

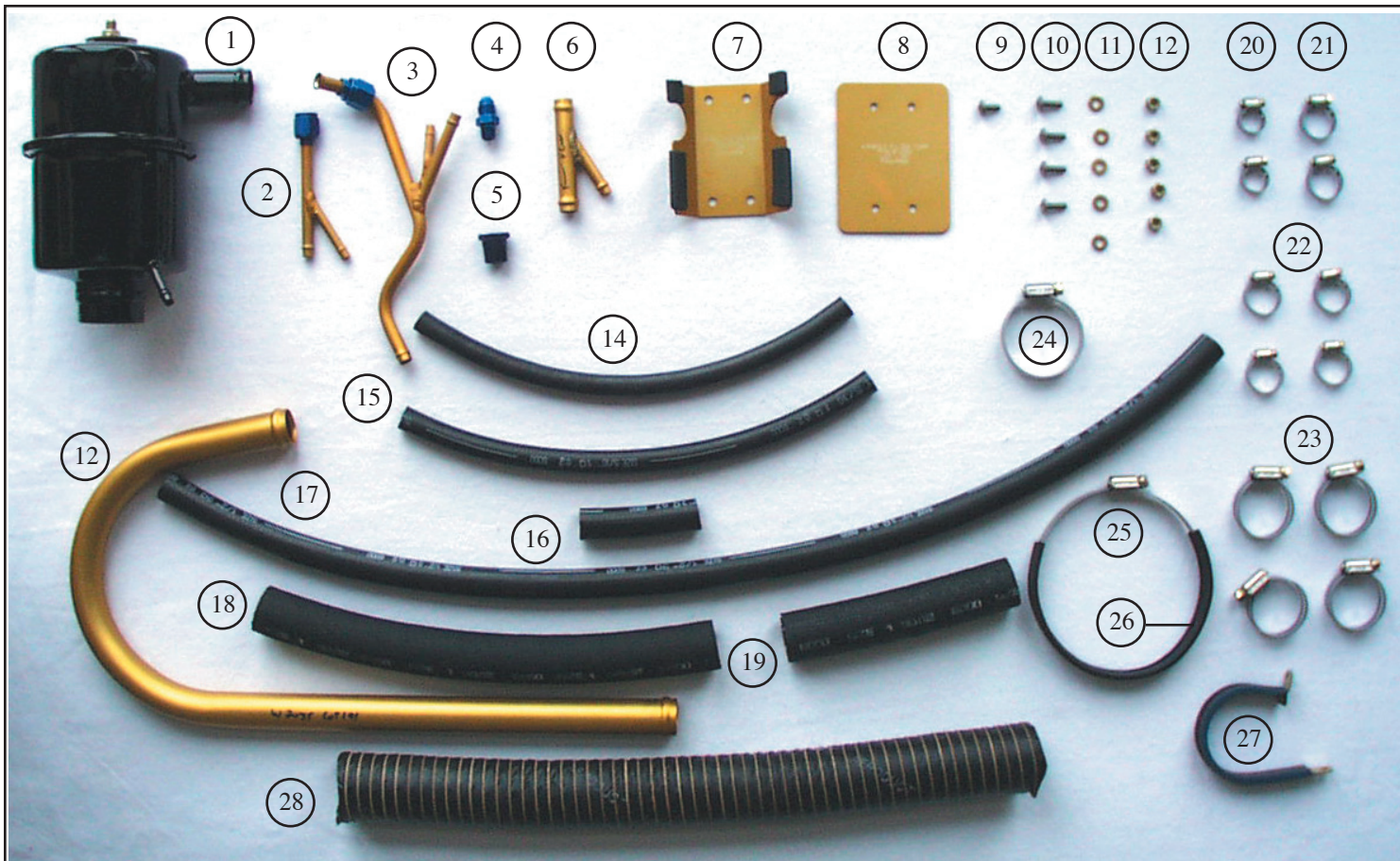
FOR REFERENCE ONLY

Applicability: PIPER [Non Turbo Charged]
 Cherokee 6: PA32-260, PA32-300, PA32S-300
 Cherokee 6X: PA32-301FT
 Lance: PA32R-300, PA32RT-300
 Saratoga: PA32-301, PA32R-301

