Instructions for NFC Replacement Control

THESE INSTALLATION INSTRUCTIONS PROVIDE STEPS IN THE REPLACEMENT OF THE FURNACE CONTROL BOARD

INSTALLATION

NOTE: Read the entire instruction manual before installing replacement control.

SAFETY CONSIDERATION

NOTICE

MODEL NUMBER AND PROGRAM NUMBER

This control board must be programmed with the correct model program number to allow for proper operation.

Installing and servicing heating equipment can be hazardous due to gas and electrical components. Only trained and qualified personnel should install, repair, or service heating equipment.

Untrained personnel can perform basic maintenance functions such as cleaning and replacing air filters. Trained service personnel must perform all other operations. When working on heating equipment, observe precautions in the literature, on tags, and on labels attached to or shipped with the unit, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves. Have a fire extinguisher available during start-up, adjustment steps, and service calls.

Recognize safety information. This is the safety-alert symbol \wedge . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury. Understand the signal words DANGER, WARNING, CAUTION and NOTE. The words DANGER, WARNING, and CAUTION are used with the safety alert symbol. DANGER identifies the most serious hazards which will result in severe personal injury or death. WARNING signifies a hazard which could result in personal injury or death. CAUTION is used to identify unsafe practices which may result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

WARNING

FIRE, EXPLOSION, ELECTRICAL SHOCK, AND CARBON MONOXIDE POISONING HAZARD

The ability to properly perform service on this equipment requires certain expertise, mechanical skills, tools, and equipment. If you do not possess these, do not attempt to perform any service on this equipment other than those procedures recommended in the Owner's Manual. A failure to follow this warning could result in possible damage to this equipment, serious personal injury, or death.

INTRODUCTION

Replacement controls are received blank and will need to be programmed to match the furnace model. This programming process may be completed by using the supported Service Tech or Fast Mobile Tech App or by using a Super Plug service tool. Super Plug service tool sold separately, available through your local parts distributor.

Failure to program the control results in No-Heat and generic airflow for cooling or continuous fan operation. Refer to furnace label or Installation Instructions for fault code information. Typically, a 25.1 fault code will be indicated on a control that has not been programmed.

PROGRAMMING

Programming using the Service Application

NOTE: Commissioning of the new control requires the furnace serial number (may be retrieved from failed furnace control) and access to the internet via a Wi-Fi or cellular connection.

NOTE: The control is NOT powered with line voltage when programming is done using the Service Tech App, and the programming process may be performed before installation of the control into the furnace.

- 1. Scan the QR code on page 1 of the furnace installation manual or on the upper left-hand corner of the furnace rating plate, Fig. 1 for a link to download the mobile Service Tech App.
- 2. Open the mobile Service Tech App and access the "Connect to Equipment" menu item. Select "Replace Control Board" and follow the on-screen prompts for programming of the new control.

Programming using the Super Plug service tool

NOTE: The control must be powered to program using a Super Plug.

1. With power off, insert the Super Plug service tool into the port at PL5, see Fig. 2.

CAUTION

SHOCK HAZARD

Failure to follow this caution could result in personal injury.

Do not tape or permanently allow the door switch to be bypassed. Temporarily press the door switch with one hand while accessing the service buttons with your other hand. Do not touch uninsulated electrical components.

- 2. Apply power to the control by manually closing the door interlock (ILK) switch.
 - a. P 12 will be displayed on the 7-segment display.
- 3. Press the NEXT button, see Fig. 2, until the correct Model Program Number is displayed.

NOTE: The correct Model Program Number is located on the furnace Rating Plate.

- 4. If correct Model Program is accidentally passed, continue to hit NEXT (the numbers will scroll back around)
- 5. When the correct Model Program number is displayed, press the MENU/SELECT button, see Fig. 2.
 - a. Display will show **LPY** for a few seconds
- 6. Remove Super Plug.
- 7. Confirm correct model is programmed into the new the control (matches Rating Plate).
 - a. Press MENU button until InF is reached.
 - b. Press SELECT to show the control software version and model program.
 - c. If wrong model program, repeat above steps to correct.
 - d. Control is now programmed and ready for operation.

SYSTEM OPERATION

- 1. Verify correct operation in all modes (Heat, Cool, Continuous fan) and make any adjustment according to procedures outlined in the furnace installation manual.
- 2. Refer to furnace Diagnostic Label or Installation Instructions for further troubleshooting assistance.



