



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TAIL BOOM - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the tail boom.
- 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
55-36-00-000-801-A	TAIL BOOM - REMOVAL	ALL
55-36-00-400-801-A	TAIL BOOM - INSTALLATION	ALL



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 55-36-00-000-801-A

EFFECTIVITY: ALL

2. TAIL BOOM - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the tail boom.

B. References

REFERENCE	DESIGNATION
AMM TASK 55-11-01-200-801-A/600	HORIZONTAL-TO-VERTICAL-STABILIZER BONDING JUMPERS - VISUAL INSPECTION
S.B.145-33-0005	-
S.B.145-55-0028	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
321		Horizontal stabilizer

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
1	Does the task	Horizontal stabilizer

I. Preparation

SUBTASK 841-002-A

- (1) On the circuit breaker panel, open the PITCH TRIM 1 and 2 circuit breakers and attach a DO-NOT-CLOSE tag to them.
- (2) On the left electrical power control/distribution box, open the PITCH TRIM 1 circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (3) On the right electrical power control/distribution box, open the PITCH TRIM 2 circuit breaker and attach a DO-NOT-CLOSE tag to it.



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

(4) Put a DO-NOT-OPERATE-THE-HORIZONTAL-STABILIZER sign on the pitch trim panel, in the cockpit.

(5) Make sure that the NAV and STROBE switches, on the overhead panel, are in the OFF position and attach a DO-NOT-SET-TO-ON tag to them.

J. Front Movable Fairing - Removal ([Figure 401](#))

SUBTASK 020-002-A

(1) Remove the screws (19).

(2) Remove the front movable fairing (17).

K. RH and LH Seal Fairings - Removal ([Figure 401](#))

SUBTASK 020-003-A

NOTE: For AIRCRAFT PRE-MOD. [S.B.145-55-0028](#), after removing one of the LH or RH seal fairings inspect the horizontal-to-vertical bonding jumpers, according to [AMM TASK 55-11-01-200-801-A/600](#).

(1) Remove the screws (7).

(2) Remove the screws (8).

(3) Remove the LH seal fairing (9).

(4) Remove the screws (16).

(5) Remove the screws (14).

(6) Remove the RH seal fairing (15).

L. Rear Movable Fairing - Removal ([Figure 401](#))

SUBTASK 020-004-A

(1) Remove the screws (6).

(2) Disconnect the electrical connector (4). Refer to [Figure 402](#).

(3) Remove the screws (3) and open the access panel (4).

(4) For aircraft POST-MOD. [S.B.145-33-0005](#) (installation of the mounting rack):

(a) Remove the screws (2) and washers (3). Refer to [Figure 402](#).

(b) Remove the screws (6) and washers (5). Refer to [Figure 402](#).

(5) Remove the screws (2) and washers (1).

(6) Remove the rear movable fairing (5).

M. Rear Fixed Fairing - Removal ([Figure 401](#))

SUBTASK 020-005-A

(1) Remove the screws (11).



