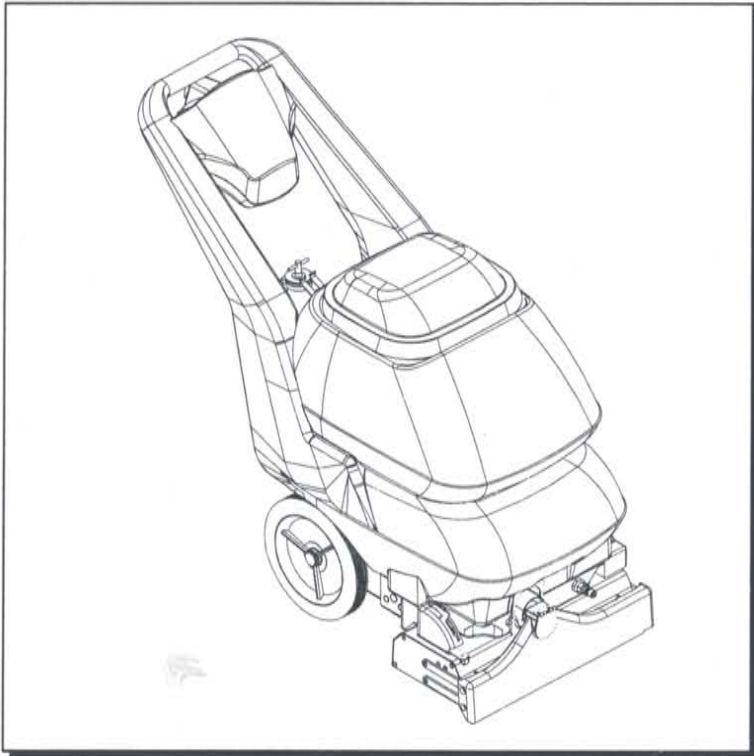


Fiber **PROTM 8**

BETCO.

CARPET EXTRACTOR



Operating Instructions

MODEL: BFP8
10080210

Read these instructions before operating the machine

W

86038500 05/11/07

PRV NO. 98778

MACHINE DATA LOG/OVERVIEW

MODEL _____

DATE OF PURCHASE _____

SERIAL NUMBER _____

SALES REPRESENTATIVE # _____

DEALER NAME _____

OPERATIONS GUIDE NUMBER _____

PUBLISHED

YOUR DEALER

Name: _____

Address: _____

Phone Number: _____

TABLE OF CONTENTS

<i>Machine Data Log/Overview.....</i>	<i>1</i>
<i>Table of Contents.....</i>	<i>2</i>

HOW TO USE THIS MANUAL

<i>How to use this Manual.....</i>	<i>1-1</i>
------------------------------------	------------

SAFETY

<i>Important Safety Instructions</i>	<i>2-1</i>
<i>Hazard Intensity Level.</i>	<i>2-2</i>
<i>Grounding Instructions.....</i>	<i>2-3</i>

OPERATIONS

<i>Technical Specifications.</i>	<i>3-1</i>
<i>Controls/Component Location</i>	<i>3-2</i>
<i>Filling Operation.....</i>	<i>3-5</i>
<i>Operations.</i>	<i>3-6</i>
<i>Cleaning Procedure.</i>	<i>3-8</i>
<i>Accessory Tool Usage.</i>	<i>3-10</i>

MAINTENANCE

<i>Periodic Maintenance.</i>	<i>4-1</i>
<i>Daily/ Regular Maintenance.....</i>	<i>4-1</i>
<i>Vacuum Motor Replacement</i>	<i>4-2</i>
<i>Solution Pump Replacement</i>	<i>4-3</i>
<i>Belt Replacement.....</i>	<i>4-3</i>
<i>Wiring Diagram.</i>	<i>4-4</i>
<i>Machine Troubleshooting.....</i>	<i>4-5</i>

GROUP PARTS LIST

<i>Frame Assembly.</i>	<i>5-1</i>
<i>Brush Assembly.</i>	<i>5-3</i>
<i>Pump Assembly.....</i>	<i>5-5</i>
<i>Vacuum Shoe Assembly.....</i>	<i>5-7</i>
<i>Control Panel Assembly.....</i>	<i>5-9</i>
<i>Solution Tank Assembly.</i>	<i>5-11</i>
<i>Recovery Tank Assembly.</i>	<i>5-13</i>
<i>Suggested Spare Parts/Notes</i>	<i>5-15</i>

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. They are listed in this general order:

- Periodic
- Daily/Regular

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.
- **PRV NO.** – reference number.
- **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.

NOTE: The number on the lower left corner of the front cover is the part number for this manual.

IMPORTANT SAFETY INSTRUCTIONS

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

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

This machine is for commercial use.



WARNING:

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

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

Do not leave the machine unattended. Unplug machine from outlet when not in use and before maintenance or service.

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

Do not allow machine to be used as a toy. **Close attention** is necessary when used by or near children.

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

Do not use damaged electrical cord or plug. Follow all instructions in this manual concerning grounding the machine. 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 pull or carry machine by electrical cord, use as a handle, close a door on cord, or pull cord around sharp edges or corners.

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

Do not unplug machine by pulling on cord. To unplug, grasp the electrical plug, not the electrical cord.

Do not handle the electrical plug or machine with wet hands.

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

This machine is intended for cleaning carpet only.

Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.

This machine is not suitable for picking up health endangering dust.

Turn off all controls before unplugging.

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.

If foam or liquid comes out of machine, switch off immediately.

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.

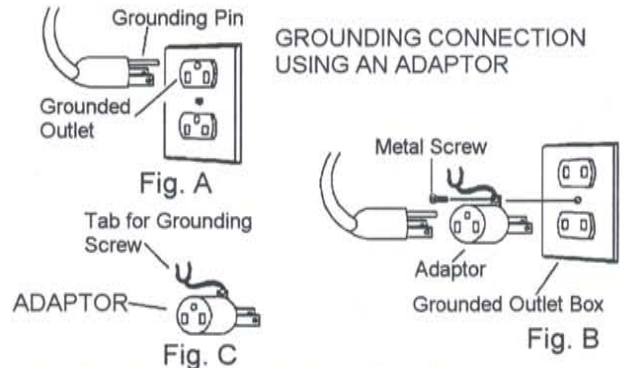
EXTENSION CORDS:

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 having an equipment-grounding conductor and grounding plug. The plug must be inserted into an 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 equipment-grounding 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.

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) 15" (38.1 cm.)

SOLUTION PUMP: 100 PSI, diaphragm style, internal bypass

SOLUTION CAPACITY: 8 gallons (30.3 ltr)

RECOVERY CAPACITY: 8 gallons (30.3 ltr)

BRUSH SPEED: 1000 rpm

GENERAL DIMENSIONS/WEIGHT

Vacuum shoe: 17" (43.18 cm) cast aluminum with spring loaded down pressure

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

WEIGHT: 92 lbs. (42 kg)

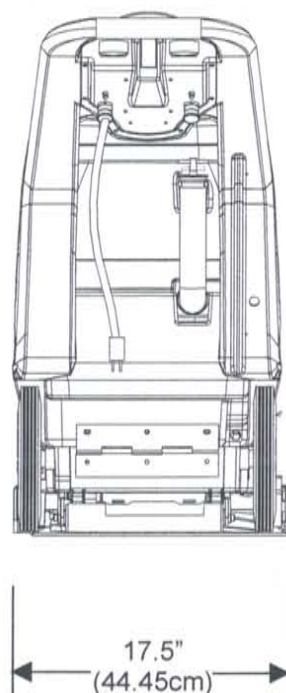
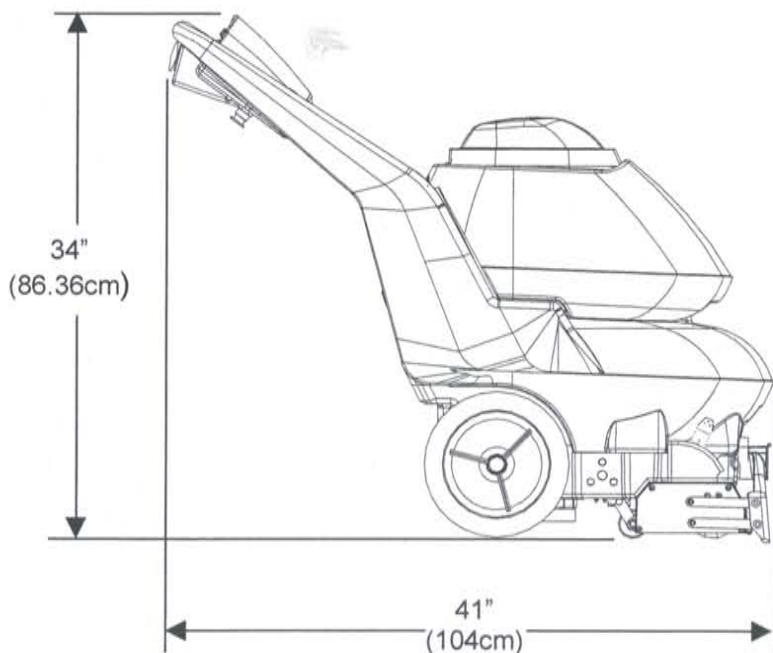
LENGTH: 41" (104 cm)

HEIGHT: 34" (86.36 cm)

WIDTH: 17.5" (44.45 cm)

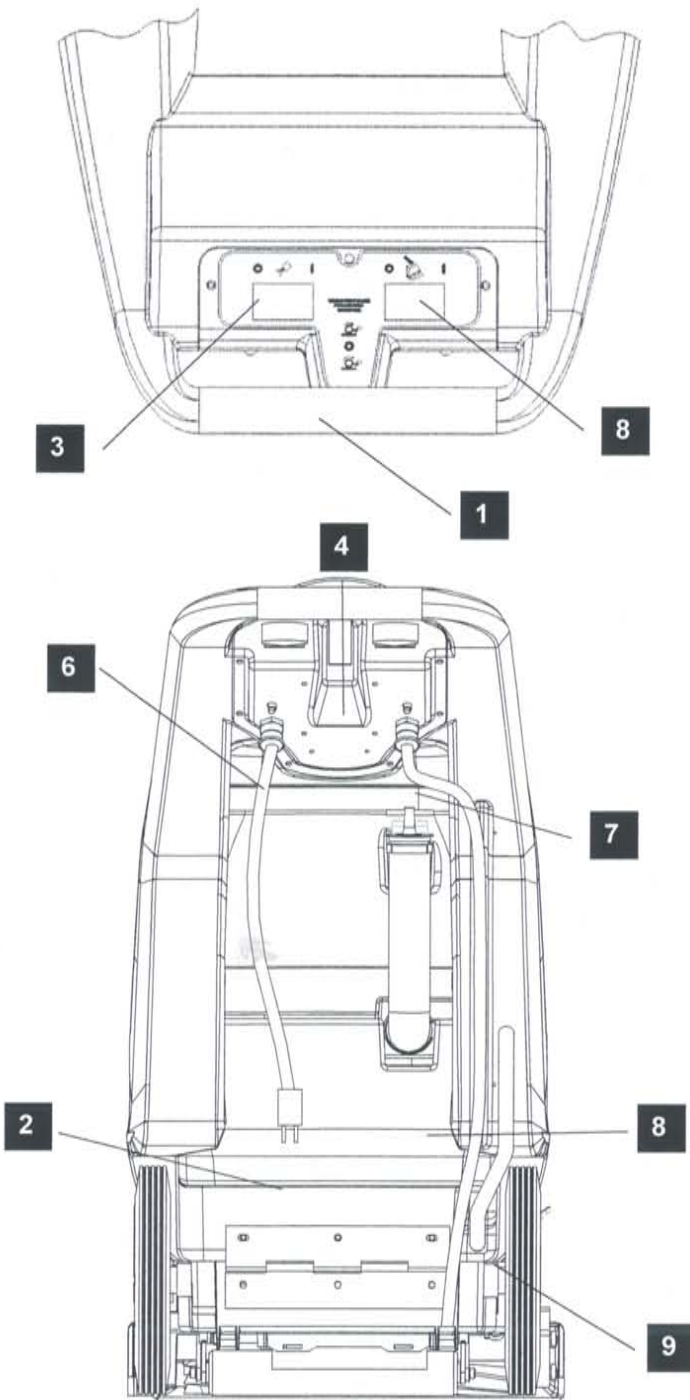
SOLUTION SPRAY: 2 quick change jets.

