

# NEW ENGLAND ROPES

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## SPLICING GUIDE

### General-Splicing Tips

1. Before starting, it is a good idea to read through the directions so you understand the general concepts and principals of the splice.
2. A properly executed splice retains approximately 90% of the rated tensile strength of the rope.

### Tools Required

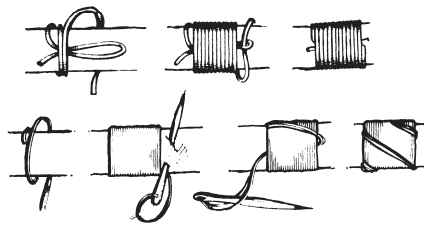
Masking Tape, Sharp Knife, Felt Tip Marker, Measuring Tape, Splicing File.



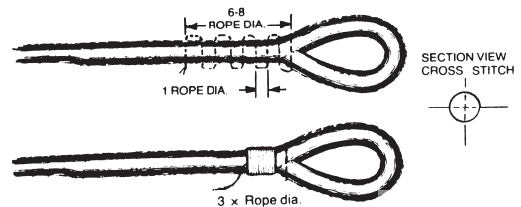
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### Whipping

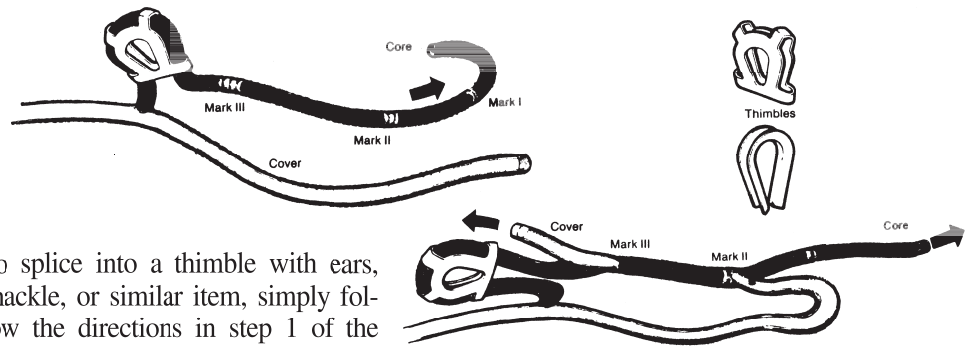
Seize by whipping or stitching the splice to prevent the crossover from pulling out under an unbalanced load. To cross-stitch, mark off six to eight rope diameters from throat in one rope diameter increments (stitch length). Using same material as cover braid if available, or waxed whipping thread, start at bottom leaving at least eight inches of tail exposed for knotting and work toward the eye where you then cross-stitch working back toward starting point. Cut off thread leaving an eight inch length and double knot as close to rope as possible. Trim thread to a one inch length and bury remaining thread and knot into rope.



As a general rule of thumb, if you whip the rope, do so for a length three times the rope diameter and hold it in place with cross-stitching. Use the same material as the cover braid if available, or waxed whipping thread.



### Splicing into a thimble or shackle

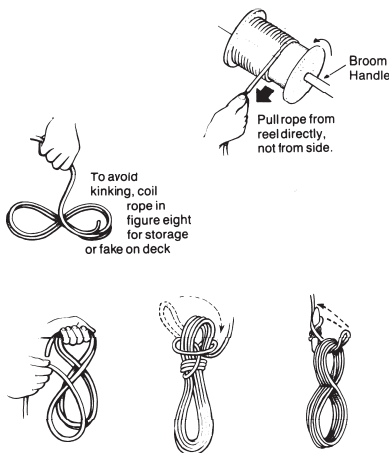


To splice into a thimble with ears, shackle, or similar item, simply follow the directions in step 1 of the splicing instructions, using the thimble or shackle bale to determine the eye size. Extract the core and insert the core through the bale or around the shackle as illustrated. The eye splice is then completed in a normal fashion with one exception: before final bury, slide the thimble around to cover side of eye. For a thimble without ears: insert thimble into eye before final burying of splice.

### Used Rope

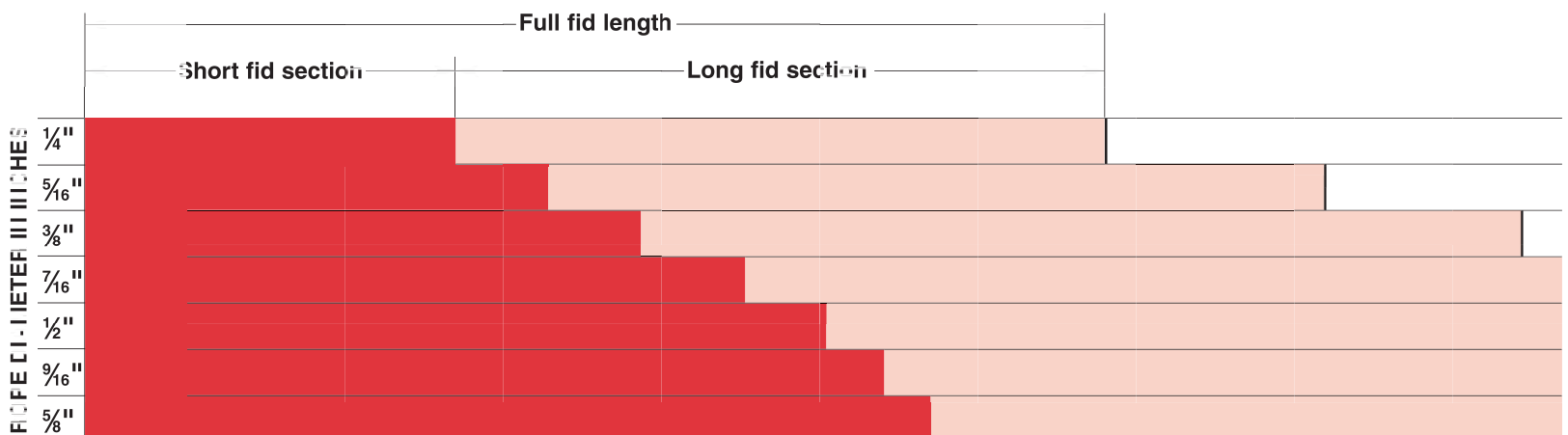
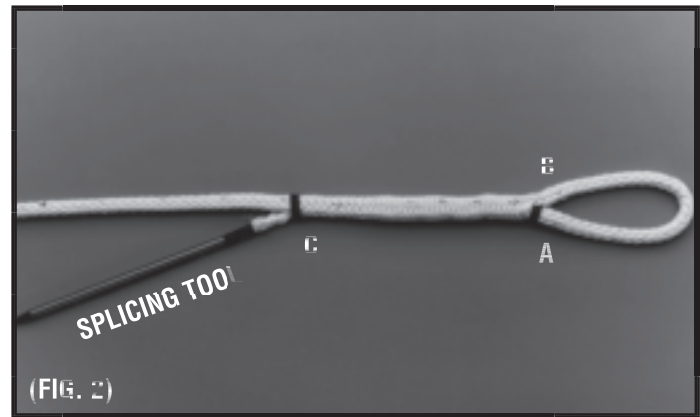
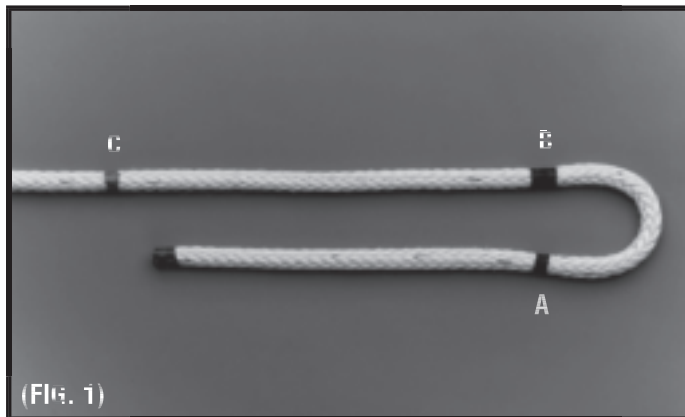
Soaking the section of used rope to be spliced in water will loosen and lubricate the fibers and make the splice easier to perform. Through use and exposure to the elements, the fibers in a used rope have probably lost some of their original strength. In addition, some shrinkage has probably occurred making this splice the most difficult to perform.

