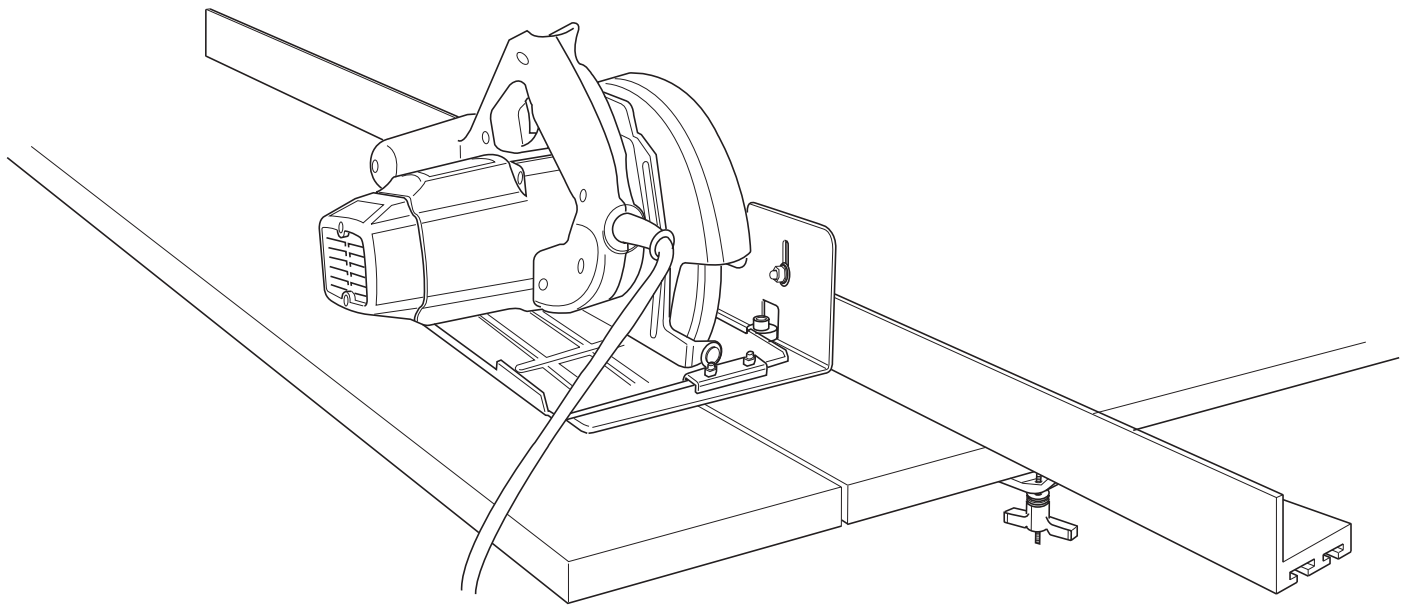


# PORTABLE PANEL SAW SYSTEM 2 #PPS-2

An Accessory System For Use with Hand Saws and Routers  
Assembly and Operation Guide V 1.0



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## PSI Woodworking Products

Congratulations on your purchase of the Portable Panel Saw System. Once assembled, you will be able to make perfectly straight cuts with your power handsaw or router. This system is particularly useful in cutting large sheet goods that are normally very difficult and awkward to cut accurately.

### Features

- Cut over 50" using a single rail
- Cut over 114" using 2 connected rails
- Integrated clamps
- Lightweight aluminum fence rails
- Deflection less than 1/16" over 9'
- Ball bearing tracking fixture

### Warranty

This product is warranted against defects in materials and workmanship for a period of 2 years from the date of purchase. The warranty applies to the original purchaser of the product and is limited to the repair or replacement of the product or its parts at our discretion. Excluded are parts which have been misused, abused, altered, or consumed by normal operation of the product. Also excluded are direct and consequential damages to persons, property, or materials. Your invoice serves as proof of purchase and must be referenced to authorize warranty repairs. Call PSI Woodworking Products for proper authorization prior to return.

### Product Support

If you are having problems with your Portable Panel Saw System, feel free to call us during normal business hours (8:30 a.m. to 4:30 p.m. Monday thru Friday EST). Have your invoice number handy to expedite processing any warranty parts ordered. Thank you for your business.

