SUPPLEMENT TO INSTRUCTION MANUAL
P/N 238-45637-00 and 238-48933-00
(Replaces pg. 32 (238-45637-00) or pg. 28 (238-48933-00) in instruction manual.)

Wiring Diagram

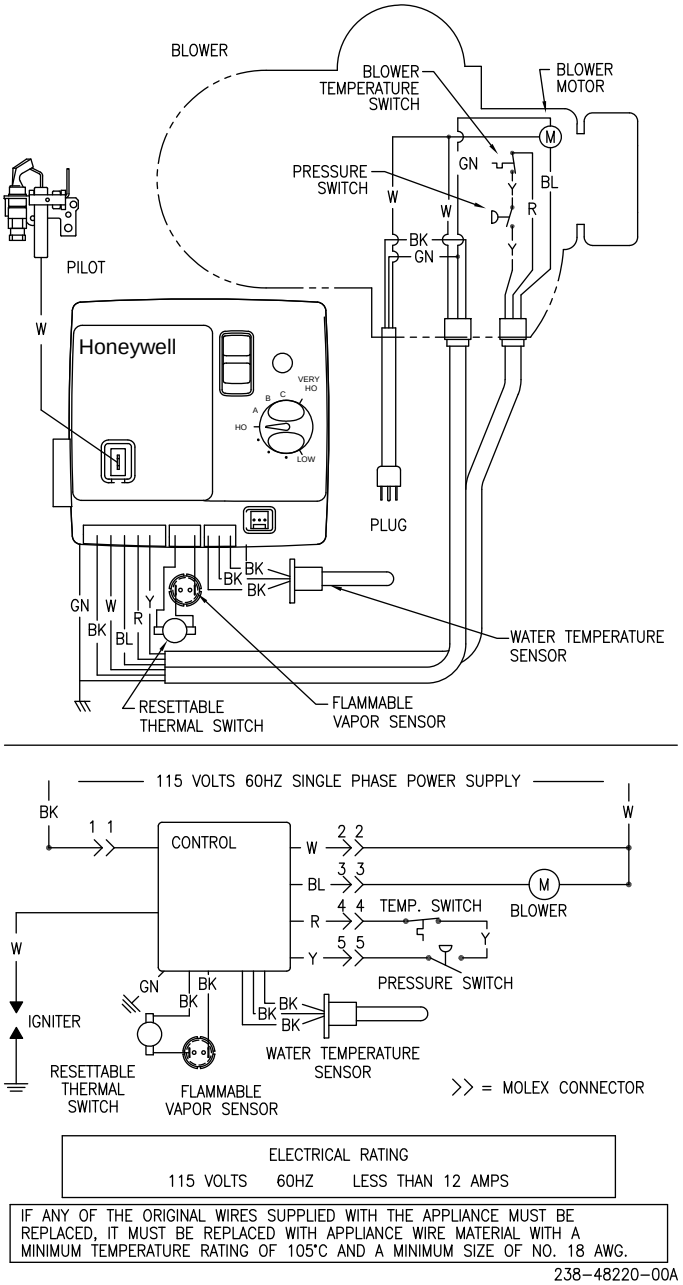
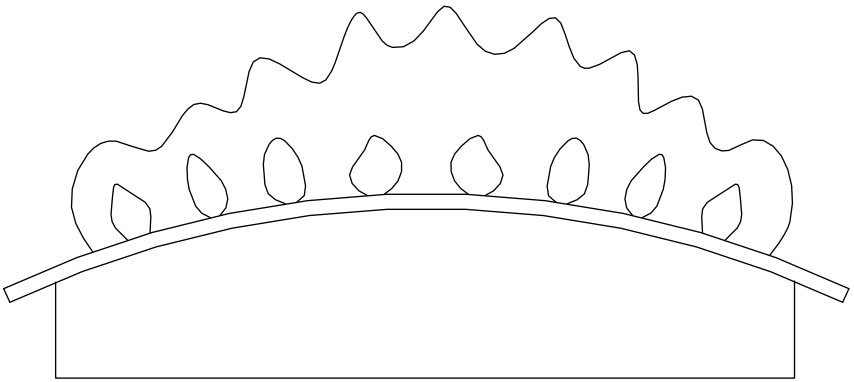
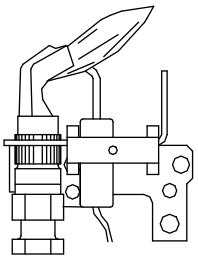


