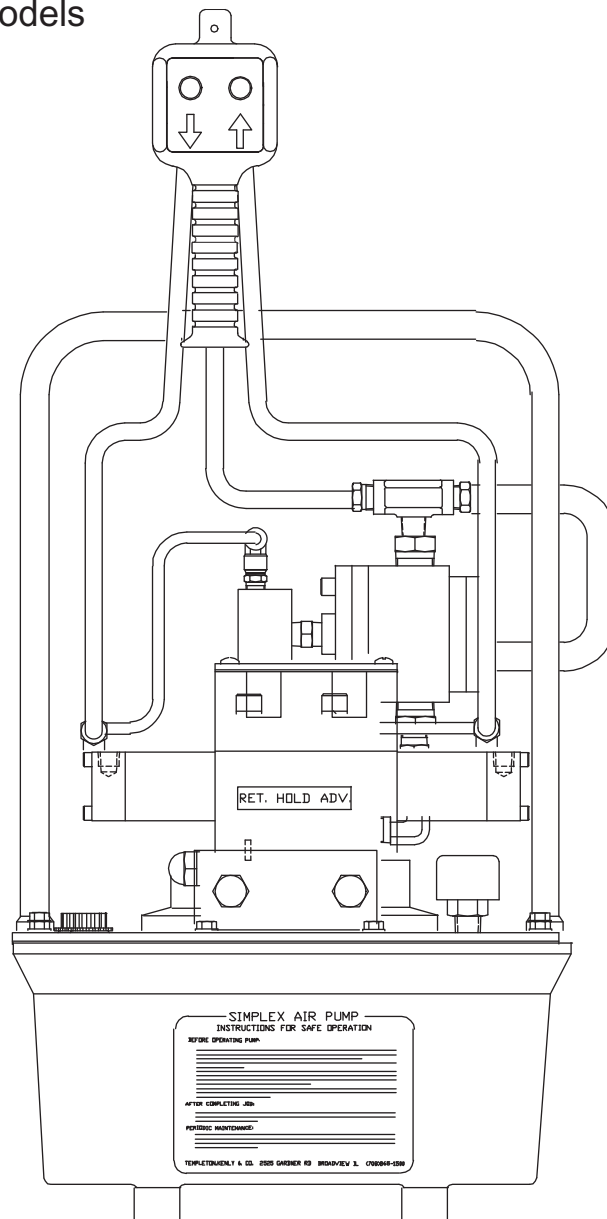


SIMPLEX®

PA 40 SERIES AIR POWER PUMPS

Parts Identification Manual
For Air Powered Hydraulic Pumps
PAD, PAM, and PAS Models
Revision B
04/2008



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

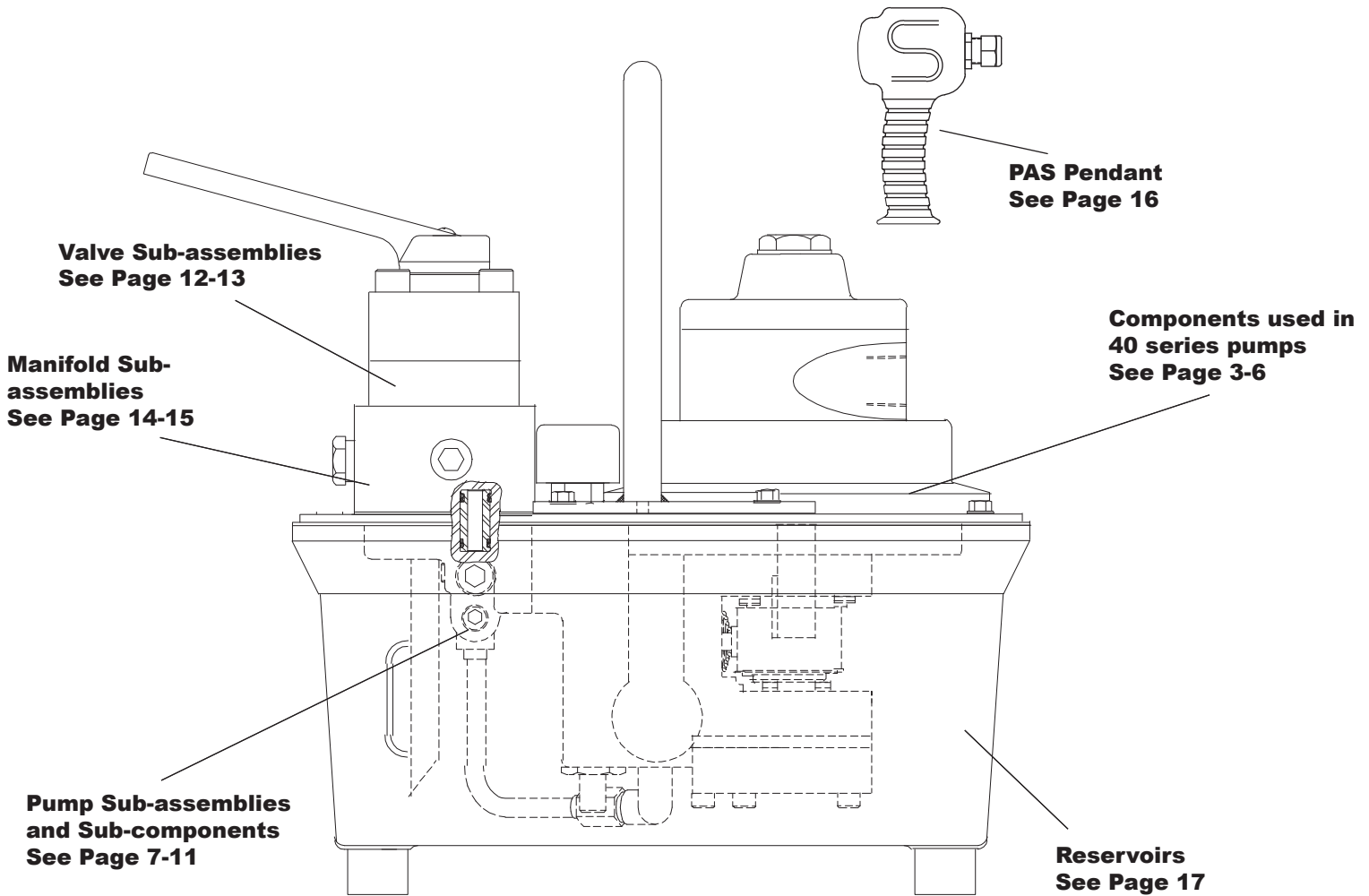
40 Series Air Power Pump

How to Identify Parts for Your Model.

Understanding our model number configurations

Sample Model #	P	A	M	4	0	0	2
Description	Power Pump Type	Motor Type / Controls A = Rotary Air Motor	Valve Style D = Dump Valve M = Manual Valve S = Solenoid Valve	Pump Series 4 = 20 Series	Options 0 = no options 1 = roll bars 4 = oil filter 5 = roll bars & oil filter	Valve type 2 = 2 way 2 position 3 = 3 way 3 position 4 = 4 way 3 position 5 = 3 way locking 6 = 4 way locking	Reservoir Size 2 = 2 gallon 5 = 5 gallon 6 = 10 gallon 7 = 10 gallon

