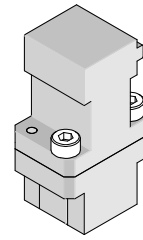


Impact™  
Backplane Module  
Installation  
Press-In Tool



Application Tooling  
Specification Sheet



Order No. 62201-8879

## 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:** Impact™ 85 Ohm Vertical Backplane Assembly, (3-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](http://www.molex.com).

Series No.	Guide Style	Columns	Assembly Order Number					
170525 85 Ohm	Open Wall	12	170525-1203	170525-1204	170525-1205	170525-1206	170525-1207	170525-1208
	Dual End	12	170525-1223	170525-1224	170525-1225	170525-1226	170525-1227	170525-1228
	Left End	12	170525-1213	170525-1214	170525-1215	170525-1216	170525-1217	170525-1218
	Right End	12	170525-1233	170525-1234	170525-1235	170525-1236	170525-1237	170525-1238
	Left Guided	12	170525-3203	170525-3204	170525-3205	170525-3206	170525-3207	170525-3208
			170525-3213	170525-3214	170525-3215	170525-3216	170525-3217	170525-3218
			170525-3223	170525-3224	170525-3225	170525-3226	170525-3227	170525-3228
			170525-3233	170525-3234	170525-3235	170525-3236	170525-3237	170525-3238
			170525-3243	170525-3244	170525-3245	170525-3246	170525-3247	170525-3248
			170525-3253	170525-3254	170525-3255	170525-3256	170525-3257	170525-3258
			170525-3263	170525-3264	170525-3265	170525-3266	170525-3267	170525-3268
			170525-3273	170525-3274	170525-3275	170525-3276	170525-3277	170525-3278
			170525-3283	170525-3284	170525-3285	170525-3286	170525-3287	170525-3288
			170525-3203	170525-3204	170525-3205	170525-3206	170525-3207	170525-3208
			170525-3213	170525-3214	170525-3215	170525-3216	170525-3217	170525-3218
			170525-3223	170525-3224	170525-3225	170525-3226	170525-3227	170525-3228
			170525-3233	170525-3234	170525-3235	170525-3236	170525-3237	170525-3238
			170525-3243	170525-3244	170525-3245	170525-3246	170525-3247	170525-3248
			170525-3253	170525-3254	170525-3255	170525-3256	170525-3257	170525-3258
			170525-3263	170525-3264	170525-3265	170525-3266	170525-3267	170525-3268
			170525-3273	170525-3274	170525-3275	170525-3276	170525-3277	170525-3278
	170525-3283	170525-3284	170525-3285	170525-3286	170525-3287	170525-3288		
	Right Guided	12	170525-5203	170525-5204	170525-5205	170525-5206	170525-5207	170525-5208
			170525-5213	170525-5214	170525-5215	170525-5216	170525-5217	170525-5218
			170525-5223	170525-5224	170525-5225	170525-5226	170525-5227	170525-5228
			170525-5233	170525-5234	170525-5235	170525-5236	170525-5237	170525-5238
			170525-5243	170525-5244	170525-5245	170525-5246	170525-5247	170525-5248
			170525-5253	170525-5254	170525-5255	170525-5256	170525-5257	170525-5258
170525-5263			170525-5264	170525-5265	170525-5266	170525-5267	170525-5268	

Series No.	Guide Style	Columns	Assembly Order Number					
			170525-5273	170525-5274	170525-5275	170525-5276	170525-5277	170525-5278
170525 85 Ohm	Right Guided	12	170525-5283	170525-5284	170525-5285	170525-5286	170525-5287	170525-5288
			170525-9203	170525-9204	170525-9205	170525-9206	170525-9207	170525-9208
			170525-9213	170525-9214	170525-9215	170525-9216	170525-9217	170525-9218
			170525-9223	170525-9224	170525-9225	170525-9226	170525-9227	170525-9228
			170525-9233	170525-9234	170525-9235	170525-9236	170525-9237	170525-9238
			170525-9243	170525-9244	170525-9245	170525-9246	170525-9247	170525-9248
			170525-9253	170525-9254	170525-9255	170525-9256	170525-9257	170525-9258
			170525-9263	170525-9264	170525-9265	170525-9266	170525-9267	170525-9268
			170525-9273	170525-9274	170525-9275	170525-9276	170525-9277	170525-9278
			170525-9283	170525-9284	170525-9285	170525-9286	170525-9287	170525-9288

### 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.

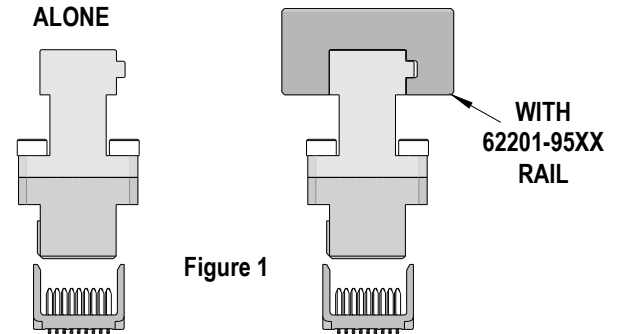


Figure 1

### 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: The 62201-8879 Press-In Tool is 22.7mm (0.89 in.) long.

### Printed Circuit Board (PCB) Support

The Impact™ 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.

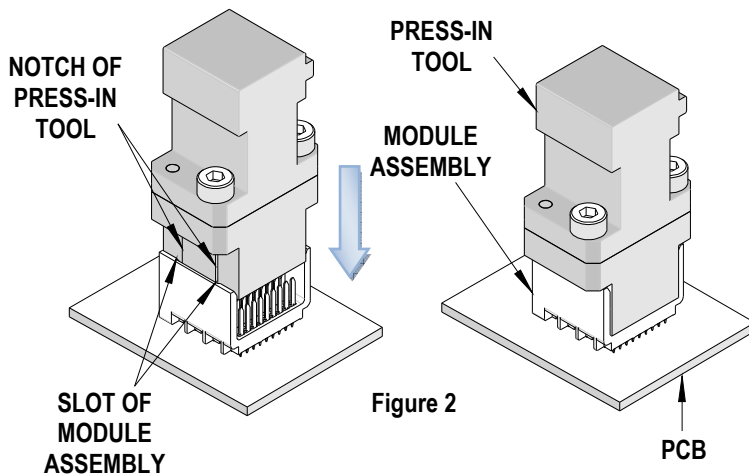
Due to the custom nature of every application, Molex does not offer any PCB support plate. The customer must furnish their own support plate.

When creating the PCB support plate, remember to allow clearance for the connector pins as they pass through the PCB thickness.

## Press Equipment Recommendations

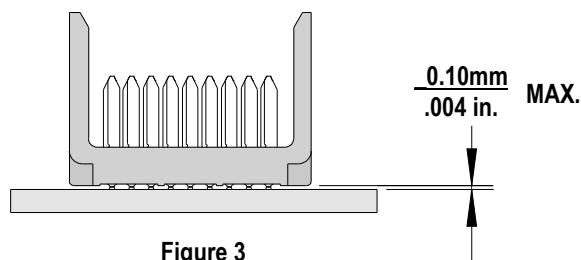
Many types of presses can be used to install Impact™ connectors, but to assure consistent connector installation Molex recommends the following press criteria:

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.



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>