

# Hand Stitching Repair in Fabric Assemblies

## A. Preparing Needle and Thread

### NOTE

If you use two-strand thread you will need twice as much; if you use four-strand, you will need four times as much.

- (1) Estimate amount of thread required to complete stitching and cut thread to length.
- (2) See Figure 001-00-2. Thread surgeon's needle (3) with thread to form a large, two- or four-strand thread as follows:
  - (a) One end and push the loop through the eye of the needle.
  - (b) Two-Strand: To make a double strand thread, put the thread through the needle until the needle is at the midpoint of the single thread strand.
  - (c) Four-Strand: To form four-strand thread, bend a length of thread in half and insert the loop and into the eye of the needle, pulling it through so that the eye is at the midpoint of the double strand of thread.
- (3) Twist the strand together.
- (4) The knot at top of the single, two- or four-strand thread.



Figure 001-00-2



Figure 001-00-3



Figure 001-00-4



Figure 001-00-5



Figure 001-00-6



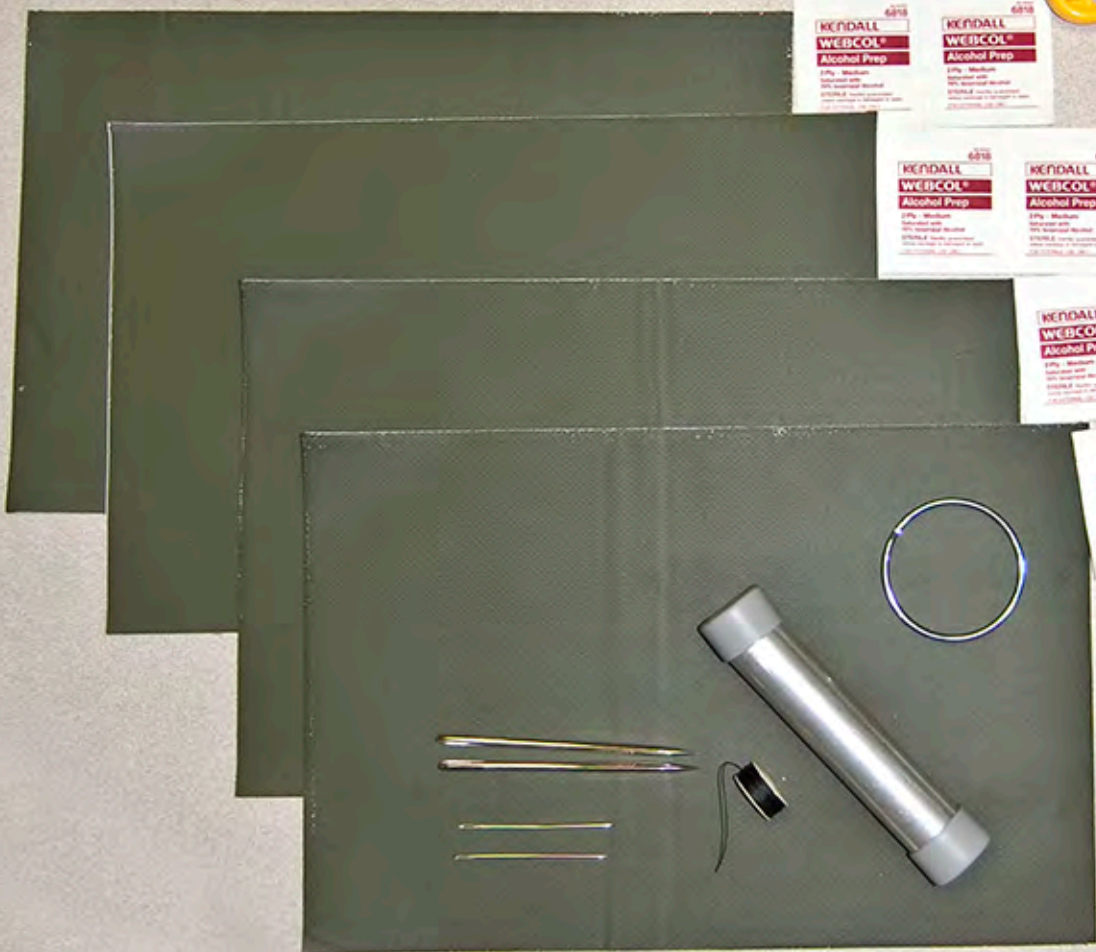
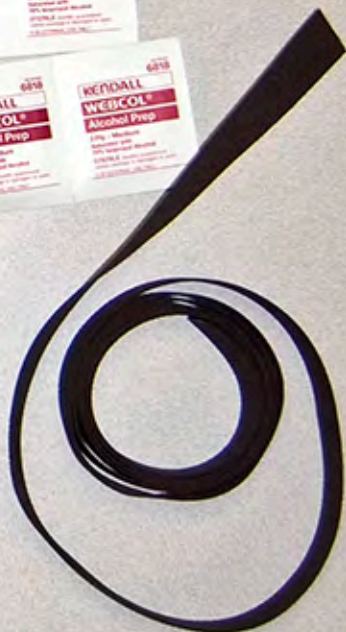
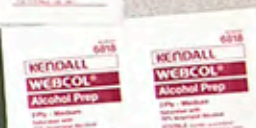
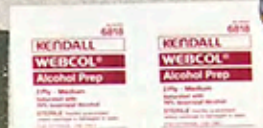
Figure 001-00-7



Figure 001-00-8

## B. Handstitches. There are five common hand stitches used to mend fabric in different situations. Choose the one that most closely resembles the repair you are making.

