

Industrial Vacuums

Barrel Vac

Controlled Air Design

919-607-6765

www.controlledairdesign.com

Operations and Parts Manual



Models:

S9429BV

S9430BV

S9433BV

S9429SBV

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



DANGER: Failure to read and observe all DANGER statements could result in severe bodily injury or death. Read and observe all DANGER statements found in your Owner's Manual and on your machine.



WARNING: Failure to read and observe all WARNING statements could result in injury to you or to other personnel; property damage could occur as well. Read and observe all WARNING statements found in your Owner's Manual and on your machine.



CAUTION: Failure to read and observe all CAUTION statements could result in damage to the machine or to other property. Read and observe all CAUTION statements found in your Owner's Manual and your machine.



DANGER: Failure to read the Owner's Manual prior to operating or attempting any service or maintenance procedure to your machine could result in injury to you or to other personnel; damage to the machine or to other property could result as well. You must have training in the operation of this machine before using it. If you or your operator(s) cannot read English, have this manual explained fully before attempting to operate this machine.



DANGER: Operating a machine that is not completely or fully assembled could result in injury or property damage. Do not operate this machine until it is completely assembled. Inspect the machine carefully before operation. Use only as described in this manual. Use only the manufacturer's recommended attachments.



DANGER: Machines can cause an explosion when operated near flammable materials and vapors. Do not use this machine with or near fuels, grain dust, solvents, thinners, or other flammable materials.



DANGER: Do not pick up flammable fluids, dust or vapors.



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



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



DANGER: Using a machine with a damaged power cord could result in an electrocution. Do not use the machine if the power cord is damaged. Do not use the electrical cord to move the machine. Keep cord away from heated surfaces. Do not unplug by pulling on the cord; grasp the plug, not the cord. Turn off all controls before unplugging. Do not close a door on cord or pull around sharp edges or corners.



DANGER: Electrocution could occur if maintenance and repairs are performed on a unit that is not properly disconnected from the power source. Disconnect the power supply before attempting any maintenance or service.



Warning: Operating a machine without observing all labels, decals, etc., could result in injury or damage. Read all machine labels before attempting to operate the machine. Make sure all of the labels are attached or fastened to the machine. Get replacement labels and decals from the manufacturer's distributor.



Warning: Electrical components can "short-out" if exposed to water or moisture. Keep the electrical components of the machine dry. Always store the machine in a dry area.



Warning: Use of this machine to move other objects or to climb on could result in injury to the operator or damage to the machine. Do not use this machine as a step or furniture. Do not allow to be used as a toy. Close attention is necessary when used by or near children.



Warning: Moving parts of this machine can cause injury and/or damage. Keep hands, feet, loose clothing, hair, fingers, and all parts of the body away from openings and moving parts.



Warning: Electrocutation could occur if you handle the plug or appliance with wet hands. Do not handle plug or appliance with wet hands.



Warning: The machine employs a removable float for wet pick-up operation to reduce risk of electrical shock. Always install float before any wet pick-up operation.



Warning: Rotating fan blades inside the cover. Before opening cover, switch off machine. Wait until the fan/brush stops completely or dust and debris may be ejected.



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



Warning: Damage could occur to machine if openings are blocked. Do not put any object into openings. Do not use any opening blocked: keep free of dust, lint, hair, and anything that may reduce air flow.



Warning: Injury could occur to the operator or the machine if used without the dust bag and/or filters in place. Do not use the machine without the dust bag and/or filters in place.



Warning: Injury to the operator and/or damage to the machine could occur when cleaning on stairs, unless caution is used. Use extreme caution when cleaning on stairs.

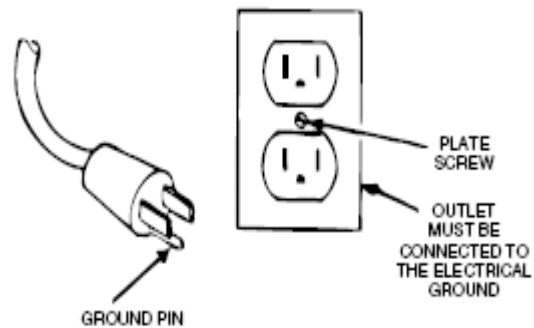


Warning: To reduce the risk of electrical shock, always use a 3-wire electrical system connected to the electrical ground. Whenever possible connect the machine to an outlet protected by a ground fault interrupter (GFCI). See "Grounding Instructions."

