

Common Bogu Repairs

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## A. KOTE (甲手)

### 1. *Tenouchigawa* (手の内皮) replacement.

- a. Loosen and untie the *herikawa* (へり皮) with an awl.
- b. Carefully cut the stitches which attach the *herikawa* to the *tenouchigawa*.
- c. Carefully cut the stitches which attach the *herikawa* to the leather on the outside of the hand portion of the *kote* (甲手), known as the *kotegashira* (甲手頭).
- d. Remove the *herikawa* and *tenouchigawa*, and set to one side. Remove any remaining string from the former stitching.
- e. Any tears on the interior fabric which secures the padding on the *kotegashira* may be patched with blue cotton fabric or re-stitched at this point, while the palm leather is removed. Also, if the interior fabric is torn on the edges where it contacts the exterior leather, it should be repaired at this moment with waxed string.
- f. Using a paper or cardboard stencil, drawn either directly from the *kote* owner's palm or from a standard size,<sup>1</sup> and being particularly careful not to modify the silhouette between the thumb and forefinger, cut out the new *tenouchigawa* from high-quality tanned deer skin.
- g. Secure temporary stitches 1-8 in order to hold the hide in place on the gauntlet (fig. 1).
- h. Using waxed string, stitch the *tenouchigawa* underneath the back-of-hand leather along its entire length, using a common running stitch or back stitch, but ensuring that the stitch is longer on the exposed side of the palm leather and shorter on the underside.
- i. With waxed string, stitch the *herikawa* on top of the back-of-hand leather again using a running stitch, and passing underneath the *tenouchigawa* each time (fig. 2a).<sup>2</sup> Ensure that the stitches are placed correctly on the back-of-hand leather so that the previous stitches made when attaching the *tenouchigawa* are not visible.<sup>3</sup> The *herikawa* should be stretched while being attached to the *kote* in order to prevent wrinkles forming in curved portions.
- j. Once one edge of the *herikawa* is attached to *kotegashira* along its entire length, proceed to fold it as shown in fig. 2b, and oversew the folded edge to the *tenouchigawa* using the *sukui nui* (すくい縫い) or dip-stitch<sup>4</sup> with waxed string, in the diagonal manner represented in fig. 2c.
- k. The two ends of the *herikawa* should be left untrimmed, but tapered. Once the *sukui nui* stitches are complete, retie the *herikawa* (fig. 3a-b).

<sup>1</sup> Note that the Japanese standard size is rather smaller than the European and North American Standard. For the sake of practicality, both have been reproduced (fig. 1).

<sup>2</sup> If the original *herikawa* cannot be reused, it should be replaced with a similarly coloured deer hide.

<sup>3</sup> The present stitch will be better hidden if the needle is inserted on an angle so that the visible part of the stitches on the *tenouchigawa* is closer to the edge (fig. 2a).

<sup>4</sup> The nail of the thumb of the supporting hand bends the leather so that a straight needle may emerge from the dip without bending.

- i. If the former *herikawa* was not tied off at the end, with an awl (whose diameter is slightly narrower than that of the tapered *herikawa*) make the first hole in the *kotegashira* approximately 5mm away from the final stitch.
- ii. Pull the *herikawa* through the hole from inside to outside, but do not pull it tight.
- iii. Create a second hole roughly 5mm underneath the point where the extremity of the *tenouchigawa* joins the *kotegashira*, as shown in the image, and pull the *herikawa* through it from outside to inside.
- iv. Using the awl, bring the working end of the *herikawa* through the loop created with the inside of the *kote*.
- v. Pull to tighten, and trim the end of the *herikawa*.
- vi. Repeat at the other end.

## 2. *Tenouchigawa* (手の内皮) patch.

- a. Cut the shape of the patch to be fitted to the *tenouchigawa*, and round the edges. The patch should be larger than the hole if the palm leather is torn.
- b. Glue the patch onto the palm leather using glue for leather or rubber, which will dry flexible. Do not place any glue on the extremities of the patch where stitches are to be sewn (fig. 4a).
- c. With waxed string, stitch around the patch as shown using a basic oversewing stitch (fig. 4b). Ensure that the stop-knot and the final knot in the string are both hidden between the patch and the original palm leather, in order to protect them and to avoid hand discomfort.

