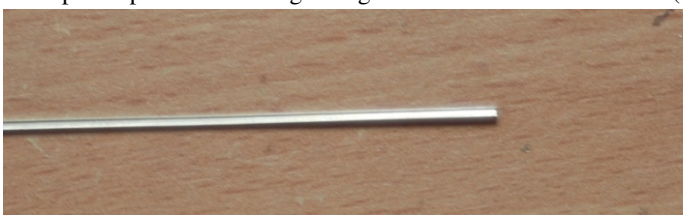
First Step: Using Your Switch Blade Filing and Soldering Jig - Filing the Switch Blade:

The Jig makes filing Switch blades very easy, but there is a small bit of soldering to do to strengthen up the rail.

1: Prepare a piece of rail long enough to become the switch blade (this will reach all the way to the frog, but not touch the frog.

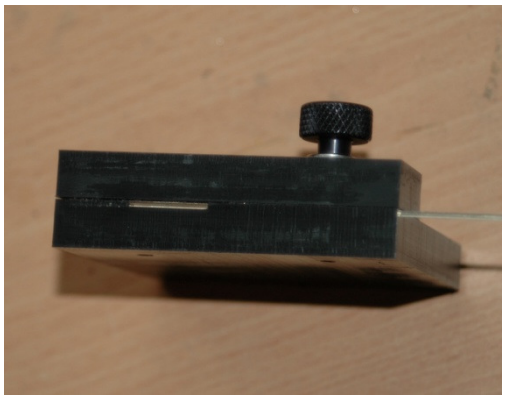


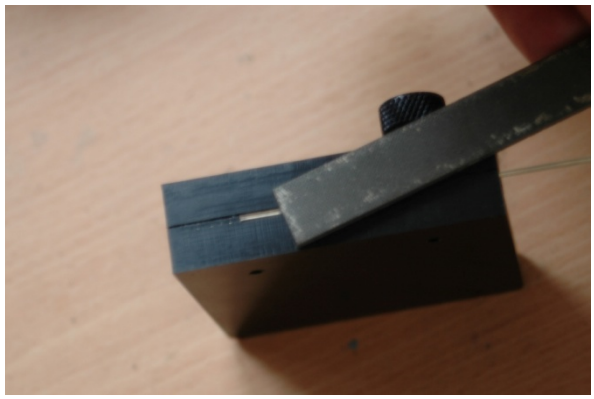
Your aim is to fill the recess of one side of the rail with solder, strengthening the rail for filing. This is a very easy job if using the correct tools. You will need a flat/chisel end soldering tip, and some flux. Fry Power Flow Flux is recommended, available from www.britishfinescale.com). Without the flux, it is unlikely that the solder will flow into and along the recess of the rail:

Introduce flux into the recess of the rail, about 20mm length. Wipe off any excess off the top and bottom of the rail, so that there is only flux in the recess:

2: With a clean tip on your soldering iron (a 2mm chisel tip is ideal), tin the end of your iron tip with a little solder. Then hold the iron onto the rail, the flux will start to work its magic and the solder run into the recess. Start moving the iron tip along the rail, keeping good pressure onto the rail, allowing heat to be transferred to the rail. Once done, clean up with a file:

3: Now you can insert the rail into the filing jig. You want to file the opposite side to the solder, don't file the solder side. Undo the thumbscrew





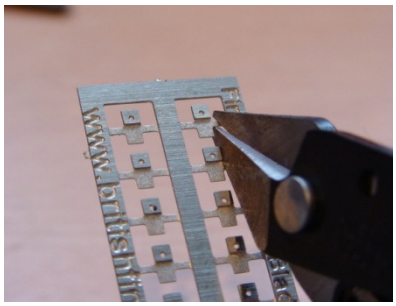
on the jig, insert the rail from the side of the jig. I recommend placing the rail half way up the jig to begin with, and file off the sharp end of the rail. Recommended use is a 'Bastard Cut' or '2nd Cut' file available from www.britishfinescale.com.

Start filing very lightly, it's easy for the file to grab the end of the rail and bend it. Once filing has started, you can increase pressure gradually:

Once filed down, you can move the rail up close to the end of the jig, and continue filing. It should only take about 10 minutes to file off. Just be patient. You don't want to file down to the solder the other side, just before it. Once happy, the rail can be removed and inserted back into the jig the other way around, so that you can now file the solder side. This side does not need as much filing as the first step, but will ensure a nice sharp blade.

Second Step: Using Your Switch Blade Filing and Soldering Jig - Soldering to Chair Plate:

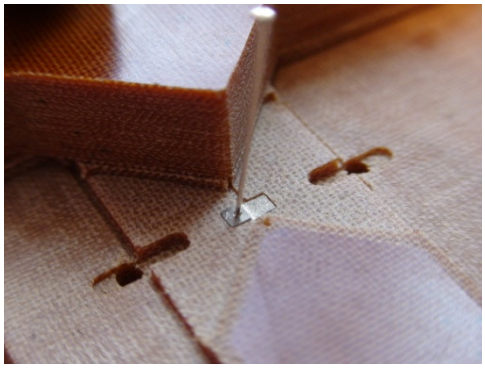
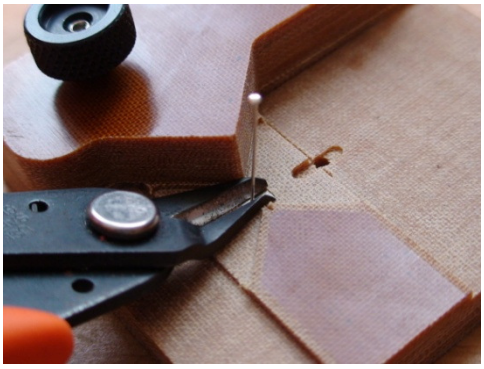
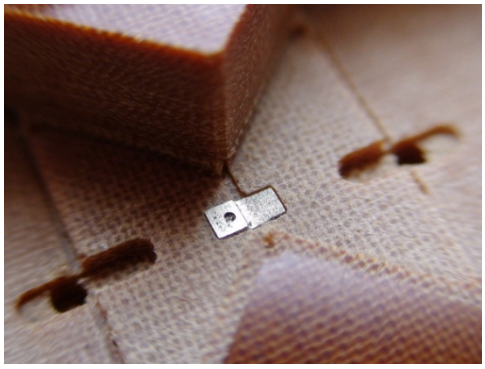
The next step is to solder the filled switch blade to a chair plate. You will also solder a piece of 0.4mm wire through a hole on the chair plate to make a pin - this pin will later locate into a hole in the tie bar.



1: You first need to cut a chair plate out from a sprue of etched chair plates using a pair of Xuron 440 Photo Etch Scissors (both of these are available from www.britishfinescale.com). The Photo Etch Scissors ensure a clean cut from the sprue without damaging or bending the chair plate. Cut close to the plate, ensuring that you completely remove the 2 tabs that held the chair plate to the sprue.

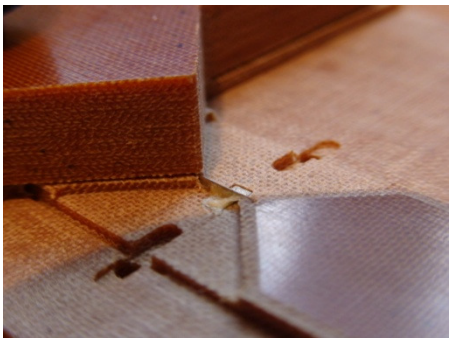
2: Place the chair plate into the small recess on the assembly part of the Jig. It needs to be orientated so that the side of the plate with the hole sits against the soldered side of the switch blade (this will be the other way when you do the other switch blade).

3: Next use the 0.4mm wire that came with the turnout kit. This must be inserted through the hole on the chair plate and into the hole on the Jig.

Make sure that the wire is pushed all the way to the bottom of the hole on the Jig, this will ensure that the wire/pin is the correct length. Then, using a pair of side cutters, cut the wire flush with the top of the chair plate.

4: Loosen the Jig Thumbscrew and slide the switch blade into the centre slot, over the chair plate and to the end of the slot. The Switch Blade should sit on top of the thinner part of the chair plate, against the ridge. Tighten the Thumbscrew only so there is very slight pressure on the switch blade to hold it in place. Over tightening the thumbscrew will cause the switch blade to twist and be soldered twisted.

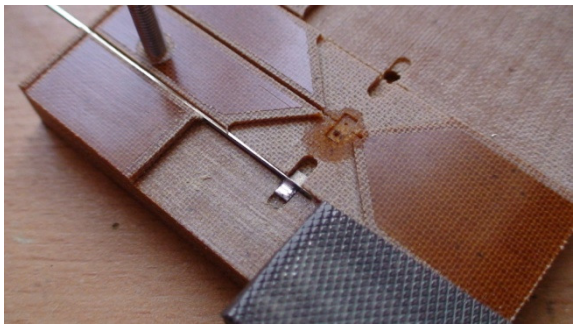
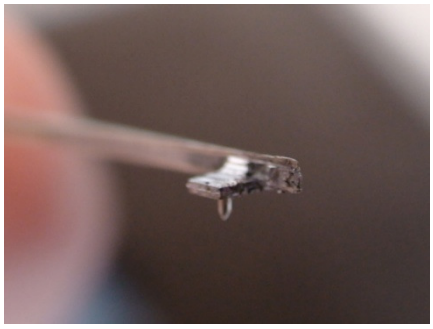




5: Now apply a small amount of Power Flow Flux over the top of the chair plate with 0.4mm wire, and on the joint between the chair plate and the switch blade. Wipe off and flux from the top of the switch blade.

6: With a clean tip on your soldering iron (a 2mm chisel tip is ideal), tin the end of your iron tip with a little solder. Touch the top of the chair plate with the tip of the soldering iron, making sure to also make contact with the switch blade to transfer heat to it. The solder should flow and give a soldered joint between chair plate and switch blade. The 0.4mm wire pin will also be soldered in place.

7: Loosen the Thumbscrew and remove the tightening plate of the Jig. The switch blade assembly can be removed using the top of a modelling knife.

8: The fillet of solder needs to be filled down, as wheel flanges will hit this. Place the switch blade assembly into the filing slot as shown and file down and against the switch blade, removing most of the fillet of solder. the Jig is designed as to prevent you from filing too far and weakening the joint.

9: All done. The result is a switch blade with a Chair Plate and small pin on the bottom. You can now install the Switch Blade onto your turnout and tie bar, following the instructions that came with the turnout kit.