

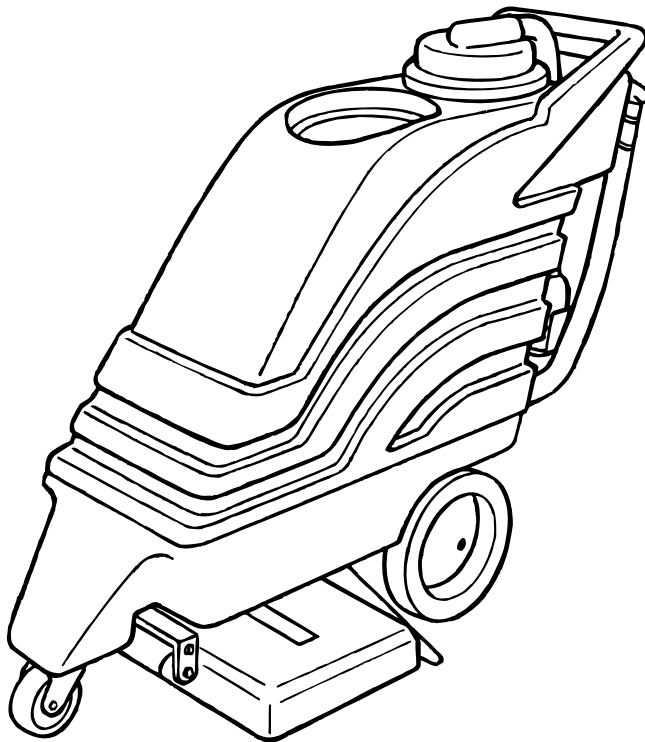


# Frontier™

Self-Contained Carpet Extractor

**Model No.:**  
**608549**  
**609236**

**Operator and Parts Manual**

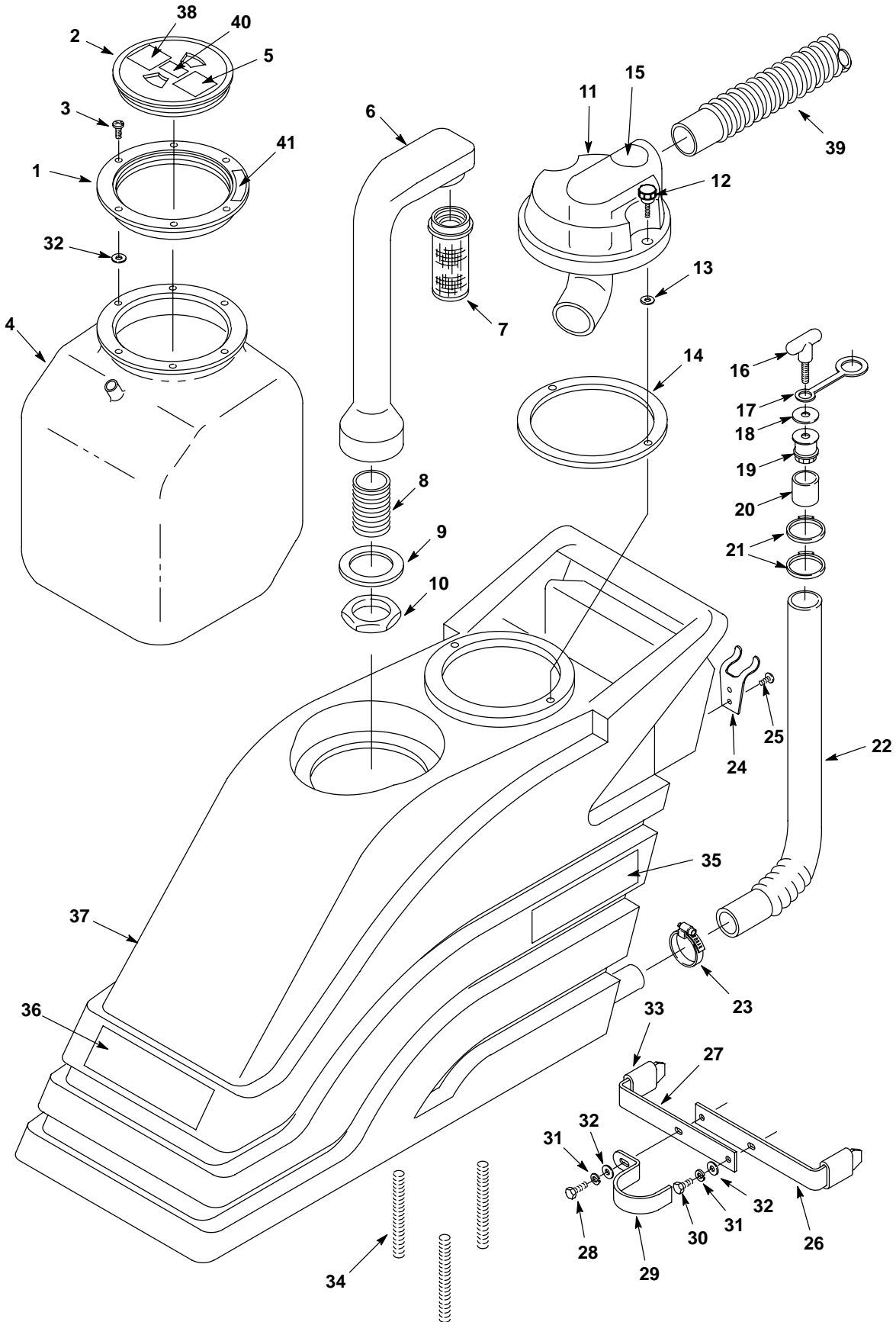


**NOBLES**  
12875 RANSOM STREET  
HOLLAND MI 49424 U.S.A.

**CUSTOMER SERVICE: 1-800-365-6625**  
**FAX: 1-800-678-4240**  
**OUTSIDE U.S. : 1-616-786-2330**

**608550**  
**Rev. 00 (09-99)**

RECOVERY TANK GROUP



## RECOVERY TANK GROUP

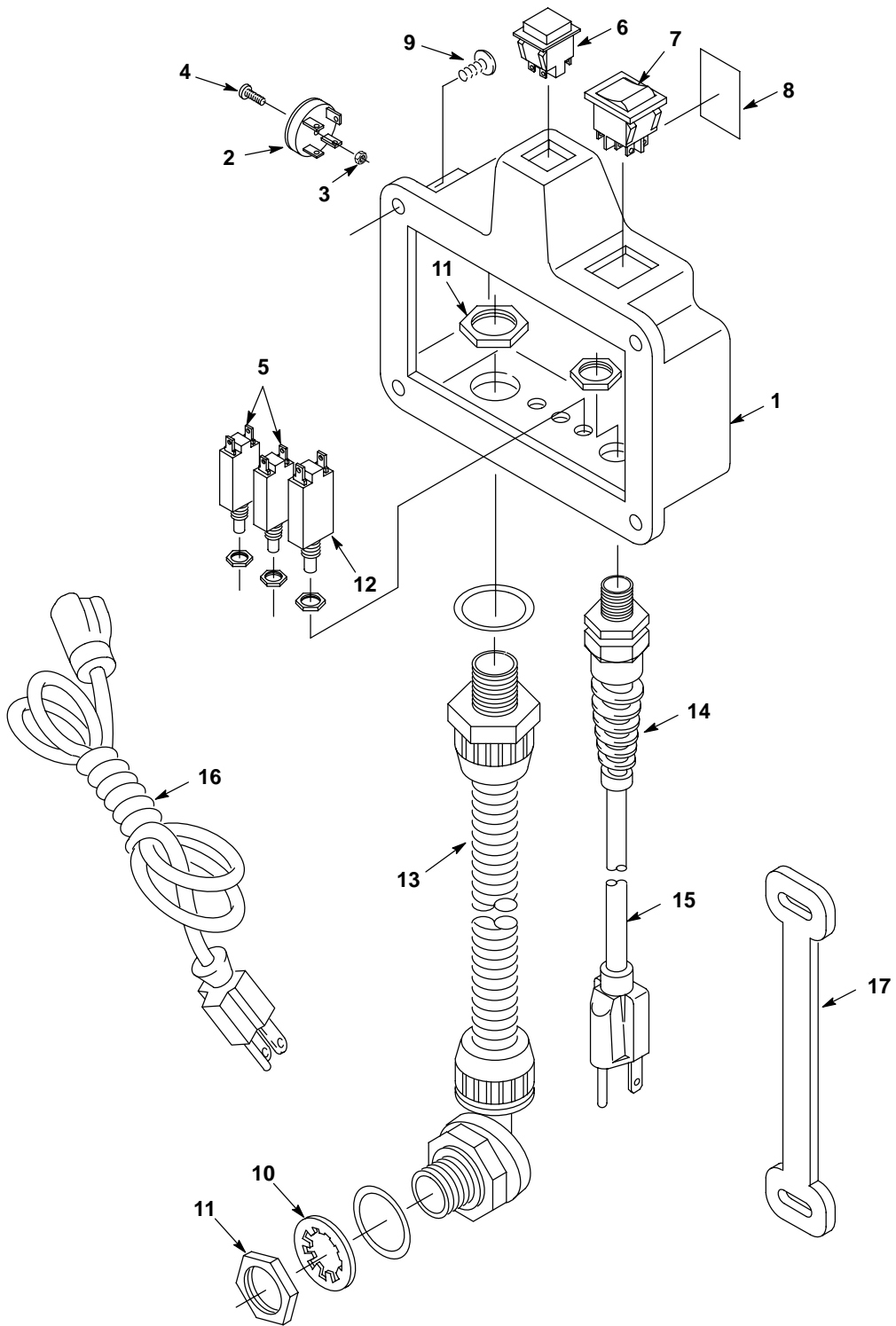
REF	PART #	DESCRIPTION	QTY.
∇	100103	ASM., LID, ASSEMBLY	1
▲1	100109	LID, OUTER RING ONLY (BLACK)	1
▲2	100105	LID, CENTER ONLY (CLEAR)	1
3	140900	SCREW, 10-24 X 3/4	6
4	602715	BLADDER, 10 GAL. MODEL	1
5	578729	DECAL, READ MANUAL	1
6	602448	STANDPIPE 10 GAL. MODEL	1
7	180613	FLOAT, SHUT-OFF	1
8	606088	NIPPLE	1
9	230159	O-RING, STANDPIPE	1
10	210240	NUT, FLANGED METAL	1
∇11	701005	ASM., DOME	1
