



**Reliability Driven™**

February 4, 2014

**IMPORTANT SAFETY RECALL**

**This notice applies to your vehicle [insert VIN here]**

«Customer\_Name»

ATTENTION: TECH SERVICE DEPT/MAINT

«Address»

«Address\_2»

«City», «State» «Zip»

«ctry»

**SUBJECT: SAFETY RECALL: SURE POWER EQUALIZERS**

Ref.: **NHTSA # 13V-498 (MCI)**  
**NHTSA # 13E-050 (Sure Power)**  
**Transport Canada # 2013-357**  
**MCI Service Bulletin 401**

Attention Owner:

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act and the Canadian Motor Vehicle Safety Act.

Motor Coach Industries, Inc. (“MCI”) has decided that a defect which relates to motor vehicle safety exists in model year 2000 through 2012 MCI D, E, G, and J series coaches that are equipped with a Sure Power battery equalizer identified in the attached September 10, 2013 Product Safety Recall Notice from Sure Power. According to Sure Power, the specific potting compound used for insulation in the recalled equalizers was found to be capable of conducting electricity once exposed to significant thermal energy. Once electrically conductive, the material is capable of self-heating and maintaining temperatures capable of causing a fire, potentially causing personal injury or property damage. Please see the attached Defect Information Report and September 10, 2013 Product Safety Recall Notice from Sure Power. MCI Service Bulletin 401 will contain additional information regarding how to have the recall work performed on your affected vehicle(s), and will be sent to you as soon as it is available.

200 EAST OAKTON STREET  
DES PLAINES, ILLINOIS 60018  
847-285-2000 PHONE  
866-624-2622 TOLL FREE  
WWW.MCICOACH.COM

The vehicles that are subject to this notice are the following model year 2000 - 2012 MCI D, E, G, and J series coaches (last five VIN digits):

|               |               |               |               |               |
|---------------|---------------|---------------|---------------|---------------|
| 52946 – 53196 | 53198         | 53200         | 53202 – 53227 | 53245 – 53249 |
| 53252 – 53254 | 53259         | 53262 – 53439 | 53442         | 53448         |
| 53454 – 53456 | 53460         | 54365         | 53471         | 53477         |
| 53483         | 53489         | 53495         | 53501         | 53505 – 53519 |
| 53539         | 53545         | 53551         | 53557         | 53563         |
| 53569         | 53574 – 53837 | 53879 – 54115 | 54146 – 54306 | 54309 – 54390 |
| 54397 – 54596 | 54617 – 55112 | 55114 – 55155 | 55162         | 55199         |
| 55203         | 55208 – 55279 | 55330 – 55543 | 55550 – 57999 | 58100 – 59665 |
| 59667 – 59859 | 61301 - 65955 |               |               |               |

MCI is conducting a recall of the above vehicles to replace the defective Sure Power equalizers. Sure Power advises that it will replace the affected equalizers with new equalizers that do not contain the specific potting material that is in the recalled equalizers, at no cost to you. Upon receipt from Sure Power of additional information regarding the procedures to order replacement equalizers, MCI will complete and send to you MCI Service Bulletin 401 with such additional information.

MCI records indicate that you are the owner or operator of the following vehicle(s) included in this recall:

«Unit\_Numbers»

MCI strongly urges you to have the recall work performed on your vehicle(s) as quickly as possible.

You may contact the MCI Customer Service Line at 1-800-241-2947 if you have any questions about this recall campaign or wish to make arrangements to have your vehicle(s) repaired at an authorized MCI service center. Submission of MCI Warranty Claim Forms may be completed on MCI's website at <http://fleetsupportiw.mcicoach.com/iwarranty/signon> (click on Customer Care System), or a photocopy of the Warranty Claim Form found in the Warranty Manual can be mailed / faxed to the MCI Warranty Department.

After contacting MCI Customer Service, if you are still unable to have the safety defect remedied without charge and within a reasonable time, you may submit a complaint:

**For US customers:**

You may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue, SE, Washington, DC 20590, or call 888 327-4236 (TTY: 800-424-9153), or go to <http://www.safercar.gov> if remedy difficulties exist.

**For Canadian customers:**

Please contact our customer service at 1-800-241-2947, or for additional information about the recall, you can contact Transport Canada at 1-800-333-0510.

If you are the lessor of the vehicle(s) identified above, Federal law requires that you forward this notice by first class mail to the most recent lessee(s) known to you, within ten days of your receipt of this notice.

If you have sold or otherwise transferred the vehicle(s) identified above, please contact the MCI Customer Service Line at 1-800-241-2947 with all of the information you have regarding the current owner/operator of the vehicle(s).

If you had your vehicle repaired for this condition prior to receipt of this notice and incurred any costs, you may be eligible for reimbursement. Please contact the MCI Customer Service Line at 1-800-241-2947 for further information in that regard.

We regret the inconvenience this may cause you, but urge you to implement the recall procedures with respect to your vehicle(s) as soon as possible for your added safety and satisfaction.

