

# USER MANUAL

# EASY GO VAC

ASPIRATOR

Model No. PM65HG  
PM65E



## SAVE THESE INSTRUCTIONS

**CAUTION**

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

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# CONTENTS

RECEIVING/INSPECTION..... 2

INTENDED USE ..... 2

READ ALL INSTRUCTIONS BEFORE USING ..... 2

EXPLANATION OF ABBREVIATIONS ..... 2

SAFETY INFORMATION - WARNINGS AND CAUTIONS ..... 3

SPECIFICATIONS ..... 5

COMPONENT DESCRIPTION ..... 6

OPERATING INSTRUCTIONS..... 6

    A. AC Electrical Receptacle Operation ..... 7

    B. Internal Battery Operation..... 8

    C. Auto DC Operation ..... 9

CHARGING BATTERY..... 10

CLEANING/MAINTENANCE ..... 10

RETURNS..... 11

DISPOSAL INSTRUCTIONS ..... 11

TROUBLESHOOTING GUIDE..... 12

REPLACEMENT PARTS ..... 13

LIMITED WARRANTY ..... 14

## **RECEIVING/INSPECTION**

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

## **INTENDED USE**

The Easy Go Vac Aspirator provides a portable, AC/DC powered medical vacuum source. It is intended for use in the homecare/healthcare environment.

## **READ ALL INSTRUCTIONS BEFORE USING**

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

## **EXPLANATION OF ABBREVIATIONS**

mmHg	Millimeters of Mercury
inHg	Inches of Mercury
kPa	Kilopascal
lpm	Liters per Minute

# SAFETY INFORMATION - WARNINGS AND CAUTIONS

## **DANGER**

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

## **WARNING**

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

## **CAUTION**

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 BF equipment.



Suction "OFF" (Battery Charging mode when plugged into charger.)



Suction "ON"

## **⚠ DANGER**

- Equipment not suitable for use in the presence of flammable anesthetic.
- Caution must be exercised when operating the Easy Go Vac Aspirator where oxygen is being administered.
- **DO NOT** use near any type of flame or flammable/explosive substances.
- **DO NOT** allow Aspirator to exceed Operating or Storage Temperature specifications.

### **TO REDUCE THE RISK OF ELECTROCUTION:**

- Always unplug the Easy Go Vac Aspirator after using, except when battery is being recharged.
- **DO NOT** use while bathing.
- **DO NOT** place or store the Easy Go Vac Aspirator where it can fall or be pulled into a tub or sink.
- **DO NOT** immerse into water or other liquid.
- **DO NOT** reach for the Easy Go Vac Aspirator that has fallen into water. Unplug immediately.
- **DO NOT** attempt to repair the Easy Go Vac Aspirator. Any attempt could result in electrical shock.

## **⚠ WARNING**

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

- Close supervision is necessary when this Easy Go Vac Aspirator is used by, on, or near children or invalids.
- Use this Easy Go Vac Aspirator only for its "Intended Use" as described in this manual.
- Keep the cord away from heated surfaces.
- **DO NOT** use when sleepy or drowsy.
- **DO NOT** use attachments not recommended by the Precision Medical, Inc.
- **DO NOT** use if the Easy Go Vac Aspirator has a damaged cord or plug.
- **DO NOT** use if the Easy Go Vac Aspirator has been dropped or damaged.

# SPECIFICATIONS

**Dimensions (in Carry Bag):** Length: 12" (30 cm)  
Width: 9.5" (24 cm)  
Height: 10" (25 cm)

**Weight (with Carry Bag and all Accessories):** 9.6 lbs (4.4 kg)

**Shipping Weight:** 11 lbs (5 kg)

**Suction Canister:** 800cc Max Volume  
Vacuum is not to exceed 25 inHg (84.7 kPa).  
The Canister Lid has a float shut off valve,  
that protects the Aspirator from overflow.

