

Nordyne 624735R

Nordyne 624735R OEM Replacement Furnace Control Board User Manual

Model: 624735R

Brand: Nordyne

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Nordyne 624735R OEM Replacement Furnace Control Board. This control board is designed as a direct replacement part for specific Nordyne furnace models, ensuring optimal performance and safety. Please read this manual thoroughly before proceeding with installation or any service.

The 624735R control board is a critical component responsible for managing various functions within your furnace, including ignition, fan operation, and safety limits. Proper handling and installation are paramount to ensure the longevity and safe operation of your heating system.

SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

- Always disconnect power to the furnace before installing or servicing the control board to prevent electrical shock.
- Ensure all wiring connections are secure and follow the furnace manufacturer's wiring diagrams.
- Do not bypass any safety devices.
- Wear appropriate personal protective equipment (PPE), such as gloves and safety glasses, during installation.
- Keep children and pets away from the work area.
- If you are unsure about any step, consult a qualified HVAC technician.

PRODUCT OVERVIEW

The Nordyne 624735R is an OEM replacement furnace control board. It is designed to be a direct fit and functional equivalent to the original board in compatible Nordyne furnace models. The board integrates various circuits for ignition control, fan motor operation, and safety monitoring.

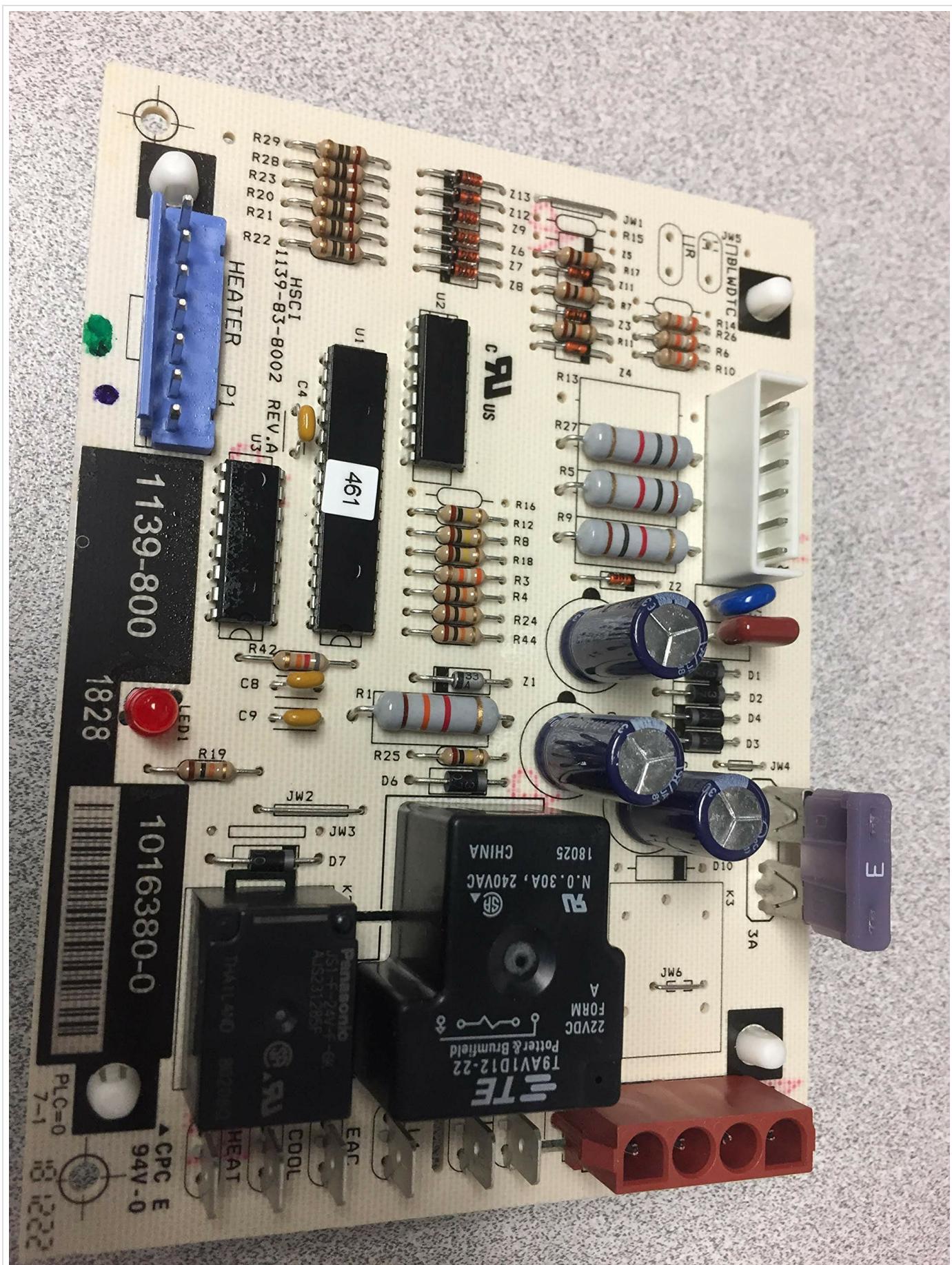


Figure 1: Nordyne 624735R OEM Replacement Furnace Control Board. This image shows the top-down view of the circuit board, highlighting various components such as resistors, capacitors, relays, integrated circuits, and connection terminals. Key labels like "HEATER P1", "1139-800", and "1016380-0" are visible on the board.

Key components on the board include:

- **Microcontroller/Integrated Circuits:** For processing control logic.
- **Relays:** To switch high-current loads for components like the blower motor and igniter.
- **Capacitors and Resistors:** For circuit stability and signal conditioning.
- **Terminal Blocks:** For connecting low-voltage thermostat wires and high-voltage power and component wires.
- **LED Indicators:** For diagnostic purposes (e.g., LED1 visible on the board).
- **Fuses:** For circuit protection (e.g., 3A fuse visible).

SETUP AND INSTALLATION

This section outlines the general steps for replacing a furnace control board. Always refer to your specific furnace model's service manual for detailed wiring diagrams and procedures.

1. **Power Disconnection:** Turn off all electrical power to the furnace at the main circuit breaker or fuse box. Verify power is off using a voltage tester.
2. **Access the Control Board:** Locate and open the furnace access panel to expose the existing control board.
