ARTEX C406-N EMERGENCY LOCATOR TRANSMITTER SYSTEM - MAINTENANCE PRACTICES

1. General

A. This section gives maintenance practices for the emergency locator transmitter (ELT) system. Components in the ELT system include the ELT unit, integral battery pack, warning buzzer, internal G-switch, antenna, remote switch, cable assembly, optional programming adapter, and antenna coaxial cable. The ELT unit transmits on 121.5 /243.0 MHz and 406.028 MHz

2. Emergency Locator Transmitter (ELT) Removal and/or Installation

- A. Remove the Emergency Locator Transmitter (ELT) (Refer to Figure 201).
 - (1) Make sure that the MASTER switch is in the OFF position.
 - (2) Remove access panel 340A on the right side of the dorsal assembly. Refer to Chapter 6, Access Plates and Panels Identification Description and Operation.
 - (3) Keep the ON/OFF switch on the ELT in the OFF position.

CAUTION: The ELT is off when the electrical connector is removed from the ELT. However, you can activate the ELT with the electrical connector removed if you move the switch on the front of the ELT to the ON position. Be careful not to move the switch to the ON position.

- (4) Loosen the thumbscrews on the end of the cap.
- (5) Pull the end cap away from the ELT.
- (6) Lift up the protective top Cover and push it away from the connector end of the ELT unit.
- (7) Disconnect the BNC connector (PZ148) and the electrical connector (PZ146) from the ELT.
- (8) Lift the ELT from the connector end to remove it from the mounting tray.
 - NOTE: Careful use of a flat blade screwdriver as a lever makes this step easier.
- B. Install the Emergency Locator Transmitter (ELT) (Refer to Figure 201).

CAUTION: The ELT is off when the electrical connector is removed from the ELT. However, you can activate the ELT with the electrical connector removed if you move the switch on the front of the ELT to the ON position. Be careful not to move the switch to the ON position.

- (1) Put the ELT in the mounting tray at an angle necessary to engage the lock-ears at the end opposite of the direction-of-flight arrow.
- (2) Push the ELT down into the mounting tray until it is fully installed in the tray.
- (3) Install the protective top cover on the ELT with the cover locking-slots over the locking-ears on the ELT. Push the cover toward the connector end of the ELT and down in position on the ELT.
- (4) Insert the antenna BNC connector through the end cap access hole and connect it to the ELT unit.
- (5) Put the 22-pin connector through the end cap and connect it to the ELT connector.
- (6) Slide the end cap into position over the mounting tray and protective top cover and attach the end cap to the mounting tray with the two thumbscrews.

CAUTION: Do not tighten the thumbscrews more than 18 inch-pounds.

- (7) Make sure that the ON/OFF switch is in the OFF position.
- (8) Do a Transmitter Test of the ARTEX C406-N Emergency Locator Transmitter (ELT) System. Refer to Emergency Equipment Inspection/Check.
- (9) Install access panel 340A on the right side of the dorsal assembly. Refer to Chapter 6, Access Plates and Panels Identification Description and Operation

3. ELT Buzzer Removal/Installation

- A. Remove the ELT Buzzer (Refer to Figure 201).
 - (1) Remove electrical power from the airplane.
 - (2) Remove access panel 340A on the right side of the dorsal assembly. Refer to Chapter 6, Access Plates and Panels Identification Description and Operation.
 - (3) Remove the screws from the terminals on the top of the buzzer.
 - (4) Remove the electrical connectors from the terminals on the buzzer.

- (5) Remove the mounting nut on the bottom side of the bracket from the bottom of the buzzer.
- (6) Lift the buzzer from the bracket and remove the buzzer from the tailcone.
- B. Install the buzzer (Refer to Figure 201).
 - (1) Carefully put the buzzer in position on the bracket.
 - (2) Install the mounting nut on the bottom of the buzzer.
 - (3) Put the electrical connectors on the terminals on the top of the buzzer.
 - (4) Install screws to the terminals to hold the electrical connectors on the terminals.
 - (5) Do a Transmitter Test of the ARTEX C406-N Emergency Locator Transmitter (ELT) System. Refer to Emergency Equipment Inspection/Check.
 - (6) Install access panel 340A on the right side of the dorsal assembly. Refer to Chapter 6, Access Plates and Panels Identification Description and Operation.

4. Remote Switch Removal/Installation

- A. Remove the Remote Switch (Refer to Figure 201).
 - (1) Remove electrical power from the aircraft.
 - (2) Remove access panel 340A on the right side of the dorsal assembly. Refer to Chapter 6, Access Plates and Panels Identification Description and Operation.
 - (3) Disconnect the electrical connector (PZ146) from the ELT.
 - (4) Remove the screws from the front of the remote switch.
 - (5) Pull the remote switch from the panel to get access to the electrical connector.
 - (6) Disconnect the connector from the back of the switch.
- B. Install the Remote Switch.
 - (1) Connect the electrical connector to the back of the switch.
 - (2) Put the remote switch into the panel.
 - (3) Install the screws on the front of the switch.
 - (4) Connect the electrical connector to the ELT.
 - (5) Do a Transmitter Test of the ARTEX C406-N Emergency Locator Transmitter (ELT) System. Refer to Emergency Equipment Inspection/Check.
 - (6) Install access panel 340A on the right side of the dorsal assembly.

