AIR-BLEED LINE O-RINGS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

   A. This section gives the procedures for the typical removal and installation of the air-bleed line O-ring.

   B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
36-11-10-000-801-A	AIR-BLEED LINE PAIRS OF O-RINGS - REMOVAL	ALL
36-11-10-400-801-A	AIR-BLEED LINE PAIRS OF O-RINGS - INSTALLATION	ALL

TASK 36-11-10-000-801-A
EFFECTIVITY: ALL

2. AIR-BLEED LINE PAIRS OF O-RINGS - REMOVAL

A. General

(1) This task gives the instructions for the removal of the bleed line pair of O-rings.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-30-00/100	-
AMM MPP 06-41-01/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 25-23-01-000-801-A/400	-
AMM TASK 25-23-01-000-802-A/400	-
AMM TASK 36-11-09-000-801-A/400	FUSELAGE DUCT LINES - TYPICAL REMOVAL
AMM TASK 53-01-02-000-801-A/400	-
AMM TASK 53-01-02-000-802-A/400	-
AMM TASK 53-01-03-000-801-A/400	BAGGAGE-COMPARTMENT FLOOR PANELS - REMOVAL
S.B. 145-36-0048	-
S.B. 145-36-0049	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
193	193	Aft wing-to-fuselage fairing
194	194	RH side of wing-to-fuselage fairing
195	195	LH side of wing-to-fuselage fairing
261	261BF	Passenger floor panel
261	261DF	Passenger floor panel
262	262AF	Passenger floor panel
262	262BF	Passenger floor panel
262	262CF	Passenger floor panel
271	271AF	Floor panel of the baggage compartment
271	271BF	Floor panel of the baggage compartment
271	271BLW	Inside the baggage compartment
272	272DR	In the aft electronic compartment
272	272AF	Floor panel of the baggage compartment

(Continued)

ZONE	PANEL/DOOR	LOCATION
272	272BF	Floor panel of the baggage compartment
272	272CRW	Inside the baggage compartment
320	322	Dorsal fin
320	323	Vertical-Stabilizer Leading Edge
813	813	Baggage compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Flat nose pliers	To remove retaining ring	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	In and outside the aircraft

I. Preparation

SUBTASK 841-002-A

(1) De-energize the aircraft (AMM TASK 20-40-01-860-801-A/200).

(2) Remove access panel 272DR (AMM MPP 06-41-01/100).

(3) Open baggage compartment door 813 (AMM MPP 06-30-00/100).

(4) Remove sidewall linings 271BLW and 272CRW (AMM TASK 25-23-01-000-801-A/400, only for EMB-145 () models, and AMM TASK 25-23-01-000-802-A/400, only for EMB-135 () models, as applicable).

(5) On the EMB-145 () models, remove floor panels 271AF, 271BF,272AF, and 272BF (AMM TASK 53-01-03-000-801-A/400), 261BF, 261DF, 262AF, 262BF, and 262CF (AMM TASK 53-01-02-000-801-A/400), as applicable.

(6) On the EMB-135 () models, remove floor panels 271AF, 271BF,272AF, and 272BF (AMM TASK 53-01-03-000-801-A/400), 261DF, 262BF, and 262CF (AMM TASK 53-01-02-000-802-A/400), as applicable.

(7) Remove panels 193, 194 and 195 (AMM MPP 06-30-00/100).

(8) Remove dorsal-fin access panel 322 and the vertical-stabilizer leading edge access panel323 (AMM MPP 06-30-00/100), as applicable.

J. Removal (Figure 401)

SUBTASK 020-002-A

WARNING: DO NOT TOUCH THE BLEED-AIR SYSTEM DUCTS OR COMPONENTS IMMEDIATELY AFTER THE ENGINE OR APU STOPS, BECAUSE OF THE HIGH BLEED-AIR TEMPERATURE.

(1) For assemblages where a Gamah flange/clamp joint is used, refer to AMM TASK 36-11-09-000-801-A/400 to remove the Gamah joint O-rings. Refer to Figure 401, sheet 2, 3 and 4.

(2) For assemblages where a Gamah threaded coupling assembly is used, remove the Gamah coupling O-rings as follows: Refer to Figure 401, sheet 5 and 6.

NOTE: Refer to AMM TASK 36-11-09-000-801-A/400 if the removal of the duct is necessary.

(a) (For A/C POST-MOD. S.B. 145-36-0048 and/or A/C POST-MOD. S.B. 145-36-0049) Remove the blanket (REF.) from the protective sleeve (2).

(b) Remove and discard the cable tie-down straps (1) and (3).

(c) Remove the protective sleeve (2).

(d) Move the locking collar on the coupler (6) to the back end of the coupler to disengage the locking mechanism. The nut (4) can now be unthreaded in the normally.

(e) Remove the nut (4) from the coupler (6).

(f) Disengage the coupler (6) from the threads on the nut (4) and move it out of the O-rings (5) on the mating flange.

(g) Move the coupler (6) back from over the O-rings (5) at the tube flange.

(h) Remove and discard the O-rings (5).

NOTE: Refer to Figure 401, sheet 1, to see the system borders:
The even numbered joints from 2 to 24 are part of the RH pneumatic system, which ends at the cross bleed valve.
The odd numbered joints from 1 to 27 are part of the LH pneumatic system, which ends at the stab anti-icing valve (limited by the APU bleed-air check valve and the cross bleed valve).
The joints numbered 26, 28, and 30 are part of the APU pneumatic system, which starts at the APU bleed-air check valve and ends at the APU.

(3) For assemblages where a Gamah threaded coupling assembly is used, remove the retaining ring (Ref.), coupler (6), and nut (4) from the bleed duct, as follows: Refer to Figure 401, sheet 5.

(a) Move the locking collar on the coupler (6) to the back end of the flange.

(b) Use the flat nose pliers to pull and remove retaining ring (Ref.) from the cavity of coupler (6).