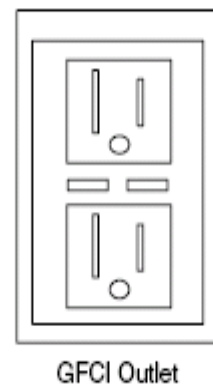
SAVE THESE INSTRUCTIONS

120 Volt Machine Instructions For Connection To The Power Supply And The Electrical Ground

This machine must be connected to the electrical ground to protect the operator from electrical shock. The machine has an approved power cord with three conductors and a plug with three terminals. Connect the plug to a receptacle that has three holes and is connected to the electrical ground. The green (or green and yellow) conductor in the cord is the ground wire. Never connect this wire to any terminal other than the ground terminal.



This machine uses a 120 volt AC 60 cycle electrical circuit. Make sure you have the correct frequency and voltage before connecting the power cord to an outlet. The machine has a plug as shown in Figure 1. If a receptacle connected to the electrical ground as shown in Figure 1 is not available, have one installed by an electrical contractor. **Do not use an adapter.**



Warning: To reduce the risk of electrical shock, protect the machine from rain. Keep the machine in a dry area.



Warning: To reduce the risk of electrical shock, always use a 3-wire electrical system connected to the electrical ground. Whenever possible connect the machine to an outlet protected by a ground fault interrupter (GFCI).



Warning: Do not cut, remove or break the ground pin. If the outlet does not fit the plug, consult your electrical contractor.



Warning: Have worn, cut or damaged cords and plugs replaced by an authorized service person.



Warning: If it becomes necessary to use an extension cord to reach an electrical outlet, you must use one that is at least one size larger in wire size. Such as a power cord that is marked 12/3 would need to use an extension cord that is marked 10/3. Do not use an extension cord that is undersized.

IMPORTANT INSTRUCTIONS

- Before use the equipment must be correctly assembled with all of its components
- Check that the electrical outlet is correct for use with the plug on the machine
- Before connecting, check that the specified motor voltage corresponds to the main voltage available
- Never use the equipment near flammable, explosive or toxic substances: sparks from the motor could cause dangerous reactions.
- Always unplug the machine from the electrical outlet when leaving machine unattended or before attempting any repair.
- Service and repair should be done by qualified personnel only. Use only original manufacturer's replacement parts.

Operation

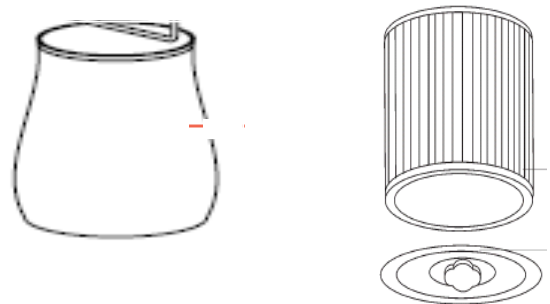
This machine is a commercial vacuum designed for dry pick up only. The motors can be run simultaneously or independently as the job requires. The machine is designed to sit on top of a standard 55 gallon steel drum.

Depending on the type of dust and debris being picked up it may be necessary to operate the filter shaker or clean the filter before it is time to empty the drum. To clean the filter on the "shake" model, simply push the shake rocker switch, this will momentarily stop the vacuum motors and activate the shaker motor. When you release the shaker switch the vacuum motors will automatically start back up. For "non-shake" models, turn off all of the motor switches and allow the motors to stop running. Remove the motor head from the top of the barrel ring, next remove the filter from the barrel ring opening and tap or brush the filter surface clean.

To extend the life of the filter you may want to occasionally remove the complete filter assembly and wash the filter bag. Allow the fabric to dry fully before returning it to the inside of the machine.

