

TWO AUSTIN SEVENS

Nik Bak details the work involved in building two LMS 7F 0-8-0 kits.

Photographs by William Robbins.

Nu Cast

The Nu-Cast kit was built up first and no problems were found. The loco was more or less built straight out of the box with the exception of fitting an Anchoridge DS10 motor in preference to the K's HP2M as suggested by the manufacturer. The chassis is a solid milled brass block machined out for the driven axle and gearset. This hole was filed out to take the DS10 motor mounted on a Stelfox cast mounting frame which accepts Romford 40-1 gears. The Stelfox mounting makes up a useful open-framed gearbox and simply bolts onto the front of the motor. The Romford gears and axle can be set up and the mesh adjusted, if not quite right, by tweaking the casting. This saves any headaches on final assembly of the chassis.

The motor was run in for a while which showed up end-play which was taken up by fitting a flywheel to the back end of the motor (which is double shafted) up against the motor body so about 10 thou play is allowed. The rest of the chassis was built up, using Romford wheels and crankpins. The coupling rod holes were opened out to suit and the cast knuckle joints soldered in place, before final fitting. The pickups were fashioned out of nickel silver wire and soldered to paxolin strips, glued to the underside of the chassis.

The body and tender were assembled, after cleaning flash from the castings, which was minimal, and the usual procedure of fitting parts in a dry run before soldering. Care has to be taken in keeping the long footplate straight whilst fitting the cab and boiler assemblies, as even mere handling can distort it, until these components are attached. Frequent checking with a straight-edge at all stages of assembly should overcome any problem, but look at every angle of the model as you proceed. This isn't a criticism of this particular kit but a boiler and firebox assembly can look OK side on, but like a dog's leg when viewed from above.

Nu-Cast kit in early BR livery.

The buffer beams were opened out to take Jackson screw 3-link couplings. I usually drill two or three holes in line with a number 64 drill and open out the slot with an old, sturdy craft knife taking care to keep my fingers out of the way, as these will still be needed to finish off the kit! This method is not recommended for armchair modellers working on their knees in front of the television! Handrails were next fitted, using brass handrail knobs; a number 68 drill provides a tight fit. However, I usually drill the holes oversize, as I solder the knobs in place. My procedure is to prepare the handrail as straight as possible, tin the shanks of the knobs and thread them on the rail. I then put a drop of flux over each hole then insert the knobs and solder in place with low melt solder. This fills the oversize hole; a quick dab with the soldering iron will allow any minor irregularities to be straightened out. When satisfied that all is well, a spot of flux is applied to each knob, and a quick dab of ordinary solder holds the handrail firmly in place.

When the body was complete, cleaning up with scraper and fine wet and dry paper is well worth the effort, followed by a scrub with a toothbrush and mild abrasive such as Chemico bath cleaner, in hot water. If you solder your kits, an overnight soak in a bath of diluted ammonia will shift unwanted flux and debris, followed by another scrub. I use approximately three tablespoons of household ammonia to a pint of water.

With the body dry and free from dust, a coat of Precision etch primer was sprayed on, followed by two or three fine coats of dull black. When perfectly dry the buffer beams were painted red, and the loco lettered up using PC Pressfix transfers. A coat of Precision satin varnish, with a few drops of matt added, completed the job.

