

FOR REFERENCE ONLY

Applicability:	CESSNA		Drawing: AFC-W302
	180, A, B, C, D, E, F, G, H, J, K	[S/N 1800001 & After]	Revision: B
	182, A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q	[S/N 1820001 & After]	Date: 06/01/05
	185, A, B, C, D, E	[S/N 1850001 & After]	
	A185E, F	[S/N 1851150 & After]	

Airwolf Parts List No. AFC-W302

Index	Part Number	Description	Quantity
01.	W-3000	AirSep Assy, 3/4" Breather, 1/2" Vacuum	(1)
02.	W-2031	Air Syphon Pump	(1)
03.	W-2018-1	Air-Tee	(1)
04.	W-2025-1	Tube	(1)
05..	W-2025-2	Tube	(1)
06.	W-2023	Doubler	(1)
07.	W-2011	Bracket	(1)
08.	AN526C-1032R10	Screw, #10 X 5/8" Long	(9)
09.	MS20365-1032A	Locknut, #10	(9)
10.	AN970-3	Flat Washer, 3/16"	(9)
11.	MIL6000-1/4	Hose, 1/4" ID	(11")
12.	MIL6000-5/16	Hose, 5/16" ID	(24")
13.	MIL6000-5/8	Hose, 5/8" ID	(16")
14.	MIL6000-5/8	Hose, 5/8" ID	(3")
15.	MIL6000-3/4	Hose, 3/4" ID	(3-1/4")
16.	MM-4	Hose Clamp, 1/4"	(2)
17.	MM-5	Hose Clamp, 3/8"	(2)
18.	QS100M10H	Hose Clamp, 5/8"	(4)
19.	QS100M12H	Hose Clamp, 3/4"	(4)
20.	QS100M24H	Hose Clamp, 1-1/2"	(1)
21.	QS100M72H	Hose Clamp, 4-1/2"	(1)
22.	W-2100	"C" Channel	(10")
23.	W-2024	Flange	(1)
24.	KW-2031	Drain Back Kit	(1)
25.	MS20074-04-46	Bolt, 1/4" X 4-3/4" Long	(1)
26.	AN960-416	Flat Washer, 1/4"	(1)
27.	MS35333-40	Star Washer, 1/4"	(1)
28.	W-2004	Bushing	(1)
29.	655528	Continental Gasket	(1)
30.	MS21919WDG-5	Adel Clamp, 5/8"	(1)
31.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
32.	CAT-7	Duct, 1-3/4" ID	(30")
33.	Drawing List	DLW-3000-2, DLW-3000-2-2, DLW-3000-2-3, DLW-3009	(1)

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[S/N 18000001 & After]
[S/N 18200001 & After]
[S/N 1850001 & After]
[S/N 1851150 & After]

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*Note A: Some hoses or wires may have to be rerouted so the air/oil separator will fit into position.
Reference and material per AC 43.13-1B & 2A.*

WARNING: ALL HOSES SHALL BE LOCATED AT LEAST 4.0" FROM ANY HEAT SOURCE LIKELY TO CAUSE VAPORIZATION OF THE OIL.

01. Remove the existing engine breather and vacuum pump discharge components from the crankcase breather and vacuum pump down to the cowl flap.

Note: B On vacuum pump discharge fittings that are approximately 180°, cut the fitting so that it is now 90°.

02. Install the W-2023 doubler on the rear engine baffle.
Install the duct flange (if required).
04. Install the W-2011 bracket to the doubler and the rear engine baffle using (3) each of #10 screws, washers, & locknuts. The notches in the flanged edges should be upward. Wrap the 4-1/2" clamp with the "C" Channel and slide under the W-2011 bracket and secure all hardware.
04. Install the remaining #10 screws, washers, & locknuts
05. Install the AirSep onto the W-2011 bracket with the 3/4" inlet tube protruding forward through the rear baffle and doubler.

CAUTION: Do not over tighten the clamp.

