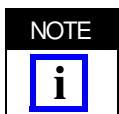


SEATING TOOL PART NUMBER	CONNECTOR
91372-1	Two-Pair
91373-1	Four-Pair

Figure 1

## 1. INTRODUCTION

This instruction sheet covers the use and maintenance of Seating Tools 91372-1 and 91373-1. See Figure 1. These tools are used to seat Hard Metric Z d (HMZd) latching header connectors with eye of needle type contacts into printed circuit (pc) boards. Tool 91372-1 is used to seat two-pair HMZd header connectors. Tool 91373-1 is used to seat four-pair HMZd connectors.



All dimensions on this document are in metric units [with U.S. customary units in brackets].

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

## 2. DESCRIPTION

The seating tool consists of a seating tool blade and an adapter to seat either two- or four-pair HMZd Latching Header Connectors.

During seating, the tool sits inside the header housing engaging the housing floor and contact shoulders, preventing 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 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

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 A PIN HEADER

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.)

**NOTE** *The seating height of 38.1 [1.50] is a reference starting point. Seating height may need adjusted to obtain the 0.1 [.004] maximum gap between the connector and the pc board.*

2. Position header on the pc board so that header posts are properly aligned to the board and board support.
3. Insert header into pc board until the eye of needle post sections are resting securely on, but have not fully entered, the board.

4. Position the appropriate seating tool into the header, making sure the key is oriented properly so the tool bottoms on housing floor.

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

**CAUTION** *Damage to the pc board, tool, or header may occur if the wrong size tool is used, 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 your power source. Check assembly for proper seating, using the requirements of the appropriate Application Specification.

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

### 5. TOOL INSPECTION

Each seating tool is assembled and inspected before shipment. It is recommended that the tool be inspected, using Figure 3, immediately upon its arrival in your plant to assure that it has not been damaged during shipment.

