

# MAKING STUB SWITCH BRIDLES

By Alan G. Mueller

Copyright 2010 by Alan G. Mueller. Members of the Civil War Railroad YAHOO Group may reproduce this document for their personal use. No reproduction for commercial use is allowed.

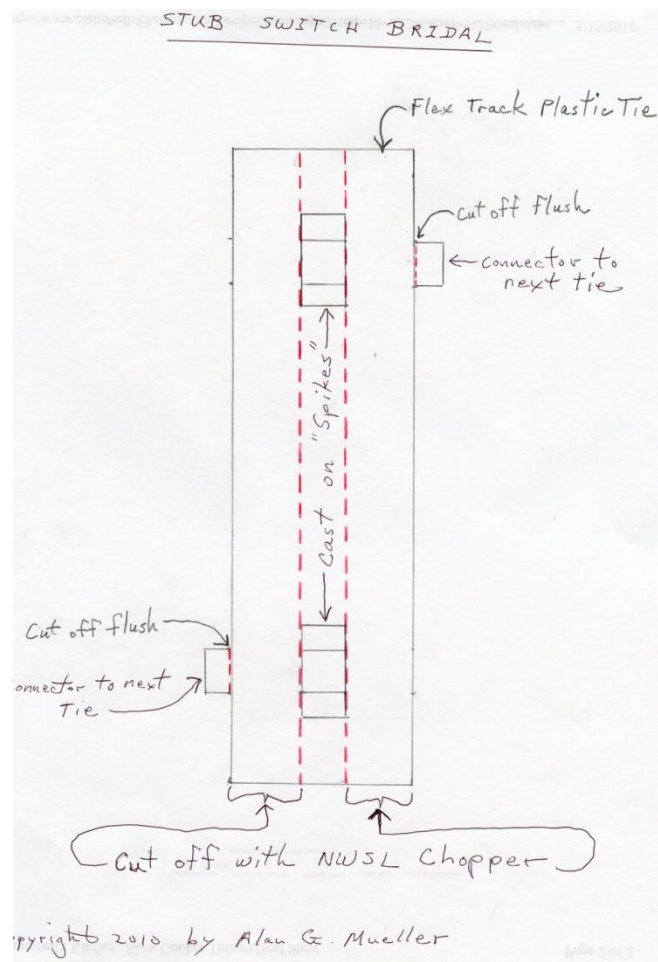
Apparently, commercially produced stub switch bridles are no longer available in HO scale. I made acceptable bridles by narrowing Walthers' code 83 flex track plastic ties for use on Micro Engineering code 70 rail. I believe code 100 flex track ties could be used on code 83 rail. You may have to experiment with different manufacturer's flex track to find the ties with the best fit. They should not be so loose as to fall off the rail size you are using, nor so tight as to impede the motion of the rails when the switch is thrown. This procedure will probably work in any scale.

1. Remove ties from a piece of flex track by cutting the ties apart from the bottom and gently sliding them off of the rail. The object is to remove the tie without damaging the plastic spikes that hold the rail to the tie.
2. Cut off the plastic "nubs" that connect the ties together flush with the edge of the tie. The closer you can cut off the nub the better your finished bridle will be, as you need the edge of the tie to butt flush to the Chopper II stop.
3. Use a NorthWest Short Line (NWSL) "Chopper II" to narrow the plastic tie. **BE CAREFUL ! THAT BLADE IS SHARP !** Do this by using a 90-degree stop which is as long or longer than the tie. This stop can be made of plastic, if you don't already have one. Use a new single-edged razor blade in the Chopper II. Set the stop so that the blade will slice the tie lengthwise along one edge of the plastic spikes. This will take a little experimentation in positioning the stop just right, but plastic ties are cheap! Once the stop is properly positioned and locked down, chop as many ties as you will need for bridles (plus lots of extra ties).
4. Repeat step 3, above for the other side of the tie. Experimentation is again required to position the stop just right, so make sure you narrowed plenty of extra ties in step 3.
5. I shorten the ends of the bridle as shown in the photo below.
6. In order to allow the bridle to move freely once installed, you have a choice of either:
  - A. Reducing the height of the bridle by positioning the plastic spikes against the Chopper II stop and cutting about 0.030 off the bottom of the bridle, or
  - B. cutting a shallow slot in the roadbed between the two ties that the bridle will be placed between. I chose the latter route.
7. Do NOT ballast between the ties where the bridle is located. Paint that area a ballast color instead. The bridle must be allowed to move freely when the switch is thrown.

