



CARVEWRIGHT™

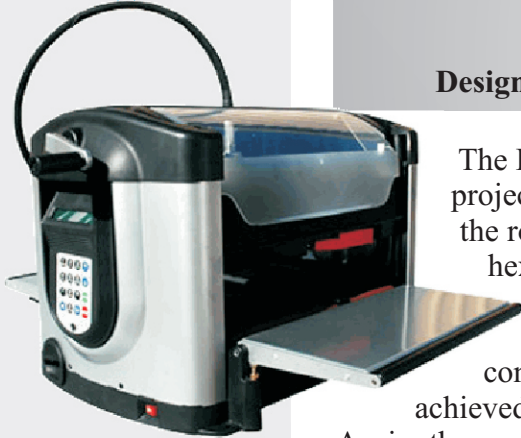
WOODWORKING SYSTEM

PROJECT
BASIC
DIFFICULTY

PROJECT TUTORIAL

Bangles & Baubles Box

Designed for CarveWright™ by Michael Tyler - www.carvebuddy.com



The Bangles & Baubles Box project features convex sides for the round base with a decorative hexagonal lid for a unique “look” not often seen in a box design. The subtle convex appearance was achieved by creating a model in Aspire then using CarveWright’s STL import software and sliced/pierced carve function for layered patterns. The resulting layers are glued together then sanded to blend into the final smooth shape.

The project uses just the two bits that came with your machine. No other bits are required.



The finished box dimensions are about 8¾" round x 4½" tall.



Main items you will need:

1) The Project Files (included):

- Lid_and_Middle.mpc
- Lower_Bottom_Section.mpc
- Upper_Bottom_Section.mpc

2) Boards with the following dimensions:

Lid_and_Middle: .75" x 11" x 26"

Lower_Bottom: .75" x 11" x 28"

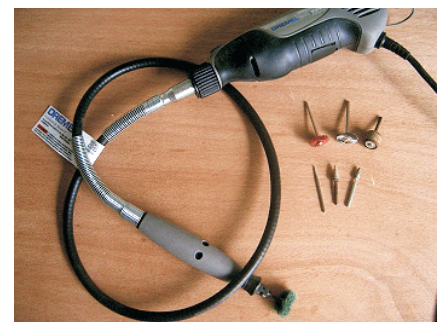
Upper_Bottom: .75" x 11" x 28"

NOTE: Do not use boards that are shorter in length than specified above.

3) Hinge(s) for lid (I used Brainerd hinge #1264XC ¾" x 4" piano-style)

4) Sandpaper, wood glue, CA wood adhesive, wood stain and/or paint and clear finish

5) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and speed up preparation for finishing.



Bangles & Baubles Box

(cont.)

STEP 1

Start your Designer software and open the .mpc files. (Fig. 1a)

