Cough Assist Machine using the T-70

Cough Assist Machine copies a natural cough by slowly sending a large volume of air to your lungs, like a normal deep breath, when you breathe in (positive pressure). Then it quickly reverses the flow of air and mucus (negative pressure). Cough Assist Machine makes your cough more effective. Your airways stay clear, reducing the chance of respiratory infections.

Getting started
We will help you to set up the machine and teach you to make needed changes. You may begin with lower pressures to become comfortable with the therapy. You should know that the lower pressures may not be effective.

A cough machine breath is made up of an inhale time, an exhale time, and a pause time. 4 sets of 5 breaths is a usual treatment. You may do more or less cough/sets, depending on how well you are clearing secretions. Between each sequence you may rest for 20-30 seconds or more. This resting time will give the caretaker time to remove any secretions in the mouth and nose.

How to set up and use my cough assist machine
- Before beginning the treatment, wash your hands with soap and warm water, or use anti-bacterial hand gel, to reduce the risk of infection.
- Plug device into AC power source, DC power source, or use the detachable battery.
- Connect the filter and tubing to the cough machine and the mask, mouthpiece or trach adapter to the tube.
- Press the start/stop button to turn on and press THERAPY.
- 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.
- As you breathe out, the machine will help by sucking the air and mucus out. This will help your cough be much stronger and it will help to remove mucus.
- Keep taking a set of 4 – 6 breaths from the cough machine and then rest for 20 – 30 seconds and cough out any mucus that may have loosened up.
- When using a mouthpiece, nose clips may be needed.
- A well-fitting, soft seal mask is important so there is less leakage. Some patients may need to have their head supported from behind during breaths to help keep their airway open. In order to be effective, firm pressure may be needed.
- If you have a cuffed tracheostomy tube, inflate the cuff during the treatment.

**How do I change pressures?**
- Turn machine on and press STANDBY
- The T-70 has three (3) different prescription settings:
  - Left button: Choose display options or do what is shown on the screen
  - Up/down button: Look through the display menu
  - Right button: Select display options or do what is shown on the screen
- Press right (Standby) button to end therapy

If you need to lower pressures at any time, you may change the pressure with help from your doctor or nurse practitioner.

**How do I clean my equipment?**

**To clean the mouthpiece, mask or trach adapter**
The mouthpiece must be cleaned after every treatment.
- Wash your hands.
- Take off the mouthpiece and wash in dish soap (Ivory®, Joy®, etc.) and hot water. Do not wash with your dishes.
- Rinse with hot tap water
- Air dry on a clean towel until your next treatment.
- The bacteria filter on the side of the machine cannot be washed. It should be replaced monthly or when blocked with mucus or trapped moisture.
- With normal use, the small square air filter in the back of the machine should be cleaned at least once every 2 weeks and replaced every 6 months.
- Unplug device and wipe outside surface using one of the following cleaners: A clean cloth dampened with water and mild detergent or 70% Isopropyl alcohol
- Replace the mask if it becomes torn or if you can no longer keep a good seal.

**Controls on the T-70 Cough Assist Machine**
- Power button
- Inhalation pressure: Amount of pressure that will be delivered
- Exhalation pressure: Amount of pressure that will be sucked out
- Inhale time/exhale time: Amount of time for inhalation and exhalation
- Manual: You must manually cycle breath to breath
- Pause Time: Amount of time between inhalation and exhalation
- Flow Mode, usually set on high: T-70 will cycle from inhalation to exhalation on its own
- Cough Trak: The patient makes a negative pressure to start a breath. This is used to help match the timing of the patient’s inhalation to tolerate the therapy easier.
- External battery: The detachable battery charges; when the battery is in the Cough Assist T70; it is plugged in and in the Standby or OFF mode. A battery charger is available if several batteries need to be charged.
Preset #1:
Mode: Auto, Manual
Cough trak: On, Off
Max pressure: ________cmH20
Inhale Flow: High
Inhale time: ________ seconds
Max negative pressure: ________cmH20
Exhale time: ________ seconds
Pause time: ________ seconds

Preset #2:
Mode: Auto, Manual
Cough trak: On, Off
Max pressure: ________cmH20
Inhale Flow: High
Inhale time: ________ seconds
Max negative pressure: ________cmH20
Exhale time: ________ seconds
Pause time: ________ seconds

Preset #3:
Mode: Auto, Manual
Cough trak: On, Off
Max pressure: ________cmH20
Inhale Flow: High
Inhale time: ________ seconds
Max negative pressure: ________cmH20
Exhale time: ________ seconds
Pause time: ________ seconds

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person’s health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 8/2015 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#7745