



SAFETY ALERT

SA0010

Rev A

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Cub Crafters, Inc. Considers Compliance Mandatory

This Safety Alert is issued per the requirements of ASTM F2295-06.
 It is a Safety Directive for the purpose of compliance with 14 CFR § 91.327(b)(4).

EFFECTIVE DATE: This Safety Alert is effective January 28, 2015

SUBJECT: OIL PRESSURE LINE REPLACEMENT

MODELS AFFECTED: CC11-100 AND CC11-160 S/N 0001 THROUGH 00280

COMPLIANCE TIME: DUE WITHIN 10 HOURS OR AT NEXT ANNUAL CONDITION INSPECTION WHICHEVER OCCURS FIRST

PURPOSE: Flexible Hose Upgrade

PARTS LIST:

<u>PART</u>	<u>DESCRIPTION</u>	<u>-001</u>	<u>-003</u>	<u>-005</u>
AN823-3D	ELBOW, 45°, MALE NPT TO MALE FLARE	1	-	-
AN837-3D	FITTING, 45° BULKHEAD, MALE FLARE	-	1	1
AN910-1D	COUPLER, FEMALE NPT, ALUMINUM	1	-	-
AN924-3D	NUT, BULKHEAD	-	1	1
HDW-50915K121	NUT, COMPRESSION FITTING, FITS 1/8" OD TUBE	-	1	1
HDW-50915K611	SLEEVE, COMPRESSION FITTING, FITS 1/8" OD TUBE	-	1	1
*MS21919WDG21	CLAMP, CUSHIONED #21	1	-	-
MS28741-3-0162A	FLEXIBLE HOSE ASSEMBLY, 16 ¼" LENGTH	1	1	-
MS28741-3-0202A	FLEXIBLE HOSE ASSEMBLY, 20 ¼" LENGTH	-	-	1
MS35489-11	GROMMET, SYNTHETIC RUBBER	-	1	1
RM0567-001	LOCTITE 567, PIPE SEALANT WITH TEFLON	AR	AR	AR
SC50003-005	ADAPTER, COMPRESSION TO FEMALE FLARE, BRASS	-	1	1
SC50003-007	ADAPTER, MALE FLARE TO MALE NPT, BRASS	1	1	1
SP50502-001	ELBOW, 45° NPT (STREET), BRASS	1	1	-
AVAILABLE LOCALLY				
RM1075-002	CABLE TIES, 5.8"	AR	AR	AR

*For Aircraft with the Dynon Oil Pressure Sensor only.

CC11-160/CC11-100 with Digital Oil Gauge..... -001 PART LIST
 CC11-160 with Analog Oil Gauge..... -003 PART LIST
 CC11-100 with Analog Oil Gauge..... -005 PART LIST

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INSTRUCTIONS:

Consult aircraft logbook to determine if SB00025 was installed. If retrofitted, skip to step 25.

1. Read all instructions before beginning any work.
2. Remove engine cowl, retaining all fasteners (Ref. SSC10020AMM 6.3.14).
3. Remove any fasteners/cable ties securing the oil line to the engine. Disconnect the oil pressure line from the engine fitting.
4. Remove the engine fitting and replace with one of the following: (see Figure 1).

CC11-160 Aircraft

SP50502-001 fitting (45° Street Elbow) and attach a restricted fitting adapter SC50003-007 (male flare to male NPT).

CC11-100 Aircraft

Restricted fitting adapter SC50003-007 (male flare to male NPT).

5. Secure fittings leaving room to accommodate the installation of the new flexible hose.

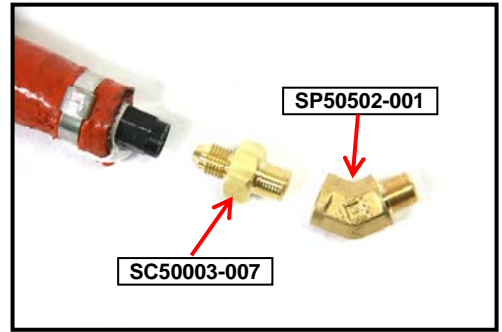


Figure 1 – Engine Fittings

NOTE

Apply Loctite 567 sealant for pipe thread (non-compression) fittings as needed.

