



AIRCRAFT MAINTENANCE MANUAL

ELT ANTENNA - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the ELT antenna.
- B. The ELT antenna is installed on the top of the center fuselage IV.
- 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
25-61-03-000-801-A	ELT ANTENNA - REMOVAL	ALL
25-61-03-400-801-A	ELT ANTENNA - INSTALLATION	ALL



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TASK 25-61-03-000-801-A

EFFECTIVITY: ALL

2. ELT ANTENNA - REMOVAL

A. General

- (1) This task gives the procedures to remove the ELT antenna.

B. References

REFERENCE	DESIGNATION
AMM TASK 25-22-04-000-801-A/400	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
263	263BLC	Passenger cabin ceiling - LH
263		Fuselage top

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Polyethylene spatula	To remove the sealant	AR
Commercially available	Workstand - Upper Skin Top	To get access to the ELT antenna	AR

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Center fuselage IV - interior
1	Does the task	Center fuselage IV - exterior

I. Preparation

SUBTASK 841-002-A

- (1) On the circuit breaker panel, installed on the cockpit ceiling, open the ELT circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (2) Remove ceiling panel 263BLC (AMM TASK 25-22-04-000-801-A/400) to get access to the ELT antenna.



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J. Removal (Figure 401) (Figure 402) (Figure 403) (Figure 404) (Figure 405) (Figure 406)

SUBTASK 020-002-A

- (1) From the inside of the aircraft, disconnect the electrical connector (3) from the ELT antenna (1).
- (2) Use a spatula to remove the sealant from around the fuselage skin hole and the ELT antenna (1), on the inner surface of the fuselage skin hole.
- (3) Use a workstand (external top fuselage) to get access to the ELT antenna (1).
- (4) On the fuselage outside, use a spatula to remove the aerodynamic sealant from the contour of the ELT antenna (1) and from aircraft skin.
- (5) Remove the sealant used as protection of the screws (2).
- (6) Remove the screws (2) that attach the ELT antenna (1) to the fuselage.

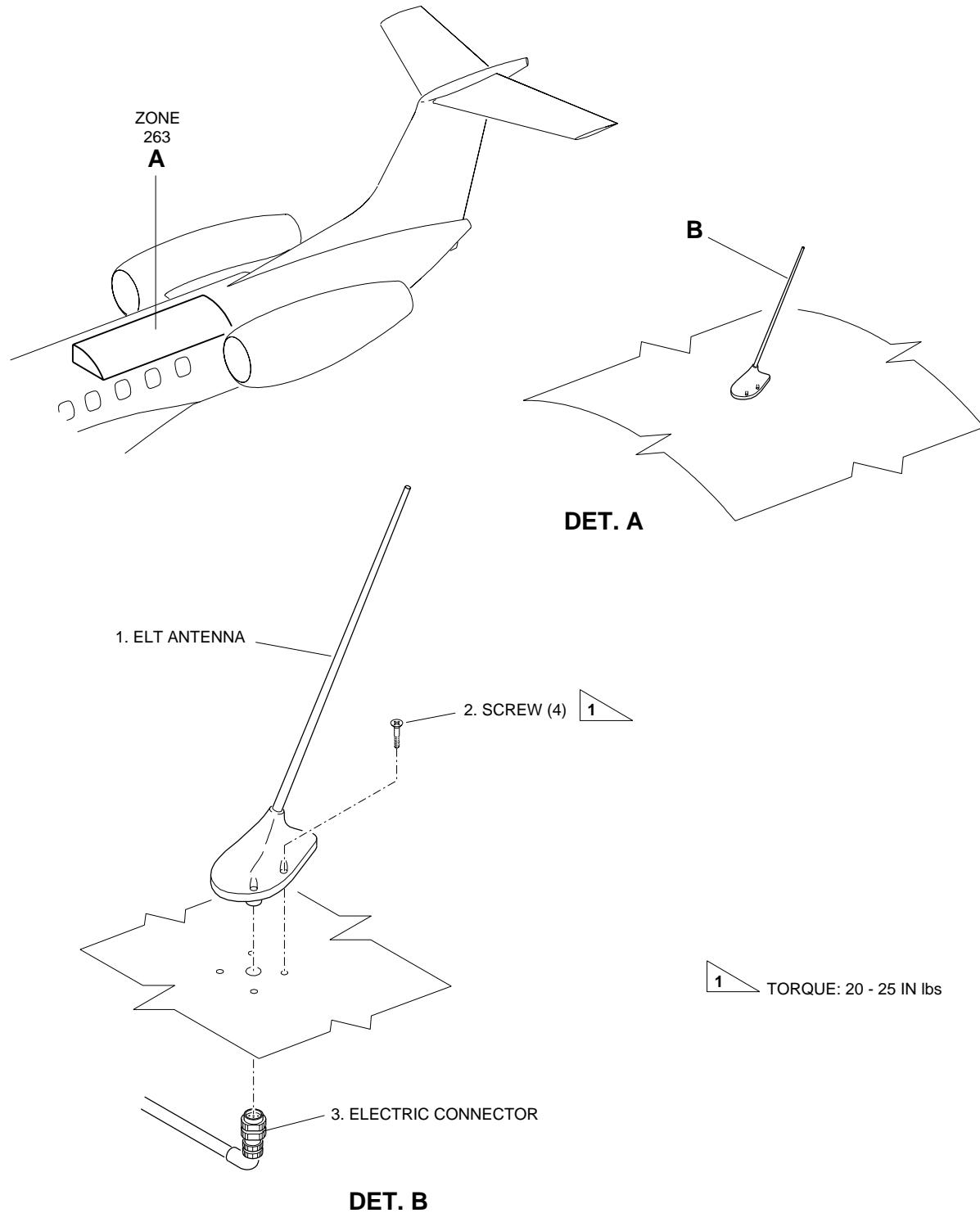
CAUTION: BE CAREFUL WHEN USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

