

## Setting up the Regulators



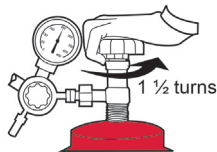
**Warning:** Ensure the adjusting screw of the regulator is backed off and the torch valves are closed before starting.



**Note:** Red indicates acetylene and green indicates oxygen.

### 1. Secure the cylinders and open the acetylene valve 1 ½ turns.

- The tank pressure gauge on the regulator should show a pressure reading (250 psi for a full tank).

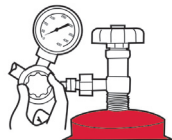


### 2. Open the oxygen cylinder valve all the way.

- If equipped, lift the red lever to the open position. The tank pressure gauge on the regulator should show a pressure reading (2,200 psi for a full tank).

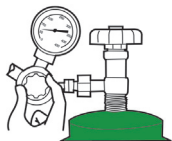
### 3. Turn in the pressure adjusting screw on the acetylene regulator until the working pressure gauge reads between 5–7 psi.

- Follow the manufacturer's recommended pressures for the tip size being used.



### 4. Turn in the pressure adjusting screw on the oxygen regulator based on the tip size. For tips of ½" and smaller, set to 25 psi. For tips over ½", set to 60–70 psi.

- Follow manufacturer's recommended pressures for the tip size being used.



## Lighting the Torch

- Open the acetylene torch valve a single ½ turn.
- Light the acetylene with a friction lighter.
- Open the acetylene valve until the black smoke above the flame stops.
  - If the valve is opened too much, the flame will jump off the end of the tip, indicating too much acetylene.
- Open the oxygen torch valve slowly to set the desired preheat flame.
- Slowly press and hold down the oxygen lever and adjust the oxygen valve on the torch to set the oxidizing flame.

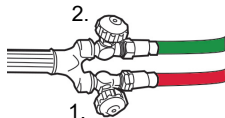
## Shutting Down the Torch



**Warning:** Valves must be closed in the correct order depending on the torch used.

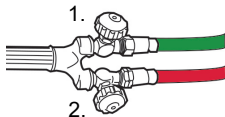
For the *equal pressure style torch*:

1. Close the acetylene torch valve.
2. Close the oxygen torch valve.



For the *premix style torch*:

1. Close the oxygen torch valve.
2. Close the acetylene torch valve.



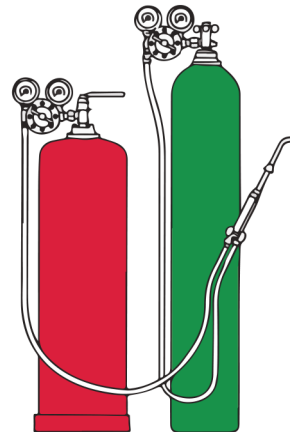
## Shutting Down the System

After closing the torch valves, shut down the system for the shift by following these steps.

1. Close the acetylene cylinder valve.
2. Close the oxygen cylinder valve.
  - If equipped with a red lever, flip the lever down.
3. Open the acetylene torch valve and vent the acetylene from the system.
4. Open the oxygen torch valve and vent the oxygen from the system.
5. Turn out the pressure adjusting screw on the acetylene regulator until it is loose.
6. Turn out the pressure adjusting screw on the oxygen regulator until it is loose.
7. Close all the torch valves.
8. Secure the torches to prevent damage.
  - If using a combination torch, remove the brazing, heating, or cutting attachment and secure it in a job box or tool box.

# Oxy Acetylene Torch Fundamentals

Job Aid



Operations Training Centre  
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