



Electronic Service Manuals

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NOBLES®

SS27 & SS33
AUTOMATIC SCRUBBERS

Instruction Manual and Parts Breakdown

PLEASE READ MANUAL BEFORE OPERATING MACHINE.
THIS MANUAL REVISED 9/92

Machine Serial Number _____

NOBLES INDUSTRIES, INC.

800-866-3200

4240 Blue Star Highway

616-394-5100

Holland, MI 49423

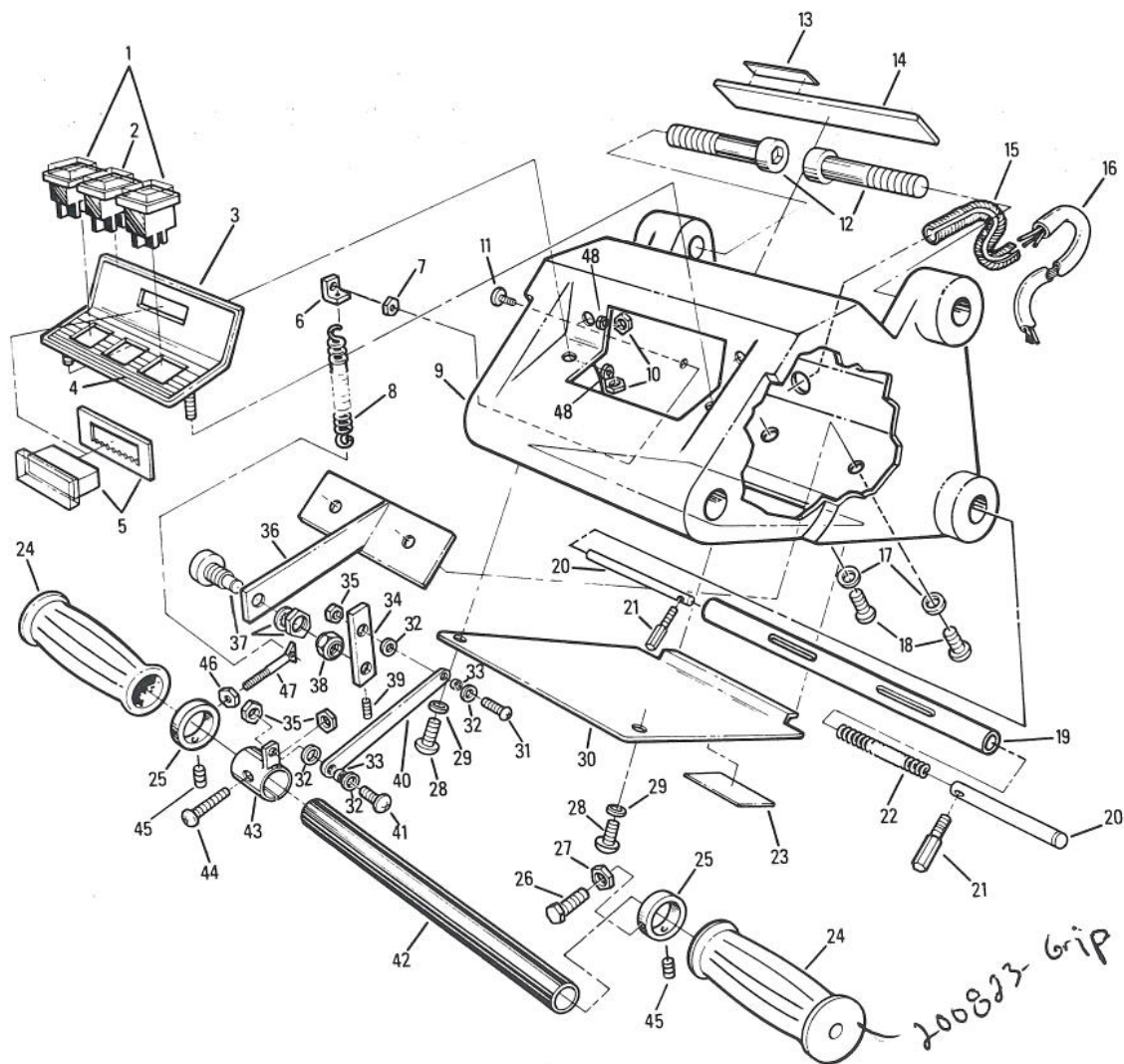
FAX: 616-392-2886

TELEX: 910 2409 127

Control Panel Parts List

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1.	SWITCH, ROCKER SPST/SPLSH GRD	130816	2	24.	GRIP, HANDLE BLACK	200815	2
2.	SWITCH, RCKR DPST-240V	130764	1	25.	COLLAR, HANDLE	230652	2
3.	PANEL, CONSOLE BLACK	230698.BK	1	26.	SCREW, HEX HD. CAP 1/4-20 X 3/4 - S/S	140554	1
4.	DECAL, DASH SS27/33	120563	1	27.	NUT, HEX JAM 1/4-20 - ZINC	140510	1
5.	METER, BATTERY VOLTAGE 24V	130015	1	28.	SCREW, MCH 10-24X3/8 PNP HL S/S	140887	2
6.	BRACKET, SPRING (SS27/33)	230564	1	29.	WASHER, INT LCK TOOTH #10-S/S	140018	2
7.	NUT, KEP 10-24 S/S BULK	140519	1	30.	COVER, CONTROL PANEL BLACK	230668.BK	1
8.	SPRING, ROLL THROTTLE	140409	1	31.	SCREW, MCH 10-24X3/4 TRSPHL SS	140900	1
9.	CONTROL HSG RM-NLG SS27/33	100164	1	32.	WASHER, FLAT 3/16" USS - ZINC	140012	4
10.	NUT, KEP 10-24 S/S BULK	140519	4	33.	BUSHING .250ODX.188IDX.135THK	140138	2
11.	SCREW, MCH 10-24X3/4 TRSPHL SS	140900	1	34.	LEVER ARM, SPEED POT	230688	1
12.	BOLT, SHLDR 5/8X2 SCKHD - BLK	140241	2	35.	NUT, KEP 10-24 - S/S BULK	140519	3
13.	DECAL, FRONT (SS33)	120561	1	36.	BRACKET, SPEED POT (SS27/33)	230690	1
	DECAL, FRONT (SS27)	120532	1	37.	KIT, POT RPLMNT/SPR RELCTN -CM	190140	1
14.	PLATE, NAME - NOBLES	120529	1	38.	SEAL, ROTARY SHAFT	130294	1
15.	WRAP, LOOM CORRUGATED .50 DIA	130008	1.5'	39.	SCREW, SCKSTCNEPT 10-24X1/4 ZC	140948	1
16.	ASM CONTROL HSG HARNES SS27/33	700996	1	40.	LINK, SPEED POT (SS27/33)	230689	1
17.	WASHER, EXT LCK TOOTH 1/4"-S/S	140052	2	41.	SCREW, MCH 10-24X3/4 TRSPHL SS	140900	1
18.	SCREW, MCH 1/4-20X1/2 TSPHL SS	140885	2	42.	HANDLE, TUBE (SS27/33)	230671	1
19.	TUBE, HANDLE ADJUSTMENT	230613	1	43.	BRACKET, TUBE SPEED POT	230687	1
20.	PIN, HANDLE ADJUSTMENT LOCK	230648	2	44.	SCREW, MCH 10-24X1-1/4 RDPH SS	140899	1
21.	PIN, HANDLE ADJUSTMENT	230649	2	45.	SCREW, SCKST CUP PT 1/4-20X1/4	140859	2
22.	SPRING, LOCK PIN	140415	1	46.	NUT, HEX JAM 1/4-20 - ZINC	140510	1
23.	DECAL, WARNING TO AVOID RISK	22626	1	47.	PIN SPRING RETURN	230491	1
				48.	WASHER, FLAT 1/4" USS-S/S BULK	140000	4

