



SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO. 0123

Revision 1

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DATE: May 19, 2017

1. SUBJECT: Oil Pressure Line, Restrictor
2. MODEL: F-28C, 280C, F-28F, 280F, 280FX
3. EFFECTIVITY: All S/N
4. BACKGROUND:

Enstrom has implemented an engine oil pressure line restrictor fitting, P/N ECD110-11. The restrictor fitting replaces the previous factory-installed MS20823-4 fitting. Implementation of the fitting satisfies requirement 14 CFR § 27.1337.

NOTE

In the event of an oil line failure, the restrictor prolongs the time before a critical amount of oil is lost.

This Service Directive Bulletin (SDB) requires inspection of the restrictor fitting at the next 100 hour/annual inspection and installation of a restrictor fitting, if not installed.

5. COMPLIANCE:

At the next scheduled 100 hour or annual inspection, whichever occurs first, verify if the engine oil pressure line fitting is a restricted fitting. If a restrictor fitting is not installed, install the oil pressure line restrictor fitting in accordance with paragraph 6.

NOTES

Perform all maintenance in accordance with the applicable F-28/280 Series Maintenance Manual (MM). Powerplant info provided in the F Series MM is applicable to C-model helicopters also. (P/N ECD110-11 supersedes P/N MS20823-4 referenced in the F Series MM (paragraph 13-2, D, 3, (b).))

Some engines may have had a restrictor fitting installed during engine overhaul or in the field. If the fitting is engraved with the letter “R” or “D”, a restrictor fitting is already installed. No further action is necessary. If no engraving is detected, verify if the fitting is a restrictor fitting (step 6.3).

NOTE

Refer also to Service Information Letter (SIL) 0188 for oil pressure gauge troubleshooting information.

6. INSPECTION AND INSTALLATION:

- 6.1 Access the oil pressure gauge connection just behind the left, top engine mount.
 - 6.1.1 Remove the left fuel cell, if not already removed.
 - 6.1.2 Remove the left and upper engine baffling.
- 6.2 Disconnect the oil pressure line from the engine oil pressure port (fitting on the engine case).
- 6.3 Inspect the fitting for a restricted orifice.
 - 6.3.1 Obtain a 4 inch/10 cm length of safety wire, 0.025 inch or 0.032 inch diameter. (Do not use 0.041 inch; it is too stiff.)
 - 6.3.2 Bend the wire slightly 0.75 inch/1.5 cm from the end. Then push this end of the wire into the fitting. (The bend should follow the 45° elbow.)
 - 6.3.2.1 If the wire stops halfway, i.e. it stops within 0.75 inch (at the elbow) and cannot be pushed through the fitting, a restrictor fitting is installed. No further action is necessary.
 - 6.3.2.2 If the wire can be pushed through 1 inch/3 cm or more, a restrictor fitting is not installed. Proceed to step 6.4.
- 6.4 Replace the existing non-restricted fitting with P/N ECD110-11 or equivalent (ref. paragraph 7) restrictor fitting.
 - 6.4.1 Remove non-restricted fitting.
 - 6.4.2 Apply primer (SF 7649, or equivalent) to the threads of P/N ECD110-11 fitting and allow to dry.
 - 6.4.3 Apply thread sealing compound (Loctite 569, or equivalent) to the threads of P/N ECD110-11 fitting.
 - 6.4.4 Install the restrictor fitting (30-40 in-lb/3.4-4.5 Nm). Additional turn may be necessary to align the fitting to the oil line.

Note: If a leak is found after tightening, do not tighten further. Remove the fitting and apply more sealing compound to the threads. Reinstall the fitting and tighten (30-40 in-lb/3.4-4.5 Nm).

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- 6.5 Connect the oil pressure line and bleed the line.
- 6.6 Perform a ground run to check oil pressure gauge operation. If fluctuation is observed, bleed the line again and repeat the ground run check.
- 6.6.1 For additional information regarding oil pressure gauge fluctuations, refer to Enstrom SIL 0188.

7. PARTS:

Part Number	Description	Quantity
ECD110-11 Or 02A22619	Restricted Fitting, Oil Gauge	1

8. SPECIAL TOOLS: None
9. MAN-HOURS: 4 hours (includes tank removal)
10. WARRANTY: Per Enstrom Helicopter Warranty policy
11. WEIGHT CHANGE: None
12. LOG BOOK ENTRY: Enter compliance with this SDB in the aircraft maintenance records.
13. REPETITIVE ACTION: None