# **OPERATION MANUAL**





## **POWER CLEAN 1000**

**CARPET EXTRACTOR** 

Item Code 19381 Edition 11 02 14 Photo updated on 2014-11

### **HOW TO USE THIS MANUAL**

This manual contains the following sections:

- HOW TO USE THIS MANUAL
- SAFETY
- OPERATIONS
- MAINTENANCE
- PARTS LIST

The HOW TO USE THIS MANUAL section will tell you how to find important information for ordering correct repair parts.

Parts may be ordered from authorized dealers. When placing an order for parts, the machine model and machine serial number are important. Refer to the MACHINE DATA box which is filled out during the installation of your machine. The MACHINE DATA box is located on the inside of the front cover of this manual.

MODEL	
DATE OF PURCHASE	
SERIAL NUMBER	
SALES REPRESENTATIVE #	
DEALER NAME	
OPERATIONS GUIDE NUMBER	
PUBLISHED	

The model and serial number of your machine is on the bottom back-end of the machine.

The SAFETY section contains important information regarding hazard or unsafe practices of the machine. Levels of hazards is identified that could result in product or personal injury, or severe injury resulting in death.

The OPERATIONS section is to familiarize the operator with the operation and function of the machine.

The MAINTENANCE section contains preventive maintenance to keep the machine and its components in good working condition.

The PARTS LIST section contains assembled parts illustrations and corresponding parts list. The parts lists include a number of columns of information:

- REF column refers to the reference number on the parts illustration.
- **PART NO.** column lists the part number for the part.
- QTY column lists the quantity of the part used in that area of the machine.
- DESCRIPTION column is a brief description of the part.
- SERIAL NO. FROM column indicates the first machine the part number is applicable to. When the machine design has changed, this column will indicate serial number of applicable machine. The main illustration shows the most current design of the machine. The boxed illustrations show older designs. If column has an asterisk (\*), call manufacturer for serial number.
- NOTES column for information not noted by the other columns.

NOTE: If a service or option kit is installed on your machine, be sure to keep the KIT INSTRUCTIONS which came with the kit. It contains replacement parts numbers needed for ordering future parts.

## **MACHINE DATA LOG/OVERVIEW**

MODEL
DATE OF PURCHASE
SERIAL NUMBER
SALES REPRESENTATIVE #
DEALER NAME
OPERATIONS GUIDE NUMBER
PUBLISHED

	YOUR DEALER
Name:	
Address:	

### IMPORTANT SAFETY INSTRUCTIONS

# When using an electrical appliance, basic precaution must always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.



To reduce the risk of fire, electric shock, or injury:

**Use only** indoors. Do not use outdoors or expose to rain.

**Use only** as described in this manual. Use only manufacturer's recommended components and attachments.

If the machine is **not working properly**, has been dropped, damaged, left outdoors, or dropped into water, return it to an authorized service center.

**Do not** operate the machine with any openings blocked. Keep openings free of debris that may reduce airflow.

This machine is not suitable for picking up hazardous dust.

**Machine can cause a fire** when operating near flammable vapors or materials. Do not operate this machine near flammable fluids, dust or vapors.

This machine is suitable for commercial use, for example in hotels, schools, hospitals, factories, shops and offices for more than normal housekeeping purposes.

Maintenance and repairs **must be done** by qualified personnel.

**During operation**, attention shall be paid to other persons, especially children.

When leaving unattended, secure against unintentional movement.

**The machine shall only** be operated by instructed and authorized persons.

When leaving unattended, switch off or lock the main power switch to prevent unauthorized use.

Do not handle the plug or machine with wet hands.

**Do not** unplug machine by pulling on cord. To unplug, grasp the plug, <u>not</u> the cord.

**Do not** use with damaged cord or plug. Follow all instructions in this manual concerning grounding the machine.

**Do not** pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners.

**Do not** pull/run machine over cord. **Keep** cord away from heated surfaces.

Connect to a **properly** grounded outlet. See Grounding Instructions.

## SAVE THESE INSTRUCTIONS

### HAZARD INTENSITY LEVEL

The following symbols are used throughout this guide as indicated in their descriptions:

### HAZARD INTENSITY LEVEL

There are three levels of hazard intensity identified by signal words -**WARNING** and **CAUTION** and **FOR SAFETY.** The level of hazard intensity is determined by the following definitions:

## **!** WARNING

WARNING - Hazards or unsafe practices which COULD result in severe personal injury or death.

## ! CAUTION

**CAUTION** - Hazards or unsafe practices which could result in minor personal injury or product or property damage.

FOR SAFETY: To Identify actions which must be followed for safe operation of equipment.

Report machine damage or faulty operation immediately. Do not use the machine if it is not in proper operating condition. Following is information that signals some potentially dangerous conditions to the operator or the equipment. Read this information carefully. Know when these conditions can exist. Locate all safety devices on the machine. Please take the necessary steps to train the machine operating personnel.

### FOR SAFETY:

DO NOT OPERATE MACHINE:

Unless Trained and Authorized.

Unless Operation Guide is Read and understood.

In Flammable or Explosive areas.

In areas with possible falling objects.

#### WHEN SERVICING MACHINE:

Avoid moving parts. Do not wear loose clothing; jackets, shirts, or sleeves when working on the machine. Use manufacturer approved replacement parts.

### **GROUNDING INSTRUCTIONS**

## THIS PRODUCT IS FOR COMMERCIAL USE ONLY.

### **ELECTRICAL:**

In the USA this machine operates on a standard 15 amp 115V, 60 hz, A.C. power circuit. The amp, hertz, and voltage are listed on the data label found on each machine. Using voltages above or below those indicated on the data label will cause serious damage to the motors.

### **EXTENSION CORDS:**

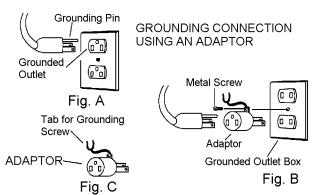
If an extension cord is used, the wire size must be at least one size larger than the power cord on the machine, and must be limited to 50 feet (15.5m) in length.

### **GROUNDING INSTRUCTIONS:**

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord equipment-grounding having an conductor and grounding plug. The must be inserted into appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

This appliance is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug in "Fig. A". A temporary adaptor that looks like the adaptor in "Fig. C" may be used to connect this plug to a 2-pole receptacle as shown in "Fig. B", if a properly grounded outlet is not available. The temporary adaptor should be used only

until a properly grounded outlet (Fig. A) can be installed by a qualified electrician. The green colored rigid ear, lug, or wire extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw.



Note: Adaptors are not allowed in Canada.

Improper connection of the equipmentgrounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance - if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

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### **TECHNICAL SPECIFICATIONS**

**POWER TYPE** 

**ELECTRICAL:** 115 V, 15 A, 60 HZ

**ELECTRIC VACUUM MOTOR:** (1) –3

stage, 1 hp, 99 cfm (2.80 cubic meters/min.) Waterlift –117" (297cm)

**BRUSH:** (1) 18" (45.7 cm.)

SOLUTION PUMP: 100 PSI, diaphragm

style, internal bypass

**SOLUTION CAPACITY:** 10 gallons (37.8

ltr)

RECOVERY CAPACITY: 10 gallons (37.8

ltr)

BRUSH SPEED: 1000 rpm

GENERAL DIMENSIONS/WEIGHT

**Vacuum shoe:** 20" (51 cm) cast aluminum with spring loaded down

pressure

WHEELS: (2) 10" dia. (25 cm) wheels by

2

**WEIGHT:** 94 lbs. (43 kg)

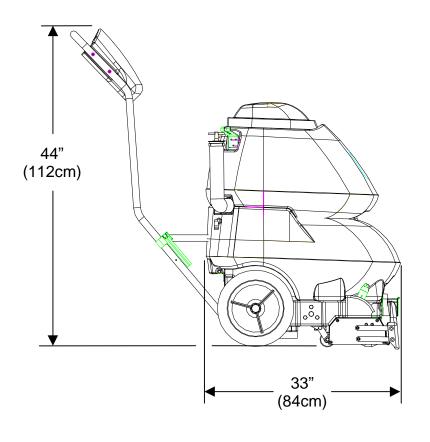
**LENGTH:** 33" (84 cm)

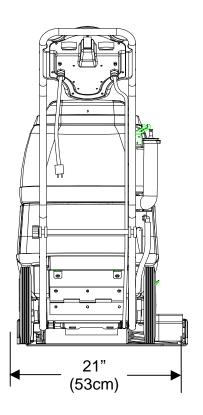
**HEIGHT:** 44" (112 cm)

**WIDTH:** 21" (53 cm)

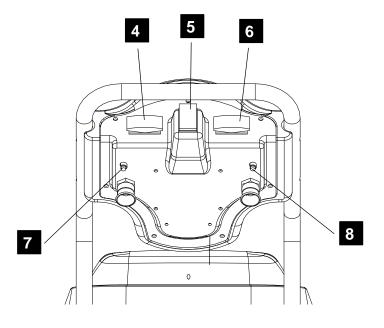
**SOLUTION SPRAY:** 2 quick change jets.

