



TIMBERBITS

HELPING YOU CREATE WITH WOOD

Custom Knife Kit

Product #148357, 148358, 148362, 148359, 148360, 148361

Warning

The blade comes pre-sharpened and you must cover the blade to protect yourself from being cut while working on the handles. Tape the blade with several layers of heavy masking tape from the tip all along the cutting edge.

Knife Handles

The knife handles or "scales" can be made from any quality hardwood. Hard, tight grained woods are easier to polish and resist damage better than soft woods. You will need two pieces $\frac{3}{8}$ " thick, at least $1\frac{1}{2}$ " wide and minimum length determined from the chart below:

	Use Countersink
(A) Skinner Knife: 4" (148357)	B 148554
(B) Drop Point Hunter: $4\frac{3}{8}$ " (148358)	B 148554
(C) Spear Point: $4\frac{3}{8}$ " (148362)	A 148553
(D) Tanto Style: $5\frac{5}{8}$ " (148359)	A & B 148553 & 148554
(E) Small Laminated: 4" (148361)	A 148553
(F) Large Laminated: $4\frac{1}{2}$ " (148360)	A 148553

Determine the side of each scale that will face out and be seen. Mark the opposite side which will face the tang (face in) portion of the knife blade. Lay the tang of the blade on one of the handle scales, on the side marked in the previous step, and trace around the tang. Trace the other scale in the same manner. **Note:** The scales for Skinner Knife Kit do not completely cover the tang of the blade. Refer to drawing #1 at the end of this instruction to determine the correct shape for the scales.

Using a scroll saw, band saw or coping saw, cut the tang's outline from both scale pieces. Cut to the **outside** of the traced lines. Using 120 grit sandpaper sand the sides of the scales which will contact the tang.

The outside edges of the scales which will face the blade tip must be shaped, sanded and polished at this time. After the scales are glued to the knife tang you will not be able to sand these areas without marring the tang and blade. Shape these edges to suit your profile, sand from 120 through 400 grit, and polish using a buffing wheel and red rouge polishing compound. Only this small area on both scales needs to be shaped and polished at this time.

Place one of the scales on the tang **exactly** where you want it located and clamp it securely. Locate your clamp so that you can drill the holes for the 5mm rivet bodies using the holes in the tang as a template.

Note: The Tanto Style Knife blade comes with two small rivets located close the front of the scales. Our epoxy mounting system does not require the installation of these rivets.

Note: On some blades there are extra holes which will not be used, be sure you **drill only the holes which will be receiving rivets.**

Also, some blades have a hole at the end of the tang for attaching a lanyard. If you wish to install a lanyard on your knife use the appropriate size bit and drill this hole also. After drilling the holes in this scale, unclamp it from the tang. Align the drilled scale exactly to the other scale and using the drilled scale as a template drill the 5mm holes in the second scale.



If you do not want the rivet heads to protrude above the surface of your finished knife handle the 5mm holes drilled in the previous step must be countersunk on the outside (shaped and sanded side) of the scales. For knife kits with black rivets the countersink (B) is $\frac{5}{16}$ " in diameter (148554), for kits with natural metal rivets countersink (A) is $\frac{17}{64}$ " (148553). The countersinks can be drilled with an appropriately sized brad point bit but it is extremely difficult to center the countersink hole exactly over the previously drilled rivet holes. We recommend using the correct Knife Rivet Countersink Bit available separately which will perfectly align the countersink hole and rivet body hole. To determine the depth of the countersink place your knife scales in place on the blade and measure the total thickness of the two scales and blade. Follow the directions below for your rivet type to determine the countersink depth.

Knives with natural metal colored rivets:

Subtract $\frac{5}{8}$ " from the total thickness determined in the last step above and divide this number by two. This is the **maximum depth** of your countersink hole to allow the rivet to tighten. Mark your bit or Knife Rivet Countersink with a marker at this depth and countersink all the 5mm diameter rivet holes drilled previously. **Proceed slowly!** If the countersink holes are drilled too deep the rivets will not tighten.

Knives with black colored rivets:

Subtract $\frac{3}{8}$ " from the total thickness determined in the last step above and divide this number by two. This is the maximum depth of your countersink hole to allow the rivet to tighten. Mark your bit or Knife Rivet Countersink with a marker at this depth and countersink all the 5mm diameter rivet holes drilled previously. **Proceed slowly!** If the countersink holes are drilled too deep it will prevent the rivets from tightening.



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Assembly

Dry fit both scales on the knife tang and push the rivets through the holes making sure everything fits and the rivets screw together and hold the scales firmly.

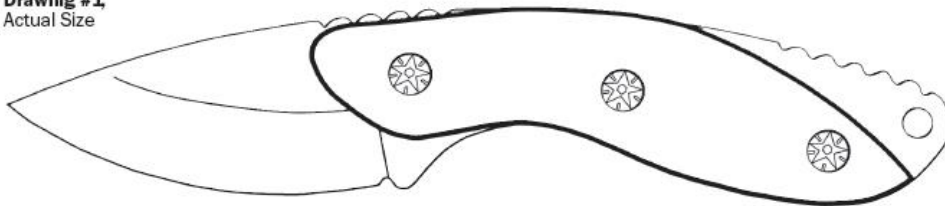
Clean the tang and the tang side of the scales with acetone. Mix enough epoxy to evenly coat both sides of the tang. Position the scales on the tang of the blade aligned with the holes in the scales. Install the rivets and clamp the scales to the tang (do not over clamp) and clean off any glue squeeze out using a rag and acetone. Allow the glue to dry overnight.

Shaping the Handles

After the epoxy has thoroughly dried, remove the clamps and begin contouring and shaping the handle. Half round and flat rasps and files or sanding drums can be used to rough in the handle shape. Final shaping and sanding should be done by hand and with sandpaper wrapped around an appropriate diameter dowel. Do not remove too much material from the thickness, concentrate on contouring the edges and finger groove. How the handle fits and feels in your hand is the best test of your progress.

Finish sanding starting at 220 grit and progressing through the grits to 400. Polish the handle with a buffing wheel and red rouge polishing compound.

Drawing #1,
Actual Size



Finished knife scale
styles & wood samples
shown below

