



Electronic Service Manuals

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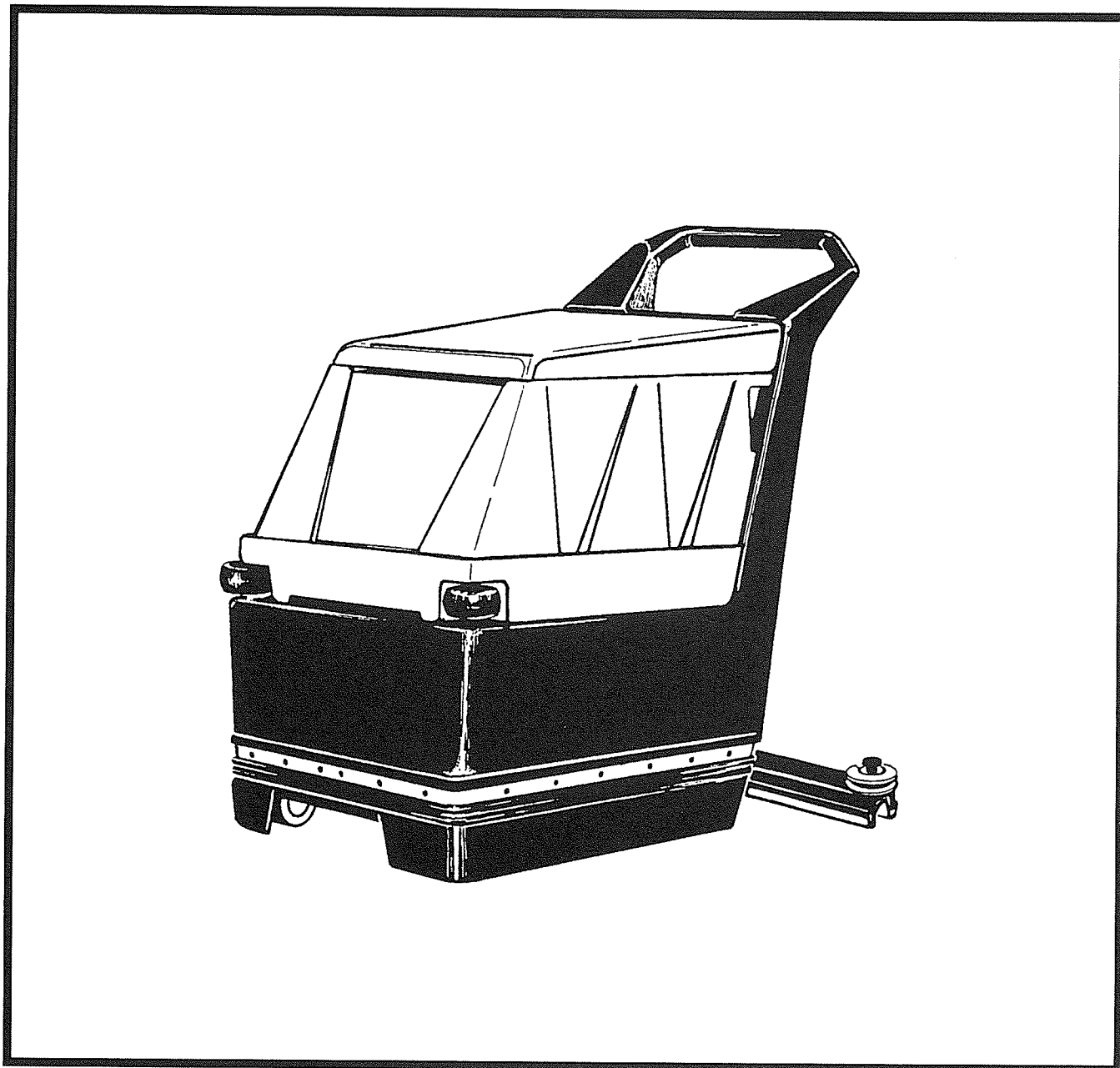
Serving the Cleaning Industry Since 1922

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200 Floor Scrubber Battery

MC20024QP
MC20024CE

■ OPERATION ■ SERVICE ■ PARTS ■ CARE



Revised 8/01

Minuteman[®]

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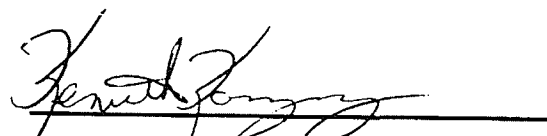
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EC Declaration of Conformity

according to Directives 89/392, 89/336 and 72/73

We, Minuteman International Incorporated, of 111 South Rohlwing Road Addison Illinois 60101 USA, declare under our sole responsibility that the products MC20024CE, MC20025CE, MC20524, MC20525 Commercial Automatic Floor Scrubbing machines to which this declaration relates corresponds to the relevant requirements of the EC Directives 89/392, 89/336 and 72/73. The following standards were used to determine compliance with the Directives: EN 292, EN 294, EN 811, EN 55011, EN 55104, EN 50082-2, EN 60335-1 and IEC 335-2-72.

SOUND		VIBRATION
76 dB Operator	73 dB At 3m	.9 m/s² At Operators Hand Grips
Tests were conducted on 6/7/96 with calibrated sound and vibration equipment under the conditions noted below:		
General Condition: Cloudy Temperature: 29°C Barometric Pressure: 29.5	Wind: 0 km/hr Humidity: 85%	



 Kenneth Kaczmarz, Standards Engineer

 12/15/97
 Date

IMPORTANT SAFETY INSTRUCTIONS

CAUTION

Operators must read and understand this manual before operating or maintaining this equipment.

- Keep hands and feet clear of moving parts while machine is in operation.
- All switches must be in the "OFF" position when charging batteries.
- Electrical motors and components can cause an explosion when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dusts, etc.
- Make sure all switches are turned "OFF" and battery connections are removed before performing any maintenance procedures.
- Store or park this machine on a level surface only.
- These machines are designed for level floor operation only. **DO NOT OPERATE** on ramps or inclines.
- Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.
- This machine is not suitable for picking up hazardous dust.

Charging batteries generates explosive gases. **DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE.** Make sure the charger is turned off before disconnecting it from the batteries. Charge the batteries in a well-ventilated area.

Maintenance and repairs must be performed by authorized personnel.

SAVE THESE INSTRUCTIONS

ELECTRICAL REQUIREMENTS:

This piece of equipment operates on 24 Volt DC.

BATTERY REQUIREMENTS:

2 x 12V 185 Amp Hour 20 Hour Rate Deepcycle P/N 956709

2 x 12V 105 Amp Hour 20 Hour Rate Deepcycle P/N 956712

Use adapter 740699.

BATTERY SERVICE AND INSTALLATION:

* Warning: Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.

BATTERY INSTALLATION:

1. Disconnect tank drain hose from rear of machine.
2. Disconnect vacuum recovery hose.
3. Raise tank assembly by gripping side hand holds, and tilting forward.
4. Position tank as shown below, figure 1, to hold tank in upright position.
5. Install batteries as shown in figure 2.

CHARGING OF BATTERIES:

Charging of batteries generates explosive gases. DO NOT CHARGE BATTERIES WHEN OPEN FLAMES OR SPARKS ARE PRESENT. DO NOT SMOKE. Make sure the charger is turned off before disconnecting it from the batteries. Charge the batteries in a well-ventilated area. Fluid levels should be checked before and after charging and maintained at the proper levels.

