

NOTE: All references in the instructions to "left," "right," "front" and "back" correspond to the orientation shown above. The Stock Clamping Knob should face toward the user.

Your new Beadlock Pro Jig will cut two types of mortises: a Beadlock mortise and a traditional smooth-sided mortise. These instructions illustrate both types using the 3/8" drilling block, which is included with your jig. The same instructions can be used for the 1/4" and 1/2" mortises (available as accessory kits). Dimensions will change depending on which drilling block you use. Reference charts are included here to reflect those changes.

PARTS LIST - BEADLOCK PRO

	Quantity
1 Stock Clamping Knob	1
2 Carriage Knobs	2
3 Guide Block Knobs	2
4 3/8" Drill Block	2
5 3/8" Mortise Paring Block	1
6 3/8" Drill Bit	1
7 3/8" Stop Collar	1
8 Carriage Assembly	1

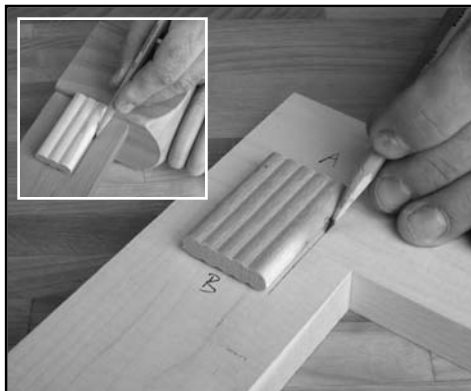


Fig. 1

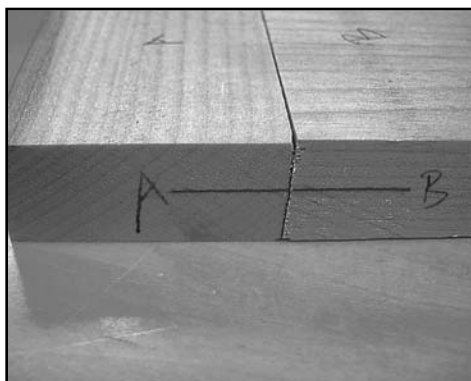


Fig. 2

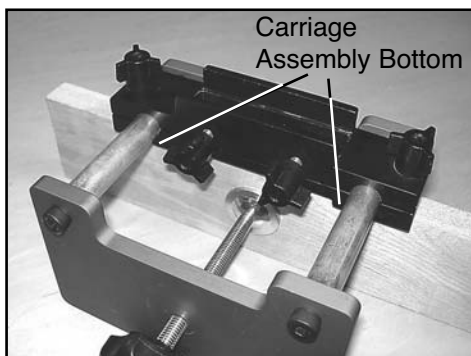


Fig. 3

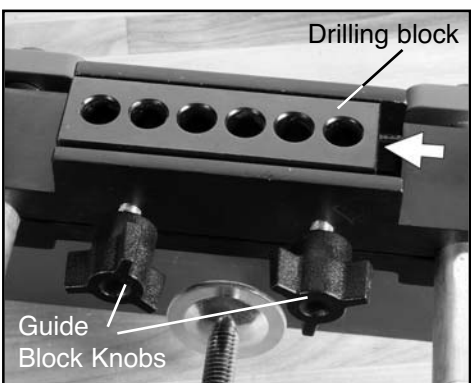


Fig. 4

Beadlock Joinery

1. Layout Beadlock tenon on workpiece and mark the inside edge of the tenon stock as shown in Fig. 1. You can use the same procedure for apron/leg assemblies. (Fig. 1 inset) **Note:** For easy reference, the parts in this example are labeled "A" (stile) and "B" (rail).

