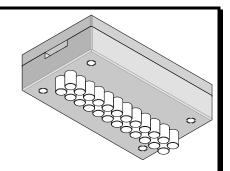


Mini-Fit BMI / CPI™ Flat Rock Insertion Tool Application Tooling Specification Order No. 62200-9400



FEATURES

- The Mini-Fit BMI / CPI™ Flat Rock Insertion Tool is designed to insert a Mini-Fit Compliant Pin Header Assembly into a printed circuit board.
- The customer must supply a suitable support fixture for the printed circuit board.
- Adjustable pins allow insertion of all circuit sizes of standard products and make-first-break-last (MFBL) products.

SCOPE

<u>Products:</u> 4.20mm (.165") Pitch Mini-Fit BMI / CPI™ Vertical Header Assembly, 43879 Series.

Product List

The following is a partial list of the product order numbers and their specifications this tool is designed to run. Updates to this list are available on www.molex.com.

43879 Series Number							
Circuits	Assembly Order Number						
04	43879-0022	43879-0033	43879-0044	43879-0055	43879-0066	43879-5000	
	43879-5011	43879-5022	43879-5033	43879-9901			
06	43879-0023	43879-0034	43879-0045	43879-0056	43879-0067	43879-5001	
	43879-5012	43879-5023	43879-5034	43879-4000	43879-6010	43879-9902	
10	43879-0025	43879-0036	43879-0047	43879-0058	43879-0069	43879-5003	
	43879-5014	43879-5025	43879-5036	43879-6001	43879-6002	43879-6003	
	43879-6007	43879-6011	43879-6013	43879-6014	43879-6015	43879-6016	
	43879-6021	43879-9904					
14	43879-0027	43879-0038	43879-0049	43879-0060	43879-0071	43879-5005	
	43879-5016	43879-5027	43879-5038	43879-6004	43879-6006	43879-6008	
	43879-6019	43879-6020	43879-6026	43879-6027	43879-9905		
18	43879-0029	43879-0040	43879-0051	43879-0062	43879-0073	43879-4001	
	43879-4002	43879-4003	43879-5007	43879-5018	43879-5029	43879-5040	
	43879-6000	43879-6005	43879-6009	43879-6012	43879-6017	43879-6018	
	43879-6025	43879-9903					
24	43879-0032	43879-0043	43879-0054	43879-0065	43879-0076	43879-5010	
	43879-5021	43879-5032	43879-5043	43879-6022	43879-7001		

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Description

The Insertion Tool consists of a backing plate, alignment pins, and a pin holder. This tool measures 55.0mm (2.17 in.) wide by 31.8mm (1.25 in.) deep by 19mm (.75 in.) high.

Operation (Standard Mini-Fit Headers)

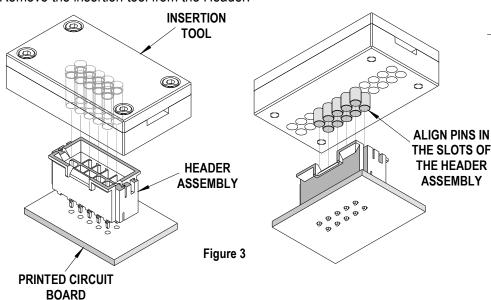
- 1. Remove the (4) M3 screws from the backing plate.
- 2. Remove the backing plate from the pin holder.
- 3. Add or remove alignment pins to make the number of pins in the pin holder equal the circuit size of the connector to be inserted (24 maximum). The group of pins remaining in the pin holder must be centered in the pin holder.
- 4. Replace the backing plate and replace the (4) screws.
- 5. Place the printed circuit board on the printed circuit board support fixture (provided by the customer).
- 6. Carefully position the header (connector) on the printed circuit board and start the terminals into the board.

Caution: There should be no components taller than the header assembly around the area of the header (connector); the Insertion tool could damage these components. See Figure 2 for details.

NOTE: This tooling is not polarized; therefore, the operator must make certain the Header assembly is correctly positioned on the board.