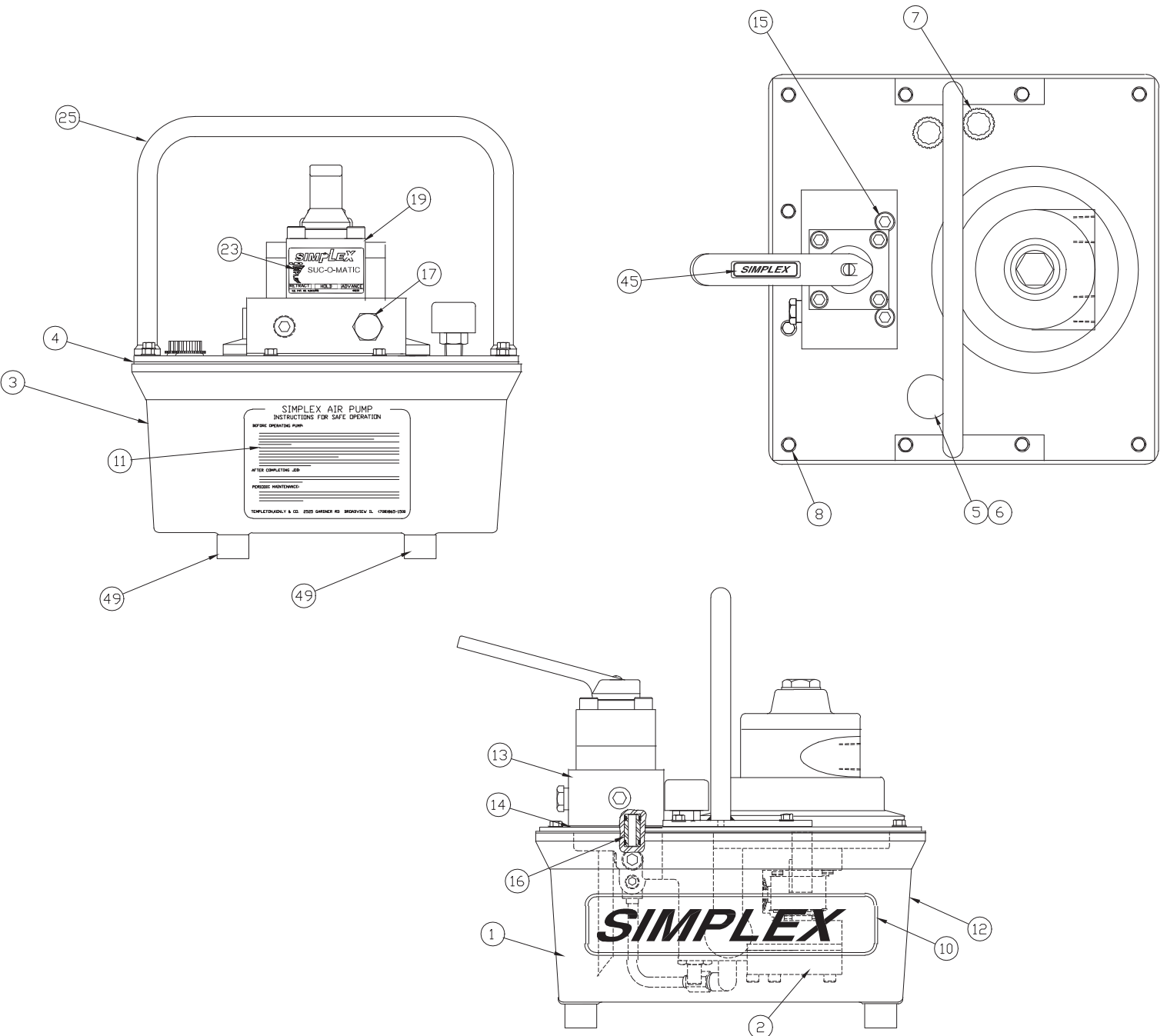
Note: This illustration is for reference only. The appearance of your unit may differ from the unit shown.



40 Series Air Power Pump

Common components used in pumps

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



40 Series Air Power Pump

Common Components Part List

ITEM #	DESCRIPTION	PART #	QTY.
01	HYD OIL-1 GAL.	AO1	2.00
02	PUMP ASM	SEE PAGE 7	1.00
03	RESERVOIR	SEE PAGE 17	1.00
04	GASKET RES 2 GAL	66014	1.00
05	BREATHER VENT BF-4	68000	1.00
06	HEX STL PIPE PLUG 1/4 NPTF	87492	1.00
07	FILLER PLUG	68571	2.00
08	SCREW 1/4-20X3/4 S.T	69249	12.00
10	SIMPLEX LOGO	68259	2.00
11	SAFE USE DECAL AIR	68394	1.00
12	BLANK DECAL 3 X 4	87305	1.00
13	MANIFOLD ASM	SEE PAGE 14-15	1.00
14	VALVE GASKET	69242	1.00
15	SHCS 3/8-16 X 2 1/2	93599	3.00
16	ADAPTER ASSY.	68963	1.00
17	HEX ST. PIPE PLUG 3/8 NPTF	87145	1.00
19	VAL ASM MAN MTG	SEE PAGE 12	1.00
23	DECAL	68199	1.00
25	HANDLE AIR PUMPS	69480	1.00
45	SIMPLEX LOGO	88187	1.00
49	RUBBER FOOT VBM-3005	69479	4.00

**NOTE: COMMON COMPONENTS ARE LISTED FOR
ALL MODEL CONFIGURATIONS. UNIQUE ITEMS
WILL BE REFERENCED TO ANOTHER PAGE.**

**** SOLENOID OPERATED PUMPS, PLEASE REFERENCE PAGES 5-6 ****

40 Series Air Power Pump

Common components Parts List

(PAS SERIES)

ITEM #	DESCRIPTION	PART #	QTY.
02	PUMP ASM 2P 1-1/2HP	SEE PAGE 8-9	1.00
03	RESERVOIR.	SEE PAGE 17	1.00
04	GASKET RES 2 GAL	66014	1.00
05	BREATHER VENT BF-4	68000	1.00
06	HEX STL PIPE PLUG 1/4 NPTF	87492	1.00
07	FILLER PLUG	68571	2.00
08	SCREW 1/4-20X3/4 S.T	69249	12.00
11	SAFE USE DECAL AIR	68394	1.00
12	BLANK DECAL 3 X 4	87305	1.00
13	4 WAY MANIFOLD ASSM	SEE PAGE 14	1.00
14	VALVE GASKET	69242	1.00
15	SHCS 3/8-16 X 2 1/2	93599	3.00
16	ADAPTER ASSY.	68963	1.00
17	HEX ST. PIPE PLUG 3/8 NPTF	87145	2.00
19	3P4WM VLV. ASM.AIR	SEE PAGE 13	1.00
20	SHCS 3/8-16 X 3 1/2	88363	4.00
21	LOCK WASHER 3/8	93943	4.00
22	ROLL PIN 1/8X3/8 LG	561604	1.00
23	LABEL, POSITION	68069	1.00
25	HANDLE 2 GALLON	66238	1.00
41	MOTOR PENDANT AIR	SEE PAGE 16	1.00
42	FLTR/LUBE ASM PUMPS	SEE PAGE 11	1.00
43	RUBBER FOOT VBM-3005	69479	4.00
48	ELBOW 1/4 90DEG STRT	18970	1.00

ITEM #	DESCRIPTION	PART #	QTY.
49	1/4" BRANCH TEE	42668	1.00
50	PUSH LOCK HOSE 3/8ID	69538R	9.00
51	ANTI-FREEZE LUBE	18243	0.50
51	HOSE BARB 1/4-3/8 HS	69547	1.00
52	INLINE AIR VALVE	44244	1.00
53	SHUTTLE VALVE	44245	1.00
54	1/4" ADAPTER	42965	1.00
55	REDUCER 1/2 TO 1/4	69936	2.00
56	1/4 IN NIPPLE	4100067	1.00
57	SWIVEL ELBOW 1/4"	86872	1.00
58	MALE ELBOW 1/4" TUBE	68794	2.00
59	MALE CONNECT 1/4TUBE	68797	2.00
60	NYLON TUBING	69361	18.00
61	HOSE	41965	1.00
62	1/8 SWIVEL TEE	42968	2.00
63	SWIVEL ADP 1/8 90	42380	1.00
64	REDUCER 1/4"-1/8"	42667	1.00
70	GASKET-MOTOR	66012	1.00
71	GASKET-PUMP @ MOTOR	68231	1.00
72	GASKET-PUMP @ VALVE	68551	1.00
73	COVER PLATE	68682P	1.00
74	PIN,DOWEL 3/16 1	69026	1.00
75	SHCS 3/8-16X1-1/4	93596	2.00
76	AIR MOTOR 4AM	88559	1.00

