

SLPS PCC 1743 Progress Report

STL PS 1743 Progress Report 1/23 to 1/28/16

1/23/16

1. Four new 8 volt deep cycle batteries were installed and wired.
2. Steve B installed bonding jumpers on all 4 track brakes.

1/24/16

1. Pilot motor resistor received from Bill Wall was packaged and mailed to Jeff Hackner at Seashore Trolley Museum.

1/26/16

1. Adjusted the voltage regulator down from 49.5 ohms to 46.7 ohms on the 100 ohm resistor to reduce the base to emitter voltage. The batteries need to charge at 35.5 VDC. The resistor was previously set to charge the 36 volt batteries at 41 VDC.
2. Steve B and I went to the streetcar shed and found a complete set of toggle switches. We removed the top and bottom contact for the second position on the track brake switch and installed them on the existing toggle. They have a lot more contact material and the toggle switch does not have to be pushed so hard to close the second position contacts.
3. Steve B installed covers on the drum brake actuators.
4. Insulated limit switch wires and wire ends around drum brake relay B3. The insulated wire ends will be left until the streetcar is running normally and then remove them. They might be needed for something we do not know about now.
5. Removed original failed ABR shunt coil and took it home for examination

1/27/16

1. Took failed ABR shunt coil apart while taking photos at each stage. The outer shunt winding that connected to D2 series coil was removed to expose the inner wiggle coil that failed. The wiggle winding had 218 turns and was 31.9 feet long. The closest wire gauge is 35 at 10.5 ohms for 31.9 feet. This will be of use if we decide to rewind the coil. The outer coil should be able to be rewound on top of the inner coil.

1/28/16

1. Added distilled water to the batteries to bring them up to the correct level.
2. Adjusted the voltage regulator to 35.7 volts. Tested with pole up for 600 VDC and MG running, took 2 tries. The slider on the 100 ohm resistor needed to move toward GA not ground.
3. The toggle switch assembly is being disassembled to save all of the contacts. It is badly rusted and will likely be scrapped when the contact removal is completed.
4. Replaced rebuilt ABR relay with A5 coil. Waiting to see if someone has a spare A4 coil, GE part number is 4739413. On the original ABR shunt coil installed in 1743 I labeled the wiggle wire that connected to B6. This should be the correct polarity so that all of the coils pull. Looking at the back of the shunt coil with the flat side on a table the top wire is B6.
5. Attempted to run sequence test and found that when C1 is manually closed C2 and B1-B2 alternate. We will try to find a way around this without using 600 volts to run the sequence test.

Plans for Saturday 1/30/16

1. Add Conducto Lube to track brake bonding jumper connections then paint with primer. Paint connections black when the primer is dry to prevent corrosion and increase bond integrity.