

Figure 1

## 1. INTRODUCTION

Seating Tools 1338742-[ ] and 1338743-[ ] are used to seat Z-PACK HS3 backplane receptacle connectors. The connectors have ACTION PIN contacts that allow solderless printed circuit (pc) board installation. Read these instructions and understand them before using the seating tools.



*All dimensions on this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.*

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

## 2. DESCRIPTION

Each seating tool is a one-piece design. During seating, the seating tool covers the connector and presses on the top surface of the connector when the applicator ram applies force to the seating tool.

## 3. REQUIREMENTS

### 3.1. PC Board Support Fixture (Customer Supplied)

A pc board support must be used to provide proper support for the pc board and alignment of the seating tool to the connector contacts and to protect the pc board and connector from damage. Design the pc board support fixture using the recommendations in instruction sheet 408-6927.

### 3.2. Application Tooling

Power for the seating tools must be provided by a machine capable of supplying a downward force of 89 Newtons (N) [20 lb] per contact. Manual Electric Servo Press (MEP 6T) 2-1399500-5 and Bench Top Electric Servo Presses (BMEP 3T) 1-1399400-5 and (BMEP 5T) 2-1399401-4 are available for these seating tools. For information on the presses, visit the press-fit assembly equipment website at <http://tooling.tycoelectronics.com/pressfit.asp>.

### 4. SEATING

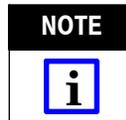
1. Set seating height to the dimension shown in Figure 2 (applicator *shut height* will equal the seating height PLUS the combined thicknesses of the pc board, and pc support.)
2. Position the connector onto the pc board so that the contacts are properly aligned with the holes in the pc board and the holes or slots in the pc board support fixture. See Figure 2.
3. Sit the connector onto the pc board until the tips of the contacts are resting securely on, but have not fully entered, the holes in the pc board.
4. Position the seating tool onto the connector with the slanted surface oriented as shown in Figure 2.

5. Center the seating tool and connector under the applicator ram, and slowly lower the ram until it just meets the seating tool. Verify the alignment of the pc board support fixture, pc board, connector, and seating tool.



*Damage to the pc board, seating tool, or connector may occur if seating height is improperly set, if the pc board is not properly positioned with the seating tool, or if the seating tool is not properly seated on the connector before cycling the applicator ram.*

6. Cycle the applicator ram according to instructions for the application tooling.
7. Remove the pc board with the seated connector, and check the connector for proper seating according to the following:
  - a. the widest section of each contact is inside its intended pc board hole
  - b. the connector is seated on the pc board with the seating height given in Figure 2.



*For detailed inspection requirements of the seated connector assembly, refer to Application Specification 114-13020.*

