

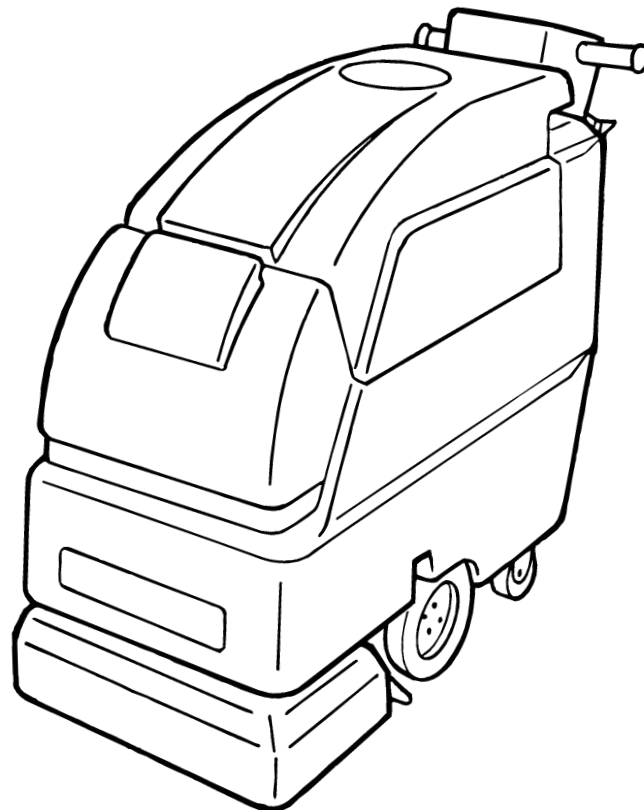


1520

Electric Automatic Carpet Extractor

**Model No.:
607649**

Operator and Parts Manual

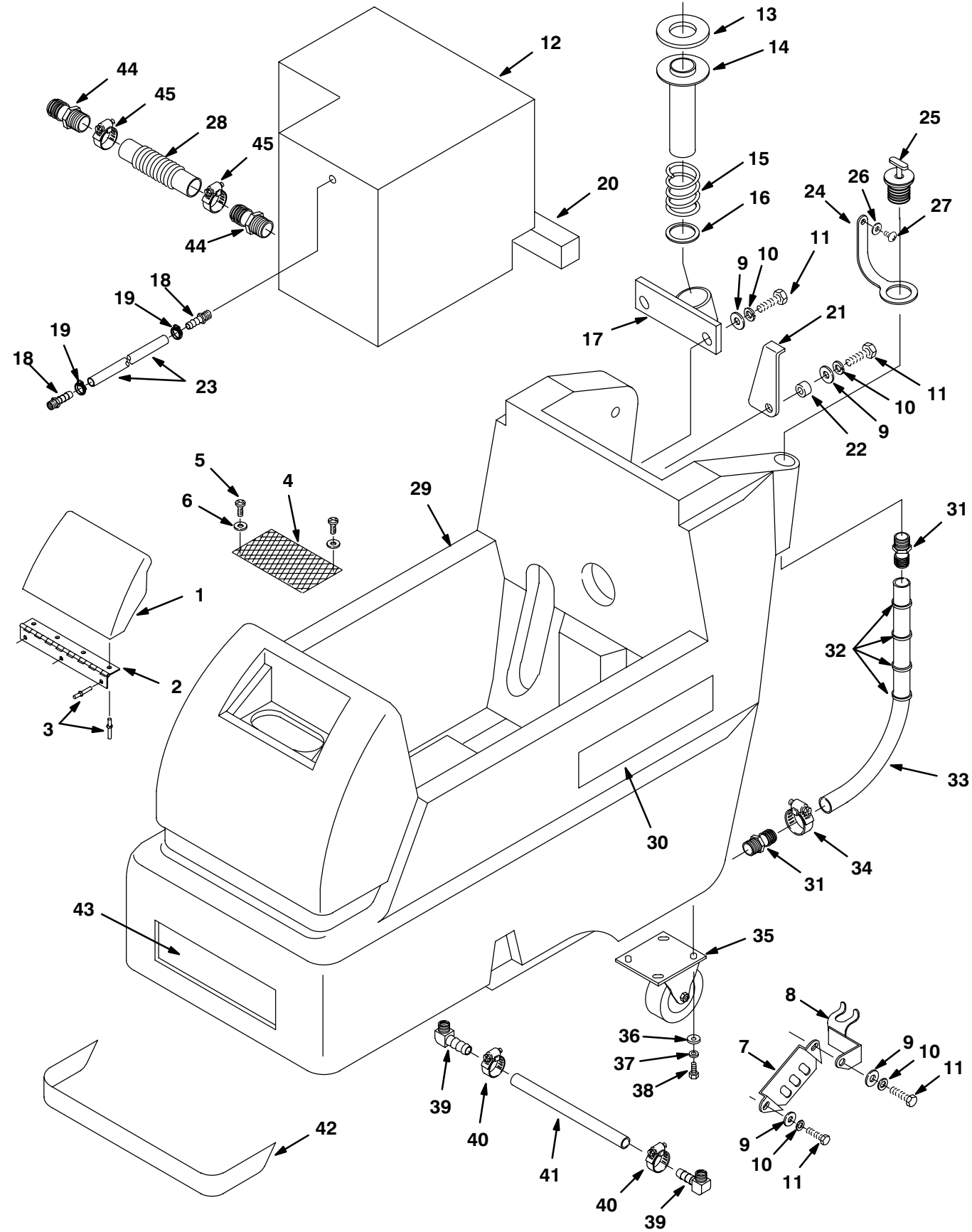


TENNANT COMPANY
Commercial Products
12875 RANSOM STREET
HOLLAND MI 49424 U.S.A.

