

general

# NGE 222 Working around electrical infrastructure

## Purpose

To prescribe the rules for non-infrastructure workers working around electrical infrastructure in the Network.



### Warning

Workers must keep themselves, tools, equipment and materials as far as possible from exposed electrical equipment and wires, and never closer than 1 metre to the 1500V overhead wiring.

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## Principle

Infrastructure workers must comply with the requirements specified in the Maintenance Representative's Electrical Safety Instructions.

Workers in the vicinity of exposed electrical equipment and wires in the Rail Corridor must keep or be kept at safe distances.

Unless they are told by an Electrical Representative that they are not live, untrained workers must treat as live:

- electrical equipment
- fallen electrical wires
- vehicles, equipment or objects in contact with wires or fallen wires
- water or fires in contact with electrical infrastructure.

Workers must treat objects caught in or touching overhead wiring as live. Only Electrical Representatives may remove these objects.

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## Electrical infrastructure

Electrical infrastructure includes:

- high-voltage and low-voltage wires, and electrical equipment, on poles
  - 1500V overhead wiring and associated equipment
  - electrical conductors carried in above-ground troughs, or buried in the ground
  - low-voltage electrical switchrooms
  - substations.
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## Working near electrical equipment

Unless authorised in accordance with the requirements specified in the Maintenance Representative's Electrical Safety Instructions, workers must not climb on top of rail vehicles on an electrified track.

## Work above electrical equipment

Workers must not cause water or debris to fall onto 1500V overhead wiring.

## Work tools and equipment

Workers must not use metal or metal-reinforced ladders within 6 metres of 1500V overhead wiring or equipment.

Steel tapes, metal-reinforced linen tapes and long steel rules may be used only in accordance with the Maintenance Representative's Electrical Safety Instructions.

### Note

Workers must take extra care when handling long objects near overhead equipment.

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## Underground services

Before the whereabouts of buried services and underground cables are known, workers must not dig, break the ground or drive anything into the ground.

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## Faults in electrical infrastructure

Workers who see or suspect faults, fallen wires or fires in the electrical infrastructure must immediately tell the Signaller.

The Signaller must tell the Electrical System Operator.



