

The Rat Pack

How does the railway function without class 25's? Once they were literally everywhere. **Jim Smith-Wright** describes how he went about modelling them.



Why 25's?

When I was very young my house backed onto the North Warwickshire Line - about 400 yards from Shirley Station. There was a steady procession of class 116 DMU's day in and day out so freight was a rare thing indeed. None of it revenue earning, freight trains were restricted to engineering types.

I remember, before I knew what a class 25 even was, a pair came trundling along, heading towards Birmingham with a string of 4 wheel hoppers in tow. The hoppers 3 bright white handrails caught my attention but what was really exciting was that they were discharging ballast as they went. To top it all off Another 25 was pushing the train from the back! Great Stuff!

I didn't know what a class 25 was - I didn't even know at that age that locomotives had classes but these 3 loco's were definitely the small diesel from the Hornby Catalogue. Since then I have always had a soft spot for them and for ballast hoppers with platforms and bright white handwheels. My interest in class 25 was cemented in for

life when, much later, a family weekend to Aberystwyth resulted in a pair of them taking us there. Imagine my disappointment when the return journey turned out to be a class 120 DMU! We really didn't know how lucky we were back then.

What are the options?

Hornby seemed to go through a faze where some of their models were just so right! Not carrying the bizzare looks of the 37 (with its completely wrong bogies) or 47, the 25 fell under the looks great banner along with the class 86. They only did the early body style and it was crude by modern standards but the shape was there. Many were converted to the later body style by the way of the Craftsman conversion kit.

There was another route to a later body though in the form of the DJH kit. It had some much nicer details but overall it was pretty much totally the wrong shape.

The route to a late 25 seemed solved for a while with the introduction of the Silver fox resin body. The detail, especially on the body sides was almost

unbearably crude but as with the earlier Hornby model the shape was there.

Not so the Bachmann RTR version. A great chassis - lovely bogies, nice mould work on the sides but the cabs? Essentially there are a mere 2 faults on the cabs but both throw the look of the model so wildly out of tilt that its scary! The two errors are, the curve of the roof and the rake of the windscreens. In the case of the former its too flat - making the cab windows appear too small (they actually are too small!). The rake of the windscreen is too much which throws the side windows out. Bachmann tried to correct the model by deepening the windscreen and to some extent it worked on a visual level but once you are aware of the problems they stick out like a sore thumb. The other body style class 25 and the 24 from the same stable bear the same problems but due to the more cluttered look of the face of these loco's they seem to hide it better.

Comparison of the Bachmann and Silver Fox cabs. There are only 2 errors in the Bachmann cab but both badly affect the look of the locomotive.



Pick 'n' mix

The use of the Bachmann chassis is a complete no-brainer! Cosmetically it needs work but mechanically its superb.

When it comes to the body types the early body style is a bit more of a decision to make - Bachmann or Hornby? For me its Hornby, It takes more work to improve than the Bachmann body but the faults with the Bachmann model are pretty much un-fixable.

The later body is a choice between the DJH one (if you can find one), the silver fox one or sticking with the Bachmann offering. The DJH one is no better than the Bachmann one so that out of the running. The Silver fox one has the look but the grill work is poor and the bachmann model has the nice detail but not the look.

The logical but perhaps slightly drastic conclusion is to take the best of the 2 body shells and combine them. Bachmann middle and Silver Fox cabs. Turns out the cabs on the real loco's are removable too so there is a nice join which we can use as a guide.

Early body style

Many modellers are happy with Bachmann's version of the earlier body style and as mentioned the more cluttered front hides the errors better than the later body style. However - not mentioned until now - the bodyside grills are proud of the body which is correct for a class 24 but not a 25. This error is not present on the Hornby body



25059, A Hornby body grafted onto the Bachmann chassis.

so for me, at least, its a good idea to swap bodies. For a variant of these machines in their later life there are several improvements/changes required to the bodyshell.

The small grill at the no. 2 end needs plating over as do the roof access steps. you can use the part from Craftsman for the former while I used spare self adhesive vinyl from left over from Southern Pride window frames for the latter. The body securing holes in the cab doors also need to be filled and sanded smooth. There may be a moulded line on the cab front that denotes the edge of the small yellow warning panel on green models. Naturally this has to go as do the handrails and the assorted furniture on the nose doors. The nose doors should be smooth for a loco in later life. There

is a prominent join around the bottom of the cab fronts - exaggerated by a line of rust that formed on the real loco's - This can be scribed on with a scalpel. The other modification to the Hornby body concerns the exhaust port. There isn't one! As I had spare middles from the Silver fox bodies I used the exhaust ports from them on my model but A1 models do an etched part.