FAX: 1-800-678-4240
CUSTOMER SERVICE: 1-800-982-7658

607311
Rev. 00 (11-99)

SOLUTION TANK GROUP



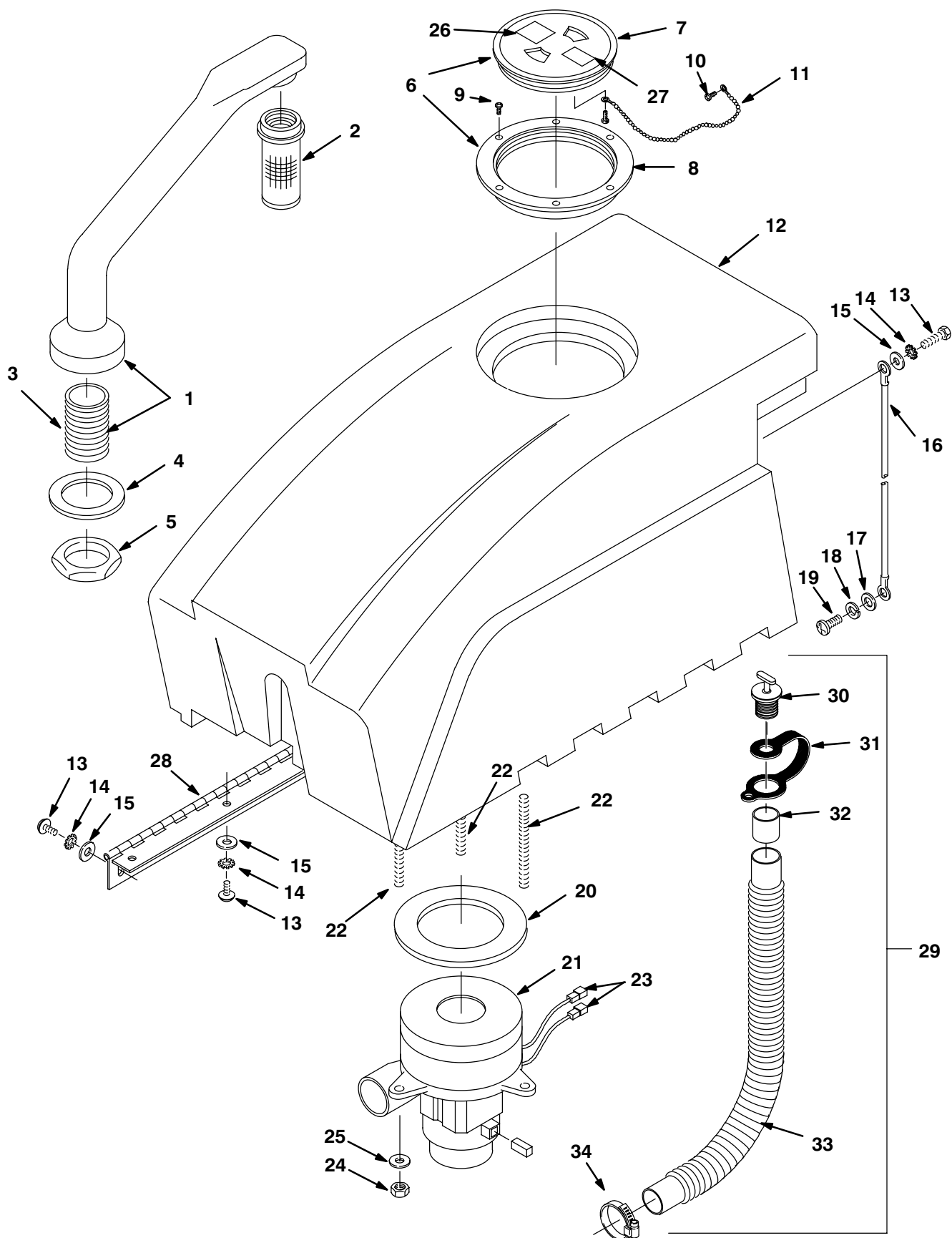
SOLUTION TANK GROUP

REF	PART #	DESCRIPTION	QTY.
1	607515	COVER, TANK, TEAL	1
2	230626	HINGE, COVER	1
3	140706	RIVET, POP	7
4	602529	SCREEN, FILL	1
5	140826	SCREW, #6X3/4	2
6	140032	WASHER, FLAT #6	2
7	230661	PLATE, LOCK CONTROL HOUSING	2
8	602641	WELDMENT, DRAIN HOSE	1
9	140027	WASHER, FLAT 5/16	7
10	140015	WASHER, LOCK 5/16	7
11	200 031 488	SCREW, M8X20MM	13
12	604308	TANK, SOLUTION 10GAL, BLUE	1
13	100151	●GASKET, TUBE ADAPTER	1
14	230664	TUBE, ADAPTER	1
15	140424	SPRING, ADAPTER TUBE	1
16	602878	WASHER	1
17	602847	BRACKET, VAC TUBE	1
18	150516	FITTING, 1/4MX3/8H BARB	2
19	140310	CLAMP, HOSE 5/16 – 7/8	2
20	604265	COUNTERWEIGHT 34LBS	1
21	230925	SUPPORT, RECOVERY TANK	1
22	140116	BUSHING	1
23	607308	HOSE, 3/8" X 8"	1

REF	PART #	DESCRIPTION	QTY.
24	600476	STRAP, PLUG	1
25	621324	●PLUG, EXPANSION	1
26	140011	WASHER, FLAT 3/16	1
27	140350	SCREW, #10X1/2	1
28	604279	HOSE, DRAIN	1
29	607552	TANK, SOLUTION, TEAL	1
30	608154	DECAL, 1520	2
31	150529	FITTING, 3/4MX3/4H	2
32	130040	WIRE TIE	4
33	607309	HOSE, 3/4" X 24"	1
34	630369	CLAMP, HOSE	1
35	630002	CASTER 4"	2
36	140036	WASHER, FLAT 3/8	8
37	140333	WASHER, LOCK M10	8
38	140277	SCREW, M10X20MM	8
39	150419	ELBOW, 1/4M X 3/8H 90°	2
40	140310	CLAMP	2
41	607310	HOSE, 3/8" X 17.5"	1
42	600730	DECAL, RECESS	1
43	120192	DECAL, "TENNANT"	1
44	150530	FITTING, 1"MX1-1/4H BARB	2
45	140307	CLAMP, HOSE 3/4 – 1-3/4	2

● RECOMMENDED STOCK ITEMS

Tennant 1520 (05-99)



RECOVERY TANK GROUP

REF	PART #	DESCRIPTION	QTY.
1	701103	ASM.,STANDPIPE	1
2	180613	●FLOAT, SHUT-OFF	1
3	606088	NIPPLE	1
4	101714	●GASKET	1
5	210240	NUT, FLANGED	1
▽6	100102	●ASM.,LID CLEAR W/STANDARD HOLE	1
▲7	100105	●LID, CENTER CLEAR ONLY	1
▲8	100109	●LID, OUTER RING ONLY	1
9	140826	SCREW, #6X3/4	7
10	3701.6	SCREW, #6X3/8	1
11	230513	CHAIN	1
12	607554	TANK, RECOVERY, TEAL	1
13	578 187 000	SCREW, M6X12MM	12
14	140052	WASHER, LOCK 1/4	12
15	140000	WASHER, FLAT 1/4	15
16	140960	CABLE	1
17	140027	WASHER, FLAT 5/16	1
18	140015	WASHER, LOCK 5/16	1
19	200 031 488	SCREW, M8X20MM	1

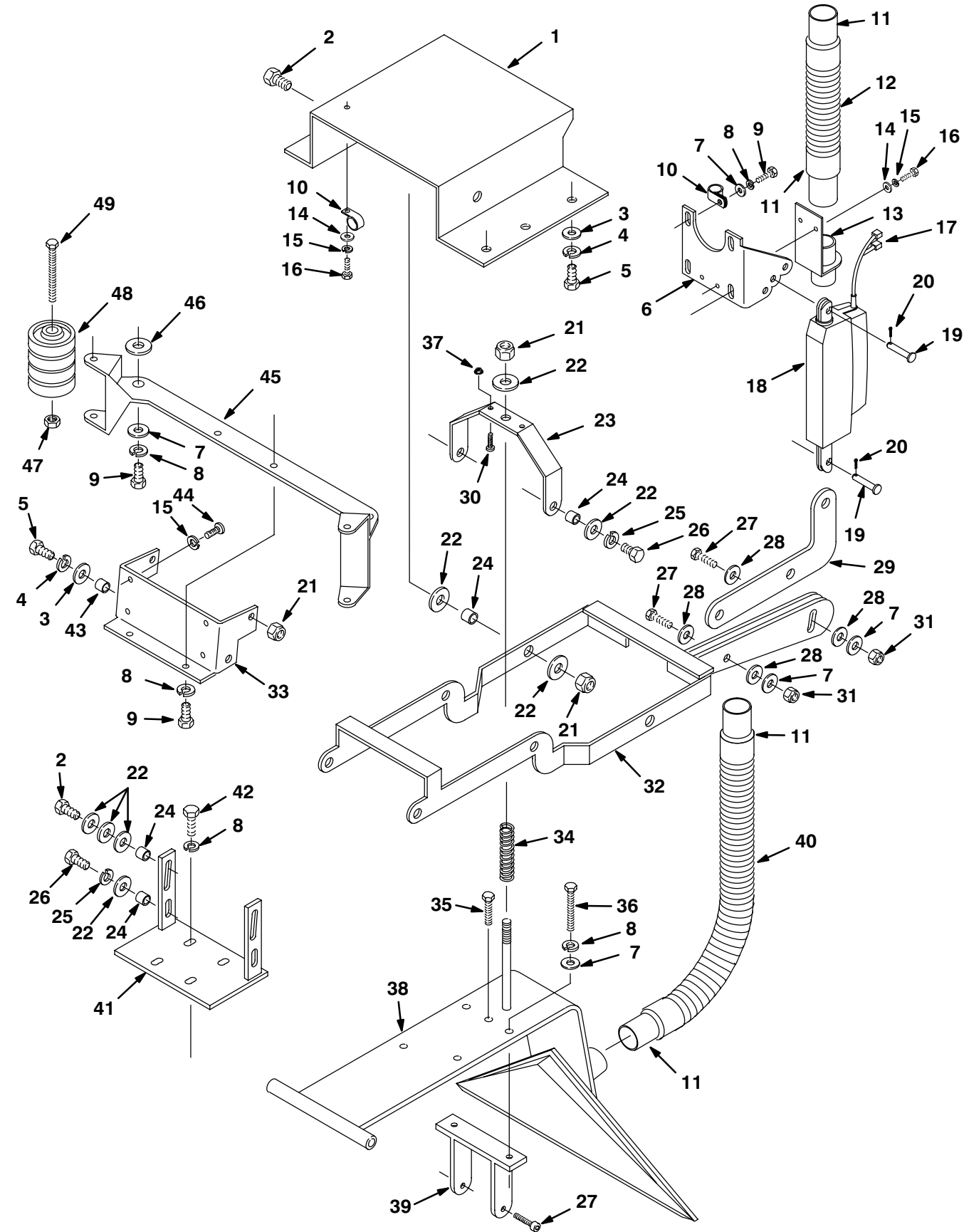
REF	PART #	DESCRIPTION	QTY.
20	100038	●GASKET, VAC MOTOR	1
21	130996	●MOTOR, VAC 5.7 /3 STAGE 120V	1
	602741	CARBON BRUSH, SET OF 2	2
22	140353	M6X108 STUD	3
23	130192	TERMINAL, MALE DSCNT	2
24	140284	NUT, M6	3
25	140000	WASHER, FLT	3
26	120906	DECAL, IMPORTANT DRAIN...	1
27	578729	DECAL, READ MANUAL	1
28	600311	●HINGE, RECOVERY TANK	1
▽29	603217	ASM., DRAIN HOSE	1
▲30	621324	PLUG, EXPANSION	1
▲31	578441	STRAP	1
▲32	630394	SLEEVE	1
▲33	630068	HOSE, DRAIN	1
▲34	140308	CLAMP	1

