

Prepare Rail Sections for filing:

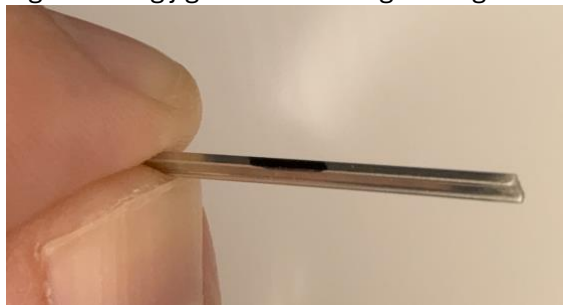
- Note: Bullhead Rail Head is thicker/higher than Rail Foot so, it's a good idea to mark the tops of rails with a marker pen to aid correct rail orientation when placing into filing jigs and threading/sliding rail into chairs

Rail HEAD



**Bullhead Rail
Cross Section**

Rail FOOT



- Ensure all rail ends are deburred. It's a good idea to file a tiny lead in chamfer to both ends of rail to enable chairs to be easily threaded onto rail.

Filing Vee crossing rails using filing jigs:

Various filing jigs are available to aid in the rail filing process to achieve a satisfactory fit and realistic look of the Vee crossing rails.

If You are 3D printing your own jigs then you can download 3D files, free of charge, from Templot and instructions on how to use these can be found on the Templot forum via the following link:

<https://85a.uk/templot/club/index.php?threads/how-to-using-the-templot-rail-filing-jigs.1049/>

If you have purchased filing jigs from the Kosmik web site (which are based upon the Templot jigs) then, the following guide may assist.

Tools required/suggested:

Engineers vice 2nd-cut engineer's flat file Needle file or 400 grit sanding block

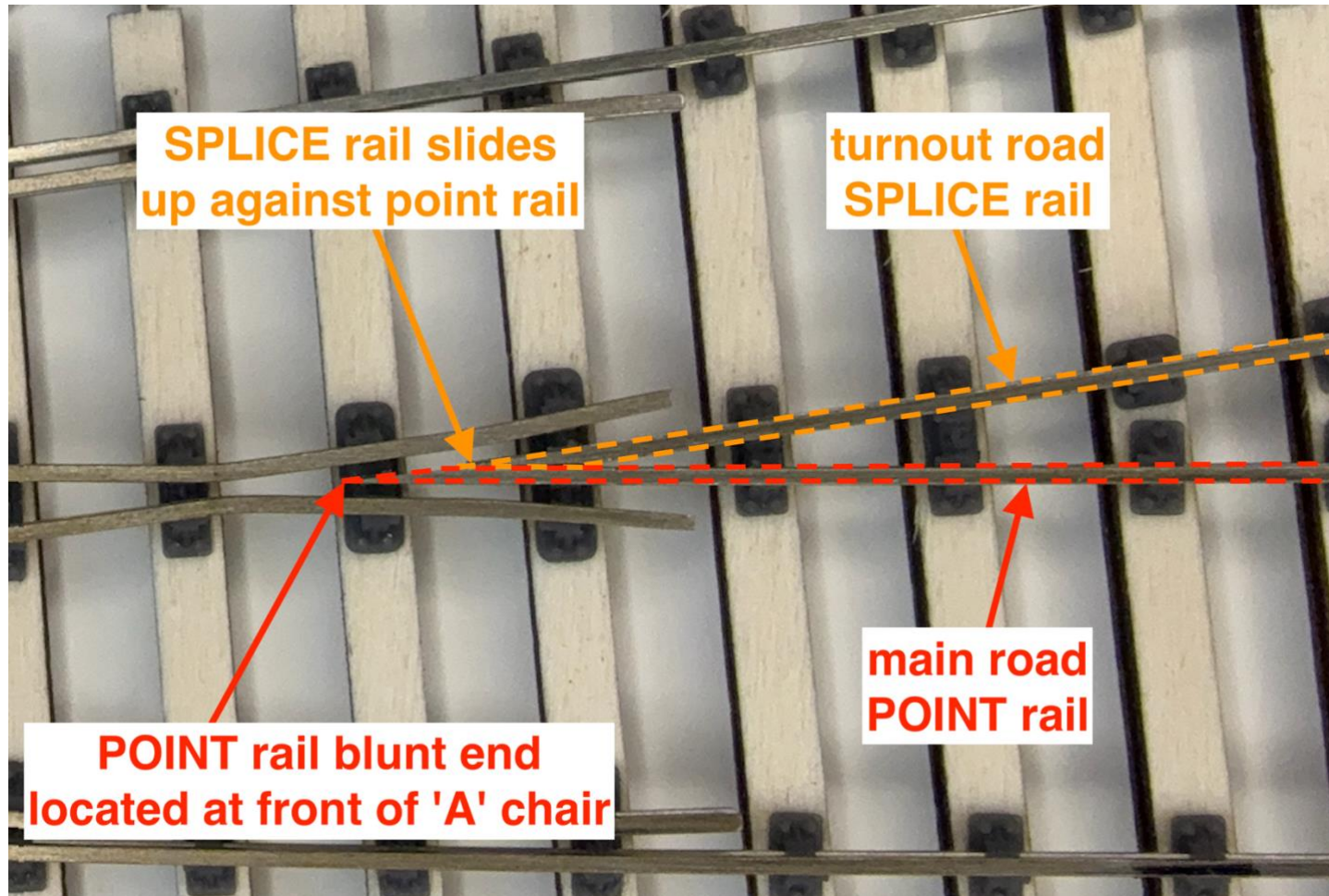


Photo of 4mm 00-SF B7 LH Vee crossing rails filed & assembled.

Filing Vee crossing rails using Kosmik's Vee crossing rail filing jig:

The crossing jig makes both point and splice vee rails by turning the rail the other way up. They are opposites for the opposite hands of a V-crossing.

For Templot plug track and COT track, you don't make a pre-assembled vee. The vee rails are inserted separately into the chairs.

The point rail forming the nose of the vee goes on the straight-ahead main side (MS) of the crossing. The splice rail goes on the diverging turnout-side (TS) of the crossing and fits snugly against the point rail. This is important to allow the rails to fit properly in the 3D-printed chairs.

The larger edge of the rail is the head (top) of the rail -- the rails won't fit in the chairs upside-down. Be sure to identify which hand you need before fitting the rails in the jig, and which side of which rail needs to be filed.

After filing, in 4mm/ft scale the point rail should be blunted back to a width of 0.25mm (10 thou) at the tip by trimming with sharp snips and sanding smooth. When correct it should slide into the "A" chair and stop with the nose just on the far edge of the chair.

The splice rail is not blunted back, but it's a good idea to remove the tiny feather of metal which remains from the rail web at the tip. The rail should slide up to the point rail and fit snugly against it.

This below is how the filed vee point rail fits in the plug track "A" chair. This is for a Left-hand V-crossing looking towards the vee nose and showing the main-side (MS) wing rail:

