

# Operating Instructions

Model PF90



**Power-Flite**<sup>®</sup>  
COMMERCIAL FLOOR CARE EQUIPMENT

Before operating the unit, please read these instructions completely.

# Index

Important Safety Instructions . . . . .	2
Grounding Instructions . . . . .	3
Two-Wire Polarization . . . . .	3
Parts Identification . . . . .	4
Replacement Bags/Filter . . . . .	4
How to Assemble and Operate the Vacuums. . . . .	5
How to Change the Dust Bag . . . . .	5
Handle Adjustments . . . . .	6
Electrostatic Filter . . . . .	6
Edge Cleaning Feature . . . . .	6
Automatic Self-Adjusting Rug Nozzle . . . . .	7
Optional Cleaning Tools/Accessories . . . . .	7
How to Replace the Headlight Bulb, Drive Belt, & Brush . . . . .	8
Replacing the Agitator . . . . .	9
How to Clean the Nozzle Hose . . . . .	9
Thermal Fuse Protection . . . . .	10
For Best Performance . . . . .	10

## Customer's Record

The model and serial numbers of this product may be found on the back side of the unit. You should complete the enclosed warranty card and mail it back to us as soon as possible for your protection. Also, note the model and serial numbers of your unit in the spaces provided below, and retain this book as a permanent record of your purchase.

Model Number: \_\_\_\_\_  
Serial Number: \_\_\_\_\_  
Date Purchased: \_\_\_\_\_

Your Powr-Flite Vacuum Cleaner is a product of high quality materials and superior workmanship. It has many desirable features, such as a large capacity disposable filter bag, and others. Starting today, your new Powr-Flite Vacuum Cleaner will work for you on carpets, floors, and for all other cleaning needs in your home. We urge you to read these operating instructions carefully before you use this vacuum cleaner, in order to obtain the full performance and satisfaction that it can offer you.

## Save These Instructions

Before you plug in your Powr-Flite Vacuum Cleaner, make sure that the voltage indicated on the rating plate located underneath the vacuum cleaner is the same as your local supply.

# IMPORTANT SAFETY INSTRUCTIONS

## READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE.

When using an electrical appliance, basic precautions should always be followed, including the following:

## SAVE THESE INSTRUCTIONS. WARNING

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

1. Do not leave appliance unattended when plugged in. Unplug from outlet when not in use and before servicing.
2. WARNING: ELECTRIC SHOCK COULD OCCUR IF USED OUTDOORS OR ON WET SURFACES.
3. Do not allow to be used as a toy. Close attention is necessary when used by or near children.
4. Use only as described in this manual. Use only manufacturer's recommended attachments.
5. Do not use with damaged cord or plug. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
6. 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 run appliance over cord. Keep cord away from heated surfaces.
7. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
8. Do not handle plug or appliance with wet hands.
9. Turn off all controls before unplugging.
10. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
11. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
12. Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
13. Do not use without dust bag and/or filters in place.
14. Use extra care when cleaning on stairs.
15. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
16. Do not attempt to service the unit while appliance is plugged in.
17. For grounded models, connect to a properly grounded outlet only. See Grounding Instructions.

# 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 plugged 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 grounding attachment plug that looks like the plug illustrated in Fig. 1. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adapter should be used with this appliance.

**WARNING** - 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.

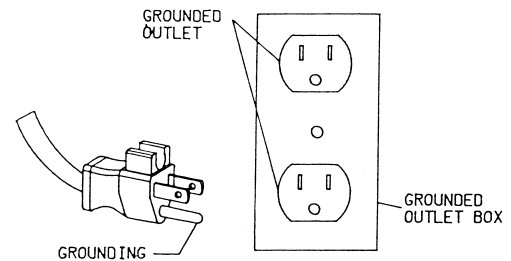


Fig. 1

# Two-Wire Polarized Cord

This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of the polarized plug.

