

Figure 1

## 1. INTRODUCTION

Seating Tool 90752-1 is used to seat a 110-position Z-PACK 2mm HM pin header with ACTION PIN contacts to allow solderless printed circuit (pc) board installation. Read these instructions and understand them before using the seating tool.

### NOTE



*Dimensions 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.*

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

## 2. DESCRIPTION

The seating tool is an assembly of two blades and an adapter. See Figure 1.

During seating, the seating tool sits inside the housing of the pin header with the blades engaging the housing floor and contact shoulders preventing the contacts from pushing out of the housing.

## 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 tool to the pin header and to protect the pc board and pin header support fixtures from damage. Design a pc board support fixture using the recommendations in instruction sheet 408-6927.

### 3.2. Application Tooling

Power for the seating tool must be provided by an application tool (with a ram) capable of supplying a downward force of 133 N [30 lb] per contact.

Manual Electric Servo Presses (CMP 6T) 1585699-8 and (CMP 12T) 1585698-8, and Bench Top Electric Servo Press (CBP 5T) 1585696-9 are available for this seating tool. For information on the presses, visit the press-fit assembly equipment website at <http://tooling.te.com/pressfit.asp>.

#### 4. USING THE SEATING TOOL

1. Set the 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 board support fixture).
2. Position the pin header onto pc board so that the contacts are properly aligned with the holes in the pc board and pc board support fixture.
3. Insert the pin header into pc board until the open portion of the contacts are resting securely on, but have not fully entered, the pc board.
4. Position the seating tool onto the pin header making sure that the seating tool is bottomed on the housing floor.
5. Center the seating tool and pin header under the applicator ram of the power source; then slowly lower the ram until it just meets the seating tool. Verify the alignment of the pc board support fixture, pc board, pin header, and seating tool.



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

6. Cycle the applicator ram according to instructions included with the power source.
7. Check the pin header for proper seating using the requirements in Application Specification 114-19029.

#### 5. MAINTENANCE AND INSPECTION

The seating tool is assembled and inspected before shipment; however, it is recommended that the seating tool be inspected immediately using Figure 3 upon arrival at your facility to assure that it has not been damaged during shipment.

##### 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 any components of the seating tool.
2. Ensure that the socket set screws are in place and secured.
3. When the seating 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 seating 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.

Note: Not to Scale

View After Seating

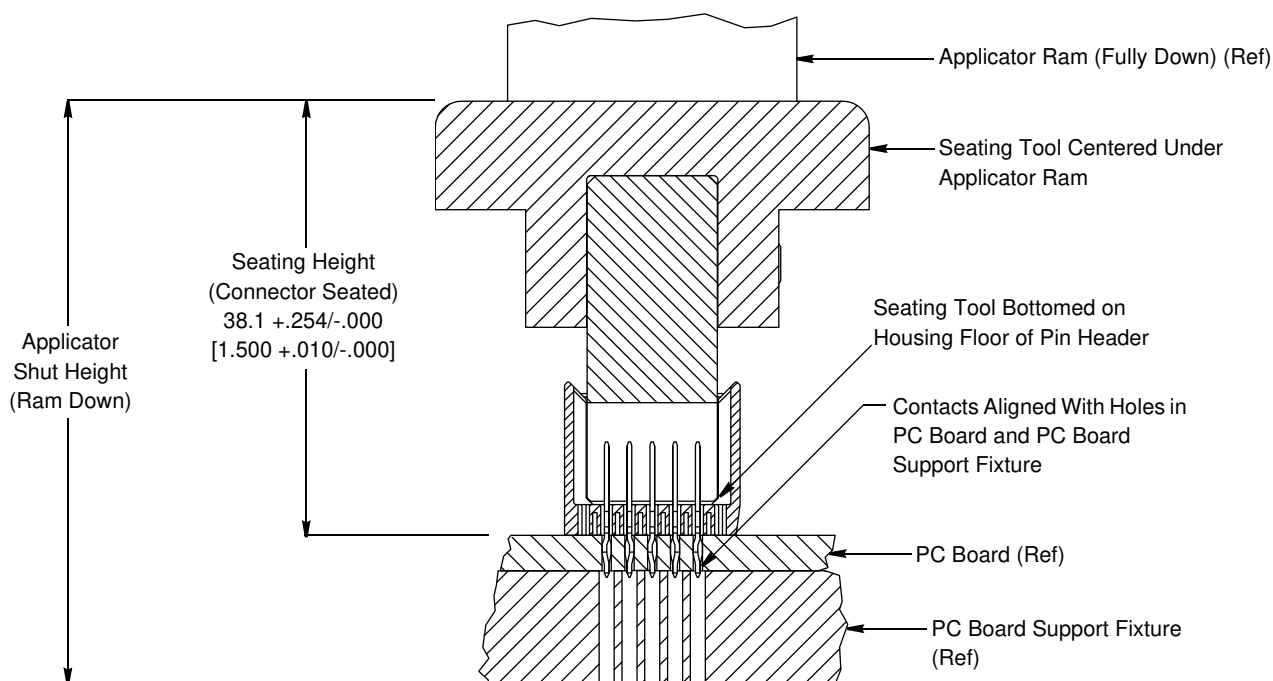


Figure 2

## 6. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 3. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by Tyco Electronics to ensure quality and reliability. Order replacement parts 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.

## 7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company name and logo
- Replaced presses in Paragraph 3.2

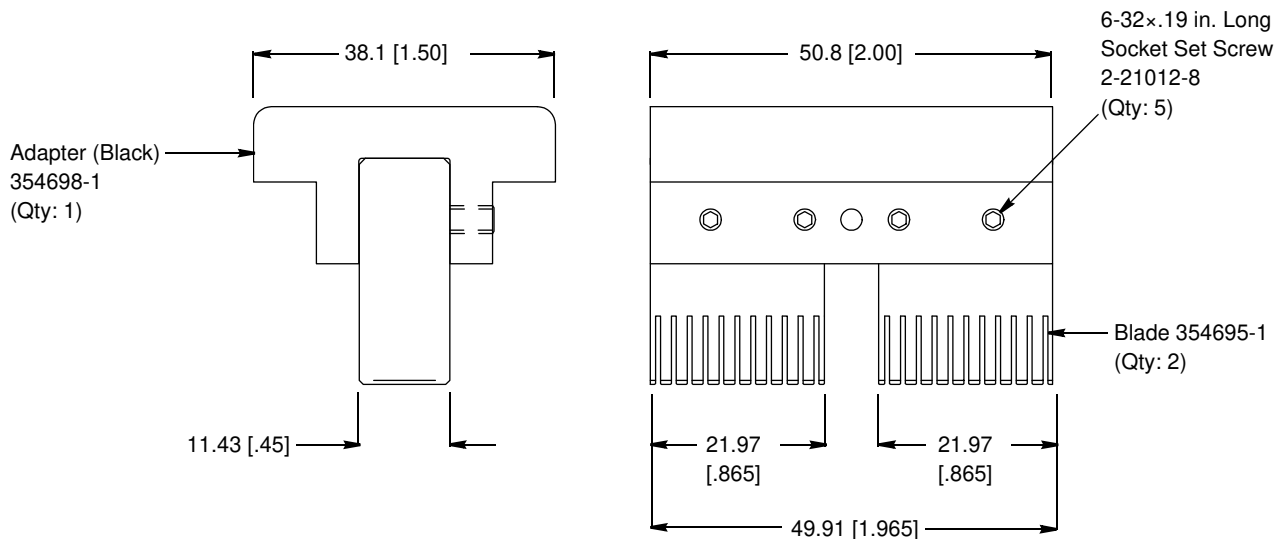


Figure 3