

General cleaning/preventative maintenance of Suburban 6 Gallon Water Heater SW6DE

Tools: 7/16" & 3/8" wrench, Phillips head screwdriver, carburetor cleaner, latex gloves, steel wool or small wire brush, vacuum with crevice tool, Windex or soapy water mixture, masking or painters tape and eye protection.

Remove the two Phillips head sheet metal screws on the left and right side of the outer flue collector and remove the outer flue. The inner or back flue has one hold down screw at the top but is not necessary to remove for cleaning.

With 7/16" wrench, undue the gas line from the burner tube. Remove the 7/16" nut at the bottom of the burner tube at the opening of the gas chamber. Remove the two 3/8 screws that hold the burner tube and electrode support at the gas chamber. Remove burner tube and electrode. Undue the gas line from the gas valve and remove. As precautionary step to prevent dust or dirt from entering the gas valve while cleaning, seal the hole with a small piece of tape after the gas line has been removed.

With carburetor cleaner clean the gas line and the orifice on the burner tube. Make sure the burner tube is clean, clear and dry by blowing compressed air into the gas line, orifice and burner tube.

Caution! Do not stick anything into the orifice of the gas metering valve (pin hole) or damage to the orifice could occur!

Take the electrode and clean with small wire brush or steel wool. Vacuum any loose deposits that are in the gas chamber.

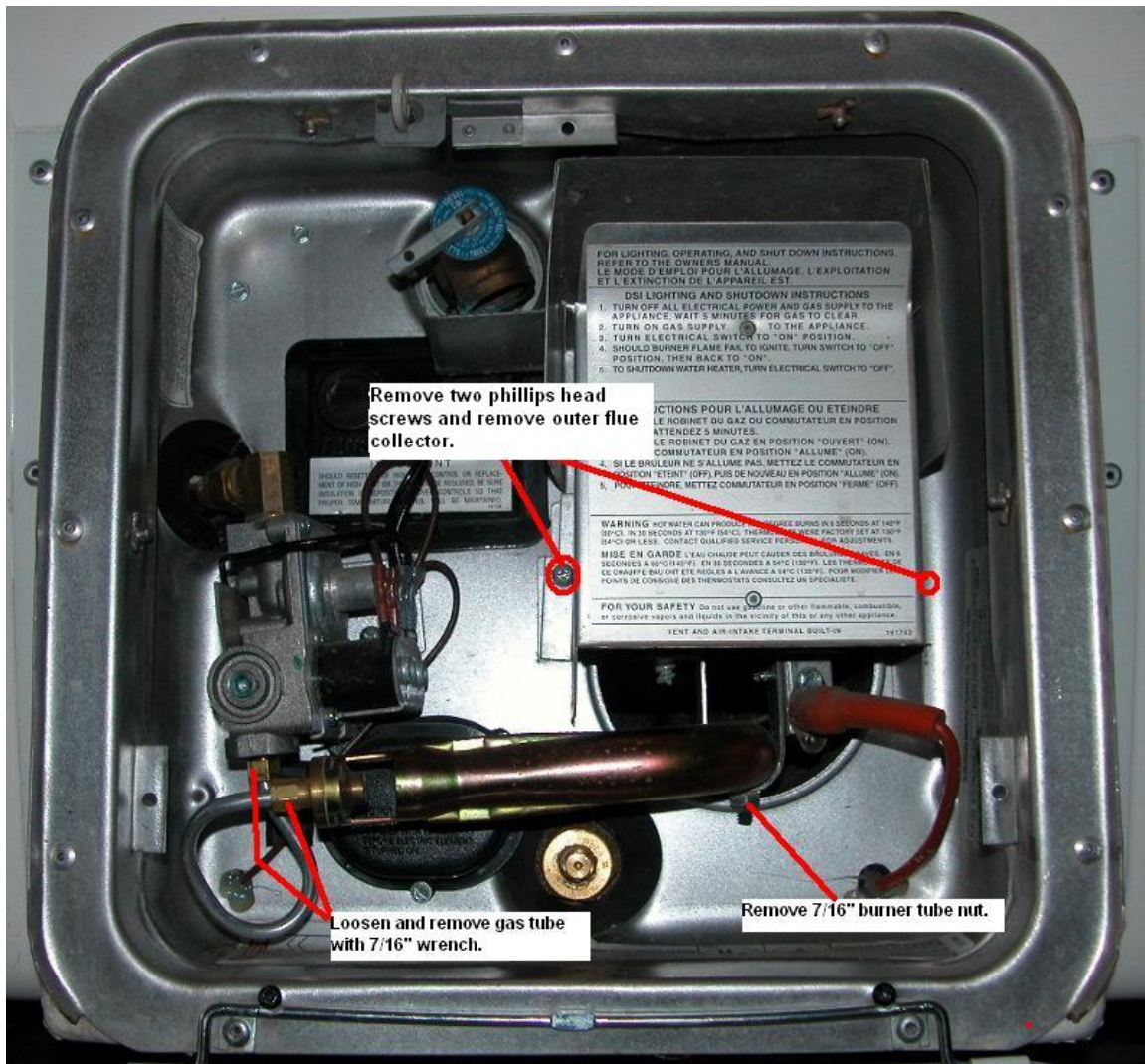
In reverse order reinstall the components, make sure the water heater is full of water. Run the water heater for proper operation and test for leaks at gas line connections with Windex or soapy water mixture. Gas will only flow from the gas valve when the water heater is running. Make sure you do not spray water into the air mixture opening of the burner tube when checking for gas leaks.