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



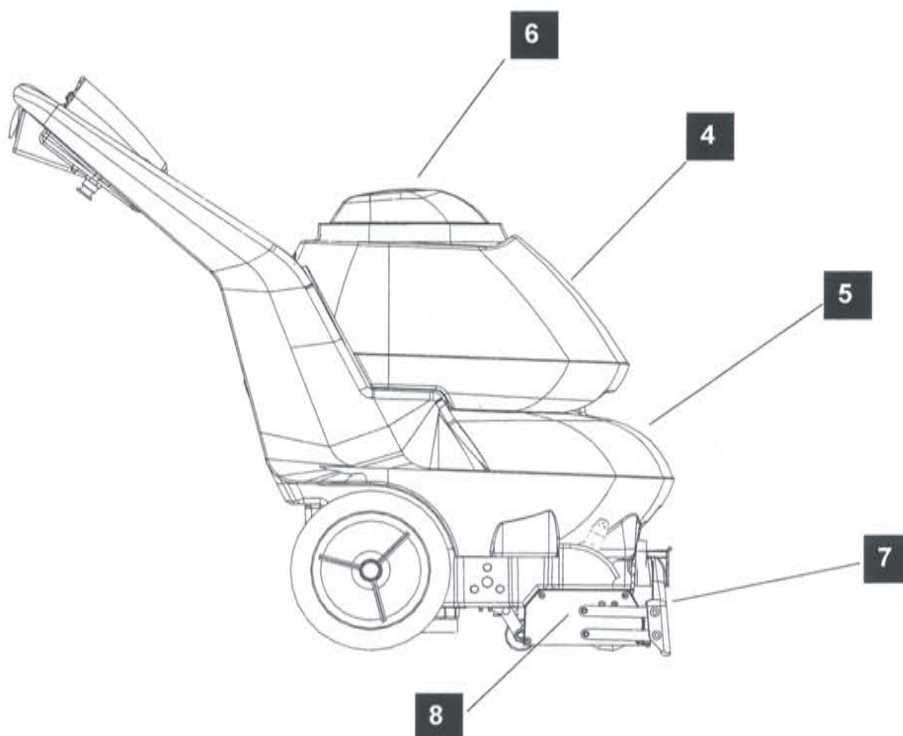
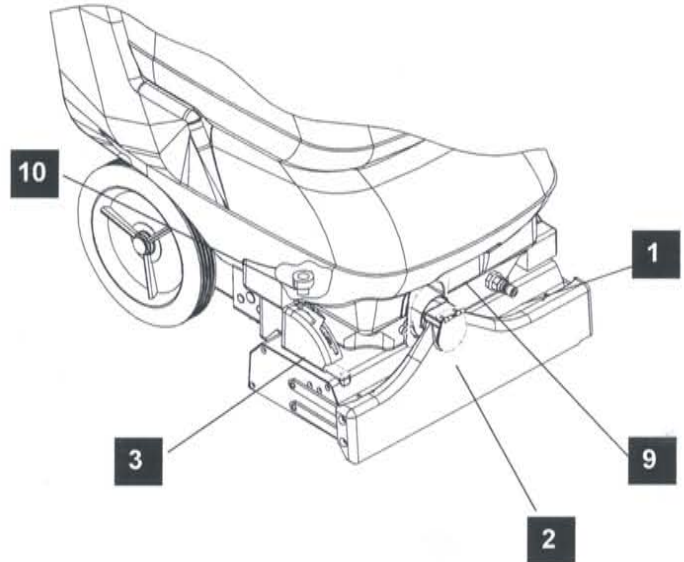
CONTROLS/COMPONENT LOCATIONS

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



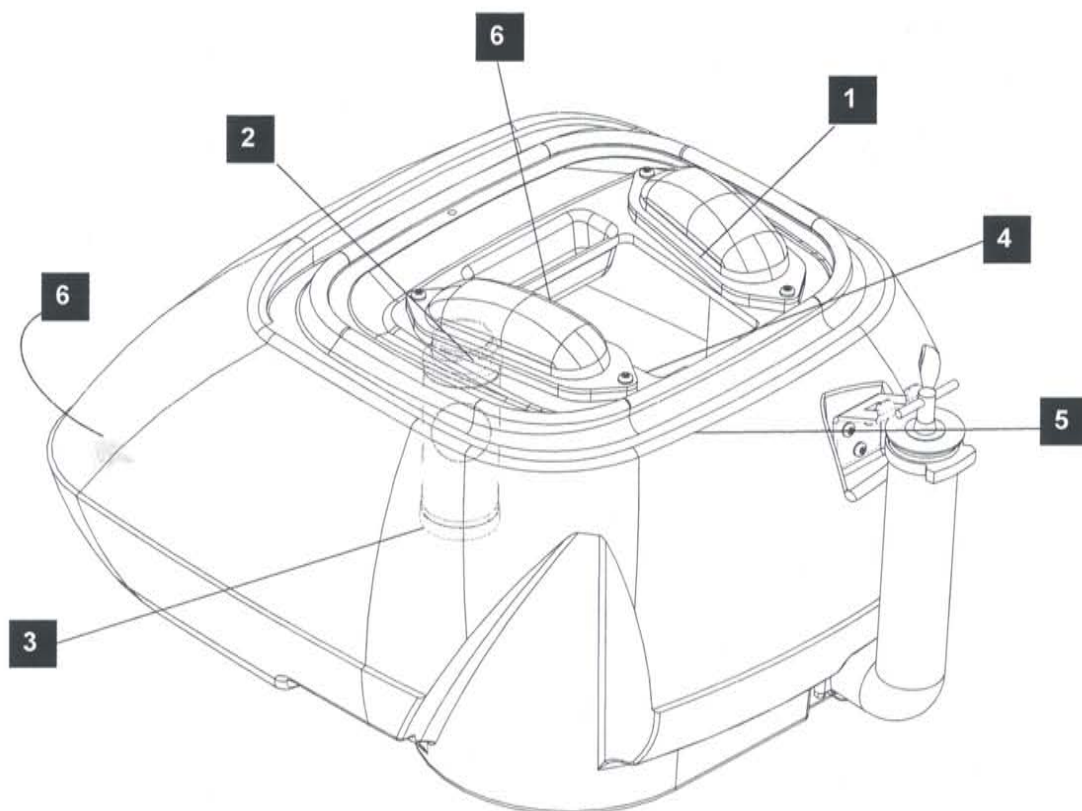
CONTROLS/COMPONENT LOCATIONS

1. **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.**

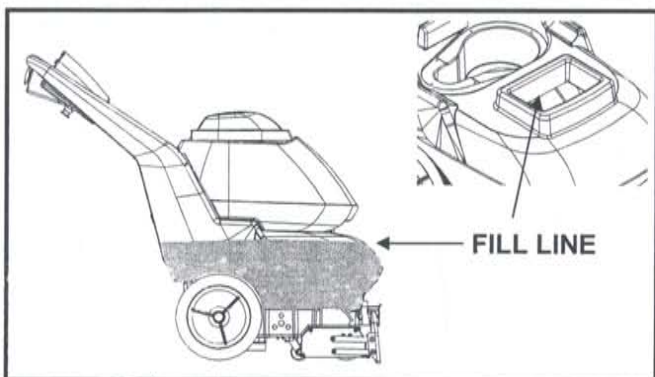


CONTROLS/COMPONENT LOCATIONS

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



FILLING OPERATIONS



FILLING THE BFP8

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

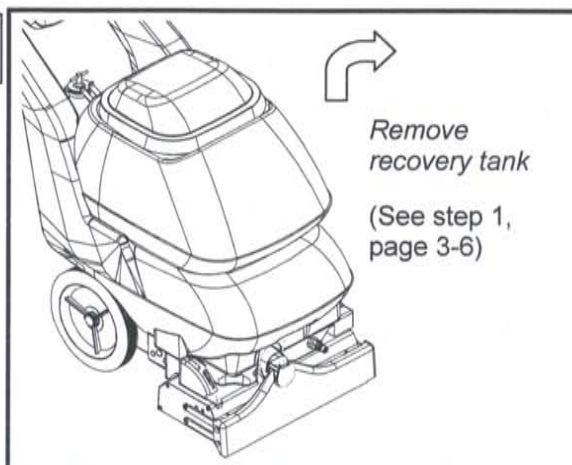
Alkalis
Detergents
Hydroxides
Soaps
Vinegar

Non-Compatible Chemicals

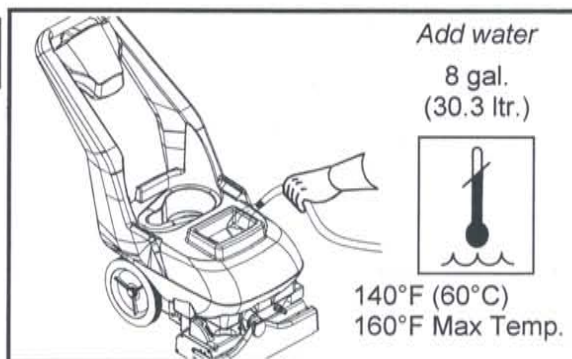
Aldehydes
Aromatic Hydrocarbons
SP Butyls
Carbon Tetrachloride
Clorox*
Chlorinated Bleaches
Chlorinated Hydrocarbons
Lysol*
Methyl Ethel Ketone (MEK)
Perchlorethylene (perc)
Phenolics
Trichlorethylene
D-Limonene

* Product Trademark Names

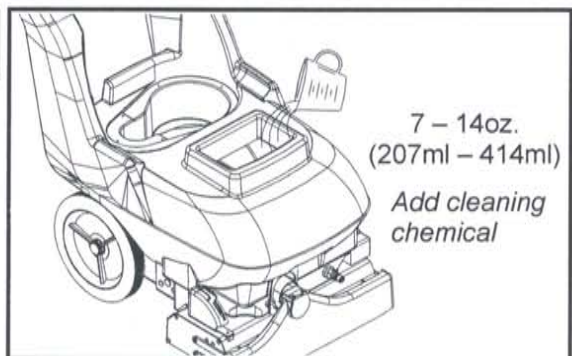
STEP
1



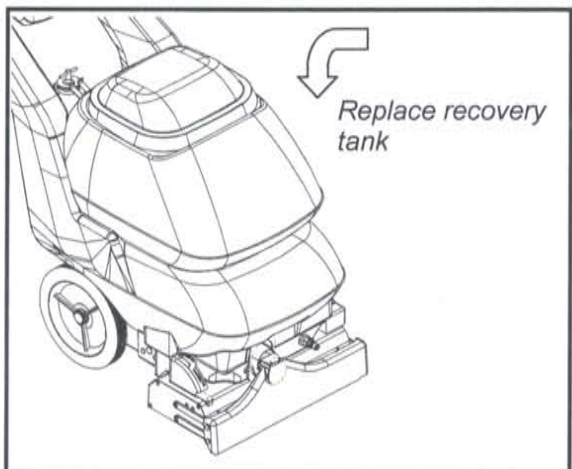
STEP
2



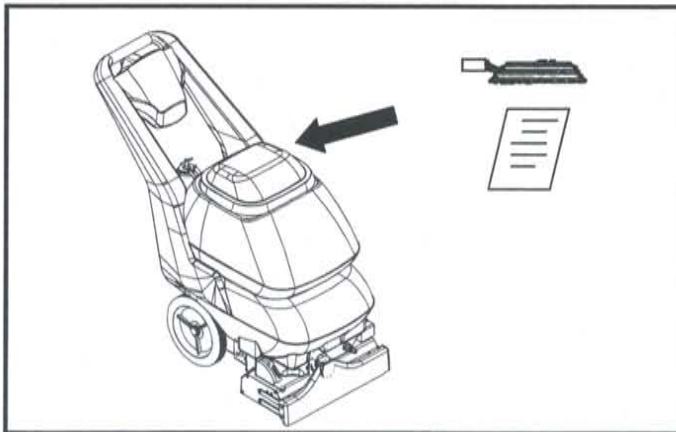
STEP
3



STEP
4

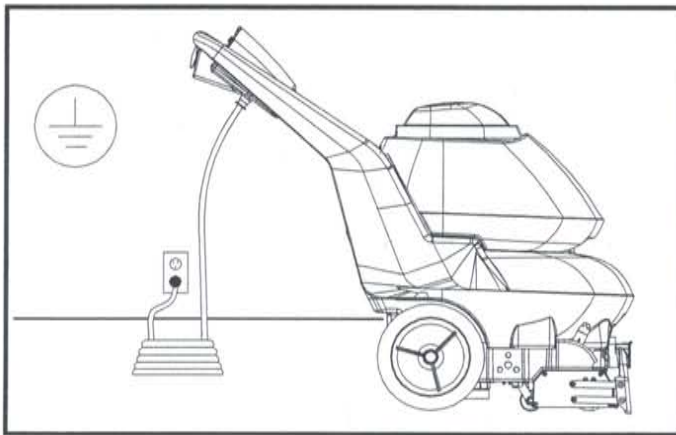


OPERATIONS



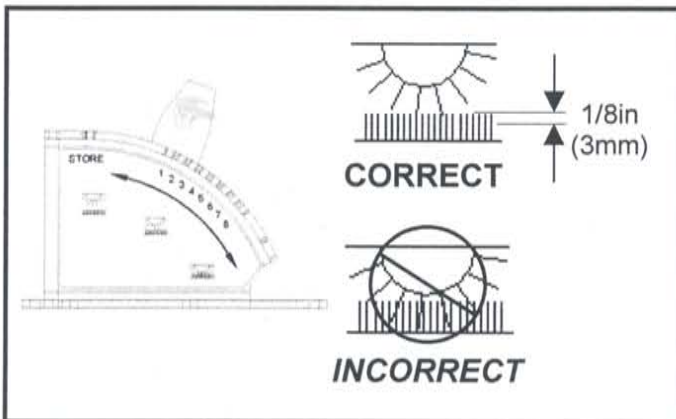
**STEP
1**

Remove electrical cord and literature from recovery tank. Fill solution tank (see filling instructions page 3-5).



