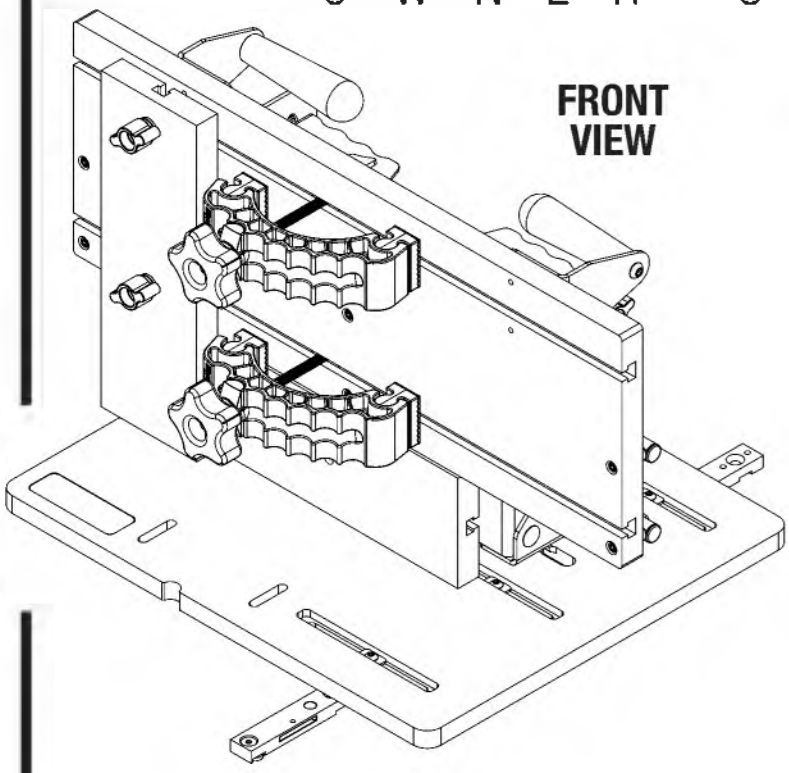
Woodpeckers®

ADJUSTA·JOINT

BOX JOINT SLED

OWNER'S MANUAL



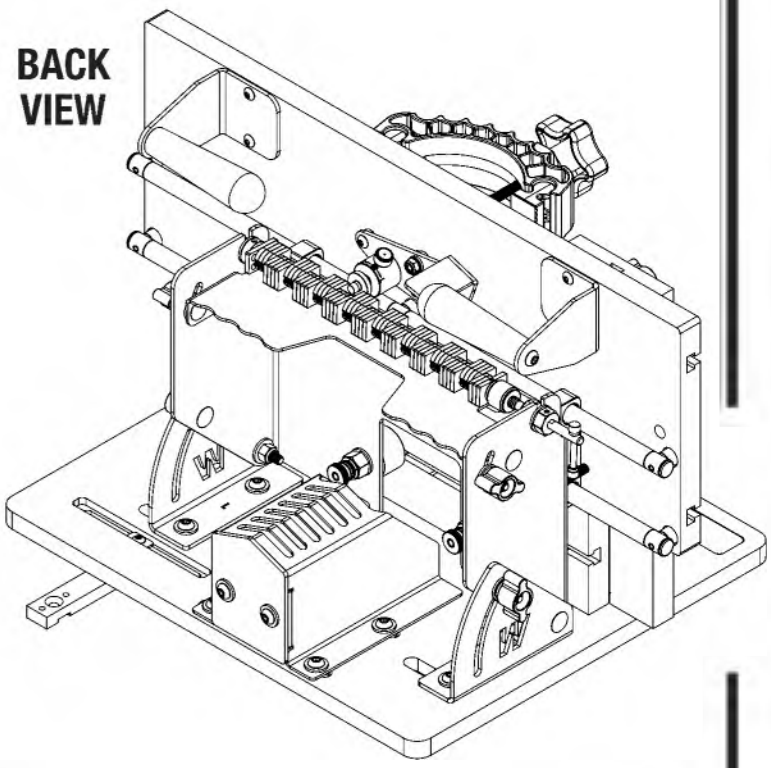


DIAGRAM NUMBER	(QTY)	PART NAME
Hardware Bag A		
①	(3)	Rectangular Washers
②	(3)	#10-32 x 3/4" Button Head Cap Screws
③	(2)	Weld Nuts
④	(2)	#10-32 x 5/16" Flat Head Screws
⑤	(1)	1/8" Hex Key
Hardware Bag B		
⑥	(4)	1/4-20 x 1/2" Socket Head Cap Screws
⑦	(4)	1/4 Washers
⑧	(2)	Knurled Knobs
⑨	(1)	2-1/4" T-Bolt
⑩	(4)	3/16" Hex Key
Hardware Bag C		
⑪	(8)	1/4-20 x 5/8" Button Head Cap Screws
⑫	(8)	Weld Nuts
⑬	(8)	1/4 Washer
⑭	(1)	Cam
⑮	(1)	5/32" Hex Key

DIAGRAM NUMBER	(QTY)	PART NAME
Hardware Bag D		
⑯	(2)	1-3/4" T-Bolt
⑰	(2)	4-1/2" T-Bolt
⑱	(2)	Knuckle Clamp Body
⑲	(2)	Knuckles
⑳	(2)	Small Red Knob
㉑	(2)	Red Star Knob
㉒	(2)	1/4 Washer
Hardware Bag E		
㉓	(3)	Stylus (1/8", 3/16", 1/4")
㉔	(1)	Stylus Locking Knob
㉕	(1)	Track Stop

Scan the QR code to watch the video or visit woodpeck.com under the video tab towards the bottom of the product page.

If you think you're missing anything, email us at mailroom@woodpeck.com.
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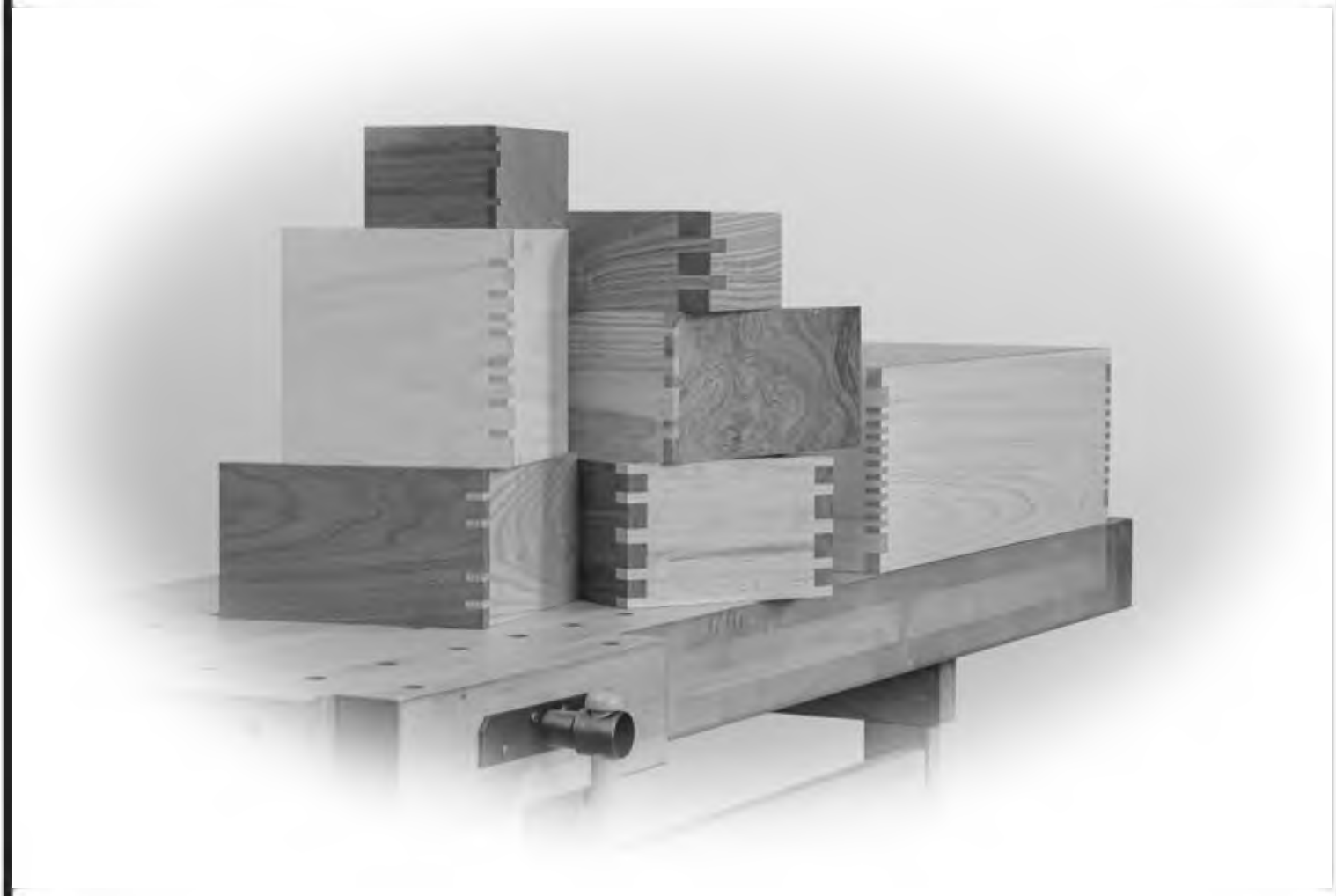
You can also call us at 800-752-0725 from 9:00 a.m. to 4:00 p.m. EST Monday - Friday.

