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SERVICE INFORMATION LETTER

DATE: December 10, 2015

1. SUBJECT: Main Rotor Transmission 600-Hour Inspection

2. MODEL: 480B

3. EFFECTIVITY: All S/N

4. REFERENCE: Enstrom TH-28/480 Series Maintenance Manual

5. BACKGROUND:

A current mandatory 600-hour inspection requires the main rotor transmission (MRGB) to be removed from the aircraft and returned to Enstrom Helicopter for inspection. (TH-28/480 Series Maintenance Manual, Table 3-2 and Table 4-8.)

This Service Information Letter (SIL) supersedes the requirements of the mandatory 600-hour inspection when a field inspection with the transmission installed in the aircraft is performed in accordance with paragraph 6. This change is approved by the FAA.

6. COMPLIANCE:

Perform this inspection at 600 hours (±50 hours) for new or overhauled transmissions.

NOTES: Perform all maintenance in accordance with the TH-28/480 Series Maintenance Manual.

Refer to the TH-28/480 Series Illustrated Parts Catalog for item number and figure references where noted.

If the inspection is performed in conjunction with a 100 hour/annual inspection and the transmission oil has been drained, it is not necessary to install the ground handling wheels.

6.1 Visual Inspection – Ring Carrier and Pinion Gear Teeth

A. Remove the upper plenum (air scoop assembly) as follows:

NOTE: The upper plenum (4) may be removed without removing the baggage compartment forward bulkhead and the air duct assemblies (17) if the upper hose clamp (20) is loosened and the top of the seal (18) is rolled down over the duct (17) (IPC Figure 6-3). Avoid contaminating the system by covering the duct assemblies with a clean cloth, or equivalent.

(1) Remove the left and right aft side cowlings (6, 7, 8, 9, 10, IPC Figure 3-2).

CAUTION: Use a backing wrench when loosening or tightening air/fluid lines and fittings to prevent damage to the lines or fittings.

(2) Disconnect the scavenge bleed air line (25) from the upper plenum (IPC Figure 6-4).

(3) Remove the screws (3) securing the upper plenum (4) to the forward air scoop (1) (IPC Figure 6-3).

(4) Remove the screws (2) securing the upper plenum to the airframe (IPC Figure 6-3).

(5) Remove the side air ducts (28, 29) and the left and right channel assemblies (20, 21) (IPC Figure 3-2).

(6) Lift the aft end of the upper plenum up slightly and remove the upper plenum.

(7) Using a clean cloth, cover the ducts (17) to prevent foreign objects from entering the lower plenum (22). Secure the cloth as appropriate (IPC Figure 6-3).

(8) Remove the hardware (17, 18, 19) securing the cover plate (16) to the main rotor transmission housing and remove the cover plate (IPC Figure 7-8.1).

B. Pitch the helicopter forward to drain the transmission oil to the forward side of the gearbox.

1) Install the ground handling wheels.

2) Lift the helicopter enough to place a tail stand under the tail rotor guard support or blocks under the aft end of the skid gear.

C. Inspect the ring and pinion gear teeth (refer to Figure 1 and Figure 2).

1) Using a bright light source, inspect ring and pinion gear teeth for cracks, any pitting, any spalling (frosting), or hard wear lines. Turn the transmission by turning the upper pulley or the tail rotor.

2) If any defective teeth are detected contact Enstrom Product Support.

3) If no defective teeth are detected, no further action is required.

D. Remove the tail stand or blocks, and ground handling wheels.

E. Reinstall components as follows:

1) Install the main rotor transmission cover plate (16) and hardware (17, 18, 19). Use a new gasket (15) and a new lock washer (18). Torque the bolts 50-70 in-lb (5.6-7.9 Nm).

2) Position the upper plenum in place and the install screws (2, 3) (IPC Figure 6-3).

3) Install the left and right channel assemblies (20, 21) and the side air ducts (28, 29) (IPC Figure 3-2).

4) Remove the cloth used to cover the ducts (17) (IPC Figure 6-3).

CAUTION: Do not over tighten the clamps used to secure the transfer ducts. If the clamps are over tightened they can cause damage to the seal lips on the upper and lower plenums.

5) Roll the seal (18) up over the plenum and tighten the clamp (20) (IPC Figure 6-3).

CAUTION: Use a backing wrench when loosening or tightening air/fluid lines and fittings to prevent damage to the lines or fittings.

6) Connect the scavenge bleed air line (25) (IPC Figure 6-4).

7) Install the left and right aft side cowlings (6, 7, 8, 9, 10, IPC Figure 3-2).

6.2 Perform a maintenance ground run to check for leaks.

6.3 Log the results in accordance with paragraph 12.

6.4 Report the following to Enstrom Product Support:

A. MRGB inspection results.

B. Aircraft/MRGB information:

Aircraft S/N_____Aircraft Total Time_____

MRGB P/N_____MRGB S/N_____

MRGB Hours Time-in-Service_____

Owner_____

Point of Contact_____

Address_____

Phone_____Email_____

C. Send MRGB inspection results and aircraft/MRGB information via:

Phone: 906-863-1200 or,

Email: customerservice@enstromhelicopter.com

7. PARTS: 28-13107-15 gasket (15), AN935-416L (18) or equivalent (IPC, Figure 7-8.1).

8. SPECIAL TOOLS OR EQUIPMENT: None

9. MAN-HOURS: Inspection – 4 hours

10. WARRANTY: Per Enstrom policy

11. WEIGHT CHANGE: N/A

12. LOG BOOK ENTRY:

A. Record this statement in the log book: "Main Rotor Transmission 600-Hour Visual Inspection conducted in accordance with SIL T-064."

