

Order Number
200199-1390

Application Tooling Specification

FEATURES

- This tool is designed to extract an Impulse RAF module from a PCB
- Extracts module without damaging the PCB
- Use tool 200214-0016 for inserting 7-pair by 16-column RAF modules

SCOPE

Products: Impulse Ortho Right Angle Female (RAF) Module, 7-Pair by 16-Column

Series No.	Columns	Assembly Order Number
173620	16	173620-0016
		173620-0056
		173620-1016
		173620-3016

DESCRIPTION

Figure 1 illustrates the principal parts of the extraction tool.

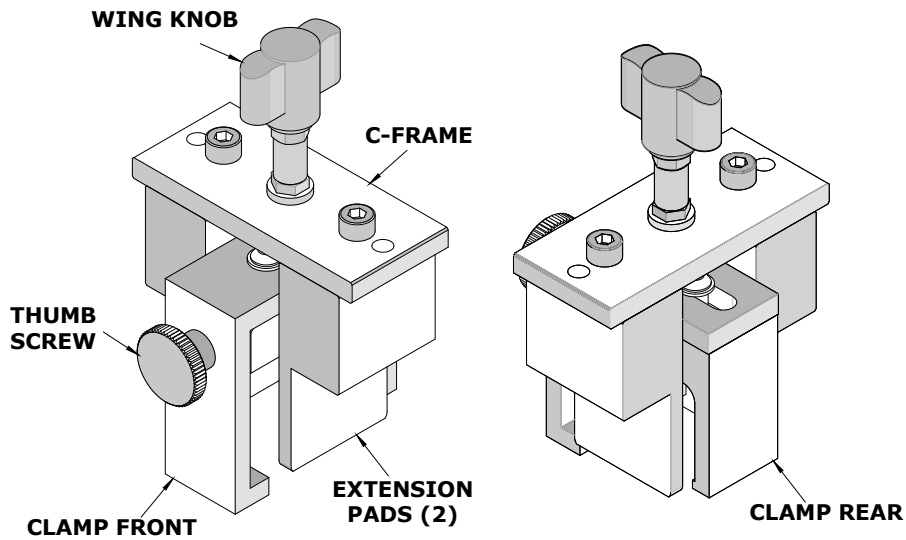
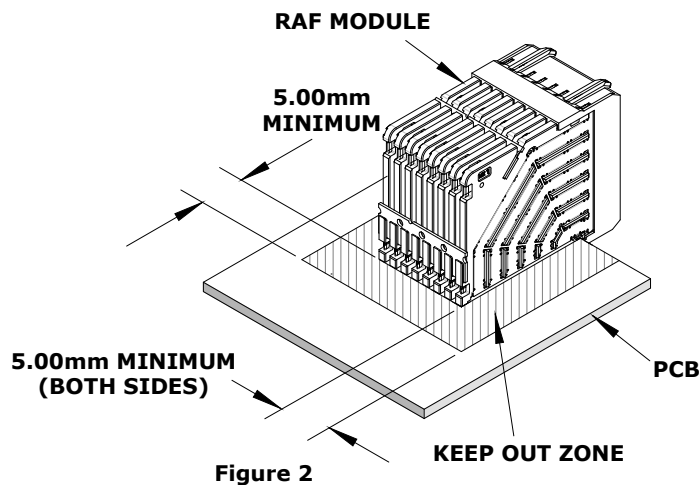


Figure 1

Tool Restrictions

These tools require a "Keep Out Zone" around the module that must be free of components. The rear of the module should have 5.00mm (.197") of clearance. The right and left sides should have 5.00mm (.197") of clearance. See Figure 2. This is a general requirement, regardless of the module being extracted.



Note: Be sure that all parts of the extraction 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 PCB support for added protection of the printed circuit board.

TOOL OPERATION

1. Turn the wing knob counterclockwise so the clamp rear and clamp front are approximately 4mm below the bottom edge of the extension pads. See Figure 3.
2. Turn the thumb screw counterclockwise so the clamp front can slide forward as shown in Figure 4.
3. Position the extraction tool over the outside walls of the RAF module. See Figure 5.

