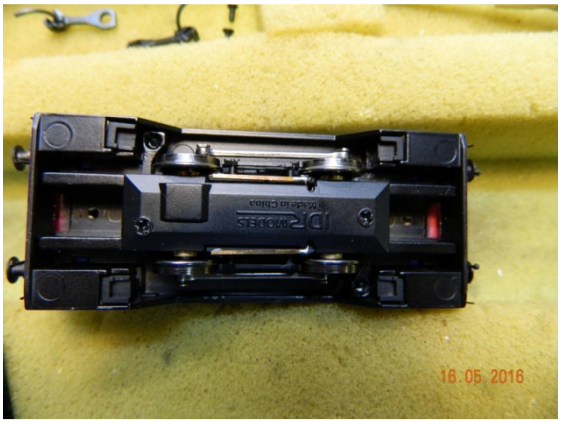
Fitting DCC with Stay Alive to IDR X200 Class.

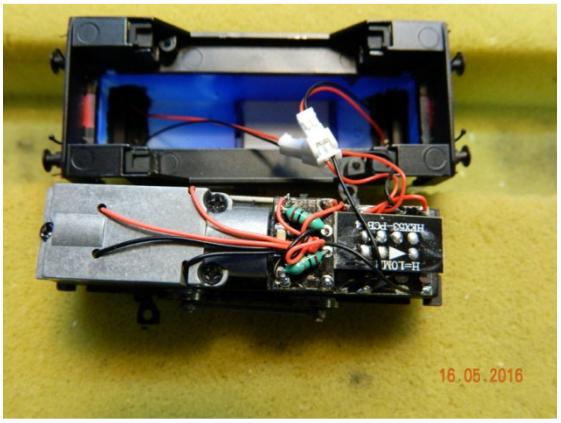
For this project I used the recommended TCS DP2X-UK and KA2 Stay Alive.

Step 1 Separate the body from the chassis.

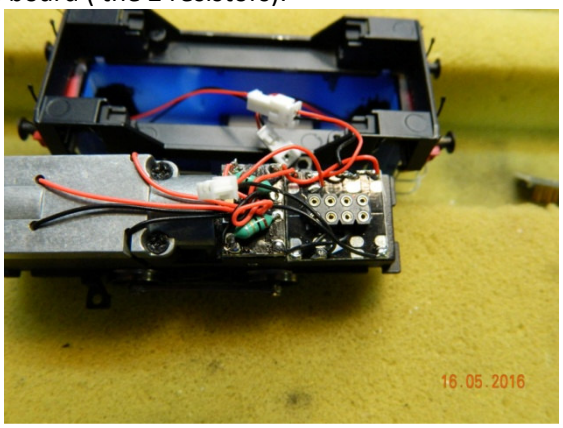


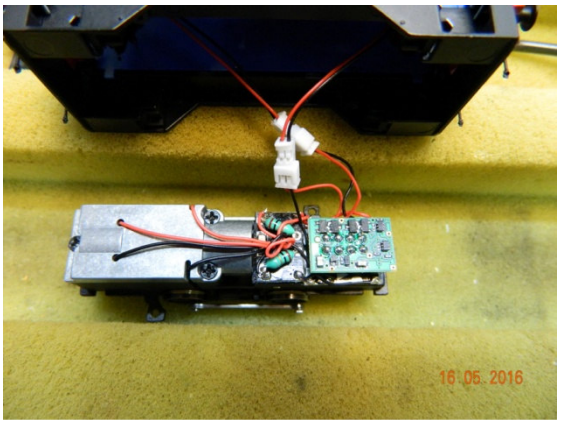


To do this you need to remove the couplers and the 2 screws diagonally opposite each other next to the wheels. The chassis should now easily slide out.

