

Carrier HK61EA005

Carrier HK61EA005 Furnace Control Board Instruction Manual

Model: HK61EA005

INTRODUCTION

This manual provides essential instructions for the safe and effective installation, operation, and maintenance of the Carrier HK61EA005 OEM Replacement Furnace Control Board. Please read this manual thoroughly before proceeding with any installation or service procedures. Retain this manual for future reference.

SAFETY INFORMATION

WARNING: Installation and servicing of heating, ventilation, and air conditioning (HVAC) equipment can be hazardous due to system pressure, electrical components, and equipment location. Only trained and qualified service personnel should install, repair, or service HVAC equipment. Failure to follow these instructions could result in property damage, personal injury, or death.

- Always disconnect power to the furnace before installing or servicing the control board.
- Verify all wiring connections are secure and correct according to the furnace manufacturer's specifications.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Ensure proper grounding of the furnace system.

PRODUCT OVERVIEW

The Carrier HK61EA005 is an OEM replacement furnace control board designed to manage the operational sequences of a furnace, including ignition, fan control, and safety monitoring. This board is compatible with various Carrier furnace models.

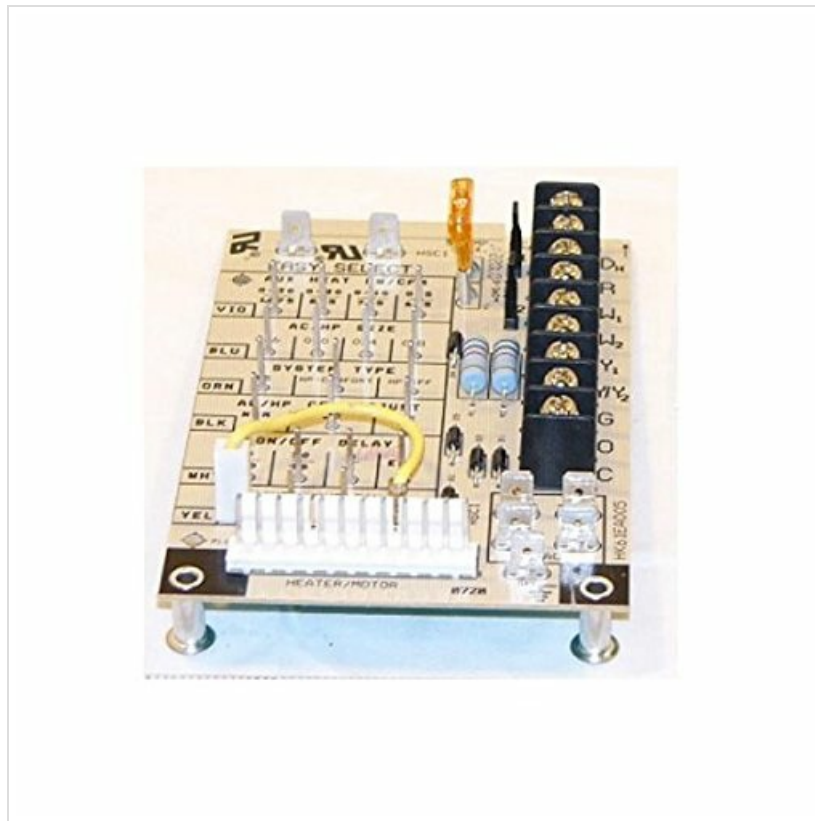


Figure 1: Carrier HK61EA005 Furnace Control Board. This image displays the circuit board with various terminals, jumpers, and components. Key features include the "EASY SELECT" jumper settings for system type, ON/OFF DELAY settings, and terminal blocks for wiring connections such as D, R, W, W2, Y, Y2, G, O, and C. A yellow jumper wire is visible connecting two pins on the board.

