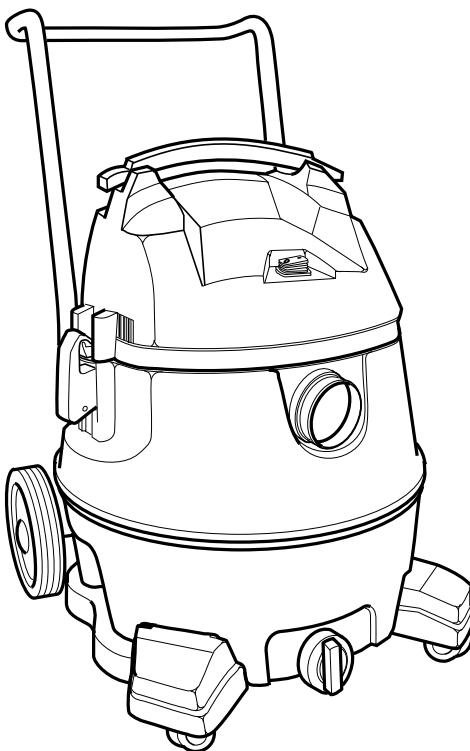


OWNER'S MANUAL

14 GALLON
SMART-PULSE VACUUM

RV34100



▲ WARNING:

To reduce the risk of injury, the user must read and understand the owner's manual before using this product.

SAVE THIS MANUAL FOR FUTURE REFERENCE

Part No. SP6906

Test Equipment



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Visit us at www.TestEquipmentDepot.com

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IMPORTANT SAFETY INSTRUCTIONS

Safety is a combination of using common sense, staying alert, and knowing how your Vacuum cleaner (“Vac”) works.

Safety Signal Words

▲ DANGER: Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

When using your Vac, always follow basic safety precautions including the following:

▲ WARNING

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

- Read and understand this manual and all labels on the Vac before operating.
- Use only as described in this manual.
- Do not leave Vac running while unattended - you may fail to notice important signs indicating abnormal operation such as loss of suction, debris exiting exhaust, or abnormal motor noises. Immediately stop using Vac if you notice these signs.
- Do not leave Vac when plugged in. Unplug from outlet when not in use and before servicing.
- Sparks inside the motor can ignite flammable vapors or dust. To reduce the risk of fire or explosion, do not use near combustible liquids, gases, or dusts, such as gasoline or other fuels, lighter fluid, cleaners, oil-based paints,

natural gas, coal dust, magnesium dust, grain dust, aluminum dust, or gun powder.

- Do not vacuum anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- This Vac is not intended for EPA RRP cleanup.
- Extremely small particles may pass through the filter. Always wear appropriate protective safety equipment.
- To reduce the risk of inhaling toxic vapors, do not vacuum or use near toxic or hazardous materials.
- To reduce the risk of electric shock, do not expose to rain or allow liquid to enter motor compartment. Store indoors.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Do not use with a torn filter or without the filter installed except when vacuuming liquids as described in this manual. Dry debris ingested by the impeller may damage the motor or be exhausted into the air.
- Turn off Vac before unplugging.
- To reduce the risk of injury from accidental starting, unplug power cord before changing or cleaning filters.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not use with damaged cord, plug or other parts. If your Vac is not working as it should, has missing parts, has been dropped, damaged, left outdoors, or dropped into water, call customer service.

- Do not pull or carry by cord, use cord as handle, close a door on cord, or pull cord around sharp edges or corners. Do not run Vac over cord. Keep cord away from heated surfaces.
- Do not handle plug, switch, or the Vac with wet hands.
- Use only grounded extension cords that are rated for outdoor use. Extension cords in poor condition or too small in wire size can pose fire and shock hazards. To reduce the risk of these hazards, be sure the cord is in good condition and that liquid does not contact the connection. Do not use an extension cord with conductors smaller than 16 gauge (AWG) in size. To reduce power loss, use a 14 gauge extension cord if 25 to 50 ft. long and 12 gauge for 50 ft. or longer.
- Do not put any object into ventilation openings. Do not vacuum with any ventilation openings blocked; keep free of dust, lint, hair or anything that may reduce air flow.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- To reduce the risk of falls, use extra care when cleaning on stairs.
- To reduce the risk of back injury or falls, do not lift a Vac that is heavy with debris. Partially empty the Vac by scooping debris to make it comfortable to lift.
- To reduce the risk of personal injury or damage to Vac, use only Ridgid recommended accessories.

When using as a blower:

- Direct air discharge only at work area.
- Do not direct air at bystanders.
- Keep children away when blowing.
- Do not use blower for any job except blowing dirt and debris.
- Do not use as a sprayer.
- Wear safety eyewear.
- To reduce the risk of eye injury, wear safety eyewear. The operation of any utility Vac or blower can result in foreign objects being blown into the eyes, which can result in severe eye damage.

- To reduce the risk of being struck by, or pulled down by, a rolling Vac, block the wheels when using on any uneven or sloped surface.
- Connect to a properly grounded outlet only. See Grounding Instructions.

