

# Austrains BL/G/81-class – Decoders, Dismantling and Light switches.

## Part 1

*By Dan Carmody*

Have you purchased an Austrains ANR BL-class (or Victorian G or NSW 81-class) Loco? If yes, have you tried to put a decoder in to the loco yet? If the answer is no, then the following may help you! This is part one of possibly two parts for a decoder installation into an Austrains BL-class loco. From here on in, when the BL is mentioned, the following also applies to the sister classes of Victorian G and New South Wales 81 classes. This article will discuss the light switches on the bottom of the loco and how to dismantle the loco. Part two, if I get around to it, ☺ will discuss installing a sound decoder into the loco.

### Dismantling the loco.

According to Austrains, the factory mucked up the way the chassis and body are attached. For whatever reason, the factory attached the body to the chassis with four screws. The bad news is that these screws are partially under each bogie and it is not possible to get to the screws without dismantling the bogies! BOTHER! The body was meant to be held on, only by the couplers. This is how I did it...

- 1) unscrew the couplers and place carefully to one side.
- 2) The centre brake cylinder on each bogie, restricts access to these offending screws. Using a small flat head screw driver, gently lever out the brake cylinder from the bogie side frame. The cylinder may come out by itself, or it may take two or more cylinders out. I had both occur to me.
  - a. Figures 1 and 2 shows the two alternate cylinder options.
- 3) Remove the screws and discard. They are not needed. I used a tweezer to lift the screw out once unscrewed.
- 4) Replace the brake cylinders by carefully pushing the items back in with tweezers. Fortunately, they are a press fit.



Figure 1. Cylinders removed to expose unnecessary screw. One of the light switches for number lights can also be seen to the left.

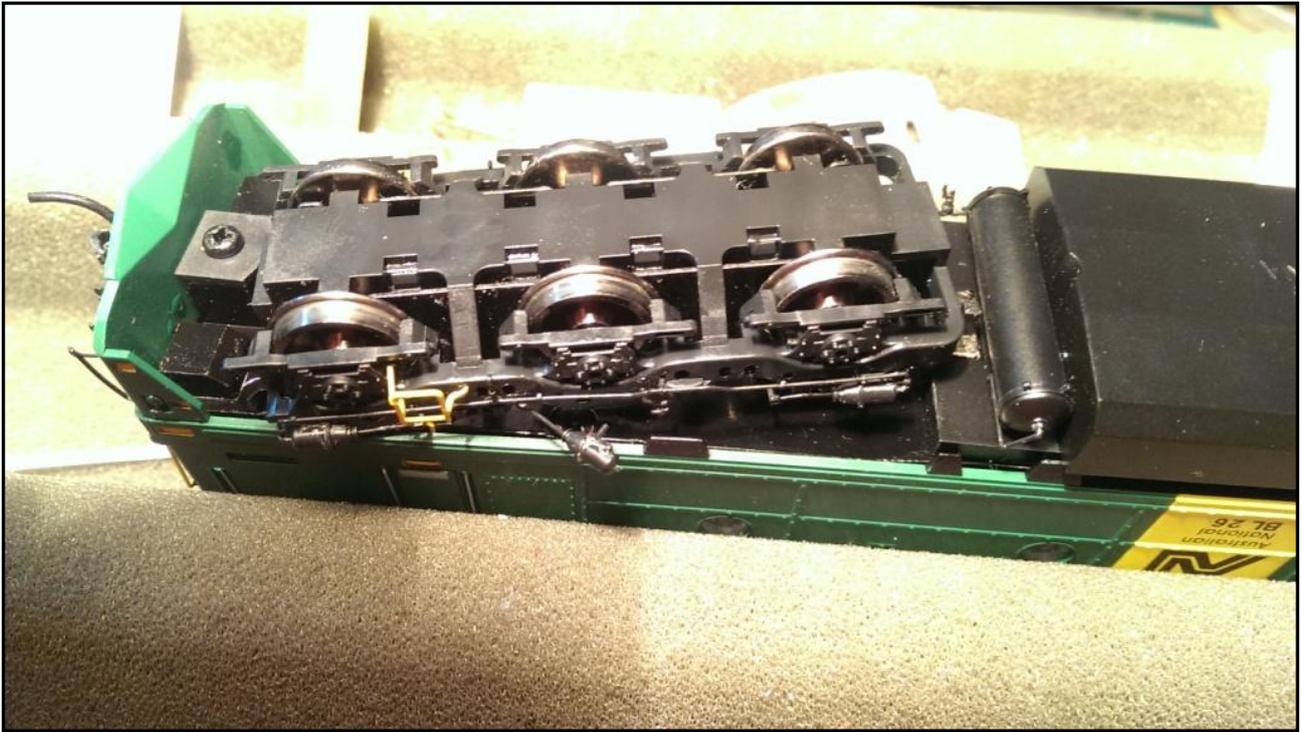


Figure 2. One cylinder removed to expose the unnecessary screw. The tail marker light switch can be seen to the right of the bogie.

Make sure that all piping and cylinders go back to where they came from.

### **Lights, marker lights and number board lights!**

A conversation with John Eassie at the 2014 Liverpool Expo...

