

TURNING A VIKING GNOME

Creating Characters with Eric Lofstrom

Turning a viking gnome is a great project for planning and refining your skills in wood turning. For me, the viking has been an opportunity to play with very simplistic composition to create a character.

Using basic turning tools, a small, character-filled viking can easily be created from a handful of scrap wood. This project provides an opportunity to plan out a multi-piece composition; body, nose, hand/arm, shield, axe or hammer, helmet, horns and beard. The combination of form, proportion, texture, color and posing of these components work together to create a truly unique character. Once you learn how to turn a viking gnome, you'll be able to apply these basics to create characters of your own!



Photo 1 Viking Gnome with battle axe.

Like many projects, creating a viking gnome requires a series of steps. Consider the equipment, materials, progression of turning, components and finishing to ensure success with this simple and exciting project.

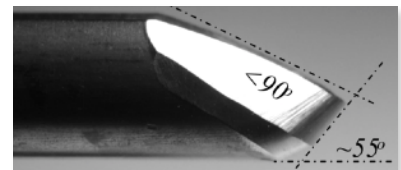
What equipment, materials & steps are needed to create a Viking Gnome?

Equipment:

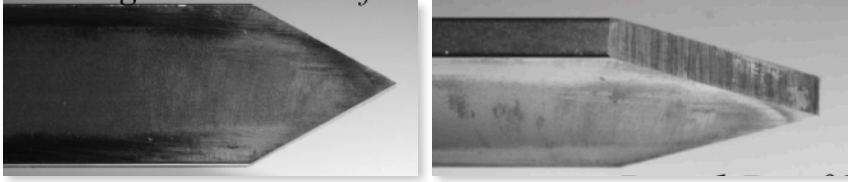


1. Radius Skew- A radius edge skew of 1" X 3/8" shank is extremely versatile in roughing the blank and refining the exterior form. I use a peeling cut to rough in the form, then a rolling cut to refine the curve with an ultra clean cut. Smaller diameter bowls are easier to turn than those with a larger diameter. As an alternative, a spindle gouge or bowl gouge may be used.

2. Fingernail Grind Bowl or Spindle Gouge- I prefer a 1/2" shank diameter gouge for turning this spindle project. These gouges can be used to turn spindle profiles and across the end grain.



3. Parting Tool- I prefer a 1/8" thick by >3/4" tall parting tool, tuned for the cleanest cut. I prefer to sharpen the parting tool by laying the tool shank flat on its side on the grinder platform, then polishing with a diamond hone. Both the leading edge (tip) and sides of the bevel can be used to slice wood cleanly.



4. Lathe- An electronic variable speed (EVS) lathe allows for adjusting the speed during the shaping process. EVS also opens up a wide range of surface speeds for possible embellishments on the helmet and shield.
5. Multi-Spur Drive Center and Four-Jaw Chuck w/ #2 Jaws- The majority of turning during this project can be accomplished using a small, multi-spur drive center such as Sorby's 1/2" Steb-Center. A chuck of approx. 3" diameter works great for turning the helmet and shield. If using a chuck, ensure your spigot is turned to match the diameter, profile and depth to maximize your chuck's mechanical advantage.
6. Drill Chuck (#2MT) + 1/4" Brad-Point Drill Bit- All joints between parts will use 1/4" dia. Wooden dowels. The best drill bit for accurately drilling a clean hole into wood is a brad-point bit. For this project I prefer a bit with hex shank or ground flats on the tang. If using a smaller scale drill chuck (one with maximum capacity of 5/16"), then it can also be used to gently hold onto small parts using the 1/4" wooden joint dowel without significantly distorting or crushing the dowel's wood fibers.
7. Light- A single-source light will allow visual inspection and feedback while turning. A finely-tuned touch will get you started when striving for a pleasing curve, but a light with a single point of origin will cast a single, crisp shadow line to visually evaluate forms.
8. Sharpening Hone- **TREND Carvers Stone-600/1000grit** (www.trend-usa.com/u-dws-cs-ff-carvers-stone-double-sided-fine-fine) or **DMT Dia-Sharp Credit Card-XF** (www.dmtsharp.com/sharpeners/pocket-sharpeners/dia-sharpr-models/3-in-dia-sharp-sharpener-extra-fine-credit-card-sized.html)

Materials:

Wood

1. Body- 1 Spindle Blank of 3"x3" x 3.5"length, DRY & DEFECT-FREE (Soft Maple, Poplar, Cherry or equivalent)
2. Nose + Arm + Horns- 1 Spindle Blank of 1"x1" x 7"length (Same wood as Body)
3. Helmet + Shield (+ Jam Chuck)- 1 Spindle Blank of 2.5"x2.5" x 3"length, DRY & DEFECT-FREE (Soft Maple, Poplar, Cherry or equivalent)

4. Hammer / Axe Head- 1 of 1"x1" x 1.75"length Blank (Same wood as Helmet / Shield)
5. Hammer / Axe Handle- 1 of 0.25"diameter x 4"length (Same wood as Helmet / Shield)
6. Dowel Joints / Fittings- 4 of 0.25"diameter x 1"length wooden dowels

