

# FOR REFERENCE ONLY

**Applicability:** BEECHCRAFT [VACUUM GYRO SYSTEMS ONLY]  
 Baron  
 95-B55, 95-B55A, 95-B55B [S/N TC-1 & After]  
 95-C55, 95-C55A, D55, D55A, E55, E55A [S/N TE-1 & After]

**Drawing:** AFC-W309  
**Revision:** A  
**Date:** 12/01/04

## Airwolf Parts List No. AFC-W309-A

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3000	AirSep 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-2032	Tube	(1)
06.	W-2033	Brace	(1)
07.	W-2011	Bracket	(1)
08.	AN526C-1032R10	Screw, #10 X 5/8" Long	(3)
09.	AN960-10	Flat Washer, #10	(3)
10.	MS20365-1032A	Locknut, #10	(3)
11.	MIL6000-1/4	Hose, 1/4" ID	(28")
12.	MIL6000-5/16	Hose, 5/16" ID	(36")
13.	MIL6000-5/8	Hose, 5/8" ID	(32")
14.	MIL6000-3/4	Hose, 3/4" ID	(3.25")
15.	MM-4	Hose Clamp, 1/4"	(4)
16.	QS100M10H	Hose Clamp, 5/8"	(3)
17.	QS100M12H	Hose Clamp, 3/4"	(2)
18.	QS100M24H	Hose Clamp, 1-1/2"	(1)
19.	QS100M72H	Hose Clamp, 4-1/2"	(1)
20.	W-2100	"C" Channel	(10")
21.	NAS395-18	Tinnerman Nut	(1)
22.	MS51861-40	Screw, #8 X 1-1/4" Long	(1)
23.	AN526C-832R20	Screw, #8 X 1-1/4" Long	(1)
24.	MS20365-832A	Locknut, #8	(1)
25.	NAS42DD5-32	Bushing	(1)
26.	MS21919WDG-16	Adel Clamp, 1"	(1)
27.	MS21919WDG-20	Adel Clamp, 1-1/4"	(2)
28.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
29.	AN960-8	Flat Washer, #8	(1)
30.	MS35489-20	Grommet, 3/4" ID	(1)
31.	CAT-7	Duct, 1-3/4" ID	(12")

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<b>Applicability:</b>	<b>BEECHCRAFT</b>	<b>[PRESSURE GYRO SYSTEMS ONLY]</b>	<b>Drawing: AFC-W309</b>
	<b>Baron</b>		<b>Revision: A</b>
	<b>95-B55, 95-B55A, 95-B55B</b>	<b>[S/N TC-1 &amp; After]</b>	<b>Date: 12/01/04</b>
	<b>95-C55, 95-C55A, D55, D55A, E55, E55A</b>	<b>[S/N TE-1 &amp; After]</b>	

## Airwolf Parts List No. AFC-W309-B

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3019	AirSep Assy	(1)
02.	W-2031	Air Syphon Pump	(1)
03.	AN816-5D	Straight Fitting, -5	(1)
04a.	W-2022	Air-Tee, 5/8" [w/o Boots]	(1)
04b.	W-2022-1	Air-Tee, 3/4" [With Boots]	(1)
05.	W-2032	Tube	(1)
06.	W-2033	Brace	(1)
07.	W-2011	Bracket	(1)
08.	AN526C-1032R10	Screw, #10 X 5/8" Long	(3)
09.	AN960-10	Flat Washer, #10	(3)
10.	MS20365-1032A	Locknut, #10	(3)
11.	MIL6000-1/4	Hose, 1/4" ID	(36")
12.	MIL6000-5/16	Hose, 5/16" ID	(32")
13.	MIL6000-3/4	Hose, 3/4" ID	(3.25")
14.	MM-4	Hose Clamp, 1/4"	(2)
15.	QS100M10H	Hose Clamp, 5/8"	(2)
16.	QS100M12H	Hose Clamp, 3/4"	(2)
17.	QS100M24H	Hose Clamp, 1-1/2"	(1)
18.	QS100M72H	Hose Clamp, 4-1/2"	(1)
19.	W-2100	"C" Channel	(10")
20.	MS21919WDG-16	Adel Clamp, 1"	(1)
21.	MS21919WDG-20	Adel Clamp, 1-1/4"	(2)
22.	NAS395-18	Tinnerman Nut	(1)
23.	MS51861-40	Screw, #8 X 1-1/4" Long	(1)
24.	AN526C-832R20	Screw, #8 X 1-1/4" Long	(1)
25.	MS20365-832A	Locknut, #8	(1)
26.	NAS42DD5-32	Bushing	(1)
27.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
28.	AN960-8	Flat Washer, #8	(1)
29.	MS35489-20	Grommet, 3/4" ID	(1)
30.	CAT-7	Duct, 1-3/4" ID	(12")

