



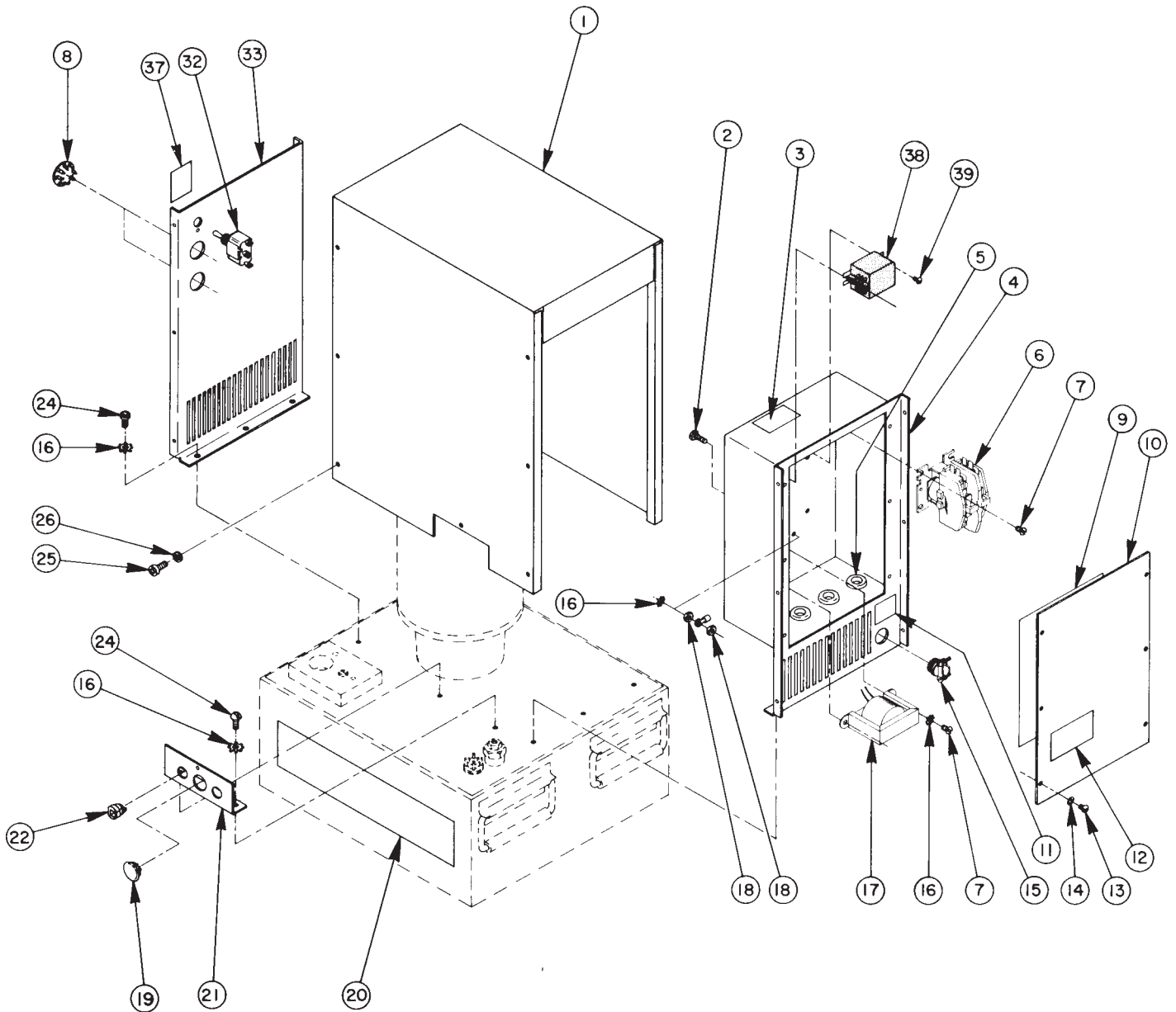
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Form No. 100632

Parts List for:

