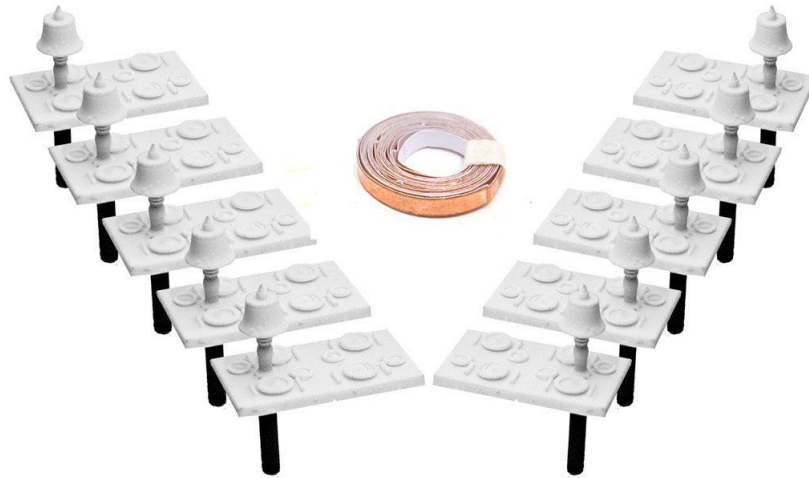


DCCconcepts Working Lamps for Pullman and Restaurant Coaches (DML-RCTL)

These are lamps complete with table settings.

Note: Lamps are also available separately (no tables) as [DML-MTL](#). These are lamps used in BR Mk 3 and 4 coaches as well as today's refurbished coaching stock.



Inside the pack ([DML-RCTL](#)) are ten pairs of tables, set with dinner and bread plates, a roll of adhesive backed copper tape, and three sets of resistors (1k Ω , 5k Ω and 10k Ω – 10 of each). The tables themselves are a white resin and have two very thin leads of different lengths coming out the bottom under the table lamps.

You will also need solder, flux and a way of getting power.

We suggest our Sapphire 179 Super Versatile solder ([DCS-S179](#)) and our Sapphire No-Clean flux ([DCS-SFNC](#)). For power, we recommend [DCCconcepts spring pickups](#). You will also need a diode – not critical as long as it is high speed so something like an IM4146 diode is ideal.

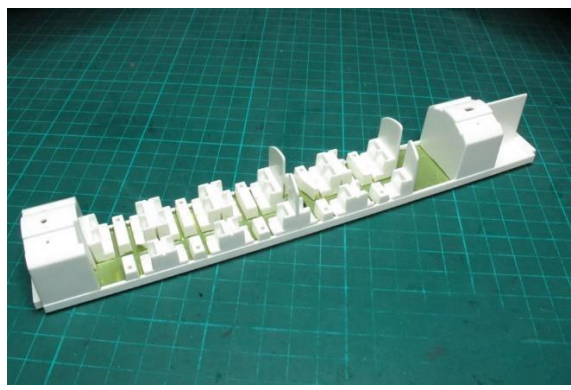
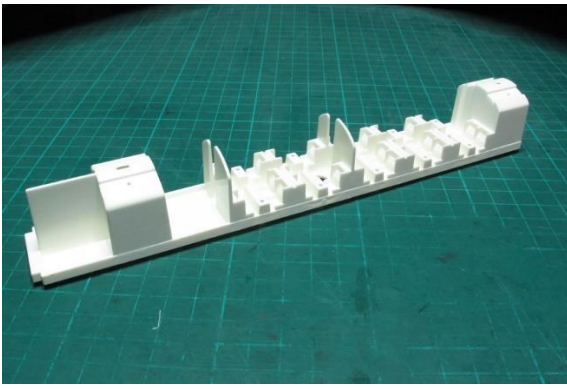


Liquid Wire Insulation ([DCW-LETBK](#)) and a fine fibreglass brush ([DCT-FBSF](#)) would also be useful and tweezers and a strong magnifier are a must!

Preparation

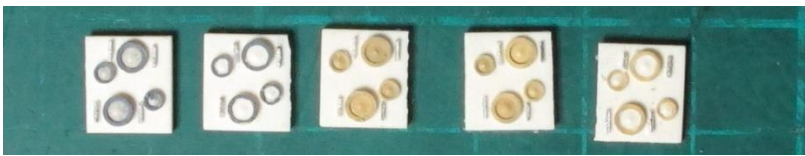


Open up the carriage and remove and strip down the carriage interior – the seating pan. For some brands of coaches, this involves pulling the brass lamp turnings out with a pair of pliers.