5. ELT Antenna Removal/Installation

A. Remove the ELT Antenna (Refer to Figure 201).

NOTE: The ELT antenna is on the top surface of the fuselage at FS 311.45 and RBL 3.62 for the Model 208. For the Model 208B, the antenna is at FS 359.45 and RBL 15.55.

(1) Remove access panel 340A on the right side of the dorsal assembly.

CAUTION: The ELT is off when the electrical connector is removed from the ELT. However, you can activate the ELT with the electrical connector removed if you move the switch on the front of the ELT to the ON position. Be careful not to move the switch to the ON position.

- (2) Make sure the ELT ON/OFF switch is in the OFF position and disconnect the electrical connector (PZ148) from the ELT.
- (3) Remove the ELT antenna. Refer to Figure 201.
 - (a) Remove and keep the screws that attach the ELT antenna to the top surface of the fuselage.
 - (b) Carefully lift the antenna from the fuselage surface.
 - (c) Disconnect the BNC connector from the antenna.
- B. Install the ELT Antenna (Refer to Figure 201).
 - (1) Make sure that you remove all of the old sealant from the ELT antenna and the airplane skin. Refer to Chapter 20, Fuel, Weather, Pressure and High Temperature Sealing Maintenance Practices.
 - (2) Connect the BNC connector to the ELT antenna.

- (3) Apply a chemically conductive chemical film treatment to the faying surfaces of the ELT antenna and to the airplane structure to make sure that there is an electrical bond. Refer to Chapter 20, Electrical Bonding Maintenance Practices.
- (4) Put the ELT antenna in position on the top surface of the fuselage.
- (5) Attach the ELT antenna to the top surface of the fuselage with the kept screws.
 - (a) Torque the screws to a maximum of 20 inch-pounds.
- (6) Use a Type I, Class B sealer to apply a fillet seal around the antenna where it touches the outside surface of the airplane. Refer to Chapter 20, Fuel, Pressure, Weather and High-Temperature Sealing Maintenance Practices.
- (7) With the ELT ON/OFF switch in the OFF position, connect the electrical connector to the ELT.
- (8) Do a Transmitter Test of the ARTEX C406-N Emergency Locator Transmitter (ELT) System. Refer to Emergency Equipment Inspection/Check.

A66969 TOP COVER **EMERGENCY** LOCATOR **TRANSMITTER ELT SWITCH** MOUNTING TRAY **END CAP ELECTRICAL** CONNECTOR (PZ146) MOUNTING TRAY TO ELT **ANTENNA** THUMBSCREW BNC CONNECTOR (PZ148) DETAILA 2610T7005 A5618T1589

Figure 201: Sheet 1: ARTEX C406-N Emergency Locator Transmitter (ELT) System Installation

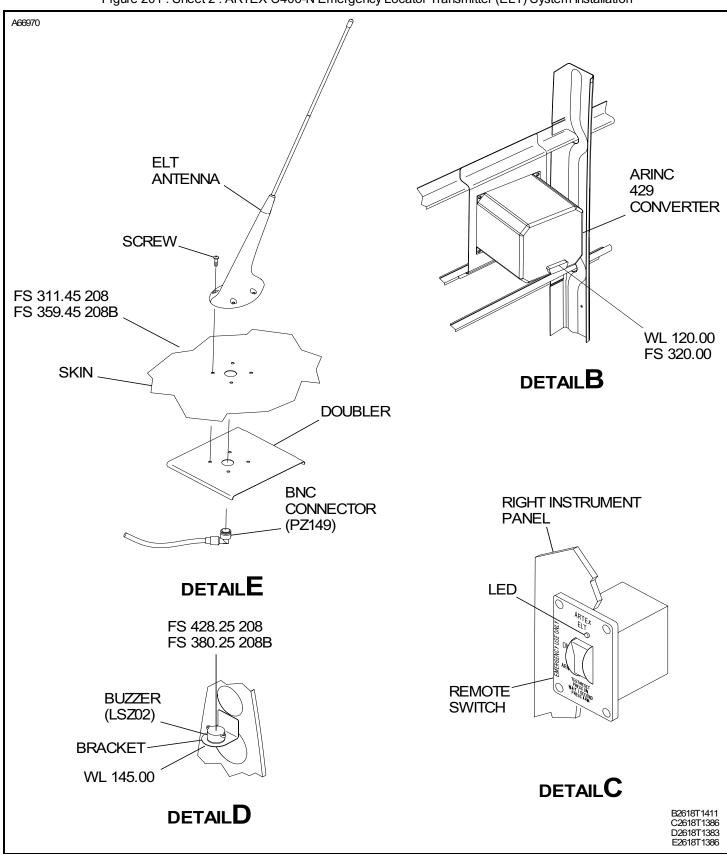


Figure 201: Sheet 2: ARTEX C406-N Emergency Locator Transmitter (ELT) System Installation