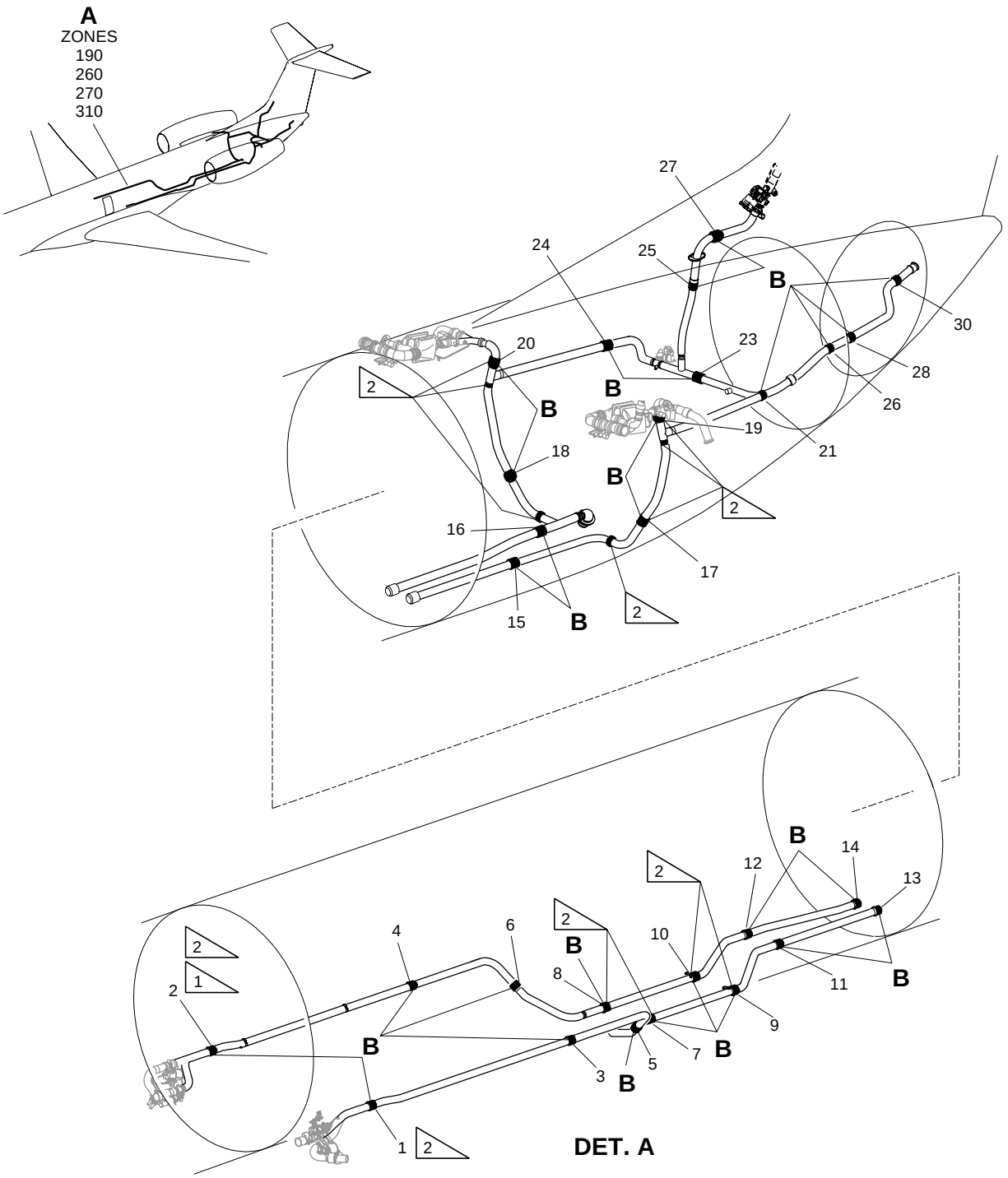
(c) Move the retaining ring (Ref.) over the flange, to remove the ring.

(d) Move the coupler (6) over the flange, to remove it.

(e) Repeat this steps above to nut side.