SETUP AND INSTALLATION

1. **Power Disconnection:** Turn off all electrical power to the furnace at the main service panel. Verify power is off using a voltage meter.
2. **Access Old Board:** Open the furnace access panel to locate the existing control board.
3. **Document Wiring:** Before disconnecting any wires, take clear photographs or make a detailed diagram of all wiring connections to the old control board. Note the position and color of each wire.
4. **Disconnect Wires:** Carefully disconnect all wires and connectors from the old control board.
5. **Remove Old Board:** Unmount the old control board from the furnace chassis. Note how it was secured (screws, clips, etc.).
6. **Install New Board:** Mount the new HK61EA005 control board in the same location and orientation as the old board. Ensure it is securely fastened.
7. **Connect Wiring:** Refer to your photographs or diagram and carefully reconnect all wires and connectors to the corresponding terminals on the new control board. Double-check each connection for accuracy and tightness.
8. **Jumper Settings:** Configure the "EASY SELECT" jumpers and ON/OFF DELAY jumpers on the new board to match the settings of the original board or the furnace manufacturer's specifications. These settings typically determine the system type (e.g., AC, HP) and fan delay times. Refer to the furnace wiring diagram for specific requirements.
9. **Close Access Panel:** Once all connections are verified, close and secure the furnace access panel.
10. **Restore Power:** Restore electrical power to the furnace at the main service panel.

OPERATING INSTRUCTIONS

After successful installation and power restoration, the furnace control board will initiate its normal operating sequence. The board manages the following functions:

- **Ignition Sequence:** Controls the gas valve and igniter for safe furnace startup.
- **Fan Control:** Manages the indoor blower motor operation based on heating or cooling demands and delay settings.
- **Safety Monitoring:** Continuously monitors various safety sensors (e.g., flame sensor, limit switches) and will shut down the furnace if a fault is detected.
- **Thermostat Interface:** Communicates with the thermostat to receive heating and cooling calls.

For specific operational details, refer to your furnace's primary instruction manual.

MAINTENANCE

The HK61EA005 control board itself requires no routine maintenance. However, regular maintenance of the overall furnace system is crucial for its longevity and proper function. This includes:

- **Air Filter Replacement:** Replace or clean the furnace air filter regularly (typically every 1-3 months) to ensure proper airflow.
- **Annual Professional Inspection:** Have a qualified HVAC technician inspect and service your furnace annually.
- **Clean Flame Sensor:** A dirty flame sensor can cause intermittent furnace operation. This should be cleaned by a qualified technician.

Always disconnect power to the furnace before performing any maintenance.

TROUBLESHOOTING

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

- **No Power:**
 - Check the circuit breaker for the furnace.
 - Ensure the furnace disconnect switch is in the "ON" position.
 - Verify all low-voltage and high-voltage connections to the control board are secure.
- **Furnace Not Igniting:**
 - Confirm the thermostat is set to "HEAT" and the temperature is above the ambient room temperature.
 - Check for error codes on the control board (if applicable, refer to your furnace manual for code interpretations).
 - Ensure the gas supply valve is open.
 - Verify the flame sensor is clean and properly positioned.
- **Fan Not Operating Correctly:**
 - Check the "ON/OFF DELAY" jumper settings on the control board.
 - Ensure the thermostat fan setting is correct (AUTO/ON).
 - Verify the fan motor connections to the control board.
- **Error Codes:** Many control boards have diagnostic LEDs that flash codes to indicate specific faults. Consult your furnace's original manual for a list of error codes and their meanings.

If troubleshooting steps do not resolve the issue, contact a qualified HVAC technician for assistance.

SPECIFICATIONS


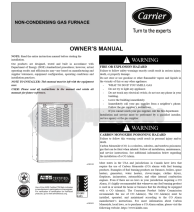

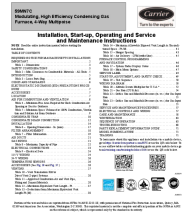
Model Number	HK61EA005
Alternate Model Number	CECOMINOD058414
Brand	Carrier (OEM Replacement)
Product Dimensions	6 x 6 x 6 inches
Weight	0.01 ounces
Date First Available	October 8, 2013