▲ CAUTION:

- To reduce the risk of hearing damage, wear ear protectors when using for extended time or in a noisy area.
- For dusty operations, wear dust mask.
- Static shocks are common when vacuuming fine debris such as drywall dust or concrete dust, especially in low-humidity conditions. To reduce the risk of static shocks when using this Vac, add moisture to the environment with a humidifier. To further reduce the possibility of static shock, this Vac can also be used with a grounded, static-dissipating hose which can be purchased as an optional accessory.

Observe the following warnings that appear on the motor housing of your Vac:

▲ WARNING: For your safety, read and understand owner's manual. Do not run unattended. Do not pick up hot ashes, coals, toxic, flammable, or other hazardous materials. Do not use around explosive liquids or vapors.

▲ WARNING: To Reduce The Risk Of Electric Shock – Do not expose to rain. Store indoors.

▲ CAUTION: To reduce the risk of static shock, use the VT2580 static-dissipating hose.

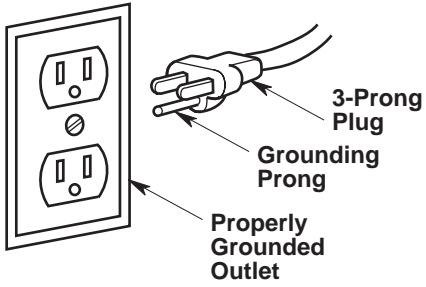
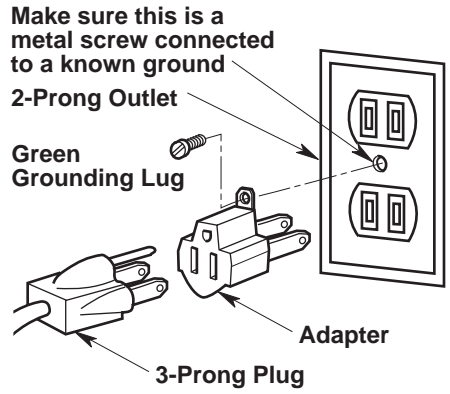
SAVE THIS MANUAL

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 vac is for use on a nominal 120-volt circuit, and has a grounded plug that looks like the plug shown. A temporary adapter that looks like the adapter shown may be used to connect this plug to a 2-pole receptacle, as shown. If a properly grounded outlet is not available, the temporary adapter should only be used until a properly grounded outlet can be installed by a qualified electrician.

⚠ 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.



The green-colored rigid ear, lug, or the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place by a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electrical Code.



Introduction

This machine is equipped with an automatic filter cleaning system which is effective at minimizing filter face loading. Throughout its operation, the control monitors the performance level of the Vac. When a predetermined drop in performance occurs, the filter cleaning cycle is initiated. Once the filters have been cleaned, the machine returns to monitoring mode until the next cleaning is needed. When the cleaning cycle becomes more frequent, or when that cleaning cycle doesn't seem to return to monitoring mode, it may be time to empty the drum and / or manually clean or replace the two filters.

Note: It is normal to hear a clicking sound during the cleaning cycle.

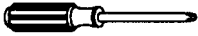
Note: For this Vac to operate properly, it must have two cartridge filters installed at all times.

This Vac is rated for commercial and household use. This Vac is supplied with two VF3800 filters. It can be used not only to pick up material like sawdust and gravel but also ultra fine material like drywall dust and concrete dust. These types of materials are so small they would pass through traditional filters. An optional static-dissipating accessory hose (VT2580) is available for pickup operations that tend to cause static charge buildup.

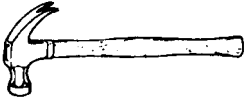


Unpacking and Checking Carton Contents

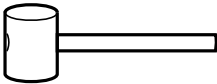
Tools Required



Phillips Screwdriver

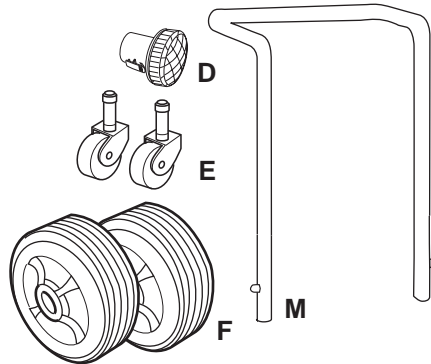
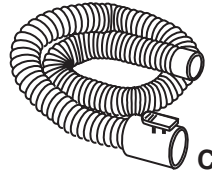
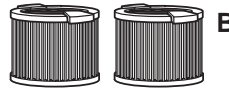
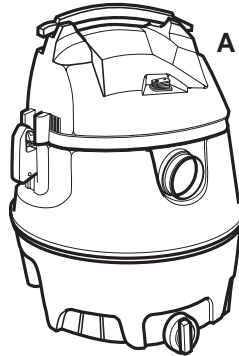


Hammer



Mallet

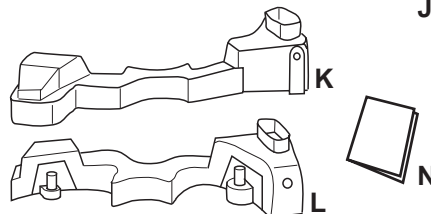
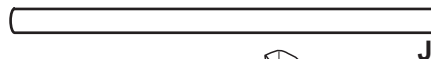
Refer to the assembly sketch for positioning of parts.