TENON SIZING

Material Thickness	Beadlock Tenon	Beadlock Tenon Width
1/2" to 3/4"	1/4"	1 1/2"
3/4" to 1"	3/8"	1 3/8"
1" to 3 1/2"	1/2"	1 1/4"

2. Mark center location of joint on edge of material. (Fig. 2)
3. Jig alignment: Clamp a straight scrap board into jig, making sure board has contact with both sides of the carriage assembly bottom. (Fig. 3) Install drill block in carriage assembly so block rests on scrap board. Shift block to far left and lock in place with guide block knobs. (Fig. 4)

4. Remove scrap board and clamp Part "A" in jig; align pencil mark with left white line on drill block. (Fig. 5)
5. Shift carriage assembly forward or backward to align its center mark with the center mark on the edge of the workpiece (Fig. 6) and tighten down guide block knobs.
6. Set drilling depth using provided stop collars. For distance from stop collar to tip of drill bit, refer to chart below.
7. With drilling block in the far left position (Fig. 7) drill the 1st series of holes. Use the Quick Reference Guide on page 3 to see which holes to drill.
8. Shift drill block all the way to the right and tighten. (Fig. 8)

STOP COLLAR DEPTH

Tenon	Drill Depth		Drill Block	Total
1/4"	7/8"	+	1 1/2"	= 2 3/8"
3/8"	1 1/8"	+	1 1/2"	= 2 5/8"
1/2"	1 3/8"	+	1 1/2"	= 2 7/8"

1/8" has been added for extra clearance

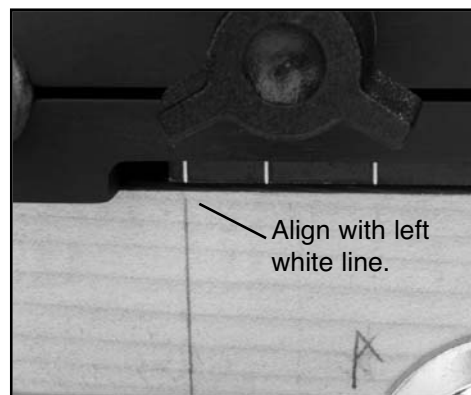


Fig. 5

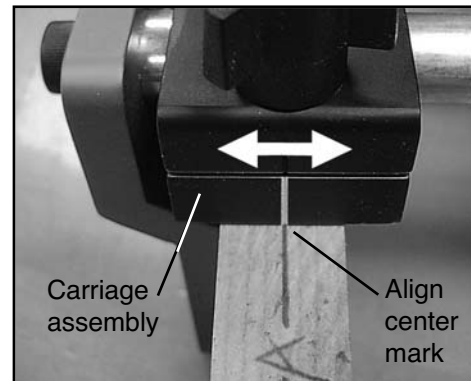


Fig. 6

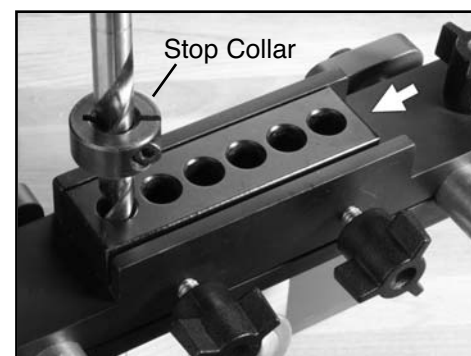


Fig. 7

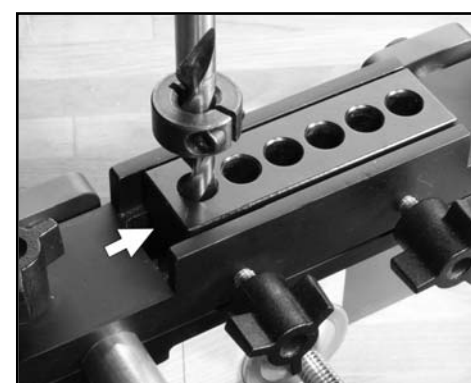


Fig. 8

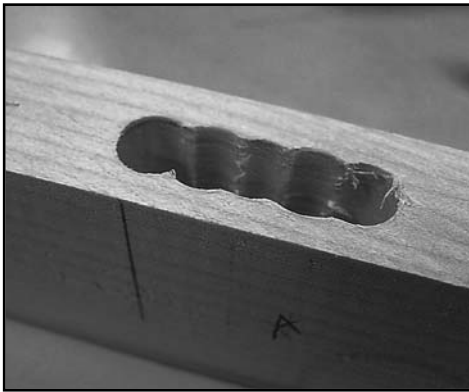


Fig. 9

9. Drill the 2nd series of holes as shown in the Quick Reference Guide below.

10. Part "A" is complete. (Fig. 9)

12. Part "B": Leaving drill block in the right position, align pencil mark with white line on the far right and tighten the guide block knobs. (Fig. 10)

