



SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. T-047

Page 1 of 4

DATE: September 25, 2014

1. SUBJECT: Tail Rotor Drive Shaft Bearing Assembly
2. MODEL: TH-28, 480, and 480B
3. EFFECTIVITY: S/N 5140 and prior
4. BACKGROUND:

Enstrom has received a report of deterioration of the rubber bushing in tail rotor drive shaft bearing assembly caused by interference of the bushing with the bearing housing. This interference is possible if the bushing, P/N 4136002-15, is installed with an incompatible bearing housing or if the bushing is installed backwards.

This SDB (Service Directive Bulletin) provides instructions for inspecting the bushing for deterioration and modifying the bearing housing to increase clearance with the bushing.

5. COMPLIANCE:

Before the next flight, inspect the bearing assemblies for deterioration and proper installation of the rubber bushing in accordance with paragraph 6.

6. INSPECTION:

NOTE

Perform all maintenance in accordance with the TH-28/480 Series Maintenance Manual. In particular, refer to paragraphs 11-59 through 11-85 for removal, inspection, and installation procedures related to the tail rotor drive shaft.

- 6.1 Remove the aft tail rotor drive shaft cover and open the remaining covers.

- 6.2 Inspect the bushing for interference with the bearing housing (Figure 1).
 - 6.2.1 If tears or deterioration is detected proceed to step 6.3.
 - 6.2.2 If no tears or deterioration is detected, no further action is required. Reinstall the aft tail rotor drive shaft cover and remaining covers.

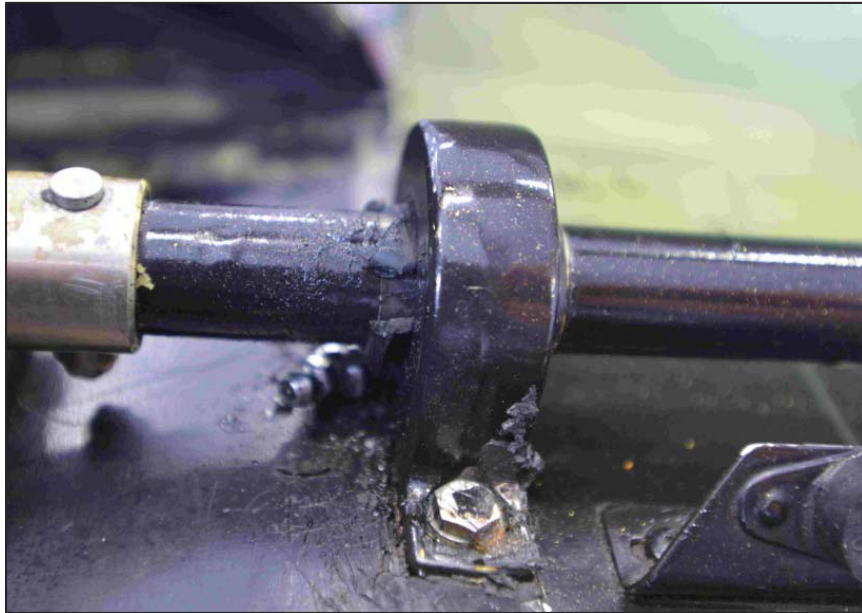


Figure 1. Bushing Deterioration (forward side shown)

- 6.3 Inspect the bearing housing:
- 6.3.1 Inspect the condition of the bearing housing in accordance with paragraph 11-76, A of the TH-28/480 Series Maintenance Manual.
 - 6.3.2 Measure the smaller hole opening. If less than 1.16 inch/29.46 mm, open the hole diameter to 1.165 inch/29.59 mm (Figure 2) or install new bearing housing 28-13611-15 (refer to Figure 3).
 - 6.3.3 Refer to step 6.4 for proper bushing installation.

