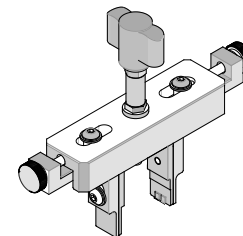


**Backplane Header Removal Tool**



**Application Tooling Specification Sheet**



**Order No. 62100-9620**

**FEATURES**

- Universal tool used for removal of Impact™ Ortho BP headers
- Removes connector without damage to the PCB

**SCOPE**

Products: Impact™ Ortho BP backplane headers. 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](http://www.molex.com).

Series No.	Column No.	Backplane Header Order No.								
76285 Unguided	10	762850104	762850105	762850107	762850108	762851104	762851105	762851107	762851108	
		762850124	762850125	762850127	762850128	762851124	762851125	762851127	762851128	
	12	762850204	762850205	762850207	762850208	762851204	762851205	762851207	762851208	
		762850224	762850225	762850227	762850228	762851224	762851225	762851227	762851228	
76285 Guided Left	10	762852104	762852105	762852107	762852108	762853104	762853105	762853107	762853108	
		762856104	762856105	762856107	762856108	762857104	762857105	762857107	762857108	
	12	762852204	762852205	762852207	762852208	762853204	762853205	762853207	762853208	
		762856204	762856205	762856207	762856208	762857204	762857205	762857207	762857208	
76285 Guided Right	10	762854104	762854105	762854107	762854108	762855104	762855105	762855107	762855108	
		762858104	762858105	762858107	762858108	762859104	762859105	762859107	762859108	
	12	762854204	762854205	762854207	762854208	762855204	762855205	762855207	762855208	
		762858204	762858205	762858207	762858208	762859204	762859205	762859207	762859208	
76845 Unguided	6	76845-0604	76845-0605	76845-0607	76845-0608	76845-0614	76845-0615	76845-0617	76845-0618	
		76845-1604	76845-1605	76845-1607	76845-1608	76845-1614	76845-1615	76845-1617	76845-1618	
		76845-1624	76845-1625	76845-1627	76845-1628	76845-1634	76845-1635	76845-1637	76845-1638	
	8	76845-0804	76845-0805	76845-0807	76845-0808	76845-0814	76845-0815	76845-0817	76845-0818	
		76845-0824	76845-0825	76845-0827	76845-0828	76845-0834	76845-0835	76845-0837	76845-0838	
		76845-1804	76845-1805	76845-1807	76845-1808	76845-1814	76845-1815	76845-1817	76845-1818	
		76845-1824	76845-1825	76845-1827	76845-1828	76845-1834	76845-1835	76845-1837	76845-1838	
	10	76845-0104	76845-0105	76845-0107	76845-0108	76845-0114	76845-0115	76845-0117	76845-0118	
		76845-0124	76845-0125	76845-0127	76845-0128	76845-0134	76845-0135	76845-0137	76845-0138	
		76845-1104	76845-1105	76845-1107	76845-1108	76845-1114	76845-1115	76845-1117	76845-1118	
			76845-1124	76845-1125	76845-1127	76845-1128	76845-1134	76845-1135	76845-1137	76845-1138
	76845 Guide Left	6	76845-2604	76845-2605	76845-2607	76845-2608	76845-3604	76845-3605	76845-3607	76845-3608
76845-6604			76845-6605	76845-6607	76845-6608	76845-7604	76845-7605	76845-7607	76845-7608	
8		76845-2804	76845-2805	76845-2807	76845-2808	76845-3804	76845-3805	76845-3807	76845-3808	
		76845-6804	76845-6805	76845-6807	76845-6808	76845-7804	76845-7805	76845-7807	76845-7808	
10		76845-2104	76845-2105	76845-2107	76845-2108	76845-3104	76845-3105	76845-3107	76845-3108	
		76845-6104	76845-6105	76845-6107	76845-6108	76845-7104	76845-7105	76845-7107	76845-7108	