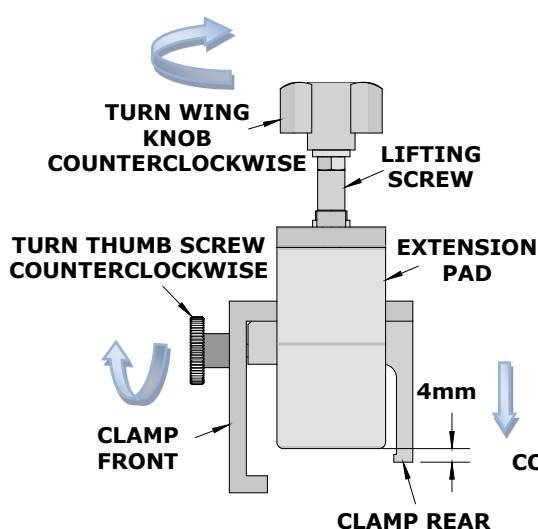


Figure 3

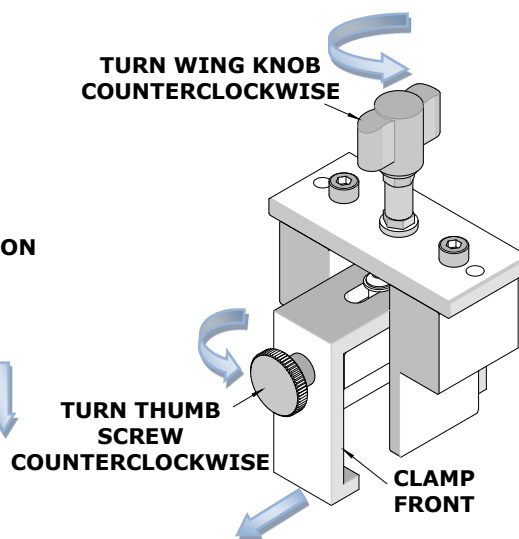


Figure 4

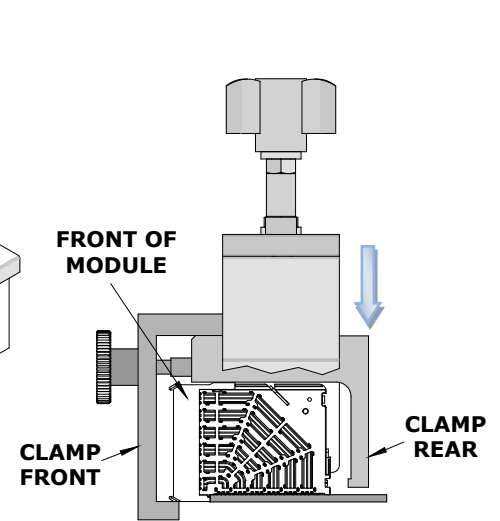
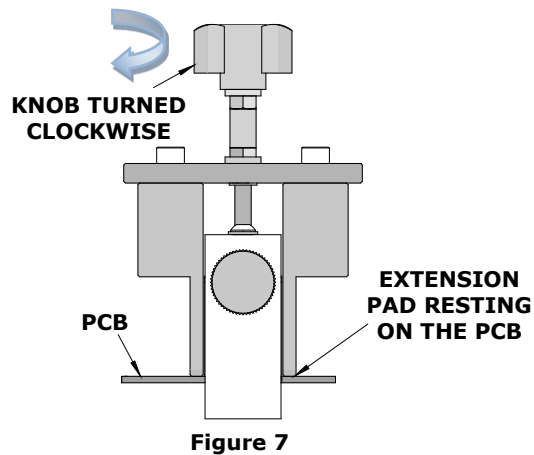
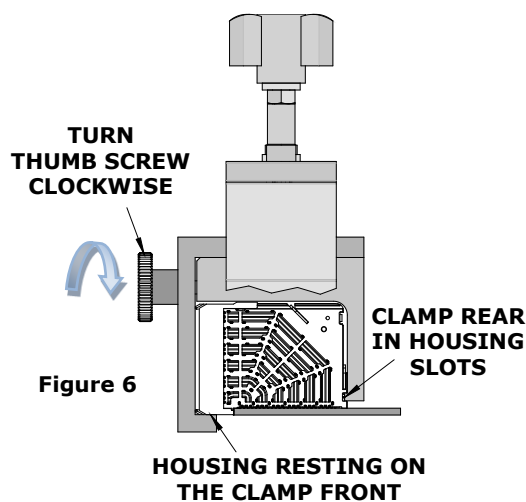


Figure 5

4. Slide the clamp front onto the bottom lip of the front module by turning the thumb screw clockwise. See Figure 6.
5. Continue turning the thumb screw until the clamp rear is pulled into position and is seated in the recessed slots of the clamp rear.