## 3. *Kotebuton* (甲手布団) patch.

- a. Where a tear has occurred on the *kotebuton*, or the fabric has worn away due to use, cover the damaged area with indigo-dyed deerskin by following the steps below.
- b. Cut out a piece of leather that will cover the edges of the tear completely. It is preferable that the shape have meaning for the *kendoka* or inspire pleasant thoughts. The shape of a tree or cloud, for example, is suitable.
- c. Glue the patch onto the *kotebuton* using glue for leather or rubber, which will dry flexible. Do not place any glue on the extremities of the patch where stitches are to be sewn.
- d. Tie a stop-knot in the string and bring it up from the inside of the *kotebuton*.
- e. With waxed string, stitch around the patch using the *sukui nui* (すくい縫い) or dip-stitch<sup>5</sup> technique. This technique is quite difficult to perform on the hard *kotebuton*.

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<sup>5</sup> See footnote 4, *supra*.

Persistence is necessary. Because of the *kotebuton's* shape the *sukui nui* will be easier to stitch along the circumference of the *kotebuton* than vertically, along its length.

- f. Finish by drawing the string under an already completed stitch and tying a final knot.

#### 4. Relacing the *kotebuton* (甲手布団).

- a. Lacing the first hole (fig. 5a):
  - i. Bring the lace or *kotehimo* (甲手紐) through the first hole towards the centre.
  - ii. Turn back the lace through the first hole to form a loop.
  - iii. Draw the working end of the lace over the edge of the *kotebuton* and pull it through the loop.
  - iv. Tighten the loop to fasten the end.
- b. Creating loops (fig. 5b):
  - i. Lace the holes on the *kotebuton* from outside to inside.
  - ii. Leave a loop with a 1cm diameter each time.
  - iii. Bring the working end of the lace back through the loop to the outside of the *kotebuton*, and repeat.
- c. Lacing the final hole (fig. 5c):
  - i. Lace the second-last hole as above.
  - ii. Bring the lace into the last hole from the outside of the *kotebuton*, leaving the usual loop.
  - iii. Now, instead of leaving the lace on the outside of the *kotebuton*, bring it back over the edge, and draw it into the same hole from inside to outside, creating another loop
  - iv. The lace should be on the outside of the *kotebuton*. Pull it once more over the edge, through the loop created by the previous manoeuvre.
- d. Lacing the *kotebuton*:
  - i. Lace the *kotebuton* in a crisscross fashion (similar to sneakers), using the loops created in the previous steps.
  - ii. Begin crisscrossing at the part closest to the *tsutsu* (筒), and ending at the extremity of the *kote*.
  - iii. Be certain to leave enough room for the wrist and forearm to have play. Generally, looser lacing is better.

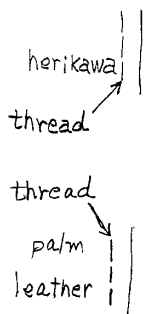
#### B. DO (胴)

##### 1. Replacing the *chichigawa* (乳皮)

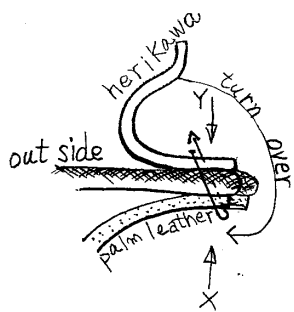
- a. If the *chichigawa* is torn or showing signs of stress, it should be replaced.

- b. Remove the damaged *chichigawa*, and if possible, reuse it by adjusting its length or removing the damaged part. If it cannot be safely reused, it should be discarded, or kept as an example of how to tie the knot properly.
- c. *Dochichigawa* (朧乳皮)
  - i. After removing the damaged leather, carefully insert the four tails of the *dochichigawa* into the *do* aperture, ensuring that they do not become tangled or disorderly. (If the two ends of the *dochichigawa* have not been bifurcated, cut a length of 2cm down the middle of each end).
  - ii. When the ends have been inserted, in a counter-clockwise fashion fold the first three ends over the one beside it at 90° (*fig. 6b*).
  - iii. The final end is folded over, and then brought under the loop formed by the adjacent end (*fig. 6a*).
- d. *Munechichigawa* (胸乳皮)
  - i. After removing the damaged leather, make a loop with the centre portion of the *munechichigawa*.
  - ii. Bring the loop through the top hole on the *mune* (*fig. 6c*).
  - iii. Draw the thin working end of the *munechichigawa* through the hole on the thick end of the *munechichigawa* from back to front, thereby creating a loop (*fig. 6d*).
  - iv. Pull the thin working end through the aperture of the *mune* closest to its centre from back to front.
  - v. Draw the thin working end across the front of the *mune*, and pull it through the final aperture from front to back (*fig. 6c*).
  - vi. Pass the *munechichigawa* through its own loop (*fig. 6d*).
  - vii. Pull on the *munehimo* (胸紐) loop created by the *chichigawa* to tighten the completed knot.

