

Figure 1

#### 1. INTRODUCTION

Seating Tool 224440-1 and Board Support Anvil 217603-1 (shown in Figure 1) are used to seat UPM Female Guide Module 223957-1.

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



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 and board support anvil are each a one-piece aluminum design.

During seating, the seating tool covers the guide module and presses on the top surface of the guide module; and the board support anvil sits in a pc board support fixture and supports the pc board and guide module.

## 3. REQUIREMENTS

## 3.1. PC Board Support Fixture

A pc board support fixture must be used to provide support for the pc board, alignment of the seating tool to the guide module, and to protect the pc board from damage. PC Board Support Fixture 679980-[] is recommended for use with this seating tool and board support anvil. For selection and detailed information, refer to instruction sheet 408-4038.

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As an alternative, a pc board support fixture can be designed using the following recommendations:

- it should be at least 25.4 [1.0] wider than the pc board
- it should have a flat surface with a cutout of at least 28.5 [1.12] deep (to allow adequate clearance for the connector)

# 3.2. Application Tooling

Power for the seating tool must be provided by application tools (with a ram) capable of supplying a downward force of 89 N [20 lb] per contact.

Manual Arbor Frame Assembly 58024-1 (refer to Instruction Sheet 408-6923) or 91085-2 (408-7777) can be used.



Over-driving of the guide module could cause damage to the guide module or pc board.

## 4. **SEATING** (See Figure 2)

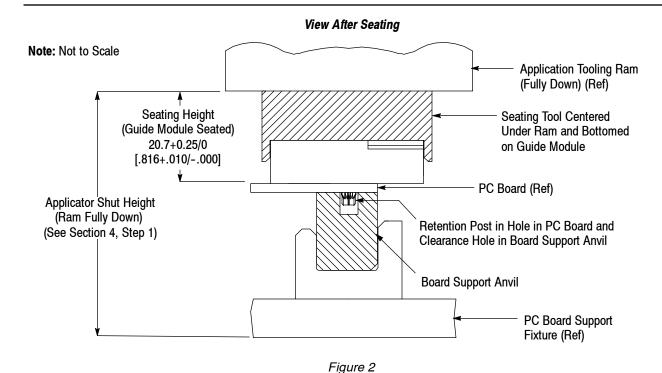
- 1. Set the seating height to the dimension shown in Figure 2 (applicator *shut height* will equal the seating height PLUS the combined thicknesses of the pc board and pc board support fixture).
- 2. Position the board support anvil, with the clearance hole facing up, into the pc board support fixture and center it under the ram of the

- application tooling. Position the pc board over the board support anvil.
- 3. Position the guide module onto the pc board so that the retention post is aligned with the hole in the pc board and clearance hole in the board support anvil.
- 4. Insert the retention post of the guide module into pc board until it is resting securely on, but not fully entered into, the hole of the pc board.
- 5. Position the seating tool onto the guide module.
- 6. Center the seating tool and guide module under the ram of the application tooling; then, slowly lower the ram until it just meets the seating tool. Verify the alignment of the board support, pc board, guide module, seating tool, and board support anvil.



Damage to the pc board, seating tool, or guide module may occur if the seating height is improperly set, the pc board is not properly positioned over the board support anvil, or the seating tool is not properly seated on the guide module before cycling the application tooling.

- 7. Cycle the application tooling according to instructions for the tooling. Check the assembly for proper seating using the requirements in Figure 2.
- 8. Re-position pc board and board support fixture to seat an additional guide module or remove the assembly from the application tooling and remove the seating tool from the guide module.



## 5. MAINTENANCE AND INSPECTION

The seating tool and board support anvil is assembled and inspected before shipment; however, it is recommended that the seating tool and board support anvil be inspected immediately upon arrival at your facility to ensure that they have not been damaged during shipment and that they conform to the dimensions provided in Figure 3.

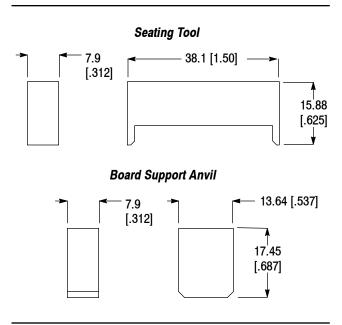


Figure 3

## 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 seating tool and board support anvil components.

2. When the seating tool and board support anvil are not in use, store them 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 seating tool and board support anvil or be supplied to personnel responsible for the seating tool and board support anvil.

Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.

## 6. REPLACEMENT

Order additional seating tools and board support anvils 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

#### 7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements
- Replaced reference to 408-6927 (obsolete) with NOTE in Paragraph 3.1
- Replaced obsolete application tooling and added CAUTION to Paragraph 3.2
- Removed evaluation and repair address from Section 6