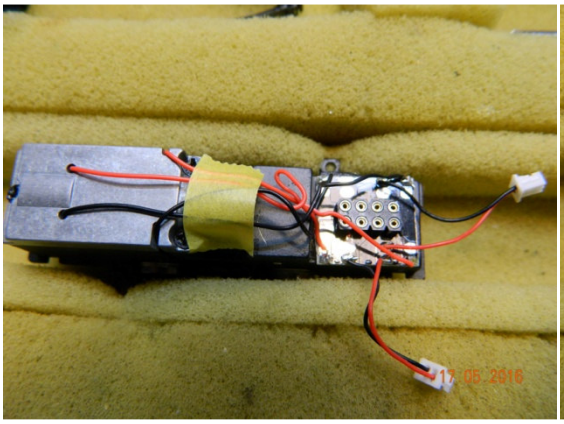
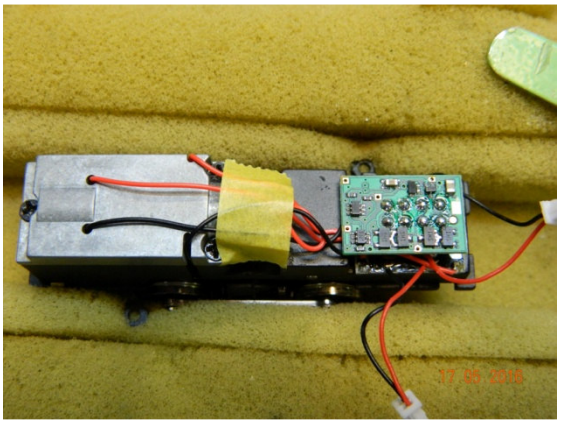


As you can see in the above photo the headlights are fitted with a plug and socket. Makes it very easy to separate body from chassis. Just mark each so as you know which one goes where. You can also see the dummy plug and the radio suppression board (the 2 resistors).





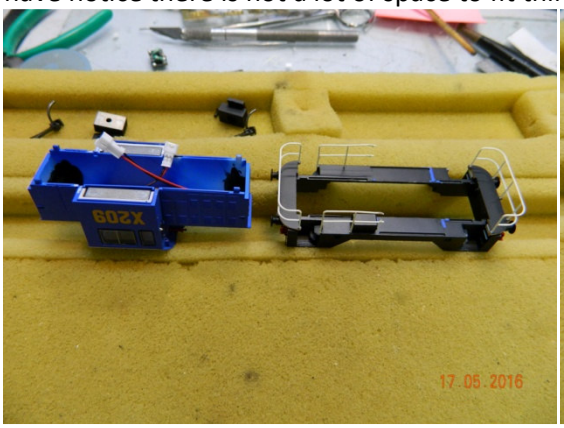
Once you remove the dummy plug it is just a straight swap for the decoder. In the above photos you will notice the decoder overhangs the chassis a little. The chassis will go back into the body but it is a tight fit. Also the decoder does not sit all the way down, sits up on the resistor board.

To solve this problem you remove the board with the 2 resistors as this is not required once the loco is converted to DCC. Both the boards are held on with double side tape. Next you rotate the socket board 180deg and stick back down. Next de-solder the motor wires from the resistor board and the resistor board wires from the socket board. Re-solder the wires form the motor to the socket board. Red wire to red wire solder pad and black wire to black wire solder pad. Refit the decoder remember to rotate it 180deg, it will now sit down flat and slide a lot easier into the body.

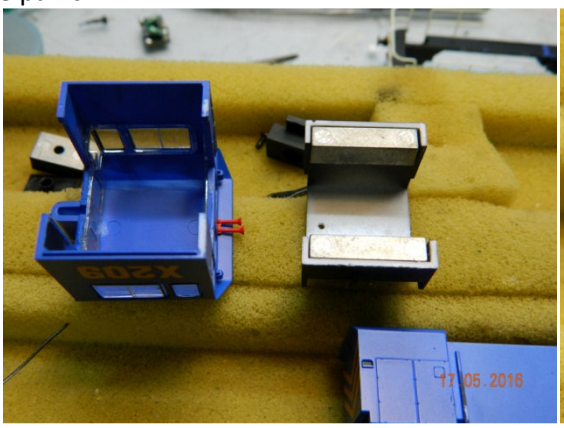
Fitting the Stay alive.

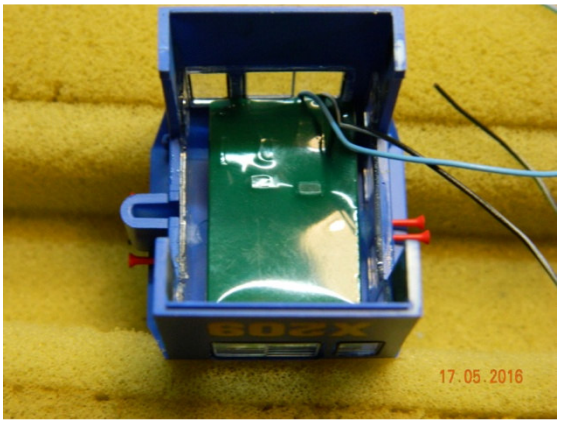
As you would have notice there is not a lot of space to fit things. The only place to fit the KA2 is in the roof of the cab.



