

## 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

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.

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.

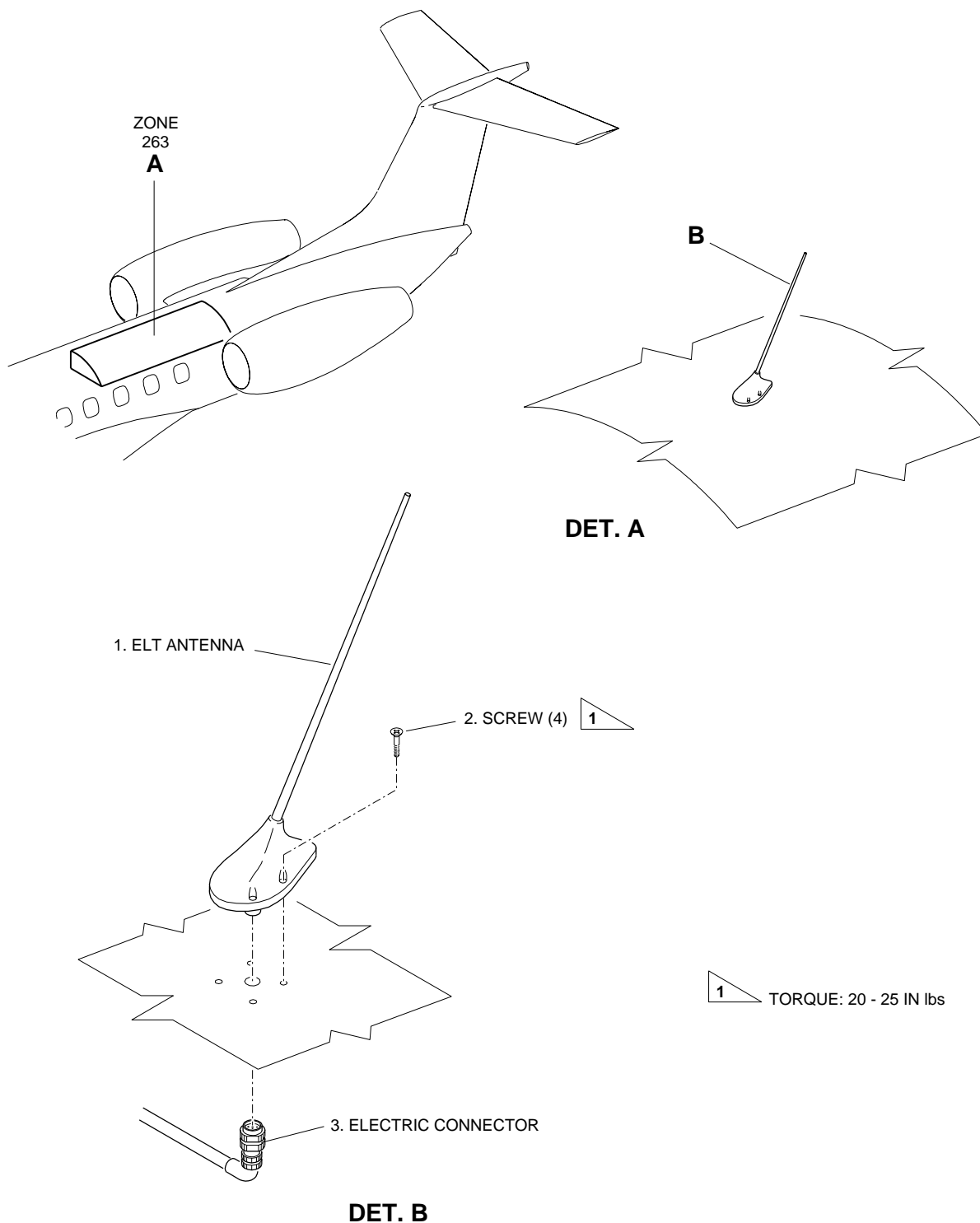
**CAUTION:** BE CAREFUL WHEN USE THE POLYETHYLENE SPATULA TO BREAK THE ANTENNA SEAL. TOO MUCH FORCE CAN CAUSE DAMAGE TO THE AIRCRAFT SKIN, THE COAXIAL CABLE, OR THE ANTENNA.

