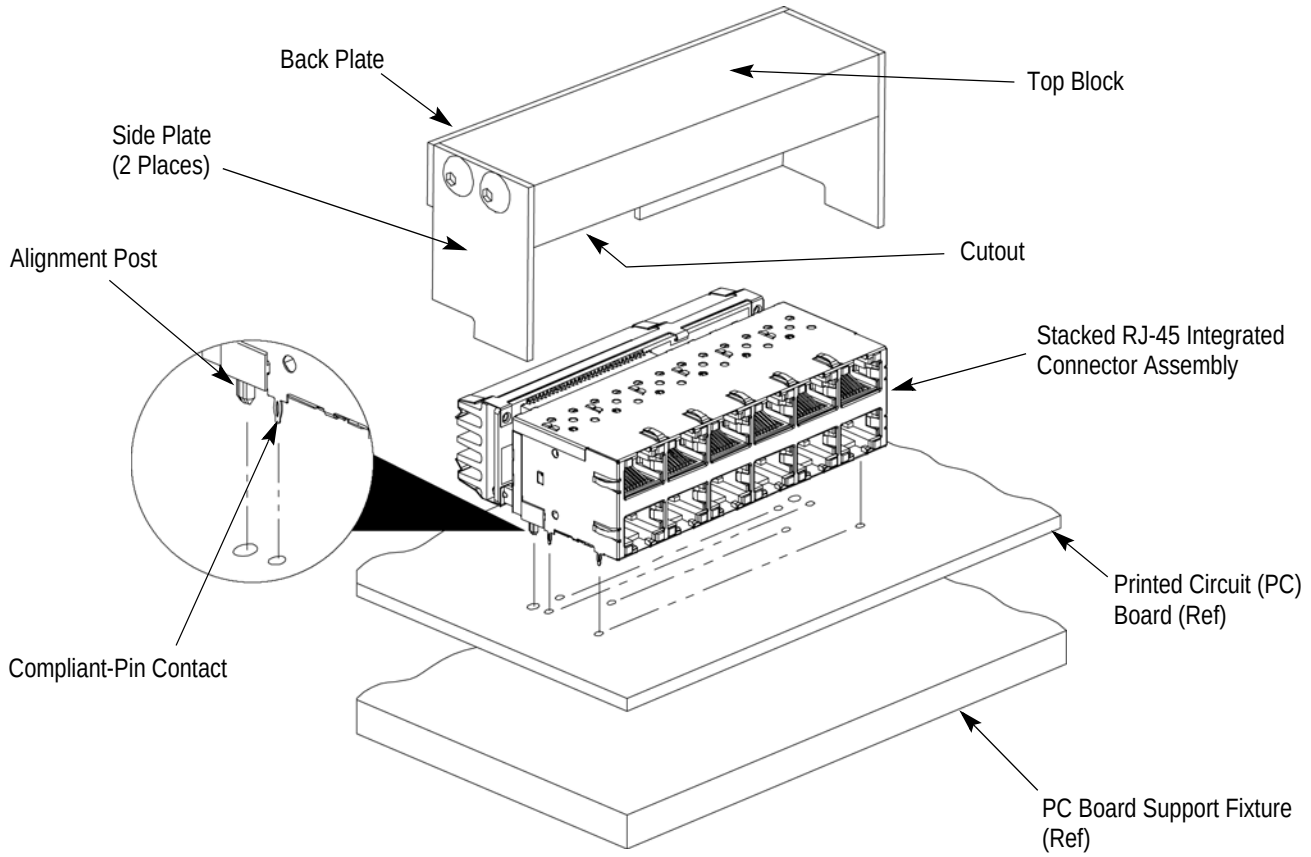


Figure 1

1. INTRODUCTION

Seating Tool Assembly 1213670-1 is used to seat a stacked RJ-45 integrated connector assembly (reference part number 1658821-1) having compliant pin contacts and alignment posts onto the pc board. Refer to Application Specification 114-13147 for description of connector assembly.

NOTE

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.

2. DESCRIPTION

The seating tool consists of a top block, two side plates, and a back plate. The back plate has a cutout designed to accept the power-over-ethernet (PoE) chip set of the connector assembly during seating of the connector assembly. See Figure 1.

The top block provides a surface to accept the force applied by the application tool to seat the connector assembly onto the pc board. During seating, the top block and side plates protect the connector assembly, and the back plate supports the back of the connector 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 the connector and connector 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 connector assembly

3.2. Application Tool

Power for seating tools must be provided by an application tool (with a ram) capable of supplying a downward force of 44.5 N [10 lb-force] per contact.

For available application tools, call PRODUCT INFO at the number at the bottom of page 1.

CAUTION

Over-driving of the connector assembly will deform parts critical to the quality of the connection. Maximum force occurs prior to the connector assembly bottoming on the pc board.

4. SETUP

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

CAUTION

If the seating tool and connector assembly are improperly aligned, damage could occur to the tooling, connector 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 connector assembly standoffs and the pc board is allowed.

