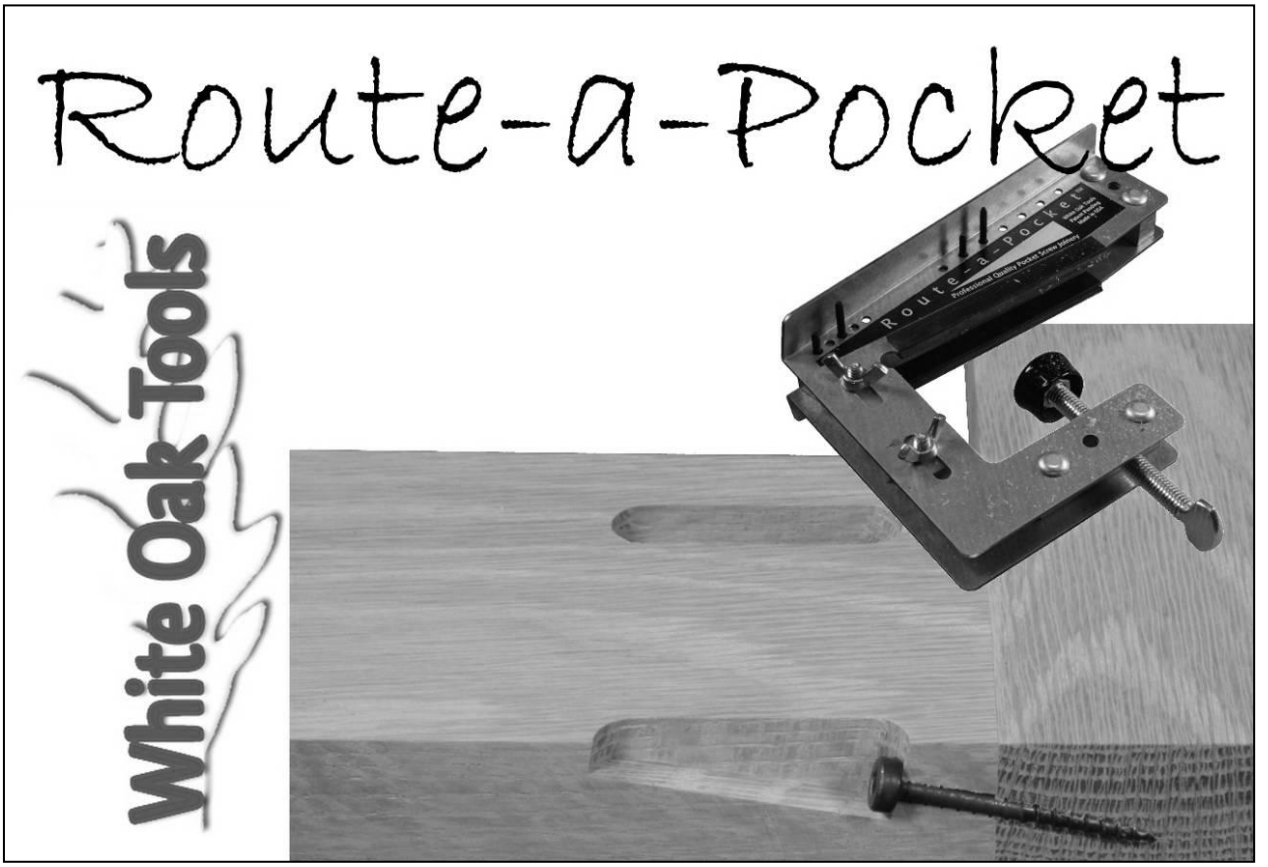
Route-a-Pocket



User Manual

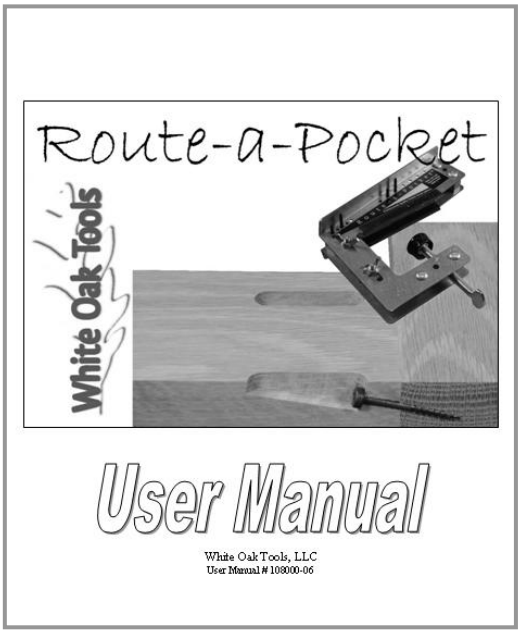
White Oak Tools, LLC
User Manual # 108000-06

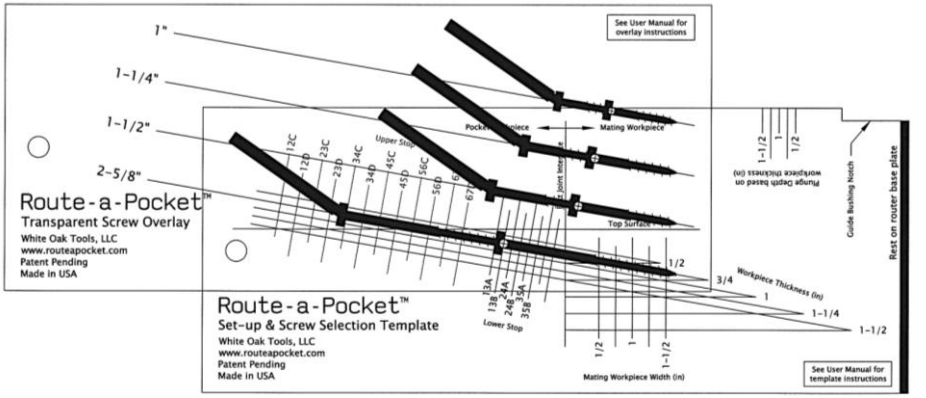
Route-a-Pocket™ Components

Patent Pending

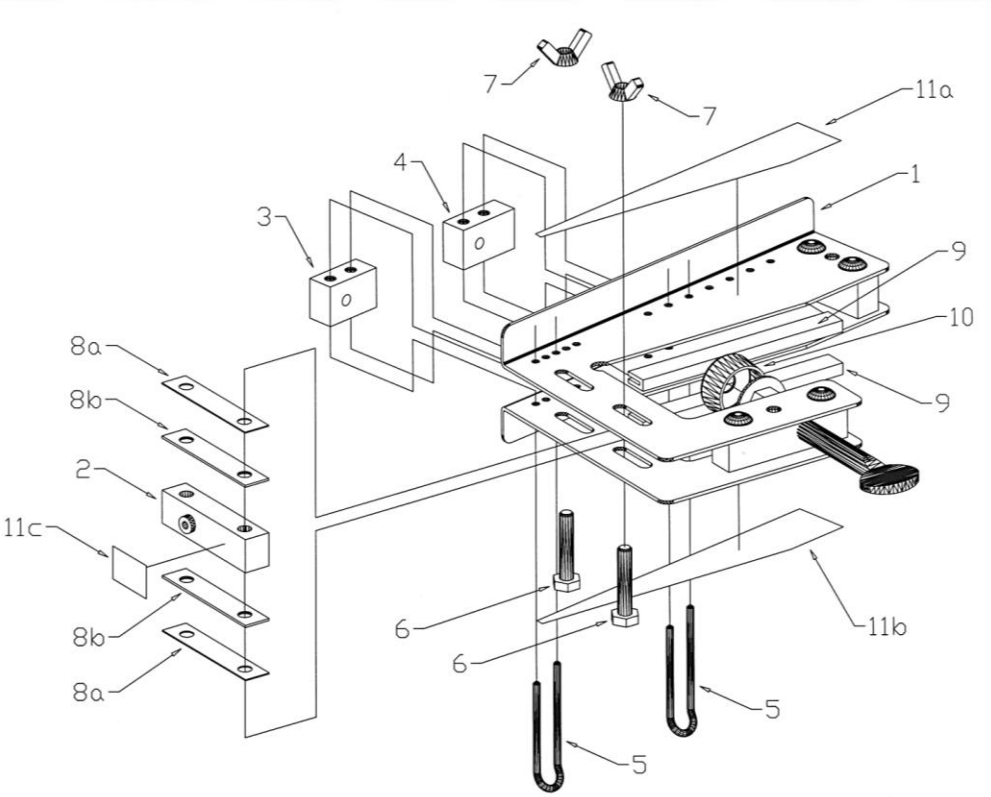
Optional Hardware

	Quantity	Component	Part #
Route-a-Pocket™ Hardware	1	Route-a-Pocket™ assembly	101000
	1	Route-a-Pocket™ router bit	106008
	1	9/64” dia. drill bit	104001
	1	#2 ball tip square drive driver	106010
	1	Storage tube	106012
	5	#7 x 1” pocket screw	106060
	5	#7 x 1-1/4” pocket screw	106061
	5	#7 x 1-1/2” pocket screw	106062
Optional Hardware	1	Mounting plate with (3) screws	101001
	1	#2 ball tip square drive screwdriver	106009



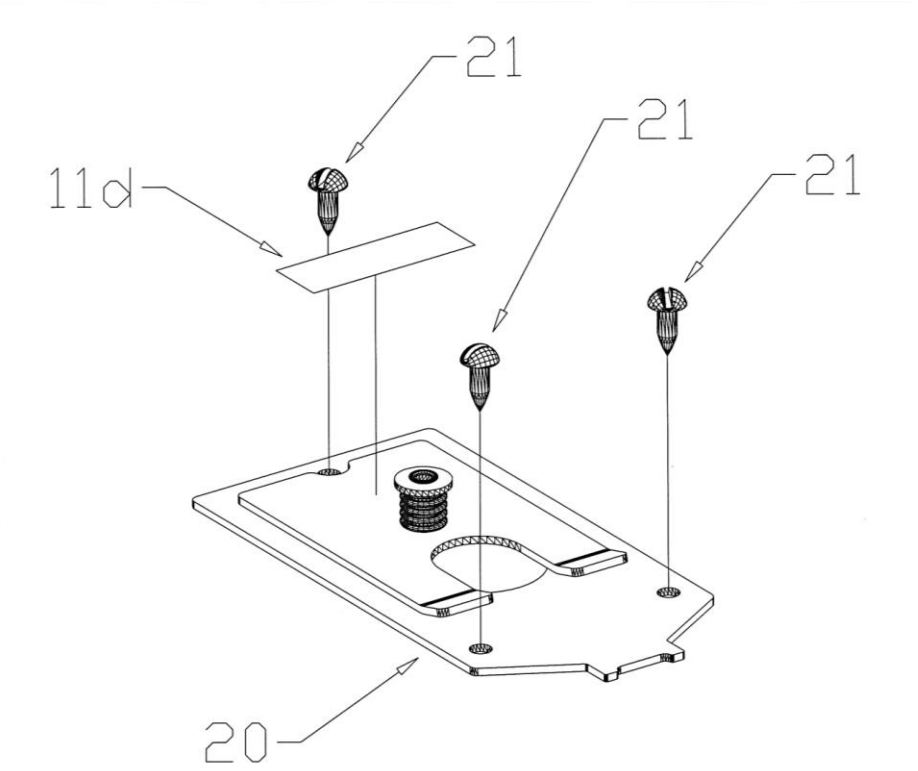


Route-a-Pocket™ User Manual, Overlay & Template	**Quantity**	**Component**	**Part #**
	1	User Manual	108000
	1	Set-up & Screw Selection Template	108001
	1	Transparent Screw Overlay	108002



