MaxiVacTM and Cyclone 3A7636A

Vacuum for collection of dry concrete and asphalt dust. For professional use only.

Vacuum

Model MV5500 - MaxiVac 550 (gasoline)

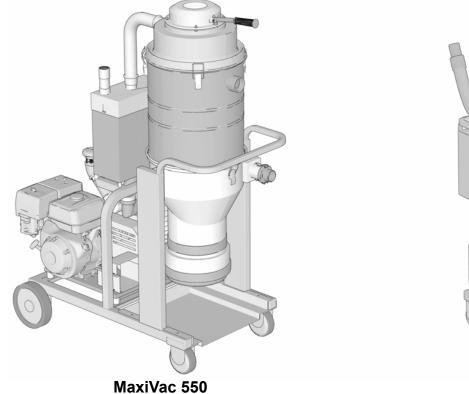
Separator

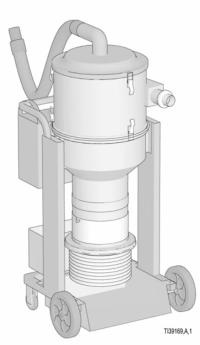
Model MVSC - Cyclone LP



Important Safety Instructions

Read all warnings and instructions in this manual before using the equipment. Be familiar with the controls and the proper usage of the equipment. Save these instructions.





Cyclone LP

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Warnings

The following warnings are for the setup, use, grounding, maintenance, and repair of this equipment. The exclamation point symbol alerts you to a general warning and the hazard symbols refer to procedure-specific risks. When these symbols appear in the body of this manual or on warning labels, refer back to these Warnings. Product-specific hazard symbols and warnings not covered in this section may appear throughout the body of this manual where applicable.

⚠ WARNING



DUST HAZARD

Grinding concrete and other surfaces can create dust that contains hazardous substances.

To reduce the risk of serious injury:

- Control the dust to meet all applicable workplace regulations.
- Wear a properly fit-tested and government approved respirator suitable for the dust conditions when emptying collection bag or performing maintenance.
- Do not use without dust bag and filters in place.



EQUIPMENT MISUSE HAZARD

Misuse can cause death or serious injury.

- Do not operate the unit when fatigued or under the influence of drugs or alcohol.
- Do not leave the work area while equipment is energized. Turn off all equipment when equipment is not in use.
- Check equipment daily. Repair or replace worn or damaged parts immediately with genuine manufacturer's replacement parts only.
- Do not alter or modify equipment.
- Use equipment only for its intended purpose. Call your distributor for information.
- Keep children and animals away from work area.
- Comply with all applicable safety regulations.
- Maintain a safe operating distance from other people in the work area.



ENTANGLEMENT HAZARD

Rotating parts can cut or amputate fingers and other body parts.

- Keep clear of rotating parts.
- Do not operate equipment with protective guards or covers removed.
- Do not wear loose clothing, jewelry or long hair while operating equipment.
- Disconnect battery before checking, moving, or servicing the equipment.



BURN HAZARD

Blower, diffuser and engine can become very hot during operation. To avoid severe burns, do not touch hot equipment.



PERSONAL PROTECTIVE EQUIPMENT

You must wear appropriate protective equipment when operating, servicing, or when in the operating area of the equipment to help protect you from serious injury, inhalation of dust or chemicals, and hearing loss. This equipment includes but is not limited to:

- Protective eye wear.
- Hearing protection.
- Properly fit-tested and government approved respirator suitable for the dust conditions.

↑ **WARNING**



FIRE AND EXPLOSION HAZARD

Flammable fumes in work area can ignite or explode. To help prevent fire and explosion:

- Do not use to pick up flammable or combustible liquids, such as gasoline, or use in areas where they
 may be present.
- Use equipment only in well ventilated area.
- Do not fill fuel tank while engine is running or hot; shut off engine and let it cool. Fuel is flammable and can ignite or explode if spilled on hot surface.
- Keep work area free of debris, including solvent, rags and gasoline.
- Keep a fire extinguisher in work area.



CARBON MONOXIDE HAZARD

Exhaust contains poisonous carbon monoxide, which is colorless and odorless. Breathing carbon monoxide can cause death.

Do not operate in an enclosed area.



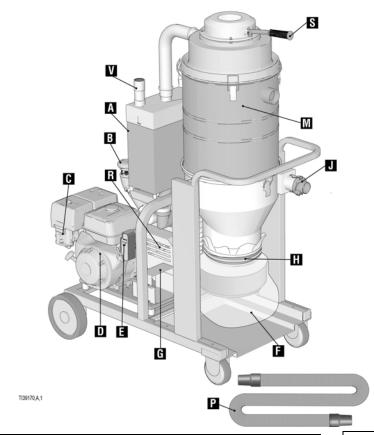
BATTERY HAZARD

Lead-acid batteries produce explosive gases and contain sulfuric acid that can cause severe burns. To avoid sparks and injury when handling or working with a lead-acid battery:

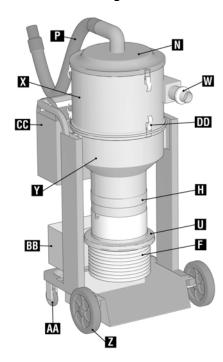
- Read and follow the battery manufacturer's warnings.
- Exercise caution when working with metallic tools or conductors to prevent short circuits and sparks.
- Keep all sparks, flames, and cigarettes away from batteries.
- Always wear protective eyewear and protective equipment for face, hands, and body.
- If you have direct contact with battery fluid, flush with water and consult a physician immediately.
- Installation and maintenance must be performed by knowledgeable personnel only.

Component Identification

MaxiVac 550



Cyclone LP

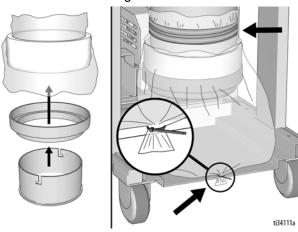


	Component	
Α	Air Filter Housing	
В	Diffuser	
С	Engine Choke, Fuel Valve, and Throttle Control	
D	Engine	
Е	Electric Start Key	
F	Vacuum Dust Collection Bag	
G	Battery	
Н	Velcro® Belt (to secure Vacuum Dust Collection Bag)	
J	Vacuum Hookup	
М	Main Housing (contains Filter Bags)	
N	Cyclone LP Lid	
0	Long Hose (to connect the MaxiVac or Cyclone to the SMITH removal equipment)	

	Component
Р	Short Hose (to connect the MaxiVac to the Cyclone)
R	Blower
S	Vacuum Release Handle
U	Bag Adapter
V	Relief Valve (protects air filters from damage)
W	Sacrificer Hookup
Х	Cyclone LP Mid Body
Υ	Cyclone LP Lower Body
Z	10" Wheel
AA	4" Wheel
BB	Tool Box
СС	Tool Bag
DD	Drum Latch

Setup

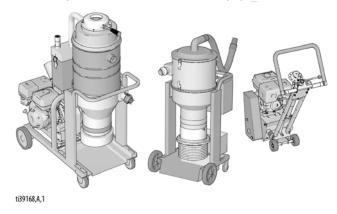
- Install dust collection bags onto vacuum and into separator.
 - a. Slide the Vacuum Dust Collection Bag onto the Continuous Dust Bag Adapter. Install the bag assembly onto the bottom of the Main Housing of the MaxiVac. Wrap the Velcro Belt around the top of the bag to ensure an air tight seal. Pull enough bag down to rest on the bottom of the vacuum cart, then tie a cable tie around the bottom of the bag.



2. Connect hoses.

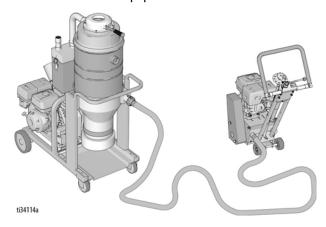
If using a Cyclone separator:

- Connect one end of the Short Vacuum Hose to the inlet of the MaxiVac. Connect the other end of the Short Vacuum Hose to the outlet of the Cyclone separator.
- Connect one end of the Long Vacuum Hose to the inlet of the Cyclone separator. Connect the other end of the Long Vacuum Hose to the vacuum hookup on the SMITH removal equipment.



If not using a Cyclone separator:

 Connect one end of the Long Vacuum Hose to the inlet of the MaxiVac. Connect the other end of the Long Vacuum Hose to the vacuum hookup on the SMITH removal equipment.

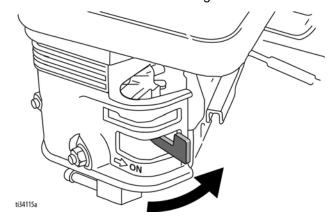


NOTE: Use the Y-Connector to connect 2 hoses to the vacuum or separator, if desired.