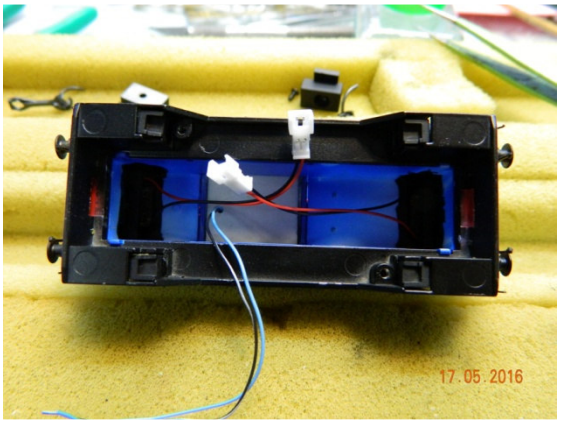


You will need to separate the body from the walkways. The body is held to the walkway by 4 lugs in each corner. Carefully remove the hand rails from the cab, warning these are easily damaged. Then squeeze the corners in to release the holding lugs and gently prize apart. Next the cab should easily slide off the body. You may have to squeeze the body in to break the paint.

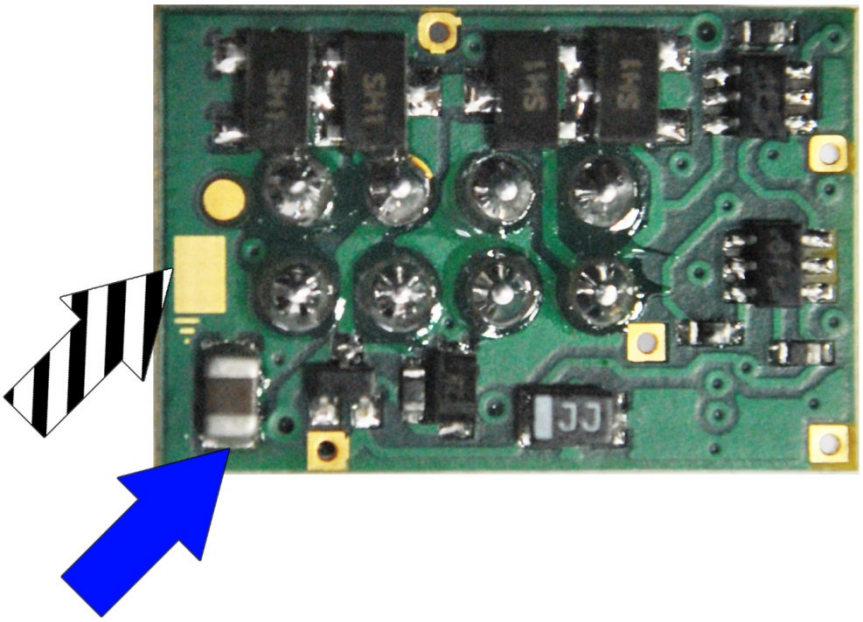




Next you will need to slide the cad interior out. This may take a little bit of gentle prising as the paint may have stuck the parts together. Running around the edge with a sharp knife blade will help. Once you have the interior out you will need to drill a 1.2 to 1.3mm hole in one end to pass the wires through. The stay alive is fitted with a plug you will need to cut this off as it is not needed. Leave as much wire as you can. Next secure the stay alive in the roof of the cab with some doubled sided tape. As shown above.



Next push the wires through the hole in the interior and reinsert it back into the cab. Reversing the above procedure reassemble the body. Being careful of the hand rails as they are easily damaged. Now we are all back together as in the above photo you need to attach the stay alive to the decoder.



The above photo shows where to solder the wires. Shorten the wires down to a comfortable length to allow you to remove the body to service the loco. The black wire goes to the solder pad marked with the black and white arrow. The blue wire is soldered to the end of the component marked with the blue arrow.
Once you have soldered the wires reassemble the loco adjust the required CV's as per the instructions with the stay alive and give it a test. I found the my loco will run for about 10 seconds when you pick it up off the tracks will running. Once the power is off the lights will fade off in around 20 to 30 seconds.
Happy modelling.
Dave Pallas.