

The 2mm Scale Association
Part Ref 2-353B
BR 4-Shoe Double/Independent Braked Underframe For 16 Ton Mineral Wagon

Order of assembly – Double brake 16T underframe

1. Detach and clean up main underframe etch.
2. Remove buffer beams if not required.
3. Ream bearing holes and holes in V hangers.
4. Bend up inner solebars/axleguards.
5. Solder in bearings.
6. Bend up inner buffer beams, if required.
7. Bend up and solder coupling plates, if required.
8. Detach, clean up, solder together cosmetic solebars.
9. Detach and assemble axlebox etches.
10. Attach axlebox etches to cosmetic solebars.
11. Attach cosmetic solebars to main underframe.
12. Attach full width buffer beams, if required.
13. Detach, clean up, bend up brake unit.
14. Attach brake unit to main underframe.
15. Solder in brake cross shaft.
16. Cut back brake cross shaft between push rod etches.
17. Bend up and assemble brake lever/lever guard assembly.
18. Add door bangers and bend to shape.
19. Good scrub !

Additional points – not in any particular order

Fit door bangers last – half etch line must be on outside of solebar to ensure correct 90 degree bend over solebar.

When attaching cosmetic solebars, line up V hangers with wire across whole underframe – this assists correct alignment of both pairs of V hangers.

Attach axleboxes to cosmetic solebars before whole assembly is attached to main underframe – a difficult balancing act will ensue otherwise !

Keep solder away from door banger and brake handle slots when soldering solebar overlays together.

I had to file a little of the end of the inner solebars to make the inner buffer beams stand vertical – this may not be necessary in every case.

I held the full width buffer beam in alignment with a 0.9mm drill through each buffer hole.

Suggest test underframe with wheels

- a) after bearings put in
- b) after brake units put in

All parts can be soldered using both multicore and cream, where appropriate.

Etch Artwork and Diagram By Bob Jones 2003. Assembly notes by David Long 2003.

THE 2MM SCALE ASSOCIATION

INSTRUCTIONS

DOUBLE / INDEPENDENT BRAKE CHASSIS - PART - 2-353B