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

LIFT GROUP



LIFT GROUP

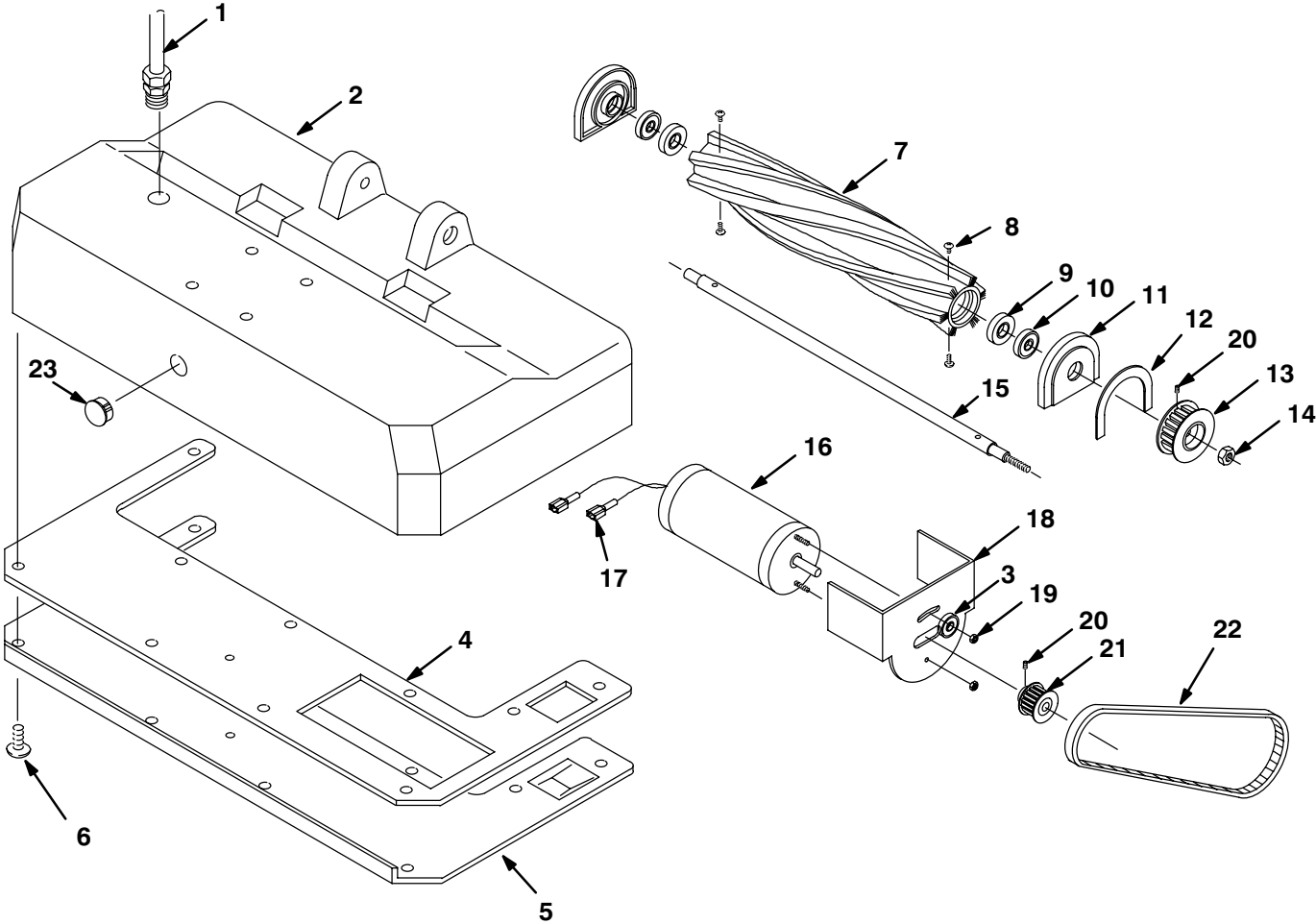
REF	PART #	DESCRIPTION	QTY.
1	600288	PLATE, BASE TRANSAXLE	1
2	140236	SCREW, 1/2-13X1 1/4	4
3	140028	WASHER, FLAT 3/8	2
4	140333	WASHER, LOCK M10	2
5	140277	SCREW, M10X20MM	2
6	600292	BRACKET, ACTUATOR	1
7	140027	WASHER, FLAT 5/16	8
8	140015	WASHER, LOCK 5/16	6
9	200 031 488	SCREW, M8X20MM	8
10	140314	CLAMP, INSULATED 3/4 ID	2
11	160486	●CUFF, HOSE	4
12	160426	●HOSE, VAC 1.5X15" W/CUFFS	1
13	603084	BRACKET, VAC HOSE	1
14	140000	WASHER, FLAT 1/4	3
15	140016	WASHER, LOCK 1/4	7
16	200 031 432	SCREW, M6X10MM	3
17	130129	TERMINAL FM DSCNT 22-18 RED	2
18	600952	●ACTUATOR, 120V	1
19	604076	PIN, CLEVIS	2
20	578421	PIN, COTTER	2
21	140516	NUT, 1/2-13 NYLOCK	3
22	140045	WASHER, FLAT 1/2	17
23	602567	BRACKET, SPRING	1
24	602882	BUSHING	8
25	140024	WASHER, LOCK 1/2	6

REF	PART #	DESCRIPTION	QTY.
26	140352	SCREW, M12X25	4
27	140564	BOLT, SHOULDER 3/8X3/4	4
28	140036	WASHER, FLAT 3/8	4
29	603044	PLATE, ACTUATOR LIFT	1
30	140804	SCREW, 10-24X1"	1
31	140546	NUT, NYLOCK 5/16-18	4
32	600305	BRACKET, LIFT EXTRACTOR	1
33	602977	BRACKET, MOUNT CARPET TOOL	1
34	602565	SPRING, CARPET TOOL	1
35	140221	SCREW, 5/16-18X1 1/4	2
36	140220	SCREW, 5/16-18X2 1/2	2
37	140519	NUT, 10-24 KEP	3
38	600306	TOOL, CARPET	1
39	603046	BRACKET, BASE LEVELER	1
40	160613	●HOSE, VAC 1.5X30" W/CUFFS	1
41	600307	BRACKET, MOUNT EXTRACTOR	1
42	140226	SCREW, 5/16-18X5/8	4
43	140139	BUSHING, BRUSH LIFT PEDAL	2
44	578187000	SCREW, M6X12MM	4
45	603093	BRACKET, BUMPER WHEEL	1
46	25732	WASHER, FLAT 1.25X.36X.09	2
47	140515	NUT, NYLOCK 3/8-16	2
48	630477	WHEEL, 2" GRAY	8
49	590248	SCREW, 3/8-16X4-3/4	2

