Retrofit Kit

Packaged Units

KIT15802 - 460V Inducer to 230V Inducer

4YCZ6060A4120 Model

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

These instructions do not cover all variations in systems or provide for every possible contingency to be met in connection with the installation. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to your installing dealer or local distributor.

Section 1. Safety

⚠ WARNING

SAFETY HAZARD! This information is for use by individuals having adequate backgrounds of electrical and mechanical experience. Any attempt to repair a central air conditioning product may result in personal injury and/or property damage. The manufacturer or seller cannot be responsible for the interpretation of this information, nor can it assume any liability in connection with its use.

⚠ WARNING

HAZARDOUS VOLTAGE! Multiple power sources may be present. Disconnect all electrical power, including remote disconnects, before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Failure to disconnect power before servicing could result in death or serious injury.

⚠ WARNING

SAFETY HAZARD! Sharp Edge Hazard. Be careful of sharp edges on equipment or any cuts made on sheet metal while installing or servicing. Personal injury may result.

Table of Contents

Section 2. General Information

Tools required:

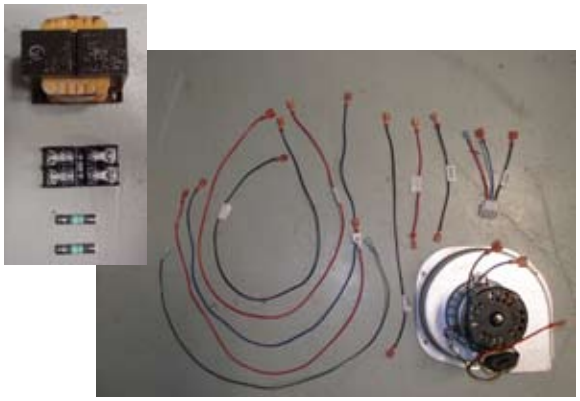
1) 5/16” nut driver OR optional screw gun (minimum 8” magentized extension recommended)

2) Wire cutters

3) Wire crimpers

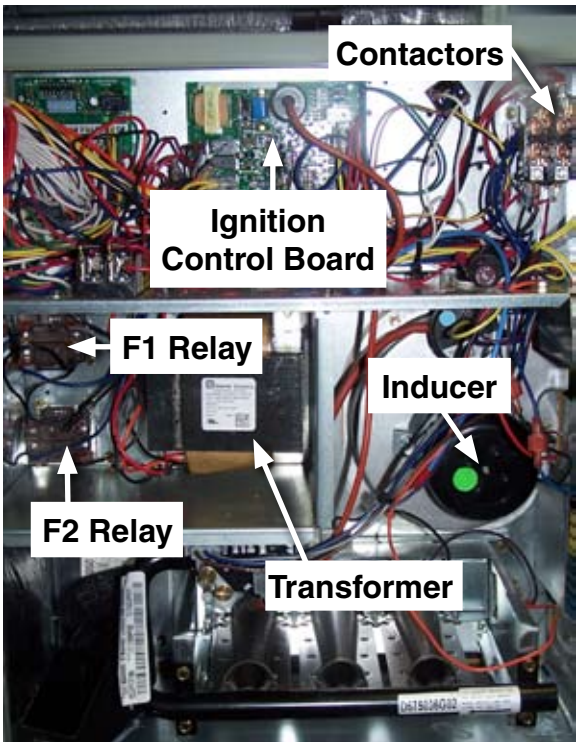
Each kit contains:

1 - New inducer motor assembly (includes 5 mounting screws)
1 - Gasket (on inducer assembly)
9 - Replacement wires/wire assemblies
1 - 460V to 230V transformer (includes 4 mounting screws)
1 - Fuse block (includes 2 mounting screws)
2 - Fuses
4 - Wire ties
4 - Replacement unit diagram stickers (only appropriate 2 will be used)
1 - Conversion label



Parts and terminology

Refer to the diagram at right for terminology and identification of primary parts addressed throughout this procedure.



Section 3. Procedure

3.1 Preparation

Turn off power and lock out power.

⚠ WARNING

HAZARDOUS VOLTAGE! Multiple power sources may be present. Disconnect all electrical power, including remote disconnects, before servicing. Follow proper lockout/tagout procedures to ensure the power can not be inadvertently energized. Failure to disconnect power before servicing could result in death or serious injury.

Remove Control/Heat panel cover.

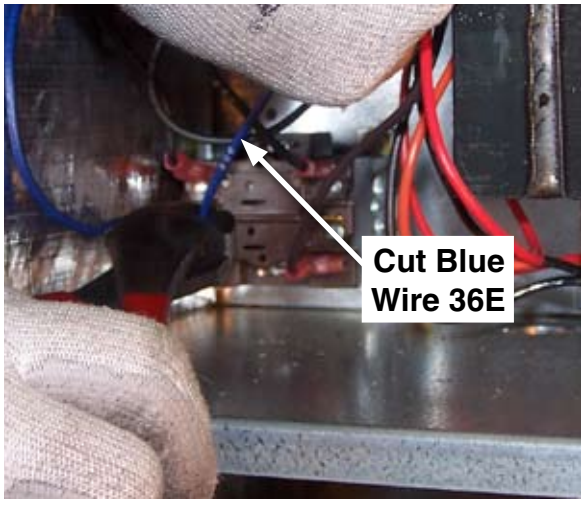
Review the service facts and wiring diagrams on the unit before attempting this procedure.

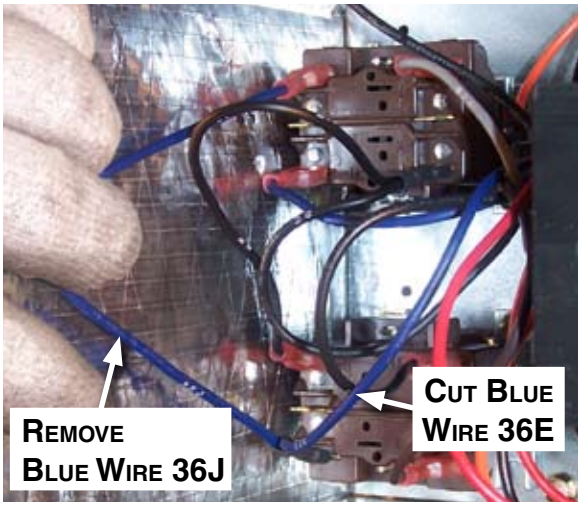
3.2 Removing existing wires and inducer assembly

STEP 1

Locate and cut the blue low voltage wire 36E from the relay coil F2, placing a supplied crimp connector on this wire. This wire will no longer be used.

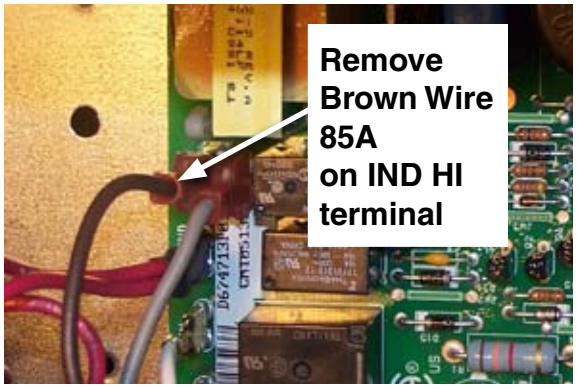
Remove and discard the blue low voltage wire 36J from relays F1 and F2 (it is a jumper between the relays).





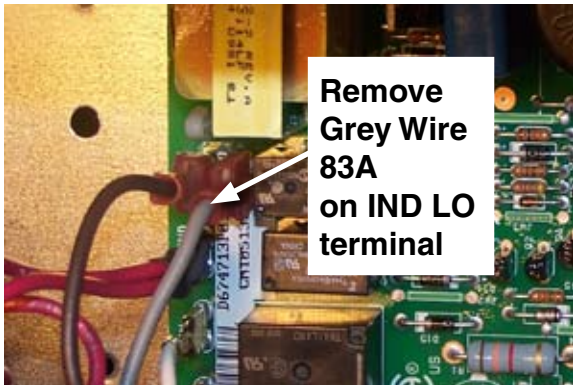
STEP 2

Remove and discard brown low voltage wire 85A from F2 relay and from IND HI terminal on the ignition control board.



STEP 3

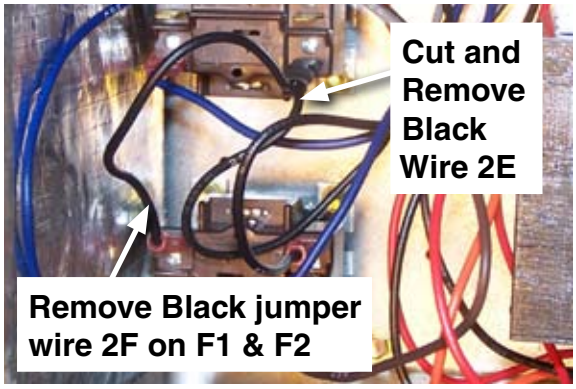
Remove and discard grey low voltage wire 83A from F1 relay and from the IND LO terminal on the ignition control board.



STEP 4

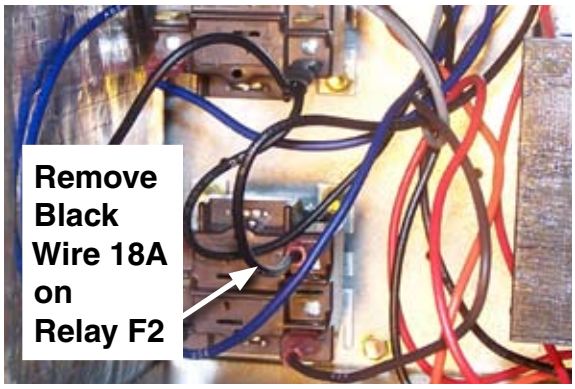
Cut and remove black high voltage wire 2E from F1 relay contact 1 and from the line side of contactor CC-2.

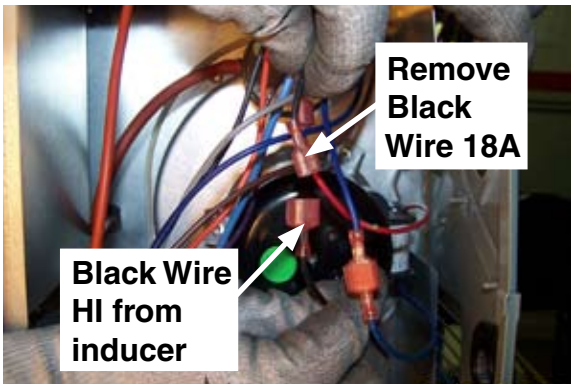
Remove and discard black high voltage wire 2F from F1 relay contact 1 and F2 relay contact 1. (it is a short jumper wire)



STEP 5

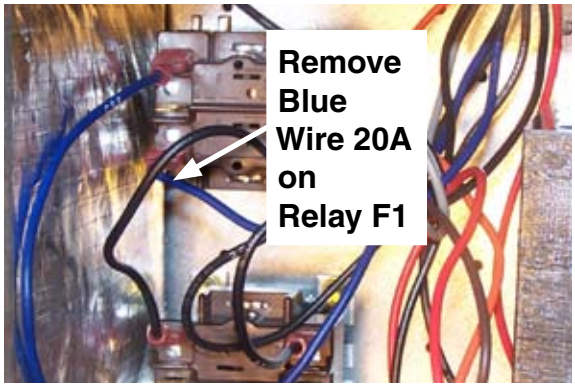
Remove and discard black high voltage wire 18A from relay F2 contact 3 and from the black HI speed wire on the inducer motor.

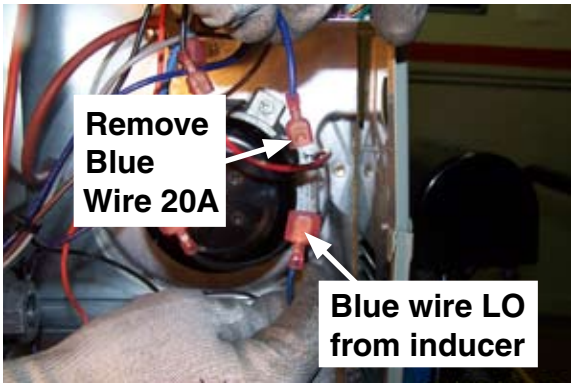




STEP 6

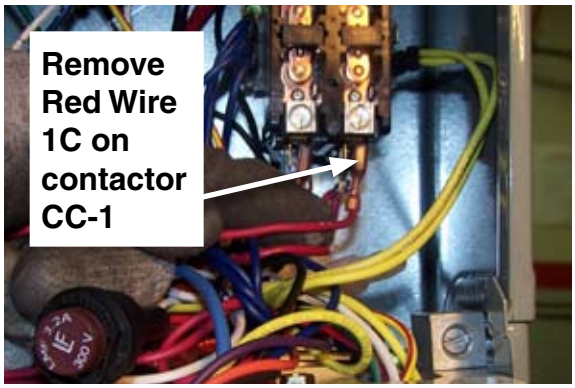
Remove and discard blue high voltage wire 20A from relay F1 contact 3 and from the blue LO speed wire on the inducer motor.

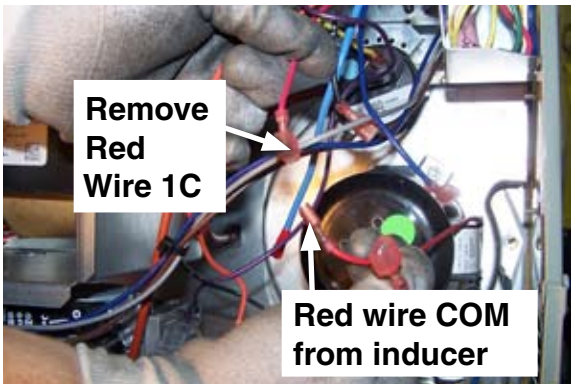




STEP 7

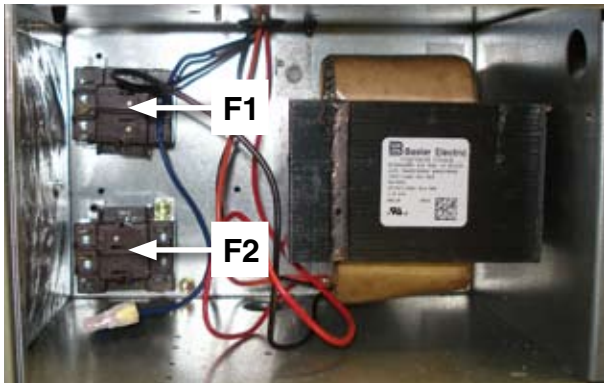
Remove and discard red high voltage wire 1C from the line side of contactor CC-1 and red COM wire on the inducer motor.

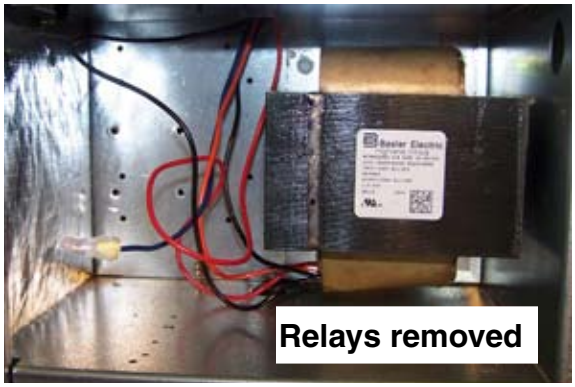




STEP 8

Remove and discard relays F1 and F2 from the unit. These relays will no longer be used.

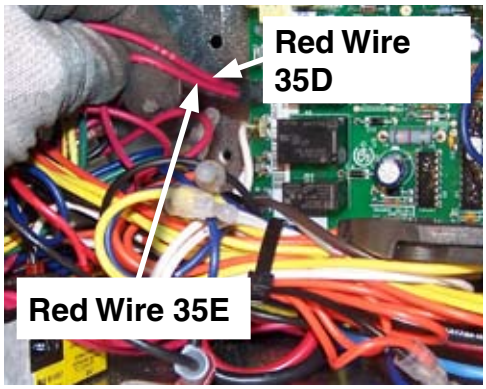


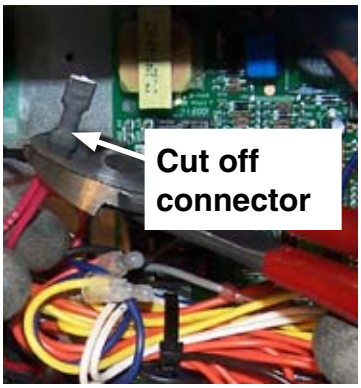


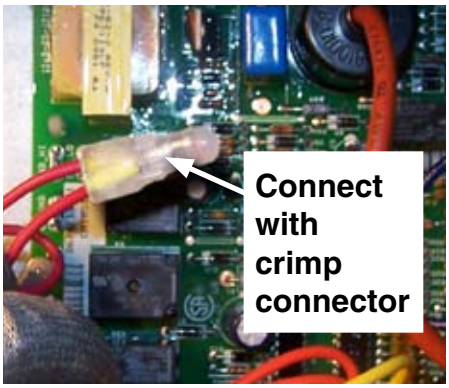
STEP 9

At the ignition control board terminal L2 IND, **remove connector with red low voltage wires 35D and 35E.**

Cut spade connector off end of wires and **connect the two wires with a supplied crimp connector**.







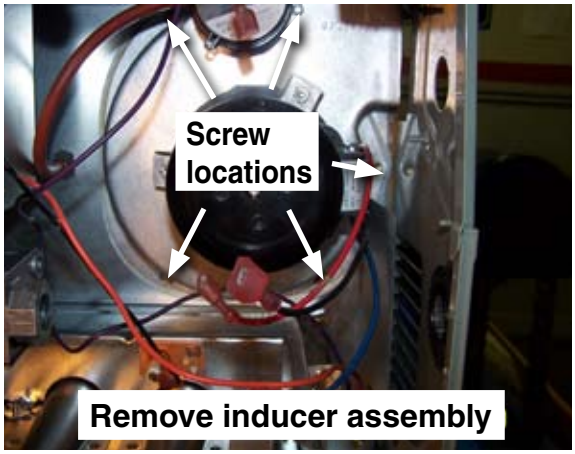
STEP 10

Remove the 5 screws which attach 460V inducer assembly and slide the assembly carefully out of unit.

This completes the removal portion of the procedure.

NOTE: *Be careful not to disturb other wiring.*

The gas line or pressure switch may need to be removed to slide the inducer out of the unit.



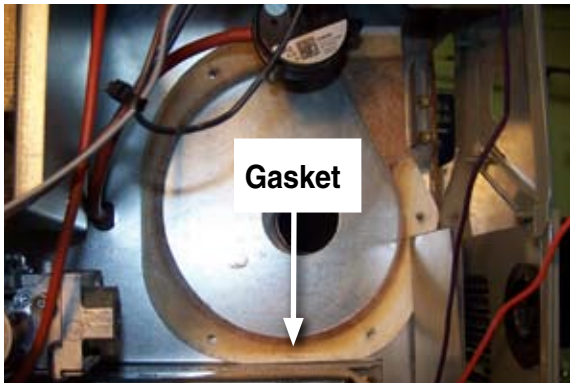
3.2 Installing new wiring and inducer assembly

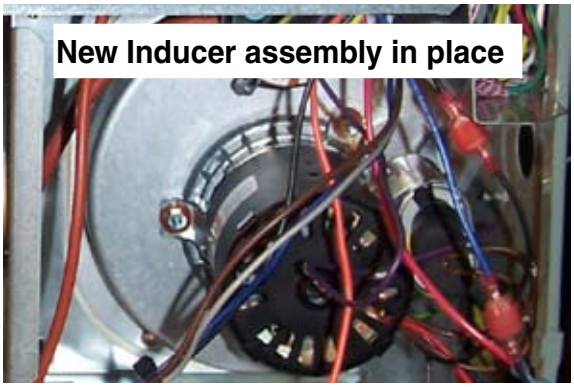
STEP 1

Using the 5 supplied screws, **install new 230V inducer assembly from kit.**

NOTE: *The white combustion housing gasket MUST be replaced if torn or damaged during the replacement process. (a new gasket is supplied with this kit)*

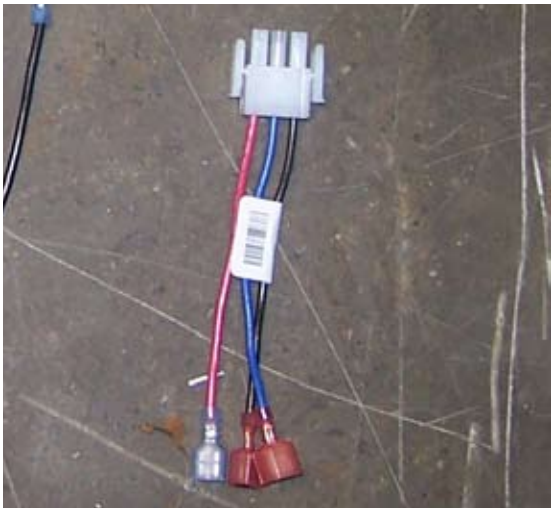
Use caution when installing the new combustion blower assembly to ensure correct alignment of gasket to the screw engagement holes.





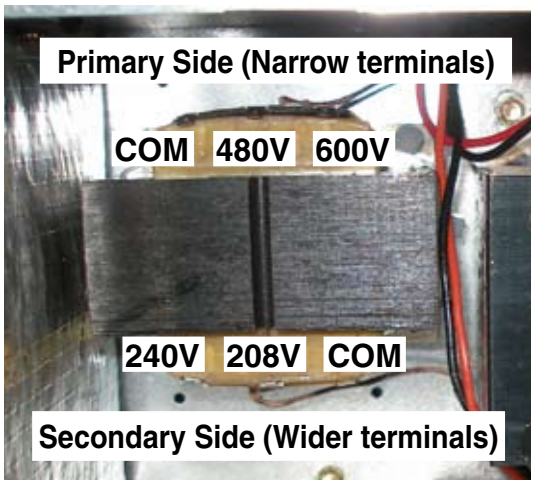
STEP 2

If new inducer motor has a 3-pin connector, **install the connector adapter furnished with the kit** at this time. If the inducer does not have a 3-pin connector, the adapter can be discarded.



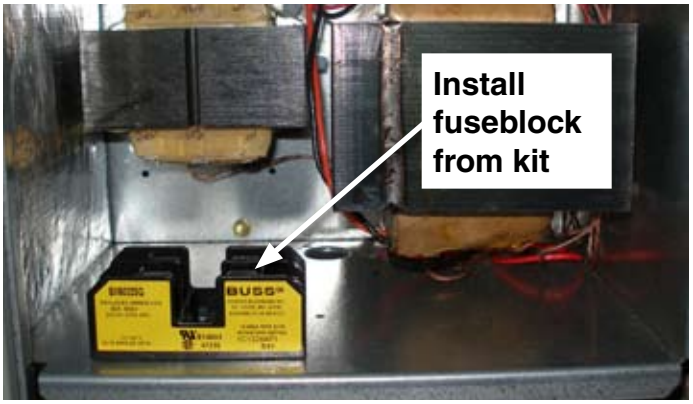
STEP 3

Using supplied screws, **install new 460v to 230v transformer (TNS3)** in the location where relays F1 and F2 were previously installed. Note orientation of terminals below.



STEP 4

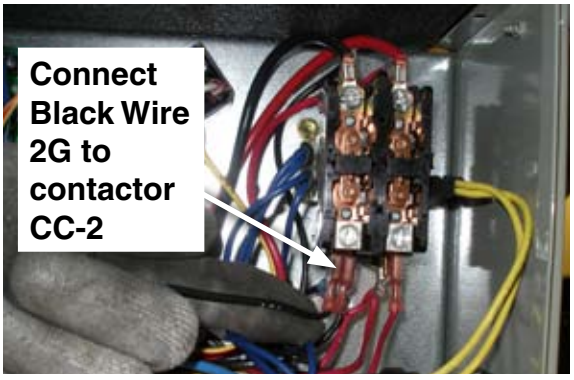
Install new fuse block from kit. Fuse block goes in front of new Transformer and uses the existing hole in the sheet metal.



STEP 5

Connect Black wire 2G to the terminal on the line side of new fuse block.

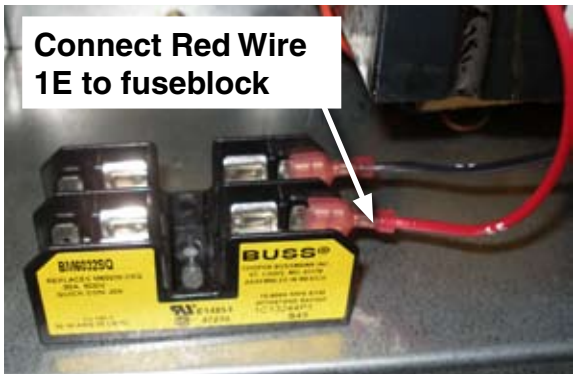
Run opposite end of Black wire 2G through wire access in control panel and **connect to contactor terminal CC2** on the 460v line side of the contactor.

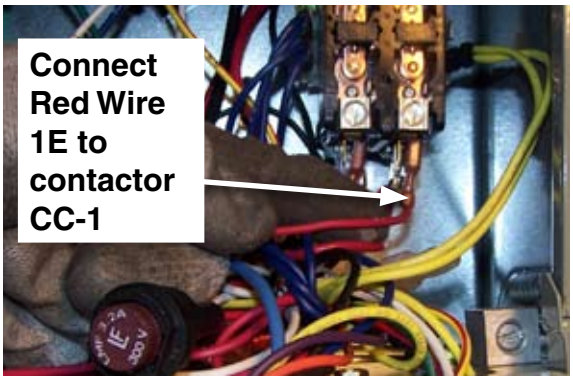


STEP 6

Connect red wire 1E to the opposite terminal on the line side of new fuse block.

Run opposite end of red wire 1E through wire access in control panel and **connect to contactor terminal CC1** on the 460v line side of the contactor.

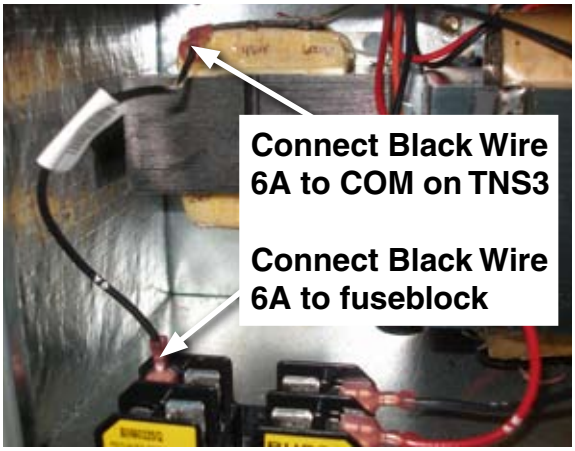




STEP 7

Connect one end of black wire 6A to the outlet side of fuse block.

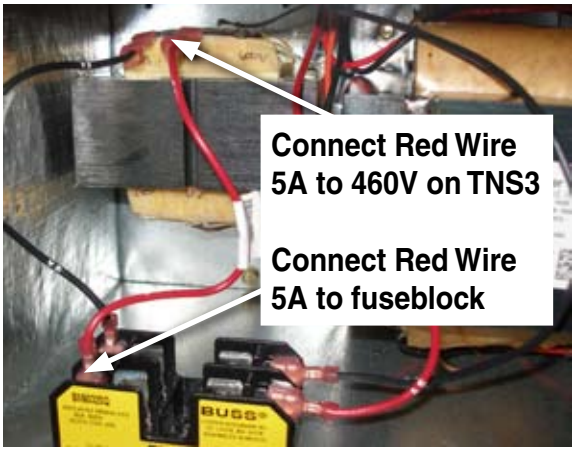
Connect opposite end of wire to COM terminal on the primary side of new transformer (TNS3).



STEP 8

Connect one end of red wire 5A to the outlet side of fuse block.

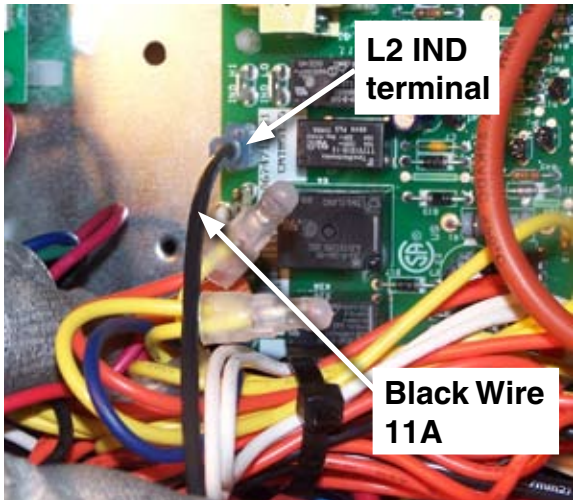
Connect opposite end of wire to 460V terminal on the primary side of new transformer (TNS3).



STEP 9

Connect black wire 11A to the COM terminal on the secondary side of transformer TNS3.

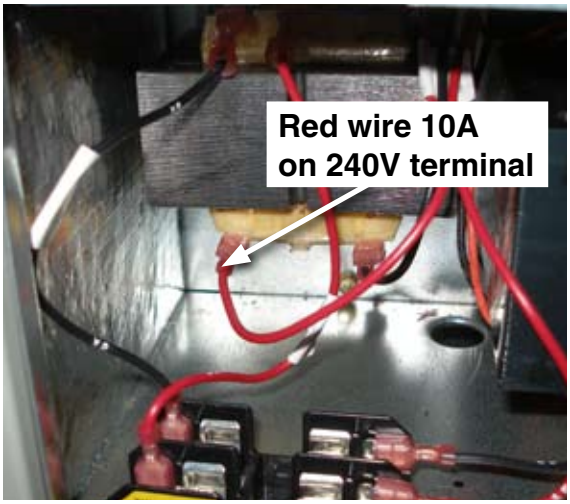
Run opposite end of black wire 11A through wire access in control panel and **connect to the ignition board terminal L2 IND.**

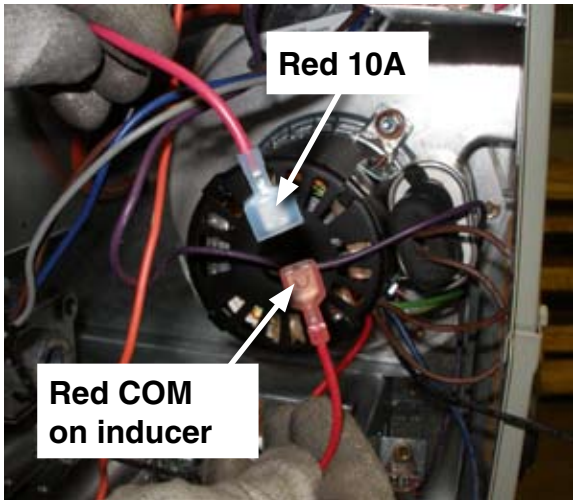


STEP 10

Connect red wire 10A to the 240V terminal on the secondary side of transformer TNS3.

Run opposite end of red wire 10A through wire access in control panel and **connect to the red common wire on the 230V inducer motor.**

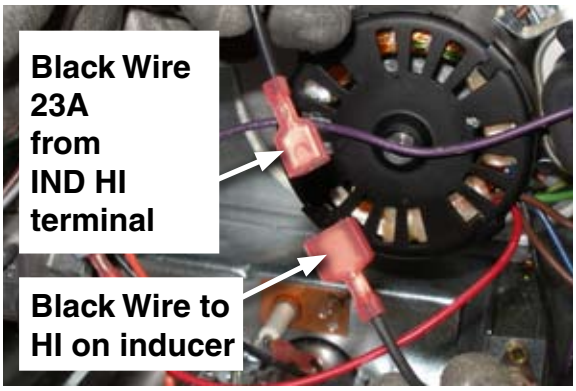


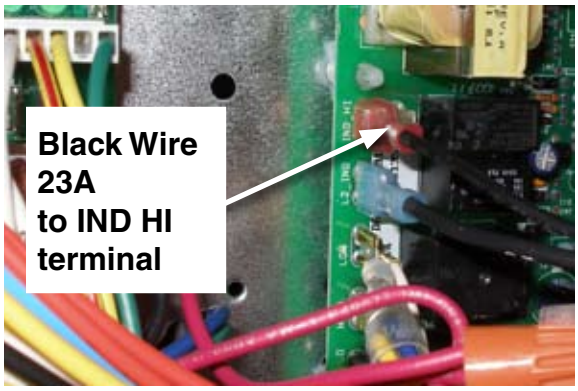


STEP 11

Connect Black wire 23A to black wire from Inducer motor.

Run opposite end of black wire 23A through wire access in control panel and **connect to the HI terminal on the ignition board** marked IND HI.

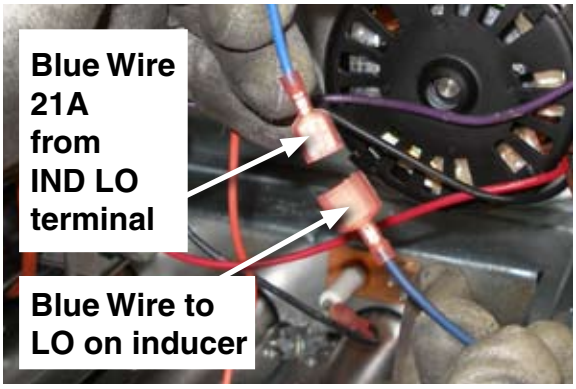


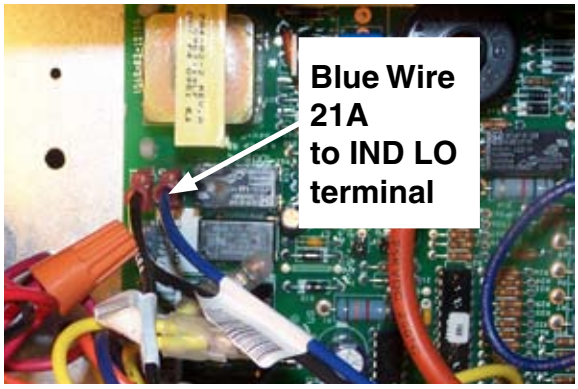


STEP 12

Connect Blue wire 21A to Blue wire from Inducer motor.

Run opposite end of Blue wire 21A through wire access in control panel and **connect to the LOW terminal on the ignition board** marked IND LO.





STEP 13

Insert the two provided fuses into the fuse-block.

The inducer and all associated wires and components should now be connected.

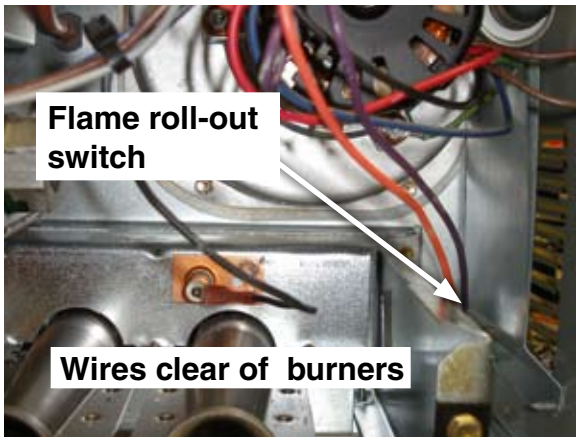
Be sure that all wires from kit have been used. (plug adaptor may remain if not needed to convert inducer plug).

3.3 Wire dressing and finalization

STEP 1

Dress wires using wire ties to secure bundles.

Ensure wires are clear of burners and are not pulled loose from Flame Roll-out switch.



STEP 2

With wire ties, **dress wires in the control panel**, ensuring they are neatly bundled and away from door edges.

Replace gas pipe and/or pressure switch if removed earlier.

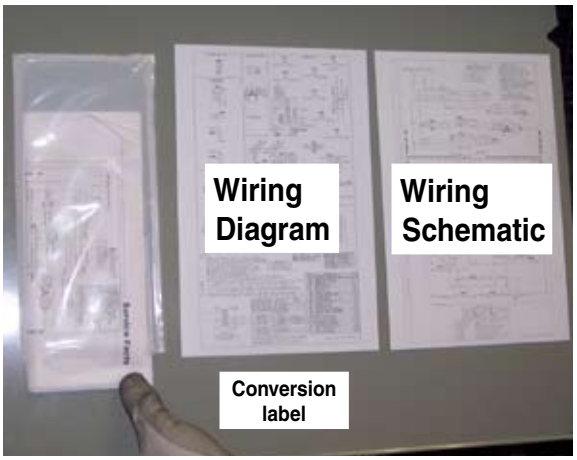
STEP 3

1) Using the stickers provided in the kit, **choose the appropriate wiring diagram and schematic** based on the table below.

Model Number	Wiring Diagram	Wiring Schematic
4YCZ6060A4120AA	D757891P01	D757892P01
4YCZ6060A4120AB	D757891P01	D757892P01
4YCZ6060A4120BA	D757893P01	D757894P01

2) Carefully **place proper stickers over the existing wiring diagram or schematic sticker** respectively on the inside of the Control/Heat cover as shown.

3) Complete information on the sticky backed conversion label and **place label next to the wiring stickers** in the previous step.



STEP 4

Replace door and power up the unit. Cycle high and low stage heating operations to confirm proper installation of kit.

6200 Troup Highway
Tyler, TX 75707