



# SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0089

Revision 1

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DATE:            January 7, 2014

1. SUBJECT:    Tail Rotor Gearbox Input Seal
2. MODEL:      F-28A Model (Left Hand Tail Rotor Configuration Only), F-28C, 280C, F-28F, 280F, 280FX
3. EFFECTIVITY: All Aircraft Equipped with either a 28-13525-5 or 28-13525-7 Tail Rotor Gearbox

## NOTE

**If the tail rotor transmission includes a retaining ring (P/N N5000-206-PP) to hold the seal in, compliance with this Service Directive Bulletin is not required.**

4. BACKGROUND:

There have been three reported instances of the tail rotor gearbox input seal coming out in service with subsequent loss of tail rotor gearbox oil. Although none of the occurrences have been catastrophic, there is the potential for complete tail rotor gearbox failure.

5. COMPLIANCE:

- 5.1 As an additional pre-flight item, check the tail rotor gearbox input seal for security and possible movement. If the seal shows signs of leakage or of being extruded from the gearbox housing, it should be replaced before further flight. To replace the seal, do the following:
  - 5.1.1 Drain the tail rotor gearbox oil and remove the existing seal P/N 10426LUP or P/N 1539-001.
  - 5.1.2 Clean the seal surface with MEK or a suitable solvent. Coat the replacement seal with a light coat of MIL-PRF-2105 gear oil, or equivalent (SAE-J2360), to the outer and inner surfaces and press into place.
  - 5.1.3 Install tabs, P/N 28-13531-11, per Paragraph 5.2 (below).
  - 5.1.4 Replenish the gearbox oil and return the aircraft to service.

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5.2 Within five flight hours of the receipt of this bulletin, install two stainless steel tabs, P/N 28-13531-11, under the heads of two of the six screws which attach the input assembly to the tail rotor gearbox housing.

5.2.1 The tabs must be installed 180° of each other.

5.2.2 Do not break the lead seal when installing the stainless steel tabs.

5.2.3 Check the torque on the screws and re-safety wire the assembly.

5.3 If the tail rotor gearbox oil level is excessively low, determine how long the aircraft has been run in this condition and contact Enstrom Customer Service prior to further flight.

## 6. PARTS AND SPECIAL TOOLS:

### 6.1 Parts:

Description	Part Number	Quantity
Input Seal	10426LUP	1
	1539-001 (alternate)	1
Tabs	28-13531-11	2

### 6.2 Special Tools: None

7. MAN-HOURS: 3 hours to replace the seal  
.25 hours to add the tabs

8. WARRANTY: Seal change covered by Enstrom Warranty Policy

9. WEIGHT CHANGE: None

### 10. LOG BOOK ENTRY:

Enter the seal change and tab installation into the maintenance log book.

### 11. REPETITIVE ACTION:

Inspect tail rotor gearbox input seal as a pre-flight item per Paragraph 5 on all subsequent pre-flights until the tabs, P/N 28-13531-11, are installed.