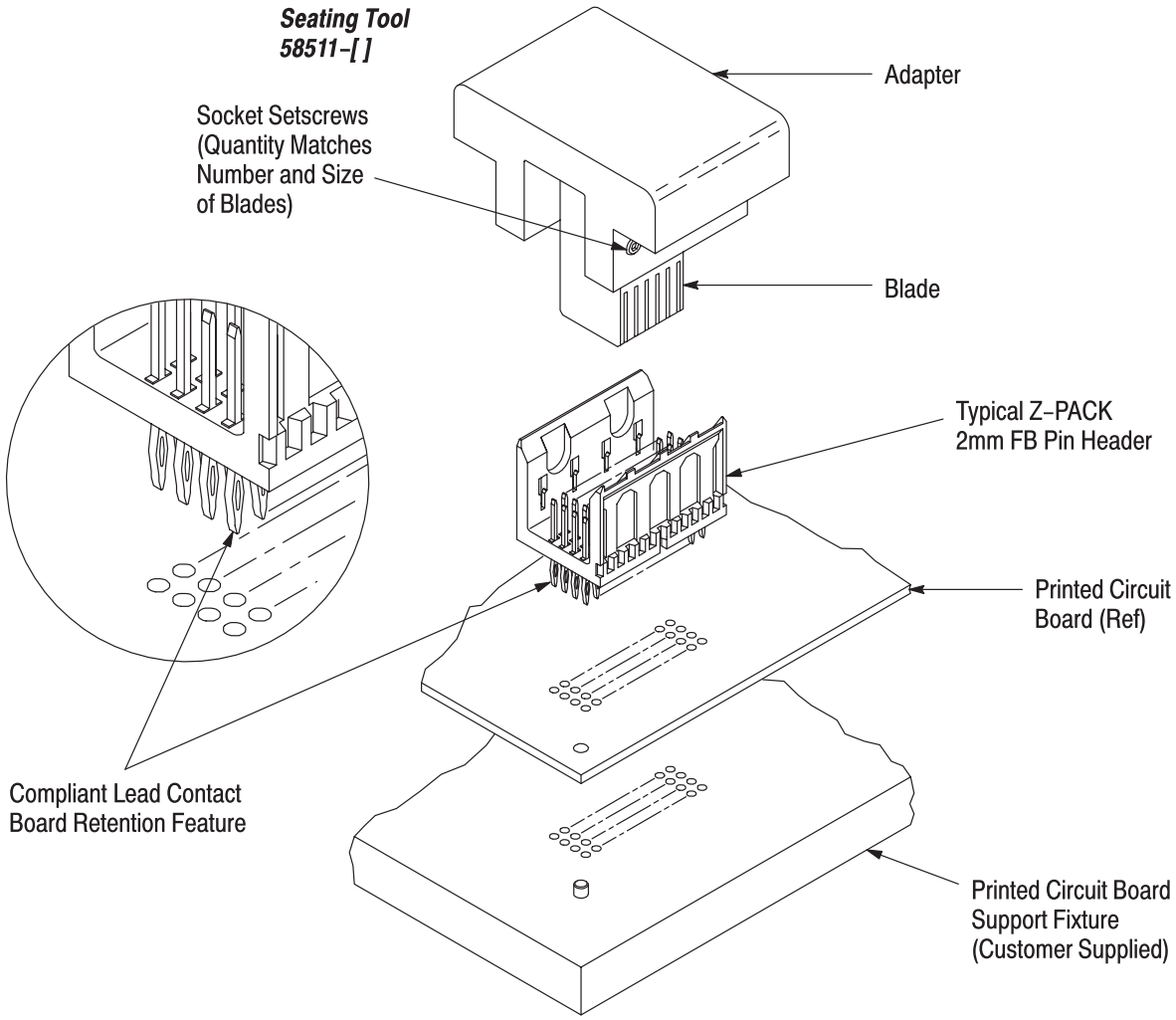


Figure 1

1. INTRODUCTION

This instruction sheet covers the use and maintenance of Seating Tools 58511–[ ]. See Figure 1. The tools are used to seat Z–PACK 2mm FB (Futurebus+) pin headers onto a printed circuit (pc) board. These headers contain compliant lead contacts to allow solderless pc board installation.

Read these instructions and understand them before using the seating tool.

NOTE

Dimensions on this sheet are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 8, REVISION SUMMARY.

