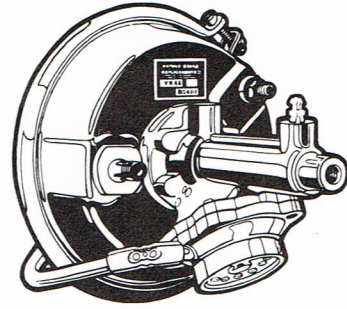
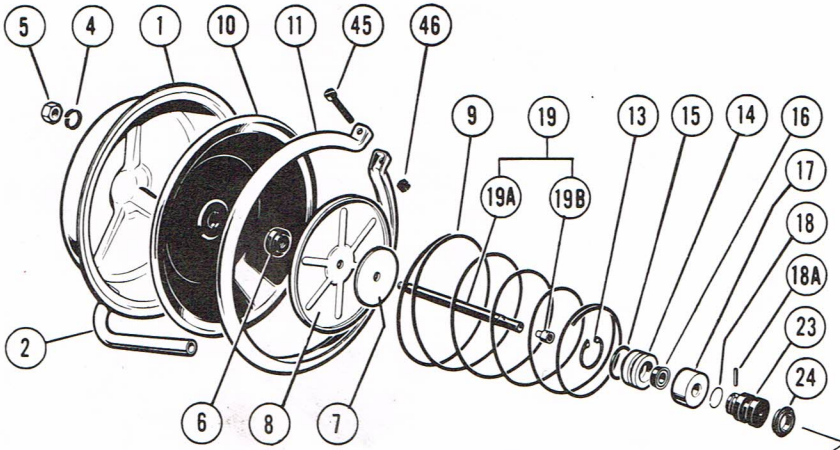


VH44 series Hydropowers

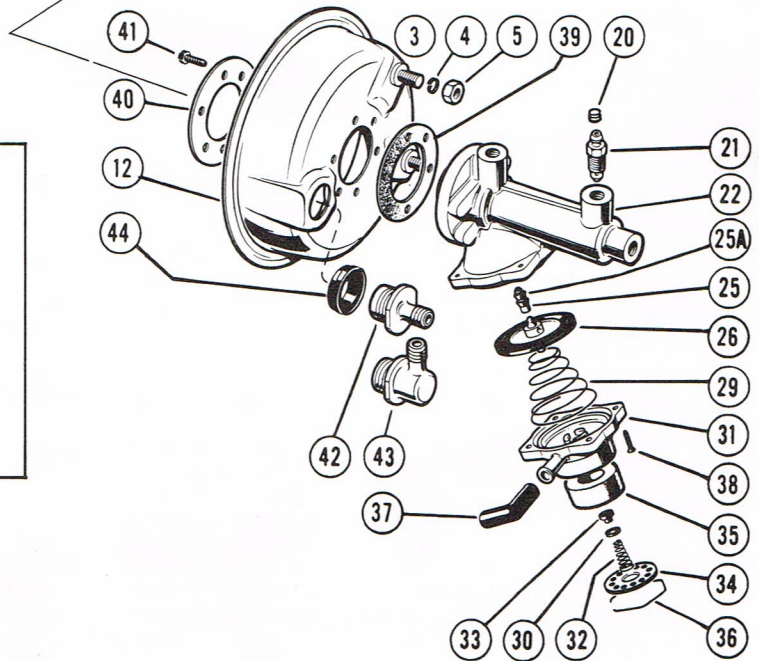


CONTROL VALVE PISTON SEAL

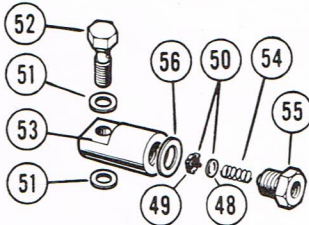


CONTROL VALVE DIAPHRAGM ASSEMBLY

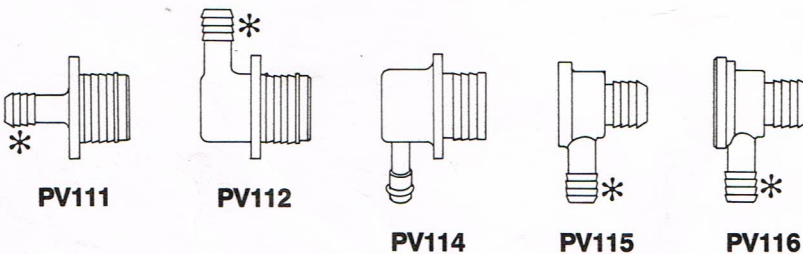
Model 1 superseded by Model 2.