ADJUSTA-JOINT
BOX JOINT SLED

Thank you for your purchase in the Woodpeckers Adjusta-Joint Box Joint Sled.

You have just opened the door to box-joint work that was previously difficult or impossible on a table saw. Now, you can make flawless, repeatable joints with adjustable finger widths, custom spacing, and handle oversized workpieces with confidence. Whether you're building fine furniture or custom boxes, Adjusta-Joint gives you the precision and flexibility your box joint projects deserve.

Your creativity is now the only limit. We're excited to see what you build.



1. INSTALL THE MITER BAR

AT THIS POINT YOU WILL NEED:
-- Hardware Bag A

The assembly and installation is best done with the Adjusta-Joint mounted in your table saw's miter slot.

A. Our patented leaf spring miter bar conforms to any miter slot nominally 3/8" x 3/4". Additionally, removeable weld nuts allow the miter bar to fit t-slot miter tracks. If your table saw has t-slot miter slots, install the weld nuts by guiding the ④ Flat Head Screws through the holes at the front and rear of the miter bar and into the ③ Weld Nuts. Tighten using the ⑤ 1/8" Hex Key ***FIGURE A.***

B. With the miter bar leaf springs facing the away from the blade, place the Sled Base on top of the miter bar and locate the three threaded holes that align with the three counter-bored slots in the Sled Base. ***FIGURE B.***

C. Place the ① Small Rectangular Washers onto the stem of the ② 10-32 Button Head Screws and install through the Sled Base and into the threaded holes of the miter bar.

D. Align the kerf and square the base to your blade.
   1. Raise your table saw blade to the highest setting.
   2. Position the sled base in front of the blade and so that the blade is centered on the kerf alignment notch in the Sled Base. ***FIGURE C.***
   3. Square the Sled Base to your saw blade plate (avoid interference with the teeth) using a reliable square or triangle.
   4. Tighten the three screws connecting the miter bar to the Sled Base using the ⑤ 1/8" Hex Key.

FIGURE A

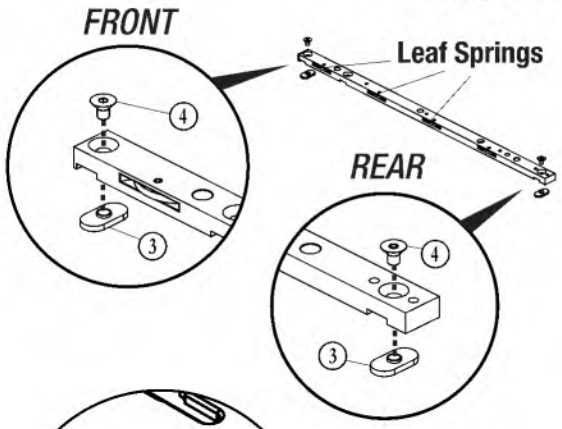


FIGURE B

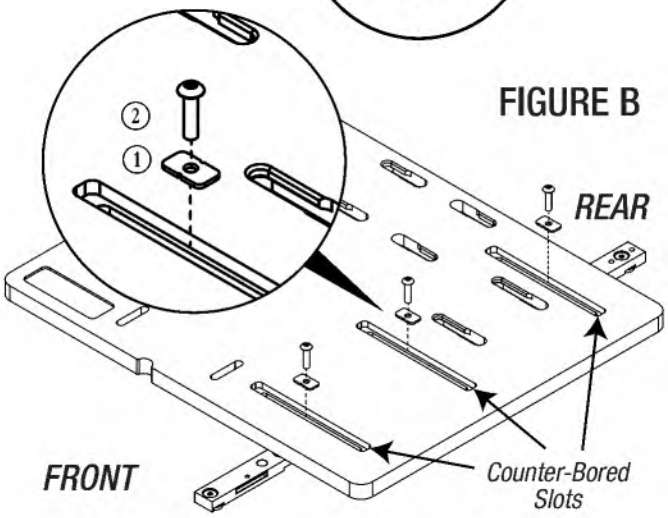
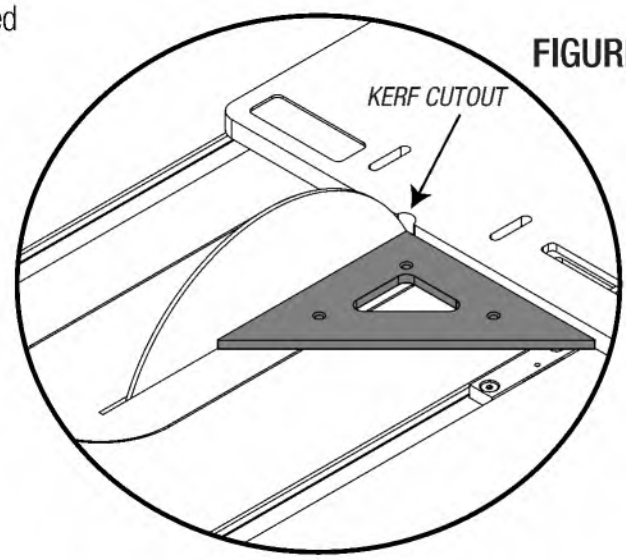


FIGURE C



2. ASSEMBLE THE SLIDING TABLE

AT THIS POINT YOU WILL NEED:
– Hardware Bag B

A. Lay the Sliding Table flat on your table with the handles up and away from you. Slide the Sliding Table Mounts all the way to the right. ***FIGURE D.***

B. Adjust the Sliding Table Base by loosening the two black knobs and guiding the feet to 90°. Re-tighten the two black knobs.

C. Align the mounting holes of the Sliding Table Base to the holes on the Sliding Table Mounts and install the ⑥ Socket Head Cap Screws and ⑦ Washers. Tighten all four Screws using the 3/16" Hex Key.