Oil Gauge Connections:

Each gauge uses a different number of union tees, insert fittings, and tube to pipe fittings. See the appropriate schematic for specific details.

- Digital Oil Pressure Gauges: see steps 6-11.
- Analog Oil Pressure Gauges: skip to step 12.

FOR AIRCRAFT WITH DIGITAL OIL PRESSURE GAUGE:

6. Disconnect the copper line and compression fitting adapter from the pressure sensor mounted to the firewall. If necessary, the entire sensor can be removed by loosening the sensor clamp. Leave any existing female to female NPT (AN910-1D) coupler attached to the sensor.
7. Install the fitting adapter AN823-3D (45° Elbow, Male NPT to Male Flare) to the AN910-1D coupler on the sensor.
8. Install the flexible hose assembly (MS28741-3-0162A) between the AN823-3D fitting adapter and the SC50003-007 fitting adapter. Secure to the dipstick tube in a similar manner as the previous copper line.

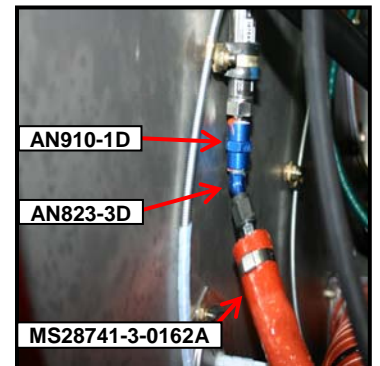


Figure 2 - Firewall Sensor

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FOR AIRCRAFT WITH DYNON OIL PRESSURE SENSOR ONLY:

9. Remove clamp (MS21919WDG24) that secures the sensor to the firewall.
10. Replace with new cushioned clamp (MS21919WDG21) and remove the rubber cushion so the clamp's metal directly contacts the sensor.
11. Reinstall the sensor to the firewall opposite the removal if applicable, then skip to step 20.

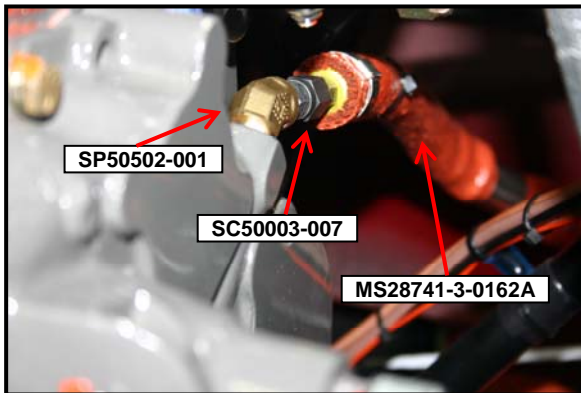


Figure 3 - CC11-160 Engine Fittings



Figure 4 - CC11-100 Engine Fittings

FOR AIRCRAFT WITH ANALOG OIL PRESSURE GAUGE:

12. Using a tubing cutter, cut off the copper oil line forward of the firewall. Leave enough of the copper tubing aft of the firewall to allow it to be reinstalled to a firewall bulkhead fitting
13. Slide the compression fitting sleeve (HDW-50915K611) and compression fitting nut (HDW-50915K121) over the copper tubing on the aft side of the firewall (see Figure 6).
14. Install the fitting adapter SC50003-005 (Compression to female flare) marked with "37" to the copper tubing using the compression nut and sleeve.
15. Remove the synthetic rubber grommet from the firewall and replace it with a larger internal diameter grommet (MS35489-11). Install the 45° bulkhead fitting (AN837-3D) in the grommet with the 45 bend forward of the firewall (see Figure 7). Attach the bulkhead nut (AN924-3D) aft of the firewall but do not tighten yet.
16. Connect the fitting adapter to the bulkhead fitting and verify the connection is secure. Ensure there is clearance for the new flexible hose.
17. Tighten the bulkhead nut (AN924-3D).