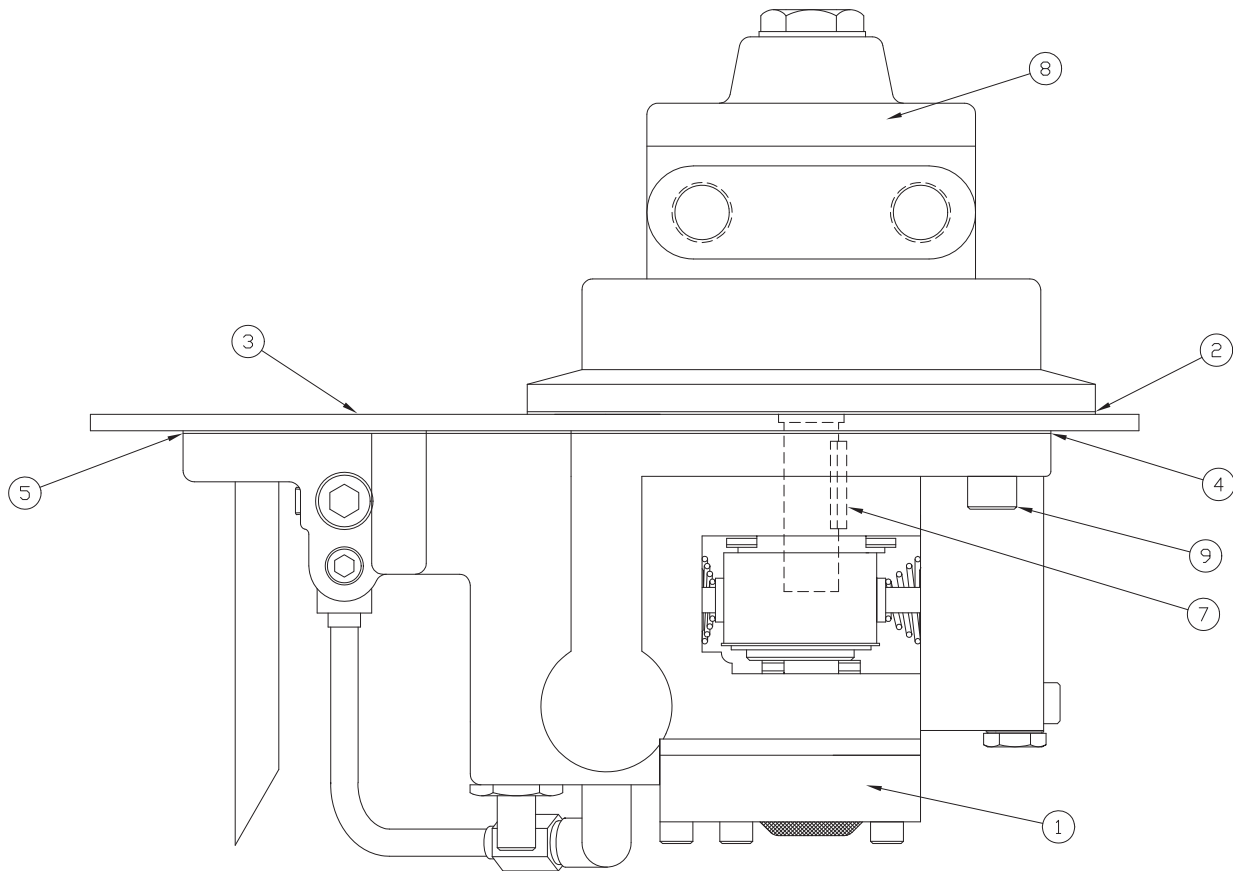
** SOLENOID OPERATED PUMPS **

NOTE: COMMON COMPONENTS ARE LISTED FOR ALL SOLENOID MODEL CONFIGURATIONS. UNIQUE ITEMS WILL BE REFERENCED TO ANOTHER PAGE.

40 Series Air Power Pump

Pump Assembly

(69059) PUMP ASM

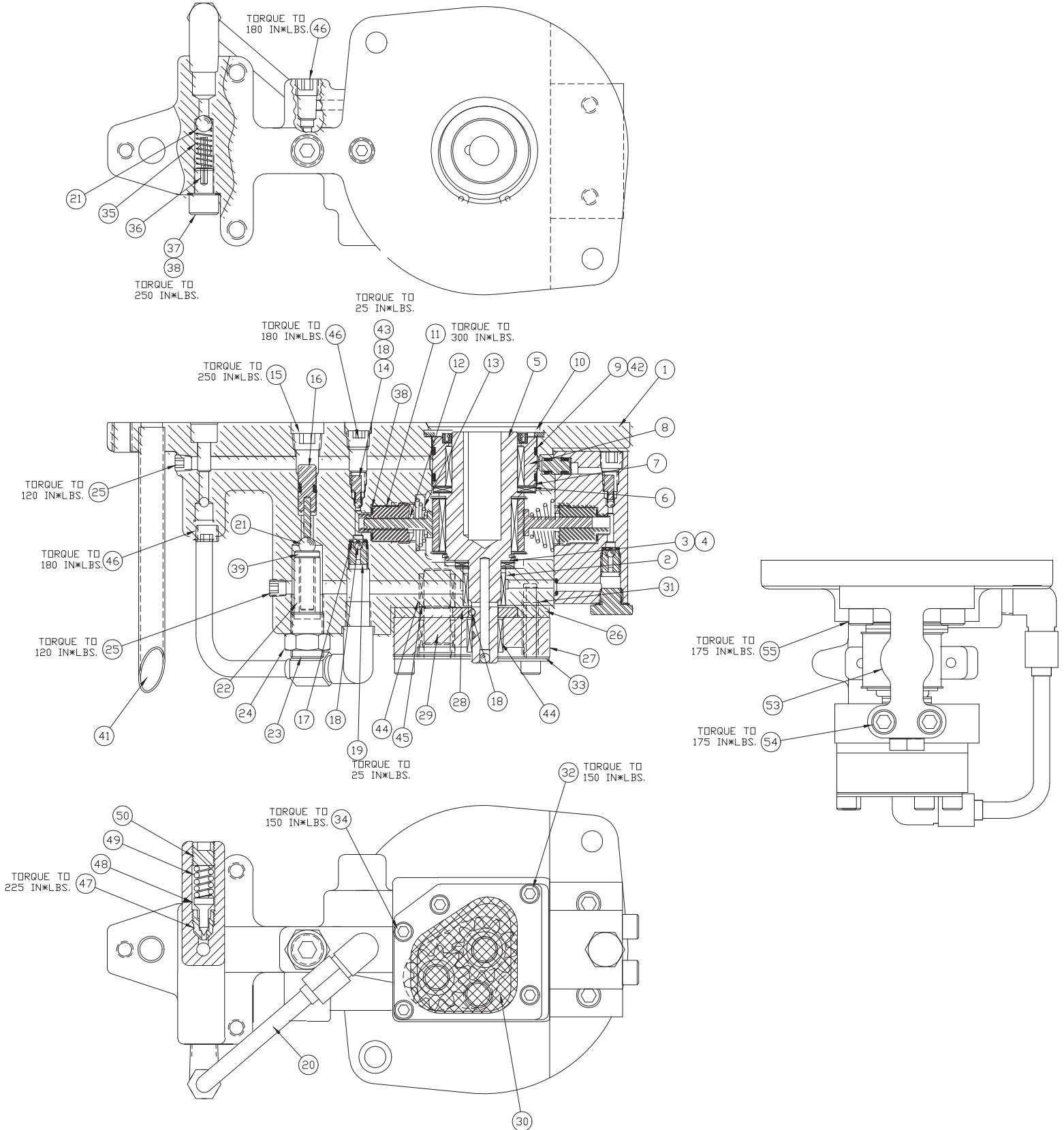


ITEM #	DESCRIPTION	PART #	QTY
01	PUMP ASM 2P 1-1/2HP	SEE PAGE 8-9	1.00
02	GASKET-MOTOR	66012	1.00
03	COVER PLATE	668682P	1.00
04	GASKET-PUMP @ MOTOR	68231	1.00
05	GASKET-PUMP @ VALVE	68551	1.00
07	PIN DOWEL 3/16	69026	1.00
08	AIR MOTOR	88559	1.00
09	SHCS 3/8-16X1-1/4	93596	2.00

40 Series Air Power Pump

Sub Pump Assembly

(18721) SUB PUMP ASM.