**Please record your invoice number for future reference.**

MERCHANT \_\_\_\_\_ INV # \_\_\_\_\_ DATE: \_\_\_\_\_

PSI Woodworking Products 1-877-774-5431

### Safety Features

The Portable Panel Saw System provides several built-in safety features. The ball bearing tracking system secures the saw to the fence with the blade running perfectly straight. Consequently:

- Less resistance makes it easier to push your saw through the work.
- Jamming, binding, and kickback is reduced or eliminated.
- Your blades and saw motor will last longer.
- Distractions are less likely to cause injury or cutting errors because the saw is always secure to the fence.

**Safety Precautions**

- Always keep your saw’s retractable blade guard in place.
- Make sure there are adequate clearances the entire length of the fence before cutting.
- Never work on the saw when it is plugged in.
- Do not leave it plugged in where accessible to children.
- Always clamp the fence securely to your work or work table.
- Wear safety glasses when using the saw or any other power tools.
- Follow all safety instructions from the saw manufacturer.

**Components** (refer to fig. 1)

*Verify that all components are included prior to assembling and using the system.*

- 1) Saw tracking plate with 5 installed bearings. This plate attaches to the base of your saw. The bearings are pre-aligned to track properly on the fence.
- 2) 2 mounting clips to attach your saw to the tracking plate.  
4 sets 8-32" x 3/4" flat head bolts with washers, lock washers and nuts. Used to connect mounting clips.
- 3) Blade alignment guide for aligning blade to fence.
- 4) 2 extended fence sections
- 5) 2 fence connection bars
- 6) Bearing allen wrench
- 7) Fence connection allen wrench
- 8) 2 clamps and hardware assemblies

