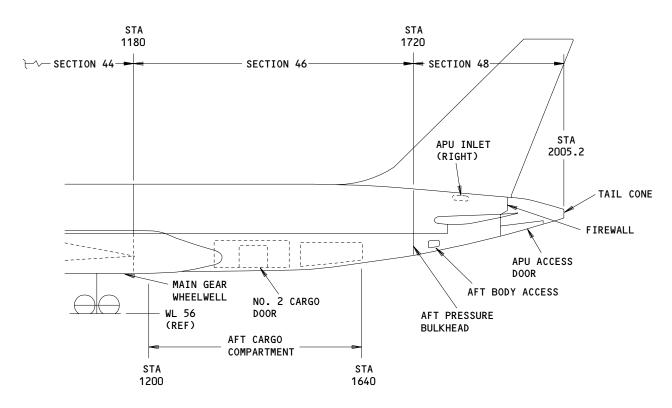


Fuselage Figure 1 (Sheet 1)



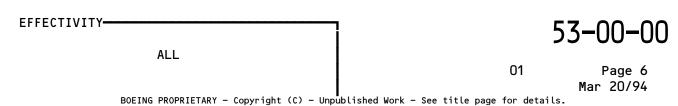






NOTE: MAIN DECK DOORS ARE NOT SHOWN.

Fuselage Figure 1 (SHeet 2)





FLOOR PANEL - REMOVAL/INSTALLATION

1. <u>General</u>

- A. This procedure contains two tasks. The first task is the removal of the floor panels. The second task is the installation of the floor panels.
- B. Special procedures to seal and apply finishes are necessary for the floor panels that are below galleys and lavatories. Special procedures to seal and apply finishes are necessary for the wet areas of the entry and exit doorways. These special procedures will prevent water damage and corrosion.
- C. The wet areas extend a minimum of 20 inches around the galleys and the lavatories. The wet areas also extend the width of the body a minimum of 20 inches forward and aft of the entry and exit doorways.

TASK 53-01-01-004-002

- 2. Remove the Floor Panel (Fig. 401)
 - A. Equipment
 - (1) Awl tool or pry bar commercially available
 - (2) Sealant removal tool, nylon (commercially available)
 - (3) Sealant removal tool, Hot Knife (commercially available)
 - (4) Sealant removal tool, Cold Knife (commercially available)
 - (5) Sealant removal tool, Oscillating Knife (commercially available)
 - B. Access
 - (1) Location Zone

200 Upper Half of Fuselage

C. Procedure

s 014-001

(1) Remove the seats and the floor covering or equipment as necessary to get access to the floor panel.

s 354-003

(2) Remove the Flexane-80 sealant as follows:

NOTE: This procedure applies to all removal tools.

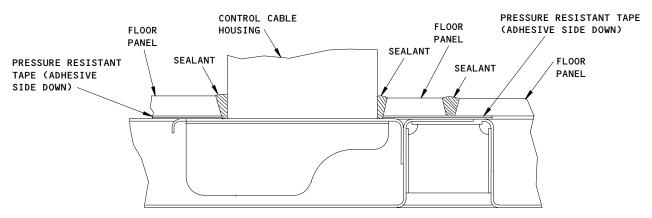
- (a) Cut a 1-1/2 to 2 inch long piece of the Flexane-80 sealant.
- (b) Remove the Flexane-80 sealant with an awl, knife or pry bar.
- (c) Do steps (a) and (b) until all of the Flexane-80 sealant is removed.

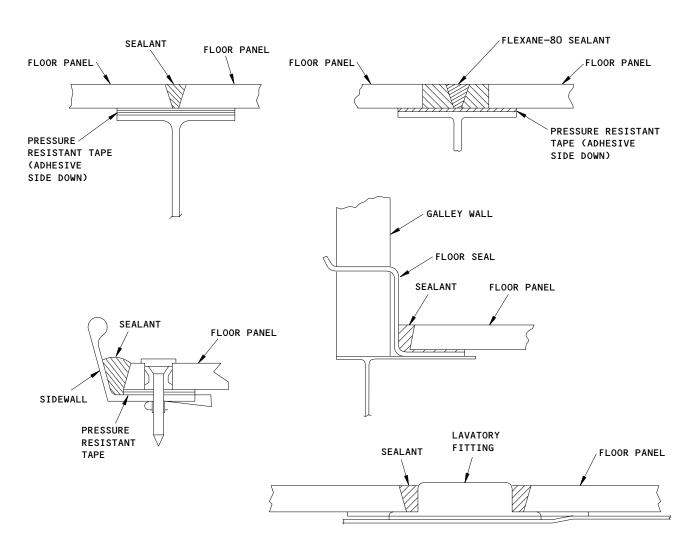
EFFECTIVITY-

53-01-01

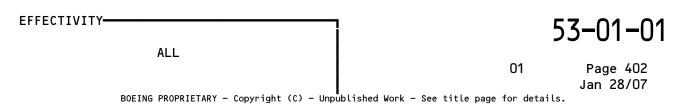
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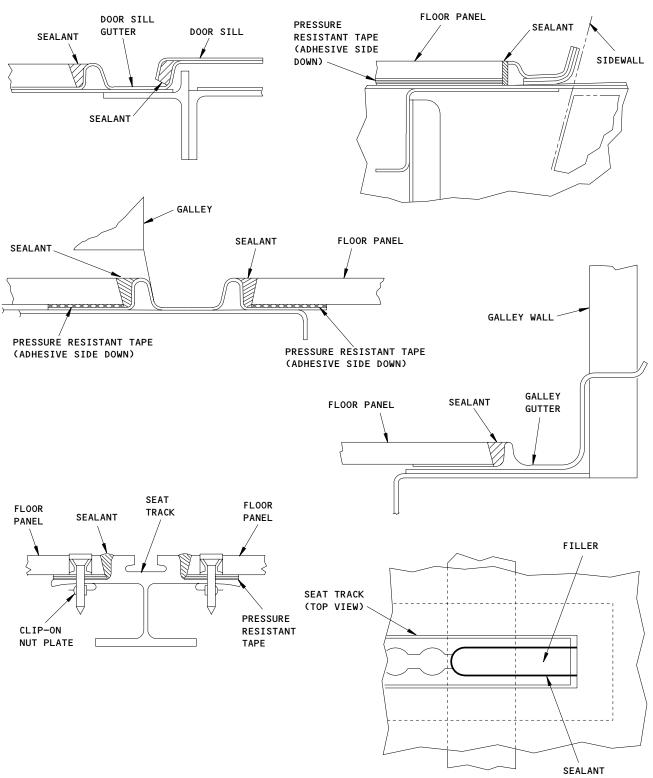




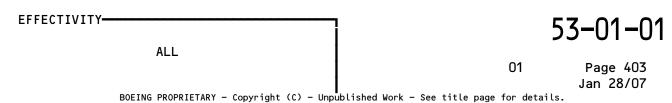
Floor Panel Sealant Application (Example)
Figure 401 (Sheet 1)







Floor Panel Sealant Application (Example)
Figure 401 (Sheet 2)





s 024-004

(3) Remove and keep the floor panel fasteners.

s 024-005

(4) Remove the floor panel.

s 014-034

- (5) If you removed the panels over the center fuel tank and do maintenance in the area above the center fuel tank, do these steps:
 - (a) Make sure you do not change the routing and clamping of the wires over the center fuel tank.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important Information on Critical Design Configuration Control Limitations (CDCCLs).

(b) Before you install the panels over the center tank, do this task only for the areas over the center tank where you removed the panels: External Wires Over the Center Tank Inspection (AMM 28-11-00/601).

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important Information on Critical Design Configuration Control Limitations (CDCCLs).

<u>NOTE</u>: It is not necessary to do the inspection task after the removal of the floor panels. It is necessary to do the inspection task before installation of the floor panels.

TASK 53-01-01-404-006

- Install the Floor Panel (Fig. 401)
 - A. Consumable Materials
 - (1) A00306 Sealant Flexane 80
 - (2) A00247 Sealant BMS5-95
 - (3) A02315 Sealant BMS5-142
 - (4) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - (5) GO2092 Tape Rubatex R326 V Pressure Resistant (Recommended)
 - (6) G50037 Tape SAE AMS-T-6841 Adhesive Rubber and Cork Composition (Alternate)
 - (7) GO2424 Tape Skyflex, noise reduction
 - (8) C00378 Primer BMS 10-11, Type I
 - (9) COO308 MIL-C-11796 Class 3, Corrosion Preventative Compound
 - (10) G00009 Corrosion Inhibiting Compound Dinitrol AV8
 - (11) G01396 Corrosion Inhibiting Compound BMS 3-26, Type II
 - (12) G00157 Tape Permacel 306

EFFECTIVITY-

53-01-01

ALL

01.1



- (13) G02453 Tape Patco 809U
- (14) G02304 Tape BMS8-346 Type I
- (15) G50179 Tape 3M 8663DL Polyurethane Tape, 36.0 inches wide
- (16) GO2500 Tape 3M 8663DL Polyurethane Tape, 4.0 inches wide
- B. References
 - (1) AMM 20-30-87/201, Airplane Structure Cleaning Solvents (Series 87)
 - (2) AMM 51-31-01/201, Seals and Sealing
- C. Access
 - (1) Location Zone

200 Upper Half of Fuselage

D. Procedure

NOTE: Edge potting on the floor panels in the wet areas is optional.

s 214-037

- (1) If you removed the panels over the center fuel tank and do maintenance in the area above the center fuel tank, do these steps:
 - (a) Make sure you do not change the routing and clamping of the wires over the center fuel tank.

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important Information on Critical Design Configuration Control Limitations (CDCCLs).

(b) Before you install the panels over the center tank, do this task only for the areas over the center tank where you removed the panels: External Wires Over the Center Tank Inspection (AMM 28-11-00/601).

NOTE: CDCCL- Refer to the task: Airworthiness Limitation Precautions (AMM 28-00-00/201), for important Information on Critical Design Configuration Control Limitations (CDCCLs).

s 354-007

(2) Remove the remaining sealant from the wet area panel and the airplane structure.

s 104-008

(3) Clean the surface with solvent (Series 87)(AMM 20-30-87/201), if it is necessary (AMM 51-31-01/201).

EFFECTIVITY-

53-01-01

ALL



s 354-009

- (4) Examine the fastener holes for the floor panel in the wet areas of the structure as follows:
 - NOTE: Before you install the floor panels, apply moisture barrier tape. The 1.00 inch of overlap joint between strips of tape must be rolled or burnished with a minimum of 20 psi to make a waterproof joint.
 - (a) Clean and apply one layer of BMS 10-11, Type I, primer to the bare aluminum surface.
 - (b) Apply MIL-C-11796 Class 3, Corrosion Preventive Compound to the holes.
 - (c) If the clipnuts were removed, install the new clipnuts as follows:
 - Apply a corrosion inhibiting compound to the floor support structure at the clipnut locations.
 - 2) To improve corrosion resistance, install new primed clipnuts everywhere on the floor structure at the floor panel attachment locations.
 - NOTE: Be careful when you install the clipnuts to prevent scratches on the floor support structure.
 - Turn the clipnuts clockwise against the floor support structure.

s 354-015

(5) Replace the damaged Rubatex tape in dry areas. In wet areas, remove the Rubatex tape and replace with Skyflex tape.

s 824-017

(6) Align the floor panel with the holes in the floor support structure.

s 434-016

- (7) Install the fasteners as follows:
 - (a) Visually examine all screws and nylon seals for damage.
 - (b) If the nylon seal is damaged, remove the nylon seal and install a new nylon seal on the screw or get a new screw.
 - (c) Install the screws with the nylon seals in the wet areas with Mil-C-11796 Class 3 Compound.
 - (d) Outside of the wet areas install the screws without the nylon seals dry.
 - (e) Torque the screws to 20-25 inch-pounds.
 - Make sure the top of the screws are no more than 0.04 inch below the top of the floor panel.

EFFECTIVITY-

53-01-01



s 394-018

- (8) Do these steps to apply sealant to all edges in the wet areas, along the seat tracks, and between the panels (Fig. 401):
 - (a) Apply one layer of masking tape to the edge of the joints that are adjacent to and along the full length of the seam that you will fill.
 - (b) Refer to the instructions on the container to prepare the sealant.

NOTE: The pot life of the Flexane-80 sealant kit is approximately 15 minutes. You must apply the compound before the pot life ends.

- (c) Fill the lower half of the seam with the sealant.
- (d) Fill the upper position of the seam with the sealant.
- (e) Remove all unwanted sealant from the seam.
- (f) Let the sealant dry. Make sure the sealant is smooth and constant. The recommended dry times are as follows:

<u>Temperature (°F)</u>	<u> Time Range (Hours)</u>
80° or over	4 to 6
70° - 80°	6 to 8
60° - 70°	8 to 10

- (g) Remove the masking tape after the sealant has dried.
- (h) Center pieces of 4-inch wide, 0.009 inch thick BMS8-346 Type I or Patco 809U polyurethane tape over all floor panel joints.
- (i) Install 0.018 inch thick 3M 8663DL polyurethane tape over the entire wet area. The 8663DL tape is 36 inches wide. Each strip will overlap by at least one inch.
- (j) Apply an additional piece of four inches wide, 0.018 inch thick 3M 8663DL tape to cover each area of overlap and along the side of the body.

s 414-014

(9) Replace all the equipment that was removed to get access to the panel.

s 344-024

(10) Repair cuts in the mylar or moisture barrier tape with 4.0 inch wide moisture barrier tape on top of the cut.

NOTE: The repair tape must make an overlap to the tape or mylar applied on the cut by a minimum of 2 inches.

EFFECTIVITY-

53-01-01



PASSENGER SEAT TRACKS - CLEANING/PAINTING

1. General

A. This procedure contains one task. The task gives instructions to remove corrosion and then apply alodine or a teflon finish to the seat tracks.