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

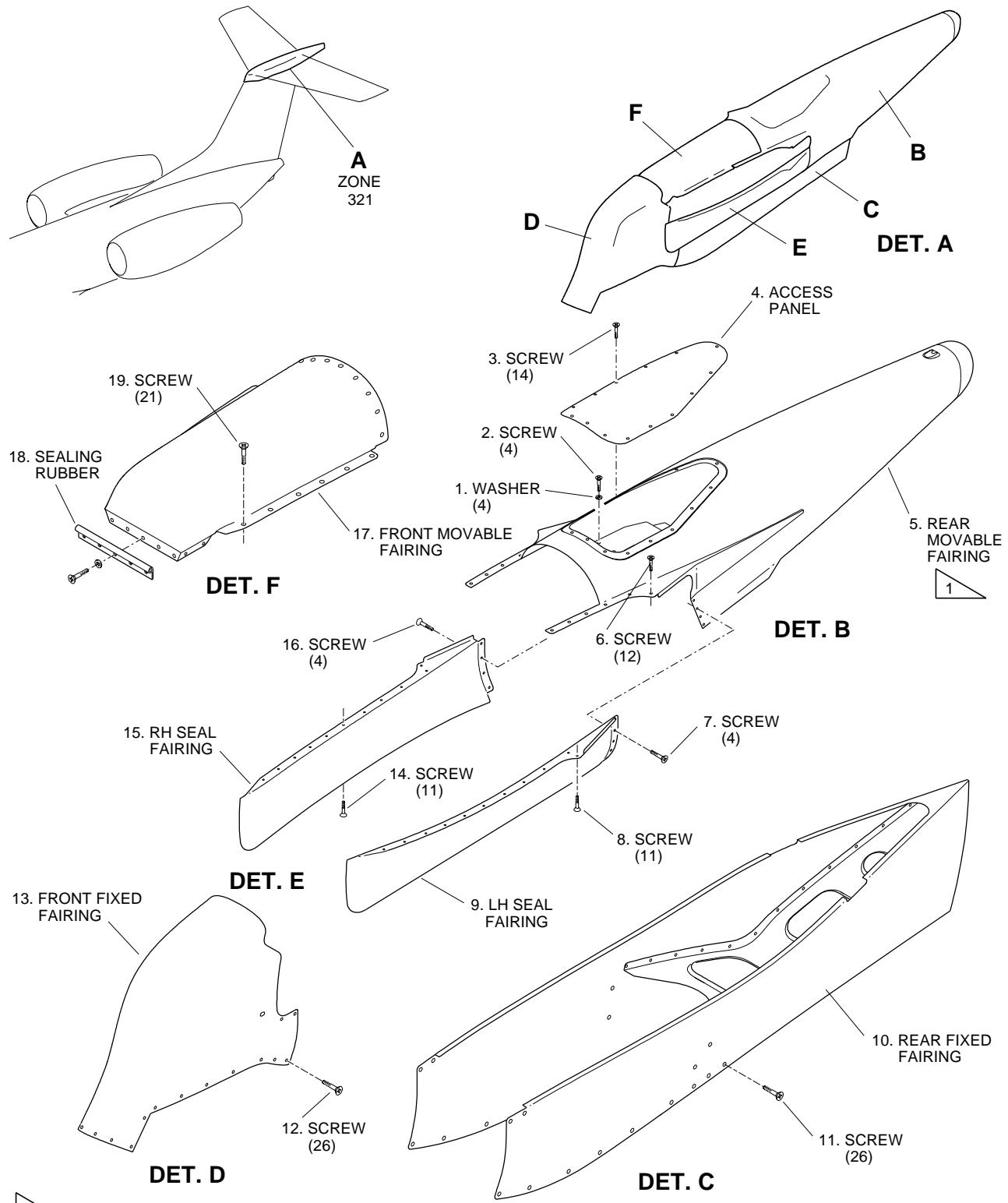
- (2) Remove the rear fixed fairing (10).

N. Front Fixed Fairing - Removal ([Figure 401](#))

SUBTASK 020-006-A

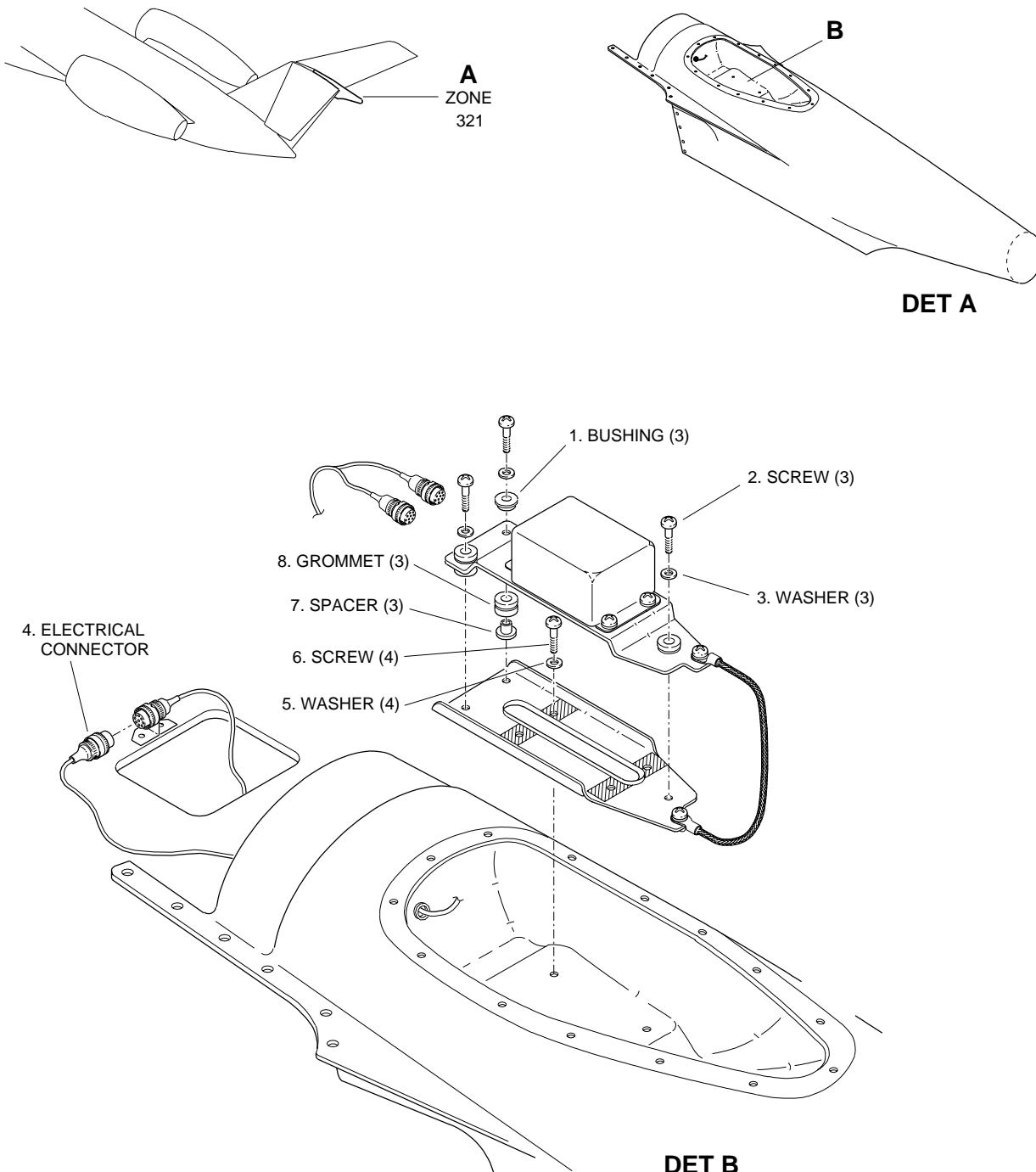
- (1) Remove the screws (12).
- (2) Remove the front fixed fairing (13).