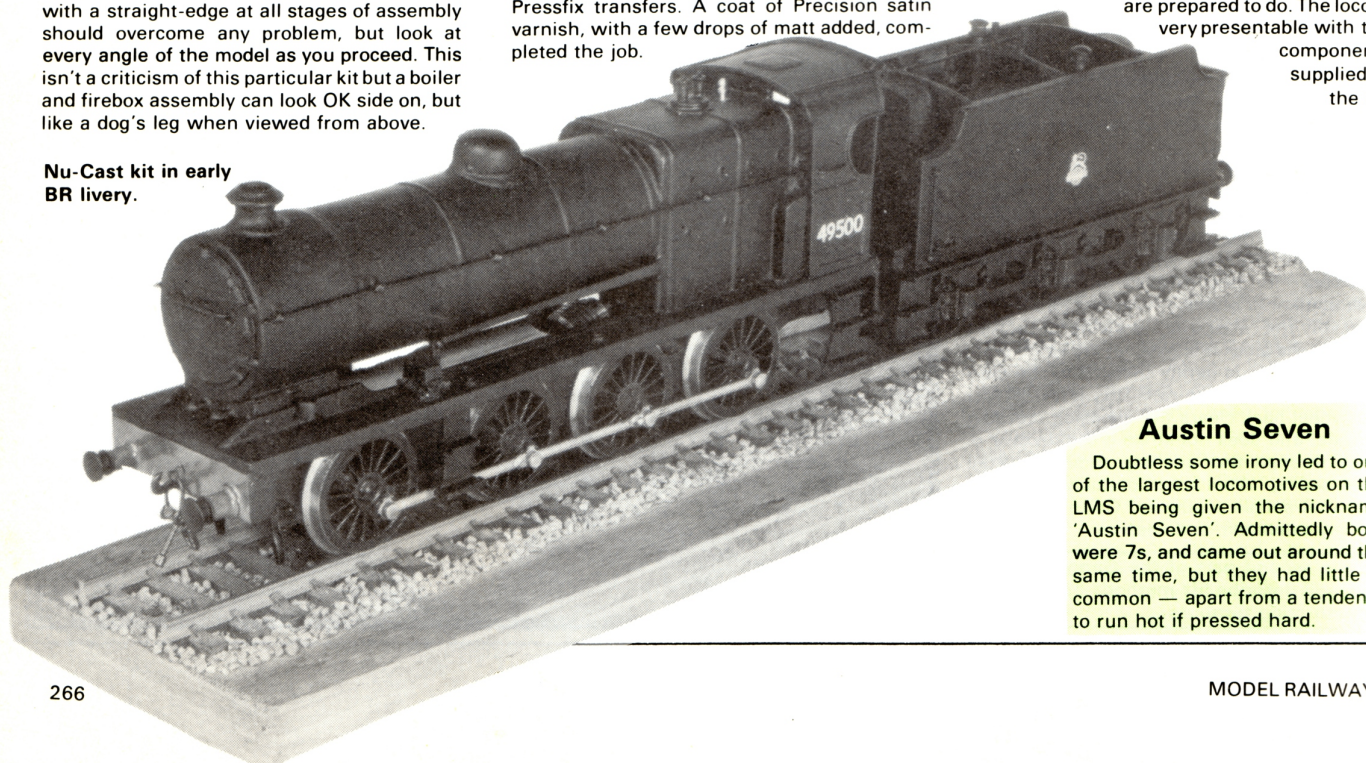
This article may be considered as a constructor's review of two kits for the same class of locomotive, from two diverse mediums. One is a whitemetal kit by Nu-Cast (ex Cotswold) and the other an etched brass kit by Jidenco. Perhaps a few words on the prototype before plunging into the merits of the kits.

The 0-8-0 7F mineral loco was introduced in 1929 to meet requirement that would be appropriate for a more powerful engine than its elder sister, the 4F. Its purpose was to alleviate double-heading, a common practice inherited from the Midland Railway small engine policy, as also was the intention with the Beyer Garratts introduced some two years earlier.

The design called for an improved and standardised version of the LNWR G1 and G2 locos which had shown their paces. A G7's boiler of not dissimilar design to the G2's boiler was fitted, operating at the higher pressure of 200lb sq.in. This supplied two inside cylinders of 19in. diameter by 26in. stroke, driving 4ft.8½in. diameter wheels, with Walschaerts long travel valve gear.

