

# Genesis 3 & 4 Burner Manifold

## Valve Replacement Kit Instructions

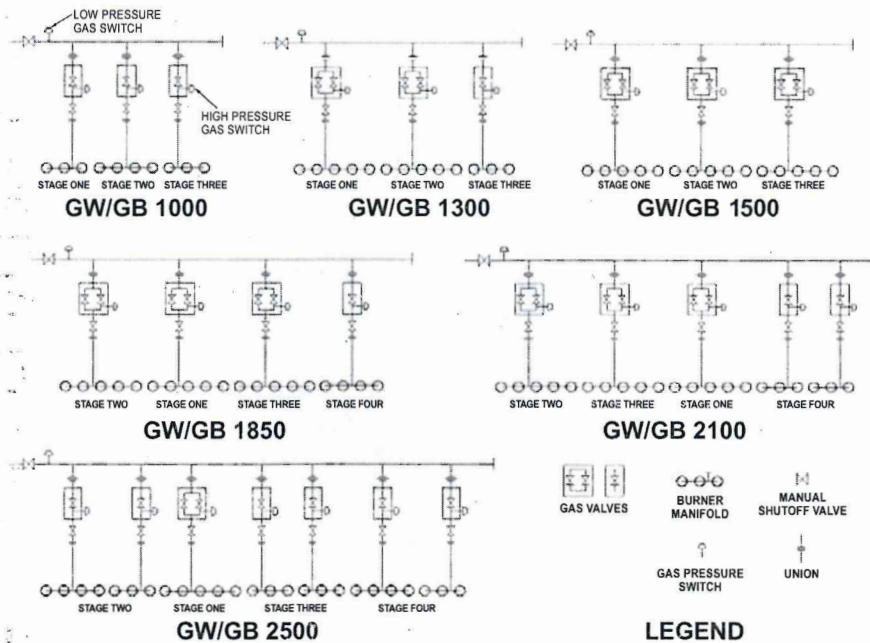
**Note To Service Personnel:**

These instructions apply to the Genesis Boiler only. When using kit for water heaters please discard any additional parts not required for your installation.

**Parts List:**

For Genesis 3 & 4 Burner Manifold		
Kit	9004521205	9004582205
Natural Gas Valve	1	---
Propane Gas Valve	---	1
Installation Instructions	1	
For Genesis 4 Burner Manifold Only		
Bushings 1" x 3/4"	2	
Close Nipple	1	
Nipple	1	

**Boiler Manifold Layout Chart:**



### Required Tools (Minimum):

Pipe Wrenches - 2  
Crescent Wrench  
5/16" Nut Runner  
Flathead and Phillips Screwdriver  
Pipe Sealant  
Silicone

### Installation for Genesis 3 & 4 burner manifold:

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

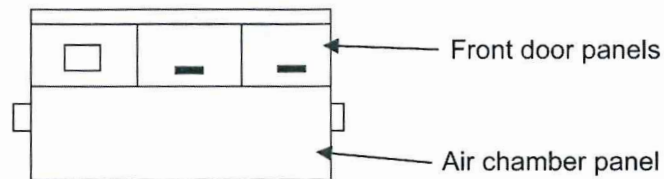


FIGURE 1.

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.
6. 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.

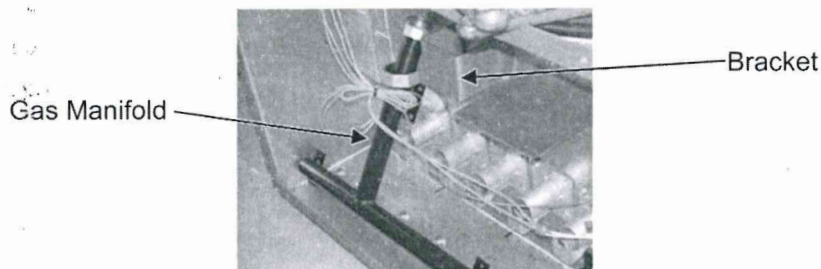


FIGURE 2.

8. 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.



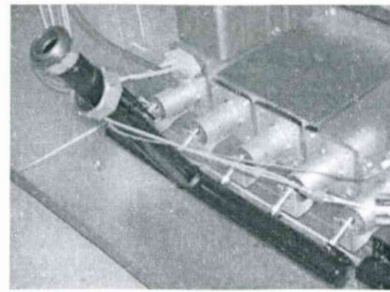


FIGURE 3.

