

Track – Jointed Rail - Renew

Scope

Includes: Replacement of worn or defective jointed rails
Excludes: Rails in CWR

Preparation

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

- Approved rail thermometer
- Rail dogs/grabs and/or iron men
- Rail turning bars
- Rail bars
- Shovels
- Pad scrapers
- Rail fastening tools
- Jack
- Rail saw or disc cutter
- Rail drill
- Portable hand grinder
- Hammer
- Torque wrench
- Lift plates or junction lift plates if required (see planning considerations)
- Road/rail machine (optional)

Work planning considerations:

- Rail depth, length and specification requirements
- Delivery of replacement rail
- Removal of redundant material
- Banding/security of material
- Isolation requirements
- Possession requirements
- Signalling requirements
- Traction requirements

Method

1. Move tools, equipment, plant and materials to site.
2. Fit rail continuity bonds for OLE and DC areas.
3. Signalling disconnections (as required).
4. Traction bonding disconnections (as required).
5. Remove fishplates from rail ends.
6. Remove rail end bonding (if fitted).
7. Unfasten old rail, jack out of position and remove.
8. Clear baseplate/chairs seatings.
9. Replace components (i.e. baseplates/chairs/sleepers/pads/insulators).
10. Cut and drill new rail as required.

Track – Jointed Rail - Renew

11. Carry out cold bolt hole expansion as appropriate.
12. Position new rail with correct rail end gaps.
13. Fasten down new rail replacing clips/keys as required.
14. Fit fishplates and blend in rail profile as appropriate (lift plates may be required).
15. Refit rail end bonding (as required).
16. Signalling reconnections (as required).
17. Traction bonding reconnections (as required).
18. Remove continuity bonding (where fitted in OLE areas).
19. Remove tools, equipment, plant and new/scrap material from site.
20. Ensure appropriate record forms are completed and forwarded to the line manager (e.g. GEOGIS).

References

Supports Ellipse Standard job

- 009074 Track - jointed rail - renew due to wear
- 009077 Track - jointed rail - renew (defects)

If applicable refer to the following associated documents:

- NR/PRC/MTC/TK0068 Management of broken rails
- NR/PRC/MTC/TK0069 Management of rail defects
- NR/WI/TRK/002/C03 Drilling of Rail
- NR/L3/TRK/002/C04 Saw and Disc Cutting
- NR/L3/TRK/002/C05 Cold Bolt Hole Expansion
- NR/GN/TRK/7001/TWI2G029 How to carry out cold bolt hole expansion
- NR/GN/TRK/7001/TWI2C001 How to change fishplates
- NR/GN/TRK/7001/TWI2G011 How to use a rail drill
- NR/GN/TRK/7001/TWI2P040 How to carry out joint shimming

- Risk Control Sheets:
- NR/L3/MTC/0002/TK000 Generic Track Risks
- NR/L3/MTC/0002/TK400 Renew rail - jointed & check