



# SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0121

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DATE:        March 21, 2016

1. SUBJECT:    Mixture Adjustment Rod Assembly
2. MODEL:     F-28C, F-28F, 280C, 280F, and 280FX
3. EFFECTIVITY:    All S/N (see Note in paragraph 5 and in paragraph 13)
4. BACKGROUND:

During a recent installation of a fuel injection servo at the Enstrom factory, it was discovered that spring washers were installed on the wrong side of the mixture control arm and the throttle control arm (at both ends of the mixture adjustment rod assembly).

This Service Directive Bulletin (SDB) requires inspection of the mixture adjustment rod assembly for the proper position of the spring washer and correcting the installation if necessary.

5. COMPLIANCE:

Within the next 5 hours or at the next scheduled inspection, whichever occurs first, inspect the mixture adjustment rod assembly for correct spring washer installation in accordance with paragraph 6.1. If the spring washers are installed incorrectly, correct the spring washer installation in accordance with paragraph 6.3. (The inspection may be conducted by the pilot.)

**NOTE: F-28F S/N 831 and subsequent and 280FX S/N 2142 and subsequent are exempt from inspection as these S/N were in compliance at the time of manufacture.**

6. INSPECTION:

6.1 Inspect that the two spring washers are installed in the proper location (Figure 1 and Figure 2). The spring washer should not be installed adjacent to the flat washer (cotter pin side, Figure 3).

6.1.1    Open the pilot side engine access panel.

6.1.2    Locate the mixture adjustment rod assembly on the engine side of the fuel injection servo.

6.1.3    Using a bright light source, check that a spring washer is installed between the mixture control arm and the mixture adjustment rod and between the throttle control arm and the mixture adjustment rod. Twist the throttle grip to move the throttle for a better view of both ends of the mixture adjustment rod assembly.

- 6.2 If the spring washers are installed correctly, no further action is necessary.
- 6.3 If a spring washer is not installed correctly, proceed as follows:
  - 6.3.1 Remove the seat cushions, remove the back access panel in the fiberglass seat deck, and remove the firewall access panel from the cabin firewall.
  - 6.3.2 Remove the cotter pin (Figure 2).
  - 6.3.3 Remove the mixture adjustment rod from the mixture control arm and/or the throttle control arm, as applicable. Retain the flat washer and the spring washer.

**CAUTION: Do not adjust the rod length as this will affect the idle mixture (ref. paragraph 14.3).**

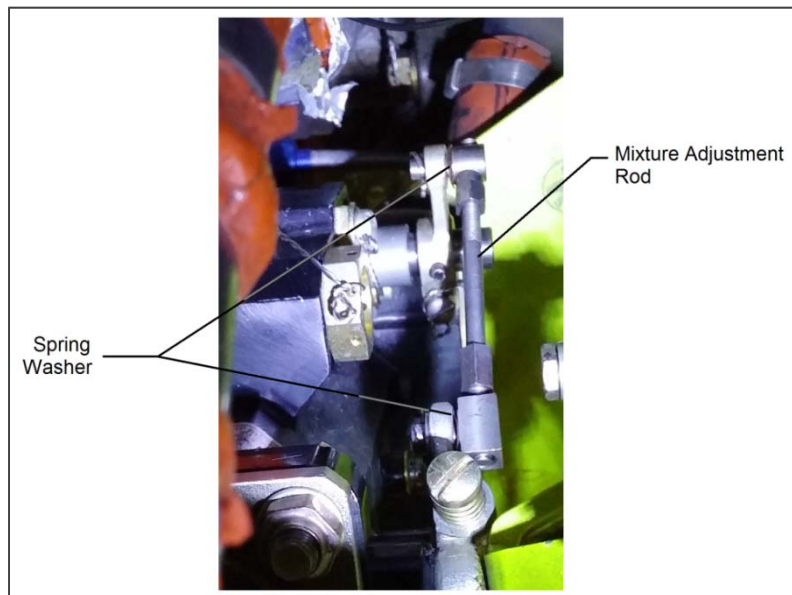
- 6.3.4 Install the spring washer between the mixture adjustment rod and the mixture control arm and/or between the throttle control arm and the mixture adjustment rod, as applicable.
  - 6.3.5 Install the mixture adjustment rod.
  - 6.3.6 Install the flat washer.
  - 6.3.7 Install cotter pin (see Parts).
  - 6.3.8 Reinstall the firewall access panel in the cabin firewall, the back access panel, and the seat cushions.
7. PARTS: MS24665-88 Cotter Pin (mixture control arm); MS24665-151 Cotter Pin (throttle control arm)
  8. SPECIAL TOOLS: None
  9. MAN-HOURS: Inspection – 5 minutes
  10. WARRANTY: Per Enstrom New Helicopter Warranty policy
  11. WEIGHT CHANGE: None
  12. LOG BOOK ENTRY: Enter compliance with this SDB in the aircraft maintenance records.
  13. REPETITIVE ACTION:

Any time a fuel injection servo is removed/installed, inspect for proper spring washer installation.

