

Metalwork – Oxy-Acetylene Torch – Setup and Shut down

Name: _____ Block: _____ Date: _____

Setup for Use - use this guide as a checklist as you are setting up the torch!

1. Close both torch body valves and back off both regulators (thread out until it feels like there is no load on the screw)
 2. Standing to the side of the regulators (not standing in front of the gauge) open the main Acetylene cylinder valve half a turn (not more than one)
 3. Open the Acetylene knob (follow the red hose) on the torch to allow for acetylene pressure to be set.
 4. Turn the Acetylene regulator in until the line pressure reads 5-6 psi on the gauge. Close the acetylene knob on the torch.
 5. Open the main Oxygen cylinder valve all the way.
 6. Open the Oxygen knob (follow the green hose) on the torch to allow for oxygen pressure to be set.
 7. Turn the Oxygen regulator in until the line pressure reads 5-10 psi (or if using a cutting torch 5psi acetylene, 20 psi oxygen). Turn off Oxygen knob on torch
 8. Holding the torch body in one hand, and the torch tip facing away from yourself and others, open the acetylene knob/valve (counter-clockwise) on the torch just enough to feel the air blowing on your hand.
 9. Use a striker to light the torch.
 10. Adjust the acetylene valve so that the flame is slightly smoky. The black sooty stuff is carbon and can make a mess!
 11. Turn on the Oxygen knob/valve (green hose side) and adjust for a neutral flame. The little bright cone should have a slightly feather.
 12. Perform welding operation
 13. To turn off torch close the Oxygen knob/valve first, then the Acetylene. This will help purge the torch of gases
- Turn off the Acetylene gas first if there is an emergency and if you need the flame off right away. Quickly close the oxygen next.

Shutdown/ Storage Procedure

1. With both the torch body needle valves closed, completely close the valves on the tops of the cylinders.
2. With the cylinder valves closed, open the needle valves on the torch body and let the line pressure drop to zero (watch the line pressure and cylinder pressure gauges drop)
3. Close both needle valves on the torch body and back out both regulators to the neutral position (no pressure being placed on internal diaphragm)
4. Wrap up hoses and put away all accessories
5. Clean up general work area

Basic 8 step setup

1. Open Acetylene Tank valve ½ turn counter clockwise
2. Open Acetylene valve on torch ¼ turn
3. Adjust Acetylene Regulator to between 5-7 psi depending on operation
4. Close Acetylene valve on torch
5. Open Oxygen Tank valve all the way counter clockwise
6. Open Oxygen valve on torch ¼ turn
7. Adjust Oxygen Regulator to around 10 psi depending on operation
8. Close Oxygen valve on torch

You are now ready to light the torch as listed in step 8 on the previous page.

A before O or up you go

- Acetylene before Oxygen when lighting the torch

O before A to put it away

- Oxygen off before Acetylene when turning off the torch

<https://holbrooktech.weebly.com/oxy-acetylene-welding-101.html>