B. Record the results of the visual inspection.

13. REPETITIVE INSPECTIONS:

Repeat every 600 hours or 600 hours after overhaul. (This inspection does not change the requirement for overhaul at 1200 hours.)

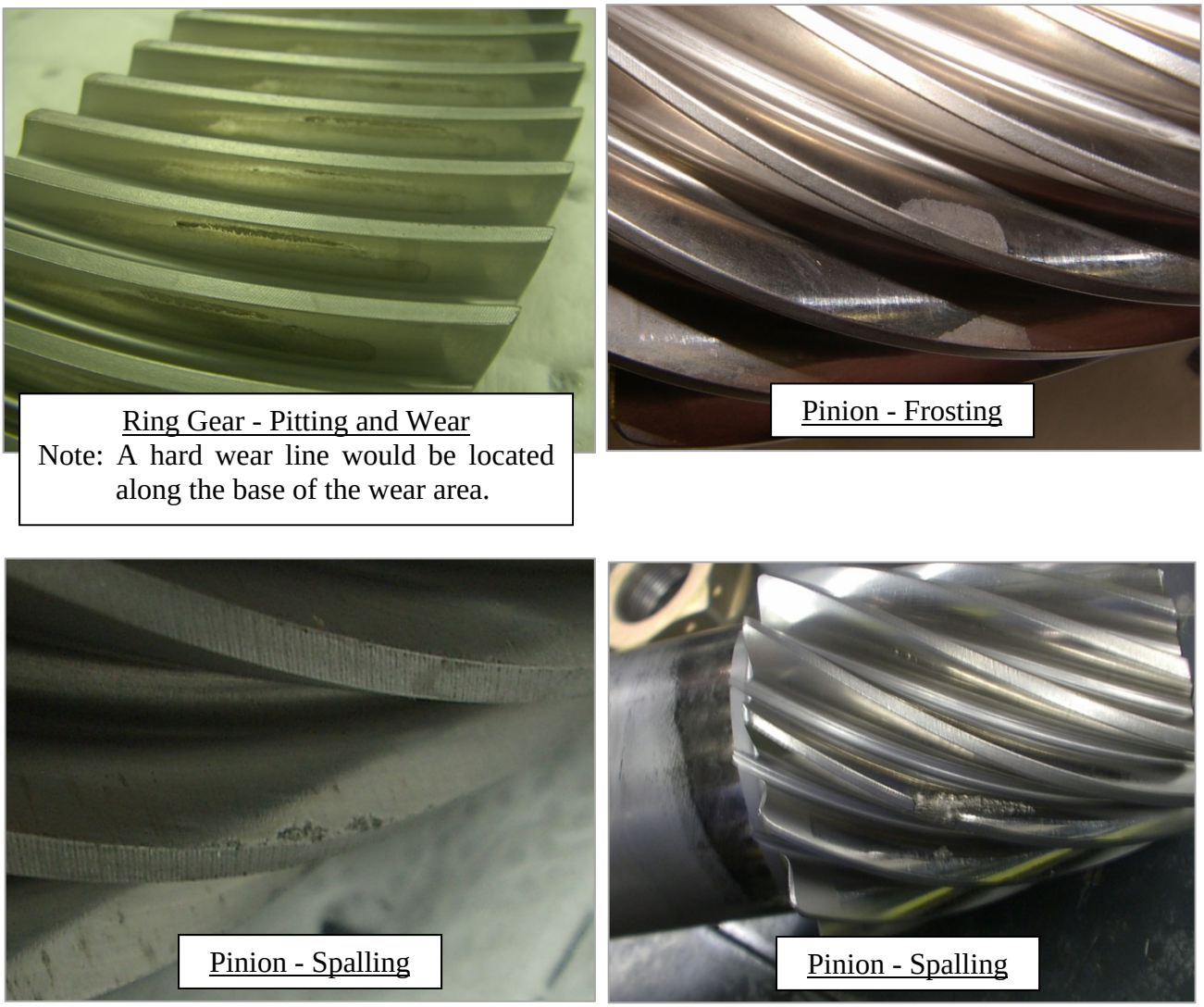

Figure 1. Examples of Gear Tooth Damage
(Ring Carrier and Pinion Removed for Clarity)

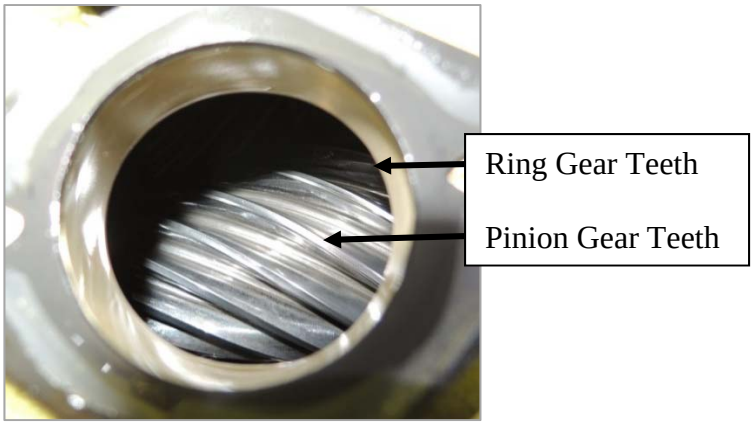

Figure 2. Main Rotor Transmission As Viewed Through the Inspection Port