Exploded View of Main Assembly

Item #	Part Name	Part #
1	Body assembly	101002
2	Drill guide assembly	101003
3	Lower stop block assembly	101004
4	Upper stop block assembly	101005
5	Retaining pin	106002
6	Hex bolt	102002
7	Wing Nut	102003
8	Shim (set of 4)	106004
9	Edge pad	106003
10	Clamp pad	106011
11	Label (set of 4)	108003



Exploded View of Optional Mounting Plate	**Item #**	**Part Name**	**Part #**
	11	Label (set of 4)	108003
	20	Mounting plate assembly	101001
	21	Wood screws	102007

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Introduction:

Thank you for choosing Route-a-Pocket™. The Route-a-Pocket™ has been designed to produce professional quality pocket screw joinery with your plunge router and power drill. Please take the time to read and understand this user manual in its entirety. By doing so, you'll be introduced to all the jig's features. We also suggest you practice using the Route-a-Pocket™ on test pieces prior to using it on your next project. This step will build your confidence with the jig and ensure you have configured the Route-a-Pocket™ to produce the anticipated results. Finally, don't forget to visit the Route-a-Pocket™ website (www.routeapocket.com). The site includes an interactive "Set-up & Screw Selection Template" along with other useful resources.

Route-a-Pocket™ Specifications	
Allowable Workpiece Thickness	Minimum: 1/2" Maximum: 1-1/2”
Pocket Width	3/8”
Pocket Length	Minimum: 1/2” Maximum: 4-1/8”
Pilot Hole Diameter	9/64”
Pocket & Pilot Hole Angle	10°
Screw Grip Length	Minimum: 7/16” Maximum: 1-1/8”

Required Tools:

Plunge Router

For your safety, it is important that you select a good quality and well maintained plunge router for use with the Route-a-Pocket™. Selecting the proper plunge router will also make it easy to achieve the quality results you expect. The plunge router must accept a router bit with a 1/2” shank and should have a plunge stroke of at least 2-3/8”. The maximum suggested plunge router horsepower rating is 2-1/4.

Guide Bushing

The guide bushing must be compatible with your plunge router and have an outside diameter of 3/4". The collar length should be 1/2" or longer.

Power drill

The power drill used to drive the pocket screws should be equipped with an adjustable clutch.

Using the Template & Adjusting the Stops

Included with your Route-a-Pocket™ is the Set-up & Screw Selection Template. This template makes it easy to select the appropriate screw and Route-a-Pocket™ settings for your joining application. The template may be used by placing an actual screw on the card or by overlaying the transparent screw overlay, also included, on the card. This section describes the process.

Notes:

- For most applications, the suggested Route-a-Pocket settings are listed on the back cover of this User Manual.
- An interactive Set-up & Screw Selection Template is available on-line at www.routeapocket.com.

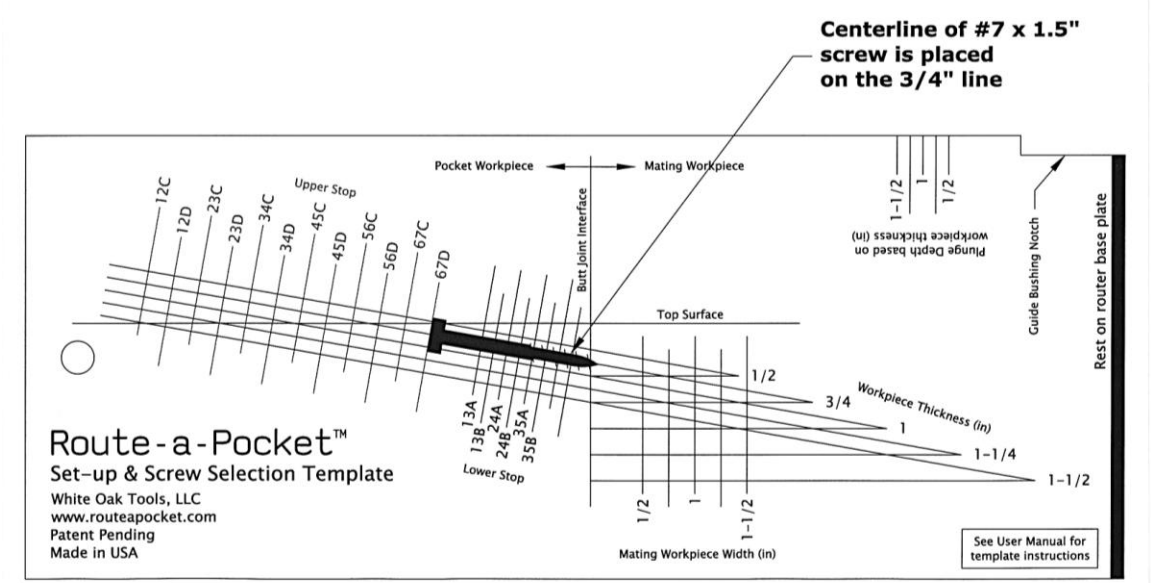


Figure 1a - **Caution, template shown above is not full scale**
Place the centerline of the desired screw on the sloped line corresponding to the workpiece thickness. In this example, a #7 x 1-1/2" long screw is to be used with a 3/4" thick workpiece.

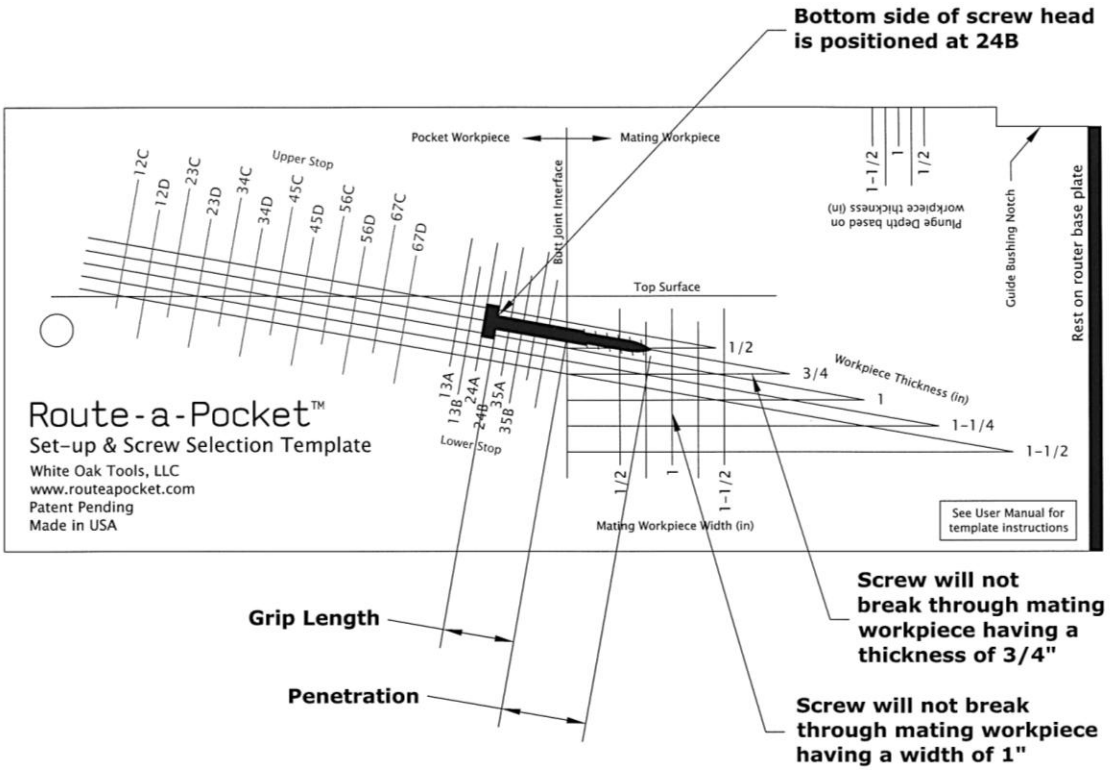


Figure 1b – Caution, template shown above is not full scale

Choose the lower stop position by sliding the screw along the sloped line and align the bottom side of the screw head with the lower stop position that provides the desired grip length and penetration. In this example, the screw is aligned with 24B.

Confirm that the screw penetration does not exceed the width or thickness of the mating workpiece and adjust if necessary. In this example, the screw will not break through a mating workpiece that is at least 1" wide and 3/4" thick

Record the selected lower stop position. In this example, 24B is recorded.

Using the Template & Adjusting the Stops

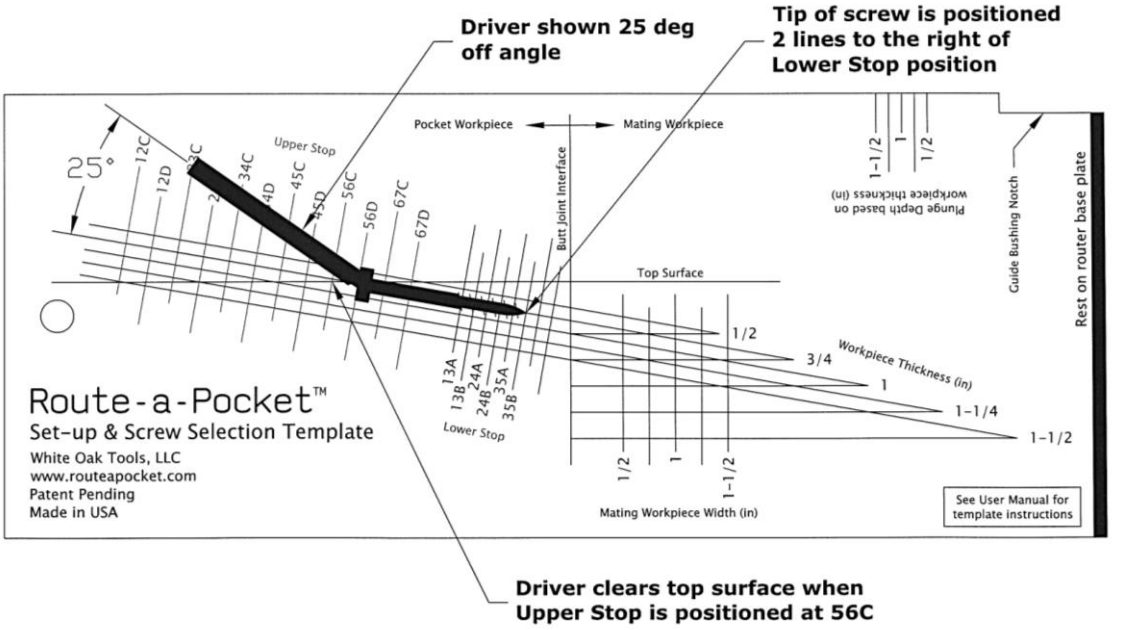


Figure 1c – Caution, template shown above is not full scale

Choose the upper stop position by repositioning the screw along the sloped line until the tip of the screw is aligned with the second line to the right of the previously recorded lower stop position. Positioning the tip at this location represents the tip of the screw entering the pilot hole 1/4". In this example, the tip of the screw is aligned with 35B.

Observe the upper stop position corresponding with the first line to the left of the screw head. Confirm that there is adequate driver access and adjust if necessary. In this example, the driver has adequate access when used at 25° off angle and the upper stop is positioned at 56C.

Record the selected upper stop position. In this example, 56C is recorded.

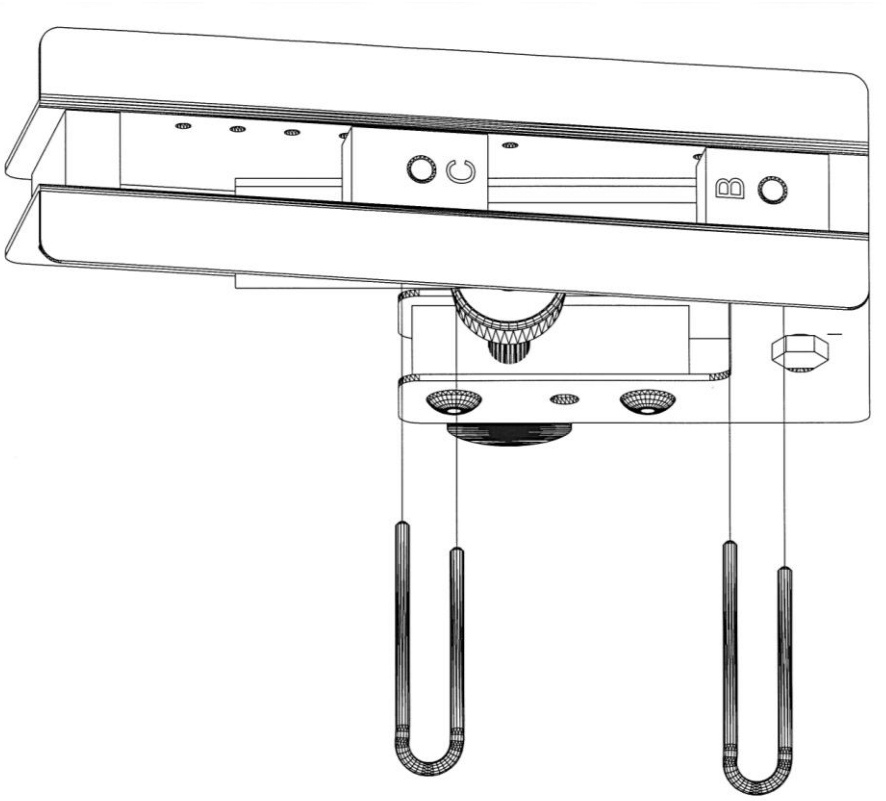


Figure 1d
Remove the pins and orient the stop blocks with the recorded stop block letters visible from above. In this example, the lower stop block is oriented to the "B" position (24B). The upper stop block is oriented to the "C" position (56C).

Note: The stop block letters must be oriented right side up when read from the drill guide end of the Route-a-Pocket™. In this example, stop block letters "A" and "D" are hidden from view on the reverse side of the stop blocks.

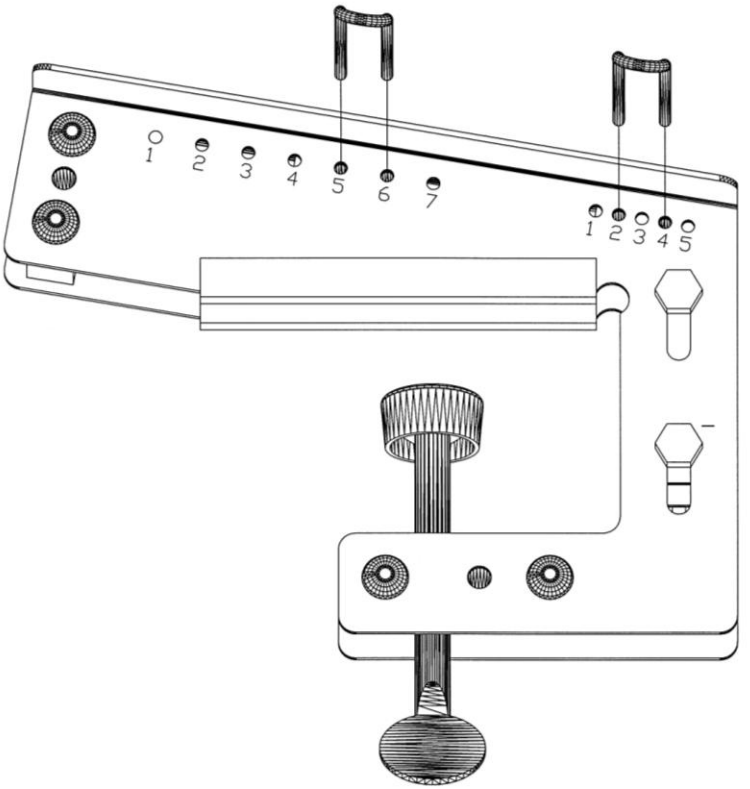
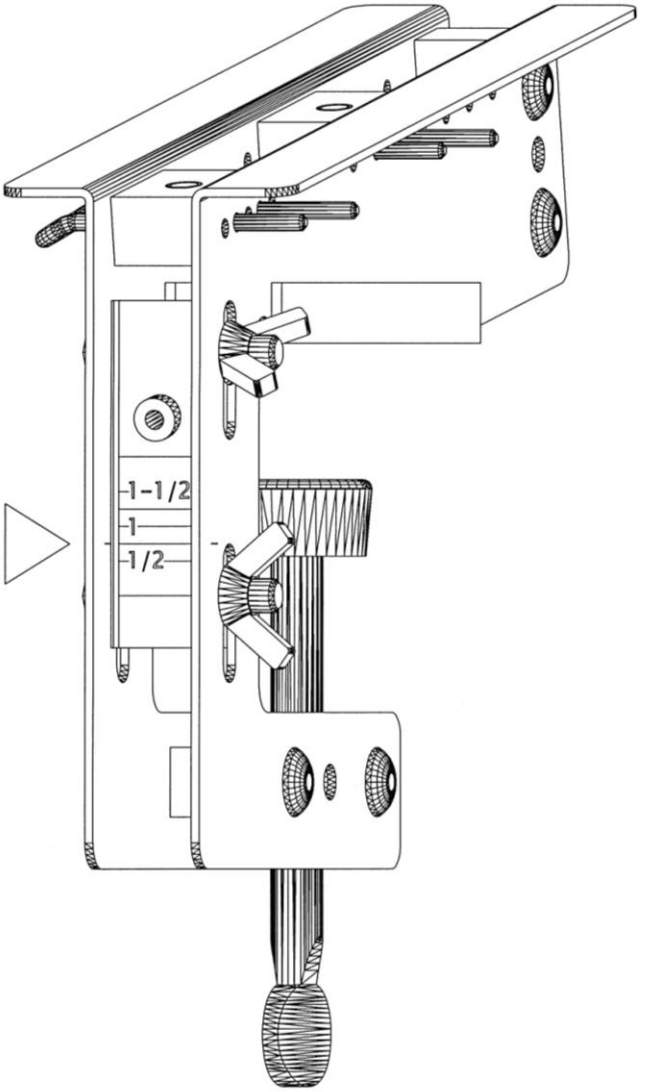


Figure 1e
Insert the pins through the recorded hole numbers making sure both legs pass through its respective stop block. In this example, the lower pin is inserted through holes 2 & 4 (24B), while the upper pin is inserted through holes 5 & 6 (56C).

Figure 2a
Loosen the 2 wing nuts.

Slide the drill guide and scale until the index (small slits on each side plate) is aligned with the mark corresponding to the workpiece thickness. In this example, the index is aligned with 3/4".

Tighten the 2 wing nuts.



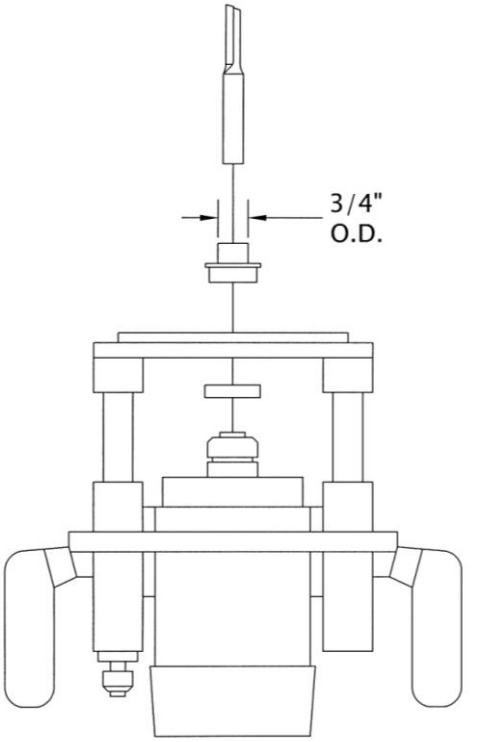


Figure 3a
Install a 3/4" outside diameter guide bushing (not included) and the supplied router bit following the safety and operating instructions provided with your plunge router and guide bushing.

Note: Confirm that the guide bushing is concentric (centered) to the router bit. If adjustment is necessary, consult the operating/user manual that came with your router. Additional information on this topic can be found in the section entitled **Aligning the Pilot Hole with the Pocket**.

