

TECHNICAL INSTRUCTION

TI 052
Issue 3
29/06/2010
Page 1 of 2



NETWORK RAIL - SIGNAL ENGINEERING

Auto-Lubrication System for the Rail Clamp Point Lock (RCPL)

Relevant Standard: NR/SMS/PB11 (issue 5)

Background

The Autolube system was introduced to provide a continuous supply of lubrication to the drive lock slide within the Lock & Detector Mechanism. In some areas, it has been reported that the canisters were dispensing prematurely. This creates a risk that not enough lubrication will be dispensed toward the latter part of the selected 12 month period.

From publication of this TI, all canisters supplied from the manufacturer shall have a viscosity stabiliser added. This change is denoted by a blue label on the canister as shown in the photograph. The old style yellow canister can still be used until stocks are diminished, since the premature dispense has only been reported at a small number of sites.

Previous publications of this Technical Instruction were issued to raise awareness of the new Autolube system and to provide the maintenance instructions. These have now been transferred into NR/SMS/PB11 (issue 5). The revised maintenance instructions contained within this TI shall be transferred into the next publication of NR/SMS/PB11.

Changes in Issue 3

This TI explains the recent changes made to the Autolube system, modifications required to PB11 (issue 5) and to promote use of the system in order to reduce the number of reported failures attributed to "dry lock slides".

Purpose

Since 2007, RCPL Lock bodies have been supplied with a facility to allow implementation of the Autolube system, however not all areas with the facility have opted to install the system. The Autolube system is used to overcome "dry lock slide" issues that are commonly reported as a failure mode within the RCPL **and** In-Bearer Clamp Lock (IBCL).

Scope

The Autolube system is currently approved for use with Standard RCPL (including Switch Diamonds) and IBCL. They are also deployed within the Hy-Drive system.

Photograph

A new viscosity stabilizer has been added to improve the dispense rate, thereby providing a more constant and regulated supply. The blue canisters are designed to meet the requirements of lubricating the drive lock slide for the 12 month cycle more closely.

Staff to be Briefed:

All staff responsible for the Installation and Maintenance of RCPL and IBCL shall be briefed on the information contained within this TI.

TECHNICAL INSTRUCTION

TI 052
Issue 3
29/06/2010
Page 2 of 2



New Blue Labelled Canister



Old Yellow Labelled Canister

Action Required

There were 349 “service affecting failures” reported in 2009, due to “seized” or “dry lock slides”. In 2007, the Autolube system was approved for use on the network to overcome the “dry lock slides” issue. Over time as more systems are renewed, it is apparent that some Delivery Units are not opting to implement the Autolube system. The action required is for all Delivery Units, that are experiencing “service affecting failures” as a result of “seized” or “dry lock slides” shall consider a retrofit programme to implement the Autolube system.

SERVICE A (Revised PB11)

Installations with Auto-lube canisters only

Check there is at least *20 ml of the lubricant* still in the canister and that the flexible hoses to the lock bodies are not damaged. Rectify as necessary.

SERVICE B (Revised PB11)

Installations with Auto-lube canisters only

Activate the Auto-lube canister *by rotating the dial on top of the Auto-lube canister until the 12 dispense value lines up with the white arrow head.*

Product Configuration:

The table below indicates all the details required to order a complete lock and detector mechanism with the Auto-lube system fitted.

Part No.	Description	PADS No.
AHC6000	Auto-Lube canister with viscosity stabilizer	086/032900
RHC-034	Canister rail clip	086/032901
AP103291-04-01	Autolube hose	086/032902
AP103291-02	Tube Assembly	086/032903
APSM2201-SA	Lock and Detection Mechanisms Assembly	086/032113
AP103291-01	Auto-Lube Kit	086/032904

Originator's Details:-

Bleddyn Davies
Network Rail
bleddyn.davies@networkrail.co.uk

PUBLISHED UNDER NR/L2/SIG/11120