ENGINE MOUNT - INSPECTION/CHECK

1. General

A. This section has the inspections and checks necessary to keep the engine mounts in a serviceable condition.

TASK 71-20-00-220

2. Engine Mounts and Firewall Detailed Inspection

A. General

(1) This task gives the procedures to do a detailed inspection of the engine mounts, ground straps, and firewall.

B. Special Tools

(1) None

C. Access

(1) Remove the engine cowlings. Refer to Engine Cowling and Nose Cap - Maintenance Practices.

D. Do a Detailed Inspection of the Tubular Mounts (Refer to Figure 201 found in Engine Mount - Maintenance Practices).

(1) Examine the areas that follow for condition, cracks at welds, distortion, corrosion, and security of attachment:

- Engine truss tube surface
- Areas around the engine truss welds
- Right and left side landing gear junctions
- Engine truss to firewall attach bolts
- ECTM instrument box (if applicable) attachment area at lower right side of truss
- Lower truss tube and ignition exciter box attachment area at the right side of truss.

(2) Examine the ground straps, attach bolts (5 ea.), and mount bolts (4 ea.) for security of installation.

(a) The mount bolts to engine mount ring must have the nuts installed against the mount ring (bolt heads aft) with cotter pins installed.

NOTE: Caravans 208B, airplanes -5000 and On, use a locking nut with a nylon insert.

E. Do a Detailed Inspection of the Engine Shock Mounts.

(1) Examine the engine upper, right, and left side mount brackets, ground straps, engine mounts, mount bolts and engine mount to engine ring attach bolts for condition, security, cracks, corrosion, and deterioration of elastomers.

NOTE: Mount brackets on airplanes 2080001 Thru 20800187 and 208B0001 Thru 208B0216 must be modified per CAB90-7 Rev.1 for improved drainage and mount bolt lubrication to aid in preventing corrosion.

(2) Examine the elastomer closely where the rubber material is bonded to the plate for signs of separation.

(a) If separation is found, replace the elastomer.

(3) If replacement of the elastomer is necessary, do the following with the components removed.

(a) Examine the mount bracket for condition, cracks, and corrosion.

(b) Examine the attaching bolt and nut for condition and corrosion.

(c) Examine the spacer and shims for condition and wear.

(d) When installing, make sure that the chamfer of the special washer is against the shoulder of the bolt head.

CAUTION: The mount bolt is an internal wrenching type. Where the shank meets the head there is a radius shoulder that must mate with the chamfer of the special washer. Incorrect installation of these parts could cause the head of the bolt to break off.

F. Do a Detailed Inspection of the Firewall Structure.

(1) Examine the forward surface of the firewall for corrosion, condition, cracks, missing rivets, and signs of damage.

(2) Examine the sealant for overall condition at the fittings where items pass through the firewall skin.

(a) If sealant is found unserviceable, replace the sealant. Refer to Chapter 20, Fuel, Weather and High-Temperature Sealing - Maintenance Practices.

CAUTION: The firewall is sealed at skin overlaps and joints with a fire resistant sealant. Where items pass through the firewall such as control cables and wire harnesses, fittings are sealed with a white ablative type fire resistant sealant (DAPCO U000117).

(3) Examine the brackets and fittings attached to the forward side of the firewall for condition, corrosion, and security.

G. Restore Access

(1) Install the engine cowlings. Refer to Engine Cowling and Nose Cap - Maintenance Practices.

END OF TASK

TASK 71-20-00-240

3. Engine Truss and Ring Assembly Special Detailed Inspection

A. General

(1) This task includes the Supplemental Inspection Document (SID) requirements necessary to keep the engine truss and ring assembly in a serviceable condition.

B. Special Tools

(1) None

C. Access

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

D. Do a Special Detailed Inspection of the Engine Truss and Ring Assembly.

(1) Do a nondestructive testing (NDT) inspection for cracks in the engine mount ring assembly. Refer to the Model 208 Nondestructive testing Manual, Part 8, Magnetic Particle, Engine Truss and Ring Assembly - Description And Operation.

(2) Do a NDT inspection for cracks in the engine mount assembly at the engine mount ring assembly. Refer to the Model 208 Nondestructive testing Manual, Part 8, Magnetic Particle, Engine Truss and Ring Assembly - Description And Operation.

(3) Do a NDT inspection for cracks in the engine mount assembly at the firewall attachments. Refer to the Model 208 Nondestructive testing Manual, Part 8, Magnetic Particle, Engine Truss and Ring Assembly - Description And Operation.

(4) If no cracks are found, restore access.

(5) If cracks are found, repair or replace the damaged part(s). Refer to Chapter 71, Engine Mount - Maintenance Practices or the Model 208 Structural Repair Manual.

E. Restore Access

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

END OF TASK