

Tips & Tech #08

TRACKWORK

TURNOUT CONTROL – 10/06

Turnout control, at least for the time being, on my layout is by Caboose ground throws. Now these are located along the edge of the layout, for the most part, and those that are not located there will be someday.

I have recently been moving the ground throws in Phillipston yard out to the edge of the layout.

Now as most of you know my yard area is over three feet wide. While it is rather low to the floor (34 inches) it does allow most of my operators the ability to lean over the yard area to throw the turnouts. There were a few turnouts that did not have throws on them yet and this was what prompted this dissertation.

As I began to add the additional ground throws I found that I needed to come up with a new way to install the extra long throw wires. In the past I was drilling through the Homasote with 24” long drills and while most of the holes work out ok there were those that the drill ended up drilling to the surface instead of following the sub-roadbed. I would then just cut a hole in the Homasote and feed the wire through the hole to the turnout.

As the distance from the edge of the layout increased and the longer hole under the Homasote got the more the drill seemed to climb up and out through the surface of the Homasote. And the hole when it surfaced was not any where near the turnout that needed controlled.

I decided to try something different and use plastic tubing under the layout surface and then feed a control wire through the tubing.

I would only need to drill an angled hole at the front edge of the layout and one at the turnout. I could then feed the plastic tubing down the hole and under the benchwork to the hole at the turnout. Although the tubing pieces, that I was using, were not long enough I made splicer pieces and glued 2 or 3 pieces of the tubing together as needed to make the tube long enough to reach the turnout and the edge of the layout. Any extra was easily cut off using a razor saw.

The end next to the turnout was cut at an angle that matched the angle of the hole so tube end would be flush with the layout surface. Although at first I did not do this to all of these ends and had to cut the center hole cut back to allow the wire to move further back into the tube. This was done as the drill was sometimes too long to get the proper angle at the turnout and the plastic ended up too close to the throw bar and needed more horizontal movement.

The other end was drilled into the end of the Homasote and the ground throw set right at the edge. Once the control wire was in and adjusted a piece of scrap Homasote would then be glued in front of the control wire.

As for the control wire I used .032 or .049 diameter Music wire. The large diameter wire was used for the turnouts further from the edge of the layout. The smaller wire was used if I needed to have a very flexible connection. On the longer runs the wire seemed to drag too much so I tried wiping Lemon Pledge spray wax on the wire before inserting it through the tube. It made it slip a lot more easily!

I also used the rigid throws instead of the sprung loaded ones due to the fact that the music wire was springy enough to not put excessive pressure on the point rails of the turnout.

BOB H