# **USER MANUAL**







#### SAVE THESE INSTRUCTIONS

**ACAUTION** 

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

# PRECISION MEDICAL.

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# RECEIVING / INSPECTION

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

# 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 Aspirator. If you do not understand this manual, DO NOT USE the Aspirator and contact vour Provider.

#### EXPLANATION OF ABBREVIATIONS

Millimeters of Mercury mmHg inHa Inches of Mercury

kPa Kilopascal

Liters per Minute lpm

# SAFETY INFORMATION - WARNINGS AND CAUTIONS

**▲** DANGER

**▲WARNING** 

**ACAUTION** 

CAUTION

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

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

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"

# **A** DANGER

#### 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 Aspirator where it can fall or be pulled into a tub or sink.
- · DO NOT place or drop into water or other liquid.
- DO NOT reach for the Aspirator that has fallen into water. Unplug immediately.
- DO NOT attempt to repair the Aspirator. Any attempt could result in electrical shock.
- DO NOT use near any type of flame or flammable/explosive substances.
- DO NOT allow Aspirator to exceed Operating or Storage Temperature specifications.
- Caution must be exercised when operating the Easy Go Vac Aspirator where oxygen is being administered.
- Equipment not suitable for use in the presence of flammable anesthetic mixture with air, oxygen or nitrous oxide.

# **AWARNING**

#### 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
- DO NOT use attachments not recommended by the Precision Medical, Inc.
- DO NOT use when sleepy or drowsy.
- DO NOT use if the Aspirator has a damaged cord or plug.
- DO NOT use if the Aspirator has been dropped or damaged.
- Connect this Aspirator to a properly grounded outlet only.
   See "GROUNDING INSTRUCTIONS".
- · Keep the cord away from heated surfaces.

# **CAUTION**

Use ONLY the Battery Charger / Power Supply provided by Precision Medical, Inc. Use of other Battery Chargers / Power Supplies is not recommended and will void the warranty.

# **SPECIFICATIONS**

**Dimensions** (in Carry Bag): Length: 12 in (30 cm)

Width: 9.5 in (24 cm) Height: 10 in (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 (635 mmHg). The Canister Lid has a float shut off valve, that

protects the Aspirator from overfill.

Patient Tubing: 1/4 in. ID Non-Conductive PVC tubing, 6 ft. long, with

1/4 in.- 3/8 in. ID female connectors, or equivalent

Filter: Inline, Hydrophobic

**Vacuum:** 2 - 21 inHg (51 - 533 mmHg) **Flow:** 6.5 ± 0.4 lpm @ 11.8 inHq

(300 mmHg)

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

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% Noncondensing

**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

Specifications are subject to change without prior notice.



#### COMPONENT DESCRIPTION

# **ACAUTION**

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.

# **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".

EASY GO VAC

# **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  $(\bigcirc/\dot{\bigcirc})$  Switch is in the "OFF" position.
- 3. Be sure the Inline Hydrophobic Filter and tubing is properly connected to the vacuum port on the Suction Canister lid.
  - The Inline Hydrophobic Filter prevents liquid from entering the vacuum pump.
- 4. Select appropriate Mode of Operation.

# **ACAUTION**

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

#### **A. AC ELECTRICAL RECEPTACLE 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  $(\bigcirc/\dot{\bigcirc})$  Switch to the "ON" position.
- 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

**NOTE:** Vacuum should be set as prescribed by your Provider.

- 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 your Provider.
- When procedure is completed, press the On/Off (⊙/Ŏ) Switch to the "OFF" position.

NOTE: DO NOT overfill the Canister.



- 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 your Provider.
- 11. Replace Suction Canister and reconnect all suction tubing.

# **CAUTION**

Canister is single patient use only.

#### **B. INTERNAL BATTERY OPERATION**

1. Steps 1 thru 4, see "OPERATING INSTRUCTIONS".

# **ACAUTION**

- 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 Aspirator cannot be restarted until the battery has been recharged, or until the Aspirator is connected to either of the external power source options.
- Push the On/Off (⊙/Ŏ) Switch to the "ON" position. If yellow Low Battery Light stays on continuously, battery needs charging. Charge battery or use another Mode of Operation.

