# **Genesis 5 Burner Manifold**Valve Replacement Kit Instructions

#### Parts List:

Kit	9004496205	9004495205
Natural Gas Valve	1	Mar. Ada. sala.
Propane Gas Valve		1
Nipple 1" x Close	1	
Manifold Plate	1	
1/8" Pipe Nipple	1	
1/8" NPT 90° Elbow	1	
1/8" NPT Plug	1	
Installation Instructions	1	

### **Boiler Manifold Layout Chart:**

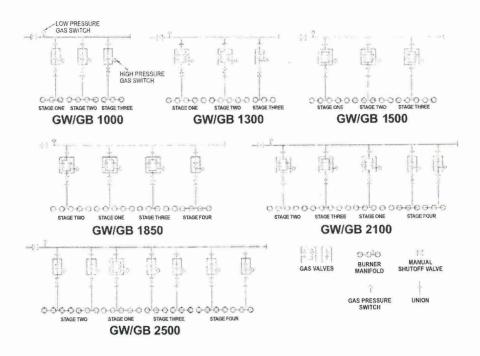


FIGURE 1.

## Required Tools (Minimum):

Pipe Wrenches - 2

Crescent Wrench

5/16" Nut Runner

Flathead and Phillips Screwdriver

Pipe Sealant

Silicone

#### Installation - Refer to Figure 7:

- 1. Turn off power to appliance.
- 2. Shut off main gas supply to the boiler.
- Remove the front door and air chamber panels. Protect gasket surfaces of panels when handling. See following diagram.

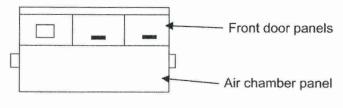


FIGURE 2.

- 4. Disconnect the two wires from the gas valve (and gas pressure switch if present).
- 5. Remove four screws from gas manifold plate with a 5/16" nut driver.
- Loosen unions holding the valve gas train. Use two wrenches to prevent twisting or damaging gas train components.
- 7. Using the 5/16" nut driver remove four screws holding the burner manifold to bracket.

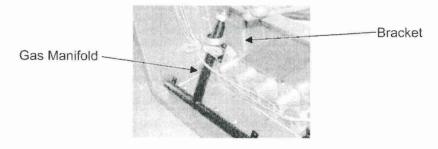


FIGURE 3.

While removing manifold take care not to damage the orifice spuds. Set manifold aside. Do not rest manifold on spuds or against wires as shown.

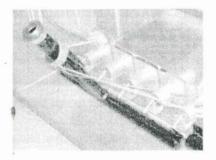


FIGURE 4.

9. Loosen four screws holding the gas train plate using a 5/16" nut driver.

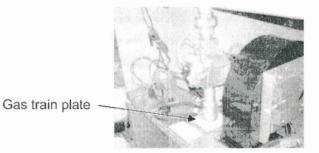


FIGURE 5.

10. Remove gas train assembly. (Take care to protect the rubber gasket under the plate.) Refer to figure for appropriate way to remove the gas train.



FIGURE 5.

- 11. Remove old gas valve from gas train assembly. (Valve removed should be Robert Shaw 7000 DERHC on a 5 burner manifold.) (See figure 7 below).
- 12. Look at bottom of new valve to confirm gas flow direction. Arrow should point in direction of flow.
  - a. Remove 3.5" nipple, manual shutoff valve, 4.5" nipple and male union from gas valve outlet.
  - b. Install new close nipple into gas valve outlet with adequate thread sealant.
  - c. Remove handle from gas valve.
  - d. Place handle in vice and remove lower portion with cutting tool. (See illustration)
  - e. Replace modified handle on valve.
  - f. Install manual shutoff valve, after applying thread sealant, to end of close nipple.
  - g. Using the old 3.5" nipple, slide on original gasket and new plate then install nipple into manual shutoff valve.

- i. If high gas pressure switch is installed remove and plug hole with 1/8" hole plug with sealant.
- h. Place male union piece on other end of nipple.
- i. Install original upper male union and close nipple on inlet of valve.
- Ensure all threads have sealant and tighten assembly to a distance of 15.5 inches between ends of male union.
- 13. Install assembled gas train into position and hand tighten top union.
- 14. Reinstall burner manifold and tighten union halves using two pipe wrenches.
- Reattach the gas train plate to the unit control shelf. Apply a bead of silicone to edge of plate to ensure a good seal.
- 16. If a high gas pressure switch was installed on old valve:
  - Remove 1/8" NPT pipe plug from outlet side of valve.
  - Install nipple into threaded hole with lubricant.
  - c. Thread elbow onto nipple and thread in switch.
- 17. Reconnect the wires to the valve and high gas pressure switch
- 18. Leak Test all joints to ensure gas tight.
- 19. Reinstall air chamber panel.
- 20. Check the gas control knobs for "on" position before operation.
- 21. Operate boiler and check performance to ensure boiler lights and operates correctly.
- 22. If gas adjustments are required, make equal adjustments to both halves of the valve.
- 23. Reinstall remaining panels. Use a bead of silicone on adjoining surfaces of the air chamber panel to improve the seal between the panel and the unit.

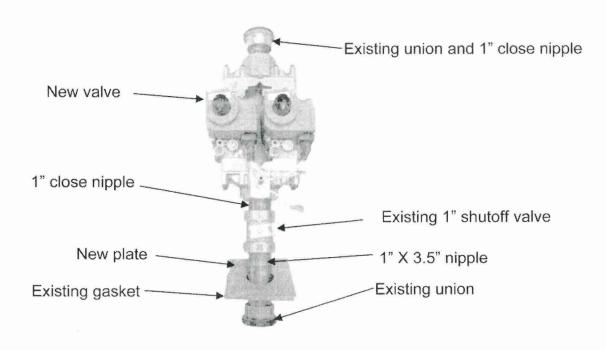


FIGURE 7 - 5 BURNER VALVE ASSEMBLY.