

**MODERN HOME PRODUCTS**

*The People That Pioneered Gas BBQ Grills and Gas Yard Lamps*



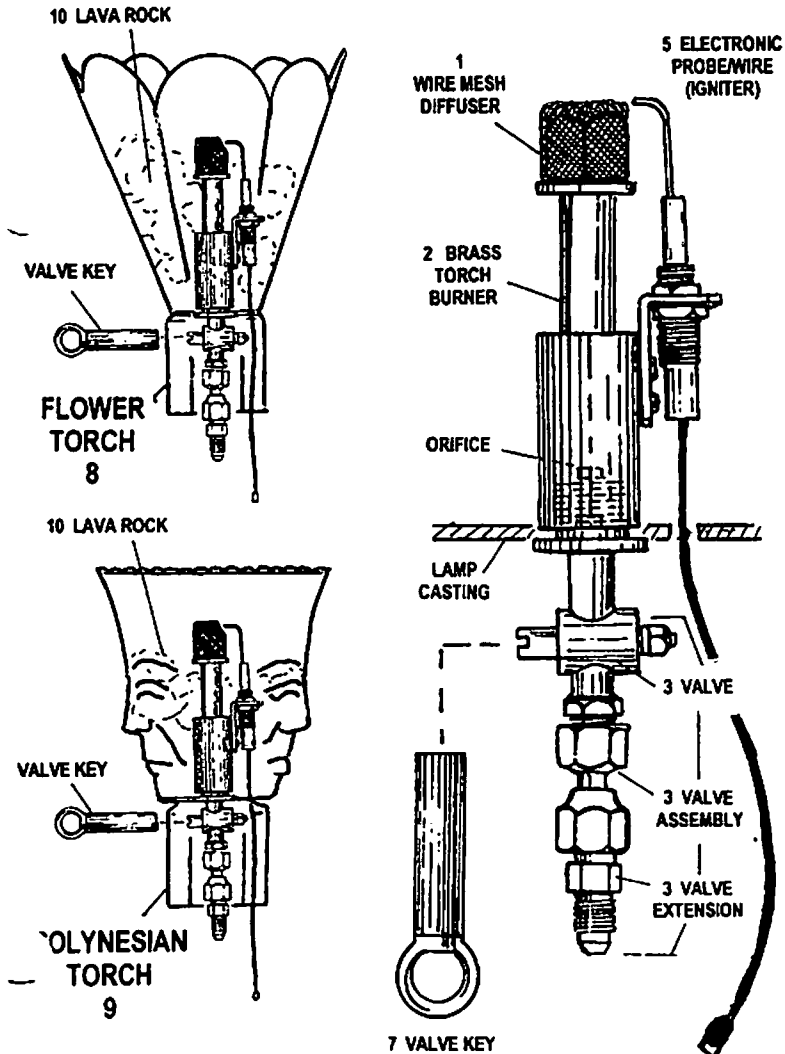
# ELECTRONIC GAS TORCH INSTALLATION & MAINTENANCE

## SPECIAL NOTE

Torches are set for 7" Water Column pressure on natural gas and 11" W.C. pressure for LP gas.

<p><b>FOR YOUR SAFETY</b> If you smell gas:</p> <ol style="list-style-type: none"> <li>1. Shut off gas to appliance.</li> <li>2. Extinguish any open flame.</li> <li>3. If odor continues, immediately call your gas supplier.</li> </ol>	<p><b>FOR YOUR SAFETY</b> Do not place combustible materials near this appliance. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.</p>	<p><b>FOR YOUR SAFETY</b> The installation of this torch must conform with all local codes or, in the absence of local codes, with the latest edition of the National Fuel Gas Code ANS Z21.42-1993.</p>
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**THESE INSTRUCTIONS SHOULD BE LEFT WITH THE CONSUMER.  
KEEP THESE INSTRUCTIONS FOR FURTHER REFERENCE.**



