

VIII. Track

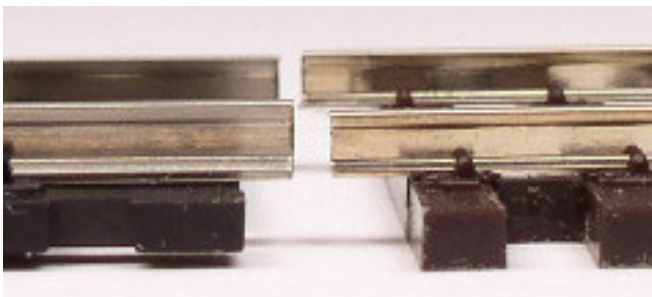
Beside hand laying track, three approaches are usually used for On30 track: HO standard gauge track, On30 track, and removing every other tie from HO standard gauge track.

HO track does not have a scale appearance but since several companies make it, it is readily available and often at a low price. On30 track has a scale appearance but the variety of pieces is limited. Removing every other tie is a compromise between the two but requires time and causes the track to be more susceptible to falling apart. Code 100 track is strong enough to survive tie removal but Code 83 track isn't.

Model Track Overview



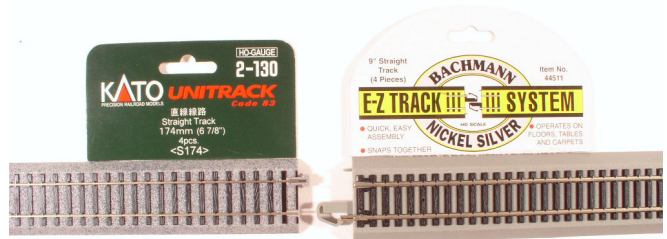
HO track: Atlas Code 100 9" Snap Track and Peco Streamline Code 83 flex track.



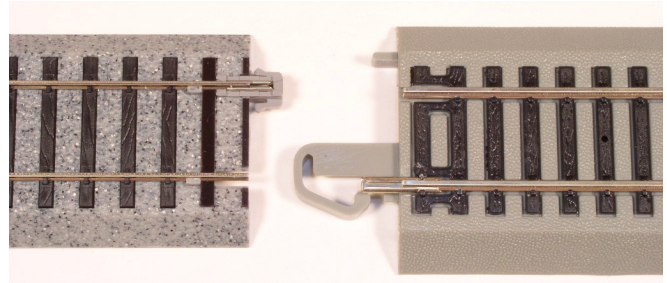
Comparison of Atlas Code 100 and Peco Code 83 track. Note the difference in rail height.



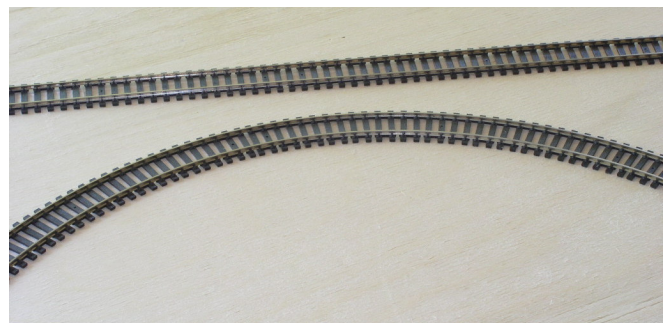
Track needs roadbed and the most common material is cork. This is a sample of Midwest Cork for HO track. The strip is 3' long and is cut along the length at an angle. The two halves are pulled apart and placed back-to-back with the beveled edges facing up. This is glued down and the track is mounted on top.



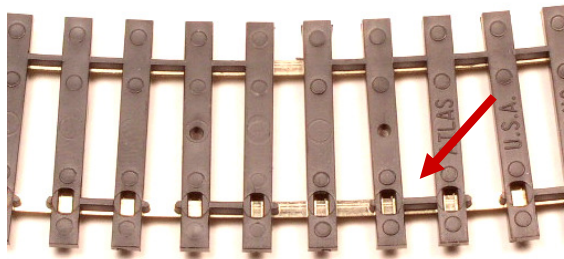
Kato and Bachmann both make HO track with built in roadbed. Kato's Unitrack is Code 83 while Bachmann E-Z Track System is Code 100.



