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Engineers**

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**Test Method for Insertion Force of
Connector to Drop Cable Interface**

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1.0 Scope

- 1.1 This test procedure is designed to measure the amount of linear force required to install a drop ("F") connector onto a drop cable of the proper size.
- 1.2 Because this performance parameter involves, and is influenced by, two separate and distinct components (connector and cables) it is desirable to create a unified procedure to evaluate each for its individual contribution to the total interface. This procedure will, therefore, necessarily diverge into two alternate paths at the appropriate junctures. One path will assume the establishment and use of a "standard test connector" to be used in the measurement of installation force(s) required for connectorization of various cables. The other path will assume the establishment and use of a "standard test cable" to be used to measure the installation force(s) required for proper seating of various connectors. For either situation, the resulting measurements should only be used for comparison between the cables versus the "standard test connector" or the connectors versus the "standard test cable".

2.0 Equipment

- 2.1 A "tensile test fixture" (Instron Model 1122 or equivalent) with a chart recorder feature and appropriate grips (as required). It may be desirable to have an automatic "cut-off" feature, which can be activated by a "maximum excursion limit" setting and/or "maximum force limit."
- 2.2 Connector/Cable "Insertion Force Test Fixture." See Figure 1.

Note: The Insertion Force Test Fixture may be a different size for different cable size (i.e. series F 59 0.290", series F6 0.325", series F11 0.430). The main purpose is to support the sample under test in order to get accurate measurements.

- 2.3 Appropriate cable preparation tool(s).
- 2.4 Drop barrel (F-81) connector(s).
- 2.5 Side cutter and assorted wrenches.