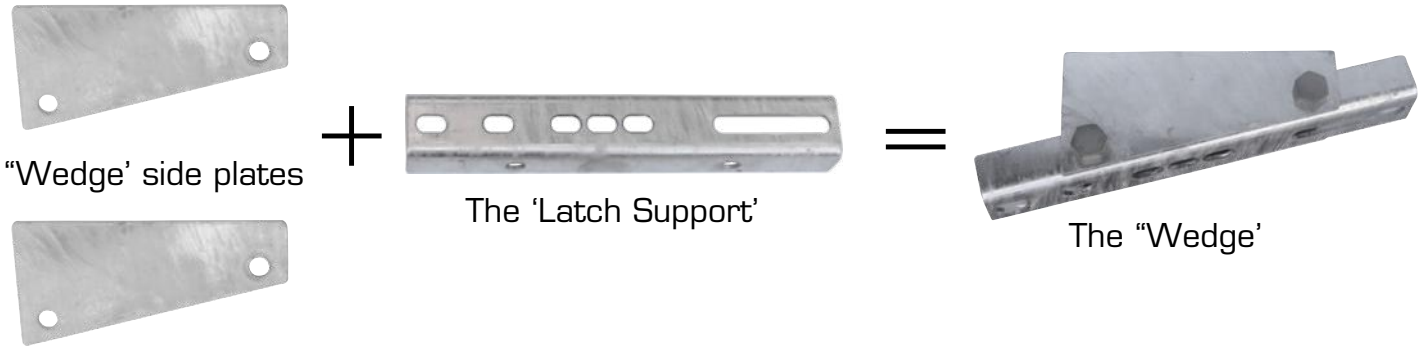
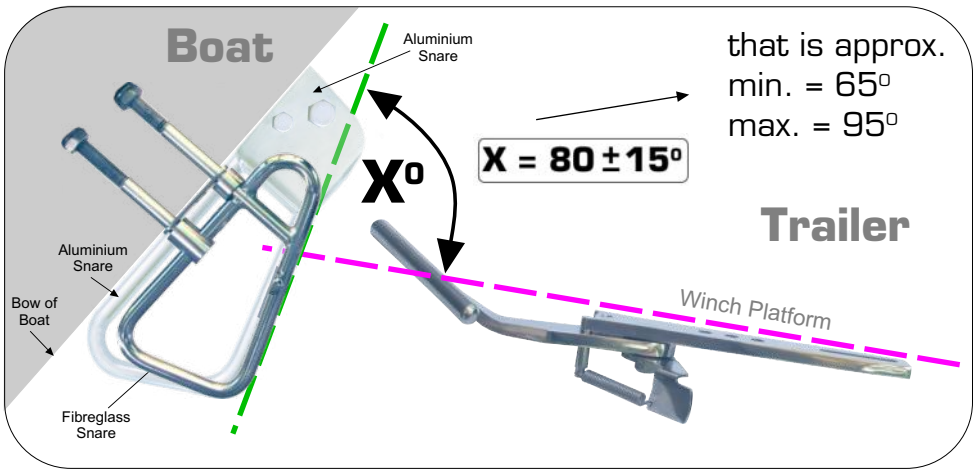
"Wedge" option



Why the 'Wedge' is used ?

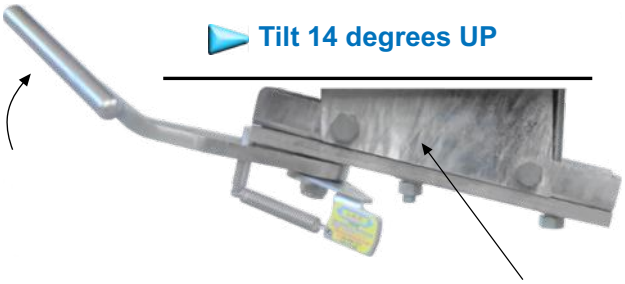
The key issue in getting good performance with the L & R Boat Latch is to have the correct angle where the Latch meets the Snare (particularly for the 'retrieve' operation). You need to roughly measure this angle. If it is not right you can adjust it using the "Wedge" or change the winch plate or the winch post angle. To help you work out the angles we have printed some on the last page. You can create a vertical by tying a nut to a bit of string and hanging it on the boat and the trailer.



The 'Latch Support' can be mounted at an angle using the 'Wedge' side plates. This provides a simple way of adjusting the angle (X) that exists when the Latch hits the Snare.

This is a fast and simple way of coping with some of the more unusual trailers that do not have a mounting surface at the correct angle to mount the Latch.
The other alternative is to alter the angle of the winch post.

Tilt 14 degrees UP



So an angle of 51º could be moved up to 65º - just within usable range.

Tilt 14 degrees DOWN

An angle of 109º could be moved down to 95º - the top of a usable range.

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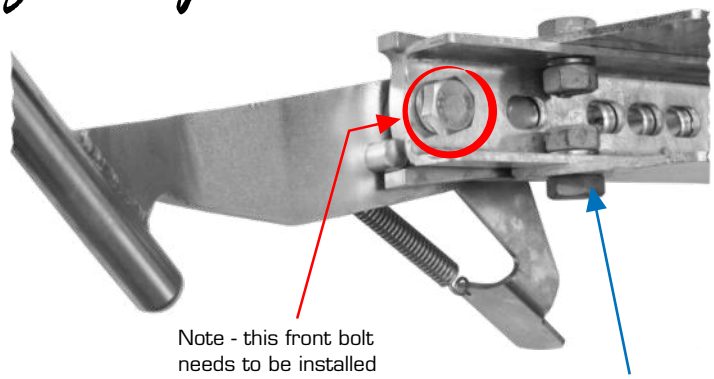
"Wedge" option

Why is the Latch Support only made of galvanised mild steel ?

Cost - Marine grade stainless steel in extremely expensive.
Normally the Latch is bolted to the trailer winch support which is usually galvanised mild steel anyway.
It is preferable if the Latch and the trailer and/or Latch support are isolated with a coating. Corrosion can occur between dissimilar metals. Compounds such as Duralac are suitable - this is available through a number of marine component dealers.

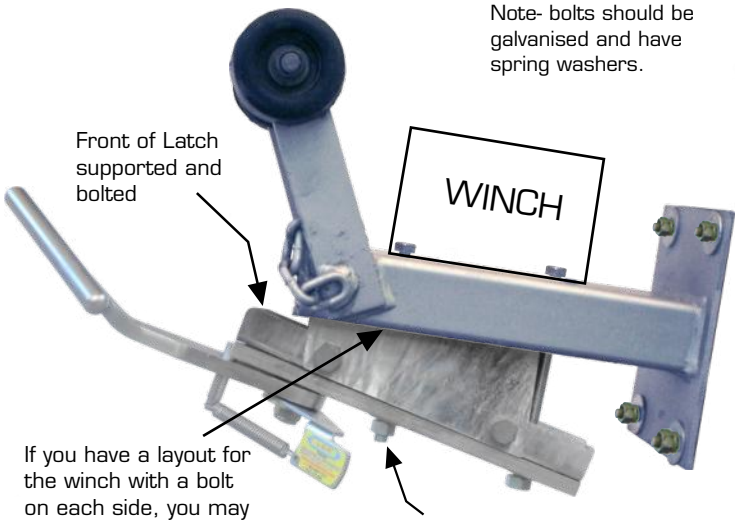


Note - this front bolt needs to be installed otherwise you will void the warranty.

Can use one long bolt in place of two short ones, if the winch bolts do not get in the way.
Note- bolts should be galvanised and have spring washers.

Why are the bolts not supplied ?

Because there are several bolt possibilities.
We want to keep the cost down and if we supply both alternatives, the other option that is not used will be thrown away. One alternative is to use two long bolts that joint the pair of holes on the 'wedge' side plates. However if, in your configuration the winch bolts come down in a position through the 'Wedge' and hit either of this pair of long bolts you will need to use some short bolts on either side instead (see photo). There are numerous variations of winches and their bolt hole layouts.



Front of Latch supported and bolted

If you have a layout for the winch with a bolt on each side, you may need, for some winch brands, to remove a bit of the side plate to cope with the bolt head.

Watch that bolt thread does not get in the way of the 'path' of the 'Selector Lever'- cut off surplus or reverse bolt so the head is here and not the nut.

Note on Winch Bolts used

You may have to use longer winch bolts, depending on your set up.

Many winches require high tensile bolts and they are not always fitted. Also some winch manufacturers specify the use of three bolts, two at the front and one at the rear, but so often only two are fitted. For large boats two are recommended at the front.
If you get longer bolts, best option is to get corrosion resistant high tensile bolts.

Bolt Sizes

The sizes we have allowed for are 10 mm diameter metric bolts. Can also fit 3/8 inch bolts. You should use spring washers and/or nylon locking nuts to stop the nuts from vibrating off.

How can I measure the Latch/Snare angle ?

There is a printed paper guide on the web version of this install manual and also on the back of the "Before you Install" brochure under "Installation - detail" on **www.boatlatch.com**

Examples where you would use the "Wedge'

Here are two examples where the 'Wedge' would sort out the angle problem.

The ski boats Latch to Snare angle is about 58 to 62° which is too low, and the 'Wedge' will bring them nicely into the right operating range.

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Angle Guide "Wedge" option