

Eye splice 32/3 (rope)

- General
- Splice

General

This instruction describes how to make a 32/3 eye splice on ropes 8-16 mm.

Splice

1. Cut the rope into length according to specification.
2. Tie a knot or clamp the rope **3000 mm** from end of rope (to secure case and core). Cut off the sealing at the end of the rope, Pic 1.



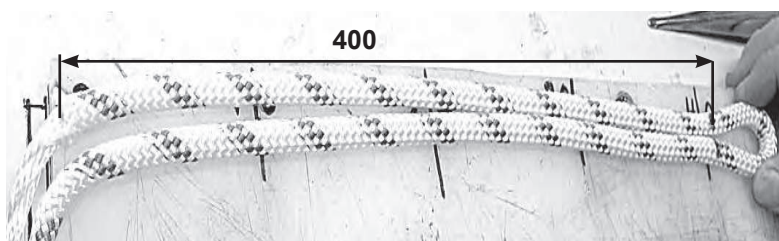
Pic 1.

3. Push back outer case by 200-300 mm, Pic 2.



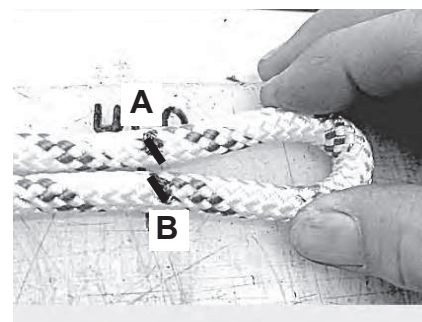
Pic 2.

3. Hold case and push back the slack for about **1000 mm**.
4. Measure **400 mm** from case end pic 3. and fold the rope (~ 30 mm), mark it **A** for eye and **B** for standing part, pic 4.



Pic 3.

5. Open a small hole (four yarns), pic 5. in the case with the fid at **B** and pull out the core, pic 6.



Pic 4.

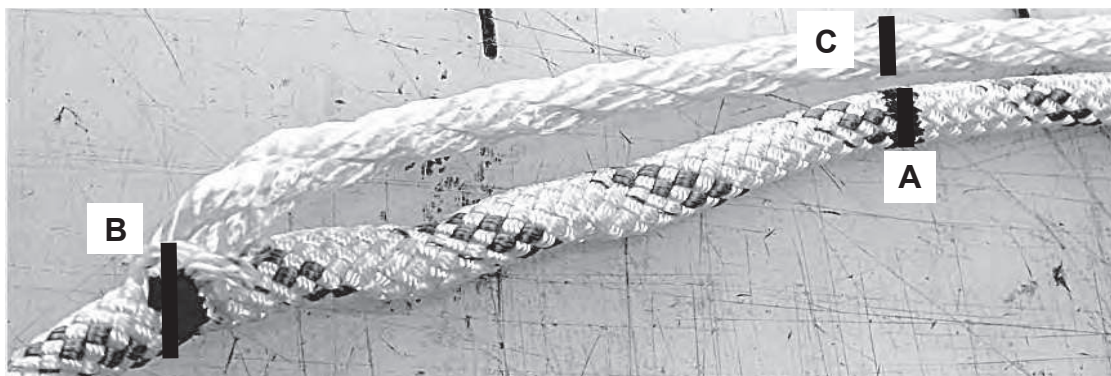


Pic 6.



Pic 5.

6. Mark the core with tape at **C** , opposite **A**, pic 7.



Pic 7.

7. After fitting the tape at **C** (do not cut of the tape yet) divide the core into 3 parts, pic 8.
8. Divide the 3 parts, every part contains different amount of yarns depending on the size of rope, see table below.

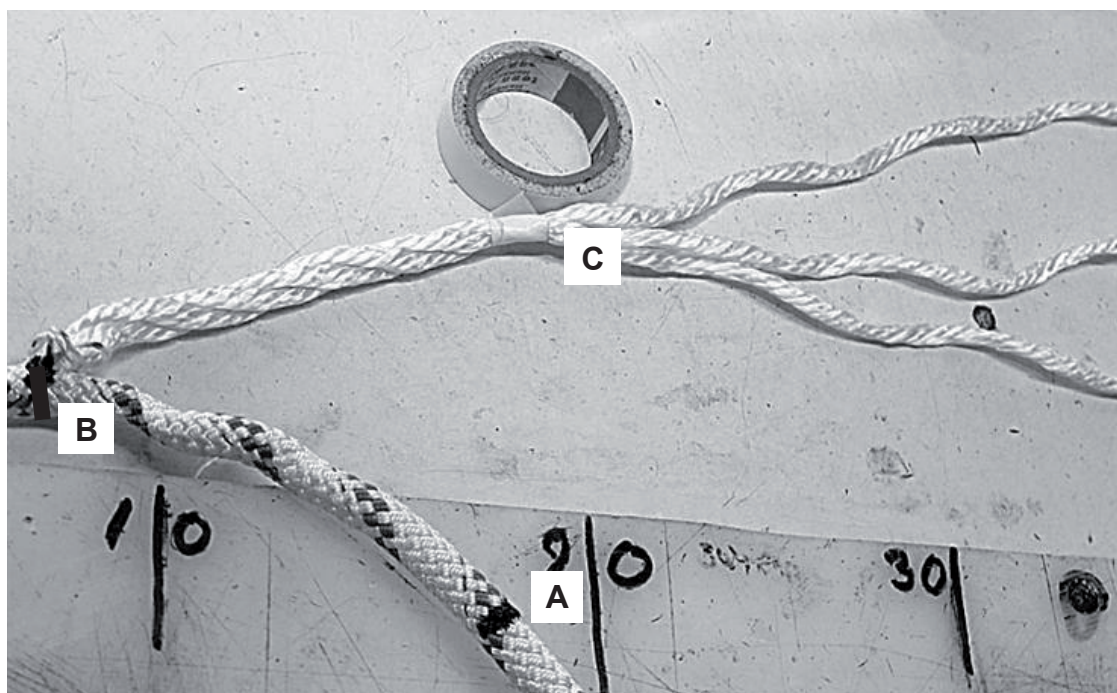


Table for LIROS rope		
Size of rope	Taper of core	Yarns / Parts
Ø 8	50%	4 x 3
Ø 10	50%	5 x 3
Ø 12	50%	8 x 3
Ø 14	60%	9 x 3

9. Taper the core by 50 %.
Example: Ø 10, cut off 2 yarns in the first part and 3 yarns in the second part and 2 in the third, pic 9.



Pic 9.

10. Proceed with tape over the area of cut yarns for about 50 mm, pic 10.



Pic 10.

11. Push the slack case back up to **B** until core starts to move. Push the slack back and forward to make the core and case slide easy, pic 11.



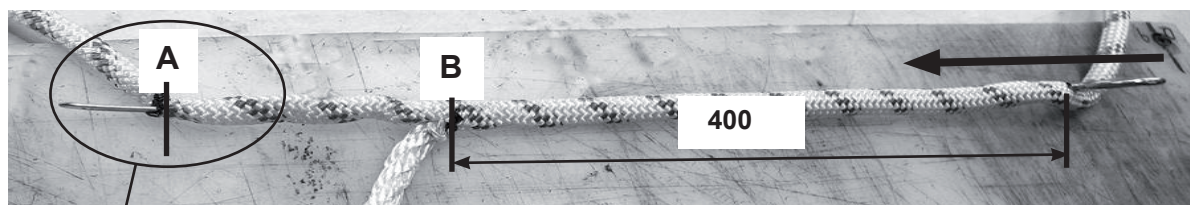
Pic 11.

12. Make a hole in the case with the fid and insert the needle 400 mm from **B**, pic 12

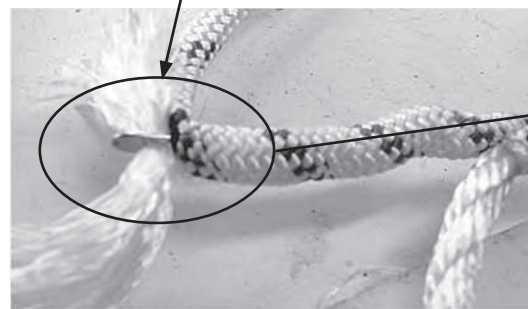


Pic 12.

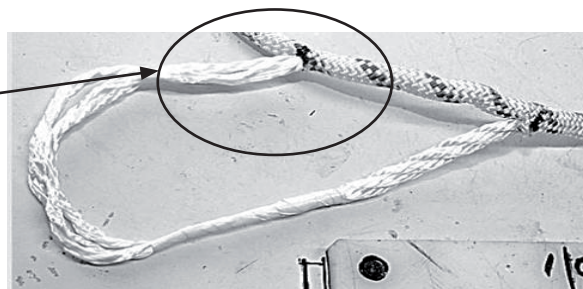
13. Exit the needle at **A**, make sure that the needle works its way between case and core. To make it easier for the needle pull careful in the core, pic 13.



Pic 13.



Pic 14.