- (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

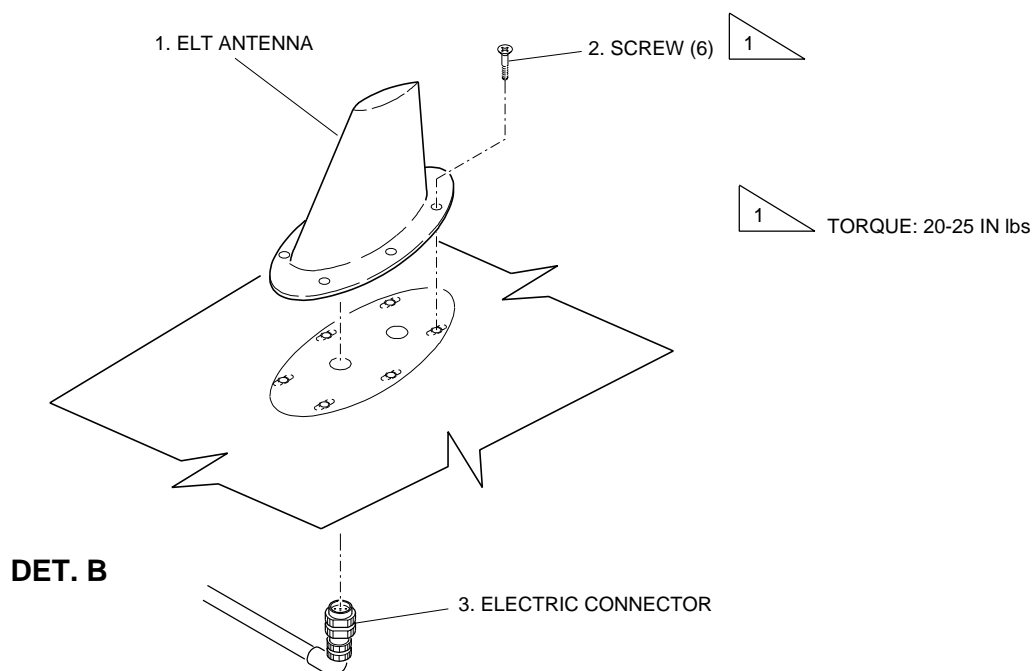
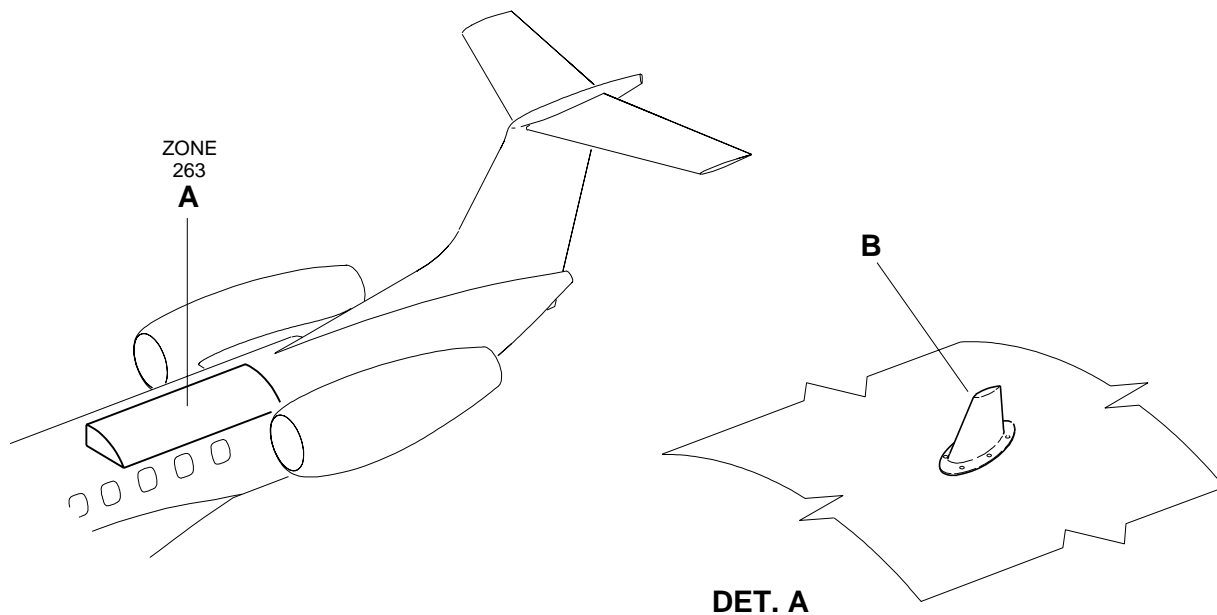


