YALE CORDAGE
SPlicing
INSTRUCTIONS

END FOR END
SINGLE BRAID
1i. The tools you will need are: a properly sized fid, a knife, a marking pen and masking tape. 1. Lay the two ropes out, side by side. Label one rope L(left) and one R(right). Measure one fid length plus one short fid length up the rope and make mark “1” on both ropes. Place mark “2” on both ropes at two full fid lengths.

2i. Fid Length Chart. 2. Starting at mark “1”, mark a left and a right pair of strands in both ropes. Moving toward the ends of the ropes, count 3 strand pairs and mark the fourth set of left and right strands. Repeat this procedure once more. Note: some ropes contain a single strand instead of a pair of strands, in this case, cut and remove a single strand only.

3i. Pull out the marked strands on both ropes. Remove old tape and retape the tapered ends tightly. 3. Cut the marked strands at the markings.

4i. Lay out the ropes again so that the tapered ends point toward each other. 4. Insert the fid through mark “2” of Rope L, making sure the rope is evenly split.

5i. Insert the tapered end of Rope R into the hollow end of the fid. Push the fid and tapered end through the body of Rope L using the pusher. 5. Pull the tapered end through until both mark “2”s are together.

6i. Count down the body of Rope L a distance of 3 strand pairs, insert the fid as in step #4 and insert the tapered end of Rope R in the fid. 6. Push fid and the tapered end through Rope L.
7. Repeat step 6i, using other tapered end, reversing the instructions for Rope R and L. 7. Pull out all slack by pulling on both tapered tails keeping both Mark "2"'s together.
8. Starting at the point where either tapered end exits from the rope, count down the body of the rope a distance of 3 strand pairs and make mark "A". From this point, measure one fid length and one short fid length, mark point "B". 8i. Repeat 8 in the opposite direction.
9. Start the fid down into the hollow core of the rope at either mark "A", collecting rope on the fid until the tip exits at mark "B". 9i. Insert tapered end of the rope into the fid and push through until taper exits at mark "B". Pull the tapered end through until all the slack enters the body of the rope.
10. Repeat 9i and 9 on the other tapered end. 10. Grasp the splice in the center and smooth out the splice down the body of the rope in both directions. Make sure all the slack is removed from the splice area.
11. Mark the tapered tails where they exit the body of the rope. 11i. Gently pull the tapered tails out of the rope and cut at approximately ¼" above the mark. Unbraid the last two inches of both tails. Fan the strands out... and cut a gradual taper.
12. Grasp the splice in the middle and smooth out the splice in both directions. The tapered ends will disappear. 12i. Finish the splice with a lock stitch.
Yale Cordage Manufactures –
Double Esterlon™
Yalon™
Polydyne™
Enduralon™
Yalex™
Poly Plus Braids
“A” Products
“XTC” Tree Climber’s rope
Maxibraid™
Maxibraid Plus™
Crystalyne™
Vectrus™
Above are available with
Maxijacket™ Rope Coating
Yale Cordage Fabricates –
Eye and Eye Slings
Endless Slings
Adjustable Slings
Winchlines
Custom Assemblies on Specialized Hardware

**YALE S.P.I.L.C.E.R. KITS**
Contains – Tubular Aluminum Fids ¼” through 1” Diameter, 1 large and 1 small Fid Pusher, Scissors and needles included.

Packaging – Convenient storage canvas Roll-up kit. Slot for each tool. Brass grommets to hang over a work area. The kit has a complete list of fid lengths.

Order Part No. 10008624

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**Individual Fids & Pushers**

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S.P.I.L.C.E.R Instructions – Complete set of splice instructions in a handy storage notebook. Purchase automatically adds you to our S.P.I.L.C.E.R mailing list entitling you to periodic updates. PN860068

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**CAUTION: USE OF WORKING LOADS**

Because of the wide range of rope use, rope condition, exposure to the several factors affecting rope behavior, and the degree of risk to life and property involved, it is impossible to make blanket recommendations as to working loads. However, to provide guidelines, working loads are tabulated for rope in good condition with appropriate splices, in non-critical applications and under normal service conditions.

A higher working load may be selected only with expert knowledge of conditions and professional estimate of risk and if the rope has not been subject to dynamic loading or other excessive use, has been inspected and found to be in good condition and is to be used in the recommended manner and the application does not involve elevated temperatures, extended periods under load, or obvious dynamic loading (see explanation below) such as sudden drops, snubs, or pickups. For all such applications and for applications involving more severe exposure conditions, or for recommendations on special applications, consult the manufacturer.

Many uses of rope involve serious risk of injury to personnel or damage to valuable property. This danger is often obvious, as when a heavy load is supported above or more workmen. An equally dangerous situation occurs if personnel are in line with a rope under tension. Should the rope fail, it may recede with considerable force. Persons should be warned against the serious danger of standing in line with any rope under tension. In all cases where such risks are present, or there is any question about the loads involved or the conditions of use, the working load should be substantially reduced and the rope properly inspected.

**DYNAMIC LOADING voids NORMAL WORKING LOAD**

Normal working loads are not applicable when rope is subject to significant dynamic loading. Whenever a load is picked up, stopped, moved or swung there is an increased force due to dynamic loading. The more rapidly or suddenly such actions occur, the greater the increase will be. In extreme cases, the force put on the rope may be two, three or even more times the normal load involved. Examples could be picking up a tow on a slack line or using a rope to stop a falling object. Therefore, in all such applications as towing lines, lifelines, safety lines, climbing ropes, etc., working loads as given DO NOT APPLY.

Users should be aware that dynamic effects are greater on a low elongation rope such as polyester than on a high elongation rope such as nylon, and greater on a shorter rope than on a longer one. The working load ratios listed contain provision for very modest dynamic loads. This means, however, that when this working load has been used to select a rope, the load must be handled slowly and smoothly to minimize dynamic effects and avoid exceeding the provision for them.

**EFFECT OF TEMPERATURE ON TENSILE STRENGTH**

The tensile strength charts apply to ropes tested at normal room temperature (70°F). Ropes have lower tensile strengths at higher temperatures. 30% (or more) lower at the boiling point of water (212°) and continuing on down to zero strengths for nylon and polyester at 480°F and 300°F for polypropylene.

Also continued exposure at elevated temperatures causes permanent damage.