

## **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.

# Suburban 6 Gallon DSI SW6DE Water Heater

Pressure Relief Valve, Do not open this valve to drain the water heater faster. Instead open the outside shower valve or a faucet inside the trailer to drain the WH faster.

High Limit reset switches. 12V DC on right. 110V AC on left.

FOR LIGHTING, OPERATING, AND SHUT DOWN INSTRUCTIONS, REFER TO THE OWNERS MANUAL.  
LE MODE D'EMPLOI POUR L'ALLUMAGE, L'EXPLOITATION ET L'EXTINCTION DE L'APPAREIL, EST

DSI LIGHTING AND SHUTDOWN INSTRUCTIONS

1. TURN OFF ALL ELECTRICAL POWER AND GAS SUPPLY TO THE APPLIANCE. WAIT 5 MINUTES FOR GAS TO CLEAR.
2. TURN ON GAS SUPPLY TO THE APPLIANCE.
3. TURN ELECTRICAL SWITCH TO "ON" POSITION.
4. SHOULD BURNER FLAME FAIL TO IGNITE, TURN SWITCH TO "OFF" POSITION, THEN BACK TO "ON".
5. TO SHUTDOWN WATER HEATER, TURN ELECTRICAL SWITCH TO "OFF".

INSTRUCTIONS POUR L'ALLUMAGE OU ETEINDRE

1. METTEZ LE ROBINET DU GAZ OU COMMUTATEUR EN POSITION FERME. ATTENDEZ 5 MINUTES POUR LE GAZ SE DIVERGIR.
2. METTEZ LE ROBINET DU GAZ EN POSITION "OUVERT".
3. METTEZ COMMUTATEUR EN POSITION "ON".
4. SI LE BRULEUR NE S'ALLUME PAS, METTEZ LE COMMUTATEUR EN POSITION "ETEND" (OFF), PUIS DE NOUVEAU EN POSITION "ALLUMAGE".
5. POUR ETEINDRE, METTEZ COMMUTATEUR EN POSITION "FERME".

WARNING: HOT WATER CAN PRODUCE 3RD DEGREE BURNS IN 6 SECONDS AT 140°F (60°C). IN 18 SECONDS AT 120°F (54°C). THERMOSTATS WERE FACTORY SET AT 120°F (54°C) OR LESS. CONTACT QUALIFIED SERVICE PERSONNEL FOR ADJUSTMENTS.  
MISE EN GARDE: L'EAU CHAUDE PEUT CAUSER DES BRULURES GRAVES EN 6 SECONDES A 60°C (140°F). EN 18 SECONDES A 54°C (120°F). LES THERMOSTATS DE CHAUFFE-EAU ONT ETE REGLES A L'AVANCE A 54°C (120°F). POUR RECEVOIR LES POINTS DE CONSEILS DES THERMOSTATS, CONSULTEZ UN SPECIALISTE.

FOR YOUR SAFETY Do not use propane or other flammable, combustible, or corrosive vapors and fluids in the vicinity of this or any other appliance.  
VENT AND AIR-INTAKE TERMINAL BUILT-IN

Front Flue Collector

L.P. Gas Valve

110v AC heating element is behind the burner tube. The On/Off switch for the heating element is behind the gas line.

The On/Off switch of the water heater circuit breaker inside the trailer should always be in the off position when the water heater is empty. If not, the heating element will over heat if AC power is applied which will trip the high limit reset switch shutting AC power down to the heating element.

Burner Tube

Electrode/Thermocoupler

Anode Rod / Drain



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.

FOR LIGHTING, OPERATING, AND SHUT DOWN INSTRUCTIONS, REFER TO THE OWNER'S MANUAL. LE MODE D'EMPLOI POUR L'ALLUMAGE, L'EXPLOITATION ET L'EXTINCTION DE L'APPAREIL EST.

