

Grizzly **Industrial, Inc.**®

MODEL H7507 ROUTER TABLE EXTENSION OWNER'S MANUAL



Model H7507 Shown Installed on Model G1023RLW

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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
(FOR MODELS MANUFACTURED SINCE 3/05) #BL13275 PRINTED IN TAIWAN

WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

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

The owner of this machine/equipment 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, blade/cutter 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

Manual Accuracy

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

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
E-Mail: techsupport@grizzly.com

We want your feedback on this manual. If you can take the time, please email or write to us at the address below and tell us how we did:

Grizzly Industrial, Inc.
c/o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

Machine Description

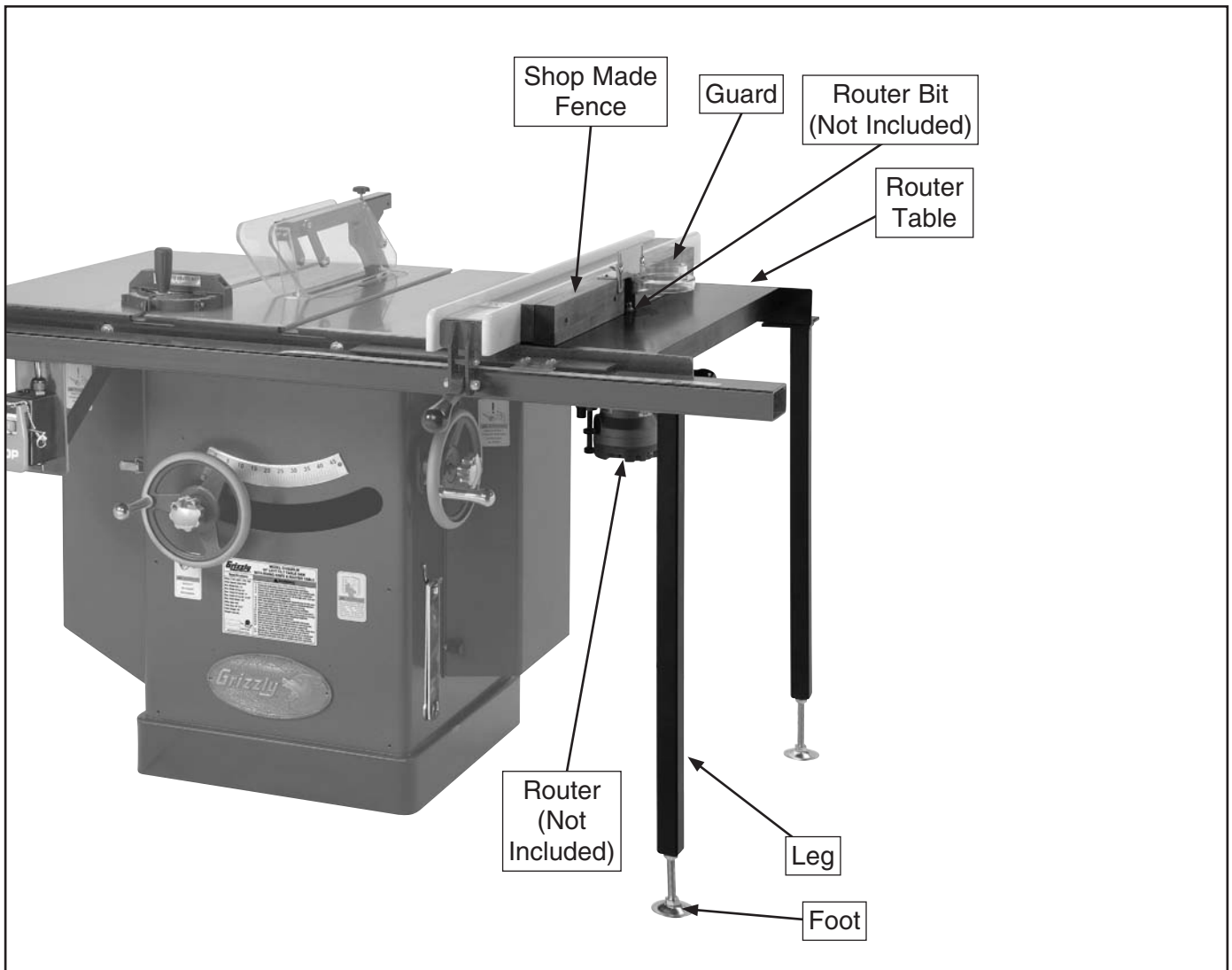
This addition to your table saw features a universal router mount and an 18" by 27" precision-ground cast iron table. Included with the Model H7507 are adjustable support legs, a router guard that supports routers with a base thickness between 1/4" and 3/4", and features a 3" dust port.

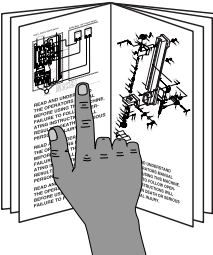
NOTICE

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



	<p>⚠ WARNING To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.</p>
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SECTION 1: SAFETY

WARNING

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.



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

This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual **BEFORE** using machine. Untrained users can be seriously hurt.

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.

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

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

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.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.



WARNING

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in poorly-lit areas. Keep work area clean, dry, and well-lighted to minimize risk of injury.

ONLY USE AS INTENDED. Only use machine for its intended purpose. Never modify or alter machine for a purpose not intended by the manufacturer or serious injury may result!

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

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

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

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

STABLE MACHINE. Unexpected movement during operations greatly increases the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

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.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine **OFF** and ensure all moving parts completely stop before walking away.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine may increase the risk of serious injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

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



Additional Safety for Router Tables

WARNING

AVOIDING AMPUTATION. Never place hands directly over or in front of the cutter. As one hand approaches the cutter, move it away. Always keep hand at least 6" away from the spinning cutter.

SECURING LEVERS AND KNOBS. Never operate the router table without first making sure that the fence lock knob, router guard fasteners, and router clamps are tight and secure. Otherwise, the workpiece can slip out of alignment during cutting and cause injury from kickback.

PREVENTING WORKPIECE DRAW-IN OR KICKBACK. Always feed the workpiece against the rotation of the cutter. Never force materials past the router. Let the cutter do the work. Excessive force is likely to result in poor cutting and may cause kickback or serious personal injury.

APPROPRIATE WORKPIECES. The danger of kickback and injury is increased when the workpiece has knots, holes, or foreign objects in it. Warped stock should be properly squared up with a jointer and planer before routing.

BLIND CUTTING. Keep the cutter on the underside of the workpiece when making blind cuts. This decreases risk of accidental contact with the cutter.

TESTING CLEARANCE. With the machine disconnected from power, rotate the router spindle to test any new setup to ensure proper cutter clearance before starting the machine.

CUTTING SUPPORT. Never cut a workpiece without using a fence or jig. Otherwise, the workpiece can be grabbed by the cutter and pull your hands into the cutter.

WORKPIECE SIZING. Never cut a workpiece shorter than six inches without special fixtures or jigs. Otherwise, your hands will be too close to the spinning cutter.

CUTTER HEIGHT. If any part of the router bit comes above the workpiece, it must be guarded.

USING SAFETY GUARDS. To prevent amputation or other injuries, NEVER remove any guards when machine is operating. Fabricate additional guards or jigs for special circumstances. Use an overhead guard if the fence is removed.

TRIPPING HAZARD. To prevent tripping over the router power cord when operating the table saw, always disconnect it and safely store it out of the way.