06. Remove the #2 cylinder rocker cover and install the KW-2031 kit per enclosed instructions.
07. Install the AirSyphon Pump to the modified rocker cover and brace it with (1) each of a W-2004 Bushing, 1/4" Star Washer, 1/4" Flat Washer, and -5 Adel clamp.
08. Install the W-2025-1 tube to the existing hose and clamp assy. at the engine breather. On aircraft equipped with cold weather shielding, reinstall shielding on the tubes.
09. Install a 3-1/4" section of 3/4" hose between the W-2025-1 and W-2025-2 tubes and secure with 3/4" clamps.
10. Install a 3-1/4" section of 3/4" hose between the W-2025-1 and the 3/4" inlet of the AirSep and secure with 3/4" clamps.
11. Install a section of 1/2" hose between the Air-Tee and the vacuum pump exhaust port and secure with 1/2" clamps.

Note C: Cutting or rotation of the vacuum pump fitting may be necessary.

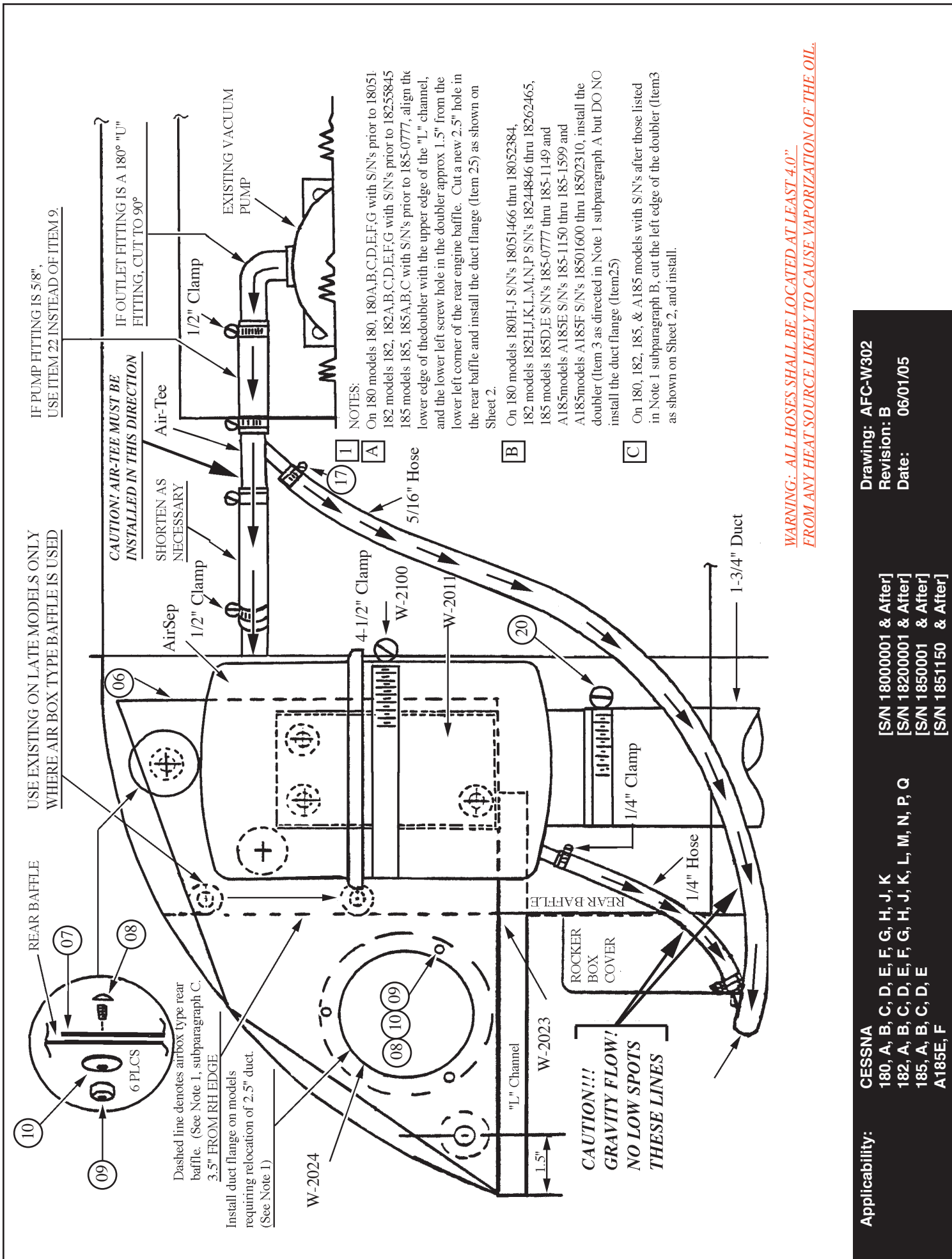
12. Install the 1/2" hose between the 1/2" inlet of the AirSep and the Air-Tee and secure with 1/2" clamps.
Note: Shortening of the 1/2" hose may be necessary in some installations.

