



2 EPB kit construction notes

In your Eastleigh Model Rail kit you will find:

- Your choice of motor bogie frame and mounting - see the "Motor Bogies for Eastleigh Kits" PDF downloadable from the Resources section of the Eastleigh Model Rail website
- Two Southern Railway standard 8ft bogie centres (8BC)
- Two Southern Railway standard 8ft bogie left sideframes (8BL)
- Two Southern Railway standard 8ft bogie right sideframes (8BR)
- One Southern Railway motor bogie centre (MBC) - two, if you have opted for an unpowered motor bogie
- One Southern Railway trailer pickup bogie left sideframe (TPL)
- One Southern Railway trailer pickup bogie right sideframe (TPR)
- Four SR suburban EMU underframe trusses
- One EPB type SR suburban EMU motor coach underframes (UEP)
- One EPB type SR suburban EMU driving trailer underframes (UDE)
- One motor coach semi-saloon interior (E8S)
- One driving trailer semi-saloon interior (EDI)
- Two cab ends (ECE)
- Two step ends (ESE)
- One motor coach left side (E8L)
- One motor coach right side (E8R)
- One driving trailer left side (EDL)
- One driving trailer right side (EDR)
- One motor coach roof (RE2)
- One driving trailer roof (RED)

You will also need.....

A motor bogie - see the "Motor Bogies for Eastleigh Kits" PDF downloadable from the Resources section of the Eastleigh Model Rail website

Your choice of OO, EM or P4 14mm diameter disc wheels

Brass 'top hat' bearings

Couplings - the kit is designed to use the Symoba close-coupling system between cars (available from DCC Supplies (dccsupplies.com)). You will need one pair of Symoba 111 sliders and one Symoba 108 drawbars. If you intend to operate your 2 EPB in multiple with other stock you will also need your choice of NEM-type inter-unit couplers.

8BA/M2 nuts, washers and bolts

Adhesives and plastic filler (I use Deluxe Models Glue 'n Glaze to fix glazing panels in place as it avoids the risk that cyanoacrylate glues may 'fog' some clear plastics).



Glazing (See “Glazing dimensions for Eastleigh kits” PDF downloadable from the Resources section of the Eastleigh Model Rail website.

Paints and transfers

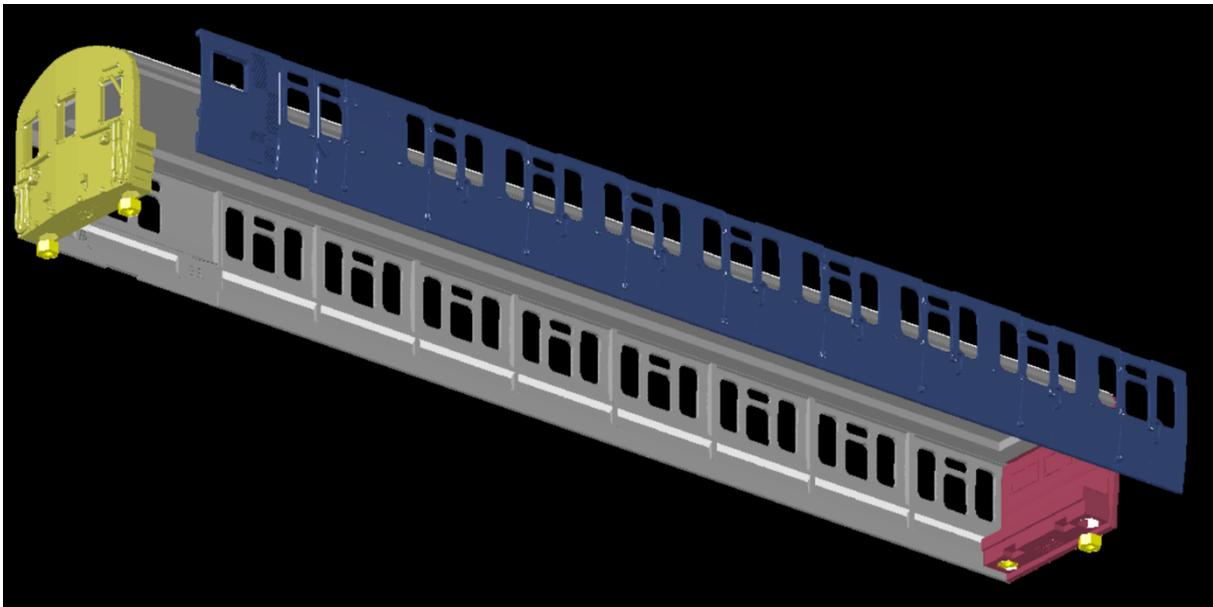
3D printed parts can bow slightly but they are usually quite easy to straighten, for example by taping the affected part to a flat surface and leaving overnight in a warm place. Avoid intense heat.