EFFECTIVITY: ALL

Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 1



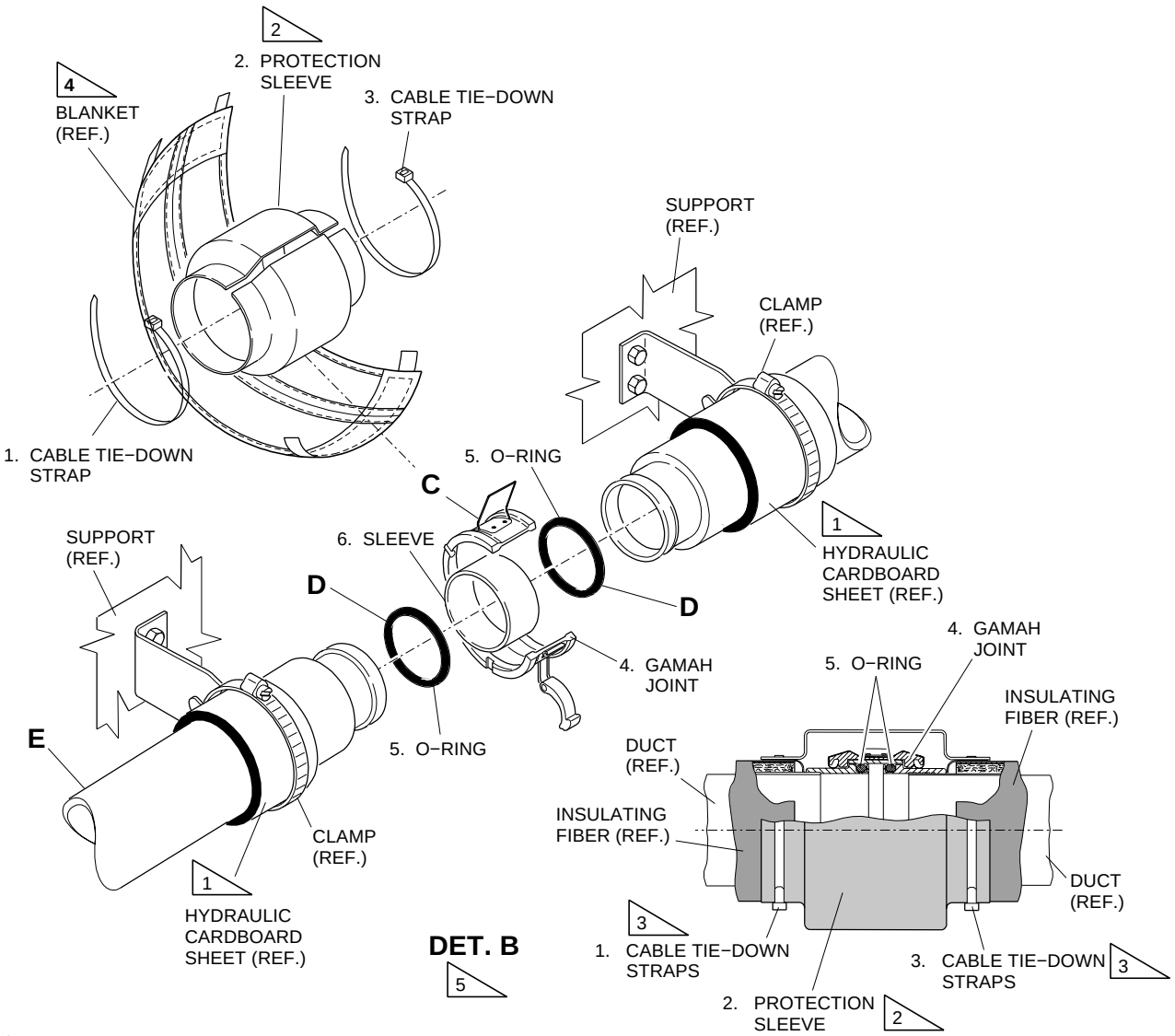
1 JOINTS NUMBERS ARE FOR REFERENCE ONLY

2 FOR AIRCRAFT POST−MOD. S.B. 145−36−0048.

EM145AMM360108F.DGN

EFFECTIVITY: ALL

Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 2



1 IT IS PERMITTED TO CORRECT A SMALL MISMATCH IN THE ASSEMBLY, ADD INSULATION FIBER LAYERS UNDER THE HYDRAULIC−CARDBOARD SHEET (TASK 36−11−09−300−801−A) UNTIL THE ALIGNMENT IS CORRECT.
MAKE SURE THAT THE V−CLAMPS ARE CORRECTLY INSTALLED. (REFER TO TASK 20−10−10−910−801−A).

2 MAKE SURE THAT THE OPENING OF THE PROTECTION SLEEVE OVERLAPPING IS TURNED TO THE THERMAL SWITCHES USED TO DETECT BLEED−AIR LEAKAGE.

3 MAKE SURE THAT THE TIE−DOWN STRAPS ARE ATTACHED OVER THE SLEEVES AND FIBER INSULATION.
IF NOT, THE DIRECT CONTACT WITH THE DUCT CAN CAUSE DAMAGE TO THE STRAPS AND BREAK THEM OUT.

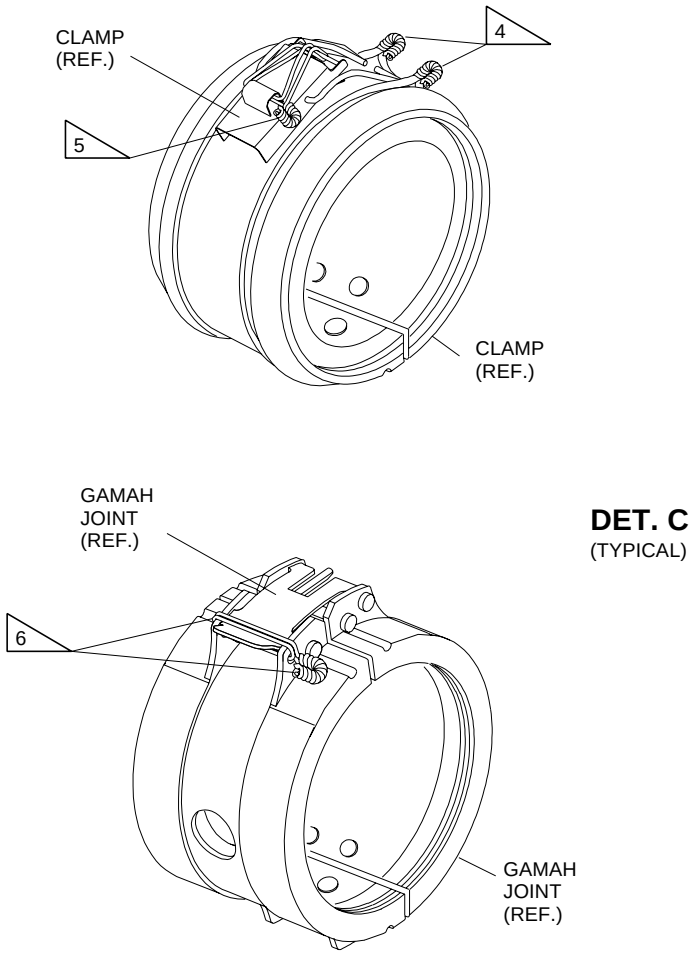
4 FOR A/C POST−MOD. S.B. 145−36−0048.
MAKE SURE THAT THE BLANKET LEAVES THE PROTECTIVE SLEEVE OPENING FREE AND THAT THE OPENING IS THE TURNED TO THE THERMAL SWITCH USED TO DETECT BLEED AIR LEAKAGE.

5 FOR AIRCRAFT WITH GAMAH FLANGE/CLAMP JOINT.

EM145AMM360107H.DGN

EFFECTIVITY: ALL

Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 3



DET. C
(TYPICAL)

