

PECO *STREAMLINE* HO Code 75 Concrete Sleeper Electrofrog Turnouts

Laying Flexible Track

Flexible track can be used straight or curved – recommended minimum radius 500mm (18"). To curve the track, place on the baseboard, bend to the radius required and cut off surplus inner rail using a razor saw or "Xuron" rail cutters.

Laying Turnouts and Crossings

These products are ready to use, but sometimes in order to maintain desired track spacing it may be necessary to trim the ends of some sleepers/ties (Fig. 1). Extreme care should be taken when cutting the plastic. The sleepers/ties at

Smooth rail ends with a file. Join tracks together using Metal Rail Joiners (SL-110) or Insulating Rail Joiners (SL-111) as required. To achieve uniform sleeper/tie spacing it may be necessary to cut the rail fixing spikes off the end sleepers/ties so that the joiner can slide easily

onto the rail. Track can be secured to the baseboard by inserting Peco Fixing Pins (SL-14) directly through the sleepers/ties using needle nosed pliers, otherwise drill holes 0.8mm (1/32"). The use of a hammer to drive the pins is not recommended as it may damage or distort

the track. Alternatively track can be glued down using a contact adhesive. Check that the glue does not adversely affect the plastic. For further instructions see Peco Publications booklet "Laying the Track".

the rail ends are undercut to permit fitting the rail joiners without the need to remove the rail fixing spikes. All turnouts and crossings have blind fixing holes (visible from the underside) which should be pierced through with a small drill. Turnouts can be secured to the baseboard using

Pins (SL-14) or using a contact adhesive. Again check that the glue does not adversely affect the plastic. If using an adhesive, take care not to glue the area around the tie-bar and spring.

Fig. 1

Trim sleepers to fit



Wiring for Standard 12v. DC Systems and for Digital Command Control (DCC)

Wiring a Peco Electrofrog turnout is more or less the same for both standard 12v DC layouts and for DCC layouts. DCC is more sensitive to any slight short circuits. Your Peco Electrofrog turnout can be used in two ways.

Option 1

Use the turnout straight from the box. In this way the polarity of the frog is switched by the point blades. This is the simplest option but some locomotives with long wheelbases may electrically short the open point blade/switch rail and the stock rail by touching both rails simultaneously. If your rolling stock suffers from this problem, apply option 2 below.

Option 2

This option is particularly recommended for DCC operation. Modify the wiring on the underside of the turnout as shown in figure 2. This method requires that the two wires linking the centre rails (illustrated) be removed (A). A single pole switch (PL-13 or PL-15) must then be linked to the point motor (switch machine) PL-10 to change the polarity of the frog. An extra modification but one that is not entirely necessary provided all rail surfaces are kept clean, is to connect the centre rail to its nearest stock rail (B). This modification means that the centre rails are no longer relying on point blade contact for their current supply. It is important to note that this should be done only if the other two wires linking the centre rails (A) have already been removed.

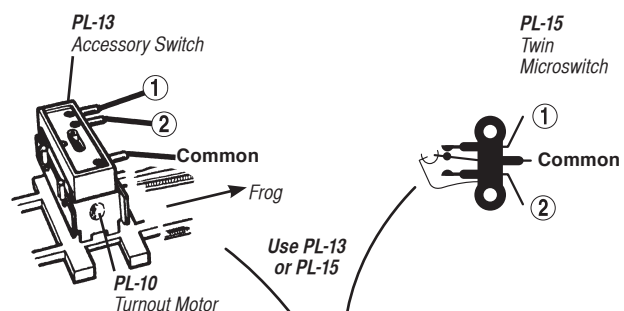
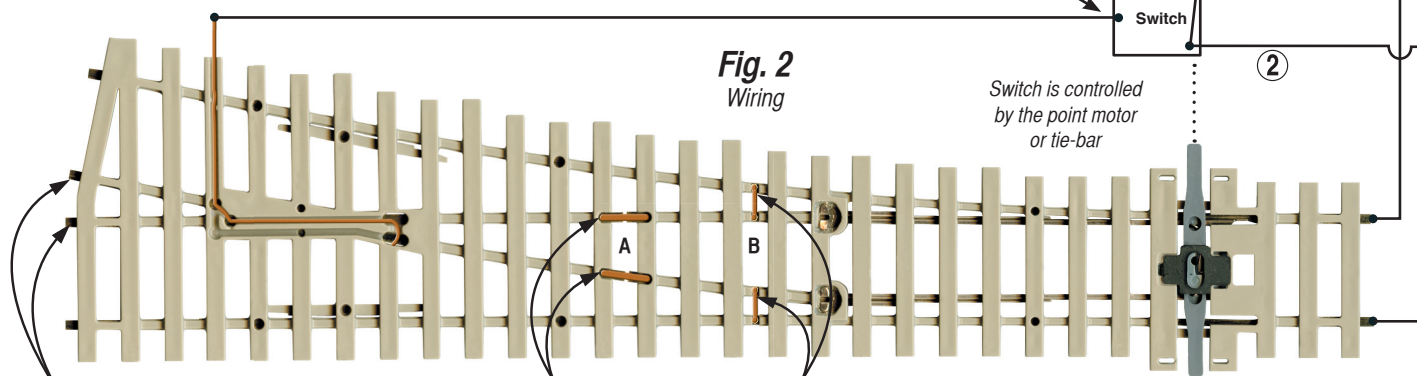


