

Operating Instructions

Respond C₅ Conserving Regulator



Keep these instructions for future reference by anyone who may use this device

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Safety Information

This chapter defines the signal word warnings (Danger, Warning, Caution, Note) that appear throughout this manual. The warnings are inserted in the manual whenever deemed necessary.

This section also describes safety hazards encountered in normal use or misuse.

Read all instructions and safety information BEFORE using this device

! DANGER

Danger means a hazard that will cause death or serious injury if the warning is ignored.

⚠ WARNING

Warning means a hazard that may cause death or serious injury if the warning is ignored

∴ CAUTION

Caution means a hazard that may cause minor or moderate injury to a person, or damage to property, if the warning is ignored.

NOTE

A NOTE indicates a recommendation or company policy. The message may relate directly or indirectly to the safety of the user or protection of property. A NOTE is not used in place of "CAUTION", "WARNING", or "DANGER" notice

Device Precautions

The user must understand and apply the following general safety precautions when using this device. These precautions may or may not be included elsewhere in this manual.

Read ALL instructions before using.

⚠ DANGER

- ✓ THIS PRODUCT OPERATES WITH HIGH PRESSURE OXYGEN USE NO OIL
- ✓ Keep grease and oil away from the device at all times.
- ✓ Do not smoke while using this device or anytime oxygen is in use.
- ✓ Do not expose device to any flames or sparks.

⚠ WARNING

- ✓ Service on this device should be performed only by an authorized service facility. Do not use the device if it has been tampered with in any way.
- ✓ When mounted to an oxygen source, internal components of the device may be under extreme pressure. Improper assembly or handling could result in explosion or fire.
- ✓ Failure to close the cylinder valve before removing the regulator from the cylinder will result in rapid de-pressurization of the cylinder and a fire could result.
- ✓ This product vents a small amount of oxygen when used. Do not use this product under clothing or in any way which could trap oxygen and cause a fire. Only use the accessories provided with this unit.
- ✓ Any unit that does not meet the performance requirements outlined in this manual should not be used. Contact a technician.

Device Precautions, cont'd

- ✓ Federal law restricts this oxygen conserving device to sale by, or on order of, a licensed physician. This device must be used only under the supervision of a licensed physician
- Anyone handling this device should have clean hands that are free of greases, oils, hand lotions, petroleum jelly, or any other similar products
- ✓ This device will not function properly if exposed to excessive moisture or excessive salt spray.
- Do not use the device with a humidifier.
- ✓ Do not expose this device to extreme temperatures
- Do not use the device if the oxygen tubing is kinked or obstructed. Backpressure downstream of the device may cause a restriction in flow.

NOTES:

- ✓ This device is only to be used by patients requiring supplemental oxygen and only when a nasal cannula is prescribed.
- ✓ Be sure the device is free of contaminants before installing.
- ✓ Turn off oxygen supply when not in use.
- ✓ Do not use this device to sustain life, or while the patient is sleeping.
- ✓ The use of this device for gases or pressures other than those outlined in this manual is expressly prohibited by the manufacturer.
- ✓ Be sure the oxygen hose is attached snugly to the outlet barbs.
- ✓ Use only with standard single-lumen cannula. Do not use with pediatric (low flow) nasal cannula or mask.
- ✓ Do not use with patients who consistently fail to trigger equipment (e.g., mouth breathing or light breathing patients).

Introduction

The Respond C5 Conserving Regulator.

The Respond C₅ Conserving Regulator is a high-pressure oxygen regulator and conserving device that is combined into a single compact unit. It operates in the same manner as traditional oxygen pressure regulators with the added benefit of having a conserving device included. The system is designed for use by an ambulatory patient with a high-pressure oxygen cylinder. Since the Respond C₅ requires no electrical (battery) power source, it is a reliable and easy to use device.

Function of the Device.

Like traditional click-style oxygen regulators, the Respond C5 Conserving Regulator can function as a standard continuous flow regulator. However, it is also a conserving device which will increase a patient's ambulatory time over that of continuous flow oxygen systems.