4 (APPLICABLE TO GAMAH JOINT P/N CA33015)
– APPLY TWO TURNS OF LOCKING WIRE TO EACH POSITION

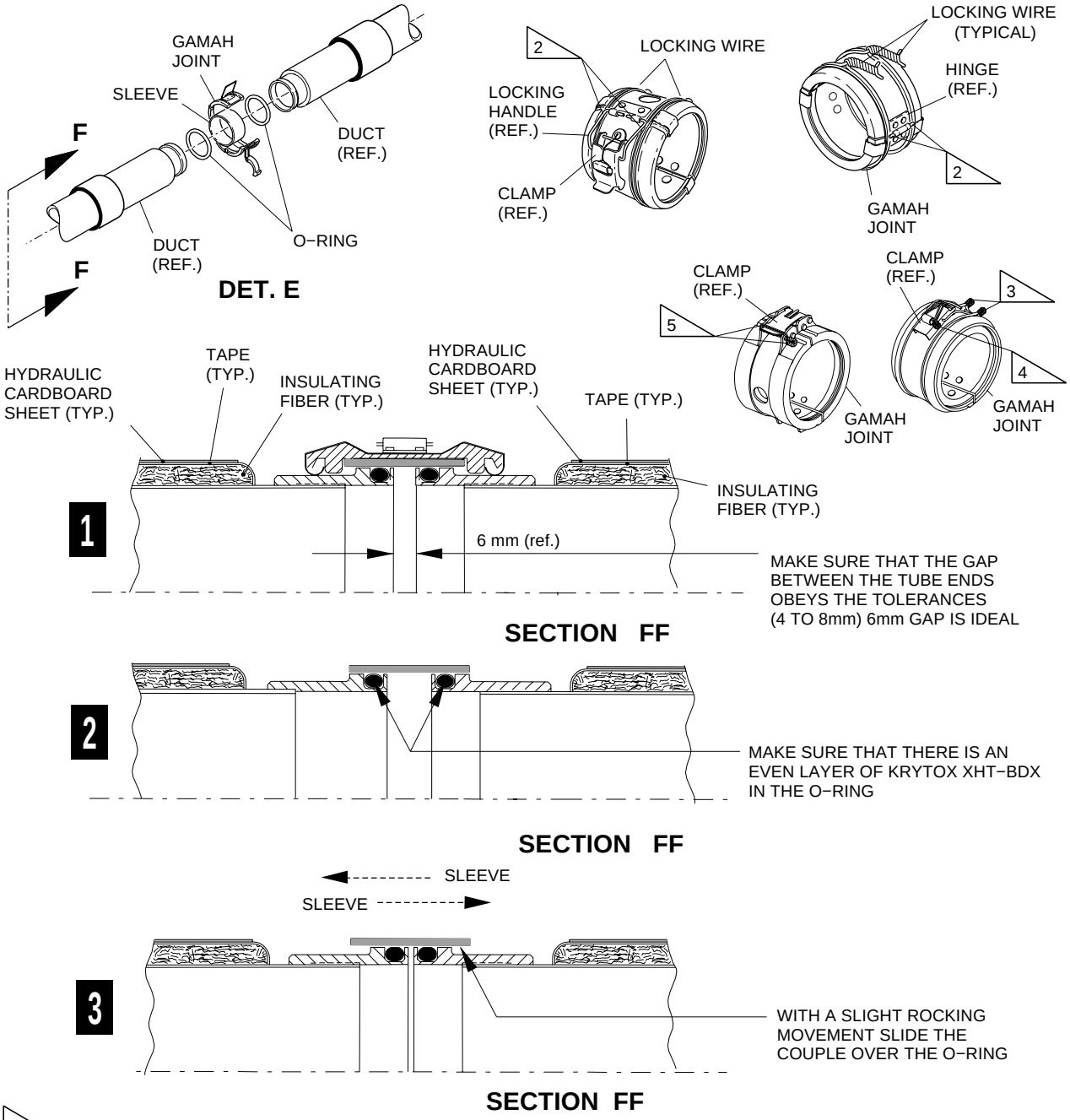
5 APPLY LOCKING WIRE UNDER CLAMP LOCKING ELEMENT

6 (APPLICABLE TO GAMAH JOINT P/N CA36015C)
– APPLY LOCKING WIRE UNDER CLAMP LOCKING ELEMENT

EM145AMM360470B.DGN

EFFECTIVITY: ALL

Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 4



1 APPLY TWO TURNS OF LOCKING WIRE TO EACH POSITION.

2 IF APPLICABLE, THE LOCKING WIRE STRAP MUST BE PUT UNDER THE HINGE PIN ENDS AND LOCKING HANDLE.

3 (APPLICABLE TO GAMAH JOINT P/N CA33015) APPLY TWO TURNS OF LOCKING WIRE TO EACH POSITION.

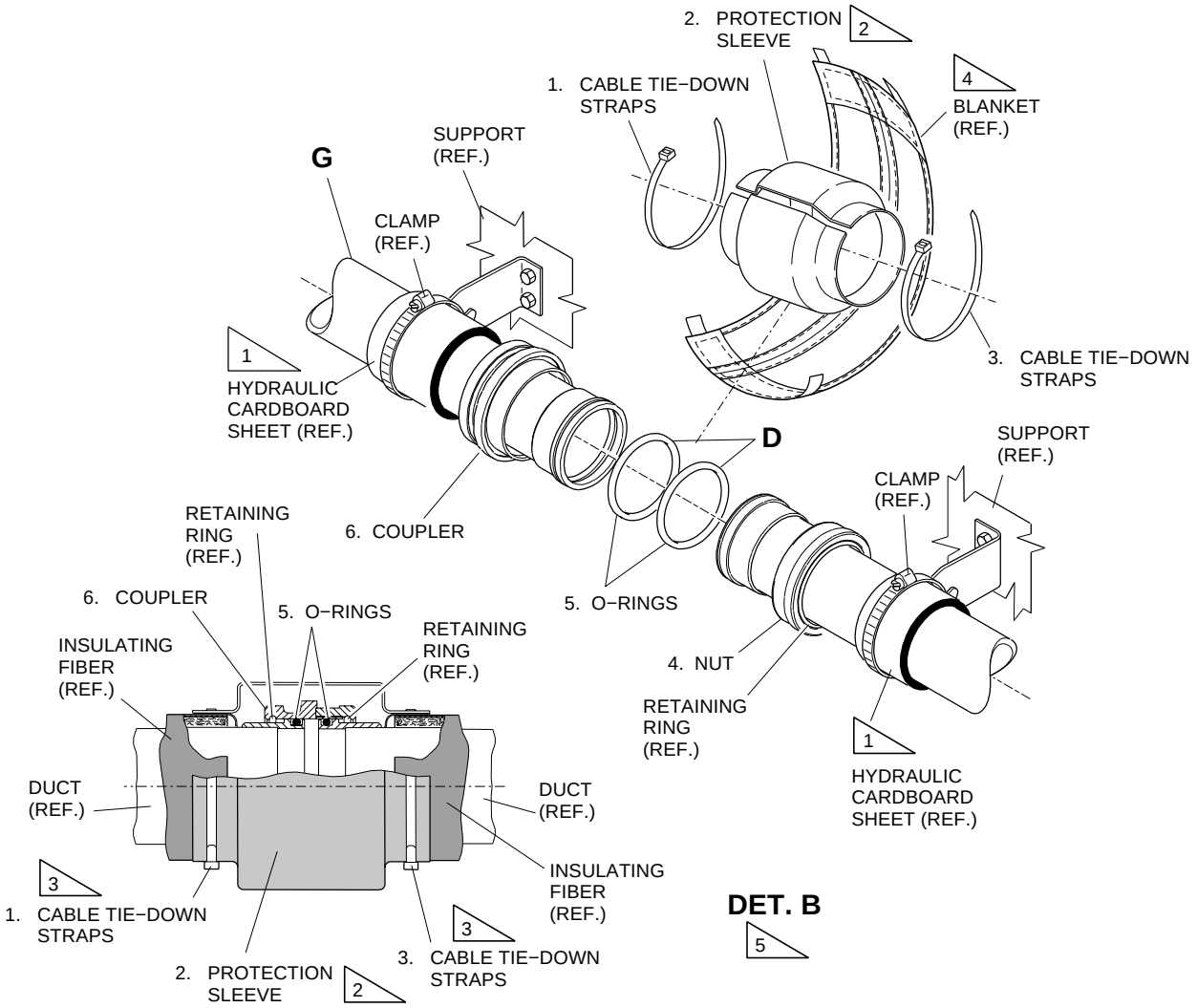
4 APPLY LOCKING WIRE UNDER CLAMP LOCKING ELEMENT

5 (APPLICABLE TO GAMAH JOINT P/N CA36015C)
– APPLY LOCKING WIRE UNDER CLAMP LOCKING ELEMENT.