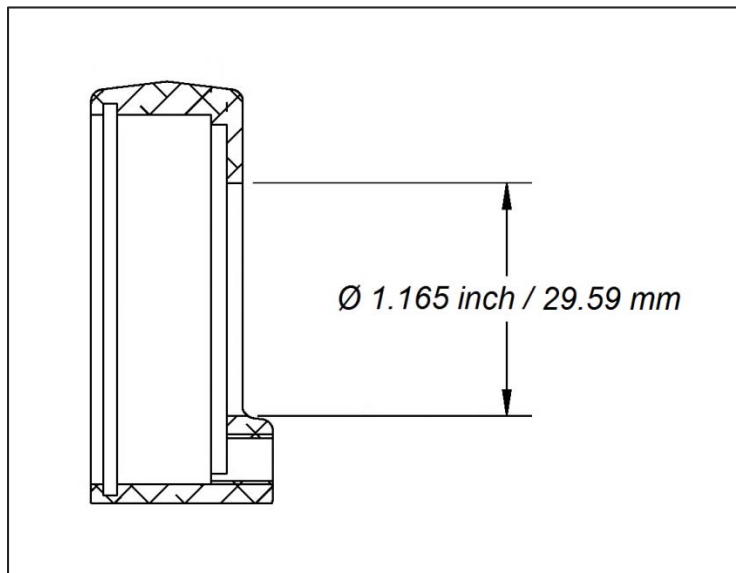
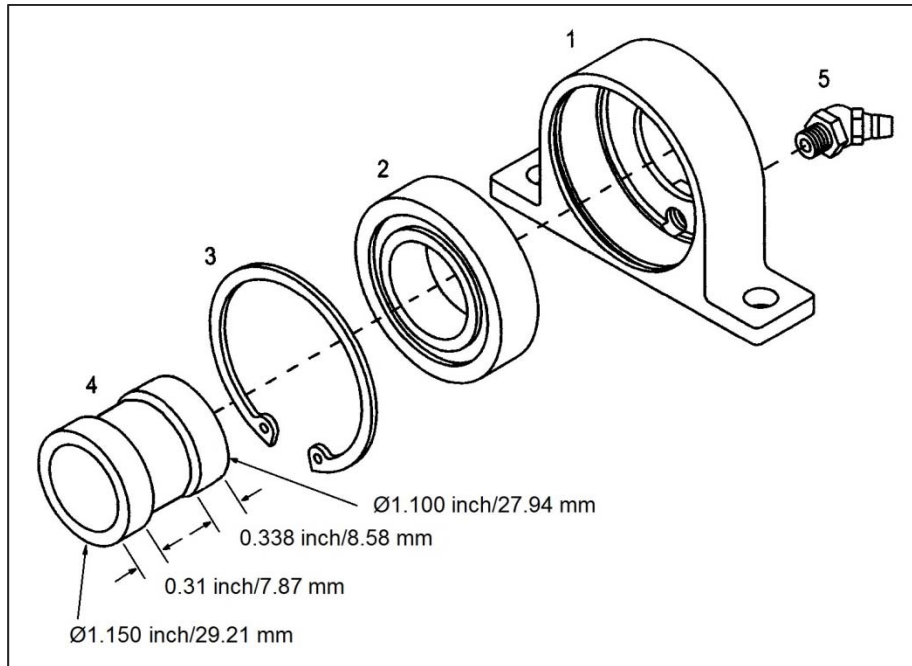


Figure 2. Bearing Housing Modification

- 6.4 Bushing installation (Figure 3):
- 6.4.1 Install a new bushing as shown in Figure 3. (The end of the bushing with diameter 1.150 inch/29.21 mm and flange width 0.31 inch/7.87 mm is to the open side of the housing; the end of the bushing with diameter 1.100 inch/27.94 mm and flange width 0.338 inch/8.58 mm is to grease fitting side of the housing.) **Note:** For pillow block 1, bond the bushing to the inner race of the bearing in accordance with paragraph 11-77, D of the TH-28/480 Series Maintenance Manual.
 - 6.4.2 Ensure tail rotor drive shaft is aligned in accordance with paragraph 11-61 of the TH-28/480 Series Maintenance Manual.
- 6.5 Inspect for interference whenever bushings are changed.



Item	Part Number	Description	Quantity
-1*	28-13611-1	Bearing Housing	5
-1**	28-13611-13		
1	28-13611-15		
2	ECD015-11	Bearing	5
3	N5000-187-S-PP	Retaining Ring	5
-4°	4136002-11	Rubber Bushing	5
-4°	4136002-13		
4	4136002-15		
5	1637-B	Grease Fitting	5
- Not illustrated * For use with Enstrom Piston Helicopters F-28F and 280FX only ** Inactive ° Obsolete			

Figure 3. Bushing Installation

7. PARTS: N/A
8. SPECIAL TOOLS: N/A
9. MAN-HOURS: Inspection: 10 minutes
10. WARRANTY: Per Enstrom Warranty Policy
11. WEIGHT CHANGE: None
12. LOG BOOK ENTRY: As required for maintenance actions.
13. REPETITIVE ACTION: N/A