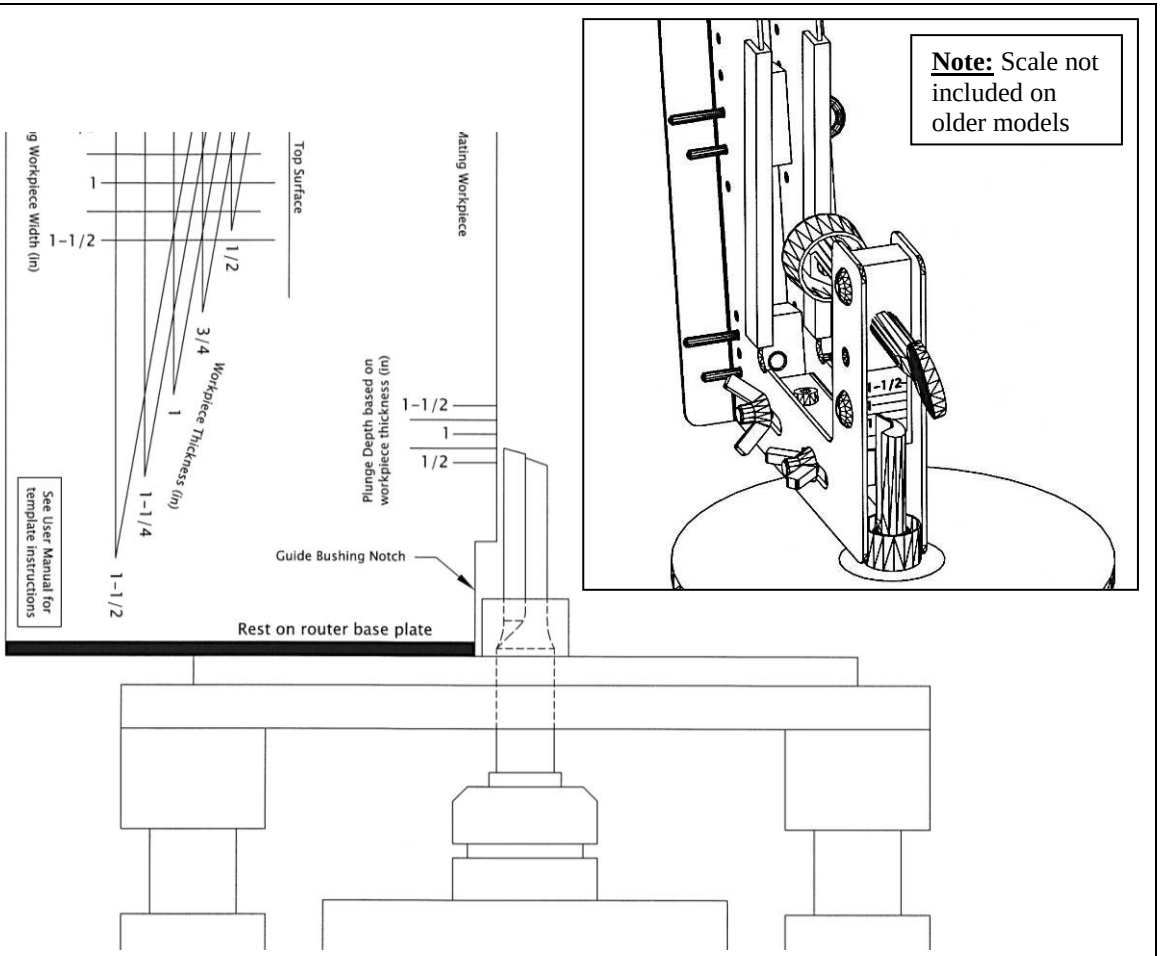


Figure 3b

Using the Set-up & Screw Selection Template, set the plunge depth by aligning the tip of the router bit with the line corresponding to the workpiece thickness. On newer model Route-a-Pockets, the plunge depth may be set using the scale located near the thumb screw. In this example, the plunge depth has been set for a 3/4" workpiece.

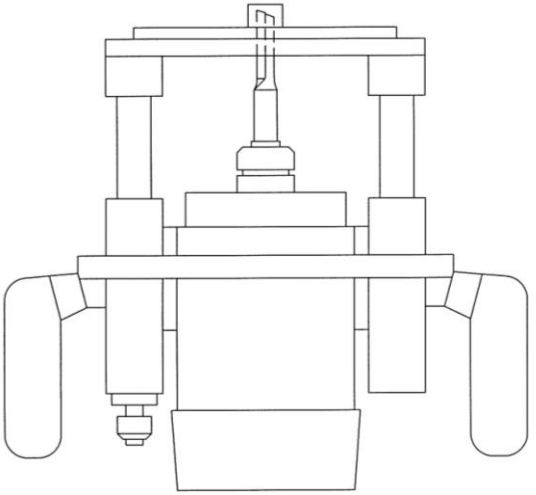


Figure 3c
Adjust the plunge stroke such that the router bit fully retracts into the guide bushing. Confirm that the router collet and bit do not contact the guide bushing or base plate at any point through the entire plunge stroke.

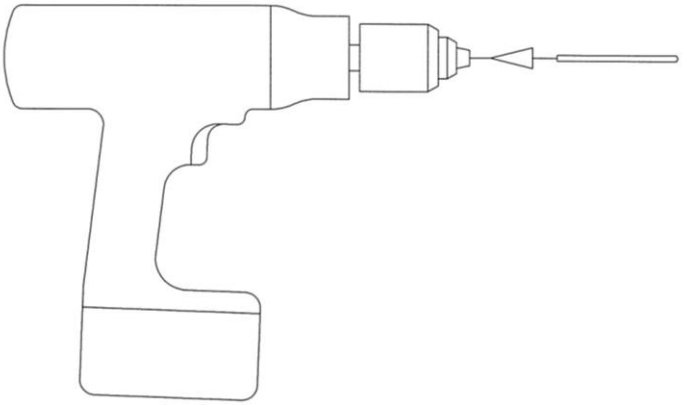


Figure 3d
Install the supplied 9/64" diameter drill bit following the safety and operating instructions provided with your power drill.

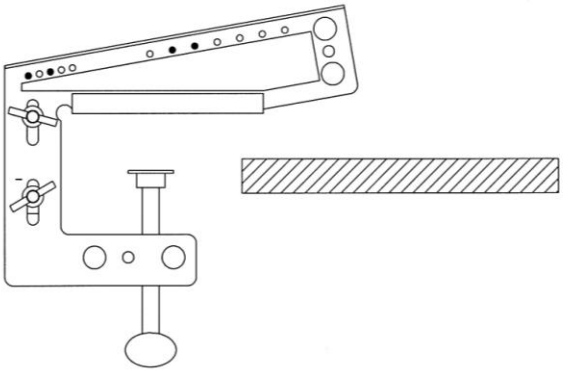


Figure 4a
Secure the workpiece to your workbench. Position the Route-a-Pocket™ near the workpiece.

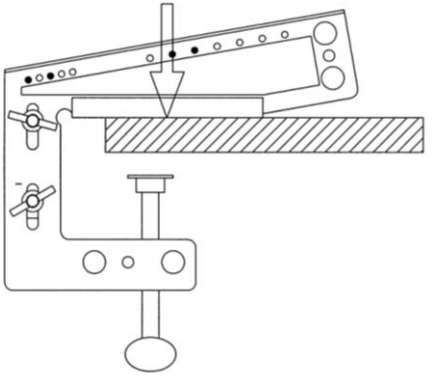


Figure 4b
Rest the Route-a-Pocket™ on the workpiece.

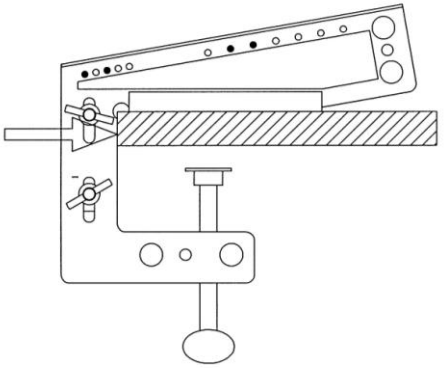


Figure 4c
Slide the Route-a-Pocket™ over against the edge of the workpiece.

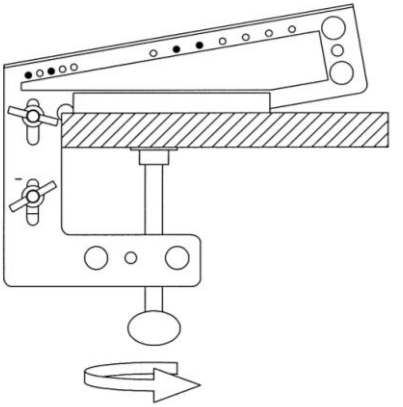


Figure 4d
Securely tighten the thumb screw.

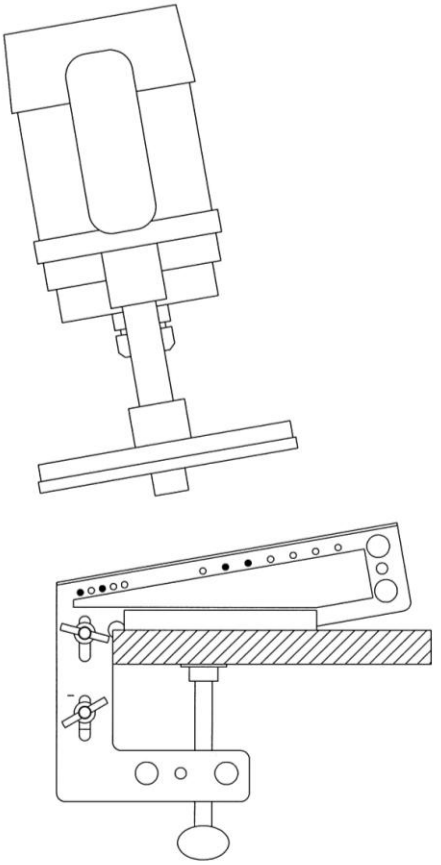


Figure 4e
Position the plunge router over the Route-a-Pocket™.

Note: Follow the safety and operating instructions that came with your plunge router.

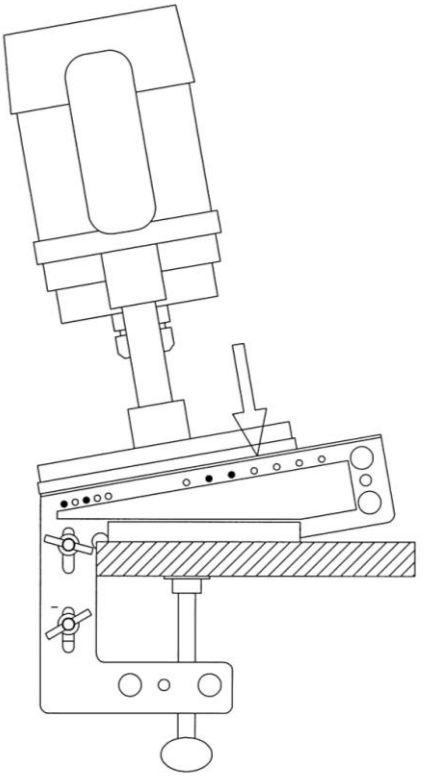


Figure 4f
Rest the router base plate on the incline of the Route-a-Pocket™. Make sure the guide bushing is between the upper and lower stops.

