### 18-CH43D1-3A-EN

# Installer's Guide

## Connecting an ACCE to a Communicating Systems 3-Stage Furnace

#### WARNING

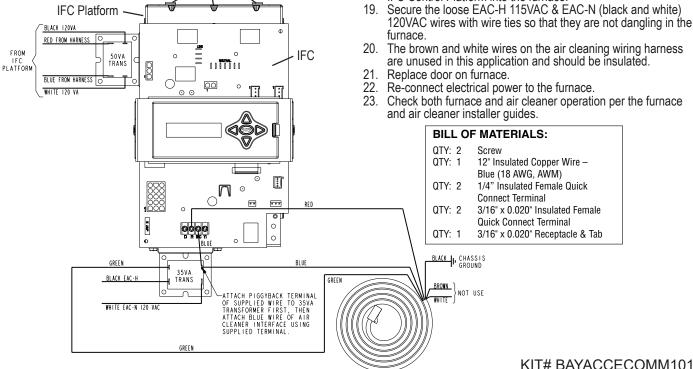
HAZARDOUS VOLTAGE! DISCONNECT ALL ELEC-TRIC POWER, INCLUDING REMOTE DISCONNECTS BEFORE SERVICING. FLOW PROPER LOCKOUT/ TAGOUT PROCEDURES TO ENSURE THE POWER **CANNOT BE INADVERTENTLY ENERGIZED. FAIL-URE TO DISCONNECT POWER BEFORE SERVICING** COULD RESULT IN DEATH OR SERIOUS INJURY.

#### PROCEDURE:

- Remove electrical power going into the furnace.
- Open blower door to upflow or downflow furnace.
- Remove the two screws that secure the IFC platform to the underside of the blower deck on an upflow furnace or the three screws that secure the IFC to the top panel on a downflow furnace. Save these screws for remounting later.
- Remove the IFC and platform from the upflow or downflow
- 5. Disconnect all wires on the 35VA transformer.
- Remove the 35VA transformer from the IFC platform. Save the screws for 35VA transformer relocation.
- Mount the 50 VA transformer supplied in the packaging with the air cleaner onto the IFC platform where the 35VA transformer was previously located. Use the sheet metal screws supplied with the air cleaner to mount the 50VA transformer. Re-connect the 115V and 24V wires that were connected to the 35VA transformer onto the 50 VA transformer.
- On an upflow furnace, remount the 35VA transformer onto the underside of the IFC platform. Use existing holes and the original sheet metal screws that originally mounted the 35VA transformer. See diagram.

Screw locations

- On a downflow furnace, mount the 35 VA transformer on the blower deck by drilling two 0.144 inch diameter (#27) holes 13/16" inches apart and attaching the transformer to the blower deck using the screws retained from step 3 above.
- 10. Remove the EAC-H 115VAC & EAC-N wires (white and black) out of the junction box and pull them through the grommet in the blower deck. Attach two supplied 1/4" insulated female quick connect terminals by stripping the wires and crimping the terminals onto the wires. Attach these wires to the 115V terminals of the 35VA transformer as shown in the diagram.
- 11. Connect the terminal to the 24V terminal on the 35VA trans-
- 12. Remove the wiring harness supplied with the air cleaner from the packaging. Attach a supplied 3/16" insulated female guick connect terminal to the blue wire and to the green wire.
- Attach the blue wire from the air cleaner wiring harness to the open tab on the piggyback terminal.
- Insert the 12" blue stripped wire under the terminal strip screw marked "B/C" on the IFC control board. If the application also includes an outdoor unit (communicating or non-communicating), the B/C terminal will require three wires. For this connection, rather than connecting the three wires to the low voltage terminal strip on the furnace IFC, create a pigtail using a short length of thermostat wire and a wire nut (field supplied) to attach to the B/C terminal.
- 15. Connect the green wire from the air cleaner wire harness to the 24VA terminals of the 35VA transformer terminal as shown in the diagram (this terminal is labeled "RD" on the transformer).
- Insert the red stripped wire from the air cleaner wiring harness under the terminal strip screw marked "R" on the IFC Control board.
- 17. Attach the black stripped wire from the air cleaner wiring harness directly to ground with a screw in the chassis.
- Once all of the connections have been completed, remount the IFC Control Platform into the furnace.
- Secure the loose EAC-H 115VAC & EAC-N (black and white) 120VAC wires with wire ties so that they are not dangling in the
- The brown and white wires on the air cleaning wiring harness
- 23. Check both furnace and air cleaner operation per the furnace



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## Connecting an ACCE to a Modulating or an 80% Furnace in Communicating Mode. For 24V mode, Connect per ACCE Instructions

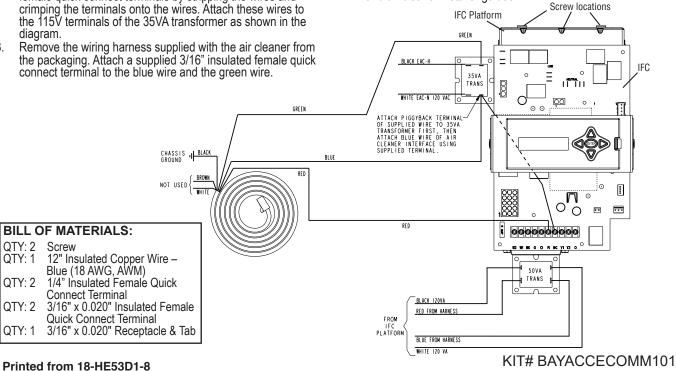
#### WARNING

HAZARDOUS VOLTAGE! DISCONNECT ALL ELEC-TRIC POWER, INCLUDING REMOTE DISCONNECTS **BEFORE SERVICING. FLOW PROPER LOCKOUT/** TAGOUT PROCEDURES TO ENSURE THE POWER CANNOT BE INADVERTENTLY ENERGIZED. FAIL-**URE TO DISCONNECT POWER BEFORE SERVIC-**ING COULD RESULT IN DEATH OR SERIOUS INJURY.

#### PROCEDURE:

- Disconnect all electrical power supplies to the furnace.
- Remove blower door to up-flow or down-flow furnace.
- Remove the two screws that secure the IFC platform to the underside of the blower deck on an up-flow furnace or the screws that secure the IFC platform to the top panel on a down-flow furnace.
- Carefully remove the IFC platform from the furnace
- On both the up-flow and down-flow furnaces, mount the 50VA transformer supplied in the packaging with the air cleaner onto the bottom of the IFC platform. Screws and pilot holes are provided. See figure.
- Remove wiring from existing 35VA transformer and reconnect to the 50VA transformer. Note the polarity of the wires and
- reconnect to the appropriate terminals. See diagram Remove the EAC-H 115VAC and EAC-N wires (white and black) out of the junction box and pull them through the grommet in the blower deck. Attach two supplied 1/4" insulated female quick connect terminals by stripping the wires and crimping the terminals onto the wires. Attach these wires to the 115V terminals of the 35VA transformer as shown in the

- Attach the blue wire from the air cleaner wiring harness to the open tab on the piggyback terminal supplied in the BAYACCE-COMM101. Attach piggyback terminal to the 35VA transformer terminal "C" (Common).
- 10. Insert the 12" blue stripped wire under the terminal strip screw marked "B/C" on the IFC control board. If the application also includes an outdoor unit (communicating or non-communicating) the B/C terminal will require 3 wires connected. For this connection, rather than connecting the three wires to the low voltage terminal strip on the furnace IFC, create a pigtail using a short length of thermostat wire and a wire nut (field supplied) to attach to the B/C terminal.
- 11. Connect the green wire from the air cleaner wiring harness to the 24V terminal on the 35VA transformer labeled "RD". See
- 12. Insert the red stripped wire from the air cleaner wiring harness under the IFC control board terminal screw marked "R". See
- 13. Attach the black stripped wire from the air cleaner wiring harness directly to ground with a screw on the furnace chassis. See
- Once all of the connections have been completed, remount the IFC control platform into the furnace.
- Secure any loose wiring with wire ties.
- The brown and white wires from the EAC wiring harness are unused in this application and should be insulated. See diagram.
- Replace the furnace door.
- Re-connect electrical power to the furnace.
- Check both furnace and air cleaner operation per the furnace and air cleaner installer guides.



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