Vinuteman[®] PowerBoss[®]

3800 Rider Scrubber MC380000 MC380000QP MC380001 MC380001QP MC380002 MC380002QP MC380003 MC380003QP





DUMP HOSE:

Under the recovery tank on the left side is the dump hose. This is used for dumping of the recovery tank. To dump the recovery tank extend the hose from the machine and open the dump valve. The dump valve is opened by flipping up the tab that is on the end of the valve. The hose might need to be squeezed in the middle to allow the waste water to flow.

When the recovery tank is empty it is important to replace the valve on the end of the hose.

SQUEEGEE ADJUSTMENT:

The squeegee set-up is pre-adjusted at the factory. Adjustments may be required to get optimum performance for different floors and conditions.

Pitch Control Adjustment:

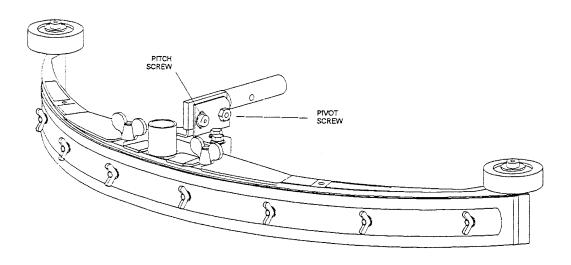
Ensure that the scrubber is on a relatively flat surface. Turn on the main power switch and select "Vacuum Only" mode.

Move the scrubber forward slowly while someone behind the machine checks the squeegee blade for uniform deflection.

If uneven deflection or lay is evident, minor adjustments may be necessary to avoid streaking and uneven wear on the blade.

To correct this, pitch adjustment is necessary. Loosen the pivot screw and the pitch screw. Move the machine forward and allow the squeegee to level itself or adjust the angular position accordingly to achieve a uniform blade deflection. Re-tighten the screws.

In certain applications where a different blade setup is required, the reinforcement blade may be turned upside-down. The notch, which is normally on the bottom, will now be located on the top. This adjustment allows the rear squeegee blade a larger deflection than normal.





CONTROL SETTINGS ADJUSTMENT AND MAINTENANCE MODE:

The machine settings are easily adjusted with any Windows computer equipped with Hyperterminal. (Hyperterminal is Windows 95/98 Accessory). The program can be accessed through the "Start" bar, scroll to "Programs" then scroll to "Accessories". It is possible that it might be under "Communication" under "Accessories". Depending on the specific configuration of the computer, the "hyperterm" icon might then need to be clicked to run the program.

Once the program is running the "New connection" menu will be open. Type in "3800 Rider" at the connection name, then hit OK. The "Connect To" menu will then be open. The "Connect Using" line must be changed to either "Direct to com1", "Direct to com2", "Direct to com3" or "Direct to com4". Be sure to choose the same com port that your serial input card is plugged into.

Then open the "Configure" menu (It might also be called "Properties" depending on which version is running). The following are the correct settings.

Bits per second 4800
Data Bits 8
Parity None
Stop Bits 1
Flow Control None

Adjust all of the above to match, then hit "OK". If the "Configure" window closes it can be opened by clicking "Properties" under the "File" pull down window. Next, press the "Settings" tab. Under the "Emulation" line, change it to "VT100". Then click "OK". The windows computer is now configured correctly.

To connect to the 3800 rider, remove the front cover of the computer. This is located on the steering column. Insert the communication cable (Minuteman P/N 742764) into the 3800 rider's computer port that is labeled "laptop". Insert the other end of the cable into the computer interface box (Minuteman P/N 742737). Finally, insert the computer interface box into the serial port that the computer was configured for under "Connect to" above.

In order for the computer to communicate, the 3800 rider must be turned on. Once the machine is turned on, the setting screen shown should appear on the computer. It is possible that "Control-L" might need to be pressed to reset the screen.



The first screen of the programming menu looks like this:

Α	BRUSH UP SPEED	40	40
В	BRUSH DOWN SPEED	40	40
С	BRUSH HYSTERESIS	8	8
D	PARTIAL RAISE TIME	5	5
E	PUMP START UP TIME	3	3
F	(NOT USED)		
G	SCRUB TO RAISE BRUSH TIME	35	35
Н	RAISE TO BRUSH OFF TIME	5	5
l I	VAC TO RAISE SQUEEGEE TIME	70	70
J	RAISE TO VAC OFF TIME	120	120
K	(NOT USED)		
L	CLEAN TO FAST TRAVEL TIME	70	70
M	CALIB VALUE	30	30
N	MEDIUM ADDER	12	12
0	HIGH ADDER	25	25
L REDRAW	/ SCREEN, TAB MORE PARAMS, ^P M	AINTEI	NCE

These parameters can be adjusted by pressing the letter next to the parameter that is to adjusted. The number that is in the left column is the current setting, the number in the right column is the "factory" setting.

The following is an explanation of the above parameters.

A. Brush up speed An indication of how fast the brush deck will be raised when it is being adjusted for proper brush pressure. The higher the number the faster the brush deck will go up, the lower the number, the slower the deck will go up.

- B. Brush down speed An indication of how fast the brush deck will be lowered when it is being adjusted for proper brush pressure. The higher the number, the faster the brush deck will go down, the lower the number, the slower the deck will go down.
- C. Brush hysteresis An indication of how sensitive the controller will be to changing floor conditions. The higher the number the more sensitive, the lower the number the less sensitive. If the controller is too sensitive, it will constantly be changing the position of the scrub deck every time that a high or low spot is encountered on the floor.
- D. Partial raise time While operating in the full function or double scrub modes, the brush deck is raised slightly after the machine is no longer moving. The amount of time that the brush deck is raised is called the partial raise time. The larger the number the higher the scrub deck will be raised, the lower the number the less it will be raised.



E. Pump start up time Whenever any of the pumps are turned on to any speed from being completely off, they are first run at full speed. The length of time that the pumps are run at full speed is called the pump start up time. The larger the number the longer the pumps will be run at full speed, the shorter the number the shorter they will be run.

F. Not used

- G. Scrub to raise brush time While operating in the full function or double scrub modes the brush deck is raised slightly after the machine is no longer moving. The amount of time delay between no longer moving and the brush deck raising is called the scrub to raise brush time. The larger the number the longer the time delay will be, the smaller the number the shorter the number will be.
- H. Raise to brush off time After the brush deck has been raised there is a delay in turning off the brushes. This is called the raise to brush off time. The larger the number the longer the brush motors will stay on after they are raised.
- I. Vac to raise squeegee time While operating in the full function or vacuum only modes, the squeegee is raised after the machine is no longer moving. The amount of time delay between no longer moving and the squeegee raising is called the vac to raise squeegee time. The larger the number, the longer the delay will be, the smaller the number, the shorter the delay will be.
- J. Raise to vac off time After the squeegee is raised there is a time delay before the vacuum motors turn off. This amount of time is called the raise to vac off time. The larger the number the longer the delay will be, the shorter the number, the shorter the delay will be.

K. Not used

- L. Clean to fast travel time When going from full function, double scrub, or vacuum only to transport mode, there is a time delay before the machine will transport at a higher speed. This amount of time is called the clean to fast travel time. The larger the number the greater the amount of time before the machine will go into high speed, the smaller the number, the less the amount of time will be.
- M. Calib value The value in amps that the brush motors will draw in the light brush pressure setting is called the calib value. This value is the total amps that the motors draw. The higher the value, the greater the scrubbing pressure will be in light brush pressure. THE VALUE IN SETTING M PLUS SETTING N CANNOT EXCEED 55. THE VALUE IN SETTING M PLUS THE VALUE IN SETTING O CANNOT EXCEED 55. PERMANENT MOTOR DAMAGE WILL OCCUR!

- N. Medium Adder. The additional amps that the brush motors draw in medium brush pressure is called the medium adder. This value is added to the calib value in setting M. The higher the value, the greater the scrubbing pressure will be in medium brush pressure. THE VALUE IN SETTING M PLUS SETTING N CANNOT EXCEED 55. THE VALUE IN SETTING M PLUS THE VALUE IN SETTING O CANNONT EXCEED 55. PERMANENT MOTOR DAMAGE WILL OCCUR!
- O. High Adder. The additional amps that the brush motors draw in high brush pressure is called the high adder. This value is added to the calib value in setting M. The higher the value, the greater the scrubbing pressure will be in high brush pressure. THE VALUE IN SETTING M PLUS SETTING N CANNOT EXCEED 55. THE VALUE IN SETTING M PLUS THE VALUE IN SETTING O CANNONT EXCEED 55. PERMANENT MOTOR DAMAGE WILL OCCUR!

To redraw the screen press ^L.

Press TAB to get to the second programming screen. The second screen of the programming menu looks like this:

PUMP:	MIN	LOW	HIGH	MAX
WATER(IF NORM) WATER (RECYCLE) SOAP (IF LOW) SOAP (IF MED) SOAP (IF HIGH)	A 46 46	F 89 89	K 147 147	P 204 204
	B 33 33	G 54 54	L 83 83	Q 113 113
	C 13 13	H 28 28	M 46 46	R 64 64
	D 25 25	I 59 59	N 91 91	S 120 120
	E 50 50	J 114 114	O 176 176	T 255 255

^L REDRAW SCREEN, TAB MORE PARAMS, ^P MAINTENCE

These parameters can be adjusted by pressing the letter next to the parameter that is to adjusted. The number that is in the left column is the current setting, the number in the right column is the "factory" setting.

This table is a table of all of the water flow rates. It is not recommended that adjustments are made since chemical metering will no longer be calibrated.

The numbers represent a speed value for the pumps: 1 is off and 255 is full speed. The first column is the pump description, the second column is the pump speed at one light segment on the main keyboard, the third column is the pump speed at two light segments on the main keyboard, the fourth column is the pump speed at three light segments on the main keyboard, the fifth column is the pump speed at four light segments on the main keyboard.

The first row is the "water (if norm)" row. This is the speed of the solution pump for the various flow rate settings. The factory settings are .3, .7, 1.1, or 1.5 gal/min.

The second row is the "water (recycle)" row. This is the speed that the solution pump and the recycle pump will run at if the machine is in recycle mode. The factory settings are .15, .35, .55 or .75 gal/min.

The third row is the "soap (if low)" row. This is the speed that the chemical metering pump will run at while the machine is running in the low dilution ratio mode. This mode mixes chemical at 1oz/gal of solution. The factory settings are .3, .7, 1.1 or 1.5 oz/gal.

The fourth row is the "soap (if med)" row. This is the speed that the chemical metering pump will run at while the machine is running in the medium dilution ratio mode. This mode mixes chemical at 2 oz/gal of solution. The factory settings are .6, .14, 2.2 or 3.0 oz/gal.

The fifth row is the "soap(if high)" row. This is the speed that the chemical metering pump will run at while the machine is running in the high dilution ratio. This mode mixes chemical at 4oz/gal of solution. The factory settings are 1.2, 2.8, 4.4 or 6.0 oz/gal.

To enter into the maintenance mode, press ^P. This mode allows maintenance personnel to control the outputs of the controller and view the state of the inputs to the controller. The maintenance screen looks like this:

```
MAINT MODE V=OVERRRIDE
    ab=defghi
                        jklmno--r=
          I Chms
                              R SolE
         H Syst
        G Brsh
       F VacM
                           O Recy
      E Wtrs
                          N TkFI
                       M OffA
    D Multi
                      L Rev
                     K Fwd
 B Sq-
A Sq+
                   J SysR
```

While in this screen, the state of the output relays are shown (a,b,d,e,f,g,h,i) and the state of the inputs are shown (j,k,l,m,n,r). The output is "ON" if the letter is capitol and the output is "OFF" is the letter is lower case. "ON" means that an input as +36V coming in or it means that an output has +36V coming from it.

