

MODEL 8700 B HO-PAC

OPERATING AND MAINTENANCE INSTRUCTIONS PARTS LIST AND WARRANTY

P/N 102331

1. GENERAL: MODEL 8700B 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.

SOLD AND SERVICED BY:

MANUFACTURED BY:





MODEL 8700 B HO-PAC PART NO. 708701 S/N 3668

ITEM NO.	PART NO.	QTY.	DESCRIPTION	WEIGHT/LBS.
1	708501	1	Base Plate	275
2	708516	4	Hex Head Cap Screw	.7
3	719003	12	Hardened Flat Washer	.1
4	719004	4	Hex Nut	.2
5	708511	8	Hex Head Cap Screw	.1
6	708512	40	Hardened Flat Washer	
7	708717	1	Grease Fitting	
8	708510	1	Cover Plate	9
9	708507	2	Roller Bearing	3
10	708508	2	Bearing Housing	14
11	708503	1	Eccentric Assembly	34
12	708703	1	Housing	189
13	719749	4	Rubber Mount	8
14	719730	32	Hex Head Cap Screw	.1
16	813289	32	Elastic Stop Nut	
17	708509	1	Adaptor Plate	8
18	708517	1	Hydraulic Motor	18
19	708514	2	Hardened Flat Washer	
20	708513	2	Hex Head Cap Screw	
21	708763	2	90° Male Elbow W/O — Ring	.5
23	708768	1	Hose Assembly	7
24	905526	1	Hose Assembly	6
25	656715	2	Hose Assembly	14
30	563632	8	Drive Screw	
31	708718	2	Name Plate	
32	708704	1	Top Mounting Bracket	160
33	617104	2	Klik Pin	
34	617080	2	Boom Pin	15
35	563629	2	Cotter Pin	
36	719034	1	Q.D. Socket	2
37	719029	1	Q.D. Plug	2
38	814133	2	Male Connector W/O — Ring	.1
39	656723	2	Male Connector W/O — Ring	.1
40	798197	1	Grease Fitting	



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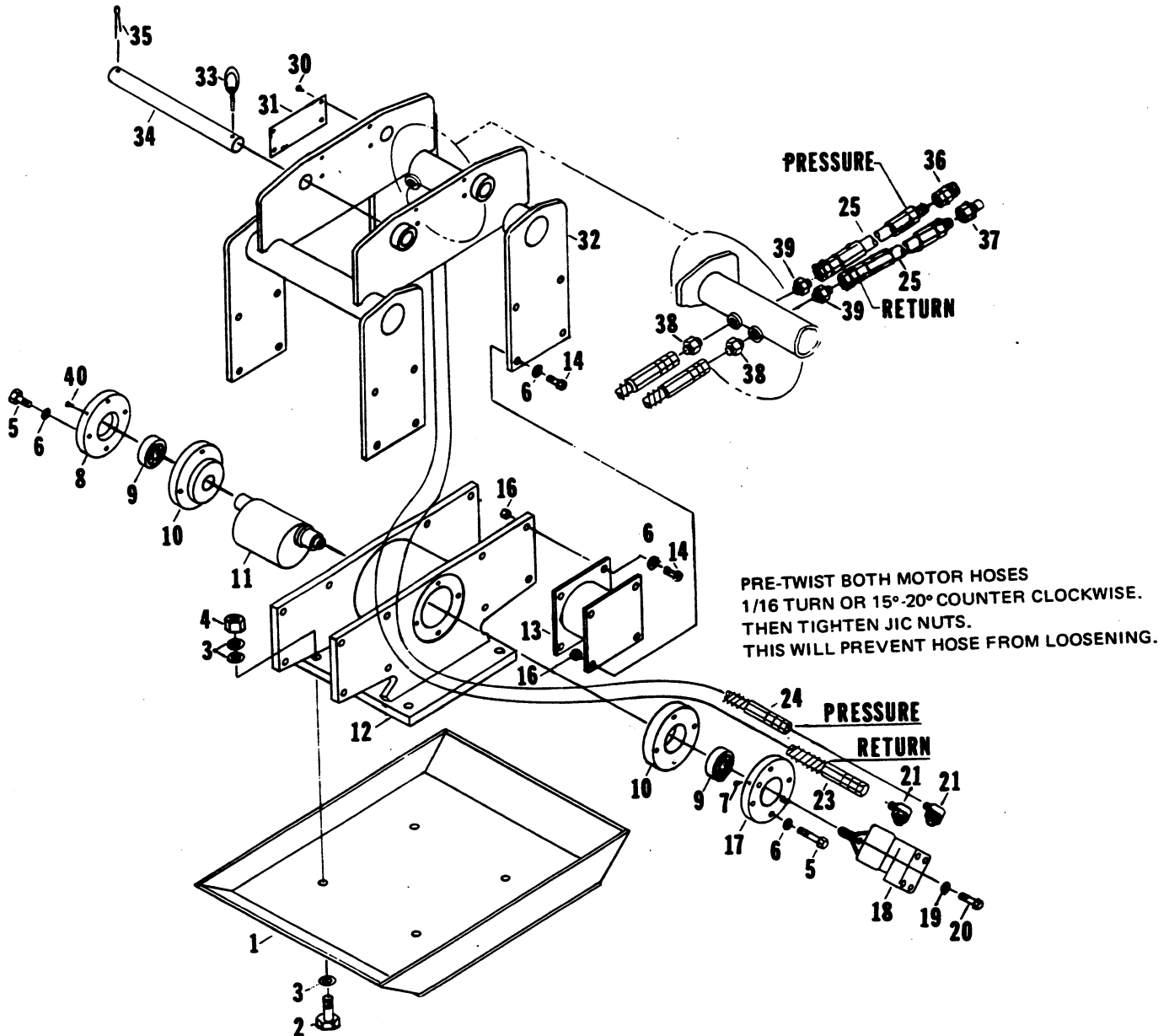


FIG. 1

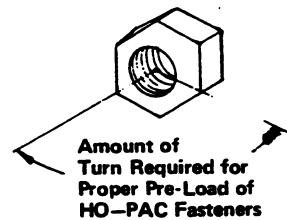


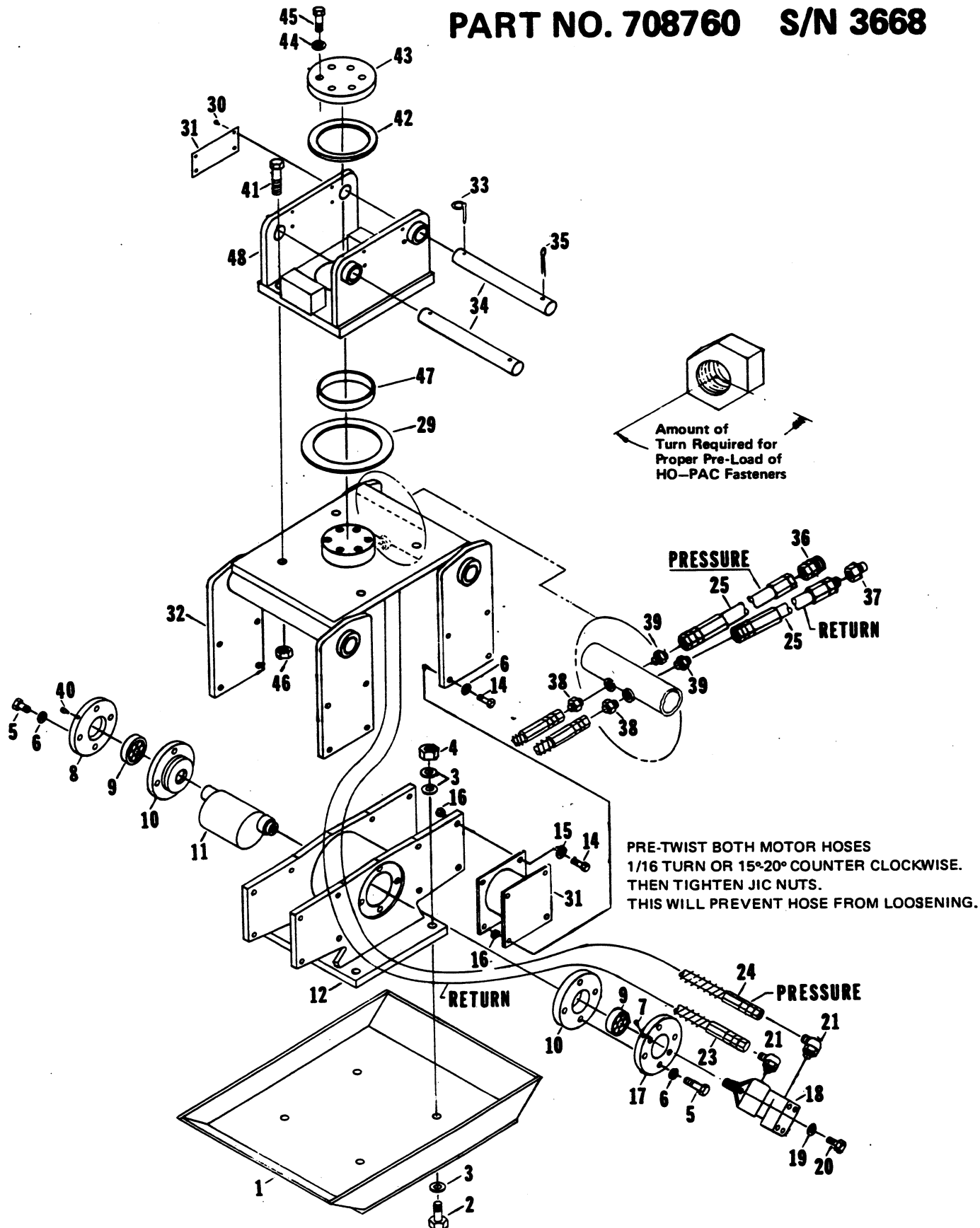
FIG. 2



MODEL 8700 B HO-PAC WITH SWIVEL TOP ASSEMBLY
PART NO. 708760 S/N 3668

ITEM NO.	PART NO.	QTY.	DESCRIPTION	WEIGHT/LBS.
1	708501	1	Base Plate	275
2	708516	4	Hex Head Cap Screw	.7
3	719003	12	Hardened Flat Washer	
4	719004	4	Hex Nut	.2
5	708511	8	Hex Head Cap Screw	.1
6	708512	40	Flat Washer Hardened	
7	708717	1	Grease Fitting	
8	708510	1	Cover Plate	9
9	708507	2	Roller Bearing	3
10	708508	2	Bearing Housing	14
11	708503	1	Eccentric Assembly	34
12	708703	1	Housing	189
13	719749	4	Rubber Mount	8
14	719730	32	Hex Head Cap Screw	.1
16	813289	32	Elastic Stop Nut	
17	708509	1	Adaptor Plate	8
18	708517	1	Hydraulic Motor	18
19	708514	2	Hardened Flat Washer	
20	708513	2	Hex Head Cap Screw	
21	708763	2	90° Male Elbow w/O — Ring	.5
23	708771	1	Hose Assembly-Return	7
24	708772	1	Hose Assembly-Pressure	6
25	656715	2	Hose Assembly	14
29	617078	1	Bottom Bearing Washer	1
30	563632	8	Drive Screw	
31	708718	2	Name Plate	
32	708723	1	Stationary Swivel Weldment	190
33	617104	2	Klik Pin	
34	617080	2	Boom Pin	15
35	563629	2	Cotter Pin	
36	719034	1	Q.D. Socket	2
37	719209	1	Q.D. Plug	2
38	814133	2	Male Connector w/O — Ring	.1
39	656723	2	Male Connector w/O — Ring	.1
40	798197	1	Grease Fitting	
41	719520	1	Hex Head Cap Screw	
42	617079	1	Top Bearing Washer	.5
43	617077	1	Thrust Plate	13
44	719021	6	Hardened Flat Washer	
45	719710	6	Hex Head Cap Screw	
46	620600	1	Elastic Stop Nut	
47	708594	1	Thrust Bushing	1.5
48	708712	1	Movable Swivel Weldment	73

MODEL 8700 B HO-PAC WITH SWIVEL TOP ASSEMBLY PART NO. 708760 S/N 3668



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 use only genuine Allied parts as replacement items.
- C. Do make use of the nylon ties provided with the kit to effect a clean installation. Additional quantities can be purchased from your distributor.
- D. 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).
- E. 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.
- F. Keep return line restrictions to a minimum and maintain a clean filter. Follow manufacturer's recommendation concerning hydraulic system maintenance.
- G. 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-B		
	St. Top Part No. 708701	Swivel Top Part No. 708760
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	26"	30"
Weight	780 lbs	840 lbs

Specifications are subject to change without notice.



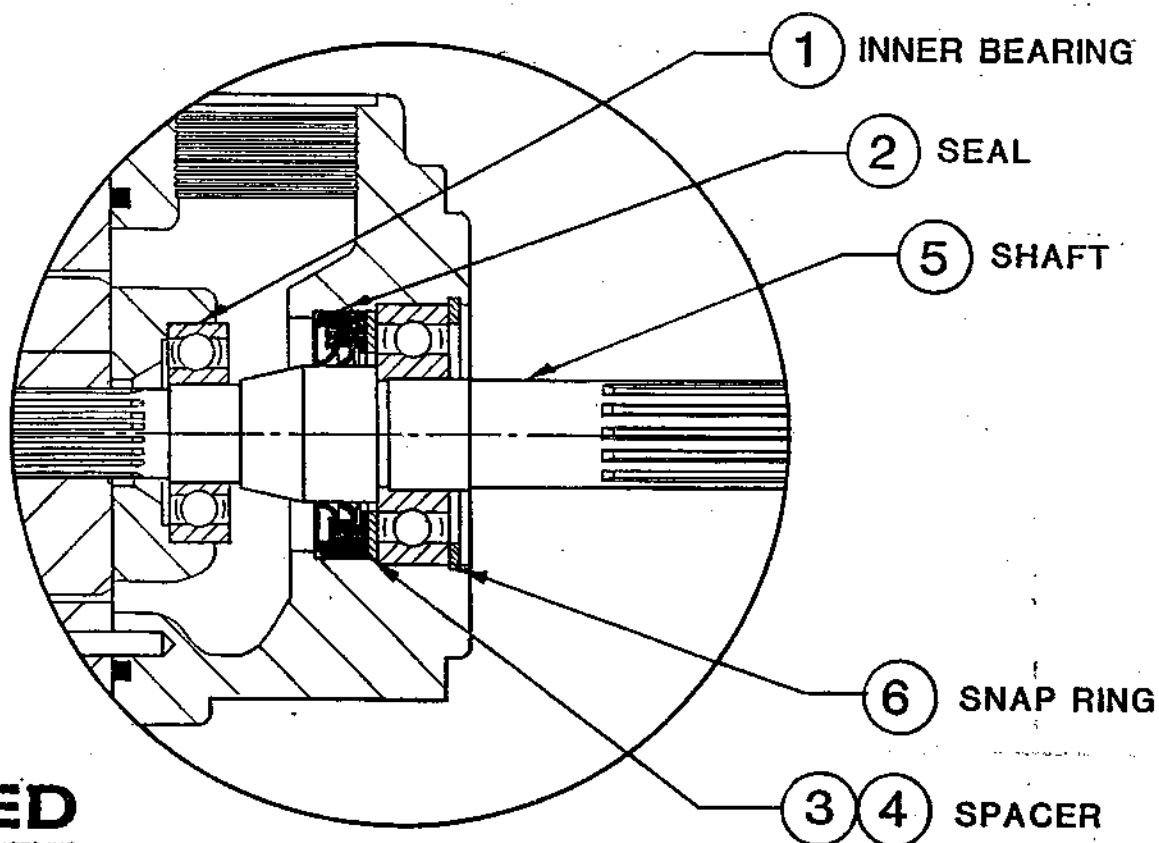
PROCEDURE FOR ASSEMBLING DOUBLE LIP SEAL & SPACER

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.





STEEL & TRACTOR PRODUCTS, INC.
5800 HARPER ROAD, SOLON, OHIO 44139
(216) 248-2600 Cable: ALTRAC Telex: 980192

SEAL AND O-RING KIT PACKING LIST

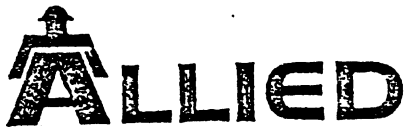
KIT NO. 798290

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	