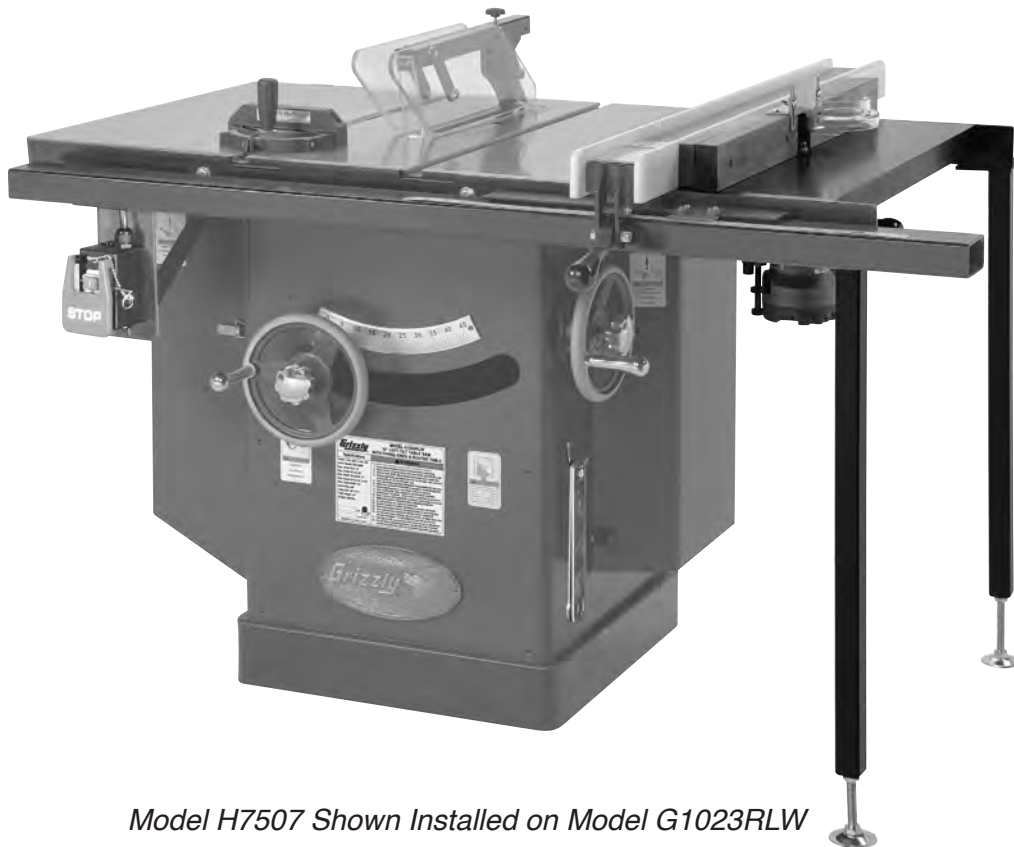


# *Grizzly* *Industrial, Inc.*®

## MODEL H7507 ROUTER TABLE EXTENSION OWNER'S MANUAL *(For models manufactured since 06/23)*



*Model H7507 Shown Installed on Model G1023RLW*

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OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**  
#BL13275 PRINTED IN TAIWAN

V2.05.24

**\*\*\*Keep for Future Reference\*\*\***



## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.**

**Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.**

**The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**



## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

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# INTRODUCTION

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## Manual Accuracy

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We are proud to offer this document with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, immediately call our technical support for updates or clarification.

For your convenience, we post all available documentation on our website at **www.grizzly.com**. Any updates to this document will be reflected on our website as soon as complete.

## Contact Info

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We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support  
1815 W. Battlefield  
Springfield, MO 65807  
Phone: (570) 546-9663  
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager  
P.O. Box 2069  
Bellingham, WA 98227-2069  
Email: manuals@grizzly.com

### **WARNING**

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

### **CAUTION**

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

## Machine Description

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This addition to your table saw features a universal router mount and an 18" by 27" precision-ground cast iron table. Included with the Model H7507 are adjustable support legs, a router guard that supports routers with a base thickness between 1/4" and 3/4", and features a 3" dust port.

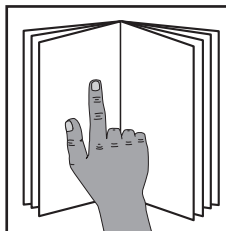
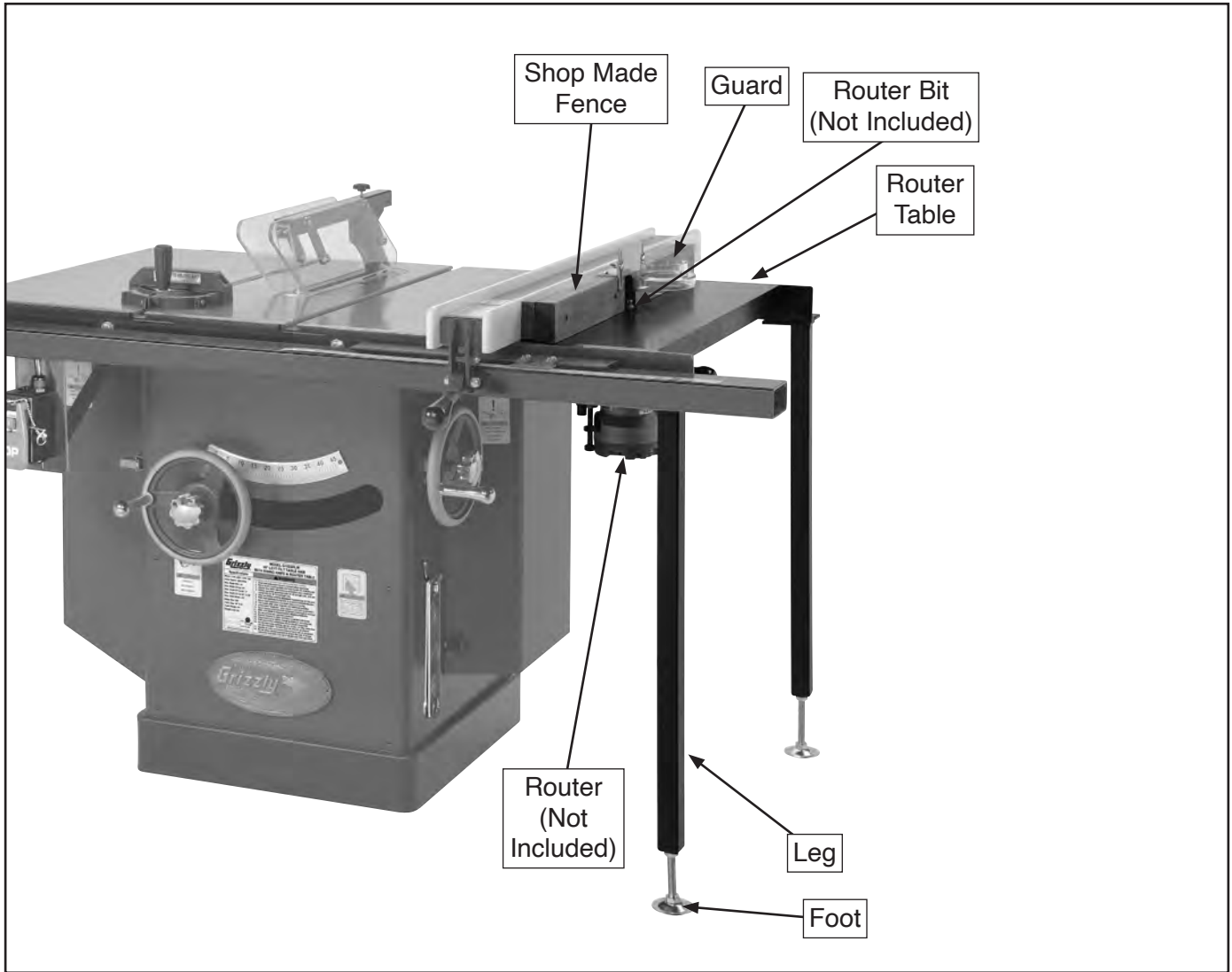
### **NOTICE**

Installation may require permanent modification to your table saw or its parts. This modification can include cutting, grinding, drilling, and tapping threads into metal surfaces. Before beginning any modification to your table saw or its parts, read the entire assembly section in this manual to make sure the person making the modification is capable of performing the required tasks, and to make sure the Model H7507 will fit your saw.



# Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



## **!WARNING**

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.



# SECTION 1: SAFETY

## For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.



Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.



Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

**NOTICE**

Alerts the user to useful information about proper operation of the machine to avoid machine damage.

## Safety Instructions for Machinery



**OWNER'S MANUAL.** Read and understand this owner's manual **BEFORE** using machine.

**TRAINED OPERATORS ONLY.** Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

**DANGEROUS ENVIRONMENTS.** Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

**MENTAL ALERTNESS REQUIRED.** Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

### **ELECTRICAL EQUIPMENT INJURY RISKS.**

You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

**DISCONNECT POWER FIRST.** Always disconnect machine from power supply **BEFORE** making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

**EYE PROTECTION.** Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are **NOT** approved safety glasses.



# WARNING

**WEARING PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

**HAZARDOUS DUST.** Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

**HEARING PROTECTION.** Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

**REMOVE ADJUSTING TOOLS.** Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

**USE CORRECT TOOL FOR THE JOB.** Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

**AWKWARD POSITIONS.** Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

**CHILDREN & BYSTANDERS.** Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

**GUARDS & COVERS.** Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

**FORCING MACHINERY.** Do not force machine. It will do the job safer and better at the rate for which it was designed.

**NEVER STAND ON MACHINE.** Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

**STABLE MACHINE.** Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

**USE RECOMMENDED ACCESSORIES.** Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

**UNATTENDED OPERATION.** To reduce the risk of accidental injury, turn machine **OFF** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

**MAINTAIN WITH CARE.** Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

**DAMAGED PARTS.** Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

**MAINTAIN POWER CORDS.** When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

**EXPERIENCING DIFFICULTIES.** If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.



# Additional Safety for Router Tables

## WARNING

Serious cuts, amputation, entanglement, or death can occur from contact with spinning bit. Improperly secured bits or spindle parts/fasteners can fly off and strike nearby operators or bystanders with great force. Flying dust or debris from cutting operation can cause eye injuries or blindness. To minimize risk of getting hurt or killed, anyone operating router **MUST** completely heed hazards and warnings below.

**AVOIDING AMPUTATION.** To avoid making contact with spinning router bit, never place hands directly over or in front of bit. As one hand approaches bit, move it away and over to other side. Always keep hands at least 6" away from spinning bit.

