



Electronic Service Manuals

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26/32B Automatic Scrubbers

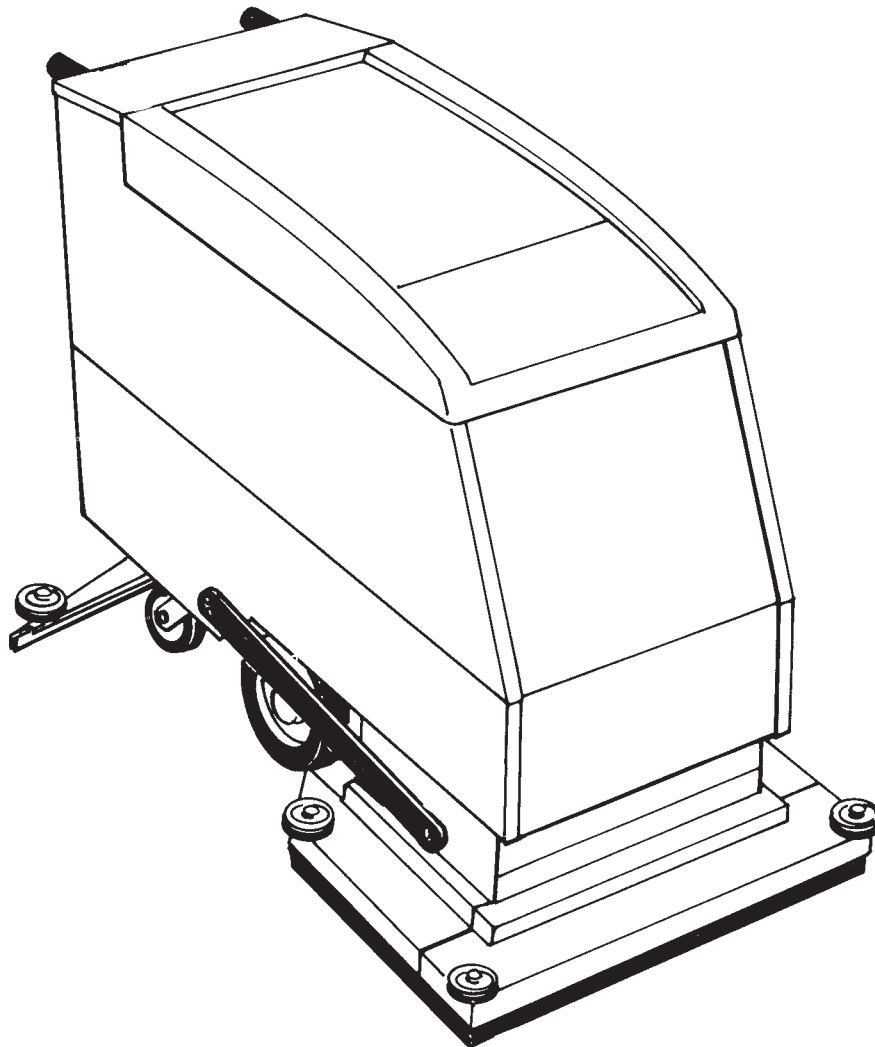
Model:
MC833472-26B-S
MC833471-26B-P
MC833473-26B-F
MC833475-32B-S
MC833480-32B-P
MC833930-32B-F

OPERATION

SERVICE

PARTS

CARE



Revised 11/93

Minuteman[®]

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ILLUSTRATION, SPARE PARTS, OPERATION AND SERVICE

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OPERATING AND SERVICE MANUAL

INSPECTION

Carefully unpack and inspect your scrubber for shipping damage. Each unit is tested and thoroughly inspected before shipment and any damage is the responsibility of the delivering carrier who should be notified immediately.

ELECTRICAL

This machine is battery operated and is designed to operate on 36 volts D.C. six 6-volt batteries.

SPECIAL SAFETY PRECAUTIONS

- 1) Keep hands and feet clear of moving parts while machine is in operation.
- 2) Electrical motors and components can cause an explosion when operated near explosive material or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dusts etc.
- 3) While machine is in operation special attention should be paid to avoiding loose floor tile, electrical cables, telephone connection boxes, door jams, etc.

BATTERIES

Scrubbers are shipped without batteries.

Part No. 956720	6V 220AH	20 Hour Rate	6	Required
Part No. 956740	6V 275AH	20 Hour Rate	6	Required

We do not recommend mixing AMP hour capacities. Any alternate battery sets can be used if they equal physical size and capacity.

BATTERY SERVICE AND INSTALLATION:

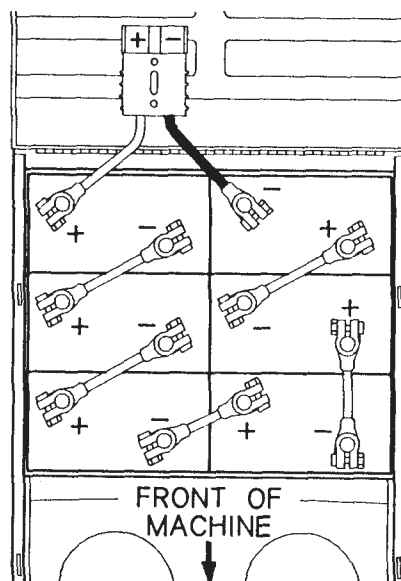
• **Warning:** Battery acid can cause burns. When working on or around batteries, wear protective clothing and safety glasses. Remove metal jewelry. Do not lay tools or metal objects on top of batteries.

CHARGING OF BATTERIES

Part No. 957727 (36V 23AMP 115V input) battery charger is recommended to charge batteries. Charge batteries in a well ventilated area; gases generate while charging batteries are explosive. Always charge batteries away from spark or flame. The Top Cover, Part No. 760316, should be raised during the charging cycle to provide venting and access to battery inspection caps.

Fluid levels should be checked before and after charging and be maintained at the proper level. If scrubber is not used for extended periods of time, batteries should be kept fully charged with a boost charge once a week. Batteries should be charged after each use or when battery condition indicator shows **LOW CHARGE**.

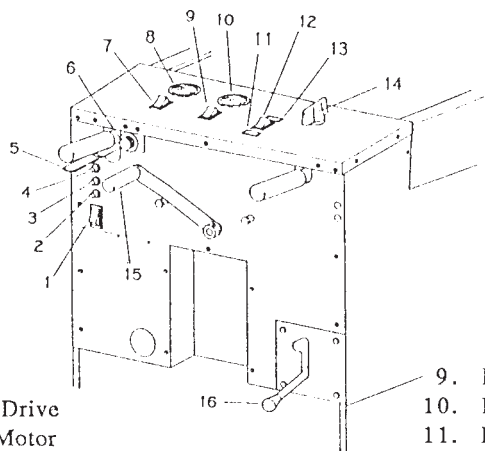
BATTERY CABLE ROUTING



OPERATING PROCEDURES

CAUTION: Familiarity with controlling this machine is essential before entering areas which contain equipment and/or people.

26/32 CONTROL PANEL



- | | |
|--|--|
| 1. SCR Control Main Power Switch | 9. Brush Pressure - Raise Lower Switch |
| 2. Circuit Breaker 20AMP Traction Drive | 10. Brush Pressure Gauge |
| 3. Circuit Breaker 20AMP Vacuum Motor | 11. Reverse Red Indicator |
| 4. Circuit Breaker 70AMP Brush Drive Motor | 12. Forward/Reverse Switch |
| 5. Deadman Switch Lever | 13. Forward Green Indicator |
| 6. Speed Control | 14. Solution Control |
| 7. Vacuum Power On Switch | 15. Squeegee Lift |
| 8. Battery Condition Gauge | 16. Parking Brake |

MOUNTING OF BRUSHES

Lift up lower front panel; release latches on sides of splashguards. Then remove front splashguard by removing the two wingnuts which retain it. Raise scrubhead assembly into up position. On the 38B model there is a hinged left splashguard to allow easier access to rear brush. You may now lift this up and reach under to slide out support arm. Brushes can now be installed.

MOUNTING OF SQUEEGEE

Rotate #15 (Squeegee lift) to the right and mount squeegee at rear of machine with tee nuts provided, tighten securely. Then connect vacuum hose to squeegee, and check other end of hose to insure it is attached to inlet vacuum tank. Hand tighten the tee nut securely (do not use wrench or pliers).