In the Conserving Mode, the flow of oxygen is controlled by the patient's inhalation, which triggers a sensing diaphragm within the control module. As a result, the unit delivers a pulse of oxygen when the user begins his/her inhalation cycle.

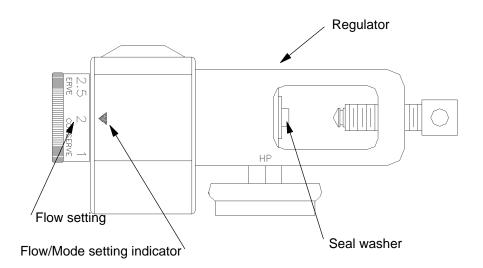
In either mode, the Respond C5's flow rates are adjusted by setting the flow control knob at the prescribed flow rate. Also, the device can be easily switched between continuous or conserve mode without turning the device off.

Features and Specifications

FEATURES

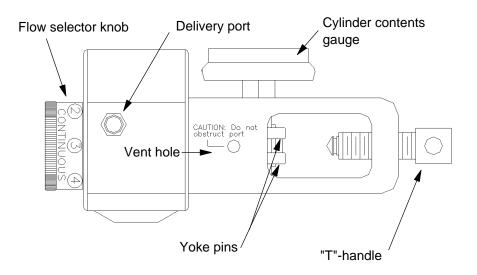
- ✓ The Respond C5 Conserving Regulator is a combined regulator and conserving device.
- ✓ It provides therapy and conserves oxygen by delivering the patient's prescribed liter flow only during inhalation.
- ✓ The user can switch between Continuous and Conserve Mode simply by turning the knob
- ✓ The device has a compact one-piece aluminum body with all-brass in the high-pressure zone.
- ✓ It includes a click-style flow control with 10 flow settings.
- ✓ For additional safety and longer device life, it has a sintered bronze high-pressure inlet filter.

Feature Illustrations



SPECIFICATIONS:

- ✓ Operating pressure: 500 to 3000 PSIG
- ✓ Outlet pressure nominal: 22 PSI
- ✓ Selectable outlet flow: 1-5 LPM Conserving; 2-4 LPM continuous
- ✓ Oxygen Conservation: Nominal 75% at all settings based upon an average I:E ratio.
- ✓ Inlet Configuration: CGA 870 Pin Indexed Yoke
- ✓ Outlet connection: Cannula hose barb
- ✓ Unit weight 14 oz (0.9 lbs)
- ✓ Storage Temperature (degrees C): -20 to 60
- ✓ Operating Temperature (degrees C): 0 to 40
- √ 1-1/4" diameter gage



Set Up

/!\ CAUTION

- ✓ Keep cylinder valve closed at all times when the cylinder (or Respond C5) is not in use.
- Be sure the sealing washer is in place on the inlet yoke.
 Do not use more than one sealing washer and be sure
 the sealing washer is clean and in good condition. Only
 use sealing washers approved by the manufacturer -- DO
 NOT use plastic seal washers. Be sure the inlet area is
 free of contaminants.

∴ CAUTION

- Anyone handling this device should have clean hands that are free of greases, oils, hand lotions, petroleum jelly, or any other similar products
- 2. Inspect the cylinder valve and the device to insure they are clean and free of contamination.
- 3. Attach the Respond C5 to the cylinder valve by placing the two yoke pins (on the Respond C5) into the matching holes on the cylinder post valve. Align the pointed end of the T-Handle with the round depression on the opposite side of the post and tighten by turning the T-handle in a clockwise motion.

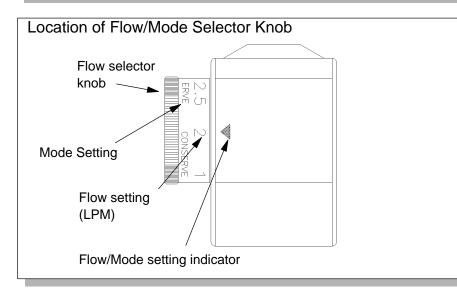
Set-up, cont'd

- ✓ Do not face the gauge of the Respond C5 when opening the cylinder valve. Attach it to the cylinder valve with the outlet port facing downwards.
- ✓ Open the cylinder valve SLOWLY until oxygen begins to flow into the regulator. Check for audible leaks around the cylinder connection. If leaks are detected, turn off the cylinder valve and re-tighten the connection. SLOWLY reopen the cylinder and check again. If leaks are still detected, do not use the Respond C5 -- call a technician.
- 4. In the "Conserve" mode, this device should be used only with standard single lumen cannula 7 feet long or shorter. RRI recommends using a 4 foot cannula unless additional length is necessary.

