E Tank Cylinder Troubleshooting

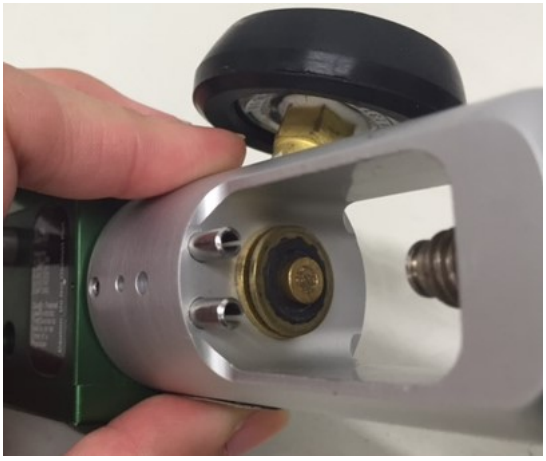
“Loud noise / leaking air”

Problem:	Oxygen is escaping and creating a noise
Cause:	Regulator is missing the brass/rubber washer on the largest prong
Solution:	Replace the washer part or switch out regulator

*See FIGURE 1.1

FIGURE 1.1

NOT GOOD
Brass washer is missing on this regulator. Must be replaced.



GOOD
The flat brass and rubber washer is intact!

Cause:	Oxygen tubing connections
Solution:	Check 02 tubing to make sure it is secured

"Tank is empty"

Problem:	02 gauge needle is not showing any psi
Cause:	Oxygen is not flowing into the regulator
Solution:	Ensure the regulator is properly secured and the **tank valve is OPEN**

*See Figure 1.2 Below

Cause:	Oxygen tank is empty
Solution:	Locate another backup 02 tank cylinder to utilize

FIGURE 1.2

TURN VALVE TO OPEN TANK

Note: 02 tank cylinder without a toggle top will require a tank key.

“Tank was delivered half full or half empty”

As shown above, the regulator has a gauge to indicate the psi (pounds per square inch of pressure) inside the tank cylinder. When the regulator is properly attached to the tank, the needle will raise up and point to the psi. The needle should NOT go all the way to the 3000 psi range. If it’s a full tank, the needle should reflect the **“green range”**.

NOT ACCURATE

The gauge should ***not*** show 3000 psi. If so, examine the tank connection, tubing, and/or switch out regulator.

Accurate, FULL TANK

When the tank is full, the gauge will be in the green zone / range. 2200 psi is an accurate “full” reading.

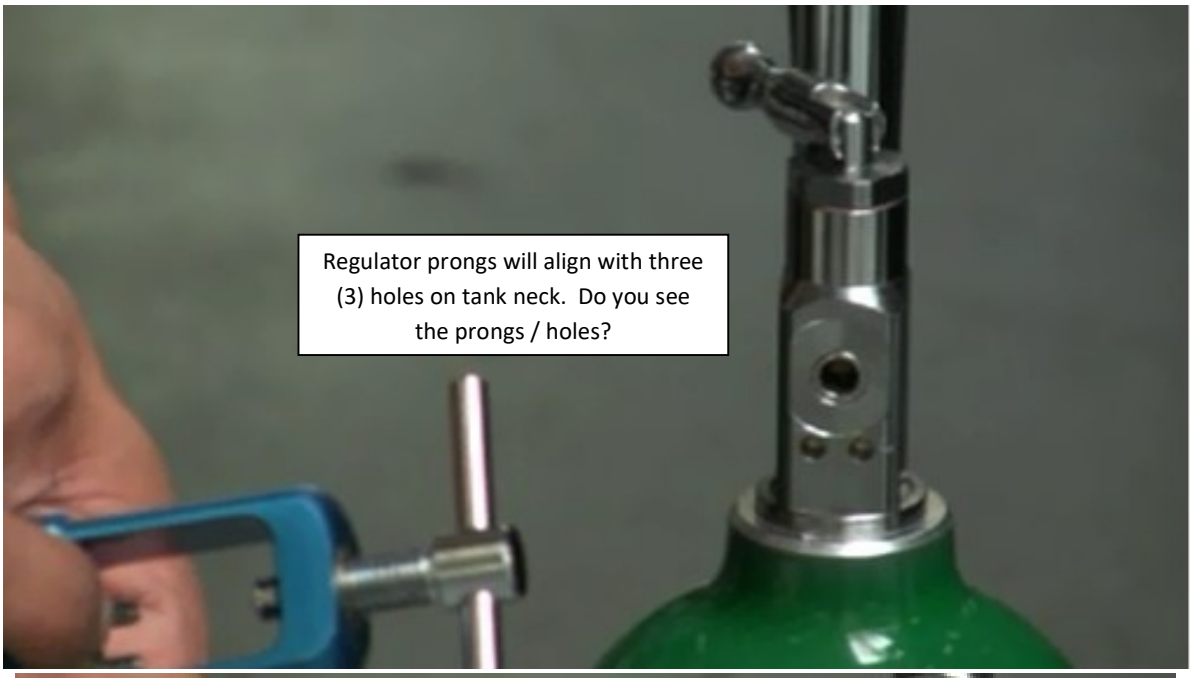
02 Tank instructions for use:

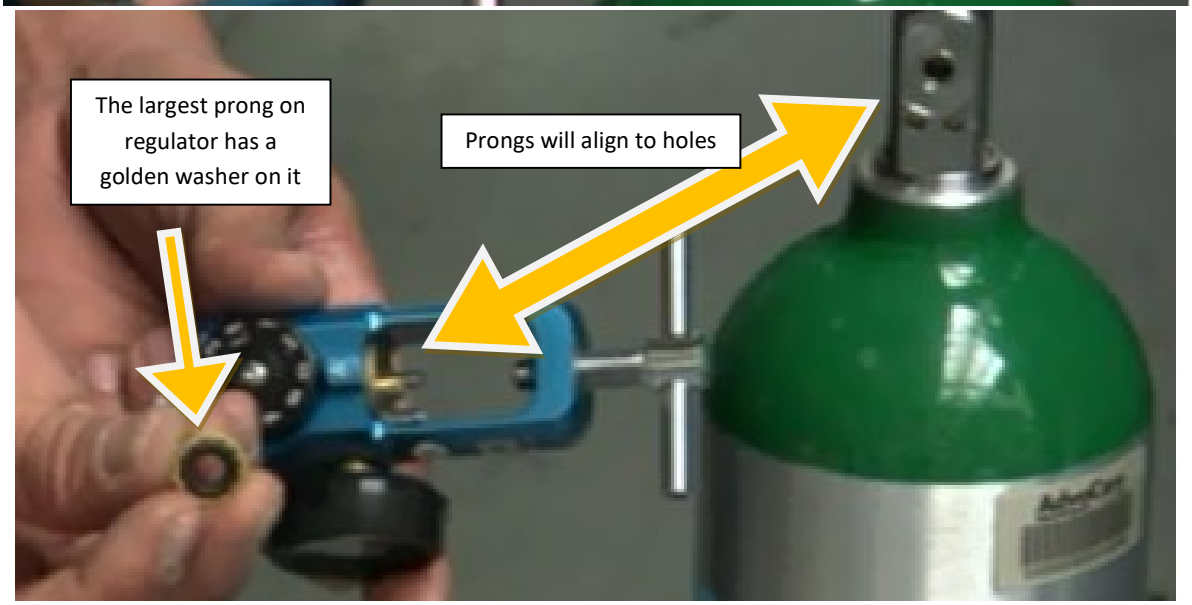
FIGURE 1.5

Locate 02 regulator, E tank cylinder, and 02 tubing (with nasal cannula).

Note: 02 tank cylinder without a toggle top will require a tank key.

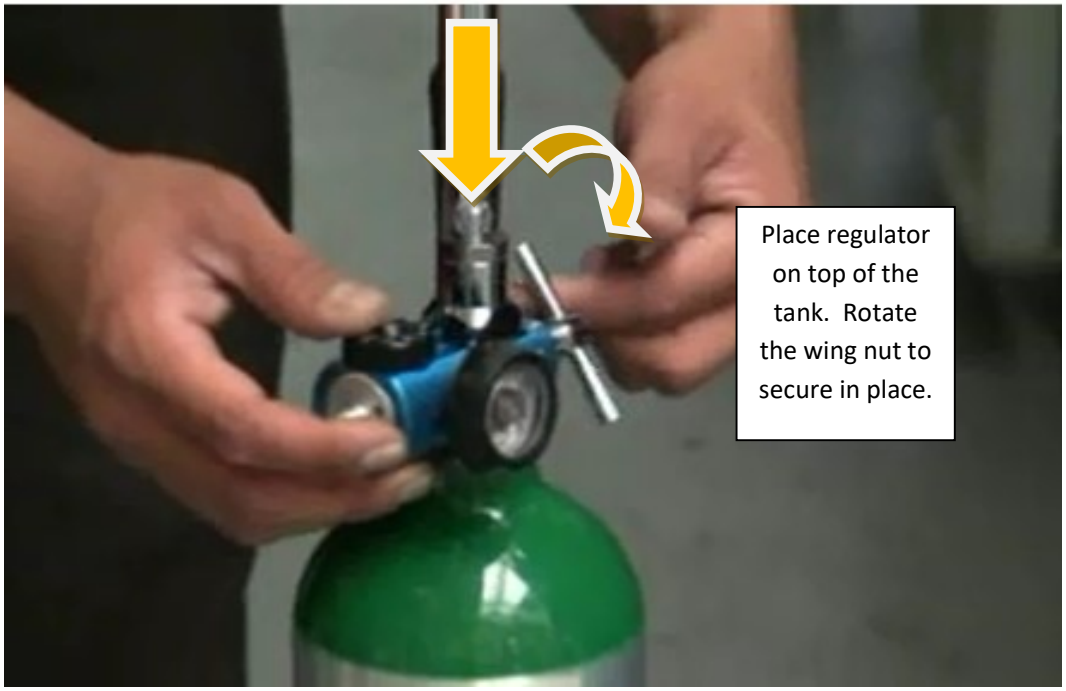
Step 1: Inspect items:



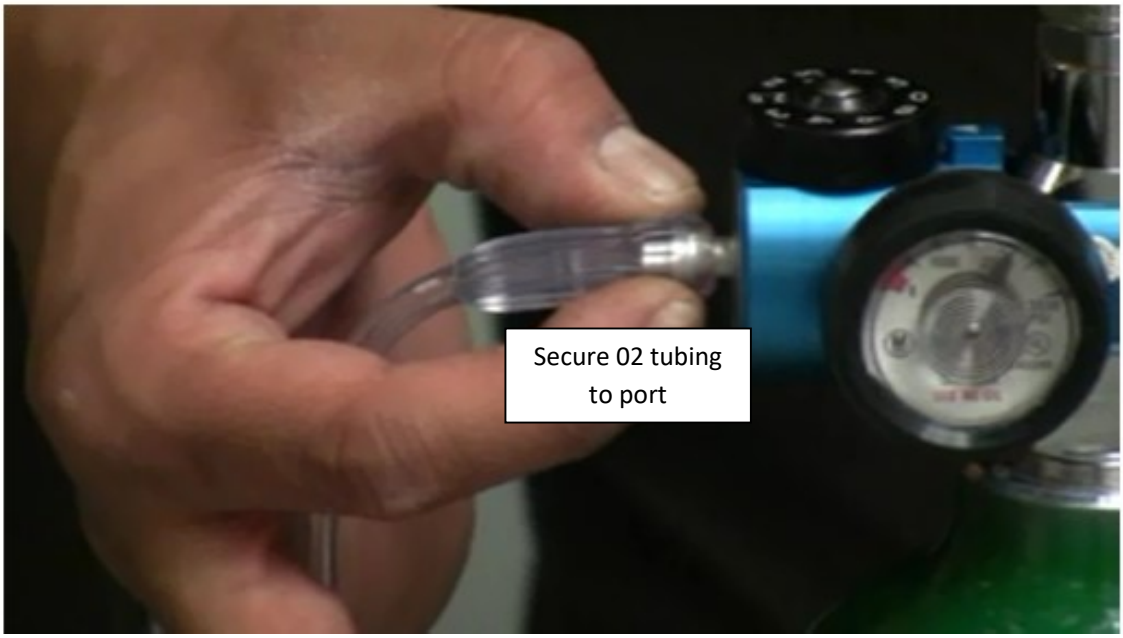


Once you have explained the process, proceed to step 2.

Step 2: Attach Regulator to 02 tank:

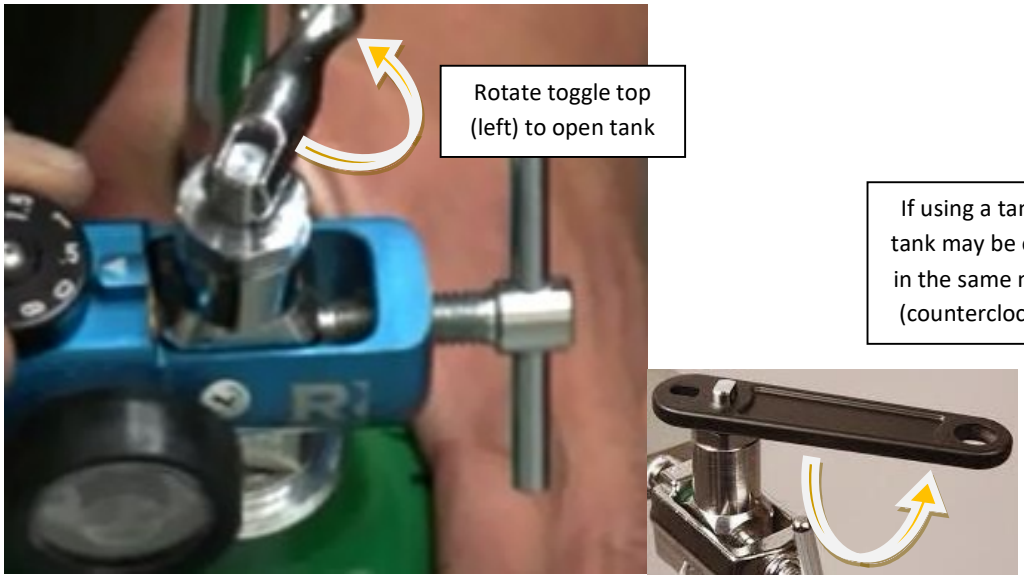


Step 3: Connect 02 tubing:



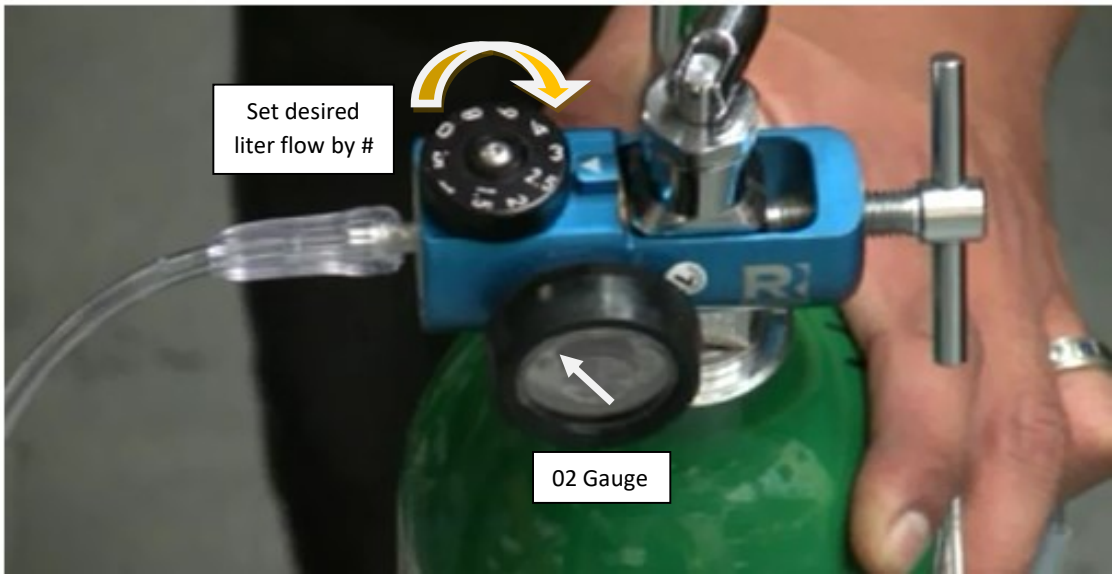
Push the 02 tubing firmly into place on the spout.

Step 4: Open 02 Tank:



Open the tank so oxygen will flow into the regulator. A quarter turn (90 degrees). If key is needed, service technician may deliver one.

Step 5: Set liter Flow



Once the tank is open, gauge needle will move to indicate the regulator is successfully attached and oxygen is flowing properly. Adjust 02 liter flow by turning the numbered dial.

Step 6: Test with cup of water

If still unsure about whether 02 is being delivered, test it.
Submerge the nasal cannula into a cup of water to ensure it bubbles.
When bubbling, 02 is ready to be delivered to the patient.

If the "bubble test" troubleshooting is completed (and equipment is working properly to our knowledge) but the patient is *still* not feeling the oxygen working, please notify the Hospice Nurse, POA, or Caregiver.

02 Tank Duration Chart

Tank duration may be estimated by referring to the chart below.