View from Y

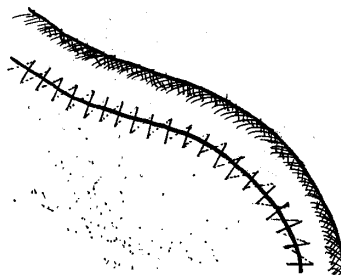


View from X

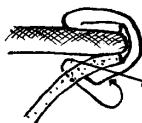


A

FIGURE 2

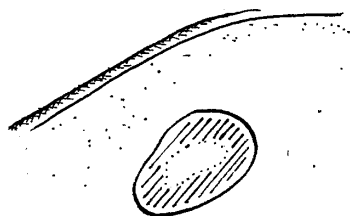


B

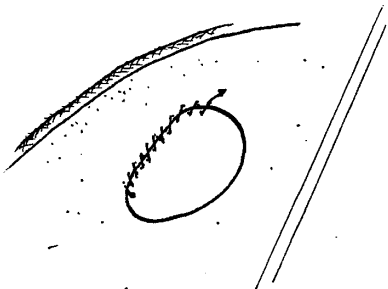


C

FIGURE 4



A



B



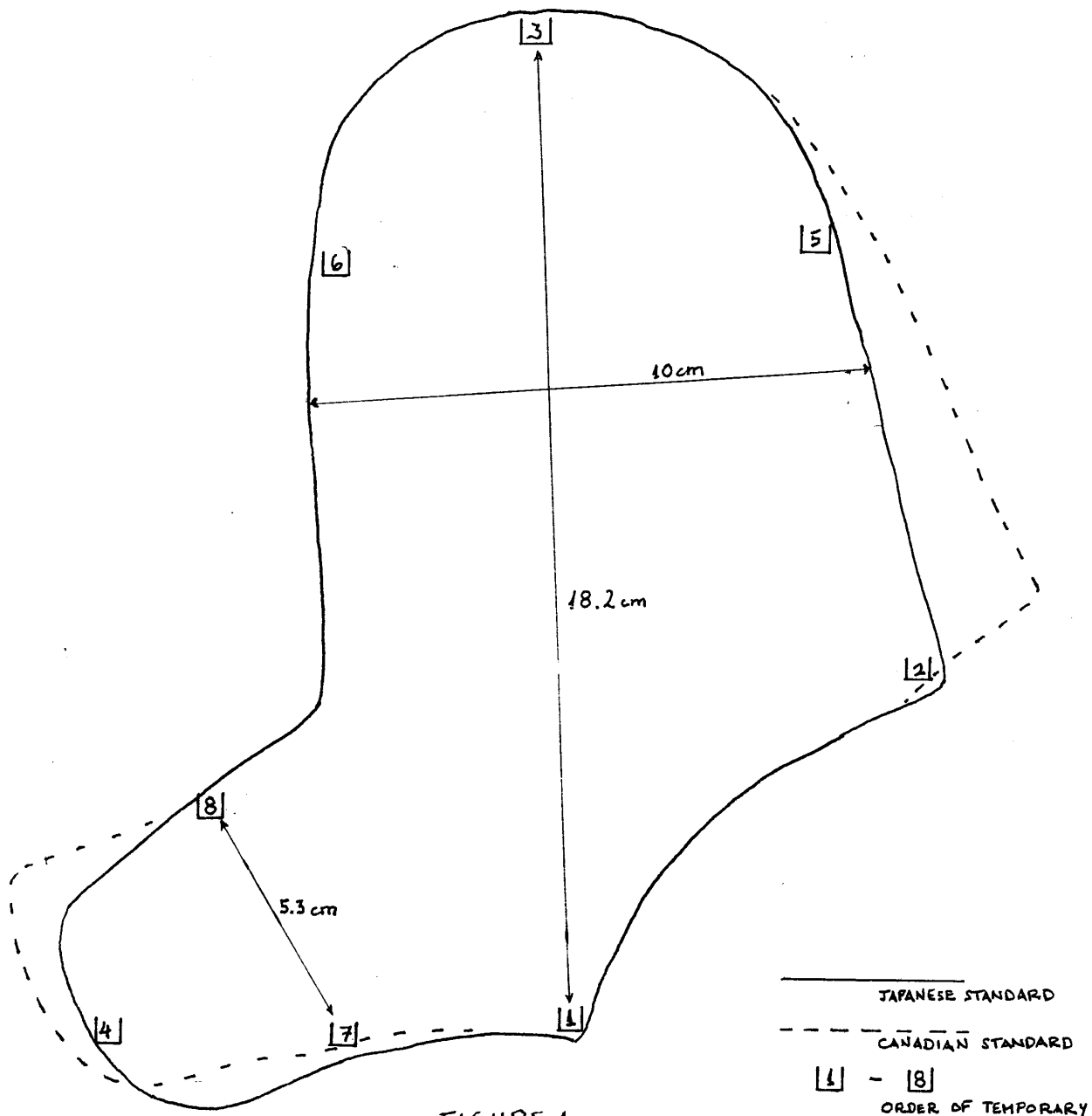
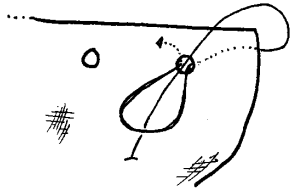