● RECOMMENDED STOCK ITEMS

PARTS LIST

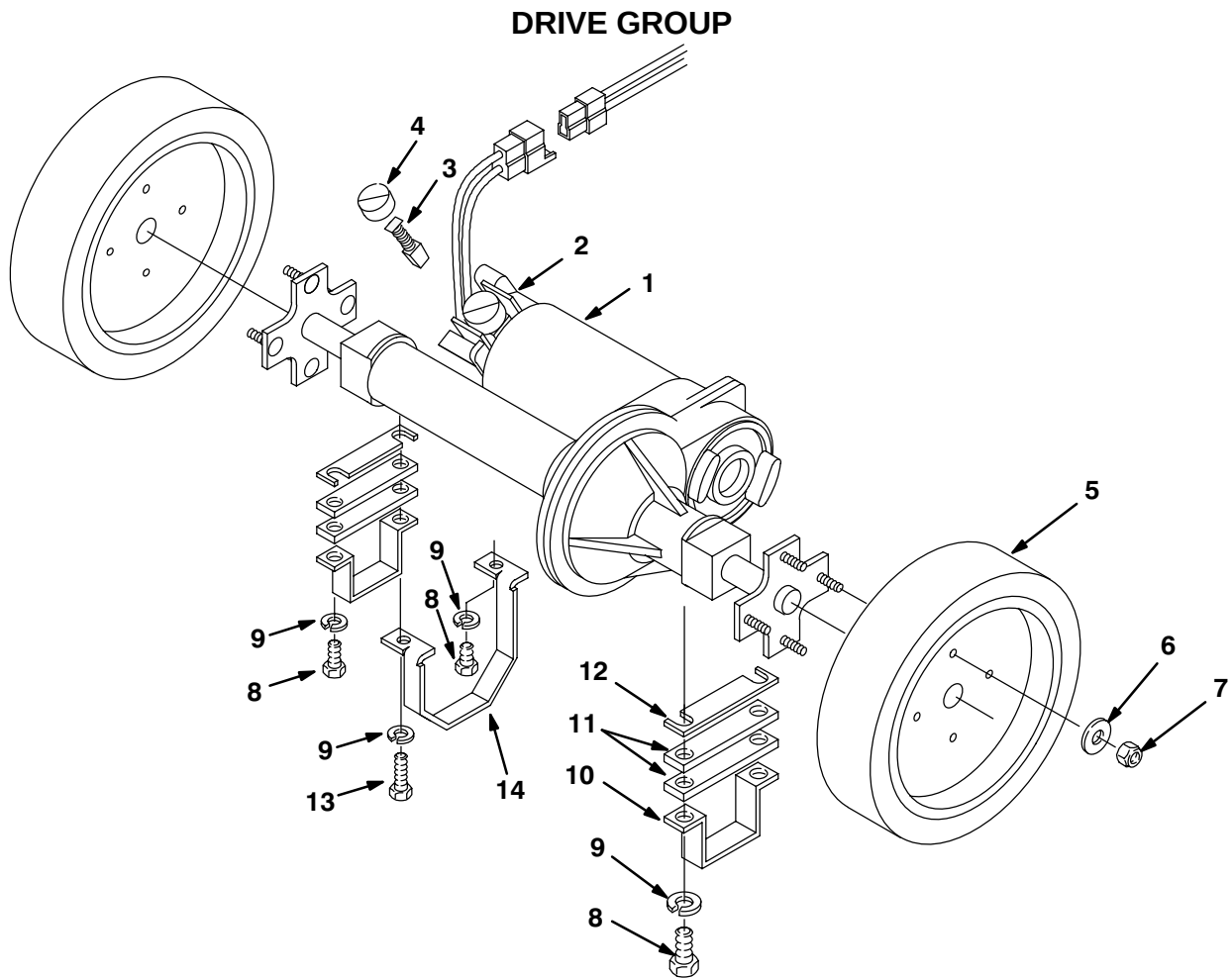
BRUSH BASE GROUP



REF	PART #	DESCRIPTION	QTY.
1	130290	CORD, BASE 18/3X36 BK	1
2	101106	BASE, 22"	1
3	200315016	WASHER, FLAT	1
4	100157	GASKET, BASE PLATE	1
5	230401.BK	PLATE, BASE	1
6	140197	SCREW, 10-24X3/8 TRSPHL	11
▽	700422	●ASM., BRUSH	1
▲7	240063	BRUSH, CYLINDER	1
▲8	140554	SCREW, 1/4-20X3/4	4
▲9	100049	SEAL, BRUSH BEARING	2
▲10	140125	BEARING, BRUSH	2
▲11	230261	BLOCK, BEARING	2

REF	PART #	DESCRIPTION	QTY.
▲12	100005	GASKET, BEARING BLOCK	1
▲13	230408	PULLEY, BRUSH	1
▲14	140548	NUT 5/16	1
▲15	230406	SHAFT, BRUSH	1
16	130471	●MOTOR, BRUSH DRIVE	1
17	130096	TERMINAL, MALE DSCNT 16-14	2
18	230411	BRACKET, BRUSH MOTOR	1
19	140518	NUT, KEP 10-32	2
20	140859	SCREW, SET 1/4-20X1/4	1
21	230410	●PULLEY, MOTOR	1
22	230409	●BELT, TIMING	1
23	130154	DOME PLUG	1

- ▽ ASSEMBLY
- ▲ INCLUDED IN ASSEMBLY
- RECOMMENDED STOCK ITEMS



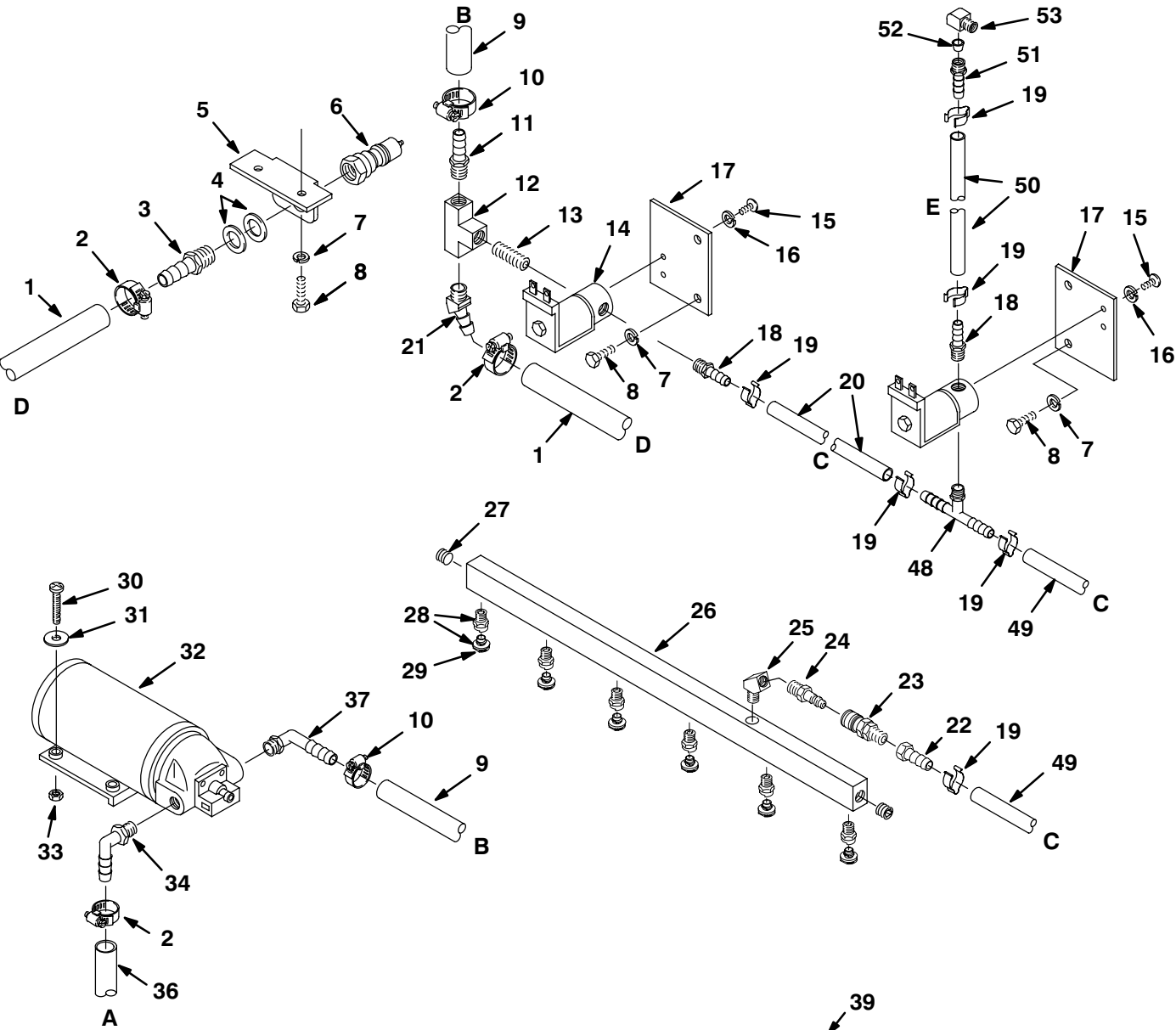
REF	PART #	DESCRIPTION	QTY.
▽1	603833	TRANSAXLE 120VDC	1
▲2	604504	END BELL, TRANSAXLE MOTOR	1
▲3	604505	CARBON BRUSH	2
▲4	604506	CAP	2
5	640013	WHEEL, 8"	2
6	140000	WASHER, FLAT 1/4	8
7	630268	NUT 1/4-28	8

