

FOR REFERENCE ONLY

Applicability: **BELLANCA**
Viking

Drawing: **AFC-W307**
Revision: **A**
Date: **10/01/05**

Airwolf Parts List No. AFC-W307

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3000	Air Sep Assy	(1)
02.	W-2031	Air Syphon Pump	(1)
03.	W-2018-1	Air Tee, 5/8"	(1)
04.	Deleted		
05.	W-2011	Bracket	(1)
06.	W-2025-2	Tube	(1)
07.	Deleted		
08.	Deleted		
09.	Deleted		
10.	MIL6000-1/4	Hose, 1/4" ID	(31")
11.	MIL6000-5/16	Hose, 5/16" ID	(21")
12.	MIL6000-3/4	Hose, 3/4" ID	(8")
13.	MIL6000-5/8	Hose, 5/8" ID	(17")
14.	MIL6000-5/8	Hose, 5/8" ID	(3")
15.	MIL6000-3/4	Hose, 3/4" ID	(3.25")
16.	Deleted		
17.	MM-4	Hose Clamp, 1/4"	(2)
18.	MM-5	Hose Clamp, 5/16"	(2)
19.	Deleted		
20.	QS100M10H	Hose Clamp, 5/8"	(4)
21.	QS100M12H	Hose Clamp, 3/4"	(4)
22.	QS100M24H	Hose Clamp, 1-1/2"	(1)
23.	QS100M72H	Hose Clamp, 4-1/2"	(1)
24.	W-2100	"C" Channel	(10")
25.	MS27039C-0810	Screw, #8 X 5/8" Long	(4)
26.	AN526C-1032R10	Screw, #10 X 5/8" Long	(1)
27.	AN960-8	Flat Washer, #8	(4)
28.	MS20365-1032A	Locknut, #10	(1)
29.	MS35338-41	Lock Washer, #8	(4)
30.	A8K-75	Rivnut, #8-32 X 7/16" Long	(4)
31.	MS21919WDG-18	Adel Clamp, 1-1/8"	(1)
32.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
33.	CAT-7	Duct, 1-3/4" ID	(22")
34.	AN816-5D	Straight Fitting, -5	(1)
35.	DLW-3000-7	Airwolf Drawing List, Rev B	(1)

AIRWOLF INSTALLATION INSTRUCTIONS AFC-W307

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Viking
17-30A

Amended 08/01/02

First Release 06/02/78

*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. Mark the breather tube 8.5" forward of the rear baffle. Cut the tube at the located position and discard the tube from that point aft.
02. Locate a position 5.5" to the left of the centerline of the upper engine mount attach fitting and 6" inches down from the upper edge of the cowl attachment flange. Drill the located point with a #11 drill and install (1) rivnut (Item 30) in the hole.
03. Secure the universal bracket (Item 5) in the top right hand hole using 1 ea. of Item 25. Align the bracket (Item 5), vertically, drill the other 3 holes, and remove the bracket.
04. Install (3) rivnuts (Item 30) in the additional 3 holes, and reinstall the universal bracket (Item 5), with the large clamp (Item 23) between the bracket and the firewall. Use items 25, 27 and 29 to secure the bracket.
05. Position the AirSep on the universal bracket with the 3/4" inlet facing forward towards the breather tube. Use the large clamp to secure the AirSep.
06. Locate a position on the rear engine baffle 3.0" to the right of the accessory housing and 5.5" down from the top edge of the rear baffle. Drill a 1.5" hole at that point and install the breather tube grommet from the old position.
07. Patch the old breather tube hole in the rear baffle.
08. Install the 3/4" hose (Item 12) over the 3/4" inlet of the AirSep.
09. Install the tube (Item 6) through the grommet in the rear baffle and into the open end of the hose (Item 12). Clamp both ends of the hose (Item 12) using 1 ea. of Item 21 on each end.
10. Install the short 3/4" hose (Item 15) one end over the tube (Item 6) and the other end over the existing breather tube. Clamp both ends using 1 ea. of Item 21 on each end.
11. Install the 5/8" hose (Item 14) on the outlet fitting of the vacuum pump and install the Air-Tee (Item 3) in the remaining end of the hose, exactly as shown on the drawing. Clamp both ends using 1 ea. of Item 20 on each end.
12. Install the long 1/2" hose one end on the 1/2" port of the Air-Tee (Item 3) and the other end over the 1/2" inlet of the AirSep. Clamp both ends using one each of the Item 19 on each end.
13. Remove the 1/8" plug from the side of the crankcase under and in between the #1 and #3 cyl.
Install the fitting (Item 34) in the hole.
14. Install the Air Syphon Pump (Item 2) on the fitting (Item 34) with the open ports facing aft.
15. Install the 5/16" hose (Item 10) from the AirSep drain to the Air Syphon Pump as shown on the drawing.
Clamp both ends using 1 ea. of the Item 18 on each end.
16. Install the 5/16" hose (Item 11) from the Air-Tee (Item 3) to the Air Syphon Pump as shown on the drawing.
Clamp both ends using 1 ea. of Item 18 on each end.
17. Install the overboard duct (Item 33) on the 1-3/4" inch outlet of the AirSep and clamp it in place using 1 ea. of item 22.
18. Secure the lower end of the duct to the lower engine mount tube using one each of the items 26, 28, 31, and 32
19. Determine weight & balance, initiate Form 337, and update the equipment list.