# FOR REFERENCE ONLY

**Applicability:** BEECHCRAFT [PRESSURE GYRO SYSTEMS ONLY] Drawing: AFC-W309  
Baron Revision: A  
58TC, 58TCA [S/N TK-1 & After] Date: 12/01/04  
58P, 58PA [S/N TJ-1 & After]

## Airwolf Parts List No. AFC-W309-D

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3019	AirSep Assy	(1)
02.	W-2152	Tube Assy [Beech P/N 102-910069-1]	(1)
03.	W-2153	Welded Tube Assy [Beech P/N 58-910001-11]	(1)
04.	AN844-4	45° Fitting	(1)
05.	MS35207-263	Screw, #10 X 1/2" Long	(2)
06.	AN960-10L	Thin Flat Washer, #10	(2)
07.	AN363-1032	Locknut, #10	(2)
08.	MS21919WH12	Hi-Temp Adel Clamp, 3/4"	(1)
09.	MS21103D28	Clamp	
10.	AN3-4A	Bolt, 1/2" Long	(1)
11.	AN960-10	Flat Washer, #10	(2)
12.	AN743P12	Bracket	(1)
13.	AN363-1032	Locknut, #10	(2)
14.	MIL6000-1/4	Hose, 1/4" ID	(18")
15.	MIL6000-1/4	Hose, 1/4" ID	(18")
16.	MIL6000-1/4	Hose, 1/4" ID	(3")
17.	MIL6000-3/4	Hose, 3/4" ID	(28")
18.	MM-4	Hose Clamp, 1/4"	(4)
19.	MM-5	Hose Clamp, 5/16"	(2)
20.	AN737TW56	Tangential Clamp, 1-3/4"	(1)
21.	MS21919WDG-26	Adel Clamp, 1-5/8"	(1)
22.	MS21919DG-64	Adel Clamp, 4"	(1)
23.	SCEET-7	Hi-Temperature Duct, 1-3/4" ID	(18")

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<b>Applicability:</b>	<b>BEECHCRAFT</b> Baron 95-B55, 95-B55A, 95-B55B D55, D55A, E55, E55A, 95-C55, 95-C55A	<b>[PRESSURE GYRO SYSTEMS ONLY]</b> <b>WITH IO-550 CONVERSIONS</b> [S/N TC-1 & After] [S/N TE-1 & After]	<b>Drawing: AFC-W309</b> <b>Revision: A</b> <b>Date: 12/01/04</b>
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## Airwolf Parts List No. AFC-W309-E

<u>Index</u>	<u>Part Number</u>	<u>Description</u>	<u>Quantity</u>
01.	W-3019	AirSep Assy	(1)
02.	W-2014	Air Syphon Pump	(1)
03.	W-2022-1	Air-Tee, 3/4" [With Boots]	(1)
04.	W-2032	Tube	(1)
05.	W-2011	Bracket	(1)
06.	W-2033	Brace	(1)
07.	W-2154-2	Pushrod Shroud Tube	(1)
08.	MIL6000-1/4	Hose, 1/4" ID	(36")
09.	MIL6000-5/16	Hose, 5/16" ID	(32")
10.	MIL6000-3/4	Hose, 3/4" ID	(12")
11.	W-2100	"C" Channel	(10")
12.	MS21919WDG-16	Adel Clamp, 1"	(1)
13.	MS21919WDG-20	Adel Clamp, 1-1/4"	(2)
14.	MM-4	Hose Clamp, 1/4"	(2)
15.	MM-5	Hose Clamp, 5/16"	(2)
16.	QS100M10H	Hose Clamp, 5/8"	(2)
17.	QS100M12H	Hose Clamp, 3/4"	(2)
18.	QS100M24H	Hose Clamp, 1-1/2"	(1)
19.	QS100M72H	Hose Clamp, 4-1/2"	(1)
20.	NAS395-18	Tinnerman Nut	(1)
21.	MS51861-40	Screw, #8 X 1-1/4" Long	(1)
22.	AN526C-832R20	Screw, #8 X 1-1/4" Long	(1)
23.	AN526C-1032R10	Screw, #10 X 5/8" Long	(3)
24.	AN960-10	Flat Washer, #10	(3)
25.	MS20365-1032A	Locknut, #10	(3)
26.	MS20365-832A	Locknut, #8	(1)
27.	NAS42DD5-32	Bushing	(1)
28.	MS21919WDG-30	Adel Clamp, 1-7/8"	(1)
29.	CAT-7	Duct, 1-3/4" ID	(12")
30.	AN960-8	Flat Washer, #8	(1)
31.	MS35489-20	Grommet, 3/4" ID	(1)

