

MAGNUM ZC GAS

INSTALLATION AND OPERATION MANUAL

The Magnum ZC Zero Clearance Wood/Gas burning appliance can be adapted for use either with Wood or Gas. Particular attention needs to be paid to the following guidelines for installation and operation of your Magnum ZC appliance.

- ◆ Installation requirements of the Magnum ZC appliance are the same whether you are installing it for wood or gas.
- ◆ 2100-degree metal insulated or metal air-cooled venting must be used with wood and/or gas.
- ◆ All clearance requirements are the same for gas as it is for wood burning.
- ◆ Do not burn wood in a Magnum ZC that has been changed over to gas unless the gas log kit has been removed by a professional service man trained to work on the Magnum ZC appliance.

- ◆ Do not operate the Magnum ZC gas equipped appliance until you have read and understand the operations section of this manual.

INSTALLATION OF THE SP-40-ZC GAS LOG

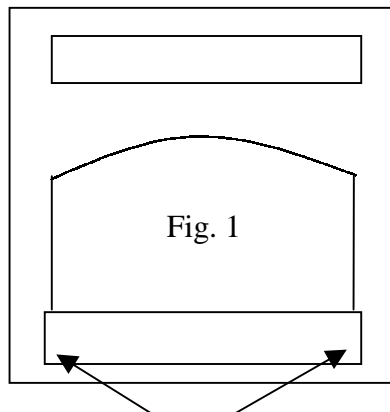
IMPORTANT: THE MAGNUM SP-40-ZC GAS LOG KIT MUST BE INSTALLED BY A TRAINED GAS TECHNICIAN

Tools needed: small flat screwdriver - #2 Phillips head screwdriver - hammer - punch - gas piping wrenches including pipe cutters, testing equipment and pressure testing equipment - electric or portable drill with drill bits and nut drivers - knife or hack saw blade

INSTALLATION: If you are installing the SP-40-ZC gas log kit in a Magnum ZC appliance that has been in operation as a wood burning appliance you will need to do the following.

- ◆ make sure that the chimney has been cleaned and checked for defects
- ◆ cover the floor in front of the Magnum ZC to make sure that the carpet etc does not get dirty
- ◆ vacuum out the entire firebox to get rid of ash and smoke buildup
- ◆ take out the bottom and side firebrick and put them in a box for storage in case the homeowner wants to have the unit changed back to wood at some time in the future.
- ◆ take off the Fireplace doors and put them in a secure place or open them wide open.

Whether you are installing the gas option in a new unit or existing Magnum ZC appliance you will need to run a gas line into the bottom area of the unit. This can be accomplished by running the gas line through one of the combustion air access inlets located on each side of the Magnum ZC. (you can locate these by opening the lower grill and looking to the left or right side of the unit) See Fig. 1. You will see a 5" diameter opening in the steel cabinet that has insulation covering the access. Take a knife or hack saw blade and cut a hole through the insulation the size of the gas line.



Access for the gas line can be seen by opening the lower grill.

Note: The gas line will have to be located on the left front side of the unit so make sure that you run the line around the bottom of the unit to the front left side with enough length to hook onto the gas valve that will be located in the center front of the unit.

There are (3) 1" diameter holes that will have to be drilled. The hole on the far right of the unit also has to be drilled all the way through the inner firebox and through the combustion air pan. This will give you access to the bottom of the unit where the gas line and wiring will be routed. See Fig. 2.

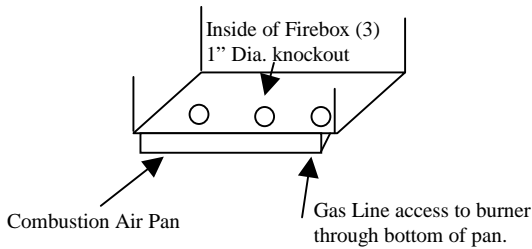


Fig. 2

Drill the right 1" dia. Hole 2" in from the right side and back 3 1/2" from the front door flange. The (2) 1" holes for the air inlet are located 9" from each side and 3 1/2" back from the front door flange. Drill these holes only through the inner firebox, not through the combustion air pan.