Control Panel Parts Diagram

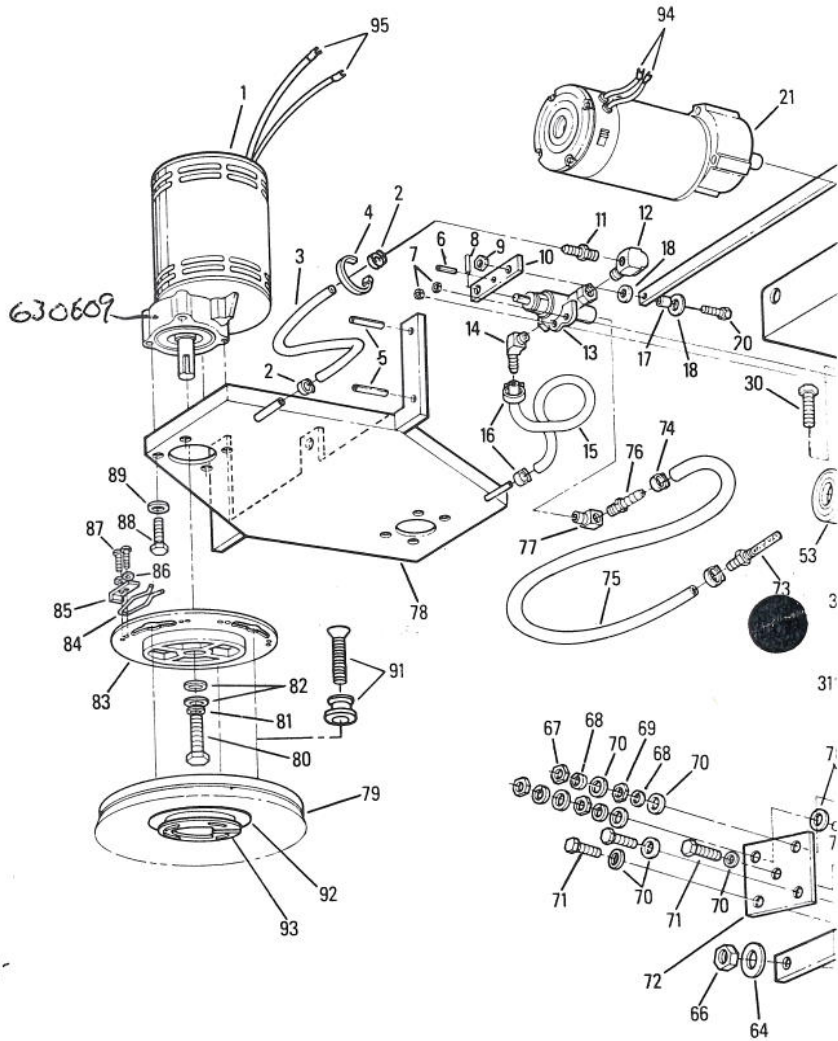


Main Chassis Parts List

322000

Main Chassis

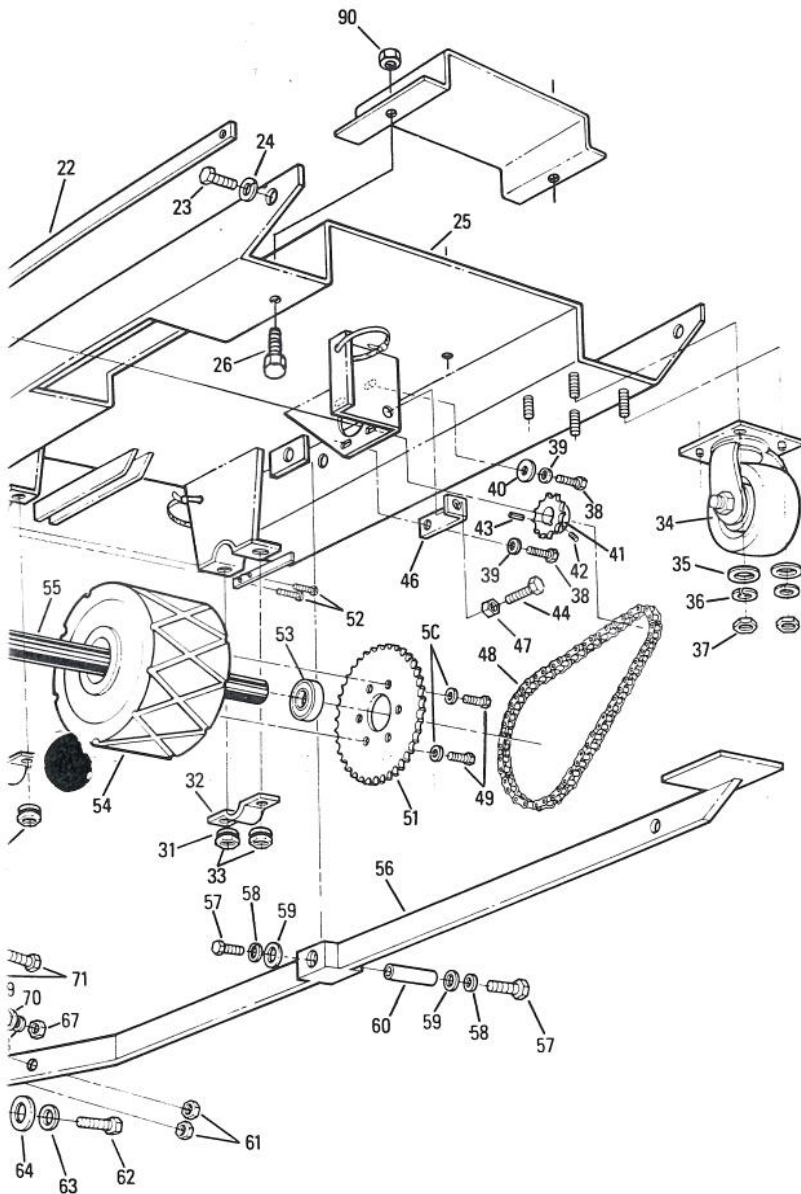
ITEM #	DESCRIPTION	PART #	QTY.
1.	MOTOR, BRUSH DRIVE 24 VOLT	130491	2
	KEY, 1/4 X 1" (+.000/- .002) - (supplied w/motor)	140632	2
2.	CLAMP, HOSE 5/16 - 7/8 DIAM- S/S	140310	2
3.	HOSE, 3/8 CLR W/WIRE REINFRCD	160625	1.208 ft.
4.	WIRE TIE, NYLON 11 1/2 X .19	130041	1
5.	PIN, ROLL 1/4 X 1 1/2 ZINC	140618	4
6.	PIN, ROLL 3/16 X 1 ZINC	140627	1
7.	NUT, NYLON LOCK 10-24 S/S	140552	2
8.	PIN, ROLL 3/32 X 5/8 ZINC	140616	1
9.	NUT, HEX JAM 1/4-20 ZINC	140510	1
10.	ARM, VALVE	230657	1
11.	HOSE BARB, 1/4M X 3/8H - BRASS	150516	1
12.	ELBOW, STRT 1/4" X 90 DEGREE	150406	1
13.	VALVE, SOLUTION	210261	1
14.	HOSE BARB	28303	1
15.	HOSE, 3/8 CLR W/WIRE REINFRCD	160625	.416 ft.
16.	CLAMP, HOSE 5/16 - 7/8 DIA	140310	2
17.	BUSHING .375ODX.250IDX.270THK	140134	1
18.	WASHER, FLAT 1/4 USS - S/S	140000	2
20.	SCREW, HXHDGP 1/4-20X1 S/S	140208	1
21.	MOTOR DRIVE 1/2HP 1500RPM 24V	130464	1
	CAP, CARBON BRUSH	130507	4
	CARBON BRUSH	130508	4
22.	LEVER, VALVE	230656	1
23.	SCREW, HEX HD CAP 1/2-13 X 1 S/S	140237	4
24.	WASHER, LOCK 1/2 - S/S	140024	4
25.	CHASSIS, WELDMENT BLACK	230678.BK	1
26.	SCREW, HXHDGP 5/16-18X3/4 S/S	140223	2
28.	SUPPORT, BATTERY (BK)	230299.BK	1
29.	WIRE TIE, NYLON 6 X .115	130040	2
30.	SCREW, HEX HD CAP 3/8-16 X 1 - S/S	140202	4
31.	WASHER, SPLIT LOCK 3/8 - S/S	140017	4
32.	CLAMP, WHEEL AXLE BLACK	140311.BK	2
33.	NUT, HEX 3/8-16 - S/S	140525	4
34.	CASTER, 4" SWIVEL	103002	2
35.	WASHER, FLAT 3/8" SAE - ZINC	140025	8
36.	WASHER, SPLIT LOCK 3/8" - S/S	140017	8
37.	NUT, HEX 3/8-16-S/S	140525	8
38.	SCREW, HEX HD CAP 3/8-16 X 1 1/4 S/S	140232	4
39.	WASHER, SPLIT LOCK 3/8" - S/S	140017	4
40.	WASHER, FLAT 3/8" SAE - ZINC	140025	3
41.	SPROCKET, DRIVE MOTOR	240071	1
42.	SCREW, SOCK. SET PT. 1/4-20 X 1/4 ALLEN	140859	2
43.	KEY, 1/4 X 1" (+.000/- .002)	140632	1
44.	SCREW, HEX HD CAP 3/8-16 X 1 1/4 - S/S	140232	1
46.	BRACKET, DRIVE MOTOR TENSION	230655	1
47.	NUT, HEX 3/8-16 - S/S BULK	140525	1
48.	CHAIN, ROLLER-BULK	240072	2.33 ft
	LINK, CONNECTING	240021	1
	LINK, HALF	240073	1