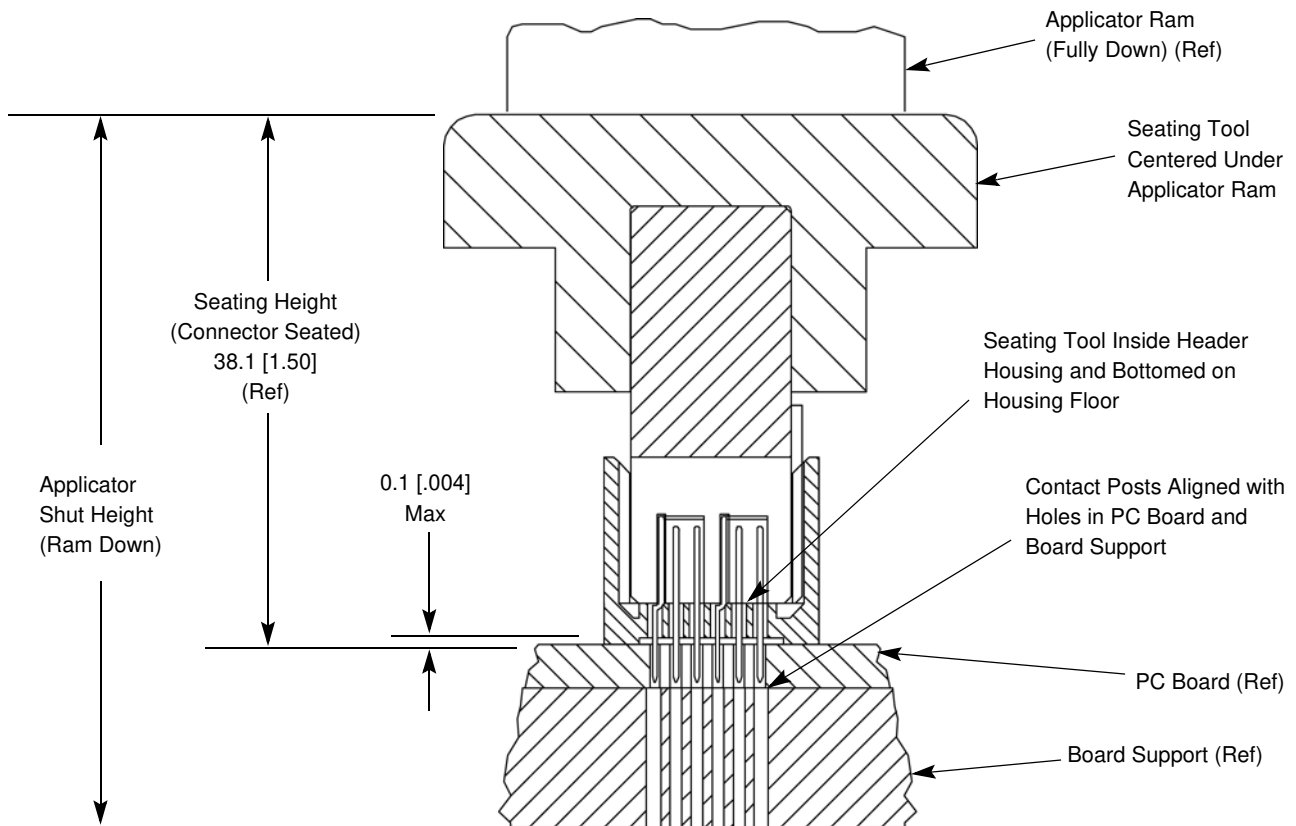


Figure 2

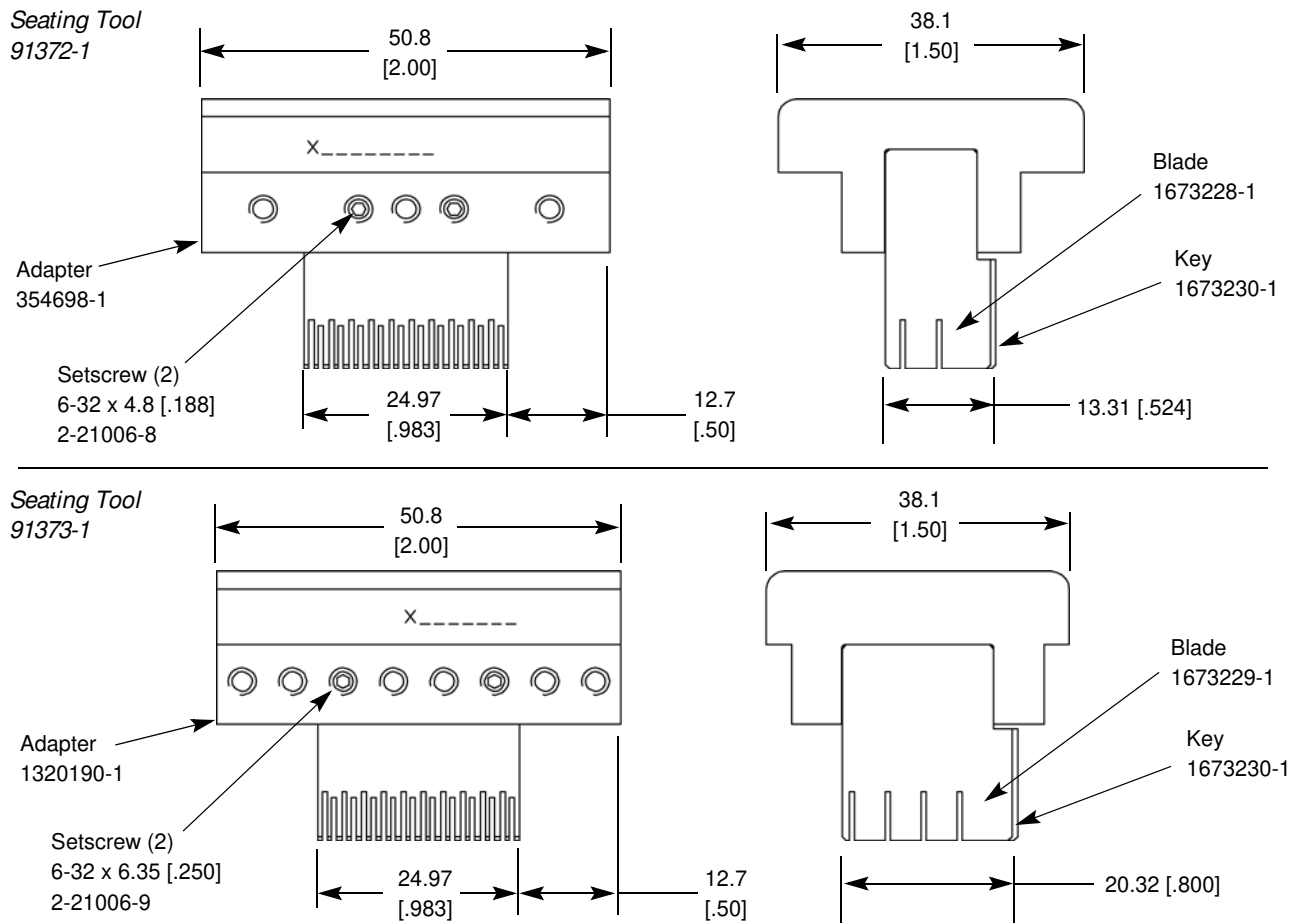


Figure 3

## 6. MAINTENANCE/INSPECTION

### 6.1. 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 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.

### 6.2. Periodic Inspection

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.

## 7. REPLACEMENT AND REPAIR

The parts shown in Figure 3 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 field 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

For customer repair service, call 1-800-526-5136.

## 8. REVISION SUMMARY

Since the previous version of this document, the following changes were made:

- Changed application tooling information in Paragraph 3.2.
- Modified replacement and repair information in Figure 3 and Section 7.
- Updated document to corporate requirements.