Problems changing the impellor – Speedseal is the way to go I reckon

On my Ford 2722 (Lehman Super 90) I have always avoided changing the impellor on the raw water pump as it is just so difficult to reach. At the forward end of the engine, it actually faces backwards and there's just no room to get your hand in there to get to the original pump screws.

I would not like to change an impellor out at sea, so I decided to look at the Speedseals (http://www.speedseal.com/saferboatindex.html) you see advertised in the magazines, and I have to say so far so good.

I thought I'd type up what it involves and the results, although just to spoil the punch line, it definitely makes things easier.

1. First you need to know what your pump is. Strictly speaking this may be unnecessary, as the manufacturers of Speedseal seem to know the Nauticat engines. However I'd previously had the raw water pump changed so thought it would be good to check. The pump is usually marked with a number, but getting your phone in there to take a picture can be difficult. Next challenge was to get the existing cover off, 6 screws all requiring a different contorted position around the engine. I had to disconnect a few hoses to get anywhere near it.	
2. Once the kit arrives (took 2 days by the way) then you obviously need to fit it. If you are used to replacing your impellor then this is probably easy. It wasn't for me. But I learnt that using a screwdriver and gently levering out the existing impellor is the way to go. I noted the direction of the vanes – again I got the phone in there to take a photograph so I knew which way to put the replacement in. I also stocked up on replacement impellors so I've got them to hand if necessary.	 Before  After
3. Top tip is to put a cable tie around the vanes keeping them in the right direction so that the impellor slides easily over the spindle. This made getting the new impellor in fairly easy. The instructions supplied seemed to place emphasis on greasing the spindle with the clear substance they provided.	

4. Next steps to get two of the big thumbs screws in place in the most inaccessible place on the pump. These will never be fully taken out again so although a problem it is not going to be repeated. Once done then the new cover is assembled. There is an O ring, and a PTFE plastic disk under a brass disk. All needed greasing which prevents them falling apart when putting them on	
5. Last step is to slide the cover on the back two thumbscrews put in on step 4 and then put the other two in. Job done subject to starting up the engine and looking for leaks.	

All in all I think this is worth doing. It took me three hours all in all, but I had to learn a few things on the way. Now I just need to get 2 thumb screws out and two slackened to change the impellor. Still wouldn't want to do it at sea though, but at least it should be a little bit easier and avoid disconnecting the engine pipework.