



## **Using the LTV Ventilator with a mouthpiece (straw)**

For intermittent use to increase the Minute Ventilation (volume and frequency of air that goes in and out of your lungs).

Settings on the Ventilator will be adjusted by a Respiratory Care Practitioner, with the input from a physician, to maximize patient comfort.

The goal is to increase minute ventilation (volume of air going in and out of the lungs). This is not to be used as a life support device as is set up in the open circuit system. If the patient needs more support, please contact his/her physician as soon as possible.

Never use this ventilator or circuit other than the way it was originally set up by your Respiratory Care Practitioner.

### **Settings that need to be entered on the front panel:**

#### **Controls:**

Mode-usually in the Assist/Control Mode

Tidal Volume-typically 10-15 ml/kg, but may be more or less for patient comfort

Respiratory Rate

Inspiratory Time

Sensitivity-allows patient to initiate a breath

**Alarms:**

High pressure Limit

Low Pressure

**Extended Features-not available for the user to adjust:**

Alarm volume

Alarm Interval-60 seconds to avoid annoyance alarms

**Display Window:**

Rate (frequency)

I:E Ratio

MAP

PEEP

PIP

**Turning Ventilator on:**

On/Standby button-press and release button on front panel

The ventilator will commence operation

The Front panel displays will light up

**Turning Ventilator off:**

On/Standby button-press and hold for 3 seconds. The ventilator will stop operating; the audible alarm will sound continuously and the Vent Inop LED will be lit

Press the Silence/reset button on the front panel to silence the audible alarm

# Troubleshooting Alarm Situations

## **Disc/Sense:**

There may be a leak or disconnect in the circuit or proximal pressure sense line or the proximal pressure sense line is pinched or occluded.

## **High Pressure:**

The circuit pressure may have exceeded the high pressure setting-check to see if the tubing is crimped. Check the tidal volume setting, this may have been increased.

## **Low Pressure:**

If the peak inspiratory pressure is below the Low Pressure Alarm setting-check all connections

When using the LTV with an open circuit (SIP and Puff), we are using settings to avoid nuisance alarms.

High pressure is set to 50-90 cmh<sub>2</sub>O, Low pressure is turned off and the apnea delay is set to 60 sec.

## **Filters:**

On the left side of the ventilator there is a cooling fan with a thin gray filter over it. At the other end there is a foam filter (off white in color).

## **Cleaning:**

Replace all the supplies listed above once a week or as needed.

Both filters need to be cleaned as needed, checked weekly. Take them out, clean with warm soapy water, let air dry thoroughly before putting them back in the machine.

## **Battery Operation:**

The internal battery will be 90% charged within 8 hours when it is connected to an appropriate power source.

The Charge status LED will be illuminated **green** when the internal battery is charged to >90% of its capacity.

The internal battery is to be used for short periods of time.

The internal battery will last for a minimum of 60 minutes on nominal ventilator settings.

## **Accessories and Mounting**

The LTV ventilator has a backpack available, with or without battery pack, which can be secured to a power chair or removed and put on a table top.

The LTV ventilator can be set up to interface with the battery on the power chair and avoid the use of a separate battery, tray and time. There is a special adapter that can be ordered through Reliable Medical Supply.

The LTV ventilator can be secured to a power chair with a specially ordered vent tray and mounted onto the chair by a mobility specialist. This will require a prescription from a physician. A mobility specialist will need to see the power chair and take measurements. This may take time to get approved by the insurance company.

## **Follow-Up**

The Respiratory Care Practitioner will come out quarterly, or as ordered by the physician, to check the ventilator and to adjust settings.