Filtration can also be enhanced by adding one of the various cartridge filters to the bottom of the motor head assembly and also by adding one of the Corolon Filters to the outside of the main polyester filter assembly. These optional filters can be purchased from your Distributor, the optional filters available are listed below:

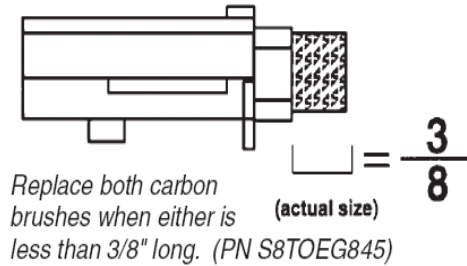
- S82852 Cartridge Filter, Paper (will fit S9M429BV & S9M430BV)
- S76061 Cartridge Filter, Polyester (will fit S9M429BV & S9M430BV)
- S82995 Cartridge Filter, Hepa (will fit S9M429BV & S9M430BV)
- S82855 Cartridge Filter Retainer (necessary to use optional cartridge filters on S9M429BV & S9430BV)
- S820237 Cartridge Filter, Polyester (will fit S9M429SBV)
- T80086 Corolon Filter



Periodic Maintenance

(Every six to twelve months)

1. Check filter for wear, replace dirt saturated filters that do not respond to normal cleaning.
2. Inspect gasket seals and replace those which have begun to leak.
3. Examine carbon motor brushes and commutator.



Servicing The Filter

The filter is accessed by lifting the head assembly off the tank.

The Polyester filter assembly is easily removed by simply lifting the filter basket out of the tank.

If the machine is equipped with one of the optional cartridge filters they are removed very easily. First remove the filter retainer by turning the black knob 90 degrees counter-clockwise. The cartridge filter will then slide off of the support assembly.

The cartridge filter for the "shake" model (S9M429SBV) is a simple friction fit, remove by pulling down on the molded handle.

If the machine is equipped with a Corolon filter it is easily removed from the outside of the Polyester filter assembly by grasping it and sliding it off. The elastic band will stretch and the filter will easily slide off of the Polyester filter.

Note:

- Be sure to frequently clean the filters.
 - Allow filters to thoroughly air dry after washing them before returning them to the machine.
 - Worn filters can affect vacuum performance. Replace the filters when they become worn out and normal cleaning will not restore vacuum performance.
-

Servicing The Vac Motor

Motor Replacement

1. Disconnect power cord from power source.
2. To access the vac motor, remove the screws that attach the main cover to the head assembly and set the cover to one side.
3. Disconnect the motor's 2 red lead wires from the main wiring bridge.
4. Disconnect green/yellow wire by removing the screw from the motor core.
5. Remove the four motor mounting screws.
6. Remove motor plate and set aside.
7. Take out the motor and remove the upper and lower gaskets.
8. Inspect gaskets. If they show signs of wear replace the.
9. Install gaskets onto new motor ensuring that they are properly seated.
10. Install the new motor. Make sure foam mufflers are positioned properly.
11. Attach motor plate to motor.
12. Connect green/yellow wire to motor core.
13. Connect motor's 2 red lead wires to main wiring bridge.
14. Re-assemble vac cover.

Servicing The Vac Motor

Carbon Brush Replacement

1. Disconnect power cord from power source.
2. To access the vac motor, remove the screws that attach the main cover to the head assembly and set the cover to one side.
3. Remove the motor cover by removing two screws. **See Fig. 1**
4. Remove the wire terminal from carbon brush housing. **See Fig. 2**
5. Remove the carbon brush assembly by removing the 2 screws that attach it to the vac motor. **See Fig.3**
6. Inspect armature commutator. If it is extremely pitted, grooved or not concentric then the motor will need to be replaced or sent to a qualified service center.
7. Slide the yellow brush housing from plastic holder. **See Fig. 4**
8. Reverse steps 7 through 4 to install new brush and housing (part number S8TOEG845)
9. Repeat steps 4 through 8 for the other carbon brush.
10. Reverse steps 3 and 2 for re-assembly.
11. Test for proper operation.