Drawing: AFC-W315
Revision: B
Date: 06/01/05

Airwolf Parts List No. AFC-W315-A

Index	Part Number	Description	Quantity
01.	W-3001	AirSep Assy, 1" Breather, 5/8" Vacuum	(1)
02.	W-2046 or	Air Syphon Pump	(1)
03.	W-2008	Air Syphon Pump	(1)
04.	AN816-5D	Straight Fitting [Use with W-2008 Pump]	(1)
05.	AN912-3D	Reducer Bushing [Use with W-2008 Pump]	(1)
06.	W-2018-1	Air-Tee, 5/8"	(1)
07.	W-2035	Breather Tube	(1)
08.	W-2011	Bracket	(1)
09.	W-2150	Doubler	(1)
10.	AN526C-1032R10	Screw, #10 X 5/8" Long	(4)
11.	AN960-10	Flat Washer, #10	(5)
12.	MS20365-1032A	Locknut, #10	(5)
13.	MIL6000-1/4	Hose, 1/4" ID	(12")
14.	MIL6000-5/16	Hose, 5/16" ID	(13")
15.	MIL6000-5/8	Hose, 5/8" ID	(33")
16.	MIL6000-1	Hose, 1" ID	(6")
17.	MM-4	Hose Clamp, 1/4"	(2)
18.	MM-5	Hose Clamp, 5/16"	(2)
19.	QS100M10H	Hose Clamp, 5/8"	(4)
20.	QS100M16H	Hose Clamp, 1"	(4)
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"	(18")



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Applicability:

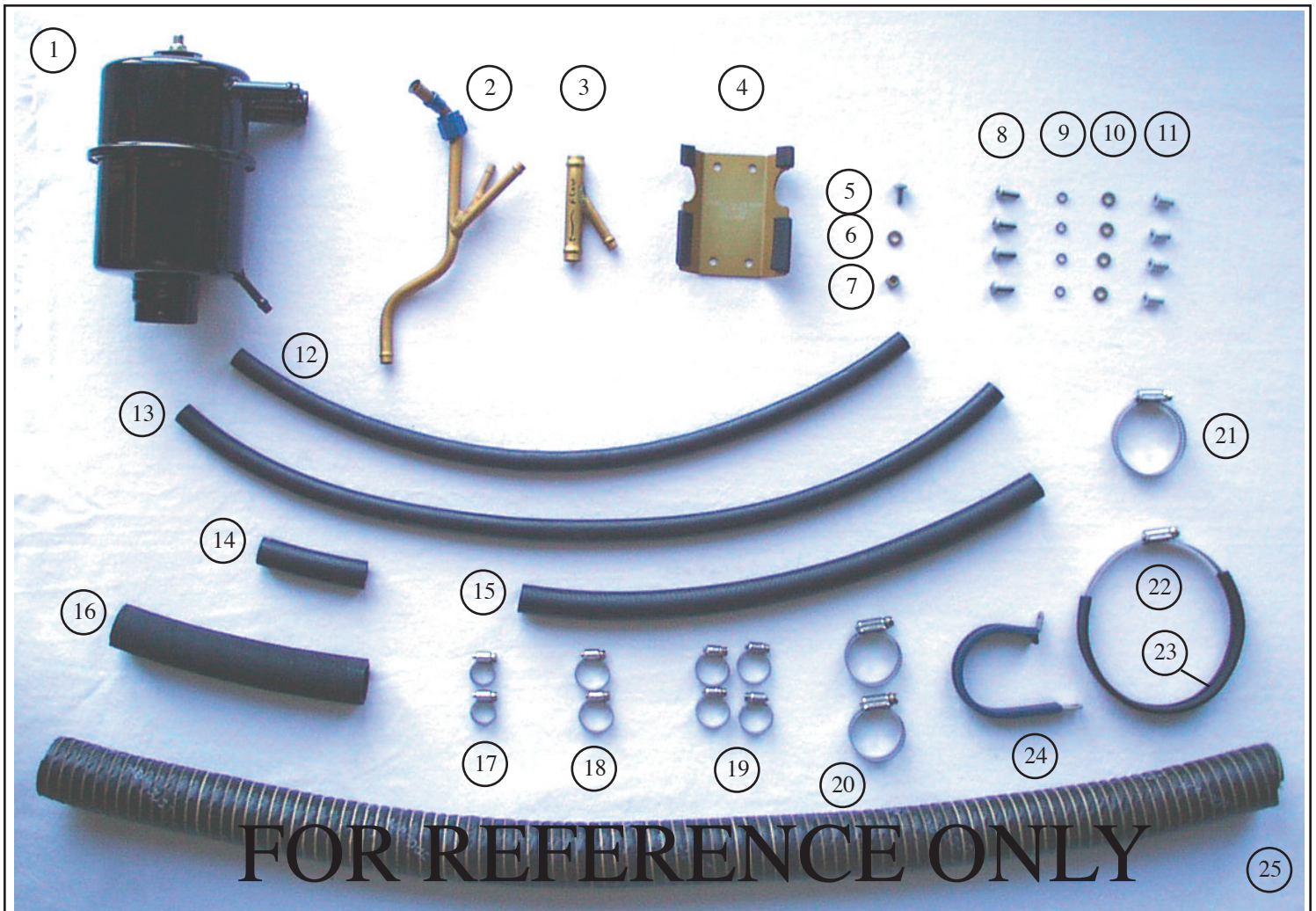
PIPER
Cherokee 6XT:
Turbo Lance:
Turbo Saratoga:

[Turbo Charged]
PA32-301XTC
PA32RT-300T, PA32R
PA32-301T, PA32R-301T

Drawing: AFC-W315
Revision: B
Date: 06/01/05

Airwolf Parts List No. AFC-W315-B

Index	Part Number	Description	Quantity
01.	W-3001	AirSep Assy, 1" Breather, 1/2" Vacuum	(1)
02.	W-2046 or	Air Syphon Pump	(1)
03.	W-2008	Air Syphon Pump	(1)
04.	AN816-5D	Straight Fitting [Use with W-2008 Pump]	(1)
05.	AN912-3D	Reducer Bushing [Use with W-2008 Pump]	(1)
06.	W-2018-1	Air-Tee	(1)
07.	W-2035	Breather Tube	(1)
08.	W-2011	Bracket	(1)
09.	W-2150	Doubler	(1)
10.	AN526C-1032R10	Screw, #10 X 5/8" Long	(5)
11.	AN960-10	Flat Washer, #10	(5)
12.	MS20365-1032A	Locknut, #10	(5)
13.	MIL6000-1/4	Hose, 1/4" ID	(12")
14.	MIL6000-5/16	Hose, 5/16" ID	(13")
15.	MIL6000-5/8	Hose, 5/8" ID	(33")
16.	MIL6000-1	Hose, 1" ID	(18")
17.	MM-4	Hose Clamp, 1/4"	(2)
18.	MM-5	Hose Clamp, 5/16"	(2)
19.	QS100M10H	Hose Clamp, 5/8"	(4)
20.	QS100M16H	Hose Clamp, 1"	(4)
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"	(18")



FOR REFERENCE ONLY

Applicability: PIPER [W/Twin Raja Turbos
 Cherokee 6: PA32-260, PA32-300, PA32S-300
 Cherokee 6X: PA32-301FT
 Lance: PA32R-300, PA32RT-300
 Saratoga: PA32-301, PA32R-301

