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

SAR 4 Wheel Ballast Plough



Photo courtesy Rob O'Regan's website robx1.net

The Prototype: This ballast plough was one of four converted from Y wagons by the SAR at Islington over a 23 year period from 1936 – 59. The numbers and years of conversion were: 3562(36), 4159(39), 3437(55), 4121(59).

Paint Schemes: The wagons were painted in the standard SAR freight grey livery with white lettering.

For More Information:

Much of the information used in the development of the kit and presented here was gleaned from the Modelling the Railways of South Australia Convention data base <u>http://www.mrsac.com/rollingstock/</u> Broad Gauge Freight Wagons 1957 (Excel spreadsheet), Rob O'Regan's website robx1.net, as well as the SAR line drawings.

The Kit: The kit consists of a body and underframe printed in Shapeways smoothest fine detail plastic, plus the plough blade. The model requires MicroTrains 1015 couplers and suitable wheels with MicroTrains axle length (0.540") to complete it. Some brass wire of 0.5 mm diameter is needed for various handles and handrails.

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.

2. It is necessary to bend up brass wire to make the brake handwheel and the plough height control handwheel. Use wire of 0.5 mm diameter. Fold pieces to the profiles shown, solder the vertical sections to the centre of the horizontal sections. In addition, make two guard rails to the profile shown to fit to the sides.



Profiles for Plough (L) and Brake (C) Handwheels and Guard Rails (R)

3. Check the fit of the floor into the bottom of the body. If necessary, sand or file the floor so that it is a snug fit in the base of the body.



4. Check the fit of the plough into the bottom of the underframe. Note that the legs should come up flush with the top surface of the underframe.



5. When satisfied, glue the plough to the underframe with CN superglue.



6. Drill the body to accept the screws for the MT 1015 couplers. Then fit the underframe to the floor, noting carefully the orientation of the blade relative to the handwheel stands.

7. Fit the two handwheels to the appropriate stands as shown.

8. Drill holes and fit the side guard rails as shown. (Note that different wagons had different configurations of the guard rails – see photographs – the configuration shown is correct for 4121).

9. Painting: first wash the model in warm soapy water, rinse and dry. Apply a primer, then paint the body with light or dark SAR grey, depending on the era modelled.



10. Apply decals. Black panel with number and tare weight to the lower left corner of the body, legend Ballast Plough to lower right panel (see photographs).

10. Fit couplers. Drill where marked for the screws of the MicroTrains 1015 couplers. Fit wheelsets.

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