Shop Supplies

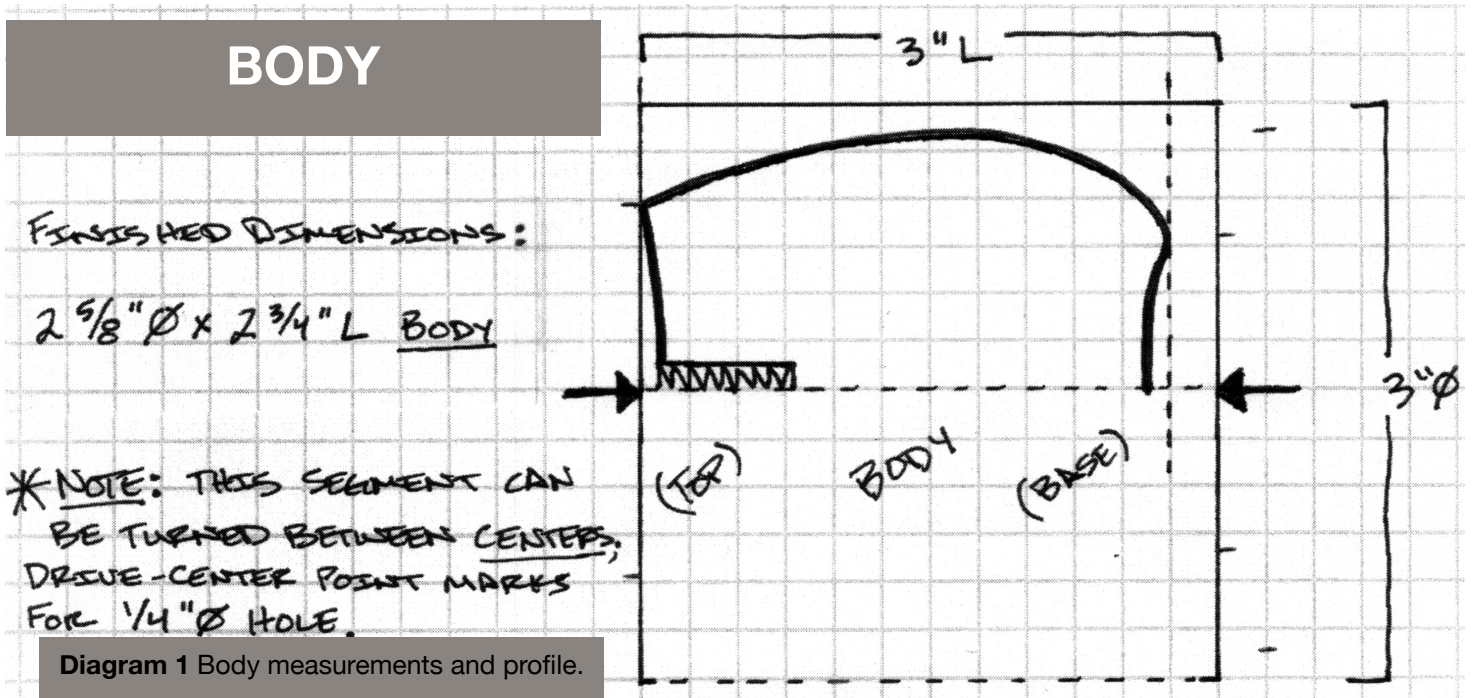
1. PPE- Face shield, eye & ear protection, dust mask, nitrile gloves, etc.
2. Pencil w/ Eraser- Ticonderoga Erasable Checking Pencil (Red) is my preferred pencil for marking. This pencil comes in both red & blue, allowing you to choose a color appropriate for the surface you are marking.
3. Sandpaper- Assorted aluminum oxide in graduating grits (180, 220, 320, 400)
4. Rotary Carving Tool- A Dremel, Foreman, or Micro-motor with an assortment of carving bits is a great place to start. A basic assortment of bits (sphere, cylinder, dovetail, etc.) and experimentation are all that is necessary for creating a unique and interesting texture pattern on the helmet/ shield and for sculpting a set of horns for the helmet.
5. Colorants- Black India Ink (Speedball SuperBlack India Ink 16oz.) & Patina Wax (AMACO "Rub n Buff"- Pewter, 15ml/ea.)
6. Finish- Deft Spray Lacquer (Matte sheen) is my preferred, quick and easy finish.
7. Scissors- Must be CLEAN and SHARP to cleanly cut the beard material!
8. Beard- Synthetic fur in 3"wide x 4" length (per viking) can be purchased in 4" x 60"length ("Shaggy Plush Faux Fur Fabric Precut Strips- Grey Frost", 4x60in.).
9. Wood Adhesive- Starbond Thick/ Gap-Filling + Accelerant OR Titebond yellow wood glue.
10. Fabric Adhesive- E6000 Craft/Fabric Adhesive (4 fl.oz. Shelf Bottle)
11. Thread (optional)- Use Uxcell 0.6mm Polyester Sewing Thread (Black) for a more subtle accent of the transition from horn to helmet, OR hemp cording for a more rustic look.
12. Double-Sided Tape- Can be used for a more secure hold on parts when chucking them in the jam chuck (XFasten "Double Sided Woodworking Tape" 1"x36yds).

