



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

August 14, 2007

## **CIRCULAR LETTER 2007-12**

### **EBERLE DESIGN, INC., RECALL OF CONFLICT MONITORS/ MALFUNCTION MANAGEMENT UNITS**

COUNTY ENGINEERS/SUPERINTENDENTS OF HIGHWAYS  
MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS/MAYORS  
CONSULTING ENGINEERS

We have been notified that Eberle Design, Inc., (EDI) is recalling some of their Conflict Monitor Units/Malfunction Management Units (CMUs/MMUs). The recall includes products they shipped from July 2006 through mid-April 2007 that have a serial number within the range of 060700171 through 070413756, inclusive. Details are provided in the attached two-page Recall Notice from EDI, including the product return process and their toll-free support telephone number (1-877-800-4370).

The Illinois Commerce Commission has contacted the two authorized EDI product providers in Illinois: Brown Traffic Products, Inc., and Traffic Control Corporation. They have informed the ICC that a failure of one of the CMUs/MMUs can result in the signal controller placing the traffic signals into a "stop time" condition. If a railroad preemption call is placed during this condition, the railroad sequences will be serviced while the call is present, and once released, the traffic signals will resume the "stop time" condition.

Note that this recall also affects all locations with the subject EDI product, not just railroad interconnect locations. We recommend that all units under the recall get repaired at the earliest opportunity. The units at railroad interconnected traffic signals should be given higher priority.

If you have questions, contact Jeff Harpring, Rail Safety Engineer, at (217) 785-8542 or Yogesh Gautam, Traffic Systems Engineer, at (217) 782-3452.

Sincerely,

A handwritten signature in black ink that reads "Charles J. Ingersoll".

Charles J. Ingersoll, P.E.  
Engineer of Local Roads and Streets

A handwritten signature in black ink that reads "Joe Hill".

Joe Hill, P.E.  
Engineer of Operations

Attachment

# EBERLE DESIGN INC.

## RECALL NOTICE

**THE PROBLEM:** The two output relays used in Nema type monitors and manufactured by a third party are subject to tin whisker growth. This growth is caused by the changeover to tin plating within the relay by the relay manufacturer in 2006. This changeover was made in an attempt by the relay manufacturer to comply with new environmental regulations known as RoHS.

The use of 100% tin plating has led to crystalline growths that can breach the contact arms and cause conductive shorts within the relay housing. Of the thousands of units shipped in the 10 month period, EDI has had 38 monitors returned to date with apparent whisker growth related shorts and ten intersections have been reported that were placed in stop time without a fault indicated.

**NECESSARY ACTION:** REQUIRED, Affected products must be returned to the factory for replacement of the output relays.

**PRODUCTS AFFECTED:** Shelf mounted NEMA type Conflict Monitors including NSM-3, NSM-6, NSM-12, SSM-3E, SSM-6E, SSM-12E, SSM-6LE, SSM-12LE, SSM-6LEC, SSM-12LEC, MMU-16E, MMU-16LE and MMU-16LEIP, that have a serial number within the range of 060700171 and 070413756, inclusive.

**DATE OF MANUFACTURE:** Shelf mounted NEMA type Monitor Units shipped from July, 2006 April, 2007. The first four numbers of the nine digit serial number represent the year and the month of shipment. For example, in the serial number example of 060812345, the 06 would represent the year 2006 and the digits 08 would represent the month of August.

<b>SSM12LE</b>	<b>Rev:</b>
345647	060812345 0162

Affected date codes: 0607xxxxx    0612xxxxx  
                          0608xxxxx    0701xxxxx  
                          0609xxxxx    0702xxxxx  
                          0610xxxxx    0703xxxxx  
                          0611xxxxx    0704xxxxx

The remaining five digits of the serial number (12345) identify the specific incremental unit number produced within that month.

**RESOLUTION:** Replace the two output relays with new relays that contain a silver plating rather than tin. This is a factory required operation due to the complexity of the change and the need for factory testing of the monitor. Monitors will have both relays replaced, testing performed, and the warranty restarted.

Units that have been through this factory change-out of the output relays will have the letter “K” added to the Revision Number of the serial number label, for example REV: 0162K.

The serial number label is located on the top and forward-most area of the monitor chassis. Also, a 3/8 inch diameter green dot will be placed on the front panel in the upper left-hand corner to assist in identifying monitor units that have been through this factory change-out process.

**THE RETURN PROCESS:** Eberle Design, Inc. can provide a user agency with an initial number of monitors to replace a portion of the recalled units that are installed in the field if necessary. The re-use of the shipping boxes of the replacement units is recommended.

The affected units should be returned to : Eberle Design Inc., 3819 E. La Salle Street, Phoenix, AZ 85040. Eberle Design Inc. will pay freight both ways and will return the units as quickly as possible. **Please contact the factory by calling toll free 1-877-800-4370 and asking for recall assistance to obtain an RCL number.** Please be sure the shipment contains the RCL number as well as the contact information for return shipment.

Eberle Design regrets the necessity of this recall and is sensitive to the difficulty this places on you. If you have any questions, please call the toll-free number above. We appreciate your assistance in performing all actions necessary to avoid any potential faults due to this conductive crystalline growth problem.