**Patient Tubing:** 1/4" ID Non-Conductive PVC tubing, 6 ft.  
long, with 1/4" - 3/8" ID female connectors,  
or equivalent

## Electrical:

Aspirator Unit: 12 Volts DC, 1.8 Amps

Battery Charger/Power Supply: 100 - 240 Volts AC, 50/60 Hz,  
0.80-0.35 Amps

Internal Battery Type: 12 Volt, Sealed Lead Acid

**Vacuum:** 2 - 21 inHg (51 - 533 mmHg)

**Flow:** 6.5 ± 0.4 lpm @ 11.8 inHg  
(300 mmHg)

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

## Storage/ Transport Requirements

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

Maximum Humidity: 95% Non-condensing

## Equipment Classification:

Class I - with respect to protection from electrical shock

Type BF - degree of protection against electrical shock

IPX0 - degree of protection against ingress of liquids

Mode of Operation - continuous

The Easy Go Vac Aspirator meets the EMC requirements of EN 60601-1-2.

Specifications are subject to change without prior notice.

# COMPONENT DESCRIPTION

## **⚠ CAUTION**

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



# GROUNDING INSTRUCTIONS

The Battery Charger Power Supply 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 Battery Charger Power Supply 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.

## **⚠ DANGER**

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

## **⚠ WARNING**

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

# OPERATING INSTRUCTIONS

## CAUTION

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

1. Place the Easy Go Vac Aspirator in the upright position on a level surface.
2. Make sure the On/Off (⊙/⊙) Switch is in the “OFF” position.
3. Ensure the Inline Hydrophobic Filter and tubing is properly connected to the vacuum port on the Suction Canister lid.

## ▲CAUTION

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

4. Select appropriate Mode of Operation.

## **A. AC ELECTRICAL RECEPTICLE OPERATION**

(100-240 Volts AC)

- a. Insert the small plug on the cord from the Battery Charger/Power Supply into **External Power Jack** on the Easy Go Vac Aspirator.
  - b. Connect the female end of the AC Power Cord into the Battery Charger/Power Supply.
  - c. Plug the male end (3 prong plug) into a grounded receptacle.
5. Push the On/Off (⊙/⊙) Switch to the “ON” position.
  6. 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.
  7. Connect one end of the Patient Suction Tubing to the port on the canister marked Patient Tubing.
  8. Connect the other end of the Patient Suction Tubing to the suction catheter and begin procedure as instructed by Healthcare Provider.



9. When procedure is completed, press the On/Off (⊖/⊕) Switch to the “OFF” position.
  - DO NOT overfill the Canister.
10. Empty the Suction Canister as follows:
  - Remove the canister from its bracket and empty as instructed by Physician or Healthcare Professional.

### **CAUTION**

Canister is single patient use only.

11. Replace Suction Canister and reconnect all suction tubing.

## **B. INTERNAL BATTERY OPERATION**

1. Steps 1 thru 4, see Operating Instructions on page 6.

### **▲CAUTION**

- Battery should be fully charged before using; to charge battery see Charging Battery.
- When the yellow Low Battery Light is on continuously during normal use, the battery needs to be charged.
- If automatic shut off occurs during battery operation, the Easy Go Vac Aspirator cannot be restarted until the battery has been recharged, or until the Aspirator is connected to either of the external power source options.

5. Push the On/Off (⊖/⊕) Switch to the “ON” position. If yellow **Low Battery Light** stays on continuously, battery needs charging. Charge battery or use another Mode of Operation.

### **▲WARNING**

Operating Easy Go Vac Aspirator after yellow **Low Battery Light** has been on continuously, will cause automatic shut down.

6. 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.
7. Connect one end of the Patient Suction Tubing to the port on the canister marked Patient Tubing.

8. Connect the other end of the Patient Suction Tubing to the suction catheter and begin procedure as instructed by Healthcare Provider.
9. When procedure is completed, press the On/Off (⊖/⊕) Switch to the “OFF” position.
  - DO NOT overfill the Canister.
10. Empty the Suction Canister as follows:
  - Remove the canister from its bracket and empty as instructed by Physician or Healthcare Professional.

**CAUTION**

Canister is single patient use only.