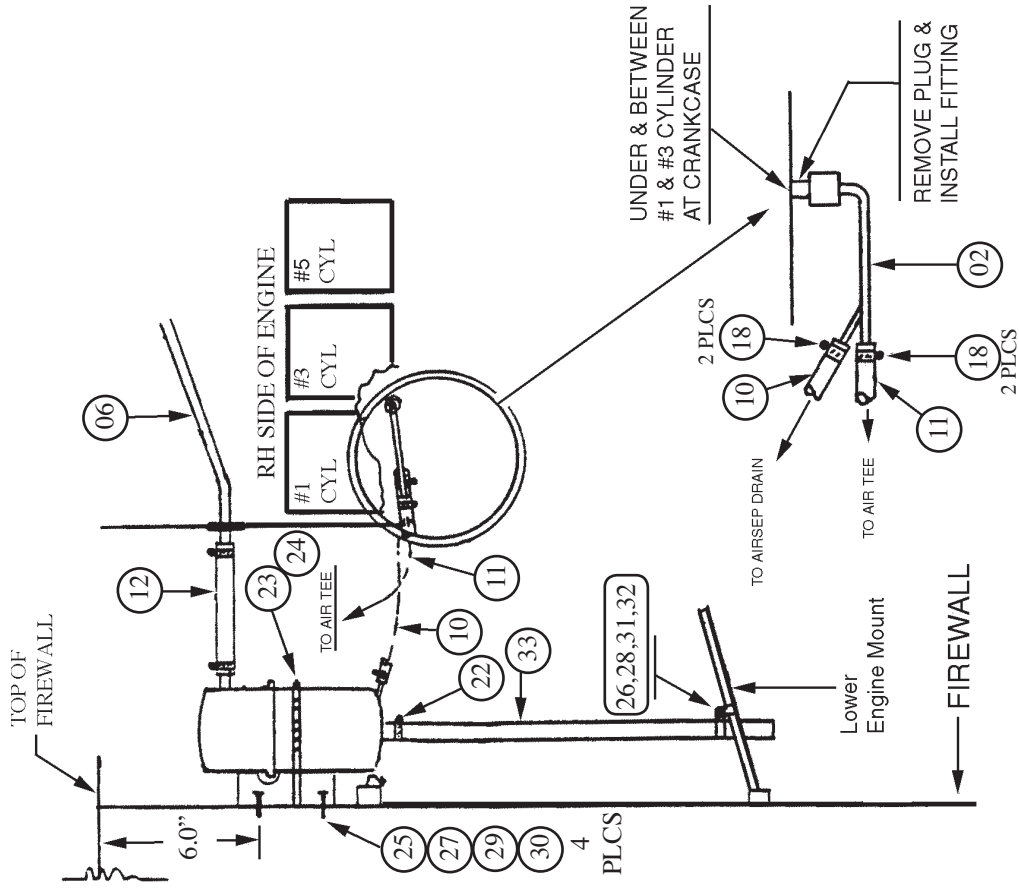
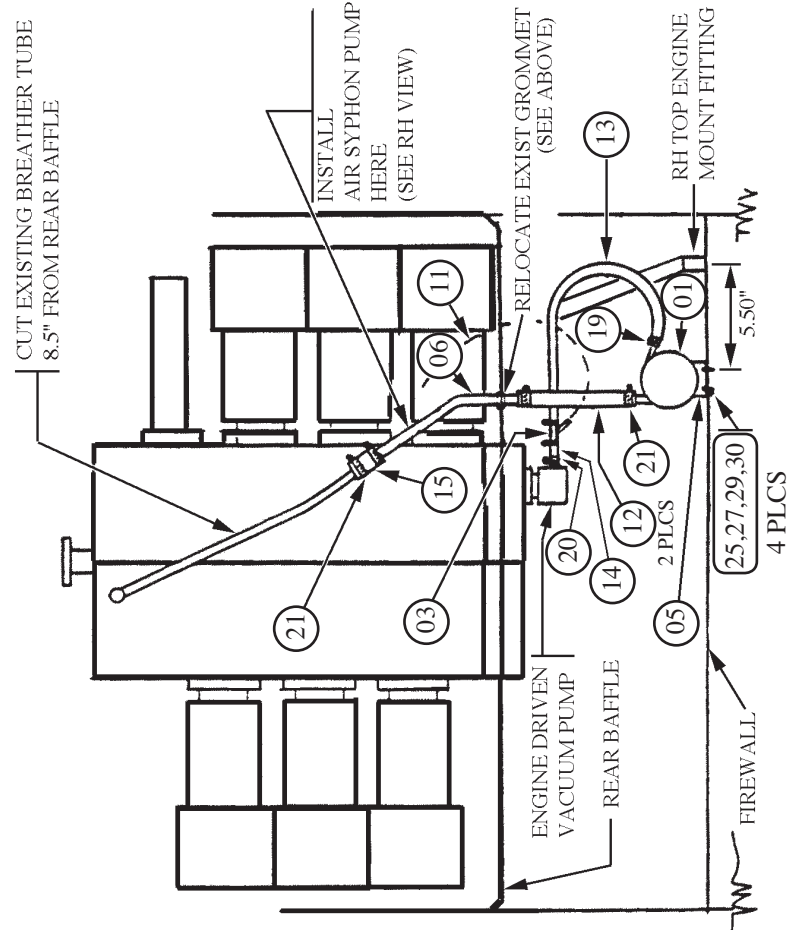
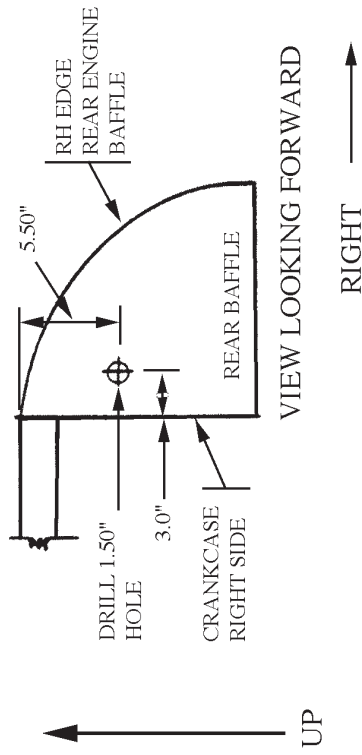
Note B: The duct must not be extended into the airstream.

******* WARNING *******

THE DUCT MUST BE ROUTED SO AS NOT TO INTERFERE WITH THE LANDING GEAR OPERATION.

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