

**Insertion Tool 1583255-1**

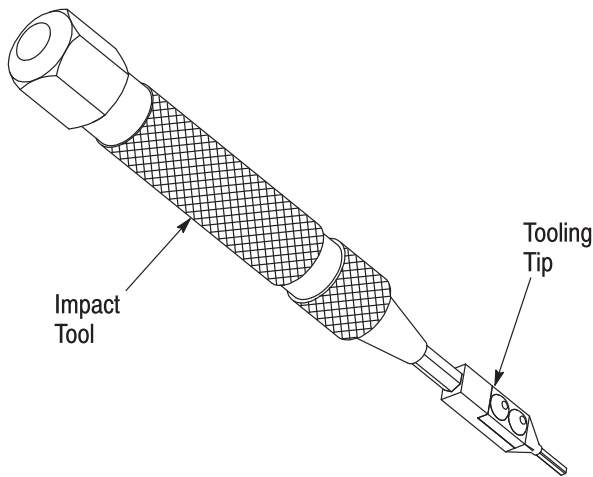


Figure 1

**1. INTRODUCTION**

These instructions cover the use Pin (Post) Insertion Tool 1583255-1. Refer to Figure 1. This tool was designed to insert individual pin (post) contacts into HM-Zd Connectors and printed circuit (pc) boards.

**NOTE** *All dimensions on this document are in metric units [with U.S. customary units in brackets], unless otherwise specified.*

Read these instructions and understand them before using the header removal tools and pin removal tool.

**2. DESCRIPTION**

Insertion Tool 1583255-1 consists primarily of the impact tool (which also acts as handle) and the tooling tip. Refer to Figure 1.

The impact tool generates the needed force to seat the contact pin (post) into the pc board and HM-Zd connector.

The tooling tip is used to orient and hold the contact pin prior to and during insertion.

**3. CONTACT PIN (POST) INSERTION PROCEDURE**

Before inserting any new posts, be sure that any old or damaged posts are removed from the contact housing and pc board using Extraction Tool 1583237-1. Refer to 408-8646. Then proceed as follows:

1. Insert new post into the tooling tip as shown in Figure 2. In order to ensure proper orientation of the post during insertion, the post will only enter the tooling tip one way. Note the following during post placement:

- Screws on Tooling Tip facing upwards,
- Eye of needle portion of post facing away from the tool,
- Shoulders of the contact aligned with screws, as shown in Figure 2.

2. Position the insertion tool over the connector and pc board as shown in Figure 3.

**NOTE** *The screw heads on the tooling tip must face the ground shield associated with the pin being replaced.*

3. Carefully insert the tip of the post into the appropriate cavity. Refer to Figure 4.

4. Apply downward force to the impact tool until the tool “snaps,” seating the post to the required depth in the HM-Zd connector and pc board.

5. Remove the tool by carefully pulling the tool off the post. Be sure to keep the tool perpendicular to the floor of the connector when removing the insertion tool.

