

# MALKY'S N-SCALE S.A.R. MODELS

## Baby Health Centre Car 3

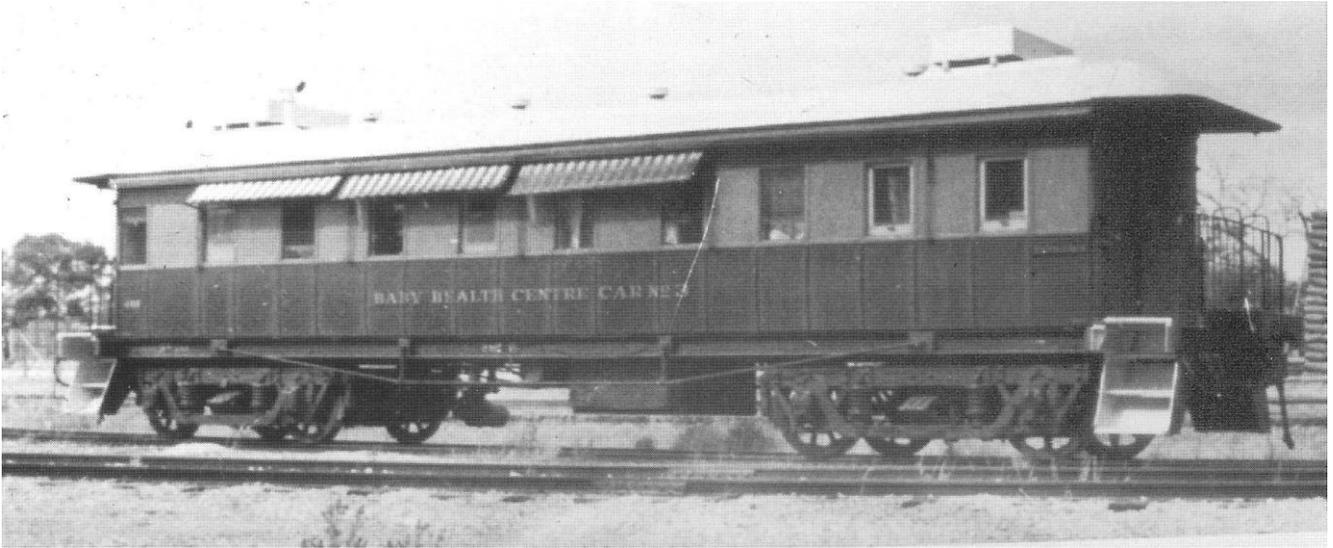


Photo from MRSAC notes 2001 p 3-136

**The Prototype:** Three passenger cars were converted to provide Baby Health Care services to remote communities. One of these, BHC3, was a narrow gauge sleeping car 113 converted to broad gauge 499 and subsequently converted to BHC3.

### For More Information:

The information used in the development of this kit was taken from the article *The 3'6" Gauge Passenger Rollingstock of the South Australian Railways – Part 2 – Long Toms, Sleeping Cars and 12-wheel Cars* in the notes of the Modelling the Railways of South Australia Convention 2001, pp 3-127 – 3-138. That article provided the first photograph of the car. The SAR drawing 40A describes this car, but has obvious differences from photographic evidence regarding details, number of windows etc. This model has been based preferentially on the photographic evidence.

**The Kit:** This is not a complete kit, but provides the major components for a skilled modeller to complete a model of this unusual car. In addition to the plastic and brass parts, you will need wire or styrene round strip to build the truss rods, various pieces of brass wire and styrene for the roof vents, suitable bogies and couplers. Further details could also be added such as grab irons etc.

The kit has two elements: 3D printed parts which can be purchased from Shapeways and a pack of etched brass parts and decals available from MNSSARM. The Shapeways portion consists of four parts printed in Shapeways Frosted Extreme Detail plastic: a carbody, underframe and two roof tanks. In addition you will need Microtrains 1015 couplers, and suitable bogies. The 8300 bogies available from Shapeways under the MNSSARM shop are close, but not exactly right for the 6'0" wheelbase. The brass parts provide two handrails for the end platforms.