EM145AMM360372E.DGN

EFFECTIVITY: ALL

Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 5



1 IT IS PERMITTED TO CORRECT A SMALL MISMATCH IN THE ASSEMBLY, ADD INSULATION FIBER LAYERS UNDER THE HYDRAULIC−CARDBOARD SHEET (TASK 36−11−09−300−801−A) UNTIL THE ALIGNMENT IS CORRECT.
MAKE SURE THAT THE V−CLAMPS ARE CORRECTLY INSTALLED. (REFER TO TASK 20−10−10−910−801−A).

2 MAKE SURE THAT THE OPENING OF THE PROTECTION SLEEVE OVERLAPPING IS TURNED TO THE THERMAL SWITCHES USED TO DETECT BLEED−AIR LEAKAGE.

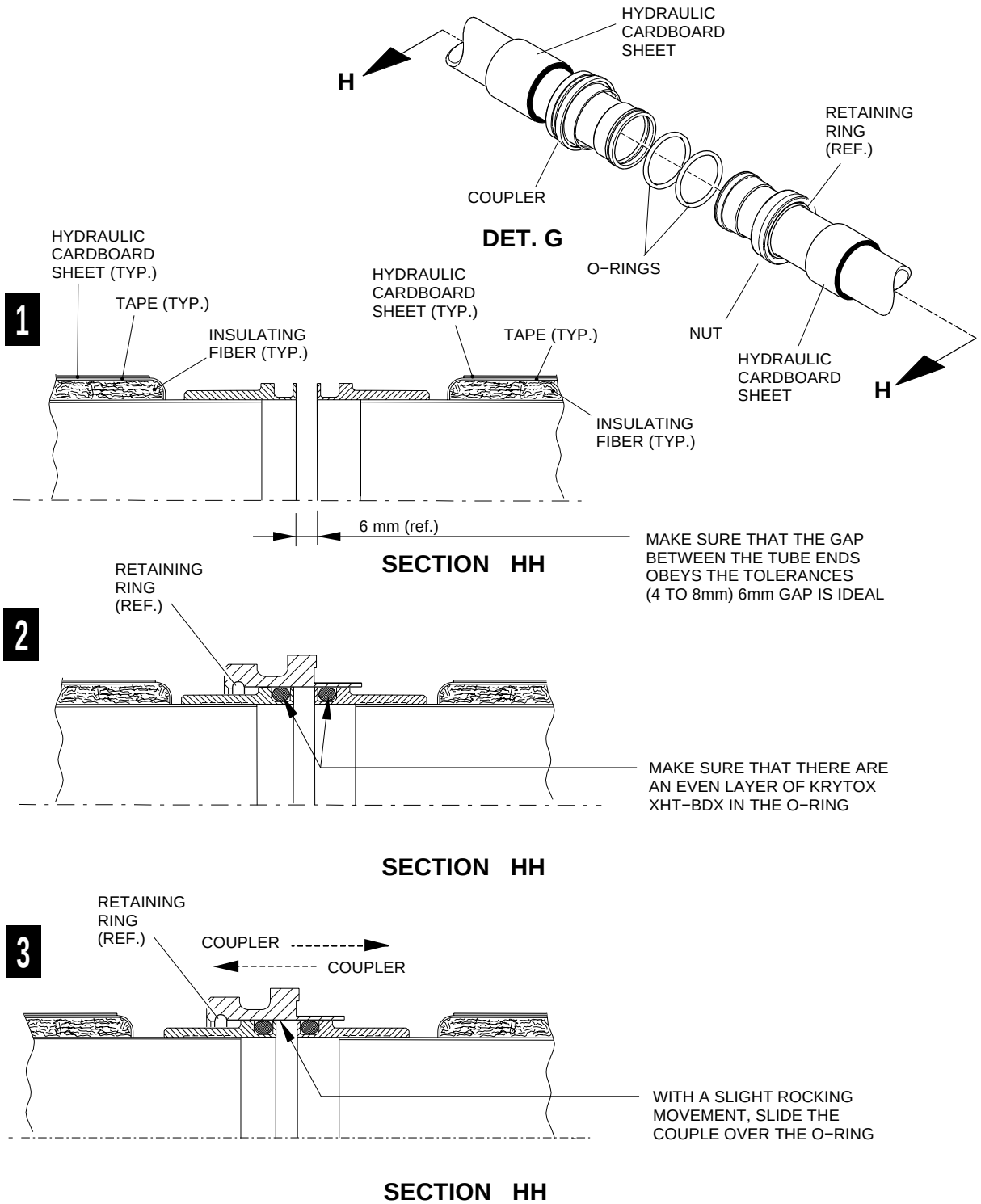
3 MAKE SURE THAT THE TIE−DOWN STRAPS ARE ATTACHED OVER THE SLEEVES AND FIBER INSULATION.
IF NOT, THE DIRECT CONTACT WITH THE DUCT CAN CAUSE DAMAGE TO THE STRAPS AND BREAK THEM OUT.

4 FOR A/C POST−MOD. S.B. 145−36−0048.
MAKE SURE THAT THE BLANKET LEAVES THE PROTECTIVE SLEEVE OPENING FREE AND THAT THE OPENING IS THE TURNED TO THE THERMAL SWITCH USED TO DETECT BLEED AIR LEAKAGE.

5 FOR AIRCRAFT WITH GAMAH THREADED COUPLING.

EM145AMM360109H.DGN

EFFECTIVITY: ALL
Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 6

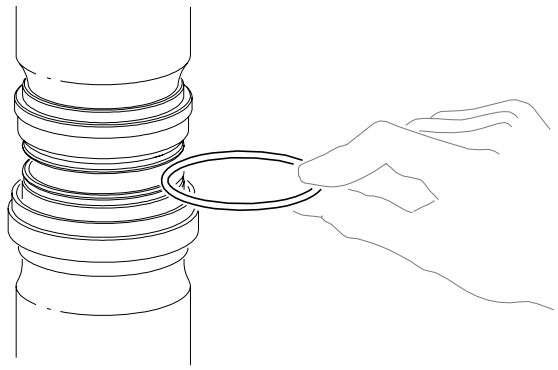


EM145AMM360371D.DGN

EFFECTIVITY: ALL

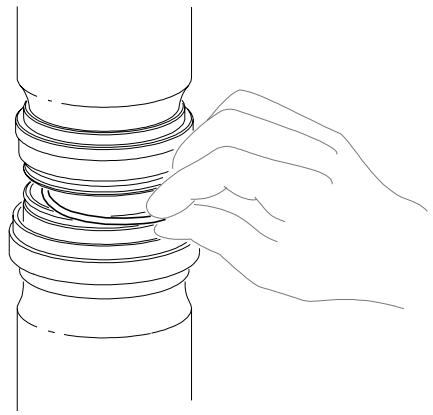
Bleed Line O-ring - Removal/Installation
Figure 401 - Sheet 7

