



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

WING TIP - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the wing tip.
- 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).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
57-30-00-000-801-A	WING TIP - REMOVAL	ALL
57-30-00-400-801-A	WING TIP - INSTALLATION	ALL



AIRCRAFT MAINTENANCE MANUAL

TASK 57-30-00-000-801-A

EFFECTIVITY: ALL

2. WING TIP - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the wing tip.

B. References

REFERENCE	DESIGNATION
AMM SDS 33-43-00/1	
AMM SDS 33-47-00/1	
SB145-33-0036	-
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 wing tip

I. Preparation

SUBTASK 841-003-A

- (1) On the circuit breaker panel, open the "LIGHTS-STROBE" circuit breaker and attach a DO-NOT-CLOSE tag to it.

J. Removal (Figure 401) (Figure 402)

SUBTASK 020-003-A

- (1) Remove the screws (2) from the wing tip (3) (refer to Figure 401).



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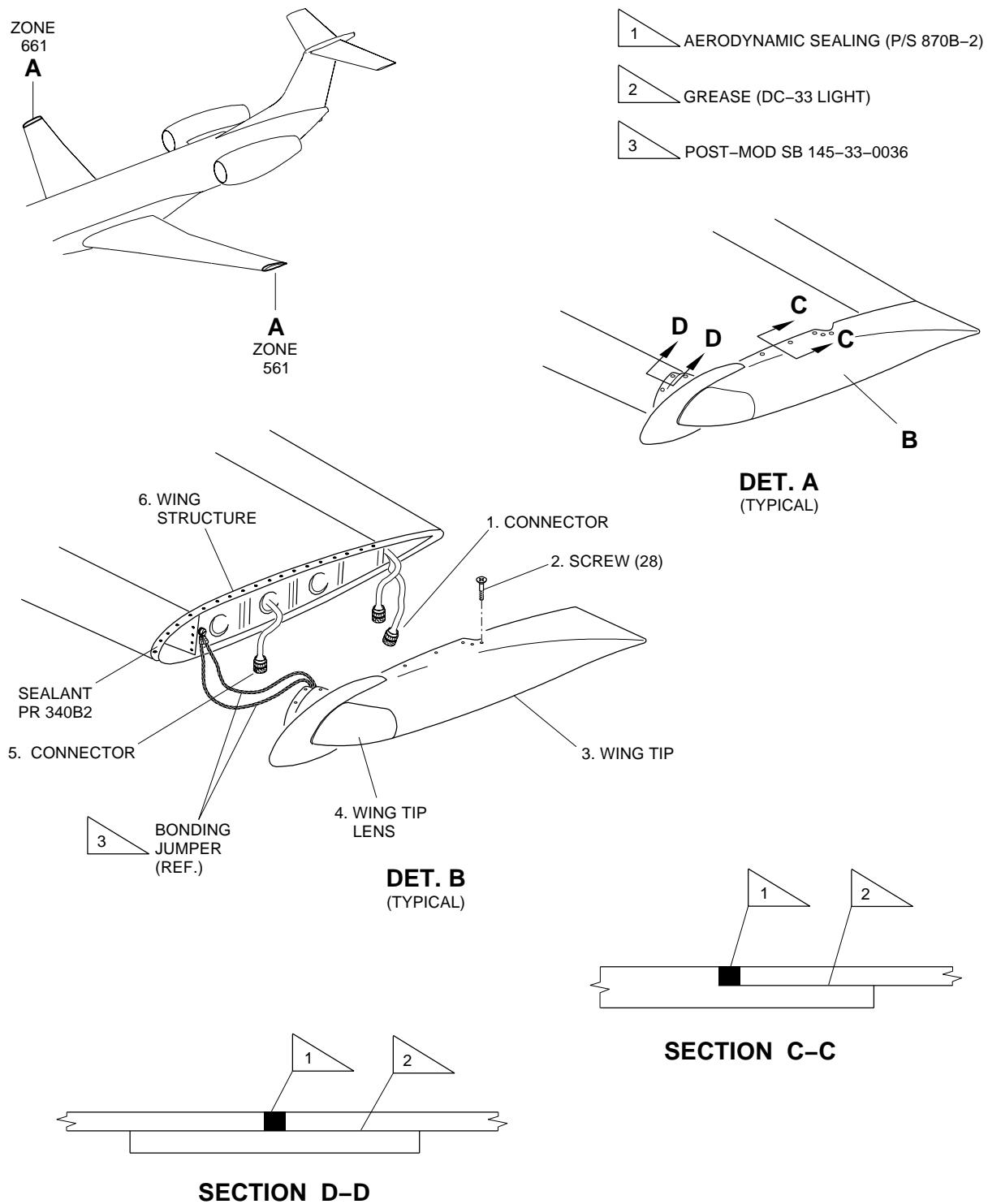
WARNING: MAKE SURE THAT THE SYSTEM IS DEENERGIZED BEFORE YOU DO THIS TASK. A MINIMUM OF 10 MINUTES MUST GO BY BEFORE IT IS SAFE TO TOUCH THE ANTICOLLISION LIGHT CONNECTOR (AMM SDS 33-47-00/1) AND THE NAVIGATION LIGHT (AMM SDS 33-43-00/1).

