



## AIRCRAFT MAINTENANCE MANUAL

### TORQUE BOX FAIRINGS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to remove and install the LH and RH Torque Box Fairings.
- B. These procedures are applicable to the LH and RH Torque Box Fairings.
- C. 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
57-50-01-000-801-A	TORQUE BOX FAIRINGS - REMOVAL	ALL
57-50-01-400-801-A	TORQUE BOX FAIRINGS - INSTALLATION	ALL



AIRCRAFT  
MAINTENANCE MANUAL

TASK 57-50-01-000-801-A

EFFECTIVITY: ALL

2. TORQUE BOX FAIRINGS - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the RH and LH Torque Box I, II and III Fairings.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
SRM 51-20-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Acrylic Spatula	To remove the sealant	-

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	On the torque box fairings

I. Preparation

SUBTASK 841-004-A

**WARNING: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE FLAP TRAVEL AREA.**

- (1) Energize the aircraft with the External DC Power Supply ( [AMM TASK 20-40-01-860-801-A/200](#)).
- (2) Set the flaps to the 45-degree position.
- (3) On the circuit breaker panel, open the FLAP 1 and FLAP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.



J. Removal - Torque Box I Fairing ([Figure 401](#))

SUBTASK 020-006-A

- (1) Remove the fairing (10), as follows:
  - (a) With an acrylic spatula, remove the remaining aerodynamic sealant.
  - (b) With a cloth soaked in neutral liquid detergent, clean the surface (SRM 51-20-01).
  - (c) Remove the screws (9), (11) and (12), bonding strip (13) and fairing (10).

K. Removal - Torque Box II Fairings ([Figure 401](#))

SUBTASK 020-007-A

- (1) Remove the fairing (8), as follows:
  - (a) With an acrylic spatula, remove the remaining aerodynamic sealant.
  - (b) With a cloth soaked in neutral liquid detergent, clean the surface (SRM 51-20-01).
  - (c) Remove the screw (7) and the fairing (8).
- (2) Remove the cover (6), as follows:
  - (a) With an acrylic spatula, remove the remaining aerodynamic sealant.
  - (b) With a cloth soaked in neutral liquid detergent, clean the surface (SRM 51-20-01).
  - (c) Remove the bolts (4) and (5) and the cover (6).

