



Halyard Lock Installation Guide

Installing one of our 6mm Halyard Locks is easily achieved on most dinghy masts. Be they constructed from carbon fibre or aluminium. Halyard locks are beneficial in removing compression tension out of the mast and eliminating halyard stretch.

Rated for use up 60kg leech tension, the halyard locks and custom halyards are manufactured from the best materials and manufactured to the highest standards.



Features

Halyard Lock

CNC machined from 12mm 6061 marine grade aluminium plate to close tolerances. Lock has a 4mm slot and wide 6.8mm return hole.

Halyard

Strop utilises 2mm high grade, flexible stainless steel wire rated to 220 kg. Tail is manufactured from lightweight 3mm Dynex rated at 1000kg.

Strop and tail are spliced, with the splice being approximately 4mm thick. Splice slides through the slot without binding.



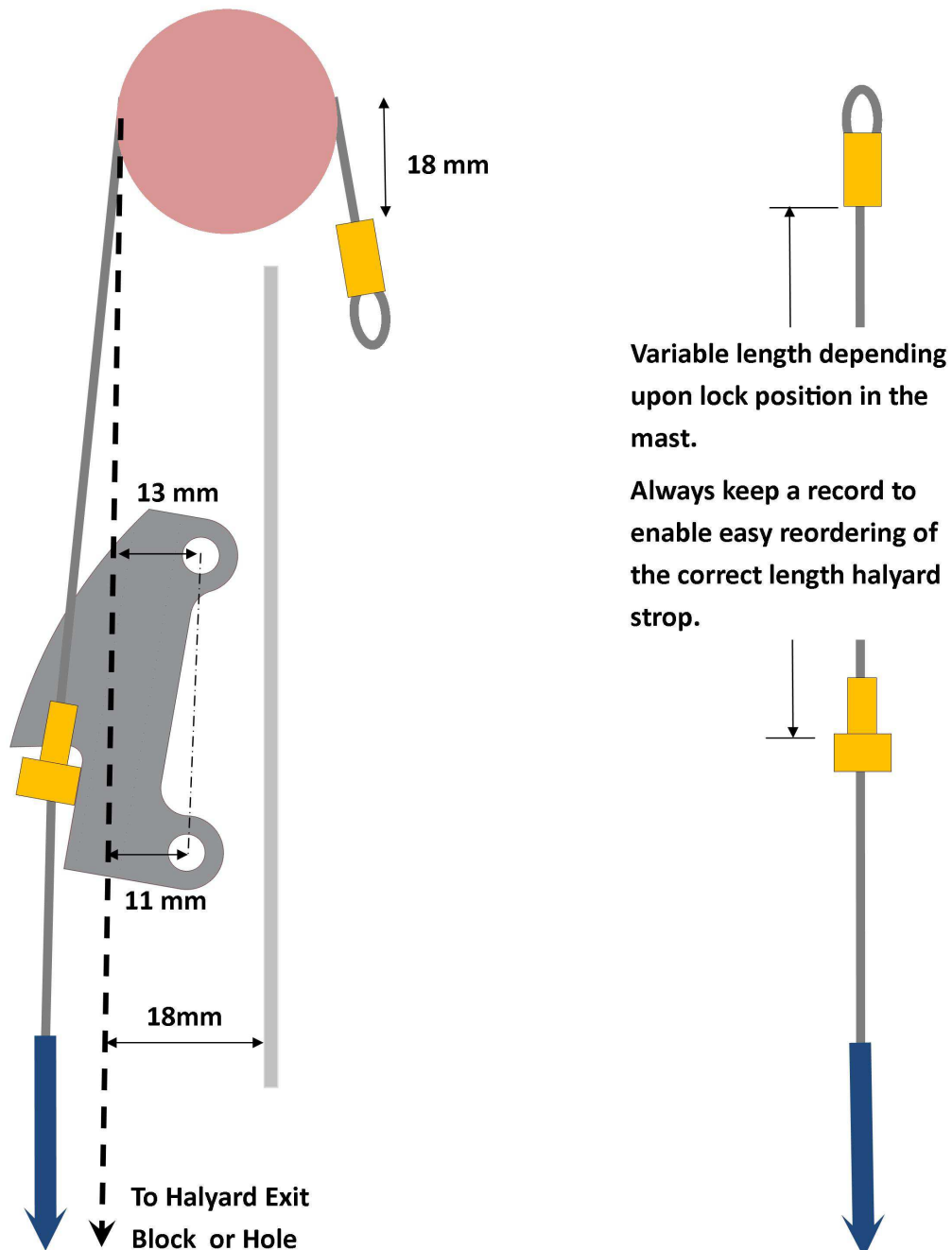
Talurit

Manufactured from rivet grade brass with large 6.34mm head for extra holding power.

Critical Measurements

For best results the largest possible turning sheave at the top of the mast is recommended. Wire strops perform best over a wider turning radius.

- The sheave must present the centreline of the halyard a minimum of 18mm from the internal back wall of the mast. Too little and the mounting holes will be too far back on the curve of the mast. In some cases slight rounding of the edges around the mounting holes of the halyard lock may be useful in a tight situation.
- The 5mm mounting holes to be drilled, for the halyard lock, must be in parallel with, and 11mm from the centreline of the halyard along the line from the sheave to the exit block or hole.
- The strop ferrule holding the sail shackle end of the strop should be at least 18mm from the sheave. If the distance is too short the halyard may not unlock.



Always maintain a record of the distance between the top strop ferrule and the lock talurit for each individual mast. New strops or full halyards are easily reordered if the correct length is known.

The Installation

To make fitting the halyard lock easier, a slot in front of the mast is advantages. Simply mark out the position of the halyard lock on the front of the mast and cut a 50mmx13mm slot. Accuracy is not vital at this stage.

If in doubt of the structural integrity of the mast with a slot , consult the mast manufacturer.

A simple carbon lay-up to strengthen the tip of the mast is

- 4 - 60mm wide layers of 200 gram uni carbon at 0 degrees (horizontal) above and below the slot.
- 4 - 200x40mm layers of 200 gram uni carbon at 90 degrees (vertical) along the slot sides.
- Layer of woven carbon cloth to "pretty it up".



The mast is ready to have the lock installed



- Remove mast halyard sheave and re-position with a longer bolt in place on the outside of the mast. Install a mouse line if practical whilst removing the old halyard.
- Place new halyard around sheave and tension up the halyard in the location where it would be if a sail was fully hoisted. Being mindful of the shackle length, shackle hole position in the headboard and alignment of the sail with any distance marks on the mast. Ensure the halyard tail is placed where it leaves the mast (either through an exit block or hole).
- Draw a line under the centreline of the halyard
- Inside the mast, measure back 18mm from the halyard centreline to check for sufficient clearance. On skinny masts it may be possible to increase the sheave size (or add an extra one) to move the halyard closer to the front of the mast. The lock may be placed with the hooks outside the front edge of the mast. Alternatively it may be possible to run the halyard outside the front of the mast from the sheave to the slot.

- Draw a line back from the halyard centreline, 11mm at the base and 13mm at the head, towards the aft edge of the mast.
- Place halyard lock on the halyard lock talurit with the holes lined up on the newly drawn line.
- Check that the halyard centre line exits in line with the centre of the bottom exit hole of the halyard lock.
- Check that the halyard centreline meets the curved hooks of the halyard lock roughly 1/3 from the top.
- Mark holes and drill 5mm mounting holes.
- Reinstall the mast halyard sheave, install the lock using the clevis pins supplied, run stainless steel welding wire through the clevis pins holes (split rings are cumbersome and fiddly) and mouse the new halyard.
- Check all is working correctly. Adjust as required

Spares Parts

Fittings required to maintain the halyard lock system are available on an individual basis.

Part Number	Description	Price (ex GST)-(NZL Dollars)
V-Tech_310	6mm Halyard Lock	\$70.00
V-Tech_314	13 Metre Halyard with Strop	\$50.00

Clevis pins are from Ronstan, part number RF269. Shackle is Ronstan RF0621 long reach.



For further information contact us directly

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