

Splicing Instructions

Whipping

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The following steps describe the method used to install a whipping at the base of an eye splice. Whipping with appropriate size nylon twine prevents an eye splice from potentially coming loose when the rope is not under load or when the lines are mishandled.



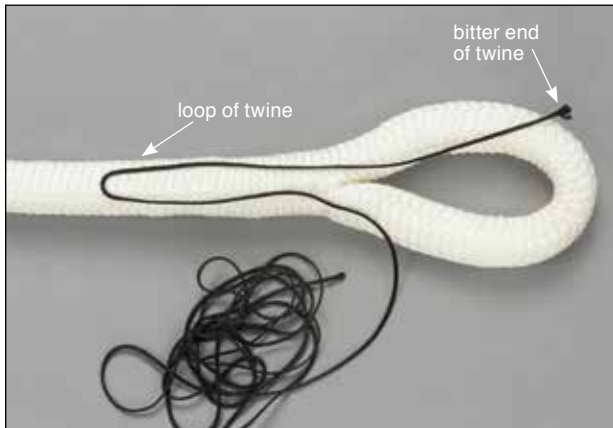
You will need the following tools to complete these instructions:

- Scissors
- Tape
- Appropriate size nylon twine

Note: The twine should be at least the same diameter as one of the twisted strands of the cover.

Whipping should be performed on a clean, flat surface.

Step 1 Execute the Whipping



1.1 Lay a loop of twine along the spliced area of the rope with the loop facing away from the eye. The bitter end of the twine should extend past the base of the eye.



1.2 Starting at the base of the eye wrap the standing part of the twine tightly over the spliced area of the rope. Avoid gaps between adjacent wraps of the twine. Continue to wrap the twine down to a point just before the loop of twine at the end of the splice.

NOTE: The recommended whipping length is three times the nominal rope diameter.



1.3 Insert the end of the twine through the exposed loop.



1.4 Pull the bitter end of the twine until the loop and a length of the standing part of the twine are buried midway through the whipped area. If the whipping needs to be tightened further, both ends of the twine can then be pulled simultaneously.



1.5 Trim both ends of the twine.



1.6 Completed whipping.

Glossary

Bitter End – End of the rope closest to the working area.

Core – Inner braid of a double braid rope. The core is contained within the cover braid.

Core Dependent Rope – A double-braid rope in which the core carries the entire load and the cover is primarily for protection from abrasion and external damage.

Cover/Sleeve/Jacket – Outer braid of a double braid rope that covers the core braid.

Cross Stitching – A series of sewing stitches using twine that locks a splice into place to prevent it from slipping or being pulled apart. Reference Cortland's Cross Stitching Instructions, CT_TL_060 document.

Crossover – The point in a splice where the core enters the cover and the cover enters the core.

Eye Allowance – Length of the rope that determines the final eye size.

Eye Splice – The splice that is necessary to form an eye at the end of a rope.

Fid – A metal, wood or plastic tool used as an aid in splicing. Fids typically are tapered at one end and have a method to allow attaching the cover or core of the rope being spliced at the other end. Some fids are also intended to be used as a measuring tool when laying out the splicing marks on the rope.

Fid Length – A fid length is a unit of measurement originally based on the design of tubular fids used for splicing double braids. A fid length is now generally defined as 7 x the rope circumference or 21 x the rope diameter.

Grommet – (or Endless Grommet or Endless Loop) – A line that is spliced into a loop rather than having eyes.

Milk – The act of removing slack in the cover or core by sliding the loose braid back over the rope element that has been buried inside the loose section.

Pick – A point on either the core or cover braid in which one strand in the left or "S" direction crosses over or under a strand in the right or "Z" direction.

Splice – The process used to make an eye or join two ends of rope together.

Standing End – The end of the rope not in use.

Standing Part – The central section of rope away from the end being used or spliced.

Strands – A twisted (S twist or Z twist) bundle of yarn comprising one of the discrete components used to make a braided rope.

S-Twist – A strand in which the fibers are twisted in a left-hand direction.

Taper – Trimming or cutting a strand or braid so that it gradually becomes thinner toward one end.

Thimble – A ring or tear-drop shaped form, often of metal or plastic, that fits on the rope on the inside of an eye splice. It is used to prevent sharp bending of the rope at the top of the eye & to protect the inside of the eye from chafing or cutting.

Unlay (Unbraid) – To take apart and separate the strands of a rope into individual components.

Whipping – Securing rope ends or sections of a rope or splice by wrapping twine tightly around the object to be whipped.

Z-Twist – A strand in which the fibers are twisted in a right-hand direction.

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