



AIRCRAFT MAINTENANCE MANUAL

RH SERVICE UNIT SUPPORTING STRUCTURE - REMOVAL/INSTALLATION

EFFECTIVITY: ACFT MODEL(S) EMB-145

1. General

- A. This section gives the procedures to remove/install the right-hand passenger service unit (PSU) channel/duct supporting structure (PSU structure).
- 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
25-22-02-000-801-A	PSU STRUCTURE - REMOVAL	ACFT MODEL(S) EMB-145
25-22-02-400-801-A	PSU STRUCTURE - INSTALLATION	ACFT MODEL(S) EMB-145



AIRCRAFT
MAINTENANCE MANUAL

TASK 25-22-02-000-801-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

2. PSU STRUCTURE - REMOVAL

A. General

- (1) This task gives the procedures to remove the RH PSU structure.

B. References

REFERENCE	DESIGNATION
AMM TASK 21-20-04-000-801-A/400	-
AMM TASK 25-21-01-000-801-A/400	-
AMM TASK 25-22-03-000-801-A/400	OVERHEAD BIN - REMOVAL
AMM TASK 25-22-04-000-801-A/400	-
AMM TASK 25-22-05-000-801-A/400	PSUS - REMOVAL
AMM TASK 25-23-01-000-801-A/400	-
AMM TASK 25-23-08-000-801-A/400	ESCAPE-HATCH TRIM SHROUD - REMOVAL
AMM TASK 25-30-02-000-801-A/400	-
WM 20-50-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Passenger cabin

I. Preparation

SUBTASK 841-005-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) On the overhead circuit breaker, open the PASS SIGNS circuit breaker and attach a DO-NOT-CLOSE tag to it (Location Tip: DC BUS 1/LIGHTS/PASS SIGNS).

- (3) On the RH electrical power control/distribution box, open these circuit breakers and attach a DO-NOT-CLOSE tag to them:
 - (a) GALLEY (Location Tip: RB SERVBUS/GALLEY).
 - (b) GALLEY (Location Tip: RB SHED DC BUS2/GALLEY).
 - (4) Remove the headliner, as applicable (AMM TASK 25-22-04-000-801-A/400).
 - (5) Remove the overhead bins, as applicable ([AMM TASK 25-22-03-000-801-A/400](#)).
 - (6) Remove the passenger service units, as applicable ([AMM TASK 25-22-05-000-801-A/400](#)).
 - (7) Remove the passenger seats, as applicable (AMM TASK 25-21-01-000-801-A/400).
 - (8) Remove the sidewall lining panels, as applicable (AMM TASK 25-23-01-000-801-A/400).
 - (9) Remove the escape-hatch trim shroud assembly, as applicable ([AMM TASK 25-23-08-000-801-A/400](#)).
- J. PSU-Structure Module I - Removal ([Figure 401](#)) ([Figure 402](#)) ([Figure 403](#)) ([Figure 404](#))
SUBTASK 020-018-A
- (1) Remove the aft galley (AMM TASK 25-30-02-000-801-A/400), as applicable.
NOTE: Make sure that the aft galley is empty for its removal.
 - (2) Cut the strap (1) that attaches the conditioned air hose (5). See Det. B, Figure 401.
 - (3) Remove the screws (3) and washers (2). See Det. B, Figure 401.
 - (4) Remove the clamps that attach the thermoacoustic insulation pad to frame 24.
 - (5) Open the thermoacoustic insulation pad.
 - (6) Disconnect the electrical connector (4). See Det. B, Figure 401.
 - (7) Remove the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nuts (6). See Det. C, Figure 403.
 - (8) Cut the straps that attach the PSU harness to PSU-structure module I and to the fuselage.
 - (9) Pull the electrical cable through the PSU duct hole.
 - (10) Disconnect the electrical connector (1). See Det. B, Figure 402.
 - (11) Remove the screw (4), aluminum washer (2), and cables (3). See Det. B, Figure 402.
 - (12) Remove the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
 - (13) Disconnect the transparent drain tube (5) that is installed between frame 22 and frame 23. See Det. B, Figure 404.

- (14) Remove the screws (4) and washers (5) that attach PSU-structure module I to module II. See Det. B, Figure 405.
- (15) Remove the joint extension panel (6). See Det. B, Figure 405.
- (16) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module I to frame 23 and frame 28. See Det. C, Figure 404.
- (17) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
- (18) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module I. See Det. B, Figure 403.
- (19) **NOTE:** Be careful with the lamp during the movement of PSU-structure module I.
Remove PSU-structure module I. See Det. A, Figure 404.

K. PSU-Structure Module II - Removal (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 020-019-A

- (1) Disconnect the electrical connector (1). See Det. B, Figure 402.
- (2) Remove the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (3) Remove the clamps that attach the thermoacoustic insulation pad to frame 29.
- (4) Open the thermoacoustic insulation pad.
- (5) Disconnect the splice electrical connector from the PSU harness side (WM 20-50-01).
- (6) Cut the straps that attach the PSU harness to PSU-structure model II and to the fuselage.
- (7) Pull the electrical cable through the PSU duct hole.
- (8) Disconnect the transparent drain tube (5) that is installed between frame 28 and frame 29. See Det. B, Figure 404.
- (9) Remove the screws (4) and washers (5) that attach PSU-structure module II to modules I and III. See Det. B, Figure 405.
- (10) Remove the joint extension panel (6). See Det. B, Figure 405.
- (11) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module II to frame 29 and frame 32. See Det. C, Figure 404.
- (12) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
- (13) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module II. See Det. B, Figure 403.