Progression/ Basic Steps:

As the Viking Gnome project is made from a composition of multiple parts, you may develop a personal progression which differs from the one I use. My suggestion is to use the following progression to make multiple vikings, potentially with different proportions for each one, before you change the order of parts turned.

NOTE: There are a total of 9 individual components to shape and combine to create the Viking Gnome character, reference diagrams with measurements and profiles for each component are provided for each step. The last two pages are a copy of reference diagrams combined.

CAUTION: **DO NOT GLUE** the parts together **UNTIL ALL PARTS ARE DRY-FITTED AND YOU ARE HAPPY WITH THE COMPOSITION!**



1. Turn the BODY between centers and create an egg-like shape with flats at both ends. Leave a small amount of waste on the base (foot)/ tailstock side of the blank. Once the shape is created, sand to desired finish. Then, use the tailstock and drive center markings to align the blank for drilling the $\frac{1}{4}''$ dia. X $\frac{1}{2}''$ deep dowel hole in the top of the blank. With a drill chuck mounted in the headstock and a $\frac{1}{4}''$ brad point drill bit, align the base of the body with the tailstock and advance the quill to drill through the top of the body. Save the extra nib at the base of the body until all other parts are made and you are pleased with the proportions, *just-in-case* you need to remount the body between centers to make needed adjustments.

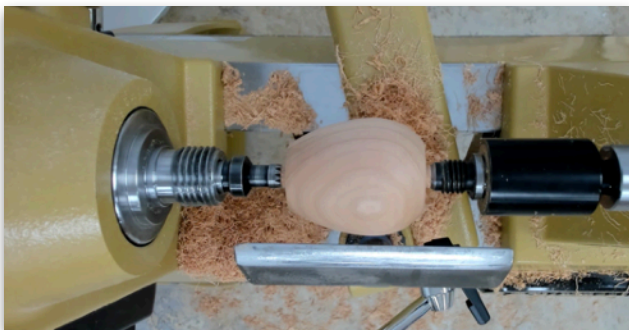


Photo 2 Turning the body between centers.

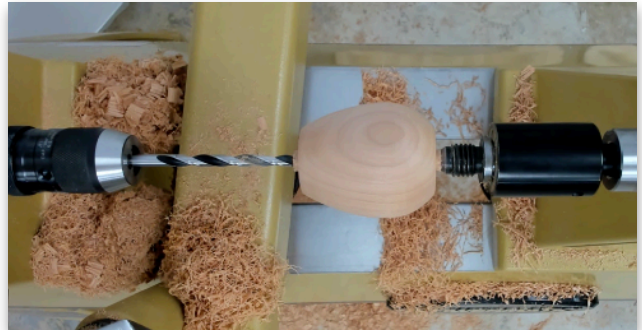


Photo 3 Drilling the body, using the lathe.

- Mount the second blank and turn a tenon on one end, while between centers. Use this blank to turn the helmet, shield and jam chuck. Mount in a 4-jaw chuck and turn the next three parts.

HELMET, SHIELD, JAM

FINISHED DIMENSIONS:

$2\frac{5}{16}"\varnothing \times 1\frac{5}{16}"\text{L}$ HELMET

$2\frac{5}{16}"\varnothing \times \frac{1}{2}"\text{L}$ SHIELD

$2\frac{5}{16}"\varnothing \times \sim\frac{5}{8}"\text{L}$ JAM

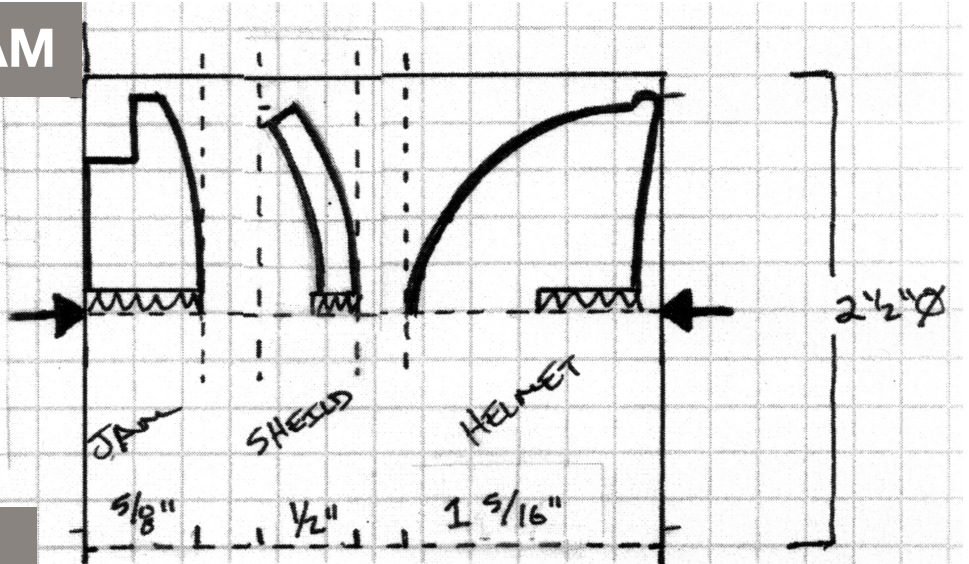


Diagram 2 Helmet, shield, jam chuck.