REF	PART #	DESCRIPTION	QTY.
8	612 255 000	SCREW, M10X35MM	3
9	140333	WASHER, LOCK M10	4
10	602881	BRACKET, TRANSAXLE MOTOR	2
11	600304	SPACER, AXLE 3/4X4X1/4	4
12	602883	SPACER, 3/4X4X1/8	2
13	601094000	SCREW, M10X45	1
14	603466	GUARD, TRANSAXLE	1

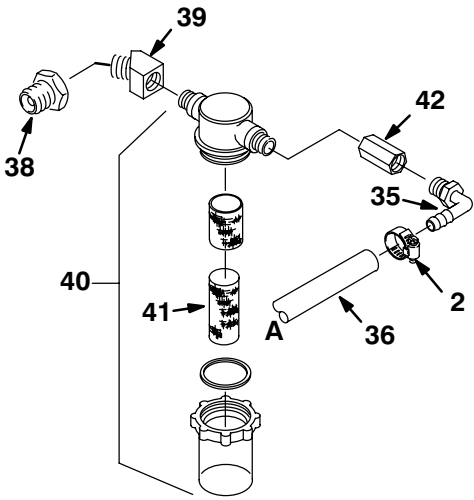
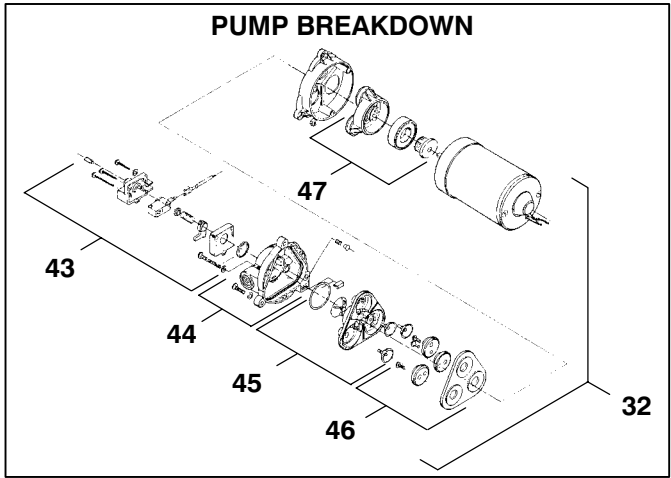
▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

PLUMBING GROUP



PUMP BREAKDOWN



PLUMBING GROUP

REF	PART #	DESCRIPTION	QTY.
1	607704	HOSE, 3/8 X 24.5"	1
2	140310	CLAMP, HOSE	4
3	150516	FITTING, 1/4MX3/8H HOSE BARB	1
4	140058	WASHER, WAND	2
5	603063	BRACKET, QC MOUNT	1
6	150933	FITTING, 1/4F PLUG	1
7	140016	WASHER, LOCK 1/4	8
8	578 187 000	SCREW, M6X12MM	8
9	607705	HOSE, 1/2" X 24" RED	1
10	630369	CLAMP, HOSE	2
11	150517	FITTING, 1/4MX1/2H HOSE BARB	1
12	150706	TEE, 1/4F	1
13	150615	FITTING, 1/4M CLOSE NIPPLE	1
14	210033	●SOLENOID, WATER 120V	2
15	140801	SCREW, 8-32X3/8	4
16	140023	WASHER, LOCK #8	4
17	603055	BRACKET, SOLENOID	2
18	150515	FITTING, 1/4MX3/8H HOSE BARB	3
19	140325	CLAMP, 1/2	6
20	607706	HOSE, 1/4" X 18"	1
21	28303	FITTING, 1/4MX3/8H HOSE BARB	1
22	150520	FITTING, 1/8FX1/4H HOSE BARB	1
23	150915	FITTING, 1/8M COUPLER	1
▽	700423	ASM., SPRAY BAR	1
▲24	150921	FITTING, 1/8M PLUG	1
▲25	150422	FITTING, 1/8MX1/8F 45° ELBOW	1
▲26	230407	MANIFOLD, SPRAYBAR	1
▲27	150208	PLUG	2
▲28	201011	●FITTING, TWISTOUT NOZZLE (80015)	6

REF	PART #	DESCRIPTION	QTY.
29	201013	●FITTING, REPLACEMENT TIP (80015)	6
30	140899	SCREW, 10-24X1 1/4	2
31	140012	WASHER, FLAT	2
32	180103	●PUMP, 100 PSI 120V	1
N/S	130096	TERMINAL, 120V	1
33	140552	NUT, NYLOCK 10-24	2
34	150412	FITTING, 3/8MX3/8H BUSHING	1
35	150415	FITTING, 1/4MX3/8H ELBOW	1
36	607305	TUBING, 3/8 X 30" GRAY VINYL	1
37	150425	FITTING, 3/8MX1/2H 90° ELBOW	1
38	150101	FITTING, 1/2MX1/4F BUSHING	1
39	150403	FITTING, 1/4MX1/4FX45° ELBOW	1
40	180619	FILTER, 1/4 NPT CLEAR BOWL	1
41	180638	●SLEEVE, NYLON FILTER	1
42	150302	FITTING, 1/4FX1/4F COUPLING	1
43	190129	●KIT, PUMP PRESSURE SWITCH	1
	190172	●KIT, PUMP PRESS SWITCH(VITON)	1
	190134	●KIT, PUMP DIAPHRAGM ONLY	1
44	190128	●KIT, PUMP UPPER HOUSING	1
	190124	●KIT, PUMP CHECK VALVE ONLY	1
45	190171	●KIT, PUMP VALVE (VITON)	1
46	190131	●KIT, PUMP SERVICE	1
47	190130	●KIT, PUMP LOWER HOUSING	1
48	607306	FITTING 1/4MX1/4HX1/4H TEE	1
49	607307	HOSE, 1/4" X 12" LP GRAY	1
50	607707	HOSE, 1/4" X 9.5" LP GRAY	1
51	603649	FITTING 1/4MX1/4H-1/8NPTF	1
52	603557	FITTING, PLUG W/ 1/16" ORIFICE	1
53	150406	FITTING 1/4MX1/4F ELB STRT90	1

