

Powr-Flite[®]

OPERATOR'S MANUAL & PARTS LIST

Self-Contained Carpet Extractors Model 98150-PF



WARNING: OPERATOR MUST READ AND UNDERSTAND THIS MANUAL COMPLETELY BEFORE OPERATING THIS EQUIPMENT.

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Save These Instructions

98150-PF-MAN 7/16

READ ALL INSTRUCTIONS BEFORE USING!

Congratulations on purchasing a Powr-Flite self-contained extractor. Given proper care, this product will afford you many years of trouble-free operation. All parts have passed rigid quality control standards before being assembled to produce the finished product.

Prior to packaging, the extractor is again inspected for assurance of flawless assembly. This unit is protectively packed to prevent damage in shipment. We recommend removal and inspection of unit upon delivery for possible damage in transit. Only a visual examination will reveal damage that may have occurred.

If damage is discovered, immediately notify the transportation company that delivered your extractor. As a shipper, we are unable to report claims for concealed damage. You must originate any claim within 5 days of delivery.

This manual is for your protection and information. **PLEASE READ CAREFULLY** since failure to follow precautions could result in discomfort or injury. When using electrical equipment, basic safety precautions should always be followed.

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CARE OF THIS SELF-CONTAINED EXTRACTOR

Treat this unit as you would any other high grade precision made product. Dropping, unreasonable bumping across thresholds and other misuses may result in a damaged unit which will not be covered by warranty. When not in use, power cord should be wrapped around handle for storage.

Read this manual completely before operating this extractor. It is important to follow instructions in this manual to prevent the possibility of injury or damage to the user and/or machine.

WARRANTY-PLUS *Powr-Flite* Value Assurance Package.

5 YEARS on
*One Piece
Housing*

2 YEARS on
Brush Motor

1 YEAR on
*Parts & Our
Workmanship*

WARRANTY

The manufacturer warrants to the original purchaser that products manufactured are free from defects of workmanship and material, provided such goods are installed, operated and maintained in accordance with written manuals or other instructions for a period of 1 year from date of purchase on parts and workmanship. In case you as our customer, meet any trouble with your machine, contact your Powr-Flite® representative who will be happy to be of service to you and will take care of the warranty settlement.

NOTE: Alterations and changes made to the machine without written approval of the manufacturer and use of unapproved spare parts will not be covered by warranty.

IMPORTANT SAFETY PRECAUTIONS

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

WARNING
To avoid fire, **DO NOT**
use with a flammable or
combustible liquid to clean
floor.



WARNING
To avoid electric shock,
DO NOT expose to
rain.
Store Indoors.

This machine is intended for commercial use. It is designed to clean carpet and upholstery in an indoor environment and is not constructed for any other use. Use only recommended cleaning solutions and accessory tools.

All operators must read, understand and practice the following safety precautions.

The following safety alert terms are used throughout this manual as indicated in their description:

WARNING: To warn of hazards or unsafe practices which could result in severe personal injury or death.

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

The following information signal potentially dangerous conditions to the operator or equipment:

FOR SAFETY:

- 1) Do not operate machine:
 - unless trained and authorized
 - unless operator manual is read and understood
 - in flammable or explosive areas
 - unless cord is properly grounded
 - with damaged cord or plug
 - if not in proper operating condition
 - in outdoor areas
 - in standing water
 - with the use of an extension cord
- 2) Before operating machine:
 - make sure all safety devices are in place and operate properly
- 3) When using machine:
 - do not run machine over cord
 - do not pull machine by plug or cord
 - do not pull cord around sharp edges or corners

- do not unplug by pulling on cord
- do not stretch cord
- do not handle plug with wet hands
- keep cord away from heated surfaces
- report machine damage or faulty operation immediately
- follow mixing and handling instructions on chemical containers

4) Before leaving or servicing machine:

- turn off machine
- unplug cord from wall outlet

5) When servicing machine:

- unplug cord from wall outlet
- avoid moving parts (Do not wear loose jackets, shirts or sleeves)
- use manufacturer supplied or approved replacement parts

WARNING: Hazardous Voltage. Shock or electrocution can result. Always unplug machine before servicing.

WARNING: Flammable materials can cause an explosion or fire. Do not use flammable materials in tank(s).