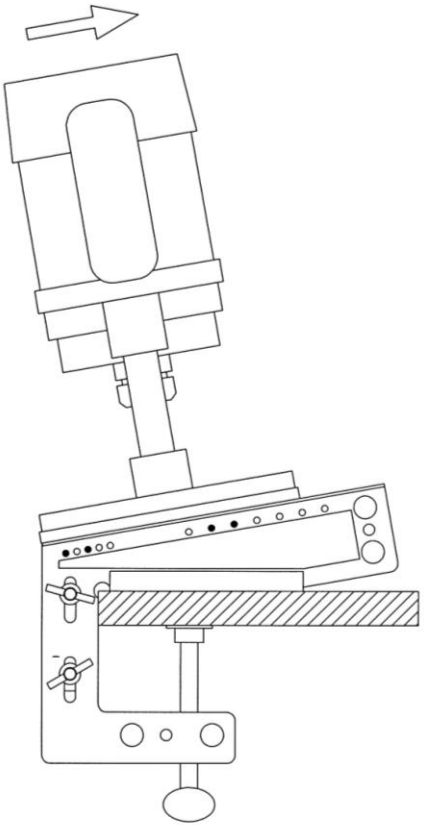


Figure 4g
Slide the router up the incline until the guide bushing is against the upper stop.

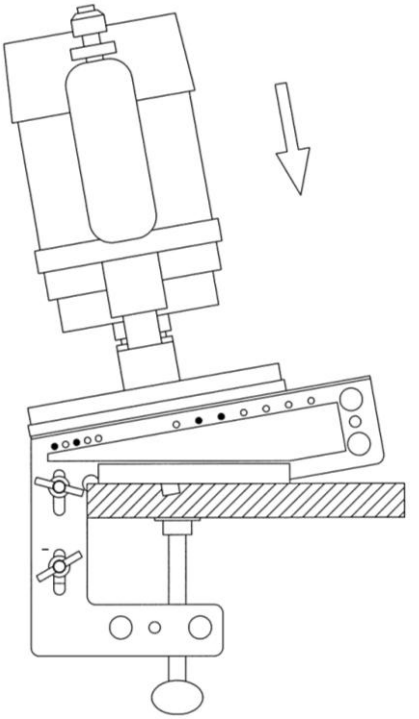


Figure 4h
Turn the router on. Plunge the router to the bottom of its plunge stroke.

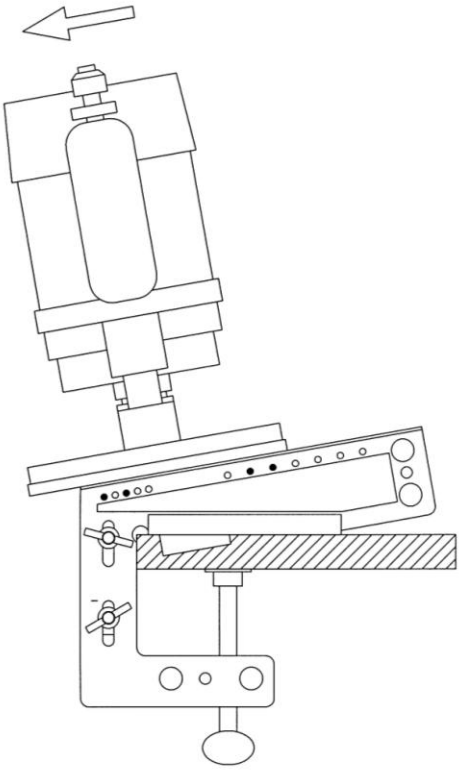


Figure 4i
Slide the router down the incline until the guide bushing is against the lower stop.

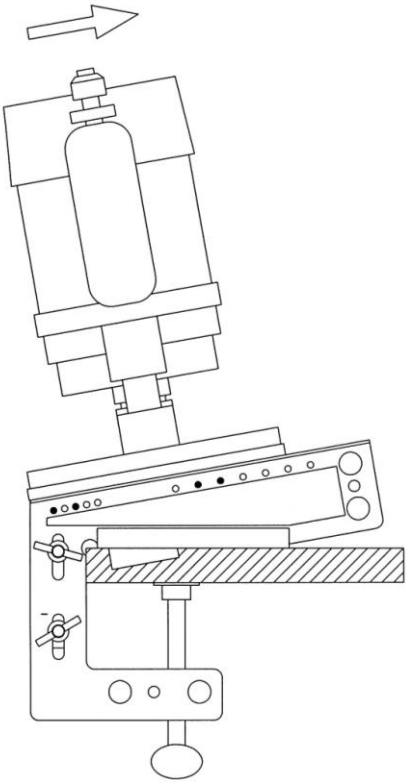


Figure 4j
Slide the router back up the incline until the guide bushing is against the upper stop. This step clears the chips from the pocket.

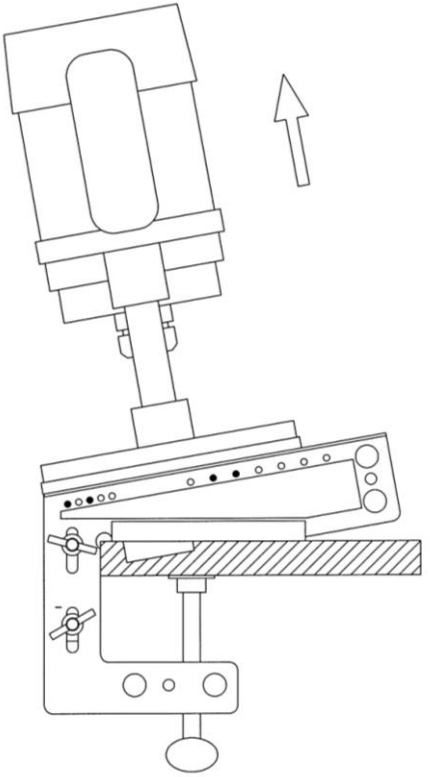


Figure 4k
Return the router to the top of its plunge stroke.

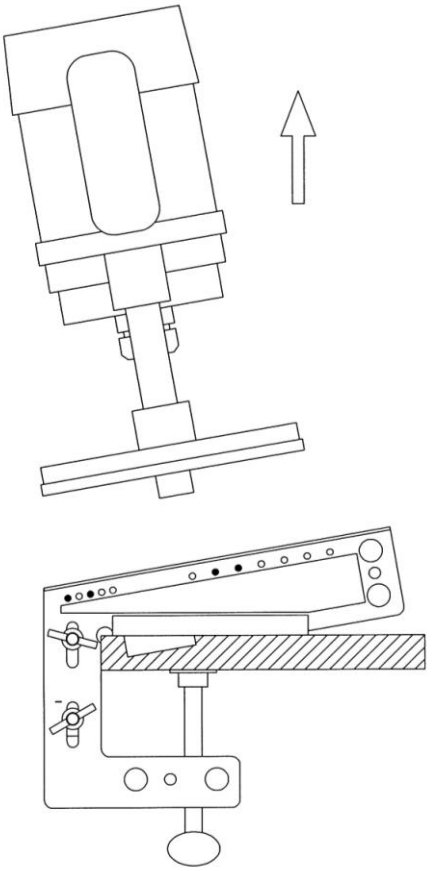


Figure 4l
Turn the router off. Lift the router off the Route-a-Pocket™.

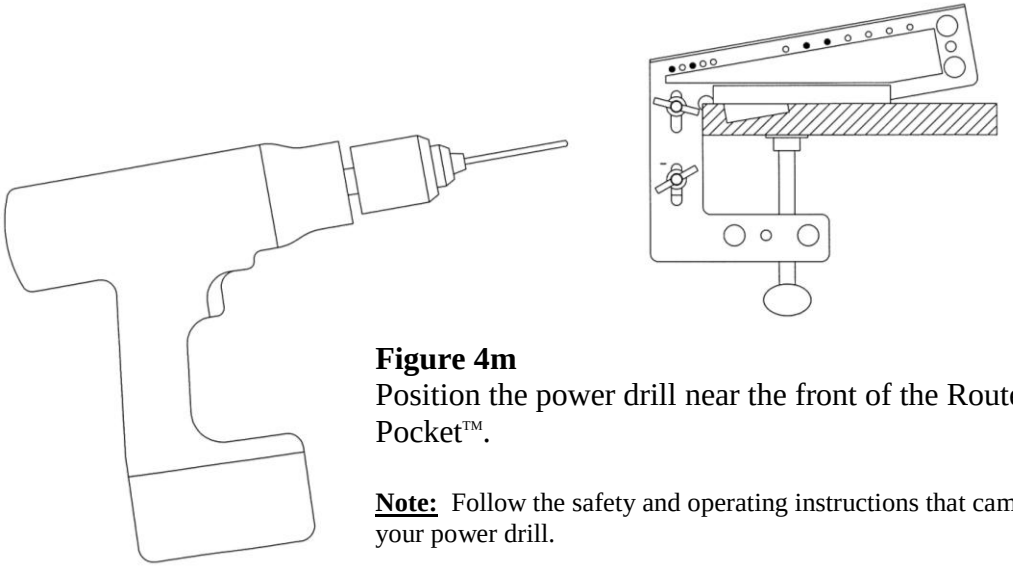


Figure 4m
Position the power drill near the front of the Route-a-Pocket™.

Note: Follow the safety and operating instructions that came with your power drill.

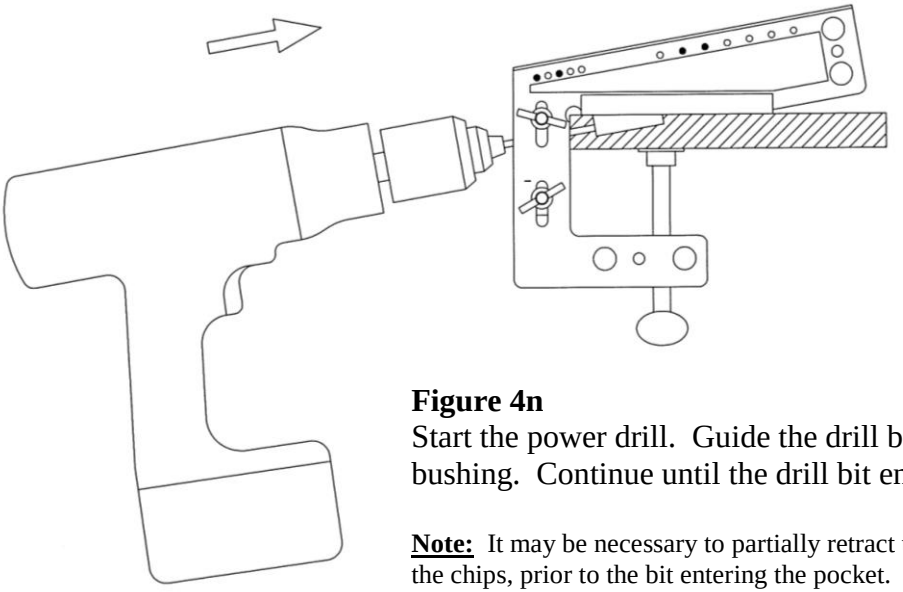


Figure 4n
Start the power drill. Guide the drill bit through the drill bushing. Continue until the drill bit enters the pocket.

