



9/17/09

Dear OEM

This notification is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Trans/Air Manufacturing has decided that a defect, which relates to motor vehicle safety exists in the Trans/Air EC2.0, 2.5 & 3.0 electrical systems installed between May 2006 and June 2009. The electrical systems in question are typically installed in school and transit type commercial buses. These systems include a relay board with a 12-position terminal strip with screws mounted to a pc board. Trans/Air has concluded that the relay boards present a risk of overheating under any of the following three conditions: loose screws due to improper torquing; poor wire connections due to improperly crimped terminals; or debris deposited on the EC board. These can result in electrical arcing and overheating of the EC board. In the worst case scenario, such arcing and overheating can result in a fire.

Trans/Air will be instituting a Mandatory Safety Corrective Action Program for this product.

**You Must Notify NHTSA & Conduct a Safety Recall:** According to our records, affected units were purchased by your company. If those units were installed as original equipment on vehicles manufactured at your facility, and you agree that they contain a safety defect, your company must notify the National Highway Traffic Safety Administration (NHTSA) within 5 business days and conduct a safety recall of those vehicles. It is critical that the NHTSA guidelines are followed in a timely manner and that your customers are notified to discontinue the use of the EC2.0/2.5/3.0 climate control electrical system until they schedule a time for you to repair the vehicle. You may contact the NHTSA with questions by sending an email to [rmd.odi@dot.gov](mailto:rmd.odi@dot.gov).

To help you comply with your obligation to issue a safety recall of the vehicles that contain an affected EC2.0/2.5/3.0 climate control electrical system, we have attached samples of a dealer service bulletin and a sample letter to dealers, which should facilitate your notification to dealers and owners of the recall and the required repairs and service procedures. Although we have provided these samples to you for your convenience, you must submit drafts of your version of these notices to NHTSA for approval at least 5 days prior to mailing such notification to dealers and owners of potentially affected EC2.0/2.5/3.0 climate control electrical system.

**Important:** Dealer notification by Certified Mail is required by Federal law for all safety recalls. Responsible dealership personnel should be instructed to sign for this Certified mail without hesitation as it contains urgent safety recall information. Notifications to owners of potentially affected vehicles are by first class mail. Please be advised that the outside of each envelope containing an owner notification letter must be marked "SAFETY RECALL NOTICE" all in capital letters, either in boldface or underlined, and in type that is larger than that used in the address section. A sample of the envelope must be submitted to NHTSA for approval at least 5 business days before mailing to owners.

**IMPORTANT:** Some of the vehicles affected may still be in your inventory. Federal law requires you to complete the recall service on these vehicles before delivery. Trans/Air Mfg. will provide replacement or repair for these units prior to delivery to your customers.

Trans/Air Mfg. Inc.



Trans/Air Manufacturing Corp. is an ISO 9001 registered firm committed to providing world class climate control products and services to the bus and commercial vehicle markets.

Transportation Climate Control Systems

480 E. Locust Street • P.O. Box 70 • Dallastown, Pennsylvania 17313 • USA • Phone: 717-246-2627 • Fax: 717-244-7088  
e-mail: [Trans-Air-Lehnerl@worldnet.att.net](mailto:Trans-Air-Lehnerl@worldnet.att.net) • website: <http://www.transairmfg.com/>

10/19/2009 10:08AM

# SAFETY RECALL NOTICE

Date:

Dear Customer:

This notification is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Trans/Air Manufacturing has decided that a defect, which relates to motor vehicle safety exists in the Trans/Air EC2.0, 2.5 & 3.0 electrical systems installed between May 2006 and June 2009. The electrical systems in question are typically installed in school and transit type commercial buses. These systems include a relay board with a 12-position terminal strip with screws mounted to a pc board. Trans/Air has concluded that the relay boards present a risk of overheating under any of the following three conditions: loose screws due to improper torquing; poor wire connections due to improperly crimped terminals; or debris deposited on the EC board. These can result in electrical arcing and overheating of the EC board. In the worst case scenario, such arcing and overheating can result in a fire.

Our records indicate that you have operating in your fleet one or more vehicles equipped with the above referenced electrical system. Trans/Air is instituting a Mandatory Safety Corrective Action Program. You must complete this mandatory Trans/Air safety recall program regardless of how your Trans/Air air conditioning system is operating and even if you believe your system was properly installed.

Trans/Air will inspect all EC system relay boards already installed on buses or other commercial vehicles. This inspection will ensure that the board is properly installed. As part of this effort, Trans/Air will also replace all existing terminal-strip screws with new torx head screws containing a self-locking mechanism. Instructions will be provided to torque the screws to the proper torque specification. All EC board terminals will be inspected and replaced if improperly crimped. All EC boards will be inspected for foreign material deposited on the board and cleaned if necessary. Trans/Air will add a diode and a protective cover to each EC3.0 relay board. Finally, Trans/Air will also provide a protective cover with warning label to be installed over the terminal strip.

This program is being provided to all end users at no charge. The attached notification details the VIN #'s of the buses in your fleet, which will require correction. Arrangements to have this service performed, which normally takes approximately 60 minutes per board, can be scheduled after \_\_\_\_\_, by calling your nearest Trans/Air Service Point which is included on the attached list.

If you wish to install the kit yourself, detailed instructions are included with the attached Service Bulletin number 09-002. Please notify Trans/Air Mfg. for our records. Or, if you wish you may e-mail the information to us at [jkochenour@transairmfg.com](mailto:jkochenour@transairmfg.com), or [lstaley@transairmfg.com](mailto:lstaley@transairmfg.com).

You may also wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE., Washington, D.C., 20590, or call the toll-free Auto Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <http://www.safercar.gov> if your service center fails to repair or is unable to remedy this condition without charge or within a reasonable time.

Should you require assistance or have any questions in reference to this Corrective Action Program, please do not hesitate to contact the Trans/Air Warranty and Service Center @ 1-800-673-2446.

Sincerely,

Mark Slobodian  
Vice President

Enclosure: Service Bulletin # 09-002

Dear OEM Dealer,

This notification is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Trans/Air Manufacturing has decided that a defect, which relates to motor vehicle safety exists in the Trans/Air EC2.0, 2.5 & 3.0 electrical systems installed between May 2006 and June 2009. The electrical systems in question are typically installed in school and transit type commercial buses. These systems include a relay board with a 12-position terminal strip with screws mounted to a pc board. Trans/Air has concluded that the relay boards present a risk of overheating under any of the following three conditions: loose screws due to improper torquing; poor wire connections due to improperly crimped terminals; or debris deposited on the EC-board. These can result in electrical arcing and overheating of the EC board. In the worst case scenario, such arcing and overheating can result in a fire.

Trans/Air will be instituting a Mandatory Safety Corrective Action Program for this product. According to our records, affected units were purchased by your company. Trans/Air Mfg will conduct a safety recall of those vehicles. It is critical that the NHTSA guidelines are followed and that your customers are notified in a timely manner. Trans/Air will produce and mail the notifications utilizing information from our warranty database; however, in some cases you will be contacted for your assistance in identifying the end users. Notifications to End Users of potentially affected vehicles are by first class mail.

To help comply with our obligation to issue a safety recall of the vehicles that contain an affected EC2.0/2.5/3.0 climate control electrical system, we have attached samples of a service bulletin and a sample letter to owners of potentially affected vehicles, which will facilitate our notification to owners of the recall and detail the required repairs and service procedures. .

**IMPORTANT: Some of the vehicles affected may still be in your inventory. Federal law requires the Dealers to perform the recall service on these vehicles before delivery. Trans/Air Mfg. will provide for the repair of these units prior to delivery to your customers.**

You may contact the NHTSA with questions by sending an email to [rmd\\_vdi@dot.gov](mailto:rmd_vdi@dot.gov). If you have any questions for Trans Air, please contact our Warranty Department at 800-673-2446, ext 268.

Thank you for your assistance in implementing this program.



# SERVICE BULLETIN

Number: 09-002

Date: 9/18/09

## EC Series Electrical System Mandatory Product Improvement

Based on information gathered from the field, Trans/Air Manufacturing has learned of poor installation practices from aftermarket installers. The issues that we have found are directly related to the EC series electrical system only.

Trans/Air has concluded that if installers fail to follow Trans/Air installation instructions and/or comply with accepted good installation practices, the EC boards present a risk of overheating under any of the following three conditions: loose screws due to improper torquing; poor wire connections due to improperly crimped terminals; or debris deposited on the EC board. These improper installation practices can result in electrical arcing and overheating of the EC board. In the worst case scenario, such arcing and overheating can result in a fire.

Trans/Air Manufacturing maintains a policy of continuous improvement of our products and services. In keeping with this philosophy, Trans/Air is issuing Mandatory Product Improvement 09-002, to address the following key areas of concerns in the aftermarket installation of Trans/Air EC series electrical Climate Control Systems.

Trans/Air has developed a product improvement kit p/n 5031234 for EC2.0 & EC2.5 and kit p/n 5031233 for EC3.0

If you have a vehicle with an EC series electrical system, an inspection of the EC2.0/2.5 relay board(s), the replacement of EC3.0 relay boards, and the addition of the product improvement kit should be conducted as follows:

1. Crimps on the wires going to the terminal strip of the relay board should be uniform and tight. There should be no bare wire visible between the wire insulation and the terminal, and strands flush with terminal barrel. (Fig 1 & Fig 2)
2. All terminals attached to the terminal strip on the relay board should be a ring type terminal. Spade or other type terminals should not be present.
3. All screws on the terminal strip should be replaced with the Torx type screw, supplied in the product improvement kits for EC2.0, EC2.5 & EC3.0, and **MUST BE** torqued to 18 in/lbs. (a torque screwdriver is available on a loan basis, from Trans/Air) (Fig 3)
4. EC2.0/2.5 - Inspect the board overall. Look for any discoloration or evidence of heat. Inspect the area in front of, and above the EC2.0/2.5 relay board. If there are any refrigerant hoses laying against the board or directly above the board, please contact Trans/Air for a relay board cover to eliminate any chance of condensate contacting the relay board. Hoses that may be near the board must be secured properly, to eliminate movement toward the relay board.

5. EC3.0 - To provide additional protection from high resistance shorts caused by conductive material on the EC3.0 relay board, Trans/Air has developed a product improvement kit (p/n 5031233) that includes all components of the EC2.0/2.5 kit plus a diode, and protective cover assembly. Replace board with board provided in kit. **Old Board Must Be Returned.** (Call 800-673-2446 Ext268 for RMA #) RMA number must be written on outside of box. Send UPS or Fed Ex ground, and add shipping to your claim/invoice. Send to: Trans/Air Mfg, 480 E. Locust St., Dallastown, PA 17313
6. Inspect the wiring harness going to the relay board. Is it secured properly? It should not be pulling on the terminals, but should be supported enough so that it does not move or vibrate.
7. Some aftermarket installers have used the relay board assembly as a template to drill the mounting holes for that board. This could result in metal chips or shavings falling on the board and causing a high resistance short. Inspect the board for any conductive debris that may have fallen on the board. Blow the board off using compressed air to eliminate any debris that may have been missed.
8. The kit includes a terminal strip cover with an affixed warning label. Install the terminal strip cover onto the terminal strip.

**Trans/Air Product:**

All EC2.0/2.5/3.0 electrical systems shipped between 5/2/06 and 7/1/09

**Symptoms:**

High resistance short. Overheat condition, smoke, possible ignition source.

**Probable Cause:**

Conductive material on relay board. (Metal shaving etc.) Loose wire terminal screws at the relay board, or improper crimps

**Corrective Action:**

Execute items 1 – 8 contained in Service Bulletin 09-002, utilizing kit # 5031234 for EC2.0/2.5, or kit # 5031233 for EC3.0

**NOTE: EC3.0 BOARD MUST BE RETURNED TO TRANS/AIR.**

(Call 800-673-2446 for RMA number)

**Compensation:**

Special authorization code:

EC2.0/2.5

E-09-A flat rate 45 minutes per board.

EC3.0

E-09-B flat rate 75 minutes per board.