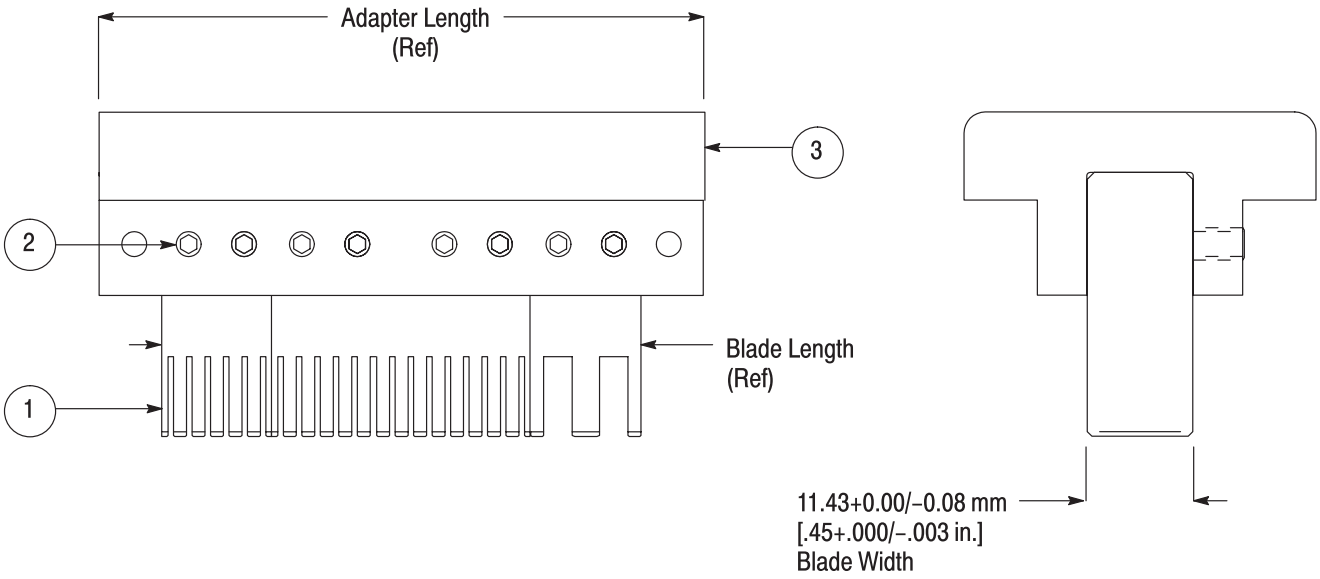
2. DESCRIPTION

Each seating tool is an assembly of one or more different length *blades* to one of five different length *adapters*. The choice of lengths allows you to build tools to seat any of the available pin header sizes. Figure 2 matches tool part number to the size of the pin header to be seated. The adapter straightens the header, during the cycle of the applicator ram, to provide proper insertion into the pc board. When seating the header, the blades are positioned over the contact shoulders to prevent damage to the contacts. Each tool is designed for a specific combination of contacts in a row and number of rows in a header.

During seating, the tool sits inside the header housing with the blades engaging the housing floor and contact shoulders, preventing contacts from pushing out of the housing.

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ITEM	PART NUMBER	DESCRIPTION (Length in mm [in.] +0.00/–0.10 [+.000/–.004])	QUANTITY FOR SEATING TOOL 58511–SUFFIX PART NUMBER / PIN HEADER SIZE▪																				
			-1 / 24S	-2 / 48S	-3 / 96S	-4 / 192S	-5 / 144S	-6 / 120S	-7 / 168S	-8 / 216S	-9 / 240S	-10 / 264S	-11 / 8P–192S	-12 / 8P–216S	-13 / 8P–144S	-14 / 72S	-15 / 16P–216S	-16 / 16P–192S	-17 / 8P–96S	-18 / 8P–120S	-19 / 8P–24S	-20 / 8P–48S	-21 / 8P–72S	-22 / 8P–216S–8P
1	354695–3	Blade 11.89 [.468]	1	2			2	1	3	1	2	3		1	2	3	1		4	1	1	2	3	1
	354695–4	Blade 47.88 [1.885]			1	2	1	1	1	2	2	2	2	2	1		2	2		1				2
	354697–1	Blade 11.89 [.468]											1	1	1		2	2	1	1	1	1	1	2
2	2–21012–8	Socket Setscrew 6–32 × .19 in.	4	4	5	4	10	4	7	7	10	10	7	10	7	5	10	10	10	10	4	5	5	10
3	354698–2	Adapter 50.80 [2.000]			1											1						1	1	
	354699–1	Adapter 95.25 [3.750]				1	1	1											1	1				
	354703–1	Adapter 25.40 [1.000]	1	1																	1			
	122430–7	Adapter 114.30 [4.500]							1	1			1		1									
	122430–8	Adapter 165.10 [6.500]									1	1		1			1	1						1

▪S – Signal P – Power

Figure 2

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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 alignment of the tool to the header pins, and to protect the pc board and header posts from damage. Design a pc board support fixture for your specific needs using the recommendations in Instruction Sheet 408–6927.

3.2. Application Tooling

The pin headers can be seated with an application unit capable of supplying a downward force of 102 Newtons (N) [23 lb] per contact. 10/20–Ton “H” Frame Assembly 803880–6 is capable of seating up to 1740 contacts; SM–3 Frame Assembly 814700–[ ] seats up to 261 contacts. For operating and setup procedure of the frame assemblies, refer to Customer Manual 409–5567 (“H” frame assembly) or 409–5626 (SM–3 frame assembly).

