

GLASS TORCH TECHNOLOGIES, INC.



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INSTRUCTIONS FOR PHOENIX AND (13 JET) CHEETAH TORCHES:

- Set **Propane Take Regulator** to **5 to 8 lbs.** of pressure.
- Set **Oxygen Regulator** to **20 to 25 lbs.** of pressure.
- **Red Valve** on torch controls Fuel.
- **Green Valve** is the main outer oxygen. This valve is the most important oxygen control because it helps to keep the torch cool and keeps the flame from burning too close to the burner jet orifices. If this valve is not set right, the burner jet orifices will glow orange and you may also notice orange streaks in the blue flame. If this occurs, turn on the Green Valve a little more until the orifices stop glowing.
- **Blue Valve** controls the flame characteristics. This valve will focus the flame, give the flame thrust, and sharpen the flame. If you want a brushy flame, use less of the Blue Valve or completely shut off the Blue Valve. With this valve you can get and produce very big long flames. (The Blue Valve is the secondary inner oxygen).
- **To Start**, turn the Red Valve slowly until you get the torch lit. Get a yellow flame out to about 10 to 12 inches. Open the Green Valve until the Main Flame turns blue and the individual candle lengths are about ½ inch long; the flame should be smooth and quiet. (If you open up the Green Valve too much, the flame will start to distort and be ripply looking. Just back down the Green Valve a little until the flame smoothes out). The flame should be about 10 to 12 inches long at this point and candle lengths at about ½ inch long. Next, start to open up the Blue Valve (about a ¼ of a turn from the time you see the flame changing. If you open the Blue Valve too much the flame will start to distort and you will hear a hissing or crackling noise, then just back down the Blue Valve until the flame is quiet and smooth). Next, start adding more Red Valve (fuel) until you get to the maximum flame length, about 24 inches long and candle lengths about 1 to 1 ½ inches long. You'll have to experiment to see what flame settings you want. To tighten up the flame, use a little more Blue Valve, and for a softer flame use less Blue Valve or shut it off.
- **Never run a short soft flame.** This torch is not designed for doing very small work. Also, never run this torch without the Green Valve on, but you can run with the Blue Valve off.
- **If you need soft brushy type flames** only use the Red and Green Valve controls.
- **If you need a very hot flame**, use all three valve controls. You will also get the widest range of flame characteristics by using all three valves.
- **Never run a soft low or short flame.** This will cause the burner to overheat.
- **To get a tighter flame**, use less Green Valve and more Blue Valve to get a longer, tighter, more focused flame.
- **To shut burner off**, turn the Blue Valve off, then the Green Valve and finally the Red Valve.

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. 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 to put hot glass scraps in.**

We recommend taking a glass working class.

PORT CLEANING WIRE

BURNER FACE BRUSH

**Any questions call: (570) 835-9777
Glass Torch Technologies, Inc., 55 N. Main Street, 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.**