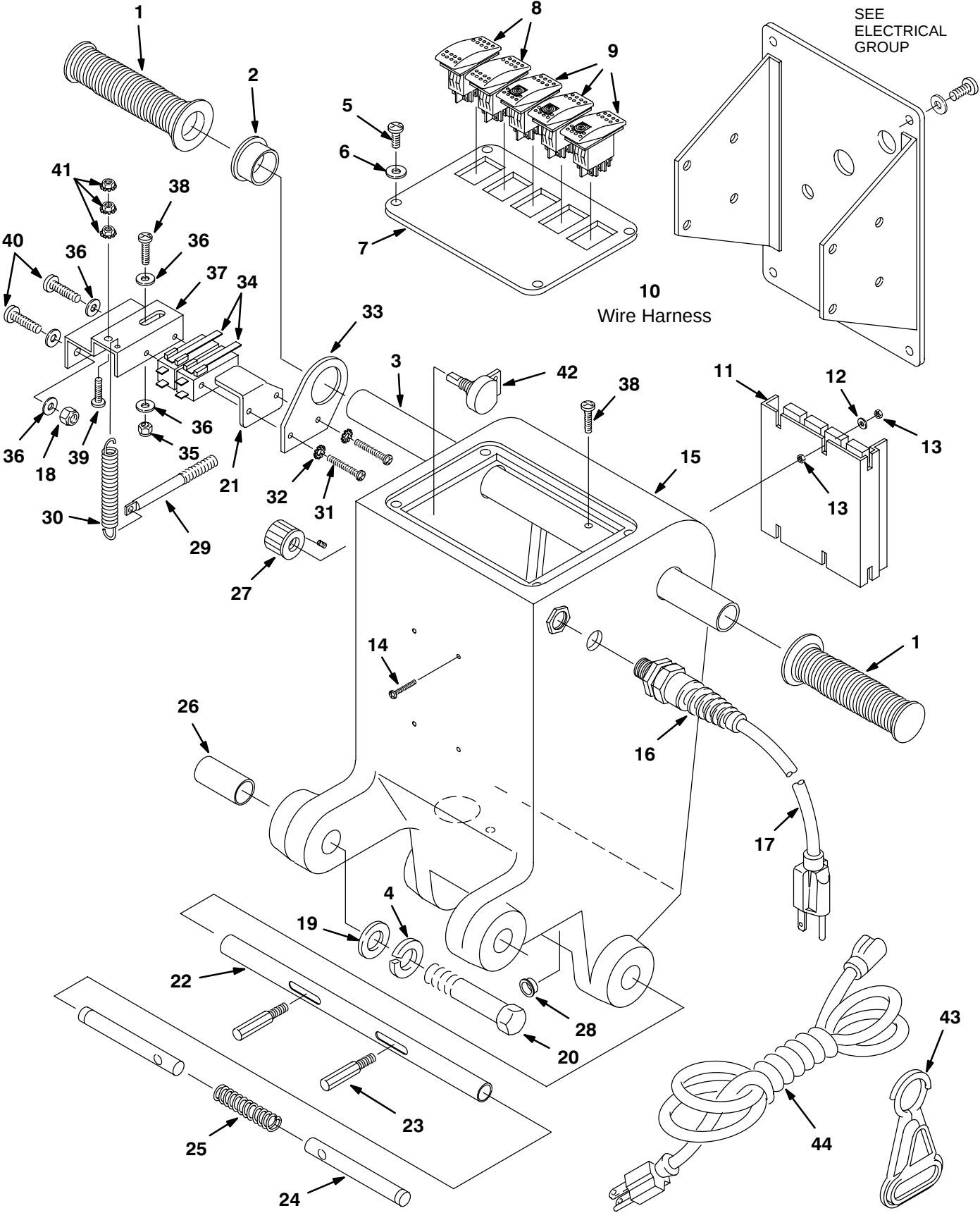
▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

PARTS LIST

CONSOLE GROUP



CONSOLE GROUP

REF	PART #	DESCRIPTION	QTY.
1	200823	GRIP, HANDLE TUBE	2
2	27099	BUSHING	1
3	604402	HANDLE, TUBE	1
4	140024	WASHER, LOCK 1/2	2
5	578 141 000	SCREW, M5X10MM	4
6	140018	WASHER, LOCK #10	4
▽	607699	ASM., CONTROL PANEL	1
▲7	604325	PANEL, CONTROL	1
▲8	602919	●SWITCH, DPDT ON/OFF	2
▲9	604326	●SWITCH, LIGHTED ROCKER 120V	3
▲10	604328	HARNESS, CONSOLE W/POT. (N/S)	1
11	130379	●CONTROL, BOARD 120V	1
12	140026	WASHER, #6 FLAT	4
13	140534	NUT, 6-32 NYLON	8
14	140879	SCREW, 6-32X3/4 RNDSLT	4
15	607556	HOUSING, CONTROL, TEAL	1
16	130167	CORDGRIP, LIQTIGHT FLX 1/2N	1
17	130228	CORD, 14/3 X 34" YLW SMOOTH	1
18	140284	NUT, M6X1.0	2
19	140045	WASHER, FLAT 1/2	2
20	140351	SCREW, M12X70MM	2
21	603830	PLATE, GUARD SWITCH	1
22	230715	TUBE, HANDLE ADJUSTMENT	1

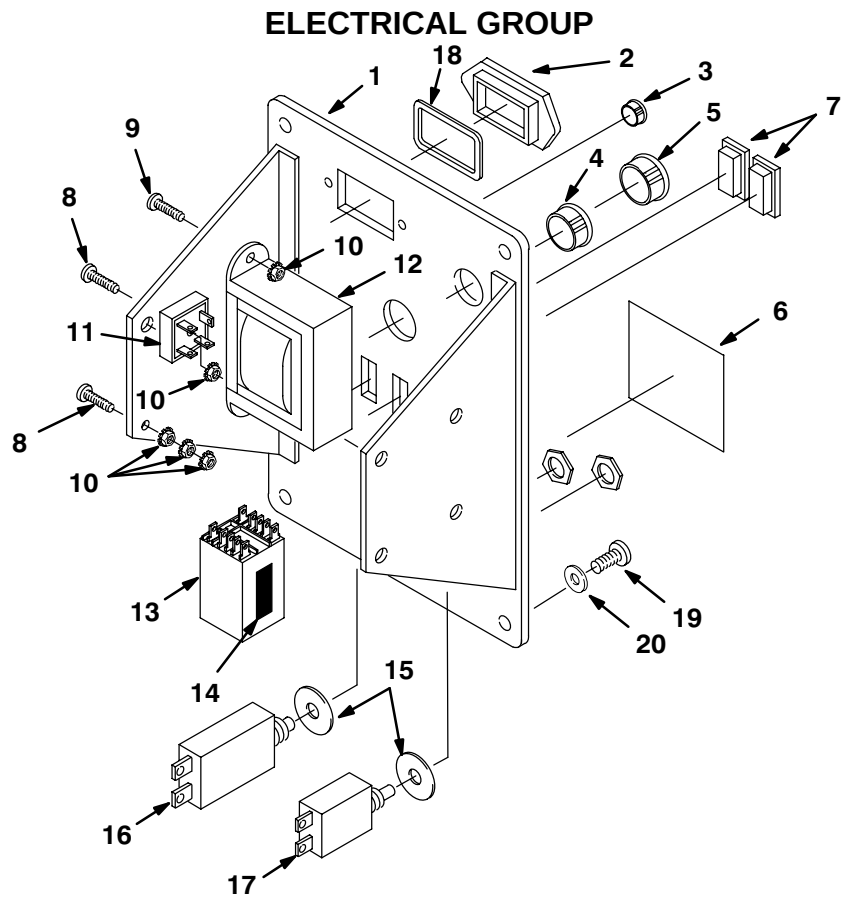
REF	PART #	DESCRIPTION	QTY.
23	230649	PIN, HANDLE ADJUSTMENT	2
24	230710	PIN, HANDLE LOCK	2
25	140415	SPRING, LOCK PIN	1
26	140155	BUSHING	2
27	601110	KNOB, SPEED CONTROL	1
28	603007	BUSHING, SNAP	1
29	602886	PIN, SPRING RETURN	1
30	601118	SPRING, EXTENSION	1
31	140830	SCREW, 6-32X1-5/8	2
32	140019	WASHER, LOCK #6	2
33	27098	BRACKET, SWITCH	1
34	130729	●SWITCH, ROLL	2
35	140552	NUT, 10-24	1
36	140000	WASHER, FLAT 1/4	6
37	25671	MOUNT, SWITCH	1
38	140890	SCREW, 10-24X1/2	2
39	140900	SCREW, 10-24X3/4	1
40	578 321 000	SCREW, M6X16MM	2
41	140519	NUT, 10-24 KEP	3
42	190802	●POTENTIOMETER, 50K	1
43	130176	BELT CLIP, STRAIN RELIEF	1
44	130229	CORD, 14/3X75'	1