40 Series Air Power Pump

Sub Pump Assembly

**(18721)
SUB PUMP ASM.**

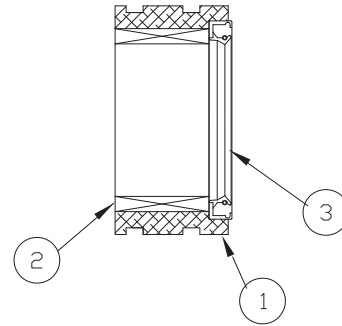
ITEM #	DESCRIPTION	PART #	QTY.
01	PUMP BODY 2 PISTON	43769	1.00
02	BEARING ROLLER 5/8x13/16x5/8 WIDE	68360	1.00
03	THRUST BEARING	66033	1.00
04	THRUST WASHER	66474	2.00
05	ECCENTRIC SHAFT ASSEMBLY	SEE PAGE 10	1.00
06	THRUST BEARING	66106	1.00
07	THRUST WASHER	66108	2.00
08	ADAPTER-SHAFT ASM	SEE PAGE 10	1.00
09	O-RING 1 7/8X2" URE	56020322	2.00
10	RETAINING RING	68978	1.00
11	ADAPTER-.210 PISTON	68915	1.00
12	PISTON-.210 DIA	68830	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 1/8"	90906	5.00
19	INTAKE SEAT	66046	1.00
20	TUBE ASM	68851	1.00
21	BALL 5/16"	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 .187	68848	1.00
27	PLATE-BOTTOM	68849	1.00
28	GEAR-PUMP .1875	68883	2.00
29	SHAFT-IDLER	68850	1.00
30	SCREEN	68921	1.00
31	TUBE-GUIDE .11	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 1/8X15/16	81332	1.00
37	SCREW, BALL STOP	68226	1.00
38	GASKET 25/64X19/32	85726	2.00
41	TUBE RETURN	68569	1.00
42	SHAFT ADP BACKUP WAS	69513	2.00
43	SPRING	66042	1.00
44	BEARING ROLLER 1/2x11/16x1/2 WIDE	68891	3.00
45	RING-RETAINING	68892	1.00
46	PIPE PLUG 1/8" FLUSH	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
52	POW'R BUDDY SPRING CAP	43277	1.00
52	SPRING CAP UNLOADING VALVE	43673	1.00
53	PISTON BLK .210	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

40 Series Air Power Pump

Sub Component Assemblies

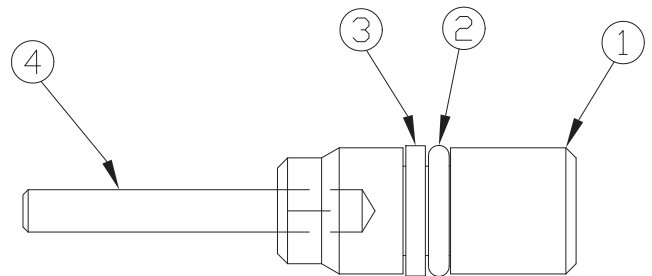
(68829) ADAPT-SHAFT ASM.

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



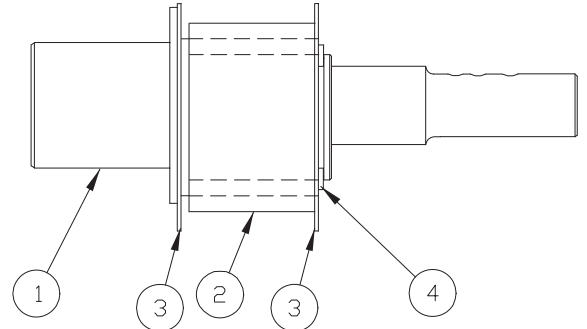
(43766) UNLOAD. PISTON ASM.

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



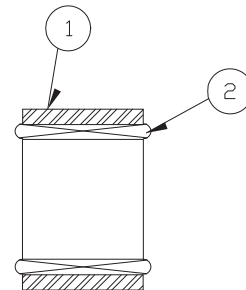
(68906) ECCENTRIC SHAFT ASM.

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



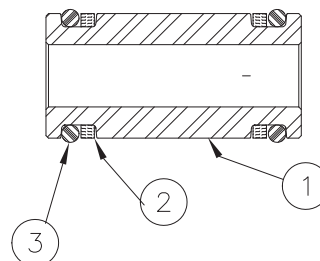
(69081) ECC ASM.

ITEM #	DESCRIPTION	PART #	QTY.
01	RING-ECC	68218	1.00
02	BRG-SLEEVE	68060	1.00



(68963) ADAPTER ASM.

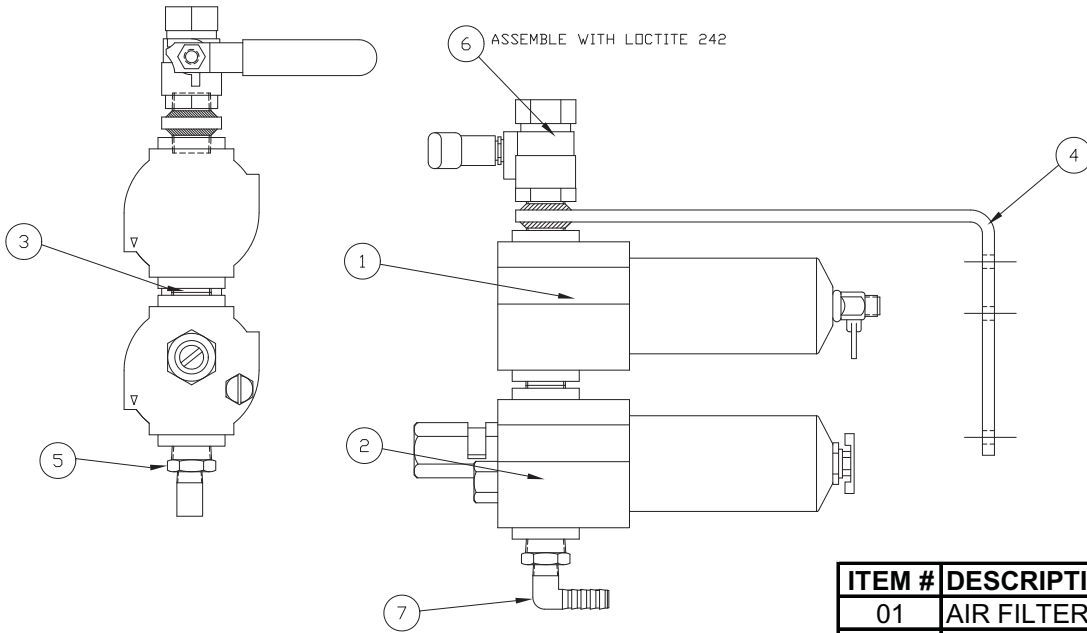
ITEM #	DESCRIPTION	PART #	QTY.
01	VALVE ADAPTER	88073	2.00
02	B-U RING	65881	2.00
03	VALVE ADAPTER	5602012	1.00



40 Series Air Power Pump

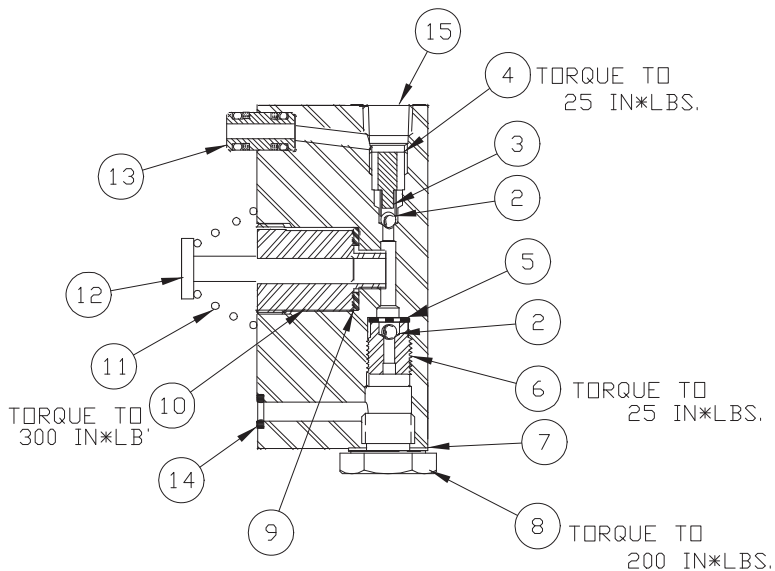
Sub Component Assemblies

(43393) FLTR/LUBE ASM.