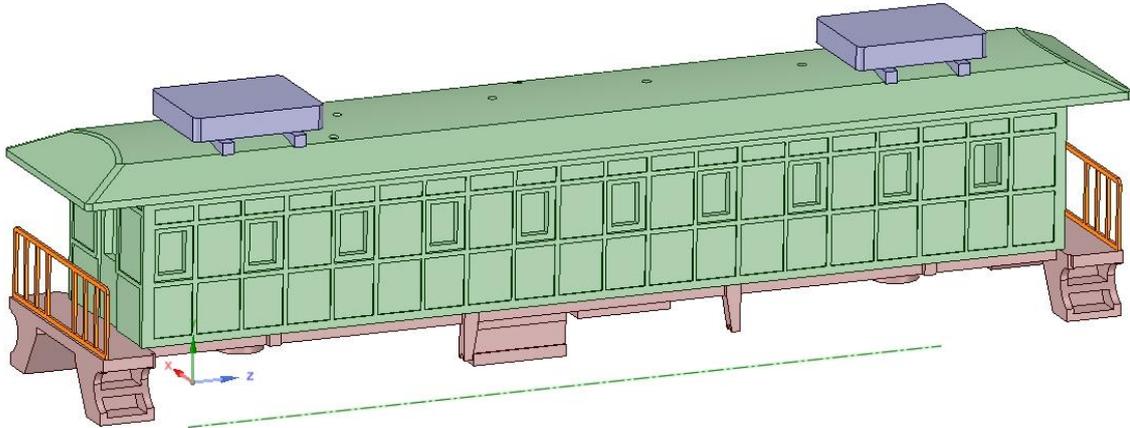
1. Clean the plastic parts thoroughly to remove any remaining wax from the printing process. This is essential to ensure good paint and glue adhesion. Cleaning can be by soaking in suitable solvent, such as isopropyl alcohol, assisted with a toothbrush. Further cleaning and/or sanding may be needed to produce an acceptable finish on the plastic parts. The brass etch should be soaked for a few minutes in vinegar and then washed with clean water. Separate the parts from the fret with a sharp hobby knife or suitable snips.
2. Before fitting any other parts to the underframe, drill for fitting the bogies, couplers and handrails. It is necessary to fit two pieces of wire or styrene round strip to make the truss rods. This should fit into the grooves provided in the queenposts on the underside and be terminated at either end on the plates provided on the side of the underframe – see photographs.

It is probably preferable to fit the bogies before attaching the other components, because of the need to press down to fit the bogie pins. Consideration must also be given to the painting sequence.

3. The two brass end platform railings should be fitted to the underframe before final assembly. These should be painted black before fitting. It will be necessary to drill four holes at each end, using the marks on the 3D print. Holes should be 0.3 or 0.4 mm diameter. The four pins on the lower edge of the handrails should be fitted into the holes on the end platforms.

4. Roof tanks. The two roof tanks should first be painted, then fitted into the grooves in the carbody roof. When a good fit has been achieved, glue the tanks in place with CN glue.

5. The underframe fits up into the car body. Ensure that a good, neat fit is achieved. Before final fitment, drill the underframe for bogies, couplers and handrails, determine if added weight is needed and fit the handrails to the end platforms.



6. Paint the parts. The car body should be green and cream. The underframe should be black. Roof and tanks should be silver. For the green and cream Centenary scheme: Humbrol No 3 Brunswick Green is a good representation of the green. For the cream, Humbrol No 41 Ivory has a white colour, while No 74 Linen (matt) has more of a cream hue. It is possible to add a few drops of No 7 Light Buff to No 41 to get closer to the cream colour. Roof, tanks and step interiors silver. For the underbody a matt black and suitable weathering would be appropriate.

7. Apply decals: the car numbers (499) on the left hand door of each side; the Baby Health Centre Car No 3 lettering on the middle of each side (see photographs). Seal with Dullcote or similar.

8. Added Details. Locations are marked on the roof for four central air vents and two additional vents for the kero heater and kero stove (see SAR diagram 40A).

### Acknowledgements

Information and photos from the MRSAC notes. Assistance from Hugh Williams with additional photographs. Extra assistance from Stuart Rees, the prime mover behind this project.