▲12	240217	KNOB, DOME	2
▲13	140037	WASHER, NYLON	2
▲14	100042	GASKET, RECOVERY DOME	1
▲15	120399	DECAL, DO NOT ALLOW FOAM	1
∇	701061	ASM., DRAIN HOSE	1
▲16	230831	KNOB, DRAIN HOSE	1
▲17	230882	STRAP	1
▲18	140056	WASHER, FENDER	1
▲19	140955	PLUG	1
20	140921	SLEEVE, DRAIN HOSE	1

REF	PART #	DESCRIPTION	QTY.
21	140072	CLAMP	2
22	160416	HOSE, DRAIN	1
23	140307	CLAMP	1
24	230696.BK	BRACKET, DRAIN HOSE	1
25	140825	SCREW, #6X3/4	2
26	230843	BRACKET, TANK BRACE W/ THREADS	1
27	230844	BRACKET, TANK BRACE W/HOLES	1
28	140259	SCREW, 1/4-20X5/8	1
29	230955	CLAMP	1
30	140553	SCREW, 1/4-20X1/2	1
31	140016	WASHER, LOCK	2
32	140000	WASHER, FLAT	8
33	102569	TANK, GASKET	2
34	140227	STUD, 1/4-20X5	3
35	608472	DECAL, FRONTIER	2
36	608186	DECAL, "NOBLES"	1
37	608532	TANK, RECOVERY GREEN	1
38	630420	DECAL, FLAMMABLE MATERIAL	1
39	603547	HOSE, VAC 1-1/2 X 51" W/CUFFS	1
40	120906	DECAL, IMPORTANT DRAIN	1