190168 - Kit, Chain kit.

wheel Support Retro - 190702
 wheel only - 103007

Parts Diagram



Main Chassis Parts List

ITEM #	DESCRIPTION	PART #	QTY.
49.	SCREW, HEX HD CAP 5/16-18 X 3/4 - S/S	140223	6
50.	WASHER, SPLIT LOCK 5/16 - S/S	140015	6
51.	SPROCKET, DRIVE WHEEL	240070	1
52.	SCREW, MACH. 10-24 X 3/4 RHP - S/S	140895	2
53.	BEARING, WHEEL	140124	2
54.	WHEEL, DRIVE 8" SCRUBBER	103058	1
55.	SHAFT, DRIVE WHEEL	230205	1
56.	LIFT ARM, BRUSH ASSY.	230675	1
57.	SCREW, HEX HD CAP 1/4-20 X 3/4 - S/S	140554	2
58.	WASHER, LOCK 1/4" - S/S	140016	2
59.	WASHER, FLAT 1/4" USS - S/S	140000	2
60.	PIN, LIFT ARM PIVOT	230653	1
61.	NUT, KEP 1/4-20 - ZINC	140524	2
62.	SCREW, HEX HD CAP 1/2-13 X 2 S/S	140235	1
63.	WASHER, LOCK 1/2" - S/S	140024	1
64.	WASHER, FLT .5/510X1.25X.06SS	140045	2
65.	BUSHING, .499IDX.624ODX.530LG	140137	1
66.	NUT, HEX JAM 1/2-13 - S/S	140509	1
67.	NUT, FULL HEX 1/4-20 - ZINC	14501	3
68.	WASHER, LOCK 1/4" - S/S	140016	6
69.	NUT, HEX JAM 1/4-20 - ZINC	140510	3
70.	WASHER, FLAT 1/4" USS - S/S	140000	11
71.	SCREW, HEX HD CAP 1/4-20 X 1 - S/S	140208	5
72.	BOARD, CONNECTION	230554	1
73.	FILTER, SOLUTION TANK	180629	1
74.	CLAMP, HOSE 5/16-7/8 DIAM-S/S	140310	2
75.	TUBING, VINYL	14894	1.33 ft
76.	HOSE BARB, 1/4M X 1/2H-BRASS	150517	1
77.	ELBOW, STRT 1/4" X 90 DEGREE	150406	1
78.	BRACKET, BRUSH MOTOR MOUNT SS27	230674	1
	BRACKET, BRUSH MOTOR MOUNT SS33	230691	1
79.	DRIVER, 14" PAD FOR SS27 PK/2	240232	1
	DRIVER, 17" PAD FOR SS33 PK/2	240233	1
80.	SCREW, HEX HD CAP 5/16-18 X 1 - S/S	140219	2
81.	WASHER, SPLIT LOCK 5/16 - S/S	140015	2
82.	WASHER, FLT 1.25X.359X.093 ZNC	25732	4
83.	PLATE, DRIVE	230672	2
84.	CLIP, SPRING (SS27/33)	140417	2
85.	CLAMP, BRUSH PLATE	230651	2
86.	WASHER, INT LCK TOOTH #10-S/S	140018	4
87.	SCREW, MACH. 10-24 X 3/8 PHP - S/S	140887	4
88.	SCREW, HXHD 3/8-16X1 S/S	140202	8
89.	WASHER, SPLIT LOCK 3/8" - S/S	140017	8
90.	NUT, LCK-NYL INSERT 5/16-18 SS	140546	2
91.	LUGS W/SCREWS (SET OF 3) P74 †	240238	2
92.	PLATE, PAD DRIVER BASE †	100106	2
93.	RING, PAD RETAINER SNAP-IN †	100107	2
94.	TERMINAL, FLNG SPD 12-10 #6STD	130116	2
95.	TERMINAL, RING (YELLOW) 12 GA	130163	2

231032 - Caster

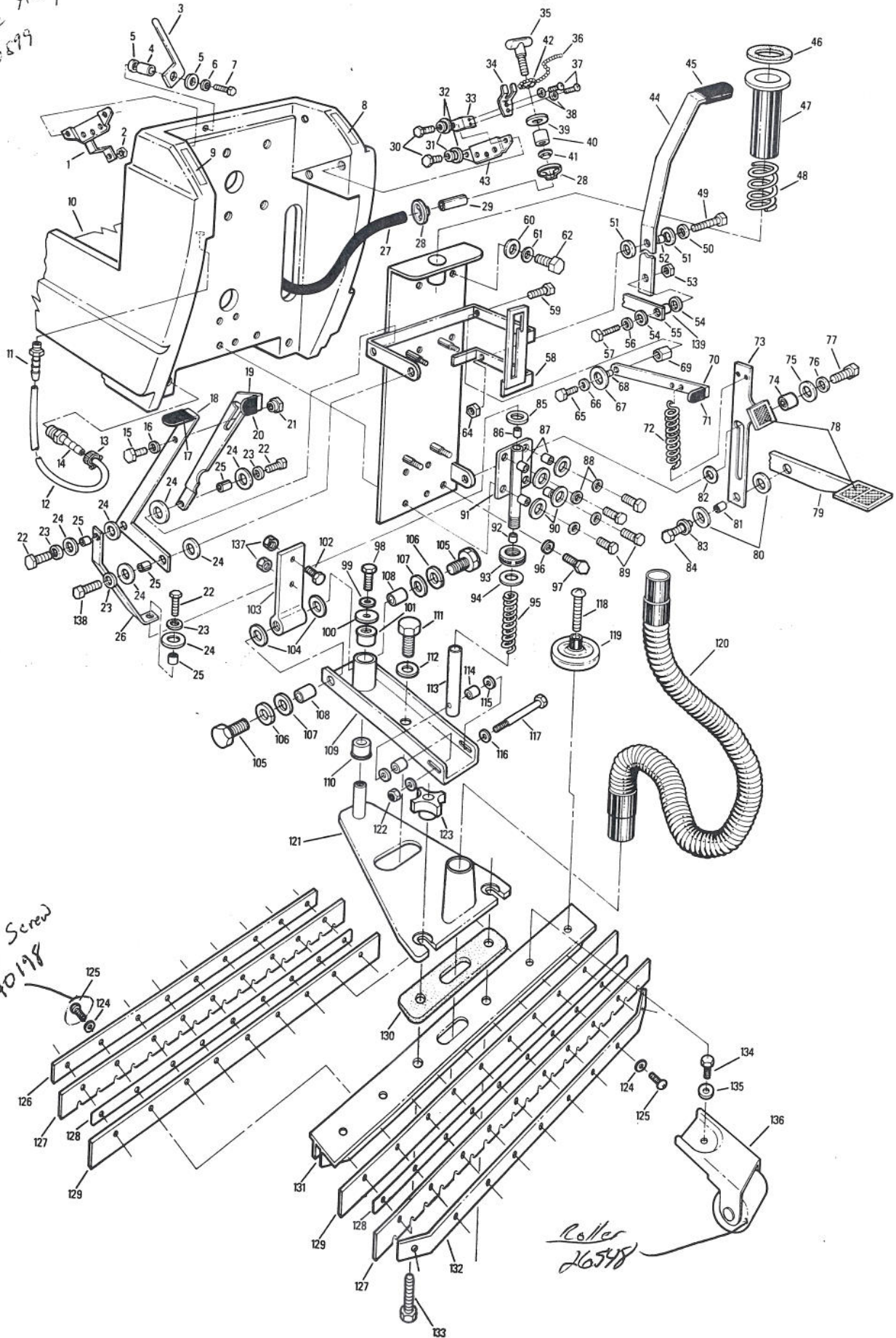
PLEASE NOTE:

† INDICATES THAT THIS PART IS INCLUDED WHEN YOU ORDER ITEM #79, PAD DRIVER.