- (14) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.
 - (15) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp at PSU-structure module III. See Det. D, Figure 403.
 - (16) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module III. See Det. B, Figure 403.
 - (17) Remove the screws (4) and washers (5) that attach the PSU-structure module III to module IV. See Det. B, Figure 405.
 - (18) Remove the joint extension panel (6). See Det. B, Figure 405.
 - (19) Move PSU-structure module III toward module IV (Figure 404).
 - (20) NOTE: Be careful with the lamp during the movement of PSU-structure model II.
Remove PSU-structure module II (Figure 404).
- L. PSU-Structure Module III - Removal ([Figure 402](#)) ([Figure 403](#)) ([Figure 404](#)) ([Figure 405](#))
- SUBTASK 020-020-A**
- (1) Disconnect the electrical connector (1). See Det. B, Figure 402.
 - (2) Remove the screws (2), aluminum washers (1), and cables (3). See Det. B, Figure 405.
 - (3) Remove the clamps that attach the thermoacoustic insulation pad to the frame.
 - (4) Open the thermoacoustic insulation pad.
 - (5) Remove the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
 - (6) Cut the straps that attach the PSU harness to PSU-structure module III and to the fuselage.
 - (7) Pull the electrical cable through the PSU duct hole.
 - (8) Disconnect the center conditioned-air ducts from the PSU conditioned-air duct (AMM TASK 21-20-04-000-801-A/400).
 - (9) Disconnect the transparent drain tube (5) that is assembled at frame 33 and frame 34. See Det. B, Figure 404.
 - (10) Remove the screws (4) and washers (5) that attach PSU-structure module III to modules II and IV. See Det. B, Figure 405.
 - (11) Remove the joint extension panel (6). See Det. B, Figure 405.
 - (12) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.

- (13) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
- (14) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module III. See Det. B, Figure 403.
- (15) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-Structure module II to frame 29 and frame 32. See Det. B, Figure 404.
- (16) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp at PSU-structure module II. See Det. D, Figure 403.
- (17) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module II. See Det. B, Figure 403.
- (18) Remove the screws (4) and washers (5) that attach PSU-structure module II to module I. See Det. B, Figure 405.
- (19) Remove the joint extension panel (6). See Det. B, Figure 405.
- (20) Move PSU-structure module II forward (Figure 404).
- (21) **NOTE:** Be careful with the lamp during the movement of PSU-structure module III.
Remove PSU-structure module III (Figure 404).

M. PSU-Structure Module IV - Removal (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 020-021-A

- (1) Disconnect the electrical connector (1). See Det. B, Figure 402.
- (2) Remove the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (3) Release the Velcro fasteners to open the thermoacoustic insulation pad.
- (4) Disconnect the splice electrical connector from the PSU harness side (WM 20-50-01).
- (5) Cut the straps that attach the PSU harness to PSU-structure module IV and to the fuselage.
- (6) Pull the electrical cable through the PSU duct hole.
- (7) Disconnect the transparent drain tube (5) that is installed between frame 37 and frame 38. See Det. B, Figure 404.
- (8) Remove the screws (4) and washers (5) that attach PSU-structure module IV to modules III and V. See Det. B, Figure 405.
- (9) Remove the joint extension panel (6). See Det. B, Figure 405.
- (10) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module IV to frame 38 and frame 44. See Det. C, Figure 404.



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- (11) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
 - (12) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module IV. See Det. B, Figure 403.
 - (13) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.
 - (14) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp at PSU-structure module III. See Det. D, Figure 403.
 - (15) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module III. See Det. B, Figure 403.
 - (16) Remove the screws (4) and washers (5) that attach PSU-structure module III to module II. See Det. B, Figure 405.
 - (17) Remove the joint extension panel (6). See Det. B, Figure 405.
 - (18) Move PSU-structure module III forward (Figure 404).
 - (19) NOTE: Be careful with the lamp during the movement of PSU-structure module IV.
Remove PSU-structure module IV. See Det. B, Figure 405.
- N. PSU-Structure Module V - Removal (Figure 402) (Figure 403) (Figure 404) (Figure 405)
- SUBTASK 020-022-A
- (1) Disconnect the electrical connector (1). See Det. B, Figure 402.
 - (2) Remove the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
 - (3) Remove the clamp that attaches the thermoacoustic insulation pad to frame 43 and frame 53.
 - (4) Open the thermoacoustic insulation pad.
 - (5) Remove the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
 - (6) Disconnect the splice electrical connector from the PSU harness side (WM 20-50-01).
 - (7) Cut the straps that attach the PSU harness to PSU-structure module V and to the fuselage.
 - (8) Pull the electrical cable through the PSU duct hole.
 - (9) Disconnect the transparent drain tube (5) that is assembled between frame 45 and frame 46. See Det. B, Figure 404.
 - (10) Remove the screws (4) and washers (5) that attach PSU-structure module V to modules IV and VI. See Det. B, Figure 405.

- (11) Remove the joint extension panel (6). See Det. B, Figure 405.
- (12) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module V to frame 47 and frame 52. See Det. C, Figure 404.
- (13) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
- (14) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module V. See Det. B, Figure 403.
- (15) Remove the screws (1), washer (2) and (3), and nut (4) that attach PSU-structure module IV to frame 38 and frame 44. See Det. C, Figure 404.
- (16) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp at PSU-structure module IV. See Det. D, Figure 403.
- (17) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module IV. See Det. B, Figure 403.
- (18) Remove the screws (4) and washers (5) that attach PSU-structure module IV to module III. See Det. B, Figure 405.
- (19) Remove the joint extension panel (6). See Det. B, Figure 405.
- (20) Move PSU-structure module IV forward (Figure 404).
- (21) **NOTE:** Be careful with the lamp during the movement of PSU-structure module V.
Remove PSU-structure module V (Figure 404).

