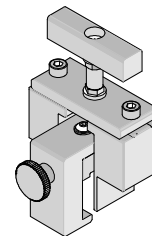| **Impact™ Daughtercard Removal Tool**	**molex** **Application Tooling Specification Sheet**	 **Order No. 62100-8090**

FEATURES

- This tool is designed for the removal of an Impact™ Daughtercard signal module from a PCB
- This tool will not remove the Impact™ right-angle-male (RAM) signal module (use tool 66602-4350)
- Use tool 66601-8663 for inserting 6 pair by 16 column Daughtercard assemblies

SCOPE

Products: Impact™ Daughtercard signal module, 6 Pair x 16 columns. See Product List below for order 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.

Series No.	Guide Style	Columns	6 Pair Assembly Order Number					
76150	Open	16	76150-0016	76150-0026	76150-1016	76150-1026	76150-9001	
	Left	16	76150-2016	76150-2026	76150-2116	76150-2126	76150-2216	76150-2226
			76150-2316	76150-2326	76150-2416	76150-2426	76150-2516	76150-2526
			76150-2616	76150-2626	76150-2716	76150-2726	76150-2816	76150-2826
			76150-3016	76150-3026	76150-3116	76150-3126	76150-3216	76150-3226
			76150-3316	76150-3326	76150-3416	76150-3426	76150-3516	76150-3526
			76150-3616	76150-3626	76150-3716	76150-3726	76150-3816	76150-3826
			76150-9002					
	Right	16	76150-4016	76150-4026	76150-4116	76150-4126	76150-4216	76150-4226
			76150-4316	76150-4326	76150-4416	76150-4426	76150-4516	76150-4526
			76150-4616	76150-4626	76150-4716	76150-4726	76150-4816	76150-4826
			76150-5016	76150-5026	76150-5116	76150-5126	76150-5216	76150-5226
			76150-5316	76150-5326	76150-5416	76150-5426	76150-5516	76150-5526
			76150-5616	76150-5626	76150-5716	76150-5726	76150-5816	76150-5826
			76150-9003	76150-9005				

DESCRIPTION

Figure 1 illustrates the principal parts of the removal tool.

T-HANDLE

C-FRAME

THUMB SCREW

CLAMP FRONT

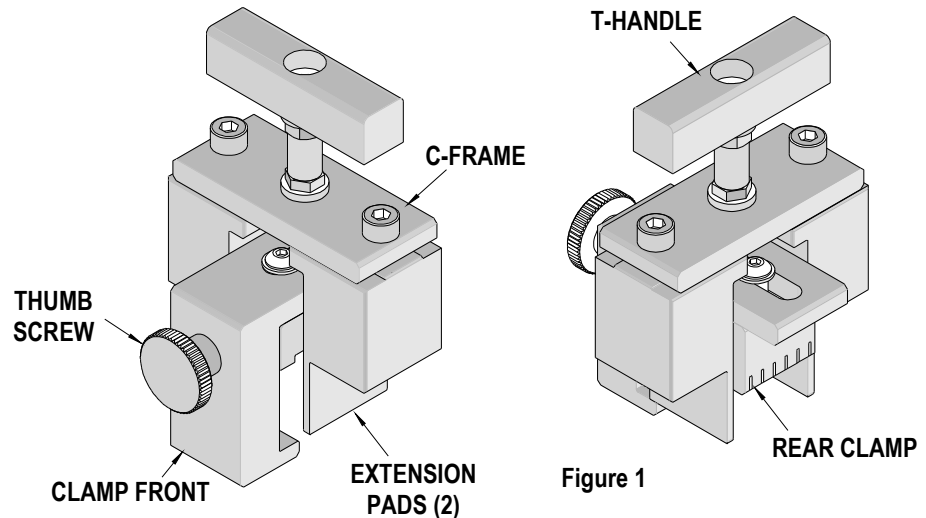**EXTENSION PADS (2)**

REAR CLAMP

Figure 1

Tool Restrictions

These tools require a "Keep Out Zone" on the open side of the Daughtercard free of components. The right and left sides should be 3mm (0.12 in). See Figure 2. This is a general requirement, regardless of the module being removed.

Note: Be sure that all parts of the removal tool will clear any components on the printed circuit board during use. Tape may also be placed over circuit traces or on the bottom of the Extension Pads for added protection of the printed circuit board.
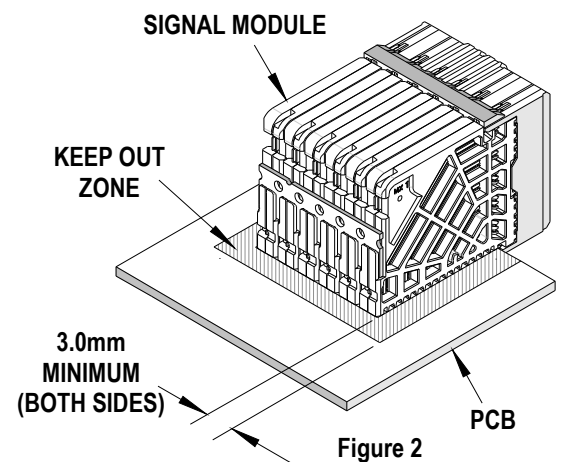
SIGNAL MODULE

KEEP OUT ZONE

3.0mm MINIMUM (BOTH SIDES)

PCB

Figure 2

Tool Operation

1. Turn the T-handle counter clockwise until the clamp assembly is free of the upper frame.
2. Turn the thumb screw counter clockwise so the clamp front can open to fit over the Daughtercard shroud. See Figure 3.
3. Position the rear clamp so it is flush with the side of the outer wafer. The "teeth" of the rear clamp should fit snugly in the cut-outs of the wafers. See Figure 4.
4. Turn the thumb screw clockwise to close the clamp tightly against the Daughtercard.
5. Position the tool frame over the closed clamp and turn the T-handle clockwise until the Extension Pads contact the PCB surface. See figure 5.
6. Continue turning the T-handle clockwise until the Daughtercard is free from the PCB.
7. Move the extraction tool away from the PCB. Turn the thumb screw counterclockwise to open the clamp and Daughtercard from the extractor tool. Discard the Daughtercard module.
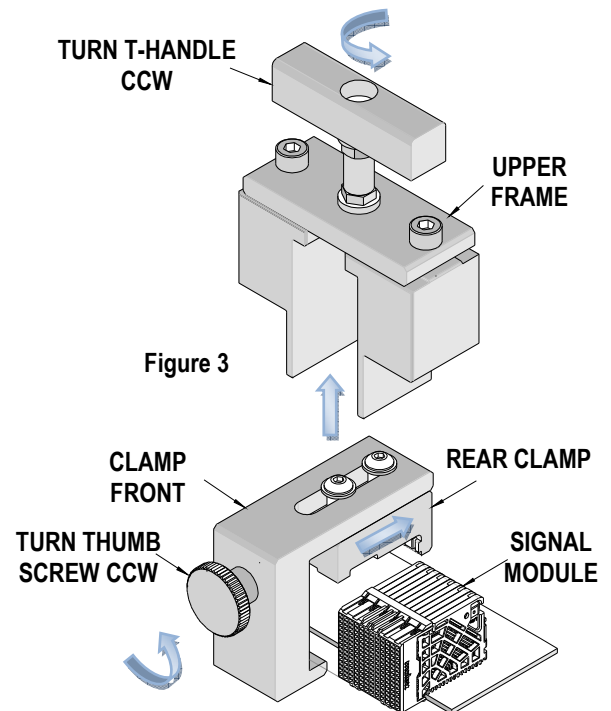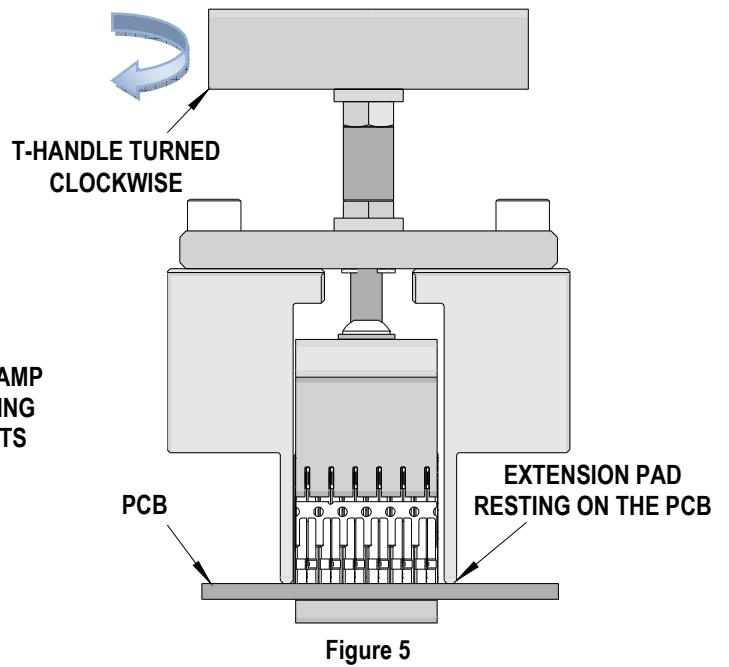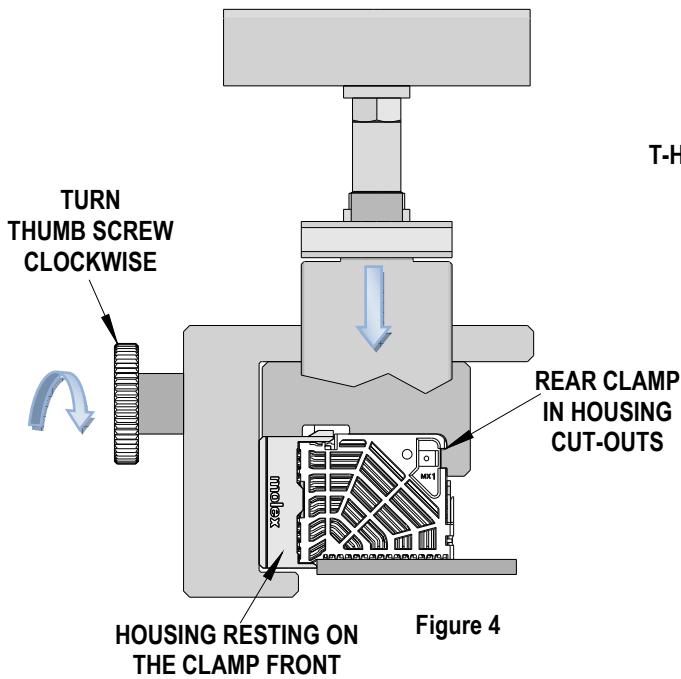
TURN T-HANDLE CCW

