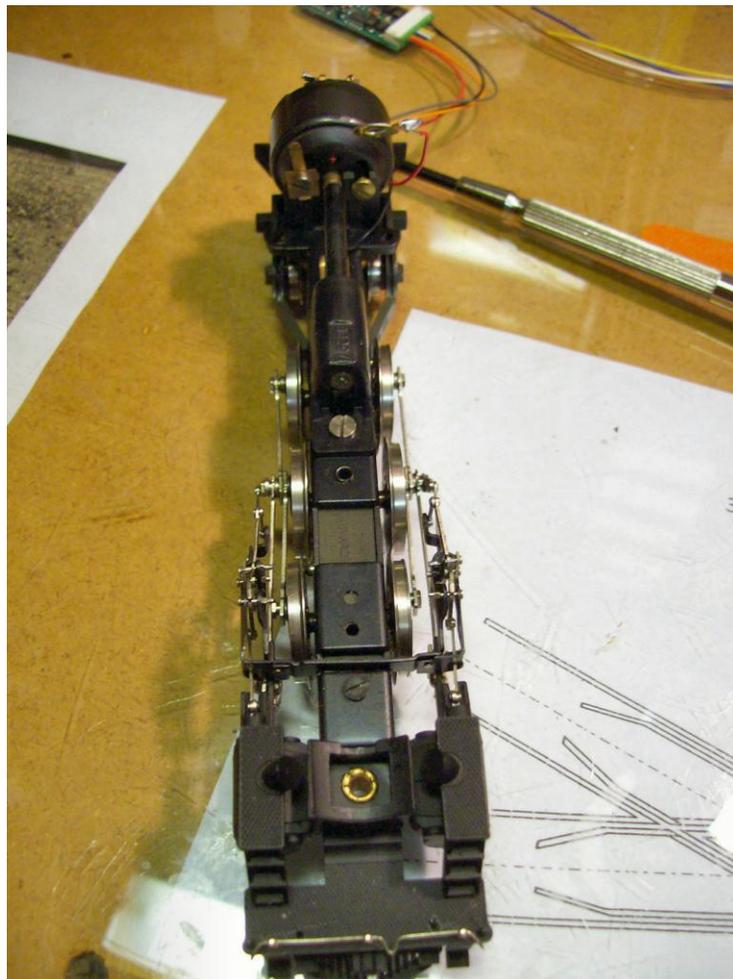


ANOTHER DECODER INSTALLATION

by Jerry Hansz

We're never satisfied! Needed more DCC steam locomotives! I had a nice Rivarossi 4-6-2 I picked up from Irv Johnson. It ran pretty well, and the stall current was low enough, so I dived in. I used the NCE D13SRJ decoder, which has a NMRA 9-pin quick disconnect connector and cable.

The boiler shell comes off pretty easy. Remove the lead truck mounting screw. Remove one screw at the front of the boiler, and it comes off.



I needed to isolate the motor brushes. One brush connects to an insulated rivet that connects to the tender drawbar. The tender left-hand wheels pick up from the left rail. The other brush was shorted to the motor case, which is shorted to the chassis and the right-hand drivers. A soldering iron and long nose pliers made short work of the shorting bar.

I connected the black decoder wire to the tender, and the red wire to a motor mounting screw, using a ring terminal from the junk box. The orange and gray decoder wires were soldered to the motor brushes. Not wanting to fight wiring around the boiler weight, I decided not to use the lights and other functions, so those wires were cut back.

The decoder was programmed on my decoder tester. Long address - 3429, normal forward, DC function enabled, etc. Plugged the decoder into the cable, and placed the loco on the track. Nothing! What the....! Out came the multimeter. No continuity from the frame to the red wire! Curses! I used an anodized ring connector, insulated! Found a brass truck wiper in the junk box. Clipped off one ear, and replaced the anodized connector. It runs.



Chaos on the workbench!



The culprit

I left the decoder cable leads long, so things wouldn't break when the tender uncouples. I cut a clearance slot in the front of the tender, to accept the decoder. The decoder has black electrical tape on the bottom of the board, and slides into the tender nicely.



Tender modification

After all the trauma, it ran well enough to make it to Talheim Station.



ATSF Pacific #3429 at Talheim