Pic 15.

14. Thread core end through the needle eye and pull it through from **A**, pic 14-15.

15. Pull the core and make sure that the tape on the core slips into **B**, leave 10-20 mm of core visible, see pic 16.



Pic 16.

16. Remove 5 strands in a line (**D**) on the cover 50 mm from **A**, pic 17-18.



Pic 17.



Pic 18.

17. Cut the 5 yarns with a pair of scissors, pic 19.

Push back the slack as far as possible, push it past the point for needle entrance, see pic 13.



Pic 19.

18. Make a hole in the case (**E**) with the fid and insert the needle 350 mm from **B**, pic 20.

19. Exit the needle at **A** and make sure that the needle works its way between case and core. To make it easier for the needle pull carefully in the core, pic 21.



Pic 20.



Pic 21.

20. Thread case end through the needle eye and pull it through from the eye, pic 22-23.



Pic 22.



Pic 23.

21. Pull everything tight, then give the splice a hard snatch and use a hammer or similar on the eye to bed yarns in position, pic 24-25.

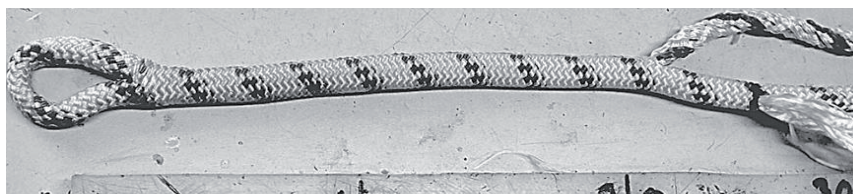


Pic 24.

22. If a timble is required, insert while the eye is being formed and before the ends are pulled tight.

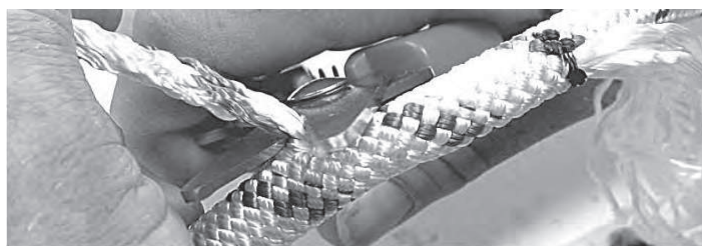


Pic 25.



Pic 26.

23. Cut off protruding ends, smooth down the outer case from the eye until the cut ends disappear, 27-28.



Pic 27.

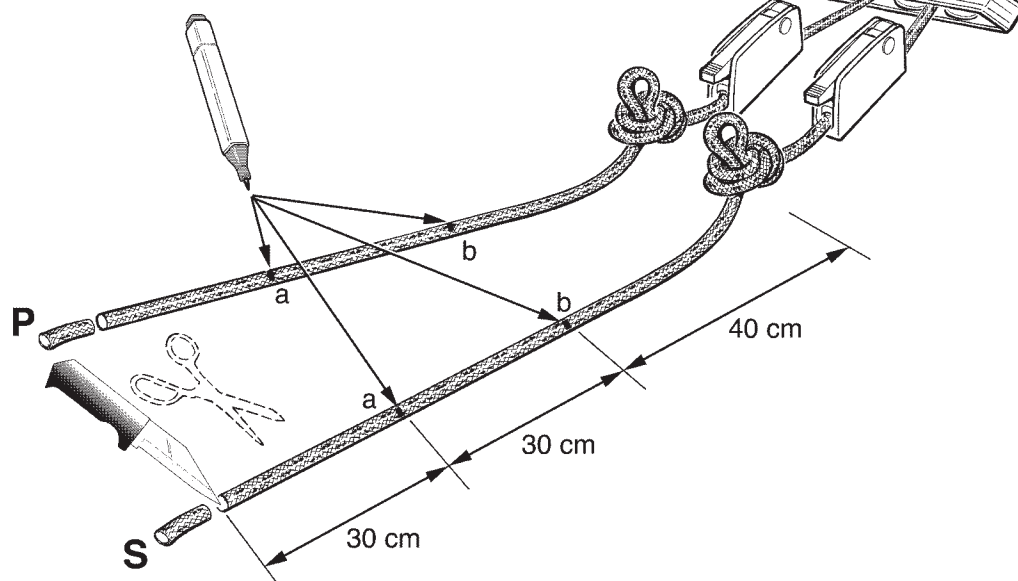
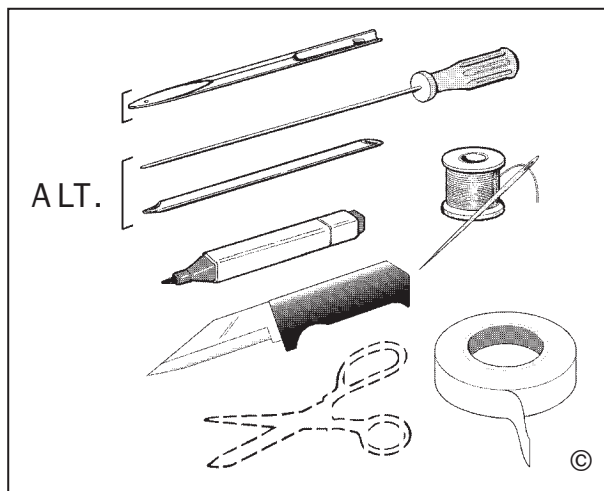


Pic 28.

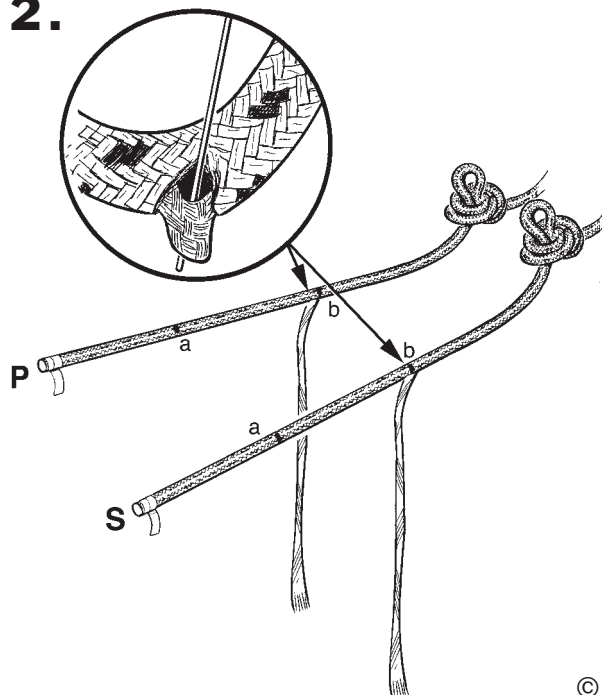
Splice, "endless" line

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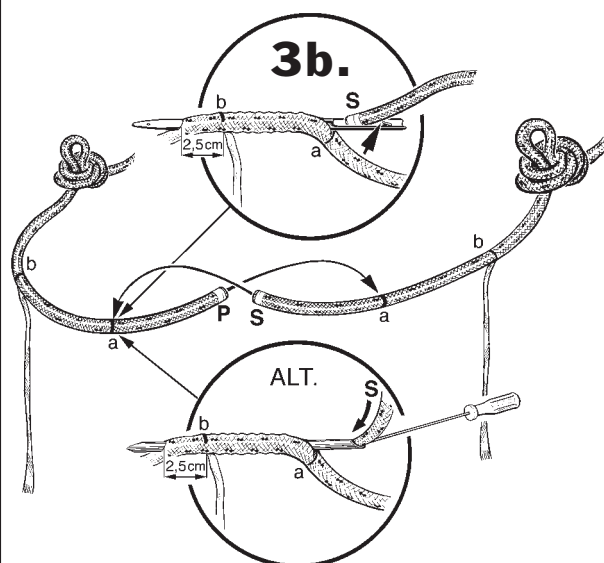
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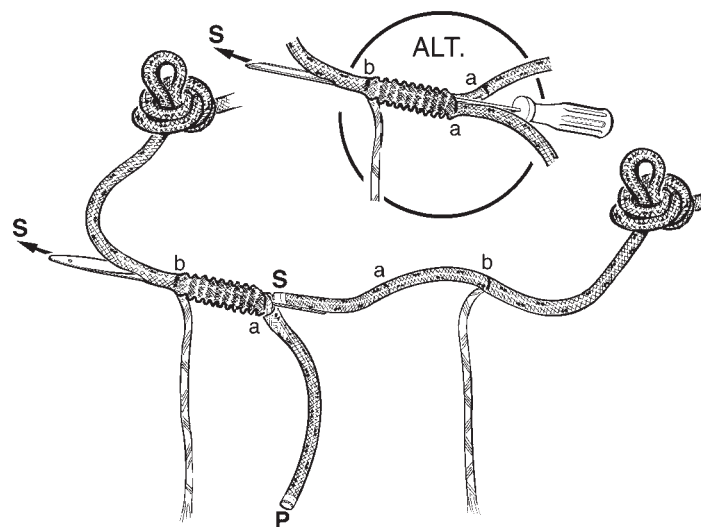
2.



