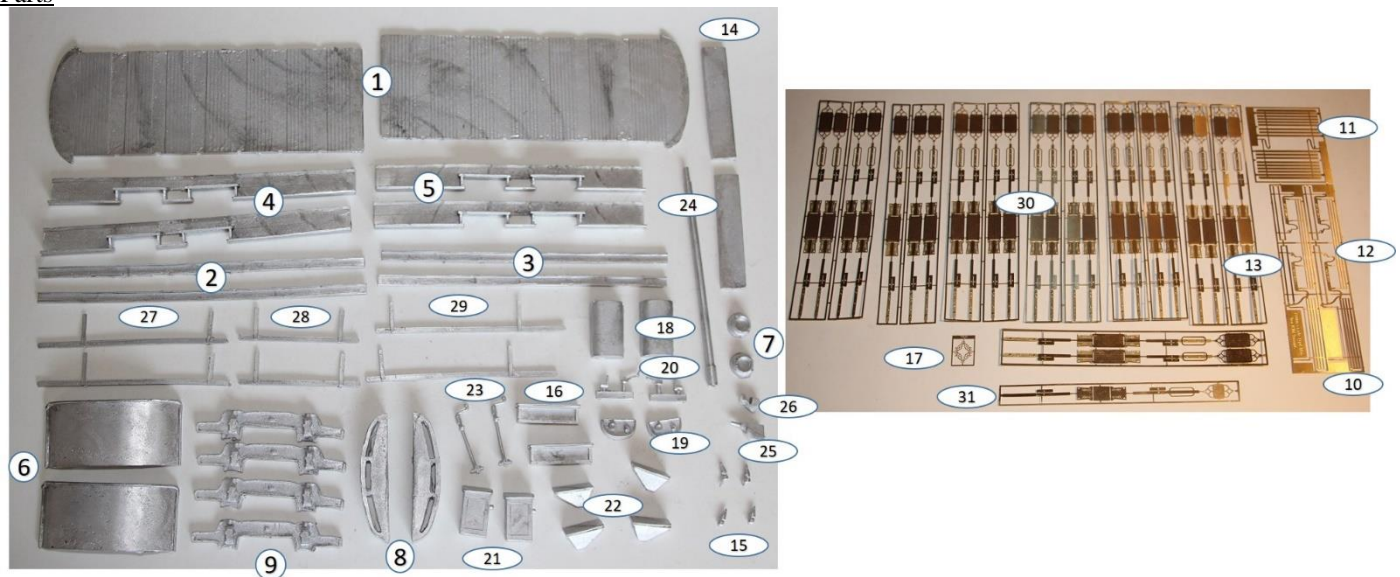


## KW Trams

### **KW 124a Blackpool Toastrack**

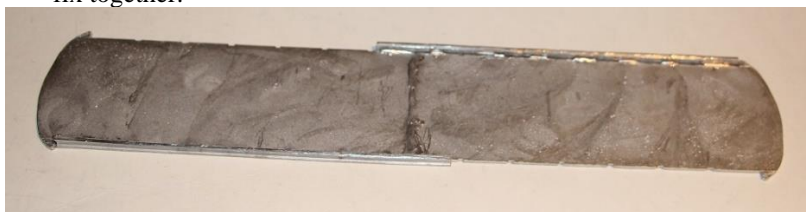
#### Parts



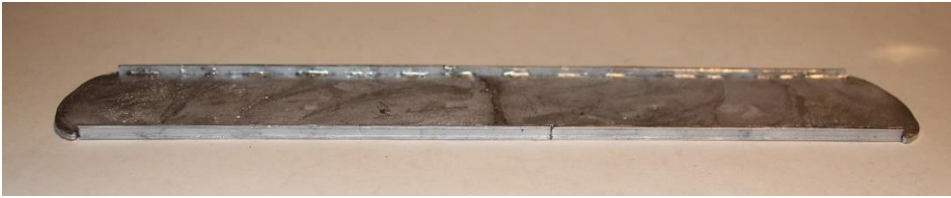
1. Tram floor 1/2	x2	19. Controller top	x2
2. Floor sides long	x2	20. Controller handle / key	x1
3. Floor sides short	x2	21. Switch box	x2
4. Steps long section	x2	22. Sand box	x4
5. Steps short section	x2	23. Handbrake	x2
6. Dash panel	x2	24. Trolley mast	x1
7. Headlight	x2	25. Trolley pole bottom	x1
8. Platform end / bumper	x2	26. Trolley pole head	x1
9. Bogie side	x4	27. Handrail left	x2
10. Life guard etched	x2	28. Handrail centre	x2
11. Life tray etched	x2	29. Handrail right	x2
12. Middle side lifeguard etched	x2	30. Double seats etched	x25
13. End side lifeguards etched	x4	31. Single seats etched	x1
14. Destination board	x2	32. Trolley mast top sleeve (brass tube)	x1
15. Destination board finials	x4	33. Brass strip for the ends of the steps	x2
16. Destination box	x2	34. Brass wire for trolley pole, destination boards	x3
17. Destination box scrollwork etch	x1	35. Screw for mounting trolley pole	x1
18. Controller body	x2		