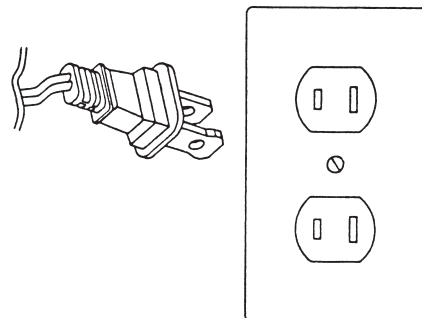
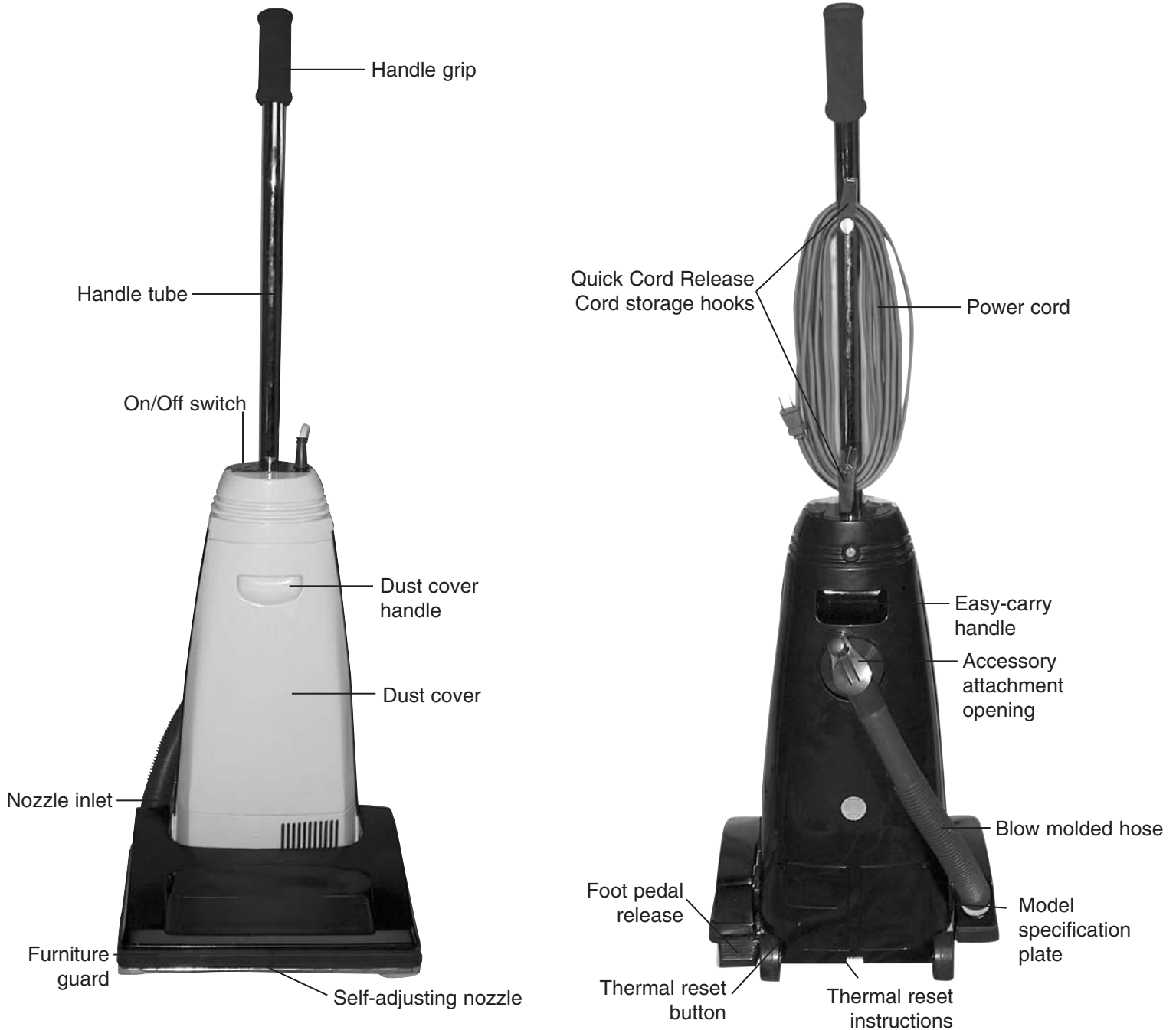