3a.

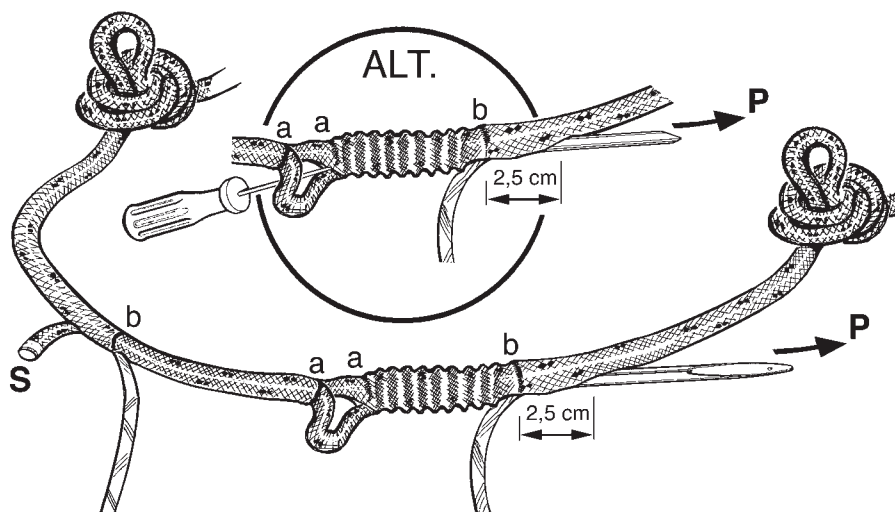


4.

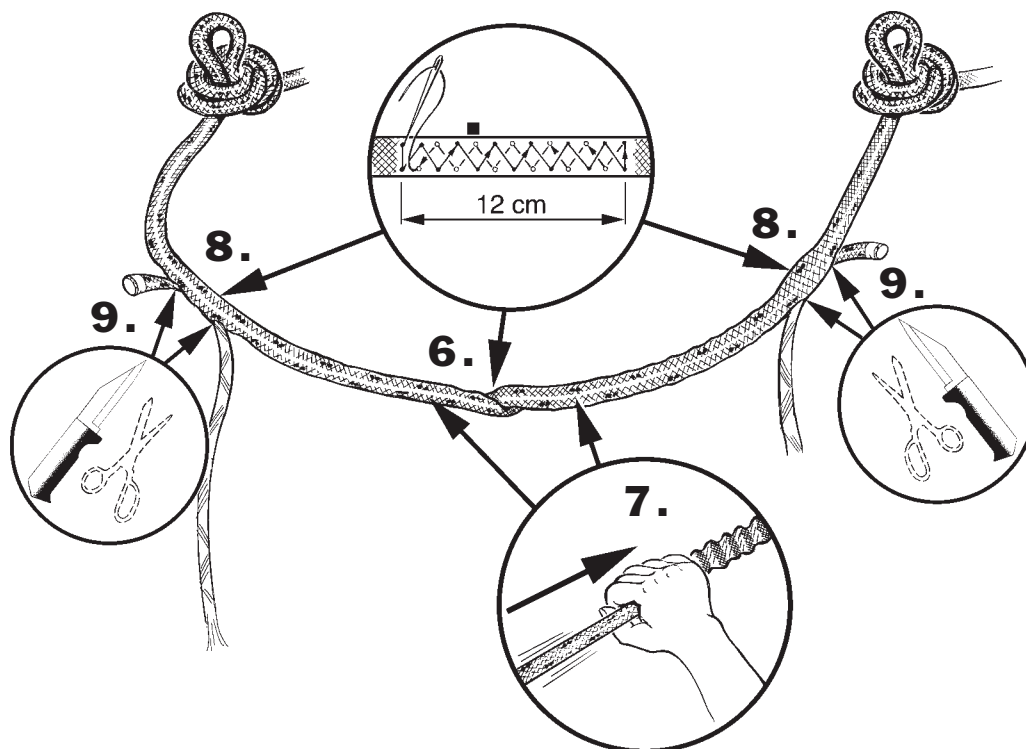


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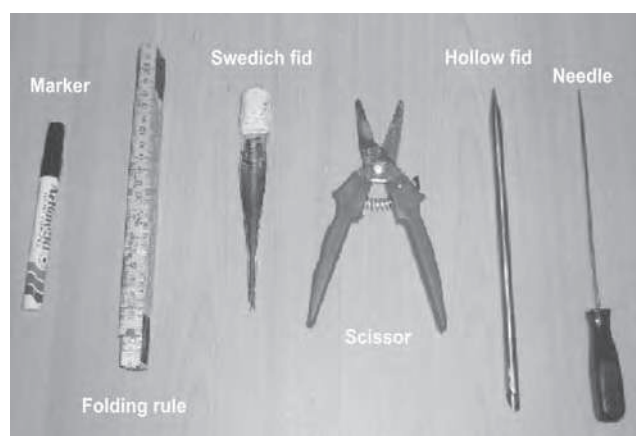
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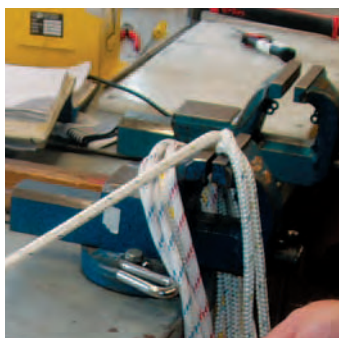
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Eye splice 16/16

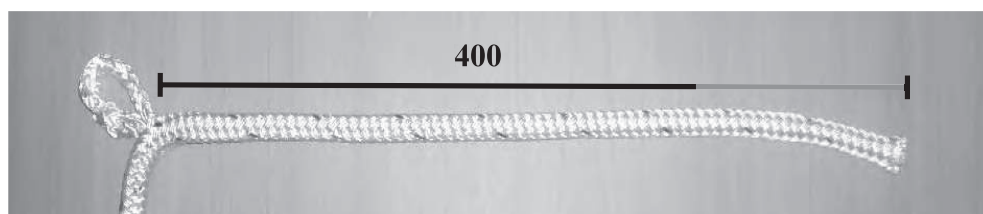
Introduction: This splice is used on 16/16 ropes 6-16 mm. Tools to be needed, scissors, maker pen, sail makers needle, hollow fid, (tape) and needle. Determine how large the eye should be, with the measurement on 230 mm the eye will be a small eye to match a shackle or a



1. Tie a knot or clamp the rope in a vice at 3 meters from end of rope (to secure rope core and cover). Cut off the sealing at the end of rope

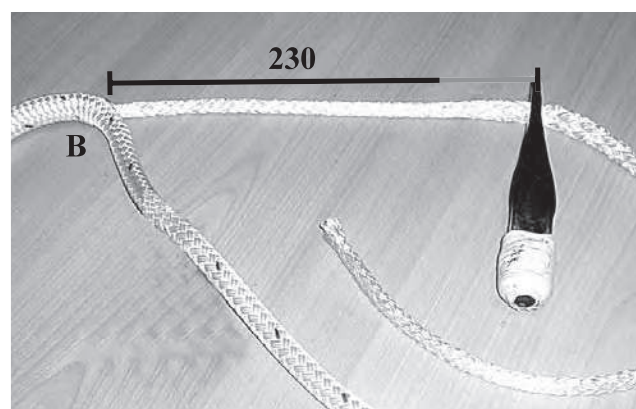


2. Pull out the core (use the sail makers needle) through the cover at 400 mm (B) from end of rope.

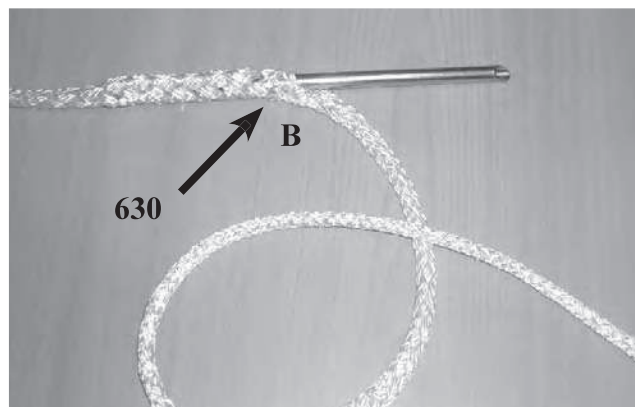


3. Pull out 230 mm more core (mark it or hold the core with your fingers) for the eye splice plus ~500 mm extra. There should now be 400+230+500 mm of core pulled out through the cover.

