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February 15, 2002

TO: Recipients of Enstrom Helicopter Service Directive Bulletins.

SUBJECT: REVISION OF SERVICE DIRECTIVE BULLETIN NO. 0054, WASTEGATE

LINKAGE ASSEMBLY

This letter transmits Revision 1 of Service Directive Bulletin No. 0054. This is a COMPLETE revision. Replace the previous issue with this edition.

This revision adds all serial numbers of F-28F, 280F, and 280FX model helicopters to the effectivity and provides more detailed procedure for inspecting the wastegate linkage assembly for proper breakaway force.

TECHNICAL PUBLICATIONS ENSTROM HELICOPTER CORPORATION



# ENSTROM HELICOPTER CORPORATION

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# SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0054

Revision 1

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DATE: February 15, 2002

1. SUBJECT: Wastegate Linkage Assembly

2. MODEL: F-28F, 280F, and 280FX

3. EFFECTIVITY: All serial numbers

4. BACKGROUND:

The initial release of this Service Directive Bulletin (SDB), issued against early production F-28F and 280F model helicopters, modified the wastegate linkage assembly, provided maintenance procedures for setting the breakaway force for the detent, and established inspection of the detent breakaway force at the 100 hour inspection.

This revision adds all F-28F, 280F, and 280FX model serial number aircraft to the effectivity and deletes the modification requirement of wastegate linkage assembly (replacement parts were provided with the original SDB).

#### 5. COMPLIANCE:

a. At or before the next 100 hour/annual inspection, test the wastegate linkage assembly for proper detent breakaway force in accordance with paragraph 5.1.

#### 5.1. INSPECTION:

#### **NOTE**

Except as specified in the following instructions, perform all maintenance in accordance with the latest revision of the Enstrom F-28F/280F Series Maintenance Manual with 280FX Supplement.

a. Remove the wastegate linkage assembly from the aircraft (Refer to Figure 1).

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b. Using a spring scale, determine the force required to pull the linkage assembly out of detent. The correct range is 15 - 20 pounds/6.8 - 9.1 kg.

- c. If the detent breakaway force is correct, reinstall the wastegate linkage assembly. Install a lock wire (MS20995C32) through the eye of the cotter pin used to secure the clevis pin and washer at the linkage assembly and wastegate arm connection (Refer to Figure 3). Terminate the lock wire around the linkage assembly clevis. The lock wire prevents the clevis pin from rotating and extends the service life of the clevis pin, wastegate linkage assembly, and the wastegate
- d. If the detent breakaway force is not correct, adjust the spring plunger in accordance with paragraph 5.2.

#### 5.2. ADJUSTMENT:

- a. Remove the lock wire from the jam nut securing the spring plunger and loosen the jam nut (Refer to Figure 2).
- b. Remove the rod from the sleeve assembly and clean the rod using a suitable solvent/cleaner.
- c. Lightly coat the rod with Loctite® Silver Grade Anti-Seize Compound or equivalent and insert the rod into the sleeve assembly.
- d. Using a spring scale, adjust the spring plunger as required to obtain a 15 20 pound/6.8 9.1 kg breakaway force to pull the rod out of detent. Tighten the jam nut to 12 15 in-lbs/1.4 1.7 Nm and recheck the breakaway force. Readjust the spring plunger as required. Lock wire (MS20995C32) the jam nut to the sleeve assembly.
- e. Reinstall the wastegate linkage assembly (Refer to paragraph 5-1,c).

#### 5.3. PARTS:

a. Refer to Revision 2, dated April 28, 2000, of the Enstrom F-28/280 Series Illustrated Parts Catalog.

## 6. SPECIAL TOOLS & MATERIALS:

Description	Part Number
Spring Scale	N/A
Anti-Seize Compound	Locktite® 76764 or equivalent
Lock Wire	MS20995C32

7. MAN HOURS REQUIRED: .3 Man-Hours per inspection

.7 Man-Hours per breakaway force adjustment

8. WARRANTY: Per Enstrom warranty policy

9. WEIGHT CHANGE: None.

10. LOG BOOK ENTRY: Enter compliance with this Service Directive Bulletin.

## 11. REPETITIVE INSPECTIONS:

Inspect the wastegate linkage assembly for proper breakaway force in accordance with paragraph 5-1 during the 100 hour/annual inspection.

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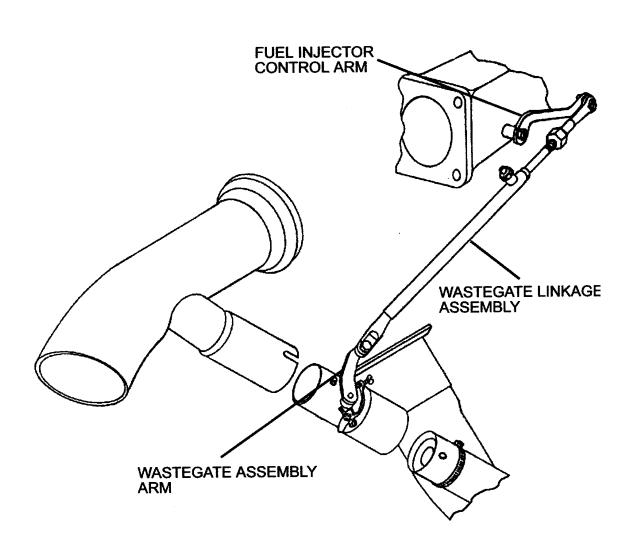
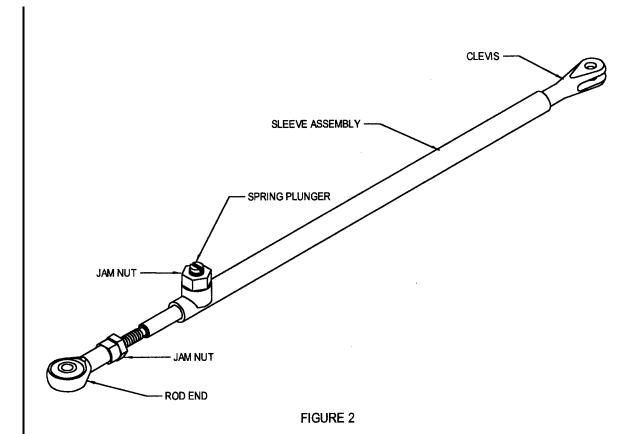


FIGURE 1



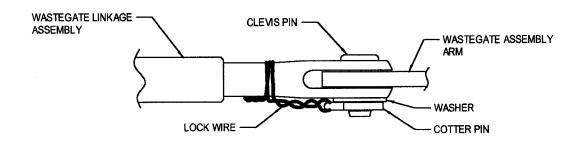


FIGURE 3