TASK 53-01-02-307-002

- 2. Clean and Paint the Passenger Seat Tracks
 - A. Consumable Materials
 - (1) C00064 Coating Surface Treatment -MIL-C-5541, Type II, Grade C Class 1 for Aluminum or Aluminum Alloys (alodizing) Alodine 1000 Clear
 - (2) COOOO2 Coating Abrasion Resistant Teflon Finish (Spray or Brush) Laminar X-500 Kit, Color W (White)
 - (3) B00153 Solvent Toluene Spec. TT-T-548 Grade A
 - (4) B00083 Solvent Spec. TT-N-95 Aliphatic Naphtha
 - (5) B00102 Abrasive Aluminum Oxide Disks and Sheets Bear-Tex Pad
 - (6) G00034 Cheesecloth New, Clean, Dry, Lint Free
 - B. References
 - (1) 51-21-04/701, Alodizing
 - (2) 51-24-13/701, Abrasion Resistant Teflon Finish
 - C. Access
 - (1) Location Zone

200 Upper Half of Fuselage

D. Procedure - Clean and Paint the Seat Tracks without Abrasion Resistant Teflon Finish.

s 117-001

(1) Clean the seat track with aliphatic naphtha to remove all the oil or grease.

s 107-003

(2) Rub the seat track with 320-grit aluminum oxide paper to remove the corrosion.

s 107-004

(3) Use a vacuum cleaner to remove all the loose unwanted materials.

s 117-005

(4) Clean the area with aliphatic naphtha one more time.

EFFECTIVITY-

53-01-02



s 377-006

WARNING: DO NOT GET ALODINE IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. PUT ON A PROTECTIVE SPLASH GOGGLE AND GLOVES WHEN YOU USE ALODINE. ALODINE CONTAINS CHROMATIC ACID WHICH CAN CAUSE INJURY TO PERSONS.

DO NOT LET CLOTHS THAT ARE SOAKED WITH ALODINE BECOME DRY. SOAK THESE CLOTHS IN WATER WHEN YOU DISCARD THEM. DRY CLOTHS THAT HAVE ALODINE CAN START TO BURN SUDDENLY.

<u>CAUTION</u>: PUT A COVER ON ALL ADJACENT CARPETS WHEN YOU APPLY ALODINE. ALODINE WILL CAUSE A STAIN ON FABRICS.

- (5) Apply clear alodine to the surfaces of the seat track that you can see (Ref 51-21-04).
- E. Procedure Clean and Paint the Seat Tracks with Abrasion Resistant Teflon Finish.

s 107-010

(1) Rub the seat track with 320-grit aluminum oxide paper to remove the corrosion.

NOTE: Seat tracks with abrasion resistant finish are white.

s 107-009

(2) Use a vacuum cleaner to remove all the loose unwanted materials.

s 117-008

(3) Clean the area with a cheesecloth that is moist with toluene (Ref 51-21-04).

s 377-007

(4) Apply abrasion resistant teflon finish to the clean areas (Ref 51-24-13).

EFFECTIVITY-

53-01-02

ALL



NOSE RADOME - MAINTENANCE PRACTICES

1. General

- A. This procedure contains four tasks:
 - (1) The first task gives instructions to open and close the nose radome.
 - (2) The second task gives instructions to remove and install the nose radome.
 - (3) The third task gives the instructions necessary to adjust the nose radome.
 - (4) The fourth task gives instructions to clean and paint the nose radome.

TASK 53-12-01-912-001

- 2. Open and Close the Nose Radome
 - A. Access
 - (1) Location Zone

111 Radome

B. Procedure - Open the Nose Radome

s 012-079

- (1) Make sure the weather radar system is INOP before the nose radome is opened:
 - (a) Open these circuit breakers on the P11 panel and attach D0-NOT-CLOSE tags:
 - 1) 11F2, CB-WX RADAR L
 - 2) 11F27, CB-WX RADAR RIGHT
 - 3) 11F3, CB-WX RADAR IND

s 012-002

WARNING: DO NOT OPEN THE NOSE RADOME WHEN THE WIND IS MORE THAN 65 KNOTS. BE CAREFUL WHEN YOU OPEN THE NOSE RADOME IN ALL WINDS. THE WIND CAN CAUSE DAMAGE TO THE NOSE RADOME AND INJURY TO PERSONS.

(2) Open the radome latches (6 locations).

NOTE: The latch is open when the red plunger is out.

s 912-003

(3) Move the nose radome to the open position.

EFFECTIVITY-

53-12-01

ALL



s 092-004

(4) Remove the two support rods that are on the forward pressure bulkhead.

s 492-005

- (5) To keep the nose radome in the open position, install the support rods on the brackets that are on the radome and bulkhead.
- C. Procedure Close the Nose Radome

s 092-006

(1) Remove the support rods. Keep the support rods in the forward pressure bulkhead.

s 912-096

CAUTION: MAKE SURE THAT THE NOSE RADOME CORRECTLY ATTACHES WITH THE BULB SEAL. IF THE NOSE RADOME IS NOT CORRECTLY ATTACHED, IT CAN CAUSE DAMAGE TO THE WEATHER RADAR SYSTEM.

(2) Close and latch the nose radome (6 locations).

s 902-080

(3) Close the circuit breakers that were opened to make the weather radome INOP.

TASK 53-12-01-902-008

- 3. Remove and Install the Nose Radome
 - A. Equipment
 - (1) Radome Sling A53001-14
 - (2) Multimeter 0-100 megohm range, commercially available.
 - B. Access
 - (1) Location Zone

111 Radome

C. Procedure - Remove the Nose Radome

s 862-076

- (1) Open this circuit breaker and attach the DO-NOT-CLOSE tag:
 - (a) On the Overhead Circuit Breaker Panel P11:
 - 1) 11F2, WX RADAR

s 912-009

(2) Do the Open the Nose Radome procedure in the Open and Close the Nose Radome task.

s 492-010

(3) Put the sling around the nose radome (latch points 1, 3, 4, 6) and attach the sling to the crane.

EFFECTIVITY-

53-12-01

ALL



s 092-011

(4) Disconnect the support rods from the radome.

s 022-013

(5) Disconnect the ground straps from the radome (2 locations).

s 022-014

(6) Remove the four hinge bolts (1) that attach the hinge arms (2) to the nose radome hinge fittings (3).

s 022-015

(7) Remove the radome.

D. Procedure - Install the Radome

s 492-016

(1) Put the sling around the nose radome (latch points 1, 3, 4, and 6).

s 422-017

(2) Lift the nose radome into position with the crane.

s 422-018

(3) Install the four hinge bolts (1) that attach the hinge arms (2) to the nose radome hinge fittings (3).

s 492-019

(4) Install the support rods to hold the nose radome in the open position.

s 092-018

(5) Remove the radome sling.

s 422-020

(6) Connect the ground straps to the nose radome (2 locations).

s 912-021

(7) Do the Close the Nose Radome procedure in the Open and Close the Nose Radome task.

s 862-022

(8) Measure the electrical resistance between the radome diverter strip and the forward bulkhead.

NOTE: The maximum permitted resistance is 30 miliohms.

s 222-023

(9) Make sure each latch is serviceable with less than 100 pound-inch torque.

EFFECTIVITY-

53-12-01

ALL



S 222-024

(10) Measure the tolerances (Fig. 202) and adjust the nose radome if it is necessary.

s 862-075

(11) Close this circuit breaker and remove the DO-NOT-CLOSE tag:

(a) On the Overhead Circuit Breaker Panel P11:

1) 11F2, WX RADAR

TASK 53-12-01-822-025

- Nose Radome Adjustment/Test
 - Equipment
 - Eyebolt Adjustment Tool (Optional). See Fig-202.
 - B. Access
 - (1) Location Zone

111 Radome

C. Procedure - Adjust the Nose Radome (Fig. 202)

s 822-026

To adjust the nose radome flushness, remove or install the shims that are below the alignment fitting.

s 822-027

CAUTION: DO NOT TRY TO TURN THE EYEBOLT. YOU MUST TURN THE NUT THAT IS BEHIND THE EYEBOLT. IF YOU TRY TO TURN THE EYEBOLT, YOU WILL CAUSE DAMAGE TO THE LATCH.

To adjust the latch, put a 0.125-inch diameter rod into the slot that is behind the eyebolt.

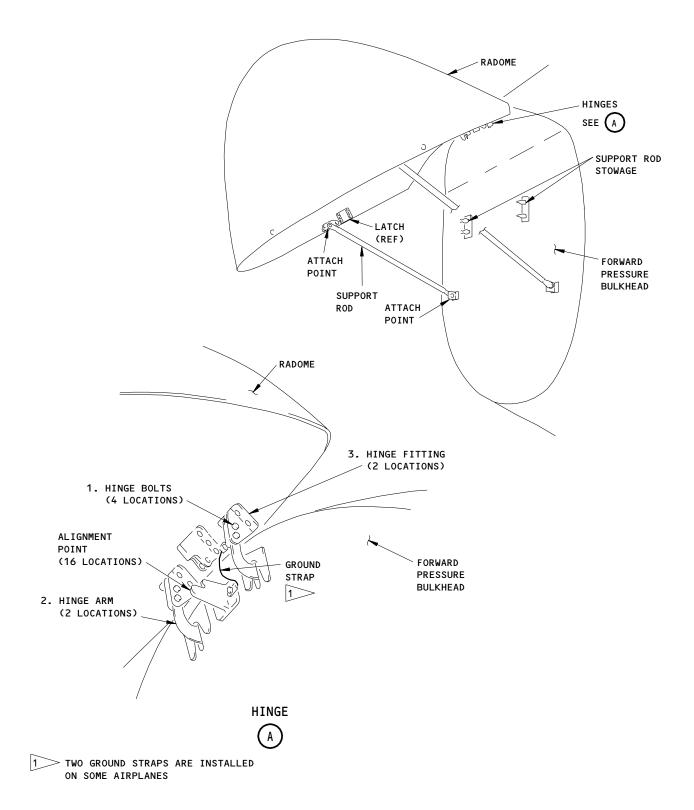
NOTE: This will turn a nut which changes the eyebolt depth.

EFFECTIVITY-

53-12-01

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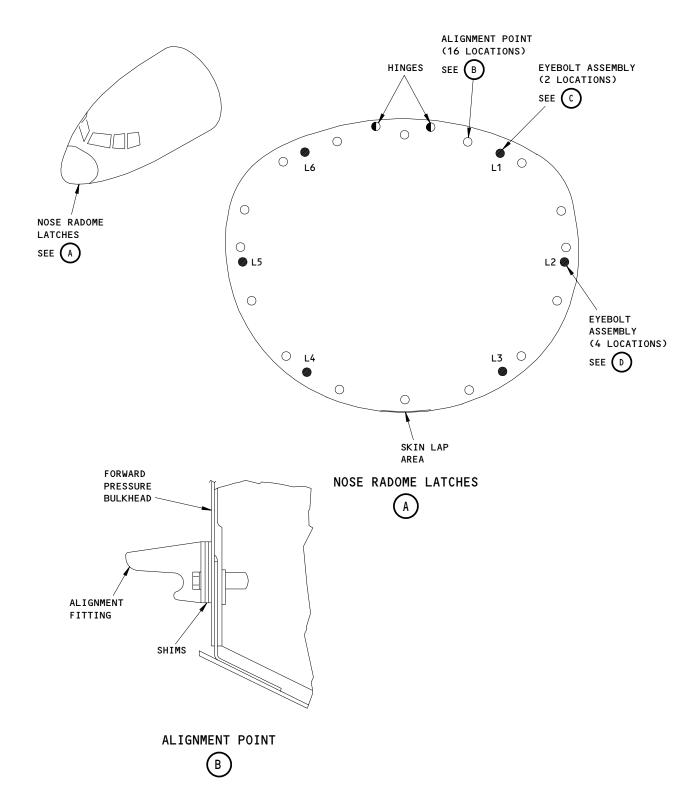


Nose Radome Figure 201

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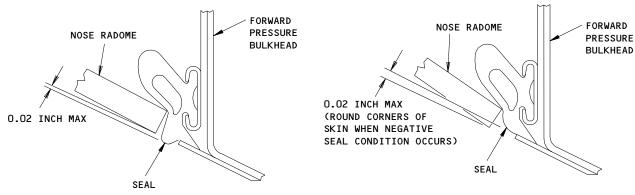
Nose Radome Adjustment Figure 202 (Sheet 1)

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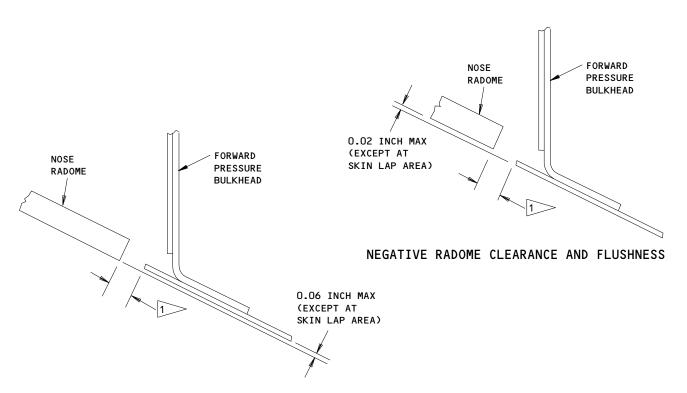
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POSITIVE SEAL FLUSHNESS NEGATIVE SEAL FLUSHNESS



POSITIVE RADOME CLEARANCE AND FLUSHNESS

THE CLEARANCE IS 0.25 ±0.03 INCH AT THE BOTTOM OF THE RADOME WHERE THERE IS AN OVERLAP OF THE SKIN, BETWEEN LBL 6.00 AND RBL 6.00. AT ALL OTHER LOCATIONS THE CLEARANCE IS 0.42 +0.03, -0.04 INCH.

