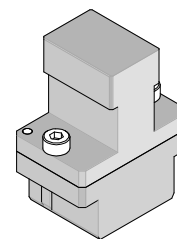


**IMPEL  
Backplane Module  
Installation  
Press-In Tool**



**Application Tooling  
Specification Sheet**



**Order No. 62201-8946**

**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**

Products: IMPEL (1.9mm pitch) Backplane Assembly, (4-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 [www.molex.com](http://www.molex.com).

Series No.	Guide Style	Columns	Assembly Order Number					
171315	Unguided	8	171315-1804	171315-1805	171315-1807	171315-1808	171315-1814	171315-1815
			171315-1817	171315-1818	171315-1824	171315-1825	171315-1827	171315-1828
			171315-1834	171315-1835	171315-1837	171315-1838		
	Left Guided	8	171315-3804	171315-3805	171315-3807	171315-3808	171315-3814	171315-3815
			171315-3817	171315-3818	171315-3824	171315-3825	171315-3827	171315-3828
			171315-3834	171315-3835	171315-3837	171315-1338	171315-3844	171315-3845
			171315-3847	171315-3848	171315-3854	171315-3855	171315-3857	171315-3858
			171315-3864	171315-3865	171315-3867	171315-3868	171315-3874	171315-3875
			171315-3877	171315-3878	171315-3884	171315-3885	171315-3887	171315-3888
			171315-7804	171315-7805	171315-7807	171315-7808	171315-7814	171315-7815
			171315-7817	171315-7818	171315-7824	171315-7825	171315-7827	171315-7828
			171315-7834	171315-7835	171315-7837	171315-7838	171315-7844	171315-7845
			171315-7847	171315-7848	171315-7854	171315-7855	171315-7857	171315-7858
			171315-7864	171315-7865	171315-7867	171315-7868	171315-7874	171315-7875
			171315-7877	171315-7878	171315-7884	171315-7885	171315-7887	171315-7888
	Right Guided	8	171315-5804	171315-5805	171315-5807	171315-5808	171315-5814	171315-5815
			171315-5817	171315-5818	171315-5824	171315-5825	171315-5827	171315-5828
			171315-5834	171315-5835	171315-5837	171315-5838	171315-5844	171315-5845
			171315-5847	171315-5848	171315-5854	171315-5855	171315-5857	171315-5858
			171315-5864	171315-5865	171315-5867	171315-5868	171315-5874	171315-5875
			171315-5877	171315-5878	171315-5884	171315-5885	171315-5887	171315-5888
			171315-9804	171315-9805	171315-9807	171315-9808	171315-9814	171315-9815
			171315-9817	171315-9818	171315-9824	171315-9825	171315-9827	171315-9828
			171315-9834	171315-9835	171315-9837	171315-9838	171315-9844	171315-9845
			171315-9847	171315-9848	171315-9854	171315-9855	171315-9857	171315-9858
			171315-9864	171315-9865	171315-9867	171315-9868	171315-9874	171315-9875
			171315-9877	171315-9878	171315-9884	171315-9885	171315-9887	171315-9888

### 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.

### Tool Installation

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

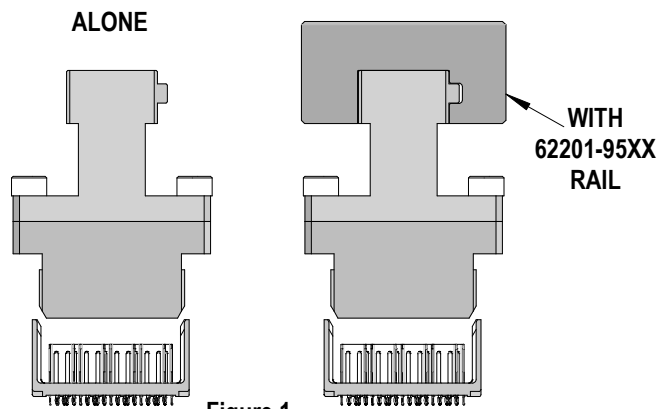


Figure 1

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 15.90mm (.626 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:

1. 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.
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.

## 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.

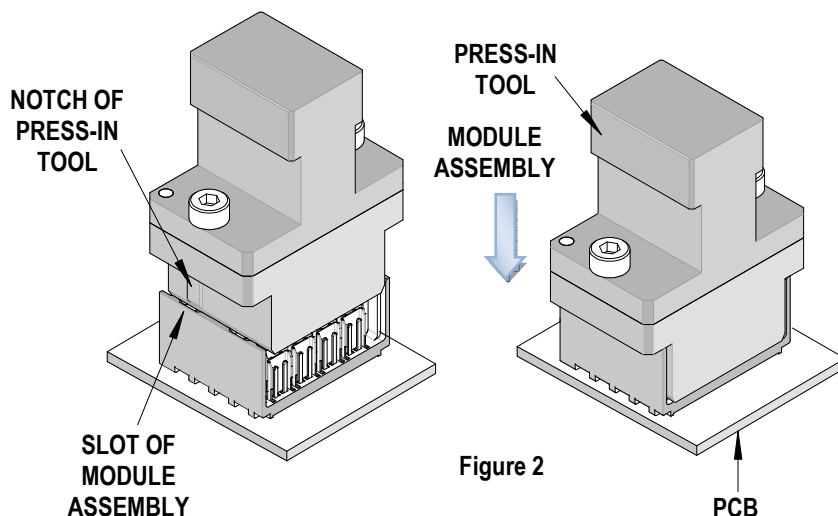


Figure 2

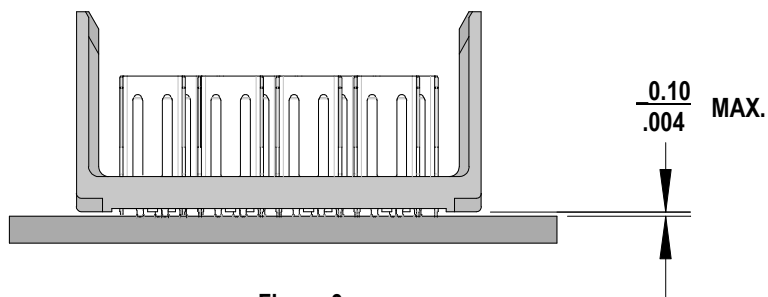


Figure 3

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>