11. Replace Suction Canister and reconnect all suction tubing.

**C. AUTO DC OPERATION**

(Auto Power Port)

1. Steps 1 thru 4, see Operating Instructions on page 6.
  - a. Insert small plug on the Auto DC Power Cord into the **External Power Jack** on the Aspirator.
  - b. Plug the other end into the auto power port receptacle.

**CAUTION**

**DO NOT** leave the Aspirator connected to the auto power port when not in use. Failure to follow these instructions can cause severe battery failure and will VOID THE WARRANTY, see CHARGING BATTERY instructions.

5. Push the On/Off (⊖/⊕) Switch to the “ON” position. If yellow Low Battery Light stays on continuously, battery needs charging. Charge battery or use another mode of operation.

**⚠WARNING**

Operating Easy Go Vac Aspirator after yellow **Low Battery Light** has been on continuously, will cause automatic shut down.

6. 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.

7. Connect one end of the Patient Suction Tubing to the port on the canister marked Patient Tubing.
8. Connect the other end of the Patient Suction Tubing to the suction catheter and begin procedure as instructed by Healthcare Provider.
9. When procedure is completed, press the On/Off (⊖/⊕) Switch to the “OFF” position.
  - DO NOT overfill the Canister.
10. Empty the Suction Canister as follows:
  - Remove the canister from its bracket and empty as instructed by Physician or Healthcare Professional.

### CAUTION

Canister is single patient use only.

11. Replace Suction Canister and reconnect all suction tubing.

## CHARGING BATTERY

1. Insert small plug on cord from the Battery Charger/Power Supply into **External Power Jack** on the Easy Go Vac Aspirator.
2. Connect the female end of AC Power Cord into the Battery Charger/Power Supply.
3. Plug male end (3 prong plug) into a grounded receptacle. **Amber** light on Battery Charger/Power Supply will come on. When amber light changes to green, battery is fully charged. Average charging time is 2-4 hours.  
(A new battery may take longer to fully charge the first time.)  
**Note:** No damage will occur if the charger is left connected.
4. Disconnect AC Power Cord from AC receptacle.
5. Disconnect cord from **External Power Jack** on Aspirator. When fully charged, battery will provide approximately 120 minutes of operation in 8, 15 minute intermittent duration periods.

## CLEANING/MAINTENANCE

### ⚠WARNING

- Turn the Easy Go Vac Aspirator off and disconnect from any external power source before cleaning.
- **DO NOT** clean the Easy Go Vac Aspirator with Alcohol, Acetone or other solvents.

### **Inline Hydrophobic Filter:**

This filter cannot be cleaned. If it becomes contaminated or clogged, it must be replaced.

### **To replace Inline Hydrophobic Filter:**

1. Disconnect filter assembly from Suction Canister and remove Suction Canister from the Aspirator.
2. Unscrew filter assembly from the Aspirator.
3. Dispose of filter.
4. Install new filter (Part # 502438) by screwing filter into the Aspirator, until hand tight. Then reconnect tubing and elbow.

### **CAUTION**

**DO NOT** use sealing material on the filter threads.

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

### **Easy Go Vac Case:**

Use a cloth or sponge dampened with soap and water. Wipe dry with a clean cloth or paper towel.

### **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](http://www.precisionmedical.com).

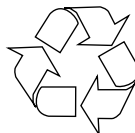
### **DISPOSAL INSTRUCTIONS**

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

### **⚠WARNING**

- The Easy Go Vac Aspirator contains a sealed lead acid battery. **DO NOT** dispose with normal trash. Consult your local waste management authority for proper disposal procedures.
- If Aspirator is used for treatment of infectious disease, consult your Physician or Healthcare Professional for recommended procedures for proper disposal.

**Please Recycle**



# TROUBLESHOOTING

If the Easy Go Vac Aspirator fails to function, consult the Troubleshooting Guide.

There are no user serviceable parts inside. DO NOT open case. If the problem cannot be corrected, consult your Equipment Provider.

