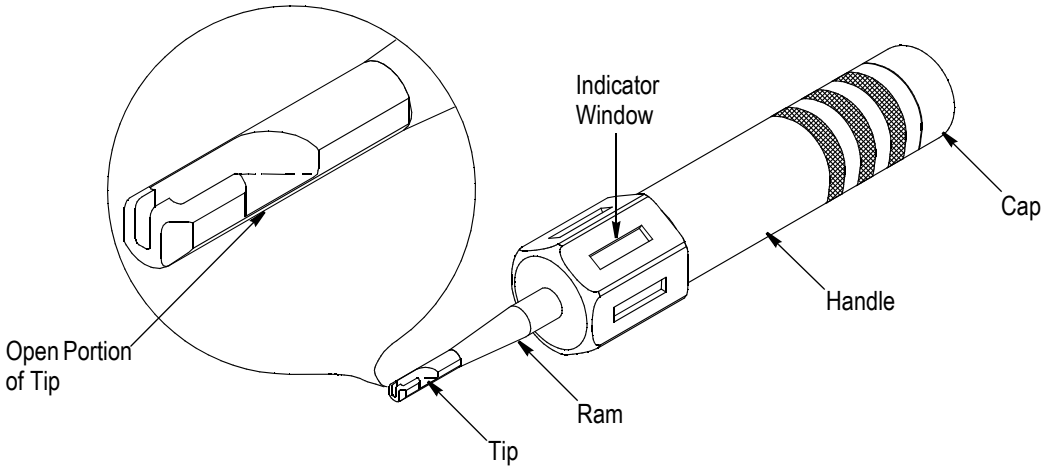

INSERTION TOOL		TAPER PIN		ACCESSORY	
SOLID BARREL RECEPTACLE	FORMED RECEPTACLE	WIRE SIZE (AWG)	WIRE INSULATION DIAMETER RANGE	SPARE TIP	EXTENSION
401403-1	497652-1	24-22	1.02-1.52 [.040-.060]	395005-2	397989-1
401403-2	497652-2	22-16	1.52-3.56 [.060-.140]	380366-1	
401403-3	497652-3	All Applicable	All Applicable	402608-1	

Figure 1

1. INTRODUCTION

Taper Pin Insertion Tools 401403-[ ] and 497652-[ ] are used to insert Series 53 taper pins into contact springs in patchcord programming systems and panels.

NOTE

All numerical values in this instruction sheet are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Figures are not drawn to scale.

Read these instructions carefully before using the tool.

Reasons for reissue of this instruction sheet are provided in Section 7, REVISION SUMMARY.

2. DESCRIPTION

Each tool has a tip, handle, cap, and ram. Spare tips are available. See Figure 1. Tools 401403-[ ] have a black cap and are used to insert solid barrel receptacles. Tools 497652-[ ] have a cap the same color as the tool handle and are used to insert formed receptacles.

An extension is available that can be attached to the tool which permits the insertion of taper pins where protruding wires restrict the movement of the tool. It also improves visibility of the tool indicator window in installations where panels are recessed.

3. EXTENSION ATTACHMENT

To attach the extension, refer to Figure 2, and perform the following:

1. Remove the tool tip from the ram.
2. Place the large end of the extension support sleeve over the tool ram, and screw the extension and ram together until the threads bottom. Do not overtighten.
3. Turn the extension support sleeve back against the ram until it is snug.
4. Thread the tool tip onto the end of the extension until it is snug.

Extension Attachment

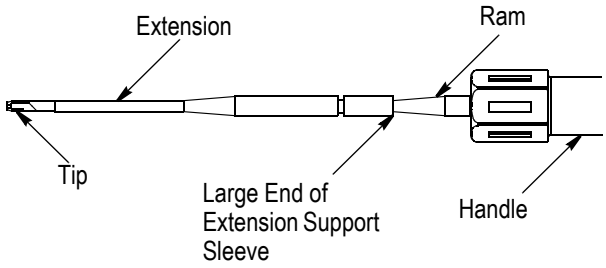

Figure 2

4. INSERTION PROCEDURE

After crimping the taper pins onto the wire in accordance with the instructions packaged with the applicable crimping tool, proceed as follows:

1. Insert the crimped taper pin into the groove of the tool tip as shown in Figure 3. Allow the wire to lay in the groove, and hold the wire against the body of the tool, thereby maintaining some tension on the wire and retaining the taper pin in the tool tip.

