

Justification:
Safety Instruction
(Maintenance)

**Private Owner
Circular Letter
658 Issue 2**

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Title

Cracks in
Gloucester Three-
Piece Bogie
Bolsters (Disc
Braked Wagons
Only)

AUTHORISATION

Authorised by:

PC



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1. INTRODUCTION

POCL 658, Issue 2 has been produced in order to instruct Private Owners with Gloucester three-piece bogies (disc braked wagons only) on the action to take with regard to potential cracks in the bogie bolsters. This follows an investigation by Lloyds Register Rail that was commissioned by VTG Rail (UK) Ltd and updates the initial version of POCL 658, which was produced in response to the issue of NIR 2759 (Initial).

2. INSTRUCTION

All wagons fitted with disc brakes and Gloucester three-piece bogies shall receive thorough visual inspections of the bogie bolster and webs (i.e. two per bogie, four per wagon) at intervals of no more than 2,500 miles. If in doubt please contact the Senior PWRA Engineer for further advice.

Thoroughly clean the relevant areas using a scraper/wire brush as required and inspect as follows:

2.1 Examination of outer surface of bolster

Examine the bogie bolster for fracture on the outer surface of the bolster below the sidebearer and above the 'lightening hole' (see Photograph 1). If found, remove bogie from service immediately and report the finding to the Senior PWRA Engineer.

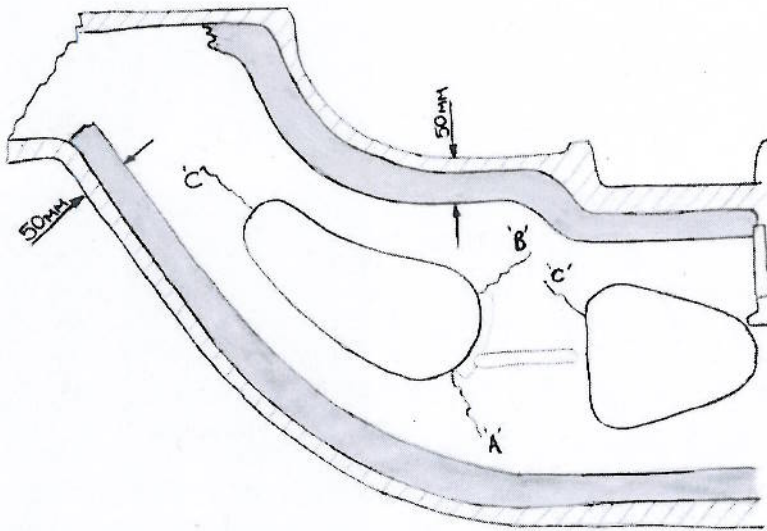
2.2 Inspection of internal bolster webs

The fractures in the internal bolster webs around the lightening holes are a known historic problem and were first identified in the early 1990's. It is thought that these fractures originally initiated from casting defects in the poor quality castings and that these fractures have not propagated any further since this time.

Once the area/fractures have been thoroughly cleaned inspect the bogie bolster webs through the main bolster lightening holes and ensure that if any fractures are present that they **DO NOT** extend into the shaded area of the web as shown in Fig. 1.

If any fractures **DO** extend into the shaded area shown in Fig.1, then the bogie shall be removed from service immediately and the Senior PWRA Engineer notified.

Fig. 1 – View of Internal Bolster Web



Note; 'A', 'B', 'C' & 'D' show typical locations of fractures.

If the fractures **DO NOT** extend into the shaded area shown in Fig.1, then mark the end/tip of the fracture using a WHITE paint pen, care should be taken to ensure that only the end/tip of the fracture is marked with a spot of paint no larger than 5mm (see Photograph 2).

The internal bolster webs shall be inspected to ensure that:

- Fractures which have previously been identified with a white dot at the fracture tip have not propagated.
- No new unidentified fractures are present.

If any of the fractures are found to have propagated or any new unidentified fractures are found, then the wagon shall be removed from service immediately and Senior PWRA Engineer shall be notified.

3. **SCOPE**

This instruction applies to disc braked wagons fitted with Gloucester three-piece bogies.

4. **IMPLEMENTATION**

This document shall be implemented immediately.

In the event of any query arising or clarification required, please contact:

Senior PWRA Engineer
PWRA Management Group
Room 203 Derwent House
rtc Business Park
London Road
Derby
DE24 8UP

Photograph 1 – Fracture on Outer Surface of Bogie Bolster



Photograph 2 – Fracture on Internal Web of Bogie Bolster