- Turn the HELMET by cutting a gentle concave in the end of the blank. Drill a $\frac{1}{4}"$ dia. X $\frac{1}{2}"$ deep hole in the underside of the helmet using a drill chuck mounted in the tailstock, then complete the profile, sand and glue a 1" long joint dowel into the base of the helmet. The helmet needs to be about $\frac{1}{4}"$ dia. larger than the top of the body, to conceal the top edge of the beard when fastening it to the front of the body. Test fit with the body to ensure correct proportions, then remove the body from the helmet and part the helmet from the remaining blank.
- Turn the SHIELD by turning a convex surface across the end grain. This will be the outer surface of the shield. Once an appealing profile has been created, drill the center using $\frac{1}{4}"$ drill mounted in the tailstock. Drill approx. $\frac{1}{2}"$ deep so, the hole is drilled completely through the shield. Begin parting the back of the shield (as cleanly cut as possible), undercut the surface (see diagram) so it curves slightly around the convex exterior of the viking body when mounted. Part from the chucked blank and clean up any splinters from around the $\frac{1}{4}"$ hole using a sharp knife or countersink. **DO NOT GLUE THE JOINT DOWEL YET.**



Photo 5 Drilling the shield on the lathe.

- Create a JAM CHUCK with the remaining blank. Once the shield is completely parted from the blank, turn a convex surface to closely match the contour of the shield and drill a $\frac{1}{4}"$ dia. hole completely through the remaining thickness of the blank to aid in removal of a jam-mounted piece. Glue a 1" long joint dowel into the center of the shield, ensuring it protrudes slightly out of the convex side of the shield. You may want use the jam chuck to help align the dowel. Once

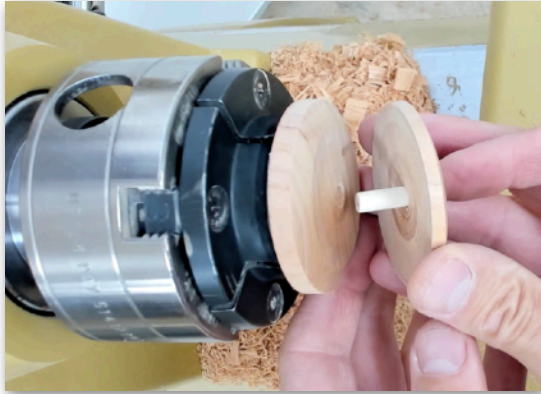


Photo 5 Jam chuck and shield.

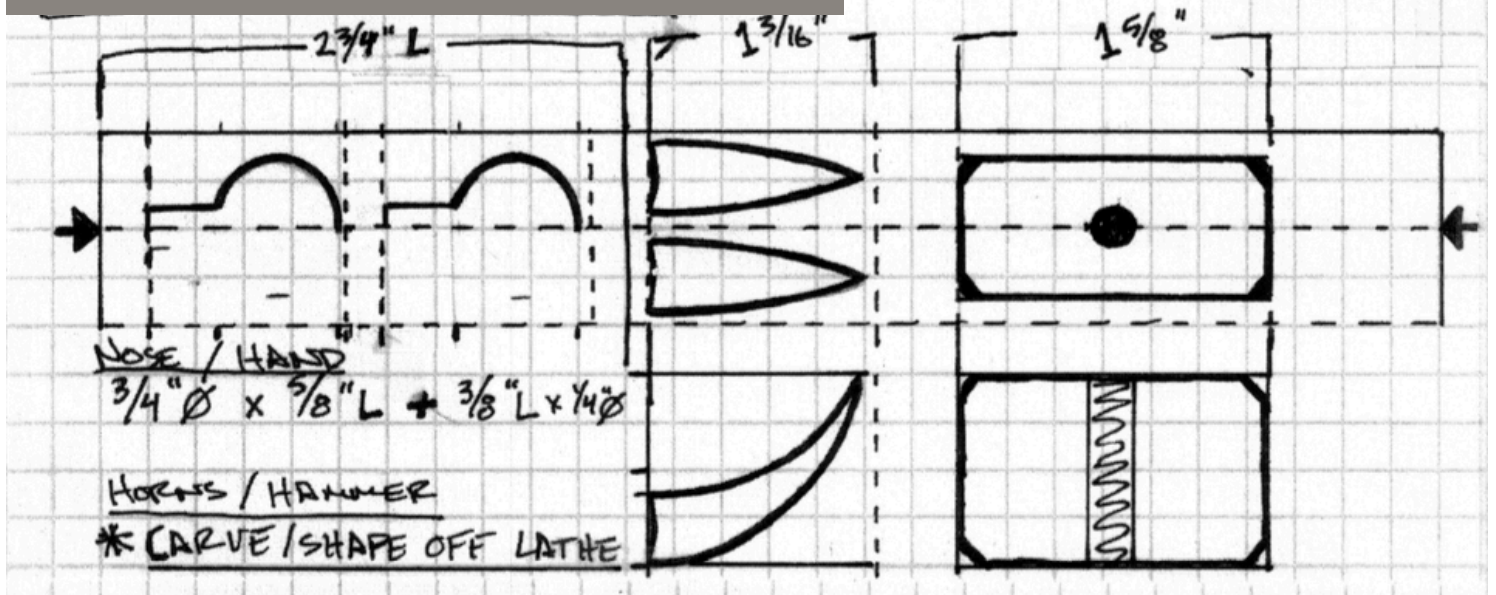
the glue is dry, use the jam chuck to finish turn the center dowel to blend with the front of the shield.

