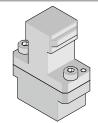
Impact™ Backplane Module Installation Press-In Tool



Application Tooling Specification Sheet



Order No. 62201-8890

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

<u>Products</u>: Impact[™] 85 Ohm Vertical Backplane Assembly, (5-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 <u>www.molex.com</u>.

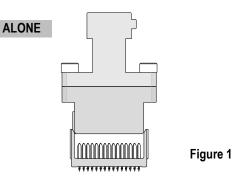
	170475 Series Numbers								
Guide Style	Columns	Assembly Order Number							
Open Wall	8	170475-1803	170475-1804	170475-1805	170475-1806	170475-1807	170475-180		
Dual End	8	170475-1823	170475-1824	170475-1825	170475-1826	170475-1827	170475-182		
Left End	8	170475-1813	170475-1814	170475-1815	170475-1816	170475-1817	170475-181		
Right End	8	170475-1833	170475-1834	170475-1835	170475-1836	170475-1837	170475-183		
	8	170475-3803	170475-3804	170475-3805	170475-3806	170475-3807	170475-380		
		170475-3813	170475-3814	170475-3815	170475-3816	170475-3817	170475-381		
		170475-3823	170475-3824	170475-3825	170475-3826	170475-3827	170475-382		
		170475-3833	170475-3834	170475-3835	170475-3836	170475-3837	170475-383		
		170475-3843	170475-3844	170475-3845	170475-3846	170475-3847	170475-384		
Left Guided		170475-3853	170475-3854	170475-3855	170475-3856	170475-3857	170475-385		
		170475-3863	170475-3864	170475-3865	170475-3866	170475-3867	170475-386		
		170475-3873	170475-3874	170475-3875	170475-3876	170475-3877	170475-387		
		170475-3883	170475-3884	170475-3885	170475-3886	170475-3887	170475-388		
		170475-7803	170475-7804	170475-7805	170475-7806	170475-7807	170475-780		
		170475-7813	170475-7814	170475-7815	170475-7816	170475-7817	170475-781		
		170475-7823	170475-7824	170475-7825	170475-7826	170475-7827	170475-782		
		170475-7833	170475-7834	170475-7835	170475-7836	170475-7837	170475-783		
		170475-7843	170475-7844	170475-7845	170475-7846	170475-7847	170475-784		
		170475-7853	170475-7854	170475-7855	170475-7856	170475-7857	170475-785		
		170475-7863	170475-7864	170475-7865	170475-7866	170475-7867	170475-786		
		170475-7873	170475-7874	170475-7875	170475-7876	170475-7877	170475-787		
		170475-7883	170475-7884	170475-7885	170475-7886	170475-7887	170475-788		
Right Guided	8	170475-5803	170475-5804	170475-5805	170475-5806	170475-5807	170475-580		
		170475-5813	170475-5814	170475-5815	170475-5816	170475-5817	170475-581		
		170475-5823	170475-5824	170475-5825	170475-5826	170475-5827	170475-582		
		170475-5833	170475-5834	170475-5835	170475-5836	170475-5837	170475-583		

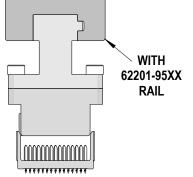
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170475 Series Numbers								
Guide Style	Columns	Assembly Order Number						
	8	170475-5843	170475-5844	170475-5845	170475-5846	170475-5847	170475-5848	
		170475-5853	170475-5854	170475-5855	170475-5856	170475-5857	170475-5858	
		170475-5863	170475-5864	170475-5865	170475-5866	170475-5867	170475-5868	
		170475-5873	170475-5874	170475-5875	170475-5876	170475-5877	170475-5878	
		170475-5883	170475-5884	170475-5885	170475-5886	170475-5887	170475-5888	
		170475-9803	170475-9804	170475-9805	170475-9806	170475-9807	170475-9808	
		170475-9813	170475-9814	170475-9815	170475-9816	170475-9817	170475-9818	
Right Guided		170475-9823	170475-9824	170475-9825	170475-9826	170475-9827	170475-9828	
		170475-9833	170475-9834	170475-9835	170475-9836	170475-9837	170475-9838	
		170475-9843	170475-9844	170475-9845	170475-9846	170475-9847	170475-9848	
		170475-9853	170475-9854	170475-9855	170475-9856	170475-9857	170475-9858	
		170475-9863	170475-9864	170475-9865	170475-9866	170475-9867	170475-9868	
		170475-9873	170475-9874	170475-9875	170475-9876	170475-9877	170475-9878	
		170475-9883	170475-9884	170475-9885	170475-9886	170475-9887	170475-9888	

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.

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 15mm (0.59 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.

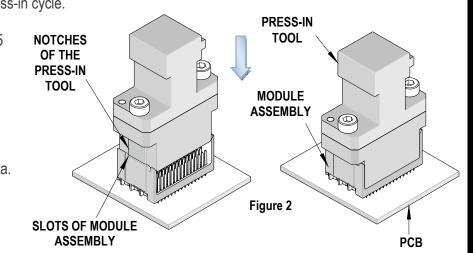
When creating the PCB support plate, remember to allow clearance for the connector pins as they pass through the PCB thickness.

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Press Equipment Recommendations

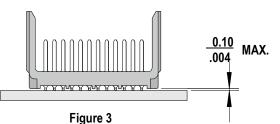
Many types of presses can be used to install Impact[™] connectors, but to assure consistent connector installation Molex recommends the following press criteria:

- 1. The capability to detect force variations as low as 4.5kg (10 lbs.) 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.

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