

SLPS PCC 1743 Progress Report

STL PS 1743 Progress Report 11/13 – 11/19/15

1. Steve Binning came in on Tuesday to help me complete the work on truck 1. Steve normally works on Thursday and Saturday.
2. Finished cleaning field terminals on motor 1, Cleaned armature and field terminals on motor 2 with modified battery cleaning brush. Applied Conducto Lube to connectors and positioned connectors on armature and field connections.
3. Removed cable clamps from field 1 and sprayed it with red insulating varnish to prevent cable clamps from shorting to ground through rubber on back of cable.
4. Removed all cable clamps from truck 1 because they no longer fit the back of the cables which have mushroomed over the years and set them on table. The insulating varnish was not allowed to completely dry and shows in photo.
5. It was decided that the clamps would be cleaned and the depression for the top of the cable would be filled with epoxy. An added benefit of using epoxy is that it is an insulator and will prevent shorts from the top of the cable connector to ground through the clamp.
6. Sent a message to Ed Lindstrom asking how he manages the old cable ends and clamps. I said that some of the cables had been spliced. Ed replied that they did the same as we did with a wire brush but also bead blasted the cables and connectors. Ed said that he found a local machine shop in San Diego that can make the cable connectors and knows another shop that can encapsulate them with rubber to duplicate the original cables.
7. While waiting for streetcar to be repositioned Steve and I reviewed the schematics to determine why contactor LB1 had not energized when 600 volts was applied to the pole. It was determined that the master controller 17KC24 pedal must be depressed slightly to the switching position. This explains why the wire from the CI contact to the LB1 coil did not have continuity.
8. Repositioned streetcar so truck 2 was over pit. Terminated drum and track brake cables under truck.
9. Cleaned armature and field cables and connector.
10. On arrival Thursday it was noted that the truck 1 cable clamps were missing from the table. The MOT was closed on winter hours and no community service workers were present. The St Louis County employees did not see anyone that should not have been in the maintenance building on Wednesday. Where they are is not known except by the person who moved or took them.
11. Neil determined that some cable clamps were available in the streetcar shed and Steve found 2 armature and 2 field clamps. Cable clamps from truck 2 were retrieved from the pit and all clamps were thoroughly cleaned on the cable side so epoxy would adhere.
12. All of the clamps were wrapped with painters tape to prevent the epoxy from running off of the edges. The armature clamps bolt holed were covered to prevent the epoxy from running through the hole. The field clamps were held at an angle by a wood shim and the epoxy was mixed and poured.
13. The field and armature clamps were heated with a heat gun (also use for heat shrink) to get the epoxy to set so the other end of the field clamps could be filled.
14. When the epoxy had set on all of the clamps they were hidden to finish curing so they could be installed next Tuesday.
15. PVC pipe was cut to the length of the 600 volt fuses for the track brakes, marked "no fuse" and inserted into the fuse holders.
16. Bob Leight and Karl Horn adjusted the track brakes on truck 1.