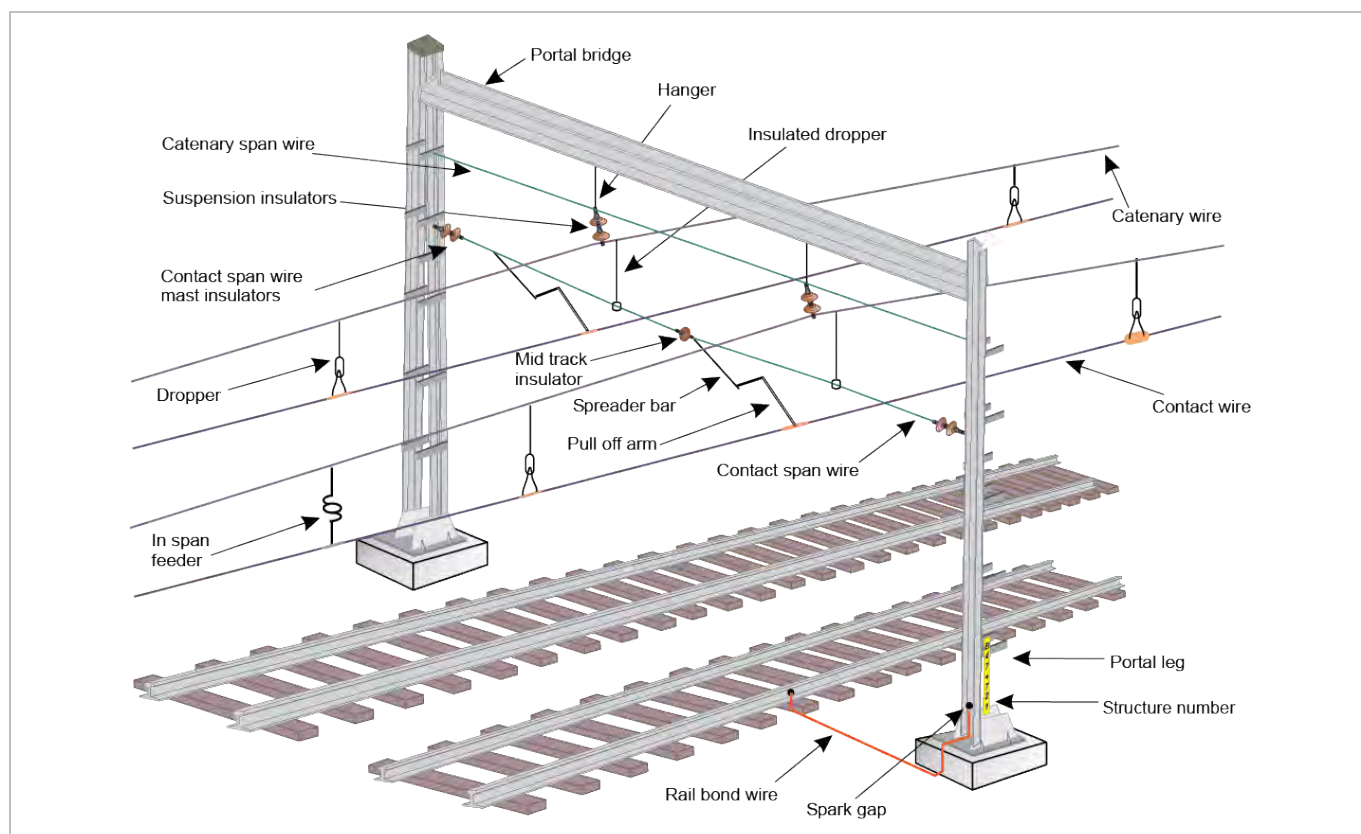
### Warning

Untrained workers must not try to fight fires near electrical infrastructure and signalling locations.

## Illustrations

If possible, refer to these diagrams to report faults, fallen wires or fires in 1500V overhead wiring.

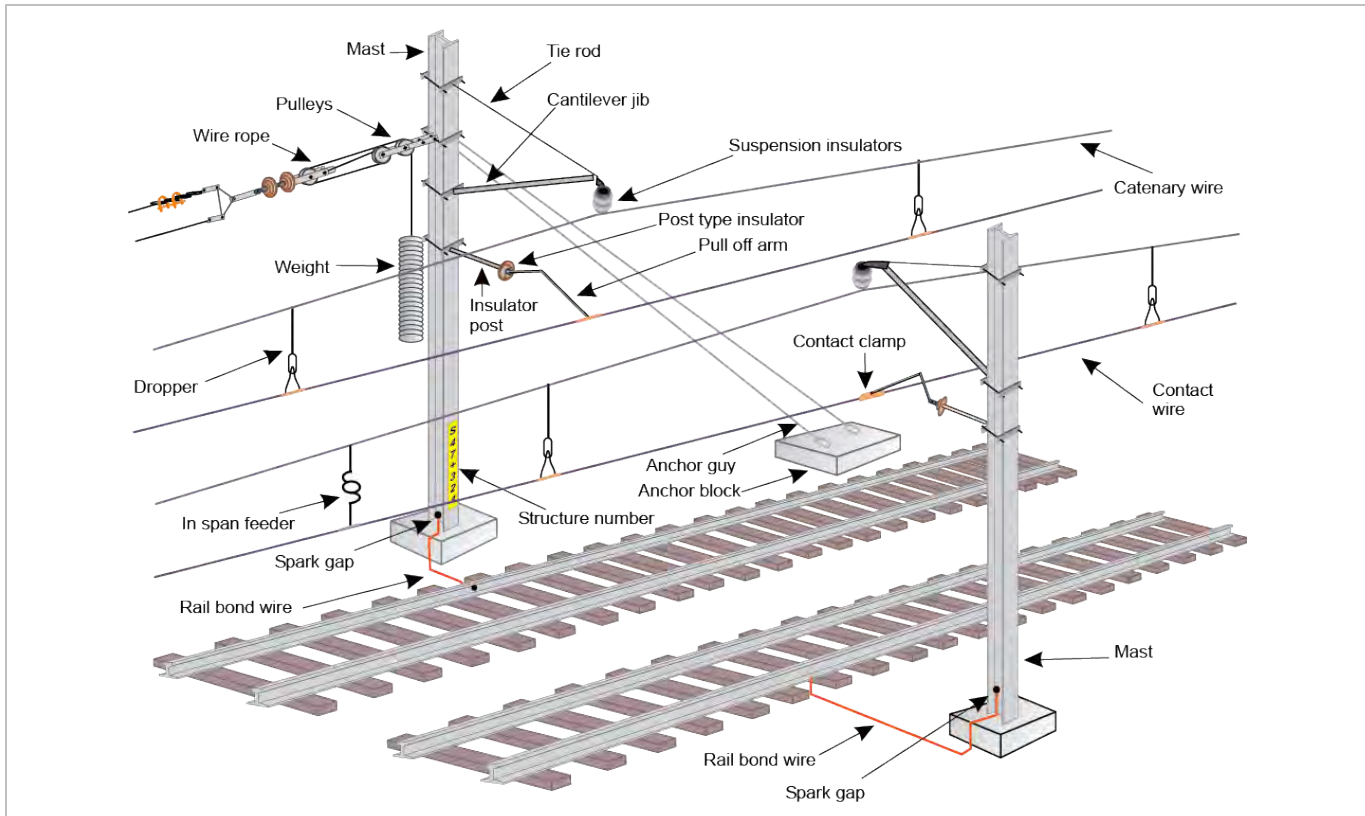
**FIGURE 1:** Simple catenary, fixed-anchored, span-wire construction on portal structures



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**FIGURE 2:** Simple catenary, regulated-tension, cantilever construction on masts



## Related Documents

Nil