6V4850  
6V4890

## MODEL C ELECTRIC TWO-STAGE HYDRAULIC PUMP CONTROL BOX & COVER ASSEMBLY



Sheet No. 1 of 4

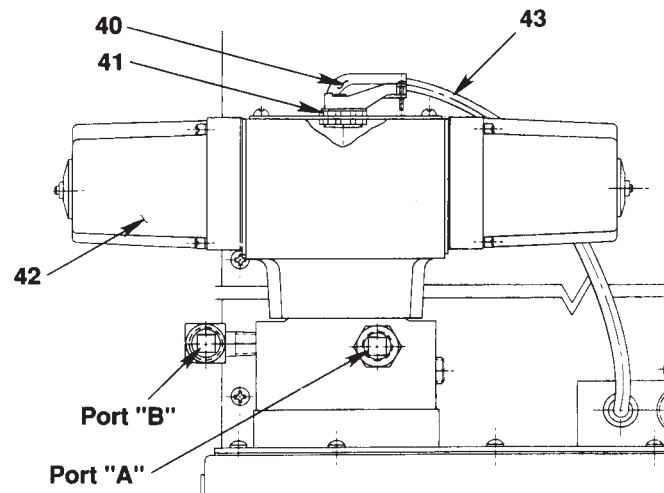
Rev. 2 Date: 10 Nov. 1996

# Parts List, Form No. 100632, Back sheet 1 of 4

Item No.	Part No.	No. Req'd	Description
1	50946WH2	1	Shroud Cover
2	11856	1	Hex Hd. Machine Screw (#10-24 X 1" Lg.)
3	202504	1	Rotation Decal
4	60235TA2	1	End Panel & Electrical Box
5	15497	5	Rubber Grommet
6	52061-4	1	Starter Relay
7	10164	4	Rd. Hd. Machine Screw (#10-24 UNC X 3/8 Lg.)
8	19502	2	Snap Plug (For 1" hole)
9	306310	1	Electrical Schematic Decal
10	42457TA2	1	Cover Plate
11	207223	1	Spec. Decal (For 6V4850)
	207444	1	Spec. Decal (For 6V4890)
12	200188	1	Warning Decal
13	10975	6	Pan Hd. Machine Screw (8-32 UNC X 5/16 Lg)
14	11107	6	Serrated Washer (#8 internal tooth)
15	11203	1	Strain Relief (Connector)
16	11108	AR	Serrated Washer (#10 external)
17	11852	1	Transformer
18	10197	2	Hex Nut (#10-24 UNC)
19	15327	1	Snap Plug (For 7/8 hole)
20	14113	2	Decal
21	36746WH2	1	Angle Plate
22	15993	2	Strain Relief Bushing
24	16613	8	Pan Hd. Machine Screw (10-24 UNC x 5/16 Lg.)
25	14394	14	Self-Tapping Screw (#10 X 3/8 Lg.)
26	12356	AR	Serrated Washer (#10 internal tooth)
32	16618	1	Toggle Switch
33	51124TA2	1	End Panel
37	205409	1	On-Off Decal
38	39092	2	Control Relay
39	10159	AR	Rd. Hd. Machine Screw (#6-32 UNC X 5/16 Lg.; used to mount Control Relay)
40	11144	1	90° Conduit Connector (Used on top cover plate of Solenoid Valve)
41	11362	1	Conduit Locknut (Used of top cover plate of Solenoid Valve)
42	9592	1	Solenoid Valve Assembly (See Form #100540)
43	12908	AR	Solenoid Cable