- (7) Use a spatula between the baseplate of the ELT antenna (1) and the aircraft skin to make the separation.
- (8) Carefully pull the ELT antenna (1) away from the fuselage.
- (9) Remove the antenna (1).
- (10) (AIRCRAFT WITH ANTENNA WITH GEL CONDUCTIVE GASKET) Remove and discard the gel conductive gasket (4).
- (11) Use a spatula to remove the sealant from around the connector of the ELT antenna (1).

EFFECTIVITY: PRE-MOD. S.B. 145-25-0080

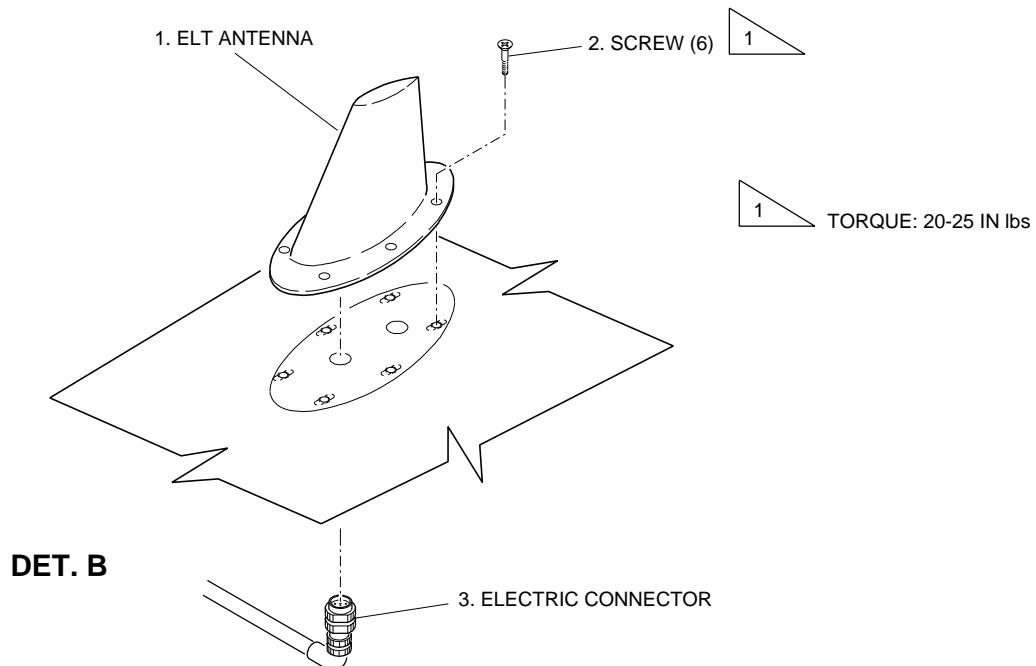
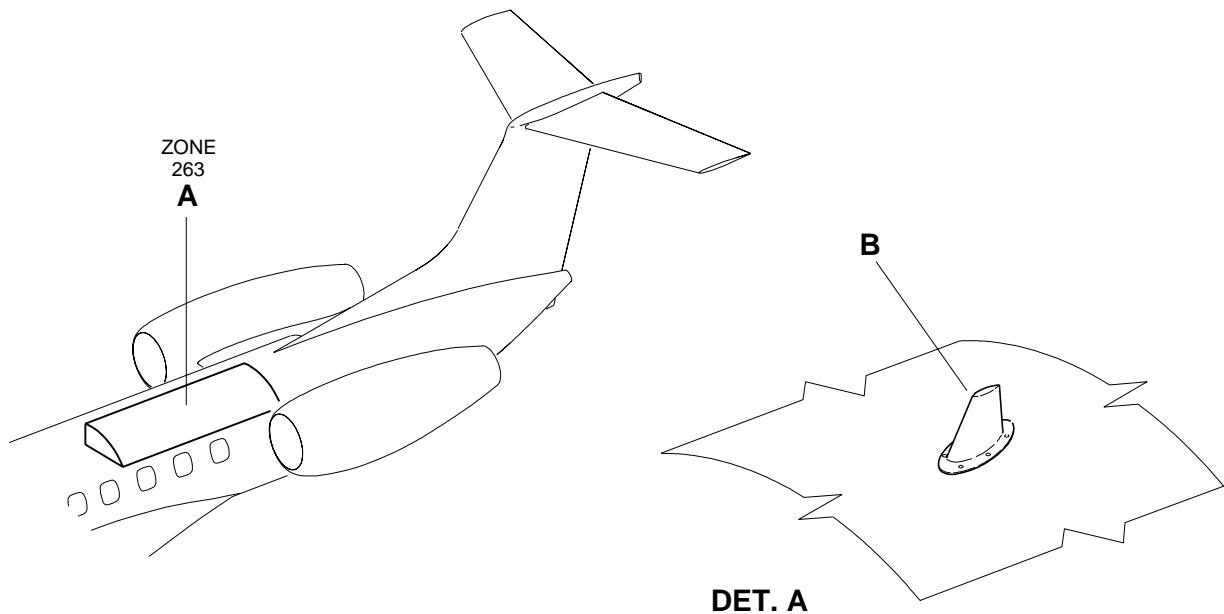
ELT Antenna - Removal/Installation

