

FOR REFERENCE ONLY

Applicability: NAVION
A, B, D, E, F, G, H

ALL MODELS WITH CONTINENTAL IO520 ENGINES

Drawing: AFC-W312
Revision: B
Date: 06/01/05

Airwolf Parts List No. AFC-W312

Index	Part Number	Description	Quantity
01.	W-3000	Air Sep Assy	(1)
02.	W-2031	Air Syphon Pump	(1)
03.	AN816-5D	Straight Fitting, -5	(1)
04.	W-2018-1	Air Tee, 5/8"	(1)
05.	W-2021	Doubler	(1)
06.	W-2011	Bracket	(1)
07.	AN526C-1032R10	Screw, #10 X 5/8" Long	(4)
08.	AN970-3	Flat Washer, 3/16"	(4)
09.	MS20365-1032A	Locknut, #10	(7)
10.	AN526C-1032R8	Screw, #10 X 1/2" Long	(3)
11.	AN960-10	Flat Washer, #10	(3)
12.	MIL6000-1/4	Hose, 1/4" ID	(20")
13.	MIL6000-5/16	Hose, 5/16" ID	(23")
14.	MIL6000-5/8	Hose, 5/8" ID	(3")
15.	MIL6000-5/8	Hose, 5/8" ID	(12")
16.	MIL6000-3/4	Hose, 3/4" ID	(11")
17.	MM-4	Hose Clamp, 1/4"	(2)
18.	MM-5	Hose Clamp, 3/8"	(2)
19.	QS100M10H	Hose Clamp, 5/8"	(4)
20.	QS100M12H	Hose Clamp, 3/4"	(2)
21.	QS100M24H	Hose Clamp, 1-1/2"	(1)
22.	QS100M72H	Hose Clamp, 4-1/2"	(1)
23.	W-2100	"C" Channel	(10")
24.	MS21919WDG-30	Adel Clamp, 1-7/8" Long	(1)
25.	CAT-7	Duct, 1-3/4" ID	(18")

*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 existing breather components from the oil filler spout down to the cowl flap.
02. Remove existing vacuum pump discharge components from the discharge fitting down to the cowl flap.
03. Remove the screws securing the left rear baffle to the left flange of the engine oil cooler.
04. Slide the doubler (Item 5) between the left flange of the oil cooler and the left baffle. Align the doubler with the oil cooler overlapping it .75" and the top edge 2.5" above the upper flange of the cooler.
05. Match drill the holes from the oil cooler flange through the doubler.
06. Match drill the holes from the doubler through the rear baffle.
07. Secure the doubler between the oil cooler and the rear baffle using the screws removed in step 3 above.
08. Slide the clamp (Item 22) over the Universal Bracket (Item 6). Install the bracket to the rear baffle and doubler using (4) each of items 7, 8, and 9 as shown in figures 1 and 2. Install the bracket with the notches in the flanged edges upward.
09. Install (2) each of items 10, 11, & 9 in the remaining (2) holes of the doubler.
10. Install the AirSep to the Universal Bracket as shown in figures 2 & 3.
11. Connect the hose (Item 16) between the engine breather and the 3/4" inlet to the AirSep. Clamp with (2) each of item 20.
12. Connect the hose (Item 14) between the 1/2" inlet of the AirSep and the Air-Tee (Item 4). Clamp with (2) each of item 19.
13. Connect the hose (Item 15) between the Air-Tee and the vacuum pump outlet. Clamp with (2) each of item 19.
14. Remove the 1/4" pipe plug in the left engine case, below and between cyls #2 & #4.
15. Install the fitting (Item 3) at the above mentioned point.
16. Connect the hose (Item 13) between the 5/16" diagonal leg of the Air-Tee and the 5/16" inlet to the Air Syphon Pump (Item 2).
17. Connect the hose (Item 12) between the 1/4" AirSep drain tube and the 1/4" diagonal leg of the Air Syphon Pump.
18. Install the Air Syphon Pump to the fitting installed in step 15 above.
19. Locate a point on the left rear engine mount superstructure 1.0" inboard of the engine basket structure and 1.5" aft of the forward edge of the super structure. Drill a 3/16" hole at that point.
20. Install the duct (Item 24) to the 1-3/4" outlet of the AirSep. Clamp with (1) each of item 21.
21. Secure the lower end of the duct with (1) each of items 10, 11, 09, & 24 at the hole drilled in step 19 above.
22. Determine weight & balance, initiate Form 337, and update the equipment list.

