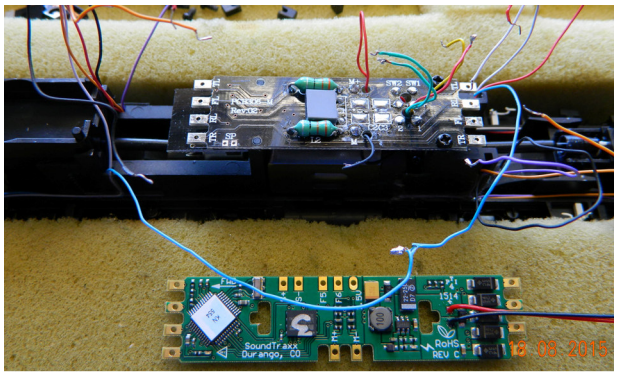
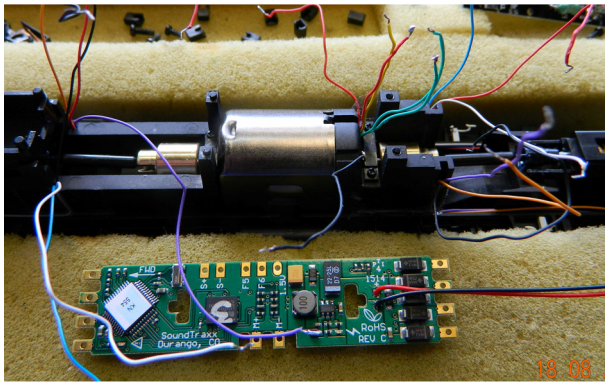
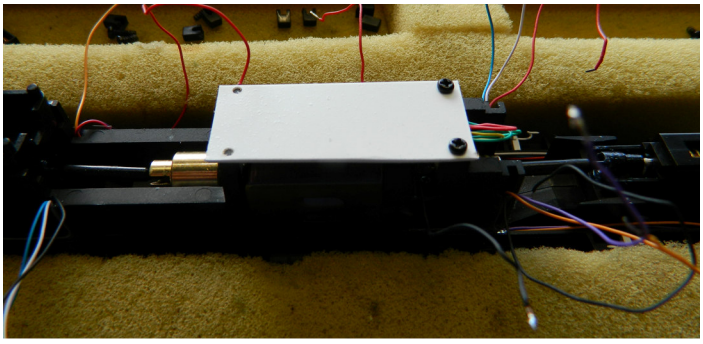
Installing a Tsunami into Auscision 45 class.
with a sugar cube speaker.
By Dave Pallas.

Step 1 remove the body as per the instruction. If you do not have the instructions, remove the couplers and the screws located either side of the couplers. The body is a firm fit so gently rock the body side to side while pulling up. Hold the chassis by the fuel tank be careful not to pull on the air tanks. Set the body aside.

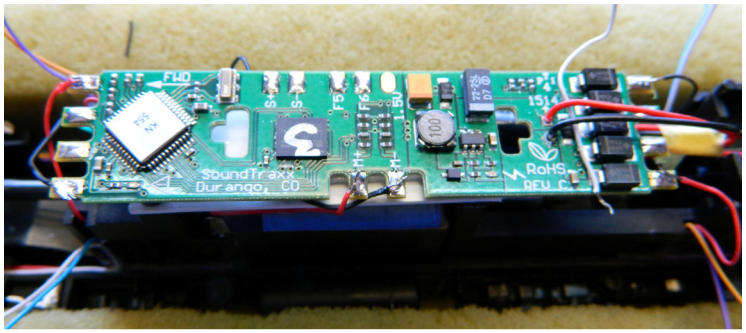


Step 2 As shown in the picture above, disconnect all wires from the installed board and remove the board. Now for the fun part identifying what wire does what. The red and black wires on the ends are your standard power pick up wires from the bogies. The middle red and black wires are the motor wires. SW1 and SW2 are the switch wires, you won't need to reconnect them. What are the rest of the wires.
Blue wire Common positive power for marker lights.
Purple Common positive power for head light
White Head light and white marker light
Orange Red marker light.

