

USER MANUAL

EASY GAUGE REG

1600 SERIES OXYGEN REGULATOR



168715G (Shown)

SAVE THESE INSTRUCTIONS

CAUTION

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. Gauge Regulator from packaging and inspect for damage. If there is any damage, DO NOT USE and contact your Provider.

INTENDED USE

To regulate flow of oxygen from a high pressure oxygen cylinder for medical use only. To be used by or after instruction from a trained, healthcare professional.

READ ALL INSTRUCTIONS BEFORE USING

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

EXPLANATION OF ABBREVIATIONS

psi	Pounds Per Square Inch
kPa	Kilopascal
l/min	Liters Per Minute

SAFETY INFORMATION - WARNINGS AND CAUTIONS

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, could result in minor or moderate injury.

CAUTION

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



CONSULT ACCOMPANYING DOCUMENTS



Symbol for "USE NO OIL"

WARNING

To prevent risk of burns, fire or injury to person(s):

- Handle the Gauge Regulator carefully at all times and use the Regulator according to the instructions in this manual.
- Oxygen cylinder should be in an **upright** position when in use.
- **ALWAYS** confirm prescribed flow before administering to patient and monitor flow on a frequent basis.
- Always follow ANSI and CGA standards for Medical Gas Products and Flowmeters and Oxygen Handling.
- **DO NOT** use tape, oils, greases, petroleum jellies, organic lubricants, paint or any other hydrocarbon based or combustible materials on or near this Gauge Regulator.
- **DO NOT** use if oil, grease or contaminants are present on or around Regulator, cylinder valve or connecting devices.
- **DO NOT** use near any type of flame or flammable/explosive substances, vapors or atmosphere.
- **DO NOT** smoke in an area where oxygen is being administered.

CAUTION

- Only personnel instructed and trained in its use should operate this Gauge Regulator.
- This Gauge Regulator contains magnetic, ferrous material that may affect the results of an MRI.
- Ensure all connections are tight and leak free.
- Only use oxygen safe leak detector to test for leaks.
- Store Regulator in a clean area when not in use.
- **DO NOT** direct flow of oxygen at any person, or flammable material when “cracking” cylinder.
- **DO NOT** autoclave.
- **DO NOT** gas sterilize with EtO (Ethylene Oxide).
- **DO NOT** clean with aromatic hydrocarbons.
- **DO NOT** attempt to repair Regulator.
- **DO NOT** immerse the Regulator in any kind of liquid. This will void the warranty.

SPECIFICATIONS

Accuracy: $\pm 10\%$ of indicated setting @ 70°F (21°C)

Transport / Storage Temperature Range:
-4°F (-20°C) to 140°F (60°C)

Inlet Pressure Range:
300 - 3000 psi (2068 - 20684 kPa)

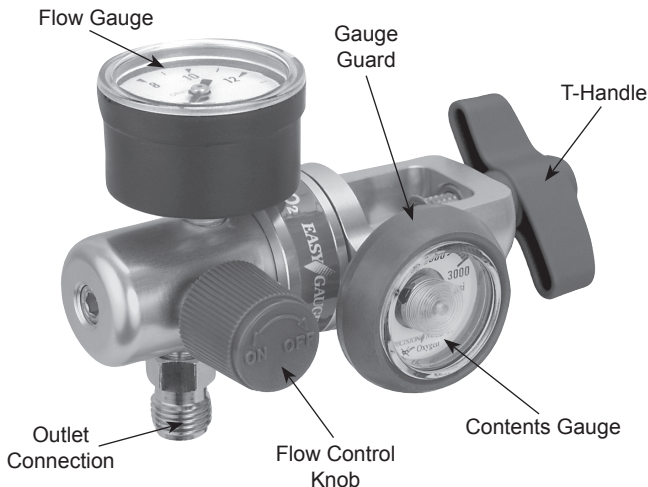
Ignition and Fault Tolerance: meets ASTM G175-03

Specifications are subject to change without prior notice.