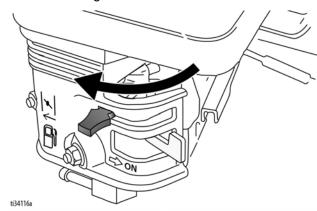
Operation



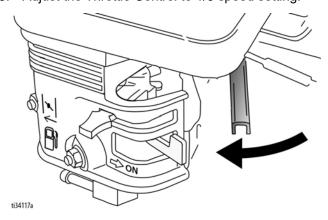
Slide the Fuel Valve on the engine to ON.



2. Slide the Engine Choke to closed.



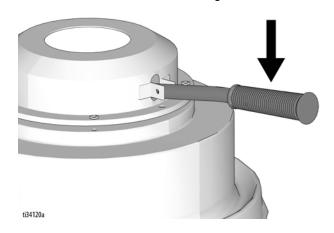
3. Adjust the Throttle Control to 1/3 speed setting.



4. Turn the Electric Start Key to START.



- 5. After the engine warms up, move Engine Choke to open and adjust the Throttle Control to the desired speed.
- 6. MaxiVac is now ready for dust collection from the SMITH removal equipment.
- 7. To help ensure proper dust collection, momentarily pull down on the Vacuum Release Handle every 10 minutes of operation while the MaxiVac engine is running. This helps clean the Filter Bags from accumulated dust and debris, and transfers them to the Vacuum Dust Collection Bag.



Emptying Collection Bag







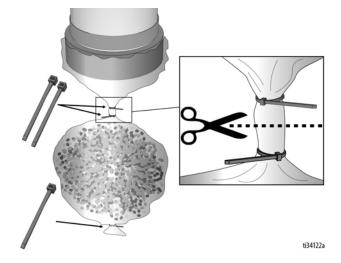
DUST HAZARD

Grinding concrete and other surfaces can create dust that contains hazardous substances. To reduce the risk of serious injury:

- Respirator must be worn when emptying or cleaning Dust Collection bags.
- Follow local ordinances and regulations for disposal.

MaxiVac and Cyclone LP

- 1. When Vacuum Collection Bag has collected approximately 45 lbs (20 kg) of dust, the bag should be replaced. Momentarily pull down on the Vacuum Release Handle, then turn the MaxiVac off.
- 2. Pull down on the continuous bag to expose 6 12" (15 30 cm) of new, unused bag.
- 3. Use a cable tie to tie off the top of the bag. Fasten another cable tie 2" (5 cm) cable tie above the first cable tie.
- 4. Put on respirator. Cut the bag between the two cable ties.

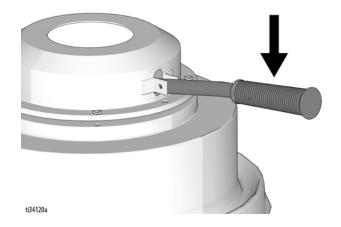


- 5. Dispose of the dust bag. Follow local ordinances and regulations for disposal.
- 6. Pull down on the new bag attached to the vacuum until the bottom of the bag rests on the bottom of the vacuum cart. Ensure the bottom of the bag is tied off firmly with the cable tie.

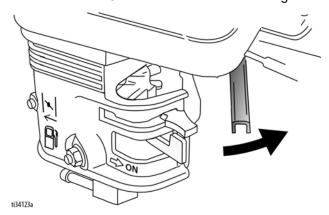
Shutdown and Storage

Shutdown

1. While the engine is running, momentarily pull down on the Vacuum Release Handle.



2. Move Throttle Control to the minimum setting.



3. Turn the Electric Start Key to OFF.



Storage

Slide Fuel Valve on the engine to OFF. Store indoors.

NOTICE

Do not store in a location with high temperatures or excessive humidity, in order to prevent damage to your MaxiVac components.

Maintenance and Repair









To reduce the risk of serious injury:

- Respirator must be worn during all maintenance and repair.
- Follow local ordinances and regulations for disposal of dust.
- Disconnect spark plug wire and black cable from battery before maintenance.

Maintenance

The following steps should be performed to help maintain proper operation and sustain the life of the MaxiVac.

