



**Hand-Held Scarifiers**



**Needleguns**



**Walk-Behind Scarifiers**



**Impact Tools**



**Sanders**



**Specialty Tools**



**Industrial Vacuums**



# Dominator

**6 Gallon Electric Critical Filtration Vacuum**  
Canister and Backpack Models  
*with ULPA Filtration*



340.900



340.902



340.003

### 6 Gallon Dominator Vacuum Configurations

Part	Description	Accessories Furnished
340.900	Dominator, polyethylene tank	10' hose, initial filters & bags, casters
340.902	Dominator, stainless steel tank	10' hose, initial filters & bags
340.003	Dominator, stainless steel, backpack	6' hose, initial filters & bags

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## 1.0 General Information

### 1.1 Introduction

This manual is furnished with each new DESCO Dominator Vacuum. This provides the necessary operating and preventive maintenance instructions. Operators must read and understand this manual before operating or servicing this machine.

This machine was designed to give you excellent performance and efficiency. For best results and minimal cost, please follow the general guidelines below:

- Operate the machine with reasonable care.
- Follow the manufacturers suggested maintenance instructions as provided in this booklet.
- Use original Desco supplied parts.

### 1.2 Technical Specifications

Voltage	115V
Tank Size	6 gal (22 ltr)
Power	1.25 HP
Air Flow	106 CFM
Water Lift	85"
Dry Capacity	.46 cu. ft (.013 m <sup>3</sup> )
Cord	16-3, 10' (3.05 m)
Air Watts	404
Weight	23.8 lbs (10.79 kg)

### 1.3 Accessories

Part	Description
300.082	Vacuum hose 1.5" x 10', replacement, complete
340.000001	Vacuum hose 1.5" x 25', replacement, complete
300.039	Vacuum hose 1.5" x 25', extension, coupler required
340.390014	Inlet coupler, 1.5", w/swivel cuff
300.066	Hose cuff, 1.5"
340.490024.1	Tool kit, plastic, 7 piece
340.490025.1	Tool kit, aluminum, 11 piece



## 1.4 Consumables

Part	Description	Image (Pictured in assembly sequence)
340.110029	UPLA Filter	 <p><i>(Pictured with pre-filter sleeve. Included with ULPA filter.)</i></p>
340.110030PKG	Pre-Filter Sleeve (6 pk)	
340.805041 340.805040	Filter, cloth, w/ ring Filter, cloth, w/o ring	
340.761177PKG	Paper Filter Protector (10 pk)	
340.384003PKG	Collection Bag (10 pk)	
340.802206PKG	Liner/Disposal Bag (10 pk)	 <p><i>(Optional)</i></p>

## 1.5 Provisioning of Vacuum Consumables

Below are guidelines designed to give an idea of how many consumable items should be on hand to keep a vacuum system running efficiently. Actual consumable requirements vary widely due to the number of variables involved, including: tank size, debris volume, and particle size. As a result, there is no accurate way to predict consumable consumption. Therefore, the guidelines below should be used for initial provisioning. Once you have usage data, you can adjust to suit your actual needs.

### Recommended Initial Provisioning

Stage	Item	Vacuum Systems Provisioned								
		1 Vacuum			2 Vacuums			3 Vacuums		
		Qty Rec	Pkg Qty	Order Pkgs	Qty Rec	Pkg Qty	Order Pkgs	Qty Rec	Pkg Qty	Order Pkgs
1	Collection Bag	20	10	2	30	10	3	40	10	4
2	Paper Filter Protector	10	10	1	20	10	2	30	10	3
3	Cloth Bag	2	1	2	3	1	3	4	1	4
4	Pre-Filter Sleeve	2	6	1	3	6	1	4	6	1
5	ULPA Filter	1	1	1	2	1	2	3	1	3

## 1.6 Critical Filtration and Vacuum Efficiency

- **Efficiency** is a balance of: 1) maintaining effective particle removal as measured by the ULPA specification while, 2) maintaining rated vacuum air flow as measured in cubic feet per minute (CFM).
- **Maintaining air flow** volume is critical to maintain the level of cleanliness required by the process.
- **Air flow declines** as particulate embeds in the filter fabric. As a result, efficiency decreases as filter use increases.
- **Efficiency is maintained** by checking and servicing filters often – before vacuum air flow declines significantly.
- **Multi-stage filtration is sacrificial.** Meaning each filtration stage sacrifices itself to save the next stage. Changing early filtration stages often (such as collection bag & filter protector) will greatly extend the life of the later filtration stages. **Key to understand** is that besides being an efficiency measure, this is also an **economy measure** as the early stages of filtration are far less expensive than the ULPA filter.

