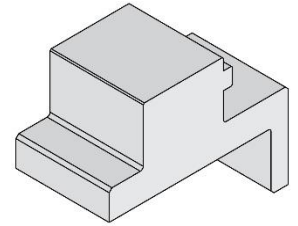


**Order Number  
200214-0016**



**Application Tooling Specification**

**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 insertion tools

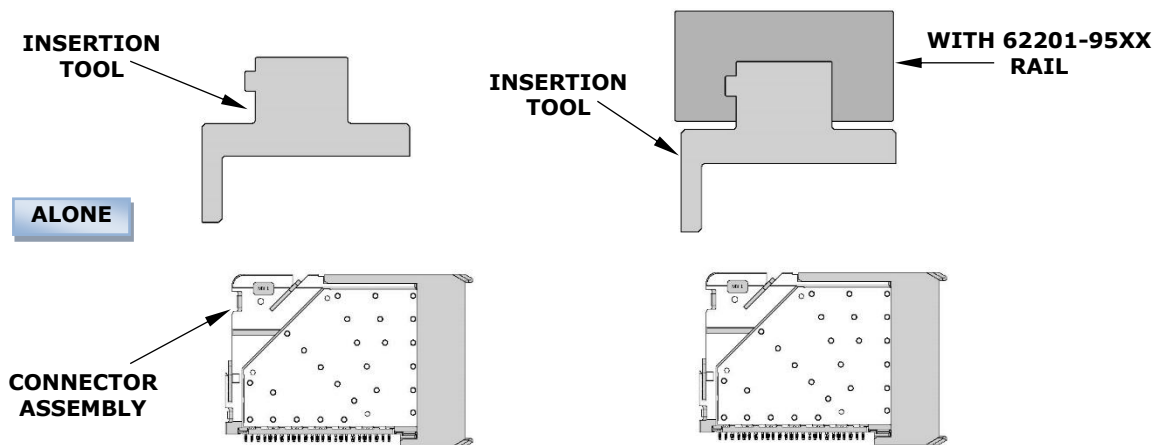
**SCOPE**

**Products:** Impulse Orthogonal Right Angle Female (RAF) Module (7-Pair by 16-Column Assemblies).

Series No.	Columns	Assembly Order Number
173620	16	173620-0016
		173620-0056
		173620-1016
		173620-3016

**TOOL SETUP**

Depending on the number of connectors to be installed or the press used, this tool can be used alone 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 (0.94")
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 200214-0016 insertion tool is 33.3mm (1.31") long.

## PRINTED CIRCUIT BOARD (PCB) SUPPORT

The Impulse connectors require up to 3.6kg (8 lb.) of force per pin to insert 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 any PCB support plate. Customers must furnish their own support plates.

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 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 (0.005") per second.
3. Press stroke control should be within 0.25mm (0.010").
4. The total press stroke must be at least 19mm (0.75").
5. For statistical purposes, presses should automatically collect force and distance data.

## OPERATION

1. By hand, carefully insert the Orthogonal RAF module(s) into the PCB hole pattern.
2. Place the application tool on top of the Orthogonal RAF module with the back guide surface of the tool against the back of the Orthogonal RAF module. See Figure 2.

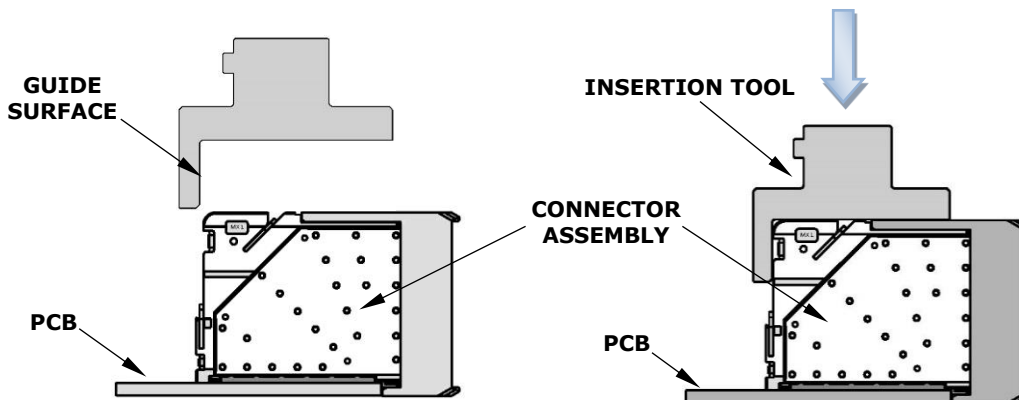
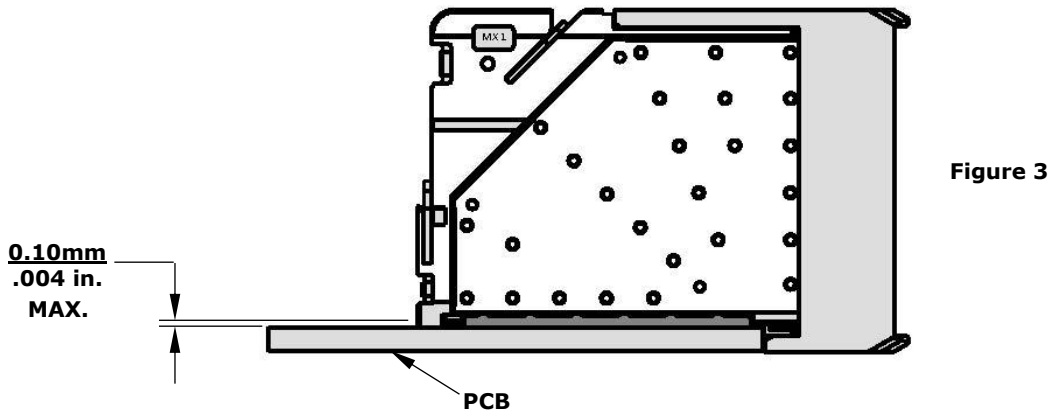


Figure 2

- Using the application tool and an appropriate press, seat the Orthogonal RAF module 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.



There should be no broken standoffs along the perimeter of the part (an indication of overpressing).

**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.

### Application Tooling Support

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