AUSTRALIAN RAIL TRACK CORPORATION LTD

Engineering (Signalling) Instruction **ESI-06-01**

Claw Lock Failure

Applicability

ARTC Network Wide	✓

Amendment Record

Version	Date Reviewed	Clause	Description of Amendment
1.0	8 Oct 2014		First Issue

Main Points

Scope

This Instruction is for signals maintenance staff to undertake an inspection of claw lock points within their area of responsibility.

Background

A report was received that a blade was standing open on a claw lock set of points. On inspection it was found that the blade was sitting higher than the stock rail, giving an illusion that the blade was open. This situation is brought about by irregularities in top geometry, which leads to faults throughout the turnout.

This condition was entered into the D.M.S. for action.

During maintenance inspections the following was identified:

- Broken claw at pivot mount (Fig. 1)
- Claw modified by machining /grinding, not to specification or approved (Fig. 2)
- Incorrect coupling bar /spreader installed preventing correct setup /adjustment capability to maintain compliance with manufacturer's setup parameters (Fig. 3).

Actions

Signals maintenance staff are to undertake an inspection of claw lock points within their area of responsibility within the next maintenance cycle or 6 weeks (whichever comes first).

This instruction highlights specific items to be inspected.

All Signal maintainers should record actioning of this instruction and details of the findings for each layout and return to their work group leaders.

Geometry anomalies throughout turnouts should be identified and entered into the D.M.S. and work group leaders notify Team Managers for actioning.

Issued by	**Date**
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Fig 1. Points were pumping at the B and C timbers, which caused excessive stress and wear causing subsequent failure of the claw (See Above).

Fig 2. Claw has been ground to allow locking to occur due to incorrect lock box installation.

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Fig 3. Incorrect coupling bar installed to turnout.

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