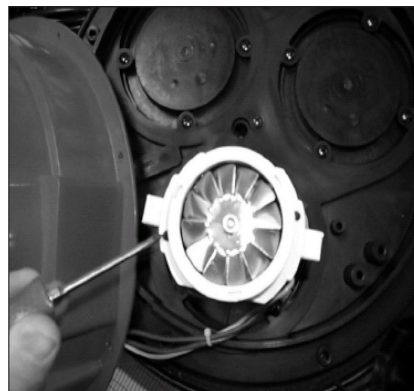


Fig. 1



Fig. 2

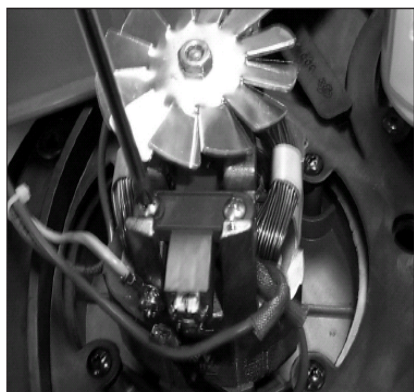


Fig. 3

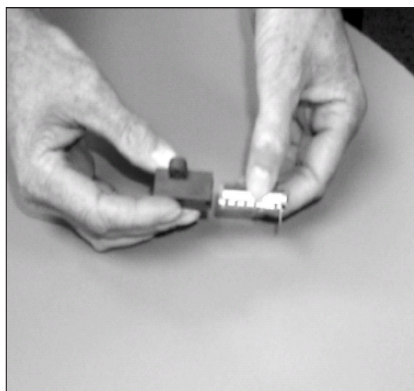
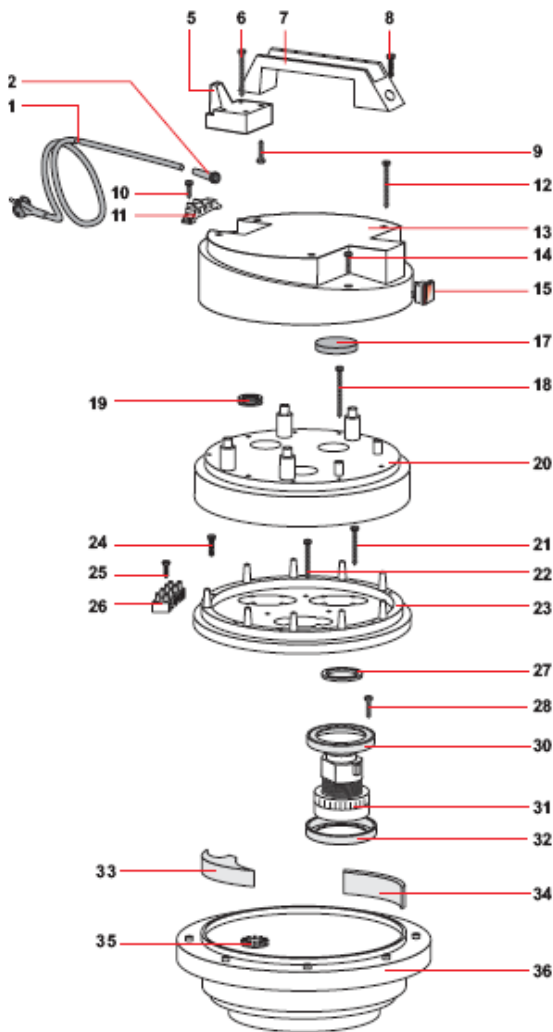


