Fitting instructions for rubber tyres

These tyres are extruded from natural rubber and have a shore hardness between 70 and 80. They are suitable for all model road vehicles between 1 1/2" and 6 inch scales. The recommended adhesive is "Marineflex".

Method of attachment to the engine.

All the wheel rims must be smooth to at least the width of the tyres(s). If the rear wheels are fitted with strakes, these may be covered with a steel band, 1/8” or 3mm thick in 4” scale, other scales pro-rata. These bands must be the same width as the wheel and must be securely fixed to it. A light shrink fit plus tack welding to, say every fourth or fifth strake is recommended (the weld should be on the inside of the wheel for appearance sake). If the front wheels are fitted with steel tyres these must be removed or the width built up with narrow strips either side. These strips may be welded to the original tyres without harming the paintwork if short tack welds, at about 4" spacing, are used. The gaps between the sections of steel tyre should be filled with car body filler.

To find the length of each band of rubber, wrap it around the wheel but leave a gap of 1" to 1 1/4" per foot of wheel diameter for front wheels and 1 1/2" to 1 3/4" per foot of wheel diameter for rear wheels. The rubber should be cut squarely to length with a clean bandsaw, stanley knife or similar to leave a smooth clean end surface. It is recommended that a thin piece of rubber is cut of first to clean the blade. The cut ends should be cleaned with cellulose thinners or similar if necessary.

The clean ends of the tyres are then fixed together with a waterproof glue (professional super glue is recommended) and left clamped for at least a minute. The full strength is developed over the next 12 hours. When satisfied, the inside of the tyre should be scoured clean with, for preference, a sanding disc in the angle grinder, use the coarsest available grade, or a coarse file. This is to give a binding surface and to remove any traces of the release compound that is used when making the tyres. When completed this surface must not be touched with the fingers or any other source of grease. The outside of the wheel rims should have the same treatment. Aim for a well scratched metallic surface, no rust, dirt or loose mill scale please.

We recommend stretching the tyres on to the rims first using tyre levers and/or a clean screwdriver as a lever, and then using a round bar of 3/8” - 1/2” diameter, push this between the rim and the rubber tyre; then rotating the rod will make it go around the rim and the Marineflex adhesive can be put into the gap behind the rod.

This can be a messy processes, so wear old protective clothing as the glue is difficult to remove. It may be found helpful to fasten a G cramp across the width of the wheel to stop the tyre sliding off. Any spills may be cleaned with white spirit or similar solvent. The tyres can be slid around to their correct positions for about 15 minutes.

When everything is in place clean up around the tyres and leave them to cure for at least 2-3 days and preferably a week. Store the wheels upright as the tyres could slide down by gravity until the glue has set. Also, if the wheels have been replaced onto the vehicle, it should be left jacked up so there is no localised pressure on the tyres.

Professional Super glue and Marineflex can be obtained from MJ Engineering.