Fig. 2

# Parts Identification



# Replacement Bags/Filters

- Genuine Powr-Flite Vacuum Filter Bags  
Part # 460PB  
3 pk.

- Genuine Powr-Flite Electrostatic Filter  
Part # F901  
1 pk.

# How to Assemble and Operate the Vacuum

## How to Attach the Handle to the Vacuum Cleaner

The cleaner and the handle are packed separately.

1. After first removing the handle screw, insert handle into the hole on top of the vacuum cleaner. Make sure that the switch on the handle is positioned to the front of the vacuum cleaner (Fig. 1).
2. Line up the small hole on the handle with the small hole on the vacuum cleaner and insert the screw. Make sure the screw is tightened securely.
4. Turn the upper cord storage hook to the upright position and wind the power cord around the cord storage hooks when storing the vacuum cleaner (Fig. 2).



Fig. 1



Fig. 2

## How to Release the Power Cord

1. The upper cord storage hook has a quick-release action. To release the cord, rotate the hook downward and the cord will drop off the handle for immediate use (Fig. 3).
2. Return the hook to the upright position before attempting to rewind the cord.



Fig. 3



Fig. 4

## On/Off Switch (Fig. 4)

1. To turn the vacuum on, push the switch located on the dust compartment to the ( I ) position.
2. To turn the vacuum off, push the switch located on the dust compartment on the ( 0 ) position.

# How to Change the Dust Bag

Always operate the vacuum cleaner with a dust bag installed.

## How to Change the Dust Bag

1. Unplug the vacuum cleaner. Remove the used bag from the bag holder (Fig. 1).
2. Spread out the end of the new dust bag (Fig. 2).
3. Attach the new dust bag onto the bag holder (Fig. 3). To ensure proper cleaning and extended motor life, make sure the secondary bag support is always in place.
4. Reinsert the tab on the end of the dust cover into the groove on the dust compartment housing. Press it into place and fasten the dust cover tightly (Fig. 4).



Fig. 1



Fig. 2



Fig. 3



Fig. 4

# Handle Adjustments

The handle on this vacuum cleaner can be set to one of three positions – upright, middle, or low.

## How to Adjust the Handle

1. To release the handle, step on the pedal at the left rear corner of the vacuum cleaner (Fig.1).
2. Middle position – for normal cleaning (Fig. 2).
3. Upright position – for when cleaning tools are used or for storage (Fig 3). Handle locks in this position.
4. Low position – for cleaning under furniture (Fig. 4).



Fig. 1



Fig. 2



Fig. 3



Fig. 4

# Electrostatic Filter

Your Powr-Flite vacuum cleaner is equipped with an electrostatic filter (CPU-1 model only) to capture fine dust particles and protect the motor from dirt. Accumulated dirt in the dust compartment will be collected on this filter and may restrict motor performance. It is important to change the electrostatic filter regularly — approximately every third filter bag change, or as needed.

## To Change Electrostatic Filter:

1. Unplug the vacuum cleaner. Remove filter bag.
2. Remove bag support (Fig. 5).
3. Remove electrostatic filter and replace with a new filter (Fig. 6).
4. Reinsert bag support and new filter bag.

NOTE: Electrostatic filters cannot be washed.



Fig. 5



Fig. 6

# Edge Cleaning Feature

The edge cleaning feature provides for improved cleaning of carpets near wall and stationary furniture.