Figure 10 or Figure 6

Burner Flame Check
(Replaces pg. 36 (238-45637-00) or pg. 32 (238-48933-00) in instruction manual.)

These models are equipped with self adjusting air mixture and do not have an adjustable air shutter (*See Figure* 12). At periodic intervals a visual check of the main burner and pilot flames should be made to determine if they are burning properly. The main burner flame should light smoothly from the pilot.





PILOT IN OPERATION

Figure 12 or Figure 8

(Replaces pg. 42 (238-45637-00) or pg. 38 (238-48933-00) in instruction manual.)

Troubleshooting continued-

LED Status	Control Status	Probable Cause
Six flashes-three flashes, three second pause (Soft lockout)	Pilot flame extinguished. System resets after 5 minutes.	1. Unstable pilot. 2. Pilot tube blocked or restricted. 3. Oxidation build up on pilot electrode. 4. Wire damage to pilot assembly or bad connection at gas valve. 5. Insufficient combustion air.
Six flashes-four flashes, three second pause	Undesired-false pilot flame sensed. System auto resets.	Pilot valve stuck in open position.
Seven flashes, three second pause	Flammable vapor sensor fault detected, see warning label	1. Flammable vapor present 2. Flammable vapor sensor exposed to excessive moisture 3. Flammable vapor sensor exposed to extreme ambient temp 4. Resettable thermal switch open.
Eight flashes-one flash, three second pause	Flammable vapor sensor out of specification. Possible short.	1. Flammable vapor sensor out of specification 2. Possible short in flammable vapor sensor or resettable thermal switch wiring.
Eight flashes-three flashes, three second pause	T'stat well & sensor damaged or unplugged or Gas valve electronics fault detected	1. Damage to thermowell wire. 2. Thermowell sensor resistance out of range. 3. Replace thermowell. 4. Verify control is not wet or physically damaged 5. Reset control on/off switch. 6. Replace electronic module if 8-3 error persists
Eight flashes-four flashes, three second pause	Gas valve fault detected.	1. Verify control is not wet or physically damaged 2. Reset control on/off switch. 3. Replace gas control if 8-4 error persists

Fault	Probable Cause
Resettable thermal switch tripped (open)	1. Burner failure. 2. Flammable vapor present.