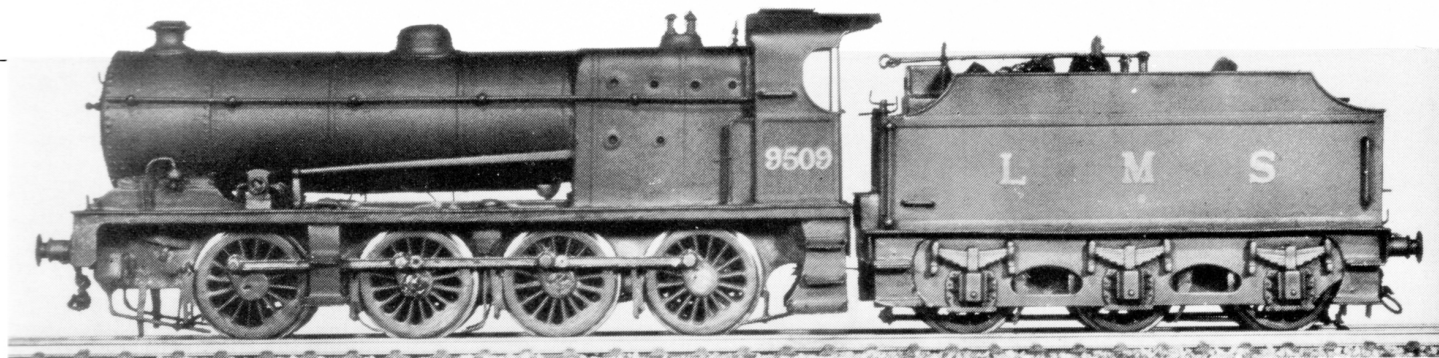
The loco had the stamp of Fowler and Derby in its appearance, and was partnered with the Fowler 3,500 gallon tender, which had coal rails fitted at a later date to increase capacity. A good front end layout provided very favourable steaming, with lower coal consumption than its LNWR predecessor, the G2. However, as with the Garratts, small axle bearings to the 4F specification were used which proved to be the Achilles heel of the 7F. Only low mileage was attained between shopping, with much bad performance as rapid wear prematurely set in. Withdrawals of the 175 strong class took place between 1959 and 1962.

All in all this is a pleasing, simple kit to tackle. The experienced modeller should sail through this one and the beginner should have a successful first attempt. More detail could be added mainly in the brake gear department, but that depends on how much more work you are prepared to do. The loco is very presentable with the components supplied in the kit.



Austin Seven

Doubtless some irony led to one of the largest locomotives on the LMS being given the nickname 'Austin Seven'. Admittedly both were 7s, and came out around the same time, but they had little in common — apart from a tendency to run hot if pressed hard.



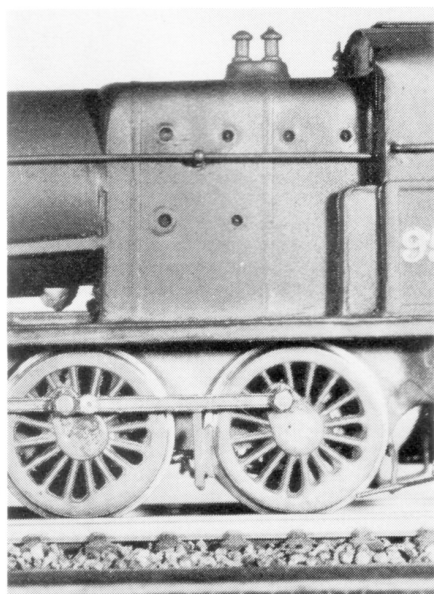
Jidenco

Now to the Jidenco kit, of which this is one of the simplest I have tackled in their range. Etched brass loco kits, are a different kettle of fish to whitmetal, and call for rehabilitation of ideas, if you have been in the whitmetal and plastic camps for too long. I personally think these kits must be soldered together, but there is bound to be someone happily assembling them with superglue and Plastic Padding to prove me wrong!

Anyhow, back to the kit in question. I think the manufacturer expects you to have experience of loco construction, as the instruction sheet is implicitly direct and assumes you are capable to do such things as; quote "Make up a motor mounting bracket from scrap brass or nickel silver, mount the motor, when satisfied with gear meshing solder the bracket in place." This is an example with which an experienced modeller can easily cope, but a raw beginner can be rather unhappy about. There is also no mention, or provision, of where to stick the motor, but it allows you to choose whatever motor and transmission you like, providing it will fit within the superstructure. This is where experience helps, but it is not an insurmountable problem.

The tender was tackled first; there are enough parts to construct either the beaded or riveted versions. In fact if you used the other parts as templates you can construct two tenders, but I don't think this is what Jidenco had in mind! It is pleasing enough that a choice is given; I built the beaded version for this loco,

A close-up of photo 2 showing the bung and washout plug to more devastating effect. Also imperfect cleaning up at the firebox-boiler joint and bottom of smokebox wrapper. This is hardly noticeable on the model but the photo tells the awful truth of lack of attention.



having surreptitious thoughts for another loco with the leftovers. The sides and rear are sweated to strengthening plates; then I drilled the handrail holes before assembling these components. All other parts followed as the instructions, and no problems were found. A tender that anyone should be pleased with was now on the workbench. This was cleaned up as mentioned earlier with the Nu-Cast kit, and put to one side.

