

Safety Advice

Action required following a serious incident

Installation of Tensorex tensioning devices

Issued to: All Network Rail line managers, safety professionals and RISQS registered contractors

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Location: Various locations

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Overview

Tensorex and Tensorex C+ tensioning devices are used to maintain mechanical tension in the overhead line conductors.

There have been three separate incidents relating to working practices with these Tensorex tensioning devices.

During endurance testing of a Tensorex C+ there was a catastrophic failure of one of the terminal forks. During the setup of the device the operator was adjusting the terminal fork nuts while under line tension. The initial findings suggest that this process has introduced a latent defect in one of the terminal forks which is a contributory factor of the failure of the terminal fork.

Earlier this year a 1.5T pull-lift was being used to rig around insulation in the contact wire. The pull-lift slipped causing a release in tension of the contact wire whilst the pull-lift was extended to its mechanical stop. The wire run was tensioned using a Tensorex C+ tensioning device.

In the third incident a 1.5T pull-lift was used to rig a Tensorex device to land the catenary wire. The pull-lift slipped causing a release in tension of the Tensorex unit. The pull-lift was extended to its mechanical stop. The operator in the basket injured his fingers during the incident.

Although the primary cause of these incidents was a pull-lift failure, investigations are on-going as there are concerns about the suitability of a 1.5T pull-lift with Tensorex devices.

Immediate action required

Prior to the re-issue of the OLE Maintenance Work Instructions the following actions are required when working with Tensorex and Tensorex C+ devices:

1. Tensorex C+ ONLY - Do not adjust any Tensorex C+ M14 terminal forks while the Tensorex C+ is under line tension.
2. All Tensorex devices - When rigging any Tensorex or Tensorex C+ devices and the associated wire run, you must use a pull-lift with a capacity of a minimum of 3 tonnes.

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