The description of the inputs and the outputs are as follows:

Outputs

- A Squeegee raise output relay
- B Squeegee lower output relay
- D Multimode output relay (Connects to speed control board to engage high speed)
- E Solution water solenoid output relay
- F Vacuum motor output relay
- G Brush motor output relay
- H System start output relay
- I Chemical solenoid output relay

Inputs

- J System ready input
- K Forward input
- L Reverse input
- M Off aisle cleaning input
- N Recovery tank full input
- O Recycle on input
- R Solution empty input

The inputs/outputs are self explanatory aside from the system start and system ready. When the operator presses "1" on the main keyboard the system start output will energize for 1 second. This will send +36V through the recharge switch and through the keyswitch. If both of these switches are closed then the main control relay will turn on. When the main control relay turns on it sends +36V back to the board to the system ready input. If the board does not get +36V to the system ready input within 1 second then the system start output will deenergize. The only reason the system ready input would not turn on would be the recharge switch or the keyswitch being open.

As input changes from 0V to +36V the letter on the first line will change from lower case to a capitol letter. Conversely, as input changes from +36V to 0V the letter on the first line will change from a capitol letter to a lower case letter.

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When this screen is active the outputs cannot be changed. By pressing "V", the controller will go into "Override" mode. The screen will then look like this:

```
OVERRRIDE MODE S=SQ UP/DN
MAINT MODE
   ab=defghi
                      jklmno--r=
             I Chms
                                 R SolE
            H Syst
           G Brsh
          F VacM
                              O Recy
                             N TkFI
         E Wtrs
                          M OffA
       D Multi
                         L Rev
    B Sq-
                        K Fwd
   A Sq+
                      J SysR
```

When this screen is active, pressing A,B,D,E,F,G,H,I will change the state of the output relays. To raise/lower the squeegee both the A and B outputs must change. As indicated on the first line, pressing "S" will raise/lower the squeegee (This actually is changing A and B simultaneously).

Finally, there is a number to the right of the equal sign as shown here:

$$ab = defghi$$
 $jklmno--r = 0$

This number is the number of amps that the brush motors are actually drawing in real time. The line below would be 52 amps being drawn by the brush motors.



AFTER USE:

Turn machine off by pressing the "O" button on the control panel. Machine can be cleaned with a mild detergent and a damp cloth. Batteries should be charged after each use or when the battery condition meter shows a low charge. To recharge the batteries, plug the 36V charger into the recharge port located at the left front side of the machine. The recharge port has an interlock switch so the machine can not be turned on when the batteries are being recharged. Once the meter on the battery charger reads 0 amps, the batteries are recharged. This should take approximately 6-8 hours if the batteries are completely discharged.

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.

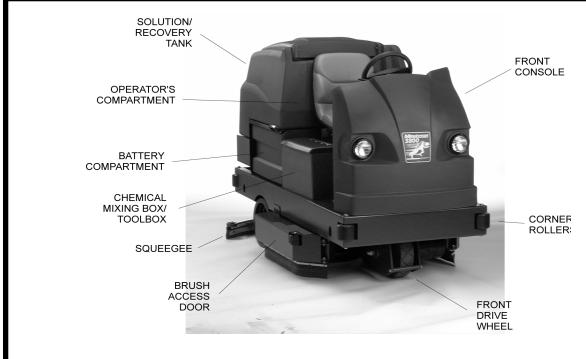
CHARGING OF BATTERIES:

Charging batteries generates explosive gasses. 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. If low, add water until the metal plates are covered. If the machine is not used for extended periods of time, batteries should be kept fully charged with a boost charge once a week.

CARBON BRUSH REPLACEMENT:

Design life of carbon brushes is between 1800-2000 hours. Replace brushes if worn to 3/8" or less, broken, or chipped. All carbon brushes should be replaced when motor is serviced.



