## **NBR Horse Box Diagram 110**

Manufactured by: D&S Models, 46 The Street, Wallington, BALDOCK, SG7 6SW. Tel: 01763 288 353.



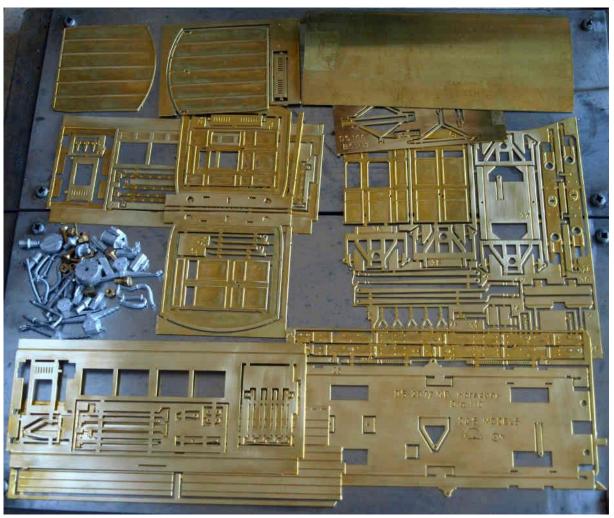
Finished and ready to go to the client, Warren has done his usual excellent job, the only problem I can see is that the roof is out of line due to the springs needing adjusting. It went direct to client so I did not have the opportunity to check out things like that.



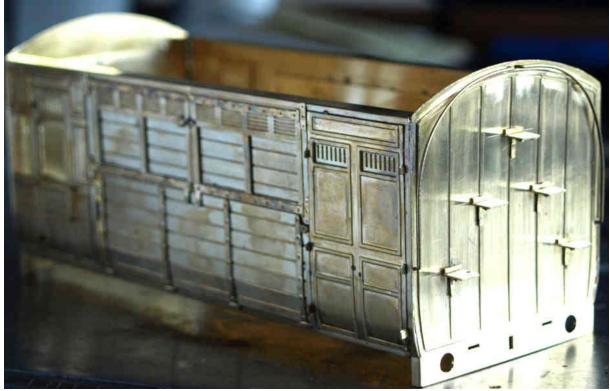
The parts arrive as a sheet of etch taped to some stout card together with a bag of castings, nuts and bolts etc. I have parted the main components here to shew the parts before beginning work and press out the few rivets/bolt heads that are not already etched in place. The instructions consist of very closely typed notes but have very useful diagrams to follow too. The buffers, which did not have any heads (but may have been lost over time, the kit is clearly old) were replaced with a set of Midland pattern with round heads.

As per my usual method I have done as much work 'in the flat' as possible before assembly. The sides are a combination of three layers and need careful fitting. All the cusps need to be filed flat and each parts needs the lower body curve bending before assembly since trying it after construction would impose undue stresses on the joints, which may then fail over time. There are no markings for where the end steps go but the instructions give measurements and their centre lines are the vertical panelling. The buffer beam overlay has not been fitted yet as there are parts on it that fold over the body.

The kit seems to have been designed for a removable chassis but the fact that the buffer beam wraps around the body rather gets in the way of that happening so this one will have a removable roof instead. The grills behind the doors also carry the hinges and are an excellent fit, as are the doors themselves in the holes in the sides. I opted to put the alarm gear on the opposite end to the steps since it seems that many were soon so altered, possibly to prevent damage when climbing the steps. The steps themselves are an intended to be a fold up unit but I found it easier to break them of at the bend lines and solder the bracket to the step before fitting the whole unit to the end.



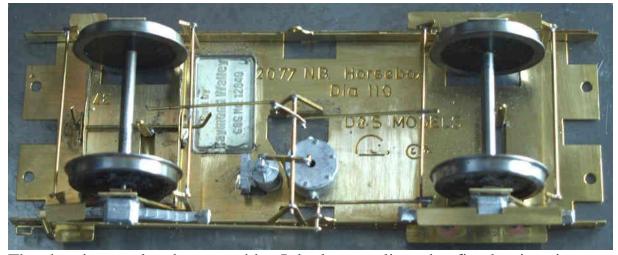
Here is the body largely complete, the parts fit very well and make up into a strong, square box.





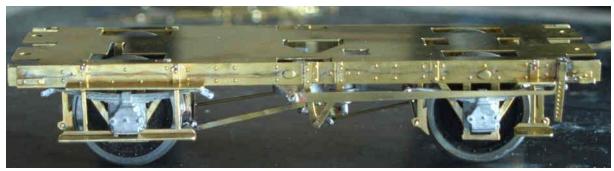
Here are the parts for the chassis. The bearings needed the square flats thinned to clear the wheels since fitting them the other way round would have meant excavating a square hole in the spring/axelbox casting. These castings are quite delicate, indeed two were damaged when I opened the packet and at the time of writing, I am awaiting replacements from Danny Pinnock, which is why only one side of the chassis is completed.

It is essential that the upper steps are fitted before the springs and then the lower steps fitted after that so it is important the gaps in the upper steps, to allow the lower steps to reach the solebar, are made deep enough to allow them to slide through; I know this because I did not do it for the first one and had some difficulty in getting the part into place.



The chassis completed on one side. It looks complicated at first but is quite easy once the parts are tried in a dry run. The two cylinders are for the vacuum and Westinghouse brakes.

The rather nicely etched brake yokes could not be fitted as they are too short to stretch between the brake blocks so I simply fitted some wire in place between the blocks as most of the part is invisible in normal operation. I think that if the brake blocks had been arranged to fit closer to the wheels, then the yokes would



have fitted.

The side view shewing how the brake lever is fitted. There is one for each side and it looks like they only act on one set of wheels. The holes for bolting the chassis to the body are clearly visible at each end.

The completed vehicle complete except for Westinghouse pipes, I had only the low fitting type in stock so am awaiting an upright set from Laurie; once fitted it can go to Warren for painting.





An interesting kit and relatively easy to build but not for the beginner.