

Seating Tool Assembly 1367607-1 For X2 Guide Rail Assemblies







1. INTRODUCTION

Seating Tool Assembly 1367607-1 is used to seat an X2 guide rail assembly (reference part number 1367610-1) having compliant pin contacts onto the pc board. Read these instructions carefully before using the tool.



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 8, REVISION SUMMARY.

2. DESCRIPTION

The seating tool features a flat surface at the top, a notch at one end, and a series of grooves on the bottom. The flat surface accepts the force applied by

the application tool to seat the guide rail assembly onto the pc board. During seating, the notch ensures proper alignment of the guide rail assembly in the seating tool, and the grooves stabilize the legs of the guide rail assembly. See Figure 1.

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 the guide rail assembly from damage. The support fixture must be designed for specific needs using the following recommendations:

- it should be at least 25.4 mm [1.0 in.] longer and wider than the pc board
- it should have flat surfaces with holes or a channel large enough and deep enough to receive any protruding components of the guide rail assembly

TOOLING ASSISTANCE CENTER 1-800-722-1111 PRODUCT INFORMATION 1-800-522-6752 This controlled document is subject to change. For latest revision and Regional Customer Service, visit our website at **www.tycoelectronics.com**

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3.2. Application Tool

Power for the seating tool must be provided by an application tool (with a ram) capable of supplying a maximum downward force of 1600 N [360 lb-force]. For available application tools, call PRODUCT INFORMATION at the number at the bottom of page 1.



Maximum force occurs prior to the guide rail assembly bottoming on the pc board. Over-driving of the guide rail assembly (applying a force greater than 2400 N [540 lb-force]) may cause distortion to the guide rail assembly.

4. SETUP

When setting up equipment to seat the guide rail assembly, pay particular attention to the alignment of the seating tool, guide rail assembly, and application tool ram before cycling the application tool.



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

1. Set tool seating height to the dimension shown in Figure 2 (application tool *shut height* will equal the tool 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 guide rail assembly standoffs and the pc board is allowed.



Use the tool 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 guide rail assembly and the pc board.

5. SEATING

1. Place the pc board on the support fixture.

2. Place the legs of the guide rail assembly (with the contacts facing up) in the grooves of the seating tool so that the gasket end of the guide rail assembly is aligned with the notched end of the seating tool. Make sure that the stabilizing tabs of the seating tool are seated on the floor of the seating tool. Refer to Figure 3.

3. Place the seating tool (with the guide rail assembly) on the pc board so that the contacts are aligned and started into the matching holes in the pc board.

4. Place the seating tool (with the guide rail assembly) on the pc board so that the contacts are aligned and started into the matching holes in the pc board.

5. Center the seating tool (with the guide rail 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, guide rail assembly, and seating tool.



Damage to the pc board, seating tool, or guide rail assembly may occur if the seating tool is not properly seated on the guide rail assembly before cycling the application tool.

6. Cycle the application tool to seat the guide rail assembly on the pc board. Refer to Figure 2. Then retract the ram, and carefully remove the seating tool by pulling it straight from the guide rail assembly.



Figure 2



7. Check assembly for proper seating according to the following:

a. the widest section of each compliant pin is inside its intended pc board hole

b. if present, the gap between the guide rail assembly standoffs and the pc board is no more than 0.10 mm [.004 in.]

6. 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 it has not been damaged during shipment, and that it conforms to the dimensions provided in Figure 4.

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 components.

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



Seating Tool Assembly Dimensions

Figure 4

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

7. ORDERING INFORMATION

Order seating tools 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

8. REVISION SUMMARY

Revisions to this instruction sheet include:

• Updated document to corporate requirements