Fig. 2
Wiring

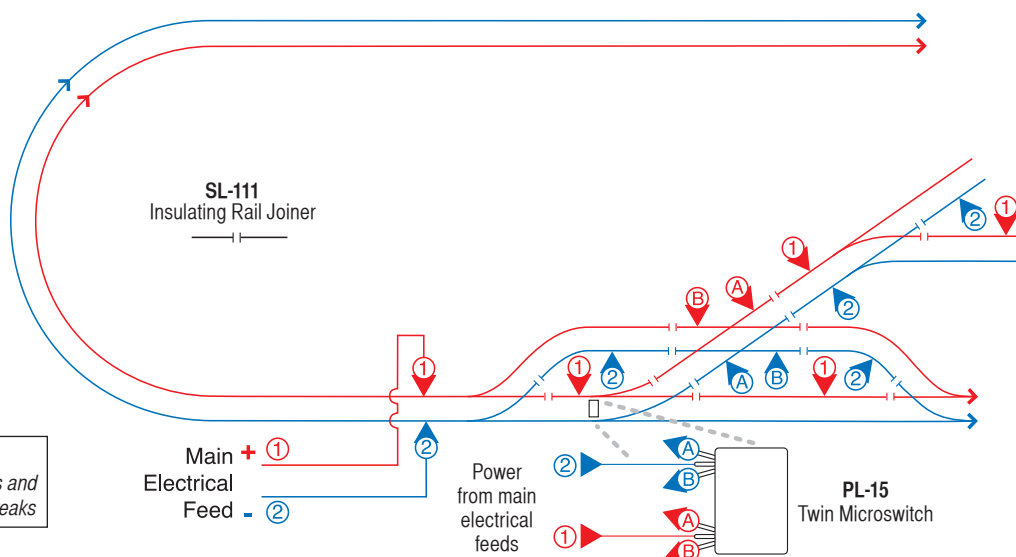


Option 2: Remove these two wires (A), for extra reliability link these two pairs of rails (B).

Electrical Feeds and Breaks

The necessary electrical feeds and breaks for a layout with Electrofrog turnouts are basically the same for both 12v DC and DCC, although slightly more complicated for standard 12v DC layouts as isolating switches will have to be used at different sections of the track so that locomotives can be stored without moving. The basic principles are that all frog rails should have insulated joiners and that the electrical current feed should be applied at the toe end of any turnout. Figure 3 shows an example layout to show the principles.

Fig. 3
Power Feeds and Insulating Breaks



Smooth operation

For smooth operation of locomotives it is important that pickups on the wheels are kept perfectly clean. It is equally important that there are at least two pairs of wheels from which current is collected and ideally on a six-coupled locomotive, pick-up should be on all wheels. Always check that your locomotives are collecting current correctly. If your locomotive does not perform faultlessly off the track, it cannot be expected to do so on the track. The Peco Lectrics range includes useful aids to simplify wheel cleaning and other maintenance.

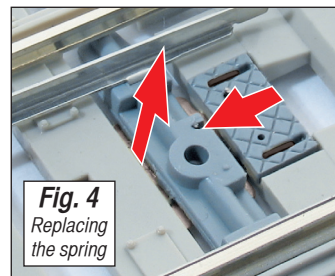
Over-centre Spring

WARNING: Eye protection should be used when working with springs. If the turnout

blades no longer snap positively into place it could be that the spring at the tie bar has become dislodged from its slot. If so it can be easily pushed back into place using a small screwdriver. To relocate or replace the spring, simply slide the grey cover plate towards the tie bar and pull up. Fit the new spring through the hole of the cover plate and locate the other arm into tie bar. Place down over the metal clip arms and the spring should push it back and lock into place (figure 4).

Outdoor use

Peco Streamline with Nickel Silver rail is suitable for use out of doors in temperate climatic conditions. It cannot be expected to withstand extreme temperatures as in some hotter climates or concentrated



direct sun rays. The over-centre spring should be lubricated with Peco Power-Lube or similar.

WARNING

Some glues, paints, oils and wood preservatives etc. can attack plastic and their use could damage this unit. Test all

fixing or colouring agents before use. It will be appreciated that we are unable to accept responsibility for damage resulting from neglect of this simple precaution.

Further Advice

Should you require more information on how to use Peco Streamline track contact: Peco Technical Advice Bureau
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