Daily

- Prior to use, inspect all hoses for holes. Repair or replace damaged hoses.
- To help maintain performance and dust control, replace bag filters and/or air filters when:
 - Filters have tears or are clogged.
 - Airborne dust is visible when using the MaxiVac.
 - Airborne dust exits the Diffuser when using the MaxiVac.
- Check belt tension for slipping and/or excessive wear. Tighten or replace belt if needed.
- Verify that the Relief Valve does not open when the engine is running. If the Relief Valve opens, clean or replace the air filters.





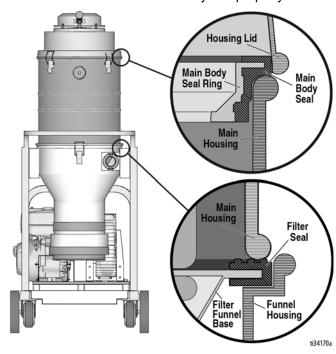


DUST HAZARD

Vacuum performance will deteriorate if the drive belt has excessive wear or is not properly tensioned.

Weekly

Inspect seals for damage. If damaged, replace seal. Ensure seals are installed correctly and properly sealed.

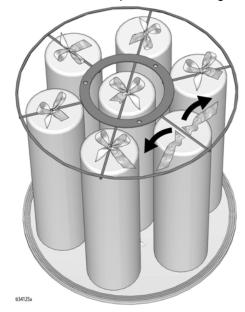


Repair

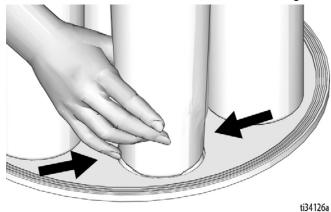
Filter Bag Replacement

 Unlatch the Drum Latches from the Main Housing in order to access the Filter Bags. Lift off the Housing Lid.

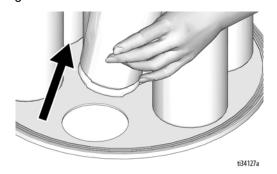
2. Untie knots from the top of the Filter Bags.



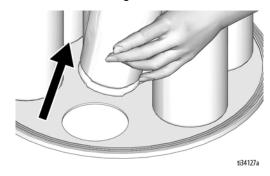
3. Press wire form at the bottom of the Filter Bag.



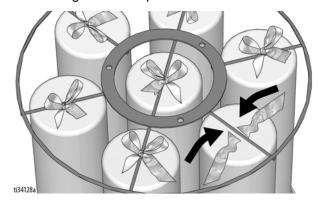
4. Separate filter from hole by lifting up on the Filter Bag.



5. Remove old Filter Bag from the vacuum.



6. Insert new Filter Bag and tie a knot from the new Filter Bag onto the top wire rack.



7. Press wire and insert new Filter Bag into hole.

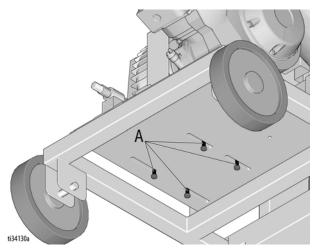


8. Ensure seals are installed correctly and properly sealed when reassembling the Main Housing.

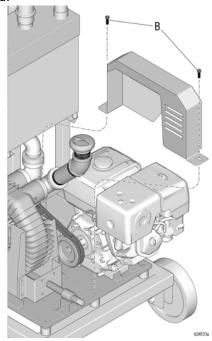
V-Belt Replacement and Tensioning

Follow these instructions to install a new V-Belt, or to re-tension current belts.

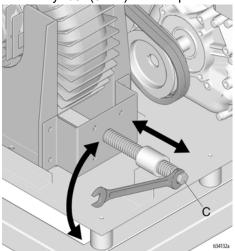
1. Loosen the four bolts (labeled "A") that secure the Blower to the mounting plate.



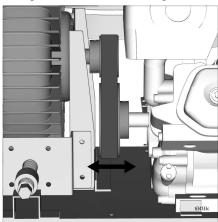
Loosen the two bolts (labeled "B") and remove Belt Guard.



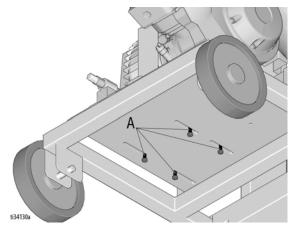
 To install a new V-Belt, use a 3/4" hex wrench on "C" to move the Blower Pulley closer to the Engine Pulley. Replace the belt. 4. To tension the belt, use a 3/4" hex wrench on "C" to move the Blower Pulley away from the Engine Pulley. Keep tightening the belt until the belt deflects approximately 1/8" (3mm) when squeezed by hand.