D. Install the ⑨ T-bolts through the knurled Leveling Knobs and thread the ⑧ Small Knurled Knobs onto the stem of the T-bolt. Leave loose for now. ***FIGURE E.***

3. INSTALL THE SLIDING TABLE

AT THIS POINT YOU WILL NEED:
-- Hardware Bag C

A. Locate the four Keyhole Slots in the Sled Base. ***FIGURE F.***

B. Pre-install ⑪ (4) Button Head Cap Screws, ⑬ (4) 1/4 Washers, and ⑫ (4) Weld Nuts through the holes in the feet of the Sliding Table Base. Thread the Weld Nuts just enough that they stay in place. ***FIGURE F-1.***

C. Place the ⑭ Cam in the circular pocket in the Sled Base with the raised portion to the left. ***FIGURE F-2.***

D. Align the Screws & Washers to the four keyhole slots and guide the oval nuts into the keyhole. Push the Sliding Table Base to the right so that it sits flat on the sled and the Cam engages the slot in the Sliding Table Base. Tighten the four screws using the 5/32" Hex Key. ***FIGURE F-3.***

FIGURE D

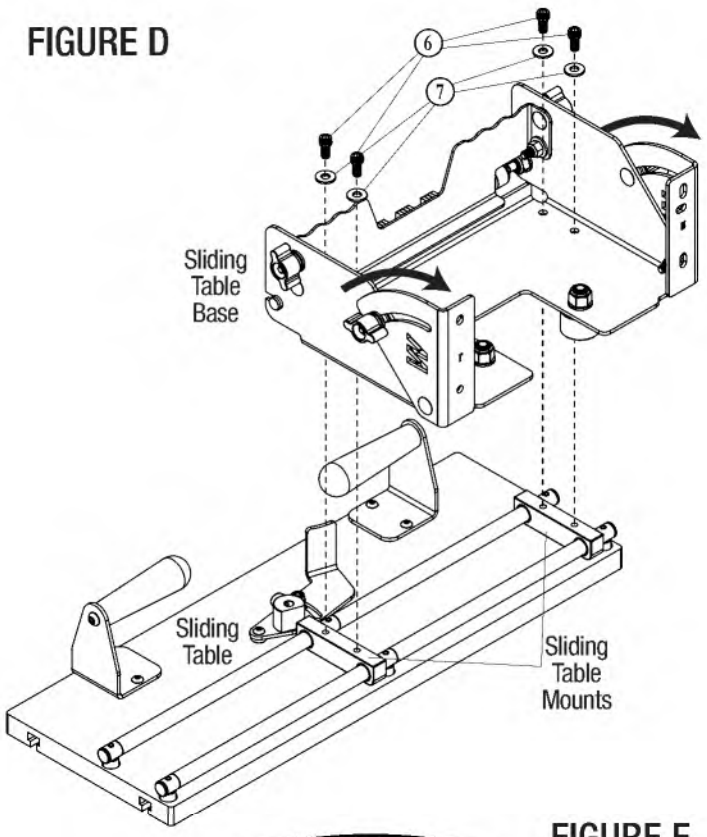


FIGURE E

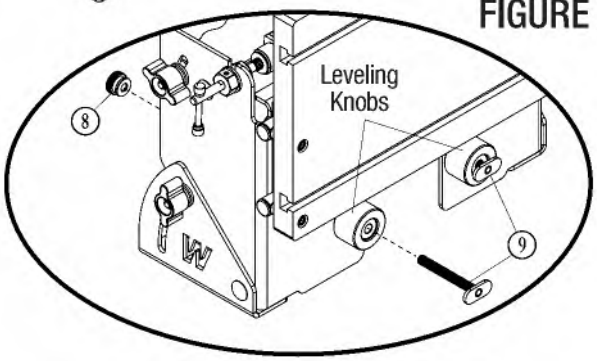
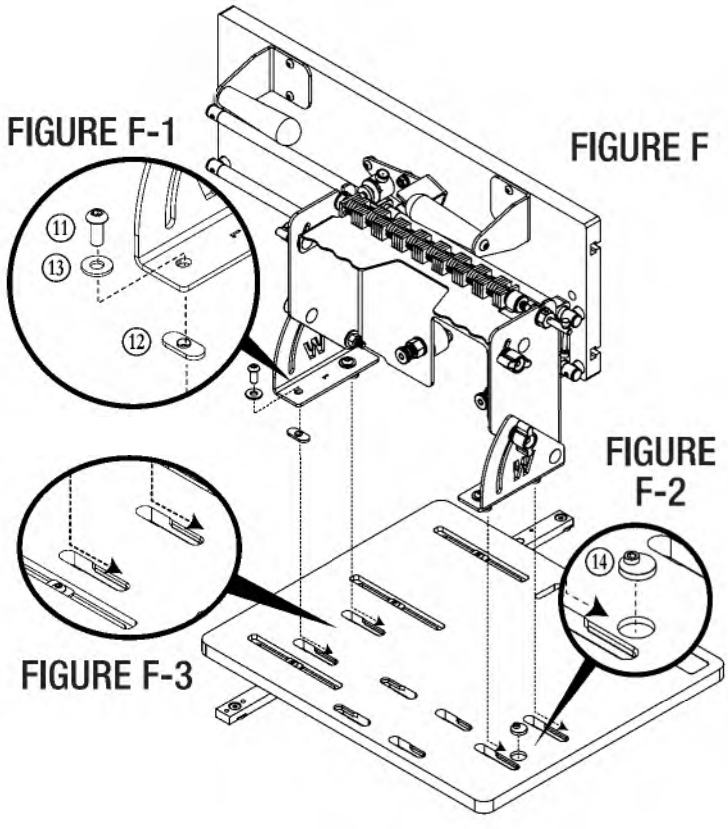


FIGURE F-1

FIGURE F

FIGURE F-2

FIGURE F-3



E. Install the Sacrificial MDF Fences.

1. Guide (1) Sacrificial MDF Fence onto the two T-Bolts installed previously through the Leveling Knobs. With the fence located where you like, tighten the Sacrificial Fence Lock Knobs on the back side. (See Tips & Tricks on page 10 for best practices on kerf location.) ***FIGURE G.***
2. Assemble the Vertical Fence by guiding two ⑯ T-Bolts through the holes on the Sacrificial MDF Fence and install a ㉒ Washer and ⑳ Small Red Knob onto each stem. NOTE: The T-slot track should be facing the Sliding Table. ***FIGURE H.*** Guide the Oval Nuts into the two tracks on the Sliding Table. Roughly locate the fence and tighten the two knobs until calibration later.

F. Install the blade guard.

1. Drop one ⑫ Weld Nut into the keyhole in each of the four Keyhole Slots. Move the ⑫ Weld Nuts to the through-hole in each slot using a hex key to help guide the nut.
2. Align the Blade Guard to the oval nuts and thread a ⑪ Button Head Cap Screw and ⑬ 1/4 Washer through the holes in the Blade Guard and into the oval nuts. Tighten the four screws. ***FIGURE I.***

F. Assemble the two Knuckle Clamps.

AT THIS POINT YOU WILL NEED:
– Hardware Bag D

- Place a ⑲ Knuckle in one of the grooves on the ⑱ Knuckle Clamp body and guide the ⑰ 4-1/2" T-Bolt from underneath through the hole. Install a ㉑ Red Star Knob on the T-Bolt to secure the assembly. ***FIGURE J.***

G. Install the Knuckle Clamps onto the Fence.

- Guide the head at the bottom of the ⑰ T-Bolt into the track slot on the Sliding Table. When the Clamp is at your desired position, turn the ㉑ Red Star Knob clockwise until tight.

