

MODEL 8700/8750 HO PAC

OPERATING AND MAINTENANCE INSTRUCTIONS PARTS LIST AND WARRANTY

P/N 102330

1. **GENERAL:** Your Model 8700/8750 Ho-Pac is made up of the following major sub-assemblies:
 - A. **Top Mounting Bracket** which connects to the excavator, supports the hydraulic hoses, and supports the upper end of the springs.
 - B. **"Live Frame"** made up of the base plate (Item 1), and the vibration generator (which includes such items as the eccentric (Item 11), bearings (Item 9), and hydraulic motor (Item 18). In operation, the "Live Frame" vibrates.
 - C. **Suspension System** made up of Rubber Mounts (Item 13), whose purpose it is to suspend and stabilize the "Live Frame" and also to isolate the vibration from the "Live Frame" to the excavator.

Installation kits are required to effect the marriage between the Ho-Pac and excavator and these kits are available for most models. Kits include all parts required for the mechanical and hydraulic hook up. Extra kits can be purchased so that one Ho-Pac may be used on several excavators.

2. **BEARINGS & LUBRICATION:** Bearing replacement, when required, should be done in the following manner. Remove bearing housing assembly from the main housing (Item 12) using, if necessary, back out screws in the tapped holes provided in the bearing housing (Item 10). Removal of the worn bearing can be accomplished by pushing a bar against the inner ring of the bearing (Item 9) from the back side of the bearing housing. The bar should be 1-3/4" diameter and have square cut ends.

The replacement bearing, which will have a press fit in the housing, should be forced in by pushing on the outer ring only.

Use only Allied supplied bearings. They have been specifically selected to do the job.

Under normal operating conditions bearings should be relubricated with a hand gun every 20 running hours. The preferred grease is: Texaco Molytex #2. The following greases have also been suggested as suitable for this application: Standard Oil - Rykon #2, Shell Oil - Cyprina #3, Gulf Oil - Gulf Crown #2, Mobile Oil - Mobilux #2.

3. **FASTENERS:** Adherence to the fundamental rules related to Ho-Pac fastener concept will contribute to long life of the machine. The concept has been proven by experience, and compromises could shorten life drastically.

Very simply the concept is the use of highly preloaded fasteners which will keep the joined surfaces together without slippage and without need for retorquing for an unlimited period of time. The rules are as follows:

- A. Use only Allied fasteners. Cap screws, nuts, and washers have been specifically selected to do the job.
- B. Limit the number of reuses of fasteners to two or three times especially those which screw into tapped holes.
- C. **IMPORTANT** - Tighten fasteners exactly as described. First clean mating surfaces, then draw the surfaces up **SNUG TIGHT** by exerting medium effort with wrench of normal length. Preload the fastener by turning screw head or nut 1/3 turn or 2 flats as shown in Figure 2; this will usually require a "cheater bar."

Check tightness of fasteners occasionally. Check carefully during the first day's use, especially at the outset.

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(216) 248-2600 Cable: ALTRAC Telex: 990192

MODEL 8700 HO-PAC PARTS LIST

ITEM NO.	QUANTITY	PART NUMBER	DESCRIPTION	WEIGHT LBS.
1	1	708501	Base Plate	275
2	4	708516	Hex Head Cap Screw	
3	12	719003	Hardened Flat Washer	
4	4	719004	Hex Nut	
5	8	708511	Hex Head Cap Screw	
6	9	708512	Flat Washer	
7	2	708717	Grease Fitting	
8	1	708510	Cover Plate	9
9	2	708507	Roller Bearing	3
10	2	708508	Bearing Housing	14
11	1	708503	Eccentric Assembly	34
12	1	708702	Housing	189
13	4	653314	Rubber Mount	7
14	16	902509	Hex Head Cap Screw	
15	16	903713	Flat Washer	
16	16	759808	Elastic Stop Nut	
17	1	708509	Adaptor Plate	8
18	1	708517	Hydraulic Motor	18
19	2	708514	Hardened Flat Washer	
20	2	708513	Hex Head Cap Screw	
21	1	708519	90° Male Elbow	
22	1	656535	90° Elbow	
23	1	708630	Hose Assembly	7
24	1	708627	Hose Assembly	8
25	1	719730	Hex Head Cap Screw	
26	1	708719	Hose Clamp	1
27		-----	Hose Protector - Rubber	
28	1	813289	Elastic Stop Nut	
29	12	708716	Hex Head Cap Screw	
30	8	563632	Drive Screw	
31	2	708718	Name Plate	
32	1	708724	Top Mounting Bracket	155
33	2	617104	Klik Pin	
34	2	617062	Boom Pin	15
35	2	563629	Cotter Pin	
36	1	719029	Q.D. Plug	2
37	1	719034	O.D. Socket	2
38	12	708721	Special Washer	

MODEL 8700 HO-PAC PART NO. 708700

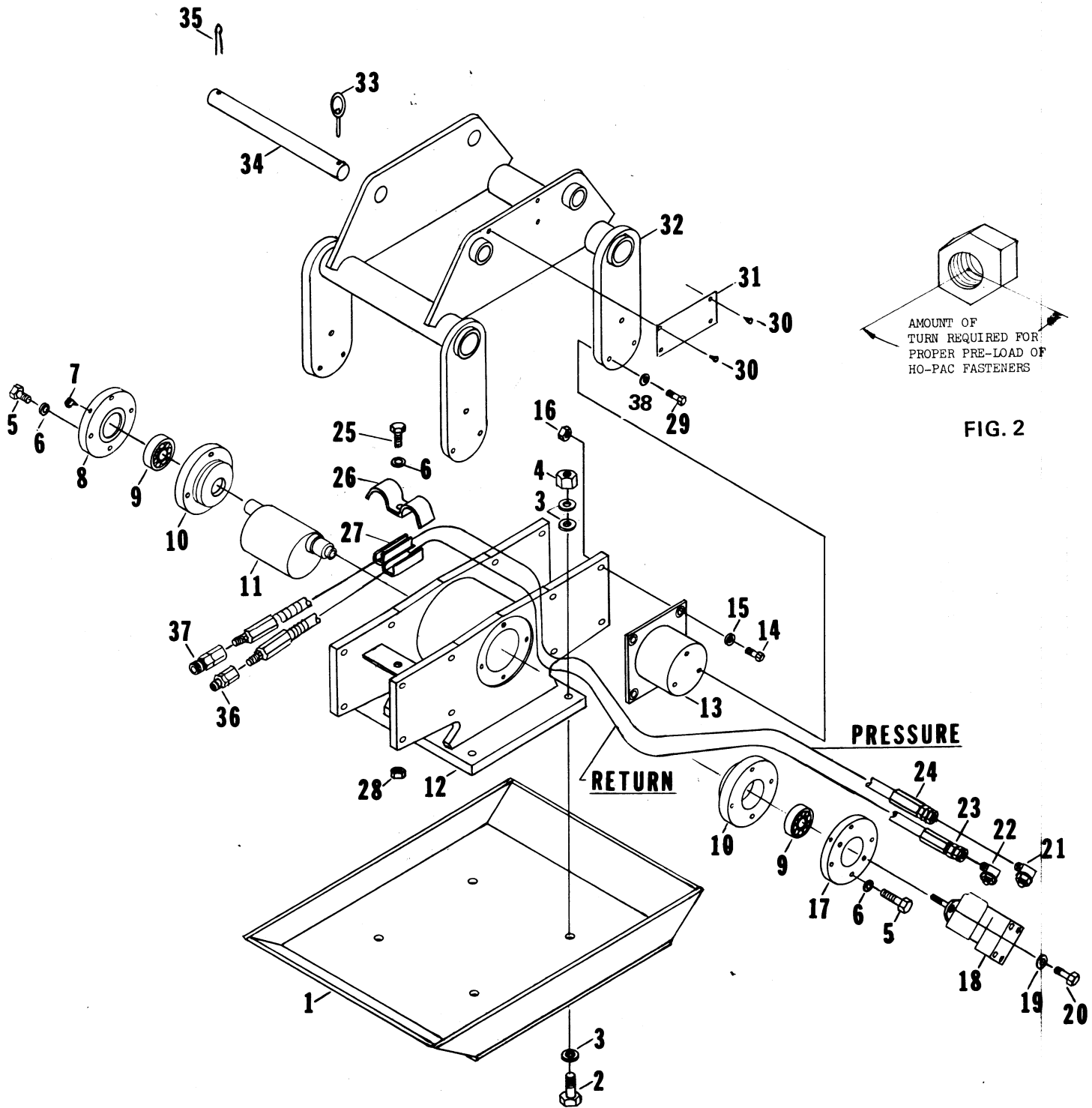


FIG. 1

8700 HO-PAC W/SWIVEL TOP ASSEMBLY

P/N 708750*

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>WEIGHT</u>
1	1	708501	Base Plate	275
2	4	708516	Hex Head Cap Screw	
3	12	719003	Hardened Flat Washer	
4	4	719004	Hex Nut	
5	8	708511	Hex Head Cap Screw	
6	9	708512	Flat Washer	
7	2	708717	Grease Fitting	
8	1	708510	Cover Plate	9
9	2	708507	Roller Bearing	3
10	2	708508	Bearing Housing	14
11	1	708503	Eccentric Assembly	34
12	1	708702	Housing	189
13	4	653314	Rubber Mount	7
14	16	902509	Hex Head Cap Screw	
15	16	903713	Flat Washer	
16	16	759808	Elastic Stop Nut	
17	1	708509	Adaptor Plate	8
18	1	708517	Hydraulic Motor	18
19	2	708514	Hardened Flat Washer	
20	2	708513	Hex Head Cap Screw	
21	1	708519	90° Male Elbow	
22	1	656535	90° Elbow	
23	1	708630	Hose Assembly	7
24	1	708627	Hose Assembly	8
25	1	719730	Hex Head Cap Screw	
26	1	708719	Hose Clamp	1
27	---	-----	Hose Protector	
28	1	813289	Elastic Stop Nut	
29	12	708716	Hex Head Cap Screw	
30	8	563632	Drive Screw	
31	2	708718	Name Plate	
32	1	708713	Stationary Swivel Weldment	186
33	2	617104	Klik Pin	
34	2	617062	Boom Pin	15
35	2	563629	Cotter Pin	
36	1	719029	Q. D. Plug	2
37	1	719034	Q. D. Socket	2
38	1	617078	Bottom Bearing Washer	1
39	1	708594	Thrust Bushing	1 1/2
40	1	708712	Movable Swivel Weldment	73
41	1	719520	Hex Head Cap Screw	
42	1	617079	Top Bearing Washer	1/2
43	1	617077	Thrust Plate	13
44	6	719021	Flat Washer	
45	6	719710	Hex Head Cap Screw	
46	1	620600	Elastic Stop Nut	
47	12	708721	Special Washer	*Optional