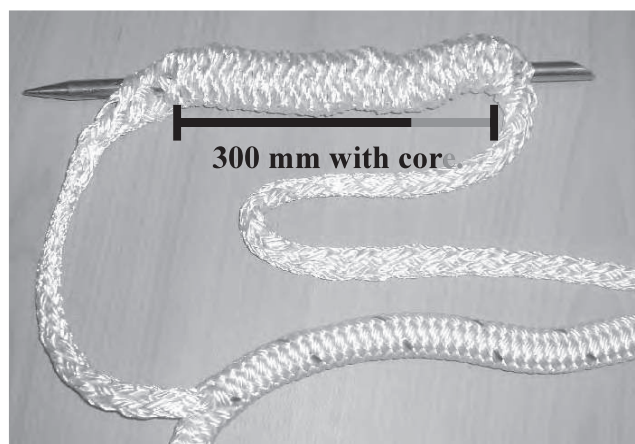
If a block or similar should be added.
Fit it on to the rope at this point. Pull the cover through the block.



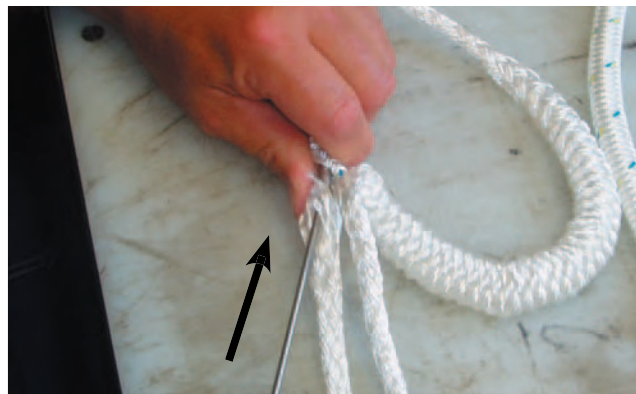
4. Push the fid into the centre of the core at 630 (400+230 mm at the mark B).



5. Push the fid through the core (direction from end of core) and feed the core over the fid ~300 mm.



6. Fit end of cover (without core) into the fid end opening. Use the needle to keep the cover in place inside the fid end opening. If necessary tape the end of the cover and fit it into the hollow fid.



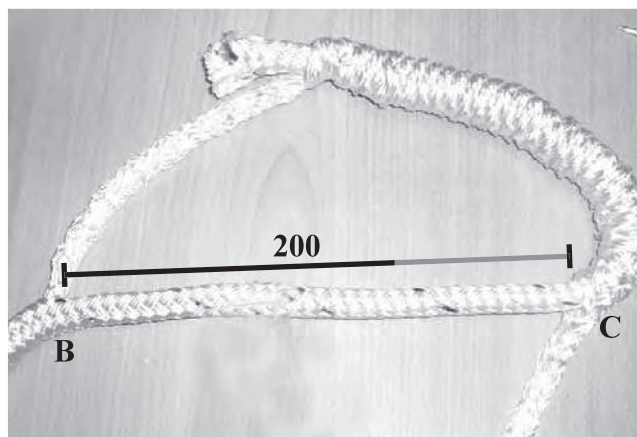
7. Push cover and fid (with the needle holding the cover in place) through the core centre.



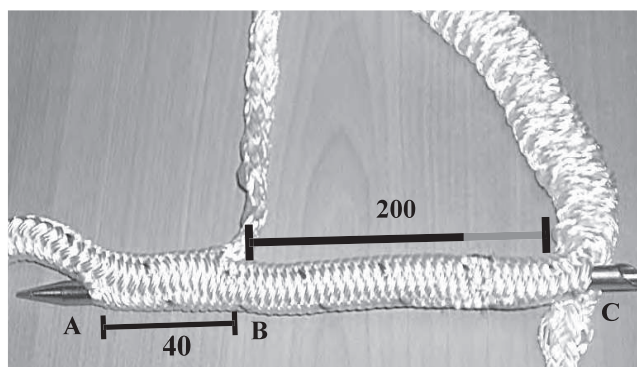
8. Cut the end of the cover in an angle (to achieve a point shape).



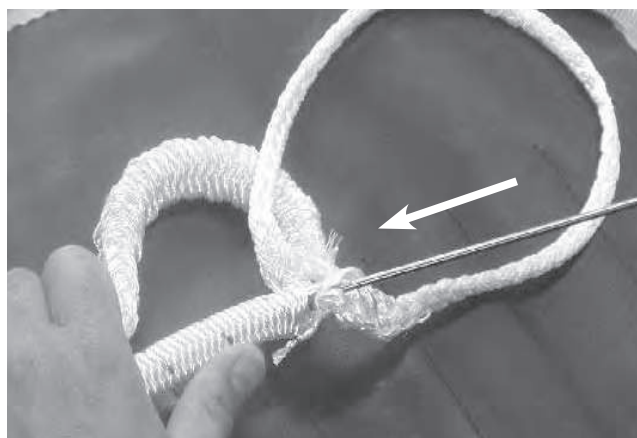
9. Pull out the cover from the core and measure out 200 mm from where the core exits the cover (B) to where the cover enters the core (C).



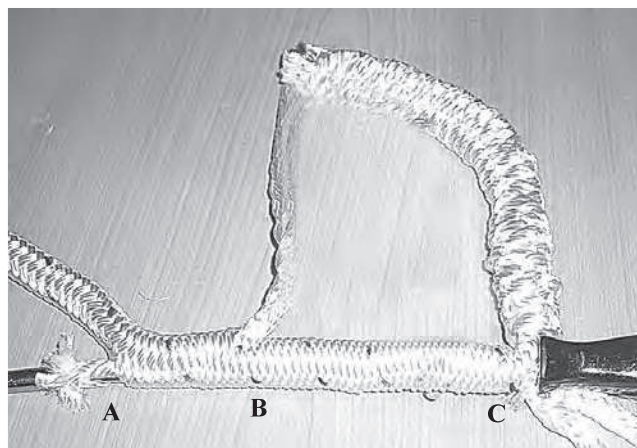
10. Insert the fid (towards securing knot or vice) from where the cover exits the core (C) and push the fid past the point where the core exits the cover (B) about 40 mm to (A). When the fid is passing between (A) and (B) be sure not to catch any yarns from the core.



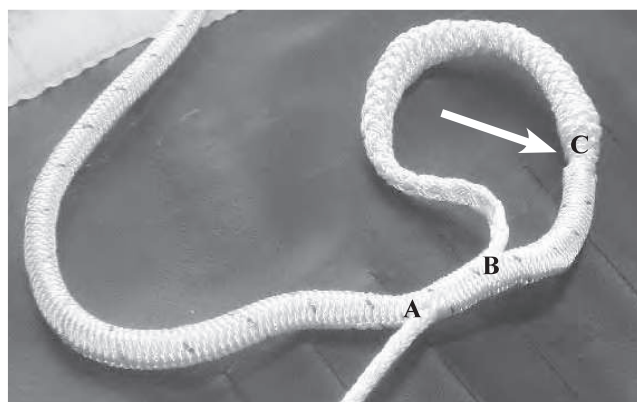
11. Fit end of core into the fid end opening.
Use the needle to keep the core in place inside the fid end opening.



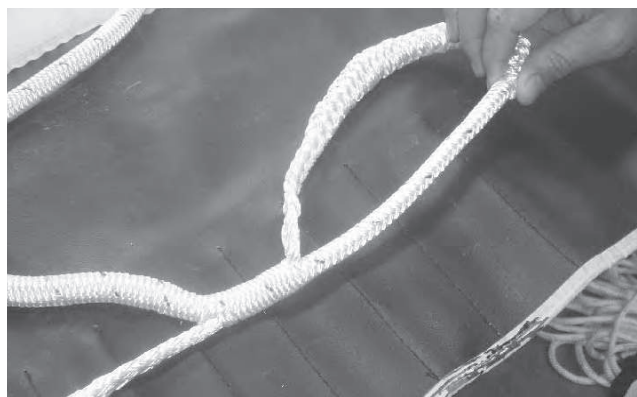
12. Push the core and fid with the needle through the cover centre from (C) to (A).



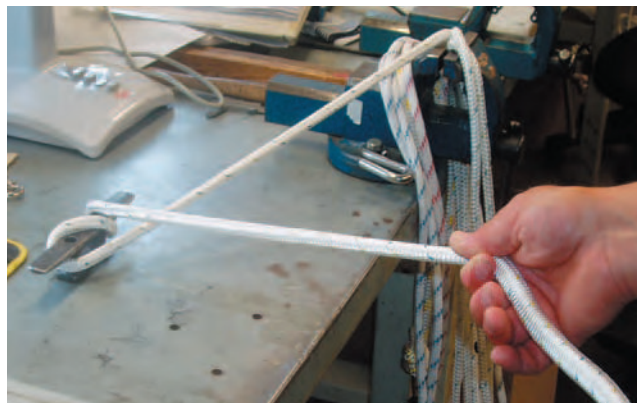
13. Pull the core end until it exit the cover.