6. The jam chuck may also be used to mount the helmet to gently turn away the small nib left from parting it off the blank. Before removing the jam chuck from the 4-jaw chuck, clearly mark between the #4 and #1 jaws to ensure quick and accurate future realignment.

7. Turn the NOSE and ARM by mounting the third blank between centers. Approximately half of the blank (closest to the tailstock) will be used to create the horns and hammer OR axe head; THIS SECTION MUST EITHER REMAIN SQUARE (CROSS SECTION) OR IT MUST BE REMOVED PRIOR TO TURNING THE NOSE AND ARM. There are advantages to BOTH methods. The square section WILL BE CUT INTO SMALLER BLANKS AND SCULPTED INTO HORNS AND HAMMER OR AXE HEAD.

NOSE, HAND, HORNS , HAMMER

Diagram 3 Nose, hand, horns and hammer.



- Before turning the nose and arm profiles, decide whether to include the 1/4" joint dowel in the turning or to drill and glue it in after turning is complete. Turn the appropriate profiles, then part / cut with saw to separate from the blank. You may either turn a short section of 1/4" dia. dowel as part of each piece, OR you may drill once separated from the blank. Either method works great. If turning the 1/4" dowel "attached", use a 1/4" open-end wrench or calipers to quickly size the diameter. If drilling, use the open morse taper recess in the tailstock quill to help align and advance the spherical pieces into a drill bit-chuck combination, spinning in the headstock.

Once the nose and arm are turned and 1/4" dowel/tenon is present, it can be mounted for trimming the nib or gently refining the form using either the jam or drill chuck.



Photo 7 Mounting the nose in a keyless chuck.



Photo 8 Removing the nib from parting off.

9. Design and shape the HORNS and HAMMER/AXE HEAD using the remaining wood from the blank used to turn the nose and arm. Layout a basic profile for the horn side-profile then carefully cut to shape using a coping saw or bandsaw. Next, use a method of your choosing to safely hold each piece while you continue to sculpt to finished form. I prefer to either drill a hole in each horn and glue a dowel or heavy gauge wire, then grip the dowel or wire using either my drill chuck or locking pliers such as small Vice-Grips.
10. Layout and drill all 1/4" joinery holes and **DRY-FIT ALL PIECES.** Remember to also mark and drill the hand to fit the handle of the hammer/axe.



Photo 9 Drilling nose hole on the lathe.



Photo 10 Drilling joinery holes completed. Dry fit.

11. The next step is to embellish the helmet and shield with texture and color. I prefer to layout a basic pattern by hand and to power carve a design and then to cover the entire surface with light texture to emulate a hammered surface.

Note: Most surface embellishments are applied after the helmet and shield are complete. For laying out reference and index lines, each part may be remounted onto the lathe using the jam chuck, tool rest and any indexing system on the lathe. While hand-created patterns using power carving techniques allow for a more organic appearance, on-the-lathe texturing tools (Sorby Texturing/

Spiraling Tool, Wagner Texturing Tool, Henry Taylor Elf Decorating Tool, etc.) may also be used to create quickly created spiral or mechanical looking patterns. Create your chosen pattern, then highlight the textures and create the illusion of metal by dying with black India ink to bring out the shadows, then apply patination wax to shine like metal.



Photo 11 Texture embellishments complete, ready for color.

12. Once the helmet and shield embellishments are dry, I use aerosol lacquer (matte) to lightly coat the surface of all components. This layer will provide a thin layer of protection against handling, while maintaining the look of raw wood.

13. The last step before gluing all the pieces together is to measure, cut and adhere the beard. The reference diagram offers the dimensions of webbing (fabric backing) I use for this size and shape gnome. The fur/hair will extend past the specified dimensions. ANY change to the form or proportions may alter the fit of the beard. I suggest creating a basic paper template and test the fit BEFORE cutting your beard material. Make sure to allow for the 1/4" joint dowel for the nose. Once satisfied with the shape and fit, sparingly apply fabric adhesive about 1/8" in from the border of the beard and start at the top. The beard may protrude above the forehead line of the viking's body... if so, allow adhesive to dry and trim as needed prior to gluing the helmet in place.



