

Seating Tool 535072-1 for Type C Eurocard Receptacle Connectors With ACTION PIN\* Contacts **408–9623** 14 JUN 11 Rev E





# **1. INTRODUCTION**

Seating Tool 535072-1 is used to seat Type C Eurocard receptacle connectors with ACTION PIN contacts onto the pc board. Read these instructions carefully before using the seating tool.

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



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

## 2. DESCRIPTION (Figure 1)

The seating tool features a push plate, stabilizers, and side plates. The push plate, located at the top of the tool, provides the bearing surface for the application tooling, which supplies the force to push the contacts into the pc board holes. The side plates hold 3 rows of 32 rectangular blades which push on the respective connector contacts. The side plates fit over the connector body to align the components for proper seating.

#### 3. REQUIREMENTS

#### 3.1. PC Board Support (Customer Supplied)

A pc board support must be used to provide proper support for the pc board and to protect the pc board and connector from damage. Design the pc board support fixture using the following recommendations:

- it should be larger than the pc board by approximately 25.4 mm [1 in.] around all edges of the pc board
- it should have a flat surface with a cutout at least deep enough to allow adequate clearance for the contact tails

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## 3.2. Application Tooling

The seating tool is designed for use with an applicator assembly, or similar manual machine with sufficient ram surface and the capability of applying a maximum insertion force of 178 N [40 lbs] per contact. A pneumatic machine can also be used, provided the equipment has positive shut-height stops.

## 3.3. Seating Height

The seating height—the distance from the bottom surface of the ram to the top of the pc board when the ram is fully DOWN—must be set at the dimension given in Figure 2 before starting the seating procedure. The shut height equals the seating height plus the combined thickness of the pc board and pc board support fixture. See Figure 2.

## 4. SEATING PROCEDURE

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

— make sure that the number of rows and positions in the connector is identical to the number of rows and position of rectangular blades of the seating tool (refer to Figure 1)

— be sure that the seating tool and connector are properly aligned and set (refer to Figure 2) before cycling the application tooling



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

After the tool has been installed and the equipment has been set up with the pc board support fixture in place, proceed as follows:

1. Place the pc board with the proper hole pattern onto the pc board support fixture.

2. Insert the contacts of the connector into the pc board holes until the compliant pin area of each contact starts to enter its pc board hole.

3. Position the side plates of the seating tool over the connector to be seated.

4. Center the seating tool and connector under the push surface of the ram.

5. Lower the ram slowly and verify the alignment of the seating tool to the connector.

6. Apply force to the push plate of the seating tool to seat the connector onto the pc board.

7. Manually retract the ram, and carefully remove the seating tool.

8. Continue seating connectors as described until all connectors have been seated.



Figure 2



# 5. MAINTENANCE AND INSPECTION

#### 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 other contaminants with a clean, soft brush or lint-free cloth. DO NOT use objects that could damage the rectangular blades or other tool components.

2. Ensure that the proper screws and rectangular blades are in place and secured.

3. When the seating tool is not in use, store it in a clean, dry area.

#### 5.2. Periodic Inspection

The seating tool is assembled and inspected before shipment. Inspect the seating tool immediately upon arrival to ensure that it has not been damaged during shipment.

Thereafter, 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. The inspection frequency should be based on the amount of use, working conditions, operator training and skill, and established company standards.

#### 6. REPLACEMENT AND REPAIR

The parts for the seating tool shown 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

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

#### 7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Changed company logo
- Updated instruction sheet to corporate requirements
- Removed obsolete seating tools
- Changed "housing" to "side plates"
- Added pc board support fixture and part numbers of customer-replaceable parts to Figure 1
- Added requirements for pc board support fixture to Paragraph 3.1
- Changed "push pins" to "rectangular blades" in Section 4 and Paragraph 5.1
- Replaced address for returning tools for evaluation and repair with customer repair service phone number