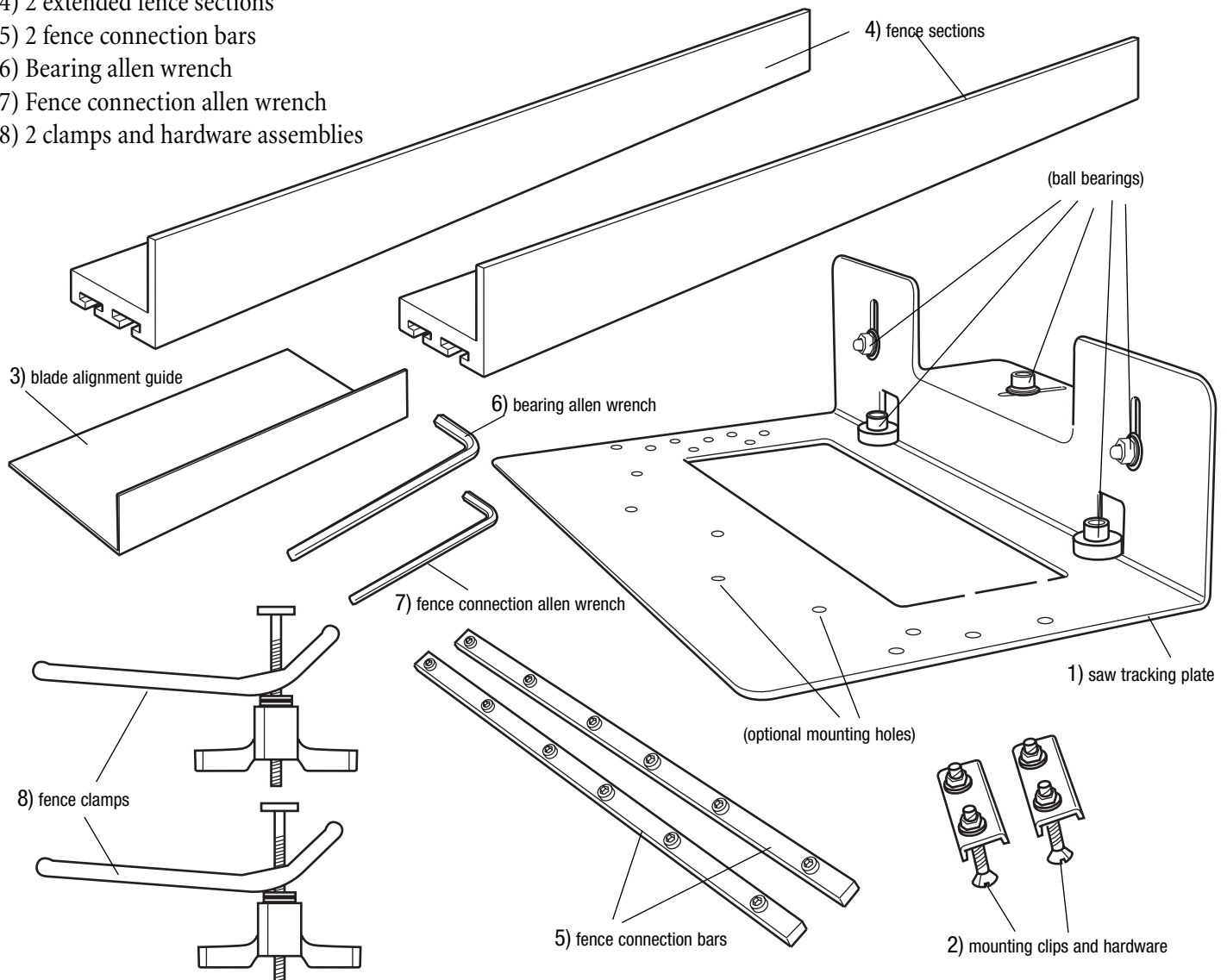


fig. 1 - System Components

Preliminary Procedures

**Check the Tracking System** (see fig. 2)

The bearing on the saw tracking plate will mount onto the fence as shown. Before attaching the saw to the tracking plate, set the slotted edge of the fence on a flat surface, mount the tracking plate then roll it along the fence. The plate should ride just above the surface and there should be no lateral movement of the plate on the fence. All bearings should be turning.

- Adjust the top bearings to raise or lower the height of the plate. For it to ride just above the surface, slip a few sheets of paper under the plate (to raise it slightly) then reposition the bearings.
- Adjust the two side bearings to adjust for lateral movement. Draw the bearings in towards the fence as necessary but do not make it too tight or it will bind.

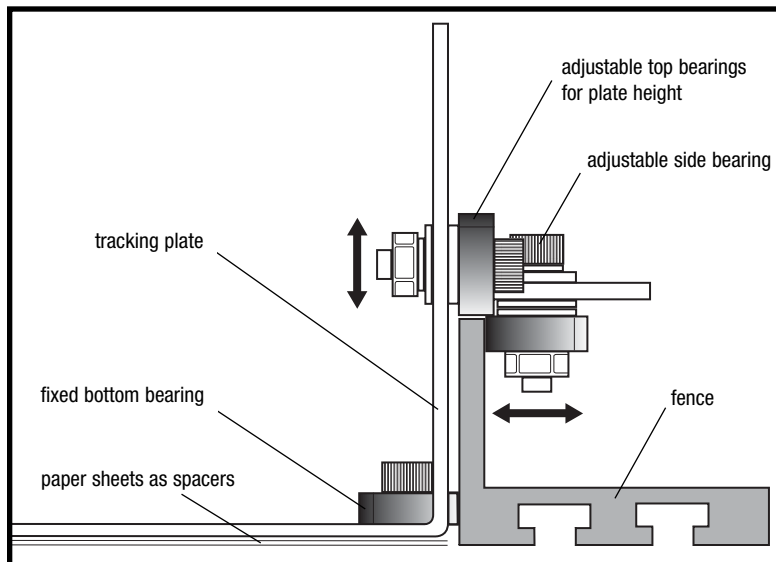


fig. 2 - Adjusting the Bearing

**Attaching the Saw Tracking Plate to Your Saw** (see fig. 3) (see page 7 for router mounting instructions)

Measure the length of the base plate of your saw. The tracking plate will attach to most 6" and 7" power handsaws with bases from 9" to 11" (without modifying the base plate). 8" saws may require permanent mounting.

- Position the saw on the plate so that the saw base aligns with the pre-drilled mounting holes on the front and rear of the tracking plate.
- Using the mounting clips (as shown), slide the four 10-32 flat head bolts through the plate and connect them to the plate (with the supplied washers, lock washers and nuts). Hand tighten.