The tail lights on the hornby body are too low and they need filling and a new representation making higher up. After a repaint the body was suitably distressed to look like a rat in the last few months of its life. One noticeable weathering characteristics of the class 25's is that the radiator overflow is near the fan grill. This results in noticeable white water streaks on the roof.



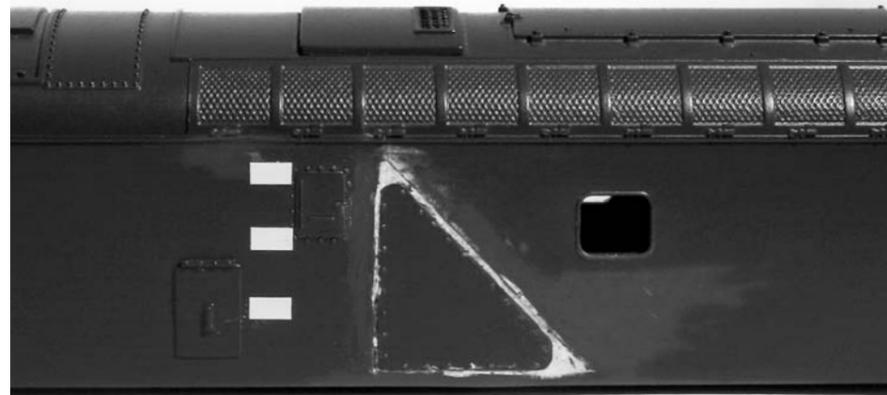
Later body style

The hardest part of producing the late body style is finding the silver fox donor loco's but they do crop up now and again. I used the line of rivets across the roof and the rear of the cab doors as my guide for cutting the cabs off. This leaves a stepped joint which is no bad thing. On the cab front the handrail can be replaced by 0.3mm wire (along with the door handrails) and the lamp irons folded up from flat brass strip. I also cut away the vertical divider bar on the side windows to be later replaced with microstrip stuck to the replacement window. On 25 265 I modelled the windows of the no. 1 end open by differing amounts.

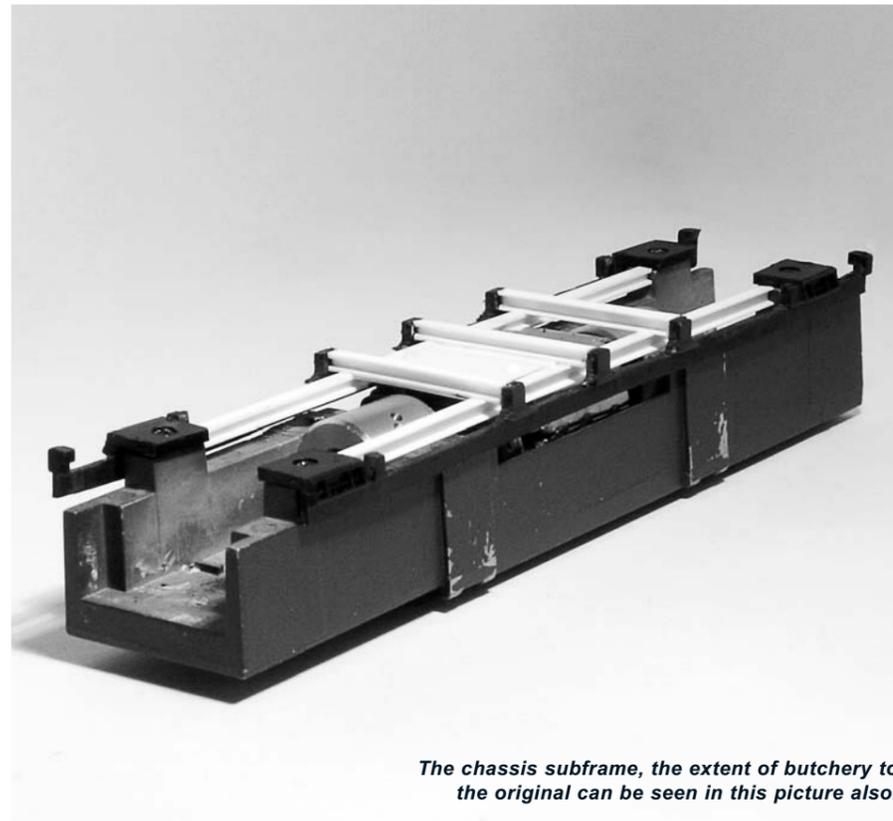
Turning to the bodyside there are 2 versions of body featuring 2 different approaches to the large triangular panel. One style features a raised panel which is incorrect while the other features a flush panel surrounded by quite a deep trench. I am a little unsure which is the better option. As it turns out 25191 features the raised panel body while '265 features the trench version. On 25191 I cut the panel out as a simple triangle and remounted it flush, filling in the corners. I left the panel on 25265 as it comes. The bodyside steps were plated as per the early body style.



