Furness Railway Coach Co.

Highland/Caledonian/North Sunderland Rlys
Rib Sided Coaches

Paint and transfers required to complete.

The Parts.

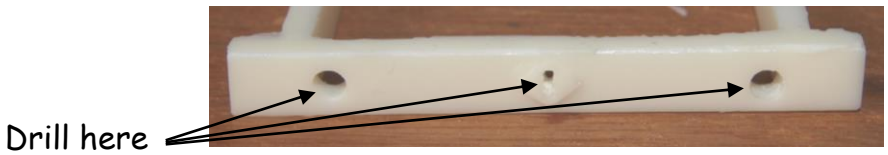
Part 5
Part 32
Part 4
Part 7/8
Part 9
Part 1
Part 6
Part 3
Part 31
Part 2
Part 14
Part 15
Part 19
Parts 28/29/30
Parts 20/21/22
Part 35


Parts 33/34
Part 10
Part 11
Part 13
Part 17
Part 12
Part 18
Part 16 not shown

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 Chassis (parts 3) and floor (part 4) to fit exactly between the sides and ends. The length of the chassis and floor is designed to be trimmed if required. You may find it a good idea to label the corners
3. Drill out the holes at both ends of the chassis (part 5) for the buffers and coupling hooks as shown.



4. Fit both ends to the chassis, making sure that they line up and are square. Next fit the sides and floor, as shown.
5. Now fit the compartment partitions. 1st and 2nd class partitions are full height and 3rd class are only part height.

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

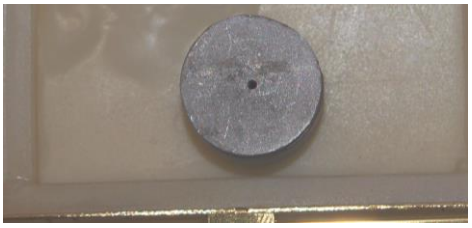
7. Fold out the running board supports on the sole bar.

8. Now fold up the bottom running boards (part 7) and attach them to the lower supports. Then fix the upper running boards (part 8) to the upper supports. Make sure that the wheel slots line up with the rivets on the sole bars.

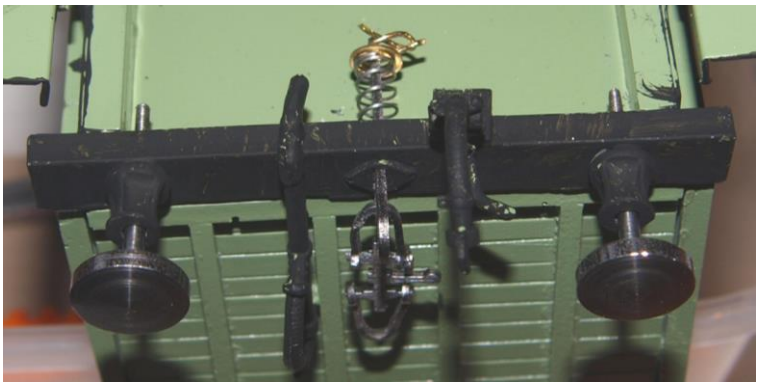
9. Next fit the Brake pipe (part 9) as shown. If you are building the model to be running in the period 1875-1899 the it is likely that the coach would not have had any braking at all so you can leave these parts off.

10. Next fit the hand rails, door handles (part 10) and Steps (part 11). 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.

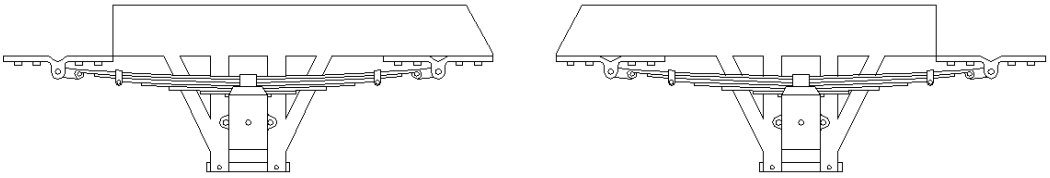
11. Fit the brake cylinder (part 12) in to the hole in the centre of the chassis as shown.



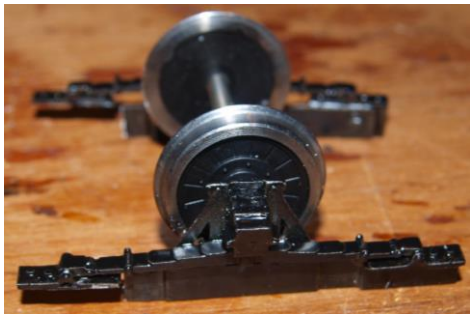
12. Next push the coupling assembly (part 13) into the chassis then push over the spring and secure. Then fix the four buffers (part 14) into the holes in the buffer beam using two part epoxy resin.



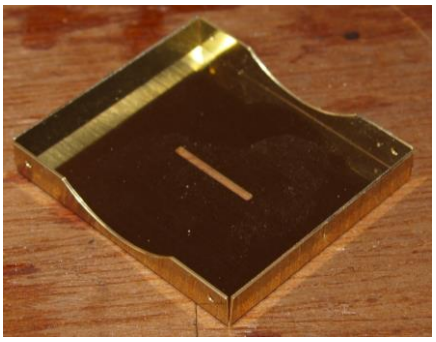
13. Take the axel box castings (parts 15) and cut away as shown.