- DSI LIGHTING AND SHUTDOWN INSTRUCTIONS
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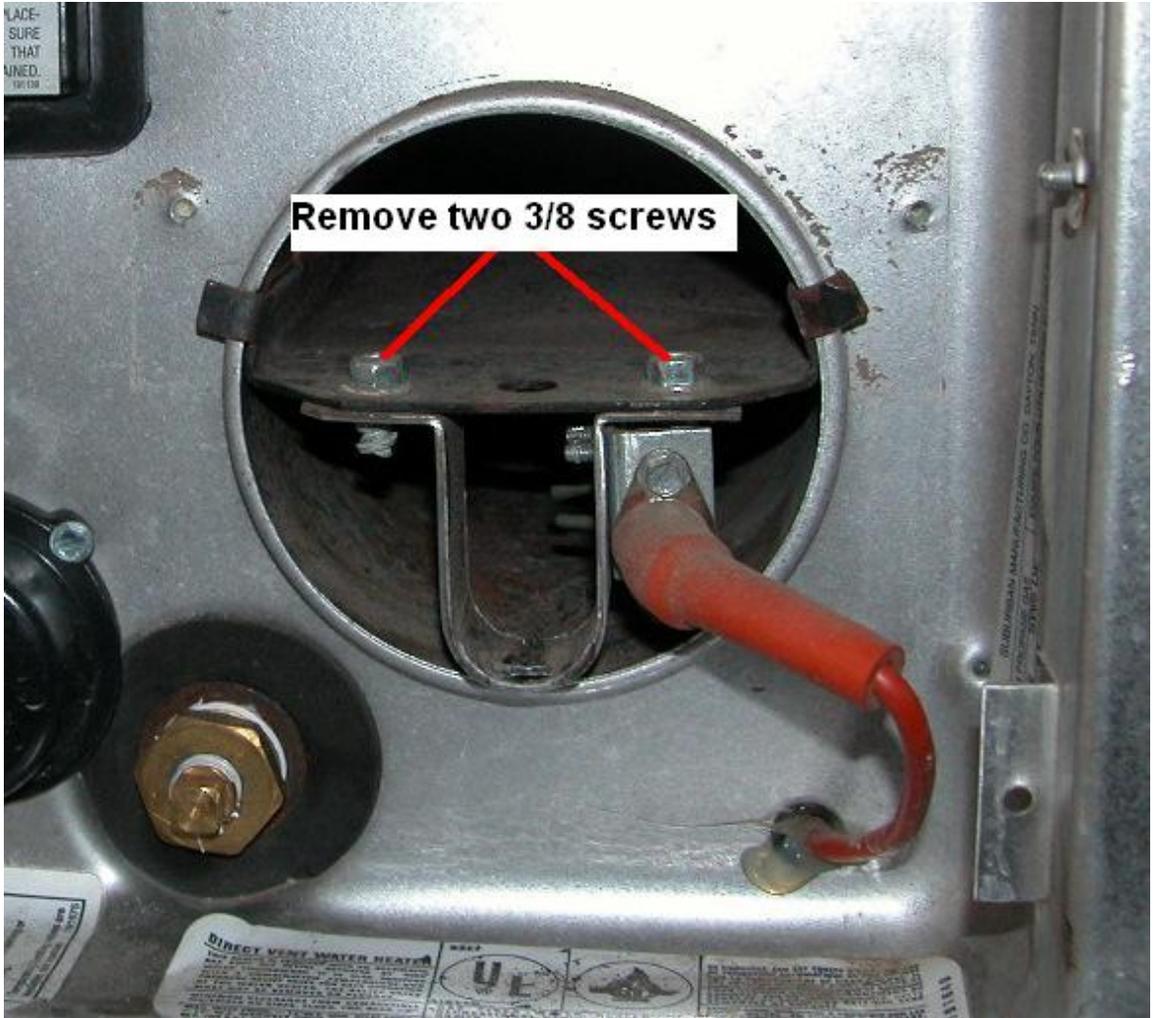
- INSTRUCTIONS POUR L'ALLUMAGE OU ETEINDRE LE ROBINET DU GAZ OU COMMUTATEUR EN POSITION
1. ATTENDEZ 5 MINUTES.
  2. LE ROBINET DU GAZ EN POSITION "OUVERT" (ON). COMMUTATEUR EN POSITION "ALLUME" (ON).
  3. SI LE BRULEUR NE S'ALLUME PAS, METTEZ LE COMMUTATEUR EN POSITION "ETEINT" (OFF), PUIS DE NOUVEAU EN POSITION "ALLUME" (ON).
  4. POUR ETEINDRE, METTEZ COMMUTATEUR EN POSITION "FERME" (OFF).