Caution; the gas tube nuts (Loxit nuts) are made of brass and the gas line is made of aluminum. These items can be easily over tightened or bent. When removing the burner tube, take care not to put too much force on the gas line! When tightening the gas tube, firmly hold the burner tube while you tighten the Loxit nut.

Note: If possible use a **Flare Nut Wrench**, when loosening or tightening the Loxit nut on the gas line.



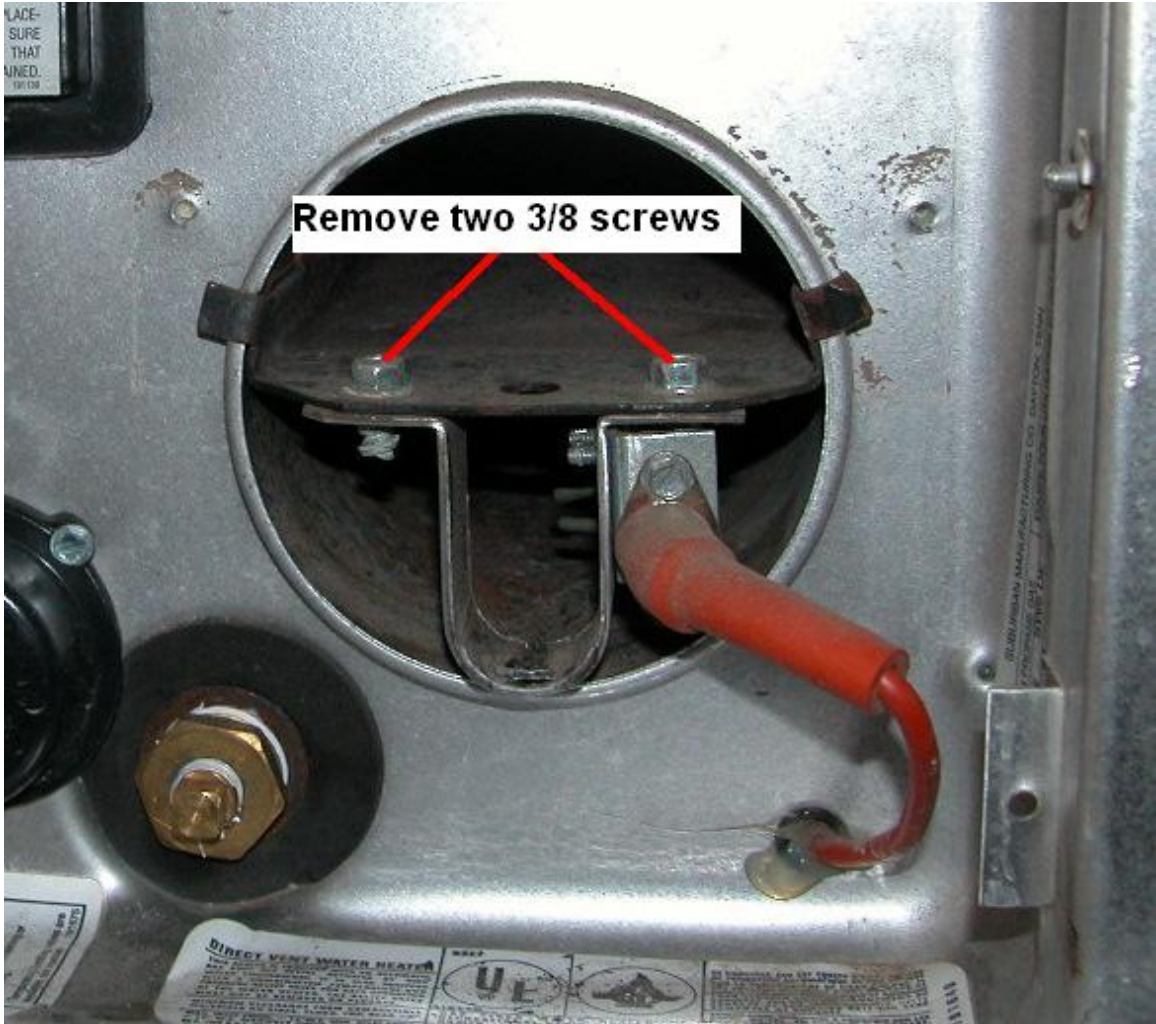
Flare Nut Wrench



Remove two phillips head screws and remove outer flue collector.

Loosen and remove gas tube with 7/16" wrench.

Remove 7/16" burner tube nut.



Remove two 3/8 screws



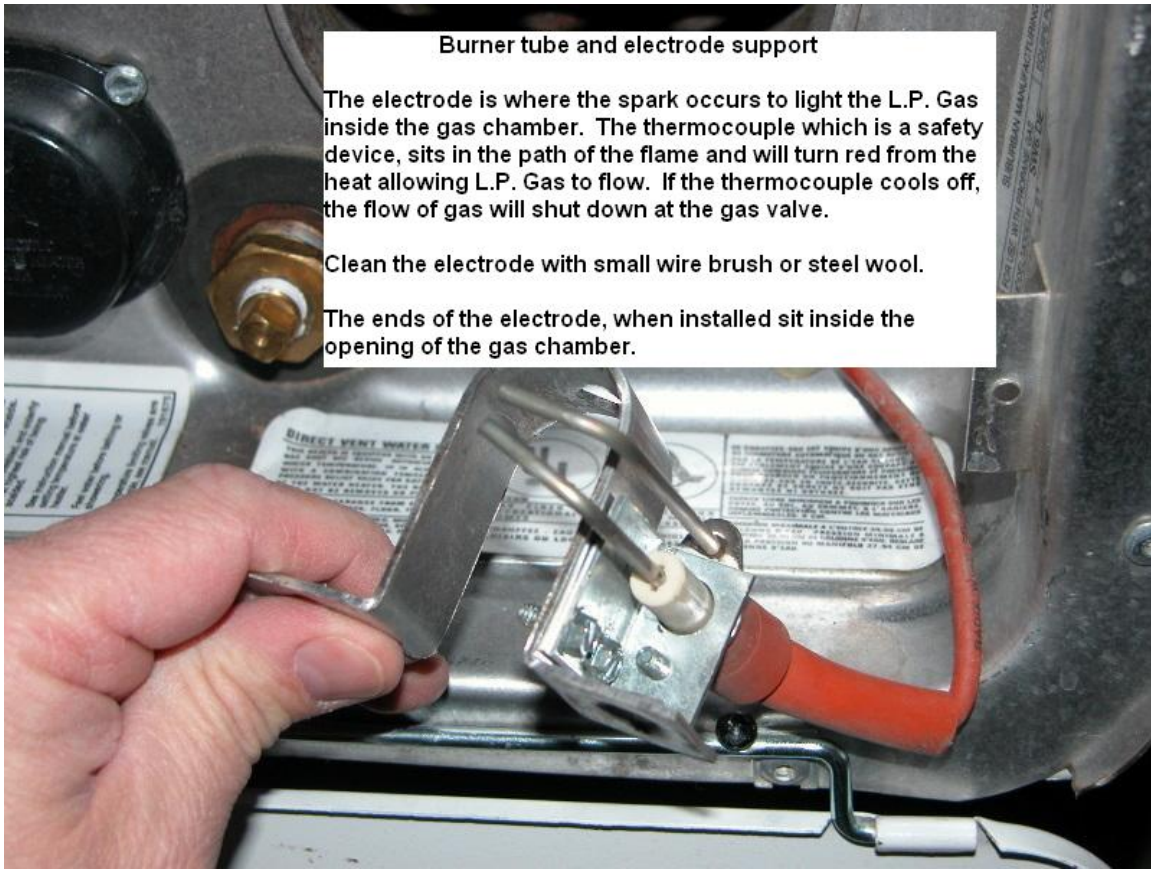
View with outer flue, Gas line, burner tube and electrode removed.