**Note:** *If your saw will not mount with the clips, you will have to drill through the base plate for permanent mounting. Use any of the pre-drilled holes in the base plate for permanent mounting. Important: first align the blade as discussed below.*

**Note:** *Make sure the heads of the mounting bolts are seated flush with the bottom of the fixture within the countersink*

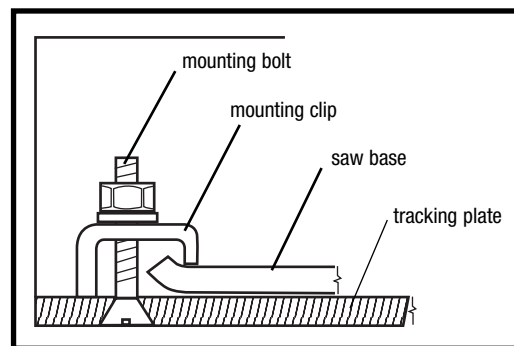


fig. 3 - Mounting the Saw Base

**Blade Alignment** (see fig. 4)

To guarantee a perfectly straight cut, the saw blade must be exactly parallel to the fence. Since the two fixed-bottom bearings roll on the fence, it is sufficient to align the blade to those bearings. Use the supplied Blade Alignment Guide.

- First unplug your saw. Retract the blade guard and secure it. Extend the blade for its maximum depth of cut.
- Position the alignment guide to the tracking plate so that both rollers touch the inside vertical edge of the guide. Clamp or tape the guide to the plate in this position.
- Slide the saw base until the edge of the guide butts perfectly flush to the saw blade.
- Tighten two of the mounting clips to firmly attach the saw to the plate. Double check for parallelism after tightening. For a permanent setup, you can now drill through any of the available holes on the tracking plate and bolt it to the saw base.

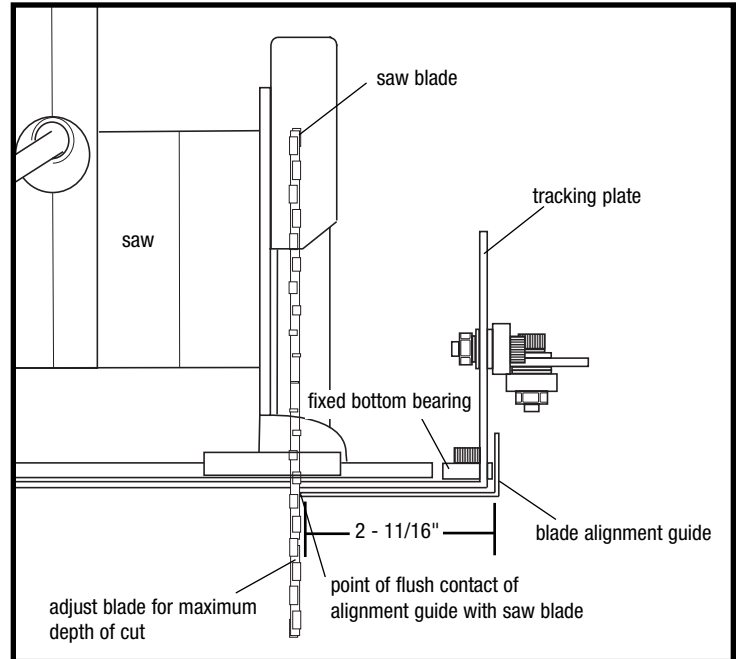


fig. 4 - Aligning the Blade

**Note:** *The guide provides a fixed 2-11/16" distance between the bearings and the blade. Any other distance is possible if you measure or construct an alignment guide different than the one provided. It may be necessary to use a greater distance for certain saws if the saw hits the tracking plate when tilting the saw on its base for bevel cuts.*

**Connecting the Fence Sections Together**

**You will be able to cut 50" with a single rail and up to about 114" with 2 rails connected together.**

- Slide the fence connector bars into the slots of the fence (see fig. 5).
- Lay the attached sections on a flat surface. Tighten all set screws making sure the connected fences are completely straight (see fig. 6).
- File off any burrs at the fence butt connection on the rail surface where the tracking plate rides.