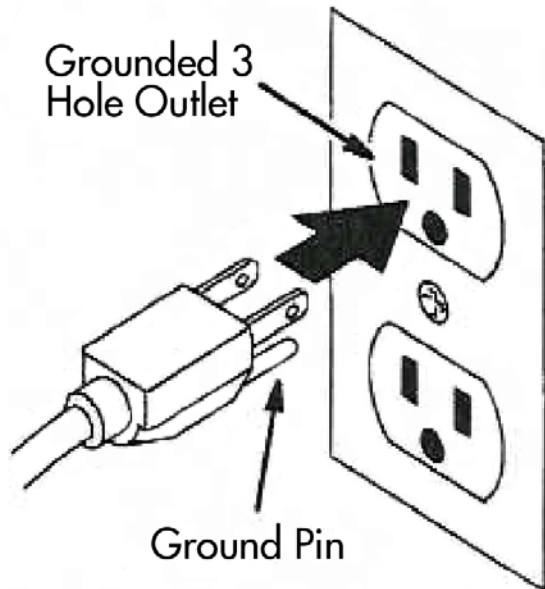
WARNING: Flammable materials or reactive metals can cause an explosion or fire. Do not pick up any of these items and materials.

GROUNDING INSTRUCTIONS

DANGER: Improper use of the grounding plug can result in a risk of electric shock.

GROUNDING INSTRUCTIONS

This self-contained extractor must be properly grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. This machine 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. **DO NOT** remove ground pin; if missing, replace plug before use.



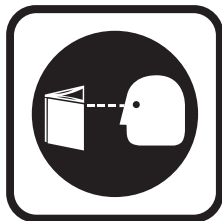
SAFETY LABELS

The safety labels appears on the machine in the locations indicated. Replace labels if they become damaged or illegible.

FOR SAFETY Label:

- located on rear panel

FOR SAFETY:
Read manual before
operating machine.



WARNING Label:

- located on cover
- warns operator of safe practices of equipment
- English text



FLAMMABLE MATERIALS/SPILLS Label:

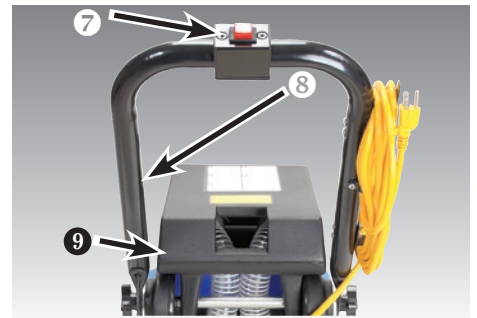
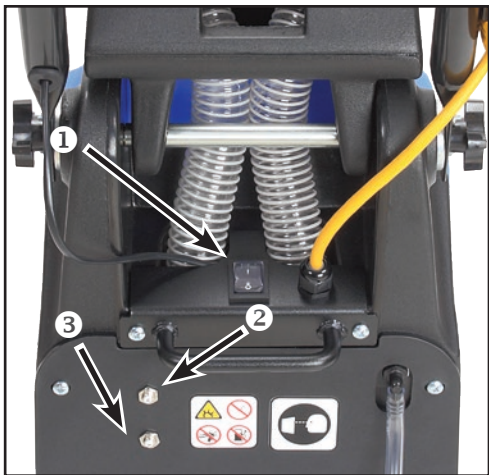
- located near solution tank fill port and on
recovery tank lid

WARNING: Flammable materials can cause an explosion fire. Do not use flammable materials in tank(s). Flammable materials or reactive metals can cause explosion or fire. Do not pick up these types of products.



GENERAL INSTRUCTIONS

MACHINE COMPONENTS & SETUP



- | | | |
|---------------------------------|--------------------------------|---|
| 1) main power ON/
OFF switch | 6) solution tank drain
hose | 12) accessory tool
solution hose coupler |
| 2) pump reset button | 7) solution switch | 13) accessory tool
vacuum hose port |
| 3) brush reset button | 8) folding handles | 14) recovery shoe |
| 4) power cord wrap | 9) recovery tank cover | |
| 5) folding handle lock
knob | 10) recovery tank | |
| | 11) solution tank | |



Figure 1



Figure 2



Figure 3



Figure 12

- 1) Carefully check carton for signs of damage. Report damages at once to carrier. The machine is shipped fully assembled and is ready for use.
- 2) Adjust handle from transport position. To adjust, rotate handle knob to outward position and lift handle to desirable operating height, turn knob inward to lock handle (Figure 1).
- 3) Open cover and remove recovery tank from machine. Make sure the float shut-off screen and solution tank strainer are in place before use (Figure 2).
- 4) Using a clean bucket or hose, fill solution tank with 4 gal (15 L) of hot water, 140°F (60°C) maximum (Figure 3). Observe solution tank hose at rear of machine when filling. The hose indicates the amount of water in solution tank. (Figure 4) Do not use recovery tank to fill machine. Use a clean bucket.
- 5) Add a recommended Powr-Flite extraction cleaner, such as Powr-Extract 7 or Powr-Extract Plus.
- 6) Replace recovery tank and close cover after filling.
- 7) Plug machine's power cord into a grounded wall outlet.