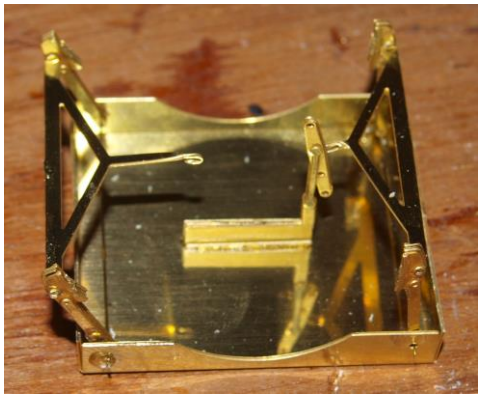
14. Now drill out the axel boxes to take your chosen wheel sets.



15. Fold up the brake support (part 16) and then attach the brake pivot blanks (part 17) to the brake pivots with the detail (parts 18/19). Note these are handed. The pivot assembly fits into the slot in the base of the brake support.

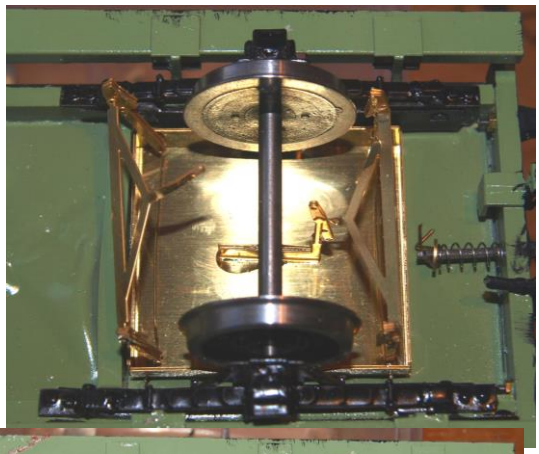


16. Next attach the brake block blanks (part 20) to the brake blocks with the detail (parts 21/22). Note these are handed.



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

18. You then need to fit the brake pull bars (parts 23/24). 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.

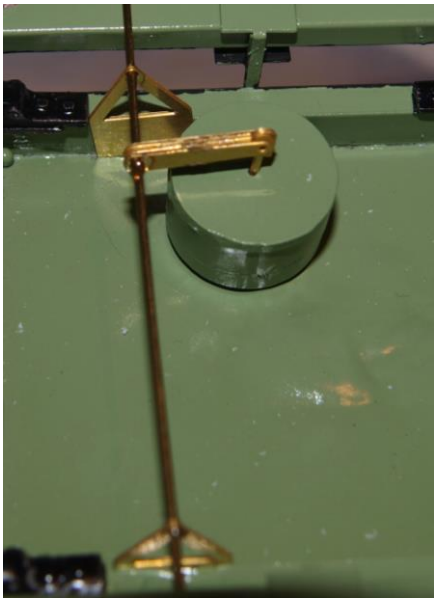


19. Using the axel box assembly as a guide fit the brakes to the chassis as shown. Once satisfied that they are in the correct position glue down. And repeat for the other end of the wagon.

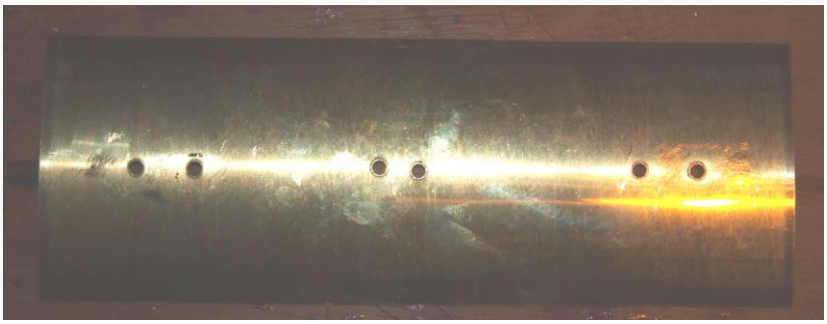
20. Now you can attach the wheel assemblies making sure that they are square and don't bind on the brakes.

21. 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.

22. Take the vac cylinder piston link blank (part 25) and laminate the detail (parts 26/27) on to it. Then take the 'V' hangers (part 28) 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.



23.Drill out the half etched holes in the roof (part 29) to suit your chosen prototype.



24.Attach the chosen number of ventilators (part30) and oil lights (part 31) through the holes in the roof.

25.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 32) to the inside of the coach.

History of the Coaches

These coaches were manufactured by Highland and Caledonian railways from 1875 to 1884. They were a standard design between both companies. After about 1895 the Highland started to sell off its 4 wheels coaches to small light railways. 5 examples ended up on the North Sunderland Railway.

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 Inverness.

It is known that the Both the Highland and North Sunderland converted some of their stock for use in permanent way dept and others were turned in to grounded bodies in goods yards etc

As these coaches were ideal candidates to be sold out of service to smaller light railways any were in the UK.

Liveries.
Highland: Originally dark green, dark green with white upper panels from 1895 to 1903 and back to dark green or red oxide for the PW stock.

North British: Royal blue, royal blue with white upper panels from 1895 to 1910 and back to royal blue or red oxide for the PW stock.

North Sunderland Railway as Highland.

All were painted black from the sole-bar down.

Furness Railway Coach Co.

Highland/Caledonian/North Sunderland Rlys
Rib Sided 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. One chassis casting,
8. Four axel box castings
9. Two vac pipe castings
10. One set of 3 link link couplings
11. four buffer assemblies
12. Three oil lights castings (all 3rd)
13. Four oil light casting (2nd /3rdComp or 1st/2ndComp)
14. Three oil lights vents castings (all 3rd)
15. Four oil light vents casting (2nd /3rdComp or 1st/2ndComp)
16. Glazing strip.

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