Note: It may be necessary to partially retract the drill bit, to clear the chips, prior to the bit entering the pocket.

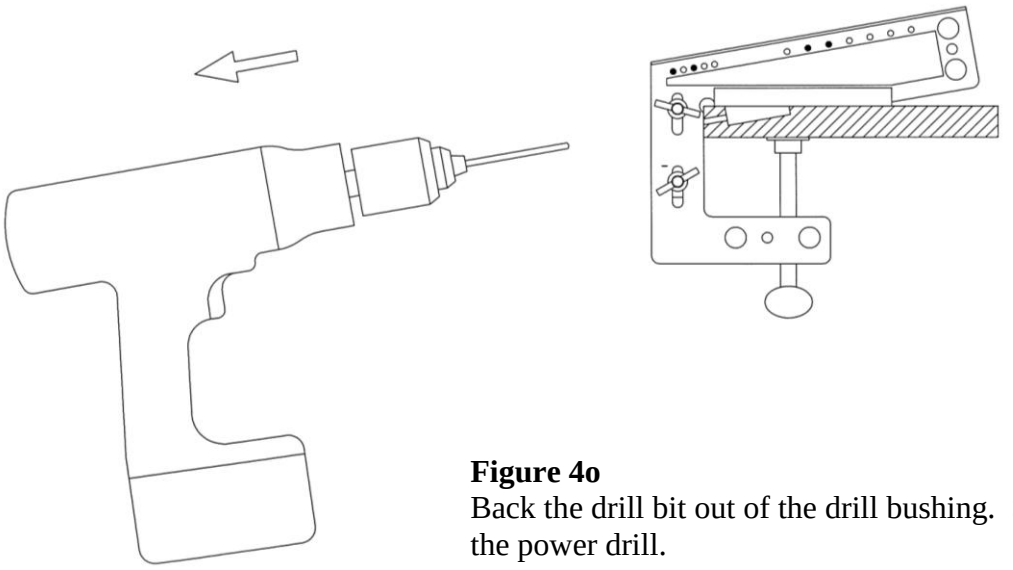


Figure 4o
Back the drill bit out of the drill bushing. Stop the power drill.

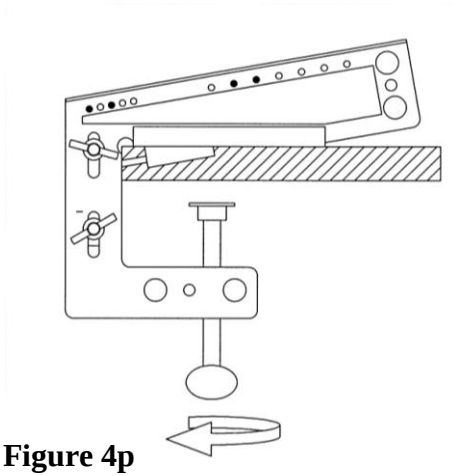


Figure 4p
Loosen the thumb screw.

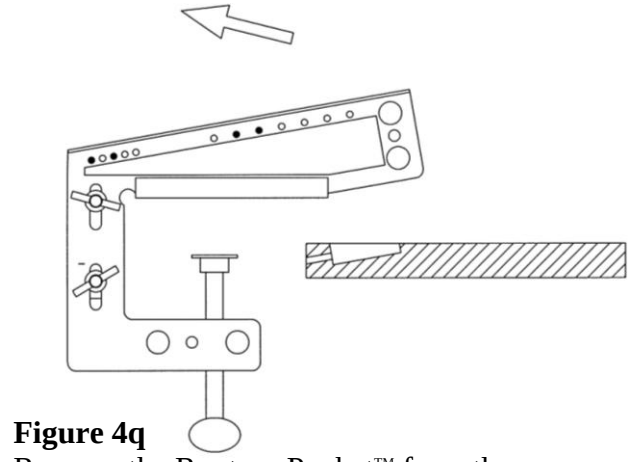


Figure 4q
Remove the Route-a-Pocket™ from the workpiece.

Aligning the Pilot Hole with the Pocket

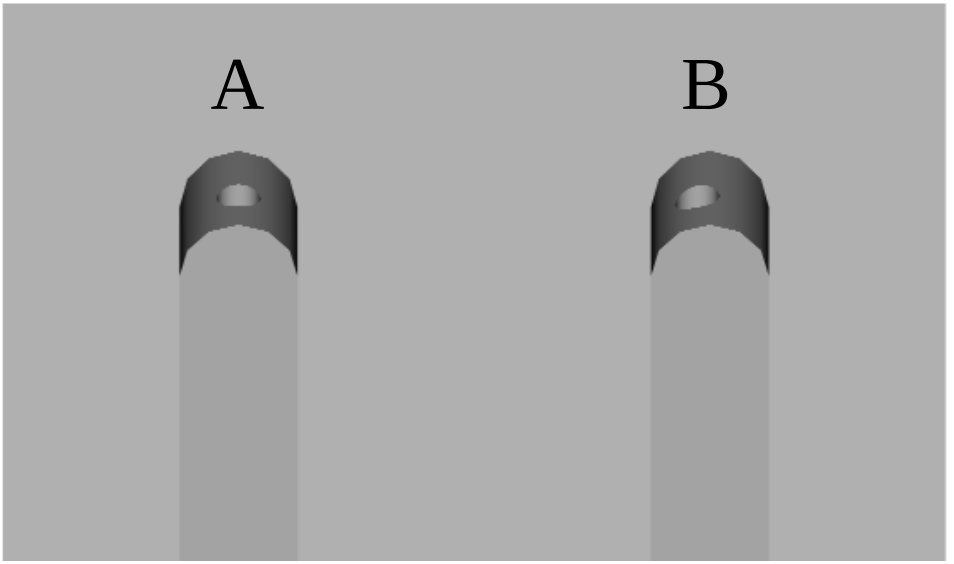


Figure 5a
When looking into the pocket, the pilot hole should be centered in the pocket as shown at "A". If the pilot hole is off center, as shown at "B", adjustment is required.

Start by confirming that the guide bushing is concentric (centered) to the router bit. If they are not concentric to each other, consult the operating/user manual that came with your plunge router and make the necessary adjustments.

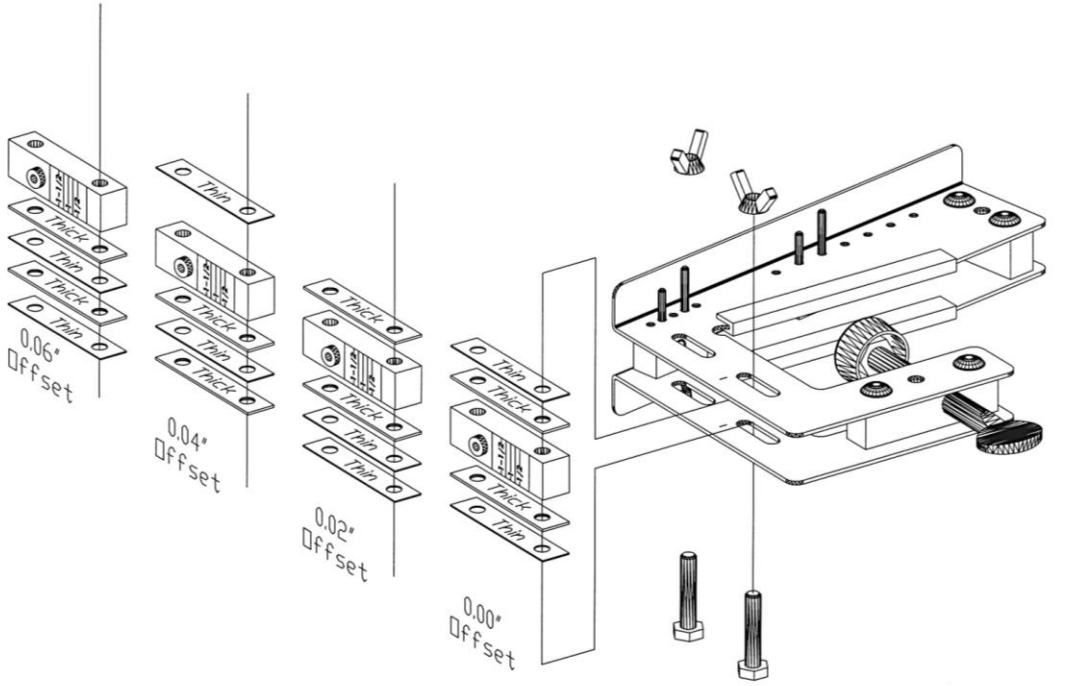


Figure 5b
Often, it is difficult to make the guide bushing concentric with the router bit. For this reason, your Route-a-Pocket™ has been designed with shims on the sides of the drill guide. These shims can be used to correct for misalignment between the pilot hole and pocket. Your Route-a-Pocket™ was shipped with (1) thin and (1) thick shim on each side of the drill guide. By moving the shims from one side to the other, the pilot hole can be shifted relative to the centerline of the pocket. Reposition the shims as needed to center the pilot hole in the pocket. For reference, the thin shims are 0.02" thick and the thick shims are 0.04" thick.

Note: To maintain proper side plate spacing, all (4) shims must be used at all times.

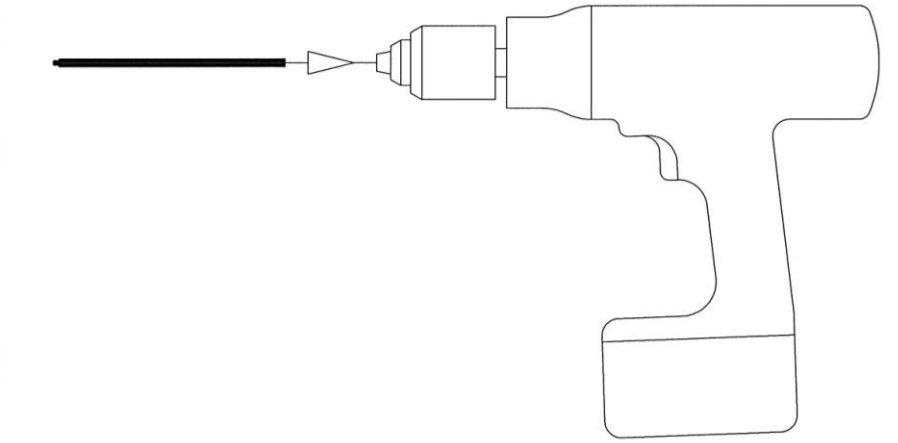


Figure 6a
Install the supplied driver bit and adjust the clutch setting following the safety and operating instructions provided with your power drill.