ATTENTION: Do not use recovery tank to fill solution tank. Residual dirt or debris could cause damage to solution pump.
WARNING: Flammable materials can cause an explosion or fire. Do not use flammable materials in tank(s).
FOR SAFETY: When using machine, follow mixing and handling instructions on chemical containers.
FOR SAFETY: Do not operate machine unless cord is properly grounded. Do not operate machine with the use of an extension cord.

GENERAL INSTRUCTIONS

OPERATION OF SELF-CONTAINED CARPET CLEANER

FOR SAFETY: Do not operate machine unless operator manual is read and understood.

PRE-OPERATION

- 1) Vacuum carpet and remove other debris.
- 2) Perform MACHINE SETUP procedures.
- 3) Inspect power cord for damage.

CLEANING CARPETS

- 1) Turn main power switch on (Figure 5).
- 2) To begin cleaning carpets, push solution switch on handle and slowly pull machine backwards (Figure 6).
- 3) Release solution switch at end of path and continue to pull machine to pick up excess solution.
- 4) Tip machine back on wheels and push machine forward to begin next path.

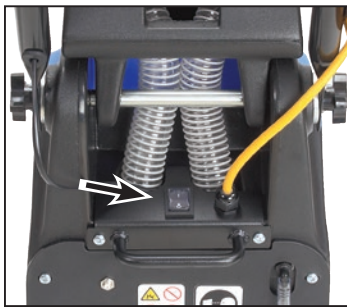


Figure 5



Figure 6

WHILE OPERATING

- 1) Overlap each path by 2 in (50 mm).

WARNING: Flammable materials or reactive metals can cause an explosion or fire. Do not pick up these types of materials.

- 2) Work away from outlet and power cord to prevent cord damage.
- 3) Periodically check for excessive foam buildup in recovery tank. Use defoamer foam control solution to prevent vacuum motor damage. **ATTENTION:** Excessive foam buildup will not activate the float shut-off screen.
- 4) If brush stops, the circuit breaker may have been tripped. Unplug power cord and check brush for obstruction. Push brush reset button on resume (Figure 7). Resume cleaning.
- 5) To clean heavily soiled areas, repeat cleaning path from different direction.
- 6) When float shut-off is activated or when recovery appears to stop, empty recovery tank (Figure 8).

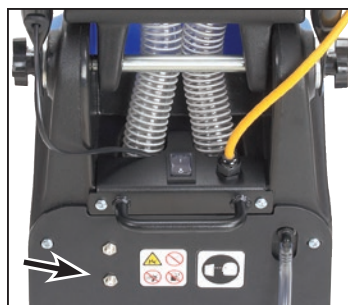


Figure 7



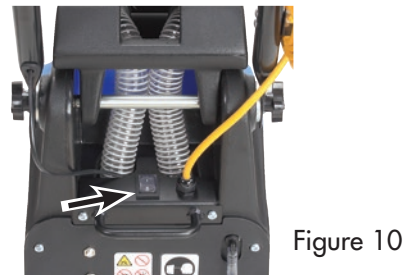
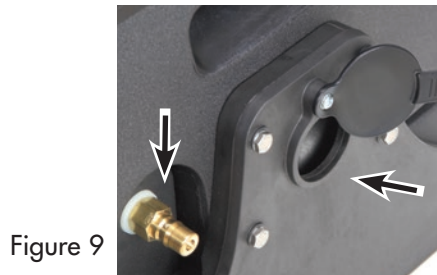
Figure 8

GENERAL INSTRUCTIONS

OPERATION OF SELF-CONTAINED CARPET CLEANER

CLEANING WITH ACCESSORY TOOLS

- 1) Connect accessory tool hoses to solution hose coupler and vacuum hose port located at front of machine (Figure 9).
- 2) Turn main power switch on (Figure 10).
- 3) Operate accessory tools as normal. NOTE: When cleaning upholstery always check cleaning instructions sewn in furniture by manufacturer.
- 4) After cleaning, relieve water pressure from tool before disconnecting hose. Push switch for five seconds after turning main power switch off.