The estimated breaking-in periods of the squeegee are as follows:

Terrazzo floors	Light pressure	2 - 4 hours
Tile floors	Moderate pressure	1 - 2 hours
Cement floors	Heavy pressure	15 - 30 minutes

TRANSPORTATION OF MACHINE

Insure that the machine and its attachments clear loading ramps by removing the brushes, squeegee, and splashguards. The ramp should have a capacity of at least 2,000 lbs. The braking action of the drive motor can be used to slow down or stop the machine on the ramp by closing the deadman switch and leaving the forward/reverse in the corresponding position. When transporting, be sure that wheels are blocked and machine is securely tied down to prevent rolling and tipping. Do not operate handles in tie down locations.

SCRUBBING

- 1) To prevent splashing, adjust front splashguard to 1/8" above floor and side splashguards lightly touch floor.
- 2) Turn speed control knob counterclockwise to low speed position (6).
- 3) Turn on SCR control switch (1).
- 4) Lower scrub-head to floor with pressure lever (17).
- 5) Turn on vacuum switch (7).
- 6) Lower squeegee with squeegee lift (15).
- 7) Turn solution valve to 'ON' or desired intermediate setting (14).
- 8) Put machine into forward with forward/reverse switch (12).
- 9) Squeeze deadman switch and adjust speed range of machine by turning speed control knob with thumb of left hand.
- 10) When using reverse, be sure to raise squeegee assembly above floor level to prevent damage to squeegee blades.

Adjust scrubbing force desired with pressure lever (17). In making turns, it is recommended that the machine be slowed down and the solution valve be turned off 8 to 10 feet before the turn is begun. Restart solution flow as turn is being completed.

Drain vacuum tank each time solution tank is filled. This will allow uninterrupted use between fillings.

When the tank is full, a float will automatically shut off suction. A change in vacuum motor noise level indicates this. When this occurs, turn off solution valve, vacuum motor and scrub motor.

DRAINING OF VACUUM TANK

- 1) Unhook vacuum tank drain hose, remove hose plug, and drain.
- 2) Flush tank with clean water if area being scrubbed is very dirty. This can be done by removing vacuum motor float assembly.
- 3) Reinstall the hose plug and hook in place.

STRIPPING PROCEDURES

The procedure is the same as for scrubbing, but with the following exceptions:

- 1) Apply a low foam wax and finish stripper to the floor, and allow a reaction time of 5 to 10 minutes.
- 2) Use stripping attachments, such as the Poli-Grit Brush or Strato-Grit Brush.
- 3) Adjust machine speed and stripping force to obtain maximum stripping efficiency.

FORCE ON SQUEEGEE

Force on the squeegee can be adjusted by increasing (or decreasing) the spring tension on the squeegee mount plate. This is done by turning the knurled nuts. It is recommended that the force on the squeegee be kept at a minimum, consistent with good performance. The use of more force than is required causes undue rubber wear and uses battery power needlessly. The following are recommended squeegee pressures:

- Terrazzo floors - light pressure
- Tile floors - moderate pressure
- Cement floors - heavy pressure

MAINTENANCE OF MACHINE

SPEED CONTROL - IT IS IMPORTANT TO OBSERVE THE FOLLOWING PRECAUTIONS:

The speed control is a solid-state design and will serve for a very long period of time without any servicing. **IF NOT ABUSED.** To prolong unit life, follow these recommendations:

1. Do not subject machine to heavy current draws, which will occur if:
 - a. Motor circuit is left in "ON" position when machine's movement is blocked or held back.
 - b. Machine is used to pull load other than its own weight.
2. Take care not to short out motor circuit when performing maintenance.
3. Check battery connections to insure that they are not loose.
4. Take care to prevent reversed connections when servicing and/or replacing the batteries.

VACUUM MOTOR

Motor brushes can be replaced with Brush Set, Part No. 741008. Brushes should be replaced only once. More than once brush replacement will cause very high current consumption. This undue current consumption lower overall machine performance and is not in the best interest of economical machine use.

CARBON BRUSHES IN DRIVE MOTOR

Inspect these brushes once every 18 months or 720 hours.

The brushes can now be inspected by removing the air vent ring near the end of the drive motor. Examine all four brush lengths; if the back end of a brush is even with the edge of the brush holder or shorter, the brush must be replaced. Replace with Brush Set, Part No. 833855. When installing new brushes, also inspect commutator for pits and/or excessive wear. If it is in poor condition, replace drive motor with Part No. 833850.

Also check and adjust drive train when servicing drive motor brushes. Follow procedure outlined in Section *DRIVE CHAIN*.

CARBON BRUSHES IN BRUSH DRIVE MOTORS

Inspect these brushes once every six months or 360 hours.

Remove scrubhead assembly. Then remove the air vent ring on each motor and examine brush lengths; if the back end of brush is even with the edge of the brush holder or shorter, the brush must be replaced. Replace with Part No. 833474. When installing new brushes, also inspect commutator for pits and/or excessive wear. Replace motor with Part No. 833379 if commutator is in poor condition.

LUBRICATION

1. Grease casters once every week (two fittings per caster) or 15 hours.
2. Lightly grease drive chain once every two weeks or every 30 hours.
3. Oil all moving parts such as hinges and pressure points once every month or every 60 hours.

SQUEEGEE RUBBERS

When the thick rear squeegee rubber is damaged or worn excessively, it will cause streaking and poor solution pickup. Extended rubber life can be obtained by reversing it, provided it is not torn or otherwise damaged. Do not tighten screws so tightly that squeegee rubbers are made to bulge and show an uneven edge.

DRIVE CHAIN

The Drive Chain is durable and will give trouble free service under conditions of normal machine use. Should it become necessary to adjust tension it will be necessary to tip the machine on its front. This can be done by removing the batteries, battery pan, squeegee, scrubhead assembly and tanks. If chain is worn or damaged it should be replaced. Check slack in chain and adjust to a deflection of 1/8" - 3/16". Lightly coat chain with grease, also check sprocket and differential for alignment. Adjust if out of alignment.

TANKS

At the end of a day's work (or work cycle), both the vacuum and solution tanks should be drained and flushed with warm water.

Once a week or 15 hours the vacuum tank should be cleaned of settled debris. This can be done by removing the drain cover and scraping out the debris with the small hoe provided for this purpose. Rinse with water.

BATTERIES (956720, 956740)

Periodically remove batteries from machine. Clean batteries, battery tray, and battery compartment with a solution of baking soda and water. Check all battery cable and wiring for signs of damage or wear. Replace as needed. Check battery fluid level each charge. Check electrolyte with hydrometer every 15 hours.

TROUBLE SHOOTING

1. Inefficient scrubbing - floors are smeared in appearance.

Solution: Use proper type and correct amount of detergent. Replace worn or damaged scrub attachments. Increase force on scrubbing head.

2. Squeegee streaks.

Solution: Check rear squeegee rubber for imbedded objects, clean; reverse, or replace if worn or damaged. Make sure scrub solution is being fed onto brush properly. Use more scrubbing solution. Replace well-worn scrubber attachments.

3. Odor development.

Solution: Inspect and clean thoroughly the vacuum tank, solution tank, squeegee, vacuum motor, vacuum hose. NOTE: Super Staph-Trole 64 disinfectant cleaner can be helpful in reducing odors.

4. Drive components.

Loud clunking or chattering noise. First check chain tension. If it is too tight, it will cause these sounds. Chain is properly tensioned if the slack side can be moved freely the thickness of the chain up or down. The noise could be caused by worn motor bearings. To check for this remove chain from sprockets and run motor. If noise persists the bearings are bad. Replace motor as needed.

Machine pulls to one side while running. This could be caused by worn wheel bearings on the side of the machine that it pulls to - if the machine pulls to the right check the right side wheel bearings. The problem could also be a bad caster on the side the machine pulls to.

5. Vacuum not picking up.

Solution: Water lift should be 40-60" with fully charged batteries. Check seals around vacuum motor and hose connections. Check vacuum tank drain hose and plug to insure seal. Check hoses for holes. Clean out squeegee inlet and check squeegee rubbers for severe wear. Make sure solution is properly feeding into scrubhead attachments. Clean and/or repair vacuum motor.

6. Charger malfunction.

Solution: Consult maintenance and repair data contained in brochure herewith for detailed information. In general, make sure charger is put in upright position when charging - this helps keep unit cool. Do not cover charger when it is in use. Make sure connectors on inlet and outlet cords are not broken. Check AC input voltage - it should be 110 volts, 120 volts, maximum. Replace faulty fuses, ammeter, timer, or other components, when necessary.

7. Use cycle too short.

Solution: Check voltage on batteries after full charging; output voltage should be 43-45 volts with specific gravity at 1.260-1.265. Check battery electrolyte level. Check for loose or corroded battery leads and connections. Replace batteries that will not hold a charge. Lubricate casters. Reduce scrubbing pressure. Check brushes on motors, especially on vacuum motor. Replace brushes on motors when needed. Test charger for output, it may need repair.