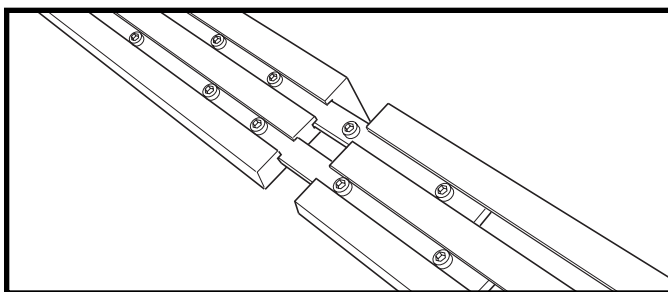


fig. 5 - Installing Fence Connectors

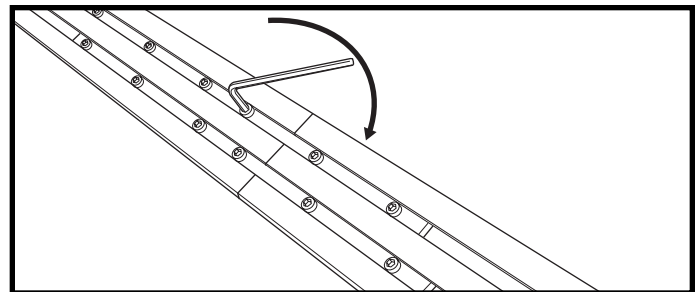


fig. 6 - Securing Fence Sections Together

## Using the Portable Panel Saw System

### Lining Up and Securing the Fence

Install the clamps by sliding each clamp's 'T' bolt head into the fence 'T' slots (fig. 7 and 7A).

Mark the beginning and end of your cut line. Set the fence 2-11/16" from your cut. **Hint:** Make a "set-up" block from scrap as shown in fig. 8.

**Note:** When marking your board, you must anticipate whether your finished width is on the inside (to the right of the saw) or outside (to the left of the saw). If you are cutting for the outside dimension, make a wider "set-up" block to account for the blade kerf.

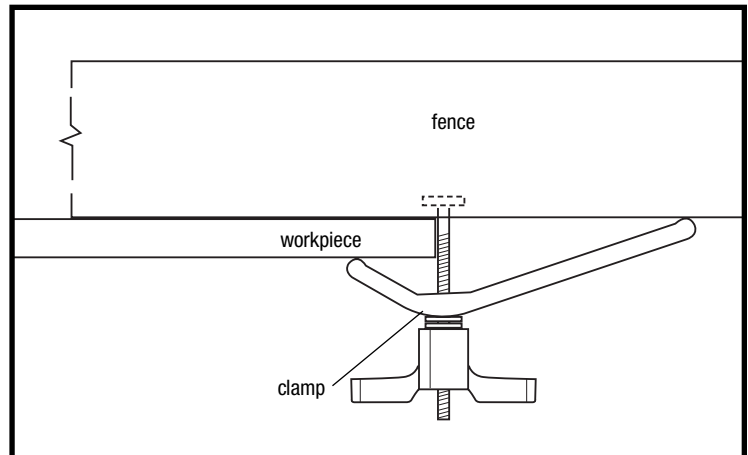


fig. 7 - Using the Clamps

Tighten the clamps and secure the fence to your work.

### Making Your Cut

The fence should extend a minimum of 7" beyond the end of your work to leave sufficient space to mount the saw fixture. Mount the tracking plate, with the saw attached, onto the front end of the fence (fig. 9). Turn on your saw and slowly push the saw through your work, making sure the tracking plate is riding securely on the 5 bearings.

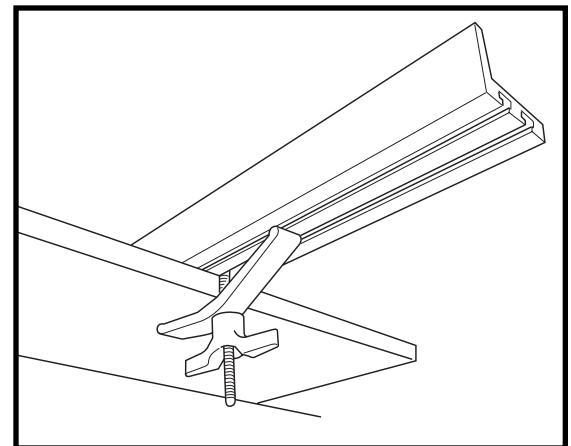


fig. 7A - Using the Clamps

### Other Hints and Tips

- Use a good quality carbide tipped blade in your saw for best overall results.
- After changing blades, make sure the cutting guide aligns with the edge of the blade (fig. 4).
- When setting the saw blade cutting depth, anticipate the extra thickness of the tracking fixture.
- Clean the ball bearings regularly to avoid sawdust buildup.
- Store the fence(s) flat. Avoid bending them.
- Check the tracking system (and adjust it) periodically per procedure on page 4.
- Do you need extra fences and/or clamps?