O. PSU-Structure Module VI - Removal ([Figure 402](#)) ([Figure 403](#)) ([Figure 404](#)) ([Figure 405](#))

SUBTASK 020-023-A

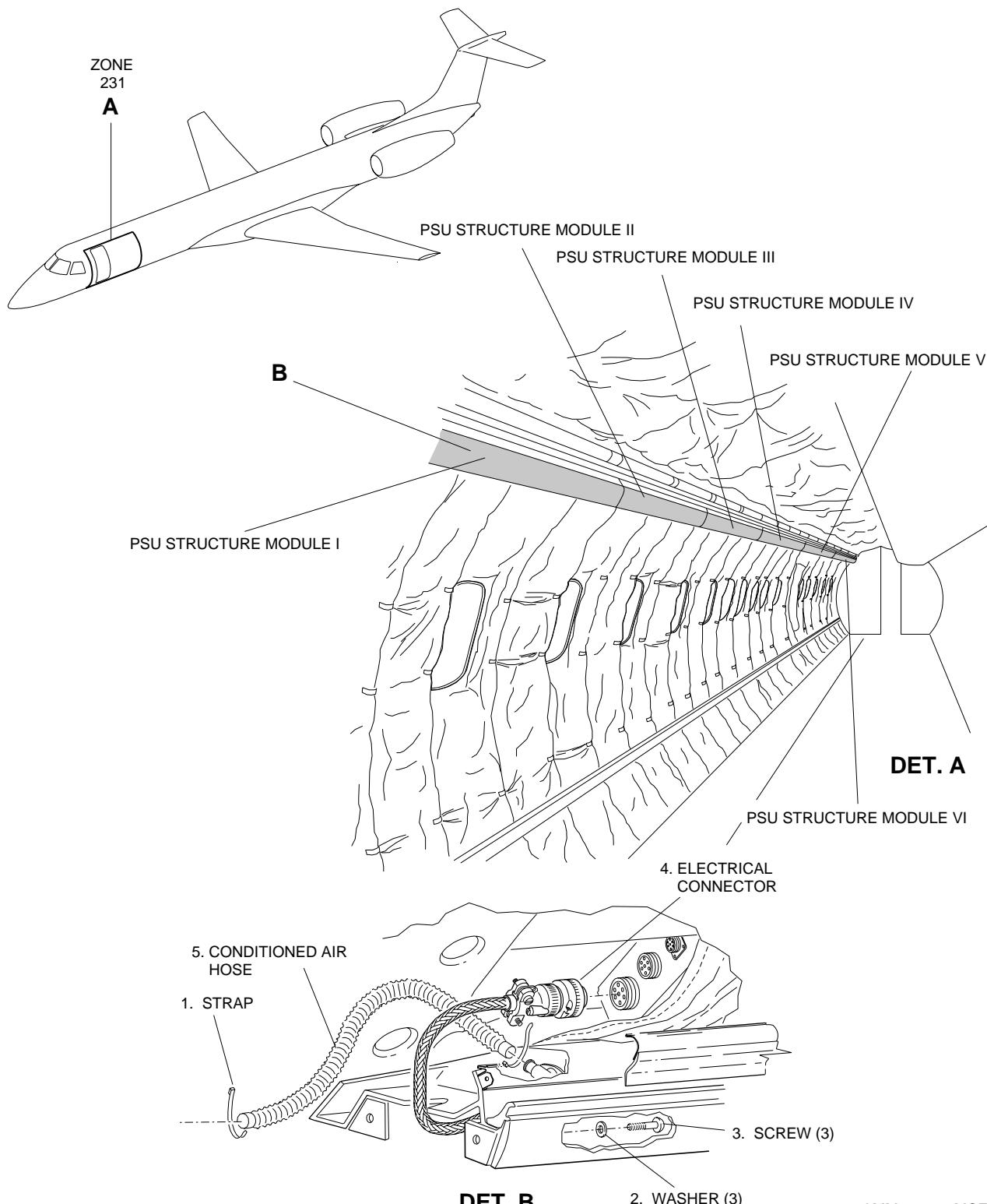
- (1) Disconnect the electrical connector (1). See Det. B, Figure 402.
- (2) Remove the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (3) Remove the clamps that attach the thermoacoustic insulation pad to frame 53 and frame 57.
- (4) Open the thermoacoustic insulation pad.
- (5) Remove the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
- (6) Disconnect the splice electrical connector from the PSU harness side (WM 20-50-01).
- (7) Cut the straps that attach the PSU harness to PSU-structure module VI and to the fuselage.
- (8) Pull the electrical cable through the PSU duct hole.

- (9) Disconnect the transparent drain tube (5) that is installed between frame 58 and frame 59. See Det. B, Figure 404.
- (10) Disconnect the rear conditioned-air duct from the PSU conditioned-air duct (AMM TASK 21-20-04-000-801-A/400).
- (11) Cut the strap that attaches the conditioned air hose.
- (12) Remove the screws (4) and washers (5) that attach PSU-structure module VI to module V. See Det. B, Figure 405.
- (13) Remove the joint extension panel (6). See Det. B, Figure 405.
- (14) Remove the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module VI to frame 53 and frame 58. See Det. C, Figure 404.
- (15) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp. See Det. D, Figure 403.
- (16) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module V. See Det. B, Figure 403.
- (17) Remove the screws (1), washer (2) and (3), and nut (4) that attach PSU-structure module V to frame 47 and frame 52. See Det. C, Figure 404.
- (18) Remove the pin (7), washers (8), and cotter pin (9), and open the mounting-bracket tube clamp at PSU-structure module VI. See Det. D, Figure 403.
- (19) Turn the tube (11) clockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to remove the support bracket rod (10) from the connection at PSU-structure module VI. See Det. B, Figure 403.
- (20) Remove the screws (4) and washers (5) that attach PSU-structure module V to module VI. See Det. B, Figure 405.
- (21) Remove the joint extension panel (6). See Det. B, Figure 405.
- (22) Move PSU-structure module V forward (Figure 404).
- (23) NOTE: Be careful with the lamp during the movement of PSU-structure module VI.
Remove PSU-structure module VI (Figure 404).