Drawing: AFC-W315
Revision: B
Date: 06/01/05

Airwolf Parts List No. AFC-W315-C

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3009	AirSep Assy	(1)
02.	W-2046-3	Air Syphon Pump	(1)
03.	W-2018-1	5/8" I.D. Air-Tee	(1)
04.	W-2011	Bracket	(1)
05.	W-2150	Doubler	(1)
06.	AN525-10R10	Screw, #10 X 5/8" Long	(5)
07.	AN960-10	Flat Washer, #10	(5)
08.	MS20365-1032A	Locknut, #10	(5)
09.	MS35338-43	Lock Washer, #10	(4)
10.	AN960-10	Flat Washer, #10	(4)
11.	A10K-80	Rivnut, #10-32 X 7/16"	(4)
12.	MIL6000-1/4	Hose, 1/4" ID	(20")
13.	MIL6000-5/16	Hose, 5/16" ID	(24")
14.	MIL6000-5/8	Hose, 5/8" ID	(18")
15.	MIL6000-1	Hose, 1" ID	(7")
16.	MM-4	Hose Clamp, 1/4"	(2)
17.	MM-5	Hose Clamp, 5/16"	(2)
18.	QS100M10H	Hose Clamp, 5/8"	(4)
19.	QS100M16H	Hose Clamp, 1"	(2)
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.	SCAT-7	Duct, 1-3/4" ID	(35")

Applicability: PIPER [Non Turbo Charged]
Cherokee 6: PA32-260, PA32-300, PA32S-300
Cherokee 6X: PA32-301FT
Lance: PA32R-300, PA32RT-300
Saratoga: PA32-301, PA32R-301

Drawing: AFC-W315
Revision: B
Date: 06/01/05

*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 all existing engine breather and vacuum pump outlet components. Retain the hose fittings on both the breather and the vacuum pump.
02. Loosen the nose baggage compartment interior at the firewall to facilitate bracket mounting. The interior need only be pulled back a little.
03. Locate a point on the firewall 7.0" inboard of the upper right engine mount, and 5.75" down from the upper cowl (see drawing). Using a #11 drill bit, drill a hole at that point.
04. Secure the W-2011 bracket with 1 ea of a #10 screw, washer, and locknut. Match drill the other three holes.
05. Slide the 4-1/2" clamp under the W-2011 bracket, slightly below the notch in the flanged edges. Secure the bracket to the firewall with the notches upward with an additional 3 ea #10 screws, washers, and locknuts.
06. Remove the 1/4" NPT plug in the lower right side accessory housing and install the AN912-3D and AN816-5D fittings. If no 1/4" plug found in accy case, replace rocker box drain in RH rear cylinder and use 1 ea. of W-2046.
07. Install the W-2035 breather tube & secure to the engine breather using the 1" hose and secure with 1" clamps.
08. Connect the 1" inlet of the AirSep to the W-2035 breather tube using the 1" hose and 1" clamps.
09. Secure the AirSep to the W-2011 bracket with the 4-1/2" clamp just slightly below the flanged split line on the AirSep. Position the 1" hose and secure and with a 1" clamp.
10. Insert the Air-Tee into one end of the 5/8" hose and install the hose onto the vacuum pump exhaust. Secure both ends with 5/8" clamps. Observe proper Air-Tee direction.

Note B: Rotation of the vacuum pump exhaust fitting may be necessary.

11. Connect the 5/8" hose to the 5/8" inlet of the AirSep and the other end to the remaining 5/8" opening on the Air-Tee. Secure both ends with 5/8" clamps
12. Connect the 5/16" hose to the 5/16" diagonal tube of the Air Tee, and to the 5/16" inlet tube of the Air Syphon Pump. Secure both ends with 5/16" clamps
13. Connect the 1/4" hose from the 1/4" drain on the AirSep to the 1/4" diagonal inlet tube of the Air Syphon Pump. Secure both ends with 1/4" clamps
14. Secure the Air Syphon Pump to the AN816-5D fitting.
15. Locate a point on the firewall 8.5" inboard of the right side of the cowl and 5.0" up from the bottom of the cowl. Drill a #11 hole.
16. Connect the 1-3/4" duct to the bottom of the AirSep and secure with a 1-1/2" clamp
17. Clamp the 1-3/4" duct at the lower end using a -30 Adel clamp, and a #10 screw, washer, and locknut.