CAUTION: Observe proper direction of the Air-Tee.

13. Install the 5/16" hose between the 5/16" diagonal leg of the Air-Tee and the 5/16" branch of the Air Syphon Pump and secure with 5/16 clamps.
14. Install the 1/4" hose between the 1/4" drain of the AirSep and the 1/4" diagonal leg of the Air Syphon Pump and secure with 1/4" clamps.
15. Install the 1-3/4" duct to the outlet of the AirSep and secure with a 1-1/2" clamp.
16. Route the lower end of the duct down to the center vertical cowl attach bracket and secure with a -30 Adel Clamp and a #10 Screw, Washer and Locknut.

NOTE: The duct should not extend closer than (3) inches to the lower cowl skin.

18. Determine weight & balance, initiate Form 337, and update the equipment list.



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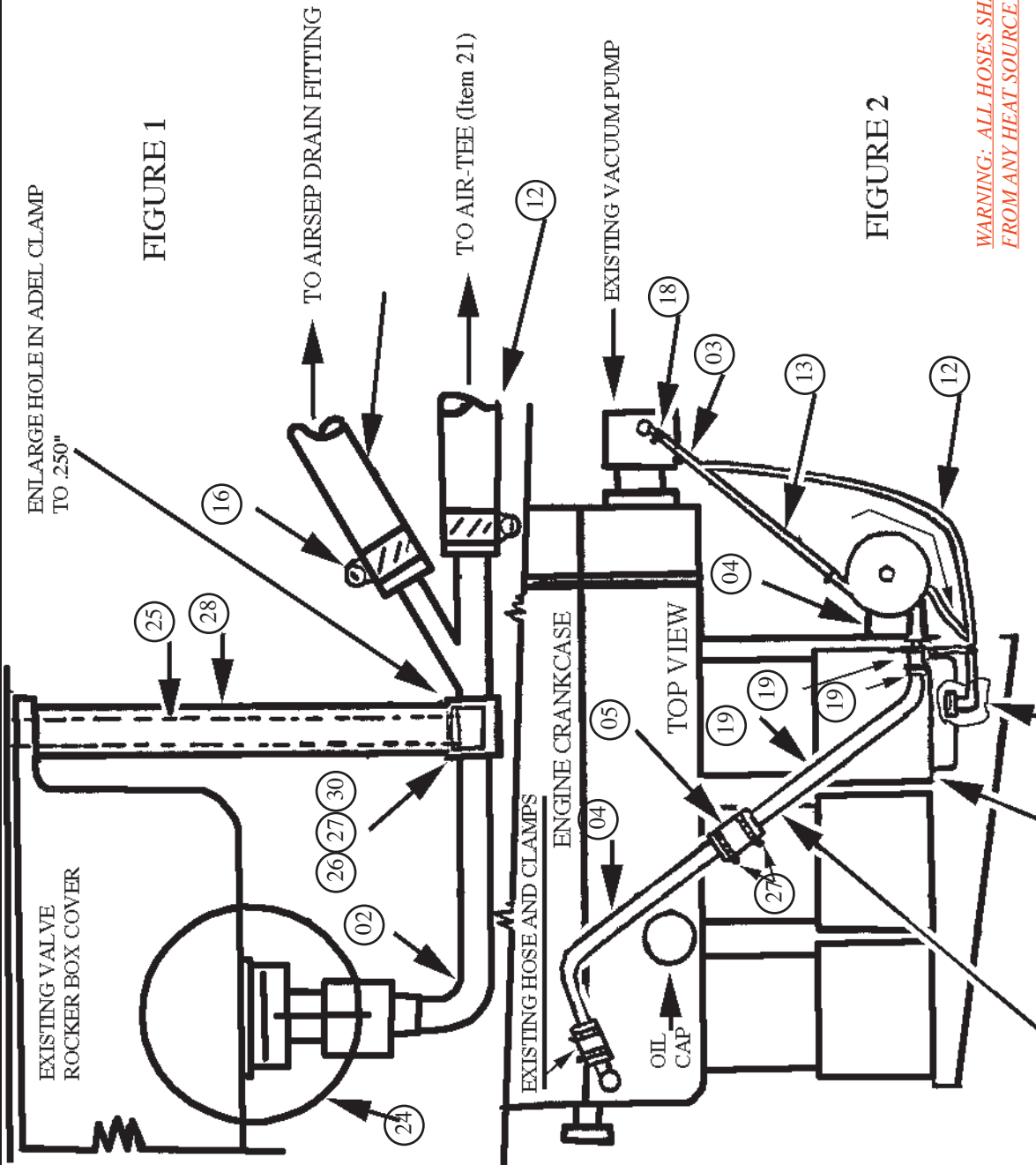