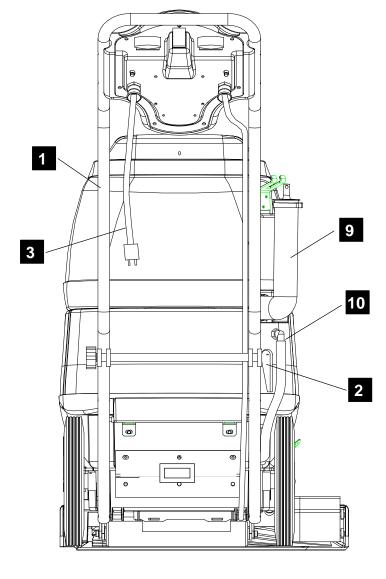
**POWER CABLE:** 50' (12.7 m) (14 gauge)





### **CONTROLS/COMPONENT LOCATIONS**

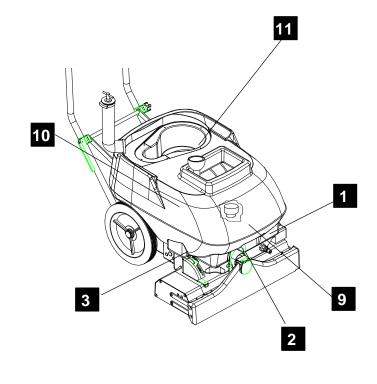


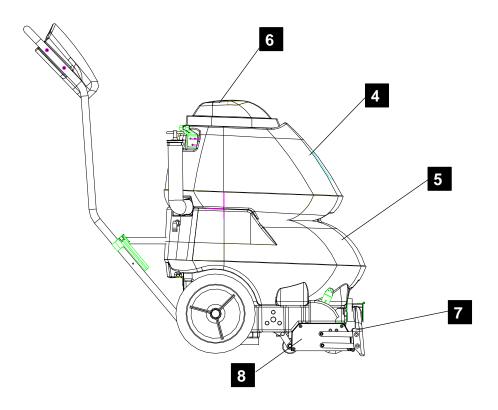


- **1. Main Handle.** Used to pull and maneuver machine.
- **2.** Handle Adjustment. Used to adjust height of handle.
- 3. Electrical Cord.
- **4. Pump Switch.** Turns on pump and enables spray.
- 5. Brush/Spray Switch. Turns on brush motor and activates electrovalve to dispense solution to floor through jets. Intermittent, off, and continuous settings.
- **6.** Vacuum Motor Switch. Turns on vacuum motor.
- **7.** Brush Motor Circuit Breaker. 6 amp. Breaker protecting brush motor.
- 8. Vacuum Motor Circuit Breaker.
  15 amp. Breaker protecting vacuum motor.
- **9. Recovery Dump Hose.** Facilitates draining dirty cleaning solution.
- **10.** Solution Dump Hose. Facilitates draining excess cleaning solution from solution tank.

### **CONTROLS/COMPONENT LOCATIONS**

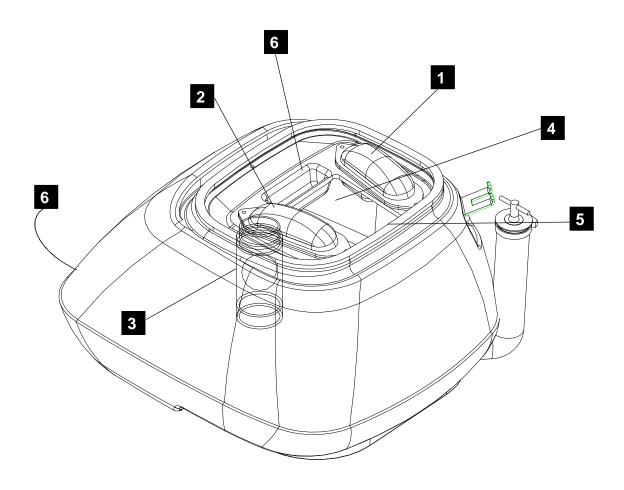
- Solution Accessory Tool Hookup.
   Used for various auxiliary cleaning tools.
- **2. Vacuum Hose Door.** Used to connect various auxiliary 1 ½ inch cleaning tool vacuum hoses.
- **3.** Brush Height Adjustment. Used to regulate brush height from storage position to various carpet heights.
- **4. Recovery Tank.** Used to collect dirty cleaning solution.
- **5. Solution Tank.** Used to hold cleaning solution.
- **6.** Recovery Tank Dome.
- 7. Vacuum Shoe.
- 8. Brush Housing.
- 9. Front Lifting Handle.
- 10. Cleaning Solution Filter.
- 11. Solution Tank Fill Hose.



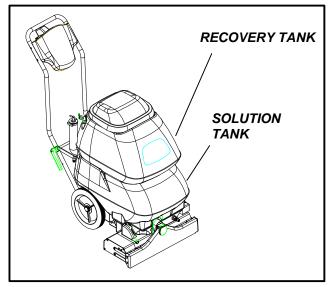


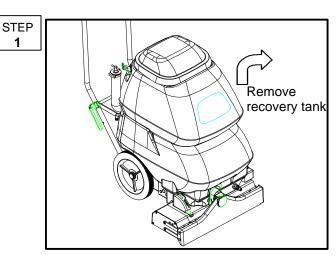
### **CONTROLS/COMPONENT LOCATIONS**

- 1. Solution Intake Cover
- 2. Vacuum Intake Cover
- 3. Float Shut-Off
- 4. Clean-Out Opening
- 5. Pour Spout
- 6. Lift Handle

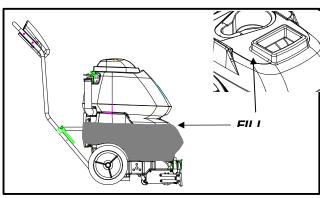


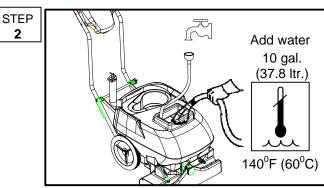
### FILLING OPERATIONS





1



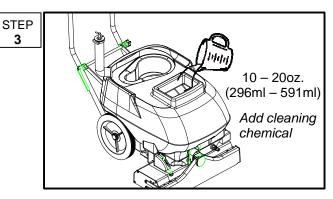


### **FILLING THE FB10**

NOTE: Use clean bucket of water to fill solution tank

Do not put defoamer, solvents, spotter or prespray chemicals in the solution tank.

Do not allow water to spill into vacuum motor inlet. Dry spillage from top of solution tank before replacing recovery tank.