**SECURING LEVERS AND KNOBS.** Never operate router table without first making sure all lock levers and knobs are tight, and all fence hardware and guide rails are secure. Otherwise, workpiece can slip out of alignment while cutting and cause injury from kickback.

**DO NOT FORCE WORKPIECE.** Never force materials past router. Let router bit do the work. Excessive force is likely to result in poor cutting results and will cause kickback conditions that could cause serious personal injury.

**BLIND CUTTING.** Keep router bit on underside of workpiece when making blind cuts. This will decrease risk of accidental contact with spinning bit.

**ROUTER BIT ROTATION.** Always feed workpiece against rotation direction of bit. Otherwise, workpiece could be aggressively pulled from your hands, drawing them into spinning bit.

**ROUTER BIT HEIGHT.** Keep any unused portion of bit below the table surface to minimize risk of your hand contacting spinning bit.

**ROUTER BIT SPEED.** Do not exceed recommended speed of any router bit. Doing so can cause bit to fracture or explode and cause injury.

**CUTTING SUPPORT.** NEVER cut workpiece without using a fence, jig, or miter gauge as a support guide. Otherwise, workpiece could be aggressively pulled from your hands, drawing them into spinning bit.

**WORKPIECE SIZING.** NEVER use workpiece shorter than 6" without special fixtures or jigs. Otherwise, workpiece can become trapped between fence and router bit, which could draw your hands into spinning bit.

**USING SAFETY GUARDS.** To prevent amputation or other injuries, always use a guard. Fabricate additional guards or jigs for special circumstances. Use an overhead guard if fence is removed.

**TRIPPING HAZARD.** To prevent tripping over power cord of router when not in use, always disconnect it and safely store it out of way.

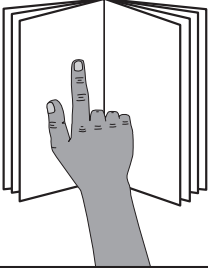
**APPROPRIATE WORKPIECES.** Danger of kickback and injury is increased when workpiece has knots, holes, or foreign objects in it. Warped stock should be flattened with a jointer before you shape it with router.

**TESTING ROTATION.** With router disconnected from power, rotate router spindle to test any new setup to ensure proper bit clearance before starting router.

**INSTALLING ROUTER BIT.** Insert at least  $\frac{3}{4}$  of bit shank into collet, and allow  $\frac{1}{8}$ " of clearance between shank and bottom of collet to ensure bit is securely installed.




# SECTION 2: SETUP



**!WARNING**  
 This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



**!WARNING**  
 Wear safety glasses during the entire setup process!



**!WARNING**  
**HEAVY LIFT!**  
 Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

## Needed for Setup

The following are needed to complete the setup process, but are not included with the router table. Additional tools may be necessary if drilling or tapping is required to install it.

Description	Qty
• Safety Glasses .....	1
• Cleaner/Degreaser ( <b>Page 10</b> ) ....	As Needed
• Disposable Shop Rags.....	As Needed
• Another Person .....	1
• Straightedge 4' .....	1
• Screwdriver Phillips #2 .....	1
• Wrenches or Sockets 8, 10, 14mm .....	1 Ea
• Drill Bit $\frac{3}{16}$ " , $\frac{3}{8}$ " .....	1 Ea
• Wood $1\frac{1}{2}$ " x $2\frac{1}{2}$ " x 28" .....	1
• Wood $2\frac{3}{4}$ " x (Fence Thickness) x 28" .....	1
• Jointer.....	1
• *Wood Screws #10 x 2.....	4

\*Size may vary depending on thickness of infeed and outfeed fence boards.

## Unpacking

This router table was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

**IMPORTANT:** Save all packaging materials until you are completely satisfied with the router table and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your table later.*

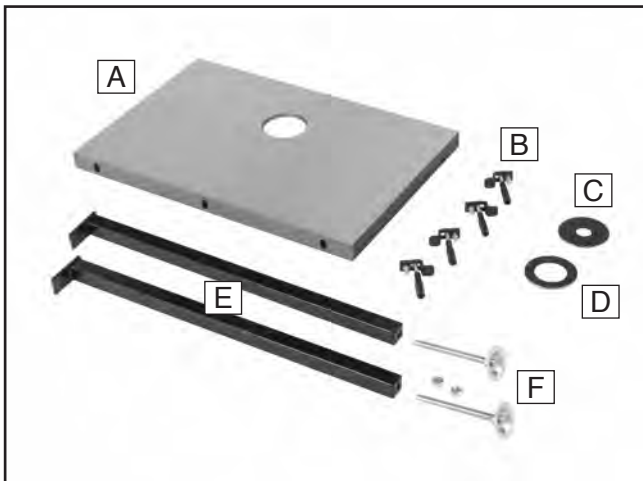


# Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

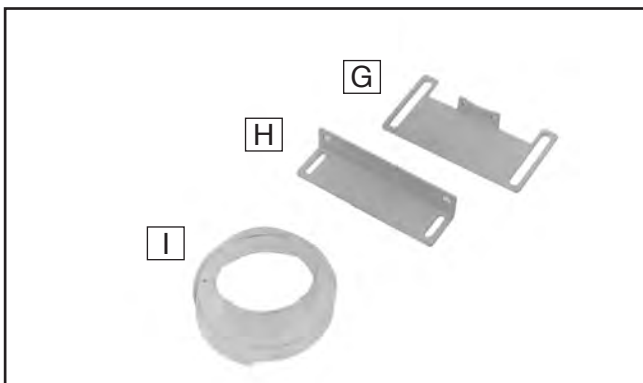
If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

<b>Box Contents: (Figures 1–2)</b>	<b>Qty</b>
<b>A.</b> Router Table Extension Wing.....	1
<b>B.</b> Hold Down Assemblies .....	4
<b>C.</b> Table Insert 29mm .....	1
<b>D.</b> Table Insert 60mm .....	1
<b>E.</b> Extension Legs.....	2
<b>F.</b> Adjustable Feet with Hex Nuts .....	2



**Figure 1.** Router table extension wing inventory.

<b>G.</b> Vertical Bracket .....	1
<b>H.</b> Horizontal Bracket .....	1
<b>I.</b> Guard.....	1



**Figure 2.** Router table guard inventory.

## Hardware and Tools (Not Shown):

### Router Table

- Hex Bolts  $\frac{3}{8}$ "-16 x  $1\frac{1}{4}$ " (Rtr/Main Table) ..... 3
- Lock Washers  $\frac{3}{8}$ " (Rtr/Main Table) ..... 3
- Flat Washers  $\frac{3}{8}$ " (Rtr/Main Table) ..... 3
- Hex Bolts  $\frac{3}{8}$ "-16 x  $1\frac{1}{2}$ " (Rtr Table/Rail) ..... 2
- Lock Washers  $\frac{3}{8}$ " (Rtr Table/Rail)..... 2
- Flat Washers  $\frac{3}{8}$ " (Rtr Table/Rail) ..... 4
- Hex Nuts  $\frac{3}{8}$ "-16 (Rtr Table/Rail) ..... 2
- Flat Head Screws  $\frac{1}{4}$ "-20 x  $\frac{3}{4}$ " (Rail/Leg).... 4
- Flat Washers  $\frac{1}{4}$ " (Rail/Leg) ..... 2
- Hex Nuts  $\frac{1}{4}$ "-20 (Rail/Leg)..... 2

### Guard

- Phillips Head Screws #8-32 x  $\frac{5}{8}$ "..... 2
- Flat Washers #8 .....
- Lock Washers #8 .....
- Hex Nuts #8-32 .....
- Wood Screws #8 x  $\frac{3}{4}$ "..... 2
- Phillips Head Screws #10-24 x  $2\frac{1}{2}$ " ..... 4
- Carriage Bolts  $\frac{1}{4}$ "-20 x  $\frac{1}{2}$ " .....
- Flat Washers  $\frac{1}{4}$ " .....
- Wing Nuts  $\frac{1}{4}$ "-20 .....

## **NOTICE**

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

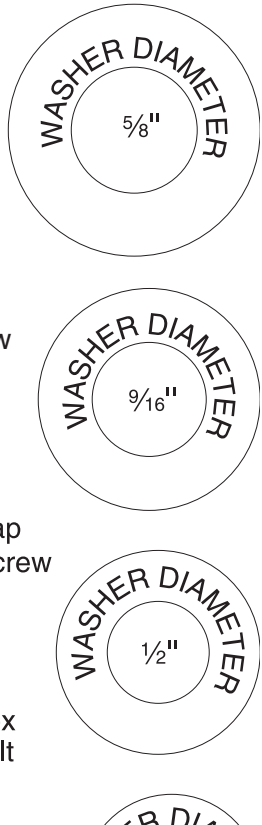
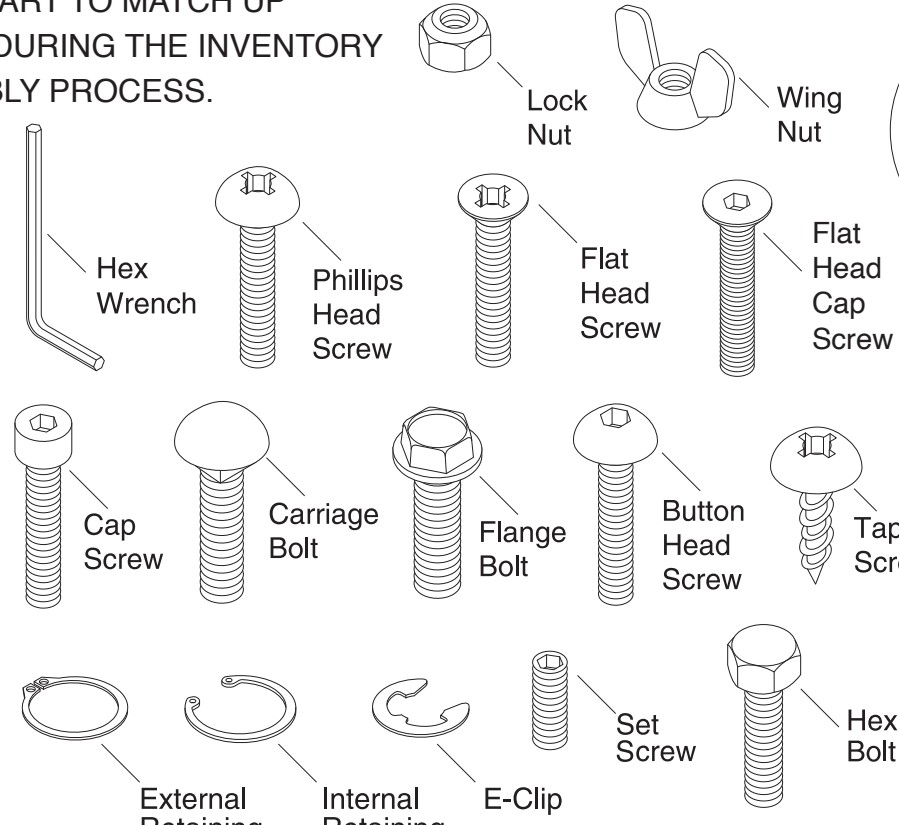