*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 engine breather components aft of the oil filler spout. Retain the large adel clamp on the left rear intake tube, and the 3/4" hose and clamps on the oil spout.
02. Locate and drill a 1-1/16" hole in the left rear baffle as per Figure C, and install the -20 grommet.
03. Install the W-2032 tube through the -20 grommet, with the wider occluded angle forward. Secure it to the oil filler spout using existing hardware. NOTE: Assure sufficient clearance from #2 cylinder fins.
04. Install the W-2011 bracket with the half-round, routed area upward. Secure the bracket to the vertical engine mount member with:
  - A. (1) ea. of items 22, 25, 26, 27, & 29, in the upper left hole.
  - B. (1) ea. of items 22, 09, 10, & 11, in the lower left hole.

*Note B: The clamps, (Item 16), should be positioned with the toe outboard & forward as shown in Fig. A*

- C. Install the W-2033 brace to the bracket using one each of item 09, 10, & 11, in the upper right hole.  
Secure the brace to the upper horizontal engine mount member using a -16 Adel clamp and secure with 1 ea of a #10 screw, washer and locknut.
- D. Hold AirSep up to the bracket and position it for optimum alignment of the 3/4" AirSep inlet to the 3/4" breather tube.
- E. Secure all bracket hardware.
05. Slip the 3/4" hose and 3/4" clamps half way over the aft end of the breather tube.
06. Install the AirSep to the W-2011 bracket using the 4-1/2" clamp. Install with the clamp slightly below the flanged split line on the AirSep. Slide the 3/4" hose aft to join the 3/4" breather tube to the 3/4" inlet tube on the AirSep. Secure both ends with 3/4" clamps.
07. Cut the existing pressure pump output hose 6" forward of the firewall and install the Air-Tee observing proper direction as shown in Fig. A. Secure with 1/2" clamps.

*Note C: Steps 9 & 10 may require partial lowering and removal of the lower cowl.*

08. Remove the 1/8" pipe plug in the right engine case, under and in between #3 and #5 cyls. Install the AN816-5D fitting,
09. Install the AirSyphon Pump to the AN816-5D and point it aft.
10. Connect the 1/4" hose from the 1/4" drain on the AirSep to the 1/4" branch on the AirSyphon Pump and secure with 1/4" clamps.
10. Connect the 5/16" hose from the 5/16" branch on the Air-Tee to the 5/16" branch of the AirSyphon Pump and secure with 5/16" clamps.

*Note D: Route hoses clear of exhaust stacks and cowl flaps, and secure using good shop practices.*

11. Install the 1-3/4" duct, to the bottom of the AirSep and secure it with a 1-1/2" clamp. Secure it to the intake manifold using (1 ea of a #8-40 screw, tinnerman nut and -30 Adel clamp to the existing adel clamp. Route the tube forward and away from the cowl flap area
12. Determine weight & balance, initiate Form 337, and update the equipment list.

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Baron  
95-B55, 95-B55A, 95-B55B [S/N TC-1 & After]  
95-C55, 95-C55A, D55, D55A, E55, E55A [S/N TE-1 & After]

Drawing: AFC-W309  
Revision: A  
Date: 12/01/04

*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 engine breather components aft of the oil filler spout. Retain the large adel clamp on the left rear intake tube, and the 3/4" hose and clamps on the oil spout.
02. Locate and drill a 1-1/16" hole in the left rear baffle as per Figure C, and install the -20 grommet.
03. Install the W-2032 tube through the -20 grommet, with the wider occluded angle forward. Secure it to the oil filler spout using existing hardware. NOTE: Assure sufficient clearance from #2 cylinder fins.
04. Install the W-2011 bracket with the half-round, routed area upward. Secure the bracket to the vertical engine mount member with:
  - A. (1) ea. of items 22, 25, 26, 27, & 29, in the upper left hole.
  - B. (1) ea. of items 22, 09, 10, & 11, in the lower left hole.

