CORTEC Laboratories
4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com
Internet http://www.cortecvci.com

Protection of Automotive Parts for TRW

Background: TRW currently uses a Northern Technologies Incorporated bag placed in a Styrofoam molded package. They are looking for alternative packaging materials that will provide better corrosion protection

Purpose: Compare the corrosion inhibition abilities of CorPak Liner film and the Northern Technologies Incorporated bag in the TRW packaging.

Materials: CorPak Film
VpCI-422
VpCI-417
Methanol

Method: Environmental Chamber, 105°F, 95-100% Relative Humidity

Procedure: The parts arrived from TRW packaged in Styrofoam boxes, with one assembly having corroded prior to arrival at Cortec. Corrosion was removed from the part with VpCI-422, neutralized with VpCI-417, and then both parts were rinsed with Methanol.
One set of parts were placed in the yellow northern bag and inserted into the foam box. The second box was lined with CorPak film and the parts were placed on the film. The liner was then wrapped over the parts, and the top was placed on and both boxes were secured with packing tape.
Next the boxes were placed in the Humidity Chamber and periodically inspected.
After 74 hours the parts were removed, inspected, pictures were taken*, and a report was written
* = the packaging materials were cut to allow pictures to be taken

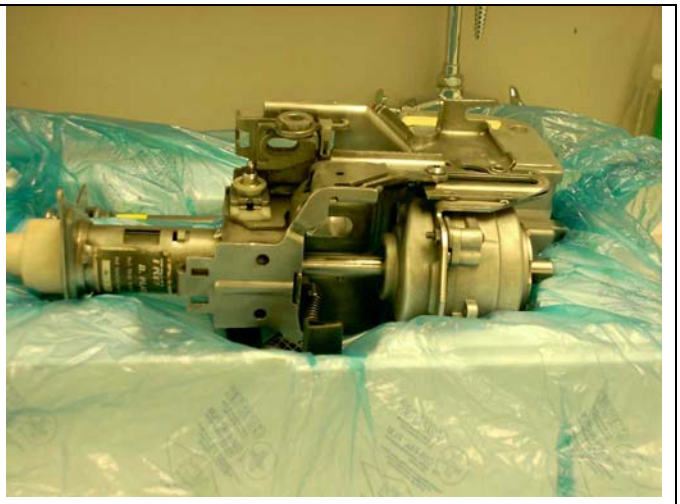
Results: The following results were found:

Sample	Time to Failure (hours)
Northern Technologies bag	7
CorPak Liner Film	DNF

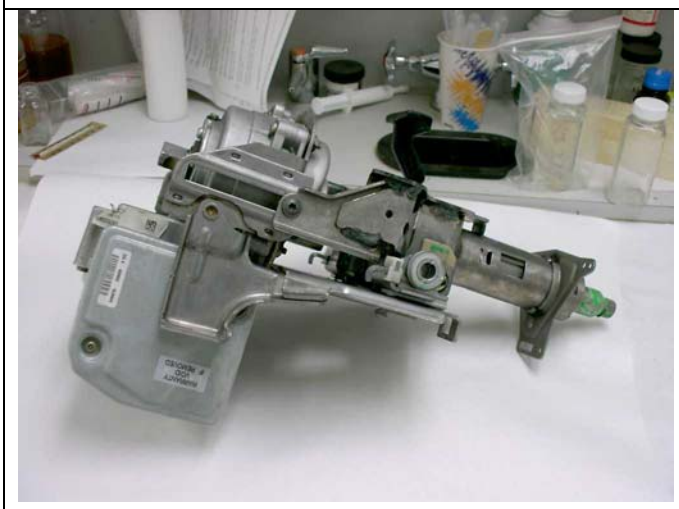
DNF = Did Not Fail during the 74 hours of the test

Conclusion: CorPak Liner film easily outperformed the Northern Technologies Incorporated bag, providing over 10 times the corrosion protection.

Cor-Pak (2) Before



Cor-Pak (1) Before



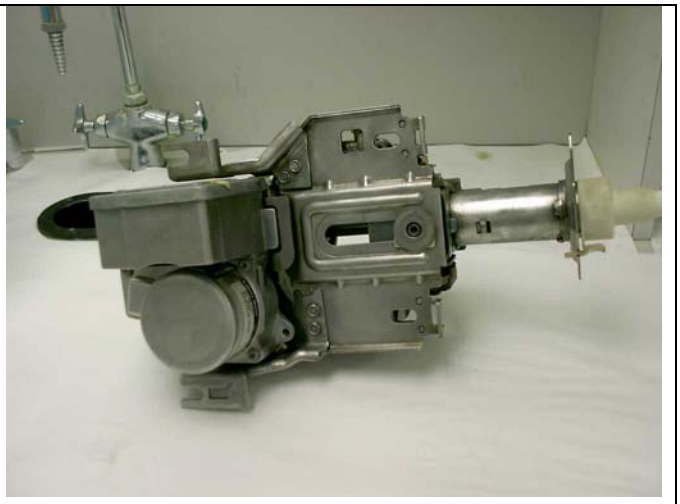
Control (1) Before

Control (2) Before

Cor-Pak (3) Before

Cor-Pak (1) After 74 Hours

Cor-Pak (2) After 74 Hours



Cor-Pak (3) After 74 Hours

Control (1) After 74 Hours

Control (2) After 74 Hours

Control (3) After 74 Hours

Control (4) After 74 Hours