H. Using the Knuckle Clamps

- When clamping your workpiece to the Sliding Table, slightly angle the the knuckle clamp towards the fence. When tightening the clamp, the design will pull your material into the fence. Conversely, the opposite angle can pull your material away from the fence. ***FIGURE K.***

FIGURE G

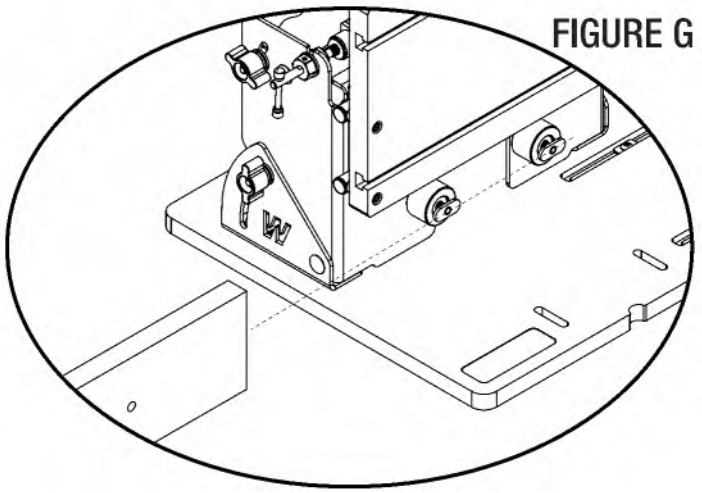


FIGURE H

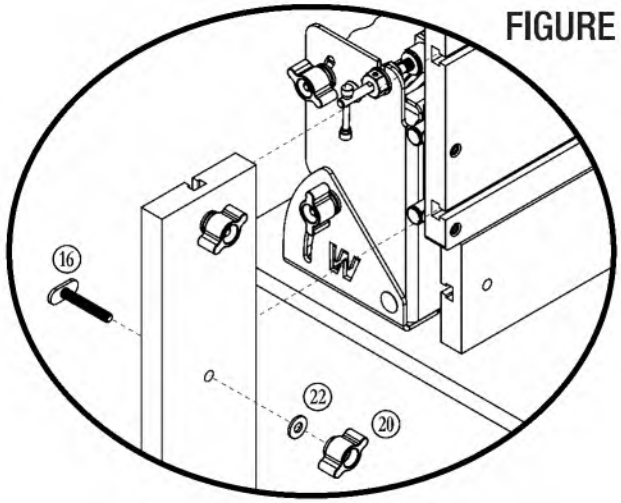


FIGURE I

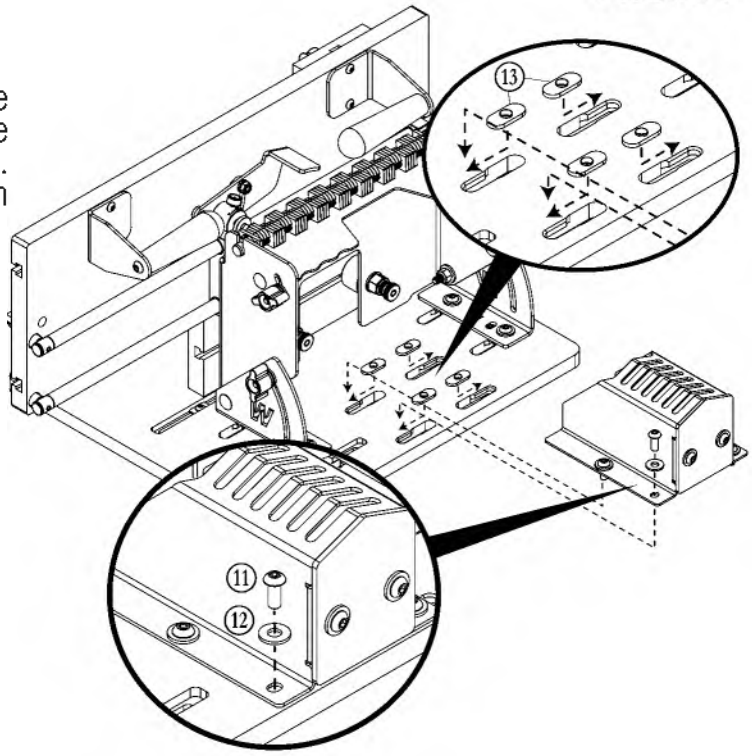


FIGURE J

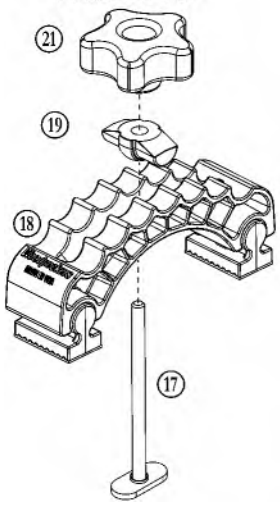
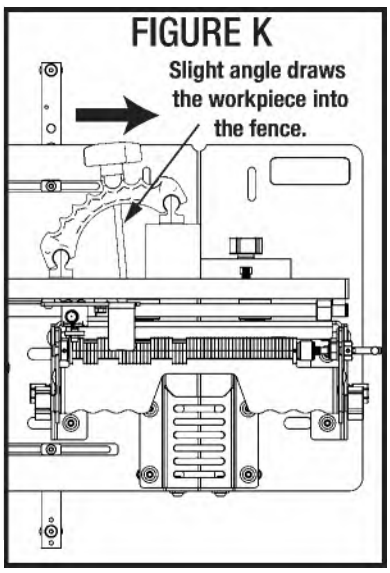


FIGURE K



I. Install the Stylus

1. Choose the ㉓ Stylus that matches your blade thickness. Thread the stylus into the Stylus Housing and keep turning clockwise until the thickest part of the taper on the Stylus pin aligns with the keys. Install the ㉔ Stylus Lock Knob in the remaining hole in the Stylus Housing.
2. The ball detent indexes into the grooves machined into the stem of the stylus for fine-tuning the fit of your box joint. You do not need to adjust or remove the set screw in the Stylus Housing.

NOTE **When loosening the lock to adjust the Stylus, turn at least one full turn then adjust the Stylus.**

4. CALIBRATION

A. First, ensure that the sled base is square to the blade and the kerf is aligned to the notch in the Sled Base. (See part I.D).

B. Ensure that the Sacrificial MDF Backing is flush to the Sliding Table. Run a straight edge over the joint. If adjustment is necessary, loosen the Sacrificial Fence Lock Knobs and adjust the Leveling Knobs so that the joint is flush. ***FIGURE M.***

PRO TIP

For maximizing the use of your Sacrificial MDF Backing, see Tips & Tricks on Page 10.

C. Using a reliable square, check that the Sliding Table is square to the Sled Base. If adjustment is necessary, loosen the two Black Knobs, Square the Sliding Table to the Sled Base, and re-tighten the two Black Knobs. ***FIGURE N.***

D. Adjusta-Joint is designed for use with a 10" saw blade with a Flat Top Grind and a thickness of 1/8", 3/16", or 1/4", like Ultra-Shear's Flat Top Grooving Blades. Install your choice of flat-top grooving blade to calibrate and cut the initial kerf. If you only plan to work with one size, go with that. If you will use varying sizes, you should calibrate with your thickest blade.