ITEM #	DESCRIPTION	PART #	QTY.
01	AIR FILTER	86241	1.00
02	AIR LUBRICATOR	86242	1.00
03	PIPE NIPPLE 1/2" BRS	69998	1.00
04	BRACKET WLDMNT PUMPS	43392	1.00
05	REDUCER 1/2 TO 1/4	69936	1.00
06	AIR VALVE	85851	1.00
07	HOSE BARB ELBOW 3/8	68798	1.00

(68832) PISTON BLK.



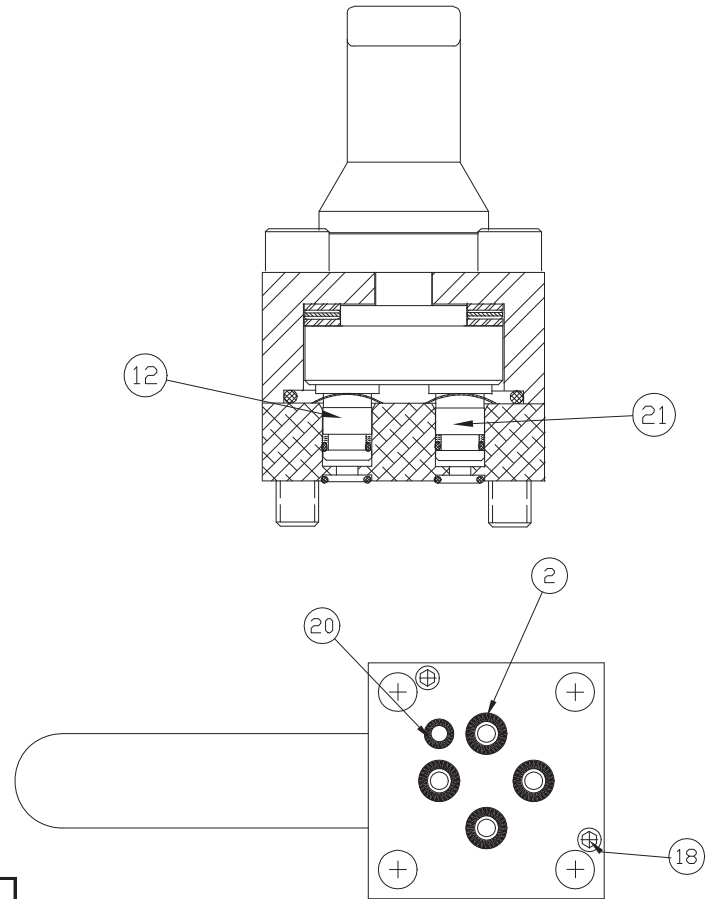
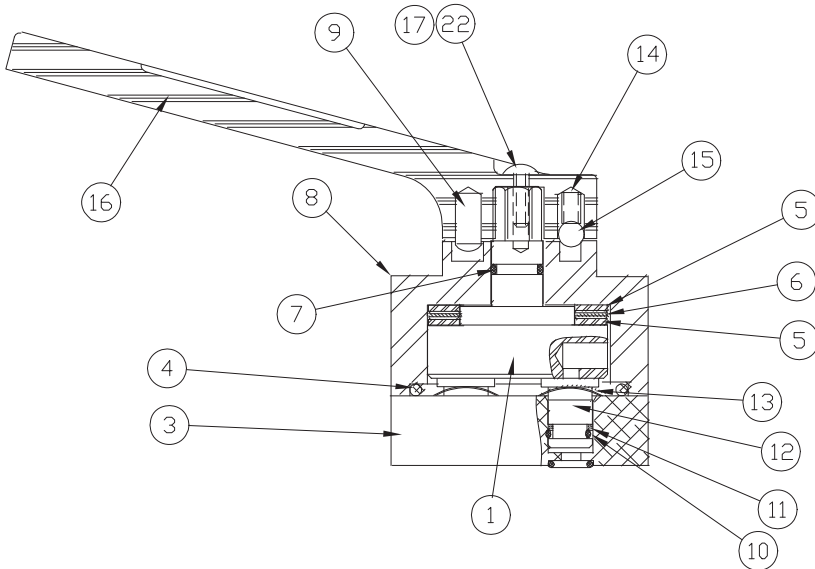
ITEM #	DESCRIPTION	PART #	QTY.
01	PISTON BLOCK MACH'G	68501	1.00
02	BALL 1/8"	90906	2.00
03	SPRING	66042	1.00
04	BALL STOP	68810	1.00
05	BALL RETAINER	66043	1.00
06	INTAKE SEAT	66046	1.00
07	GASKET 29/64 X 5/8	86269	1.00
08	PLUG PISTON BLOCK	68825	1.00
08	ADAPTER ASSY.	68970	1.00
09	GASKET 25/64X19/32	85726	1.00
10	ADAPTER-.210 PISTON	68915	1.00
11	SPRING, PISTON	68340	1.00
12	PISTON-.210 DIA	68830	1.00
14	O-RING 3/16X5/16	5602008	1.00
15	PIPE PLUG 1/8" FLUSH	81093	1.00

40 Series Air Power Pump

Valve Sub Assemblies

(69691) 3 WAY MANUAL

(69101) 4 WAY MANUAL



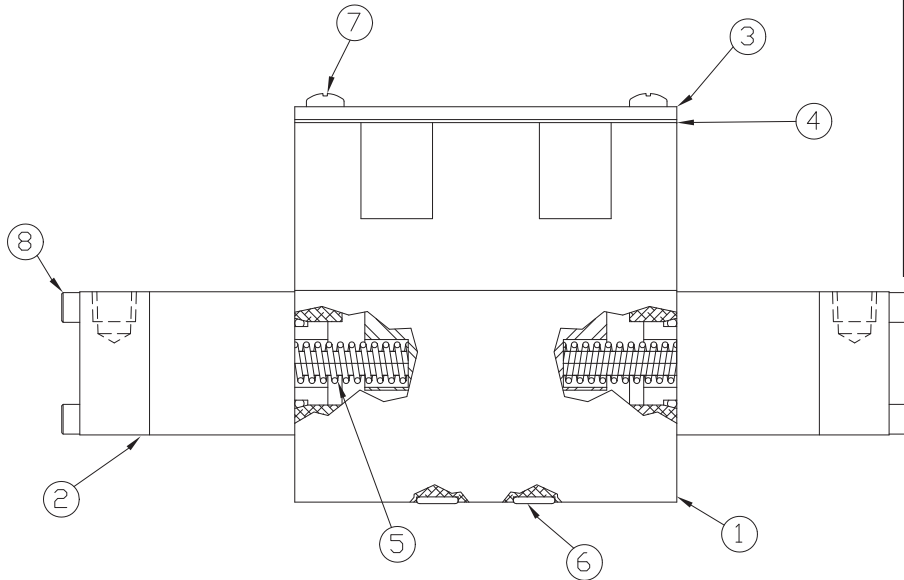
ITEM #	DESCRIPTION	-69691		-69101	
		3 WAY VAL	QTY.	4 WAY VAL	QTY.
01	VALVE ROTOR	43762	1.00	43762	1.00
2	O-RING	56020112	2.00	56020112	4.00
03	SUBPLATE- VALVE	68180	1.00	68180	1.00
04	O-RING	5602225	1.00	5602225	1.00
05	THRUST WASHER	68026	2.00	68026	2.00
06	THRUST BEARING	68155	1.00	68155	1.00
07	O-RING	5602012	1.00	5602012	1.00
08	UPPER VALVE BLOCK	69135	1.00	69135	1.00
09	DRIVE LOK PIN	93804	1.00	93804	1.00
10	O-RING	5602011	6.00	5602011	3.00
11	WASHER	65882	4.00	65882	3.00
12	SHEAR SEAL	68029	3.00	68029	1.00
13	SPRING WASHER	68028	4.00	68028	3.00
14	DETENT SPRING	68025	1.00	68025	1.00
15	BALL	92549	1.00	92549	1.00
16	VALVE HANDLE	69091	1.00	69091	1.00
17	SCREW	44595	1.00	44595	1.00
18	SCREW	85317	2.00	85317	2.00
NS	SCREW	93598	4.00	93598	4.00
20	O-RING	5602008	1.00	5602008	1.00
21	SHEAR SEAL	68181	1.00	68181	2.00
22	LOCKWASHER	Y0010765	1.00	Y0010765	1.00

