

Figure 1

1. INTRODUCTION

Seating Tool Assembly 2063547-1 is designed to seat a SEC II power connector assembly (reference part number 2057185-2). The connectors have a power module and signal module that each contain press-fit compliant pin contacts to allow solderless pc board installation.

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

NOTE



Dimensions on this sheet are in metric units [with U.S. customary units in brackets]. Figures are for reference only and are not drawn to scale.

2. DESCRIPTION (See Figure 1)

The seating tool consists of an adapter and flat rock block (shown in Figure 1), and a center plate and two side plates (shown in Figure 2).

The adapter provides a surface to accept the force applied by the application tooling to seat the connector onto the pc board. During seating, the center plate enters the card slot of the connector power module, and the flat rock block sits on the housing of the signal module. The side plates feature blades that enter the contact cavities of the power module. Together, the center plate and side plates support the power contacts and prevent them from pushing out of the connector.

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 seating tool to the contacts, and to protect the pc board and connector from damage. Design the pc board support fixture for specific needs using the following recommendations:

- it should be at least 25.4 mm [1.0 in.] wider than the pc board

— it should have a flat surface with a cutout or holes to allow adequate clearance for the contacts



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

3.2. Application Tooling

Power for seating tools must be provided by application tooling (with a ram) capable of supplying a maximum downward force of 37.8 Newtons (N) [8.50 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.tycoelectronics.com/pressfit.asp>.

4. SEATING

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

- the seating tool must be matched to the connector
- the seating tool, connector, and applicator ram must be properly aligned before cycling the application tooling

Proceed as follows:

1. Place the pc board on the pc board support fixture. See Figure 2.
2. Place the connector on the pc board so that the contacts are aligned and started into the matching holes in the pc board.
3. Position the seating tool over the connector so that the side blades align with the contact cavities of the power module and the alignment feature straddles the signal module. Then lower the seating tool onto the connector until the seating tool bottoms on the connector.
4. Center the seating tool (with the connector) under the ram of the application tooling. Lower the ram slowly until it just meets the seating tool. Verify alignment of pc board support, pc board, connector, and seating tool. See Figure 2.



Damage to the pc board, seating tool, or connector may occur if the seating tool is not properly seated in the connector before cycling the application tooling.

Note: Not to Scale

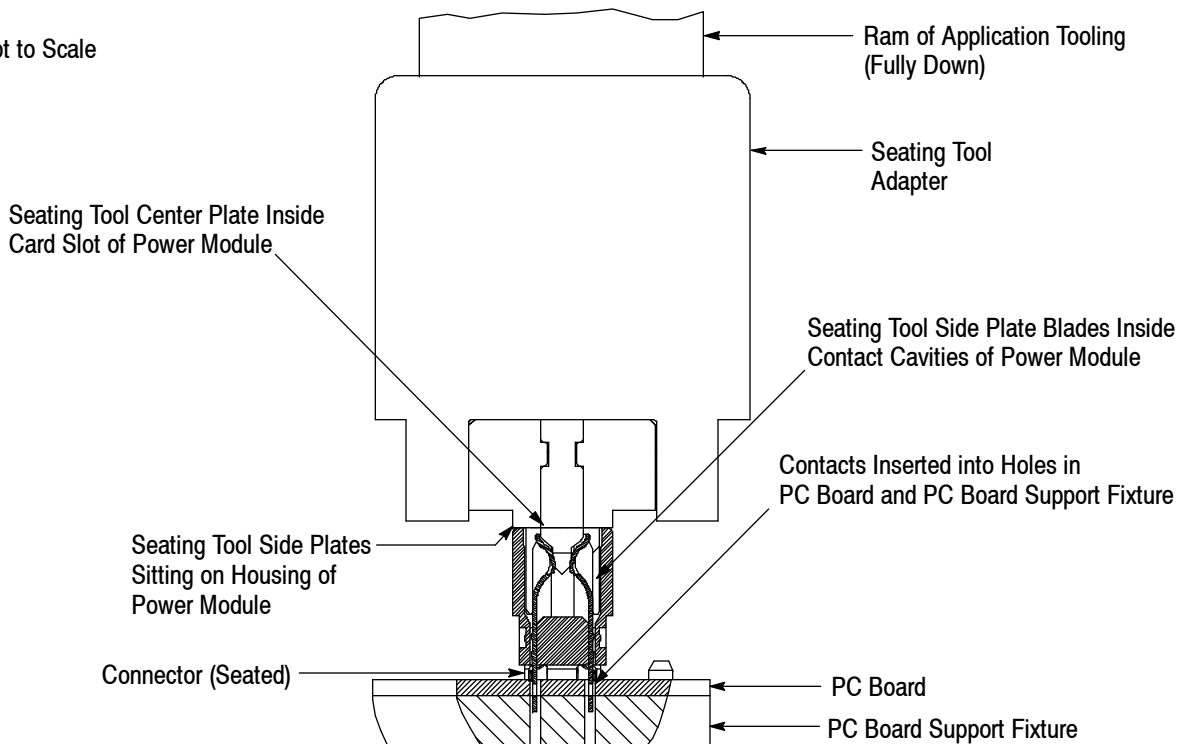


Figure 2

5. Cycle the application tooling to seat the connector on the pc board. Then retract the ram and carefully remove the seating tool by pulling it straight from the connector.
6. Check assembly for proper seating according to the following:
 - a. the connector standoffs are fully seated on the pc board
 - b. the widest section of each compliant pin is inside its intended pc board hole

5. MAINTENANCE AND INSPECTION

The seating tool is assembled and inspected before shipment. It is recommended that the seating tool be inspected immediately upon arrival at your facility to ensure that the seating tool has not been damaged during shipment, and that the seating tool conforms to the dimensions provided in 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 components.

2. When the seating tool is not in use, store it 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 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.

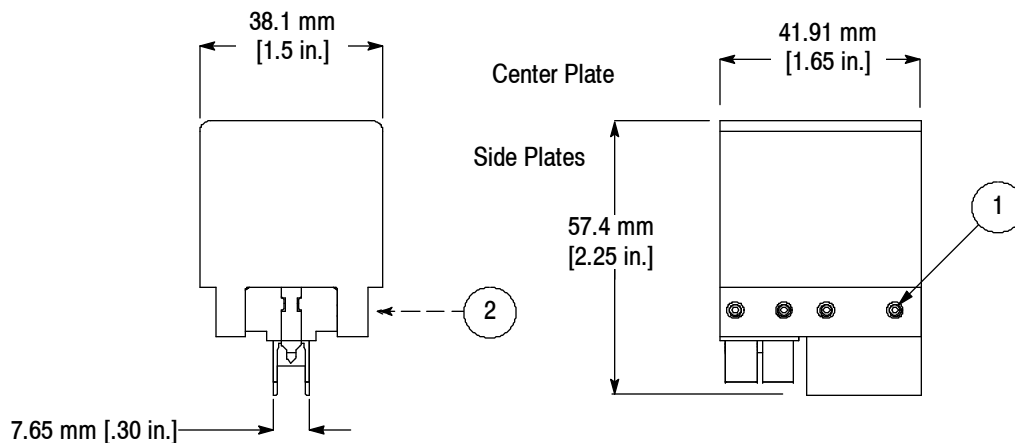
6. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 3. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by Tyco Electronics Corporation to ensure quality and reliability. Order replacement parts 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

- Initial release of instruction sheet



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	2-21006-1	SCREW SET, Cup Point, 4-40 × .250	4
2	1-21002-9	SCREW, Button Socket Head Cap, 6-32 × .625	1

Figure 3