WARNING: HOT WATER CAN PRODUCE STEAM BURNS IN 2 SECONDS AT 140°F (60°C). IN 30 SECONDS AT 180°F (82°C), THE DANGER FACTOR IS AT 1200°F (538°C) OR LESS. CONTACT QUALIFIED SERVICE PERSONNEL FOR ADJUSTMENTS.

MISE EN GARDE: L'EAU CHAUDE PEUT CAUSER DES BRULURES EN 2 SECONDES A 140°C (284°F). EN 30 SECONDES A 180°C (356°F), LES DANGERS DE CE CHAUFFE-BAU ONT ETE REGLES A L'AVANCE A 540°C (1000°F). POUR MODIFIER LES POINTS DE CONSIGNE DES THERMOSTATS, CONSULTEZ UN SPECIALISTE.

FOR YOUR SAFETY Do not use gas or other flammable, combustible, or corrosive vapors and liquids in the vicinity of this or any other appliance.

VENT AND AIR INTAKE TERMINAL BUILT-IN 151742



Remove two 3/8 screws



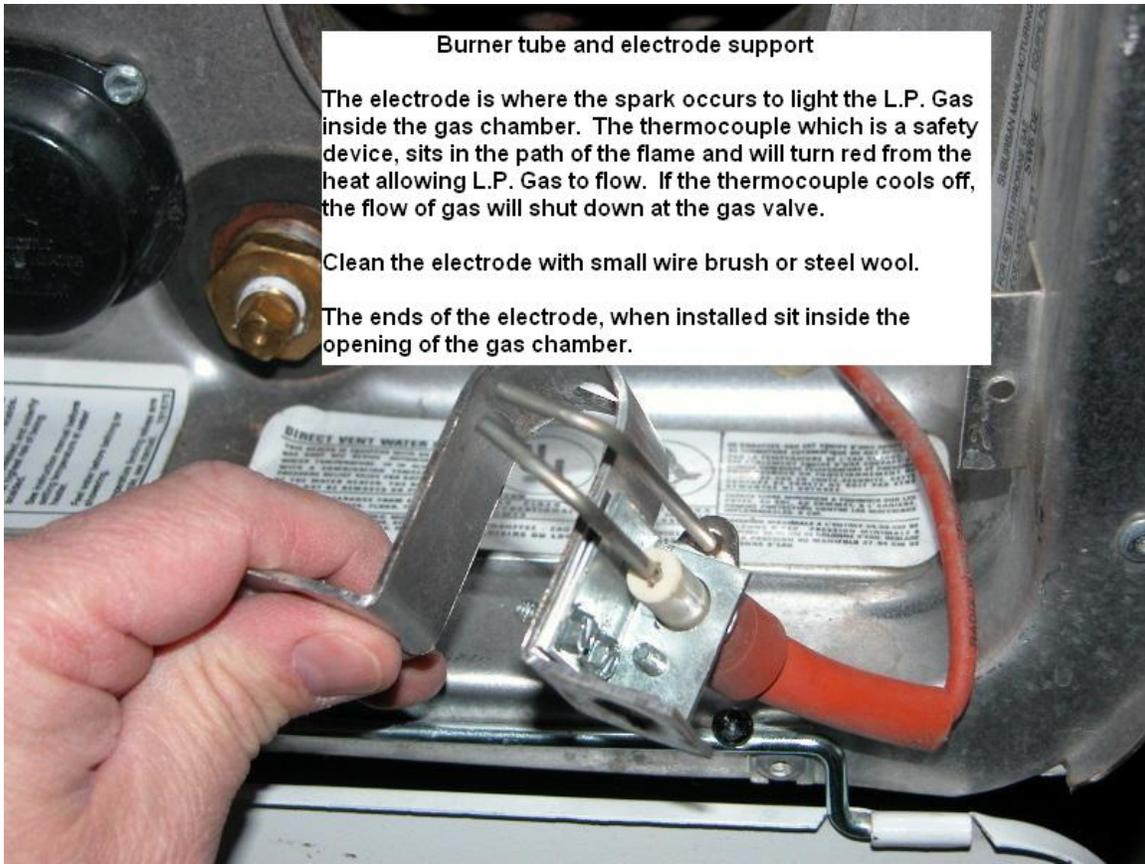
View with outer flue, Gas line, burner tube and electrode removed.