Carton Contents List

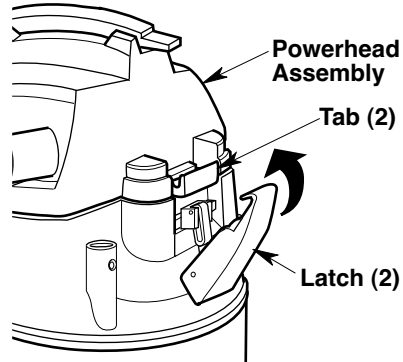
Key	Description	Qty
A	Wet/Dry Vac Assembly	1
B*	Filters	2
C	15' ProHose	1
D	Muffler/Diffuser	1
E	2" Casters.....	2
F	8" Wheels	2
G	Wheel Caps.....	2
H	1/2" Cap Nuts.....	2
I	#10 x 1-3/4" Screws	4
J	Axle	1
K*	Caddy, Right.....	1
L*	Caddy, Left.....	1
M	Metal Handle	1
N	Owner's Manual	1

* Items may come preassembled.



Vac Assembly

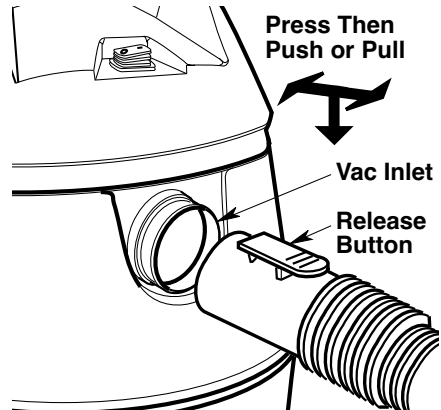
1. Position the powerhead assembly on the drum as shown,
2. Hook the latches over the tabs on the powerhead assembly.
3. Press the latches down until they snap closed against the sides of the tank.



Insert Hose

Insert the push button end of the locking hose into the inlet of the Vac. The hose should snap into place.

To remove the hose from the Vac, press the release button in the hose assembly and pull the hose out of the Vac inlet, as shown.

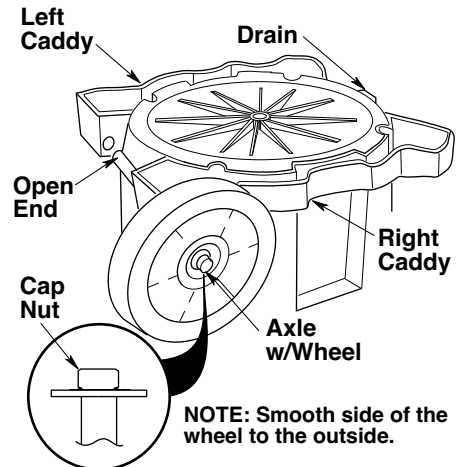
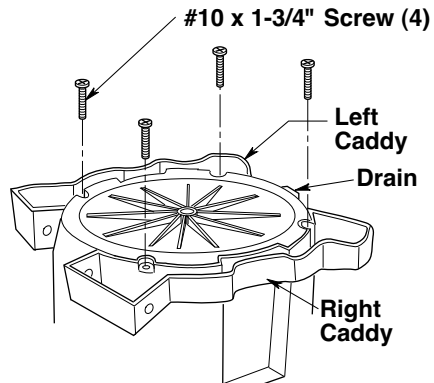
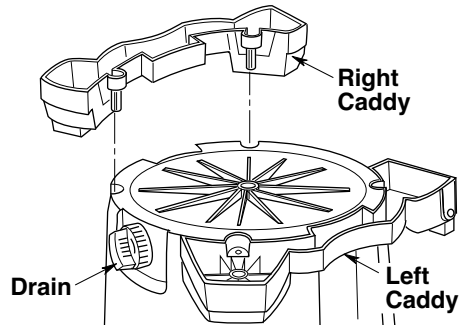


Caddy Assembly

If any parts are missing or damaged contact Customer Service.

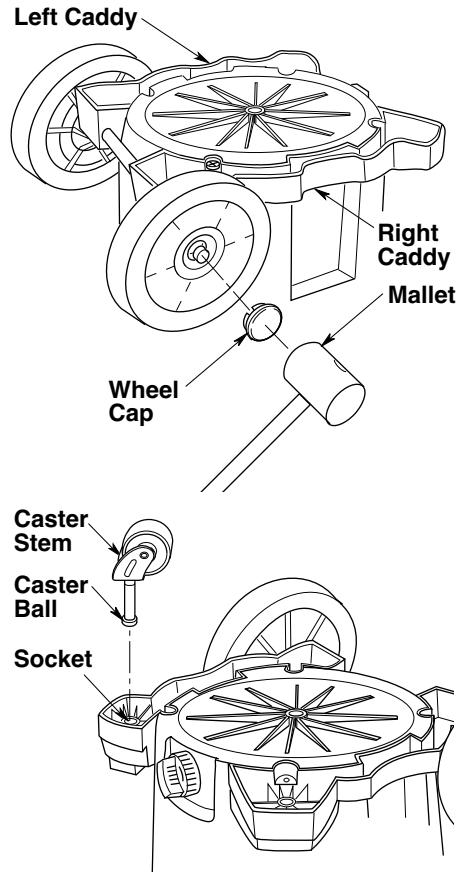
Do not assemble until you have all the parts.

