

**Operating
Instructions
for
General Purpose
and
High Purity
Regulators**

**WARNING: DO NOT ATTEMPT TO
OPERATE THIS REGULATOR UNLESS
YOU HAVE BEEN TRAINED IN ITS
PROPER USE OR ARE UNDER
COMPETENT SUPERVISION.**

**IMPORTANT SAFETY AND
OPERATING INSTRUCTIONS**
For General Purpose and
High Purity Regulators

WARNING

Do not use this regulator with gases other than those for which it is intended.

Do not attempt to operate this regulator unless you have been trained in its proper use or are under competent supervision. Do not use this apparatus unless you are familiar with the hazards associated with the gas you are using.

WARNING

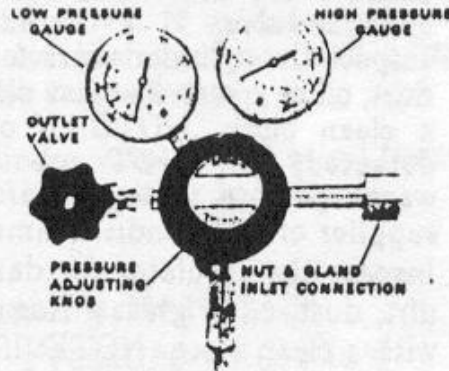
Oxygen is not flammable; however, the presence of pure oxygen will drastically increase the speed and force with which burning takes place. Oxygen must never be allowed to contact oil, grease or other petroleum-based substances; therefore, use no oil or grease on regulator, cylinder, valves or equipment. Do not use or store near excessive heat 125 degrees F (51.5 degrees C) or open flame.

Setting Up Equipment

1. Secure cylinder to wall, stand or cart so it will not tip over or fall.
 2. Remove the protective dust seal from the cylinder valve.
 3. Inspect the cylinder valve for traces of dirt, dust, oil or grease. Remove dirt and dust with a clean cloth. NOTE: If oil or grease is detected, DO NOT use cylinder. (See warning note above.) Inform your gas supplier of this condition immediately.
 4. Inspect the regulator for damaged threads, dirt, dust, oil or grease. Remove dirt or dust with a clean cloth. NOTE: If oil or grease is detected or if threads are damaged, DO NOT use the regulator. Have your distributor or an authorized repair station clean the regulator and/or repair the damage before using.
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Installing the Regulator

1. Make sure the regulator has the proper CGA inlet fitting to fit the cylinder valve. If the connection is so equipped, make sure the flat sealing washer is in place between the regulator and the cylinder valve outlet. Attach the regulator to the



cylinder valve outlet. The threads may be either right hand or left hand depending on the cylinder and regulator connections. Regulator inlet connections with left hand threads have a "V" notch machined into the hex to signify a left hand thread.

2. Tighten the regulator inlet nut securely.
3. Make proper connection to outlet of regulator valve or fitting.
4. Before opening the cylinder valve, release the tension on the regulator adjusting spring by turning the adjusting knob in a counter-clockwise (decrease) direction.

Turning on the Cylinder

1. Be sure that tension on regulator adjusting spring is released. After all pressure has been drained, release all tension on the pressure adjusting knob by turning it counterclockwise (decrease) until the knob turns freely. Stand so the cylinder valve is between you and the regulator. NOTE: Never stand in front or in back of a regulator when opening the cylinder valve. Slowly turn the valve handle in a counterclockwise direction until you hear the gas begin to flow into the regulator. Wait about 10 seconds, then turn the cylinder valve fully open.
2. To check for leaks, close the cylinder valve and observe the high pressure gauge for five minutes. If the high pressure gauge reading drops, there is a leak in the cylinder valve, inlet fitting, high pressure gauge or regulator seat. If the high pressure gauge does drop, retighten the regulator-to-cylinder connection and repeat Step 1. Should the high pressure gauge continue to drop after retightening the regulator-to-cylinder connection, the regulator must be removed and returned for service.

WARNING

Never attempt to tighten a cylinder valve or any parts of the valve. If cylinder valve is leaking, place cylinder outdoors and notify cylinder supplier immediately.

3. Keep the cylinder valve closed at all times, except when the regulator is in use.

Adjusting Regulator Delivery Pressure and Flow

1. After the regulator has been securely attached to the cylinder and no leaks exist (see previous sections), adjust the delivery pressure to the desired pressure setting by turning the adjusting knob in a clockwise (increase) direction until the desired pressure is reached.
2. If the regulator is equipped with an outlet valve, flow can be regulated by proper adjustment of the valve.

Turning Off Cylinder Valve

When you have finished using the regulator, close the cylinder by turning handle in a clockwise direction and allow all pressure to

drain from the regulator. Gas will cease to flow and the pointers on both pressure gauges will indicate "0" when all pressure has been drained from the regulator. After all pressure has been drained, release all tension on the pressure adjusting knob by turning it counterclockwise (decrease) until the knob turns freely. Turn the outlet valve, if so equipped, in a clockwise direction to turn off valve.

Removing Regulator

1. It is not necessary to remove the regulator unless the cylinder is being moved or an empty cylinder is being exchanged for a full one.
 2. NEVER attempt to remove the regulator if any pressure is showing on either pressure gauge. Turn the cylinder valve handle clockwise and allow all pressure to drain from regulator. Gas will cease to flow and the pointers on both pressure gauges will indicate "0" when all pressure has been drained from the regulator. After all pressure has been drained, release the tension on the pressure adjusting knob by turning it counterclockwise (decrease) until the knob turns freely.
 3. Remove the regulator from the cylinder and replace the protective cap on the cylinder.
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