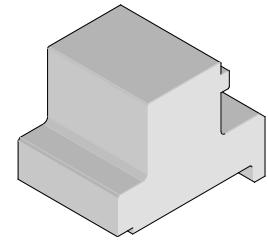


**Impact™  
Daughtercard  
Module Installation  
Press-In Tool**

**molex®**

**Application Tooling  
Specification Sheet**



**Order No. 62201-8661**

## FEATURES

- Lip provided for positive alignment to connector assembly.
- 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™ Daughtercard Signal Module Assembly and Daughtercard Orthogonal Assembly and Impact™ RAM Signal Module Assembly (6-Pair by 10 Column Assemblies). Also Impact™ 85 Ohm Plus Daughtercard Signal Module Assembly (6-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						
76150	Open	10	76150-0010	76150-0020	76150-1010	76150-1020			
			76150-2010	76150-2020	76150-2110	76150-2120	76150-2210	76150-2220	
	Left	10	76150-2310	76150-2320	76150-2410	76150-2420	76150-2510	76150-2520	
			76150-2610	76150-2620	76150-2710	76150-2720	76150-2810	76150-2820	
			76150-3010	76150-3020	76150-3110	76150-3120	76150-3210	76150-3220	
			76150-3310	76150-3320	76150-3410	76150-3420	76150-3510	76150-3520	
			76150-3610	76150-3620	76150-3710	76150-3720	76150-3810	76150-3820	
			76150-4010	76150-4020	76150-4110	76150-4120	76150-4210	76150-4220	
	Right	10	76150-4310	76150-4320	76150-4410	76150-4420	76150-4510	76150-4520	
			76150-4610	76150-4620	76150-4710	76150-4720	76150-4810	76150-4820	
			76150-5010	76150-5020	76150-5110	76150-5120	76150-5210	76150-5220	
			76150-5310	76150-5320	76150-5410	76150-5420	76150-5510	76150-5520	
			76150-5610	76150-5620	76150-5710	76150-5720	76150-5810	76150-5820	
	76560	Open	10	76560-0104	76560-0105	76560-0107	76560-0108	76560-0114	76560-0115
				76560-0117	76560-0118	76560-0124	76560-0125	76560-0127	76560-0128
76560-0134				76560-0135	76560-0137	76560-0138			
76560-1104				76560-1105	76560-1107	76560-1108	76560-1114	76560-1115	
76560-1117				76560-1118	76560-1124	76560-1125	76560-1127	76560-1128	
76560-1134				76560-1135	76560-1137	76560-1138			
76560-2104				76560-2105	76560-2107	76560-2108	76560-2114	76560-2115	
Left		10	76560-2117	76560-2118	76560-2124	76560-2125	76560-2127	76560-2128	
			76560-2134	76560-2135	76560-2137	76560-2138	76560-2144	76560-2145	
			76560-2147	76560-2148	76560-2154	76560-2155	76560-2157	76560-2158	
			76560-2164	76560-2165	76560-2167	76560-2168	76560-2174	76560-2175	
			76560-2177	76560-2178	76560-2184	76560-2185	76560-2187	76560-2188	
			76560-3104	76560-3105	76560-3107	76560-3108	76560-3114	76560-3115	
			76560-3117	76560-3118	76560-3124	76560-3125	76560-3127	76560-3128	

