

Small Folding Knife Hardware Kit Instructions

58189

⚠ DANGER Danger indicates a hazardous situation that, if not avoided, will result in death or serious injury.

⚠ WARNING Warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION Caution indicates a hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

NOTICE Notice indicates important or helpful information and/or user tips.

⚠ WARNING

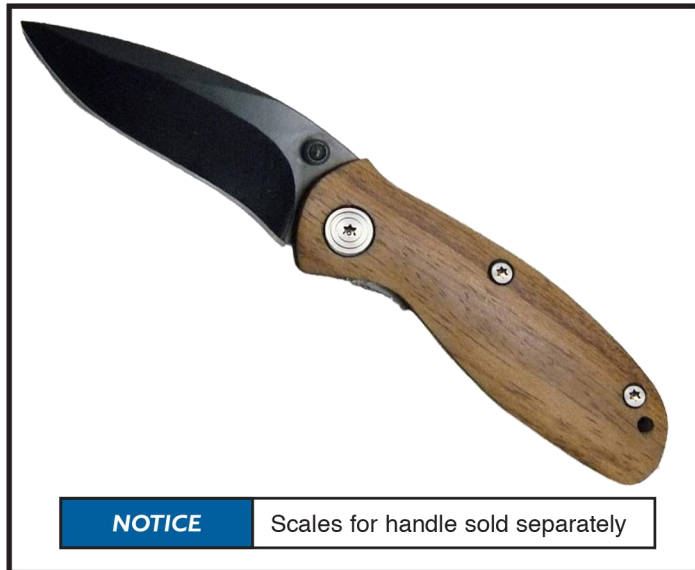
- > Please read these instructions completely before beginning.
- > Be aware that the blade comes sharpened. For your safety, cover the edge with several layers of painter's tape before you begin working on your custom knife kit. Remove the tape after assembly is complete; if necessary, remove any adhesive residue with hot, soapy water or acetone.

Select, label and cut the "scales" for the handle

1. The pieces for the handle are called "scales" and can be cut from domestic or exotic hardwoods, acrylic, bone, antler or other suitable material. (They are not included with the kit.) Scales should be at least 3" long by 1" wide and from 3/16" to 1/4" thick.
2. Identify the Left and Right Scales and determine the inside and outside faces. Label accordingly. (As used here, "right" and "left" refer to the sides of the knife handle as oriented when the knife is held in the hand.)
3. Use the Left Liner (1) to trace the outline of the knife body on the outside faces of both Left and Right Scales. Be sure to trace mirror images and preserve the grain orientation.
4. Using a coping saw, scroll saw or band saw, cut the scales slightly oversized, at least 1/16" outside the trace line.

Glue the scales to the liners

1. Apply CA glue or epoxy to the outside face of the Right Liner (2), taking care not to get any glue on the blade-lock mechanism (the part that extends toward the inside of the knife).
2. Align the Right Scale with the Right Liner (2) and hold or clamp together until the adhesive sets.



3. Apply CA glue or epoxy to the outside face of the Left Liner (1).
4. Align the Left Scale with the Left Liner (1) and hold or clamp together until the adhesive sets.

Drill the scales

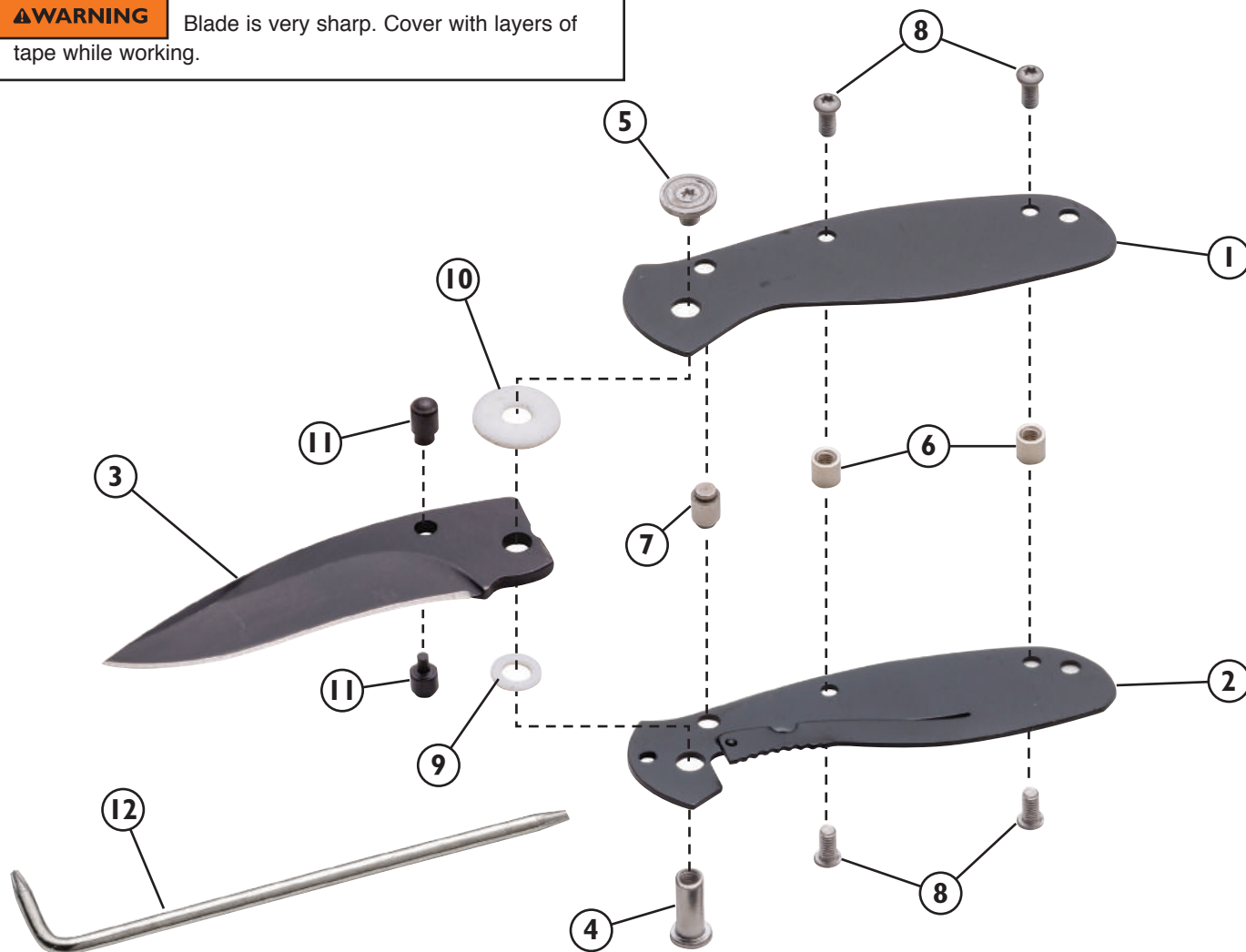
NOTICE If desired, a 1/8" diameter through hole can be drilled at the rear-most hole on the Left Liner/Scale to accommodate a lanyard (not included).