Me: *John, when I got my BL, there were no instructions for dismantling or how to operate the light switches.*

JE: *Put it on the track and play with it, see what happens!*

This wasn't entirely the answer I was looking for... Anyway, back home, loco on the track under DC power and start operating the light switches. There are three light switches. Two parallel to the sides at the A-end side of the fuel tank and one transverse mounted at the B-end side of the fuel tank. The B-end of the loco is the end with three radiator fans on the roof. By altering these switches you can:

- 1) Have the red tail lights on/off.
- 2) The A end number lights off while the B end number lights are on (or vice versa)
- 3) Both number lights on/off.

Hopefully the following diagram (figure 3) on the following page will assist you with light operation.

### **Thoughts on decoder installation**

Once I had the lid off, I was rather disappointed to see how the loco was wired up. Austrains, for whatever reason, seem to invert the PCB/Decoder plug as compared to other manufacturers. Austrains' PCB board has a "male" DCC plug unlike others who usually have a "female" plug. To operate the loco, the female plug is plugged onto the PCB. For non-sound operation, this probably doesn't matter much, a standard DCC decoder can just plug in. For sound though, the wires to lights, pick-ups etc are all over the place. This affects where/how you place the decoder, and installing a speaker. There is provision for a speaker but it is fouled by wires. Also, as wired, I don't know what happens to these light functions when you install a decoder. Having seen this, I decided to leave decoding for another day! 😊 😊

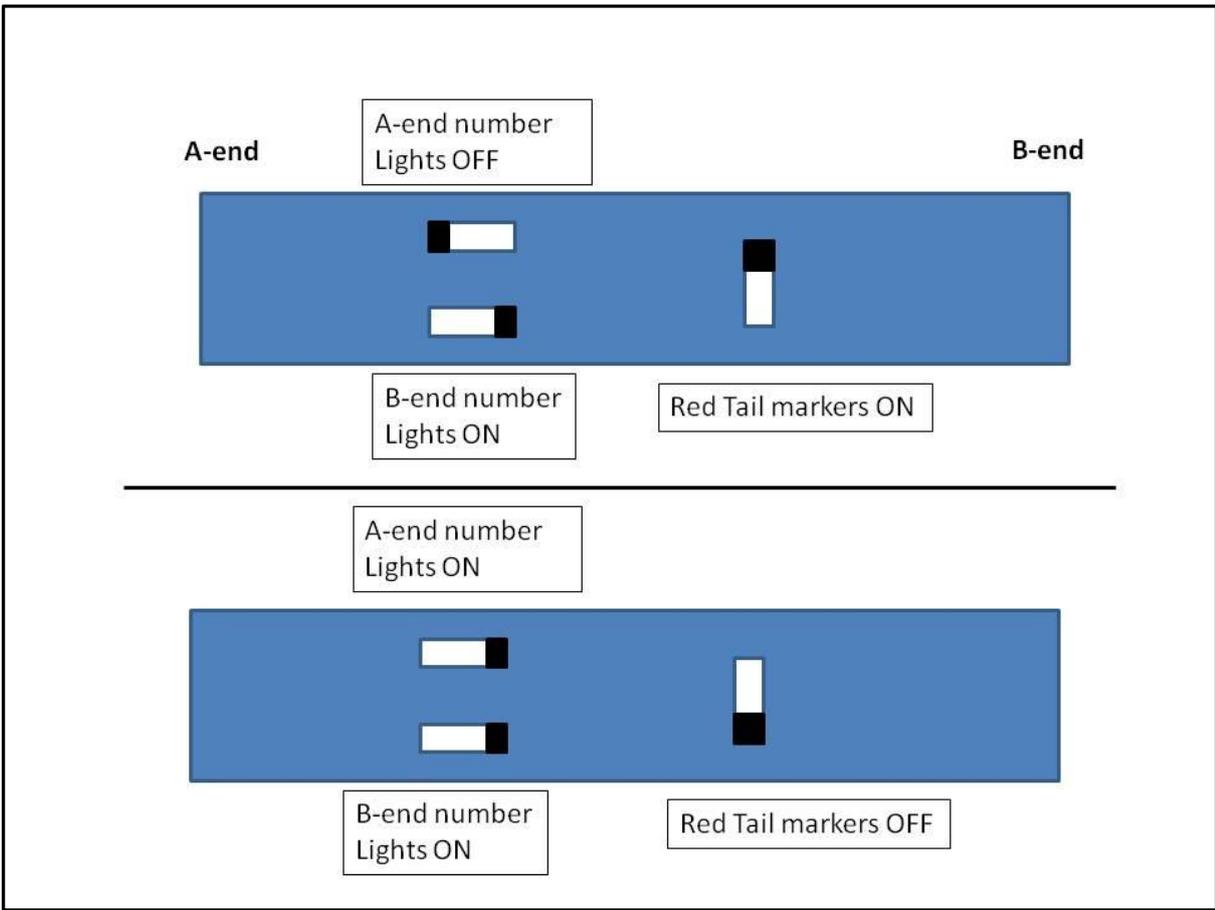


Figure 3. Light switch positions.