Figure 401



145AMM250025.MCE B

**EFFECTIVITY: POST-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITHOUT GEL CONDUCTIVE
GASKET**
ELT Antenna - Removal/Installation
Figure 402

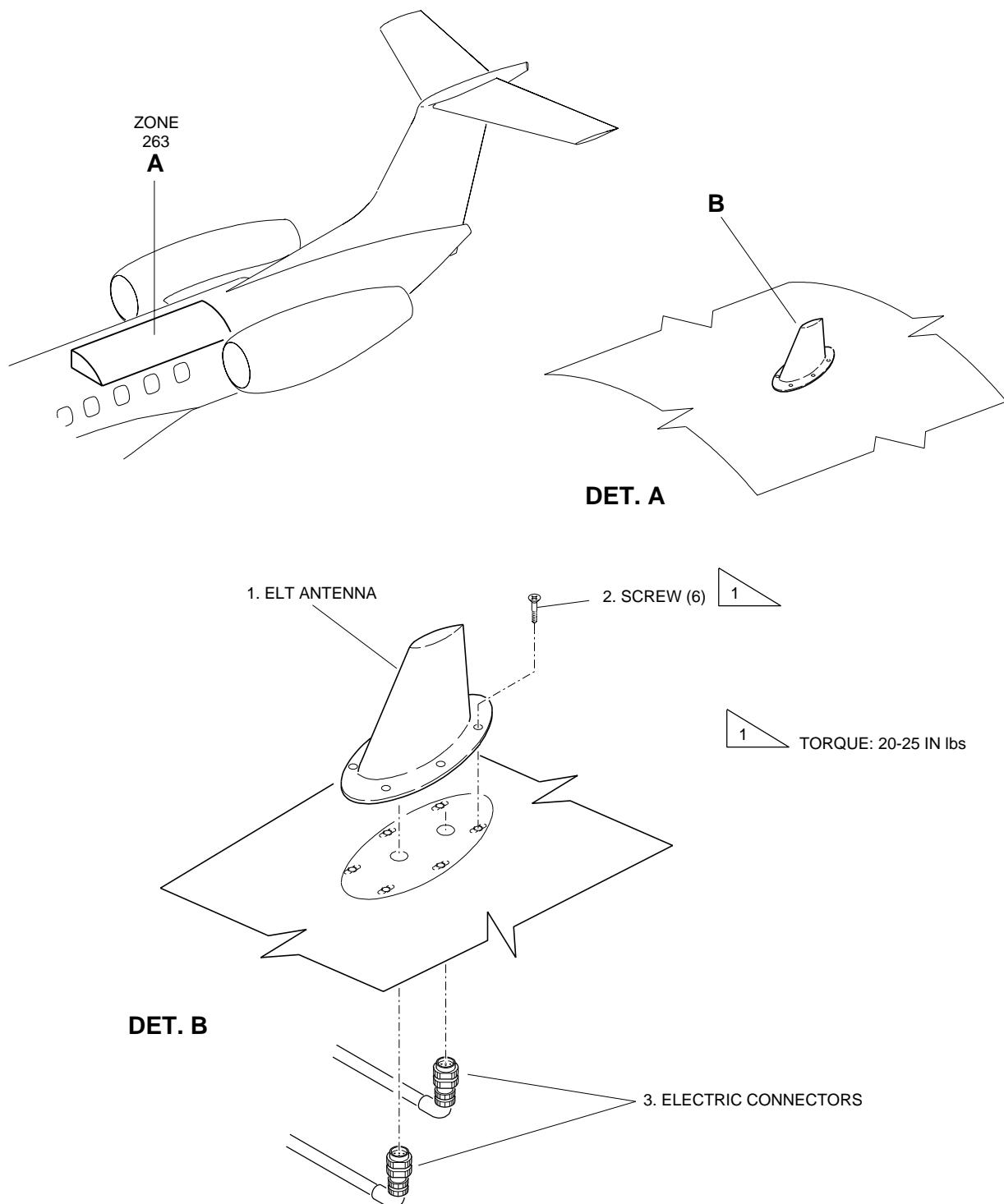


