

S&C Change Timber Bearer

Scope Includes: All Timber S&C Bearers
Excludes: Concrete S&C Bearers, Plain Line Sleepers.

Preparation

Tools, equipment and plant items required but not limited to:

- Generators
- Spanner
- Shovel
- Pan Puller
- Keying Hammer
- Duff Jacks
- Timber Nips
- Heel/Slewing Bar
- Set Square
- Track Gauge
- Impact Wrench
- Sleeper Drill (with correct type of drill bit)

Work planning considerations:

- Timber Type and Size
- Method of bearer removal to be adopted;
 1. slide out
 2. slue and slide
 3. remove railsor a combination of the 3 above.
- Manual or Machine Assisted Installation
- Lifting Plan
- Layout Stressing requirements
- Follow Up Tamping requirements
- Signalling requirement
- Traction bonding requirements
- Changes to CRTs

Method 1 – Slide Out

1. Check the area the timber is to be pulled through to is suitable.
2. Check the new timber is of the correct type and size, and is not bowed.
3. Open out the ends and cribs either side of the timber to be changed.
4. Release all chairs, baseplates and/or fastenings from the timber and where fitted; remove lateral end restraint plates, gauge stops etc.
5. Partially release all screws on the timbers adjacent to the timber to be changed.

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6. Insert sufficient jacks and lift the rails ensuring adjacent bearers remain on their beds.
7. Taking care not to disturb the existing bed, slide out the timber.
8. Taking care not to disturb the existing bed, slide the new timber in.
9. Ensure timber is square and correctly positioned.
10. Lower jacks.
11. Drill holes and fasten down one rail; where applicable, start with the middle rail.
12. Measure gauge and fasten down remaining rails.
13. Ensure all chairs or baseplates are tightened.
14. Pack timbers as required.
15. Back fill all cribs and re-instate correct ballast profile.
16. Check Top and Line.
17. Remove waste and materials from site.

Method 2 – Slue and Slide

18. Check the new timber is of the correct type and size, and is not bowed.
19. Determine the number of timbers that require moving to allow the removal of the timber to be changed.
20. Open out the ends and cribs of the designated timbers.
21. Mark the position of all timbers on all rails.
22. Release all chairs or baseplates from the designated timbers and where fitted, remove lateral end restraint plates, gauge stops etc.
23. Insert sufficient jacks and lift the rails ensuring adjacent bearers remain on their beds.
24. Taking care not to disturb the existing beds move the designated timbers to allow the extraction of the timber to be changed.
25. Remove the timber to be changed.
26. Insert new timber and position correctly.
27. Taking care not to disturb the existing beds move the remaining timbers back to their correct positions.
28. Lower jacks.
29. Check alignment, drill holes and fasten down one rail, where applicable, start with the middle rail.
30. Measure gauge and fasten down the remaining rails.
31. Ensure all chairs or baseplates are tightened.
32. Pack timbers as required.