CAUTION: Under no circumstances should the duct extend into the aircraft slip stream

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

Applicability:

PIPER
Cherokee 6XT:
Turbo Lance:
Turbo Saratoga:

[Turbo Charged]
PA32-301XTC
PA32RT-300T, PA32R
PA32-301T, PA32R-301T

Drawing: AFC-W315**Revision:** B**Date:** 06/01/05

*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 all existing engine breather and vacuum pump outlet components. Retain the hose fittings on both the breather and the vacuum pump.
02. Loosen the nose baggage compartment interior at the firewall to facilitate bracket mounting. The interior need only be pulled back a little.
03. Locate a point on the firewall 7.0" inboard of the upper right engine mount, and 5.75" down from the upper cowl (see drawing). Using a #11 drill bit, drill a hole at that point.
04. Secure the W-2011 bracket with 1 ea of a #10 screw, washer, and locknut. Match drill the other three holes.
05. Slide the 4-1/2" clamp under the W-2011 bracket, slightly below the notch in the flanged edges. Secure the bracket to the firewall with the notches upward with an additional 3 ea #10 screws, washers, and locknuts.
06. Remove the 1/4" NPT plug in the lower right side accessory housing and install the AN912-3D and AN816-5D fittings. If no 1/4" plug found in accy case, replace rocker box drain in RH rear cylinder and use 1 ea. of W-2046.
07. Install the W-2035 breather tube & secure to the engine breather using the 1" hose and secure with 1" clamps.
08. Connect the 1" inlet of the AirSep to the W-2035 breather tube using the 1" hose and 1" clamps.
09. Secure the AirSep to the W-2011 bracket with the 4-1/2" clamp just slightly below the flanged split line on the AirSep. Position the 1" hose and secure and with a 1" clamp.
10. Insert the Air-Tee into one end of the 1/2" hose and install the hose onto the vacuum pump exhaust. Secure both ends with 1/2" clamps. Observe proper Air-Tee direction.

Note B: Rotation of the vacuum pump exhaust fitting may be necessary.

11. Connect the 1/2" hose to the 1/2" inlet of the AirSep and the other end to the remaining 1/2" opening on the Air-Tee. Secure both ends with 1/2" clamps
12. Connect the 5/16" hose to the 5/16" diagonal tube of the Air Tee, and to the 5/16" inlet tube of the Air Syphon Pump. Secure both ends with 5/16" clamps
13. Connect the 1/4" hose from the 1/4" drain on the AirSep to the 1/4" diagonal inlet tube of the Air Syphon Pump. Secure both ends with 1/4" clamps
14. Secure the Air Syphon Pump to the AN816-5D fitting.
15. Locate a point on the firewall 8.5" inboard of the right side of the cowl and 5.0" up from the bottom of the cowl. Drill a #11 hole.
16. Connect the 1-3/4" duct to the bottom of the AirSep and secure with a 1-1/2" clamp
17. Clamp the 1-3/4" duct at the lower end using a -30 Adel clamp, and a #10 screw, washer, and locknut.

