MAJOR COMPONENTS OF A VENT FREE UNIT

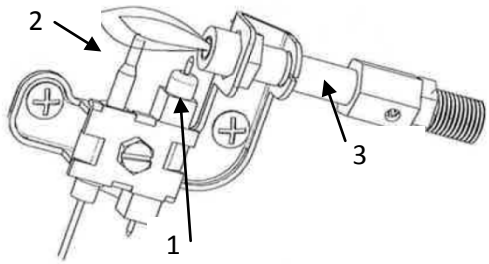
Ignitors:

A) Manual push button Piezo Ignitor: This type of ignitor send a spark to the electrode on the ODS thru a wire.

B) Electronic Ignitor-Requires (1) AAA battery, when button is held in it creates a continuous spark when button is depressed.

ODS/Pilot Assembly: The Pilot Assembly has (3) major components:

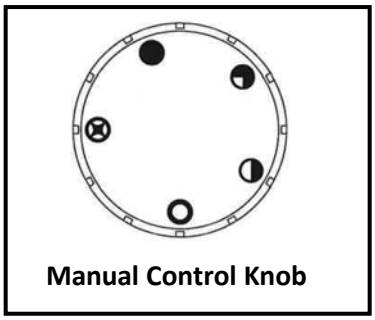
1. Ignitor Electrode: Creates spark at the end of the pilot tube.
2. Thermocouple: Senses heat from the pilot light allowing the valve to open and light the burners
3. Pilot Tube: Maintains gas flow to keep pilot lit and thermocouple warm.



To light the pilot, turn control knob to pilot, push down in conjunction with the ignitor. Once the pilot is lit, hold the gas valve knob (see next page) for at least 30 seconds to allow the thermocouple to be heated. When the thermocouple reaches a certain temperature it produces an electrical current allowing the vale to open.

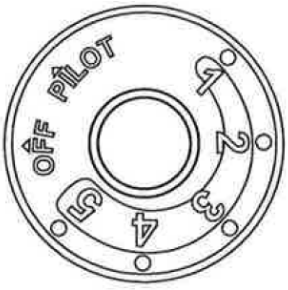
Control Knobs/Valves:

A) **Manual control:** This type of control allows the BTU output to be controlled. It has 3-4 setting depending on the model. "Pilot-Low-High" or "Pilot-Low-Med-High". This heater will not cycle on and off, it will stay running until operator manually turns the unit off. (this type of unit is also refer to as variable)



Manual Control Knob

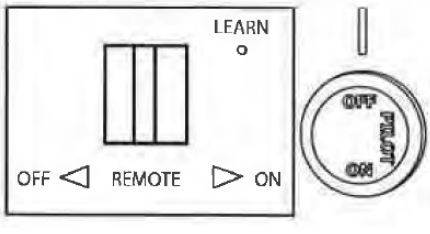
B) **Thermostat control:** This type of control allows the operator to set the temperature of the heater to cycle on an off at. The temperature range of this type of heater is 63-85°. There is a thermostat bulb located on the back of most units. The bulb measures the temperature of the air near the heater cabinet.



Thermostat Control Knob

Thermostat Control Valve

C) **Remote Control:** This type of control; allows the operator to adjust the temperature of their unit within 20 ft of the receiver.



Remote Control Knob

Valve w/ Solenoid

Internal Regulator:

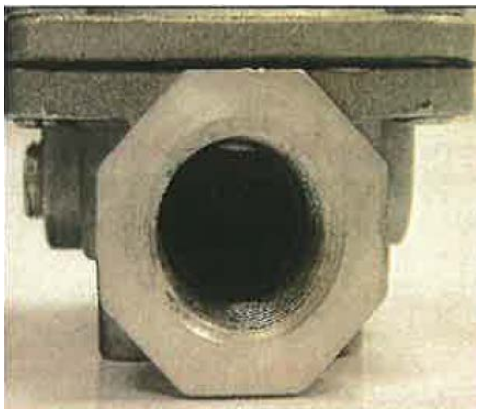
The internal non-adjustable regulator prevents over-firing in case of increased gas pressure. The regulators maybe dedicated or dual fuel.

Dedicated Fuel

Dual Fuel

In the event of increased pressure the internal regulator will "close off" the flow of gas by closing an internal plunger often referred to as a diaphragm:

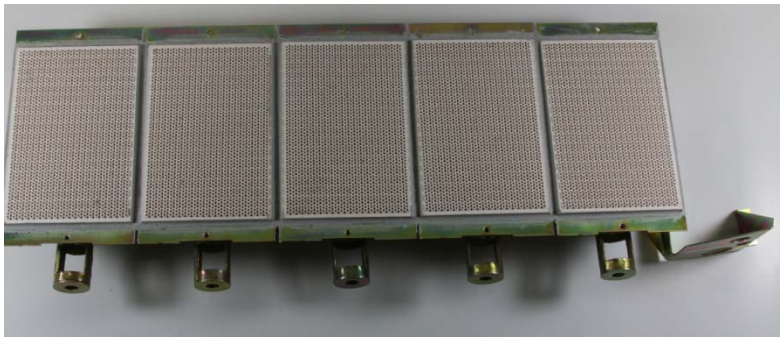
OPEN Regulator



CLOSED Regulator

Burner Assembly: Wall Heaters

1. Plaque/Infrared: Infrared heaters are considered radiant heaters because they heat like the sun. These heaters will warn the objects in the room closest to the unit.



2. Blue Flame/Ambient: Blue flame heaters are considered convection heaters. They slowly warm the air in the room.

Burner Assembly: Stoves and Fireplaces

1. **Blue Flame-U shaped Burners:** They slowly warm the air in the room.

GAS HEATER ASSESSORIES

Gas Wall Heaters:

Blower 20-6127: For gas wall heaters with a BTU output of 10K or higher

Base Legs 20-5345: For gas wall heaters with a BTU output of 10K or higher

Gas Stoves and Fireplace:

Blower 20-6143: For gas stoves. Non thermostat.

Blower 20-6140: For gas fireplaces. Thermostatically controlled.

Gas Log Sets:

Glowing Ember Fiber 20-8112: For Models GLD2465R/GLD3070R & GLV018/GLV024/GLV030

Lava Rock 20-8111: For Models GLD2465R/GLD3070R, GLD1855T/GLD2455T, & GLV018/GLV024/GLV030

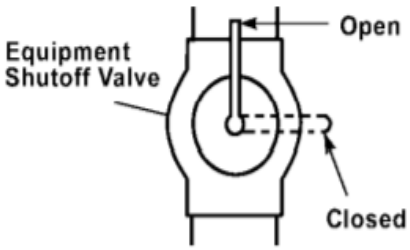
Vermiculite 20-8110: For Models GLV018/GLV024/GLV030

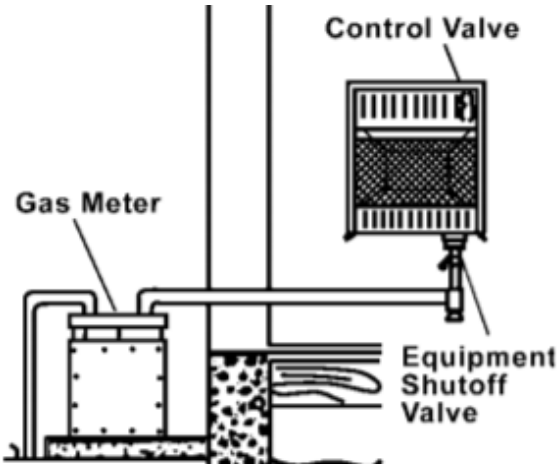
Safety Pilot/LP Conversion Kit 20-8113 for Models GLV018/GLV024/GLV030

INSTALLATION REQUIREMENTS

Gas Specific Heaters-Natural Gas:

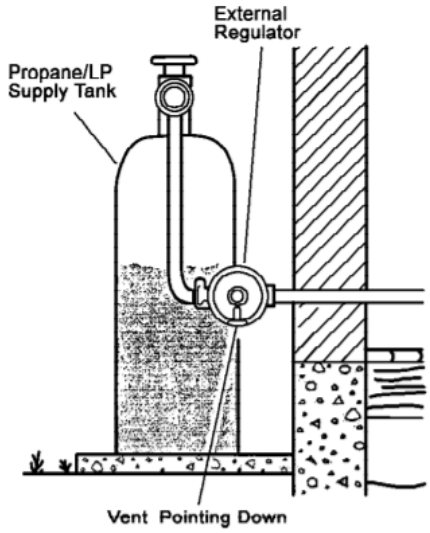
Equipment shut off valve is required on gas product installations. On Natural Gas installation the equipment shut off valve should be located on the line connected to the heater inside of the property:





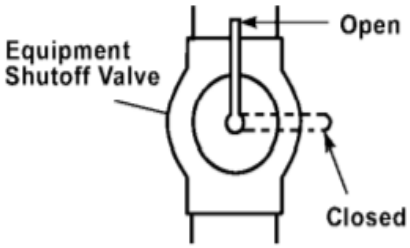
Gas Specific Heaters-Liquid Propane:

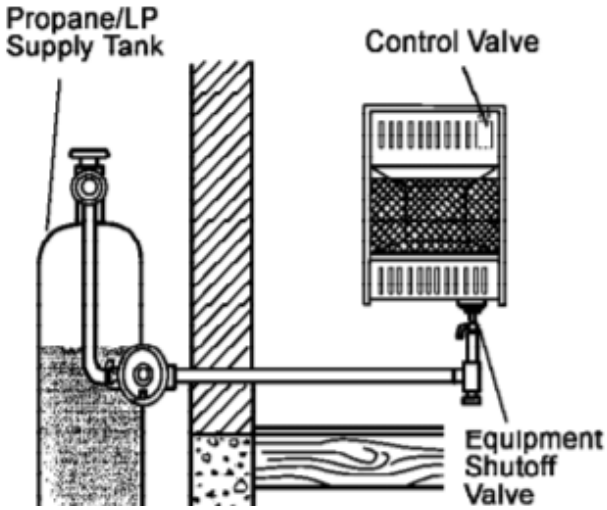
Liquid Propane installations require the use of a 100lb minimum tank, with and external regulator reducing the incoming gas pressure to between 11 and 14” of water column pressure. If the pressure is not reduced the internal regulator can be damaged.



Gas Specific Heaters-Liquid Propane continued:

Equipment shut off valve is required on gas product installations. On Liquid Propane installation the equipment shut off valve should be located on the line connected to the heater inside of the property:



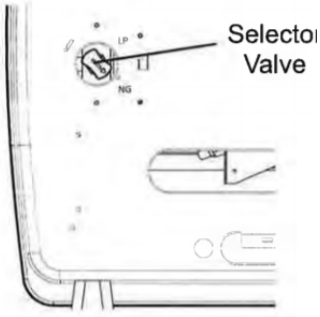


Dual Fuel Heaters-Liquid Propane:

Dual Fuel heaters are preset from the factory to be installed on liquid propane. Follow installation instructions a shown above.

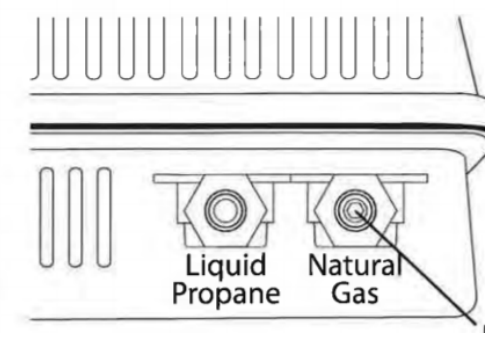
Dual Fuel Heaters-Natural Gas wall heaters:

Because Dual fuel heaters are preset for propane these heaters will need to be converted to run on natural gas. On the back of the heater there is an access panel to the gas selector valve. Remove screws from access panel; the gas selector valve should be in the LP position. Push and turn the selector knob clockwise until the knob lock into the NG position. The selector valve must be locked in the NG position do not operate heater between positions.



Dual Fuel Heaters-Natural Gas wall heaters continued:

Remove the plug from the inlet on the Natural gas regulator. Tighten in insure the LP regulator plug is secure and tightly sealed to avoid any leaks.

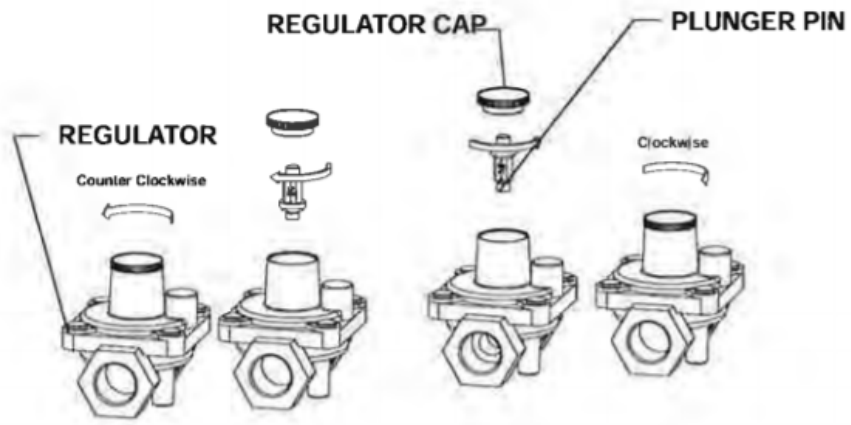


Dual Fuel Heaters-Stoves, Fireplaces and Log sets Liquid Propane:

Dual Fuel heaters are preset from the factory to be installed on liquid propane. Follow installation instructions a shown in the wall heater installation section for Liquid Propane.

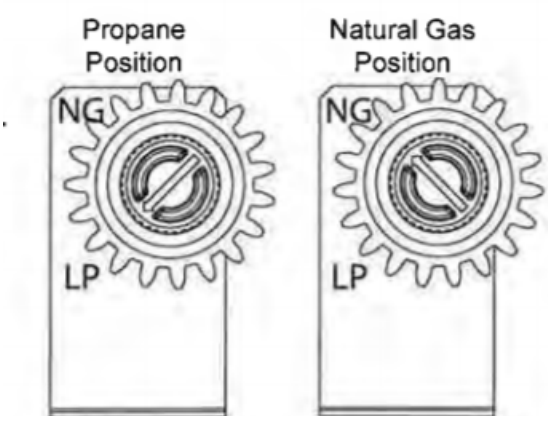
Dual Fuel Heaters-Stoves, Fireplaces and Log sets Natural Gas:

Converting the regulator, Unscrew the cap on the top of the pressure regulator by turning it counter clockwise ↶. Unscrew the plunger pin from the regulator cap by turning it counter clockwise ↶. Flip the plunger pin 180 degrees and screw back into regulator cap by turning it clockwise ↷. Replace the cap by turning it clockwise ↷ back into the regulator. Make sure the plunger pin and cap are finger tight.



Dual Fuel Heaters-Stoves, Fireplaces and Log sets Natural Gas continued:

Adjust the selector valve. Push on the selector valve knob and rotate the knob counter clockwise until it stops. DO NOT OPERATE THE APPLIANCE BETWEEN LOCKED POSITIONS

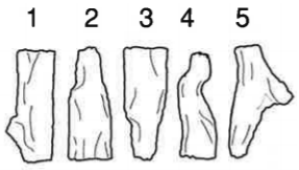


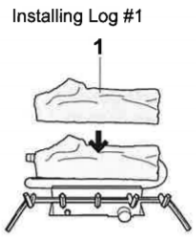
Gas installation kits are available for all models 20-7010:

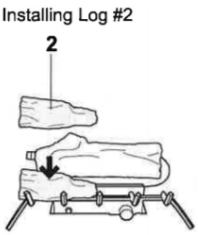
The kit includes ½" flex gas connection, 3/8" and ½" adapter fittings, and pipe sealant.

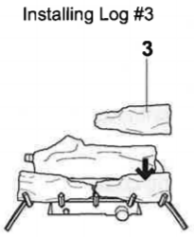
Log Placement: Fireplace and Stoves:

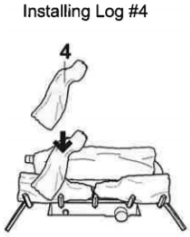
Correct log placement is very important for vent-free as well as vented units. Improper placement can cause sooting. Vent-free logs should never touch open flame. Log units vary in the number of logs and placement. Each log is marked with a number to help identify when installing. See example below:

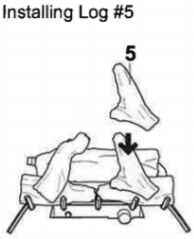






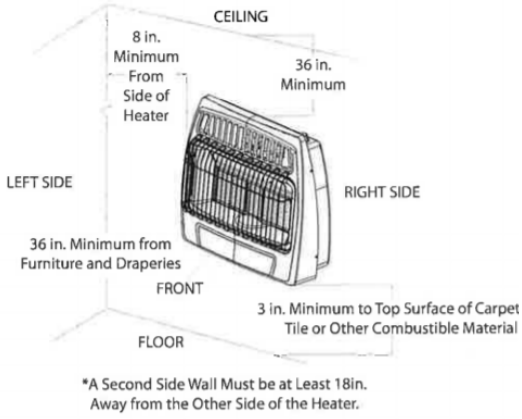


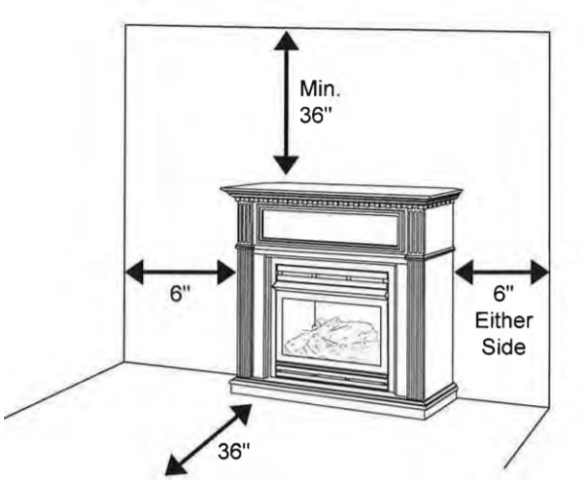




Clearance and Restrictions on Vent-Free product installations:

Vent-Free products have minimum ventilation and clearances to have adequate flow of fresh air. The restrictions from combustibles may vary according to the product. Below are a few examples showing different restrictions. For exacts clearances and restrictions please refer to the products owner's manual





CLEANING AND MAINTENANCE

- Units should be cleaned every 2,500 hours o f operation or every three month. Use a small can of compressed air, or an air compressor set at 30 psi or less
- WARNING: Turn off gas supp, and let unit cool prior to servicing

Gas Wall Heaters ODS/Pilot Assembly:

Remove entire front panel of heater by removing 4 outsides screw on the units (1). Locate the ODS/Pilot assembly (2) Spray canned or compressed air set at 30 psi or less into the air inlet hole located on the pilot tube (3)

(1)

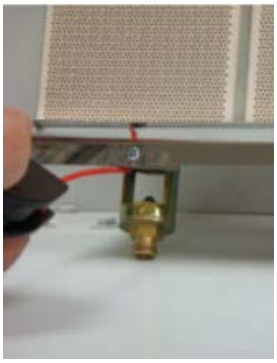
(2)

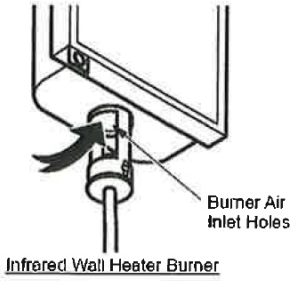
(3)

Gas Wall Heaters Burners and Injectors:

Infrared/Plaque heaters: The Bricks/Plaques should be cleaned with canned air starting from the upper left hand corner of each brick going across to the right and down (same direction as reading a book) (1) The injector orifice should be cleaned by blowing 3 quick blasts of air up into the brick (2).

(1)



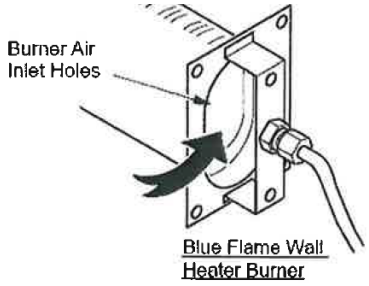


(2)

Gas Wall Heaters Burners and Injectors:

Blue Flame: With canned air blow out the ports and slots on the burner tube (1). The injector orifice should be cleaned by blowing 3 quick blasts of air into the Burner Air Inlet hole (2)

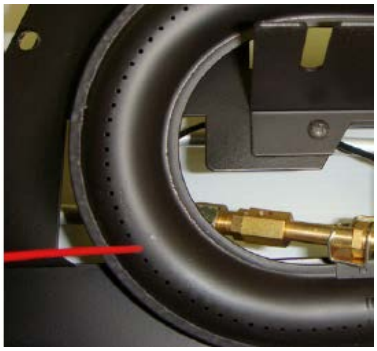
(1)



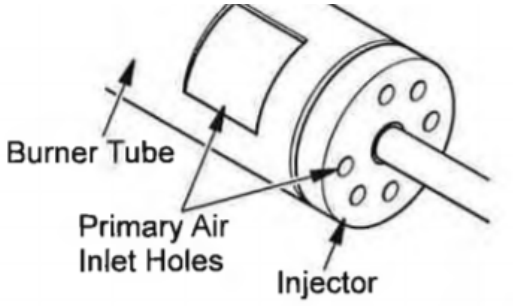
(2)

Gas Fireplace, stoves and logs Burners and Injectors:

"U" shaped burners: With canned air blow out the ports and slots on the burner tube (1). The injector orifice should be cleaned by blowing 3 quick blasts of air into the Burner Air Inlet hole (2)



(1)



(2)