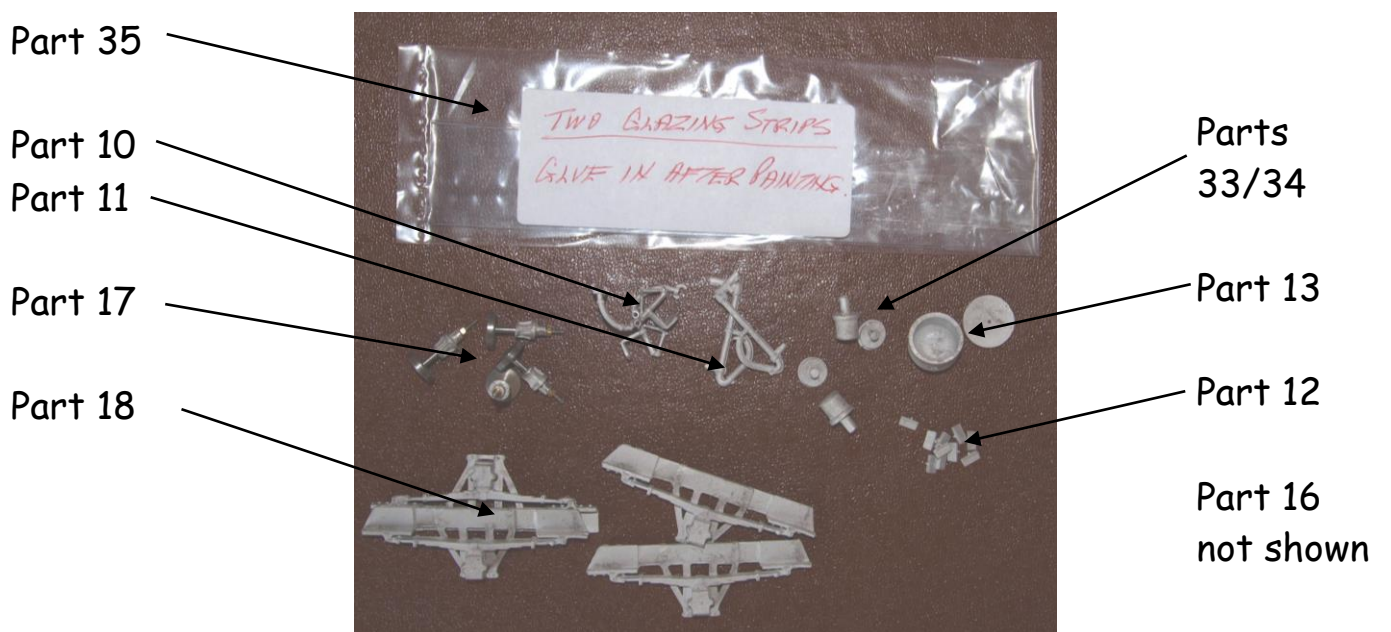
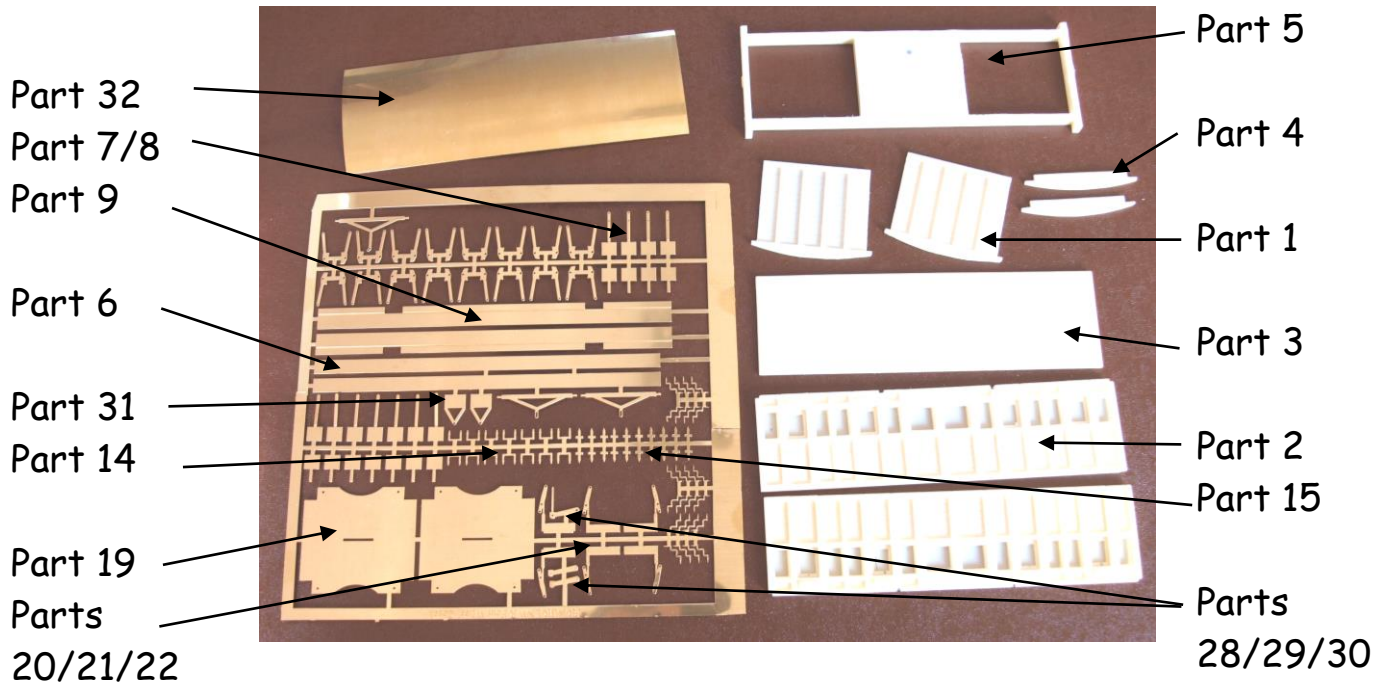


Furness Railway Coach Co.

Outside Framed Coaches

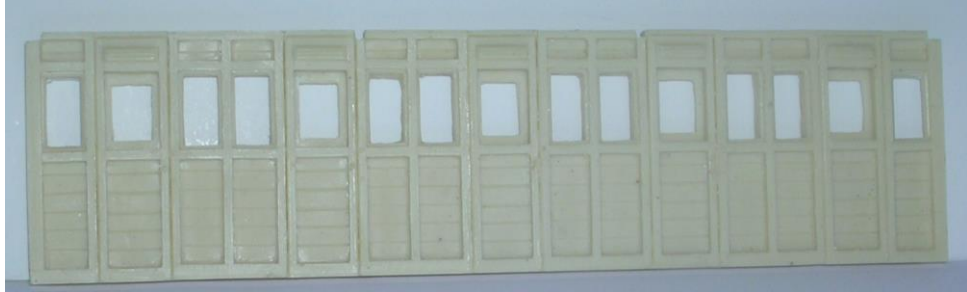
Paint and transfers required to complete.

The Parts.

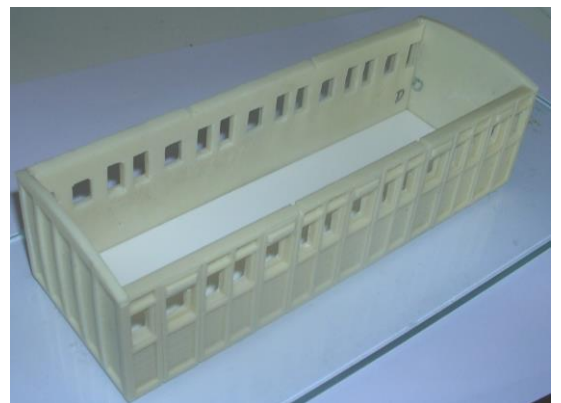
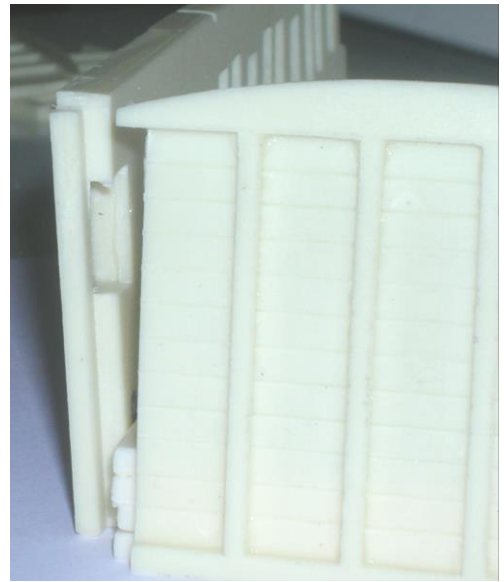


Assembly of Coach Body.

1. Wash and clean up the castings making sure that the castings fit together before gluing.



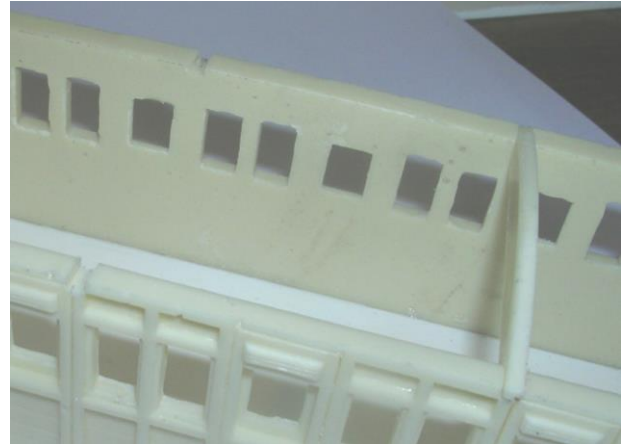
2. Trim individual ends (parts 1) and sides (parts 2) to fit and then trim the floor (parts 3) to fit exactly between the sides and ends. The length of the floor is designed to be trimmed if required. You may find it a good idea to label the corners



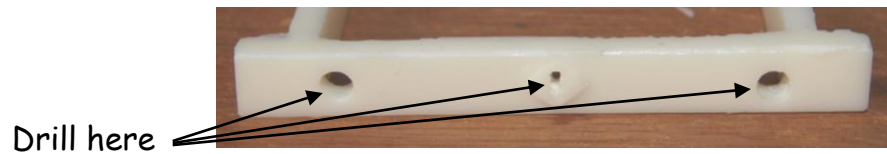
3. Fit both ends to one side, making sure that they line up with the ends and are square. Next fit the floor to the sides and floor, as shown. Then fit the last side to complete the box.

4. If you want to fit any internal detail (Not supplied) then you might find it easier to do it now.

5. Trim slots in the sides of the body to enable the cross members (part 4) to be added.



6. Drill out the holes at both ends of the chassis (part 5) for the buffers and coupling hooks as shown.



7. Fit the chassis to the bottom of the coach body.

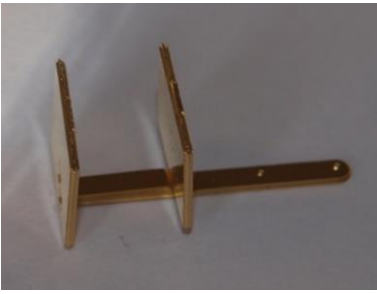
8. Take the Sole Bar (part 6) and punch out the half etched rivets then attach that to the coach as shown.



9. Take the running board supports (part 7) and punch out the rivets and fold up.



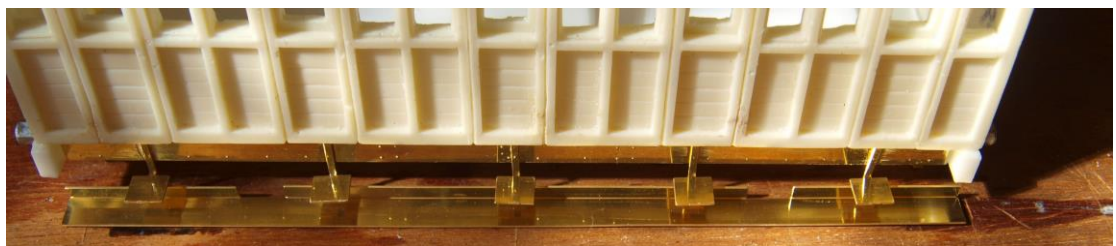
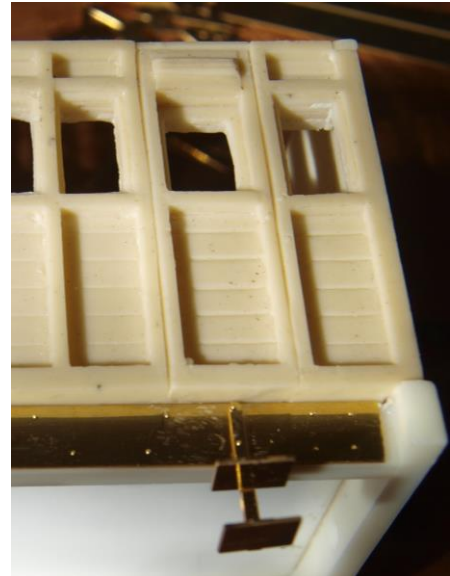
10. Repeat the this for the running board steps (part 8)



11. Attach the step to the support.

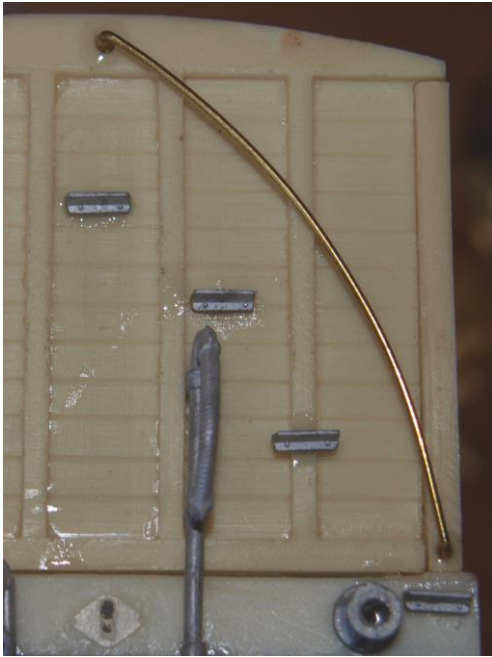
12. Fix one of the running board step assemblies centrally under each door. In the case of the Lug 3rd the support goes between the two access doors.

13. Glue the running boards (part 9) to the bottom sections of the support assemblies making sure that the wheel slots line up with the reverts on the sole bars.

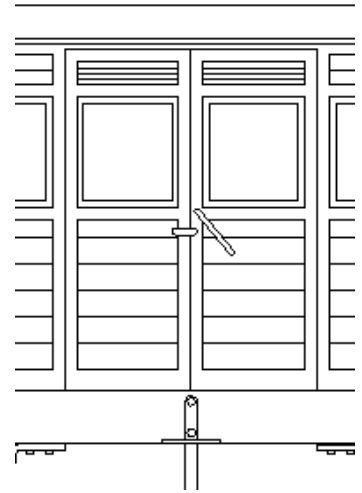


14. Next fit the Brake pipe (part 10) and the steam heating pipe (part 11) as shown. If you are building the model to be running in the period 1875-1899 the it is likely that the coach would not have had any braking at all so you can leave these parts off.

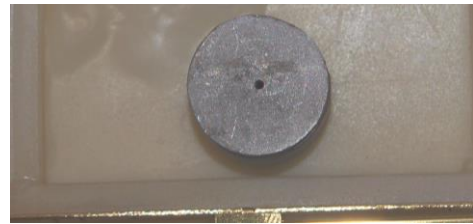




15. Next fit the hand rails and Steps (part 12). The number of steps and hand rails changes dependent on who bought the wagon so it is a god idea to check with a photo or drawing of the prototype. The most usual arrangement is shown.

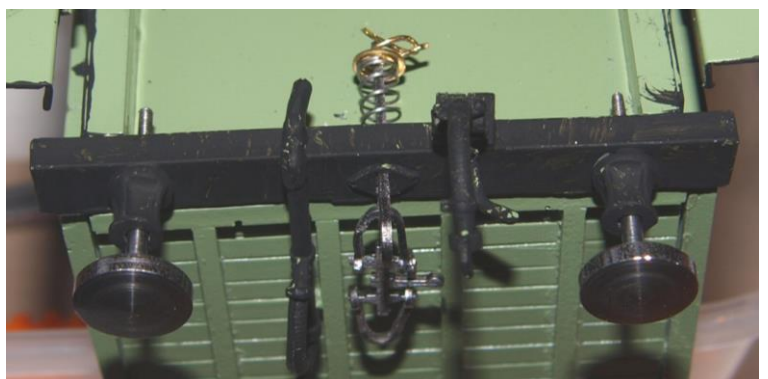


16. Fit the brake cylinder (part 13) to the hole in the centre of the chassis as shown. Again if you are building the model to be running in the period 1875-1899 then it is likely that the coach would not have had any braking at all so you can leave this part off.



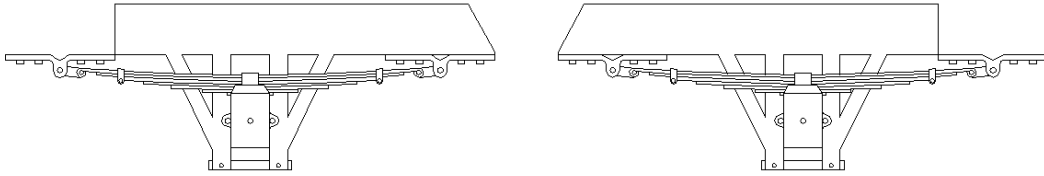
17. Now fit the door handles (part 14) and the door latches (part 15) as shown. Note that the Lug 3rd's centre doors only have one handle which is made from a piece of wire.

18. Next push the coupling assembly (part 16) into the chassis then push over the spring and secure with the

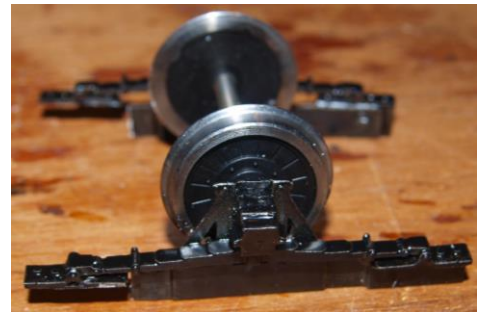


split-pin. Then fix the four buffers (part 17) into the holes in the buffer beam using two part epoxy resin.

19. Take the axel box castings (parts 18) and cut away as shown.

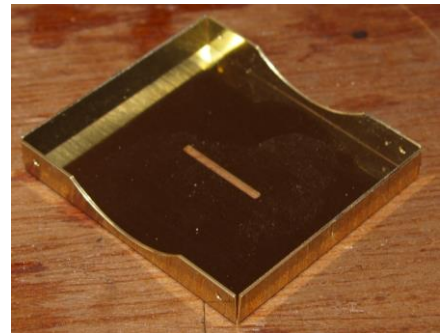


20. Now drill out the axel boxes to take your chosen wheel sets.



21. If you are building the model to be running in the period 1875-1899 then it is likely that the coach would not have had any braking at all so you can skip to section 27 in the instructions.

22. Fold up the brake support (part 19) and then attach the brake pivot blanks (part 20) to the brake pivots with the detail (parts 21/22). Note these are handed. The pivot assembly fits into the slot in the base of the brake support.



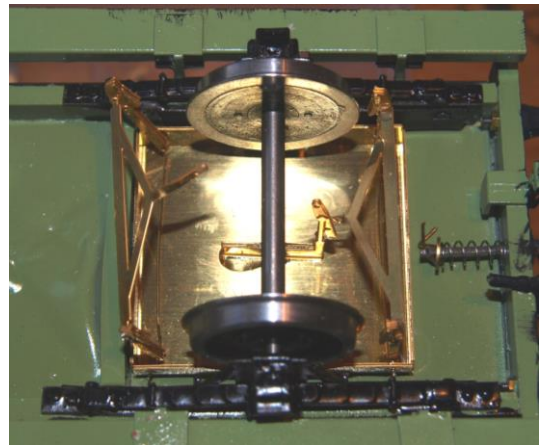
23. Next attach the brake block blanks (part 23) to the brake blocks with the detail (parts 24/25). Note these are handed.

24. Now thread some of the thin wire through the holes in the sides of the brake support, then through two of the brake assemblies.



25. You then need to fit the brake pull bars (parts 26/27). These also act as spacers. The longer bar should be fitted furthest from the pivot and should be left loose in order to fit the wheels.

26. Using the axle box assembly as a guide fit the brakes to the chassis as shown. Once satisfied that they are in the correct position glue down. And repeat for the other end of the wagon.

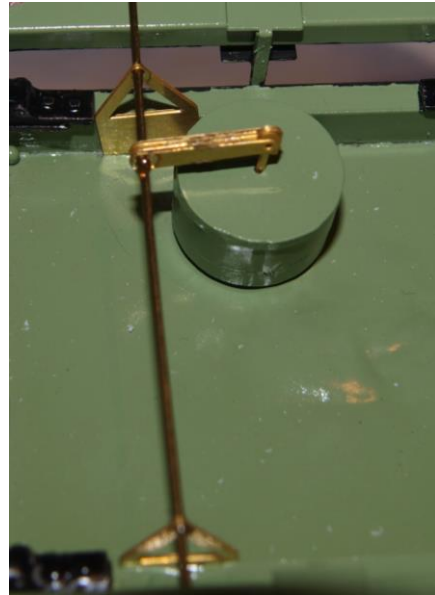


27. Now you can attach the wheel assemblies making sure that they are square and don't bind on the brakes.

28. If you are building the model to be running in the period 1875-1899 then it is likely that the coach would not have had any braking at all so you can skip to section 31 in the instructions.

29. You can now close up the other side of the brakes using some wire. Again make sure that the brakes don't bind on the wheels.

30. Take the vac cylinder piston link blank (part 28) and laminate the detail (parts 29/30) on to it. Then take the 'V' hangers (part 31) and attach as shown. There is provision in the kit for the long brake linkages to be fitted between the brake pivots and the shaft attached to the Vac brake cylinder but you will have to make a cam from some of the scrap brass on the etch.



31. Drill out the half etched holes in the roof (part 32) to suit your chosen prototype. Note some of these all



3rd coaches had 2 lights some had 3. The Lug 3rd had two over the passenger compartments and none over the luggage compartment.

32. Attach the chosen number of ventilators (part 33) and oil lights (part 34) through the holes in the roof.



33. Fit the roof, making sure that it is square. Paint the model in the livery of your choice.



34. Finally glue the glazing strip (Part 35) to the inside of the coach.

History of the Coaches

These coaches were manufactured by Joseph Wright and Son in the Saltney works near Birmingham from 1875 to 1884. They were a standard design and were ordered by many companies at this time. Railway companies that are, currently, known, to have definitely bought these coaches are the North British, Furness, Whitehaven Egremont and Cleator Moor. We also suspect that they were bought by the Cambrian but I have not got any concrete proof of this.

When the Whitehaven Egremont and Cleator Moor Railway was taken over jointly by the Furness and the London North Western the company's coaching stock passed to the LNWR.

How long these coaches lasted in service is open to conjecture however there is a photograph taken in 1925 of these types of coaches in what looks like a workman's train in Barrow-in-Furness. It is known that the Furness converted some of their stock for use in permanent way dept and others were turned in to grounded bodies in goods yards etc (grounded coaches available as a separate kit FRSC01)

These coaches were ideal candidates to be sold out of service to smaller light railways.

Liveries.

Furness: Originally Dark Varnish; if repainted Dark Blue or dark grey for the PW stock.

North British: Crimson Lake

Whitehaven Egremont and Cleator Moor Railway: Originally Dark Varnish

LNWR; blackberry and white

All were painted black from the sole-bar down.

Furness Railway Coach Co.

Outside Framed Coaches

1. Construction Manual (CD),
2. One rolled etched Brass roof.
3. One etch
4. Two Coach side casting (resin),
5. Two Coach end casting (resin),
6. One Coach floor Casting (resin)
7. Two cross member casting (resin),
8. One chassis casting,
9. Four axel box castings
10. Two vac pipe castings
11. Two steam pipe castings
12. One set of screw link couplings
13. four buffer assemblies
14. Three oil lights castings (all 3rd)
15. Three oil light vents casting (all 3rd)
16. Two oil lights castings (Lug 3rd)
17. Two oil light vents casting (Lug 3rd)
18. Eight step castings
19. Glazing strip.

We recommend Slaters 3'1" Mansell Disc wheels
(Ref:7132) for this kit.