



CARVEWRIGHT™

WOODWORKING SYSTEM

**PROJECT
BASIC
DIFFICULTY**



PROJECT TUTORIAL

Christmas Candle Centerpiece

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



This Candle Centerpiece design features pinecones and evergreen branches to adorn your holiday table! The “candles” are PVC pipes with battery operated flickering tea lights resting at the base of each one. The pipes lift out of recessed grooves for easy access to turn the lights on and off.

All components are carved and cut out using just the 1/16" Carving Bit and the 1/8" Cutting Bit. No other bits are required.

The completed project dimensions are about 10" x 16" oval x 1.5" thick (not including PVC candle height).



Main items you will need:

1) The Project Files (included):

- Christmas_Centerpiece_TOP.mpc
- Centerpiece_BASE.mpc

2) Boards with the following dimensions:

TOP: 0.75" x 11" x 24"

BASE: 0.75" x 11" x 24"

Do not use boards that are smaller than specified above unless using an appropriate jig. Larger boards are fine in all cases.

3) One 8.5" and two 6.5" lengths of 1.5" PVC pipe (*NOTE: a 1.5" PVC pipe has an outer diameter of 2"*)

4) Three battery operated LED tea light candles, wood glue, sandpaper, 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.



Christmas Candle Centerpiece

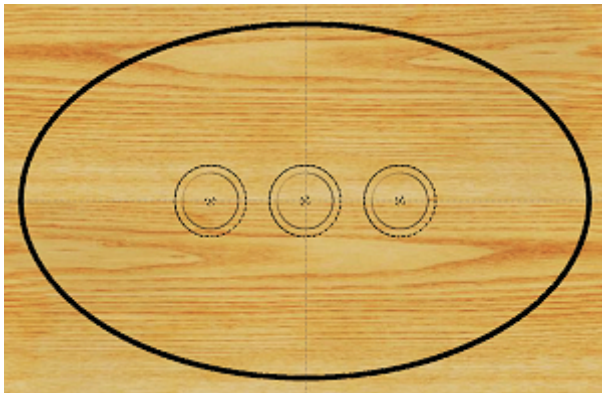
(cont.)

STEP 1

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



Christmas_Centerpiece_TOP.mpc
BEST: 5 hrs. OR OPTIMAL: 7 hrs.



Centerpiece_BASE.mpc
BEST: 15 min. OR OPTIMAL: 18 min.

fig. 1a

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

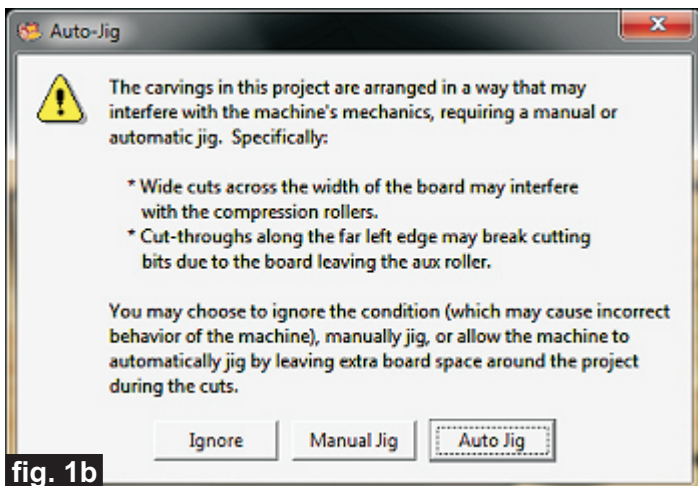


fig. 1b

If you do see the message, you may safely click on "Ignore" because the actual boards will be large enough that it won't cause any problems at all. After each project is compiled, select your preferred File Quality setting when uploading 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 the particular mpc (see page 1 for board dimensions). Turn on your machine and proceed with the project setup in Step 2...

STEP 2 - Running the MPC Files

You will see "Project Menu" on your LCD display. Press "1", scroll to **Christmas_Centerpiece_TOP.mpc** project, and press the green ENTER button. Follow the additional prompts closely...

- **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.
- **Load Bit: 1/8" Cutting** - Insert your 1/8" cutting bit, then press ENTER. button. (homes, etc.)
- **Select Carving Bit: 1/16" Carving** - Press ENTER. The machine will move the bit holder to the center.
- **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 and insert your 1/8" cutting bit. Press the green ENTER button. The machine will perform the final part cutouts as it moves around the component outlines. When the machine is finished, remove your board and clean your machine of excess sawdust.

(cont.)

Christmas Candle Centerpiece

(cont.)

STEP 2 - Running the MPC Files - (cont.)

Run the **Centerpiece_BASE.mpc** project...

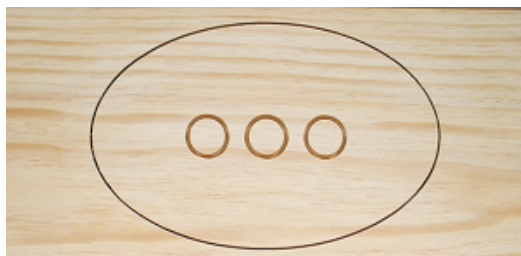
On the "Project Menu" on your LCD display, press "1", scroll to **Centerpiece_BASE.mpc** project, and press the green ENTER button. Follow the additional prompts closely....