Nose Radome Adjustment Figure 202 (Sheet 2)

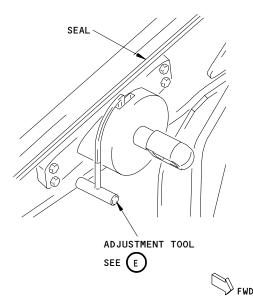
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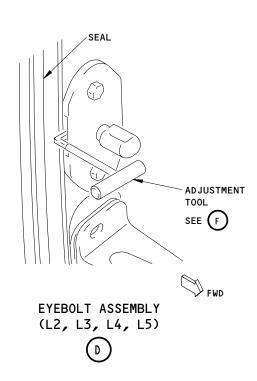
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(L1, L6)





Nose Radome Latches Figure 202 (Sheet 3)

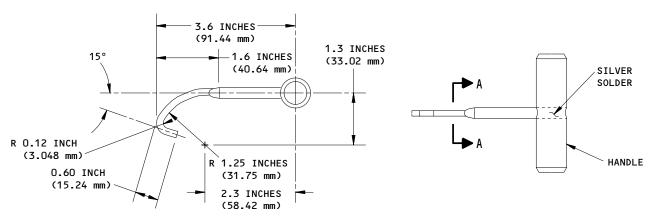
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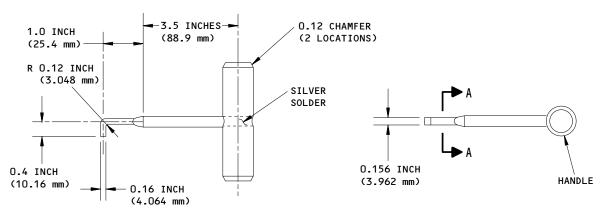
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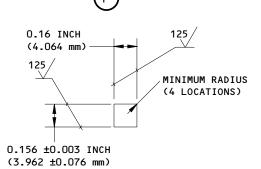


ADJUSTMENT TOOL (L1, L6)





ADJUSTMENT TOOL (L2, L3, L4, L5)



A-A

Nose Radome Latches Figure 202 (Sheet 4)

ALL

O1 Page 209

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s 822-098

(3) Adjust the latch handle torque if it is necessary.

(a) Do the task to open the nose radome.

CAUTION: DO NOT TRY TO TURN THE EYEBOLT. YOU MUST TURN THE NUT. IF YOU TRY TO TURN THE EYEBOLT, YOU CAN CAUSE DAMAGE TO THE LATCH.

(b) Put the Eyebolt Adjustment Tool (OJ-53004 optional) through the slot in the eyebolt housing.

NOTE: You cannot see the slot. It is behind the radome seal. Use adjustment tool D (Fig. 202) on the upper latches (L1 and L6) and adjustment tool E (Fig. 202) on the center and lower latches (L2, L3, L4 and L5).

- (c) Engage the tool in a hole in the adjustment nut in the housing.
- (d) Turn the adjusting nut to move the eyebolt forward or aft.

NOTE: The nut is held by a spring-loaded detent. Turn the nut to the next detent.

- 1) Move the eyebolt aft to increase the latch torque.
- 2) Move the eyebolt forward to decrease the latch torque.

s 912-097

CAUTION: MAKE SURE THAT THE NOSE RADOME CORRECTLY ATTACHES WITH THE BULB SEAL. IF THE NOSE RADOME IS NOT CORRECTLY ATTACHED, IT CAN CAUSE DAMAGE TO THE WEATHER RADAR SYSTEM.

(4) Close and latch the nose radome (6 locations).

TASK 53-12-01-302-095

- 5. Nose Radome Clean and Paint
 - A. Equipment
 - (1) Multimeter 1-100 megohm range, commercially available
 - (2) Paint Spray Equipment
 - B. Consumable Materials
 - (1) COO841 Antistatic Paint Black Desoto -

BMS 10-21, Type II Base 528 X 306

Activator 910 X 464

- (2) C00584 Primer BMS 10-79, Type II
- (3) C00033 Enamel BMS 10-60 Type II
- (4) GO2100 Filler Static Conditioner 28-C-1
- (5) C00059 Surfacer Dexter 8-W-5
- C. References
 - (1) AMM 51-21-02/701, Prepaint Cleaning and Treatment

53-12-01



- (2) AMM 51-21-10/701, Decorative Exterior Finishes
- (3) AMM 51-24-02/701, Conductive Coating for Exterior Fiberglass and Kevlar
- (4) AMM 53-12-03/201, Lighting Diverter Strips
- D. Access
 - (1) Location Zone

111 Radome

E. Prepare the nose radome surface (Fig. 203):

s 102-043

(1) Clean the nose radome (AMM 51-21-02/701).

s 102-081

(2) Clean and Prepare the nose radome surface (AMM 51-21-02/701).

s 302-044

- (3) If there are surface defects, do the steps that follow:
 - (a) Apply the static conditioner filler to the surface defects with your hand.

NOTE: Use the static conditioner filler to fill the small surface defects such as pinholes. Do not use this filler to smooth the surface. A continuous layer of this filler will cause an unsatisfactory paint bond.

- (b) Let the filler dry for 30 minutes at temperatures between 70°F to 90°F, or until the filler becomes white.
- (c) Remove the remaining filler with a dry cheesecloth.

NOTE: Do not use solvents to remove the remaining filler. Solvents will remove the static conditioner on touch.

s 302-045

- (4) If there are remaining surface defects that you cannot fill with the filler, use the 8-W-5 surfacer.
- F. Procedure Mixing and Application Instruction (See Table 201)

s 372-046

(1) Mix the base component.

s 372-047

(2) Add the catalyst to the base component while you mix the solution.

s 372-048

(3) Permit an induction time for the solution.

s 372-049

(4) Add a thinner to the solution if it is necessary.

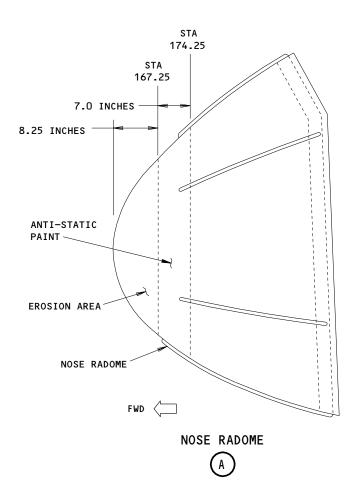
EFFECTIVITY-

53-12-01

ALL







Nose Radome Painting Figure 203

EFFECTIVITY-ALL

53-12-01

02

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s 372-050

(5) Apply the solution with the spray equipment.

NOTE: Obey the pot life of the paint as shown (Table 201).

s 372-051

(6) Let the paint dry before you apply the top layer (Table 201).

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Application Chart Table 201					
MATERIAL	MIX RATIO	POT LIFE (HRS)	SINGLE LAYER DRY FILM THICKNESS (MILS)	DRY TIMES (70° - 90°F)	
BMS 10-79 TYPE II PRIMER Base: Catalyst: Thinner:	1 1 none	8	0.5 - 0.8	The minimum time before you apply tape is 2 hours. The minimum time between layers is 2 hours. The maximum time before you can apply the top layer is 24 hours.	
BMS 10-60 TYPE II ENAMEL Base: 822-T-203 Catalyst: 910-152 thinner:	2 1 none	4	1.4 - 1.8	The minimum time before you apply tape is 5 hrs at 90°F to 7 hours at 70°F. The minimum time before you can use the airplane is 48 hours. *[1]	
BMS 10-21				*[1] The dry times decrease with increased temperatures.	
TYPE II ANTI-STATIC Base: 528x306 Catalyst: 910x464	1	4 below 81°F 2 above 81°F	0.6 - 1.0	The minimum dry time is 7 days at 75°F. Accelerated dry time is 60 minutes at 140°F	

G. Procedure - Apply Paint to the Nose Radome

s 722-093

(1) Use only items in table 201 and decorative paint applied to calculate the total paint thickness of the radome.

EFFECTIVITY-

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s 372-092

(2) Apply masking tape to the forward area of STA 167.25 and to the aft area of STA 174.25 (Fig. 203)

NOTE: Thicknesses of paint layers which total more than 0.012 inch can decrease the necessary radome electrical transmission efficiency. A radome wall that has been repaired, should be put back to its initial thickness. If this is not done, the radome transmission efficiency will be decreased.

NOTE: For repaired radomes on airplanes that have Predictive Wind Shear (PWS), and that are finished with CAAPCO erosion and p-static protection (Caapcoat B-274 as specified in BAC5880 and Caapcoat AS-P108), do a transmission efficiency test. The efficiency test must show the radome to be Class C or better.

s 372-094

CAUTION: DO NOT MAKE THE PAINT TOO THICK ON THE RADOME. PAINT THAT IS MORE THAN 0.012-INCHES THICK WILL DECREASE THE ELECTRICAL CONDUCTIVITY OF THE RADOME. THIS WILL CAUSE ELECTRICAL COMPONENTS TO OPERATE INCORRECTLY.

- (3) Do these steps to apply paint on the nose radome:
 - (a) Apply a coat of Black DeSoto Anti-static paint (BMS 10-21, Type II) to the vertical band around the radome, between STA 167.25 and STA 174.25, to a dry-film thickness of 0.8 +/- 0.2 mils (AMM 51-24-02/701).
 - (b) Let the anti-static paint dry (AMM 51-24-02/701).
 - (c) Apply a second coat of anti-static paint (BMS 10-21 Type II) to a dry-film thickness of 0.8 +/- 0.2 mils (AMM 51-24-02/701).
 - (d) Let the anti-static paint dry (AMM 51-24-02/701).

s 862-059

- (4) Measure the surface resistance of the anti-static paint as follows:
 - (a) Remove the masking tape from the radome.
 - (b) Find 5 pairs of equidistant points in each quadrant of the anti-static paint band (20 total pairs).
 - (c) Push the multimeter probes to each pair of the points on the anti-static paint.
 - (d) Make sure that the multimeter indication is 1-100 megohms at each point.
 - (e) If the surface resistance is less than 1 megohm, remove and apply the anti-static paint again (AMM 51-24-02/701).
 - (f) If the surface resistivity is more than 100 megohms, dry the anti-static paint and measure the resistance again (AMM 51-24-02/701).

EFFECTIVITY-

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s 372-088

(5) Do these steps to apply paint on the nose radome:

s 372-083

- (6) Continue as follows:
 - (a) Apply BMS 10-79 Type II primer to the nose radome surface that is forward of STA 167.25 and aft of STA 174.25.

NOTE: The dry film thickness must be approximately 0.5 to 0.8 mil (0.0005 - 0.0008 inch).

(b) Apply BMS 10-60 Type II enamel to the nose radome surface that is forward of STA 167.25 and aft of STA 174.25.

NOTE: The dry film thickness must be approximately 1.0 - 2.0 mils (0.001 - 0.002 inch).

- (c) Apply the decorative exterior paint, as it is necessary, on the radome surface (AMM 51-21-10/701).
- (d) Remove the masking tape from the radome.

EFFECTIVITY-

ALL

53-12-01

ı



NOSE RADOME SEAL - REMOVAL/INSTALLATION

- 1. General
 - A. This procedure contains two tasks:
 - (1) The first task gives instructions to remove old seal.
 - (2) The second task gives instructions to install the nose radome seal.
 - B. Access
 - (1) Location Zone

111 Radome

TASK 53-12-01-014-048

- 2. Remove Nose Radome Seal
 - A. Procedure Remove Nose Radome Seal

s 914-049

(1) Do the Nose Radome procedure in the Open and Close the Nose Radome task.

s 914-003

(2) Slide Nose Radome Seal completely out of channel.

TASK 53-12-01-414-050

- 3. <u>Install Nose Radome Seal</u>
 - A. Procedure

s 094-006

(1) Slide new Nose Radome Seal completely into channel.

s 404-046

(2) Do the close the Nose Radome procedure in the Open and Close Nose Radome task.

EFFECTIVITY-

53-12-01

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NOSE RADOME - INSPECTION/CHECK

1. General

- A. This procedure contains three tasks:
 - (1) An inspection/check of the nose radome for moisture.
 - (a) Moisture that enters the honeycomb cells of a radome can cause the radar transmission to decrease. Periodic radome inspection is necessary to ensure sufficient radar transmission. Water that is entrapped in the honeycomb cells can be detected with the three methods that follow.
 - (b) There are three radome moisture inspection methods. The recommended method 1 is the moisture meter inspection method. Two alternative methods are electronic thermography inspection method and liquid crystal sheets method.

NOTE: These methods can also be used during the drying process to ensure that all subsurface water has been removed from the radome.

- (2) An inspection/check of the glidescope director element.
- (3) An inspection/check of the nose radome seal.

TASK 53-12-01-206-034

- 2. Nose Radome Inspection/Check
 - A. Equipment
 - (1) Moisture Register, Type A8-AF, or equivalent. Penta Engineering, Moisture Register Products P.O. Box 369 La Verne, Ca. 91750-0369
 - B. References
 - (1) AMM 53-12-01/201, Open and Close the Nose Radome
 - (2) AMM 53-12-01/401, Nose Radome
 - (3) AMM 53-12-05/401, Glide Slope Director Element
 - (4) NDT Part 9, 51-00-01, Thermography Inspection
 - (5) NDT Part 9, 51-00-02, Liquid Crystal Inspection
 - (6) SRM 53-10-72, Nose Radome
 - C. Access
 - (1) Location Zone

111 Radome

EFFECTIVITY-



TABLE 1				
Moisture Water Reject Level	Allowable Surface Area of Water			
20	5-inch (127mm) diameter or equivalent area			

NOTE:

Unlimited 1-inch (25.4mm) diameter areas of water are allowed if they are spaced more than 10 inches (254.0mm) apart.

