

**PROPER USE GUIDELINES**

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. Hand tools are intended for occasional use and low volume applications. A wide selection of powered application equipment for extended-use, production operations is available.

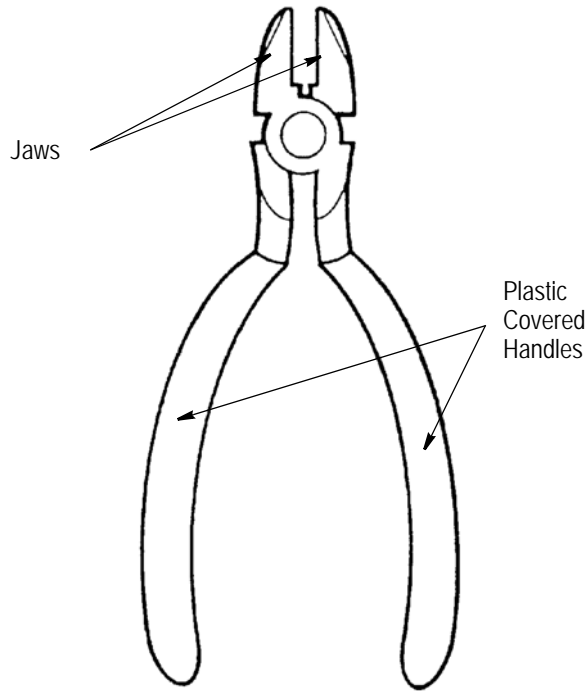


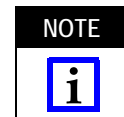
Figure 1

**1. INTRODUCTION**

This instruction sheet covers the Tel-Splice Connector Economy Hand Tools 231839-1 and 790162-1 which

are designed to terminate the Tel-Splice loose piece connectors listed in Figure 2.

Read this instruction sheet thoroughly before using the tool.



*Dimensions on this sheet are in metric units [with U.S. customary units in brackets].*

Reasons for reissue are provided in Section 6, REVISION SUMMARY.

**2. DESCRIPTION (Figure 1)**

The tools have plastic-covered handles and feature parallel jaws that provide a smooth, even surface for compressing the connector together.

Each connector consist of a pre-assembled two-piece housing (contact retainer and wire entry) and an insulation-displacement contact which will accept solid copper conductors--any combination of 19 through 26 AWG with a maximum insulation diameter of 2.03 [.080].

**3. TERMINATION PROCEDURES**

Determine whether you are going to terminate two or three wires, or a half-tap application, and whether the application requires a sealed or unsealed connector. Refer to Figure 2 and select the proper connector. Select wire within the specified size and proceed as follows::

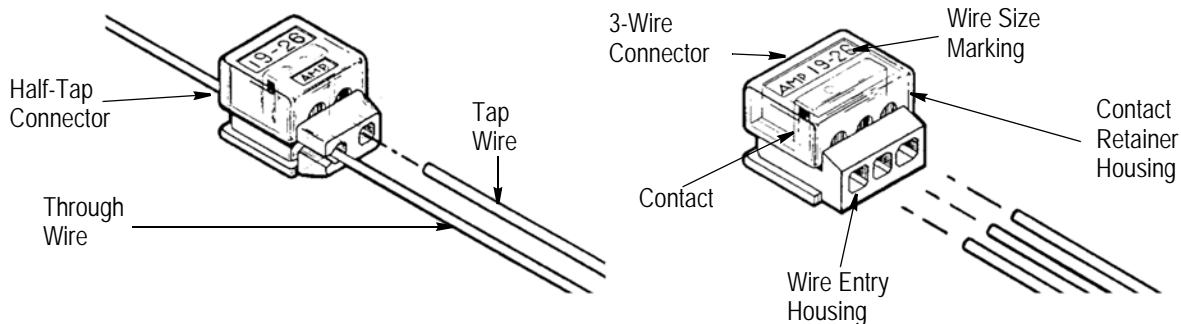


Figure 2

FORM	2-WIRE CONNECTOR		3-WIRE CONNECTOR		HALF-TAP CONNECTOR	
	WITH SEALANT	WITHOUT SEALANT	WITH SEALANT	WITHOUT SEALANT	WITH SEALANT	WITHOUT SEALANT
Loose Piece	552795-2	552795-4	552678-2	552678-4	553017-2	553017-4

1. For two- or three-wire connectors, trim wire ends flush. Insert wires into wire holes until bottomed in wire entry housing.