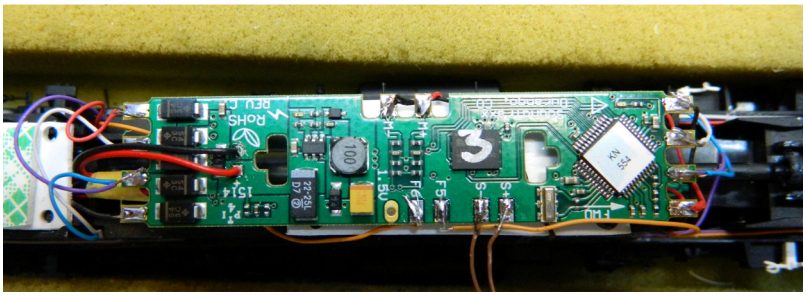




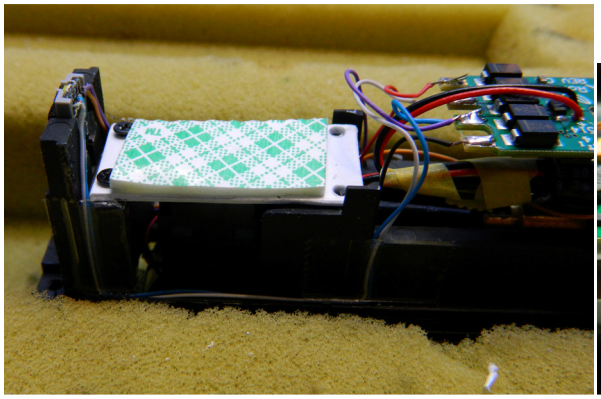
Step 3 The above photos show the mech ready to fit the decoder. I made a mounting plate from 1mm thick styrene from the scrap box. Secured the decoder to it with a piece of doubled sided tape.

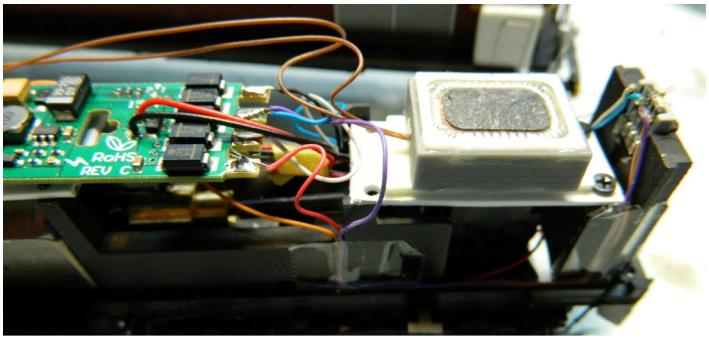


Step 4 Rewiring. The above photo shows the start of the rewiring process. You need to be careful here. I got caught out. Once I had attached the motor wires and pickup wires I put it on the test track to test and got a dead short. After checking all the wiring I discovered the bogie pickup wires were reversed. So on one end of the decoder you wire as per the decoders instructions as to which pickup wire goes to which terminal on the decoder. On the other end you reverse this. So it is Red/Black on the side of the decoder marked with the FWD and arrow and Black/Red on the other side as shown in the photo above. Tuck the capacitor under the board, using a bit of tape to hold its wires in a bundle.



Step 5 Adding the lights. Join the Blue and Purple common wires together an solder to the common wire terminals on the decoder. These are the second terminal from the bottom as shown in the picture above. Next take the white head light wires and attach them to the third terminal. Take the front orange wire and attach it to the solder pad marked F5 and the rear orange wire to the solder pad marked F6. Test to make sure the lights are working. Function F5 and F6 will turn the red marker lights on and off.





Step 6 Fitting the speaker. I decided to use a small sugar cube speaker and enclousere available from Model Railroad Craftsman in Blacktown. First remove the installed enclosere by undoing the 2 retaining screws. Using the base of the enclousere as a template make a new support out of 1mm styrene as shown in the photo above. Attach the speaker to the support with some double sided tape. Make sure the speaker is sealed onto the enclousere by running a thin bead of PVA glue around the outside and seal the hole where the wires come through. Test to make sure all is working.
Refit the body. As it is a firm fit youneed to gently press the body bake over the mech making sure not to catch any wires. Also press the body down evenly or it will not refit properly.
As the 45 does not have a bell I changed to function around using JMRI Decoder Pro as follows.
F1 Short Horn, F2 Long horn, F3 function output 5 front red marker light, F4 function output 6 rear red marker lights.
F5 Dynamic brake, F6 Headlight dimmer, F7 radiator fan, F9 air commpressor, F10 not used.
All other functions remained as originally programmed.
The Horn you will need to play with a bit. The 45 was fitted with Wabco horns. I used the Wabco A2 horn adjusting the reverb controls to get an acceptable horn, well atleast to my ear.
Once you are satisified your loco is ready to join your roster.
This is a relative straight foward install that most modellers should be able to do in about 1-2 hours including programming the decoder.
Dave Pallas.