

## Running Maintenance on the RAL Fleet: QRR 1100

- Seth Adams



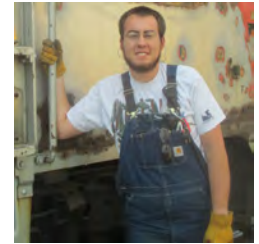
I came up to the museum for a couple days in August looking for some corrective maintenance items to perform on our RAL fleet (my WP 501 project is on hold awaiting fuel injectors). I had come up with a list and asked others (David Elems) what issues the locomotives had, and so set out to try and fix some of them. I worked on the 1100 from the night of August 19<sup>th</sup> through 20<sup>th</sup>. Phil Schmierer was on property and helped me with the air box inspection.

The after action report includes:

1. QRR 1100 Compressor Unloader Magnet Valve: Replaced magnet valve for compressor unloader with one from stock. Utilized old coil.
2. QRR 1100 Deadman pedal valve removal: Old spool valve under cab floor that was associated with a dead man pedal was removed from service. PCS type switch was bypassed for the time being. This should be set to trigger when the BP goes into emergency.
3. Installed new bell ringer cartridge.
4. Performed airbox inspection: Most cylinders looked smooth, and had evidence of glazing (brown stains). No cross-hatching was present (not great....) Rings looked to have decent life left in them, and most were springy. Pistons were wet, and oil was prevalent around nearly all compression rings. Blower discharge area had evidence of carbon, but no telltale sign of oil streaks from a blown seal.
5. Cleaned oil stain on fireman's side of hood, cleaned fireman's side of engine and engine compartment floor. Utilized kerosene to cut caked on oil on exterior of locomotive and Purple Power (Super Clean) on engine. I could likely have used the Purple for both.

## Golf Cart Battery Replacement

- Ethan Doty



It all started back in late May when the Golf Cart had the first battery problem. The usual symptoms, wouldn't last long, sometimes wouldn't go after a charge and was sluggish. So it was temporarily pulled from service and I tested the batteries to find the problem; one battery was dead and the others was barely there. I went into the Battery House to our stash of replacements to see if any of those were any good, but only one held up to the battery tester. So the dead one was replaced and the weak one was told to soldier on, which it did till mid-July.

Mid-July rolls around and it's starting to act up again. Greg Elems and Eugene Vicknair try to use the cart. It clears the shop door and promptly dies; leading me to declare it out of service because there is no point trying to use it and we didn't have any more spares. In response to that email, six members came forward to donate money towards the batteries to return the cart to service without a cost to the society since it was declared that we were no longer will piecemeal the cart together anymore. Charlie Spikes, Greg Elems, Matt Elems, Bob Sims, Bart Hansen, Loren Ross all donated towards it, Thank you! Charlie and Loren handled the transport of the batteries for us. The cost of the replacement batteries was \$732 plus tax.

Vince Bonfiglio took on the installation work and in the process found out that the old batteries were installed backwards explaining why some things weren't working on the cart. Having found a proper wiring diagram for our cart, he proceeded to fix it properly and document all the work done in a file. Now the cart runs nicely, has working headlights, taillights and the turn signals at least light up steady when the headlights are on.