Backplane Header Removal Tool

Series No.	Column No.	Backplane Header Order No.							
76845 Guide Right	6	76845-4604	76845-4605	76845-4607	76845-4608	76845-5604	76845-5605	76845-5607	76845-5608
		76845-8604	76845-8605	76845-8607	76845-8608	76845-9604	76845-9605	76845-9607	76845-9608
	8	76845-4804	76845-4805	76845-4807	76845-4808	76845-5804	76845-5805	76845-5807	76845-5808
		76845-8804	76845-8805	76845-8807	76845-8808	76845-9804	76845-9805	76845-9807	76845-9808
	10	76845-4104	76845-4105	76845-4107	76845-4108	76845-5104	76845-5105	76845-5107	76845-5108
76845-8104		76845-8105	76845-8107	76845-8108	76845-9104	76845-9105	76845-9107	76845-9108	
76855 Unguided	6	76855-0604	76855-0605	76855-0607	76855-0608	76855-0624	76855-0625	76855-0627	76855-0628
		76855-1604	76855-1605	76855-1607	76855-1608	76855-1624	76855-1625	76855-1627	76855-1628
	8	76855-0804	76855-0805	76855-0807	76855-0808	76855-0824	76855-0825	76855-0827	76855-0828
		76855-1804	76855-1805	76855-1807	76855-1808	76855-1824	76855-1825	76855-1827	76855-1828
76855 Guide Left	6	76855-2604	76855-2605	76855-2607	76855-2608	76855-3604	76855-3605	76855-3607	76855-3608
		76855-6604	76855-6605	76855-6607	76855-6608	76855-7604	76855-7605	76855-7607	76855-7608
	8	76855-2804	76855-2805	76855-2807	76855-2808	76855-3804	76855-3805	76855-3807	76855-3808
		76855-6804	76855-6805	76855-6807	76855-6808	76855-7804	76855-7805	76855-7807	76855-7808
76855 Guide Right	6	76855-4604	76855-4605	76855-4607	76855-4608	76855-5604	76855-5605	76855-5607	76855-5608
		76855-8604	76855-8605	76855-8607	76855-8608	76855-9604	76855-9605	76855-9607	76855-9608
	8	76855-4804	76855-4805	76855-4807	76855-4808	76855-5804	76855-5805	76855-5807	76855-5808
		76855-8804	76855-8805	76855-8807	76855-8808	76855-9804	76855-9805	76855-9807	76855-9808
76985 Unguided	8	76985-0804	76985-0805	76985-0807	76985-0808	76985-0824	76985-0825	76985-0827	76985-0828
		76985-1804	76985-1805	76985-1807	76985-1808	76985-1824	76985-1825	76985-1827	76985-1828
	10	76985-0104	76985-0105	76985-0107	76985-0108	76985-0124	76985-0125	76985-0127	76985-0128
		76985-1104	76985-1105	76985-1107	76985-1108	76985-1124	76985-1125	76985-1127	76985-1128
	12	76985-0204	76985-0205	76985-0207	76985-0208	76985-0224	76985-0225	76985-0227	76985-0228
		76985-1204	76985-1205	76985-1207	76985-1208	76985-1224	76985-1225	76985-1227	76985-1228
76985 Guided Left	8	76985-2804	76985-2805	76985-2807	76985-2808	76985-3804	76985-3805	76985-3807	76985-3808
		76985-6804	76985-6805	76985-6807	76985-6808	76985-7804	76985-7805	76985-7807	76985-7808
	10	76985-2104	76985-2105	76985-2107	76985-2108	76985-3104	76985-3105	76985-3107	76985-3108
		76985-6104	76985-6105	76985-6107	76985-6108	76985-7104	76985-7105	76985-7107	76985-7108
	12	76985-2204	76985-2205	76985-2207	76985-2208	76985-3204	76985-3205	76985-3207	76985-3208
		76985-6204	76985-6205	76985-6207	76985-6208	76985-7204	76985-7205	76985-7207	76985-7208
76985 Guided Right	8	76985-4804	76985-4805	76985-4807	76985-4808	76985-5804	76985-5805	76985-5807	76985-5808
		76985-8804	76985-8805	76985-8807	76985-8808	76985-9804	76985-9805	76985-9807	76985-9808
	10	76985-4104	76985-4105	76985-4107	76985-4108	76985-5104	76985-5105	76985-5107	76985-5108
		76985-8104	76985-8105	76985-8107	76985-8108	76985-9104	76985-9105	76985-9107	76985-9108
	12	76985-4204	76985-4205	76985-4207	76985-4208	76985-5204	76985-5205	76985-5207	76985-5208
		76985-8204	76985-8205	76985-8207	76985-8208	76985-9204	76985-9205	76985-9207	76985-9208
171880 Unguided	6	171880-1604	171880-1605	171880-1607	171880-1608	171880-1624	171880-1625	171880-1627	171880-1628
	8	171880-1804	171880-1805	171880-1807	171880-1808	171880-1824	171880-1825	171880-1827	171880-1828
171880 Left	6	171880-3604	171880-3605	171880-3607	171880-3608	171880-7604	171880-7605	171880-7607	171880-7608
	8	171880-3804	171880-3805	171880-3807	171880-3808	171880-7804	171880-7805	171880-7807	171880-7808
171880 Right	6	171880-5604	171880-5605	171880-5607	171880-5608	171880-9604	171880-9605	171880-9607	171880-9608
	8	171880-5804	171880-5805	171880-5807	171880-5808	171880-9804	171880-9805	171880-9807	171880-9808
171884 Unguided	8	171884-1804	171884-1805	171884-1807	171884-1808	171884-1824	171884-1825	171884-1827	171884-1828
	10	171884-1104	171884-1105	171884-1107	171884-1108	171884-1124	171884-1125	171884-1127	171884-1128
	12	171884-1204	171884-1205	171884-1207	171884-1208	171884-1224	171884-1225	171884-1227	171884-1228
171884 Left	8	171884-3804	171884-3805	171884-3807	171884-3808	171884-7804	171884-7805	171884-7807	171884-7808
	10	171884-3104	171884-3105	171884-3107	171884-3108	171884-7104	171884-7105	171884-7107	171884-7108
	12	171884-3204	171884-3205	171884-3207	171884-3208	171884-7204	171884-7205	171884-7207	171884-7208
171884 Right	8	171884-5804	171884-5805	171884-5807	171884-5808	171884-9804	171884-9805	171884-9807	171884-9808
	10	171884-5104	171884-5105	171884-5107	171884-5108	171884-9104	171884-9105	171884-9107	171884-9108
	12	171884-5204	171884-5205	171884-5207	171884-5208	171884-9204	171884-9205	171884-9207	171884-9208

