

Further bits on fitting alternative wheels to Triang Locos

by Tony Penn

Whilst you bottomless pocketed scale fanatics (spelt rivet counters) bemoan the continuation of the tension lock coupling, the coarseness of BRSMB (let alone early Triang!) wheel standards and proprietary (spelt low cost toy) model inaccuracies. Us mere mortals soldier on with what we have and what we can afford. I may be perverse, but I got a distinct pleasure in handing on to my son models I had as a child, they needed some minor updating and restoration, but now take their place alongside his modern Hornby and Bachmann products. In truth they may not be as 'accurate', nor as 'good' a model, but compared with some more modern products, they are a darn sight more durable....

If you think like me, that common wheel standards and a common coupling socket would be great for 'New World' future products, but have forty years worth of existing stock, to which I attach the term 'Legacy Model Railways'. But a word of practical advice, do not butcher pristine, mint boxed, or rare items to make them run with today's stock. If you have good condition Triang, Wrenn, Hornby Dublo, or indeed almost any model made in the Fifties or Sixties, you would be better off selling it and buying modern stock with the proceeds. Put it like this, give me your mint boxed Hornby Dublo Ludlow Castle and I'll give you a re-wheeled, fine scale detailed and professionally re-painted Bristol Castle instead and I'll still win financially..... I'm focusing on well played with, slightly tatty, or previously detailed/repainted items, which have no value to the collector, but will give years of good service as runners.

My first 00 loco was a trusty Triang 3F 0-6-0 from the Set in my 1959 Christmas Present Sack. This 3F survived continual running for it's early years, my 'fine scale' detailing attempts and tar brush repainting in the sixties, storage in less than ideal circumstances in the loft through the seventies and eighties, to be reborn in the nineties! Today nearly forty years on, still powered by the original motor, it hauls Bachmann/Dapol wagons on my sons Wansford Town LMS era layout!

Early Triang deep flanged steam roller wheel profiles bounce along the chairs of even Code 100 track and no-one in their right mind would try to use early Triang track today (not even me!). There are multiple ways to sort this out and the cost increases as we go through the options. Fitting Romford Wheels was covered in the last Journal, but it's not always as easy as you might think. The same techniques can be applied to most of the Triang, Triang/Hornby steam locomotives (diesels and dmu's I'll cover in the future).

Whatever approach is chosen some basic tools and materials are a pre-requisite (you do not need a lathe), a wheel press to set the quartering of Hornby/Triang wheels correctly (mine came from KingCraft now East Kent Models), a pin punch, a small vice, soldering iron, wheel puller and various small screw drivers. Phosphor-bronze pickup strip and soft solder are often needed as well. These tools are not cheap, but essential to do the job correctly. If you only

want to do one loco, you would probably be better off getting one of the specialist model shops such as Alton Model Railway Centre, East Kent Models, or any one of a number of advertisers in the colour edition railway modelling comics to do the job for you, it will be cheaper than buying the tools.

First off is the real cheapskate approach of reducing the flanges of the original wheels (but is also ideal for unique wheels like the Bullied Boxpok on Winston Churchill). First step of all is to check that your Triang loco flanges do indeed clout the chairs of modern code 100 track, many will clear and will only require an adjustment to the back to back dimension (very high tech - tap the axle end with a pin punch). If the flanges are too deep strip the wheels and axles from the chassis, but first remove everything else that can be unscrewed. If you try to work with anything left assembled you will almost certainly damage it.

To remove the wheels, secure the chassis in a vice, drift out the axle from the leading and trailing insulated drivers with a pin punch. The centre unflanged drivers are left alone. The driven axle on the four coupled locos needs a little more care, either pull off the wheels with a wheel puller from each side, or CAREFULLY drift each wheel loose individually. Do not attempt to remove the axle from the driven gear.

With the chassis completely stripped, clean of the decades of crud that will inevitably have accumulated, check also for excessive wear of the axle holes in the chassis. Some play is ok and usually the axle itself will be the more worn item, if so swap it for another less worn one from a scrap chassis (these can be acquired at swap meets for very little money).

Now with one wheel still on the axle, place the axle into the chuck of an electric drill and by holding a file to the spinning flange reduce the flange depth to 0.8mm. Do it in stages and regularly check the depth as the wheels are fairly soft and the metal comes off quite easily, taper off the inside face of the flange as well. Swap over the wheels on the axle and repeat.

With the wheels doctored, re-assemble them onto the axles in the chassis to a back to back dimension of 14mm for Peco/Hornby track or 14.5/14.8 for scale track, using a wheel press in a vice to keep things square. You can quarter spoked wheels by eye if you are careful. Re-assemble the rest of the loco and that's it. Plastic bogie and pony wheels can be dealt with in the same way, but best to use a mini drill at a low speed setting to avoid melting the plastic.

Replacement with Modern Hornby Wheels. Remove the outer drivers as before, but now the centre unflanged drivers go as well, the approach for these varies according to exactly which type of chassis you have.

With the very early chassis with mild steel side frames, pull off the wheels with a wheel puller from each side, or CAREFULLY drift each wheel loose individually and then unscrew the side frames to release the axle and drive gear. DO NOT

ATTEMPT TO DRIFT THE AXLE THROUGH THE DRIVE GEAR AS THE CHASSIS PLATES WILL BEND EVEN IF THEY ARE VERY CAREFULLY SUPPORTED. With the driven gear supported on the top of a vice, drift the axle through the drive gear with the pin punch, or better still place a short length of steel tube over one axle end and press off the gear in the later cast chassis will have to have the axle drifted through the driven gear, provided one wheel is removed first and the chassis supported on the top of a vice.

You will need to acquire a set of the same diameter modern Hornby equivalent wheels from one of the spares stockists, but it is important to get a set of axles to match as the splined end of the early axles is much larger than the later ones. Also make sure you get an axle complete with the centre splines for the driven gear. Re-assembly is the same as for the reduced flange original wheels except you have to drift or press the driven gear onto the centre axle first.

The only problem likely to be encountered is that early pickups are too short and jam in the spokes as they were intended to rub on the flat centre of the original non-spoked wheels. Don't shorten them but extend them by soldering on a short length of pickup strip so that they rub on the outer edge of the wheels. Also one tip from practical experience is to make sure you get the insulated drivers on the correct side....

Replacement with Romford Wheels has basically been covered but there are a few gotchas learnt from experience. Don't use super glue, or file the centre of the worm wheel, press a top hat bearing into the centre of the driven gear in a vice (secure with a dab of solder if it is not a tight fit in a brass gear, or super glue with a nylon one), I've never found a need to reduce the top hat of the bearing for clearance. Knurl the centre of the Romford axle that's going to be driven with a pair of side cutters (yup graunch around and rough it up!) and drift it through the worm wheel. This method allows adjustment of position and can be dismantled later if necessary. Romford lower ratio gear wheels are smaller in diameter than the Triang/Hornby ones and are not an easy swap as the motor will need to be lowered on the chassis by 2mm to mesh the gears.

The motion for locos without Walschaerts valve gear is simple, if the Triang motion is being retained the screws are the same thread as the Romford wheel crankpin holes and the outer wheels can have the crankpin holes drilled to match the coupling rod pins on six coupled locos. To avoid the coupling rods from creating shorts onto the rims of the insulated wheels, add a Peco insulating washer under the screw and on the crank pins. The screw will require shortening otherwise it sticks too far out of the back of the thinner Romford wheel.

The return crank on the outside valve gear can be tackled in two ways. First salvage the large crankpin from the Triang wheel and open up the Romford wheel crankpin hole to accept it, securing it in position with the return crank at the right angle with epoxy. This is not easy and requires drastic drilling from the rear of the wheel. The alternative is to use a Romford crankpin sleeved with a length of brass tube to match the hole in the connecting and coupling rods, then solder

the return crank onto the end of the Romford crankpin (also fiddly and not easy - but does not destroy an expensive wheel if you make a dogs breakfast of it.....).

Finally you could of course replace all the motion with a scale alternative, but that rather defeats the objective of keeping the costs down and particularly on the earlier locos looks a little odd (mutton dressed as lamb?).

The pick-ups will usually need to be extended as before, because the Romford wheels are rim insulated. Also if you fit the same diameter wheel (flanged or not) on the centre axle of a six coupled chassis you will need to add a pickup to that wheel as well, to ensure pick-up over slight track irregularities (the Triang unflanged wheels are smaller diameter and you really have an 0-4-0!

If you have opted to fit larger nearer to scale wheels, then the body will be riding too high on the chassis, removing metal on some of the locos is all that's necessary to restore the status-quo. But then the flanges will foul the splashers, the motor the top of the firebox and you'd have been better off leaving things alone.

Hopefully this will get you to rejuvenate some of those old locos that you cannot run any more, or encourage those returning to the hobby to start with their childhood treasures that have sat unused for many years.

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