CAUTION: Under no circumstances should the duct extend into the aircraft slip stream

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

Applicability: PIPER [Non Turbo Charged] PA32-260, PA32-300, PA32S-300
 Cherokee 6: PA32-301FT PA32R-300, PA32RT-300
 Lance: PA32-301, PA32R-301
 Saratoga:

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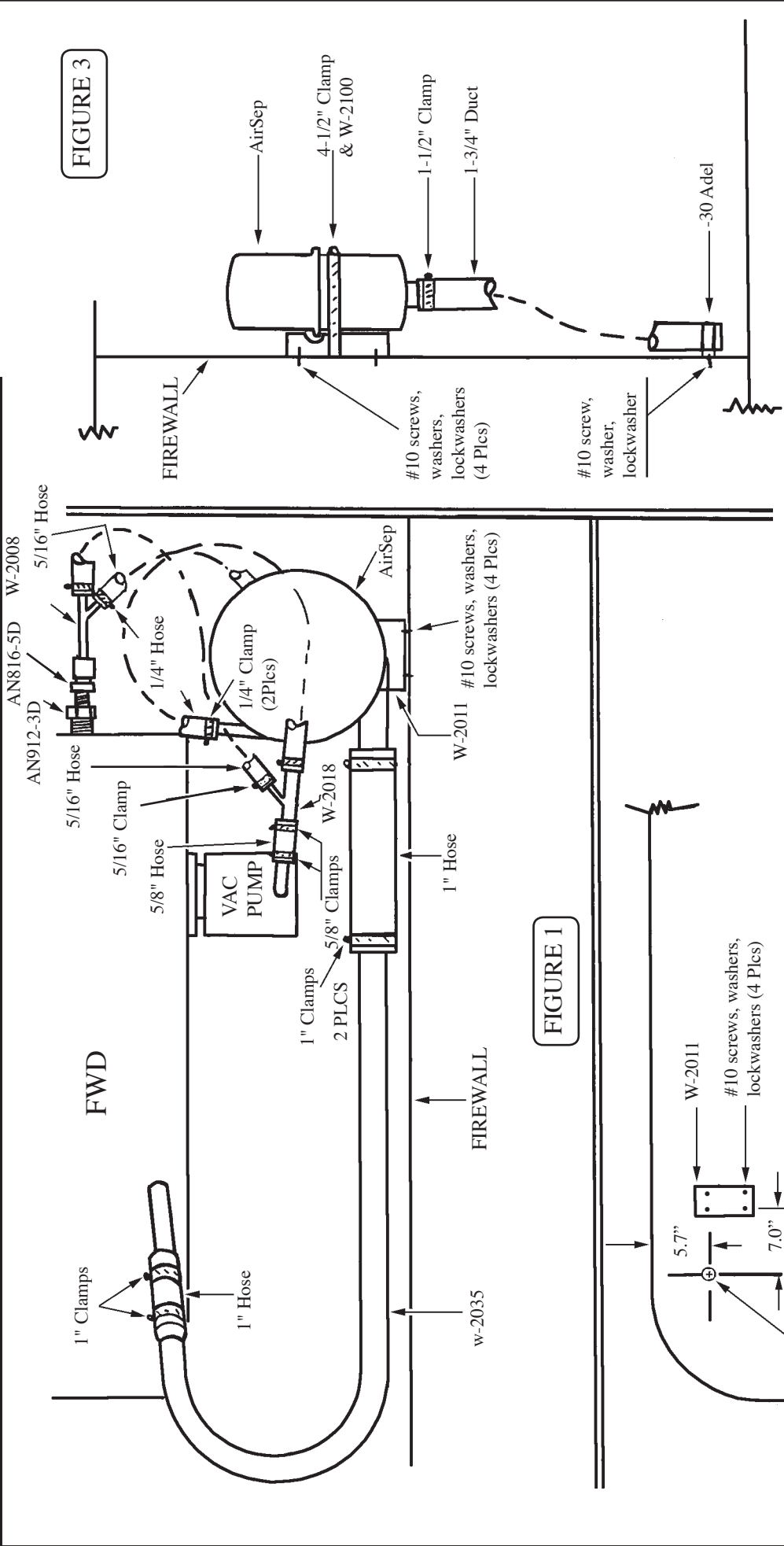


FIGURE 1

FIREWALL VIEW LOOKING AFT

NOTE:
 AirSep can be relocated as necessary to avoid conflict with other parts or accessories.