D. Procedure

s 016-035

(1) Do the open the Nose Radome procedure in the Open and Close the Nose Radome task (AMM 53-12-01/201).

s 216-036

(2) Examine the nose radome for holes, scuffs, cracks, blisters, delamination and other damages.

s 206-037

- (3) Do these steps for the inspection/check of the nose radome:
 - (a) Open the nose radome to get access to the internal surface (AMM 53-12-01/201).
 - (b) Do a check for moisture in the honeycomb material with a moisture register.

s 826-077

- (4) Moisture Meter Calibration
 - (a) Turn the instrument on with the toggle switch or the button in the handle.

EFFECTIVITY-

53-12-01



(b) Hold the sensor head at least 12 inches (305mm) away from any object and push the null button to zero the instrument.

NOTE: If you release the handle button or turn the instrument off, you must zero the instrument again before you continue with the radome inspection.

NOTE: Some moisture meters have a meter zero control that must be manually adjusted.

(c) Refer to the moisture meter operating manual for additional instructions.

S 286-076

- (5) Moisture Meter Inspection Method
 - (a) Put the sensor head on the inner surface of the radome.
 - Make sure that all the electrodes contact the radome surface.
 - 2) If necessary, apply light force to make sure the sensor head contacts the radome surface.
 - (b) Move the sensor head over all of the inner surface of the radome. The sensor head must touch the full inner surface of the radome. To perform an adequate inspection, the sensor must be indexed at an interval of 1 inch (25.4mm) or less.
 - (c) In areas that cause a meter reading of 20 or greater, put the sensor head away from the center of the indication (in an adjacent area with a reading of less than 20). Monitor the meter reading as you move the sensor head toward the center of the area.
 - (d) To identify the area of entrapped water, make marks on the radome at the position of the electrodes closest to the entrapped water when the meter reading increases to 20.
 - Do these steps until the boundary of the entrapped water is marked.
 - (e) If the area that you marked is greater than the allowable area shown in Table 1, remove the moisture in the marked area and seal it (SRM 53-10-72).

s 286-075

- (6) Electronic Thermography (alternative) Inspection Method
 - (a) Refer to NDT Manual Part 9, NDT 51-00-01 for equipment, calibration and inspection instructions.

NOTE: The inspection can be performed from either side of the radome.

EFFECTIVITY-

53-12-01



(b) Examine the entire surface of the radome.

NOTE: Areas that contain entrapped water will appear cold.

- (c) Monitor the surface of the radome with the infrared camera while you use a marker to put a mark at the boundary of the entrapped water.
- (d) If the area that you marked is greater than the allowable area shown in Table 1, remove the moisture in the marked area and seal it (SRM 53-10-72).

s 286-074

- (7) Liquid Crystal (alternative) Inspection Method
 - (a) Refer to NDT Manual Part 9, NDT 51-00-02 for equipment, calibration and inspection instructions.

NOTE: The inspection can be performed from either side of the radome.

(b) Examine the entire surface of the radome.

NOTE: Areas that contain entrapped water will appear cold.

- (c) Monitor the surface of the radome with the liquid crystal sheets while you use a marker to put a mark at the boundary of the entrapped water on the transparent template.
- (d) If the area that you marked is greater than the allowable area shown in Table 1, remove the moisture in the marked area and seal it (SRM 53-10-72).

s 216-038

- (8) Do these steps to examine the glideslope director element:
 - (a) Make sure the glideslope director element is in one piece.
 - (b) Make sure the adhesion is tight.
 - (c) Make sure there is no other damages on the glideslope director element.
 - (d) Replace the element as it is necessary (AMM 53-12-05/401).

s 216-039

ALL

- (9) Do these steps for the inspection/check of the nose radome seal:
 - (a) Examine the nose radome seal for cracks, blisters, holes, or other damages.
 - (b) If there is damage, consult removal/installation of a new nose radome seal (AMM 53-12-01/401).

EFFECTIVITY-

53-12-01



S 416-040
(10) Put the airplane back to its usual condition.
(a) Close the nose radome (AMM 53-12-01/201).

EFFECTIVITY-

53-12-01

ALL

01

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NOSE RADOME LATCH MECHANISM - REMOVAL/INSTALLATION

1. General

- A. This procedure contains four tasks:
 - (1) The first task is the removal of the latch mechanism from the nose radome.
 - (2) The second task is the installation of the latch mechanism on the nose radome.
 - (3) The third task is the removal of the eyebolt from the forward pressure bulkhead.
 - (4) The fourth task is the installation of the eyebolt on the forward pressure bulkhead.
- B. The latch mechanism on the nose radome locks on an eyebolt on the forward pressure bulkhead.

TASK 53-12-02-004-001

- Remove the Nose Radome Latch Mechanism
 - A. References
 - (1) 53-12-01/201, Nose Radome
 - B. Access
 - (1) Location Zone

111 Radome

C. Procedure

s 014-002

(1) Open the nose radome (Ref 53-12-01).

s 024-003

(2) Remove the nutplates from the latch bolts.

s 024-004

(3) Remove the latch mechanism of the nose radome.

TASK 53-12-02-404-005

3. Install the Nose Radome Latch Mechanism

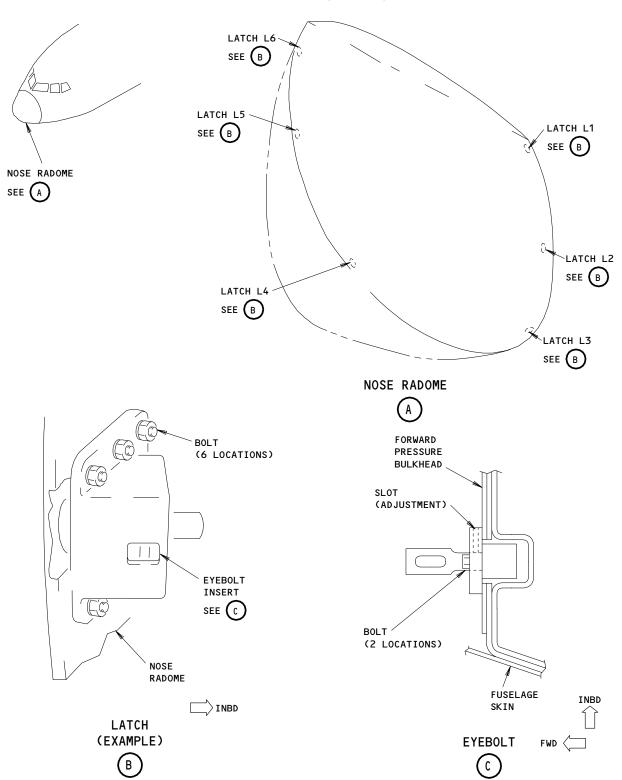
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- A. Consumable Materials
 - (1) A00247 Sealant BMS 5-95
 - (2) COO308 Corrosion Preventive Compound, MIL-C-11796 Type 2

EFFECTIVITY-

53-12-02





Nose Radome Latch Mechanism Figure 401



- B. References
 - (1) 53-12-01/201, Nose Radome
- C. Access
 - (1) Location Zone

111 Radome

D. Procedure

s 394-006

(1) Apply the wet sealant around the latch hole in the nose radome.

s 424-007

(2) Put the latch in its position and install the nutplates.

s 164-008

(3) Remove the unwanted sealant from the inner and outer surfaces of the radome.

s 414-009

(4) Close the nose radome (Ref 53-12-01).

TASK 53-12-02-004-010

- 4. Remove the Eyebolt from the Forward Pressure Bulkhead
 - A. References
 - (1) 53-12-01/201, Nose Radome
 - B. Access
 - (1) Location Zone

111 Radome

C. Procedure

s 014-011

(1) Open the nose radome (Ref 53-12-01).

s 024-012

(2) Remove the bolts that connect the eyebolt to the forward pressure bulkhead.

<u>NOTE</u>: Do not change the number of and shims and plates that have serrations. The latch will be out of adjustment.

s 024-013

(3) Remove the eyebolt.

TASK 53-12-02-404-014

- 5. Install the Eyebolt on the Forward Pressure Bulkhead
 - A. Consumable Materials
 - (1) A00247 Sealant BMS 5-95
 - (2) C00308 Corrosion Preventive Compound, MIL-C-11796 Type 2

EFFECTIVITY-

53-12-02

ALL



- B. References
 - (1) 53-12-01/201, Nose Radome
- C. Access
 - (1) Location Zone 111 Radome
- D. Procedure

s 394-015

(1) Apply the corrosion preventative compound in the bolt holes.

s 394-016

(2) Apply the wet sealant between all the mating surfaces.

s 424-017

(3) Put the eyebolt in position and install the bolts.

s 424-018

(4) Tighten the bolts to 50-75 pounds-inch.

s 414-019

(5) Close the nose radome.

EFFECTIVITY-

53-12-02

ALL



LIGHTNING DIVERTER STRIPS - MAINTENANCE PRACTICES

1. General

- A. This procedure contains three tasks:
 - (1) The first task is the removal of the lightning diverter strips.
 - (2) The second task is the installation of the lightning diverter strips.
 - (3) The third task is the adjustment/test of the lightning diverter strips.
- B. You must repair the damaged radome surface before you install the new lightning diverter strips.

TASK 53-12-03-002-001

- 2. Remove the Lightning Diverter Strips
 - A. Consumable Materials
 - (1) B00083 Solvent TT-N-95, Naphtha
 - B. References
 - (1) AMM 20-30-86/201, Airplane Structure Cleaning Solvents (Series 86)
 - (2) AMM 53-12-01/201, Nose Radome
 - C. Access
 - (1) Location Zone

111 Radome

D. Procedure

s 012-002

(1) Open the nose radome and keep it in the open position, or fully remove the nose radome (AMM 53-12-01/201).

s 022-003

(2) Remove the screws that attach the diverter strips to the nose radome (Fig. 201).

s 022-004

(3) Remove the diverter strip from the nose radome.

s 102-005

(4) Remove all unwanted material from the nose radome surface.

s 102-006

(5) Clean the nose radome surface with a cheesecloth that is moist with solvent (Series 86)(AMM 20-30-86/201).

TASK 53-12-03-402-007

3. <u>Install the Lightning Diverter Strip</u>

ALL

- A. Consumable Materials
 - (1) A00247 Sealant BMS5-95

EFFECTIVITY-

53-12-03



- (2) B00083 Solvent TT-N-95, Naphtha
- B. References
 - (1) AMM 51-21-10/701, Decorative Exterior Finishes
 - (2) AMM 53-12-01/201, Nose Radome
- C. Access
 - (1) Location Zone

111 Radome

D. Procedure

s 372-008

(1) Repair the nose radome surface if the protective finish is damaged (AMM 51-21-10/701).

s 102-009

(2) Clean the mating surfaces of the diverter plate and the diverter strip for a satisfactory electrical bond.

s 392-021

- (3) Seal the nose radome diverter strip inserts.
 - (a) Clean the insert surface with a rag moistened with solvent and let dry.
 - (b) Clean radome surface around insert holes with a rag moistened with solvent and let dry.
 - (c) Apply BMS5-95 sealant on and around the insert hole in the the nose radome and the mating surface of the insert. Completely coat the honeycomb core cells with sealant.
 - (d) Install the insert immediately before the sealant has a chance to set-up.
 - (e) Make sure there is squeeze out of sealant all around the insert on both surfaces of the nose radome. The sealant squeeze out on the aerodynamic surface of the nose radome needs to be flush with the surface. This is to accommodate the fit-up of the diverter strips.
 - (f) Apply a fillet seal, 0.12 inch wide, of BMS5-95 sealant around the flange of the diverter strip insert that is exposed to the interior side of the nose radome.

NOTE: It is important to make sure that the diverter strip attach inserts are completely sealed to prevent moisture from entering into the nose radome honeycomb core.

s 422-010

(4) Put the diverter strip in position and install the screws.

s 412-011

(5) Install the nose radome if it was removed.

EFFECTIVITY-

ALL

53-12-03



s 212-012

(6) Make sure there are no clearances between the diverter strip and the nose radome.

s 372-022

(7) Apply decorative exterior finishes as necessary (AMM 51-21-10/701).

s 862-013

(8) Do a bonding resistance test between the nose radome and the lightning diverter strips.

s 412-014

(9) Close the nose radome (AMM 53-12-01/201).

TASK 53-12-03-822-015

4. Lightning Diverter Strips - Adjustment/Test

- A. General
 - (1) This procedure gives the instructions to do a dc continuity test for all parts that are related to the lightning diverter strips. You must do this test after you install the new diverter strips or when the inspection shows deterioration. The deterioration of the lightning diverter strips can cause radio noise interference.
- B. Equipment
 - (1) Milliohmmeter 0-30 milliohm range (commercially available)
- C. References
 - (1) AMM 53-12-01/201, Nose Radome
- D. Access
 - (1) Location Zone

111 Radome

E. Procedure

s 012-016

(1) Open the nose radome (AMM 53-12-01/201).

s 212-017

(2) Make sure the electrical resistance between the points shown in Fig. 201 is less than 10 milliohms.

s 412-018

(3) Close the nose radome (AMM 53-12-01/201).

EFFECTIVITY-

53-12-03



s 212-019

(4) Make sure the electrical resistance between the diverter strip and the forward bulkhead is less than 30 milliohms.

