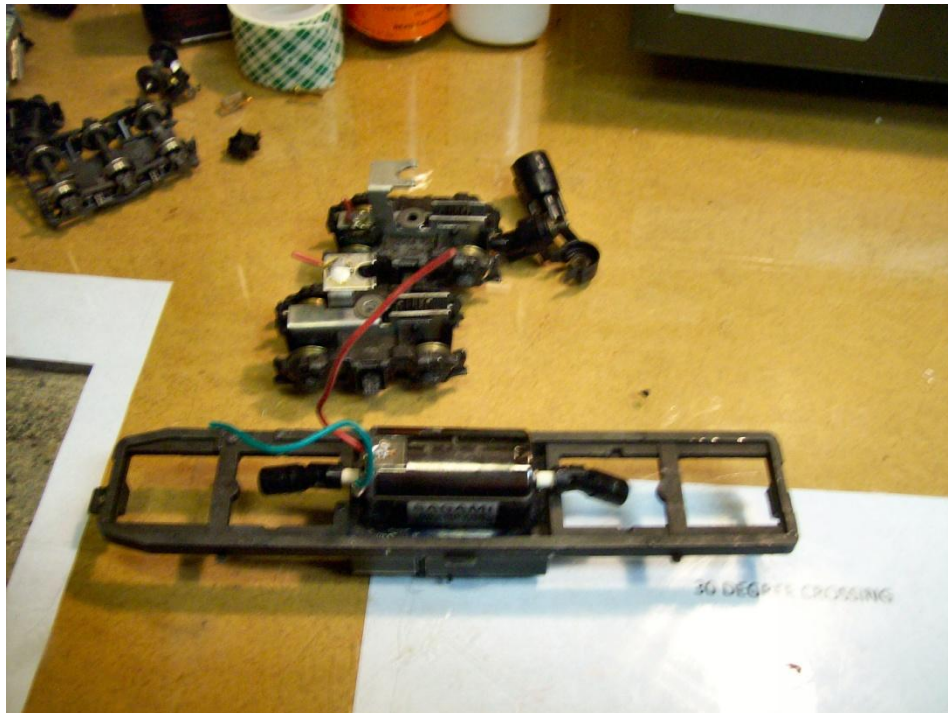
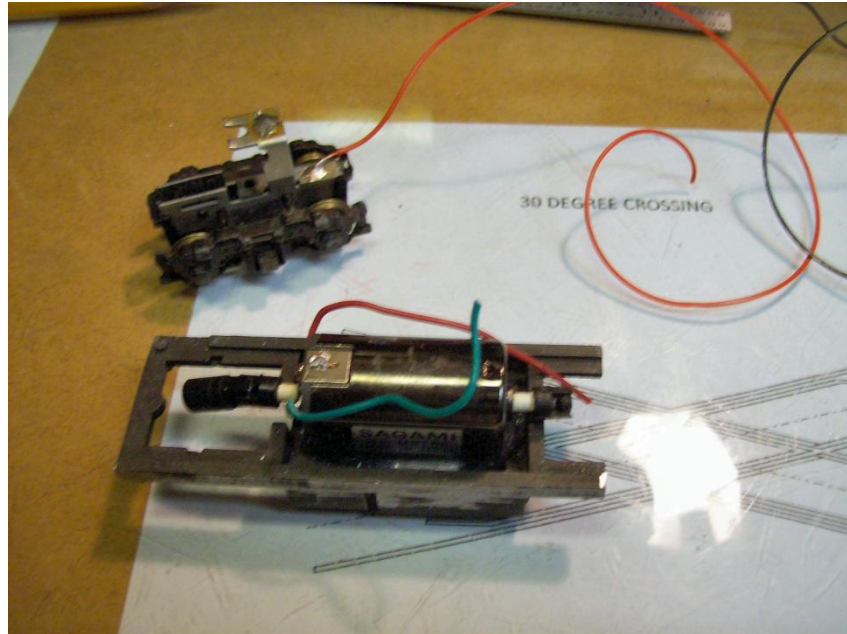


SANTA FE INTERURBAN
A 2014 exercise in train trashing
By Jerry Hansz
Part II

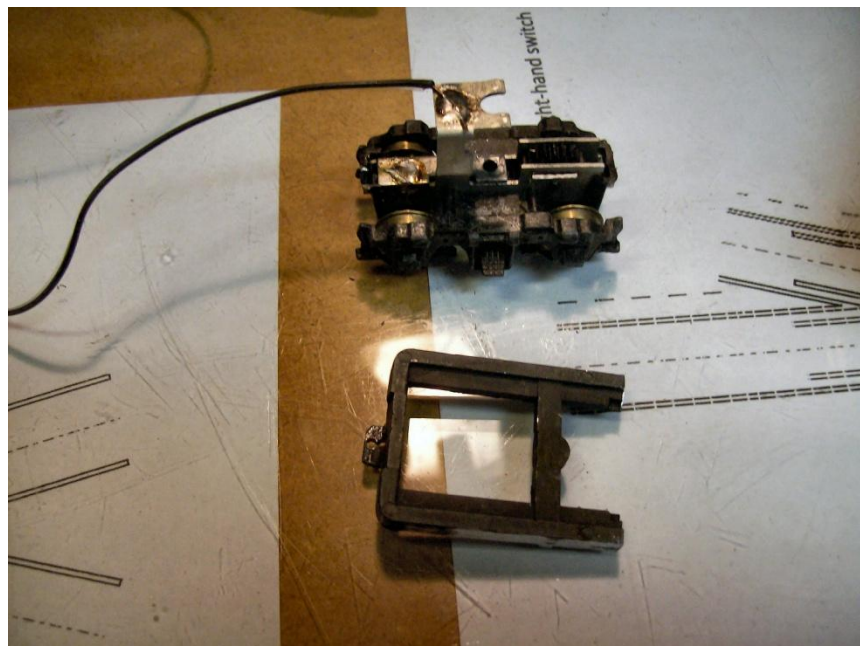
The first car doesn't perform well. So much for pre-testing motors! I have another same type coach. I went looking for better power, and found an old GP7 with a can motor. It ran well on DC, so it was a candidate for sacrifice! After the shell was removed, the chassis looked like this:



The truck mounting points need to be 6 7/8 inches apart, so I cut the frame at the front to clear the body front and behind the motor to extend the rear truck. There were tabs on the sides of the frame, which were filed down to permit a tight fit to the body.



