Rail Systems

CLAMPLOCK

INSTALLATION PRE-INSPECTION

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1. Introduction

This is a joint inspection to be carried out with the track organisation.

The objective of this inspection is to identify parts that may require renewal or major adjustment. Careful inspection at this stage will mean that you will be fully equipped with both the tools and spares that are required on the day of the Pointcare service.

It should be noted that the Pre-inspection is only an inspection of the equipment (i.e. taking measurements and a general examination) and will not require possession of the points for more than a few minutes.

⚠ **Warning:**

- **Before staring work, the relevant parts of the Rule Book shall be applied.**

  Isolate the machine by setting the Hydraulic Power Unit to "Manual".

Note:

- **The paragraph numbers in Section 2 refer to the numbers on the Pointcare Pre-inspection Record Form (Figure J1).**

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Pointcare Maintenance Pre-inspection Record Form:
Rail Clamp Point Lock Mk1/Mk2* (delete as appropriate)

Signal Box _____ **Point Identification** _____

Point Type _____

	Checks for Mk1					Checks for Mk2			
lo.	General		LH	RH	No.	General		LH	RH
1	Locating Stud Wear (5mm Gauge)	3			6	Lock Arm (Free on Bush)	3		
2	Lock Body (Cracks in Sideplates)	3			7	Detector Blade Lug (Free On Bush)	3		
3	Lock Body Spiral Pins (Flush Fit)	3			8	Lock Arm/Detector Blade Lug (Free On Pivot Pin)	3		
4	Lock Arm//Detector Blade Lug Bush(Free On Pivot Pin)	3			9	Lock Arm/Detector Blade Lug (Bronze Bush Condition)	3		
5	Lock Arm/Detector Blade Lug Bush (Rubber Bush Condition)	3							

* Checks for Mk1 & Mk2				
No.	Description		LH	RH
10	Force-Down Lock Arm Fitted	3		
11	Fixed Cam Security	3		
12	Drive Lock Slide Vertical Play (10mm Max)	3		
13	Switch Opening (105-110mm (82-87mm from Switch Diamonds))	mm		
14	Pivot Pin Alignment	3		
15	Lock Arm/Drive Lock Slide Clearance (4-12mm)	3		
16	Lock Arm/Drive Lock Slide Clearance (3-6mm)	3		
17	Actuator Stroke (210mm Max)	mm		
18	Tie Bar/Actuator Clearance (3mm Min)	3		
19	Tappet Screws (25mm Max)	3		
20	Locking Piece Fine Packing (4mm Max)	mm		
21	Lock Body Internal Wiring & Terminations	3		
22	Type Of Power Pack (Smiths Or Vickers)	S/V		
23	Power Pack Internal Wiring & Terminations	3		
24	Supplementary Detector Internal Wiring & Terminations	3		
25	Supplementary Mechanical Drive Crank Vertical Play (10mm Max)	3		
26	Supplementary Hydraulic Drive Condition	3		
27	Point Heaters	3		

Comments_____
_____
_____

Signatures	Date
..... Signal Engineer	/ /
..... Permanent Way Engineer	/ /

Figure J1

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ISSUE 1

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2.1 (Mk 1 Only) Locating Stud Wear (5mm Gauge)

This check is only applicable to Mk 1 equipment fitted on 113A flat bottom vertical rail (refer to Figure J2).

Insert the 5mm end of the FPL gauge between the lock body and the foot of the rail.

The gauge should be seen to reach the locating stud. If it is not possible to insert the 5mm gauge, then the locating studs are badly worn, causing misalignment of the lock body. The studs shall therefore be replaced on the Pointcare service.