NS= NOT SHOWN

40 Series Air Power Pump

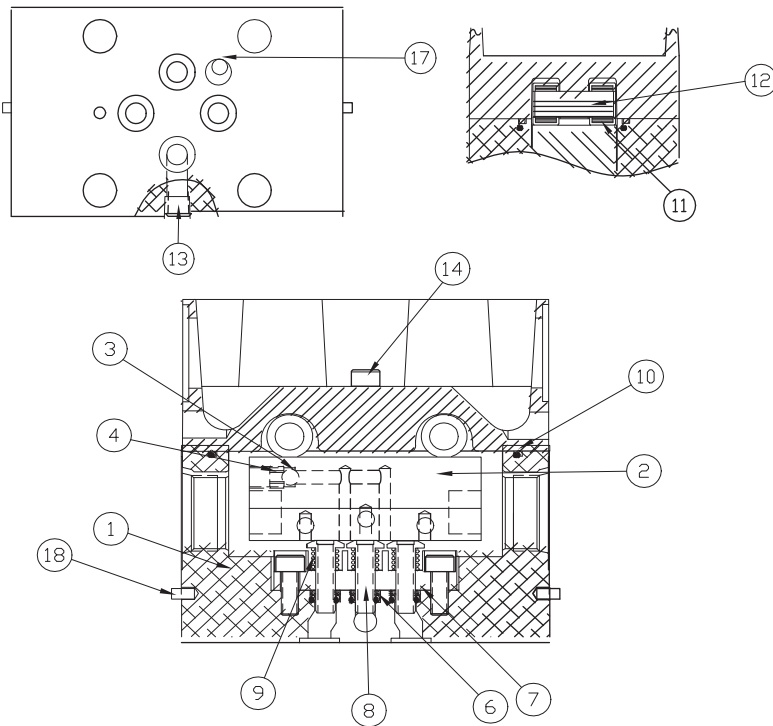
Valve Sub Assemblies

(41949) 3P4WM VLV. ASM.AIR



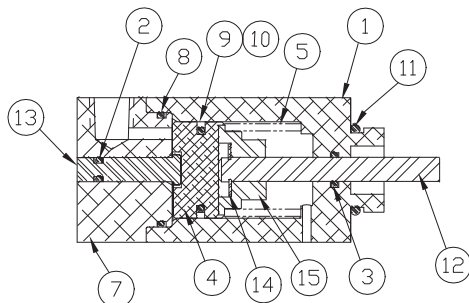
ITEM #	DESCRIPTION	PART #	QTY.
01	VALVE ASSEMBLY TC	68710	1.00
02	AIR CYL ASM	41954	2.00
03	COVER, VALVE	68388	1.00
04	GASKET CVR	68389	1.00
05	SPRING	68711	2.00
06	O-RING 5/16X7/16	56020112	4.00
07	SCREW,	98250	4.00
08	SHCS #10-24 X 3.25"	41959	8.00

(68710) VALVE ASM TC.



ITEM#	DESCRIPTION	PART#	QTY.
01	BODY-VALVE	68708	1.00
02	SLIDER	68709	1.00
03	BALL	90548	1.00
04	SCREW	40254	1.00
06	O-RING	5602009	3.00
07	BACK UP WASHER	68391	3.00
08	SHEAR SEAL	68383	3.00
09	SPRING	68384	3.00
10	O-RING	5602038	1.00
11	BEARING,ROLLER	68385	4.00
12	PIN BEARING	68390	2.00
13	1/16 PIPE PLUG-FLUSH	40049	1.00
14	SCREW	68264	2.00
NS	PLATE-TOP	68381	1.00
17	O-RING	5602008	1.00
18	ROLL PIN	69636	2.00

(41954) AIR CYL ASM.

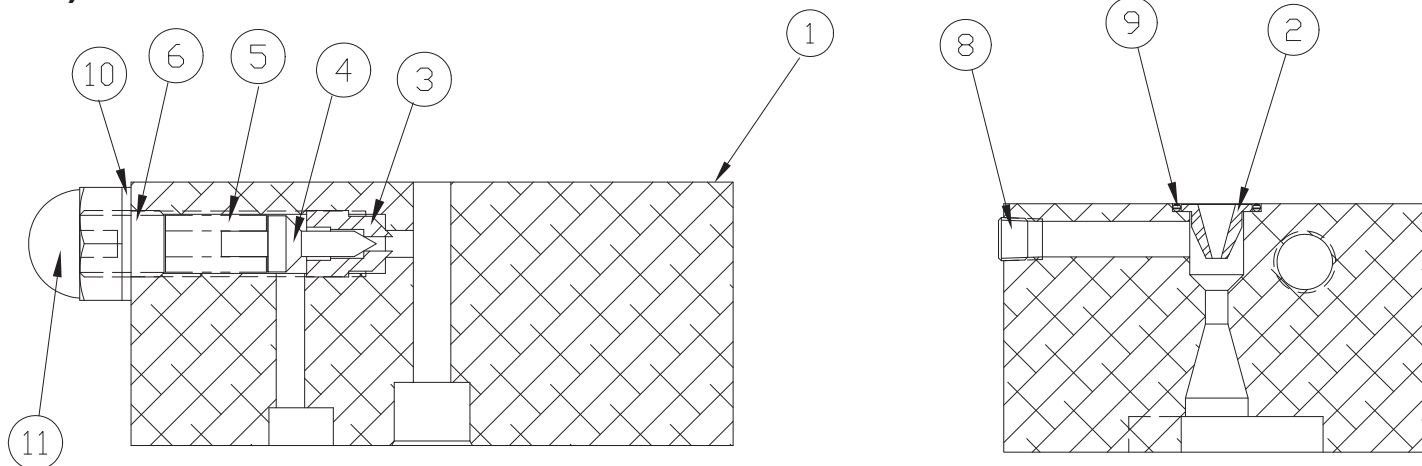


ITEM #	DESCRIPTION	PART #	QTY.
01	BODY AIR CYL	42744	1.00
02	O-RING 1/8 X 1/4	5602006	1.00
03	O RING 1/4X3/8	5602010	1.00
04	AIR CYLINDER PISTON	42747	1.00
05	SPRING AIR CYL	42749	1.00
07	END CAP	41956	1.00
08	O-RING 1 1/16X1 3/16	5602023	1.00
09	SEAL	68497	1.00
10	O-RING 11/16X13/16	5602017	1.00
11	O-RING SAE PORT #10	5603910	1.00
12	PUSH PIN AIR VALVE	42746	1.00
13	OVERRIDE PIN	41958	1.00
14	E-RING 1/4" SHAFT	42750	1.00
15	SPRING PLATE AIR VLV	42748	1.00

