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Engineers***

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**Cable Retention Force Testing of
Trunk & Distribution Connectors**

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1. Scope

1. The purpose of this document is to define a standard test procedure to prepare, test and document the retention forces of a given connector/cable assembly, as whole or separate components.
2. This test is intended to determine the tensile forces required to cause one or more of the following conditions in a connector/cable assembly under test:
 - Catastrophic cable structural failure.
 - Connector structural failure.
 - Separation due to slip at the connector/cable interface.

2. Compliance Notation

<i>shall</i>	This word or the adjective “ required ” means that the item is an absolute requirement of this specification.
<i>shall not</i>	This phrase means that the item is an absolute prohibition of this specification.
<i>forbidden</i>	This word means the value specified <i>shall</i> never be used.
<i>should</i>	This word or the adjective “ <i>recommended</i> ” means that there may exist valid reasons in particular circumstances to ignore this item, but the full implications should be understood and the case carefully weighted before choosing a different course.
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<i>may</i>	This word or the adjective “ <i>optional</i> ” means that this item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because it enhances the product, for example; another vendor may omit the same item.
<i>deprecated</i>	Use is permissible for legacy purposes only. Deprecated features may be removed from future versions of the standard. Implementations should avoid use of deprecated features.

3. Abbreviations and Definitions

3.1. Abbreviations

3.2. Definitions

Adapters/Fixtures	A mechanical device typically located between the test stand Load Cell or Crosshead and the DUT
Cable Jacket	The material covering the outer conductor (shield) to provide environmental and physical protection.
Center Conductor	The centermost portion of coaxial cable, typically consisting of solid copper, copper clad aluminum, or other conductive wire.
Chart Recorder	A device for plotting test results such as stress-strain curves.
Dielectric	The insulating and support material between the outer surface of the center conductor and the inside surface of the outer conductor (shield).
DUT	Device under Test, also referred to as specimen or sample.