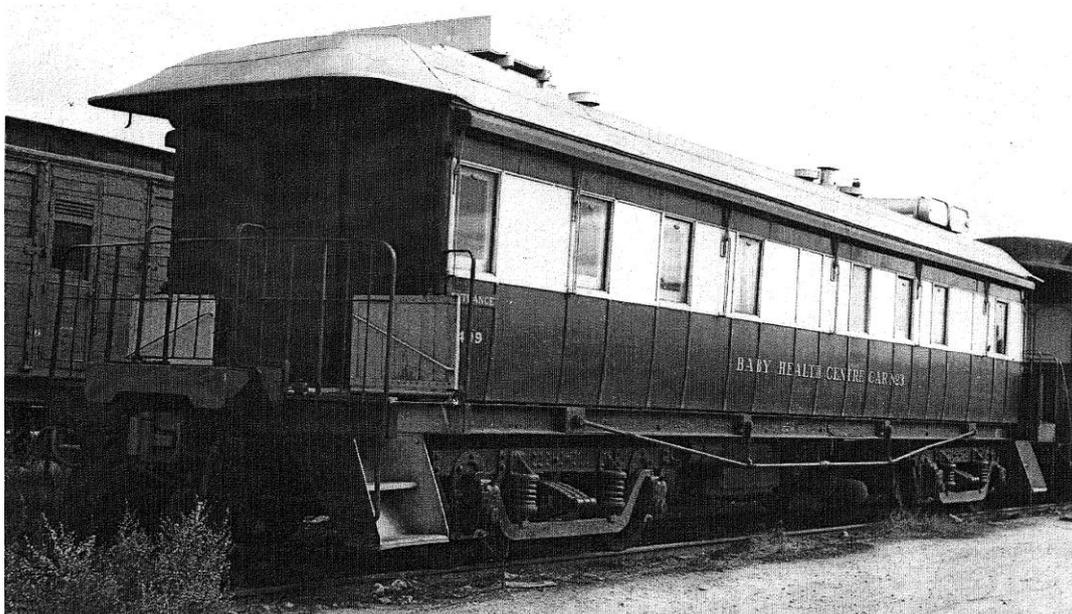
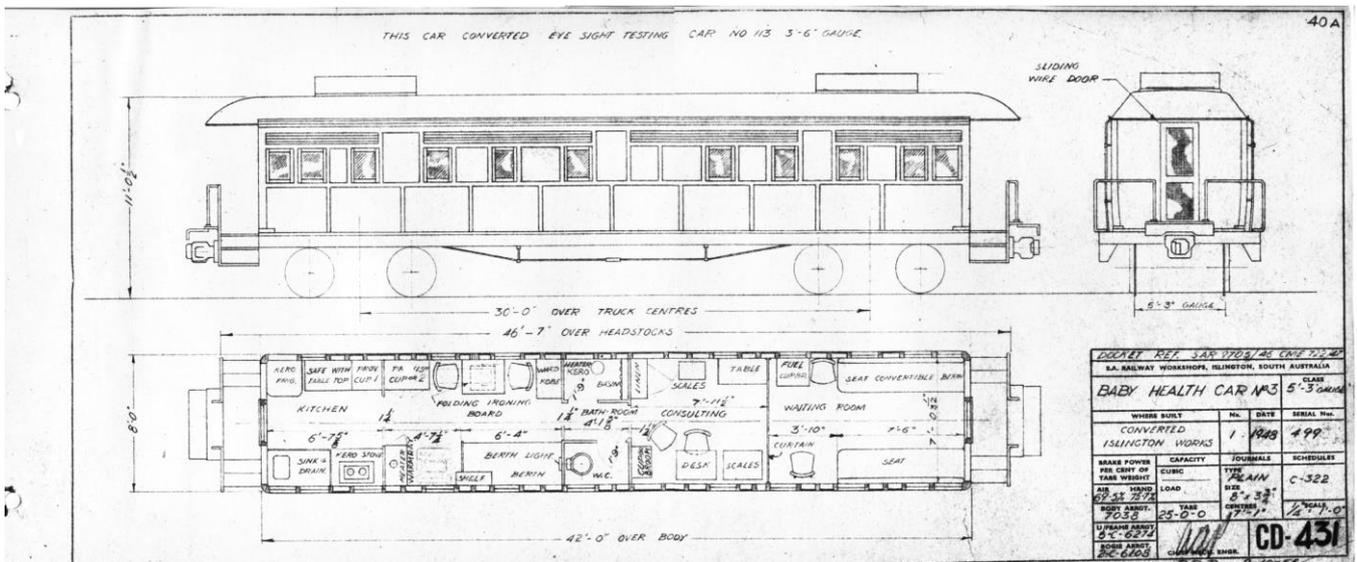


Photo courtesy Hugh Williams



It should be noted that significant variations exist between SAR drawing No 40A and the two available photographs. This model has been based preferentially on the photographic evidence.



Model and photo by Stuart Rees