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EFFECTIVITY: AIRCRAFT WITH ELT ARTEX C406-2 AND ANTENNA WITHOUT GEL CONDUCTIVE GASKET

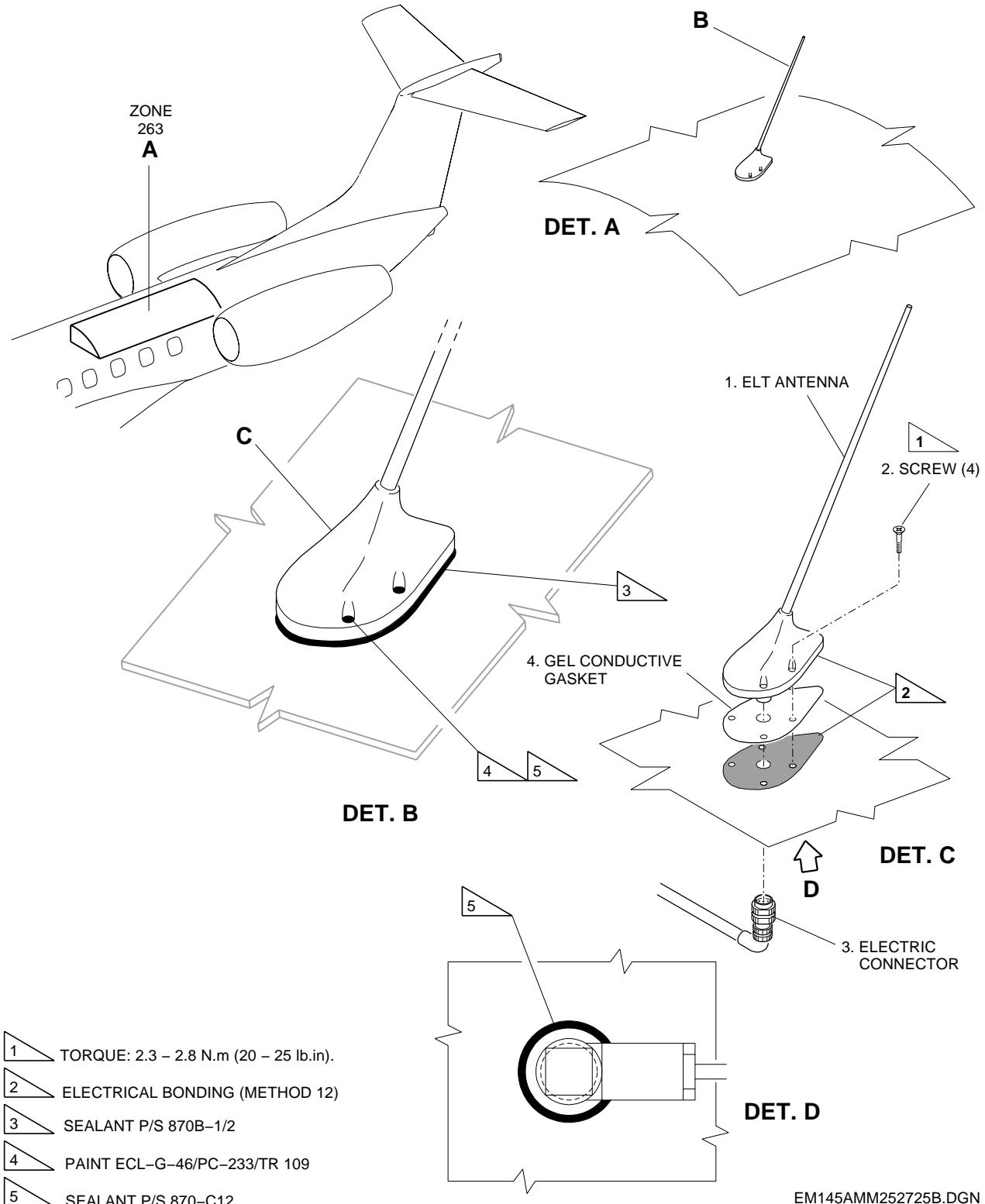
ELT Antenna (ARTEX C406-2) - Removal/Installation