8. Motors will not start or run.

Solution: Check battery leads and connection for corrosion and looseness; correct if required. Check switches for proper contacting; replace if required. Check motor brushes; replace brushes or motors if required.

9. Speed control does not function.

Solution: The speed control has built-in protection to guard against reversed connections, check battery connections. Machine locked in high or low speed. Inspect entire speed control for burn marks of components that have broken. These would be caused by a direct short in the circuit. Replace entire control as needed

SPEED CONTROL UNIT - TROUBLE SHOOTING

SYMPTOM - 1) Machine is always in "high" speed. Control knob has no effect.

PROCEDURE

- A. 1) Check for a good connection of the three wires from the potentiometer to terminals Hi, M, and LO on the connecting block.
- 2) Check for the knob being tight on the potentiometer shaft.
- 3) Rotate the control knob from full Counter Clock-Wise (CCW) to full Clock Wise (CW) a number of times. This has a self-cleaning action on the control.

Turn the potentiometer to "slow" (full CCW). Again attempt to operate the machine in "forward". If the machine is still on "high" speed, replacement of the potentiometer will repair the unit.

- B. Remove the speed control unit from the machine. Visually check all wire connections between the terminal block, finned heat sink and printed circuit board. Short circuits, loose wires or mechanical damage should be repaired, if possible. Examine the printed circuit board. It should be free from heavy accumulations of dirt, grease, etc.

Reinstall the speed control unit and check its operation. If the unit still does not function properly, the entire unit must be replaced.

SYMPTOM - 2) Machine won't move. Control knob has no effect.

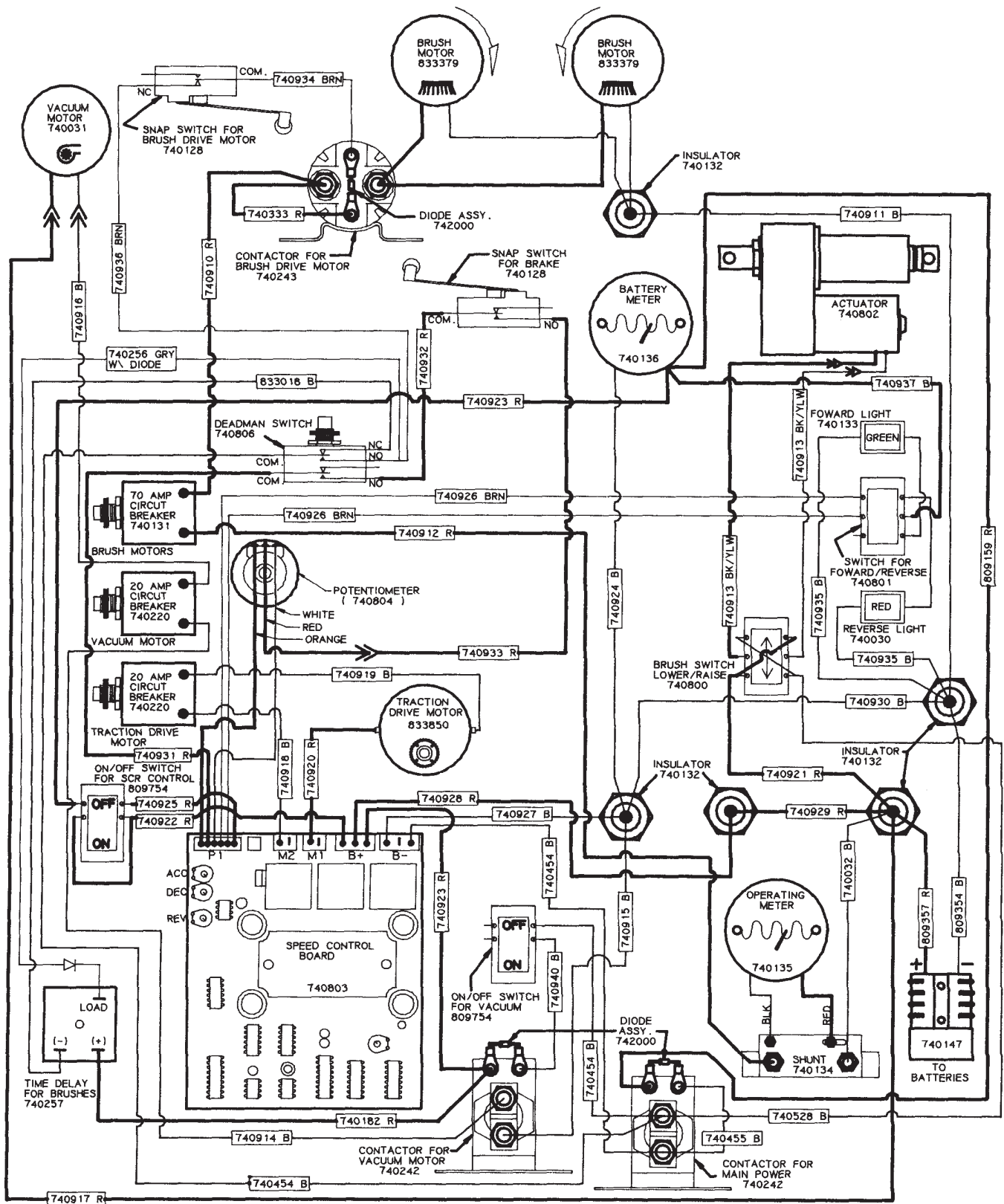
PROCEDURE

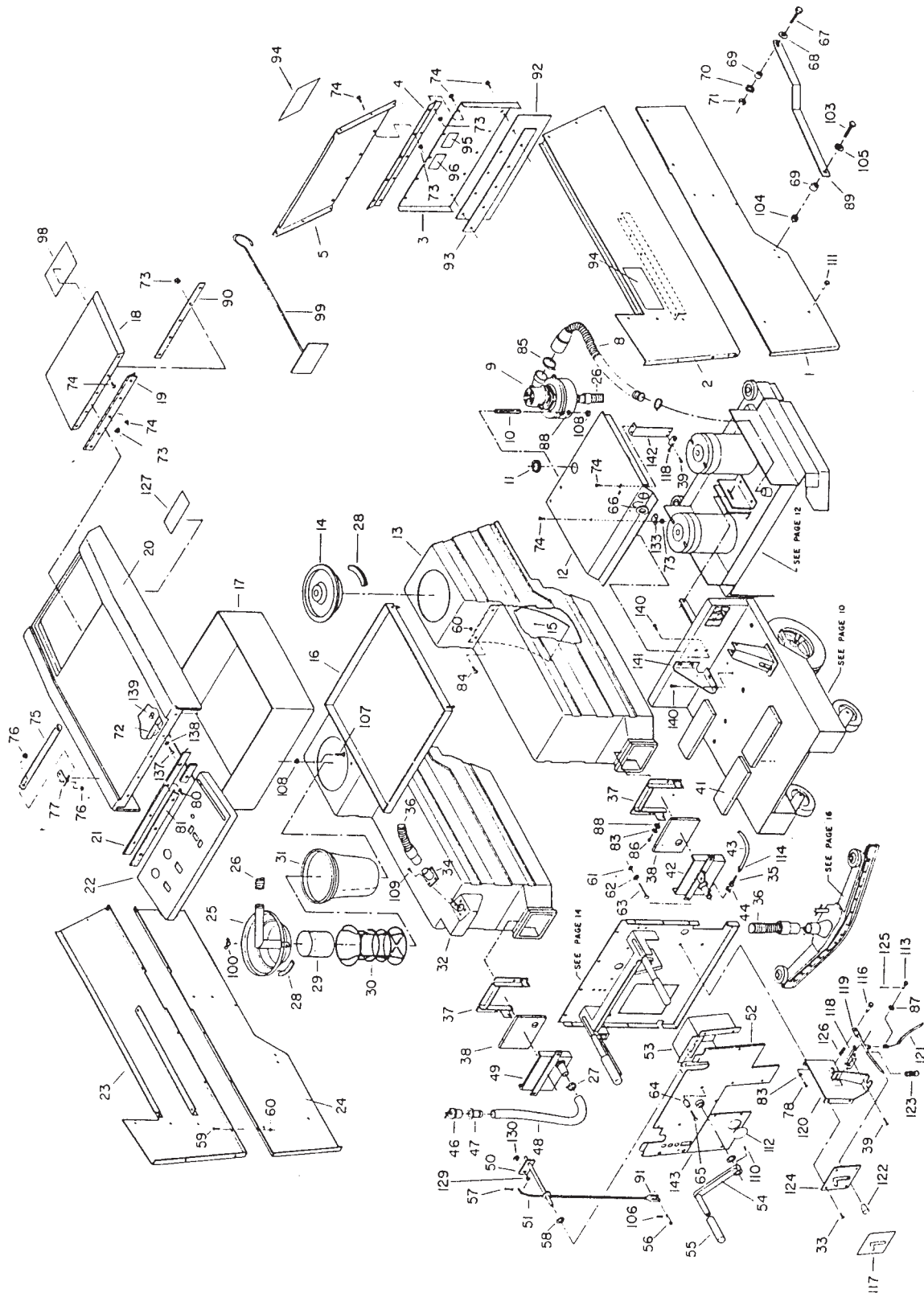
- A) Locate the battery (+) and (-) terminal connections on the speed control unit. With a voltmeter set to read 36 volts DC, check to be sure that the 36 volt battery voltage is present from terminal (+) to terminal (-) on the connecting block when the deadman switch is closed, with the forward/reverse switch set to forward, and the speed control knob set to "high" (CW). If no voltage is present, the malfunction is not in the speed control unit. If 36 volts is present from battery (+) to (-) check for the presence of 36 volts from the motor (+) to (-) terminals. If voltage (36V) is present, then the speed control unit is functioning and the failure must be elsewhere.

