
RAGSTONE MODELS

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LBSCR CCT Kit

Diagram 82/253

Version no: 1.1

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26 Wadham Close
Rowley Regis
West Midlands
B65 9SH

LBSCR Covered carriage truck

History

The LBSCR constructed 12 CCTs between 1892 & 1901 that appear to be based on similar vans (nos 141-46) built in 1882. They had short lives due to their 20 foot length and two were broken up in 1911. Withdrawal of the rest was by 1919 but these ten vans were transferred to departmental use as stores vans etc based at various locations on the Brighton system, see below.

Originally air braked only, probably being fitted with a handbrake later. Provision is made to fit this if required.

Numbers

Dia 82/253

Built 1892 – 94-98

Built 1899 – 10, 46, 57

Built 1901 – 54, 70, 72, 75

Transfers

10 "Stores Van C and Loco – Brighton"

46 "Staff Use - Eardley Sidings"

54 "Carriage Cleaners Cabin - Norwood Junction"

70 "Stores Van - New Cross"

72 "Stores - Brighton and Lancing"

94 "Carriage Cleaners - New Cross"

95 "Stores Van - Brighton and Lancing"

96 "To Eardley"

97 "Stores Van - Brighton and Lancing"

98 "To Epsom Downs"

Livery

1892- approx 1907 Varnished mahogany body, possibly with gold lining to panelling on sides. Black underframe. Prior to 1900 a garter device with the number inside may have been used, from then lettering was probably white and positioned as per the photo, but gold/yellow is also possible

Approx 1907-1923 LBSC umber body, other details as earlier.

1923 – Withdrawal

SR departmental livery was Grey body, Black underframe.

Introduction to kit building

Etchings

Cut the brass parts from the fret using a *sharp* craft knife (or similar) on a firm surface rather than using tin snips as these can distort the delicate etchings. The etching process leaves a small 'cusp' on the edge of the parts which should be gently filed to remove, along with any remains of the tab. This is essential to enable the parts to locate accurately as well as providing a smooth edge, which as well as looking better, provides a better surface for the paint to stick to.

Castings

These are supplied either attached to sprues or loose, if the former carefully cut from the sprue and (in both instances) clean up the remaining feed and any area you intend to solder to. If the casting forms a moving part, the relevant surfaces will need smoothing to ensure free running. Using fine files and emery cloth or other fine abrasive sheet to give a polished finish will pay dividends in reliable operation.

Folds

Generally all fold lines are on the inside of the bend, if not this is stated in the instructions. Folding can be performed in a number of ways, such as using smooth jawed pliers up elaborate folding bars. Clamping the part to a flat surface with a steel rule and using a second one to perform the folding action can be very effective. Long folds are ok as they are, but any shorter than about 10mm, and especially very small ones (less than 3mm), will benefit from a reinforcing fillet of solder.

Solder

This kit is designed for solder assembly using either 188 degree solder (brass to brass), 145 degree (brass to whitemetal) or 'lowmelt' 70 degree for whitemetal only joints. Where the term 'solder' is used in these instructions it will refer to any of these methods. It is up to you to decide the appropriate type and use the correct flux and iron for the job.

Glue

Some small parts can be added with glue. Use a good quality product and follow the manufacturers' instructions.

Cleaning

Keeping the model clean is a vital part of a good final finish. Flux residues and metal filings build up so always wash this off at regular intervals, especially at the end of a modelling session when you are not going to resume for a day or two. Occasionally I will wash the model during a session if it gets particularly bad. Several products such as lime scale remover or scouring cleaners can be used, but some, such as most washing up liquids do contain chemicals to give added shine which then need to be removed before painting.

