

**AMTRAK** National Railroad Passenger Corporation  
15 S. Poplar Street, Wilmington, DE. 19801

March 21, 2001

Mr. Lew Krosner  
Lektro-Tech, Inc.  
P.O. Box 18566  
Tampa, FL 33679

Dear Mr. Krosner,

**Summary:**

Amtrak equipment engineering testing and acceptance of your product "*Lektro-Tech Super Corr-B.*"

Amtrak Part Number: AMS # 3737037000

The Product Lektro-Tech Super Corr-B has produced the following improvements to our operation.

**Lubrication:**

The mating of the 480V car jumpers is impressively improved. The units still require the initial 40 lbs. to start its mating process, but once started it moves to its final seat with little or no effort.

**Anti-Corrosive Ability:**

We found that your product offers excellent protection to the connector pins and lugs. The pins and lugs showed no corrosion, over-heating or electrical pitting for the six-month period test. As a side benefit we have also noticed the silver-plating on the connector pin shows little or no wear.

**Life:** Per your recommendations we will recoat the 480volt connector pins (male and female) every six months.

**History:**

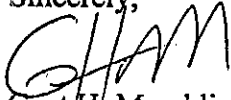
Amtrak cars and locomotives operate in an environment that can reach temperatures of  $-40^{\circ}\text{F}$  to  $120^{\circ}\text{F}$  and all ranges of dryness, rain, snow, and humidity, with acid, salt, metal, and other contaminants in solution, and are subjected to high levels of vibration and force. Amtrak's rolling stock's electrical power system was developed to replace the antiquated steam, wheel-driven generator, batteries and block ice used in the past to supply our passenger's comfort in the passenger cars. The new system corrected most of the previous systems short-falls, but like all advancements, it introduced its own new problems. Most of the problems have been corrected except for those dealing with the electrical connectors and connections. These devices are protected in the latest methods from the environment, but still have corrosion and deterioration that causes electrical breakdown. Another major problem that has plagued us is the constant mating of the bulky cables and connectors between the passenger cars and the locomotives and passenger cars. Each of these four jumpers at each end of the passenger equipment weighs at least 20lbs. and takes a minimum of 40lbs. of force to mate in an awkward and tight positions. The 40lbs. of force can increase when the connectors are wet, contaminated, corroded or have electrically pitted pins. On trains with high power demands we have experienced passenger equipment connections that were being overheated to the point of producing a conductive gas, causing an electrical

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explosion within the mated connection. **Cause of explosions:** Four parallel paths are being used to supply passenger car power. We found that we were overloading one of these connections due to its parallel connection pins were so contaminated, loose, deformed or worn that they carried no electrical current. Replacing the non-conducting connectors and coating the pins with Super Corr-B and a little preventive maintenance has all but eliminated this type of failures on our highest power demanding passenger train, the "Autotrain."

Thank you for your efforts in support of Amtrak's maintenance operations.

Sincerely,



Gust H. Meraklis

Manager Electrical

Amtrak's Corporate Equipment Engineering