Fig. 4

Barrel Vac S9429BV

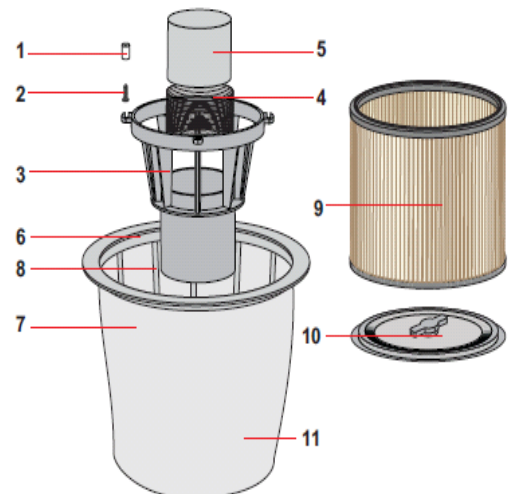


Head Assembly H9429

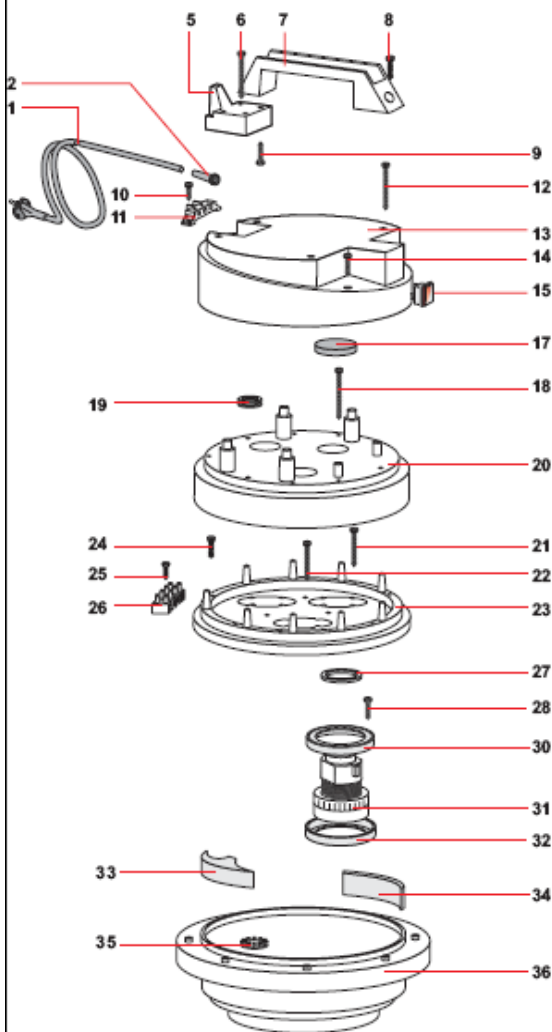
1	T821802005 Power Cord 14/3 x 35'	1
2	S820881 Cord Strain Relief	1
5	S82931AU Cord Guide Block	1
6	S81054 Screw 5 x 50	4
7	S82930 Handle	1
8	S81026 Screw 5 x 30	1
9	S81006 Screw 5 x 20	2
10	S81005 Screw 5 x 14	2
11	S83439 Terminal Block	1
12	S81054 Screw 5 x 50	4
13	S82932AU Cover, Top	1
14	S81006 Screw 5 x 20	2
15	S80484 Switch	2
17	S83937 Filter	2
18	S83273 Screw 5 x 55	9
19	S81502 Grommet	1
20	S82957AU Cover, Intermediate	1
21	S82627 Screw 5 x 40	9
22	S82627 Screw 5 x 40	3
23	S82937AU Cover, Motor Retainer	1
24	S83189 Screw 5 x 30	1
25	S81004 Screw 4.5 x 20	1
26	S83434 Wiring Bridge	1
27	S83969 Gasket	2
28	S81006 Screw 5 x 20	12
30	S83901 Gasket	2
31	S81120S Motor 1000w 120vac	2
32	S83901 Gasket	2
33	S83454 Filter	3
34	S83456 Filter	3
35	S80468 Valve	2
36	S82954 Base	1

Filter Group S73240

1	S83706 Bushing	4
2	S83724 Screw 5 x 25	4
3	S82823 Body, Filter Support	1
4	S83117 Strainer	1
5	S82676 Float	1
6	S80473 Filter Ring	1
7	S82845 Filter Bag	1
8	S82833 Filter Support	1
9	Cartridge Filter-Optional	
10	S82855 Filter Retainer-Optional	



