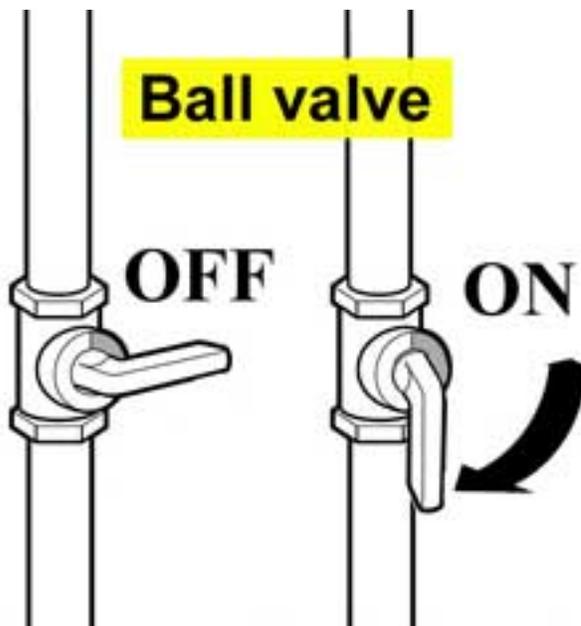


KSU GLASS Flameworking Manual

Start Up Procedures:

1. See that black dial on the wall with the green label marked “vent”? That is the ventilation that will keep the air you are breathing nice and clean while you work, **please turn exhaust vent dial to “on”**.
2. **Do a quick table check to ensure that all of the ball valves and torches are in the off position.** For ball valves, the off position is perpendicular to the gas/oxygen line.



3. **Always check all torches on the whole table**, and any unused torches, to ensure that when we turn everything on for our torches, we are not creating a leak elsewhere in the room. For the torches, the knobs turn clockwise (right-tighty) for the “off” position.
4. Follow the hoses back from the torch you want to work on, and identify which gas line and oxygen tank operate that torch.
5. **Turn ON the Main On/Off valve at the top of the oxygen tank** (lefty-loosey).

6. On the regulator, use the “T-Pin” valve to adjust the pressure, which you will watch on the left gauge, by turning the clockwise, righty-tighty. Turning slowly set the oxygen pressure to 10psi. (We read the inside numbers on the dial).

(NOTE! If you set the pressure too high, you will need to *bleed the lines*, see shut down procedure.)

7. Follow the hose that is coming off of the oxygen tank regulator, there is a main-line ball valve that needs to be turned ON to supply your ½ of the table (the handle says “OXY”).

8. Locate the natural gas line that is operating your torch, it is a black pipe that drops down from the ceiling closest to your oxygen tank. The blue handle says “GAS”, turn the ball valve to the “ON” position, (**see diagram above**). There is no pressure to set for the natural gas.

9. At your torch you will need to turn **ON** the oxygen and gas ball valves under the table that feed your torch, see diagram above.

10. On your torch, notice that you have green (oxygen) and red (gas) knobs. Remember PO-OP! When lighting the torch, turn on the gas (red) first, by slowly turning the red knob ON (about ½ turn, lefty-loosey). Hold your striker underneath and strike to light your torch. Once you have a flame, adjust it up or down so that you have about a 6” flame. SLOWLY, turn on the oxygen (green knob, lefty-loosey). Adjust your flame until you have a ¼” inner cone.

NOTE! If you need to take a short break (10 min), you will need to turn off your torch, the main valve on the oxygen tank, and the main gas line (you do not need to re-adjust the t-pin, or under the table ball valves). If you are taking a longer break, please see shut down procedure.

Shut Down Procedure:

1. At the torch, remember PO-OP, turning off the oxygen knob first, and then the gas.

2. At the oxygen tank, turn off (righty-tighty) the Main On/Off valve. Loosen the T-Pin valve (lefty-loosey) until it jiggles.

3. Turn off the ball valve for the main gas line (the black pipe that drops down from the ceiling)

4. Go back to your torch and briefly open the gas and oxygen knobs, letting the gasses trapped in the lines “bleed” out. This is called *bleeding the lines*. Make sure that you re-close the knobs on the torch (righty-tighty).

5. Turn ball valves for both the oxygen and gas lines to the off position under the table.

6. Turn ventilation off.