

Figure 1

1. INTRODUCTION

Seating Tools 90757-1 is used to seat Z-PACK 77-position 2mm pin headers with ACTION PIN contacts to allow solderless pc board installation.



All dimensions in this instruction sheet are in metric units [with U. S. customary units in brackets].

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

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

2. DESCRIPTION

The seating tool is an assembly of an adapter and a blade.

During seating, the seating tool sits inside the header housing 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 to protect the pc board and header assembly from damage. The board support fixture must be designed for specific needs using the following recommendations:

- It should be at least 25.4 mm [1 in.] wider than the pc board
- It should have a flat surface with a cutout of at least 28.5 mm [1.12 in.] deep (to allow adequate clearance for the header assembly)

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. SEATING

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

6. 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.

7. Cycle the applicator according to instructions included with the applicator. Check the assembly for proper seating using the requirements of the applicable application specification.

8. Remove the pc board with the seated pin header or re-position the pc board and pc board support fixture for seating additional pin headers.

5. MAINTENANCE AND INSPECTION

5.1. Initial Inspection

The seating tool is assembled and inspected before shipment. The seating tool should be inspected using Figure 3 immediately upon arrival at your facility to assure 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 seating tool or any of its components.
2. Ensure that the screws are in place and secured.
3. When the seating tool is not in use, store it in a clean, dry area.

Note: Not to Scale

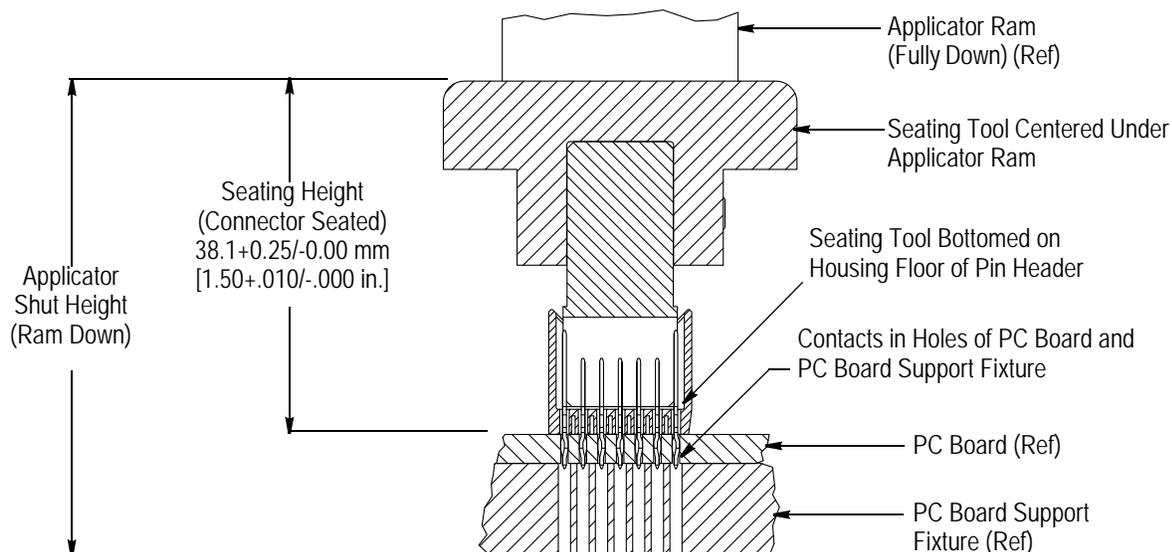


Figure 2

Note: Not to Scale

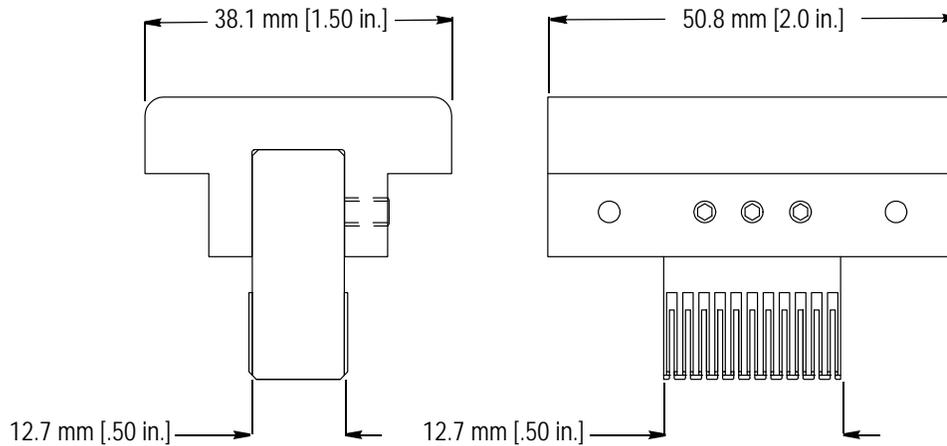


Figure 3

5.3. 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 seating tool. The inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards.

6. REPLACEMENT AND REPAIR

The parts shown 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 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 (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company name and logo
- Modified Paragraph 3.1
- Changed tooling in Paragraph 3.2