Figure 403

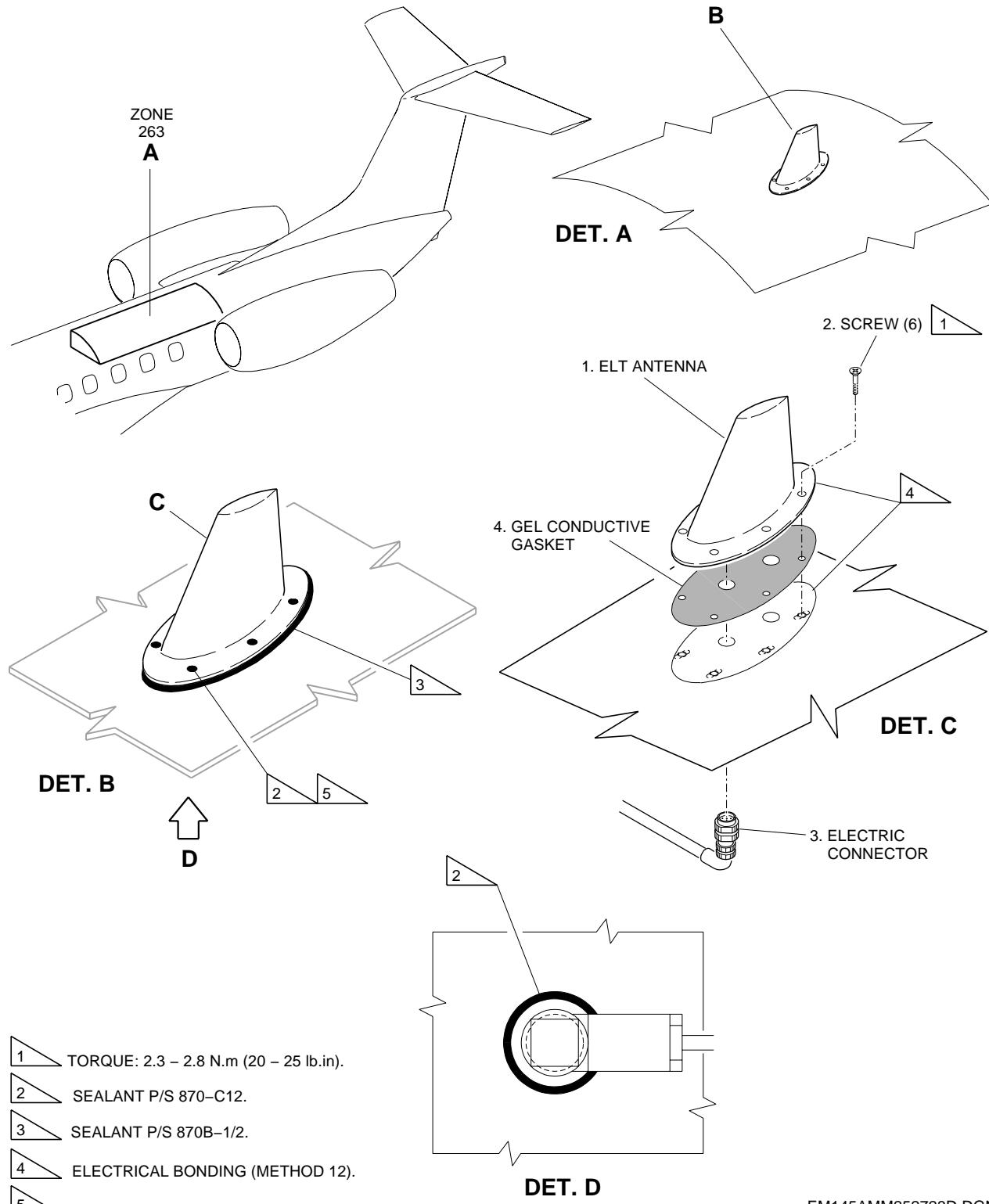


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EFFECTIVITY: PRE-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITH GEL CONDUCTIVE GASKET
ELT Antenna - Removal/Installation
Figure 404

