

FUEL TEMPERATURE PROBE - REMOVAL/INSTALLATION**1. General**

- A. This section gives the removal and installation procedures for the fuel temperature probe. For a general description of the temperature probe, refer to Fuel System - Description and Operation.
- B. The fuel temperature probe is installed on the Pratt and Whitney PT6A-140 engine and is located on the outlet of the fuel oil heat exchanger.

2. Tools and Equipment

- A. For a list of tools and equipment, refer to Fuel - General.

3. Fuel Temperature Probe Removal and Installation

WARNING: When you do work on the fuel system, make sure that you obey all of the safety precautions in the Fuel - Maintenance Practices section. Injury or death can occur if you do not obey these precautions.

- A. Remove the Fuel Temperature Probe (UN042).
 - (1) Remove external electric power from the airplane.
 - (2) Pull the fuel firewall shutoff control out (off).
 - (3) Open or remove the upper right cowling to get access to the engine fuel inlet line. Refer to Chapter 71, Engine Cowling and Nose Cap- Maintenance Practices.
 - (4) Remove and cap/cover the electrical connector (PN051) from the fuel temperature probe.
 - (5) Place suitable container underneath the fuel temperature probe to catch residual fuel.
 - (6) Remove the safety wire from the fuel temperature probe.
 - (7) Remove fuel temperature probe from the Fuel Oil Heat Exchanger (FOHE) outlet.
 - (8) Discard packings. Refer to the Pratt and Whitney PT6A-140 Parts Catalog, refer to Supplier Publication List.
 - (9) Clean and inspect the fuel temperature probe for defects, replace as necessary.
- B. Install the Fuel Temperature Probe.
 - (1) Install the new packings on the temperature probe. Refer to the Pratt and Whitney PT6A-140 Parts Catalog, refer to Supplier Publication List.
 - (2) Install the temperature probe into the FOHE outlet.
 - (3) Torque the fuel temperature probe to 65-75 inch pounds (7.35-8.48 Nm), refer to Chapter 20, Torque Data - Maintenance Practices.
 - (4) Install new safety wire, refer to Chapter 20, Safetying - Maintenance Practices.
 - (5) Remove cap/cover and install electrical connector (PN051) to the fuel temperature probe.
 - (6) Push the fuel firewall shutoff control fully in.
 - (7) Install or close the upper right cowling. Refer to Chapter 71, Engine Cowling and Nose Cap- Maintenance Practices.
 - (8) Complete an engine run to make sure there are no visible fluid leaks and to make sure the FUEL TEMP LOW CAS message is not shown on the Primary Flight Display (PFD) when the engine oil temperature is within normal operating limits for takeoff. (Refer to the approved Model 208B 867 SHP Garmin G1000 Aircraft Flight Manual)