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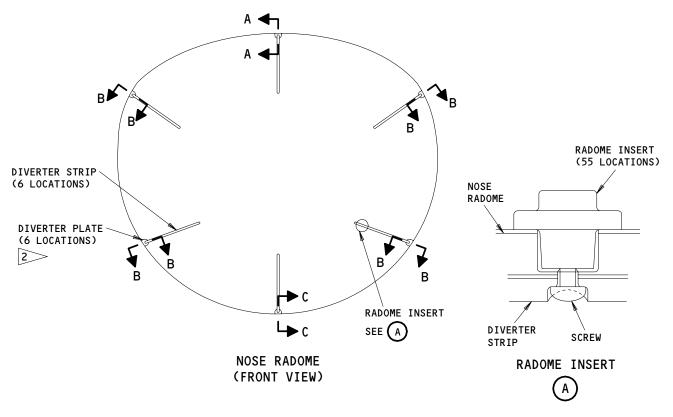
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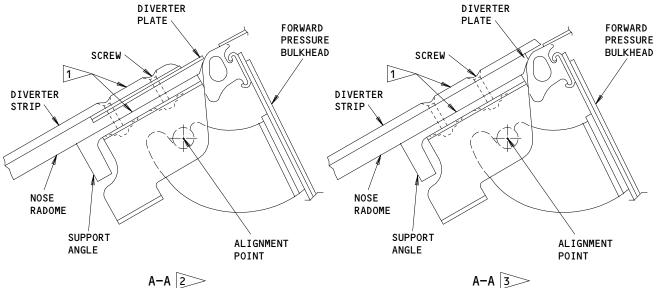
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THE ELECTRICAL RESISTANCE BETWEEN THESE SURFACES MUST BE LESS THAN 0.01 OHM

AIRPLANES WITH METAL GROUNDING RING AROUND
THE AFT INTERIOR PERIPHERY OF THE RADOME

AIRPLANES WITHOUT METAL GROUNDING RING AROUND THE AFT INTERIOR PERIPHERY OF THE RADOME

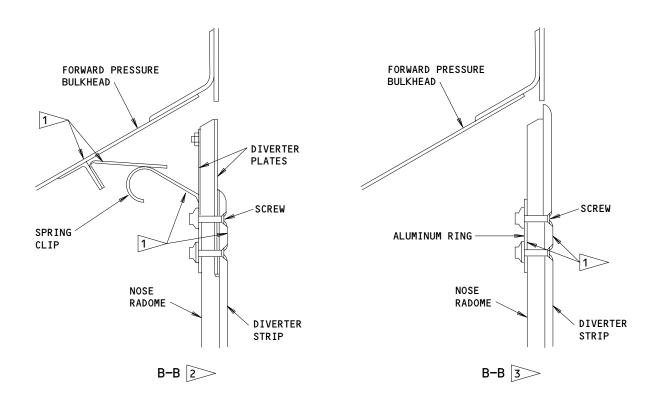
Lightning Diverter Strip Figure 201 (Sheet 1)

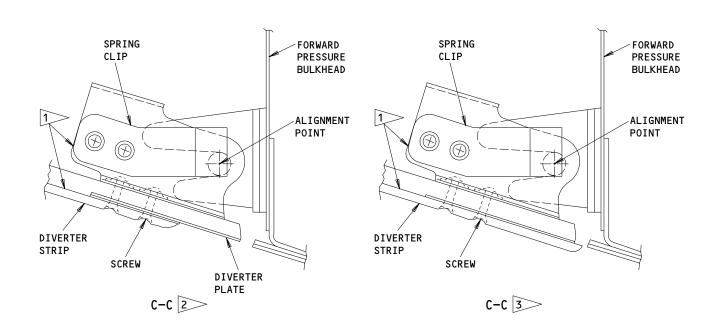
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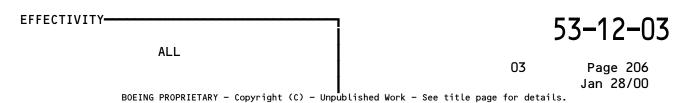
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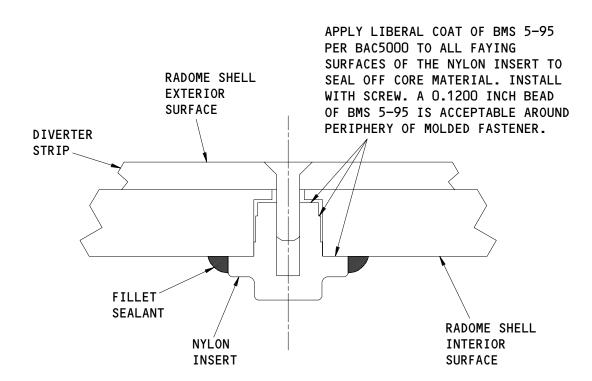




Lightning Diverter Strip Figure 201 (Sheet 2)







Insert/Sealant Installation Figure 202

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GLIDE SLOPE DIRECTOR ELEMENT - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks. The first task is the removal of the director element (pressure sensitive tape) from the glide slope. The second task is the installation of the director element on the glide slope.
- B. The director element is a pressure sensitive tape that is made of aluminum foil. It is attached to the inner surface of the nose radome. It changes the glide slope radiation antenna patterns.

TASK 53-12-05-004-001

- 2. Remove the Glide Slope Director Element
 - A. References
 - (1) 53-12-01/201, Nose Radome
 - B. Access
 - (1) Location Zone

111 Radome

C. Procedure

s 014-002

(1) Open the nose radome (Ref 53-12-01).

s 024-003

(2) Remove the director element from the nose radome.

TASK 53-12-05-404-004

- 3. <u>Install the Glide Slope Director Element</u>
 - A. Consumable Materials
 - (1) GO2095 Aluminum foil pressure sensitive tape, 1/2-inch wide - No. 425, BAC5801
 - (2) C00259 Primer BMS 10-11 Type I
 - (3) B00135 Solvent Aliphatic Naphtha
 - (4) B00192 Solvent BMS 3-2 Type I
 - (5) G00034 Cheesecloth
 - B. References
 - (1) 51-21-10/701, Decorative Exterior Finishes
 - (2) 53-12-01/201, Nose Radome
 - C. Access
 - (1) Location Zone

111 Radome

D. Procedure

s 104-005

(1) Use a cheesecloth that is moist with aliphatic naphtha to clean the surface where you will install the director element.

s 374-006

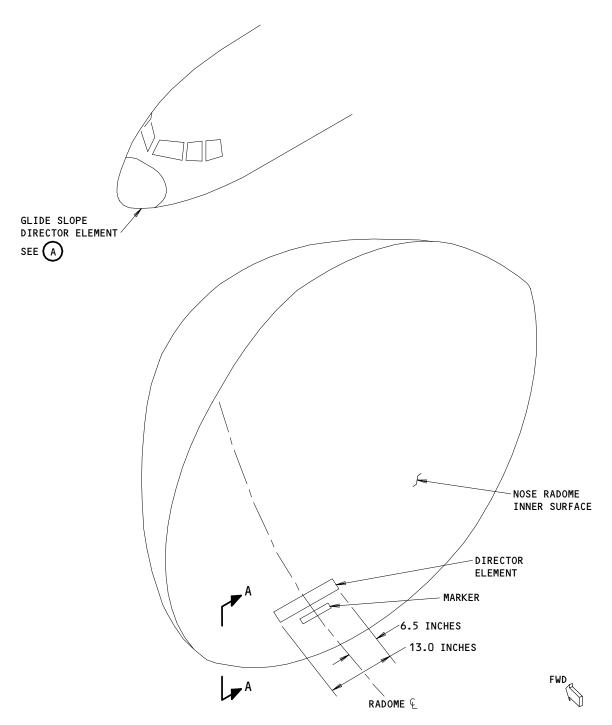
(2) Apply one layer of primer to the surface (Ref 51-21-10).

EFFECTIVITY-

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GLIDE SLOPE DIRECTOR ELEMENT



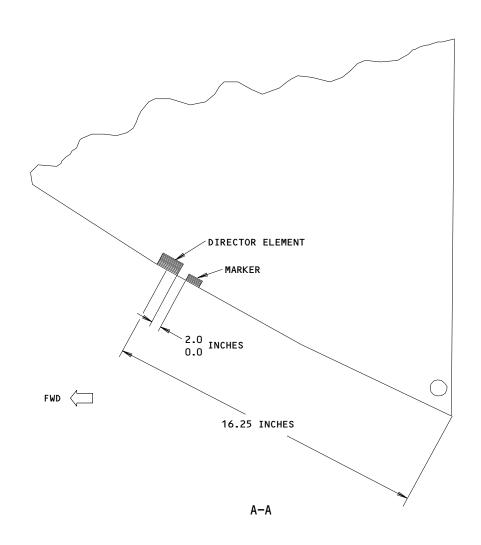
Glide Slope Director Element Figure 401 (Sheet 1)

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Glide Slope Director Element Figure 401 (Sheet 2)

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s 214-007

(3) Make sure the primer extends approximately 0.25 inch on all sides of the glide slope director element.

s 104-008

(4) Clean the surface with BMS 3-2 solvent.

s 424-009

(5) Apply the pressure sensitive tape directly to the radome surface (Fig. 401)

s 424-010

(6) Push the pressure sensitive tape tightly on the surface.

s 214-011

(7) Make sure the pressure sensitive tape is clear of the lightning diverter strip fastener.

s 934-012

(8) Make sure you identify the location of the director element on the glide slope.

s 414-013

(9) Close the nose radome (Ref 53-12-01).

EFFECTIVITY-

53-12-05

ALL



LOWER DOORSILL SCUFF PLATE - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the scuff plates.
 - (2) The second task is the installation of the scuff plates.
- B. All the installations of the scuff plates are almost the same.
- C. The clearances between the scuff plates and the airplane structure are sealed for aerodynamic smoothness.

TASK 53-13-01-024-011

2. Remove the Scuff Plates

- A. Equipment
 - (1) Sealing compound cutting tool nylon; commercially available
- B. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
- C. References
 - (1) AMM 51-31-01/201, Seals and Sealing
- D. Access
 - (1) Location Zones

830 Left Side Doors

840 Right Side Doors

E. Procedure

s 024-001

CAUTION: BE CAREFUL WHEN YOU REMOVE THE SEALANT FROM THE EXTERNAL PORTION OF THE SCUFF PLATE. IF YOU ARE NOT CAREFUL, DAMAGE TO THE FUSELAGE SKIN CAN OCCUR.

(1) Remove the scuff plate fasteners.

NOTE: Be careful not to damage the scuff plate or the airplane skin.

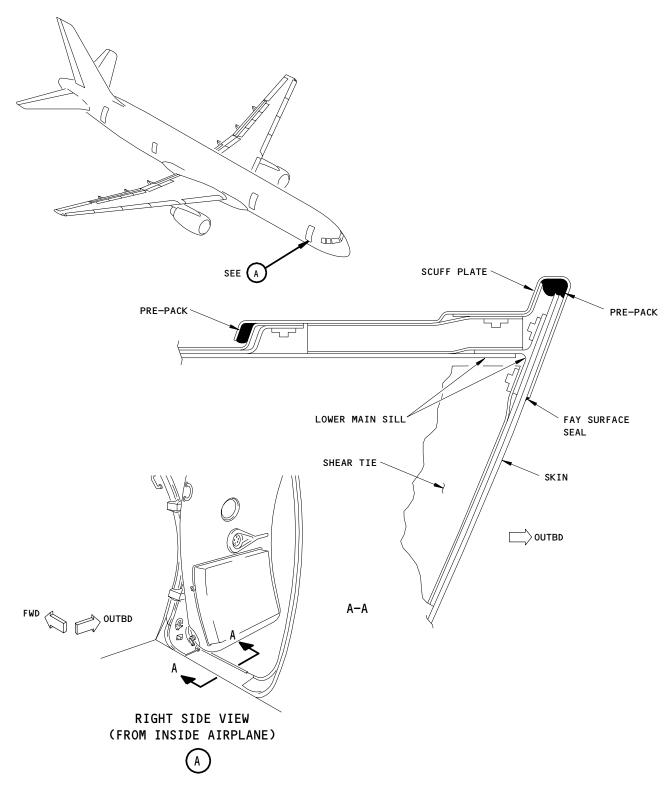
s 024-012

(2) Remove the scuff plate.

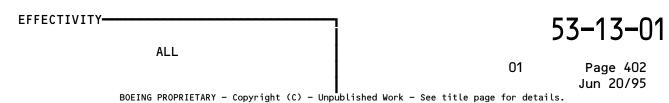
EFFECTIVITY-

53-13-01





Lower Sill Scuff Plate Sealing Figure 401





S 114-014

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(3) Clean all faying surfaces by removing old sealant and parting compound using a nylon scraper (AMM 53-12-01/201).

TASK 53-13-01-424-003

- 3. <u>Install the Scuff Plates</u>
 - A. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - (4) A00000 Compound BAC5530 Type I
 - (5) A01024 Fairing Compound 3M EC-3587
 - B. References
 - (1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)
 - (2) AMM 51-31-01/201, Seals and Sealing
 - C. Access
 - (1) Location Zones

830 Left Side Doors

840 Right Side Doors

D. Procedure

s 114-004

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH, OR YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(1) Clean all faying surfaces with a solvent (Series 88) wipe (AMM 20-30-88/201).

s 844-005

(2) Apply alodine and one coat BMS 10-11 type I primer to all bare aluminum surfaces including the faying surface of the fuselage skin.

EFFECTIVITY-

53-13-01

ALL



s 824-006

(3) Apply a coat of strippable parting agent to all faying surfaces of the threshold, the scuff plates and the fuselage skin.

(AMM 51-31-01/201)

s 824-007

(4) Apply the BMS 3-23 type 2 corrosion inhibiting compound to the entire area under the threshold.

<u>NOTE</u>: The area in contact with the scuff plate should be masked to prevent exposure to the corrosion-inhibiting compounds so the sealant will adhere.

s 394-008

(5) Prepack sealant BMS 5-95 to the cap, doorsill mating surface and the skin mating surface as shown on fig. 401 and install scuff plates with fasteners according to the production drawings.

NOTE: It is critical that sufficient sealant be prepacked into the scuff plates to completely fill the gap between the scuff plates and the fuselage skin along the lower edge of the doorway as shown on the sketch. Continuous sealant squeeze-out is required along all gaps.

s 394-009

(6) Remove excess sealant from the gap and the edge after squeeze-out has stopped.

s 394-010

ALL

(7) Apply fairing compound as a ramp at a 10 to 1 ratio to fair in the upper corners of the scuff plates to the doorway frame in order to provide a smooth transition for the door seal.

NOTE: No voids, ripples or bumps are allowed in the compound. Final surface finish of the ramp should be visually equivalent to 125 AA microinches finish.