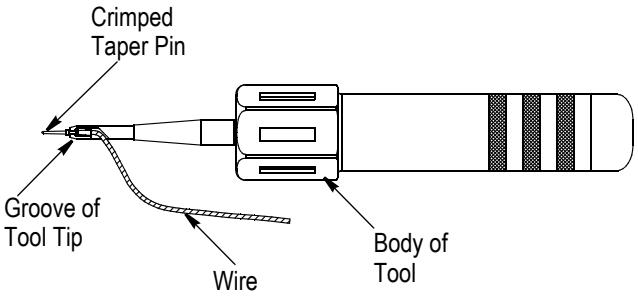

Figure 3

2. Hold the tool perpendicular to the patchcord programming system or panel and begin to insert the taper pin into the desired contact spring, orienting the tool tip so that the contact spring will not interfere with the full travel of the tool tip. See Figure 4.

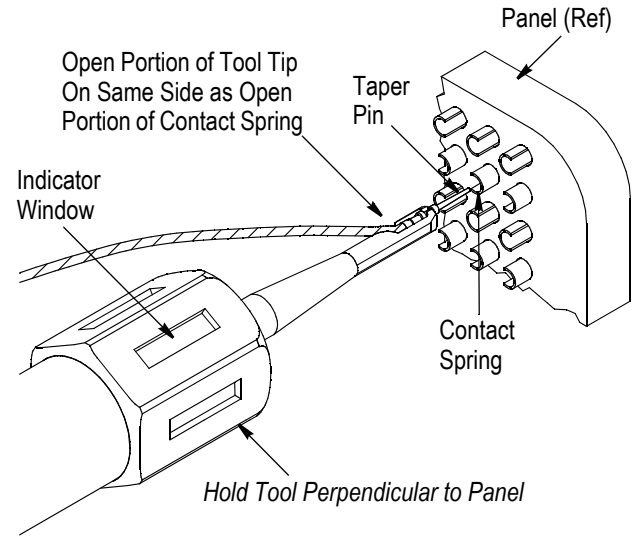

Figure 4

3. Fully insert the taper pin into the contact spring using only one drive stroke. A red indicator will be visible in the center of the indicator window of the tool when the required insertion pressure has been applied—use 67 to 85 N [15 to 19 lb-force] when using Tools 497652-[ ] and 94 to 116 N [21 to 26 lb-force] when using Tools 401403-[ ]. See Figure 4.

DO NOT remove the tool. A pull test must be performed before removing the tool from an installed taper pin. Proceed with the following:

a. With the tool still in position after inserting the taper pin, slowly begin to pull straight back on the handle until the handle begins to move on the ram (see Figure 5), then relax the pull and allow the handle to return to its original position.

NOTE

The pull test force should be 32.25±1.11 N [7.25± .25 lb-force].

If the taper pin remains in place after performing a pull test, a good connection has been achieved. If the taper pin pulls out, it must be re-driven and pull-tested again.

b. Remove the insertion tool carefully from the taper pin using a sideways motion to clear the open portion of the contact spring.

Pull Test

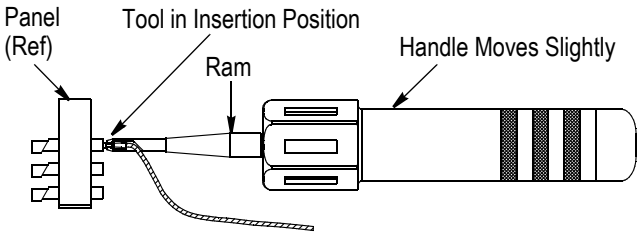

Figure 5

5. MAINTENANCE AND INSPECTION

Clean the tool by wiping it with a clean, soft cloth after each use. Ensure that no foreign objects become lodged in the tool tip.

6. REPLACEMENT AND REPAIR

Order additional tools and accessories through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

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

7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements