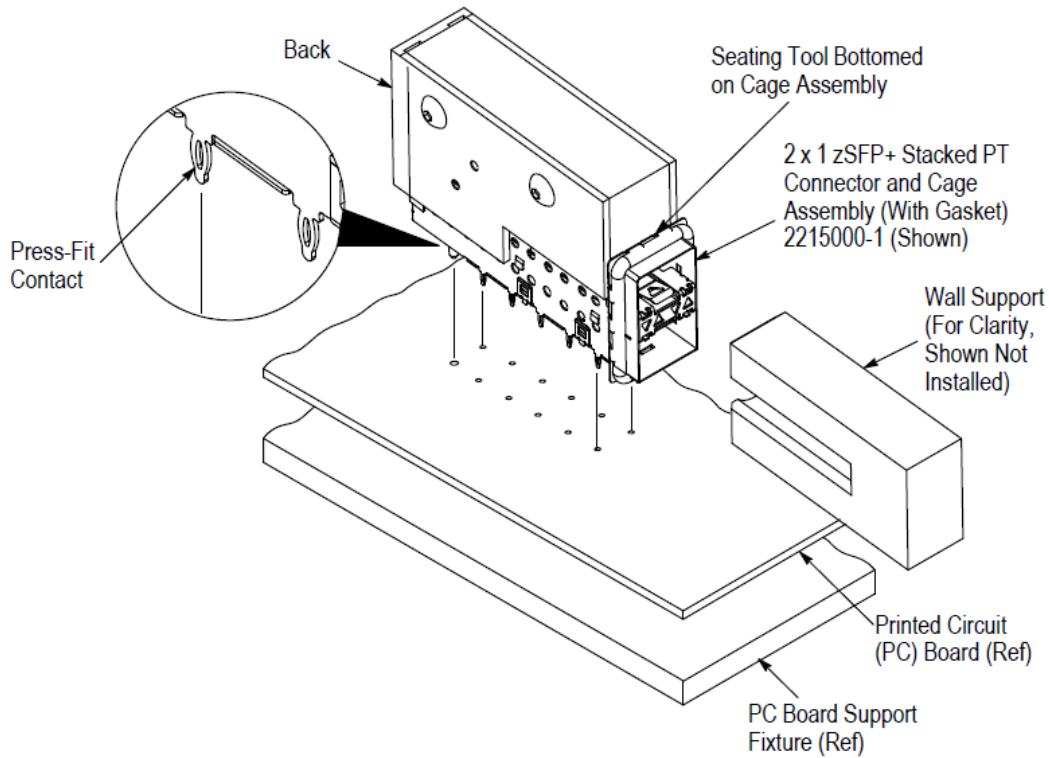


Typical Small Form-Factor Pluggable (zSFP+) Seating Tool Kit PN 2215000-[] for Stacked PT Connector



Seating Tool Kit PN	zSFP+ Connector and Cage Assembly Configuration	Seating Tool Kit PN	zSFP+ Connector and Cage Assembly Configuration
2215000-1	2 X 1	2215000-6	2 X 8
2215000-2	2 X 2	2215000-7	2 X 12
2215000-3	2 X 4	2215000-8	2 X 4
2215000-4	2 X 5	2215000-9	2 X 12
2215000-5	2 X 6		

Figure 1

1. INTRODUCTION

zSFP+ Seating Tool Kits (PN 2215000-[]) are used to seat the zSFP+ Stacked PT Connector and Cage configurations (see Figure 1) onto a pc board. The connector and cage assemblies contain press-fit contacts to allow solderless pc board installation.

i **NOTE**
Read these instructions thoroughly before using the Seating Tool kit.

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

2. DESCRIPTION

Each PN 2215000-[] Seating Tool kit consists of a seating tool 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 port(s) 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 connector and cage assembly onto the pc board. During seating, the back and sides of the seating tool protect the connector and cage assembly from damage; the wall support provides rigidity to the port(s) 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 connector and cage assembly and prevent the pc board from bowing.

3.2. APPLICATION TOOL

Power for the 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, contact PRODUCT INFORMATION at the phone number on the bottom of page 1.



CAUTION

Over-driving of the connector and 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 connector and cage assembly, pay particular attention to the following:

- The seating tool must be matched to the connector and cage assembly.



CAUTION

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

- The wall support must be properly installed, and the seating tool, connector and 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).