EFFECTIVITY-

53-13-01



CARGO DOOR SCUFF PLATE - REMOVAL/INSTALLATION

1. <u>General</u>

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the scuff plates.
 - (2) The second task is the installation of the scuff plates.
- B. All the installations of the scuff plates are almost the same.
- C. The clearances between the scuff plates and the airplane structure are sealed for aerodynamic smoothness.

TASK 53-13-02-024-001

2. Remove the Scuff Plates

- A. Equipment
 - (1) Sealing compound cutting tool nylon; commercially available
- B. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
- C. References
 - (1) AMM 51-31-01/201, Seals and Sealing
- D. Access
 - (1) Location Zones

821 No.1 Cargo Door

822 No.2 Cargo Door

E. Procedure

s 024-002

CAUTION: BE CAREFUL WHEN YOU REMOVE THE SEALANT FROM THE EXTERNAL PORTION OF THE SCUFF PLATE. IF YOU ARE NOT CAREFUL, DAMAGE TO THE FUSELAGE SKIN CAN OCCUR.

(1) Remove the scuff plate fasteners.

NOTE: Be careful not to damage the scuff plate or the airplane skin.

s 024-003

(2) Remove the scuff plate.

ALL

EFFECTIVITY-

53-13-02



s 114-004

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(3) Clean all faying surfaces by removing old sealant and parting compound using a nylon scraper (AMM 53-31-01/201).

TASK 53-13-02-424-005

- 3. <u>Install the Scuff Plates</u>
 - A. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - (4) A00000 Compound BAC5530 Type I
 - (5) A01024 Fairing Compound 3M EC-3587
 - B. References
 - (1) AMM 20-30-88/201, Airplane Structure Cleaning Solvents (Series 88)
 - (2) AMM 51-31-01/201, Seals and Sealing
 - C. Access
 - (1) Location Zones

821 No.1 Cargo Door

822 No.2 Cargo Door

D. Procedure

s 114-006

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH, OR YOUR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(1) Clean all faying surfaces with a solvent (AMM 20-30-88/201).

s 844-007

(2) Apply alodine and one coat BMS 10-11 type I primer to all bare aluminum surfaces including the faying surface of the fuselage skin.

s 824-008

(3) Apply a coat of strippable parting agent to all faying surfaces of the threshold, the scuff plates and the fuselage skin. (AMM 51-31-01/201)

EFFECTIVITY-

53-13-02

ALL



s 824-009

(4) Apply the BMS 3-23 type 2 corrosion inhibiting compound to the entire area under the threshold.

NOTE: The area in contact with the scuff plate should be masked to prevent exposure to the corrosion-inhibiting compounds so the sealant will adhere.

s 394-010

(5) Prepack sealant BMS 5-95 to the cap, mating surface and the skin mating surface and install scuff plates with fasteners.

NOTE: It is critical that sufficient sealant be prepacked into the scuff plates to completely fill the gap between the scuff plates and the fuselage skin. Continuous sealant squeeze-out is required along all gaps.

s 394-011

(6) Remove excess sealant from the gap and the edge after squeeze-out has stopped.

EFFECTIVITY-

ALL

53-13-02



FORWARD WING-TO-BODY FAIRING PANELS - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the forward wing-to-body fairing panels.
 - (2) The second task is the installation of the forward wing-to-body fairing panels.
- B. All fairing panels are installed almost the same. Clearances between the fairing panels and the fuselage skin (external fairing panels) are sealed with a sealant for aerodynamic smoothness.

TASK 53-36-01-004-001

- 2. Remove the Forward Wing-to-Body Fairing Panels
 - A. Equipment
 - (1) Sealing compound cutting tool hardwood or plexiglass; commercially available
 - B. References
 - (1) 51-41-00/201, Airframe Drainage
 - C. Access
 - (1) Location Zones

191/192 Wing to Body - Forward Upper Half 193/194 Wing to Body - Forward Lower Half

- (2) Access Panels
 - (a) 193BL/194BR Ram-Air Inlet Door Access Door
 - (b) 193HL/194ER ECS Access Door
- D. Prepare for the removal.

s 844-027

(1) Supply electrical power (AMM 24-22-00/201).

S 864-029

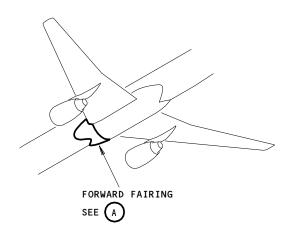
- (2) Turn the applicable (L or R) PACK selector, on the pilot's overhead panel, P5, to the OFF position.
 - (a) Make sure the PACK OFF light comes on.

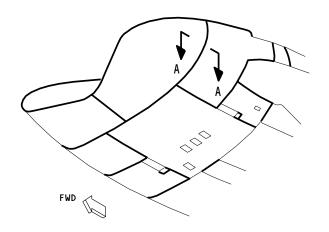
EFFECTIVITY-

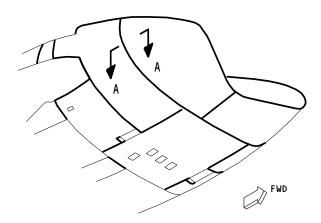
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ALL



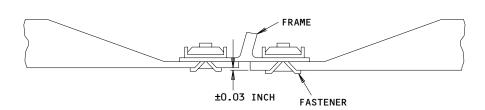






FORWARD FAIRING
(LEFT SIDE)





PANEL INSTALLATION (EXAMPLE) A-A

NOTE: MAKE SURE YOU APPLY SEALANT ONLY TO THESE AREAS (THICK LINES).
THE CLEARANCES BETWEEN THE ADJACENT PANELS ARE NECESSARY TO
DRAIN THE WATER OUT OF THE FORWARD FAIRING.

Forward Wing/Body Fairing Figure 401

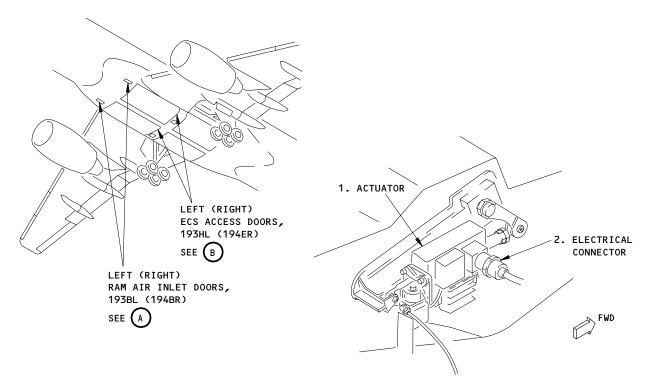
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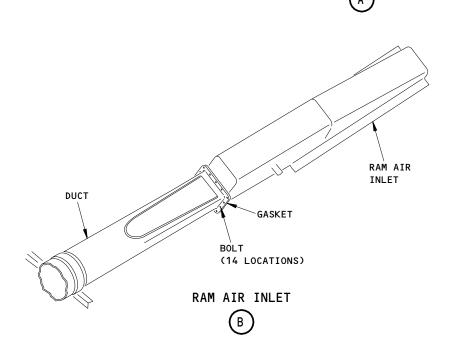
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RAM AIR INLET DOOR ACTUATOR



Ram Air Inlet Door Actuator Figure 402

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(b) Put a DO NOT OPERATE tag on the selector.

s 864-030

- (3) Open these circuit breakers and attach DO NOT CLOSE tags:
 - (a) On the overhead circuit breaker panel, P11:
 - 1) 11A13, AIR COND PACK LEFT AUTO CONT
 - 2) 11A15, AIR COND PACK RIGHT STANDBY CONT
 - 3) 11A26, AIR COND PACK LEFT STANDBY CONT
 - 4) 11A28, AIR COND PACK RIGHT AUTO CONT
 - 5) 11M11, LEFT PACK AUTO POWER
 - 6) 11M15, RIGHT PACK STANDBY POWER
 - 7) 11M19, RIGHT PACK AUTO POWER
 - 8) 11M24, LEFT PACK STANDBY POWER
- E. Procedure

s 104-002

CAUTION: BE CAREFUL WHEN YOU REMOVE THE SEALANT FROM THE EXTERNAL WING-TO-BODY FAIRING PANELS. IF YOU ARE NOT CAREFUL, DAMAGE TO THE FUSELAGE SKIN CAN OCCUR.

(1) Remove the sealant between the fuselage and the forward fairing panel.

NOTE: For the sealant removal between adjacent forward fairing panels, refer to AMM 51-41-00.

s 014-031

(2) Open the applicable (left or right) access door for the Ram-Air inlet, 193BL or 194BR (AMM 06-41-00/201).

s 024-032

(3) Diconnect the electrical connector (2) from the actuator (1).

S 014-043

(4) Open the applicable (left or right) access door for the ECS bay, 193HL or 194ER (AMM 06-41-00/201).

s 024-033

(5) Disconnect the duct from the Ram-Air Inlet Door Housing at station 857.5 by removing the gasket and the (14) bolts and flat washers.(a) Tag the washers, bolts and the gasket so they are not lost.

EFFECTIVITY-

53-36-01

ALL



s 864-015

(6) Remove the fasteners which attach the fairing to the structure.

NOTE: Different types of fasteners are used to hold the fairing panels. Stainless steel bolts and dimpled washers are used to hold the fairing panel and also to provide electrical bonding. Make sure these fasteners will be reinstalled in the same location(s) when repair/maintenance is completed.

S 024-004

(7) Remove the forward wing-to-body fairing panel.

TASK 53-36-01-404-005

- 3. <u>Install the Forward Wing-to-Body Fairing Panels</u>
 - A. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) B00148 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - B. References
 - (1) 51-31-01/201, Seals and Sealing
 - (2) 51-41-00/201, Airframe Drainage
 - C. Access
 - (1) Location Zones

191/192 Wing to Body - Forward Upper Half 193/194 Wing to Body - Forward Lower Half

- (2) Access Panels
 - (a) 193HL/194ER ECS Access Door
 - (b) 193BL/194BR Ram-Air Inlet Door Access Door
- D. Procedure

s 214-006

(1) Examine the mating surfaces on the structure and the fairing panel. Ensure all mating surfaces are clean and free from any contamination or paint.

EFFECTIVITY-

53-36-01

ALL



s 394-007

(2) Apply the corrosion preventive compound to all the mating surfaces of the airplane structure that touch the wing-to-body fairing panels.

s 214-008

(3) Examine the fasteners and the area around the fastener holes to make sure they are clean and free of any contamination.

<u>NOTE</u>: Stainless steel fasteners are usually at four locations per panel, one at each corner.

s 114-023

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(4) Use solvent, Series 95 (AMM 20-30-95), to clean the fasteners. Use solvent, Series 95 (AMM 20-30-95), to clean the fairing panel areas that are around the fastener holes.

s 164-018

(5) Remove any paint or primer covering the conductive surface at the panel in the area underneath the dimpled washer.

S 864-019

- (6) If the conductive surface is flame sprayed aluminum, do the following:
 - (a) Apply alodine over the exposed aluminum.

EFFECTIVITY-

53-36-01



- (b) Install fasteners (stainless bolt and dimpled washer).
- (c) Measure the resistance.

NOTE: Maximum resistance shall not exceed 0.5 OHMs.

(d) Touch up the finish.

s 864-020

- (7) If the conductive surface is anti-static coating, do the following:
 - (a) Apply anti-static paint over exposed area.
 - (b) Install fasteners (stainless bolt and dimpled washer).
 - (c) Measure the resistance.

NOTE: Maximum resistance shall not exceed 300,000 OHMs.

(d) Touch up the finish.

<u>NOTE</u>: Do not apply anti-static paint to the flame sprayed aluminum.

s 424-009

(8) Install the fairing to the structure with the fasteners.

NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.

(a) Torque the stainless steel (bonding) fasteners to 35-45 lb-in.

EFFECTIVITY-

53-36-01



s 214-010

(9) Make sure the flushness between the panels is ± -0.03 inch (Fig. 401).

s 764-021

(10) Measure the electrical bonding resistance between the conductive fasteners and the conductive surface of the fairing panel.

NOTE: Maximum resistance shall not exceed 300,000 OHMs for the conductive paint or 0.5 OHMs for flame sprayed aluminum.

Make the resistance measurement prior to painting the panel and the mounting hardware. If the fairing panels and bolts have been covered with paint, you may not get a correct reading. In this case, use two sharp probes and make sure the probes contact the conductive surface on the panel and the structure, then measure the resistance.

s 424-036

(11) Install the gasket and attach the duct to the Ram-Air inlet door housing at station 857.5 by installing the (14) bolts and flat washers.

S 914-044

(12) Close the (left or right) access door for the ECS bay, 193HL or 194ER (AMM 06-41-00/201).

s 424-037

(13) Connect the electrical connector (2) to the actuator (1).

s 414-038

(14) Close the applicable (left or right) access door for the Ram-Air inlet, 193BL or 194BR (AMM 06-41-00/201).

s 914-039

ALL

(15) Remove the DO NOT OPERATE tag from the applicable (left or right) PACK Selector on the P5 Panel.

EFFECTIVITY-

53-36-01



s 914-040

- (16) Remove the DO NOT CLOSE tags and close these circuit breakers:
 - a) On the overhead circuit breaker panel, P11:
 - 1) 11A13, AIR COND PACK LEFT AUTO CONT
 - 2) 11A15, AIR COND PACK RIGHT STANDBY CONT
 - 3) 11A26, AIR COND PACK LEFT STANDBY CONT
 - 4) 11A28, AIR COND PACK RIGHT AUTO CONT
 - 5) 11M11, LEFT PACK AUTO POWER
 - 6) 11M15, RIGHT PACK STANDBY POWER
 - 7) 11M19, RIGHT PACK AUTO POWER
 - 8) 11M24, LEFT PACK STANDBY POWER

s 704-041

(17) Do the System Test on the Ram-Air inlet door (AMM 21-53-00/501).

