


<p>Technique</p>	<p>Protect the receptacles/plug ends of demated electrical connections with covers provided by manufacturer or with generic plastic caps or if covers are unavailable, leave in downward facing position.</p>
 <h2 style="margin: 0;">ELECTRICAL CONNECTOR PROTECTION</h2> <p style="margin: 0;"><i>Protect demated electrical connectors with plastic caps or manufacturer's covers instead of double bagging</i></p>	
<p>Benefits</p>	<p>Moisture collects in the bag when the double-bag-and-seal method is used. This can lead to corrosion of the connector or possible electrical shock when the connector is reused. The use of plastic caps or manufacturer's covers will prevent moisture buildup, thus alleviating potential hardware damage or injury.</p>
<p>Key Words</p>	<p>Connector, Electrical</p>
<p>Application Experience</p>	<p>Space Transportation System (STS)</p>
<p>Technical Rationale</p>	<p>If the proper method of protection is not used when connectors are demated, there is the possibility of electrical shock to personnel connecting receptacles/plug ends, and increased surface corrosion rate due to environmental effects.</p>
<p>Contact Center</p>	<p>Kennedy Space Center (KSC)</p>

Electrical Connector Protection
Technique OPS-2

This practice can be implemented in two ways:

- Provide instructions in operations and maintenance documents for protecting the connector after use. (A step should be included to inspect the connectors for corrosion/debris and provide direction for corrosion/debris removal, if necessary.) If ESD is a concern, do not use generic plastic caps as they can be ESD generators. ESD-approved caps should be used.
- Provide placard or tag on or near connector, stating method to leave connector after use.

Reference

KSC-DE-512-SM, Rev. B, *Guide for Design Engineering of Ground Support Equipment.*