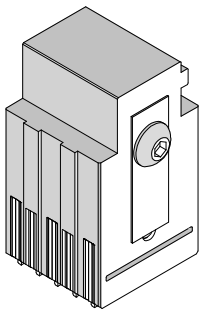
Impact™ Backplane Module Installation Press-In Tool

Application Tooling Specification Sheet



Order No. 62203-0580

FEATURES

- Polarized tool prevents product damage
- Tool provides uniform distribution of press force across entire pin array
- May be used as a stand-alone tool or mounted in an optional holder with other Molex press-in tools

SCOPE

Products: Impact™ 100 Ohm Vertical Orthogonal Backplane Signal Module Assembly, 76985 Series, (5-Pair by 10 Column Assemblies). See Product List below for specific part numbers.

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.

Guide Style	Columns	Assembly Order Number					
Open Wall	10	76985-0104	76985-0105	76985-0107	76985-0108	76985-1104	76985-1105
		76985-1107	76985-1108				
Dual End	10	76985-0124	76985-0125	76985-0127	76985-0128	76985-1124	76985-1125
		76985-1127	76985-1128				
Left End	10	76985-2104	76985-2105	76985-2107	76985-2108	76985-3104	76985-3105
		76985-3107	76985-3108	76985-6104	76985-6105	76985-6107	76985-6108
		76985-7104	76985-7105	76985-7107	76985-7108		
Right End	10	76985-4104	76985-4105	76985-4107	76985-4108	76985-5104	76985-5105
		76985-5107	76985-5108	76985-8104	76985-8105	76985-8107	76985-8108
		76985-9104	76985-9105	76985-9107	76985-9108		

Tool Setup

Depending on the number of connectors to be installed and/or the press used, this tool can be used alone or with a group of press-in tools, mounted in a 62201-95XX rail (ordered separately). See Figure 1.

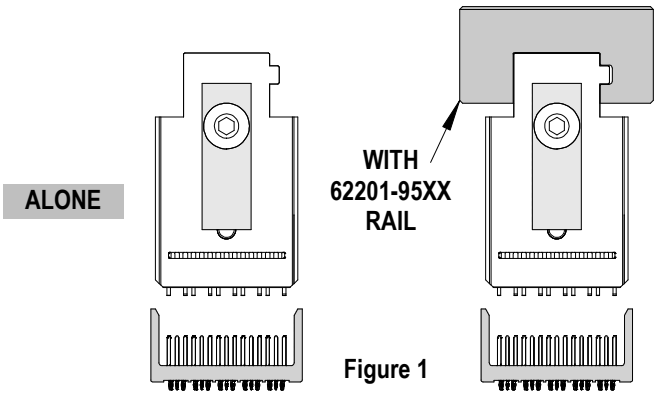


Figure 1

Tool Installation

The 62201-95XX rail is available in a variety of lengths to accommodate multiple press-in tools.

Rail Part Number	Rail Overall Length
62201-9501	24mm (0.94 in)
62201-9502	72mm (2.83 in)
62201-9503	156mm (6.14 in)
62201-9504	216mm (8.50 in)
62201-9509	254mm (10.0 in)
62201-9511	305mm (12.0 in)

Reference: This Press-In Tool is 20.95mm (0.82 In.) long.

Printed Circuit Board (PCB) Support

The Impact™ connectors require up to 3.6kg (8 lb) of force per pin to press into the PCB. To prevent excessive PCB flexure and/or damage to the PCB, a support plate is strongly recommended directly beneath the connector hole pattern.

Due to the custom nature of every application, Molex does not offer any PCB support plate. The customer must furnish their own support plate.

When creating the PCB support plate, remember to allow clearance for the connector pins as they pass through the PCB thickness.

Press Equipment Recommendations

Many types of presses can be used to install Impact™ connectors, but to assure consistent connector installation Molex recommends the following press criteria:

1. The capability to detect force variations as low as 4.5kg (10 lb) during the press-in cycle; excessive force measurements should stop the press-in cycle.
2. The rate of pressing can be regulated as low as 0.13mm (0.005 in) per second.
3. Press stroke control to within 0.25mm (0.010 in).
4. Total press stroke must be at least 19mm (0.75 in).
5. For statistical purposes, automatic collection of force and distance data.

Tool Operation

1. Insert by hand the backplane signal module assembly (s) carefully into the PCB hole pattern. Make sure the connector(s) are oriented properly by confirming the location of the #1 circuit notch with respect to the PCB layout.
2. Insert the Press-In Tool making sure that the notch in this tool is inserted into the slot on the connector housing. See Figure 2.
3. Using the application tool and an appropriate press, seat the header assembly until there is less than 0.10mm (.004 in) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.

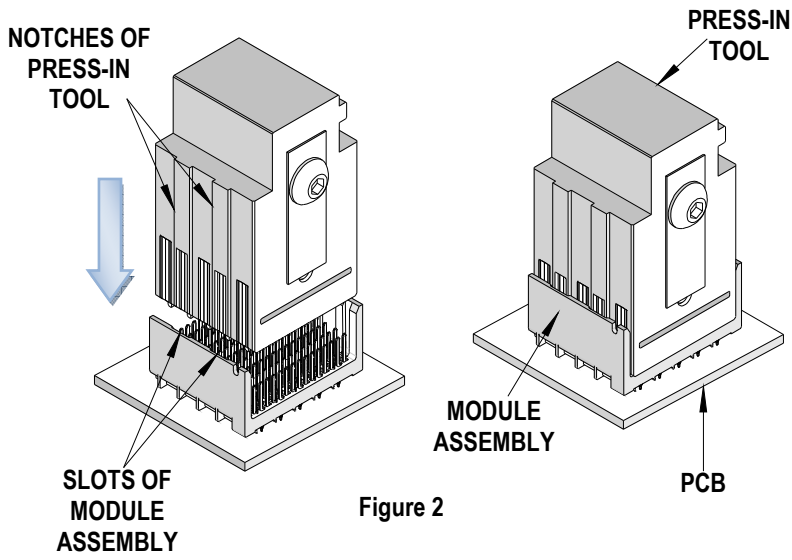


Figure 2

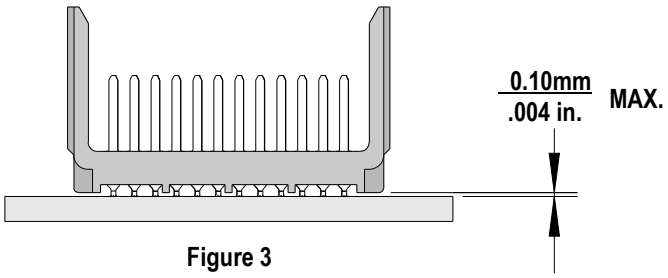


Figure 3

There should be no broken stand-offs along the perimeter of the part (an indication of over-pressing).

CAUTION: To prevent injury, never operate any press without the guards in place. Refer to the press manufacturer's instruction manual.

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.

Visit our Web site at http://www.molex.com