EFFECTIVITY: ACFT MODEL(S) EMB-145

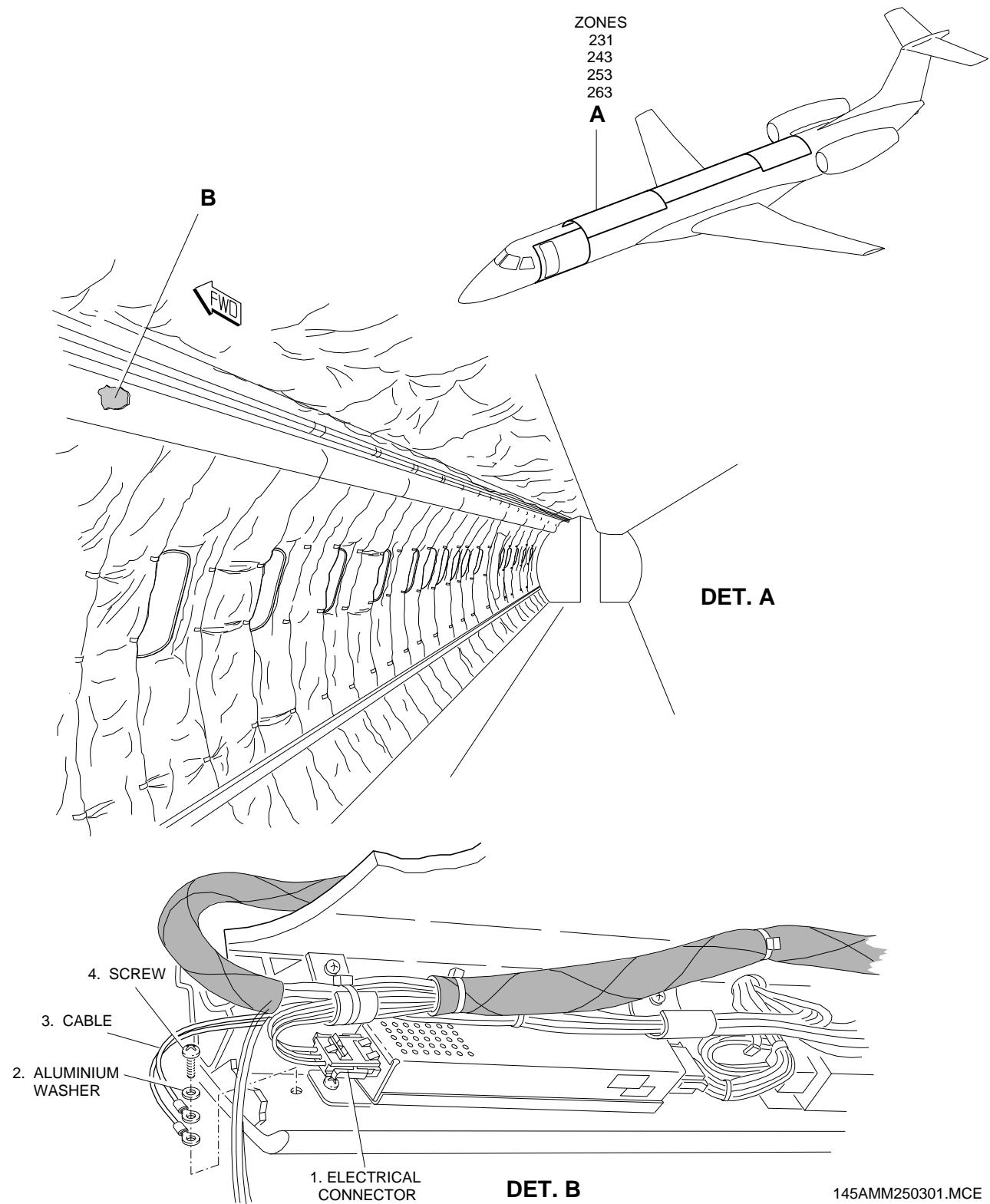
RH PSU Structure - Removal/Installation

Figure 401



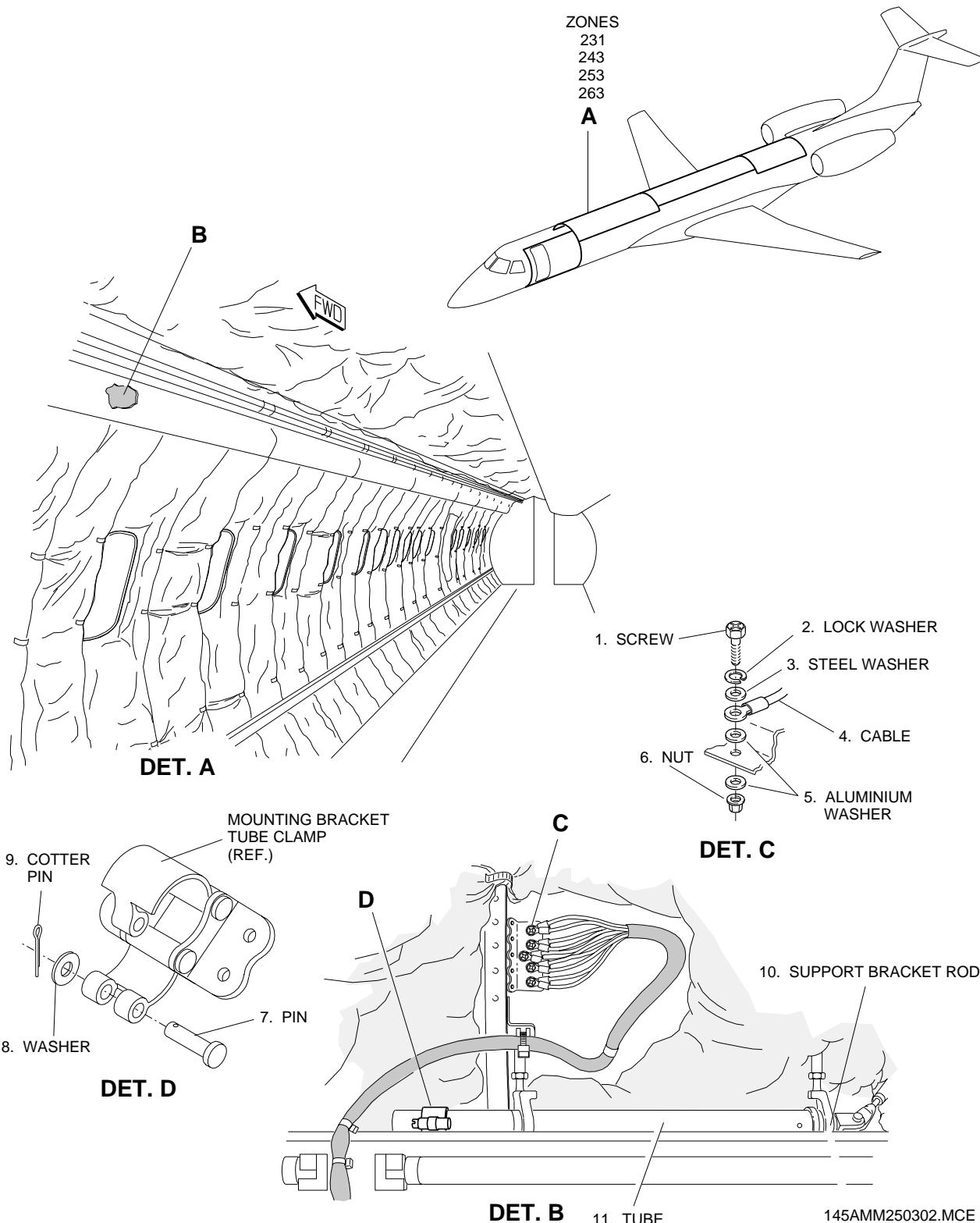
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EFFECTIVITY: ACFT MODEL(S) EMB-145
RH PSU Structure - Removal/Installation
Figure 402