# Hardware Recognition Chart

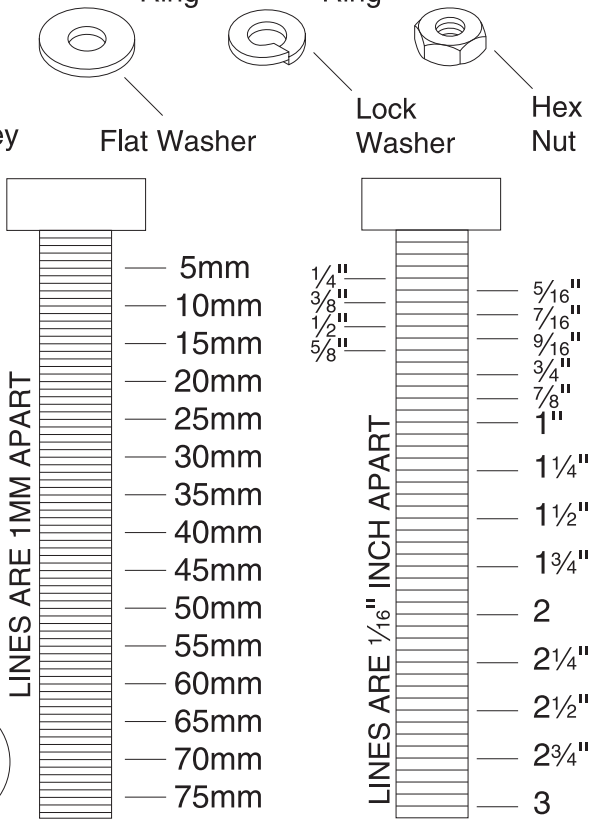
USE THIS CHART TO MATCH UP  
HARDWARE DURING THE INVENTORY  
AND ASSEMBLY PROCESS.

MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

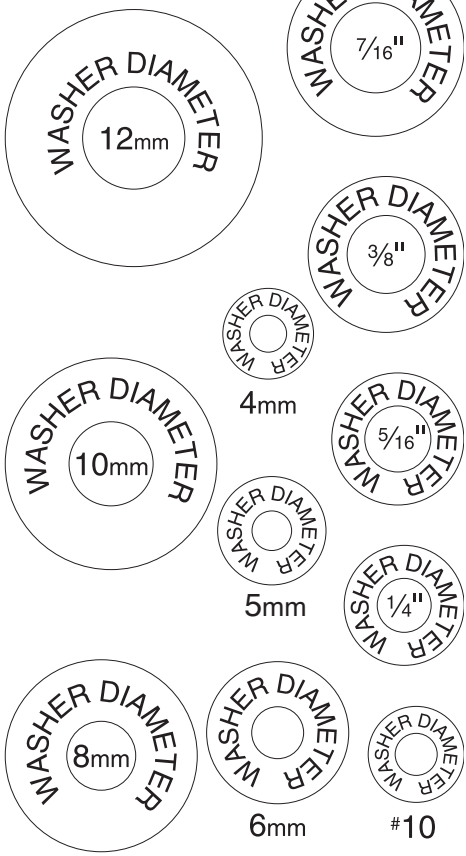
- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"



- 4mm
- 5mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm



WASHERS ARE MEASURED BY THE INSIDE DIAMETER



# Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

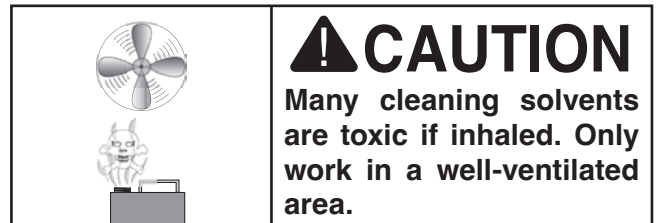
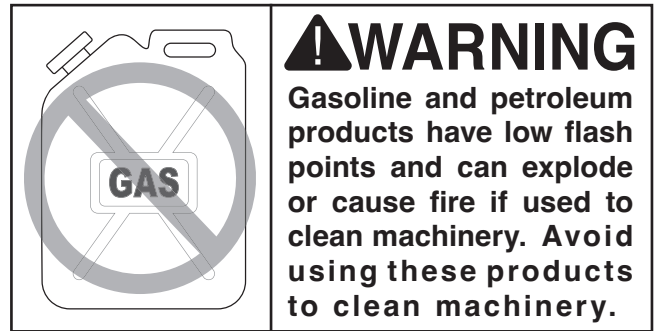
There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

## Before cleaning, gather the following:

- Disposable rags
- Cleaner/degreaser (WD-40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

## Basic steps for removing rust preventative:

1. Put on safety glasses.
2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.
4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



## T23692—Orange Power Degreaser

A great product for removing the waxy shipping grease from the *non-painted* parts of the machine during clean up.



Figure 3. T23692 Orange Power Degreaser.



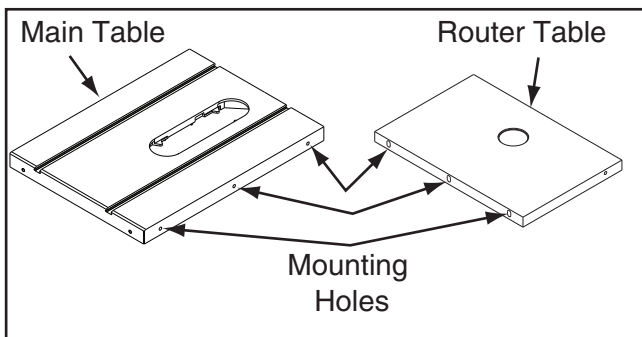
# Assembly

The Model H7507 mounts on most table saws that have 27" deep tables. If your table saw does not have mounting holes that match the router table, you will need to drill and tap the holes yourself.

Also, you may have to modify the fence rails for mounting the router table. Read this entire assembly section before you begin the installation procedure below to make sure the H7507 will fit your table saw before making any modifications.

## To assemble and install your router table extension wing:

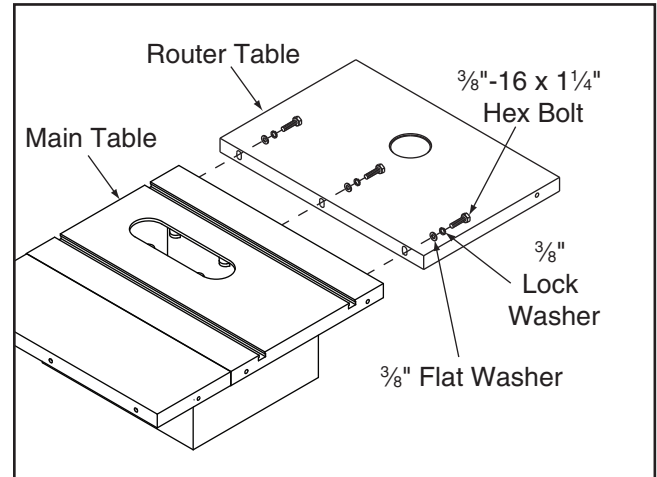
1. DISCONNECT TABLE SAW FROM POWER!
2. Remove the right extension wing of the saw table and use the mounting holes shown in **Figure 4** to install the router table in its place.



**Figure 4.** Mounting holes in router table and saw table.

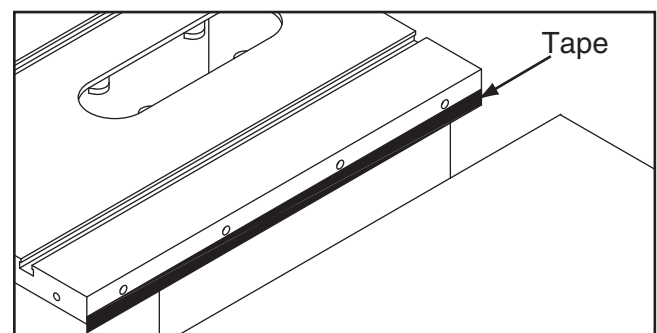
**Note:** There are other ways to attach the router table to a table saw, but these may require modifications to the saw.

3. With the help of another person to hold the router table, align the mounting holes in both tables and secure them together with the (3)  $\frac{3}{8}$ "-16 x  $1\frac{1}{4}$ " hex bolts, (3)  $\frac{3}{8}$ " lock washers, and (3)  $\frac{3}{8}$ " flat washers, as shown in **Figure 5**. Finger tighten.



**Figure 5.** Example of mounting router table to table saw.

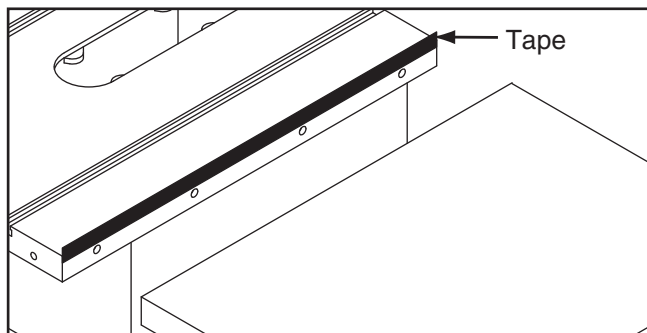
4. Place the straightedge across the saw table and router table to make sure that the combined table surface is flat.
  - If the combined table surface is flat, continue with **Step 5**.
  - If the outside edge of the router table tilts down, place strips of masking tape along the *bottom* edge of the saw table to shim the router table up and even with the saw table from side to side (see **Figure 6**).