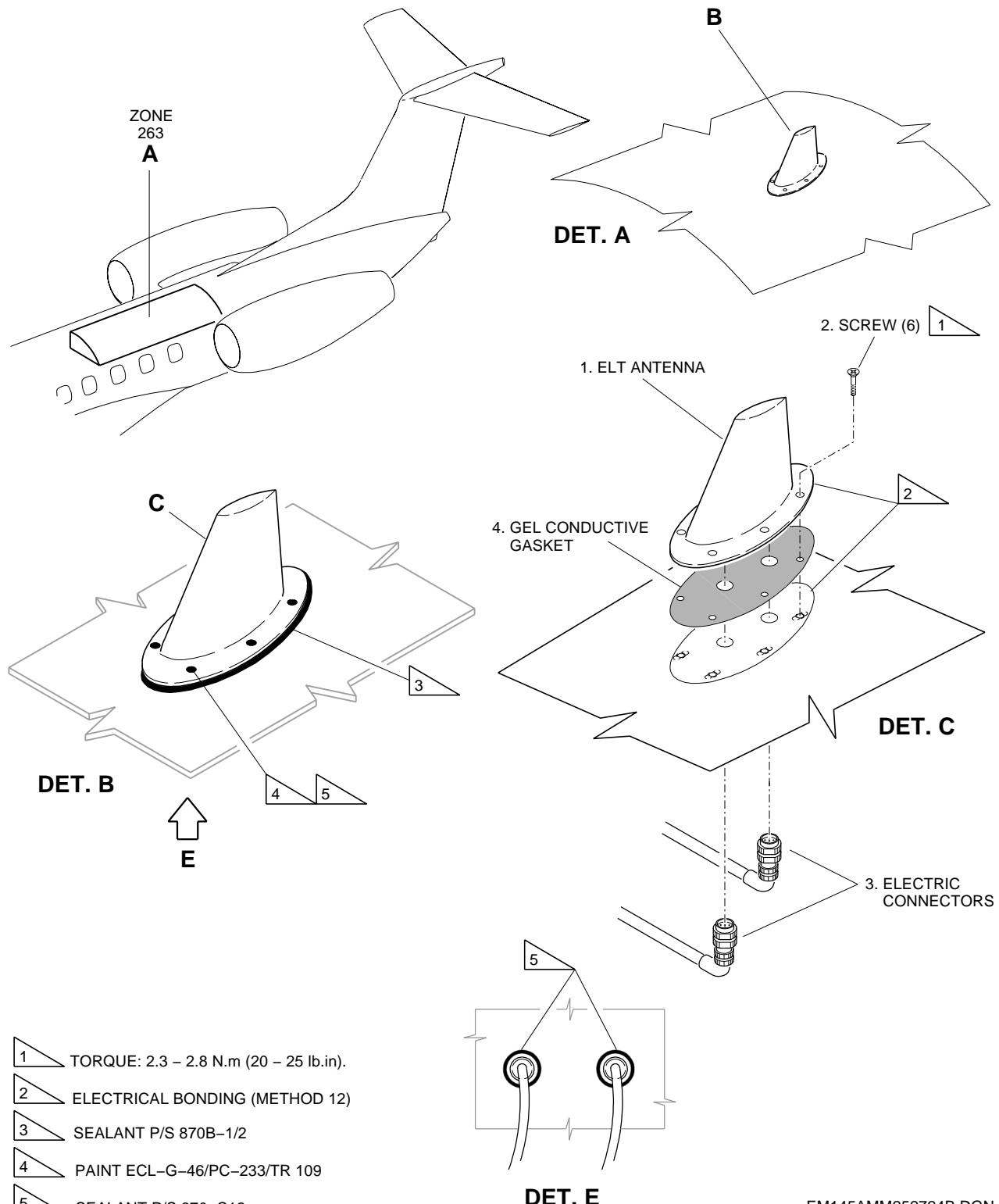


EFFECTIVITY: POST-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITH GEL CONDUCTIVE GASKET
ELT Antenna - Removal/Installation
Figure 405



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EFFECTIVITY: AIRCRAFT WITH ELT ARTEX C406-2 AND ANTENNA WITH GEL CONDUCTIVE GASKET
ELT Antenna (ARTEX C406-2) - Removal/Installation
Figure 406



EM145AMM252724B.DGN



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TASK 25-61-03-400-801-A

EFFECTIVITY: ALL

3. ELT ANTENNA - INSTALLATION

A. General

(1) This task gives the procedures to install the ELT antenna.

B. References

REFERENCE	DESIGNATION
AMM TASK 20-11-01-910-801-A/200	ANTENNA SEALING
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 25-22-04-400-801-A/400	-
AMM TASK 25-61-00-700-801-A/500	EMERGENCY LOCATOR TRANSMITTER SYSTEM (ELT 110-4) - OPERATIONAL CHECK
AMM TASK 25-61-00-700-802-A/500	EMERGENCY-LOCATOR-TRANSMITTER SYSTEM (ELT SATORI) - OPERATIONAL CHECK
AMM TASK 25-61-00-700-803-A/500	EMERGENCY LOCATOR TRANSMITTER SYSTEM (ELT C406-2) - OPERATIONAL CHECK
CPM 51-21-06	-
SRM 51-20-01	-

C. Zones and Accesses

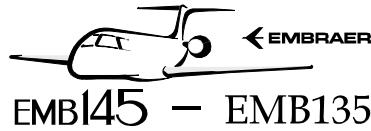
ZONE	PANEL/DOOR	LOCATION
263	263BLC	Passenger cabin ceiling - LH
263		Fuselage top

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Polyethylene spatula	To remove the sealant	AR
Commercially available	Clean and dry cloth	To clean the antenna base	AR
Commercially available	Workstand - Upper Skin Top	To get access to the ELT antenna	AR



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F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
ASTM-D-740	Methyl Ethyl Ketone (MEK)	AR
P/S870B-1/2 (MIL-PRF-81733)	Type II CL B-1/2 Polysulfide Aerodynamic Sealant	AR
P/S870C-12 (MIL-PRF-81733)	Type IV CL-12 Rubber, Polysulfide-Interface Sealant	AR
ECL-G-46/PC-233/TR109 (MEP 10-069)	High Solids Polyurethane White Paint	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Center fuselage IV - interior
1	Does the task	Center fuselage IV - exterior

I. Installation (Figure 401) (Figure 402) (Figure 403)

SUBTASK 420-002-A

EFFECTIVITY: AIRCRAFT WITH ANTENNA WITHOUT GEL CONDUCTIVE GASKET

WARNING: BE CAREFUL WHEN YOU USE THE METHYL-ETHYL-KETONE (MEK). PUT ON SAFETY GOGGLES, PROTECTIVE GLOVES AND CLOTHING. DO NOT BREATHE THE GAS. DO THE WORK IN AN AREA WHICH HAS A GOOD FLOW OF AIR. THE METHYL-ETHYL-KETONE (MEK) IS POISONOUS AND HIGHLY FLAMMABLE.

- (1) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the antenna base surface.
- (2) Use a workstand (external top fuselage) to get access to the installation position of the ELT antenna (1).

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT AND TO THE EQUIPMENT CAN OCCUR.