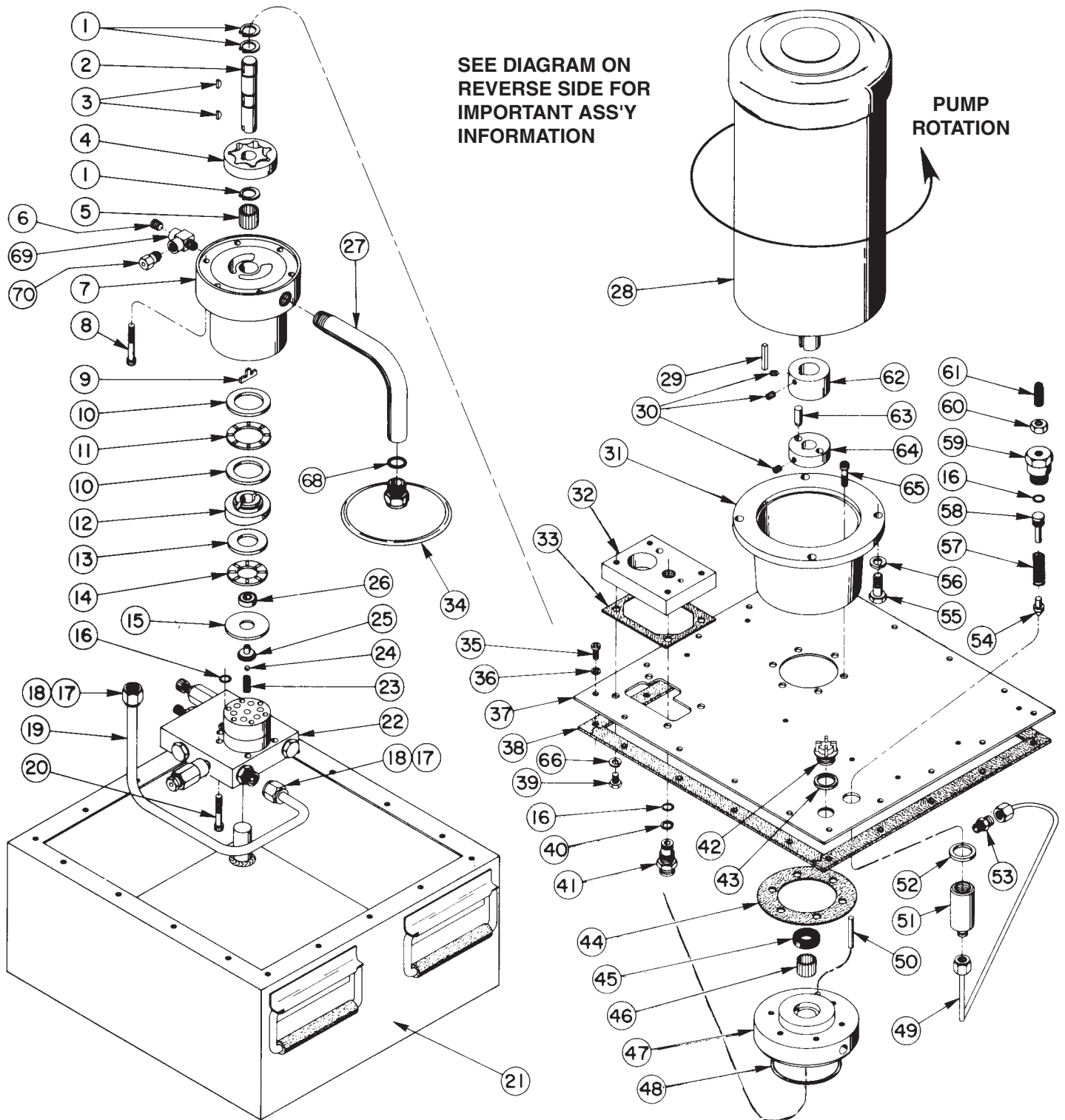
## PARTS INCLUDED BUT NOT SHOWN

Part No.	No. Req'd	Description
304609	1	Motor Leads Decal
205189	1	Ground Decal
39272	1	Power Cord
10195	1	Nut (#6-32 UNC; used to mount Control Relay)
10448	1	Screw (#6-32 X 3/8 Lg.; used to mound Control Relay)
17645	1	Lockwasher (Used to mound Control Relay)
17627	1	Foot Switch
51854TA2	1	Foot Switch Housing
13758	1	Decal (For Foot Switch)
10962	1	Flat Hd. Mach. Screw (#8-32 X 1/2 Lg.; for Foot Switch)
17644	1	Lockwasher (#8; for Foot Switch)
11388	1	Lockwasher (#8; for Foot Switch)
10196	1	Nut (#8-32; for Foot Switch)



