

CONTROL BOARD REPLACEMENT KIT 17223000A06817, 17223000A06818 FOR FMA4 FAN COILS, 18 thru 36 Size

Installation Instructions


NOTE: Read this entire instruction manual before starting the installation.


SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to individual instructions packaged with kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing, and work gloves. Use quenching cloth for brazing operations. Have a fire extinguisher available. Read these instructions thoroughly and follow all warning or cautions included in literature and attached to the unit. Consult local building codes and the current editions of the National Electrical Code (NEC) NFPA 70.


In Canada, refer to the current editions of Canadian Electrical Code CSA C22.1.

Recognize safety information. This is the safety alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand the signal words **DANGER**, **WARNING**, and **CAUTION**. These words are used with the safety alert symbol. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards 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**

ELECTRICAL OPERATION HAZARD

Failure to follow this warning could result in personal injury or death. Before installing or servicing the unit, always turn off all power to unit. There may be more than one disconnect switch. Turn off accessory heater power if applicable. Lock out and tag switch with a suitable warning label.

 **CAUTION**

CUT HAZARD

Failure to follow this caution may result in personal injury. Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing, safety glasses and gloves when handling parts.

Kit Contents

- (1) Printed Circuit Board with wiring harness



Existing Board



New Board

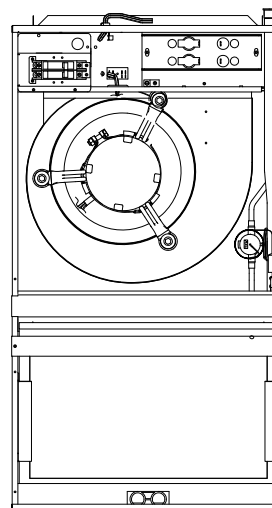
Fig. 1 – Old and New Boards

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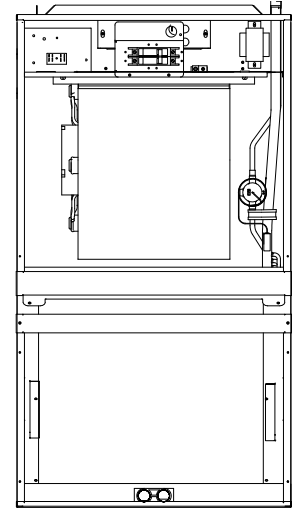
INSTALLATION

Remove Existing Control Board

1. Remove the door from the unit. Locate the control board ([Fig. 2](#)).



Unit sizes 18, 24



Unit sizes 30, 36

Fig. 2 – Typical Wall Hung Unit, Door Removed

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- Unplug and keep the black, blue, purple and red motor wires from the installed control board. These will be reused to connect the motor to the new control board (Fig. 3).



Fig. 3 – Remove Motor Wires

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- Unplug the low voltage signal wires from the thermostat. Save the rubber gasket.
- Keeping only the Transformer and Power wire harness (Fig. 4), remove the installed PC board. Take care to not damage the plastic retaining clips (Fig. 5).



Transformer Power Supply Wire

Fig. 4 – Keep Transformer and Power Wires

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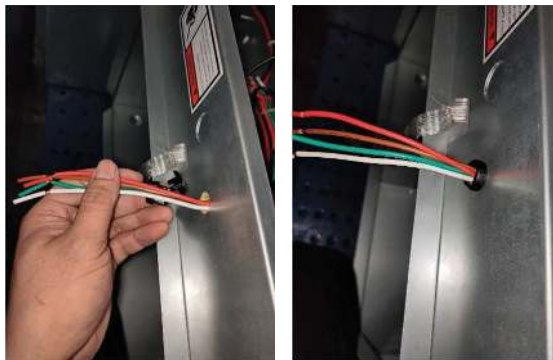


Fig. 5 – Keep Retaining Clips and Grommets in Place

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- Dispose of control board, relay and wiring according to local codes.

! CAUTION

ENVIRONMENTAL HAZARD.

Failure to follow this caution may result in environmental pollution. Always remove and recycle all hazardous components or materials (i.e., oil, refrigerant, control boards, etc.).

Install Replacement Control Board

- Thread red, brown, green and white signal wires thru the opening in the top of the case and connect them to the thermostat wires.
- Reinstall the rubber gasket between the wires and the case.
- Snap new control board onto plastic retainers; verify a secure fit.

Connect New Control Board to Transformer and GND

- Connect the yellow wire to the upper transformer secondary output.
- Connect the purple/green wires to the lower transformer secondary output.
- Connect the red wire to the 240V lead on the transformer (Fig. 6).
- Connect the black wire to the transformer COM terminal.



Fig. 6 – Red Wire to 240V, Black Wire to COM

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- Connect the ground wire to the green screw on the back of the case (Fig. 7).



Fig. 7 – Ground to Green Screw (red circle)

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Connect Motor Harness

- Connect red motor wire to FAN.
- Connect black motor wire to M2.
- Connect blue motor wire to M1.
- Connect purple wire to the black transformer COM Wire (Fig. 8).



Fig. 8 – Purple Wire to COM

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Final Steps

1. Double check wire connections and correct and tight, and final configuration is correct (Fig. 9).
2. Use a zip tie(s) to dress loose wires.
3. Apply new rating plate sticker over the existing rating plate located on the exterior of the door.

START-UP

Refer to outdoor unit Installation Instructions for system start-up instructions and refrigerant charging method details.

18/24K



Before



After

30/36K



Before



After

Fig. 9 – Before and After

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