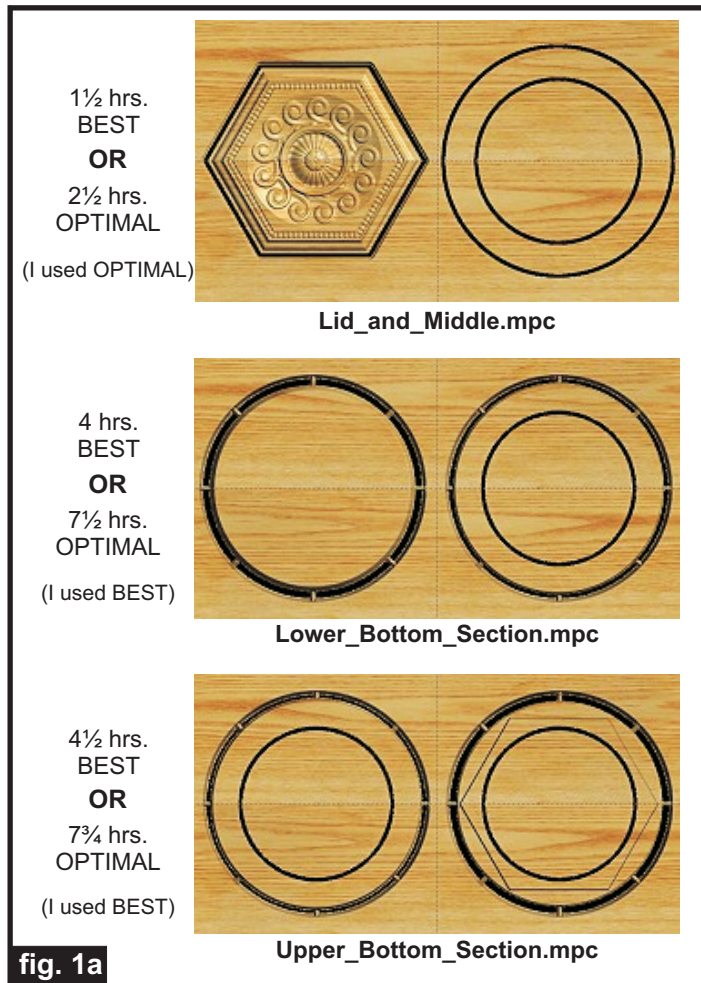


fig. 1a

All you need to do at this point is upload the project files to your memory card. (File/Upload). When you upload, you may or may not get a pop-up window with an “Auto-Jig” warning message (Fig. 1b)

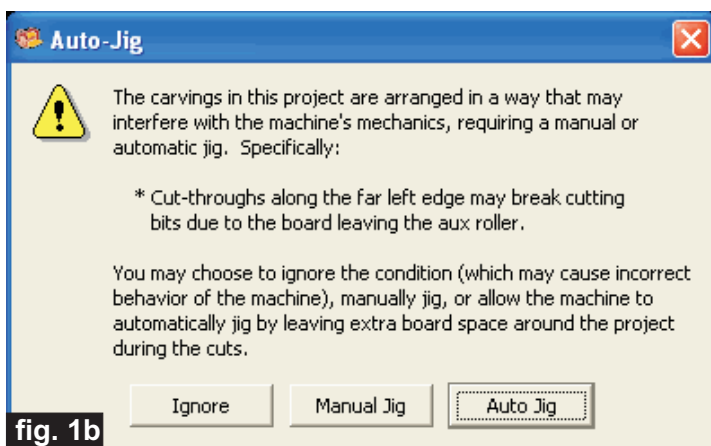


fig. 1b

If you do see the message, you may safely click on “Ignore” because our actual boards will be large enough that it won’t cause any problems at all. After each project is compiled, select “Best” or “Optimal” for the File Quality setting.

Click “OK” and upload each mpc project file to your memory card. Insert the card into your machine and load a board that measures the appropriate dimension specified for each particular mpc (see page 1 for board dimensions). Turn on your machine and proceed with the standard project setup in Step 2...

STEP 2

You will see “Project Menu” on your LCD display. Press “1” and scroll to **Lid_and_Middle.mpc** project, and press the green ENTER button to select it. Then follow the additional prompts...

- **Stay Under Rollers** - press 1) YES
- **DO NOT RESIZE or SCALE the projects!** If prompted, always keep the original size. No scaling!
- **How To Place** - press 1) Center
- **Cut Board to Size?** - press 2) NO
- **Select Cutting Bit: 1/8 "Cutting** - Press ENTER. The machine will move the bit holder to the center of the machine in preparation for the bit installation.
- **Load Bit:1/8 "Cutting** -Insert your 1/8 " cutting bit, then press the green ENTER button. (homes, etc.)
- **Select Carving Bit: 1/16 "Carving** - Press the green ENTER button. (Moves to center of machine.)
- **Load Bit: 1/16 "Carving** - Remove the 1/8 " cutting bit, and insert your 1/16 " carving bit, then press the green ENTER button. After homing and finding surface, the machine will begin the carving process.
- **After it is done carving, you will be prompted to load your 1/8 "cutting bit.** Take out the 1/16 " carving bit, then insert your 1/8 " cutting bit, remove excess sawdust debris from the machine, then press the green ENTER button. Cutouts are always performed last, after all raster carving is completed.

(cont.)

Bangles & Baubles Box

(cont.)

STEP 2 (cont.)

• The machine will now proceed to perform the cutouts as it moves around the component outlines. It leaves little tabs to hold the part in the board. When the machine is finished, remove your board and clean your machine of excess sawdust.

• Repeat the entire procedure for the remaining mpc files.

When the machine is finished, remove your board and clean your machine of excess sawdust.

