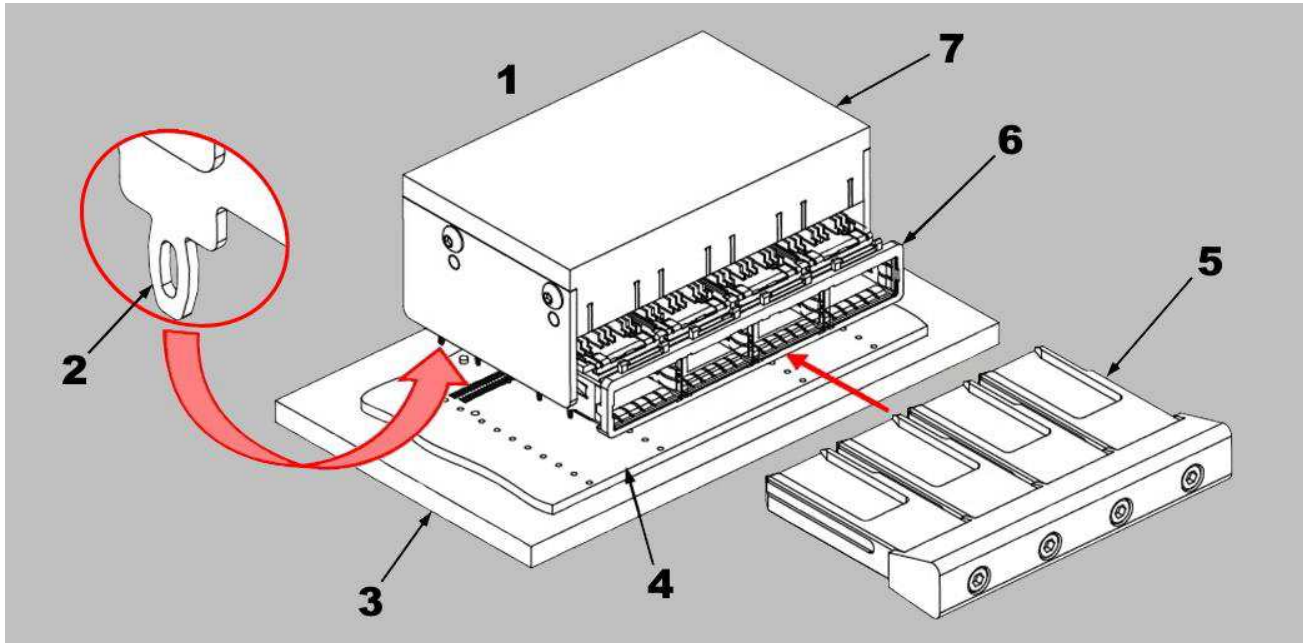


Figure 1: zSFP+ Cage Assembly Seating Tool 2185256-[]



- 1 Back of seating tool
- 2 Compliant pin contact
- 3 PC board support fixture (for reference)
- 4 Printed circuit board (for reference)
- 5 1 x 4 wall support (for clarity, not shown installed)
- 6 1 x 4 cage assembly
- 7 1 x 4 seating tool (bottomed on cage assembly)

Table 1: Part numbers

Seating tool kit part number	Cage assembly configuration	Cage assembly part number	Application specification
2185256-1	1 X 4	2312532-1	114-13120
2185256-2		2309976-1	
2185256-3		2309976-3	
		2309976-4	
2185256-4		2309976-6	

1. INTRODUCTION

The zSFP+ cage assembly seating tool shown in Figure 1 is used to seat the cage assembly onto the printed circuit (PC) board. The cage assembly contains compliant pin contacts to allow solderless PC board installation.



NOTE

Dimensions in this instruction sheet are in millimeters with [inches in brackets]. Figures are for reference only and are not drawn to scale.

Read these instructions thoroughly before using the seating tool kit.

2. DESCRIPTION

Each 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 wall support fits into the port 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 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 must:

- Be at least 25.4 mm [1 in.] longer and wider than the PC board.
- Have flat surfaces with holes (or a channel) large and deep enough to receive any protruding components of the products.

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 greater than that specified in the 108 series product spec or 114 series application spec.

**NOTE**

For information on the application tools available, contact Product Information at the phone number on the bottom of page 1.

**CAUTION**

Do not over-drive the connector. Doing so deforms parts that are critical to the quality of the connection.

4. SETUP

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

- The seating tool must be matched to the cage assembly.
- The wall support must be properly installed (if applicable).
- The seating tool, cage assembly, and application tool ram must be properly aligned before cycling the application tool.

**CAUTION**

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

**NOTE**

Refer to the applicable 114 series application specification (see Table 1) for seating requirements.

5. SEATING

1. Place the PC board on the support fixture.
2. Slide the wall support into the port of the cage assembly until the wall support is secure.
3. Place the cage 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. Orient the seating tool over the cage assembly so that the back of the tool is aligned with the back of the cage assembly.
5. Lower the seating tool onto the cage assembly (ensuring that the cutouts slide over the protruding components of the cage assembly) until the seating tool bottoms on the top of the cage assembly.
6. Center the seating tool (with the cage assembly) under the ram of the application tool.
7. Slowly lower the ram until it just meets the seating tool.
8. Verify the alignment of the PC board support fixture, PC board, cage assembly, and seating tool.



CAUTION

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

9. Cycle the application tool to seat the cage assembly onto the PC board.
10. Retract the ram and carefully remove the seating tool by pulling it straight up from the cage.
11. Remove the wall support by pulling it straight out of the cage assembly.
12. Check the cage assembly for proper seating in accordance with the product specification.



NOTE

For detailed application requirements of the cage, refer to the 114 series application specification (see Table 1).

6. MAINTENANCE AND INSPECTION

The seating tool kit is assembled and inspected before shipment. Inspect the kit immediately upon arrival at the facility of use to ensure that it has not been damaged during shipment.

6.1. Daily maintenance

Make each operator aware of, and responsible for, the following daily maintenance requirements:

- Remove dust, moisture, and other contaminants with a clean soft brush or soft lint-free cloth. **Do not** use objects that could damage the seating tool kit components.
- When the seating tool and wall support are not in use, store them in a clean, dry area.

6.2. Periodic inspection

Regular inspections should be performed by quality control personnel. Keep a record of scheduled inspections with the tool, or provide it to the personnel responsible for the tool. Determine your inspection frequency based on amount of use, working conditions, operator training and skill, and established standards.

7. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in the product drawing. Stock and control a complete inventory 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 TE representative. You can also order parts by any of the following methods:

- Go to TE.com and click the **Shop TE** link at the top of the page.
- Call 800-522-6752.
- Write to:

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

For customer repair services, call 800-522-6752.

8. REVISION SUMMARY

Revisions to this instruction sheet include:

- Added new part numbers to Table 1.
- Edited to update format and improve clarity.