*Note B: The clamps, (Item 16), should be positioned with the toe outboard & forward as shown in Fig. A*

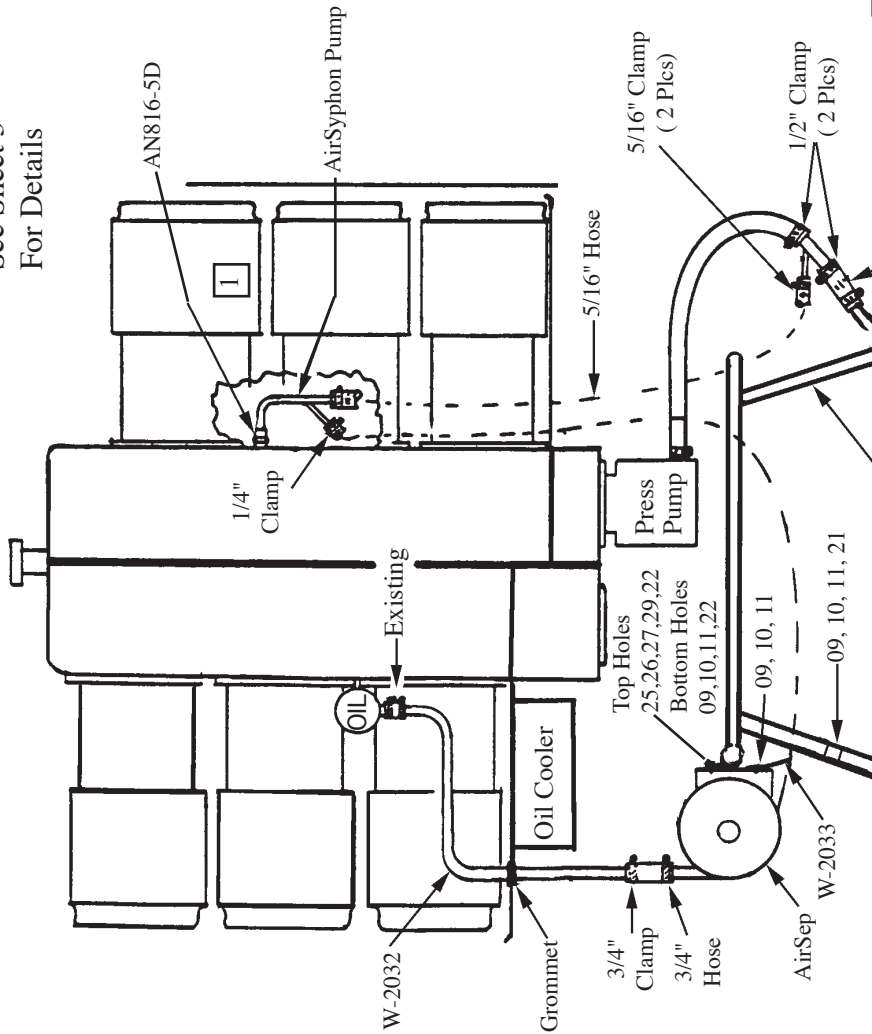
- C. Install the W-2033 brace to the bracket using one each of item 09, 10, & 11, in the upper right hole.  
Secure the brace to the upper horizontal engine mount member using a -16 Adel clamp and secure with 1 ea of a #10 screw, washer and locknut.
  - D. Hold AirSep up to the bracket and position it for optimum alignment of the 3/4" AirSep inlet to the 3/4" breather tube.
  - E. Secure all bracket hardware.
05. Slip the 3/4" hose and 3/4" clamps half way over the aft end of the breather tube.
  06. Install the AirSep to the W-2011 bracket using the 4-1/2" clamp. Install with the clamp slightly below the flanged split line on the AirSep. Slide the 3/4" hose aft to join the 3/4" breather tube to the 3/4" inlet tube on the AirSep. Secure both ends with 3/4" clamps.
  07. Cut the existing pressure pump output hose 6" forward of the firewall and install the Air-Tee observing proper direction as shown in Fig. A. Secure with 1/2" clamps.

