Impact™ Backplane Module Installation Press-In Tool	**molex** **Application Tooling Specification Sheet**	
	Order No. 62203-0585	
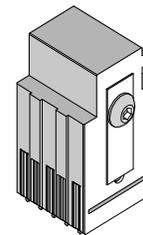
FEATURES

- 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, (5-Pair by 12 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.

Series No.	Guide Style	Columns	Assembly Order Number					
76985	Open Wall	12	76985-0204	76985-0205	76985-0207	76985-0208	76985-1204	76985-1205
			76985-1207	76985-1208				
	Dual End	12	76985-0224	76985-0225	76985-0227	76985-0228	76985-1224	76985-1225
			76985-1227	76985-1228				
	Left End	12	76985-2204	76985-2205	76985-2207	76985-2208	76985-3204	76985-3205
			76985-3207	76985-3208	76985-6204	76985-6205	76985-6207	76985-6208
			76985-7204	76985-7205	76985-7207	76985-7208		
	Right End	12	76985-4204	76985-4205	76985-4207	76985-4208	76985-5204	76985-5205
			76985-5207	76985-5208	76985-8204	76985-8205	76985-8207	76985-8208
			76985-9204	76985-9205	76985-9207	76985-9208		
76986	Custom	12	76986-0001					

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.
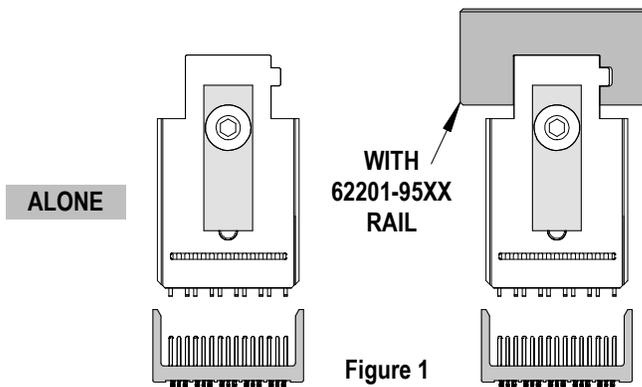

ALONE

WITH 62201-95XX RAIL

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 25.0mm (0.98 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 top of the connector housing of the backplane signal module assembly. 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.
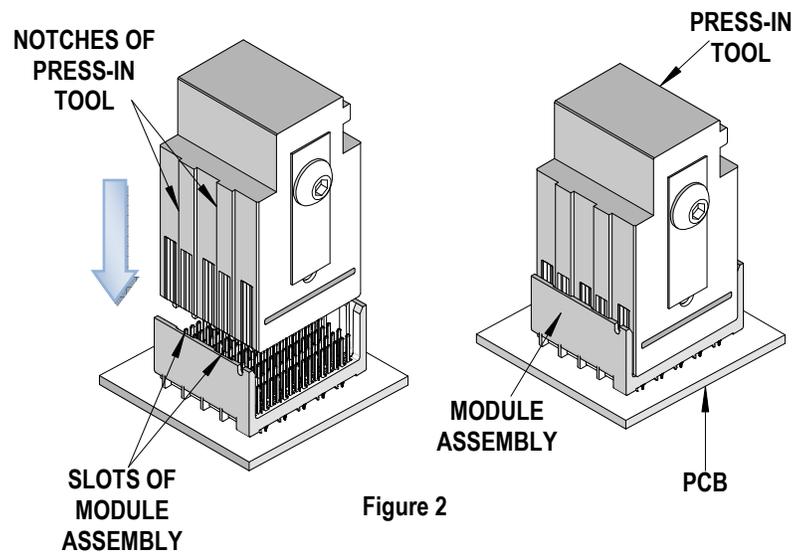
NOTCHES OF PRESS-IN TOOL

PRESS-IN TOOL

SLOTS OF MODULE ASSEMBLY

MODULE ASSEMBLY

PCB

Figure 2

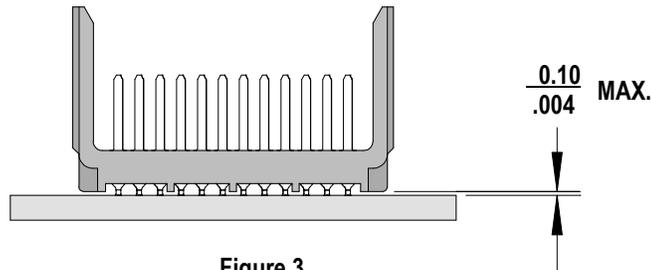$\dfrac{0.10}{.004}$ **MAX.**

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