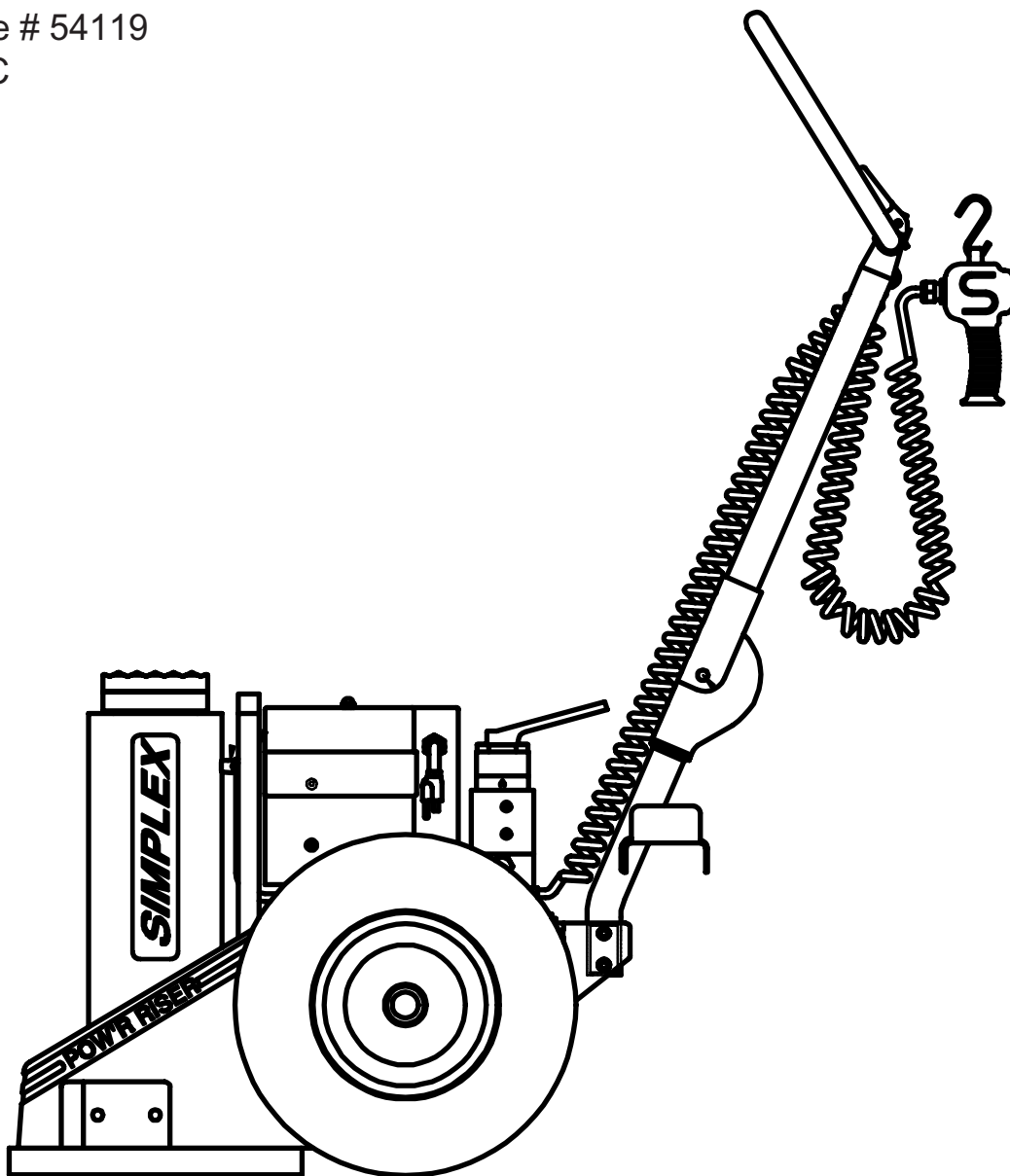


SIMPLEX®

A Division Of Templeton, Kenly & Co., Inc.

100 Ton Electric Pow'r-Riser Models

Operating and Part Identification Manual
For all 100 Ton Electric Pow'r-Riser Models
Reference # 54119
Revision C
08/2006

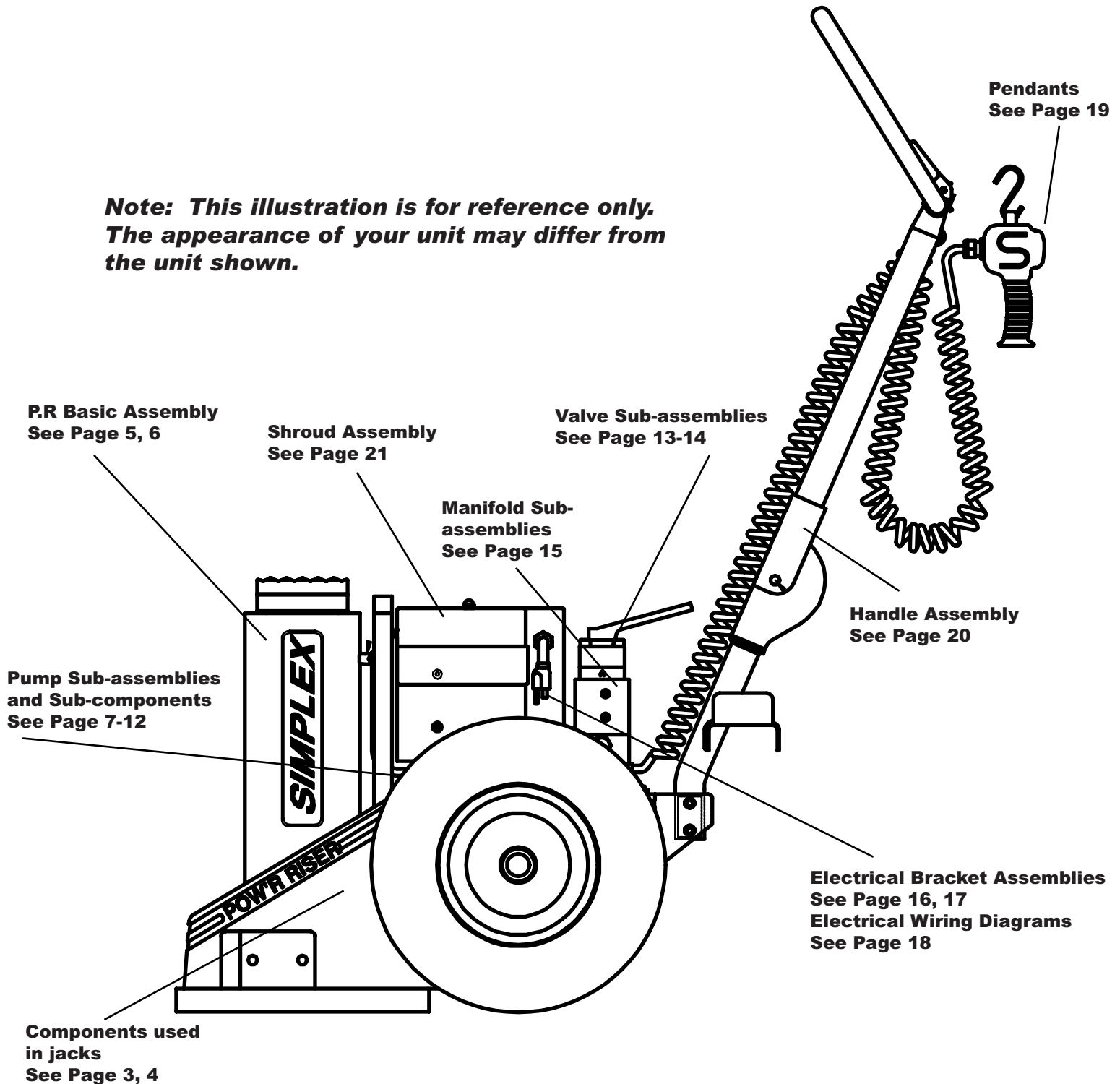


2525 Gardner Road . Broadview, Il. 60155 . (800)323-9114 . www.tksimplex.com

100 Ton Electric Pow'r-Riser Models

How to Identify Parts for Your Model.

Note: This illustration is for reference only. The appearance of your unit may differ from the unit shown.



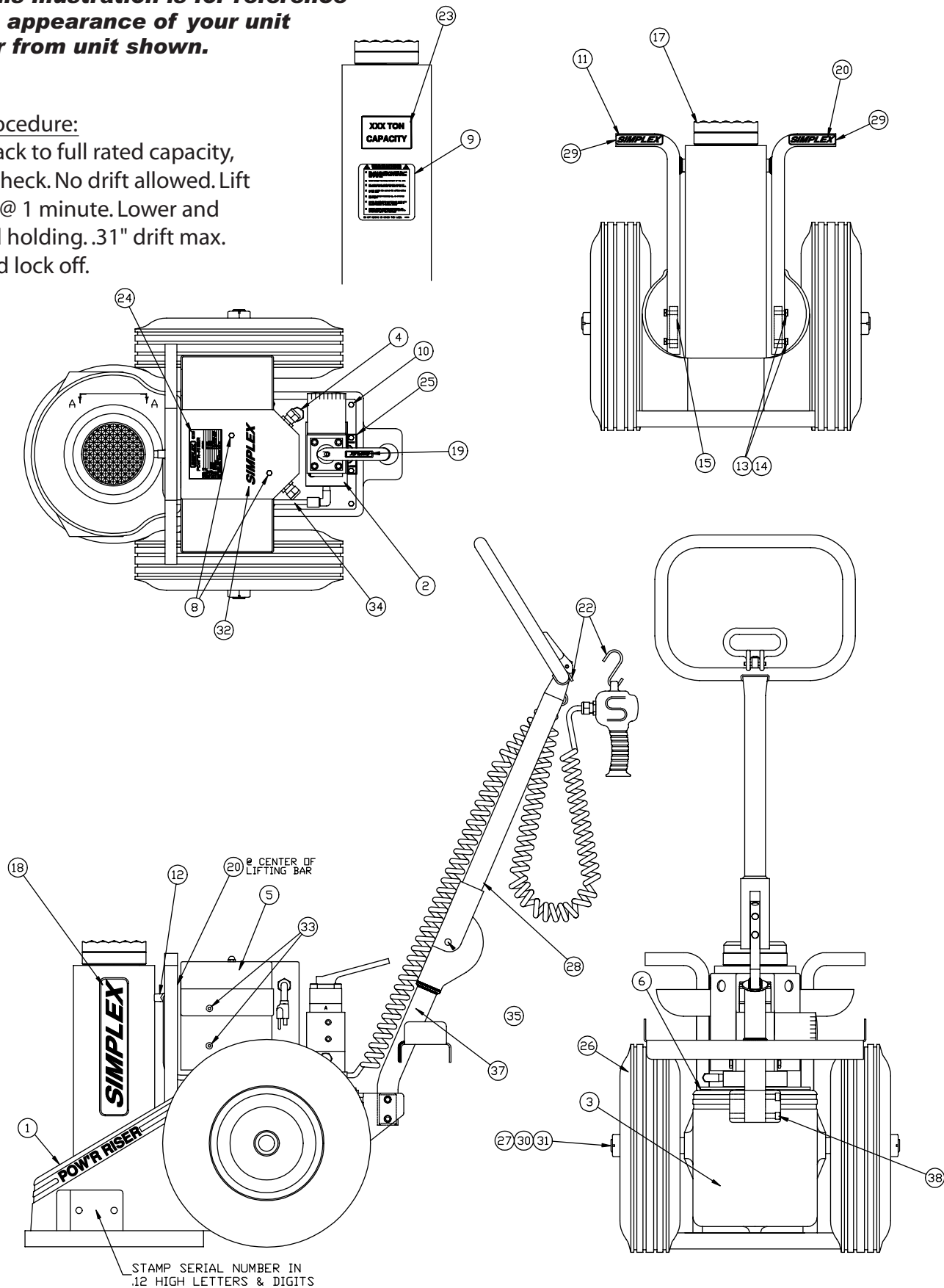
100 Ton Electric Pow'r-Riser Models

Common components used in Jack

NOTE: This illustration is for reference only. The appearance of your unit may differ from unit shown.

