"A1 Peppercorn, part 27, completion"

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It's not over until the Fat Controller blows his whistle! (not a reference to anyone at our track of course!).

So, I am now well into the shakedown period, having completed numerous laps of the track on several sessions. I guess the main issue has been with the lubricator, and of course the fireman! Firstly, the lubricator wasn't working at all, and after fixing this it was probably over lubricating, not a problem, only that with only a small tank the oil runs out very quickly. Considering this lubricator is feeding three cylinders, then its size is not really adequate. There is plenty of room to fit a larger tank, however it is located between the frames and driven of the central driving wheels. There wouldn't be a commercially available version that would fit without considerable modification, so I am building a new tank and refitting the old pump mechanism. My plan will be to upgrade the pump and ratchet at a later date, but as the current one works, that can be done later. You can see the new tank alongside the old one in the picture. Just needs to be fitted now.

Another issue that became obvious as soon as you start running were the injector water feed valves, these were a screw down design and became very irritating to use. To avoid a major change, I was able to modify the existing valve bodies to work on a quarter turn. This proved to be a much better arrangement for simpler operation. There is enough other stuff going on during the driving, so the simpler the better, particularly for a novice driver like me.

What I also noticed was that the axle boxes on the front bogie were at the top of their travel and although it seemed to work OK, this was far from ideal. After considering the options I decided to reduce the diameter of the wheels by taking an 1/8" off. This solved the problem and actually the wheels look better proportioned now, so I am wondering if they should have been this size all along?

During the build I think I mentioned that I had fitted LEDs into the electrical headlamps, with a view to making them operational at some point. The brass housings were machined out to fit the LED and resistor. One side of the LED is wired to the brass housing as an earth return and the other via

the resistor to a feed wire. You select the resistor based upon the supply voltage, which in my case was going to be a 3v battery. The LEDs are

high intensity so should be visible in daylight. Now I needed to find a place to hide the battery. The A1's actually had a steam driven electrical generator located behind the smoke deflector, an ideal place to also limit the wiring. I was able to find a 3v battery in a half AA size which is ideal to be hidden inside a mock generator.

I made the generator out of bits from my scrap bin, the main body housing bored out to the battery diameter and this screws in the base. With a spring in the bottom and a terminal in the base this provides the battery contacts. I was also able to find a waterproof push switch the correct diameter, this was glued into the generator base and is accessible behind the smoke deflector. You can see the final version in the picture. The wiring to the lamps is via 1/8" copper tube that I have used like trunking and a small brass junction box behind the front steps. Probably too much work in the end, but it is done now and at least gives a talking point.

So, from now on I am hoping that everything is going to be regular maintenance. Hoping to get many more runs in this summer so that I can improve my firing skills.

I hope the story of this build hasn't been too tedious, and I will get Dereck to hold a page for the next project, whatever that is going to be.