**Authorization:**

Lin Staley, Technical Services Manager

**Distribution:**

E – All

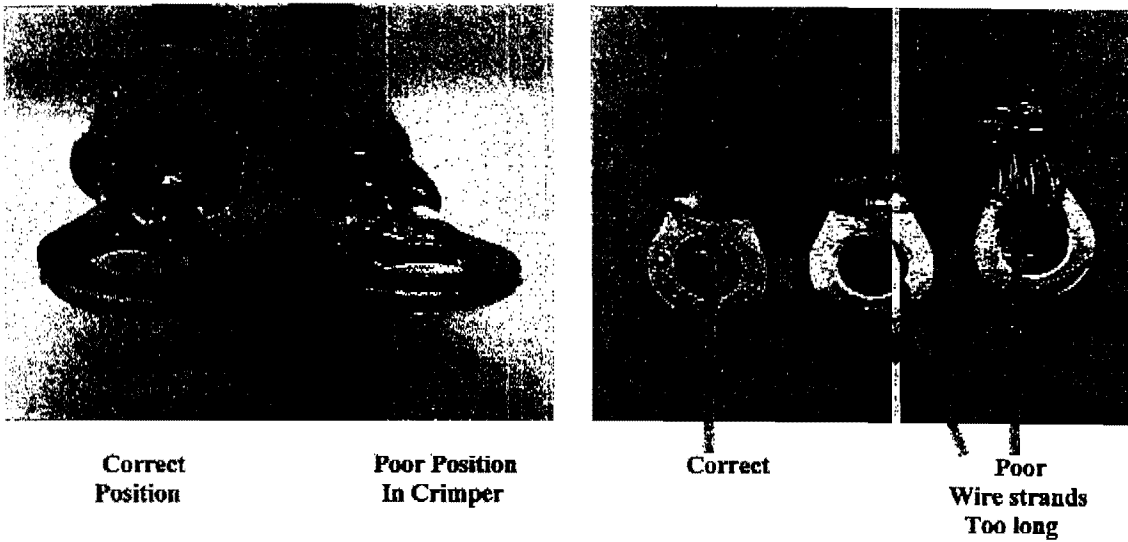
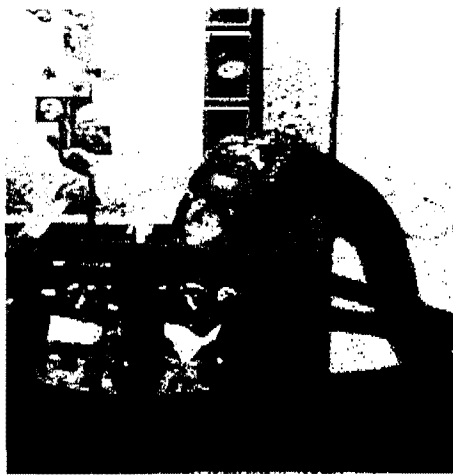
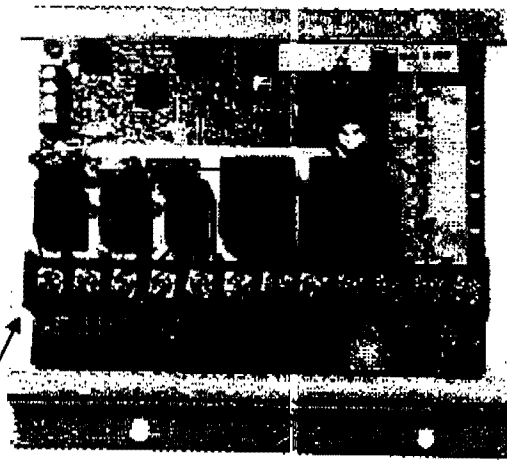


Fig 1



Poor Crimp

Fig 2



Torque all Torx type screws to 18 in/lbs

Fig 3



Fig 4

Heat discoloration of a poor (loose) crimp

After retrofit is completed, please submit claim (detailed invoice) including VIN to:

Trans/Air Mfg  
Warranty Department  
480 E. Locust St. PO Box 70  
Dallastown, PA 17313

Claim must be submitted (and old EC3.0 board returned, if applicable) within 30 days of repair.

OR

Claim can be submitted within 30 days on-line, at the Trans/Air website: [transairmfg.com](http://transairmfg.com)  
(board must still be sent to Trans/Air within 30 days)

**For questions, please call Trans/Air Mfg. at 800-673-2446**

Jeff Kochenour	Ext. 226	<a href="mailto:jkochenour@transairmfg.com">jkochenour@transairmfg.com</a>	(Warranty Manager)
Jen Wagner	Ext. 267	<a href="mailto:jwagner@transairmfg.com">jwagner@transairmfg.com</a>	
Wendy Kuhn	Ext 225	<a href="mailto:wkuhn@transairmfg.com">wkuhn@transairmfg.com</a>	
Amy Leisenring	Ext. 262	<a href="mailto:aleisenring@transairmfg.com">aleisenring@transairmfg.com</a>	