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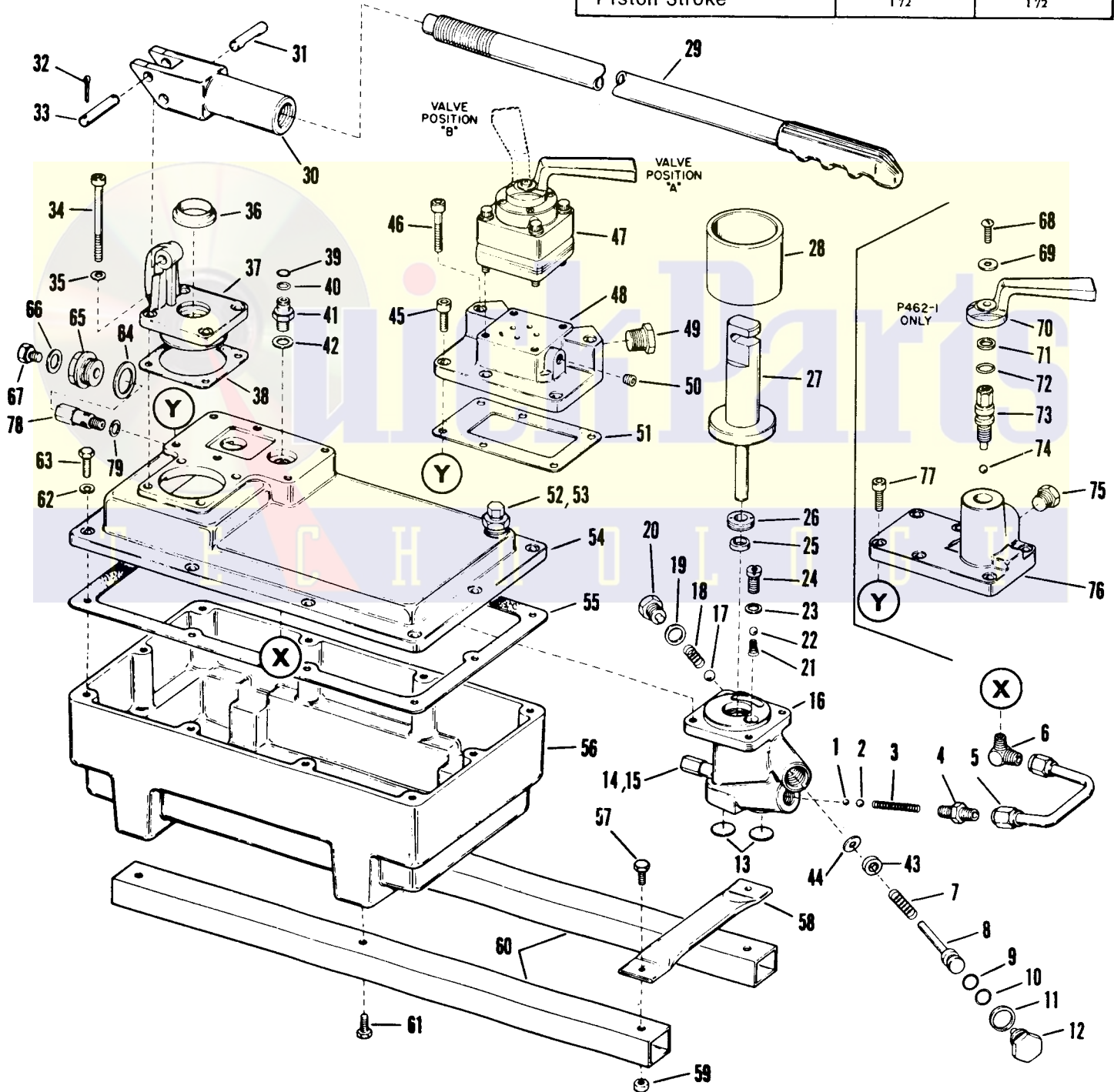
# ENERPAC

## Parts & Instruction Sheet

EH-462-1, EH-464-1

MODEL NO. SHOWN — EH-464-1

	1st Stage	2nd Stage
Maximum Pressure	200 psi	10,000 psi
Volume per Stroke	8.14 cu. in.	.294 cu. in.
Piston Stroke	1½"	1½"



TO PROTECT YOUR WARRANTY, USE ONLY ENERPAC HYDRAULIC OIL.

# INSTRUCTIONS

## PRELIMINARY PROCEDURE

1. Remove air vent assembly (Item No. 52) and gasket (Item No. 53).
2. Reservoir should be filled to bottom of filler pipe stand (with all cylinders retracted).
3. If necessary, add ENERPAC HOF-100 series hydraulic oil. **DO NOT OVER-FILL.**  
**CAUTION:** The use of other fluid may cause extensive damage to the pump. Such damage is not covered by the ENERPAC Warranty.
4. Replace air vent assembly and gasket.
5. Turn air vent screw counter-clockwise one turn.