1. Insert left caddy and right caddy into the bottom of drum as shown. Light taps with a mallet or hammer may be needed to fully seat both caddies.
2. Install (4) #10 x 1-3/4" screws into matching holes on both right and left side of caddy, securing them to the bottom of the drum. Tighten screws until just snug. Do not over tighten as this may tend to deform the caddies.
3. Installing Cap Nut
 - a. Place cap nut on end of axle.
 - b. Tap gently with hammer until fully seated.
 - c. Place wheel on the axle with smooth portion of wheel facing outward.



Caddy Assembly (Continued)

4. Slide open end of axle through left caddy making sure the leg slot lines up with the cradle hole. Slide all the way through the right caddy. Light taps with a mallet may be required to fully insert axle.
5. Install second wheel onto axle with smooth portion of wheel facing outward.
6. Install the second cap nut. Tap gently until cap nut is firmly seated
7. Using a rubber mallet or hammer, gently tap the wheel cap onto the right wheel until the wheel cap is firmly seated onto the wheel. This is required on both left and right sides.
8. Insert the caster stem into the socket of the caster foot as shown. (Front caster only).
9. Push on the caster until the ball on the caster stem is inserted all the way into the socket. You will be able to hear the ball snap into the socket and the caster will swivel easily when positioning is correct.



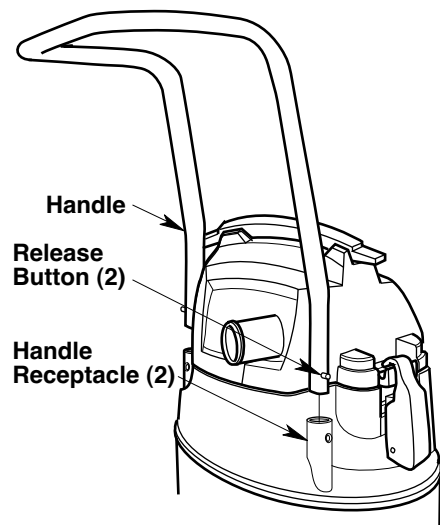
Installing Handle

Press and hold release buttons while installing handle into handle receptacles in drum (See illustration).

NOTE: An audible snap of release buttons indicates successful engagement of handle.

Removing Handle

Press and hold release buttons as shown. While firmly pushing in release buttons, pull handle upwards to remove (see illustration).



Operation

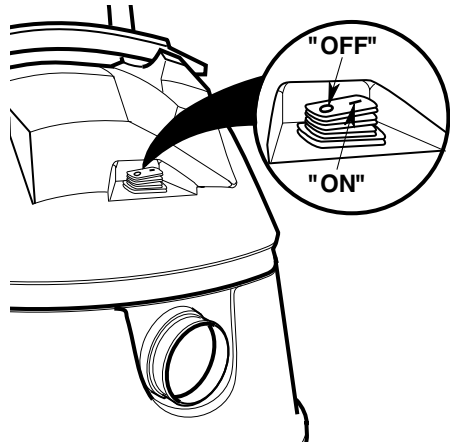
▲ WARNING: To reduce the risk of fire, explosion, or damage to Vac:

- Do not leave Vac running while unattended - you may fail to notice important signs indicating abnormal operation such as loss of suction, debris exiting the exhaust, or abnormal motor noises. Immediately stop using Vac if you notice these signs.
- Do not leave Vac plugged in when not in use.
- Do not continue running when float has cut off suction.
- Sparks inside the motor can ignite airborne flammables. Do not operate Vac near flammable liquids or in areas with flammable gases, vapors, or explosive/airborne dust. Flammable liquids, gases, and vapors include: lighter fluid, solvent-type cleaners, oil-based paints, gasoline, alcohol, and aerosol sprays. Explosive dusts include: coal, magnesium, aluminum, grain, and gun powder.
- Do not vacuum up explosive dusts, flammable liquids, or hot ashes.

▲ WARNING: To reduce the risk of electric shock or injury:

- Do not expose to rain or allow liquid to enter motor compartment. Store indoors.
- Do not handle the plug, switch, or Vac with wet hands.
- Unplug Vac before servicing. If your Vac is not working properly, has missing parts, has been dropped, damaged, left outdoors, or dropped into water, return it to an independent service center or call customer service.
- When using an extension cord, use only outdoor-rated cords that are in good condition. Do not allow the connection to come into contact with liquid.

▲ CAUTION: To reduce the risk of static shocks while using this Vac, avoid using it in very dry conditions, or use the optional static-dissipating accessory hose, VT2580. Always plug cord into a properly-grounded outlet.



After you plug the power cord into the outlet, turn the unit on by pushing the switch from position "O" to position "I". The symbols used on the switch actuator are international "On & Off" symbols.

○ = OFF | = ON

Operation (Continued)

Vacuuming Dry Material

1. The filters must always be in correct position to reduce the risk of leaks and possible damage to Vac.
2. Your Vac comes with two VF3800 Filters installed. When using your Vac to pick up very fine dust, it may be necessary for you to empty the drum and clean the filters periodically or replace the filters to maintain peak Vac performance.