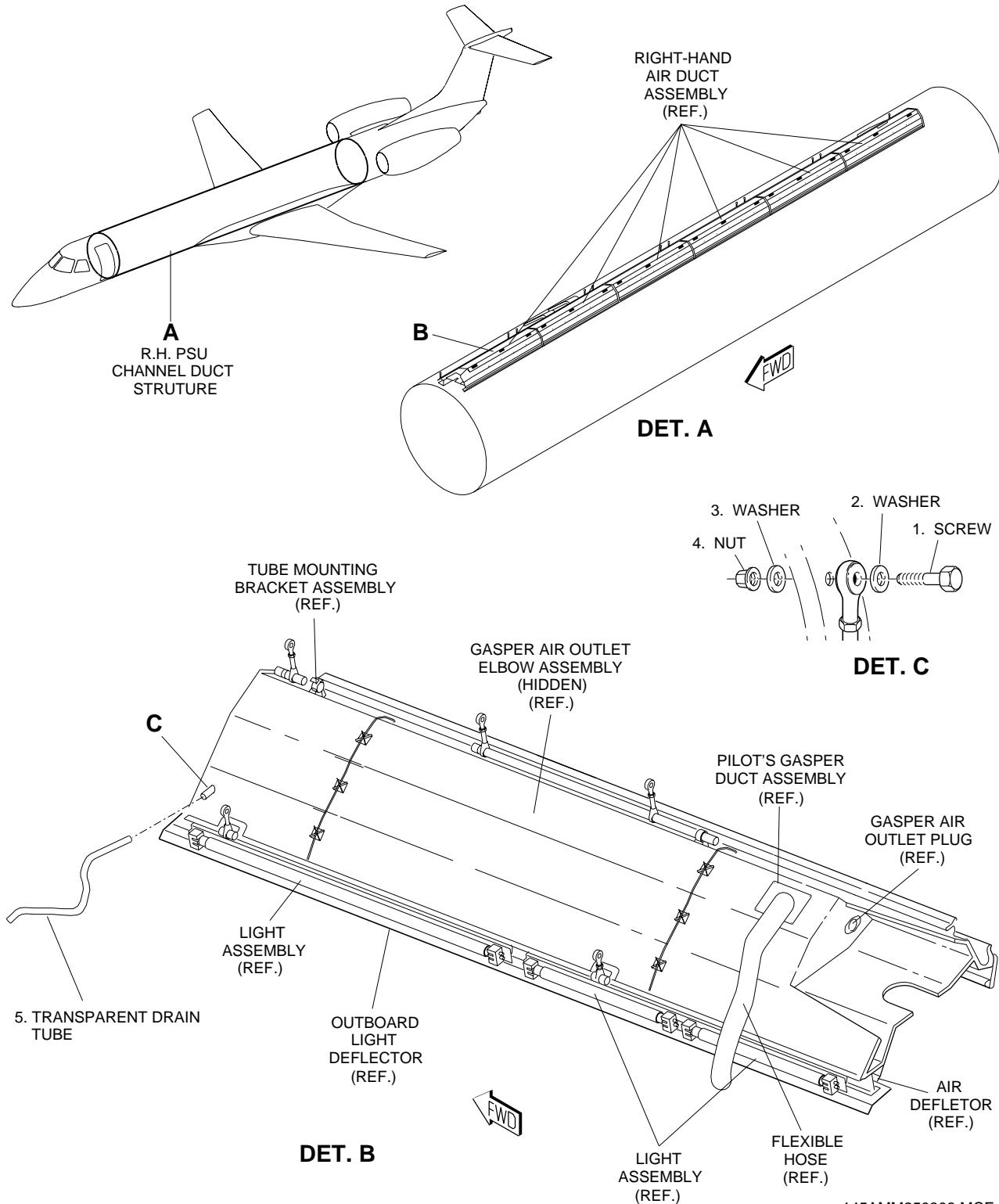


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EFFECTIVITY: ACFT MODEL(S) EMB-145
RH PSU Structure - Removal/Installation
Figure 403