12. Drill holes for part "B" as shown in the Quick Reference Guide. (Fig. 11)

13. Shift drill block back to the left and tighten guide block knobs. (Fig. 12)

14. Drill holes for second drilling as shown in the Quick Reference Guide.

15. Check your fit using Beadlock tenon stock. (Fig. 13)

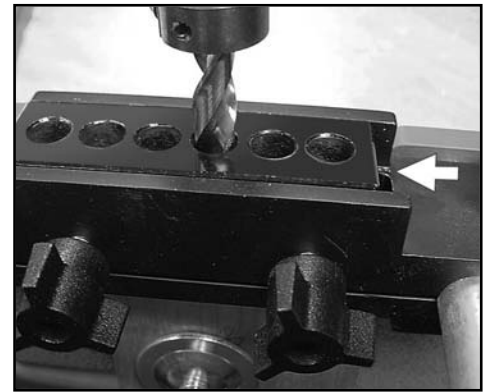


Fig. 12

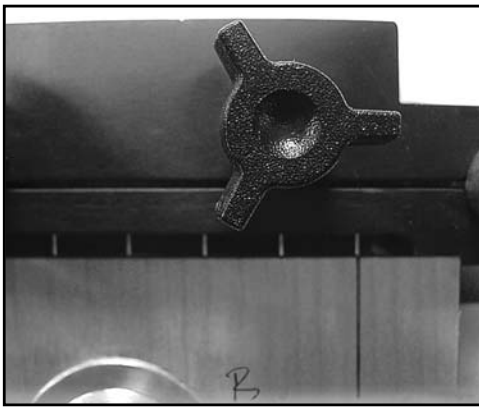


Fig. 10

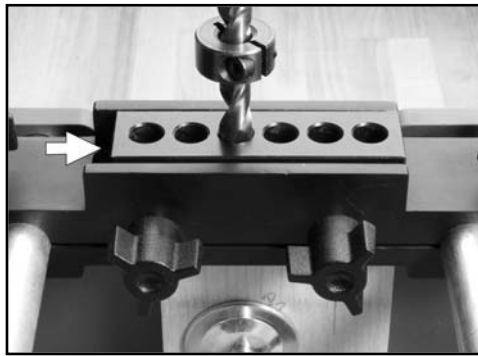


Fig. 11

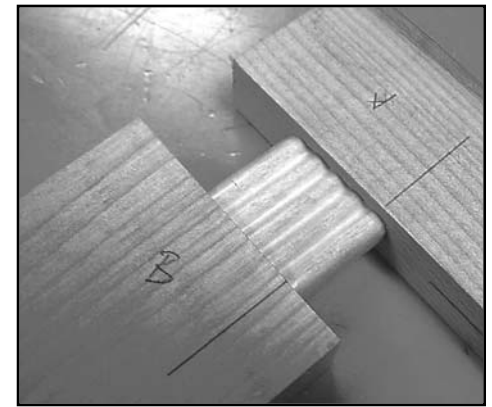
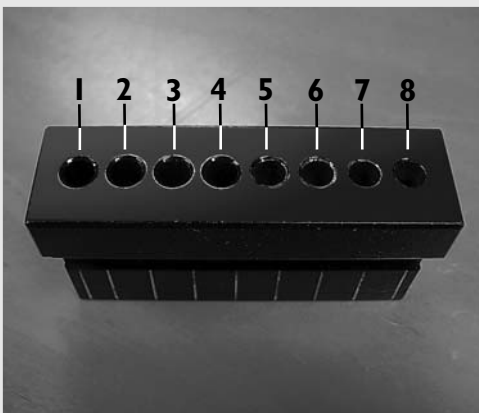


