

SEATING TOOL	VERTICAL HEADER ASSEMBLY CONFIGURATION‡
1725769-1	2ACP
1725769-2	6P
1725769-3	3P
1725769-4	3ACP
1725769-5	8P
1725769-6	4ACP
1725769-7	4P

‡“P” stands for power module with contact centerline spacing of 6.35 mm [.250 in.] and “ACP” stands for power module with contact centerline spacing of 7.62 mm [.300 in.].

Figure 1

## 1. INTRODUCTION

Seating Tool Assemblies 1725769-[ ] are designed to seat Multi-Beam XL vertical header assemblies with only power contacts. These header assemblies have precision formed press-fit (compliant pin) contacts to allow solderless pc board installation. See Figure 1.



### NOTE

Dimensions 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 8, REVISION SUMMARY.

## 2. DESCRIPTION

The seating tool consists of a blade and an adapter. The adapter provides a surface to accept the force applied by the application tool to seat the header assembly onto the pc board. During seating, the seating tool sits inside the header assembly and the inserts prevent the contacts from pushing out of the header assembly.

## 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 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 application tools (with a ram) capable of supplying a maximum downward force of 890 Newtons (N) [200 lb] per power contact and 27 N [6 lb] per hold-down clip.

Manual Electric Servo Presses (CMP 6T) and (CMP 12T), and Bench Top Electric Servo Press (CBT 5T) are available for this seating tool.

For information on the presses, visit the press-fit assembly equipment website at <http://tooling.te.com/pressfit>.



**CAUTION**

Over-driving of the header assembly could cause damage to the pc board.

### 4. SETUP

When setting up equipment to seat the header assembly, pay particular attention to the following:

- the seating tool must be matched to the header assembly



**CAUTION**

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

- the seating tool, header assembly, and application tool ram must be properly aligned before cycling the application tool

Set the seating height to the dimension shown in Figure 2 (application tool shut height will equal the seating height PLUS the combined thicknesses of the pc board and support fixture). After seating, a gap of no more than 0.10 mm [.004 in.] between the header assembly standoffs and the pc board is allowed.



**NOTE**

Use the seating height as a reference starting point. This height may need to be adjusted to obtain the amount allowed (maximum of 0.10 mm [.004 in.]) between the standoffs of the header assembly and the pc board.

### 5. SEATING (See Figure 2)

1. Place the pc board on the support fixture.
2. Place the header assembly on the pc board so that the contacts (and hold-down clips) are aligned and started into the matching holes in the pc board.
3. Hold the seating tool over the header assembly, then lower the seating tool into the header assembly until it bottoms on the floor of the header assembly.
4. Center the seating tool (with the header assembly) under the ram of the application tool. Slowly lower the ram until it just meets the seating tool. Verify alignment of pc board support, pc board, header assembly, and seating tool.



**CAUTION**

Damage to the pc board, seating tool, or header assembly may occur if the seating tool is not properly inserted into the header assembly before cycling the application tool.