Assembly

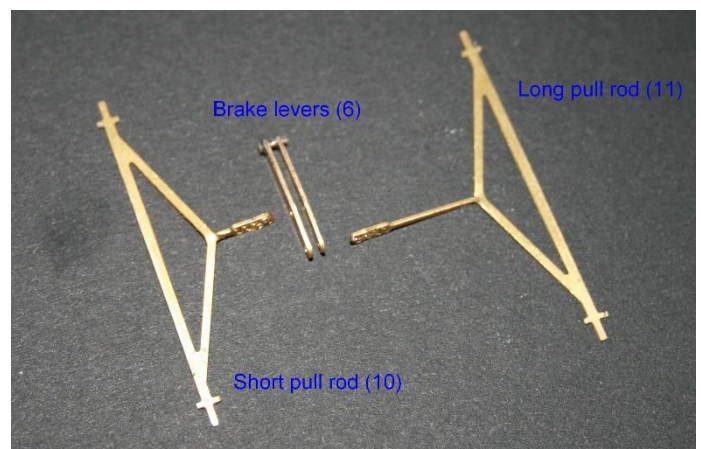
Body

1. Take Sides (21), fold top flange to match the end profile, fold bottom flange almost to 90° and form tumblehome, using the end to check the shape of the curve as you go. Laminate vents 23 with the half etch inwards. Fit to bodyside along with hinges (24 lower & 25 upper). Fit 0.9mm wire in the 4 holes, protruding 1mm to form bump stops.
2. Laminate the Ends/End strapping overlays (22 & 26/27), the position is indicated by a half etch line to the outer edge of the strapping. Add hinge overlays and latch (29) on the centreline, 2 planks down from the top hinges.
3. Fold back the bottom flaps, and then fold to give a double thickness flap, this fold line is on the OUTSIDE of the bend. Fit 6ba nuts over holes.
4. Two types of lamp iron (28/28a) are provided, the ½ etch ones look better but are more delicate, however it is not clear where they were fitted. It is possible that straight lamp irons were fitted to the bufferbeam.
5. Assemble 1 side and one end. Repeat with other side and end, remembering to make both 'L' assemblies the same hand. Once happy that both are square, bring together to make a box. I use a piece of plate glass for this stage to ensure the body is flat and square on all axes.
6. Check roof for fit to body, adjust curve and trim if required, then fix. Fit rain strips using the thin plastic strips, these fit along the bottom edge & help to disguise the join.
7. Trim the ends to approx 3mm and fit 4 wire grab handles to the corners, two to the right of the left hand door – as shown in the photo below. If desired a label clip (30) is provided and would be fitted to the lower right hand corner of the body side.