Barrel Vac S9430BV

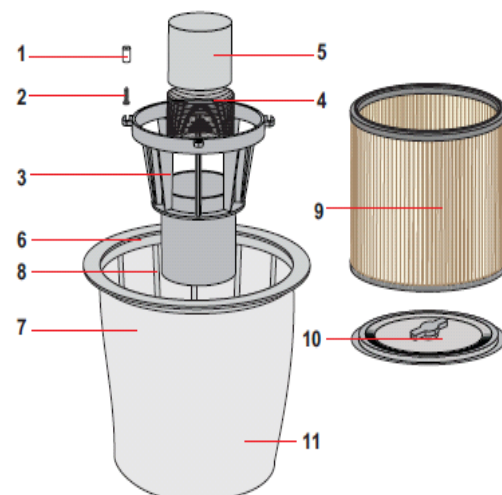


Head Assembly H9430

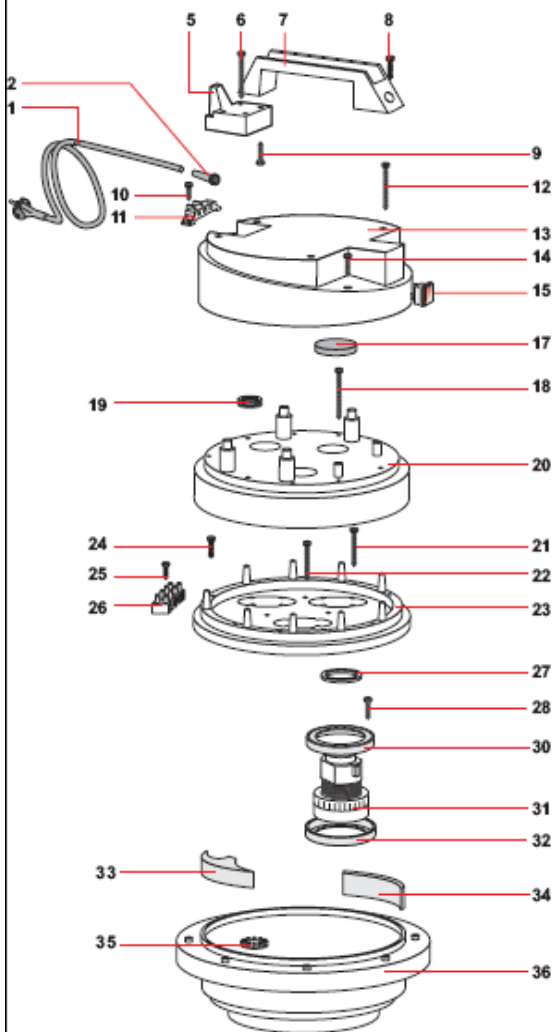
1	T80070	Power Cord 12/3 x 25'	1
2	S820881	Cord Strain Relief	1
5	S82931AU	Cord Guide Block	1
6	S81054	Screw 5 x 50	4
7	S82930	Handle	1
8	S81026	Screw 5 x 30	1
9	S81006	Screw 5 x 20	2
10	S81005	Screw 5 x 14	2
11	S83439	Terminal Block	1
12	S81054	Screw 5 x 50	4
13	S82964AU	Cover, Top	1
14	S81006	Screw 5 x 20	2
15	S80484	Switch	3
17	S83937	Filter	3
18	S83273	Screw 5 x 55	9
19	S81502	Grommet	1
20	S82957AU	Cover, Intermediate	1
21	S82627	Screw 5 x 40	9
22	S82627	Screw 5 x 40	3
23	S82937AU	Cover, Motor Retainer	1
24	S83189	Screw 5 x 30	1
25	S81004	Screw 4.5 x 20	1
26	S83434	Wiring Bridge	1
27	S83969	Gasket	3
28	S81006	Screw 5 x 20	12
30	S83901	Gasket	3
31	S81119S	Motor 800w 120vac	3
32	S83901	Gasket	3
33	S83454	Filter	3
34	S83456	Filter	3
35	S80468	Valve	3
36	S82954	Base	1

Filter Group S73240

1	S83706	Bushing	4
2	S83724	Screw 5 x 25	4
3	S82823	Body, Filter Support	1
4	S83117	Strainer	1
5	S82676	Float	1
6	S80473	Filter Ring	1
7	S82845	Filter Bag	1
8	S82833	Filter Support	1
9		Cartridge Filter-Optional	
10		Filter Retainer-Optional	