A comparison of tie profiles on Kato Unitrack and Bachman E-Z Track



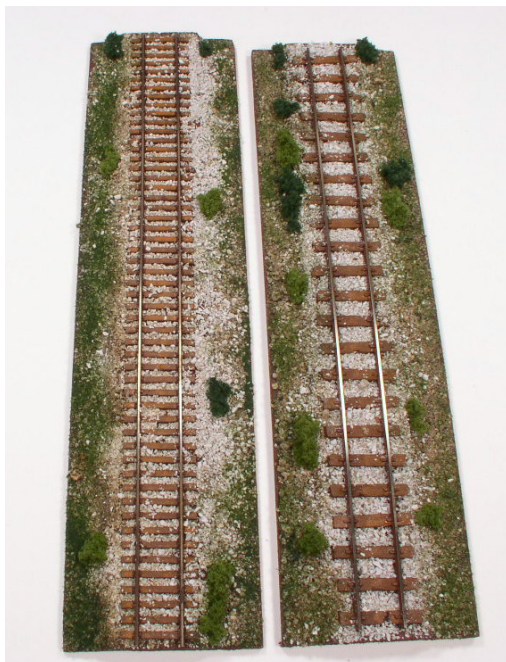
Atlas code 100 HO flex track. Flex track has the ability to be curved in order to create track configurations not possible with sectional track.



The track flexes because the ties are connected in pairs on one side of the rail.



Peco code 100 On30 track. It has the same gauge as standard HO track, but the ties are larger and spaced farther apart.



A comparison of Peco Track: left—Code 83 HO track; right—O-16.5. Presentation prepared by Granite Creek Enterprises.

Removing Every Other Tie from Atlas Code 100 Track

While this process does not make HO track look like On30 track, it does help it to look less like HO track. The HO ties are spaced 13 1/2" in O scale and removing every other tie puts them at 27", slightly farther apart than a common spacing of 21". The plastic ties are 1/16" thick,

5/32" wide and 1 1/8" long, giving a scale size of 3" X 7 1/2" X 4' 6".

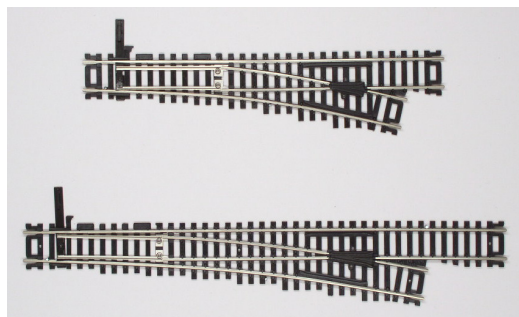
Cutting out every other tie weakens the track, so conversion should only be done once the track is ready to be laid. Work out the track plan and test fit the track before cutting.

Guidelines for Cutting

- *Do not convert the track until it is ready to be laid.
- *Mark the ties that will be cut out before starting cutting.
- *Switches—start at the throw bar and work upwards.
- *Switches—don't cut any molded plastic ties that are necessary for operation of the switch.
- *Wear safety glasses.
- *Cut in an area free from people and animals—when the pieces are cut, they fly across the room.
- *Use sharp plastic nippers—buy a pair just for converting the track. This process dulls them quickly.
- *Use code 100 track as code 83 track falls apart when doing this. The cast on spike heads are too small on code 83 track to hold the track together.