NOTE: A dry filter is necessary to pick up dry material. If you use your Vac to pick up dust when the filter is wet, the filter will clog quickly and be very difficult to clean.

Optional Dust Collection Bags

Note: This Vacs computer programing only monitors for blockages in the pleated filters. Use of the optional Dust Collection Bag will keep the Smart-Pulse function from sensing any blockages that occur, leading to a premature drop in vacuum performance.

1. The available Dust Collection Bag for this Vac is catalog number VF3502.
2. The Dust Collection Bag is intended for cleaning up dry debris ONLY.
3. If the debris being picked up has any moisture, the bag will absorb the moisture and may deteriorate very quickly, making the bag nonfunctional.
4. If you are using your vacuum to pick up fine dust, the Dust Collection Bag will make cleanup easier.

Note: Dust Collection Bag MUST be used in conjunction with a Pleated Cartridge Filters. Do not overfill the filter collection bags. The overfilling of these bags may cause the weight of the collected debris to tear these bags and/or make it difficult to remove the bag from the vacuum's drum due to its physical size.

5. Directions for Installation and Removal of Dust Collection Bags are printed on the bags.

Vacuuming Liquids

1. Before using your vacuum for wet pickup, ensure the drum is empty and free of dust or debris.
2. Remove the filters. With the filter removed, the float mechanism activates to prevent water from entering the motor blower housing. If the filters are not removed, water could enter the motor blower housing which could overload and damage the motor.
3. When the liquid in the drum reaches a predetermined level, the float mechanisms will rise automatically to cut off air-flow. When this happens, turn off the Vac, unplug the power cord, and empty the drum. You will know that the float has risen because the Vac airflow ceases and the motor noise will become higher in pitch, due to increased motor speed.

IMPORTANT: To reduce the risk of damage to the Vac, do not run motor with floats in raised position.

4. After using the Vac to pick up liquids, the drum must be cleaned out, and completely dried before use. The filters must be re-installed before using your machine to pick up dry materials.

Operation (Continued)

Emptying the Drum

▲ WARNING: To reduce the risk of injury from accidental starting, unplug power cord before emptying the drum.

▲ WARNING: To reduce the risk of back injury or falls, do not lift a Vac heavy with liquid or debris. Scoop or drain enough contents out to make the Vac light enough to lift comfortably.

1. The Vac comes equipped with a drain for ease of emptying liquids. Simply unscrew the drain cap and lift the opposite side slightly to empty the drum.
2. Another option is to remove the powerhead assembly.
3. Lay powerhead assembly aside on a clean area while emptying drum.
4. Dump the drum's contents into the proper waste disposal container.

Moving the Wet/Dry Vac

Should it become necessary to pick the Vac up to move it, the handle on the sides of the dust drum are used to lift. To maneuver the Vac, the push/pull handle in the rear of the unit should be used.

Blowing Feature

Your Vac features a blowing port. It can blow sawdust and other debris. Follow the steps below to use your Vac as a blower.

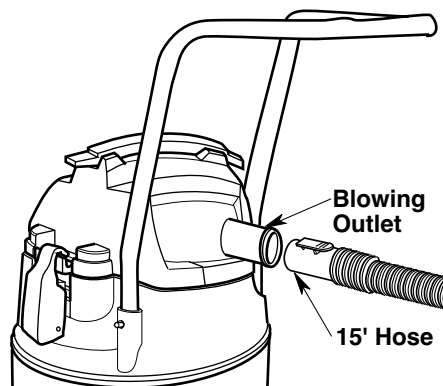
▲ WARNING: Always wear safety eyewear complying with ANSI Z87.1 (or in Canada, CSA Z94.3) before using as a blower.

▲ WARNING: To reduce the risk of injury to bystanders, keep them clear of blowing debris.

▲ CAUTION: Wear a dust mask if blowing creates dust which might be inhaled.

▲ CAUTION: To reduce the risk of hearing damage, wear ear protectors when using the Vac/Blower for extended time or in a noisy area.

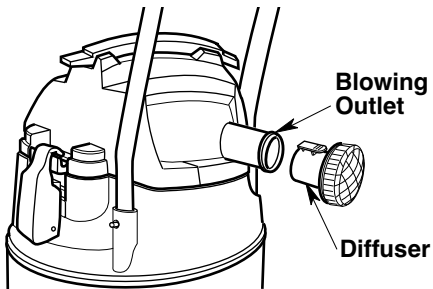
1. Locate the blowing outlet of your Vac.
2. Insert the locking end of the hose into the blowing port of the Vac. The hose should snap into place. To remove the hose from the Vac, press the release button in the hose assembly and pull the hose out of the Vac inlet.
3. Turn Vac on and you are ready to use your Vac as a blower.



Operation (Continued)

Diffuser

This Vac comes equipped with a diffuser that can be inserted into the exhaust port of the vacuum when it's not being used as a blower. This diffuser is adjustable and can be used to change the flow and direction of the vacuum's exhaust away from areas you may not want it blowing.



Static-Dissipating Accessory Hose

An optional accessory hose, VT2580, can be used with this Vac to reduce the effects of static charge buildup. In dry conditions and when vacuuming large amounts of fine/dry dust, static charge can build up on the hose or Vac. The VT2580 hose will dissipate static charge, through the ground conductor in the cord.

