

MALKY'S S.A.R. MODELS

400 Class Redhen



The Prototype: New double ended suburban railcars were produced for the SAR from 1959 to 1971 by the Islington workshops to complement the 300 series redhen railcars and add flexibility to the fleet, with the possibility of running single units on lightly patronised services. The double ended cars were numbered in the 400 class (400 – 436) and also became known as Red Hens, in contrast to the earlier Bluebirds.

For More Information:

Much of the information used in the development of the kit and presented here was gleaned from the notes of the *Modelling the Railways of South Australia Convention* pp 3-521 – 3-566, the line drawing in that article, as well as the SAR line drawing.

The Comrails web site: http://www.comrails.com/sar_locos/r_b_redhen_400.html is a wonderful source of information on these (and other) cars and the photographs in these notes are courtesy of that site. The site also lists each car with important dates and other information.

The Kit: The kit can be purchased from Shapeways and consists of eight parts printed in Shapeways Smoothest Detail plastic: a body shell, two pilots, underframe detail, with bogie side frames to represent the unique bogies fitted to these cars. The kit requires the Tomytec TM12 tram chassis, Microtrains 1015 couplers and the custom Redhen decal sheet available from MNSSARM.

1. Clean the 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. It may also assist to clean up the surfaces by rubbing with fine sandpaper to remove the striations caused by the printing process.
2. Carefully remove the pilots and bogie side frames from the sprue, preferably using sprue cutters or similar. File off any remaining sprue material.
3. Check fit the front and rear pilots into the body. They should be a light press fit into place. Do not glue them at this time – they should be painted before final assembly.
4. Test fit the Tomytec TM12 chassis. It will be necessary to trim a small amount from the ends to fit between the pilots.
5. Paint the parts. Apply a primer, then the appropriate colour scheme. The underframe should be painted matt black, bogie sideframes silver, pilot outer surface yellow, body shell SAR Regal Red (an alternative is Revell Purple Red SM331).

The headlights should be picked out in silver. Note the original colour scheme, as applied to the NRM examples, had a silver roof.

6. Apply decals: the silver numbers on each side at each end behind the driver's cab, the hi-vis chevrons to the cab fronts beneath the windows, small numbers above headlights, see photographs. Seal with Dullcote or similar.

7. Cement the pilots into the body shell – one at each end under the driving cab. Drill and tap for fitting of the Microtrains couplers. The couplers must be fitted **after** the chassis is located in the shell, and will prevent the chassis from falling out.

8. Fit the bogie side frames into the holes on the sides of the bogies in the chassis. They should be a light press fit and should not require any adhesive. If they are too loose, apply cyanoacrylate cement (superglue), if too tight, carefully drill or ream out the holes in the bogies to suit.

9. Fit the underframe detail. This should be a light fit over the protruding section of the chassis. If necessary it can be held in place with CA cement. Note that the battery box should align under the centre door.

Acknowledgements

Master 3D design by Malcolm Jenkins, Photos courtesy of Comrails webpage (Chris Drymalik).