### **CHEMICALS**

Suitable Chemicals Alkalis Detergents Hydroxides Soaps

Vinegar

Non-Compatible Chemicals

Aldehydes

Aromatic Hydrocarbons

SP Butyls

Carbon Tetrachloride

Clorox\*

Chlorinated Bleaches

Chlorinated Hydrocarbons

Lysol\*

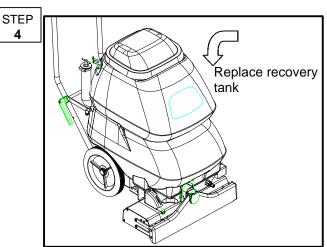
Methyl Ethel Ketone (MEK)

Perchorethylene (perc)

**Phenolics** 

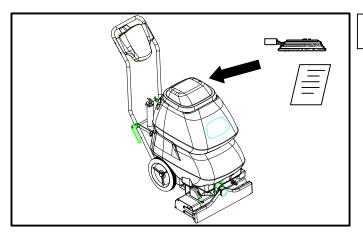
Trichlorethylene

D-Limonen

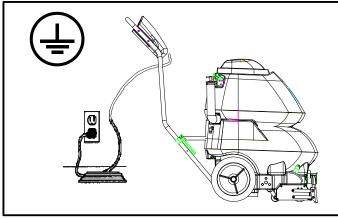


<sup>\*</sup> Product Trademark Names

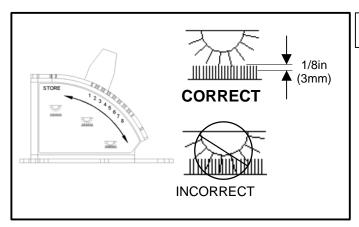
### **OPERATIONS**



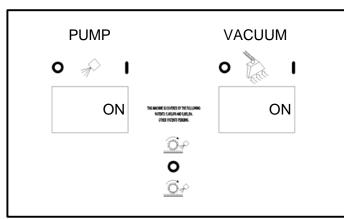
Remove electrical cord and literature from recovery tank. Fill solution tank (see filling instructions page 7).



STEP Plug cord into grounded outlet. Note: Be sure dome is seated on recovery tank, and float shut-off is installed correctly.



Adjust brush to proper setting. Note: For good operation the brush must skim the carpet. If circuit breaker trips raise brush to prevent damage to motor or carpet.



Turn on both Vacuum and Pump motor switches ("ON"="I").

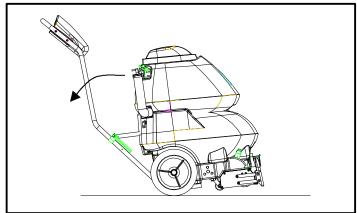
STEP

STEP

### **OPERATIONS**

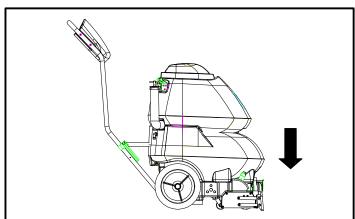
Adjust handle to comfortable operating position. Tip machine back by main handle to move to starting point.





Lower machine to floor.

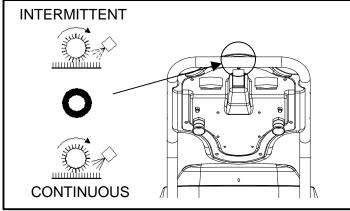




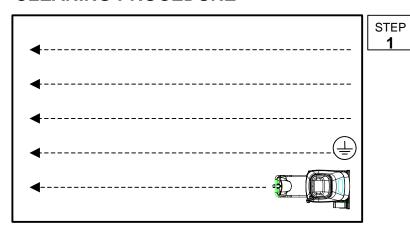
Select intermittent or continuous switch setting to turn on brush and start solution spray.

The intermittent setting requires the operator to hold the switch in the "on" position with the thumb, and is typically used in small areas where short cleaning passes are made. The continuous setting allows the operator to set the switch in the "on" position with one touch, and is typically used in large areas where long cleaning passes are made.





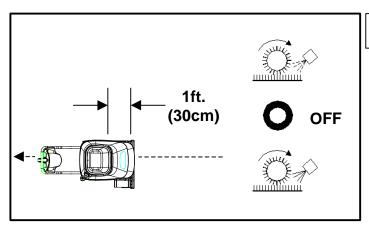
### **CLEANING PROCEDURE**



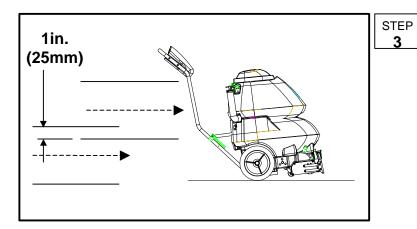
Start at wall closest to power outlet. Pull straight back without pushing down on handle.

1

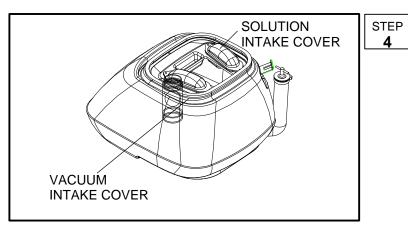
3



STEP Release intermittent setting or turn off continuous setting on brush/spray switch approximately 1 foot before ending cleaning pass.



Push down on handle to raise vacuum shoe and brush before moving to the next cleaning pass. Overlap brush contact area approximately 1inch.

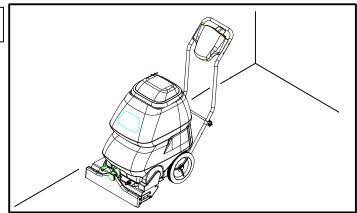


During operation, observe the following: The FB10 is equipped with clear internal covers to facilitate operator viewing of dirty solution and vacuum air During operation, observe the vacuum intake cover. Large amounts of water or foam entering the vacuum system can damage the vacuum motor. If you notice either condition, shut down the machine immediately. Empty recovery tank and/or add defoamer to recovery tank.

### **CLEANING PROCEDURE**

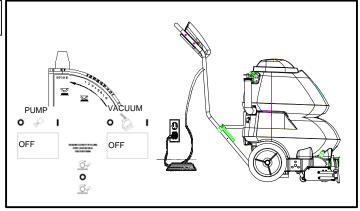
Use right side of machine for cleaning against walls.

STEP 5



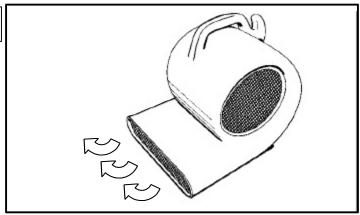
After cleaning, turn off all controls, return brush to storage position and carefully unplug machine.

STEP 6



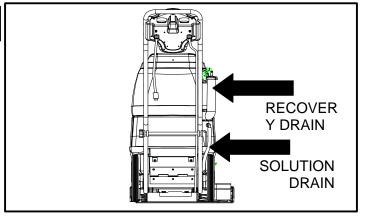
To speed drying, use a Mach $^{\text{TM}}$  3 fan.

STEP 7

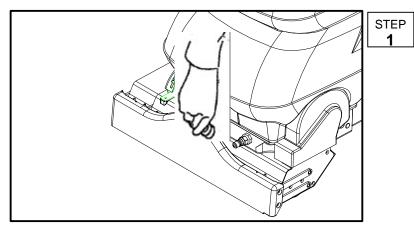


Empty recovery tank by releasing dump hose. Use a hose with cold water to clean out the recovery tank. Also drain solution tank after each use.

STEP 8



### **ACCESSORY TOOL USAGE**

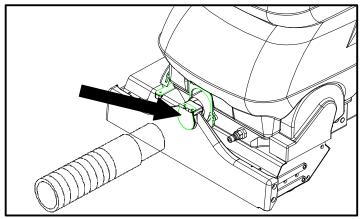


Use only one of the following acceptable accessory tools.

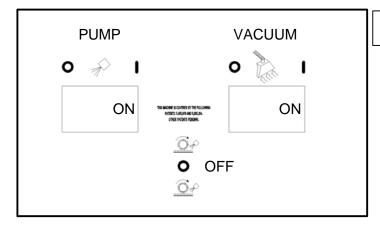
CST DH SW

CST DH SW SW-PRO 39504

Pull back collar and insert over machine mounted fitting, then release collar to lock into place.

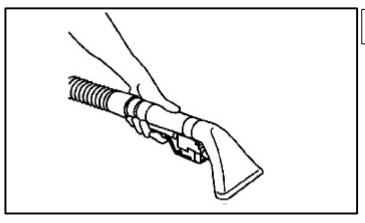


Lift door on front of vacuum shoe and insert 1 ½ inch hose cuff into hole.



Turn on Pump and Vacuum Switch.

Note: Be sure intermittent/continuous switch is in center (off) position and brush is in storage position.



Squeeze handle on accessory tool to begin cleaning.

STEP

### **MAINTENANCE**

### PERIODIC MAINTENANCE

Twice a month, flush a white vinegar solution (One quart vinegar to two gallons of water) or anti-browning solution (mixed as directed) through the extractor. This will prevent build-up of alkaline residue in the system. If spray jets become clogged, remove the spray tips, wash them thoroughly, and blow-dry.

NOTE: Do not use pins, wire, etc. to clean nozzles as this could destroy spray pattern.

Periodically inspect all hoses, electrical cables and connections on your machine. Frayed or cracked hoses should be repaired or replaced to eliminate vacuum or solution pressure loss. If the cable insulation is broken or frayed, repair or replace it immediately. Don't take chances with electrical fire or shock.

## DAILY / REGULAR MAINTENANCE

Before making any adjustments or repairs to the machine, disconnect the power cord from electrical source.

- 1. Empty unused cleaning solution from the solution tank.
- Inspect and clean filter screen in solution tank.
- 3. Flush pumping system with 4 or 7 liters of clean, hot water.
- After each use, rinse tank with fresh water. Periodically inspect the recovery tank and decontaminate if necessary, using a Hospital Grade Virucide or a 1-

- 10 bleach to water solution. Waste water should be disposed of properly.
- 5. Check for and remove any lint or debris around vac shoe.
- 6. Check spray jets for full spray pattern.
- 7. Remove lint and dirt build-up from brush and housing.

NOTE: Brush removal.

- A. To remove brush, grab and pull brush out from end opposite drive belt (operator's right). Remove other end from brush driver.
- B. To install brush, line up slots in brush core with pin in driver on drive belt side (operator's left) and push brush onto driver. Then snap bearing end (opposite end) of brush into retaining clip.
- 8. Check cooling air screen (located on frame behind left wheel) for lint or debris.
- 9. Check float and shut-off screen and clean as necessary.

NOTE: Always store machine with brush in "Store" position.



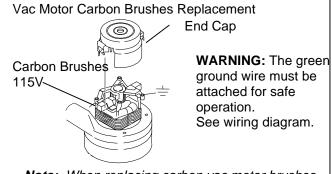
## ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

### **VACUUM MOTOR REPLACEMENT**

- 1. Turn off all switches and unplug machine.
- 2. Remove recovery tank.
- 3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
- Locate the vacuum motor wires and disconnect at the connector. Close the solution tank.
- 5. Remove the (6) screws holding the vacuum motor cover (p/n 27809) to the solution tank.
- 6. Remove the vacuum motor.
- 7. Reverse process to install vacuum motor.

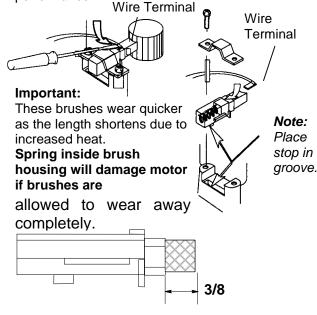
### SOLUTION PUMP REPLACEMENT

- 1. Turn off all switches and unplug the machine.
- 2. Remove recovery tank.
- 3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
- 4. Remove solution hoses from fittings in pump.
- 5. Remove the (2) screws that fasten the pump to the frame.
- 6. Reverse process to install pump.

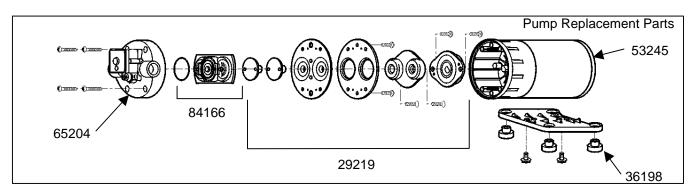


**Note:** When replacing carbon vac motor brushes loosen wire terminal **BEFORE** removing screws on bracket.

If armature commutator is not concentric, extremely pitted, or grooved the motor will need to be replaced or sent to a qualified service center to restore vac performance.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" long.



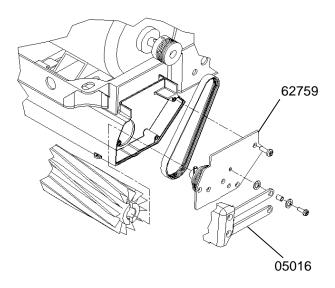
### **MAINTENANCE**



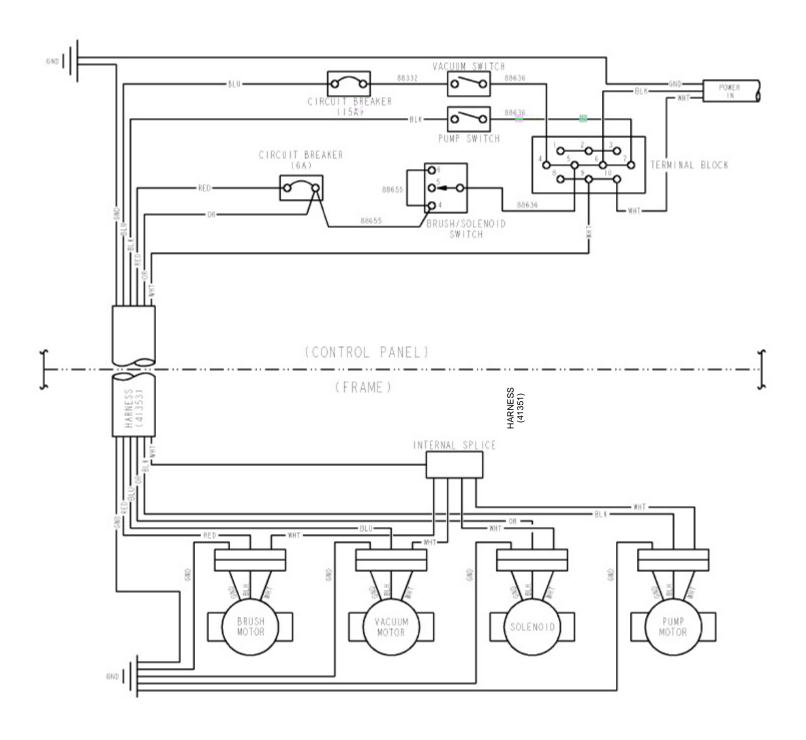
## ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

### **BELT REPLACEMENT**

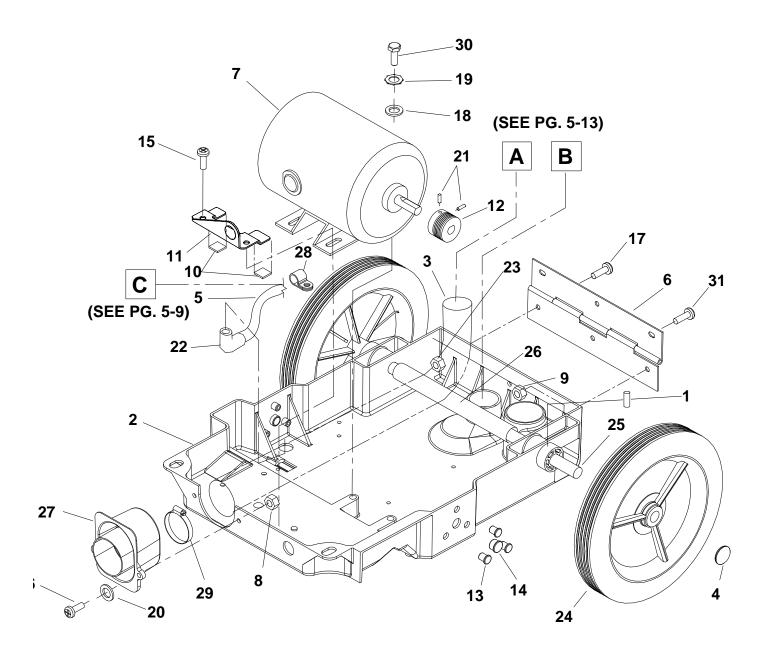
- 1. Turn off all switches and unplug machine.
- 2. Remove recovery tank and brush.
- Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
- 4. Loosen the (4) screws that hold the brush motor in place and slide motor forward to release tension in belt.
- 5. Remove the (2) screws that fasten the vacuum shoe links (p/n 05016) to the brush housing.
- 6. Remove the (3) screws that fasten the side plate (p/n 62759) to the brush housing to remove belt. NOTE: All components associated with driving the brush will come out with the side plate.
- 7. Reverse process to install belt.