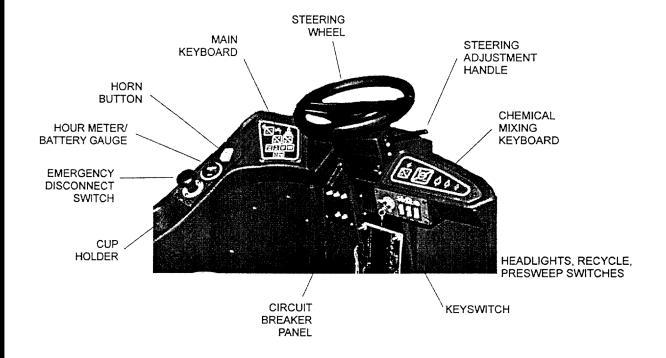


MACHINE OVERVIEW, FRONT

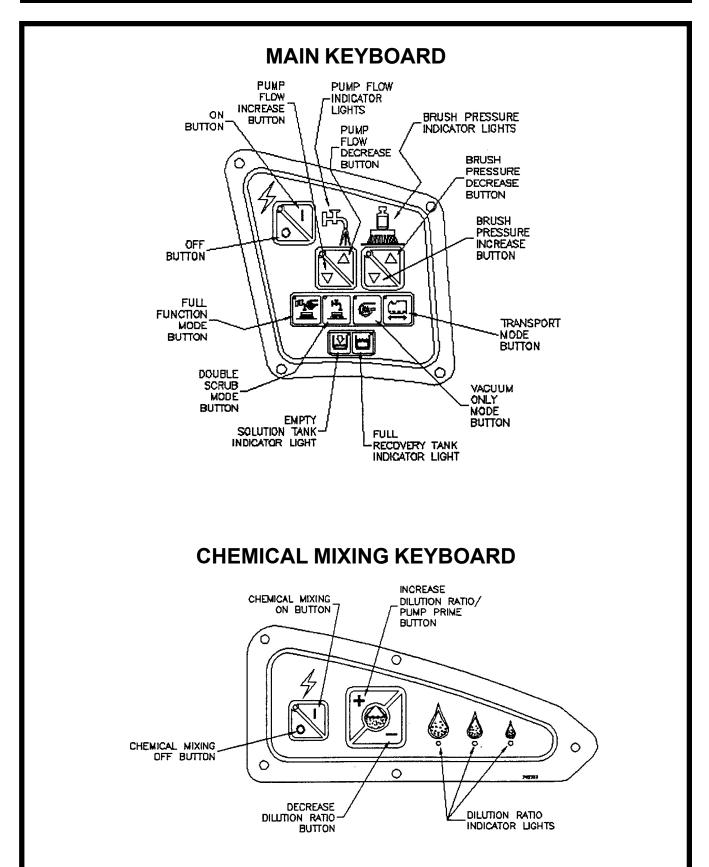


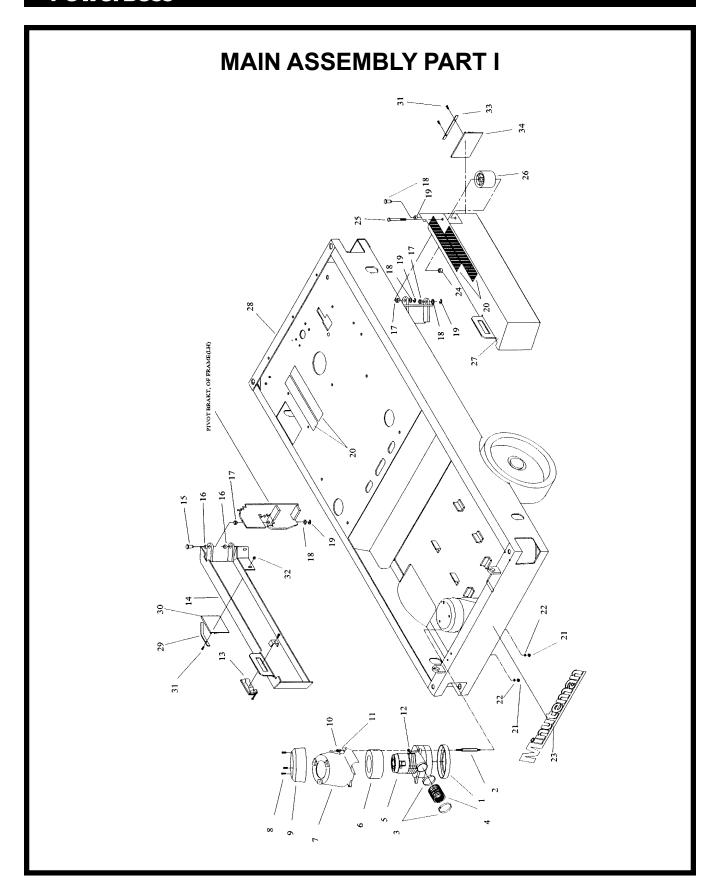


OPERATOR COMPARTMENT





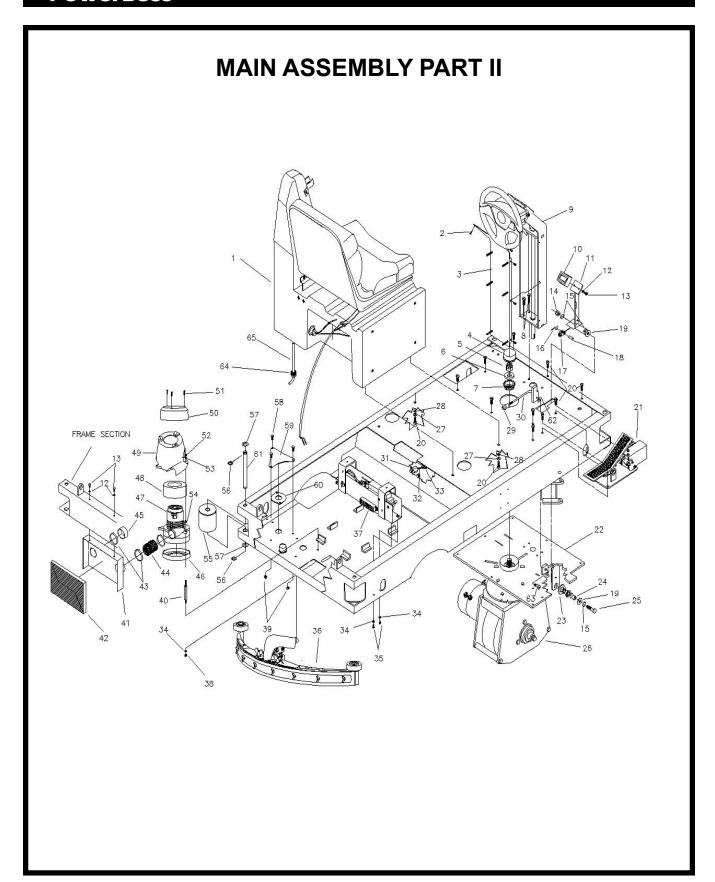






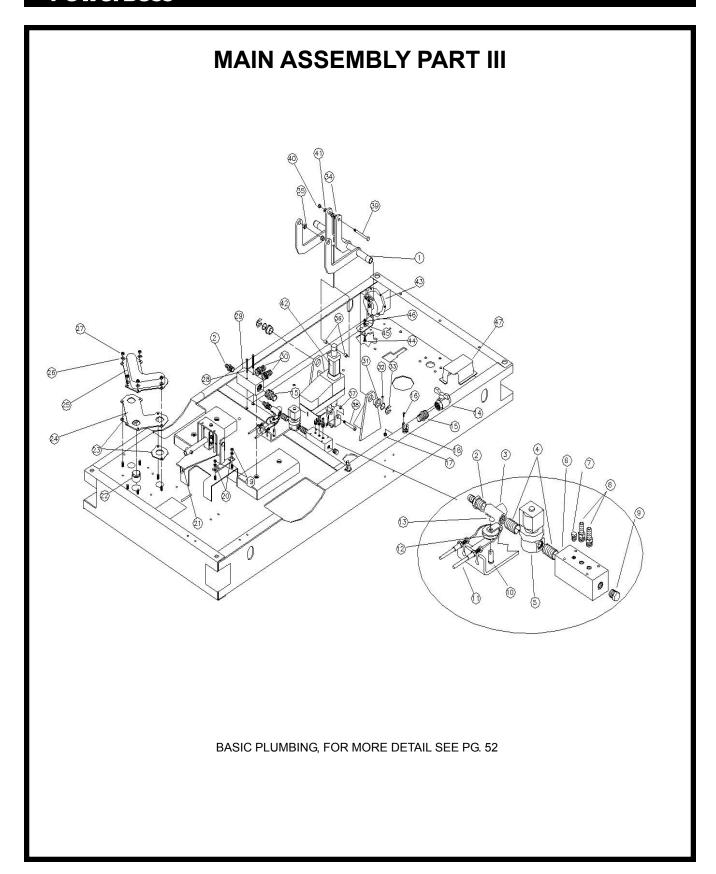
ITEM	PART NO.	QTY.	DESCRIPTION
1	290017	1	Vac Motor Gasket
2	383143	3	Vac Motor Stand-off
3	829067	2	Hose Clamps
4	383375	1	Short Vac Motor Hose
5	742772	1	Vac Motor Assy.
6	380064	1	Foam Ring
7	840012	1	Vac Motor Cover Bottom
8	711160	3	SCR-Hi/Lo #10 x 5/8
9	840011	1	Vac Motor Cover Top
10	711373	3	Nut-Nyloc 1/4-20
11	711505	3	WSR-Flat 1/4
12	832015	3	Spacer .38 x .50 x .14
13	383256	2	Latch
14	383765	1	Skirt Support Weldment LH
15	260036	4	Pin, Retainer
16	260030	4	Oilite Bushing
17	260041	4	Oilite Flange Bushing
18	711594	4	WSR-Flat .56 x .88 x .03
19	711713	4	Retaining Ring
20	383196	4	Anti-Skid Strips
21	712667	3	Nut-Hex 1/4-20 SS Nyloc
22	711504	3	WSR-Flat 1/4 SS
23	715387	1	Decal, Minuteman
24	711380	1	Nut-Hex 3/8-16 Nyloc
25	711280	1	BLT-HH 3/8-16 x 3.5
26	76-56-A	1	Roller
27	383764	1	Skirt Support Weldment RH
28	383001	1	Mainfame
29	383758	1	Skirt Retainer LH
30	383763	1	Skirt LH
31	712536	4	SCR 10-24 x .62
32	712638	4	Nut Hex 10-24 SS
33	383761	1	Skirt Retainer RH
34	383762	1	Skirt RH

Items 1-12 are optional.



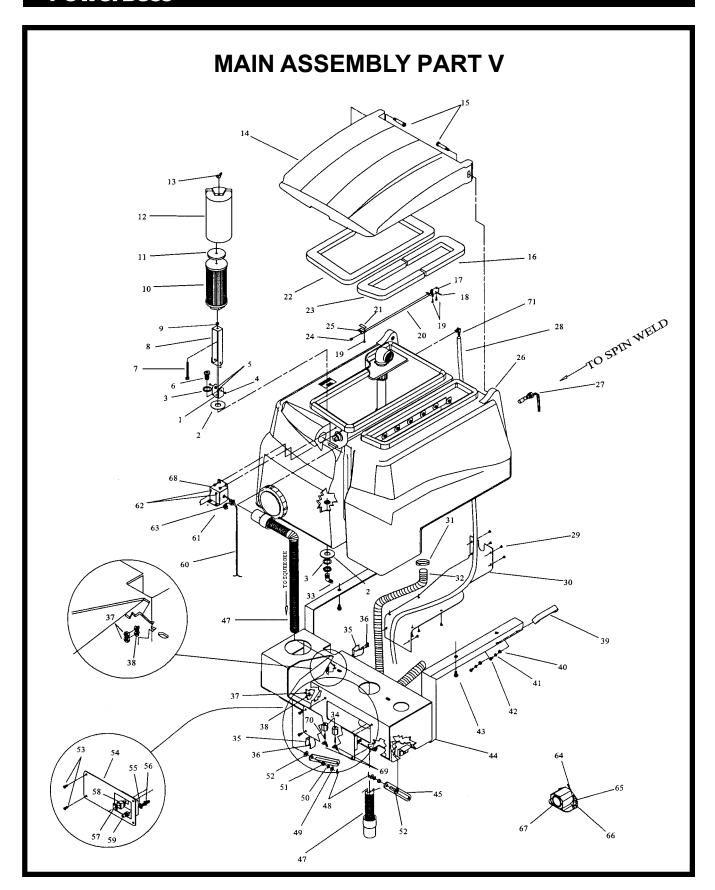


ITEM	PART NO.	QTY.	DESCRIPTION
1	383363	1	Aux. Tank Assy.
2	710329	10	SCR-MC 8-32 x .5
3	383296	1	Steering Cover
4	383250	1	Grease Cap
5	712113	1 1	Slotted Nut
6 7	383364 383077	1	Spacer, Front Drive Roller Bearing
8	713043	4	BLT-HH 3/8-16 x 1.25
9	383200	1	Steering Assy.
10	762294MCH	1	Brake Pad
11	383064	1	Brake Pad
12	711544	4	WSR-Helical 1/4
13	711202	4	BLT-HH 1/4-20 x .5
14	711376	1	Nut-Nyloc ½-13
15 16	711524 809311	5 1	WSR-Wave .52 x .87 x .01 Cotter Pin 7/64
17	383230	1	Brake Pedal Cable
18	711668	1	Clevis Pin
19	711510	2	WSR-Flat .50 x 1.37 x .10
20	713042	14	BLT-HH 3/8-16 x 1 #5
21	383197	1	Accelerator Assy.
22	383225	1	Steering Mount Assy.
23	711514	1	WSR-Flat 1.06 x 2 x .15
24 25	807885 712074	1 1	Spacer .5 x .75 x .602 BLT-HH ½-13 x 2.00
26	76-58-A	1	Front Drive Assy.
27	712301	4	WSR-Flat .37 x .87 x .06
28	711546	4	WSR-Helical 3/8
29	760592	1	Oval Tapered Knob
30	383067	1	Emergency Brake Weldment
31	740132	2	Glastic Insulator
32 33	833638 711368	2 2	Brass Stud Nut-Wing ¼-20
34	711504	7	WSR-Flat 1/4 SS
35	712101	4	SCR-Hwsr. 10-24 x .50
36	383794	1	Squeegee Assy.
37	383128	1	Squeegee Actuator Assy.
38	712667	3	Nut-Nyloc 1/4-20 SS
39	712683	3 3	Nut-Nyloc 5/16-18 SS
40 41	383143 383153	ა 1	Vac Motor Mount Muffler, Motor
42	383374	1	Exhaust Sound Dampener
43	829067	3	Hose Clamp
44	383375	1	Short Vac Motor Hose
45	383392	1	Cap Plug
46	290017	1	Vac Motor Gasket
47	742772 380064	1 1	Vac Motor Assy.
48 49	840012	1	Foam Ring Vac Motor Cover Bottom
50	840011	1	Vac Motor Cover Top
51	711160	3	SCR-Hi/Lo #10 x 5/8
52	711373	3	Nut-Nyloc 1/4-20
53	711505	3	WSR-Flat 1/4
54	832015	3	Spacer, .38 x .50 x .14
55 56	66-436-A	4	Corner Roller
56 57	809148 711517	8 8	E-Ring .75 WSR-Flat .77 x 1.37 x .03
58	712575	3	BLT-HH 5/16-18 x .75 SS
59	383142	1	Vac Cover Plate
60	383068	1	Gasket, Air Manifold
61	383145	4	Roller Pin
62	210033	1	Oilite Thrust Washer
63 64	712099PLT 383469MCH	1 1	Shoulder-Bolt 3/8 x ½ 3/8 Compression Fitting
65	383473	1	Tubing, Copper
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ITEM	PART NO.	QTY.	DESCRIPTION
1	383127	1	Lever Arm Weldment
2	383467	2	Fitting Brass 1/2 x 1/2
3	383325	1	Fitting Brass Tee 1/2 FPT
4	383465	2	Fitting Brass Nipple 1/2 MPT
5	742718	1	Water Solenoid 36V
6	383457	1	Hydraulic Manifold, Upper
7	383480	1	Fitting Brass 1/8 MPT Plug
8	3400261	2	Fitting Brass 1/4 MPT x 3/8 Barb
9	383479	1	Fitting Brass 3/8 MPT Plug
10	711668	1	Clevis Pin
11	383229	1	Brake Cable (from 3838350)
12	81-44-A	1	Nylon Pulley
13	711808	1	Spring Cup
14	383461	1	1" Ball Valve
15	383471	2	Fitting Brass 1" MPT x 1"
16	710230	4	SCR 8-32 x .62
17 18	711426	4 2	8-32 Wizz Nut Clip, 1" Hose
19	383474 712680	4	Nut Hex 5/16-18 Ss
20	712000 711545	4	WSR Helical 5/16
21	383226	1	Squeegee mechanism
22	260064	1	Flanged Tube
23	383068	1	Gasket, Air Manifold
24	383238	1	Air Manifold, Bottom
25	383237	1	Air Manifold, Top
26	712767	6	WSR-Flat .406 x .75
27	712683	6	Nut-Hex 5/16-18
28	712547	6	SCR 10-24 x 2.5" SS
29	383458	1	Hydraulic Manifold, Lower
30	383468	2	Fitting Brass 3/4 x 3/4
31	809236	2	Oilite Flanged Bushing
32	711526	4	WSR-Wave 1.01 x 1.20 x .01
33	809237	2	Retaining Ring
34	260066	2	Oilite Flange Bushing
35	260041	2	Oilite Flange Bushing
36	383368	2	Spacer .384 x .500 x .437
37	383369	2	Spacer .384 x .500 x .219
38	712100	1	Shld-Blt 3/8 x 2.25
39	712119	1	Shld-Blt 3/8 x 3
40	711374	2	Nut-Nyloc 5/16-18
42	742712-1	1	Actuator 36V
43	742711	1	Horn
44	710180	1	SCR 1/4-20 x .75
45	711505	1	WSR-Flat 1/4
46	711373	1	Nut-Nyloc 1/4-20
47	383414	1	Cover, Electrical Cable

