

# Trailer Wheel Covers

By Keith Thatcher, Shrimper 144 (*Winkle*) (March 2010)

I'm sure that those of us who tow regularly are very diligent with our trailer maintenance, especially the running gear (brakes, bearings etc.), but how often do you look at the tyres? Whilst checking my trailer prior to taking *Winkle* to Falmouth in 2006 for the 25<sup>th</sup> Anniversary Shrimper Week I noticed that the tyre sidewalls were starting to crack. My local tyre dealer immediately advised replacement as, in their words, "They might do a few more trips from home to Poole Harbour (about 6 miles), but I would certainly wouldn't risk a 450 mile round trip".

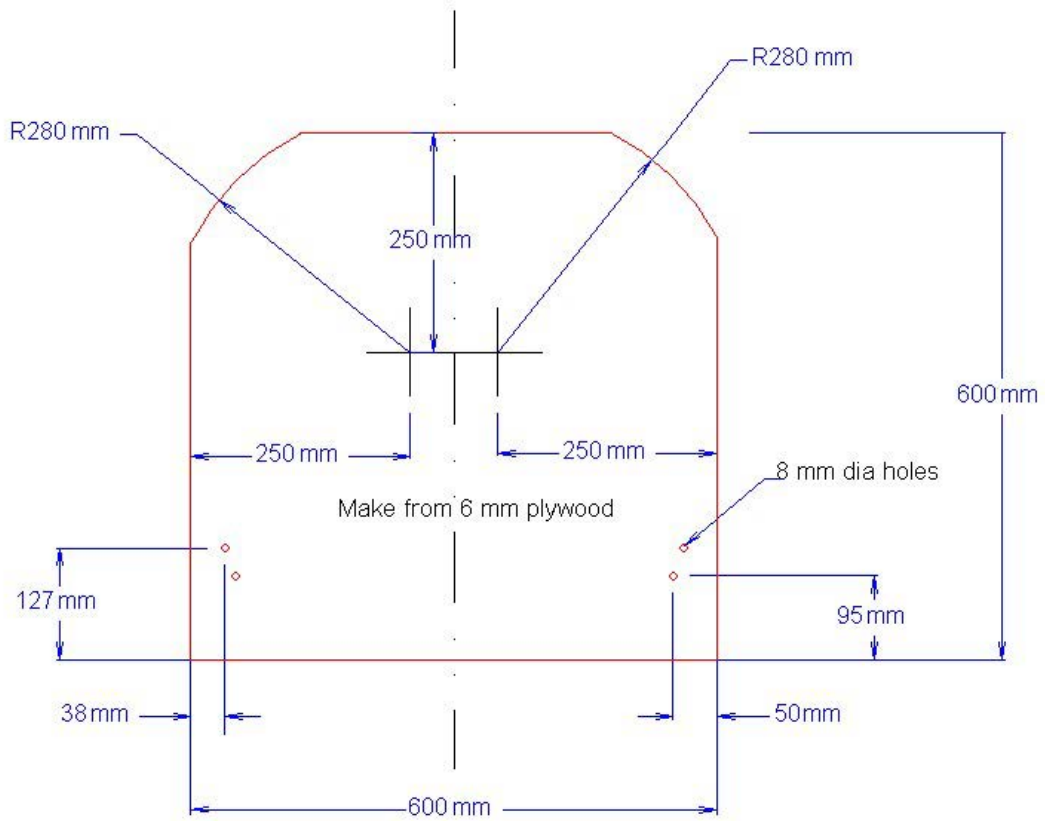
My trailer is a 1989 vintage break-back and the tyres were probably the originals, so the need to replace them did not come as a big surprise. What did was the tyre dealer saying that the degradation had probably been caused by the sun, or more precisely, UV radiation. I have since found out that tyres, in common with many other things, are adversely affected by long term exposure to UV radiation that can cause brittleness of the rubber compound used in their manufacture. Theoretically the problem can occur on any vehicle, but is rarely seen on cars as their tyres generally wear out well before UV has a chance to cause any serious damage. Trailers, on the other hand, remain idle for long periods, often in full sunlight and rarely get enough use to warrant tyre replacement through wear. (My tyres were probably sixteen years old and still had maximum tread depth). Trailer wheels also spend a much of their time immobile with the tyre in one position, often carrying the weight of boat. This causes sidewall distortion that stresses the rubber and is where cracking often starts. Advice from the dealer was that, if I wished to get maximum life from my expensive new tyres, they should be covered up when not in use.

The obvious choice seemed to be a full fabric cover, similar to the one covering the spare on the tailgate of my Landrover Discovery, but these are expensive and could be difficult to find as they are usually made to fit a specific size of wheel. Also, since trailer tyres are exposed only on the outside wall, to cover the tread area seemed overkill.

I therefore sought a simpler alternative and came up with the idea of using a plywood panel, shaped to fit under the outer flange of the mudguards and held in place with a shock-cord strap passing behind the wheel. Since maximum UV occurs when sun is high in the sky there seemed no need for the panel to extend right to the bottom of the wheel and this also allowed them to be made small enough to be fitted with the trailer loaded and the tyre compressed.

The following drawing and photos show the covers that have now been in use for three seasons. The shock-cord strap is a ready made off-the-shelf item about 500 mm long (part of an assorted bag from Southampton Boat Show). It is attached to the ply panel using a short length of 6 mm line passed through each pair of 8 mm holes and tied to form a loop. The shock-cord lies in the edge tread of the tyre to hold it in place.

The panels shown should fit most standard 13 inch wheels, but the profile might need to be adjusted for wider and/or higher mudguards. For larger wheels adjust the sizes accordingly.



**Bramber 13 inch Wheel Cover**



**Wheel cover in place**



**Wheel cover dropped to show top corner profile**



**Rear view showing shock-cord attachment**



**Detail of shock-cord attachment loop**