



# IPC-TM-650 TEST METHODS MANUAL

## 1.0 Scope

1.1 To determine the mechanical strength of the crimped contact-to-conductor joint.

## 2.0 Reference Documents

2.1 Information in this section is intended to parallel the test method described in EIA-RS-364/TP-08.

## 3.0 Test Specimen

3.1 A contact and conductor crimped together with the specified tool.

**NOTE:** A contact may be crimped to both ends of the conductor to facilitate fixturing.

## 4.0 Apparatus

4.1 Clamps, jaws, or other means to hold the contact and conductor.

4.2 A force measuring device capable of measuring the specified forces at a rate of travel of  $1 \pm 1/4$  inch per minute.

Number <b>3.3</b>	
Subject <b>Crimp Tensile Strength, Connectors</b>	
Date <b>7/75</b>	Revision <b>A</b>
Originating Task Group <b>N/A</b>	

## 5.0 Procedure

5.1 The sample shall be mounted in the tensile tester and an axial force sufficient to rupture the contact-to-conductor crimp shall be applied. The peak force required to separate the contact from the conductor shall be recorded and shall not be less than the minimum specified crimp tensile strength as defined in the individual contact or connector specification for the particular wire size under test.

5.2 The tested sample shall be visually examined for distortion of the crimp barrel or area to the extent that it is unfit for further use. The condition of crimp failure shall be noted as one of the following:

1. Slip (pull-out)
2. Conductor broken within crimp area or immediately adjacent to the crimp area (including any strain relief).

## 6.0 Notes

6.1 Acceptance criteria shall be established as the minimum acceptable mechanical strength of the crimped connection as defined by the individual contact or connector specification.