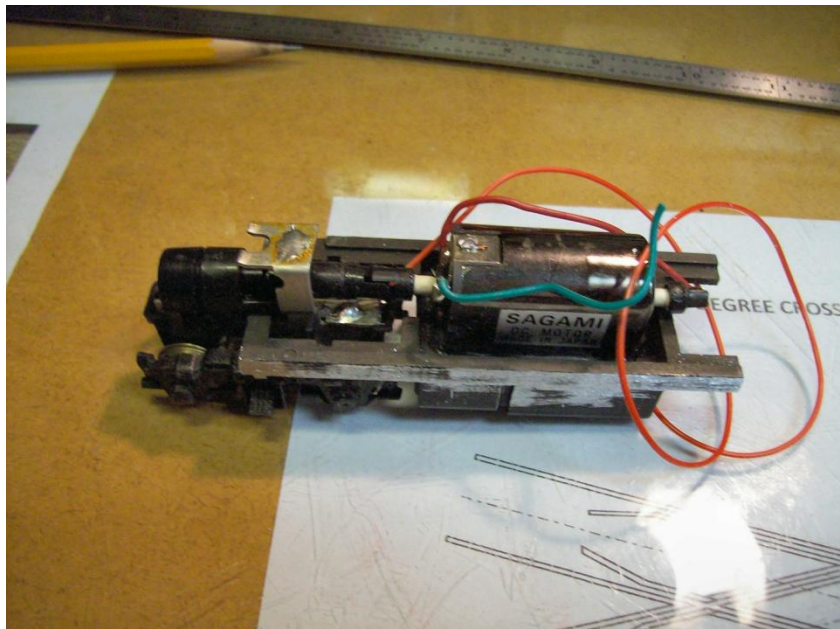
Frame front and front truck



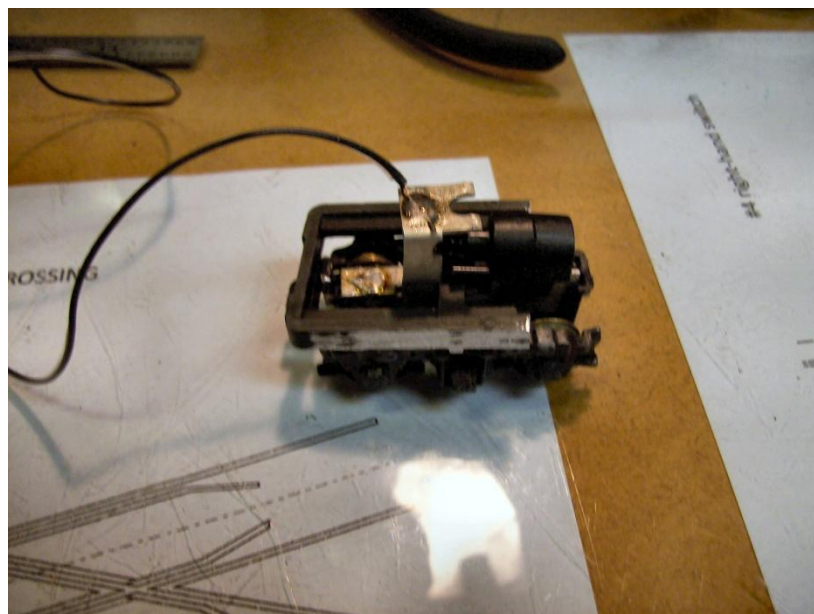
Frame rear and rear truck

I checked the truck's polarity. As before, the front truck had contact to the left rail with a wire soldered to the frame. The rear truck had contact to the right rail with a wire soldered to the tower. I want front to right and rear to left, so I removed the wires and soldered new wires. With the trucks reversed, the front truck contacts the right rail, with a red wire on the frame. The rear truck contacts the left rail, with a black wire on the frame. These wires have the correct colors to connect to a DCC decoder.

I removed the worm gear from the rear truck, since I don't have a long shaft to connect it to the motor. The front truck will have to do the work! The trucks were assembled to their respective frame sections, which were glued to the body shell.

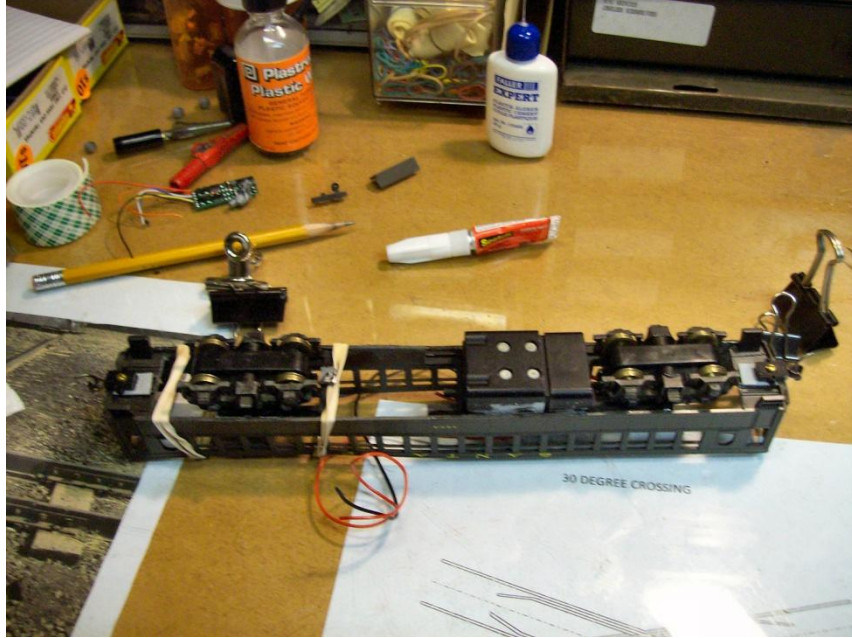


Front frame and truck assembled



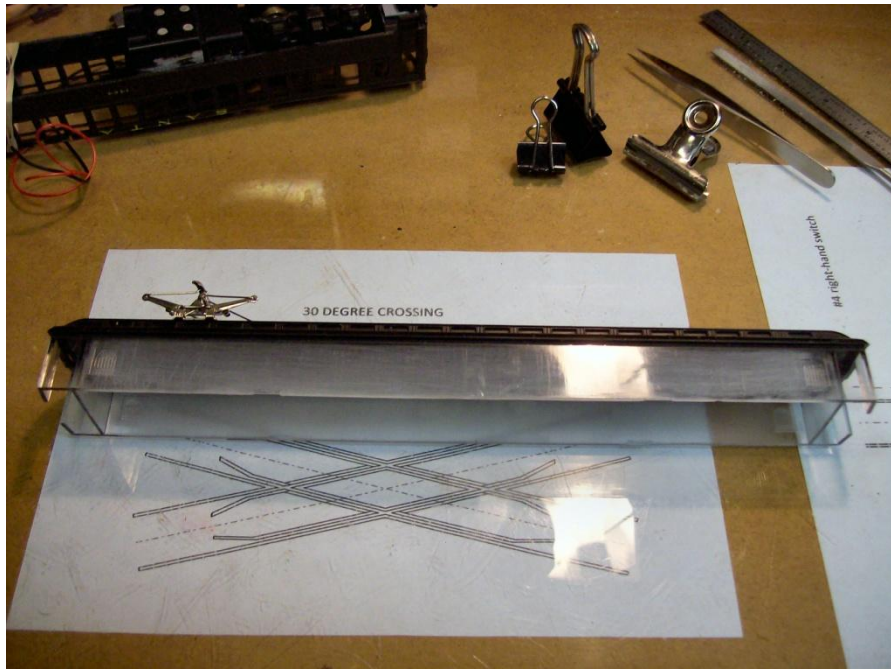
Rear frame and truck assembled

The front and rear frames were located in the shell, and secured with “super glue”. The bottom of the truck frames were located as flush as possible (by eyeball) with the bottom of the shell.



Truck frames mounted

The clear window portion of the roof shell was scarred, probably by glue. Attempts to remove the scarring didn't work, so I 'frosted' it with emery cloth. (I had planned to make some sort of overlay with passenger outlines anyway.) The mounting tabs on the bottom of the roof shell were removed and the area was smoothed.

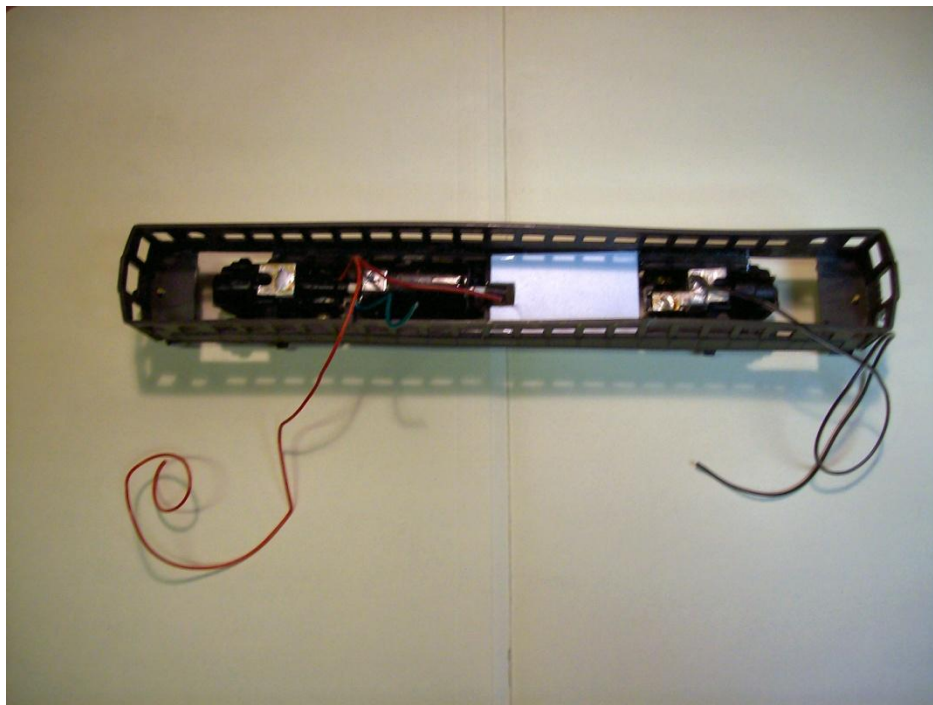


Windows 'frosted'