EFFECTIVITY: ALL
Tail Boom - Removal/Installation
Figure 401



EM145AMM550029B.DGN

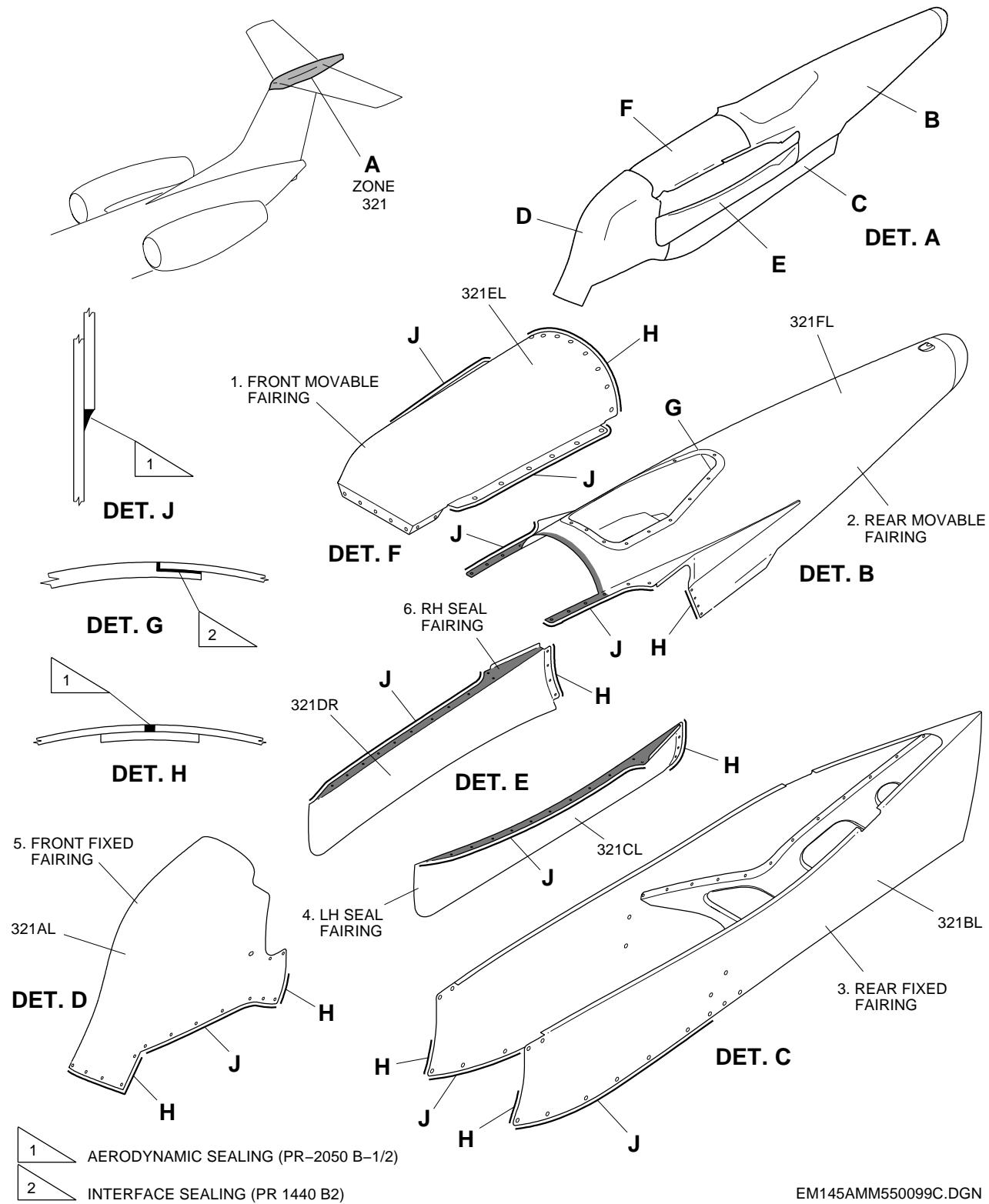
EFFECTIVITY: ALL
Mounting Rack
Figure 402