### **WIRING DIAGRAM**



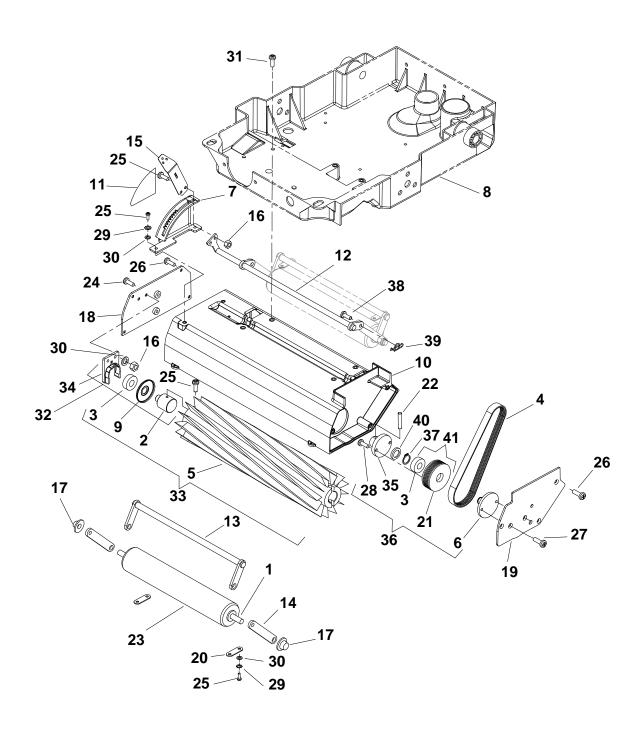
### **FRAME GROUP**



### **FRAME PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-66052	1	PIN, ROLL 1/8" X 1.0"L		
2	3-34341	1	FRAME		
3	3-39528	1	HOSE ASM, 1.5 BLK VAC X 15.5		
4	3-41236	2	HUBCAP, 5/8" SHAFT		
5	3-41351	1	HARNESS, MAIN		
6	3-41354	1	HINGE, TANK TO FRAME		
7	3-53640	1	MOTOR ASM, BRUSH		
8	3-57030	2	NUT, 10-32 HEX NYLOCK		
9	3-57245	2	NUT, 1/4-20 HEX NYLOCK SS		
10	3-99809	2	FOAM TAPE, 1/8 THK X 3/4 1SDA		
11	3-62761	1	PLATE, BRUSH MTR CLAMP		
12	3-64099	1	PULLEY, 1.4 OD, 6GR, MICRO-V		
13	3-66282	6	PLUG, HOLE, .375" BLK		
14	3-66288	2	PLUG, 9/16 OD BLK NYLON		
15	3-70643	2	SCR, 1/4-20 X 3/8 PPHMS		
16	3-70066	2	SCR, 10-32 X 3/4 PPHMS		
17	3-70697	1	SCR, 1/4-20 X 1.25 PPHMS SS		
18	3-87013	2	WASHER, 1/4 ID X 5/8 OD SS		
19	3-87025	2	WASHER, 1/4 LOCK EXT STAR SS		
20	3-87018	2	WASHER, #10 X 9/16 OD		
21	3-70074	2	SET SCR, 10-32 X 1/4 KCP		
22	3-73197	1	STRAIN RELIEF, 90 DEGREE		
23	3-57105	3	NUT, 1/4-20 HEX W/STAR WASHER		
24	3-89114	2	WHEEL, 1-5/16 X 9.625 DIA		
25	3-03107	1	AXLE, 5/8 X 17.06L		
26	3-99667	10"	HEAT SHRINK, 3/4 ID UL/CSA		
27	3-73943	1	SEAL, FRAME/TANK		
28	3-20035	1	CLAMP, 7/16 DIA NYLON UL		
29	3-20041	1	CLAMP, 2.0" WORM GEAR		
30	3-70271	2	SCR, 1/4-20 X 1/2 HHCS PLTD		
31	3-70057	2	SCR, 1/4-20 X 1 PPHMS SS		

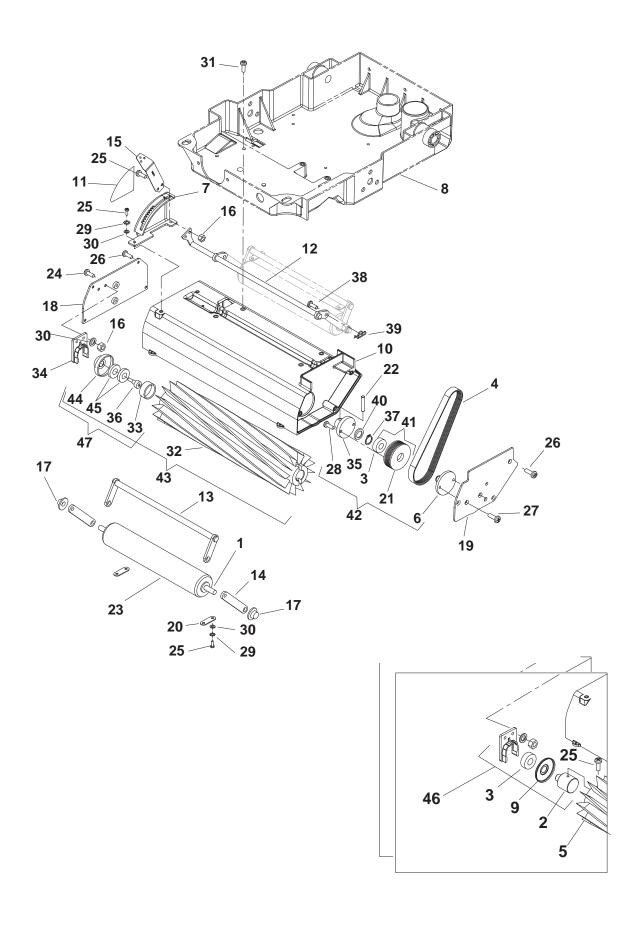
### **BRUSH GROUP**



### **BRUSH PARTS LIST**

REF		QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-03110	1	AXLE, ROLLER		
2	3-04084	1	ADAPTER, BRUSH BRG.		
3	3-09019	2	BEARING, 1.125ODX.500IDX.375		
4	3-11045	1	BELT, 180J6 MICRO-V		
5	3-12032	1	BRUSH, 18L X 3.38OD		
6	3-140343	1	BRKT, BRUSH PULLEY		
7	3-140351	1	BRKT, BRUSH HEIGHT		
8	3-34341	REF	FRAME		
9	3-36192	1	GUARD, THREAD		
10	3-41346	1	HOUSING, BRUSH 18"		
11	3-50998	1	LABEL, BRUSH HEIGHT		
12	3-51311	1	LINKAGE, ASM, BRUSH HEIGHT		
13	3-51312	1	LINKAGE ASM, ROLLER SUPPORT		
14	3-51314	2	LINK, ROLLER, FRONT		
15	3-51317	1	LEVER, HEIGHT ADJUSTMENT		
16	3-57030	4	NUT, 10-32 HEX NYLOCK		
17	3-57271	2	NUT, 3/8 DIA CAP, TYPE PUSH PLT		
18	3-62758	1	PLATE, BRUSH HOUSING RH		
19	3-62759	1	PLATE, BRUSH HOUSING LH		
20	3-62762	2	PLATE, AXLE RETAINER		
21	3-64098	1	PULLEY, 2.2 OD, 6GR, MICRO-V		
22	3-66192	1	PIN, ROLL 1/4 X 1.25L		
23	3-67411	1	ROLLER, 1.9 DIA X 10.5 LG		
24	3-70043	2	SCR, 10-32 X 5/8 PFHMS		
25	3-70088	8	SCR, 10-32 X 1/2 PPHMS SS DL		
26	3-70177	7	SCR, 10-32 X 1/2 FHMS SS		
27	3-70232	2	SCR, 10-32 X 3/8 FHMS SS		
28	3-70497	2	SCR, #10-24 X 1/2 SHCS		
29	3-87016	4	WASHER, #10 LOCK EXT STAR SS		
30	3-87018	6	WASHER, #10 X 9/16 OD		
31	3-70675	4	SCR, 1/4-20 X.5/8 THMS PLTD NP		
32	3-47383	1	BRUSH BEARING ASM.		
33	3-12515	1	BRUSH ASM, 18 IN		
34	3-27805	1	CLIP, BEARING		
35	3-29157	1	DRIVER, BRUSH		
36	3-29208	1	DRIVER ASM, BRUSH		
37	3-67094	1	RING, 1/2 EXT. SNAP		
38	3-66310	2	PIN, CLEVIS 1/4 X 1/2 PLTD		
39	3-80604	2	COTTER, 1/4" RING		
40	3-73966	1	SPACER, .81ID X 1.06OD, ALUM		
41	3-64102	1	PULLEY ASM, BRUSH		

