

GTP 59 OUTSIDE AIR TEMPERATURE (OAT) PROBE - MAINTENANCE PRACTICES**1. General**

- A. Each air data computer uses an outside air temperature (OAT) probe to calculate the outside ambient air data environment.
- B. The OAT probes are found on top of the fuselage at FS 157.00.

2. Outside Air Temperature (OAT) Sensor Removal/Installation

- A. Remove the OAT Sensor (Refer to Figure 201).

NOTE: Installation is typical for left and right probes.

- (1) Disconnect electrical power from the airplane.
- (2) Remove the headliner above the crew seats. Refer to Cabin Upholstery-Maintenance Practices.
- (3) Remove the jam nut and washer from the OAT sensor.
- (4) Disconnect the electrical connector.
- (5) Remove the OAT sensor from the airplane.

- B. Install the OAT Sensor (Refer to Figure 201).

- (1) Clean and electrically bond (Type I) the installation surfaces of the airplanes skin and the OAT probe. Refer to Chapter 20, Electrical Bonding – Maintenance Practices.
- (2) Put the OAT sensor into the airplane.
 - (a) Make sure the bonding jumper is installed between the probe and the airplanes skin.
- (3) Connect the electrical connector.
- (4) Install the washer and jam nut on the OAT sensor.
 - (a) Use a Type I, Class B sealer to apply a fay seal between the washer and skin. Refer to Chapter 20, Fuel, Pressure, Weather and High-Temperature Sealing - Maintenance Practices.
 - (b) Use a Type I, Class B sealer to apply a fay seal between the nut and washer. Refer to Chapter 20, Fuel, Pressure, Weather and High-Temperature Sealing - Maintenance Practices.
 - (c) Use a Type I, Class B sealer to apply a shank seal between the OAT probe and the nut. Refer to Chapter 20, Fuel, Pressure, Weather and High-Temperature Sealing - Maintenance Practices.
- (5) Make sure that the OAT probe is electrically bonded (Type I) to the airplane skin.
- (6) Install the headliner above the crew seats. Refer to Cabin Upholstery-Maintenance Practices.
- (7) Connect electrical power to the airplane.
- (8) Make sure that the OAT probe functions properly.
 - (a) Make sure there are no red X's on the OAT and TAS indicators on PFD 1 or PFD 2.
 - (b) Make sure the OAT indications on PFD 1 and PFD 2 are less than 5°F (3°C) different.
- (9) Disconnect electrical power from the airplane.

Figure 201 : Sheet 1 : GTP 59 Outside Air Temperature (OAT) Probe