AR: As Required

### BASIC PUMP ASSEMBLY

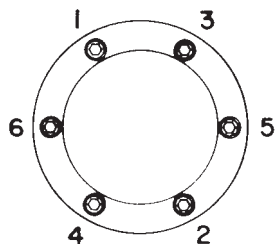


SEE DIAGRAM ON REVERSE SIDE FOR IMPORTANT ASS'Y INFORMATION

PUMP ROTATION

# Parts List, Form No. 100632, Back sheet 2 of 4

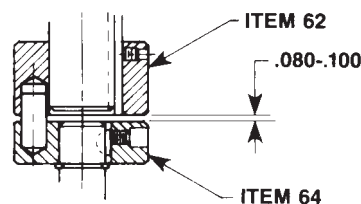
Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	12178	3	Retaining Ring (5/8 shaft)	35	16876	18	Machine Screw (#10-24 X 1/2 Lg.)
2	303009	1	Pump Shaft	36	12356	18	Serrated Washer (#10 internal tooth)
3	12179	2	Woodruff Key	37	60922	1	Cover Plate
4	15428	1	Gerotor Set	38	50712	1	Cover Gasket
5	15461	1	Needle Bearing	39	10005	4	Hex Hd. Cap Screw (1/4-20 UNC X 1/2 Lg.)
6	10427	1	Pipe Plug (1/8 NPTF)	40	11863	1	Backup Washer (1/2 X 3/8 X 1/16)
7	50705	1	Pump Housing	41	20787	1	Connector
8	10854	6	Soc. Hd. Cap Screw (1/4-20 UNC X 1-3/4 Lg.; see NOTE below)	42	20937	1	Filler Plug
9	200397	1	Key	43	200415	1	Washer
10	11227	2	Needle Thrust Race	44	35266	1	Gasket
11	11228	1	Needle Thrust Bearing	45	12194	1	Seal
12	35271	1	Angle Plate	46	15430	1	Needle Bearing
13	15432	1	Needle Thrust Race	47	50706	1	Gerotor Pump Housing
14	15431	1	Needle Thrust Bearing	48	12504	1	O-ring (3" X 2-13/16 X 3/32)
15	23548	1	Top Plate	49	35282	1	Oil Line Ass'y with Fittings (3/16 Dia.)
16	10268	3	O-ring (1/2 X 3/8 X 1/16)	50	13152	1	Dowel Pin (3/16 X 1-1/2 Lg.)
17	10430	2	Tube Sleeve	51	22361	1	Body
18	10431	2	Tube Nut	52	14857	1	Flat Washer (.062 Thk.)
19	35281	1	Oil Line (3/8 Dia.)	53	14844	1	Connector Fitting
20	10022	5	Soc. Hd. Cap Screw (1/4-20 UNC X 1-1/2 Lg.; Torque to 110/120 in. lbs.)	54	21046	1	Valve Stem
21	60234TA2	1	Reservoir	55	10049	4	Hex Hd. Cap Screw (3/8-16 UNC X 1" Lg.)
22	41806	1	High Pressure Pump As'y (See Sheet 3 of 4)	56	10247	4	Lockwasher (For 3/8 bolt)
23	10361	1	Compression Spring (1/4 O.D. X 1" Lg.)	57	10495	1	Compression Spring (1/2 O.D. X 1-5/8 Lg.)
24	10375	1	Steel Ball (1/4 Dia.)	58	21306	1	Spring Guide
25	23547	1	Top Bearing Plate	59	21305	1	Valve Cap
26	11814	1	Ball Bearing	60	10386	1	Hex Nut (3/8-24 UNF)
27	204242	1	Tube Extension	61	22362	1	Valve Adjusting Screw
28	15435	1	Motor (2 H.P., 60 Hz.)	62	207440	1	Coupling (See diagram below)
	17646	1	Motor (2 H.P., 50 Hz.)	63	27003	2	Nylon pin
29	27778	1	Square Key	64	27001	1	Coupling (See diagram below)
30	10133	3	Soc. Hd. Set Screw (#10-24 X 1/4 Lg.)	65	10012	6	Soc. Hd. Cap Screw (1/4-20 X 7/8 Lg.; Torque to 110/120 in. lbs.)
31	41838	1	Motor Mount	66	10244	4	Washer (For 1/4" bolt)
32	41839	1	Valve Mounting Block	67	10527	1	O-ring (13/16 X .644 X .087)
33	00395	1	Gasket				
34	21345	1	Filter Assembly				



