

Figure 1

# 1. INTRODUCTION

Removal Tool Assembly 1213660-1 is used to remove a stacked RJ-45 integrated connector assembly (reference part number 1658821-1) having compliant pin contacts and alignment posts from the pc board. Refer to Application Specification 114-13147 for description of connector assembly.



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

Each removal tool consists of a top block, base block, pin holder, locating pins, pins, and special pins. See Figure 1.

The top block provides a surface to accept the force applied by the application tool to remove the connector from the pc board. The locating pins (which protrude from the bottom of the base block) are used to properly align the removal tool with the connector.

During removal, the base block adjusts to accommodate the thickness of the pc board (the contacts may or may not protrude from the pc board), and the pins and special pins are forced through the holes in the base block, onto the contacts, and through the holes in the pc board.

# 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 from damage. The board support fixture must be designed for specific needs 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 removal tool must be provided by application tools (with a ram) capable of supplying a downward force of 44.5 N [10 lb] per contact. For available application tools, call PRODUCT INFO at the number at the bottom of page 1.



Over-driving of the connector could cause damage to the pc board.

#### 4. USING THE TOOL

- 1. Place the pc board (with the connector) upsidedown on the pc board support. Refer to Figure 2.
- 2. Carefully position the removal tool onto the pc board so that locating pins fit over the alignment posts of the connector.



To avoid damage to the pc board, DURING REMOVAL ALL pins and special pins must enter a pc board hole.

3. Center the removal tool (with connector, pc board, and support fixture) under the ram of the application tool. Slowly lower the ram until it just meets the removal tool. Verify alignment of support fixture, pc board, connector, and removal tool.



Damage to the pc board or connector may occur if the removal tool is not properly aligned with the ram before cycling the application tool. 4. Cycle the application tool to remove the connector from the pc board. Then retract the ram, and carefully remove the removal tool from the pc board.

### 5. MAINTENANCE AND INSPECTION

The removal tool is assembled and inspected before shipment. It is recommended that the removal 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.

# 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 removal tool components.
- 2. When the removal 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 removal tool or be supplied to personnel responsible for the removal tool. Inspection frequency should be based on amount of use, working conditions, operator training and skill, and established standards.

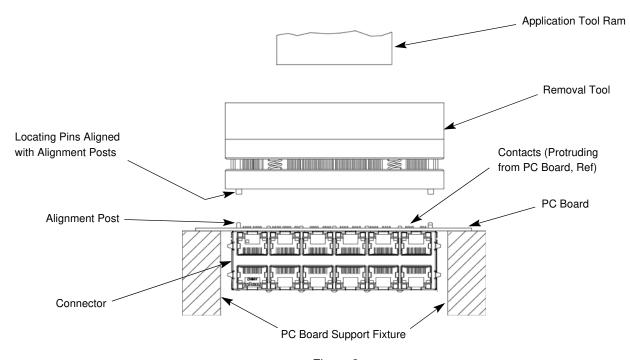


Figure 2

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# 6. REPLACEMENT AND REPAIR

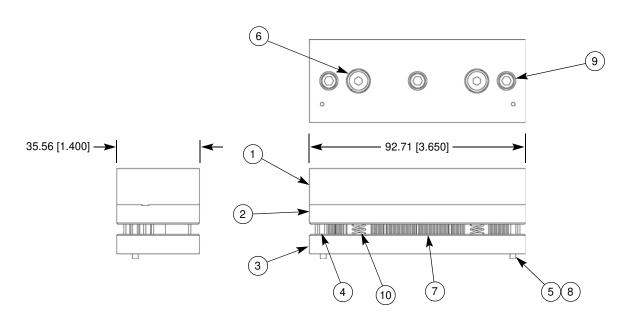
Customer-replaceable parts are listed in Figure 3. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by TE Connectivity to ensure quality and reliability. Order replacement parts through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

### 7. REVISION SUMMARY

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

• Updated document to corporate requirements.



REPLACEMENT PARTS			
ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	1213661-1	TOP BLOCK	1
2	1213662-1	PIN HOLDER	1
3	1213663-1	BASE BLOCK	1
4	1213664-1	PIN, .037 X .700 in.	15
5	1213665-1	PIN, Locating	2
6	1213666-1	SCREW, Modified Shoulder	2
7	1725479-1	PIN, Special	170
8	22278-5	SPRING, Compression	2
9	2-21000-7	SCREW, Socket Head Cap, 8-32 X .50 in. L	3
10	6-22282-1	SPRING, Compression	2

Figure 3

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