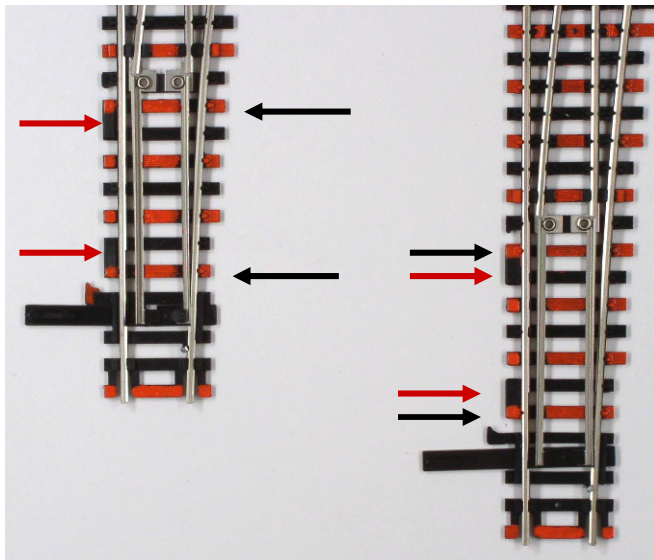


Tools needed: safety glasses, a bright color of bottle paint, plastic nippers, paint brush and razor knife.

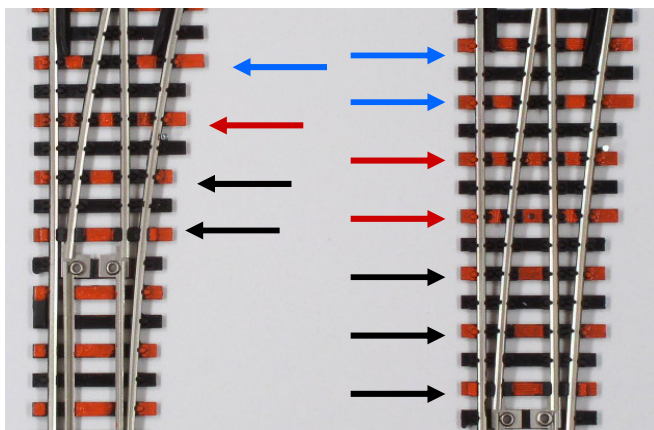


Atlas Mark 3 code 100 #4 and #6 switches ready for conversion. The Mark 3 is recommended as it has isolated metal frogs and hidden electrical connection to the odd rails.

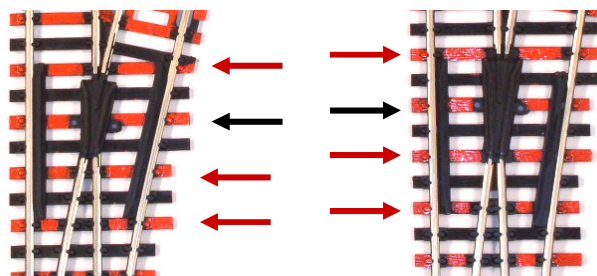
Marking the Ties



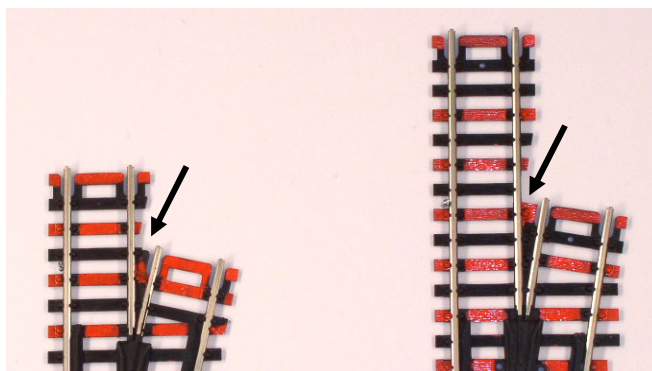
Step 1. Begin at the throwbar. Mark the first tie after the tie at the throwbar (lower black arrow). Keep working upwards and stop at the tie with the rivets that holds the point rails (upper black arrow). Mark the tie ends on the outside rail. The nubs and the connectors between ties need to be removed (red arrows).



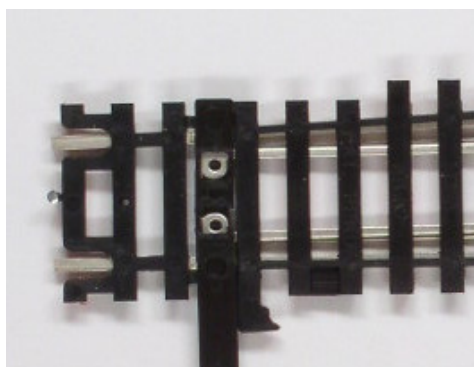
Step 2. The first ties from the pivot tie moving upwards will only be cut on the ends and in the middle between the rails (black arrows). The third tie is removed entirely (red arrows). The fourth tie only has the ends and the material between the rails removed (blue arrows).



