

ANGE 220

## Unreliable Track-Circuit Operation

### Applicability

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NSW

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SMS

### Publication Requirement

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External Only

### Document Status

Issue/Revision #	Effective from
3.0	11 October 2015

## Purpose

To prescribe the rules for identifying and responding to unreliable *track-circuit* operation in the *Australian Rail Track Corporation (ARTC) NSW Network*

## Identifying unreliable track-circuits


### Reporting

*Qualified Workers must report track-circuits suspected of being faulty to the Network Control Officer.*

The Network Control Officer must treat the operation of the reported track-circuits as unreliable.

### Intervals between train movements

Network Control Officers must treat the operation of track-circuits that have not been *travelled* over by *rail traffic* for 72 hours or more as unreliable.



**The 72 hour period may be varied longer or shorter for designated portions of line by Waiver in accordance with ARTC Engineering Standards.**

**The Waiver is to be endorsed by the ARTC Signalling Standards Engineer and approved by the Standards and Systems Manager.**

## Responding to unreliable track-circuits

### Rail traffic detection failure

Track-circuit operation must be treated as failed and in an unsafe condition if it fails to provide an indication when a *train* or a *track vehicle* listed in the ARTC *Train Operating Conditions (TOC)* manual as operating track-circuits, is on the track-circuit.

*Signallers* who become aware that track-circuit detection of rail traffic may have failed must:

- set *controlled signals* allowing entry to the affected blocks at **STOP** and apply *blocking facilities*, and
- arrange for the *Signals Maintenance Representative* to be told about the unreliable track-circuits, and
- make sure that signalling equipment affected by unreliable track-circuits is not used before it is tested and *certified* as working correctly by the *Signals Maintenance Representative*, and
- tell the *Train Controller*, and
- *block work* rail traffic

### False detection of rail traffic

Track-circuit detection is treated as false if it indicates that the track-circuit is occupied without rail traffic being present.

Network Control Officers who become aware that track-circuits are providing a false indication of the presence of rail traffic must arrange for the *Signals Maintenance Representative* to certify the track-circuits as working correctly.

Until the track-circuits have been certified as working correctly, rail traffic must be worked in accordance with:

- Rule *ANSY 512 Manual block working*, or
- Rule *ANSG 608 Passing signals at STOP*

### Related ARTC Network Procedures

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<b>ANPR 722</b>	Manual block working
<b>ANPR 746</b>	Authorising rail traffic to pass an absolute signal at STOP

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### Effective Date

11 October 2015