

# SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0100

Revision 1

DATE: September 30, 2025

1. SUBJECT: Inspect Swashplate Rod End (Dog Leg) Assembly, P/N 28-16143, for excessive play/wear.
2. MODELS: F-28A, F-28C, F-28C-2, F-28C-2R, 280, and 280C
3. EFFECTIVITY: All Serial Numbers
4. BACKGROUND:

As initially reported in 2006, Enstrom received a report from the field of two swashplate rod end (dog leg) assemblies, P/N 28-16143-1, with excessive play/wear in the uni-ball bearings. Initial photographs showed that on one of the dog leg assemblies the outer race of the uni-ball bearing was worn through at the bottom and the rod end assembly was approximately 60% worn through the bottom. The bolts securing the dog legs to the lower swashplate assembly and the lower swashplate assembly were also damaged from the excess play/wear. The dog legs were installed in a 280FX with approximately 500 hours time since new.

This Service Directive Bulletin provides instructions for inspecting the swashplate rod end (dog leg) assembly bearing installation.

Revision 1 corrects a typo and updates reference and contact information. In addition, F-28F and 280F series models were removed from the Models list. (Maintenance aspects of this SDB are provided in the F-28F/280F Series Maintenance Manual.)

5. COMPLIANCE:

If not previously inspected when the SDB was initially released, at or before the next 5 hours time in service, inspect the swashplate rod end (dog leg) assemblies, P/N 28-16143, for excessive bearing play/wear in accordance with (IAW) paragraph 5.1.

## 5.1. INSPECTION:

### NOTE

Perform all maintenance in accordance with the applicable maintenance manual for the model aircraft.

### NOTE

Refer to F-28/280 Series Illustrated Parts Catalog (IPC), Figure 8-1, Figure 8-2, and Figure 8-3A, for the part numbers of items referenced in the following procedure.

- A. Remove the right and left side access panels from between the fuel tanks and the engine access panels.
- B. Inspect the swashplate rod end (dog leg) assemblies (IPC, Figure 8-3A, Item 380 and Item 390) for excessive bearing play/wear using the following procedure:
  1. Using a suitable light source and inspection mirror, as required, visually inspect each of the dog leg assemblies for condition and/or excessive radial play/wear between the bearing uni-ball and the uni-ball bearing race (Refer to Figure 1). To accomplish the inspection, a second person should slightly rotate, in the pitch axis, the main rotor blade corresponding to the dog leg assembly being inspected.
  2. If the visual inspection of the dog leg assemblies indicates obvious uni-ball play exceeding approximately 0.025"/0.635 mm, remove the lower swashplate assembly from the aircraft and remove the dog leg assemblies from the aircraft. Inspect and replace the dog leg assemblies with airworthy components as required.
  3. If the lower swashplate assembly has been removed, inspect the corresponding mounting lugs of the lower swashplate assembly (IPC, Figure 8-1, Item 80) for excessive wear/damage. Repair or replace the lower swashplate as applicable.
  4. If the lower swashplate assembly has been removed, inspect the bolts and spacers (IPC, Figure 8-2, Item 30 and Item 40, respectively) for excessive wear/damage (Refer to Figure 1). Replace the bolts and/or spacers as required.
- C. Reinstall the right and left side access panels when completed with the inspection/repair of the aircraft.

## 5.2. PARTS: Refer to the F-28/280 Series Illustrated Parts Catalog.

### 5.3. CONTACT INFORMATION

Enstrom Helicopter Product Support

Tel: 906-863-1200

Fax: 906-863-6821

email: [customerservice@enstromhelicopter.com](mailto:customerservice@enstromhelicopter.com)

6. SPECIAL TOOLS: None required for the visual inspection.

7. ESTIMATED MAN-HOURS:

0.5 Main-hours to inspect the swashplate rod end (dog leg) assemblies IAW paragraph 5.1.B.1.

8. WARRANTY: Per Enstrom Warranty

9. WEIGHT CHANGE: None

10. LOG BOOK ENTRY:

Enter compliance with this Service Directive Bulletin in the aircraft maintenance records.

11. REPETITIVE INSPECTIONS:

Repeat the inspection procedure in paragraph 5.1 at each 100 hour/annual inspection.

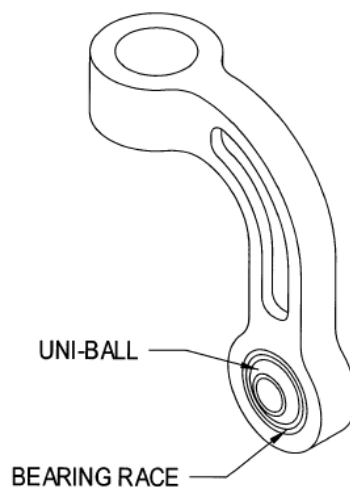


Figure 1. Uni-Ball Bearing Location