



AUSTRALIAN RAIL TRACK CORPORATION LTD

Discipline: Engineering (Signalling)

Category: Standard

Microtrax Coded Track Circuits

SMP 37

Applicability

New South Wales	✓	CRIA (NSW CRN)	✓
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Primary Source

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Amendment Record

Version	Date Reviewed	Clause	Description of Amendment
1.1	1 September 2004		Reformatting to ARTC standard.
1.2	14 March 2005	Disclaimer	Minor editorial change. Footer reformatted.
1.3	2 June 2010		Sections 1 to 5 and Section 9 transferred to ESM-07-03. Document transferred to new template and edited for grammar and style. Track Circuit History Card transferred to ESI-07-03.

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About This Standard

This document defines the procedures and tests to be followed when carrying out routine maintenance, fault finding and attending to failures on Microtrax coded track circuits.

1 References

Refer to Section 2 References in ESM-07-03 Microtrax Coded Track Circuits.

2 Repair

Refer to Section 3 Repair in ESM-07-03 Microtrax Coded Track Circuits.

3 Maintenance

Refer to Section 4 Maintenance in ESM-07-03 Microtrax Coded Track Circuits.

4 Analysis of Data

Refer to Section 5 Analysis of Data in ESM-07-03 Microtrax Coded Track Circuits.

5 System Failure and Initialisation

Refer to Section 6 System Failure and Initialisation in ESM-07-03 Microtrax Coded Track Circuits.

6 Booking Equipment Out of Use at Microtrax Crossing Loops

6.1 Points

Points disconnected in the normal position shall have the points switch turned off and fuses removed. Disable the 'Points Reverse' non-vital relay by removing the pin in that circuit.

6.2 Signal to the Loop

The signal to the loop may be disconnected by removing the fuse and common link on the shunt signal operating circuit.

6.3 Signal to the Main and Point Indicators

It is not possible to disconnect the main signal or the point indicators. In circumstances that require these to remain at stop, they shall be booked out of use and disabled by switching off the Microtrax units at both ends of the loop. Both the fuse and the negative link shall also be removed when switching off a Microtrax unit.

This action will disable the entire interlocking and points will need to be wound over to use the loop for traffic purposes and clipped for all facing movements.

6.4 Microtrax Track

The Microtrax unit at both ends (master and slave units) shall have the fuse and negative link removed.

7 Operators Keys for Crossing Loops

Operators keys are provided to prevent unauthorised access to the point and signal control push buttons. Only staff required to operate the push buttons will be issued with operators keys. The keys are numbered and will be a personal issue. Staff are responsible for the security of the key issued to them. Keys must not be lent to other personnel.

8 Booking Equipment Out of Use on Microtrax Sections

8.1 Signal Driven Directly by Microtrax

Powering down the Microtrax will result in the signal displaying a red aspect via the back contacts of the VPFR relay. The Microtrax unit at both ends (master and slave units) are also to have the fuse and negative link removed and the signals are to be observed to confirm they are displaying a red aspect.

8.2 Microtrax Track

The Microtrax unit at both ends (master and slave units) are to have the fuse and negative link removed.

9 Security of Microtrax Software

Refer to Section 9 Security of Microtrax Software in ESM-07-03 Microtrax Coded Track Circuits.

10 Microtrax Coded Track Circuit History Card

Refer to ESI-07-03 Track Circuit History Cards for a copy of the Microtrax Coded Track Circuit History Card.