# Automatic Self-Adjusting Rug Nozzle

Your Powr-Flite upright vacuum cleaner is designed with an Automatic Self-Adjusting Rug Nozzle. No manual adjustments are required. The height of the rug nozzle is instantly and automatically adjusted to carpet pile height. This self-adjusting feature allows the rug nozzle to float evenly over all carpet pile surfaces.

## Optional Cleaning Tools/Accessories

### Deluxe Attachment Set SDK12 (Fig. 1)

- 12-foot hose
- Curved wand
- Extension wand (2 pieces)
- Dusting brush
- Crevice tool
- Upholstery tool
- Upholstery brush insert
- Deluxe floor brush



Fig. 1

### Attachment Set SDK15 (Fig. 2)

- 15-foot hose
- Curved wand



Fig. 2

### Connecting the hose assembly to the vacuum cleaner:

Open the lid located on the back side of the vacuum cleaner and insert the plastic end of the hose assembly into the cleaning attachment opening. Then connect the curved wand to the hose assembly ( Fig. 3).

### How to connect the tool:

You can connect any of the cleaning tools to the end of the extension wand(s) or directly to the curved wand. Push the cleaning tool onto the extension wand(s) or curved wand making sure the hole on the tool aligns with the spring button on the curved wand or the extension wand(s) end. To remove the cleaning tool from the extension wand(s) or curved wand, press the spring button and pull off the tool.



Fig. 3



# How to Replace the Headlight Bulb and the Drive Belt

## CAUTION:

First, unplug the vacuum cleaner.

## How to Remove the Bottom Plate.

1. Place vacuum cleaner in the low position by using the handle release pedal. Then, turn the vacuum cleaner over, exposing the underside.
2. Remove the two screws holding the lower plate in place.
3. Now remove the bottom plate.

## How to replace the belt.

1. Turn the unit over and remove the lower plate as described in the preceding section.
2. Remove the agitator holder (Fig. 1). Take out the agitator assembly and remove belt guard from the agitator pulley and the motor drive shaft (Fig. 2 & 3).
3. Loop the new belt around the agitator pulley and the motor drive shaft.
4. Reinsert the agitator assembly back into housing (Fig 4). Turn the agitator assembly by hand, making sure the belt is not twisted and all rotating parts move smoothly (Fig. 5).
5. Reinsert the agitator holder. Be sure that the agitator holder is in place before fastening the lower plate.
6. Hook the front end of lower plate to the two ribs at the front end of the housing. Press the lower plate into place and fasten it by two screws.

NOTE: To ensure maximum cleaning efficiency, the belt should be checked regularly to be sure it is in good condition. Check to see if the belt is stretched, cracked, or if excessive slipping is occurring. Replace it if needed.



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

# Replacing the Agitator Assembly

Brushes should be replaced when they are worn or when the bristle does not touch a card that is held across the nozzle. You should replace all four brushes at the same time in order to maintain good cleaning efficiency.

Remove E-clip first from agitator shaft by using screw driver. Then remove the end cap at right end by holding the agitator assembly. Pull out the agitator shaft from the left end.

NOTE: Take care not to deform the agitator shaft.

Now the brushes can be removed easily. After inserting the new brushes, re-install the agitator pulley and agitator holder, making sure they are completely and firmly inserted. Reinstall other parts following the steps in reverse.

Be sure the end caps and filters are in place before fitting the E-clip back into place. Reinstall the agitator assembly as described in preceding section.

# How to Clean the Nozzle Hose

## CAUTION:

Unplug the vacuum cleaner.

The nozzle hose, located on the back of the vacuum cleaner, carries the dirt from the nozzle to the filter bag. The hose also functions as the attachment cleaning hose. If the hose should become clogged:

1. Pull out and turn the lid of the cleaning attachment opening. Remove the clog or blockage (Fig. 1).
2. If the above step is not enough, remove hose cuff from the nozzle inlet (Fig. 2). Turn the unit over and unscrew and remove the bottom plate (see "How To Remove Bottom Plate."). Check nozzle inlet tube for obstructions. Clear tube and reinstall the bottom plate.