The loco body was started next. A good flat surface, such as a piece of plate glass, is really essential for best results. OK don't tell me your mate produced his exhibition winner on his knees, on board a tug in a force nine gale. We all aren't that good! The valances are soldered to the footplate; I found it best to start at one end, and work towards the other, rather than spot soldering in various places along the length, as the components are thin enough to buckle under the heat of the iron, if freedom to expand and contract is not allowed. Many parts may seem thin at first, but the strength factor is built in with stiffeners, or by the attachment of other components, so a solid job finally ensues. However, keep the facts of this thinness of components at the back of your mind, as denting and creasing can easily occur through a heavy handed approach. The buffer and drag beams follow; then attention is given to the cab, where strengtheners are soldered to the inner sides. Now comes the first heart-stopper, since the next move is to get the one piece cab side, roof, other cab side, wrapped around the cab front! Very careful bending, around a small diameter former, will help matters. Aim to get it right first go, otherwise a nasty crease may ensue on further attempts. If you are unfortunate to have this happen, as I have had in the past, carry on until satisfied that the part is the right shape, then tin the affected area with solder and rub down until a satisfactory surface is attained. The firebox is next; this part didn't want to fit snugly between the spectacles on the cab front, so the firebox formers had to be trimmed a little to accommodate this. At this point both front and rear formers should be treated the same, so as to ensure the firebox wrapper will be parallel. From here on was plain sailing. There is a smokebox wrapper to go round the boiler which may prove difficult, if the two parts aren't thoroughly tinned first. A few added details were fitted, such as lamp irons and lubricator pipes, to complete the body.

Attention was next given to the chassis; no problems were encountered, providing assembly is again carried out on a flat surface. The coupling rods are in three sections per side, which allowed plenty of sideways movement of the driving wheels, as well as up and down movement for those wishing to fit suspension. There is a lot of detail to fit on the chassis, such as brake-rigging, sand boxes and pipes; as each part is added it is as well to ensure nothing fouls the wheels or coupling rods. This chassis really scores over the Nu-Cast version as it really looks a solid lump of heavy engineering, ready for some hard work. I fitted the Anchoridge DS10 motor, mounted on

Jidenco kit in grimy LMS livery. Unfortunately Plasticine bung has dropped down just in front of the firebox and leading bottom washout plug looks as though explosion is imminent. Probably too much prodding about with the 2in. thick fire-irons.

the Stelfox mounting frame with 40-1 gears driving the third axle, which just about fitted in the firebox; I wanted to fit backhead detail at a later date. There was so much detail that it was almost impossible to fit pickups, but this was just managed by cranking them round the springs and brake rigging. If I built this loco again I would certainly use the Maygib type of plunger pickup, so if you are contemplating building this model I strongly recommend this approach.

This sums up the construction except I filled the boiler with leadshot held in place with a Plasticine bung. Cleaning and painting was carried out as before, but this time with the addition of heavy weathering.

Conclusion

So now that we have two 7Fs, how do they compare? Pricewise the Jidenco model's a pound or so dearer, but don't forget the bonus of those useful tender leftovers. Performance wise the Jidenco chassis lends itself to more sideplay and the fitting of suspension systems if you are into that. The Nu-Cast chassis is basically a well machined block with no problems at all for the beginner to average modeller. Visually the Jidenco model has got it; the tender is near perfection, the chassis, with its detail, gives the impression of massive weight, while the body details look right, with thin cab sides etc. There is far more work in this kit, but the end result is really worthwhile. The Nu-Cast kit should not, however, be dismissed as it makes a very presentable model capable of being built by anyone, with nothing like the effort required of the Jidenco version.

I have included a photograph of the 7F in three scales of O, OO and N, see page 248. The O gauge is an old Edward Exley model of immense power, that I have rebuilt, added some detail and which is now awaiting two rail wheels. The N gauge version is the Gem kit. I did plenty of filing on the roof to give it a more prototypical look since, as supplied, it is quite sharply radiused. I built this for my friend Alastair Knox, of local mouse gauge layout fame, and it has shown its paces hauling long trains of wagons at local exhibitions. I thank him for loaning it me for the photograph and also wish to thank Bob Campbell of Scotland for allowing me to use his commission for the description of the Nu-Cast kit. Don't believe all you hear about Scotsmen. Thanks also to the photographer William Bob Robbins who does more than justice to the models, and last but not least my wife for putting up with endless railway and model matters, not to mention the odd tantrum from the depths of the workshop, plus having to type this lot out.