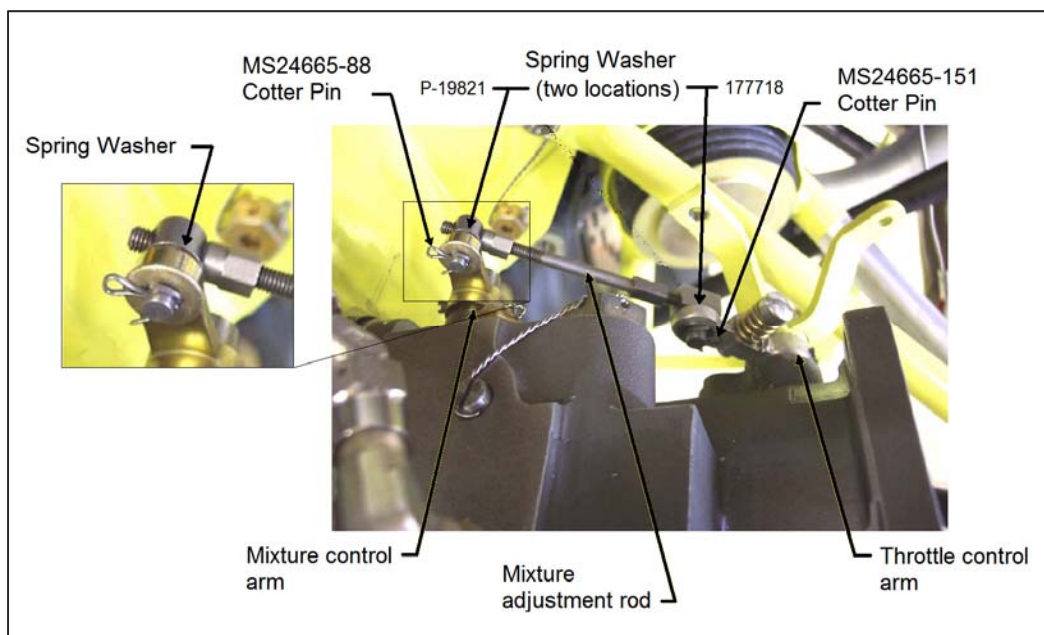
**NOTE: Paragraph 13 applies to all S/N.**

## 14. ADDITIONAL REFERENCES:

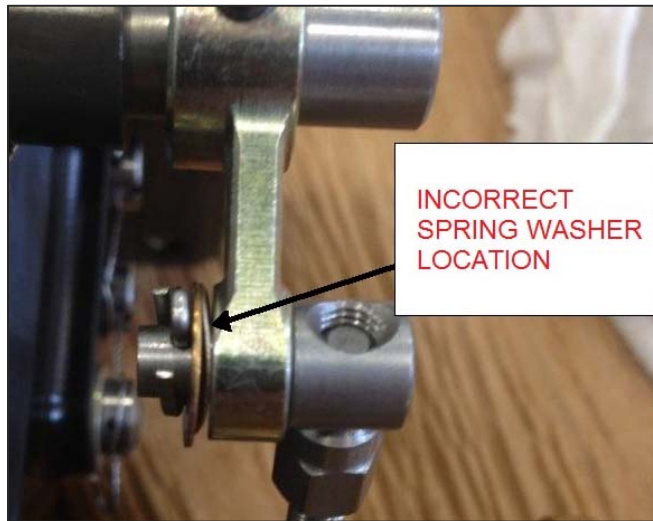
- 14.1 F-28F/280F Series Maintenance Manual, paragraph 13-4
- 14.2 Overhaul Manual and Illustrated Parts List (Model RSA-5AB1 Servo Fuel Injector Assembly, Parts List No. 2524858-5, Precision Airmotive Corporation)
- 14.3 Fuel Servo Adjustment Technical Tip;  
<http://enstromhelicopter.com/support/technical-support/>



**Figure 1 - Mixture Adjustment Rod Assembly (as viewed through the left engine access panel)  
 (See Figure 2 for additional detail)**



**Figure 2 – Mixture Adjustment Rod Assembly (close-up of spring washer installation for the mixture control arm shown on left side, as viewed through the cabin engine access window)**



**Figure 3 – Incorrect Spring Washer Installation (assembly removed for clarity)**