

FOR REFERENCE ONLY

Applicability: **COMMANDER**
112

Drawing: **AFC-W331**
Revision: **B**
Date: **06/01/05**

Airwolf Parts List No. AFC-W331-A

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3003	AirSep Assy	(1)
02.	W-2046	Air Syphon Pump	(1)
03.	W-2018-1	Air-Tee, 5/8"	(1)
04.	W-2011	Bracket	(1)
05.	W-2151	Bracket	(1)
06.	AN526C-1032R10	Screw, #10 X 5/8" Long	(9)
07.	MS20365-1032A	Locknut, #10	(9)
08.	AN960-10	Flat Washer, #10	(9)
09.	MS21919WDG-10	Adel Clamp, 5/8"	(2)
10.	MS21919WDG-12	Adel Clamp, 3/4"	(2)
11.	W-2034	3/4" Breather Tube	(1)
12.	MIL6000-1/4	Hose, 1/4" ID	(18")
13.	MIL6000-5/16	Hose, 5/16" ID	(18")
14.	MIL6000-5/8	Hose, 5/8" ID	(18")
15.	MIL6000-3/4	Hose, 3/4" ID	(24")
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, 1"	(4)
20.	QS100M24H	Hose Clamp, 1-1/2"	(1)
21.	QS100M72H	Hose Clamp, 4-1/2"	(1)
22.	W-2100	"C" Channel	(10")
23.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
24.	CAT-7	Duct, 1-3/4" ID	(24")

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Applicability: COMMANDER
114, 114A, 114B, 114TC
115, 115TC

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Airwolf Parts List No. AFC-W331-B

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3009	AirSep Assy	(1)
02.	W-2046	Air Syphon Pump	(1)
03.	W-2018	Air-Tee	(1)
04.	W-2011	Bracket	(1)
05.	W-2151	Bracket	(1)
06.	AN526C-1032R10	Screw, #10 X 5/8" Long	(9)
07.	MS20365-1032A	Locknut, #10	(9)
08.	AN960-10	Flat Washer, #10	(9)
09.	MS21919WDG-10	Adel Clamp, 5/8"	(2)
10.	MS21919WDG-12	Adel Clamp, 3/4"	(2)
11.	W-2035	Breather Tube	(1)
12.	MIL6000-1/4	Hose, 1/4" ID	(18")
13.	MIL6000-5/16	Hose, 5/16" ID	(18")
14.	MIL6000-1/2	Hose, 1/2" ID	(18")
15.	MIL6000-1	Hose, 1" ID	(24")
16.	MM-4	Hose Clamp, 1/4"	(4)
17.	MM-5	Hose Clamp, 3/8"	(4)
18.	QS100M08H	Hose Clamp, 1/2"	(4)
19.	QS100M16H	Hose Clamp, 1"	(4)
20.	QS100M24H	Hose Clamp, 1-1/2"	(1)
21.	QS100M72H	Hose Clamp, 4-1/2"	(1)
22.	W-2100	"C" Channel	(10")
23.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
24.	CAT-7	Duct, 1-3/4" ID	(24")

*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 tube assy. from the engine breather fitting to the firewall attach point. Retain the hardware at the attach point.
02. Install the doubler (Item 4) on the left side, engine mount. Position the clamps (Item 17) on the tubes with the toes pointing towards each other, the flat side outboard. Align the clamps so all holes match the holes in the doubler. Secure it with (4) each of items 25, 28, &30.
03. Install the Universal Bracket (Item 5) to the doubler. Position the bracket with the notches in the flanged edges upward. Secure it to the doubler throughout the lower two holes using (2) each of items 25, 27, & 30.
04. Install the AirSep (Item 1) to the Universal Bracket using (1) each of item 22. Position the clamp slightly below the flanged split line of the AirSep.

CAUTION: Do not over tighten the clamp.

05. Remove the #3 cylinder rocker box drain tube and replace with W-2046 drain tube.
06. Install the Air Syphon Pump (Item 2) to the existing hose and clamp assembly. See page 2.
07. Install the hose (Item 15) between the Air Syphon Pump and modified drain tube. Secure it with (2) each of item 19.
08. Secure the drain tube to the existing fitting in the rocker box.
09. Install the hose (Item 12) between the engine breather and the 1/2" inlet to the AirSep using (2) each of Item 20. Secure it at both ends.
10. Install the hose (Item 14) to the vacuum pump outlet. Secure it with (1) each of item 19.

Note B: Cutting of the outlet tube may be necessary for the most direct installation.

11. Install the Air-Tee (Item 3) in the remaining end of the hose (Item 14) above. Secure it with (1) each of item 19.

Note C: Observe proper direction of Air-Tee (see drawing)

12. Install the hose (Item13) between the remaining end of the Air-Tee and the 1/2" inlet to the AirSep. Secure it with (2) each of item 19.
13. Install the hose (Item 11) between the 5/16" diagonal leg of the Air-Tee and the 5/16" inlet to the Air Syphon Pump. Secure it with (2) each of item 18.
14. Install the hose (Item 10) between the AirSep drain and the 1/4" inlet to the Air Syphon Pump. Secure it with (2) each of item 18.
15. Install the overboard duct (Item 33) to the 1-3/4" outlet of the AirSep. Secure it at the AirSep with (1) each of item 21. Secure the lower end at the old breather tube attach point using (1) each of item 32 and existing hardware.

Note: The lower end of the duct must not extend into the aircraft slipstream.

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