If you lose or damage any parts during construction, let us know and we will replace them for you at cost.

Bodies

My own preference is to paint and glaze the body sides and ends before assembly but be aware that you may need to fill and rub down the joint between the motor coach bodysides and the cab ends. For this reason some customers prefer to paint and glaze the bodyside after assembly.

Note when glazing that the driver’s side window consists of a fixed and a sliding element. Arrange the glazing so that one overlaps the other.



Glue 8BA (or M2 metric) nuts into the hexagonal recesses in the body ends.

Test fit a cab end and an inner end to each motor coach roof, using the locating tabs to help ensure a precise fit. When satisfied, glue the components together and check that the assembly is square by standing it on a flat surface.

Test fit the motor coach body sides to the roof/end assembly, noting that the sides fit into the recessed projections on the cab end but overlap the inner end.



When satisfied with the fit, run a bead of glue along the groove in the roof and down the contacting surfaces of the ends and glue each side into place in turn.

Apply filler as necessary to the seam where the cab front joins the sides and remove any surplus. When dry, rub smooth with fine grade wet and dry paper.

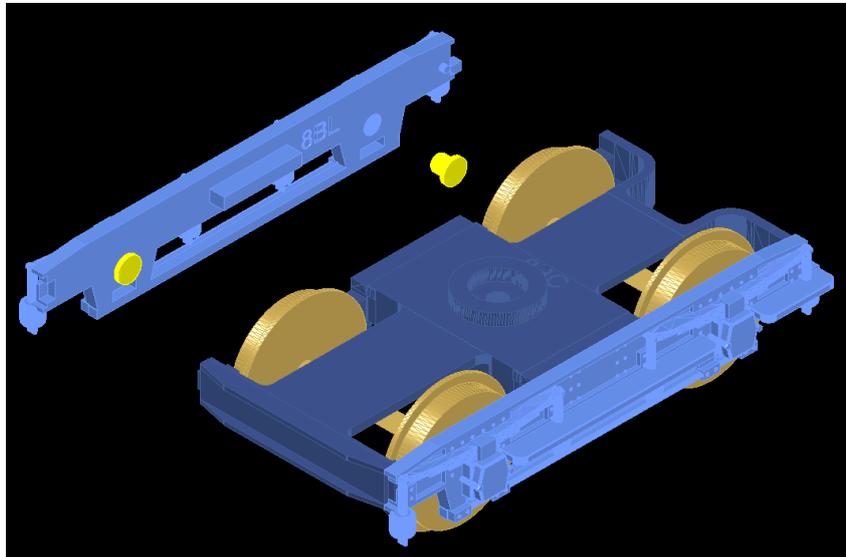
Assemble the driving trailer in the same way. Note that the corridor side has locating brackets for a handrail that can be made from 1mm rod..

Bogies

Your kit contains parts for two SR standard 8ft wheelbase unpowered bogies, one for the inner end of the motor coach and one for the inner end of the driving trailer. Each consists of a centre section (8BC) and left and right sideframes (8BL and 8BR).

Your kit also contains parts for an 8ft 9ins trailer pickup bogie, mounted at the outer end of the driving trailer coach. This bogie uses the same centre as an unpowered motor bogie (MBC) and the left and right sideframes (TPL and TPR) look generally similar to the equivalent motor bogie components (MBL and MBR) so if you are using an Eastleigh motor bogie take care to keep the two sets of parts separate.

Eastleigh bogies are dimensioned to accommodate 'OO', 'EM' or 'P4' gauge 14mm disc wheelsets with standard 26mm 'pinpoint' axles and the sideframes have holes to fit shouldered 'top hat' brass wheel-bearings. You may wish to add pickups to the bogies fitted to the inner ends of the motor coaches.



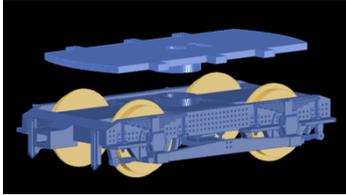
Paint the inner faces of the sideframes and the centre section and glue a brass 'top hat' wheel bearing into each of the holes on the inner faces of the bogie sideframes before assembly.

Bogie assembly is straightforward but note that the sideframes are 'handed' to ensure that step-boards are correctly positioned. Tabs and recesses on the centre and sideframes ensure accurate location.