Figure 6b
Or select the optional screw driver.

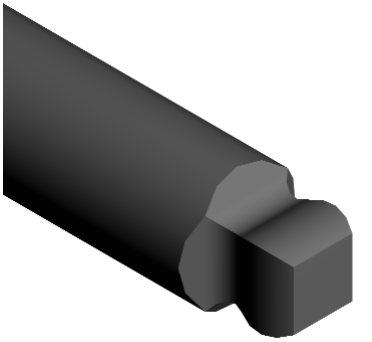


Figure 6c
The driver bit and screwdriver are designed with a #2 square drive ball tip end. This feature allows the driver to be used off angle up to 25°.

Figure 6d
Rest the pocket workpiece and its mating workpiece on a flat work surface.

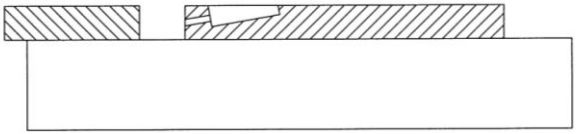
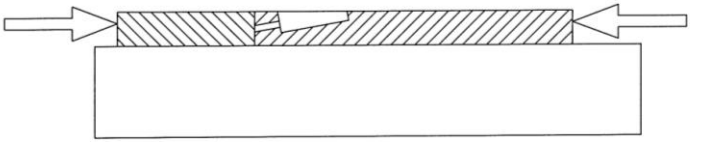


Figure 6e
If desired, add glue to the joint interface. Align the workpieces and push them tightly together.



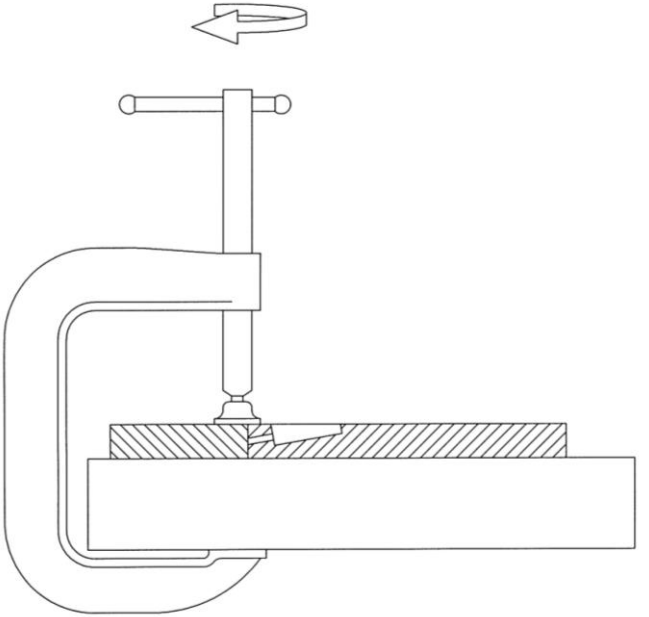


Figure 6f
Clamp both pieces to the flat work surface.

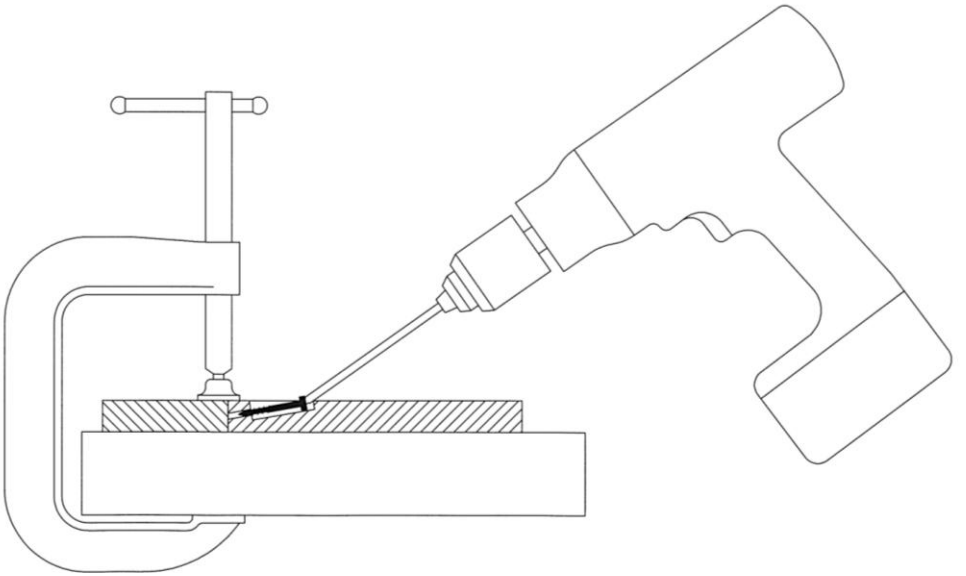


Figure 6g
Position the tip of the screw in the pilot hole. Begin to drive the screw with the driver off angle, if required.

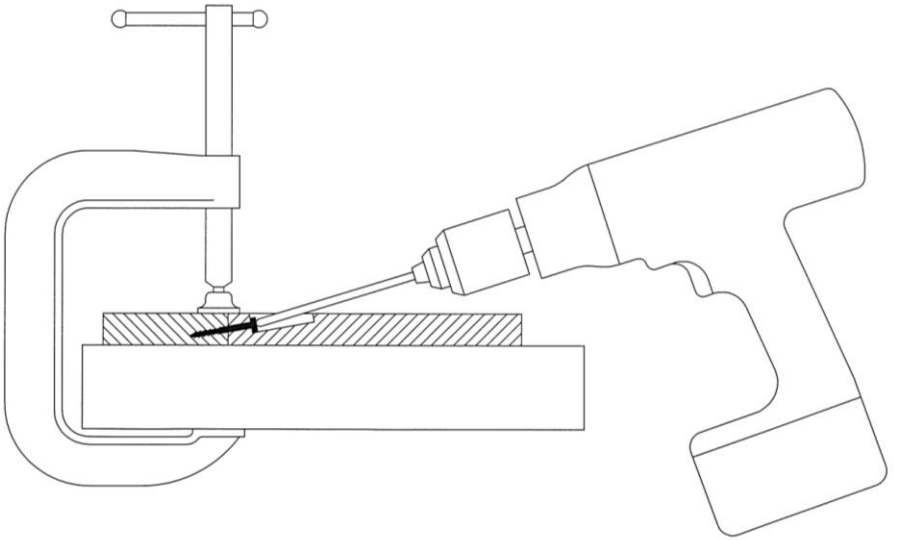


Figure 6h
Drive the screw home.

Note: The driver can become less off angle as the screw approaches home.

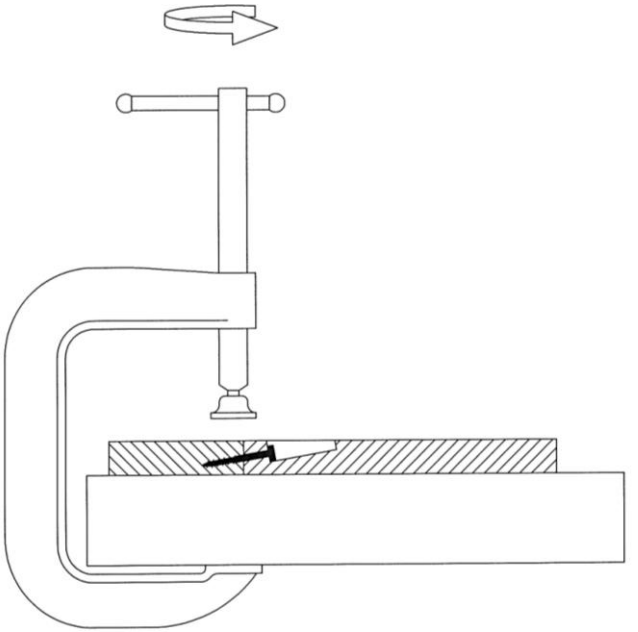


Figure 6i
Remove the clamp.

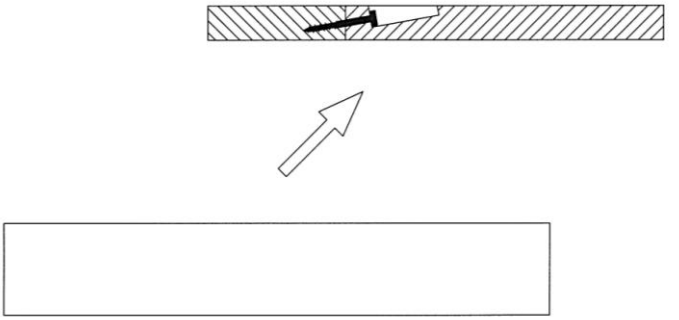


Figure 6j
The joint is now complete.

Using the Optional Mounting Plate

The optional Route-a-Pocket™ mounting plate saves time when working with smaller workpieces.
Once the Route-a-Pocket™ is "snapped" into its mounting plate, tightening the Route-a-Pocket's thumb screw not only secures the Route-a-Pocket™ to the workpiece, it also secures the workpiece to the workbench. This section describes how to use the mounting plate.

