

NOTE: Connector Not Shown

Seating Tool Kit Part Number	Cage Assembly Configuration	Application Specification
2215084-1	1 X 1 (SFP+)	114-13120
2215084-2	1 X 1 (SFP+)	
2215084-3	1 X 1 (SFP+)	
2215084-4	1 X 1 (SFP)	
2215084-5	1 X 1 (SFP)	
2215084-6	1 X 1 (SFP)	

Figure 1

1. INTRODUCTION

SFP/SFP+ surface mount PT cage assembly seating tool kits listed in Figure 1 are used to seat the cage assemblies¹ described in Figure 1 onto the pc board. The cage assembly contains compliant pin contacts to allow solderless pc board installation.

i NOTE
 Read these instructions thoroughly before using the seating tool kit.

i NOTE
 Dimensions on this sheet are in millimeters [with inches in brackets]. Illustrations are for reference only and are not drawn to scale.

¹ PN 2215084-[] seating tool kits are designed to seat ONLY the cage assemblies; NOT the connectors.

2. DESCRIPTION (Figure 1)

Each PN 2215084-[] seating tool kit consists of a seating tool assembly and a wall support.



NOTE

The seating tool and wall support can be purchased separately.

The seating tool has cutouts (two located on each side) to accept the protruding part of the standoffs of the cage assembly. The wall support fits into the ports of the cage assembly.

The top of the seating tool provides a surface to accept the force applied by the application tool to seat the cage assembly onto the pc board. During seating, the back and sides of the seating tool protect the cage assembly from damage. The wall support provides rigidity to the ports of the cage assembly.

3. REQUIREMENTS

3.1. PC Board Support Fixture (Customer Supplied)

A pc board support fixture must be used under the pc board to protect the pc board, connector, and cage assembly from damage. The support fixture must be designed for the specific application, using the following recommendations. The pc board support fixture:

- ✦ Should be at least 25.4 mm [1 in.] longer and wider than the pc board
- ✦ Should have flat surfaces with holes or a channel large enough and deep enough to receive any protruding components of the product(s).

3.2. Application Tool

Power for seating tool kit 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.



NOTE

For information on the application tool(s) available, call PRODUCT INFORMATION at the phone number on the bottom of page 1.



CAUTION

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

4. SETUP

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

- ✦ The seating tool must be matched to the cage assembly



CAUTION

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

- ✦ Light pipes **MUST NOT** be assembled onto the cage assembly
- ✦ The wall support must be properly installed, and the seating tool, cage assembly, and application tool ram must be properly aligned before cycling the application tool

1. Set the *Tool Seating Height* to the dimension shown in Figure 2 (application *Tool Shut Height* will equal the *Tool Seating Height* + 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 cage 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 cage assembly and the pc board.

2. Slide the wall support into the ports of the cage assembly until the wall support is secure.

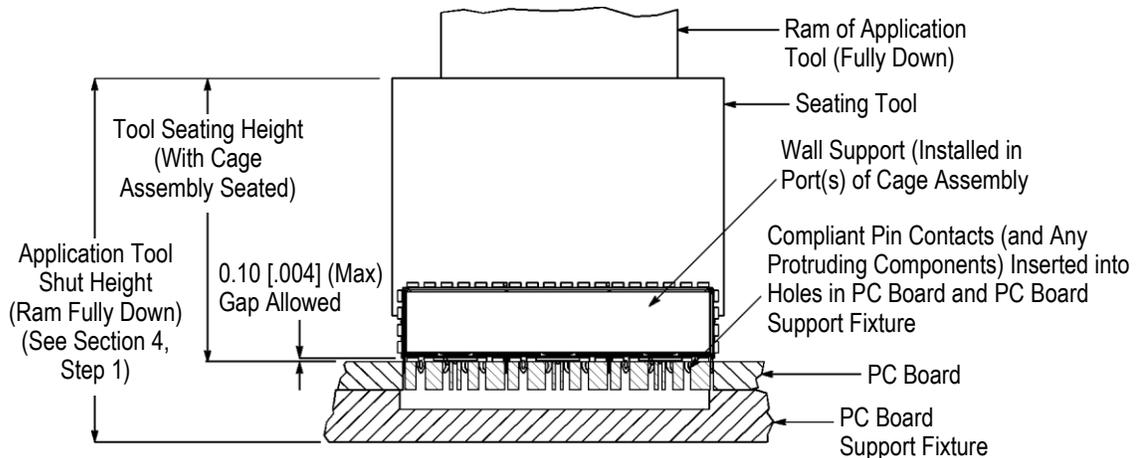


Figure 2

5. SEATING



NOTE

The connector must be mounted on the pc board BEFORE seating the cage assembly.

1. Place the pc board (with connector mounted) on the support fixture.
2. Orient the seating tool over the cage assembly so that the back of the tool is aligned with the back of the cage assembly. Lower the seating tool onto the cage assembly (ensuring the cutouts slide over the protruding components of the cage assembly) until the seating tool bottoms on the top of the cage assembly.
3. Place the cage assembly on the pc board so the contacts and alignment posts are aligned and started into the matching holes in the pc board.
4. Center the seating tool (with the cage 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 fixture, pc board, cage assembly, and seating tool.



CAUTION

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

5. Cycle the application tool to seat the cage assembly on the pc board. Retract the ram and carefully remove the seating tool by pulling it straight from the cage assembly.
6. Check the cage assembly for proper seating in accordance with the following:
 - a. The widest section of each compliant pin is inside its intended pc board hole.
 - b. Each alignment post is in its intended pc board hole.
 - c. If present, the gap between the standoffs and the pc board is not more than 0.10 [.004] (reference Figure 2).

