

What is a humidification system?

The humidification system has many parts. Together, the parts deliver warm, moist air and oxygen to your child's trach tube. This air helps keep the secretions thin. Secretions in the lungs can block the trach tube if they are too thick.

1. Compressor

Purpose

This machine is where air flow comes from. The air travels to the heater, and delivers the warm, moist air to your child. This machine is not where oxygen comes from.

Guidelines

- Keep the compressor free from dirt and dust.
- Keep curtains and bedding away from the compressor.
- Do not put the compressor against the wall. Do not block the filter.
- Do not smoke near this device.
- Keep the compressor on the floor or other smooth, flat surface.



Procedure

- Your compressor may be set using pressure or flow. This will be determined by your home healthcare provider.
- To check the **pressure**, turn the compressor on.
- Block the air outlet with your finger. The needle on the pressure gauge should read the pressure taught to you by your home healthcare provider. Make sure you are eye level with the gauge. If it does not, adjust the dial.
- To adjust the dial, it should be pulled out. Push the dial in to lock it in place.
- To check the **flow**, turn the compressor on.
- Adjust the flowmeter to the set liter per minute taught to you by your home healthcare provider. Make sure you are eye level with the flowmeter. If it does not, adjust the flowmeter.

Troubleshooting

- Is the compressor plugged into the outlet?
- Is the electrical outlet working?
- Is the compressor on?
- Is the filter clear and clean?
- Is the pressure set?
- If the compressor still does not work, call your home healthcare provider.

2. Heater

Purpose

To heat up the air from your compressor, which will deliver warm, moist air to your child's trach tube. It will alert you to temperatures too hot, or too cool.



Guidelines

- Make sure the temperature probe, and heater wire adapter are in good working order.
- To see the temperature, your machine may display this on the front panel (as shown above). For some machines, you will need to push and hold the Alarm Silence button.
- Make sure you have the right amount of water in the heater canister.
- You can use sterile or distilled water in the canister, not tap water.
- If possible, do not place the heater set up near a window or vent.

Note: The compressor and the heater work together. One cannot be on without the other.

Troubleshooting

- Is the heater plugged into the outlet?
- Is the electrical outlet working?
- Is the heater on?
- Is the temperature probe connected?
- Is the temperature probe broken?
- Is the heater wire adapter connected?
- Is the heater wire adapter broken?
- Is there water in the canister?
- Is there air flow coming from the compressor?
- If all else fails, change the circuit.
- If the heater still does not work, call your home healthcare provider.

3. Circuit set up

Supplies

- Trach collar mask
- 1-six inch length of corrugated tubing
- Package of corrugated tubing with wire
- Temperature probe
- Heater wire adapter
- Water chamber
- Bag of sterile water (if provided by your home healthcare provider)
- Oxygen tubing (if your child is on oxygen you will need 2)
- Reducing adapter
- Multi-access adapter, if using oxygen

Special directions

- If any water collects in the corrugated tubing, drain it away from your child.
- The corrugated tubing should always be kept below the level of your child's chest (not draped over a crib railing or pack 'n play).
- Always have a supply of inhalation water for the humidifier.

NOTE: Refer to Oxygen teaching sheet #3054 if your child requires the use of supplementary oxygen.

Refer to HME teaching sheet #3034 for information on portable humidity setups.

ALERT: Call your child's doctor, nurse, or clinic if you have any questions or concerns or if your child has special health care needs that were not covered by this information.

This sheet was created to help you care for your child or family member. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment and follow-up.