Maintenance

Filter

This Smart-Pulse vacuum is supplied with two of the RIDGID's Qwik Lock™ PTFE Filters. Replacement Filters are available where you purchased your Vac. Ask for the RIDGID Qwik Lock™ Filter VF3800.

NOTE: The filters are made of high quality material designed to stop very small particles of dust. The filters can only be used for dry pick up. Handle the filters carefully when removing, cleaning, or installing them. Creases in the filter pleats may occur from installation but will not affect the performance of the filter.

Removal and Installation of the Qwik Lock™ Filters

Filter Removal:

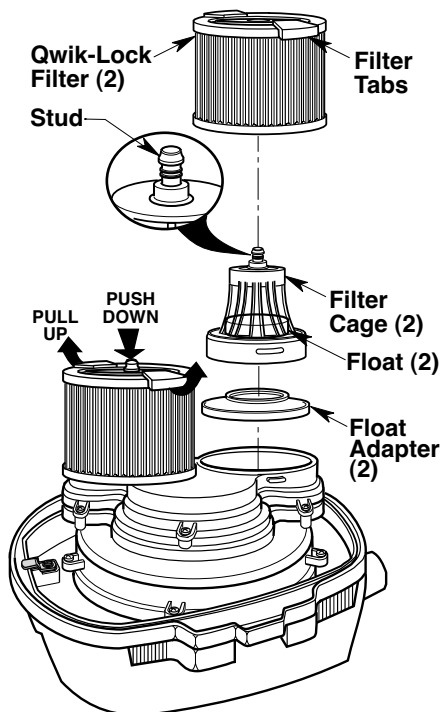
1. Hold the filter tabs of the Qwik Lock™ filter in each hand.
2. With one thumb on the Qwik Lock™ stud, which protrudes through the integrated filter plate, lift up on the filter tabs while pushing down on the stud.
3. This action will cause the filter to release from the filter cage. Slide filter off cage. Repeat for second filter.

Maintenance (Continued)

Filter Installation:

1. Carefully slide the Qwik Lock™ filter over the filter cage and press down on the outside edge of the filter until the rubber gasket on the bottom of the filter seats securely around the base of the filter cage and against the lid.
2. Align the small center hole in the top of the filter over the Qwik Lock™ stud on the filter cage. Press firmly on top of the filter near the stud to allow the filter to snap over the ball on the end of the stud. The filter is now attached. Repeat for second filter.

NOTE: Failure to properly seat the bottom gasket could result in debris bypassing the filter.



⚠ WARNING: Do not operate with no filters or only one filter in place unless picking up liquid. For liquid pickup both filters should be removed. Do not operate without filter cages, float adapters and floats, as they prevent liquid from entering the impeller and damaging the motor.

IMPORTANT: To avoid damage to the blower wheel and motor, always reinstall both filters before using the Vac for dry material pick-up.

NOTE: For best cleaning results due to accumulated dust, clean the filters in an open area. Cleaning SHOULD be done outdoors and not in the living quarters.

Remove filters from Vac. Gently tap filters against the inside wall of your dust drum and the debris will loosen and fall off.

IMPORTANT: After cleaning, check the filters for tears or small holes. Do not use filters with holes or tears in it. Even a small hole can cause a lot of dust to come out of your Vac. If damaged, replace filters immediately.

Cleaning and Disinfecting the Vac

To keep your Vac looking its best, clean the outside with a cloth dampened with warm water and mild soap.

To clean the drum:

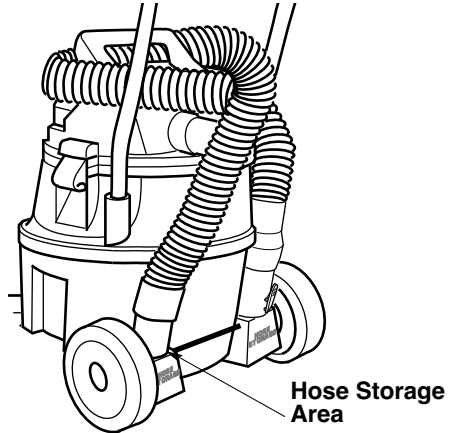
1. Dump debris out.
2. Wash drum thoroughly with warm water and mild soap.
3. Wipe out with dry cloth.

Before prolonged storage or as needed the drum should be disinfected.

Maintenance (Continued)

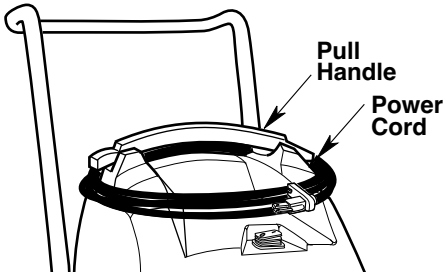
To disinfect the drum:

1. Pour 1 gallon of water and 1 teaspoon of chlorine bleach into the drum.
2. Let solution stand for 20 minutes, carefully swishing every few minutes, making sure to wet all inside surfaces of the drum.
3. Empty drum after 20 minutes. Rinse with water until bleach smell is gone. Allow drum to dry completely before sealing the motor on the drum.