145AMM250025.MCE B

EFFECTIVITY: POST-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITHOUT GEL CONDUCTIVE GASKET

ELT Antenna - Removal/Installation

Figure 402

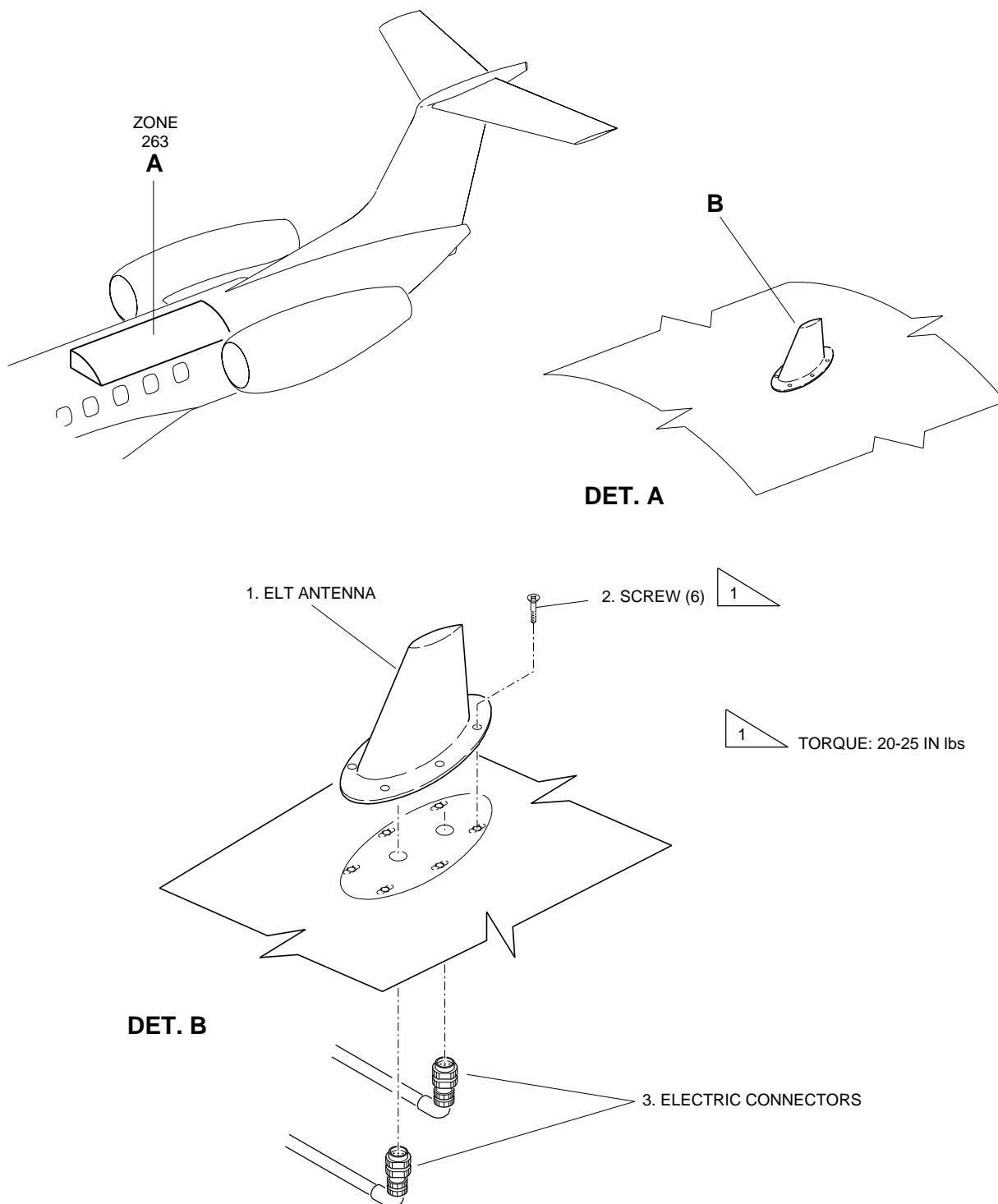


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EFFECTIVITY: AIRCRAFT WITH ELT ARTEX C406-2 AND ANTENNA WITHOUT GEL CONDUCTIVE GASKET