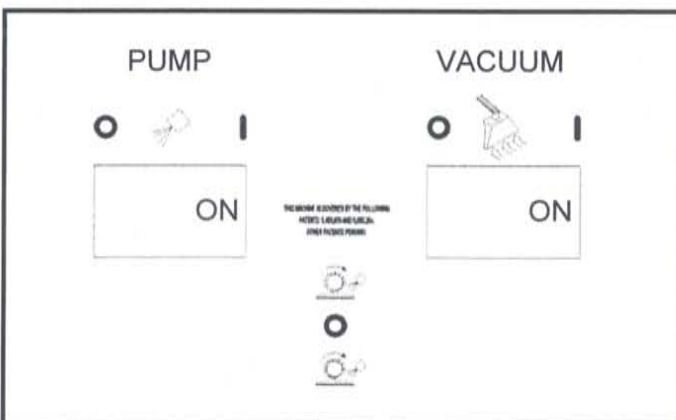
**STEP
2**

Wrap cord through yellow strain relief on handle then plug cord into grounded outlet. *Note: Be sure dome is seated on recovery tank, and float shut-off is installed correctly.*



**STEP
3**

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.*



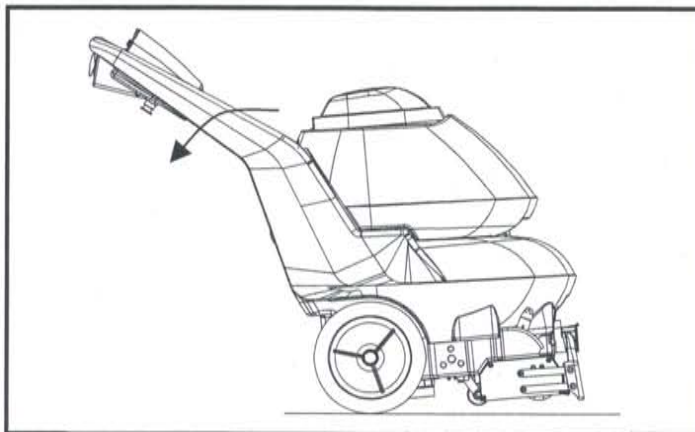
**STEP
4**

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

OPERATIONS

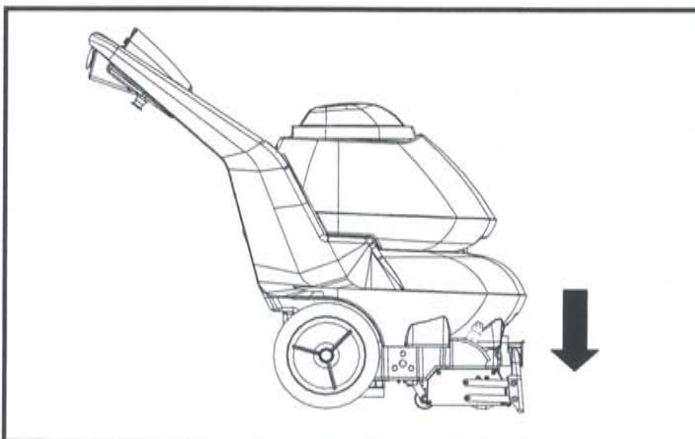
Tip machine back by main handle to move to starting point.

STEP
5



Lower machine to floor.

STEP
6

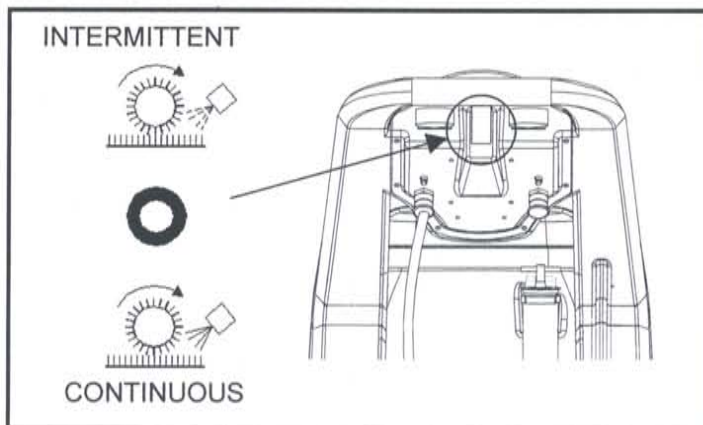


Select intermittent or continuous switch setting to turn on brush and start solution spray.

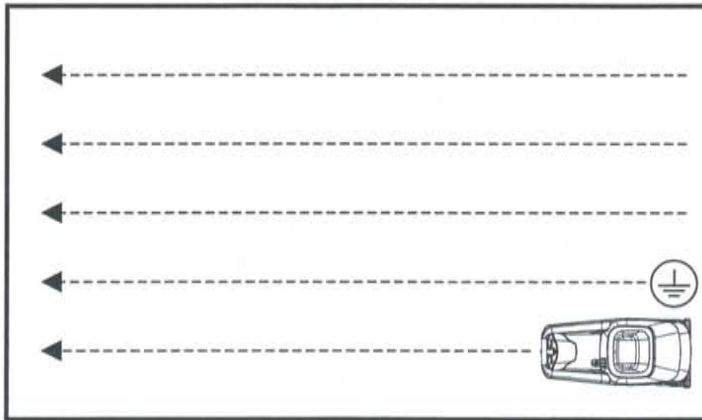
The intermittent setting requires the operator to hold the switch in the "on" position with the thumb, and is typically used in small areas where short cleaning passes are made.

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.

STEP
7

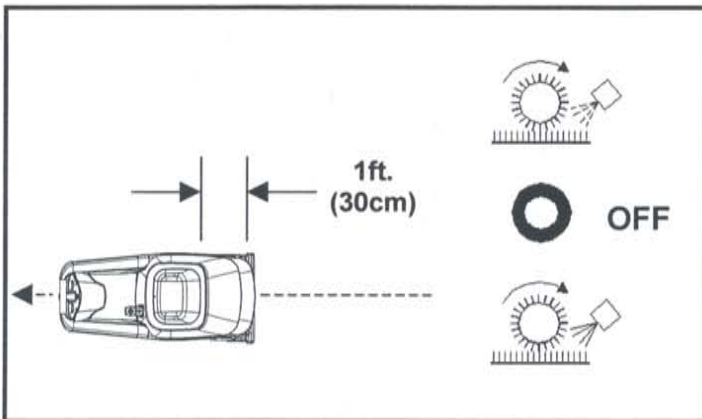


CLEANING PROCEDURE



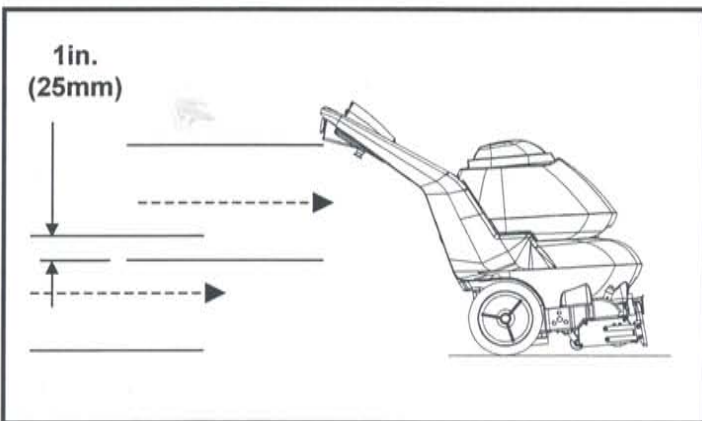
STEP 1

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



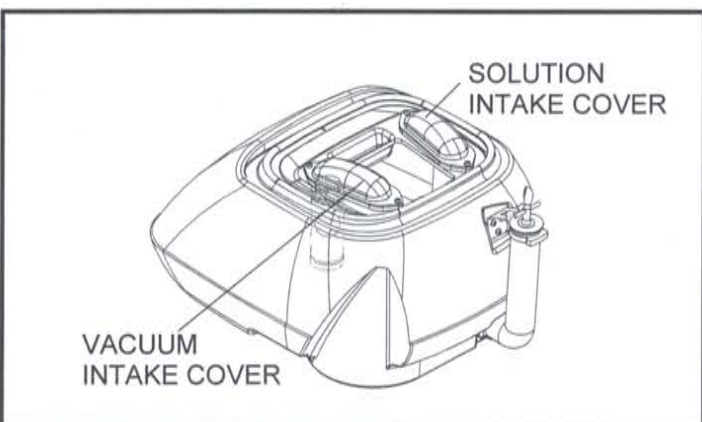
STEP 2

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



STEP 3

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



STEP 4

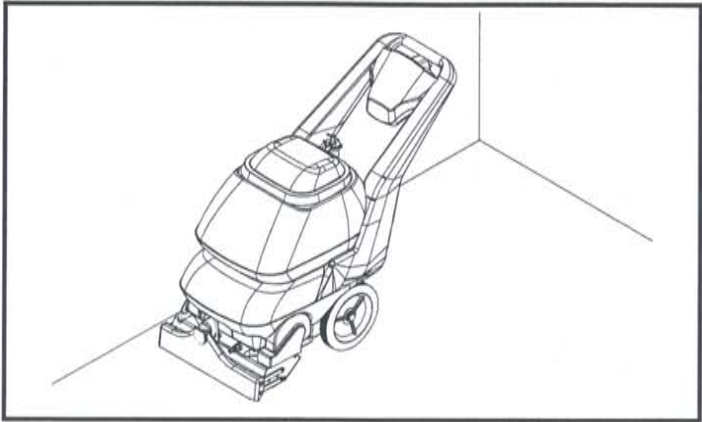
During operation, observe the following: The BFP 8 is equipped with clear internal covers to facilitate operator viewing of dirty solution and vacuum air flow.

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

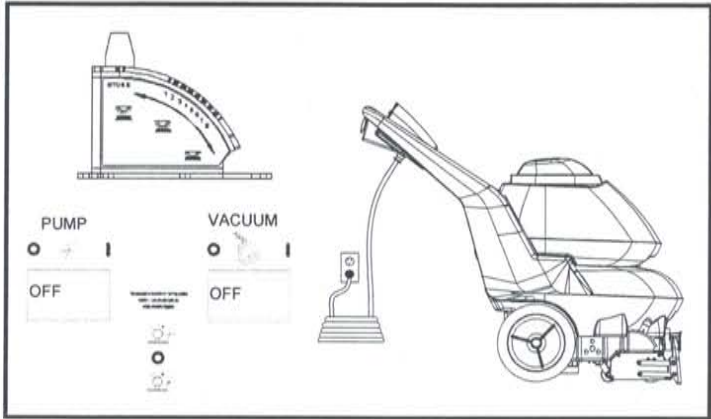
Use right side of machine for cleaning against walls.

STEP 5



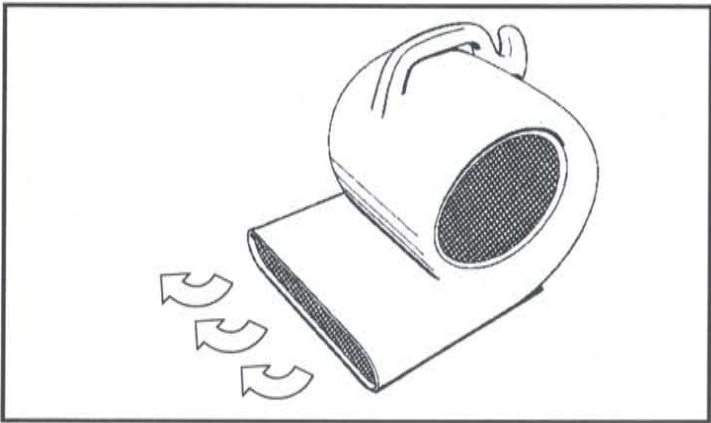
After cleaning, turn off all controls, return brush to storage position and carefully unplug machine.

