BASIC MODEL RAILROADING

Part 3: LAYING TRACK

The purpose of this leaflet is to set out the basics of laying ready-made track and its appearance.

Satisfaction with your model railway is very much dependent on how well you have laid your track.

Most modellers start with “setrack” (sectional track) – the geometrically uniform “snap” track that comes with all starter sets.

As the railway moves off the floor, all modellers start to experiment with “flextrack” (flexible track, that is bendable track up to 3 ft in length that can be cut to fit a required length or curvature).

“Flextrack” moves the layout from the toy train world of a geometrically uniform configuration to a replica of prototype railway track formation (subject only to the overall limitation of the model railway itself).

Choice of type of track, the function of track formations such as turnouts, slips and crossings, suggested layout track plans, and how to work with “flextrack” are all covered in the abundant variety of “how to” publications available at all hobby stores and in the model railway press.

The prime criterion for well-laid track is a firm level roadbed that will accept track spikes.

Modellers using a homasote™ roadbed do not need a cork or equivalent underlay, but those with plywood or styrofoam roadbeds will require a homasote, cork or equivalent underlay to deaden sound and accept track pins.

Whatever the combination of materials, ensure that the track itself is continuously level without any undulation.

The vast majority of modellers use track pins of whatever brand to secure the track to the roadbed.

Some use glue, but glue is prone to “pop”, and adjustments are more difficult to make.

For the smaller scales, the Peco™ track pin is to be recommended for easy placement with needle-nose pliers rather than a tack hammer.

In whatever scale, when nailing your track work down, make sure you do not push the nail in too far. If it pushes the tie down it can actually put your track out of gauge by squeezing the two rails in slightly. Keep a track gauge handy.

Do not pin too frequently near turnouts and crossings, but the ultimate test is continuous electrical contact.

Remember to leave minute gaps at rail joints as the rails will expand and contract with temperature variations. Adjust track pinning until this is achieved.
Most modellers will ballast track for prototypical appearance.

Ballast with care (if at all) near the connecting rails of turnouts and slips.

Defer ballasting until you are satisfied that you have smooth operation, and that you are unlikely to adjust for track alignment. The pins may be removed once the ballast glue has set.

Two things to watch for when laying the track are lateral sway (track that has not been laid perfectly straight), and “doglegs”, or kinks. Both are unsightly and doglegs will impair smooth running. Pin as necessary until these are corrected. By far the best way to check for them is to look along the track at track level.

Another very common but easily correctable unsightliness is missing ties where one section of track joins another, gaps that occur commonly with flextrack and at turnouts and crossings.

Simply cut some single or double ties from a section of unused flextrack, trim off the plastic chairs and slide the tie(s) under the rails at the gap. The improved appearance transforms your track laying into a professional-looking job.

Switch machines (e.g., Tenshodo™ or Peco™) and switch motors (e.g., Tortoise™) are necessary on large layouts or in remote corners, but many modellers minimize their use for cost, convenience and appearance reasons.

Some brands of turnouts come with ready-assembled above-ground switch machines.

Except where you may be modelling a large urban or heavy main line track configuration, these switch machines are unprototypical for the vast North American single track rail network where turnouts are for the most part thrown manually.

For appearance avoid this turnout option in favour of a switch machine that can be installed under the roadbed. As a neat decorative touch, some modelers buy or scratchbuild non-operative switch stands to simulate the familiar prototype.

Finally, once you have your track laid the way you want it, you will discover that you have to do maintenance just like a real section gang does.

You may have to relieve slight unevennesses in track levels, cure poor electrical conductivity or adjust slightly out-of-gauge spots, or smooth rough joint connections with a fine needle file.

Do not use emery cloth or any other abrasive or liquid to clean your track – invest in good quality track cleaners and have them handy at critical points on your layout.

Since dust is inevitable, occasionally vacuum, brush or blow your trackbed free of particles.

Finally, those turnout designs that rely on an electrical connection between the moving connecting rail (blade) and the stock rail, their two inside surfaces will require occasional burnishing with a very fine emery cloth.

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