∇ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

CONTROL CONSOLE GROUP



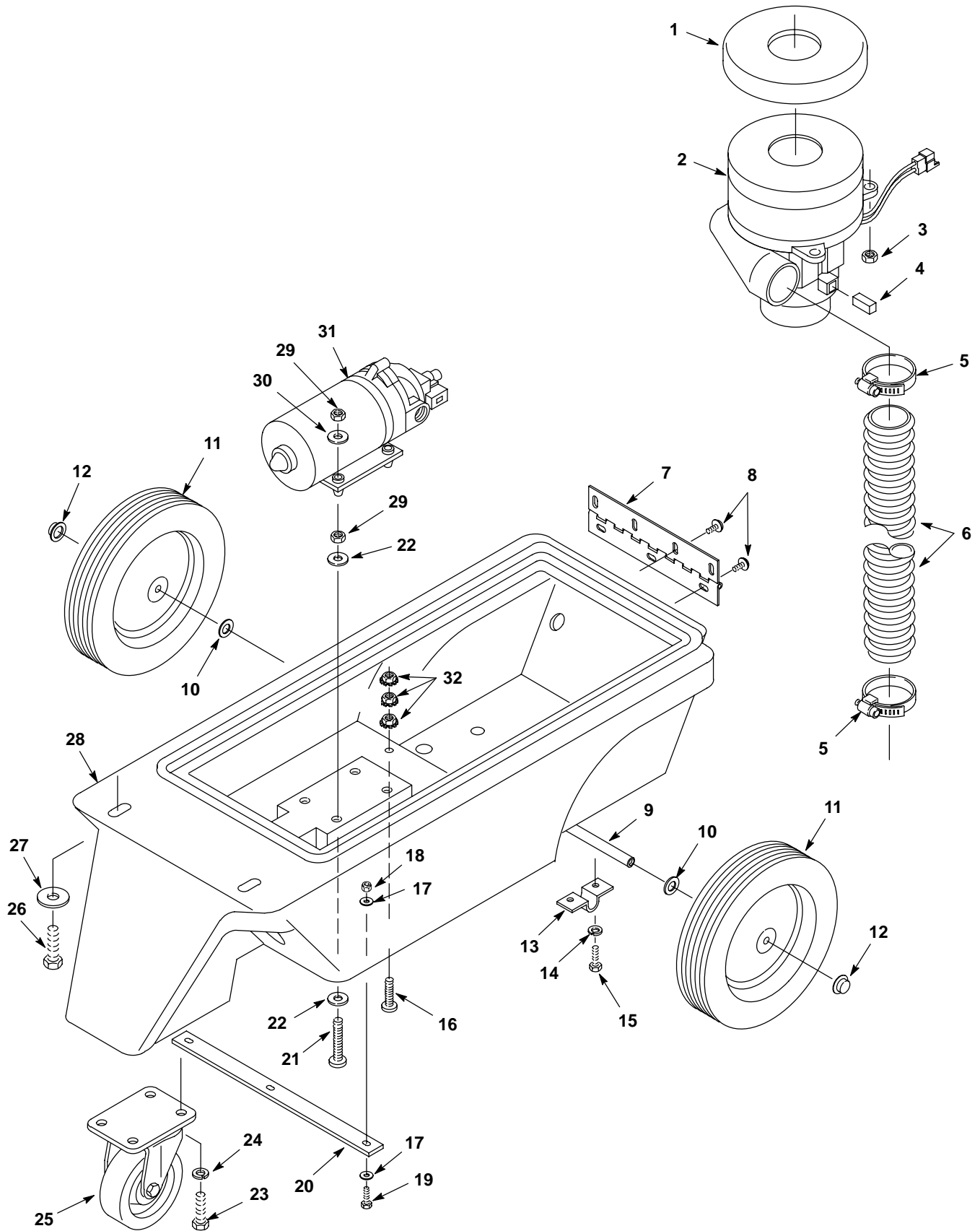
## CONTROL CONSOLE GROUP

REF	PART #	DESCRIPTION	QTY.
1	608537	ASM, SWITCHBOX GREEN (120V)	1
2	130304	●RECTIFIER, MINIBRIDGE 600V	1
3	140534	NUT, NYLON	1
4	140879	SCREW, 6-32X3/4	1
5	578337000	●BREAKER, CIRCUIT 1.5A (120V)	2
	130747	BREAKER, CIRCUIT 1.2A (220V)	1
6	130441	●SWITCH, PULSE (120V)	1
	130716	SWITCH, PULSE (220V)	1
7	130717	●SWITCH, ROCKER (120V)	1
	130764	SWITCH, ROCKER (220V)	1
8	120619	DECAL, WARNING EXTRACTOR	1

REF	PART #	DESCRIPTION	QTY.
9	140824	SCREW 1/4-20X5/8	4
10	140044	WASHER 13/16 INT	1
11	140504	NUT, CONDUIT	2
12	130670	●BREAKER, CIRCUIT 12AMP (120V)	1
13	130977	HARNESS, WIRE	1
14	130166	●GRIP, CORD (120V)	1
	130137	GRIP, CORD (220V)	1
15	130237	●CORD, 16/3X18" YELLOW (120V)	1
	130662	CORD, 18/3X24" BLACK (220V)	1
16	130229	CORD, 14/3 X 75' YELLOW SMOOTH	1
17	604393	STRAP, CORD STRAIN RELIEF	1

