

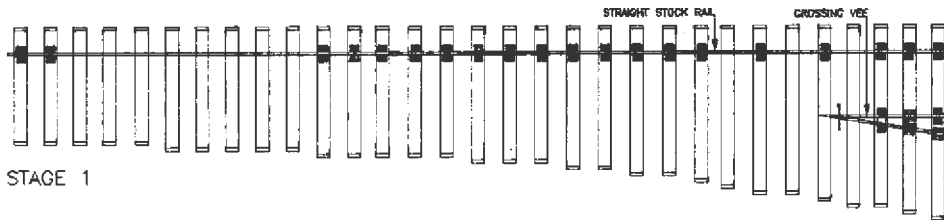
Stepbystep instructions for building a turnout.

Point construction kits with fully made up common crossings..

Track making is not a black art - it really is one of the most relaxing aspects of our hobby. The C+L system is moulded in a plastic known as ABS, in order to give strength and ensure durability. Normal solvents do not work on this material and we recommend and sell Butanone - Carr's product ID - C1501. So, do ensure you are equipped with a bottle.

1. Tape the selected Track Template down on to a hard surface, lay a 'vee' or an 'x' of double sided Sellotape on this and place your turnout timbers as indicated by the template. Use our templates as a reasonably accurate guide, but as with all plans and drawings, it is unwise to scale off them. So, at all times, rely on your track gauges for accurate measurement.
2. Cut the sections of rail to size. Make certain the rail end is square, file to remove all burrs, and then put a slight angle on the base and lower sides as well as the web. This makes it easier to slide the chairs on to the rail.
3. Take your straight stock rail, thread all the running rail chairs on, and using the Track Template as a guide, glue the two end ones down. Using a straightedge as a guide, glue the rest down. Butanone bonds quickly, but if you do make a mistake, you should be able to lift and reposition a chair, by easing a scalpel blade between the chair and the sleeper.
4. Now look closely at your track template. The letter H and an arrow denotes the check rail chairs. Where you have chairs for the stock rail glued down where the check rail will be positioned later, file or cut the bolts off on the inside. (Later you will do the same to the chairs threaded on the check rail). This is so that the check rail can slide over them. (You do not need to fit the check rail at this stage).
5. Now that you have the straight stock rail positioned, it is time to fix the common crossing into place. Slide two chairs onto each side of the wing rail. They may need to be trimmed so that they fit opposite each other. Slide the required number of chairs onto the vee end on the crossing. Again, these will need to be trimmed to fit. Due to the closeness of the rails to each other, there will not be sufficient room to thread all required chairs. Instead, you will need to cut some in half and glue them up against the side of the rails once the crossing is fixed. Position the crossing approximately in place according to the template. Gauge across from the straight stock rail using the track gauges and glue down. Take two slide chairs and slip them onto the sleeper under the tip of the vee. Repeat this operation under the narrow point of the wing rails – you may need to trim to length.

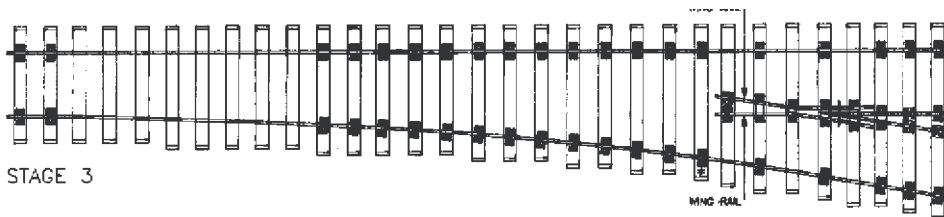
6. Your turnout should now look like this. (For clarity, only the vee has been drawn).



7. Cut the curved stock rail to length and curve it slightly by pulling between your fingers so that it aligns with the curve on the template. Thread the required number of chairs onto it. Gauge across at the switch end and glue the two chairs down.

8. Go to the other end, gauge across from the vee, and glue the chairs parallel from the end to the tip of the vee. The curve should follow the template, but a minor alteration should not be harmful. Above all, you want the curve to look natural, without any flats or dog's legs. A useful tip is to place a small mirror onto the rails and look at the reflection.

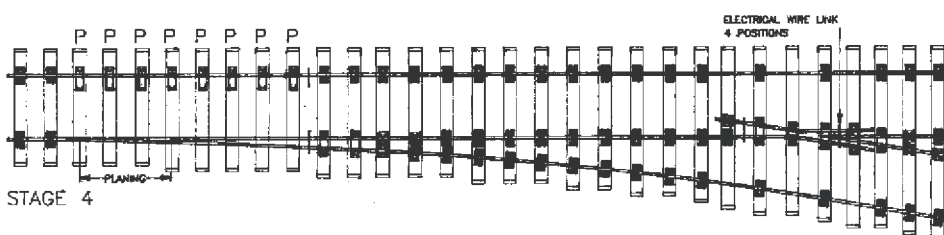
9. Your turnout should now look like this.