Cord Maintenance

When vacuuming is complete, unplug the cord and wrap it around the motor cover. If the power cord is damaged, it must be replaced by the manufacturer or their service agent or by similarly qualified personnel to reduce the risk of accident.



Storage

Before storing your Vac, the drum should be emptied and cleaned. The cord should be wrapped around the unit. The hose may be stored by wrapping it around the unit and plugging the open end into one of the storage locations on the caddy assembly. The Vac should be stored indoors.

Casters and Wheels

Should your cart squeak or become hard to roll, you should place two or three drops of general purpose oil on each wheel at the axle. If your casters are noisy, you may put a drop of oil on the roller shaft to make them quieter.

Frame and Handles

Your metal handle is painted to prevent rust, however, liquids and corrosive debris should be wiped off with a soft cloth should they come in contact with the handle.

▲ WARNING: To assure product SAFETY and RELIABILITY, any other repairs and adjustments should be performed by Authorized Service Centers, always using RIDGID replacement parts.

Repair Parts

14 U.S. Gallon Smart-Pulse Vacuum

Stock Number RV3410 (Model RV34100)

▲ WARNING: To reduce the risk of injury from electrical shock, unplug power cord before servicing the electrical parts of the Vac.

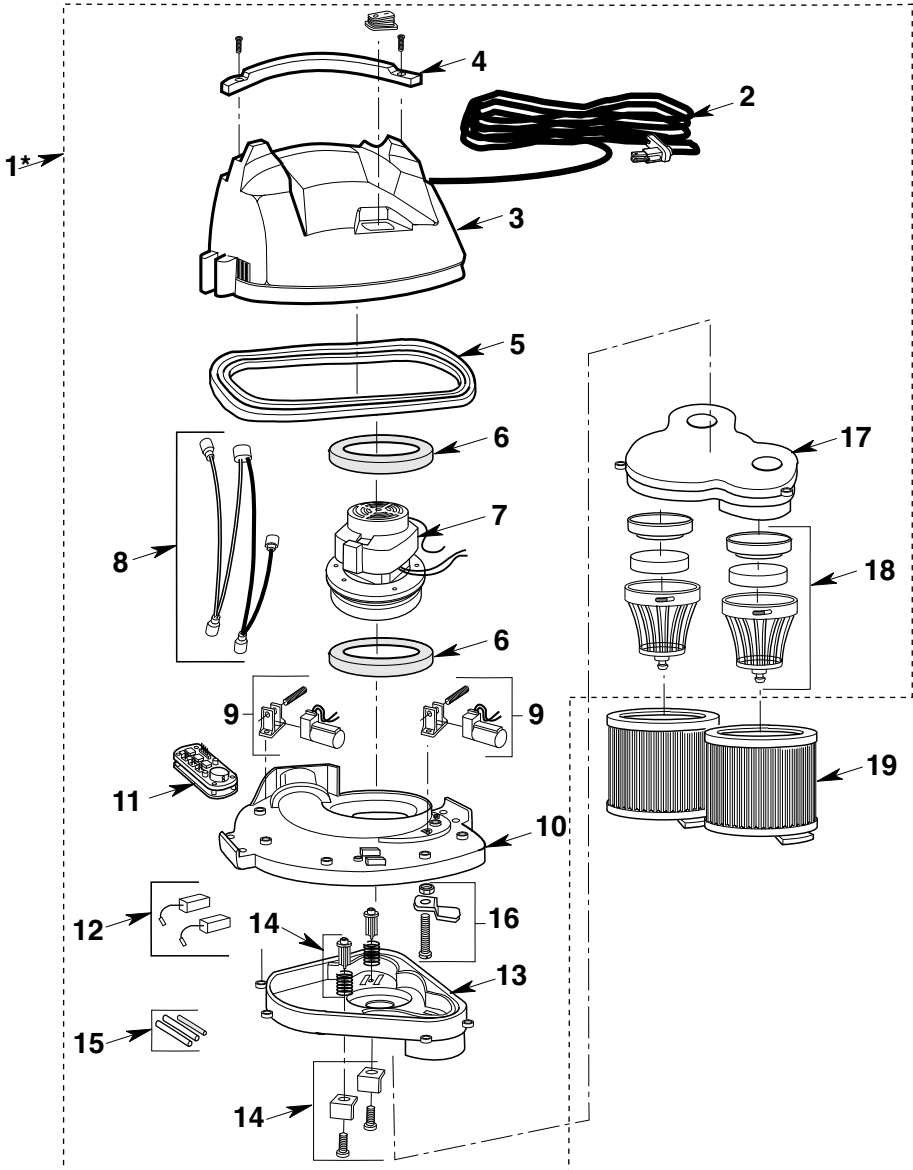
Key No.	RV3410 Part No.	Description
1*	510322	Powerhead Assembly (Includes Key Numbers 2 - 18)
2	831657-3	Cord Assembly
3	510321	Motor Cover Assembly
4	835195-2	Carry Handle
5	833518	Gasket For Upper Lid
6	827415	Gaskets (2 Required)
7	831567	Motor
8	510320	Wiring Harness (Power/Grounding)
9	510325	Actuator w/ Bracket (2 Required)
10	835193-2	Upper Lid
11	510318	Control Module
12	822374-8	Motor Brush Kit (1 Set)
13	835191	Lower Lid
14	510324	Valve Assembly (Stem, Spring, Screw, Valve w/ Gasket - Includes 2 Each)
15	510319	Tubes (Set of 3)
16	510336	Grounding Spring Assembly
17	835194	Manifold
18	510332	Filter Cage Assembly (1 Filter Cage, 1 Float, 1 Float Adapter)
19	VF3800	Filters (2 Required)

* All parts are included in the Powerhead Assembly (#1) (except for the 2 Filters).