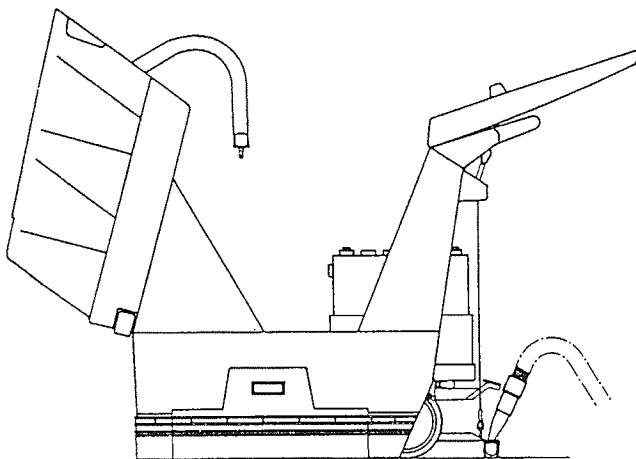


Figure 1

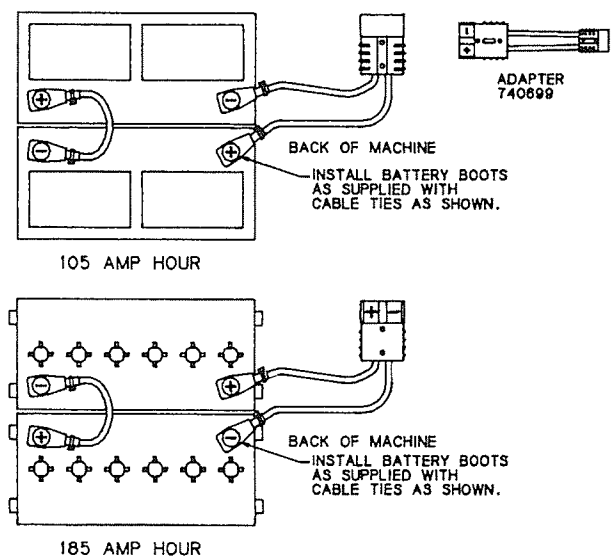
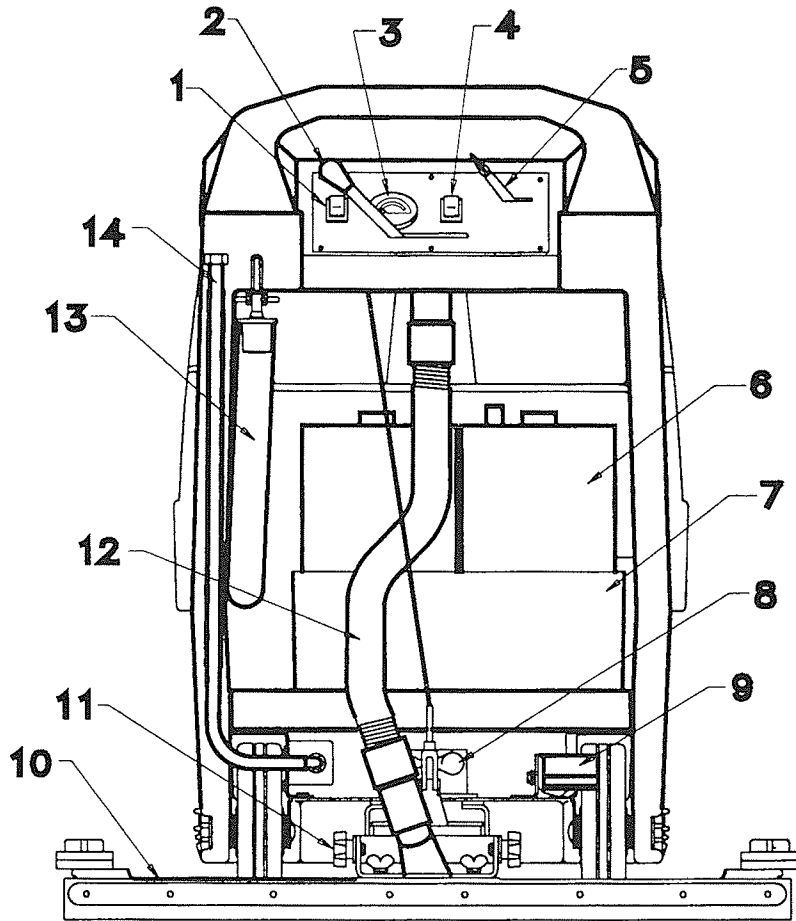


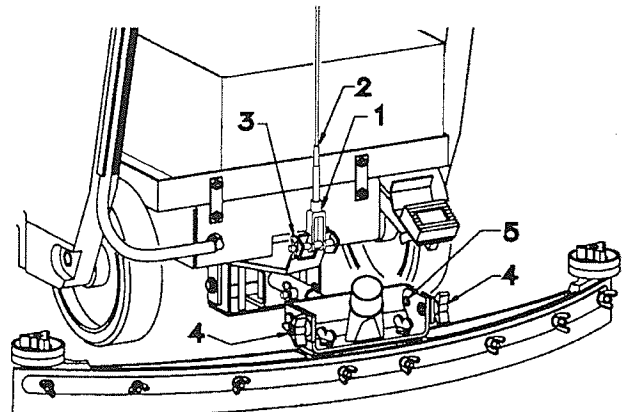
Figure 2



- | | |
|----------------------------|--|
| 1. Vacuum switch | 8. Power assist control |
| 2. Squeegee lift lever | 9. Foot pedal for lowering/raising brush |
| 3. Battery condition gauge | 10. Squeegee |
| 4. Brush switch | 11. Squeegee pitch control |
| 5. Solution control lever | 12. Recovery hose |
| 6. Batteries | 13. Recovery tank dump hose |
| 7. Battery liner | 14. Solution tank dump hose |

SQUEEGEE PITCH CONTROL ADJUSTMENTS

Some minor adjustments may be required due to floor types and conditions to extend downward travel. Remove clevis pin (3) and unscrew yoke (1) from cable (2). To adjust pitch (angle) of squeegee, loosen bolts (5) and knobs (4). Squeegee angular position can now be changed for best performance.



BRUSH INSTALLATION - REMOVAL

INSTALLATION - Figure 1

1. Disconnect batteries.
2. Set brush assist lever (A) to rabbit.
3. Raise brush mechanism (B) to the "up" position by depressing pedal downward as shown.
4. Remove side skirt (C) by lifting up and away.
5. Center brush (D) under machine as shown lining up center hex drive hub.
6. By releasing foot pedal (B) to lower brush mechanism, drive hub will engage.

REMOVAL - Figure 2

1. Disconnect batteries.
2. Set brush assist lever (A) to rabbit.
3. Raise brush mechanism (B) to "up" position by depressing pedal downward as shown.
4. Remove side skirt (C) by lifting up and away.
5. Brush has snap-on push-off clutch plate. By pushing brush away from machine and from side it will release brush assembly.

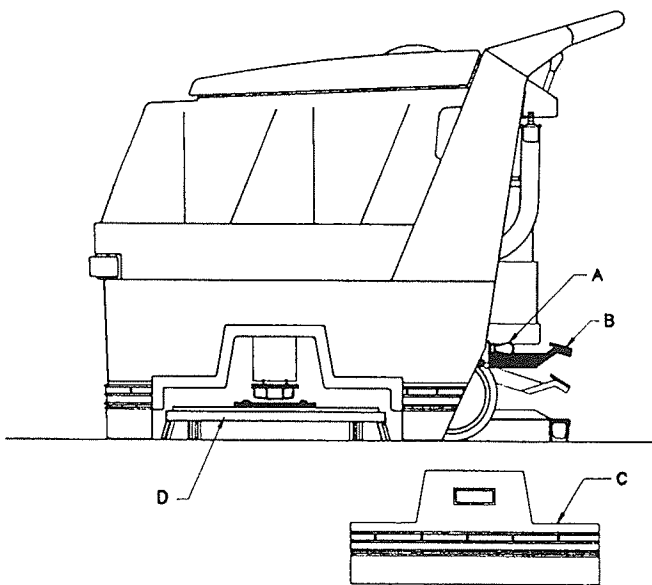


Figure 1

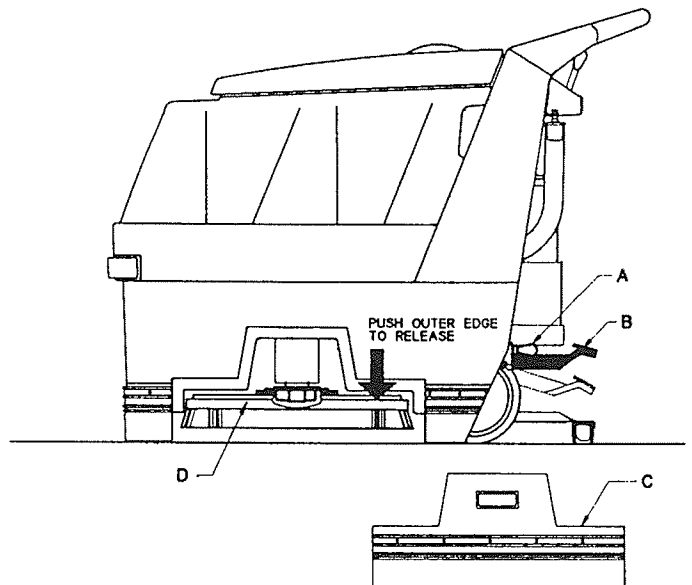


Figure 2

OPERATING INSTRUCTIONS

1. Filling: Fill the solution tank with the desired amount of water and add liquid cleaning solution to the proper dilution ratio. DO NOT USE powdered cleaning chemicals. Powders are unlikely to dissolve thoroughly, resulting in clogging the in-line solution filter. This can reduce or stop water flow to the brush.
2. Close lid.
3. Lower brush assembly.
 - To lower the brush, first push the pedal slightly towards the center of the machine (unlock it), then release it slowly.
 - To lift the brush, press the pedal down until lift mechanism engages.
4. Turn on brush switch.
5. Adjust solution control feed lever.
6. Turn on vacuum switch.
7. Lower squeegee assembly.

