

## Seating Tools 90755-[ ]

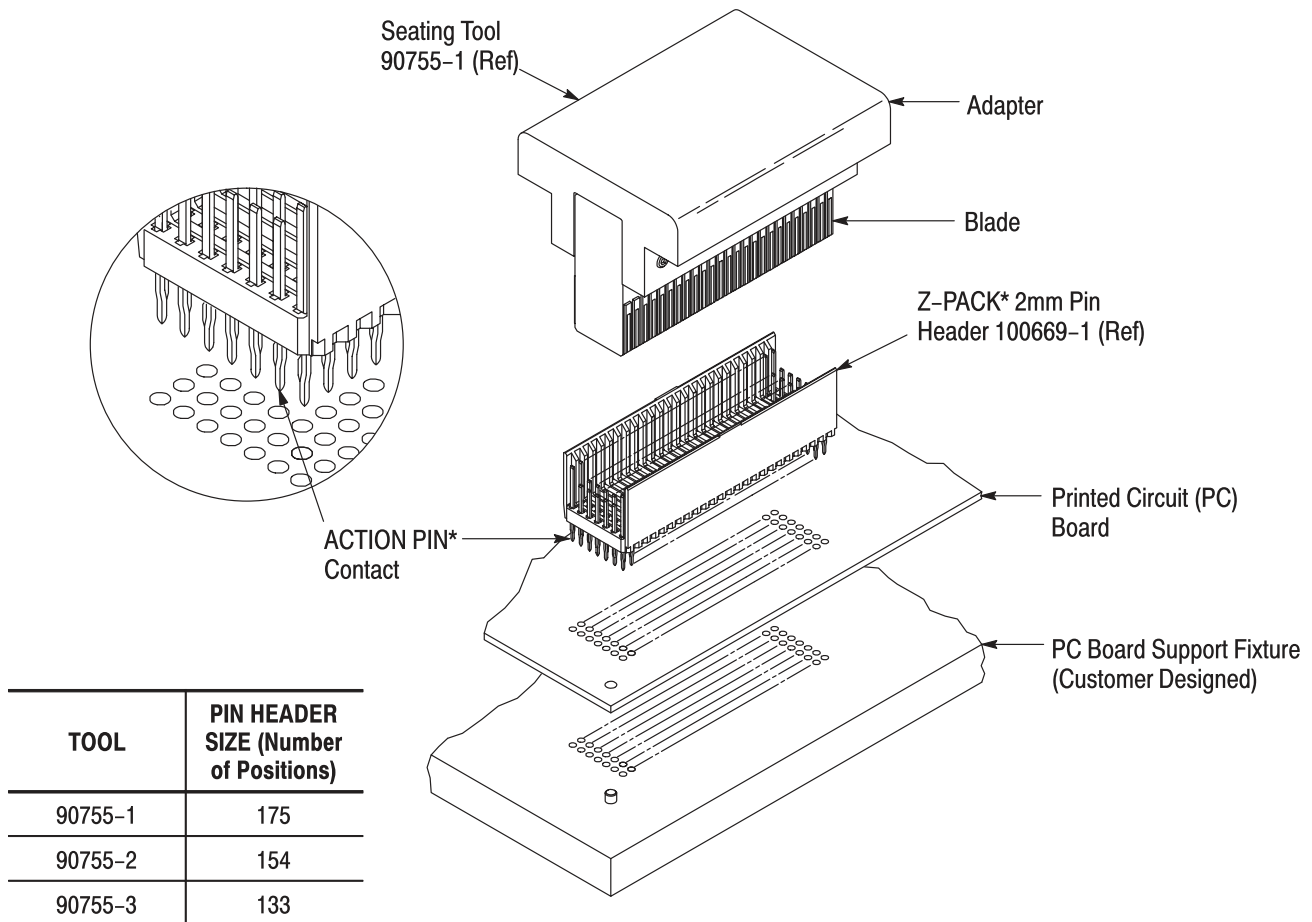



Figure 1

### 1. INTRODUCTION

Seating Tools 90755-[ ] are used to seat Z-PACK 2mm pins headers with ACTION PIN contacts to allow solderless pc board installation. Each seating tool is specifically designed for the number of positions in the pin header. Refer to Figure 1. Read these instructions thoroughly before using the seating tool.

**NOTE**  All numerical values 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 consists of an adapter and a blade.

During seating, the blade sits inside the pin header engaging the housing floor and contacts preventing

the contacts from pushing out of the housing. The adapter presses on the top surface of the pin header when the applicator ram applies force to the seating tool.

### 3. REQUIREMENTS

#### 3.1. PC Board Support Fixture

A fixture must be used to provide proper support for the pc board and alignment of the seating tool to the contacts, and to protect the pc board and pin header from damage. The pc board support fixture must be designed for the specific needs according to Instruction Sheet 408-6927.

#### 3.2. Application Tooling

Power for seating tools must be provided by a machine capable of supplying a downward force of 133 Newtons (N) [30 lb] per contact. SM-3 Frame Assembly 814700-[ ] (customer manual 409-5626 provides instructions) can be used.

