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Telecommunications
Engineers***

**ENGINEERING COMMITTEE
Interface Practices Subcommittee**

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**Test Method for
Hex Crimp Tool Verification/Calibration**

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1.0 SCOPE

- 1.1 To determine and verify the actual crimp dimension of hex crimp tools.
- 1.2 Measurement technique for determining the final hex size that may affect pull-off performance of the cable-to-connector interface.
- 1.3 Calibration technique for adjusting hex crimp tools.

2.0 EQUIPMENT

- 2.1 Machinist's outside micrometer having a flat anvil and flat spindle, calibrated to read directly to at least 0.005 inch (0.127 mm), with each division of a width that facilitates estimation of each measurement to 0.0005 inch (0.0127 mm). As an alternate use digital calipers calibrated to read directly to at least 0.0005 inch (0.0127 mm).

3.0 VERIFICATION OF HEX CRIMP SIZE

- 3.1 Crimp an empty F-fitting (no cable) of the appropriate size in the front-most hex cavity.
- 3.2 Using a micrometer or digital caliper, measure and record the dimensions across each of the three sets of hex flats.
 - 3.2.1 No single measurement across hex flats should deviate more than ± 0.005 inch (± 0.127 mm) of the published hex size.
- 3.3 Average the three measurements recorded in 3.2.
 - 3.3.1 The average hex crimp measurement should be within ± 0.003 inch (0.076 mm) of the published hex size.
- 3.4 Repeat procedures 3.1 through 3.3 for each hex cavity.
- 3.5 If discrepant measurements are obtained, proceed to Section 4, Adjustment Method.

4.0 CRIMP TOOL ADJUSTMENT METHOD

- 4.1 If crimp tool is adjustable, adjust the tool cam adjustment mechanism per the tool manufacturer's instructions. Adjustments should be made one notch at a time so that the tool is not over-adjusted or damaged.

- 4.2 Secure the cam keeper, crimp an F-fitting (no cable) and measure the flats as described in Section 3.0.
- 4.3 Continue the adjusting process until the correct hex specification is measured.
- 4.4 If correct hex measurements cannot be obtained by adjustment, the crimp tool must be rebuilt or replaced.

5.0 DOCUMENTATION

Crimp Tool Manufacturer -			
Crimp Tool Part Number -			
F-Fitting Manufacturer -			
F-Fitting Part Number -			
Hex Crimp Dimensions			
	Hex Number 1	Hex Number 2	Hex Number 3
	a)	a)	a)
	b)	b)	b)
	c)	c)	c)
Average -			
Published Hex Dimensions			
Maximum Difference			
Average Difference			