



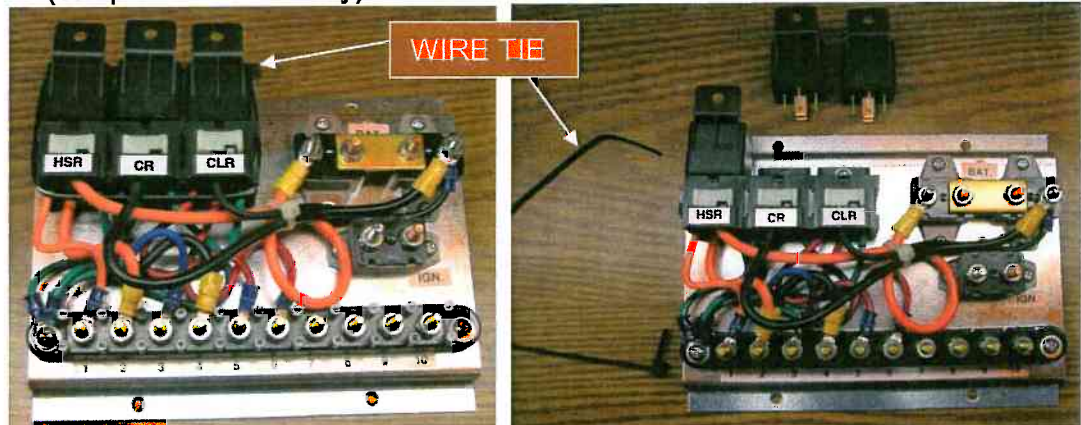
TAC-SER09-006
09-18-09

Subject: K410 disconnect instructions

We are advising anyone that has the K410 Condenser assembly to disable the air conditioning system immediately until a replacement retrofit kit can be obtained.

Below is a simple representation of the relay panels supplied through Carrier for Split System Product. The quantity of relays and layout of panel may vary according to system components. In order to disable the K410 condenser and related compressor until upgrades are performed, please follow the instructions below:

- 1) Locate the Carrier electrical panel and identify the CR (condenser relay) and CLR (compressor clutch relay).



- 2) Depending on panel supplied, it may be necessary to remove the wire tie in order to remove the relays. Simply cut and remove the wire tie. Remove the CR and CLR relays and install a wire tie around remaining relay.

With the CR and CLR relays removed, the cooling system will be safely disabled until corrections can be made on the K410 condenser. System evaporator fans will remain functional for air circulation.


Note: It is imperative that both CR and CLR relays are removed for safe system operation.

Please contact Carrier Transport Technical Service Hot-Line at (800) 450-2211 with any questions or concerns.

Robert Picker

Service/Warranty Manager
Carrier Transicold Division

BD, BU

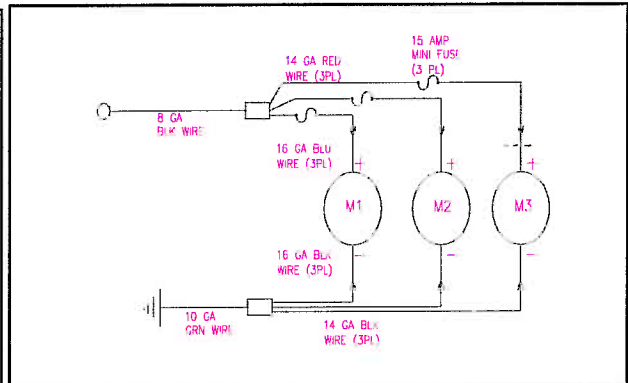
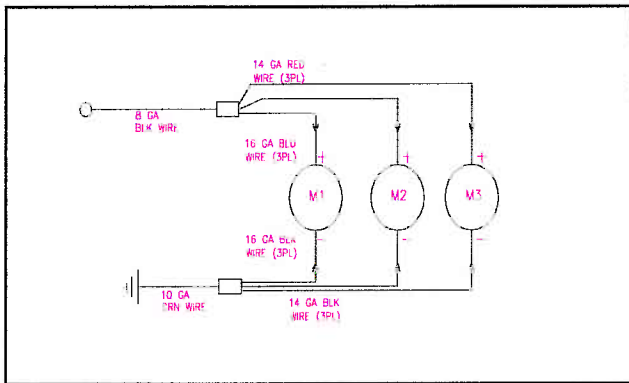
 Carrier A United Technologies Company Carrier Transicold Division P.O. Box 4805 Syracuse, New York 13221 USA	Drawing No. 98-63122	Rev. 1
	Date SEP 18, 2009	Sheet 1 of 2
Title: REWORK INSTRUCTIONS K410 – FUSE ADDITION	Supersedes	Sheet OF

Purpose:

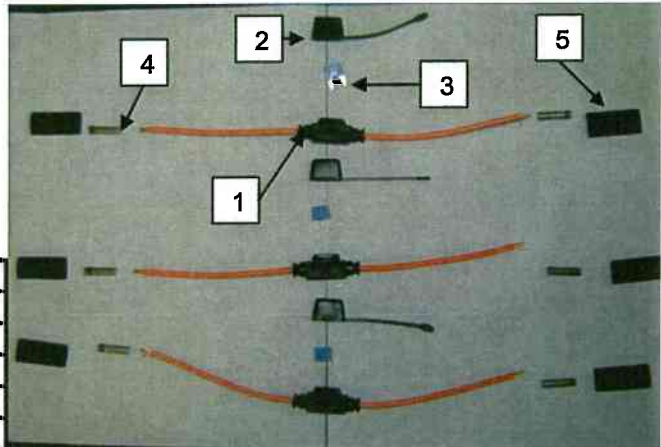
74-62051-00 Rework kit is intended to add inline fuses to K410 condenser built and shipped prior to Sep 18, 2009. Fuse is added inline to each motor (3 motors on the K410) model.

BEFORE


AFTER



Kit Contents:



Item	Part Description	QTY
1	Fuse Holder	3
2	Fuse Holder, Cap	3
3	Fuse, 15A mini	3
4	Butt Connector, Step Down 12/14	6
5	Heat Shrink tube	6

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Tools Required:

Item	Tool Description
1	Ratchet w/ 10MM Socket
2	Diagonal Cutters
3	Wire Strippers
4	Wire Crimpers (UNINSULATED TERMINALS)
5	Heat Gun
6	Tyewraps
7	Tape, Electrical



General Safety Notices:

The following general safety notices supplement specific warnings and cautions appearing elsewhere in this document. They are recommended precautions and must be understood and applied during maintenance/service activities contained herein.

Qualified technician is required for successful installation of this kit. This document does not replace proper technical or safety precautionary training. Refer to Carrier Installation and Service Manuals for more information on safety notices and proper service techniques.

Prior to starting work each day, or starting any new job or task, it is expected that employees will inspect the job for potential hazards. Work must not start until all unsafe conditions are mitigated.

First Aid:

An injury, no matter how slight should never go unattended. Always obtain first aid or medical attention immediately.

Special Precautions:

Always wear appropriate personal protective gear (safety glasses, hearing protections, gloves, safety lanyards).

Keep hands, clothing, and tools, clear of moving parts (engines, condenser and evaporator fans).

No work should be completed unless battery power has been disconnected. Lockout/Tagout procedures should be in place and followed.

Working at height greater than six (6) feet require special precautions; all employees performing work at a height greater than 2 meters (6 feet) will utilize fall protection and be familiar with the Working at Heights Fatality Prevention checklists. Performing work without fall protection, while on a ladder, is permitted only if 3-point contact can be maintained at all times.

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**REWORK INSTRUCTIONS
 K410 – FUSE ADDITION**

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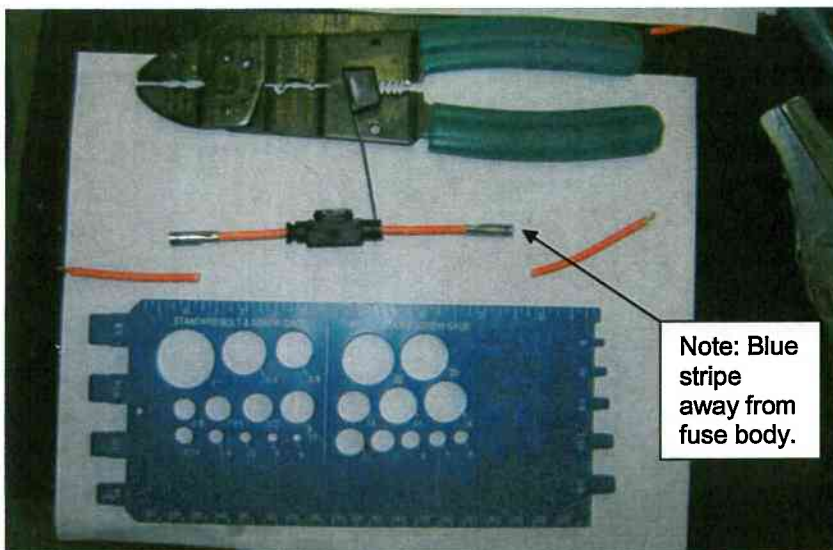
Step By Step Instructions:

1. Disconnect vehicle battery.
2. Remove unit Cover to gain access to unit electrical harness. Remove the four (4) 8 MM bolts/washer front and rear of unit, total per unit. (10 MM Socket and Ratchet)




CAUTION: Take all necessary precautions when working on the roof of a bus.

3. Prep fuse assembly by cutting to required length, strip wire ends, install fuse cover and crimp step down terminals on to the wire.



- IMPORTANT: INSTALL FUSE COVER BEFORE YOU CRIMP ONTO UNIT HARNESS.
- USE PROPER TERMINAL CRIMPER, MUST BE DESIGNED FOR NON ISULATED TERMINAL.

4. Remove tie wraps on K410 unit base securing electrical harness.


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- **IMPORTANT:** Take care not to damage the harness, if damaged repair appropriately.

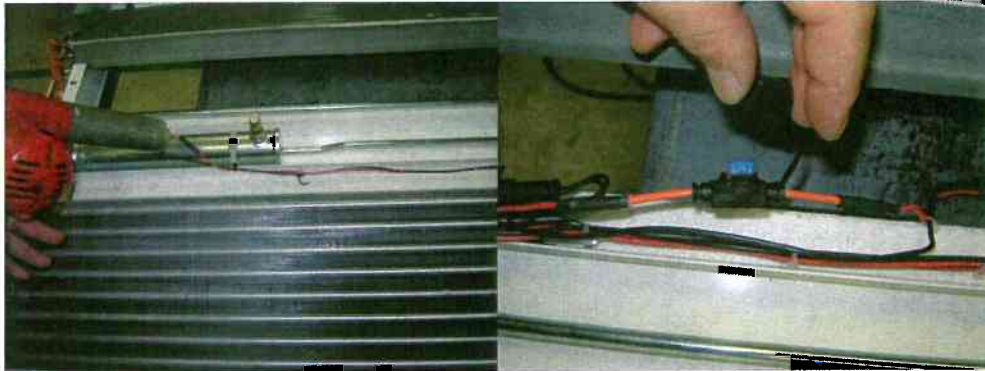


5. Install the fuse holder assembly in each 14 GA red wire lead near the connector (before 180° bend in harness). Orient your fuse assembly made in step 2 in the harness so that it will fit neatly with the harness routing area. Cut the K410 harness using the fuse assembly as a guide.
 - **IMPORTANT:** Be careful to estimate accurately the required end of the wire as it will needed to be inside approx. ½ lengths of the butt connectors. Do not place the butt connect near the 180° harness bend.
6. Install the heat shrink tube over the fuse holder.
 - **IMPORTANT – PLACE HEAT SHRINK ON WIRE BEFORE CRIMPING.**
7. Crimp K410 red 14GA wire to fuse assembly (2 times).
 - **IMPORTANT - Test your crimps by giving them a firm tug to ensure good contact, you should not be able to pull apart a crimp (no matter how hard you tug).**

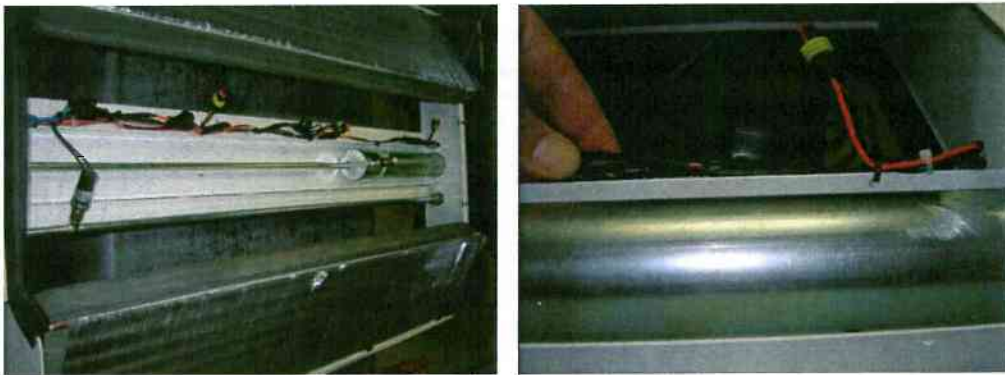


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- Center the heat shrink tube over the butt connection and using the heat gun, shrink tube to seal the connector. Apply electrical tape for additional measure to prevent water intrusion into the connection. Use **CAUTION** not to overheat wire or other objects in the area.



- Install 15 A fuse into holder, install cover, and inspect assembly.
- Using supplied hardware and Tie wraps, reattach harness back to K410 base. Take care to secure harness to the base using holes provide and make sure harness is secured to prevent possible short.



CAUTION: Take all necessary precautions to secure harness to unit base, avoiding sharp edges, fan blades, tubing or other possible hazards that could damage the harness insulation causing a short.

- Connect fans and reinstall cover. Take care to secure cover using proper hardware as originally provided, make sure all bolts are installed and properly torqued.

SAFETY: Take all necessary precautions to properly secure unit cover.

- Re-connect battery and operate unit and verify all fan are running in correction direction.

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**REWORK INSTRUCTIONS
K410 – FUSE ADDITION**

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