

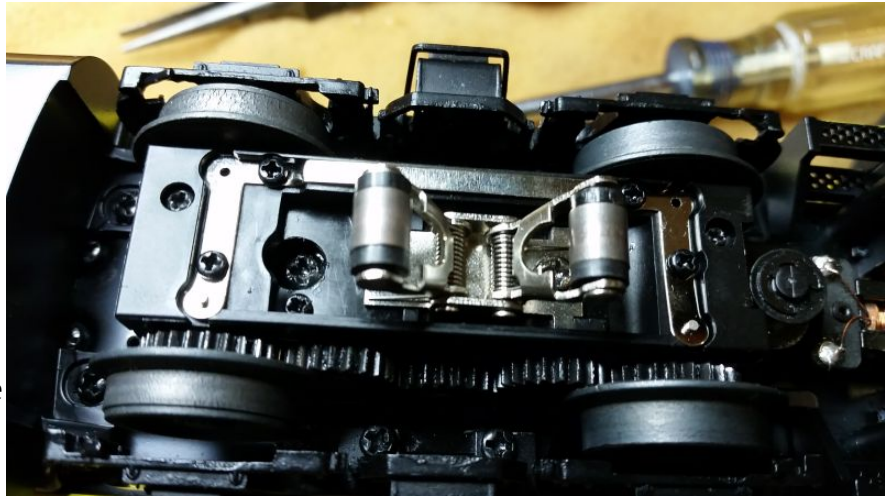
Modifications to MTH Center Roller
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I have several MTH PS2 diesels lettered for my railroad of choice, the Pittsburgh & Lake Erie. My layout uses postwar style tubular track.

I have two spots where my diesels regularly stall. They hit these spots, and stop dead. The motor with the tach strip continues to spin, the wheels spin, the other motor stops and the engine does not move.

Over other parts of the layout, the engines run fine. I originally thought the problem was with the engines so I spent time checking the motors and looking for bad solder joints or some mounting problem.

I finally realized that the motorized truck was actually riding up somehow and lifting the wheels up enough that they lost traction. I've now seen that this is a problem on many of my diesels.



Here is a photo of typical truck. When I press down on the center roller, I can see that the outside roller (on the right in this photo) was not retracting all the way. It was hitting something.

I also noticed that if I pressed the roller hard enough, it actually locked in to the retracted position. I could sight along the roller and see that the roller (when retracted) was lower (toward the track) than a line between the treads of the two outer wheels.

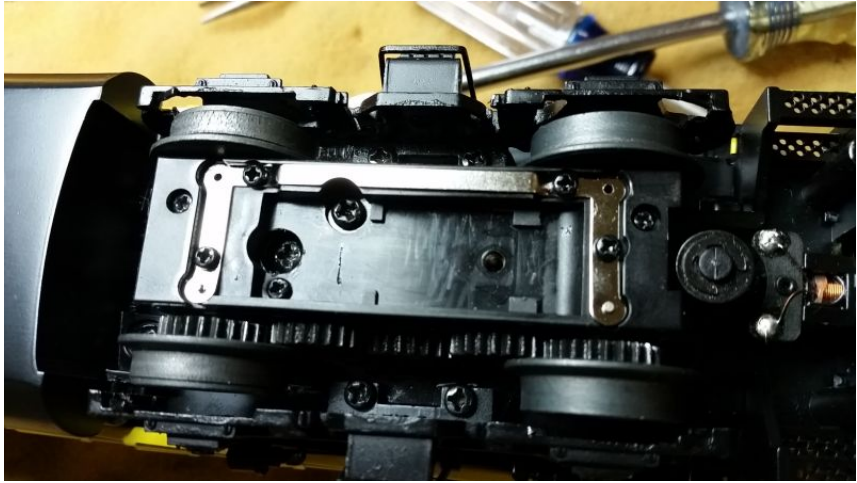
So it seems like the roller retracts as far as it can, which is not enough and then the entire truck is raised up off the track.



I unscrewed the one screw holding the roller assembly on the truck and removed it.

I could see plastic nubs that helped to align the roller assembly.