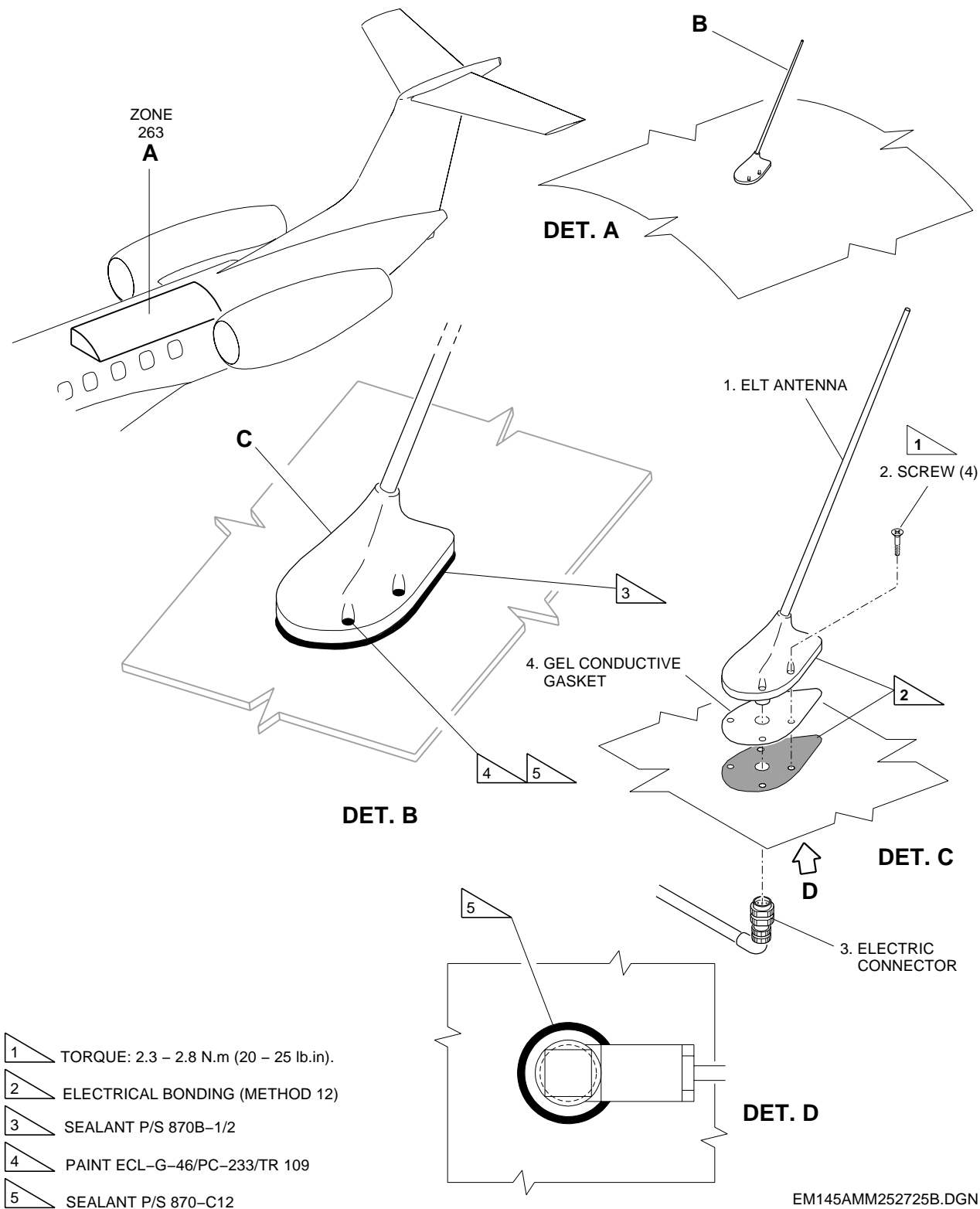
ELT Antenna (ARTEX C406-2) - Removal/Installation