## DESCRIPTION

Figure 1 illustrates the principal parts of the removal tool.

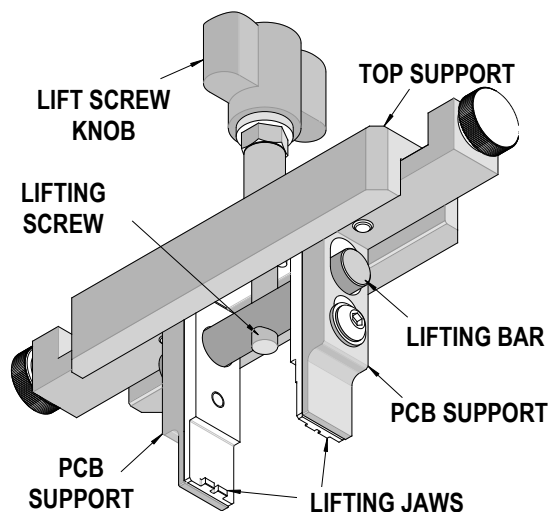


Figure 1

## Tool Restrictions

In order for this tool to function, there is a "Keep-Out Zone" of .197" (5.00mm) around the header that needs to be clear of other components. See Figure 2. This is a general requirement, regardless of the header 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 PCB Support for added protection of the printed circuit board.

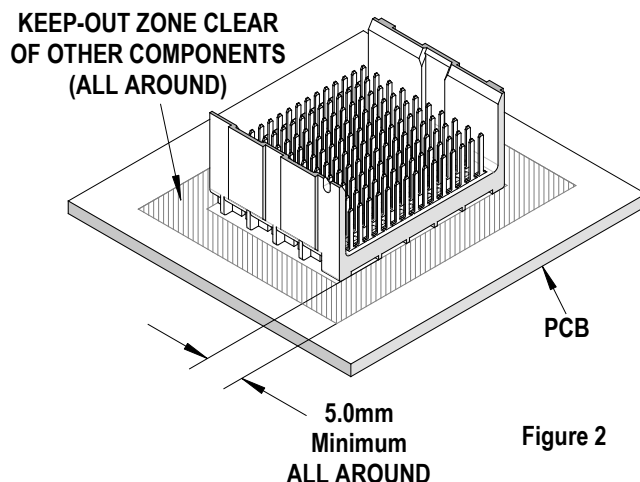


Figure 2

## Tool Operation

Note: Some longer-length headers may need the following steps repeated, with the tool being re-applied along the length of the assembly.