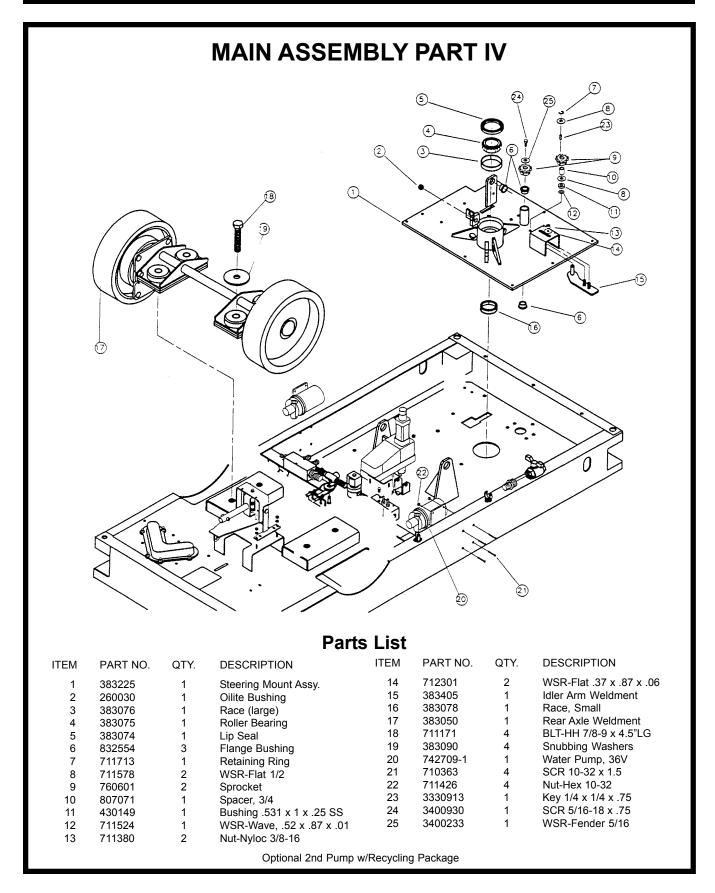




ITEM	PART NO.	QTY.	DESCRIPTION
1	383425	1	Filter Bracket, Lower
2	383446	2	Gasket, 1.125 x 2.75 x .125
3	383447	2	Spacer, 1.125 x 1.625 x .125
4	711922	2	Rivet Tube, .19 x .28
5	712764	2	WSR-SS #10
6	383448	1	Anchor Coupling
7	807901	1	Bolt SP, Machined
8	383246	1	Filter Bracket, Upper
9	712680	1	Nut-Hex 5/16-18 SS
10	340071	1	Recycle Filter 340
11	340067	1	Gasket, Recycle Filter
12	340069	i	Cover Recycle Filter
13	711369	1	Nut, Wing 5/16-18 Nylon
14	383303	i	Lid
15	712120	2	Shoulder Bolt, 1/2 x 2 PLT
16	383397	1	Gasket, Solution
17	383297	i	U Channel
18	383264	i	Roll Pin .125 x 1.00
19	711161	3	SCR-Hi/Lo #10 x 3/4
20	383263	1	Prop Rod
21	760263	i	Double Sided Tape
22	383026	1	Gasket Recovery
23	383030	1	Gasket Solution
24	840059	1	Cap, Thread Cover
25	383231	1	Clip, Screw Down
26	383135	1	Solution/Recovery Tank (w/o Recovery)
27	742708-2	1	Float w/Male Term.
28	383454	1	Vacuum Equalizing Tube 9.41 ft.
29	712540	10	SCR-MC 10-24
30	383184	1	Tank Bottom Cover
31	260203	1	Hose Clamp, 102120
32	383273	1	1.5" Vac Hose x 52"
33	383449	1	Fitting Brass 90° 1/2 x 1/2
34	740132	2	Glastic Insulator
35	383270	2	Tool Clip
36	710230	4	SCR-MC 8-32 x .62
37	711372	4	Nut-Nyloc 8-32
38	711502	4	WSR-Flat #8
39	130040PTD	2	Handle
40	711505	4	WSR-Flat 1/4
41	711544	4	WSR-Helical 1/4
42	713002	4	BLT-HH 1/4-20 x 3/4
43	712083	6	BLT-Flange Wizz Loc 3/8-16
44	383165	1	Tank Frame Weldment
45	383291	2	Hinge
46			
47	383272	1	2" Wireloc Hose
48	809311	2	Cotter Pin 7/64 x 1
49	712301	2	WSR-Flat .37 x .87 x .06
50	711523	2	WSR-Wave .37 x .68 x .08
51	260066	2	Oilite Flanged Bushing
52	711592	2	WSR-Nylon .5 x 1.06 x .06
53	710197	4	SCR-MC 5/16-18 x 3/4
54	383235	1	Back Door Weldment
55	711579	1	WSR-Flat .56 x 1.00
56	3400261	1	Fitting Brass 1/4 MPT x 3/8 Barb
57	740811	1	Dreefs Switch Boot
58	740800CE	1	Momentary Dreefs Switch
59	828368	1	BH2-61 Male Coupler
60	742833	1	Cable Assy.
61	383186	1	Hose Hook
62	712534	4	SCR-MC 10-24 x .5
63	380032	1	Strain Relief
64	712812	2	SCR 10-24 x .62 PHL
65	711543	2	WSR-Helical #10
66	711599	2	WSR-Flat .187 x 1.00 x .06
67 69	742710-1 383185	1 1	Backup Alarm
68 60		2	Switch Cover Rear Nut-Wing 1/4-20
69 70	711368 833638	2	Brass Stud
70 71	220174	1	Fitting Brass 90° 1/4 MPT x 3/8 Barb
7.1	220114	ı	Timing Diass 50 1/4 WIF I X 5/0 DdID

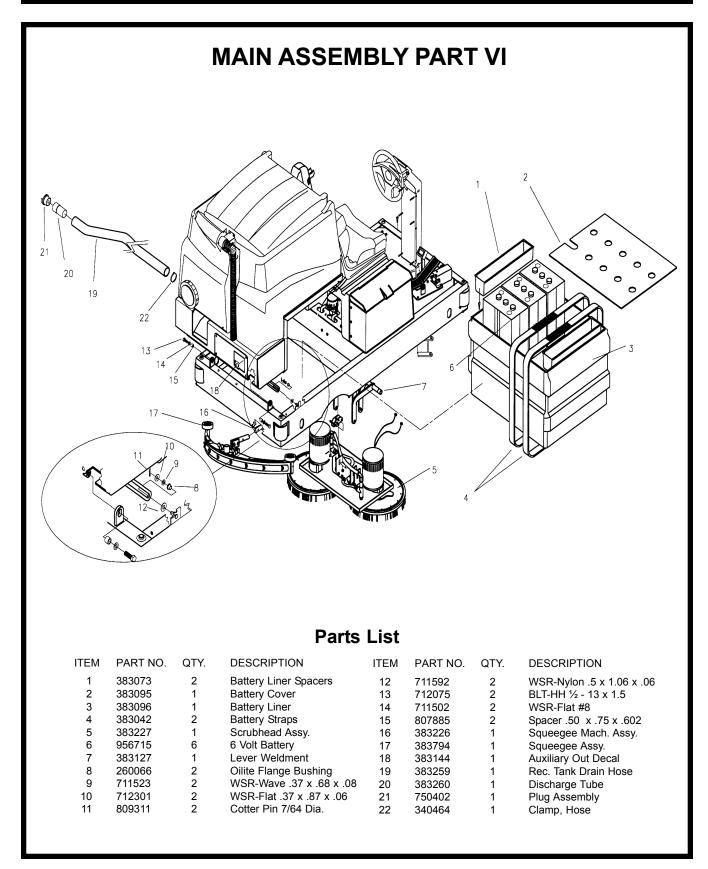
Items 1 thru 13 and 27 are included with Model #MC380001 & MC380003. Items 64 thru 67 are optional.

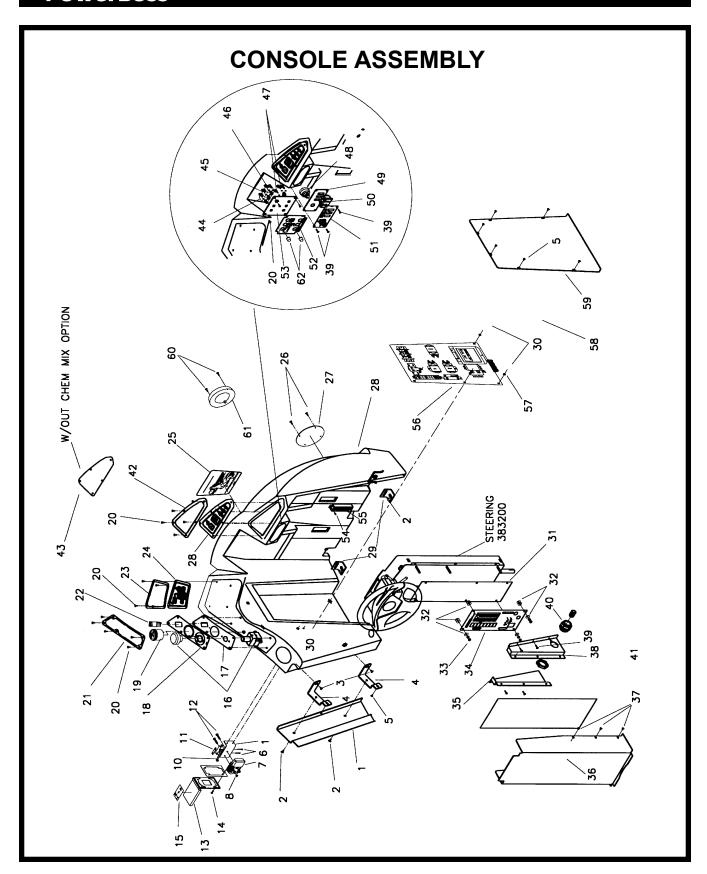




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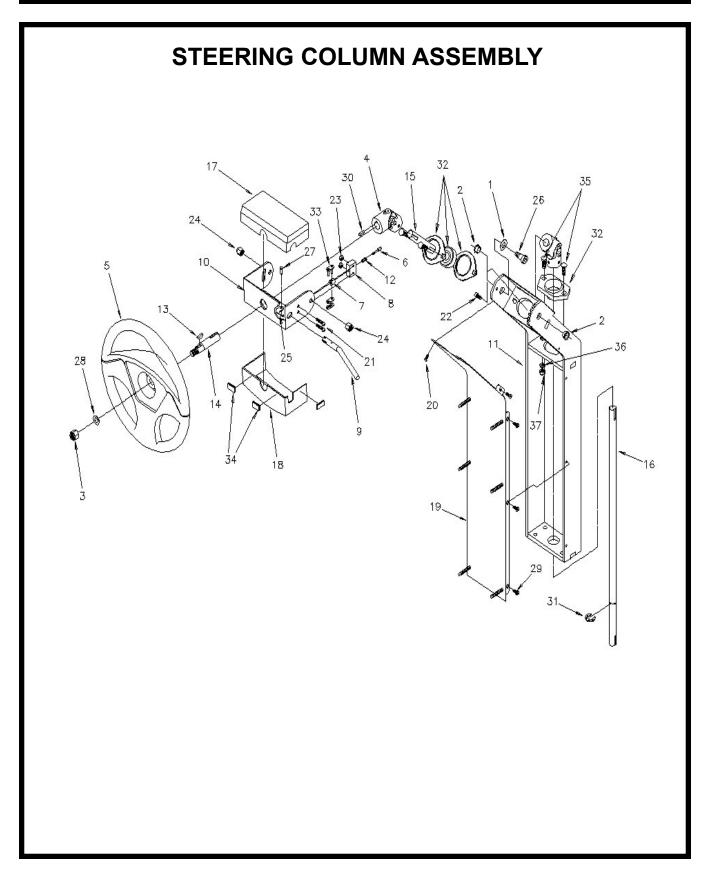