Barrel Vac S9433BV

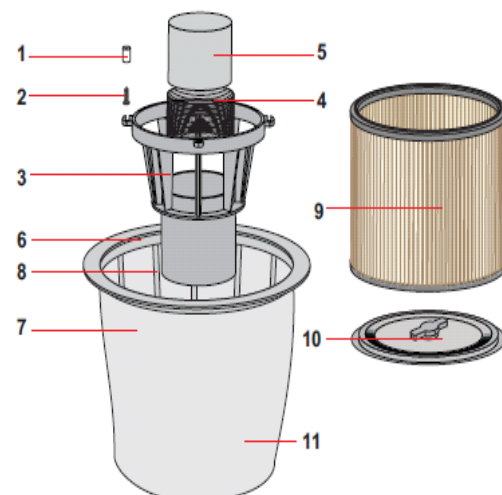


Head Assembly H9430

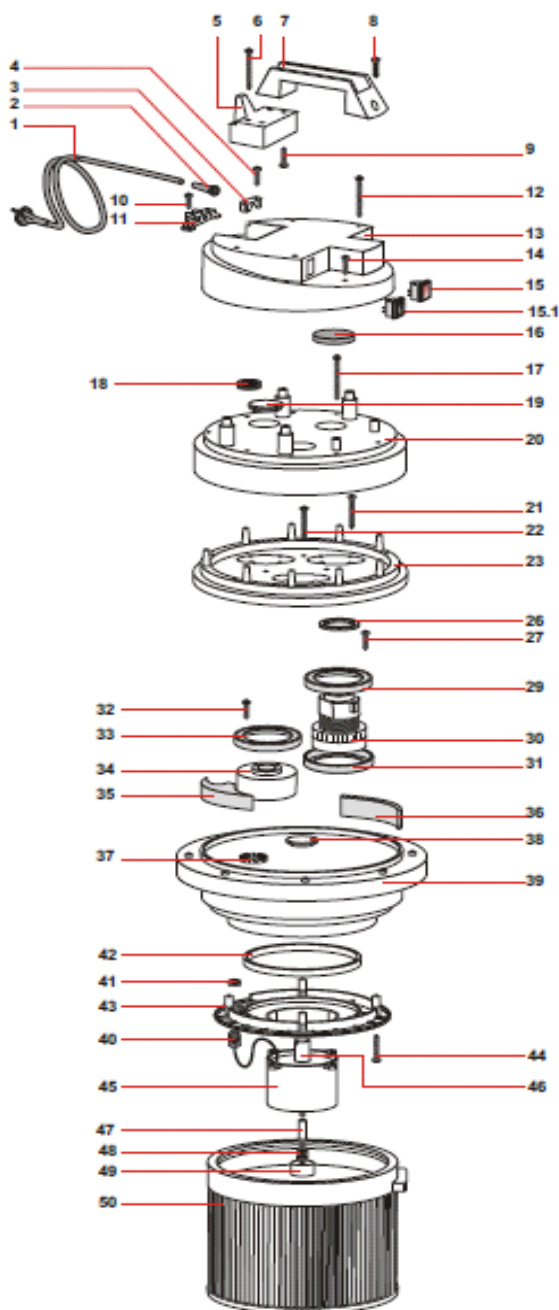
1	T80070	Power Cord 12/3 x 25'	1
2	S820881	Cord Strain Relief	1
5	S82931AU	Cord Guide Block	1
6	S81054	Screw 5 x 50	4
7	S82930	Handle	1
8	S81026	Screw 5 x 30	1
9	S81006	Screw 5 x 20	2
10	S81005	Screw 5 x 14	2
11	S83439	Terminal Block	1
12	S81054	Screw 5 x 50	4
13	S82964AU	Cover, Top	1
14	S81006	Screw 5 x 20	2
15	S80484	Switch	3
17	S83937	Filter	3
18	S83273	Screw 5 x 55	9
19	S81502	Grommet	1
20	S82957AU	Cover, Intermediate	1
21	S82627	Screw 5 x 40	9
22	S82627	Screw 5 x 40	3
23	S82937AU	Cover, Motor Retainer	1
24	S83189	Screw 5 x 30	1
25	S81004	Screw 4.5 x 20	1
26	S83434	Wiring Bridge	1
27	S83969	Gasket	3
28	S81006	Screw 5 x 20	12
30	S83901	Gasket	3
31	S83891S	Motor 1200w 220vac	3
32	S83901	Gasket	3
33	S83454	Filter	3
34	S83456	Filter	3
35	S80468	Valve	3
36	S82954	Base	1

Filter Group S73240

1	S83706	Bushing	4
2	S83724	Screw 5 x 25	4
3	S82823	Body, Filter Support	1
4	S83117	Strainer	1
5	S82676	Float	1
6	S80473	Filter Ring	1
7	S82845	Filter Bag	1
8	S82833	Filter Support	1
9		Cartridge Filter-Optional	
10		Filter Retainer-Optional	



