

"How to" Guide

PECO POINTS

Insulfrog to Electrofrog

Point removed method.

Point In situ Method.

Helpline in action

Taunton Controls Ltd

01823 327155

Insulfrog to Electrofrog

WHY should I change all my points to electrofrog ?

If you run DCC this will improve your track running at low speed, as well as reducing the number of harmful spikes.

Spikes are one reason your chips become corrupted and stop working. Some times a factory reset will bring them back from the dead.

(Factory reset = CV8 preset 8 E.R. E.R.).

How do spikes happen :-

When a short occurs due to a loco or wagon derailling.

When a loco goes through a point frog and the wheel flange touches both sides of the frog.

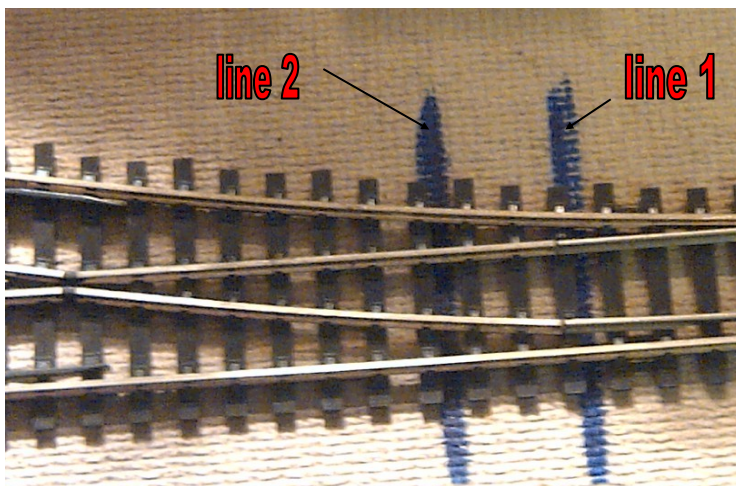
When you place a loco onto the track without turning off the track supply.

In this booklet we have given you two methods to help remove spikes, the first method is with the point removed and the second is with the point in situ.

Taunton Controls Ltd.

Helpline is open from 9am to 9 pm 6 days a week
closed on Wednesday's 01823 327155.

Point removed method.



Step 1 set up , place a piece of cardboard or paper under the point and mark two lines as above. (this will be your template for all the points you are converting).

The first line (**line 1**) should be to the right of the moving blade pivot. The second (**line 2**) should be between sleeper number 3 and 4 from the first mark.

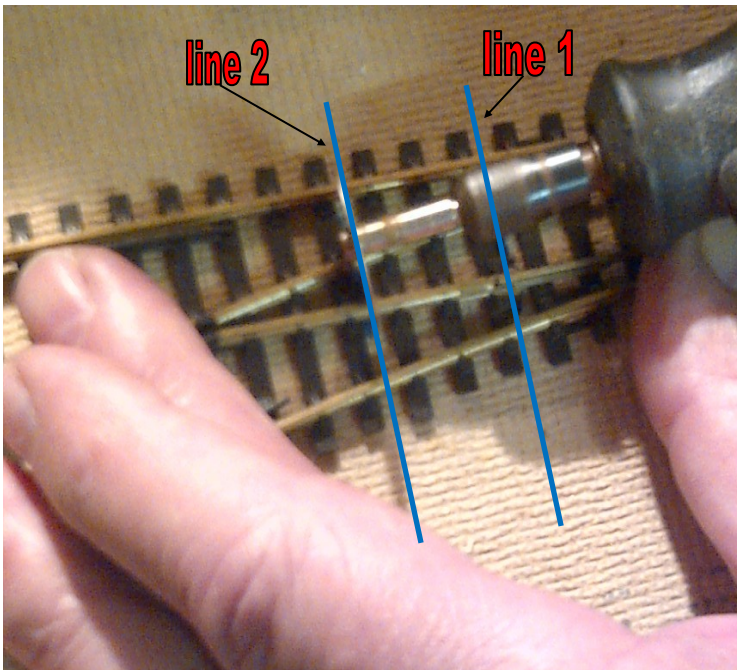
Please note that as you may be converting left or right hand points or long or short points I have only used the two lines as any more would lead to confuse the reader.