**4. SEATING**

When setting up equipment to seat pin headers, pay particular attention to the following:

- The seating tool must be matched to the pin header
- The seating tool, pin header, and applicator ram must be properly aligned before cycling the tool



*If the tool and pin header are mismatched or are improperly aligned, damage could occur to the tooling, pin header, or both.*

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 board support fixture).
2. Position the pin header onto pc board so that the contacts are properly aligned to the pc board and pc board support fixture.
3. Insert the pin header into pc board until the contacts are resting securely on, but have not fully entered, the board.
4. Position the seating tool onto the pin header, making sure that the tool is bottomed on the housing floor.
5. Center the seating tool and pin header under the applicator ram of the tool. Slowly lower the ram until it just meets the seating tool. Verify alignment

of pc board support fixture, pc board, pin header, and seating tool.



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

6. Cycle the tool to seat the pin header in the pc board. Then retract the ram, and carefully remove the seating tool. Check to make sure that the pin header has been properly seated.
7. Repeat Steps 2 through 6 until all pin headers are seated.

**5. MAINTENANCE AND INSPECTION**

Each seating tool is assembled and inspected before shipment. It is recommended that the tool be inspected immediately upon arrival at your facility to ensure that the tool 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 contaminants with a clean, soft brush or a lint-free cloth. Do NOT use objects that could damage the tool components.
2. Ensure that setscrews are in place and secured.

**Note:** Not to Scale

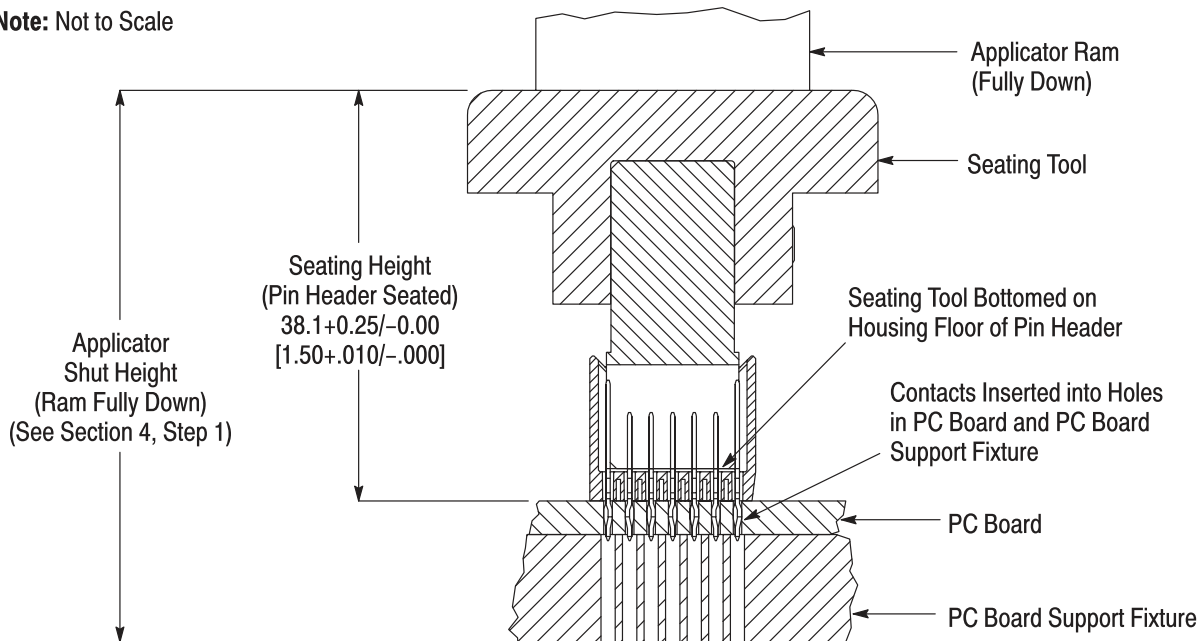


Figure 2

3. 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 tooling or be supplied to supervisory personnel responsible for the tool. Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.

**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:

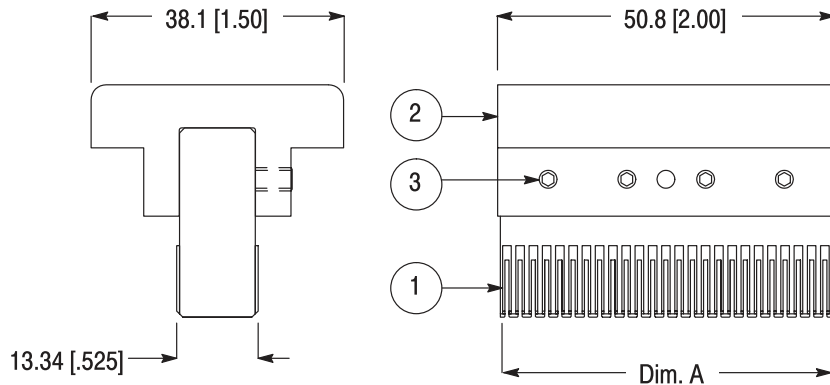
CUSTOMER SERVICE (038-035)  
 TYCO ELECTRONICS CORPORATION  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

For customer repair service, please contact a representative at 1-800-526-5136.

**7. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated document to corporate requirements



TOOL	DIM. A
90755-1	49.91 [1.965]
90755-2	43.89 [1.728]
90755-3	37.89 [1.492]

**REPLACEMENT PARTS**

ITEM	PART NUMBER FOR SEATING TOOL			DESCRIPTION	QTY PER TOOL
	90755-1	90755-2	90755-3		
1	904809-1	904809-3	904809-4	BLADE	1
2	354698-1			ADAPTER	1
3	2-21012-8			SETSCREW, Socket, 6-32 x .19 L	3 ■

■ Tool 90755-1 requires 5 setscrews

Figure 3