#### Build Steps

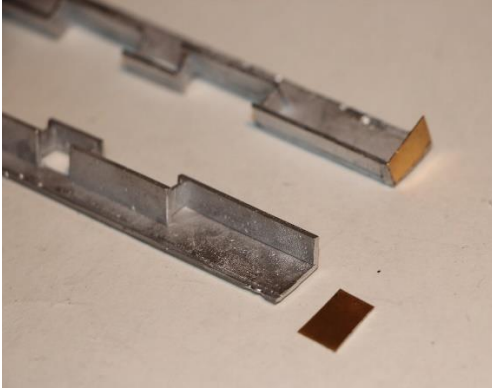
1. Take the two halves of the floor and trim the inner ends so that the flat section is the same length as the others and the overall length is 250 mm.
2. Put the two halves of the floor face down on the bench with a steel ruler along the side to make sure that the stay straight, then fix together.



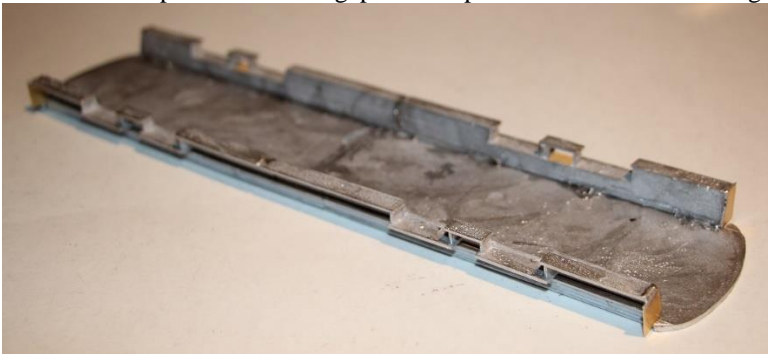
3. Drill a hole in the exact centre of the floor to take the screw to hold the trolley mast.
4. Drill a slot each side of the trolley mast screw hole to take the inner pin on the middle seats. Also make a matching slot on the outer edge to take the outer pin on the middle seats.
5. Keeping the floor face down and running along the workbench, fit the longer of the floor edges to the top right and bottom left edges of the floor. Then cut the shorter floor edges to the correct length and fit to the top left and bottom right edges of the floor. Make sure that you don't fill the notches in the sides of the floor – these will be used to fit the seats later.



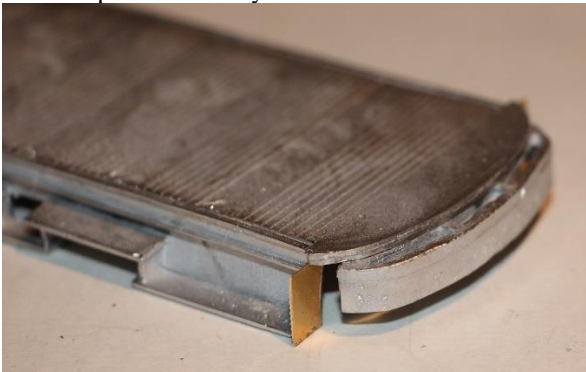
6. Cut the brass strip to fit the ends of the steps. The front edges should be vertical and the back edges match the angle of the back of the step. The top and bottom should be flush with the top and bottom of the step. Fit the strips to the outer ends of the steps (the ends with the shorter lower step).



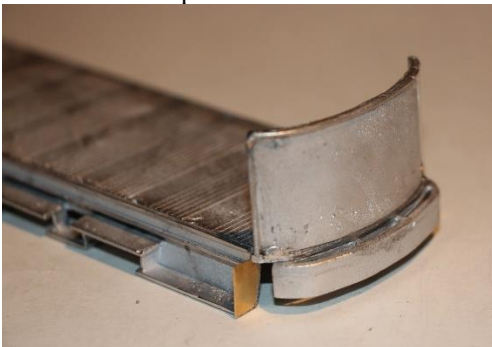
7. Fix the steps under the sides of the floor. The longer step should be fixed to the upper left and lower right, and then the shorter step should fill the gap. The steps should be fixed at an angle so that the steps themselves are horizontal.



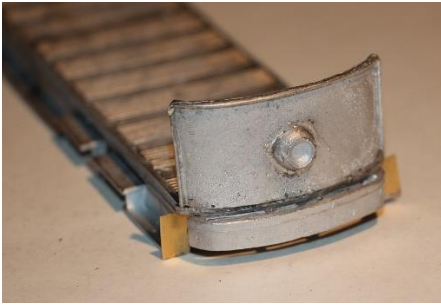
8. Fix platform ends / bumpers under the ends of the floor so that the platform end is flush with the end of the floor and the bumper extends beyond it.



