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 form 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 I or Type XIV, Class B-2 sealant.

Figure 401 : Sheet 1 : Radar Altimeter Antenna Installation