SERVICE BULLETIN CK-SB005 Rev NC

Cub Crafters, Inc. Considers Compliance Mandatory

EFFECTIVE DATE: This Service Bulletin is effective ***February 02, 2015***

SUBJECT: *OIL PRESSURE LINE REPLACEMENT*

MODELS AFFECTED: *CCK-1865 S/N 0001 THROUGH S/N 0100*

COMPLIANCE TIME: *DUE WITHIN 25 HOURS OR AT NEXT ANNUAL CONDITION INSPECTION WHICHEVER OCCURS FIRST*

PURPOSE: *Upgrade the existing copper line forward of the firewall to a flexible braided hose.*

PARTS LIST:

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

*For Aircraft with the Dynon Oil Pressure Sensor Only.

CCK-1865 with Digital Oil Gauge ..... -001 PART LIST
CCK-1865 with Analog Oil Gauge ..... -003 PART LIST

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INSTRUCTIONS

1. Read all instructions before beginning any work.
2. Remove engine cowl, retaining all fasteners (Ref. AMM), to gain access to the oil pressure line which runs from the upper right rear of the engine to/through the upper right side of the firewall.
3. Inspect the oil pressure line to see if it has an upgraded flexible braided hose. If so, skip to step 26. If a copper line exists, proceed with step 4.
4. Remove any fasteners/cable ties securing the oil line to the engine. Disconnect the oil pressure line from the engine fitting.
5. Remove the engine fitting and replace with SP50502-001 fitting (45° Street Elbow) and attach a restricted fitting adapter SC50003-007 (male flare to male NPT), see Figure 1.
6. 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 7-12.
- Analog Oil Pressure Gauges: skip to step 13.

FOR AIRCRAFT WITH DIGITAL OIL PRESSURE GAUGE:

7. 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.
8. Install the fitting adapter AN823-3D (45° Elbow, Male NPT to Male Flare) to the AN910-1D coupler on the sensor.
9. 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.

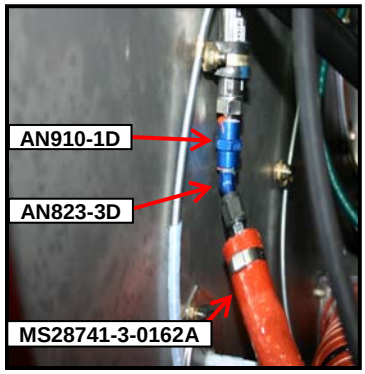

Figure 2 - Firewall Sensor

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FOR AIRCRAFT WITH DYNON OIL PRESSURE SENSOR ONLY:

10. Remove clamp (MS21919WDG24) that secures the sensor to the firewall.

11. Replace with new cushioned clamp (MS21919WDG21) and remove the rubber cushion so the clamp's metal directly contacts the sensor.

12. Reinstall the sensor to the firewall opposite the removal (if applicable), then skip to step 21.

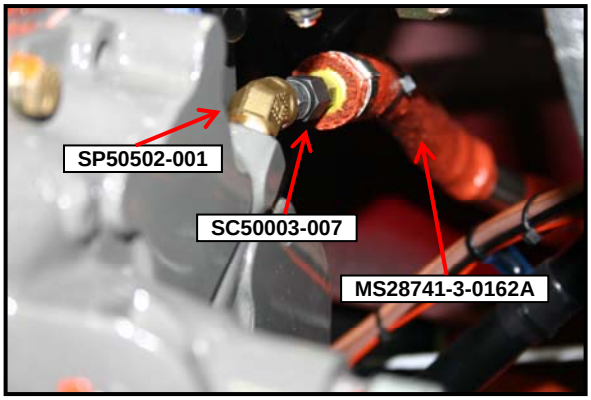

Figure 3 - CC11-160 Engine Fittings

FOR AIRCRAFT WITH ANALOG OIL PRESSURE GAUGE:

13. 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.

14. 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).

15. Install the fitting adapter SC50003-005 (Compression to female flare) marked with "37" to the copper tubing using the compression nut and sleeve.

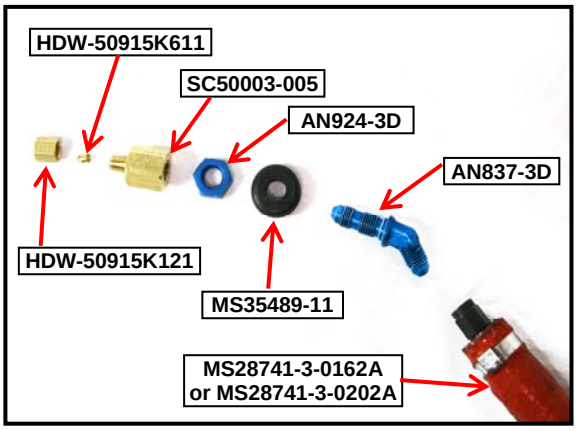

Figure 5 - Analog Gauge Firewall Fittings

16. 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.

17. Connect the fitting adapter to the bulkhead fitting and verify the connection is secure. Ensure there is clearance for the new flexible hose.

18. Tighten the bulkhead nut (AN924-3D).

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

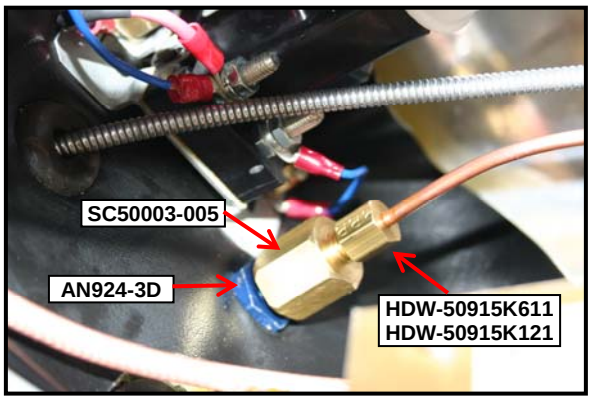

Figure 6 - Firewall Compression Fittings

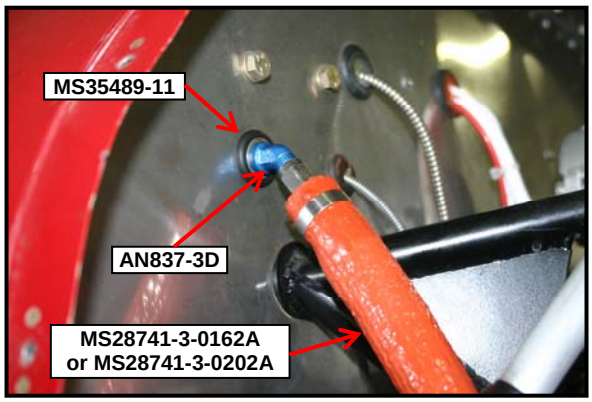

Figure 7 – Analog Gauge Firewall Hardware

20. Secure hose to the dipstick tube in a similar manner as the previous copper line.

21. Secure all connections as needed with cable ties.

22. Reinstall the engine cowling per AMM.

23. Clean off any oil from the engine and firewall.

24. Perform a run-up and check oil temperature and pressure gauge readings (per SSC10020AFM 4.4.3.1).

25. Check for leaks post run-up.

26. Make logbook entry stating the oil pressure line was replaced, and CK-SB005 Rev NC 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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Please include the aircraft registration number, serial number, current name, and address of the owner and/or operator.