PRODUCT DIAGRAM

⚠ CAUTION

Missing or illegible labels must be replaced, contact Precision Medical, Inc.



OPERATING INSTRUCTIONS

WARNING

Read this User Manual before installing or operating the Gauge Regulator.

1. Check cylinder valve to be sure it is not bent or damaged. A damaged valve could leak or fail, or it may not make a tight connection when cylinder is placed into use.
2. Make sure the Regulator and cylinder valve are free of oil, grease or other contaminants.
3. Before installing Regulator, “**crack**” cylinder valve by opening the valve slightly and closing to remove any foreign particles.
4. Turn Flow Control Knob fully **clockwise** to the “OFF” position.
5. a) For CGA 870 connection (Yoke):
 - Be sure the high pressure inlet port has a Yoke Seal.
 - Attach Regulator to the oxygen cylinder post valve and align index pins with mating holes.
 - Hand tighten T-handle.b) For CGA 540 connection (Nut & Nipple):
 - Attach the Regulator to the oxygen cylinder valve and tighten with wrench.
6. Position the Regulator so the cylinder valve opening is pointing away from the user and any other person(s).
7. S-L-O-W-L-Y open cylinder valve **counterclockwise**, until completely open.
8. Adjust Flow:
To INCREASE flow - Turn Flow Control Knob **counterclockwise**
To DECREASE flow - Turn Flow Control Knob **clockwise**
9. Set flow by aligning indicator needle with marks on flow gauge face.
NOTE: Adjustment of flow beyond the last calibrated indicator line will result in an undetermined oxygen flow.
10. Continue procedure as prescribed by your healthcare professional.
NOTE: Precision Medical, Inc. strongly recommends the use of kink proof patient tubing.

11. To remove Regulator from cylinder:

- Completely close oxygen cylinder valve.
- Turn Flow Control Knob fully **clockwise** to the “OFF” position.
- S-L-O-W-L-Y loosen T-handle or Nut and remove Regulator.

⚠ WARNING

To prevent risk of burns, fire or injury to person(s):

- Prior to handling regulator and cylinder valve, be sure hands are free of oil, grease and other contaminants.
- **DO NOT** use Regulator if oil, grease or dirt is found.
Particles propelled in a high-velocity oxygen stream could create a spark, causing a fire. Oil and grease can react with oxygen and other oxidizers, causing an explosion.

⚠ CAUTION

- **DO NOT** use tools to tighten T-handle. This can lead to over tightening and will cause damage to the Regulator.

CAUTION

- Inspect the Regulator for visual damage before use, **DO NOT USE** if damaged.
- For optimum safety, use only a Precision Medical, Inc. Yoke Seal part number 1221. The Yoke Seal supplied with the Regulator is reusable.
- **DO NOT** use plastic yoke seals.

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MAINTENANCE / CLEANING

1. Disconnect all connections before cleaning.
2. Clean exterior surfaces of the Gauge Regulator with a cloth dampened with disinfectant SporidicinR or equivalent.
3. Wipe dry with a clean cloth.
4. Store the Regulator in a clean area free from grease oil and other sources of contamination.

CAUTION

- **DO NOT** use cleaning solutions.
- **DO NOT** attempt to repair the Regulator. All repairs must be performed by Precision Medical, Inc.

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.

Manuals available on our Website; www.precisionmedical.com

TROUBLESHOOTING

If the Gauge Regulator fails to function, consult the Troubleshooting Guide. If problem cannot be solved, consult your Provider.

Problem	Probable Cause	Remedy
<i>No flow</i>	<ul style="list-style-type: none">• Cylinder valve closed• Regulator in "OFF" position• Cylinder empty	<ul style="list-style-type: none">• Turn "ON" cylinder• Set to prescribed flow• Replace cylinder

LIMITED WARRANTY AND LIMITATION OF LIABILITY

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

Five (5) years from date of 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 representative 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.