



THE ENSTROM HELICOPTER CORPORATION

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SERVICE INFORMATION LETTER

SERVICE INFORMATION LETTER NO. 0171

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DATE: March 26, 2012

1. SUBJECT: Proper Servicing of Fuel Filter Screen

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

3. EFFECTIVITY: All Serial Numbers

4. BACKGROUND:

Enstrom has received reports from an overseas operator of clogged fuel injection nozzles following an incident where several helicopters were fueled with contaminated fuel. Investigation of the circumstances that allowed the particles to bypass the fuel filters has demonstrated that proper maintenance procedures are crucial to maintaining the integrity of the fuel filtration system.

This Service Information Letter provides updated fuel filter cleaning and assembly procedures.

5. FUEL FILTER CLEANING PROCEDURE:

NOTE

Perform all maintenance in accordance with the applicable maintenance manual.

WARNING

Shut off fuel before disassembly and servicing of the fuel filter.

5.1 Shut off fuel.

5.2 Drain residual fuel from the filter (strainer).

5.3 Disassemble the fuel filter in accordance with the applicable maintenance manual:

- 5.3.1 For F-28C, follow the disassembly procedure on page MM-5-31, steps b through f of the F-28A Maintenance Manual.
- 5.3.2 For 280C, follow the disassembly procedure on page MM-5-35, steps b through f of the 280 Maintenance Manual.
- 5.3.3 For F-28F/280F Series, follow paragraph 13-10.E.(2) (a) through (d) of the F-28F/280F Series Maintenance Manual.
- 5.4 Inspect the fuel filter screen in accordance with the applicable maintenance manual:
 - 5.4.1 For F-28C, follow the inspection procedure on page MM-5-31, step b of the F-28A Maintenance Manual.
 - 5.4.2 For 280C, follow the inspection procedure on page MM-5-36, step b of the 280 Maintenance Manual.
 - 5.4.3 For F-28F/280F Series, follow paragraph 13-10.E.(3)(b) of the F-28F/280F Series Maintenance Manual.
- 5.5 Clean the fuel filter assembly in accordance with steps (a) through (d) below.
 - 5.5.1 For F-28C, this procedure supersedes the cleaning procedure on page MM-5-31 of the F-28A Maintenance Manual.
 - 5.5.2 For 280C, this procedure supersedes the cleaning procedure on pages MM-5-35 through MM-5-36 of the 280 Maintenance Manual.
 - 5.5.3 For F-28F/280F Series, this procedure supersedes paragraph 13-10.E.(4) of the F-28F/280F Series Maintenance Manual.

NOTE

The following steps supersede the procedures stated in the applicable maintenance manual (F-28C: page MM-5-31; 280C: pages MM-5-35 and MM-5-36; F-28F/280F Series: paragraph 13-10.E.(4)).

- (a) Clean all filter housing parts with a suitable solvent.

NOTE: Pay particular attention to fittings and passageways within the housing body.

- (b) Clean interior and exterior surfaces of the filter housing with solvent and a fine bristle brush.

CAUTION: Damage to the screen can occur if excessive force is used during cleaning.

- (c) Immerse the screen in solvent (Naphtha or Toluene) for approximately 10 minutes. Use a fine bristle brush to aid removal of debris. Dry the fuel servo screen thoroughly with filtered, compressed air.

6. FUEL FILTER ASSEMBLY PROCEDURE:

6.1 Assemble the fuel filter in accordance with steps (a) through (h) below.

6.1.1 For F-28C, this procedure supersedes the assembly procedure steps a through c on pages MM-5-31 and MM-5-32 of the F-28A Maintenance Manual.

6.1.2 For 280C, this procedure supersedes the assembly procedure steps a through c on page MM-5-36 of the 280 Maintenance Manual.

6.1.3 For F-28F/280F Series, this procedure supersedes paragraph 13-10.E.(5) of the F-28F/280F Series Maintenance Manual.

NOTE

The following steps supersede the procedures stated in the applicable maintenance manual (F-28C: steps a through c on pages MM-5-31 and MM-5-32; 280C: steps a through c on page MM-5-36; F-28F/280F Series: paragraph 13-10.E.(5)).

(a) Install upper gasket, filter top ring, screen, and end cap.

(b) Secure the filter with pin (spring clip). Take care that the curved portions of the pin are installed between the bottom cap of the filter and the straight section of the pin and that the curved section of the pin tail is tucked under the straight section of the pin (reference Figures 1 and 2).

WARNING

The curved section of the pin must be installed between the straight section of the pin and the base of the screen and the curved tail of the pin must be tucked under the straight section of the pin (Figure 1). The screen assembly must be checked for looseness and must fit tightly into the filter base.

(c) Check to ensure that the screen fits tightly into the filter assembly top cap with no looseness.

(d) Install gasket in bottom cover.

(e) Install outer body and end cap on assembly.

NOTE: Align drain port on end cap with the hole in the engine quarter panel or bottom cowling as appropriate.

(f) Swing the retaining bracket under the assembly and align the bolt with the recess in the end cap.

- (g) Secure the assembly by tightening the retaining bracket bolt (torque 20-25 in-lbs/2.3-2.8 Nm).



Figure 1. Correct Installation of Pin; Curved tail is installed under the straight tail.

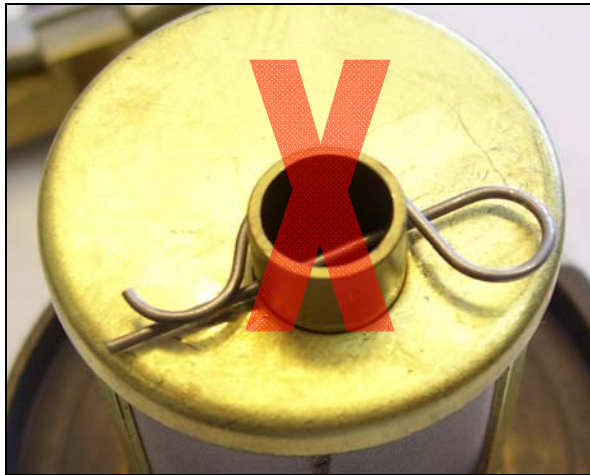


Figure 2. Incorrect Installation of Pin; Curved tail is installed over the straight tail.

- 7. PARTS:
 - 7.1 Consumable: MS20995C32 Safety Wire (A/R)
 - 7.2 Replacement (if required):
 - (a) 33-199-916 Filter Assembly – 40u (Sigmatek)
 - (b) 2212A Gasket (qty 2) (Sigmatek)
 - (c) 33-199-36 Spring Clip (qty 1) (Sigmatek)
- 8. SPECIAL TOOLS: N/A
- 9. MAN-HOURS: N/A
- 10. WARRANTY: N/A
- 11. WEIGHT CHANGE: N/A
- 12. LOG BOOK ENTRY: As required for maintenance actions
- 13. REPETITIVE ACTION: N/A