# **USER MANUAL**



Model No. PM61 (shown)
PM61E



#### SAVE THESE INSTRUCTIONS



Federal (USA) law restricts this device to sale by or on the order of a physician.



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#### RECEIVING / INSPECTION

Remove the Precision Medical, Inc. Power Vac Aspirator from the packaging and inspect for damage. If there is any damage, DO NOT USE and contact your Provider.

#### INTENDED USE

To supply a continuous vacuum source, within the stated operating vacuum range, to aspirate fluids in medical suctioning procedures by trained healthcare professionals.

#### READ ALL INSTRUCTIONS BEFORE USING

This manual instructs a Professional to install and operate the Power Vac Aspirator. This is provided for your safety and to prevent damage to the Aspirator. If you do not understand this manual, DO NOT USE the Aspirator and contact your Provider.

#### **SAFETY INFORMATION - WARNINGS AND CAUTIONS**

**▲** DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

**AWARNING** 

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

**ACAUTION** 

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.



CONSULT ACCOMPANYING DOCUMENTS



Type B equipment



PE Ground



Fuse



**Alternating Current** 

## **A** DANGER

## TO REDUCE RISK OF BURNS, ELECTROCUTION, FIRE, OR INJURY TO PERSONS:

- Always unplug the Power Vac Aspirator after using.
- DO NOT use the Aspirator if exposed to water. Unplug immediately if immersed in water.
- DO NOT attempt to repair the Aspirator. Any attempt could result in electrical shock.
- **DO NOT** use if the Aspirator or the power cord has been dropped or damaged.
- DO NOT use near any type of flame or flammable / explosive substances or in the presence of a flammable anesthetic.
- DO NOT allow the Aspirator to exceed Operating or Storage Temperature specifications.
- · Keep the cord away from heated surfaces.

#### **AWARNING**

- Connect the Aspirator to a properly grounded outlet, See GROUNDING INSTRUCTIONS.
- Close supervision is necessary when this Aspirator is used by, on, or near children or invalids.
- Use this Aspirator only for its "Intended Use" as described in this manual.
- DO NOT leave the Aspirator unattended while operating.
- DO NOT cover air vents. Restriction of air flow will cause unit to overheat, causing the thermal reset to shut down the Aspirator.

#### **SPECIFICATIONS**

Operating Vacuum Range: 0-26 inHg (0-660 mmHg)

**Dimensions:** 

Length: 15.9 in (40.3 cm)
Width: 7.4 in (18.7 cm)

Height: 10.1 in (25.7 cm)

**Weight:** 21 lbs (9.6 kg)

Shipping Weight: 25 lbs (11.3 kg)

**Electrical:** 

**PM61:** 108 VAC to 132 VAC, 60 Hz, 5 Amps

**PM61E:** 207 VAC to 253 VAC, 50 Hz, 2.4 Amps

**Operating Temperature Range:** 50°F to 104°F (10°C to 40°C)

**Storage Temperature Range:** -4°F to 104°F (-20°C to 40°C)

**Humidity:** Maximum 95% Non-condensing

Filter: Inline, Hydrophobic

Safety Systems: Automatic Resetting Thermal Limit Switch

Suction Canister: Maximum Volume 2,000 cc

**Equipment Classification:** 

Class I - with respect to protection from electrical shock.

Type B - degree of protection against electrical shock.

IPX0 - degree of protection against ingress of liquids.

Mode of Operation - continuous

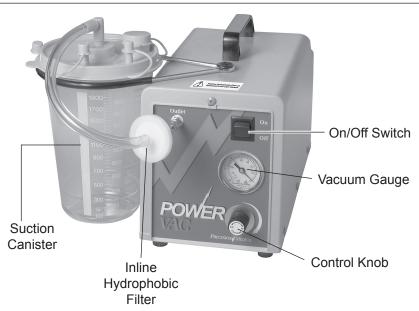
This Power Vac Aspirator meets the EMC requirements of EN55011:2007 Group 1 Class B.

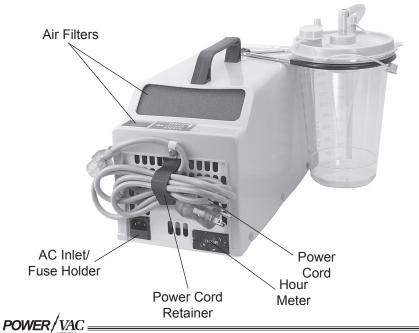
Specifications are subject to change without prior notice.