ITEM PART NO.	DESCRIPTION
1 BR-SG	WIRE MESH DIFFUSER
2 BTB	BRASS TORCH BURNER
3 GLV-N	NATURAL GAS VALVE ASSEMBLY FT ORIFICE #46 PT #53
GLV-P	PROPANE GAS VALVE ASSEMBLY FT ORIFICE #53 PT #59
4 PIB	ELECTRONIC MODULE HOUSING
5 ELIW	PROBEWIRE COMBINATION
6 EIB	ELECTRONIC MODULE
7 GLK	VALVE KEY
8 LAFT	CAST ALUMINUM FLOWER TORCH CASTING
9 LAPT	CAST ALUMINUM POLYNESIAN TORCH CASTING
10 NA	LAVA ROCK
11 POBE	ELECTRONIC POST 6 FT. PATIO MOUNT 7 FT. 9 INCH IN-GROUND POST
12 ABA	CAST ALUMINUM BASE INCLUDED WITH PATIO/DECK PACKAGE ONLY

Both the Electronic Flower Torch and the Electronic Polynesian Torch are designed to be mounted on a specially prepared and punched 3 in. Post that accommodates an electronic module control and spark generator.

**Note:** Torches are for outdoor installation ONLY and must be installed at least 60" (5 feet) from any combustible materials.

**Note:** It is also important to match your torch for the proper gas. THERE IS A DIFFERENCE! Make sure you specify Natural Gas or Propane.

**NOTE: YOUR TORCH IS FACTORY ASSEMBLED WITH THE BURNER AND VALVE ALREADY IN PLACE. DO NOT DISASSEMBLE!**

## ATTACHING TORCH ONTO POST

**Note: Your torch is factory assembled with the Burner and Valve already in place. DO NOT DISASSEMBLE.**

With help or alone (perhaps an extra hand on another ladder) carefully lower the Torch assembly to the flare fitting and start threading to the Valve Assembly by hand. Direct the Electrode Wire down through the center of the coiled copper tubing so that the terminal end exits the "window" in the side of the post.

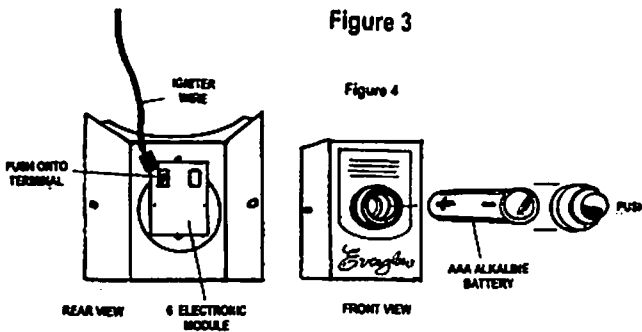
Insert the Valve Key into the torch slip fitter valve hole and onto the valve to act as a 'Valve Positioner' while tightening the flare nut. Carefully tighten the flare nut to the Valve Assembly using **two wrenches**. You **must** hold the valve body with one wrench and tighten with another. The Key will keep the valve in position. Turn the Key to the OFF position.

Turn ON the Main gas supply and check for leaks at your two connections which are now under pressure. A 50/50 mix of dish soap and water will show bubbles if leaking. If OK, turn OFF main gas supply, position the torch on the post and lock the set screws.

## ELECTRONIC MODULE INSTALLATION

The Electronic Module is already mounted inside the Post Mounting Box. Carefully push the wire terminal end into the module terminal hole which has a metal connector. Fasten the mounting box to the post with the two screws provided.

Install the battery (size AAA Alkaline, supplied). Insert the PLUS (+) end first. **Make sure the gas is OFF!** Hand screw the push button over the battery and push to test for spark. It may be hard to see a spark in daylight, but it should be visible as it jumps the 1/8" gap and you should hear a distinct snapping sound..