## 1.7 Filtration Stages and Maintenance Steps



- 1) **Collection Bag** – A disposable container where dust particles are accumulated for disposal.
  - *Particle containment efficiency: 90% at 5 microns, Typical Life: Up to 12.5 hours*
  - Check space available every 4 hours of operation. More often for heavy volume pickup.
  - Change when  $\frac{3}{4}$  full. Change more frequently when collecting fine dust particles, such as concrete dust.
  - Always change. Never empty and reuse.
  - Always check stages 2-5 when changing collection bag.



- 2) **Paper Filter Protector** – A disposable filter designed to catch particles that pass through the collection bag (Stage 1) and to protect the cloth bag (Stage 3).
  - *Particle containment efficiency: 97% at 5 microns, Typical Life: Up to 25 hours*
  - Change when compromised: punctured, visibly contaminated or air flow is restricted.
  - If not visibly compromised, change with every second collection bag.
  - Always change. Never clean and reuse.
  - When replaced, stage 1 should also be replaced.



- 3) **Cloth Bag** – A reusable filter designed to catch particles that pass through the Paper Filter Protector (Stage 2) and to protect the Pre-Filter Sleeve (Stage 4).
  - *Particle containment efficiency: 95% at 3 microns, Typical Life: Up to 125 hours*
  - Always change when vacuum has been used with HAZMAT. Never clean and reuse.
  - Reusable only when you are certain the vacuum has not been used for HAZMAT. Clean by vacuuming exterior of the bag with a second vacuum.
  - Change when compromised: punctured, visibly contaminated or air flow is restricted.
  - When replaced, stages 1 and 2 should also be replaced.



- 4) **Pre-Filter Sleeve** – A reusable filter designed to catch particles that pass through the Cloth Bag (Stage 3) and to protect the ULPA filter (Stage 5).
  - *Particle containment efficiency: 99% at 1-3 microns, Typical Life: Up to 250 hours*
  - Always change when vacuum has been used with HAZMAT. Never clean and reuse.
  - Reusable only when you are certain the vacuum has not been used for HAZMAT. Clean by vacuuming exterior of the sleeve with a second vacuum.
  - Change when compromised: punctured, visibly contaminated or air flow is restricted.
  - When replaced, stages 1, 2 and 3 should also be replaced.



- 5) **ULPA Filter** – A disposable filter designed to catch particles that pass through the Pre-filter Sleeve (Stage 4).
  - *Particle containment efficiency: 99.999% at 0.12 microns, Typical Life: Up to 1,000 hours*
  - Change when compromised: punctured, visibly contaminated or air flow is restricted.
  - Always change. Never clean and reuse.
  - When replaced, stages 1, 2, 3 and 4 should also be replaced.

## 2.0 Safety



### **READ ALL INSTRUCTIONS BEFORE USING**

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

#### **WARNING – To reduce the risk of fire, electric shock, or injury:**

- Do not leave appliance when plugged in. Unplug from outlet when not in use and before servicing.
- To avoid electrical shock, do not expose to rain, store indoors.

#### **WARNING – To reduce risk of personal injury:**

- Use only as described in this manual. Use only manufacturer's recommended attachments.
- 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.
- 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.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- 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.
- Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without dustbag and/or filters in place.
- Turn off all controls before unplugging.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Connect to a properly grounded outlet only. See grounding instructions.

**SAVE THESE INSTRUCTIONS**



## 3.0 Operating Instructions

### 3.1 Inspection

Carefully unpack and inspect your machine for shipping damage. Each unit is tested and thoroughly inspected before shipment, and any damage is the responsibility of the delivery carrier who should be notified immediately.

### 3.2 Electrical

This machine is designed to operate on a standard 15 amp, 115 volt, 60 hz, AC circuit. Voltages below 105 volts AC or above 125 volts AC could cause serious damage to the motor.



#### **WARNING**

Electric motors can cause explosions when operated near explosive materials or vapors. Do not operate this machine near flammable materials such as solvents, thinners, fuels, grain dust, etc.