STEP 6



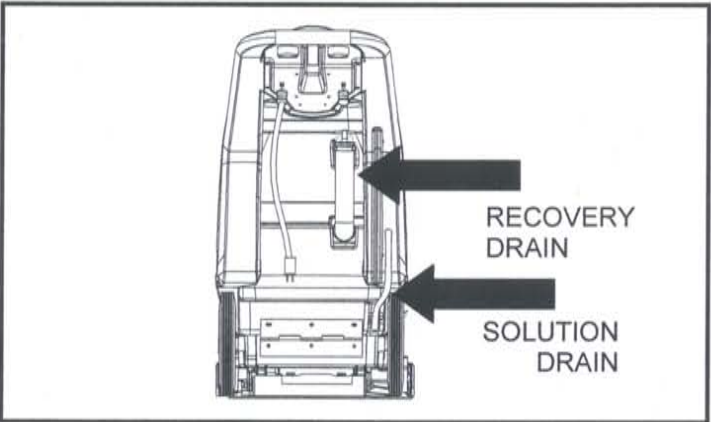
To speed drying, use a fan.

STEP 7

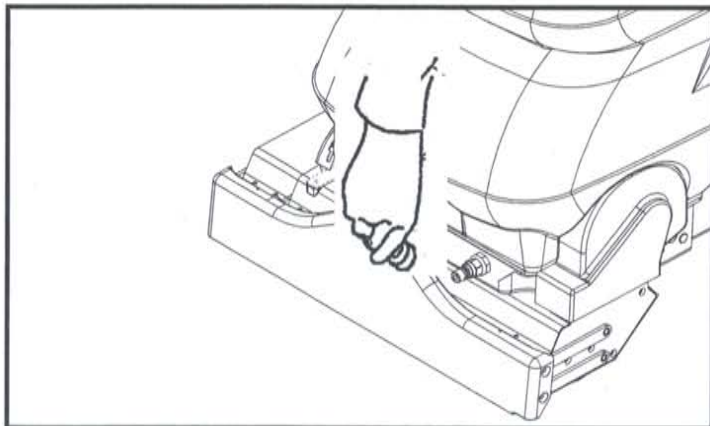


Empty recovery tank by releasing dump hose. Use a hose with cold water to clean out the recovery tank. Also drain solution tank after each use.

STEP 8

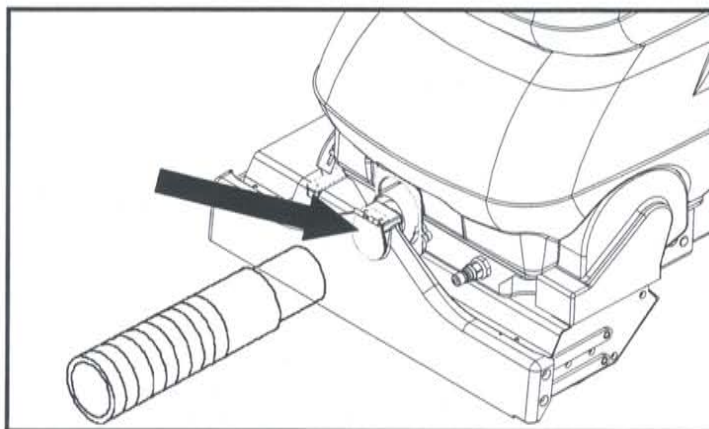


ACCESSORY TOOL USAGE



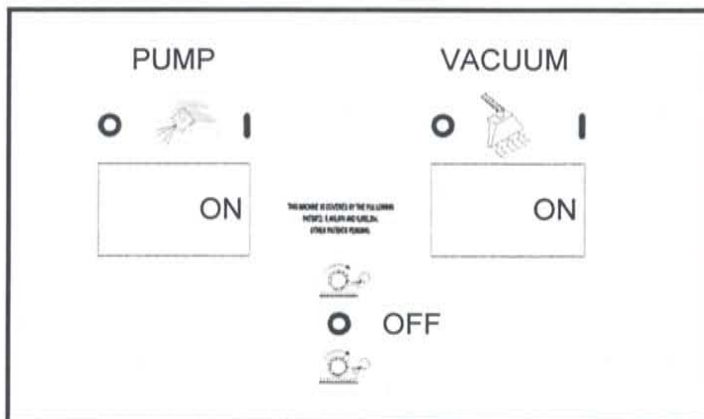
STEP
1

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



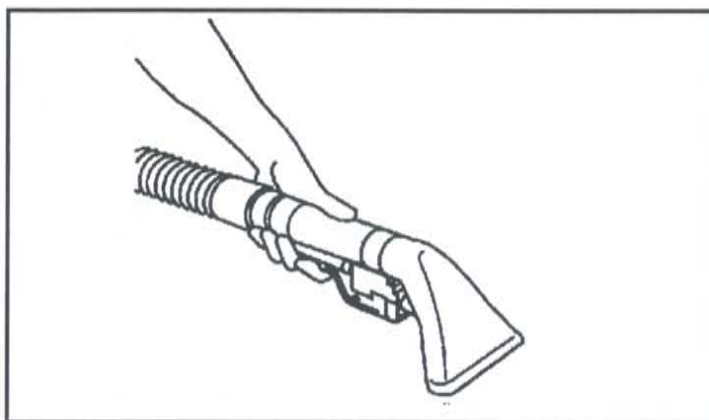
STEP
2

Lift door on front of vacuum shoe and insert 1 ½ inch hose cuff into hole. Ensure clear dome is in place on top of machine to create vacuum.



STEP
3

Turn on Pump and Vacuum Switch. *Note: Be sure intermittent/continuous switch is in center (off) position and brush is in storage position.*



STEP
4

Squeeze handle on accessory tool to begin cleaning.

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.
2. Inspect and clean filter screen in solution tank.
3. Flush pumping system with 4 or 7 liters of clean, hot water.
4. 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.



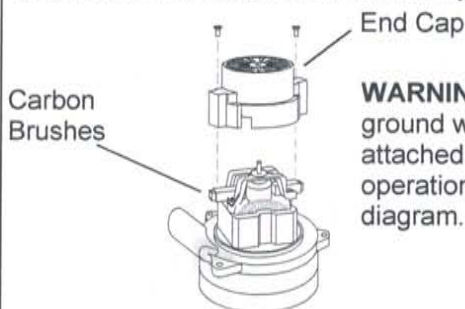
WARNING:

ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

VACUUM MOTOR REPLACEMENT

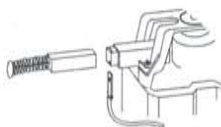
1. Turn off all switches and unplug machine.
2. Remove recovery tank.
3. Remove the (2) screws that fasten the solution tank to the frame, and tilt tank back to expose the inside of the frame.
4. Locate the vacuum motor wires and disconnect at the connector. Close the solution tank.
5. Remove the (6) screws holding the vacuum motor cover (p/n 86003080 – PRV NO. 27809) to the solution tank.
6. Remove the vacuum motor.
7. Reverse process to install vacuum motor.

Vacuum Motor Carbon Brushes Replacement



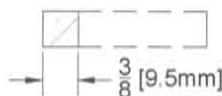
WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

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



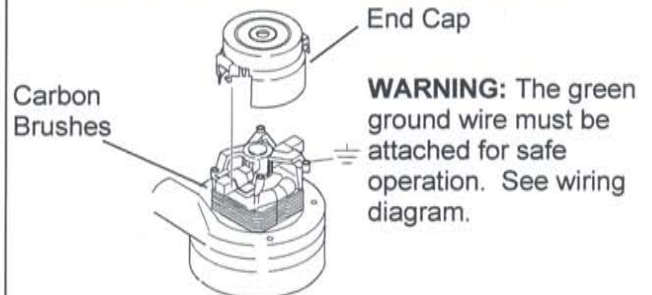
Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



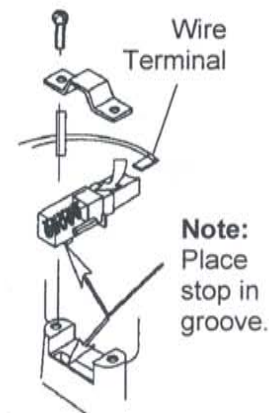
Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

Vacuum Motor Carbon Brushes Replacement

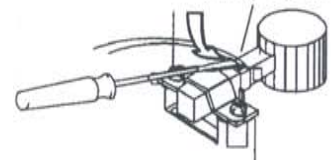


WARNING: The green ground wire must be attached for safe operation. See wiring diagram.

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

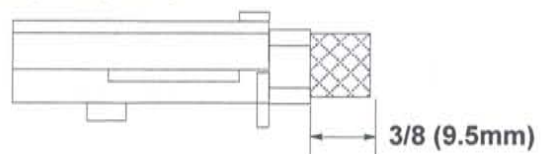


If armature commutator is grooved, extremely pitted or not concentric, the motor will need to be replaced or sent to a qualified service center. Wire Terminal



Important:

These brushes wear quicker as the length shortens due to increased heat. Spring inside brush housing will damage motor if brushes are allowed to wear away completely.



Periodically check the length of the carbon brushes. Replace both carbon brushes when either is less than 3/8" (9.5mm) long.

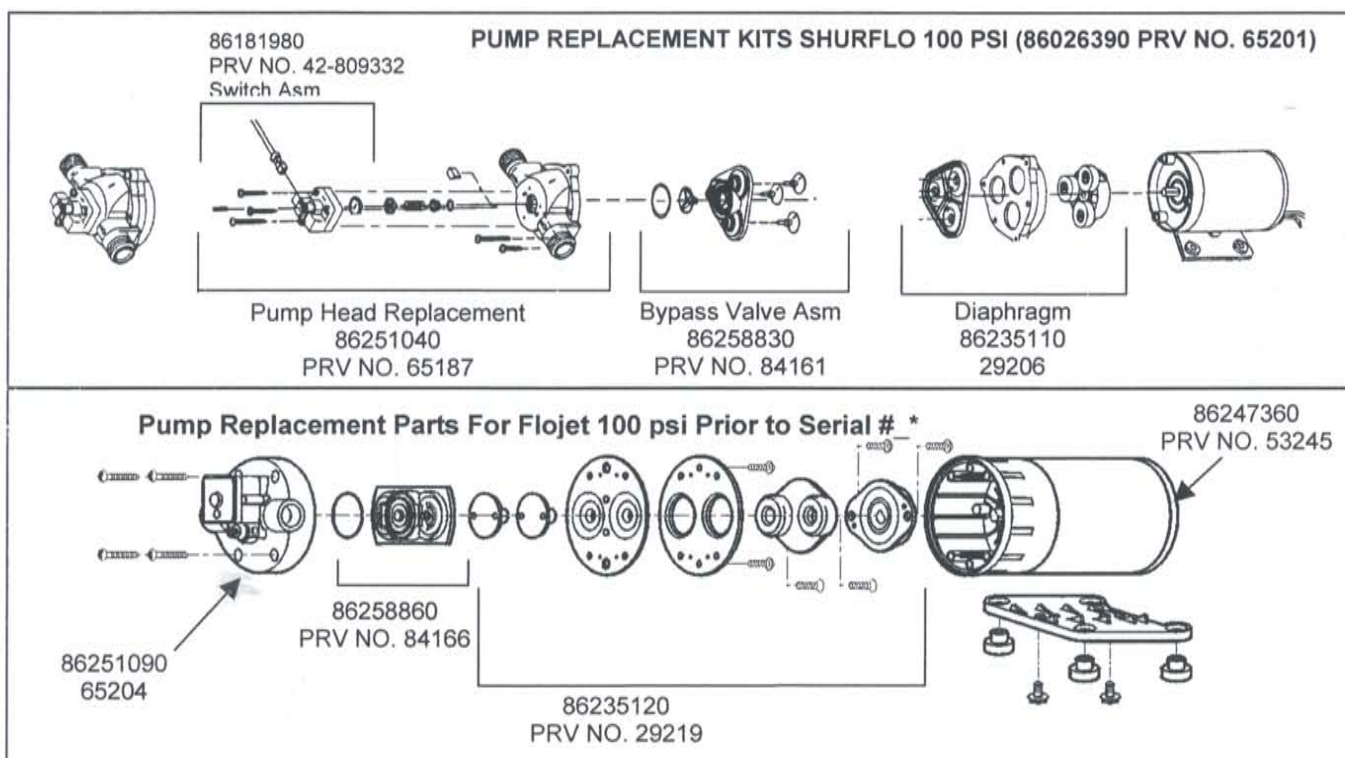


WARNING:

ONLY QUALIFIED MAINTENANCE PERSONNEL ARE TO PERFORM THE FOLLOWING REPAIRS.

