Honeywell CECOMINOD058515

Honeywell Furnace Control Circuit Board User Manual

Model: **CECOMINOD058515** | Brand: **Honeywell**

Product Overview

The Honeywell Furnace Control Circuit Board (Model ST9160B1050, upgraded replacement CECOMINOD058515) is a critical component designed to manage and control the operational sequences of your furnace. Often referred to as the "brain" of the furnace, this board orchestrates various functions including ignition, fan operation, and safety shutdowns, ensuring efficient and safe heating.

Figure 1: The Honeywell Furnace Control Circuit Board. This green circuit board features various electronic components, relays, and connection terminals, serving as the central control unit for furnace operations.

Installation and Setup

Installation of the furnace control board requires careful attention to safety and proper wiring. It is highly recommended that installation be performed by a qualified technician. If you choose to proceed with self-installation, ensure all safety

precautions are strictly followed.

Safety Precautions:

- **Disconnect Power:** Before beginning any work on the furnace, ensure the main power supply to the furnace is completely disconnected at the circuit breaker or fuse box. Verify power is off using a voltage tester.
- **Static Discharge:** Static electricity can damage electronic components. Discharge any static electricity from your body by touching a grounded metal object before handling the circuit board.
- **Consult Manuals:** Always refer to the specific wiring diagrams and instructions provided with your furnace and the new control board. Wiring configurations can vary significantly between models.

Installation Steps:

1. **Access the Old Board:** Locate and carefully remove the access panel to the furnace control board.
2. **Document Connections:** Before disconnecting any wires, take clear photographs or make detailed diagrams of all existing wire connections to the old board. Label each wire if necessary.
3. **Remove Old Board:** Disconnect all wires and mounting screws holding the old control board in place. Carefully remove the old board.
4. **Install New Board:** Position the new Honeywell control board in the same location as the old one. Secure it with mounting screws.
5. **Connect Wiring:** Refer to your documented connections and the new board's wiring diagram. Connect all wires to their corresponding terminals on the new board. Note that some models may require a wire harness conversion, which should be included with the upgraded board. Ensure all connections are secure.
6. **Inspect Installation:** Double-check all wiring connections for accuracy and security. Ensure no wires are pinched or exposed.
7. **Restore Power:** Once confident in the installation, replace the furnace access panel and restore power to the furnace.
8. **Test Operation:** Initiate a heating cycle to verify proper furnace operation. Listen for unusual noises and observe the furnace's sequence of operation.

Important Note: This upgraded board is designed to be a direct replacement for various Honeywell models, including ST9160B1050. The instructions provided with the board are comprehensive and designed to assist with wiring for many different furnace models. Follow them precisely for a successful installation.

Operation

The Honeywell Furnace Control Circuit Board operates automatically once installed and power is supplied to the furnace. It continuously monitors inputs from various sensors (e.g., thermostat, flame sensor, limit switches) and controls outputs to components such as the igniter, gas valve, and blower motor.

- **Heating Cycle Control:** The board initiates the heating cycle based on thermostat demand, activating the igniter, opening the gas valve, and monitoring flame presence.
- **Fan Control:** It manages the operation of the furnace blower fan, turning it on and off at appropriate times during heating and cooling cycles.
- **Safety Monitoring:** The board incorporates safety features that monitor furnace conditions. If an unsafe condition is detected (e.g., overheating, flame failure), it will shut down the furnace to prevent damage or hazards.
- **Diagnostic Codes:** Some control boards may display diagnostic codes via an LED light or a connected display. Consult your furnace manual for interpretation of any such codes.

No direct user interaction is typically required with the control board itself during normal operation, as its functions are managed by the thermostat and internal furnace sensors.

Maintenance

The Honeywell Furnace Control Circuit Board is designed for long-term reliability and generally requires minimal maintenance. However, periodic checks can help ensure its longevity and proper function.

- **Visual Inspection:** During routine furnace maintenance (e.g., filter changes), visually inspect the control board for any signs of dust accumulation, corrosion, or physical damage.
- **Cleanliness:** If dust is present, gently clean the board using a soft brush or compressed air. Ensure power is disconnected before cleaning.
- **Connection Integrity:** Periodically check that all wire connections to the board are secure and free from looseness or corrosion.
- **Environmental Protection:** Ensure the furnace compartment is free from excessive moisture or extreme temperature fluctuations that could affect electronic components. If your previous board showed signs of shorting due to proximity to metal components (like a blower housing), ensure this replacement board is adequately protected, as it comes in a plastic box designed to prevent such issues.

Do not attempt to repair the circuit board yourself if it is damaged. Replacement is typically the only viable solution for a malfunctioning board.

Troubleshooting

If your furnace is experiencing issues, the control board may be a contributing factor. Here are some common troubleshooting steps:

- **No Power to Furnace:**
  - Check the circuit breaker for the furnace and reset if tripped.
  - Ensure the furnace power switch (if present) is in the "ON" position.
- **Furnace Not Starting:**
  - Verify the thermostat is set to "HEAT" and the temperature is above the current room temperature.
  - Check the furnace filter; a clogged filter can cause overheating and safety shutdowns.
  - Inspect the flame sensor for dirt or corrosion. Clean gently if necessary (ensure power is off).
  - Look for any diagnostic LED flashes on the control board and consult your furnace manual for their meaning.
- **Blower Fan Issues:**
  - If the fan runs continuously or not at all, check the thermostat's fan setting.
  - A faulty fan relay on the control board could be the cause.
- **Intermittent Operation:**
  - Loose wiring connections can cause intermittent issues. Power off the furnace and re-seat all connections on the board.
  - Overheating limit switches can cause cycling. Ensure proper airflow.

If troubleshooting steps do not resolve the issue, or if you are uncomfortable performing these checks, it is strongly recommended to contact a qualified HVAC technician. Attempting repairs without proper knowledge can be dangerous and may void warranties.

Specifications

Feature	Detail
Product Dimensions	8 x 6 x 10 inches
Item Weight	1 pound (16 ounces)
Manufacturer	Honeywell
ASIN	B00EFDTYFK
Item Model Number	CECOMINOD058515 (Replacement for ST9160B1050)
Voltage	24 Volts (DC)
Display Type	LCD (Note: May refer to compatible external displays or internal diagnostic LEDs)

Warranty and Support

For specific warranty information regarding your Honeywell Furnace Control Circuit Board, please refer to the documentation included with your purchase or contact Honeywell directly. Warranty terms can vary based on the point of purchase and regional regulations.

For technical support, installation assistance, or to inquire about replacement parts, please visit the official Honeywell support channels. You can often find helpful resources, FAQs, and contact information on their website:

Visit the Honeywell Store for Support