

Enhancing everyday living



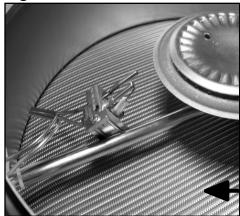
# FVIR WATER HEATER CLEANING PROCEDURE

This procedure applies to Atmospheric and Power Vent water heaters that comply to the FVIR requirement and include a flame arrestor.



Periodically or at least once a year, a visual inspection should be made of the venting and air supply system, piping systems, main burner, pilot burner and flame arrestor.

#### Figure 1:



Your water heater is built to the current industry safety standards and meets all FVIR (flammable vapor ignition resistant) requirements. This assures that any flammable vapors drawn into the combustion chamber and ignited can not ignite remaining flammable vapors on the exterior of the heater causing a fire or explosion. This design includes a flame arrestor, the bottom part of the combustion chamber that is illustrated in Figure 1.

#### FLAME ARRESTOR

**NOTE:** All tests on this bulletin must only be performed by a certified gas technician. Servicing requires trade knowledge in the areas of plumbing, electricity, venting, air supply and gas supply. If you are not a qualified technician or have difficulty understanding these instructions, you should not proceed. Enlist the help of a qualified service technician.

The following paragraphs address the cleaning of the flame arrestor and the combustion chamber. Required tools are commonly found in most homes, home stores, or surpercenters.

#### Tools:

- Vacuum cleaner with crevice and curtain attachments.
- Twisted wire brush (household cleaning brush).
- Flashlight.
- Small mirror 2" X 3".
- 3/8", 7/16", and 3/4" inch open end wrenches.
- 3/8" inch nut driver.
- Small container of soapy water and an applicator.



# Verify the water heater for the following:

- **1.** Obstructions, damage or deterioration in the venting system. Make sure the ventilation and combustion air supplies are not obstructed.
- 2. Build-up of soot and carbon on the main burner and pilot burner. Check for a soft blue flame.
- 3. Leaking or damaged water and gas piping.
- 4. Presence of flammable or corrosive materials in the installation area.
- 5. Presence of combustible materials near the water heater.
- 6. Presence of debris on the outside of the flame arrestor.

#### **Procedure**

- **Step 1.0** Unplug the power cord from the electrical outlet (power vent water heater models).
- **Step 1.1** Turn the water heater top knob to "**OFF**" and allow the burner area to cool (atmospheric water heater models).

### Follow instructions in your owner's manual

- **Step 2.** Remove outer door.
- **Step 3.** Then remove inner doors. Brush and vaccum all the accessible area of the flame arrestor and combustion chamber.



The following procedure requires abilities equivalent to that of a licensed tradesman. Contact a qualified service agent for assistance.

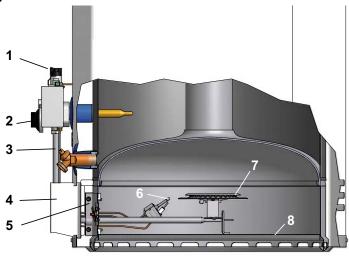
- Step 4.0. Remove burner assembly from combustion chamber.
- **Step 4.1.** Clean flame arrestor by using firm brush, compressed air and/or vacuum to eliminate any scale or other accumulated debris. Use a soft brush to clear openings of any dirt or debris.
- **Step 4.2.** Remove any debris from burner assembly and put back burner assembly into combustion chamber.
- **Step 5.** Reposition inner doors.
- Step 6. For power vent water models, connect power cord and proceed to lighting the water heater. For atmospheric water heater models, simply proceed to lighting the water heater. Follow the lighting instructions of your owner's manual. (Also available on our web site at : www.giantinc.com/english/data/manuals.htm).

# IF THE YELLOW FLAME OR PILOT OUTAGE PROBLEM PERSISTS, CALL A LICENSED TECHNICIAN TO PERFORM STEP 4 OF THE PROCEDURE.

**Step 7.** Reposition outer door.

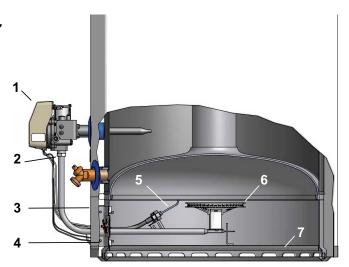
#### **Atmospheric gas water heater**

- 1 Main gas valve
- 2 Temperature control knob
- 3 Gas manifold
- 4 Exterior access door
- 5 Inner access doors
- 6 Pilot assembly
- 7 Burner
- 8 Flame arrestor



## **Power Vent gas water heater**

- 1 Gas control valve
- 2 Gas manifold
- 3 Exterior access door
- 4 Inner access door
- 5 Igniter assembly
- 6 Burner
- 7 Flame arrestor



# **Cleaning log**

| Date | Note |
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