# **AWARNING**

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

6. Steps 6 thru 11, see "OPERATING INSTRUCTIONS".

#### C. AUTO DC OPERATION

(Auto Power Port)

- 1. Steps 1 thru 4, see "OPERATING INSTRUCTIONS".
  - 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".

 Push the On/Off (⊙/Ŏ) Switch to the "ON" position. If yellow Low Battery Light stays on continuously, battery needs charging. Charge battery or use another mode of operation.

# **AWARNING**

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

6. Steps 6 thru 11, see "OPERATING INSTRUCTIONS".

#### CHARGING BATTERY

- Insert small plug on cord from the Battery Charger/Power Supply into External Power Jack on the 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.
- 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 Aspirator "OFF" and disconnect from any external power source before cleaning.
- DO NOT clean the 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.

EASY GO VAC

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# To replace Inline Hydrophobic Filter:

- Disconnect filter assembly from Suction Canister and remove Suction Canister from the Aspirator.
- 2. Unscrew filter assembly from the Aspirator.
- 3. Dispose of filter.
- Install new filter (Part #506047) 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.

# **Cleaning for Exterior Components:**

- Disconnect the Aspirator from power source and other connections before cleaning.
- 2. Use a cloth or sponge dampened with soap and water.
- 3. Wipe dry with a clean cloth or paper towel.
- 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.

#### DISPOSAL INSTRUCTIONS

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

# **AWARNING**

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

Problem	Probable Cause	Pomody
Aspirator will not	1. On/Off Switch in "OFF"	Remedy  1. On/Off Switch to "ON"
operate on battery	position	position
	Battery not charged     (Low battery light on)	Pecharge battery     If battery will not charge, contact your Provider
Aspirator will not operate when	1. On/Off Switch in "OFF" position	1. On/Off Switch to "ON" position
connected to AC Power Source	AC Power Cord not connected	Check connection at both AC Power Source and Aspirator
Aspirator will not operate when	1. On/Off Switch in "OFF" position	On/Off Switch to "ON"     position
connected to Auto	Auto DC Power Cord not connected properly	Check connections at both ends of cord
DO I OWEI GOIG	3. Defective auto power port	3. Connect to a known
	receptacle 4. Defective Auto DC Power Cord	working auto power port 4. Contact your Provider
Battery will not charge	Not connected to Battery     Charger / Power Supply	Connect Battery     Charger/Power Supply
onargo	Defective Battery Charger     / Power Supply	2. Contact your Provider
	3. Defective battery	3. Contact your Provider
Unable to adjust vacuum	Filter assembly not connected properly	Confirm and tighten connections
	Suction Canister not connected properly	Confirm and tighten connections
	3. Filter clogged	3. Replace filter assembly
	Defective Suction Canister     Defective Aspirator	Replace Suction Canister     Contact your Provider

# REPLACEMENT PARTS

Description	Part #
Filter	506047
Filter Assembly	503293
800cc Canister, (Case-10 ea.)	502519-10
Patient Suction Tubing	1955
Charger	503974
Carry Bag	502956
AC Power Cord	503106
Auto DC Power Cord	502954

# **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 Easy Go Vac Aspirator

Product: Easy Go Vac Aspirat Model(s): PM65HG, PM65E

MDD Class:

Classification criteria: Clause 3.2 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:

requirements of MDD 95/42/LLC Affilex II.5 and the following documents.			
Document	Title	Edition	
EN 60601-1	Medical Electrical Equipment-General requirements for safety	2006	
EN 60601-1-2	Medical Electrical Equipment-Collateral Standard: Electromagnetic compatibility	2007	
EN ISO 10079-1	Medical Suction Equipment-Part 1: Electrically Powered Suction Equipment-Safety Requirements	1999	
EN 1041	Information Supplied by the Manufacturer with Medical Devices	1998	
EN 980	Graphical Symbols for use in the labelling of Medical Devices	2003	
ISO 14971	Medical Devices - Application of Risk Management to Medical Devices	2000+	
EC Certificate N	o: HD60019110 0001	A1:2003	

Notified Body: TÜV Rheinland Products Safety GmbH 0197

# 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.