NewWoodworker.com
Custom Plan Sets

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A list of possible options available for this project.

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Not familiar with some of the techniques used in this project? Helpful links to related articles on NewWoodworker.com provide the information you need to complete this project and expand your skills.

USE
Links to related articles on NewWoodworker.com regarding the use of this project.

DRAWN PLAN
NewWoodworker.com plans are uncluttered, but provide all necessary details, including dimensions.

Instructions For Plan #NWW001 – Gauge Block

NOTE: This gauge block is designed for use with the standard 2 1/8"-wide by 2 ½"-tall JetFence. If your fence is square or rectangular it may work with the appropriate dimensions altered according to the dimensions of your fence. See Step 1 of the instructions for more information on adapting this gauge block to your fence.
This gauge block may not be suitable for use on some fences, particularly those with oddly shaped extruded arms. The user must determine if this gauge block fits their particular fence correctly and is safe to use.

MATERIALS

All pieces for this project are 7/16”-thick (minimum) plywood. Thicker material can be substituted but remember to size the dados accordingly.

1 piece – 5” X 6” work side – Part A
1 piece – 3 3/8” X 5” screw side – Part B
1 piece – 2 9/16” X 5” cross piece – Part C
2 pieces – 2 ½” X 2 3/16” (approximate) gussets – Parts D
1 – ¼-20 T-nut
1 – ¼-20 thumb screw or equivalent
6 – 1 ¼”-long drywall screws

INSTRUCTIONS

Step 1 – Adapting this gauge block to other fences.
This plan is specifically for the standard JetFence. If you have a square or rectangular fence with other dimensions, modifications to these plans are necessary. Measure the width of your table saw fence, and then add 5/8” to establish the actual width of the cross piece, Part C in Figure 3 of the plan sheet.
Also, measure up from the table surface to 1/8” above the highest point of the fence to properly locate the dados in Parts A and B to insure the gauge block slides freely along the fence.

Step 2 – Cut Parts A, B and C to size.

Step 3 – Cut ¼”-deep dados in Parts A and B according to locations in Figures 1 and 2 of the plan sheet. If modifying this plan for another fence, remember to adjust dado locations accordingly.
Round all four corners of Parts A and B to approximately a ¾” radius.

Step 4 - Clamp Parts A, B and C together (no glue) and test fit on the fence. Hold Part A against the fence and check for approximately 1/8” clearance between the fence and Part B. Insure the gauge block slides freely on the fence without contacting obstructions on the top of the fence.

Step 5 – Using a ¾” Forstner bit, drill a recess approximately 1/8” deep in the inside face of Part B, centered on its width and 1 ¼” up from the bottom edge (See Figure 2). Change to a 5/16” bit and finish drilling the hole though Part B.
Put a little slow set epoxy around the edges of the recess, and then drive the T-nut into the recess so the flange is seated, and slightly below the surface. Using a 9/16”

deep socket helps fully seat the T-nut properly. Add a thin coat of epoxy around the edge of the T-nut flange and set aside to dry.

Step 6 – Using yellow glue, assemble Parts A and C, making sure they are square (90-degrees) to each other. Clamp and allow the glue to set up. When dry, add Part B, again using yellow glue and checking that it is square to the assembly. Clamp and set the assembly aside to dry.

Step 7 – Measure the dimension between Parts A and B (see Figure 4) to determine the exact size of Part D. Rip a length of plywood to this width, then cut two pieces at a 45-degree angle, making sure to leave a flat at the bottom edge that when installed, butts against Part B. See Figure 4 on the drawn plan sheet.
The tips of these gussets may protrude above Part A, and should be trimmed after assembly. Apply glue and install both gussets, inset from the front and rear edges of the gauge block by approximately ½".

Step 8 – When the assembly is dry, trim the gussets if necessary, sand rough edges and finish if desired. When dry, insert the thumbscrew and test the fit.

OPTIONS

The primary option when building this gauge block is to use thicker material. Most common is ¾"-thick plywood, but some go thicker yet to increase the amount of free space between the cut off piece and the fence. Under no circumstances should this gauge block be constructed from material thinner than 7/16"-thick.