### Rope Handling



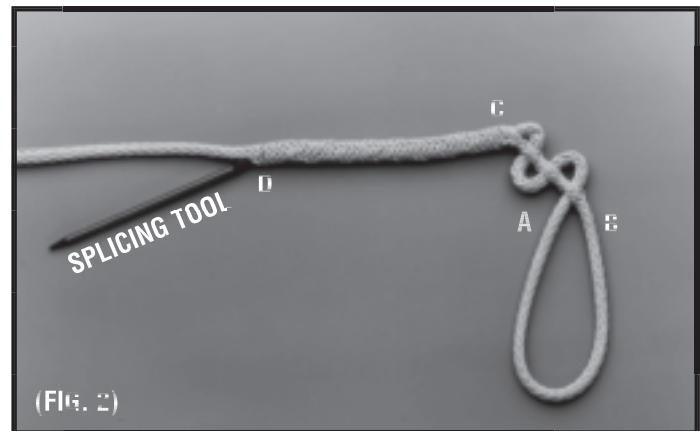
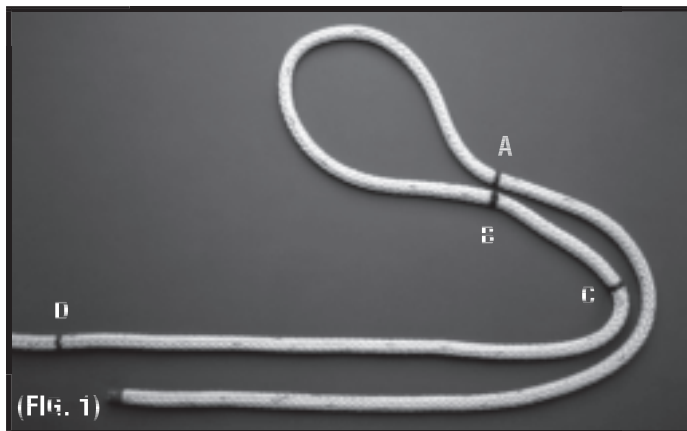
## Single Braid Eye Splice (Bury) Instructions

- 1) From the rope's bitter end measure back two full fid lengths, and place a mark on the rope. "A". Put a single wrap of tape at the bitter end. (Fig. 1) (A fid length equals 21 times the diameter of the rope or 7 times the circumference.)
- 2) Form the desired eye size and mark the point opposite "A". This will be mark "B". (Fig. 1)
- 3) From mark "B", measure down the rope 2 1/2 full fid lengths, this will be mark "C". (Fig. 1)
- 4) From point "A" counting toward the bitter end, count out 6 pics. (A pic is the V shaped strand pair you can see as you look down onto the top of the rope.) Mark this pair and continue down the rope marking every 5th pair as shown.
- 5) Cut and remove these strands back to bitter end.
- 6) Re-tape the bitter end and attach it to your splicing tool. Insert this tool at "B" and exit at "C". Pull through until "A" and "B" line up. Remove the tool and the tape wrap from the exposed tail. (Fig. 2)
- 7) Firmly grasp the rope at the point where "A" and "B" meet. Smooth the rope away from this point up the standing part of the line. The tapered tail will withdraw into the rope.
- 8) We recommend lock stitching and whipping the splice.(see instructions on Page 1)



## Single Braid Eye Splice (Lock Stitch) Instructions

- 1) Mark rope two and one half full fid lengths from the bitter end. This is mark "A". Form the desired eye—size and place a mark opposite "A", this is mark "B". Measure 1 long fid section further. This is mark "C". Continue down the rope an additional 2 1/2 fid lengths. This is mark "D". (Fig. 1)
- 2) To mark the tuck points in the area between points "B" and "C" mark the 3rd, 6th and 9th pics. Open up "B" with a fid tool and pass the bitter end and tail through the rope completely. Pull the tail through until "A" and "B" align. Make subsequent tucks in the same manner between the 3rd and 4th, 6th and 7th strands. (Fig. 2)
- 3) Pull the tucks tight as you go. After the last tuck above attach your splicing tool to the tail and insert at mark "C" exiting the rope at mark "D". Remove the tool and the tape wrap from the tail end.
- 4) Work from the bitter end toward Mark "A", count three consecutive strand pairs and mark, count another five consecutive strand pairs and mark the fifth pair. Continue counting and marking the fifth consecutive strand pair until a total of five strand pairs have been marked. Cut and remove these strands back to bitter end and re-tape the bitter end. After taper is complete hold rope at neck of splice and smooth cover until taper disappears.  
 (Note: The rope may be too tight to bury before tapering, if so perform step 4 before steps 2 & 3.)



Rope Dia.	Rope Circ.	Fid Section Measure	Eye Section Measure	Full Fid Length
1/4"	3/4"	2"	3 1/2"	5 1/2"
3/8"	1"	2 1/2"	4 1/2"	6 3/4"
1/2"	1 1/8"	3"	4 3/4"	7 1/4"
5/8"	1 1/4"	3 1/2"	6"	9 1/2"
3/4"	1 1/2"	4"	7"	11"
7/8"	1 3/4"	4 1/2"	8"	12 1/4"
1"	2"	4 3/4"	9 1/2"	14"
1 1/8"	2 1/4"	4 3/4"	11 1/4"	16"
1 1/4"	2 3/4"	5"	14"	19"
1 1/2"	3"	5 1/4"	15 3/4"	21"

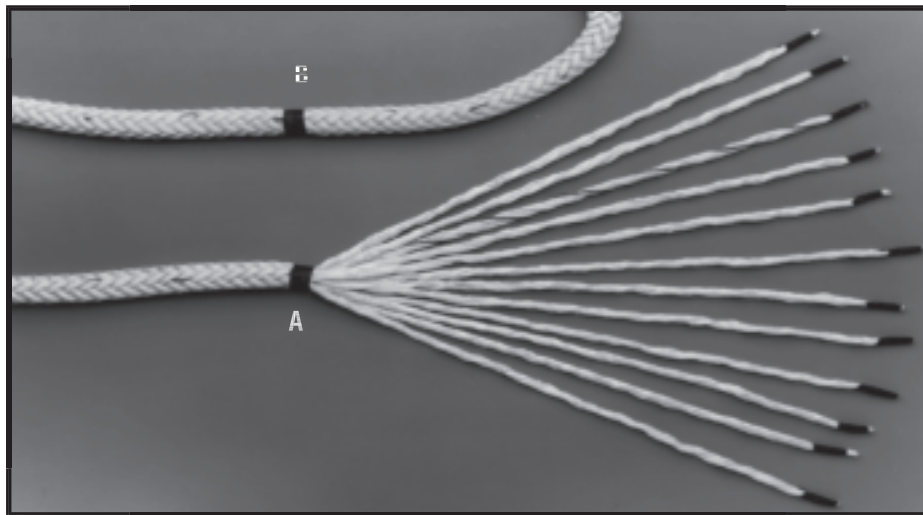
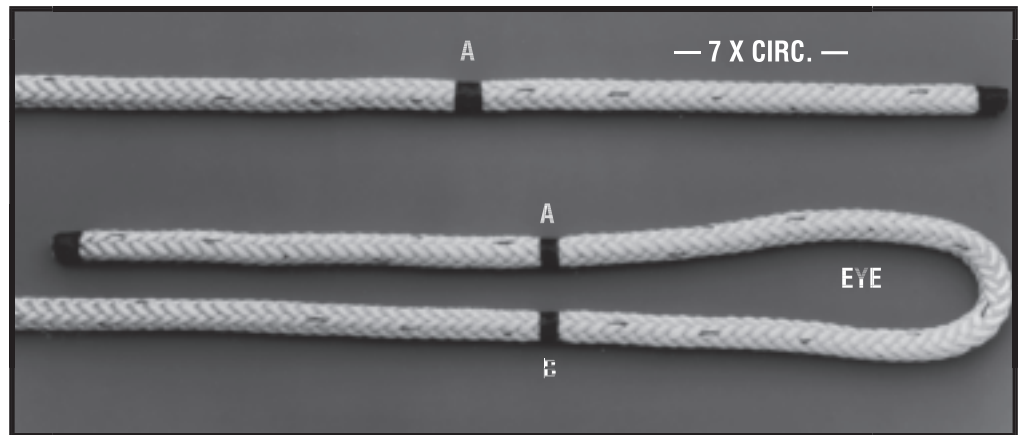
**FIDS AND DIMENSIONS**

Rope Dia.	Rope Circ.	Fid Section Measure	Eye Section Measure	Full Fid Length
1/4"	3/4"	2"	3 1/2"	5 1/2"
3/8"	1"	2 1/2"	4 1/2"	6 3/4"
1/2"	1 1/8"	3"	4 3/4"	7 1/4"
5/8"	1 1/4"	3 1/2"	6"	9 1/2"
3/4"	1 1/2"	4"	7"	11"
7/8"	1 3/4"	4 1/2"	8"	12 1/4"
1"	2"	4 3/4"	9 1/2"	14"
1 1/8"	2 1/4"	4 3/4"	11 1/4"	16"
1 1/4"	2 3/4"	5"	14"	19"
1 1/2"	3"	5 1/4"	15 3/4"	21"

## Single Braid Eye Splice (Tuck) Instructions

### Step #1 - Eye Size

From the rope's bitter end measure back one full fid length and make mark 'A'. Tape at this mark. Now form desired eye size and make "Mark B".