Squeegee Assembly Parts Diagram

*Trim Hose Assy.
700599*

*plug
61061*

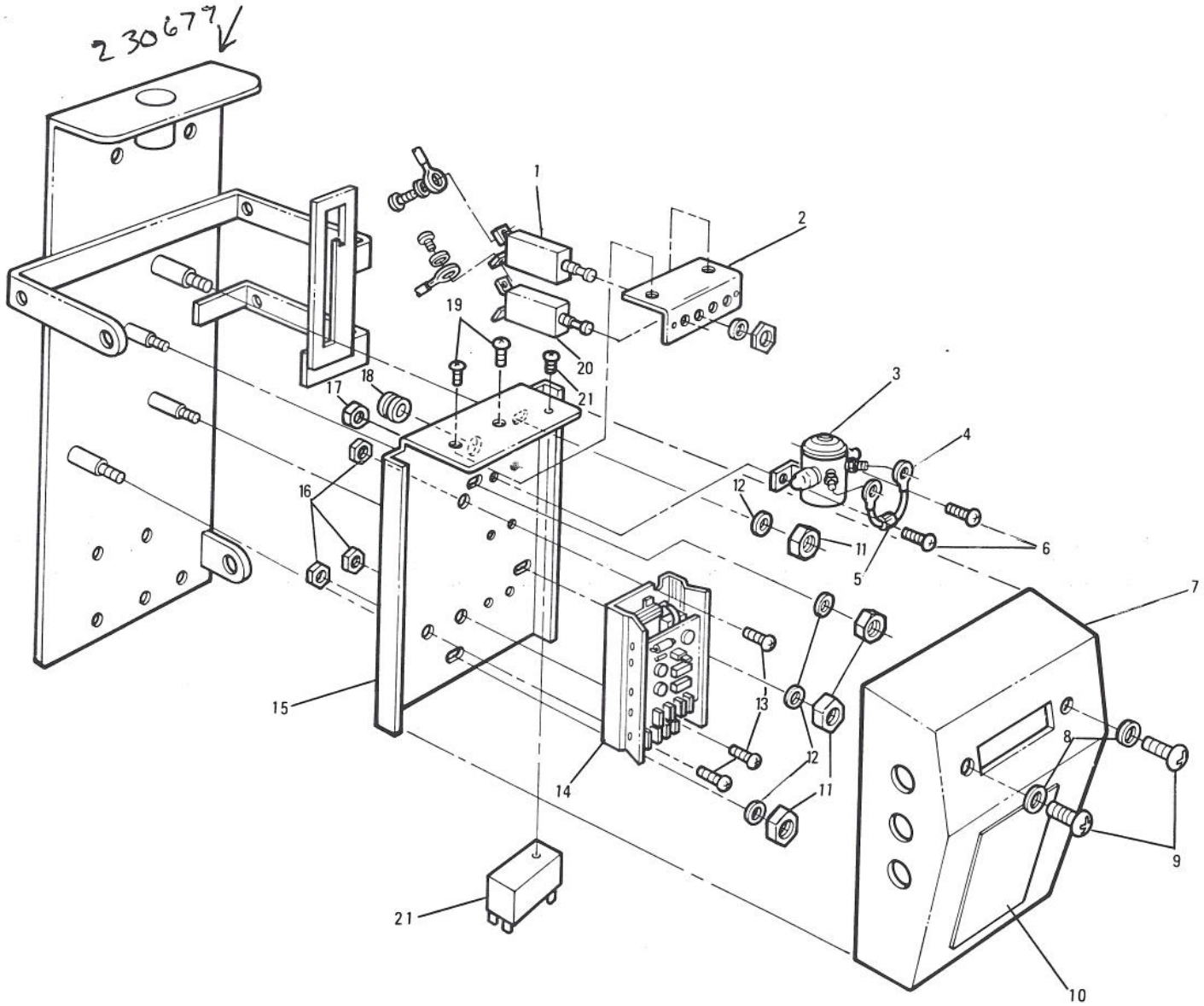


Squeegee Assembly Parts List

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1.	PLATE, LOCK CONTROL HOUSING	230297	1	74.	BUSHING LIFT LATCH (OUTER)	140145	1
2.	NUT, LCK-NYL INSRT 3/8-16 S/S	140515	1		BUSHING, 3/8 ID X 1/2 OD (INNER)	140136	1
3.	ROD, RECOVERY TANK SUPPORT	230666	1	75.	WASHER, FLAT 3/8" USS - S/S	140028	1
4.	BUSHING, 3/8 ID X 1/2 OD X	140136	1	76.	WASHER, SPLIT LOCK 3/8" - S/S	140017	1
5.	WASHER, FLAT 5/16" USS - S/S	140027	2	77.	SCREW, HXHDCP 3/8-16X1 S/S	140202	1
6.	WASHER, SPLIT LOCK 5/16 - S/S	140015	1	78.	NON SLIP SURFACING 4" X 60' BULK	15886RAW	.16'
7.	SCREW, HXHDCP 5/16-18 X 3/4 - S/S	140223	1	79.	LIFT ARM, BRUSH ASSEMBLY	230675	1
8.	DECAL, SOLUTION CONTROL	120565	1	80.	WASHER, FLT .5/510X1.25X.06SS	140045	2
9.	DECAL, SQUEEGEE UP-DOWN	120564	1	81.	BUSHING, BRUSH LIFT PEDAL	140139	1
10.	KIT SOLUTION TANK REPL SS27/33	190119	1	82.	WASHER, FLAT 3/8" USS - S/S	140028	1
11.	HOSE BARB, 1/2H X 3/8M - BRASS	14884	1	83.	WASHER, LOCK 1/2" - S/S	140024	1
12.	ASM HOSE W/SOL LEVEL IND (MTS)	700199	1	84.	SCREW, HXHDCP 1/2-13X1 S/S	140237	1
13.	CLAMP, HOSE 5/16-7/8 DIAM-S/S	140310	1	85.	WASHER, FLAT 3/8" USS - S/S	140028	1
14.	HOSE BARB, 1/2H X 3/8M - BRASS	14884	1	86.	BEARING, FLANGE 5/8" ID	140103	1
15.	SCREW, HXHDCP 1/4-20X5/8 - S/S	140259	1	87.	BUSHING, SQUEEGEE MOUNT BRKT	140133	4
16.	WASHER, LOCK 1/4" - S/S	140016	1	88.	WASHER, SPLIT LOCK 5/16 - S/S	140015	4
17.	GRIP, HANDLE 1/4 X 1 X 2 1/4	200816	1	89.	SCREW, HXHDCP 5/16-18X3/4 S/S	140223	4
18.	HANDLE, SQUEEGEE LEVER BLACK	230658.BK	1	90.	WASHER, FLAT 5/16" USS - S/S	140027	4
19.	LATCH, SQUEEGEE HANDLE BLACK	230659.BK	1	91.	BRACKET, SQUEEGEE MOUNT	230750	1
20.	GRIP, HANDLE .095X7/8X1-3/8 BK	200817	1	92.	BEARING, FLANGE 5/8" ID	140103	1
21.	SPACER, SQUEEGEE LIFT	230631	1	93.	NUT, ADJUSTING 1"-8 X 1"	140583	1
22.	SCREW, HXHDCAP 3/8-16X3/4 S/S	140201	3	94.	WASHER, FLAT .687 ID X 1.50 OD	27820	1
23.	WASHER, SPLIT LOCK 3/8" - S/S	140017	4	95.	SPRING, SQUEEGEE PRESSURE	140427	1
24.	WASHER, FLAT 3/8" USS - S/S	140028	7	96.	WASHER, SPLIT LOCK 5/16 - S/S	140015	1
25.	BUSHING, 3/8 ID X 1/2 OD X	140136	4	97.	SCREW, HXHDCP 5/16-18X3/4 S/S	140223	1
26.	LINK, SQUEEGEE HANDLE	230660	1	98.	SCREW, HXHDCP 1/4-20X5/8 - S/S	140259	1
27.	HOSE, DRAIN	160414	1	99.	WASHER, LOCK 1/4" - S/S	140016	1
28.	CLAMP, EAR 1-9/16" - S/S	140317	2	100.	WASHER, FENDER 1/4" X 1" S/S	140003	1
29.	SLEEVE, DRAIN HOSE	140921	1	101.	BEARING, FLANGE 5/8" ID	140103	1
30.	SCREW, HXHDCP 5/16-18X3/4 S/S	140223	4	102.	SCREW, HXHDCP 5/16-18X3/4 S/S	140223	2
31.	WASHER, SPLIT LOCK 5/16 - S/S	140015	4	103.	BRACKET, SQUEEGEE MOUNT	230442	1
32.	WASHER, FLAT 5/16" USS - S/S	140027	4	104.	WASHER, FLT .5/510X1.25X.06SS	140045	2
33.	BRACKET, HOSE HANGER CLIP	230296	1	105.	SCREW, HXHDCP 1/2-13X1 S/S	140237	2
34.	BRACKET, DRAIN HOSE HNGR BK	230696.BK	1	106.	WASHER, LOCK 1/2" - S/S	140024	2
35.	KNOB, DRAIN HOSE W/ 3/8-16 THD	230831	1	107.	WASHER, FLT .5/510X1.25X.06SS	140045	2