Above: First attempt at the later body style. A Silver Fox body and Bachmann chassis.



Below: The triangular bodyside panel, cut out and re-mounted flush with the side



The chassis subframe, the extent of butchery to the original can be seen in this picture also.

Chassis

There are some things in modelling where the effort involved is far outweighed by the result. Regardless of whether or not you decide to mess about with the bodyside it's well worth improving the chassis. A real class 25 certainly doesn't have solebars and yet the model does. In order to remove the solebar it is necessary to adjust the metal chassis block first. If you remove the plastic chassis you will see 4 "feet" that stick down below the rest of the chassis. The outer ones can be left alone as they sit behind the bogie pivots but the inner ones are in the way and need cutting away with a hack saw. The metal is very soft so it's not difficult but it is worth removing everything from the chassis block first to prevent swarf getting into the motor. I also washed the chassis block down when I had finished cutting.

You will then need to separate the chassis into 5 main parts using a fine circular saw in a mini drill. These bits are bufferbeams, 2 sides and battery

boxes. In the case of models with water tanks these are a separate part anyway.

Bufferbeams

The buffer beams are cut from the chassis behind the little step for the cab door. The 'solebar' cab can be carefully cut away and replaced with 2mm H section plastic strip. This is 15mm long and runs from the front edge of the bufferbeam back toward the centre of the loco at about a 30 degree angle. There are various pipes under the buffer beam and I used florists wire to represent the 3 main pipes visible in the picture. There is a pipe each side that appears downwards from the floor and bends over the channel to disappear into the depths of the loco. The one on the drivers side is about 6mm from the front while the one on the secondmans side is about 3mm from the bufferbeam. There is a second pipe on this side that appears from behind the cab step parallel with the cab side, goes through a slight S bend to drop away from the floor before taking a right angled turn through the H section about 5mm from the front. The usual pipes can be added to the front of the bufferbeam (magnetic ones if requiring coupling up) along with the small ladder and other bachmann supplied parts or snowplows if required. The bufferbeams need to be glued into the cabs as the original fixing method has been well and truly demolished.



A pair of class 25's nose to nose giving a hint of the work done to the underframe under the cabs. A hint that something is there is really all that is required.



Battery boxes

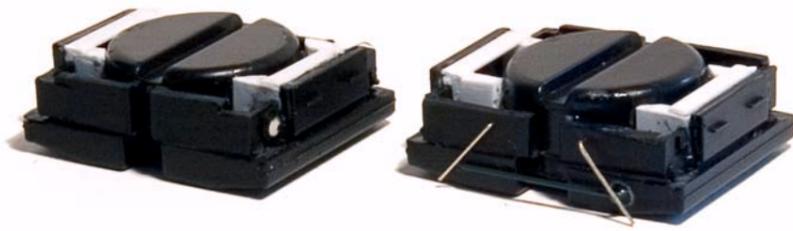
The sides of the battery boxes that contain the fuel gauge and other pipework are a bit too near the front and can be cut off and relocated further back (fitting a 19mm speaker into the battery box first if you want sound). There is a pipe that runs between the fuel tanks to keep them equal and this can be replicated with florists wire while the 2 drain pipes are from .3mm handrail wire.

Chassis side

Most of the chassis sides need removing while retaining the upper part that is hidden behind the body. From right to left you need to retain the following - Small moulding behind the cabs, bogie pivot, small box near bogie pivot, 3 main brackets in the centre of the loco, small box near bogie pivot, bogie pivot and the small box behind the cab.