Take the SP-40-ZC gas log kit out of the box and check to make sure that all of the parts are enclosed.

The kit should include: Main burner pan - (2) bags of sand for natural gas or (2) bags of vermiculite for LP gas - (1) bag of burning embers - logs - valve (includes valve assembly bracket, spark igniter

assembly - spark igniter - hardware package bracket, attaching screws)

NOTE: Make sure that none of the parts are mixed up with the packaging and get thrown out. Sift through the packaging carefully and then set the parts out of the way so that they do not get stepped on and broken.

Assemble the valve to the valve assembly bracket using the (2) # 10-24 X 3/8" long screws provided and the (2) # 10 washers. Place the washers over the screws and align the gas valve so that the gas inlet is facing to the left. Tighten the screws securely.

Align the bracket on the combustion air pan located on the front center of the unit directly in from the lower grill. Use the (2) #10 self drilling and tapping screws provided to attach the bracket. Fig. 4.

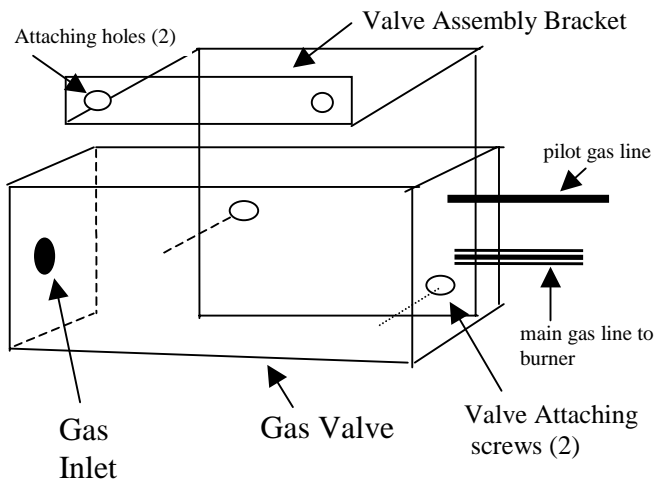


Fig. 3

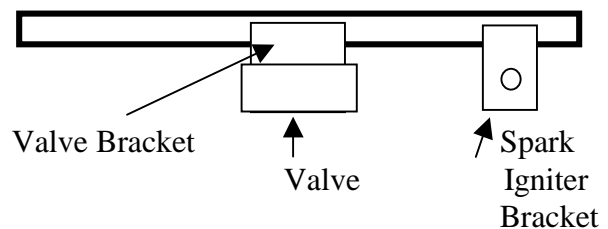


Fig. 4

Next attach the spark igniter bracket using the (2) #10 self drilling and tapping screws provided. The bracket needs to be located to the far right of the Combustion Air pan. See fig. 4. When locating the bracket make sure

that it is not in the way of the gas lines or the electrical box located on the inside right side of the cabinet.

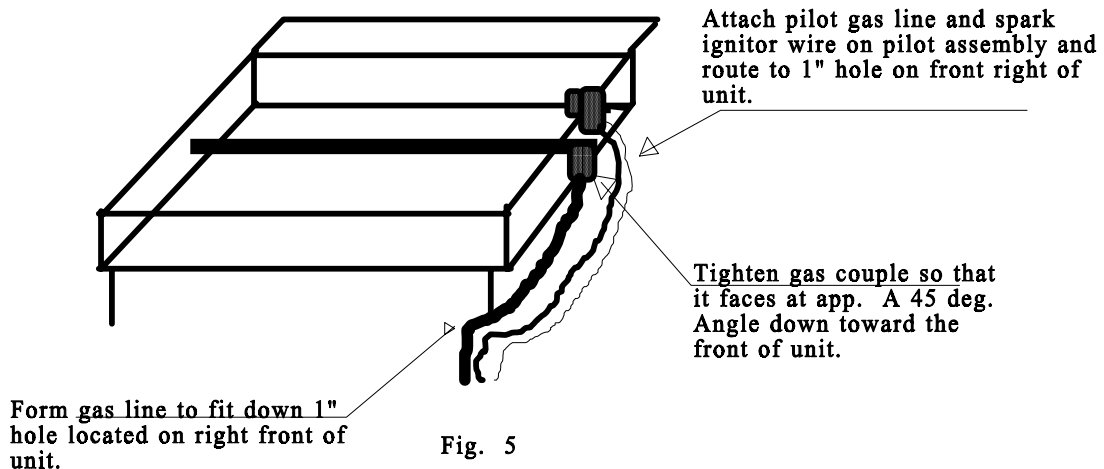
You can attach the spark igniter to the bracket hand tightening the plastic nut to make sure that it does not get over tightened or stripped. Make sure that the wire for the spark igniter is in place on the back of the spark igniter.