**Figure 6.** Using tape to shim the router table up.



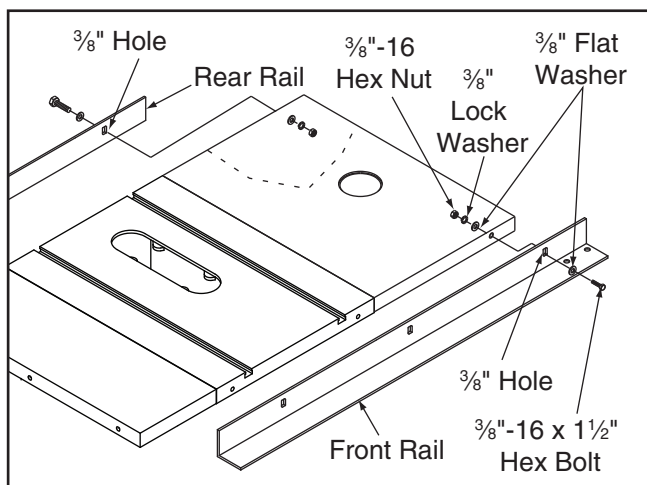
- If the outside edge of the router table tilts up, place strips of masking tape along the *top* edge of the saw table to shim the router table down and even with the saw table from side to side (see **Figure 7**).



**Figure 7.** Positioning the tape to shim the router table down.

**Note:** After reinstalling the router table, remove all excess masking tape with a razor blade.

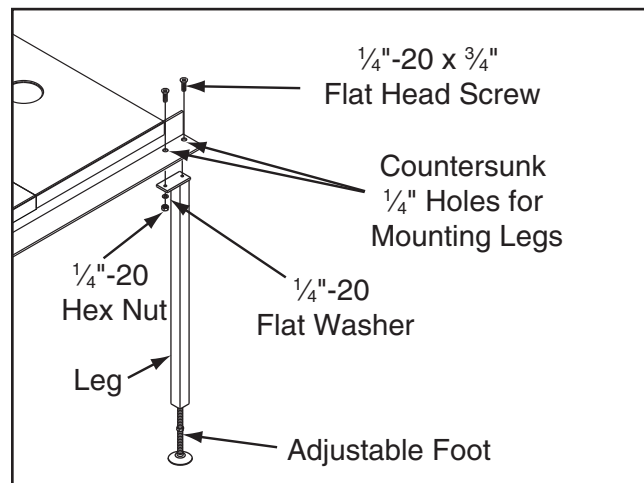
5. Remove the fence and front rail tube (if installed) to give yourself clear access to the fence rails.
6. Use (2)  $\frac{3}{8}$ "-16 x  $1\frac{1}{2}$ " hex bolts, (2)  $\frac{3}{8}$ " lock washers, (4)  $\frac{3}{8}$ " flat washers, and (2)  $\frac{3}{8}$ "-16 hex nuts to secure the router table to the front/rear fence rails, as shown in **Figure 8**.



**Figure 8.** Example of mounting router table to rails.

**Note:** If your rails do not have mounting holes to accommodate the router table, you may need to drill holes in your fence rails to allow the router table to be fastened, as shown in **Figure 8**.

7. Install the adjustable feet in the bottom of the legs.
8. Thread the feet into the legs so the leg/foot assembly is shorter than the rail height.
9. Use (4)  $\frac{1}{4}$ "-20 x  $\frac{3}{4}$ " flat head screws, (2)  $\frac{1}{4}$ " flat washers, and (2)  $\frac{1}{4}$ " hex nuts to secure the legs to the fence rails, as shown in **Figure 9**.



**Figure 9.** One of two legs secured to rail for supporting router table.

**Note:** If your rails do not have mounting holes to accommodate the router table legs, you may need to drill holes in the end of the rails to allow the legs to be fastened, as shown in **Figure 9**.

10. Adjust the feet to the ground, then tighten the hex nut on the foot against the leg to lock the foot height in place.
11. Replace the front rail tube on the rail. **Figure 10** shows an example of the Model H7507 installed on a saw.



**Figure 10.** Example of Model H7507 installed.

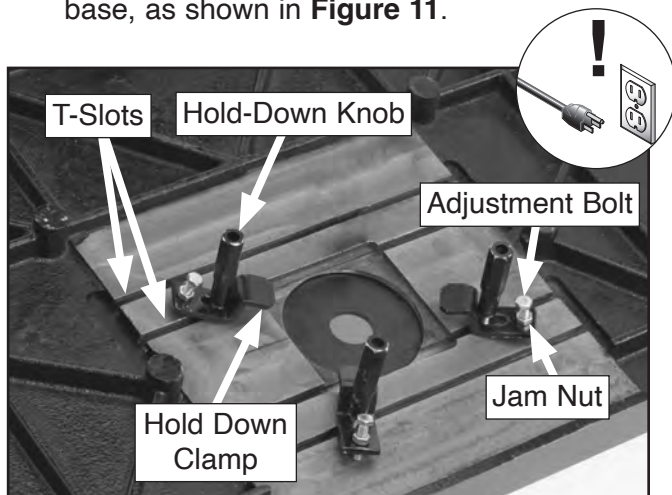


# Mounting Router

The Model H7507 will support a router with a base thickness between 1/4" and 3/4".

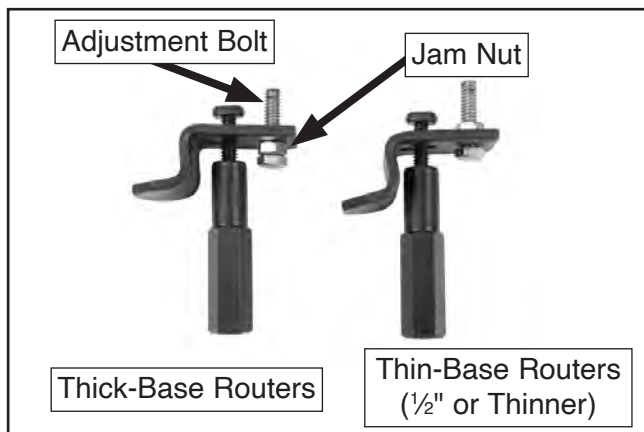
To mount a router to the router table:

1. DISCONNECT SAW AND ROUTER FROM POWER!
2. Slide three of the router hold-down assemblies into the T-slots underneath the router table so that they allow room for the router base, as shown in **Figure 11**.



**Figure 11.** Router hold-down assembly controls.

**Note:** To properly position the hold-down clamp, balance the tightness of the hold-down knob and the adjustment bolt so that the clamp will allow room for the router base in the next step. It may be necessary to move the jam nut on the adjustment bolt to the other side of the hold down clamp, as shown in **Figure 12**, to properly fit your router.



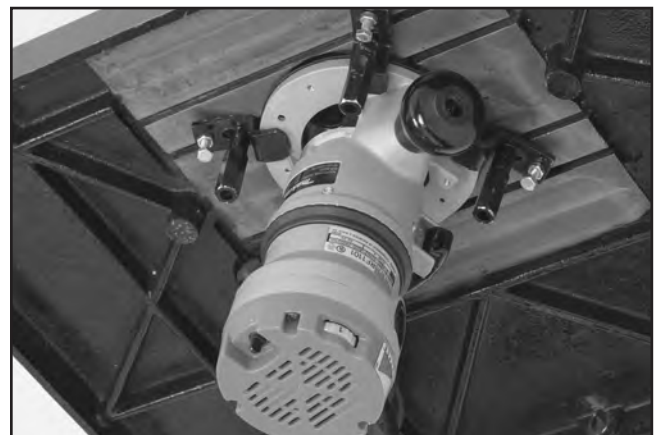
**Figure 12.** Router adjustment bolt positions.



	<p><b>NOTICE</b></p> <p>Do not tighten the clamp adjustment bolts against the thin edge of the T-slots, or they may break.</p>
--	--------------------------------------------------------------------------------------------------------------------------------

<p><b>! WARNING</b></p> <p>If the router unexpectedly moves or the router bit contacts the table insert or fence during operation, serious personal injury could result from flying debris. ALWAYS make sure that at least three router clamps are used and are applied to a flat surface of the router base before connecting the router to power.</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3. Slide the router base onto the three hold-down clamps, position them so that they secure the router bit in the center of the table opening, then tighten the hold-down knobs and adjustment bolts to secure the router in place (see **Figure 13**).



**Figure 13.** Router mounted under wing.

4. Install the remaining hold-down assembly to make sure the router stays firmly in place during operation.

# Router Guard

A router guard is included with your machine to reduce the risk of accidental cutter contact during operation. The router guard (see **Figure 14**) is also designed to be connected to a dust collector to help collect dust and chips during operation.



**Figure 14.** Router guard.

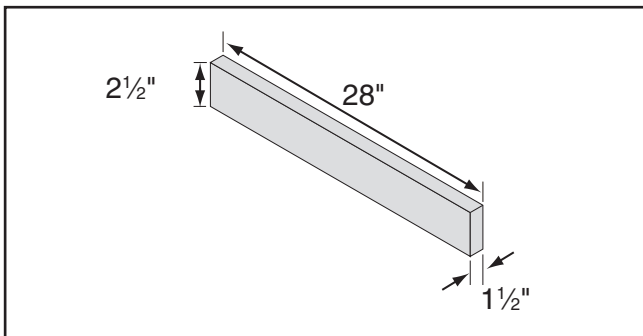
The router guard is intended to be used with a shop-made fence and must be used when making cuts that leave part of the router bit exposed to the operator.

The fence setup requires making a support board and two fence pieces. The support board aids in mounting and remounting the fence pieces.

The fence pieces must be moved in or out to minimize router bit clearance for maximum safety and support. Often, more than one fence will be necessary to safely accommodate various sized router bits.

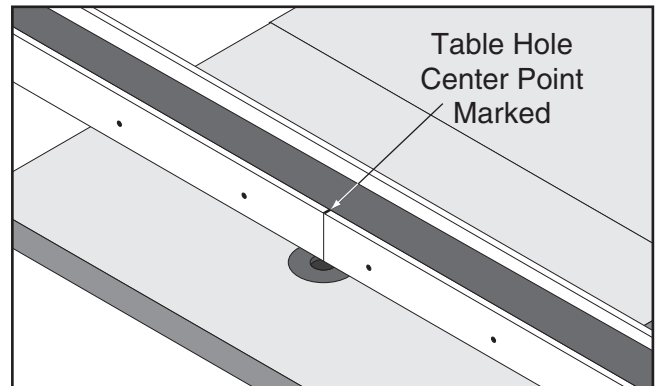
## To make a shop made fence and install the router guard:

1. Make a support board with a piece of  $1\frac{1}{2}$ " stock, approximately 28" long, cut to  $2\frac{1}{2}$ " tall and square up on all sides (see **Figure 15**).