Usage

∴ CAUTION

- To insure proper flow from the Respond C5, the patient must use a single lumen cannula no more than 7 feet long.
- Breathing through the nose is required for the unit to operate. Breathing exclusively through the mouth, extremely light breathing, or nasal blockage will inhibit the device from delivering oxygen flow.
- ✓ Be sure the cannula is properly attached to the hose barb and there are no kinks or obstructions in the tubing.
- The adjusting knob must be set at a marked flow setting. Placing the knob between settings will result in inaccurate flow or no flow at all.
- Do not cover or block vent holes in the device with labels, decals, adhesive material or any foreign object. Blocking vents will cause the conserver to fail, resulting in a reduced or no flow condition and/or an unsafe high-pressure condition.



Usage, cont'd

To Use the Respond C5

- ✓ NOTE: The flow selector knob on the end of the regulator allows the use to select the oxygen flow rate in liters per minute. The flow selector knob "clicks" into the specified flow rate settings on the knob. Oxygen will not flow out of the regulator if the knob is set between the indicated flow settings.
- ✓ Set the flow selector knob to the desired flow setting.
- ✓ Attach the cannula to the Respond C5 outlet port.
- ✓ Place the nasal portion of the cannula into the nose as directed by the oxygen therapist.
- ✓ Breathe through the nose.

To Switch from Continuous to Conserve Mode

This oxygen conserving unit is capable of delivering flow in two modes:

- Conserving Mode, which delivers flow only during inhalation.
- Continuous Flow Mode, which delivers a constant flow, regardless of breathing patterns.

To select Conserving Mode, turn the flow/mode selector knob to a position that indicates "Conserve" flow rate. The knob should click into place. To select Continuous Flow Mode, turn the flow/mode selector knob to a position that indicates "Continuous" flow rate. The knob should click into place.

Removal from Oxygen Cylinder

✓ Failure to close the cylinder valve before removing the regulator from the cylinder will result in rapid de-pressurization of the cylinder and a fire could result.

NOTE: Always turn off cylinder valve when not using the conserver/regulator. It is not necessary to remove the conserver/regulator from the cylinder unless the cylinder is being exchanged for a new one.

To remove the Respond C5 from the cylinder:

- Close the cylinder valve.
- ✓ Set the adjusting knob to the lowest flow setting and allow the regulator to de-pressurize.
- Be sure the contents gauge reads zero.
- ✓ Remove regulator from cylinder valve.

Cleaning and Maintenance

- ✓ The exterior surfaces can safely be wiped off with a clean, lint-free cloth. If the cloth is dampened with water, do not let water enter the relief valve or vent holes.
- ✓ This device should be tested by the manufacturer at a minimum of every five years.

/ WARNING

- ✓ If grease or oil is visible or suspected to be present, DO NOT use the device, and do not attempt to clean or repair it. Have it serviced by qualified personnel.
- ✓ If any leakage of the oxygen cylinder is detected, turn the valve stem or handle clockwise until the cylinder valve is closed. If leakage persists, place the cylinder outdoors and notify the gas supplier immediately.

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Warranty

Your Respond C5 is designed to work satisfactorily for many years. However, in the event the unit does not perform to its specification, it is warranted under normal use against any and all manufacturing defects from date of purchase for a period of 3 years. Any failure resulting from defective parts or faulty workmanship, as determined during evaluation at a manufacturer-approved repair facility, will be repaired under warranty.

This warranty will be null and void for any unit that has been subjected to misuse, negligence, or repairs other than those performed by authorized service facility.



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