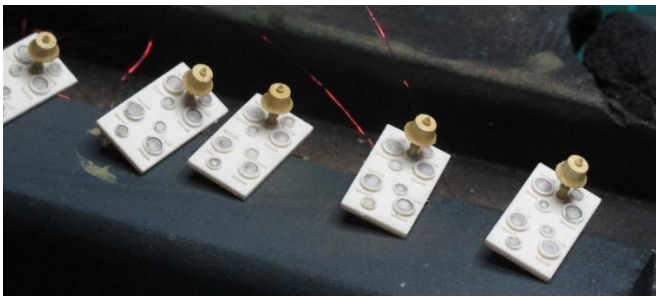


Trim the tops off the existing tables. All reference photos do show the table tops above the bottom of the sill and, if you do not nip around 1mm off the existing plinths, the new lighted tables will sit almost mid-window. A sharp knife can be used, although a razor saw is best, as some of the areas between the seats can prove quite hard to get into.

As the tables come in quad settings, half of them may need to be split to suit the single seats down one side of the coach. This is easily done as the tables have a groove cast on their underside and, after a few strokes of the scalpel blade, the extra setting will part free.



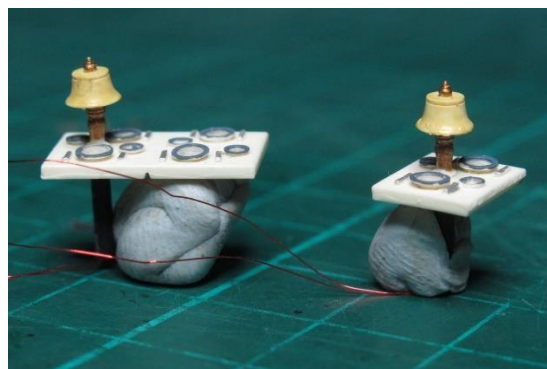
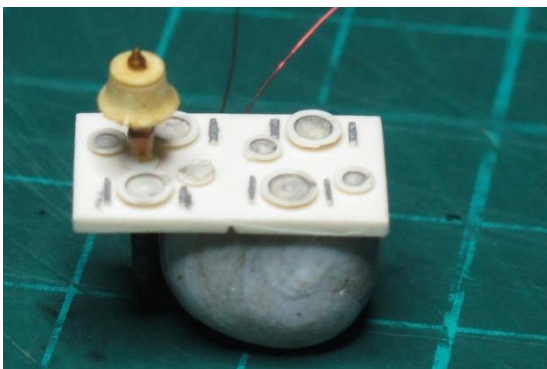
Tip: use these extras to practice your painting technique and to try a few different china patterns.



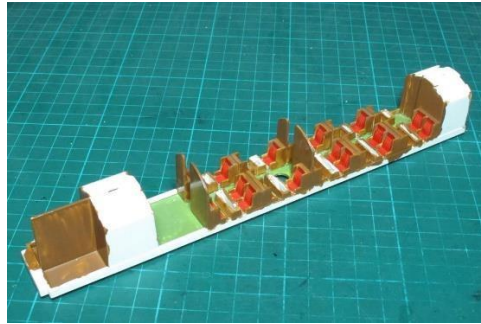
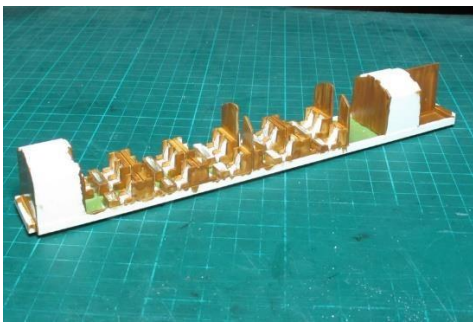
For example, if you paint the plates cream, the result can be too much like the lampshades, so maybe use a wash of pale blue on the tops of the plates to give them some depth and distinguish them from the table top.



To paint the rims of the plates, cut the eraser squarely off the end of a pencil.



Dip the cut (flat) end of it into a small bit of paint that is on the palette (not the tin!) and gently *stamp* the paint on – in fact, just like a rubber stamp! (This is also a good method for the cutlery – and for that matter, handrails too!)



Tip: now is the time to paint the inside of the carriage interior – trim, carpets, etc.