- (3) Do the electrical bonding procedure, method 12, on the installation surfaces of the antenna (1) and the fuselage skin ([AMM TASK 20-13-21-910-801-A/200](#)).
- (4) Put the ELT antenna (1) in position.
- (5) Wet the screws (2) in P/S870C-12 and attach the ELT antenna (1) with them. Tighten manually.
- (6) From the inside of the aircraft, connect the electrical connector (3) to the ELT antenna (1).
- (7) Do the electrical bonding test between the coaxial connector on the antenna (1) and the aircraft ground ([AMM TASK 20-13-21-700-801-A/200](#)).



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- (8) Apply sealant P/S870C-12 on the contour of the electrical connector (3).
- (9) Apply aerodynamic sealant P/S870B-1/2 along all the contour of the ELT antenna base ([AMM TASK 20-11-01-910-801-A/200](#)).

J. Installation (Figure 404) (Figure 405) (Figure 406)

SUBTASK 420-003-A

EFFECTIVITY: AIRCRAFT WITH ANTENNA WITH GEL CONDUCTIVE GASKET

WARNING: BE CAREFUL WHEN YOU USE THE METHYL-ETHYL-KETONE (MEK). PUT ON SAFETY GOGGLES, PROTECTIVE GLOVES AND CLOTHING. DO NOT BREATHE THE GAS. DO THE WORK IN AN AREA WHICH HAS A GOOD FLOW OF AIR. THE METHYL-ETHYL-KETONE (MEK) IS POISONOUS AND HIGHLY FLAMMABLE.

- (1) With a clean cloth soaked in Methyl Ethyl Ketone (MEK), clean the antenna base surface.
- (2) Use a workstand (external top fuselage) to get access to the installation position of the ELT antenna (1).

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT AND TO THE EQUIPMENT CAN OCCUR.

- (3) Do the electrical bonding procedure, method 12, on the installation surfaces of the antenna (1) and the fuselage skin ([AMM TASK 20-13-21-910-801-A/200](#)).
- (4) Carefully remove the protective release film identified with "ANTENNA SIDE" from the gel conductive gasket (4).
- (5) Carefully align the gel conductive gasket (4) with the screw holes and connector, and install it to the base of the ELT antenna (1).
- (6) Carefully remove the protective release film identified with "AIRCRAFT SIDE" from the gel conductive gasket (4).
- (7) Put the antenna (1) in position.
- (8) Use a torque wrench to torque the screws (2) to 2.3 to 2.8 N.m (20 - 25 lb.in) in a crisscross pattern.
- (9) From the inside of the aircraft, connect the electrical connector (3) to the ELT antenna (1).

CAUTION: BE CAREFUL WHEN YOU USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

- (10) If necessary, with a spatula, remove the excess gel of the conductive gel gasket (4) from around the ELT antenna (1) and from the aircraft skin.

CAUTION: MAKE SURE THAT THE ELECTRICAL BONDING GIVES A GOOD ELECTRIC CONDUCTIVE PATH. IF NOT, DAMAGE TO THE AIRCRAFT AND TO THE EQUIPMENT CAN OCCUR.



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- (11) Do the electrical bonding test between the coaxial connector on the antenna (1) and the aircraft ground ([AMM TASK 20-13-21-700-801-A/200](#)).
- (12) Apply sealant P/S870C-12 on the contour of the electrical connector (3).
- (13) Apply aerodynamic sealant P/S870B-1/2 along all the contour of the ELT antenna base ([AMM TASK 20-11-01-910-801-A/200](#)).
- (14) Apply paint ECL-G-46/PC-233/TR109 on the screw (2) heads (CPM 51-21-06).
- (15) Apply sealant P/S870C-12 over the screws (2) heads until fully fill the recesses in the antenna body (SRM 51-20-01).

K. Follow-on

SUBTASK 842-002-A

- (1) On the circuit breaker panel, remove the DO-NOT-CLOSE tag from the ELT circuit breaker and close it.
- (2) Do the operational check as follows:
 - On aircraft with ELT ARTEX 110-4, do the Emergency Locator Transmitter System (ELT 110-4) - operational check ([AMM TASK 25-61-00-700-801-A/500](#)).
 - On aircraft with ELT SATORI, do the Emergency Locator Transmitter System (ELT SATORI) - operational check ([AMM TASK 25-61-00-700-802-A/500](#)).
 - On aircraft with ELT ARTEX C406-2, do the Emergency Locator Transmitter System (ELT C406-2) - operational check ([AMM TASK 25-61-00-700-803-A/500](#)).
- (3) Install ceiling panel 263BLC (AMM TASK 25-22-04-400-801-A/400).