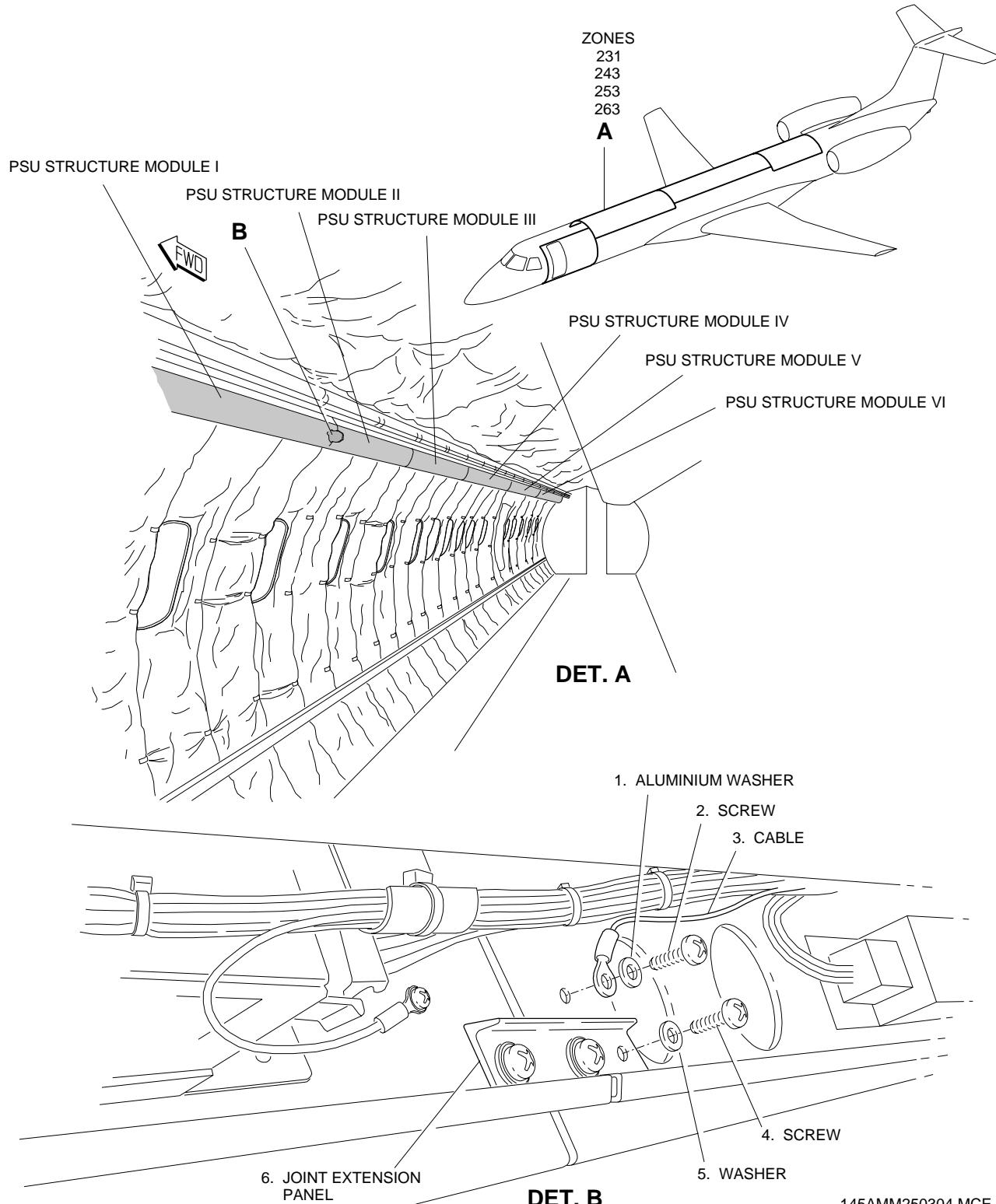


EFFECTIVITY: ACFT MODEL(S) EMB-145
RH PSU Structure - Removal/Installation
Figure 404



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EFFECTIVITY: ACFT MODEL(S) EMB-145
RH PSU Structure - Removal/Installation
Figure 405



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TASK 25-22-02-400-801-A
EFFECTIVITY: ACFT MODEL(S) EMB-145
3. PSU STRUCTURE - INSTALLATION
A. General

- (1) This task gives the procedures to install the RH PSU structure.

B. References

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 21-20-04-400-801-A/400	-
AMM TASK 25-21-01-400-801-A/400	-
AMM TASK 25-22-03-400-801-A/400	OVERHEAD BIN - INSTALLATION
AMM TASK 25-22-04-400-801-A/400	-
AMM TASK 25-22-05-400-801-A/400	PSUS - INSTALLATION
AMM TASK 25-23-01-400-801-A/400	-
AMM TASK 25-23-08-400-801-A/400	ESCAPE-HATCH TRIM SHROUD - INSTALLATION
AMM TASK 25-30-02-400-801-A/400	-
AMM TASK 33-21-00-700-801-A/500	PASSENGER CABIN LIGHTS - OPERATIONAL TEST
AMM TASK 33-23-00-700-801-A/500	PASSENGER WARNING SIGNS - OPERATIONAL TEST
AMM TASK 33-25-00-700-801-A/500	READING AND ATTENDANT CALL LIGHTS (1) - OPERATIONAL TEST
AMM TASK 33-50-00-700-801-A/500	EMERGENCY LIGHTS - OPERATIONAL CHECK
IPC 25-22-02	PSU RH
WM 20-50-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

<i>ITEM</i>	<i>DESCRIPTION</i>	<i>PURPOSE</i>	<i>QTY</i>
Commercially Available	Rubber Gloves	Handle Bond Materials	
Commercially Available	Safety Goggles	Eye Protection	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
RTV 106	Sealant, Silicone	AR
RTV 109	Sealant, Silicone	AR
RTV 102	Sealant, Silicone	AR

G. Expendable Parts

<i>ITEM</i>	<i>IPC REFERENCE (VENDOR REFERENCE)</i>	<i>QTY</i>
Tiedown Strap -	IPC 25-22-02	AR

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
2	Do the task	Passenger cabin

I. PSU-Structure Module I - Installation (Figure 401) (Figure 402) (Figure 403) (Figure 404) (Figure 405)
SUBTASK 420-018-A

- (1) **NOTE:** Be careful with the lamp during the movement of PSU-structure module I.
Install PSU-structure module I (Figure 404).
- (2) **NOTE:** Make sure that the gap between the PSU structures after the installation is 3 mm.
Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection. See Det. B, Figure 403.
- (3) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (4) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module I to frame 23 and frame 28. See Det. C, Figure 404.
- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (4) and washers (5) that attach PSU-structure module I to module II. See Det. B, Figure 405.
- (7) Connect the transparent drain tube (5) at PSU structure between frame 22 and frame 23. See Det. B, Figure 404.
- (8) Pass the electrical cable through the PSU duct hole.
- (9) Install the straps that attach the PSU harness to PSU-structure module I and to the fuselage.