SYMPTOM - 3) Speed is erratic.

PROCEDURE

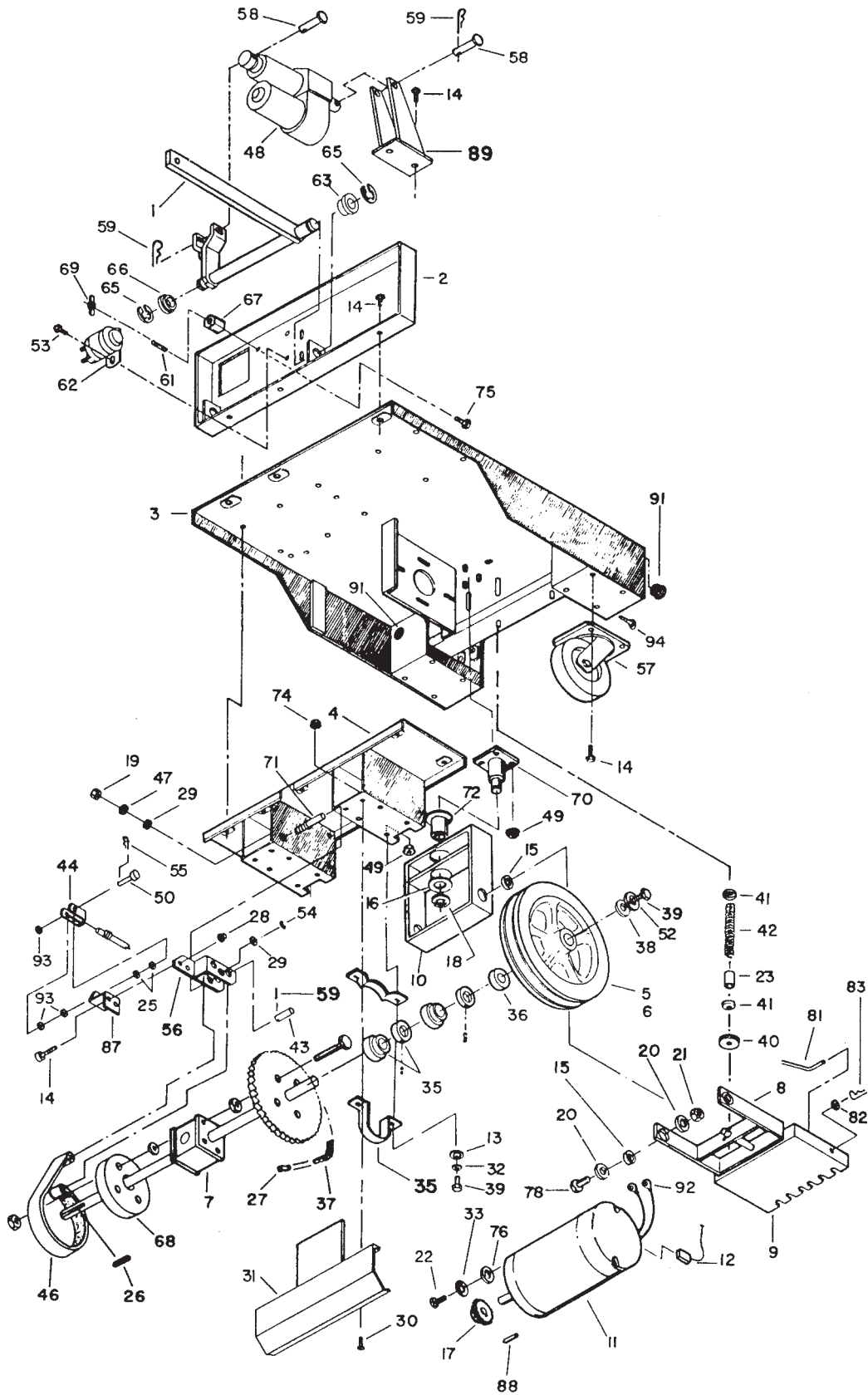
- A) Check potentiometer leads for good connection at both the potentiometer and at the speed control terminal block. Replace potentiometer if erratic control persists.





Basic Assembly

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	760361	1	Lower Side Panel Right	48	760353	2	Hose Drain	93	760461	2	Front Flap Backing Plate
2	760457	1	Upper Side Panel Right	49	750057	1	Clean-out Door Weldment	94	715095	3	Decal Lg. HM7.5 x 4.2 BLK
3	760329	1	Front Cover Door	50	828274	1	Shaft Weld	95	833694	1	Decal, Brush
4	809171	1	Hinge Cover	51	828282	1	Rod Lift	96	809702	1	Decal, Gearhead
5	760460	1	Nose Cover	52	832958	1	Rear Panel Assembly	98	827656	1	Decal
8	833668	1	Hose Assembly	53	750058	1	Hose Box Assembly	99	809293	1	Handle Weldment
9	740031	1	Vac Motor 36V w/1.5 Intake	54	829242	1	Handle Weld	100	711368	2	Nut Wing 1/4 - 20 Nyloc PL
10	760340	3	Spacer, Vac Motor	55	762086	1	Grip Handle	103	711247	2	BLT-HH 3/8 - 16 x 2.00 ST PL
11	760341	1	Busing Hose	56	881002	1	Pin Control Rod	104	711439	2	Nut - Flanged Wizz 3/8 - 16
12	760459	1	Splash Plate	57	711808	1	Cotter Pin - Hair #13	105	711508	2	WSR - Flat .44 x 1.00 x .06
13	833781	1	Solution Tank Assembly	58	711524	2	WSR - WAVE .52 x .87 x .01	106	809799	2	Clip Hitch Pin
14	833476	1	Cover	60	712638	13	Nut Hex 10 - 24 SS Nyloc	107	710586	2	SCR-MC 1/4 - 20 x 1.25 ST PL
15	809196	2	Tank Baffle	61	711420	4	Nut Hex Jam 5/16 - 18 STPL	108	711425	8	Nut - Flanged Wizz 1/4 - 20
16	809190	1	Tray Battery Weld	62	711575	4	WSR - Flat .31 x .75 x .06 ST	109	711114	4	SCR-ST-A 8 x .50 PL
17	830901	1	Battery Liner	63	712071	4	SCR - Thumb 5/16 - 18 x 2.50	110	711658	1	Rollpin .25 x 1.0 PLT
18	760315	1	Cover Access Panel	64	828263	2	Handle Stop	111	710195	10	SCR-MC 5/16 - 18 x .50 ST PL
19	760349	1	Hinge Cover Front	65	711231	2	BLT - HH 5/16 - 18 x 1.25	112	833823	1	Dome Plug 2" White
20	760316	1	Cover Assembly Compete	66	806821	2	Grommet	113	711668	1	Clevis Pin 3/8 x 1" 11 - 141
21	760350	1	Hinge Cover Rear	67	712074	2	WSR - Flat .56 x 1.375 x .10	114	829129	1	Hose Clamp Micro Seal
22	760432	1	Dashboard	68	712303	4	Spacer Plated	116	712081	1	BLT SDR 5/16 18 x .75 x 375
23	760455	1	Upper Side Panel Left	69	830549PLT	1	WSR - Helical 1/2	117	715087	1	Decal Brake
24	760360	1	Lower Side Panel Left	70	711547	2	Nut - Hex 1/2-13 NIPL	118	740128	2	Switch, Snap SPST NC
25	750059	1	Vac Motor Mount Assembly	71	711437	2	Lid Brace	119	750098	1	Brake Handle Weldment
26	760351	1	Hose Vac	72	760466	1	Support Bar	120	750099	1	Brake Bracket Weldment
27	806157	2	Clamp Hose	73	712908	36	Nut Flanged Wizz 10 - 24	121	760236	1	Cable Assembly Brake
28	833633	1	Gasket	74	712822	36	SCR - THMS 10 - 24 x .50 STPL	122	760592	1	Knob Oval Tapered
29	830987	1	Float Assembly	75	760309	1	Nut Nyloc 10 - 32	123	760594	1	Extension Spring
30	832279	1	Filter Frame	76	711350	3	Hinge Bracket	124	760595	1	Face Plate Brake Lever
31	830978	1	Recovery Tank Assembly	77	760311	1	SCR-MC 1/4 - 20 x .50 STPL	125	809311	1	Cotter Pin 7/64 Dia. x 1
32	833782	1	Intake Weldment	78	710755	2	Gasket Hinge Diecut	126	833102	1	Spring .62 x .75 x 1.75
33	710177	4	Hose 35 Plastic	80	710779	5	WSR - MC 5/16 - 18 x .50 Nyloc	127	715500	1	Decal, Automatic Battery
34	809283	1	Clean-out Door Mfg. Bkt.	81	762139	1	WSR - Helical 1/4	129	829052	1	Flange Bushing Nylon .312 ID
36	809469	1	Gasket Cover	83	711544	2	SCR-MC 10 - 24 x .62 SS	130	711506	1	WSR - Flat 5/16 ST PL
37	829644	2	SCR-MC 6 - 32 x 1.00 ST PL	84	712536	4	Grimp Clamp 560R	133	833866	1	Cable Clamp .50 Dia.
38	809282	2	Gasket Support	86	829067	1	BLT - HH 1/4 - 20 x .87	137	711143	5	SCR-ST-F 10 - 24 x .62 PL
39	710307	7	Clean-out Door Solution Tank	86	711206	4	WSR - Flat 44 x 87 x .07	138	712302	5	WSR - Flat .19 x .50 x .06
41	809412	4	Valve Solution	87	711515	2	Guide Arm 26/32	139	711423	5	Weld Nut Zinc Plt. 10/24
42	809429	1	Drain Plug 1 1/4	88	711504	4	Hinge Backer Plate	140	711203	4	BLT-HH 1/4 - 20 x .62
43	827005	5	Tube Hose	89	760363	1	Yoke	141	760549	1	Center Support Strut
44	809413	1		90	760308	2	Front Door Flap	142	760467	1	Switch Support
46	833316	2		91	881009	1		143	827730	1	Circuit Box Cover
47	760343	2		92	760440	1					



