



AUSTRALIAN RAIL TRACK CORPORATION LTD

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Discipline
Engineering Standard – NSW

Category
Signalling

Title
Facing Point Lock Testing - Mechanical

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Document Control

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		Refer to Reference Number	H Olsen	M Owens	Refer to minutes of meeting 12/08/04

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About This Standard

This Standard defines the procedures and tests to be followed when carrying out maintenance on a Mechanical Facing Point Lock.

Superseded by ESM-06-01

Document History

Primary Source – RIC Standard SC 00 52 00 29 SI Version 2.0

List of Amendments –

ISSUE	DATE	CLAUSE	DESCRIPTION
1.1	01/09/2004		▪ Reformatting to ARTC Standard
1.2	14/03/2005	Disclaimer	▪ Minor editorial change ▪ Footer reformatted
	13/08/2010	ALL	Superseded by ESM-06-01

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Superseded by ESM-06-01

1. General Procedure

Facing point locks shall be periodically tested to ensure the reliable operation of the points and that with the lock engaged the switches are held within 3.2mm of the running face of the stock rail, and to ascertain if the slide chairs in the vicinity of the points rodding have worn, or the stock rails have worn, or the track gauge has varied.

The lock plunger travel is to be 200mm, except in the case of double lock plungers worked by one lever, where the travel is 175mm. When the lock plunger is withdrawn the clearance between the end of the lock plunger and the slotted lock rod or locking rod block is to be 20mm.

When gauge testing a 3.2mm gauge shall be used and the lock shall be maintained sufficiently tight to ensure that the movement of the F.P.L. lever cannot be completed with the gauge inserted between the point switch and the stock rail in line with the stretcher at the toe of the points. The switch shall be operated by means of the lever in the interlocking machine. When the F.P.L. locks the points both ways, each switch shall be tested.

The signalling maintainer shall confirm that the track is to gauge at the points, looking for signs of excessive wear or movement of the track that would affect the safe or reliable operation of the points equipment.

The signalling maintainer shall notify the Corridor Manager or nominated Signalling representative of any undue movement or wear of the track at the points and request rectification of same.

In routine testing of facing point locks and point detection, the signalling maintainer carrying out the tests shall liaise with the signaller so that the testing is conducted without detriment to safety or train working.

The signalling maintainer carrying out the tests shall arrange for the signals protecting the points concerned to be securely maintained at stop during testing.

Where adjustment is required the signals protecting the points are to be booked out of use for traffic movements in accordance with Network Rule NWT 312 and Procedure NPR 704.

2. Adjustments

If, during testing under normal operation, the switches do not fit hard up against the stockrail with some spring then the points drive may need adjustment.

If, during testing under normal operation, the facing point lock plunger is tight with the point switch blades fitting hard up against the stock-rail then the points may need adjustment.

If, during gauge testing it is found that the facing point lock lever can be put fully home with the gauge between the point switch and stock- rail, then adjustment is necessary.

Before adjustment ensure that there is no movement due to loose F.P.L casting or movement of stockrail or chairs.

Adjustment shall be immediately made as follows:

- Loosen the two bolts at the joint in the lock rod, sufficiently to allow the disengagement of the serrations. Adjust the lock rod bar accordingly and re-engage the serrations at the required new position. Tighten the bolts.
- If the required adjustment is 3.2mm or less, or if the lock rod is of the non-serrated type, shims shall be used. These are to be inserted between the switch
- If the extent of the wear is such that a properly adjusted lock cannot be obtained the worn fittings shall be replaced.
- A facing point lock return shall be provided as and when locks are tested or on a regular period basis for locks tested during that period and then forwarded to the Signal Maintenance Engineer. Details of adjustments made shall be included in the return. The period should be at least monthly.