 Ensure pulleys are aligned after tensioning. If they are not aligned, release the belt tension, loosen the Engine Pulley bushing screws and align the pulleys. Check alignment after tensioning the V-Belt.



6. When the V-Belt is properly aligned and tensioned, tighten the four bolts (labeled "A") to secure the Blower to the mounting plate. Reassemble the Belt Guard with the two bolts (labeled "B" in step 2).



Recycling and Disposal

Rechargeable Battery Disposal

Do not place batteries in the trash. Recycle batteries according to local regulations. In the USA and Canada, call 1-800-822-8837 to find recycling locations or go to www.call2recycle.org.

Do not place batteries in the trash. Recycle batteries according to local regulations.

End of Product Life

At the end of a product's useful life, recycle it in a responsible manner.

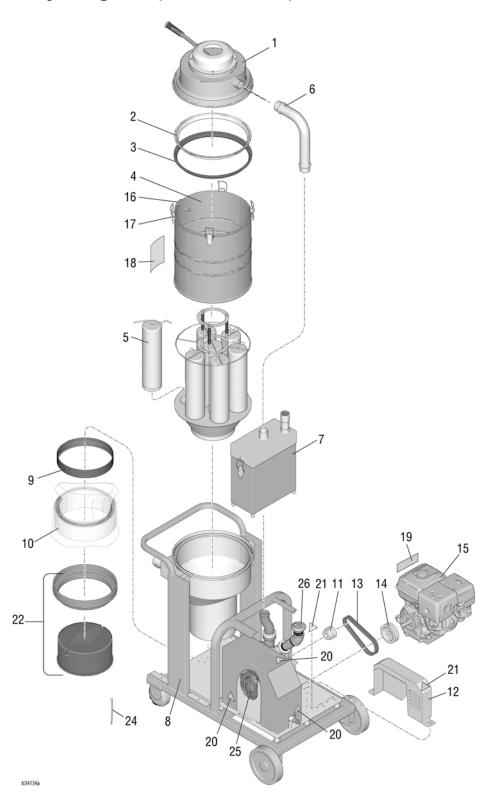






Parts

Main Assembly Diagram (MaxiVac 550)



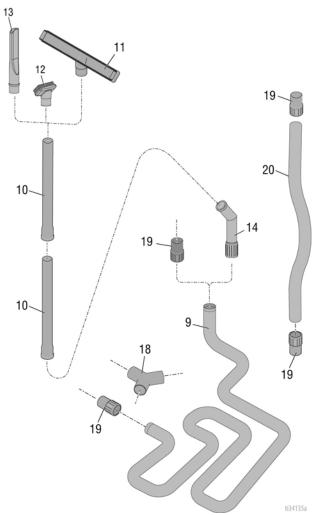
Main Assembly Parts (MaxiVac 550)

Ref	Part Number	Description	Qty
1	see page 17	Lid and Vacuum Release Plunger	
2	17X196	Main Body Seal	
3	17X197	Main Body Seal Ring	1
4	MV.5.7	Filter Housing/Main Body	1
5	see page 18	Filter Bag Assembly	1
6	17X199	Coupler Hose	1
7	see page 19	Filter Housing Assembly	1
8	MV.5.13	Main Frame	1
9*	17X154	Velcro Belt	1
10*	MV.7.LP.PAXXO	Vacuum Dust Collection Bag (Continuous, 20 meters)	1
44	X3.00.219.1	Blower Pulley, 3"	1
11	X3.00.220.4	Bushing, Blower Pulley	1
12	17X202	Belt Guard	1
13	MV.5.VB.300	V-Belt	1
4.4	X3.00.218.1	Engine Pulley, 5"	1
14	X3.00.220.2	Bushing, Engine Pulley	1
15	RS-E-17007E	13 hp Honda Engine	
16	MV.5.8	Vacuum Gauge	1
17	MV.1.33	Drum Latch	7
18▲	17W132	Warning Label, Multiple, Icons	1
19▲	194126	Warning, Fire and Explosion	
20▲	16D646	Warning, Hot Surface	
21▲	16C394	Warning, Entanglement	
22	MV.7.LP.H	Continuous Dust Bag Adapter 1	
24	N/A	Cable Ties (to tie off bag)	
25	MV.5500.B	Blower	1
26	MV.5.10.A	Exhaust Diffuser	1

[▲] Replacement warning, safety labels, tags, and cards are available at no cost.