	•	ai to	Liot
ITEM	PART NO.	QTY.	DESCRIPTION
	1741110.	Q	DEGGIAI TIGIT
1	383290	1	Cover, Connector
2	710178	4	SCR-MC 1/4-20 x .50 STPL
2		-	
3	710177	2	SCR-MC 1/4-20 x .37
4	383289	2	Bracket, Connector
5	712540	8	SCR-MC 10-24 x .37
6		2	
	710307		SCR-MC 6-32 x 1.00
7	740147	1	Grey Housing
8	711316	2	Nut-Hex 1/4-20
9	383310	1	Bracket, Recharge
10	740128	i	
		-	Snap Switch
11	711430	1	Tinnerman Nut
12	711209	2	BLT-HH 1/4-20 x 1.12
13	724747	1	Cover, Charge Port
14	711157	4	SCR Hi/Lo #7-19 x .50
		-	
15	715246	1	Decal, Battery 36V
16	742703	1	Emergency Disconnect
17	383151	1	Dashboard Plate
18	715402	1	Decal, Dashboard Left
		1	
19	742310	-	Hour Meter
20	712822	18	SCR-MC 10-24 x .50
21	383378	1	Bezel Dashboard
22	742736	1	Switch, Horn
		-	
23	383376	1	Bezel Keyboard
24	742701	1	Keyboard
25	715403	1	Decal, Console
26	711160	8	SCR Hi/Lo #10 x 5/8
27	383213	2	Headlight Cover
28	742733	1	MEM-Switch, Chemical Mix
29	383268	2	Console Bracket
30	710180	8	SCR-MC 1/4-20 x .75
31	383394	1	Insulator
		-	
32	711550	12	WSR-Nylon .25 X .75 0D
33	712665	8	Nut-Hex 1/4-20 SS
34	742700	1	Computer, 3800
35	383305	1	Computer Cover, Left
		1	
36	383304		Computer Cover, Middle
37	710153	6	SCR-MC 10-32 x .37
38	383306	1	Computer Cover, Right
39	711161	10	SCR Hi/Lo #10 x .75
40	210405	1	Liquid Tight Fitting
41	383393	1	Insulator
42	383377	1	Bezel, Chemical Mix
43	383149	1	Right Side Dash Plate
44	740247	1	Circuit Breaker 30A
			Circuit Breaker 18A
45	740238	1	
46	740249	1	Circuit Breaker 50A
47	740131	2	Circuit Breaker 70A
48	741005	1	Key Switch
49	383147	1	Key Switch Plate
50	742716	1	Switch, 1 Pole w/Splash
51	715401	1	Decal, Key Switch
52	715276	1	Circuit Breaker
53	383150	1	Circuit Breaker Plate
		-	
54	711131	2	SCR-MC Self Tap #8 x .37
55	742728	1	Terminal Block
56	742954	1	Electrical Assy. 3800
57	711544	6	WSR-Helical 1/4
58	383395	1	Insulator
		-	
59	383267	1	Electrical Panel Cover
60	711162	2	SCR Hi-Lo #10 x 1.50
61	742704	2	Headlight
62	742748	5	Circuit Breaker Boot
63		1	Console, 3800
	383300		· · · · · · · · · · · · · · · · · · ·
64	383310	1	Recharge Bracket

Items 28 and 42 are optional with Model #MC380002 and #MC380003. Item 50 has optional $2^{\rm nd}$ and $3^{\rm rd}$ switch. Items 60 and 61 are optional.

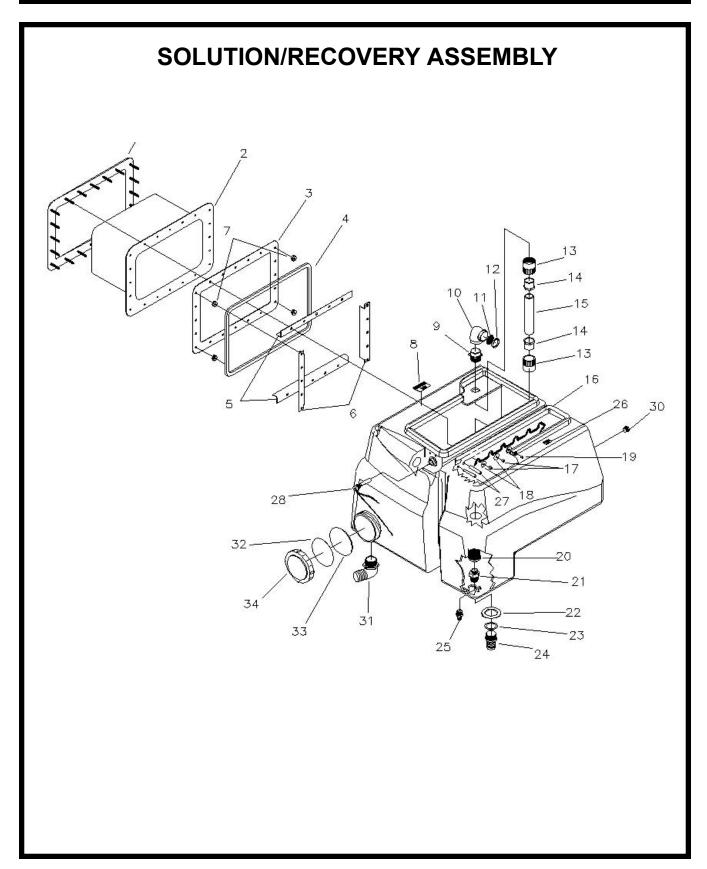






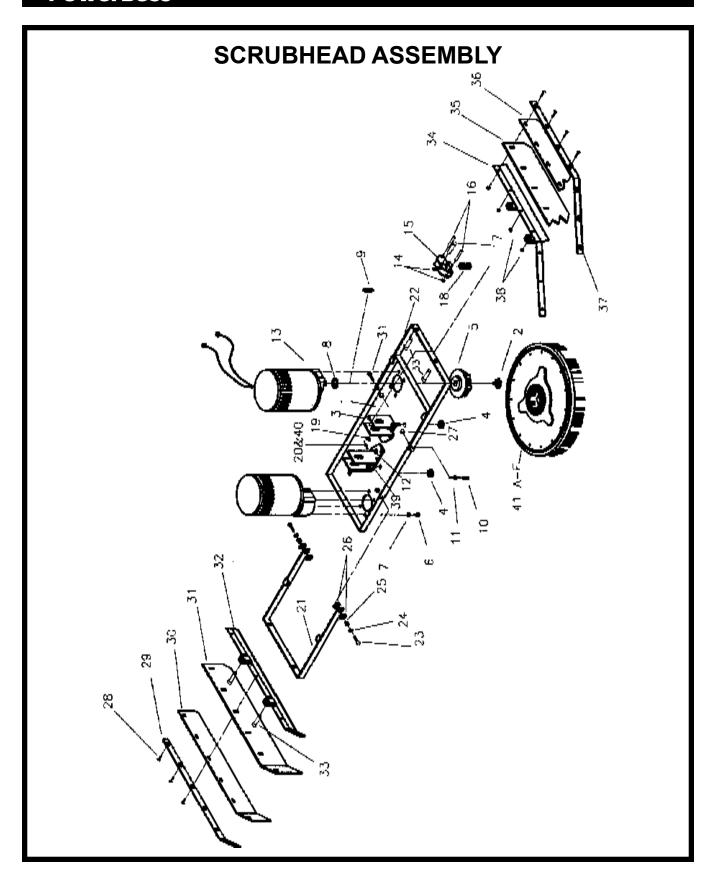
ITEM	PART NO.	QTY.	DESCRIPTION
1	210033	2	Oilite Thrust Washer
2	260041	2	Oilite Flange Bushing
3	363-816	1	Nut-Nyloc 1/2-20
4	383098	2	Universal Joint
5	383152	1	Steering Wheel
6	383171	1	Locking Pin Shaft
7	383172	1	Locking Pin Head
8	383211	1	Housing, Compression Spring
9	383214	1	Pivot Arm
10	383215	1	Upper Bracket Weldment
11	383218	1	Steering Weldment
12	383221	1	Spring, Compression
13	383277	1	Woodruff Key, 3/16 x 3/4
14	383278	1	Shaft, Upper Steering
15	383279	1	Shaft, Middle Steering
16	383280	1	Shaft, Lower Steering
17	383284	1	Cover, Steering Top
18	383285	1	Cover, Steering Bottom
19	383296	1	Cover, Steering Weldment
20	3331835	2	SCR-MC 8-32 x .50 STPL
21	710360	2	SCR-MC 10-32 x 1.0 STPL
22	710961	1	SCR-SC 1/4-20 x .37
23	711350	2	Nut Nyloc 10-32
24	711380	2	Nut Nyloc 3/8-16
25	711803	1	Cotter Pin .06 x .75
26	712099PLT	2	BLT-Shoulder 1/2 x 1/2
27	712117	1	Clevis Pin 3/16 x 19/32
28	712310	1	WSR-Flat .52 x .87 x .06
29	712811	8	SCR-MC 10-24 x .5 STPL
30	760043	4	Key .187 Sq. x .675
31	809148	1	E-Ring .75
32	3330940	2	Bearing Flange, 3/4
33	833629	1	Master Chain Link
34	383407	4	Valcro Strips 1" Lg.
35	3400009	4	SCR-CAR 5/16-18 x 1.00
36	3400088	4	WSR-Flat 5/16
37	3400080	4	Nut-Nyloc 5/16-18





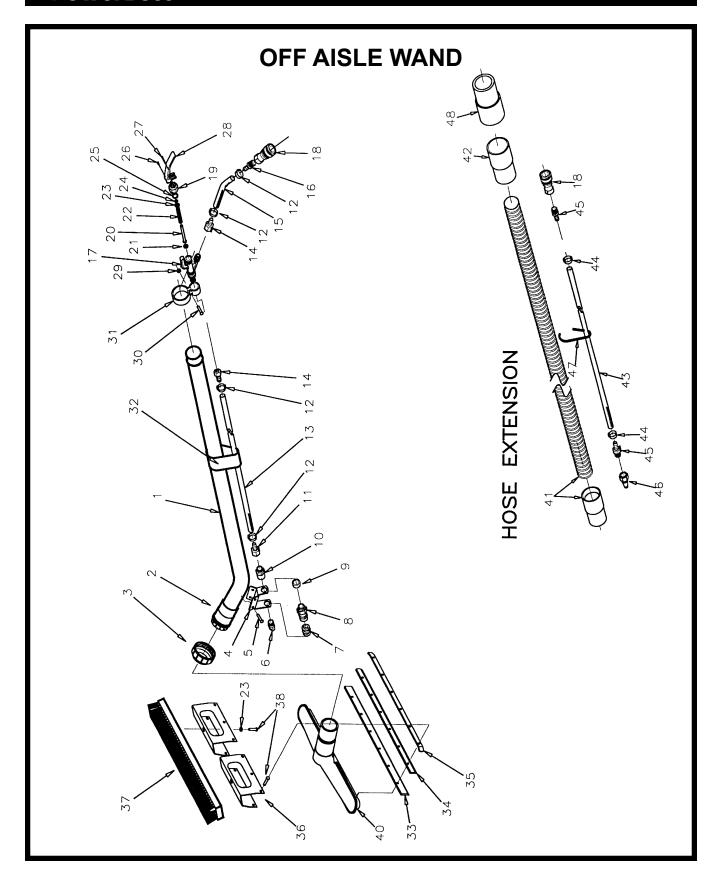


ITEM	PART NO.	QTY.	DESCRIPTION
1	383138	1	Bladder Frame
2	383089	1	Bladder Bag
3	383139	1	Bladder Plate
4	383101	1	Bladder Gasket
5	383141	2	Angle Bladder, Top-Bottom
6	383140	2	Angle Bladder, Side
7	130029	4	Grommet, .75 x .31 x .25
8	715206	1	Decal-Rec., Tank Cover
9	383210	1	1 1/2" Adapter, MPT
10	383379	1	Elbow 1 1/2" PVC
11	840099	1	Filter Screen
12	840102	1	Cap, Filter
13	833160	2	1.5" Pipe Coupling
14	430095	2	PVC Bushing, 1.5 x 1.25
15	383365	1	Stand Pipe, 1.5
16	383302	1	Solution/Recovery Tank
17	712683	22	Nut-Hex 5/16-18
18	712579	22	WSR-Flat .31 x 1.37 x .06
19	840059	22	Cap, Thread Cover
20	383146	1	Solution Strainer
21	383046	1	MPT Reducer, 3/4" x 1/2"
22	828970	1	WSR-Neoprene 1.87 x 2.4 x .125
23	450081	1	WSR-SS 1.908 x 2.41 x .03
24	450083	1	Insert Fit, White
25	340047	1	3/4" Barb Fitting
26	715205	1	Decal, Solution Tank Cover
27	420013	2	Tube 1/2" x 3" Lg.
28	742708-2	1	Float Switch with Male Term
29	742833	1	Cable Assy.
30	383319	1	Fitting Plug, 1/2 MPT
31	383318	1	2" MPT x 2" Barb
32	383401	1	Plate, Gasket Backing
33	383402	1	Gasket, Dump Cover
34	383437	1	Cap, Dump Cover