*Note C: Steps 9 & 10 may require partial lowering and removal of the lower cowl.*

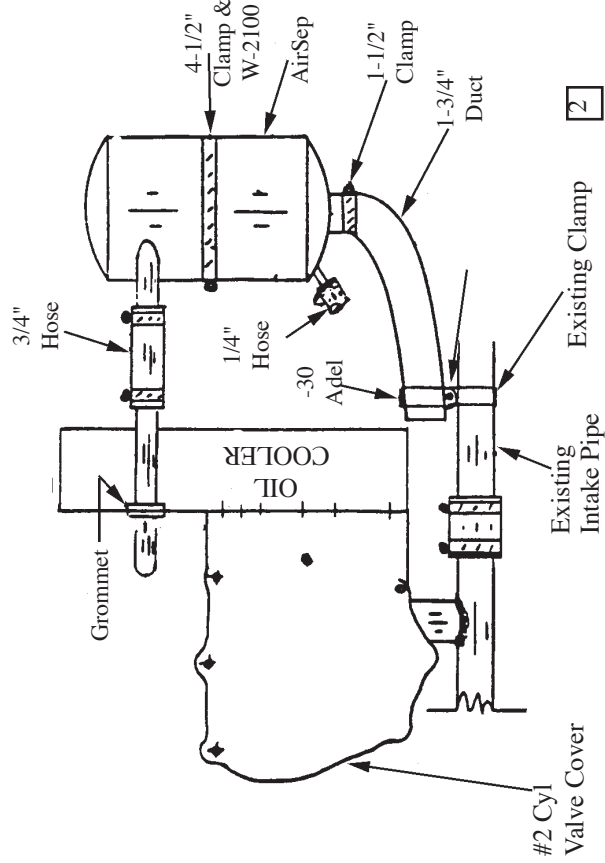
08. Remove the 1/8" pipe plug in the right engine case, under and in between #3 and #5 cyls. Install the AN816-5D fitting,
09. Install the AirSyphon Pump to the AN816-5D fitting and point it aft.
10. Cut the 1/2" vacuum pump discharge line 3" from the outlet of the vacuum pump and install the Air-Tee and secure with a 1/2" clamp. Make sure the flow marked on the Air-Tee points towards the AirSep.
11. Install a 1/2" X 32" hose between the Air-Tee and the AirSep. Secure both ends with 1/2" clamps.
12. Install the 5/16" hose between the 5/16" branch of the Air-Tee and the 5/16" branch of the AirSyphon pump. Secure both ends using 5/16" clamps
13. Install the 1/4" hose between the 1/4" drain on the AirSep and the 1/4" branch of the AirSyphon pump.
14. Install the 1-3/4" duct, to the bottom of the AirSep and secure it with a 1-1/2" clamp. Secure it to the intake manifold using(1 ea of a #8-40 screw, tinnerman nut and -30 Adel clamp to the existing adel clamp. Route the tube forward and away from the cowl flap area
15. Determine weight & balance, initiate Form 337, and update the equipment list.