FIGURE L

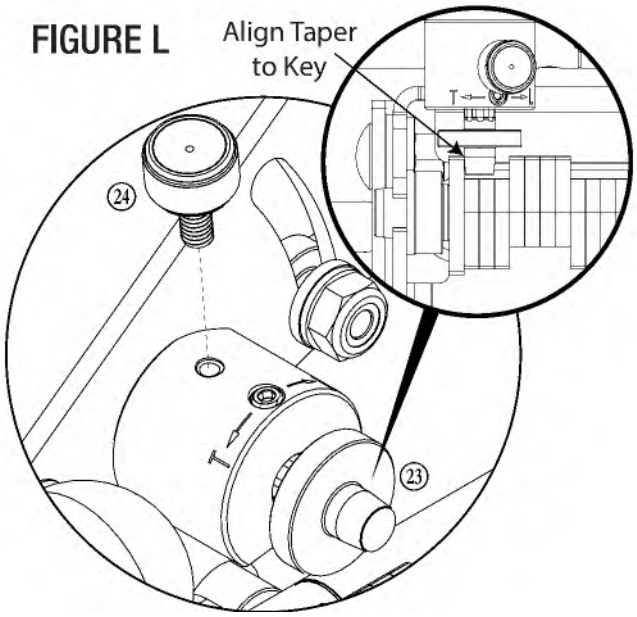


FIGURE M

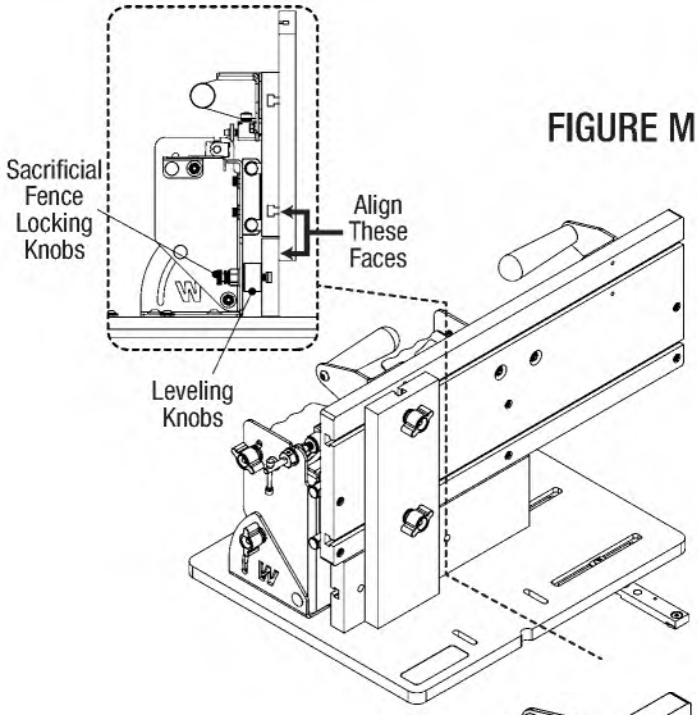
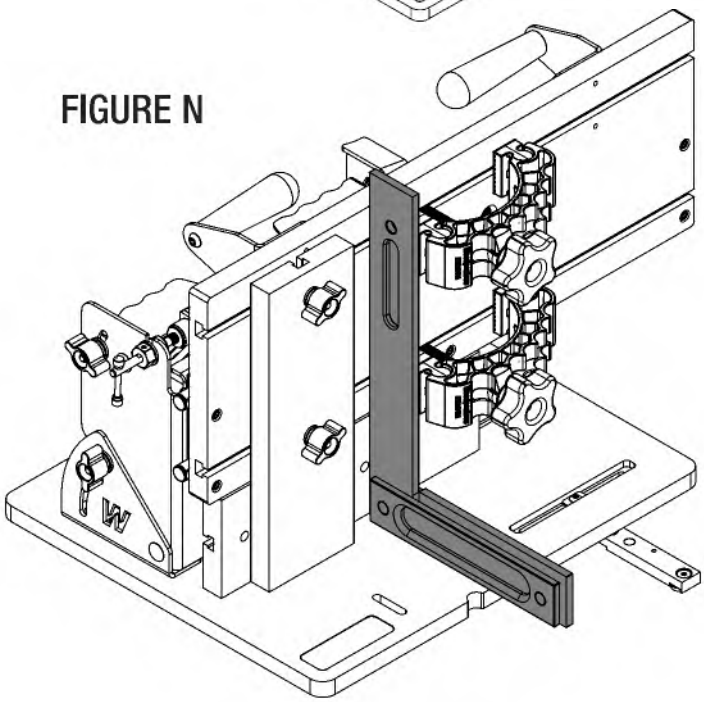


FIGURE N



E. Cut the kerf and set your travel stop.

1. Set the blade height to around 2". Ensure the Vertical Fence is clear of the blade or temporarily removed.
2. Make a mark on the saw table to note where top-dead-center of your blade is. Mark at least 7" right of the blade so you can reference it when cutting the kerf. ***FIGURE O.***

PRO TIP

Use a pencil, tape, or other means. This does not need to be precise.

3. Turn ON your table saw and carefully make the initial cut. Turn the saw OFF when the Sliding Table meets the top-dead-center mark on your table. This will be the furthest point your Adjusta-Joint must travel to fully cut the workpiece.
4. Install the ㉕ Track Stop in your table saw miter slot and butt it against the miter bar. Tighten the Knob. Double-check that the top-dead-center of the blade is indeed inside the Sacrificial MDF Backer.
5. If your table saw does not have a T-slot miter track, see Tips & Tricks on Page 10 for alternative stop methods.

F. Make a test cut and calibrate for square.

1. Fetch or mill a piece of square stock to be used for calibration. The stock should be thicker than your intended project's material thickness (about 1" to 1-1/2" should work) and a minimum of 2" wide x 10" long.
2. Move the Adjusta-Joint to the front of the table and slide the Vertical Fence so that its edge is centered on the kerf (ensuring a full-depth cut on the test piece).
3. Using a reliable square, ensure that the Vertical Fence is square to the Sled Base (in the same plane as the Sliding Table). ***FIGURE P.***
4. Mark the reference face of your test piece and place it against the face of the Sliding Table.
5. Slide the test piece so it fully engages both the Vertical Fence and Sled Base. There should be no gaps on either reference.
6. Clamp the test piece to the Sliding Table, again checking that there are no gaps.
7. Make a cut on the test piece. ***FIGURE Q.***
8. Remove the test piece from the Adjusta-Joint and check the edge-to-reference-face for square using a reliable square. If the test cut is not square, some adjustment is necessary.