Series No.	Guide Style	Columns	Assembly Order Number							
76560	Left	10	76560-3134	76560-3135	76560-3137	76560-3138	76560-3144	76560-3145		
			76560-3147	76560-3148	76560-3154	76560-3155	76560-3157	76560-3158		
			76560-3164	76560-3165	76560-3167	76560-3168	76560-3174	76560-3175		
			76560-3177	76560-3178	76560-3184	76560-3185	76560-3187	76560-3188		
			76560-6104	76560-6105	76560-6107	76560-6108	76560-6114	76560-6115		
			76560-6117	76560-6118	76560-6124	76560-6125	76560-6127	76560-6128		
			76560-6134	76560-6135	76560-6137	76560-6138	76560-6144	76560-6145		
			76560-6147	76560-6148	76560-6154	76560-6155	76560-6157	76560-6158		
			76560-6164	76560-6165	76560-6167	76560-6168	76560-6174	76560-6175		
			76560-6177	76560-6178	76560-6184	76560-6185	76560-6187	76560-6188		
			76560-7104	76560-7105	76560-7107	76560-7108	76560-7114	76560-7115		
			76560-7117	76560-7118	76560-7124	76560-7125	76560-7127	76560-7128		
			76560-7134	76560-7135	76560-7137	76560-7138	76560-7144	76560-7145		
			76560-7147	76560-7148	76560-7154	76560-7155	76560-7157	76560-7158		
			76560-7164	76560-7165	76560-7167	76560-7168	76560-7174	76560-7175		
			76560-7177	76560-7178	76560-7184	76560-7185	76560-7187	76560-7188		
			Right	10	76560-4104	76560-4105	76560-4107	76560-4108	76560-4114	76560-4115
					76560-4117	76560-4118	76560-4124	76560-4125	76560-4127	76560-4128
	76560-4134	76560-4135			76560-4137	76560-4138	76560-4144	76560-4145		
	76560-4147	76560-4148			76560-4154	76560-4155	76560-4157	76560-4158		
	76560-4164	76560-4165			76560-4167	76560-4168	76560-4174	76560-4175		
	76560-4177	76560-4178			76560-4184	76560-4185	76560-4187	76560-4188		
	76560-5104	76560-5105			76560-5107	76560-5108	76560-5114	76560-5115		
	76560-5117	76560-5118			76560-5124	76560-5125	76560-5127	76560-5128		
	76560-5134	76560-5135			76560-5137	76560-5138	76560-5144	76560-5145		
	76560-5147	76560-5148			76560-5154	76560-5155	76560-5157	76560-5158		
	76560-5164	76560-5165			76560-5167	76560-5168	76560-5174	76560-5175		
	76560-5177	76560-5178			76560-5184	76560-5185	76560-5187	76560-5188		
	76560-8104	76560-8105			76560-8107	76560-8108	76560-8114	76560-8115		
	76560-8117	76560-8118			76560-8124	76560-8125	76560-8127	76560-8128		
	76560-8134	76560-8135			76560-8137	76560-8138	76560-8144	76560-8145		
	76560-8147	76560-8148			76560-8154	76560-8155	76560-8157	76560-8158		
	76560-8164	76560-8165			76560-8167	76560-8168	76560-8174	76560-8175		
	76560-8177	76560-8178			76560-8184	76560-8185	76560-8187	76560-8188		
	76560-9104	76560-9105			76560-9107	76560-9108	76560-9114	76560-9115		
	76560-9117	76560-9118			76560-9124	76560-9125	76560-9127	76560-9128		
76560-9134	76560-9135	76560-9137			76560-9138	76560-9144	76560-9145			
76560-9147	76560-9148	76560-9154			76560-9155	76560-9157	76560-9158			
76560-9164	76560-9165	76560-9167			76560-9168	76560-9174	76560-9175			
76560-9177	76560-9178	76560-9184			76560-9185	76560-9187	76560-9188			
76290	Open	10			76290-0010	76290-0020	76290-1010	76290-1020		
	Left	10			76290-2010	76290-2020	76290-3010	76290-3020		
	Right	10			76290-4010	76290-4020	76290-5010	76290-5020		
170540	Open	10			170540-0010	170540-0020	170540-1010	170540-1020		
	Left	10	170540-2010	170540-2020	170540-2050	170540-2060	170540-2110	170540-2120		
			170540-2150	170540-2160	170540-2210	170540-2220	170540-2250	170540-2260		
			170540-2310	170540-2320	170540-2350	170540-2360	170540-2410	170540-2420		
			170540-2450	170540-2460	170540-2510	170540-2520	170540-2550	170540-2560		
			170540-2610	170540-2620	170540-2650	170540-2660	170540-2710	170540-2720		
			170540-2750	170540-2760	170540-2810	170540-2820	170540-2850	170540-2860		
			170540-3010	170540-3020	170540-3050	170540-3060	170540-3110	170540-3120		
			170540-3150	170540-3160	170540-3210	170540-3220	170540-3250	170540-3260		
			170540-3310	170540-3320	170540-3350	170540-3360	170540-3410	170540-3420		
			170540-3450	170540-3460	170540-3510	170540-3520	170540-3550	170540-3560		
			170540-3610	170540-3620	170540-3650	170540-3660	170540-3710	170540-3720		

Series No.	Guide Style	Columns	Assembly Order Number					
170540	Left	10	170540-3750	170540-3760	170540-3810	170540-3820	170540-3850	170540-3860
	Right	10	170540-4010	170540-4020	170540-4050	170540-4060	170540-4110	170540-4120
			170540-4150	170540-4160	170540-4210	170540-4220	170540-4250	170540-4260
			170540-4310	170540-4320	170540-4350	170540-4360	170540-4410	170540-4420
			170540-4450	170540-4460	170540-4510	170540-4520	170540-4550	170540-4560
			170540-4610	170540-4620	170540-4650	170540-4660	170540-4710	170540-4720
			170540-4750	170540-4760	170540-4810	170540-4820	170540-4850	170540-4860
			170540-5010	170540-5020	170540-5050	170540-5060	170540-5110	170540-5120
			170540-5150	170540-5160	170540-5210	170540-5220	170540-5250	170540-5260
			170540-5310	170540-5320	170540-5350	170540-5360	170540-5410	170540-5420
			170540-5450	170540-5460	170540-5510	170540-5520	170540-5550	170540-5560
			170540-5610	170540-5620	170540-5650	170540-5660	170540-5710	170540-5720
			170540-5750	170540-5760	170540-5810	170540-5820	170540-5850	170540-5860
			172105	Open	10	172105-1010	172105-1020	
Right	10	172105-3010		172105-3020	172105-3110	172105-3120	172105-3210	172105-3220
		172105-3310		172105-3320	172105-3410	172105-3420	172105-3510	172105-3520
		172105-3610		172105-3620	172105-3710	172105-3720	172105-3810	172105-3820
Left	10	172105-5010		172105-5020	172105-5110	172105-5120	172105-5210	172105-5220
		172105-5310		172105-5320	172105-5410	172105-5420	172105-5510	172105-5520
		172105-5610		172105-5620	172105-5710	172105-5720	172105-5810	172105-5820

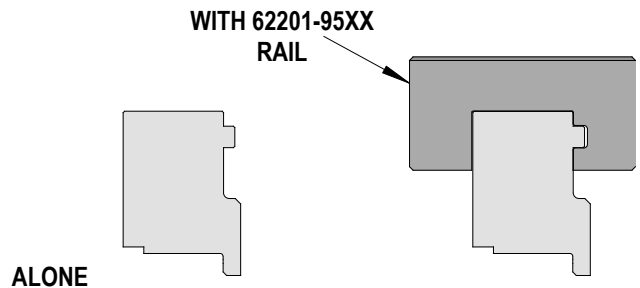
### Tool Setup

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.

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 18.9mm (0.74 in.) long.

### Printed Circuit Board (PCB) Support



Figure 1

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. Carefully insert, by hand, the Daughtercard module(s) into the PCB hole pattern.
2. Place the application tool on top of the Daughtercard module with the back guide surface of the tool against the back of the Daughtercard module. See Figure 2.
3. Using the application tool and an appropriate press, seat the Daughtercard module until there is less than 0.25mm (0.01 in) clearance between the bottom of the plastic housing and the surface of the PCB. See Figure 3.

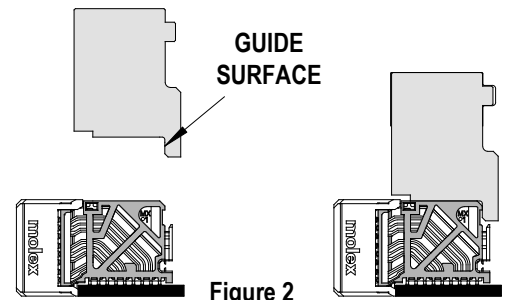


Figure 2

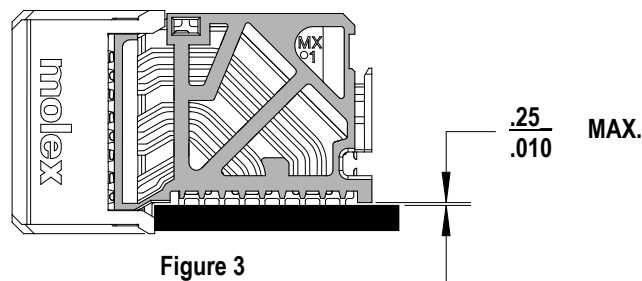


Figure 3

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>