● RECOMMENDED STOCK ITEMS

CHASSIS GROUP



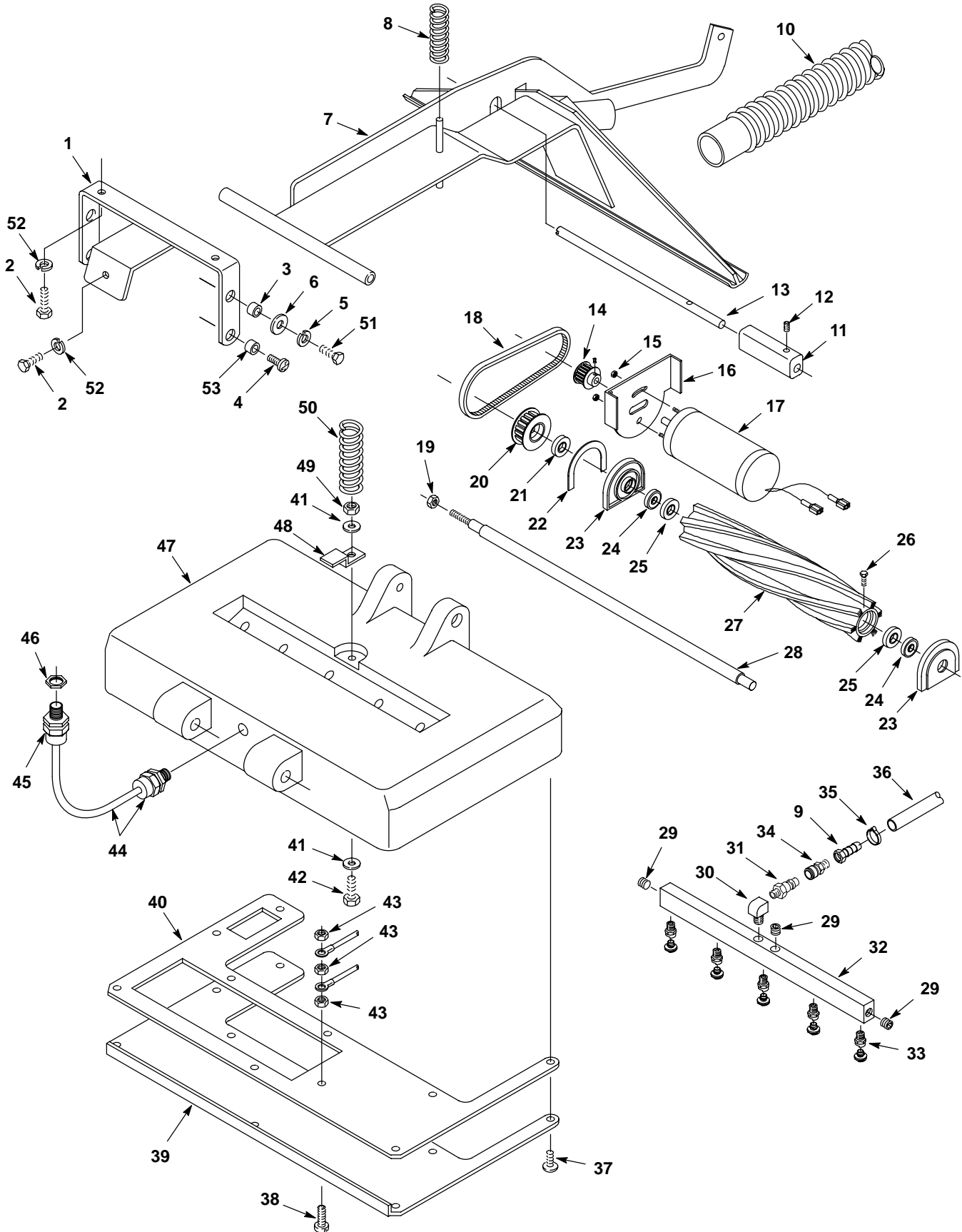
**CHASSIS GROUP**

REF	PART #	DESCRIPTION	QTY.
1	100118	●GASKET, VAC MOTOR 120V	1
	100038	GASKET, VAC MOTOR 220V	1
2	130996	●MOTOR, VAC 120V	1
	603042	COVER, VAC FAN 120V	1
	130403	MOTOR, VAC 240V	1
3	140501	NUT 1/4-20 NYLOCK	4
4	600177	●BRUSH, CARBON 2/PK 120V	2
	190158	BRUSH, CARBON 2/PK 220V	2
5	140308	CLAMP, HOSE 1-5/16 TO 2-1/4	2
6	069 760 778	HOSE, EXHAUST 2" X 31.5"	1
7	230390	HINGE, TANK	1
8	140885	SCREW, 1/4-20X1/2 TRSPHL	7
9	230739	AXLE	1
10	140008	WASHER, 1/2" FLAT	2
11	103068	WHEEL, 10" X 1.75"	2
12	103019	CAP, HUB	2
13	230746	BRACKET, AXLE OFF SET	2
14	140016	WASHER, 1/4 LOCK	4
15	140259	SCREW, 1/4-20X5/8 HXHDCP	4

REF	PART #	DESCRIPTION	QTY.
16	140804	SCREW 10-24X1	1
17	140000	WASHER, 1/4 FLAT	6
18	140501	NUT, 1/4-20 NYLOCK	3
19	140208	SCREW, 1/4-20X1	3
20	604640	BRACKET, CHASSIS SUPPORT	1
21	140899	SCREW 10-24X1-1/4	4
22	140011	WASHER, 3/16 FLAT	8
23	140226	SCREW, 5/16-18X3/4 HXHDCP	4
24	140015	WASHER, 5/16 SPLITLOCK	4
25	103065	●CASTER, SWIVEL 4"	1
26	140256	SCREW, 3/8-16XX2-1/2	2
27	140028	WASHER, FLAT	2
28	608831	CHASSIS, GREEN	1
29	140519	NUT, 10-24 KEP	8
30	140012	WASHER, 3/16 FLAT	4
31	180103	PUMP,100PSI 120V	1
	180109	PUMP,100PSI 230V	1
32	140519	NUT, 10-24 KEP	3

● RECOMMENDED STOCK ITEMS

BRUSH BASE GROUP





## BRUSH BASE GROUP

REF	PART #	DESCRIPTION	QTY.
1	603175	BRACKET,MOUNT	1
2	140226	SCREW, 5/16-18X5/8 HXHDCP	3
3	140136	BUSHING, 3/8ID X 1/2OD	2
4	140898	SCREW, 3/8-16X3/4 TRSPL	2
5	140017	WASHER, 3/8 SPLITLOCK	2
6	140028	WASHER, 3/8 FLAT	2
7	603184	TOOL, PICKUP W/LEVER	1
8	603448	SPRING, TOOL PRESSURE	1
9	150520	FITTING, 1/8FX1/4H BARB	1
10	603547	HOSE, VACUUM 1-1/2X46"	1
11	603178	CAM ADJUSTER	1
12	140859	SCREW, SET 1/4-20X1/4	1
13	603177	LEVER, CAM ADJUSTER	1
14	230506	●PULLEY, MOTOR	1
15	140518	NUT, KEP 10-32	2
16	230366	PLATE, MOTOR MOUNT	1
17	130471	●MOTOR, BRUSH DRIVE 120V	1
	190150	●BRUSH, CARBON	1
	130472	MOTOR, BRUSH DRIVE 220V	1
18	230507	●BELT, BRUSH DRIVE	1
▽	500094	ASM, BRUSH 20"	1
▲19	140548	NUT, 5/16 FINJAM	1
▲20	230505	●PULLEY, BRUSH	1
▲21	230363	SPACER	1
▲22	100005	●GASKET, BEARING BLOCK	1
▲23	230261	●BLOCK, BEARING	2
▲24	140125	●BEARING, BRUSH	2
▲25	100049	●SEAL, BRUSH BEARING	2
▲26	140554	SCREW, 1/4-20X3/4	4
▲27	240050	●BRUSH, CYLINDER 20" BASE	1
▲28	230362	●SHAFT, BRUSH 20" BASE	1

REF	PART #	DESCRIPTION	QTY.
▽	606844	ASM, SPRAYBAR 20"	1
▲29	150208	FITTING, 1/8M PLUG	3
▲30	150430	FITTING 1/8MX1/4F ELBOW	1
▲31	150921	●FITTING 1/8M QD CPLR BRS	1
▲32	230379	MANIFOLD, SPRAYBAR 20"	1
▲33	201011	●FITTING, 80015 NOZZLE TWIST-OUT	5
34	150915	●FITTING, 1/8 QD CPLR BRS	1
35	140325	CLAMP, EAR 1/2"	1
36	606453	HOSE, 1/4" X 1.25' LP GRAY	1
37	140887	SCREW, 10-24X3/8	12
38	140900	SCREW, 10-24X3/4	1
39	230367.BK	PLATE, BRUSH BASE 20"	1
40	100115	GASKET, 20" PWR BRSH BASE	1
41	140028	WASHER, 3/8 FLAT	2
42	140233	SCREW, 3/8-16X1-3/4 HXHDCP	1
43	140519	NUT, KEP	3
44	603561	CORD, 18/3 X 24" BLACK	1
45	130181	CORD GRIP (FOR SERVICE ONLY)	1
46	140504	NUT, CONDUIT	1
47	604494	BASE BRUSH 20" BLACK	1
48	606712	LATCH, SPRAYBAR	1
49	140515	NUT, 3/8-16 NYLOCK	1
50	140407	SPRING, .845OD	1
51	140201	SCREW, 3/8-16X3/4	2
52	140015	WASHER, 5/16 SPLTLCK	3
53	140914	SPACER, .38X.50X.25	2