10. Fit the slide chairs denoted on the template by the letter P and an arrow, under the straight stock rail. Ensure the straight stock rail remains straight by the use of a straight edge. (You can strengthen the turnout by gluing them to the sleepers and then introducing the tiniest amount of superglue between the rail and the jaw of the slide chair. Loctite 480 is ideal for this purpose).

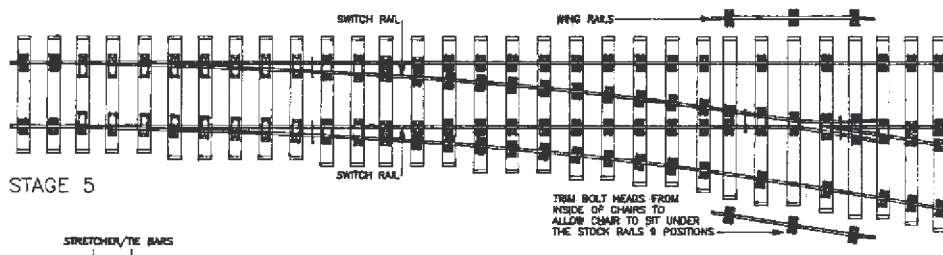
11. Take the straight switch rail; ensure that the planed end is free from any burrs and correctly shaped. Slide the chairs on, and trim the first three or four on the inside. It will also be necessary to trim the chairs on the curved stock rail. Fix and glue the straight switch rail, gauge from straight stock rail, solder to wiring link.

12. Your turnout should look like this.



13. Next comes the curved switch rail – you may need to put a slight bend in it by running it between your finger and thumb. Position, fix and glue the curved switch rail, gauging from the curved stock rail and fit chairs, noted by the letter P and an arrow on the template.

14. Your turnout should look like this.



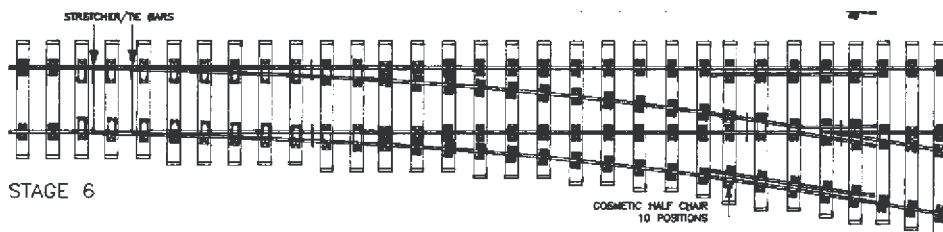
15. Ensure all rails are soldered to wire connection links as indicated on the template. It is advisable to use 145 solder for this, in order to minimise the risk of Desoldering previously soldered joints.

16. Trim bolt heads on stock rail in check rail position, to enable check rails to be positioned close enough to the stock rails.

17. Fix and glue the checkrails, gauging from the vee and the wing rails – not the stock rail.

18. Fix the stretcher/tie bars. These are soldered to the inside of the switchblades at positions indicated on the template.

19. Your turnout should be finished and looking like this.



20. Now for the testing. If you do all your tests before you remove the template backing, it should be strong enough to allow some 'surgery' with the scalpel should this be necessary. NB. It is not necessary to remove the template in its entirety. Modern double sided tape is so strong that you could damage the turnout. Instead, you can just tear the template paper back to the tape and leave the balance in place.

21. Run a selection of your rolling stock through the turnout, but do check the backtoback measurements of them before you do anything. If any of them 'split' (one set of wheels going one way, the others another), check your switch clearances at the Tiebar end. If they foul the crossing, (frog), check the check rail clearances. If this happens on the branch, widen the check rail clearance slightly. *NB. For OO modellers only. This turnout is gauged to OO finescale standards and ready to run locos, coaches and wagon should run perfectly. There has been a recent occurrence where a new RTR model, manufactured in China, has been fitted with oversize wheels. If you do encounter problems, use a variety of rolling stock items to check before attempting any alterations to the turnout.*

If this is your first turnout and it is not very successful, do not despair.... We all made a few that we consigned to the back of the workbench for a time.

If you destroy a chair in the process, use another. If you cannot thread it on, because other chairs are in the way, just cut it in half and glue it together around the rail. Sometimes you can 'break it back' and open it out. It will stay together and regain its strength when glued down. Remember, in repair situations, you can use Loctite 480 or 406 as an alternative to Butanone.

Happy track making!

C+L Finescale.,
Cadbury Camp Lane, Clapton in Gordano, Bristol, BS20 7SD
Tel: 01 275 852 027. www.finescale.org.uk

You will now perhaps wish to build track, another turnout, crossing or slip. Please refer to our web site for details of available components.