Testing Procedure:

Load the jack to full rated capacity, hold and check. No drift allowed. Lift 3.25-2.25" @ 1 minute. Lower and check load holding. .31" drift max. before load lock off.



100 Ton Electric Pow'r-Riser Models

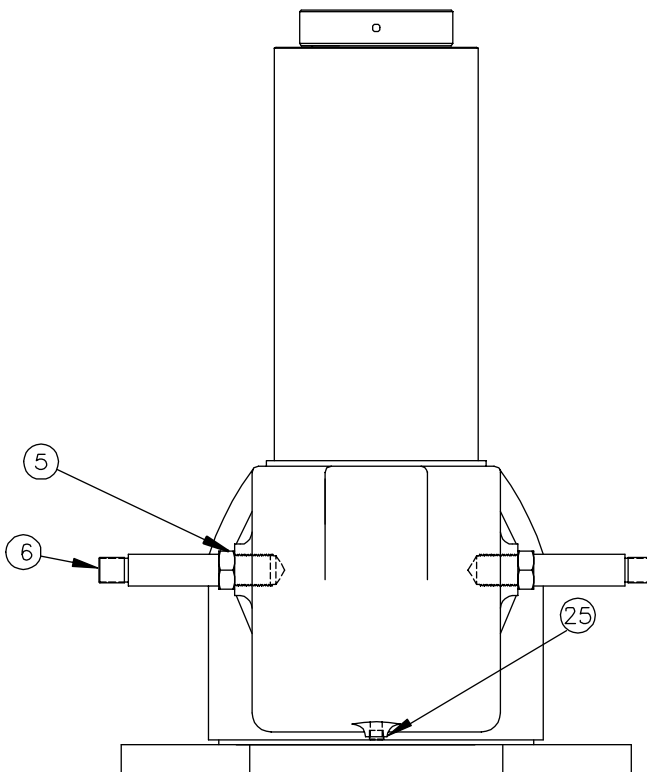
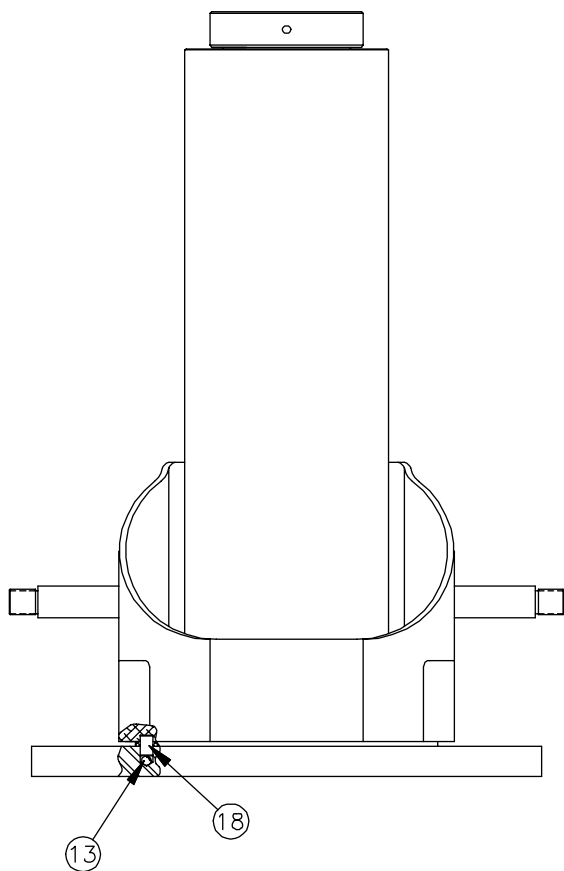
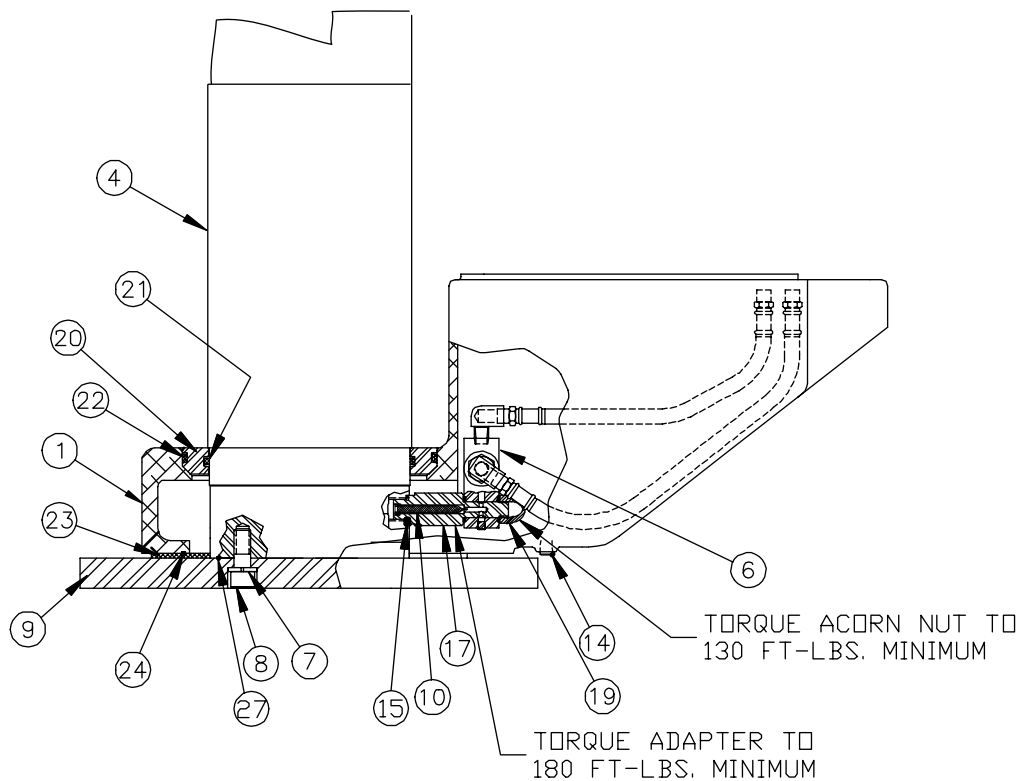
Common components used in Jack

ITEM #	DESCRIPTION	JE10026	JE10026A	JE10037	JE10037A	QTY.
		115V.	230V.	115V.	230V.	
01	PR 10026 BASIC ASM	SEE PAGE 5-6				1.00
02	PUMP ASM 100 TON	SEE PAGE 7-9				1.00
03	OIL RYKON MV BULK	18129	18129	18129	18129	5.00
04	PLUG HEX O-RING	88743	88743	88743	88743	1.00
05	SHROUD ASM	SEE PAGE 21				1.00
06	GASKET	85469	85469	85469	85469	1.00
08	ACORN NUT 1/4-20 PLT	42336	42336	42336	42336	2.00
09	DECAL,WARNING-	89292	89292	89292	89292	1.00
10	SCREW 1/4-20X3/4 S.T	69249	69249	69249	69249	14.00
11	LIFTING BAR 24"	42358	42358	N/A		1.00
12	MALE ELBOW 3/8-3/8	40085	40085	40085	40085	1.00
13	HCS 5/16-18X1.25 PLT	42363	42363	N/A		4.00
14	LOCK WASHER 5/16	93942	93942	N/A		4.00
15	NUT PLT - LIFT BAR	42365	42365	N/A		2.00
17	LOAD CAP LONG STM	42208	42208	42208	42208	1.00
18	SIMPLEX LOGO LARGE	89967	89967	89967	89967	1.00
19	SIMPLEX LOGO	88187	88187	88187	88187	1.00
20	SIMPLEX LOGO	88186	88186	N/A		3.00
22	S-HOOK	42367	42367	42397	42367	2.00
23	100 TON CAP LBL	42531	42531	42531	42531	1.00
24	MODEL LABEL	42432	45715	42433	45608	1.00
25	CONTROL VAL PLATE	86027	86027	86027	86027	1.00
26	TIRE/RIM ASM	41944	41944	41944	41944	2.00
27	SPACER	41945	41945	41945	41945	2.00
28	HANDLE ASM	SEE PAGE 20				1.00
29	SQUARE HOLE PLUG	43021	43021	N/A		2.00
30	HEX LOCK NUT 1"-8	46053	46053	46053	46053	2.00
32	TK SIMPLEX LOGO	88165	88165	88165	88165	1.00
33	BHSCS 10-24 X .5 LG	69236	69236	69236	69236	4.00
34	TUBE 10026	41979	41979	42412	42412	1.00
35	SCREW SHOULDER	41983	41983	41983	41983	1.00
37	LOWER WELDMENT 4"	41598	41598	41598	41598	1.00
38	SHCS 3/8-16 X 2 1/2	93599	93599	93599	93599	2.00

