

ENGINE WASH RING - INSPECTION/CHECK**1. General**

- A. This section has the inspections and checks necessary to keep the engine wash ring, air plenum, and trim thermocouple (T1) in a serviceable condition.

TASK 71-41-00-220**2. Engine Wash Ring, Air Plenum, and Thermocouple (T1) Detailed Inspection**

A. General

- (1) This task gives the procedures to do an inspection of the engine wash ring, air plenum, and trim thermocouple (T1).

B. Tools and Equipment

- (1) None

C. Access

- (1) Remove the left and the right upper cowling doors. Refer to Engine Cowling and Nose Cap - Maintenance Practices.
- (2) Remove the right and the left nose gear fairings. Refer to Chapter 32, Nose Gear Fairing - Maintenance Practices.
- (3) Remove the left and the right lower cowl panels. Refer to Engine Cowling and Nose Cap - Maintenance Practices.
- (4) Remove the inspection panel assembly from the air plenum.

D. Do an Engine Wash Ring, Air Plenum, and Thermocouple (T1) Detailed Inspection.

CAUTION: Security of the air plenum attaching hardware is very important. Ingestion of loose hardware during engine startup can cause damage to the airplane or injury to personnel.

- (1) Examine the air plenum assembly and all attaching brackets and hardware for condition, cracks, corrosion, chafing, excessive wear, and security of installation.
 - (a) If you find that there is missing hardware, it is necessary to do a more detailed inspection of the engine compressor section.
- (2) Examine the upper and the lower air plenum band assemblies for condition, cracks, corrosion, and security.
- (3) Examine the induction air bleed tube assembly for condition, cracks, corrosion, and security.
- (4) Examine the engine wash ring tube for condition and security.
 - (a) Examine the tube attach brackets for condition and security.
 - (b) Examine the tube attach clamps for condition and security.
 - (c) Examine the tube cap and chain for condition and security.
- (5) Examine the trim thermocouple (T1) for condition, bends, and security of attachment at the T5 boss. Refer to the Pratt & Whitney Engine Maintenance Manual, Section 77-20-01.

CAUTION: If using a wrench to examine the security of the trim thermocouple attach bolts, use an additional wrench for the backup nut that is attached to the terminal lug. If you do not obey these instructions, damage can occur to the T5 lugs.
- (6) Examine the connection at the T5 boss for condition, corrosion, and security.
- (7) Examine the exterior of the gas generator case for general condition. cracks, distortion, corrosion, and signs of overheating.
- (8) Examine the air inlet screen wire mesh for condition, cleanliness, and damage.
- (9) Examine the rims and the flanges of the screen for security and damage.

E. Restore Access

- (1) Install the inspection panel assembly to the air plenum.
- (2) Install the left and the right lower cowl panels. Refer to Engine Cowling and Nose Cap - Maintenance Practices.
- (3) Install the right and the left nose gear fairings. Refer to Chapter 32, Nose Gear Fairing - Maintenance Practices.
- (4) Install the left and the right upper cowling doors. Refer to Engine Cowling and Nose Cap - Maintenance Practices.

END OF TASK