- (1) **Flat Stitch.** (See Figure 001-00-4). This stitch is used as a temporary fastening until machine repairs can be made. Pass the needle over and under an equal amount of material, each successive entering the material from the opposite side.
- (2) **Round Stitch.** (See Figure 001-00-5). This stitch is used to reinforce grommets. Insert the material at right angles to the edge of material and bring around edge before making the next stitch.
- (3) **Overcast Stitch.** (See Figure 001-00-6). This stitch is used to apply a hand sewn patch. Insert the needle through the material at an angle so that it comes out to one side and ahead of the point of insertion, and bring the cord over to the original line of insertion before making the next stitch.
- (4) **Backstitch.** (See Figure 001-00-7). This stitch is used to secure an open seam. It is so named because the needle is always set back one half of a stitch length into the last stitch made. Make two small stitches in the same place to secure the cord ends. Continue by inserting the needle into the middle of the preceding stitch and bringing it out on the same side of the material one stitch length in advance of preceding stitch.
- (5) **Handsewn Patch.** (See Figure 001-00-8). This stitch is used to join edges of a tear until a patch can be applied. Insert needle between two edges of material to be sewn together. Take a diagonal stitch from one side toward the other, bringing the needle out between the two edges. Repeat this operation on the opposite side, and continue alternating stitches from side to side. To keep the stitches uniform, hold the edges smoothly together. Make stitches firmly, but do not put them tight enough to pucker the fabric.



## APPENDIX A, SHELTER PRODUCT DATA SHEET, REVISION A:

<b>PRODUCT DATA SHEET</b>		<b>CONTRACTOR NAME: Johnson Outdoors Gear LLC</b>	
<b>1.PART NUMBER: 2480289</b>		<b>2.NSN 8340014910486</b>	
<b>3.NAME: MGPTS Repair Kit, Green, Tentage</b>	<b>4.TYPE: MGPTS (Modular General Purpose Tent System)</b>		<b>5.CLASS: Accessory</b>
<b>6.COLOR:Clear Poly Bag</b>	<b>7. Support System: NA</b>		<b>8.SERIES: NA</b>
<b>9. INTENDED USE: Make temporary fabric repairs during deployment in the field</b>			
<b>10.DIMENSIONS (IN FEET AND INCHES)</b>	<b>LENGTH: NA</b>	<b>WIDTH: NA</b>	<b>HEIGHT: RIDGE/EAVE NA</b>
<b>11.DIMENSIONS (EXTERNAL GUYED)</b>	<b>LENGTH NA</b>	<b>WIDTH NA</b>	
<b>12.SQUARE FEET INTERIOR: NA</b>			
<b>13.WEIGHT (POUNDS, UNPACKAGED) 1.5</b>		<b>14.WEIGHT (PACKAGED) 2</b>	<b>15.SHIPPING CUBE (PACKAGED) 0.5 Ft<sup>3</sup></b>
<b>16SHIPPING CONTAINER</b>	<b>LENGTH 13 .25 "</b>	<b>WIDTH 10 .25"</b>	<b>HEIGHT 3 "</b>
<b>17.SET-UP TIME/ NUMBER OF PERSONS NA</b>		<b>18.STRIKE TIME/ NUMBER OF PERSONS NA</b>	
<b>19.PARTS INCLUDED:</b> Web, rope, needle, thread, adhesive patch material, sail maker's palm			
<b>20.DESCRPTION:</b> Field Expedient Repair Kit for MGPTS			
<b>21. SUPPORT EQUIPMENT:</b>	<b>PART NUMBER Or NSN</b>	<b>Included or Optional</b>	<b>DESCRIPTION</b>
<b>LIGHT SET</b> Product Data Sheet			
<b>ELECTRICAL OUTLET SET</b> Product Data Sheet			

<b>FLOORING</b>			
<b>Product Data Sheet</b>			
<b>HEATER</b>			
<b>Product Data Sheet</b>			
<b>AIR</b>			
<b>CONDITIONER</b>			
<b>Product Data Sheet</b>			
<b>GENERATOR</b>			
<b>Product Data Sheet</b>			
<b>POWER</b>			
<b>DISTRIBUTION</b>			
<b>Product Data Sheet</b>			
<b>TRAILER</b>			
<b>MOUNTED</b>			
<b>SUPPORT</b>			
<b>SYSTEM Product</b>			
<b>Data Sheet</b>			
<b>INSULATED</b>			
<b>LINER Product</b>			
<b>Data Sheet</b>			
<b>INSULATED</b>			
<b>FLOORING</b>			
<b>Product Data Sheet</b>			
<b>SOLAR SHADE/</b>			
<b>CAMOU. NETT</b>			
<b>Product Data Sheet</b>			