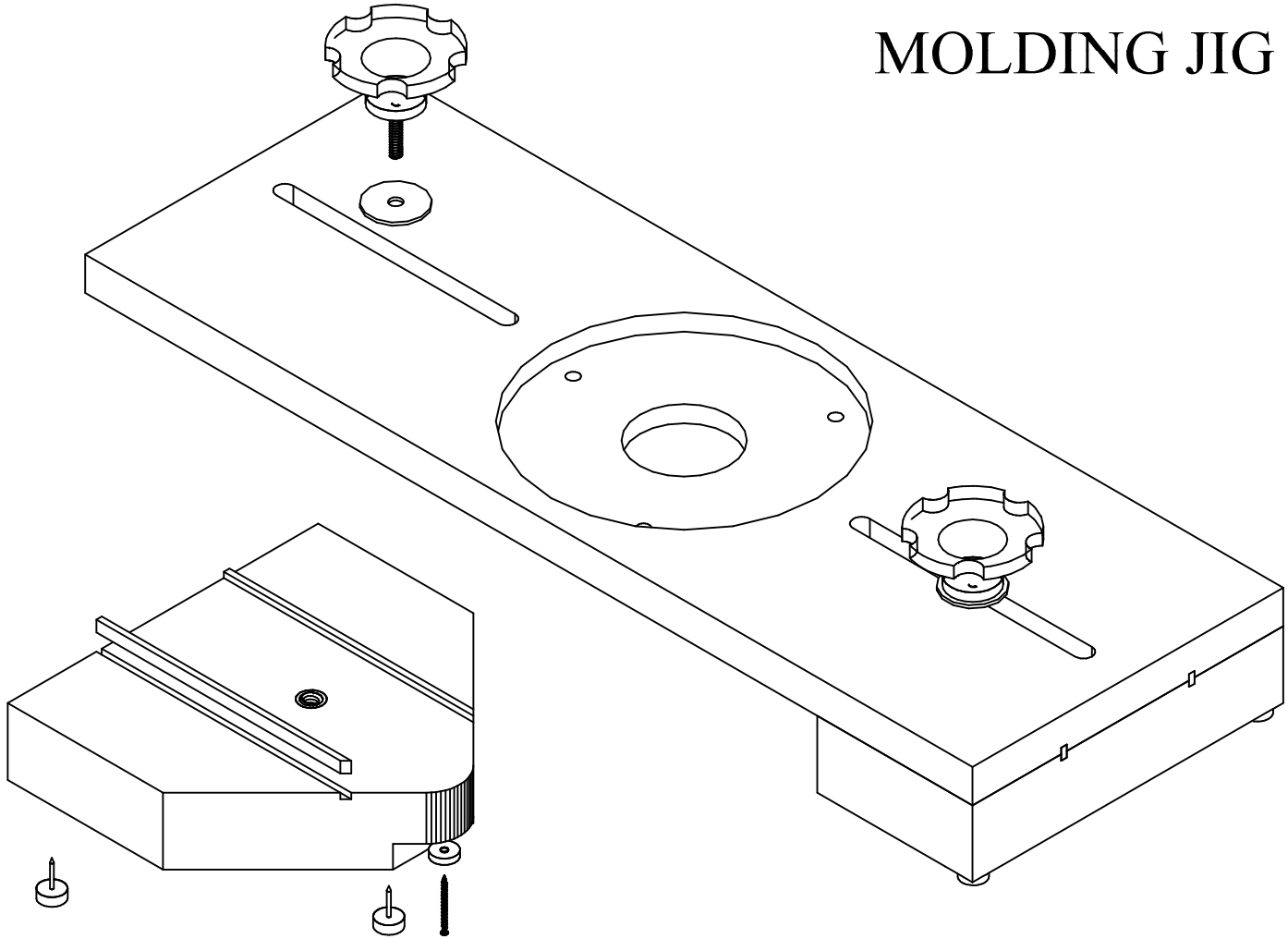
MOLDING JIG



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Bill of Materials:

Item	Size (T" x W" x L")	Qty
Router Carrier	¾ x 7 1/2 (rgh) x 20	1
Support Blocks	¾ x 7 1/2 (rgh) x 16 (rgh)	2*
Guide Strip	1/8 x 3/8 x 15	2
Threaded Insert	¼ - 20	2
Threaded Knob (1" Stud)	¼ - 20	2
Fender Washer	¼" (Hole Diameter)	2
Bearing	3/8" to 1" Diameter	2
Nylon Glide	5/8" Diameter	6

*Makes two Support Blocks

1. This jig offers a great opportunity to use shop scraps (particularly left over sheet goods). Although a measured drawing is attached, you can make dimensional changes without affecting the end use of the jig.