### 3.3 Grounding Instructions

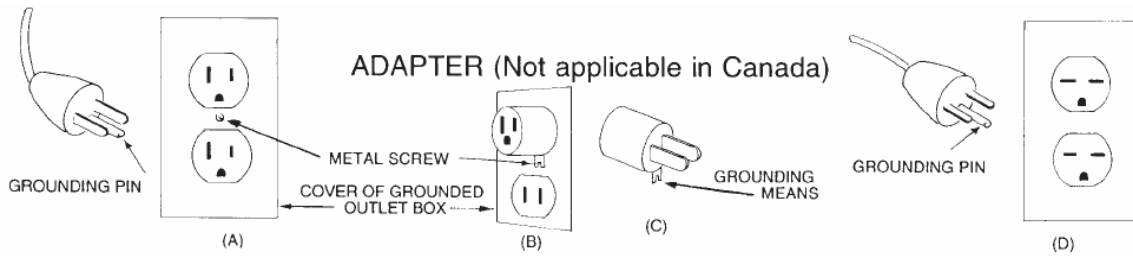
This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.



#### **Danger**

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 the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

This machine is for use on a nominal 120 volt circuit and has a grounding plug that looks like the plug illustrated in Sketch A. Make sure that the machine is connected to an outlet having the same configuration as the plug. No adapter should be used with this appliance.



### **WARNING**

This vacuum may contain potentially hazardous dust depending on its application. Special handling of contaminated disposal bags and filters is recommended. Disposal must be in compliance with local EPA regulations.

### **3.4 User Maintenance Instructions**

All service and repair should be performed by qualified vacuum service representative or electrician. No user serviceable components are employed in the electrical vacuum lid head assembly. No lubrication of the motor is required.

### **3.5 Cloth Bag and Hose Assembly**

Cloth bag and hose assembly are user maintenance items and can be replaced when worn out. For optimum performance, empty and clean filter bag regularly. A clogged and dirty bag restricts the flow of air and results in reduced vacuum. The hose assembly can be maintained by wiping off with a dampened cloth of mild liquid soap and water, then allowed to dry.

### **3.6 Cord Storage**

While not in use, storage can be accomplished by winding cord around motor lid assembly. Cord should be completely unwound from lid assembly during operation.

- 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 to service center.
- 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 appliance over cord. Keep cord away from heated surfaces.
- Do not unplug by pulling cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Always unplug the machine when removing the motor head off the tank. This equipment should be stored indoors and not exposed to rain.

Always unplug the machine when removing the motor head off the tank. This equipment should be stored indoors and not exposed to rain.



## 4.0 Filter Care

### 4.1 Operation and Filter Care Instructions

Special filters reduce the incidence of airborne dust that would be created by any other method of cleaning.

- During the removal of hazardous dust, do not sweep, scoop, shovel or, in any manner, handle other than by vacuuming.
- Do not at any time attempt to bypass, remove, substitute or, by any other means, change the filters used in this vacuum.
- Use only approved Desco Back Pack Vacuum filters and filter bags.
- Before attempting to use and before cleaning, be certain that you fully understand the instructions given by the setting up or cleaning/changing of filters of this vacuum.

The following instructions include the use of an optional paper filter protector (P/N: 340.76117PKG)

### 4.2 Tank/Filter Set-Up Procedure (Refer to Filter Assembly)

Each facility has its own individual and unique cleaning problems. It is suggested that you use the following:

1. Take the paper bag that has the cardboard collar attached and open it up by gently pulling the folds apart.
2. You will notice two creases on the top side of the collar; carefully bend the ends down (toward) the bag.
3. Insert the bag into the tank and push it to the bottom.
4. Locate the cardboard collar around the intake bag tube and gently work it up past the raised ring that runs around the tube.
5. Starting at the bottom of the cloth filter, slip the paper filter protector over the entire cloth filter until the elastic band on the paper filter protector goes around the black plastic frame of the cloth filter.
6. NOTE; FOR SPECIALLY EQUIPPED VACUUMS WITH STEEL BAG FRAMES [Ensure that the inside steel frame that supports the cloth filter is inserted into the tank with the cut-out section facing the front of the down tube.] Then insert the cloth filter and paper filter protector inside the tank. Be careful not to rip the paper filter protector when pushing the cloth filter with steel frame into the tank.
7. Position the lid onto the tank, making sure that the paper filter elastic is inside the cloth filter frame so that the U.L.P.A. filter will go down inside the cloth filter. Make sure that the motor lid is seated onto the ring of the cloth filter frame completely around the tank.
8. Snap the lid latches into place.