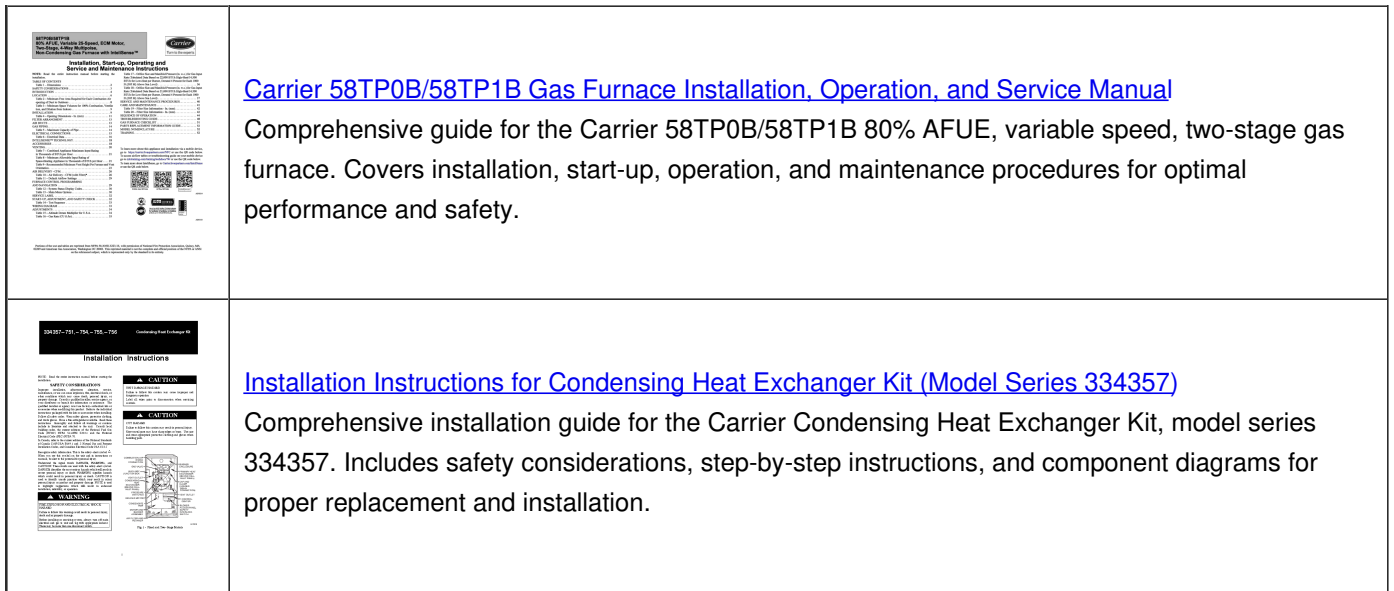
WARRANTY AND SUPPORT

For warranty information regarding this OEM replacement part, please refer to the terms provided by your original point of purchase or the specific warranty documentation included with the product. For technical support, it is recommended to consult a qualified HVAC technician or the original furnace manufacturer's support resources.

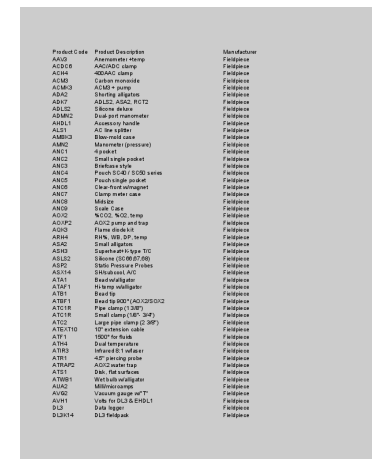
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Related Documents - HK61EA005