- (2) Remove the wing tip (3) and then disconnect the connectors from the anti-collision light (5) and navigation light (1) cables (refer to Figure 401).
 - (3) On aircraft POST-MOD **SB145-33-0036**, do as follows:
 - (a) Remove the nut (3), screw (1), and bonding jumpers (2) from the navigation light connector flange (refer to Figure 402).
 - (4) Remove the wing tip (3) (refer to Figure 401).
- NOTE:** Make sure that the interface sealant is not damaged. If necessary, apply sealant again. Refer to SRM 51-20-01.
- (5) Remove the old aerodynamic sealant and prepare the surface (SRM 51-20-01).

EFFECTIVITY: ALL

Wing Tip - Removal/Installation

Figure 401

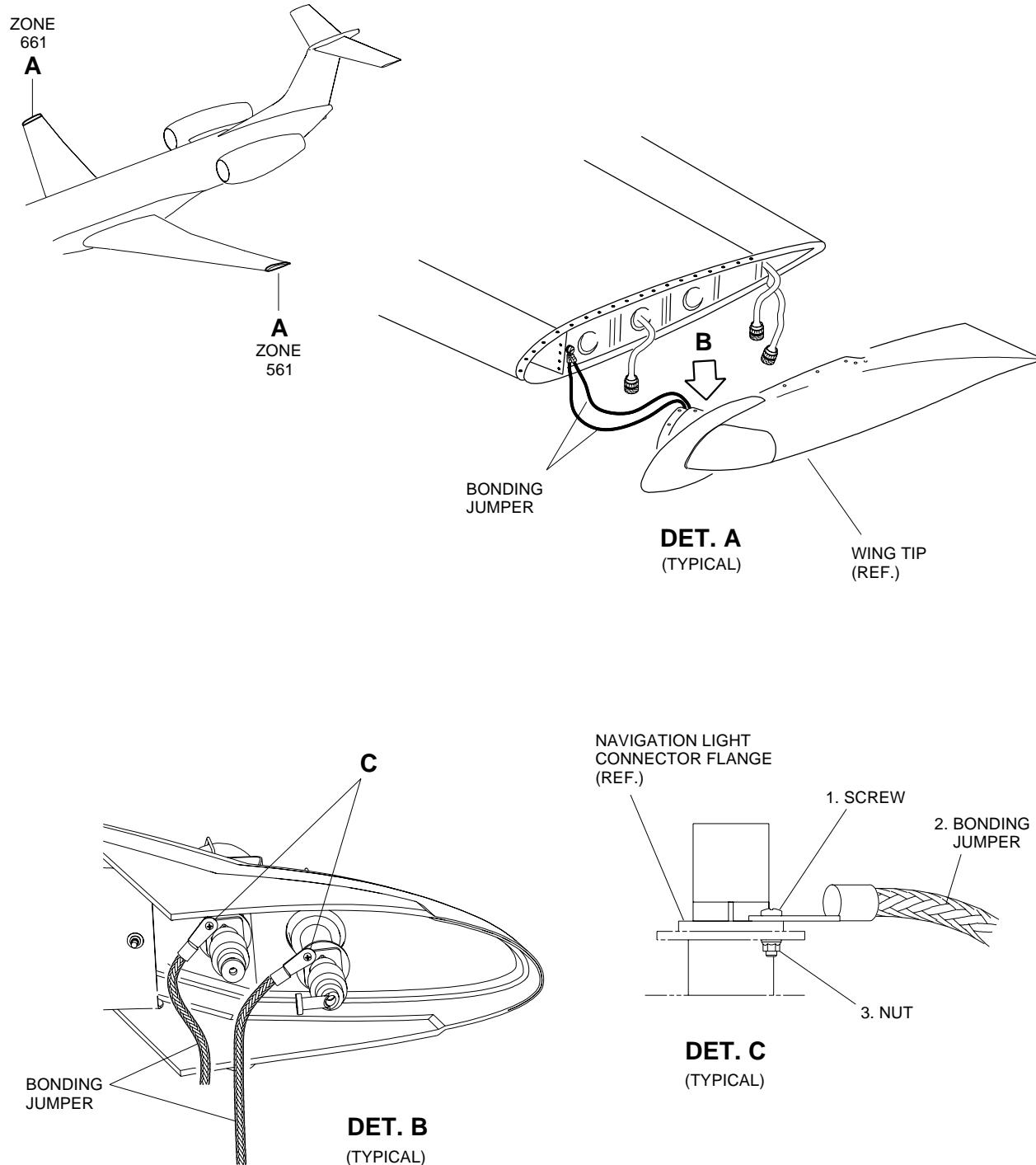


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EFFECTIVITY: ALL

Bonding Jumper - Removal/Installation

Figure 402



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TASK 57-30-00-400-801-A

EFFECTIVITY: ALL

3. WING TIP - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the wing tip.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-13-21-700-801-A/200	ELECTRICAL BONDING TEST - STANDARD PROCEDURES
AMM TASK 20-13-21-910-801-A/200	TYPES OF ELECTRICAL BONDING AND SURFACE PREPARATION - STANDARD PROCEDURES
AMM TASK 20-13-21-910-802-A/200	ELECTRICAL BONDING PROTECTION - STANDARD PROCEDURES
AMM TASK 33-43-00-700-801-A/500	NAVIGATION LIGHTS - OPERATIONAL TEST
SB145-33-0036	-
SRM 51-20-01	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

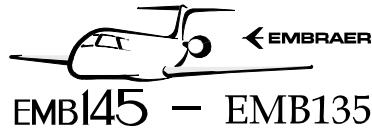
Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MIL-PRF-81733 TYPE II-2	Sealant, P/S 870 - B 2	AR
MIL-PRF-81733 TYPE II-1/2	Sealant, P/S 870 - B 1/2	AR
Commercially available	Adhesive Tape	AR
Commercially available	Aluminum Tape (AL Tape 425)	AR
Commercially available	Polyethylene Film	AR
MIL-G-47886	Grease, Molykote, DC-33, Light	AR
TT-N-95	Naphtha	AR
Commercially available	Flannel	AR

G. Expandable Parts

Not Applicable



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	On the wing tip

I. Installation (Figure 401) (Figure 402)

SUBTASK 420-003-A

- (1) Apply Molykote DC-33 light grease to the faying surface of the wing tip (refer to Figure 401).
- (2) On aircraft POST-MOD [SB145-33-0036](#), do as follows:
 - (a) Install the bonding jumpers (2), screw (1), and nut (3). Refer to [AMM TASK 20-13-21-910-801-A/200](#), method 7 (refer to Figure 402).