Photo 12 Beard positioned prior to gluing parts in place, a final test fit.

14. Once the beard adhesive is dry, glue all other parts.

BEARD

FINISH DIMENSIONS:

* SHAPE WILL VARY,
DEPENDING ON BODY
PROFILE & NOSE PLACEMENT.

1. ENSURE PROPER FIT BEFORE
GLUING, THEN ATTACH TO
BARE BODY SEGMENT.

2. ONCE ADHESIVE IS SET, ATTACH NOSE.

3. ATTACH FINISHED HELMET & SHIELD.

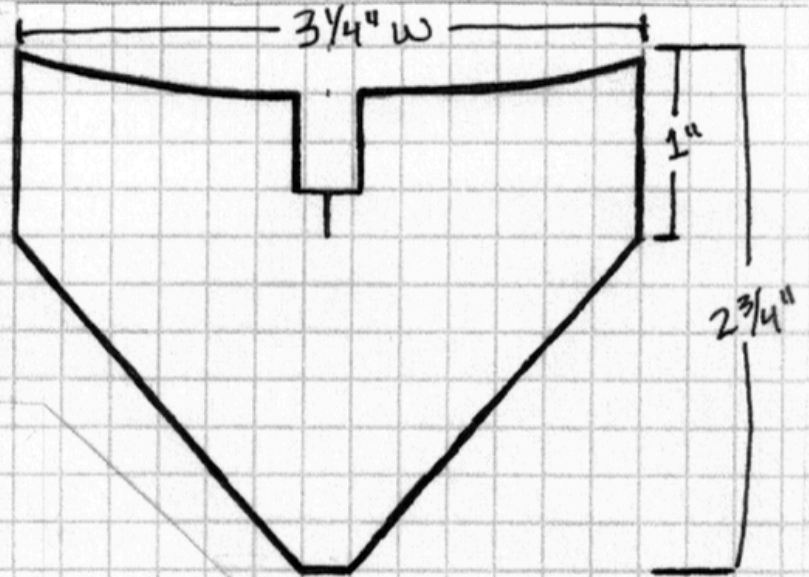


Diagram 4 Beard measurements and profile.

What is the intended purpose of this Gnome Viking?

Considering the purpose or function of a piece helps to focus your creative intention and make the entire process more efficient. This may take into account many factors including the audience and how the audience will interact with it. Sometimes the function of a piece is more about provoking thought or emotion than solving a utilitarian need. For me, the embellishment of each Viking in the Character Series is what shifts the *function* to eliciting an emotional response. These pieces have the potential to be quite whimsical and can take on very unique character traits given enough intentional exploration in the creative process.

How do design elements and finish support the intended function of this character?

The form of your character is both the silhouette and composition of turned elements, which play off each other to emphasize contrast or cohesiveness. The proportions of height-to-diameter, visual weight line or waist, and elements which come together to create a specific character are ALL part of form. I encourage turners to play with all form components; creating two-dimensional drawings to explore basic shapes and then into mock-up studies to see how the combination of different elements helps to create the character and story that accompanies them.

Every woodturner seems to have their favorite finishes. For me, the Gnome Vikings are best finished with a light spray coating of matte lacquer, prior to final gluing and attaching the beard. I prefer to

use Deft aerosol lacquer in a matte or satin sheen, as it readily available at many hardware retail locations.



Photo 13 Viking painters, equipped with paint rollers. Textures created w/ Sorby Spiraling/Texture System.

Closing Thoughts

The ultimate goal in this project is to find a way for your creative voice to shine through your craft. The Viking Gnome project has been a great breakthrough for my own creative process. I have only begun to explore the many possibilities of characters. My hope is that you make several Viking Gnomes, playing with the process, proportions and elements of character to find your own, unique and playful expression along the way! As always, reach out to share with me what you discover and how your characters evolve... it is a true honor to be part of your creative woodturning journey!