Figure 403



145AMM250744.MCE

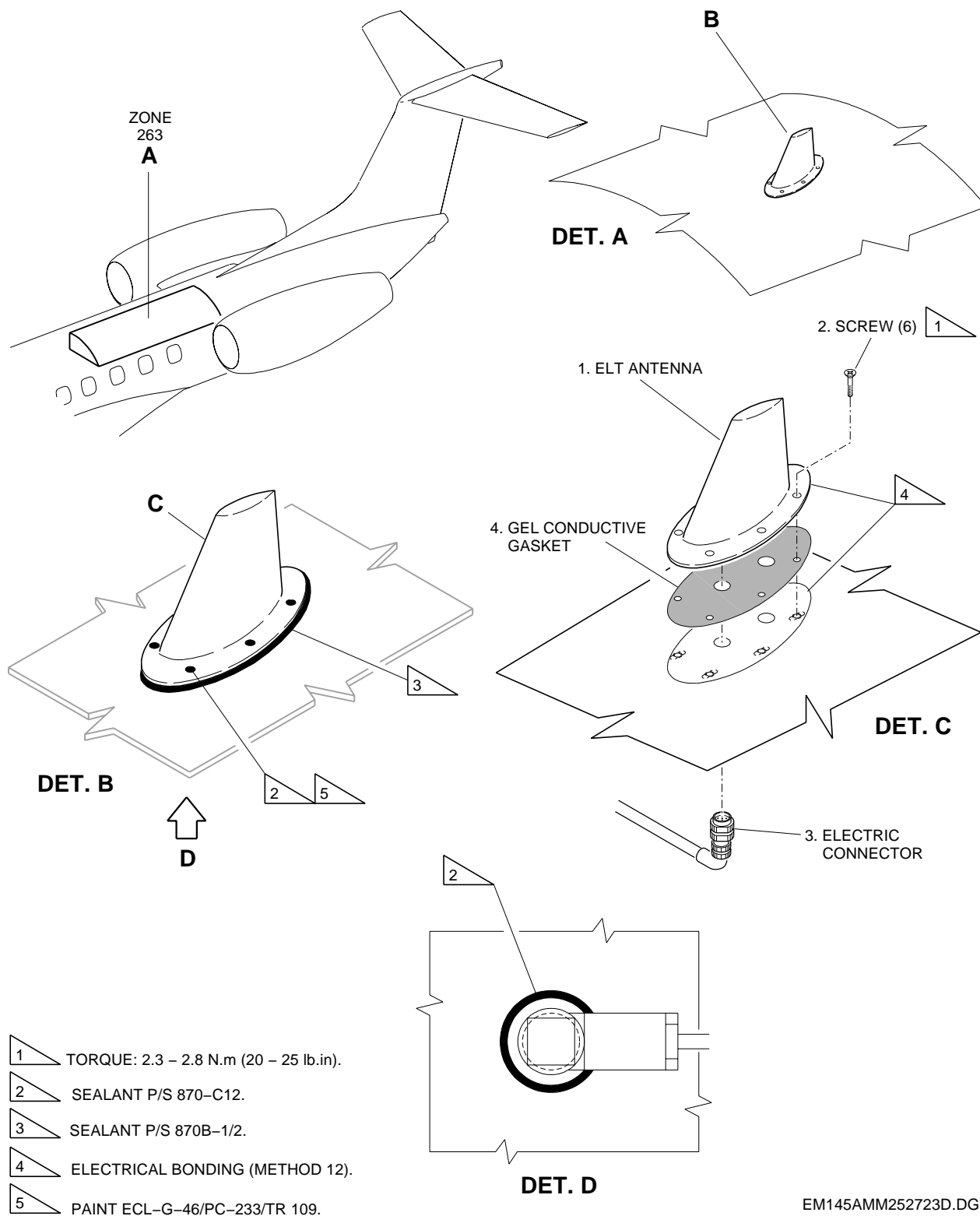
EFFECTIVITY: PRE-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITH GEL CONDUCTIVE GASKET  
ELT Antenna - Removal/Installation  
Figure 404