WARNING

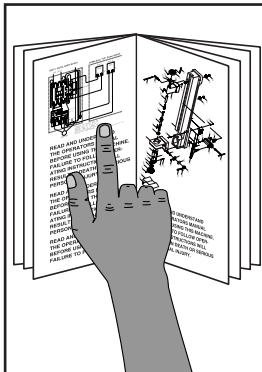
Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious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



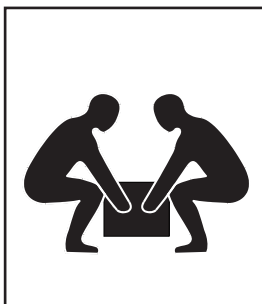
SECTION 2: SETUP



!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
This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

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 (Page 10)	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

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



Inventory

The following is a description of the main components shipped with your machine. Lay the components out to 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.

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

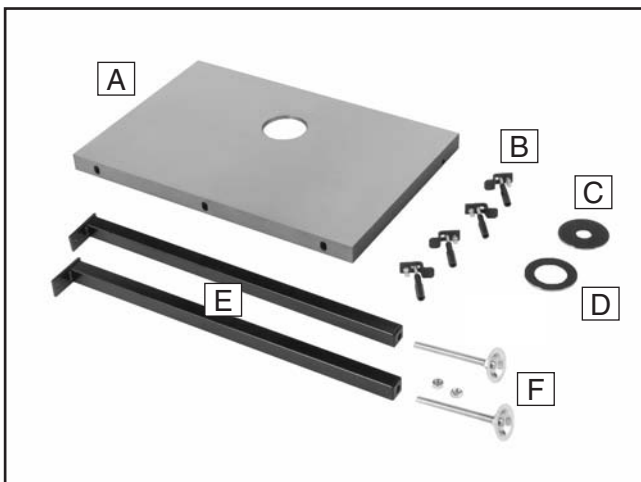


Figure 1. Router table extension wing inventory.

G. Vertical Bracket	1
H. Horizontal Bracket	1
I. Guard	1

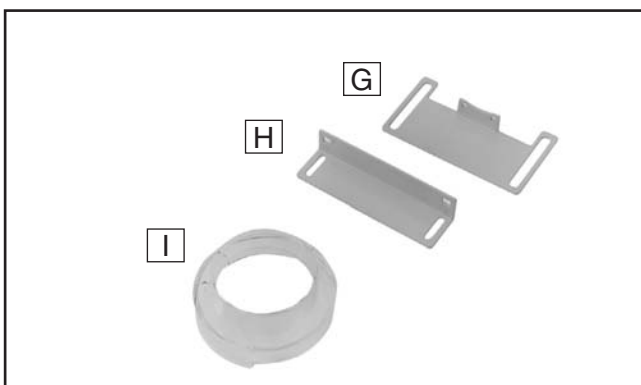


Figure 2. Router table guard inventory.

Hardware and Tools (Not Shown):

Router Table

- Hex Bolts $\frac{3}{8}$ "-16 x $\frac{1}{4}$ " (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 $\frac{1}{4}$ " (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 6
- Lock Washers #8..... 2
- Hex Nuts #8-32 2
- 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 $\frac{1}{2}$ "..... 2
- Flat Washers $\frac{1}{4}$ " 2
- Wing Nuts $\frac{1}{4}$ "-20 2

NOTICE

If you cannot find an item on this list, check the mounting location on the machine or the packaging materials. Sometimes parts are pre-installed for shipping, or they become hidden by packaging materials.



! WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials unpacked with this machine. Discard immediately.



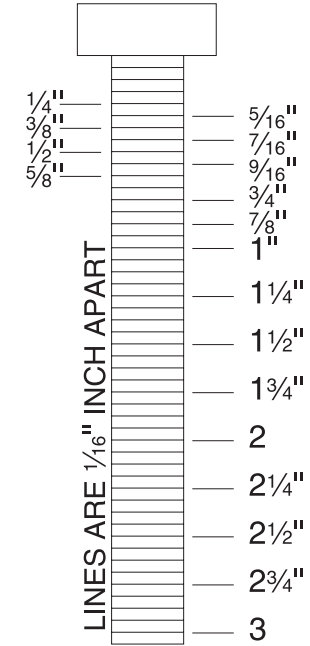
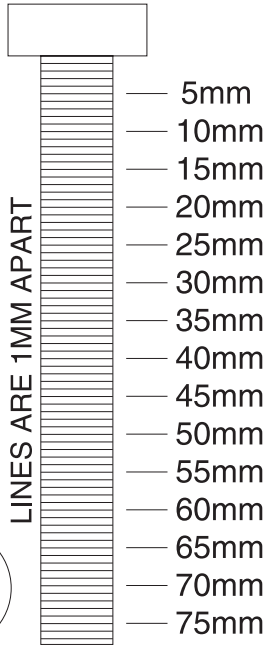
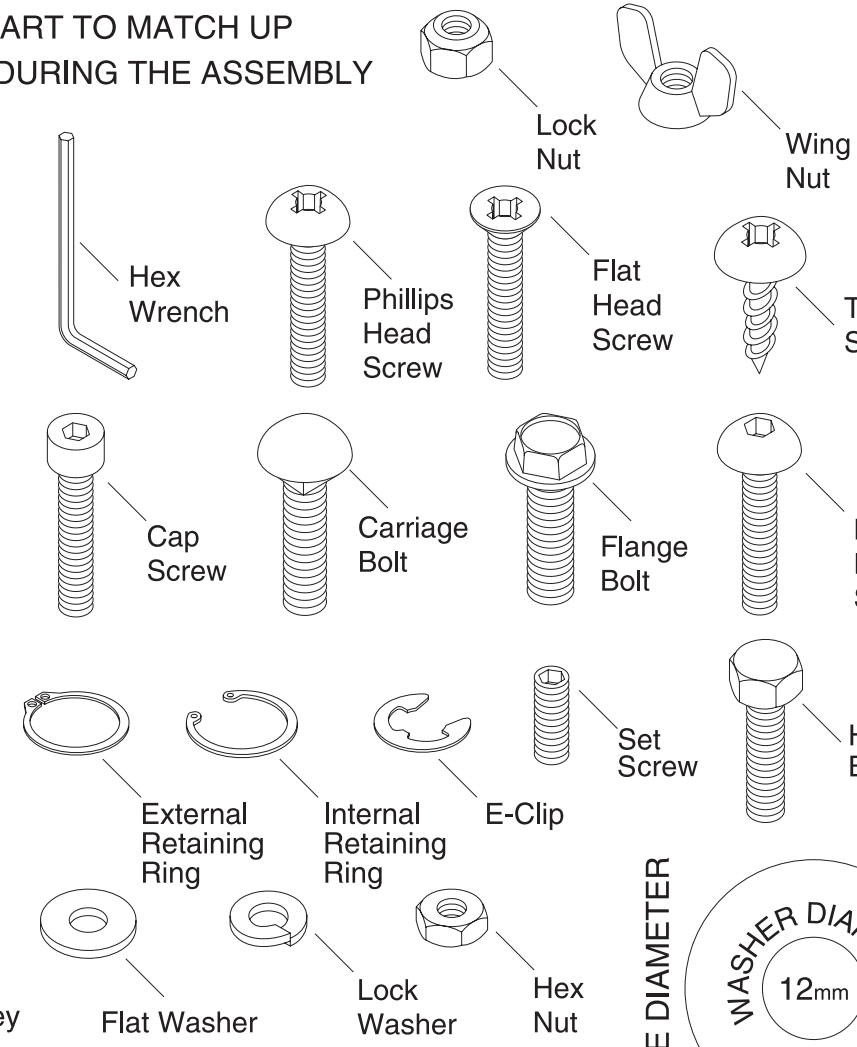
Hardware Recognition Chart