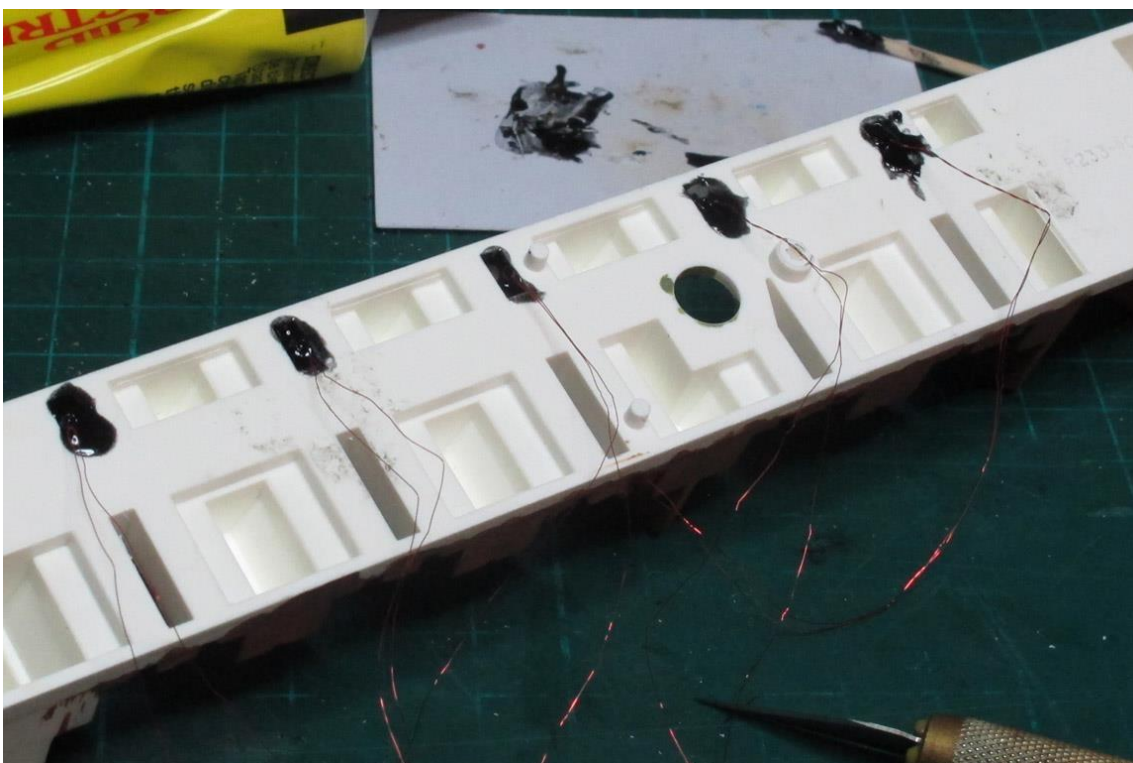
Paint brass bodies and a knob on the top of each lamp – otherwise they could look too two dimensional. Use silver paint for the cutlery using the pencil eraser method.

Installation



With the table painted, but not fitted, trial fit then glue in some passengers (not supplied). All of them need to have their legs lopped off at the knees, while some of the more rotund characters may need bellies shaving before placing into position!

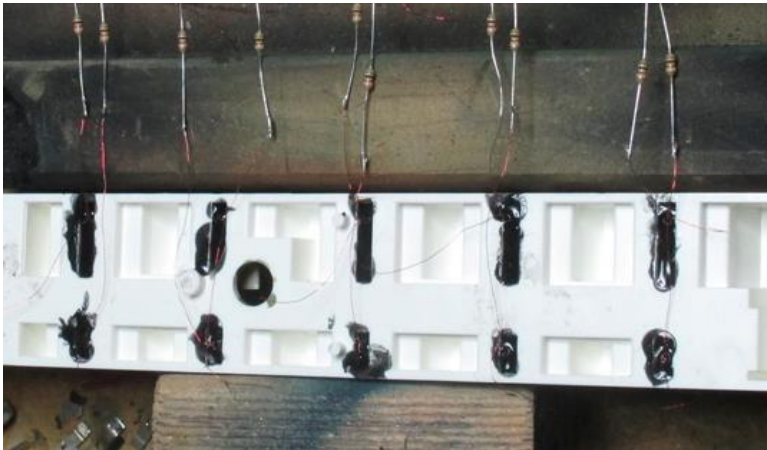
Tip: Have some characters leaning over into the area where the table top will sit. It does make for a nice realistic look to have people “over” a table rather than regimentally sitting upright at all the tables. The steward standing in the aisle is also a nice touch but maybe glue him (or her) in place later.