EFFECTIVITY: POST-MOD. S.B. 145-25-0080 AND WITH ANTENNA WITH GEL CONDUCTIVE GASKET

ELT Antenna - Removal/Installation

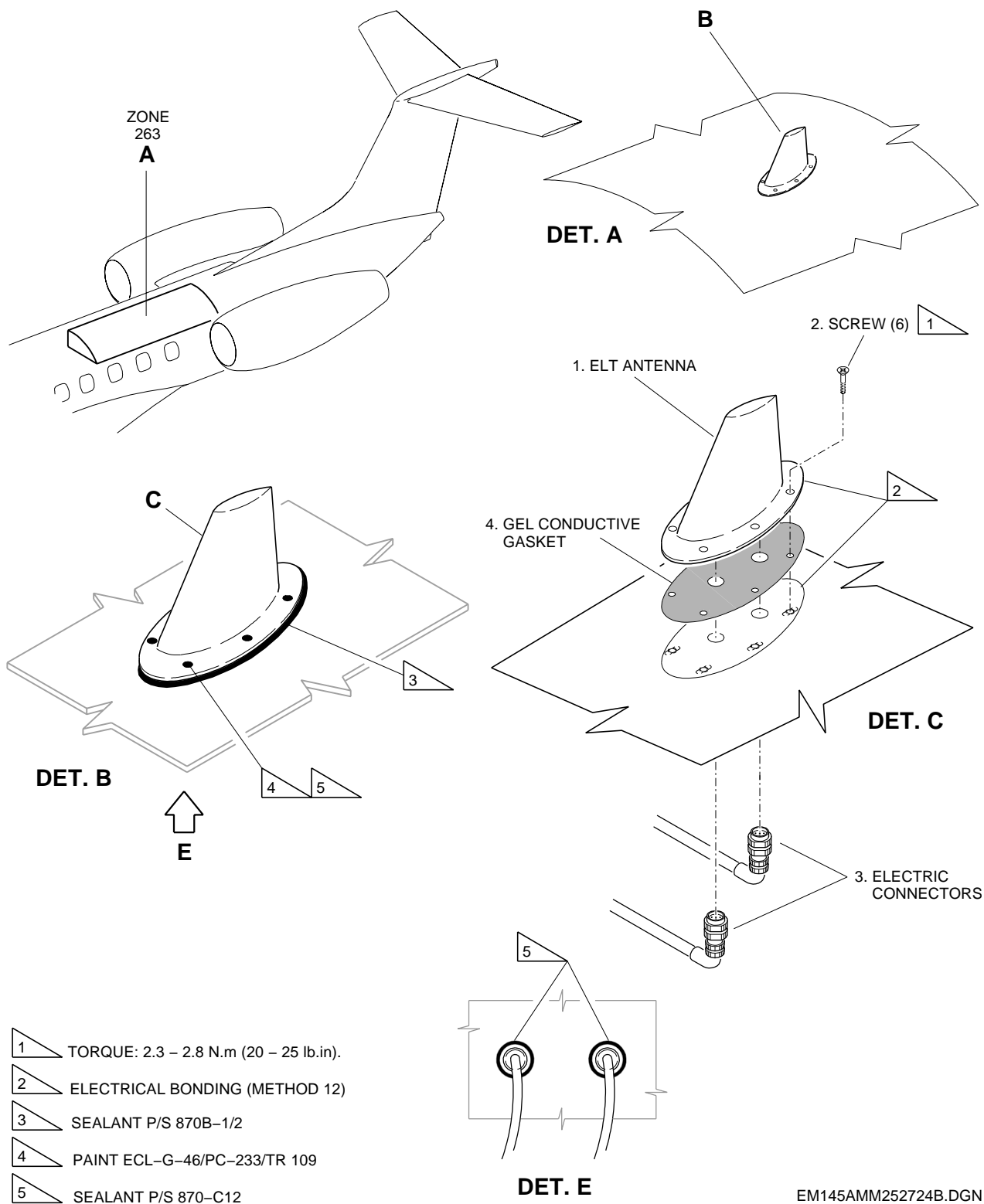
Figure 405



EM145AMM252723D.DGN



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



EM145AMM252724B.DGN

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

F. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
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

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
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](#)).

- (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.**

- (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).