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

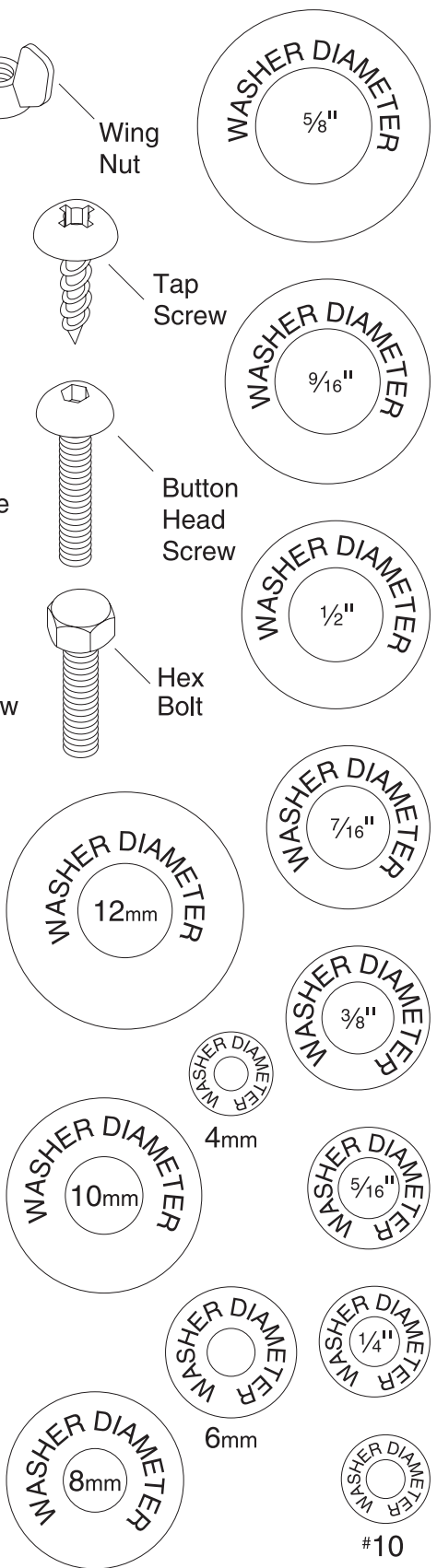
MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

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

- 4mm
- 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 has been your machine's close ally and guardian since it left the factory. If your machine arrived to you free of rust, then be thankful that the rust preventative protected it during its journey...and try to stay thankful as you clean it off, because it can be challenging to remove if you are unprepared and impatient.

Plan on spending some time cleaning your machine. The time you spend doing this will reward you with smooth sliding parts and a better appreciation for the proper care of your machine's unpainted surfaces.

Although there are many ways to successfully remove the rust preventative, these instructions walk you through what works well for us.

Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (see below)
- Safety glasses & disposable gloves

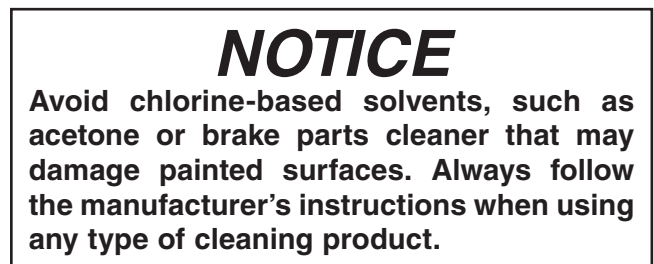
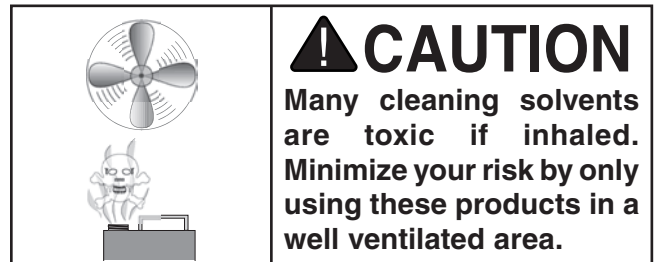
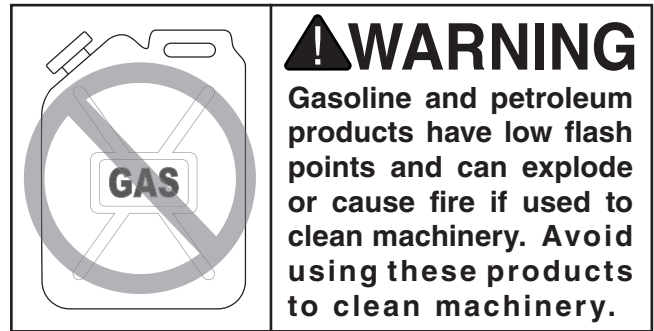
H9692—Orange Power Cleaner & Degreaser

One of the best cleaners we've found for quickly and easily removing rust preventative.



Figure 3. Model H9692 Industrial Orange Power Cleaner/Degreaser (99.9% biodegradable).

Note: In a pinch, automotive degreasers, mineral spirits or WD•40 can be used to remove rust preventative. Before using these products, though, test them on an inconspicuous area of your paint to make sure they will not damage it.



Basic steps for removing rust preventative:

1. Put on safety glasses and disposable gloves.
2. Coat all surfaces that have rust preventative with a liberal amount of your cleaner/degreaser and let them soak for few minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily.

Note: To clean off thick coats of rust preventative on flat surfaces, such as tables, use a PLASTIC paint scraper to scrape off the majority of the coating before wiping it off with your rag. (Do not use a metal scraper or you may scratch your machine.)

4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.



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.

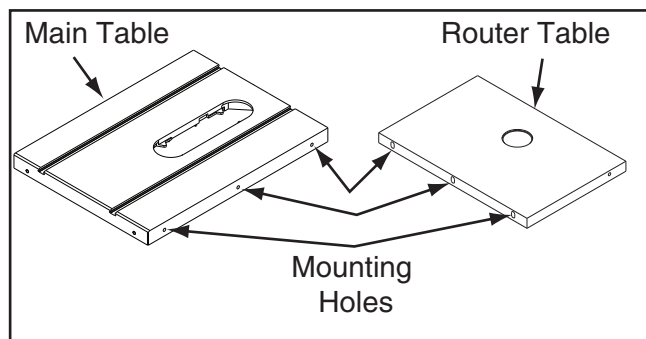


Figure 4. Mounting holes in router table and saw table.

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 $1\frac{1}{4}$ " bolts, (3) $\frac{3}{8}$ " lock washers, and (3) $\frac{3}{8}$ " flat washers, as shown in **Figure 5**. Finger tighten.

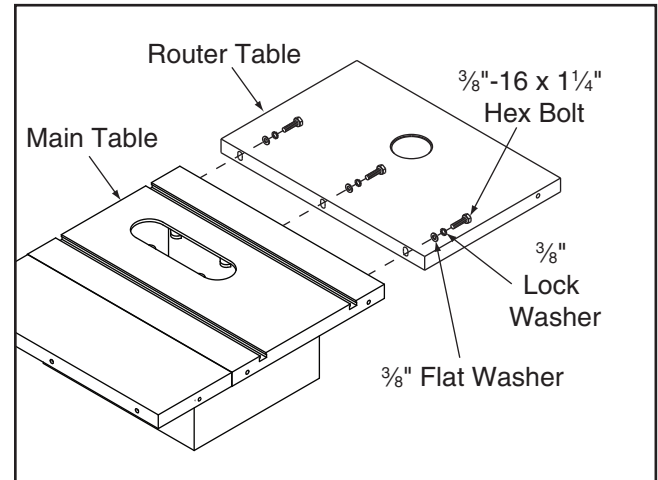


Figure 5. Example of mounting router table to table saw.

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**).

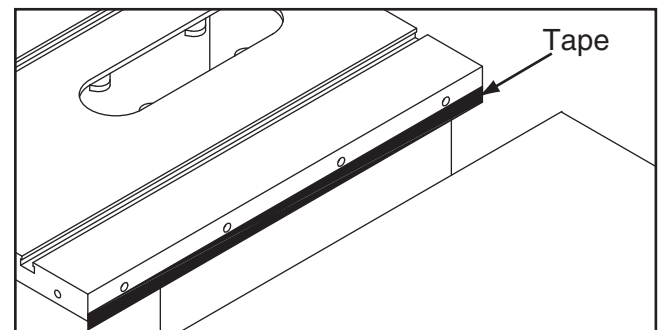


Figure 6. Using tape to shim the router table up.

—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**).

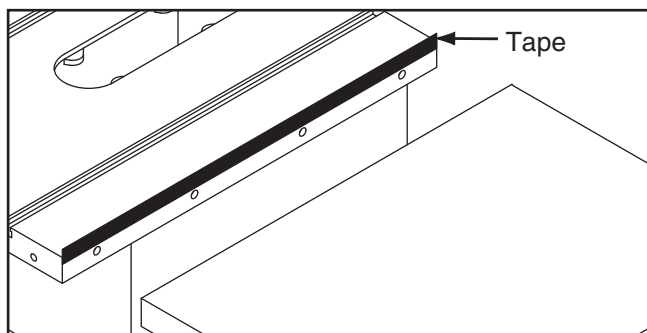


Figure 7. Positioning the tape to shim the router table down.

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 $1\frac{1}{4}$ " 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**.

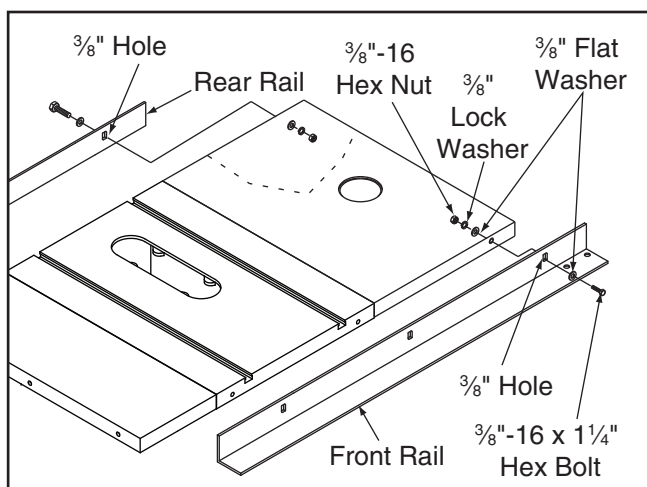


Figure 8. Example of mounting router table to rails.

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**.

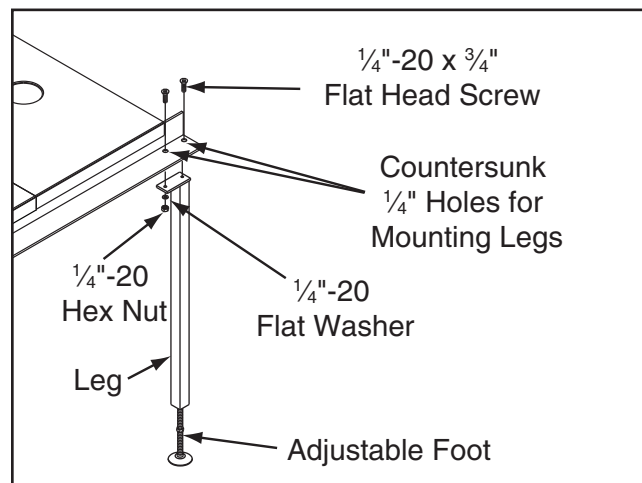


Figure 9. One of two legs secured to rail for supporting router table.

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 $\frac{1}{4}$ " and $\frac{3}{4}$ ".

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**.

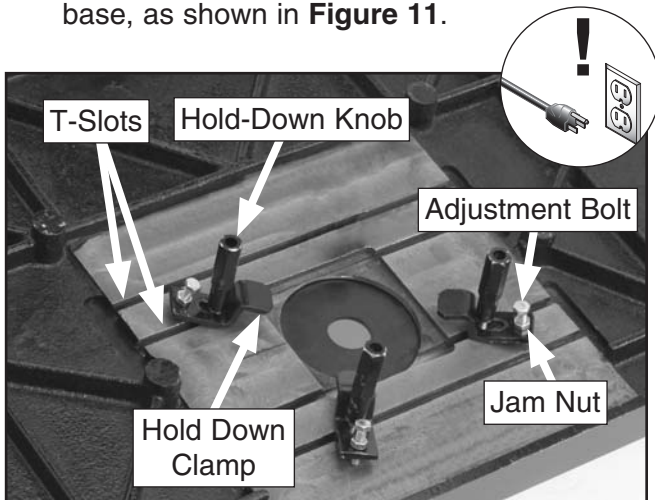


Figure 11. Router hold-down assembly controls.

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.

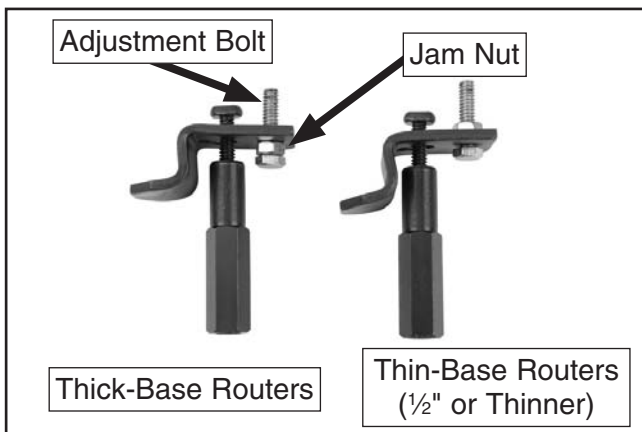
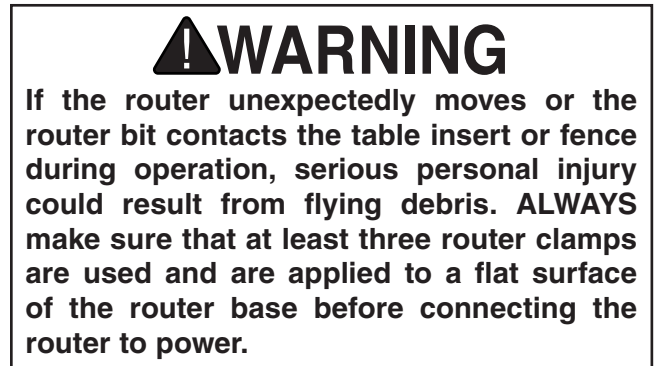
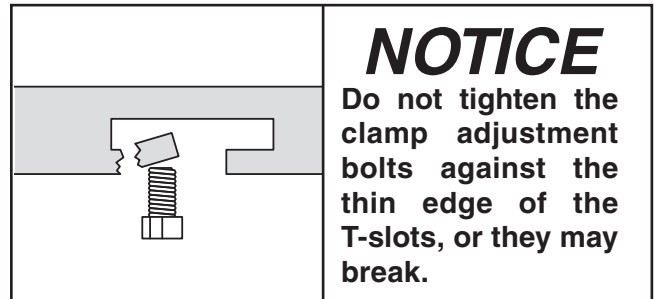


Figure 12. Router adjustment bolt positions.



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**).



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

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 (**Figure 15**).

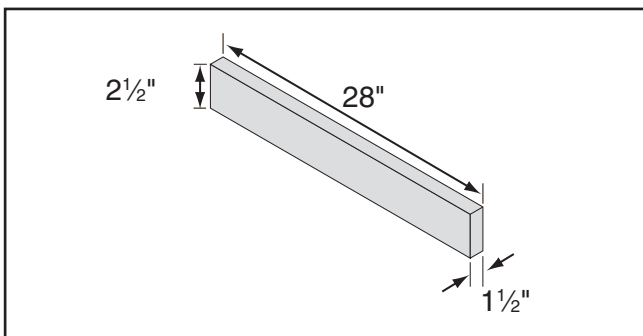


Figure 15. Support board dimensions.

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 (**Figure 16**).

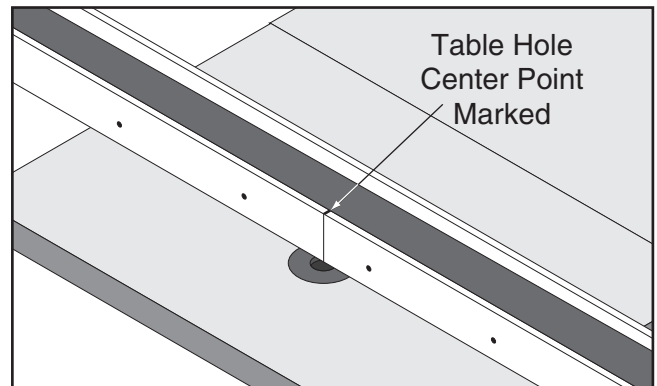


Figure 16. Table hole center point marked on fence face.

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

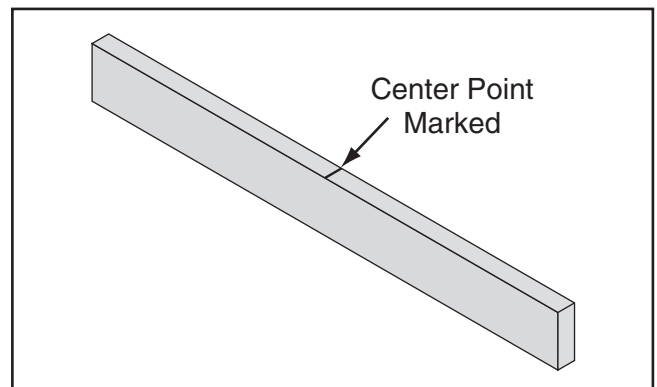


Figure 17. Center point marked on support board.

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 (**Figure 18**). Use a center punch or long nail to mark the holes.

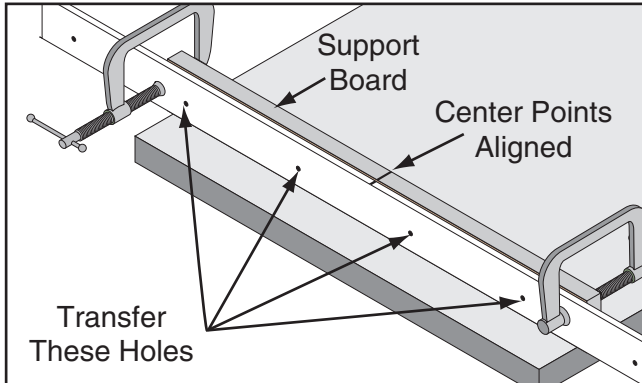


Figure 18. Fence and board lined up and clamped to transfer screw hole positions.

- 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**.

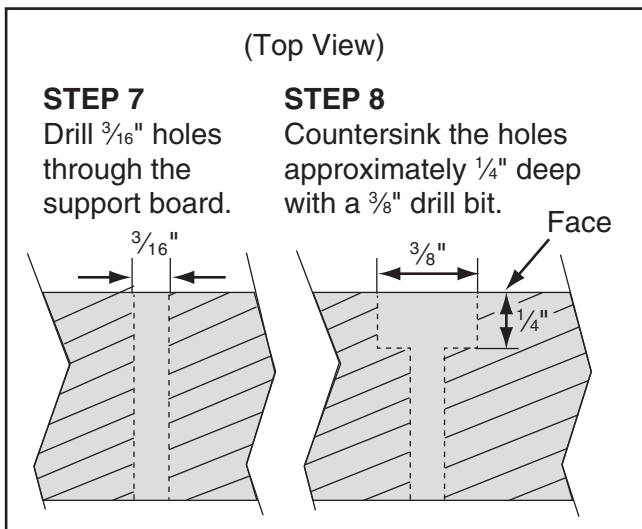


Figure 19. Steps for drilling and countersinking screw holes into support board.

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

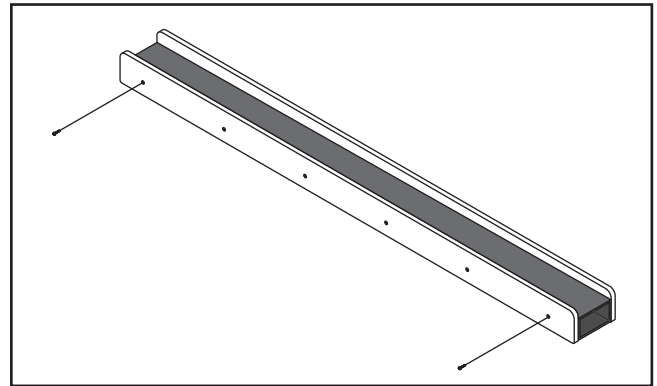


Figure 20. Reattaching fence face.

- 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.

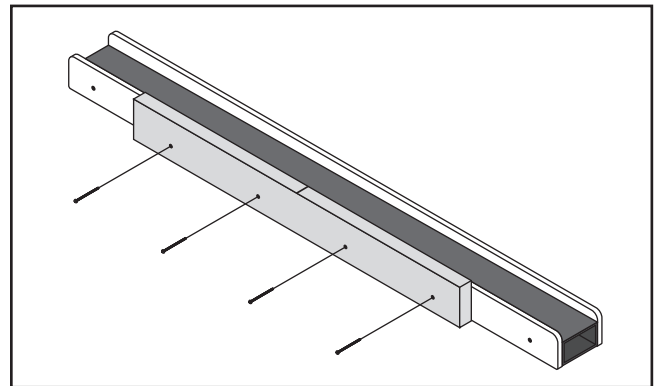


Figure 21. Attaching support board.

11. Make a 28" long fence that is 2³/₄" tall.

The fence thickness is determined by the largest size router bit you will use. A 1¹/₂" 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 1/4" (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.)

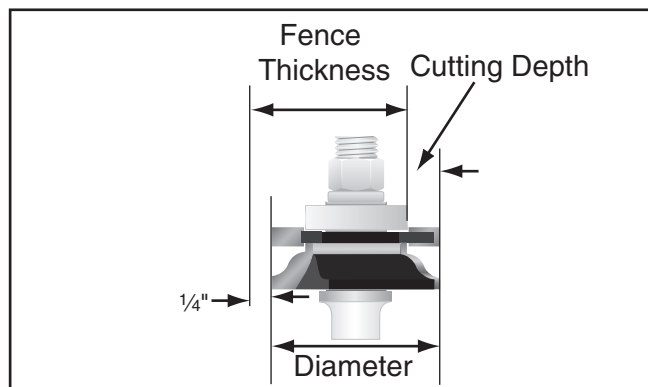


Figure 22. Determining fence thickness from router bit dimensions.

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**.

