## Building a Budget Model Railways kit

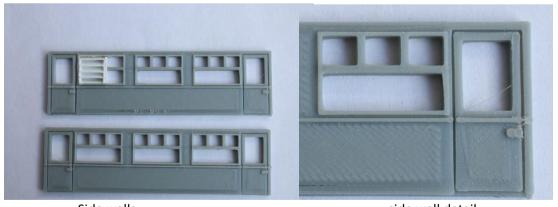
## **Hugo Baart**

It was on a hunch that I purchased the railbus shown below from Budget Model Railways.



https://www.budgetmodelrailways.co.uk/store/p17/OO9 GAUGE RAILBUS %2F RAILCAR BODY.html #/

As I wanted to build a motor vehicle with a trailer, I decided to order two right away. For £ 10.00 a piece you can risk it, at least that was what I thought. I knew it would not be a ready-made printed model but four walls, a roof and a base plate. When I received the printed parts I frankly was shocked to see the state they were in. In a budget model you can't expect miracles but the finish of the prints wasn't too good. But no worries, I thought – let's just to do something about it.



Side walls side wall detail

First of all, I cleaned up the window apertures with Swiss files as well as possible. Ultimately, this proved no success, so I gave up. The printed buffers were then cut off and replaced by something more realistic.



Front and rear

Next, I replaced the lamps. Only the front of the motor vehicle and the rear of the trailer were fitted with lighting. To improve the lamp detail, I stuck 1.6mm washers on.



Trailer, rear end.

The rear of the motor vehicle and the front of the trailer were fitted with a steel rod fixed in the former lamp aperture, by way of camouflage. The rod hasn't any function but it looks nice.



Trailer, front end.

Next, I fitted handrails and door handles of 0.5 mm copper wire, instead of the existing door handle detail. Printed steps were added as well.



The roof was corrugated, and sanding it smooth was not an option for me, so a sheet of 0.25 mm styrene was stuck over it, slightly oversized by 2mm all round. The sides were finished with an edge strip of  $1.5 \times 1.5 \text{ mm}$ . The roof ventilators have been replaced something more realistic. Two exhausts were added for the diesel engine.



Under the baseplate I stuck 2 mm H profiles to add a little more 'body' to the model. However, afterwards I found the KATO chassis didn't look very realistic. The wheels were too close together, so I fitted a skirt all round, printed by a friend. The chassis now is more or less obscured.



Motor vehicle fitted with a skirt. The roof is still loose.

Being a motor vehicle, an engine compartment was needed. I therefore fitted a ventilation grille in part of the first window, giving the impression of an engine compartment.

I could have tried sanding the side walls smooth, but sticking on an 0.25 mm sheet of styrene was less work and worked wonders. The inside walls were much worse. As well I could I tried sanding them smooth, but eventually I did the same trick with 0.25 mm styrene. The end walls also showed a great deal of irregularity. I filled and sanded them as well as possible. Thus, the printed body became more or less acceptable.

You cannot expect any miracles from a budget model but the fit of the walls wasn't too good either. Part of that was caused by the need to sand the edges smooth, preventing the need of filler.

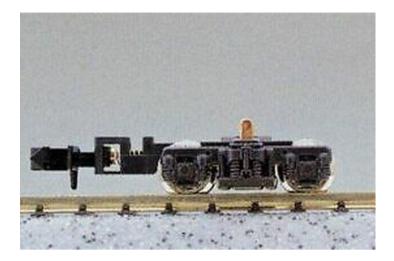
The window apertures were warped so badly that I decided to glue styrene strips of  $0.25 \times 0.5$  mm inside. The strips were painted with Vallejo 71.083 Silver prior to fitting. The application of the strips turned out to be quite a challenge due to the state of the aperture edges. They were glued in with Crystal Clear.



Front end of motor vehicle

The bogies for the trailer came from a KATO 11-033. These are beautifully detailed bogies with built-in power pick-ups. Copper patches were stuck under the baseplate of the trailer with the copper pins of

the bogies touching. The wires necessary for the lights were soldered to the copper patches. The lights of the motor vehicle are linked to the power supply of the motor.

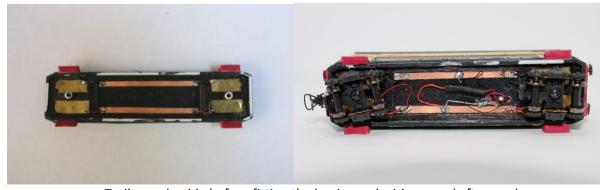


After all this preparation, the real work began: airbrushing the model inside and out. Just as a challenge I chose to spray the exterior in two colors and the interior in light grey. Somehow the uneven surface makes the model more realistic. In reality, the walls of a rail vehicle aren't flat either. Just look along the surface of the vehicles in a railway museum. A red stripe was added using red tape of about 1mm, as the surface was too uneven to mask and spray it on. Simple but effective! The walls were slightly weathered, as they probably are on a prototype vehicle.



Side wall detail with skirt, exhaust, grille, paint scheme and red stripe

The contact patches for the lights are interconnected by copper strips. To make sure, the bogie pick-up was connected to the copper strip with thin wire. It seems like a mess of threads but fortunately they are not visible. Ultimately, it resulted in permanent lighting without the need of capacitors to prevent flickering.

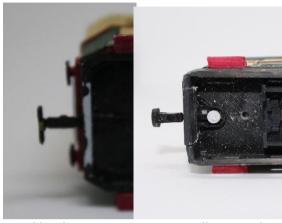


Trailer underside before fitting the bogies and wiring... and afterwards

Finally, after all this effort, the motor vehicle and trailer were lighted inside and out. Seats for the passengers and passengers themselves were fitted inside.

Naturally the model is fitted with an SD-05-A sound decoder by Doehler and Haass. The chassis is a Kato 11-103, also recommended by BMR, which I still had available. This fits into the aperture and clicks into the baseplate.

When testing on a small oval with a minimum radius curve, a new problem occurred. The power vehicle had been fitted with a fixed hook, and the trailer with a coupling fitted to a bogie. However, the overhang was so large that the trailer was pushed off the rails. The fixed hook was replaced by a swivelling one: problem over.



Fixed hook

swivelling coupling

Conclusion: on the BMR website rather positive reviews can be found. However, I'm not sure what quality the authors are used to, but I would say think twice before you start one of these. It is definitely not a beginner's kit. It can be done, but assembling and finishing the model takes a great deal of effort and ingenuity.

Anyway, it was another interesting challenge! It proved to be quite a job that afterwards gave me satisfaction of success – here is another unique train running over my layout.



The end result