Point removed method.

Step 2

With a drill and a cutting disc cut through the 2 middle rails, **Over line 2**

Care at this point is required not to slip and cut the 2 outer rails or your fingers

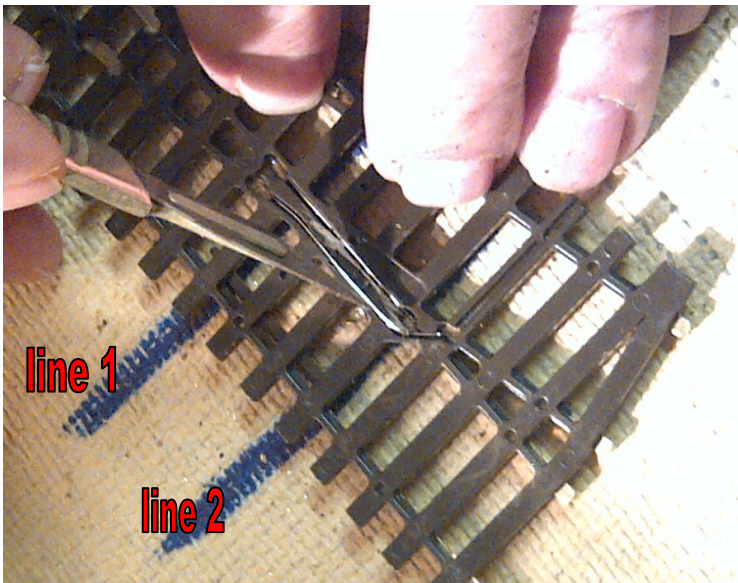


After cutting through the rails check with a scalpel that you have a full clearance between each rail.

Point removed method.

Step 3

Turn over the point and join the two wires at the frog end as below.



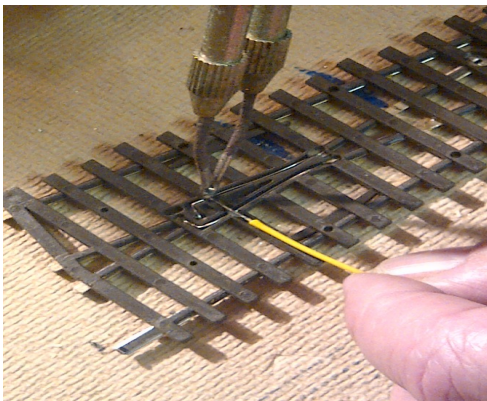
First with a scalpel remove the plastic that keeps the 2 wires apart. **Again here take care and time.** Once you have removed this divider ease the 2 wires together and join with solder.

Next, you will need a length of uncovered wire to form a frog wire (about 14 inches / 38cms) this can be obtained from Taunton Controls if you don't have any.

Point removed method.

Step 4.

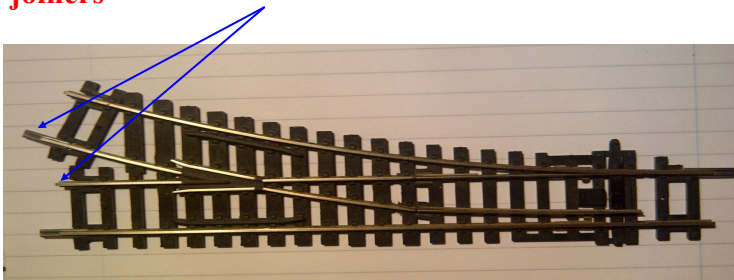
Solder the frog wire to both existing wires, this wire will be connected to the frog switch. (either to the point motor or a sub miniature switch).



This picture shows a length of insulated wire this was too fat to recess into the underside of the sleeper however this shows why you should use an uncovered wire.

