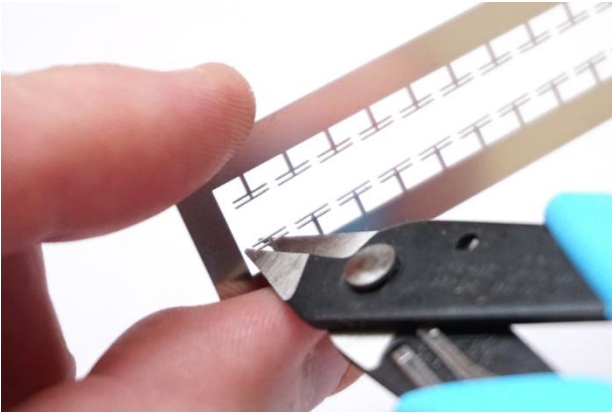


## Functional Code 40 Rail Joiners

These rail joiners are designed to make a functional joint between two pieces of rail. Due to the nature of code 40 rail, they are manufactured as a 'loose fit' and require 'sizing' to the correct fit using a pair of flat nose pliers while attached to two pieces of scrap Bullhead Rail.

Even if using with Code 40 Flat Bottom rail, these joiners must first be 'sized' to Bullhead Rail. They can also be used to join Bullhead Rail to Flat Bottom Rail.



### Cutting the Rail Joiner off the Sprue

The Rail Joiners come as a Sprue of 20, with each Rail Joiner needing to be cut off from the Sprue. Use a pair of thin cutters (Xuron Photo Etch Scissors are perfect) to cut off a Rail Joiner when required. Cut towards the Sprue and away from the Rail Joiner to prevent damage to it when cutting. It can be useful to do this inside a small plastic bag to prevent from losing the joiner.

### Cleaning up and 'Sizing' the Rail Joiner

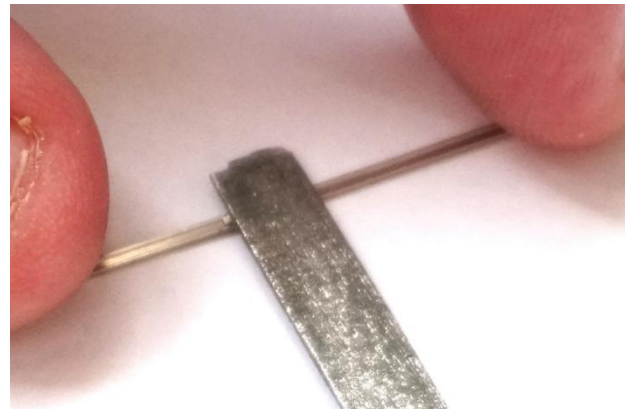
Start by pushing the Rail joiner onto the end of one piece of scrap Bullhead Rail.

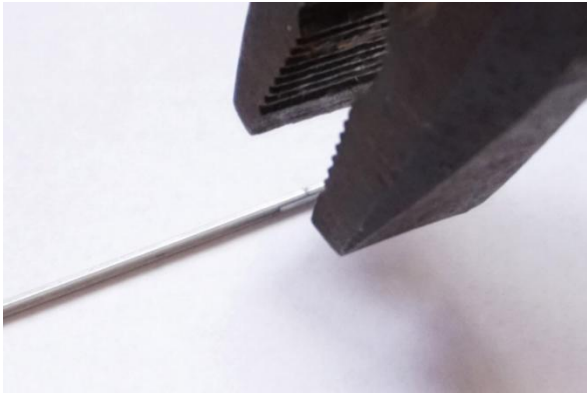


The small leg of metal that was connecting the Rail joiner to the Sprue needs to be cut off. This can be done using a pair of Side/Flush Cutters. Insert a second piece of scrap Bullhead Rail into the other side of the Rail Joiner and then lay this flat on its side on a suitable work area/table. Then use the Side/Flush Cutters to cut off the metal leg.

**WARNING:** You MUST wear eye protection when doing this as the small leg of metal can easily ping off and into your eye.

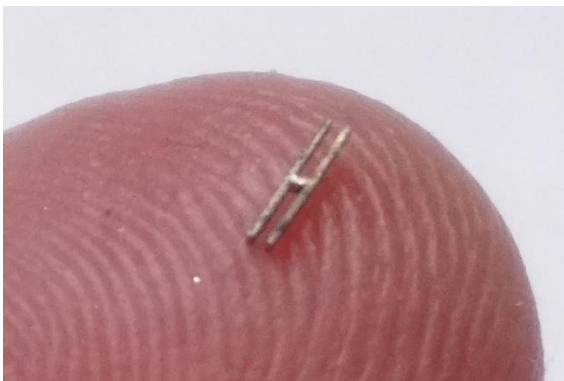
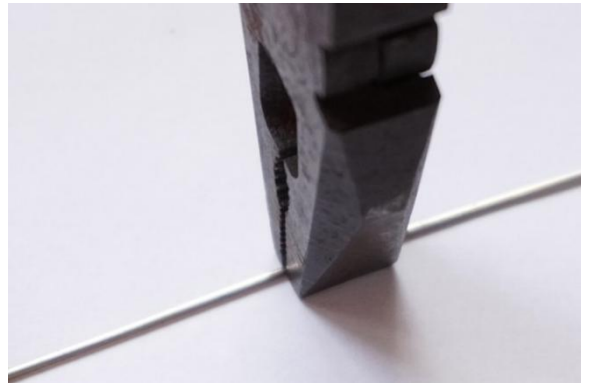
There will still be a slightly raised area left by the Side/Flush Cutters, this will be required to be filed off with a fine file. You may find that this is easier if you temporarily stick the rail and joiner to a piece of card using double sided sticky tape.





The Rail Joiner must then be 'sized' using a pair of Pliers that has a flat surface at the tip. Orientate the two pieces of rail 'correct way up' as they would be on a layout.

Offer the Pliers up to the sides of the Rail Joiner and give a gentle squeeze onto the rail. This doesn't require much pressure so don't overdo it.



The Rail Joiner can now be removed from the scrap pieces of Bullhead rail. Use the edge of a metal tool such as Tweezers or a File to 'push' the Rail Joiner off the scrap piece of Bullhead Rail. This will prevent damage and bending of the Joiner.

The Rail Joiner is now ready to be used. Slide them onto the ends of the track ready for joining to the next piece.



As previously mentioned, the joiners can be used to join Bullhead to Flatbottom rail.