1. Slide the PCB Supports and Lifting Jaws by turning the adjusting knobs on the PCB supports fully open. See Figure 3. Turn the Lifting Screw Knob counter-clockwise (CCW) until the Lifting Jaws are slightly below the PCB Supports. At this point, the end of the Lifting Screw will be nearly flush with the bottom of the Lifting Bar.

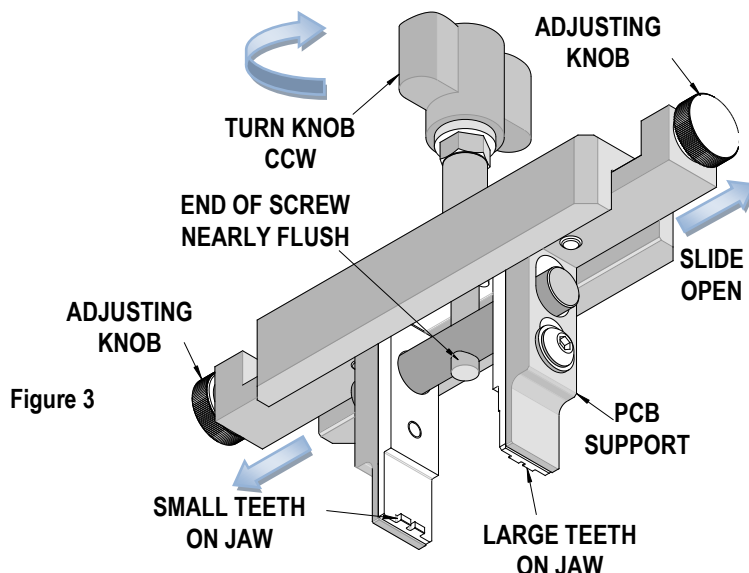


Figure 3

2. Move the tool down over the outside walls of the backplane housing. Note that the jaws have “teeth” that engage the recessed area of the housing (near the PCB surface). See Figure 4. The large teeth must engage in the large recessed area of the housing and the small teeth must engage in the small recessed area of the housing.

**Note:** The lifting jaws must engage the recesses in the housing so it can be lifted off the PCB.

3. Close the Lifting Jaws by turning the adjusting knobs on the PCB onto the backplane header housing. When the teeth are properly engaged in the recesses, the inside of the Lifting Jaws should be very close to the sides of the header housing. See Figure 5.