Repair Parts (Continued)

14 U.S. Gallon
Smart-Pulse Vacuum

Stock Number RV3410 (Model RV34100)



Repair Parts (Continued)

**14 U.S. Gallon
Smart-Pulse Vacuum**

Stock Number RV3410 (Model RV34100)

▲ WARNING: To reduce the risk of injury from electrical shock, unplug power cord before servicing the electrical parts of the Vac.

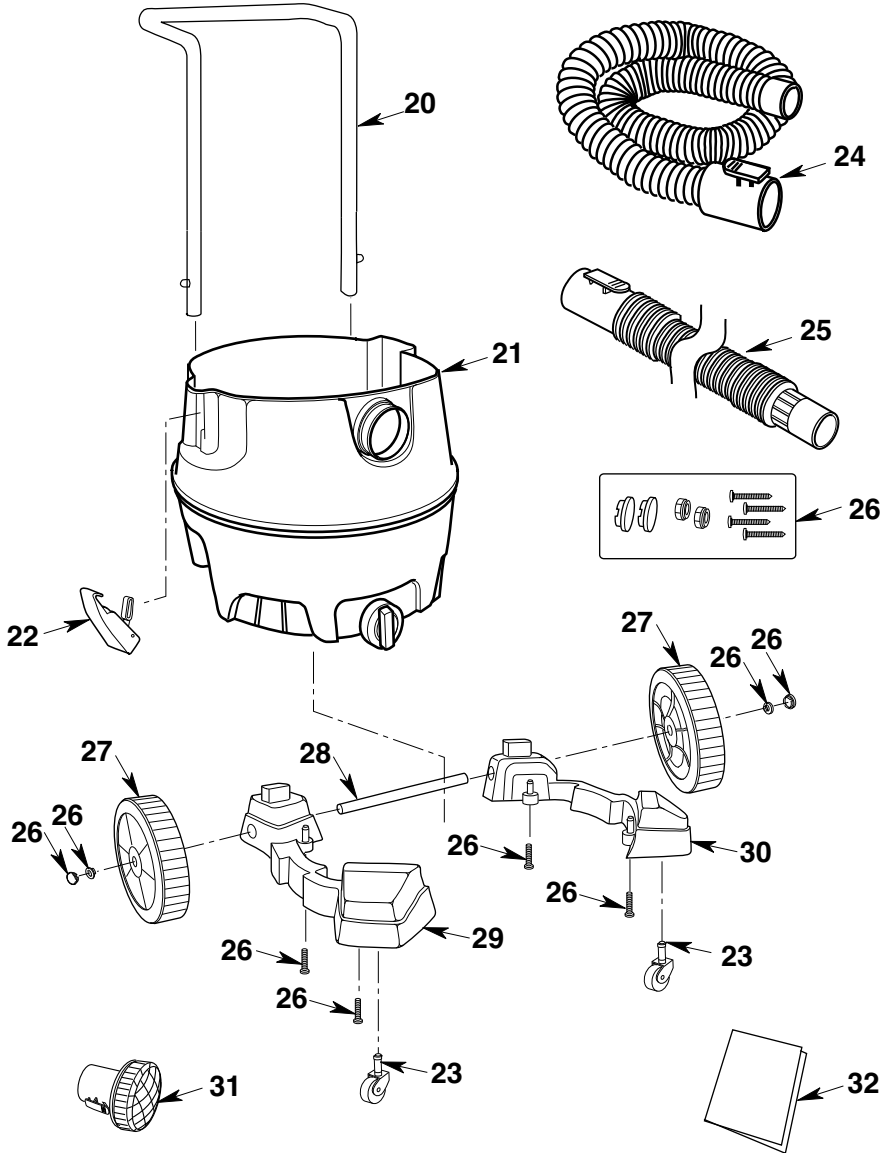
Key No.	RV3410 Part No.	Description
20	830686	Drum Handle Assembly
21	510323	Drum Assembly
22	510333	Drum Latch Assembly (Complete Set)
23	832123	Casters (2 Required)
24	831337-11	15' Hose Assembly
25	VT2580	Static-Dissipating 15' Hose (Optional)
26	509944	Loose Parts Bag (Wheel Caps, 1/2" Cap Nuts, #10 x 1-3/4" Screws)
27	832190	8" Wheels (2 Required)
28	831024	Shaft (1)
29	830577	Left Caddy
30	830576	Right Caddy
31	830675-2	Diffuser
32	SP6906	Owner's Manual



Repair Parts (Continued)

14 U.S. Gallon
Smart-Pulse Vacuum

Stock Number RV3410 (Model RV34100)



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