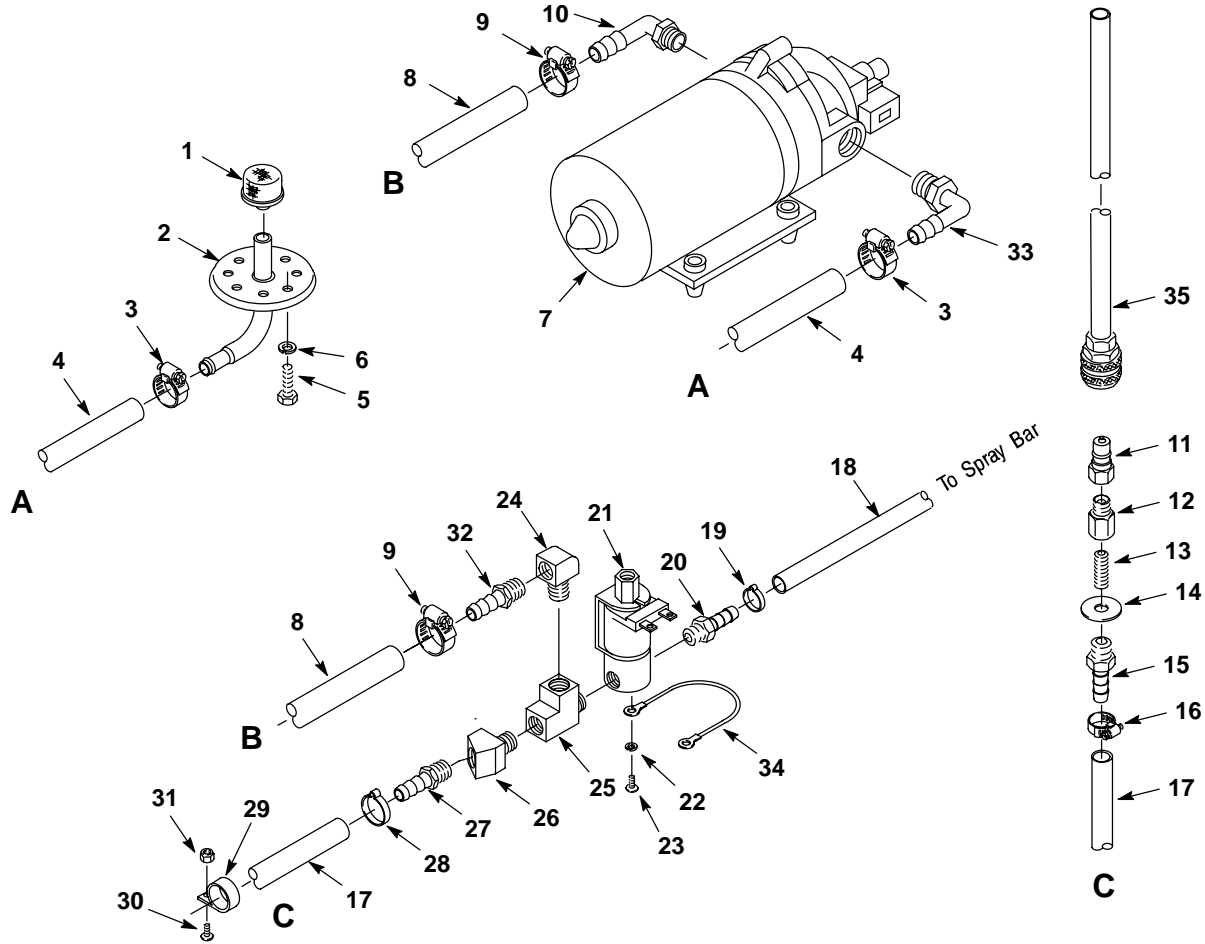
▽ ASSEMBLY

▲ INCLUDED IN ASSEMBLY

● RECOMMENDED STOCK ITEMS

# PARTS LIST

## PLUMBING GROUP

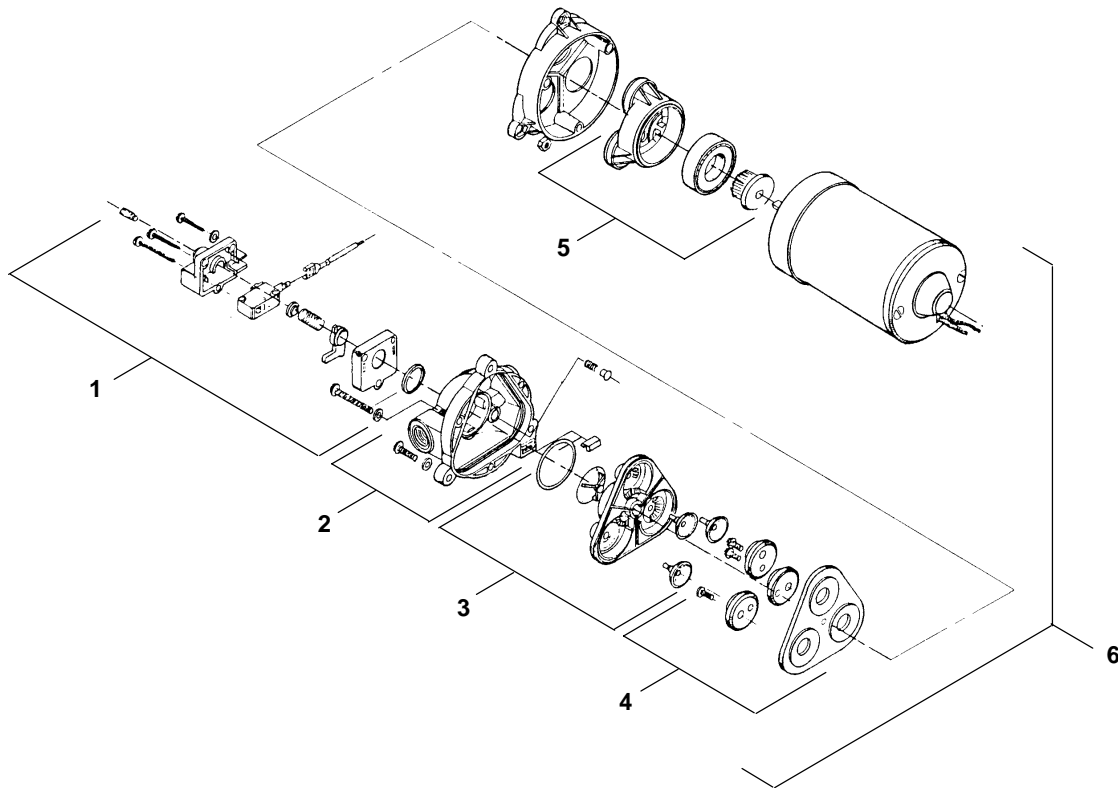


REF	PART #	DESCRIPTION	QTY.
1	180628	●SCREEN, TANK	1
2	600451	BLADDER PLATE	1
3	140310	CLAMP	2
4	606452	HOSE, 3/8" X 2.75' LP GRAY	1
5	140259	SCREW	4
6	140016	WASHER, LOCK	4
7	180103	●PUMP, 100PSI, 120V	1
	180109	PUMP, 100PSI, 220V/240V	1
8	606162	HOSE, 1/2" X 26"	1
9	630369	CLAMP	2
10	150425	ELBOW, 3/8M X 1/2H	1
11	150933	QUICK COUPLER	1
12	150000	ADAPTER, 1/4FX1/4M	1
13	150600	NIPPLE, 1/4 X 2 - BRASS	1
14	140008	WASHER, FLAT	1
15	150511	FITTING, BARB 1/4FX3/8H	1
16	140310	CLAMP	1
17	606451	HOSE, 3/8" X 4.33' LP	1
18	606453	HOSE, 1/4" X 1.25' LP	1
19	140325	CLAMP, EAR 1/2" S/S	2

REF	PART #	DESCRIPTION	QTY.
20	150515	FITTING, BARB 1/4MX1/4H	1
21	210033	●VALVE, SOLENOID 120V 60HZ	1
	210036	VALVE, SOLENOID 220V 50HZ	1
	210037	VALVE, SOLENOID 100V 50HZ	1
	210260	VALVE, SOLENOID 240V 50HZ	1
22	140023	WASHER, LOCK	2
23	140801	SCREW, 8-32X3/8	2
24	150406	ELBOW, 1/4"	1
25	150709	TEE, 1/4"	1
26	150403	FITTING, 1/4MX1/4F ELBOW 45°	1
27	150516	FITTING, BARB 1/4MX3/8H	1
28	140301	CLAMP, EAR	1
29	140916	CLAMP	1
30	140895	SCREW, 10-24X3/4	1
31	140552	NUT, LOCK	3
32	150517	FITTING, BARB 1/4MX1/2H	1
33	150412	ELBOW, 3.8MX3/8H	1
34	700551	ASM., WIRE GROUND 9" 10X10	1
35	700141	HOSE, PUMP-OUT	1

● RECOMMENDED STOCK ITEMS

PUMP BREAKDOWN

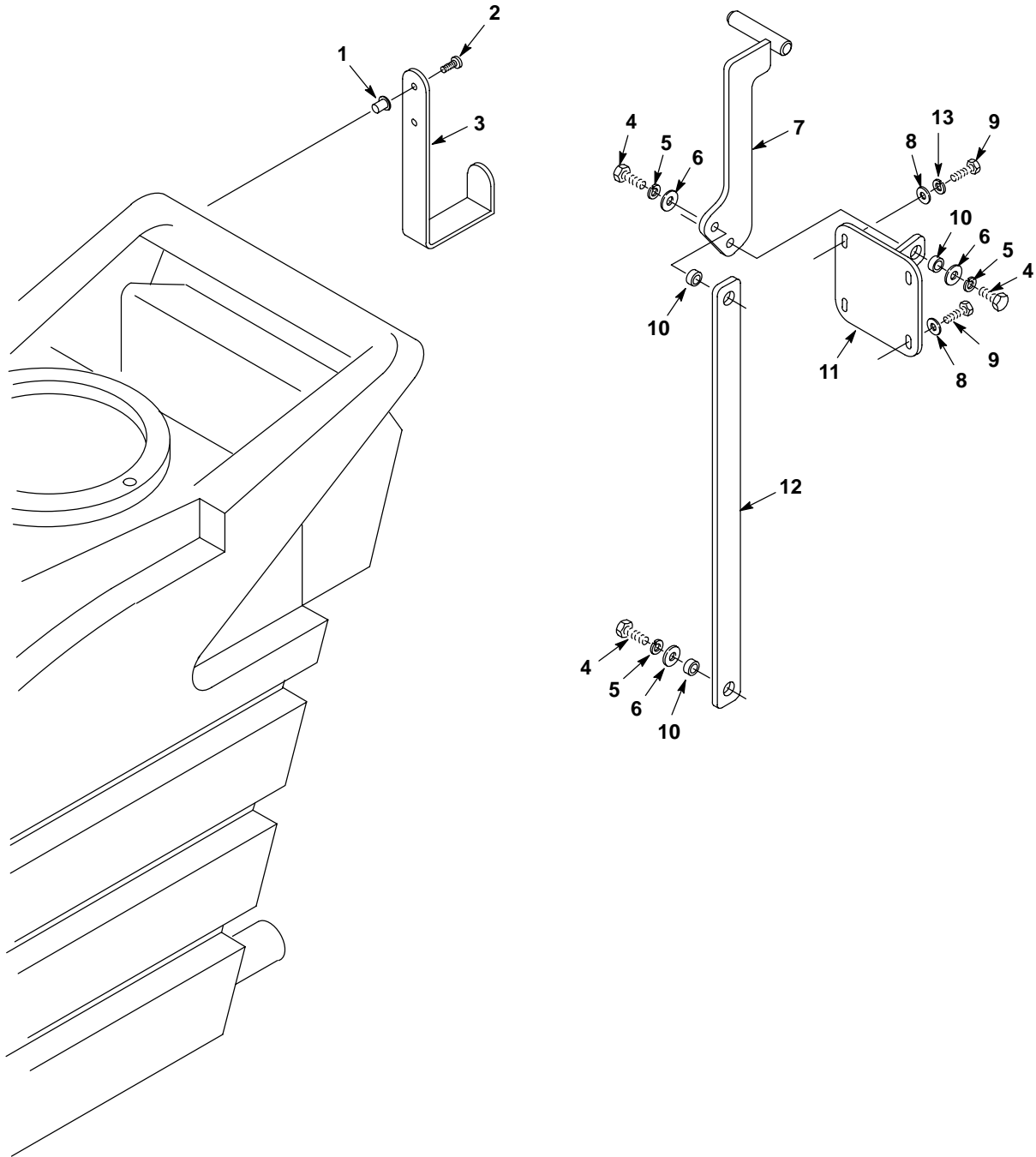


REF	PART #	DESCRIPTION	QTY.
1	190129	KIT, PRESSURE SWITCH	1
	190172	KIT, PRESSURE SWITCH (VITON)	1
	190134	KIT, DIAPHRAGM ONLY	1
2	190128	KIT, UPPER PUMP HOUSING	1
	190124	KIT, CHECK VALVE ONLY	1

REF	PART #	DESCRIPTION	QTY.
3	190171	KIT, VALVE (VITON)	1
4	190131	KIT, SERVICE	1
5	190130	KIT, LOWER PUMP HOUSING	1
6	180103	PUMP, 100 PSI 120V	1
	180109	PUMP, 100 PSI 240V	1

# PARTS LIST

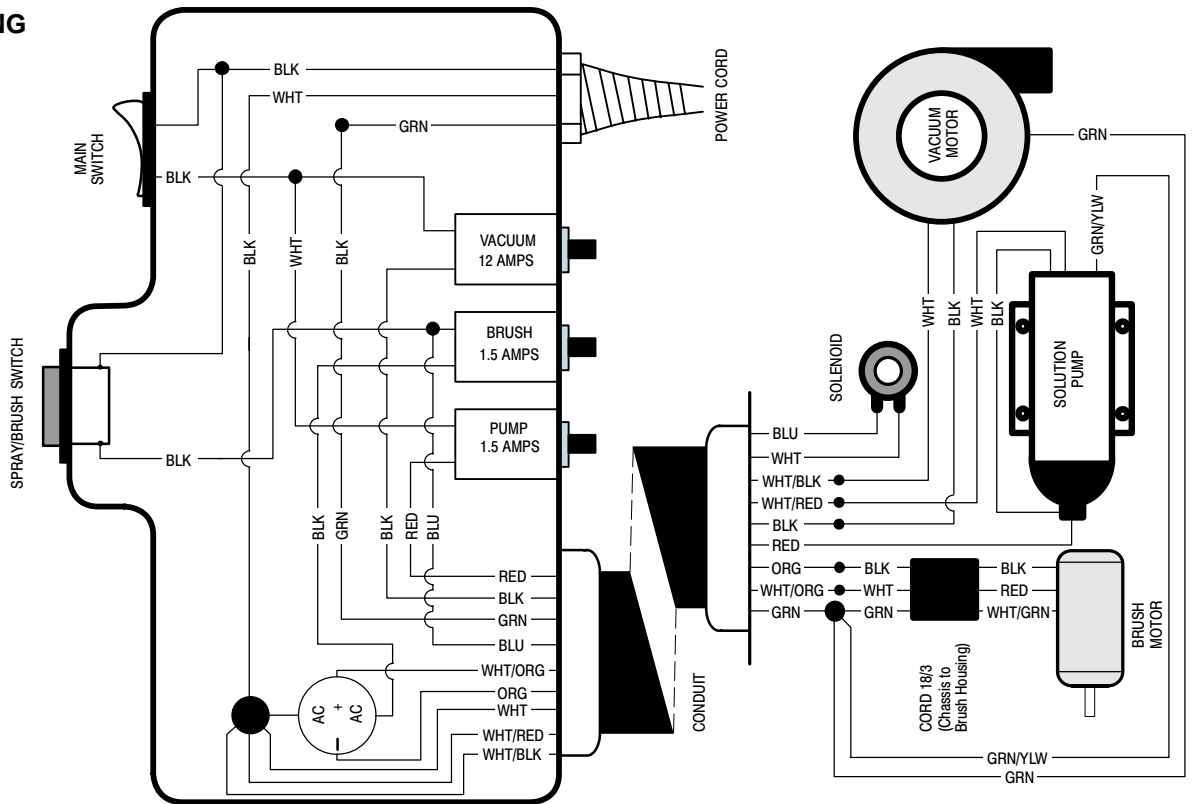
## REAR HOUSING GROUP



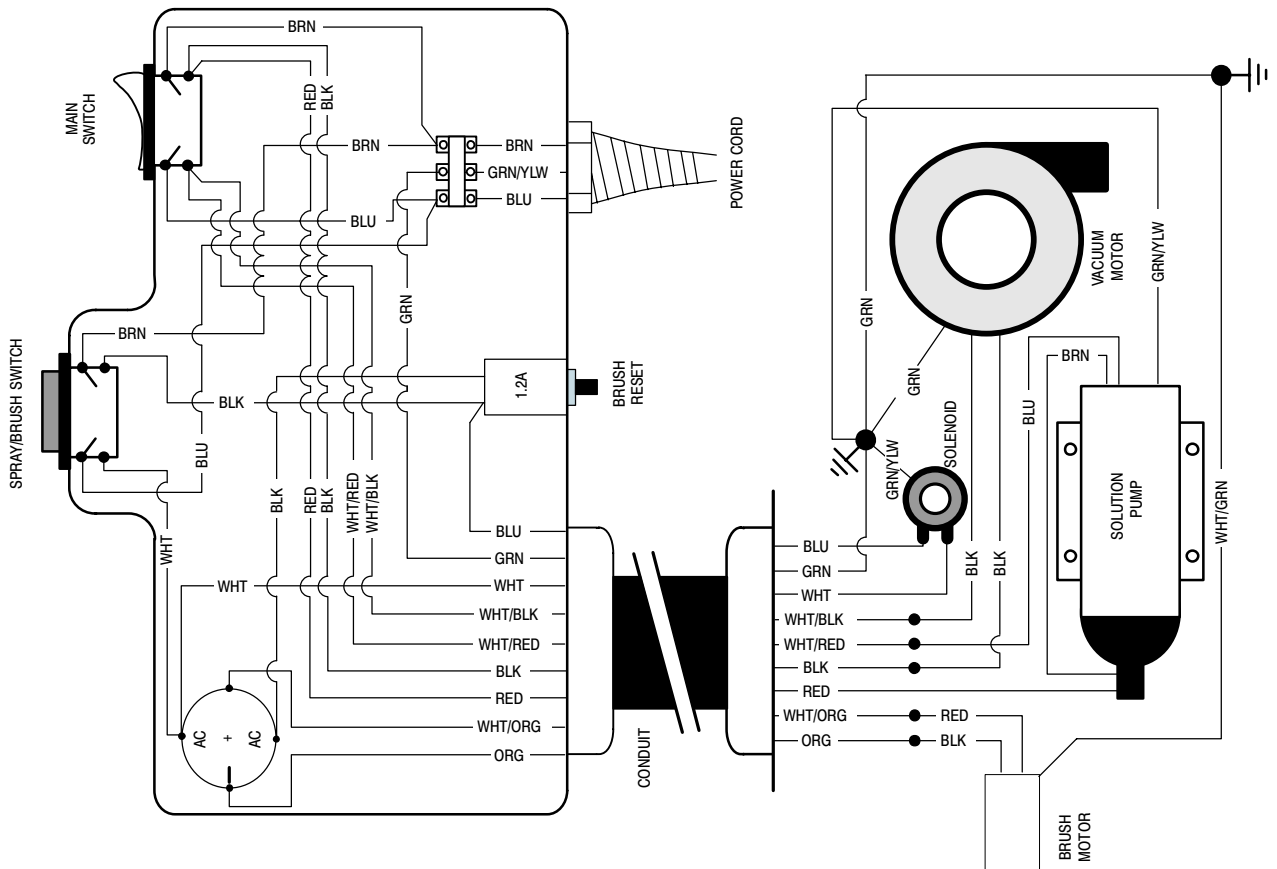
REF	PART #	DESCRIPTION	QTY.
1	140637	NUT, WELL 10-32	2
2	140887	SCREW, 1024X3/8 PANPHL	2
3	230755.BK	BRACKET, CORD HANGER BLACK	1
4	140226	SCREW, 5/16 18X5/8 HXHDCP	3
5	140015	WASHER, 5/16 SPLITLOCK	3
6	140027	WASHER, 5/16 FLAT	3
7	603414	HANDLE, LIFT	1

REF	PART #	DESCRIPTION	QTY.
8	140000	WASHER, FLAT	4
9	140259	SCREW, 1/4-20X5/8	4
10	603415	BUSHING, PIVOT	3
11	603413	BRACKET, LIFT MOUNT	1
12	603412	PLATE, LIFT	1
13	140016	WASHER, LOCK	4