100 Ton Electric Pow'r-Riser Models

Common components used in Jack

(41939, 42408)
P.R. BASIC ASM



100 Ton Electric Pow'r-Riser Models

Common components used in Jack

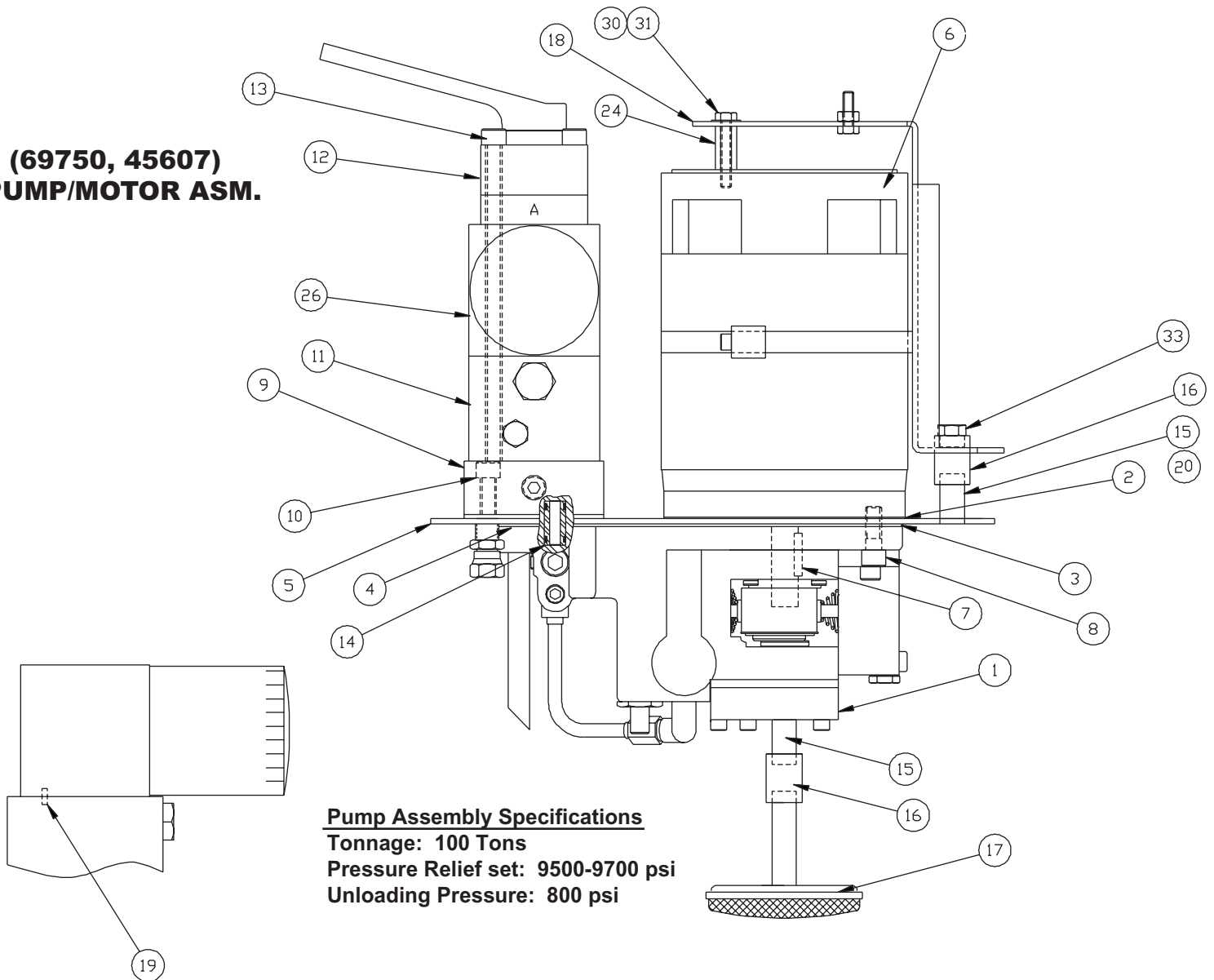
**(41939, 42408)
P.R. BASIC ASM**

ITEM #	DESCRIPTION	JE10026	JE10026A	JE10037	JE10037A	QTY.
		41939	41939	42408	42408	
01	HOUSING MACH'G P.R.	41886	41886	41886	41886	1.00
04	100 TON CYL ASM	41917	41917	42430	42430	1.00
05	JAM NUT	85477	85477	85477	85477	2.00
06	OC VALVE / HOSES	SEE PAGE 12				1.00
07	LOCK WASHER 5/8	93947	93947	93947	93947	6.00
08	SHCS 5/8-11 X 1.5 LG	93605	93605	93605	93605	6.00
09	BASE PR 100T	41941	41941	41941	41941	1.00
10	SCREEN - 2" NIPPLE	89754	89754	89754	89754	1.00
13	RUBBER BALL 3/8" 70	44968	44968	44968	44968	2.00
14	1/4 SOC PIPE PLUG	93950	93950	93950	93950	1.00
15	GASKET ADAPTER	*	*	*	*	1.00
16	AXLE SHAFT POW'R RISER	41948	41948	41948	41948	2.00
17	ADAPTER O.C. VALV	41942	41942	41942	41942	1.00
18	PR BASE PIN	42275	42275	42275	42275	2.00
19	ACORN NUT 5/8-11	42263	42263	42263	42263	1.00
20	RING 100 TON	41940	41940	41940	41940	1.00
21	O-RING 6 3/4 X 7 1/4	*	*	*	*	1.00
22	O-RING 9" X 9 1/2	-	*	*	*	1.00
23	GASKET BASE POW'R RISER	*	*	*	*	1.00
24	O-RING POWER RISER	*	*	*	*	1.00
25	MAGNET	66021	66021	66021	66021	1.00
27	O-RING 6" X 6 1/4	*	*	*	*	1.00
	PACKING KIT (* = COMPONENTS)	54411	54411	54411	54411	1.00

100 Ton Electric Pow'r-Riser Models

Motor Sub Assembly

**(69750, 45607)
PUMP/MOTOR ASM.**



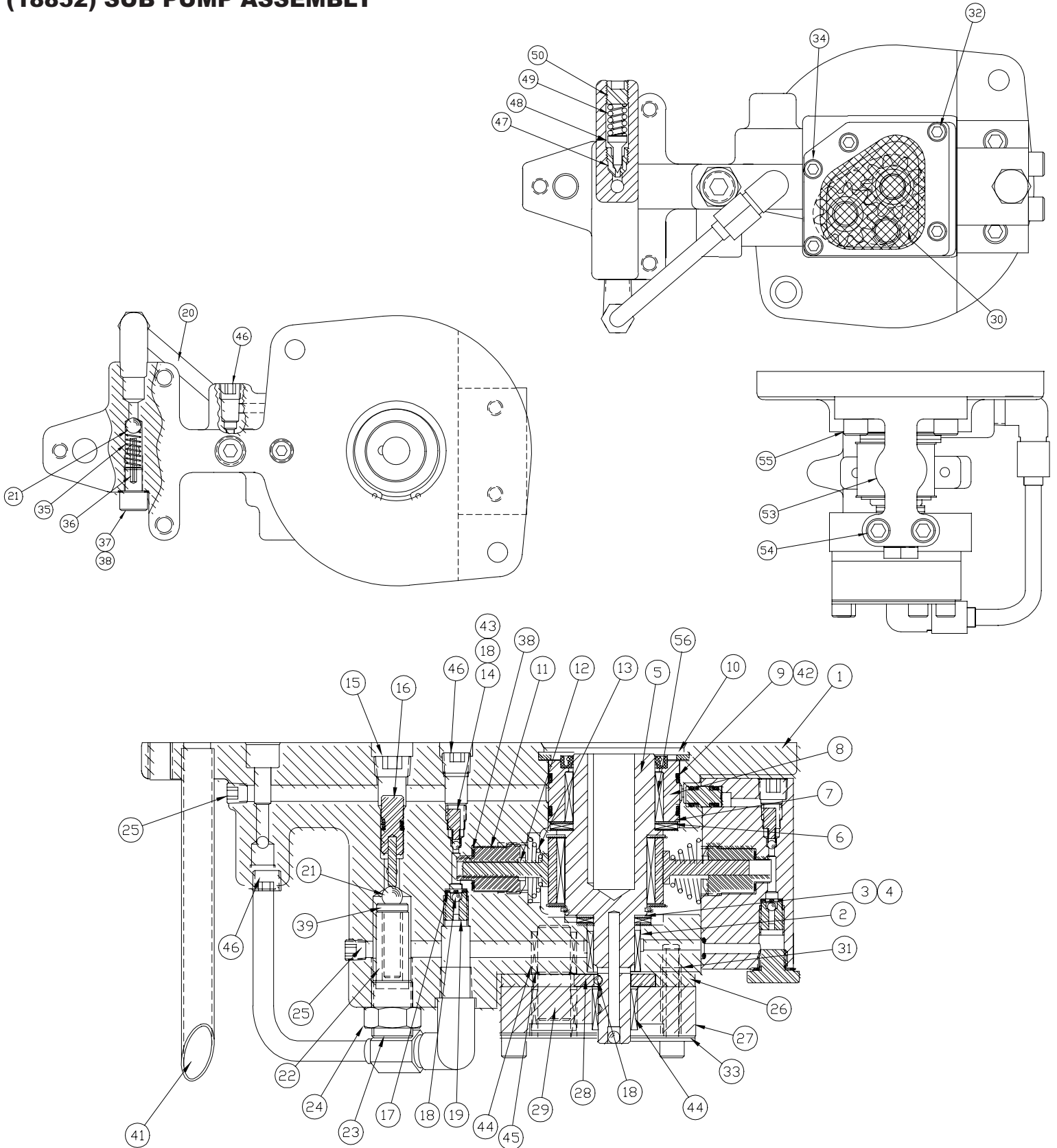
ITEM #	DESCRIPTION	115 V.		230 V.		QTY.
		69750	45607	69750	45607	
01	PUMP ASM 2P 1-1/2HP	SEE PAGE 8-9	SEE PAGE 8-9	1.00		
02	GASKET-MOTOR	66012	66012	1.00		
03	GASKET-PUMP @ MOTOR	68231	68231	1.00		
04	GASKET-PUMP @ VALVE	68551	68551	1.00		
05	PR COVER PLATE	42254	42254	1.00		
06	1 1/2HP, PM MOTOR	68376	68403	1.00		
07	PIN,DOWEL 3/16 1	69026	69026	1.00		
08	SHCS 3/8-16X1-1/4	93596	93596	2.00		
09	MANIFOLD ASM NPR	SEE PAGE 15	SEE PAGE 15	1.00		
10	SHCS 3/8-16X1 1/2	86184	86184	3.00		
11	LOCKING VLVE W/REL	42480	42480	1.00		
12	4 W VAL ASM MAN MTG	SEE PAGE 13	SEE PAGE 13	1.00		
13	SHCS 3/8-16X8.0	42383	42383	4.00		

ITEM #	DESCRIPTION	115 V.		230 V.		QTY.
		69750	45607	69750	45607	
14	ADAPTER ASSY.	SEE PAGE 10	SEE PAGE 10	1.00		
15	NIPPLE 1/4NPT X 1.5L	69442	69442	2.00		
16	PIPE COUPLING 1/4	80241	80241	2.00		
17	SCREEN	68884	68884	1.00		
18	BRK ASM NPR	SEE PAGE 16-17	SEE PAGE 16-17	1.00		
19	ROLL PIN 1/8X3/8 LG	561604	561604	1.00		
24	SPACER	69353	69353	2.00		
26	FILTER BLOCK ASM	SEE PAGE 11	SEE PAGE 11	1.00		
30	HHCS 1/4-20X1.5 LG.	84417	84417	2.00		
31	WASHER SS 1/4"	88429	88429	2.00		
33	BREATHER VENT	69264	69264	1.00		
34	PUSH-ON TERMINAL	65888	65888	2.00		

100 Ton Electric Pow'r-Riser Models

Sub Pump Assembly

(18852) SUB PUMP ASSEMBLY



100 Ton Electric Pow'r-Riser Models

Sub Pump Assembly

(18852) PART LIST

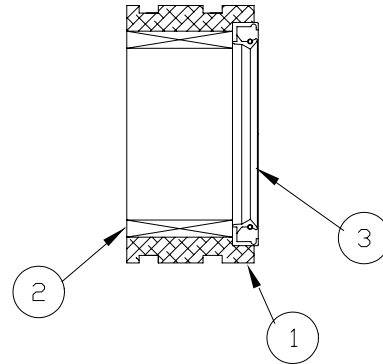
ITEM #	DESCRIPTION	PART #	QTY.
		PUMP ASM	
01	PUMP BODY	43769	1.00
02	BEARING	68360	1.00
03	THRUST BEARING	66033	1.00
04	THRUST WASHER	66474	2.00
05	ECCENTRIC SHAFT ASSEMBLY	See Page 10	1.00
06	THRUST BEARING	66106	1.00
07	THRUST WASHER	66108	2.00
08	ADAPTER-SHAFT ASM	See Page 10	1.00
09	O-RING	56020322	2.00
10	RETAINING RING	68978	1.00
11	ADAPTER	68945	1.00
12	PISTON	67868	1.00
13	SPRING, PISTON	68340	1.00
14	BALL STOP	68810	1.00
15	1/4 SOC PIPE PLUG	93950	1.00
16	UNLOADING PISTON ASSEMBLY	See Page 10	1.00
17	BALL RETAINER	66043	1.00
18	BALL	90906	5.00
19	INTAKE SEAT	66046	1.00
20	TUBE ASM	68851	1.00
21	BALL	91701	2.00
22	UNLOADING SPRING	43671	1.00
23	SET SCREW UNLOADING VALVE	43674	1.00
24	HEX NUT UNLOADING VALVE	43675	1.00
25	1/16 SOC PIPE PLUG	97641	2.00
26	PLATE-CENTER	68848	1.00
27	PLATE-BOTTOM	68849	1.00
28	GEAR-PUMP	68883	2.00
29	SHAFT-IDLER	68850	1.00
30	SCREEN	68921	1.00
31	TUBE-GUIDE	68894	2.00
32	SHCS 1/4-28 X 1 3/4	68255	4.00
33	PLATE-SCREEN MTG.	68927	1.00
34	SHCS 1/4-28 X 1 1/2	89148	1.00
35	SPRING	68225	1.00
36	ROLL PIN	81332	1.00
37	SCREW, BALL STOP	68226	1.00
38	GASKET	85726	2.00
39	SPRING CAP UNLOADING VALVE	43673	1.00
41	TUBE RETURN	68569	1.00
42	SHAFT ADP BACKUP WAS	69513	2.00
43	SPRING	66042	1.00
44	BEARING	68891	3.00
45	RING-RETAINING	68892	1.00
46	PIPE PLUG	81093	3.00
47	SEAT - EXT RELIEF	68004	1.00
48	CONE - EXT RELIEF	68003	1.00
49	SPRING - RELIEF VALVE	66085	1.00
50	RELIEF VALVE ADJUSTING SCREW	66083	1.00
53	PISTON BLK	See Page 11	1.00
54	SHCS 5/16-24 X 1.75	69392	2.00
55	SHCS 5/16-24 X 5/8	82687	2.00

100 Ton Electric Pow'r-Riser Models

Sub Component Assemblies

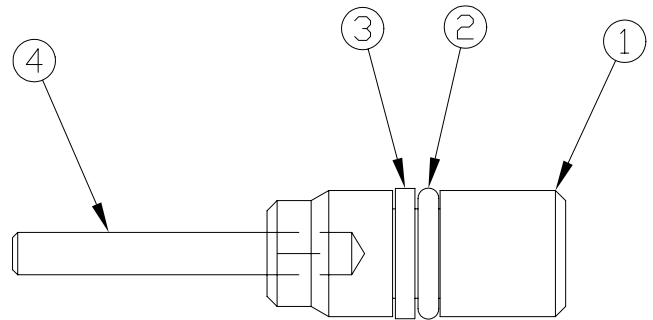
(68829) ADAPT-SHAFT ASM.