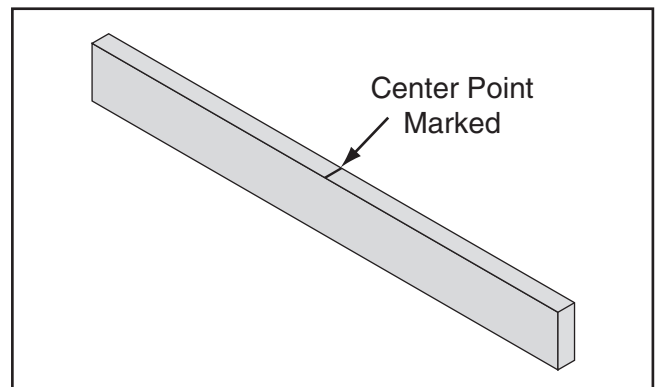
**Figure 15.** Support board dimensions.

2. Move the table saw fence next to the opening on the router table extension wing and mark the center point of the table hole opening on the right-hand side of the table saw fence face (see **Figure 16**).



**Figure 16.** Table hole center point marked on fence face.

3. Mark the center point of the length of the support board (see **Figure 17**).



**Figure 17.** Center point marked on support board.

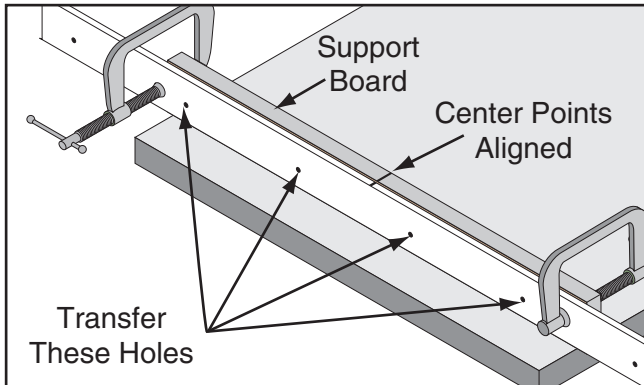
4. Remove the fence face from the right-hand side of the fence by unscrewing the six mounting screws.

**Note:** Be careful not to disturb any shim tape on the metal body of the fence. This has been carefully installed at the factory to ensure that the fence face remains straight when installed.

5. Rest the fence face and the support board on the saw table, align the center point marks, and clamp the two pieces together.

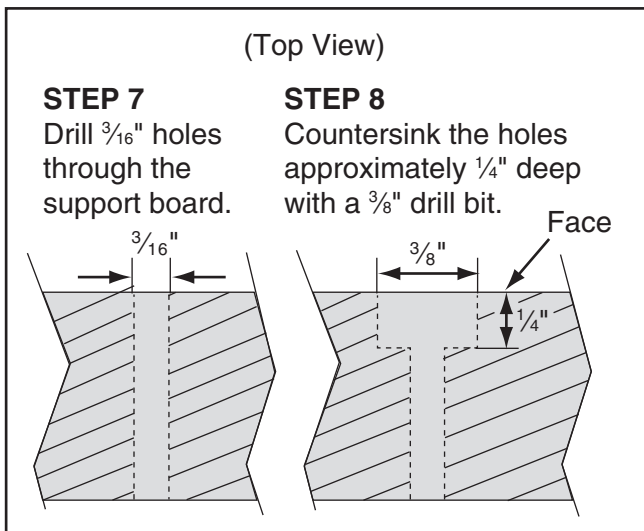


- Use the table saw fence face as a template to transfer the screw hole positions onto your fence board (see **Figure 18**). Use a center punch or long nail to mark the holes.



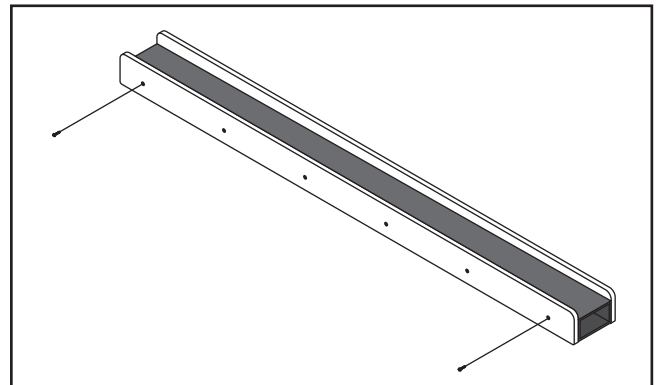
**Figure 18.** Fence and board lined up and clamped to transfer screw hole positions.

- Unclamp the support board and fence face, and drill holes through the support board where marked with a  $\frac{3}{16}$ " drill bit.
- Countersink the holes in the face of the support board approximately  $\frac{1}{4}$ " deep with a  $\frac{3}{8}$ " drill bit, as shown in **Figure 19**.



**Figure 19.** Steps for drilling and countersinking screw holes into support board.

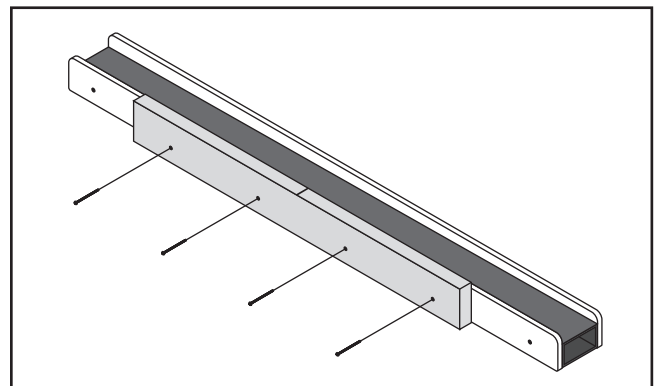
- Re-attach the fence face at both ends, as shown in **Figure 20**.



**Figure 20.** Reattaching fence face.

- Attach the support board to the fence with the #10-24 x  $2\frac{1}{2}$ " Phillips screws included with the kit, as shown in **Figure 21**.

**Note:** If you are using a non-Shop Fox Classic Fence, you may have to provide your own screws if the ones provided with the kit are not the correct size and will not secure the support board to the fence face.



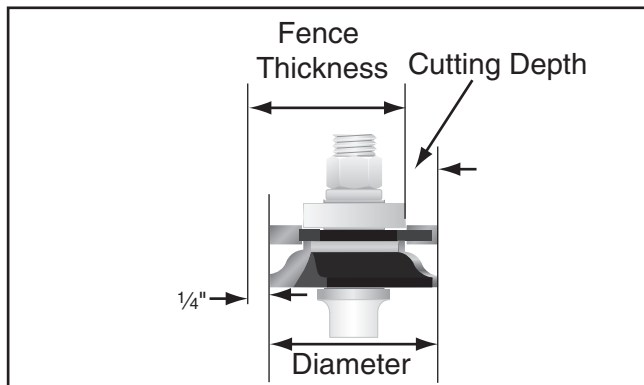
**Figure 21.** Attaching support board.



11. Make a 28" long fence that is 2¾" tall.

The fence thickness is determined by the largest size router bit you will use. A 1½" thick fence works well for most router bits. Ultimately, the fence must be thick enough to accommodate the portion of the router bit behind the front fence surface. To determine this, subtract the cutting depth from the router bit diameter, then add ¼" (see **Figure 22**).

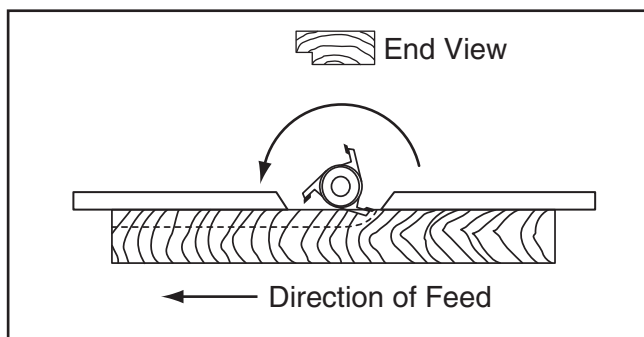
Make sure you properly square up all sides of your fence. (If you regularly experience snipe from squaring your boards with your planer and jointer, make the fence 4" longer and cut off the end with the snipe after squaring the board up.)



**Figure 22.** Determining fence thickness from router bit dimensions.

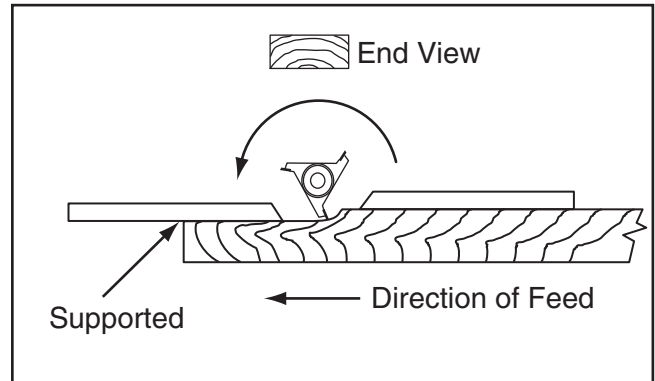
12. Cut your fence in half. One side will be the infeed fence and the other side will be the outfeed fence.

- If you are using a router bit that will not remove the entire face of your workpiece, as illustrated in **Figure 23**, then skip ahead to **Step 14**.



**Figure 23.** Typical routing operation for partial face removal of workpiece.

- If you are using a router bit that will remove the entire face of the workpiece, as illustrated in **Figure 24**, continue with **Step 13**.



**Figure 24.** Typical routing operation for full face removal of workpiece.

13. Face plane approximately ¼" off of the fence board that will be the infeed fence. The amount of material removed in this step will control your depth of cut.

## ⚠ CAUTION

Removing more than ¼" from the infeed fence may greatly increase the risk of kick-back injury when routing.

14. If not already done so, properly mount your router with the installed router bit on the router table. Refer to **Mounting Router** on **Page 13** for instructions.

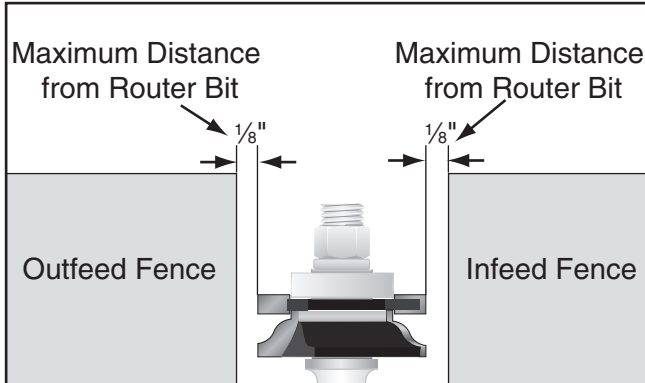
15. Mount the table saw fence to the left of the router bit and move the fence so the support board is next to the router bit.