### **COMPONENT IDENTIFICATION**

## **ACAUTION**

If for any reason any label becomes illegible or lost, contact Precision Medical, Inc.





#### **GROUNDING INSTRUCTIONS**

The Power Vac Aspirator should be grounded. In the event of an electrical short circuit, grounding reduces the risk of electrical shock by providing an escape wire for the electrical current. This Aspirator is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

## **A DANGER**

Improper use of the grounding plug can result in a risk of electrical shock.

#### AWARNING

Ground reliability can only be achieved when the power cord is connected to an equivalent receptacle marked "Hospital Grade".

#### OPERATING INSTRUCTIONS

#### CAUTION

Inspect the Power Vac Aspirator for visual damage, DO NOT USE if damaged.

- Position the Aspirator near a properly grounded electrical receptacle.
   Allow a minimum of 4 in (10 cm) clearance on all sides to ensure adequate air flow for cooling of the Aspirator.
- 2. Make sure the On / Off Switch is in the "OFF" position.
- 3. Connect the Inline Hydrophobic Filter as follows:
  - Connect the short tubing to the outlet on the pump.
  - Install Inline Hydrophobic Filter, make sure filter is oriented per directions on filter.
  - Connect one end of the long tubing to the filter and other end to the elbow fitting.
  - Connect the elbow fitting to the center of lid on Suction Canister.
     NOTE: The Inline Hydrophobic Filter prevents liquid from entering the vacuum pump.

## **ACAUTION**

**DO NOT** run the Power Vac Aspirator without the Inline Hydrophobic Filter. This will void the warranty.

- 4. Plug the female end of the Power Cord into the A/C inlet on the back of the Aspirator.
- 5. Plug the male end into a grounded receptacle.
- 6. Push the On / Off Switch to the "ON" position.
- 7. Block the patient connection on the Suction Canister and adjust the Vacuum Control Knob to the desired vacuum.

To INCREASE vacuum - Turn knob CLOCKWISE

To DECREASE vacuum - Turn knob COUNTERCLOCKWISE

 Vacuum should be set as prescribed by your Physician or Healthcare Professional.

POWER/VAC

- 8. Connect one end of the Patient Suction Tubing to the Patient Tubing Connection on the Suction Canister.
- Connect the other end of the Patient Suction Tubing to the suction catheter and begin procedure as instructed by Healthcare Provider.
   NOTE: DO NOT overfill the Canister.
- 10. When procedure is completed, press the On / Off Switch to the "OFF" position.
- 11. Empty the Suction Canister as follows:
  - Disconnect patient tubing and elbow fitting from the top of the Canister.
  - Remove the Canister from its bracket and empty as instructed by Physician or Healthcare Provider.
- 12. Reassemble Suction Canister and Tubing in reverse order.

#### CAUTION

Canister is single patient use only.

### **CLEANING / MAINTENANCE**

#### **AWARNING**

- Turn the Power Vac Aspirator "OFF" and unplug from the electrical receptacle before cleaning.
- DO NOT immerse the Aspirator into liquid.

## **Inline Hydrophobic Filter**

This filter cannot be cleaned. If it becomes contaminated clogged or wet, it must be replaced. It is recommended the tubing from the canister to the filter be replaced when the filter is replaced.

## To replace Inline Hydrophobic Filter:

- 1. Disconnect filter from short and long tubing.
- 2. Dispose of filter as directed by your Healthcare Professional or your Healthcare Facilities protocol.
- 3. Install new filter (Part # 1690). Make sure filter is oriented per directions on filter. Then reconnect tubing and elbow.

**Tubing** is single patient use only. DO NOT clean.

#### WEEKLY:

- 1. Check both Air Filters on top rear of cabinet for dust build-up.
- 2. If dust build-up occurs, unplug the Aspirator, remove Air Filters from their recessed areas and wash in warm, soapy water and rinse.
- 3. Absorb excess water from filters with a dry towel.
- 4. Return filters to their original locations.

#### **AT 8500 HOURS:**

Return the Power Vac Aspirator to your Provider for Aspirator maintenance (including pump). Call Precision Medical, Inc. for Preventative Maintenance Services.

#### CAUTION

- Excessive dust build-up on external filters will reduce the performance of the Aspirator. If this occurs, clean or replace with new filters.
- DO NOT use where saline mist could be drawn into the Aspirator. The Air Filters do not filter out saline.
   Saline causes rapid deterioration of the Aspirator and will void the warranty.

#### **EXTERNAL CLEANING:**

- Disconnect all connections before cleaning.
- 2. Clean exterior surfaces of the Aspirator with a cloth dampened with mild detergent and water.
- 3. Wipe dry with a clean cloth.
- Store the Aspirator in a clean area free from grease, oil and other sources of contamination.

#### RETURNS

Returned products require a Returned Goods Authorization (RGA) Number, contact Precision Medical, Inc. All returns must be packaged in sealed containers to prevent damage. Precision Medical, Inc. will not be responsible for goods damaged in transit. Refer to Precision Medical, Inc. Return Policy available on the Internet, www.precisionmedical.com.

NOTE: When returning this Power Vac Aspirator, disconnect the power cord from the back of the unit.

#### **DISPOSAL INSTRUCTIONS**

Dispose of Bio-waste products as prescribed by your Healthcare Professional or Healthcare Facility protocol.

## **AWARNING**

If the Aspirator is used for treatment of infectious disease, biohazard precaution should be followed. Contact your Provider.

Please Recycle



#### **TROUBLESHOOTING**

If the Power Vac Aspirator fails to function, consult the Troubleshooting Guide below. There are no serviceable parts inside. DO NOT open case. If problem cannot be solved, consult your Provider.

Problem	Probable Cause	Remedy
The Aspirator will not operate	On / Off switch is in the "OFF" position     Power Cord is not connected properly	Push On / Off switch to the "ON" position     Check plug at wall receptacle and AC Inlet on the back of Aspirator
	Thermal limit exceeded  4. Blown Fuse	3. Shut the Aspirator "OFF". Wait 15 minutes, check that air filters are clean and clear 4. Replace Fuse
With Aspirator running / no vacuum at Patient Connection Tubing	Control Knob completely turned counterclockwise     Hydrophobic Filter assembly not connected properly     Suction Canister not connected or assembled properly     Defective Suction Canister	Increase vacuum with Control Knob     Confirm and tighten connections     Confirm and tighten connection / assembly     Replace Suction Canister
No vacuum on gauge / vacuum at Patient Connection Tubing	Defective vacuum gauge	Contact your Provider
Vacuum on gauge / no vacuum at Patient Suction Tubing	Clogged Hydrophobic     Filter assembly     Canister overfilled	Replace Hydrophobic     Filter assembly     Empty Canister
Unable to adjust vacuum	Defective Vacuum control	Contact your     Provider

## REPLACEMENT PARTS LIST

Description	Part #	
Patient Suction Tubing	1955	
Inline Hydrophobic Filter & Tube Assembly	502690	
Inline Hydrophobic Filter	1690	
Suction Canister - 2000 cc (with lid)	502687	
Small Filter	502391	
Large Filter	502471	
Fuse	503240	
POLATED / VAC		

POWER/VAC =

## LIMITED WARRANTY AND LIMITATION OF LIABILITY

Precision Medical, Inc. warrants that Power Vac Aspirator (the Product) will be free of defects in workmanship and/or material for the following period:

Five (5) years from shipment

Should any failure to conform to this warranty appear within the applicable period, Precision Medical, Inc. shall, upon written notification thereof and substantiation that the goods have been stored installed maintained and operated in accordance with Precision

stored, installed, maintained and operated in accordance with Precision Medical, Inc.'s instructions and standard industry practice, and that no modifications, substitutions, or alterations have been made to the goods, correct such defect by suitable repair or replacement at its own expense.

#### ORAL STATEMENTS DO NOT CONSTITUTE WARRANTIES.

The representatives of Precision Medical, Inc. or any retailers are not authorized to make oral warranties about the merchandise described in this contract, and any such statements shall not be relied upon and are not part of the contract for sale. Thus, this writing is a final, complete and exclusive statement of the terms of that contract.

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ANY WARRANTYOFMERCHANTABILITY, FITNESS FOR APARTICULAR PURPOSE OR OTHER WARRANTY OF QUALITY, WHETHER EXPRESS OR IMPLIED.

Precision Medical, Inc, shall not under any circumstances be liable for special, incidental or consequential damages including but not limited to lost profits, lost sales, or injury to person or property. Correction of non-conformities as provided above shall constitute fulfillment of all liabilities of Precision medical, Inc. whether based on contract, negligence, strict tort or otherwise.

Precision Medical, Inc. reserves the right to discontinue manufacture of any product or change product materials, designs, or specifications with out notice.

Precision Medical, Inc. reserves the right to correct clerical or typographical errors without penalty.



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