

Project Tutorial

Featuring compatibility with nearly all CNC Machines

It is our pleasure to provide our customers with fun and useful projects to enjoy!

Vectric Project Tutorial
www.vectric.com

Tripod Pedestal Table

Designed for Vectric™ by Michael Tyler

Compatible with:

VCarvePro 6.5
(or greater)

and

Aspire 3.5
(or greater)

Sample Carved with:

ShopBot Buddy
PRSalph BT48

ShopBot®
www.shopbottools.com

Add a nice furniture accent to your home with this classic Tripod Pedestal Table project! Perfect for showcasing a favorite grouping or collectable item in a compact space, this attractive table will add a touch of class to your décor.

The sample shown is finished with a somewhat traditional Black Cherry stain, but you can customize the finish any way you like. The overall dimensions of the table are about 13½" diameter x 30" tall.



Main items you will need:

1) The Project Files (included):

- Base-and-Top_parts.crv
- Feet_Parts.crv
- Middle_Section.crv
- Round-Pedestal_Parts.crv
- TableTop.crv

2) Boards with the following dimensions:

- Base-and-Top: 0.75" x 11" x 21"
 - Feet_Parts: 0.75" x 10" x 15"
 - Middle_Section: 0.75" x 11" x 18"
 - Round-Pedestal_Parts: 0.75" x 10" x 12"
 - TableTop*: 0.75" x 14.5" x 14.5"
- (* I did an edge glue-up of two 1 x 8 x 14.5" nominal measured boards)

3) Six 1.25"-long coarse-thread drywall screws, three 1" #6 wood screws, three 3d finish nails, three 1.25" dia. x 29" wood dowels, three 0.25" dia. x 2" wood dowels

4) Drill and bits, sandpaper, stain or paint and clear finish

5) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details.



CNC Bits used for the Sample:

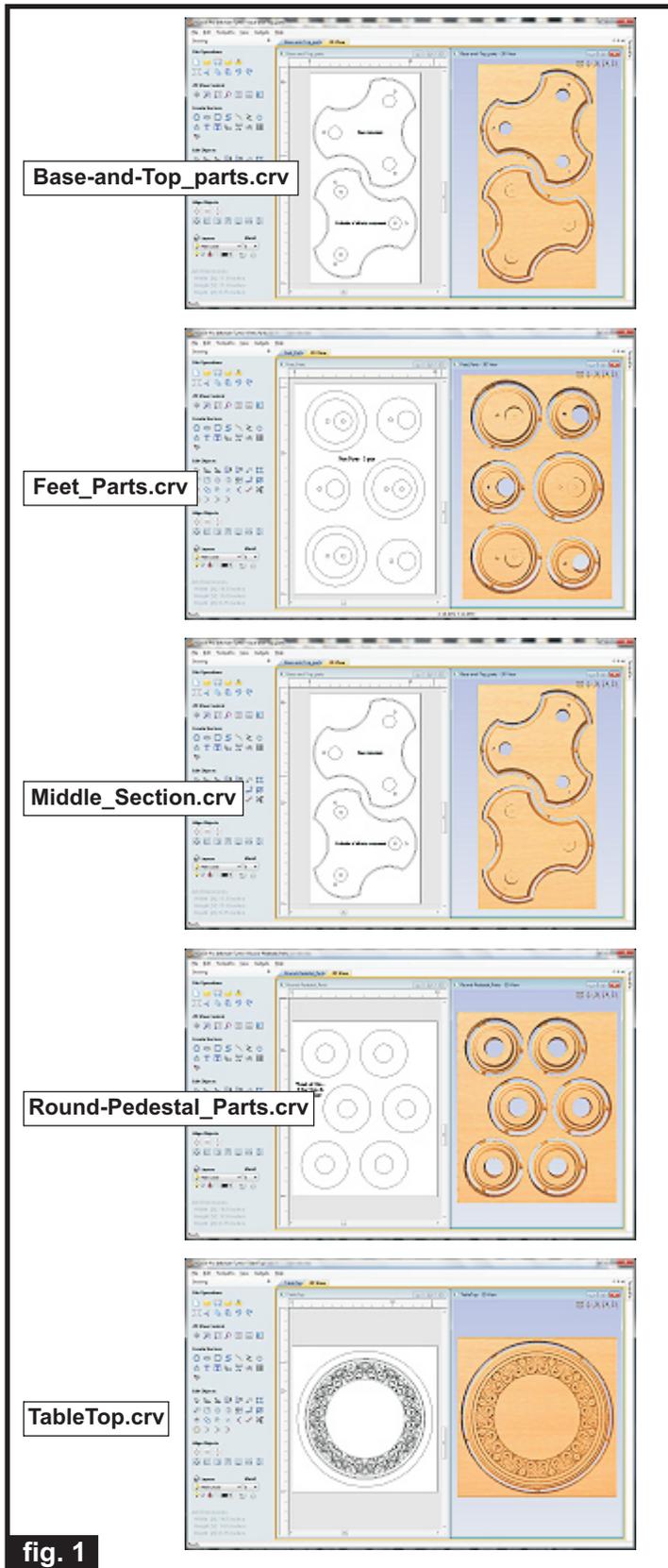
V-Carve:	60° V-Bit
Cut Profiles:	0.5" Ballnose
Pockets & Drills :	0.25" Up-Cut EM
Cut Profiles:	0.25" Down-Cut EM

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(cont.)

STEP 1 - Open and Review the Project Files

Start your VCarve Pro or Aspire software and open the project files. (fig. 1)



Carefully review all the toolpaths and make any necessary changes (feed/speed, RPM settings, etc.) to suit your particular bits and machine.

The toolpaths are currently set with feeds, speeds, pass depths and so on, that were used in creating the original sample. Please don't use them directly until you review them for your own setup.

NOTE: Measure your 1.25" diameter dowels. Dowel diameters can vary, so you may need to slightly adjust the dowel thru-pocket diameters for the best fit of the dowels you have on hand. The fit should allow a small clearance for glue as well as for ease of assembly. **It is very important to recalculate all toolpaths after making any edits/changes.**

Once you have recalculated the toolpaths for your own machine and bits, reset the preview, then preview all toolpaths again to visually verify the project outcome on-screen.

The project is designed with tabs to hold parts in place during the final part cut outs. You may delete the tabs if you use some other reliable hold-down method.

STEP 2 - Run the Project

When you are satisfied with your settings, save the toolpaths to the appropriate Post Processor for your machine, place your material on your machine bed and proceed to run the project. (fig. 2a, 2b)



fig. 2a



fig. 2b

fig. 1

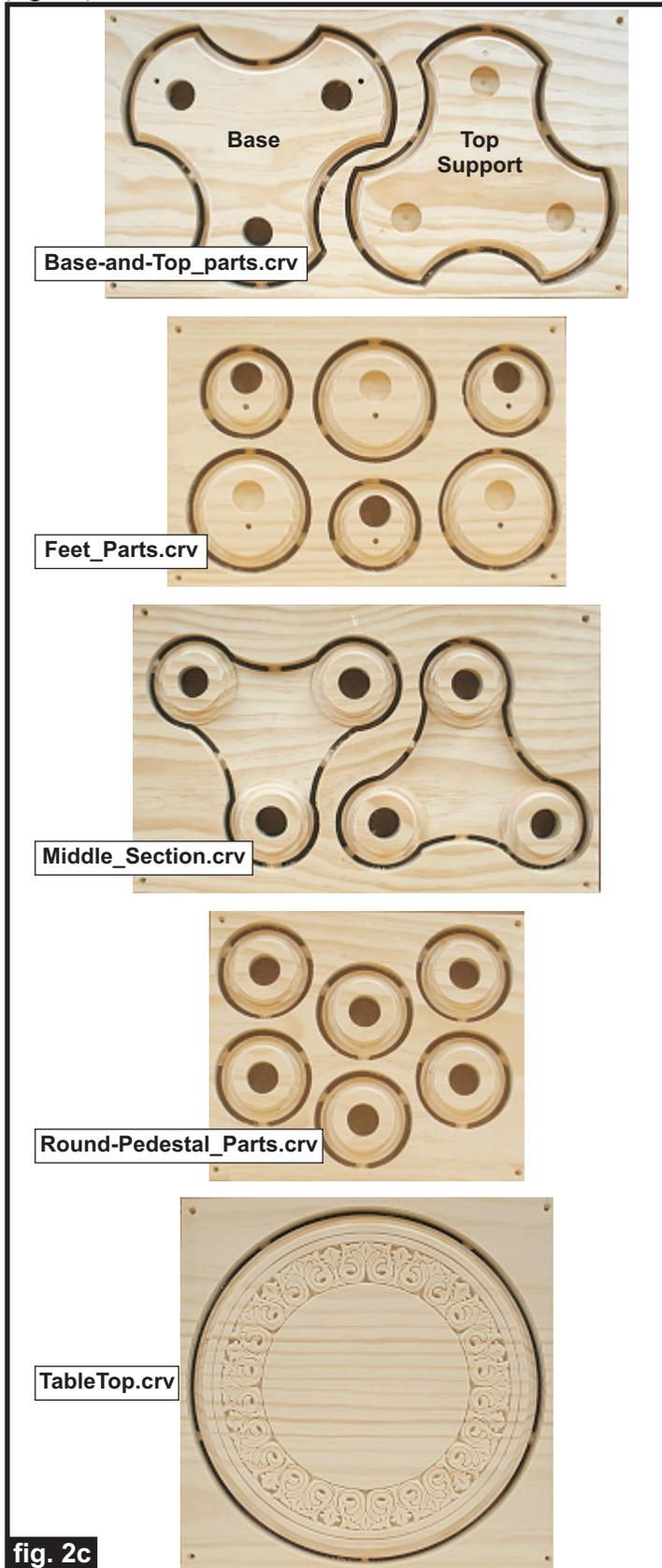
(cont.)

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(cont.)

STEP 2 - Run the Project (cont.)

Your machined material will look something like this. (fig. 2c)



STEP 3 - Release, Sand and Drill Parts

Separate the parts from the material, then sand off any tab remnants and any undesirable toolmarks. (fig. 3a)



Drill six small pilot holes through the Top Support using the shallow .25" divots as a guide. Drill countersinks on the **outer** three holes - not too deep - just enough so the screwheads will be slightly below the material surface.

(fig. 3b)



Flip the part over and drill countersinks into the flat underside at the three **inner** pilot hole locations. (fig. 3c)



(cont.)

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(cont.)

STEP 3 - Release, Sand and Drill Parts (cont.)

Similarly, drill 3 pilot holes through the center of each large foot part pocket hole. Turn the parts over and drill countersinks into the flat underside at the pilot hole locations. (fig. 3d)



fig. 3d

STEP 4 - Glue-ups and Pedestal Assembly

Glue the Middle Section parts together and clamp until dry. Use a scrap length of a 1.25" diameter wood dowel (4 or 5 inches long) to help align the parts accurately. (4a, 4b)

Notice I glued these together crossed-grained. This is intentional and strengthens the part.



fig. 4a



Scrap length of large dowel used for help in aligning parts

fig. 4b

Glue together the feet parts and the three 0.25" dia. x 2" wood dowels. Use the scrap length of the large diameter dowel to help align the parts. Clamp until dry. (fig. 4c, 4d)



fig. 4c



fig. 4d

Glue the feet assemblies to the Base (use the large dowel to help align). Weigh down on a flat, smooth surface until dry, then sand the 0.25" diameter wood dowels flush with the top surface. (fig. 4e, 4f, 4g)



fig. 4e



fig. 4f

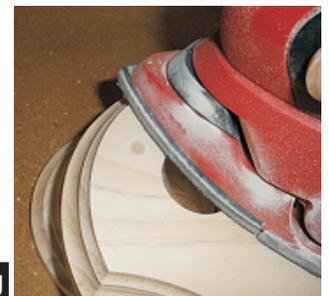


fig. 4g

Tripod Pedestal Table

(cont.)

STEP 4 - Glue-ups and Pedestal Assembly (cont.)

Glue three of the decorative round rings onto the base (use the large dowel to align). Weigh down until dry. (fig. 4h, 4i)



fig. 4h



fig. 4i

Glue the three 1.25" dia. x 29" wood dowels into the Base pockets. Place the Top Support onto the tops of the dowels to keep them vertically aligned. (DO NOT glue the Top Support onto the top of the dowels yet!) (fig. 4j, 4k)



fig. 4j



fig. 4k

Carefully flip the pedestal upside down onto a flat surface. Drill three pilot holes through the feet into the dowel ends, then drive in three drywall screws into the dowel ends. (4l, 4m)

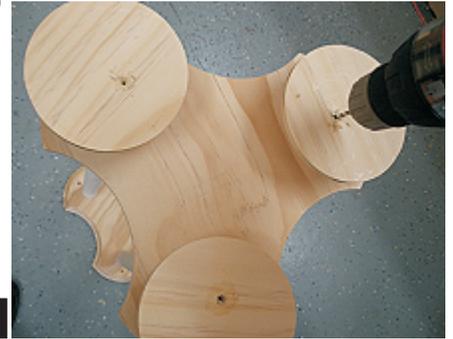


fig. 4l

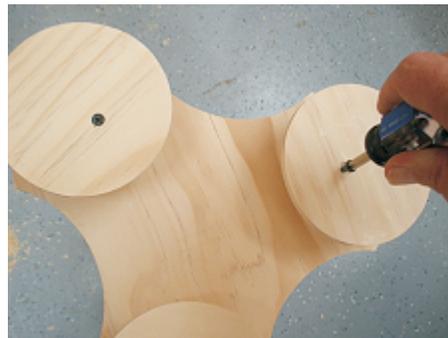


fig. 4m

Turn the pedestal upright, then use a pencil to mark each dowel post 12.125" from the top surface of the base rings.

The marks indicate where the bottom of the Middle Section will be positioned. (fig. 4n)



fig. 4n



fig. 4o

Wrap a strip of painter's tape around the posts, lining up the top edge of the tape with the pencil marks. (fig. 4o)

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(cont.)

STEP 4 - Glue-ups and Pedestal Assembly (cont.)

Remove the Top Section. Brush a little glue on the outside of the posts above the marks. (fig. 5e)



fig. 4p



Slide the Middle Section over the posts until the bottom lines up with the tape. Allow to dry. (fig. 4q)

fig. 4q

Drill 0.0625" (1/16") pilot holes for the three 3d finish nails through the inside of each of the bottom "rings" of the Middle Section and into the posts. (fig. 4r)



fig. 4r



Drive in the nails and countersink with a nail punch. Fill the holes with a dab of wood filler. (fig. 4s)

I turned the pedestal upside down to make it easier to drive the nails.

fig. 4s

STEP 5 - Final Assembly

Print and cut out three support position template patterns and tape together. (fig. 5a)



fig. 5a



Place the taped template on the underside of the Tabletop and center it. (fig. 5b)

fig. 5b

Place the Top Support (crossed-grained with the tabletop) on top of the template. Drill pilot holes through the three countersunk outer holes on the support and into the underside of the Tabletop. (Don't go too deep!) Make some pencil marks on the tabletop for positioning reference later.

Temporarily drive the three 1" #6 woodscrews through the support and into the tabletop, then remove the screws and Top Support. (fig. 5c)



fig. 5c



Slide the last three rings (wider side UP) onto the posts. (fig. 5d)

fig. 5d

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(cont.)

STEP 5 - Final Assembly (cont.)

Place the Top Support onto the posts. Drill pilot holes into the dowel ends. (fig. 5g)



fig. 5g

Remove the Top Support.



Apply glue to each dowel end, place the Top Support back onto the posts, then drive three drywall screws through the support and into the dowels. (fig. 5h, 5i)

fig. 5h

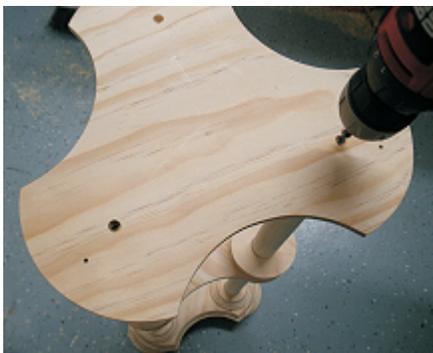


fig. 5i

Place the Tabletop upside down on a flat, smooth surface and apply glue for the Top Support. (fig. 5j)



fig. 5j

Position the pedestal assembly (upside down) onto the tabletop lining it up with your pencil marks and the pilot holes.

Tape the rings out of the way so they don't slide down the posts. (fig. 5k)



fig. 5k



Drive the three 1" #6 woodscrews through the support and into the tabletop. (fig. 5l)

fig. 5l

Apply glue around each post and lower the rings to glue them in place. (fig. 5m)



fig. 5m



This completes the assembly of your table. (fig. 5n)

fig. 5n

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(cont.)

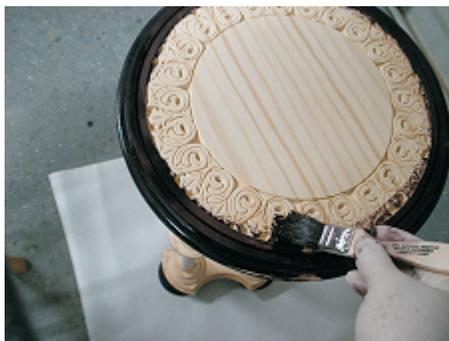
STEP 6 - Finish Application

Apply the finish of your choice. Here's what I used on my Pedestal Table sample made from Select Pine:

- Rust-Oleum Ultimate Stain - Black Cherry
- several coats Bulls Eye 100% wax-free spray shellac
- several coats Krylon clear Acrylic spray



Staining the underside first



Staining all the remaining surfaces



Staining completed. Ready for clearcoats.



Clearcoats Applied

Applying Gold Rub-n-Buff with fingertip to accent edges



IN CONCLUSION

Finally, apply three discs of self-stick sheet cork to the bottom of each foot to complete your project. I hope you enjoyed making your own Tripod Pedestal Table.

Very special thanks to the Vectric and ShopBot companies for making this project possible.

Happy Carving!

Michael

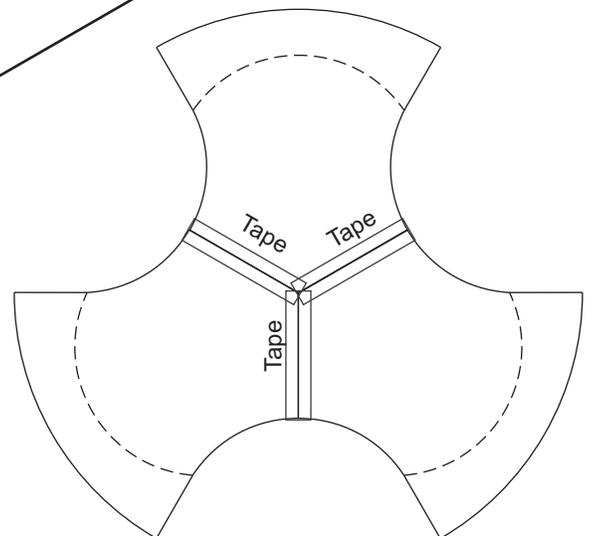
Top Support Position Template

Print and Cut Out
3 of These

Cut Along SOLID Lines Only
(don't cut the dashed line)



Tape the 3 cutouts together to
create a guide for the underside
Table Support location.



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



Items Purchased at Lowes™

- Rust-Oleum Ultimate Stain - Black Cherry
- Zinsser Bulls Eye 100% wax-free Clear Spray Shellac
- Disposable Brushes and Paint Rags
- 1.25" coarse-thread drywall screws
- 3d finish nails
- 1.25" dia. x 29" wood dowels
- 0.25" dia. x 2" wood dowels
- 1" #6 wood Screws



Items Purchased at Michael's Arts & Crafts™

- Gold Leaf Rub-n-Buff



Krylon Clear Gloss Acrylic
from WalMart™

Additional Resources

RESOURCES...

There are numerous resources for Vectric software owners to make their experience with their products more enjoyable. The Vectric website includes videos and tutorials to provide a good overview of the software products and how to use them. (http://www.vectric.com/WebSite/Vectric/support/support_vew_tutorials.htm)

As well as the resources available from the Tutorial page, please also visit the 'FAQ' and 'How To' pages for more support information...

'How To' webpage

http://www.vectric.com/WebSite/Vectric/support/support_how_to.htm

'FAQ' webpage

http://www.vectric.com/WebSite/Vectric/support/support_faq.htm

Vectric User Forum

Every Vectric software owner should join the Vectric User Forum (<http://www.vectric.com/forum/>) where fellow users share their experience and knowledge 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. There are Gallery sections as well, where you can post and view photos of projects created with Vectric software.

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