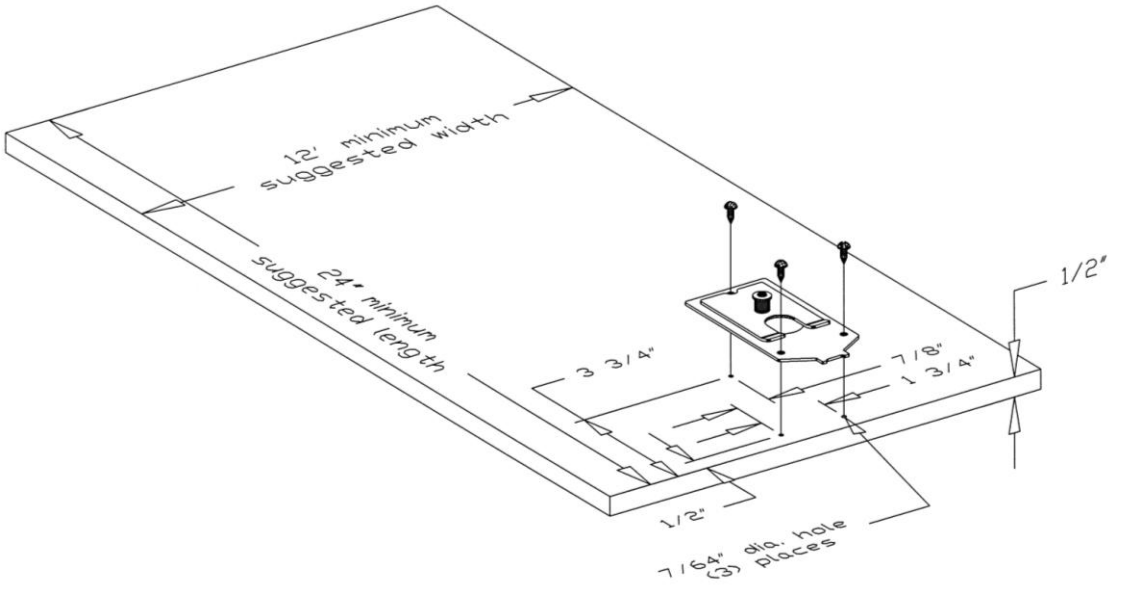


Figure 7a
The mounting plate is typically secured to a piece of 1/2" plywood (not included). As the plywood will be used as a work surface, it should be flat and smooth. The suggested minimum plywood dimensions are 12" wide x 24" long. Fasten the mounting plate to the "bad" side of the plywood using the 1/2" screws provided. The (2) front screws should be positioned 1/2" from the edge of the plywood.

Note: The head of the rear screw must fit into the notch of the small plate. This will prevent the plate from rotating during use.

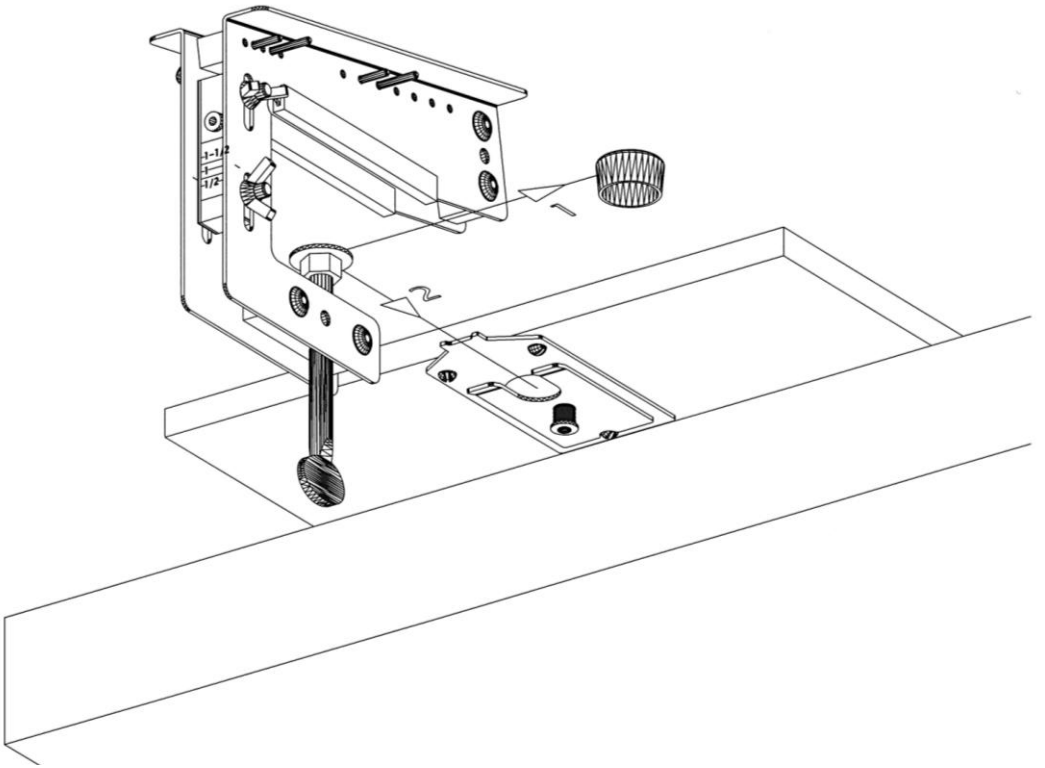


Figure 7b
With the mounting plate facing down and hanging over the edge of your workbench, secure the plywood to your workbench. Remove the clamp pad (1) (it may be stored in the storage tube) and slide the Route-a-Pocket's swivel pad between the spring loaded plates (2). The Route-a-Pocket™ will snap securely into position when the swivel pad finds the large hole in the mounting plate assembly.

Note: The tab on the mounting plate assembly will fit between the Route-a-Pocket™ side plates when properly engaged.

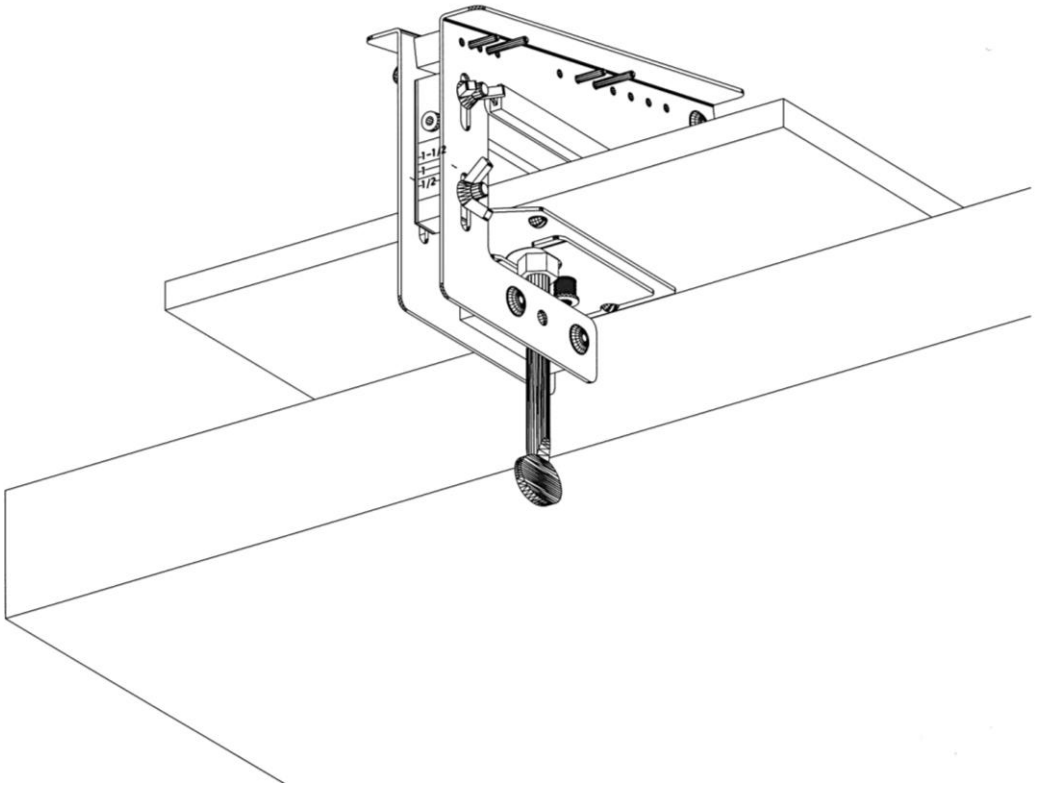


Figure 7c
Route-a-Pocket™ shown properly engaged with the mounting plate.

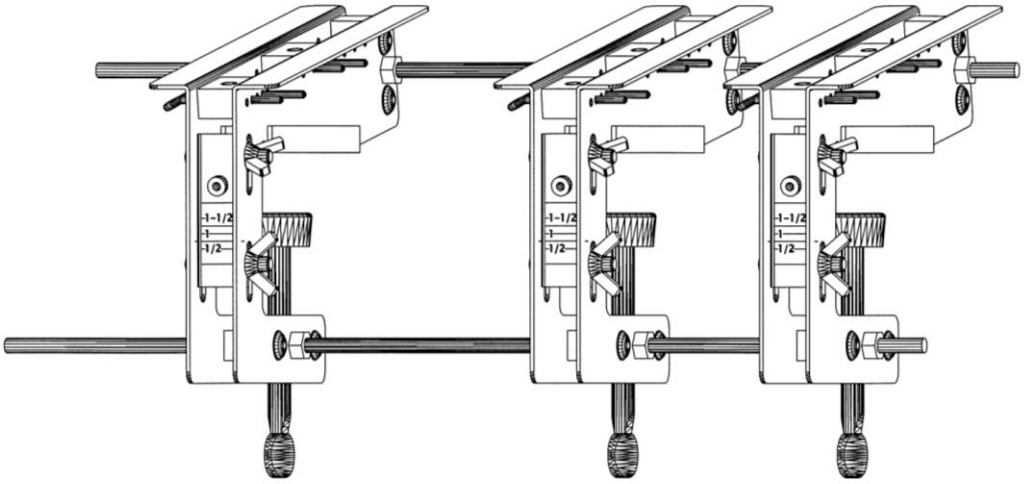


Figure 8a
Your Route-a-Pocket™ has been designed with two spare through holes. These through holes may be used to join multiple Route-a-Pockets at fixed distances from each other. This is often useful when multiple pockets are needed on multiple workpieces.

To join two or more Route-a-Pockets, slide a 1/4" diameter threaded rod (not included) through each spare hole. Position the Route-a-Pockets along the rods using nuts (not included) on both sides of each Route-a-Pocket™.

Maintenance

To keep the plunge router sliding smoothly over the incline surface of the Route-a-Pocket™, periodically apply a coat of good quality silicone free paste wax to the surface of the incline.

Customer Support

Feel free to contact us at:

White Oak Tools
4840 Adams Rd.
Rochester, MI 48306

Email: support@whiteoaktools.com

Website: www.routeapocket.com

Telephone: (248) 891-7198

Additional Route-a-Pocket™ components and accessories can be ordered from our website or by telephone.

Thank you for choosing the Route-a-Pocket™ System.

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Suggested Route-a-Pocket™ Settings				
Workpiece Thickness (in)	#7 Screw Length	Plunge Depth & Drill Guide Height	Lower Stop Position	Upper Stop Position
1/2 (note 1)	1	1/2	35B	67D
5/8	1-1/4	5/8 (note 2)	35A	56D
3/4	1-1/2	3/4	35A	56D
1	1-1/2	1	35A	56C
1-1/4	1-1/2	1-1/4	35B	45D
1-1/2	1-1/2	1-1/2 (note 3)	35B	45C (note 4)

Note 1: Can not be plugged.
Note 2: If plugging, set plunge depth & drill guide height to 3/4".
Note 3: If plugging, set plunge depth & drill guide height to 1-1/4".
Note 4: If plugging, set Upper Stop to 45D.

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