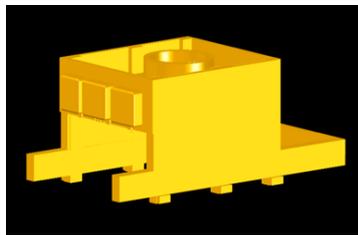
Assemble the bogie with the wheelsets in place. Check that all four wheels of your assembled bogie sit squarely on a flat surface such as a sheet of glass.

The motor bogie components in your kit will depend on the options ordered:



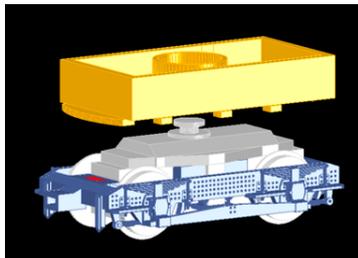
Unpowered. Your kit includes a SR 'Central type' 8ft 9ins wheelbase motor bogie consisting of a centre section (MBC) and left and right hand sideframes (MBL, MBR). These are assembled in the same way as the trailer bogies.

The pivot plate (MBP) is fitted to the motor coach underframe.



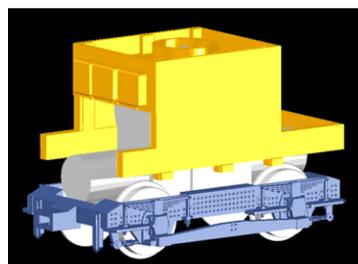
Hornby. No motor bogie components are included as the Hornby X6575 (Bil/Hal) motor bogie is complete with sideframes, etc.

The Hornby motor bogie housing (HMH) is fitted to the motor coach underframe.



Black Beetle. Your kit includes a motor bogie frame (BBF). Insert the frame from beneath the motor bogie and glue in place.

The Black Beetle motor bogie housing (BBM) is fitted to the motor coach underframe.



Branchlines MB35. Your kit includes a motor bogie frame (35F). Insert the frame from above the assembled motor bogie and glue in place.

The MB35 motor bogie housing (35H) is fitted to the motor coach underframe.

Underframes and interiors

Identify the motor coach underframe (UEP) and driving trailer underframes (UDE).

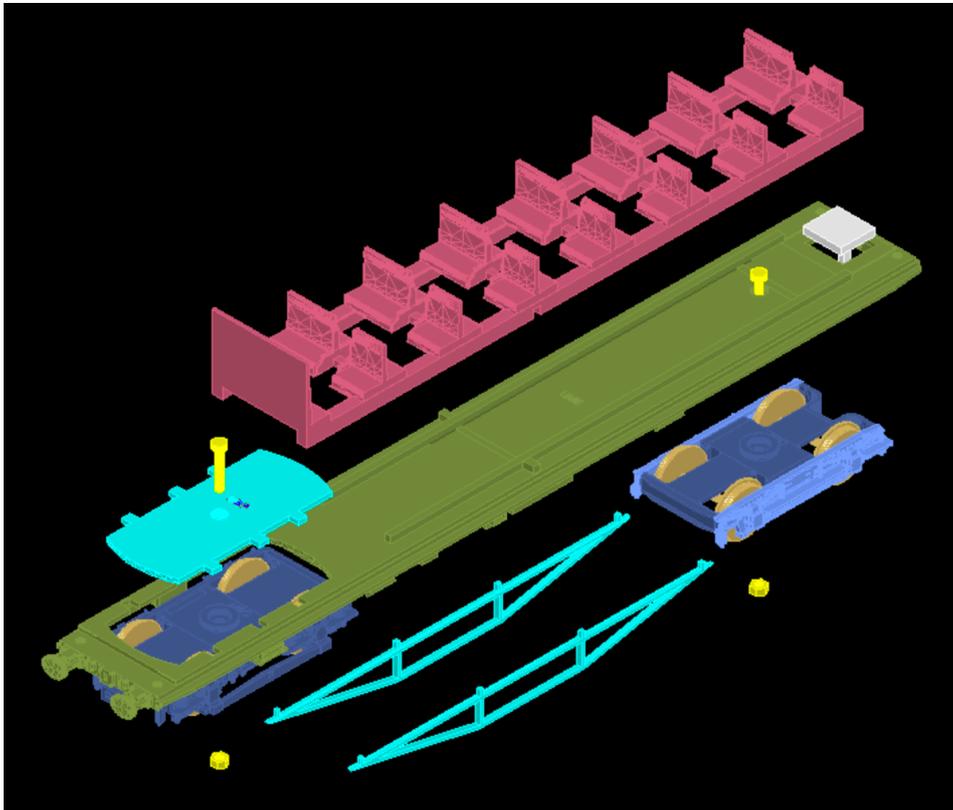
Glue the motor bogie housing (HMH, BBM or 35H) or pivot plate (MBP) into the opening in the motor bogie underframe using the asymmetric locating notches to ensure an accurate fit.



