## The Wombat 30T DCC Installs

This morning I started the sound install in a Wombat. When I first took it out of the box, popped the body off the tender, unplugged the rear markers and removed the DC plug.



I then plugged a TCS DP2X into the socket - the DP2X was new out of the box also. With no programming except to turn off DC I started the test.



I left the European bits on the board and started with the throttle set on 28 speed steps. It took off a little too quick for my liking. I then did the same in 128 speed steps - much better start but still a little too quick.



I then removed the European bits - two capacitors and two inductors - I then wired links in place of the inductors.

In 28 step mode - a much better start - just creeping on step 1. In 128 steps - a perfect start in step 1 I had to look really hard at the con rods to see the movement.



I then removed all the "extras" from inside the tender. I will finish the install after lunch. I am taking photos at every step so anyone can see what to do.



The two black wires sticking up are the 2 wires from the pickups – one on either side.



This shows the transducer mounted and a strip of PCB sleeper with four sections mounted on one side. The Keep Alive capacitor is mounted on one end. The other sections are the function wire for the back lights, and the two rail pickups.



Here are two Wombat tenders. The one at the top is the one I am doing today, the one below is using a piece of Vero Board set up the same as the PCB sleeper – and the transducer is mounted sideways.



Here the wires from the decoder are soldered to the plug that sits at the front of the tender. For simplicity, I have used the yellow wire for the cab light. The blank pad (fourth from the top) will get the wire for the Firebox flicker.



All done - only needs the body clipped back on.



The PCB with the SMD LED and SMD Resistor (3K3) have been attached to the underside of the chassis – still to be painted black. The brown wire comes from the blank pin on the plug. The black wire is attached to the pickup plate on the left side. There is also a piece of silicone tube on the draw bar pin on the tender – lees strain on the plug and its cables.



Shows cab light (F1) and rear marker lights. The rear lights are too bright as is so they have been turned down with a CV on the decoder.

See next photo for the dimmed lights.



Much better brightness. If your decoder does not have the ability to set the light dimmer – insert a 3K3 resistor in the black lead to the lights.



This one shows the cab light and the firebox flicker. There are two setting for the flicker – just normal flick or Smart flicker which flickers brighter when the fire stokes the fire or the loco workers harder.



- F0 = Headlight or Rear Markers
- F1 = Cab Light
- F2 = Whistle
- F3 = Short Whistle
- F4 = Firebox Flicker
- F5 = Drift On
- F6 = Drift Off
- F7 = Brake On / Brake Off
- F8 = Mute
- F 9 = Wheel Slip
- F10 = Blowdown
- F11 = Cylinder Cocks
- F12 = Brake Select.

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