2. Here's one way to make the jig:

a. Laminate the two pieces for the Support Blocks to form a blank that is 1 ½" thick. Two Support Blocks will eventually be cut from this blank. However, it is safer and easier to perform the following steps while the Support Blocks remain in this larger, "single blank" form.

b. To ensure proper alignment of the Guide Strips located between the Router Carrier and Support Blocks, it's important that you make them the same finished width. Rip Router Carrier and Support Block blank to 7" wide.

c. A simple guide system is used to keep the Support Blocks properly registered with the Router Carrier. Set the table saw fence to about 1 7/8" and blade height to 1/8". Rip a kerf on the bottom side of the Router Carrier. Rotate Router Carrier end for end and rip a second kerf. Repeat this procedure on one face of the Support Block blank. Because the Router Carrier and Support Block blank were ripped to the same width in the previous step, the grooves should align perfectly. Set the Support Block blank aside for now.

d. Complete the Router Carrier:

1) To maximize the depth of cut range, recess the router base into the Router Carrier. Suggest recess of about 3/8". Recess diameter of 6" shown in drawing accepts Porter Cable 690. Modify this dimension to accommodate your specific router.

2) On underside of Router Carrier, locate and drill holes for router base mounting screws (not shown on drawing). Mounting screws must be countersunk so they do not

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interfere when moving the support blocks. Orient router base so that mounting screws will not interfere with Guide Strips. Try to keep router base centered on Router Carrier.

3) Cut/drill opening (approximately 2" diameter) for router bits. Adjust this diameter to suit your needs/maximum bit diameter.

4) Cut or rout 3/8" wide by 4 5/8" long slots near each end of Router Carrier (see drawing). Slots allow lateral positioning of Support Blocks.

e. Complete the Support Block blank:

1) Glue Guide Strips (1/8" thick hardboard works great for Guide Strips) to kerfs in Support Block blank. Exposed portion of Guide Strips must slide in corresponding kerfs cut in Router Carrier; **do not glue** Guide Strips to Router Carrier!

2) Crosscut/square ends of Support Block blank to final length of 15".

3) On kerfed face of Support Block blank, locate/mark center points for threaded inserts (see drawing). Install threaded inserts.

4) Cut double miter on each end of Support Block blank. Angle is not critical; something close to 45^{o} works fine. Remove the points formed by the miter cuts by rounding the sharp corner back about 3/16" to ¼".

5) Crosscut a shallow rabbet on bottom of each end of the Support Block blank to accept bearings. (Bearings will be installed later.) Width of rabbet depends on diameter of bearing. Depth of rabbet depends on thickness of bearings and glides you use. Try for about 1/16" clearance between bottom of bearings and top of work surface (Nylon Glides installed).

6) Install Nylon Glides.

7) Crosscut Support Block blank at center. This yields two Support Blocks.

8) Assemble jig with knobs and fender washers.

9) Install router.

10) **For this jig to work properly, the router bit and two guide bearings should be aligned on the same axis**. To locate bearing positions, turn jig/router unit upside down. Insert router alignment pin/centering bit or anything that will help establish the center of the router collet (i.e. V-Groove bit). Using collet center as reference, establish axis for bearing centers. Mount bearings on this axis (and in the rabbets cut earlier) so that bearings protrude slightly forward of their respective Support Blocks; 1/16" protrusion should work fine.

