

## Lennox 50A66-123-04

# Lennox OEM Replacement Furnace Control Board 50A66-123-04 Instruction Manual

Model: 50A66-123-04

## 1. INTRODUCTION

This manual provides essential instructions for the safe and proper installation, operation, and maintenance of the Lennox OEM Replacement Furnace Control Board, model 50A66-123-04. This control board is designed as a direct replacement part for compatible Lennox furnace systems. Adherence to these instructions is crucial for optimal performance and safety.

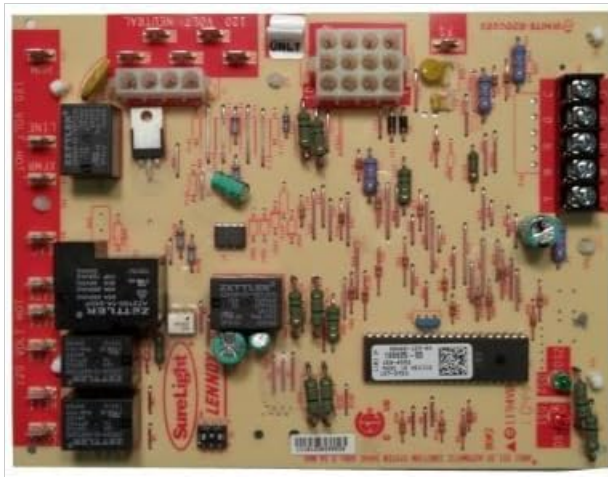
## 2. SAFETY INFORMATION

**WARNING:** Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Read and understand all instructions thoroughly before proceeding. Installation and service must be performed by a qualified installer, service agency, or gas supplier.

- **Electrical Hazard:** Always disconnect all electrical power to the furnace unit before installing or servicing the control board. Failure to do so can result in electrical shock, personal injury, or death.
- **Static Discharge Precautions:** Electronic components are sensitive to electrostatic discharge (ESD). Before handling the control board, discharge any static electricity from your body by touching a grounded metal object, such as the furnace chassis. Wear an anti-static wrist strap if available.
- **Component Handling:** Handle the control board by its edges only. Avoid touching the electronic components or circuit traces.
- **Wiring Accuracy:** Ensure all wiring connections are correct and secure. Incorrect wiring can damage the control board, furnace, or create a fire hazard.

## 3. PRODUCT OVERVIEW

The Lennox 50A66-123-04 is an Original Equipment Manufacturer (OEM) replacement control board for specific Lennox furnace models. This board manages the various functions of the furnace, including ignition, fan operation, and safety controls, ensuring efficient and safe heating.



*An overhead view of the Lennox 50A66-123-04 OEM Replacement Furnace Control Board, showing various electronic components, relays, and wiring terminals. The board is red and beige with white and black markings.*

## 4. SETUP AND INSTALLATION

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This section outlines the general procedure for replacing a furnace control board. Specific furnace models may have variations. Always refer to your furnace's specific service manual for detailed instructions.

1. **Disconnect Power:** Turn off all electrical power to the furnace at the main service panel (breaker box). Verify power is off using a voltage tester.
2. **Access Control Board:** Open the furnace access panel to locate the existing control board.
3. **Document Connections:** Before disconnecting any wires, take clear photographs of all wiring connections to the old control board. Label each wire and its corresponding terminal on the old board. This step is critical for correct re-installation.
4. **Disconnect Wires:** Carefully disconnect all wires from the old control board. Note the position of any jumpers or switches.
5. **Remove Old Board:** Unmount the old control board from the furnace chassis. This usually involves removing screws or releasing clips.
6. **Install New Board:** Following static discharge precautions, mount the new Lennox 50A66-123-04 control board in the same location as the old one. Secure it with the appropriate fasteners.
7. **Connect Wires:** Refer to your photographs and labels to meticulously reconnect all wires to the corresponding terminals on the new control board. Ensure all connections are firm and secure. Double-check every connection.
8. **Verify Jumpers/Switches:** Ensure any necessary jumpers or DIP switches on the new board are set correctly according to your furnace model's specifications.
9. **Close Access Panel:** Securely close the furnace access panel.
10. **Restore Power:** Restore electrical power to the furnace at the main service panel.

## 5. OPERATING INSTRUCTIONS

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After successful installation, the control board will manage the furnace's operation automatically. The following steps are for initial verification:

1. **Initial Power-Up:** Upon restoring power, the control board will typically perform a self-diagnostic check. Observe any diagnostic lights or codes on the board, if present, and compare them to your furnace's service manual for normal operation indications.

2. **Thermostat Call for Heat:** Set your thermostat to a temperature higher than the current room temperature to initiate a call for heat.
3. **Observe Furnace Cycle:** Monitor the furnace through a complete heating cycle: inducer motor activation, igniter glow, gas valve opening, burner ignition, and main blower fan activation.
4. **Thermostat Call for Fan:** Test the fan-only operation by setting the thermostat to 'Fan ON' mode. The main blower fan should activate.

## 6. MAINTENANCE

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The Lennox 50A66-123-04 control board is designed for reliable operation and generally requires no routine maintenance itself. However, periodic inspection of the furnace system is recommended:

- **Annual Furnace Inspection:** Have your furnace inspected annually by a qualified HVAC technician. This includes checking electrical connections, cleaning components, and verifying proper operation of all safety devices.
- **Clean Connections:** During furnace maintenance, ensure all wiring connections to the control board are clean and tight.
- **Environmental Control:** Ensure the furnace area is kept clean and free of dust, debris, and excessive moisture, which can negatively impact electronic components.