RESIDUAL LINE PRESSURE VALVE (VH44B ONLY)



VACUUM CHECK VALVE IDENTIFICATION:



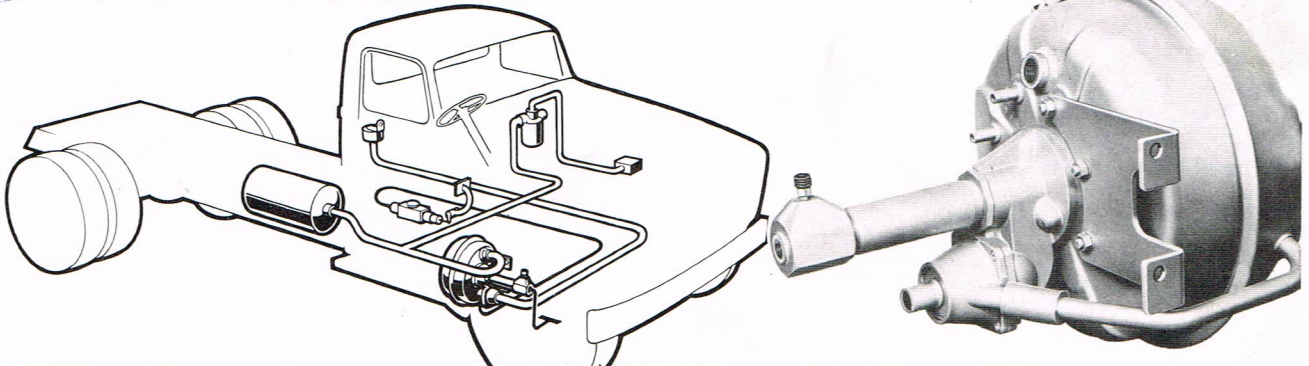
* SUITS 11/32" (8.73mm) VACUUM HOSE

IDENTIFICATION GUIDE to car type hydropowers

Assy. No.	Power Cham. Dia.	Diaph.	Slave Cyl. Dia.	Control Valve Dia.	Hyd. Dis. Cu. In.	Crack Press. psi.	Input psi.	Output psi.	Mounting Detail	Remarks	Car Coy.	O.E. Part No.	Repair Kits - Major Minor	New Units avail.	Reman. Units avail.
● VH44F N										SUPERSEDED BY VH44 FW					
● VH44F W	7 1/2"	Large	3/4"	5/16"	.97	45	450	950	RH side & Centre	Same as VH44F except shell & clamping ring in different position.	AMI	R61-01-14	VH44-90 VH44-88	×	×
● VH44F A	7 1/2"	Large	3/4"	5/16"	.97	45	450	950	RH side & Centre	Same as VH44F except rear shell rotated 180°	IHC		VH44-90 VH44-88	×	×
● VH44G	7 1/2"	Small	7/8"	5/16"	1.32	45	450	710	LH side & Centre	90° check valve.	Ford		VH44-95 VH44-88	×	×
● VH44G C	7 1/2"	Small	7/8"	5/16"	1.32	45	450	710	RH side & Centre	90° check valve.	Ford		VH44-95 VH44-88	×	×
VH44J	7 1/2"	Large	5/8"	5/16"	.68	40	560	1270	LH side & Centre	90° check valve.	Chrysler	2791487	VH44-72 VH44-73	×	×
● VH44J A	7 1/2"	Large	5/8"	5/16"	.68	40	560	1270	RH side & Centre	90° check valve.	BMC	AYG5244	VH44-72 VH44-73		
● VH44N	7 1/2"	Small	3/4"	5/16"	.97	45	450	820	LH side	Same as VH44 except Nasco Name Plate.	GMH	7427595	VH44-89 VH44-88	×	
● VH44 P	7 1/2"	Small	3/4"	5/16"	.97	45	450	820	LH side & Centre	Straight check valve.	BMC AMI	T006-01-03	VH44-89 VH44-88	×	×
● VH44W	7 1/2"	Small	3/4"	5/16"	.97	45	450	820	LH side	Same as VH44 except chrome plated shells and anodised slave cylinder.			VH44-89 VH44-88	×	

● NOT AVAILABLE - INCLUDED FOR IDENTIFICATION ONLY

VH80, VH90 series Hydropowers



The Hydropower is a vacuum-hydraulic unit designed for power braking. The unit utilises vacuum from the manifold of a petrol engine or a vacuum exhauster (as fitted to a diesel engine) together with atmospheric pressure, for its operation.

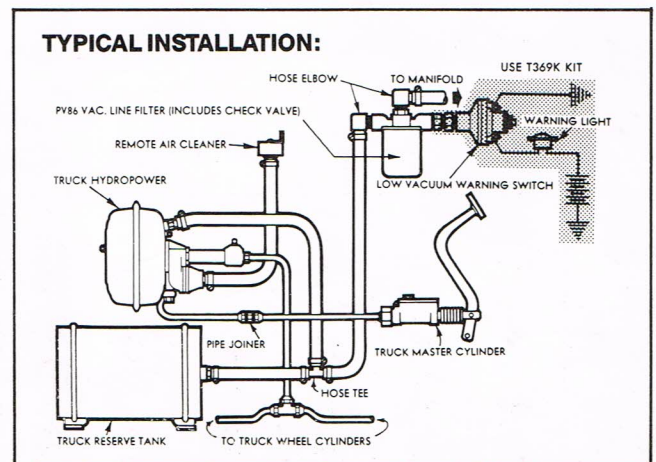
The Hydropower adds to the pressure created physically in the master cylinder and delivers this combined pressure to the wheel cylinders.

The unit is self contained, having no external rods or levers exposed to dirt and moisture.

The Hydropower can be installed in any convenient position on a vehicle having a vacuum supply and equipped with hydraulic brakes. (Studs are provided on the unit for either right or left hand mounting.) It does not take over the application of the brakes from the driver, but assists him by contributing a considerable brake applying effort, under his full control, and in proportion to the pressure exerted on the brake pedal.

Construction of the Hydropower is such that in the event of a complete loss of vacuum the brakes will function as in a conventional brake system.

The Hydropower does not interfere with the normal operation of the brake system.