FIGURE 1

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

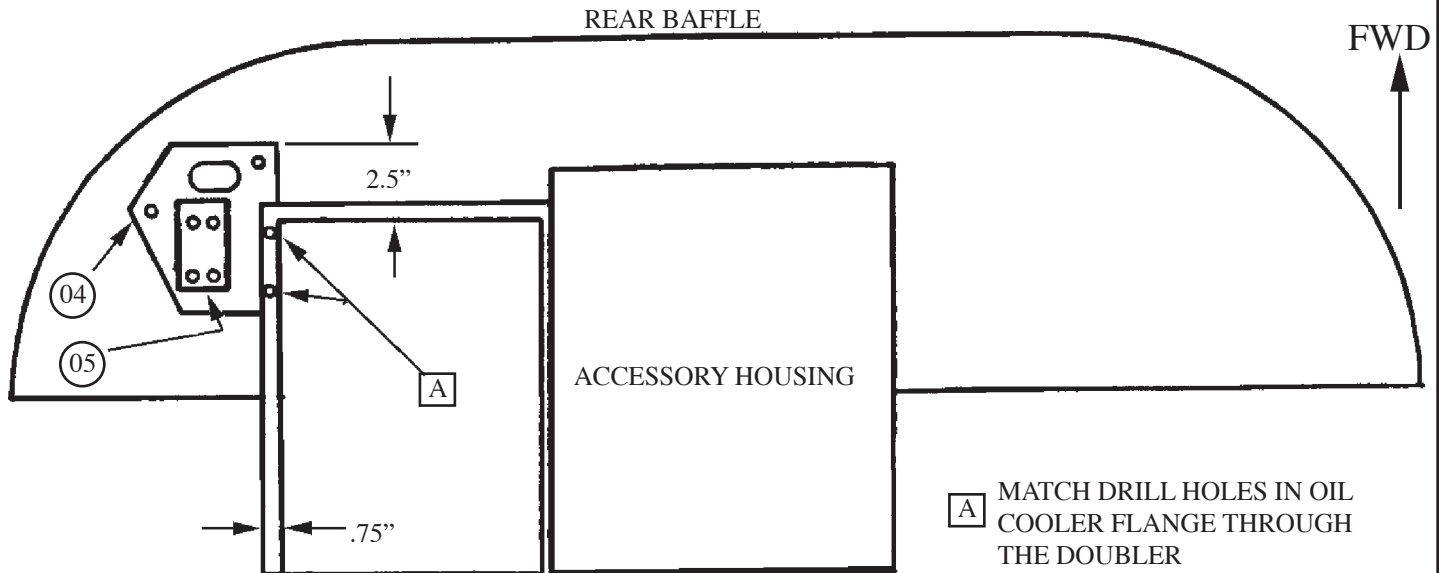


FIGURE 2