Barrel Vac S9429SBV



Head Assembly H9429SH

1	T80070	Power Cord 12/3 x 25'	1
2	S820881	Cord Strain Relief	1
3	S80139	Clamp, Cord	1
4	S81006	Screw 5 x 20	2
5	S82931AU	Cord Guide Block	1
6	S81054	Screw 5 x 50	4
7	S82930	Handle	1
8	S81026	Screw 5 x 30	1
9	S81006	Screw 5 x 20	2
10	S81005	Screw 5 x 14	2
11	S83439	Terminal Block	1
12	S81054	Screw 5 x 50	4
13	S82964AU	Cover, Top	1
14	S81006	Screw 5 x 20	2
15	S80484	Switch	2
15.1	S87724	Switch	1
16	S83937	Filter	2
17	S83273	Screw 5 x 55	9
18	S81502	Grommet	1
19	S83383AU	Cover	1
20	S82957AU	Cover, Intermediate	1
21	S82627	Screw 5 x 40	9
22	S82627	Screw 5 x 40	3
23	S82937AU	Cover, Motor Retainer	1
24	S81004	Screw 4.5 x 20	1
25	S83434	Wiring Bridge	1
26	S83969	Gasket	2
27	S81006	Screw 5 x 20	12
29	S3901	Gasket	2
30	S81120S	Motor 1000w 120vac	2
31	S83901	Gasket	2
32	S81006	Screw 5 x 20	4
33	S83901	Gasket	2
34	S83451AU	Plug	1
35	S83454	Filter	3
36	S83456	Filter	3
37	S80468	Valve	2
38	S83519	Cap	1
39	S83108G	Base w/Gasket	1
40	S820253	Cord Restrainer	1
41	S820316	Nut, Cord Restrainer	1
42	S820249	Gasket	1
43	S820236	Support, Shaker Motor	1
44	S81054	Screw 5 x 50	4
45	S87715	Shaker Motor	1
46	S820265	Plunger	1
47	S87646M5	Shaker Rod	1
48	S81033	Nut M8	2
49	S86363	Bumper, Filter Shaker	1
50	S820237	Filter, Polyester	1

Barrel Vac Ring S920751 (Complete)



1	S87390	Latch	2
2	S81301	Rivet	4
3	S820297	Inlet, Complete	1
4	S82586	Gasket, Inlet	1
5	S80725	Screw 5 x 25	4
6	S81015	Nut M5	4
7	S820749	Gasket, Lid	1

Warranty Policy

Limited Warranty

IPC Eagle warrants new cleaning equipment against defects in material and workmanship under normal use and service to the original purchaser as detailed below.

10 years

Subject to the conditions stated below, IPC Eagle warrants polyethylene tanks and housings to be free from defects in materials and workmanship for a period of ten years.

3 years

Subject to the conditions stated below, IPC Eagle warrants all automatic scrubber components to be free from defects in materials and workmanship for a 3-year period. Parts replaced or repaired are warranted for the remainder of the original warranty period.

1 year

Subject to the conditions stated below, IPC Eagle warrants all other cleaning equipment components to be free from defects in materials and workmanship for a 1-year period. Parts replaced or repaired are warranted for the remainder of the original warranty period. Batteries are pro-rated for one year.

IPC Eagle will furnish and charge for replacement parts, including transportation, to the original owner through an IPC Eagle authorized service center. If the part is returned within 30 days and is found defective, the owner will be credited for the cost of the replacement part including shipping and handling.

Labor charges are covered for one year from the date of purchase if provided by an authorized IPC Eagle service center. Travel is covered for 90 days for battery operated equipment only.

Wear items exempt from warranty include belts, carbon brushes, power cords, wheels, pad drivers, clutch plates, brushes, pads, handle grips, filters, screens, throttle cables, hoses, and squeegees.

This warranty shall not apply to failures caused by misuse or abuse, improper maintenance as stated in the operation manuals, use of unauthorized repair parts, repairs by other than an IPC Eagle authorized service center, and damage in transit.

IPC Eagle disclaims and denies any liability for any direct, indirect, special incidental or consequential damage which may be suffered as a result of sale, delivery, servicing, use, loss of any product, downtime, labor, freight, or other charges not expressly included herein.



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