# **Burner Replacement Kit**

# **INSTALLATION INSTRUCTIONS**

## For Model Series M1B and M1S Furnaces

### **IMPORTANT SAFETY INFORMATION**

Please read all instructions before using this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death.

**CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of this kit. Some local codes require licensed installation/service personnel to install this type of equipment. Please read all instructions carefully before starting the installation. Return these instructions to the customer's package for future reference.

# **WARNING:**

Shut off the gas supply at the manual gas shutoff valve, before disconnecting the electrical power. A fire or explosion may result causing property damage, personal injury or loss of life. Failure to follow the safety warnings exactly could result in serious injury, death or property damage.

# A WARNING:

To avoid electric shock, personal injury, or death, turn off the electric power at the disconnect or the main service panel before making any electrical connections.

## ABOUT THE KIT

This kit is designed for use on the NORDYNE series M1B and M1S furnaces to replace the burner. Refer to the appropriate section below for more details on your specific installation.

### **INSTALLING THE KIT**

### To Turn Off the Fuel Supply to the Appliance

- 1. Set the thermostat to "OFF" or to its lowest setting.
- 2. Turn "OFF" all electrical power to the appliance.
- 3. Remove the furnace door.
- 4. For gas burners, push in the gas control lever and move to "OFF". DO NOT FORCE LEVER.
- 5. For oil burners, shut off the oil supply to the furnace.

**Removing the Burner Assembly** 

# A WARNING:

The burner assembly is equipped with natural gas orifices. For LP operation, replace them with the supplied LP orifices. Failure to follow this safety warning could result in serious injury, death or property damage.

- 1. Follow the instructions "To Turn Off the Fuel Supply to the Appliance".
- 2. Shut off the gas/oil supply at the meter/tank.
- 3. Disconnect the fuel piping to the burner. For a gas burner, disconnect the gas piping from the gas valve. For an oil burner, disconnect the oil line(s) from the oil pump.
- 4. Unplug the burner from the furnace.
- 5. Remove wires from the terminals of the burner. For a gas burner, disconnect the gray wire from the "C" terminal and the blue wire from the "W" terminal. **NOTE:** on some models, the terminals may be marked "T T" instead of "C W". For an oil burner, disconnect the red wire from the "T1" terminal and the blue wire from the "T2" terminal.
- 6. Remove the fasteners that hold the burner to the heat exchanger panel. Keep these fasteners for re-assembly.
- 7. Carefully remove the burner assembly from the unit.
- 8. Before replacing the burner assembly, ensure that the original burner mounting gasket has been removed from the heat exchanger panel. Discard the original burner mounting gasket.

### For Natural Gas/LP Burner Replacements Only

- 1. Install the replacement natural gas burner in the furnace. Ensure that the provided mounting gasket is in place before installing the burner.
- 2. Secure the burner to the heat exchanger panel with the fasteners that were removed earlier.
- 3. Plug in the burner to the furnace.
- 4. Reconnect the gray wire to the "C" terminal and the blue wire to the "W" terminal. Note, on some models, the terminals may be marked "T T" instead of "C W". If the furnace does not operate after connecting the wire to one of the "T" terminals, then switch the wires. If the furnace still does not operate, refer to the troubleshooting guide in the installation instructions.
- 5. Reconnect the gas piping to the gas valve.
- 6. Ensure that both the electric and gas connections are secure and tight.
- 7. Open fuel line valves and test for leaks. DO NOT USE OPEN FLAME TO TEST FOR LEAKS.

### For Gas to Oil Burner Conversions Only

**NOTE:** Before installing the new burner into the furnace, determine the manufacturing date by examining the serial

number on the rating plate of the furnace. The serial number will look like M1\*9810\*\*\*\*\*. The fourth through seventh digits represent the date code of the furnace. In the above example, 9810 represents October 1998. If the date code on the furnace is prior to 9811, then a ceramic combustion chamber (part #903423), which is shown in Figure 1, must be added to the furnace (if not already present). If a ceramic combustion chamber is added to the furnace, then the main air limit must be replaced with another main air limit (part #626469). NOTE: These items are not included in this kit and must be ordered separately.

To install these items follow the instructions below. **NOTE:** If the date code on your furnace is after 9811. then skip to step #3 and proceed with installing the new oil burner.

- 1. Replace the main-air temperature limit.
  - A) Remove wires from the main-air limit terminals.
  - B) Remove fasteners holding the original limit in place, and remove the limit. Be sure to keep the fasteners that were removed for re-assembly.
  - C) Install the new limit with the fasteners removed in step B.
  - D) Reconnect the wires to the limit terminals.
- 2. Install the combustion chamber into the furnace.
  - A) Remove the burner mounting plate by removing the fasteners that hold the plate to the furnace. See Figure 1.
  - B) Remove the combustion chamber ring.
  - C) Remove the original gaskets and discard.
  - D) Re-install the combustion chamber ring and the burner mounting parts as shown in Figure 1. NOTE: Make sure the gaskets (provided in the combustion chamber kit) are properly positioned as shown in Figure 1.
- 3. Install the oil burner.
  - A) Install the oil burner in the furnace. NOTE: Make sure the provided burner mounting gasket is in place before installing the burner.
  - B) Secure the burner to the heat exchanger panel with the fasteners that were removed earlier.
  - C) Connect the red wire to "T1" and the blue wire to "T2" on the terminal board.

- D) Plug in the burner to the furnace.
- E) Connect the oil line(s) to the burner. NOTE: Make sure both the electric and oil connections are secure and tight.

#### For Oil Burner Replacements Only

- 1. Install the oil burner in the furnace. NOTE: Make sure the provided burner mounting gasket is in place before installing the burner.
- 2. Secure the burner to the heat exchanger panel with the fasteners that were removed earlier.
- 3. Reconnect the red wire to "T1" and the blue wire to "T2" on the terminal board.
- 4. Plug in the burner to the furnace.
- 5. Connect the oil line(s) to the burner. NOTE: Make sure both the electric and oil connections are secure and tight.

#### For Oil to Gas Burner Conversions Only

- 1. Install the natural gas burner in the furnace. NOTE: Make sure the provided burner mounting gasket is in place before installing the burner.
- 2. Secure the burner with the fasteners that were removed earlier.
- 3. Connect the gray wire to the "C" terminal and the blue wire to the "W" terminal. Note: Some models may be marked "T T". NOTE: If the furnace does not operate after connecting the wire to one of the "T" terminals, then switch the wires. If the furnace still does not operate, refer to the trouble shooting section in the installation instructions.
- 4. Plug in the burner to the furnace.
- 5. Reconnect the gas piping to the burner. NOTE: Make sure both the electric and gas connections are secure and tight.
- 7. Open fuel line valves and test for leaks. DO NOT USE OPEN FLAME TO TEST FOR LEAKS.

### OPERATING THE UNIT

1. Follow the start-up and lighting procedures outlined in the Installation Instructions for the furnace.





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