CONTINUED ON NEXT PAGE

IDENTIFICATION GUIDE to car type hydropowers

Assy. No.	Power Cham. Dia.	Diaph.	Slave Cyl. Dia.	Control Valve Dia.	Hyd. Dis. Cu. In.	Crack Press. psi.	Input psi.	Output psi.	Mounting Detail	Remarks	Car Coy.	O.E. Part No.	Repair Kits - Major Minor	New Units avail.	Reman. Units avail.
VH40	9"	—	5/8"	5/16"	.68	35	450	1470	LH side & Centre	90° check valve	—	—	VH40-73 VH40-74	×	×
● VH40A	9"	—	5/8"	3/8"	.68	20	315	1375	LH side & Centre	90° check valve	Ford	ARC7DA2005A		×	×
VH40A J	9"	—	5/8"	3/8"	.68	20	315	1375	RH side & Centre	Same as VH40A L except PV114 check valve	Ford	ARC8DA2005B	VH40-75 VH40-80	×	×
VH40A L	9"	—	5/8"	3/8"	.68	20	315	1375	RH side & Centre	90° check valve Double poppet	Ford IHC	ARC6DA2005A 884228R91	VH40-75 VH40-80	×	×
● VH40A M	9"	—	5/8"	3/8"	.68	50	345	1405	RH side & Centre	Same as VH40A L except different control spring	Ford	ARC8DA2005A	VH40-80		
● VH40A N	9"	—	5/8"	3/8"	.68	75	370	1430	RH side & Centre	Same as VH40 A J except different control spring			VH40A J	×	
● VH40A P	9"	—	5/8"	3/8"	.68	75	370	1430	RH side & Centre	Same as VH40A L except different control spring			VH40-75 VH40-80	×	
VH40B	9"	—	3/4"	5/16"	.97	35	450	1130	LH side & Centre	90° check valve	Chrysler	3426219	VH40-130 VH40-131	×	×
VH40D	9"	—	7/8"	7/16"	1.32	35	235	840	RH side & Centre	Straight check valve	IHC	885279R91	VH40-78 VH40-79	×	×
● VH40D C	9"	—	7/8"	7/16"	1.32	35	235	840		Same as VH40D except has brackets	BMC	AYK5732	VH40-78 VH40-79		
VH40E L	9"	—	9/16"	3/8"	.50	18	325	1825	LH side & Centre	Double poppet	BMC	AYH5344	VH40-121 VH40-122	×	×
● VH40F	9"	—	7/8"	5/16"	1.32						Chrysler IHC	3428017 3206622R91			
● VH40F A	9"	—	7/8"	5/16"	1.32					Same as VH40F except rear shell rotated 180°	IHC	3206622R91			
● VH40J	9"	—	5/8"	5/16"	.68	25	600	1650	RH side & Centre	Same as VH44J except pressing of VH40L and VH44J control. Double poppet.					
VH40L	9"	—	5/8"	5/16"	.68	20	450	1470	LH side & Centre	Straight check valve c/w adaptors M120-4 Double poppet.	GMH	7433728	VH40-85 VH44-73	×	×
VH44	7 1/2"	Small	3/4"	5/16"	.97	35	450	820	LH side				VH44-89 VH44-88	×	×
VH44B	7 1/2"	Large	3/4"	5/16"	.97	35	450	950	RH side & Centre	GS380 Line valve Straight check valve			VH44-90 VH44-88	×	×
VH44B S	7 1/2"	Large	3/4"	5/16"	.97	35	450	950	RH side & Centre	Same as VH44B except BMC name badge.	BMC	AYB5108	VH44-90 VH44-88		
● VH44B U	7 1/2"	Large	3/4"	5/16"	.97	45	450	950	RH side & Centre	Same as VH44B except 90° check valve.	BMC		VH44-90 VH44-88		
● VH44 C										SUPERSEDED BY VH44 P					
VH44D	7 1/2"	Large	7/8"	5/16"	1.32	45	450	780	LH side & Centre	Straight check valve	Chrysler	2288610	VH44-91 VH44-88	×	×
VH44D V	7 1/2"	Large	7/8"	5/16"	1.32	45	450	780	LH side & Centre	Same as VH44D except transfer tube in different position and rear mounting stud.	Chrysler	2790056	VH44-91 VH44-88	×	×
VH44E	7 1/2"	Large	5/8"	3/8"	.68	40	315	1080	LH side & Centre				VH44-93 VH44-94	×	×
VH44F	7 1/2"	Large	3/4"	5/16"	.97	45	450	950	RH side & Centre	Straight check valve.	Chrysler IHC Freighter	883726R91	VH44-90 VH44-88	×	×
● VH44F U	7 1/2"	Large	3/4"	5/16"	.97	45	450	950	RH side & Centre	Same as VH44F except 90° check valve.	Chrysler	2599573	VH44-90 VH44-88	×	×

VH44 series Hydropowers

SERVICED PARTS:

REF. No.	DESCRIPTION	VH44B	VH44D	VH44DV	VH44E	VH44F	VH44FW	VH44J	QTY.
1	SHELL ASSEMBLY REAR	—	—	—	—	—	—	—	1
2	PIPE ELBOW	—	—	—	—	—	—	—	—
3	MOUNTING STUD	—	—	—	—	—	—	—	—
4	LOCKWASHER 5/16" I.D.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	3
5	NUT HEX. 5/16" UNF.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	3
• 6	DIAPHRAGM COLLAR	VH44-29	VH44-29	VH44-29	VH44-29	VH44-29	VH44-29	VH44-29	1
• 7	STIFFENING WASHER	VH44-27	VH44-27	VH44-27	VH44-27	VH44-27	VH44-27	VH44-27	1
8	DIAPHRAGM PLATE	VH44-28	VH44-28	VH44-28	VH44-28	VH44-28	VH44-28	VH44-28	1
9	SPRING	VH44-6	VH44-6	VH44-6	VH44-6	VH44-6	VH44-6	VH44-6	1
• 10	DIAPHRAGM	VH44-30	VH44-30	VH44-30	VH44-38	VH44-38	VH44-30	VH44-38	1
11	CLAMPING RING	—	—	—	—	—	—	—	1
12	SHELL ASSEMBLY FRONT	—	—	—	—	—	—	—	1
13	CIRCLIP	SIC-0.937	SIC-0.937	SIC-0.937	SIC-0.937	SIC-0.937	SIC-0.937	SIC-0.937	1
14	BUSH	VH44-23	VH44-23	VH44-23	VH44-23	VH44-23	VH44-23	VH44-23	1
•†15	"O" RING	OR141014	OR141014	OR141014	OR141014	OR141014	OR141014	OR141014	1
•†16	ROD PUSH SEAL	PH2059	PH2059	PH2059	PH2059	PH2059	PH2059	PH2059	1
17	SPACING COLLAR	VH44-24	VH44-24	VH44-24	VH44-24	VH44-24	VH44-24	VH44-24	1
•†18	SNAP RING	VH44-22	VH44-22	VH44-22	VH44-22	VH44-22	VH44-22	VH44-22	1
•†18a	VALVE PLUNGER PIN	VH44-21	VH44-21	VH44-21	VH44-21	VH44-21	VH44-21	VH44-21	1
• 19	PUSH ROD ASSEMBLY	VH44-16	VH44-16	VH44-16	VH40-8	VH44-16	VH44-16	VH40-8	1
19a	PUSH ROD	VH44-13	VH44-13	VH43-13	VH40-7	VH44-13	VH44-13	VH40-7	1
•†19b	PUSH ROD SEAL ASSEMBLY (incl. VH44-14)	VH44-15	VH44-15	VH44-15	VH44-15	VH44-15	VH44-15	VH44-15	1
20	BLEEDER SCREW COVER	P27	P27	P27	P27	P27	P27	P27	1
21	BLEEDER SCREW	P4433	P4433	P4433	P4433	P4433	P4433	P4433	1
22	MAIN BODY	VH44-1	—	—	VH40-14	VH44-1	VH44-1	VH44-74	1
23	SLAVE CYLINDER PISTON	VH44-20	VH44-56	VH44-56	VH40-9	VH44-20	VH44-20	VH40-9	1
•†24	SLAVE CYLINDER PISTON SEAL	P4664	PH2048	PH2048	P4422	P4664	P4664	P4422	1
• 25	CONTROL VALVE PISTON ASSEMBLY	VH24-56	VH24-56	VH24-56	VH40-137	VH24-56	VH24-56	VH24-56	1
25a	CONTROL VALVE PISTON SEAL	—	—	—	—	—	—	—	2
• 26	CONTROL VALVE DIAPHRAGM	VH40-61	VH40-61	VH40-61	VH40-61	VH40-61	VH40-61	VH40-29	1
26a	CONTROL VALVE PUSH ROD	—	—	—	—	—	—	—	1
27	DIAPHRAGM PLATE	—	—	—	—	—	—	—	1
28	PRESSURE PLATE	—	—	—	—	—	—	—	1