FIGURE O

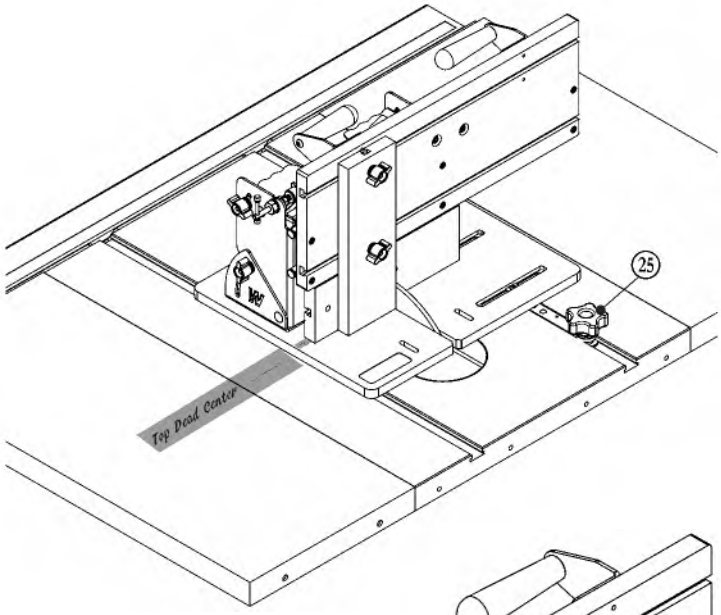


FIGURE P

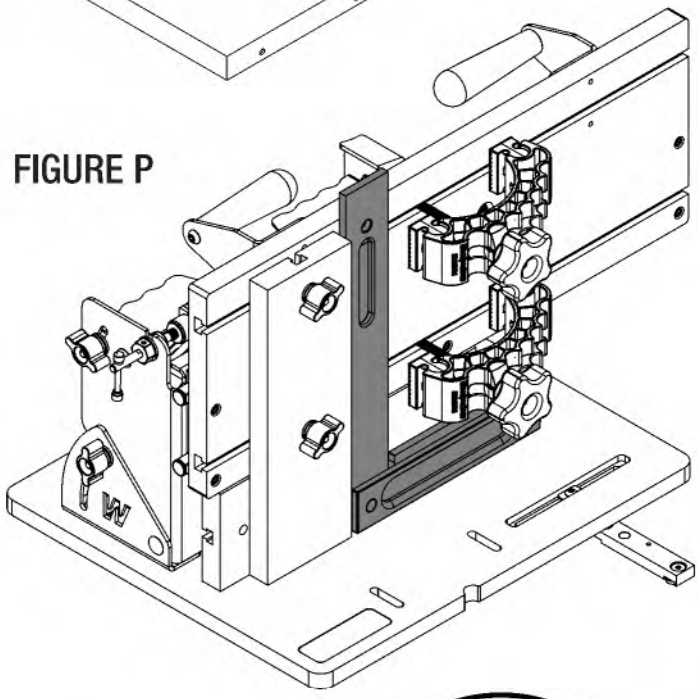
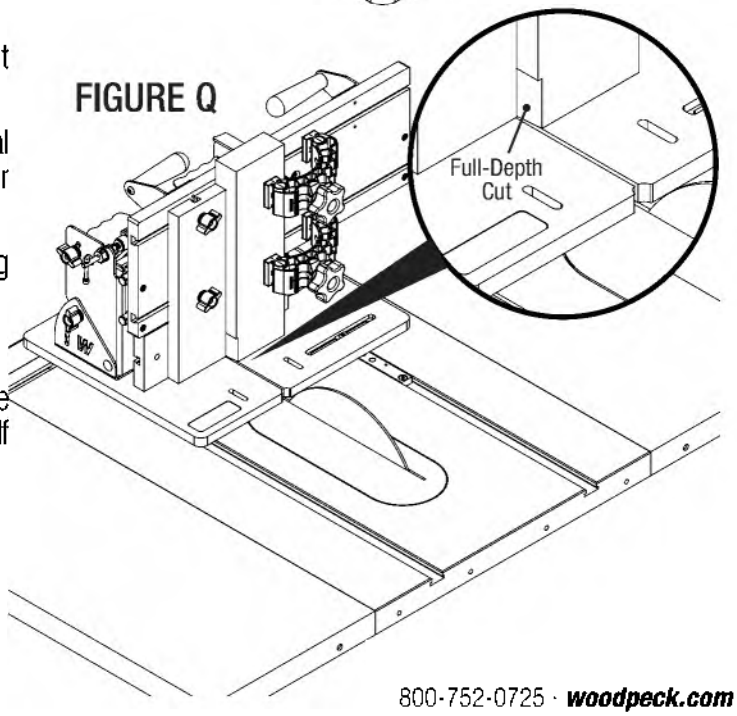


FIGURE Q



9. Crack loose 3 of the Sliding Table Mounting Screws, leaving the forward-left screw tight using the 5/32" Hex Key. ***FIGURE R.***
10. Adjust the Cam by a small amount using the 1/8" Hex Key to fine-tune the Adjusta-Joint square to your saw blade. See ***FIGURE R-1.***
11. When you feel you've adjusted it enough, re-tighten the Sled Base Mouting Screws and clamp the test piece to the Sliding Table, again ensuring your reference face is against the table.
12. Make another test cut, moving the Sliding Table sideways so the blade fully cuts the workpiece.
13. Repeat steps 9-12 until you get a satisfactory square cut.

5. SETTING UP YOUR BOX JOINTS

Now that your Adjusta-Joint is calibrated square to the blade, you can set up your specific project and dial in the perfect fit.

1. Template Requirements. ***Reference FIGURE S.***

A. The Template is comprised of all 64 keys. Each key is slightly wider than 1/8". When you set the Template, both inverse templates are automatically created.

B. Setup Requirements: For 1/8" & 3/16" blades, a minimum of two keys per pin are required. For 1/4" blades, a minimum of three keys per pin are required.

C. The left-most key must be facing with the long part towards you (drilled holes towards the Sliding Table). This will be your Fence Reference Key.

