

Justification:
Safety Instruction
(Maintenance)

**Private Owner
Circular Letter
625 Issue I**

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Title

**UAT Periodicities
for Axles without
Raised Wheelseats**

ENDORSEMENT & AUTHORISATION

Endorsed by:



.....
D. Minshull, Senior Standards Engineer

Authorised by:



.....
K. Stannard, Vehicle Conformance Engineer

1. INTRODUCTION

Private Owners have reported that there are a small number of axles without raised wheelseats fitted to PWRA wagons in service. The axles identified (Drawing No. SW/DE/37726, Issue E) are fitted to 46 tonne two axle wagons. Prior to these reports it was understood that such axles were no longer fitted on any of the PWRA wagon fleets.

If any other axles without raised wheelseats are found in service (other than those to Drawing No. SW/DE/37726, Issue E or fitted to other than 46 tonne two axle wagons) then the Senior Standards Engineer shall be advised immediately in order that necessary action may be agreed.

Due to the numbers of axles involved it is accepted that it may not be feasible to remove such axles from service immediately without disrupting traffic flows, therefore the requirements of this instruction shall be applied.

2. BACKGROUND

The concern over axles without raised wheelseats is that they do not have the geometry that was applied to later designs of axle and hence will have a reduced fatigue life. As a result axles without raised wheelseats require to be subject to a more stringent UAT periodicity. Recent calculations carried out by an Approved Technical Consultancy on axles to Drawing No. SW/DE/37726, Issue E and fitted to 46 tonne two axle wagons have concluded that the periodicities and limitations prescribed in this document shall need to be applied in order to ensure continued safety in service.

3. INSTRUCTION

Wherever it is practicable, axles without raised wheelseats shall be removed from service and scrapped. However, if such axles are to remain in service then the UAT periodicity prescribed below shall be applied with immediate effect:

Axles without raised wheelseats that are forty years old or older
UAT at 36,000 total miles and also at re-profiling and wheelset overhaul.

Axles without raised wheelseats and less than forty years old
UAT 72,000 total miles and also at re-profiling and wheelset overhaul.

The following shall also apply:

- a). All such axles shall have received (and shall continue to receive) UAT capable of detecting a defect, in the area of the wheelseat, that is equivalent to that of an effective High Angle Scan.

- b). The total accumulated mileage for the life of such axles shall not exceed 1,000,000 total miles.

If axles without raised wheelseats are to continue in service then it is imperative that the mandated UAT requirements are applied immediately. To this end all such axles shall be identified quickly and then subjected to UAT at their next maintenance event, if the periodicities prescribed have been exceeded.

It shall also be ensured that UAT is carried out in accordance with the correct Procedure Chart that has been approved for the particular axle/wheelset design.

4. SCOPE

This instruction applies to all axles without raised wheelseats fitted to PWRA wagons.

5. IMPLEMENTATION

This document shall be implemented immediately.

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

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