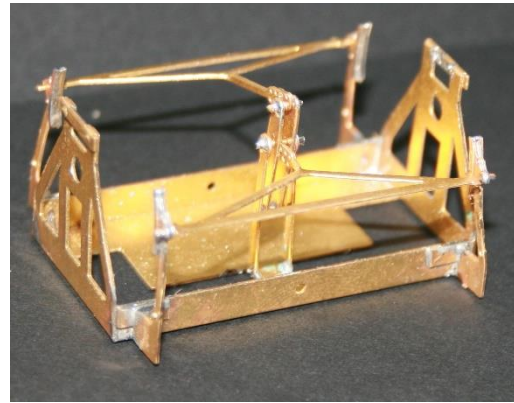


Underframe

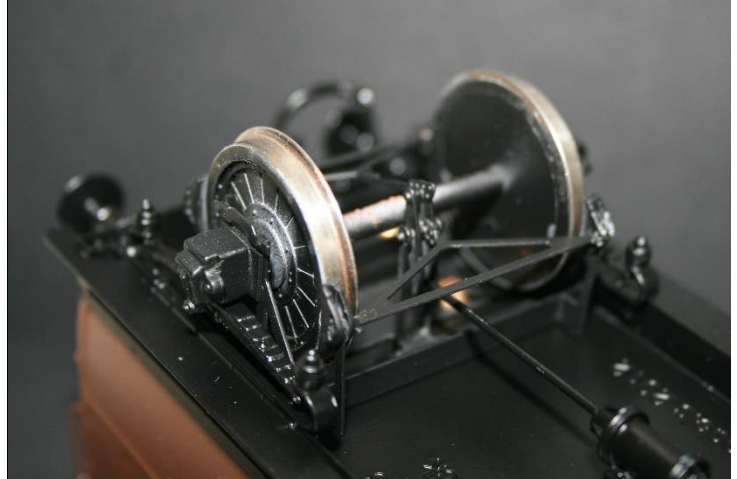
8. Form rivets on solebars (1), buffer beam detail parts are best fitted whilst in the flat. Form rivets on coupler plate Part 14 & fix over hole. Strapping (19) fits where marked, alternatively they can be left off and bolt heads embossed from the back.
9. It is not clear if/when handbrakes were added to these vans, if fitting the handbrake, fit inner V hanger (8) to the slot in the floor and using a piece of wire align the outer V hanger (9) and fit to the solebar. Parts 7/7a provide cranks that can be fitted to this and the brake handle (17) attaches to the end of the wire with overlay (18) and pin guide (16) fixed to the solebar, just inboard of the right hand row of rivets
10. Fold up solebars and bufferbeams. Emboss rivets on the solebar/beam joint plate (13), fold and fit between the solebar and rear of the buffer beam (after folding the ends round). The gaps at the end should be filled when all soldering is complete. Fit footboards (2), there will automatically be a small gap between them and the solebars to clear the handbrake and V hangers (if fitted).
11. Fit body retaining brackets (12), 22mm apart (11mm from centre line) to the bufferbeams and crank slightly to allow the body to sit correctly on the underframe – it may help to fit the body to the underframe to do this. Curve end of coupling hanger hook (15) to a half circle approx 2mm diameter and fit inboard of the right hand bracket with the curved portion protruding below the buffer beam
12. Fit 6ba nuts over mounting holes in the floor. The fixed W-iron assembly is fitted to these with 6ba screws, the rocking end being fixed by 1.5mm wire through the fold down tabs.
13. Drill 1mm holes in each end of the air cylinder and attach a length of 1mm wire to both ends, this fits centrally to the floor where marked
14. Take W-iron units (3&4). Form rivet on axlebox retainers and fold over (fold line to the outside). Fold up main W-iron assembly and solder all corners.
15. Fit brake hangers (5) to slots in the ends and axlebox plate (20) over the bearing holes. Wheels/bearings can be fitted now to check clearances when fitting the brakes.
16. Take two brake levers (6), fit to 0.7mm wire through the hole furthest from the pivot, and solder a second lever to this wire with a 2mm gap between them. This is then attached to the pivots folded down from the top of the W iron assemblies with 0.7mm wire via the centre hole and short (inner) brake linkage (10). Before assembly twist the pull rod part of the brake links thru 90deg as shown in the photo.



17. Fit inner brake linkage (10) with cast brake blocks to the brake hangars 5. The long (outer) linkage (11) fits using a short piece of 0.7mm wire to the brake levers 6 on the bottom hole, but do not secure if you wish to remove the wheels for painting. Note – photo shows a similar assembly with different W irons & etched brake shoes.



18. Fit the cast springs to the inner faces of the solebars. Clean up and fit the buffer castings. Drill these 1.2mm right through & 1.8mm about 5mm deep from the front. The steel heads can be fitted later with the springs and nuts (to avoid damage from flux fumes!). Make up and fit couplings and air pipes



19. Before painting the model should be thoroughly cleaned to remove any remaining flux, dirt or other construction debris. Allow to dry completely before painting. It is best to use some sort of etch primer, but providing the model is completely grease free, acrylic grey primer (car paint in spray cans) will provide a good base for the final livery.

20. Once the paint is completely dry apply lettering, fit the door handles then varnish if required.

21. The body is secured to the chassis with 4 6ba screws.

Parts List

Etch

Chassis

1	Underframe
2	Footboards
3	Fixed W iron
4	Rocking W iron
5	Brake hanger
6	Combination lever
7	Crank
8	V hanger
9	V hanger
10	Short yoke
11	Long yoke
12	Retainer bracket
13	Angle
14	Coupler pocket
15	Coupling hangar
16	Brake pin guide
17	Brake lever
18	Brake lever overlay
19	Strapping plate
20	Axlebox plate

Body

21	Side
22	End
23	Vent
24	long hinge
25	Short hinge
26	End strapping/hinges/strapping
27	Lower end strapping
28	Lamp brackets
29	Latch
30	Label clip

Castings/Other

Whitemetal

1x	Westinghouse brake cylinder
8x	Brake blocks
4x	Axleboxes

Lost wax brass

1pr	Couplings
2x	Air pipe
4x	Buffer bodies
6x	Springs

Other Parts

1x	Preformed roof (brass)
6x	6ba screws/nuts
4x	Turned buffer heads/springs/nuts
2x	Coupling springs
2x	Split pins

Wire

6x	Door handles
1x	0.7mm approx 40mm
1x	0.9mm approx 40mm
1x	1.5mm approx 30mm
2x	Rainstrip (plastic)

Parts required

2x	3' 7" Mansell coach wheels (1 pack Slater's 7127)
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Transfers for your chosen livery