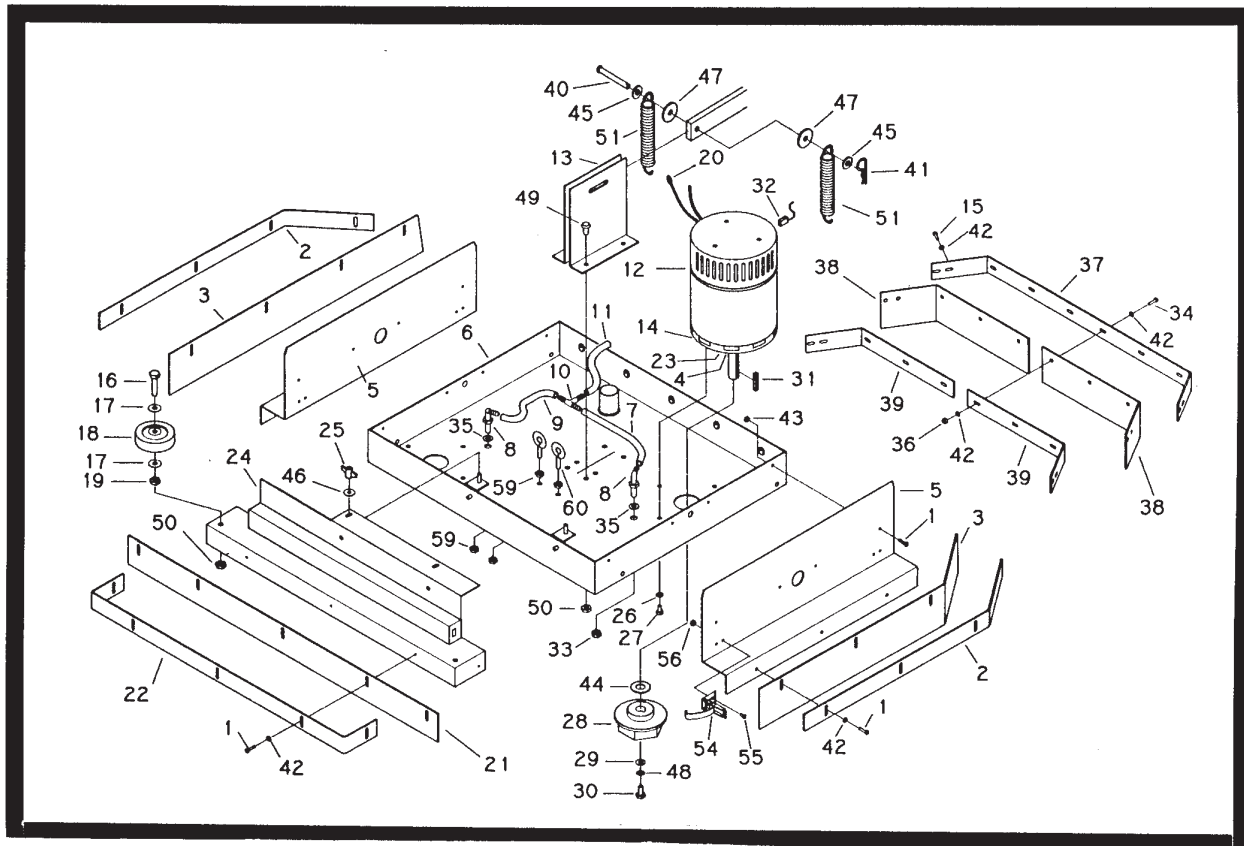
Parts List

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	760410	1	Lever Weldment Plated	42	828301	2	Squeegee Spring
2	760411	1	Lower Panel Weldment	43	760568	2	Clevis Pin Zinc Plt.
3	832485	1	Mainframe Weldment	44	760236	1	Cable Assembly Brake
4	828170	1	Mount Wheel Bracket	46	760210	1	Brake Band
5	809983	2	Wheel 10" Solid	47	711557	1	WSR - Internal Lock 5/8 ID
6	828169	2	Wheel 10" Pneumatic	48	740802	1	Actuator D36-20A5-02
6A	833910	2	Wheel Foam Filled Pneumatic	49	711439	2	Nut - Flanged Wizz 3/8 - 16
7	830544	1	Differential	50	711668	1	Clevis Pin 3/8 x 1" 11 - 141
8	750115	1	Carriage Weldment	52	711538	2	WSR - Helical .38 x .69 x .09
9	828289	1	Squeegee Mount Plate	53	710378	2	SCR-MC 1/4 - 20 x .50 ST PL
10	750110	1	Squeegee Bkt. Weldment	54	808756	1	E Ring .62 5133-62
11	833850	1	Traction Drive Motor	56	750109	1	Bkt. Weldment
12	833855	1	Carbon Brush Set of 4	57	827110	2	Caster 5 Inch
13	711575	18	WSR - Flat .31 x .75 x .06 ST	58	711669	2	Clevis Pin 11-231 .5 x 2.2
14	711228	26	BLT-HH 5/16-18 x .75 ST PL	59	711670	4	Hairpin Cotter 21-06 1/2
15	829023	4	Bushing	61	833638	1	Brass Stud
16	711512	1	WSR - Flat.75 x 1.37 x .08	62	740243	1	Contacto 36 V 124-117111
17	760601	1	Sprocket 40B11F 3/4	63	809236	1	Oillite Flanged Bushing
18	809148	1	Ring E	65	809237	2	Ring Retaining
19	711445	1	Nut - Hex 5/8 x 11 Plated	66	809238	1	Oillite Flanged Bush Shor.
20	712303	4	WSR - Flat .56 x 1.375 x .10	67	740132	1	Insulator (Glastic)
21	711376	2	Nut, Nloc 1/2 - 13	68	760591MCH	1	Brake Hub Machined
22	711202	1	BLT-HH 1/4 - 20 x .50 STPL	69	711368	1	Nut - Wing 1/4 - 20 Nyloc PL
23	830898	2	Tube, Spring	70	750113	1	Pivot Assembly
25	711515	5	WSR - Flat .44 x .87 x .07	71	760593	1	Pin Brake
26	809227	2	Key .25 x .25 x 2.25	72	760224	1	Oillite Bush .75 x 1 x 1.5
27	833629	1	Master Chain Link	74	712908	4	Nut - Flanged Wizz 10-24
28	711425	2	Nut Flanged Wizz 1/4 - 20	75	711206	6	BLT-HH 1/4 - 20 x .87 STPL
29	711527	2	WSR - Flat .63 x 1.12 x .11	76	711519	4	WSR - Flat .25 x 1.01 x .06
30	712811	14	SCR-MC 10-24 x .50 STPL	78	712075	2	BLT-HH 1/2 - 13 x 1.5
31	760569	1	Splash Guard	81	828283	1	Rod Connector
32	711545	32	WSR - Helical 5/16	82	711504	2	WSR - Flat 1/4 ID SS
33	711544	4	WSR - Helical 1/4	83	805073	3	Pin Cotter
35	828173	4	Bearing w/Flange Mounts	87	760597	1	Bracket Brake
36	809224	2	Spacer Wheel	88	833621	1	Key 1/4 x 1/4 x 1
37	760602	1	#40 Drive Chain 33" CTDC	89	750693	1	Actuator Mt. Weldment
38	809226	2	Washer	91	809803	2	Bushing Snap
39	711250	10	BLT-HH 3/8 - 16 x 1.25 STPL	92	809434	2	Term, Ring 1/4 #8 Cable
40	828273	2	Nut	93	712317	3	WSR - Flat .41 x .81 x .06 PL
41	828264	4	Washer Cup	94	712086	2	BLT Eye 5/16 x 1.125