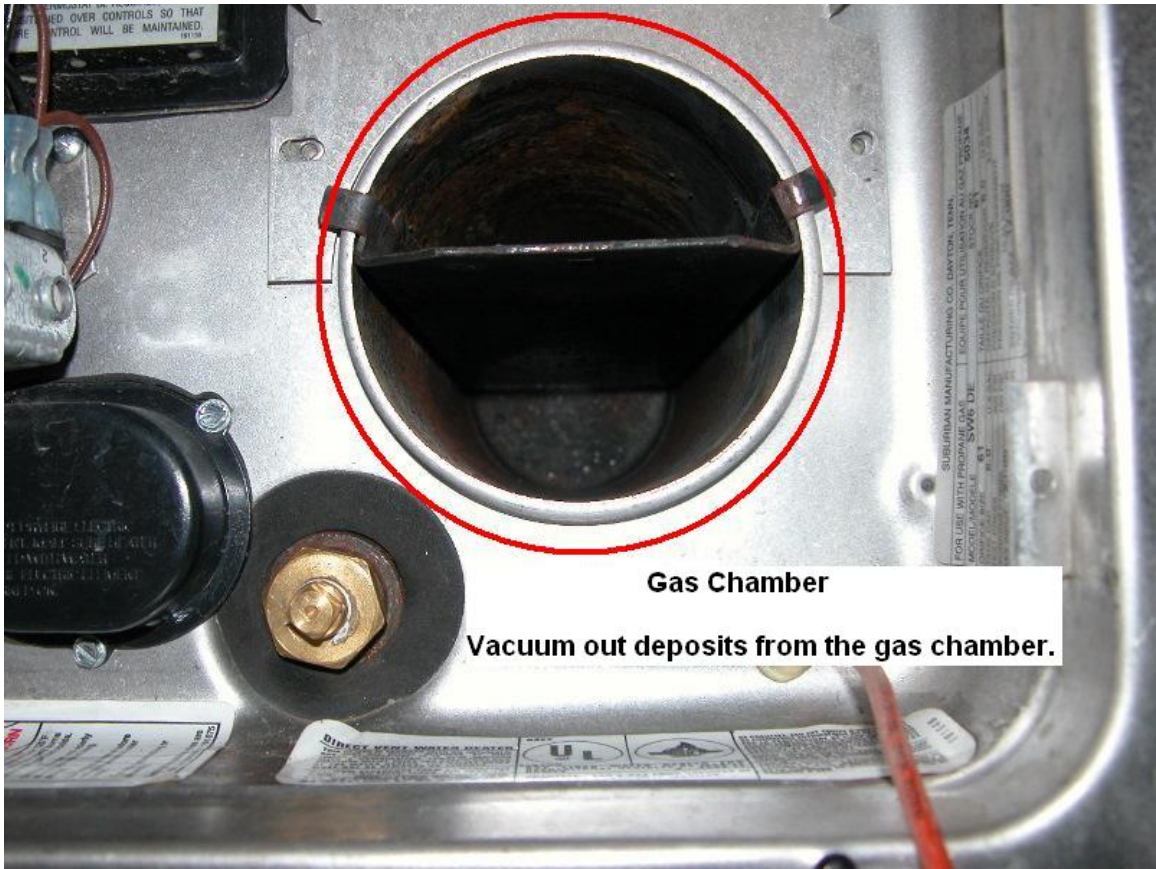
Burner tube and electrode support

The electrode is where the spark occurs to light the L.P. Gas inside the gas chamber. The thermocouple which is a safety device, sits in the path of the flame and will turn red from the heat allowing L.P. Gas to flow. If the thermocouple cools off, the flow of gas will shut down at the gas valve.

Clean the electrode with small wire brush or steel wool.