	<p>Carrier Furnace Control Board with NFC Technology Quick Start Guide</p> <p>Quick start guide for technicians on using Carrier's Service Technician app with NFC-enabled furnace control boards for easier installation, troubleshooting, and servicing.</p>
	<p>Carrier Non-Condensing Gas Furnace Owner's Manual</p> <p>Comprehensive owner's manual for Carrier non-condensing gas furnaces. Provides essential guidance on installation, safe operation, routine maintenance, and troubleshooting for optimal performance and longevity.</p>
	<p>Carrier 58MCA, 58MTA, 58MVP, 58MXA Gas Furnace User Manual</p> <p>Comprehensive user information manual for Carrier's 58MCA, 58MTA, 58MVP, and 58MXA multipoise, condensing gas furnaces, covering operation, maintenance, safety, and troubleshooting.</p>
	<p>Carrier 59MN7C Modulating High Efficiency Condensing Gas Furnace Installation and Service Manual</p> <p>Detailed installation, start-up, operation, service, and maintenance guide for the Carrier 59MN7C Modulating High Efficiency Condensing Gas Furnace. Covers safety, technical procedures, and troubleshooting for HVAC professionals.</p>



Documents - Carrier – HK61EA005



[Carrier 58TP0B/58TP1B Gas Furnace Installation, Operation, and Service Manual](#)

Comprehensive guide for the Carrier 58TP0B/58TP1B 80% AFUE, variable speed, two-stage gas furnace. Covers installation, start-up, operation, and maintenance procedures for optimal performance and safety.

[Installation Instructions for Condensing Heat Exchanger Kit \(Model Series 334357\)](#)

Comprehensive installation guide for the Carrier Condensing Heat Exchanger Kit, model series 334357. Includes safety considerations, step-by-step instructions, and component diagrams for proper replacement and installation.

[\[pdf\] User Manual Installation Guide Instructions Accessories](#)

Carrier Corporation ICM2 Replacement Kit For FK4A Installation Instructions P N 320981 Install board and bracket assembly by aligning tab on with rear slot in the blower deck 5 Insert into tilt back control IIKFK4A 02 3 shareddocs hvac docs 1009 Public 01 |||

ICM2 Replacement Kit For FK4A Cancels: IIK FK4A-02-2 IIK FK4A-02-3 6-01 Installation Instructions ... ils is indicated in Table 2, and must be ordered separately not included with this kit . PART NO. **HK61EA005** 324498-101 324498-103 324498-105 324498-106 322898-101 324846-701 320481-302 AL79AZ128 HTO... lang:en score:24 filesize: 91.34 K page_count: 8 document date: 2005-11-10

[\[pdf\] Guide Accessories](#)

Carrier Products Guide 50DK501626 Scroll Compressor Combustion Depot Shop Online for Parts and Systems used in the creation monitoring of flame heat 1374321875Partslist www bustiondepot media industrialstores product attachments |||

Product Code AAV3 ACDC6 ACH4 ACM3 ACMK3 ADA2 ADK7 ADLS2 ADMN2 AHDL1 ALS1 AMBK3 AMN2 ANC1 ANC2 ANC3 A ... HK50AA033 HK50AA035 HK50AA039 HK50AA040 HK50AA051 HK60EC002 HK61EA001 HK61EA002 HK61EA003 HK61EA004 **HK61EA005** HK61EA006 HK61EA009 HK61EA010 HK61EA016 HK61EA017 HK70EZ001 HK70EZ005 HK70EZ007 HK99ZZ001 ... lang:en score:20 filesize: 526.7 K page_count: 197 document date: 2012-02-20

[\[pdf\] User Manual Specifications Guide Decleration of Conformity Accessories Catalog](#)

Product Code Description Manufacturer 11212 HA 12 BLUE HOSE Yellow Jacket 11224 24 11236 36 11248 48 11260 60 Query ASSET ID 4536105 USE TYPE SPECIFICATION PRODUCT 718698 api ferguson dar step service 40825 REPLACEMENT MANUAL 40826 DMA SWIVEL ADAPTERS P805 W2022T 5 8 CXC 90 INT ELB W2002 Carrier W2055T 13 LNG W2055 Products Guide %CO2 %O2 temp Fieldpiece AOXP2 AOX2 pump and trap AQK3 77930 MAX FLOW DELUXE OIL PUMP 77931 SEAL KIT FOR 317749 419 Compressor Plug Combustion Depot Shop Online for Parts Systems used in the creation monitoring of flame heat P041 5201 Grommet Industrial Stores 06EA502023 Compression Piston