Fig. 1



Fig. 2

# Thermal Fuse Protection

Your Powr-Flite vacuum cleaner comes equipped with a Manual Reset Thermal Fuse Protector. This thermal protector is designed to protect your vacuum cleaner from overheating due to a cutoff in airflow (i.e. clogged hose, operating the vacuum without a bag). Should this situation occur, the thermal fuse protector will safely shut off your vacuum cleaner to avoid any potential damage.

**NOTE:** To determine that it was the thermal fuse protector that turned off your vacuum cleaner and not some other reason, please refer to the vacuum cleaner's headlight. **If the headlight is on while the motor is off, then the thermal fuse did safely shut down the motor.** If the headlight and motor are off, then there is some reason other than the thermal protector (i.e. pulled plug).

## To reset the thermal fuse:

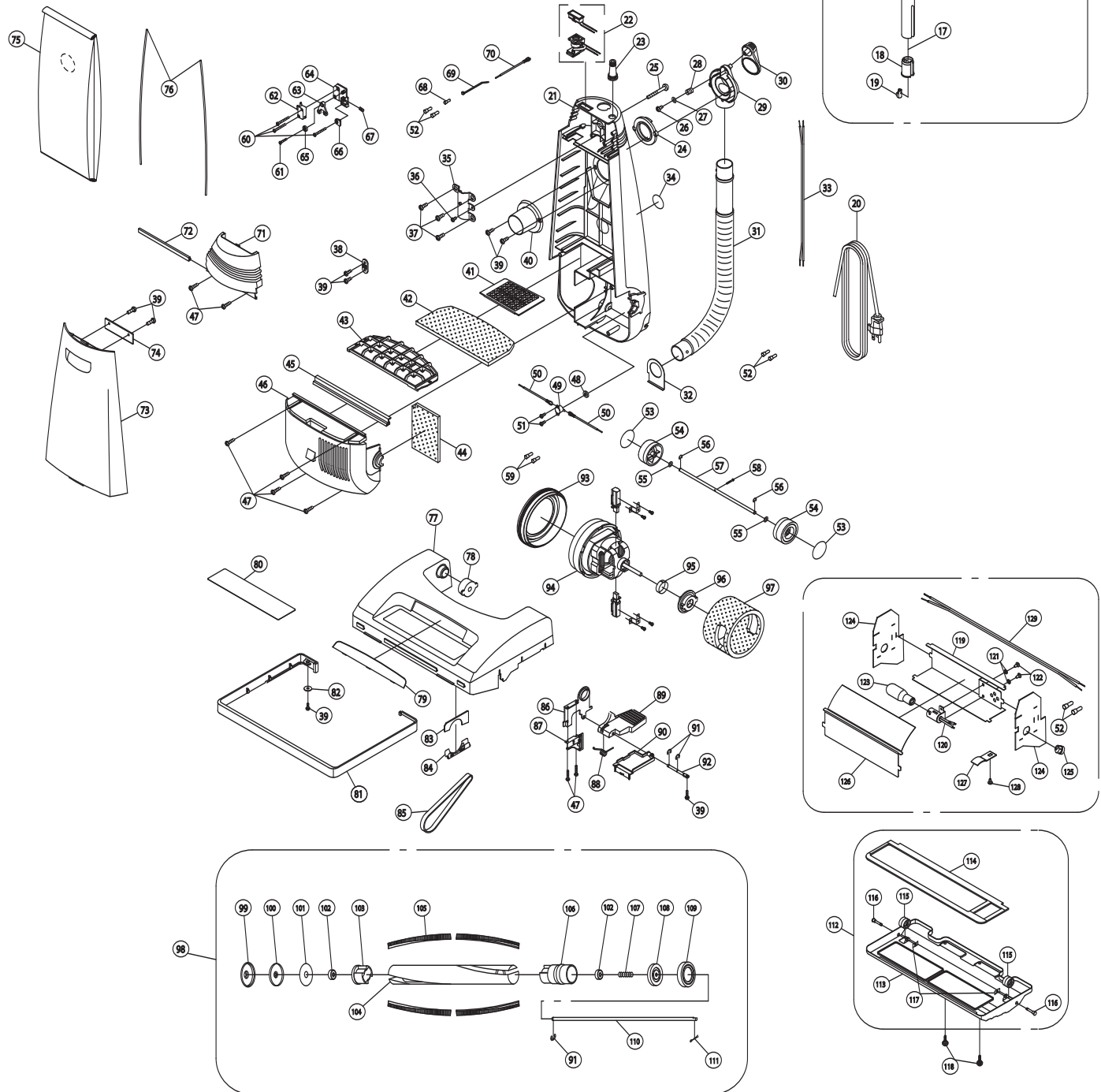
1. Unplug the vacuum cleaner.
2. Check for problem (over filled bag, clog in hose, clogged filters, etc.).
3. Correct problem.
4. Locate "tripped" fuse — the small red button located on the bottom of the back side of the main body (roughly one inch to the right of the left wheel).
5. Using a pencil, paper clip, or other pointy object, push the reset button.
6. Plug vacuum cleaner in and begin using.