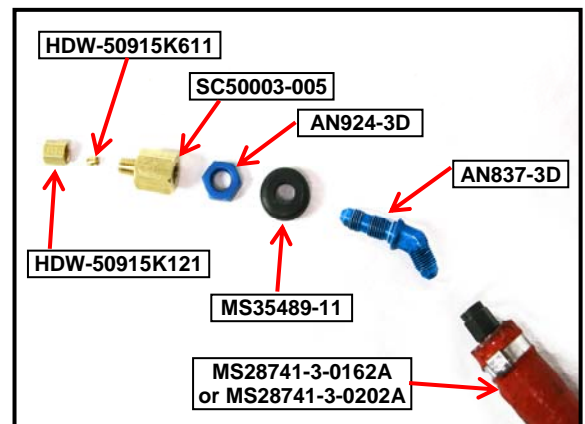


Figure 5 - Analog Gauge Firewall Fittings

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18. Install the flexible hose assembly between the bulkhead fitting and the engine fitting(s).

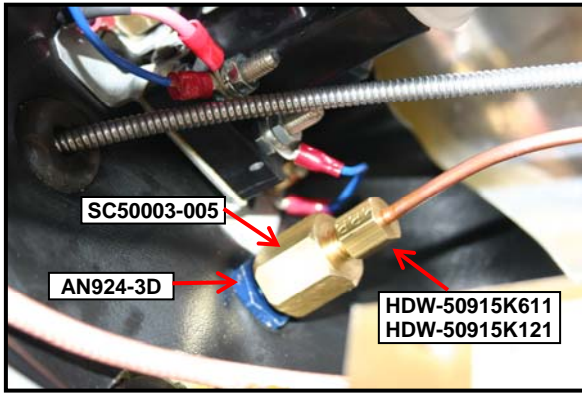


Figure 6 - Firewall Compression Fittings

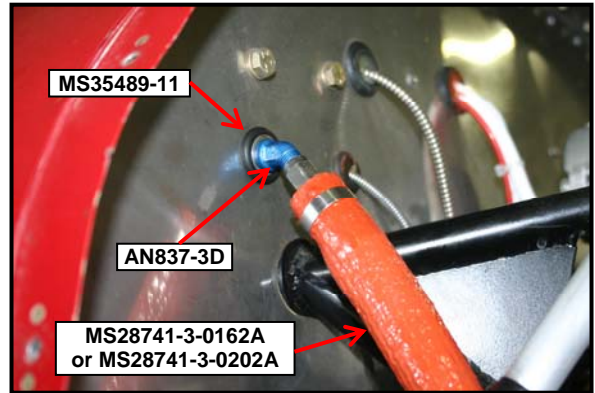


Figure 7 - Analog Gauge Firewall Hardware

NOTE

For CC11-100 aircraft, use 20-1/4" flexible hose length (MS28741-3-0202A)
 For CC11-160 aircraft, use 16-1/4" flexible hose length (MS28741-3-0162A)

- 19. Secure hose to the dipstick tube in a similar manner as the previous copper line.
- 20. Secure all connections as needed with cable ties.
- 21. Reinstall the engine cowling per AMM.
- 22. Clean off any oil from the engine and firewall.
- 23. Perform a run-up and check oil temperature and pressure gauge readings (per SSC10020AFM 4.4.3.1).
- 24. Check for leaks post run-up.
- 25. Make logbook entry stating the oil pressure line was replaced, and SA0010 Rev A was complied with. There are no changes to weight and balance.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. Contact the customer service department at:

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 Yakima, WA 98903.
 1-877-484-7865 or 1-509-248-9491
support@cubcrafters.com

Please include the aircraft registration number, serial number, current name, and address of the owner and/or operator.