Fig. 13

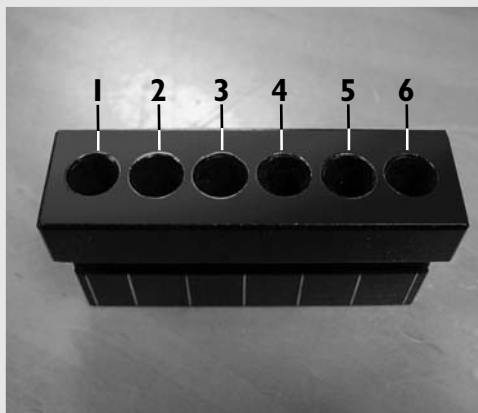
DRILLING HOLE QUICK REFERENCE GUIDE - Beadlock Tenon Stock

		1/4" Block	3/8" Block	1/2" Block
Part A	1st Drilling Series	1,2,3, 4	1,2, 3	1, 2
	2nd Drilling Series	1,2, 3	1, 2	1
Part B	1st Drilling Series	5, 6, 7, 8	4, 5, 6	3, 4
	2nd Drilling Series	6, 7, 8	5, 6	4

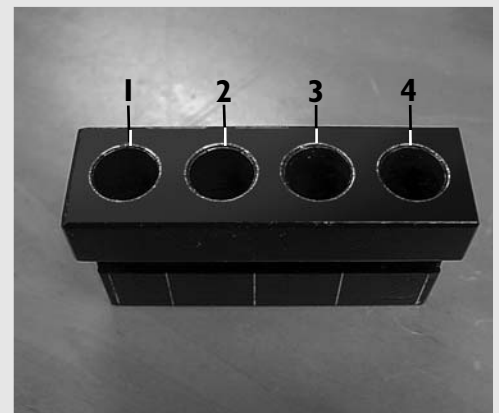
DRILL BLOCK DIAGRAM



1/4" Guide Block



3/8" Guide Block



1/2" Guide Block

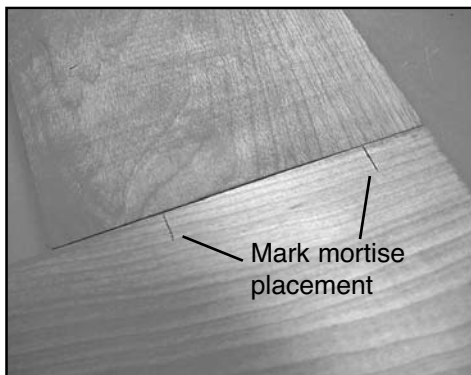


Fig. 14

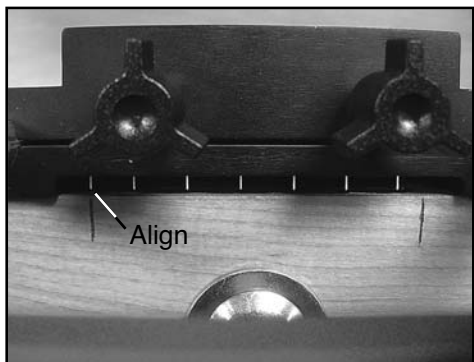


Fig. 15

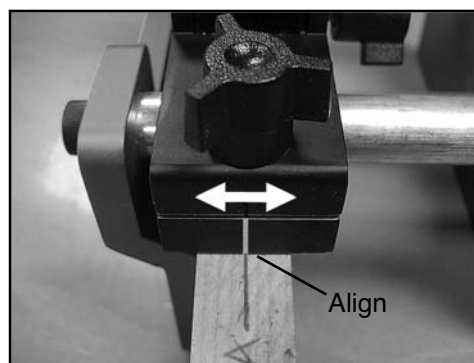


Fig. 16

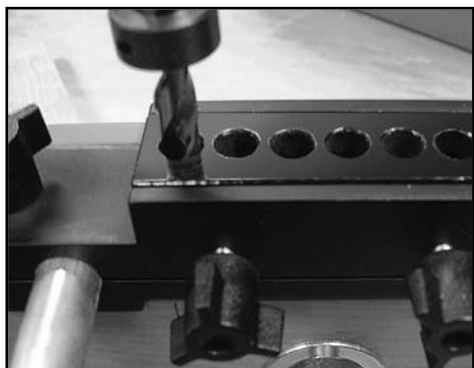


Fig. 17

Traditional Mortise and Tenon

1. Determine exact size of your mortise so you can layout joint on stock and line up jig. Mortise can be longer or shorter in set increments, depending on drill bit size. The chart below shows the range of possible mortise lengths for your chosen drill block.

MORTISE LENGTHS

Guide	Max*	Increments
1/4"	3/16"	3/16"
3/8"	3/8"	1/4"
1/2"	3/8"	3/8"

*Without shifting the entire jig.

2. Mark mortise on your stock. (Fig. 14)
3. Align the jig: See page 2, step 3.