D. The first two keys (three for 1/4" blades) must also be facing you.

2. Lay out your box joint design.

A. You need only lay out one set of box joint fingers to set the Template.

B. As with every box joint layout, mark your reference faces and joining ends ("A" & "B" cuts).

3. Set the Template

A. To adjust the Keys, first loosen the Knurled Nut at the end of the stack of keys. ***FIGURE T.***

FIGURE R

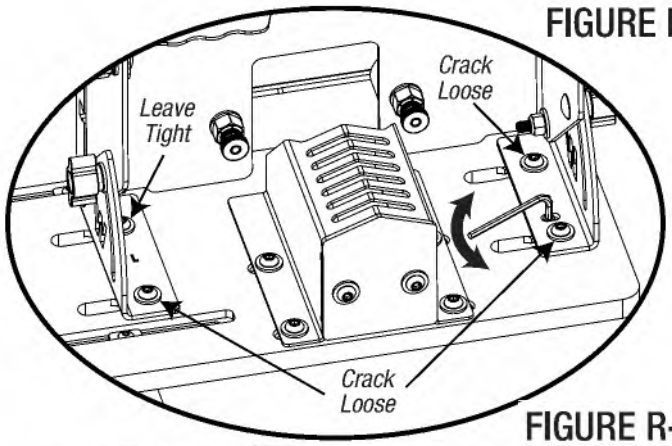


FIGURE R-1

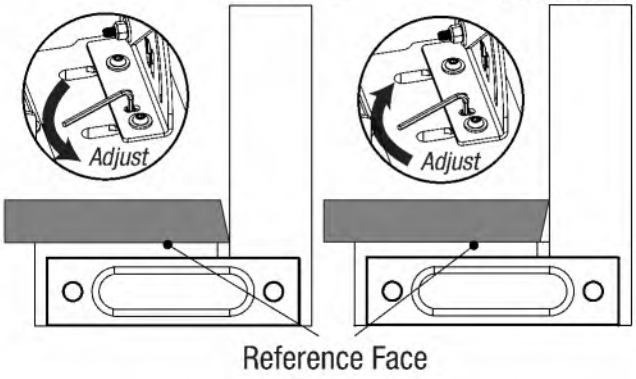


FIGURE S

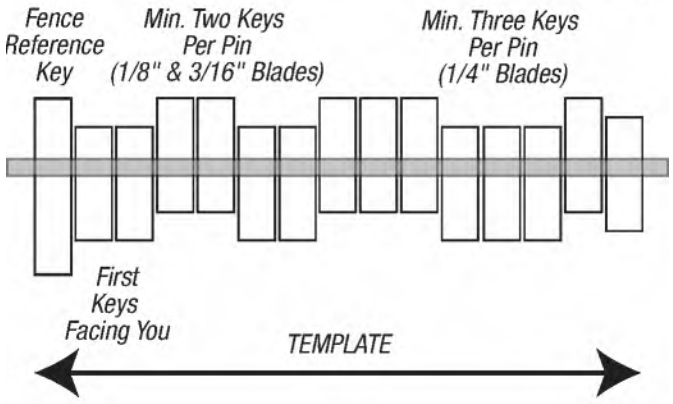
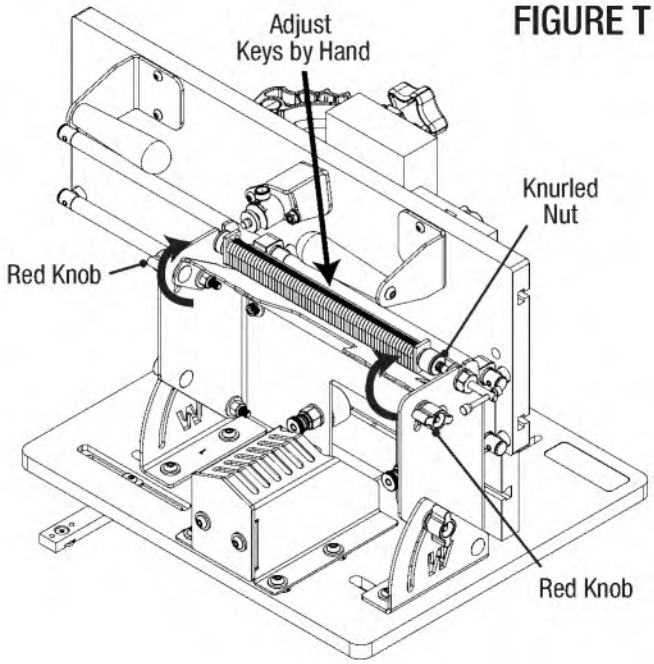


FIGURE T



B. With your box joint design sketched out on your workpiece or a sheet of graph paper, align the layout to the Fence Reference Key. ***FIGURE U.***

C. Flip the keys forward or backward so that it matches your layout to the closest key. The keys now form both templates for the Stylus: Cut "A" is facing towards you, and Cut "B" is facing towards the Sliding Table.

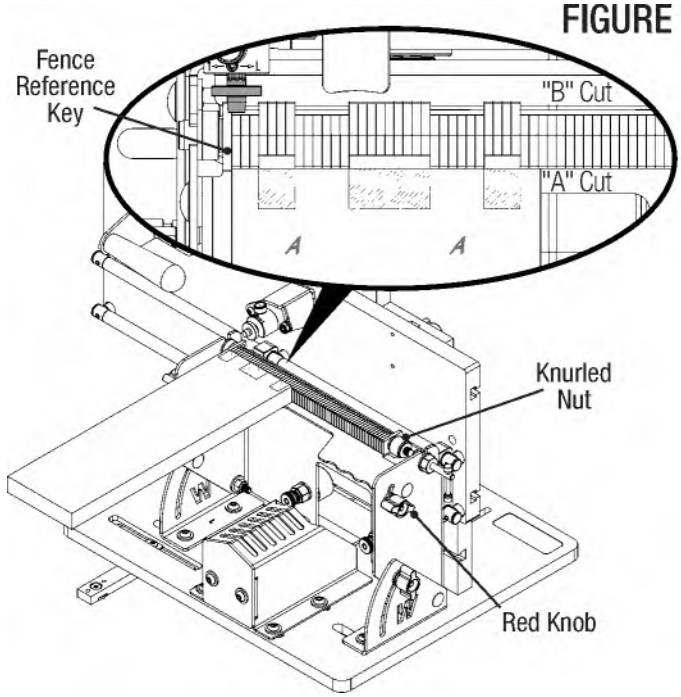
NOTE: The keys facing toward the Sliding Table preclude the Stylus from being lowered and therefore will not be cut. These will be the box joint fingers. The voids in between those Keys will be cut, and the Sliding Table can slide freely between the two. This will cut the sockets.

D. Use the Shelf to ensure the edges of the Keys are aligned.

E. When your Template is set, tighten the Knurled Nut firmly so the Keys do not spin.

F. Ensure the shelf is level and the Keys are aligned and re-tighten the Red Knobs.

FIGURE U



6. DIAL IN A PRECISION-FIT

A. Each time a new project is set up, you'll need to dial in the fit for that blade and template. Use stock of the same width and thickness as your project material for calibrating the fit.

B. Align the Vertical Fence to the right side of the saw blade.

C. Lift the Stylus Handle and position the Vertical Fence so that the Stylus drops in the left-most part of the Template. The stylus should contact the left-most Key. Ensure the largest part of the taper on the Stylus is contacting the Key. (See part 3.I)

D. Clamp the "B" Cut test piece to the Sliding Table. Ensure the reference face is against the Vertical Table and the reference edge is against the Vertical Fence. Ensure the "B" Template is facing towards the Stylus). ***FIGURE V.***

E. Set your blade depth of cut by placing your workpiece on the Sled Base. Adjust your blade height so that it is flush or just above the workpiece (depending on your preference).

E. Make the box joint cuts for the whole width of the test piece.

F. Remove the Cut "B" test piece and clamp the Cut "A" test piece to the Sliding Table. Ensure the reference face is against the Vertical Table and the reference edge is against the Vertical Fence.

G. Loosen the two Red Knobs, flip the template, and re-tighten the two Red Knobs.

H. Make the box joint cuts for the whole width of the test piece. When cutting each socket, step over roughly the width of the blade until all material is cut away.

I. Test fit the two pieces together to determine how much adjustment is necessary.

J. If the two pieces just won't fit together, turn the stylus clockwise 3 clicks and re-cut the two pieces. Test fit the two pieces again. Each click represents .0015" difference in joint size. ***FIGURE W.***

K. If the two pieces can fit, but are tight, just one or two clicks may be all that is necessary. This will vary depending on the species of wood, how many fingers, etc., the goal is to get the precise fit you want. Keep dialing it in until you are satisfied.

FIGURE V

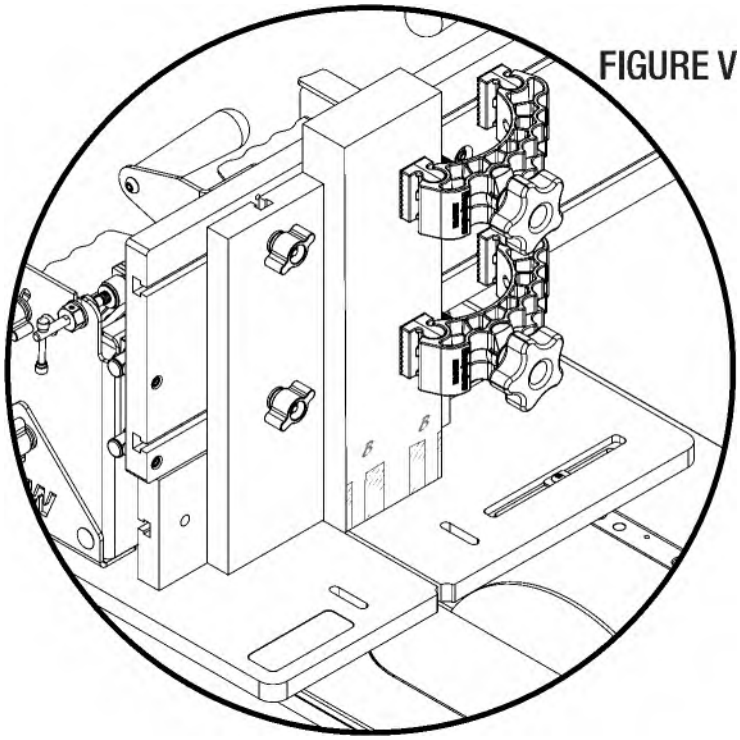
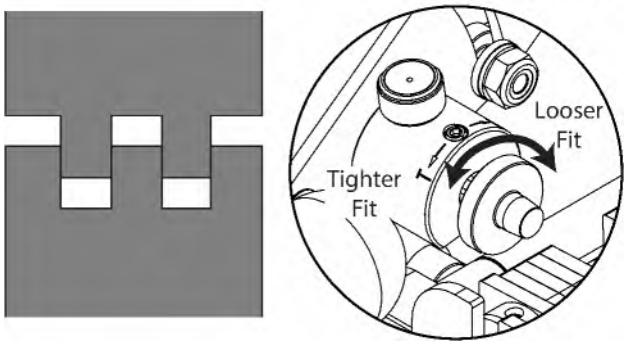


FIGURE W



7. INSTALLING THE RACK-IT®

A. Find a suitable location to mount the Rack-It. The weight of the Adjusta-Joint requires a stud, plywood, or other sturdy backing in order to mount the Rack-It. Do not use hollow wall anchors.