## 4.3 Procedure for Removing Contaminated Filters and Cleaning Contaminated Tank

### FOR HAZARDOUS MATERIALS



***Always wear a facemask and gloves when conducting this procedure!***

1. Unplug the machine from the power source.
2. Carefully and slowly unlatch the tank latches and remove the vacuum lid only (be sure when you lift up on the lid that the cloth filter stays inside the tank.) Set the lid with U.L.P.A. filter assembly aside.
3. Gently remove the cloth and paper filter protector from the tank. Carefully place the paper and cloth filter into a plastic bag. With one hand, grab the bottom of the paper filter protector through the plastic bag and, with the other hand, release the elastic band from around the cloth filter frame. Slide the cloth filter out of the paper bag.
4. Before closing up the plastic bag with the used paper filter inside, check the pre-filter sleeve attached to the U.L.P.A. filter for any noticeable dirt. The pre-filter sleeve should be changed every other time you change the paper filter or if any dirt particles are noticed during inspection. Then the used pre-filter sleeve can also be put into the plastic bag before sealing up for disposal. See ***“Changing the (Black Foam) Pre-filter Sleeve”***, for more information.
5. Carefully surround the paper collection bag with a plastic bag. Pull the opening of the plastic bag securely around the bag tube with one hand. Make sure the plastic bag completely encapsulates the collection bag. Pull inward on the collection bag on the bag’s cardboard collar until it slips off of the bag tube.
6. Slowly pull the top of the plastic bag upwards. When you have the plastic bag fully extended upwards, slowly squeeze the plastic bag closed to avoid trapping excess air. Twist the plastic bag until enough plastic can be tied into a knot.
7. Lift the bag out of the tank and dispose of it properly.
8. Before inserting another paper collection bag, take a wet paper towel and wipe out the inside of the tank of any dirt contaminate. Put this inside the plastic bag along with the used paper filter protector and pre-filter sleeve. This plastic bag should also be twisted shut, tied into a knot and disposed of properly.
9. To help prolong the life of the U.L.P.A. filter, a spare cloth filter should be interchanged with the existing cloth filter. Vacuum out when there is any noticeable dirt or soil. The cloth bag can also be sprayed with a garden hose from the inside out to remove any soil. Make sure that the cloth filter is completely dry before reinstalling it into the vacuum.
10. CAUTION: Any hazardous materials must be disposed of properly. Never throw contaminated debris into your usual trash receptacle. Place debris in a plastic bag, mark ***“Hazardous Materials”*** and take to a hazardous waste handler.
11. For proper assembly of new filters, see ***“Tank Filter Set Up Procedures”***.

### 4.4 Changing the Black Foam Pre-filter Sleeve

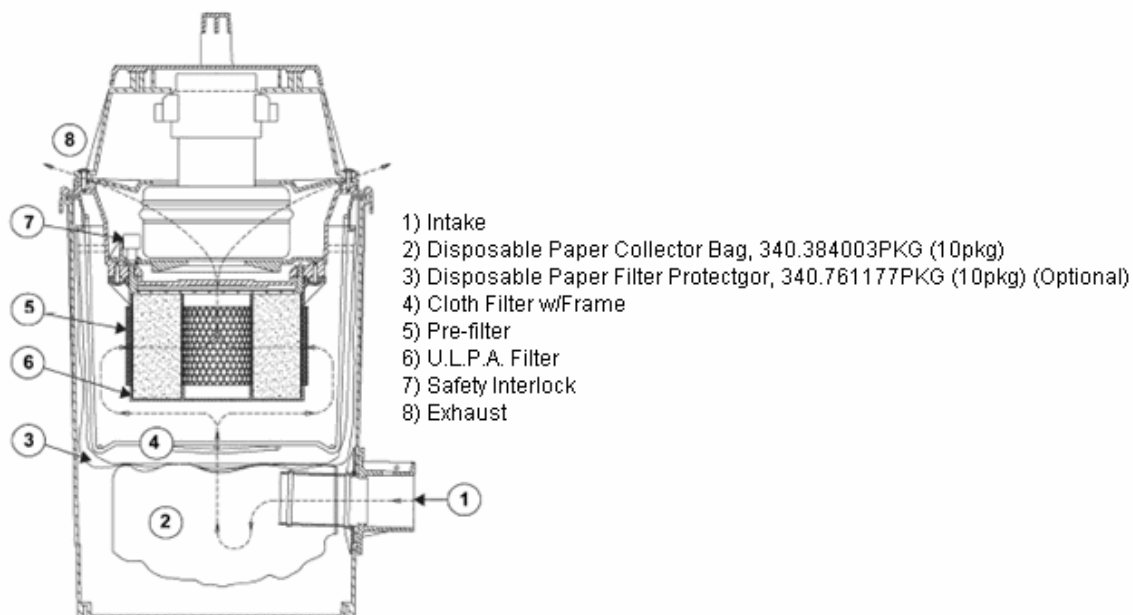
The pre-filter sleeve should be changed, using all of the precautions previously mentioned. The pre-filter sleeve should be changed, when any of the following takes place:

1. Anytime there is an indication of a filter tear during normal operation of the unit. This tear could be in any of the filters used.
  - a. Paper dust collection bag
  - b. Paper bag protector
  - c. Cloth filter bag

These tears would show up during the tank clean-out procedure or at every other tank clean-out period.

2. Every other tank clean-out period: To change the pre-filter sleeve, do the following before you do Step #3 of the normal clean-out procedure.
  - a. Wipe down all of the exposed surfaces on the underside of the removed lid, using the dampened wiping cloth.
  - b. Remove the pre-filter sleeve from the U.L.P.A. filter. Be careful so as not to damage or puncture the U.L.P.A. media used in the final filter. **Do not attempt to clean the pre-filter sleeve in any way.** Dispose of it by placing into the tank you are now in the process of cleaning. **DO NOT USE ANY TOOLS TO REMOVE THE PRE-FILTER SLEEVE.**
  - c. Before proceeding any further in cleaning the tank, first place a new pre-filter sleeve (one only) onto the U.L.P.A. filter.

### 4.5 Filter Assembly



## **4.6 Changing of Pre-filters**

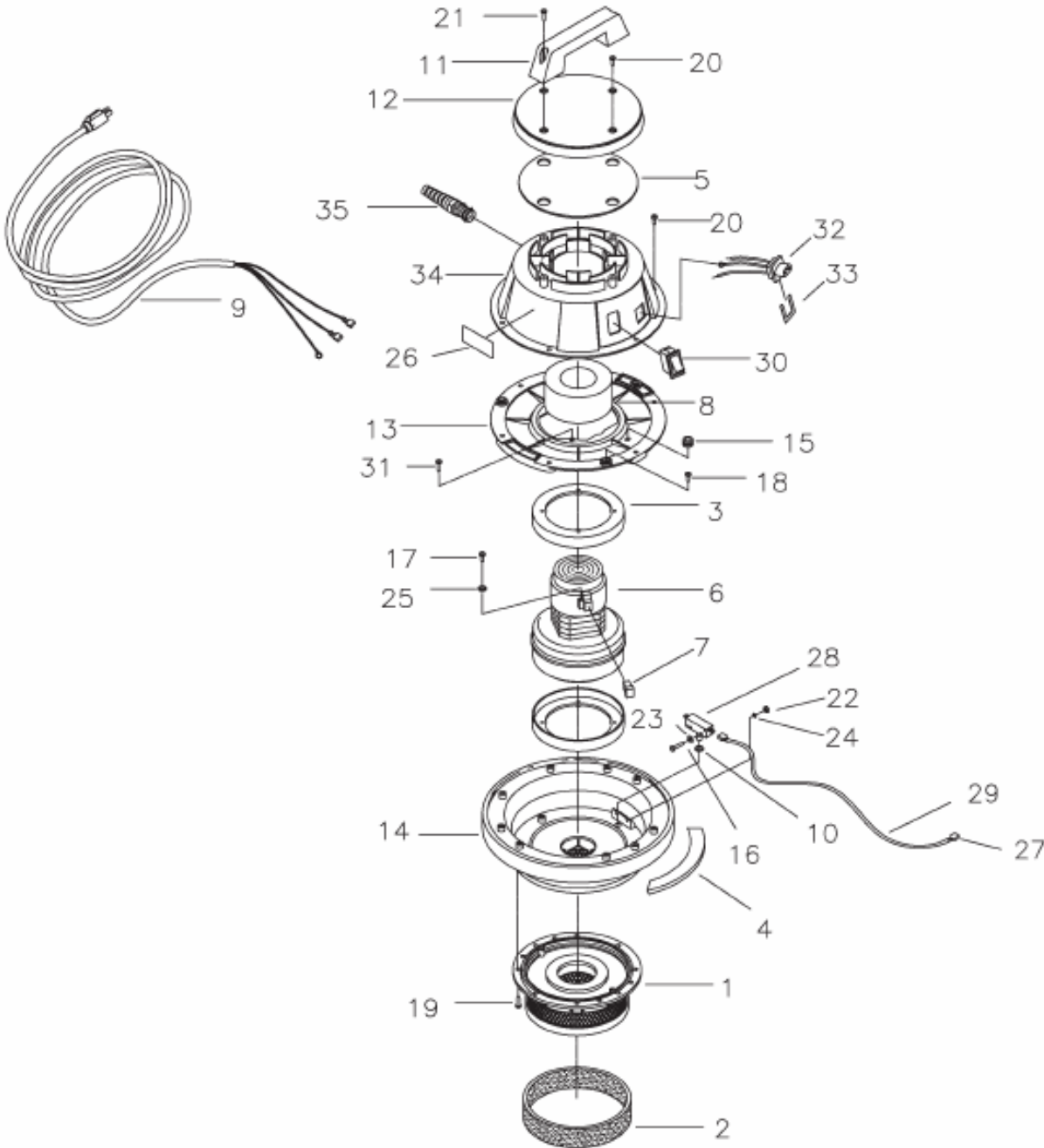
In order to prolong the efficiency and performance of the ULPA filter, it is recommended that each pre-filter collection bag and paper filter protector be changed every time the collection bag is full. Change the foam pre-filter sleeve every second time or if a bag breaks or tears. Follow the manual for bag replacement.