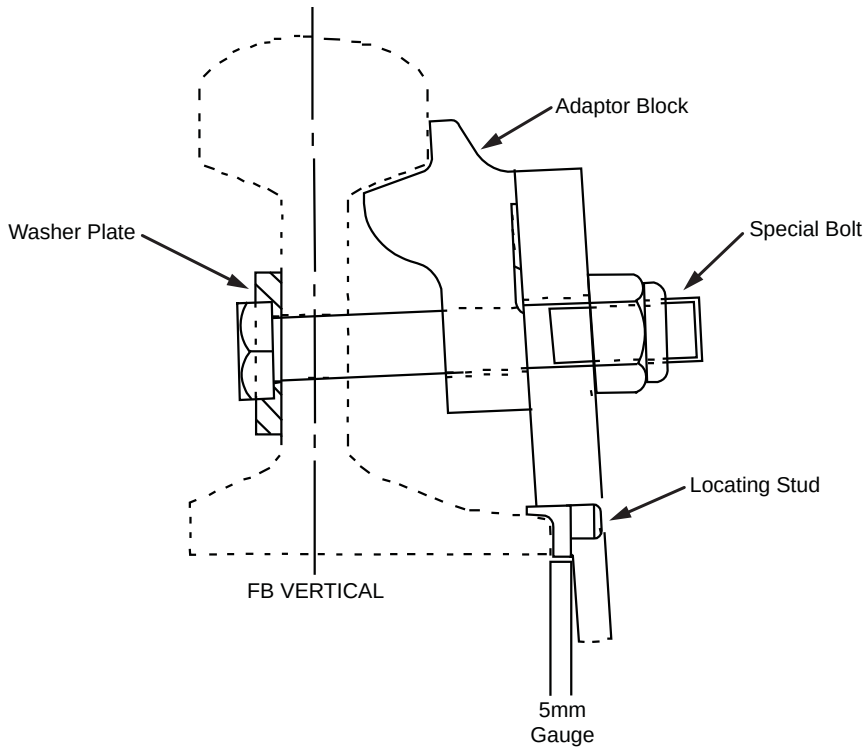


Figure J2

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2.2 (Mk 1 Only) Lock Body (Cracks in Sideplates)

A number of instances have occurred in which the body frames of clamp locks have fractured in service (refer to Figure J3). These fractures are believed to result from the development of fatigue cracks in the body material.

The body should be visually examined for cracks in the sideplates as detailed in Signalling Maintenance Specification PB11. Lock bodies which have cope holes and are not stamped 'P, 'RP' or 'W' have been found to be more prone to fracture failure. Although greater attention should be given to a lock body which has cope holes and is not stamped with the letters 'P', 'RP' or 'W', all lock body types shall be examined.

If any cracks are detected or suspected, the rail clamp point lock shall be treated as defective. In these circumstances, the points shall be clipped and the Signaller and Supervisor should be informed accordingly.

Check that the support bracket is secure and not damaged.

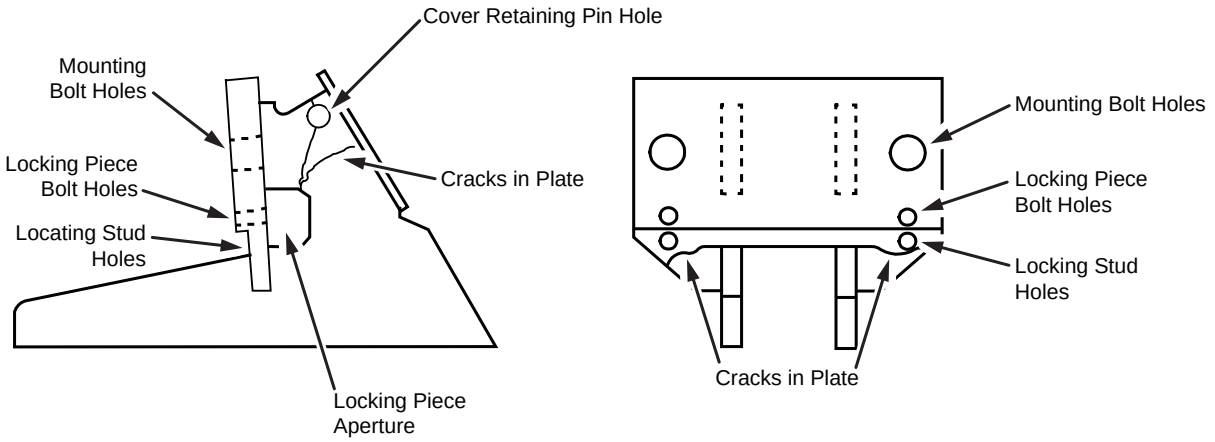


Figure J3

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