

Seating Tool 91345-1

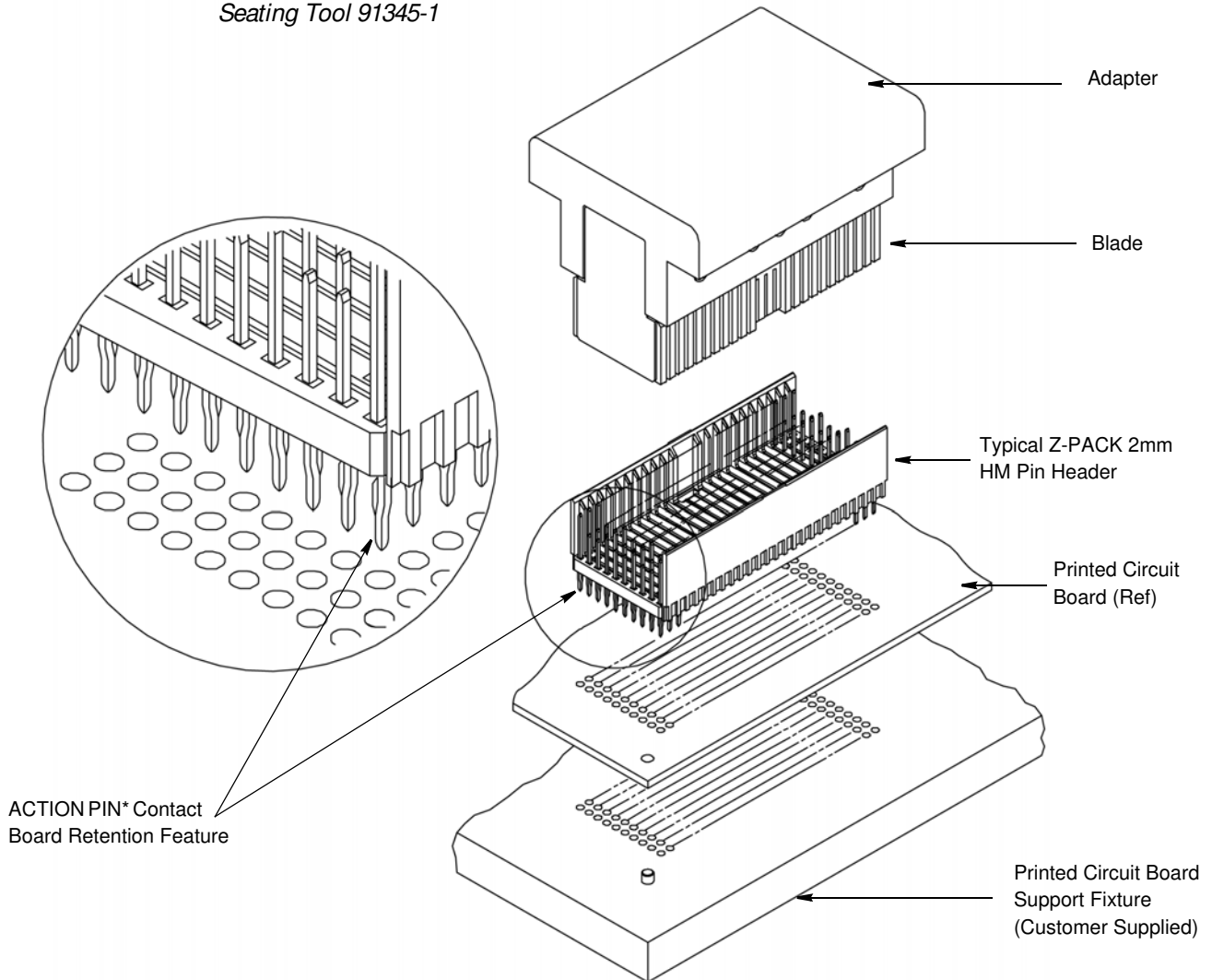


Figure 1

## 1. INTRODUCTION

This instruction sheet covers the use and maintenance of Seating Tool 91345-1. The tool is used to seat Z-PACK 2mm HM (hard metric) 8-row and 8-row +2 Type DE pin headers with 200 and 244 positions onto a printed circuit (pc) board. These headers contain ACTION PIN contacts to allow solderless pc board installation. See Figure 1.

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

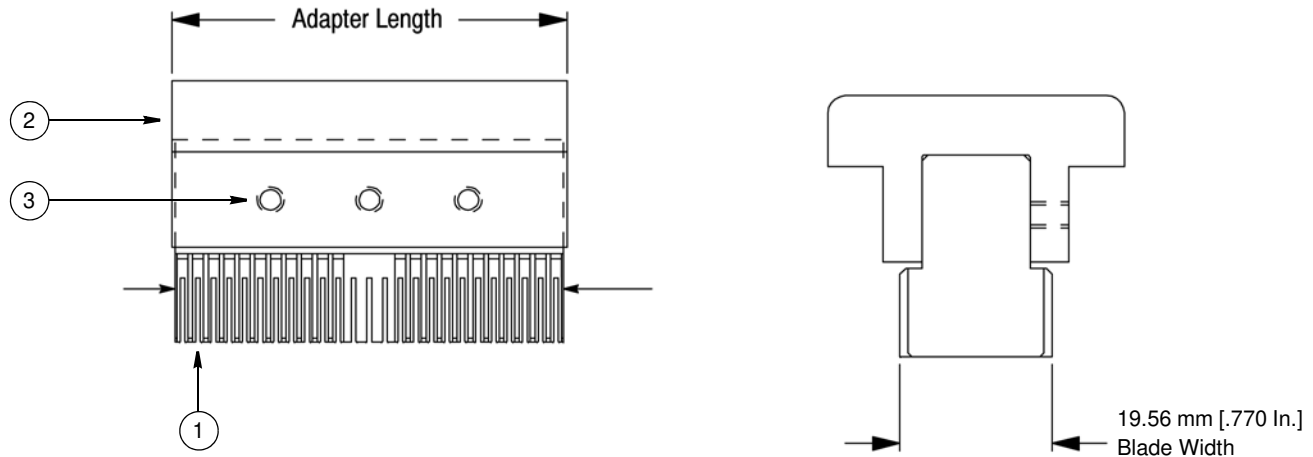
### NOTE



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

## 2. DESCRIPTION

Each seating tool is an assembly of a blade and an adapter. Figure 2 matches tool part number to the size (positions) of the pin header to be seated. The adapter straightens the header, during the cycle of the applicator ram, to provide proper insertion into the pc board. Each tool is designed for a specific combination of contacts in a row and number of rows in a header. During seating, the tool sits inside the header housing with the blades engaging the housing floor and contact shoulders, preventing contacts from pushing out of the housing.



ITEM	PART NUMBER	DESCRIPTION (Length in mm [in.] +0.00/-0.10 [+ .000/- .004])	QUANTITY PER SEATING TOOL
1	1424586-1	BLADE, 49.91 [1.965]	1
2	314274-1	ADAPTER, 50.80 [2.000]	1
3	2-21012-8	SOCKET SETSCREW, 6-32.19 In.	3

Figure 2

### 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 header pins, and to protect the pc board and header posts from damage. Design a pc board support fixture for your specific needs using the recommendations in Instruction Sheet 408-6927.

#### 3.2. Application Tooling

The pin headers can be seated with an application unit capable of supplying a downward force of 133 Newtons (N) [30 lb] per contact. SM-3 Frame Assembly 814700-[ ] is available for seating contacts. For operating and setup procedure of the frame assemblies, refer to Customer Manual 409-5626 (SM-3 frame assembly).

### 4. SEATING

1. Set seating height to the dimension shown in Figure 3 (applicator *shut height* will equal the seating height PLUS the combined thicknesses of the pc board and pc board support).
2. Position header into pc board so that header contacts are properly aligned to the board and board support.
3. Insert header into pc board until the ACTION PIN post section of the contacts are resting securely on, but have not fully entered, the pc board.

4. Position appropriate seating tool into header, making sure tool is bottomed on housing floor.

5. Center seating tool and header under the applicator ram of the power source; slowly lower ram until it just meets the seating tool. Verify the alignment of the board support, pc board, header, and seating tool.



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

6. Cycle applicator ram according to instructions for the power source. Check assembly for proper seating using the requirements in Figure 3.

7. Remove pc board and seated header, or reposition board and board support for seating additional headers.

### 5. TOOL INSPECTION

Each seating tool is assembled and inspected before shipment. We recommend that the tool be inspected immediately upon arrival at your plant to ensure that it has not been damaged during shipment.

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.

View After Seating

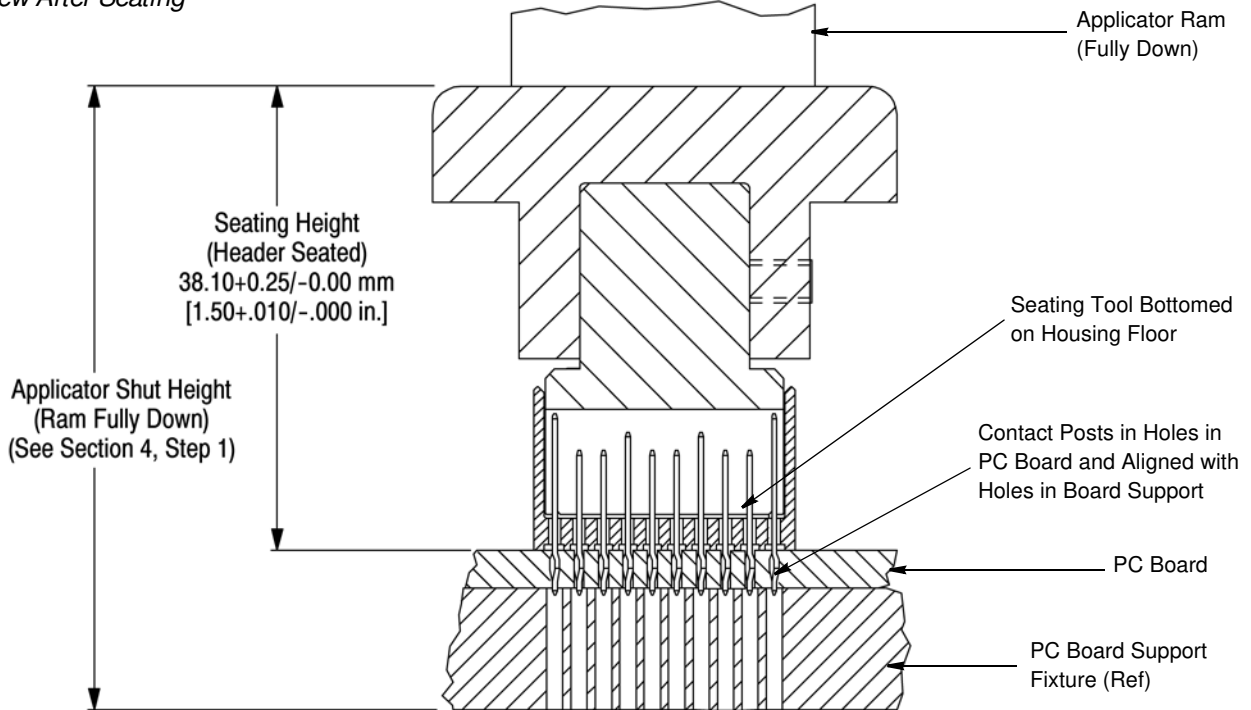


Figure 3

## 6. 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.
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.

## 7. REPLACEMENT AND REPAIR

The parts listed in Figure 1 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your TE 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 Tool Repair Service, call 1-800-526-5136.

## 8. REVISION SUMMARY

This sheet was revised to incorporate the latest TE logo.