

**STANDBY ELECTRICAL SYSTEM - INSPECTION/CHECK****1. General**

A. This section has the inspections and checks necessary to keep the standby electrical system in a serviceable condition.

**2. Drive Pulley Assembly/Bearing Housing Inspection**

**NOTE:** Dripping grease at the pulley drive shaft may show that the oil scavenge pump seal leaks into the standby alternator drive assembly. If this occurs, the standby alternator drive assembly must be replaced with a serviceable unit.

**NOTE:** The maximum allowable leakage of engine oil from the engine scavenge pump/standby alternator drive access pad is 2cc per hour. The engine scavenge pump must be inspected for oil leakage that drips past the drive shaft seal. Repairs must be done in accordance with the P&WC Engine Maintenance Manual.

A. Do an inspection of the Drive Pulley Assembly/Bearing Housing. (Refer to Figure 601).

- (1) Remove the drive pulley assembly. Refer to Alternator and Drive Pulley Removal/Installation.
- (2) Fully clean the housing with Methyl n-Propyl Ketone or equivalent.
- (3) Visually do an inspection of the mounting holes for cracks.
- (4) Do an inspection of the mounting face for flatness with a straight edge or equivalent.
  - (a) Do a check that any gaps between straight edge and surface of mounting face do not exceed 0.010 inch.
- (5) Visually do an inspection of the seal land for damage and/or cracks.
- (6) Visually do an inspection of the bearing lands for evidence of galling and/or cracks.
 

**NOTE:** Scratches related to the installation and removal of bearing is acceptable.
- (7) Measure the bearing lands for out-of-round condition.
  - (a) Check to make sure that the inner diameter from out-of-round measurement is 1.5746 inch, +0.0002 or -0.0002 inch.
  - (b) Check to make sure that the outer diameter from out-of-round measurement is 1.497 inch, +0.010 or -0.010 inch.
- (8) If the housing has drain lines, visually do an inspection for cracked, plugged, collapsed or out-of-round lines.
  - (a) If damage exists and is repairable, repair as necessary.
- (9) On part number 2601270-4, visually do an inspection for plugged vent holes.
  - (a) If the vent holes are clogged, clean as necessary. Use a piece of safety wire or equivalent.
- (10) Install the drive pulley assembly. Refer to Alternator and Drive Pulley Removal/Installation.

**TASK 24-36-00-220****3. Standby Alternator Detailed Inspection**

A. General

- (1) This task gives the procedures to do a detailed inspection of the standby alternator.

B. Special Tools

- (1) None

C. Access

- (1) Open the left side of the engine cowling. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.

D. Do the Standby Alternator Detailed Inspection.

- (1) Examine the alternator for condition, security, correct safety of the mount bolts, and correct installation.
- (2) Examine the alternator drive for condition, leaks, and security.
  - (a) Move the top and the bottom of the drive pulley in and out by hand to examine for free play.
    - 1 If there are signs of free play, remove the drive and do a detailed inspection of the drive splines and the coupling.
- (3) Examine the mount for condition, cracks, corrosion, and security.

- (4) Examine the ground strap for condition and security.
- (5) Examine the alternator drive belt for condition and correct tension. Refer to the Standby Electrical System - Maintenance Practices, Alternator Removal/Installation.
  - (a) If it is necessary to adjust the tension, refer to Alternator Removal/Installation, Standby Electrical Systems - Maintenance Practices.
- (6) Examine the alternator electrical boots, and components for condition and security.
- (7) Examine the wiring for condition and security of the connectors at the alternator terminals.

**NOTE:** Make sure that the in-line resistor is attached with a plastic screw, washers, and a nut.
- (8) Examine the drive drain (if installed) for condition and security.
  - (a) Examine the drain hose for correct routing, kinks, and security.
  - (b) Examine the drain can for condition and security.
  - (c) Drain the contents of the can.
- (9) Examine the alternator filter capacitor, mounting bracket, and wire lead for security and condition.

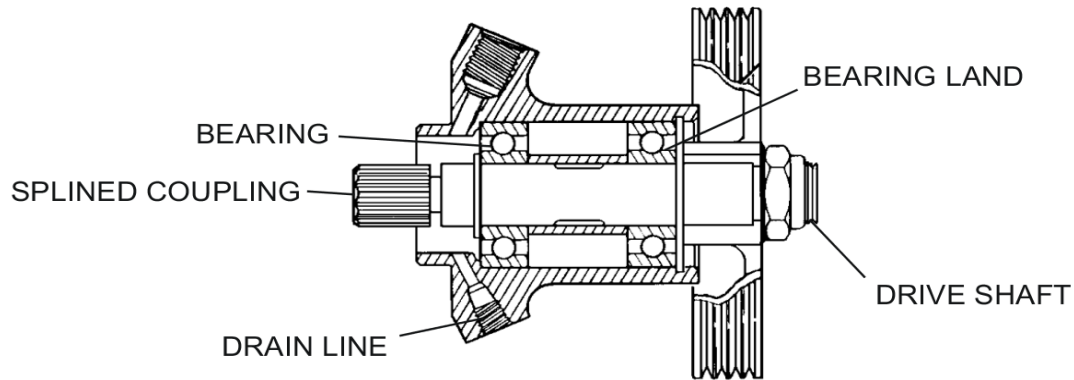
E. Restore Access

- (1) Close the left side of the engine cowling. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.

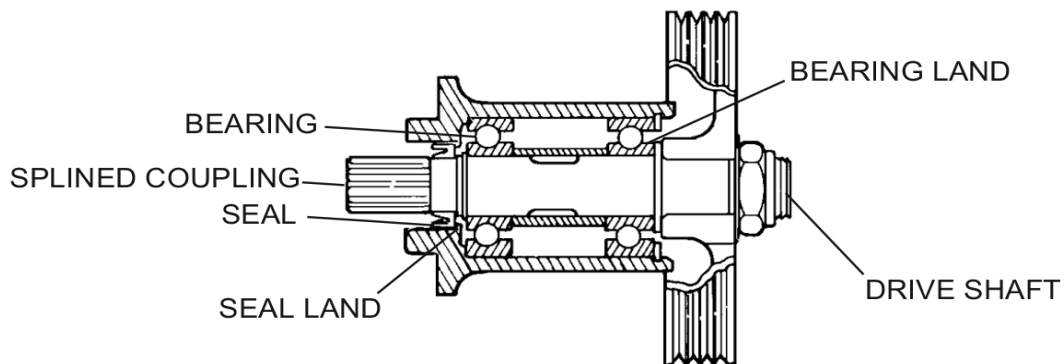
**END OF TASK**

Figure 601 : Sheet 1 : Drive Pulley Assembly/Bearing Housing Inspection

A6175



AIRPLANES 20800001 THRU 20800079  
EXCEPT AIRPLANES INCORPORATING  
SK208-17



AIRPLANES 20800080 THRU 20800241  
AIRPLANES 208B0001 THRU 208B0434  
AND AIRPLANES 20800001 THRU 20800079  
INCORPORATING SK208-17

26181087  
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