Using a sliding dovetail (secured with glue) in place of the dado joints to secure Part C to Parts A and B is certainly strong, but will require resizing of the crosspiece (Part C) accordingly. Also, a minimum of ¾"-thick material must be used to accommodate cutting the dovetail.

USE

For a complete description of how this Gauge Block is used see "Using a Gauge Block" in the Tips and Tricks section of NewWoodworker.com.

RESOURCES

Not familiar with some of the techniques in this project? Check the NewWoodworker.com resources below for help!

Setting Up and Using a Stacked Dado Set

Using Push Sticks

Using Gauge Blocks

Gauge Block

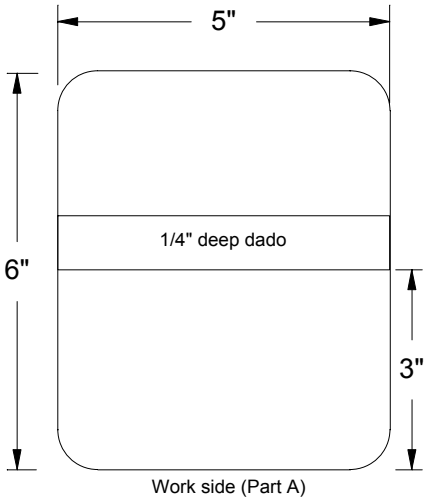

Figure 1

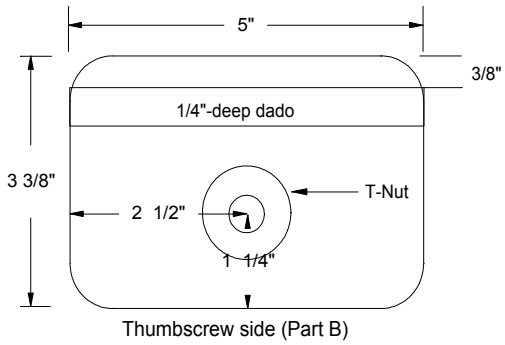

Figure 2

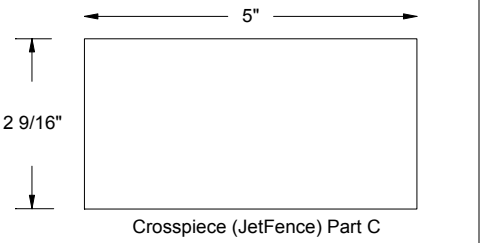

Figure 3

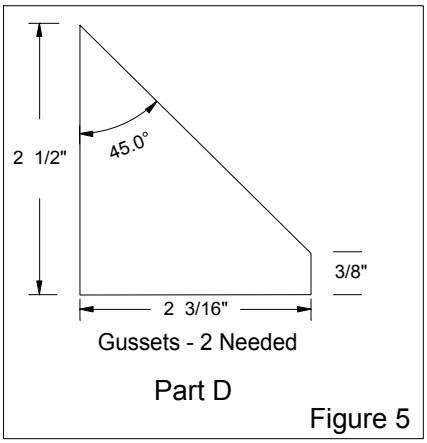

Figure 5

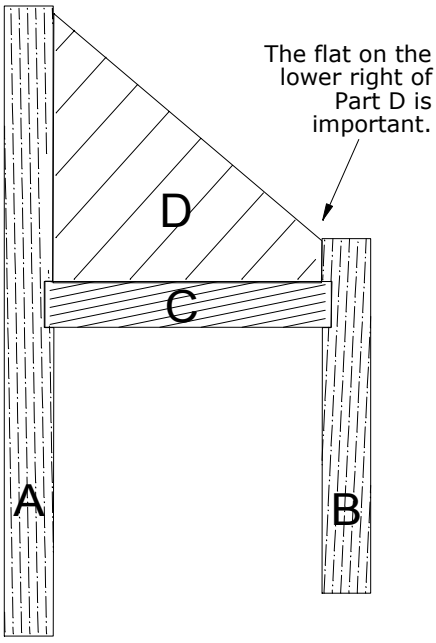

Figure 4

Plan #NWW001 - Gauge Block
Designed & Drawn by Tom Hintz
Drawn with DesignCad Express