DRAINING TANKS

FOR SAFETY: When servicing machine, unplug cord from wall outlet.

DRAINING RECOVERY TANK

- 1) Turn machine off and unplug power cord.
- 2) Open cover; lift recovery tank out and empty (Figure 11). NOTE: Make sure to rinse out recovery tank after each use. Do not use this tank to fill machine with cleaning solution.



DRAINING SOLUTION TANK

- 1) Pull solution tank drain hose off of hose barb at rear of machine and empty remaining solution (Figure 12).
- 2) Replace drain hose.



GENERAL INSTRUCTIONS

STORING MACHINE

- 1) Before storing machine, be certain to empty and rinse both tanks of all solution.
- 2) Store machine in a dry area in the upright position.
- 3) Open recovery tank cover to promote air circulation.

ATTENTION: Do not expose to rain. Store indoors.

ATTENTION: Do not store in freezing temperatures of 32°F (0°C) or below.

DAILY (EVERY 4 HOURS OF OPERATION)

- 1) Empty and rinse out recovery tank thoroughly (Figure 13).
- 2) Remove float shut-off screen from recovery tank cover and clean (Figure 14).
- 3) Drain remaining water from solution tank (Figure 15).
- 4) Clean solution tank fill port strainer.
- 5) Remove any entangled carpet fibers and debris from brush (Figure 16).
- 6) Remove any debris lodged in pick up head.
- 7) Wipe off power cord and check for damage, replace if necessary. Coil cord neatly after use.
- 8) Clean machine with all purpose cleaner and damp cloth.



Figure 13



Figure 14



Figure 15



Figure 16

WEEKLY (EVERY 20 HOURS OF OPERATION)

- 1) Inspect vacuum hoses for holes and loose cuffs.
- 2) Inspect spray pattern for clogs. If clogged, remove spray tips by twisting spray tip body counter-clockwise and clean orifices.
- 3) Inspect cord and cord grip for damage. Replace immediately if damaged.

GENERAL INSTRUCTIONS

ROUTINE MAINTENANCE INSTRUCTIONS

MONTHLY (EVERY 80 HOURS OF OPERATION)

- 1) Flush solution system with recommended liquid neutralizer to dissolve normal chemical buildup.
 - a. Pour 2 gal (7.5 L) of hot water 140°F (60°C) into solution tank. Add a liquid neutralizer according to mixing instructions on bottle. FOR SAFETY: When using machine, follow mixing and handling instructions on chemical containers.
 - b. Position brush over floor drain and operate machine for one minute.
 - c. Connect hand tool solution hose to machine and also over a floor drain operate tool for one minute.
 - d. Shut off machine and allow remaining solution to break down chemical buildup overnight.
 - e. Next day, spray out remaining solution and flush system with 3gal (11 L) of clean water.
- 2) Lubricate wheels with water resistant oil.
- 3) Inspect machine for water leaks and loose hardware.

QUARTERLY (EVERY 250 HOURS OF OPERATION)

- 1) Check vacuum motor for carbon brush wear. Replace brushes if worn to a length of 3/8 in (10 mm) or less.

FILTER MAINTENANCE

EXTERNAL FILTER

- 1) Remove the recovery tank and locate the filter (Figure 17).
- 2) Grasp the inner handles and pull out the filter.
- 3) Rinse the filter bag inside and out.
- 4) Replace the filter by snapping the filter back into place.



Figure 17

INTERNAL FILTER

- 1) Take off the back cover by removing the four screws.
- 2) Locate the filter next to the vacuum motor and unscrew the cap.
- 3) Remove the filter screen from the cap and rinse it thoroughly.
- 4) Reassemble the screen, cap, and fasten the back cover on.