UPPER FRAME

Figure 3

CLAMP FRONT

TURN THUMB SCREW CCW

REAR CLAMP

SIGNAL MODULE

TURN THUMB SCREW CLOCKWISE

REAR CLAMP IN HOUSING CUT-OUTS

HOUSING RESTING ON THE CLAMP FRONT

Figure 4

T-HANDLE TURNED CLOCKWISE

PCB

EXTENSION PAD RESTING ON THE PCB

Figure 5

Daughtercard Module Assembly Removal
(When mounted alongside other Daughtercard)

When Daughtercard modules are stacked end to end on one side the extractor tool can be adjusted to allow the removal of the desired Daughtercard module.
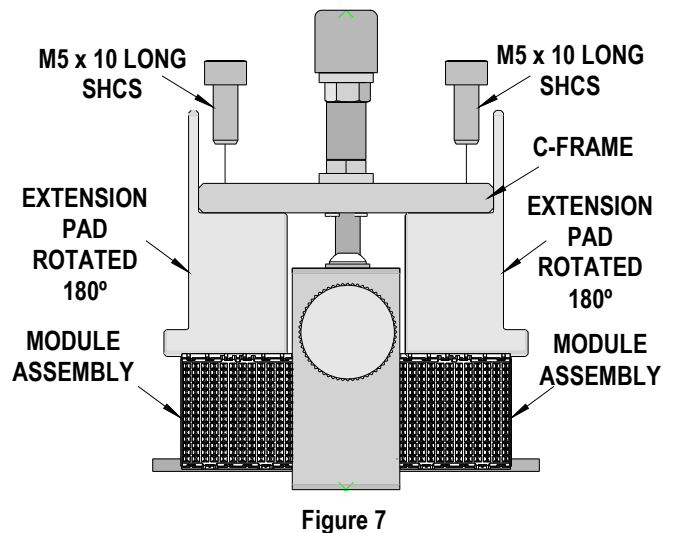
1. Remove the M5 x 10 long SHCS on the side where the extra module is located. See Figure 6.
2. Rotate the Extension Pad 180º.
3. Reinstall the Extension Pad with the M5 x 10 long SHCS.
4. Follow the Tool Operation procedure for Daughtercard removal.

