

PLAIN VERSION



Before construction – please see photographs on pages 38 & 39 in British Railway Wagons No 1 Opens & Hoppers

1. Cut out solebars, headstocks and inner chassis members from etch (1-8)
2. Push out the rivet detail on solebars and fold to U shape
3. Solder up chassis assembly. First solder the solebars (1) to the headstocks (2) so that the solebars are flush with the end of the headstocks. Repeat with the other side and solder the two units together to form the outside of chassis (note solebars are handed top to bottom the extra rivets going on the bottom edge).
4. Now solder the 8 small members (3/4/5/6) to the inner solebar (7) aligning with the dashed lines. Repeat with other then align the centre crosspiece with the centre rivets on the outside solebar, then solder in place. Repeat with other side (note cut away section at end of inner solebar goes to bottom).
5. Now solder inner ends of cross members (8) to inner solebars (7) and also to outer solebars (1) making sure all is square (if you have sprung buffers then bend out the spring retaining tabs).
6. Take the two end platforms (9) and push out rivet detail then solder to chassis top so that the outside end of platform is flush with headstock (1)
7. Add coupling hook overlays to headstocks (13)
8. Cut out hopper sides (10). If you are doing the cast stanchion three panel body then don't push out the rivets.
9. Fold top lip to 90 degrees around hopper top.
10. Fold body and solder the 2 halves together. Bend the base tabs to 90 degrees across hopper bottom and solder.
11. Solder tack hopper base and when satisfied with positioning complete soldering. Then file off excess which sticks out of bottom of hopper.
12. Plain Version – Take the long top strips (12) from etch and bend to L shape, next bend at right angles and these solder to top of hopper on top of lip.

13. Non-riveted version – solder or glue the two cast side stanchions to the hopper side over the second and fourth sets of rivets.
14. Now fit the end cast stanchions with the crosspiece casting which then line up with the bend on the hopper side.
15. Now drop the body onto the chassis and solder in place making sure all is square.
16. Now add the etched side plates 5 of (17) > (21) the large ones go on the body side, the small ones go on the cast side stanchions these solder to the outer solebar.
17. Now add the three cast support pillars from the end platform to the cast crosspiece.
18. Next take the two cross braces (22) form and solder to bottom outside of discharge chutes.
19. Add handrail to platform ends (made from 0.7mm wire).
20. Take three handrail brackets (23) and two small handrail brackets (24) and solder to hopper ends see photos as they all vary. Add handrail wire repeat with other end (note on non-rivet version use 2x handrail supports (25) for upper handrail as well).

This now completes the top half of the wagon.

21. Add consignment clip (33) and makers plate (34) to solebars. They go at left hand side over W iron see photos.
22. Now add W irons with wheel sets align W iron with rivet detail on solebar, solder or glue in place making sure there is a little or no side play on wheel sets.
23. Next add steps (26) to solebars, they go at left hand ends only. Also add four buffers (if you want sprung buffers take off heads and drill through casting make buffer heads from drawing pin and tube – not supplied). Also add coupling hook. NB *Sometimes the DW3 hook & Instanter can be replaced with detail set DW16*
24. Brake - Take the brake etch (27) fold over and solder together bend top tabs these solder to solebar, get brake shoe assembly the right way round as it is handed. Add V hangers (28) the double hole one (29) goes to the opposite side of the brakes, and cross rod made from 1.2mm wire (not supplied). Also add brake retainers (29) which solder to short chassis members (5&6) and will need trimming to length to suit each side of brake shoe assembly.
25. Next take brake handles (30) (31) and pin down bars (32) push out the four rivets on the pin bars (32) fold to shape and fit to wagon side, they go on and in line with the right hand end stanchion. When fitted add the brake handles the two hole one (30) goes to the side with no brake shoes, then add the other brake handle see photos the end 4mm of both brake handles require bending double.
26. “Now the last” pieces of etch, the load discharge levers (handed) (31) and mounting plates (36) push out the rivet detail on parts (32) bend to shape and solder to solebars.

Also on the etch are two W iron strips (35) these are only fitted to the four shoe brake version but can be fitted if required.

To complete model

3'1" wheel sets

(M&M can supply Slater's standard wagon wheel c/w bearings spoked ref no 7121 or Slater's standard wagon wheel c/w bearings 3 hole disc ref no 7122 as well as the New Welcome Turned Steel Insulated Wheels c/w ball races. If sprung buffers are required (M&M can supply RCH type Slater's, Ref No. 71565

Or Oleo Type Slater's Ref No 71572) Transfers (M&M can supply BR Hop21or HTV transfers for this wagon)

(M&M can supply all these if required, order online on the website www.modelrailwaywagons.co.uk)

Reference Books

British Railways Wagons the First half million
By Don Rowan
ISBN 07529 03780

British railways Goods wagons in Colour
By Robert Hendry
ISBN 1 85780 03780

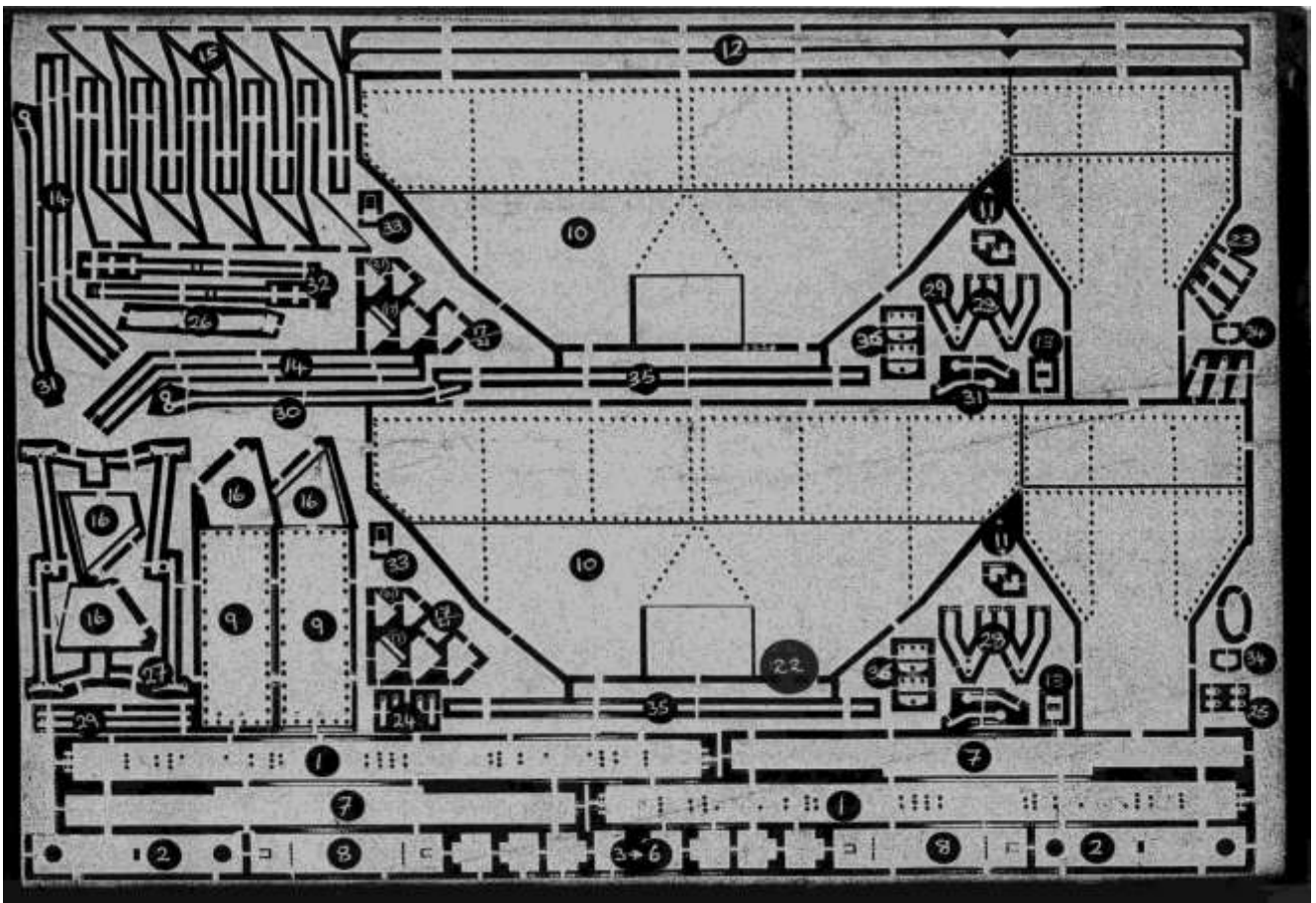
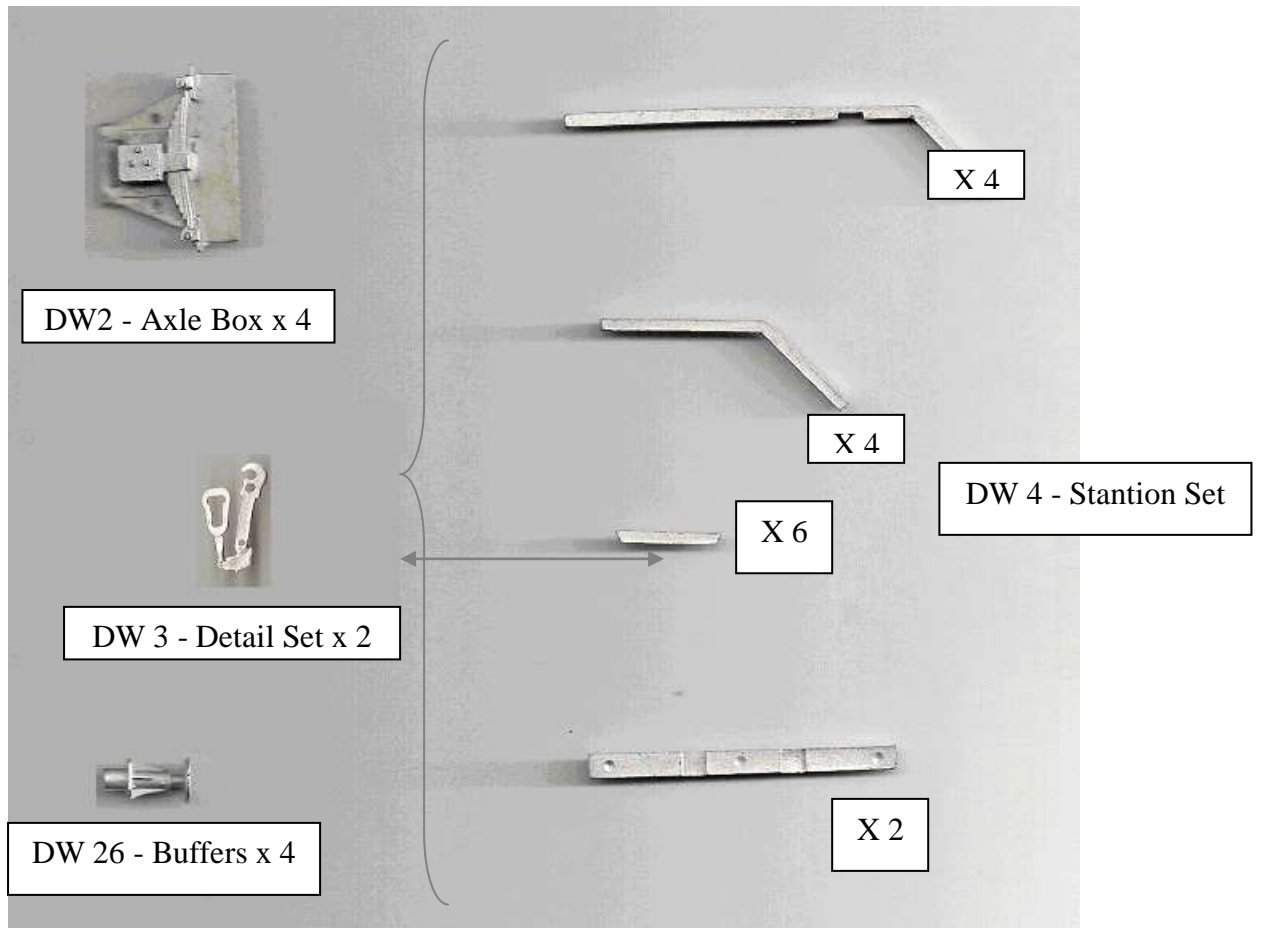
British Railway wagons, opens and hoppers
By G. Gamble
ISBN 1 1900298 06 6

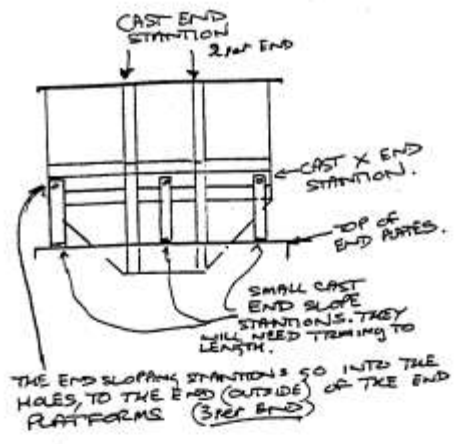
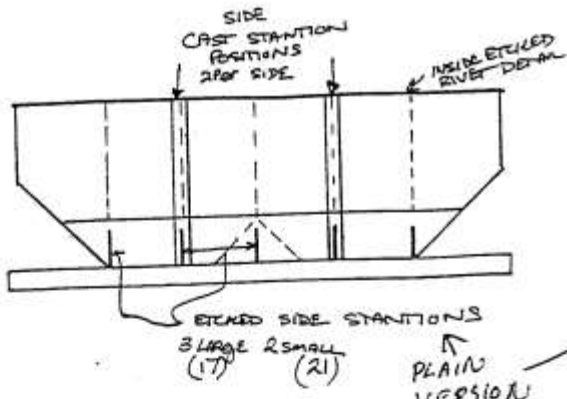
British Railway Wagons No.1, Open & Hoppers
ISBN 1900298 015

Web Reference

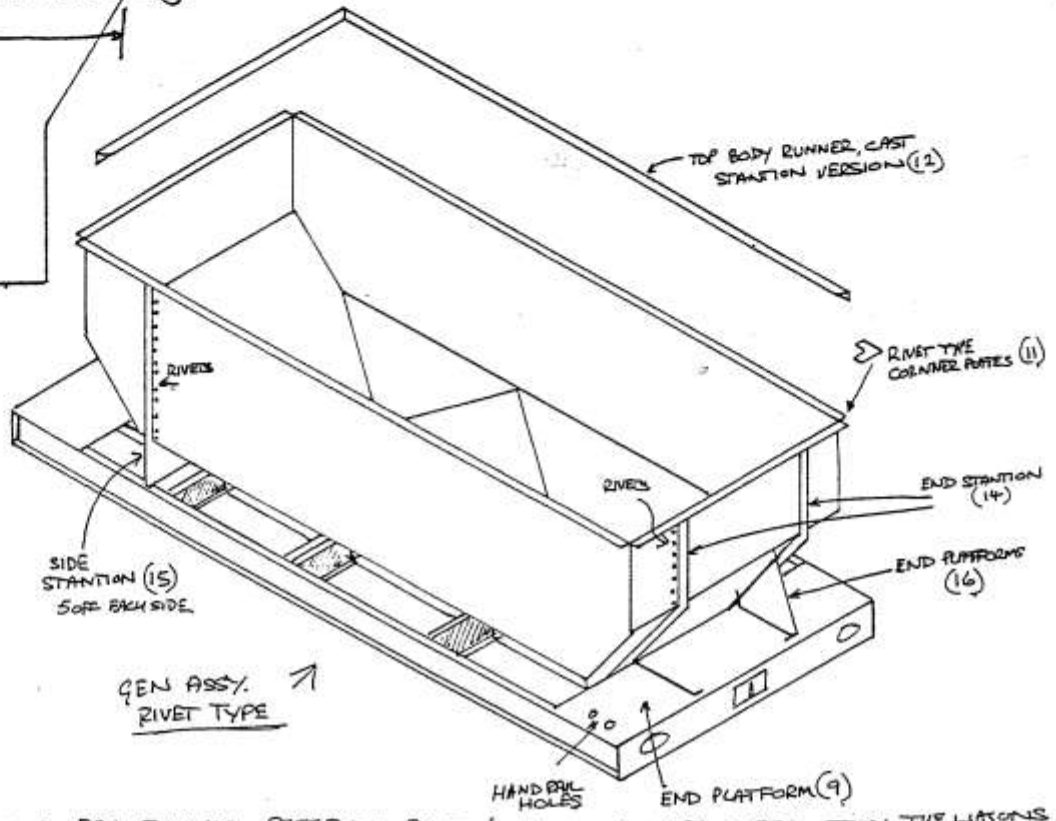
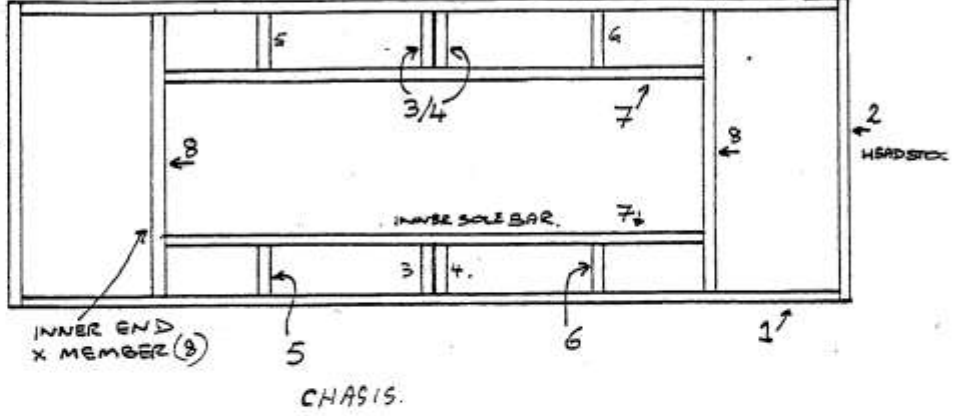
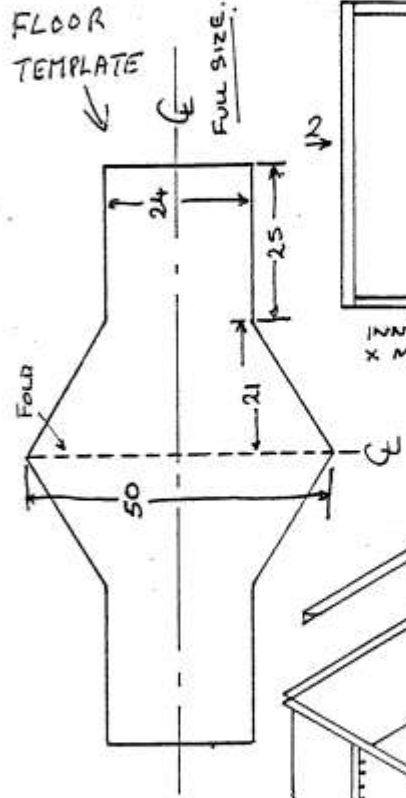
<http://paulbartlett.zenfolio.com/br21thopperweldrebody>

NB:- The floor is now supplied as an etch part.





NOTE: EXTRA RIVETS DETAIL ON SOLEBARS GO TO UNDERSIDE (BOTTOM) W/ IRON FINNS, REF PHOTOS.



GEN ASSY. RIVET TYPE

FOR HAND RAIL FIXINGS, REFER TO PHOTO'S AS THEY ARE DIFFERENT ON THE LAYONS.