ILLUSTRATED PARTS LIST

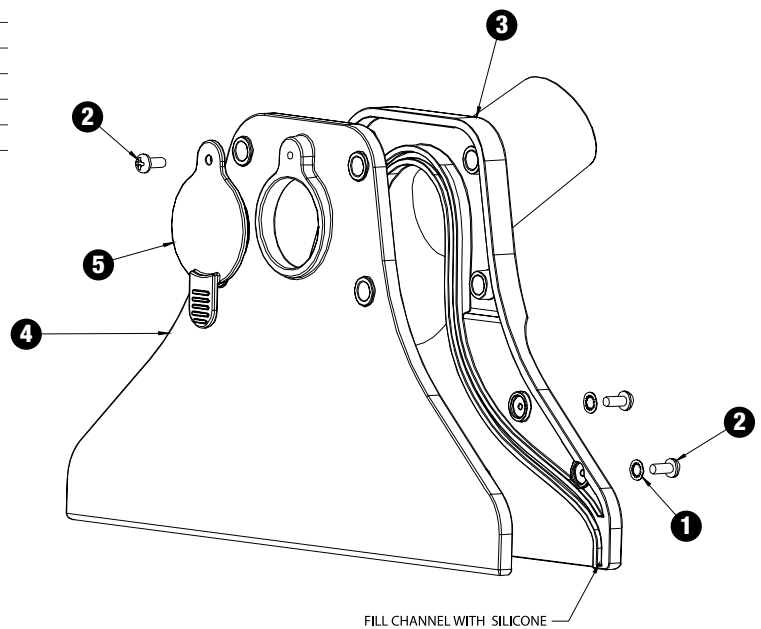
Motor/pump assembly continued

ref#	order#	description
1	00696	washer-plain #10
2	01574	washer-lock (1/4")
3	01604	nut-finished hex #10-32
4	01713	washer, lock #10
5	02038	screw-Phillips round head machine 1/4-20 x 1.00
6	02625	nut-hex. lock (keps) #10-32
7	03218	washer-plain 1/4
8	03261	screw, tct panhead, #10-32 x 3/8
9	04442	screw-Phillips pan head machine 1/4-20 x 1/2
10	05209	bearing-radial ball
11	05282	jam nut
12	11007	washer-lock (i/t) #10
13	11733	screw-socket hd cap #10-32 x 1-1/4
14	12554	washer-plain .500 id (natural nyl)
15	14858	clamp-hose (screw)
16	14881	brass fitting- nipple, 1/4" fnpt x 1/4" qc
17	15330	strain relief bushing
18	16091	clamp
19	17160	1/4 x 3/4-20 screw
20	17508	nut-finished hex 1/4-20
21	19149	fitting-brs.plug 1/8 mpt hex socket
22	19157	bearing block-brush
23	19158	bearing seal
24	19161	pulley timing-motor
25	19190	spacer 5/16" delrin
26	19228	gasket-bearing block
27	32175	pulley timing-motor

ref#	order#	description
28	32183	plug in elbow 3/8"
29	32186	male conector 3/8"
30	32245	lock washer 5/16"
31	32905	clevis pin spring
32	32936	2" vac hose
33	32937	spray nozzle tip
34	32946	vacuum bracket
35	32948	pump bracket
36	32959	10.25" brush axle
37	32962	solution pump
38	32963	solenoid valve
39	32973	spray manifold
40	32974	spray cap connector
41	32975	spray nozzle cap
42	32982	brush-20" roller, carpet scrubbing
43	33000	1/4 npt f x f x m tee
44	33002	2" threaded pipe
45	33006	hose-3/8" x 4.5" lg. (natural tube)
46	33007	hose-3/8" x 14" lg. (natural tube)
47	33450	gasket-lower housing (large)
48	33015	gasket-lower housing (small)
49	33061	bridge rectifier-25 a
50	33063	screw-socket hd cap #10-32 x 1-5/8
51	33073	17" belt - 98150
52	33086	120v 1200w tangential bypass vac motor
53	33090	motor/pump housing
54	33094	#10-32 x 3/8" flat head screw
55	33427	bottom plate assembly
56	X9002+	motor-brush

Vacuum nozzle assembly

ref#	order#	description
1	11007	washer-lock (i/t) #10
2	32654	#10 plastite hi-lo screw, .500 long
3	32956	vacuum nozzle-back
4	32957	vacuum nozzle-front
5	32958	intake cap