ITEM #	DESCRIPTION	PART #	QTY.
01	ADAPTER SHAFT	68912	1.00
02	BEARING	66030	1.00
03	SEAL	68901	1.00



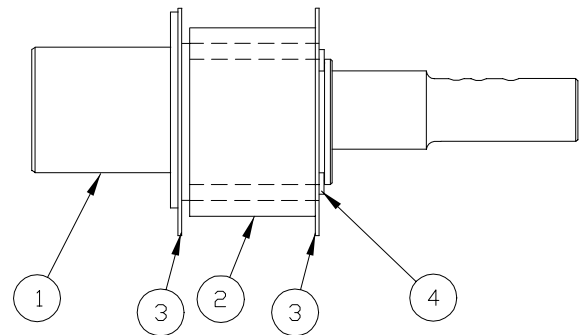
(43766) UNLOAD. PISTON ASM.

ITEM #	DESCRIPTION	PART #	QTY.
01	UNLOAD PISTON	43765	1.00
02	O RING	5602009	1.00
03	BACK-UP WASHER	43768	1.00
04	ROLL PIN	43686	1.00



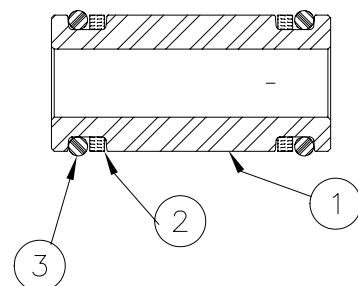
(69082) ECCENTRIC SHAFT ASM.

ITEM #	DESCRIPTION	PART #	QTY.
01	ECCENTRIC SHAFT	68859	1.00
02	BEARING	69081	1.00
03	BEARING WASHER	69475	2.00
04	RET. RING	67863	1.00
05	BALL	90548	1.00



(68963) ADAPTER ASM.

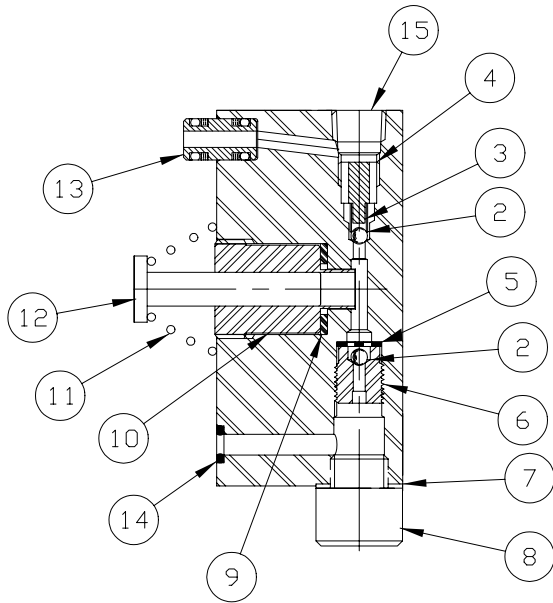
ITEM #	DESCRIPTION	PART #	QTY.
01	VALVE ADAPTER	88073	2.00
02	B-U RING	65881	2.00
03	VALVE ADAPTER	5602012	1.00



100 Ton Electric Pow'r-Riser Models

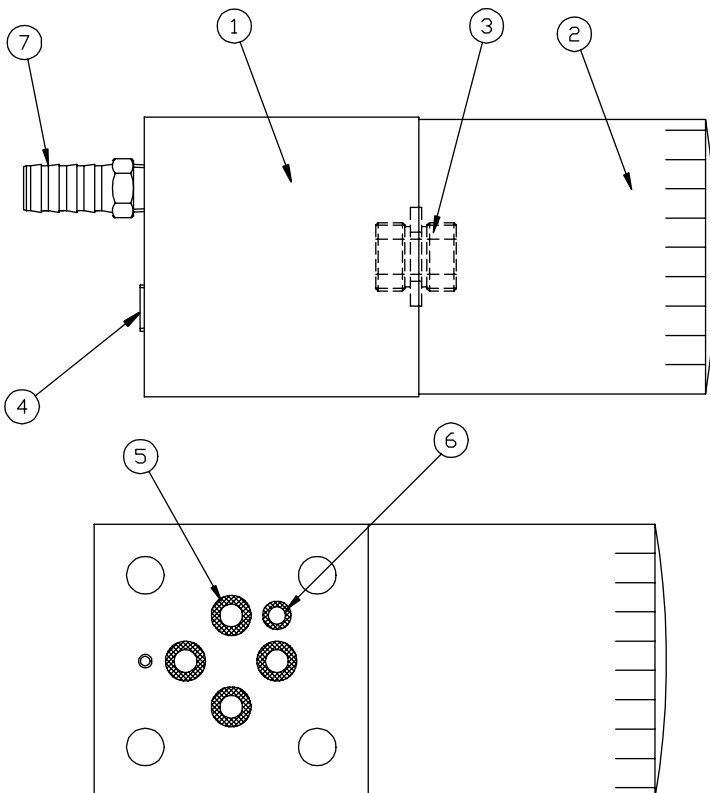
Sub Component Assemblies

(68501) PISTON BLK.



ITEM #	DESCRIPTION	PART #	QTY.
02	BALL 1/8"	90906	2.00
03	SPRING	66042	1.00
04	BALL STOP	68810	1.00
05	BALL RETAINER	66043	1.00
06	INTAKE SEAT	66046	1.00
07	GASKET 29/64 X 5/8	86269	1.00
08	SCREW	68825	1.00
09	GASKET 25/64X19/32	85726	1.00
10	ADAPTER .225 PISTON	68945	1.00
11	SPRING, PISTON	68340	1.00
12	PISTON .225 DIA.	67868	1.00
13	ADAPTER ASSY.	68970	1.00
14	O-RING 3/16X5/16	5602008	1.00
15	PIPE PLUG 1/8" FLUSH	81093	1.00

(69740U) FILTER BLK. ASM

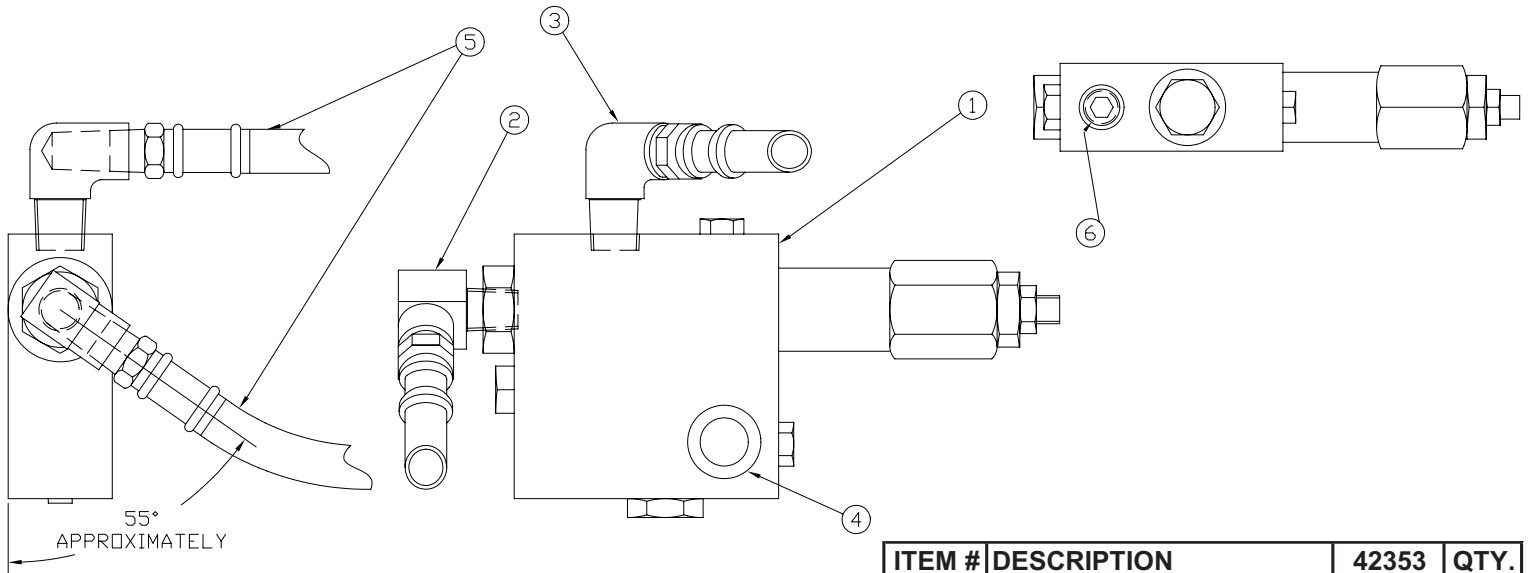


ITEM	PART #	DESCRIPTION	QTY
01	69546	FILTER BLOCK MACH.	1.00
02	69670	OIL FILTER POWR PUMP	1.00
03	69144	ADAPTER FILTER	1.00
04	93950	1/4 SOC PIPE PLUG	2.00
05	56020112	O-RING 5/16X7/16 URE	4.00
06	5602008	O-RING 3/16X5/16	1.00