Step 3. The tie underneath the solder lugs on the frog is removed (black arrows). The ties under the guardrails are partially removed (red arrows).

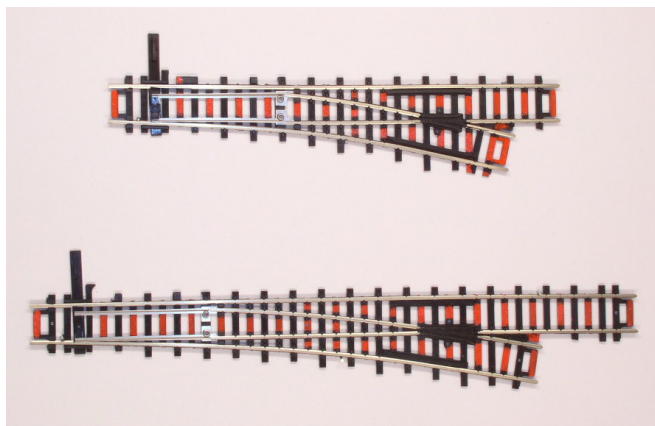


Step 4. The ends of the track pose problems because removing too many ties will cause the rails to lose gauge and become weak. The #4 is the worst case as all of the ties are scheduled for removal. It is best to leave a few extra ties here and there as needed to preserve integrity (left). The #6 has a tie left to hold gauge. Leave the filler plastic between the two tracks to help maintain integrity (black arrows).

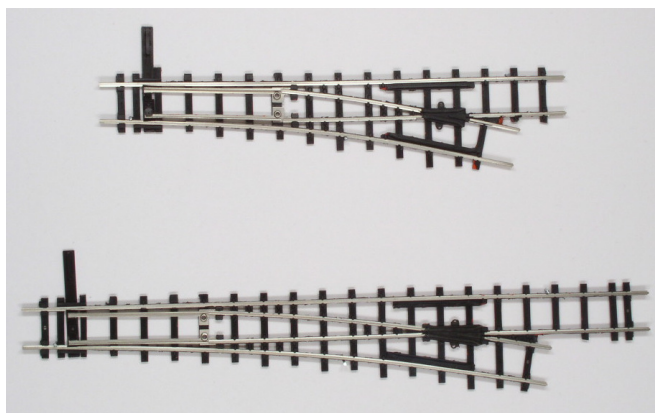


The back of the switch. Note the thin plastic running underneath the rails. This will not be removed, only the ends and center of the ties. Removing this material can cause the switch to lose its shape.

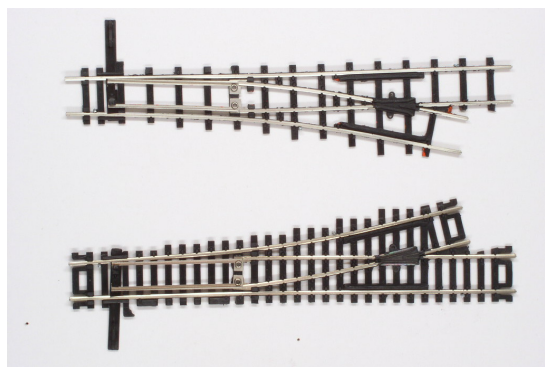
Removing the Ties



1. Cut the tie ends. The #4 has the tie throw bar trimmed. Start at the points and work upward.



2. Cut the ties between the rails. Work slowly because the action of snipping a tie into two pieces causes these pieces to move outward and distort the connecting plastic under the rail. Nibble the material out if necessary.



A comparison of a converted and a stock switch. The top switch is curving due to its weakened condition. Use a metal straight edge and realign it.



Both switches after being laid and ballasted. Presentation by Granite Creek Enterprises.