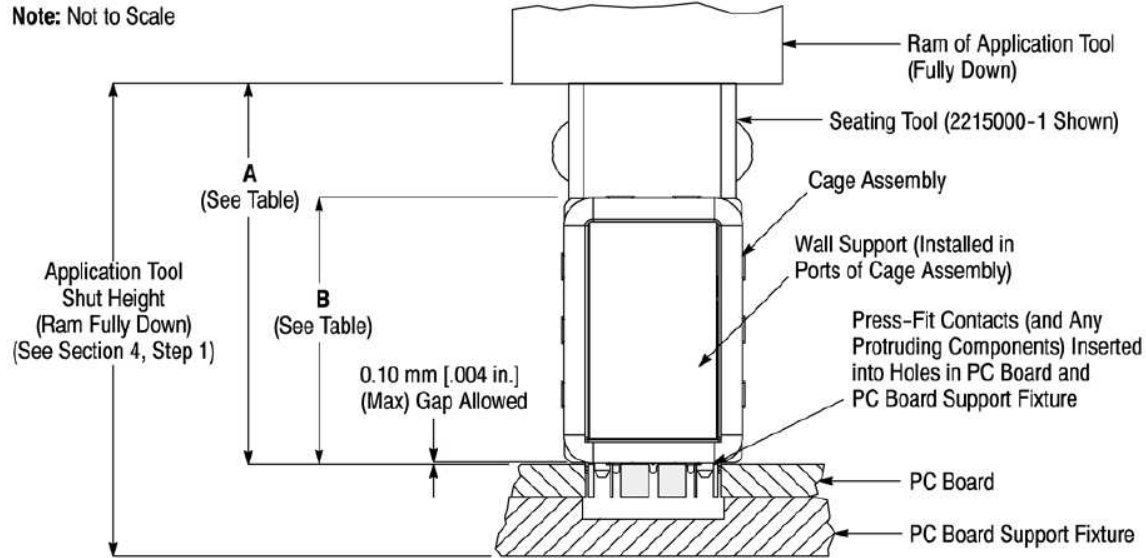
After seating, a gap of no more than 0.10 [.004] between the cage assembly standoffs and the pc board is allowed.



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 [.004]) between the standoffs of the cage assembly and the pc board.

2. Slide the wall support into the port(s) of the cage assembly until the wall support is secure.



DIMENSION "A" TOOL SEATING HEIGHT‡	DIMENSION "B" CAGE ASSEMBLY SEATING HEIGHT‡
40.64 mm [1.600 in.]	25.5 mm [1.004 in.]

‡With Connector and Cage Assembly Seated

Figure 2

5. SEATING

- Place the pc board on the support fixture.
- Orient the seating tool over the cage assembly so 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.
- Place the connector and cage assembly on the pc board so the contacts and alignment posts are aligned and started into the matching holes in the pc board.
- Center the seating tool (with the connector and 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, connector and cage assembly, and seating tool.



CAUTION

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

- Cycle the application tool to seat the connector and cage assembly onto the pc board. Retract the ram and carefully remove the seating tool by pulling it straight up from the cage assembly.
- Remove the wall support from the cage assembly.
- Check the connector and cage assembly for proper seating in accordance with the following:
 - The widest section of each compliant pin is inside its intended pc board hole.
 - Each alignment post is in its intended pc board hole.
 - The connector and cage assembly is seated on the pc board with a seating height (measured from the top of the cage assembly, not including the springs or elastomeric gasket, to the top of the pc board) identified given in Figure 2.
 - If present, the gap between the standoffs and the pc board is not more than 0.10 [.004].



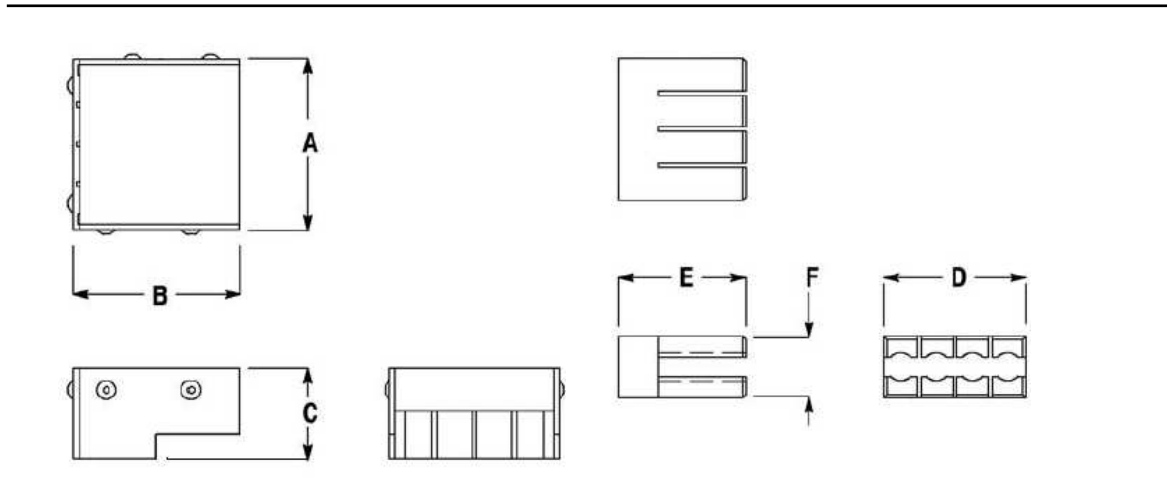
NOTE

For detailed application requirements of the connector and cage assembly, refer to the appropriate 114 Series Application.