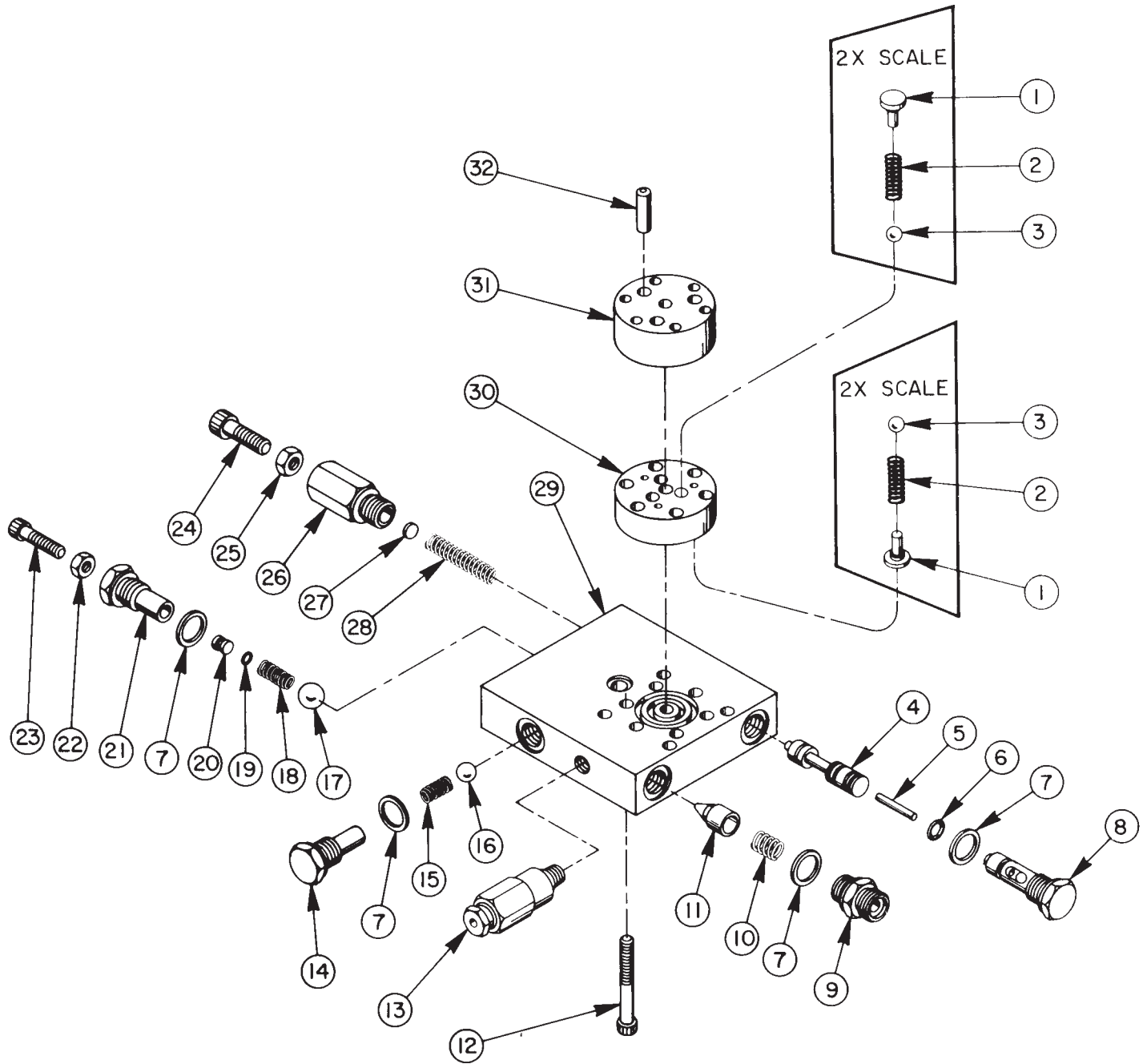
## BOLT TIGHTENING SEQUENCE

**NOTE:** All bolts must be torqued in sequence shown. Torque to 110/120 in. lbs. in increments of 50/60 in. lbs.

## COUPLING CLEARANCE



### #41806 HIGH PRESSURE PUMP ASSEMBLY



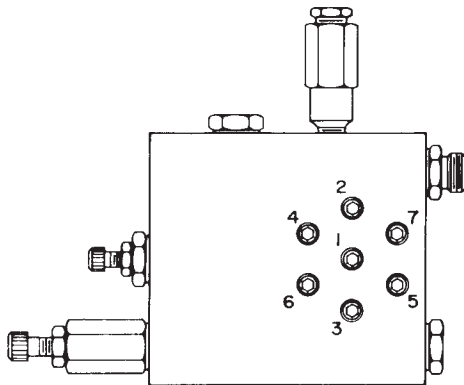
SEE DIAGRAM ON REVERSE SIDE  
FOR IMPORTANT ASSEMBLY  
INFORMATION

# Parts List, Form No. 100632, Back sheet 3 of 4

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	*24549	6	Valve Guide	17	10379	1	Steel Ball (1/2 Dia.)
2	*10445	6	Compression Spring (5/32 O.D. X 3/4 Lg.)	18	15319	1	Compression Spring (1/4 O.D. X 3/4 Lg.)
3	*12223	6	Steel Ball (3/16 Dia.)	19	12099	1	O-ring (9/32 X 5/32 X 1/16)
4	200273	1	Spool	20	200271	1	Adapter
5	16471	1	Dowel Pin (1/8 X 1" Lg.)	21	200270	1	Super Charge Fitting (Torque to 30/35 ft. lbs.)
6	14763	1	O-ring (7/16 X 5/16 X 1/16)	22	10383	1	Jam Nut (1/4-20)
