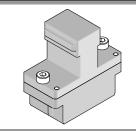
IMPEL
Backplane Module
Installation
Press-In Tool



# **Application Tooling Specification Sheet**



Order No. 62201-8949

#### **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
- Use tool 62201-8904 for removing connectors

#### **SCOPE**

<u>Products</u>: IMPEL Backplane Assembly, (6-Pair by 8 Column Assemblies). See Product List below for specific part numbers.

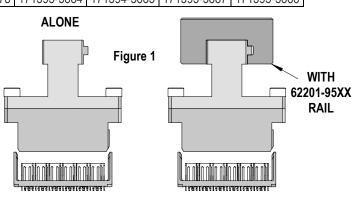
#### **Product List**

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 <a href="https://www.molex.com">www.molex.com</a>.

Series	Column	<b>Guide Style</b>	Backplane Header Order No.					
171395	8	Unguided	171395-1804	171395-1805	171395-1807	171395-1808		
		Left	171395-3104	171395-3805	171395-3807	171395-3808	171395-3814	171395-3815
			171395-3817	171395-3818	171395-3824	171395-3825	171395-3827	171395-3828
			171395-3834	171395-3835	171395-3837	171395-3838	171395-3844	171395-3845
			171395-3847	171395-3848	171395-3854	171395-3855	171395-3857	171395-3858
			171395-3864	171395-3865	171395-3867	171395-3868	171395-3874	171395-3875
			171395-3877	171395-3878	171395-3884	171395-3885	171395-3887	171395-3888
		Right	171395-5104	171395-5805	171395-5807	171395-5808	171395-5814	171395-5815
			171395-5817	171395-5818	171395-5824	171395-5825	171395-5827	171395-5828
			171395-5834	171395-5835	171395-5837	171395-5838	171395-5844	171395-5845
			171395-5847	171395-5848	171395-5854	171395-5855	171395-5857	171395-5858
			171395-5864	171395-5865	171395-5867	171395-5868	171395-5874	171395-5875
			171395-5877	171395-5878	171395-5884	171394-5885	171395-5887	171395-5888

## **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.



Doc No: ATS-622018949 Release Date: 02-01-13 Revision: A Revision Date: 02-01-13

#### **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 15.80mm (0.62 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

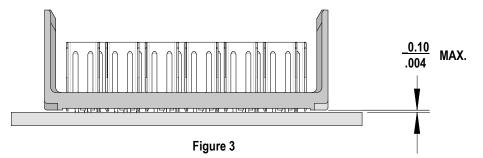
  SLOT OF MODULE ASSEMBLY

  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.

Doc No: ATS-622018949 Release Date: 02-01-13 **UNCONTROLLED COPY** Page 2 of 3 Revision: A Revision Date: 02-01-13

### **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

Doc No: ATS-622018949 Release Date: 02-01-13 **UNCONTROLLED COPY** Page 3 of 3 Revision: A Revision Date: 02-01-13