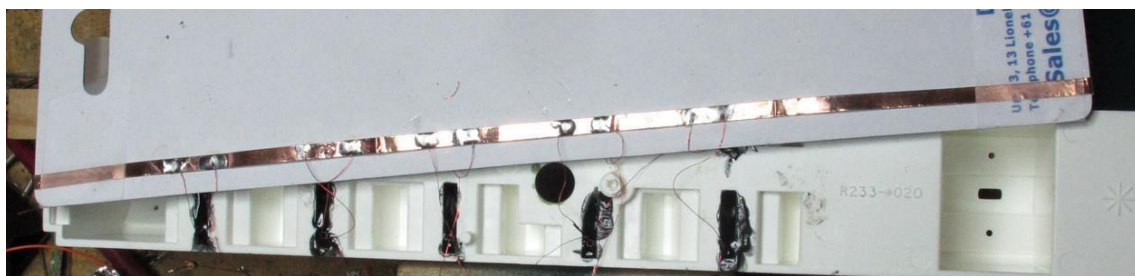
Hold the tops in place using a gap filling SuperGlue to glue to the existing plinths. Once in place, fill the cavity of the old table plinth from underneath using Liquid Wire Insulation ([DCW-LETBK](#)). This sticks like mud but dries like soft rubber, and so works a bit like a bath plug. You may have to touch up to a few of the edges of the table/tablecloth with paint. This will prevent strain on the very thin wires.

For consistency, we suggest soldering resistors to “the long lead”. This also ensures that you don’t have a rogue lamp offering the wrong polarity to the copper tape. Place the seating pan upside down and arrange the wires from each lamp splayed left and right, with the short ones all to one side. Nip about 50mm off each wire to try and make things a little neater under the floor. Take a strip of the copper tape and, using the card from the blister pack, hold it next to the seating pan and solder the short leads in order on the tape.

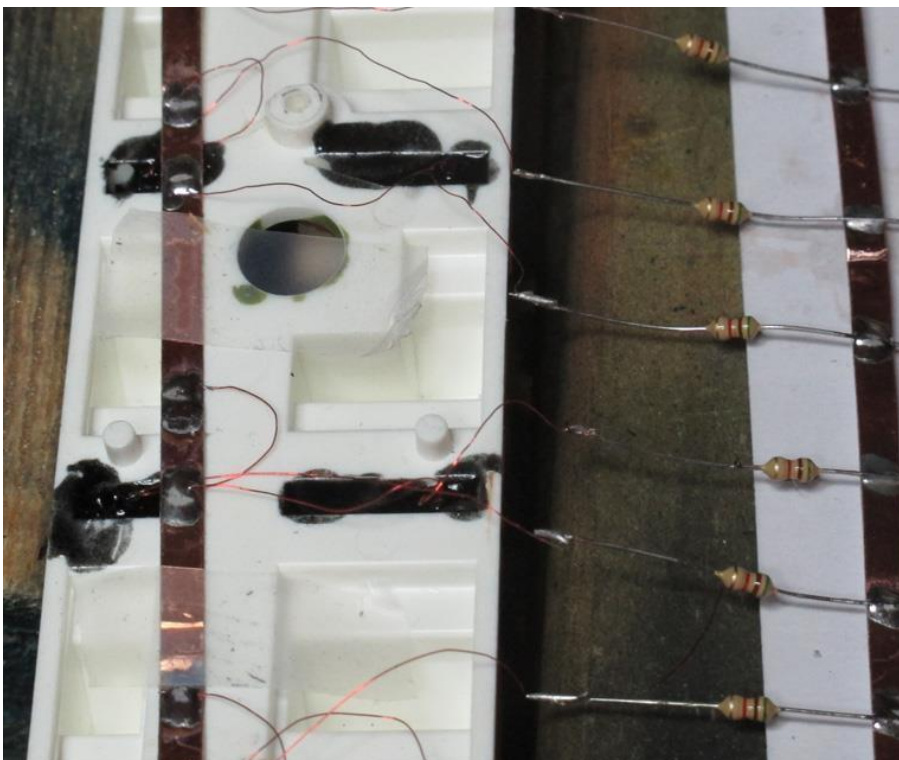
Cut the resistor tails right down to 10mm or so on both sides before soldering them on. Clean up the tails of the resistors (eg using a fibreglass pen) and tin them.



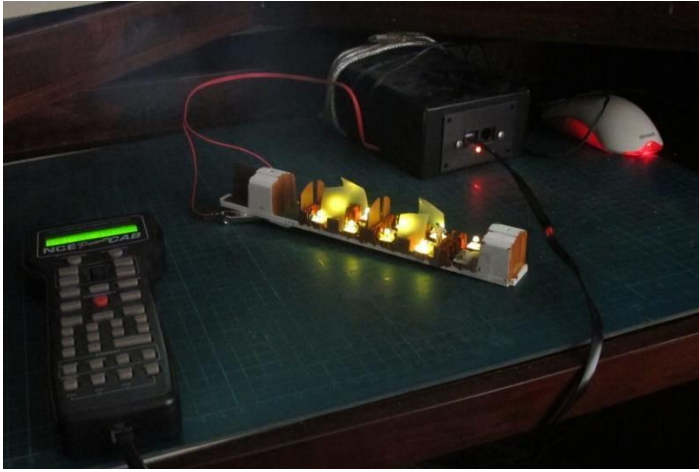
Turn the seating pan around and, using the mid-range resistor (5K Ω), solder one to the end of each long lead. Don’t forget that you can change the resistors to adjust lighting for personal preference.