NOTE

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 connector assembly and the pc board.

5. SEATING (Figure 2)

1. Place the pc board on the support fixture.

2. Orient the seating tool over the connector assembly so that the back plate is aligned with the back of the connector assembly and the cutout is aligned with the PoE chip set. Then lower the seating tool until it bottoms on the connector assembly.

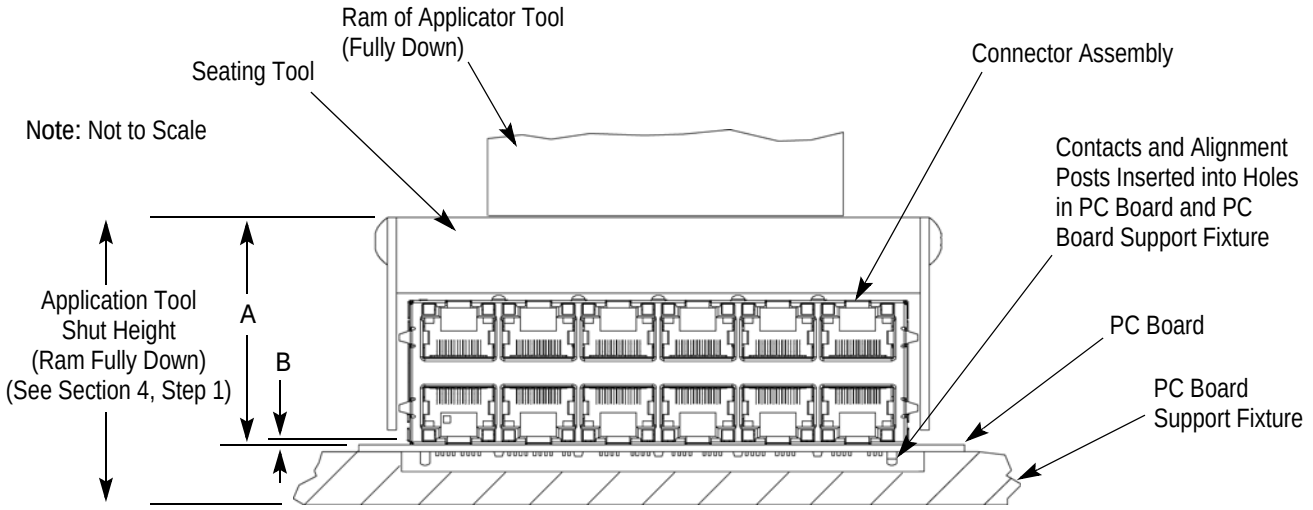
3. Place the connector assembly on the pc board so that the contacts and alignment posts are aligned and started into the matching holes in the pc board.

4. Center the seating tool (with the connector 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, connector assembly, and seating tool.

CAUTION

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

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



DIMENSION A Tool Seating Height (With Connector Assembly Seated)	DIMENSION B Maximum Gap Allowed
37.92 mm [1.493 in.]	0.10 mm [.004 in.]

Figure 2

6. 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. each connector alignment post is in its intended pc board hole

c. the connector assembly is seated on the pc board with a seating height of 25.22 mm [.993 in.] measured from the top of the connector assembly (not including the panel ground springs) to the top of the pc board

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

NOTE

For detailed application requirements of the connector assembly, refer to Application Specification 114-13147.

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 3.

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.

6.2. Periodic Inspection

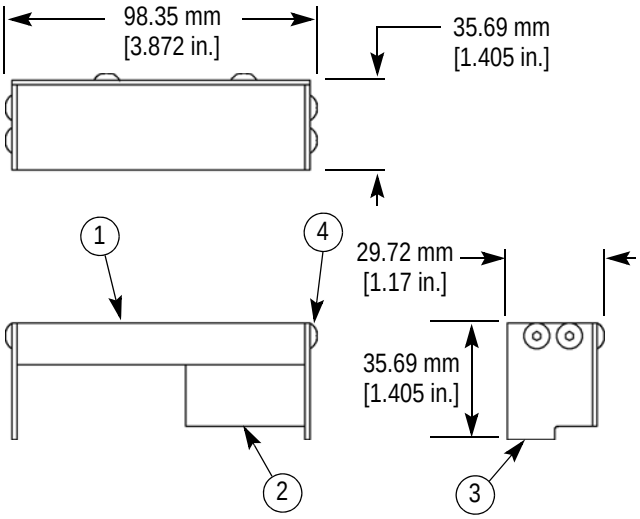
Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the seating tool or be supplied to personnel responsible for the seating tool assembly. Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.

7. 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 TE Connectivity 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

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



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	1213667-1	BLOCK, Top	1
2	1213669-1	PLATE, Back	1
3	1213668-1	PLATE, Side	2
4	2-21002-1	SCREW, Button Head Socket Cap, 8-32 X .375 in.	

Figure 3

8. REVISION SUMMARY

Since the previous version of this document, the following changes were made:

- Updated document to corporate requirements.