For half-tap connectors, place through wire into slot of connector at desired tap location. Make sure through wire is fully contained in slot. Insert tap wire into wire hole until bottomed in wire entry housing.

2. Press connector sections together with fingers in order to pre-crimp and hold wires in place until final termination.

3. Position jaws of tool over connector. Check to be sure wires have not shifted. Hold wires in place and squeeze tool handles together until connector is bottomed as shown in Figure 3.

4. Open tool handles FULLY and remove terminated connector.

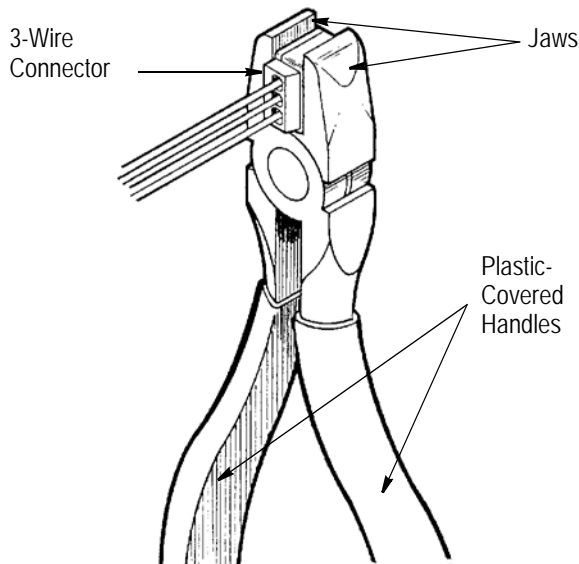


Figure 3

#### 4. TERMINATION HEIGHT INSPECTION

This inspection requires the use of Tel-Splice Connector Gage 230495-1 which is designed to ensure proper wire insertion depth.

Proceed as follows:

1. Terminate several sample connectors.
2. Check each connector by placing connector in gage so contact is aligned with gage slot as shown in Figure 4.
3. Slide gage away from connector - it should slide off with little or no drag. Improperly terminated connectors will stick or have excessive drag.

If the sample connectors do NOT gage properly, the tool must be replaced. If damaged connectors are evident, they must also be replaced.

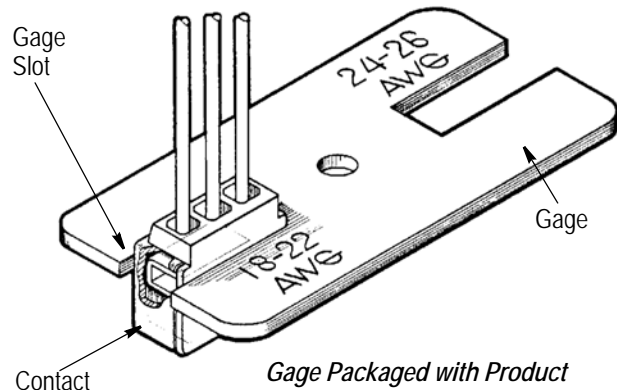


Figure 4

#### 5. TOOL INSPECTION

Tel-Splice Economy Hand Tools 231839-1 and 790162-1 should conform with the information provided in Figure 5. Each tool should be inspected immediately upon arrival at your facility to be sure it has not been damaged in transit.

Additional tools can be purchased from your TE representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605, or write to:

CUSTOMER SERVICE (038-035)  
 TYCO ELECTRONICS CORPORATION  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

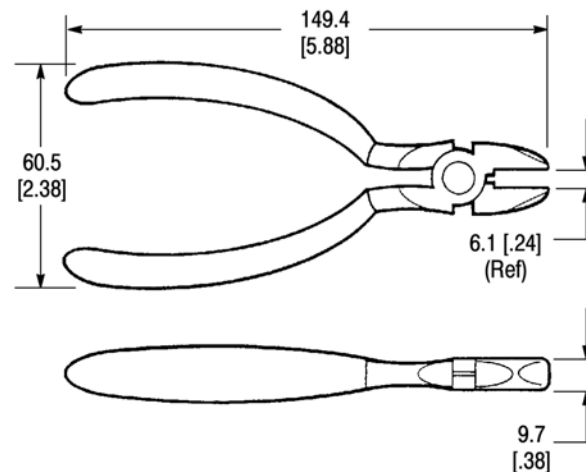


Figure 5

#### 6. REVISION SUMMARY

Since the previous release of this instruction sheet, the current TE logo has been applied.