

# Seating Tools 768216-[] for Eurocard Pin Headers with ACTION PIN\* Contacts



SEATING TOOL	PIN HEADER ASSEMBLY	
	POSITIONS	REFERENCE PART NUMBER †
768216-1	48	536092-1
768216-2	96	536019-2
768216-3	120	536094-3
768216-4	150	536096-4

† Pin header assembly dash numbers match seating tool dash numbers.

#### 1. INTRODUCTION

Seating Tools 768216-[] are used to seat Eurocard pin header assemblies. Reference part numbers for the pin header assemblies are given in Figure 1. These pin headers contain ACTION PIN contacts to allow solderless pc board installation.

Figure 1



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

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

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# 2. DESCRIPTION

Each seating tool consists of a body, pin guide, two legs, mount to hold the pin guide, push pins, and a plate to stabilize the tool under the pressure of the machine. See Figure 1. The legs may be used in either the end position or the side position, as required.

The push pins are supplied as a kit containing 25 push pins. For example, Seating Tool 768216-2, used to seat a 96-position connector, is supplied with four of Push Pin Kit 768383-1 (100 gold-colored push pins), which provides a pin header pin height of approximately 4.17 mm [.164 in.] and four of Push Pin Kit 768383-2 (100 black-colored push pins), which provides a pin header pin height of approximately 4.93 mm [.194 in.].

Each seating tool can be programmed for any configuration required. Each seating tool is marked with "A1" and will only fit on the connector one way.

## 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 178 N [40 lb] per contact.

Manual Electric Servo Press (MEP 6T) 2-1399500-5 and Bench Top Electric Servo Presses (BMEP 3T) 1-1399400-5 and (BMEP 5T) 2-1399401-4 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.

#### 3.3. Loading the Push Pins

To load the push pins, remove two 4-40x<sup>3</sup>/<sub>4</sub>-in. socket head screws. The body and stabilizer plate can then be removed, allowing the pin mount with push pins to be loaded according to your selection. The body and plate tool is then ready for use. See Figure 2.

During seating, the seating tool sits inside the pin header housing (one way only) with the pin guide engaging the contacts, preventing contacts from bending during seating. See Figure 3.

## 4. SEATING A PIN HEADER

1. Set the seating height to the dimension shown in Figure 3 (machine shut height will equal the seating height *plus* the combined thickness of the pc board and pc board support fixture).









2. Position the pc board onto the pc board support fixture so that it is secure and will receive the pin header assembly contacts.

3. Insert the contacts of the pin header into the holes of the pc board until the open sections of the contacts begin to enter the holes.

4. Position the appropriate seating tool onto the pin header assembly, making sure that the contacts are firmly engaged by the cavities of the pin guide.

5. Center the seating tool or pin header assembly under the ram of the applicator; then slowly lower the ram until it just meets the seating tool. Verify alignment of the pc board support fixture, pc board, pin header, assembly and seating tool.



Damage to the seating tool or pin header assembly may occur if the wrong seating tool is used, if the seating height is improperly set, or if the seating tool is not seated in the pin header assembly before cycling the applicator.

6. Cycle the applicator according to instructions included with the applicator. Remove the seating tool and pc board from the applicator. If seating more than one pin header assembly, begin again with Step 2.

## 5. MAINTENANCE AND INSPECTION

Inspect the seating tool when you receive it and occasionally thereafter. When not in use, store it in a clean, dry area.

## 6. 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 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 logo
- Updated instruction sheet to corporate requirements
- Replaced pin header assembly part numbers with reference part numbers
- Modified Section 3
- Removed customer repair address