Control Sequence of Operation

Start up Sequence

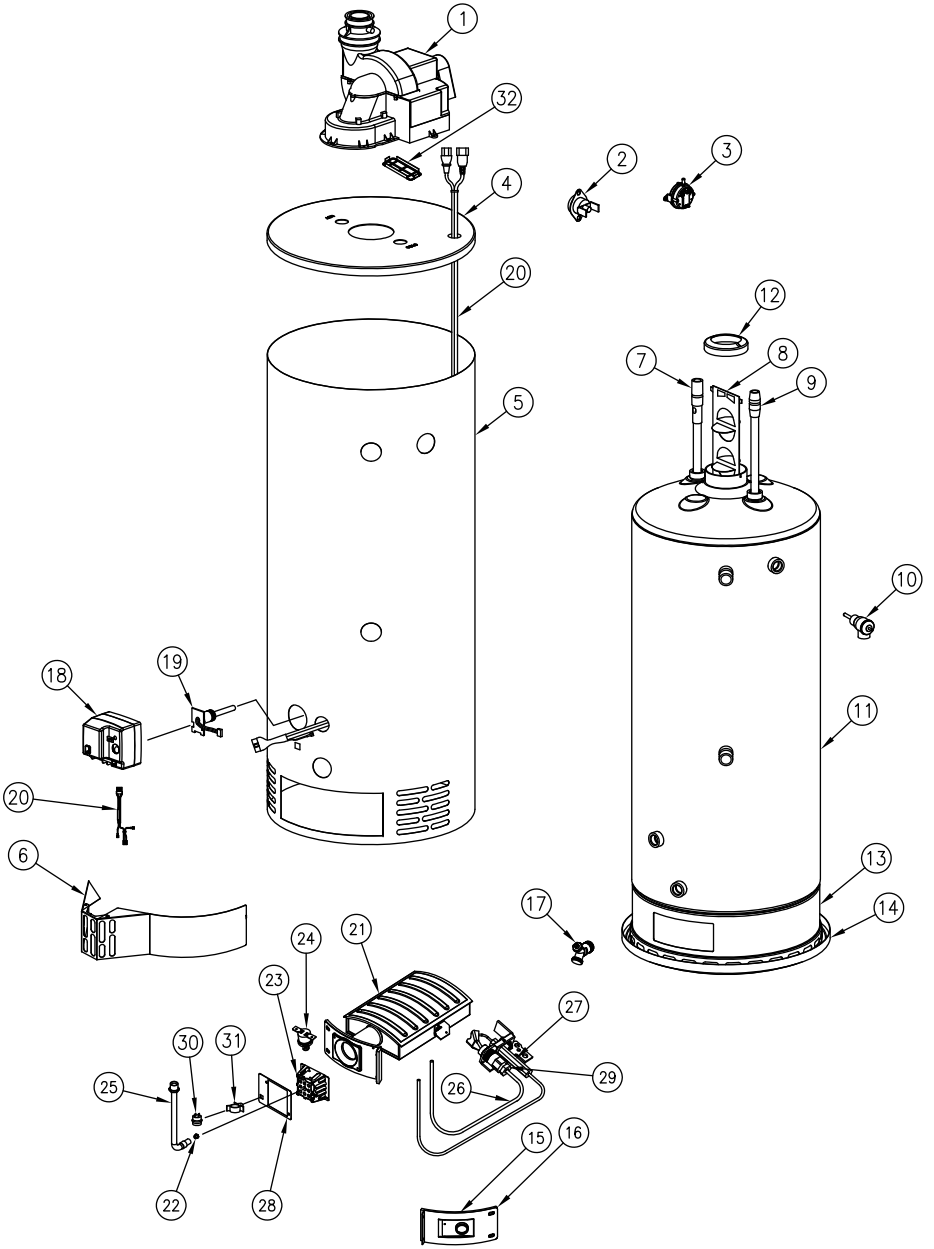
Upon powering up, the control checks for the presence of the vapor sensor, if the resistance is in the expected range the control will begin normal operation after 5 to 8 seconds.

Normal Heating Sequence

1. The thermostat senses a need for heat.
2. The control checks the pressure switch condition.

(Replaces pg. 43 (238-45637-00) or pg. 39 (238-48933-00) in instruction manual.)

PARTS LIST DRAWING



PARTS LIST *(Continued)*

PART NAME AND DESCRIPTION	
1. Blower Assembly	17. Drain Valve
2. Temperature Switch	18. Gas Valve
3. Pressure Switch	19. Thermal Well
4. Jacket Head Pan	20. Wire Harness
5. Jacket	21. Radiant Burner
6. Outer Door	22. Orifice
7. Mag. Anode- Hot Water Outlet	23. Manifold Mount
8. Flue Baffle Assembly	24. High Temp. Limit Switch
9. Dip Tube-Cold Water Inlet	25. Gas Feedline to Burner
10. Temp. & Pressure Relief Valve	26. Gas Feedline to Pilot
11. Glass Lined Tank	27. Spark Igniter
12. Flue Reducer	28. Mounting Plate
13. Combustion Chamber Assembly	29. Pilot Assembly
14. Jacket Base Pan	30. Flammable Vapor Sensor
15. Inner Door Gasket	31. Flam. Vapor Sensor Clip
16. Inner Door Assembly	32. Dilution Air Clip