S 114-024

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(18) Use solvent, Series 95 (AMM 20-30-95), to clean the area you will seal.

s 394-012

(19) Apply the sealant to the fairing panels as shown (Fig. 401).

NOTE: Figure 401 shows sealing requirements for the installation of the fairing. For complete fairing sealing requirements, refer to (AMM 51-41-00/201).

EFFECTIVITY-

53-36-01



MID WING-TO-BODY FAIRING - REMOVAL/INSTALLATION

- 1. General
 - A. This procedure contains two tasks:
 - (1) A task to remove the mid wing-to-body fairing
 - (2) A task to install the mid wing-to-body fairing.

TASK 53-36-02-004-001

- 2. Remove the Mid Wing-to-Body Fairing
 - A. Equipment
 - (1) Sealing compound cutting tool nylon: commercially available
 - B. Access
 - (1) Location Zones

191/192 Wing to Body - Forward Upper Half

C. Procedure

s 104-003

CAUTION: BE CAREFUL WHEN YOU REMOVE THE SEALANT FROM THE EXTERNAL WING-TO-BODY FAIRING PANELS. IF YOU ARE NOT CAREFUL, DAMAGE TO THE FUSELAGE SKIN CAN OCCUR.

(1) Remove the sealant from the mid wing-to-body fairing that is to be removed.

s 024-005

(2) Remove the mid wing-to-body fairing (Fig. 401).

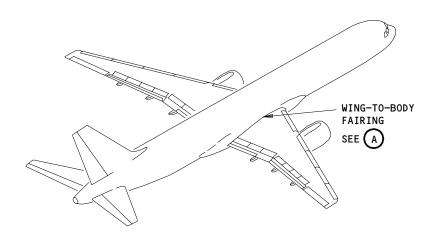
TASK 53-36-02-404-006

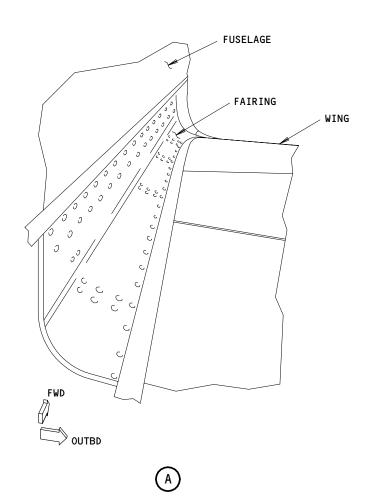
- 3. <u>Install the Forward Wing-to-Body Fairing Panels</u>
 - A. Consumable Materials
 - (1) G02186 Foam Rubber BMS1-68
 - (2) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - (3) A00552 Adhesive BAC 5010 Type 60
 - (4) A00553 Adhesive BAC 5010 Type 68

EFFECTIVITY-

53-36-02







Wing-to-Body Fairing Figure 401

ALL

ALL

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- B. References
 - (1) AMM 20-30-95/201, Airplane Structure Cleaning Solvents (Series 95)
- C. Access
 - (1) Location Zones

191/192 Wing to Body - Forward Upper Half

D. Procedure

s 214-010

 Look to make sure the vapor seal in the fairing support is satisfactory.

NOTE: There is foam rubber on the fairing and on the structure. Both of these align to make the vapor barrier.

- (a) Do these steps to replace any foam rubber parts that have damage or are not there:
 - 1) Cut a piece of foam rubber that is the same as the part that you must replace.
 - 2) Use the BAC 5010 Type 68 adhesive to attach the parts to the structure.

s 424-011

(2) Align the fairing with the fastener holes and install the bolts and washers.

NOTE: Some fastener locations do not use a washer. Only install a washer at locations that have a hole countersunk for a washer.

s 424-012

(3) Make sure the rubber seal is tightly against the wing.

NOTE: This seal can make a noise in flight if it is not against the wing tightly.

s 394-013

(4) Do these steps if the seal is not against the wing tightly:(a) Remove the fairing.

EFFECTIVITY-

53-36-02



WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY

DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER

HANDLING PROCEDURES.

(b) Use solvent, Series 95 (AMM 20-30-95/201), to clean the surface of the wing and the surface of the fairing.

s 164-017

(5) Remove any paint or primer covering the conductive surface at the panel in the area underneath the dimpled washer.

s 864-018

- (6) If the conductive surface is flame sprayed aluminum, do the following:
 - (a) Apply alodine over the exposed aluminum.
 - (b) Install fasteners (stainless bolt and dimpled washer).
 - (c) Measure the resistance.
 - (d) Make sure the maximum resistance is not moe than 0.5 OHMs.
 - (e) Touch up the finish.

s 864-019

- (7) If the conductive surface is anti-static coating, do the following:
 - (a) Apply anti-static paint over exposed area.
 - (b) Install fasteners (stainless bolt and dimpled washer).
 - (c) Measure the resistance.
 - (d) Make sure the maximum resistance is not more than 300,000 OHMs.
 - (e) Touch up the finish.

<u>NOTE</u>: Do not apply anti-staic paint to the flame sprayed aluminum.

s 424-014

- (8) Install the fasteners which attach the fairing to the structure.
 - NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.

EFFECTIVITY-

53-36-02

ALL



S 214-015

(9) Make sure the flushness between the panels is ± -0.03 inch (Fig. 401).

s 284-020

(10) Measure the electrical bonding resistance between the conductive fasteners and the conductive surface of the fairing panel.

NOTE: Maximum resistance shall not exceed 300,000 OHMs for the conductive paint. or 0.5 OHMs for flame sprayed aluminum.

Make the resistance measurement prior to painting the panel and the mounting hardware. If the fairing panels and bolts have been covered with paint, you may not get a correct reading. In this case, use two sharp probes and make sure the probes contact the conductive surface on the panel and the structure then measure the resistance.

- (a) Apply a layer of BAC 5010 Type 60 adhesive to the area of the seal that touches the wing.
- (b) Install the fairing.

EFFECTIVITY-

53-36-02



KEEL BEAM FAIRING PANEL SUPPORT RAILS - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the keel beam fairing panel support rails.
 - (2) The second task is the installation of the keel beam fairing panel support rails.

TASK 53-46-01-034-001

- 2. Remove the Keel Beam Fairing Panel Support Rails
 - A. Access
 - (1) Location Zones

139 Keel Beam - Forward Section

149 Keel Beam - Aft Section

(2) Access Panels

139AL Panel - Access - Keel Beam

139BL Panel - Access - Keel Beam

139CL Panel - Access - Keel Beam

149AL Panel - Access - Keel Beam

149BL Panel - Access - Keel Beam

149CL Panel - Access - Keel Beam

149DL Panel - Access - Keel Beam

149EL Panel - Access - Keel Beam

B. Procedure (Fig. 401)

s 034-002

(1) Remove the fasteners from the appropriate keel beam fairing panels.

s 034-003

(2) Remove the keel beam fairing panels.

s 034-004

(3) Remove the nuts, bolts, washers and bushings from the end of the keel beam fairing panel support rail and the slotted hole in the keel beam support structure.

s 034-005

(4) Remove the nuts, bolts and washers from the other end of the keel beam fairing panel support rail and keel beam support structure.

s 034-006

(5) Remove the keel beam fairing panel support rail.

EFFECTIVITY-

53-46-01

ALL



TASK 53-46-01-424-007

- Install the Keel Beam Fairing Panel Support Rails
 - Access
 - (1) Location Zones

139 Keel Beam - Fwd Section 149 Keel Beam - Aft Section

(2) Access Panels

139AL Panel - Access - Keel Beam 139BL Panel - Access - Keel Beam 139CL Panel - Access - Keel Beam 149AL Panel - Access - Keel Beam 149BL Panel - Access - Keel Beam 149CL Panel - Access - Keel Beam 149DL Panel - Access - Keel Beam 149EL Panel - Access - Keel Beam

- B. Procedure (Fig. 401)
 - s 424-008
 - Put the fairing panel support rail into position below the keel

s 424-010

- (2) Install and seal the bolt threads per BAC5000, washers and nuts that attach the end of the keel beam fairing panel support rail to the holes that are not slotted in the keel beam support structure.
 - s 424-009

ALL

- CAUTION: DO NOT APPLY SEALANT AROUND THE BOLTS AND BUSHINGS THAT ATTACH THE END OF THE KEEL BEAM FAIRING PANEL SUPPORT RAIL TO THE SLOTTED HOLES IN THE KEEL BEAM SUPPORT STRUCTURE. THE HOLES IN THE SUPPORT STRUCTURE ARE SLOTTED TO ALLOW FOR SOME MOVEMENT OF THE SUPPORT RAIL DURING AIRPLANE SERVICE. SEALING THE SLOTTED HOLES CAN CAUSE DAMAGE TO THE KEEL BEAM SUPPORT RAIL AND KEEL BEAM FAIRING PANELS.
- Install the bushings, bolts, washers and nuts that attach the end of the keel beam fairing panel support rail to the slotted holes in the keel beam support structure. Do not seal the fasteners that go through the slotted holes.

EFFECTIVITY-

53-46-01



s 424-011

(4) Put the keel beam fairing panels into position below the support rails.

s 424-012

CAUTION: DO NOT APPLY SEALANT AROUND THE BOLTS THAT ATTACH THE KEEL BEAM FAIRING PANELS TO THE SLOTTED HOLES IN THE KEEL BEAM SUPPORT STRUCTURE. THE HOLES ARE SLOTTED TO ALLOW FOR MOVEMENT OF THE FAIRING PANELS DURING AIRPLANE SERVICE. SEALING THE SLOTTED HOLES CAN CAUSE DAMAGE TO THE KEEL BEAM FAIRING PANELS.

(5) Install the fasteners that attach the keel beam fairing panels to the slotted holes in the keel beam fairing support structure. Do not seal the fasteners that go through the slotted holes.

s 424-016

(6) Install but do not seal the remaining fasteners that attach the keel beam fairing panels to the keel beam support rails and support structure.

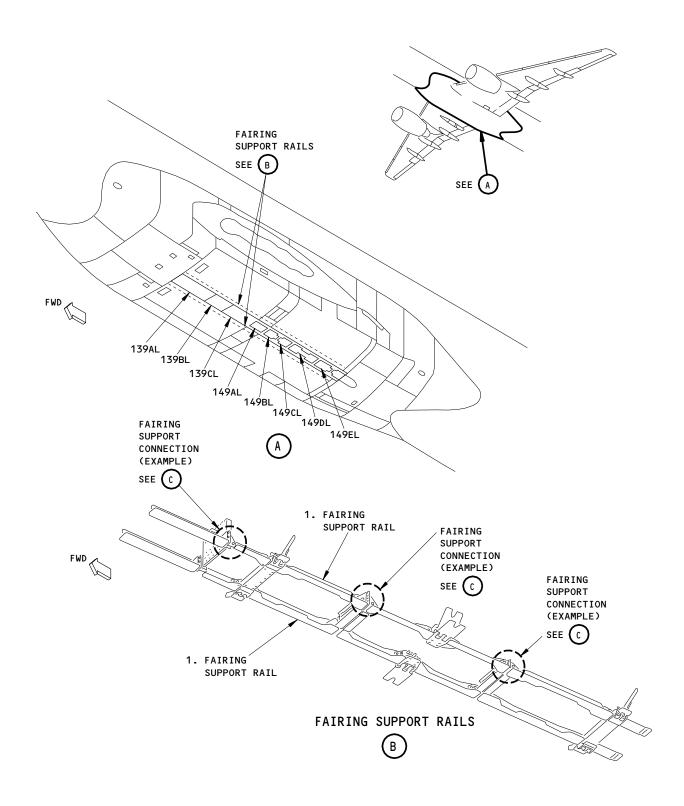
s 424-015

(7) Apply aerodynamic sealant to the fairing panels as required.

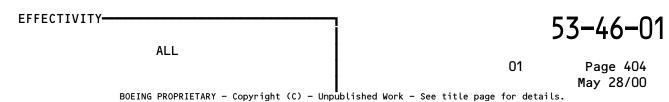
EFFECTIVITY-

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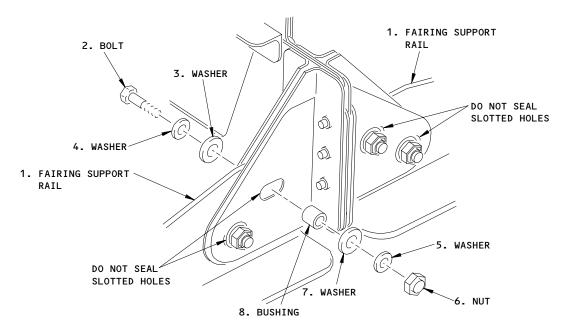




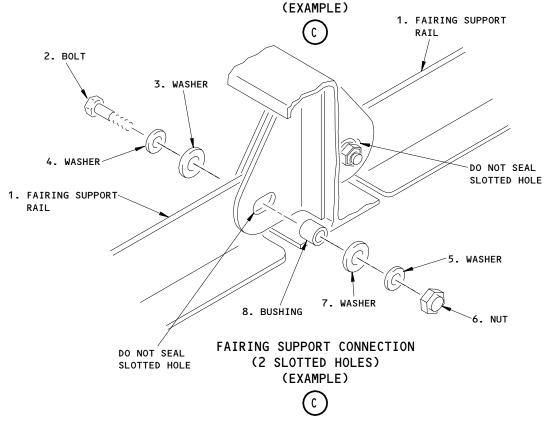
Keel Beam Fairing Support Rail Installation Figure 401 (Sheet 1)







FAIRING SUPPORT CONNECTION (4 SLOTTED HOLES)



Keel Beam Fairing Support Rail Installation Figure 401 (Sheet 2)

53-46-01

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AFT WING-TO-BODY FAIRING PANELS - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the aft wing-to-body fairing panels.
 - (2) The second task is the installation of the aft wing-to-body fairing panels.
- B. All the installations of the aft fairing panels are almost the same.
- C. The clearances between the aft fairing panels and the airplane structure (external fairing panels) are sealed for aerodynamic smoothness.