Please refer to your Authorized Powr-Flite Dealer with any questions.

# For Best Performance

- Keep machine and all accessories clean and in good operating condition.
- Change filter bags and filters as recommended to maintain optimum cleaning efficiency.
- Always use genuine Powr-Flite filter bags and filters, as use of other products may result in poor cleaning or filtration performance. Powr-Flite filtration products are designed for maximum performance.
- Have machine checked periodically by an Authorized Powr-Flite Vacuum Service Center.
- Use only Powr-Flite Vacuum Cleaner authorized Service Centers for parts or service.
- Store machine carefully in dry area.
- For optimum cleaning performance and safety, study and follow your Owner's Manual. Keep it in a handy and safe place for future reference.

# ASSEMBLY PF90



ref#	order	description	each
1	<b>18.146</b>	handle assembly complete	<b>19.50</b>
2	<b>G10</b>	handle end cap	<b>.41</b>
3	<b>B431-2014</b>	foam handle grip	<b>3.07</b>
4	<b>AE0663714</b>	switch knob	*
5	<b>A732-0700</b>	set screw	<b>.19</b>
6	<b>AK0723582</b>	switch knob guard	*
7	<b>AE0893006</b>	handle tube fixing screw	*
8	<b>AE1053582</b>	hook holder, black	*
9	<b>4840022</b>	nut	*
10	<b>B430-0314</b>	upper cord hook	<b>.89</b>
11	<b>B430-0200</b>	cord hook spring	<b>.29</b>
12	<b>A430-0305</b>	washer	<b>.27</b>
13	<b>AE1023001</b>	handle tube	*
14	<b>54.018</b>	lower cord hook	<b>2.99</b>
15	<b>A732-3900</b>	washer	<b>.23</b>
16	<b>A732-3300</b>	set screw	<b>.26</b>
17	<b>AE0673006</b>	handle lever rod	*
18	<b>AC0533582</b>	lever holder	*
19	<b>AC0543582</b>	lever knob	*
20	<b>AK0733582</b>	power cord, 40'	*
21	<b>54.009</b>	dust compartment	<b>22.50</b>
22	<b>AG1514000</b>	vacuum sensor and indicator	*
	<b>AG0123000</b>	vacuum sensor	*
	<b>AG0133000</b>	full bag initiator	*
23	<b>AK0253582</b>	boot strain relief	*
24	<b>A721-0214</b>	suction inlet gasket	<b>.48</b>
25	<b>A232-0100</b>	handle screw	<b>.34</b>
26	<b>4250265</b>	set screw	*
27	<b>4300916</b>	washer	*
28	<b>B625-0805</b>	suction spring	<b>.34</b>
29	<b>54.007</b>	suction inlet	<b>4.25</b>
30	<b>AC0343582</b>	suction inlet cover	*
31	<b>C44-E</b>	nozzle hose	<b>4.40</b>
32	<b>A07</b>	suction fitting collar	<b>1.49</b>
33	<b>AG0893000</b>	motor cord	*
34	<b>AA9933109</b>	warning label	*
35	<b>B324-0400</b>	handle fitting	<b>.70</b>
36	<b>4240056</b>	set screw	<b>.30</b>
37	<b>4240806</b>	set screw	*
38	<b>54.050</b>	cord holder	*
39	<b>4240896</b>	set screw	*
40	<b>B211-0230</b>	bag support collar	<b>.93</b>
41	<b>C33</b>	filter support screen	<b>23.35</b>
42	<b>C32-A</b>	secondary filter	<b>1.56</b>
43	<b>N24</b>	filter bag support	<b>2.53</b>
44	<b>C30-A</b>	motor cover filter	<b>.86</b>
45	<b>C31</b>	motor cover seal	<b>1.46</b>
46	<b>54.003B</b>	motor cover	<b>8.95</b>
47	<b>A732-8305</b>	set screw	<b>.18</b>
48	<b>B333-0600</b>	temperature switch seal	<b>.33</b>
49	<b>B33-0400</b>	temperature switch	*
50	<b>B33-0700-C</b>	temperature wire	*
51	<b>A732-0700</b>	set screw	<b>.19</b>
52	<b>B123-0100</b>	wire connector	<b>.16</b>
53	<b>B210-0414</b>	rear wheel decal	<b>.30</b>
54	<b>B210-0214</b>	rear wheel	<b>1.36</b>
55	<b>A732-6400</b>	washer	<b>.09</b>
56	<b>3010056</b>	e-ring	*
57	<b>AE1063005</b>	rear wheel shaft	*
58	<b>4230525</b>	set screw	*
59	<b>AA0453000</b>	wire connector	*
60	<b>4230296</b>	set screw	*
61	<b>4230326</b>	set screw	*
62	<b>AF0063000</b>	main switch	*
63	<b>AE0193713</b>	switch activator	*
64	<b>AE0203713</b>	switch mounting plate	*