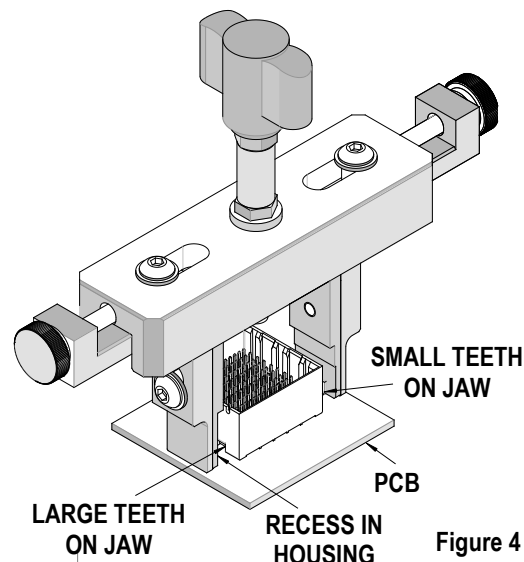


Figure 4

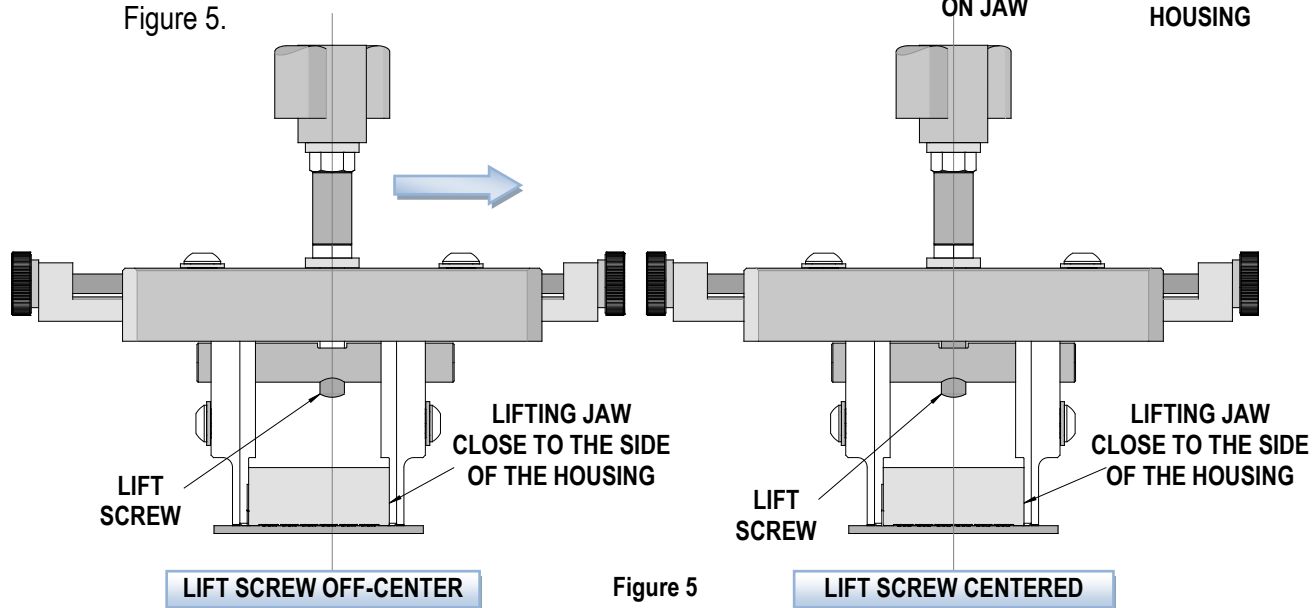


Figure 5

4. Ideally, the Lift Screw should be centered on the width of the backplane assembly. This will prevent the header assembly from tilting as it is removed from the PCB. If the screw is off-center, the top of the tool (screw, Lifting Bar, and Top Support) can be adjusted until centered. See Figure 5.
5. The PCB support adjusting knobs must be tightened firmly against the housing wall. Be certain the correct size teeth (large or small) are orientated to the large and small recesses in the housing.
6. Turn the Lift Screw Knob clockwise (CW) until the PCB Supports contact the printed circuit board.

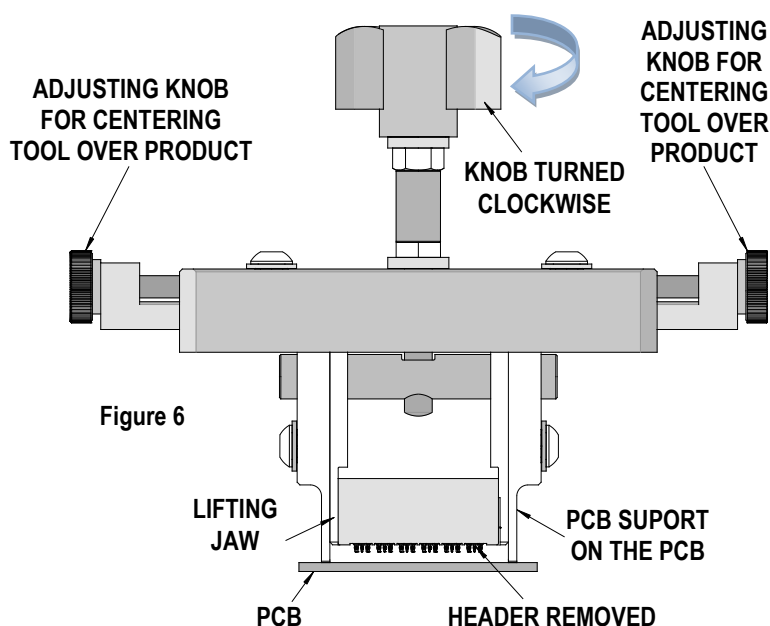


Figure 6

7. Continue turning the Lift Screw Knob clockwise (CW) until the backplane header is removed from the printed circuit board. See Figure 6.
8. Move the extraction tool away from the printed circuit board. Loosen the PCB Supports by turning the adjusting knobs counter-clockwise (CCW) the Lifting Jaws will open to release the header from the tool. Discard the header.

**Note:** After the backplane header is removed from the PCB, some terminals may be left in the PCB. This is not a tooling malfunction. If there are terminals left in the PCB use a pair of long nose pliers to remove them carefully so no damage is caused to the PCB. Caution is required when using this method; if a terminal is incorrectly gripped or pulled away at an angle, it could break off inside the PCB hole. After terminals are pulled out of the PCB, they should be discarded. The PCB should be free of any contact debris.

## 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>