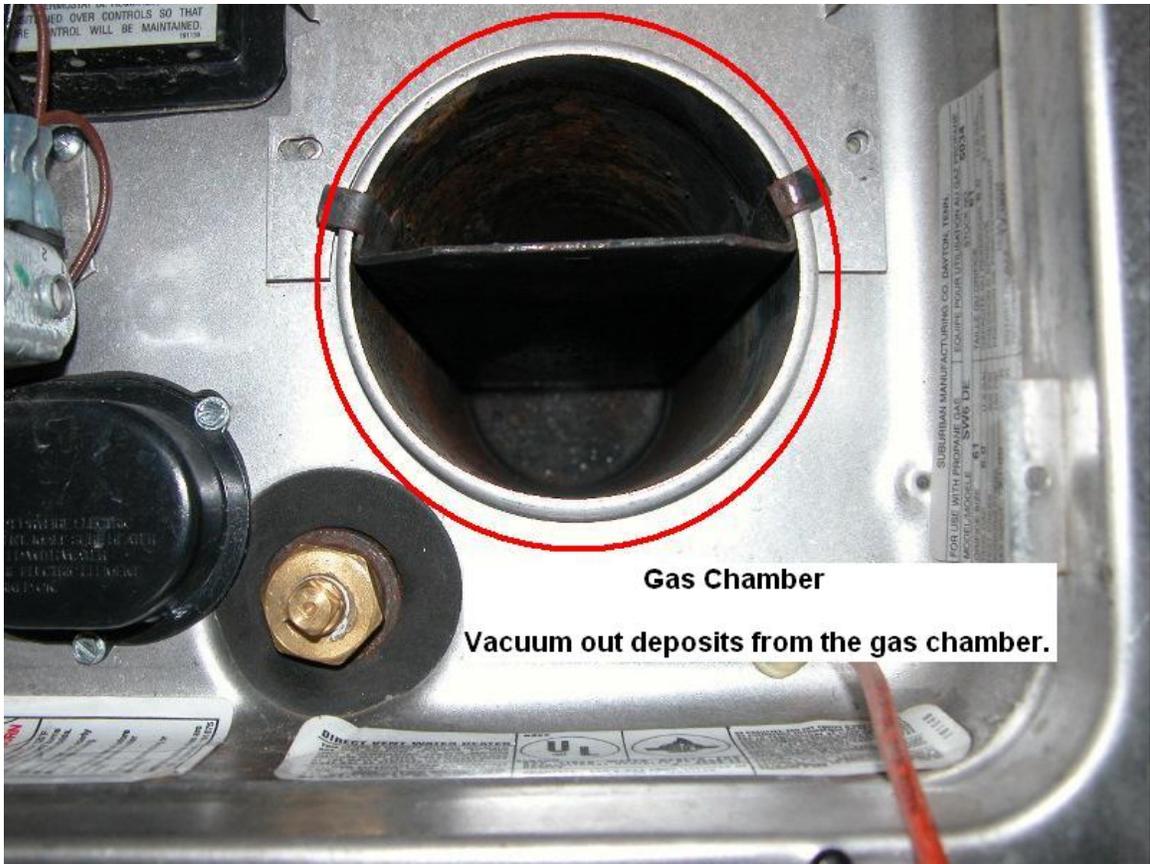
### Burner tube and electrode support

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.