1. Position the Left Liner/Scale with the liner side up and use a 1/16" brad-point bit to drill a guide hole at the center of the hole in the liner for the Pivot Bolt (4) and Pivot Bolt Fastener (5) and at the centers of the holes for the Threaded Spacers (6). To prevent splitting or tear-out at the back of the holes, drill with a sacrificial block under the scales.
2. Bring the Right Liner/Scale and the Left Liner/Scale together, taking care to precisely align the liners. Place them on the sacrificial block (Left Liner/Scale on top) and clamp to the work surface to maintain liner alignment.

NOTICE If desired, the rear-most hole position can be marked and a 1/8" diameter through hole drilled to accommodate a lanyard (not included).

3. Use the 1/16" drill bit to extend the holes through the Right Liner/Scale.

⚠ WARNING Blade is very sharp. Cover with layers of tape while working.



Exploded View

4. Release the Right Liner/Scale and Left Liner/Scale.

NOTICE The depth of the counterbore will depend on the thickness of the scale. Drill it deep enough that 9/32" of the Pivot Bolt (4) will extend beyond the inside face of the scale.

5. Use a 1/4" brad-point bit guided by the 1/16" hole to drill a stopped counterbore for the head of the Pivot Bolt (4) on the outside of the Right Scale.

NOTICE As on the Right Scale, the depth of the counterbore will depend on the thickness of the scale. Drill it deep enough that 1/16" of the Pivot Bolt Fastener (5) threads will extend beyond the inside face of the scale.

6. On the Left Scale, use a 5/16" brad-point bit guided by the 1/16" hole to drill a stopped counterbore for the head of the Pivot Bolt Fastener (5).

PARTS LIST		Quantity
1	Left Liner	1
2	Right Liner	1
3	Blade	1
4	Pivot Bolt	1
5	Pivot Bolt Fastener	1
6	Threaded Spacer	2
7	Solid Spacer	1
8	Screw	4
9	Small Plastic Washer	1
10	Large Plastic Washer	1
11	Thumb Stud (2 pieces)	1
12	Wrench	1

NOTICE

Drill the counterbores deep enough that 7/64" of the Screw (8) threads will extend beyond the inside face of the scale.

7. On both scales, use a 5/32" brad-point bit to drill stopped counterbores for the heads of the Screws (8) that will go into the Threaded Spacers (6).
8. Use the 5/32" brad-point bit to drill through holes centered in the counterbores for the Pivot Bolt (4) and Pivot Bolt Fastener (5).
9. Use a 7/64" brad-point bit to drill through holes centered in the counterbores for the Screws (8) that will go into the Threaded Spacers (6).

Assemble the knife

Refer to the **Exploded View** on page 2 for the following steps.

1. Install the two-piece Thumb Stud (11) on the Blade (3) by threading the pieces together through the hole near the top of the Blade spine.
2. Insert a Screw (8) in each of the smaller holes on the outside face of the Right Liner/Scale. From the inside face of the liner, thread on the Threaded Spacers (6) and finger tighten.
3. Insert the Pivot Bolt (4) in its counterbored hole on the outside of the Right Scale/Liner.
4. Position the Solid Spacer (7) in its hole on the inside face of the liner.
5. Place the Small Plastic Washer (9) on the Pivot Bolt (4).
6. Install the Blade (3) on top of the Small Plastic Washer (9).
7. Install the Large Plastic Washer (10) on top of the Blade (3).

8. Position the Left Liner/Scale on the Right Liner/Scale, aligning the holes and making sure the Solid Spacer (7) is fully seated in both liners.
9. Insert a Screw (8) in each of the smaller holes on the outside face of the Left Scale and thread the Screws into the Threaded Spacers (6). Finger tighten.
10. Thread the Pivot Bolt Fastener (5) into the Pivot Bolt (4).
11. Using the included Wrench (12), fully tighten the Pivot Bolt Fastener (5) and all Screws (8).

Shape and finish the handle

1. Using an oscillating spindle sander, flat and round files or sandpaper, shape the scales until the edges are flush with the liners and the desired handle contour is achieved. Take special care when sanding near the edges of the liners; the black finish will come off if sanded.
2. Sand the handle through progressive grits, up to 600.
3. Apply the finish of your choice, keeping in mind that, as the knife is used, the handle will come in regular contact with oils that could degrade the finish.

For additional questions contact SARGE Customer Service at 800.454.7448