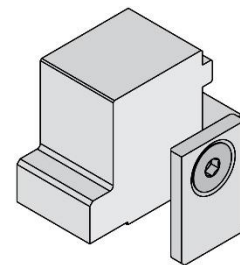


Order Number
200214-1400



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
- Use this tool with unguided Impel assemblies

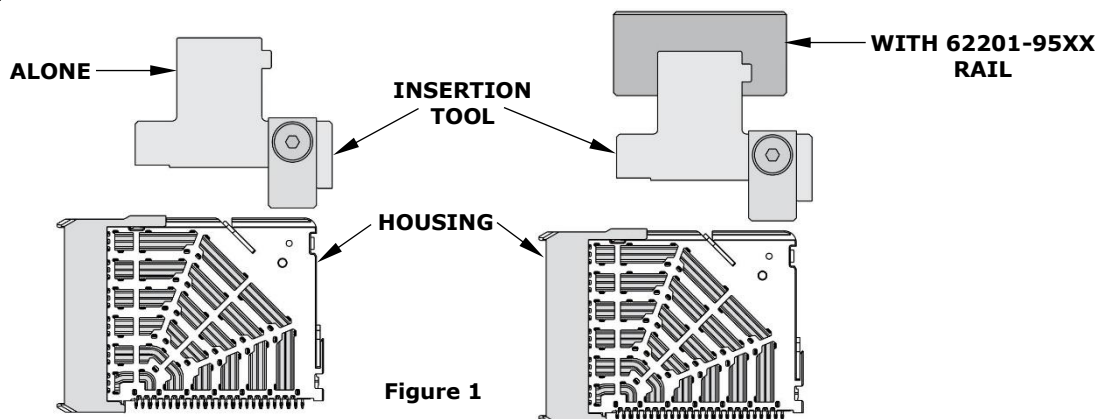
SCOPE

Products: Impel 1.9mm Pitch Daughtercard Unguided Assembly (4-Pair by 6-Column).

Series No.	Guide Style	Columns	Assembly Order Number
171320	Unguided	6	171320-9036

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.



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")

The 200214-1400 insertion tool is 15.5mm (.61 in.) long

PRINTED CIRCUIT BOARD (PCB) SUPPORT

The Impel 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

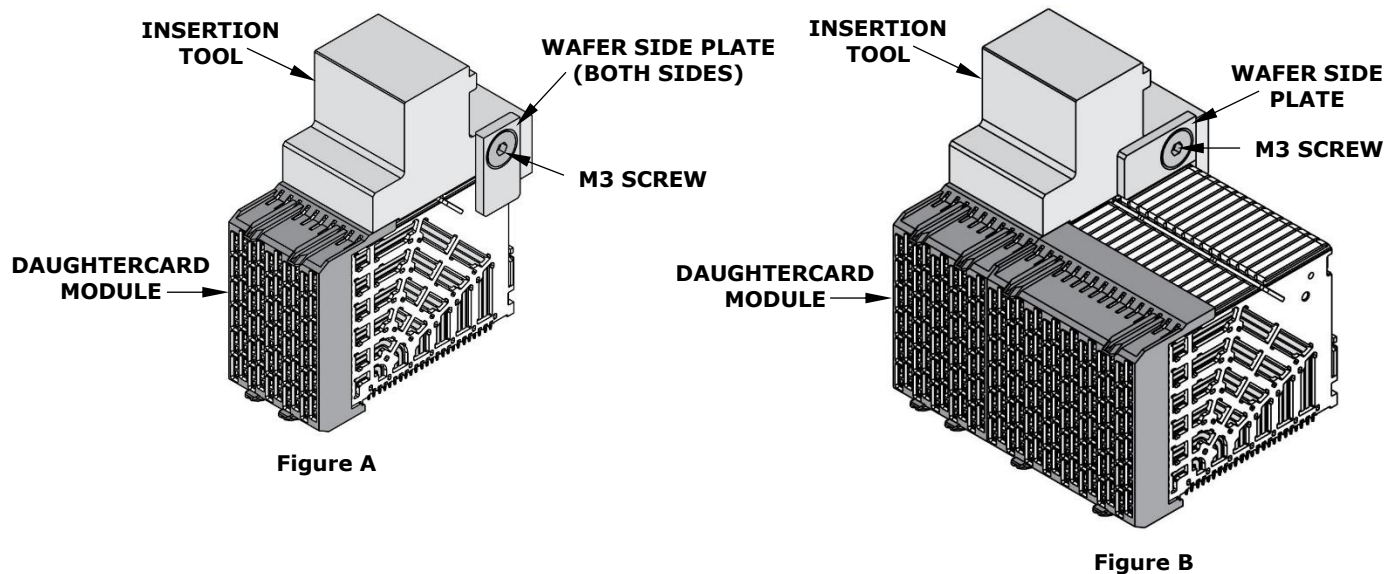
Many types of presses can be used to install Impel connectors, but to assure consistent connector installation, Molex recommends the following press criteria:

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 19mm (.750").
5. For statistical purposes, presses should automatically collect force and distance data.

TOOL CONFIGURATION

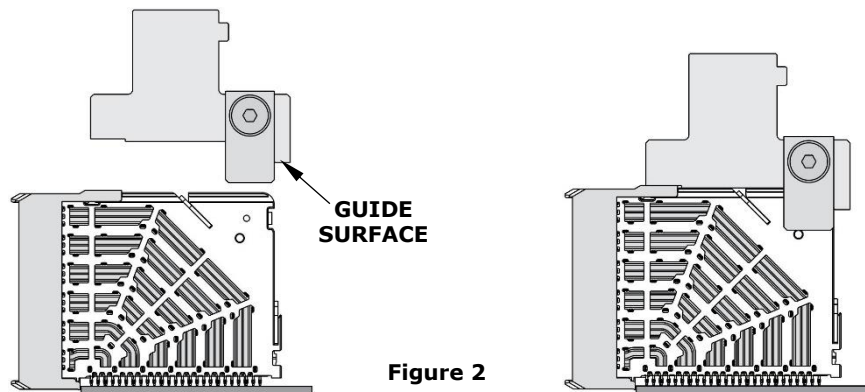
This insertion tool has wafer side plates on its left and right sides. These plates must be positioned correctly according to the specific application. Consider the following figures:

- A. Figure A shows the tool with the wafer side plates in a normal configuration so that the wafers are aligned when inserting a single unobstructed Daughtercard module.
- B. Figure B shows the tool being used to insert a module that is closely stacked together with other Daughtercard modules.
 - When Daughtercard modules are closely stacked together, loosen the M3 screw with a 2mm hex key and rotate the wafer side plate 90° so it is clear from the adjacent Daughtercard module. Re-tighten the screw before using the insertion tool.
 - Only reposition the wafer side plate that interferes with the other Daughtercard modules.

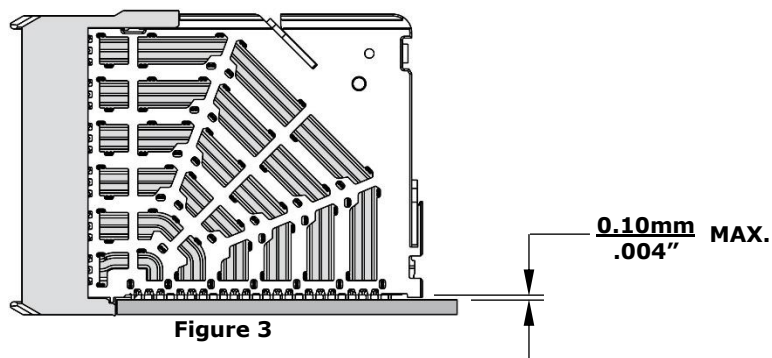


OPERATION

1. By hand, carefully insert the Daughtercard module into the PCB hole pattern.
2. Place the correctly configured application tool on top of the Daughtercard module so the back guide surface of the inside of the tool rests against the back of the Daughtercard module. See Figure 2.



3. Using the application tool and an appropriate press, seat the Daughtercard 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 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.

Application Tooling Support

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