L. Removal - Torque Box III Fairing ([Figure 401](#))

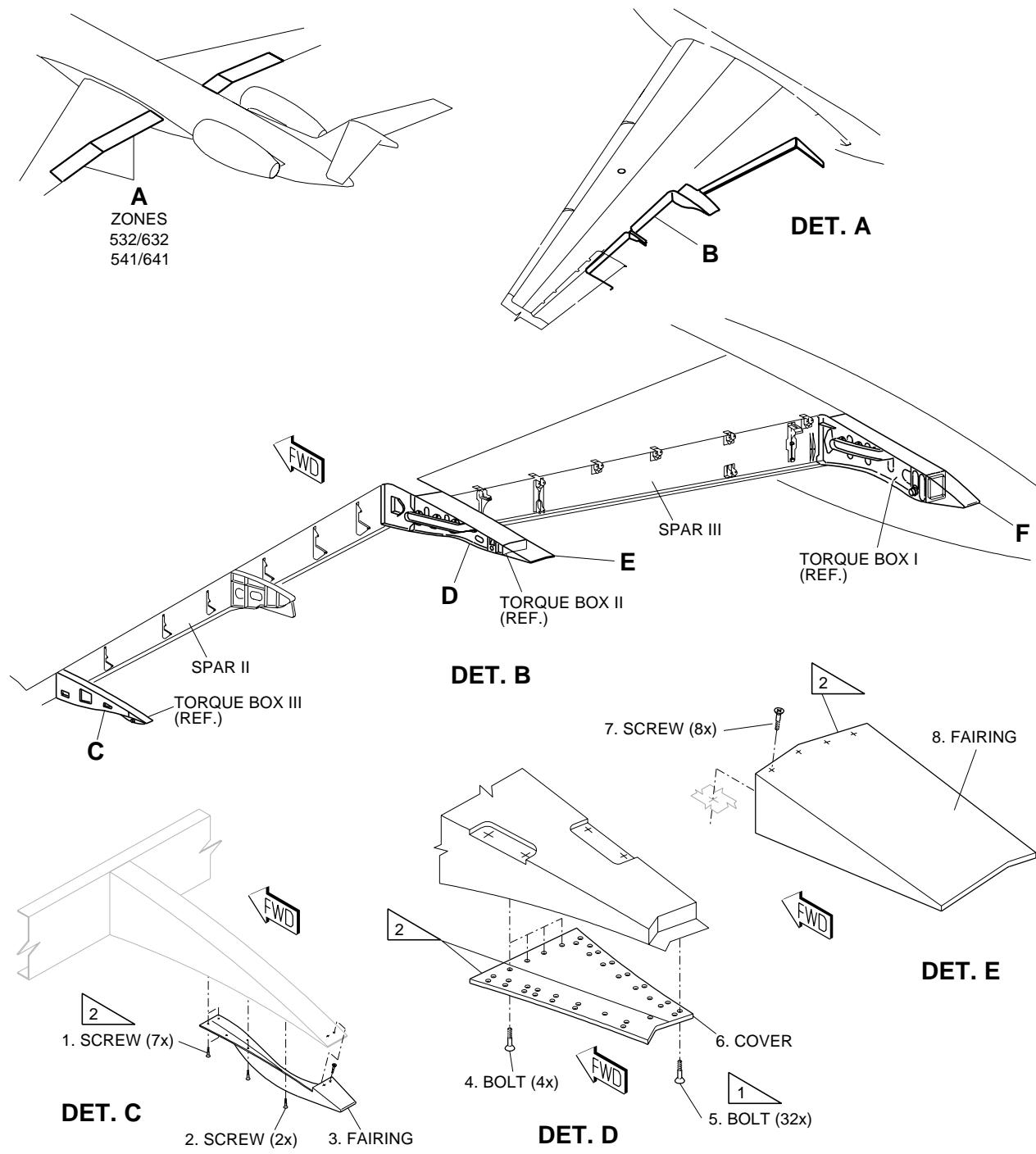
SUBTASK 020-008-A

- (1) Remove the fairing (3), as follows:
  - (a) With an acrylic spatula, remove the remaining aerodynamic sealant.
  - (b) With a cloth soaked in neutral liquid detergent, clean the surface (SRM 51-20-01).
  - (c) Remove the screws (1) and (2) and the fairing (3).

**EFFECTIVITY: ALL**

Torque Box I, II, III Fairings - Removal/Installation

Figure 401 - Sheet 1



 1 APPLY SEALANT P/S 870C-12

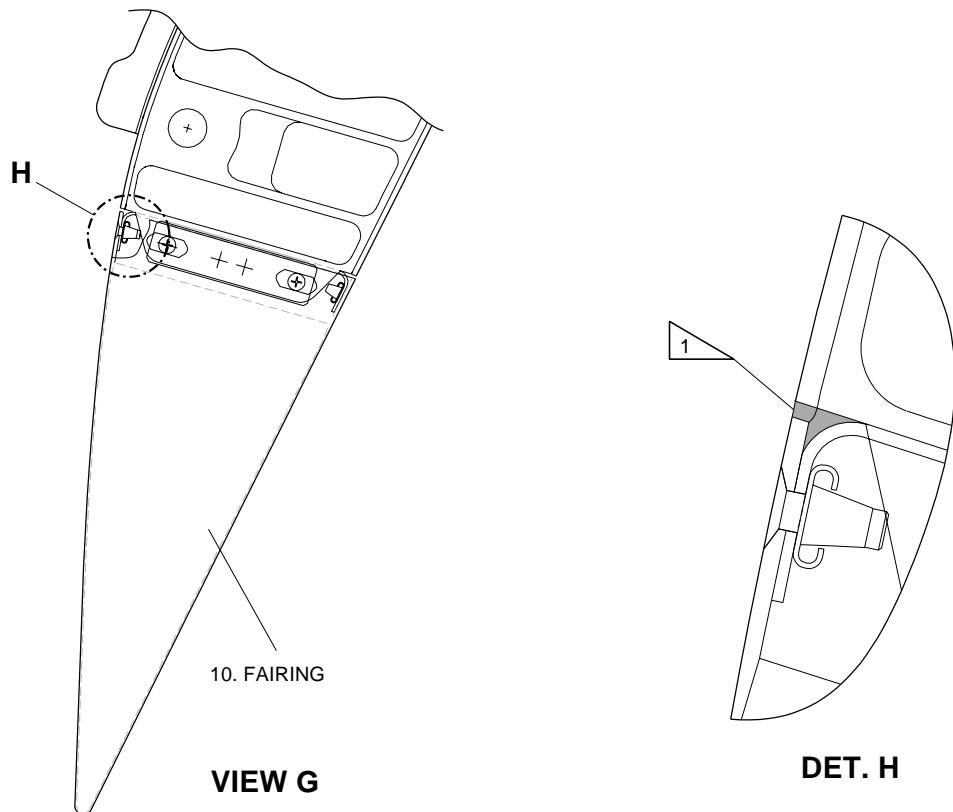
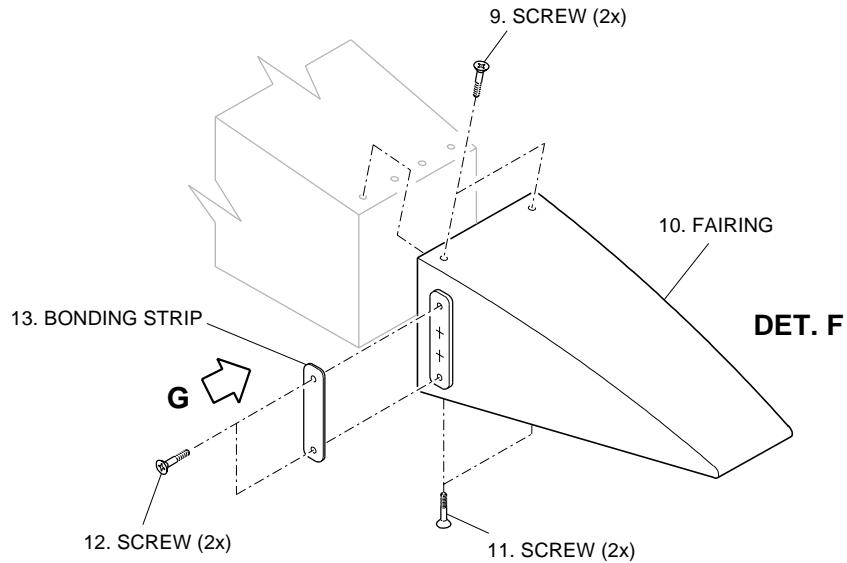
 2 APPLY SEALANT P/S 870B-2