40 Series Air Power Pump

Manifold Sub Assemblies

(69570) 3 WAY STANDARD

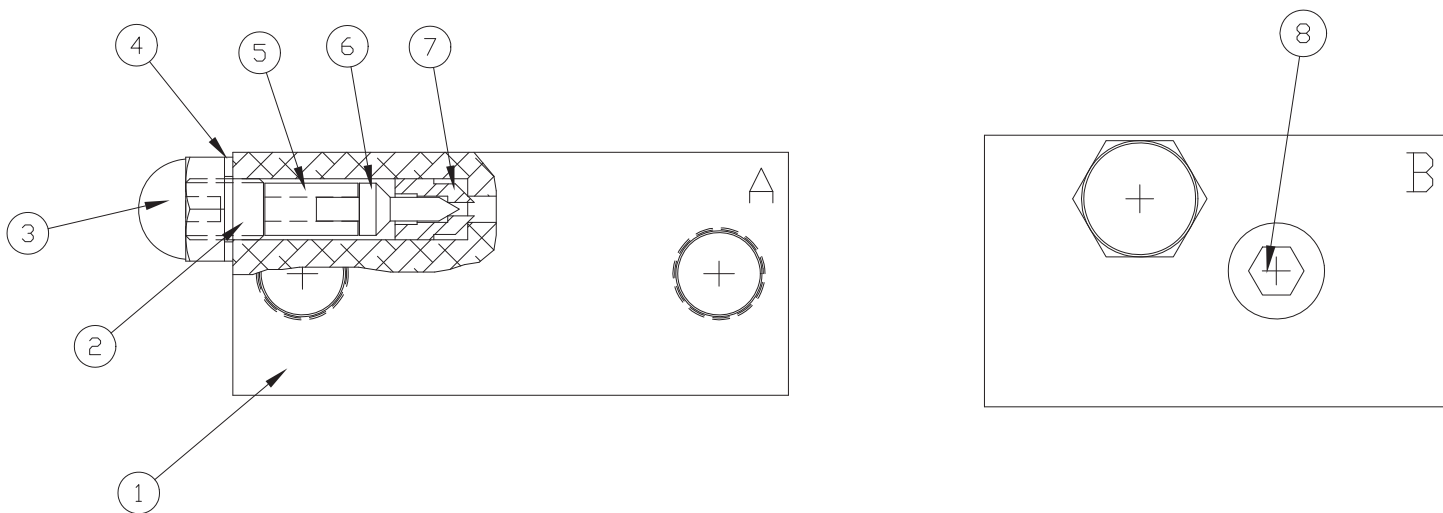


ITEM#	DESCRIPTION	PART#	
		3 WAY MAN. ASM	QTY.
01	RET. VALVE MANIFOLD	69569	1.00
02	NOZZLE-VALVE	68197	1.00
03	SEAT - EXT RELIEF	68004	1.00
04	CONE - EXT RELIEF	68003	1.00
05	SPRING - RELIEF VALVE	66085	1.00
06	ADJUSTING SCREW	69104	1.00

ITEM#	DESCRIPTION	PART#	
		3 WAY MAN. ASM	QTY.
NS	PIPE PLUG	84084	3.00
08	PIPE PLUG-FLUSH	40049	2.00
09	O-RING	5602014	1.00
10	WASHER	69124	1.00
11	ACORN NUT	69105	1.00

NS = NOT SHOWN

(69100) 4 WAY STANDARD



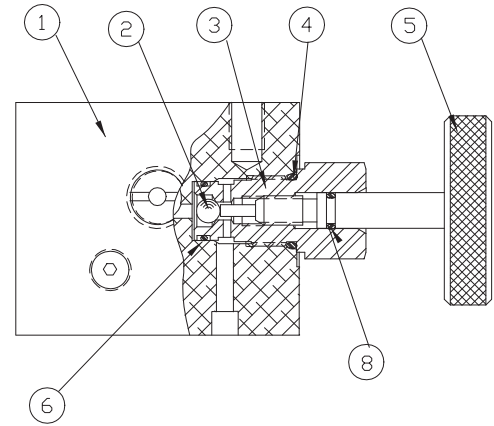
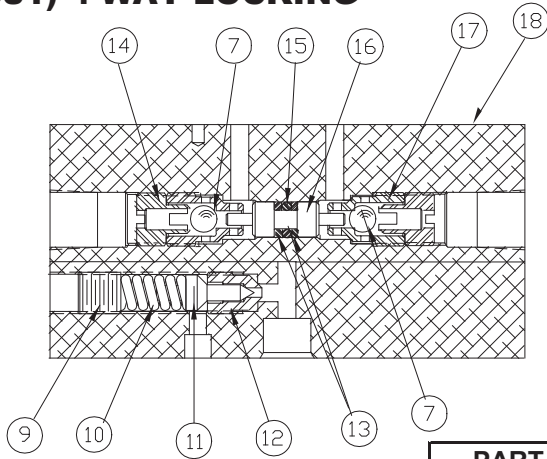
ITEM#	DESCRIPTION	PART#	
		4 WAY MAN. ASM	QTY.
01	VALVE MANIFOLD	69099	1.00
02	ADJUSTING SCREW	69104	1.00
03	ACORN NUT	69105	1.00
04	WASHER	69124	1.00

ITEM#	DESCRIPTION	PART#	
		4 WAY MAN. ASM	QTY.
05	SPRING - RELIEF VALVE	66085	1.00
06	CONE - EXT RELIEF	68003	1.00
07	SEAT - EXT RELIEF	68004	1.00
08	PIPE PLUG	84084	2.00

40 Series Air Power Pump

Manifold Sub Assemblies

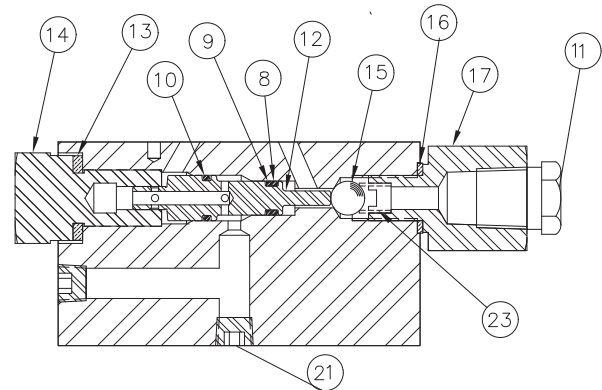
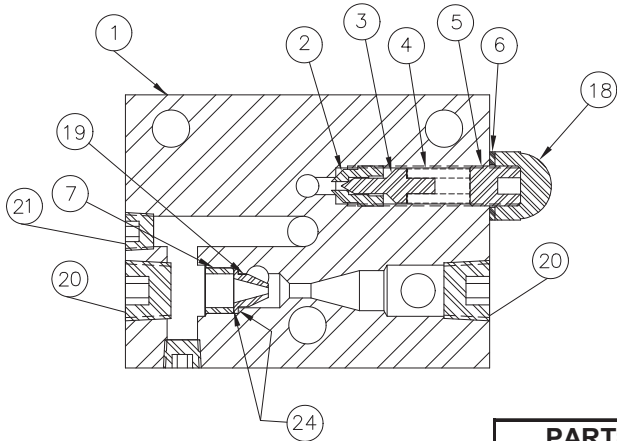
(68581) 4 WAY LOCKING



ITEM #	DESCRIPTION	PART #	
		3 WAY LOCK	QTY.
01	VALVE BODY LOCK VAL	68591	1.00
02	BALL	92549	1.00
03	RELEASE GLAND	68637	1.00
04	O-RING	5603908	1.00
05	RELEASE SCREW ASM	89435	1.00
06	O-RING	56021115	1.00
07	BALL	92526	2.00
08	O RING	5602010	1.00
09	RELIEF VALVE ADJ SCREW	66083	1.00

ITEM #	DESCRIPTION	PART #	
		4 WAY LOCK	QTY.
10	SPRING - RELIEF VALVE	66085	1.00
11	CONE - EXT RELIEF	68003	1.00
12	SEAT - EXT RELIEF	68004	1.00
13	BU-WASHER	5608106	2.00
14	BALL RETAINER	68589	2.00
15	O-RING	5602106	1.00
16	SPOOL-LOCK VALVE	68636	1.00
17	SEAT	68590	2.00
18	PIPE PLUG	82552	1.00