What we are aiming at. The boiler fitted version above and the non boiler below. David Clarke



Using the 2mm H section cut 3 lengths measuring 29mm and 2 lengths at 102mm. You can now re-attach the chassis sides to the chassis block using the original screws. The 3 shorter sections fit across the chassis between the 3 body mounting points (see pic) while the long ones fit along the chassis length about 4mm in from the sides. A floor of 20thou plasticard can be fitted between 2 cross members at the number 1 (fan) end. Ensure the chassis is orientated with the lower section at the same end - especially if fitting a speaker. If you look at the loco side on with the fan to the right there is a pipe that runs the length of the loco inside the long channel. Again the trusty florists wire can be used for this and the other pipes too using photos as a guide.

Reassembly

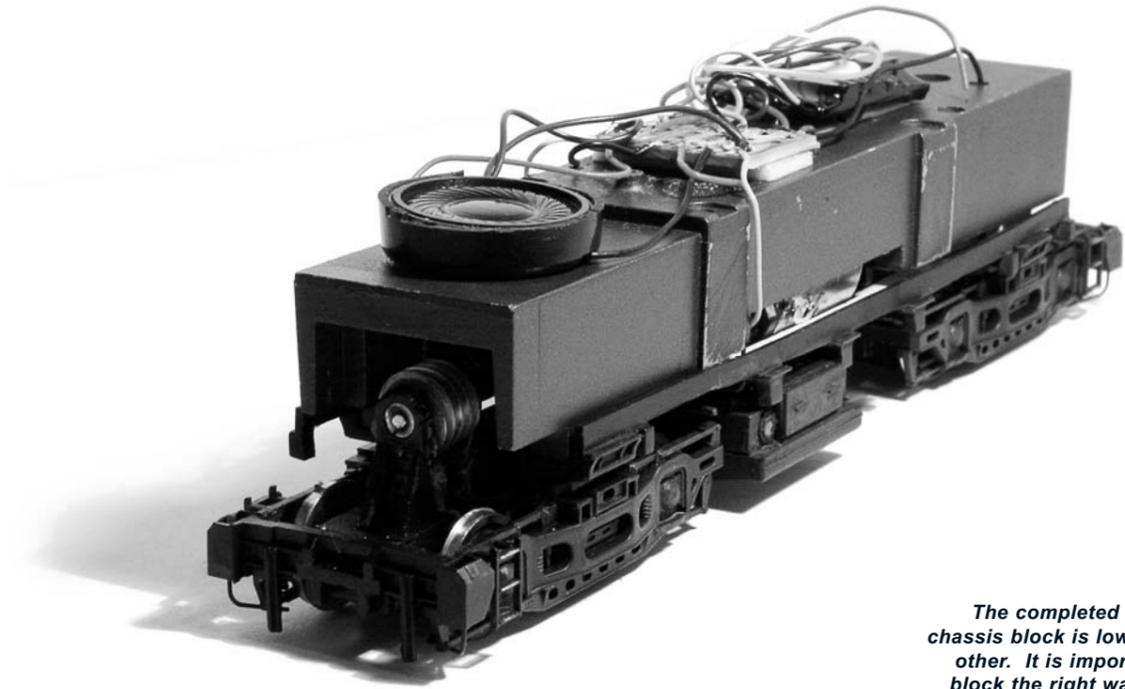
Where Bachmann centre sections have been used the original fixings can be utilised to secure the body and chassis back together. Where the Hornby (and indeed full Silver Fox) bodies have been used a new method of fixing is required. It just so happens that there is a ledge in the back of the Bachmann cab moulding which lines up with the underside of the cast chassis. At one end a piece of 80 thou plasticard can be superglued in place to hook under the chassis. At the other end I used a smaller piece of 80 thou, not wider than the ledge and secured it with a screw so that once in place it can be swivelled under the chassis to form a simple latch.

There you have it - a route which, to my eyes at least, results in a much improved Baby Sulzer. The chassis rebuild can be applied to the class 24's to improve their looks too. Both 25191 and 25265 are quite happy pottering around with their distinctive sulzer burble courtesy of the South West Digital sound chip. They still look best on a rake of 4 wheel ballast hoppers with bright white handwheels!

Top: Both ends of the new battery boxes. The round object is a sound box for the speaker.

Middle: Close up of the boiler fitted underframe. There was a small sub-class of late body style loco's that were boiler fitted.

Bottom: Likewise the non boiler fitted version. At least one example of the early body style had this version of underframe.



The completed chassis. Note that the chassis block is lower at one end than the other. It is important to get the chassis block the right way around, especially if fitting a speaker. The speaker's sound box has been reduced in height to fit.



25191 and 25265 both feature Silver Fox/Bachmann hybrid bodies and sound. This is about as far as I can take a model class 25!