Whenever the vacuum is in operation or being emptied, the operator should be wearing protective clothing and respirator for protection.

All used pre-filters, filter protectors and collection bags should be handled and disposed of in accordance with Federal E.P.A. regulations.

## 5.0 Schematics

### 5.1 Vacuum Head Assembly



## Vacuum Head Assembly – Cont'd.

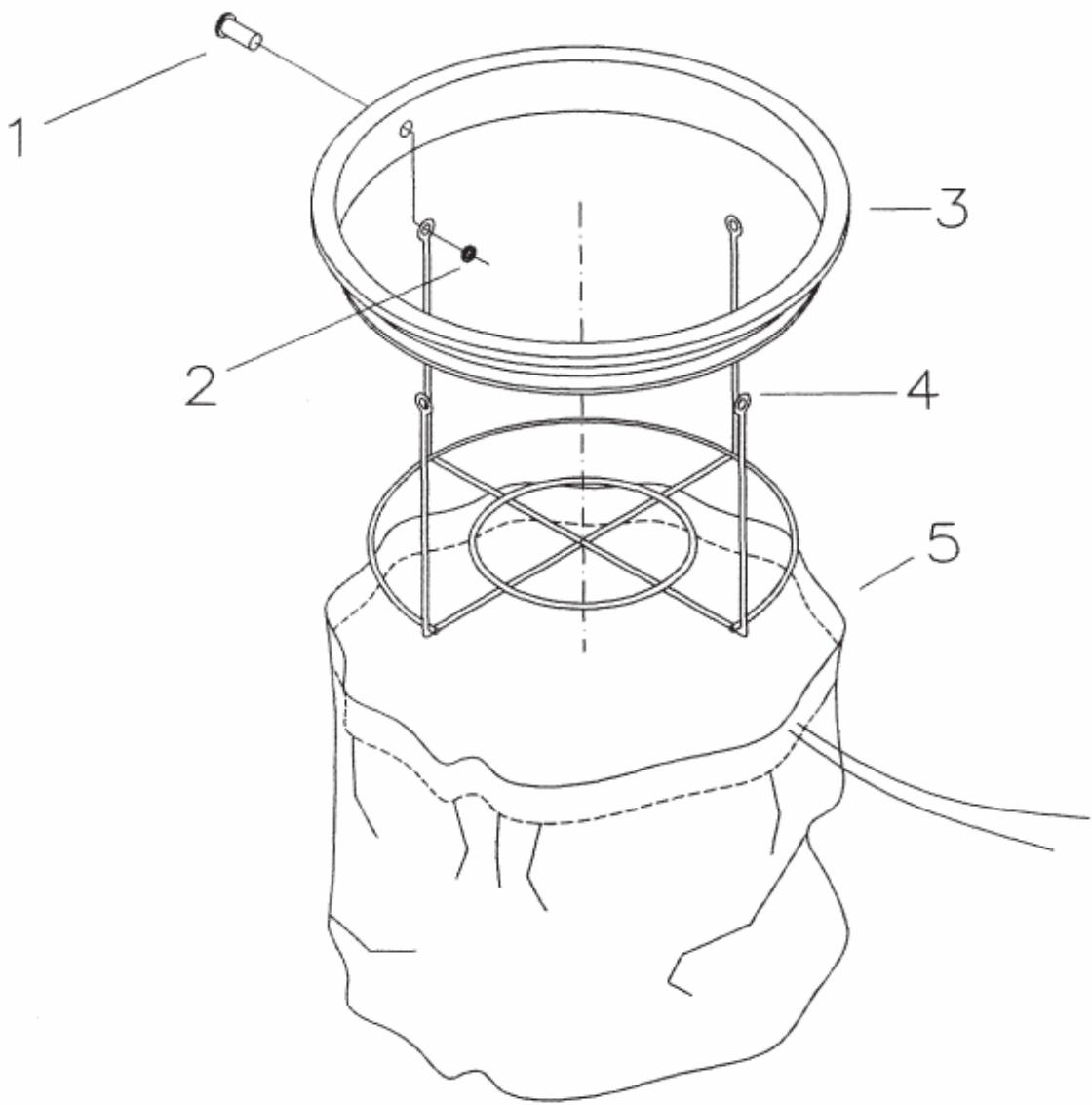
Item	Part No.	Qty.	Description
1	340.110029	1	Filter-ULPA, X829 Series
2	340.110030PKG	1	Prefilter Sleeve, 829/839, Pkg of 6
3	340.290017	2	Molded Vac Mtr Gasket
4	340.290031	1	Lid Gasket 294/6 Diecut
5	340.290032	1	Dome Seal 296
6	340.380001-4	1	Vac Motor 120V (ECM) w/ Wires
7	340.740607	1	Carbon Brush Replacement (set of 2)
8	340.380064	1	Foam Ring
9	340.5160	1	Cord, 10', with inline switch
10	340.390062	1	O-Ring-Valve Seat Body
11	340.460001	1	Handle Basic 460 Black
12	340.460101	1	Motor Cap Black
13	340.460104MCH	1	Mtr Holdown 829 Series
14	340.460120	1	Motor Pan Assy 829 Series
15	340.700287	1	Grommet
16	340.710307	2	SCR-MC 6/32 x 1 ZINC
17	340.711124	1	SCR-ST-B 10 x .37 NI
18	340.711125	3	SCR-ST-B 10 x .5 NI
19	340.711160	9	SCR Hi/Lo #10 x 5/8 ZINC
