

## **SPLICING**

Splices are used to mend a damaged rope or fasten one rope to another. A good splice has up to 95% of the rope's strength, while a knot's efficiency varies from only 45 to 60% of the rope. The long splice allows the rope to run through a block, and should be made only with two ropes of the same size; however, the long splice is time consuming to make and uses a lot of rope. The short splice is the strongest way to join two ropes, can be made quickly, and involves little rope waste – the disadvantage is that it cannot pass through a block. The eye splice is used in the end of a rope for mooring, or when a permanent loop is required. The back splice is used for pointing a rope and is much superior to whipping.

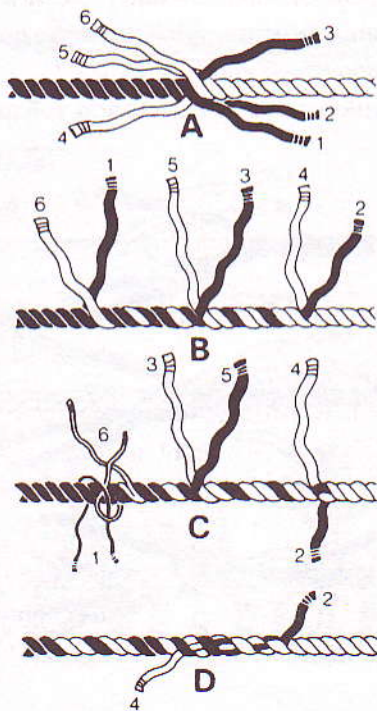
### **THE LONG SPLICE**

- a) Unlay each rope about 15 turns and place ropes together, alternating strands of each end.
- b) Using opposite pairs, unlay one strand (four) and fill its place with its “partner” strand (two). Repeat operation exactly with another pair of strands (one and six) in opposite directions.
- c) Trim the longer strand (four) and tie each pair of opposing strands (two and four) with an overhand knot, tucking each strand twice. The tuck goes over one strand, under the second and out between the second and third.

Strands three and five are simply tied with an overhand knot. Strands one and six are halved.

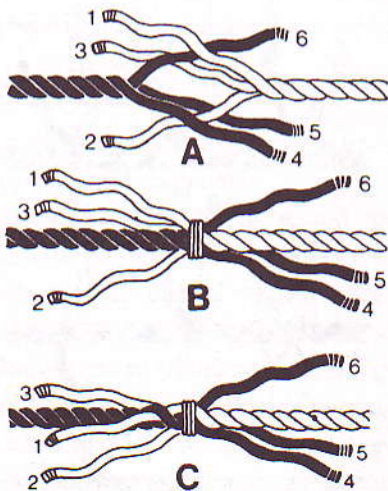
Strands three and five are simply tied with an overhand knot. Strands one and six are halved, and opposite strands are tied with an overhand before tucking.

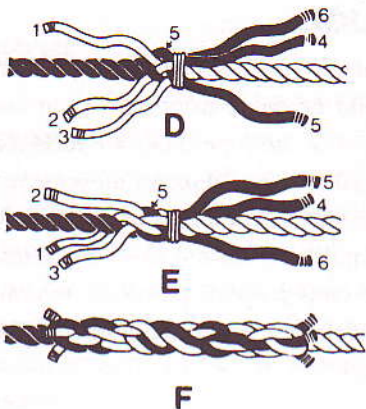
- d) Roll and pound tucks into the rope and clip the strands.



## THE SHORT SPLICE

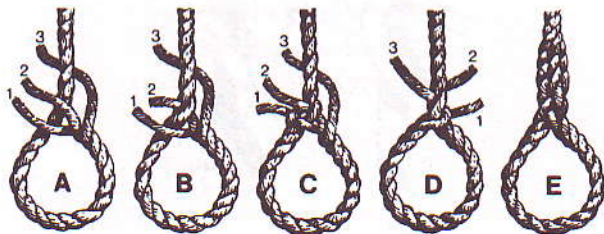
- a) Unlay the rope a few turns and alternate the strands.
- b) Tie the strands down to prevent further unlaying.
- c) Tuck one strand (one) over an opposing strand and under the next strand.
- d) The tuck of strand two goes over the first strand five, under the second, and out between the second and third.
- e) Repeat operation with the other two strands (one and three) from same rope end. Remove tie and repeat operation on other rope end.
- f) Make two more tucks for each strand, roll tucks, clip ends.





## EYE SPLICE

- Unlay end.
- Strand two is tucked over strand (c), under (b) and out between (a) and (b).
- Strand one is tucked once over (b) and under (a).
- Tuck strand three.
- Tuck each strand, in turn, two more times. Clip ends.



## BACK SPLICE

The ends are first laid over each other in a crown knot (see figures 1-3) and protrude from the crown knot back along the standing part of the rope. They are tucked as in the short splice with the same over and under movement. Trim the ends and smooth the splice by rolling it on the floor with your foot.

Rope of any length should not be put into use without having had the ends properly prepared. Whipping is one way to prevent fraying and unravelling. Back splicing is a more durable method.