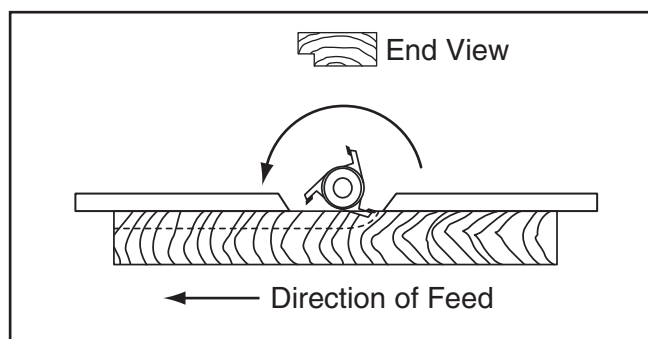


Figure 23. Typical routing operation for partial face removal of workpiece.

—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**.

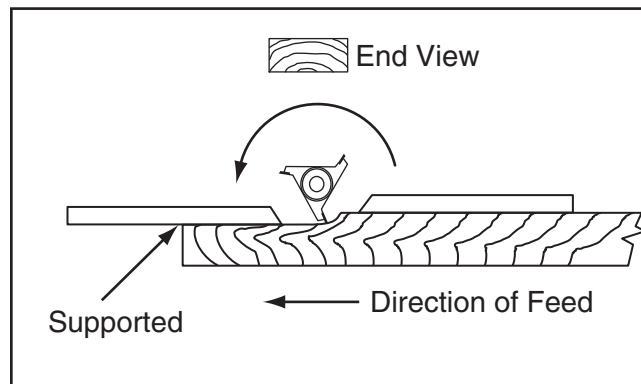


Figure 24. Typical routing operation for full face removal of workpiece.

13. Face plane approximately 1/16" 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 1/16" 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**).

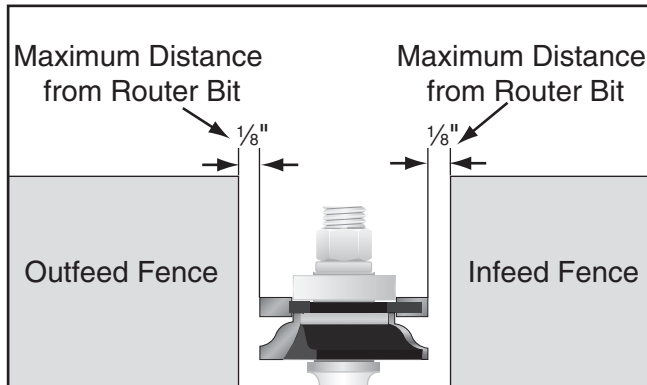


Figure 25. Positioning fences around router bit.

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**.

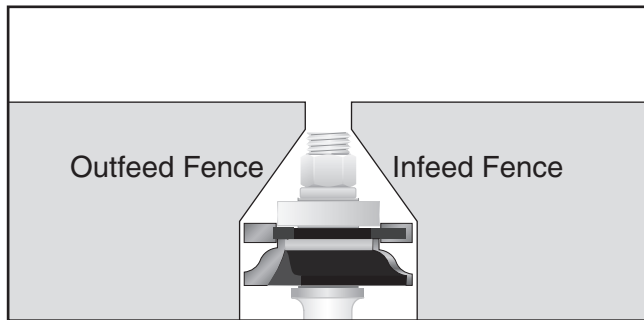


Figure 26. Minimum clearance fence setup.

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.

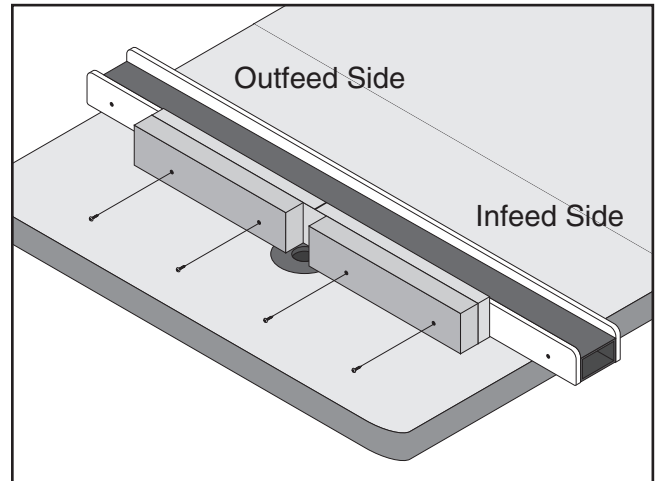


Figure 27. Attaching fence boards.

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.

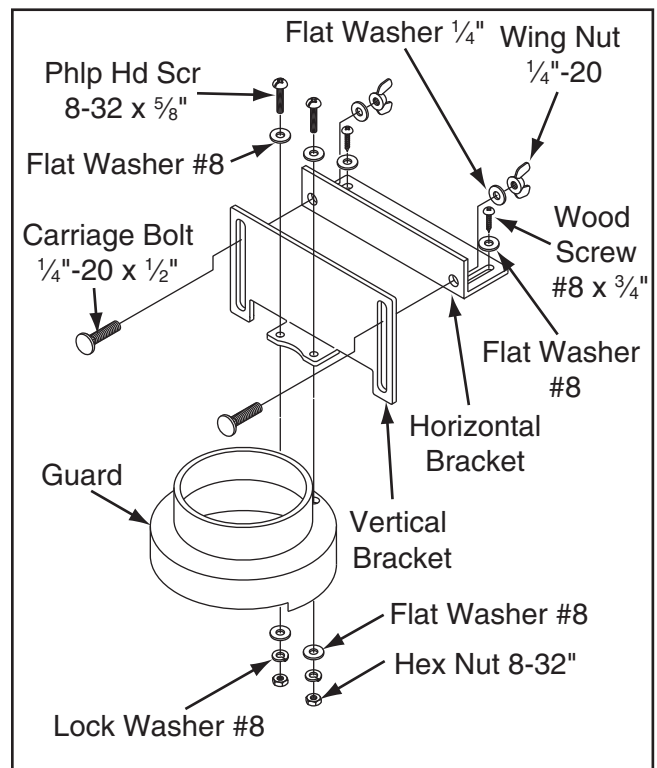


Figure 28. Assembling router guard.

- 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**.

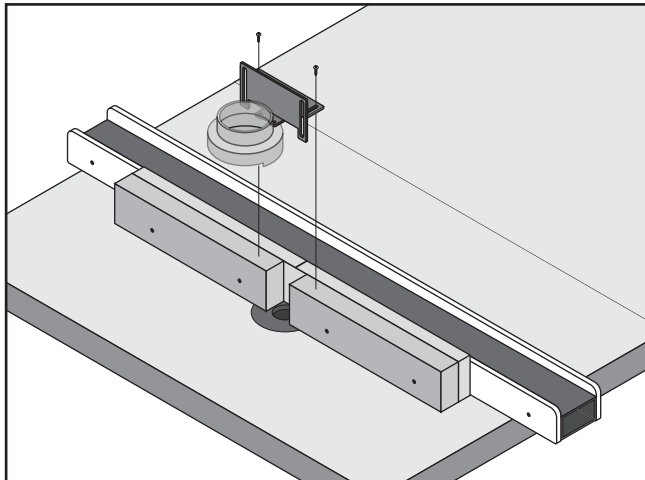


Figure 29. Attaching router guard.