1



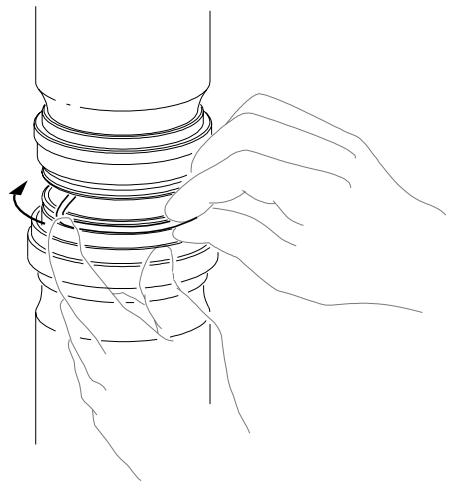
PUT THE O−RING IN THE SPACE BETWEEN THE FLANGES OF THE TWO DUCTS.

2



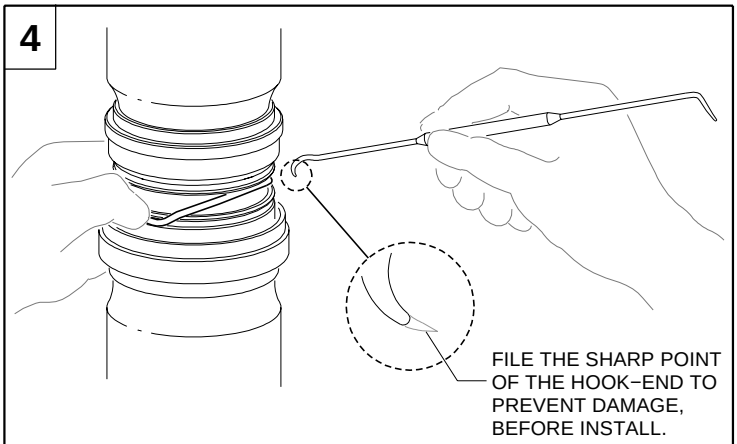
PARTIALLY INSTALL THE O−RING IN THE FRONT PORTION OF THE FLANGE GROOVE.

3



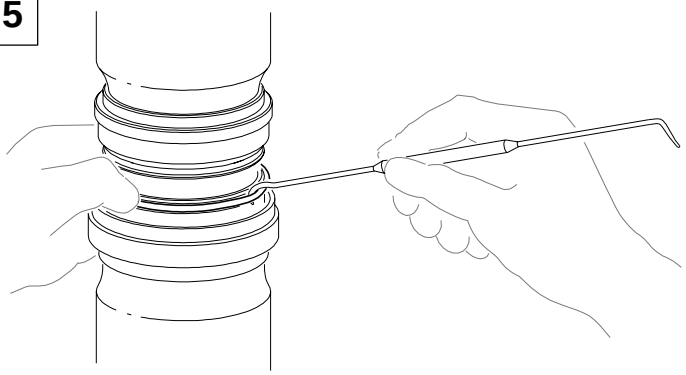
WITH YOUR INDEX FINGER, HOLD THE O−RING IN THE FRONT PORTION OF THE FLANGE AND TURN THE O−RING UNTIL IT PARTIALLY FITS INTO THE REAR PORTION OF THE FLANGE GROOVE.
NOTE: MAKE SURE THE O−RING DOES NOT GET TWISTED AS YOU TURN THE O−RING.
NOTE: KEEP YOUR INDEX FINGER HOLDING THE O−RING UNTIL THE END OF INSTALLATION.

4



INSERT THE TOOL BETWEEN THE FLANGES OF THE TWO DUCTS AND CAPTURE THE O−RING.

5



USE THE TOOL TO COMPLETELY INSERT THE O−RING INTO FLANGE GROOVE.

DET. D

(TYPICAL)

EM145AMM360540A.DGN

TASK 36-11-10-400-801-A
EFFECTIVITY: ALL

3. AIR-BLEED LINE PAIRS OF O-RINGS - INSTALLATION

A. General

(1) This task gives the instructions for the typical installation of the air-bleed line pair of O-rings.

B. References

REFERENCE	*DESIGNATION*
36-15-00, 36-16-00, 36-17-00, and 36-18-00	-
AMM MPP 06-30-00/100	-
AMM MPP 06-41-01/100	-
AMM TASK 20-10-10-910-801-A/200	V-BAND CLAMPS - INSTALLATION
AMM TASK 25-23-01-400-801-A/400	-
AMM TASK 25-23-01-400-802-A/400	-
AMM TASK 36-00-00-860-802-A/200	PNEUMATIC ENERGY - AIR BLEED THROUGH THE APU
AMM TASK 36-11-09-200-801-A/600	DUCT LINES OF THE BLEED SYSTEM - GENERAL VISUAL INSPECTION
AMM TASK 36-11-09-200-802-A/600	DUCT LINES OF THE AIR-BLEED SYSTEM - ALIGNMENT INSPECTION
AMM TASK 36-11-09-200-803-A/600	AIR-BLEED LINES - LEAK INSPECTION
AMM TASK 36-11-09-300-801-A/200	THERMAL INSULATION OF THE DUCT LINES OF AIR BLEED SYSTEM - REPAIR
AMM TASK 36-11-09-400-801-A/400	FUSELAGE DUCT LINES - TYPICAL INSTALLATION
AMM TASK 53-01-02-400-801-A/400	-
AMM TASK 53-01-02-400-802-A/400	-
AMM TASK 53-01-03-400-801-A/400	BAGGAGE-COMPARTMENT FLOOR PANELS - INSTALLATION
S.B. 145-36-0048	-
S.B. 145-36-0049	-
S.B.145-36-0022	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
193	193	Aft wing-to-fuselage fairing
194	194	RH side of wing-to-fuselage fairing
195	195	LH side of wing-to-fuselage fairing
261	261BF	Passenger floor panel
261	261DF	Passenger floor panel
262	262AF	Passenger floor panel
262	262BF	Passenger floor panel

(Continued)