Your boards will look like this (fig. 2)



Lid_and_Middle.mpc



Upper_Bottom_Section.mpc



Lower_Bottom_Section.mpc

fig. 2

STEP 3

Separate all the pieces from the boards with a utility knife or hobby saw (fig. 3a)



fig. 3a

STEP 4 - Glue-ups and Sanding

Glue all the box sections together EXCEPT do not glue the solid bottom section on yet. I used wood glue and a few drops of CA wood adhesive (super glue for wood) to tack the parts in position. Clamp until dry. (fig. 4a, 4b, 4c)



fig. 4a



fig. 4b



fig. 4c

Bangles & Baubles Box

(cont.)

STEP 4 - Glue-ups and Sanding (cont.)

After the glue is dry, remove the clamps and sand the interior circle to blend the seams of the layers. Use a coarse sandpaper to begin with then move up through successive finer grits to finish the interior until smooth (I used 60-grit up to 220-grit). If you own a spindle sander, the job goes even faster and easier. (fig. 4d, 4e)



fig. 4d



fig. 4e

Now glue on the solid bottom and allow to dry. (fig. 4f)



fig. 4f

After the glue is dry, remove the clamps and sand the exterior smooth and blended. You can use the [CarveWright Sanding Mop](http://www.carvebuddy.com) to help speed up the job. (fig. 4g)



fig. 4g

STEP 4 - Glue-ups and Sanding (cont.)

Use a Dremel-type tool to sand off the tabs to remove any fuzzies and undesirable tool marks from the decorative lid carving. I use 3M Radial Bristle Discs from www.mcmaster.com to safely remove fuzzies from carvings without loss of detail. (fig. 4h)



fig. 4h

STEP 5 - Install Hinge

Position your hinge and mark the box with a pencil. Cut, route or chisel a mortise in the top of the box to suit whatever hinge(s) you use. (fig. 5a, 5b, 5c)



fig. 5a



fig. 5b



fig. 5c

Bangles & Baubles Box

(cont.)

STEP 5 - Install Hinge (cont.)

Place the hinge, drill pilot holes and install the screws. Check the hinge action and lid alignment. Sand the lid edges to match the box hex top, as required. Remove the hinge before applying your finish. (fig. 5d, 5e, 5f)



fig. 5d



fig. 5e



fig. 5f

STEP 6 - Finishing

Apply the finish of your choice. Here's what I used on my Bangles & Baubles Box made from Select Pine:

- One coat of thinned Bullseye Sealcoat (2 parts sealer/3 parts Denatured alcohol)
- Sanded again with very fine sandpaper & Dremel
- Applied three coats full-strength Bullseye Sealcoat
- Applied one coat Amber Shellac
- Applied Valspar translucent Mocha #94825 Glaze and dry-brushed off the excess glaze
- Applied several spray coats of Krylon clear acrylic

Reinstall the hinge to complete your project.



Apply Sealcoat

Apply Amber Shellac



Apply Glaze



Dry-Brushing



IN CONCLUSION

The box can be modified as a "lift lid" instead of using hinges. Simply cut out your own 6½" O.D. circle and glue it centered under the decorative lid.

Another idea is to finish the box with metallic paints and antiquing glazes to give the box an "ancient" metallurgical appearance. Use your imagination when deciding how you want your Bangles & Baubles Box to look!

Happy Carving!

Michael

Materials Source Page

- **3M Radial Bristle Discs** from www.mcmaster.com
(stack 3 discs at a time on your rotary tool mandrel)

80-grit: part # 4494A19

220-grit: part # 4494A18

(also available from <http://www.ottofrei.com>)



- **TiteBond CA Wood Adhesive and CA Activator** from www.rockler.com



Krylon Clear Gloss Acrylic
from WalMart™



Sanding Mop
from www.carviewright.com

Miscellaneous Items Purchased at Lowes™

- Minwax Zinsser Bulls Eye Sealcoat
- Minwax Amber Shellac
- Valspar Translucent Mocha Glaze #94825
- Disposable Brushes and Paint Rags



Additional Resources

RESOURCES...

There are numerous resources for the CarveWright/CompuCarve owner to make their experience with these machines much more enjoyable.

Every owner should join the CarveWright User Forum (<http://forum.carviewright.com/forum.php>) where fellow users share their experiences and knowledge with these machines on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have.



The trademarks, service marks and logos (the "Trademarks") used and displayed here are registered and unregistered Trademarks of LHR and others.