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

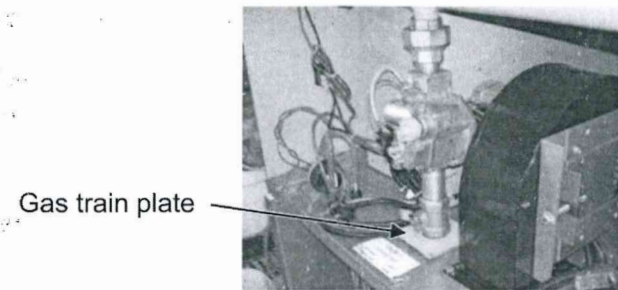


FIGURE 4.

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.

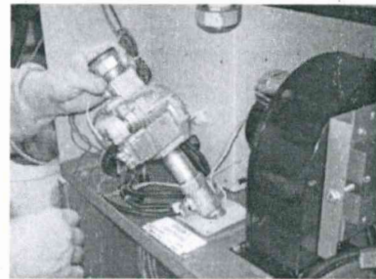


FIGURE 5.

#### For the 3 Burner Manifold (See Figure 6)

11. Remove old gas valve from gas train assembly. (White Rodgers 36H22412).
  - a. Save parts from old gas train to be used in new assembly.
  - b. Replace with appropriate new Honeywell VR8305M valve supplied with kit.
  - c. Apply thread sealant to threads.
  - d. Install new valve, with flow arrow towards manual shutoff valve, while maintaining a distance of 15.5" between ends of gas train when tight.

#### For the 4 Burner Manifold (See Figure 7)

12. Remove old gas valve from gas train assembly. (Robert Shaw 7000 DERHC)
  - a. Replace with new Honeywell VR8305M valve supplied with kit.

- b. Remove 1" pipe nipples attached to union and manual shut off valve.
- c. Leave remaining components assembled.
- d. Apply thread sealant to 3/4" pipe threads and thread into valve.
- e. Install 3/4" x 1" bushings into union and manual shutoff from original assembly.
- f. Install new valve, with flow arrow towards manual shutoff valve, maintaining a distance of 15.5" between ends of gas train when tight.
- g. Reinstall the high gas pressure switch from original assembly, if supplied on original assembly.

13. Install assembled gas train into position and hand tighten top union.
14. Reinstall burner manifold and tighten union halves using two pipe wrenches.
15. 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. Reconnect the wires to the valve and high gas pressure switch.
17. Leak Test all joints to ensure gas tight.
18. Reinstall air chamber panel.
19. Check the gas control knobs for "on" position before operation.
20. Operate boiler and check performance to ensure boiler lights and operates correctly.
21. If gas adjustments are required, make equal adjustments to both halves of the valve.
22. 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.

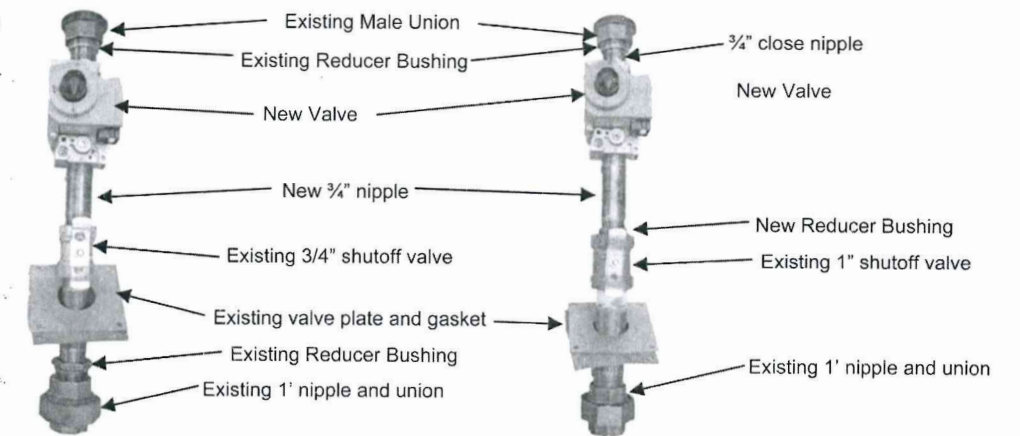


FIGURE 6.  
3 BURNER VALVE ASSEMBLY.

FIGURE 7.  
4 BURNER VALVE ASSEMBLY.