## INSTALLING GAGE (OPTIONAL EQUIPMENT)

1. (EH462-1 ONLY) Remove plug (Item No. 75) from hose connection port.  
(EH-464-1 ONLY) Remove plug (Item No. 49) from hose connection port.
2. Screw GCA-1, GCA-2, or GCA-3 gage adaptor into hose connection port.  
**NOTE:** The GCA-3 gage adaptor is used with gage GCF813S only.
3. Screw gage into center port of gage adaptor.
4. Make sure all connections are tight. (Use a small amount of pipe dope on all threaded connections).

## ADJUSTING RELIEF VALVE

1. Gage and gage adaptor must be installed.
2. Use pipe plug to block off oil flow from gage adaptor.
3. (EH-462-1 ONLY) Turn valve handle (Item No. 70) to maximum clockwise ("closed" position).  
(EH-464-1 ONLY) Place valve handle (VM-40) over hose connection port in which gage adaptor is installed (valve position "A").
4. Operate pump until gage pointer reaches maximum reading (relief valve pressure setting).
5. Remove adaptor plug (Item No. 65) and gasket (Item No. 64).
6. Insert 7/32" Allen Wrench through hole into adjusting screw (located inside Item No. 78).
7. Turn adjusting screw counter-clockwise to reduce the relief valve setting; clockwise to increase the relief valve setting (10,000 psi maximum).
8. (EH-462-1 ONLY) Turn valve handle (Item No. 70) counter-clockwise ("open" position).  
(EH-464-1 ONLY) Move valve handle to center position.
9. Repeat steps 3, 4, 7 and 8 until desired relief valve setting is obtained.

## **EH-462-1 ONLY**

### HOSE CONNECTION

1. Screw 3/8" N.P.T. hose end into gage adaptor or hose connection port.
2. Connect hose half of Hi-Flow Coupler to cylinder half of coupler (JSS cylinder series furnished with cylinder half coupler installed).

## VALVE OPERATION

1. To extend cylinder plunger - turn valve handle (Item No. 70) to maximum clockwise ("closed" position). Operate pump until work is completed.  
**WARNING: Do not exceed rated cylinder capacity or plunger stroke.**
2. To retract cylinder plunger - turn valve handle (Item No. 70) counter-clockwise ("open" position). Cylinder will retract without pump operation.
3. Extend cylinder plunger several times to purge air from system (cylinder should be lower than pump reservoir).

## **EH-464-1 ONLY**

### HOSE CONNECTION (SINGLE-ACTING CYLINDER)

1. Screw 3/8" N.P.T. hose end into gage adaptor or hose connection port.
2. Connect hose half of Hi-Flow Coupler to cylinder half of coupler (JSS cylinder series furnished with cylinder half coupler installed).
3. Second single-acting cylinder can be connected to remaining hose connection port (repeat steps 1 and 2).

## VALVE OPERATION (SINGLE-ACTING CYLINDER)

1. To extend plunger of first cylinder - place valve handle (Item No. 47A) over hose connection port in which gage is installed (valve position "A"). Second cylinder plunger will retract.
2. To extend plunger of second cylinder - place valve handle (Item No. 47A) over second hose connection port (valve position "B"). First cylinder plunger will retract.  
**NOTE:** Both cylinder plungers will hold when the valve handle (Item No. 47A) is placed in center position.
3. Extend cylinder plungers several times to purge air from system (cylinders should be lower than pump reservoir).

### HOSE CONNECTION (DOUBLE-ACTING CYLINDER)

1. Screw 3/8" N.P.T. hose end into gage adaptor.
2. Connect hose half of Hi-Flow Coupler to cylinder half coupler located near bottom of double-acting cylinder (JDS cylinder series furnished with cylinder half couplers installed).
3. Remove pipe plug from second hose connection port.
4. Screw second 3/8" N.P.T. hose end into remaining hose connection port in valve.
5. Connect hose half of Hi-Flow Coupler to cylinder half coupler located near the plunger end of double-acting cylinder (JDS cylinder series furnished with cylinder half couplers installed).  
**IMPORTANT:** Make sure both Hi-Flow Couplers are fully engaged.

## VALVE OPERATION (DOUBLE-ACTING CYLINDER)

1. To extend cylinder plunger - place valve handle (Item No. 47A) over hose connection port in which gage is installed (valve position "A"). Operate pump until work is completed.  
**WARNING: Do not exceed rated cylinder capacity or plunger stroke.**
2. To release load - move valve handle to center position.
3. To retract cylinder plunger - move valve handle to valve position "B". Operate pump until cylinder plunger is retracted.
4. To hold load - leave valve handle in operating position ("A" or "B").
5. Extend cylinder plunger several times to purge air from system (cylinder should be lower than pump reservoir).  
**NOTE:** Make sure couplers are wiped clean when making or breaking a connection. Hi-Flow Coupler halves seal themselves against oil leakage when disconnected. Dust caps should be attached to prevent dirt from entering exposed ends of Hi-Flow Coupler.

# PARTS LIST

Item No.	Description	No. Req'd.	Part Number
1	Ball (7/32")	1	*
2	Ball (5/16")	1	*
3	Spring	1	*
4	Connector	1	C764.096
5	Tube Assembly	1	C784.268
6	Elbow	1	C765.096
7	Spring	1	*
8	Piston	1	C496.900
9	Back-Up Washer	1	*
10	"O" Ring	1	*
11	Gasket	1	*
12	Plug	1	C770.185
13	Screen	2	C590.018
14	Safety Valve	1	C949.900
15	Gasket	1	S3.037
16	Pump Body	1	C600.005
17	Ball (7/16")	1	*
18	Spring	1	*
19	Gasket	1	*
20	Plug	1	C770.185
21	Spring	1	*
22	Ball (5/16")	1	*
23	Gasket	1	*
24	Plug	1	C596.185
25	"U" Cup	1B	*
26	Retaining Nut	1	F20.005
27	Plunger Assembly	1	C577.900
28	Cylinder	1	C584.030
29	Handle Assembly	1	C397.900
30	Beam	1	C576.060
31	Pin	1	P75.57
32	Retaining Ring	2	*
33	Pin	1	CB334066
34	Cap Screw	4	C589.128
35	Gasket	4	C846.037
36	Wiper Ring	1	*
37	Top Cap	1	C575.020
38	Gasket	1	*
39	"O" Ring	1	*
40	Back-Up Washer	1	*
41	Connector	1	C649.270
42	Gasket	1	S15.167
43	Spacer	1	L624.186

Item No.	Description	No. Req'd.	Part Number
44	Washer	C	L625.108
45	Cap Screw (EH-464)	3	C299.128
46	Cap Screw (EH-464)	2	C301.128
47	Valve (EH-464)	1A	VM-40
48	Adaptor Block (EH-464)	1	C293.345
49	Plug (Plastic)	1	R515.245
50	Plug (EH-464)	1	C169.245
51	Gasket	1	*
52	Air Vent Assembly	1	C514.900
53	Gasket	1	P182.167
54	Reservoir Cover	1	C574.098
55	Reservoir Gasket	1	*
56	Reservoir	1	C377.025
57	Cap Screw	2	B794.173
58	Tie Rod	1	C344.396
59	Hex Nut	2	SJ100.270
60	Pump Skid	2	C343.641
61	Cap Screw	4	B794.173
62	Lock Washer	10	J-66
63	Cap Screw	10	SJ100.078
64	Gasket	1	P182.47
65	Adaptor Plug	1	P182.150-1
66	Gasket	1	B159.167
67	Plug	1	AJ100.061
68	Screw (EH-462)	1	C302.128
69	Washer (EH-462)	1	D220.108
70	Handle (EH-462)	1	C303.070
71	Back-Up Washer	1	**
72	"O" Ring	1	**
73	Valve Spindle	1	C790.010
74	Ball (5/16")	1	**
75	Plug (Plastic)	1	R515.245
76	Valve Body (EH-462)—Order Complete	VM-20	
77	Cap Screw (EH-462)	6	C806.048
78	Relief Valve	1	P181.190
79	Gasket	1	B159.167
	Decal	1	*
*	Pump Packing Kit		P462K-1
**	VM-2 Packing Kit		VM2K
A	Refer to VM-40 Parts Sheet for Repair Parts		
B	Free Floating "U" Cup—Do Not Over Tighten.		
C	Replace with same Quantity as removed from Pump.		

# OTHER ENERPAC® PRODUCTS

**HYDRAULIC H-FRAME PRESSES**  
25-50-100 Ton Capacities

- New "Hydra-Lift" Elevator Bed
- Electric Presses Powered by New Quiet "Hushh-Pump"
- Economical - High Quality Line
- Long or Short Cylinder Strokes - 0-14½" Travel

Labels in image: Electric Powered, Manually Actuated, Air Powered.

**HYDRAULIC POWER PUMPS - 0 - 10,000 PSI**

- Electric Powered - Including New Quiet Hushh-Pump Series
- Gasoline Driven
- Hand Operated

T E C H N O L O G Y

**NOTE:** Orders for parts cannot be filled unless both model and serial number with prefix imprinted on nameplate are given.

## PARTS AND SERVICE

For quality workmanship and genuine ENERPAC parts, select a Franchised ENERPAC Service Depot for your repair needs.

Only repairs performed by a Franchised Service Depot displaying the official ENERPAC Franchised sign are backed with factory warranty.

The Classified Section in your Phone Book lists your nearest Franchised Service Depot.

## WARRANTY

ENERPAC warrants its products against defects in workmanship and materials for 90 days from date of delivery to user. Chain is not warranted.

Warranty does not cover ordinary wear and tear, abuse, misuse, overloading, altered products or use of improper fluid.

## WARRANTY RETURN PROCEDURE

When question of warranty claim arises, the user should send his unit to the nearest ENERPAC Franchised Service Depot for inspection, transportation to be prepaid and evidence of purchase date furnished. If the claim comes under the terms of our warranty, the Franchised Service Depot will REPAIR OR REPLACE PARTS AFFECTED and return prepaid.

# ENERPAC®

AN APPLIED POWER  INDUSTRY