- **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.
- **Load Bit: 1/8" Cutting** - Insert your 1/8" cutting bit, then press the green ENTER button. (homes, etc.)
- **Select Vector Bit: 1/8" Cutting** - Just press ENTER. (The bit is already installed.)
- The machine will perform the circular slot cuts followed by the oval cutout as it moves around the component outlines.

Your boards will look something like this. (fig. 2)



Christmas_Centerpiece_TOP.mpc



Centerpiece_BASE.mpc

fig. 2

STEP 3 - Separate Parts

Separate all the parts from the boards with a utility knife or hobby saw. Sand the tabs from the inside of the TOP circles. (fig. 3a, 3b)



fig. 3a



fig. 3b

STEP 4 - Part Assembly and Prep

Glue the TOP to the BASE. Clamp until dry. (fig. 4a, 4b)



fig. 4a



fig. 4b

(cont.)

Christmas Candle Centerpiece

STEP 4 - Part Assembly and Prep (cont.)

Final sand the carve details and edge perimeter.
(fig. 4c, 4d)



fig. 4c



fig. 4d

STEP 5 - Apply Finish

Apply your choice of finish. Here's what I used on my own "Christmas Candle Centerpiece" made from Select Pine:

- Several light coats Zinsser Bulls Eye spray Shellac sanding between coats
- Applied green craft paint with fingertip on the raised "branches" only
- Applied three coats Zinsser Bulls Eye spray Shellac
- Applied Rust-Oleum Carrington stain overall, then wiped off the high spots to enhance the carving details
- Several light coats of Krylon Clear acrylic spray as the final topcoat

(fig. 5a, 5b, 5c, 5d)

Apply
Spray Shellac
(sand
between
coats)



fig. 5a



Apply Green
paint with
finger on
the pine
branches

fig. 5b

Spray Shellac
to seal paint



fig. 5c



Apply Stain
then wipe off

fig. 5d

Christmas Candle Centerpiece

STEP 6 - Final Assembly

Cut one 8.5" and two 6.5" lengths of 1.5" PVC pipe
NOTE: The 1.5" PVC pipe has an outer diameter of 2" (fig. 6a)



fig. 6a

Sand the pipes with 320-grit wet sandpaper to remove the printing and smooth any blemishes. Sand the pipe edges too, to remove any sharp edges. (fig. 6b)



fig. 6b

Turn on the battery operated tea lights and place onto the base circle centers. Place the pipes into the grooves surrounding the tea lights. Remove the pipes to access the lights when ready to switch them off. (fig. 6c, 6d)



fig. 6c



fig. 6d

IN CONCLUSION

I hope you've enjoyed making your "Christmas Candle Centerpiece"!

Ideas for variations:

- Paint the PVC pipe "candles" - gold, red, or green
- Add metallic glitter flakes using spray adhesive
- Apply white paint "snow" on the pine cones and branches using your finger or a paint pen or a brush
- If you own the CarveWright Rotary Jig, you can carve a design or photo on each of the PVC pipes for a classy lithophane backlit effect!

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



Krylon Clear Gloss Acrylic
from WalMart™



Items Purchased at Home Depot™

- Zinsser Bulls Eye Spray Shellac (100% wax-free)

Items Purchased at Lowes™

- Sandpaper
- Rust-Oleum Ultimate Wood Stain (Carrington)
- Disposable Brushes and Paint Rags
- 1.5 " white PVC pipe
(NOTE: 1.5 " PVC pipe has an outer diameter of 2 ")



LED battery
operated Flickering
Tea Light Candles



Items Purchased from amazon.com

AGPtek 24 Battery Operated LED Cool White Tea Light Flickering Candles \$15.99 (less than \$0.67 for each light)
Box of 24 Cool White Led Flameless Flickering Candles. Includes 24 CR2032 coin batteries (inside the candles)

http://www.amazon.com/AGPtek-Operated-Flickering-Decoration-Occasions/dp/B00AH83J58/ref=pd_sim_hi_1ie=UTF8&refRID=1JHXN0WX09BMYKEGMBKQ

I purchased the Cool White LED candles above. If you prefer, Warm White LED candles are also available.

AGPtek 24 Battery Operated LED Warm White Tea Light Candle Flickering \$17.99
Box of 24 Warm White Led Flameless Flickering Candles. Includes 24 CR2032 coin batteries (inside the candles)

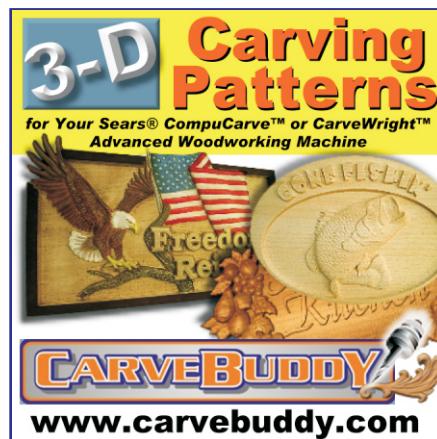
http://www.amazon.com/AGPtek-Battery-Operated-Flickering-Flashing/dp/B00AH9HH1E/ref=pd_sim_hi_2ie=UTF8&refRID=0CGCFCV6M61MZ79QP0AG

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.



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