Pneumatic Wheel Replacement Parts

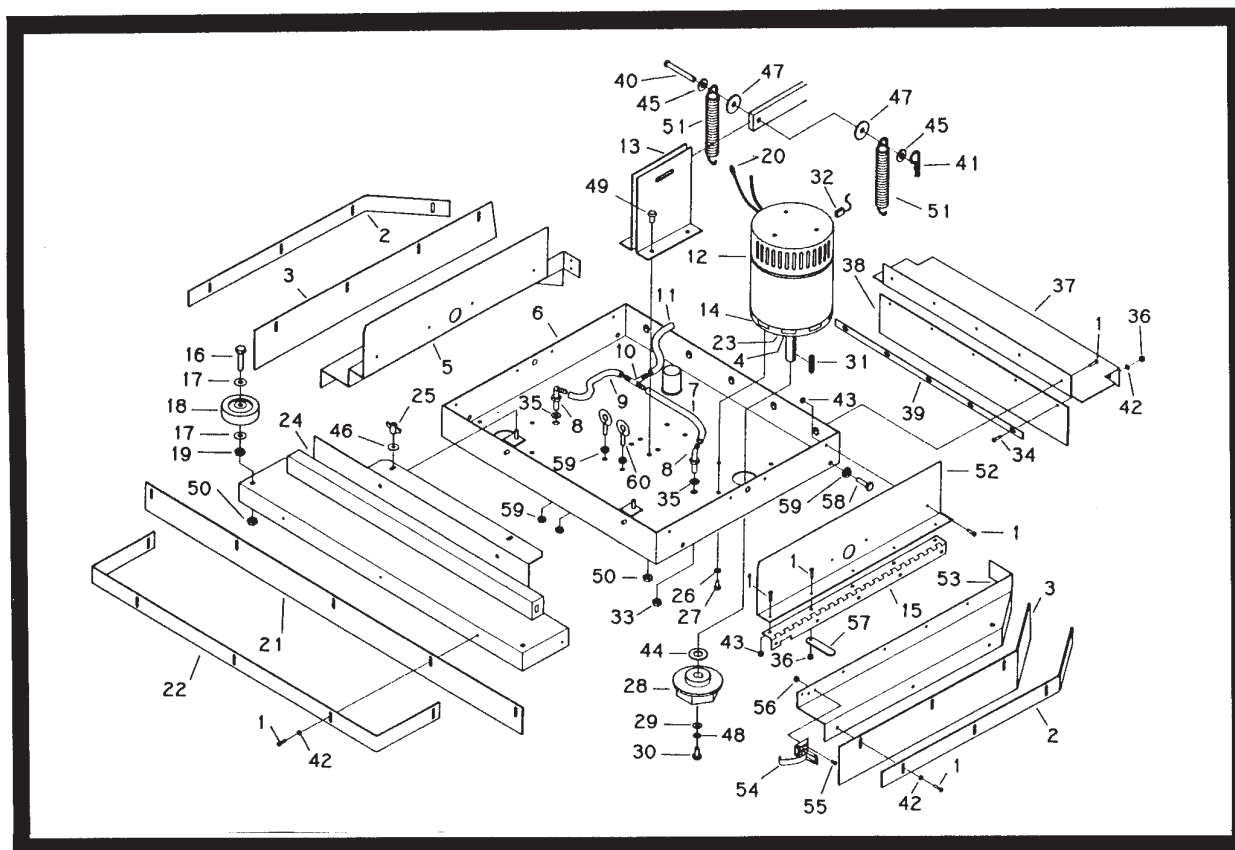
xx	833861	Hub Only
xx	828188	Inner Tube
xx	828187	Replacement Tire
xx	833910	Foam Filled Tire