7	10261	4	Copper Washer (3/4 X 19/32 X 1/32)	23	10016	1	Cap Screw (1/4-20 UNC X 1-1/4 Lg.)
8	202561	1	Actuating Pin Adapter (Torque to 30/35 ft. lbs.)	24	10809	1	Cap Screw (5/16-18 X 1" Lg.)
9	20770	1	Connector (Torque to 30/35 ft. lbs.)	25	10385	1	Jam Nut (5/16-18)
10	10425	1	Compression Spring (3/8 O.D. X 3/4 Lg.)	26	36545	1	Unloading Fitting (Torque to 30/35 ft. lbs.)
11	20771	1	Poppet	27	16528	1	Disc
12	*15318	7	Cap Screw (1/4-28 X 2" Lg.; see diagram below)	28	203031	1	Compression Spring (.300 O.D. x 1-3/4 Lg.)
13	21278	1	Relief Valve Assembly (Set at 10,100/10,700 PSI)	29	*50691	1	Valve Body
14	200269	1	Adapter Plug (Torque to 30/35 ft. lbs.)	30	*40630	1	Valve Head
15	11451	1	Compression Spring (1/4 O.D. X 5/8 Lg.)	31	*41062	1	Pump Barrel
16	10378	1	Steel Ball (3/8 Dia.)	32	*21628	1	Piston (9/32 Dia.)

When replacing items marked with an asterisk (\*), consult OTC Technical Services.