36.	CHAIN, BEAD #6	180542	12'	108.	BUSHING, BRUSH LIFT PEDAL	140139	2
37.	SCREW, MCH 6-32X3/8 RDPHL-BKZC	140810	2	109.	BRACKET, SQUEEGEE PIVOT (BK)	230440.BK	1
38.	WASHER, EXT LCK TOOTH #6 ZINC	140019	2	110.	BEARING, FLANGE 5/8" ID	140103	1
39.	WASHER, FNDR 3/8ID X 1.50OD SS	140056	1	111.	SCREW, HXHDCP 1/2-13X1 S/S	140237	1
40.	PLUG, DRAIN HOSE	140927	1	112.	WASHER, LOCK 1/2" - S/S	140024	1
41.	NUT, SERRIATED FLNGE 3/8-16 SS	140577	1	113.	SHAFT, LIFT	230441	1
42.	LINK, SPLICING #6 BEAD CHAIN	180543	1	114.	BEARING, SLEEVE	28971	2
43.	PLATE, LOCK CONTROL HOUSING	230661	1	115.	WASHER, FLAT 1/4" USS-S/S BULK	140000	2
44.	HANDLE, VALVE LEVER BLACK	230680.BK	1	116.	WASHER, FLAT 1/4" USS-S/S BULK	140000	2
45.	GRIP, HANDLE 1/4 X 1 X 2 1/4	200816	1	117.	SCREW, HXHDCP 1/4-20X2-1/2 ZNC	140209	1
46.	GASKET, TUBE ADPTR (SS-27/33)	100151	1	118.	SCREW, MC 5/16-18X1-1/2 TPH SS	140799	2
47.	ADAPTER, TUBE	230664	1	119.	WHEEL, 3" BLACK W/ BUSHINGS	103055	2
48.	SPRING, TUBE ADAPTER	140424	1	120.	HOSE, VAC 1.5 X 29.5 W/CUFFS	160613	1
49.	SCREW, HXHDCP 3/8-16X1 S/S	140202	1	121.	WELDMENT SQUEEGEE MNT PLT (BK)	230443.BK	1
50.	WASHER, SPLIT LOCK 3/8" - S/S	140017	1	122.	NUT, LCK NYL INSERT 1/4 - S/S	140501	1
51.	WASHER, FLAT 3/8" USS - S/S	140028	2	123.	KNOB, 5/16-18 THREAD - BLACK	27257	2
52.	BUSHING, 3/8 ID X 1/2 OD X	140136	1	124.	WASHER, INT LCK TOOTH #10-S/S	140018	24 or 28
53.	NUT, HEX JAM 1/4-20 - ZINC	140510	1	125.	SCREW, MCH 10-24X1/2 RNDPHL SS	140892	24 or 28
54.	WASHER, FLAT 1/4" USS-S/S BULK	140000	2	126.	PLATE, FRONT SQUEEGEE (SS33)	230686.BK	1
55.	LEVER, VALVE (SS27/33)	230656	1		PLATE, FRONT SQUEEGEE (SS27)	230670.BK	1
56.	WASHER, LOCK 1/4" - S/S	140016	1	127.	BLADE, SQUEEGEE BACKING (SS33)	240293	2
57.	SCREW, HXHDCP 1/4-20X1 S/S	140208	1		BLADE, SQUEEGEE BACKING (SS27)	240295	2
58.	BRACKET, PANEL MOUNT	230679	1	128.	SPACER, SQUEEGEE FOR/REV (SS33)	230768	2
59.	SCREW, HXHDCP 3/8-16X5/8 S/S	2949.5	1		SPACER, SQUEEGEE FOR/REV (SS27)	230767	2
60.	WASHER, FLAT 5/16" USS - S/S	140027	4	129.	BLADE, SQUEEGEE WIPER (SS33)	240292	2
61.	WASHER, SPLIT LOCK 5/16 - S/S	140015	4		BLADE, SQUEEGEE WIPER (SS27)	240294	2
62.	SCREW, HXHDCP 5/16-18X3/4 S/S	140223	4	130.	GASKET, SQUEEGEE (SS27 & SS33)	100150	1
64.	NUT, HEX 3/8-16 - S/S	140525	1	131.	CHANNEL, SQUEEGEE (SS33)	230692.BK	1
65.	SCREW, CAP 3/8-16 X 7/8 HEX	2949.7	1		CHANNEL, SQUEEGEE (SS27)	230682.BK	1
66.	WASHER, SPLIT LOCK 3/8" - S/S	140017	1	132.	PLATE, SQUEEGEE BLADE (SS33)	230685.BK	1
67.	WASHER, FLAT 3/8" USS - S/S	140028	1		PLATE, SQUEEGEE BLADE (SS27)	230669.BK	1
68.	BUSHING .375/.380X.500/.498	140144	1	133.	SCREW, HXHDCP 5/16-18X1-1/4 SS	140221	2
69.	SPACER, BRUSH PRESSURE NUT	140576	1	134.	SCREW, HXHDCP 5/16-18X5/8 S/S	140226	2
70.	HANDLE, BRUSH PRESSURE	230564	1	135.	WASHER, SPLIT LOCK 5/16 - S/S	140015	2
71.	GRIP, HANDLE 1/4 X 1 X 2 1/4	200816	1	136.	ASM SQUEEGEE ROLLER	700844	2
72.	SPRING, BRUSH PRESSURE	140423	1	137.	NUT, LCK-NYL INSERT 5/16-18 SS	140546	2
73.	LATCH BRUSH LIFT PEDAL	230775	1	138.	SCREW, HXHDCP 3/8X1-1/2 FULTHD	140231	1
				139.	BUSHING .375ODX.250IDX.270THK	140134	1