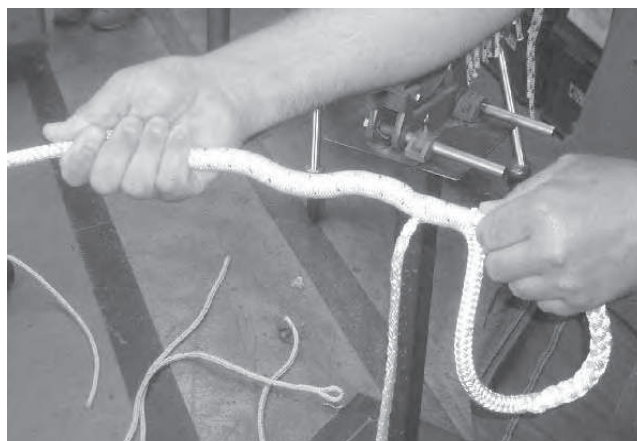
14. Milk the cover over the core until the cover stops against the thick core.



15. The splice is nearly done and the cover is now milked from the knot or vice to pull it inside. Fix the knot or the rope from the vice to a cleat or similar to a secure holdfast.



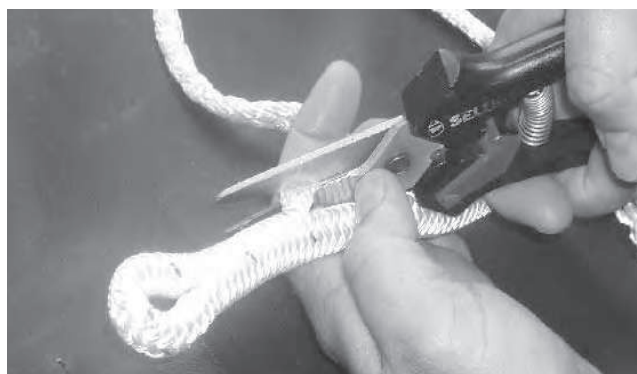
16. It requires a little manipulation of the rope to get the threads smooth to slide the core inside.



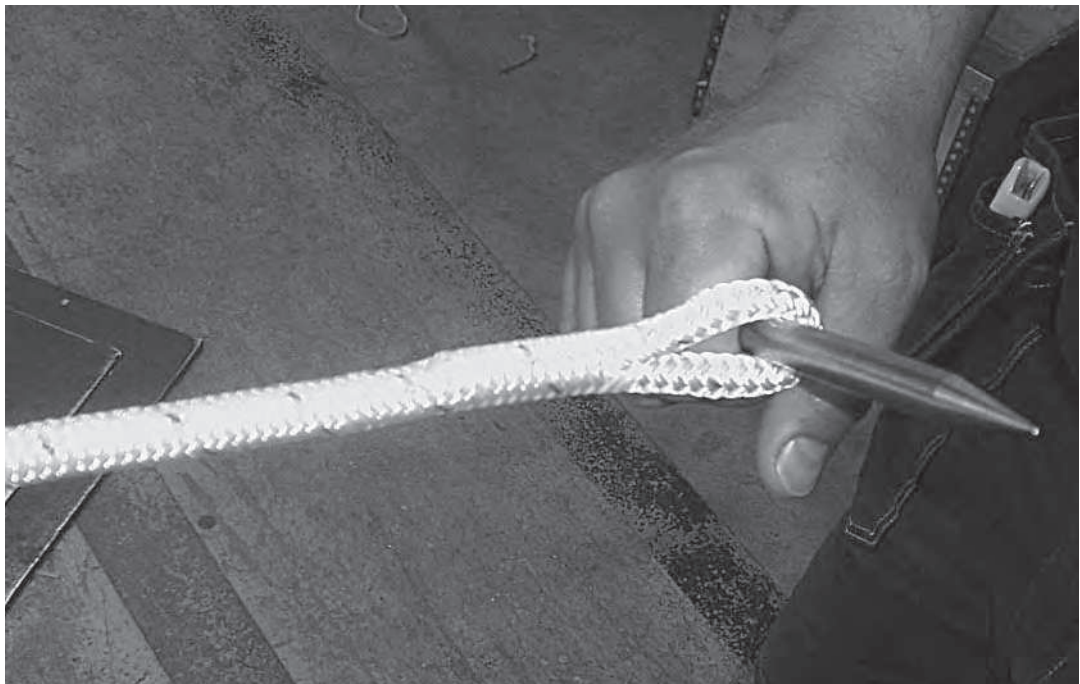
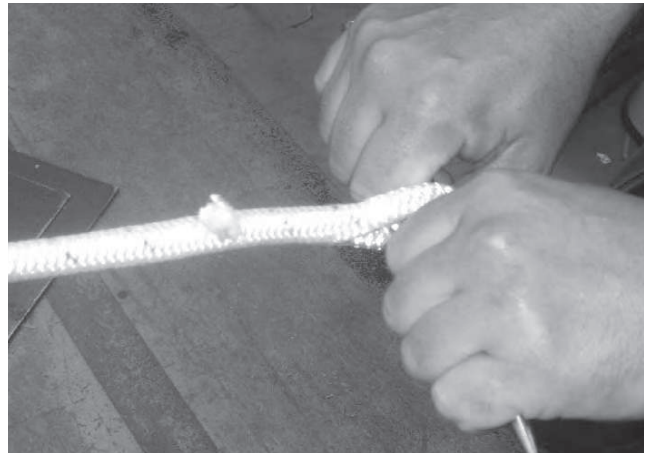
17. Work the eye to match the core and cover together.



18. Trim of the core end about 5 mm from the rope.



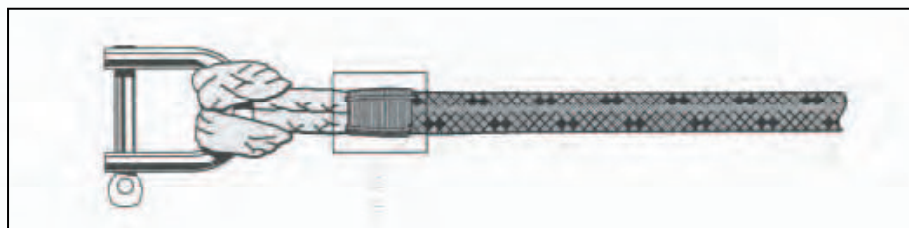
19. Then work the end inside the cover, fit the fid into the eye and snap it hard with both hands until the core slips into the cover.



HMPE eye-splice on lines with cover

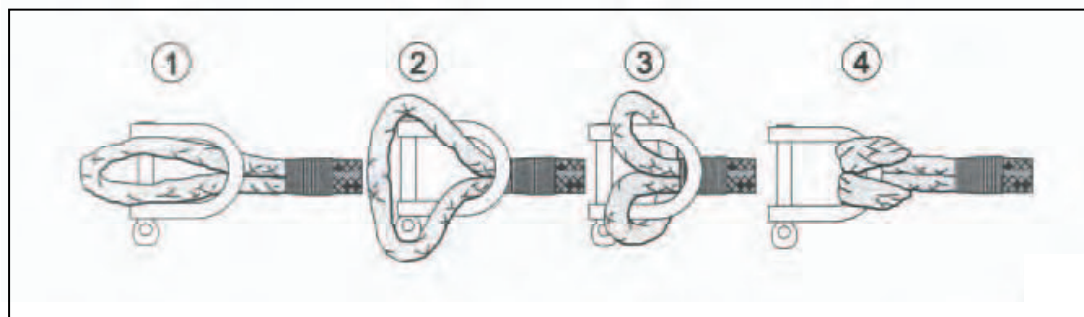
Introduction: This splice is for HMPE-lines only (Dyneema, spectra, etc.) with a braided core. The stiffness of the braided core determines how much load the splice can take, i.e. stiffer core makes a stronger splice.

The splice is based on two tucks that lock mechanically and one tuck that locks by friction. Even the loop around a shackle is part of locking. **Note:** This splice must only be used as shown in pic 1.



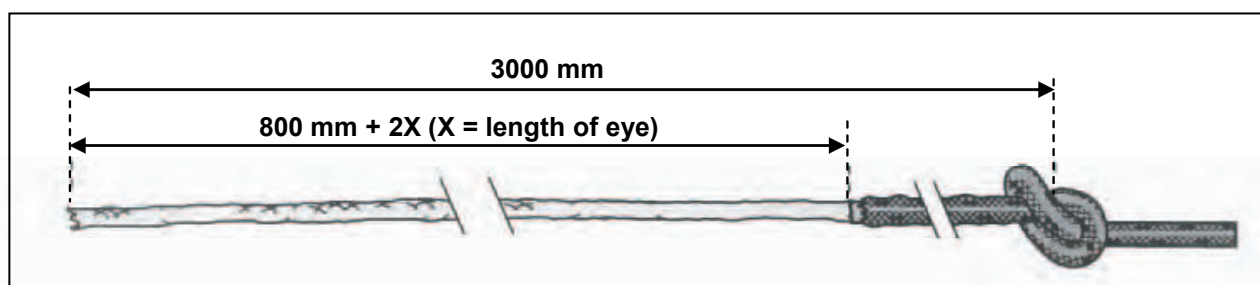
Pic 1

Design: Determine how large the eye should be. As little as possible of the core should be visible when the splice is looped around a shackle, see pic 2. After a few trial splices, the size of the eye can be determined easily.