- (10) Do the preparation of the surface and the electrical bonding ([AMM TASK 20-13-21-910-801-A/200](#)).
- (11) Install the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nuts (6). See Det. C, Figure 403.
- (12) Connect the electrical connector (4). See Det. B, Figure 401.
- (13) Close the thermoacoustic insulation pad.
- (14) Install the clamps that attach the thermoacoustic insulation pad to frame 24.
- (15) Install the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (16) Install the screw (4), aluminum washer (2), and cables (3). See Det. B, Figure 402.
- (17) Connect the electrical connector (1). See Det. B, Figure 402.
- (18) Install the strap (1) that attaches the conditioned air hose (5). See Det. B, Figure 401.
- (19) Install the screws (3) and washers (2). See Det. B, Figure 401.
- (20) **NOTE:** Make sure that the aft galley is empty for its installation.

Install the aft galley (AMM TASK 25-30-02-400-801-A/400), as applicable.

J. PSU-Structure Module II - Installation (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 420-019-A

- (1) **NOTE:** Be careful with the lamp during the movement of PSU-structure module II.
Install PSU-structure module II. See Figure 404.
- (2) **NOTE:** Make sure that the gap between the PSU structures after the installation is 3 mm.
Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module II . See Det. B, Figure 403.
- (3) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (4) Install the screws (4) and washers (5) that attach PSU-structure module II to frame 29 and frame 32. See Det. B, Figure 405.
- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure modules II to modules I and III. See Det. C, Figure 404.
- (7) Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module III. See Det. B, Figure 403.
- (8) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.

- (9) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.
- (10) Install the joint extension panel (6). See Det. B, Figure 405.
- (11) Install the screws (4) and washers (5) that attach PSU-structure module III to module IV. See Det. B, Figure 405.
- (12) Connect the transparent drain tube (5) at PSU-structure module II between frame 28 and frame 29. See Det. B, Figure 404.
- (13) Pass the electrical cable through the PSU duct hole.
- (14) Install the straps that attach the PSU harness to PSU-structure module II and to the fuselage.
- (15) Connect the splice electrical connector (WM 20-50-01).
- (16) Close the thermoacoustic insulation pad.
- (17) Install the clamps that attach the thermoacoustic insulation pad to frame 29.
- (18) Install the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (19) Connect the electrical connector (1). See Det. B, Figure 402.

K. PSU-Structure Module III - Installation (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 420-020-A

- (1) **NOTE:** Be careful with the lamp during the movement of PSU-structure module III.
Install PSU-structure module III (Figure 404).
- (2) **NOTE:** Make sure that the gap between the PSU structures after the installation is 3 mm.
Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module III. See Det. B, Figure 403.
- (3) Close the mounting-bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (4) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.
- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (4) and washers (5) that attach PSU-structure module III to modules II and IV. See Det. B, Figure 405.
- (7) Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module II. See Det. B, Figure 403.

- (8) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
 - (9) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module II to frame 29 and frame 32. See Det. C, Figure 404.
 - (10) Install the joint extension panel (6). See Det. B, Figure 405.
 - (11) Install the screws (4) and washers (5) that attach PSU-structure module II to module I. See Det. B, Figure 405.
 - (12) Connect the transparent drain tube (5) at PSU-structure module III at the frame 33 and frame 34. See Det. B, Figure 404.
 - (13) Pass the electrical cable through the PSU duct hole.
 - (14) Install the straps that attach the PSU harness to PSU-structure module III and to the fuselage.
 - (15) Do the preparation of the surface and the electrical bonding ([AMM TASK 20-13-21-910-801-A/200](#)).
 - (16) Install the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
 - (17) Close the thermoacoustic insulation pad.
 - (18) Install the clamps that attach the thermoacoustic insulation pad to frame 29.
 - (19) Install the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
 - (20) Connect the electrical connector (1). See Det. B, Figure 402.
 - (21) Connect the central conditioned-air ducts from the PSU conditioned-air duct ([AMM TASK 21-20-04-400-801-A/400](#)).
- L. PSU-Structure Module IV - Installation (Figure 402) (Figure 403) (Figure 404) (Figure 405)
- SUBTASK 420-021-A**
- (1) **NOTE:** Be careful with the lamp during the movement of PSU-structure module IV.
Install PSU-structure module IV (Figure 404).
 - (2) **NOTE:** Make sure that the gap between the PSU structures after the installation is 3 mm.
Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module IV. See Det. B, Figure 403.
 - (3) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
 - (4) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module IV to frame 38 and frame 44. See Det. C, Figure 404.

- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (4) and washers (5) that attach PSU-structure module IV to modules III and V. See Det. B, Figure 405.
- (7) Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module III. See Det. B, Figure 403.
- (8) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (9) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module III to frame 34 and frame 37. See Det. C, Figure 404.
- (10) Install the joint extension panel (6). See Det. B, Figure 405.
- (11) Install the screws (4) and washers (5) that attach PSU-structure module III to module II. See Det. B, Figure 405.
- (12) Connect the transparent drain tube (5) at the PSU Structure between the frame 37 and frame 38. See Det. B, Figure 404.
- (13) Pass the electrical cable through the PSU duct hole.
- (14) Install the straps that attach the PSU harness to PSU-structure module IV and to the fuselage.
- (15) Connect the splice electrical connector (WM 20-50-01).
- (16) Close the thermoacoustic insulation pad and hold it with the Velcro fastener.
- (17) Install the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.
- (18) Connect the electrical connector (1). See Det. B, Figure 402.

