

# GLASS TORCH TECHNOLOGIES, INC.



55 N Main St.  
Tioga, PA 16946  
(570) 835-9777  
[gtt@glasstorchtch.com](mailto:gtt@glasstorchtch.com)  
[www.glasstorchtch.com](http://www.glasstorchtch.com)

## INSTRUCTIONS FOR CRICKET TORCHES:

To setup the Cricket torch start by using ¼" ID grade "T" twin welding hose.

**1. Connect the red fuel line to the fuel source and tighten the brass fitting. The fuel hose fitting is a left hand thread, so the fitting will be turned to the left to be tightened.**

**2. Connect the green oxygen hose to the concentrator or the regulator on the oxygen tank.**

- If using tanks and a regulator, connect the brass fitting to the regulator. The fitting is a right hand thread, so the fitting will be turned to the right to be tightened.
- If using a concentrator, the brass fitting may need to be cut off to connect to the nipple on the concentrator. Clamp the hose with an automotive worm gear clamp or a crimp style clamp.

**3. Connect the hoses to the torch one of two ways:**

- If the torch came with "B" fittings and hose attached to the torch, do not cut the fittings off of the torch end of the hose. Connect the fuel (**red**) hose to the fuel (**red**) hose on the torch and tighten. The fitting is left hand thread, so the fitting will need to be turned to the left to be tightened. Connect the oxygen (**green**) hose to the oxygen (**green**) hose on the torch and tighten. The fitting is right hand thread, so the fitting will be turned to the right to be tightened.
- If the torch came with brass studs, cut the brass fittings off the torch end of the supply hose. Slide the fuel (**red**) hose on the right side of the torch where the fuel (**red**) valve is located. A small amount of soapy water will help the hose slide onto the brass stud on the torch easily. Clamp the hose to the brass stud using an automotive worm gear clamp, or a crimp style clamp. Slide the oxygen (**green**) hose on the left side of the torch where the oxygen (**green**) valve is located. A small amount of soapy water will help the hose slide onto the brass stud on the torch easily. Clamp the hose to the brass stud using an automotive worm gear clamp, or a crimp style clamp.

**4. Secure the torch to the table by using a clamp or bolt through the holes in the base.**

**5. Setting the fuel and oxygen to proper pressure or flow.**

***The Cricket can run on fuel pressures as low as ¼ psi and oxygen pressures as low as 3psi.***

• **FUEL:**

- If using a **Propane tank**, set the regulator to **5 lbs.** of pressure.
- If using **Natural gas**, contact a professional to tap into the natural gas lines to install a valve and ¼" barb or "B" fitting. The line pressure of Natural gas is low, and no regulator is necessary if it is regulated down before coming into the shop to approx. ¼ to 1 psi.

- **OXYGEN:**
  - If using a **Concentrator**, set the flow meter to the highest recommended flow WITH THE OXYGEN VALVE (**Green**) ON THE TORCH OPEN. Run the concentrator for the manufacturers warm up period WITH THE OXYGEN VALVE (**Green**) ON THE TORCH OPEN. Close the oxygen (**Green**) valve for a moment to light the torch.
  - If using **Tanked Oxygen**, set the regulator to 10 lbs of pressure.
- **To start**, Open the Red Valve slowly and light with a match or a liquid fuel lighter. DO NOT USE A BUTANE LIGHTER, IT COULD EXPLODE. Once it is lit, adjust yellow flame to about 5 or 6 inches long and then start to open the Green Valve. The flame will turn from yellow to blue and you can then add more fuel (**Red**) and more oxygen (**Green**) a little at a time until a smooth blue flame is about 6 inches long and 1/2 inch in diameter. This is a good flame for most bead work. For Borosilicate Glass, keep working the valves open for a bigger, hotter flame of about 10 to 12 inches in length with a diameter of about 5/8 inch. Again, this should be a nice smooth flame. If the flame is noisy or distorts, the valves are not adjusted properly.
- **To get a tighter flame**, back down the fuel (**Red**) a little. Experiment until it is the way you want. The oxygen (**Green**) may need to be backed down a little.
- **If you need a brushy type flame** use more fuel (**Red**) and less oxygen (**Green**).
- **PRECAUTION:** We recommend that you **DO NOT** run flame lengths of less than 4 inches long until you become more experienced. This can overheat the burner if not adjusted properly and put stress on the tubes and cause damage to the torch. Also, there is more of a chance that you could get glass stuck in the face of the torch.