Your Burner spark gap has been set at the factory, but may have changed in handling during the installation process. A 1/8 inch gap is the best compromise between Natural Gas and Propane ignition.

Finish the installation by carefully placing lava rock pieces into the torch to surround the burner. Try to keep the rock from contacting the electrode itself. In humid weather, damp lava rock can take the spark away from the gas portt.

To light the torch, turn the key to the ON position and push the igniter button. Ignition should occur in several seconds. If not see the trouble shooting guide.

### NO IGNITION

#### POSSIBLE CAUSE

#### REMEDY

#### AIR IN LINE

Allow enough time for gas to purge air from the system, especially at the initial start up. Check for joint leaks.

#### POOR OR NO SPARK

Check gap size and verify the arc is to the metal burner gas port, not to lava rock. Check wire connection at box

#### POOR GROUND

Make sure igniter wire is not shorted to the inside of the post. Make sure no lava rock is contacting the wire probe or diffuser screen.

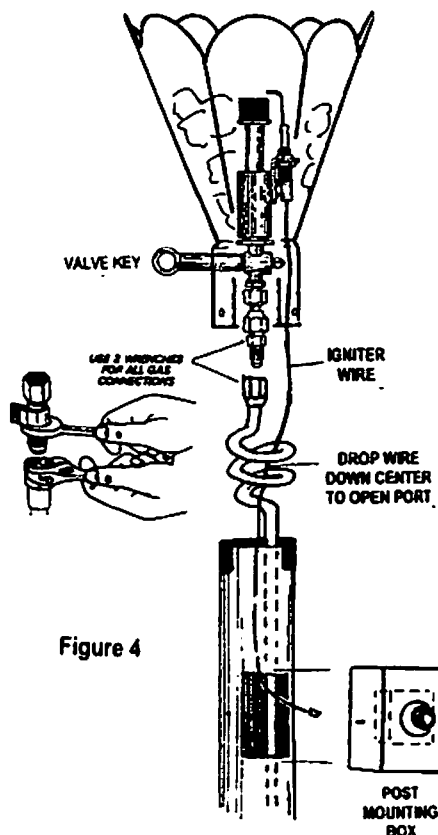


Figure 4

## POST & TUBING

The proper post and copper tubing selection is essential. Your local gas company or an authorized MHP Distributor can supply these parts. It is recommended that internally tinned  $\frac{1}{4}$ " soft copper tubing be used although tubing without tinning may be substituted.  $\frac{1}{4}$ " flare nuts should be used on both ends. The MHP part number for a 3" post with internals is POB-I (Black) or POW-I (White).

**NOTE:** The torch is for outdoor installation only and must be installed at least 60" (5 ft.) in any direction from any combustible materials.