26B Scrubhead Assembly

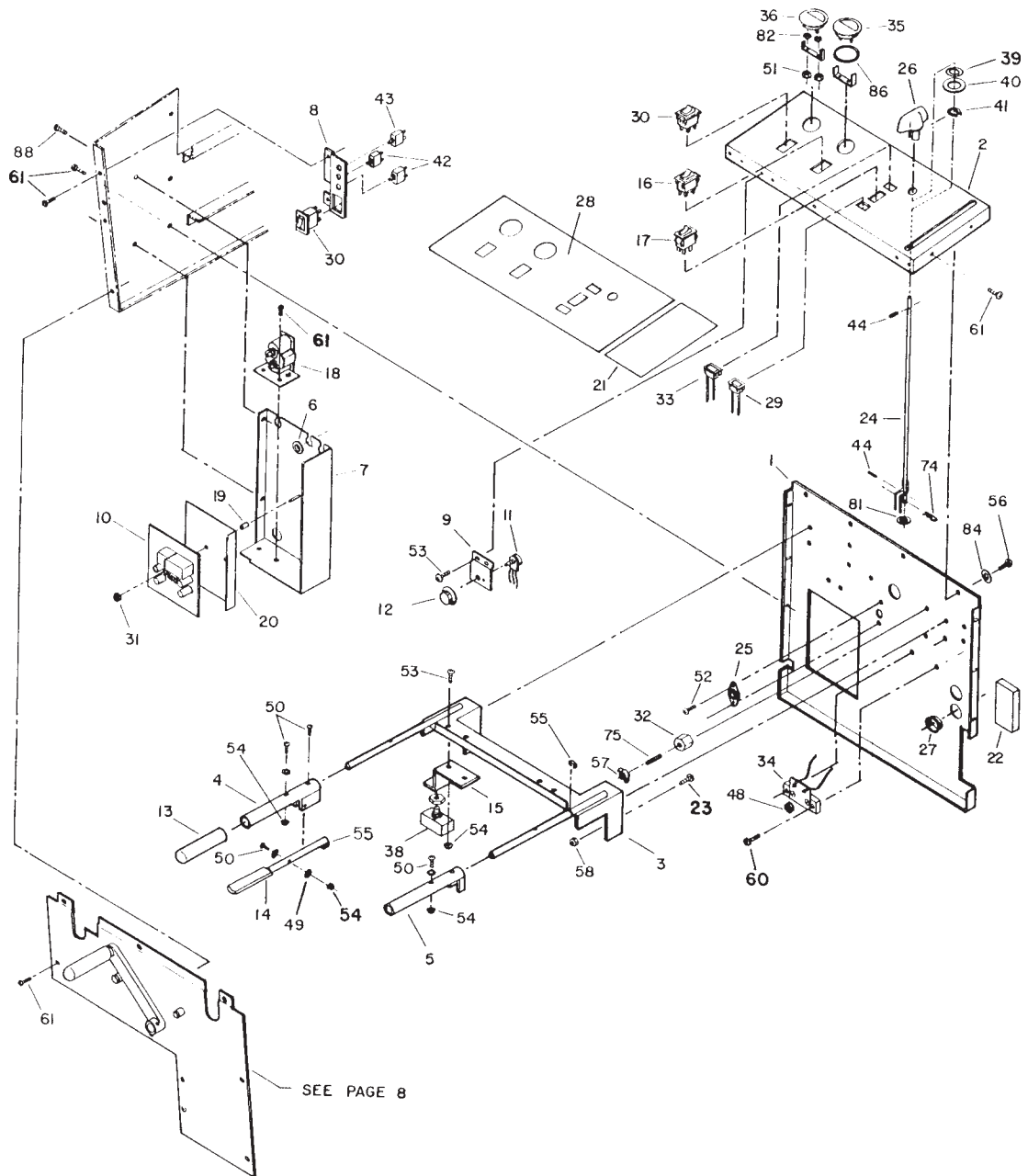


ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	712822	25	SCR-THMS 10-24 x .50	31	833621	2	Key 1/4 x 1/4 x 1
2	830578	2	Skirt Band - 26B	32	833474	1	Replacement Carbon Brush (set of 4)
3	833579	2	Side Skirt 26B	32A	833918	1	Replacement Brush Board Assembly
4	831819	1	Replacement Oil Seal	33	833628	2	Brass Hex Nut
5	260101	2	Side Splash Guard - 26B	34	712824	5	SCR-THMS 10-24 x .75
6	833108	1	Motor Mounting Plate	36	712638	6	Nut Hex 10/24 SS Nyloc
7	833623	1	Solution Hose Assembly	37	760115	1	Skirt Mounting Bracket
8	833325	2	Elbow PLS 1/4 MPT x 3/8 BARB	38	760117	2	Splash Skirt 26B
9	833624	1	Solution Hose Assembly	39	760116	2	Skirt Retainer 26B
10	833626	1	Hose Barb T	39	760441	1	Retainer Strip
11	827004	1	Solution Hose 50 1/2"	40	712103	1	Clevis Pin 3/8 x 3
12	833379	2	Brush Drive Motor 36V	41	711670	1	Hairpin Cotter 21-06 1/2
13	833112	2	Lifting Bkt. Scrubhead	42	711503	24	WSR - Flat #10
14	833959	1	Replacement Lower End Bell for 833379	43	712908	10	Nut - Flanged Wizz 10-24
15	712532	4	SCR-MC 10-24 x 1.00 SS	44	711517	2	WSR - Flat .77 x 1.37 x .03
16	711276	2	BLT-HH 3/8 - 16 x 1.75	45	711508	2	WSR-Flat .44 x 1.00 x .06
17	711515	4	WSR-Flat .44 x .87 x .07	46	711575	4	WSR-Flat .31 x .75 x .06
18	808829	2	Wheel	47	809226	2	Washer
19	711391	2	Nut-Hex Jam 3/8-16	48	711545	2	WSR - Helical 5/16
20	809434	2	Term. Ring 1/4 #8	49	711241	4	BLT-HH 3/8 - 16 x .75
21	260103	1	Front Skirt 26B	50	711439	8	Nut - Flanged 3/8 - 16
22	260104	1	Front Skirt Band 26B	51	809993	2	Spring Tension
23	832947	1	Replacement Bearing 6205 Sealed	54	833868	2	Latch
24	260100	1	Front Splash Guard 26B	55	710328	4	SCR-MC 8-32 x .37
25	711368	2	Nut-Wing 1/4-20 Nyloc	56	711372	4	Nut - Nloc 8 - 32
26	711544	8	WSR - Helical 1/4	58	711231	2	BLT-HH 5/16 - 18 x 1.25
27	711203	8	BLT-HH 1/4 - 20 x .62	59	711379	6	Nut - Flanged 5/16 - 18
28	430035	2	Drive Hub	60	712086	2	BLT-Eye 5/16 x 1.125
29	711516	2	WSR - Flat .31 x 1.25 x .05	61	711594	2	WSR-Flat .56 x .88 x .03
30	711228	2	BLT-HH 5/16 - 18 x .75				

32B Scrubhead Assembly



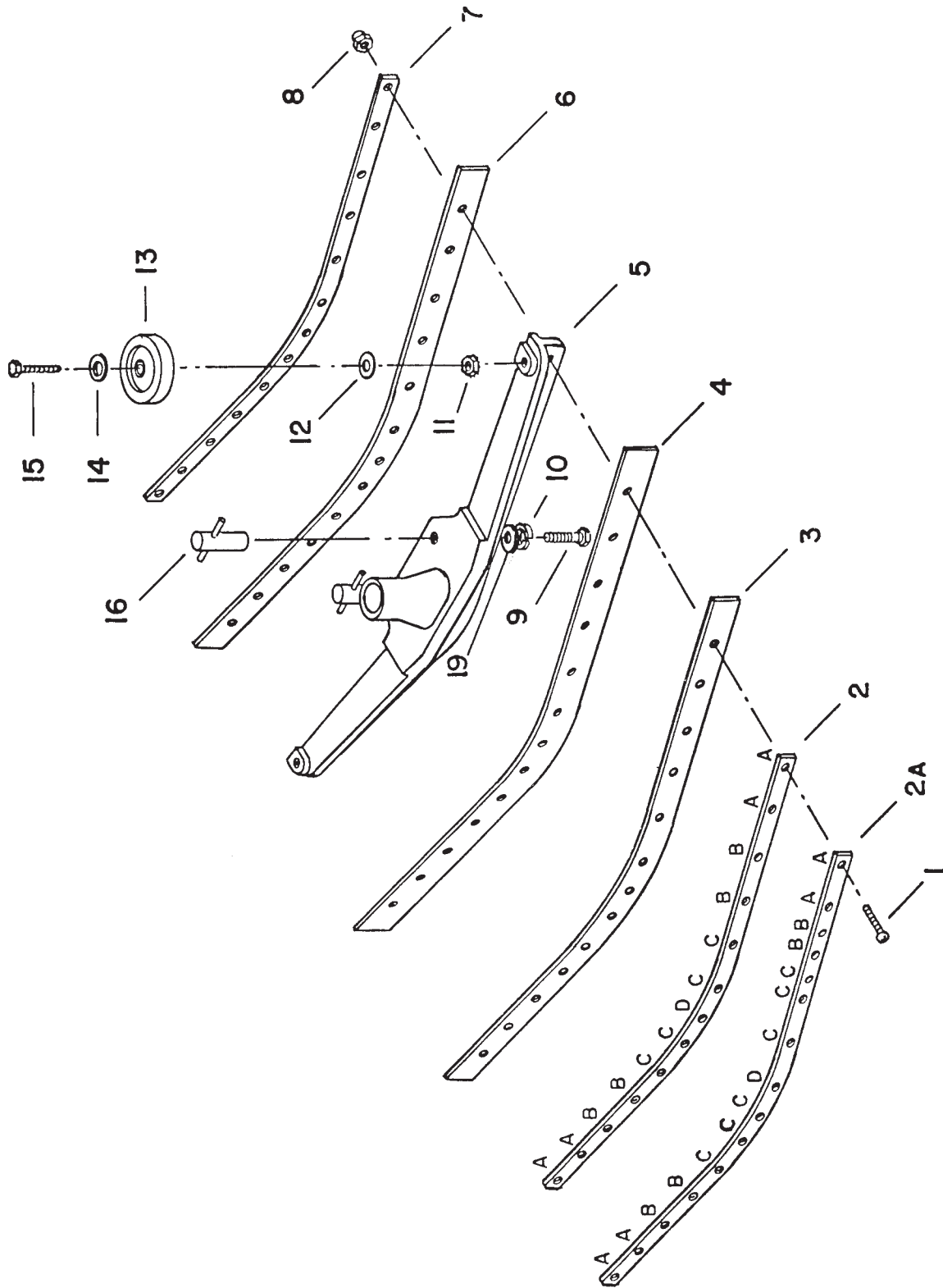
ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	712822	25	SCR-THMS 10-24 x .50	31	833621	2	Key 1/4 x 1/4 x 1
2	830576	2	Skirt Band - 32B	32	833474	1	Replacement Carbon Brush (set of 4)
3	833577	2	Side Splash Skirt 32B	32A	833918	1	Replacement Brush Board Assembly
4	831819	1	Replacement Oil Seal	33	833628	2	Brass Hex Nut
5	833575	1	Right Splash Guard - 32B	34	712824	5	SCR-THMS 10-24 x .75
6	833108	1	Motor Mounting Plate	35	711594	2	WSR-Flat .56 x .88 x .03
7	833623	1	Solution Hose Assembly	36	712638	6	Nut-Hex 10/24 SS Nyloc
8	833325	2	Elbow PLS 1/4 MPT x 3/8 BARB	37	760362	1	Splash Skirt 32B
9	833624	1	Solution Hose Assembly	38	760440	1	Skirt 3.75 x 21.25 x .12
10	833626	1	Hose Barb T	39	760441	1	Retainer Strip for 760440
11	827004	1	Solution Hose 50 1/2"	40	712103	1	Clevis Pin 3/8 x 3
12	833379	2	Brush Drive Motor 36V	41	711670	1	Hairpin Cotter 21-06 1/2
13	833112	2	Lifting Bkt. Scrubhead	42	711503	24	WSR-Flat #10
14	833959	1	Replacement Lower End Bell for 833379	43	712908	10	Nut-Flanged Wizz 10-24
15	833873	1	Hinge Splash Guard	44	711517	2	WSR-Flat .77 x 1.37 x .03
16	711276	4	BLT-HH 3/8 - 16 x 1.75	45	711508	2	WSR-Flat .44 x 1.00 x .06
17	711515	8	WSR-Flat .44 x .87 x .07	46	711575	4	WSR-Flat .31 x .75 x .03
18	808829	4	Wheel	47	809226	2	Washer
19	711391	4	Nut-Hex Jam 3/8-16	48	711545	2	WSR-Helical 5/16
20	809434	2	Term Ring 1/4 #8	49	711241	4	BLT-HH 3/8 - 16 x .75
21	809845	1	Front Splash Skirt 32B	50	711439	10	Nut-Flanged Wizz 3/8 - 16
22	809844	1	Skirt Band 32B	51	809993	2	Spring Tension
23	832947	1	Replacement Bearing 6205 Sealed	52	833876	1	Splash Guard Upper LH
24	809842	1	Splash Guard 32B	53	833875	1	Splash Guard LLH Weld
25	711368	2	Nut-Wing 1/4-20 Nyloc	54	833868	2	Latch
26	711544	8	WSR - Helical 1/4	55	710328	4	SCR-MC 8-32 x .37
27	711203	8	BLT-HH 1/4 - 20 x .62	56	711372	4	Nut - Nloc 8 - 32
28	430035	2	Drive Hub	57	833889	1	Support Arm
29	711516	2	WSR-Flat .31 x 1.25 x .05	58	711231	2	BLT-HH 5/16 - 18 x 1.25
30	711228	2	BLT-HH 5/16 - 18 x .75	59	711379	6	Nut-Flanged Wizz 5/16 - 18



