OWNERS MANUAL

MODEL CF6
DOWN FLOW MP80 KIT

This kit supplies the necessary parts and instructions needed when using the MP80 in a down flow configuration.

SAVE THESE INSTRUCTIONS

VALLEY COMFORT SYSTEMS INC.
1290 COMMERCIAL WAY
PENTICTON, B.C.
V2A 3H5

(250) 493-7444

Revised September 16, 2002

CF6 Counterflow Kit Instructions

To use the valley comfort MP80 wood furnace in a counterflow configuration requires the installation of a CF6 kit.

NOTE: When used in a counterflow configuration, normal MP80 clearances do not apply.

SPECIFICATIONS

1. The counterflow add on system shall not be installed in a room smaller than 7 ft x 8 ft x 7 ft ceiling height.
2. Minimum clearance above the hot air plenum is 12 inches.
3. Minimum clearance where the hot air duct penetrates the floor and the first 3 feet of duct, is 1 inch.
4. Minimum clearance where the return air duct penetrates the floor is 0 inches or as specified on the alternate furnace specification.
5. Maximum temperature setting for high limit switch controlling CF6 damper motor is 220 °F.

INSTALLATION

NOTE: Installation shall be done by a qualified heating technician who is familiar with the operation of wood heating appliances and electrical control circuits.

1. Turn off all power feeding the MP80 system
2. Read these instructions carefully so you understand the operational concept of the CF6 kit..
3. Position the CF6 back plate to assure a flat mounting surface on the hot air plenum, approximately 16" above the MP80.
4. Using the back plate as a template, mark the opening required.
5. Cut a 5 1/2" x 6 1/2" opening in the plenum as marked above.
6. Mount the CF6 kit onto the plenum using the screws provided. Make sure the opening in the back plate and the plenum are in alignment. See Fig 1 and Fig 2 for typical installations.
7. Connect the electrical wiring as per Fig 3. **NOTE: The 24vac to the CF6 damper motor must be controlled via the 220 deg high limit switch.**
8. Apply power to the system and ensure that the wood thermostat controls operate correctly. Under normal operation the CF6 exhaust air door should be closed.
9. Remove power from the system and ensure that the MP80 draft damper closes and the CF6 exhaust air damper opens.
10. Install the perforated metal cover on the CF6 chassis.
11. Install the tamper elimination cover over the MP80 draft door and damper motor mechanism. See typical installation Fig 1 & 2.
12. Apply the enclosed, serialized, certification label onto the MP80 near the existing MP80 certification.

OPERATION

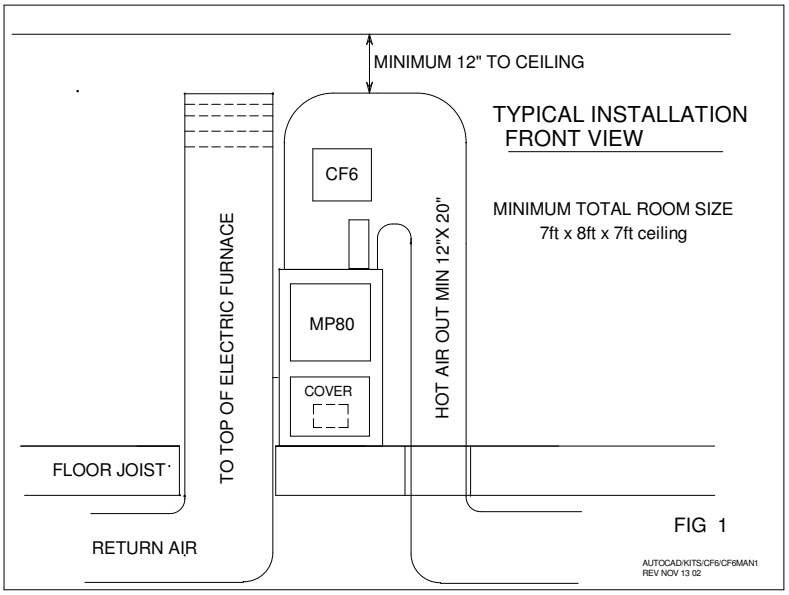
Theory of operation: In the event of a power failure the MP80 control system operates to close the draft air damper. However, there is still considerable heat energy stored in the system and the fire is not immediately or completely extinguished. When installed in a counterflow configuration and under some circumstances, the gravity convection air flow through the system is greatly reduced. Warm air on the plenum can cause excessive heat buildup. The CF6 kit is designed to open under power failure conditions and allow the heat to escape.

Under normal operation the CF6 requires no maintenance. In the event of a malfunction, contact a qualified heating system technician.

Do not cover the perforated unit cover or set anything on top of the CF6 unit.

As noted in the MP80 instructions, do not overfire the wood furnace. Do not fill the firebox above the bottom of the firebox door.

In the event of a power failure leave the furnace closed, do not add fuel.



