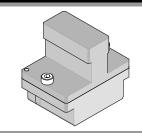
IMPEL
Backplane Module
Installation
Press-In Tool
OPTION B



# **Application Tooling Specification Sheet**



Order No. 62201-8936

#### **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**

<u>Products</u>: IMPEL Backplane Assembly, (6-Pair by 12 Column Assemblies). See Product List below for specific part numbers.

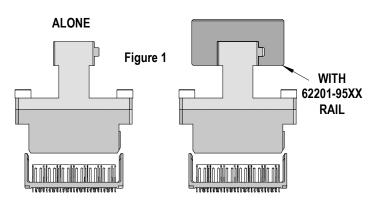
#### **Product List**

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 www.molex.com.

Series	Column	<b>Guide Style</b>	Backplane Header Order No.					
171495	12	Unguided	171495-1227	171495-1228				
		Left	171495-3207	171495-3208	171495-3217	171495-3218	171495-3227	171495-3228
			171495-3237	171495-3238	171495-3247	171495-3248	171495-3257	171495-3258
			171495-3267	171495-3268	171495-3277	171495-3278	171495-3287	171495-3288
		Right	171495-5207	171495-5208	171495-5217	171495-5218	171495-5227	171495-5228
			171495-5237	171495-5238	171495-5247	171495-5248	171495-5257	171495-5258
			171495-5267	171495-5268	171495-5277	171495-5278	171495-5287	171495-5288

# **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.



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#### **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 29.75mm (1.17 in.) long.

## **Printed Circuit Board (PCB) Support**

The IMPEL 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 IMPEL connectors, but to assure consistent connector installation Molex recommends the following press criteria:

- 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.
- NOTCH OF PRESS-IN TOOL

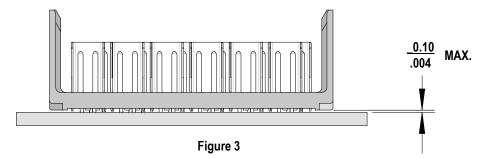
  SLOT OF MODULE ASSEMBLY

  MODULE ASSEMBLY
- 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.

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### **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.



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

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