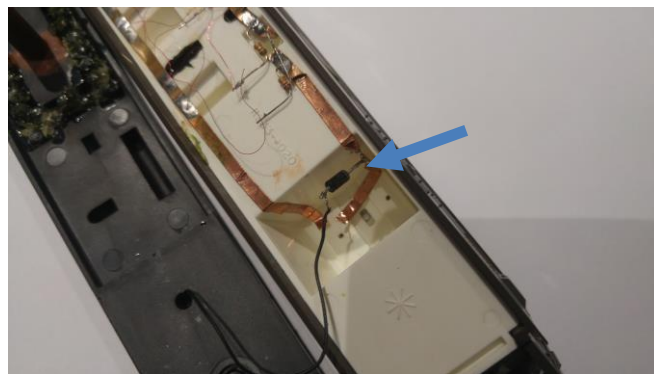
Use the card as a template to solder the resistors to the copper tape at regular intervals.



Use sticky tape to temporarily hold the copper tape under the coach in its final position, then bend the legs of the resistors to keep them away from the opposite copper tape, and the “feed” end of any neighbouring resistors.



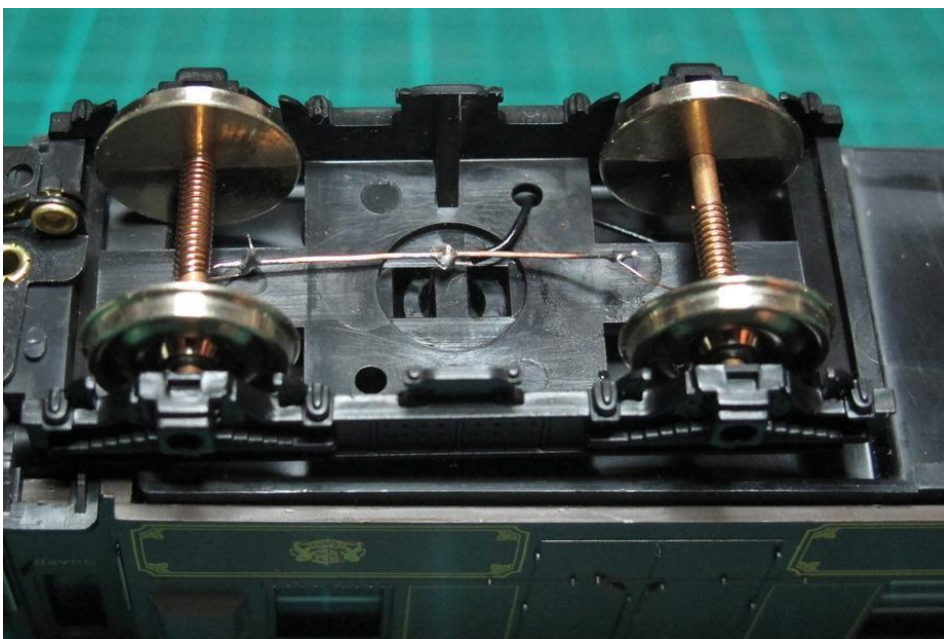
At this point, we suggest testing everything. Perhaps use some alligator leads off your DCC unit and apply power to the copper tape.



Now put a diode in the circuit!! LEDs are very vulnerable to a large reverse polarity so this diode protects them. Use temporary leads to connect the diode – if the table lamps do not illuminate, the diode is the wrong way round!

Tidy up the wiring and peel back the adhesive to fix the copper tape to the underside.

Power pick-up



[DCCconcepts spring pickups](#) are shown here. Use a short length of copper wire to join the springs together under the bogie, and attach a black wire to this, passing it up through the bogie pivot and then solder it to the copper tape. This arrangement works by having the two bogies picking up power from the left and right rail respectively, each bogie having its insulated wheels on the side of the “other” rail.

Re-assemble the coach. The additional detail is very visible, as is the difference in how these lamps light the carriage.

Tip: Maybe to add some curtains to the windows, too!

Conclusion



Bachmann



Hornby



Yours!