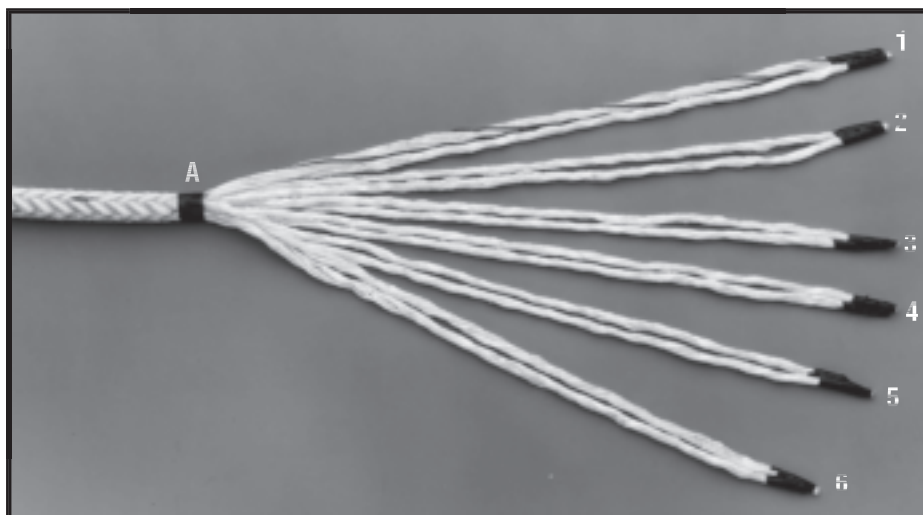
### Step #2 - Strand Separation

Tape each of the 12 strands, and unlay strands back to "Mark A". Try not to remove twist from individual strands.

### Step #3 - Pair Strands

Rope is comprised of a total of 12 strands, six (6) strands with left hand twist and six (6) strands with right hand twist.

Select one left twist strand and one right twist strand and tape together. Repeat this procedure so that you have taped 6 separate strand pairs. Select strands that are located near one another as they emerge from Tape Wrap at "Mark A".

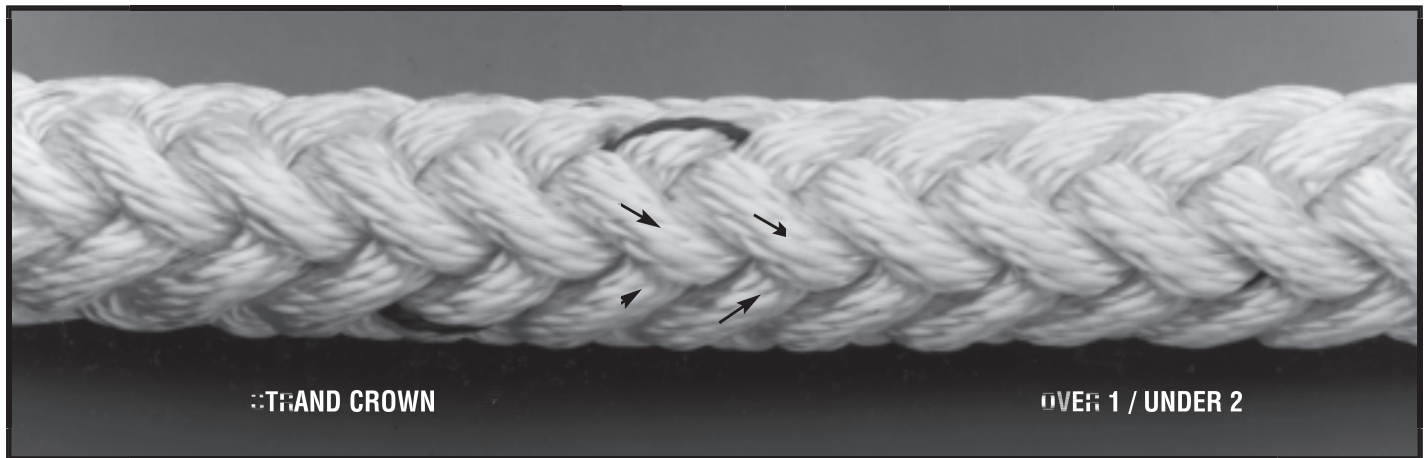
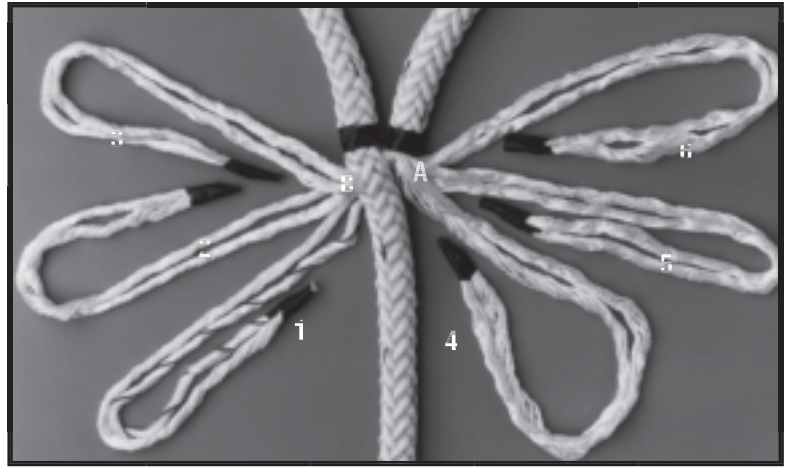


### Step #4 - Marking Pairs

Lay rope out forming eye. Do not twist rope. Select 3 taped pairs closest to the standing part of the rope and mark on tape: #1, #2 and #3 respectively. Mark the other 3 pairs #4, #5, #6.

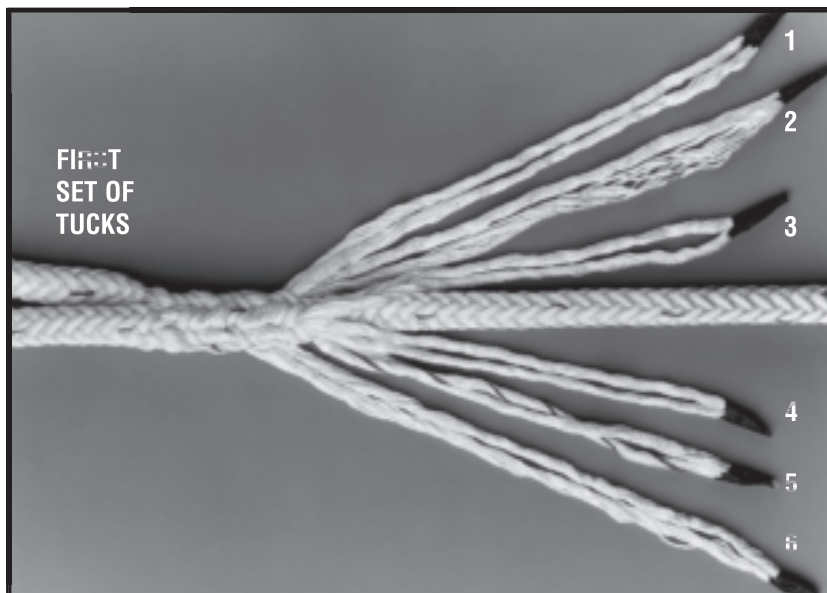
**Step #5 - Strand Insertion**

The rope axis is comprised of 6 strand crowns 3(S) & 3(Z). With fid, open rope at Mark "B" and insert strand pair #1 completely through the rope at a right angle. With remaining strand pairs (2, 3, 4, 5, and 6) insert each strand pair into the same opening as the #1 strand pair and exit one strand pair for each row of strand crowns. Pull each strand pair snug against the body of the rope. At this point each strand pair will be lined up with a line of crowns running parallel to the axis of rope.