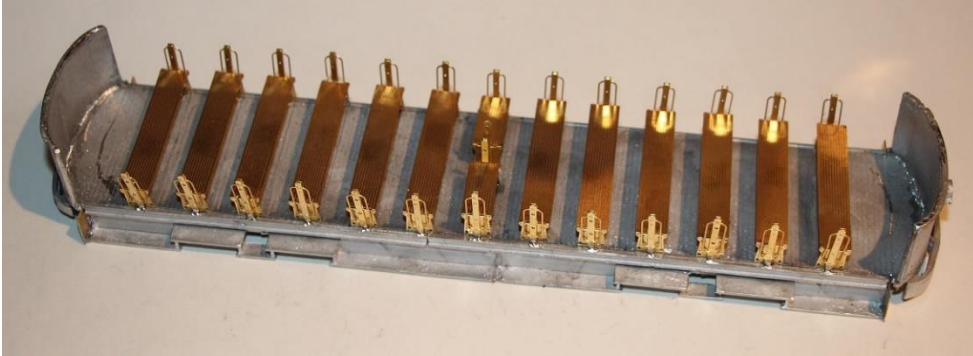
9. Fit the dash panels flush to the ends of the floor, you may need to bend them a little to match the curve of the floor.



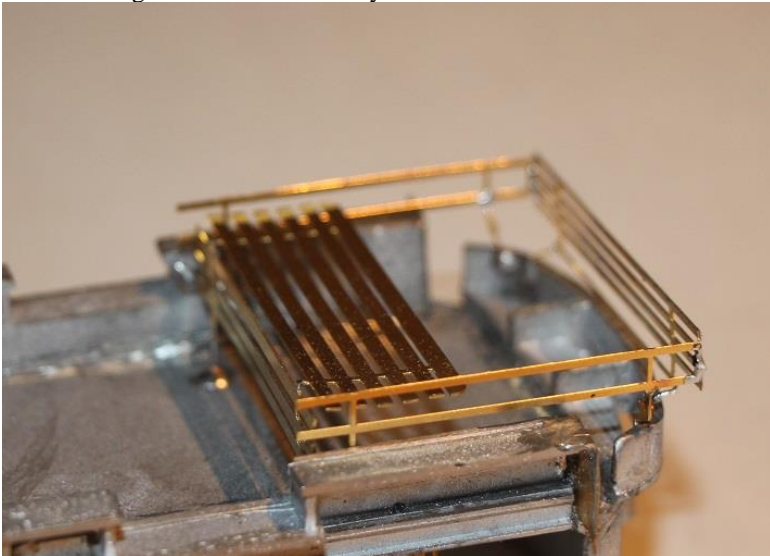
10. Fit the headlamps to the centre of the dashes.



11. Bend the seats and solder the inner and outer sections together. See the additional instructions for more details.
12. Fit the seats into the holes in the floor (the lower sides slope inwards). There should be six pairs of double seats at each end and a double seat one side and a single on the other side of the hole for the trolley mast.



13. Bend the legs on the front lifeguard in a zigzag with the score lines on the inside. Solder the bends to give them strength. Then fix the lifeguard against the back of the bumper so that it sticks out in front of the tram.
14. Take the end side lifeguards and while paying close attention to which is which, slowly and carefully twist the front leg so that the patterned side is to the front. Use solder to strengthen the joint, then fit the lifeguards so that the front is flush with the ends of the front lifeguard.
15. Bend the lifetrays to 90 degrees and solder the bends to give them additional strength. Fix the lifetrays to the floor with the back edge about 1/4 of the way forward from the rear ends of the side lifeguards in order to avoid obstructing the bogies.



16. Fit the middle lifeguard centrally to the back of the middle steps so that there is a small gap between the bottom of the step and the top rail of the lifeguard.
17. Drill a hole in the floor at each end of the dash panel to take the destination board support post (made from wire included in the kit). Drill a hole in the bottoms of the destination board post tops to take the wire. Fit the post tops then cut the posts so that the total length including the tops is 68mm.



18. Shorten the destination boards if necessary so that they fit between the support posts with a small gap each side. Drill out the hole in the middle of the end of the destination boards to take a piece of the wire (do not fix in place). Cut a short length of wire to fit in the destination board and solder it to the support post 12mm from the top.
19. Fit the destination board support posts each side of the dash so that the bottom is flush with the bottom of the floor. Bend another piece of the wire to match the shape of the curve of the dash and fit between the posts 1mm above the top of the dash.
20. Drill a smaller hole in the bottom of the trolley mast and screw the mast in place. Fit the destination boxes each side of the mast so that the bottom of the destination boxes is 57mm above the floor. Fit the etched brass scrollwork to the box / mast.



21. File down the top section of the trolley mast so that the brass tube fits over it and can turn. Fit the trolley pole bottom to the brass tube. Drill a hole in the trolley pole bottom and top to take the wire. Cut the wire so that the length of the trolley pole between the two end castings is 106mm and fit to the ends.



22. Make up the controllers and fix inside the dash panels in the centre, the handbrake to the right so the driver would have one in either hand.