EFFECTIVITY: ALL

Sealing

Figure 403

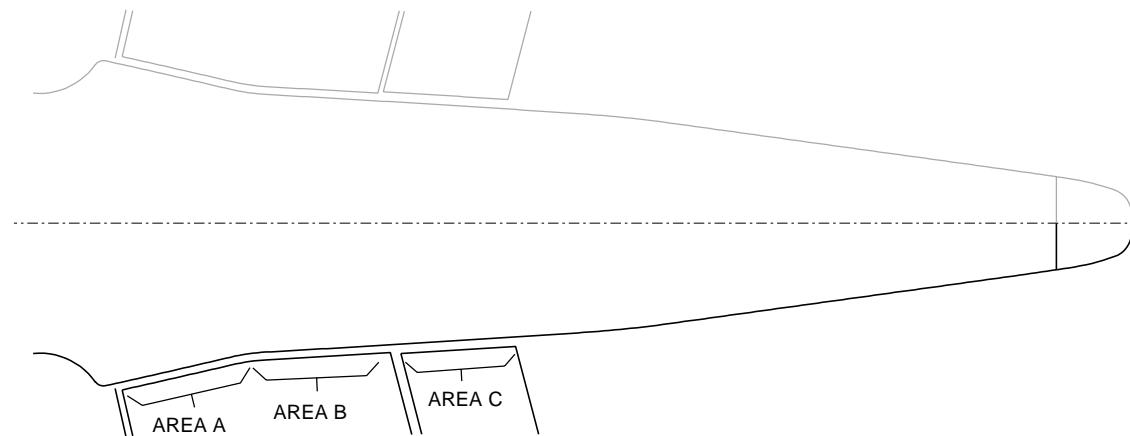
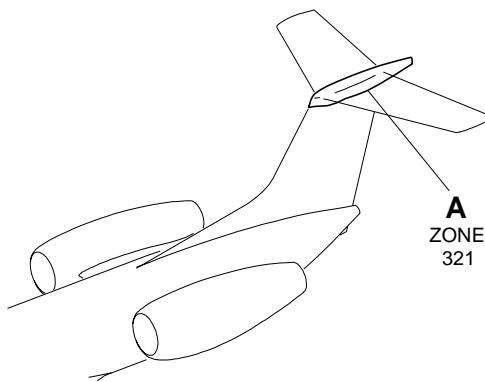


EM145AMM550099C.DGN

EFFECTIVITY: ALL

Gaps Between Rear Fixed and Moveable Fairing and Horizontal Stabilizer Structures

Figure 404

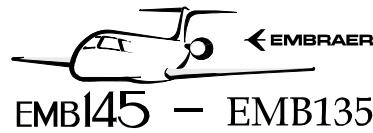


DET. A

TAIL BOOM, ELEVATOR AND SPRING TAB UPPER VIEW

AREA A – GAP BETWEEN ELEVATOR AND TAIL BOOM: FROM 4 TO 8.5 mm (0.157 TO 0.334 in).
 AREA B – GAP BETWEEN ELEVATOR AND TAIL BOOM: FROM 4 TO 9.7 mm (0.157 TO 0.381 in).
 AREA C – GAP BETWEEN SPRING TAB AND TAIL BOOM: FROM 4 TO 9.7 mm (0.157 TO 0.381 in).