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

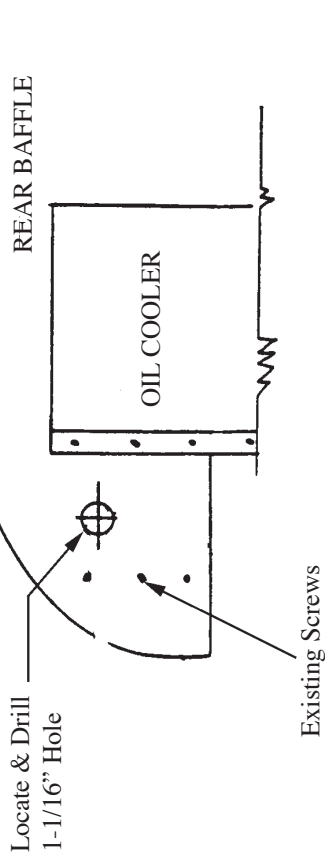
See Sheet 3  
For Details



TOP VIEW



LEFT SIDE VIEW

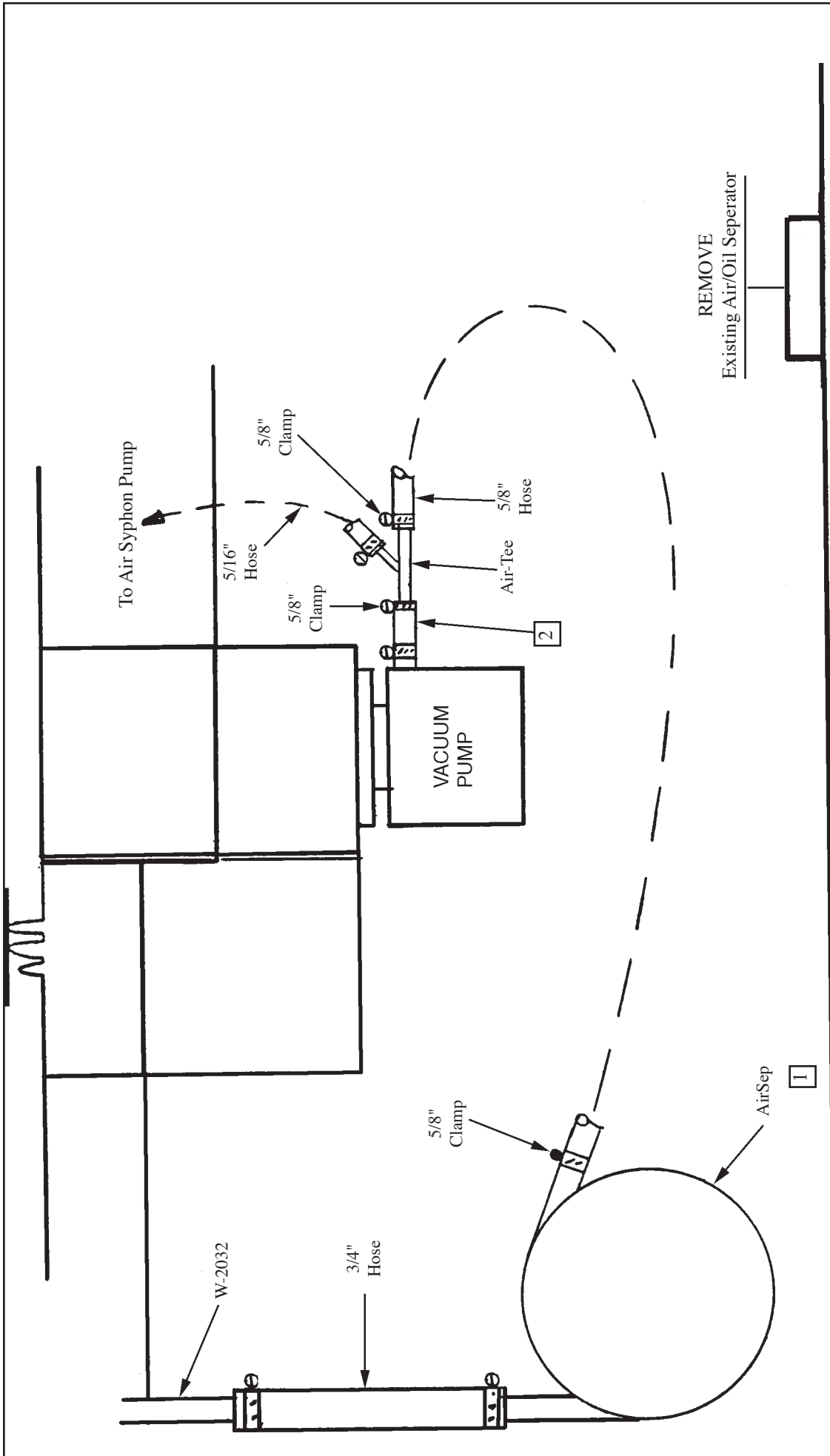


- NOTES:
- 1 REMOVE DRAIN PLUG UNDER & BETWEEN #3 or #4 CYL AND INSTALL ITEM 34.
  - 2 ROUTE TUBE FORWARD OUT OF COWL FLAP AREA.

Applicability: BEECHCRAFT Baron 95-B55, 95-B55A, 95-B55B 95-C55, 95-C55A, D55, D55A, E55, E55A

Drawing: AFC-W309  
Revision: A  
Date: 12/01/04

[S/N TC-1 & After]  
[S/N TE-1 & After]



**NOTES:**

1. Install Air/Oil Separator same as shown on Sheet 2
2. Cut vacuum pump discharge line 3.0" from pump.

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**Applicability:**  
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 95-B55, 95-B55A, 95-B55B  
 95-C55, 95-C55A, D55, D55A, E55, E55A

**Drawing:** AFC-W309  
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[S/N TC-1 & After]  
 [S/N TE-1 & After]