Representative drawing only, some models may vary in appearance.

Fig. 1 – Rating Plate



© 2022 Carrier. All rights reserved.

Edition Date: 05/22

Catalog No: IIK-NFCFURBRD-01

Replaces: NEW

A Carrier Company

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

A221061



FURNACE CONTROL BOARD WITH NFC TECHNOLOGY QUICK START GUIDE

The Future is a Tap Away

We are excited to introduce our updated industry-leading Service Technician app with patent-pending Near Field Communication capability. Easier and faster installation, troubleshooting, and servicing of our gas furnaces are now just a tap away.

Experience the Difference

Utilize this guide with your smartphone and an NFC-capable furnace control board to experience firsthand what a difference these enhancements will make for technicians in the field.



Control Board with integrated NFC



Grab your Smartphone!

What is NFC technology?

Near Field Communication Technology, or NFC is the same technology used for credit card "tap to pay" systems and paying via a mobile phone.

Launching initially in our Legacy[™] Line gas furnaces, we are incorporating this technology into our furnace control boards. NFC capability combined with our improved tech app means previously time-consuming and labor-intensive jobs can now be completed with your smartphone and a series of quick, easy steps.



Let's Get Started

STEP 1 Download the free Service Technician App from your smartphone's Apple or Google Play app store.





STEP 2 Sign in if you're an existing user, Create An Account, or Continue As Guest. NOTE: You can perform all NFC functions as a guest.



STEP 3 Select Connect to Equipment.



STEP 4 Select *Furnace* to get to Furnace Menu.



Select Installer Setup to walk through the installation process.



Select Connect.



STEP 7 Tap and hold your device within one inch of the NFC chip on the control board until the success screen appears. NOTE: This may take up to 10 seconds.



STEP 8 Success! Now let's browse your installer settings.

Installer Setup

Review these Installer Setup app screens to become familiar with all of the setup features including: heating and cooling airflows, blower off delays, twinning settings, and more.

| Diagnostics > Installer Setup > Replace > Control Board > | 3:20 1 ← | Connect to Equipment | al lite 💷) |
|--|--------------------|--------------------------|------------|
| Installer Setup Replace Control Board | 0 | Diagnostics | > |
| Replace > Control Board > | 60 | Installer Setup | > |
| | | Replace Control Board | > |

INSTALLER SETUP Click on Installer Setup to adjust the unit's setup parameters when installing a new furnace.



9355860080M21A-

stallation Settings Open Favorite Setting

Heating Airflow

High Cooling Airflow

Low Cooling Airflow

Continuous Fan Airflow

Heating Blower Off Delay

Cooling Blower Off Delay

Reset to Defau

To complete setup, click

on each parameter and

follow the easy-to-use

screens.

ADJUSTING AIRFLOWS

To adjust airflows simply slide the red bubble up or down as needed and select OK. For cooling you also have the ability to select a tonnage from a drop down menu.

| Favorite Settings X Sorted by: Alphabetical Fav 2 Y Townhome route 2 Y Townhome Route 5 X | | |
|---|------------------|-------|
| Sorted by: Alphabetical Fav 2 Townhome route 2 Townhome Route 5 X | Favorite Setti | ngs X |
| Aphabetical Fav 2 X Townhome route 2 X Townhome Route 5 X | Sorted by: | |
| Fav 2 × Townhome route 2 × Townhome Route 5 × | Alphabetical | |
| Townhome Route 5 | Fav 2 | × |
| Townhome Route 5 X | Townhome route 2 | × |
| | Townhome Poute 5 | × |
| | In the role of | |

FAVORITE SETTINGS You can also save your "favorite" settings for future use within the app. For example, settings can be saved and named after model or floor plans for residential new

construction.

Diagnostics

Review these Diagnostics app screens to evaluate Fault Codes and Unit History data, or run the Component Self Test.





The Component Self Test option tests critical component functionality to assist with troubleshooting upon power-up.

Replace Control Board

Review these Replace Control Board app screens to learn how you can simply and quickly program a replacement board.



How to Learn More

Simply scan this QR code to visit our NFC landing page on HVACpartners. Here you will find:

• Furnace Control Board Training Video App Links

FAQs





©2023 Carrier. All Rights Reserved.

Manufacturer reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations. Third-party trademarks and logos are the property of their respective owners.

A Carrier Company

01-8110-1712-01 02/2023