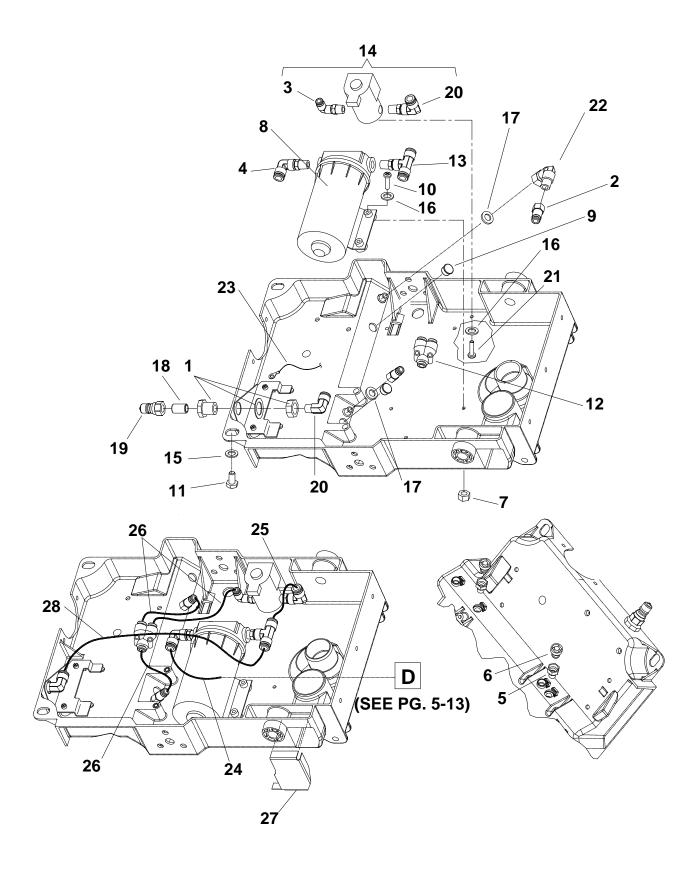
## **BRUSH GROUP - TYPE 2**



## **BRUSH PARTS LIST- TYPE 2**

REF	PART NO.	PRV NO.	QTY	DESCRIPTION	SERIAL NO.	NOTES:
4					FROM	
1	86000730	3-03110	1	AXLE, ROLLER		
3	86227100	3-04084 3-09019	2	ADAPTER, BRUSH BRG. BEARING, 1.125ODX.500IDX.375		
	86000900 86001100	l .		·		
<u>4</u> 5		3-11045 3-12515	1	BELT, 180J6 MICRO-V		WAS 12022
6	86001150		1	BRUSH, 18L X 3.38OD BRKT, BRUSH PULLEY		WAS 12032
7	86001300 86001310	3-140343	1	BRKT, BRUSH HEIGHT		
8		3-140351 3-34357	REF	FRAME, CLIPPER 12		
9	86033080	3-34337	2	GUARD, THREAD		
10	86004060 86240970	3-41346	1	HOUSING, BRUSH, 18"		
11			1	LABEL, BRUSH HEIGHT		
12	86004980	3-50998 3-51311	1	LINKAGE, ASM, BRUSH HEIGHT		
13	86093080		1	LINKAGE, ASM, BRUSH HEIGHT LINKAGE ASM, ROLLER SUPPORT		
14	86005110	3-51312	2	LINK, ROLLER, FRONT		
15	86005120 86005130	3-51314	1	LEVER, HEIGHT ADJUSTMENT		
	86005130	3-51317				
16		3-57030	2	NUT, 10-32 HEX NYLOCK		
17	86005850	3-57271		NUT, 3/8 DIA CAP, TYPE PUSH PLT		
18	86249410	3-62758	1	PLATE, BRUSH HOUSING RH		
19	86249420	3-62759	1	PLATE, BRUSH HOUSING LH		
20	86005930	3-62762	2	PLATE, AXLE RETAINER		
21	86250680	3-64098	1	PULLEY, 2.2 OD, 6GR, MICRO-V		
22	86006220	3-66192	1	PIN, ROLL 1/4 X 1.25L		
23	86006430	3-67411	1	ROLLER, 1.9 DIA X 10.5 LG		
24	86006510	3-70043	2	SCR, 10-32 X 5/8 PFHMS		
25	86006590	3-70088	6	SCR, 10-32 X 1/2 PPHMS SS DL		
26	86006650	3-70177	7	SCR, 10-32 X 1/2 FHMS SS		
27	86006700	3-70232	2	SCR, 10-32 X 3/8 FHMS SS		
28	86275530	3-70497	2	SCR, #10-24 X 1/2 SHCS		
29	86010640	3-87016	4	WASHER, #10 LOCK EXT STAR SS		
30	86010650	3-87018	6	WASHER, #10 X 9/16 OD		
31	86007030	3-70675	4	SCR, 1/4-20 X. 5/8 THMS PLTD NP	4000000747	
32	86230630	3-12525	1	BRUSH, 18L X 3.38 OD G2	1000090717	
33	86251710	3-67467	1	RING, TOLERANCE 7/8 ID X 1/2 W	1000090717	
34	86003070	3-27805	1	CLIP, BEARING		
35	86003370		1	DRIVER, BRUSH	4000000747	
36	86278130		1	SHLDR BOLT, 3/8 OD X 3/8 L SS NP	1000090717	
37	86272770	3-67094	1	RING, 1/2 EXT. SNAP		
38	86272510	3-66310	2	PIN, CLEVIS 1/4 X 1/2 PLTD		
39	86008650	3-80604	2	COTTER, 1/4" RING		
40	86008160	3-73966	1	SPACER, .81ID X 1.06OD, ALUM		
41	86006030	3-64102	1	PULLEY ASM, BRUSH		
42	86003390	3-29208	1	DRIVER ASM, BRUSH		
43	86001150	3-12515	1	BRUSH ASM, 18 IN	4000000747	
44	86227150	3-05158	1	ADAPTER, BRUSH BRG. DIE CAST	1000090717	
45	86228890	3-09137	2	BEARING, R6 3/8 ID	1000090717	
46	86028010	3-47383	1	BRUSH BEARING ASM.		
47	86004750	3-47416	REF	KIT,BRNG/ADPTR EXTRCTR		

