

MALKY'S S.A.R. MODELS

2100 Class "Jumbo" Trailer Car



The Prototype: New suburban railcars were produced for the STA from 1979 to 1981 by Comeng. The body shape was based on the Budd Metroliner and Amfleet design. The first two cars were completed in Granville, NSW, but subsequent cars were fitted out by Aresco at Dry Creek. 12 power cars (2000 class) and 18 trailer cars (2100 class) were built. They were nicknamed Jumbos because of the raised driver's cabs and the resemblance to the Boeing 747 airliner. The power cars were originally powered by two MAN D3650 V12 engines which were replaced by two turbocharged 6 cylinder Cummins engines driving a Voith hydraulic transmission in the late 1980s.

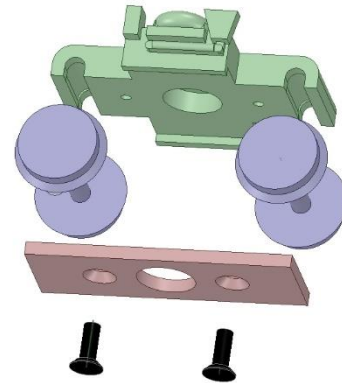
For More Information:

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 3-635 – 3-666, the line drawings in those articles, as well as photographs.

The Kit: The kit can be purchased from Shapeways <https://www.shapeways.com/shops/malky-s-n-scale-models> and consists of seven parts printed in Shapeways Smoothest Fine Detail plastic: a body shell; cab; floor with front pilot and underframe detail; and bogie frames and base plates to take wheels with a 1.5 mm diameter shaft, such as Fox Valley, to represent the unique bogies fitted to these cars. Short 00-90 screws are needed to assemble the bogies, which are fitted to the underframe using standard MicroTrains bogie pins. Microtrains 1015 couplers are required as well as the custom 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.
2. Check fit the floor with front pilot into the body. It should be a light press fit into place – if necessary, file lightly to fit length and width. Do not glue at this time – the parts should be painted before final assembly. Drill the bogie mounting holes at the centre locations on the bolsters using a 5/64" drill to suit MicroTrains bogie pins. Drill and tap the two coupler mounting holes at the centres marked to suit 00-90 screws. Paint the pilot grey and the remainder of the underframe matt black.
3. Check fit the cab into the body. It should fit into place between the cab front and the back of the cab recess. Do not glue it at this time – it should be painted before final assembly.

4. Bogies: tap the two small holes in the bogie frames to take 00-90 or M1.2 screws. Test assemble the bogies with two suitable wheelsets inserted and screw the base keeper plate into place. Check that the wheels run freely. Lubrication with powdered graphite will help. Disassemble, then paint the bogie frames and keeper plates matt black, before reassembling with wheelsets inserted.



5. Paint the parts. Apply a primer, then the appropriate colour scheme. The painting sequence is important, but may be modified according to your own methods and skill levels. Initially the strip along the windows and the cab front should be painted orange. The rear end is painted grey. The fibreglass cab is painted white. It will be necessary at some stage to mask off the majority of the cab front, and the rest of the body, to paint the fibreglass fairing over the front of the cab white. The remainder of the body sides and roof should be painted to represent stainless steel. The underframe and bogie frames should be painted matt black. The rear wall and the front pilot are grey. The cab and front outer rib should be painted white. The headlights should be picked out in silver, the marker lights red. See the photographs for guidance.

6. The order of assembly and finishing is, to a certain extent, variable, depending on your preferences for painting, masking, decaling and coating the decals. To complete the body, the cab roof should be located and glued in place using a touch of cyanoacrylate superglue.

7. The completed bogies should be attached to the underframe, using standard MicroTrains bogie pins. Note that the triangular shaped plate on the bogie side should be located at the *inboard* end of each bogie. Drill and tap the two holes in the underframe for the coupler screws – the location is marked by a small dimple in the printed part. Locate the couplers and screw in place. Use Microtrains 1015 couplers to achieve close coupling. If your curves are tight, it may be necessary to use a 1016 at the rear of one or more cars. Then insert the floor and underframe into the body.

8. Apply decals: the black numbers on each side at the cab end in the orange stripe. The STA logos inboard of the door at the cab end also in the orange stripe. The route numbers in the box on the right hand side of the front. Seal with Dullcote or similar.

Paint Colours

For the orange, I used Testors Traffic Light Amber lacquer; for the stainless steel, SMS Paints Stainless Steel; for the grey, Floquil SP Lettering Grey.

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