

# SLPS PCC 1743 Progress Report

## STL PS 1743 Progress Report 5/7 to 5/13/16

Saturday, 5/7

This is the report Steve Binning sent after operating the car on Saturday.

1. Testing of PS 1743 was done today primarily on the north side of the loop track. Several test runs were done on the main-line also.
2. The initial test of the car today was to check body-to-truck wires while the truck was on the loop track. Both trucks were checked while they were turned each direction. All wires felt like they had sufficient slack while on the loop track. They should be checked again for wear prior to May 21.
3. The second test involved an accurate understanding of the pedal pressures required to operate the car smoothly. After testing the car going forward and backward I found the pedal pressures to be nominal. Acceleration and braking pedal pressure felt very acceptable.
4. The backup Controller (BUC) was the final test. After various pedal sequences I determined the most workable method to use the BUC. Ensure that the Deadman (DM) pedal is completely up.
  - a. Press the toe portion of the brake pedal, this will cause the brake heel pedal to pop up.
  - b. Press DM pedal down completely, release slowly. DM pedal should come up about halfway.
  - c. Press brake heel pedal to release. The DM should stay at the halfway position.
  - d. Put control handle in the reverse position and remove.
  - e. Move to the back end of the car.
5. Some notes found during testing; the DM pedal is very sensitive. Often while releasing the brake heel pedal the DM would also release a small amount and that would prevent the car from moving. I suspect that it could be very temperature sensitive also. This will require some additional pedal adjustments.
6. If the conductor is operating the car from the back the motorman must take care NOT to press the DM. This was found during testing. The conductor was operating the car using the BUC. When the BUC Pushbutton was released, and the DM is already pressed, the car continued to accelerate. This could be considered a runaway condition. When the conductor detects this condition the BUC handle should be moved to the right one notch. This will cause the car to begin braking. If the motorman detects the runaway condition he will have to release the DM AND the motorman will have to initiate braking.
7. At least 6 people test drove the car after instruction. No one commented on pedal pressures so I will take that as a positive. All we need is SteveS' blessing.
8. I explained to the volunteers how to setup and use the BUC. The setup was the method I have shown above. Everyone was able to operate the car without incident.

Tuesday, 5/10

1. The car was in the Abbot building, not in the shop.
2. Steve Binning and Steve Siegerist ran the car and noticed a burning smell in the back of the car when they were operating the backup controller. They will follow up on this on Thursday morning.
3. I painted the Wabash tank black on the outside in preparation for the tank being lifted by crane and set on the completed trucks on Monday.

Thursday, 5/12

1. The car was not moved into the shop until around 10:30.
2. I cleaned the oil and dirt off of the steel surrounding the pit and primed it with Rustoleum red.
3. I loosened the brake linkage and lengthened it ~ 1/8" since the backup controller would not operate with the brake pedal in the park position. There is almost 1/4" slop in the brake to controller arm pin and gear that rotates the brake controller. I should have marked the exact position of the brake controller in park before I removed the brake pedal. I think we need the controller to be just short of the service position. Ed Lindstrom commented that the adjustment required may be as little as a millimeter between not working and working. The car was not tested with 600 volts today.
4. Steve and I routed the ground and wire 5A from LB1. A hole was drilled through the back of the controller panel and the ground wire was connected to the ground terminal. A second hole was drilled in the bulkhead

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between the controllers and contactors and wire 5A was connected to the C1 coil. Both holes were bushed with plastic air tubing to protect the wires.

5. Wires near S3 were shortened and covered with heat shrink.

Plans for Saturday, next week and the near future.

1. Adjust the brake linkage until the back up controller operates with the brake pedal in park.
2. Install the three remaining covers.
3. Finish cleaning the inside and outside of the car until it sparkles.
4. Commission the car for passenger service for the SLPS PCC 1743 50<sup>th</sup> Anniversary of on Saturday, May 21<sup>st</sup>.
5. Complete the as-built drawings.