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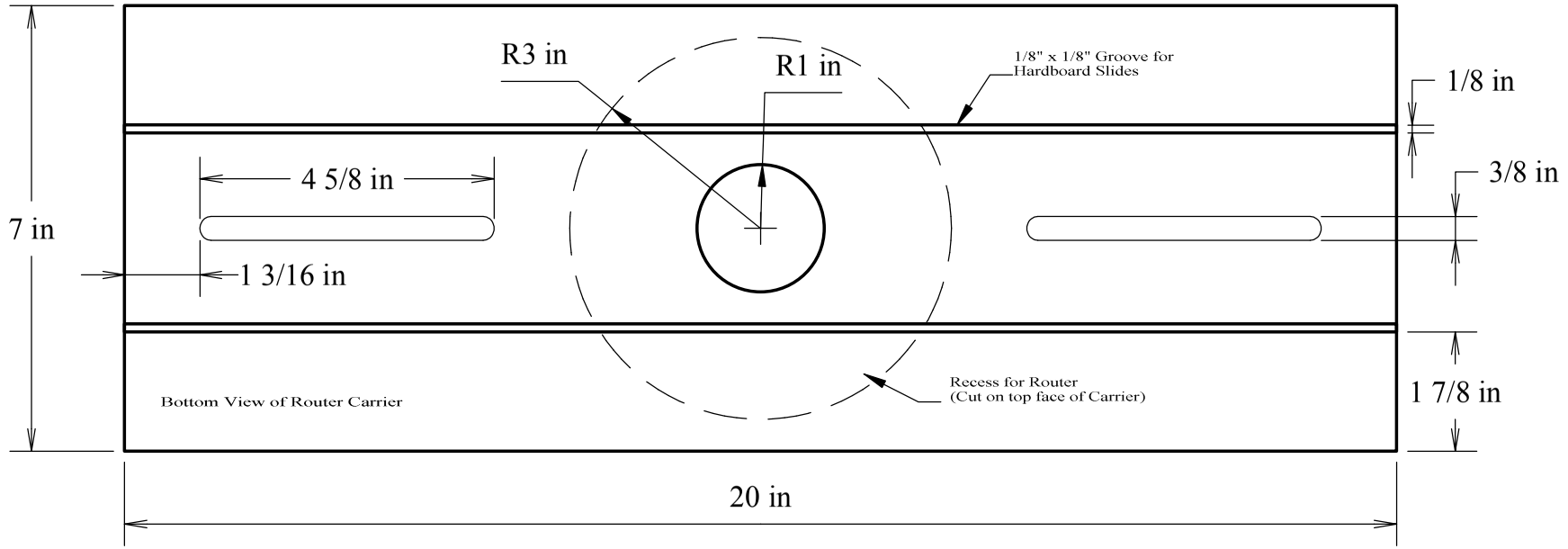

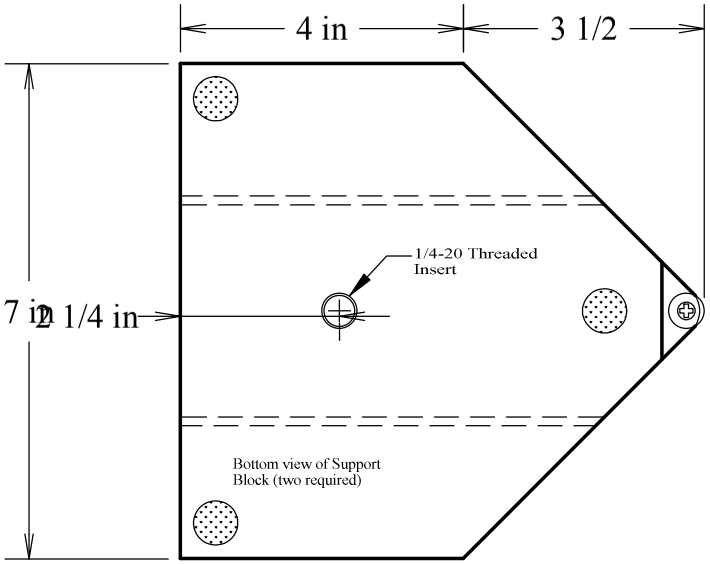

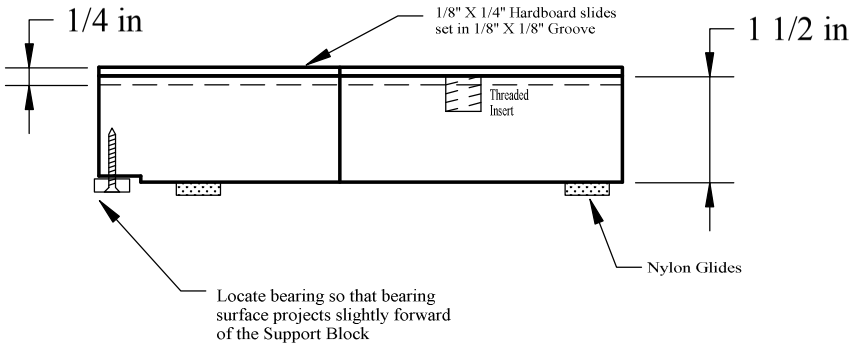

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