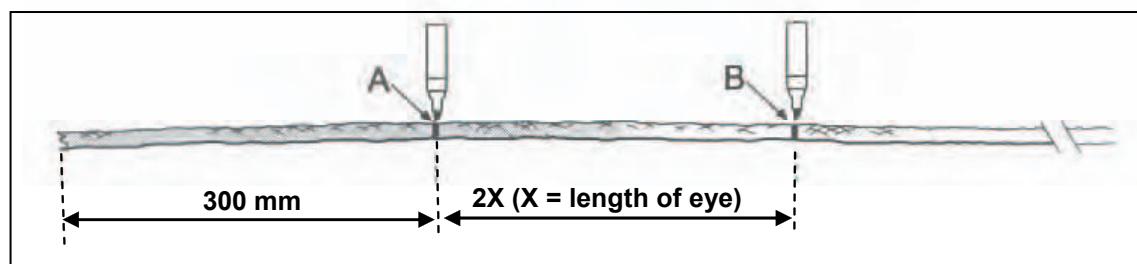


Pic 2

Pull back cover approximately 3000 mm. Look the cover with a knot. **Note:** Only the outer cover! If you have a “sock”, it should be cut as in pic 3. before it and outer cover are pulled back. Mark A and B as in pic 4.

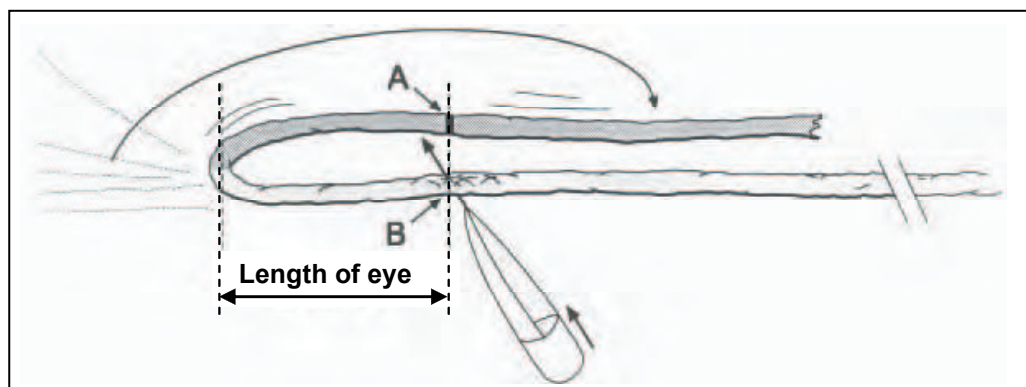


Pic 3

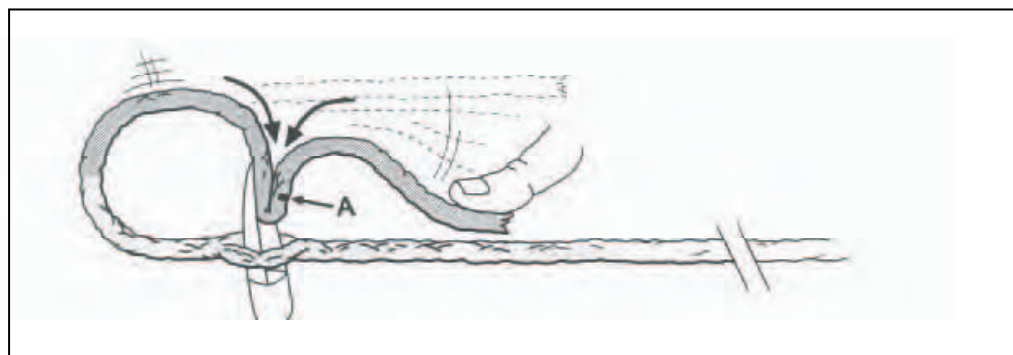


Pic 4

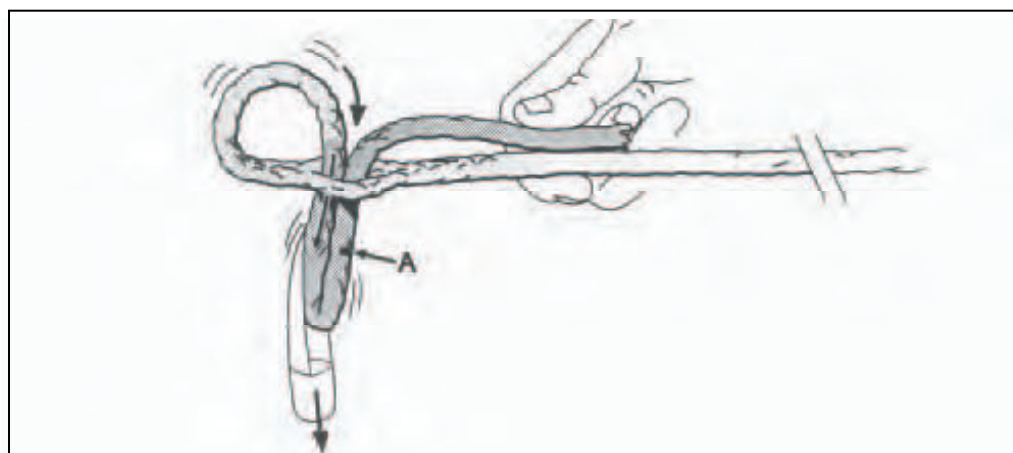
Fold the line, and make a tuck at B. Follow the diagrams to finish the first insert.