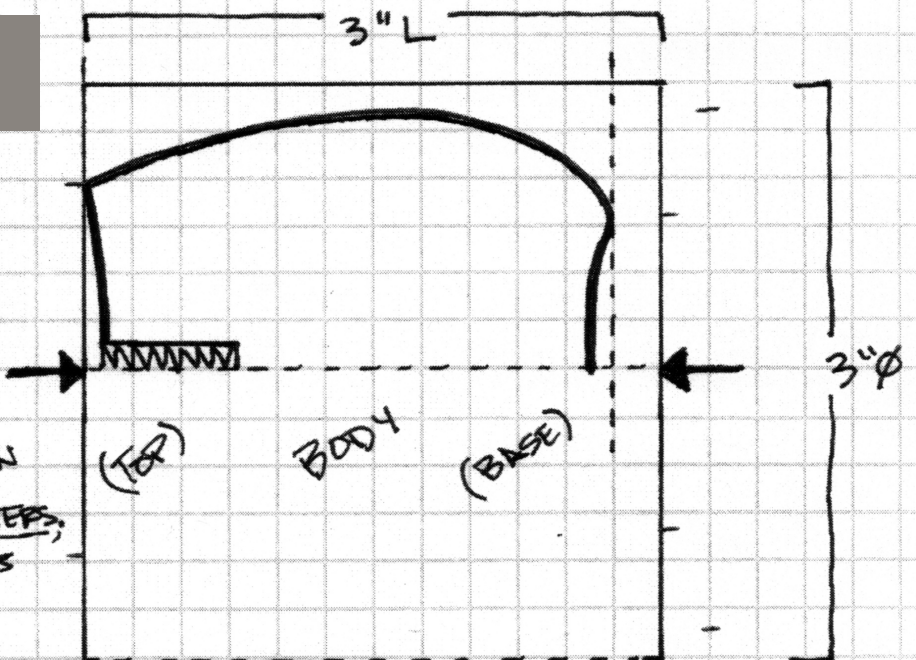
Note: The following 2 pages are schematic, scaled diagrams and notes for each component, presented in the order I use to turn each. Enjoy!

BODY

FINISHED DIMENSIONS:

$2\frac{5}{8}" \text{ } \varnothing \times 2\frac{3}{4}" \text{ L BODY}$

*NOTE: THIS SEGMENT CAN BE TURNED BETWEEN CENTERS, DRIVE-CENTER POINT MARKS FOR $\frac{1}{4}" \text{ } \varnothing$ HOLE.



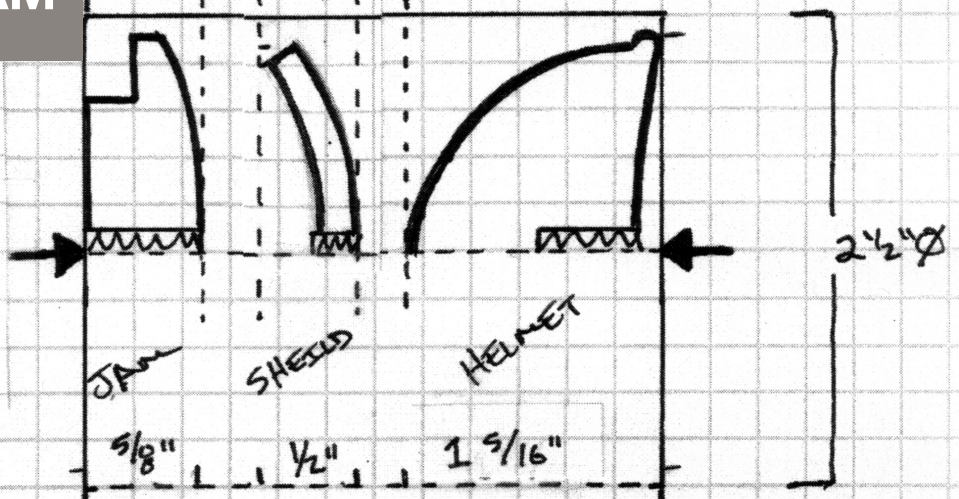
HELMET, SHIELD, JAW

FINISHED DIMENSIONS:

$2\frac{5}{16}" \text{ } \varnothing \times 1\frac{5}{16}" \text{ L HELMET}$

$2\frac{5}{16}" \text{ } \varnothing \times \frac{1}{2}" \text{ L SHIELD}$

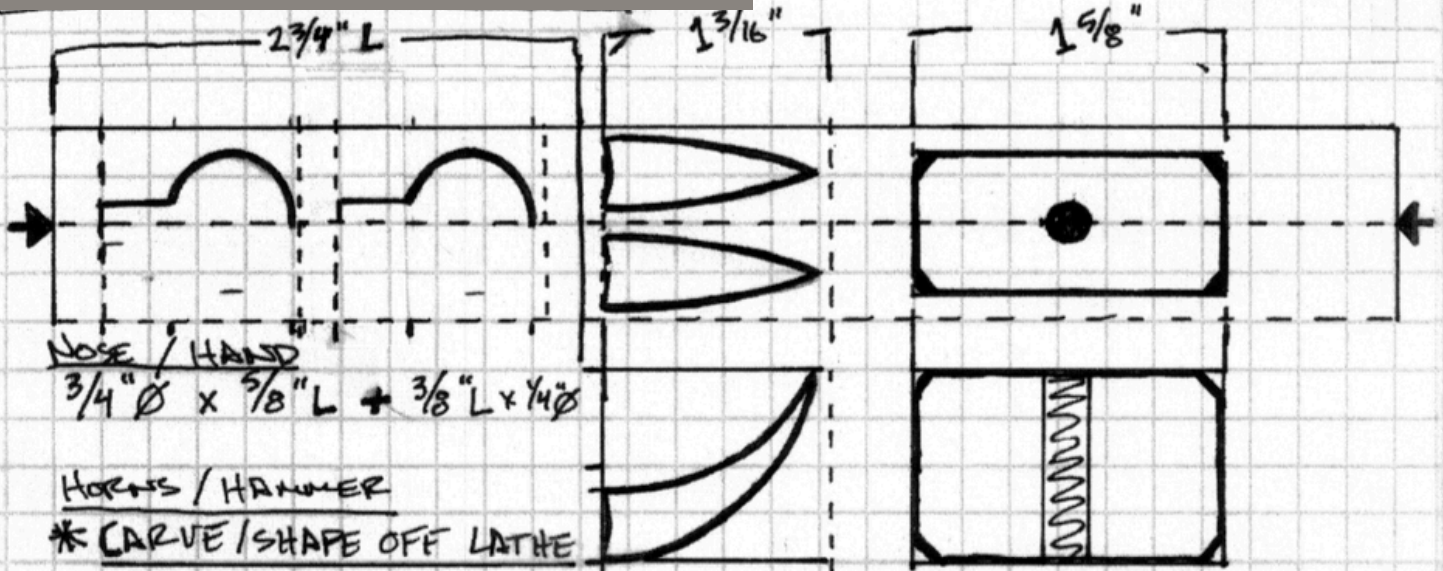
$2\frac{5}{16}" \text{ } \varnothing \times 2\frac{5}{8}" \text{ L JAW}$



