



Manuals.plus /

› NEALMART /

› NEALMART 903429 Furnace Control Circuit Board Instruction Manual

NEALMART 903429

NEALMART 903429 Furnace Control Circuit Board Instruction Manual

Model: 903429

1. INTRODUCTION

The NEALMART 903429 is a replacement circuit board designed for Nordyne brand air conditioners and furnaces. This board manages critical functions of the unit, including fan speed, temperature settings, and other operational parameters. It also incorporates essential safety features such as an over-temperature protection system and a flame sensor to ensure safe and reliable operation of your heating and cooling system.

This integrated control board is compatible with various Nordyne models, including:

- 624602
- 6246020
- 624602-0
- 624602A
- 624602B
- 624640
- 624640-A

It is specifically an integrated UTECH circuit board for M1M furnaces.

PART NUMBER: 903429

REPLACEMENT FOR:

624602

6246020

624602-0

624602A

624602B

624640

624640-A

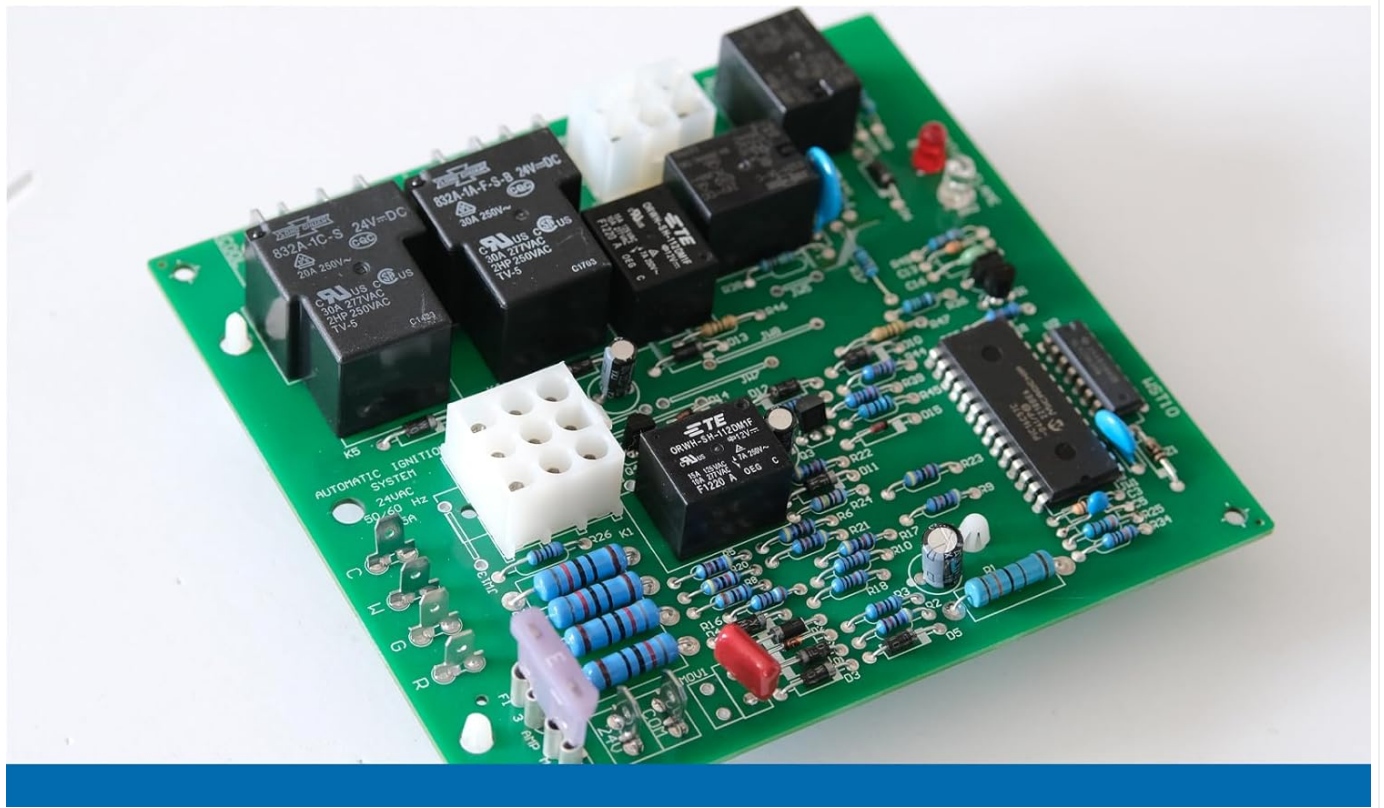


Figure 1: Front view of the NEALMART 903429 furnace control circuit board, showing various components and connectors.

2. SAFETY INFORMATION

WARNING: Before attempting any installation, maintenance, or troubleshooting procedures, ensure that the electrical power to the furnace unit is completely disconnected at the main circuit breaker or fuse box. Failure to do so can result in electrical shock, serious injury, or death.

- Always wear appropriate personal protective equipment (PPE), such as insulated gloves and safety glasses.
- Only qualified technicians should perform installation and service on HVAC systems.
- Verify all wiring connections are secure and correct before restoring power.
- Do not bypass any safety devices.

3. INSTALLATION INSTRUCTIONS

Follow these steps carefully to install the NEALMART 903429 control board. It is highly recommended to take a picture of the

Figure 2: The circuit board is supplied in an anti-static bag to protect sensitive components during handling and installation.

Important Note: To prevent damage from electrostatic discharge, handle the circuit board by its edges and avoid touching the electronic components directly.

4. OPERATION

The NEALMART 903429 control board is an integral component of your furnace system, designed to automatically manage various operational aspects. Once correctly installed and powered, the board will:

- Control the sequence of operation for heating and cooling cycles.
- Regulate fan speed based on system demands.
- Monitor temperature settings and activate components accordingly.
- Utilize an over-temperature protection system to prevent overheating.
- Employ a flame sensor to ensure safe ignition and combustion.

User interaction with the furnace's operation is typically done via the thermostat, which sends signals to the control board. The board then interprets these signals and activates the appropriate furnace components.

5. MAINTENANCE

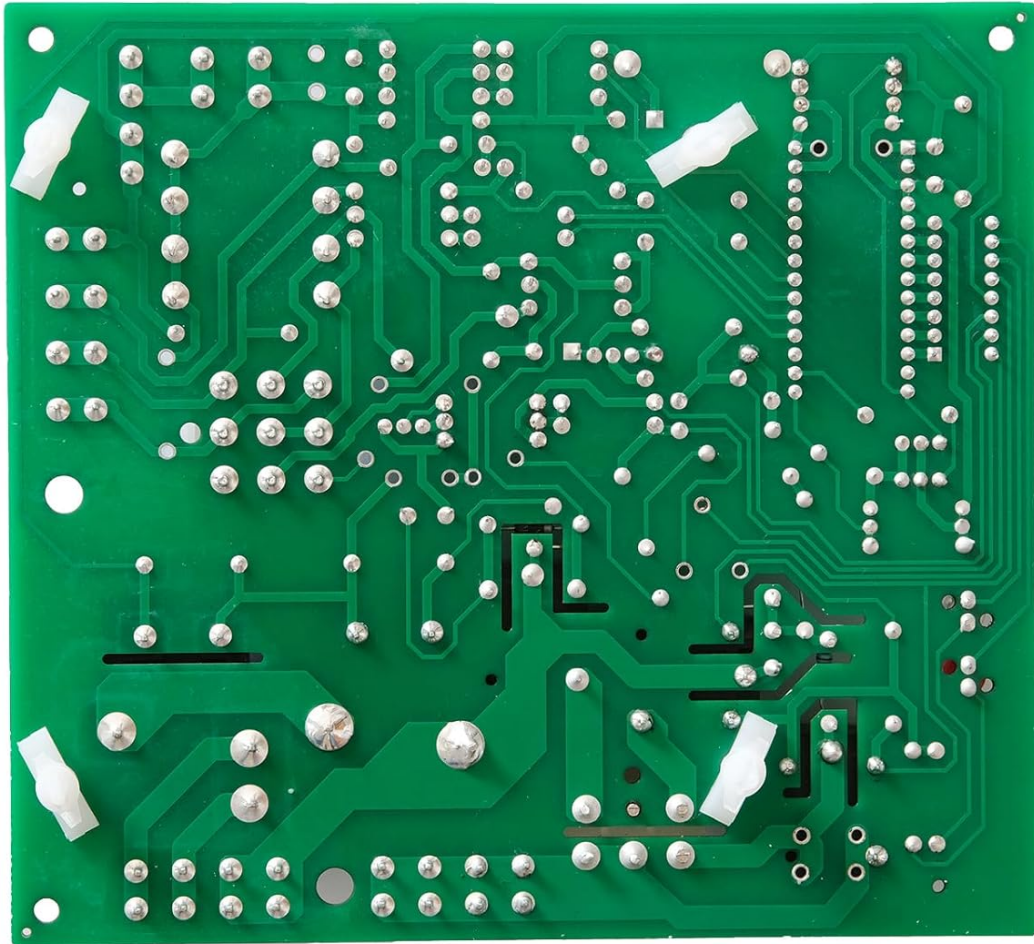
The NEALMART 903429 furnace control circuit board contains no user-serviceable parts. Regular maintenance of the furnace unit itself, such as changing air filters and ensuring clear vents, is crucial for the longevity and efficient operation of all components, including the control board.

- Keep the area around the furnace clean and free of dust and debris.
- Ensure proper airflow to prevent overheating of components.
- For any internal cleaning or inspection of the control board, it is recommended to consult a qualified HVAC technician.

6. TROUBLESHOOTING

If your furnace is not operating correctly after installing the NEALMART 903429 control board, consider the following general troubleshooting steps:

- **Power Check:** Ensure the furnace has power and the circuit breaker has not tripped.
- **Wiring Connections:** Double-check all wiring connections on the control board for tightness and correct placement, referring to your installation photos.
- **Thermostat Settings:** Verify that the thermostat is set to the desired mode (heat/cool) and temperature.
- **Error Codes:** Some furnace models display error codes. Consult your furnace's specific manual for interpreting these codes.
- **Professional Assistance:** If the issue persists, it is strongly recommended to contact a qualified HVAC technician for diagnosis and repair. Attempting complex repairs without proper training can be dangerous and may void warranties.



BACK SIDE

Figure 3: Back view of the circuit board, illustrating the quality of soldering and PCB manufacturing.

7. SPECIFICATIONS

Feature	Detail
Manufacturer	NEALMART
Part Number	903429-01
Item Model Number	90342
Item Weight	9.6 ounces
Product Dimensions	5.5 x 5 x 0.75 inches
Included Components	Furnace Circuit Board
Compatibility	Nordyne models: 624602, 6246020, 624602-0, 624602A, 624602B, 624640, 624640-A; M1M furnaces

8. WARRANTY AND SUPPORT

8.1. Warranty Information

The NEALMART 903429 Furnace Control Circuit Board comes with a **6-month warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. It does not cover damage resulting from improper installation, misuse, accidents, or unauthorized modifications. Please retain your proof of purchase for warranty claims.

8.2. Customer Support

For any questions regarding the installation, operation, or troubleshooting of your NEALMART 903429 control board, please do not hesitate to contact our customer support team. Your satisfaction is our priority.

Contact information can typically be found on the product packaging or the retailer's website where the product was purchased.

