

SENSOR SYSTEMS RADAR ALTIMETER ANTENNAS - REMOVAL/INSTALLATION

1. General

- A. This section gives the removal and installation procedures of the Sensor Systems Radar Altimeter transmit (forward) and receive (aft) antennas. For a general overview of the radar altimeter system refer to Bendix/King KRA 405B Radar Altimeter System - Description and Operation.

NOTE: This procedure is applicable to each airplane with a KRA 405B radar altimeter installed.

2. Tools and Equipment

- A. Tools and Equipment
 - None.
- B. Special Consumables
 - None.
- C. Reference Material
 - Chapter 20, Electrical Bonding - Maintenance Practices
 - Bendix/King KRA 405B Radar Altimeter System - Description and Operation
 - Bendix/King KRA 405B Radar Altimeter System - Adjustment/Test.

3. Setup

- A. Prepare the Airplane
 - (1) Make sure that the BATTERY switch is set to the OFF position.
 - (2) Make sure that the AVIONICS switches are set to the OFF position.
 - (3) Disconnect external electrical power from the airplane.
 - (4) Disengage the circuit breaker given in Table 401.

Table 401. Circuit Breaker

Circuit Breaker Name	Circuit Breaker Location
RADIO ALT	Avionics Circuit Breaker Panel

- (5) Remove the canvas or padded rear wall to gain access to the radar altimeter antenna, connector, and cable. Refer to Chapter 25, Rear Compartment Wall - Maintenance Practices

4. Sensor Systems Radar Altimeter Antenna Removal

- A. Remove the Radar Altimeter Antenna (Refer to Figure 401).

NOTE: The removal procedures for the transmit and receive antennas are identical.

 - (1) Carefully remove the sealant from the base of the altimeter antenna and the fuselage surface. Refer to Chapter 20, Fuel, Weather, Pressure, and High-temperature Sealing - Maintenance Practices.
 - (2) Remove the screws that attach the antenna to the doubler.
 - (3) Disconnect the coaxial connector from the antenna, (PT1021 - transmit, PT1019 - receive).
 - (a) If the antenna is not going to be replaced immediately, put a protective cover on the coaxial connector.
 - (4) Remove the antenna and bonding gasket from the airplane.

5. Sensor systems Radar Altimeter Antenna Installation

- A. Install the Radar Altimeter Antenna (Refer to Figure 401).

NOTE: The installation procedures for the transmit and receive antennas are identical.

 - (1) Make sure that the fuselage matting surface for the antenna is clean for sufficient electrical bonding. Refer to Chapter 20, Electrical Bonding - Maintenance Practices.
 - (2) If necessary, remove the protective cover on the antenna coaxial connector
 - (3) Put the coaxial cable through the bonding gasket.
 - (4) Put the antenna close to its correct installation position.
 - (a) Connect the coaxial connector to the antenna.
 - (5) Put the antenna in its correct position on the fuselage.

- (6) Install the screws that attach the antenna to the fuselage. Refer to Torque Data - Maintenance Practices.
- (7) Install the canvas or padded rear wall. Refer to Chapter 25, Rear Compartment Wall - Maintenance Practices.
- (8) Engage the circuit breaker given in Table 401.

6. Radar Altimeter Antenna Post-Maintenance Checks

- A. Do the Radar Altimeter Antenna Post-Maintenance checks.
 - (1) Do an electrical bond check (Type I) between the antenna and the primary structure. Refer to Chapter 20, Electrical Bonding - Maintenance Practices.
 - (2) Do an operational check of the antenna. Do the Bendix/King KRA 405B Radar Altimeter System - Adjustment/Test.

7. Closeout

- A. Put the Airplane Back to its Initial Condition.
 - (1) Fillet seal around the base of the antenna and airplane fuselage skin with Type X, Class B sealant.

Figure 401 : Sheet 1 : Radar Altimeter Antenna Installation