View After Seating

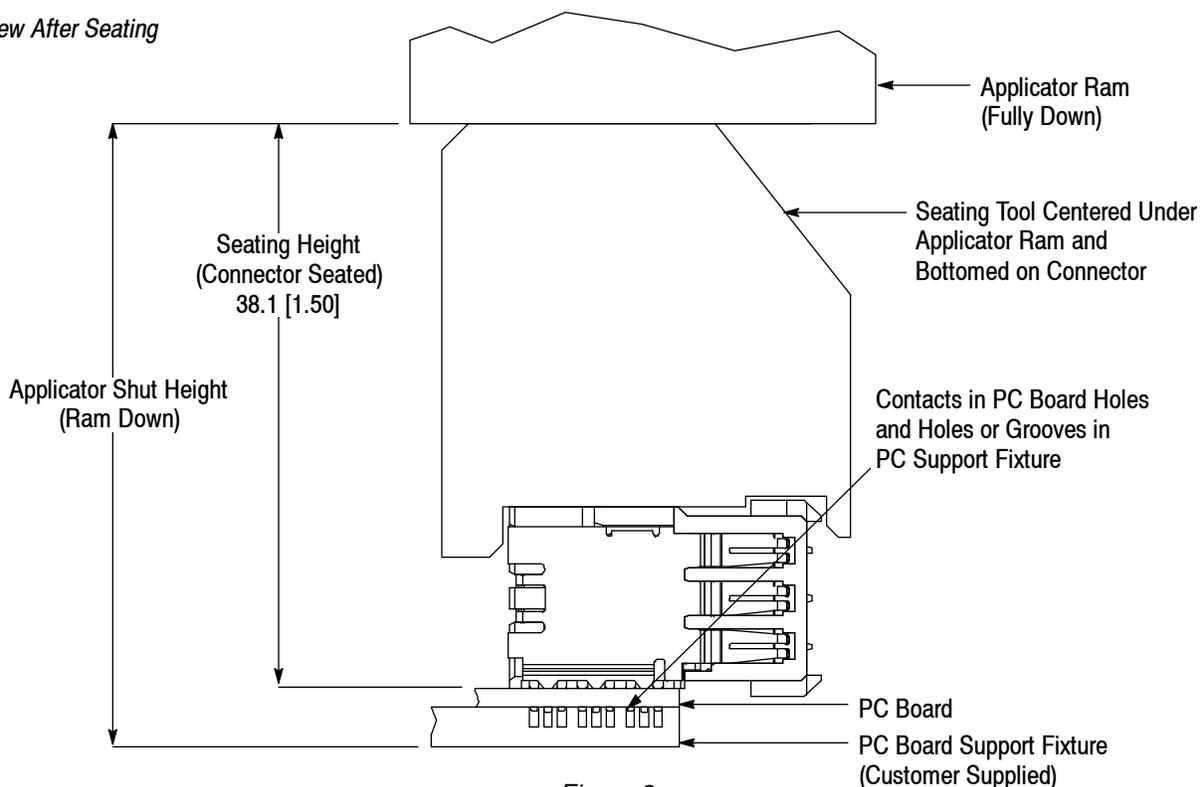
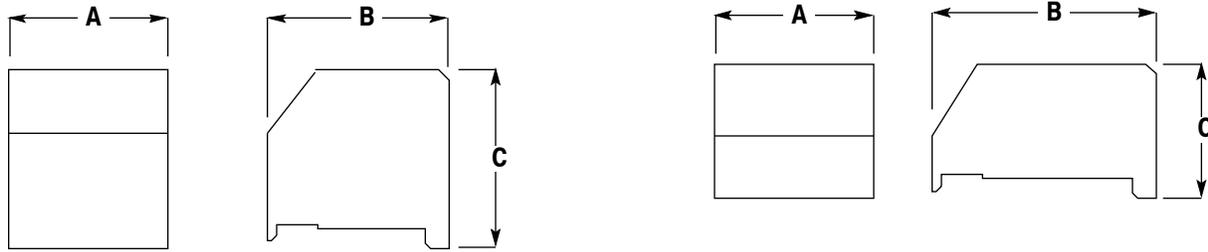


Figure 2

Seating Tools 1338742-[ ]

Seating Tools 1338743-[ ]



SEATING TOOL	DIMENSION		
	A	B	C
1338742-1	24.89 [.980]	28.45 [1.12]	27.94 [1.10]
1338742-2	49.78 [1.96]	28.45 [1.12]	27.94 [1.10]
1338742-3	248.92 [9.80]	28.45 [1.12]	27.94 [1.10]
1338743-1	24.89 [.980]	35.05 [1.38]	21.08 [.83]
1338743-2	49.78 [1.96]	35.05 [1.38]	21.08 [.83]
1338743-3	248.92 [9.80]	35.05 [1.38]	21.08 [.83]

Figure 3



A damaged connector should not be used. If a damaged connector is evident, it should be removed from the pc board and replaced with a new one.

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.

**5. MAINTENANCE AND INSPECTION**

**5.1. Initial Inspection**

It is recommended that the seating tool be inspected using Figure 3 immediately upon arrival in your facility to ensure that it has not been damaged during shipment.

**5.2. 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. Ensure that the screws are in place and secured.
3. When the tool is not in use, store it in a clean, dry area.

**5.3. Periodic Inspection**

Regular inspections should be performed by quality control personnel. A record of scheduled inspections

**6. REPLACEMENT**

The seating tool is not repairable. Order replacement seating tools through your 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  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

**7. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements
- Removed references to support anvil
- Changed Paragraph 3.2
- Modified Step 7, added CAUTION, and added NOTE to Section 4
- Removed phone number for customer repair service