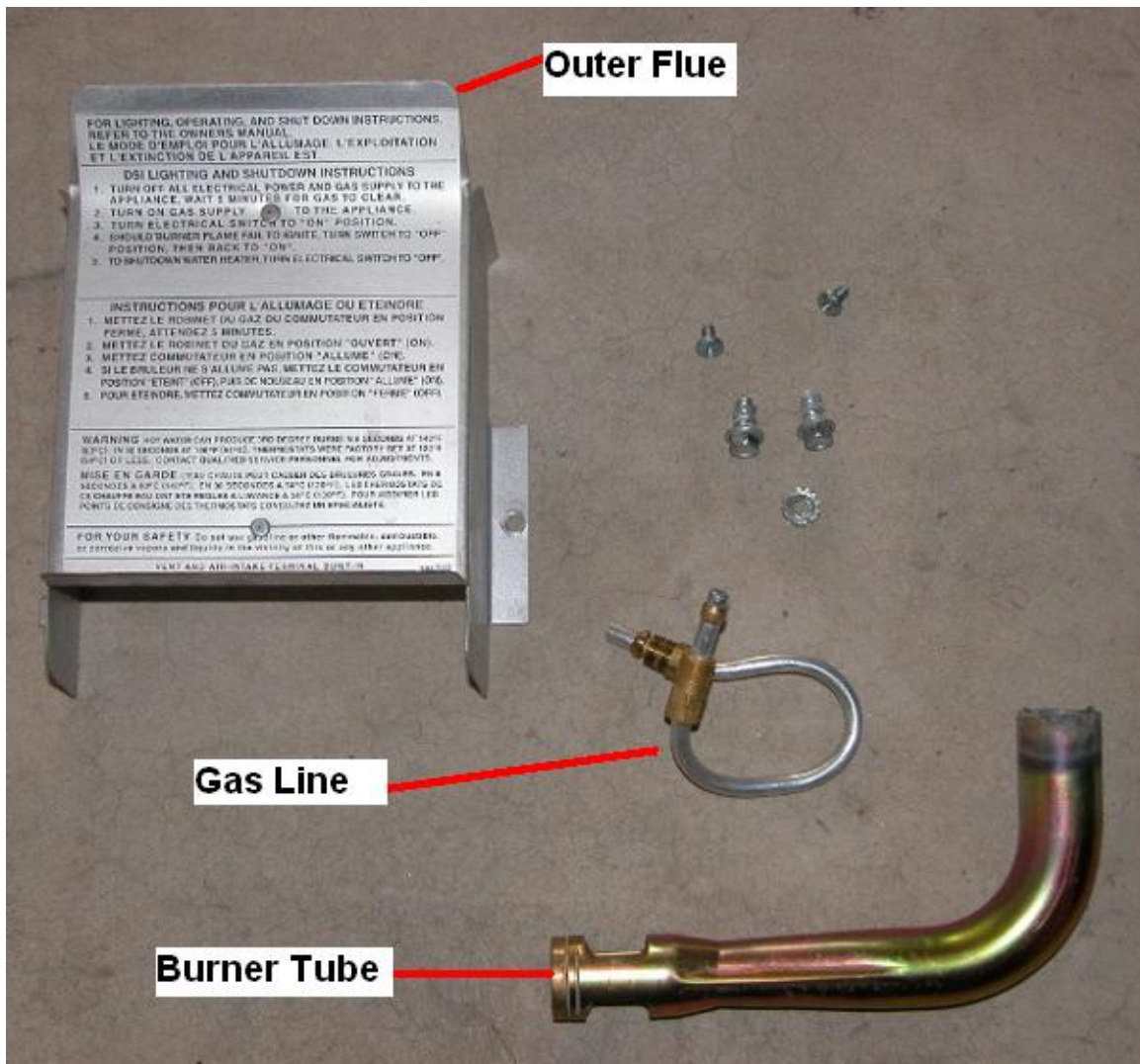
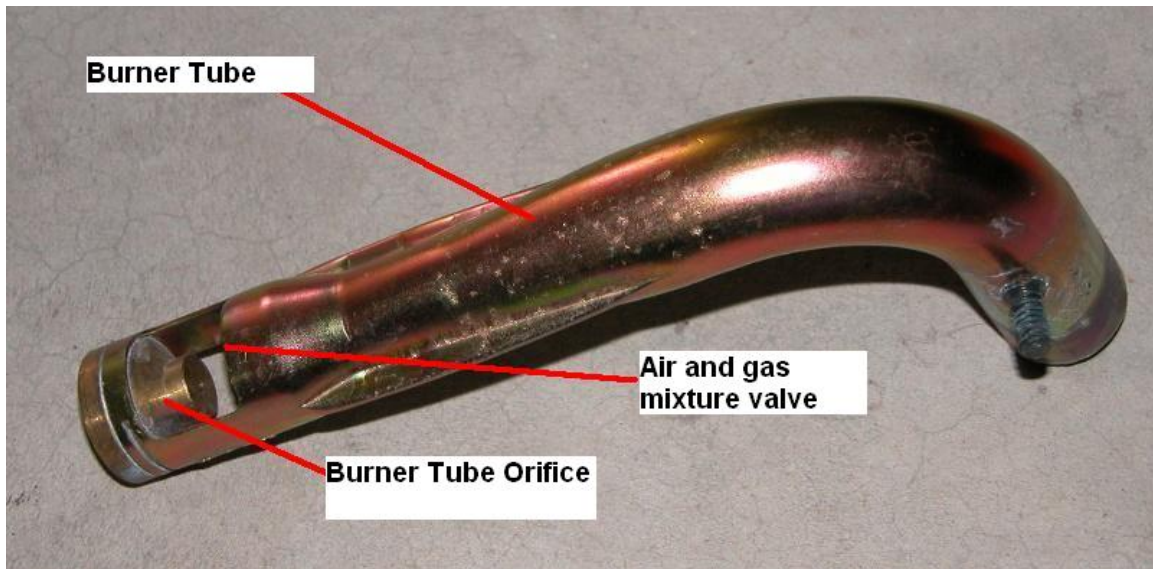
The ends of the electrode, when installed sit inside the opening of the gas chamber.





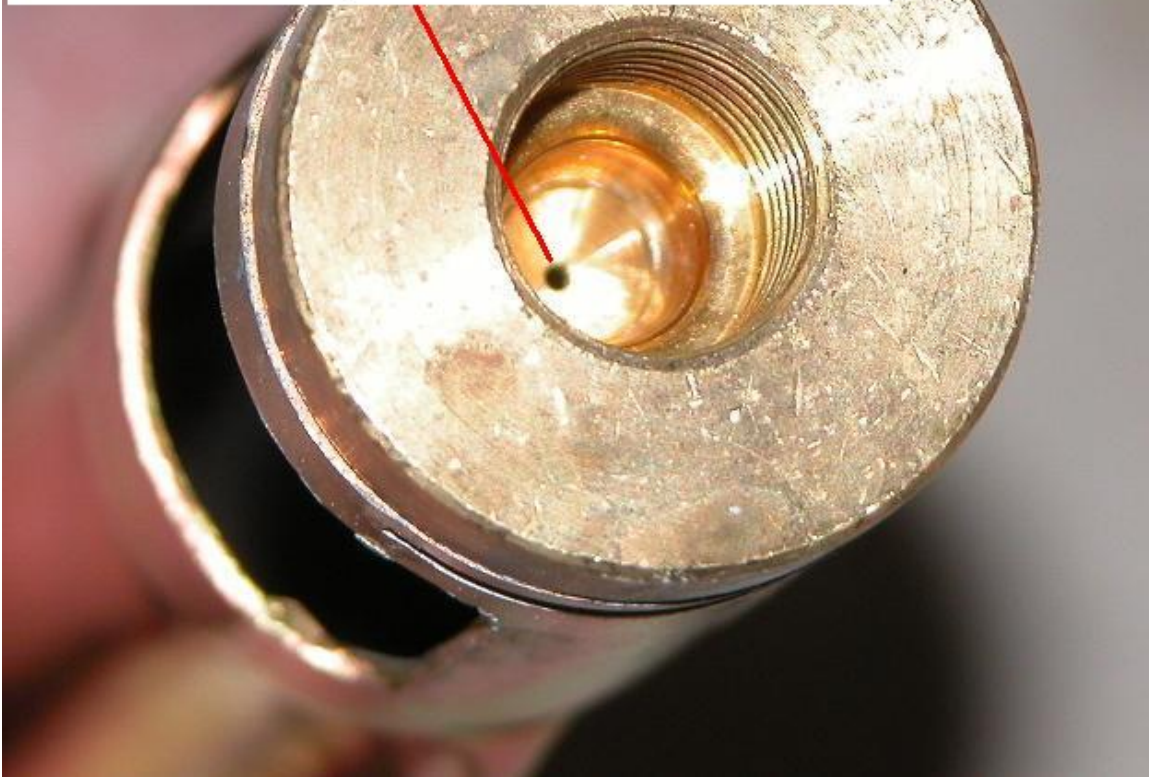
Gas Chamber

Vacuum out deposits from the gas chamber.



View from gas line connection point on burner tube. Do not stick anything into the small hole or damage will occur.

Clean burner tube and orifice with carburetor cleaner and blow out with compressed air from "Air In a Can" or air compressor.



This is the end of the burner tube where the flame enters into the gas chamber.

When installed and operating, you want to see a blue flame with small amount of orange at the end of the flame.

If you have a yellow flame the gas mixture is not correct and servicing is needed!