EM145AMM550104A.DGN



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 55-36-00-400-801-A

EFFECTIVITY: ALL

3. TAIL BOOM - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the tail boom.

B. References

REFERENCE	DESIGNATION
AMM TASK 33-47-00-700-801-A/500	ANTICOLLISION LIGHTS - OPERATIONAL TEST
S.B.145-33-0005	-
SRM 51-20-01	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
321		Horizontal stabilizer

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MEP 09-083	PR2050 B1/2 Sealant	AR
MIL-S-8802F TYPE II-Class 2	PR 1440 B2 Sealant	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Horizontal stabilizer

I. Front Fixed Fairing - Installation (Figure 401)

SUBTASK 420-002-A

- (1) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).
- (2) Install the front fixed fairing (13).
- (3) Install the screws (12).



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

J. Rear Fixed Fairing and Movable Fairing - Installation (Figure 401)

SUBTASK 420-003-A

- (1) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).
- (2) Prepare the surface for electrical bonding. Refer to TASK 20-13-21-910-801-A.
- (3) Position the Rear Fixed Fairing (10) and the Rear Movable Fairing (5), keep the screws loose in order to adjust the gaps, refer to Figure 404.
- (4) Make sure that the Rear Movable Fairing (5) gaps are within the limits shown in Figure 404 and Install the screws (6) (Figure 401).
- (5) Connect the electrical connector (4). Refer to Figure 402.
- (6) Install the screws (2) and washers (1).
- (7) For aircraft POST-MOD. [S.B.145-33-0005](#) (installation of the mounting rack):
 - (a) Install the screws (6) and washers (5). Refer to Figure 402.
 - (b) Install the screws (2) and washers (3). Refer to Figure 402.
- (8) Make sure that the rear fixed fairing is centered with the rear movable fairing and install the screws (11), (Figure 401).
- (9) Install the access panel (4), (Figure 401).
- (10) Do the electrical bonding test. Refer to TASK 20-13-21-700-801-A.
- (11) Do an operational check of the strobe lights ([AMM TASK 33-47-00-700-801-A/500](#)).

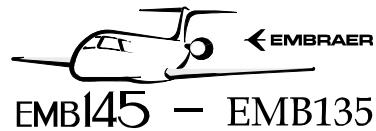
NOTE: Make sure that there is no damage in the interface sealant. If necessary, apply the sealant again (MIL-PRF-81733 Type IV-12) (SRM 51-20-01). Refer to DET. B Figure 403.

- (12) Do the aerodynamic sealing with PR2050 B1/2 sealant (SRM 51-20-01). Refer to DET. B and DET. C Figure 403.

K. RH and LH Seal Fairings - Installation (Figure 401)

SUBTASK 420-004-A

- (1) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).
- (2) Install the RH seal fairing (15).
- (3) Install the screws (14).
- (4) Install the screws (16).
- (5) Install the LH seal fairing (9).
- (6) Install the screws (7).
- (7) Install the screws (8).



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

- (8) Do the aerodynamic sealing with PR2050 B1/2 sealant (SRM 51-20-01). Refer to DET. E Figure 403.

L. Front Movable Fairing - Installation (Figure 401)

SUBTASK 420-005-A

- (1) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).
- (2) Install the front movable fairing (17).
- (3) Install the screws (19).
- (4) Do a check to see if the sealing rubber (18) is seated correctly in the front fixed fairing (13) and make sure that:
 - There is not too much friction when the horizontal stabilizer moves. Too much friction can cause damage to the sealing rubber (18).
 - There is no gap between the sealing rubber (18) and the front fixed fairing (13).
- (5) Do the aerodynamic sealing with PR2050 B1/2 sealant (SRM 51-20-01). Refer to DET. F Figure 403.

M. Follow-on

SUBTASK 842-002-A

- (1) On the circuit breaker panel, close the PITCH TRIM 1 and 2 circuit breakers and remove the DO-NOT-CLOSE tag from them.
- (2) On the left electrical power control/distribution box, close the PITCH TRIM 1 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (3) On the right electrical power control/distribution box, close the PITCH TRIM 2 circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (4) Remove the DO-NOT-OPERATE-THE-HORIZONTAL-STABILIZER sign from the pitch trim panel, in the cockpit.
- (5) Remove the DO-NOT-SET-TO-ON tags from the NAV and STROBE switches.

