

USER'S INFORMATION MANUAL

DOWNFLOW/HORIZONTAL OIL FIRED FURNACES

DO NOT DESTROY
PLEASE READ CAREFULLY AND KEEP
IN A SAFE PLACE FOR FUTURE
REFERENCE.

FOR YOUR SAFETY
DO NOT STORE OR USE FLAMMABLE
VAPORS OR LIQUIDS IN THE VICINITY OF
THIS OR ANY OTHER APPLIANCE.

WARNING:
IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN
CAUSE INJURY OR PROPERTY DAMAGE. FOR ASSISTANCE OR ADDITIONAL INFORMATION
CONSULT A QUALIFIED INSTALLER OR SERVICE AGENCY.

*CAUTION: READ THESE INSTRUCTIONS THOROUGHLY BEFORE
ATTEMPTING TO OPERATE OR MAINTAIN THIS FURNACE.*

This furnace has been designed to give you many years of efficient, dependable home comfort. With regular maintenance, this furnace will operate satisfactorily year after year. Please read this manual thoroughly to familiarize yourself with operation, maintenance and safety procedures.

DEVICES ATTACHED TO THE FLUE OR VENT FOR THE PURPOSE OF REDUCING HEAT LOSS UP THE CHIMNEY HAVE NOT BEEN TESTED AND HAVE NOT BEEN INCLUDED IN THE DESIGN CERTIFICATION OF THIS FURNACE. WE, THE MANUFACTURER, CANNOT AND WILL NOT BE RESPONSIBLE FOR INJURY OR DAMAGE CAUSED BY THE USE OF SUCH UNTESTED AND/OR UNCERTIFIED DEVICES, ACCESSORIES OR COMPONENTS.

SAFETY

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. CONSULT A QUALIFIED INSTALLER OR SERVICE AGENCY FOR SERVICE AND ASSISTANCE.

CAREFULLY FOLLOW THESE SAFETY RULES:

1. Do not alter any burner adjustments.
2. Disconnect electrical power before servicing appliance.
3. Do not attempt to start burner with oil or vapors in the combustion chamber.
4. Keep area around furnace free and clear of combustible materials such as gasoline, flammable vapors and liquids, rags and paper. Do not use furnace area for storage purposes or as a broom closet.
5. Use only No. 2 fuel oil for this furnace. Do not use gasoline, crankcase oil or oil containing gasoline.
6. Do not attempt to convert furnace to natural or LP gas.
7. Maintain adequate ventilation to the furnace.
8. Do not operate the furnace without all blower doors and compartment covers securely in place.

10. Do not attach any kind of device to flue or vent.
11. Do not attempt to operate this furnace if any part has been under water. Immediately call a qualified service technician to inspect the furnace and replace any part of the control system that has been submerged.

HOW YOUR SYSTEM OPERATES

During the heating season the operation of your furnace is automatic. Your installer has provided a wall mounted thermostat which is sensitive to the surrounding air temperature change. When the air temperature surrounding the thermostat decreases, the thermostat switch will close and start the oil burner of the furnace.

As the flame from the burner warms the heat exchanger, the solid-state fan control will after a short time start the circulating air blower. Warm air will now circulate from the supply registers throughout the dwelling and return to the furnace through the return air grille(s).

When the air temperature surrounding the thermostat reaches the thermostat setting, the thermostat switch will open and the oil burner will stop operating. The heat exchanger will cool and the blower will stop operating.

GENERAL INFORMATION

1. Keep the air filters clean. Your heating system will operate more efficiently and provide better heating more economically.
2. Arrange your furniture and drapes so that the supply and return air registers are unobstructed.
3. Keep doors and windows closed. This will reduce the heating load on your system and increase the efficiency of the furnace.
4. Avoid excess use of kitchen and exhaust fans.
5. Do not permit the heat generated by televisions, lamps or radios to influence the thermostat operation.
6. If you desire to operate your system with constant air circulation, ask for advice from your service contractor.

LIGHTING INSTRUCTIONS

This appliance is equipped with an automatic electronic ignition device. This device lights the oil burner each time the room thermostat (closes) calls for heat. See oil burner instructions enclosed with furnace for further detail.

