

PROPELLER RPM TACH GENERATOR - REMOVAL/INSTALLATION (PT6A-140)

1. General

- A. This section gives the propeller RPM tach generator removal and installation procedures for the PT6A-140 engine installation. The RPM indicator function is shown on the Garmin G1000 Multifunction Display (MFD).

2. Tach Generator Removal/Installation

- A. Remove the Tach Generator (UN033) (Refer to Figure 401).
- (1) Remove external electrical power from the airplane.
 - (2) Make sure that the BATTERY switch (SC005), found on the circuit breaker switch panel, is set to the OFF position.
 - (3) Disengage the F FLOW NG & NP circuit breaker found on the left circuit breaker panel.
 - (4) Open right upper engine cowling. Refer to Chapter 71, Cowling and Nose Cap - Maintenance Practices.
 - (5) Remove right nose cap half. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.
 - (6) Disconnect the electrical connector from the tach generator.
 - (7) Remove the nuts and washers that attach the tach generator to the engine mounting pad.
 - (a) Remove the ground strap from the upper right tach generator flange attach point.
 - (b) Remove the static oil pressure tube support bracket from the upper right tach generator flange attach point.
 - (c) Remove the tach generator and gasket from the mounting pad.

- B. Install the Tach Generator (UN033) (Refer to Figure 401).

CAUTION: Make sure that the splines of the tach generator drive shaft are aligned correctly with the engine drive when you install the tach generator to the engine drive pad.

- (1) Make sure that the tach generator mounting pad is clean.
- (2) Examine the tach generator gasket and make sure that it is serviceable.
 - (a) If the gasket is not serviceable replace it with a new gasket.
- (3) Put the tach generator and gasket in its correct position on the mounting pad.
- (4) Put the static oil pressure tube support bracket in its correct position on the upper right tach generator flange attach point.
 - (a) Make sure the oil tube is not loaded before your put the bracket in it position on the tach flange.
- (5) Put the ground strap in its correct position on top of the static oil pressure tube support bracket.
- (6) Install the nuts and washers that attach the tach generator to the mounting pad.
- (7) Connect the electrical connector (PN033) to the tach generator.
- (8) Install right nose cap half. Refer to Chapter 71, Cowling and Nose Cap - Maintenance Practices.
- (9) Close right upper engine cowling. Refer to Chapter 71, Cowling and Nose Cap - Maintenance Practices.
- (10) Engage the F FLOW NG & NP circuit breaker found on the left circuit breaker panel.
- (11) Set the BATTERY switch (SC005) to the ON position.
- (12) Do a check of the RPM indicator on the MFD. Operate the engine, use the Model 208B Pilot's Operating Handbook and FAA-Approved Airplane Flight Manual to do the operational check of the RPM indicator.
- (13) To troubleshoot the propeller RPM tach generator and RPM indication refer to the Chapter 2 Troubleshooting section of the G1000 Line Maintenance Manual (Cessna Caravan) P/N 190-00869-00 found in the Introduction, List of Publications.

Figure 401 : Sheet 1 : Tach Generator Installation

