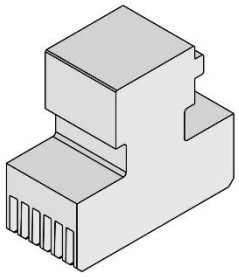
Order Number
200214-1530

molex®

Application Tooling Specification



FEATURES

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

SCOPE

Products: Impulse Backplane Signal Module Assembly (6-Pair by 8-Column Assemblies). See Product List below for specific part numbers.

Series No.	Guide Style	Columns	Assembly Order Number
203940	Open	8	203940-1805

TOOL SETUP

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

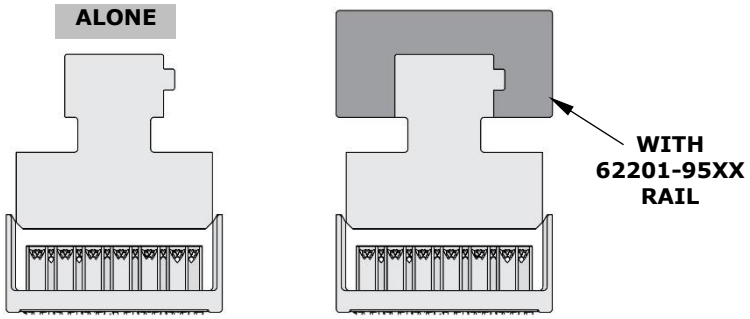


Figure 1

TOOL INSTALLATION

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

Rail Part Number	Rail Overall Length
62201-9501	24mm (.940”)
62201-9502	72mm (2.83”)
62201-9503	156mm (6.14”)
62201-9504	216mm (8.50”)
62201-9509	254mm (10.0”)
62201-9511	305mm (12.0”)

Reference: The 200214-1530 insertion tool is 16.6mm (.65”) long.

Printed Circuit Board (PCB) Support

The Impulse connectors require approximately 13N (3 lbs.) of force per pin to press into the PCB. To prevent excessive PCB flexure 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 a PCB support plate. Customers must furnish their own support plates.

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

Press Equipment Recommendations

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

1. Presses should have the capability to detect force variations as low as 4.5kg (10 lb.) during the insertion cycle; excessive force measurements should stop the insertion cycle.
2. The rate of pressing can be regulated as low as 0.13mm (.005”) per second.
3. Press stroke control should be within 0.25mm (.010”).
4. The total press stroke must be at least 19.0mm (.75”).
5. For statistical purposes, presses should automatically collect force and distance data.

TOOL OPERATION

1. By hand, carefully insert the backplane signal module into the PCB hole pattern. Make sure the connector is oriented properly on the PCB by confirming the location of the #1 circuit notch with respect to the PCB layout.
2. Insert the tool into the module. The tool can be inserted in either direction. See Figure 2.

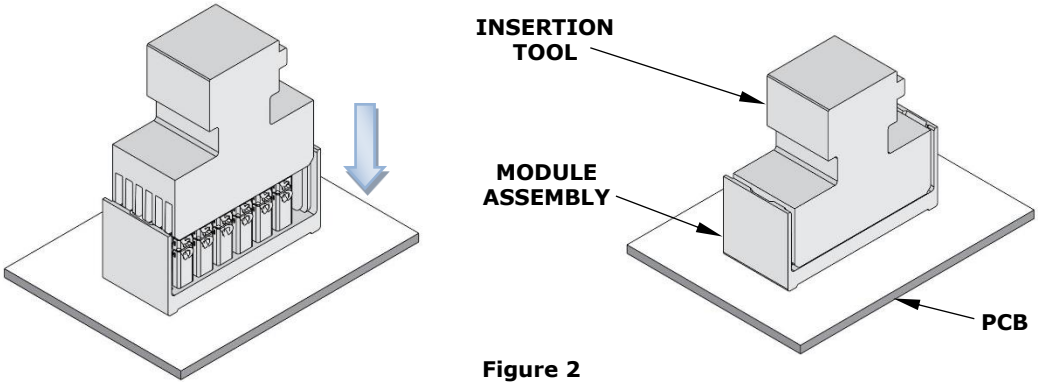


Figure 2

3. Using the insertion tool and an appropriate press, seat the header assembly until there is less than 0.10mm (.004”) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.

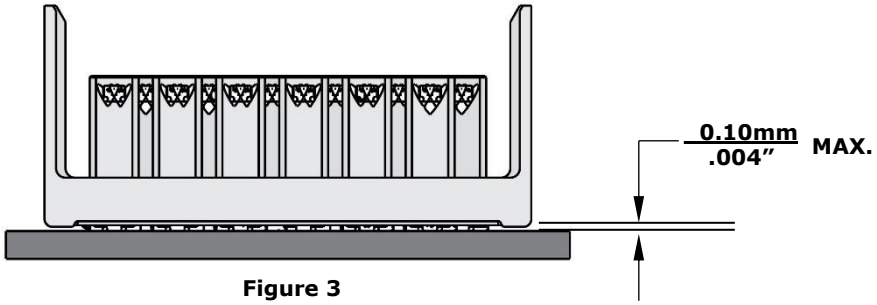


Figure 3

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

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

Application Tooling Support

Phone: (402) 458-TOOL (8665)
E-Mail: applicationtooling@molex.com
Website: www.molex.com/applicationtooling