*NOTE: THESE SEGMENTS BEGIN BETWEEN CENTERS, THEN TURN A TENON TO HOLD IN 4-JAW CHUCK. COMPLETE ALL PARTS (HELMET, SHIELD, JAW CHUCK & DRILLING $\frac{1}{4}" \text{ } \varnothing$ HOLES) WHILE HELD IN CHUCK.

- DRILL $\frac{1}{4}" \text{ } \varnothing$ HOLE COMPLETELY THROUGH SHIELD PRIOR TO PARTING-OFF.
- DRILL $\frac{1}{4}" \text{ } \varnothing$ HOLE COMPLETELY THROUGH JAW CHUCK. JAW CHUCK MAY BE REMOVED FROM CHUCK (AFTER MARKING BETWEEN #1 & #4 JAWS).
- USE THE JAW CHUCK TO MOUNT HELMET / SHIELD FOR FINISHING. → TAPE MAY BE USED TO SECURE PEECES TO JAW CHUCK, IF NEEDED.

NOSE, HAND, HORNS, HAMMER

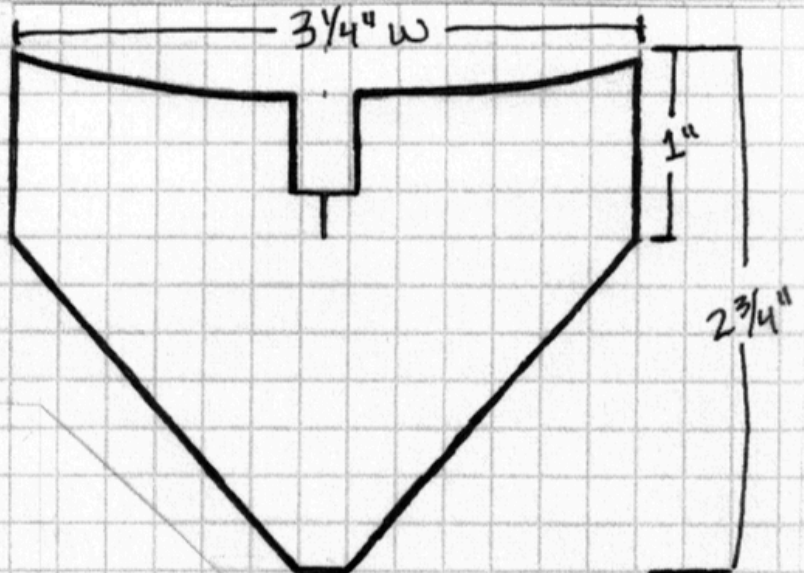


- * NOTE: TURN NOSE & HAND ON THE LATHE (W/ OPTIONAL $1/4" \text{ } \varnothing \times 3/8"$ TENSION FOR ATTACHING TO BODY). ALTERNATIVE; MOUNT TO BODY USING $1/4" \text{ } \varnothing$ DOWELS, AFTER DRILLING $1/4" \text{ } \varnothing$ HOLE (POST TURNING).
- SCULPT THE HORNS & HAMMER FROM $1" \times 1" \times 7"$ L BLANK PRIOR TO TURNING, OR LEAVE $1" \times 1"$ & SCULPT ONCE NOSE & HAND ARE TURNED.

BEARD

FINISH DIMENSIONS:

- * SHAPE WILL VARY, DEPENDING ON BODY PROFILE & NOSE PLACEMENT.



1. ENSURE PROPER FIT BEFORE GLUING, THEN ATTACH TO BARE BODY SEGMENT.
2. ONCE ADHESIVE IS SET, ATTACH NOSE.
3. ATTACH FINISHED HELMET & SHIELD.