My original interurban had two pantographs mounted. I removed one and installed it on this unit. The Southern Pacific interurban photo below shows only one pantograph.

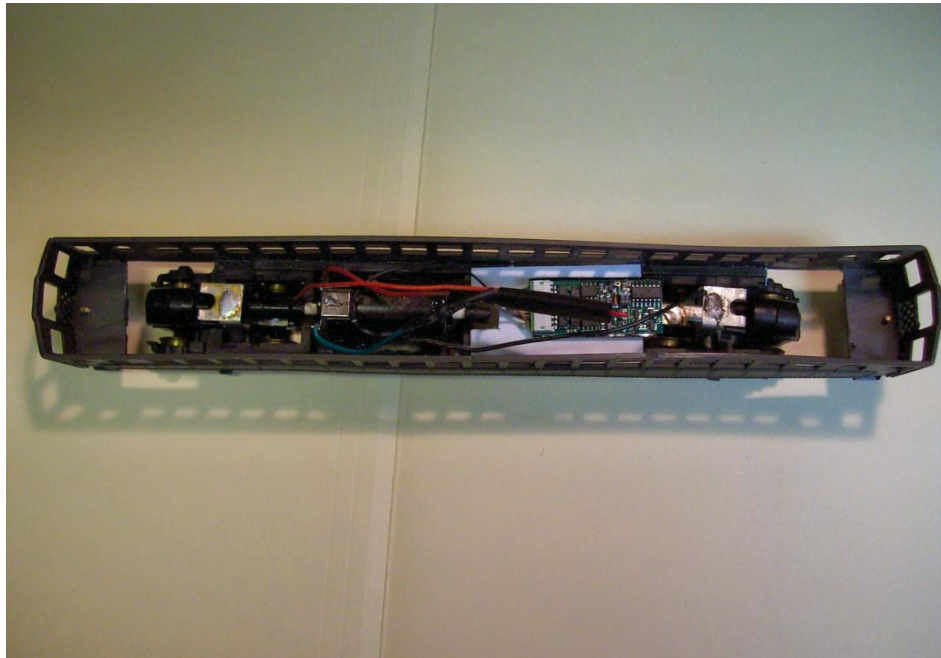


After the glue dried on the chassis, a plastic insert was glued between the front and rear frames to support the DCC decoder and close up some of the open area. It was notched to clear the rear shaft of the can motor.



Assembled car with center insert.

I installed the NCE D13SR decoder on the center insert with double-sided tape. Wires were soldered and protected with shrink tubing.



NCE D13SR decoder installed

The car was placed on the programming track. It responded to the address 1464. NCE is 011, version 036. When placed on the main line it didn't run! Inspection showed that the front truck had moved off the mounting pin, which caused the shaft to slip out of contact. Apparently the worm gear cover doesn't fit tightly enough to keep the truck in place. Back to the drawing board! The unit does look nice though. When I get some black brush paint, I'll touch up the undercarriage. Also will need some kind of headlight housing! I may add wires to get pickup from both sides of both trucks.



Assembled car

I disassembled the front truck. With the worm gear removed, the truck wouldn't move! The can motor draws so little current that the jam wasn't apparent. I removed the bottom cover on the truck and found a small solder chunk in the gears. After removing the obstruction, I greased the gears and reassembled the truck and installed it in the frame. The truck now stays on the mounting pin. The jammed gears apparently caused it to come off the pin. The car now runs, although slow at maximum DCC setting. Again, using old tired parts gets poor results!

We'll call it a day!