

## 3D Printed Parts - Supplementary Notes

A few parts in these kits are now supplied as 3D printed parts using up-to-date technology for small production runs. These parts are sensitive to heat and a few of them are quite delicate and will not take the rough handling that brass or NiSi parts will take.

The back head has been supplied with previous kits and should be fairly robust. Do not solder close to it when finishing the cab, although if you are painting the cab you may leave the cab roof off until the last moment!

The centre axle spring is simply super-glued to the bottom of the horn block, but check that it is free to move the full depth of the opening.

In earlier kits, the springs were made from 5 layers of NiSi and fitting holes drilled and tapped to allow removal of wheels when needed. This was quite difficult to solder and tapping was something to be tackled with care. The parts supplied now are quite robust and should be drilled and tapped 14 BA as per the instructions. Should you feel the need, then araldite or superglue a small section of wire across the back at the weakest point, which is where the leaves are supported by the 1 mm rod.

Brakes - the traditional NiSi brakes are on the etches. A packet of 3D printed brakes is supplied as an alternative. If using these, take care, for there are a couple of weak points. My inclination would be to superglue them to a single supporting layer of the main brake support. These 3D printed versions not only have greater detail but may be fitted closer to the wheels than metal brakes. While the metal parts would normally be drilled to 0.7 mm for fitting, drill these to 0.8 mm so that they are a looser fit.

The Class 8B (LNER C4) has an additional 3' 6" axle box over the rear wheel. This is supplied as a 3D printed item. It should be fitted right at the end of assembly. It may be worth adding a small bit of brass to the centre rear to support the assembly, it will not be visible.

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