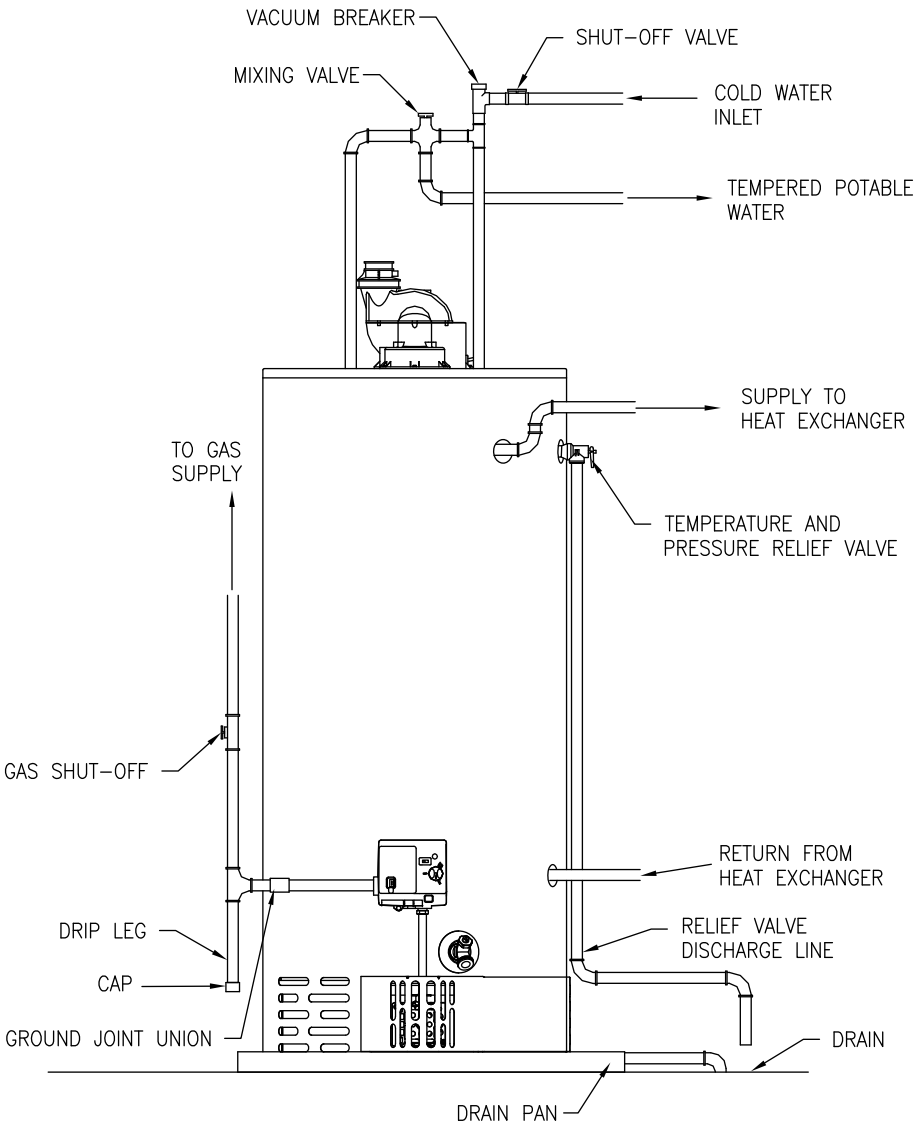
(Replaces pg. 44 (238-45637-00) or pg. 40 (238-48933-00) in instruction manual.)