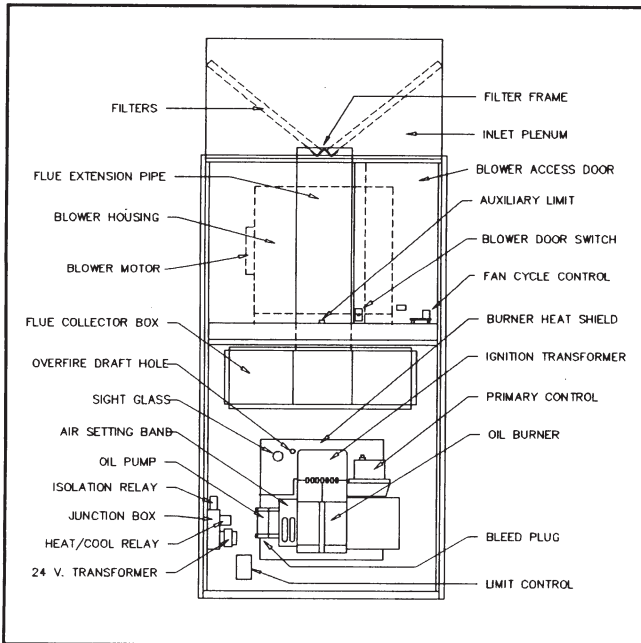


FIGURE 1. DOWNFLOW COMPONENT LOCATION

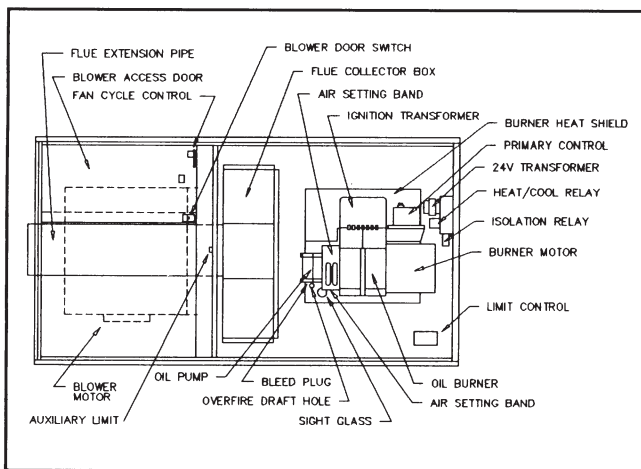


FIGURE 2. HORIZONTAL COMPONENT LOCATION

WARNING: EXPLOSION OR FLASH FIRE CAN OCCUR IF THE COMBUSTION CHAMBER IS NOT FREE OF OIL WHEN RESETTING PRIMARY CONTROL RESET BUTTON. MAKE SURE THAT COMBUSTION CHAMBER IS FREE OF OIL BEFORE USING RESET BUTTON.

TO START FURNACE

1. Set room thermostat to highest setting.
2. Open shut-off valve in oil supply line.
3. Close line switch. Burner should start automatically.
4. Bleed the fuel pump as soon as the burner motor starts rotating. To bleed the fuel unit, attach a clear plastic hose over the bleed plug. Loosen the plug and catch the oil in an empty container. Tighten the plug when all air appears to be purged.
5. Reset room thermostat to desired temperature setting.

TO STOP FURNACE

1. Set the room thermostat to lowest temperature setting.
2. Turn "Off" line switch to the furnace.

IF BURNER DOES NOT START

1. Check fuse or breaker in the furnace circuit.
2. Assure room thermostat is set above room temperature.
3. Check oil level in the tank.
4. Make sure that oil line shut-off valves are open.
5. Reset the button on the primary control. Wait five minutes to allow the control to cool, so that it will recycle.
6. Depress manual reset button on the motor.
7. After three or four failed attempts to light furnace a qualified installer should be contacted for service.

NOTE: Do not expose cad cell to direct electric bulb light or sunlight, which may enter through the air control band slot and upset the electric circuit of this device.

MAINTENANCE

WARNING: DISCONNECT ELECTRICAL POWER TO THE FURNACE BEFORE PERFORMING ANY MAINTENANCE TO THE UNIT.

FILTERS

Air filters should be kept clean. A dirty filter retards the flow of air and prevents proper airflow. Permanent filters should be cleaned and disposable filters should be replaced at least once a year and more often if necessary.

In a new house the air filter may become clogged within a short time due to the presence of dust in the air and air ducts left over from new construction. For this reason it should be checked more often than stated above.

Your furnace has been factory furnished with permanent plastic fiber filament filters (downflow), however, your installer may have installed a different type of filter. Consult the appropriate instruction below for cleaning methods.

HOW TO CLEAN FILTERS:

1. Glass Fiber (Disposable)
These filters should not be cleaned. They should be checked monthly and replaced when necessary.
2. Aluminum Mesh
Wash with detergent and water. Air dry thoroughly and renew coating in compliance with manufacturer's instructions.
3. Plastic Impregnated Fiber
Vacuum clean or rinse as convenient and reinstall.

LUBRICATION

1. Motors without oiling ports.
These motors are permanently lubricated. No further lubrication is required.
2. Motors with oiling ports.
Add from 10 to 20 drops of Electric Motor Oil or an SE grade of non-detergent SAE-10 or 20 motor oil to each bearing. Frequency should be once every two years for continuous duty or every five years for light duty. Do not over oil - Excessive oiling can damage motor.