## 120V WIRING

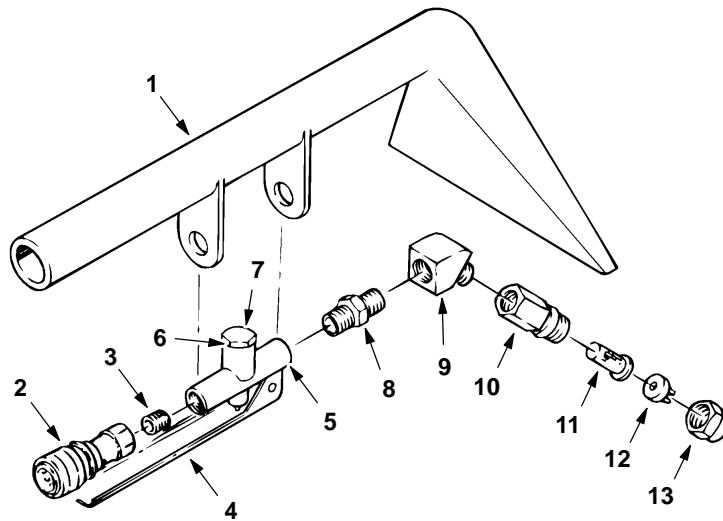


## 220V WIRING



# OPTIONS

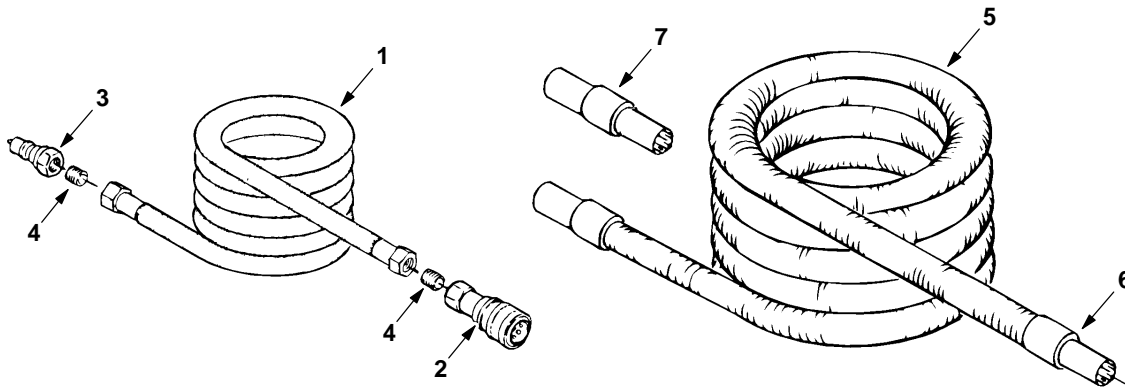
## 127 mm (5 in) HAND TOOL



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

REF	PART #	DESCRIPTION	QTY.
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	20094	CAP, SPRAY BODY	1

## SOLUTION AND VACUUM HOSES



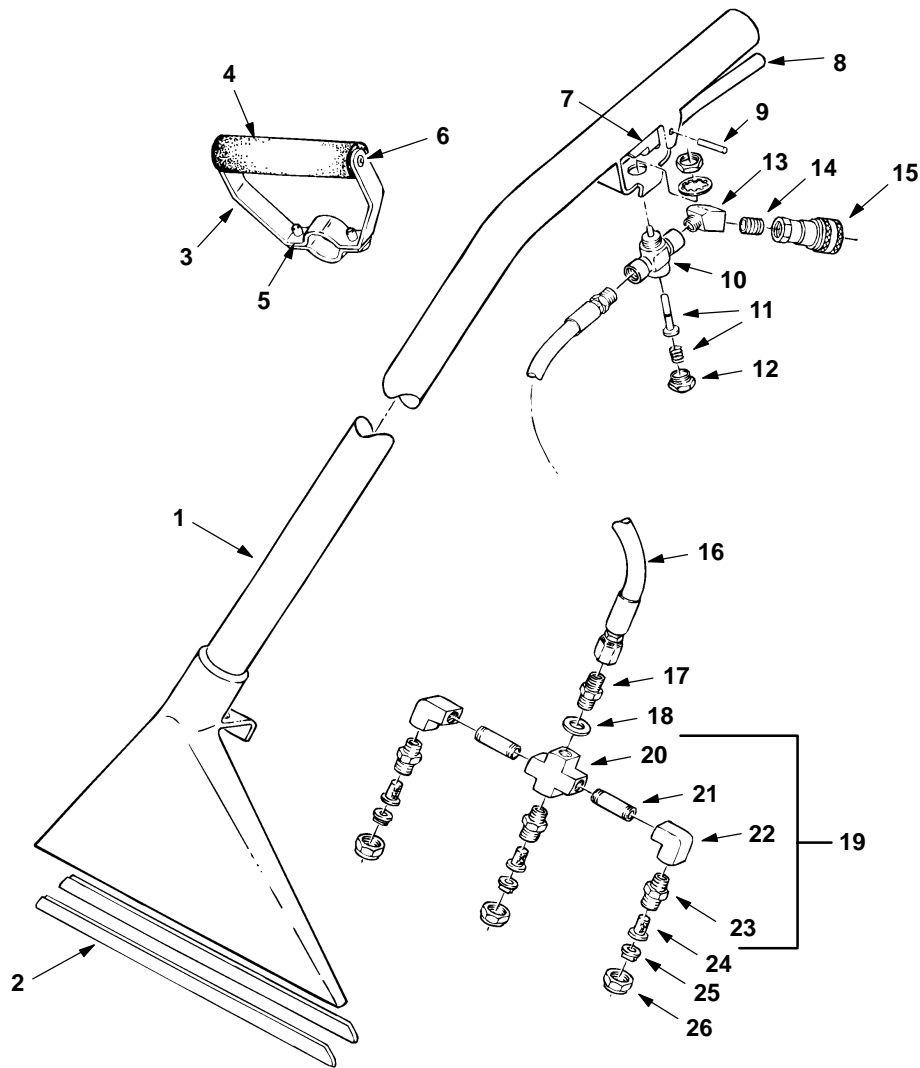
REF	PART #	DESCRIPTION	QTY.
▽1	160185	HOSE, SOLUTION 4.6M (15 FT)	1
	160186	HOSE, SOLUTION 7.6M (25 FT)	1
	160187	HOSE, SOLUTION 15M (50 FT)	1
▲2	150913	COUPLER, QUICK SER. 60	1
▲3	150933	PLUG, QUICK COUPLER	1
▲4	150615	NIPPLE	2

REF	PART #	DESCRIPTION	QTY.
▽5	160400	HOSE, VACUUM 4.6M (15 FT)	1
	160401	HOSE, VACUUM 7.6M (25 FT)	1
	160402	HOSE, VACUUM 15M (50 FT)	1
▲6	160430	CUFF, HOSE 1-1/2"	2
7	160451	CONNECTOR, VACUUM HOSE 1.5"	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, FLOOR TOOL	2
▽3	200927	GRIP, ADJUSTABLE	1
▲4	200912	FOAM, GRIP	1
▲5	140259	SCREW, 1/4X3/4	2
▲6	140834	SCREW, 1/4-20X5/8	2
7	200902	TRIGGER, FLOOR TOOL	1
8	200809	SLEEVE, TRIGGER	1
9	140605	PIN	1
	140520	NUT, PUSH (NOT SHOWN)	2
10	210150	VALVE, FLOW CONTROL	1
11	190603	KIT, VALVE PIN & SPRING	1
12	N/A	CAP, HEX, VALVE	1
13	150403	ELBOW, 1/4-45°	1

REF	PART #	DESCRIPTION	QTY.
14	150615	NIPPLE, CLOSE 1/4	1
15	150913	COUPLER, QUICK SER. 60	1
16	160170	HOSE, 1/4 HP W/ SWEDGE	1
17	150606	NIPPLE, HEX 1/4"	1
18	140058	WASHER	1
▽19	700062	ASM., SPRAY BAR	1
▲20	150700	CROSS	1
▲21	150600	NIPPLE	2
▲22	150401	ELBOW, 90° 1/4FX1/4F	2
▲23	200993	SPRAY BODY	3
24	200996	SCREEN, SPRAY BODY	3
25	200964	TIP	3
26	200994	CAP, SPRAY BODY	3

▽ ASSEMBLY  
▲ INCLUDED IN ASSEMBLY