ref#	order	description	each
65	<b>AE1243713</b>	washer	*
66	<b>AE0213713</b>	washer	*
67	<b>AC0553006</b>	switch activator spring	*
68	<b>AG0883000</b>	wire connector	*
69	<b>2027129</b>	zip tie	*
70	<b>AG0863000</b>	zipper tie	*
71	<b>54.001B</b>	switch cover	<b>5.95</b>
72	<b>AA0463320</b>	switch cover seal	*
73	<b>54.002B</b>	dust cover	<b>8.95</b>
74	<b>AE0073714</b>	dust cover gasket	*
75	<b>460PB</b>	paper bag	<b>3.28</b>
76	<b>AA0533320</b>	dust compartment side seals	*
77	<b>54.005B</b>	nozzle housing	<b>17.95</b>
78	<b>AA0073582</b>	plastic sleeve housing	*
79	<b>AF0013002</b>	clear lens	*
80	<b>AF9933000</b>	topper mark	*
81	<b>A03</b>	furniture guard, black	<b>2.47</b>
82	<b>A430-0305</b>	washer	<b>.27</b>
83	<b>A09</b>	felt packing	<b>2.79</b>
84	<b>B017-1200</b>	vented support fitting	<b>.59</b>
85	<b>09.104</b>	belt	*
86	<b>B020-0100</b>	pedal frame	<b>1.36</b>
87	<b>54.041</b>	belt cover	<b>.89</b>
88	<b>B020-0400</b>	pedal spring	<b>.93</b>
89	<b>AA0143582</b>	foot pedal release	*
90	<b>54.016</b>	pedal, black	<b>2.49</b>
91	<b>A732-0200</b>	e-clip	<b>.10</b>
92	<b>B020-0300</b>	pedal frame shaft	<b>.61</b>
93	<b>AA1123582</b>	motor mount, rear, only 1-stage motor	*
94	<b>20.010</b>	Lamb motor 1-stage	*
95	<b>AE0303006</b>	motor mount sleeve	*
96	<b>54.047</b>	motor mount	<b>4.99</b>
97	<b>B123-1900</b>	sound suppresser	<b>1.43</b>
98	<b>C012-0000</b>	pinned brushroll assembly complete	<b>25.49</b>
99	<b>B012-0214</b>	rubber end cover, left	<b>.94</b>
100	<b>B012-0700</b>	left cover	<b>1.57</b>
101	<b>B012-0600</b>	felt cover	<b>.27</b>
102	<b>08.008</b>	bearing	*
103	<b>B08S</b>	agitator bearing holder	<b>1.35</b>
104	<b>B012-0300</b>	agitator core	<b>6.38</b>
105	<b>B012-0900</b>	agitator brush, 9.0mm	<b>1.73</b>
106	<b>B07S</b>	agitator pulley	<b>2.76</b>
107	<b>B624-0100</b>	spacing spring	<b>.33</b>
108	<b>B012-0800</b>	right cover	<b>1.02</b>
109	<b>B012-0114</b>	rubber end cover, right	<b>.94</b>
110	<b>B012-1000</b>	agitator shaft	<b>2.26</b>