- 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

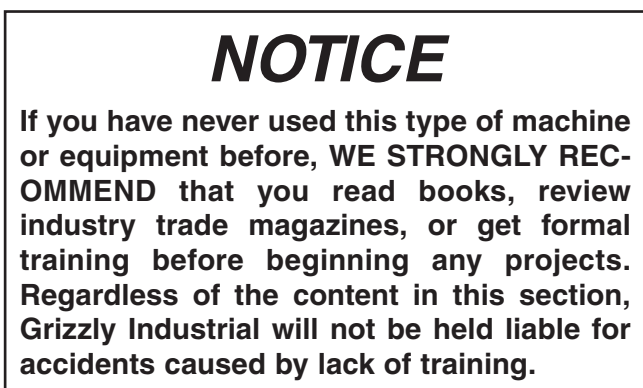
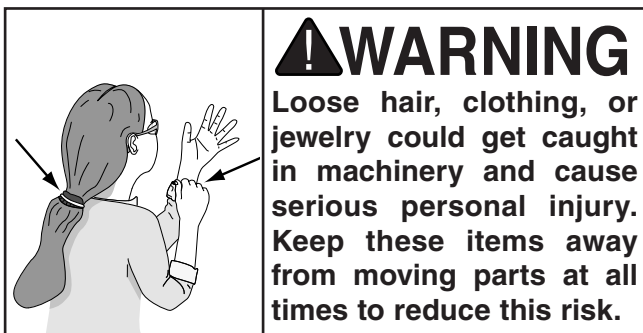
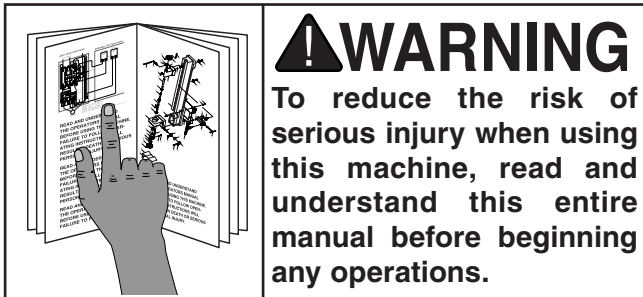
DO NOT use the Model H7507 without an adequate dust collection system. An attached router will create substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 225 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



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 and a respirator, 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.
9. Stops the router.

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.



Workpiece Inspection

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

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

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**.

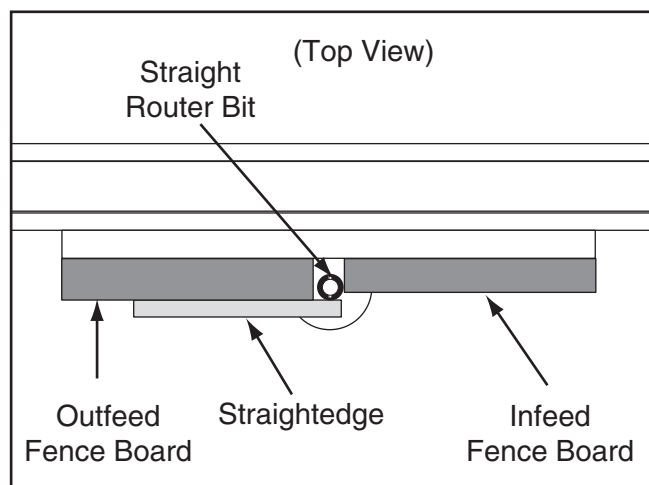


Figure 30. Fence jointer setup (guard removed for clarity).

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**).

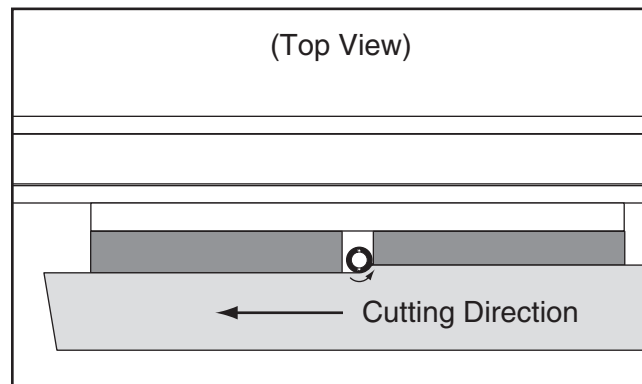
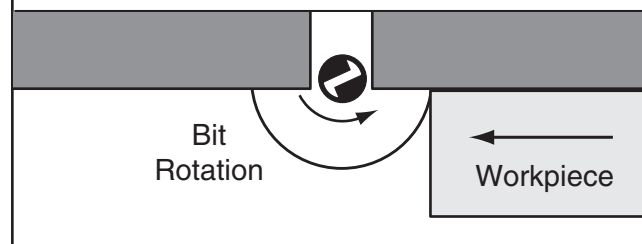


Figure 31. Edge jointing (guard removed for clarity).

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**).

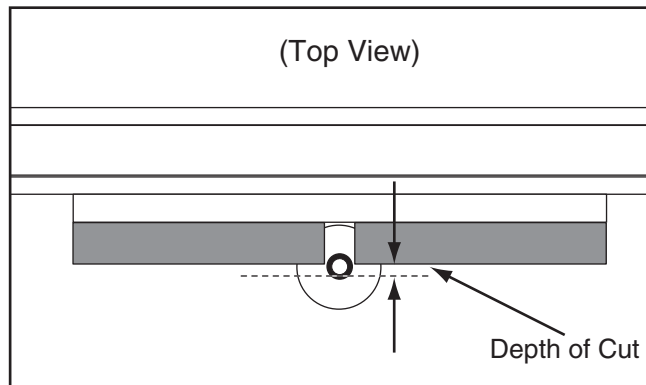


Figure 32. Groove cutting setup—top view (guard removed for clarity).

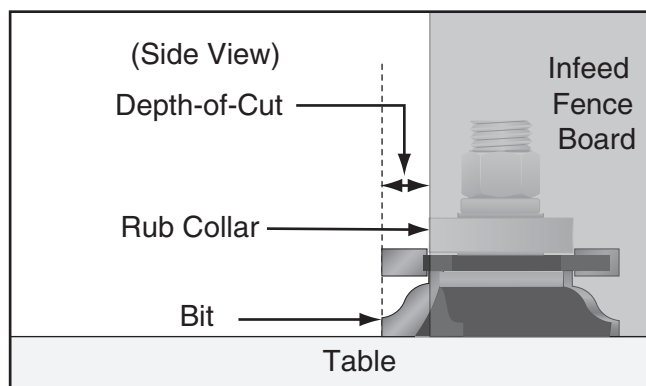


Figure 33. Groove cutting setup—side view.

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**.

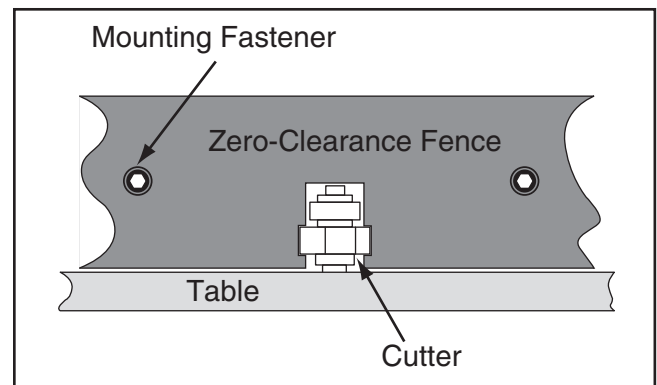


Figure 34. Example of a zero-clearance fence.