Attach the gas line to the inlet of the gas valve. (this should be on the left side) It is highly recommended that you install a drip in the line right before the valve to assure that water and junk does not get into the valve. Make sure that the line is cleaned and blown out to assure that there are no filings or pipe dope that will get into the valve. Make sure that you install a shutoff within the required distance of the unit. (see the instructions included with the SP-40-ZC log set)

IMPORTANT: You must pressure test the line before hooking onto the valve. Excess pressure will destroy the valve. Make sure that the inlet pressure is reduced to the correct pressure before hooking up the gas line to the valve. (see the instructions included with the SP-40-ZC log set.)

Attach the pilot assembly to the gas pan on the right side using the screws provided. Make sure that the pilot and igniter assembly is in the correct position. See Fig. 5

Be careful not to break the pilot assembly when installing the pan into the Magnum ZC unit. Sometimes it is easier to put the gas line and the pilot gas line on after the pan is in the unit.. Be careful not to crimp the gas lines as you form them to fit. Make sure that there is not any pressure against the gas lines as the gas pan sits in the unit.



Route the spark igniter wire to the spark igniter whichever way is the best. Either you can hook it up first down below and then hook it up the pilot assembly or reverse.

Route the pilot gas line and the main burner gas line to the right side of the valve, clean and debur ends

and attach to the valve.

Make sure that all fittings are checked for cracks and leaks.

Attach the millivolt wiring as shown in the gas log instruction sheet.

Check the gas pressure as shown in the gas log instruction sheet.

Pour the sand or vermiculite in the pan and place the logs as shown. Do not test fire the system until all fittings are checked for leaks.

Run the gas log for 30 minutes or more to make sure that all operations are working properly.

Go over the operation instructions with the customer to assure that they understand the system.

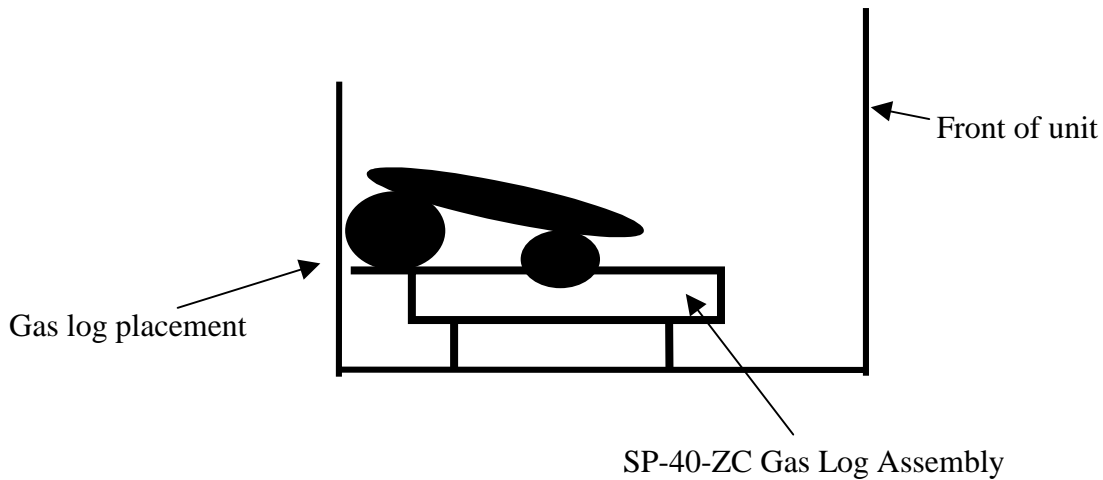


Fig. 6