### POST INSTALLATION

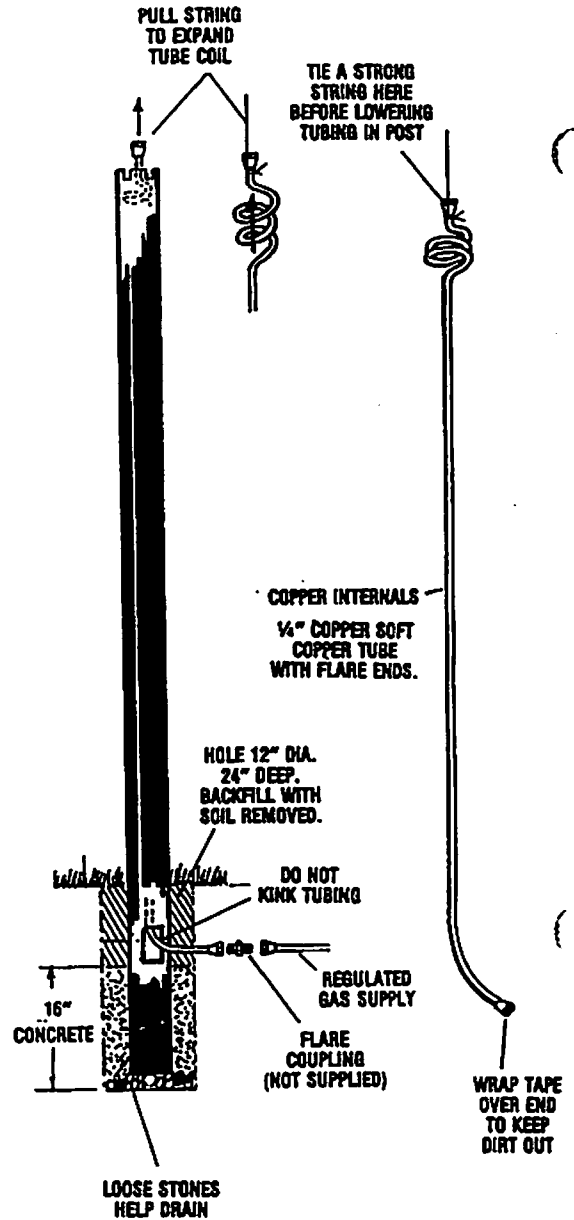
1. Dig a hole approximately 12 inches in diameter and 24 inches deep. Place some large gravel at the bottom for the post to rest on.
2. Set the post in the center of the hole. Brace the post in a plumb (vertical) position and pour concrete (about 1, 80 lb. bag) around the post to just below the gas line access hole. LET THE CONCRETE SET HARD BEFORE CONTINUING.
3. Trench the gas line from the house. There must be a gas shut off valve in a convenient location on the gas supply line. The trench can be 8" to 10" deep and the gas line can be protected from accidental digging by laying some treated boards on top before back filling.

### PUT TUBING IN POST

1. Put some tape over the lower end of the copper tubing before lowering it into the post. This will keep dirt out until the connection is made. Also, tie a piece of strong string on the upper end of the tubing. As the tubing is lowered, gently pull the lower end from the access hole forming a slow curve out to the trench. Try NOT to kink the tubing. If a kink occurs, squeeze the tubing at the kink with pliers to reform it.
2. Connect the internal tubing to the gas supply line in the trench using a flare coupling (not supplied) of  $\frac{1}{4}$ " on the torch end and fitted to the supply line flare on the other end. No sealant is necessary for flare fittings. USE TWO WRENCHES FOR TIGHTENING.
3. At the top of the post, pull the string to stretch the copper tubing coils and raise the top flare fitting. Remove the string.

### INSTALL TORCH

1. Holding only the valve, screw the upper  $\frac{1}{4}$ " flare nut to the valve bottom. Use two wrenches and tighten.
2. Put a fiber washer over the upper section of the valve and insert the valve into the center hole in the bottom of the torch. Carefully lower the torch onto the valve and the torch onto the post. Take care not to crimp or kink the tubing.
3. Align the slot in the top of the post with the screwdriver access hole in the torch collar AND align the valve ON/OFF stem with the access hole also. Tighten the lock screw in the collar to hold the torch to the post. The torch may be repositioned to face a different direction after the valve and burner are tightened together by loosening the collar lock screw.



4. Drop a second fiber washer inside the torch over the valve and thread the torch burner onto the valve. Keep the valve from turning by inserting a screwdriver through the access hole in the collar. Tighten the burner using a  $\frac{3}{4}$ " socket wrench while holding the valve.
5. Be certain the torch gas valve is in the OFF position (screwdriver slot horizontal). Turn on the main gas supply and check all connections for leaks. Use a 50/50 mix of detergent and water. Retighten all leaks as necessary.
6. Using a long butane lighter or suitable fireplace match, turn on the torch valve and light the torch at the top of the diffuser screen. THE INITIAL LIGHTING MAY GENERATE A QUICK BURST OF FLAME.

**CAUTION:** While in operation and for some time after extinguishing, the torch body will be very hot!