- 7. Position the assembled printed circuit board into the support fixture.
- 8. Place the insertion tool on top of the header aligning the pins in the slots of the header assembly. See Figure 3.
- 9. Lower the press ram onto the backing plate and apply just enough pressure to press the connector pins into the printed circuit board until Headers housing is seated on the board.
- 10. Remove the insertion tool from the Header.

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BACKING PLATE PIN HOLDER ALIGNMENT Figure 1 **PINS (24)**

31.80mm

DO NOT PUT ANY **COMPONENTS** TALLER THAN THE HEADER IN THE AREA AROUND THE **HEADER ASEMBLY** Figure 2

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55.00mm

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Operation (Mini-Fit Headers with Make-First-Break-Last Pins)

Certain Mini-Fit Headers have varying lengths of mating pins. In these cases, the alignment pin must be adjusted up or down.

- 1. Remove the (4) M3 screws from the backing plate.
- 2. Remove the backing plate from the pin holder.
- 3. Add or remove alignment pins to make the number of pins in the pin holder equal the circuit size of the connector to be inserted (24 maximum). The group of pins remaining in the pin holder must be centered in the pin holder.
- 4. Replace the backing plate and replace the (4) screws.
- 5. Look at the mating side of the Mini-Fit header and identify which contact pins are longer than the others. The longer pins are for Make-First-Break-Last (MFBL) mating.
- 6. The tool alignment pins that support the longer connector DOWN FOR STANDARD Figure 4 pins must be raised into the pin holder. To do this, loosen the M3 setscrew above the pin. Allow the setscrew to come up to the top of the backing plate (but not above the surface.). See Figure 4.

SETSCREW MUST

NOT PROTUDE ABOVE

THE BACKING PLATE

ALIGNMENT PIN

UP FOR MFBL

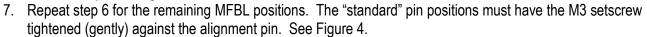
BACKING

PLATE

PIN

HOLDER

ALIGNMENT PIN



- 8. Place the printed circuit board on the printed circuit board support fixture (provided by the customer).
- 9. Carefully position the header (connector) on the printed circuit board and start the terminals into the board.

Caution: There should be no components taller than the header assembly around the area of the header (connector); the Insertion tool could damage these components. See Figure 2 for details.

NOTE: This tooling is not polarized; therefore, the operator must make certain the Header assembly is correctly positioned on the board.

- 10. Position the assembled printed circuit board into the support fixture.
- 11. Place the insertion tool on top of the header aligning the pins in the slots of the header assembly. See Figure 3.
- 12. Lower the press ram onto the backing plate and apply just enough pressure to press the connector pins into the printed circuit board until Headers housing is seated on the board.
- 13. Remove the insertion tool from the Header.

CAUTION: Molex application tooling specifications are valid only when used with Molex connectors and tooling.

Contact Information

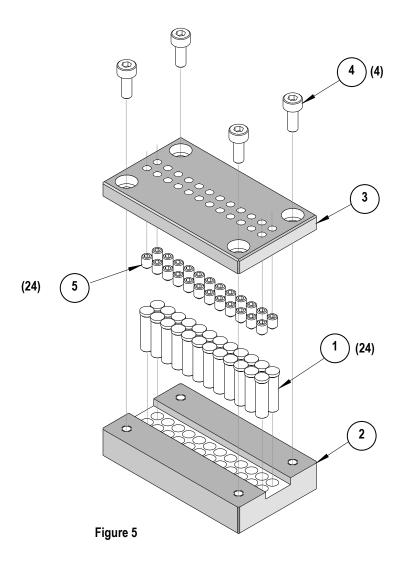
For more information on Molex application tooling please contact Molex at 1-800-786-6539.

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PARTS LIST

Mini-Fit CPI™ Flat Rock Insertion Tool 62200-9400							
Item Number	Order Number	Description	Quantity				
1	62200-9403	Alignment Pin	24				
2	62200-9401	Pin Holder	1				
3	62200-9402	Backing Plate	1				
4	N/A	M3 by 8 Long SHCS	4				
5	N/A	M3 by 4 Long SSS	24				



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