



Parker Hannifin Corporation 245 Township Line Road Hatfield, PA 19440 USA Office 215-723-4000

# Porter 2-Cylinder Mobile Cart Quick Start Guide

#### 1. Pre-Check

**Note:** To perform these tests, gas supply cylinders or gas supply shutoff valves are required in order to isolate the gas supply form the device. Attempting to perform these tests with central pipeline supplied gas without a local shut off mechanism is not recommended.



**WARNING:** Proper inspection and maintenance of this device is essential to prevent gas leaks. All hoses, fittings, and connections should be inspected regularly, and all leaks should be repaired immediately.

WARNING: If precheck test cannot be executed successfully, do not use this device and contact distributor.

#### Leak Test

1	Attach the gas supply hoses to a flowmeter and ensure the flowmeter and flow valves are off.		
2	Turn on gas cylinders to pressurize gas supply lines and Regulator Assemblies with cylinder pressure.		
3	Turn off gas cylinders.		
4	Apply masking tape to both gauge faces in a position where marking the needle movement will not be difficult.		
5	Tap lightly on gauges and mark gauge needle positions on masking tape.		
6	There should be little or no movement of the gauge needles after 15 minutes.		
7	If the needle on the gauges do not remain stationary, contact your authorized distributor for service and troubleshooting.		

### 2. Operating Instructions

1	Ensure the flowmeter is securely mounted (as described in <b>Section 2</b> ) and the gas supply hoses are connected to the correct fittings on the flowmeter.		
2	Ensure the necessary prechecks have been performed, before using the 2-Cylinder Mobile Cart. The precheck instructions are described in <b>Section 4.1 Prechecks</b> .		
3	Ensure 2-Cylinder Mobile Cart is populated with at least one full cylinder of $O_2$ and $N_2O$ before starting any procedure. (Two cylinders of $O_2$ or two cylinders of $N_2O$ or one of each are typically connected at all times.) Label each cylinder with a tag or sticker indicating "In-Use" or "Full" ("Full" is reserve) if using two of the same type of gas.		
4	Using supplied Valve Wrench, turn on the N <sub>2</sub> O and O <sub>2</sub> gas supplies. If using gas cylinders, slowly open the <b>cylinder valves</b> (1) to open the "In-Use" cylinders. If connecting to a wall supply, connect the supply lines to the appropriate <b>outlet connections</b> (2).		
5	Supply pressure is preset by the manufacturer on the 2-Cylinder Mobile Cart. When using a wall supply, refer to your flowmeter instructions for correct supply pressure.		
7	Cylinder pressure gauges on the regulators provide a visual indication of cylinder status. <b>Note:</b> If using two cylinders of the same gas and both cylinders are open, the two cylinders will deplete in tandem. The "Full" cylinder will empty with the "In-Use" cylinder and will not be available as a future spare.		
8	When "In-Use" cylinder is fully depleted, open the spare "Full" cylinder (Close valve on empty cylinder). Do not remove and replace partially full cylinder; only replace with new clean full cylinder.		
9	At the end of procedure, using supplied Cylinder Wrench, turn off the N <sub>2</sub> O and O <sub>2</sub> gas supplies. If connecting to a wall supply, disconnect the supply lines to the outlet connections.		

### 3. Maintenance

The 2-Cylinder Mobile Cart has an expected service lifetime of 20 years. The device requires proper maintenance, pre-checks, and servicing. Once the device reaches an age of 20 years, a failed pre-check will indicate that the device has reached the end of its useful life. The Gas Supply Hose has an expected lifetime of 20 years and once it reaches this age, any damage will indicate that the device has reached the end of its useful life.

Check	Frequency
Inspect E-Stand, hoses, fittings, and connections for damage, wear, and audible leaks.	Before every use
Leak Test	Once a month
Sealing Washer (Yoke) Replacement	Once a year





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## 4. Cleaning

The 2-Cylinder Mobile Cart must be cleaned between each use in order to prevent the spread of infections. Cleaning the device has been validated with Super Sani-ClothTM Germicidal wipes.

- **WARNING:** The following warning applies to the device and any device's components and accessories:
  - Do not spray directly with disinfecting chemicals.
  - Do not immerse in water, sanitizer, cleaning solution, or any other liquid.
  - Do not sanitize or wipe the inside of the fittings, gas supply hoses, or connection ports.
  - Always ensure the device and device's components and accessories are completely dry before use.

Using a Super Sani-Cloth<sup>™</sup> Germicidal wipe, thoroughly wipe down the 2-Cylinder Mobile Cart until all visible dirt and soil is removed. Take extra care to wipe tee handle, cart handle, utility basket, and cylinder holder as these are the most handled areas of the device. A soft bristled brush may be used to loosen any soil that is difficult to remove.
Using a Super Sani-Cloth<sup>™</sup> Germicidal wipe, thoroughly wipe down the gas supply hoses and fittings until all visible

- dirt and soil is removed. Do not wipe the inside of the hoses or fittings as this may deposit cleaning agents into the breathing pathway of the device.
- **3** Do not clean the regulator fittings and connections and metal and rubber washer to prevent debris from entering the device. Avoid wiping and applying cleaner to the inside of the ports.

# 5. Safety Information

**WARNING:** This product can expose you to chemicals, including lead and formaldehyde, which are known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to <u>www.P65Warnings.ca.gov</u>.



**WARNING:** Do not use this device for the administration of general anesthesia or as part of, or in conjunction with, a general anesthesia administration system.

**WARNING:** Workers exposed to excessive N<sub>2</sub>O may suffer harmful effects. The healthcare professional is responsible for employing proper techniques, such as scavenging, room ventilation, system maintenance, and patient compliance to reduce exposure. (ACGIH recommends a Threshold Limit Value of 50 parts per million over an 8-hour time-weighted average).



WARNING: Always use clean, dry, medical grade gases and never oil or grease any part of the device.

**WARNING:** Do not change the connection fitting type or diameter of the supply hoses. The Diameter Indexed Safety System (DISS) is designed to prevent misconnection of  $N_2O$  and  $O_2$  supply lines.

**WARNING**: To minimize the risk of fire or explosion:

- Always ensure cylinder valves are clear of dust and dirt prior to connection. One method to clear dust and dirt is to briefly "crack" the cylinder valve open to blow out any debris in the line before installing the cylinder.
- Do not discharge the gas at any person or flammable material.
- Always turn on Cylinder Valves slowly and fully.

**WARNING:** The user should observe the patient to prevent over sedation in the event of an  $O_2$  failsafe malfunction or a crossed lines situation. If a patient becomes overly sedated when being delivered 100%  $O_2$ , immediately remove the mask and encourage mouth breathing. This is an indication of a failsafe malfunction or crossed lines. In this case, only deliver pure  $O_2$  from an independent source.



WARNING: Do not modify this equipment without authorization of the manufacturer

**WARNING:** Do not use or replace any components or accessories, except those specified in these instructions for use and installation guide.



Visit our website: <u>https://www.porterinstrument.com/</u> for additional information. To download Full Instructions for Use: visit <u>https://www.porterinstrument.com/dental-support</u> Choose "Flowmeters" from the dropdown within the "Product Download" section.

**ID** Rx Only

Refer to FM-1346 for complete instructions and safety information.