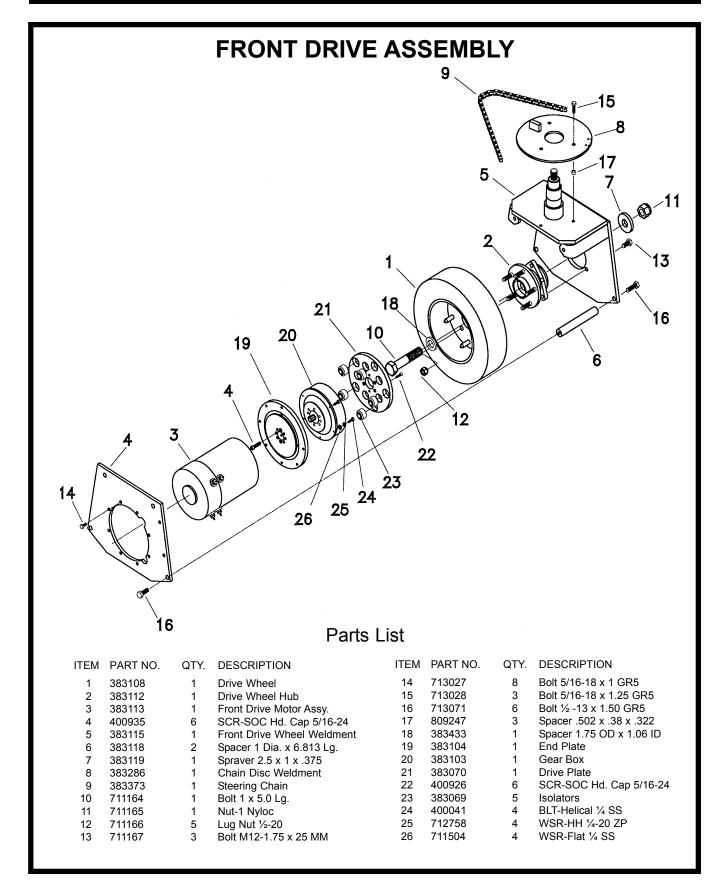
ITEM	PART NO.	QTY.	DESCRIPTION
1	383951	1	WB Motor Pan
2	210066	2	Drive Hub Retainer Belt
3	383053	2	Lift Bracket Weldment
4	383228	2	Nylon Nut 3/8 NPT
5	430163	2	Drive Hub w/Steel Insert
6	710986	8	SCR-SC 3/8-16 x 1.00
7	711546	8	WSR-Helical 3/8
8	711517	2	WSR-Flat .77 x 1.37 x .03
9	833621	2	Key 1/4 x 1/4 x 1
10	712575	6	BLT-HH 5/16-18 x .75 SS
11	711545	6	WSR-Helical 5/16
12	711343	6	Nut 5/16-18 SS
13	742714	2	36V Motor (1 hp)
14	711506	4	WSR-Flat 5/16 ST PL
15	320255	2	BRK, Spring Support
16	711671	4	Clevis Pin .31 x 2.13
17	3400755	2	Clevis Pin 1/2 x 2.25
18	260137	2	Compression Spring
	711594	2	WSR-Flat .56 x .88 x .03
19 20		6	
20 21	3400124 383768	1	5/8 Rue Ring
		1	Bracket Side Squeegee, LH
22	383780	4	Bracket Side Squeegee, RH
23	3402010	4	SCR-Hex 3/8-16 x 1.25 WSR-3/8 Flat
24	3400336	4	
25 26	3300339	8	Sleeve Bushing WSR .5 x 1.06 x .06
	711592	4	
27	3400340	13	Nut-Hex 3/8-16 SS
28	3400058	_	SCR-TRS 1/4-20 x 1.00
29	383779	1	Retainer-Side Squeegee LH
30	383778	1	Strip-Backup Side Squeegee LH
31	383777	1	Squeegee, Side LH
32	383771	1	Weld-Squeegee Mnt. LH
33	3400126	4	Pin Hitch 1/2 x 1.50
34	383782	1	Weld-Squeegee Mnt. RH
35	383784	1	Squeegee Side RH
36	383785	1	Strip Backup Side Squeegee RH
37	383786	1	Retainer Side Squeegee RH
38	3400063	13	Nut Flange Lock 1/4-20
39	3400261	2	Fitting Brass 1/4 MPT x 3/8 Barb
40	3400125	4	3/8 Rue Ring
41A	381036	2	Dyna Scrub Brush
41B	381037	2	Power Scrub Brush
41C	381038	2	Pad Holder
41D	381039	2	Nylon Brush
41E	381040	2	Poly-Grit Brush
41F	381041	2	Strata-Grit Brush



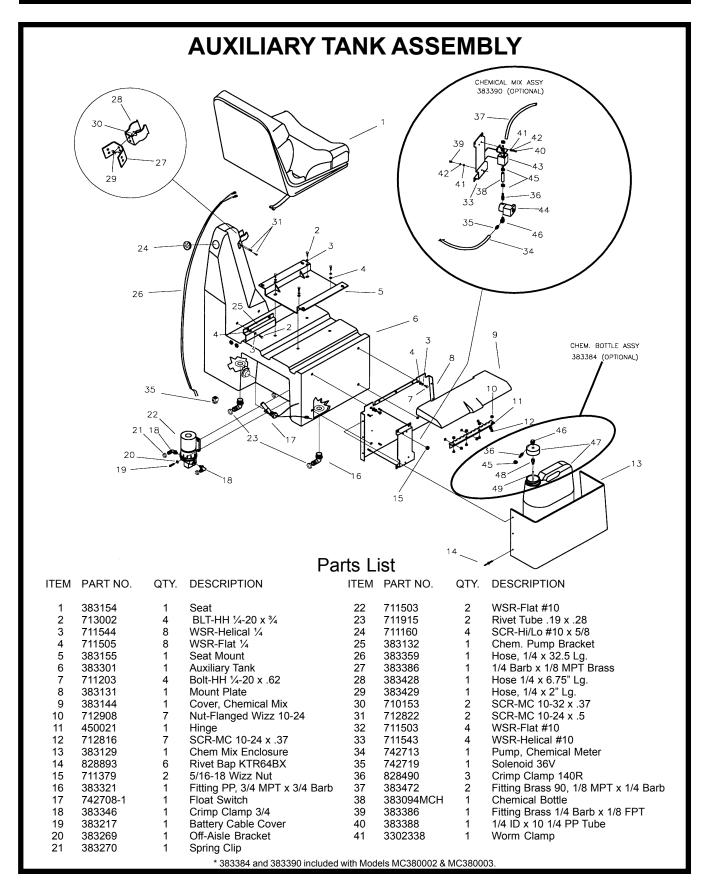


ITEM	PART NO.	QTY.	DESCRIPTION
1	383411	1	Wand AL, 1 1/4
2	832285	1	1 1/2 End Coupling
3	832284	1	Nut
4	100004	1	Bracket, Spray Jet
5	711903	4	Rivet, Pop .19 x .46
6	829115	1	Vee Jet, 1/4 NPT
7	711594	3	WSR-Flat .56 x .88 x .03
8	833384	1	Check Valve, 1/4
9	832884	1	Spacer
10	828953	1	Flare Connector
11	833488	1	HB Swivel Fl. 14HBLFSV-4-4
12	828490	4	Crimp Clamp
13	828488	3'	Hose
14	831327	2	1/4 MPT x 1/4 Hose Barb
15	828488	.42	Hose
16	829106	1	1/4 MPT Barb
17	390052	1	Body
18	828370	2	Coupler
19	390055	1	Cap
20	390054	1	Valve
21	390062	1	O-Ring
22	390049	1	Spring
23	712320	3	wsr #10
24	390061	1	O-Ring
25	390060	1	O-Ring
26	390063	1	Pin
27	711803	1	Cotter Pin
28	390053	1	Trigger
29	712636	1	Nut-Hex 10-32 SS
30	712545	1	SCR-MC 10-32 .87
31	390056	1	Valve Mount
32	762173	1	Tube, Shrink
33	500295	2	Rubber, Squeegee
34	500296	2	Rubber, Reinforcing
35	800615	2	Retaining Strip
36	833789	2	Bracket Mounting
37	833841	1	Brush
38	711106	14	SCR-ST-A #10 x .75
39	833789	2	Bracket Mounting
40	808648	1	Nozzle, Squeegee
41	801045	1	Hose, CP 1 1/2 x 15 ft.
42	383416	1	Cuff Enlarger, 1 1/2 Hose
43	828488	16'	Hose
44	828490	2	Crimp Clamp
45	828106	2	1/4 MPT Barb
46	828368	1	BH2-51 Male Coupler
47	828062	5	Cable Ties
48	383254	1	Hose Cuff