ZONE	PANEL/DOOR	LOCATION
262	262CF	Passenger floor panel
271	271AF	Floor panel of the baggage compartment
271	271BF	Floor panel of the baggage compartment
271	271BLW	Inside the baggage compartment
272	272DR	In the aft electronic compartment
272	272AF	Floor panel of the baggage compartment
272	272BF	Floor panel of the baggage compartment
272	272CRW	Inside the baggage compartment
320	322	Dorsal fin
320	323	Vertical-stabilizer leading edge
813	813	Baggage compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
P/N GS2B or similar (commercially available and according to MS90387-1)	Hand banding tool (set tension to position 6)	To join protective sleeves with tie-down straps	
Commercially available	Hook-end O-ring installation tool	To help install the bleed duct O-ring	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Krytox XHT-BDX	Lubricant	AR
MS20995C020	Lockwire	AR
TT-I-735	Isopropyl alcohol	AR
Commercially available	Cloth	AR
Commercially available	Gauze	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	36-15-00, 36-16-00, 36-17-00, and 36-18-00	AR

(Continued)

ITEM	*IPC REFERENCE (VENDOR REFERENCE)*	*QTY*
Cable tie-down strap	36-15-00, 36-16-00, 36-17-00, and 36-18-00	AR

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	In and outside the aircraft

I. Preparation

SUBTASK 841-003-A

(1) Do a check on and clean the O-rings as follows:

(a) Make sure that the O-rings are removed from the original sealed package, immediately before the installation, to keep the cleanliness, aging control, and identification.

(b) Make sure that the O-rings to be installed are free of nicks, cuts, grooves, and/or other imperfections.

(c) Wipe the O-ring with a clean, lint-free cloth moist with isopropyl alcohol.

(d) Immediately wipe the O-ring dry with a clean, lint-free cloth. Do not permit the solvent to evaporate before you dry it.

(e) Visually examine the O-ring and do steps (c) and (d) again and again, until all foreign materials are removed.

(2) Clean and examine the sealing surfaces as follows:

(a) Clean all sealing surfaces (O-ring grooves and inside diameter of sleeves/couplers) before the seal installation. Use a clean, lint-free cloth moist with isopropyl alcohol.

(b) Wipe the final film of solvent off the sealing surface with a clean, lint-free cloth. Do not permit the solvent to evaporate.

(c) Before you clean the sealing surfaces, make sure that the O-ring grooves and adjacent surfaces are free of cuts, scratches, dents, distortions, or deposits of foreign material.

J. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: WEAR GLOVES WHEN YOU USE KRYTOX XHT-BDX AND DO NOT LET IT TOUCH YOUR SKIN OR EYES. IN CASE OF CONTACT WITH THIS GREASE, EMBRAER RECOMMENDS YOU TO DO THE USUAL HYGIENE PROCEDURES (FULLY WASH YOUR HANDS AND THE OTHER EXPOSED REGIONS OF THE SKIN).

CAUTION:
- DO NOT APPLY TOO MUCH LUBRICANT TO THE O-RING. APPLY VERY LIGHT COATING OF LUBRICANT ONLY. THIS IS TO PREVENT THE O-RING TO GET TWISTED DURING INSTALLATION PROCEDURE.
- DO NOT STRETCH THE PERFLUOROCARBON O-RING (POST-MOD S.B. 145-36-0015) NOT TO CAUSE ITS INSIDE DIAMETER TO BE EXPANDED BY MORE THAN 50% DURING INSTALLATION.
- MAKE SURE THAT THE O-RINGS ARE CORRECTLY SEATED AND NOT TWISTED OR DAMAGED.

(1) For assemblages where a Gamah flange/clamp joint is used, do as follows: Refer to (Figure 401), sheet 2, 3, 4 and 7.

NOTE:
- Refer to AMM TASK 36-11-09-400-801-A/400 for Gamah joint and duct installation.
- If necessary, replace the insulation fiber layers (AMM TASK 36-11-09-300-801-A/200).
- Make sure that the ducts are correctly aligned (AMM TASK 36-11-09-200-802-A/600).
- You can correct a small mismatch in the assembly. To do this, add insulation fiber layers under the hydraulic-cardboard sheet (AMM TASK 36-11-09-300-801-A/200) until the alignment is correct.
- Make sure that the V-clamps are correctly installed. (Refer to AMM TASK 20-10-10-910-801-A/200).

CAUTION: DO NOT APPLY TOO MUCH LUBRICANT TO THE O-RING. APPLY VERY LIGHT COATING OF LUBRICANT ONLY. THIS IS TO PREVENT THE O-RING TO GET TWISTED DURING INSTALLATION PROCEDURE.

(a) Apply a thin layer of lubricant to the O-rings (5).

(b) Install the O-rings (5) into the seal cavity of each flange, as follows: Refer to (Figure 401), sheet 7.

NOTE:
- If necessary, use the hook-end O-ring installation tool as an aid to do the O-ring installation.
- Before you install the O-ring, cut the sharp point of the hook-end O-ring installation tool to prevent damage to the O-ring.

1 Put the O-ring in the space between the flanges of the two ducts.

2 Partially install the O-ring in the front portion of the flange groove.

3 With your index finger, hold the O-ring in the front portion of the flange and turn the O-ring until it partially fits into the rear portion of the flange groove.

NOTE:
- Make sure that the O-ring does not get twisted as you turn the O-ring.

- Keep your index finger holding the O-ring until the end of the installation.

CAUTION:
- FILE THE SHARP POINT EDGE FROM THE HOOK-END O-RING INSTALLATION TOOL. IF YOU DO NOT, DAMAGE TO THE O-RING CAN OCCUR.
- BE CAREFUL NOT TO CAUSE DAMAGE TO THE O-RING GROOVES AND TO THE INSIDE DIAMETER OF THE SLEEVE DURING THE INSTALLATION OF THE O-RING WITH THE HOOK-END O-RING INSTALLATION TOOL.

4 Insert the hook-end O-ring installation tool between the flanges of the two ducts and capture the O-ring.

5 Use the tool to completely insert the O-ring into to the flange groove.

(c) Remove excess lubricant from the tube flanges with a clean, lint-free gauze after the O-ring (5) installation. Do not remove the lubricant from the O-ring surface.

(d) Visually examine the sleeve (6) for ovality. If you find ovality, discard the sleeve.

NOTE:
- If the internal diameter of the sleeve (6) is covered with Teflon dry lube, refer to S.B.145-36-0022 and remove the dry lube layer.
- Make sure that the internal surface of the sleeve is clean and burnished.

(e) With a clean, lint-free cloth, remove the excess lubricant from the external surface of the sleeve (6) and from the tube flanges.