## BOLT TIGHTENING SEQUENCE



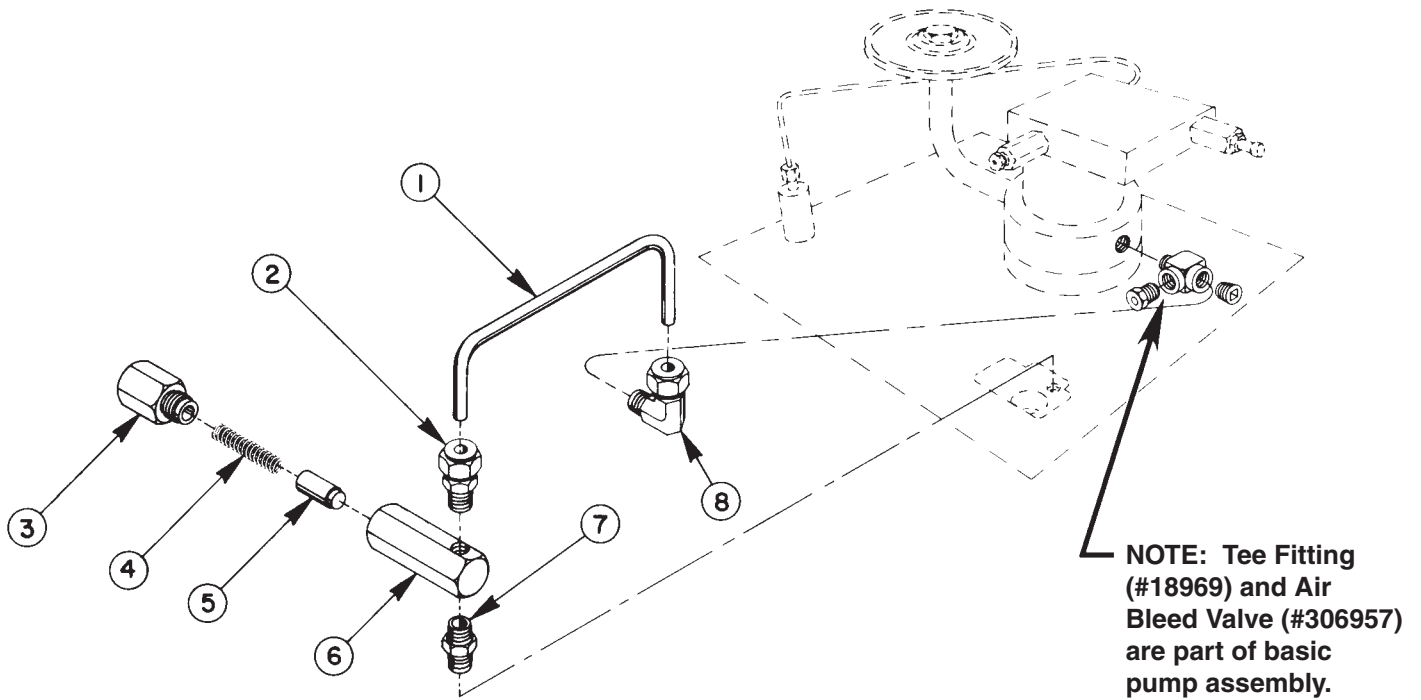
**NOTE: Assemble in sequence shown. Lubricate under head and on threads. Torque to 180 in. lbs.**

Refer to any operating instructions included with this product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected. **Therefore: Use only genuine OTC replacement parts!**

Additional questions can be directed to our Technical Services Department.

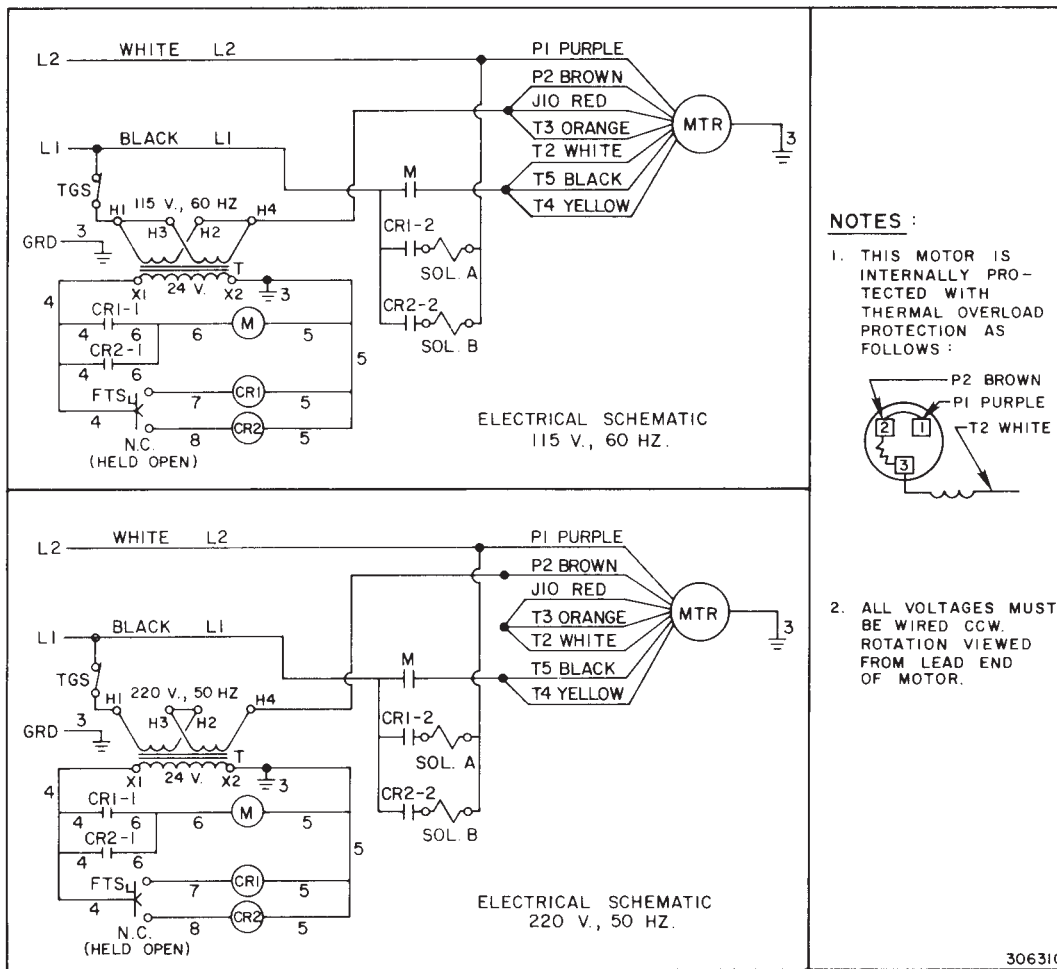
**OPTIONAL PILOT OIL LINE / ACCUMULATOR ASSEMBLY**



Item No.	Part No.	No. Req'd	Description
1	200405	1	Oil Line
2	11173	1	Connector
3	202121	1	Spring Retainer (Torque to 50/70 in. lbs.)
4	16499	1	Compression Spring (1/4 O.D. X 2-3/16 Lg.)
5	21945	1	Plunger
6	21944	1	Cylinder Body
7	11421	1	Pipe Nipple
8	11278	1	Connector
	21943	1	Accumulator (Consists of Item 3, 4, 5, & 6)

## ELECTRICAL SCHEMATIC

### 115 Volt, 60 Cycle -- 220 Volt, 50 Cycle



**NOTE:** 6V4850 is factory-wired for 115V., 60 Hx.  
6V4890 is factory-wired for 220 V., 50 Hz.



**WARNING:** To help prevent personal injury, all electrical work must be done by a qualified electrician.

#### North American & International Color Codes:

Conductors	North American	International
Line . . . . .	Black . . . . .	Brown
Neutral . . . . .	White . . . . .	Blue
Ground . . . . .	Green . . . . .	Green/Yellow