**DO NOT leave torch run on Pilot Light for extended periods of time.**

#### **WARNINGS:**

1. Never leave the area with the torch running.
2. Never leave the tank valves turned on if you leave the area, be sure to relieve pressure off torch.
3. Never get any oil on the lines and connections.
4. Use hose clamps or other approved connectors on the hose adaptors. Always check for and beware of any leaks and correct them immediately.
5. Never touch the torch on the barrel or nozzle end while it is running, or for 15 minutes or more after running.
6. Always wear Phillips Safety Eyewear or Didymium Glasses.
7. Have good ventilation in work area.
8. Keep flammable objects out of work area.
9. Keep burner pointed in a safe direction and be sure nothing flammable is within 4 feet or more, or have a fireboard backstop.
10. Secure burner to the work table.
11. Always have a fire extinguisher in its proper place.
12. Always have a small container of water by your work area for hot glass scraps.
13. The flame and glass are extremely hot and you could get serious burns if you do not take special precautions to avoid getting burned. Don't put your hand in front of the torch while it's running.

**We recommend taking a glass working class.**

**To clean the torch, insert the cleaning wire into each port to a depth of approx. 1-1/8" or until it stops. Light the torch to blow out any obstruction that was in the tubes.**

**CLEANING WIRE →**

Any questions call: (570) 835-9777  
Glass Torch Technologies, Inc., 55 N Main St. Tioga, PA 16946

# WARNINGS

Never leave the area with the torch running.

Never leave the main tank valves turned on if you leave the area, be sure to relieve pressure off torch.

Always make sure torch base and lines are anchored and secure.

Always be alert for gas and oxygen leaks. Fix them right away no matter how insignificant they may seem.

Have good exhaust ventilation in work area.

Keep flammable objects and lighters away from work table area.

Have non-flammable tabletop and back wall.

Secure gas and oxygen tanks with strap or chain them to wall; never let tanks free standing.

Always have a small container of water by your work area to put hot glass scraps in.

Always use Phillips Safety Eyewear or Didymium Glasses to protect your eyes from glare and flying pieces of glass.

Always keep a fire extinguisher close by in the work area.

Never get any oil or grease on the lines or connections.

Never touch the torch on the barrel or nozzle end while it is running, or for 15 minutes or more after running.

Use hose clamps or other approved connectors on the hose adaptors. Always check for and beware of any leaks and correct them immediately.

Never remove adaptors or any component with filter screens present. Removing filter screens may allow foreign material into the torch potentially damaging valve seats and clog internal components.

Do not strike torch with glass or other hard object. Dents or damage may occur.

Do not subject the torch to excessive heat, flame, kilns, ovens or hand torches.

Do not install premix torches in the same supply hose with any other torch. Flashback can occur and damage the other torches. If a premix torch is installed it **MUST** have flashback arrestors installed on the premix torch hoses *before* the connection to the main supply hose. Flashback arrestors placed at the tank will only protect the tank and regulators, not other torches in the system.

**DO NOT REMOVE ANY FACTORY INSTALLED COMPONENTS. FAILURE TO FOLLOW DIRECTIONS AND WARNINGS WILL VOID FACTORY WARRANTY.**

**FAILURE TO OBSERVE SAFETY RULES**  
**COULD RESULT IN INJURY OR DEATH.**