Order: PSI Item **#PPS-RP** contains: 2 extra fences, 2 connectors, and 2 clamps

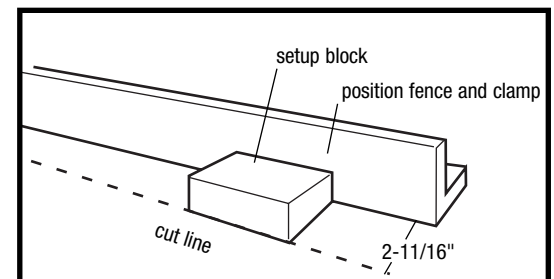


fig. 8 - Using a Setup Block

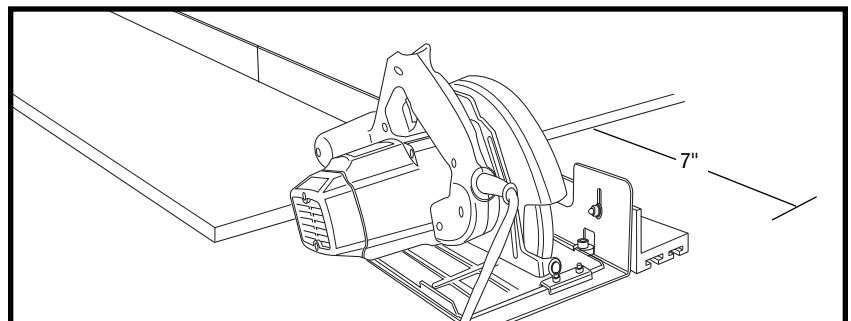


fig. 9 - Starting Your Cut

### Router Mounting Instructions

- Make an auxiliary base-plate for your router out of 1/4" masonite or 1/4" plywood. Order **PPS-RB** clear plastic base.
- Measure the dimensions of your circular saw base plate (if mounted to tracking fixture).
- Cut your chosen material to the same dimensions as your circular saw base plate.
- Drill a 1-1/2" to 2" hole in the center of the auxiliary base plate.
- Use the base plate that came with your router to mark the mounting holes for your auxiliary base plate.

**Note:** You will either need to drill your countersinks deep enough to compensate for the extra thickness of the auxiliary base plate or purchase longer bolts from your local hardware store. (Metric bolts can also be purchased from good auto parts stores).

Mount your router to the auxiliary base plate and simply slide it under the mounting brackets on the portable panel saw tracking plate. Make a quick test cut in a piece of scrap wood in order to determine the exact distance that needs to be measured for the specific bit that you are using.

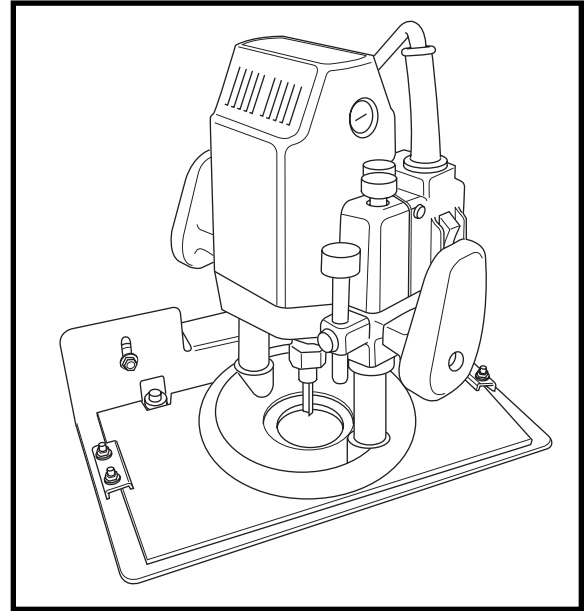


fig. 10 - Mounting the Router

### Making a Cutting Guide (optional)

Although the system works quite well without it, using this guide provides a convenience for positioning the fence and adding strength. Use a piece of 1/4" scrap about 6" wide. The total length should be 12" shorter than the fence section.