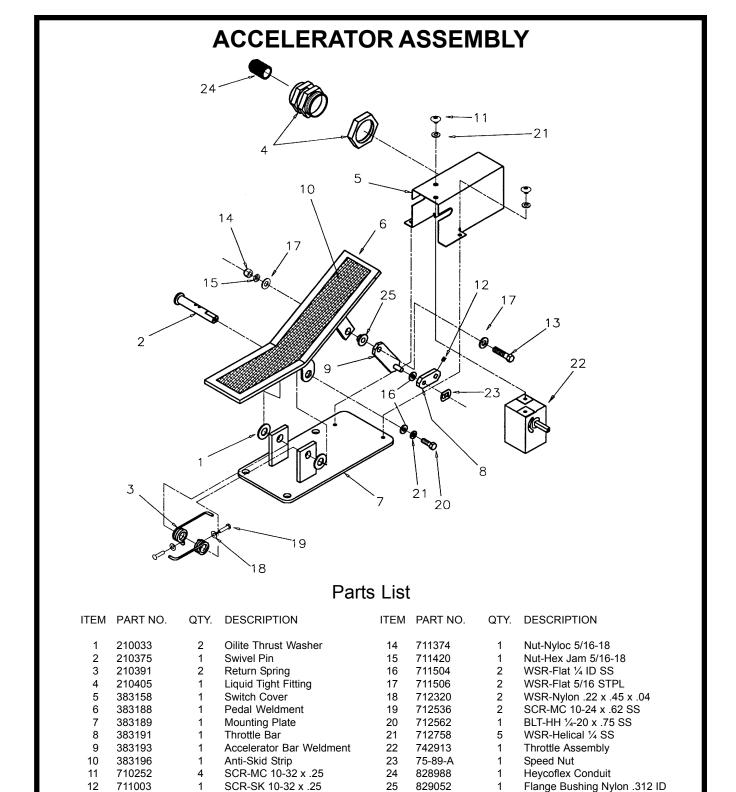










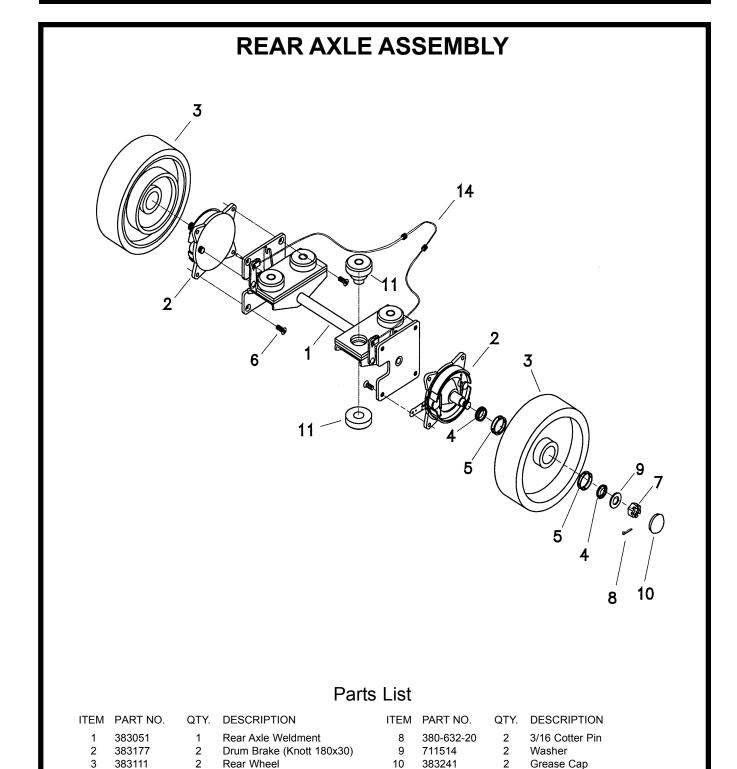


13

711231

BLT-HH 5/16-18 STPL





Bearing Cone

Bearing Cup

½-20 UNF FSHS

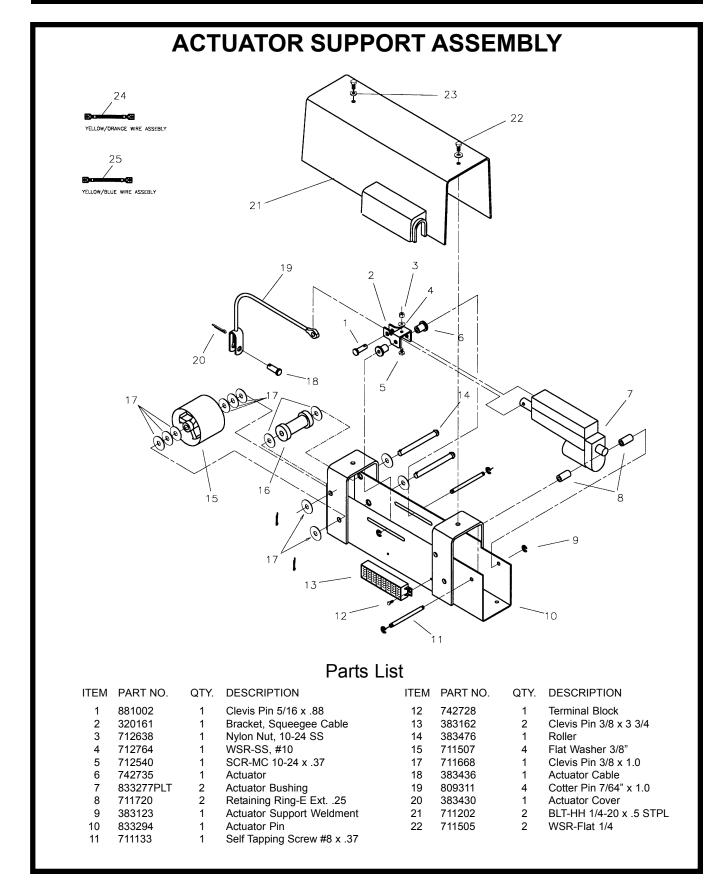
1-14 UNS-2A Slotted Nut

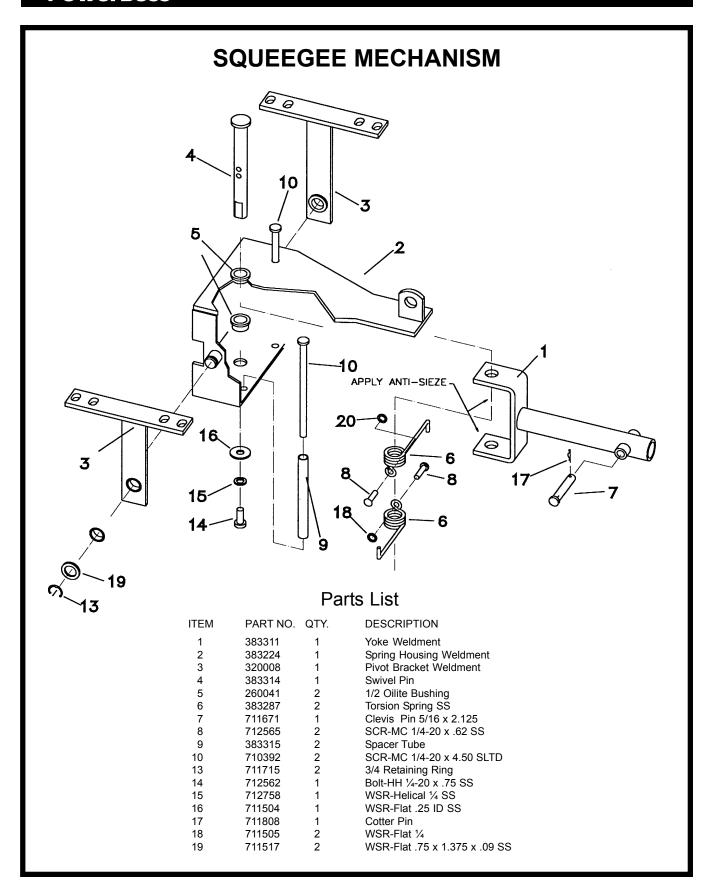
Ring & Bushing Isolator Clevis Pin ¼ x .88 Zinc PLT

Cotter Pin, Hair #13

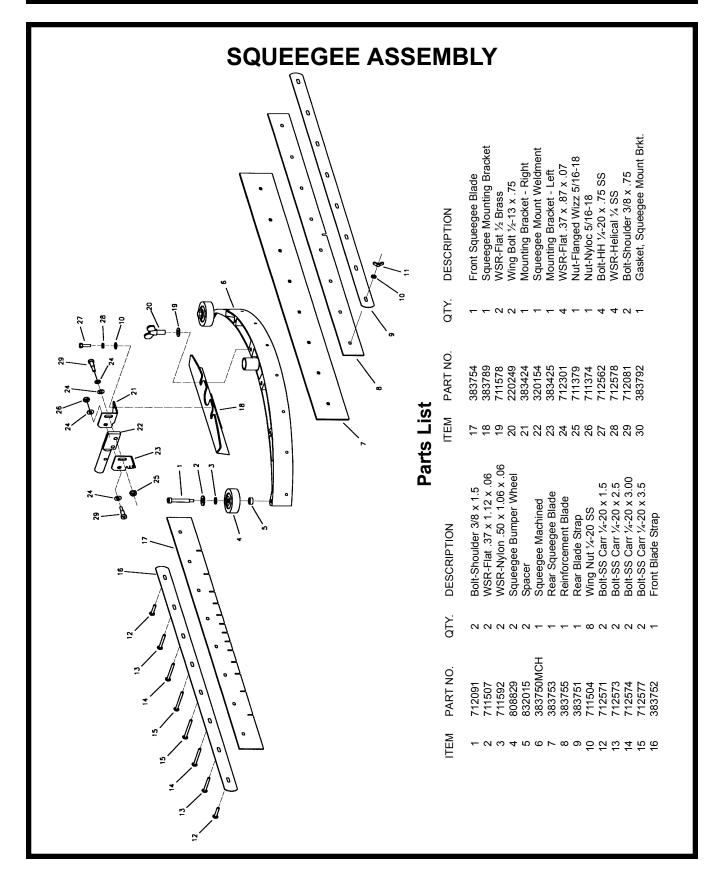
Brake Cable



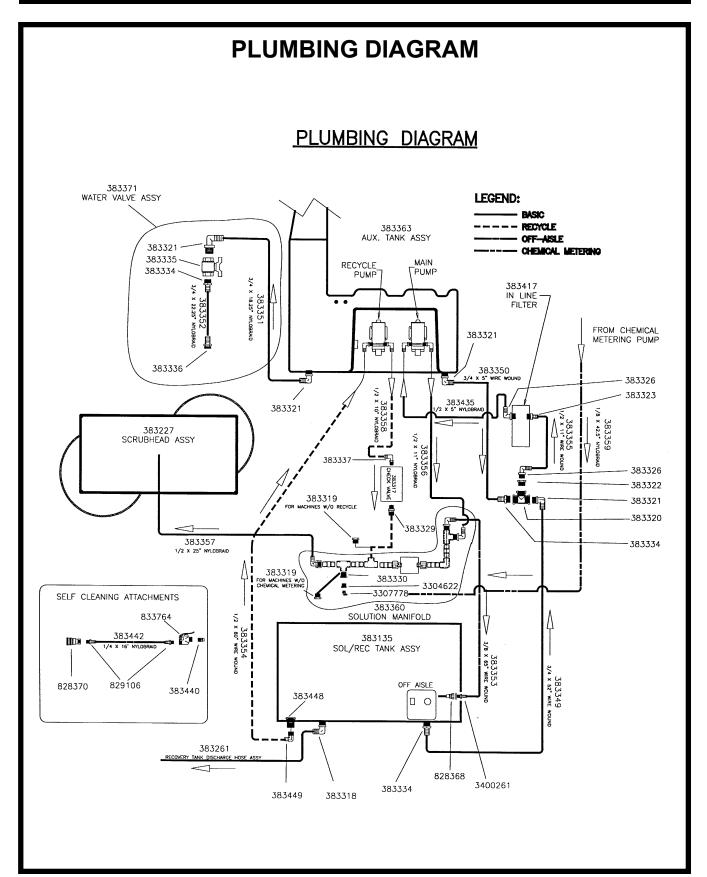


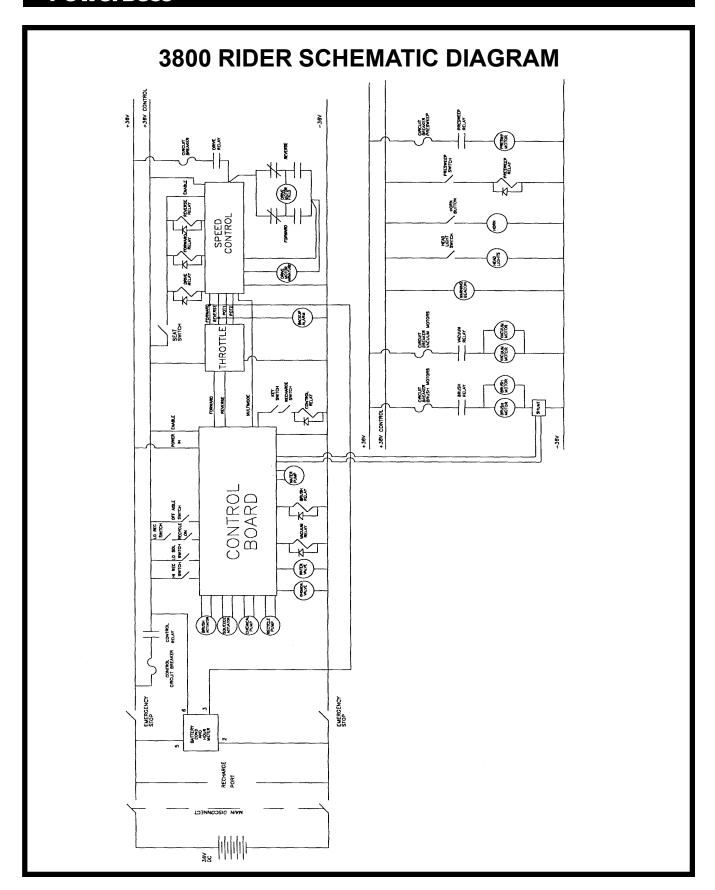


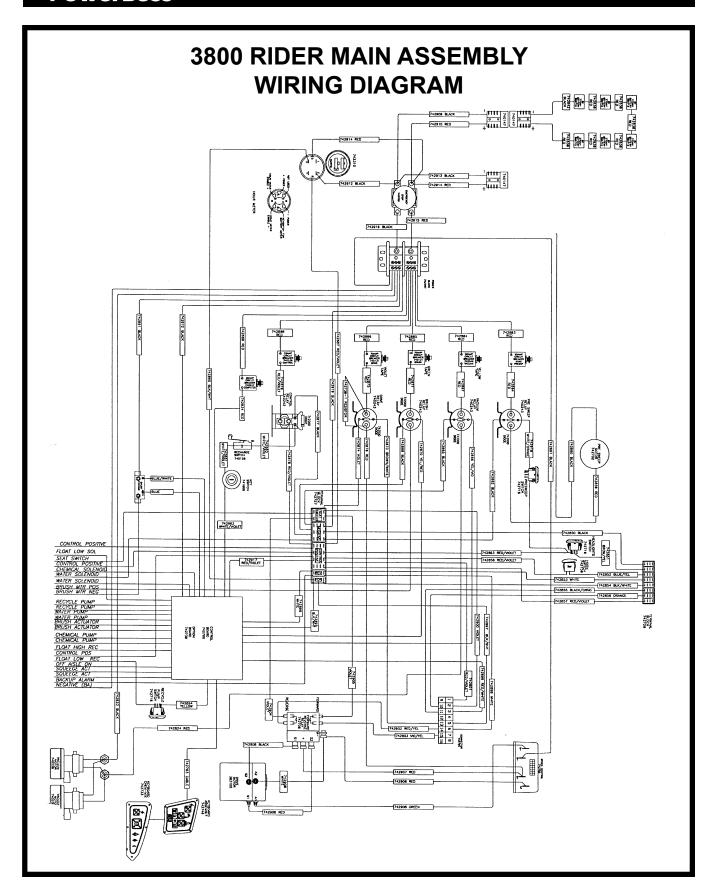


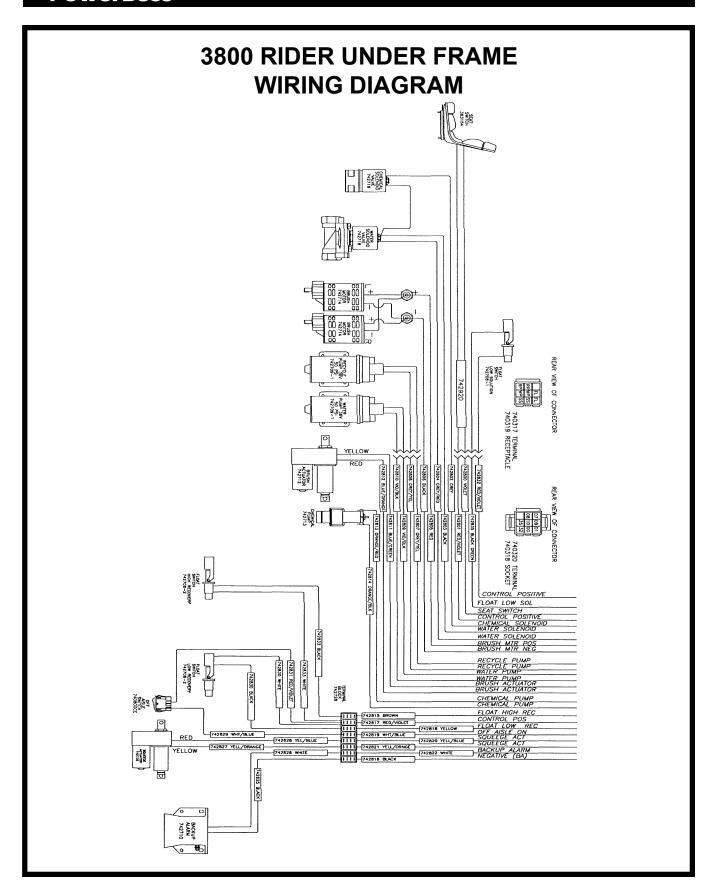




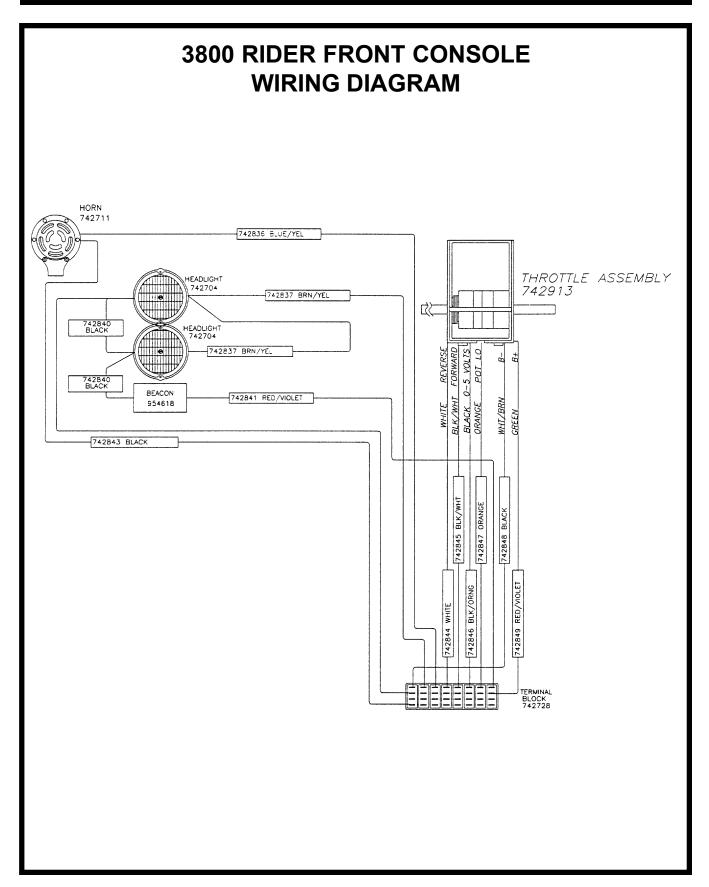














3800 RIDER WIRE COLOR WIRING GUIDE

Black/Green Black/Orange Black/White Blue Blue/White Blue/Orange Blue/Green Blue/Green Blue/Yellow Brown Brown/White Brown/Yellow Grey Grey/Red Grey/Red Grey/Pellow Orange/Black Orange/Black Orange/Red Red/Violet Red/White Red/Yellow Violet Violet/Black Violet/Yellow White White/Blue White/Orange White/Orange White/Orange White/Violet Yellow/Violet Yellow/Violet Yellow/Violet Yellow/Red Yellow/Orange Yellow/Orange Yellow/Blue Orange/Violet F	Negative Float Low Solution 0-5V Accelerator Forward - Accelerator Shunt Brush Actuator Brush Actuator Horn Float Hi Rec Orive Relay Coil Headlights Chemical Solenoid Valve Water Solenoid Valve Water Solenoid Valve Recycle Pump Pot Low Chemical Pump Chemical Pump Chemical Pump Positive System Ready Multimode Forward Relay Coil Seat Switch Water Pump Reverse Relay Coil Reverse Accelerator Off Aisle Switch Presweep System Start Recycle Vacuum Relay Coil Grueegee Actuator Squeegee Actuator Presweep Raise Presweep Actuator
---	--

Computer Only		
Black	Negative	742872
Black/Green	Float Low Solution	742816
Black/White	Forward - Accelerator	742895
Blue	Shunt	
Blue/White	Shunt	
Blue/Orange	Brush Actuator	742812
Blue/Green	Brush Actuator	742811
Brown	Float Hi Rec	742815
Grey	Chemical Solenoid Valve	742802
Grey/Red	Water Solenoid Valve	742804
Grey/Yellow	Recycle Pump	742807, 742808
Orange/Black	Chemical Pump	742814
Orange/Red	Chemical Pump	742813
Red	Positive	742889
Red/Violet	System Ready	742917
Red/White	Multimode	742899
Violet/Black	Water Pump	742809, 742810
White	Reverse Accelerator	742896
White/Blue	Off Aisle Switch	742819
White/Violet	System Start	742882
Yellow	Recycle	742894
Yellow/Violet	Vacuum Relay Coil	742866
Yellow/Red	Brush Relay Coil	742870
Yellow/Orange	Squeegee Actuator	742821
Yellow/Blue	Squeegee Actuator	742820



3800 RIDER COMPUTER WIRING GUIDE

MAIN BOARD



Side Closest to Input Connector

System Start	White/Violet	742882
Brush On	Yellow/Red	742870
Vacuum On	Yellow/Violet	742866
Water Solenoid	Grey/Red	742804
Multimode	Red/White	742899
Spare		
Squeegee Actuator	Yellow/Orange	742821
Squeegee Actuator	Yellow/Blue	742820
Water Pump	Violet/Black	742809
Water Pump	Violet/Black	742810
Brush Actuator	Blue/Orange	742812
Brush Actuator	Blue/Green	742811

Connector 742744



Side Closest to RJ11 Plug

Shunt+	Blue	
Shunt-	Blue/White	
System Ready	Red/Violet	742917
Forward	Black/White	742895
Reverse	White	742896
Off Aisle	White/Blue	742819
Recovery Tank Full	Brown	742815
Solution Tank Empty	Black/Green	742835

Spare

OPTION BOARD

Connector 742743

Side Closest to Main Board

Chemical Pump	Orange/Red	742813
Chemical Pump	Orange/Black	742814
Recycle Pump	Grey/Yellow	742807
Recycle Pump	Grey/Yellow	742808
Chemcial Solenoid	Grey	742802
Recycle On	Yellow	742894

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 warranteed 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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