**Step #6 - Initial Strand Tuck**

1 - Starting with strand pair #1, select a row of crowns down the axis of the rope and tuck the pair #1 over one strand and under two strands. Once tucked, pull out slack in strand pair #1. Make only one tuck.

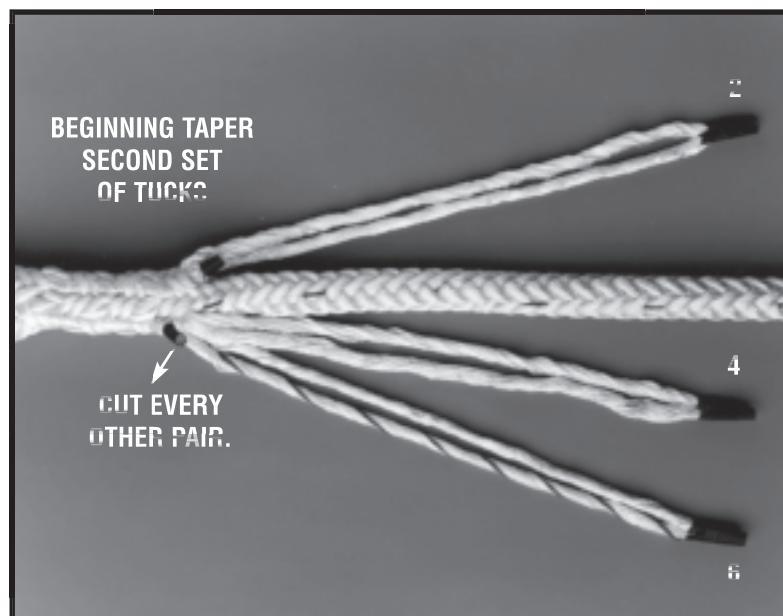
2 - Now tuck pair strands #2 and #3 in the same way – with each pair select crown row and tuck the individual pair over one strand and under two strands. Pull out slack in each strand.



3 - With remaining pair strands #4, #5 and #6, select a crown row for each pair and make one tuck. Pull out slack in each pair.

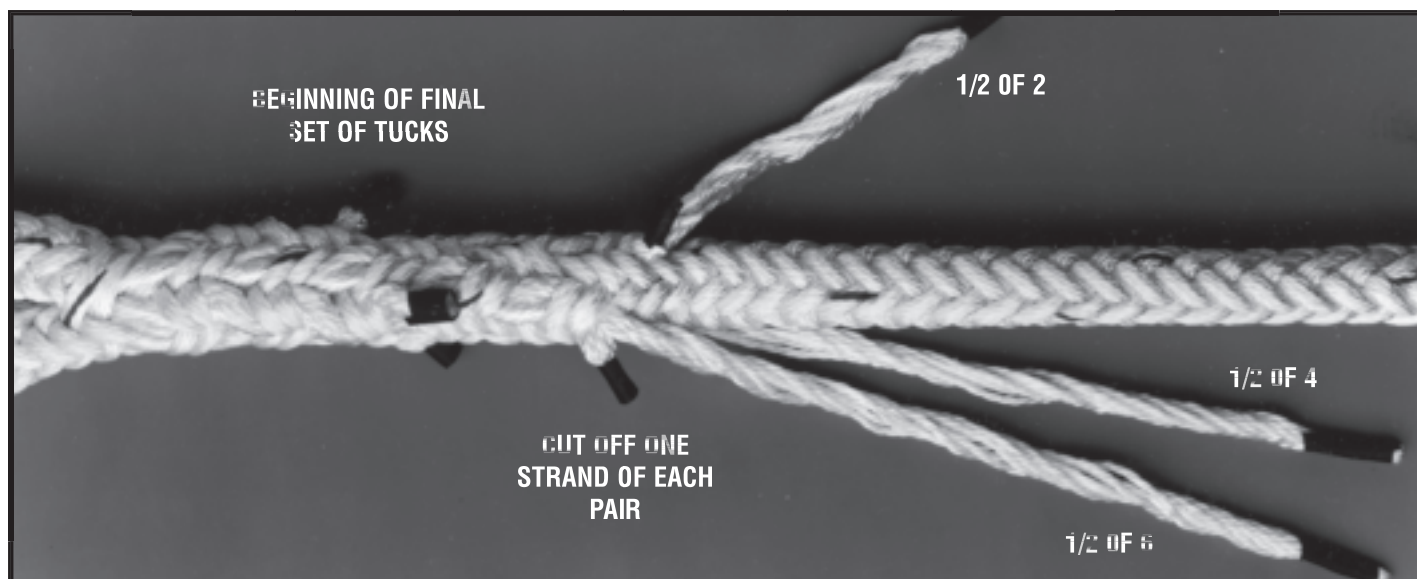
4 - Remove tape wrap at 'Mark A' and gently but firmly pull on each of the strand pairs so "Mark A" is now snug up to the base of the eye. (Mark B)

5 - Now complete two (2) more sets of tucks with each tapered strand pair. Be sure to tuck each strand pair down the same crown strand line – try to keep twist in each pair, and continually remove slack from each strand pair after tucking.



### Step #7 - Taper

- 1 - Cut off strand pairs #1, #3 and #5.
- 2 - Tuck strand pairs #2, #4 and #6 for additional 3 tucks – retain twist and remove excess slack.



### Step #8 - Final Tucks

- 1 - Split each strand pair (#2, #4, #6) into 2 individual strands and tape each strand.
- 2 - Cut off one strand in each pair leaving a short tail projecting from last tuck.

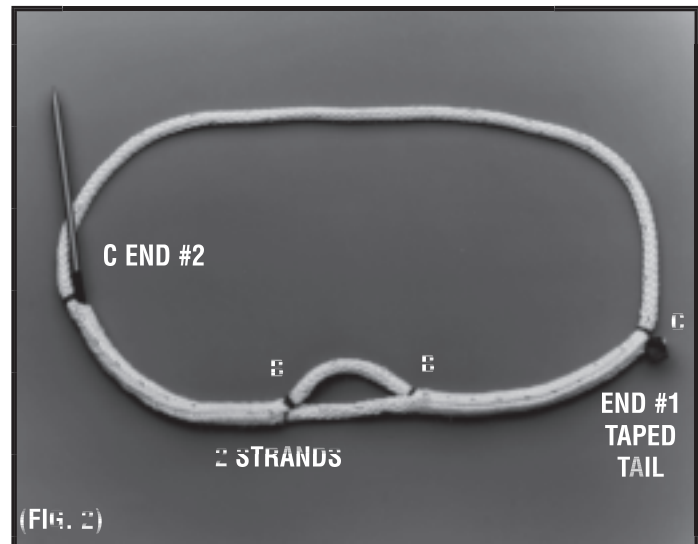
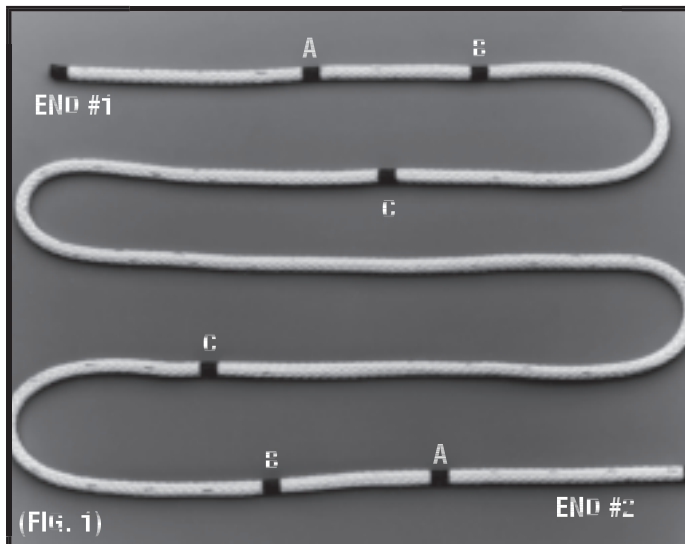


- 3 - Tuck the remaining 3 single taped strands for 3 tucks (over one under two) removing slack and keeping twist.
- 4 - Now cut off the taped strands leaving a short tail projecting as shown.

**Note:** After cutting off the last strand, melt the ends of all the cut strands and remove tape.

## Single Braid Splice (End-for-End) Instructions

- 1) Mark both ends as follows: 1 full fid in from each bitter end to "Mark A". 2/3 of a fid length further up the standing part of the line is "Mark B". "Mark C" is two full fid lengths more. (Fig. 1) Use a different color tape for wrapping each bitter end.
- 2) Taper each end by working from "A" toward the bitter end. Mark the 6th pic and continue marking every 5 pics. Cut and remove these strands back to bitter end. Re-tape the bitter ends. Attach the splicing tool to end #1.
- 3) Inset End #1 into End #2 at mark "B" and come out at "C" tie a knot in the tail to prevent it from slipping back into the rope. Repeat the process with End #2, inserting it two pics up from "B" and out as mark "C". (Fig. 2)
- 4) Hold the tail ends, one in each end. Pull sharply. Untie the knot, hold the rope at the crossover point and smooth the cover first in one direction away from the crossover until the tail disappears inside the rope. Repeat in the other direction. Lock stitch the rope on either side of the crossover.



## Double Braid Eye Splice Instructions

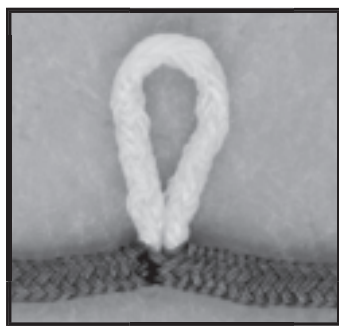
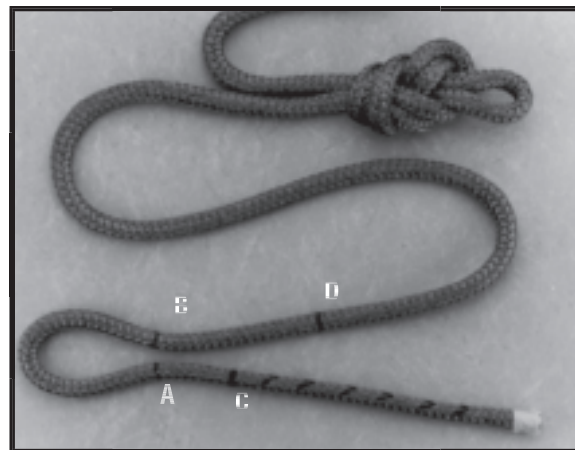
**Step 1)** From end of rope measure back one full fid length (see Fid Measurement, Table Page 2) and make Mark "A".

Using Mark "A" as a reference, form the desired size eye and make Mark "B" on the rope directly opposite Mark "A", as shown. (If using a thimble, shackle or other hardware in the eye refer to the special tips section).

From Mark "A" count eight consecutive left or right strands toward the end of the rope and make a heavy mark completely around the rope. This is Mark "C".

From Mark "B" measure one long fid section (down the body of rope) and make Mark "D". From Mark "D" measure down the rope approximately 5 full fid lengths and tie a slip knot or figure 8 knot in the rope.

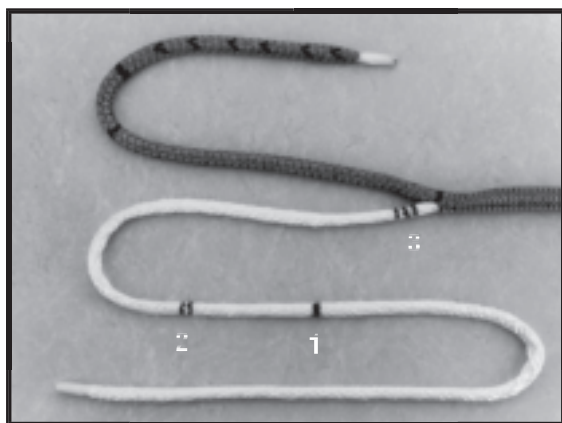
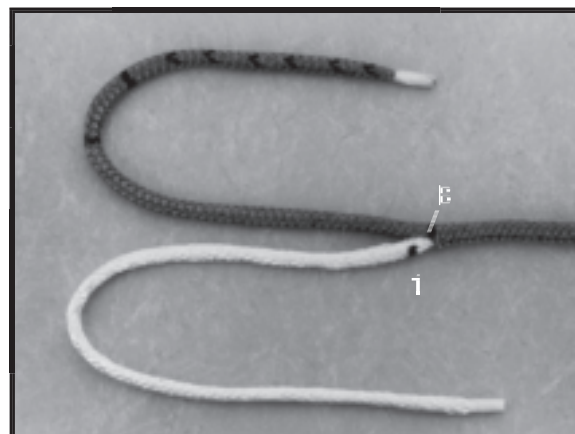
From Mark "C" count five consecutive left or right strands toward the end of the rope and mark the 5th left and right strand pair. From this point count another four consecutive strands and mark the 4th strand pair. Continue counting and marking in this 5:4 sequence to the end of the rope.



**Step 2)** Bend the rope sharply at Mark "B" and carefully spread the cover strands to expose the core. Pry the core braid out from the cover. Use care to avoid pulling any of the cover strands. Pull the end of the core braid completely out of the cover.

Tightly tape the end of both the cover and core braids. Holding the exposed core, slide the cover braid back to the

knot. Then hold the knot and slide the slack cover back down the core in the direction of the end of the rope until all of the slack has been removed. Mark the core at the point where it exits from the cover. This is Mark "1".



Once again slide the cover toward the knot. Measure one short fid length (see "Fid Measurement Chart") from Mark "1", toward the Knot and make two marks that go completely around the core. This is Mark "2".

From Mark "2" measure one full fid length plus a short fid length toward the knot and make three marks completely around the core. This is Mark "3".

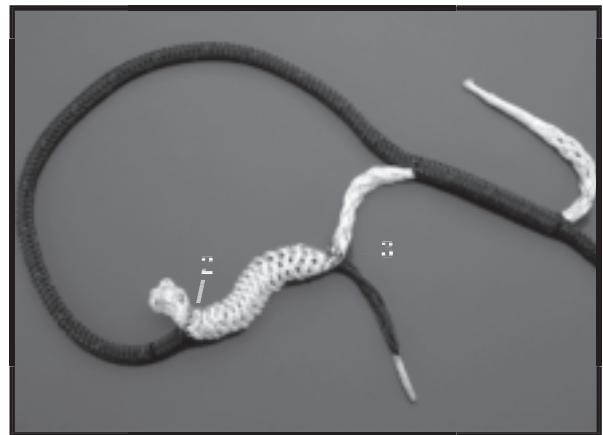
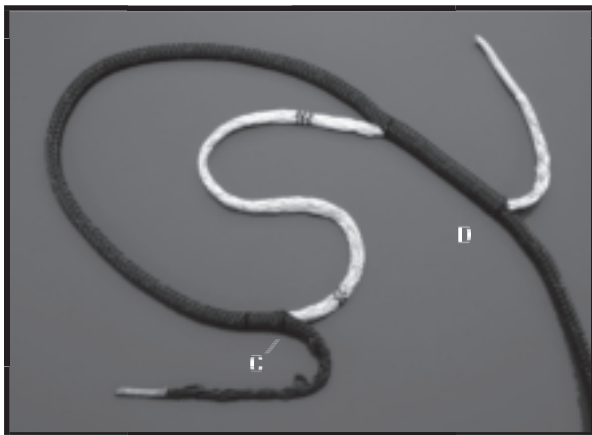


**Step 3)** Taper core tail and attach fid. Insert the fid into the cover at Mark “C” and out at Mark “D”. Pull core tail through at Mark “D” until all the slack has been removed. Remove the fid from core tail.

**Step 4)** Cut and remove the marked strand pairs on the cover tail, starting at Mark “C” and working toward the end of the cover tail.

**Step 5)** Using masking tape place a wrap of tape 2" from the end of the cover tail. Taper this by cutting the end at a 45 degree angle. Attach the fid to the cover and tape the tapered point to the fid. Insert the fid into the hollow core at Mark “2” and out at Mark “3”. When exiting or entering the braid with the fid always go between strands.

Pull the fid, with cover tail, through the core until Mark “C” on the cover is exposed at Mark “3” on the core. Remove the fid and tape. Notice the loop at mark “C” after running the cover through the core, to remove this loop simply pull on the core exiting mark “D” until the loop disappears.

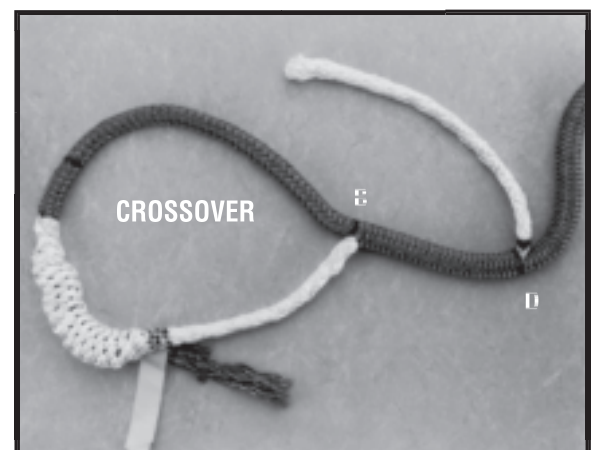


#### Notes:

- 1.) The rope may be extremely tight where the fid is traveling between Marks “C” and “D”. To create more space in this area, grasp the core as it exits the cover at point “B” and pull extra core out of the rope. This will cause the cover to “pucker” and give you some extra space.
- 2.) If the distance between “C” and “D” is longer than the length of the fid, hold the fid in place by squeezing it through the cover braid. Slide the cover slack back from the fid to Mark “C” to draw the core tail into the cover. Then continue working the fid through the cover to Mark “D”. Repeat as necessary.
- 3.) Avoid snagging the core with the tip of the fid when it is passing through the cover in the vicinity of Mark “B”. To check if the core has been snagged, pull on the exposed core where it exits from the cover at Mark “B”. If the core moves freely it is OK to proceed. If the core appears to be stuck, pull the Uni-Fid back until the core is no longer snagged and continue.

**Step 6)** The **crossover** is the point where Mark “C” on the cover and Mark “2” on the core meet. To tighten, hold the rope at the crossover point and alternately pull on the free ends of the cover and core. Continue this process until the crossover is approximately the same diameter as the rope.

To bury the cover tail, hold the rope at the crossover and smooth the core toward the cover tail, which will disappear.



To bury the core tail, hold the crossover and smooth out the slack in the cover braid from the crossover down to Mark "D". Repeat this process several times to remove all cover slack. Most of the core will disappear; however, some of the core tail will still remain at Mark "D" after this process.

Mark the core tail where it exits from the cover at Mark "D". Then mark the core tail at Mark "B" by inserting the marking pen into the opening at Mark "B".

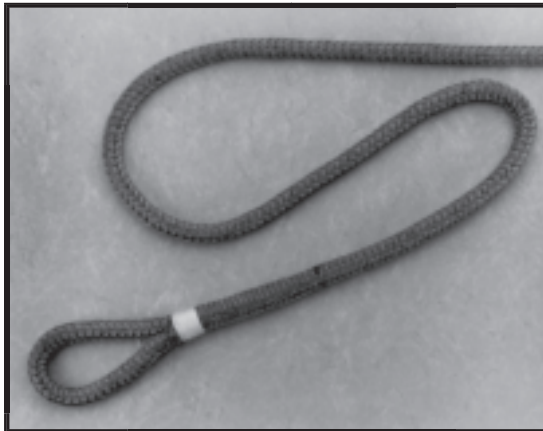


Pull out the core tail at Mark "D" until the mark made at "B" appears. Cut off the excess core tail at the first mark (the one nearest the end of the core) and unbraid the core tail back to the second mark. Fan out the strands. Cut the strands at a 45 degree angle starting at a point about halfway back from the end.

Again, hold the rope at the crossover and smooth the cover braid from the crossover toward Mark "D". The exposed core will disappear completely inside the cover.



**Step 7)** Secure the knot tied in the body of the rope to a solid anchor point. Since a good deal of tension may be placed on the rope when burying the splice, the anchor point should be very sturdy.

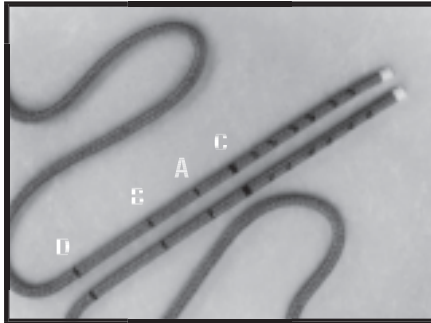


The slack in the cover braid between the knot and Mark "B" will be used to bury the exposed core, crossover and cover down to Mark "A" to produce the desired size eye. This is accomplished by holding the rope at the top of the eye and sliding the cover slack back from the knot towards the splice. Milk the cover from the crossover around the radius of the eye to the throat at "B" and pull that leg sharply with a spike to help seat the splice. Flex and/or hammer the splice section to loosen the fibers. Seize or cross-stitch the eye to finish the splice.

**Notes:**

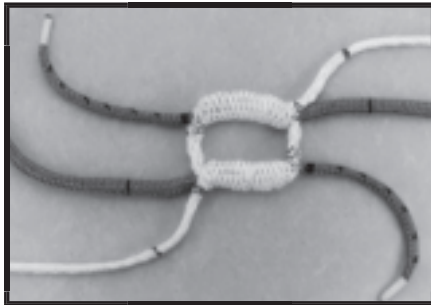
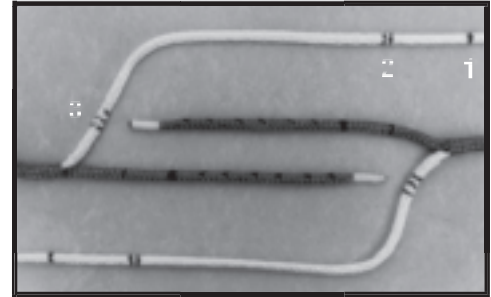
I.) If insufficient tension is placed on the rope while milking up the slack the crossover may tend to bunch up. If this happens, slide the cover slack back toward the knot until the crossover is the proper size. Then repeat the milking procedure.

## End-for-End Splice Instructions

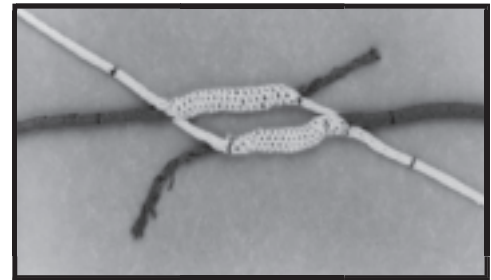


**Step 1) Mark / Extract** – Mark the two ends in the same manner as step 1 of the Double Braid Eye Splice directions. (Use 1 short fid length as the measurement from “A” to “B” to replace the “eye size”) Tie slipknots on each end as per previous directions.

Extract and mark cores per step 2 of eye splice directions.



**Step 2) Insert Cover into Core / Taper** – Attach fid to cover tail 1 and insert into core 2. Repeat with cover tail 2 and core 1. Cut and remove marked strands per step 4 in eye splice directions.



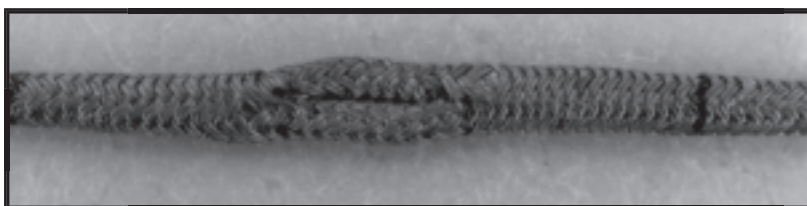
**Step 3) Insert Core into Cover** – Insert core tail 1 into cover tail 2 at “C”, per step 3 in eye splice directions. Repeat with core tail 2 into cover tail 1.



**Step 4) Tighten Crossover / Bury Tails** – Taper the core tails as per step 6 on eye splice directions. Hold the rope at the crossover and smooth down each side to bury tails.



**Step 5) Bury The Crossover Points use the Directions in Step 7 of Eye Splice.** – Some slack may develop between points “A” and “B”, the eye portion of the splice. Smooth the slack back from “A” toward “B” and sharply yank “A” away from “B”. Stitch and whip each end at Mark “B” and seize the crossover area.

