

## Converting a Bachmann Class 45 model to 45133

Bachmann have yet to produce an accurate OO gauge model of a Class 45/1. The 45/1s that have been produced were let down by the presence of steam heat details on the roof and plated over body side steps. All these features, correct for a 45/0, were removed when the locos were ETH fitted. Also, none of the models so far have high intensity headlights on the nose ends. However, with a few evenings work, it is possible to convert a standard Bachmann model into a fairly accurate representation of 45133 in preserved condition. Hopefully this article will explain how to do it and inspire some of you to have a go!

### Which model to convert?

The model used for this article was that of 45114, released back in 2004 in BR Blue with grey roof and body side stripes and with one piece centre head code boxes on the nose ends. This was because it had the most number of correct features at the time, in terms of chassis details and body side grilles to suit 45133 and it was easier to fill the hole in the nose left by the head code boxes than if a split box version was used. Although these 45114 models are not current, good second hand examples can usually be found in model shops or on ebay for around £60. Since this article was first written, Bachmann have released models with sealed beam headlights, so you will find these even easier to convert.

### Dismantling

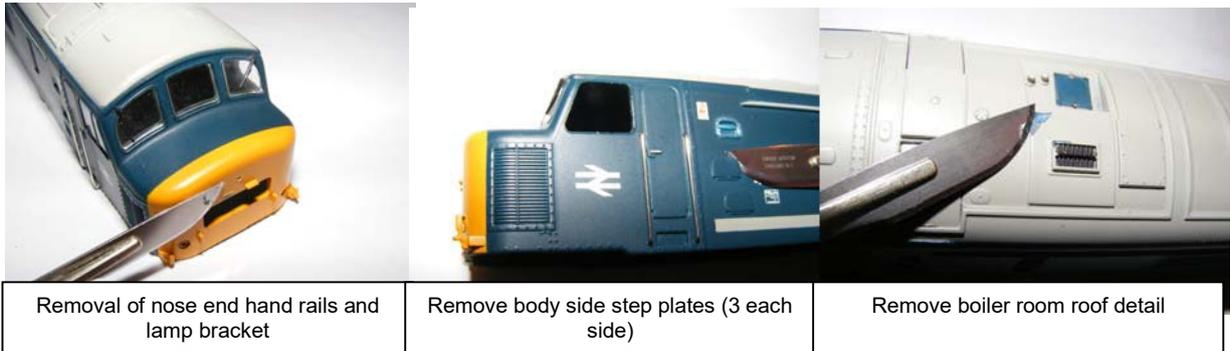
The first job is to remove the body from the chassis (by removing two small Phillips screws under the chassis) and strip it of removable parts. The radiator fan assembly is also removed by removing two screws inside the body shell and the glazing and head code boxes can be pushed out by applying gentle pressure with your fingers. Next, using a cocktail stick, push out the tail light glazing and, working from the inside, push out the windscreen wipers. Be sure to keep all these fiddly parts safe for refitting later.



The 45114 body shell, ready for stripping

## Removing unwanted details

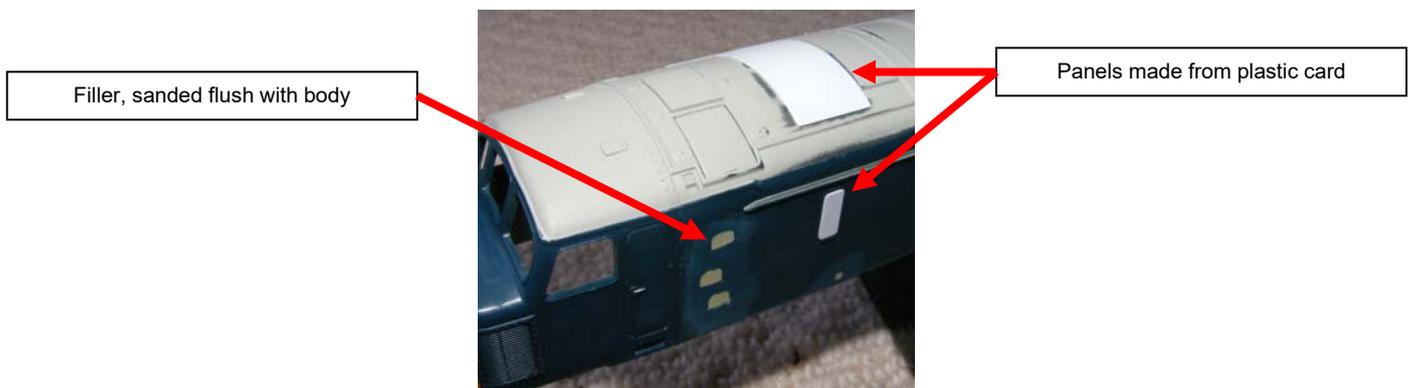
Now you reach the point of no return – taking a scalpel to some of the moulded body detail! Starting on the nose ends, cut off the small moulded hand rails and lamp bracket, just above the head code box. Then prise off the three plates on each body side covering the boiler water filler steps. Finally, on the roof, carefully carve away the boiler room detail – boiler exhaust grille, header tank and safety valves – until it is flush with the rest of the roof.



## Plating and filling

Cut out a rectangular piece of thin plastic card 27mm x 14mm and glue it to the roof, so as to cover the area of removed boiler detail. Also, the small boiler room body side grilles were plated over on 45133, so cut out two rectangular pieces of card 9mm x 4mm and glue these over the grilles.

Using Milliput, or similar modelling filler, fill the head code box apertures in the nose (this is made easier by gluing a piece of plastic card behind the hole first so you have something to push the filler against), the body side step recesses and the two small holes low down on each side. These holes were originally for bogie lubrication but were removed when the locos were refurbished. Leave the filler slightly proud and when dry, sand flat with fine sand paper.



## Nose end detail

Turning to the nose end again, one of the faults of this particular Bachmann model was the lack of seam line between the nose and nose crown (these were added to later releases of the model). I added this by first clamping a strip of thick plastic card around the front of the nose, with the top of the card level with the top of the nose side grilles on both sides. Using this as a guide I then ran a plastic scribe along the top of the card, round the nose, going over it several times until a deep enough groove had been cut into the plastic.



Cutting the nose seam line

Now add the two sealed beam headlights to the smoothed over filler. I used Shawplan DP3706 etched light surrounds secured in place with superglue. The centre of the lights needs to be 14mm apart and 9mm up from the bottom of the nose.

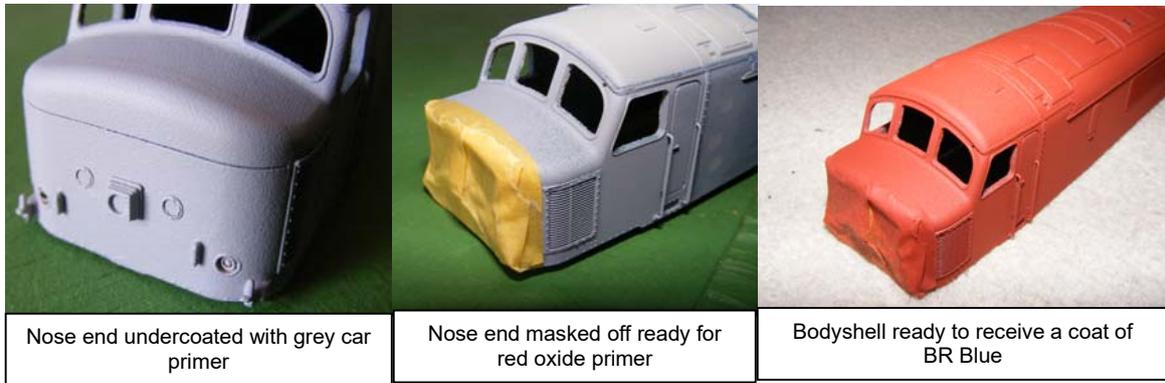
Then you can add the high intensity headlights (I used Replica Railways headlights) in the centre of the nose, with the top of the headlight level with the top of the sealed beam headlights.



## Painting

Lightly rub down the whole bodyshell with very fine sandpaper (to give a key for the new paint), then make sure the body is free of grease and dust by lightly washing it with lukewarm water and a spot of washing up liquid. It is best to use an old toothbrush for this so you clean all the fiddly bits around the grilles etc. Then rinse well with cold water and leave to dry.

Next, you need to undercoat the bodyshell, using aerosol primers from a car accessory shop. It is best to use white or grey primer for the nose ends and red oxide for the rest. Spray the nose ends first and when dry, mask off the areas that will be yellow (I use Tamiya tape available from model shops) and then spray the rest of the bodyshell with red oxide.