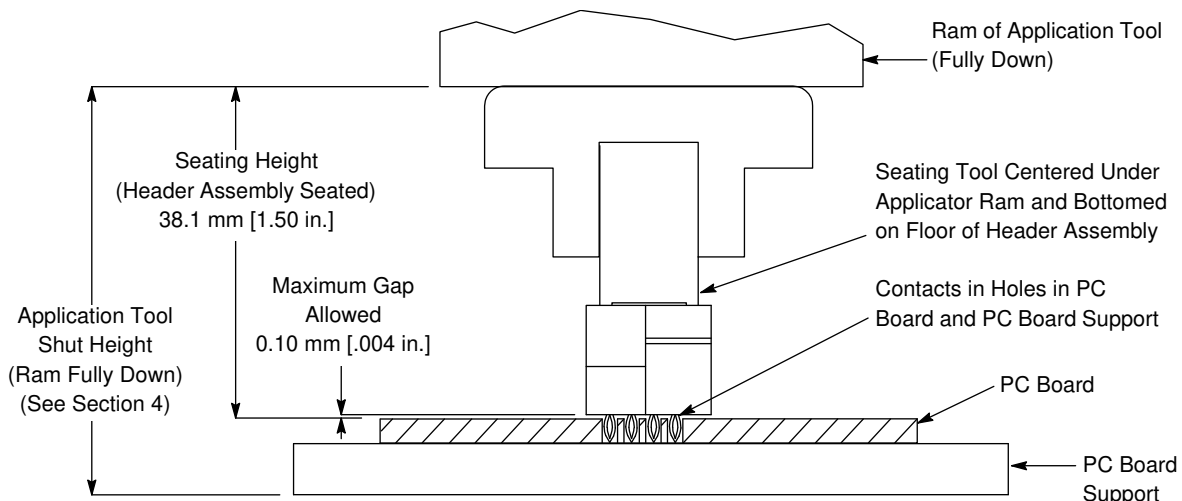


Figure 2

5. Cycle the application tool to seat the header assembly on the pc board. Then retract the ram, and carefully remove the seating tool by pulling it straight from the header assembly.

6. Check the header assembly for proper seating according to the following:

- a. the widest section of each compliant pin contact is inside its intended pc board hole
- b. the header assembly is seated on the pc board with the seating height-measured from the top of the header assembly to the top of the pc board-given in Figure 2
- c. if present, the gap between the standoffs and the pc board is no more than 0.10 mm [.004 in.]



**NOTE**  
For detailed application requirements of the header assembly, refer to Application Specification 114-13038.

## 6. MAINTENANCE AND 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 contaminants with a clean, soft brush or a lint-free cloth. DO NOT use objects that could damage the seating tool components.
- 2. When the seating tool is not in use, store it in a clean, dry area.

### 6.2. Periodic Inspection

- 1. 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. Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.
- 2. Check that the socket set screws are in place and tight.

## 7. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 3. Parts other than those listed should be replaced by TE Connectivity to ensure quality and reliability. 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 customer repair service, contact a representative at 1-800-526-5136.

## 8. REVISION SUMMARY

Revisions to this instruction sheet include:

- Deleted and added new text to Paragraph 3.2
- Changed metric dimension in Figure 3

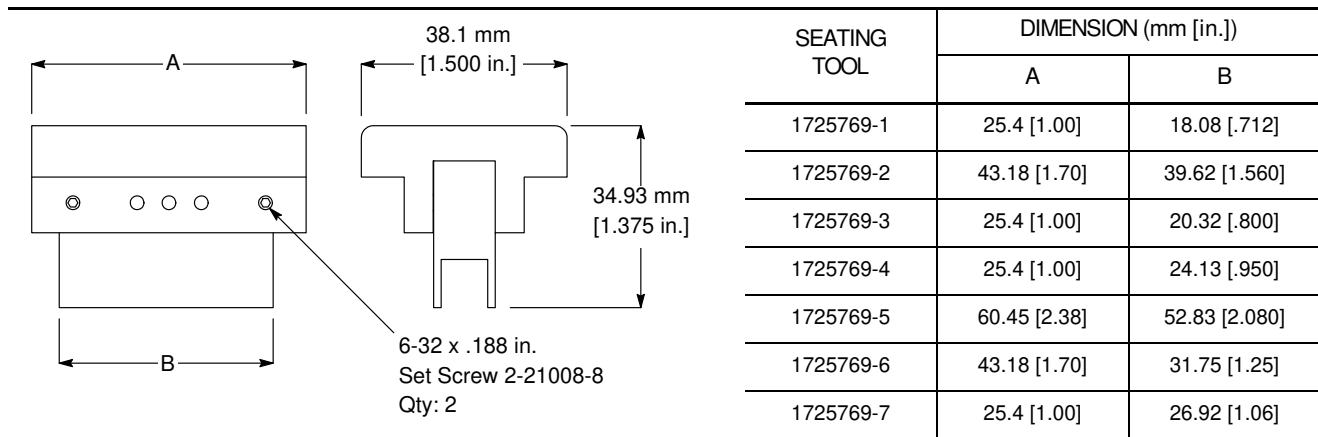


Figure 3