111	<b>A732-0400</b>	spring clip	<b>.27</b>
112	<b>54.006</b>	bottom plate assembly	<b>19.95</b>
113	<b>AA0203001</b>	bottom plate	*
114	<b>AA0255000</b>	packing lower plate assembly	*
115	<b>B010-1014</b>	base plate wheel	<b>.64</b>
116	<b>B010-0500</b>	base plate wheel pin	<b>.64</b>
117	<b>A732-2100</b>	push on spring nuts	<b>.33</b>
118	<b>AA0263001</b>	bottom plate set screw	*
119	<b>A28</b>	reflector plate	<b>3.07</b>
120	<b>AF0103000</b>	bulb socket SS-29096, 75W 125V	*
121	<b>4600016</b>	washer	*
122	<b>4230016</b>	set screw	*
123	<b>5110013</b>	light bulb-slimline, 20V 15W	*
124	<b>AB0033000</b>	insulate plate	*
125	<b>AB0083000</b>	wire bushing	*
126	<b>AB0093000</b>	reflector plate	*
127	<b>AF0043006</b>	reflector plate supporter	*
128	<b>4240306</b>	set screw	*
129	<b>AB0053000</b>	light assembly cord	*

\* call for pricing and availability

## Powr-Flite Limited Warranty

Powr-Flite will repair or exchange parts for your Light Weight vacuum cleaner in the event of a manufacturing defect as follows:

**PARTS:** New or comparable rebuilt parts, for one year after original purchase. The following items that require normal replacement are excluded: disposable dust bags, belts, light bulbs and agitator brushes.

**LABOR:** Carry-in service can be obtained during the warranty period by taking your vacuum cleaner to an Authorized Powr-Flite Warranty Service Center.

**IMPORTANT WARRANTY CONDITIONS:** A purchase receipt or other proof of date of original consumer purchase also will be required before warranty service is rendered.

This warranty covers normal use and does not cover damage which occurs in shipment or failure resulting from alteration, accident, misuse, abuse, neglect, or improper maintenance.

**STATEMENT:** This warranty is not transferable and extends only to the original purchaser when a new Powr-Flite Vacuum Cleaner is purchased from an Authorized Powr-Flite Dealer. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.