Gum Rubber Squeegee
 27" - 240221
 240223
 240225

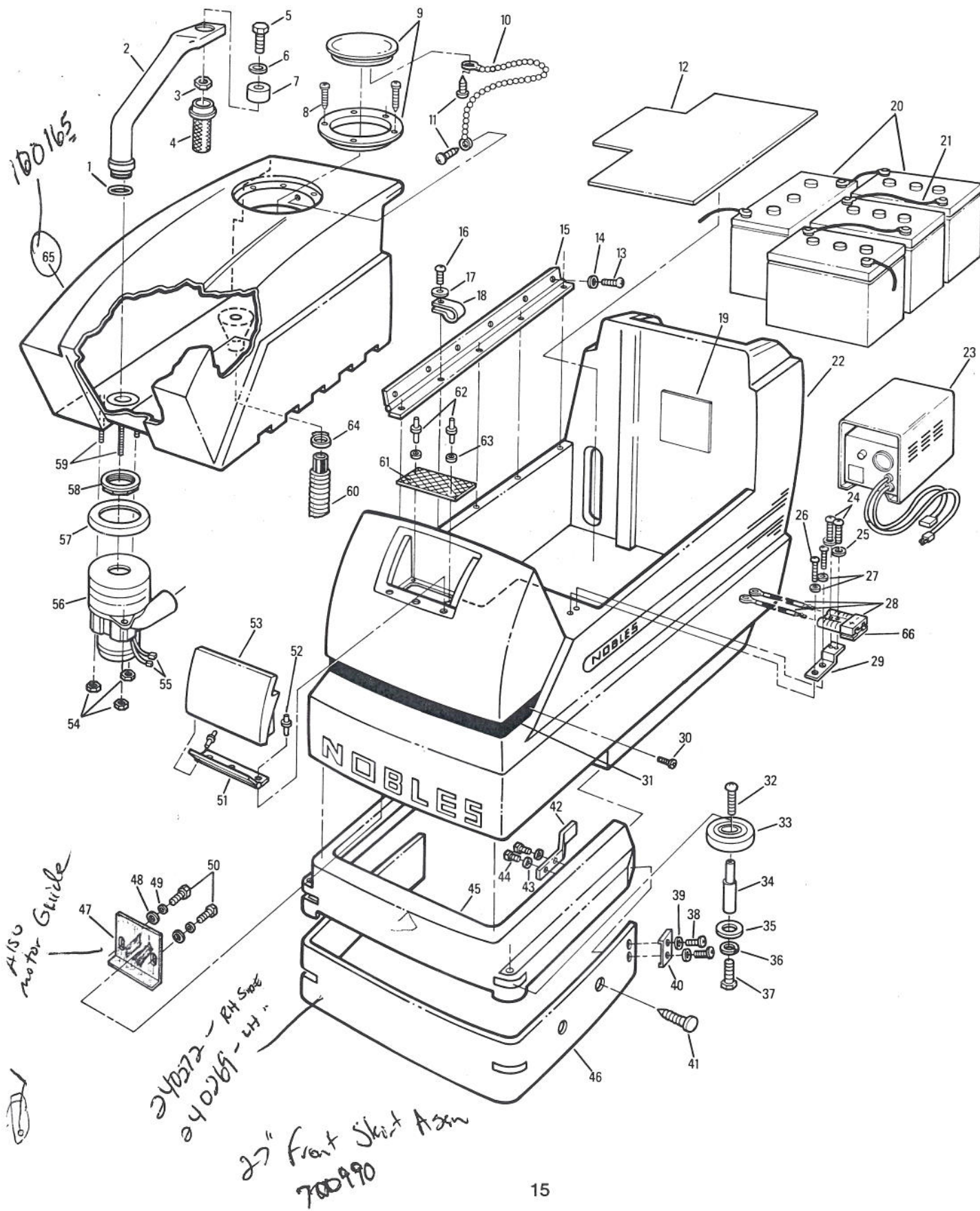
Electrical Panel Parts Diagram



Electrical Panel Parts List

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1.	BREAKER, CIRCUIT SWITCH 35 AMP	130756	3	12.	WASHER, FLAT 1/4" USS - S/S	140000	4
2.	BRACKET, CIRCUIT BREAKER	230553	1	13.	SCREW, MCH 10-24X3/8 PNPHL S/S	140887	3
3.	SOLENOID 24 VOLT	130218	3	14.	KIT, SS27/33 SPD CTRL BRD REPL	190143 190 1954	1
4.	TERMINAL, #10 RING 18-14 AWG	130125	6	15.	PANEL, ELECTRICAL (SS27/33)	230552	1
5.	RECTIFIER, 400V/6.0A SILCONE	130423	3	16.	NUT, KEP 10-24 - S/S BULK	140519	3
6.	SCREW, MCH 1/4-20X1/2 TSPHL SS	140885	6	17.	NUT, KEP 1/4-20 - ZINC	140524	6
7.	ELECTRICAL PANEL COVER SS27/33	100234	1	18.	GROMMET, RUBBER	240195	1
8.	WASHER, INT LCK TOOTH #10-S/S	140018	2	19.	SCREW, MCH 10-24X3/8 PNPHL S/S	140887	2
9.	SCREW, MCH 10-24X1/2 RNDPHL SS	140892	2	20.	BREAKER, CIRCUIT SWITCH 10 AMP	130755	1
10.	DECAL, INSTRUCTION - DIAGRAM	120542	1	21.	FLASHER, 24VDC	130021	1
11.	NUT, KEP 1/4-20 - ZINC	140524	4				

Tanks & Misc. Parts Diagram



Tanks & Misc. Parts List

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1.	GASKET, WASTE AIR CHAMBER	101714	1	33.	WHEEL, 3" BLACK W/ BUSHINGS	103055	2
2.	VACUUM TUBE RM-NATURAL	100162	1	34.	SPACER, BUMPER WHEEL	230614	2
3.	NUT, LCK NYL INSERT 1/4 - S/S	140501	1	35.	WASHER, FENDER 1/4" X 1" S/S	140003	2
4.	FLOAT, SHUT-OFF	180613	1	36.	WASHER, EXT LCK TOOTH 1/4"-S/S	140052	2
5.	SCREW, MACH. 1/4-20 X 1 1/2 RHP S/S	140846	1	37.	SCREW, MCH 1/4-20X1/2 TSPHL SS	140885	2
6.	WASHER, FLAT 1/4" USS - S/S	140000	1	38.	SCREW, MACHINE 10-24 X 1/2 RHP-S/S	140892	4
7.	SPACER, TUBE GASKET (SS27/33)	100149	1	39.	WASHER, INTERNAL LOCK TOOTH #10 - S/S	140018	4
8.	SCREW, SHEET METAL #6 X 3/4" PHP - S/S	140826	6	40.	CLAMP, BUMPER	230662	2
9.	LID, ASSY. COMPLETE BLACK	100102	1	41.	CLIP SNAP-IN, FROM 140262 (MTS) ††	140263	11 or 14
	LID, CENTER ONLY CLEAR	100105	1	42.	MOUNT PLATE, SKIRT HOUSING	230646	2
	LID, OUTER RING ONLY (BLACK)	100109	1	43.	WASHER, SPLIT LOCK 5/16 - S/S	140015	4
10.	CHAIN ASSY. STOPPER DRAIN HOSE	230513	1	44.	SCREW, HEX HD CAP 5/16-18 X 3/4 S/S	140223	4
11.	SCREW, SHTMTL #6X3/8 PN PHL-SS	3701.6	2	45.	SKIRT 27" RM-NDG SS27	100170	1
12.	PLATE, BATTERIES SUPPORT	100707	1		SKIRT 33" RM-NDG SS33	100172	1
13.	SCREW, MCH 1/4-20X1/2 TSPHL SS	140885	6	46.	KIT BUMPER SS-27 REPLACEMENT	100173	1
14.	WASHER, EXT LCK TOOTH 1/4"-S/S	140052	6		KIT BUMPER SS-33 REPLACEMENT	100174	1
15.	HINGE, RECOVERY TANK	230667	1	47.	PLATE, FRONT SUPPORT	230647	1
16.	SCREW, MACHINE 1/4-20 X 1/2 THP - S/S	140885	5	48.	WASHER, FLAT 5/16" USS - S/S	140027	2
17.	WASHER, EXT LCK TOOTH 1/4"-S/S	140052	5	49.	WASHER, SPLIT LOCK 5/16 - S/S	140015	2
18.	CLAMP, INSULATED 3/8 ID	140315	1	50.	SCREW, HEX HD CAP 5/16-18 X 3/4 - S/S	140223	2
19.	DECAL, WARNING BATTERY/DIAGRAM	120567	1	51.	HINGE, COVER	230626	1
20.	BATTERY, 6V (SS-27/33)	130986	4	52.	RIVET, POP 1/8 ZINC	140706	7
21.	CABLE, BATTERY 15' BLK X 6 GA	130367	3	53.	COVER SOL TANK RM-NLG SS27/33	100160	1
22.	KIT SOLUTION TANK REPL SS27/33	190119	1	54.	NUT, LOCK - NYLON INSERT 1/4" S/S	140501	3
23.	CHARGER, BATTERY 120V/24V 17 AMP	130987	1	55.	TERMINAL, MALE COUPLER (BLUE)	130149	2
24.	SCREW, MACH. 6/32 X 5/8 RHP - S/S	140831	2	56.	MOTOR, VACUUM 5.7 DIA 3 STG. 24V DC	130477	1
25.	WASHER, EXTERNAL LOCK TOOTH #6 - S/S	140019	2	57.	SEAT, NEOPRENE MOTOR	0174.10	1
26.	SCREW, 10-24X7/16 INDHXWSH ZNC	140951	2	58.	NUT, FLANGED METAL 1-1/2 FPT	210240	1
27.	WASHER, INT LCK TOOTH #10-S/S	140018	2	59.	STUD, THREADED 1/4-20 X 4 1/4 ZINC	140258	3
28.	ASM CHARG PLUG WIRE NA&SS27/33	700999	1	60.	HOSE, DRAIN	160414	1
29.	BRACKET, CHARGER PLUG	230665	1	61.	SCREEN, FILL (3" X 7")	230693	.14 sq.ft.
30.	SCREW, MCH 10-24X3/8 PNPHL BZC	140835	2	62.	RIVET, POP 1/8 ZINC	140706	2
31.	SHIELD, LIGHT	230298.BK	1	63.	WASHER, FLAT #6 - S/S	140032	2
	LIGHT, SAFETY	130020	1	64.	CLAMP, HOSE 3/4 TO 1 3/4 DIA - S/S	140307	1
	GASKET, 1/2" CLOSED CELL	26578	3.0 ft	65.	RECOVERY TANK RM-NLG SS27/33	100166	1
32.	SCREW, MCH 1/4-20X3/4 TRSPH SS	140864	2	66.	CONNECTOR	27833	1

†† INDICATES THIS ITEM IS INCLUDED WITH KIT, ITEM #45.