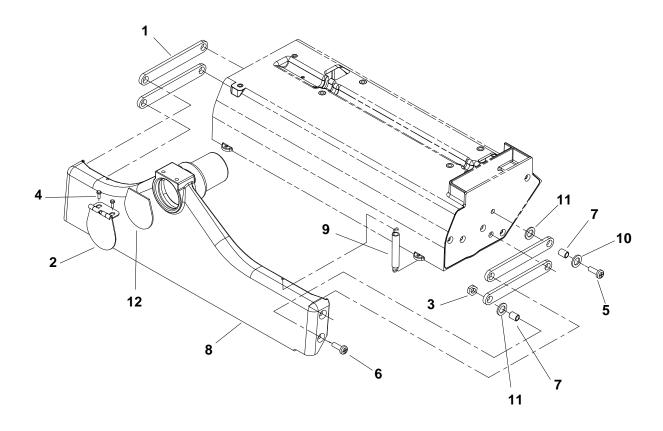
## **PUMP GROUP**



### **PUMP PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-22072	1	COUPLING, 1/4 ANCHOR W/1" HEX		
2	3-22090	2	CONNECTOR, 1/8FPT X 1/4 TUBEQC		
3	3-31072	1	ELBOW, SWIVEL, 1/4MPTX1/4TUBE		
4	3-31074	1	ELBOW, SWIVEL,3/8MPTX3/8TUBEQC		
5	3-44067	2	JET BODY, MINI PROMAX BODY		
6	3-44068	2	JET, MINI PROMAX 9504		
7	3-57030	2	NUT, 10-32 HEX NYLOCK		
8	3-65201	1	PUMP ASM		
9	3-66288	2	PLUG, 9/16 OD BLK NYLON		
10	3-70386	2	SCR, 10-32 X 1.0 PPHMS		
11	3-70011	2	SCR, 1/4-20 X 5/8 HHCS SS		
12	3-34355	1	FITTING,1/4 TUBE,"Y", QC		
13	3-78419	1	TEE, 3/8 MPT X 3/8 TUBE, QC		
14	3-84160	1	VALVE ASM,SOLENOID		
15	3-87191	2	WASHER, 1/4"IDX1.0OD. FLAT SS		
16	3-87018	4	WASHER, #10 X 9/16 OD		
17	3-87192	2	WASHER, 7/16 X 3/4 X .19RUBBER		
18	3-56014	1	NIPPLE, 1/4 CLOSE		
19	3-56012	1	NIPPLE, 1/4 FPT QD		
20	3-31076	2	ELBOW, 1/4 MPT X 3/8 TUBE, QC		
21	3-70051	2	SCR, 8-32 X 1/2 PPHMS SS		
22	3-31022	1	ELBOW, 1/8 NPT STREET		
23	3-880278	1	WIRE, 22" GRN/18 76011 X 76011		
24	3-39529	1	HOSE, 3/8 URETHANE X 29"		
25	3-39530	1	HOSE, 3/8 NYLON X 6"		
26	3-39591	3	HOSE, 1/4 URETHANE X 6" YELLOW		
27	3-73963	1	SCREEN, INTAKE		
28	3-39551	1	HOSE, 3/8 NYLON X 29"		

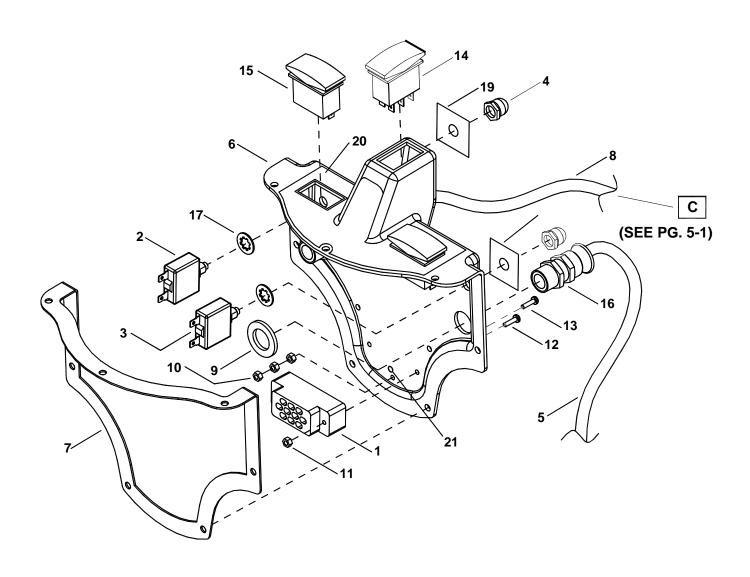
## **VACUUM SHOE GROUP**



### **VACUUM SHOE PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-05016	4	ARM, VAC SHOE PARALLEL		
2	3-27674	1	COVER, ACCESSORY PORT		
3	3-57245	4	NUT, 1/4-20 HEX NYLOCK SS		
4	3-70351	2	SCR, 10-32 X 3/8 HHTR W/STAR		
5	3-70360	4	SCR, 1/4-20 X.75 PPHMS PHIL		
6	3-70390	4	SCR, 1/4-20 X 1 FHCS PLTD		
7	3-73958	8	SPACER, 3/80DX.058WX.2814,CRS		
8	3-85040	1	VAC SHOE, 18"		
9	3-73955	2	SPRING, EXT .38D X2.75L X.055W		
10	3-87013	4	WASHER, 1/4 ID X 5/8 OD SS		
11	3-87074	8	WASHER, WAVE 3/8ID X3/4D X.125		
12	3-35171	1	GASKET, ACCESSORY PORT		

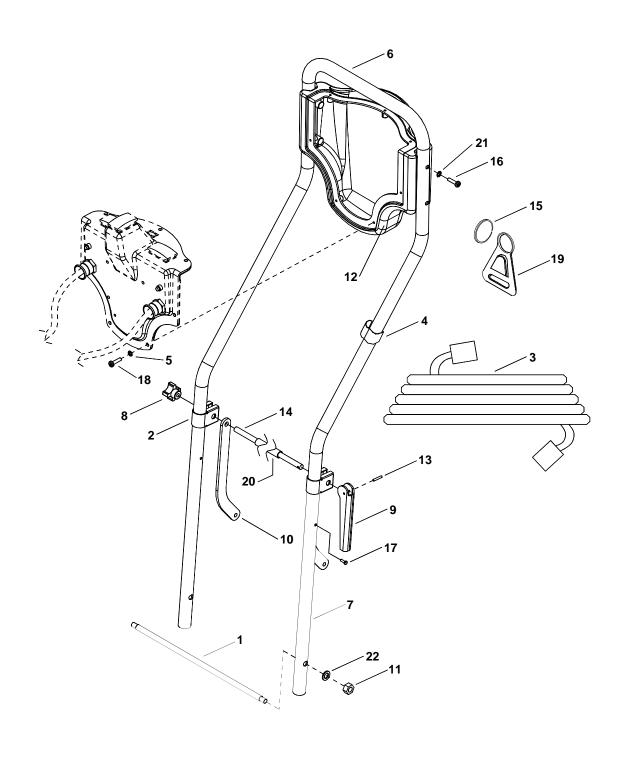
## **CONTROL PANEL GROUP**



### **CONTROL PANEL PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-14020	1	TERMINAL BLOCK, 115V (3-4-3)		
2	3-14700	1	BREAKER, 15A 250VAC 50VDC		
3	3-14832	1	BREAKER, 6A VDE CIRCUIT		
4	3-14942	2	BOOT, 3/8 CIRCUIT BREAKER		
5	3-23679	1	CORD ASM, 14/3 X 22" YLW		
6	3-27822	1	COVER, PANEL		
7	3-35248	1	GASKET, PANEL		
8	3-41351	REF	HARNESS, MAIN		
9	3-57040	2	NUT, 1/2 NPT CONDUIT		
10	3-57104	3	NUT, 10-32 W/STAR WASHER PLTD		
11	3-57116	2	NUT, 6-32 W/STAR WASHER PLTD		
12	3-70235	2	SCR, 6-32 X 1.0 PH BLK NYLON		
13	3-70386	1	SCR, 10-32 X 1.0 PPHMS		
14	3-72126	1	SWITCH, DPDT 3-POSITION ROCKER		
15	3-72130	2	SWITCH, SPST 2-POSITION ROCKER		
16	3-73505	2	STRAIN RELIEF, 1/2 NPT TRUMPET		
17	3-87100	2	WASHER, 3/8 ID INT.LOCK THIN		
18	3-500226	1	LABEL, CIRCUIT BREAKER BRUSH		
19	3-500225	1	LABEL, CIRCUIT BREAKER VAC		
20	3-500155	1	LABEL, CONTROL PANEL		
21	3-50279	1	LABEL, GROUND SYMBOL		
22	3-87189	7	WASHER, .2 ID X .500 BLK SS		
23	3-70626	7	SCR, #10 X 3/4 PPHST HI-LO BLK		