3. **Document Wiring:** Before disconnecting any wires, take clear photos of all connections to the old 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 type of connector (e.g., spade, plug-in).
5. **Remove Old Board:** Unmount the old control board. It may be held in place by screws, clips, or standoffs.
6. **Install New Board:** Mount the new Nordyne 624735R control board in the same location and orientation as the old one. Ensure it is securely fastened.
7. **Connect Wires:** Using your photos and labels, connect all wires to the corresponding terminals on the new control board. Double-check every connection for accuracy and tightness.
8. **Replace Access Panel:** Close and secure the furnace access panel.
9. **Restore Power:** Turn on the electrical power to the furnace at the main circuit breaker.
10. **Test Operation:** Initiate a heating cycle to verify proper furnace operation. Observe the furnace's sequence of operation, including igniter activation, gas valve opening, and fan operation. Check for any diagnostic error codes displayed by the LED on the board.

If the furnace does not operate correctly or displays error codes, refer to the Troubleshooting section or consult a qualified technician.

OPERATION

Once installed, the Nordyne 624735R control board operates automatically in conjunction with your furnace's thermostat and other safety controls. It manages the sequence of operations for heating and cooling cycles.

- **Heating Cycle:** Upon a call for heat from the thermostat, the board initiates the inducer motor, proves draft, activates the igniter, opens the gas valve, and then engages the blower motor after a set delay.
- **Cooling Cycle:** Upon a call for cool, the board activates the indoor blower motor and signals the outdoor unit to start.
- **Fan Operation:** The board controls the blower fan for continuous operation (if selected on the thermostat) or during heating/cooling cycles.
- **Safety Monitoring:** The board continuously monitors safety limits (e.g., high limit switch, flame sensor) and will shut down the furnace if a fault is detected, often displaying a diagnostic code via an onboard LED.

MAINTENANCE

The Nordyne 624735R control board itself requires no routine maintenance. However, regular maintenance of the overall furnace system is crucial for the board's longevity and reliable operation.

- **Annual Furnace Inspection:** Have your furnace inspected and serviced annually by a qualified HVAC technician. This includes checking electrical connections, cleaning components, and verifying proper operation of all safety devices.
- **Air Filter Replacement:** Regularly replace or clean your furnace's air filter as recommended by the furnace manufacturer. A dirty filter can restrict airflow, leading to overheating and potential stress on the control board.
- **Keep Area Clear:** Ensure the area around the furnace is clear of obstructions and combustible materials to allow for proper airflow and prevent overheating.
- **Moisture Prevention:** Protect the furnace area from excessive moisture or water leaks, which can damage electronic components like the control board.

TROUBLESHOOTING

If your furnace is not operating correctly after installing the new control board, consider the following common issues. Always disconnect power before inspecting components.

Problem	Possible Cause	Solution
Furnace not starting (no power)	Circuit breaker tripped; furnace switch off; loose wiring connection.	Check circuit breaker and furnace switch. Verify all power connections to the board are secure.
Furnace starts but no heat	Gas supply off; igniter failure; flame sensor dirty/faulty; high limit switch tripped.	Ensure gas valve is open. Inspect igniter for glow. Clean flame sensor. Check high limit switch for continuity (with power off).
Blower fan not running	Blower motor issue; capacitor failure; thermostat fan setting.	Check thermostat fan setting. Inspect blower motor and capacitor.
Diagnostic LED flashing error code	Specific system fault (e.g., pressure switch, flame loss).	Refer to your furnace's specific manual for the meaning of the flash code and corresponding troubleshooting steps.
Board appears damaged or burnt	Electrical surge; short circuit; component failure.	Replace the board. Investigate the cause of damage to prevent recurrence.

If troubleshooting steps do not resolve the issue, it is recommended to contact a qualified HVAC technician for further diagnosis and repair.

SPECIFICATIONS

Feature	Detail
Model Number	624735R
Brand	Nordyne

Feature	Detail
Type	OEM Replacement Furnace Control Board
Product Dimensions	6 x 6 x 6 inches
Item Weight	13 ounces
ASIN	B00FPUT218
Date First Available	October 8, 2013

WARRANTY AND SUPPORT

For warranty information regarding your Nordyne 624735R OEM Replacement Furnace Control Board, please refer to the documentation provided by the original seller or contact Nordyne customer support directly. Warranty terms typically cover manufacturing defects.

For technical support, installation assistance, or to inquire about specific furnace compatibility, it is recommended to contact a certified HVAC professional or the manufacturer's customer service department. When contacting support, have your furnace model and serial numbers, as well as the control board's model number (624735R), readily available.

Manufacturer: Nordyne

Note: As an OEM replacement part, specific warranty details may vary based on the distributor or installer.

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Documents - Nordyne – 624735R



[\[pdf\] Parts List](#)

NortekGlobalHVAC Nordyne 00083 1 2 4 5 8 9 PART images tradeservice ATTACHMENTS DIR100274

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REPLACEMENT PARTS LIST INDOOR AIR HANDLER B6BMM0, B6BMMX, B6BM-X, B6EMMX, B6EMMN, B6VMAX, B6VMMX S ... s, fshe / vshe not shown vertical drainpan 921312 921852 297210R 622257R 667251R 622535R 669100R **624735R** 664256R 921867 921874 921402 922458 632261R 669855R --- 913871 921881 621709R 921880 92195...

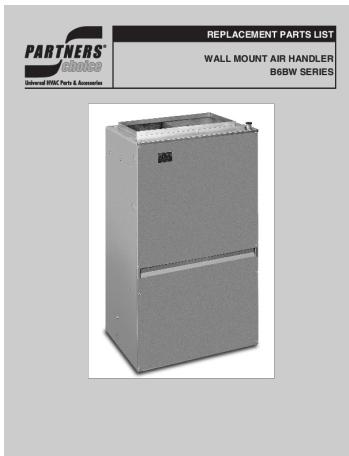
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[\[pdf\]](#) Parts List

NortekGlobalHVAC Nordyne 00034 1 2 PART images tradeservice ATTACHMENTS DIR100258 |||
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MODELS 3 6 19 9 3 13 21 17 ... 6R 622626 624737R 621709R 622597R 622626
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622336R 622264R 622550R **624735R** 622336R 622260R 622545R **624735R**
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[\[pdf\]](#) Parts List

wall mount air handler b6bw series 3 giorni fa — Please specify the correct Model No Serial and part number s when ordering parts from nearest authorized dealer or service center 709091 E literature
nortekhvac docuid 3d937142 976f 11ed bfcb 0016e1e579b9 brandkey Gibson lgt
3395041471deebbc7698279193017 |||

REPLACEMENT PARTS LIST WALL MOUNT AIR HANDLER B6BW SERIES
Element Limit Relay Switch Element Asse ... 6407R 913871 -- 176351 621709R
M0057203R -- 036K-05 921101 -- 622690R 1021518 667037R -- 921105 **624735R***
624784R* 919583 664519 669360R 1007315R 1017207 1017206 632261R 626408R
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