

DV SERIES GAS-FIRED HOT-WATER BOILERS

NOTICE

- READ AND SAVE THESE INSTRUCTIONS FOR REFERENCE.
- KEEP THIS MANUAL NEAR THE BOILER.

WARNING

If the information in this manual is not followed exactly, a fire of explosion may result causing property damage, personal injury or loss of life.

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electrical switches or use any phone or mobile electronics in your building.
- Immediately call your gas supplier FROM A NEIGHBOR'S PHONE. Follow the gas suppliers instructions.
- If you cannot reach your gas supplier, call the Fire Department.

WARNING SYMBOLS

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death, SERIOUS injury or substantial property damage.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in MINOR OR MODERATE injury or property damage.

NOTICE

Installation and service must be performed by a certified installer, service agency or the gas supplier.

LIGHTING INSTRUCTIONS



CAUTION

Before lighting pilot burner make certain the hot water boiler and system are full of water and vented of air. Set the operating control below normal.

1. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
2. Before operating smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. See “WHAT TO DO IF YOU SMELL GAS“ located on the cover of this manual.
3. Use only your hand to push in or turn gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it. Call a certified service technician.





WARNING

Force or attempted repair may result in a fire or explosion.

4. Do not use this appliance if any part has been under water. Immediately call a service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

OPERATING INSTRUCTIONS

1. **STOP!** Read the safety information above in this manual.
2. Set the thermostat to lowest setting.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
5. Remove jacket front panel (see **Figure 3**).

6. Push in gas control knob slightly and turn clockwise  to "off". See **Figure 1**.
7. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "WHAT TO DO IF YOU SMELL GAS," located on the cover of this manual. If you don't smell gas, go to the next step.
8. Turn gas control knob  counterclockwise to "on."
9. Replace jacket front panel (see **Figure 3**).
10. Turn on all electric power to the appliance.
11. Set thermostat to desired setting.
12. If the appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE


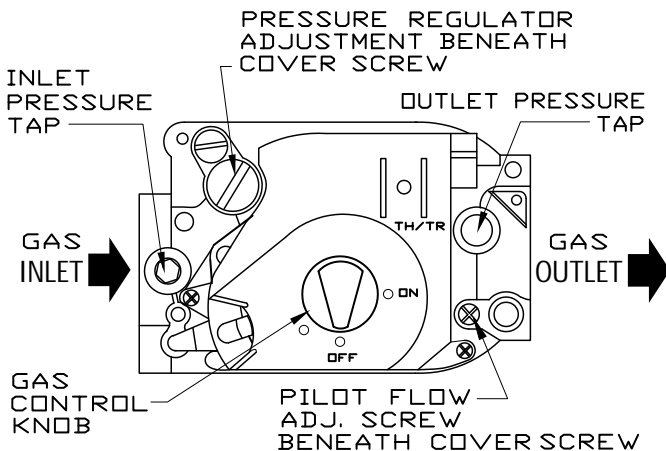
1. Set thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Turn gas control knob clockwise  to "off." DO NOT FORCE.

Figure #1



Note: For all other figures, see end of manual.

GENERAL INSTRUCTIONS

Before seasonal start up it is advisable to have a certified service agency check the boiler for soot and scale in the flues, clean the burners and check the gas input rate to maintain high operating efficiency. The service agency should make certain the system is filled with water to minimum pressure and open air vents - if used - to expel any air that may have accumulated in the system. The entire piping system should also be checked and if any leaks appear, they should be repaired immediately.

The venting system should also be inspected at the start of each heating season. The vent pipe from the boiler should be checked for signs of deterioration or sagging joints. Repair if necessary.



The following procedure should be followed to clean and check the flue gas passageways:

1. Remove the burners from the combustion chamber by raising the burners up from the manifold orifices and pulling toward the front of the boiler, (See **Figure 2**)
2. Disconnect the vent pipe from the vent adapter.
3. Remove the jacket front panel. (See **Figure 3**)
4. Check venter assembly suction pressure.
 - A. Connect a slope manometer between the venter and the pressure switch with a tee and additional tubing and connectors.
 - B. Turn the boiler on and read suction pressure on the manometer. Reading should be negative (-) $.55 \pm .05$ inches of water column or higher for the DV50 thru 150 and negative (-) $.65 \pm .05$ inches of water column or higher for the DV200. If this reading is not attainable, contact a certified service agency.
5. Remove the flue collector and venter assembly from the boiler castings by loosening the hold-down bolts located on each side of the flue collector. (See **Figure 4**)
6. Visually inspect the venter assembly for any unusual wear or dirt build up.
7. If venter has oil cups lubricate venter motor once a month during the heating season with a few drops of nondetergent motor oil (SAE 20 or 30). Do not over oil.

8. Place a sheet of heavy paper or similar material in the bottom of the combustion chamber and brush down the flue passageways. The soot and scale will collect on the paper and is easily removed with the paper.

A visual check of the main burner and pilot flames should be made at the start of the heating season and again in mid-season.

The main burner flame should have a well defined inner blue mantel with a lighter blue outer mantel. (See **Figure 5**) If the flame does not appear this way, check the burner throats and burner orifices for lint or dust obstructions.

The pilot flame should envelop 3/8 to 1/2 inch of the tip of the ignition electrode. To adjust the pilot flame, remove the pilot adjustment cover screw on the gas valve and turn the inner screw clockwise  to decrease or counterclockwise  to increase the pilot flame. See **Figure 1**. Be sure to replace the cover screw after adjustment to prevent possible gas leakage.

The burners and pilot should be checked for signs of corrosion, rust or scale build-up, and cleaned with a nylon bristle brush.

The area around the boiler must be kept clear and free of combustible materials, gasoline and other flammable vapors and liquids.

The free flow of combustion and ventilating air to the boiler and boiler room must not be restricted or blocked.

In the event the flow of combustion products through the flueways or the boiler venting system becomes blocked, a flame roll-out safety switch will shut off the main burner gas. See **Figure 3**. If this condition occurs, do not attempt to place the boiler in operation. Contact a certified service agency.

It is suggested that a certified service agency be employed to make an annual inspection of the boiler and heating system. They are experienced in making the inspection outlined above and in the event repairs or corrections are necessary, they can make the proper changes for safe operation of the boiler.

Figure #2

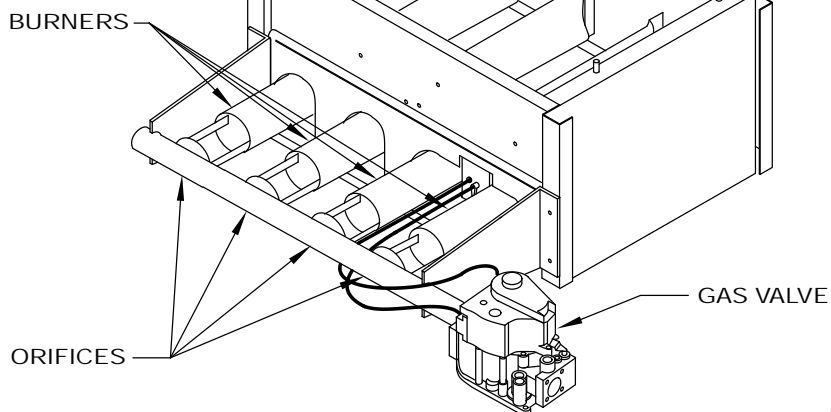


Figure #3

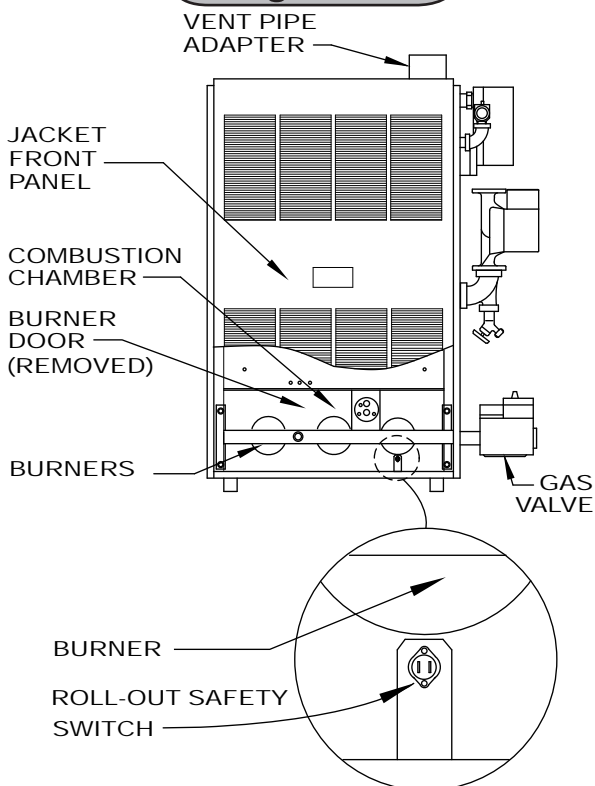


Figure #4

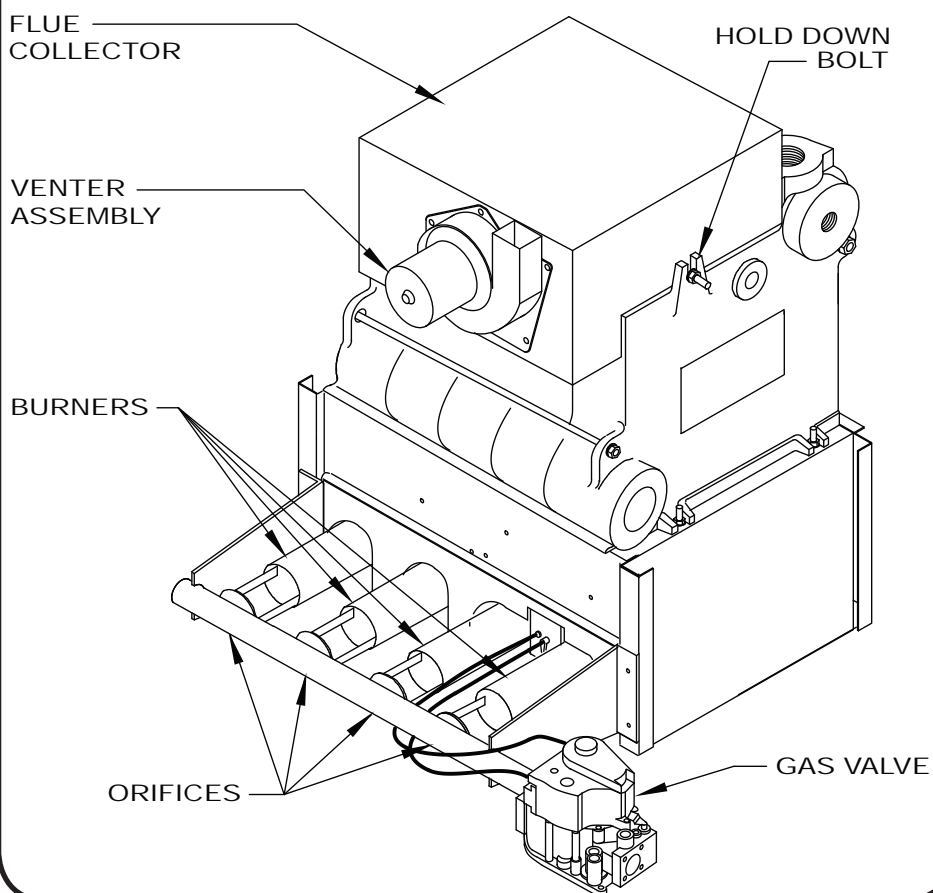
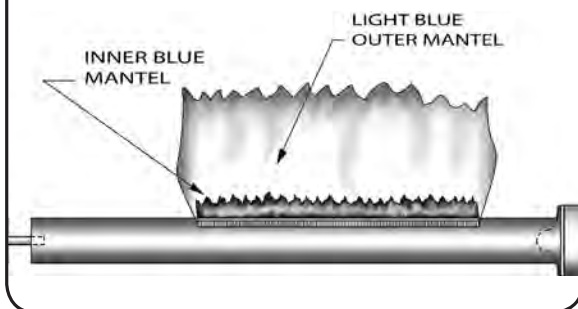


Figure #5





Olsen Technology, Inc.

P.O. Box 900 Wallaceburg, ON N8A5E5

Date of Installation: _____

Boiler Model #: _____

Installed By: _____