Flexible Window Guards.

By Bob Dietrich

I have never put window guards on an HO trolley or street car before. They always seem to overpower the entire car, especially the mesh type guards. My problem with the rod-type guards is any wire small enough to look right would not stand up to handling the car, and they would need painting which would bulk them up to be oversized.

I believe that Berkshire Junction's EZ Line is the answer. It is stretchable thread that many modelers use for telephone wire; trolley modelers make pole ropes from it. EZ Line comes in two sizes, heavy and fine, and three colors, charcoal, green, and white. While building some PRCo 3800 cars that had a three-rod window guard I started looking into using fine charcoal EZ Line. A little experimenting soon showed that CA was the wrong glue to hold EZ Line in place. I was cementing the line to each window post and the CA would work its way down the line eliminating the flexibility so when it was touched the line just sagged. Then I tried Micro-Scale Kristal Klear, the stuff that stretches across an opening to create small windows. Just a little dab of Kristal Klear is enough to hold the EZ Line in place.

My next problem was holding the EZ Line in place at the correct tension while gluing it. For this I constructed a loom, (remember those Indian Beads). The critical parts are two pieces of styrene with three slots of the correct spacing – somehow I was able to get this right. I use Scotch tape to hold the EZ Line to the end of the loom.


This is all that you'll need. EZ Line, tape, scissors, tweezers, Kristal Klear and an applicator, I like to use a sharpened skewer because I can hold it steadier than a toothpick.
Start by stretching the EZ Line over the loom. Stretch it just enough to remove all the slack, you want it to stay taut but not stretched out.

Lay the loom over the car – the car should be slightly higher than the EZ Line so it stretches it just a little more. Get the EZ Line aligned to its proper position.
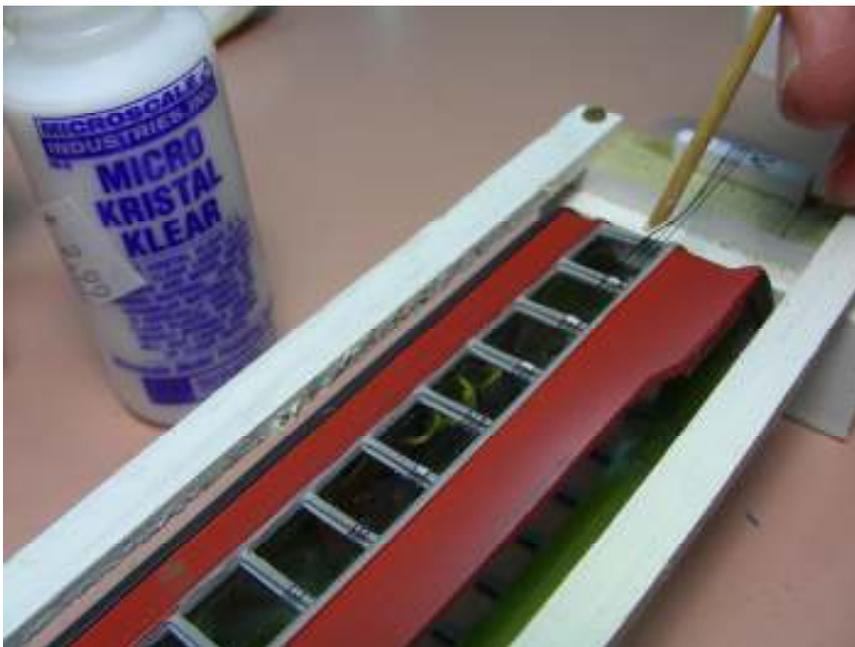
Now apply a little Kristal Klear to each EZ Line thread. Try to stroke across the window post or the thread will have a tendency to lift with the applicator, but it can usually get shifted back in place. Try to get the Kristal Klear between the threads just touching them. I wipe off the applicator and dip for fresh Kristal Klear after one or two posts, this reduces the lifting of the line. I cement both ends first and let it dry before cementing the other window posts. Then I don't have to worry about the loom shifting and misaligning the thread and every window post will have the thread in the proper position. Put a little Kristal Klear on every thread on every window post. Verify that all threads are in the correct position before the Kristal Klear dries; it

is much easier to make the adjustment at that time than trying to scrape it off later. Once dry go back and assure all threads are attached to all posts. Also, to be safe, apply a second coat to the end posts. The Kristal Klear dries clear so it almost invisible.
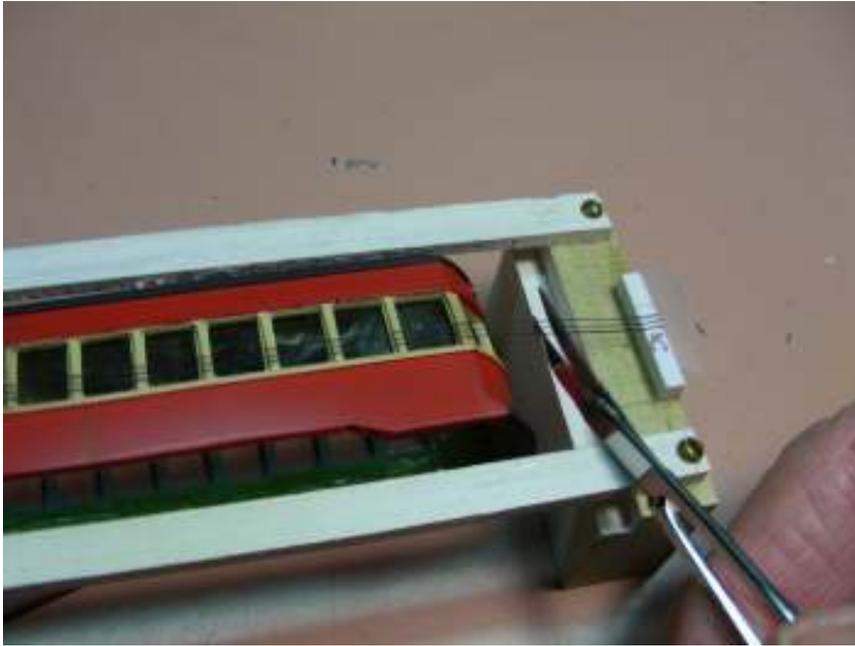
When the Kristal Klear is dry separate the loom from the car by cutting the EZ Line.

Now trim the ends of the EZ Line close to the window posts.

The cars I am modeling had a black bracket holding the wire guards. I used a small brush to paint a stripe of Grimy Black over the Kristal Klear to simulate the bracket.

And here is the result.

During the experiment stage I tried cementing short pieces of styrene to the window posts to act as the brackets. Even the smallest styrene strips were too large for HO so I cemented directly to the window posts. I think a small bracket would be appropriate for O scale.

If you want another color try dipping the white EZ Line into a RIT dye solution. I did a test with some brown RIT dye and it changed color without loosing any if its elasticity.

EZ Line is available at www.berkshirejunction.com or (413) 743-3960. Kristal Klear is available at most hobby shops.

Please send comments, suggestions, and improvements to bob@dietrichsfam.com.