Drop ½ inch 8BA (12mm M2) bolts through the holes in the bogie pivots at both ends of the driving trailer underframe, at the inner end of the motor coach underframe and, if not using a motor bogie housing, through the motor bogie pivot plate (MBP). (A bolt is not needed for any of the motor bogie housings as the Hornby, Black Beetle and Branchlines MB35 motor bogies all have their own pivot arrangements.)

Check that the each pivot bolt is absolutely vertical and secure the bolt in place with glue. Run a washer and nut on to the lower end of the bolt to hold it temporarily in place whilst the glue sets.

Fit a Symboa III close coupling slider into the opening at the inner ends of the motor coach and driving trailer underframes. Glue into place so that the coupler is flush with the underframe floor.



Mount your choice of motor bogie at the outer end of the motor coach. Mount an 8ft unpowered bogie at the inner end of each motor coach underframe and the trailer pickup bogie at the outer end of the driving trailer. Secure in place with washers and nuts.

Adding weight helps to ensure adequate adhesion. The motor bogie housings incorporate a tray above the bogie that can be filled with lead shot. This can be secured in place by soaking it with PVA glue mixed with a small amount of washing up liquid to improve flow. I also recommend fitting additional pickups to the inner bogies on the motor coaches - there is space for a cable run beneath the interior module.

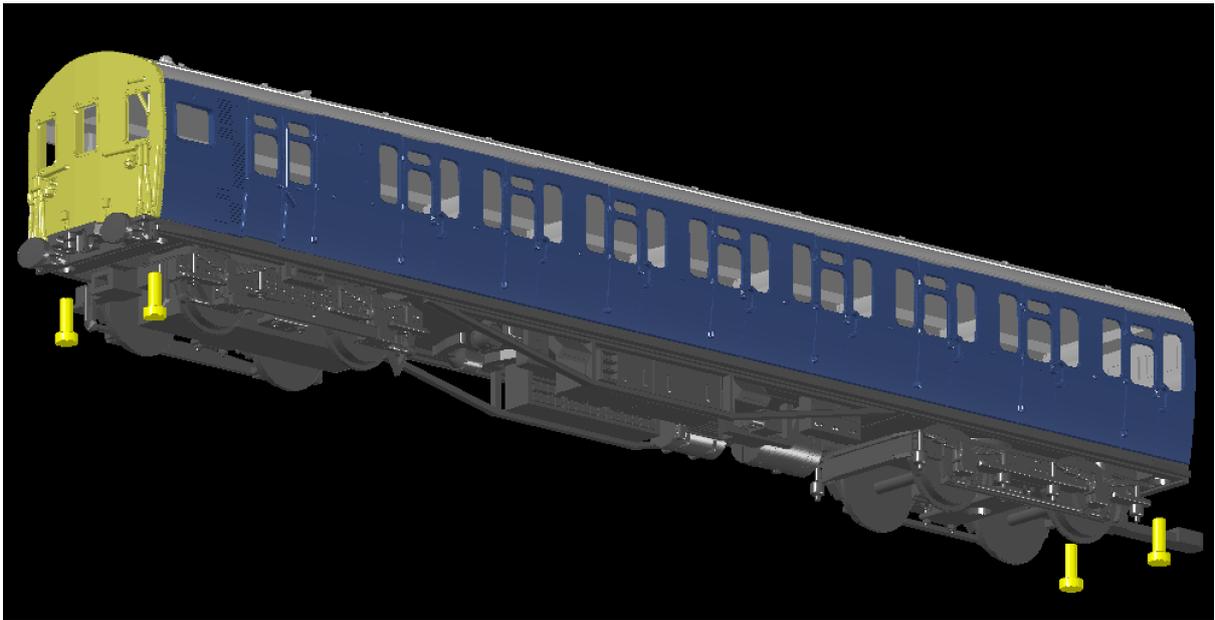
Glue the interior modules to the underframes using the ridges on the upper surface of the underframes to ensure precise location.



Fit the underframe trusses into the locating holes in the underframes.

Final assembly

Join the motor coach body and driving trailer bodies to their respective underframes and secure with ¼ inch 8BA (6mm M2) bolts.



Use Symboa I08 drawbars to form up the unit. Glue the drawbar to the drop arm of one slider unit and attach the drawbar to the slider unit of the next car. You may prefer not to glue both ends of the drawbar so that the unit can be separated when required.