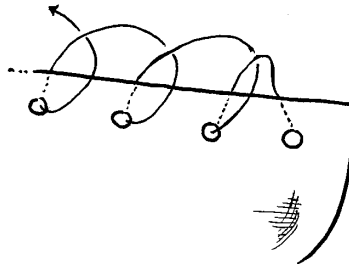
FIGURE 1

\_\_\_\_\_ JAPANESE STANDARD  
 - - - - - CANADIAN STANDARD  
 [1] - [8]  
 ORDER OF TEMPORARY STITCHES

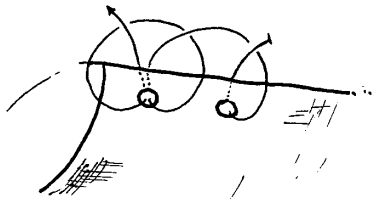
FIGURE 5



A



B



C



FIGURE 6

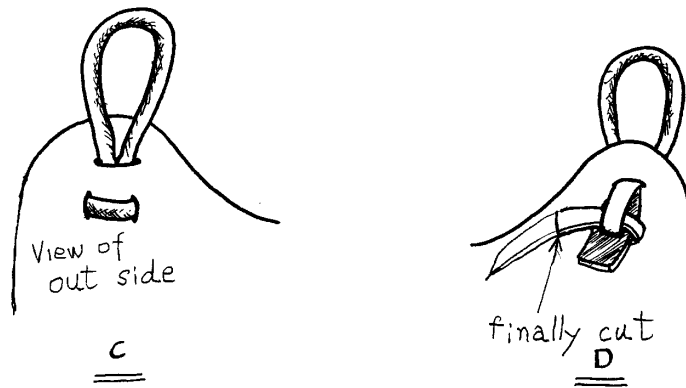
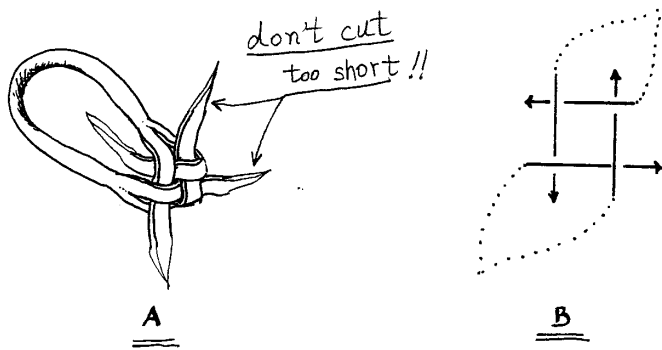


FIGURE 3