## 7. TROUBLESHOOTING

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If the furnace is not operating correctly after control board replacement, consider the following troubleshooting steps:

- **No Power to Furnace:**
  - Check the circuit breaker for the furnace.
  - Verify all power connections to the control board are secure.
- **Furnace Not Igniting:**
  - Check for diagnostic fault codes on the control board (refer to your furnace manual).
  - Ensure the gas supply is on.
  - Verify igniter operation and flame sensor cleanliness.
- **Blower Fan Issues:**
  - Check thermostat settings (Fan ON/AUTO).
  - Verify fan motor connections.
- **Incorrect Wiring:** Re-verify all wiring connections against your documentation and the furnace wiring diagram. A single misplaced wire can prevent proper operation.
- **Diagnostic Codes:** Many control boards feature LED indicators that flash specific codes to indicate faults. Consult your furnace's service manual to interpret these codes.

If issues persist, contact a qualified HVAC technician for further diagnosis and repair.

## 8. SPECIFICATIONS

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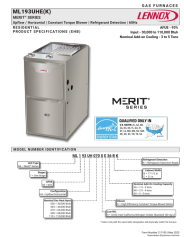

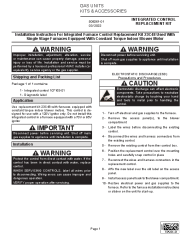
Feature	Detail
Manufacturer	Lennox
Part Number	Replaces Lennox # 50A66-123-04
Item Weight	12 ounces
Product Dimensions	6 x 6 x 6 inches
Item Model Number	CECOMINOD051807
Item Package Quantity	1




## 9. WARRANTY AND SUPPORT

For warranty information regarding your Lennox OEM Replacement Furnace Control Board 50A66-123-04, please refer to the documentation provided with your purchase or contact the original seller or Lennox directly. Warranty terms typically cover manufacturing defects for a specified period.

For technical support or assistance with installation and troubleshooting beyond the scope of this manual, it is recommended to contact a certified HVAC professional or Lennox customer service.

### Related Documents - 50A66-123-04

	<p><a href="#">Lennox ML193UHE(K) Gas Furnace Product Specifications</a></p> <p>Detailed product specifications, features, installation guidelines, and optional accessories for the Lennox ML193UHE(K) residential gas furnace. This document covers technical details, performance data, and model identification.</p>
	<p><a href="#">Lennox SLP99DFVK Gas Furnace Installation Instructions</a></p> <p>Comprehensive installation guide for the Lennox SLP99DFVK Dave Lennox Signature Collection Gas Furnace. Covers safety, setup, electrical, gas piping, venting, and troubleshooting for professional HVAC installers.</p>
	<p><a href="#">Lennox Integrated Control Replacement Kit 23C48 Installation Instructions</a></p> <p>Installation guide for the Lennox Integrated Control Replacement Kit 23C48, providing step-by-step instructions and wiring diagrams for single-stage furnaces with constant torque indoor blower motors.</p>

 <p><b>LENNOX</b> ELECTRIC HEATING SYSTEMS</p> <p><b>INSTALLATION INSTRUCTIONS</b> <b>EL280DFE</b> ELECTRIC HEATING SYSTEMS</p> <p><b>WARNING</b> To avoid fire or explosion, do not install this unit in a room with a flammable gas or liquid.</p> <p><b>CAUTION</b> To avoid injury, do not touch the burner or the gas valve.</p> <p>Model: EL280DFE Part Number: 23C01-23C04 Page 1 of 1</p>	<p><a href="#">Lennox EL280DFE Gas Furnace Installation Instructions</a></p> <p>Comprehensive installation guide for the Lennox EL280DFE Elite Series Gas Furnace, covering safety, clearances, ducting, venting, gas piping, electrical connections, unit setup, operation, and maintenance.</p>
 <p><b>LENNOX</b> ELECTRIC HEATING SYSTEMS</p> <p><b>CONSTANT TORQUE MOTOR REPLACEMENT KIT</b> <b>23C01-23C04</b> ELECTRIC HEATING SYSTEMS</p> <p><b>WARNING</b> To avoid fire or explosion, do not install this unit in a room with a flammable gas or liquid.</p> <p><b>CAUTION</b> To avoid injury, do not touch the burner or the gas valve.</p> <p>Model: 23C01-23C04 Part Number: 23C01-23C04 Page 1 of 1</p>	<p><a href="#">Lennox Constant Torque Motor Replacement Kit Installation Guide (23C01-23C04)</a></p> <p>Step-by-step installation guide for Lennox Constant Torque Motor Replacement Kits (models 23C01, 23C02, 23C03, 23C04) for E model furnaces. Includes shipping list, application, safety warnings, and installation procedures.</p>
 <p><b>LENNOX</b> ELECTRIC HEATING SYSTEMS</p> <p><b>UNIT INFORMATION</b> <b>SL280DFVK</b> ELECTRIC HEATING SYSTEMS</p> <p><b>WARNING</b> To avoid fire or explosion, do not install this unit in a room with a flammable gas or liquid.</p> <p><b>CAUTION</b> To avoid injury, do not touch the burner or the gas valve.</p> <p>Model: SL280DFVK Part Number: SL280DFVK Page 1 of 1</p>	<p><a href="#">Lennox SL280DFVK Series Gas Furnace Service Literature</a></p> <p>This service literature provides comprehensive technical details for Lennox SL280DFVK series gas furnaces, including specifications, unit components, operational sequences, troubleshooting guides, and maintenance procedures for various models such as SL280DF070V36AK, SL280DF090V48BK, SL280DF090V60CK, and SL280DF110V60CK.</p>