

### THRUSH AIRCRAFT, INC.

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## **SERVICE LETTER**

**No. SL-AG-111** 

# ENGINE MOUNT AND MOUNT ISOLATOR INSPECTION AND REPAIR

#### THIS SERVICE LETTER AFFECTS THOSE AIRPLANES THAT HAVE:

Pratt & Whitney PT6A series engines.

AIRPLANES AFFECTED:

MODEL SERIAL NUMBERS\*

PT6A Powered Models All

#### **REASON FOR PUBLICATION:**

Thrush Aircraft, Inc has recently become aware of two possible problems involving engine vibration isolators and/or the engine mount.

- 1. The presence of misalignments between the engine isolators and the engine mount isolator attach holes in the engine mount. The concern is pre-loading of the isolators caused by this alignment. Thrush Aircraft, Inc has determined that a misalignment of more than .050" may decrease engine isolator life.
- 2. Heads of bolts attaching vibration isolators to the engine may be contacting and damaging the rubber of the isolator.

#### **COMPLIANCE:**

Compliance is at the discretion of the aircraft owner.

#### BY WHOM WORK WILL BE ACCOMPLISHED:

FAA licensed A&P mechanic or foreign equivalent:

#### **APPROVAL:**

This Service Letter is approved by Thrush Aircraft, Inc.

#### **MAN HOURS:**

2 Persons 26 man hours for inspection, 2 man hours each for fabricating and welding inner plate, and 16 man hours for completing the repair and engine reinstallation.

#### **SPECIAL TOOLS:**

Not applicable.

#### **INSPECTION:**

1. Support the engine weight using a sling before it is disassemble from the engine mount. While keeping the engine suspended, proceed with removing the engine isolator bolts from the mount. Compare the alignment between the Barry mount bolts and the engine mount bracket holes. There should not be a misalignment more than 0.050". If a misalignment larger than the tolerance is detected (See Figure 1), proceed with repair instructions.

#### **NOTE:**

All engine weight must be supported by the sling. Position the engine so that misalignment is approximately the same for all isolators before measuring. Isolators do take a permanent set after significant time in service, so use a new isolator to double check alignment before deciding that repairs are necessary.

2. Inspect the isolator rubber on the under side for evidence of bolt head contact with the isolator rubber.



**Figure 1:** Misalignment Example

#### **REPAIR:**

- 1. Misalignment: See figures 2 and 3.
- 2. Rubber damage: See figure 3.

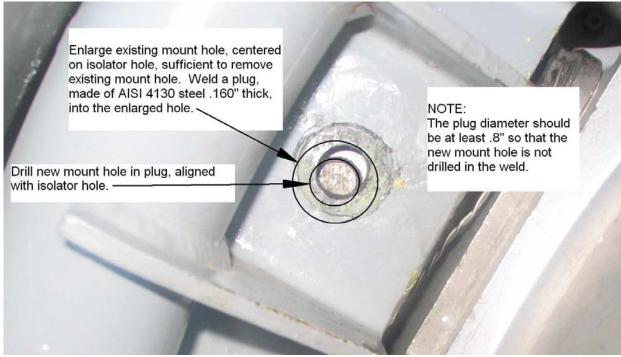
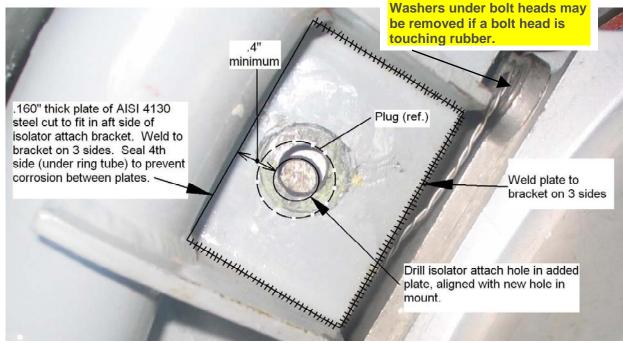


Figure 2: Plug Installation



**Figure 3:** Plate Installation

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Page 4 of 4

#### **RECORD OF COMPLIANCE**

<b>AG-1</b>	appropriate entry in airplane maintenance record 11 inspection requirement complied with at tion is a one-time inspection per SL-AG-111.		
1.	If a mount hole is repaired, make an appropriate follows: "Engine mount repair has been according to aircraft."	<u> </u>	
2.	If washers are removed from under isolator attach bolt heads, make the following log book entry: "washers under engine vibration isolator attach bolts were removed at total hours on aircraft."		
"N	Iodification accomplished by:		
			•
	name & certificate #	date	