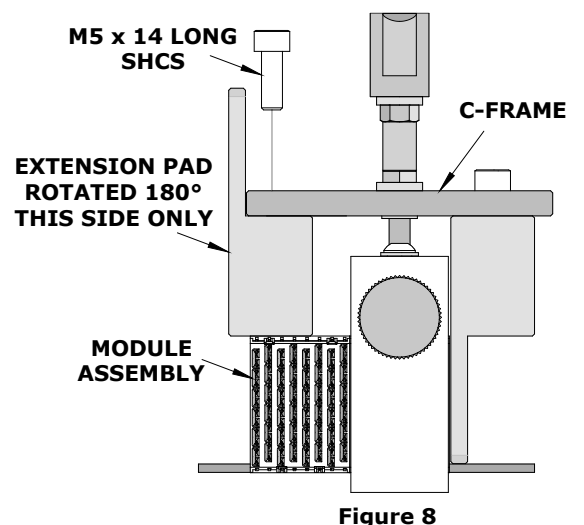


6. Make sure the clamp front and rear are in position before extracting the RAF module from the PCB.
7. Turn the wing knob clockwise until the extension pads contact the printed circuit board. See Figure 7.
8. Continue turning the wing knob clockwise until the RAF module is extracted from the printed circuit board.
9. Move the extraction tool away from the printed circuit board. Turn the wing knob counterclockwise and turn the thumb screw counterclockwise to release the module from the extraction tool. Discard the module.

RAF MODULE ASSEMBLY REMOVAL (WITH MODULE ASSEMBLIES ON ONE SIDE)

When RAF modules are stacked end to end on one side, the extraction tool can be configured to allow the extraction of the desired RAF module.

1. Remove the M5 x 14 long SHCS on the side where the extra module is located. See Figure 8.
2. Rotate the extension pad 180°.
3. Reinstall the M5 x 14 long SHCS through the slot near the end of the C-frame.
4. Follow the tool operation instructions for extraction.



RAF MODULE ASSEMBLY REMOVAL (WITH MODULE ASSEMBLIES ON BOTH SIDES)

When RAF modules are stacked end to end on both sides, the extraction tool can be configured to allow the extraction of the middle RAF module.

1. Remove the M5 x 14 long SHCS on each the side where the extra modules are located. See Figure 9.
2. Rotate the extension pads 180°.
3. Reinstall the M5 x 14 long SHCS through the slot near the end of the C-frame.
4. Follow the tool operation instructions for extraction.

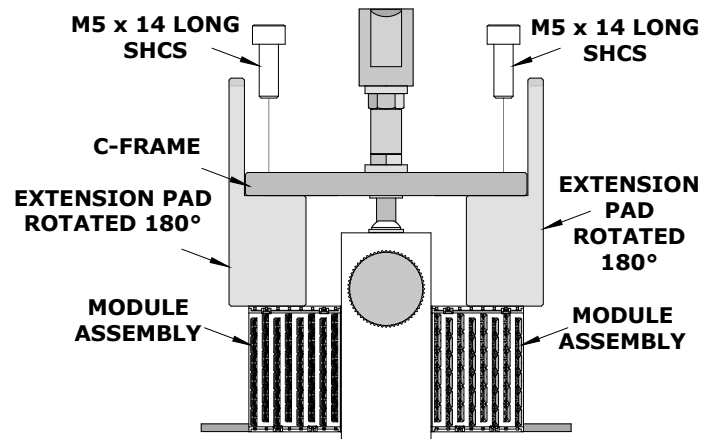


Figure 9

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 a 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 the tool is not in use, store it in a clean, dry area.

CAUTION: Molex specifications are valid only when used with Molex terminals, applicators and tooling.

Application Tooling Support

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