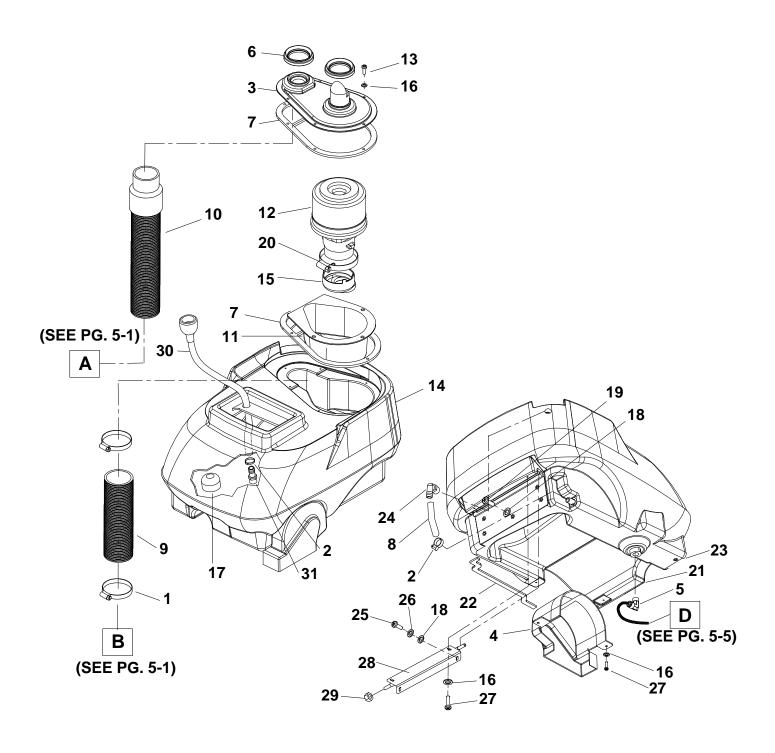
## **HANDLE GROUP**



### **HANDLE PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-03109	1	AXLE, HANDLE		
2	3-20084	2	CLAMP, HANDLE LOCK		
3	3-23086	1	CORD SET,14/3 SJTW-A X 50' YLW		
4	3-27371	3	CLIP, POWER CORD		
5	3-87189	7	WASHER, .2IDX.500 BLK SS		
6	3-36046	1	GRIP, HANDLE X 13"		
7	3-38289	1	HANDLE, CONTROL		
8	3-48012	1	KNOB, 5/16-18 4 PRONG		
9	3-51039	1	LEVER, HANDLE CLAMP		
10	3-51313	2	LINK, HANDLE ADJ.		
11	3-57113	2	NUT, 5/16-18 HEX NYLOCK		
12	3-61374	1	CONTROL PANEL		
13	3-66068	1	PIN, ROLL 1/8" X 5/8"L		
14	3-67073	1	ROD, HANDLE LOCK		
15	3-67147	1	RING, 2" DIA SPLIT		
16	3-70249	4	SCR, 1/4-20 X 1.25 HHCS PLTD		
17	3-70351	1	SCR, 10-32 X 3/8 HHTR W/STAR		
18	3-70626	7	SCR, #10x3/4 PPHST HI-LO BLK		
19	3-73169	1	STRAIN RELIEF, CORD HOOK		
20	3-73180	1	SPACER, .50 ODX.058WX9.84L CRS		
21	3-87025	4	WASHER, 1/4 LOCK EXT STAR SS		
22	3-87029	2	WASHER, 5/16 FLAT SS		

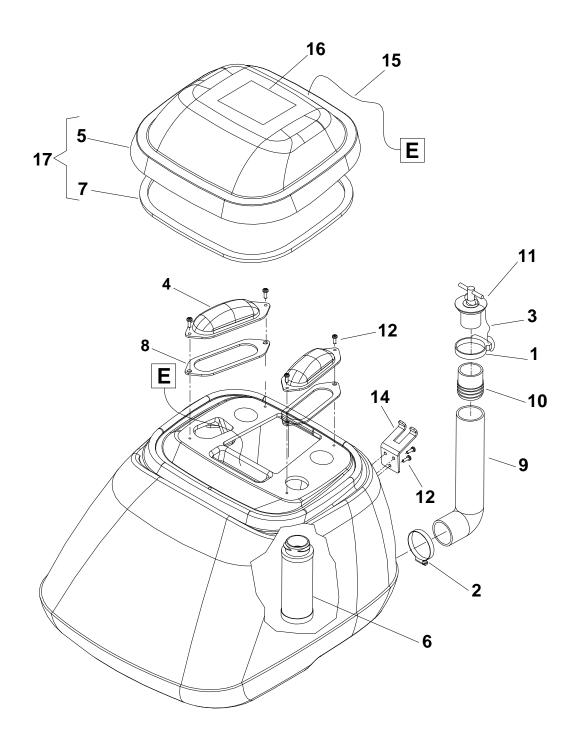
### **SOLUTION TANK GROUP**



### **SOLUTION TANK PARTS LIST**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-20041	2	CLAMP, 2.0" WORM GEAR		
2	3-20042	2	CLAMP, 3/8 HOSE (D-SLOT)		
3	3-27809	1	COVER, VAC MOTOR		
4	3-27810	1	COVER, BELT		
5	3-31081	1	ELBOW, 3/8 MPT X 3/8 TUBE, PLASTIC		
6	3-35175	2	GASKET, TANK TO VAC COVER		
7	3-35231	2	GASKET, VAC COVER		
8	3-39526	1	HOSE,1/2 CLEAR X 12		
9	3-39536	1	HOSE, 1.5 BLK VAC X 5.0		
10	3-39528	REF	HOSE ASM, 1.5 BLK VAC X 15.5		
11	3-41348	1	HOUSING, VAC MOTOR		
12	3-53789	1	VAC MOTOR ASM		
13	3-70525	6	SCR, #10 X 1.0 PPHST TYPE B		
14	3-75399	1	TANK, SOLUTION		
15	3-85038	1	VENT, COOLING AIR LRG		
16	3-87018	11	WASHER, #10 X 9/16 OD		
17	3-73864	1	STRAINER, 3/8 IN. NPT 60 MESH		
18	3-87013	5	WASHER, 1/4 ID X 5/8 OD SS		
19	3-70085	3	SCR, 1/4-20 X 1/2 PPHMS SS DL		
20	3-20092	1	CLAMP, 3.5" WORM GEAR		
21	3-35236	1	GASKET, TANK, L-F		
22	3-35237	1	GASKET, TANK, L-R		
23	3-35238	1	GASKET, TANK, RH		
24	3-40027	1	HOSEBARB, 3/8MPTX1/2 90D DL		
25	3-70360	2	SCR, 1/4-20 X.75 PPHMS PHIL		
26	3-87025	2	WASHER, 1/4 LOCK EXT STAR SS		
27	3-70114	5	SCR, #10 X 3/4 PPHST TYPE B		
28	3-89183	1	WELDMENT, HANDLE PIVOT		
29	3-57245	2	NUT, 1/4-20 HEX NYLOCK SS		
30	3-02130	1	HOSE ASSY- FILL HOSE		
31	3-40023	1	HOSEBARB, 1/2MPT X 3/8 DL		

## **RECOVERY TANK GROUP**



### **SUGGESTED SPARE PARTS**

REF	PART NO.	QTY	DESCRIPTION	SERIAL NO. FROM	NOTES:
1	3-20002	1	CLAMP, 2.00 NYLON RATCHET		
2	3-20041	1	CLAMP, 2.0" WORM GEAR		
3	3-27670	1	CORD, DRAIN PLUG TRIDENT		
4	3-27816	2	COVER, REC. TANK		
5	3-28060	1	DOME		
6	3-34351	1	FLOAT SHUT-OFF		
7	3-35230	1	GASKET, DOME		
8	3-35232	2	GASKET, PORT COVER		
9	3-39353	1	HOSE, 1.5 X 12.0 DRAIN		
10	3-40019	1	HOSEBARB, 1.5 DOUBLE MCHD		
11	3-66227	1	PLUG, DRAIN HOSE		
12	3-70114	7	SCR, #10 X 3/4 PPHST TYPE B		
13	3-75398	1	TANK, RECOVERY		
14	3-140133	1	BRKT, RECOVERY HOSE MTG		
15	3-27417	1	CORD, 99807 1/8 X 12"		
16	3-500009	1	LABEL, WARNING		
17	3-28061	1	DOME ASM		

### **SUGGESTED SPARE PARTS**

DESCRIPTION	PART NUMBER
BRUSH, 15L X 3.38OD	3-12031
BELT, 180J6 MICRO-V	3-11045
BEARING, 1.125ODX.500IDX.375	3-09019
JET BODY, MINI PROMAX BODY	3-44067
JET, MINI PROMAX 8003	3-44072
PUMP ASM	3-65183
VALVE ASM, SOLENOID	3-84160
GASKET, ACCESSORY PORT	3-35171
BREAKER, 15A 250VAC 50VDC	3-14700
BREAKER, 6A VDE CIRCUIT	3-14832
SWITCH, SPST 2-POSITION ROCKER	3-72130
SWITCH, DPDT3-POSITION ROCKER	3-72162
VAC MOTOR ASM	3-53789
STRAINER, 3/8 IN. NPT 60 MESH	3-73864
DOME ASM	3-28061
FLOAT SHUT-OFF	3-34351
PLUG, DRAIN HOSE	3-66227

## **NOTES:**