## ⚠ WARNING

Attaching the fence faces incorrectly during the next step may increase the risk of kick-back or other serious personal injury during routing operations.

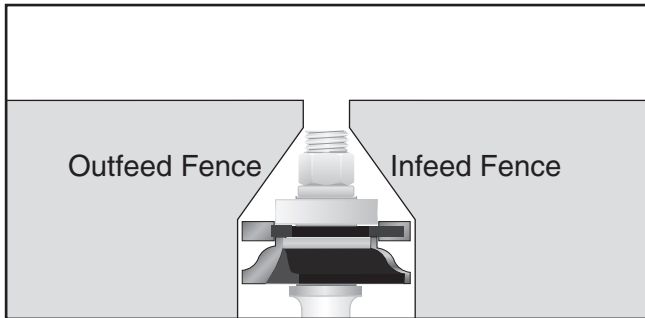


16. Position the infeed and outfeed fences as close as possible to the maximum diameter of the router bit, but not farther than  $\frac{1}{8}$ " (see **Figure 25**).



**Figure 25.** Positioning fences around router bit.

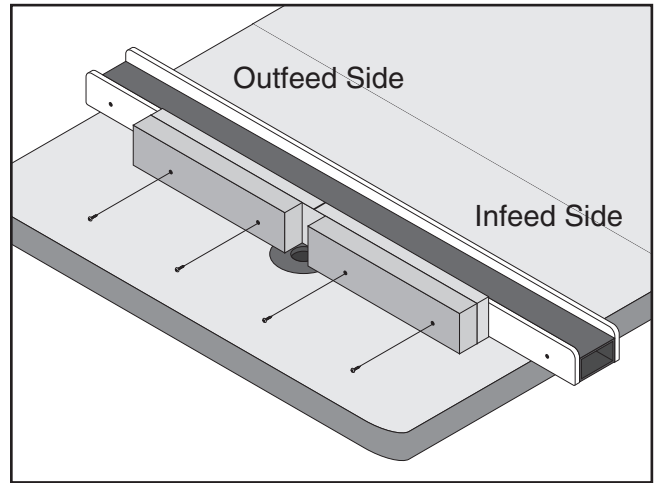
For maximum safety and support, consider using a minimum clearance design for your fences. Minimum clearance fences are cut around the shape of the router bit to minimize clearance between the router bit and the fence, as shown in **Figure 26**.



**Figure 26.** Minimum clearance fence setup.

17. Clamp, predrill with a countersinking bit, and attach the fence pieces with at least two wood screws per side, as shown in **Figure 27**. (Only use wood screws that are long enough to thread into the support board, but not so long that they enter the plastic fence face.)

**Note:** If you followed **Step 13**, be sure to install the modified board on the infeed side.

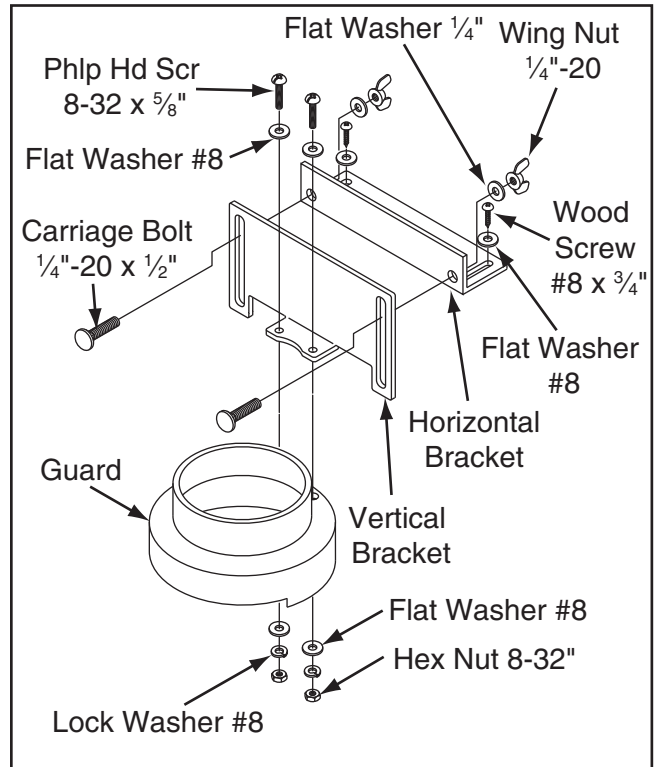


**Figure 27.** Attaching fence boards.

18. Assemble the router guard with the components shown in **Figure 28**.

**⚠ CAUTION**

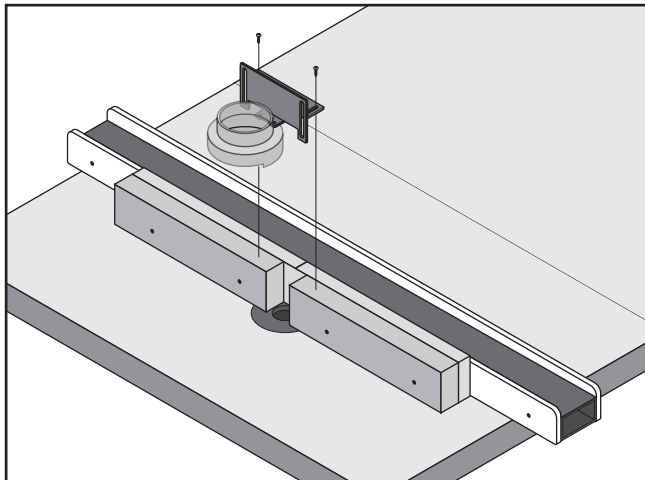
**Overtightening the fasteners that secure the plastic guard to the bracket may crack or break the plastic guard, rendering it unsafe for use.**



**Figure 28.** Assembling router guard.



- Center the guard over the table opening and attach the guard assembly to the top of the fence boards with the two provided wood screws, as shown in **Figure 29**.



**Figure 29.** Attaching router guard.

- Adjust the guard horizontally (if necessary) by using the horizontal bracket slots and wood screws.
- Adjust the height of the guard  $\frac{1}{8}$ " higher than the workpiece height by using the vertical bracket slots and carriage bolt/wing nuts.
- Connect the top of the guard to your dust collection system with a 3" adapter.

## **! WARNING**

If you change router bits, the fence pieces must be adjusted in/out so there is not more than  $\frac{1}{8}$ " clearance between the router bit and the fences.

## Dust Collection

### **! CAUTION**

**DO NOT** use the Model H7507 without an adequate dust collection system. An attached router will create substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

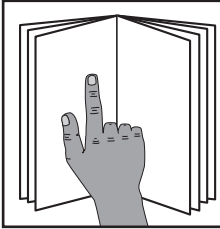
#### **Minimum CFM at Dust Port: 250 CFM**

*Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.*

The Model H7507 features a clear 3" plastic guard that can be connected to a dust collector or a dust collection system.



# SECTION 3: OPERATIONS

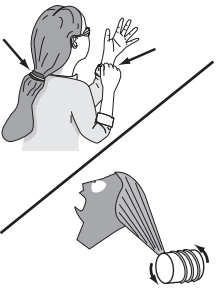
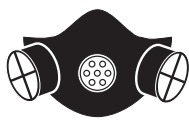


## **!WARNING**

To reduce your risk of serious injury, read this entire manual **BEFORE** using machine.

## **!WARNING**

Eye injuries, respiratory problems, or hearing loss can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.



## **!WARNING**

Keep hair, clothing, and jewelry away from moving parts at all times. Entanglement can result in death, amputation, or severe crushing injuries!

## **NOTICE**

If you are not experienced with this type of machine, **WE STRONGLY RECOMMEND** that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## Operation Overview

This overview outlines the basic process that happens during an operation with the router table. Familiarize yourself with this process to better understand the remaining parts of the Operation section.

To complete a typical operation, the operator does the following:

1. Examines the workpiece to make sure it is suitable for cutting, and ensures the router is correctly mounted.
  2. Adjusts the bit height for the desired cutting profile.
  3. Adjusts the fence position to establish the depth of cut.
  4. Verifies that the fence boards are close enough to the bit for maximum workpiece support. Adjusts the board positions or modifies their thickness as needed.
  5. Wears safety glasses, a respirator, and hearing protection, and locates push sticks if needed.
  6. If using a reversible router, verifies that the direction of spindle rotation is correct.
  7. Starts the router.
  8. Holds the workpiece firmly and flatly against the fence, and then pushes the workpiece into the bit at a steady and controlled rate until the workpiece moves completely beyond it.
- Important:** The operator is very careful to keep the workpiece firmly against the table and fence during the entire cut. For smaller workpieces or odd-shaped workpieces, a zero-clearance fence or jig is used.
9. Stops the router.



# Workpiece Inspection

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Some workpieces are not safe to cut or may require modification before routing. Before routing, inspect all workpieces for the following:

- **Material Type:** This router is intended for cutting natural and man-made wood products, laminate covered wood products, and some plastics. This machine is NOT designed to cut metal, glass, stone, tile, etc.
- **Foreign Objects:** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While shaping, these objects can become dislodged and hit the operator, cause kickback, or break the bit, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, DO NOT cut the workpiece.
- **Large/Loose Knots:** Loose knots may dislodge during a cutting operation. Knots can cause kickback and machine damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid shaping through them.
- **Wet or "Green" Stock:** Routing wood with a moisture content over 20% causes unnecessary wear on the cutters, increases the risk of kickback, and yields poor results.
- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being shaped. DO NOT process workpieces with these characteristics unless you properly square up the stock with a jointer and planer.
- **Minor Warping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table or the fence. A workpiece supported on the bowed side will rock during a cut and could cause kickback or severe injury.

# Table Inserts

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The Model H7507 features a 29 x 99mm insert and a 60 x 99mm insert that fit into the opening on the router table.

The smallest size table opening provides maximum support and stability to the workpiece during operation, which increases safety.

Using the smallest-size opening also allows any unused portion of the router bit to remain below the table surface, which increases operator protection.

After installing the insert, use a ruler to make sure it is flush with the router table surface.

# Edge Jointing

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Jointing the edge of a board involves using a straight cutting router bit to remove wood from the face of the board. The result is a perfectly flat and square edge.