THE FOLLOWING INSTRUCTIONS ARE FOR INSTALLATION OF: GAS WATER HEATERS SUITABLE FOR WATER (POTABLE) HEATING AND SPACE HEATING

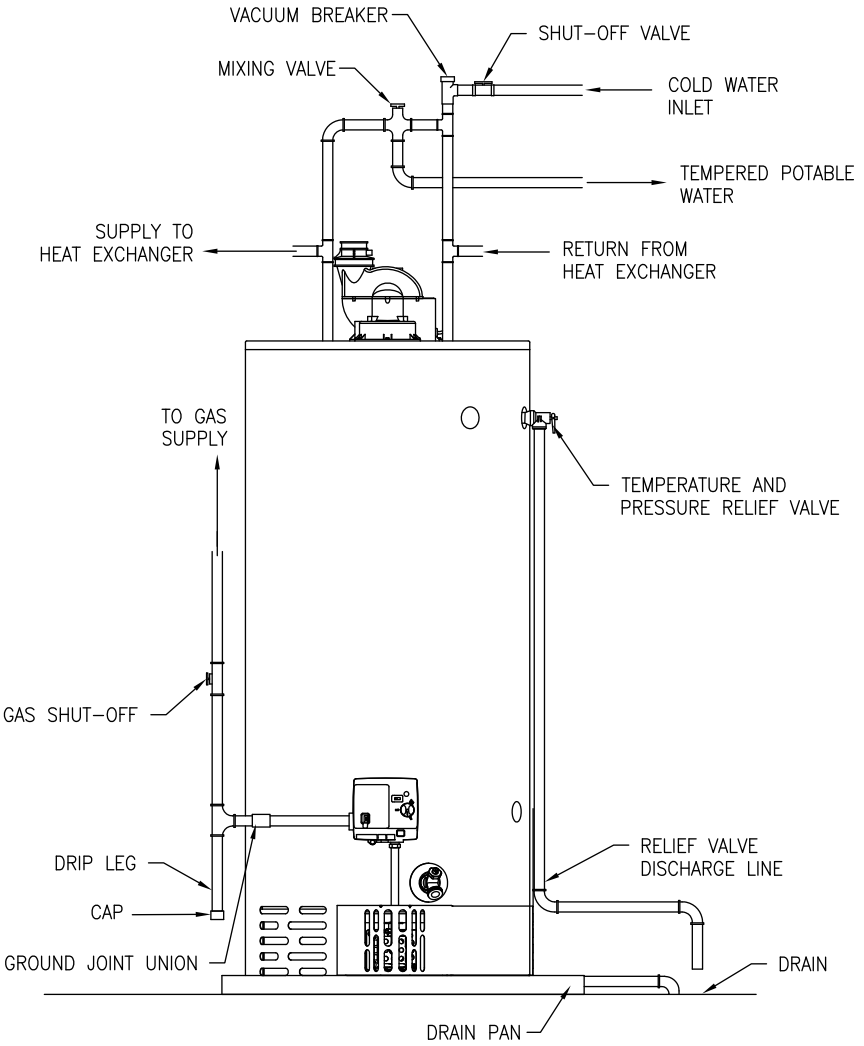
1. All piping components connected to this water heater for space heating applications must be suitable for use with potable water. In Massachusetts, space heating piping length **must not** exceed 50 feet (*15.24 meters*).
2. Toxic chemicals, such as those used for boiler treatment, **must not** be introduced into potable water used for space heating.
3. This water heater **must not** be connected to an existing heating system or component(s) previously used with a non-potable water heating appliance.
4. When the system requires water for space heating at temperatures higher than required for other means, such as an ASSE approved mixing valve must be installed to temper the water for those uses in order to reduce the scald hazard potential.

Please refer to the illustrations on the following pages for the suggested piping arrangements.

Suggested piping arrangement *(Continued)*



Suggested piping arrangement *(Continued)*



Notes: