

Background

The evolution and development of the "Preston" design is outlined in the notes to BEC kits 7 & 8. By 1906 the Board of Trade was influencing design by discouraging loans for cars fitted with reversed stairs. The United Electric Car Co. Ltd. products were subsequently constructed with direct 90° or spiral 180° stairs. The popular Brill 21E truck with a 6' wheelbase proved to be too short for some systems and existing trucks were sometimes lengthened or replaced by longer wheelbase trucks. Similar features were to be found on cars produced by Brush, Milnes and Hurst Nelson. The three window saloon was the only common element to link the uncanopied cars of the 1890's with the English Electric (successors to U.E.C.) product of the 1920's.

This Kit

The following will instruct as to the assembly of this kit to produce a model of a 1911 Milnes built tramcar in London Transport "Underground" livery used for cars 345-347. Car No. 349 sported the final red and cream livery. These former Croydon Corporation cars are fully described and illustrated in "Tramways of Croydon" by "Southnet" while 349 is illustrated in "The Tramways of Woolwich & South East London" by "Southeastern".

Assembly Instructions

Read these instructions carefully. Check each part against the list, returning any defective or damaged part for free replacement. Remove any flash, clean out locating holes and modify any part to suit the prototype selected.

Read these instructions again but whilst doing so have a dry run with the parts to familiarise yourself. When satisfied, paint as many of the parts as you can both inside and out, being very careful NOT to paint any edge surfaces where glue (UEV, clear Evostick or a modern epoxy resin) is to be applied. Ensure each part, except the upper deck and side panels, gets a second coat before assembly; the upper deck panels are best left to after assembly. Affix lining, fleet name and numbers (only the fleet name is supplied in this kit) and paint over them with a clear coat of paint.

Now cut the glazing strip to suit the insides of the saloon sides/ends, being careful not to foul the bonding surfaces for the parts to be glued together. Finally check all parts for missed glazing or pre-assembly painting and assemble the model carefully step by step following the instructions. Allow the glue used on each operation to set before proceeding to the next operation if any parts are common to both.

This kit can be soldered but this is only recommended for those who are very experienced in using a soldering iron. The method of assembly would, of course, be different to that detailed above. The "purist" modeller may wish to solder hand rails to the stairs and add the small opening windows in the tops of the bulkhead side windows.

1. Glue Saloon Sides (3) to Bulkheads (4) and hold assembly by an elastic band (not too tight) placing it upside down on underneath of Upper Floor (17) to set. The corner window pillars should be filed to produce the scalloped effect (see sketch).
2. Locate Trucksides (2A) to Saloon Sides. Insert Platforms (6) to fit over Trucksides ledges, under Bulkheads and against Saloon Sides. Glue Controllers Resistance Box (32) and Dash Fronts (5) to Platform. Cut wire to length, bend as shown in sketch to produce Brake handles adding Brake Standard Wheel (9), and fit to Platforms (small holes provided).
3. Turn car upside down and fit Mechanism (203) by clipping it into slots of Parts 6. Position so that axles line-up with axleboxes and drill 1/16" hole in Part 6 through chassis fixinghole. Secure with self-tapping screw. Glue Life Trays (15) to Trucksides and Life Guards (11) and Steps (10) to Platforms. Test on Track.
4. Remove sections A and B from Upper Floor (17) for stairwell (see drawing) Glue End Decency Panels (33) to Side Decency Panels (34) and locate on Upper Floor. Cut up seat strip to provide 14 seats each 9 mm long and 4 seats each 6 mm long. The Stairwell Partitions should be cut from card or plasticard (not supplied in this kit) and fitted on Upper Floor together with the seats in the positions shown in the sketch.
5. Locate the upper deck assembly on the lower saloon. Fit Stairs (19) to the Upper Floors and Platforms. Cut wire to length and bend as shown in sketch to form handrails to be located in the holes in the Platforms and Steps and to form stanchions to support and be glued to Indicator Boxes(29)

Fit Indicator box assemblies to End Decency Panels. Insert Trolley Pole (35) into hole in upper Floor. The Driver (38) and Conductor (39) can be placed on the car as you wish.

Check that no unpainted surfaces exist; if so paint as appropriate. The car is now ready for service and we hope you have enjoyed constructing this model. BEC Kits Nos. 11 and 12 produce models of the E and E/1 class London Transport bogie cars which served West Croydon and Aboey Wood where passengers changed onto the open-top cars for Crystal Palace (345-7) and Erith (349) respectively.