FIGURE 1.4

Cylinder Duration *(hours:minutes)* **at designated flows** *(Liters Per Minute)*

1. *Continuous Flow*

Cylinder Size	1 LPM	2 LPM	3 LPM	4 LPM	5 LPM	Weight lbs
M-6	2:44	1:22	0:54	0:41	0:33	2.9
E	11:22	5:41	3:47	2:50	2:16	8.0
M-60	28:43	14:21	9:34	7:10	5:45	23.2

2. *Conservation 5 to 1 Flow*

Cylinder Size	1 LPM	2 LPM	3 LPM	4 LPM	5 LPM	Weight lbs
M-6	13:40	6:50	4:30	3:25	2:44	2.9
E	59:49	28:24	18:56	14:12	11:22	8.0

3. *Conservation 3 to 1 Flow*

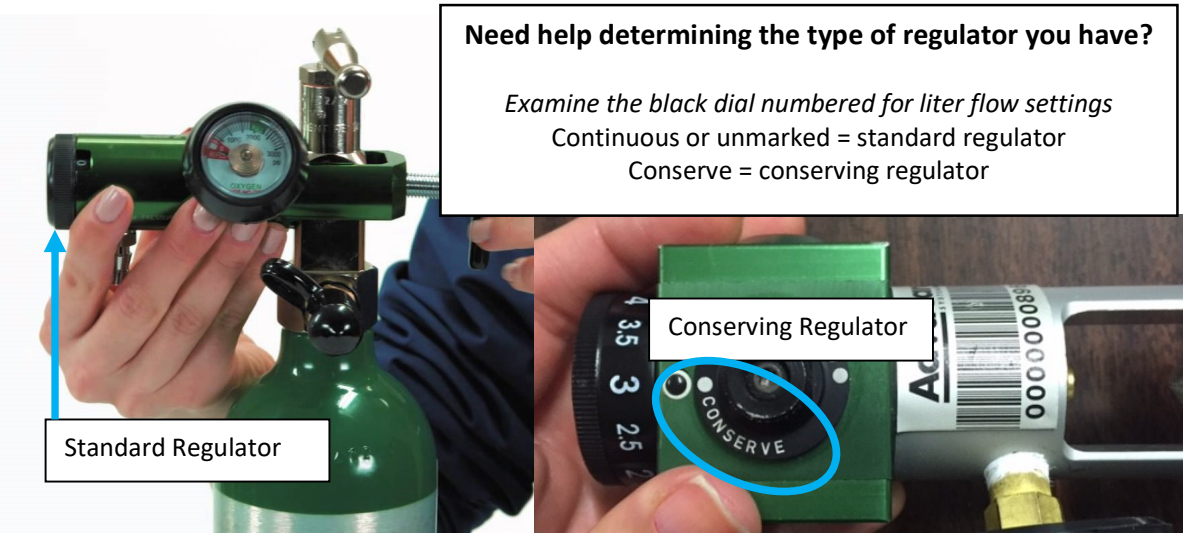
Cylinder Size	1 LPM	2 LPM	3 LPM	4 LPM	5 LPM	Weight lbs
M-6	8:12	4:06	2:44	2:03	1:38	2.9
E	34:06	17:03	11:22	8:32	6:49	8.0

Additional liter flow information here:

http://www.respondo2.com/calculator

Need help determining the type of regulator you have?

Examine the black dial numbered for liter flow settings
Continuous or unmarked = standard regulator
Conserve = conserving regulator



Key words will reveal whether your regulator is the standard or conserving type. Conserving regulators have "conserve" written on the dial.

1.

Standard "Continuous Flow"

Standard adult regulator tank duration is listed under "Continuous Flow" (#1 on the chart Figure 1.4, above)

2.

"Conserve" on the dial

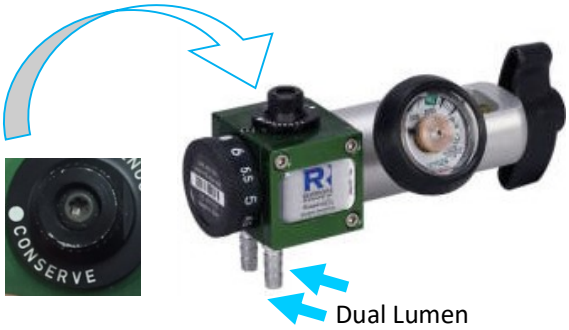
Single Lumen

"Conservation 5 to 1 Flow"

Conserving regulator tank duration is listed under "Conservation 5 to 1 Flow" (#2 on the chart Figure 1.4)

3.

"Conserve" on the dial



Dual Lumen

"Conservation 3 to 1 Flow"

Conserving regulator tank duration is listed under "Conservation 3 to 1 Flow" (#3 on the chart Figure 1.4)
The 3 to 1 type has two metal prongs (lumens).

General maintenance:

- Always store tanks upright and secure (in tank cart or rack to prevent tripping hazard)
- Always store tanks in a well ventilated area (away from heat source)
- During transport, do not place tanks in the trunk of car. Instead, secure the tanks inside the car in a well ventilated area