MODEL 8700 HO-PAC WITH SWIVEL TOP ASSEMBLY PART NO. 708750

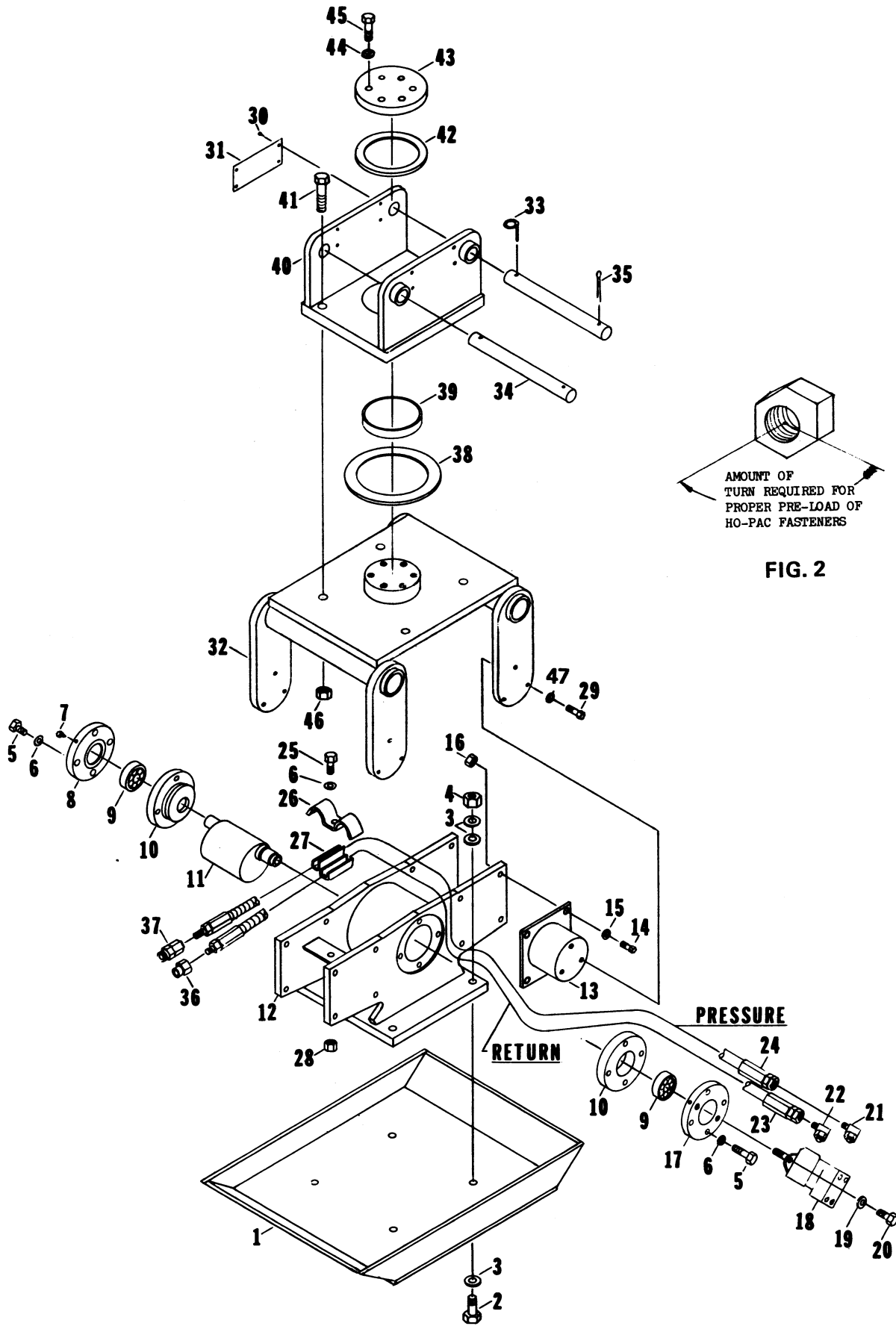


FIG. 1

4. **INSTALLATION AND OPERATION:** Excavators with hydraulic capacities of 16 GPM (at rated pressure) are adequate for simultaneous Ho-Pac and backhoe operation.

Hydraulic pressure developed during Ho-Pac operation is simply that which is encountered by the working resistance. In other words when the running Ho-Pac is hanging in mid-air, the pressure will be around 500 PSI, and when compacting, the pressure will rise to some point between this value and relief setting. Pressure relief valves should be set no higher than 2500 PSI.

Full instructions are furnished with each kit and those specifics must be followed. **In general**, this is what must be done:

- A. Break the pressure line at a point just before the backhoe valve bank. At this point the flow divider valve is interposed with the upstream line just broken connecting to the "P" (pressure) port of the flow divider valve and the downstream line (that going to backhoe valve bank) connecting to the "EF" (excess flow) port.
- B. A line then connects the "CF" (controlled flow) port of the flow divider valve and the pressure port of the Ho-Pac motor (this is on the outboard side of the motor).
- C. The following then "go to tank" (connect to the low pressure side of the system): return line from Ho-Pac motor (from the inboard motor port), line from relief valve (when supplied) of the flow divider (the "R" port), and bleed line from flow divider (this port is unmarked but is that one which is drilled directly above and towards the rotary spool of the valve).