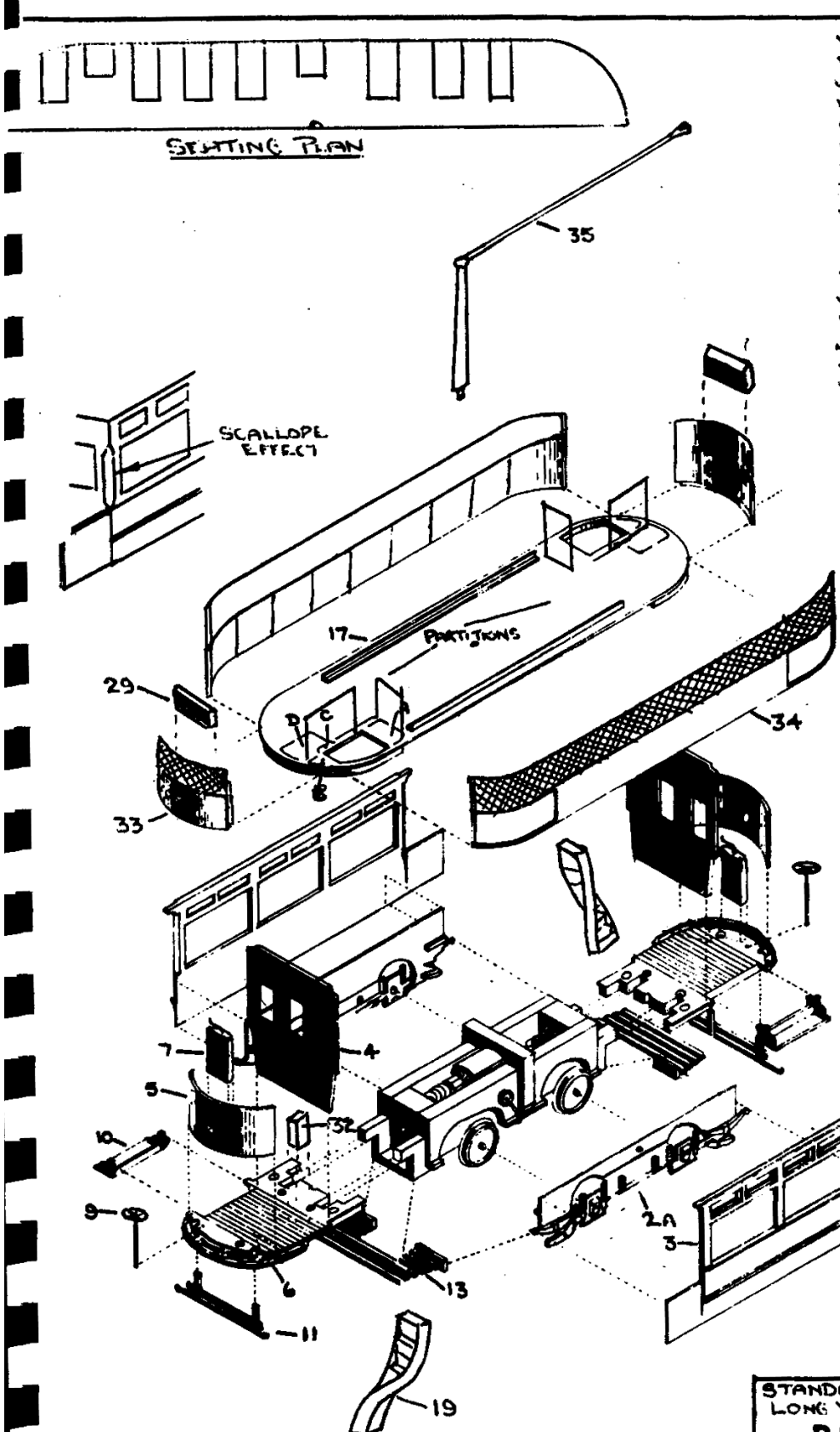
Livery

For simplicity in colour matching paints the Humbrol reference numbers are shown where appropriate.

London Transport (1933-1936)

Red	19	Side and bulkhead waist panels (panel below beading under saloon windows) Rocker panels on sides and bulkheads of 345 and 349 (panel below waist) Outside of Dash Stair sides of 345 and 349. Stair backs and upper deck decency panels of 349.
White	on 345-7	22 Rocker panels on side and bulkheads of 346/7
Cream	on 349	R114 Window pillars and frames. Cantrails, Upper deck decency panels and stair sides of 345-7. Lamp lenses and ceilings on all cars are white. Upper deck 'wire-mesh' (not 349).
Black	R145	Controllers. Collision fenders. Handrails. Recess areas of trucksides and underside. Indicator panels. Upper deck 'wire-mesh' on 349. Trolley mast and pole.
Grey	R105	Trucksides. Life trays. Life guards. Platforms, sides and steps. Stair treads and risers. Inside of Dash. Resistance Box.
Wood	R143	Doors. Indicator boxes. Saloon and upper deck interiors. Seats. Recessed window frames on 346/7.
Gold		Controller tops and handles. Brake standard handles and wheels.
Yellow lining	on 349.	Dashes.
Black lining	on 345-7	Dashes. Waist and rocker panels (not 345)
Gold Numbers		Dashes.

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- ✓ 2A TRUCK SIDES
- ✓ 3 SALOON SIDES
- ✓ 4 BUCKHEADS
- ✓ 5 DASH FRONTS
- ✓ 6 PLATFORMS
- ✓ 7 CONTROLLERS
- ✓ 9 BRAKE WHEELS
- ✓ 10 STEPS
- ✓ 11 LIFEGUARDS
- ✓ 13 LIFETRAYS
- ✓ 17 UPPER FLOOR
- ✓ 19 STAIRS
- ✓ 29 INDICATORS
- ✓ 33 END DECENTRY PANELS
- ✓ 34 SIDE DECENTRY PANELS
- ✓ 35 TROLLEY POLE
- ✓ 38 DRIVER
- ✓ 39 CONDUCTOR
- ✓ MECHANISM
- ✓ SEAT STRIP
- ✓ GLAZING
- ✓ WIRE
- ✓ LT. TRANSFERS

PO Box 5 Aldershot Hants GU12 6JP

STANDARD OPEN TOP CAR (OVERHEAD)  
 LONG WHEELBASE  
**BEC TRAM KITS** Series 2  
 Scale 4mm = 1'0" N° 6