

SLPS PCC 1743 Progress Report

STL PS 1743 Progress Report 3/5 to 3/10/16

Saturday, 3/5/16

1. When checking continuity from 7A to 7C Steve found that connection to be open. He traced the problem to the connection on the resistor where the nut was loose, tightened it and corrected the problem.
2. The wire tracing and labeling is complete except for a few paper wire tags and ground wires.

Tuesday, 3/8/16

1. Steve retested some wires, tightened the nuts on some the aux contacts and completed the wire labels.
2. I completed the aux contacts on LB1 with the parts supplied by Ed Lindstrom. The new contact arm for ground required a new hole to be drilled and tapped so that the existing wires could be terminated. I replace both of the contact insulators, one was cracked and one was missing.
3. Steve and I prepared to run the sequence test Tuesday when the new resistor is temporarily installed.
4. Steve and I discussed what is needed to complete the car. We definitely need the correct ARR coil a new track brake buzzer.
5. I asked Steve if he knew of any 1700 PCC cars we might be able to get the parts from. Steve said that he thought the Leonard's Department PCC cars that were purchase by Tandy might be at DART and suggested I call Steve Siegerist. Steve Siegerist said that they had already gotten 2 sets of contactors and other parts form the cars and agreed to contact Harry Nicholls to see if the cars were still there. Harry Nicholls replied that the cars have not been scrapped and are on the property. A trip to Dallas, TX is in the planning.

Wednesday, 3/9/16

1. Received 8 ohm, 50 watt resistor ordered last Friday. It is shorter than the original resistor.
2. Worked on Auxiliary Circuits drawing and added track brake buzzer, headlight, marker light, sign lights and dimmer.

Thursday, 3/10/16

1. Installed 8 ohm, 50 watt resistor with jumper to left screw.
2. Trimmed and installed flexible plastic isolator between frame of LB1 and aux contacts with tie wrap.
3. Removed spring from PC pedal and lubricated mechanism so PC can be operated under the car when the Sequence Test is performed.
4. Steve suggested that if a jumper was installed from wire 7 to 7C on top of the ABR relay the pilot motor would run slow enough that there would be time to determine which contactors energized and de-energized during the Sequence Test. I readily agreed and Steve installed the jumper.
5. The Sequence Test was executed successfully up to the step where the brake pedal is pressed and released. Contactor B3 was held actuated by the 8 ohm resistor which did not heat up beyond warm during the test.
6. I then suggested that next Tuesday I find a contactor in the barn with 3 normally open contacts and a 32 volt coil to substitute for C1 which requires manual closing during the Sequence Test. I will use the 5 and 5A contacts on LB1 to actuate the 32 volt coil. This will allow the test to run the same as if 600 volts were connected to LB1. Steve agreed.
7. Steve will not be at the MOT on Saturday. He will be resetting the field after each competition at the First Robotics Regional Championship this weekend.
8. Al Weber said that he has the capability to rewind the ABR coil at home.
9. Teresa Militello, Curator of Library and Archives, said that she was able to open the Visio Connection Diagram I sent her on a Windows 95 computer in the library.

Plans for next week and the near future.

1. Re-run and complete the Sequence Test with the substitute C1 contactor.

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2. Re-verify integrity of wiring to toggle switches, fuses and fuse clips, wiring to propulsion circuits to prevent low voltage problems from occurring in the future. Tighten connections and re-terminate wires if necessary.
3. Make temporary wiring permanent.
4. Isolate remaining wiring that cannot be traced.
5. Retest the brakes and attempt to move car slowly forward and reverse in the shop.
6. If the ABR relay does not work properly try adjusting it first, if that doesn't work see if we can find a replacement coil in Dallas or have the coil rewound.
7. See what other parts we can find the parts we need in Dallas.
8. Continue work on the auxiliary circuits drawings. As-Build the connection diagram when the car is running.