

Firing Rate Conversion Kit #903099, 903100, 903101, and 903102

Installation Instructions

For Model Series CMF2/CMF 80-PG Convertible and CMF2/CMF 80-PO Convertible Furnaces

Important: Read all instructions before starting the installation.

WARNING: This kit must be installed by a qualified installing agency and in accordance with local codes and ordinances. Failure to properly install the conversion kit as described herein may damage the equipment and/or the home, can create a fire or asphyxiation hazard, violates U.S. listing requirements, and will void the warranty.

FOR YOUR SAFETY

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

General

This conversion kit can be used to change the rated firing rate (input) of your CMF/CMF2 80 convertible furnace (either PG or PO) from the factory set rate of 75,000 BTU/H. The input can be either increased to 85,000 (CMF: 90,000) BTU/H or decreased to 65,000 BTU/H with the appropriate conversion kit. This set of instructions assumes that you are familiar with and have the Installation Instructions delivered with the CMF/CMF2 furnace.

Before Starting the Conversion

First check your kit components to ensure that all of the necessary items are enclosed. The components of each kit are listed below:

CMF/CMF2 80 PG Convertible 75 to 65 KBTU/H Input Conversion Kit:

1. Main Burner Orifices
 - A. One Nat. Gas Orifice
 - B. One Propane (LP) Gas Orifice
2. Conversion Kit Label (consists of four overlay labels).

NOTE: Appropriate conversion kit label should be chosen based on the furnace model (see Table 1). Overlay the conversion kit label between "PERFORMANCE DATA" and "STANDARD" of the furnace name plate label.
3. Installation Instructions for firing rate conversion.

CMF/CMF2 80 PG Convertible 75 to 85/90 KBTU/H Input Conversion Kit:

1. Main Burner Orifices
 - A. One Nat. Gas Orifice
 - B. One LP Gas Orifice
2. Conversion Kit Label

NOTE: Appropriate conversion kit label should be chosen based on the furnace model (see Table 1). Overlay the conversion kit label between "PERFORMANCE DATA" and "STANDARD" of the furnace name plate label.
3. LP Accessories
4. Installation Instructions for firing rate conversion.

CMF/CMF2 80 PO Convertible 75 to 65 KBTU/H Input Conversion Kit:

1. Oil Burner Nozzle
2. Conversion Kit Label

NOTE: Appropriate conversion kit label should be chosen based on the furnace model (see Table 1). Overlay the conversion kit label between "PERFORMANCE DATA" and "STANDARD" of the furnace name plate label.
3. Installation Instructions for firing rate conversion.

CMF/CMF2 80 PO Convertible 75 to 85/90 KBTU/H Input Conversion Kit:

1. Oil Burner Nozzle
2. Conversion Kit Label

NOTE: Appropriate conversion kit label should be chosen based on the furnace model (see Table 1). Overlay the conversion kit label between "PERFORMANCE DATA" and "STANDARD" of the furnace name plate label.
3. Burner Head
4. Installation Instructions for firing rate conversion.

Converting the Firing Rate of the CMF/CMF2 80 PG Series Furnaces

A. To Turn Off Gas to the Appliance:

1. Set the thermostat to "OFF" or to its lowest setting.
2. Turn off all electrical power to the appliance.
3. Turn the latch and open the furnace door.
4. Push in the gas control lever and move to OFF. DO NOT FORCE LEVER.

WARNING: Both propane (LP) and natural gas orifices are included with this kit. Make sure you install the proper orifice, and discard the old orifices (both Nat. and LP).

FURNACE NAME	FURNACE MODEL			
	65 PG	65 PO	90 PG	90 PO
CMF2	710670	710671	710672	710673
CMF	155941	155942	155943	155944

Table 1. Conversion Kit Label Number

Orifices for CMF/CMF2 80 PG Conv. Fired at 65 KBTU/H	LP Nat. Gas	#43 #24
Orifices for CMF2 80 PG Conv. Fired at 85 KBTU/H	LP Nat. Gas	#37 #18
Orifices for CMF 80 PG Conv. Fired at 90 KBTU/H	LP Nat. Gas	#36 #16
0-2000' Above Sea Level		

B. Remove the Burner Assembly:

1. Follow instructions "To Turn Off Gas To Appliance."
2. Shut off gas supply at meter.
3. Disconnect gas burner electric cord, gas piping to burner, and thermostat leads.
4. Remove three (3) fasteners holding burner in place.
5. Remove burner assembly from unit.