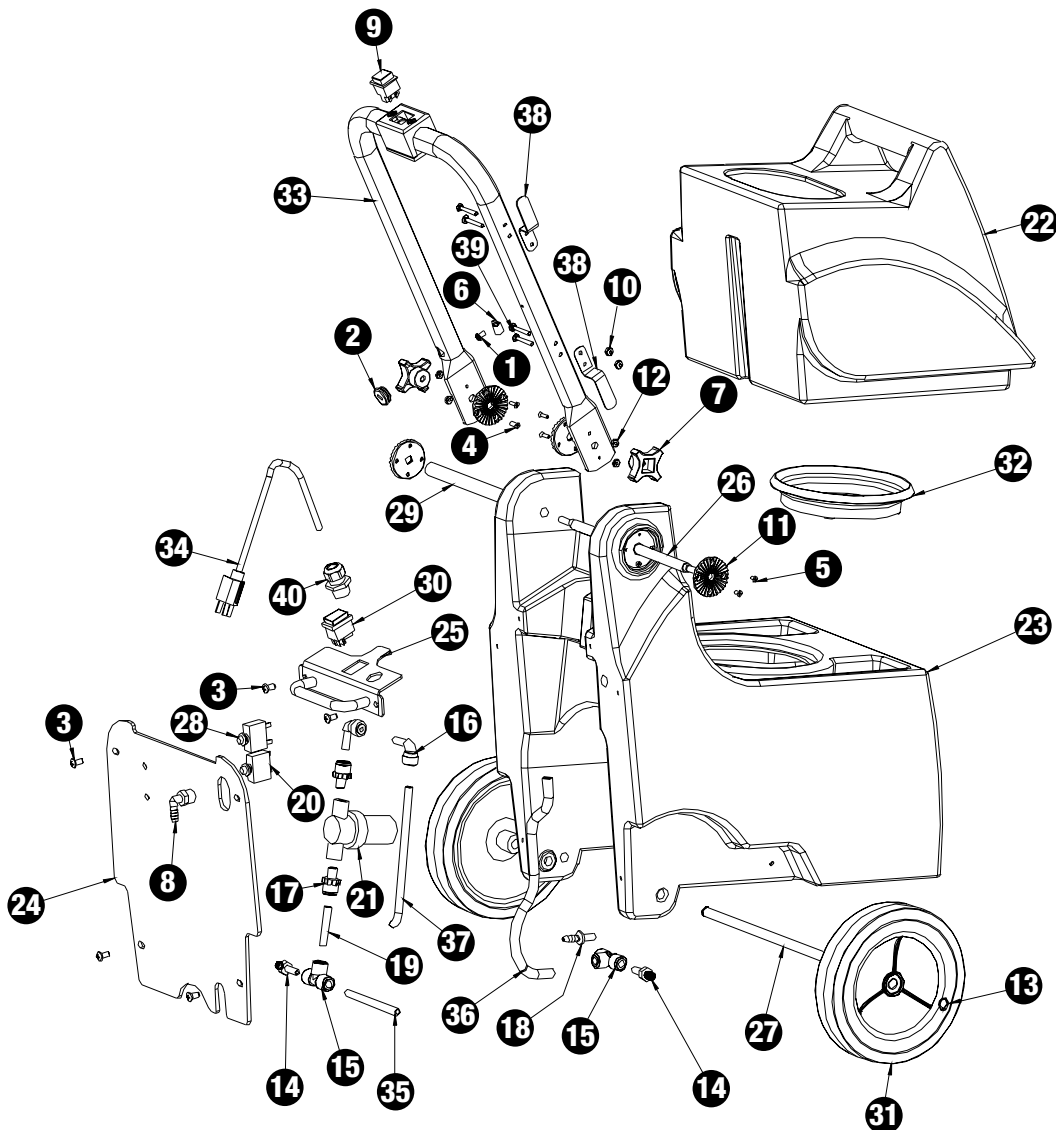


ILLUSTRATED PARTS LIST

Solution tank assembly

ref#	order#	description
1	03261	screw, tct panhead, #10-32 x 3/8
2	04145	grommet, 3/8" id x 9/64 wall
3	04442	screw-phillips pan head machine 1/4-20 x 1/2
4	05769	screw-phillips flat head machine #8-32 x 5/8
5	15475	screw-phillips flat head machine #8-32 x 3/8
6	17392	clamp, cable (cch 5/16)
7	18119	nut, thumb 5/16-18
8	18486	fitting, plastic elbow
9	19121	switch-push button
10	19145	nut-hex lock (nylon insert) #10-24
11	19798	bracket grd handle
12	30074	#8-32 hex lock nut, steel
13	30507	1/2" external snap ring
14	32181	stem adapter 3/8"
15	32182	union tee 3/8"
16	32183	plug in elbow 3/8"
17	32186	male conector 3/8"
18	32257	fitting, stem 3/8"x3/8"
19	32258	hose-3/8" x 2" lg. (natural tube)
20	32935	3 amp circuit breaker

ref#	order#	description
21	32938	inline filter
22	33901	recovery tank blue
23	33089	solution tank
24	32944	back cover
25	32952	control panel assembly
26	32954	hinge bar
27	32955	wheel axle
28	32964	10 amp circuit breaker
29	32965	hinge bar sleeve
30	32966	on/off switch-small extractor
31	32969	8" wheel
32	32970	bag filter
33	32989	tubular handle assembly
34	33003	cord-power 16/3 awg x 20' (yellow)
35	33006	hose-3/8" x 4.5" lg. (natural tube)
36	33008	hose, solution drain
37	33010	hose-3/8" x 11.5" lg. (natural tube)
38	33012	cord wrap bracket
39	33078	carriage bolt, #10-24 x 1.5l
40	PDB+	strain relief (liq. tite)