There are four nubs. By examining the truck, I could see that the roller on the right was hitting the two right side nubs. The left roller was positioned a little differently so that the left roller did not hit the left



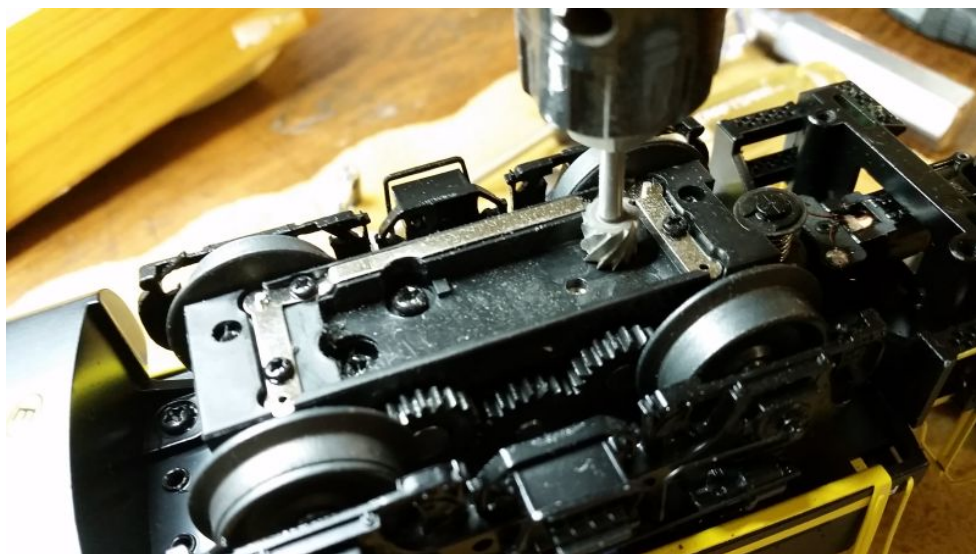
nubs. The left nubs were important in aligning the roller assembly but the right nubs did not seem to be needed as the single screw on that end would serve to align the assembly.

So I removed the right side nubs.

I grabbed my motor tools and a cutting bit. The nubs were plastic so they should be easy to remove.



I removed them.

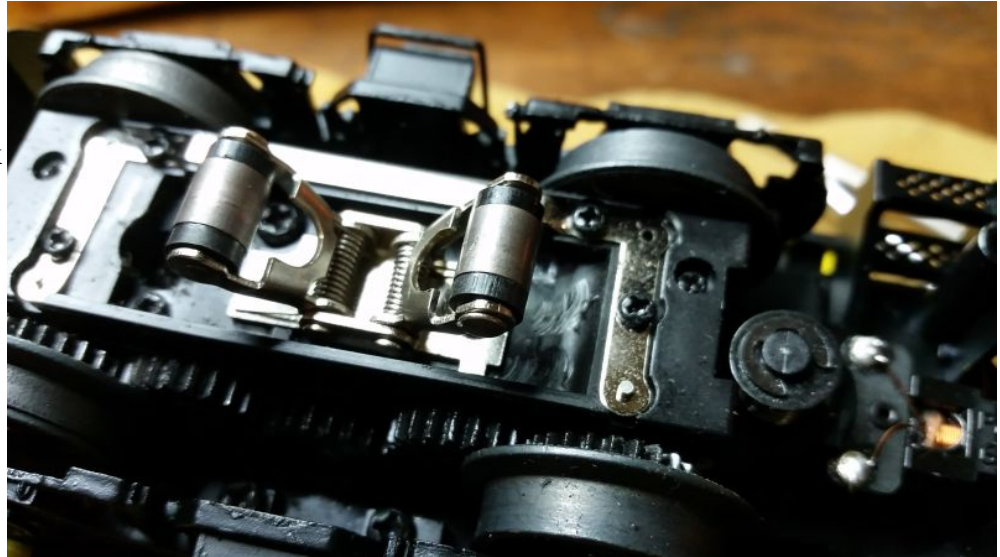


This shows the right side nubs removed.



I reinstalled the roller assembly with the single screw. Now the right side roller depresses further and does not lock into place.

Operation on my layout is much better now.



This photo shows the unevenness between the outer rails of tubular track with respect to the center rail. On the sections that I looked at, the center rail was between 1/32" and 1/16" higher. Makes sense since the center rail is raised by the thickness of the insulation.

I would think that you would not see this effect on most modern track since they are built in completely different way.