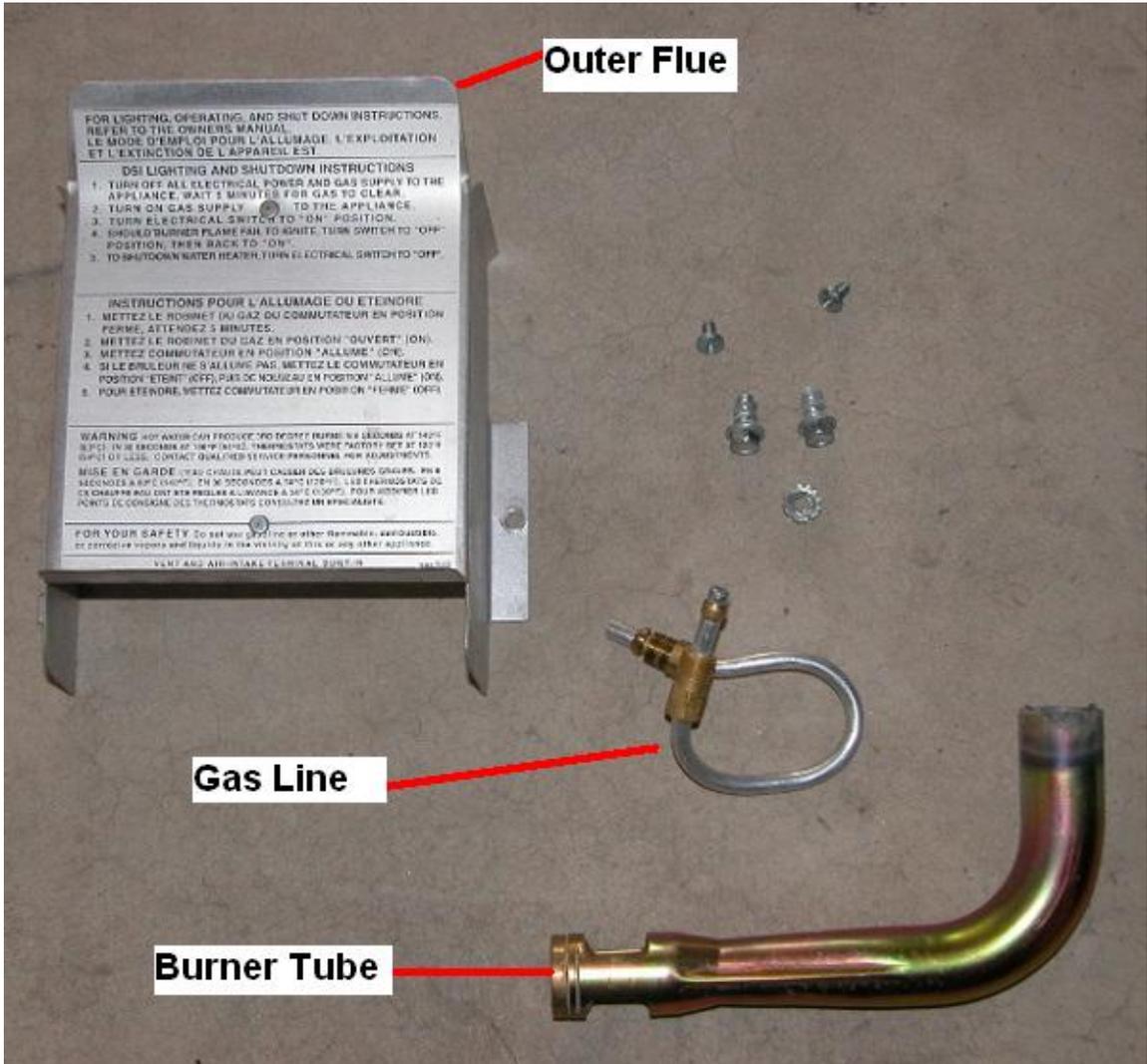
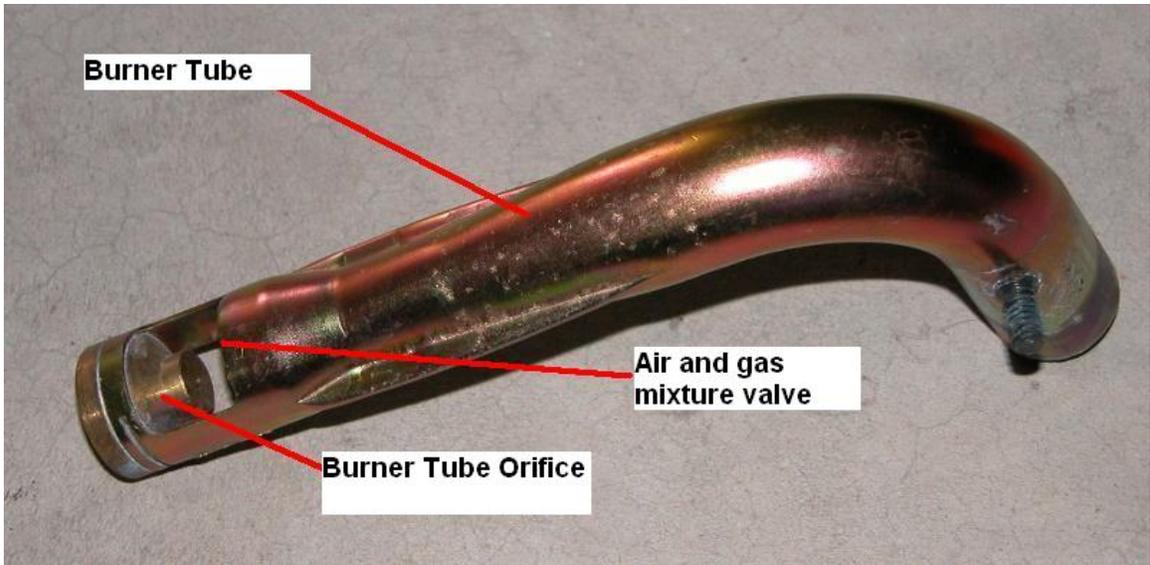
The ends of the electrode, when installed sit inside the opening of the gas chamber.