(f) Move the flanges sufficiently apart to slip the sleeve (6) over one flange end. Slide the sleeve (6) over the O-ring (5) of this flange sufficiently to permit the flanges to be aligned back to their original (Figure 401), sheet 4 - step 3), coaxial position with a satisfactory gap. Refer to (Figure 401), sheet 4 - step 1.

NOTE: If you give a slight rocking motion on the sleeve, you will make its entry over the O-rings easier.

(g) Pull the sleeve (6) back over the O-ring (5) of the other flange and center the sleeve; thus, each end of the sleeve (6) covers the inner shoulder of each flange.

(h) With a clean, lint-free cloth, remove the excess lubricant from the external surface of the sleeve (6) and from the tube flanges.

(2) For assemblages where a Gamah threaded coupling assembly is used, do as follows: Refer to (Figure 401), sheet 5, 6, and 7.

NOTE: Refer to AMM TASK 36-11-09-400-801-A/400 (Figure 403, sheet 2) for Gamah coupling assembly and duct installation.

CAUTION: DO NOT APPLY TOO MUCH LUBRICANT TO THE O-RING. APPLY VERY LIGHT COATING OF LUBRICANT ONLY. THIS IS TO PREVENT THE O-RING TO GET TWISTED DURING INSTALLATION PROCEDURE.

(a) Apply a thin layer of Lubricant to the O-rings (5).

(b) Install the O-rings (5) into the seal cavity of each flange, as follows: Refer to (Figure 401), sheet 7.

NOTE: • If necessary, use the hook-end O-ring installation tool as an aid to do the O-ring installation.

• Before you install the O-ring, file the sharp point edge of the hook-end O-ring installation tool to prevent damage to the O-ring.

1 Put the O-ring in the space between the flanges of the two ducts.

2 Partially install the O-ring in the front portion of the flange groove.

3 With your index finger, hold the O-ring in the front portion of the flange and turn the O-ring until it partially fits into the rear portion of the flange groove.

NOTE: • Make sure that the O-ring does not get twisted as you turn the O-ring.

• Keep your index finger holding the O-ring until the end of the installation.

CAUTION: • FILE THE SHARP POINT EDGE FROM THE HOOK-END O-RING INSTALLATION TOOL. IF YOU DO NOT, DAMAGE TO THE O-RING CAN OCCUR.

• BE CAREFUL DO NOT TO CAUSE DAMAGE TO THE O-RING GROOVES AND TO THE INSIDE DIAMETER OF THE COUPLERS DURING THE INSTALLATION OF THE O-RING WITH THE HOOK-END O-RING INSTALLATION TOOL.

4 Insert the hook-end O-ring installation tool between the flanges of the two ducts and capture the O-ring.

5 Use the tool to completely insert the O-ring into to the flange groove.

(c) Move the coupler (6) over the O-ring (5) (Figure 401), sheet 6 - step 3) of this flange sufficiently to permit the flanges to be aligned again to their original, coaxial position with a satisfactory gap. Refer to (Figure 401), sheet 6 - step 1.

NOTE: If you give a slight rocking motion on the sleeve, you will make its entry over the O-rings easier.

(d) Move the coupler (6) back over the O-ring (5) of the other flange and center the coupler; thus, each end of the coupler (6) covers the inner shoulder of each flange.

(e) With a clean, lint-free cloth, remove the excess lubricant from the external surface of the coupler (6) and from the tube flanges. Do not remove the lubricant from the O-ring surface.

(f) Examine the O-rings (5) to make sure that no damage occurred during the initial installation of the sleeve (6). If an O-ring (5) is damaged or twisted, replace it.

(3) For assemblages where a Gamah threaded coupling assembly is used, install the retaining ring (Ref.), coupler (6), and nut (4) to the bleed duct, as follows: Refer to (Figure 401), sheet 5.

(a) Install the retaining ring (Ref.) over the flange.

(b) Install the coupler (6) over the flange.

(c) Carefully move the retaining ring (Ref.) to coupler cavity (6) on the bleed duct.

NOTE: If necessary, use the flat nose pliers, which will help you install the retaining ring (Ref.) to the cavity.

(d) Repeat the step above to install the nut side.

K. Follow-on

SUBTASK 842-002-A

(1) Install the protective sleeve (2) and the new cable tiedown straps (1) and (3) (Figure 401), where applicable. Use the hand banding tool.

NOTE:
- Make sure that the opening of the protective sleeve overlapping is turned to the thermal switches used to detect bleed-air leakage.
- Make sure that the tiedown strap and the sleeve are assembled on the thermal insulation to prevent damage from high temperature.

(2) (For A/C POST-MOD. S.B. 145-36-0048 and/or A/C POST-MOD. S.B. 145-36-0049) Install the blanket (REF.) to the protective sleeve (2).

(a) Put the blanket in position as shown in (Figure 401), sheet 2 and 5. Adjust the opening of the blanket overlapping to the opening of the sleeve overlapping.

(b) NOTE: Make sure that the blanket rim overs the thermal insulation fully.

Apply the velcro fastener as showing (Figure 401), sheet 2 and 5.

(c) After blanket installation

NOTE:
- Make sure that the opening of the blanket overlapping is turned to the thermal switches used to detect bleed air leakage.
- Make sure that the blanket rim is fully in contact with the thermal insulation.

(3) Bleed the air through the APU (AMM TASK 36-00-00-860-802-A/200) and do a check for leakage at the joint where the O-rings were replaced (AMM TASK 36-11-09-200-801-A/600 or AMM TASK 36-11-09-200-803-A/600).

(4) Install sidewall linings 271BLW and 272CRW (AMM TASK 25-23-01-400-801-A/400, only for EMB-145 () models, and AMM TASK 25-23-01-400-802-A/400, only for EMB-135 () models, as applicable.

(5) On the EMB-145 () models, install floor panels 271AF, 271BF, 272AF, and 272BF (AMM TASK 53-01-03-400-801-A/400), 261BF, 261DF, 262AF, 262BF, and 262CF (AMM TASK 53-01-02-400-801-A/400), as applicable.

(6) On the EMB-135 () models, install floor panels 271AF, 271BF, 272AF, and 272BF (AMM TASK 53-01-03-400-801-A/400), 261DF, 262BF, and 262CF, (AMM TASK 53-01-02-400-802-A/400), as applicable.

(7) Install access panel 272DR (AMM MPP 06-41-01/100).

(8) Close baggage compartment door 813 (AMM MPP 06-30-00/100).

(9) Install panels 193, 194, and 195 (AMM MPP 06-30-00/100).

(10) Install dorsal-fin access panel 322 and vertical-stabilizer leading-edge access panel 323 (AMM MPP 06-30-00/100), as applicable.