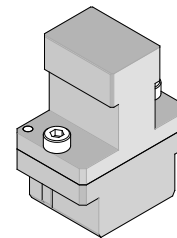


**IMPEL  
Backplane Module  
Installation  
Press-In Tool**



**Application Tooling  
Specification Sheet**



**Order No. 62201-8952**

**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 10 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	10	171315-1104	171315-1105	171315-1107	171315-1108	171315-1114	171315-1115		
			171315-1117	171315-1118	171315-1124	171315-1125	171315-1127	171315-1128		
			171315-1134	171315-1135	171315-1137	171315-1138				
	Left Guided	10	171315-3104	171315-3105	171315-3107	171315-3108	171315-3114	171315-3115		
			171315-3117	171315-3118	171315-3124	171315-3125	171315-3127	171315-3128		
			171315-3134	171315-3135	171315-3137	171315-1338	171315-3144	171315-3145		
			171315-3147	171315-3148	171315-3154	171315-3155	171315-3157	171315-3158		
			171315-3164	171315-3165	171315-3167	171315-3168	171315-3174	171315-3175		
			171315-3177	171315-3178	171315-3184	171315-3185	171315-3187	171315-3188		
			171315-7104	171315-7105	171315-7107	171315-7108	171315-7114	171315-7115		
			171315-7117	171315-7118	171315-7124	171315-7125	171315-7127	171315-7128		
			171315-7134	171315-7135	171315-7137	171315-7138	171315-7144	171315-7145		
			171315-7147	171315-7148	171315-7154	171315-7155	171315-7157	171315-7158		
			171315-7164	171315-7165	171315-7167	171315-7168	171315-7174	171315-7175		
			171315-7177	171315-7178	171315-7184	171315-7185	171315-7187	171315-7188		
			Right Guided	10	171315-5104	171315-5105	171315-5107	171315-5108	171315-5114	171315-5115
					171315-5117	171315-5118	171315-5124	171315-5125	171315-5127	171315-5128
	171315-5134	171315-5135			171315-5137	171315-5138	171315-5144	171315-5145		
	171315-5147	171315-5148			171315-5154	171315-5155	171315-5157	171315-5158		
	171315-5164	171315-5165			171315-5167	171315-5168	171315-5174	171315-5175		
	171315-5177	171315-5178			171315-5184	171315-5185	171315-5187	171315-5188		
	171315-9104	171315-9105			171315-9107	171315-9108	171315-9114	171315-9115		
	171315-9117	171315-9118			171315-9124	171315-9125	171315-9127	171315-9128		
	171315-9134	171315-9135			171315-9137	171315-9138	171315-9144	171315-9145		
	171315-9147	171315-9148			171315-9154	171315-9155	171315-9157	171315-9158		
	171315-9164	171315-9165			171315-9167	171315-9168	171315-9174	171315-9175		
	171315-9177	171315-9178			171315-9184	171315-9185	171315-9187	171315-9188		

### 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.

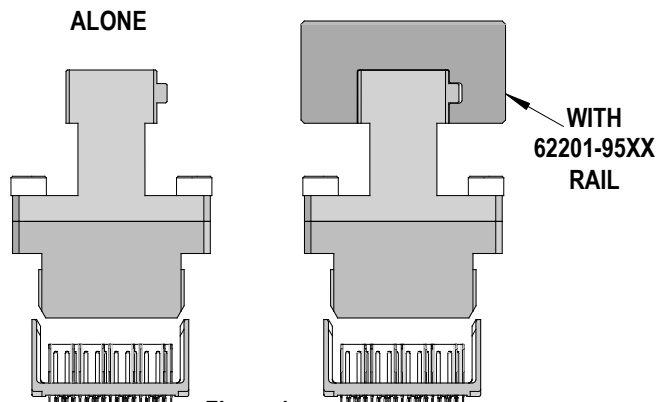


Figure 1

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 19.70mm (0.78 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.

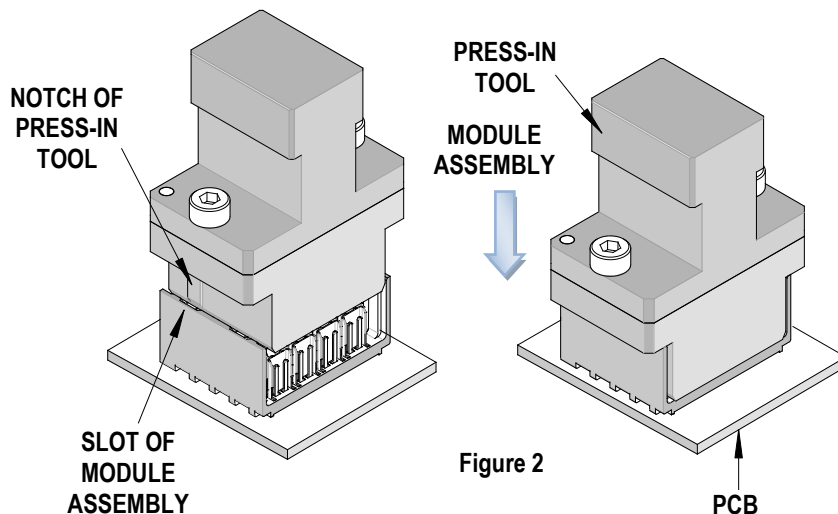


Figure 2

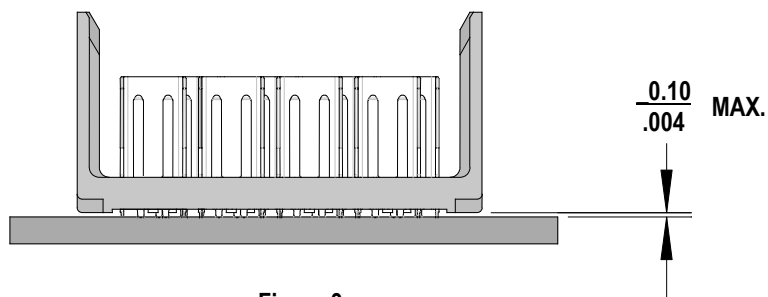


Figure 3

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>