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

PARTS LIST

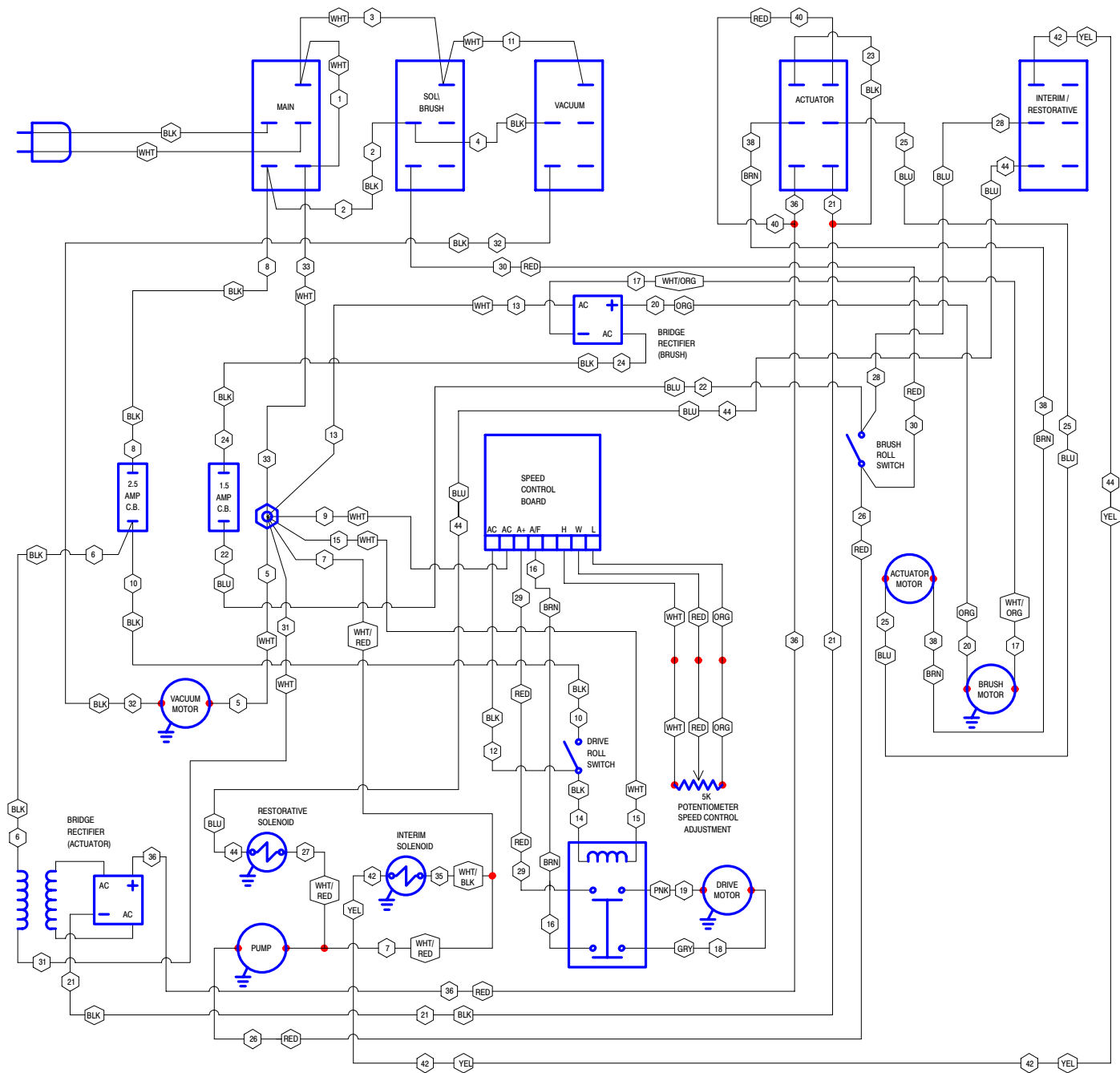


REF	PART #	DESCRIPTION	QTY.
1	602559	PANEL, CONTROL HOUSING	1
2	222519	PLUG, HOUR METER	1
3	069 764 626	PLUG, HOLE 012.7	1
4	130161	PLUG, DOME .875	1
5	130175	PLUG, DOME .750	1
6	630420	DECAL, FLAMMABLE MATERIAL	1
7	582150	PLUG, ACCESSORY SWITCH	2
8	140900	SCREW, 10-24X3/4	3
9	140890	SCREW, 10-24X1/2	2
10	140519	NUT, 10-24 KEP	7
11	130304	●RECTIFIER BRIDGE 600V 15AMP	2

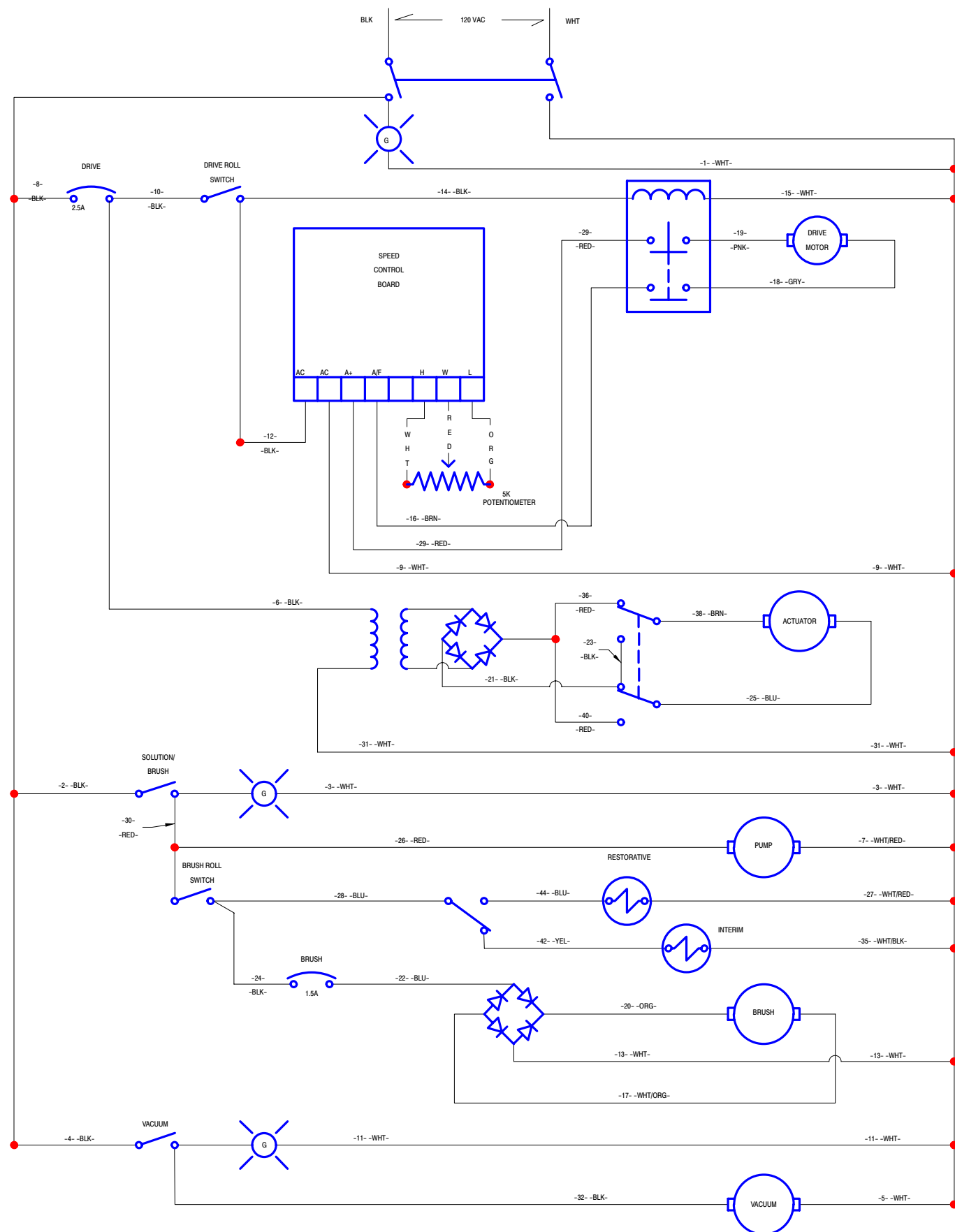
REF	PART #	DESCRIPTION	QTY.
12	604330	●TRANSFORMER 120V	1
13	604327	●SOLENOID, 120V	1
14	100058	TAPE, ACRYLIC FOAM 1" WIDE	.16ft
15	140028	WASHER, FLAT 3/8	2
16	130746	●BREAKER, CIRCUIT BRUSH 2.5 AMP	1
17	578 337 000	●BREAKER, CIRCUIT 1.5 AMP	1
18	603224	O-RING	1
19	578141000	SCREW, M5X10	4
20	140018	WASHER, LOCK #10	4

