

Figure 1

## 1. INTRODUCTION

HM-Zd header connector removal tools listed in Figure 1 are designed to be used in conjunction with HM-Zd Pin Removal Tool 1583237-1 to remove the connectors also listed in Figure 1 from the printed circuit (pc) board. Instruction Sheet 408-8646 provides information for the removal tool.

**NOTE**  
 This tool removes the housing from the pc board. The pin removal tool removes the individual pin (post) contacts from the pc board and connector.

**NOTE**  
 Dimensions in this instruction sheet are in millimeters [with inches in brackets]. Figures are not drawn to scale.

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

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

## 2. DESCRIPTION

The tool consists of a handle and a body on which two push bars, two clamping plates, a shoulder screw, and threaded shaft are mounted. See Figure 1.

The push bars are used to push on the pc board surface while removing the connector. The clamping plates, using the shoulder screw, put pressure on the sides of the connector while the tool pulls the connector off the pc board.

The threaded shaft and handle push the push plates down and pull the connector up and off the pc board.

## 3. REMOVAL PROCEDURE

1. Remove the pin contacts according to 408-8646.

### NOTE



The pin contacts must be removed (using Removal Tool 1583237-1) before the connector can be removed.

2. Make sure that the tool handle is rotated fully clockwise so that the lower surfaces of the clamping plates and the lower surfaces of the push bars are even. Straddle the connector with the tooling, ensuring that the push bars and clamping plates are on either side of the connector walls. See Figure 2.

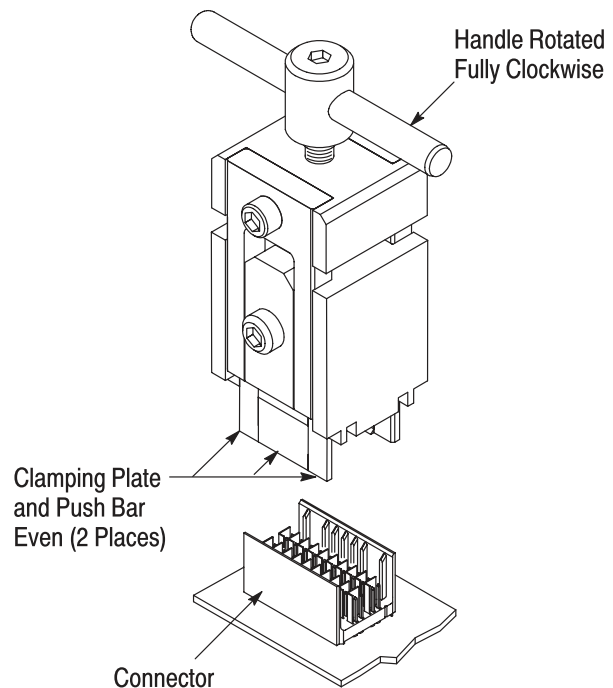


Figure 2

3. Lower the tooling onto the surface of the pc board. Refer to Figure 3.
4. With the tool in place, turn the shoulder screw using the appropriate hex wrench to tighten the clamping plates against the sides of the connector.



*Be sure that the extended edges of the clamping plates (shown in Figure 3) sink **into or under** the connector while tightening the shoulder screw.*

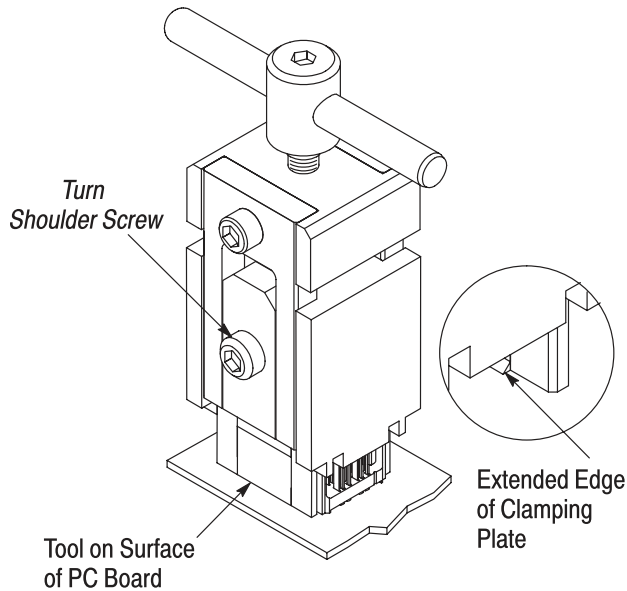


Figure 3

5. With the clamping plates tight against the connector, turn the handle *counterclockwise* until the connector comes free of the pc board. Refer to Figure 4.
6. Loosen the clamping plates by reversing the shoulder screw.

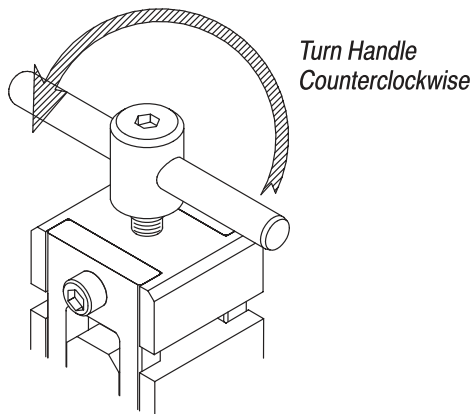


Figure 4

7. Remove the connector from the tool.
8. Turn the tool handle fully clockwise to prepare the tool for further connector removal.

**4. MAINTENANCE AND INSPECTION**

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

**4.1. 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.

**4.2. 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 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.

**5. REPLACEMENT AND REPAIR**

Order tools 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

For customer repair service, call 1-800-526-5136.

**6. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated document to corporate requirements
- Corrected callout for push bar and added callout for shoulder screw to Figure 1
- Corrected Section 1
- Switched previous Figure 2 and Figure 4