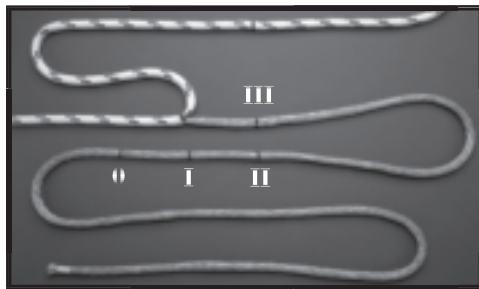
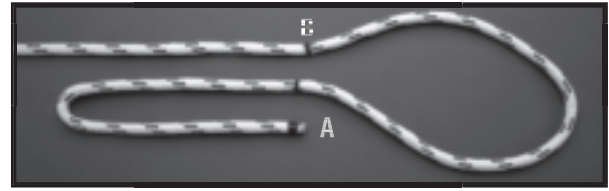


**Note:** See Tools & Fid Table requirements for 20 series splices.

## Core-to-Core Eye Splice Instructions

### 1) Marking the measurement:

Place a single wrap of tape on the end of the rope, measure off two (2) fid lengths from the end and make a mark on the cover. This is mark "A". Form the eye and make a second mark opposite the first. This is mark "B". "A" to "B" = Eye Size. Tie a slipknot approximately ten (10) fid lengths down from mark "B".



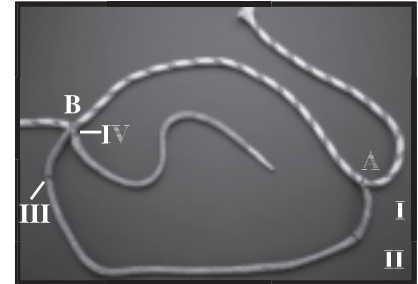
### 2) Extract and mark the core

Extract the core at mark "B" by bending rope sharply and carefully spreading the cover strands to expose the core. Then pry the core braid out using the pointed end of the fid.

Place a single wrap of tape on the end of the core and then, while holding exposed core, slide the cover back as far as possible towards the knot. Then smooth the cover back over the core to the point of extraction. Smooth cover again until all slack is removed and mark the core where it comes out of the cover. This is mark "0". Again, slide the cover back towards the knot and measure one short fid section towards the knot from mark "0" and mark the core. This is mark "I". Measure one more short fid from mark "I", and this is mark "II". Measure 3 fid lengths towards the knot from mark "II" and mark the core. This is Mark "III".

### 3) Inserting the core into the cover

Attach the fid to the end of the core. Insert the core into the cover at mark "A" around the radius of the eye and out of the cover at mark "B". The two sections of the core exiting from the cover at mark "B" should pass through the same hole between the cover strands. Pull the core through the cover until mark "I" on the core is aligned with mark "A" on the cover. Hold mark "I" and mark "A" together and smooth out the cover from mark "A" to mark "B" to remove all of the slack in the cover. After removing all of the cover slack, mark the core tail where it exits the cover at mark "B". This is mark "IV".



### 4) Burying the core tail

With the fid still attached to the end of the core, insert the core tail into the core at mark "II" and out at mark "III". Pull the core tail through until mark "IV" is aligned with mark "II". Pull out sufficient core tail from mark "III" and remove the fid.

### 5) Tapering the core tail

Starting at the end of the core tail, count three (3) consecutive strands revolving either to the right or to the left and mark the third strand pair. Count another five (5) consecutive strands and mark the fifth pair. Continue counting and marking the fifth consecutive strand pair until a total of five (5) strand pairs have been marked.



Cut and remove the five marked strand pairs from the core tail. Remove any masking tape from the end of the core tail and bury the core tail into the body of the core by holding marks "II" and "IV" in alignment and smoothing out the core from mark "II" to mark "III".

### 6) Bury the core-to-core splice

Secure the slipknot to a fixed anchor point. Bury the exposed core, and 6 inches of the cover tail by:

1. Holding the core at the point where marks "II" and "IV" coincide, place tension on the rope and smooth out the cover back over the core from the slipknot towards the eye.
2. As the cover approaches the point on the core where marks "II" and "IV" coincide, it may be necessary to alternately pull some of the core back out of the cover. Smooth the cover over the exposed core in order to get the cover marks "A" and "B" to be side by side as shown in figure below.
3. After getting marks "A" and "B" side by side, measure back from the neck of the splice 6 inches towards the body of the rope and make a mark.
4. Try removing all the slack from the rope and eye, then bunch the slack up within the neck of the splice and the six-inch mark.
5. Before burying the cover tail taper approximately 8 to 10 inches of cover, and tape tightly.
6. Attach the cover tail to a very small fid, and proceed to bury the cover tail. Enter at the neck of the splice and exit at the six-inch mark.  
**Note:** Make sure not to snag any of the core fibers while burying the cover tail.
7. After pulling the fid clear from the six-inch mark, remove fid and proceed to work the rope until the entire cover tail is buried.  
**Note:** The cover tail should be buried so that mark "B" is buried at least one inch further then the neck of the splice.
8. When cover tail is completely buried, mark cover where it exits the six-inch mark. Pull cover tail tightly and cut at mark. Smooth slack so the cover tail pulls back into splice.

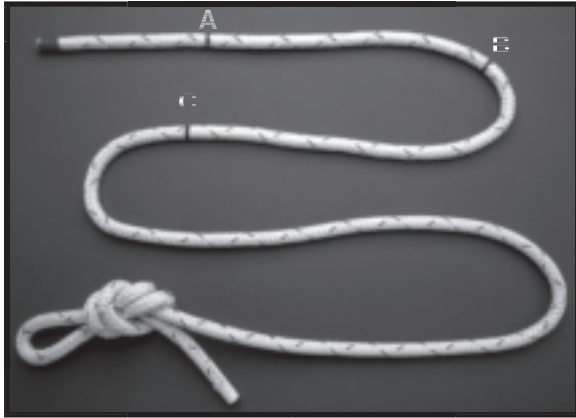
### 7) Finishing the splice

After the exposed core, and cover tail have been buried use nylon whipping thread, to tightly whip the portion of the splice where the cover tail is buried to prevent any slippage.

**Note:** It may not be possible to bury the cover tail for every rope. If it is not possible simply whip the cover tail to the outside of the rope after burying the core.

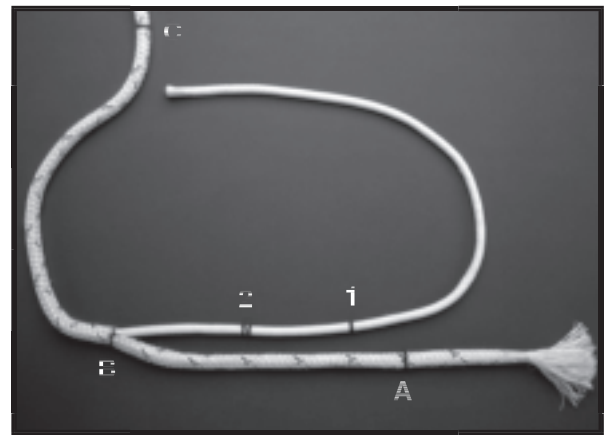
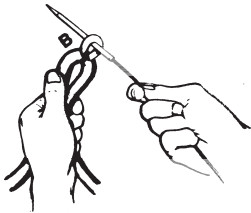


## Sta-Set X/PCR Eye Splice Instructions

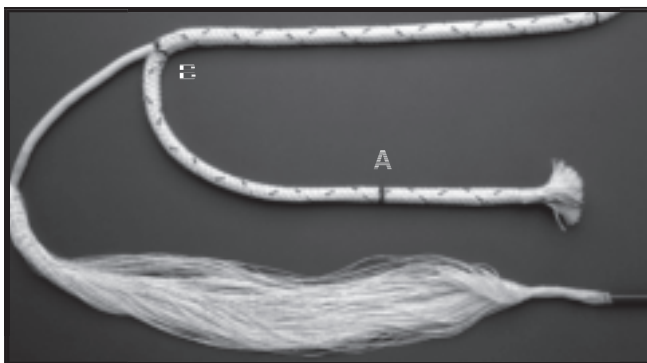


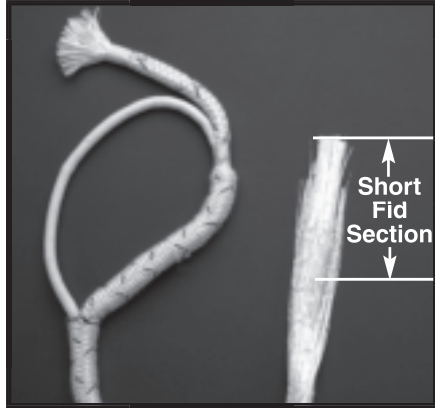
**Step 1)** Measure back from the bitter end 1 long fid section, (see "Fid & Tools" page 2 & 3 for fid measurements) to make Mark "A". Form desired eye size. (If a thimble is to be used form the rope around it with "A" as one side.) Make a mark directly across from "A", this is Mark "B". Measure back 1 1/2 full fid lengths from "B" to Mark "C". Tie a slipknot some 8 to 10 fids further up the rope.