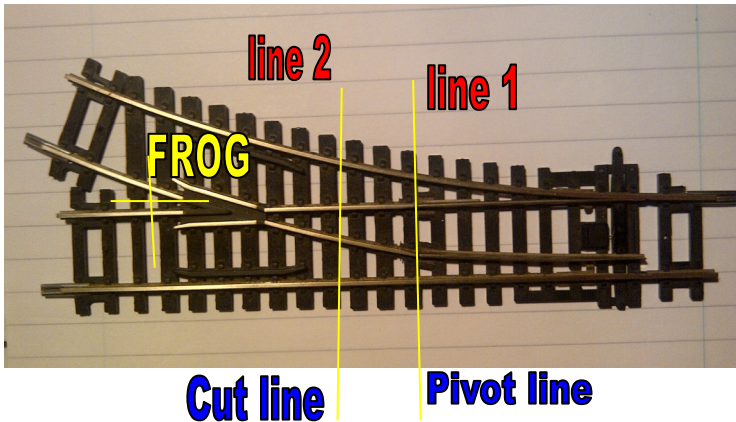
This is all you have to do, so ok let's try to return the point to the layout .

Final reminder, the two outer rail joiners should be metal and the 2 frog rails MUST have insulated rail joiners



Point In situ Method.

Step 1 set up,



As the points to be converted are in place you cannot use the card under as a guide so the above picture will be your work plan.

The first line (line 1) is the |Pivot line.

The second line (line 2) is the Cut line.

It may help to place a length of masking tape on the frog side of line 2.

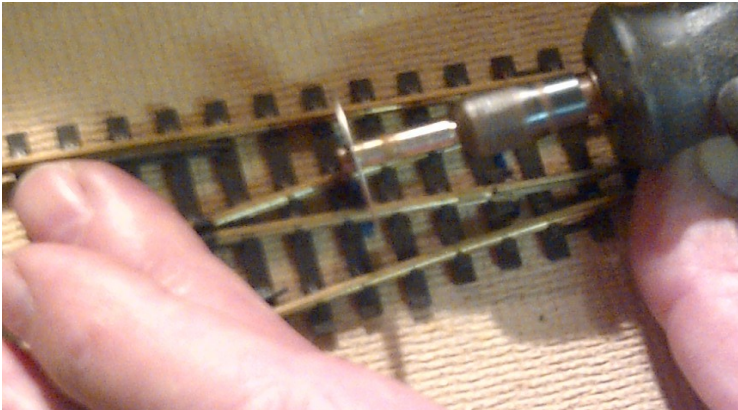
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Point In situ Method.

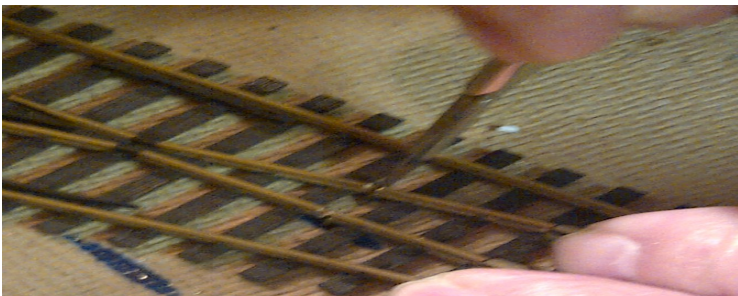
Step 2.

With a drill and a cutting disc cut through the 2 middle rails on the **Cut line**.

Care at this point is required not to slip and cut the 2 outer rails or your fingers



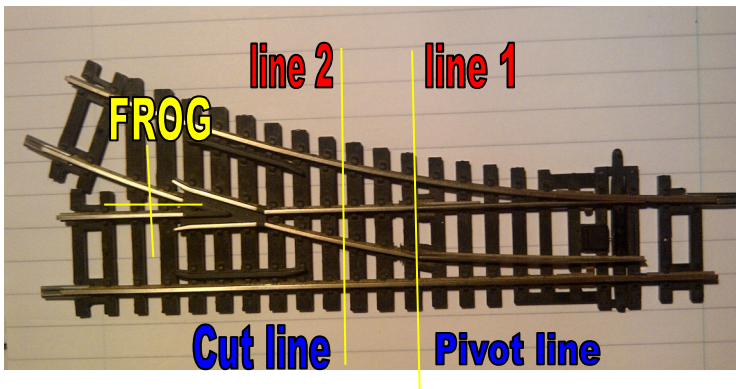
After cutting through the rails check with a scalpel that you have a full clearance between each rail. **Any small amount of metal may bridge the gap and give a short.**