100 Ton Electric Pow'r-Riser Models

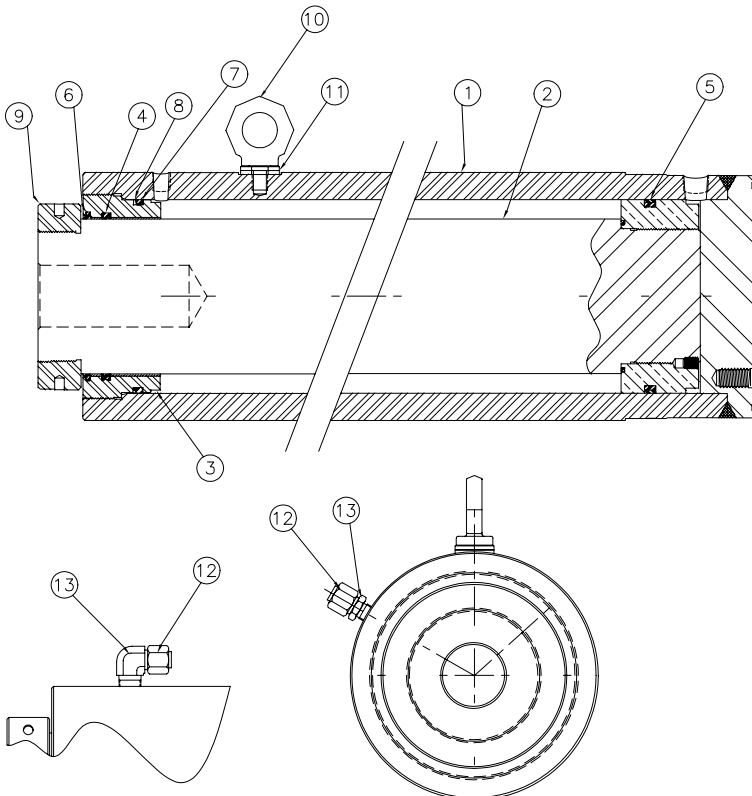
Sub Component Assemblies

(42353) OC VALVE ASM



ITEM #	DESCRIPTION	42353	QTY.
00	BALL 7/16"	94414	1.00
01	O.C. VLVE ASM NEW PR	69522M	1.00
02	ELBOW 1/4 90DEG STRT	18970	1.00
03	ELBOW 1/4-3/8 90STRT	42352	1.00
04	GASKET-PLUG	68183	2.00
05	HOSE 1/4X17 NEW PR	42354	2.00
06	PIPE PLUG 3/8" FLUSH	84084	1.00

(41917, 42430) CYLINDER ASM

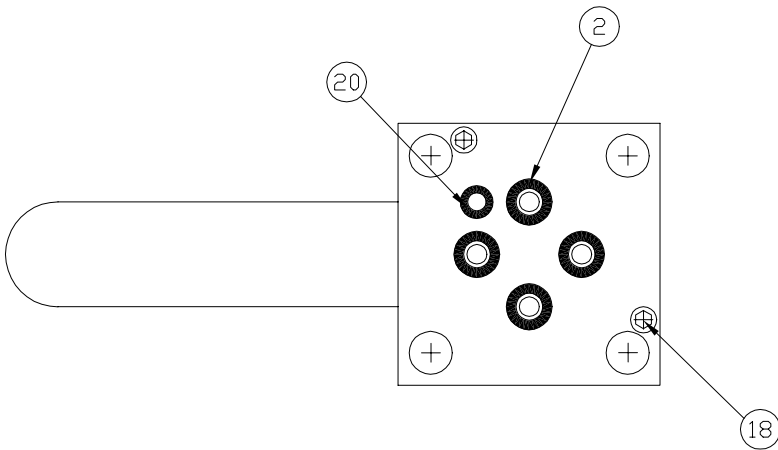
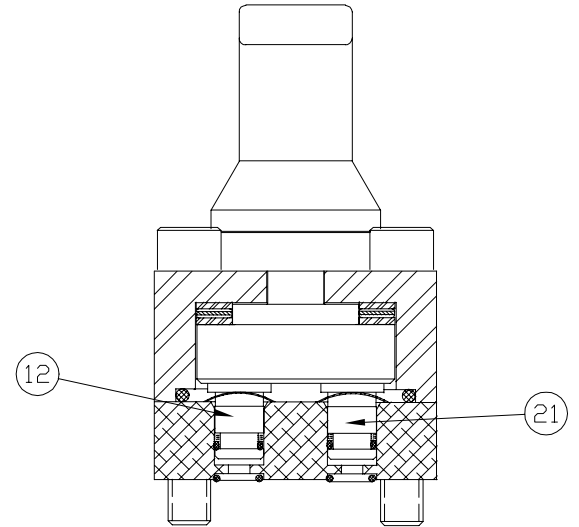
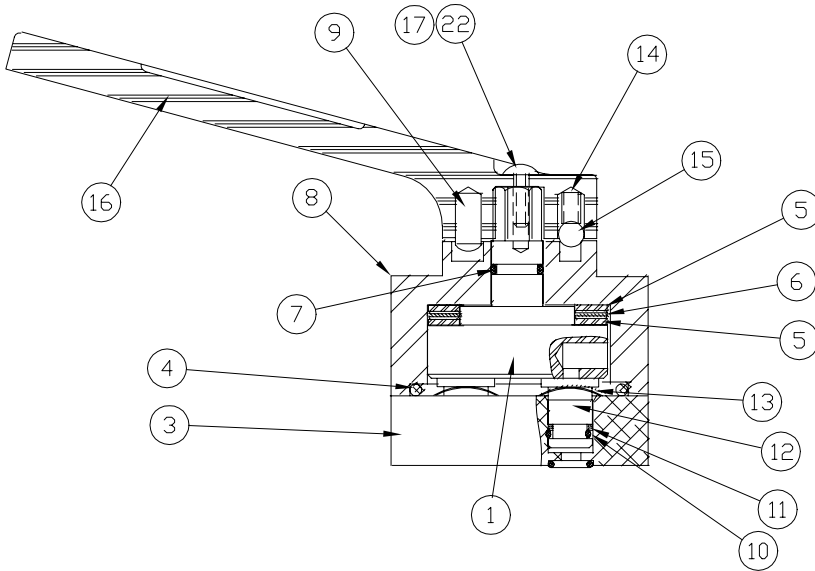


ITEM #	DESCRIPTION	41917	42430	QTY.
01	100 TON BODY WELDM'T	41918	42429	1.00
02	P-R PISTON ROD ASM	41921	42427	1.00
03	P-R HEAD GLAND	41924	41924	1.00
04	T-SEAL ROD 4" DIA.	*	*	1.00
05	T-SEAL PISTON 5 1/4"	*	*	1.00
06	WIPER 4" ROD DIA	*	*	1.00
07	O-RING 5" X 5 1/4	*	*	1.00
08	B-U WASHER	*	*	1.00
09	RING	41925	41925	1.00
10	SWIVEL EYE BOLT 1/2	N/A	43308	1.00
11	WASHER EYEBOLT	N/A	44888	1.00
12	O-RING FACE SEAL PLUG	45664	45664	1.00
13	ELBOW 3/8 NPT-O-RING	44865	45666	1.00
PACKING LIST (* = COMPONENTS)		54401	54401	1.00

100 Ton Electric Pow'r-Riser Models

Valve Sub Assemblies

(69101) 4 WAY MANUAL



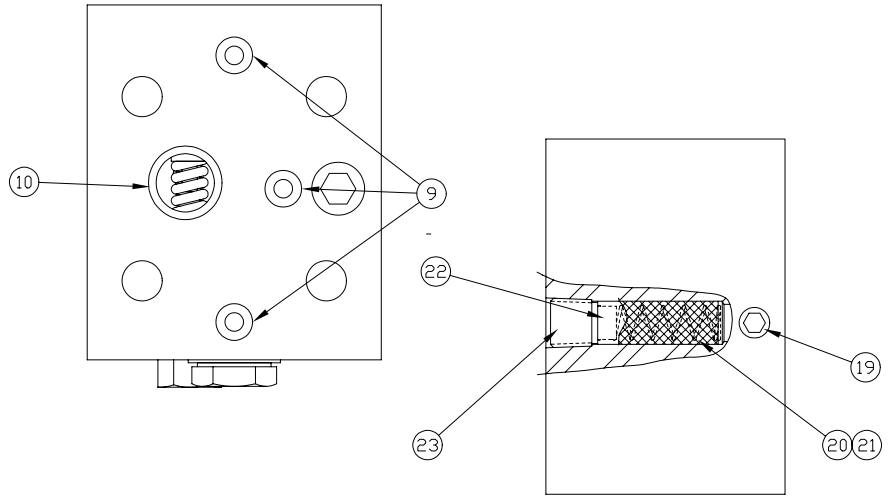
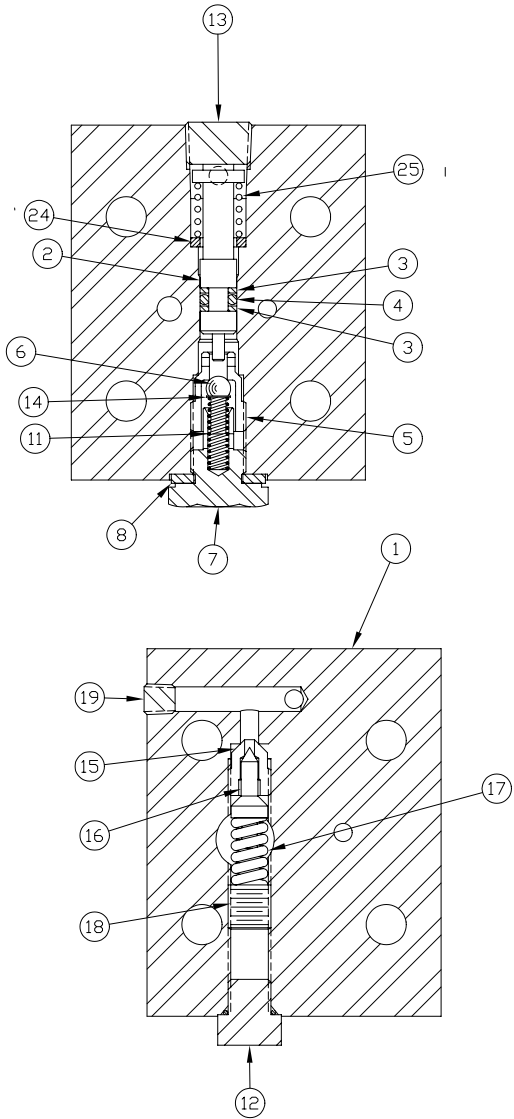
ITEM #	DESCRIPTION	PART#	
		4 WAY VAL	QTY.
01	VALVE ROTOR	43762	1.00
2	O-RING	56020112	4.00
03	SUBPLATE- VALVE	68180	1.00
04	O-RING	5602225	1.00
05	THRUST WASHER	68026	2.00
06	THRUST BEARING	68155	1.00
07	O-RING	5602012	1.00
08	UPPER VALVE BLOCK	69135	1.00
09	DRIVE LOK PIN	93804	1.00
10	O-RING	5602011	3.00
11	WASHER	65882	3.00
12	SHEAR SEAL	68029	1.00
13	SPRING WASHER	68028	3.00
14	DETENT SPRING	68025	1.00
15	BALL	92549	1.00
16	VALVE HANDLE	69091	1.00
17	SCREW	44595	1.00
18	SCREW	85317	2.00
NS	SCREW	93598	4.00
20	O-RING	5602008	1.00
21	SHEAR SEAL	68181	2.00
22	LOCKWASHER	Y0010765	1.00

