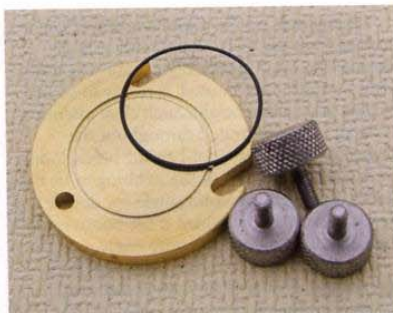




Standard cover with bolts hard to reach



The kit: cover, O-ring, knurled retaining bolts

SPEEDSEAL EASY SLIDER

£35.26

★★★★★



It is pretty well essential to have a fully functioning engine at all times and anything that helps either to keep it running or to make repairs swift and easy is to be commended. Such an item is the Speedseal Easy Slider replacement for the cooling water circulation pump cover.

It doesn't take a vivid imagination to dream up a situation where the ability to change the water pump impeller quickly could save an awful lot of trouble, and possibly the boat herself. Something as simple as a plastic bag blocking the water inlet is all it takes to stop the circulation of cooling water, causing the engine to overheat. Then it doesn't take long for a rubber impeller to become a broken mess as it runs dry, trying to suck in water.

The trouble with standard impeller covers is that they are often hard to get at and require a particular, sometimes oddly-sized, spanner to undo the bolts allowing the front plate to be removed. Then, once the impeller has been renewed, it's likely that bits of old paper gasket must be removed before a new one is put on and the cover plate replaced, using those fiddly bolts again. The Speedseal makes the job a lot easier.

It consists of a metal plate, made to the same shape and dimensions as the particular water pump's original cover, and with a groove milled into its internal face. This groove carries a greased rubber O-ring, which does away with the need for an easily torn paper gasket. The plate is secured using the same holes in the face of the pump housing, but instead of bolts requiring a spanner, it uses bolts with large, round, knurled heads that can be done up (or freed) by hand, or with a pair of pliers. To make its removal even easier, only one bolt is secured through open ended slots. This means that only the one bolt has to be removed completely. The other two need only be backed off enough to allow the cover plate to slide off their stems.

By using this design, not only are the chances of dropping and losing two of the retaining bolts brought (virtually) to zero, but much time is saved as the plate is first slid off and then later slid back into place.

Some of the latest water pumps have done away with paper gaskets and incorporate an O-ring into the face of the housing, so Speedseals are now also available for these pumps without the groove milled into the cover plate.

So how easy is it to install a Speedseal Easy Slider? Essentially very easy, but it depends on

the location of your engine's water pump. The water pump housing on the Yanmar 1GM10 is behind the pulley carrying the alternator belt and is hard to get at. It requires a 7mm spanner (not a common size) to remove the bolts – fiddly but doable. Then, with the cover plate removed, any remains of the gasket must be cleared away so that the pump face is clean and smooth.

Next, grease the threaded sections of two of the knurled bolts provided in the Speedseal kit (mine included one spare bolt) and turn them loosely into two of the bolt holes in the pump face. They should not need to be forced, but, on the 1GM10, it is hard to start the one that's right behind the alternator belt pulley. The instructions recommend using the two lowest bolts as the ones to slide the cover plate onto, but on this engine there are three bolts – one at the bottom, one at top right and one at top left. I used the bottom one and the top left, which is the one furthest behind the belt pulley.

The Speedseal is supplied with several thin rubber O-rings and one of these needs to be coated with grease, which comes with the kit in non-resealable sachets, and placed into its

milled recess on the inside of the cover plate. Once you've done this, if you have to put it down, because you've forgotten to insert the two bolts onto which it is about to slide, be sure to place it grease side up. It wasn't too difficult to remove the hairs, crumbs and grit, but shouldn't have been necessary.

With two of the bolts in place, slide the Speedseal onto them and insert the remaining bolt (or bolts). Tighten them up by hand, clamping the plate down onto the O-ring for a watertight seal. Remember there's a lot of pressure inside the pump, so do them up fairly tightly to avoid leaks when the engine is running. The knurled ends are large enough for a good grip, so later undoing should be possible without tools, but I think a pair of pliers may be needed to undo the bolt hiding behind that pulley; it really is hard to get your fingers in there.

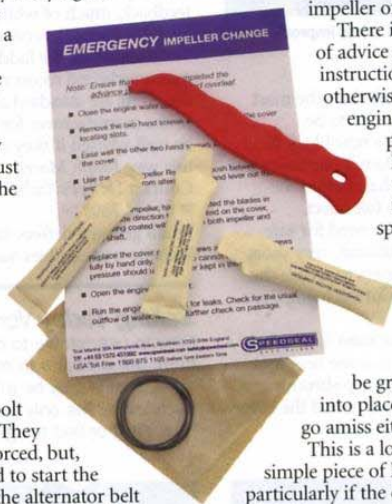
It would also be sensible, while you have the front off the water pump, to remove the impeller and use some of the silicon grease on the shaft so that, in an emergency, it will be easier to draw the old or damaged impeller off.

There is also a very sound piece of advice on the Speedseal instruction card: hang, tape or otherwise store a bag within the engine bay that has in it the plastic Quick Impeller Remover tool, a spare O-ring, a sachet of the High Slip silicon coating and a spare impeller, preferably

with a cable tie around it, which has been tightened enough for the fins to be bent in the right direction and sufficiently to enable it to

be greased and slipped quickly into place. A pair of pliers wouldn't go amiss either to help undo the bolts. This is a long report on a remarkably simple piece of kit, but it is so sensible and, particularly if the emergency bag is made up and put in place, should make impeller changing so much quicker that it deserves full coverage. *Colin Jarman*

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Old cover gone, new slide-on bolts in place



Speedseal in place, ready for emergencies