Impact™ Orthogonal Direct Ram Module Installation Press-In Tool



Application Tooling Specification Sheet



Order No. 62203-0029

FEATURES

- Lip provided for positive alignment to connector assembly.
- 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.
- Use removal tool 62203-4300 for extracting the connectors

SCOPE

<u>Products</u>: Impact[™] 100Ω Orthogonal Direct Ram Module Assembly (6-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 <u>www.molex.com</u>.

Series No.	Guide Style	Columns	Assembly Order Number			
171576	Unguided	12	171576-1214	171576-1215	171576-1217	171576-1218
	Тор	12	171576-7204	171576-7205	171576-7207	171576-7208
	Bottom	12	171576-9204	171576-9205	171576-9207	171576-9208

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

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 26.0mm (1.02 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. Carefully insert, by hand, the Orthogonal Direct Ram module(s) into the PCB hole pattern.
- 2. Place the application tool on top of the Orthogonal Direct Ram module with the back guide surface of the tool against the back of the Orthogonal Direct Ram module. See Figure 2.



3. Using the application tool and an appropriate press, seat the Orthogonal Direct Ram module 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.



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

Release Date: 04-24-12 Revision Date: 09-04-12 UNCONTROLLED COPY