Upgrading rolling stock wheels, or even just opening out the bearings, will result in finer and more reliable running.

Insert: Replacement wheels are available from myriad sources. Hornby, Dapol and Bachmann offer upgrade packs at budget prices, but turned metal wheels from the likes of DCCconcepts, Gibson, Markits and Romford are vastly superior.

**How to... Fit Wheels**

**The Easy Way**

**George Dent** demonstrates how easily rolling stock wheelsets can be changed with the aid of a rather nifty new tool.

The plastic wheels of Hornby’s new Railroad BR Mk 1 coaches (M9190) reminded me of my early days in this hobby. Back in the 1970s and 1980s, plastic rolling stock wheels were common, often with hugely over-scale flanges that would foul point frogs or bounce along the rail chairs on anything but Code 100 track.

Upgrading plastic or coarse-scale metal wheels - or those that are showing signs of wear and tear - should be a simple task of prising out the old and pushing in the new. However, some replacement wheelsets may have much freer running, and a couple of revolutions of the DCCconcepts reamer can have a positive effect on most vehicles. However, it’s important not to introduce too much side-play as this can have a negative effect on ride quality, hence why the reamer tools are set at a fraction over 26mm in length (the most common length of 4mm ‘OO’ scale axles). This reduces the risk of the bearing holes being bored too deep.

There’s no doubt that high-quality metal wheels from the likes of Romford, Markits, Gibson or Ultrascale will transform running qualities. Quiter, smoother and less prone to derailments or other problems, a good set of wheels forms the crucial foundation to any item of rolling stock. With free-running axles, there will be much less drag on the locomotive, allowing for longer trains to be hauled more easily.

**How to do it: Change Rolling Stock Wheels**

1. **Most bogies simply undo from the chassis. If not, the body will need accessing in order to remove the mounting screws. The coarse flanges of the Hornby Railroad Mk 1 wheels are evident in this view.**

2. **Gently prise out the axles, stretching the solebars outwards if necessary. The DCCconcepts reamer can then be inserted and rotated to open out the bearing holes.**

3. **A choice of reamers is supplied with different nylon ‘handles’ to suit different bogies or underframes. Gripping the axleboxes prevents the bogie sides being pushed apart while the reamer works.**

4. **It helps to check that the new wheels and axles are installed correctly by placing them on to a sheet of glass. All four flanges should be in contact with the glass, otherwise one of the axles may be misaligned.**

5. **Test fit your new wheelsets, checking that the pinon axles easily slot into the bearings and that the wheels rotate freely. If they’re stiff, simply repeat the use of the reamer until you’re happy.**

6. **Another check to make is the back-to-back measurement - that is, the distance between the inner faces of the wheels. For ‘OO’, this should be 14.5mm, whereas finescale ‘OO’ and ‘EM/P4’ have their own specifications.**

7. **Refit the bogies and test the model on your layout, looking out for how it runs over points and crossovers. These Gibson wheels have made a massive difference to looks and performance, although the centres require painting.**