## To joint the edge of a workpiece:

1. DISCONNECT ROUTER FROM POWER!
2. Secure a straight cutting bit into your router according to the router manufacturer's instructions.
3. Install the smallest table insert into the router table that still allows the router bit to freely rotate.
4. Raise the bit to a height slightly more than that of the workpiece, then rotate it by hand until the cutting flute is perpendicular to the fence boards.
5. Check the thickness of the existing infeed fence board.
  - If the infeed fence board is the same width as the outfeed fence board, remove the fasteners securing it to the support board, then remove the infeed fence board. Proceed to **Step 6**.



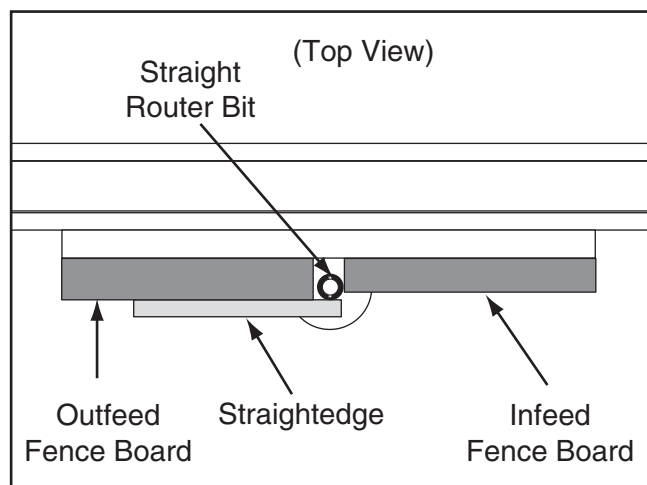
— If the infeed fence board is already face planed  $\frac{1}{16}$ " less than the outfeed fence board, proceed to **Step 8**.

6. Square up a second infeed fence board to the same dimensions as the one you removed in **Step 5**, then face plane off  $\frac{1}{16}$ ". The amount of material removed will determine the depth of cut.

## **CAUTION**

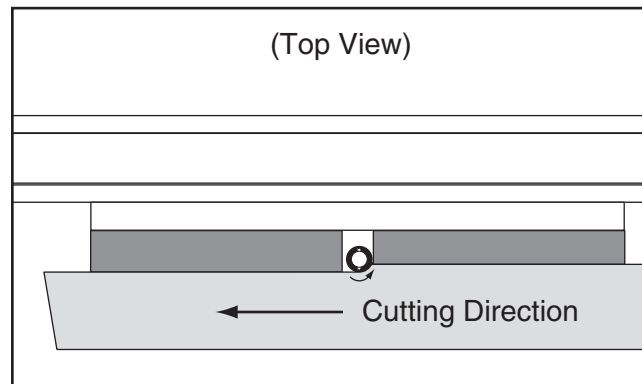
Removing more than  $\frac{1}{16}$ " from the infeed fence may greatly increase the risk of kick-back injury when routing.

7. Redrill and countersink holes in the new infeed fence board, then secure it with the fasteners removed in **Step 5**.
8. Place a straightedge against the outfeed fence board, then adjust the fence assembly so that the straightedge is also against the bit flute, as illustrated in **Figure 30**.



**Figure 30.** Fence jointer setup (guard removed for clarity).

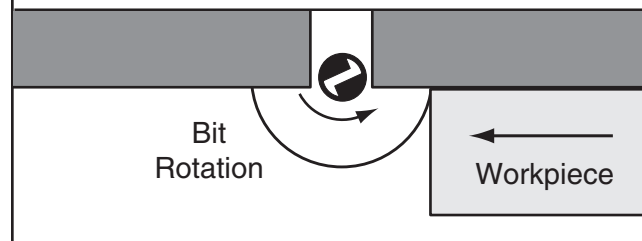
9. Lock the fence assembly in place, adjust the router guard as needed and secure it, connect the router to power, then perform the cut (see **Figure 31**).



**Figure 31.** Edge jointing (guard removed for clarity).

## **WARNING**

Always feed the workpiece against the router bit rotation direction, as illustrated below. Otherwise, the workpiece could be aggressively pulled from your hands, drawing them into the spinning cutter.

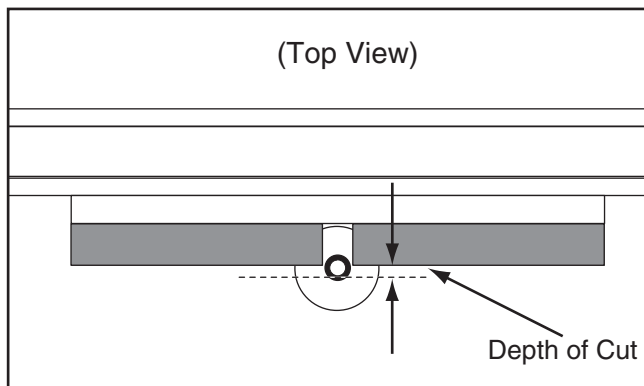


# Groove Cutting

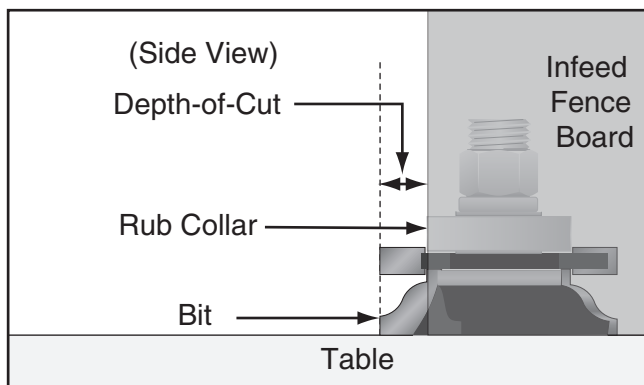
Groove cutting produces a groove or bead into the face of the board.

**To cut a groove into the face of the workpiece:**

1. DISCONNECT ROUTER FROM POWER!
2. Secure the bit into the router according to the router manufacturer's instructions.
3. Install the smallest table insert into the table that still allows the bit to freely rotate.
4. Make sure both fence boards are even with one another and secured to the fence.
5. Raise the bit to the desired height, then adjust the fence assembly so that the fence boards are behind the bit the same distance as the desired depth-of-cut (see the illustrations in **Figures 32–33**).



**Figure 32.** Groove cutting setup—top view (guard removed for clarity).



**Figure 33.** Groove cutting setup—side view.

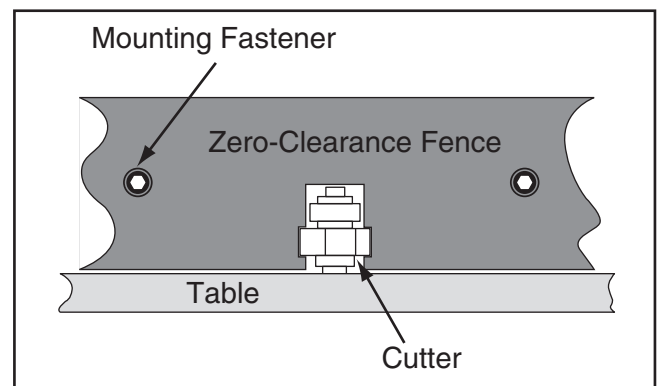
6. Lock the fence assembly in place, adjust the router guard as needed and secure it, connect the router to power, then perform the cut.

# Routing Small Stock

Feeding small stock past the router bit is always dangerous. If you must route small stock, use a zero-clearance fence. This will provide greater protection for the operator, better workpiece support, and reduced tear out on narrow or fragile stock.

**To make a zero-clearance fence:**

1. DISCONNECT ROUTER FROM POWER!
2. Remove the fence boards from the fence assembly, but leave the support board in place.
3. Select a piece of straight and smooth stock that is the same height and thickness as the fence boards and approximately 28" long.
4. Cut an outline of the spindle and cutter from the center of the stock selected in **Step 3**, as illustrated in **Figure 34**.



**Figure 34.** Example of a zero-clearance fence.

**Note:** Make the outline as close as possible to the cutter and spindle without interfering with rotation.

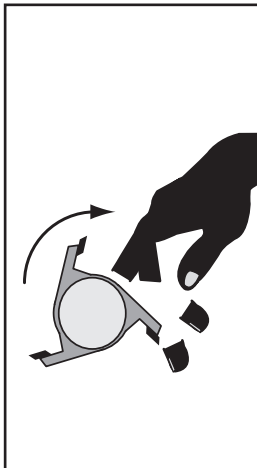


5. Create countersunk mounting holes in the zero-clearance fence so that the screws from the fence boards can be used to secure it to the support board in the same manner.
6. Secure the zero-clearance fence to the support board, check for proper clearance, connect the router to power, then run a test piece by the cutter to verify the results.

## ⚠ CAUTION

**ALWAYS** use hold-downs or featherboards and push sticks when shaping small or narrow stock. These devices keep your hands away from the spinning cutter and sufficiently support the stock to allow a safe and effective cut, reducing the risk of personal injury.

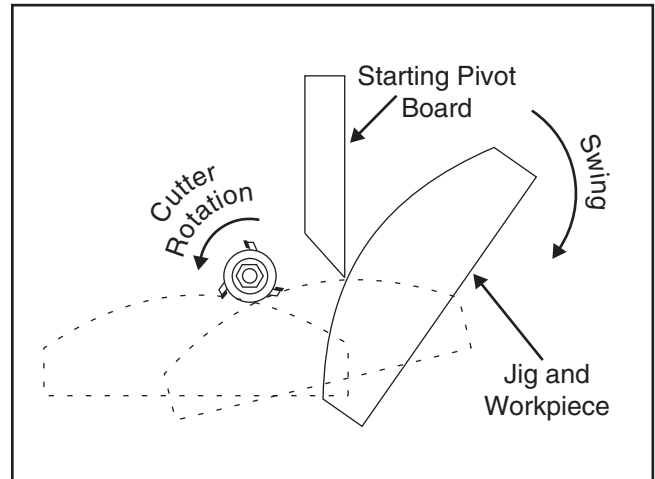
## Free-Hand Routing



## ⚠ WARNING

Free-hand or irregular routing greatly increases the chance that the operator may lose control of the workpiece. Therefore, a pivot point **MUST** be used to control the workpiece while free-hand routing. Loss of control of the workpiece could result in serious personal injury.

Irregular or free-hand routing, as illustrated in **Figure 35**, takes a high degree of skill and dexterity and is done without the protection and aid from the fence and guard. The most dangerous part of free-hand routing is beginning the cut, where the cutter first contacts the workpiece. Often the workpiece will tend to jerk or kickback, presenting an injury hazard to the operator.