## TROUBLESHOOTING GUIDE

Problem	Probable Cause	Remedy
Easy Go Vac Aspirator will not operate on battery	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch in "OFF" position</li> <li>2. Battery not charged (Low battery light on)</li> </ol>	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch to "ON" position</li> <li>2. Recharge battery</li> <li>3. If battery will not charge, contact your Equipment Provider</li> </ol>
Easy Go Vac Aspirator will not operate when connected to AC Power Source	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch in "OFF" position</li> <li>2. AC Power Cord not connected</li> </ol>	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch to "ON" position</li> <li>2. Check connection at both AC Power Source and Aspirator</li> </ol>
Easy Go Vac Aspirator will not operate when connected to Auto DC Power Cord	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch in "OFF" position</li> <li>2. Auto DC Power Cord not connected properly</li> <li>3. Defective auto power port receptacle</li> <li>4. Defective Auto DC Power Cord</li> </ol>	<ol style="list-style-type: none"> <li>1. On/Off (⊕/⊖) Switch to "ON" position</li> <li>2. Check connections at both ends of cord</li> <li>3. Connect to a known working auto power port</li> <li>4. Contact your Equipment Provider</li> </ol>

Continued on the next page.

<b>Problem</b>	<b>Probable Cause</b>	<b>Remedy</b>
Battery will not charge	<ol style="list-style-type: none"> <li>1. Not connected to Battery Charger / Power Supply</li> <li>2. Defective Battery Charger / Power Supply</li> <li>3. Defective battery</li> </ol>	<ol style="list-style-type: none"> <li>1. Connect Battery Charger/Power Supply</li> <li>2. Contact your Equipment Provider</li> <li>3. Contact your Equipment Provider</li> </ol>
Unable to adjust vacuum	<ol style="list-style-type: none"> <li>1. Filter assembly not connected properly</li> <li>2. Suction Canister not connected properly</li> <li>3. Filter clogged</li> <li>4. Defective Suction Canister</li> <li>5. Defective Easy Go Vac Aspirator</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm and tighten connections</li> <li>2. Confirm and tighten connections</li> <li>3. Replace filter assembly</li> <li>4. Replace Suction Canister</li> <li>5. Contact your Equipment Provider</li> </ol>

## REPLACEMENT PARTS

<b>Description</b>	<b>Part #</b>
Filter	502438
Filter Assembly	503293
800cc Canister, (Case-10 ea.)	502519-10
Patient Suction Tubing	1955
Charger	503974
Carry Bag	502956
AC Power Cord (65)	503106
Auto DC Power Cord	502954

## **LIMITED WARRANTY AND LIMITATION OF LIABILITY**

Precision Medical, Inc. warrants that EASY GO VAC Aspirator (the Product) and the following component parts thereof will be free of defects in workmanship and/or material for the following periods:

Easy Go Vac Aspirator	Two (2) years from shipment
Battery	Six (6) months 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 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 WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR 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 without notice.

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

# DECLARATION OF CONFORMITY

Manufacturer: Precision Medical, Inc.  
300 Held Drive, Northampton, PA 18067, USA  
CONTACT: Quality Manager  
Phone: 610-262-6090

Authorized European Representative: Emergo Europe  
Molenstraat 15  
2513 BH, The Hague  
The Netherlands

Product: Easy Go Aspirator

Model(s): PM65HG, PM65E

MDD Class: Ila

Classification criteria: Clause 3.1 Rule 11 of Annex IX of MDD

As delivered, the object of the declaration described above is in conformity with the requirements of MDD 93/42/EEC Annex II.3 and the following documents:

<u>Document</u>	<u>Title</u>	<u>Edition</u>
MDD-EEC/93/42	Council Directive Concerning Medical Devices	1993
BS EN 60601-1	Medical Electrical Equipment-General requirements for safety	1990
BS EN 60601-1-2	Medical Electrical Equipment-Collateral Standard: Electromagnetic compatibility	2002
EN ISO 10079-1	Medical Suction Equipment-Part 1: Electrically Powered Suction Equipment-Safety Requirements	2000
EN 1441	Risk Analysis	1998

Notified Body: TÜV Rheinland Products Safety GmbH CE 0197

EC Certificate No: HD60002285, SY60008447, 74\_500\_2415

There are no limitations on the validity of the declaration of conformity

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**ISO 13485 Certified**

**CE**  
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