*Repair Solution Tank
230666*

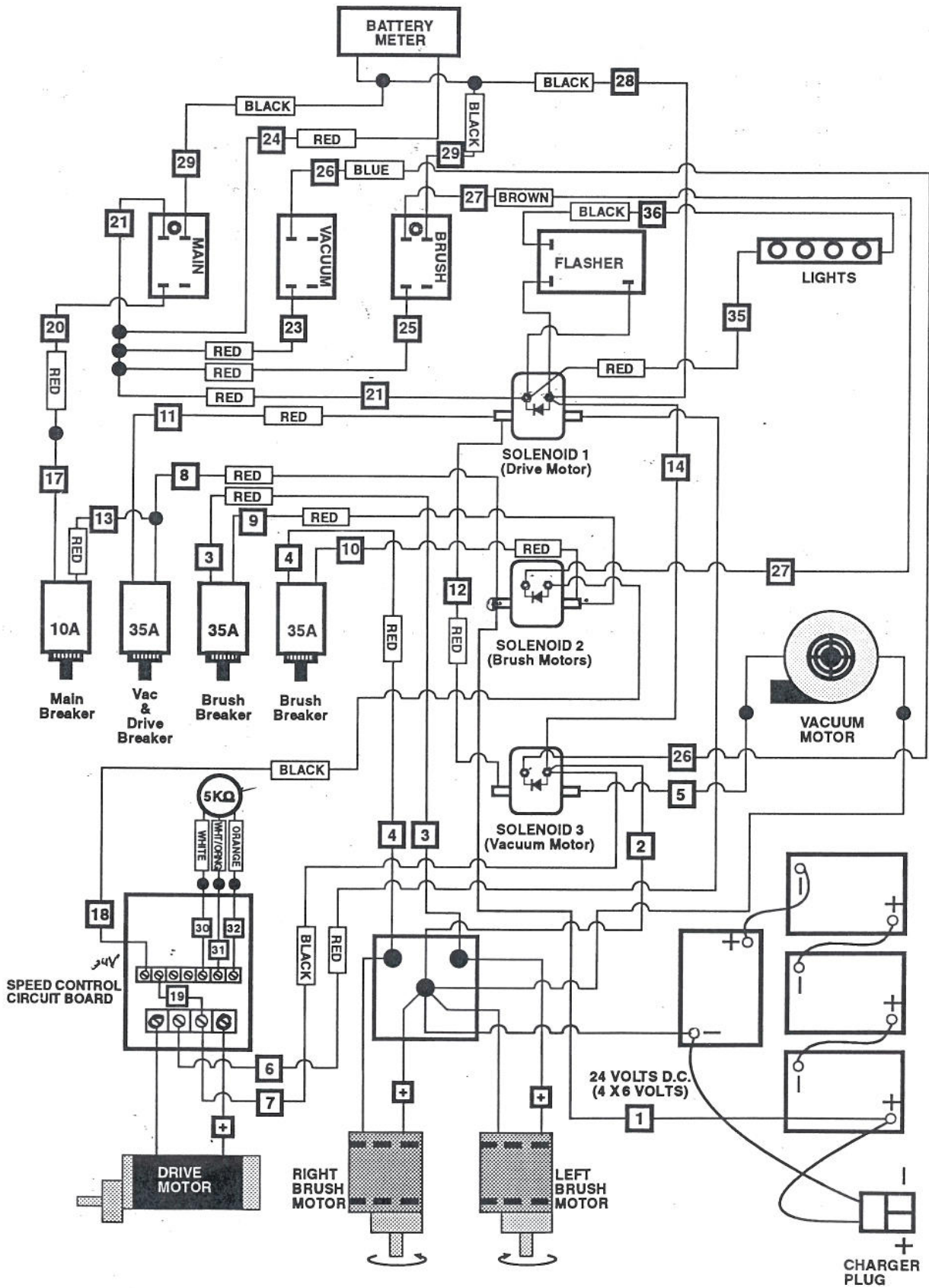
*240273
240270*

*Kit, Splash Reple - 190946 - 27
190947 - 33*

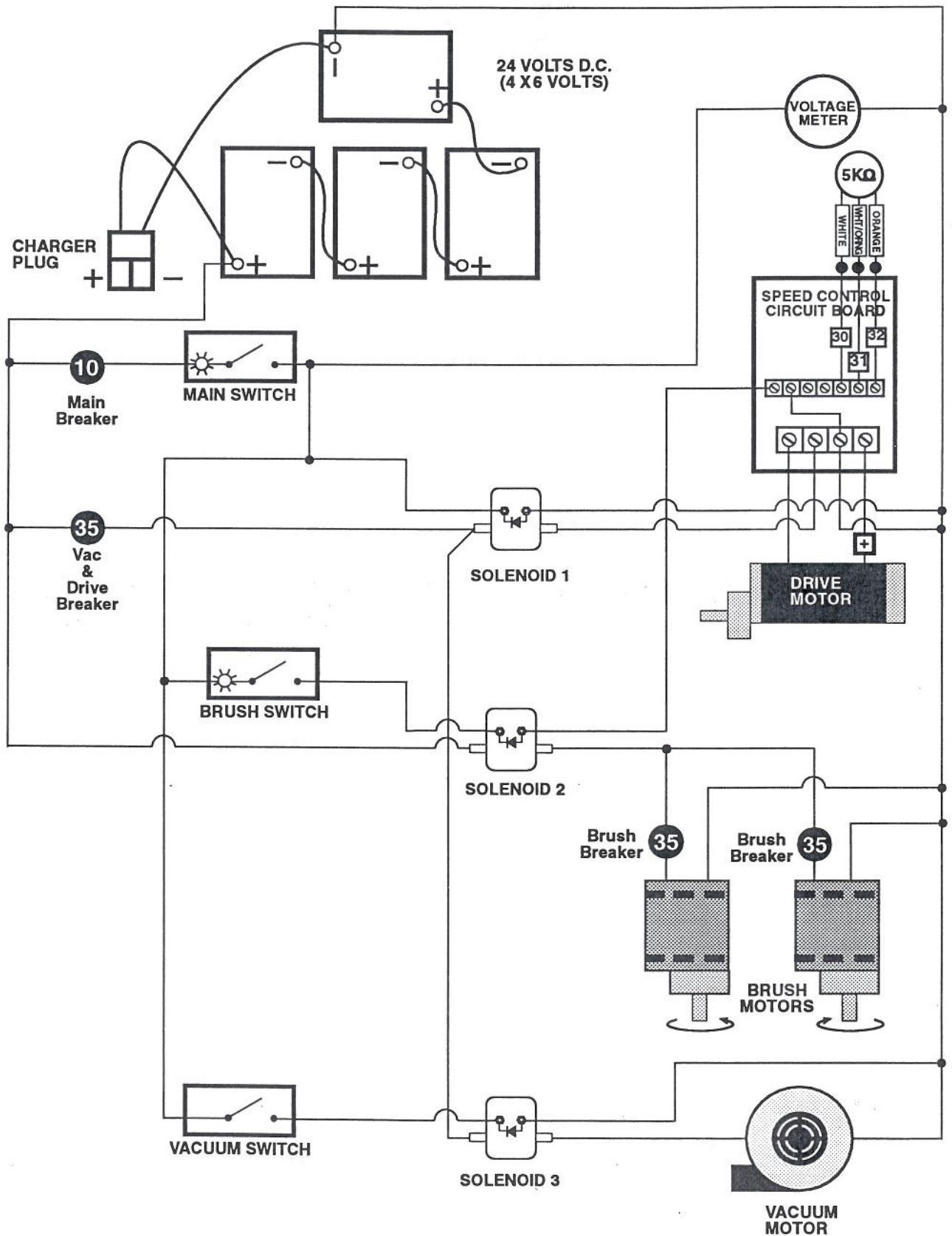
*3300 Skirt Assy
200291*

101275 - New Style Tank

Wiring Layout Diagram



Wiring Ladder Diagram

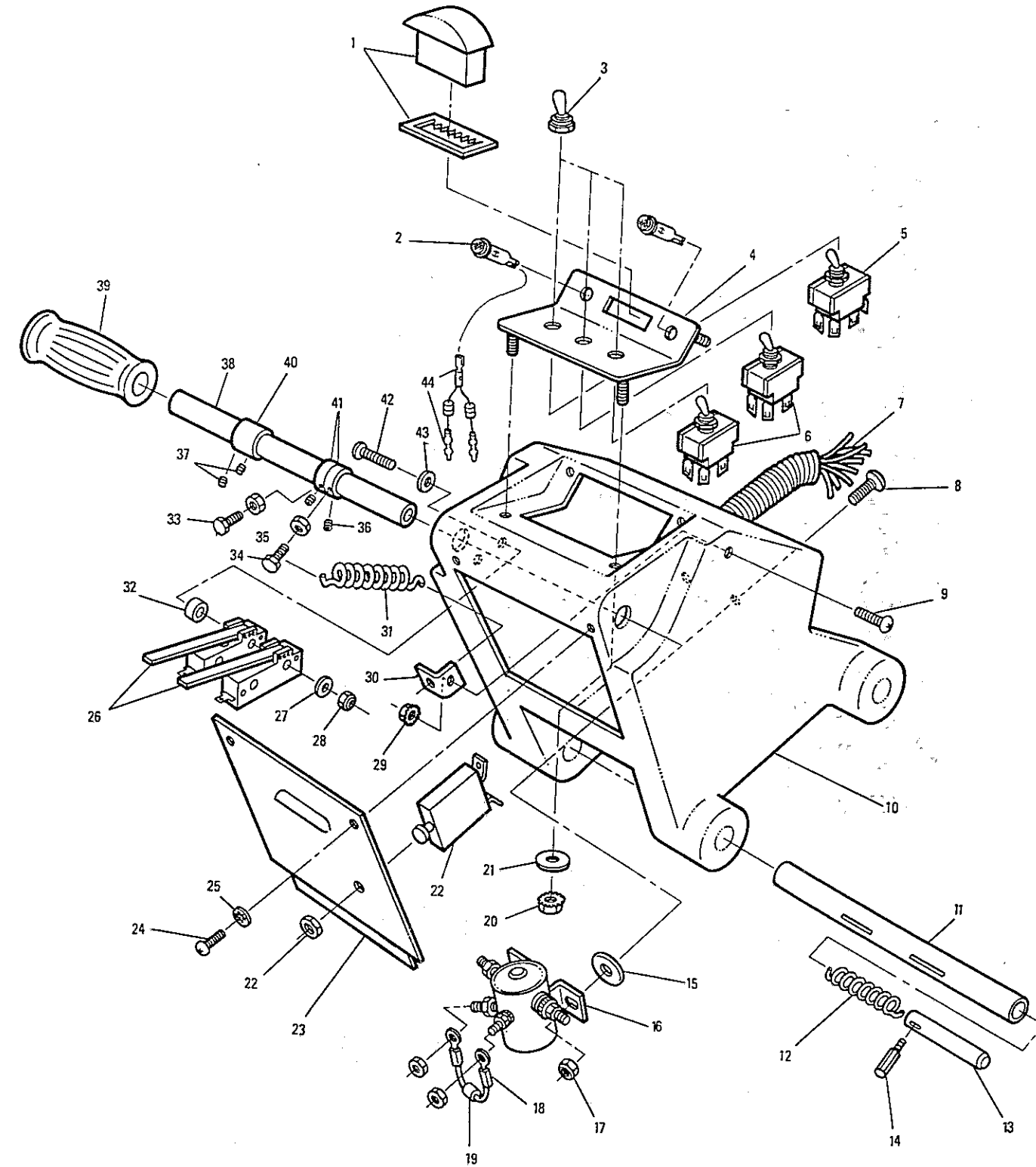


Control Housing Parts List

ITEM #	DESCRIPTION	PART #	QTY.
1.	METER, BATTERY VOLTAGE 24V	130015	1
2.	LIGHT, INDICATOR GREEN	130738	2
3.	BOOT, RUBBER SWITCH BLACK	130990	3
4.	PANEL, CONSOLE TS27/33	230514.BK	1
	GASKET, CONSOLE	100057	1
	DECAL, DASH TS27/33	120590	1
5.	SWITCH, TOGGLE 2PDT ON-OFF-ON	130684	1
6.	SWITCH, TOGGLE DPST	130726	2
7.	ASM CONTROL HSG HARNESS TS27/33	701090	1
8.	SCREW, MCH 1/4 - 20 X 1 TRSPHL ZINC	140881	2
9.	SCREW, MCH 10 - 24 X 3/4 TRSPHL SS	140900	1
10.	HSG, CONTROL RM/NLG (TS27/33) MTS	100327	1
11.	TUBE, HANDLE ADJUSTMENT	230613	1
12.	SPRING, LOCK PIN	140415	1
13.	PIN, HANDLE ADJUSTMENT LOCK	230648	2
14.	PIN, HANDLE ADJUSTMENT	230649	2
15.	GROMMET, RUBBER	240199	2
16.	SOLENOID, 24 VOLT	130218	1
17.	NUT, LOCK NYLON INSERT 1/4 - S/S	140501	2
18.	TERMINAL, RING #10 16-14 GA NI	130125	2
19.	RECTIFIER, 400V/6.0A SILICONE	130423	1
20.	NUT, KEP/10 - 24 S/S BULK	140519	4
21.	WASHER, FLAT 1/4" USS - S/S BULK	140000	4
22.	BREAKER, CIRCUIT SWITCH 35 AMP	130756	1
23.	COVER, CONTROL PANEL BLACK	230668.BK	1
24.	SCREW, MCH 10 - 24 X 3/8 PNP HL S/S	140887	2
25.	WASHER, INT LCK TOOTH #10 - S/S	140018	2
26.	SWITCH	28657	2
27.	WASHER, FLAT #6 - S/S	140032	2
28.	NUT, LOCK - NYLON INSERT 6 - 32	28675	2
29.	NUT, KEP 10 - 24 S/S BULK	140519	1