EM145AMM570198A.DGN

**EFFECTIVITY: ALL**

Torque Box I, II, III Fairings - Removal/Installation

Figure 401 - Sheet 2



 APPLY SEALANT P/S 870B-2.

EM145AMM570199A.DGN



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 57-50-01-400-801-A

EFFECTIVITY: ALL

3. TORQUE BOX FAIRINGS - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the RH and LH Torque Box I, II and III Fairings.

B. References

REFERENCE	DESIGNATION
SRM 51-20-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MIL-S-81733 Type II-2	Sealant, P/S 870B-2	AR
MIL-S-81733 Type IV-12	Sealant, P/S870C-12	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	On the torque box fairing

I. Installation Torque Box I Fairing (Figure 401 - DET. F)

SUBTASK 420-006-A

- (1) Install the fairing (10), as follows:

- (a) Install the fairing (10), the screws (9), (11), the bonding strip (13) and screw (12).  
Do not tighten the screws.
- (b) Set the flap control lever to the 0° position.
- (c) Align the fairing (10) with the flap trailing edge.
- (d) Tighten the screws (9) and (11).



**WARNING: MAKE SURE THAT THERE ARE NO PERSONS OR EQUIPMENT IN THE FLAP TRAVEL AREA.**

- (e) Set the flaps to the 45-degree position.
- (f) On the circuit breaker panel, open the FLAP 1 and FLAP 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (g) Tighten the screw (12).
- (h) Apply aerodynamic sealant P/S 870B-2 (SRM 51-20-01).

**NOTE:** The sealant curing time will vary with the environmental conditions.  
Refer to SRM 51-20-01.

J. Installation Torque Box II Fairings (Figure 401 - DET. F)

SUBTASK 420-007-A

- (1) Install the fairing (8), as follows:
  - (a) Install the fairing (8) and the screw (7). Do not tighten the screws.
  - (b) Set the flap control lever to the 0° position.
  - (c) Align the fairing (8) with the flap trailing edge.
  - (d) Tighten the screw (7).
  - (e) Apply aerodynamic sealant P/S 870B-2 (SRM 51-20-01).

**NOTE:** The sealant curing time will vary with the environmental conditions.  
Refer to SRM 51-20-01.

- (2) Install the cover (6), as follows:
  - (a) Set the flap control lever to the 0° position.
  - (b) Apply sealant P/S870C-12 (SRM 51-20-01) to the bolts (5).
  - (c) Install the cover (6) and the bolts (5) and (4).
  - (d) Tighten the bolts (4) and (5).
  - (e) Apply aerodynamic sealant P/S 870B-2 (SRM 51-20-01).

**NOTE:** The sealant curing time will vary with the environmental conditions.  
Refer to SRM 51-20-01.

K. Installation Torque Box III Fairing (Figure 401 - DET. F)

SUBTASK 420-008-A

- (1) Install the fairing (3), as follows:
  - (a) Set the flap control lever to the 0° position.
  - (b) Install the fairing (3) and the screws (1) and (2).



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

- (c) Tighten the screws (1) and (2).
- (d) Apply aerodynamic sealant P/S 870B-2 (SRM 51-20-01).

NOTE: The sealant curing time will vary with the environmental conditions.  
Refer to SRM 51-20-01.

L. Follow-on

SUBTASK 842-004-A

- (1) Set the flap control lever to the 0° position and close the FLAP 1 and FLAP 2 circuit breakers.