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; PN 2215000-[]



Seating Tool Kit Part No.	Cage Assembly Configuration	Dimension mm [inch]					
		A	B	C	D	E	F
2215000-1	2 X 1	18.05 [0.711]	55.5 [2.185]	39.7 [1.563]	13.64 [0.539]	50.80 [2.000]	24.26 [.955]
2215000-2	2 X 2	32.3 [1.272]			27.89 [1.098]		
2215000-3	2 X 4	60.8 [2.394]			56.39 [2.220]		
2215000-4	2 X 5	75.05 [2.955]			70.64 [2.781]		
2215000-5	2 X 6	89.3 [3.516]			84.89 [3.342]		
2215000-6	2 X 8	117.8 [4.638]			113.39 [4.464]		
2215000-7	2 X 12	174.8 [6.882]			170.39 [6.708]		
2215000-8	2 X 4	60.8 [2.394]	59.5 [2.343]	56.39 [2.220]			
2215000-9	2 X 12	174.8 [6.882]	59.5 [2.343]	44.7 [1.76]	170.39 [6.708]		

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.

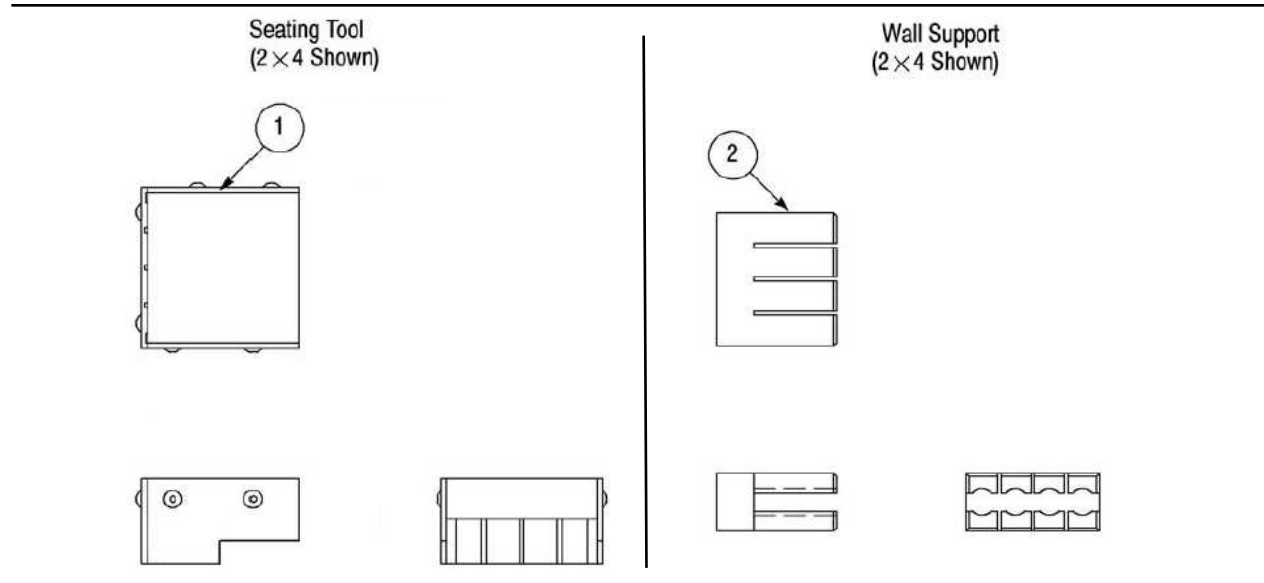
6.2. Periodic Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the tool or be supplied to personnel responsible for the tool. 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 Connectivity (TE) to ensure quality and reliability. Order replacement parts through your TE 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)
 TE CONNECTIVITY CORPORATION
 PO BOX 3608
 HARRISBURG PA 17105-3608



REPLACEMENT PARTS										
ITEM	Part Number for Kit and Cage Assembly Configuration									Qty Per Kit
	2215000-1 (2 X 1)	2215000-2 (2 X 2)	2215000-3 (2 X 4)	2215000-4 (2 X 5)	2215000-5 (2 X 6)	2215000-6 (2 X 8)	2215000-7 (2 X 12)	2215000-8 (2 X 4)	2215000-9 (2 X 12)	
1	2215200-1	2215205-2	2215205-1	2215208-1	2215208-2	2215208-3	2215208-4	2215205-3	2215208-5	1
2	2018289-1	2018286-1	2018284-1	2018805-1	2018292-1	2018801-1	2215316-1	2018284-1	2215316-1	1

Figure 4

8. REVISION SUMMARY

- Add Seating Tool Kits 2215000-8 and 2215000-9.
- Update to most current TE logo, enterprise name and corporate format.
- Separate previous Figure 3 into Figure 3 and Figure 4. Revise some dimensions in new Figure 3.