5. **ADDITIONAL OPERATING HINTS:**

- A. **Do not** try to operate the Ho-Pac without the base plate (Item 1).
- B. **Do** keep the hoses in a "loop" (between motor and top mounting bracket).
- C. **Do** use only genuine Allied parts as replacement items.
- D. **Do** make use of the nylon ties provided with the kit to effect a clean installation. Additional quantities can be purchased from your distributor.
- E. The hydraulic system will run cooler if you run the engine no faster than necessary for reasonable speed of backhoe operation (while Ho-Pac is running).
- F. The flow divider is a variable speed control device. With the handle full on, the Ho-Pac will run at the maximum rated speed, and this will be the best setting for some applications. Experience has shown that, on occasion, more production is achieved by operating at a speed less than maximum.
- G. Keep return line restrictions to a minimum and maintain a clean filter. Follow manufacturer's recommendation concerning hydraulic system maintenance.
- H. Down pressure is generally useful, as is vibration, in compaction or sheet driving.

HO-PAC WARRANTY

ALLIED warrants its products to be well-made, durable and of good material and if within 90 days from the date of delivery of such new product to the actual and original purchaser or renter, but no more than 12 months from the date of shipment from Allied's factory, any part shall fail by reason of defective material or poor workmanship, ALLIED will, at its option, repair or furnish such part free of charge, F.O.B. factory where manufactured (or other place designated by ALLIED); provided, however, that the defective part or sufficient evidence of such defect in the part be delivered to its factory in the United States where manufactured (or other place designated by ALLIED), transportation prepaid. Such parts or such evidence must clearly show that the failure was due to poor workmanship or defective material and not due to the negligence or improper use by such purchaser, renter or operator.

Breakage or damage resulting from installation or operation or use not in accordance with ALLIED'S published installation and operating instructions are not covered by any warranty.

Operation or use beyond published capacities, substitution or interchanging of parts or any alterations not approved by ALLIED shall void this warranty.

ALLIED'S responsibility and warranty applies only when this equipment is operated and used in accordance with (1) its published instructions and (2) pursuant to the terms, conditions and restrictions of any local, state, dominion or federal laws, ordinances and regulations. The purchaser, user or renter assumes the responsibility to familiarize himself with such published capacities, instructions, terms, conditions and instructions as set forth above.

This is ALLIED'S sole warranty. ALLIED makes no other warranty of any kind whatsoever, express or implied; and all implied warranties of merchantability and fitness for any particular purpose which exceed the aforesaid stated obligation are hereby disclaimed by ALLIED and excluded from this agreement.

ALLIED specifically disclaims any responsibility for any damages of any kind or description, whether to property or person, in any way connected with or arising out of the use of its products.

HO-PAC SPECIFICATIONS

	Model 8700
Cycles per minute	2,000
Impulse Force	6,400 lbs.
Hydraulic flow through HO-PAC	12 GPM
Suggested minimum Pump size	16 GPM
Hydraulic Pressure required	1,500-2,000 PSI
Length	32"
Width	23"
Compaction Plate (width and Length)	15" x 24"
Height with Fixed Mounting Frame	26"
Height with Swivel Mounting Frame	30"
Net Weight with Fixed Mounting Frame	735 lbs.
Net Weight with Swivel Mounting Frame	895 lbs.



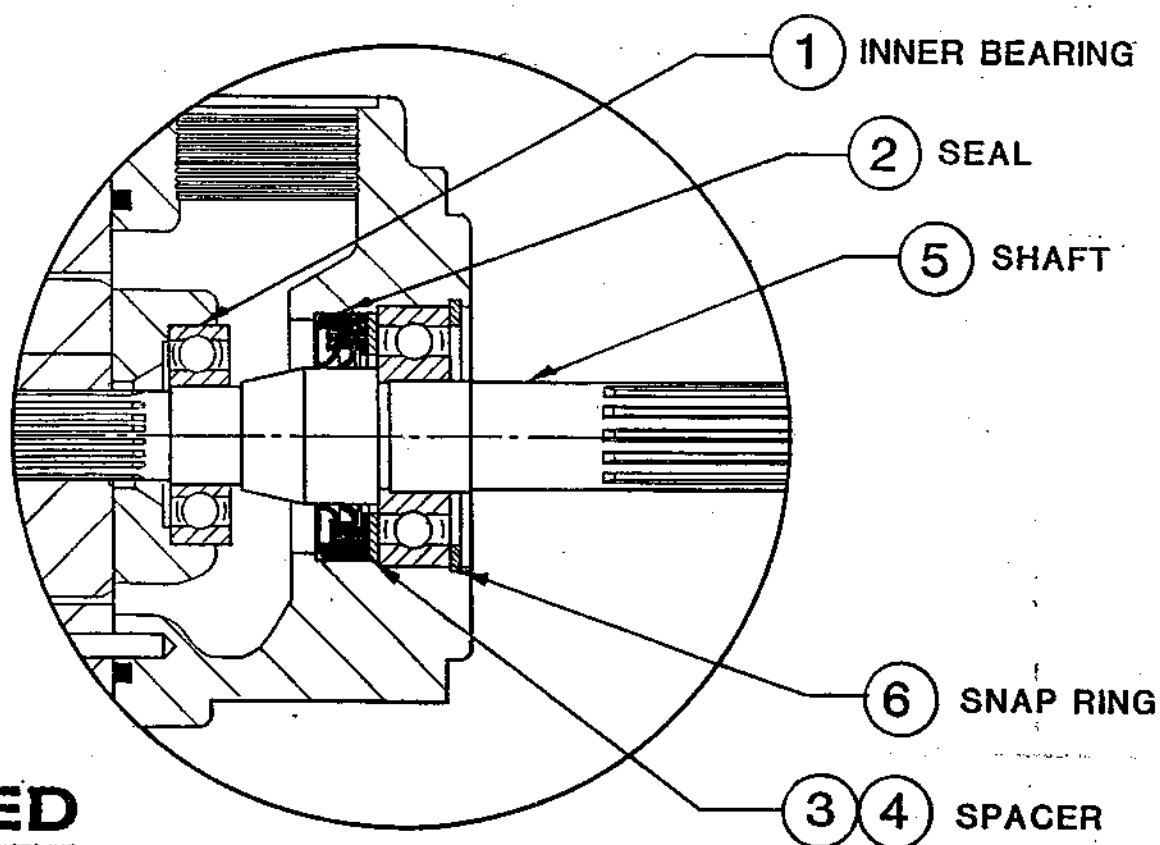
PROCEDURE FOR ASSEMBLING DOUBLE LIP SEAL & SPACER

FOR: 8000 HOPAC MOTOR - 798050
8700B HOPAC MOTOR - 708517
33 RAPID RAM MOTOR - 653327

UTILIZING: MOTOR SEAL REPAIR KIT - 798291
OR SEAL KIT - 798290

INSTRUCTIONS - WITH MOTOR VERTICAL:

- ① INSERT INNER BEARING.
- ② PRESS IN SEAL (LIP INWARDS).
- ③ VASOLINE OR GREASE THE SPACER END FACES.
- ④ PLACE SPACER ON SEAL.
- ⑤ PRESS IN SHAFT
(OUTER BEARING PRE-ASSEMBLED TO SHAFT)
- ⑥ REPLACE SNAP RING.

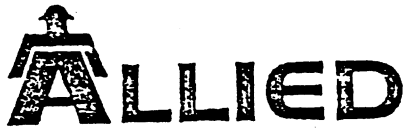


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SEAL AND O-RING KIT PACKING LIST

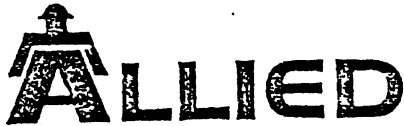
KIT NO. 798290

MODEL 798050, 708517, 653327
MOTOR

REF.

1035

QTY.	PART NO.	DESCRIPTION	ITEM NO.
2	1798243	O-RING	
1	1798282	LIP SEAL	
1	1798113	BACK UP WASHER	



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SEAL AND O-RING KIT PACKING LIST

KIT NO. - 798291

MODEL 798050, 708517, 653327
MOTOR

REF.

1036

QTY.	PART NO.	DESCRIPTION	ITEM NO.
2	1798243	O-RING	
1	1798282	LIP SEAL	
1	1798113	BACK-UP WASHER	
1	1798004	BEARING	
1	1798270	SNAP RING	