4. Remove alignment board and clamp piece to be mortised in jig, lining up left pencil line with far left guide line on drill block. (Fig. 15)
5. Shift carriage assembly front to back to align with desired joint location and tighten down carriage knobs. (Fig. 16)
6. Set drilling depths using provided stop collars (See chart on page 2).
7. Drill holes from left to right, making sure not to drill past right pencil line. (Fig. 17) **Note:** depending on the length of your mortise, the right pencil line may not line up with the white line until after shifting.
8. Shift drill block to right and lock.
9. Drill remaining overlapping holes.
10. Insert and lock paring block. (Fig. 18)

11. Using a sharp chisel, pare mortise along walls of paring block. If you leave the corners rounded, the tenon will also need rounding. (Fig. 19)

12. Mortise is complete. (Fig. 20)

13. Cut tenon to fit mortise. You can use a traditional tenon or a shop made loose tenon. **Tip:** Use a bull nose router bit to create loose tenon stock for mortises with rounded ends.

14. Dry fit parts before glue up. (Fig. 21)

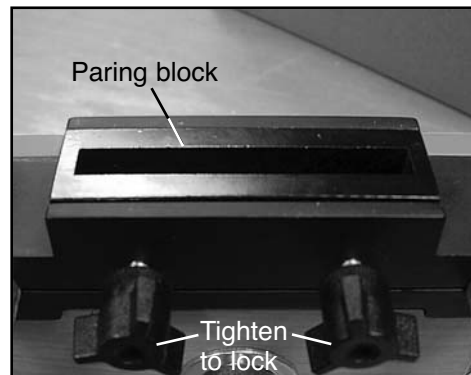


Fig. 18

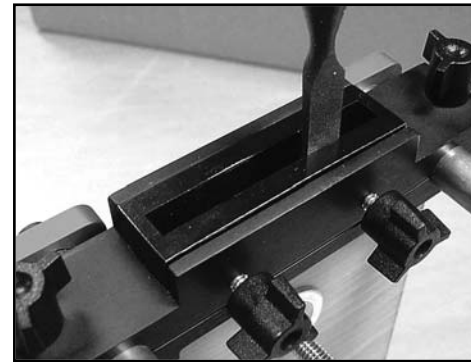


Fig. 19



Fig. 20

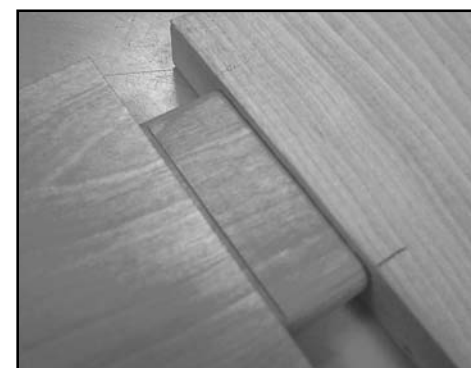


Fig. 21