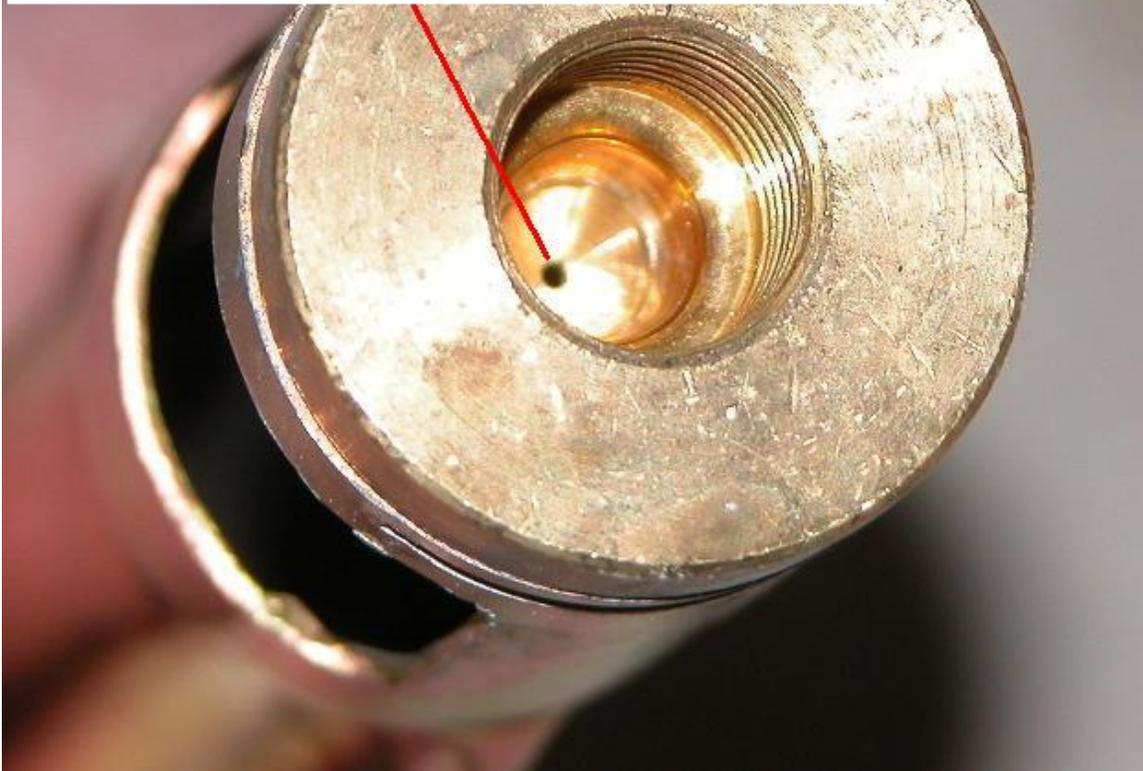
**Gas Chamber**

**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!