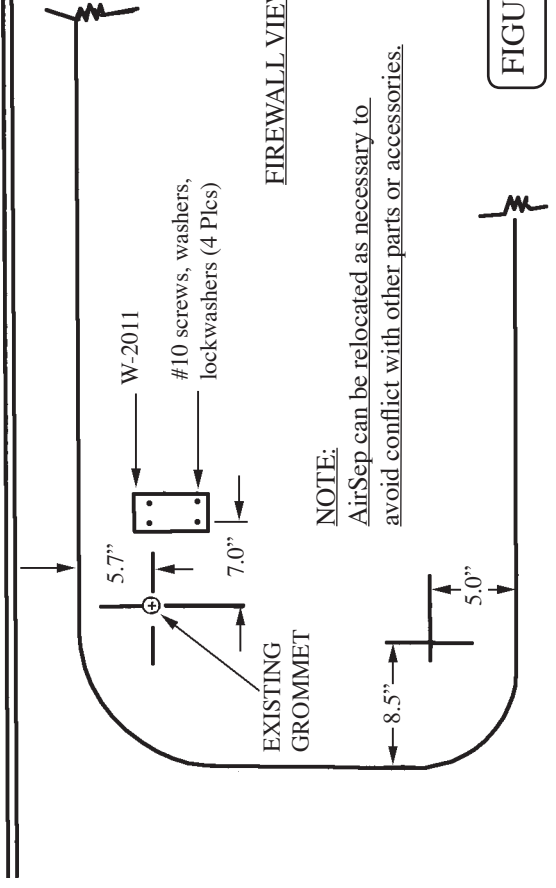
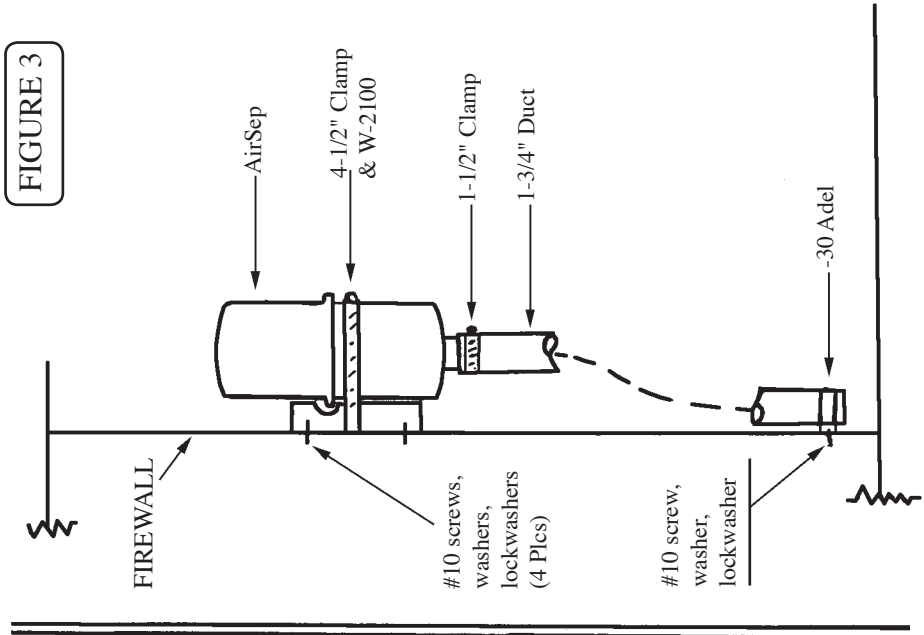


FIGURE 2

FIGURE 3



WARNING: ALL HOSES SHALL BE LOCATED AT LEAST 4" FROM ANY HEAT SOURCE LIKELY TO CAUSE VAPORIZATION OF THE OIL.