SAMSON SPLICING INSTRUCTIONS

12-Strand Class II End-for-End Splice Modified for Dirty, Used Rope

Class II ropes are made in whole or part from high modulus fibers: Dyneema®, Vectran®, Technora®, and Zylon®.

This splicing procedure is specifically for used, dirty ropes that require repair or re-splicing. By following the procedure below, the spliced rope can retain from 90% to 100% of the residual strength of the used rope strength.

1. **SOAKING USED ROPE**
   Fill a large bucket with clean, warm water. Place the area of the rope that will be spliced in the bucket to soak.

2. **CLEANING USED ROPE**
   Starting at one end of the rope, grab the rope and “birdcage” the rope while underwater. This means that you will slack and milk the rope while in the bucket to clean out the interior section of the rope.

   As the water may be dirty after the first round of cleaning, you may need to dump the water out and start with a fresh bucket of water. Continue to refresh water and wash until the rope appears clean.

3. **SQUEEGEEING WATER FROM ROPE**
   Using your hand or another small piece of rope, squeegee out as much water from the wet rope as you can.
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STEP 4 MEASURING AND MARKING
Tape ends of line to be spliced. Lay the 2 ropes to be spliced side by side and measure 1 tubular fid length (2 wire fid lengths) from taped end of each line and make a mark. This is Mark 1.

From Mark 1, measure 2 tubular fid lengths (4 wire fid lengths from end of rope) and make Mark 2 on both lines.

From Mark 2, measure 4 tubular fid lengths (8 wire fid lengths from end of rope) and make Mark 3 on both lines.

STEP 5 TAPERING TAIL
From Mark 1, in the direction of the taped end of the line, mark every second right and left strand for 3 strands.

Pull every marked strand out of line and cut off (tape at end can cause resistance and may have to be removed in order to pull out cut strands.) Tapered end will now have only 6 strands remaining.

STEP 6 TAPING BOTH TAPERED AREAS
Tape both areas of taper where you have cut the strands so they do not bunch up in the splice. Use a fid that allows the rope tail to fit into it. The smaller diameter allows the fid to pass through the rope easier.

STEP 7 REPOSITIONING ROPES
Reposition ropes for splicing according to diagram below.
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**Step 8**

**BUYING ROPE A INTO ROPE B**

Attach tail of Rope A to fid. Insert fid at Mark 2 of Rope B, bring out past Mark 3, then remove fid. When feeding the fid through with the tail attached, do not hold on to the fid and try to milk the slack back. Doing this will cause the tapered end to disconnect from the fid. Hold on to the section of the tapered end right above the fid to avoid this.

**Step 8A**

Tie off the tail of Rope A to a stationary object, then use both hands and weight of your body to smooth Rope B toward Rope A to bury Rope A up to its own Mark 2. Leave tail sticking out.

**Step 9**

**FINISH BUING**

Attach tapered tail of Rope B to fid. Insert the fid into Rope A at Mark 2, approximately the diameter of the line away from insertion point of Rope A into Rope B. Bring fid and tail out at Mark 3 of Rope A. Following same procedures as Step 8A bury Rope B up to its own Mark 2. Leave tail sticking out.

**Step 10**

**SMOOTHING OUT SPLICE**

Pull both tails to tighten crossover. Next, smooth braid in both directions away from the crossover, stroking rope firmly. Tails should bury inside cover.
**LOCK STITCHING PROCEDURE**

**STEP 11**

From Mark 2 at crossover, count 8 picks in either direction and insert stitching twine.

**STEP 12**

Working towards the crossover, stitch twine back and forth through splice until a minimum of 3 complete stitches have been made on each side of crossover.

12A Tie an overhand knot in each end of the twine, as close to its exit point as possible.

12B Insert tail of stitching twine at exact location where twine emerges. Using needle or small fid, pull (or push) through rope at a slight angle. Pull hard on the end of the twine so that the knot disappears inside the rope. Trim off the remaining twine close to the rope. Repeat on other end of the twine.