TASK 53-66-01-004-001

- 2. Remove the Aft Wing-to-Body Fairing Panels
 - A. Equipment
 - (1) Sealing compound cutting tool nylon: commercially available
 - B. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - C. References
 - (1) AMM 29-21-09/401, RAT Compartment Door
 - (2) AMM 51-31-01/201, Seals and Sealing
 - (3) AMM 51-41-00/201, Airframe Drainage
 - (4) AMM 52-49-05/401, Hydraulic Bay Access Door
 - (5) AMM 52-49-07/401, Aft Toilet Service Door
 - D. Access
 - (1) Location Zones

195/196 Wing to Body - Aft Upper Half 197/198 Wing to Body - Aft Lower Half

E. Procedure

s 104-002

CAUTION: BE CAREFUL WHEN YOU REMOVE THE SEALANT FROM THE EXTERNAL WING-TO-BODY FAIRING PANEL. IF YOU ARE NOT CAREFUL, DAMAGE TO THE FUSELAGE SKIN CAN OCCUR.

(1) Remove the sealant between the fuselage and the aft fairing panel.

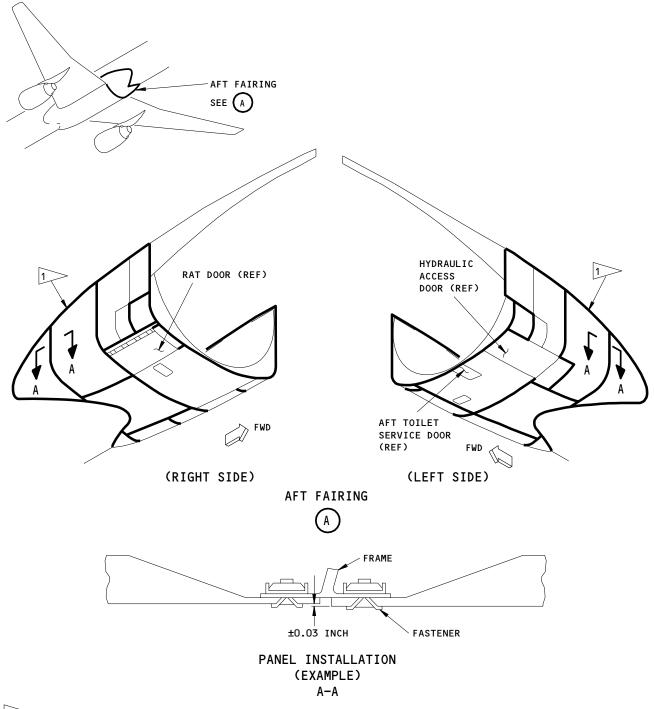
NOTE: For sealant removal from adjacent aft fairing panels, refer to AMM 51-41-00/201.

EFFECTIVITY-

53-66-01

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MAKE SURE YOU APPLY SEALANT ONLY TO THESE AREAS (THICK LINES).
THE CLEARANCES BETWEEN THE ADJACENT PANELS ARE NECESSARY TO
DRAIN THE WATER OUT OF THE AFT FAIRING. SEAL REQUIREMENTS FOR
FAIRING REMOVAL AND INSTALLATION ARE SHOWN. FOR COMPLETE FAIRING
SEALING REQUIREMENTS SEE (AMM 51-41-00/201).

Aft Wing/Body Fairing Figure 401

ALL

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s 024-003

(2) Remove the attachment fasteners on the aft wing-to-body fairing panel.

NOTE: Different types of fasteners are used to hold the fairing panels. Stainless steel bolts and dimpled washers are used to hold the fairing panel and also to provide electrical bonding. Make sure these fasteners will be reinstalled in the same locations when repair/maintenance is completed.

s 024-004

(3) Remove the aft wing-to-body fairing panel.

TASK 53-66-01-404-005

- Install the Aft Wing-to-Body Fairing Panels
 - A. Consumable Materials
 - (1) C00064 Clear Alodine 1000
 - (2) A00247 Sealant BMS 5-95 Class B
 - (3) B00148 Solvent Methyl Ethyl Ketone (MEK), TT-M-261
 - B. References
 - (1) AMM 29-21-09/401, RAT Compartment Door
 - (2) AMM 51-31-01/201, Seals and Sealing
 - (3) AMM 51-41-00/201, Airframe Drainage
 - (4) AMM 52-49-05/401, Hydraulic Bay Access Door
 - (5) AMM 52-49-07/401, Aft Toilet Service Door
 - C. Access
 - (1) Location Zones

195/196 Wing to Body - Aft Upper Half 197/198 Wing to Body - Aft Lower Half

D. Procedure

s 214-006

(1) Examine the mating surfaces on the structure and the aft wing-to-body fairing panel. Ensure all mating surfaces are clean and free from any contamination or painting.

s 214-007

(2) Examine the fasteners and the area around the fastener holes to make sure they are clean and free of any contamination.

EFFECTIVITY-

53-66-01

ALL



s 114-018

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(3) Use solvent, Series 95 (AMM 20-30-95/201), to clean the fasteners. Use solvent, Series 95 (AMM 20-30-95/201), to clean the fairing panel areas that are around the fastener holes.

s 164-013

(4) Remove any paint or primer covering the conductive surface at the panel in the area underneath the dimpled washer.

S 864-014

- (5) If the conductive surface is flame sprayed aluminum, do the following:
 - (a) Apply alodine over the exposed aluminum.
 - (b) Install fasteners (stainless steel bolt and dimpled washer).
 - (c) Measure the resistance.

NOTE: Maximum resistance shall not exceed 0.5 OHMs.

(d) Touch up the finish.

S 864-015

- (6) If the conductive surface is anti-static coating, do the following:
 - (a) Apply anti-static paint over the exposed area
 - (b) Install the fasteners (stainless bolt and dimpled washer).
 - (c) Measure the resistance.

NOTE: Maximum resistance shall not exceed 300,0000 OHMs.

s 424-009

- (7) Install the fasteners which attach the fairing to the structure.
 - NOTE: Make sure the stainless steel bolts and dimpled washers are installed at the same locations on the fairing panel as they were prior to removal of the panel. Installing different hardware in these locations may result in unacceptable electrical bonding.

Refer to the IPC to find the type of coating for the installed fairing. Usually, fairings below WL 130 have flamesprayed aluminum coatings and fairings above WL 130 have anti-static coatings.

(a) Torque stainless steel (bonding) fasteners to 35-45 lb-in.

ALL

53-66-01



s 224-010

(8) Measure the clearance between the fairing panels (View A-A, Fig. 401).

s 764-016

(9) Measure the electrical bonding resistance between the conductive fasteners and the conductive swrface of the fairing panel.

NOTE: Maximum resistance shall not exceed 300,000 OHMs for the conductive paint, or 0.5 OHMs for the flame sprayed aluminum.

NOTE: Make the resistance measurement prior to painting the panel and the mounting hardware. If the fairing panels and bolts have been covered with paint, you may not get a correct reading. In this case, use two sharp probes and make sure the probes contact the conductive surface on the panel and the structure then measure the resistance.

s 114-019

WARNING: DO NOT GET SOLVENTS IN YOUR MOUTH OR EYES, OR ON YOUR SKIN. DO NOT BREATHE THE FUMES FROM SOLVENTS. SOLVENTS ARE HAZARDOUS MATERIALS. REFER TO PRODUCT MATERIAL SAFETY DATA SHEETS (MSDS) AND LOCAL REQUIREMENTS FOR PROPER HANDLING PROCEDURES.

(10) Clean the area you will seal with solvent, Series 95 (AMM 20-30-95/201).

s 394-012

(11) Apply the sealant to the fairing panels as shown (Fig. 401).

NOTE: Figure 401 shows sealing requirements for the installation of the fairing. For complete fairing sealing requirements, refer to (AMM 51-31-01/201) and (AMM 51-41-00/201).

EFFECTIVITY-

53-66-01

ALL



STABILIZER SEAL FAIRINGS - REMOVAL/INSTALLATION

1. General

- A. This procedure contains two tasks:
 - (1) The first task is the removal of the stabilizer seal fairing.
 - (2) The second task is the installation of the stabilizer seal fairing.
- B. The removal and installation procedures for upper and lower, left and right stabilizer seal fairings are equivalent.

TASK 53-86-01-004-001

- 2. Remove the Stabilizer Seal Fairings
 - A. References
 - (1) 24-22-00/201, Electrical Power Control
 - (2) 29-11-00/201, Main Hydraulic Systems
 - B. Access
 - (1) Location Zone

310 Fuselage - Body Section 48

C. Procedure

s 864-002

WARNING: KEEP PERSONS AND EQUIPMENT AWAY FROM THE AREA THAT IS BELOW THE HORIZONTAL STABILIZER. EQUIPMENT AND MATERIALS CAN ACCIDENTALLY FALL AND CAUSE INJURY OR DAMAGE.

(1) Supply electrical power (Ref 24-22-00).

s 864-003

- (2) Put these switches that are on the quadrant stand panel, P10, to the CUTOUT position and attach DO-NOT-OPERATE tags:
 - (a) R STAB TRIM SHUTOFF
 - (b) C STAB TRIM SHUTOFF

S 864-004

- (3) Open these circuit breakers on the overhead circuit breaker panel, P11, and attach DO-NOT-CLOSE tags:
 - (a) 11C12, STAB TRIM SHUTOFF LEFT
 - (b) 11C13, STAB TRIM SHUTOFF RIGHT

s 864-005

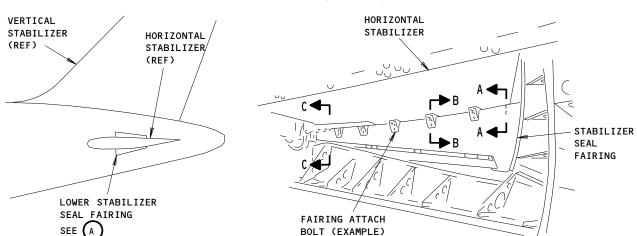
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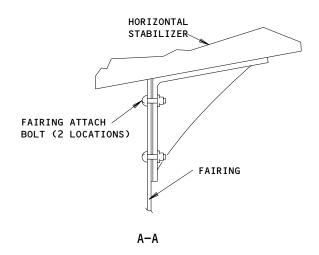
(4) Remove the hydraulic power (Ref 29-11-00).

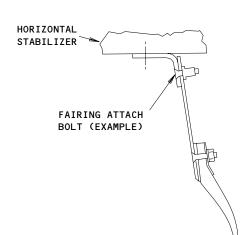
EFFECTIVITY-

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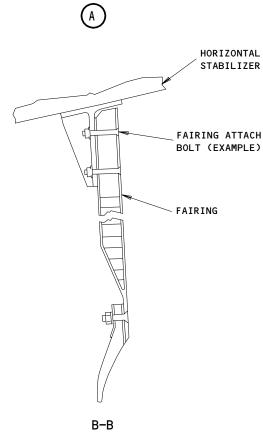


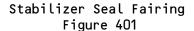


C-C



LOWER STABILIZER SEAL FAIRING (LEFT FAIRING SHOWN)





53-86-01

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s 024-018

CAUTION: BE CAREFUL WHEN YOU REMOVE THE STABILIZER SEAL FAIRING. IF YOU ARE NOT CAREFUL, SCRATCHES AND OTHER DAMAGE CAN OCCUR TO THE AIRPLANE STRUCTURE.

(5) Remove the bolts that attach the fairing to the horizontal stabilizer (Fig. 401).

s 024-007

(6) Remove the stabilizer seal fairing.

TASK 53-86-01-404-008

- 3. Install the Stabilizer Seal Fairing
 - A. Consumable Materials
 - (1) COO308 Compound Corrosion Preventive, MIL-C-11796, Class 3
 - B. References
 - (1) 24-22-00/201, Electrical Power Control
 - (2) 29-11-00/201, Main Hydraulic Systems
 - C. Access
 - (1) Location Zone

310 Fuselage - Body Section 48

- D. Procedure
 - s 394-009
 - (1) Apply the corrosion preventive compound on the bolts.

s 424-019

- CAUTION: BE CAREFUL WHEN YOU INSTALL THE STABILIZER SEAL FAIRING. IF YOU ARE NOT CAREFUL, SCRATCHES AND OTHER DAMAGE CAN OCCUR TO THE AIRPLANE STRUCTURE.
- (2) Put the stabilizer seal fairing in position, insuring that the leading edge of the blade is inside of the fuselage guide and then install the bolts.

s 864-011

- (3) Remove the DO-NOT-CLOSE tags and close these circuit breakers on the P11 panel:
 - (a) 11C12, STAB TRIM SHUTOFF LEFT
 - (b) 11C13, STAB TRIM SHUTOFF RIGHT

s 864-012

ALL

- (4) Remove DO-NOT-OPERATE tags and put these switches on the P10 panel to the NORM position.
 - (a) R STAB TRIM SHUTOFF

EFFECTIVITY-

53-86-01



(b) C STAB TRIM SHUTOFF

S 864-013

WARNING: KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES WHEN HYDRAULIC POWER IS SUPPLIED. THE HORIZONTAL STABILIZER IS A FULLY POWERED SURFACE. INJURY TO A PERSON OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

(5) Supply hydraulic power (Ref 29-11-00).

s 864-014

(6) Operate the horizontal stabilizer through its full range of travel.

S 224-017

- (7) Measure the clearance between the stabilizer fairing seals and the fuselage.
 - (a) The clearance from the edge of the seal retainer to the exterior surface of the fuselage should be 0.64 +/-0.10 inch.

S 864-015

(8) Remove the hydraulic power if it is not necessary (Ref 29-11-00).

s 864-016

(9) Remove the electrical power if it is not necessary (Ref 24-22-00).

EFFECTIVITY-

53-86-01

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