

## SOLDERING – A short “Lock Down How to” in three episodes.

by Andy Hopper

### Part 2

#### PREPARATION

The next stage is to prepare the site of the wire feed. The idea is to drill down through the baseboard immediately next to the rail we are going to solder the wire to. If possible it should be on the side away from the onlooker.

Next use the scratch brush to clean the side of the rail next to the hole, particularly the flange at its base as this is where the wire is to be soldered.

Dip the end of the solder into the flux so there is just a little flux on it. I forgot to mention another good paste flux called Fluxite, it is likely to be more difficult to get hold of than Powerflow.

While doing this the soldering iron will have been switched on and heating. It needs to be at full temperature to work properly. Before going further make sure the tip of the bit is shiny clean. I use a sponge that comes with the stand (see photo), damp the sponge and wipe the bit on it. Others swear by a metal scratch pad like this [https://www.ebay.co.uk/str/dougsmodeltrainshop?\\_bkw=solder](https://www.ebay.co.uk/str/dougsmodeltrainshop?_bkw=solder). Whichever you use wipe the bit every time before you put it back in its stand.

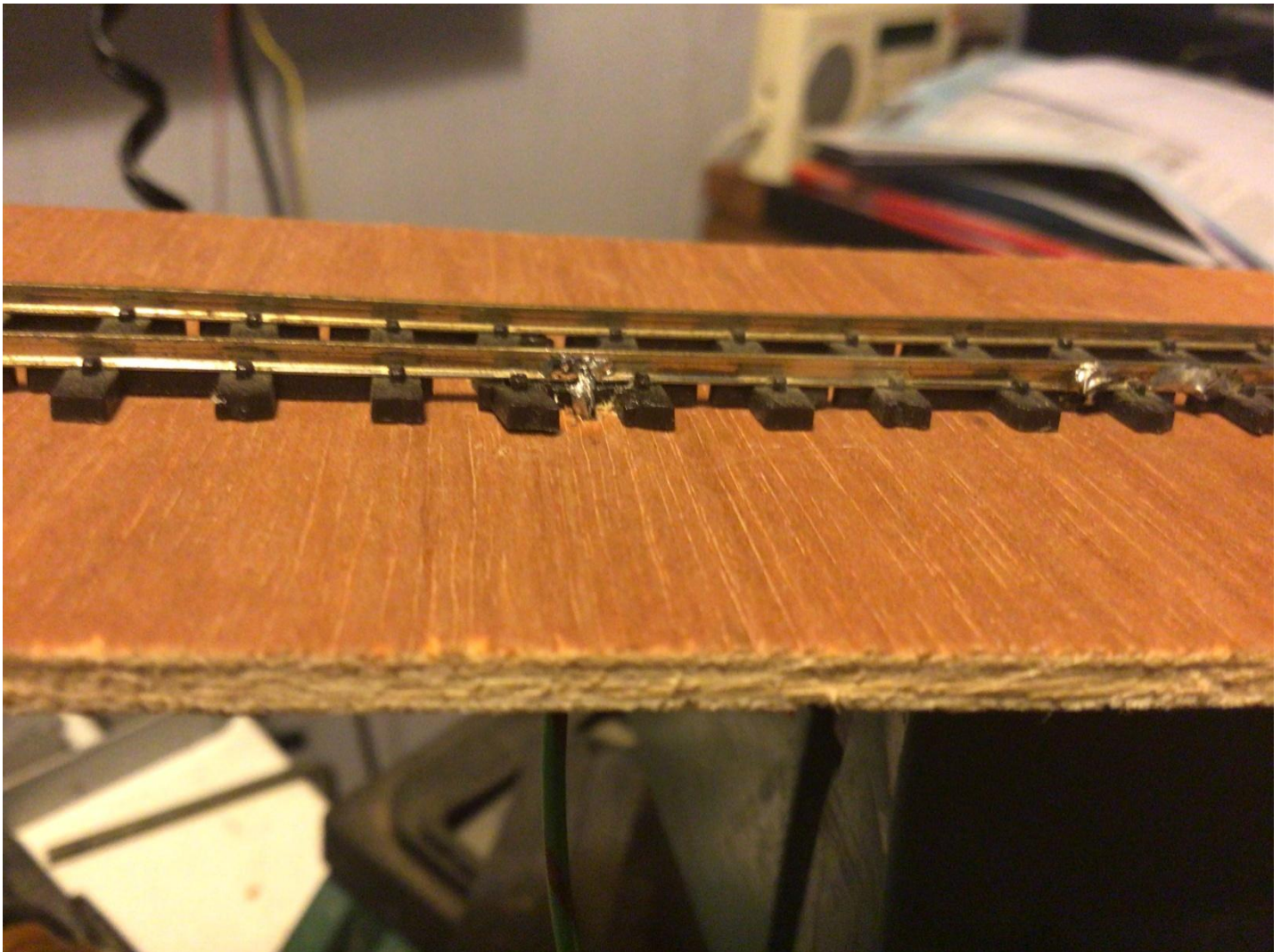
The photo shows my very well used stand with its now tatty sponge, but it still works.



## TINNING THE RAIL

When you are sure the tip is shiny and hot put the iron and the solder to the rail at the same time, so the solder touches both the iron and the rail, this should melt the solder and get the rail hot enough for the flux to help the solder run onto the rail, as soon as the solder has run take away the iron. You don't need much solder here. This is where the size of the bit is important as it works best if everything heats up quickly. If you use a bit that is too small then it will take ages for the rail to get hot enough and while this is happening a large area of rail is getting hot through conduction and you might find melted sleepers. As long as there is room for it a bigger bit is better than a smaller one.

The next photo shows a length of track which is quite tarnished. In the middle is a cleaned area between two sleepers, on the left a small patch of solder where it is needed, this rather cruel enlargement making it look quite blobby but at normal size it looks smooth, and on the right a messy lump of solder which is what you don't want.



Next time we'll prepare and attach the wire.