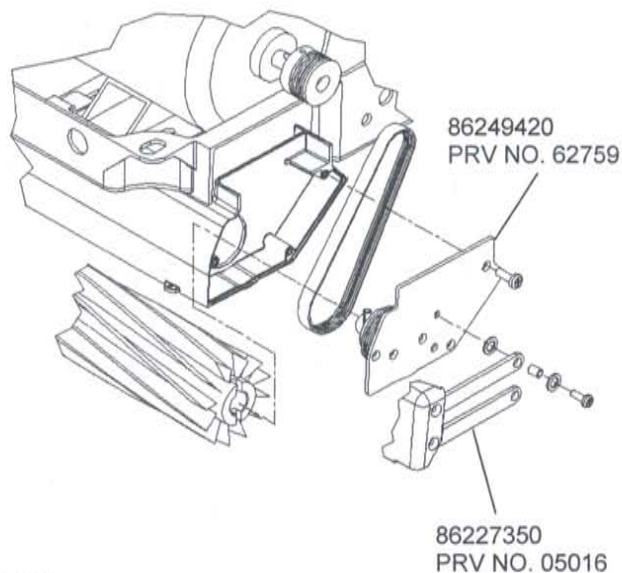
SOLUTION PUMP REPLACEMENT

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.

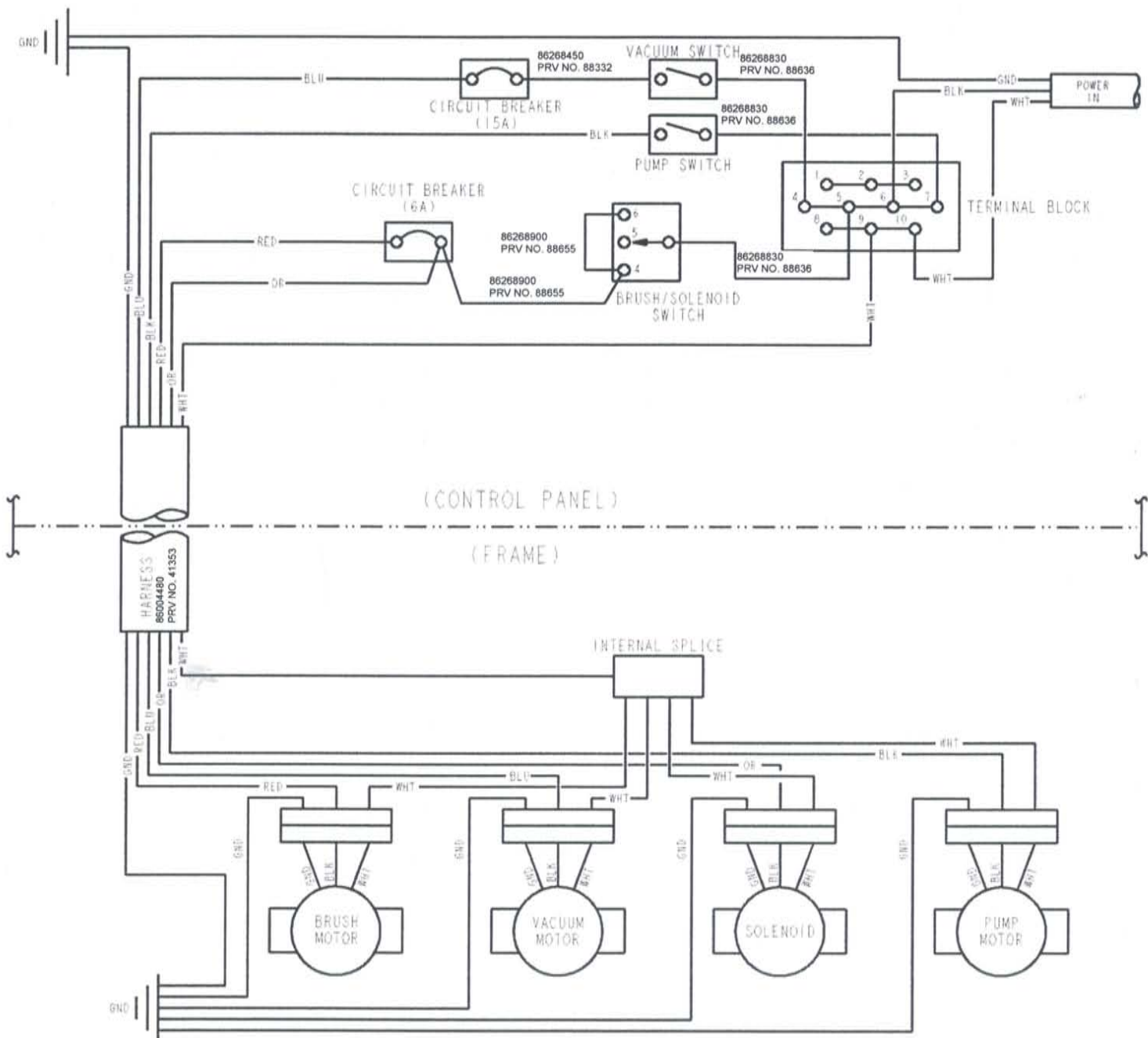


BELT REPLACEMENT

1. Turn off all switches and unplug machine.
2. Remove recovery tank and brush.
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. 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 86249420 – PRV NO. 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

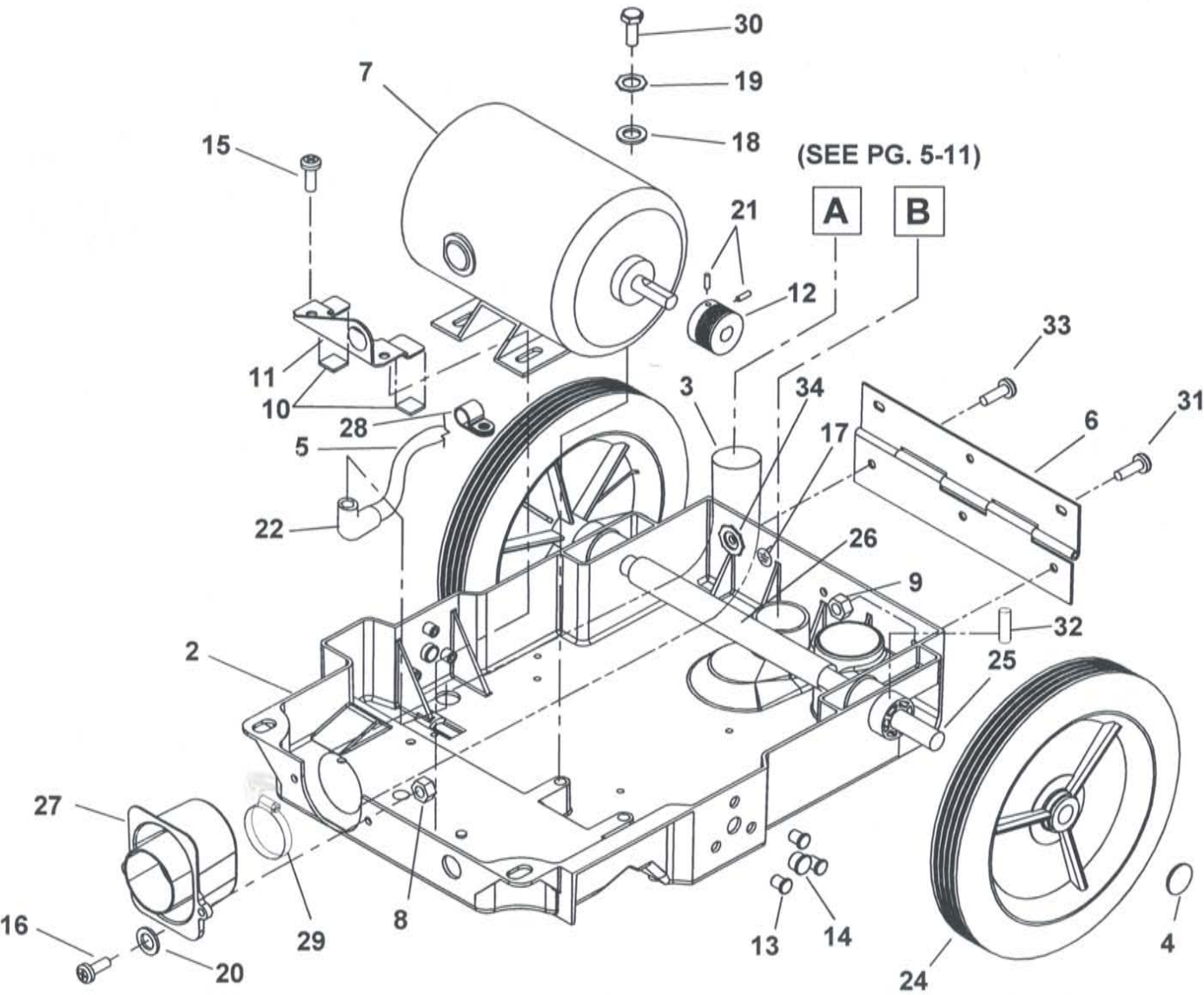


TROUBLESHOOTING CHART

PROBLEM	CAUSE	SOLUTION
No Power, Nothing Runs	Is the cord plugged in.	Plug in cord.
	Circuit breaker tripped in building.	Reset breaker.
	Faulty switch.	Call for service.
	Faulty power cord or pigtail.	Call for service.
Vacuum Motor Will Not Run	Vacuum circuit breaker tripped.	Reset breaker.
	Faulty main vacuum switch.	Call for service.
	Loose wiring.	Call for service.
	Faulty vac motor.	Call for service.
Vacuum Motor Runs But Suction Is Poor	Debris lodged in vac shoe.	Remove debris from vac shoe.
	Dome gasket defective or missing.	Replace as necessary.
	Dome is not seated properly.	Make sure dome is in proper place on tank.
	Recovery tank full / float ball stuck in the up position.	Turn off vac motor. Drain and rinse recovery tank.
Poor Or No Water Flow (Carpet Is Streaky)	Main pump switch off.	Turn on.
	Jets clogged or missing.	Clean using a vinegar /water solution or replace.
	Solution filter clogged.	Drain solution tank and clean solution filter.
	Faulty solenoid.	Call for service.
Brush Does Not Spin	Brush switch off.	Turn on brush switch.
	Brush circuit breaker tripped.	Reset circuit breaker.
	Brush belt broken.	Replace as necessary.
	Faulty brush motor.	Call for service.

NOTES:

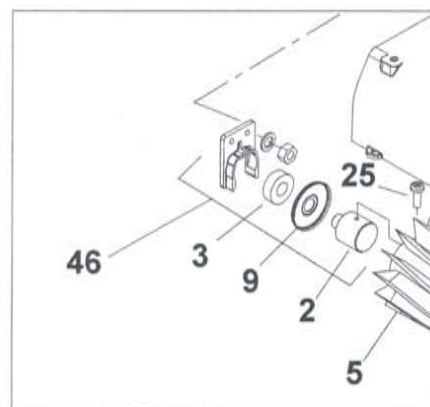
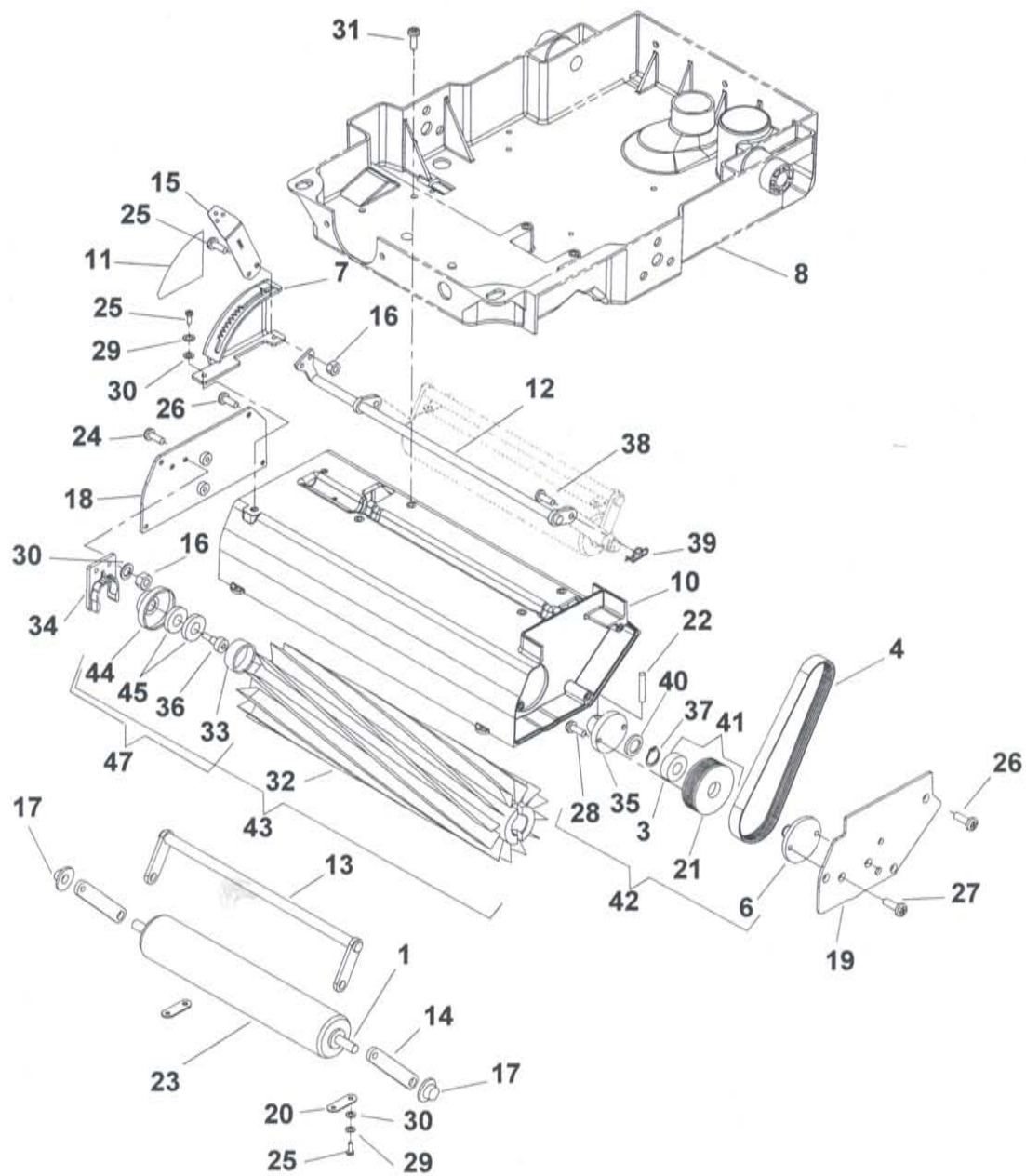
FRAME ASSEMBLY



FRAME ASSEMBLY

Item	SKU	QTY	Description
1	OPEN	-	-
2	E87724	1	FRAME
3	E87751	1	HOSE ASM, 1.5 BLK VAC X 15.5
4	E87475	2	HUBCAP, 5/8" SHAFT
5	E87486	1	HARNESS, MAIN
6	41354	1	HINGE, TANK TO FRAME
7	E87677	1	MOTOR ASM, BRUSH
8	E87515	2	NUT, 10-32 HEX NYLOCK
9	E87575	3	NUT, 1/4-20 HEX NYLOCK SS
10	99809	2	FOAM TAPE, 1/8 THK X 3/4 1SDA
11	62761	1	PLATE, BRUSH MTR CLAMP
12	E87493	1	PULLEY, 1.4 OD, 6GR, MICRO-V
13	66282	6	PLUG, HOLE, .375" BLK
14	66288	2	PLUG, 9/16 OD BLK NYLON
15	70643	2	SCR, 1/4-20 X 3/8" PPHMS
16	70066	2	SCR, 10-32 X 3/4 PPHMS
17	50279	1	LABEL, GROUND SYMBOL
18	E87414	2	WASHER, 1/4 ID X 5/8 OD SS
19	E87247	2	WASHER, 1/4 LOCK EXT STAR SS
20	E87561	2	WASHER, #10 X 9/16 OD
21	E87258	2	SET SCR, 10-32 X 1/4 KCP
22	E87235	1	STRAIN RELIEF, 90 DEGREE
23	OPEN		-
24	E87453	2	WHEEL, 1-15/16 X 10" HOOSIER
25	03107	1	AXLE, 5/8 X 17.06E
26	99667	10"	HEAT SHRINK, 3/4 ID UL/CSA
27	73943	1	SEAL, FRAME/TANK
28	E85412	1	CLAMP, 7/16 DIA NYLON UL
29	E11535	1	CLAMP, 2.0" WORM GEAR
30	70271	2	SCR, 1/4-20 X 1/2 HHCS PLTD
31	70057	2	SCR, 1/4-20 X 1 PPHMS SS
32	66052	1	PIN, ROLL 1/8" X 1.0"L
33	70697	1	SCR, 1/4-20 X 1.25 PPHMS SS
34	E87221	2	NUT, 1/4-20 HEX W/ STAR WASHER

BRUSH ASSEMBLY



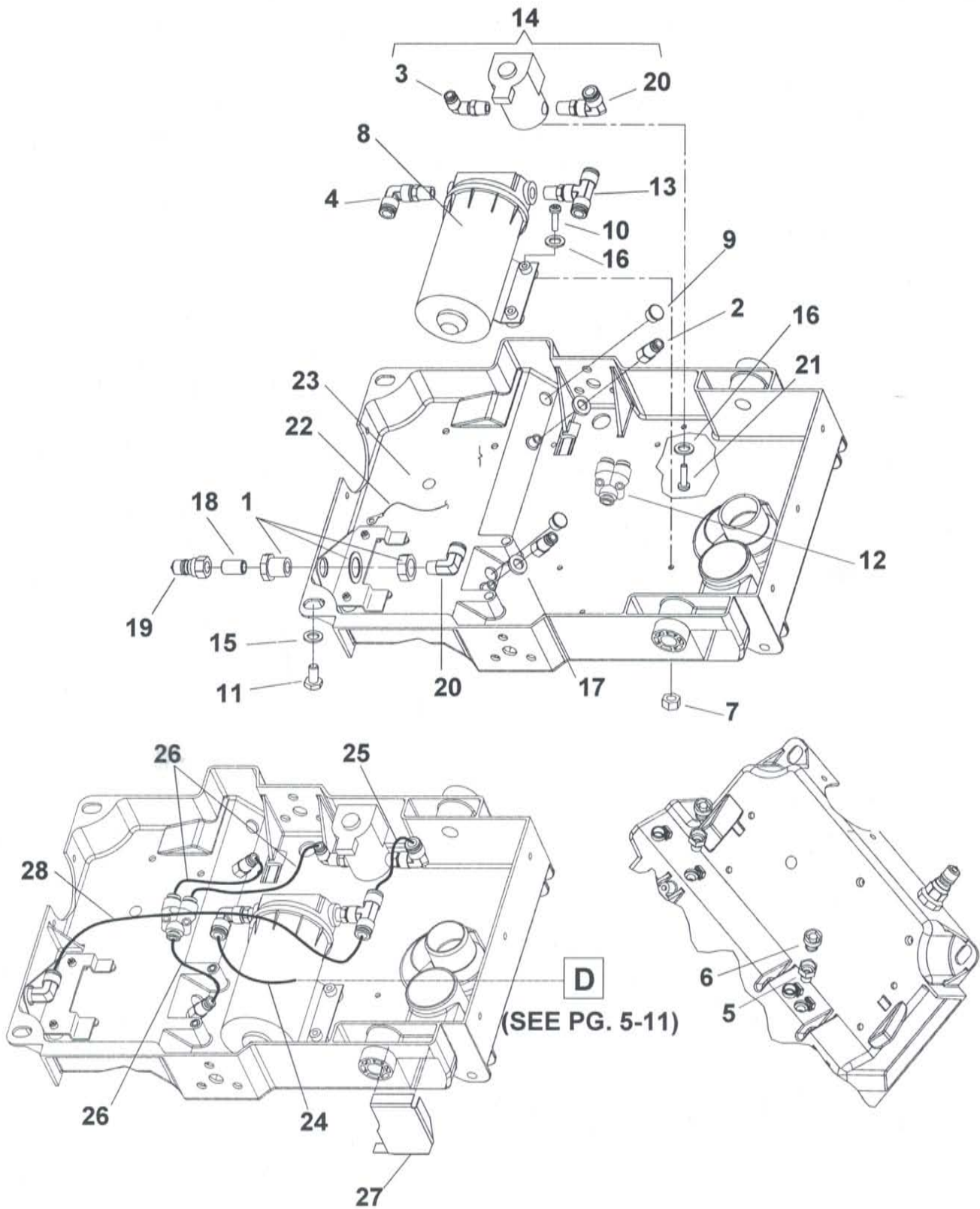
BRUSH ASSEMBLY

Item	SKU	QTY	Description	FROM Serial #
1	E87455	1	AXLE, ROLLER	
2	E87520	1	ADAPTER, BRUSH BRG.	
3	E87500	2	BEARING, 1.1250DX.5001DX.375	
4	E87501	1	BELT, 180J6 MICRO-V	
5	E87527	1	BRUSH, 15L X 3.38OD	
6	E87419	1	BRKT, BRUSH PULLEY	
7	E87456	1	BRKT, BRUSH HEIGHT	
8	E87724	REF	FRAME	
9	E87521	2	GUARD, THREAD	
10	E87712	1	HOUSING, BRUSH 15"	
11	E87562	1	LABEL, BRUSH HEIGHT	
12	51311	1	LINKAGE, ASM, BRUSH HEIGHT	
13	E87264	1	LINKAGE ASM, ROLLER SUPPORT	
14	E87265	2	LINK, ROLLER, FRONT	
15	E87522	1	LEVER, HEIGHT ADJUSTMENT	
16	E87515	4	NUT, 10-32 HEX NYLOCK	
17	E87439	2	NUT, 3/8 DIA CAP, TYPE PUSH PLT	
18	E87240	1	PLATE, BRUSH HOUSING RH	
19	E87219	1	PLATE, BRUSH HOUSING LH	
20	E87220	2	PLATE, AXLE RETAINER	
21	E88378	1	PULLEY, 2.2 OD, 6GR, MICRO-V	
22	E87423	1	PIN, ROLL 1/4 X 1.25E	
23	E87454	1	ROLLER, 1.9 DIA X 10.5 LG	
24	E87328	2	SCR, 10-32 X 5/8 PFHMS	
25	E87559	6	SCR, 10-32 X 1/2 PPHMS SS DL	
26	E87324	7	SCR, 10-32 X 1/2 FHMS SS	
27	E87228	2	SCR, 10-32 X 3/8 FHMS SS	
28	E87274	2	SCR, #10-24 X 1/2 SHCS	
29	E87560	4	WASHER, #10 LOCK EXT STAR SS	
30	E87561	6	WASHER, #10 X 9/16 OD	
31	70675	4	SCR, 1/4-20 X.5/8 THMS PLTD NP	
32	E87527	1	BRUSH, 15 L X 3.38 OD G2	1000060649
33	E87569	1	RING, TOLERANCE 7/8 ID X 1/2 W	1000060649
34	E87375	1	CLIP, BEARING	
35	E87422	1	DRIVER, BRUSH	
36	E87568	1	SHLDR BOLT, 3/8 OD X 3/8 L SS NP	1000060649
37	E87225	1	RING, 1 /2 EXT. SNAP	
38	66310	2	PIN, CLEVIS 1/4 X 1/2 PLTD	
39	E87436	2	COTTER, 1/4" RING	
40	E87421	1	SPACER, .81 ID X 1.060D, ALUM	

BRUSH ASSEMBLY CONT.

Item	SKU	QTY	Description	FROM Serial #
41	E87420	1	PULLEY ASM, BRUSH	
42	E87528	1	DRIVER ASM, BRUSH	
43	E87527	1	BRUSH ASM, 15 IN	
44	E87566	1	ADAPTER BRUSH BRG. DIE CAST	1000060649
45	E87567	2	BEARING, R6 3/8 ID	1000060649
46	E87449	1	BRUSH BEARING ASM	
47	E87570		REFKIT, BRNG/ADPTR EXTRCTR	

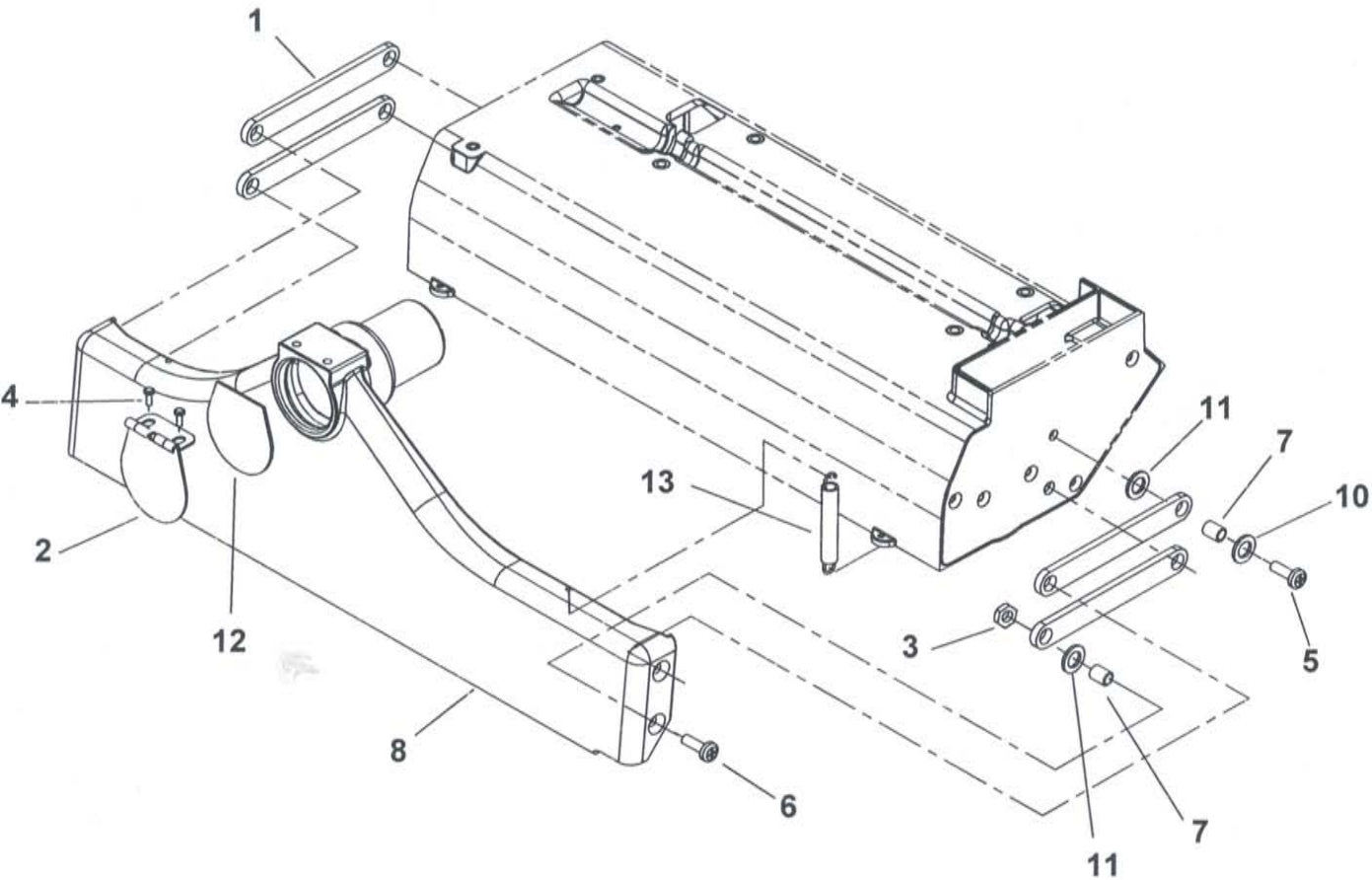
PUMP ASSEMBLY



PUMP ASSEMBLY

Item	SKU	QTY	Description
1	E87594	1	COUPLING, 1/4 ANCHOR W/1" HEX
2	E87700	2	CONNECTOR, 1/8FPT X 1/4 TUBEQC
3	E87841	1	ELBOW, SWIVEL, 1/4MPTX1/4TUBE
4	E87842	1	ELBOW, SWIVEL, 3/8MPTX3/8TUBEQC
5	E87512	2	JET BODY, MINI PROMAX BODY
6	E87514	2	JET, MINI PROMAX 9503
7	E87515	2	NUT, 10-32 HEX NYLOCK
8	E87517	1	PUMP ASM, 115V 100PSI W/CONN
9	66288	2	PLUG, 9/16 OD BLK NYLON
10	E87262	2	SCR, 10-32 X 1.25 PPHMS
11	E87246	2	SCR, 1/4-20 X 5/8 HHCS SS
12	E87222	1	FITTING, 1/4 TUBE,"Y", QC
13	E87843	1	TEE, 3/8 MPT X 3/8 TUBE, QC
14	E87516	1	VALVE ASM, SOLENOID CLP FAMILY
15	87191	2	WASHER, 1/4"IDXI.OOD. FLAT SS
16	E87561	4	WASHER, #10 X 9/16 OD
17	E87452	2	WASHER, 7/16 X 3/4 X.19RUBBER
18	E87595	1	NIPPLE, 1/4 CLOSE
19	E85638	1	NIPPLE, 1/4 FPT QD
20	E87844	2	ELBOW, 1/4 MPT X 3/8 TUBE, QC
21	E87270	2	SCR, 10-32 X 3/8 PPHMS SS
22		-	OPEN
23	880278	1	WIRE, 22" GRN/18 76011 X 76011
24	E87737	1	HOSE, 3/8 URETHANE X 29"
25	E87536	1	HOSE, 3/8 NYLON X 6"
26	E87545	3	HOSE, 1/4 URETHANE X 6"
27	E87227	1	SCREEN, INTAKE
28	39591	1	HOSE, 3/8 ID NYL11 YLW X 29"

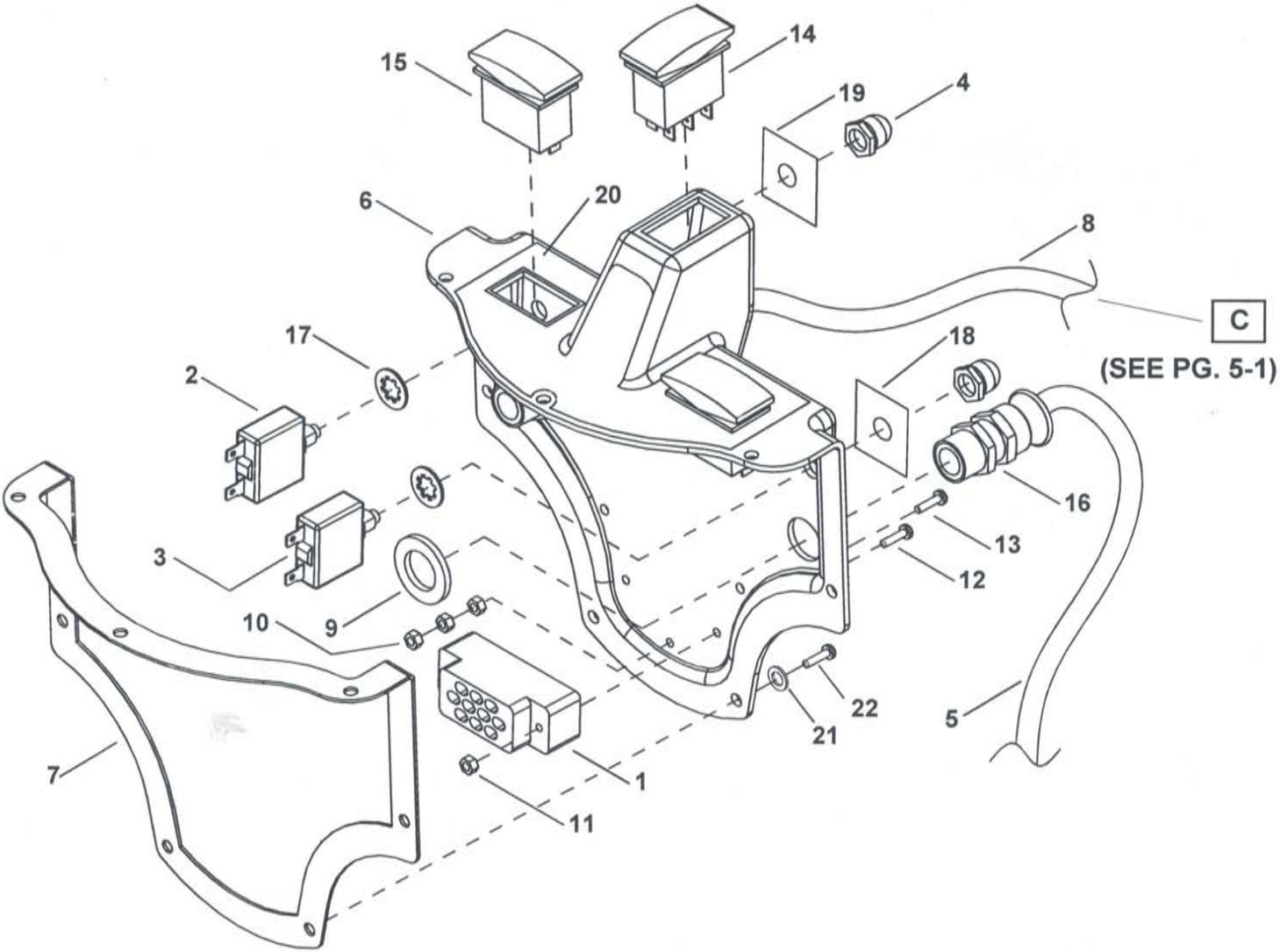
VACUUM SHOE ASSEMBLY



VACUUM SHOE ASSEMBLY

Item	SKU	QTY	Description
1	5016	4	ARM, VAC SHOE PARALLEL
2	E87571	1	COVER, ACCESSORY PORT
3	E87575	4	NUT, 1/4-20 HEX NYLOCK SS
4	E87440	2	SCR, 10-32 X 3/8 HHTR W/STAR
5	E87413	4	SCR, 1/4-20 X.75 PPHMS PHIL
6	E87224	4	SCR, 1/4-20 X 1 FHCS PLTD
7	E87679	8	SPACER, 3/80DX.058WX.2814,CRS
8	E87434	1	VAC SHOE, 15"
9	Open	-	-
10	E87414	4	WASHER, 1/4 ID X 5/8 OD SS
11	E87415	8	WASHER, WAVE 3/81D X3/4D X.125
12	E87518	1	GASKET, ACCESSORY PORT
13	E87487	2	SPRING, EXT.38D X2.75L X.055W

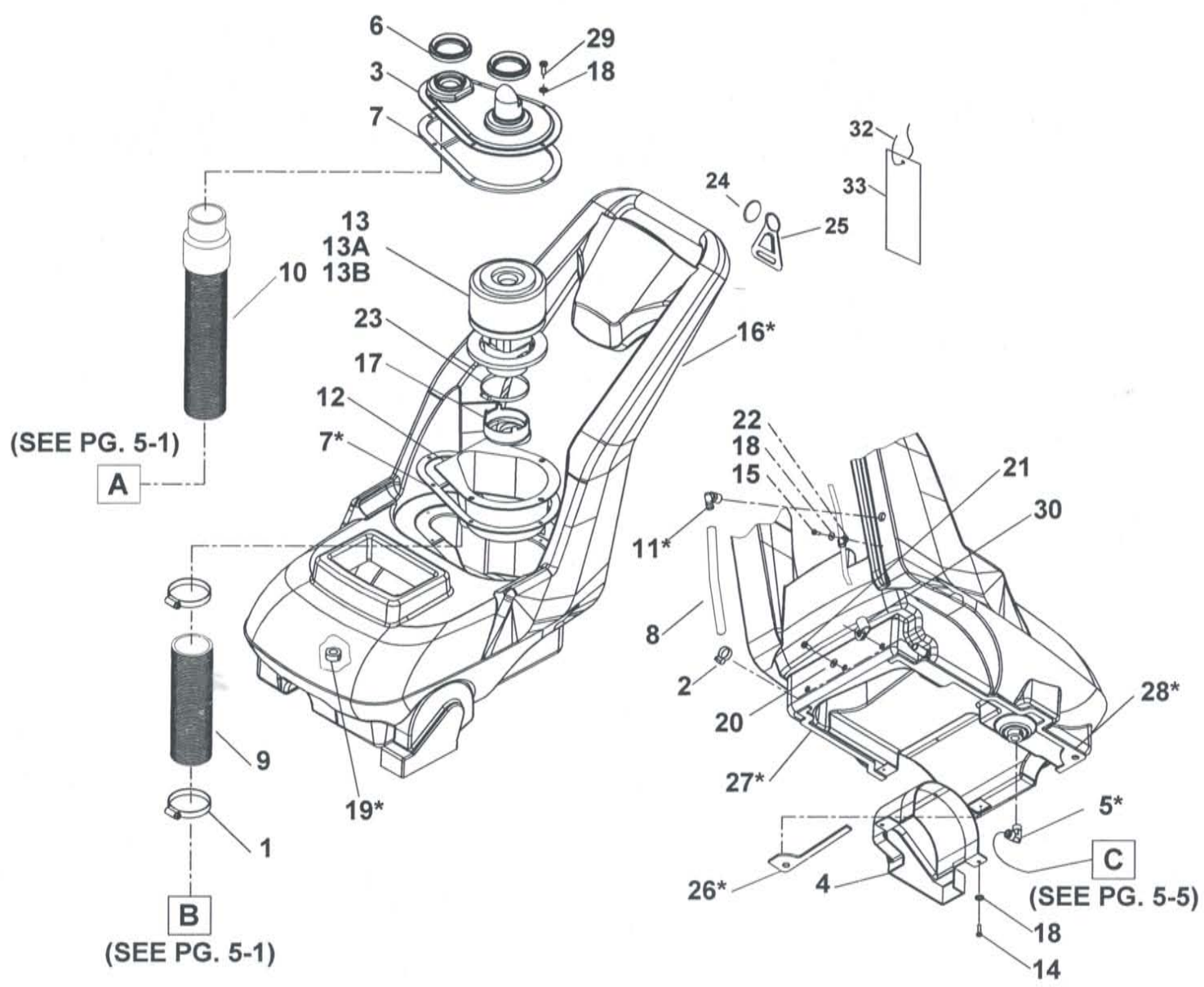
CONTROL PANEL ASSEMBLY



CONTROL PANEL ASSEMBLY

Item	SKU	QTY	Description
1	E87460	1	TERMINAL BLOCK, 115V 3-4-3
2	E87503	1	BREAKER, 15A 250VAC 50VDC
3	E87504	1	BREAKER, 6A VDE CIRCUIT
4	E87505	2	BOOT, 3/8 CIRCUIT BREAKER
5	E87506	1	CORD ASM, 14/3 X 22" YLW
6	E87266	1	COVER, FB8 PANEL
7	E87437	1	GASKET, FB8 PANEL
8	E87486	1	HARNESS, MAIN
9	57040	2	NUT, 1/2 NPT CONDUIT
10	57104	3	NUT, 10-32 W/STAR WASHER PLTD
11	57116	2	NUT, 6-32 W/STAR WASHER PLTD
12	70235	2	SCR, 6-32 X 1.0 PH BLK NYLON
13	70066	1	SCR, 10-32 X 3/4 PPHMS
14	E87507	1	SWITCH, DPDT 3-POSITION ROCKER
15	E87609	2	SWITCH, SPST 2-POSITION ROCKER
16	E87696	2	STRAIN RELIEF, 1/2 NPT TRUMPET
17	87100	2	WASHER, 3/8 ID INT.LOCK THIN
18	500226	3	LABEL, CIRCUIT BREAKER BRUSH
19	500225	1	LABEL, CIRCUIT BREAKER VAC
20	500154	1	LABEL, CONTROL PANEL
21	87189	7	WASHER, .2 ID X.500 BLK SS
22	70626	7	SCR, #10 X 3/4 PPHST HI-LO BLK

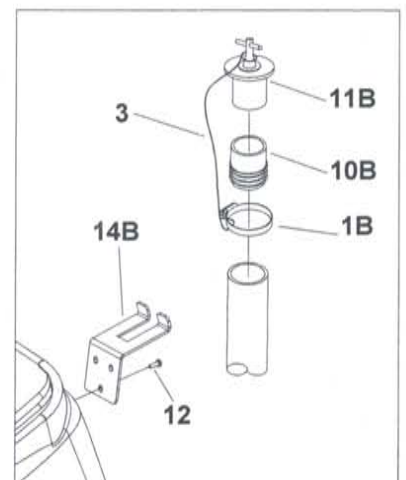
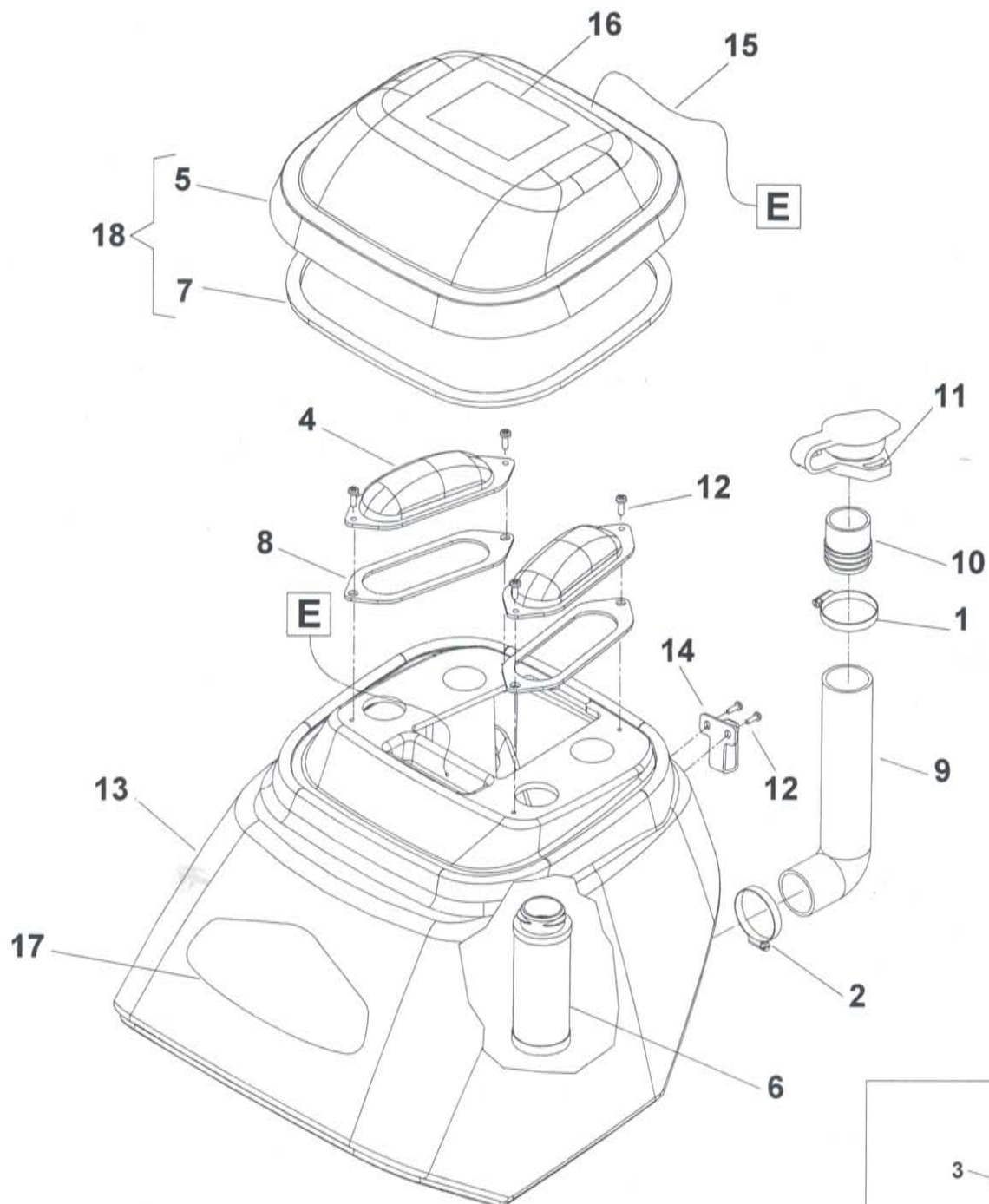
SOLUTION TANK ASSEMBLY



SOLUTION TANK ASSEMBLY

Item	SKU	QTY	Description
1	E11535	3	CLAMP, 2.0" WORM GEAR
2	20042	1	CLAMP, 3/8 HOSE (D-SLOT)
3	E87479	1	COVER, VAC MOTOR
4	E87473	1	COVER, BELT
5	E87736	1	ELBOW, 3/8 MPT X 3/8 TUBE, PLASTIC
6	E87519	2	GASKET, TANK TO VAC COVER
7	E87739	2	GASKET, VAC COVER
8	E87215	1	HOSE, 1/2 CLEAR X 12
9	E87750	1	HOSE, 1.5 BLK VAC X 3.0
10	E87751		REFHOSE ASM, 1.5 BLK VAC X 15.5
11	E87736	1	HOSEBARB
12	E87310	1	HOUSING, VAC MOTOR
13	E87509	1	VAC MOTOR ASM
13A	E87161		BRUSH SET, 120V 5.7 VAC, AMETEK
13B	E87271		BRUSH SET, 120V VAC, WINDSOR
14	E87491	2	SCR, #10 X 3/4 PPHST TYPE B
15	E87559	2	SCR, 10-32 X 1/2 PPHMS SS
16	E87579	1	TANK, F138 SOLUTION
17	E87267	1	VENT, COOLING AIR SMALL
18	E87561	10	WASHER, #10 X 9/16 OD
19	E87510	1	STRAINER, 3/8 IN. NPT 60 MESH
20	E87414	3	WASHER, 1/4 ID X 5/8 OD SS
21	70085	3	SCR, 1/4-20 X 1/2 PPHMS SS DL
22	E85412	2	CLAMP, 7/16 DIA NYLON UL
23	20092	1	CLAMP, 3.5" WORM GEAR
24	67147	1	RING, 2" DIA SPLIT
25	E87391	1	STRAIN RELIEF, CORD HOOK
26	E87416	1	GASKET, TANK, L-F
27	E87459	1	GASKET, TANK, L-R
28	E87417	1	GASKET, TANK, RH
29	E87564	6	SCR, #10 X 1.0 PPHST TYPE B
30	03-000262	1	CLAMP, CABLE 1/2 ID 1/4BLT
31	75318	1	TANK ASM, SOLUTION
32	27417	1	CORD, 99807 1/8 X 12"
33	E87229	1	CARD, INSTRUCTION

RECOVERY TANK ASSEMBLY



RECOVERY TANK ASSEMBLY

Item	SKU	QTY	Description
1A	E85458	1	CLAMP, 2.0" WORM GEAR X.312
1 B	E85358	1	CLAMP, 2.0" NYLON RATCHET
2	E11535	1	CLAMP, 2.0" WORM GEAR
3	E87615	1	CORD, DRAIN HOSE
4	E87557	2	COVER, REC. TANK
5	E87309	1	DOME, CLP FAMILY
6	E87511	1	FLOAT SHUT-OFF
7	E87711	1	GASKET, DOME
8	E87710	2	GASKET, PORT COVER
9	E87572	1	HOSE, 1.5 X 12.0 DRAIN
10A	E87168	1	HOSE, INSERT
10B	E87619	1	HOSEBARB, 1.5 DOUBLE MCHD
11A	E87573	1	HOSE, CAP
11B	E87620	1	PLUG, DRAIN HOSE
12	E87491	6	SCR, #10 X 3/4 PPHST TYPE B
13	75258	1	TANK, CDT RECOVERY
14A	140408	1	BRKT, HOSE HOOK
14B	E87563	1	BRKT, RECOVERY HOSE MTG
15	27417	1	CORD, 99807 1/8 X 12"
16	E87257	1	LABEL, WARNING
17	E87237	1	LABEL, MAIN
18	E87513	1	DOME ASM, CLP FAM

SUGGESTED SPARE PARTS

SKU	DESCRIPTION
E87527	BRUSH, 15L X 3.380D
E87501	BELT, 180J6 MICRO-V
09019	BEARING, 1.1250DX.5001DX.375
E87512	JET BODY, MINI PROMAX BODY
E87514	JET, MINI PROMAX 9503
E87517	PUMP ASM
E87516	VALVE ASM, SOLENOID CLP FAMILY
E87518	GASKET, ACCESSORY PORT
E87503	BREAKER, 15A 250VAC 50 VDC
E87504	BREAKER, 6A VDE CIRCUIT
E87609	SWITCH, SPST 2-POSITION ROCKER
E87507	SWITCH, DPDT 3-POSITION ROCKER
E87509	VAC MOTOR ASM
E87510	STRAINER, 3/8 IN. NPT 60 MESH
E87511	FLOAT, SHUT-OFF
E87513	DOMES ASM
E87620	PLUG, DRAIN HOSE
E87161	BRUSH SET, 120V VAC, AMETEK
E87271	BRUSH SET, 120V VAC, WINDSOR