(69621) 3 WAY LOCKING



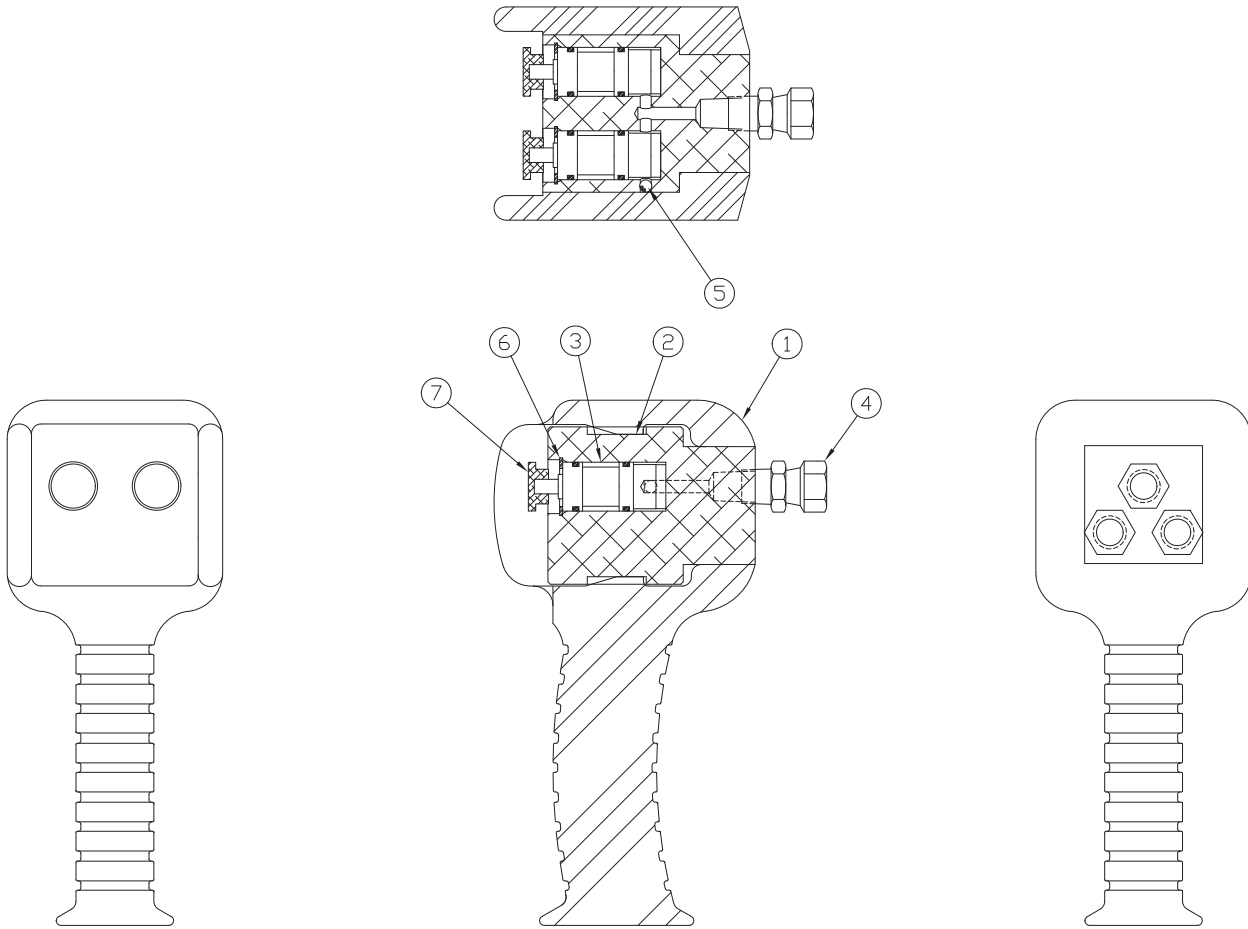
ITEM#	DESCRIPTION	PART#	
		3 WAY LOCK	QTY.
01	VLV BODY LOCKING	69573	1.00
02	SEAT - EXT RELIEF	68004	1.00
03	CONE - EXT RELIEF	68003	1.00
04	SPRING - RELIEF VALVE	66085	1.00
05	SCREW	69104	1.00
06	WASHER	69124	1.00
07	RETAINING SLEEVE	69620	1.00
08	O RING	5602010	1.00
09	BACK-UP WASHER	68145	1.00
10	O-RING	56020125	1.00
11	HEX ST. PIPE PLUG	87145	1.00
12	SPOOL	69574	1.00

ITEM#	DESCRIPTION	PART#	
		4 WAY LOCK	QTY.
13	GASKET-PLUG	68183	1.00
14	PLUG-SPOOL	68184	1.00
15	BALL	92550	1.00
16	GASKET WASHER	68080	1.00
17	PORT ADAPTER	68187	1.00
18	ACORN NUT	69105	1.00
19	NOZZLE-VALVE	68197	1.00
20	PIPE PLUG 3/8"	84084	2.00
21	PIPE PLUG 1/8"	81093	3.00
NS	1/16 PIPE PLUG-	40049	2.00
23	COMPRESSION SPRING	68188	1.00
24	LOCTITE	41828	0.10

40 Series Air Power Pump

Pendant Control Devices

(41950) MOTOR PENDANT

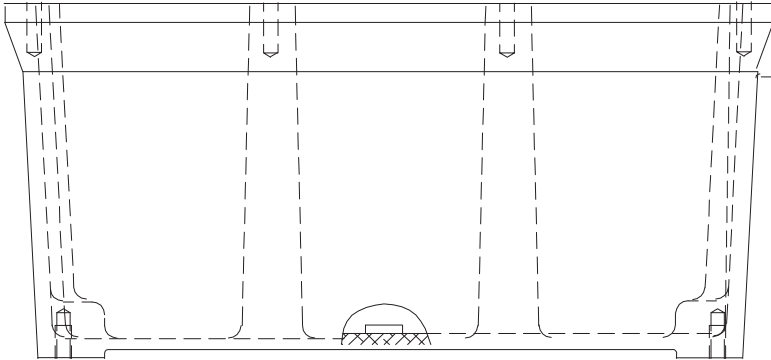


ITEM #	DESCRIPTION	PART #	QTY.
01	PENDANT BODY	41968	1.00
02	BLOCK AIR PENDENT	41969	1.00
03	CARTRIDGE-AIR	41963	2.00
04	SWIVEL ADP 1/8	42381	3.00
05	BALL 5/32	6069613	3.00
06	RETAINING-RING	68808	2.00
07	CARTRIDGE CAP	41970	2.00

40 Series Air Power Pump

Reservoirs

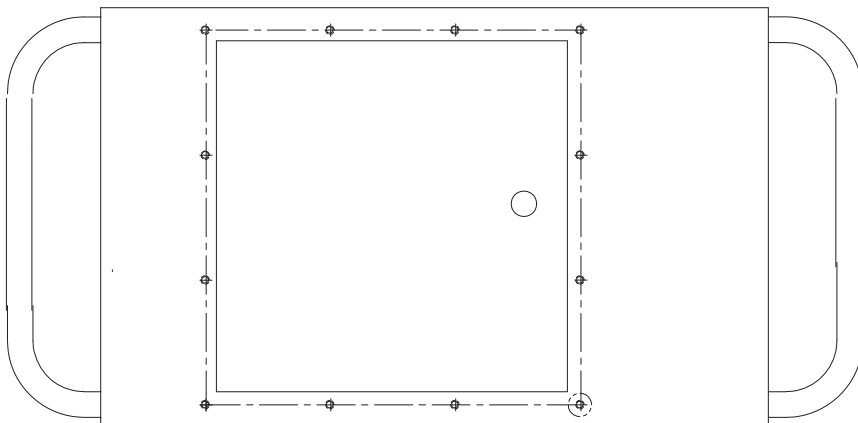
(69090G) 2 GALLON RESERVIOR



DESCRIPTION	PART#	QTY.
GASKET 1 GAL.	68608	1
GASKET 2 GAL.	66014	1
SCREW	86095	12

	LENGTH	WIDTH	HEIGHT
RES SIZE	A	B	C
2 GAL.	12 1/4	12 1/4	6

(69989G) 5 GALLON RESERVOIR (69987G) 10 GALLON RESERVOIR (18402G) 20 GALLON RESERVOIR



DESCRIPTION	PART#	QTY.
GASKET 5/10/20 GAL.	66014	1
SEALING WASHER	65892	12
SCREW	65891	12

NOTE: BOTH 5 / 10 / 20 GAL. RESERVOIR USE SAME MOUNTING HARDWARE

	LENGTH	WIDTH	HEIGHT
RES SIZE	A	B	C
5 GAL.	19 5/8	12 5/16	8
10 GAL.	19 5/8	12 5/16	12 1/2
20 GAL.	19 5/8	23 1/2	12 1/2