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

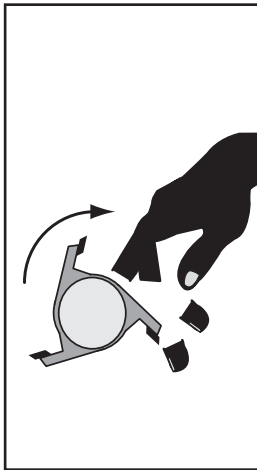


5. Create countersunk mounting holes in the zero-clearance fence so that the screws from the fence boards can be used to secure it to the support board in the same manner.
6. Secure the zero-clearance fence to the support board, check for proper clearance, connect the router to power, then run a test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

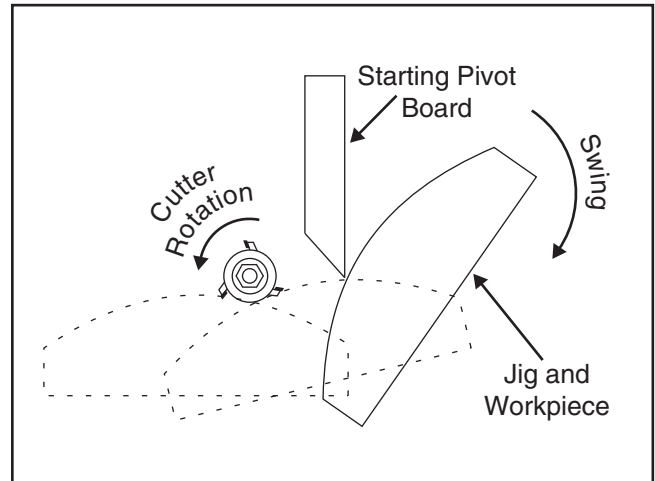


Figure 35. Illustration of free-hand cutting with a starting block.

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**).

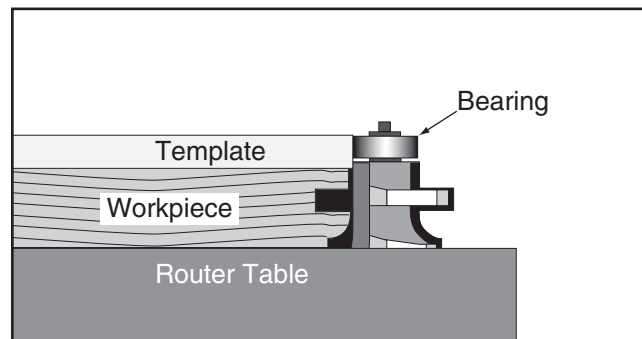


Figure 37. Using a template and a bearing for free-hand routing.

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 your router table, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check:

- Loose mounting screws, bolts or locking fasteners.
- Worn router switch.
- Worn or damaged router cords and plugs.
- Any other condition that could hamper the safe operation of this router table attachment.

Cleaning

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. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

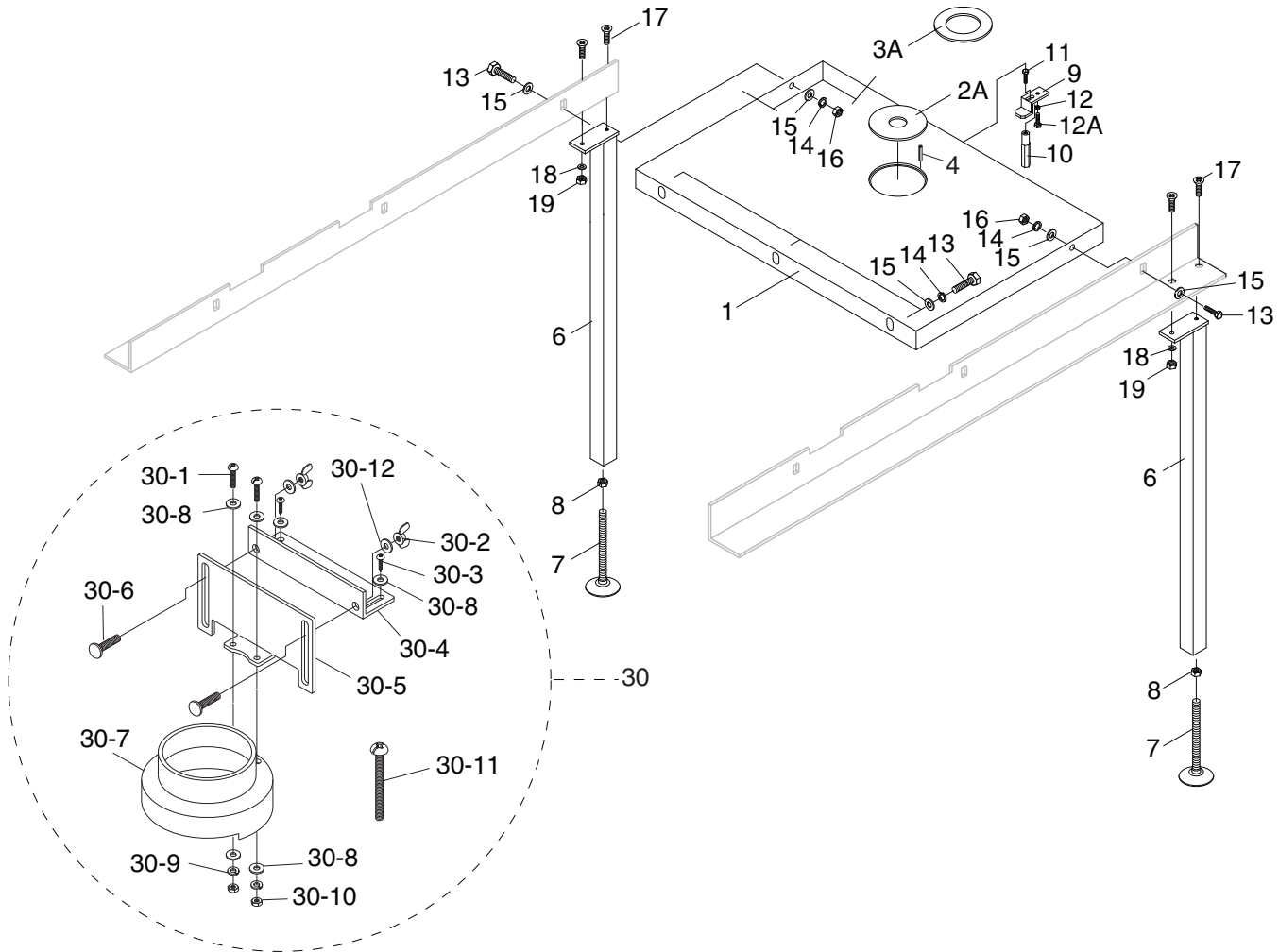
Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.



SECTION 5: PARTS

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	PRP44M	ROLL PIN 3 X 10
6	PH7507006	EXTENSION LEG
7	PH7507007	ADJUSTABLE FOOT
8	PN41	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	PN05	HEX NUT 1/4-20
12A	PB31	HEX BOLT 1/4-20 X 1
13	PB24	HEX BOLT 3/8-16 X 1-1/4
14	PLW04	LOCK WASHER 3/8
15	PW02	FLAT WASHER 3/8
16	PN08	HEX NUT 3/8-16

REF	PART #	DESCRIPTION
17	PFH05	FLAT HD SCR 1/4-20 X 3/4
18	PW06	FLAT WASHER 1/4
19	PN05	HEX NUT 1/4-20
30	P1023RLW620	ROUTER GUARD ASSEMBLY
30-1	PS25	PHLP HD SCR 8-32 X 5/8
30-2	PWN02	WING NUT 1/4-20
30-3	PH7507030-3	WOOD SCREW #8 X 3/4
30-4	P1023SLW620-4	HORIZONTAL BRACKET
30-5	PH7507022	VERTICAL BRACKET
30-6	PCB18	CARRIAGE BOLT 1/4-20 X 1/2
30-7	PH7507021	CLEAR GUARD
30-8	PW08	FLAT WASHER #8
30-9	PLW13	LOCK WASHER #8
30-10	PN14	HEX NUT 8-32
30-11	PS36	PHLP HD SCR 10-24 X 2-1/2
30-12	PW06	FLAT WASHER 1/4





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

2. Which of the following magazines do you subscribe to?

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<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place
Stamp
Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

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.

To take advantage of 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.

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.

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.

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