Bulkhead Assembly - 830036

Parts List

ITEM	PART #	QTY	DESCRIPTION	ITEM	PART #	QTY	DESCRIPTION
1	833779	1	Inside Rear Panel	33	740133	1	Light, Indicator 36 V DC
2	760432	1	Dash Board	34	740134	1	Shunt 100 MV x 100 AMP
3	828250	1	Handle Weld	35	740135	1	Meter, 100 A DC (Pressure)
4	809137	1	Handle	36	740136	1	Meter, Volt 22 V 45 V (Battery)
5	827647	1	Handle Switch	38	740806	1	Switch Snap Act 20 A 1 HP
6	762299	3	Grommet .50 x .09 x .75	39	711526	1	WSR - Wave 1.01 x .1.20 x .01
7	833777	1	Electrical Box	40	711600	1	WSR - Nylon 1.00 x 1.37 x .040
8	832420	1	Fuse Panel	41	809237	1	Ring Retaining
9	828270	1	Bracket Speed Ctrl.	42	740220	2	CB 20 AMP 1600-112-200-15
10	740803	1	SP Cont. 36 V	43	740131	1	Brkr., Circu. Drive Motor 70
11	740804	1	Potentiometer	44	808306	2	Roll Pins
12	809874	1	Knob	48	711429	2	Nut - Hex Jam 1/4 - 28 STPL
13	762086	2	Grip, Handle	49	711503	2	WSR - Flat #10
14	761197	1	Grip, Handle Black	50	712533	5	SCR-MC 10 - 24 x 1.25 SS
15	809491	1	Switch Bkt.	51	711438	4	Nut - Hex 6-32 BR NIPL
16	740800	1	Switch	52	710378	2	SCR-MC 1/4 - 20 x .50 ST PL
17	740801	1	Switch	53	712822	4	SCR-THMS 10 - 24 x .50 STPL
18	740242	2	Contacto 36 V 120-119712	54	712638	7	Nut - Hex 10 - 24 SS Nyloc
19	762073	2	Bushing .259 x .375 x .265	55	760452	1	Deadman Switch Lever Assembly
20	805637	1	SCR Insulator	56	710751	4	SCR-MC 1/4 - 20 x .75 STPL
21	715045	1	Decal Ins. Dashboard	56	711229	4	BLT HH 5/16 - 18 x .87 STPL
22	809412	1	Gasket Support	57	711368	4	Nut - Wing 1/4 - 20 Nyloc PL
23	711203	8	BLT-HH 1/4 - 20 x .62	58	712667	4	Nut - Hex 1/4 - 20 SS Nyloc
24	750068	1	Solution Control Rod	60	712537	2	SCR-MC 10 - 24 x .75 SS
25	831628	1	Flanged Bearing	61	711144	22	SCR-ST-F 10 - 24 x .5
26	760317PTD	1	Handle Solution Cont. Ptd.	74	805073	1	Cotter Pin
27	809803	3	Bushing Snap	75	833638	4	Brass Stud
28	715046	1	Decal Dashboard	81	711506	4	WSR - Flat 5/16 ST PL
29	740030	1	Panel Light Red Lens	82	711310	4	Nut - Hex 10 - 32 ST PL
30	809754	2	Switch Rocker	84	711575	4	WSR - Flat .31 x .75 x .06 ST
31	711372	2	Nut - Nloc 8 - 32	86	833824	1	S.S. Washer 2 x 2.43 x .035
32	740132	4	Insulator (Glastic)	88	710177	4	SCR-MC 1/4 - 20 x .37 ST PL



Squeegee Assembly
26B - 260126
32B - 828309

OPTIONAL ACCESSORIES

ITEM	PART #	QTY	DESCRIPTION		
1A	712533	4	SCR-MC 10 - 24 x 1.25	26B	260003
1B	712535	4	SCR-MC 10 - 24 x 1.50	32B	430131
1C	712538	4	SCR-MC 10 - 24 x 1.75 - 24B	26B	260005
1C	6		SCR-MC 10 - 24 x 1.75 - 32B	32B	430111
1D	712530	1	Screw 10 - 24 x 5/8	26B	260004
2	260106	1	Rear Bar - 26B	32B	430034
3	809527	1	Rear Bar - 32B	26B	260002
3	260107	1	Reinforcing Blade - 26B	32B	430108
4	809528	1	Reinforcing Blade - 32B	26B	260006
4	260108	1	Rear Squeegee Blade - 26B	32B	430132
5	809532	1	Rear Squeegee Blade - 32B	26/32B	750687
5	260110MCH	1	Squeegee Casting - 26B	26/32B	750686
6	828305	1	Squeegee Casting - 32B	26B	260121
6	260109	1	Front Blade - 26B	32B	833863
7	831473	1	Front Blade - 32B	26/32B	833910
7	260105	1	Front Bar - 26B	26B	260127
8	809529	2	Front Bar - 32B	32B	833932
8	712638	13	10-24 Nylock Hex Nut	26B	260120
9	712075	2	1/2 - 13 x 1 1/2" Hex	32B	833952
10	711547	2	Split Lock	26B	260127
11	711391	2	3/8 - 16 Jam Nut	32B	833932
12	712317	2	Washer, Flat	26B	260120
13	808829	2	Truck Wheel	32B	833952
14	712317	2	Washer, Flat	26B	260120
15	711247	2	3/8 - 16 x 2 Hex Bolt	32B	833952
16	828310	2	Tee-Nut Assembly	26B	260120
17	828259	2	Pin	32B	833952
18	711539	2	Star Washer	26B	260120
19	712303	2	Washer	32B	833952

Bassine Feed-Thru Brush (2 needed)	26B	260003
Poly-Grit Fee-Thru Brush (2 needed)	32B	430131
Nylon Brush Black (2 needed)	26B	260005
Nylon Drive Brush w/Pad Grab II (2 needed)	32B	430111
Strato Grit (blue) (2 needed)	26B	260004
Hour Meter Kit	32B	430034
Ignition Switch Kit	26/32B	750687
Neoprene Squeegee Set	26/32B	750686
Foam Filled Tire	26B	260121
Neoprene Squeegee Assembly	32B	833863
Gum Rubber Squeegee Set	26/32B	833910

Battery Charger

Auto 957727

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.

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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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