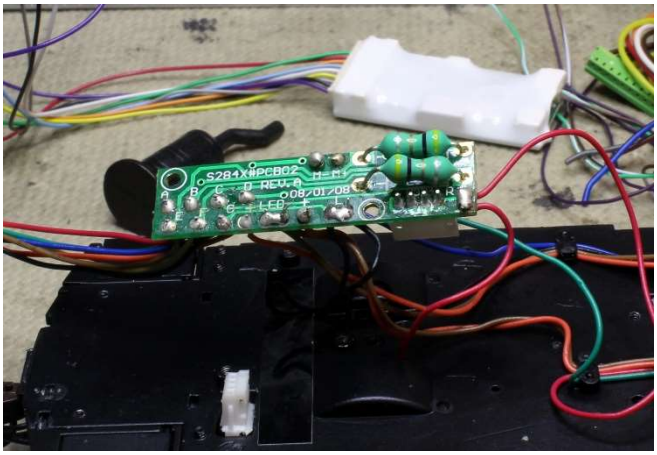
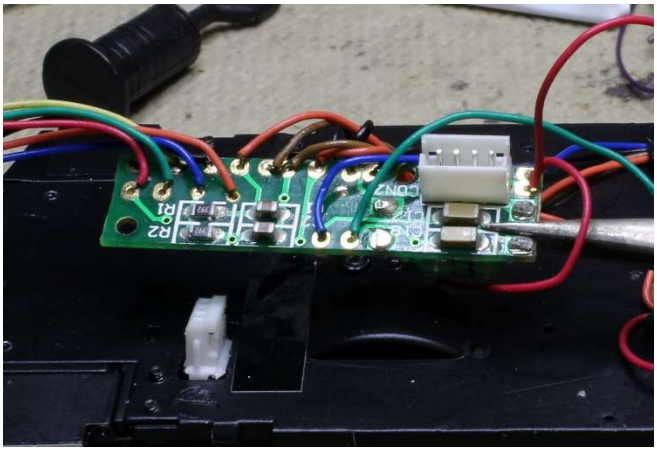
Bachmann On3 Rail Motor

Sound Install using ECOnami 200 – UK

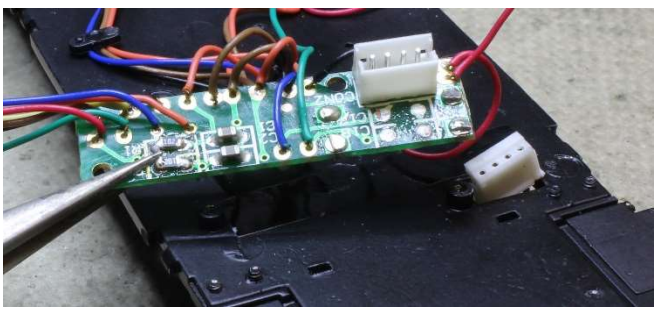
This rail motor was originally On30 but has been converted to On3 by the owner.



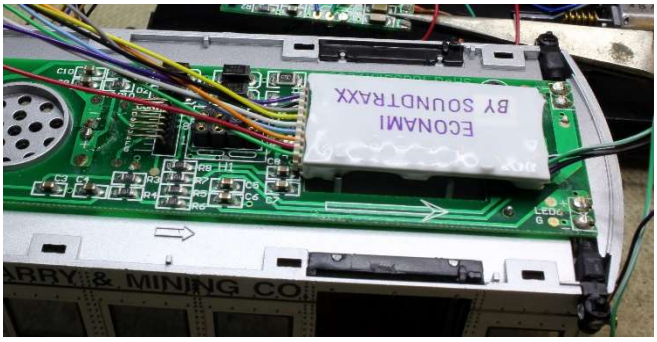
With loco dismantled this shows the connection board in the floor of the chassis. The first thing to do is remove the “European bits”. They are L1 & L2 – the two large green components on the right of the board. When they have been removed, put a wire link in their place.



On the reverse side of the same board, remove the two capacitors – as show by the tweezers. DO NOT replace with wire links.



While you are working this board, replace the two resistors shown by the tweezers. They are 3K9 – replace with 1K0 for a slightly brighter headlight.



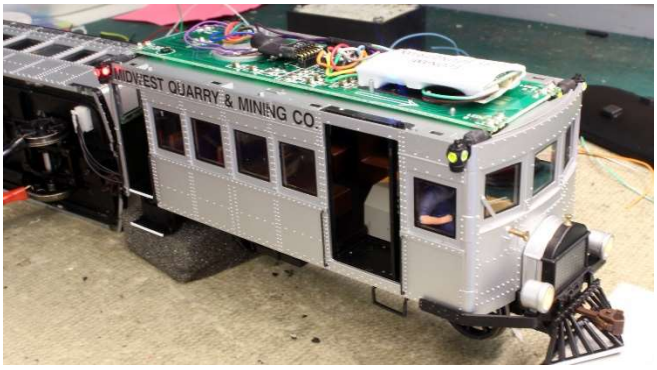
I used double side tape (the Black kind) to hold the decoder in place as shown. I fits nicely in place. This is the ECO 200 – UK but the ECO 100 – UK is smaller and fits well.

I replaced the Soundtraxx harness with a TCS harness – the wires are finer and better for this install.

I wired the decoder directly to the 8 pin socket as shown. If you ever need to remove the decoder, use the plug at the decoder end of the harness.

I did not show the transducer installed – it sits between the two rear seats inside the loco and the wires are run up inside the back wall with the harness from the bottom board. A small piece of PCB Sleeper/tie is glued in the speaker recess as a connection to the wires from the decoder.

This is like the unit I used – but mine is 15 x 11 x13 and is black. It is glued to the cross bench between the rear seats.



Almost finished, using the wheels on the trailing unit to get power to the loco for programming. The marker lights and the interior lights are on the same circuit so they come on together. To separate them would require making a new board and components. With the change of resistors the headlights are better now.

In the next day or so I will do a video of the unit running up and down my 2 metre test board.

Gerry Hopkins MMR