FIGURE 1

FIGURE 2

WARNING: ALL HOSES SHALL BE LOCATED AT LEAST 4.0" FROM ANY HEAT SOURCE LIKELY TO CAUSE VAPORIZATION OF THE OIL.

NOTES:

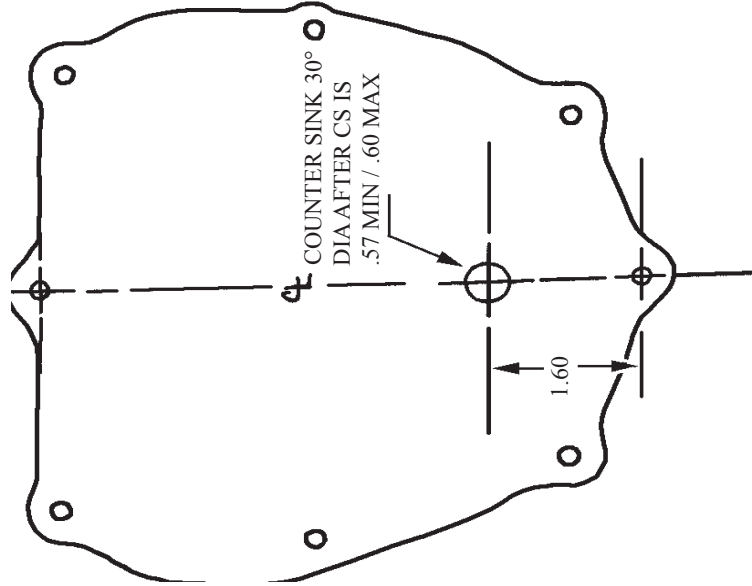
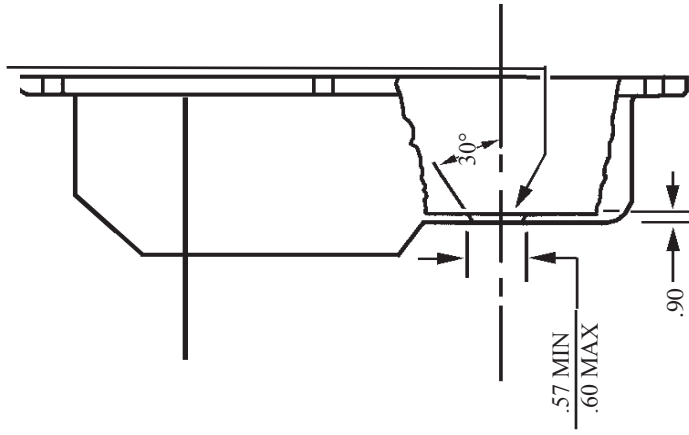
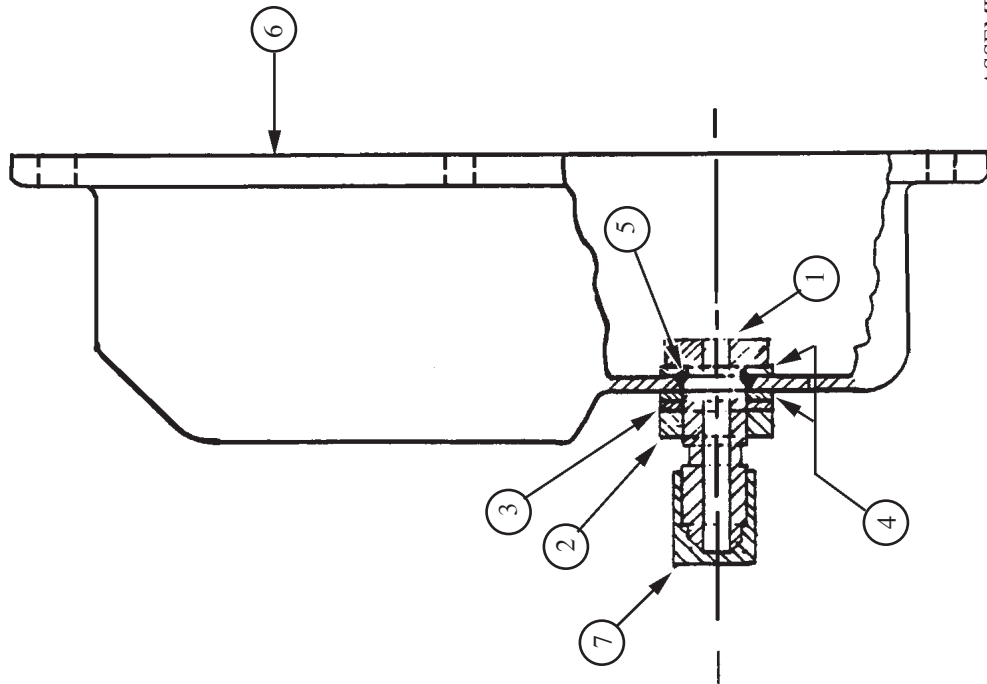
- REINSTALL WEATHER SLEEVING IF PREVIOUSLY INSTALLED
- SEE ABOVE FOR DETAILS
- MODIFY ENGINE ROCKER BOX COVER I/A/W FAA APPROVED ROCKER BOX RETURN FITTING KIT P/N KW-2031

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DRAWING: DLW-2031

ASSEMBLY INSTRUCTIONS:

1. DRILL ROCKER BOX COVER PER SHEET 2.
2. INSTALL ITEM 4 ONTO ITEM 1.
3. INSTALL ITEM 5 ONTO ITEM 1, AGAINST ITEM 4.
4. INSTALL ITEM 1 INTO DRILLED HOLE IN ROCKER BOX COVER FROM INSIDE POINTING OUTWARD.
5. INSTALL IN ORDER, ITEM 4, 3, & 2, ONTO ITEM 1 AND TIGHTEN.
6. INSTALL ITEM 7 ONLY IF NO AIR/OIL SEPARATOR IS TO BE INSTALLED AT THIS TIME.

DRAWING DLW-2031

NOTE:

THIS RETURN FITTING IS APPROVED ONLY FOR RETURNING OIL FROM THE FAA AP-

QTY	ITEM	PART#	DESCRIPTION
1	7	AN20-5D	Blockoff Cap, -5 [Not Included]
1	6	625615	Rocker Box Cover [Not Included]
1	5	M83248/1-013	Viton O-Ring, 1/2"
2	4	AN960-PD816	Flat Washer, 1/2"
1	3	MS35333-44	Lock Washer, 1/2"
1	2	AN924-5D	Nut, -5
1	1	AN832-5D-SP	Bulkhead Fitting, -5