M. PSU-Structure Module V - Installation (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 420-022-A

- (1) **NOTE:** Be careful with the lamp during the movement of PSU-structure module V.
Install PSU-structure module V (Figure 404).
- (2) **NOTE:** Make sure that the gap between the PSU structures after the installation is 3 mm.
Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module V. See Det. B, Figure 403.
- (3) Close the mounting-bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (4) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module V to frame 47 and frame 52. See Det. C, Figure 404.

- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (4) and washers (5) that attach PSU-structure module V to modules IV and III. See Det. B, Figure 405.
- (7) Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module IV. See Det. B, Figure 403.
- (8) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (9) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module IV to frame 38 and frame 44. See Det. C, Figure 404.
- (10) Install the joint extension panel (6). See Det. B, Figure 405.
- (11) Install the screws (4) and washers (5) that attach PSU-structure module IV to module III. See Det. B, Figure 405.
- (12) Connect the transparent drain tube (5) at the PSU-structure module V between the frame 45 and frame 46. See Det. B, Figure 404.
- (13) Pass the electrical cable through the PSU duct hole.
- (14) Install the straps that attach the PSU harness to PSU-structure module V and to the fuselage.
- (15) Do the preparation of the surface and the electrical bonding ([AMM TASK 20-13-21-910-801-A/200](#)).
- (16) Install the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
- (17) Connect the splice electrical connector (WM 20-50-01).
- (18) Close the thermoacoustic insulation pad.
- (19) Install the clamps that attach the thermoacoustic insulation pad to frame 38 and frame 43.
- (20) Install the screw (2), aluminum washer (1), and cable (3). See Det. C, Figure 404.
- (21) Connect the electrical connector (1). See Det. B, Figure 402.

N. PSU-Structure Module VI - Installation (Figure 402) (Figure 403) (Figure 404) (Figure 405)

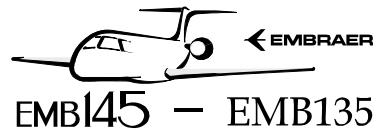
SUBTASK 420-023-A

- (1) **NOTE:** Be careful with the lamp during the movement of PSU structure module VI.
Install PSU-structure module VI (Figure 404).
- (2) **NOTE:** • Make sure that the gap between the PSU structures after the installation is 3 mm.

- Make sure that the between the PSU-structure module VI and frame 59 after the installation is 13 mm.

Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module VI. See Det. B, Figure 403.

- (3) Close the mounting bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (4) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module VI to frame 53 and frame 58. See Det. C, Figure 404.
- (5) Install the joint extension panel (6). See Det. B, Figure 405.
- (6) Install the screws (4) and washers (5) that attach PSU-structure module VI to module V. See Det. B, Figure 405.
- (7) Turn the tube (11) counterclockwise (use a pair of pliers with the jaws padded not to cause damage to the tube or manually) to install the support bracket rod (10) to the connection at PSU-structure module V. See Det. B, Figure 403.
- (8) Close the mounting-bracket tube clamp, and install the pin (7), washers (8), and cotter pin (9). See Det. D, Figure 403.
- (9) Install the screws (1), washers (2) and (3), and nut (4) that attach PSU-structure module V to frame 47 and frame 52. See Det. C, Figure 404.
- (10) Install the joint extension panel (6). See Det. B, Figure 405.
- (11) Install the screws (4) and washers (5) that attach PSU-structure module V to module IV. See Det. B, Figure 405.
- (12) Connect the transparent drain tube (5) at the PSU-structure module VI between the frame 58 and frame 59. See Det. B, Figure 404.
- (13) Pass the electrical cable through the PSU duct hole.
- (14) Install the straps that attach the PSU harness to PSU-structure module VI and to the fuselage.
- (15) Do the preparation of the surface and the electrical bonding ([AMM TASK 20-13-21-910-801-A/200](#)).
- (16) Install the screws (1), lock washers (2), steel washers (3), aluminum washers (5), cables (4), and nut (6). See Det. C, Figure 403.
- (17) Close the thermoacoustic insulation pad.
- (18) Install the clamps that attach the thermoacoustic insulation pad to frame 53 and frame 57.
- (19) Connect the splice electrical connector (WM 20-50-01).
- (20) Install the screw (2), aluminum washer (1), and cable (3). See Det. B, Figure 405.



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- (21) Connect the electrical connector (1). See Det. B, Figure 402.
- (22) Connect the rear conditioned-air duct to the PSU conditioned-air duct (AMM TASK 21-20-04-400-801-A/400).
- (23) Install the strap that attaches the conditioned air hose.

O. Follow-on

SUBTASK 842-005-A

- (1) Install the escape-hatch trim shroud assembly, as applicable ([AMM TASK 25-23-08-400-801-A/400](#)).
- (2) Install the sidewall lining panels, as applicable (AMM TASK 25-23-01-400-801-A/400).
- (3) Install the passenger service units, as applicable ([AMM TASK 25-22-05-400-801-A/400](#)).
- (4) Install the overhead bins, as applicable ([AMM TASK 25-22-03-400-801-A/400](#)).
- (5) Install the headliner, as applicable (AMM TASK 25-22-04-400-801-A/400).
- (6) Install the passenger seats, as applicable (AMM TASK 25-21-01-400-801-A/400).
- (7) On the overhead circuit breaker panel, close the PASS SIGNS circuit breaker and remove a DO-NOT-CLOSE tag from it (Location Tip: DC BUS 1/LIGHTS/PASS SIGNS).
- (8) On the RH electrical power control/distribution box, close these circuit breakers and remove the DO-NOT-CLOSE tag from them:
 - (a) GALLEY (Location Tip: RB SERVBUS/GALLEY).
 - (b) GALLEY (Location Tip: RB SHED DC BUS2/GALLEY).
- (9) Do an operational check of the passenger warning signs ([AMM TASK 33-23-00-700-801-A/500](#)).
- (10) Do an operational check of the passenger cabin lights ([AMM TASK 33-21-00-700-801-A/500](#)).
- (11) Do an operational check of the reading and attendant call lights ([AMM TASK 33-25-00-700-801-A/500](#)).
- (12) Do an operational check of the emergency lights ([AMM TASK 33-50-00-700-801-A/500](#)).