^{*} MaxiVac 550 is shipped with one spare each of items 9 and 10.

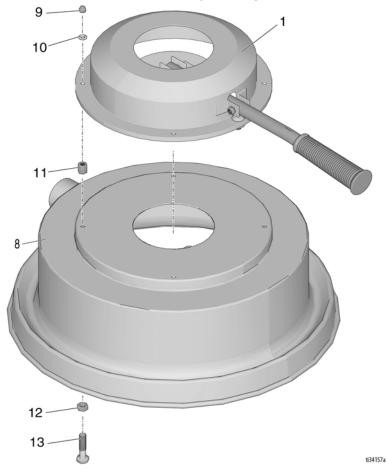
Accessories Diagram (MaxiVac 550)



Accessories Parts List (MaxiVac 550)

	Part Number	Description	Qty
9	17X156	Long Vacuum Hose, Standard, 2" (includes item 19)	1
9	MV.HS.SD	Long Vacuum Hose, Heavy Duty, High Temp, 2"	1
10	MV.26	Vacuum Extension (set of 2)	1
11	MV.24	Vacuum Large Brush	1
12	MV.22	Vacuum Small Brush	
13	MV.25	Vacuum Floor Nozzle	
14	MV.27	Vacuum Elbow	
18	MV.Y	Y-Connector	
19	MV.23	2" Hose Connector for Standard Hose (MaxiVac is shipped with 2 extra connectors)	
20	17X693	Short Vacuum Hose, Standard, 2" (includes item 19)	1
20	MV.HS.SA	Short Vacuum Hose, Heavy Duty, High Temp, 2"	1

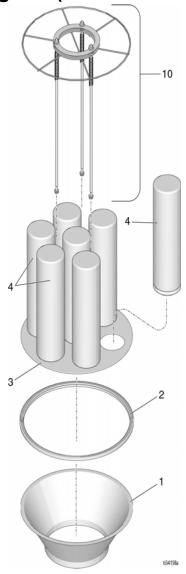
Lid and Vacuum Release Assembly Diagram (MaxiVac 550)



Lid and Vacuum Release Assembly Parts List (MaxiVac 550)

	Part Number	Description	Qty
1	MV.5.4	Vacuum Release Handle Assembly	1
8	MV.5.5	Lower Lid	1
9	AHN.25-20	1/4-20 Acorn Nut	4
10	SLW.25	1/4" Lock Washer	4
11	HN.25-20x.50	1/4-20 Coupling Nut	4
12	HN.25-20	1/4-20 Hex Nut	4
13	HX-CS.25-20x1.25	1/4-20x1 1/4 Hex Head Bolt	4

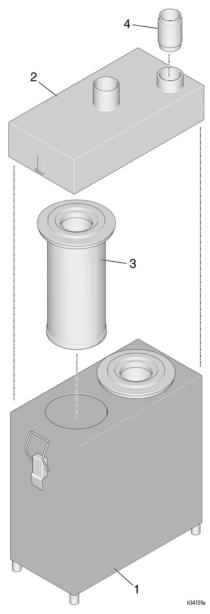
Filter Bag Assembly Diagram (MaxiVac 550)



Filter Bag Assembly Parts List (MaxiVac 550)

	Part Number	Description	Qty
1	17X235	Filter Funnel Base	1
2	MV.5.1.2	Filter Seal	1
3	MV.5.1.3	Filter Base Plate	1
4	MV.5.2	Filter Bag (set of 7)	1
10	MV.5.1	Wire Net and Spring Kit	1

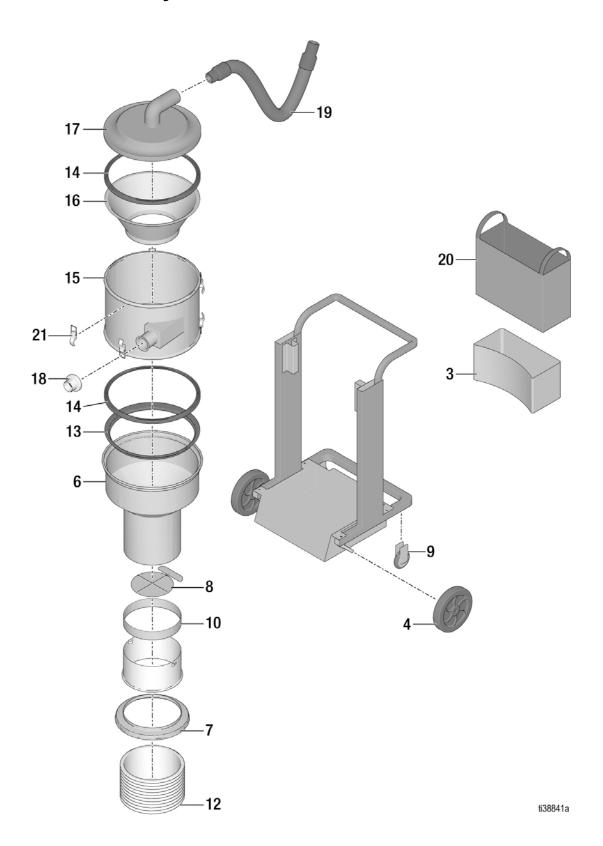
Air Filter Assembly Diagram (MaxiVac 550)



Air Filter Assembly Parts List (MaxiVac 550)

	Part Number	Description	Qty
1	MV.5.30	Filter Main Casing	1
2	MV.5.6.5	Filter Casing Lid	1
3*	MV.5.3	Air Filter, set of 2	1
4	MV.5.7.1	Relief Valve	1
*HEPA Filter Set available (MV.5.3.HEPA.A)			

Cyclone LP Assembly and Accessories



Cyclone LP Assembly and Accessories Parts List

	Part Number	Description	Qty
3	19B348	Tool Box	1
4	19B345	10" Wheel	2
6	MV-CSC-08	Lower Body	1
7	17X930	Bag Adapater	1
8	19B350	Dust Flap Cover	1
9	19B346	4" Caster	2
10	17X154	Belt (to secure Vacuum Dust Collection Bag)	1
12	17W295	Plastic Bag	1
13	17X196	Metal Ring (main body seal)	
14	17X197	Rubber Seal (main body)	
15	MV-CSC-06	Mid Body 1	
16	17X235	Base Filter Funnel	1
17	MV-CSC-02	Lid	1
18	19B341	Hose Inlet	1
19*	17X693	Vacuum Hose, short	
20	19B779	Tool Bag	1
21	17X205	Drum Latch	6
* 2" He	eavy Duty, High Tempera	ature Hose available: P/N 17W154	·

Technical Data

MaxiVac 550 (MV5500), 13 HP Gasoline	MaxiVac 5	50 (MV5500)), 13 HP	Gasoline
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Air Flow (full throttle, without hose) - 295 cfm (501 m³ /hour)

Air Flow (full throttle, with 2" x 30' hose, no Y-Connector) - 216 cfm (367 m³/hour)

Vacuum Pressure (no flow) - 148" H₂0 (276 mm Hg, 0.37 bar)

Maximum Air Power (without hose) - 2045 Air-Watts

Filtration - 99.3% at 0.3 µm particle size

Dimensions/Weight (unpackaged)	US	Metric
MaxiVac 550 (MV5500)		
Height	72 in.	183 cm
Length	48 in.	122 cm
Width	35 in.	89 cm
Weight	575 lb	260 kg
Cyclone LP (MVSC)		
Height	62 in.	157 cm
Length	28 in.	71 cm
Width	32 in.	81 cm
Weight	125 lb	57 kg

All trademarks or registered trademarks are the property of their respective owners.

California Proposition 65

CALIFORNIA RESIDENTS

MARNING: Cancer and reproductive harm – www.P65warnings.ca.gov.

SMITH Standard Warranty

SMITH warrants all equipment referenced in this document which is manufactured by SMITH and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by SMITH, SMITH will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by SMITH to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with SMITH's written recommendations.

This warranty does not cover, and SMITH shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-SMITH component parts. Nor shall SMITH be liable for malfunction, damage or wear caused by the incompatibility of SMITH equipment with structures, accessories, equipment or materials not supplied by SMITH, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by SMITH.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized SMITH distributor for verification of the claimed defect. If the claimed defect is verified, SMITH will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

SMITH's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

SMITH MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY SMITH. These items sold, but not manufactured by SMITH (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. SMITH will provide purchaser with reasonable assistance in making any claim for breach of these warranties

In no event will SMITH be liable for indirect, incidental, special or consequential damages resulting from SMITH supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of SMITH, or otherwise.

FOR SMITH CANADA CUSTOMERS

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