NS=NOT SHOWN

100 Ton Electric Pow'r-Riser Models

Valve Sub Assemblies

(42480) LOCKING VALVE W/ RELIEF

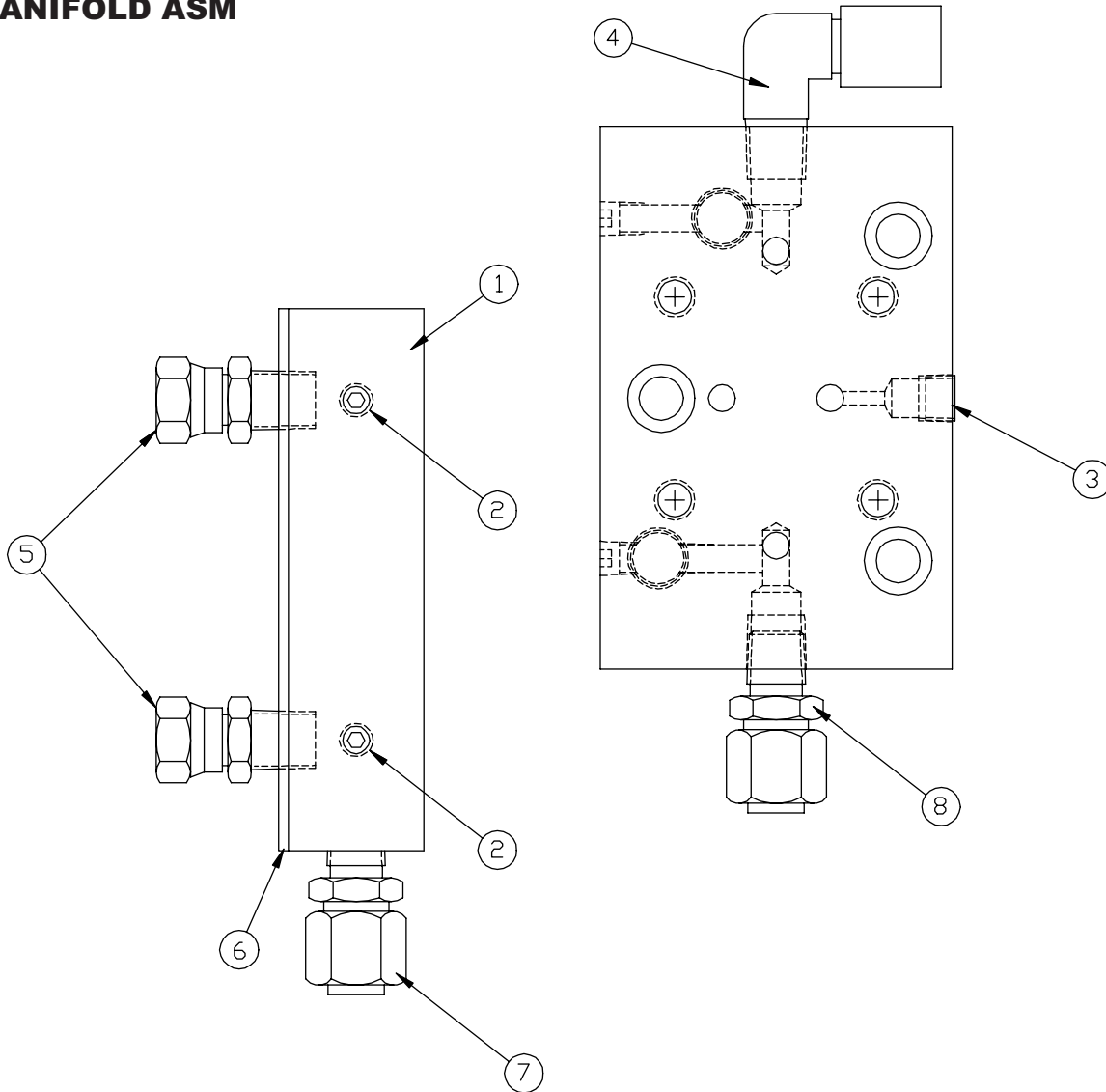


ITEM #	DESCRIPTION	PART #	QTY
01	LOCK VLVE BDY-RELIEF	42307	1.00
02	SPOOL PISTON PR LCK	42727	1.00
03	BU-WASHER 8-106	5608106	2.00
04	O-RING 3/16X3/8	5602106	1.00
05	SEAT	68590	1.00
06	BALL 9/32"	92526	1.00
07	PLUG-ADAPT P.R. LOCK	69508	1.00
08	GASKET-PLUG	68183	1.00
09	O-RING 1/4X3/8 URETH	56020102	3.00
10	O-RING 5/8X3/4 URETH	56020162	1.00
11	COMPRESSION SPRING	68870	1.00
12	PLUG SAE #4	68258	1.00
13	PIPE PLUG 3/8" FLUSH	84084	1.00
14	SPRING EYELET LOCK	69870	1.00
15	SEAT - EXT RELIEF	68004	1.00
16	CONE - EXT RELIEF	68003	1.00
17	SPRING - RELIEF VALVE	66085	1.00
18	RELIEF VALVE ADJUSTING SCREW	66083	1.00
19	1/16 PIPE PLUG-FLUSH	40049	3.00
20	SCREEN O.C. VALVE	69518	1.00
21	SPRING OC VLV SCREEN	42423	1.00
22	SCREEN CAP	69517	1.00
23	PIPE PLUG 1/4" FLUSH	82552	1.00
24	WASHER PR LOCK BLOCK	42726	1.00
25	COMPRESSION SPRING	68871	1.00

100 Ton Electric Pow'r-Riser Models

Manifold Assembly

(69749) MANIFOLD ASM

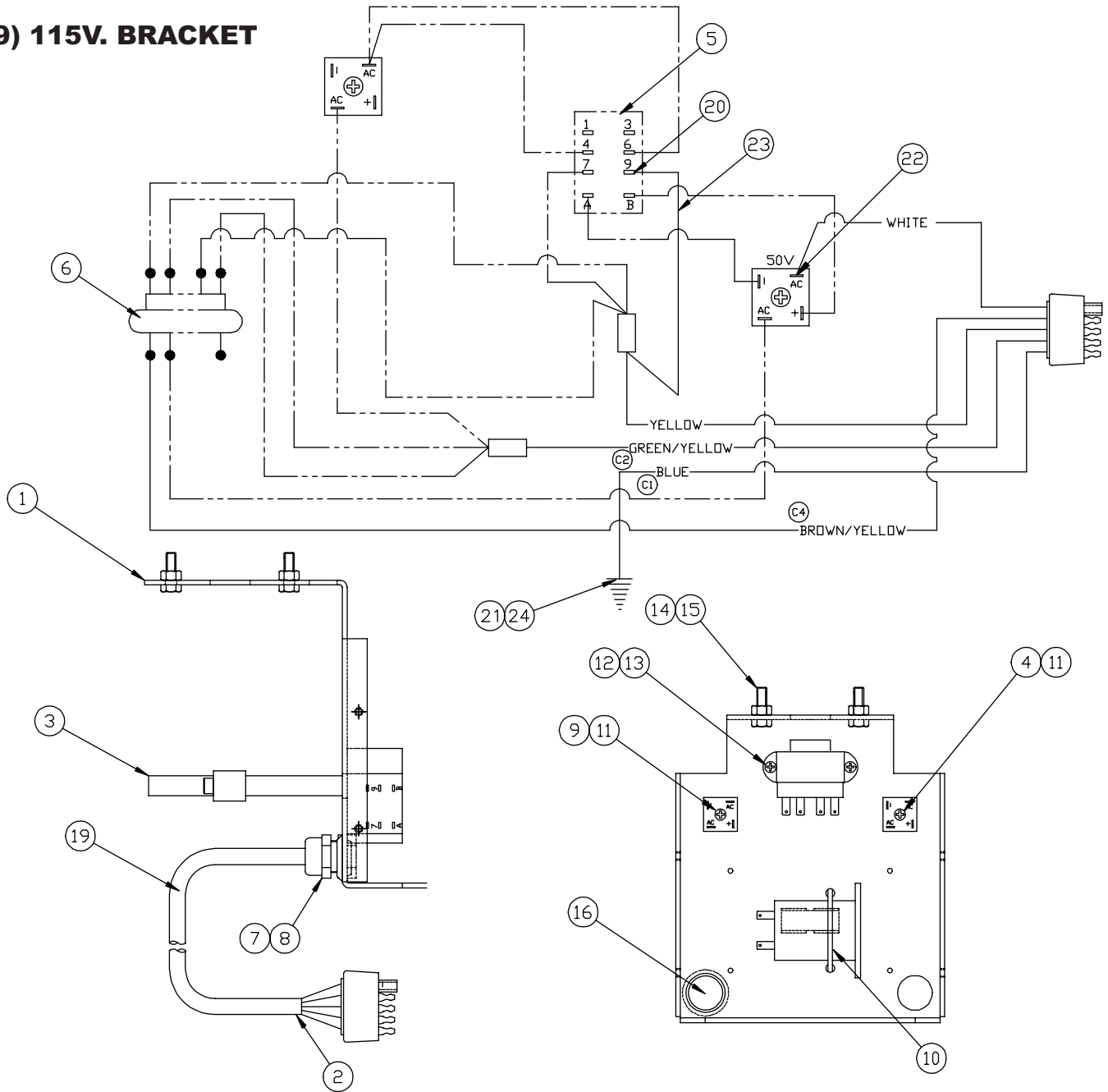


ITEM	PART #	DESCRIPTION	QTY
01	69429	MANIFOLD POWR'RISER	1.00
02	40049	1/16 PIPE PLUG-FLUSH	2.00
03	81093	PIPE PLUG 1/8" FLUSH	1.00
04	89698	MALE ELBOW 3/8-1/4	1.00
05	41964	SWIVEL FITTING	2.00
06	69510	GASKET, VALVE POWR'RS	1.00
07	45664	O-RING FACE SEAL PLUG	1.00
08	45663	O-RING FACE TUBE FITTING 1/4NPTF	1.00

100 Ton Electric Pow'r-Riser Models

Bracket Assemblies

(69739) 115V. BRACKET



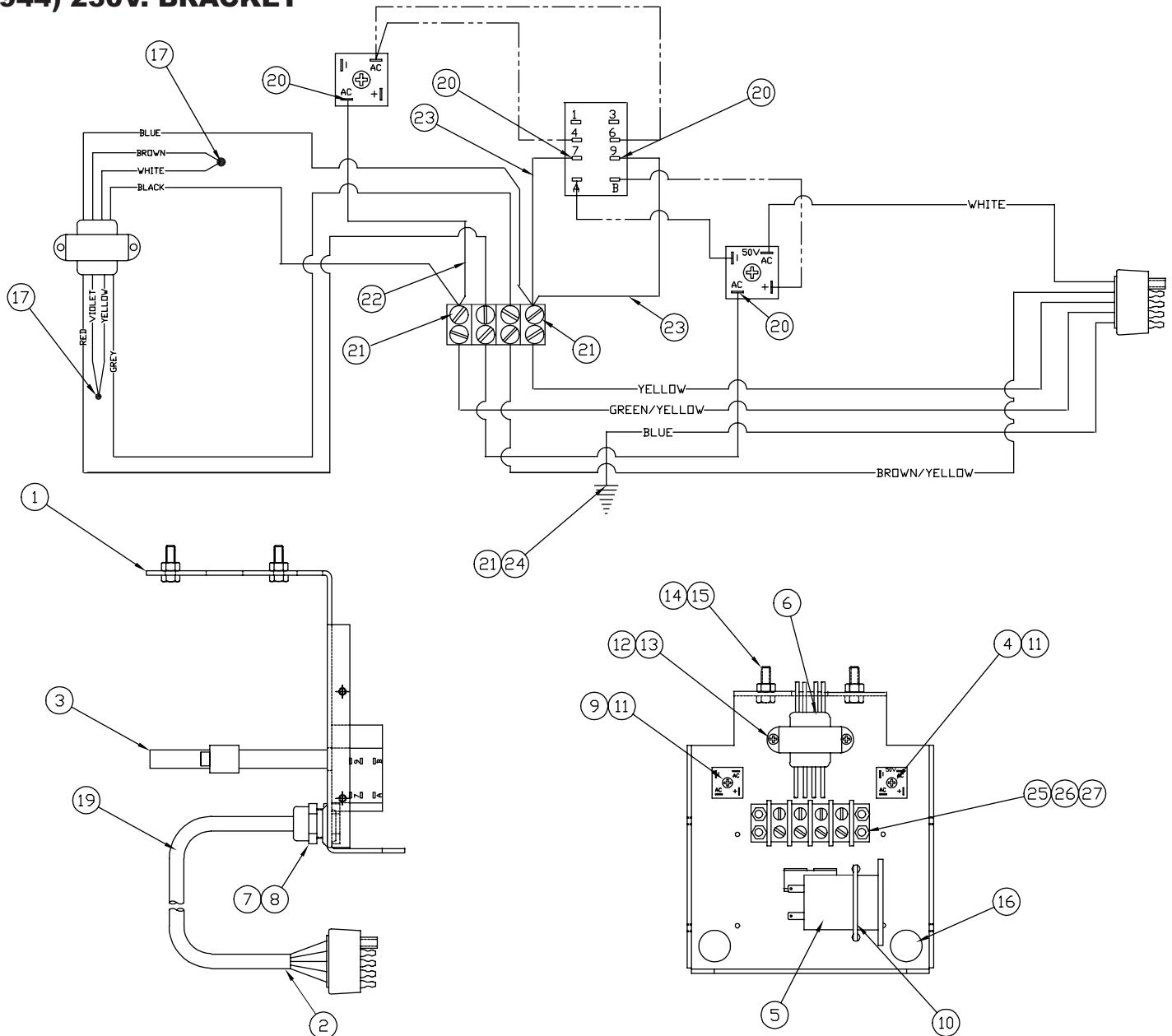
ITEM	PART #	DESCRIPTION	QTY
01	69256	OHIO MOUNTING BRCKT	1.00
02	42357	PLUG MALE 5WAY	1.00
03	69235	HOSE CLAMP	1.00
04	69489	RECTIFIER 25A 50V	1.00
05	69587	RELAY SUB-ASM 70 SER	1.00
06	69586	TRANSFORMER SUB ASM	1.00
07	68375	FITTING, CORD L-TIGHT	1.00
08	85510	LOCKNUT 1/2 INCH	1.00
09	68623	BRIDGE RECTIFIER	1.00
10	68683	TIE CABLE	2.00

ITEM	PART #	DESCRIPTION	QTY
11	88032	RHMS 10-32 X 5/8	2.00
12	68620	HEX NUT 10-24 PLATED	2.00
13	85961	SCREW 10-24X5/8 LG	2.00
14	86512	HHCS 1/4-20 X 5/8 LG	2.00
15	93849	HEX NUT 1/4-20 PLATD	2.00
16	69652	HOLE PLUG 7/8"	1.00
19	68107	HEAT SHRINK TUBE	1.00
20	65888	PUSH-ON TERMINAL	2.00
21	98250	SCREW, FILL HD MACH	1.00
23	68261	WIRE #14 BLACK	1.00
24	65887	SPADE, TERMINAL	1.00

100 Ton Electric Pow'r-Riser Models

Bracket Assembly

(69944) 230V. BRACKET



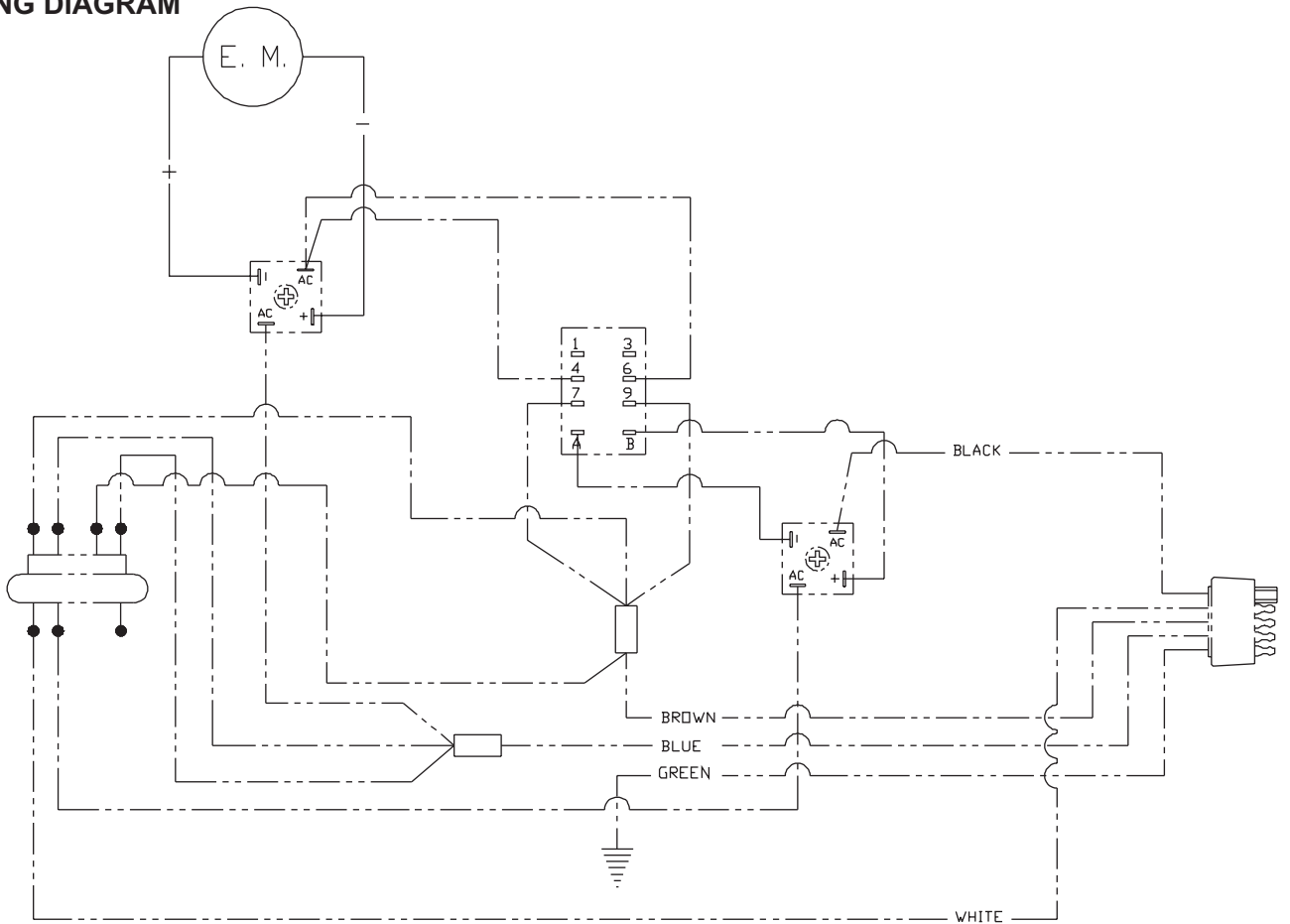
ITEM	PART #	DESCRIPTION	QTY
01	69256	OHIO MOUNTING BRCKT	1.00
02	42357	PLUG MALE 5WAY	1.00
03	69235	HOSE CLAMP	1.00
04	69489	RECTIFIER 25A 50V	1.00
05	69587	RELAY SUB-ASM 70 SER	1.00
06	69586	TRANSFORMER SUB ASM	1.00
07	68375	FITTING, CORD L-TIGHT	1.00
08	85510	LOCKNUT 1/2 INCH	1.00
09	68623	BRIDGE RECTIFIER	1.00
10	68683	TIE CABLE	2.00
11	88032	RHMS 10-32 X 5/8	2.00
12	68620	HEX NUT 10-24 PLATED	2.00
13	85961	SCREW 10-24X5/8 LG	2.00

ITEM	PART #	DESCRIPTION	QTY
14	86512	HHCS 1/4-20 X 5/8 LG	2.00
15	93849	HEX NUT 1/4-20 PLATD	2.00
16	69652	HOLE PLUG 7/8"	1.00
17	68093	WIRE NUT	2.00
19	68107	HEAT SHRINK TUBE	1.00
20	65888	PUSH-ON TERMINAL	2.00
21	98250	SCREW, FILL HD MACH	1.00
22	68262	WIRE #14 WHITE	1.00
23	68261	WIRE #14 BLACK	1.00
24	65887	SPADE, TERMINAL	1.00
25	69599	TERMINAL STRIP POLE	1.00
26	68101	R.H.M.S. 10-32X1	4.00
27	93846	HEX NUT	4.00