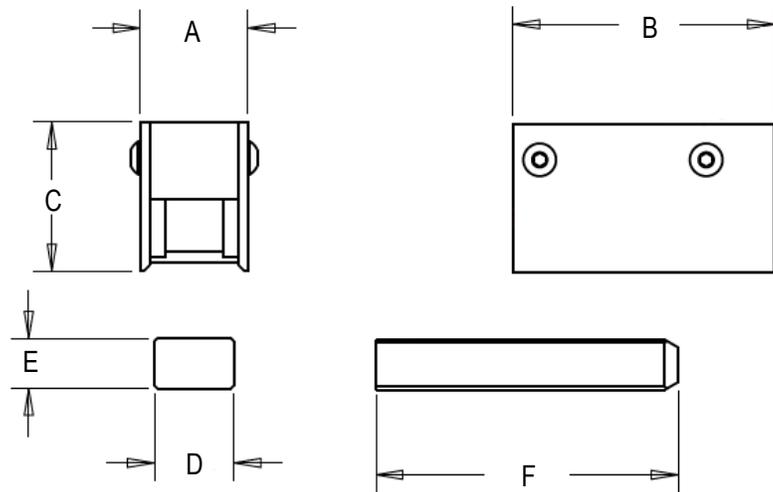


NOTE

For detailed application requirements of the cage assembly, refer to Application Specification 114-13120.

6. MAINTENANCE AND INSPECTION

The seating tool kit is assembled and inspected before shipment. It is recommended that the kit be inspected immediately upon arrival at the facility of use to ensure that it has not been damaged during shipment, and that it conforms to the dimensions provided in Figure 3.



SEATING TOOL KIT (BY CAGE ASSEMBLY CONFIGURATION)	DIMENSION					
	A	B	C	D	E	F
2215084-1	18.0 [.71]	44.0 [1.73]	25.0 [.98]	13.3 [.52]	8.4 [.33]	50.8 [2.00]
2215084-2	18.0 [.71]	44.0 [1.73]	27.3 [1.07]	13.3 [.52]	8.4 [.33]	50.8 [2.00]
2215084-3	18.0 [.71]	44.0 [1.73]	34.2 [1.35]	13.3 [.52]	8.4 [.33]	50.8 [2.00]
2215084-4	18.0 [.71]	44.0 [1.73]	25.0 [.98]	13.3 [.52]	8.4 [.33]	50.8 [2.00]
2215084-5	18.0 [.71]	44.0 [1.73]	27.3 [1.07]	13.3 [.52]	8.4 [.33]	50.8 [2.00]
2215084-6	18.0 [.71]	44.0 [1.73]	34.2 [1.35]	13.3 [.52]	8.4 [.33]	50.8 [2.00]

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 seating tool kit components.
2. When the seating tool and wall support are not in use, store in a clean, dry area.

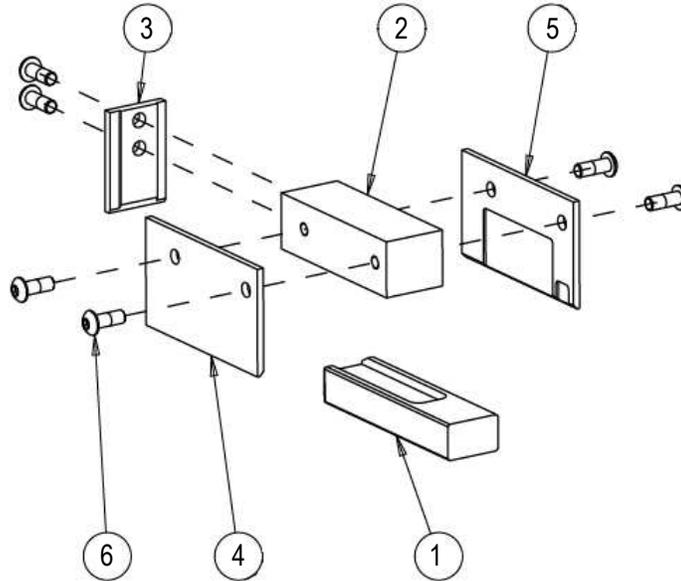
6.2. Periodic Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the seating tool kit or be supplied to personnel responsible for the kit. 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 4. 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 to ensure quality and reliability. Order replacement parts through your TE representative, call 1-800-526-5142, send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
 TE CONNECTIVITY CORPORATION
 PO BOX 3608
 HARRISBURG PA 17105-3608



REPLACEMENT PARTS								
ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY PER KIT 2215084-[]					
			-1	-2	-3	-4	-5	-6
1	2215818-4	Wall Support	1	1	1	1	1	1
2	2215872-1	Center Block	1	1	1	1	1	1
3	2215875-1	Rear Plate	1			1		
	2215875-4			1			1	
	2215875-5				1			1
4	2215874-1	Left Side Plate	1					
	2215874-2			1				
	2215874-3				1			
	2215874-4					1		
	2215874-5						1	
	2215874-6							1
5	2215873-1	Right Side Plate	1					
	2215873-2			1				
	2215873-3				1			
	2215873-4					1		
	2215873-5						1	
	2215873-6							1
6	18024-2	Screw, Btn. Head Cap	6	6	6	6	6	6

Figure 4

8. REVISION SUMMARY

Added Seating Tools 2215084-4, -5 and -6 for 1X1 SFP configuration. Made format and editorial changes throughout, including current TE Logo and changes to figures and locations of figures, as applicable.