4. SEATING

1. Set seating height to the dimension shown in Figure 3 (applicator *shut height* will equal the seating height PLUS the combined thicknesses of the pc board and pc board support).

2. Position header into pc board so that header contacts are properly aligned to the board and board support.

3. Insert header into pc board until the compliant sections of the contacts are resting securely on, but have not fully entered, the pc board.

4. Position appropriate seating tool into header, making sure tool is bottomed on housing floor.

5. Center seating tool and header under the applicator ram of the power source; slowly lower ram until it just meets the seating tool. Verify the alignment of the board support, pc board, header, and seating tool.

CAUTION

Damage to the pc board, tool, or header may occur if the wrong size tool is used, if seating height is improperly set, or if tool is not properly seated in the header before cycling the applicator ram.

6. Cycle applicator ram according to instructions for the power source. Check assembly for proper seating, using the requirements in Figure 3.

NOTE

For additional information on inspection requirements, refer to Application Specification 114–1075.

7. Remove pc board and seated header, or reposition board and board support for seating additional headers.

View After Seating

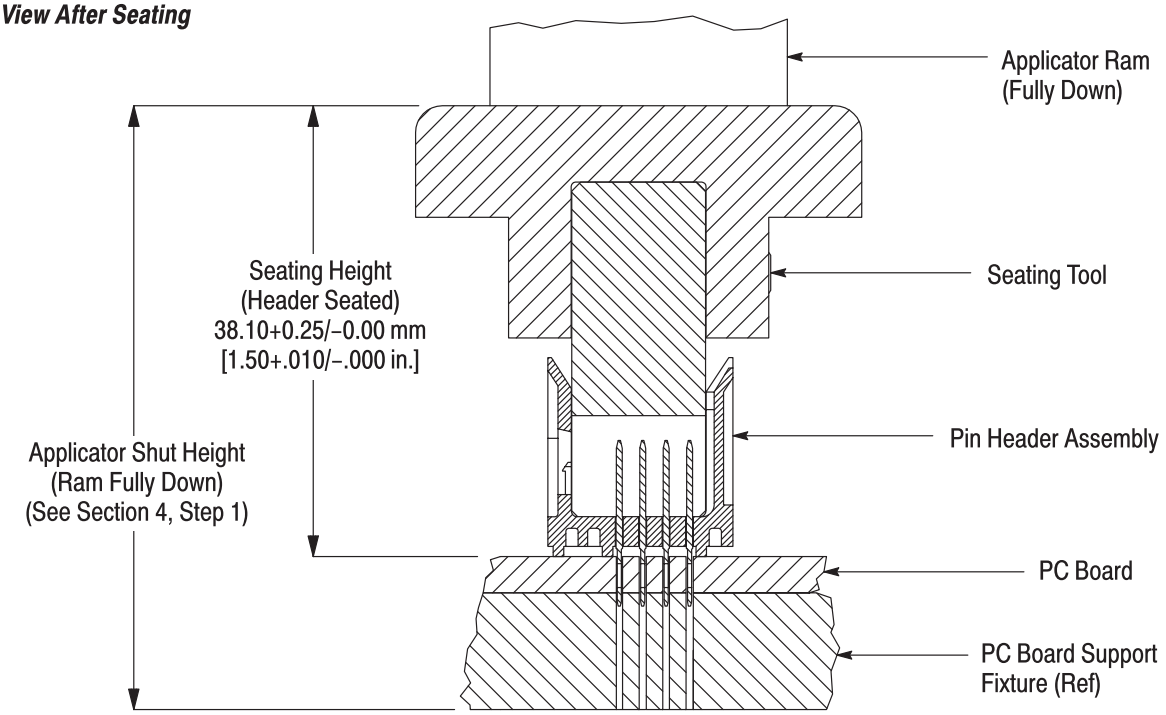


Figure 3

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5. TOOL INSPECTION

Each seating tool is assembled and inspected before shipment. We recommend that the tool be inspected immediately upon arrival at your plant to assure that it has not been damaged during shipment.

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

6. 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 other contaminants with a clean, soft brush, or lint–free cloth. Do NOT use objects that could damage the tool.

2. Ensure that the screws are in place and secured.

3. When the tool is not in use, store it in a clean, dry area.

7. REPLACEMENT AND REPAIR

The parts listed in Figure 1 are customer–replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your Tyco Electronics Representative, or call 1–800–526–5142, or send a facsimile of your purchase order to 717–986–7605, or write to:

CUSTOMER SERVICE (38–35)
TYCO ELECTRONICS CORPORATION
P.O. BOX 3608
HARRISBURG PA 17105–3608

Tools may be returned to Tyco Electronics for evaluation and repair. For tool repair service, contact a Tyco Electronics Representative at 1–800–526–5136.

8. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

- Updated document to corporate requirements
- Added new information for part number 2–58511–2 in table in Figure 2

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