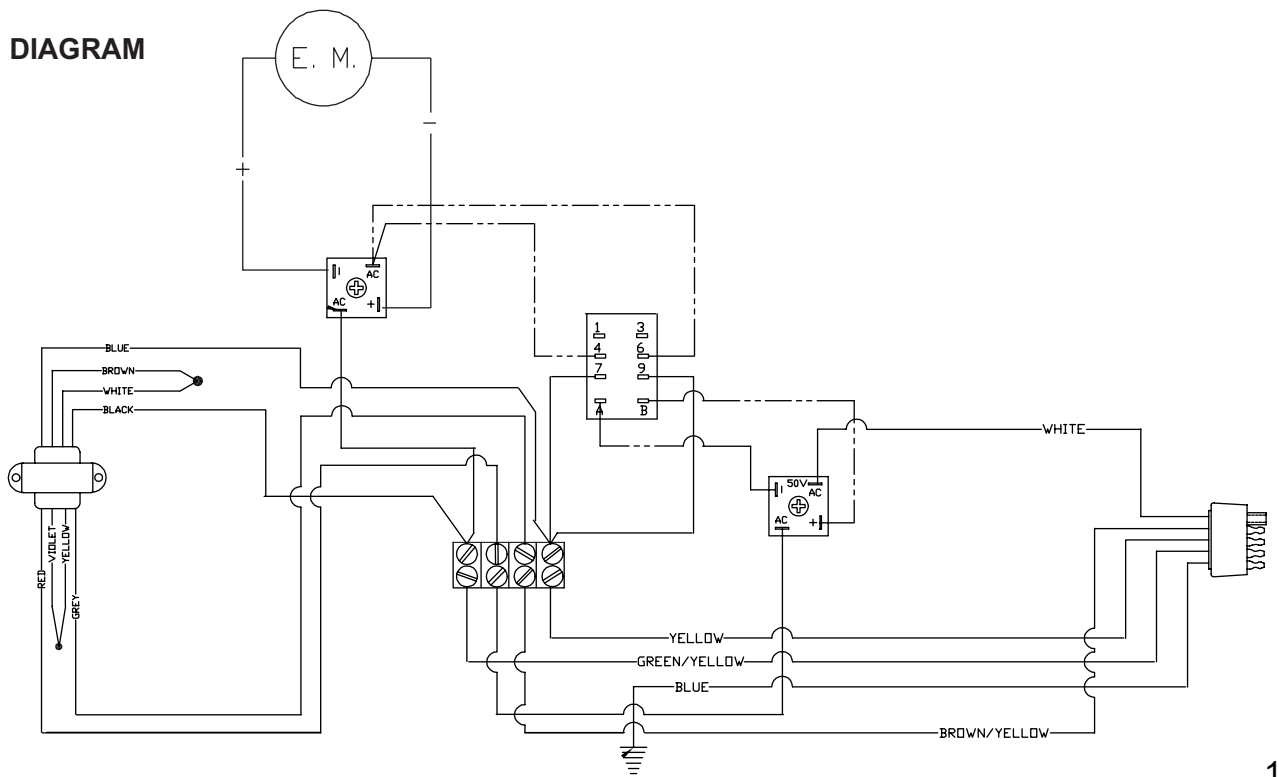
100 Ton Electric Pow'r-Riser Models

Wiring Configurations

115 VOLT WIRING DIAGRAM



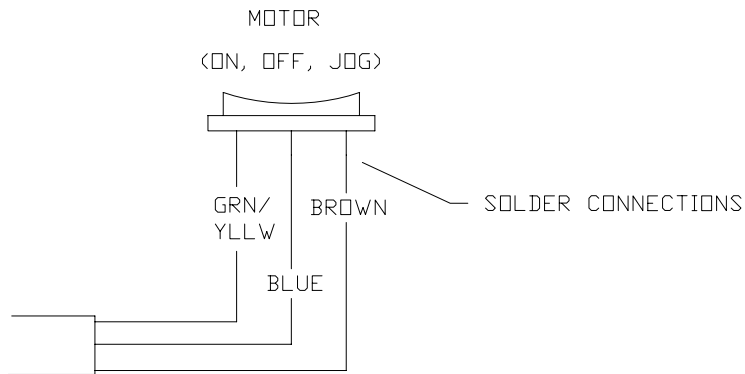
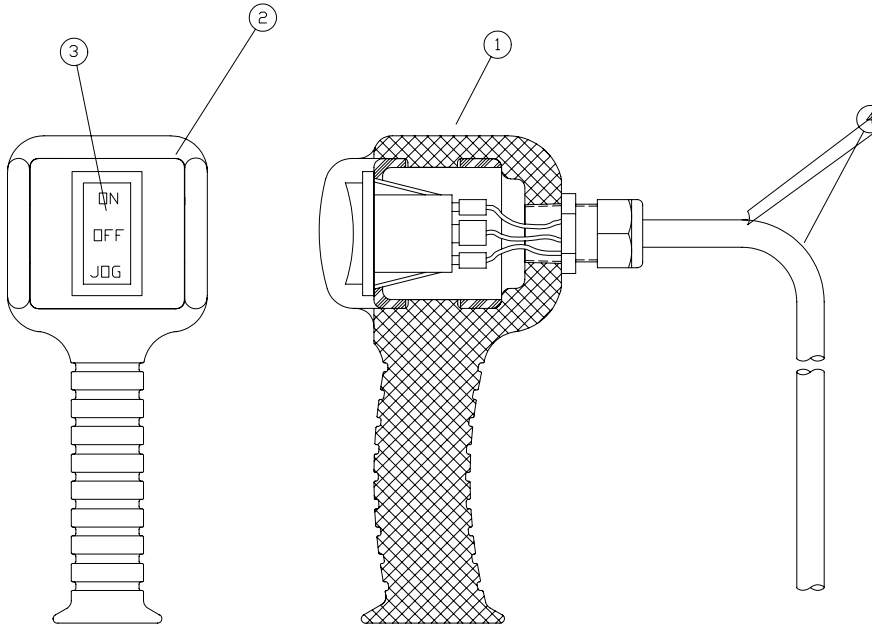
230 VOLT WIRING DIAGRAM



100 Ton Electric Pow'r-Riser Models

Pendant Control Devices

(41624) PENDANT

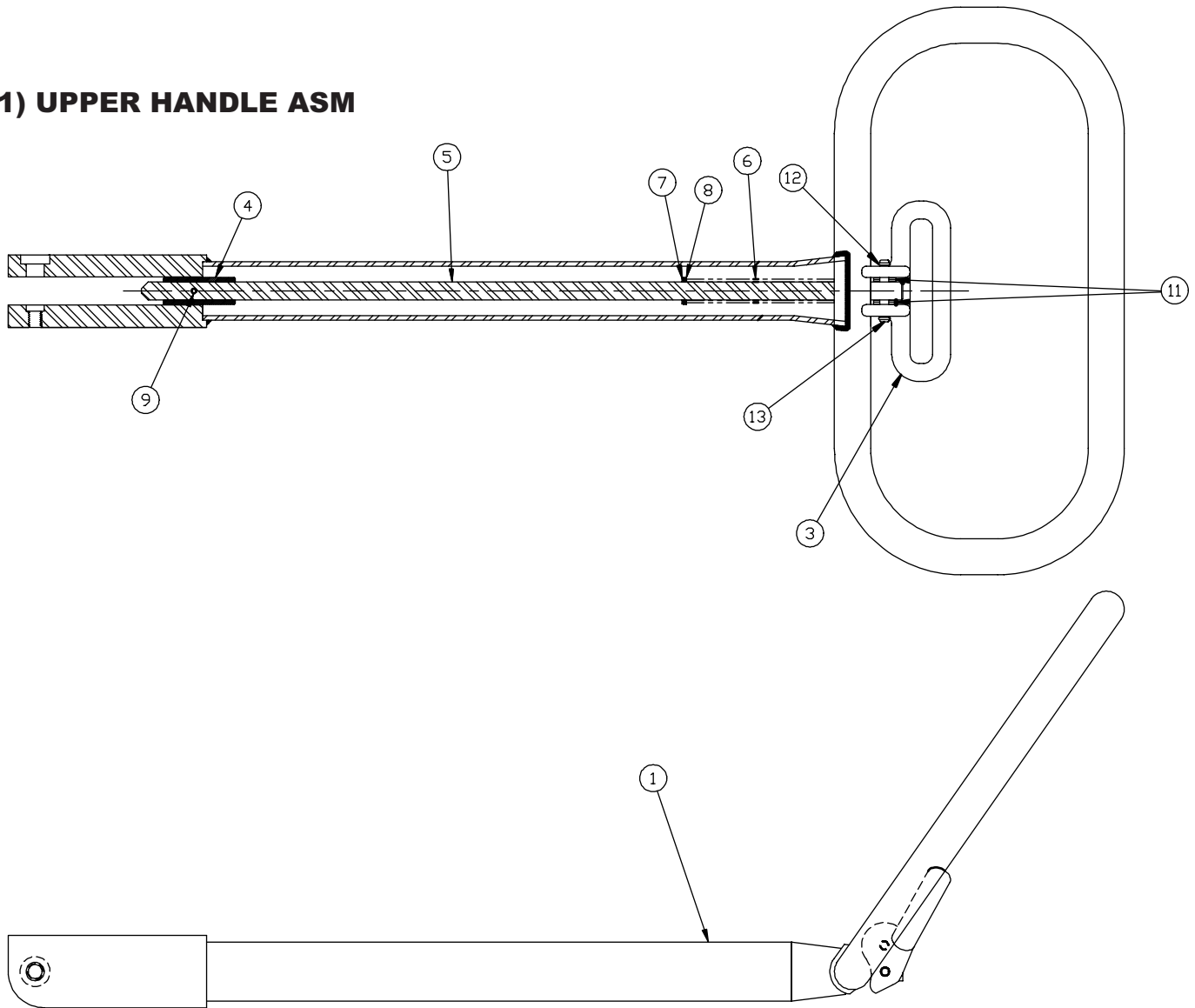


ITEM#	DESCRIPTION	PART#	QTY.
01	PENDANT BODY& RELIEF	69083	1.00
02	JUNCTION BOX 1SWITCH	69150	1.00
03	SWITCH 8961K385	69159	1.00
04	PENDANT CORD 20' LG	41615	1.00

100 Ton Electric Pow'r-Riser Models

Upper Handle Assembly

(41961) UPPER HANDLE ASM

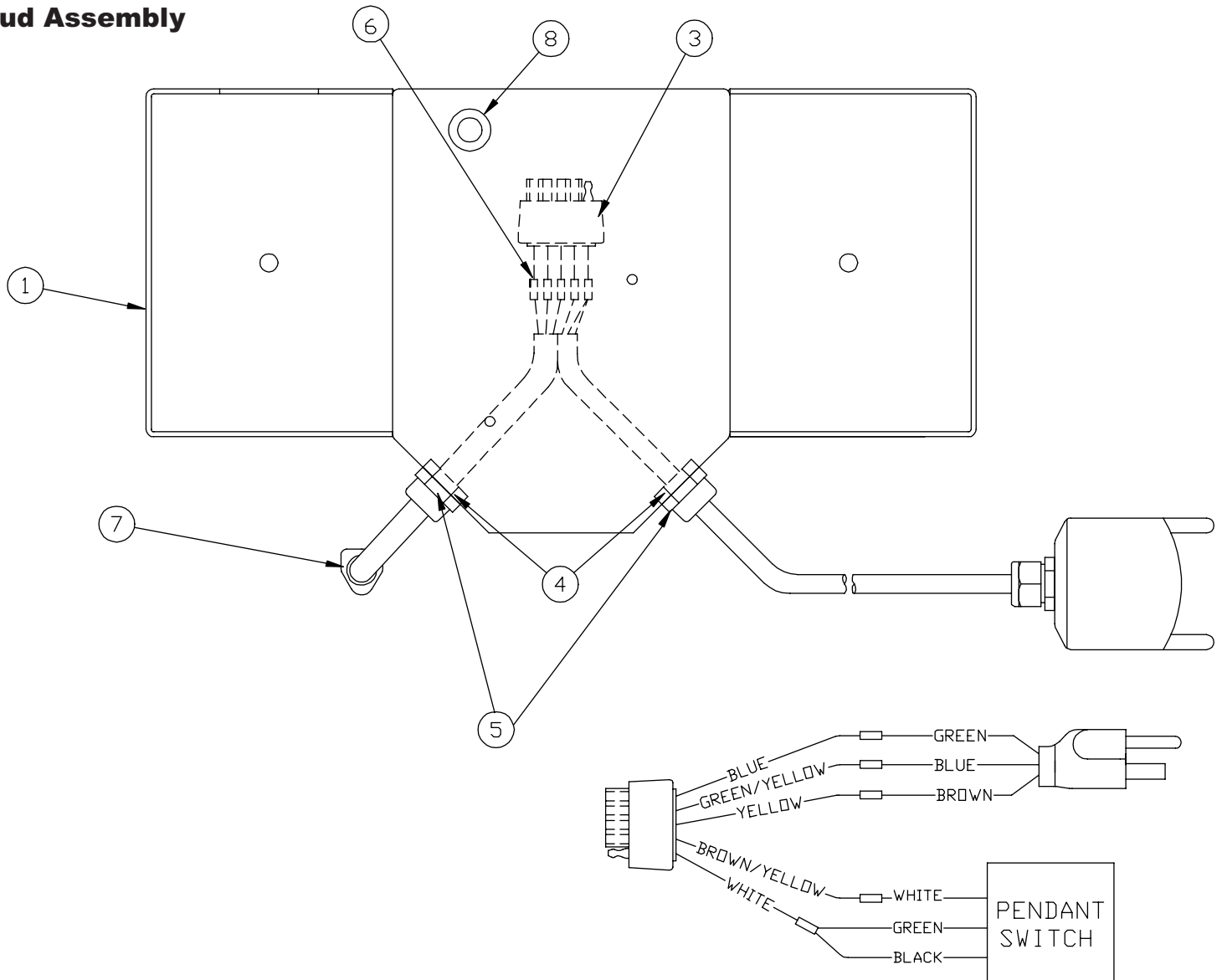


ITEM	PART #	DESCRIPTION	QTY
01	41595	UPPER WELDMENT	1.00
03	42368	HANDLE LOCK LEVER	1.00
04	41600	SLEEVE	1.00
05	41601	HANDLE ROD	1.00
06	41602	SPRING .656 X 9.50	1.00
07	41613	E-RING .8/.82 X .042	1.00
08	41614	WASHER 9/16ID X 3/32	1.00
09	42497	ROLL PIN 5/32 X 7/8	1.00
11	88429	WASHER SS 1/4"	4.00
12	42340	PIN RING	4.00
13	42338	PIN HANDLE LEVER	2.00

100 Ton Electric Pow'r-Riser Models

Shroud Assembly

(42355, 43157)
Shroud Assembly



ITEM	DESCRIPTION	115 V.	230 V.	QTY
		42355	43157	
		PART #	PART #	
01	MOTOR COVER P. R.	42259	42259	1.00
02	MOTOR PENDANT P-RISR	41624	41624	1.00
03	PLUG FEMALE 5WAY	42356	42356	1.00
04	LOCKNUT 1/2 INCH	85510	85510	2.00
05	FITTING,CORD L-TIGHT	68375	68375	2.00
06	BUTT CONNECTOR	66132	66132	5.00
07	PLUG AND CORD ASSY	68595	N/A	1.00
07	TWIST LOCK MPLG 20A	N/A	N/A	1.00
07	POWER CORD 14-3 IEC	N/A	69604R	18.00
07	PLUG 20 AMPS - 230V	N/A	87093	1.00