**Figure 35.** Illustration of free-hand cutting with a starting block.

To reduce this tendency, use a starting block (see **Figure 36**). This will allow you to anchor and slowly pivot the workpiece into the cutter as the cut is started, making the operation more stable and safe.



**Figure 36.** Example of using a jig with a starting block being used on a shaper.

With the fence assembly removed, you **MUST** use a router bit with a bearing to guide the workpiece through the cut and limit the depth-of-cut. Also, use a jig or fixture to hold the workpiece so that your hands can be kept at a safe distance from the router bit while cutting.

In many situations, it is safer to use a router that is not mounted to the table to perform free-hand routing. Make sure to use a router bit with a bearing.



If you are unfamiliar with free-hand routing, get assistance from an experienced woodworker, read books on routing, and start with a simple project.

## **!WARNING**

**ALWAYS** use an auxiliary jig and extreme care when free-hand routing that requires removal of the fence. Routing without the fence and the attached guard greatly increases the risk of accidental contact with the spinning cutter, causing serious personal injury.

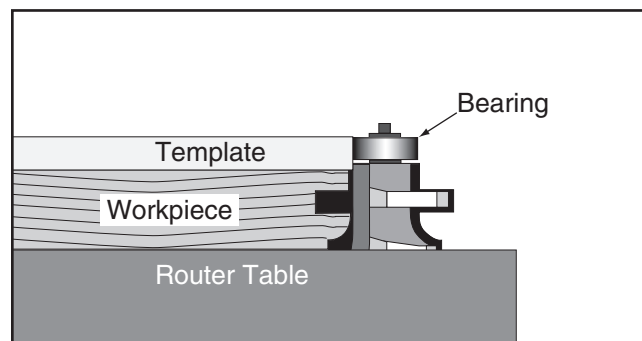
### To free-hand route:

1. DISCONNECT ROUTER FROM POWER!
2. Fabricate a jig to use with the workpiece that will match the finish shape desired, then attach it to the workpiece (see **Figure 36** on the previous page for an example).

**Note:** Make sure any fasteners used will not make contact with the router bit during the cutting operation. Glue can be used as an alternative.

3. Remove the fence assembly from the table.
4. Fabricate and mount a custom guard over the bit that safely protects your hands from the spinning cutter.
5. Clamp a starting block to the table (see **Figure 36** on the previous page for an example).

6. Install a router bit with a bearing as directed by the router manufacturer's instructions, then raise it to the desired height (see **Figure 37**).

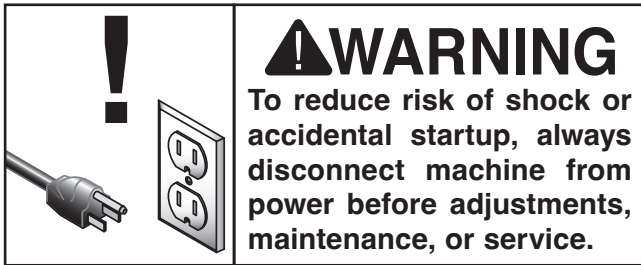


**Figure 37.** Using a template and a bearing for free-hand routing.

7. Connect the router to power and turn it **ON**.
8. Rest the jig with the workpiece attached against the starting block, then slowly pivot and feed it into the bit. After the cut is started, move the jig against the rub collar and away from the starting block, as illustrated in **Figure 35** on the previous page.



# SECTION 4: MAINTENANCE



## Schedule

For optimum performance from this router table, this maintenance schedule must be strictly followed.

### Ongoing

To minimize your risk of injury and maintain proper operation, shut down the router immediately if you ever observe any of the items below, and fix the problem before continuing operations:

- Loose mounting screws, bolts, or locking fasteners.
- Worn router switch.
- Worn or damaged wires, cords, or plugs.
- Any other unsafe condition.

## Cleaning & Protecting

Cleaning the Model H7507 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Protect the unpainted cast iron and steel by wiping it clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces. Keep the extension wing rust-free with regular applications of products like those shown in **Figure 38**.

### G5562—SLIPIT® 1 Qt. Gel

### G5563—SLIPIT® 11 Oz. Spray

Use on cast iron table surfaces and other unpainted metal surfaces to reduce sliding friction and hang-ups. This product also reduces rust and prevents resin build-up.



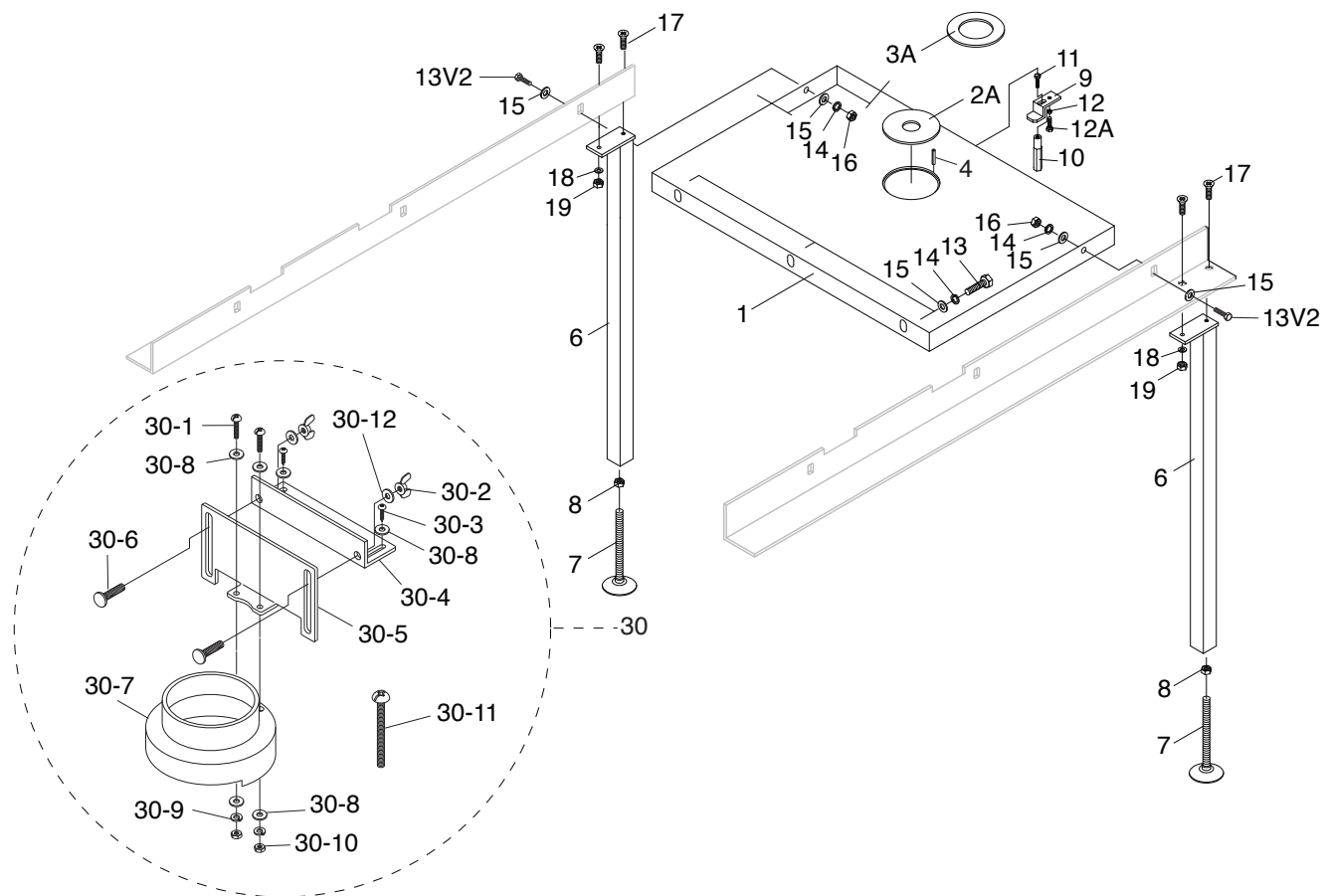
**Figure 38.** SLIPIT® gel and spray.



# SECTION 5: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call (800) 523-4777 or visit [www.grizzly.com/parts](http://www.grizzly.com/parts) to check for availability.

## Main



REF	PART #	DESCRIPTION
1	PH7507001	ROUTER TABLE EXT WING
2A	PH7507002A	INSERT 29 X 99.8MM V2.07.05
3A	PH7507003A	INSERT 60 X 99.8MM V2.07.05
4	PH7507004	ROLL PIN 3 X 10
6	PH7507006	EXTENSION LEG
7	PH7507007	ADJUSTABLE FOOT
8	PH7507008	HEX NUT 1/2-12
9	PH7507009	ROUTER CLAMP
10	PH7507010	HOLD DOWN KNOB 1/4-20
11	PH7507011	HOLD DOWN HEX BOLT 1/4-20 X 2
12	PH7507012	HEX NUT 1/4-20
12A	PH7507012A	HEX BOLT 1/4-20 X 1
13	PH7507013	HEX BOLT 3/8-16 X 1-1/4
13V2	PH7507013V2	HEX BOLT 3/8-16 X 1-1/2 V2.06.23
14	PH7507014	LOCK WASHER 3/8
15	PH7507015	FLAT WASHER 3/8
16	PH7507016	HEX NUT 3/8-16

REF	PART #	DESCRIPTION
17	PH7507017	FLAT HD SCR 1/4-20 X 3/4
18	PH7507018	FLAT WASHER 1/4
19	PH7507019	HEX NUT 1/4-20
30	PH7507030	ROUTER GUARD ASSEMBLY
30-1	PH7507030-1	PHLP HD SCR 8-32 X 5/8
30-2	PH7507030-2	WING NUT 1/4-20
30-3	PH7507030-3	WOOD SCREW #8 X 3/4
30-4	PH7507030-4	HORIZONTAL BRACKET
30-5	PH7507030-5	VERTICAL BRACKET
30-6	PH7507030-6	CARRIAGE BOLT 1/4-20 X 1/2
30-7	PH7507030-7	CLEAR GUARD
30-8	PH7507030-8	FLAT WASHER #8
30-9	PH7507030-9	LOCK WASHER #8
30-10	PH7507030-10	HEX NUT 8-32
30-11	PH7507030-11	PHLP HD SCR 10-24 X 2-1/2
30-12	PH7507030-12	FLAT WASHER 1/4







# WARRANTY & RETURNS

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Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

For further information about the warranty, visit <https://www.grizzly.com/forms/warranty> or scan the QR code below to be automatically directed to our warranty page.



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