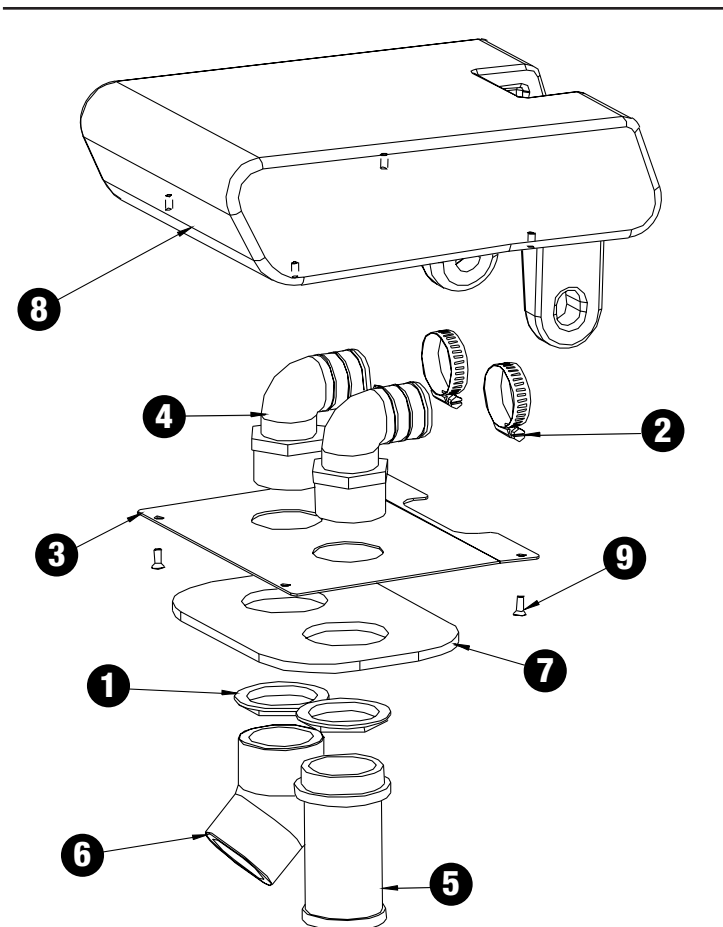
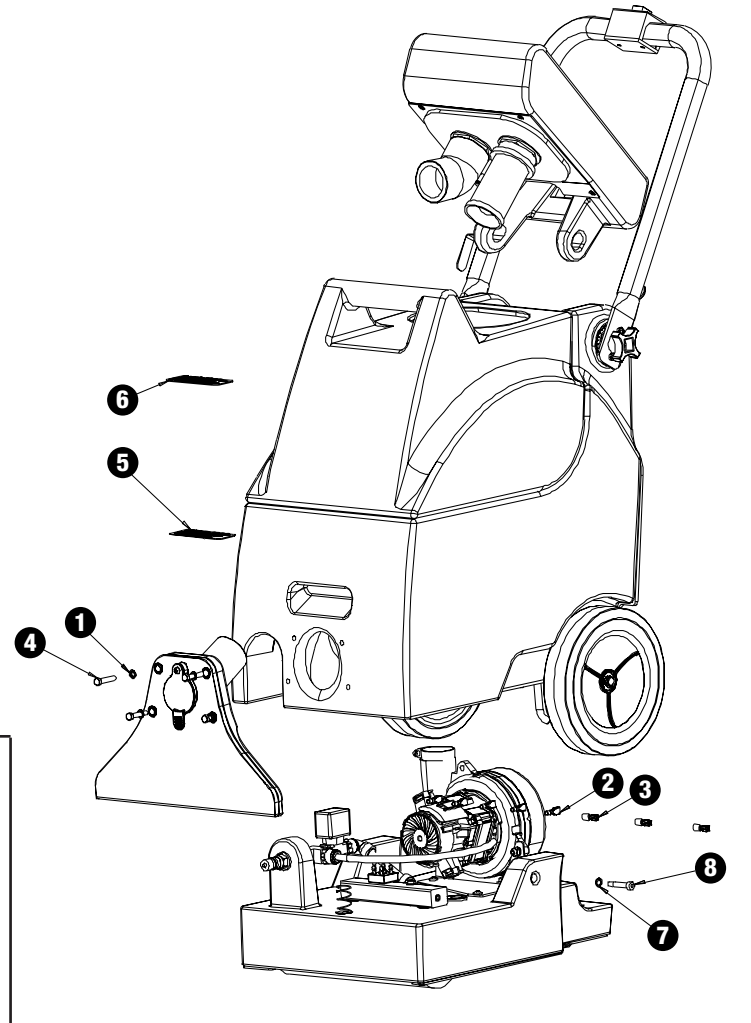
ILLUSTRATED PARTS LIST

Exterior assembly

ref#	order#	description
1	07870	washer-lock(i/t)1/4"
2	15139	terminal-q.d. female 1/4'
3	15391	1/4" piggyback terminal
4	17177	screw-hex head cap 1/4-20 x 1-1/4
5	32998	solution tank label-bilingual
6	32999	solution tank label-bilingual
7	33066	5/16 id x 15/32 od steel washer
8	33408	shoulder bolt, 1/4-20 x 1.25l, ss

NOT ILLUSTRATED

32971	discharge hose
32972	intake hose
32994	decals, pictorial instruction
32995	decals, warning
32996	decals, pictorial hazard
32997	decals, read instructions pictorial
32999	decals, recovery tank warning



Top cover assembly

ref#	order#	description
1	15092	nut hex flanged lock 1-1/2 npt
2	16091	clamp
3	32950	top cover
4	32976	1-1/2 elbow m x spigot
5	32977	ball float
6	32979	45 degree elbow
7	33013	gasket-cover plate
8	33087	cover
9	33094	#10-32 x 3/8" flat head screw

MAINTENANCE GUIDE

Machine does not operate

CAUSE:

- 1) Faulty switches or wiring.
- 2) Faulty power cord.
- 3) Building circuit breaker tripped.

SOLUTION:

- 1) Contact manufacturer or service center.
- 2) Contact manufacturer or service center.
- 3) Reset circuit breaker according to operating instructions.

Brush motor does not operate

CAUSE:

- 1) Brush motor circuit breaker tripped.
- 2) Switch not pushed.
- 3) Loose or broken brush belt.
- 4) Faulty switch or wiring.
- 5) Faulty brush motor.

SOLUTION:

- 1) Let motor cool and reset brush motor breaker button at rear of machine.
- 2) Push solution switch.
- 3) Contact manufacturer or service center.
- 4) Contact manufacturer or service center.
- 5) Contact manufacturer or service center.

Solution pump does not operate

CAUSE:

- 1) Solution pump circuit breaker tripped.
- 2) Switch not pushed.
- 3) Faulty switch or wiring.
- 4) Faulty solution pump motor.

SOLUTION:

- 1) Let pump cool and reset pump breaker button at rear of machine.
- 2) Push solution switch.
- 3) Contact manufacturer or service center.
- 4) Contact manufacturer or service center.

Vacuum motor does not operate

CAUSE:

- 1) Loose or broken wiring.
- 2) Faulty main power switch.
- 3) Defective vacuum motor.
- 4) Worn carbon brushes.

SOLUTION:

- 1) Contact manufacturer or service center.
- 2) Contact manufacturer or service center.
- 3) Contact manufacturer or service center.
- 4) Contact manufacturer or service center.

Poor solution pick-up

CAUSE:

- 1) Defective recovery tank cover gasket.
- 2) Clogged float shut-off screen.
- 3) Accessory tool vacuum hose port cover is loose or missing.
- 4) Loose vacuum hose cuffs.
- 5) Pulling machine too fast.

SOLUTION:

- 1) Replace gasket.
- 2) Open recovery tank cover and clean lint off screen.
- 3) Check vacuum hose port cover.
- 4) Secure connections under cover.
- 5) Slow down cleaning process.

Uneven or no spray

- 1) Clogged spray tips.
- 2) Improper spray tip size or spray angle.
- 3) Clogged solenoid valve.
- 4) Worn spray tips.
- 5) Solution tank low or empty.
- 6) Faulty solution pump.
- 7) Pump needs priming.

- 1) Clean or replace tips.
- 2) Replace with proper tips.
- 3) Contact manufacturer or service center.
- 4) Replace spray tips.
- 5) Refill solution tank.
- 6) Contact manufacturer or service center.
- 7) Prime pump by pressing solution hose coupler tip located at front of machine.

SAVE THESE INSTRUCTIONS