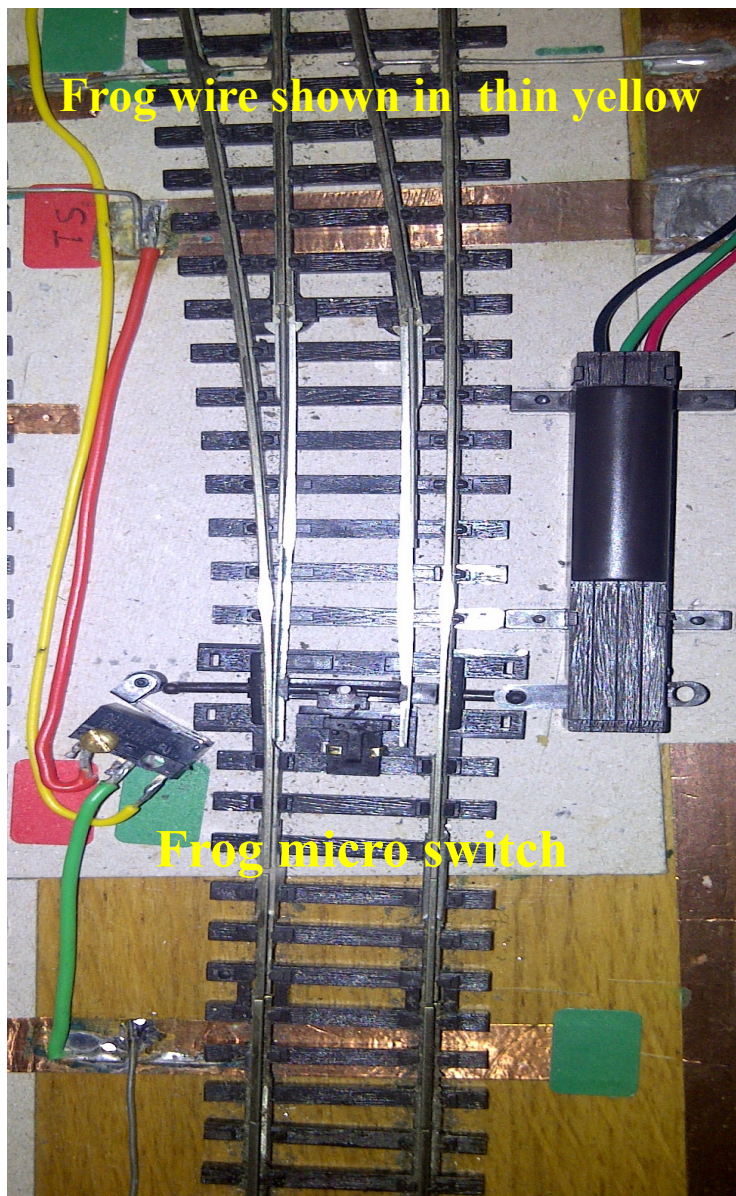
Point In situ Method.

Step 3.

Drill a hole through the baseboard between the 2 rails from the FROG at the yellow cross, see set up picture for this method, size should be just bigger than the frog wire.



The frog wire needs to be soldered to both rails in the frog and the other end connected to a point motor with a switch. However, if the point motor does not have a frog switch, then you will need to fit a sub miniature micro switch,, this switch comes from Peco (PL33) or you could try Maplins. See picture on next page. I have used 3 colour wires, the green goes to the track north supply, the red goes to the track south supply, the yellow is the frog wire. This completes this conversion.



Frog wire shown in thin yellow

Frog micro switch

ZTC 302 mk2



Frog wire shown in thin yellow



**Frog wire shown in thin yellow
Solder to corner tab**

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