

# SLPS PCC 1743 Progress Report

## STL PS 1743 Progress Report 10/2 – 11/12/15

1. Worked with Steve Binning to route and fit motor and field cables. Made two shims from copper foil but was not thick enough to make connector fit properly.
2. Streetcar #44 repairs were completed and PCC 1743 was moved back with front truck over pit on 11/7.
3. Identified wiring to drum brake from fuse and wire 2B and track brakes from fuse. Started relocating junction box for drum brakes and found that the cables to the left and right actuators have to be swapped in order to use the existing cable under the front truck. Showed Ryan (the new county maintenance supervisor and electrician by trade) the problem getting the motor and field wiring cables to fit on to the motors and field connection. Ryan suggested getting new cable ends to splice on to the existing cables. We went out to look at car #44 to see if it would be possible to get the cables or ends off the Chicago Transit cars in the streetcar shed. It would be very difficult without the trucks over the pit. There is no pit in the streetcar shed.
4. The SE-2A drum brake actuators have only one 32 volt solenoid. The 600 volt fuse for 17MK5 drum brake actuator will be removed and wire will be insulated at the front and rear trucks.
5. Finished mounting junction box near front axle. Re-terminated drum brake cables. Added crimp terminals to #12 wires for drum brakes and limit switches. Fastened terminals for drum brakes with screws. Cut off screws and filed end. Slipped heat shrink tubing over terminals and shrunk with heat gun with assistance from Steve B.
6. Went out to MOPAC caboose and found terminals for #4 cables for track brakes. Used 1/4" bolt, washer and lock washer to clamp cables together. Steve B wrapped connection with electrical tape.
7. Attached commutator wires to motor #1 with a small amount of Conducto Lube inside connector. Installed small clamp and tightened castellated nut to align with cotter pin hole. It was noted that the clamp on the motor armature terminals is slightly shorter than the clamp on the motor field wiring terminals. Conducto Lube is a pure silver powder with mineral oil lubricant. It was originally purchased for the contacts on the reverser drum.
8. Steve and I agreed that instead of using shims or getting new cable ends from the Chicago Transit cars that we would use a belt sander to remove a small amount of rubber off the sealing part end of the connectors and see if that gave it the tight fit needed to prevent arcing. A silicone insulating compound may be applied to the seal of the connectors to make them watertight.