Wood Rat PRECISION JOINERY MACHINE

A sales brochure for the WoodRat describes the tool as a "Precision Joinery Machine," which is as fitting a definition for this oddly named tool as can be found.

When coupled with a plunge router, "the rat" can do many of the same things a router table does, but it clearly isn't a router table. Likewise, dovetails and box joints are standard fare for the rat, but the system is not like any joinery jig we've ever seen.

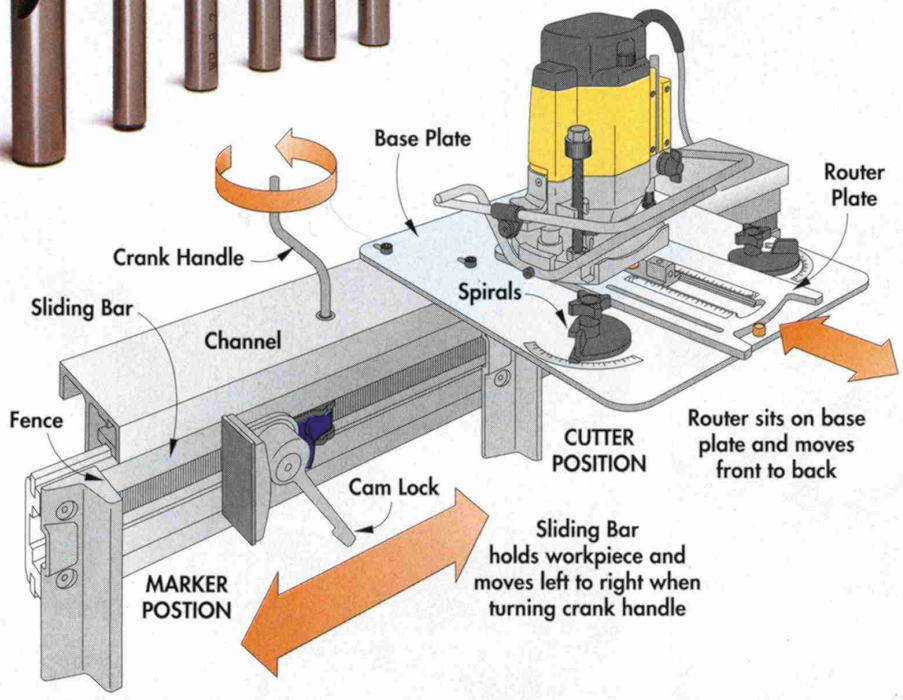
The key difference between this and conventional dovetail or box joint jigs is that the WoodRat doesn't use templates, guide bushings, or bearing-guided bits to create the joinery pattern. Rather, this system relies on the accuracy of the operator to create precise joints.

By foregoing the virtually automatic accuracy of templates and guided bits, you can be as creative as you want when designing joinery. An example of cutting custom dovetails is shown on page 40. But first, take a look at the *Illustration* at left for a quick overview of the machine.

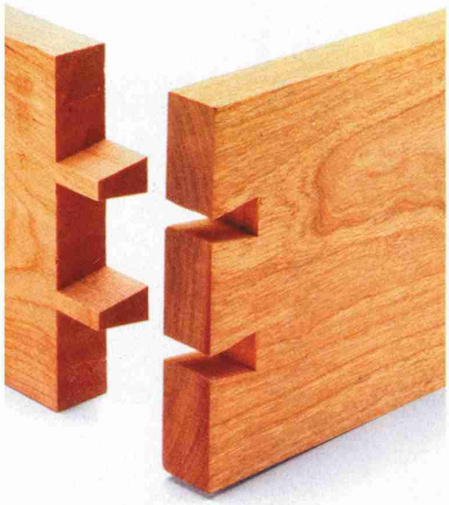
WoodRat Anatomy — The "body" of the WoodRat is a channel that affixes to a wall and also supports the base plate. A plunge router connects to this base plate and, depending on the operation, may be stationary or slide front to back.

The other major component is a sliding bar that aligns and holds the workpieces in either the cutter position or the marker position. Turning a crank moves the sliding bar and the workpieces between cuts.

▲ The WoodRat is a unique jointing system in many aspects, including the use of high-speed steel bits, *left*. *Below* is a diagram to familiarize you with you the WoodRat components.



cutting custom DOVETAILS



Although the WoodRat is much more than a dovetailing machine, it's this classic joint that most clearly demonstrates the unique appeal of this tool.

The joint shown at left is a good example of the design flexibility that distinguishes this joinery system from others. Where a more conventional dovetail jig often results in a number of uniformly spaced dovetails, here we were able to customize both the size and spacing of the pins and tails. The result is a joint that is as elegant as it is strong.

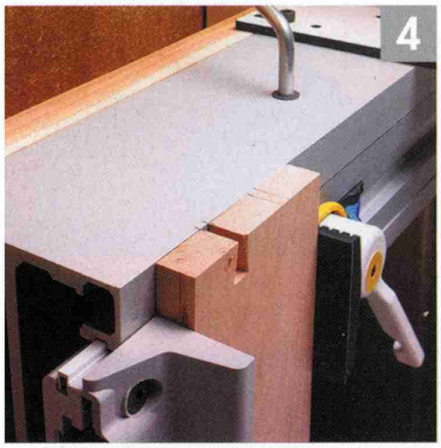
Another important element of these stylized dovetails is the *length* of the pins and tails. This comes from using high-speed steel bits, which typically have longer cutting flutes than carbide-tipped bits. The WoodRat instruction manual makes a strong argument for high-speed steel bits, and we agree that they do create an elegant joint.

Below is an overview of how to rout dovetails using the WoodRat. For a more detailed look at the system, including pricing information, visit their website at www.WoodRat.com or call 877-966-3728.

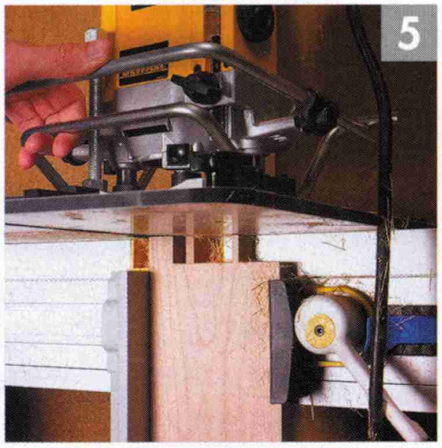
▲ Make two test boards. Zero the dovetail cutter on one board while using the other board to set the depth stop.

▲ Cut a socket in one test board. Move this board to the "Marker" position and trace the socket onto the channel.

▲ Use the parallelogram to mark tail locations on a workpiece. The parallelogram adjusts for custom layouts.



▲ Cut the tails on one workpiece and then place it in the "Marker" position for use as a guide to cut remaining pieces.



▲ A look underneath the WoodRat shows how it cuts away material to create matching pins.

▲ WoodRat's optional plunge bar makes plunging the router to depth a one-handed operation.