- Position the fence so that the guide extends about 1" past the back of the fence. (See fig. 11).
- With a 1/4" bit, drill through the fence and guide at the points of connection with the fence.
- Countersink the holes on the bottom of the guide.
- Use four (4) flat head 1/4" x 1" bolts (with washers, lock washers and nuts – not included with the system) to bolt the guide securely to the fence.
- For the short fence section – drill 4 holes about 12" apart
- For a long connected fence section, drill 5 holes about 18" apart
- Adjust the cutting depth of the saw blade (sufficient to cut through the 1/4" scrap).
- Clamp the fence and guide to a piece of scrap (from the rear) with 'C' clamps.
- Mount the saw (with the tracking plate attached) to the front of the fence.
- Cut off the front edge of the cutting guide.

**Note:** The front of the cutting guide now defines the cutting line of the blade!

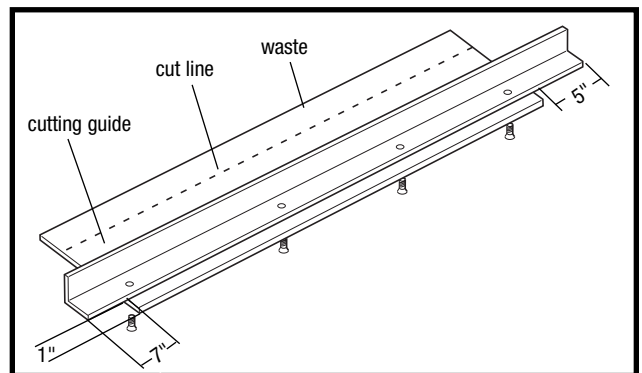


fig. 11 - Making a Cutting Guide

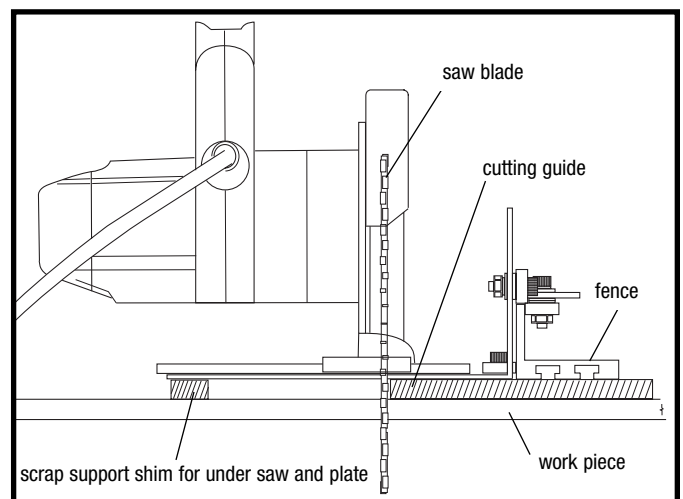


fig. 12 - Cutting Guide Support

### Using the Cutting Guide

- Mark the beginning and end of your cut line.
- Position the edge of the cutting guide over the start and end points of your cut.
- Clamp the fence to the board being cut. Position the clamp sufficiently behind the fence so that it will not interfere with the tracking plate.
- Adjust the depth of the blade to cut through the workpiece.
- Mount the saw on the end of the fence with all bearings firmly seated.
- Turn on your saw and cut.

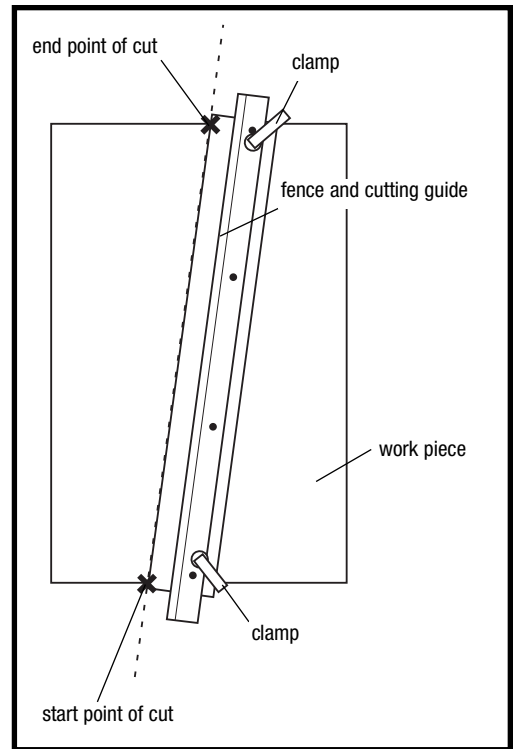


fig. 13 - Using Cutting Guide