

TECHNICAL INSTRUCTION

TI 061
Issue 2
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NETWORK RAIL - SIGNAL ENGINEERING

Actions to be taken for defective
stretcher bars and free wheel clearances
less than 50mm

Relevant Standard: NR/SMS/PF01, NR/SP/TRK/001, NR/WI/TRK/001 &
NR/SP/SIG/10660

See attached letter on
pages 2, 3 and 4
(issue 2 supercedes issue 1)

END

Originator's Details:-
Bob Cummings & Andrew Simmons
Network Rail

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40 Melton Street
London
NW1 2EE
Tel: +44 (0)20 7557 8000
Fax: +44 (0)20 7557 8020

Memorandum

To:	From:
Territory Engineers (Signalling)	Bob Cummings
Territory Engineers (Track)	Head of Track Engineering
Area Engineers(Signalling)	Andrew Simmons
Area Engineers(Track)	Head of Signal Engineering
Territory Maintenance Directors	
Infrastructure Maintenance Managers	Tel: 085 78357 / 085 78070
Maintenance Delivery Unit Managers	
Head of Maintenance Compliance	
cc	Date: 16 th March 2007
Director, Maintenance	
Chief Engineer	
File.	

NR/BS/LI/067 Version 2 : Letter of Instruction: Track and Signalling standards

Actions to be taken for defective stretcher bars and free wheel clearances less than 50mm

This is a Letter of Instruction issued jointly by the Heads of Track and Signal Engineering.

In accordance with Section 16, of Network Rail Business Process Document, NR/SP/STP/090 – *Managing Change to Network Rail Standards*, we give notice that the following changes shall be made with effect from 17:00 hours Friday 23rd March 2007.

Following the points inspections under SIN 97, this is a clarification of the requirements of Track and Signalling Standards in respect of points stretcher bar defects and free wheel clearance of less than 50mm.

Current standards defining actions to be taken when the above defects are identified by track or signalling staff include:-

- NR/SP/TRK/001 - Inspection and Maintenance of Permanent Way
- NR/WI/TRK/001 – Track Inspection handbook (TIH)
- NR/SP/SIG/10660 – Implementation of Signalling Maintenance specifications (SMS)
- NR/SMS/PF01 – Point Fittings

The requirements of the above current Standards shall continue to be complied with.

The following are clarifications and requirements to be applied by track and signalling staff, pending Standards changes.

1. **Clarification to PF01 Section 2**

Inspection of fixed stretcher bars – scrape, wipe and examine each component. Where necessary, use a wire brush and detergent-based cleaner to remove dirt and grease. Look for cracking and damage.

2. **Measurement of free wheel clearance/flangeway gap**

Measurement of free wheel clearances (FWC) / flangeway gap shall be made in a plane 14mm below the top surface of the rail. A minimum FWC / flangeway gap of 50mm throughout the switch/stock rail gap shall be maintained.

Recorded values shall state whether the FWC is within the following ranges:

- a. FWC less than 45 mm
- b. FWC between 45 mm and 59mm (NR60), 45 mm and 49 mm (all other types of switches)
- c. FWC 60 mm or more (NR60), FWC 50 mm or more (all other types of switches)

Either the FPL gauge (of 50mm width) or S&C Maintenance gauge shall be used to facilitate the measurement of the FWC. [Note: The FPL gauge does not measure 60 mm]

3. **Clarification to PF01, Section 2.8 and TIH – Actions – S&C fastenings and components**

If a missing, broken or detached stretcher bar is identified, or a cracked stretcher bar or bracket is identified that significantly reduces the integrity of the stretcher bar assembly, then:

- a. the signaller must be informed immediately
- b. a 20mph emergency speed restriction shall be imposed
- c. the defect shall be repaired within 36 hours.

If any other components in any of the other stretcher bar assemblies are missing, loose, defective, broken or detached, the line shall be blocked pending repair.

This action applies to both facing and trailing switches.

4. **If the FWC is less than 45mm**, then this shall be reported immediately to Infrastructure Fault Control for correction to a minimum of 60mm for RT60 switches and a minimum of 50mm for all other types of switches, within 36 hours.

This action applies to both facing and trailing switches.