30.	BRACKET, SPRING	230564	1
31.	SPRING, ROLL THROTTLE	140409	1
32.	SPACER, .14ID X .50OD X .38 STLZNC	140150	2
33.	SCREW, HXHDCP 1/4 - 20 X 3/4 S/S	140554	1
34.	SCREW, HXHDCP 1/4 - 20 X 1 S/S	140208	1
35.	NUT, HEX JAM 1/4 - 20 ZINC	140510	2
36.	SCREW, SCKST CUP PT 1/4 - 20 X 1/4	140859	2
37.	SCREW, SCKST CUP PT 1/4 - 20 X 3/8	140860	2
38.	HANDLE, TUBE	230671	1
39.	GRIP, HANDLE BLACK	200815	2
40.	COLLAR SWITCH ACTIVATOR	230884	1
41.	COLLAR, HANDLE	230652	2
42.	SCREW, MCH 6 - 32 X 2-1/4 PNP HL ZNC	140757	2
43.	WASHER, FLAT #6 - S/S	140032	2
44.	ASM, RECTIFIER	700657	1

Control Housing Parts Diagram

700960 Asm wire 18'x16"
 701190 Asm wire 18'x18"
 130040 wire tie
 130183 connector t-top
 100098 t-top, 2 side form



SPEEDSCRUB TS 27/33

TWO SPEED AUTOMATIC SCRUBBER

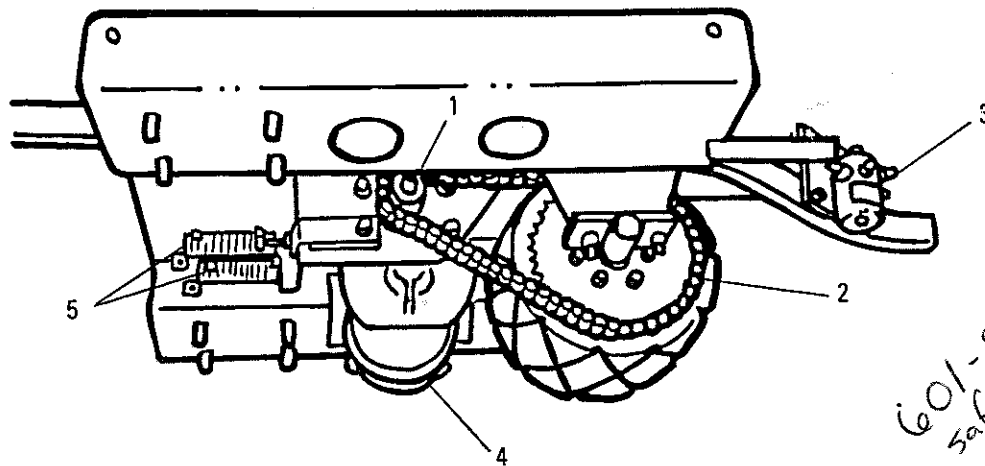
Parts Breakdown - Insert to SS27/33 Reference Manual

For Parts not listed in this Insert, use Part Numbers listed in the SS27/33 Manual.

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Machine Serial Number

Drive System Parts Diagram:



Drive System Parts List:

ITEM #	DESCRIPTION	PART #	QTY.	ITEM #	DESCRIPTION	PART #	QTY.
1.	SPROCKET, DRIVE MOTOR (TS27/33)	240087	1		CARBON BRUSH, FOR #130492	130508	4
2.	KIT, CHAIN REPLACEMENT W/LINKS	190968	1	5.	RESISTOR, 100 WATT .9 OHM	130713	2
3.	SOLENOID, 24 VOLT	130218	1		SCREW, MCH 10 - 24 X 3/4 TRSPHL S/S	140900	2
4.	MOTOR, DRIVE 24 VOLT (TS27/33)	130466	1		WASHER, FLAT 3/16 USS - S/S	140011	4
	CAP, CARBON BRUSH FOR #130492	130507	4		NUT, KEP 10 - 24 S/S	140519	4

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