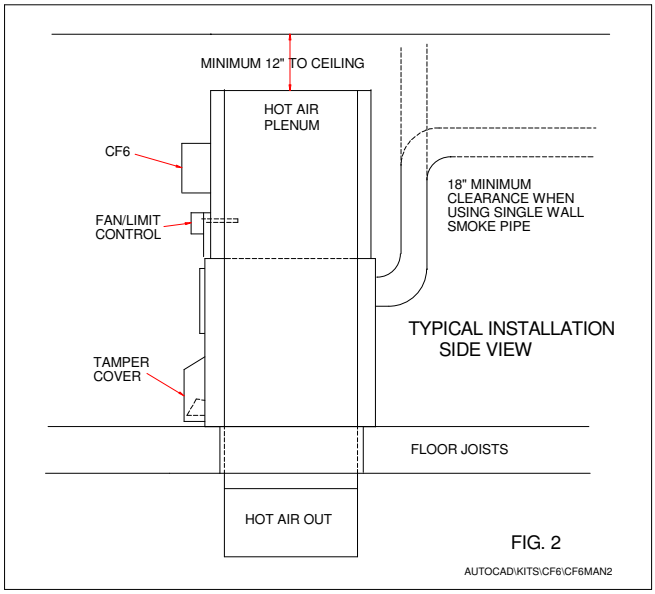
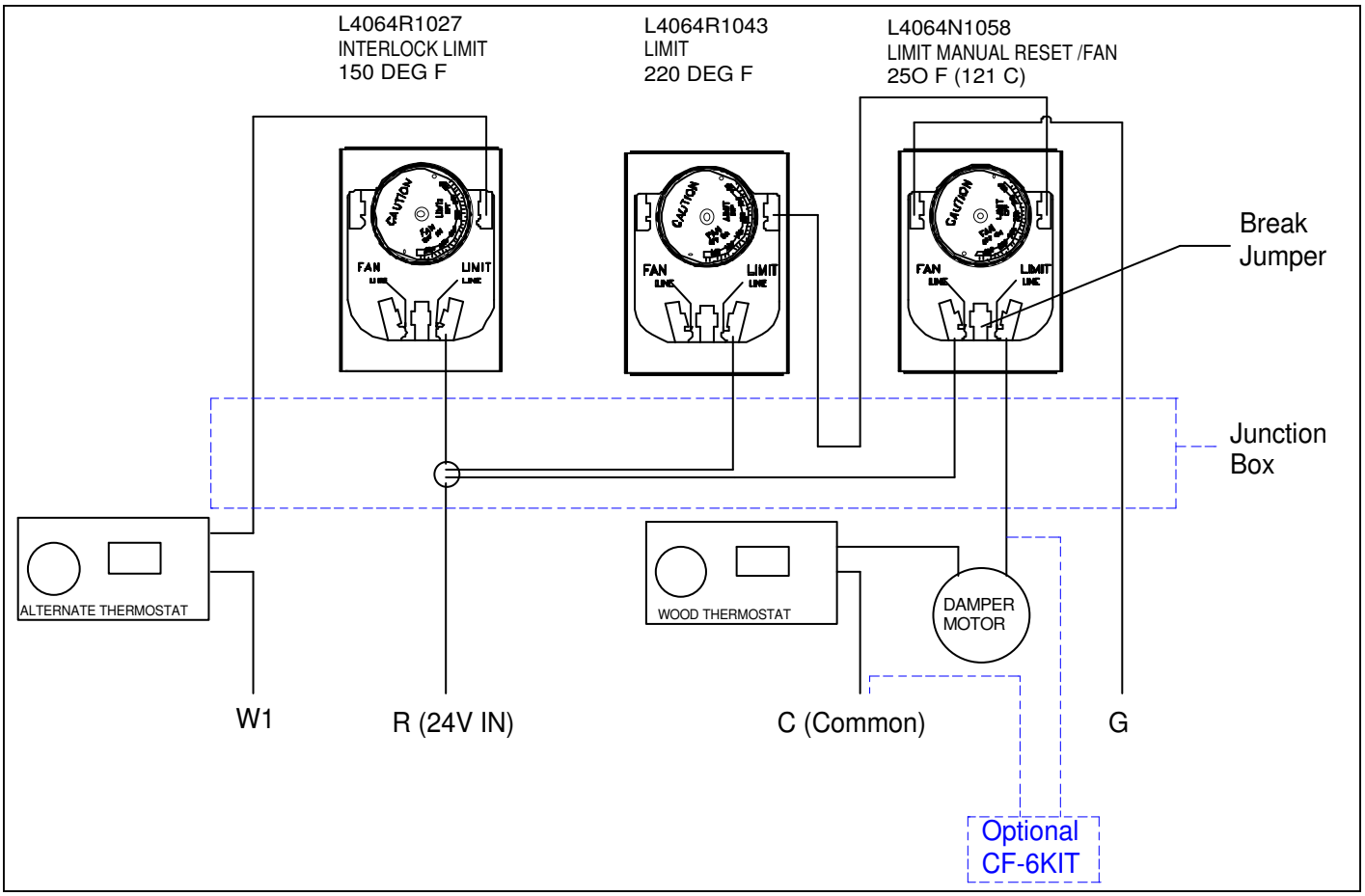


Fig. 3—Electrical Diagram



IMPORTANT!

APPLY THE ATTACHED SERIALIZED CERTIFICATION LABEL ONTO THE MP80, NEAR THE EXISTING MP80 CERTIFICATION LABEL.