• 29	VALVE RETURN SPRING	—	—	—	—	—	—	—	1
30	WASHER	VH44-32	VH44-32	VH44-32	VH44-32	VH44-32	VH44-32	—	1
31	VALVE BODY	VH44-4	VH44-4	VH44-4	VH44-4	VH44-4	VH44-4	—	1
•†32	POPPET RETURN SPRING	VH44-8	VH44-8	VH44-8	VH44-8	VH44-8	VH44-8	VH40-32	1
•†33	VALVE PAD	VH44-31	VH44-31	VH44-31	VH44-31	VH44-31	VH44-31	—	1
33a	STEM	—	—	—	—	—	—	VH40-25	1
33b	POPPET RETAINER	—	—	—	—	—	—	VH40-26	1
34	COVER PLATE	VH44-34	VH44-34	VH44-34	VH44-34	VH44-34	VH44-34	VH44-34	1
• 35	FILTER	VH44-33	VH44-33	VH44-33	VH44-33	VH44-33	VH40-36	VH40-36	1
36	SNAP RING	VH44-35	VH44-35	VH44-35	VH44-35	VH44-35	VH44-35	VH44-35	1
• 37	CONNECTING ELBOW	VH44-36	VH44-36	VH44-36	VH44-36	VH44-36	VH44-36	VH44-36	1
38	SCREW (THREAD FORMING)	G13600A	G13600A	G13600A	G13600A	G13600A	G13600A	G13600A	4
• 39	GASKET	VH44-25	VH44-25	VH44-25	VH44-25	VH44-25	VH44-25	VH44-25	1
40	SUPPORT WASHER	VH44-26	VH44-26	VH44-26	VH44-26	VH44-26	VH44-26	VH44-26	1
41	SCREW (THREAD FORMING)	G13500D	G13500D	G13500D	G13500D	G13500D	G13500D	G13500D	6
42	CHECK VALVE ASSEMBLY (Straight)	PV111	PV111	PV111	—	PV111	PV111	—	1
43	CHECK VALVE ASSEMBLY (Angled)	—	—	—	PV112	—	—	PV112	1
• 44	GROMMET	PV111-7	PV111-7	PV111-7	PV111-7	PV111-7	PV111-7	PV111-7	1
• 45	BOLT 1/4" B.S.W. 1-3/4" LONG	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	1
• 46	NUT 1/4" B.S.W.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	COMM.	1
47	RESIDUAL LINE VALVE	GS380	—	—	—	—	—	—	1
48	VALVE BODY (NOT SERVICED)	—	—	—	—	—	—	—	1
49	INSERT	—	—	—	—	—	—	—	1
•†50	VALVE ASSEMBLY	PS200	—	—	—	—	—	—	1
51	COPPER GASKET	P124	—	—	—	—	—	—	1
52	BANJO BOLT	GS380-3	—	—	—	—	—	—	1
53	BODY	—	—	—	—	—	—	—	1
54	SPRING	GS380-4	—	—	—	—	—	—	1
55	ADAPTOR	—	—	—	—	—	—	—	1
56	GASKET	P603	—	—	—	—	—	—	1
	MAJOR REPAIR KIT	VH44-90	VH44-91	VH44-91	VH44-93	VH44-90	VH44-90	VH44-72	1
	MINOR REPAIR KIT	VH44-88	VH44-92	VH44-92	VH44-94	VH44-88	VH44-88	VH44-73	1

REPAIR KITS CONVERT ALL MODEL 1 UNITS TO MODEL 2.

- MAJOR REPAIR KIT
- † MINOR REPAIR KIT

The following models have only REPAIR KITS available:

VH44, VH44N	.....	VH44-89 (Major)	VH44-88 (Minor)
VH44BS	.....	VH44-90 (Major)	VH44-88 (Minor)
VH44FU	.....	—	VH44-88 (Minor)
VH44G, VH44GC	.....	VH44-95 (Major)	VH44-92 (Minor)
VH44P	.....	—	VH44-88 (Minor)
VH44W	.....	VH44-89 (Major)	VH44-88 (Minor)