Leaving the masking tape on the nose ends, you can now spray the bodyshell BR blue. I recommend Railmatch satin paint from Howes Models, which is available either as an aerosol or in jars for use with an airbrush. If using an airbrush, the paint will need to be thinned to about 1 part thinners to 4 parts paint. Whichever you use, the body will need 2 or 3 coats to ensure an even finish, allowing each coat to dry before applying the next.

When the BR blue paint is fully dry (after about 24 hours), remove the tape from the nose ends and then mask the bodyshell so only the nose ends are exposed.

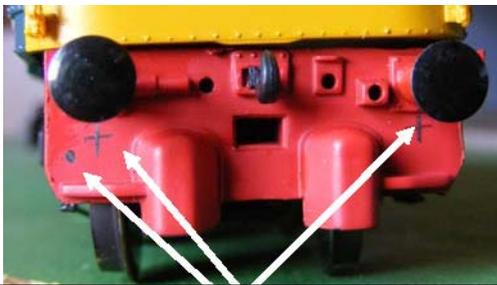
You can then apply the BR yellow paint in the same way. When this is dry, remove all the masking tape and pick out the cab handrails in white, the exhaust in black and the lights in silver using a fine brush and Humbrol enamel paints.

Now it is time for the transfers. Pressfix Sheet No.15 from Howes will give you the numbers and BR arrows that you need. These are simply cut from the sheet and pressed into place on the bodyshell, before wetting to remove the backing paper. It is best to refer to photos of 45133 to get the positions of the transfers right. The other transfers you will need are the data panels that go under the numbers (Fox transfers code: F4360) and the overhead electrification warning signs – 2 on each nose end and 1 on each body side (Fox transfers code: F4214). Again, refer to photos to check the locations.

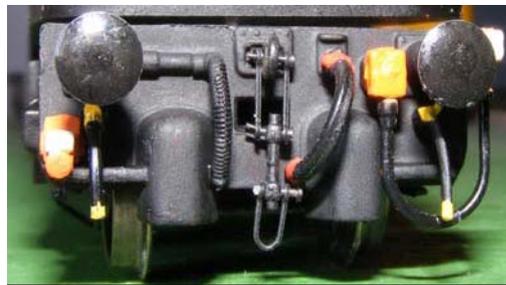
When all the transfers are on, give the whole bodyshell a coat of satin varnish to keep them all in place. When the varnish is dry (again leave for 24 hours), you can replace the radiator fan assembly, cab glazing, tail light glazing and windscreen wipers.

## Chassis

The standard Bachmann model is supplied with a pack of detail parts for the bufferbeams. This consists of 2 vacuum pipes, 2 air pipes and 2 ETH jumper cables and there are pre-drilled holes to fit these. However, in addition to these, you will need to fit the 2 main reservoir pipes and an ETH socket to each bufferbeam. These can be bought from Howes (Craftsman). Drill the extra holes where shown and glue the parts in place with superglue. Then paint the bufferbeams and pipes with Humbrol black paint and the ETH fittings in orange. For extra detail you can pick out the ends of the pipes in yellow or red as shown in the pictures. To finish off, replace the coupling hooks with replica screw couplings.

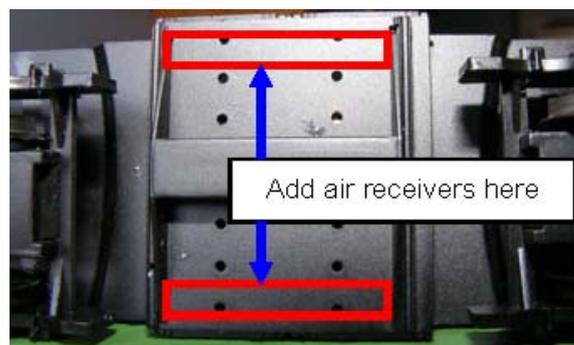


Bufferbeam showing positions of holes for additional pipes



Completed bufferbeam with all pipes and ETH fittings in place

The models of 45114 do not have the air receivers fitted under the battery boxes, so make these out of 3mm plastic dowel and glue them in place, before painting black.



All that is needed then is to fix the body back on the chassis and you should have a decent model of our loco!



Obviously you could go for different variations of 45/1 – maybe without the headlights or with headcode boxes if you wish to model a different era. Also, don't forget the option of fitting working lights and/or DCC sound – but that is another chapter!



The finished model!

**Steve Dexter**