● RECOMMENDED STOCK ITEMS

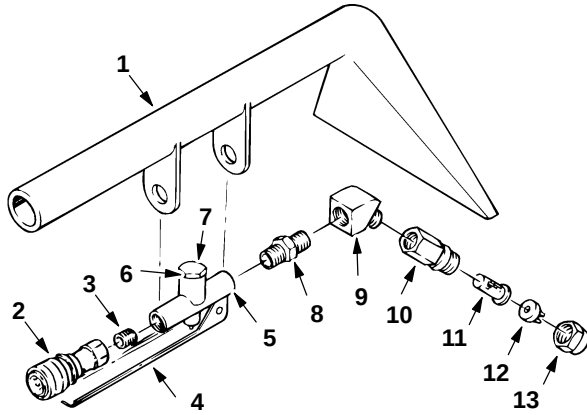
WIRE DIAGRAM 120V



Tennant 1520 (05-99)

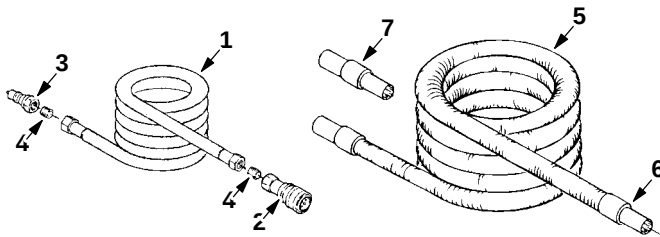


127mm (5 inch) HAND TOOL



REF	PART #	DESCRIPTION	QTY.
	200505	TOOL, HAND (COMPLETE)	1
1	200431.BK	TOOL, HAND	1
2	150913	COUPLER, QUICK (SER. 60)	1
3	150615	NIPPLE, CLOSE	1
4	200905	TRIGGER, HAND TOOL	1
5	210210	VALVE, FLOW CONTROL	1
6	190600	VALVE PIN & SPRING (NOT SHOWN)	1
7	N/A	CAP, VALVE	1
8	150606	NIPPLE, HEX 1/4	1
9	150403	ELBOW, ST 1/4 45°	1
10	200992	BODY, SPRAY 1/4F	1
11	200996	SCREEN, SPRAY NOZZLE	1
12	200965	TIP, SPRAY #8002	1
13	200994	CAP, SPRAY BODY	1

SOLUTION AND VACUUM HOSES

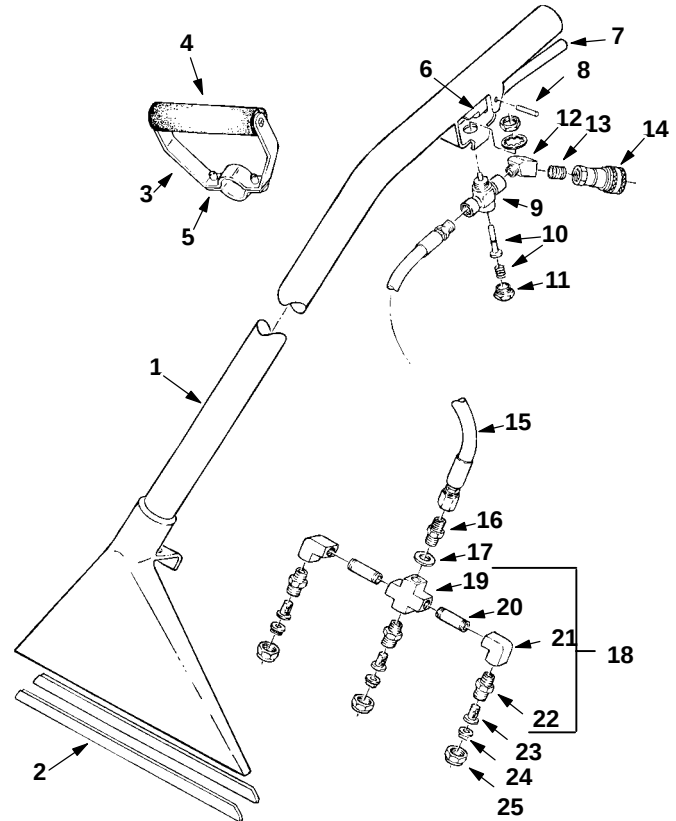


REF	PART #	DESCRIPTION	QTY.
▽1	160185	HOSE, SOLUTION 15'	1
▽1	160186	HOSE, SOLUTION 25'	1
▲2	150913	COUPLER, QUICK SER. 60	1
▲3	150933	PLUG, QUICK COUPLER	1
▲4	150615	NIPPLE	2
▽5	160400	HOSE, VACUUM 15' W/ CUFFS	1
▽5	160401	HOSE, VACUUM 25' W/ CUFFS	1
▲6	160430	CUFF, HOSE 1-1/2"	2
▲7	160451	CONNECTOR, VACUUM HOSE 1-1/2"	1

▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

FLOOR TOOL



REF	PART #	DESCRIPTION	QTY.
	600048	FLOOR TOOL (COMPLETE)	1
1	200403.BK	TOOL, FLOOR	1
2	200939	SHOES, S/S, FLOOR TOOL	2
3	200927	GRIP, ADJUSTABLE (COMPLETE)	1
4	200912	GRIP, FOAM	1
5	140259	SCREW, 1/4-20X5/8	1
6	200902	TRIGGER, FLOOR TOOL	1
7	200809	SLEEVE, TRIGGER	1
8	140605	PIN	1
	140520	NUT, PUSH (NOT SHOWN)	2
9	210150	VALVE, FLOW CONTROL	1
10	190603	KIT, VALVE PIN & SPRING	1
11	N/A	CAP, HEX, VALVE	1
12	150403	ELBOW, 1/4-45°	1
13	150615	NIPPLE, CLOSE 1/4	1
14	150913	COUPLER, QUICK SER. 60	1
15	160170	HOSE, SOLUTION, LP	1
16	150606	NIPPLE, HEX 1/4"	1
17	140058	WASHER	1
▽18	700062	ASM., SPRAY BAR	1
▲19	150700	CROSS	1
▲20	150600	NIPPLE	2
▲21	150401	ELBOW, 90° 1/4FX1/4F	2
▲22	200993	SPRAY BODY	3
23	200996	SCREEN, SPRAY BODY	3
24	200964	TIP	3
25	200994	CAP, SPRAY BODY	3