## Airwolf Parts List No. AFC-W302

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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.

03. 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.


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

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NOTE:
- 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
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.

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 

NOTE:

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