**Step 2)** Extract core from rope at Mark "B" as shown, (see illustration). Tightly tape the end of the core. Slide cover down the core as far as possible toward the knot. Now smooth the cover from the knot toward the end of the core. Mark core where it exits from cover (Mark "1"). Slide cover back down core, measure 1 short fid length from Mark "1" and make Mark "2". Place a single wrap of tape around core at Mark "2".



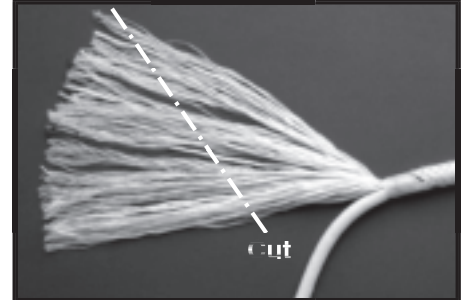
**Step 3)** Taper the end of the core tail and attach fid as shown. Slit and remove the fabric tape covering the core from Mark "2" to the end of the fid, exposing the parallel core yarns. If a closed termination is being placed in eye, slide the hardware onto the core at this time. Insert tip of fid into the cover at Mark "A" and work it down the rope and out at Mark "C". Do not snag any cover yarns with the tip of the fid. (Slack may be introduced into the cover to open it up by pulling out more of the core from Mark "B").



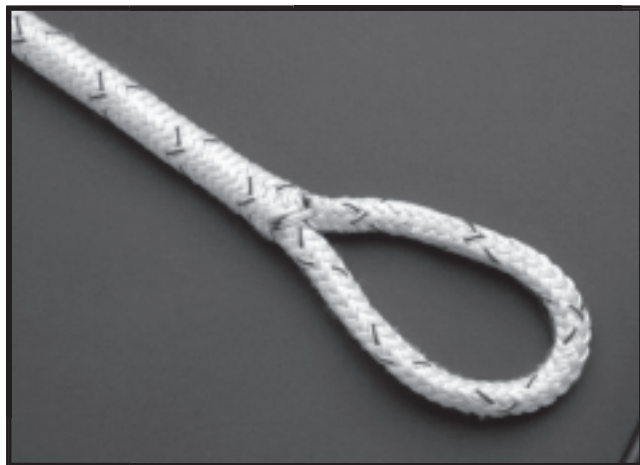


**Step 4)** Pull fid and about 4–6 inches of core out of rope at Mark “C”. Remove fid. Measure and mark the core fibers 1 short fid length from the end. Fan the core fibers and cut at a 45° angle from the mark to the bottom end.

**Step 5)** From Mark “A” on cover, count 5 pics toward end of cover tail. Unbraid cover from end back to this point; and cut at a 45° angle.



**Step 6)** Carefully pull core back out of cover at Mark “A” until Mark “2” on core (where tape was applied in Step 2) lines up with Mark “A”. This is the crossover point. Tightly tape the tapered end of the cover to the core starting from Mark “A” and working toward the end of the cover. Use masking tape and overlap each wrap of tape as little as possible. After taping, roll the taped section between your hands to smooth the taped area. Hold rope at Mark “A” and smooth cover toward the knot. Tapered core tail will disappear into rope.

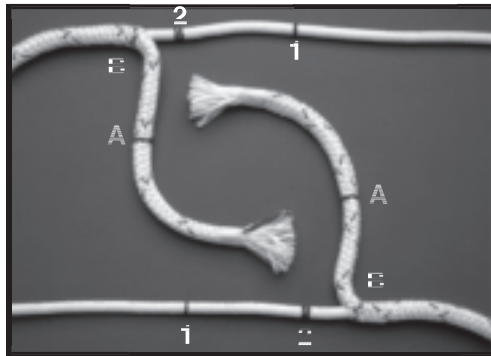


**Step 7)** Attach the knot to a secure anchor point (a good deal of tension may be required to bury the splice). Bury the exposed section of the splice up to the crossover point by milking the cover back up the rope from the knot. Keep the exposed core under tension while milking the cover. If the rope gets too tight when the crossover is being buried, flex and/or hammer the crossover to loosen the fiber. Continue the process until crossover is buried up to Mark “A” and the cover is snug around the eye. To assist in the final bury, insert a large fid or rod through the eye and give a sharp tug. Seize, cross-stitch or whip the throat.

## Sta-Set X/PCR End for End Splice Instructions

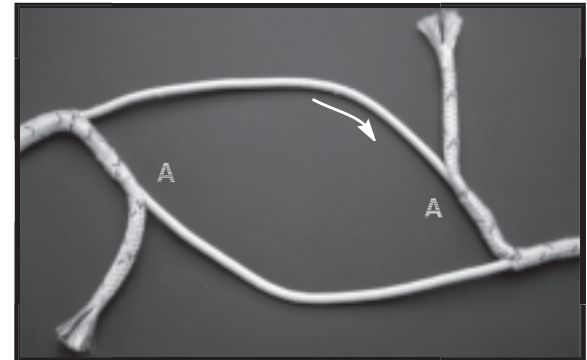
**Step 1)** Lay out the two ends of rope to be spliced together as shown in the photo. Mark each rope as follows:

Measure back 1 long fid section (see "Tools & Fids" page for measurements) from the bitter end and make Mark "A". Measure a short fid section down from "A" and make Mark "B". Measure 1 1/2 full fid lengths down the rope from "B" and make Mark "C". Tie a figure-8 knot eight to ten feet down from "C".



**Step 2)** Extract core from each rope at Mark "B" as shown. Tightly tape the end of the core. Slide cover down core toward the knot as far as possible. Then smooth the cover back toward the end of the core. Mark core where it exits from cover (Mark "1"). Slide cover back down core, measure one short fid length from Mark "1" and make Mark "2". Place a single wrap of tape around core at Mark "2".

Slit and remove the fabric tape covering the core from the tape holding the fid at Mark "2" to the tape holding the fid, exposing the parallel core yarns. Insert tip of the fid into the cover of opposite rope end at Mark "A" and work it down the rope and out at Mark "C". Do not snag any cover yarns with the tip of the fid. (Slack may be introduced into the cover to open it up by either milking the cover up from the knot or pulling out more of the core from Mark "B"). Repeat this process with the remaining core tail.



**Step 3)** Taper the end of the core tail and attach fid (as shown in step 3 of eye



**Step 4)** Pull fid and about 4-6 inches of core out of rope at Mark "C". Remove fid. Measure and mark 1 short fid section from the end of the core. Fan out end of core and cut at a 45° angle, from the mark to the end.

**Step 5)** From Mark "A" on cover count 5 pics toward end of cover tail. Unbraid cover from end back to this point and cut at a 45° angle (as described above).

**Step 6)** Carefully pull core back out of cover at Mark "A" until Mark "2" on core (where tape was applied in step 2) lines up with Mark "A". This is the crossover point. Tightly tape the tapered end of the cover to the core starting from Mark "A" and working toward the end of the cover. Use masking tape and overlap each wrap of tape as little as possible. After taping roll the

taped section between your hands to smooth the taped area. Hold rope at Mark "A" and smooth cover towards knot. Tapered core tail will disappear into rope. Repeat process with other core tail.

**Step 7)** Bury the exposed crossovers one at a time by alternately attaching each knot to a secure anchor point. Bury the exposed section of the splice by milking the cover back up the rope from the knot. Keep the exposed core under tension while milking the cover. If rope gets tight when the crossover is being buried, flex and/or hammer the crossover to loosen the fiber. Continue process until each crossover is buried (up to Mark "A"). Seize, cross-stitch and whip the splice.