C. Change the Main Burner Orifice:

1. Disconnect the two wires leading to gas control valve.
2. Remove three (3) fasteners from U-shaped manifold plate and orifice assembly.
3. Remove the main orifice and replace it with the alternate fuel orifice supplied in this kit.
4. Reconnect the manifold plate using the fasteners removed earlier. (Refer to step D-2).
5. Connect two wires to gas control valve.

D. Reassemble the Burner into the Furnace.

1. Reposition the burner back into the furnace and secure with three (3) fasteners removed earlier. (Refer to step B-4).
2. Reconnect the gas piping to the burner making sure of no leaks.
3. Reconnect electric cord and thermostat leads.

E. Set the Blower Speed & Check Appliance Operation:

1. Open the electric box underneath the vestibule divider on the left-hand side of the furnace. To do this remove the single screw in the center of the plate.
2. The blower speed must be set to the one associated with the firing rate change. Connect the low-speed blower wire (red) for 75 to 65 KBTU/H firing rate conversions. Connect the high-speed blower wire (black) for 75 to 90 KBTU/H firing rate conversions.
3. The kit has two labels included with it. The first label must be applied over the corresponding portion of the rating label. Align the label such that it covers and updates the appropriate information on the rating label. The other label included in the kit must be applied over the corresponding label on the burner to update that information. If the burner & rating plate labels are dirty clean them with water and a mild detergent.
4. Adjust the air setting of the burner as described in the "Adjusting the Burner" section of the Installation Instructions.
5. Open the manual shut-off valve & follow the "Operating Instructions" as outlined in the CMF/CMF2 Furnace Installation Instructions provided with furnace.

Converting the Firing Rate of the CMF/CMF2 80 PO Convertible Series

A. To Turn Off Oil to the Appliance:

1. Set the thermostat to "OFF" or to its lowest setting.
2. Turn off all electrical power to the appliance.
3. Turn the latch and open the furnace door.

B. Remove the Burner Assembly:

1. Shut off the oil supply at the tank.
2. Disconnect electric cord, oil piping & thermostat leads.
3. Remove three (3) fasteners holding burner in place.
4. Remove burner from furnace.

C. When Converting the CMF/CMF2 80 PO Convertible Furnace to 85,000 BTU/H (CMF: 90,000 BTU/H) Note: the Burner Head will Need to be Replaced.

1. For CMF/CMF2 80 PO Convertible 75 to 85/90 KBTU/H conversions, remove the burner head from the oil burner & replace it with the head in the kit. (See the Replacement Parts List for description of burner head).

D. Remove the Oil Nozzle and Replace it with the Nozzle from the Kit.

Furnace	Input	Nozzle	Head	
	BTU/H		CMF2	CMF
CMF2/CMF	65,000	.50 GPH, °80, A	F3	F0
CMF2	85,000	.65 GPH, °80, A	F3	-
CMF	90,000	.65 GPH, °80, B	-	F3H

E. Reassemble the Burner Assembly into the Furnace.

1. Reposition the burner back into the furnace and secure with three (3) fasteners removed earlier. (Refer to step B-3).
2. Reconnect the oil piping to the burner making sure of no leaks.
3. Reconnect electric cord and thermostat leads

F. Set Blower Speed & Check Appliance Operation:

1. Open the electric box underneath the vestibule divider on the left-hand side of the furnace. To do this remove the single screw in the center of the plate.
2. The blower speed must be set to the one associated with the firing rate change. Connect the low-speed blower wire (red) for 75 to 65 KBTU/H conversions. Connect the high-speed blower wire (black) for 75 to 90 KBTU/H firing rate conversions.
3. The kit has two labels included with it. The first label must be applied over the corresponding portion of the rating label. Align the label such that it covers and updates the appropriate information on the rating label. The other label included in the kit must be applied over the corresponding label on the burner to update that information. If the burner & rating plate labels are dirty clean them with water and a mild detergent.
4. Adjust the air setting of the burner as described in the "Adjusting the Burner" section of the Installation Instructions.
5. Open the manual shut-off valve & follow the "Operating Instructions" as outlined in the CMF/CMF2 Furnace Installation Instructions.