6. Examine the post to be sure the shoulder of the post is flush with the floor of the connector.

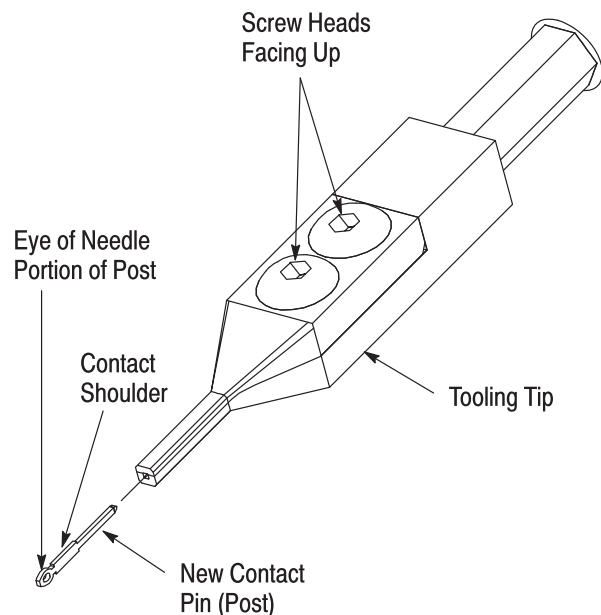


Figure 2

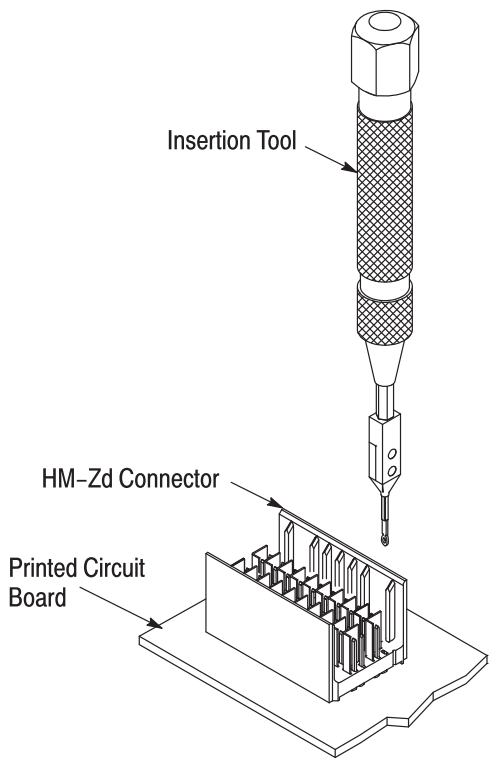


Figure 3

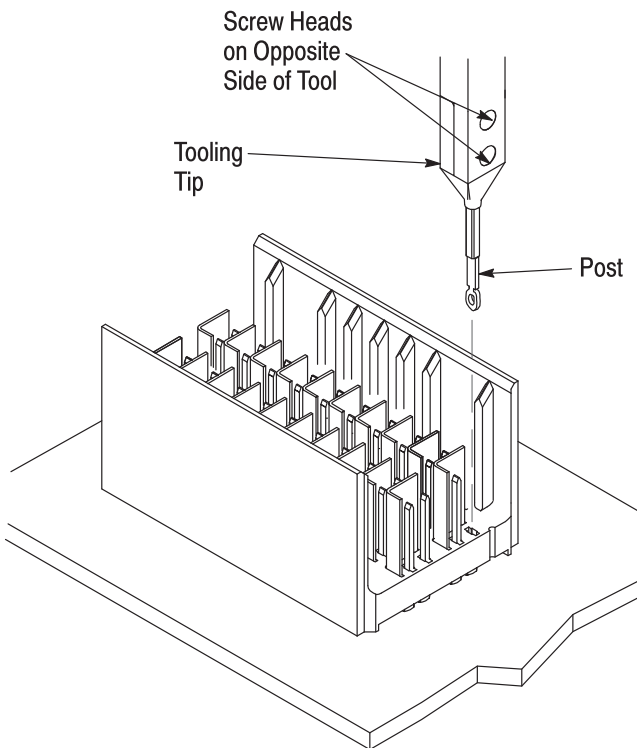


Figure 4

**4. TOOL INSPECTION**

It is recommended that the tool be inspected immediately upon its arrival in your plant to ensure that it has not been damaged during shipment.

**5. MAINTENANCE/INSPECTION**

**5.1. Daily Maintenance**

It is recommended that each operator be made aware of, and responsible for, the following steps of daily maintenance:

1. Remove dust, moisture, and other contaminants with a clean, soft brush, or lint-free cloth. Do NOT use objects that could damage the tool or any of its components.
2. When the tool is not in use, store it in a clean, dry area.

**5.2. Periodic Inspection**

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied to supervisory personnel responsible for the tool. The inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards.

**6. REPLACEMENT AND REPAIR**

Order replacement seating tools through your Tyco Electronics 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 (38-35)  
 TYCO ELECTRONICS CORPORATION  
 P.O. BOX 3608  
 HARRISBURG, PA 17105-3608

For seating tool repair service, please contact a Tyco Electronics representative at 1-800-526-5136.

**7. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated document to corporate requirements.