20	340.711161	8	SCR Hi/Lo #10 x 3/4 ZINC
21	340.711162	2	SCR Hi/Lo #10 x 1 1/2 ZINC
22	340.711301	2	Nut-HEX 6/32 ST PL
23	340.711502	2	WSR-Flat #8
24	340.711551	2	WSR-Internal Lock #6
25	340.711553	1	WSR-Internal Lock #10
26	340.715009	1	Decal Warning to Avoid
27	340.740014	4	Term 14-16G 1/4 Full Ins Female
28	340.740029	1	Switch Snap SP ST PB NO/NC
29	340.740938	1	Wire Assy 16G Black 14.00"
30	340.809754	1	Switch Rocker
31	340.828893	1	Rivet-BAP KTR64BX
32	340.740088	1	Indicator, vac light sensor
33	340.831801-1	1	Receptical Clip
34	340.832201	1	Motor Lid Cover 294 Dry
35	340.833237	1	Strain Relief w/Nut
***	340.829140-1	1	Lid Assembly Complete Leadvac 115V



### WARNING

This vacuum may contain potentially hazardous dust depending on its application. Special handling of contaminated disposal bags and filters is recommended. Disposal must be in compliance with local EPA regulations.

## 5.2 Bag Assembly



Item	Part Number	Qty	Description
1	340.711909	4	Rivet Pop .19x.44 AL
2	340.712764	4	Washer #10 SS
3	340.760244MCH	1	Plastic Bag Frame w/Hole
4	340.760406PLT	1	Bag Frame 6 gal Plated OPTIONAL
5	340.805041	1	Bag, Cloth Bag Only (6 gal)
***	340.800056	1	Bag Assy. w/Frame 6gal