 - (b) Do the electrical bonding test ([AMM TASK 20-13-21-700-801-A/200](#)).
 - (c) Do the electrical bonding protection ([AMM TASK 20-13-21-910-802-A/200](#)).
- (3) Put the wing tip (3) in position and connect the cable connectors to the anticolision light (5) and navigation light (1) (refer to Figure 401).

CAUTION: USE NONMAGNETIC SCREWS TO INSTALL THE WING TIP.

- (4) Put the wing tip (3) in position and install the screws (2) and tighten them alternately (refer to Figure 401).

J. Follow-on (Figure 401)

SUBTASK 842-003-A

- (1) Do the operational test of the main/standby wing navigation lights installed ([AMM TASK 33-43-00-700-801-A/500](#)).
- (2) There are different methods to do the aerodynamic sealing between the wing tip (3) and the frame. Use the applicable procedure as necessary.
 - (a) Full sealant-curing time:

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

NOTE: Sealant curing time will vary according to environment conditions.
Refer to SRM 51-20-01.

- (b) Acceleration of sealant curing time with heating:

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

- 2 Wait for one hour after the sealant is applied.

CAUTION: THE TEMPERATURE MUST NOT BE HIGHER THAN 55°C (131°F).

- 3 Heat the area which received the sealant.

NOTE: Sealant curing time versus temperature rate varies as shown in the Sealant Specification Table SRM 51-20-01.

- (c) Application of aluminum tape after tack-free time.

NOTE: This procedure must only be done when a faster aircraft clearance is necessary.

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.
- 2 You can accelerate the sealant curing time as written in paragraph (b).
- 3 After the sealant is tack-free, apply aluminum tape.

NOTE: You can operate the aircraft immediately after the aluminum tape application.

- 4 Remove aluminum tape after 150 hours.

- (d) Application of polyethylene film and aluminum tape.

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.
- 2 Apply a polyethylene film over the sealant.
- 3 Apply the aluminum tape.

NOTE: You can operate the aircraft immediately after the aluminum tape application.

- 4 Remove the aluminum tape after 10 days.

- (3) Clean the protective lens (4) of the anticollision light and navigation light with a flannel soaked in naphtha.

- (4) On the circuit breaker panel, close the "LIGHTS-STROBE" circuit breaker and remove the DO-NOT-CLOSE tag from it.