Sincerely,

*Motor Coach Industries*  
Warranty Department

Enclosures: Sure Power Product Safety Recall Notice dated Sep. 10, 2013  
Sure Power Defect Information Report

September 10, 2013

**PRODUCT SAFETY RECALL NOTICE**

Dear Customer:

For more than a decade, Sure Power Inc. has sold battery equalizers and DC-DC converters both to you, as a vehicle manufacturer, and through aftermarket distribution channels for installation on vehicles with 24V/12V dual voltage electrical systems, including buses, over the road trucks, and other specialty vehicle applications.

This letter is to inform you that Sure Power, Inc. has decided that a defect which relates to motor vehicle safety exists in battery equalizers and DC-DC converters that have been sold through aftermarket distribution channels for installation on vehicles with 24V/12V dual voltage electrical systems, including buses, over the road trucks, and other specialty vehicle applications. The affected products were manufactured between January, 2000 and August, 2013. The purpose of this letter is to advise you that Sure Power, Inc. has reported this issue to the National Highway Traffic Safety Administration and will be undertaking a safety recall to replace the units that were sold in the aftermarket distribution chain. We recognize that, as a vehicle manufacturer, you are entitled to make your own determination as to whether the battery equalizers and DC-DC converters that are installed in the vehicles you manufactured contain a defect related to motor vehicle safety, given their particular applications. If you decide that they do, Sure Power, Inc. will support your decision and provide you with replacement units that can be made available to your customers at no charge. If you prefer, Sure Power, Inc. will handle the safety recall directly with your customers.

The specific potting compound used in the subject products for insulation was found to be capable of conducting electricity once exposed to significant thermal energy. Once electrically conductive, the material is capable of self-heating and maintaining temperatures capable of accelerating a thermal incident. Thermal energy can be sourced by various electrical failures, and Sure Power is still investigating whether there are application-specific contributions to the risk of failure. Electrical failures have been traced to water intrusion or solder joint fatigue resulting from ongoing expansion and contraction due to thermal cycling.

Confirmed incidents to date have demonstrated smoking or flame at the affected part with additional damage limited to adjacent/connected parts such as wire harnesses and cables. No injuries have been recorded to date. The failure mechanism is not detectable and no warning is given prior to thermal failure.

A listing of the part numbers impacted as part of this notification can be found at the end of this correspondence. In the coming days Sure Power will provide you the appropriate contact information, including phone and email contact points, as well as any other information per NHTSA requirements.

Sure Power is very dedicated to quality and excellence in our customer service and we apologize for any inconvenience this recall may cause. Please contact your Regional Sales Manager or Customer Satisfaction Representative with any questions or concerns.

Best Regards,

A handwritten signature in black ink, appearing to read 'J. Bergers', with a stylized flourish at the end.

Jess Bergers

Product Manager – Power Conversion

**PRODUCT SAFETY RECALL AFFECTED PART NUMBERS**

| <b>Part Number</b> | <b>Description</b>   |
|--------------------|--|
| 12025C00           | 12V - 24V, 25A DC-DC Converter   |
| 12025C00-B         | 12V - 24V, 25A DC-DC Converter, bulk packaging   |
| 12025E00           | 12V - 24V, 25A Battery Equalizer   |
| 12025E00-B         | 12V - 24V, 25A Battery Equalizer, bulk packaging   |
| 12030C20HR         | 12V - 24V, 30A DC-DC Converter   |
| 12030C20HR-B       | 12V - 24V, 30A DC-DC Converter, bulk packaging   |
| 12040C00           | 12V - 24V, 40A DC-DC Converter   |
| 12040C00-B         | 12V - 24V, 40A DC-DC Converter, bulk packaging   |
| 12040C01           | 12V - 28V, 40A DC-DC Converter, manufactured through 2010 as identified by the first two digits of the serial number<br>(09 = 2009, 10 = 2010) |
| 12040E00           | 12V - 24V, 40A Battery Equalizer   |
| 12040E00-B         | 12V - 24V, 40A Battery Equalizer, bulk packaging   |
| 52204              | 24V - 12V, 40A Battery Equalizer   |
| 52206              | 24V - 12V, 60A Battery Equalizer   |
| 52206RB            | 24V - 12V, 60A Battery Equalizer, Revision B   |
| 52208              | 24V - 12V, 80A Battery Equalizer   |
| 52208P             | 24V - 12V, 80A Battery Equalizer, with fuse kit  |
| 52208RB            | 24V - 12V, 80A Battery Equalizer, Revision B   |
| 52210              | 24V - 12V, 100A Battery Equalizer  |
| 52210-20430K       | 24V - 12V, 100A Battery Equalizer, with 20430 regulator  |
| 52210P             | 24V - 12V, 100A Battery Equalizer, with fuse kit   |
| 52210RB            | 24V - 12V, 100A Battery Equalizer, Revision B  |
| 52210RB-B          | 24V - 12V, 100A Battery Equalizer, Revision B, bulk packaging  |
| 52210RB-T          | 24V - 12V, 100A Battery Equalizer, Revision B  |
| 52304              | 24V - 12V, 40A DC-DC Converter   |
| 52304P             | 24V - 12V, 40A DC-DC Converter, with fuse kit  |
| 52306              | 24V - 12V, 60A DC-DC Converter   |
| 52306RB            | 24V - 12V, 60A DC-DC Converter, Revision B   |
| 52308              | 24V - 12V, 80A DC-DC Converter   |

## DEFECT INFORMATION REPORT

**1. Manufacturer's name/address:** Sure Power Inc. ("Sure Power"), 10189 SW Avery St., Tualatin, OR 97062

**2. Equipment involved in this defect notification:** The products are battery equalizers and DC-DC converters manufactured between January, 2000 and August 18, 2013 containing a particular potting compound. The product is identified by the following part numbers: 12025C00, 12025C00-B, 12025E00, 12025E00-B, 12030C20HR, 12030C20HR-B, 12040C00, 12040C00-B, 12040E00, 12040E00-B, 52204, 52206, 52206RB, 52208, 52208P, 52208RB, 52210, 52210-20430K, 52210P, 52210RB, 52210RB-B, 52210RB-T, 52304, 52304P, 52306, 52306RB, 52308, 12040C01.

**3. Total number of items of equipment:** An estimated 17,861 units were sold in the aftermarket as service parts, and are covered by this report. An additional 32,831 units were sold for installation on new motor vehicles (buses and trucks and certain specialty vehicles) in the United States, and Sure Power is in the process of notifying those customers so that they are aware of this report.

**4. Approximate percentage of vehicles or equipment estimated to actually contain the defect:** The percentage is unknown; therefore, all affected units identified in this report will be included in the recall campaign.

**5. Description of the defect:** The specific potting compound used in the subject products for insulation was found to be capable of conducting electricity once exposed to significant thermal energy. Once electrically conductive, the material is capable of self-heating and maintaining temperatures capable of accelerating a thermal incident. Thermal energy can be sourced by various electrical failures, and Sure Power is still investigating whether there are application-specific contributions to the risk of failure. Electrical failures have been traced to water intrusion or solder joint fatigue resulting from ongoing expansion and contraction due to thermal cycling.

**6. Chronological summary of events leading to this determination:**

- 2000: The product is introduced to the market by Sure Power Inc.
- 2000 through 2012: Sporadic field returns with reported thermal failure were analyzed and determined to be related to either water intrusion or customer misapplication.
- December 24, 2007: Cooper Industries acquired Sure Power Inc.
- January 2012: Sure Power received information from one bus operator in California (Bus Operator 1) regarding 3 incidents involving one model of the battery equalizer installed in transit buses owned and operated by that bus operator. None of the incidents involved an injury.
- January 2012: Sure Power conducted a site visit at the location of Bus Operator 1 and based upon the mounting location and maintenance procedures of the operator determined that the failure was likely due to water intrusion.
- May 2012: Sure Power received information from one bus operator in California (Bus Operator 2) regarding four incidents involving one model of the battery equalizer installed in transit buses owned and operated by that bus operator. None of the incidents involved an injury.

- May through September 2012: Sure Power investigated the four incidents from Bus Operator 2 and concluded they appeared to be a wear out mechanism related to this particular transit bus application.
- November 30, 2012: Eaton acquired Cooper Industries, which included Sure Power, Inc.
- January 10, 2013: Sure Power evaluated three incidents from one bus operator in California (Bus Operator 3) which exhibited the same root cause as Bus Operator 2. None of these incidents involved an injury. Following examination of these three units an additional four functional units with similar age and use history were requested be returned for evaluation. These four units showed varying degrees of degradation at the bus bar solder joints, none of which had progressed to a thermal incident.
- May 29, 2013: Sure Power is notified of an April 14, 2013 incident involving a fire on a transit bus that was parked in a garage and owned by a bus operator in Pennsylvania. The incident did not involve an injury.
- July 2013 - present: Sure Power representatives have been investigating the Pennsylvania incident. The cause of this incident is still under investigation, and it is not yet determined whether this incident is related to the issue addressed by this report.
- August 1, 2013: Sure Power launched an effort to re-evaluate all past returned parts data for the subject products with specific attention given to occurrence and root cause of thermal failures.
- September 9, 2013: Sure Power decided to notify NHTSA of its decision to undertake a safety recall to replace the subject products in the aftermarket and notify its OEM customers of this decision.

**7. Description of proposed remedy (including schedule for dealer and customer notification):**

Sure Power will offer to replace each affected product at no charge with a new battery equalizer or DC-DC converter that does not contain the specific potting material that is in the units that are the subject of this report. Sure Power will provide a schedule for customer notification under separate cover shortly.

**8. Program for remedy campaign (including program for reimbursing any consumer who obtained the remedy at his/her own expense within one year of the opening of the EA, or within one year of this 573 report, whichever is earlier):**

Sure Power will offer to replace each affected product at no charge with a new battery equalizer or DC-DC converter that does not contain the specific potting material that is in the units that are the subject of this report. Sure Power will contact each of its aftermarket customers and notify them of this recall, and will also notify its OEM customers. Sure Power will offer to reimburse any customer who replaced a battery equalizer or DC-DC converter that is the subject of this report at its own expense on or after September 9, 2012. A draft customer notification letter is enclosed with this report for review by ODI staff.