After Use:

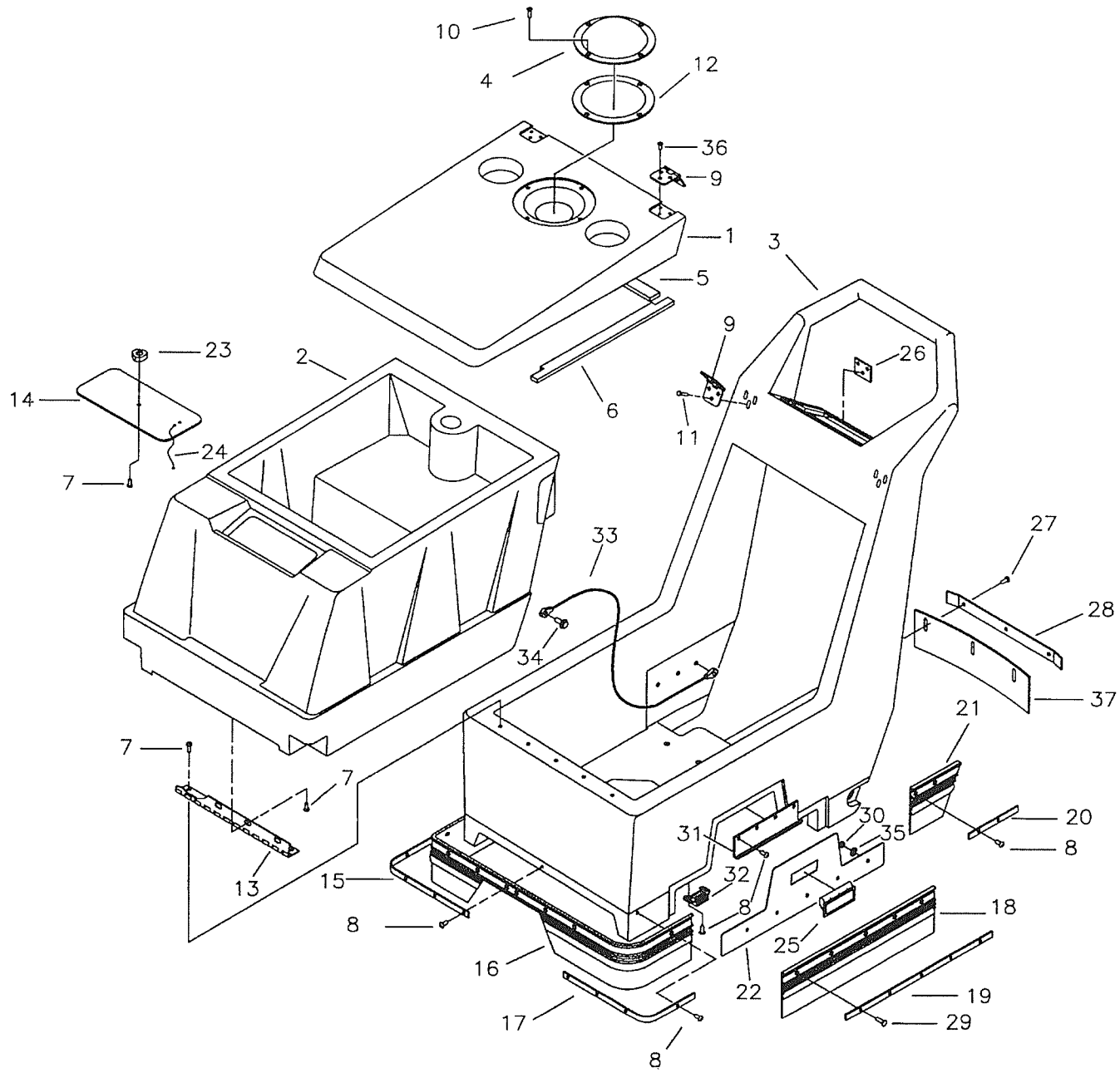
1. Turn off solution feed.
2. Switch off brush and raise.
3. Raise squeegee assembly.
4. Turn off vacuum motor.

Solution and recovery tanks should be emptied after every use.

MAINTENANCE:

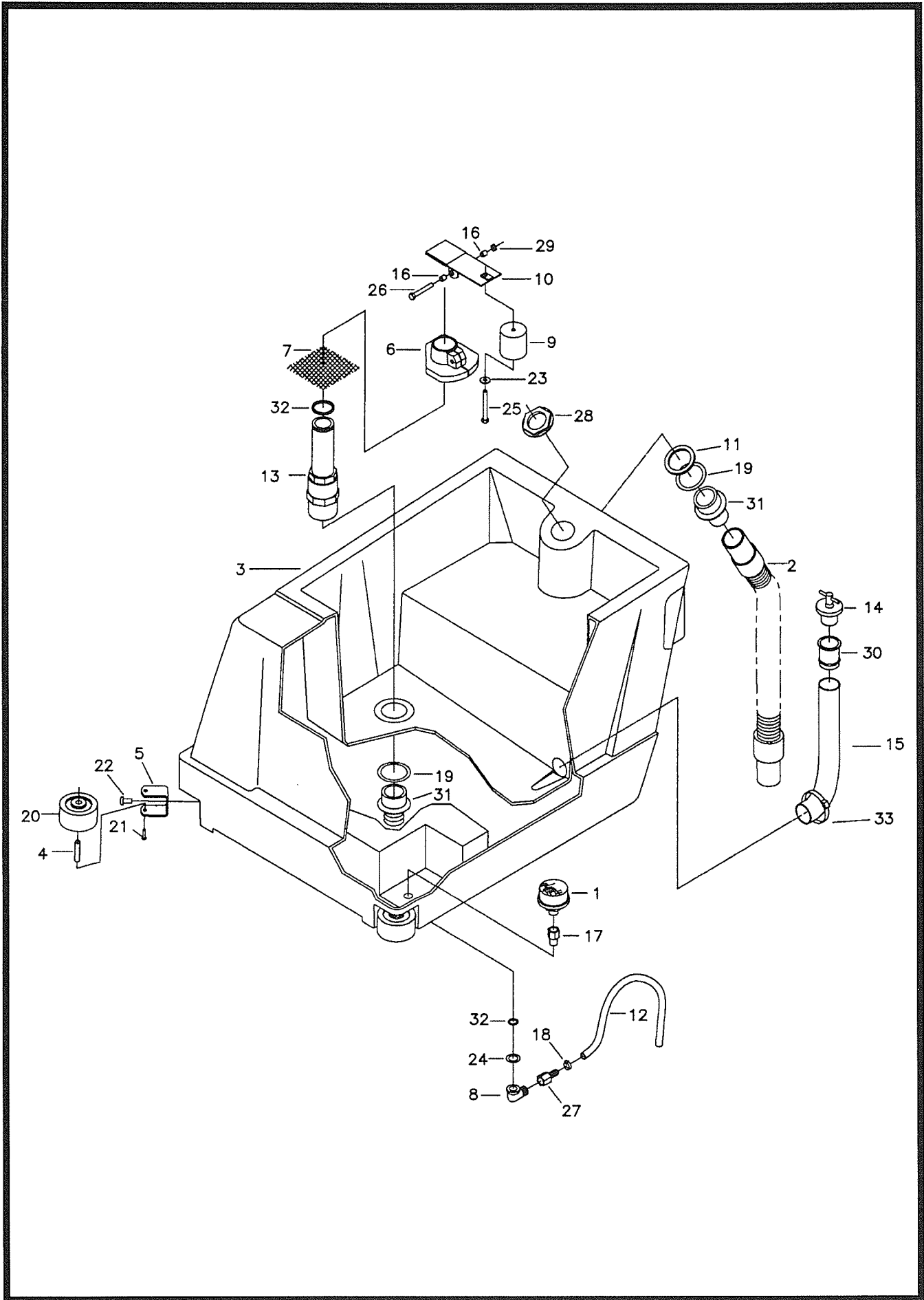
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|---------|---|
| Daily | <ol style="list-style-type: none">1. Clean float assembly & squeegee blades. Vac filter.2. Recharge batteries (check battery acid levels before and after charging). |
| Monthly | <ol style="list-style-type: none">1. Check wear on squeegee blades.2. Grease rear wheels.3. Grease pivot points on brush motor assembly. |

Every 500 hours check condition of carbon brushes on vacuum motor and brush drive motor.