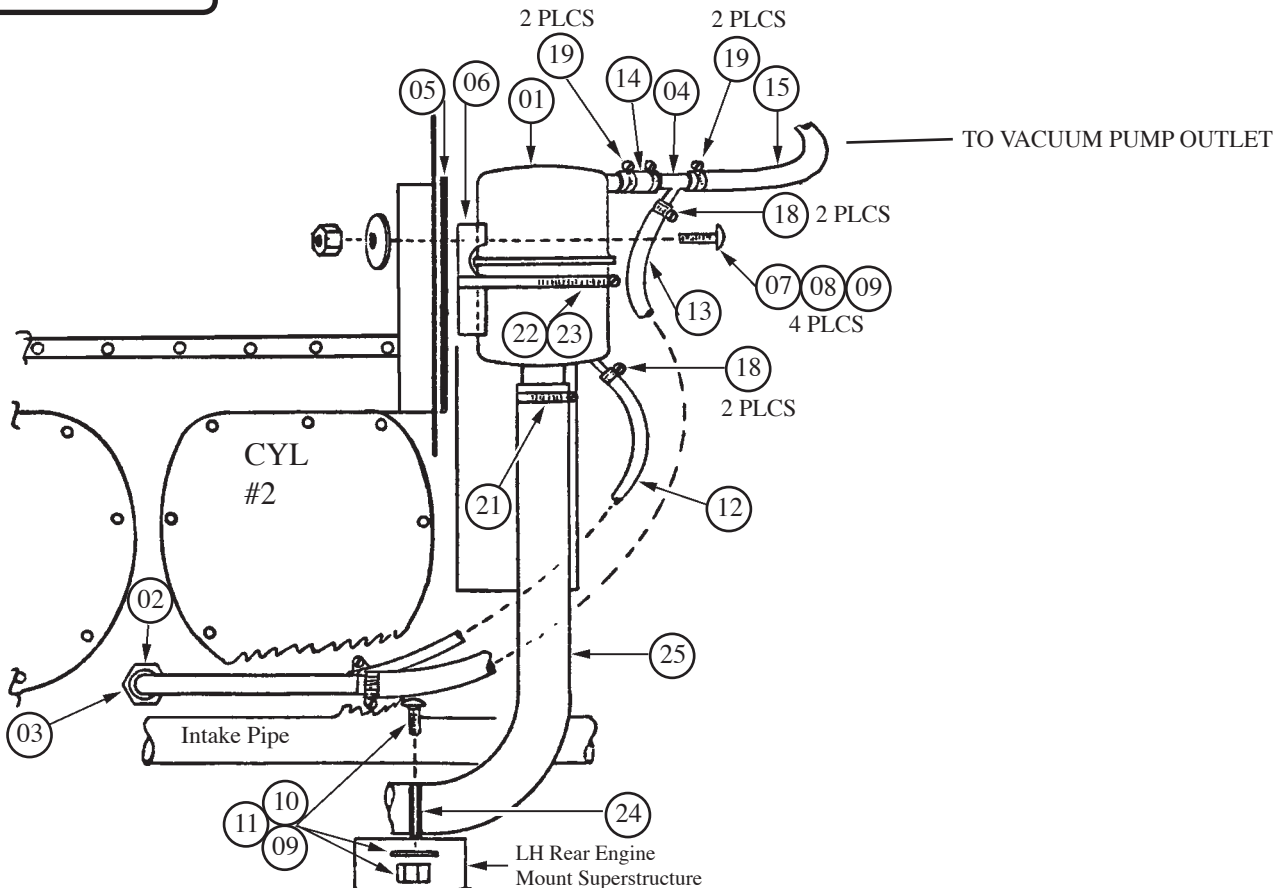
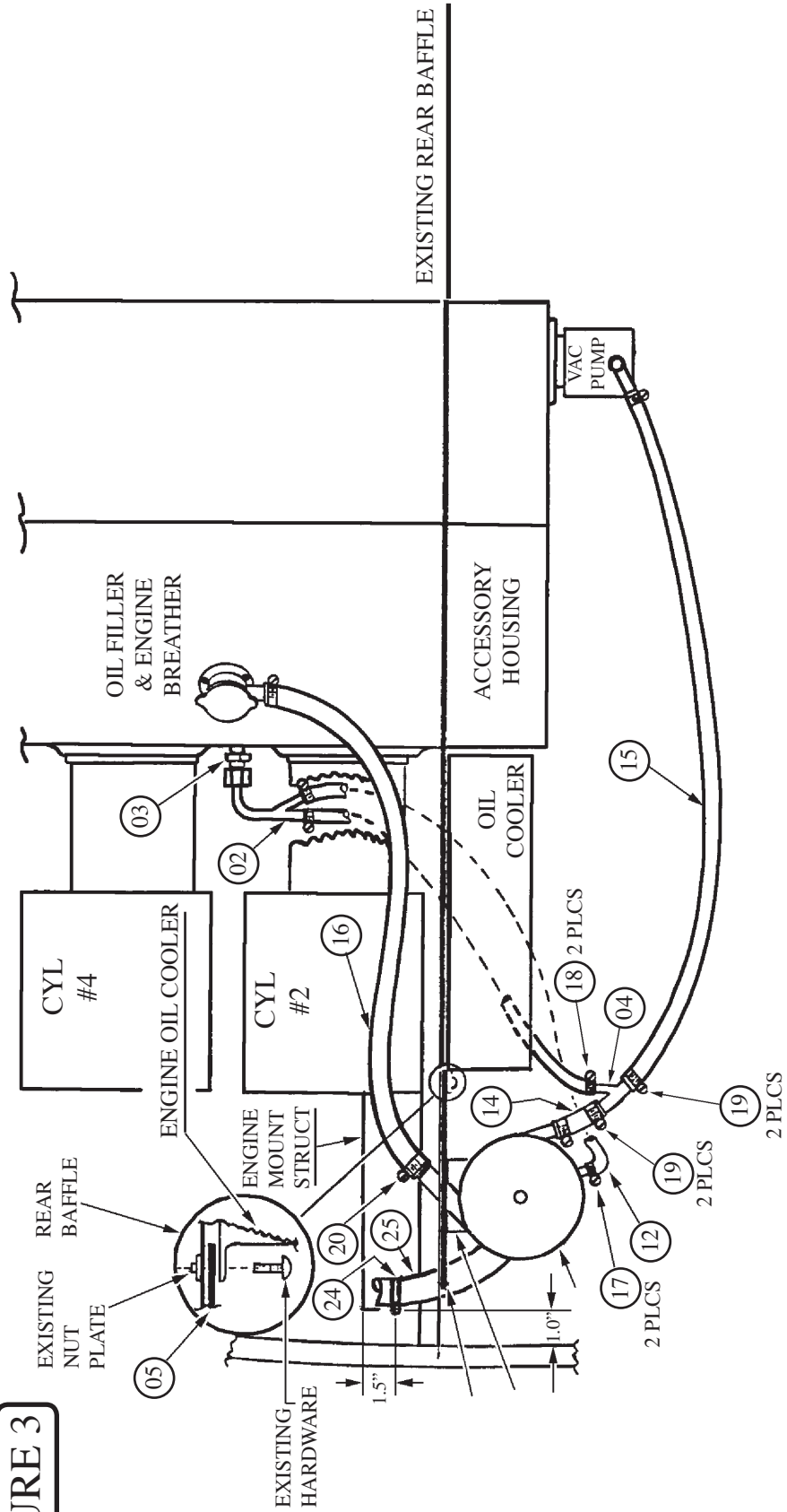


FIGURE 3



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