

Elliptical roofed FR 1643

Assembly instructions

FR 1643 is an independent R car which is one of only two which had elliptical roofs (the other being BR 1719) and were the result of the conversion of LFX cars, FR 1643 was converted in October 1942 after an accident at Cowra.

Recommended adhesives:

Superglue for polyurethane parts eg. Green Zap a gap. Some brands of superglue will not stick the plastic used in this kit. Unless you know a particular glue will work, testing the glue on some scrap is recommended.

Acrylic contact adhesive eg. Selley's Kwik Grip for clear window material.

Recommended bogies:

2AA bogies which are available either compensated from Stephen Johnson Models or AR kits.

1. Remove any flash from the window openings with a sharp knife. Take care to avoid damaging the window frames and crown light dividers. A knife with a narrow pointed blade is recommended for the flash in the curved crown lights.
2. Cut the clear glazing material into pieces which will fit in the cast window openings. Put these aside until the car has been painted. Don't remove the protective plastic coating until you are ready to glue the windows in place.
3. Glue a piece of 8mm angle to the inside of each end to provide a flat surface level with the bottom of the end.
4. Assemble sides and ends. It is best to trial fit each joint to ensure the parts fit neatly

together before applying any glue. Use the gutter line as a guide to locate the ends at the correct height. Make sure the resulting assembly is square and is not twisted.

5. Fit the roof into this assembly and glue in place. Note that the roof is directional and the vents should line up with the compartments. Fill the remaining join with body filler and remove any excess with wet and dry sandpaper wrapped over a small flat block. Glue additional vents in the holes provided.
6. Drill out buffer shanks on buffer beams to take 020" wire, also drill the centre pivot point on the diaphragm for the same wire and glue wire in place. Glue buffer beams in place, drill centre plate on buffer beam and diaphragm shroud on carriage end to .020" and fit diaphragm so that it pivots in these holes. Finally, pass wire through from behind buffer beam and glue into buffing plate on diaphragm.
7. Glue the battery boxes and generator to the appropriate pads on the floor casting.
8. With the floor in position, determine the correct location of the couplers in relation to the heads of the buffers. Mark the centre of the mounting hole of the coupler. The coupler mounting screws (either 8BA or 2-56) attach both coupler and floor to the angle glued at the bottom of each end. Drill a suitable diameter clearance hole and tap a thread in the angle glued to each end (Diagram 1).
9. Fit bogies and check coupler height. Adjust height of bogies or couplers as required.

10. Fit truss rods as per Diagram 3. To allow greater swing on the bogies for small radius curves, the truss rod should have a kink in it. (Diag. 3a.) This may not be necessary if narrower bogies than AR kits are used.

11. Fit steps under doors (Diagram 2). Bend and fit handrails from 15 thou brass wire.

12. Paint depending on era desired

13. Fit window material

References:

General assembly techniques: Branchline Modeller No. 1

Coaching Stock of the NSW Railways (Eveleigh Press) Page 143 - 144

Diagram 1.

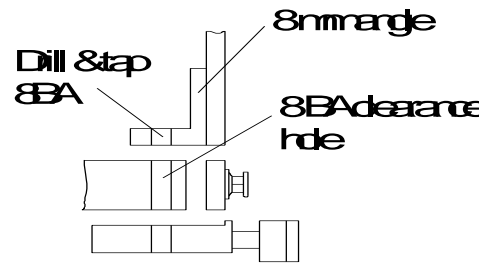


Diagram 2.

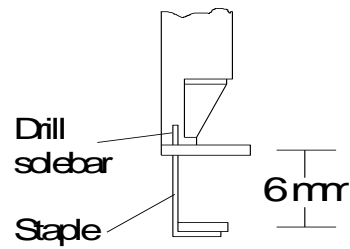


Diagram 3.