## MAKING STUB SWITCH BRIDLES

By Alan G. Mueller

8. Install the bridles before the section of rail or flex track is spiked or glued down !
9. I believe prototype railroads used 5 or more bridles per stub switch. I have successfully used as few as 3.
10. The diagram below (not to scale) shows where to cut the plastic tie.

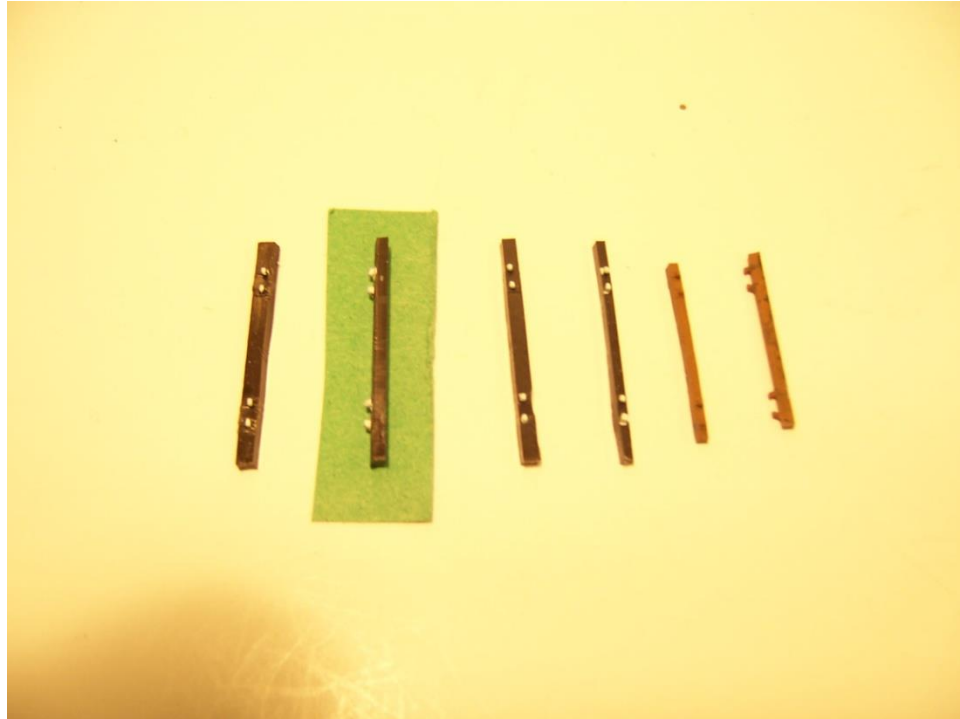


10. The photo below shows the progression in producing the bridle (spikes have been painted white for clarity), reading left to right:
  - A. The left tie is shown after trimming off the connector "nubs" to the adjacent ties.

## MAKING STUB SWITCH BRIDLES

By Alan G. Mueller

- B. The next tie is a side view of the tie before narrowing.



- C. The tie has been sliced lengthwise on its left side.
- D. The tie has been sliced lengthwise on both sides.
- E. The bridle has been shortened and painted with Floquil Rust.
- F. A side view of the finished bridle.
11. The photo below shows the bridles installed on my layout. I don't know if the above method could be used for throw bars. My throw bar is a piece of printed circuit board gapped in the middle. Note also that I've installed metal (0.020" plastic) plates over the throw bar to keep it from riding up when thrown. Prototype or not, it works and reduces headaches !

**MAKING STUB SWITCH BRIDLES**  
By Alan G. Mueller