M5 x 10 LONG SHCS

C-FRAME

EXTENSION PAD ROTATED 180º THIS SIDE ONLY

MODULE ASSEMBLY

Figure 6
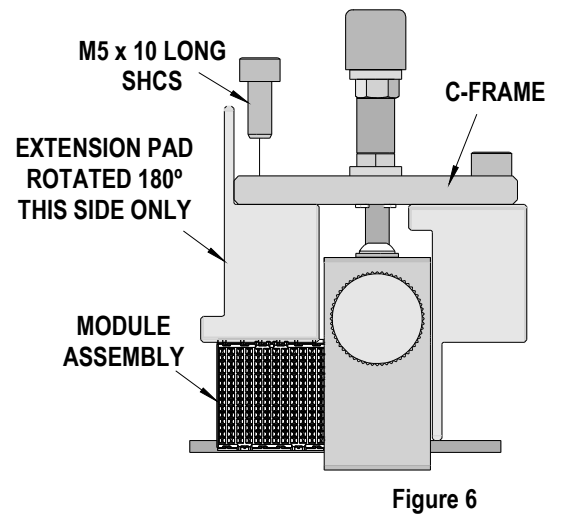
Daughtercard Module Assembly Removal
(With Daughtercard assemblies on both sides)

When Daughtercard modules are stacked end to end on both sides, the extractor tool can be adjusted to allow the removal of the middle Daughtercard module.

1. Remove the M5 x 14 long SHCS on each the side where the extra modules are located. See Figure 7.
2. Rotate the Extension Pads 180º.
3. Reinstall the Extension Pads with the M5 x 10 long SHCS.
4. Follow the Tool Operation procedure for Daughtercard removal.

M5 x 10 LONG SHCS

M5 x 10 LONG SHCS

C-FRAME

EXTENSION PAD ROTATED 180º

EXTENSION PAD ROTATED 180º

MODULE ASSEMBLY

MODULE ASSEMBLY

Figure 7

Daughtercard with Guide Module Assembly Removal

When removing a Daughtercard with a Guide module the extractor tool can be adjusted for the additional space of the guide module.

1. Remove the M5 x 10 long SHCS on the side where the guide module is located.
2. Move the Extension Pad out on this side. See Figure 8.
3. Align the second threaded hole in the extension pad with the C-frame.
4. Reinstall the M5 x 10 long SHCS thru the C-frame.

> **NOTE**: Remember to remove the screw holding the guide module to the PCB before removing the Daughtercard module.

M5 x 10 LONG SHCS

C-FRAME

EXTENSION PAD MOVED OUT

REAR CLAMP

MODULE GUIDE ASSEMBLY

Figure 8
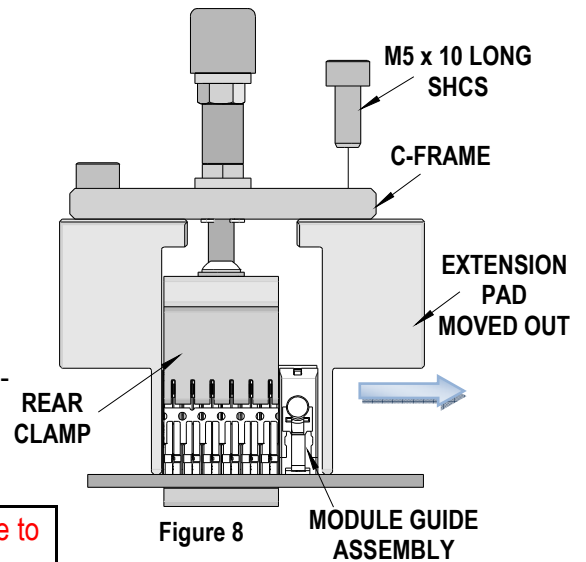
5. Follow the Tool Operation procedure for Daughtercard removal.

Maintenance
It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

1. Remove dust, moisture, and other contaminants with a clean brush, or soft, lint free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively.
4. When tool is not in use, store in a clean, dry area.

> **CAUTION**: Molex specifications are valid only when used with Molex terminals, applicators 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