5. Duct Work

Figure 5 shows a typical duct work layout. Your system may vary but the basic tie-in will be the same.

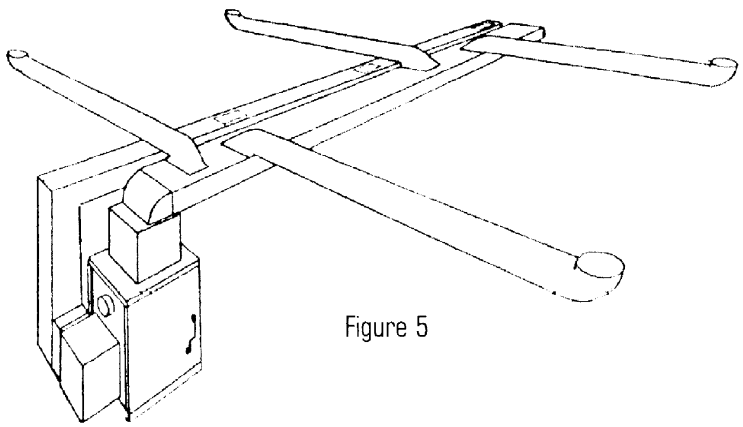


Figure 5

6. Operating Instructions

Adjusting Controls - In order for your new furnace to function, controls must be properly adjusted.

The heat output is regulated by the automatic draft control on the bottom door. The electric motor (A) opens and closes the flapper door (B). Opening and closing the flapper door regulates the airflow to the firebox.

The maximum air flow can be adjusted by turning the adjusting bolt (C) counterclockwise for more air and clockwise for less. NOTE: All adjustments of this bolt should be done when the flapper door is in the closed position. Failure to do so could result in motor damage.

The idle adjuster (D) controls the minimum amount of air that enters the firebox when the flapper door is closed. Adjustment is made by turning the adjuster vertical for zero idle air or horizontal for maximum idle air. It is best to start at a medium setting as shown in Fig. 6.

Adjusting Fan Control - Shut off power to furnace before removing cover from fan control. NOTE: The three pointers on the dial. The one on the right is the high limit adjustment which is preset at 200 degrees. Its function is to close the automatic draft control if the temperature in the plenum reaches 200 degrees. The center pointer adjusts the temperature at which the blower starts. A good setting for this pointer is 150 degrees on the dial. The pointer on the left side is to adjust the temperature at which the fan stops. A good setting for this pointer is 100 degrees to 110 degrees on the dial. If it is set too low, cool air will come out of the registers.

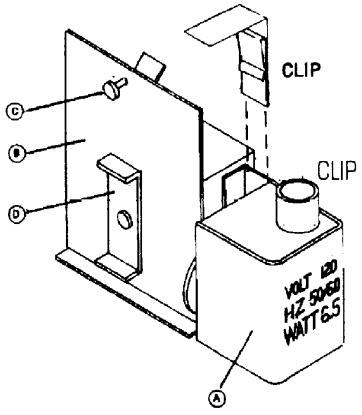
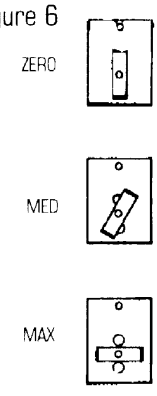


Figure 6



Thermostat - Set the thermostat at the desired room temperature. When more heat is needed, the thermostat opens the automatic draft control. This raises the output of the fire. When the temperature in the plenum reaches set temperature of the center pointer on the fan control, the blower will start. The blower will then circulate hot air throughout the house. When the room temperature reaches the set temperature on the thermostat, the automatic draft control will close, thus reducing the heat of the fire. When the temperature in the plenum drops to the setting of the left hand point in the fan control, the blower will stop.

NOTE: The temperature in the plenum may rise enough to start the blower for a short period even though the draft control is shut. This is because it takes a few minutes for the fire temperature to drop. This is normal and will be noticed more with coal than wood.