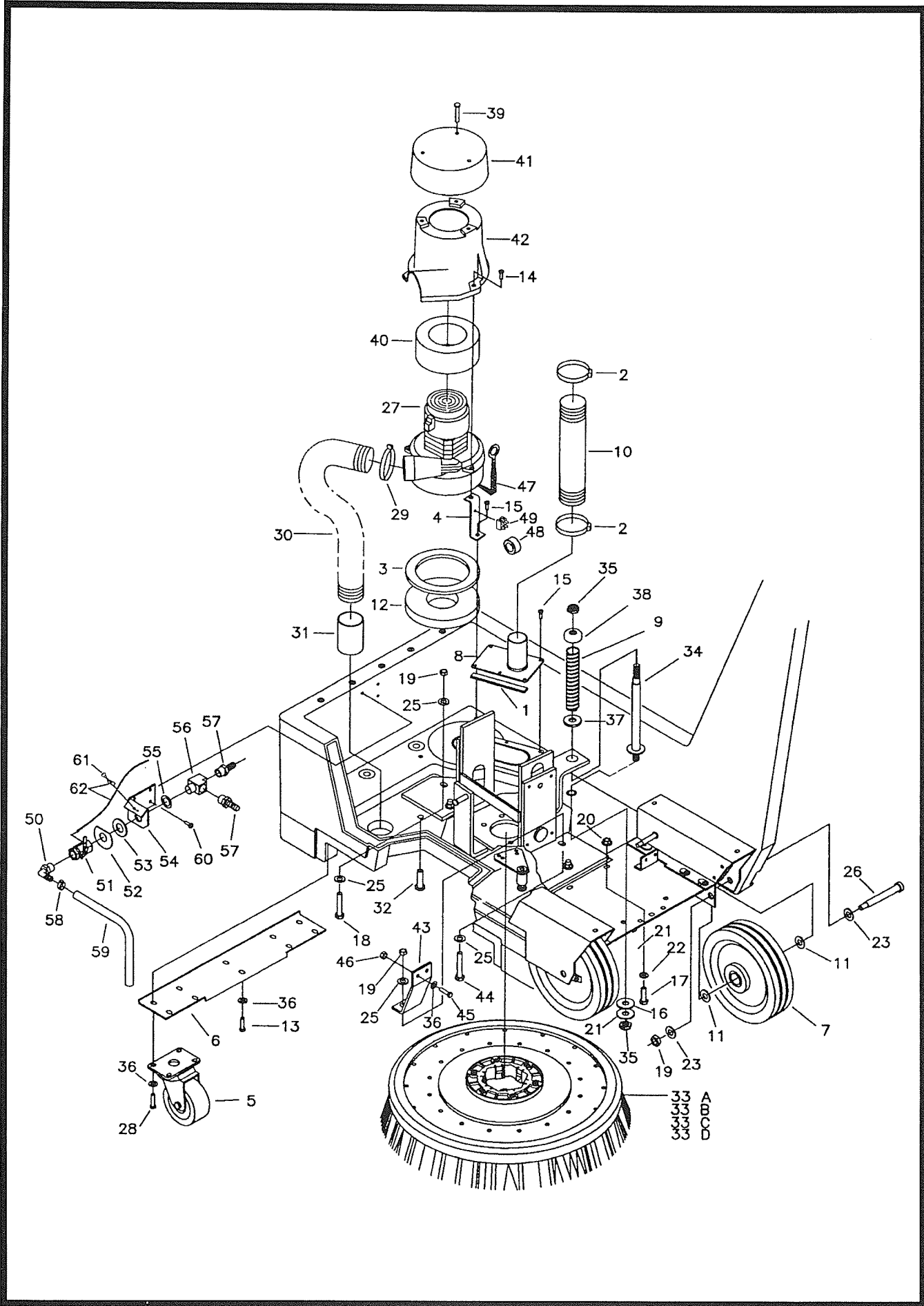
Parts List

Item	Part No.	Qty.	Description
1	210002	1	Lid Assembly Recovery
2	210001MCH	1	20" Solution/Recovery Tank Assembly
3	210000MCH	1	20" Base Assembly
4	210004	1	Recovery Dome
5	210006	2	Lid Gasket
6	210007	2	Lid Gasket
7	712565	10	SCR-MC 1/4-20 x .62 SS
8	711106	25	SCR-ST-A 10 x .75 PL
9	430044MCH	2	Hinge Lid 20"
10	712810	4	SCR-MC 10-24 x .37 STPL
11	712536	6	SCR-MC 10-24 x .62 SS TH
12	210005	1	Dome Gasket
13	260087	1	Hinge
14	450066	1	Solution Tank Cover
15	210055	1	Side Skirt Retainer
16	210052	1	Splash Skirt
17	210056	1	Skirt Retainer Front
18	210053	1	Skirt at Access Panel
19	210057	1	Skirt Retainer at Access Panel
20	210058	1	Skirt Retainer at Wheel
21	210054	1	Skirt at Wheel
22	210059	1	Access Panel
23	833214	1	Knob 3-Sided
24	450062	1	Cord, Nylon
25	210061	1	Pocket Pull
26	430126	2	Hinge Backing Plate
27	210078	1	Retainer
28	711104	3	SCR-ST 10 x .50
29	712822	5	No. 10-24 x .50 Lg. Screw
30	712900	5	Nut-Hex 10-24 STPL
31	210063	1	Access Panel Hanger
32	210027	2	Magnetic Catch
33	833463	1	Titl. Cable
34	712042	1	5/16-18 x .62 Wizz Bolt HH
35	711533	5	WSR-Internal Lock #10
36	712540	6	SCR-MC 10-24 x .37 SS TR
37	210077	1	Skirt



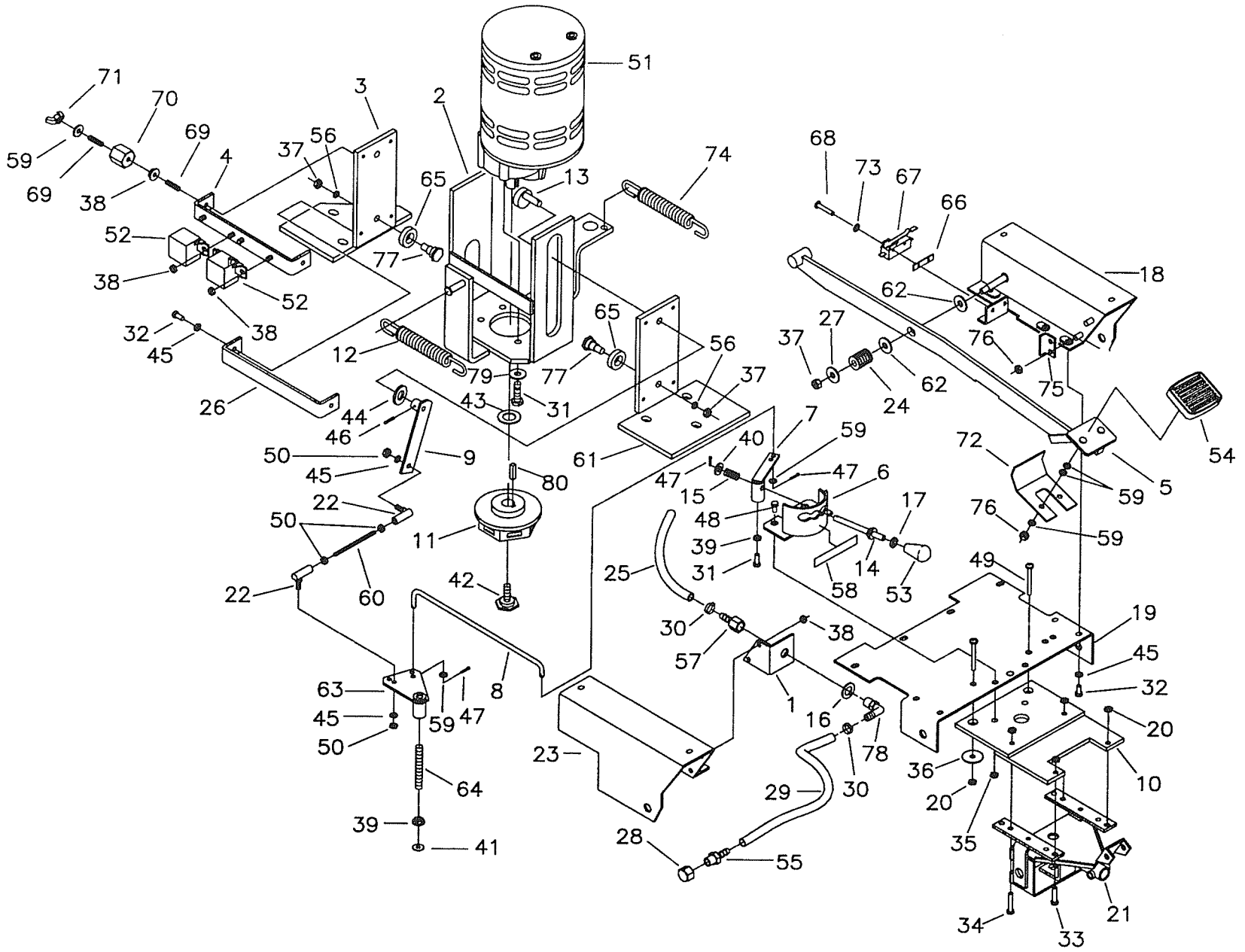
Parts List

Item	Part No.	Qty.	Description
1	130118	1	Solution Strainer M3-40
2	210068	1	Vac Recover Hose 34.5 C/L
3	210001MCH	1	Sol/Recovery Tank Assembly
4	833254	2	Bumper Wheel Axle
5	832949	2	U-Bracket Wheel Mount
6	200173	1	Float Housing
7	430050	1	Filter Screen 4 x 4
8	830062	1	Fitting Brass 90 3/8MPT
9	430089	1	Float
10	430090	1	Float Valve Weldment
11	828970	1	WSR-Neop 1.81 x 2.37 x .9
12	210401	1	Solution Hose
13	210009	1	Standpipe Assembly
14	833316	1	Drain Plug 1 1/4
15	210121	1	Dump Hose 200 Series
16	762384	2	Bushing .277 x .375 x .37
17	210409	1	Fitting Brass 3/8MPT
18	450076	2	Crimp Clamp SS 185R
19	450081	3	WSR SS 1.908 x 2.41 x .03
20	832896	2	Guide Wheel
21	710353	2	SCR-MC 10-32 x .37 ST PL
22	710985	2	SCR-SC 3/8-16 x .62
23	711504	1	WSR-Flat 1/4 ID SS
24	711594	1	WSR-Flat .56 x .88 x .03 NI
25	712092	1	SCR Nylon 1/4-20 x 2.5
26	712568	1	SCR-MC 1/4-20 x 2.25 SS
27	210410	1	Fitting Brass 3/8FPT
28	828971	1	Nut 1 1/2 Pipe Thread
29	712667	1	Nut-Hex 1/4-20 SS NYLOC
30	760343	1	Tube Hose 24/32B
31	450083	2	Hose Adapter
32	832326	1	O Ring
33	260203	1	Hose Clamp



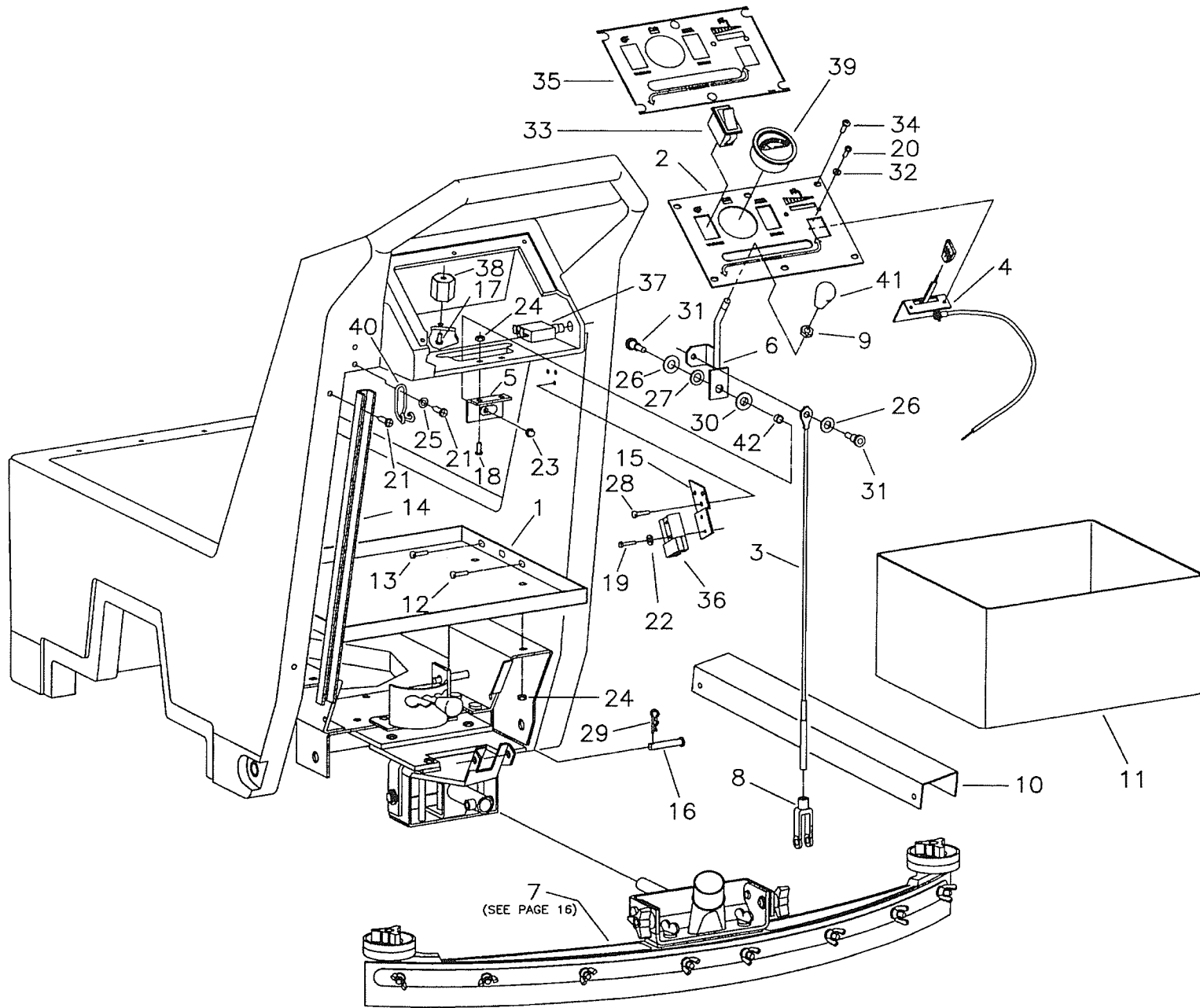
Parts List

Item	Part No.	Qty.	Description	Item	Part No.	Qty.	Description
1	250041	1	Seal, Rubber .12 x .62 x 14.5	33A	381041	1	Strata-Grit Brush
2	831001	2	Crimp Clamp	33B	381040	1	Poly-Grit Brush
3	290017	1	Gasket, 4.31 x 5.81 x .19	33C	381039	1	Nylon Brush Assembly Complete
4	430018	3	Z Bracket	33D	381038	1	Pad Driver
5	762333	2	Caster 3.5"	34	210083	1	Adjust Rod Weldment
6	210010	1	Caster Mtg. Brkt.	35	364-816	2	Nut-Nyloc 1/2-13 Half
7	210003	2	8" Wheel	36	711505	12	WSR-Flat 1/4
8	430069	1	Vacuum Manifold Assembly	37	711512	1	WSR-Flat .75 x 1.37 x .08
9	828301	1	Spring Squeegee Pressure	38	828264	1	Washer Cup
10	210074	1	Vacuum Hose 1.5 x 31 C/L	39	711160	3	#10 Hi/Lo Screw x .63
11	430149	2	Bushing .531 x 1 x .25 SS	40	380064	1	Foam Ring
12	460019	1	Gasket 3.75 x 5.75 x .75	41	840011	1	Vac Motor Cover, Top
13	710178	2	SCR-MC 1/4-20 x .50 STPL	42	840012	1	Vac Motor Cover, Bottom
14	710182	3	SCR-MC 1/4-20 x 1.00	43	210098	1	Reinforcing Bracket
15	711106	9	SCR-ST-A 10 x .75 PL	44	711244	1	BLT-HH 3/8-16 x 1.75
16	711559	1	WSR-Internal Lock	45	711204	2	BLT-HH 1/4-20 x .75
17	711231	4	BLT-HH 5/16-18 x 1.25 STPL	46	711373	2	Nut-Nylock 1/4-20
18	711243	5	BLT-HH 3/8-167 x 1.5 STPL	47	742281	1	Ground Strap
19	711380	8	Nut-Nyloc 3/8-16	48	742254	1	Torroid Ferrite
20	711425	3	Nut-Flanged Wizz 1/4-20	49	832996	1	Terminal Block
21	711510	2	WSR-Flat .5 x 1.37 x .10	50	450040	1	Elbow 3/8MPT x 3/8Barb
22	711506	4	WSR-Flat 5/16 STPL	51	809413MCH	1	Solution Valve
23	711509	6	WSR-Flat 1/2 STPL	52	829463	1	WSR-Flat D .75 x 2.00 x .05
24	711517	2	WSR-Flat .77 x 1.37 x .03	53	828975	1	WSR-Neo .75 x 1.5 x .09
25	711515	6	WSR-Flat .44 x .87 x .07	54	210370	1	Solution Valve Bracket
26	710874	2	SCR-SC 1/2 x 13 x 3.75	55	711512	1	WSR-Flat .75 x 1.37 x .08
27	740063	1	Vac Motor 2ST24V 116157-00	56	210408	1	3/8 Brass Tee
28	710180	8	SCR-MC 1/4-20 x .75	57	342430	2	Hose Barb 3/8MPT x 3/8Barb
29	829067	1	Crimp Clamp	58	450076	1	Crimp Clamp
30	210075	1	Hose Rubber Flex 2 x 15"	59	450056	1	Solution Hose 21"
31	801013	1	Sleeve, Hose	60	711106	3	SCT-ST-A 10 x .75 PL
32	832136	1	Nylon Sleeve Sol. Feed	61	711124	1	SCR-ST 10 x .37
				62	210045	1	Solution Control Cable



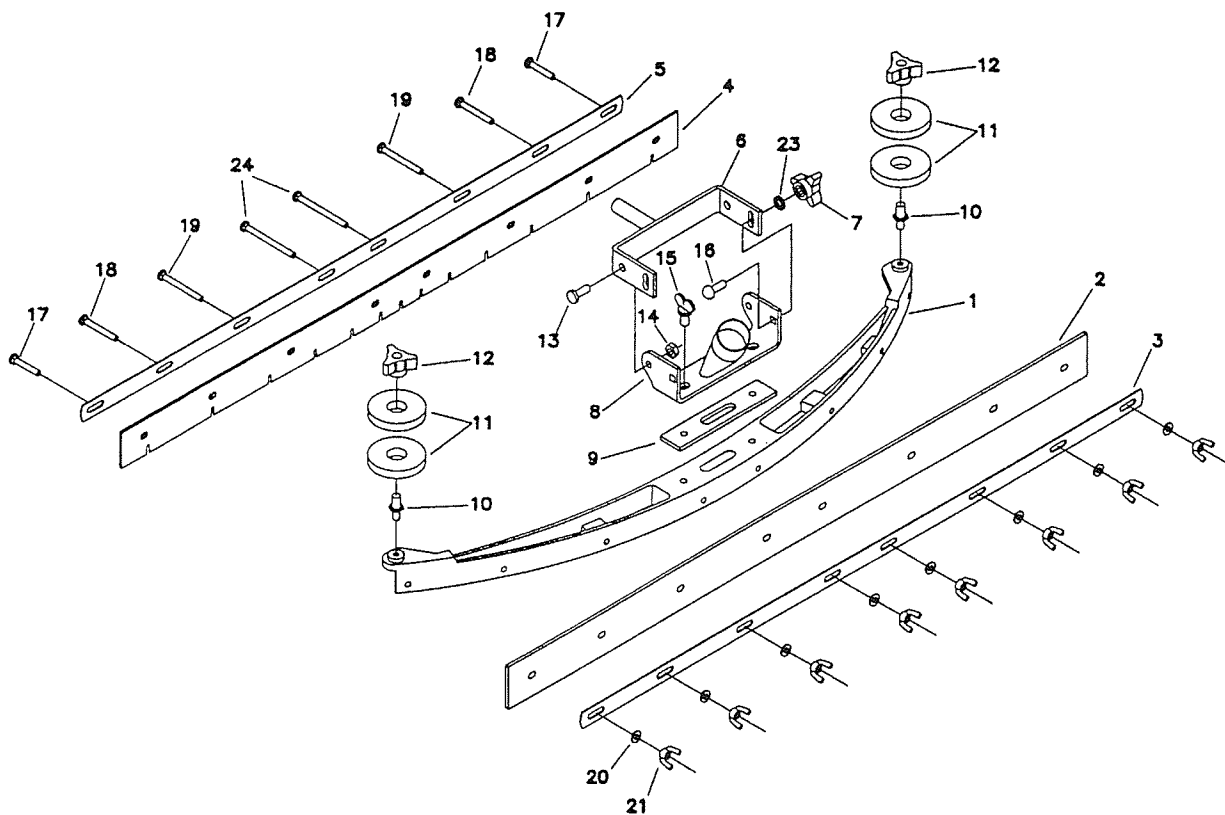
Parts List

Item	Part No.	Qty.	Description	Item	Part No.	Qty.	Description
1	100000	1	Mounting Brkt. Quick Disc	41	711515	1	WSR-Flat .44 x .87 x .07
2	210042	1	Motor Mount Weldment	42	210066	1	Drive Hub Retainer Bolt
3	210110	1	Motor Brkt. Weldment	43	711517	2	WSR-Flat .77 x 1.37 x .03
4	430013	1	Stabilizer Bracket	44	711523	2	WSR-Wave .37 x .68 x .02
5	210039	1	Lift Lever Weldment	45	711535	9	WSR-Helical .26 x .50 x .02
6	430019	1	Speed Control Weldment	46	711615	1	Rollpin .12 x .75
7	430022	1	Control Pivot Weldment	47	711803	3	Cotter Pin .06 x .75
8	210030	1	Speed Control Rod	48	712042	3	Bolt- WSR HH 5/16-18 x .62
9	430026	1	Speed Control Weldment	49	712576	2	SCR-MC 1/4-20 x 1.25 SS
10	210126	1	Mounting Plate Weldment	50	712666	4	Nut-Hex Jam 1/4-28 SS
11	430035	1	Drive Hub	51	740209	1	Gearmotor 24V
12	210035	1	Spring, Extension	52	740241	2	Contacto 24V 50AMP
13	430054	1	Pivot Cam	53	760592	2	Knob Oval Tapered
14	430055	1	Threaded Connecting Rod	54	210142	1	Pedal
15	430056	1	Compression Spring	55	828952	1	3/8 BARB x 1/4 MPT
16	711579	3	WSR-Flat .56 x 1.00	56	711546	2	WSR-Helical 3/8
17	711420	1	Nut-Hex Jam 5/16-18 STPL	57	833473	1	Hose Barb 1/4 FPT x 3/8 Barb
18	210016	1	Wheel Mount Strut Right	58	715136	1	Decal Diecut Speed Control
19	210011	1	Mtg. Plate Wheel Carriage	59	711505	6	WSR-Flat 1/4
20	712667	6	Nut-Hex 1/4-20 SS	60	210028	1	1/4-28 x 2.00 Threaded Rod
21	210455	1	Squeegee Mechanism Complete	61	210108	1	Motor Brkt. Weldment
22	430080	2	Balljoint (SP1002)	62	210033	2	Oilite-WSR
23	210015	1	Wheel Mount Strut Left	63	210031	1	Pivot Weldment
24	210047	1	Die Spring	64	210029	1	3/8-16 U.N.C. Threaded Rod
25	210073	1	Solution Dump Hose Nylon 41"	65	361254	2	Bearing
26	430106	1	Stabilizer Bar Lower	66	711443	1	Tinnerman Clip
27	711509	1	WSR-Flat 1/2	67	740129	1	Switch
28	430114	1	Nylon Cap 1/4 FPT HC4	68	710307	2	SCR-MC 6-32 x 1.00
29	430118	1	Clear Dump Hose C/L 24"	69	833638	2	Brass Stud 1/4-20 x 1.00
30	450076	1	Crimp Clamp SS 185R	70	740132	1	Isulator (Glastic)
31	710986	5	SCR-SC 3/8-16 x 1.00 STPL	71	711368	1	1/4-20 Nyloc Wing Nut
32	711202	9	BLT-HH 1/4-20 x .50 STPL	72	210076	1	Foot Guard
33	711564	2	BLT-HH 1/4-20 x 1.00	73	711551	2	Washer Flat
34	712566	2	BLT-HH 1/4-20 x 1.25	74	260211	1	Spring
35	712683	2	Nut-Nyloc 5/16-18 SS	75	210387	1	Pedal Stop
36	712761	2	WSR-Flat .28 x 1.25 x .059 SS	76	711373	2	Nut-Nyloc 1/4-20
37	711328	2	Nut-Hex 3/8-16	77	210124	2	Bearing Stud
38	711425	10	Nut-Flanged Wizz 1/4-20	78	833325	1	Elbow Pls. 1/4 MPT x 3/8 Barb
39	711439	2	Nut-Flanged Wizz 3/8-16	79	711555	1	WSR-Lock 3/8 Internal
40	711506	3	WSR-Flat 5/16 STPL	80	320268	1	Key 1/4 x 5/16 x 1



Parts List

Item	Part No	Qty	Description
1	210012	1	Battery Tray
2	210026SP	1	Dashboard, Screen Printed
2A	210026CE	1	Dashboard, CE
3	210406	1	Squeegee Lift Cable
4	210045	1	Solution Control Cable
5	430059	1	Squeegee Lift Brkt. Assembly
6	430060	1	Squeegee Lift Arm Assembly
7	210452	1	Squeegee Assembly Complete
8	881009	1	Yoke
9	711420	1	Nut-Hex Jam 5/16-18
10	210064	1	Battery Spacer
11	210048	1	Battery Liner
12	710197	1	SCR-MC 5/16-18 x .75 STPL
13	710195	5	SCR-MC 5/16-18 x .50 STPL
14	430120	1	U Channel
15	210072	1	Anderson Plg. Brkt.
16	210415	1	Clevis Pin .312 x 1.69
17	710178	1	SCR-MC 1/4-20 x .50 STPL
18	710180	2	SCR-MC 1/4-20 x .75 STPL
19	710383	2	SCR-MC 1/4-20 x 1.25
20	711124	2	SCR-ST-B 10 x .37 NI
21	711161	4	SCR HI/LO 10 x 3/4 PL
22	711554	2	WSR-Internal Lock 1/4 ID
23	711352	1	Nut-Acorn 1/4-20 ST N1
24	711425	2	Nut-Flanged Wizz 1/4-20
25	711503	2	WSR-Flat #10
26	711506	2	WSR-Flat 5/16 STPL
27	711523	1	WSR-Wave .37 x .68 x .02
28	830504	3	SCR-1/4-14 x .75 Pan
29	711808	1	Cotter Pin-Hair #13
30	829014	1	Flanged Bushing
31	712041	2	Blt-Sder 1/4-20 x .44 x .37
32	712320	2	WSR-Nylon .22 x .45 x .04
33	740801CE	2	Switch Rocker
34	712822	6	SCR-THMS 10-24 x .50 STPL
35	715059CE	1	Decal Lexan Dashboard, CE
36	740159	1	SB175 Plug Red
37	740131	1	Brkr, Circuit Drive Motor 70
38	740132	1	Insulator (Glastic)
39	740216	1	Gauge Battery Cond.
40	760286	1	Wire Formed Hook
41	760592	1	Knob Oval Tapered
42	762058	1	Spacer .319 x .375 x .250

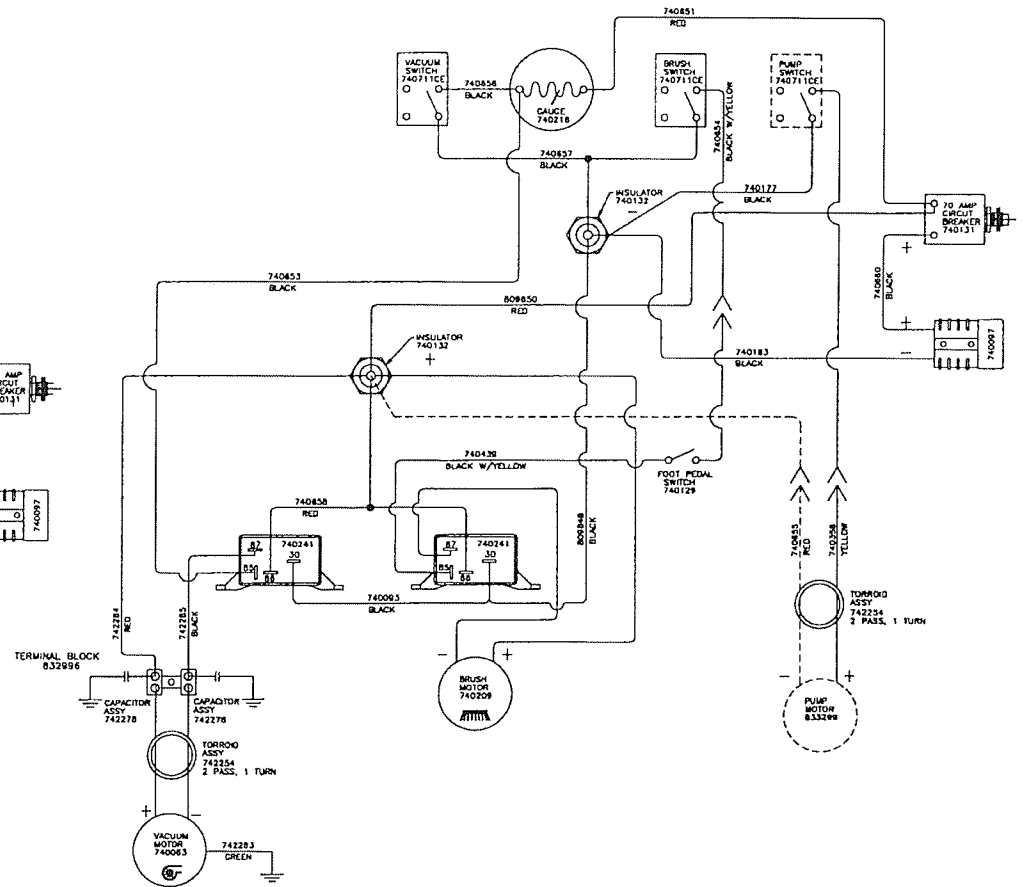
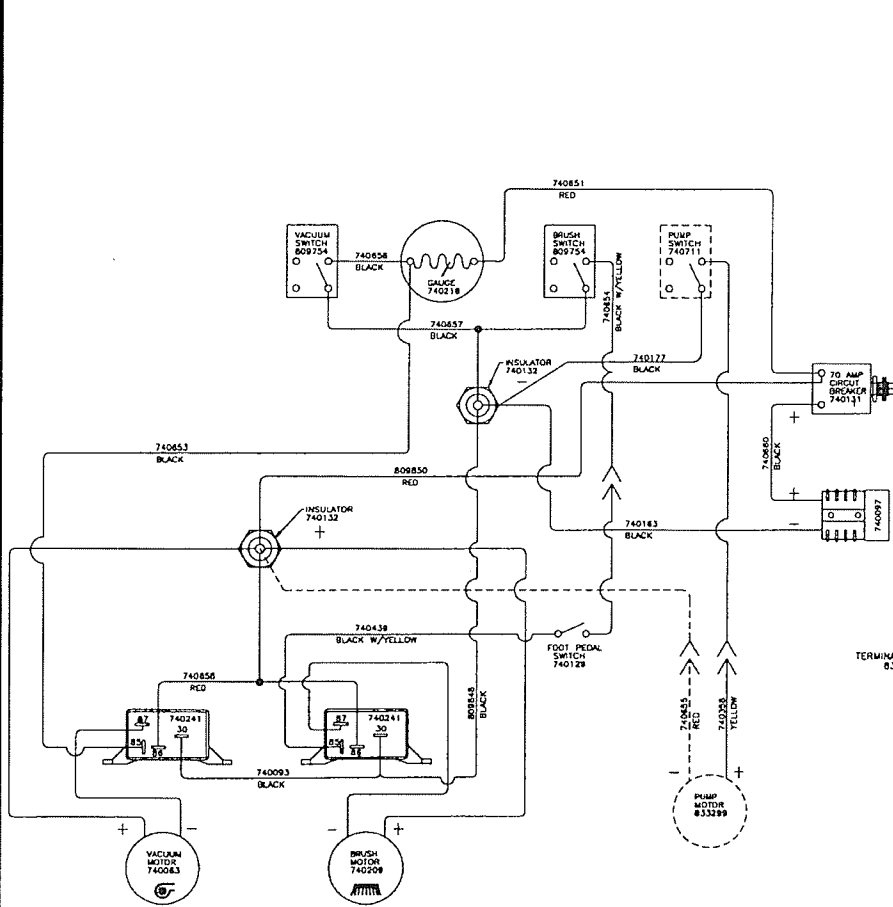


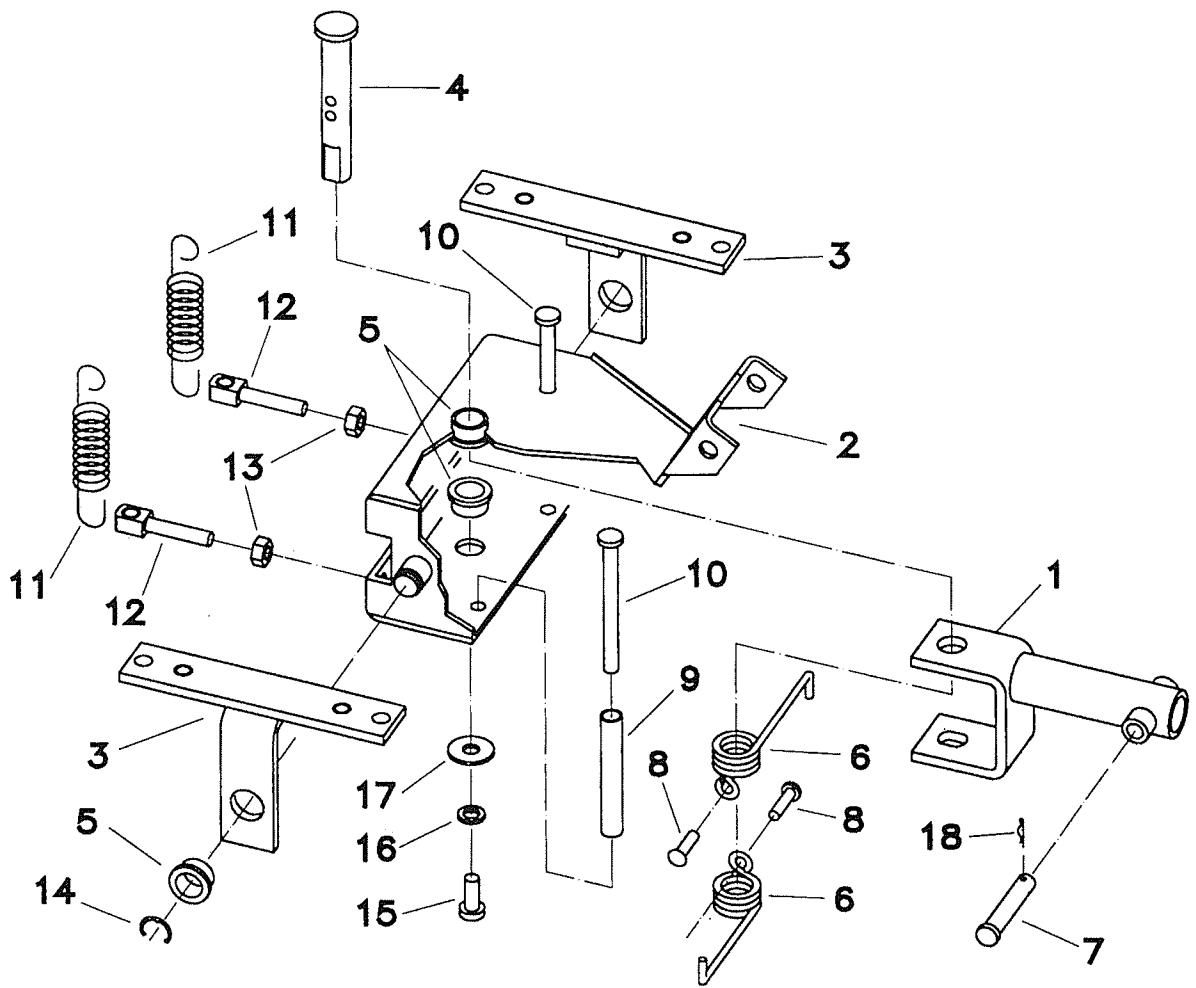
Parts List

Item	Part No.	Qty.	Description
1	210351MCH	1	Squeegee Casting
2	210352	1	Rear Squeegee Blade
3	210353	1	Rear Squeegee Strap
4	210354	1	Front Squeegee Blade
5	210355	1	Front Squeegee Strap
6	210381	1	Pitch Control Bracket
7	210118	2	Knob 3-Sided 5/16 Nyloc
8	210357	1	Tube Bracket
9	210390	1	Squeegee Gasket
10	430075	2	Threaded Insert
11	430085	4	Squeegee Bumper Wheel
12	430074	2	Adjusting Nut
13	710975	2	SCR-SC 5/16-18 x .87 BH
14	711374	2	Nut-Nyloc 5/16-18
15	260267	2	Wing Bolt 3/8-16 x .75
16	70-516-16	2	Bolt-Carr 5/16 x 1.00
17	712571	2	Bolt-SS Carr 1/4-20 x 1.50
18	712572	2	Bolt-SS Carr 1/4-20 x 2.00
19	712573	2	Bolt-SS Carr 1/4-20 x 2.50
20	711504	8	WSR-Flat .25 x .56 SS
21	712668	8	Wing Nut 1/4-20 SS
22	210102	1	Reinforcing Blade
23	711539	2	WSR-External Lock 3/8
24	712574	2	Bolt-SS Carr 1/4-20 x 3.00

WIRING DIAGRAM STANDARD MODEL

WIRING DIAGRAM CE MODEL





Parts List

Item	Part No.	Qty.	Description
1	210379	1	Yoke Weldment
2	210372	1	Spring Housing Weldment
3	210392	2	Pivot Bracket Weldment
4	210375	1	Swivel Pin
5	260041	4	½ Oilite Bushing
6	210391	2	Torsion Spring SS
7	210415	1	Clevis Pin
8	712811	2	SCR-MC 10-24 x .50
9	210400	2	Spacer Tube
10	710592	2	SCR-MC ¼-20 x 2.75
11	210413	2	Return Spring
12	260292	2	Swing Bolt
13	711316	2	Nut-Hex ¼-20
14	711713	2	½ Retaining Ring
15	710180	1	SCR-MC ¼-20 x .75
16	711535	1	WSR-Helical ¼
17	711519	1	WSR-Flat .25 x 1.00 x .06
18	711808	1	Cotter Pin

LIMITED WARRANTY

Minuteman International, Inc. warrants to the original purchaser/user that this product is free from defects in workmanship and materials under normal use and service for a period of three years from date of purchase. In addition, Minuteman International, Inc. will, at its option, honor labor warranty claims for the first 12 months from date of sale, provided such claims are submitted through and approved by factory authorized repair stations. Minuteman International, Inc. will, at its option, repair or replace without charge, except for transportation costs, parts that fail under normal use and service when operated and maintained in accordance with the applicable operation and instruction manuals.

This warranty does not apply to normal wear, or to items whose life is dependent on their use and care, such as belts, cords, switches, hoses, rubber parts, electrical motor components or adjustments. Parts not manufactured by Minuteman International, Inc. such as engines, batteries, battery chargers, hydraulic pumps, and tires are covered by and subject to the warranties and/or guarantees of their manufacturers. Please contact Minuteman International, Inc. for procedures in warranty claims against these manufacturers.

Special warning to purchaser — Use of replacement filters and/or prefilters not manufactured by Minuteman International, Inc. or its designated licensees, will void all warranties expressed or implied.

A potential health hazard exists without exact original equipment replacement.

All warranted items become the sole property of Minuteman International, Inc. or its original manufacturer, whichever the case may be.

Minuteman International, Inc. disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Minuteman International, Inc. assumes no responsibility for any special, incidental or consequential damages.

This limited warranty is applicable only in the U.S.A. and Canada, and is extended only to the original user/purchaser of this product. Customers outside the U.S.A. and Canada should contact their local distributor for export warranty policies. Minuteman International, Inc. is not responsible for costs or repairs performed by persons other than those specifically authorized by Minuteman International, Inc. This warranty does not apply to damage from transportation, alterations by unauthorized persons, misuse or abuse of the equipment, use of non-compatible chemicals, or damage to property, or loss of income due to malfunctions of the product.

If a difficulty develops with this machine, you should contact the dealer from whom it was purchased.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions and limitations may not apply to you.

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