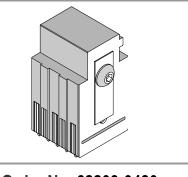
Impact™
Backplane Module
Installation
Press-In Tool



# **Application Tooling Specification Sheet**



Order No. 62203-0480

#### **FEATURES**

- Guided 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

<u>Products</u>: Impact™ 100 Ohm Vertical Orthogonal Backplane Signal Module Assembly, 76985 Series, (5-Pair by 8 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 <a href="https://www.molex.com">www.molex.com</a>.

Guide Style	Columns	Assembly Order Number					
Open Wall	10	76985-0804	76985-0805	76985-0807	76985-0808	76985-1804	76985-1805
		76985-1807	76985-1808				
Dual End	10	76985-0824	76985-0825	76985-0827	76985-0828	76985-1824	76985-1825
		76985-1827	76985-1828				
Left End	10	76985-2804	76985-2805	76985-2807	76985-2808	76985-3804	76985-3805
		76985-3807	76985-3808	76985-6804	76985-6805	76985-6807	76985-6808
		76985-7804	76985-7805	76985-7807	76985-7808		
Right End	10	76985-4804	76985-4805	76985-4807	76985-4808	76985-5804	76985-5805
		76985-5807	76985-5808	76985-8804	76985-8805	76985-8807	76985-8808
		76985-9804	76985-9805	76985-9807	76985-9808		

## **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.

WITH 62201-95XX RAIL

Figure 1

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ALONE

#### **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 16.9mm (0.67 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**

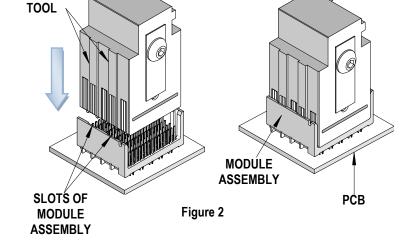
Many types of presses can be used to install Impact™ connectors, but to assure consistent connector installation Molex recommends the following press criteria:

- 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.

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### **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



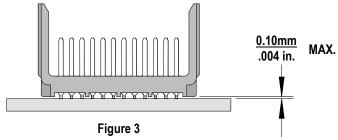
PRESS-IN

TOOL

0.10mm (.004 in) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.

**NOTCHES OF** 

PRESS-IN



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

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