

# Cough Assist Machine

The Cough Assist Machine helps to clear secretions from the lungs by helping you with your breathing. When you breathe in, the machine gives you air to help expand your lungs. When you blow out, the machine creates a sucking force that pulls air out of your lungs. This rapid change in pressure during breathing helps make your cough stronger and better.

## Machine Set-up

We will help you to set up the machine and learn to make changes on it if needed. You will start with low pressures and then build up to the highest amount of pressure that you can handle during each phase of your breathing. At first, we will set the time for each phase of breathing to your comfort level.

## How do I adjust the phases of breathing?

Each phase of breathing should be set so that you can get the air in and out of your lungs with comfort, and then pause to keep coughing if needed.

1. Set the inhale time knob at 1 second.
2. Set the exhale time knob at 1 second.
3. Set the pause time knob at 2 second.
4. Set the inhale flow knob at the 3 squiggly arrows (Full flow)

## How do I use the Cough Assist Machine?

Check to make sure that the inspiratory (positive) and the expiratory (negative) **YOU MUST ALWAYS FOLLOW PRESCRIBED SETTINGS THIS IS AN EXAMPLE**

1. pressures are set. For example Start at +20/-20 and gradually increase to +40/-40.
  - Remove the face mask or mouthpiece and hold the tubing firmly against a tight surface.
  - Turn on the machine.
  - Set the manual/auto switch to **manual**.
  - Toggle the manual control switch between inhale and exhale a few times to ensure that the pressures are correct and that the manometer returns to zero.
2. Set the manual/auto switch to **auto**. The unit will then cycle from the positive to negative pressure and back to zero for the pause on its own.
3. Put the mask or mouthpiece back on to the tubing and place it tightly on your face or mouth so that no air leaks out. You may need to use a nose clip to prevent air leakage.
4. Turn the machine on.
5. As you breathe in, the machine will help by giving a big breath of air. This breath will end at the time set on your machine.
6. As you breathe out, the machine will help by sucking the air out. This will help your cough be much stronger and it will help to remove phlegm.
7. Keep taking a series of 4-6 breaths from the cough machine and then rest for 20-30 seconds and cough out any phlegm that may have loosened up.

8. Repeat the series of breaths with a rest 4-6 times or until you no longer have any phlegm to cough out.

As you get used to the pressures during breathing, you will want to increase the pressure to the highest amount that you can handle.

### **How do I change the pressures?**

To get the highest amount of pressure you can tolerate, you must change the pressures on the cough machine.

1. Remove the face mask or mouthpiece and hold the tubing firmly against a tight surface.
2. Turn on the machine.
3. Set the manual/auto switch to **manual**
4. To change both inspiratory pressure and expiratory pressure, turn the Pressure knob clockwise to increase the pressures and counterclockwise to decrease the pressures.
5. To adjust the INSPIRATORY PRESSURE to be less than the expiratory pressure:
  - Toggle and hold the manual control lever to inhale.
  - Decrease INSPIRATORY PRESSURE by turning the Inhale Pressure knob counterclockwise to the positive pressure on the manometer that you can handle.

Once you get to the highest amount of pressure that you can handle, you will no longer have to adjust the pressures. If you need to lower the pressures at any time, you should tell your doctor.

### **How do I adjust the flow?**

If you feel there is too much air flow coming from the machine when you take a breath in, you can decrease the inhale flow.

1. Set the inhale flow knob at one squiggly arrow (reduced flow)

### **How do I clean my equipment?**

To Clean the Mouthpiece

- The mouthpiece must be **cleaned after every treatment**
- Wash your hands.
- Run hot tap water for 2 minutes to ensure clear water from tap.
- Take off the mouthpiece and wash in dish soap (Ivory®, Joy®, etc.) and water in a clean container. Do not wash with your dishes.
- Rinse with hot tap water
- Air dry on a clean *towel* until your next treatment

### **Things to know about the Cough Assist Machine**

The machine is very easy to learn once you know what each knob controls.

- **Power Switch:** T symbol means ON. 'O' symbol means OFF
- **Inhale:** sets how long the positive pressure will be blowing air into the lungs.
- **Exhale:** sets how long the negative pressure will be sucking or forcing the air out of the lungs.

- **Pause:** sets the time between the last negative pressure and next positive pressure.
- **Inhale Flow:** where you set the amount of flow needed during breathing in. There are two settings: FULL or REDUCED. If REDUCED flow is used, there is less pressure.
- **Inhale Pressure:** where you can adjust the inhale pressure to be less than the exhale pressure.
- **Manual/Auto:** controls whether you want the machine to switch between pressures on its own or if you want to do it by hand.
- **Manual Control** allows you to toggle between inhale and exhale when you are using the manual setting.
- This machine is designed for short term use only. It should not be on straight for more than 5 minutes.

**\*\* All DME equipment should be inspected, by patient, caregiver or individual operating equipment, prior to use \*\***