B. We've included two lag bolts and washers for mounting the Rack-It. Mark the first hole on the wall and drill the first pilot hole using a 3/32" bit.

C. Place the Rack-It on the wall and align one of the center holes with your drilled pilot hole. Drive the first lag bolt/washer, leaving the lag bolt slightly loose.

D. Make sure the Rack-It is level and mark the second hole location. Drill the second 3/32" pilot hole and then drive the second lag bolt/washer and finish driving the first lag bolt.

8. TIPS & TRICKS

A. Maximize your Sacrificial MDF Face.

- Try to locate all of your deep cuts to one side of the sacrificial fence and your shallow cuts in the center. That way, you can flip it over and use the other side when it's been consumed. ***FIGURE X.***

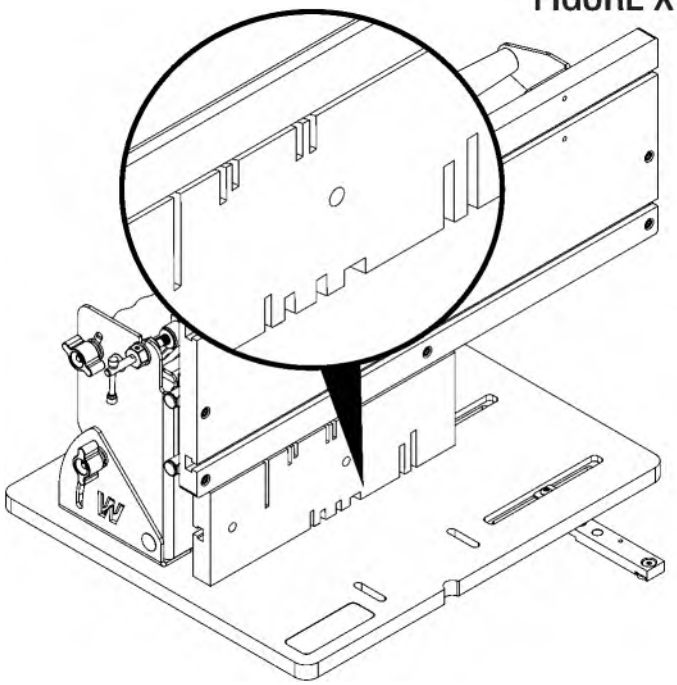
B. Clamping

- Standard T-Slot style track clamps work just as well in the Sliding Table Tracks.

C. If you don't have a T-Slot miter track in your table saw.

1. Simply clamp a scrap piece to your rip fence so that the Sled Base butts up at the stop location.
2. Or, you can use a magnetic jig on your table.

FIGURE X



9. FINE TUNING YOUR ADJUSTA-JOINT

A. Fine-Tune the Shelf Tilt.

1. Loosen the two Red Knobs. If you want more or less drag when tilting the shelf, tighten or loosen the two lock nuts under the shelf with a 7/16" wrench. When you have the desired drag, re-tighten the two black knobs. ***FIGURE AA.***

B. Fine-Tune the Template Rotation.

1. Loosen the two Red Knobs and tilt the shelf. If the Template is hard to turn by hand, loosen the end connection using two 5/8" wrenches (or non-marring adjustable wrenches) until you have the desired fit. The Template should hold its position on its own. ***FIGURE BB.***

C. Fine-Tune the Stylus Lever

1. Tighten or loosen the lock nut behind the pivot point. If the Stylus Lever is still too hard to turn, check the lock nut at the Stylus Lever. The lock nut should be slightly loose and never fully tightened. ***FIGURE CC.***

D. Fine-Tune the Stylus Pin Detent Hardness.

1. Tighten or loosen the set screw on the Stylus Housing (using a 5/64" hex key) to adjust the drag when adjusting the Stylus. You will need to temporarily remove the Stylus Lock Knob. ***FIGURE DD.***

FIGURE AA

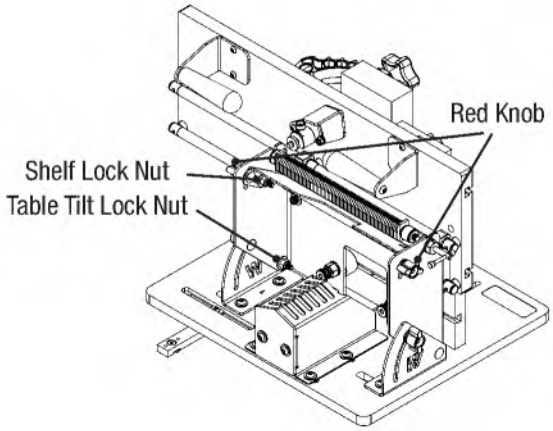


FIGURE BB

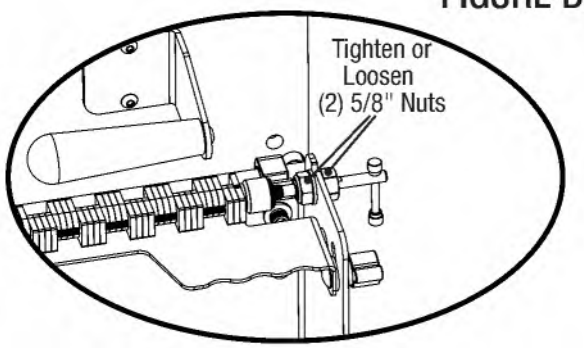


FIGURE CC

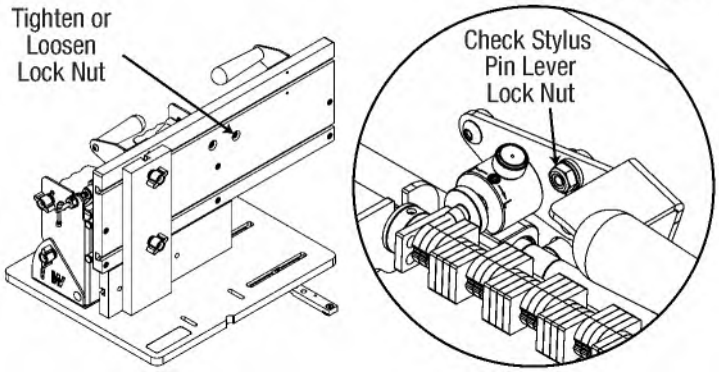
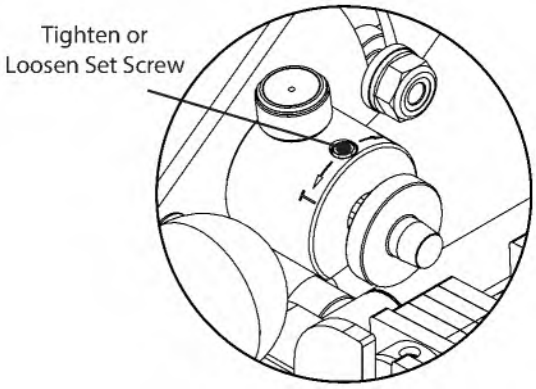


FIGURE DD



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