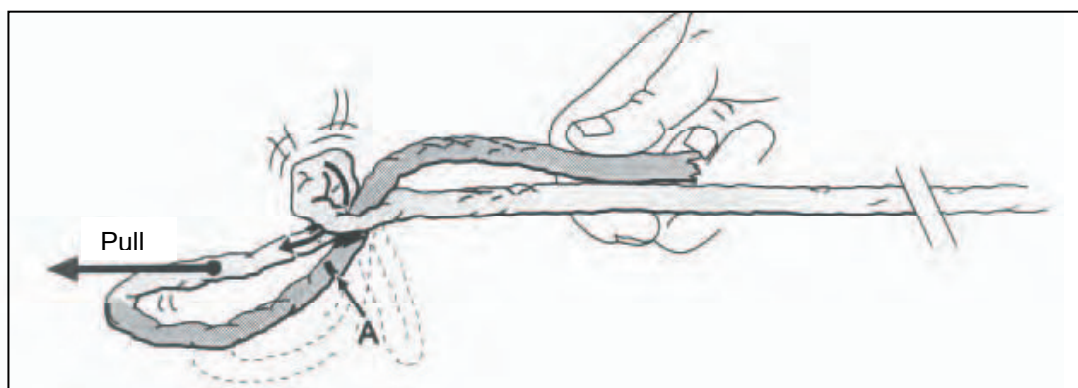
Pic 5



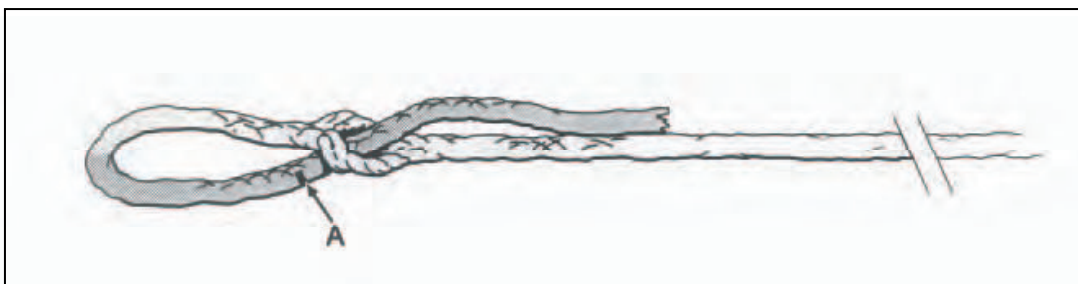
Pic 6



Pic 7

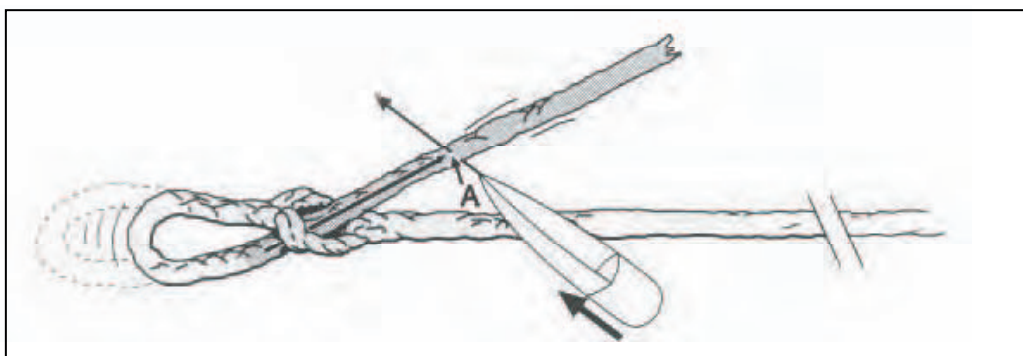


Pic 8

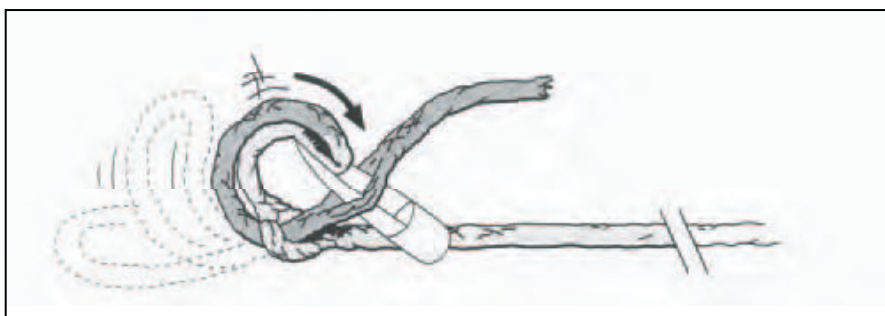


Pic 9

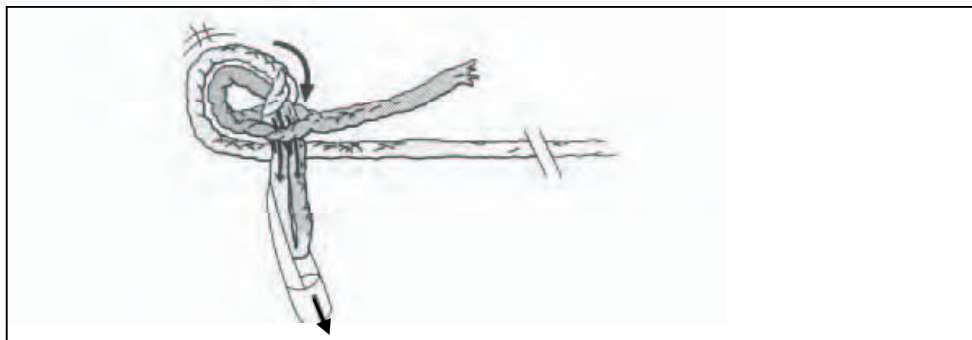
Pull the end back through B, and make second tuck at A, see pic 10. Divide the line in half. Follow pic 11 - 16 to complete the second tuck. Notice how the splice locks itself in pic 16. To avoid twisted strands of fiber in the completed splice, the core has to be pulled back through itself, as pic 15. For lines with stiff cores, the splice is now technically completed but a third tuck is recommended.



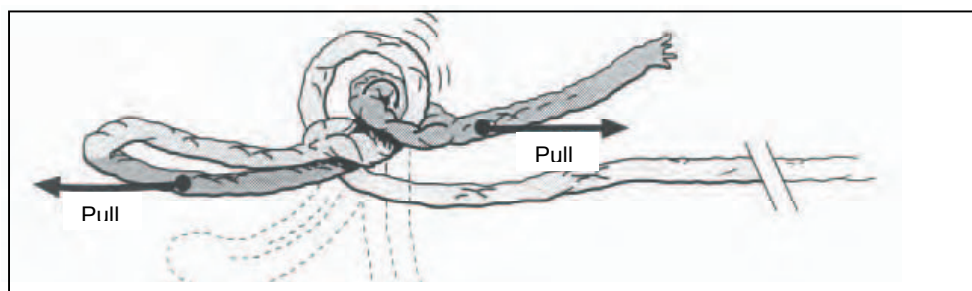
Pic 10



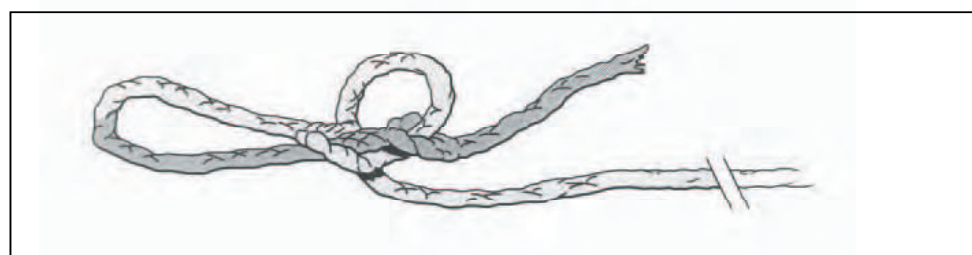
Pic 11



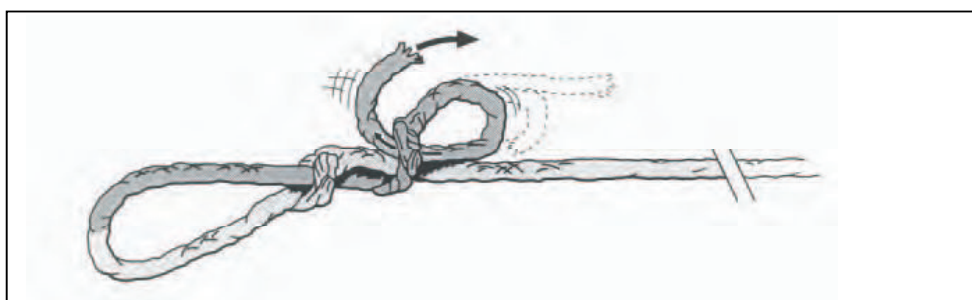
Pic 12



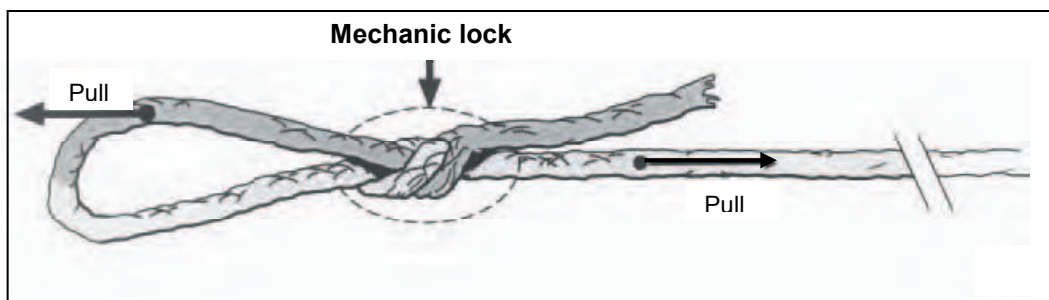
Pic 13



Pic 14

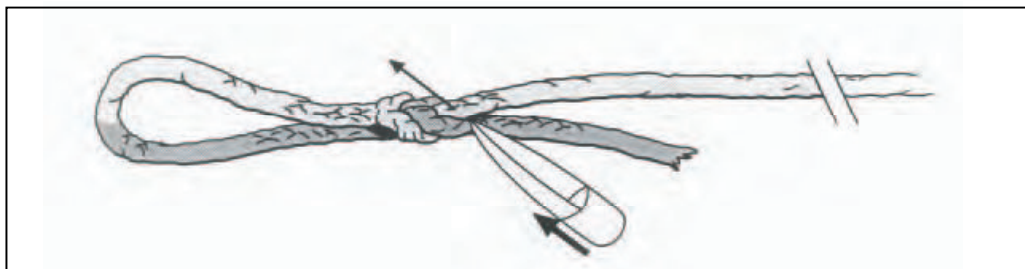


Pic 15

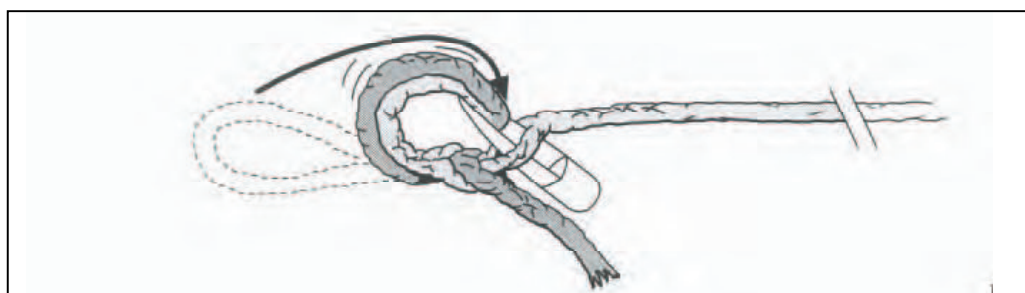


Pic 16

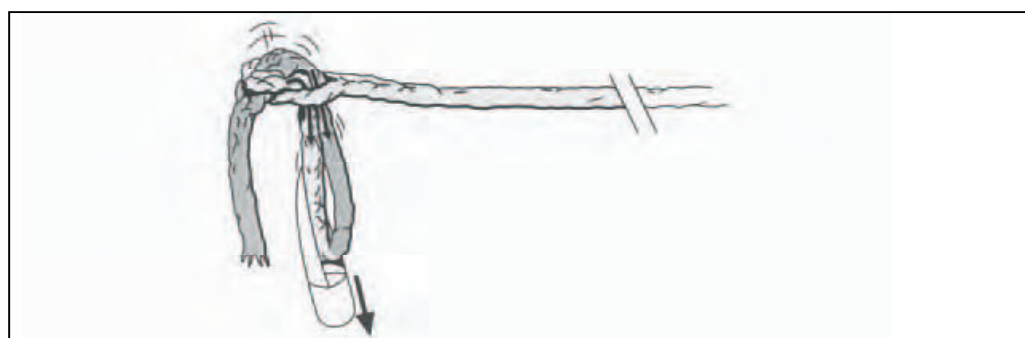
Make the third tuck just behind the “mechanic lock” that tucks # 1 and 2 made, see pic 17.
Make the third tuck as in pic 18 - 21.



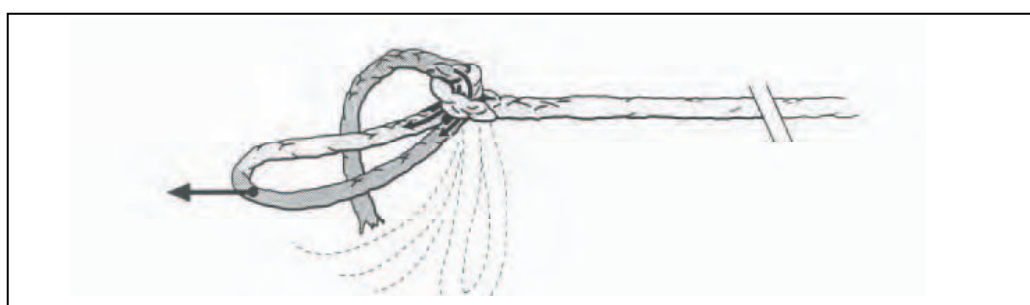
Pic 17



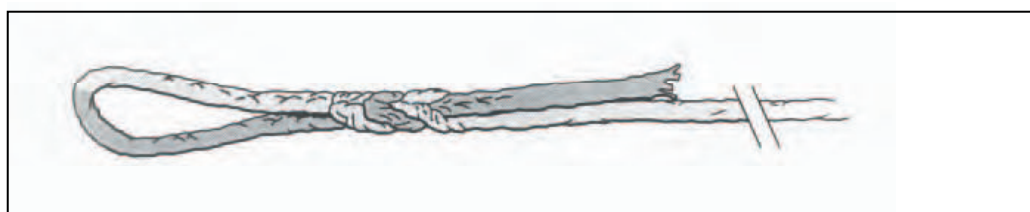
Pic 18



Pic 19

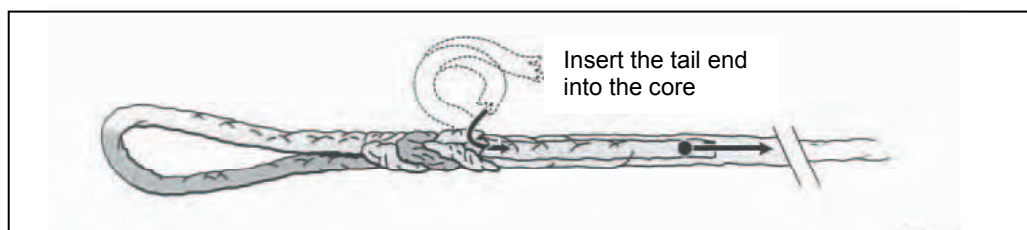


Pic 20



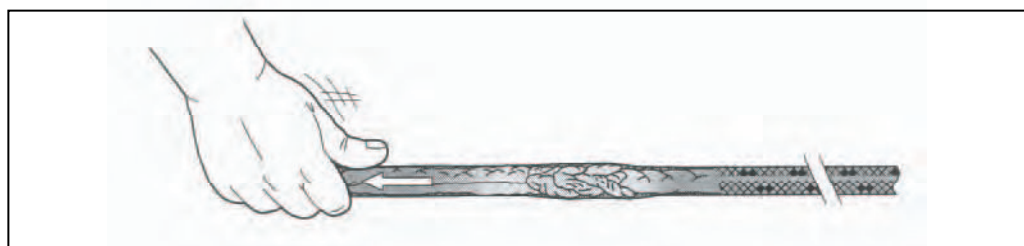
Pic 21

To complete the core splice, tuck the tail end into the core as in pic 22.

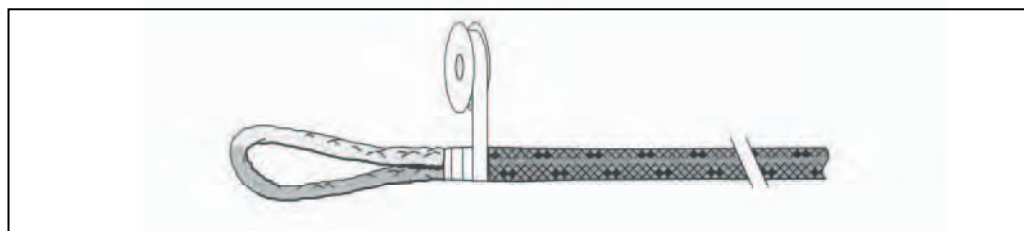


Pic 22

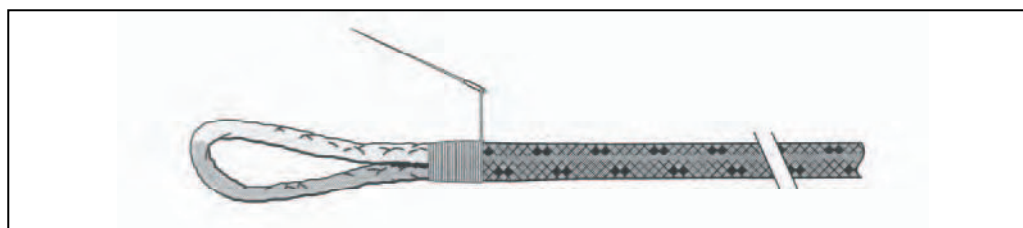
Pull back the “sock” and cover over the splice. Tape over the cover as in pic 24 and cut off excess cover beyond the tape. The tape should be approximately 10 mm wide. Make a twine whipping on top of tape, approximately 15 mm wide, see pic 25. Finish off by dipping the splice in wax.



Pic 23

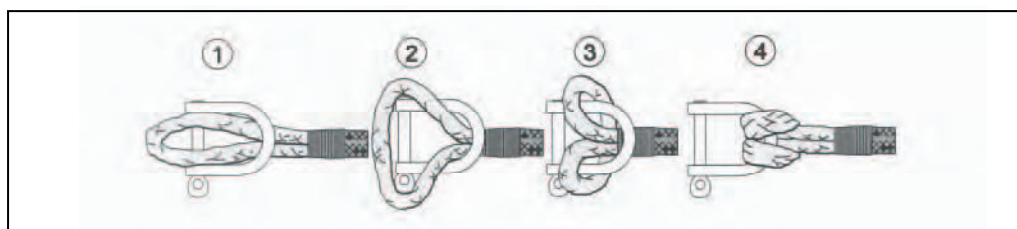


Pic 24



Pic 25

Fit to shackle as in pic 26. **Note:** This splice must only be used in the way shown.



Pic 26

100% HMPE Eye Splice

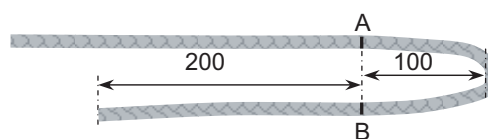
This eye splice is only suitable for 100% HMPE. It can only be used if the long end is free to be passed through the short end (point B below)*. When completed, the splice requires no additional stitching. The eye can also be made around a thimble, through a fitting, or both.

**If long part not is free to pass thru, see first part of instruction 595-821.*

Method

1. Feed line through fitting if required.

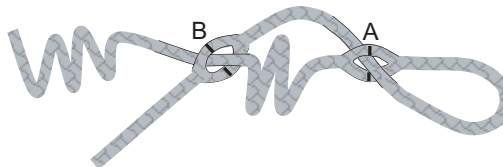
2. Make marks A and B as shown.



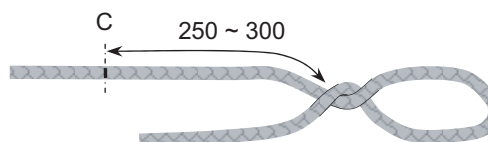
3. Feed the short end through the long part at A.



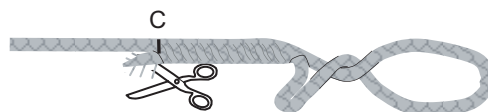
4. Feed the long part through the short end at B.



5. Pull the two loops together. Make a mark at C



6. Feed the short end through the middle of the long part, to exit at C. Taper the short end by cutting 6 strands as shown.



7. Smooth the long part to swallow the short end.



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