



ENGINEERING ACCEPTANCE CERTIFICATE

This certificate issued in accordance with RIS-1530-PLT Issue 4.

NAME OF CERTIFICATION BODY

Atkins Rail

ACCREDITATION CODE

NS

Vehicle Class/Description Road Rail Vehicle Rexquote Case 988 SP2 (Type, 9B-1)

Vehicle Owner William Bradshaw Plant Hire

Issue Date 13th June 2014

Expiry Date 6th June 2021

Vehicle Numbers: 99709 940594-3

FIRST OF CLASS

Certificate number of First of Class

YES

NO

X

N/A

Authorised by :

Signatory Name:

SP Rice

Authorised Signatory:

Reason for issue and Scope of Work

Previous scope of work;

Upgrade to RIS-1530-PLT, Issue 4, December 2012.

Fitment of Rail wheel braking system in accordance with Allan J Hargreaves General arrangement drawings AJH/RWB/ASY/004 (floating axle), AJH/RWB/ASY/005 (fixed axle) and the associated maintenance documentation AJH038 issue 3 dated 02/11/12.

Fitment of Trailer Hydraulic Service Brakes.

Fit GKD 3RCI System.

New Maintenance plan.

Scope of work for this certificate;

New certificate issued to remove the Vehicle Serial Number error on previous certificate NS/5309/14. Serial Number in Previous Scope of Work on Certificate NS/5309/14 should be CGG0231397.

Deviations associated with this certificate: None

Previous Engineering Acceptance certificate number: NS/5309/14

	Identification Number	Issue No.	Date
Maintenance plan Id.	RQM10094	1	27/08/2009
Maintenance plan title	Rexquote Maintenance Plan		
Maintenance plan Id.	AJH033	4	12/11/2012
Maintenance plan title	Addendum AJH 033 to Rexquote Manual RQM10094 Issue 1		
Maintenance plan Id.	AJH038	3	02/11/12
Maintenance plan title	Addendum for Type 9b Wheel Brake System Operation and Maintenance.		
Maintenance plan Id.	AJH078	2	26/03/2014
Maintenance plan title	Addendum following fitment of Hydraulic service brake.		

Limitations of Use

- It operates on-rail in high-mode only. No load carrying capability.
- When travelling, the RRV is within W6a gauge and exception for road wheels as RIS-1530-PLT.
- When travelling, mirrors must be folded in.
- Vehicle shall only operate inside possessions.
- Permitted number of personnel to be carried: 1 in the driver's cab.
- Working Mode: the counterweight, boom, dipper and attachments can be out of gauge, dependant on the GKD 3RCI Rated Capacity Indicator (RCI) slew settings in use.
- For on/off tracking, a site specific plan shall be used taking account of the applicable module(s) of Network Rail Infrastructure Plant Manual NR/PLANT/0200.
 - The site specific work plan shall also be in compliance with the Rexquote Manual RQM10094. Maximum track cant 100mm and/or gradient 1:25, on approved RRAP.
- OR
 - A risk assessed procedure that is specific to the on and off tracking point.
- It may travel under live OLE when used in conjunction with a safe system of work determined and authorised in accordance with the requirements of GE/RT8024, and provided the boom/dipper is in the travel position, **subject to minimum OLE wire height 4.165m** (see Limitation 21). For recovery refer to the Rexquote Manual. Maximum speed 5mph to avoid damage to the RRV.
- The vehicle shall **NOT** on or off track, or work if adjacent lines are open to traffic.
- The vehicle shall **NOT** on or off track, travel or work on live conductor rail lines.
- The vehicle shall **NOT** on or off track or work under live OLE.
- For access/egress, the RRV shall only operate with the door to the cab adjacent to a cess or a line closed to all train movements or the Method Statement safe system of work to be adopted takes account of adequate clearances to adjacent lines.
- All work equipment / attachments must be stowed and secured in their transit position when on/off tracking and when operating the vehicle in travelling mode on rail.
- The RRV is permitted to tow and/or propel rail trailers with compatible coupling, hydraulic operated brake systems with break-away brakes and marker lights in operation.
 - Maximum un-service braked load 20 tonnes.
 - Maximum service braked load 46 tonnes.
 - Hydraulic pressure for trailers park brake release: 60 bar.
 - Hydraulic pressure for trailers service brake: 0 - 60 bar.
 - All trailers shall have the service brake connected and functional test carried out.

NOTE: The maximum towed and/or propelled weight may have to be reduced where railhead condition for adhesion and/or the ruling gradient may affect the safe traction performance of the RRV.

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17. Limitation to ensure stability:
 - Controlled by GKD 3RCI RCI which shall be active when the RRV is in use, except as in limitation 18.1, See Duty Charts and LOLER Certificate.
 - Movement of boom towards backwards stability shall be at moderate/low speed.
 - Permitted to lift and carry through 360 degrees operation.

18. The RRV may work with attachments. Their use in Modes **18.1** or **18.2** shall comply with the following, as applicable:
 - Where specified, and including all lifting accessories, the attachment shall have a current certificate of approval, test and/or thorough examination.
 - The attachment shall only be used in accordance with the manufacturer's safety and operating instructions, and the safe system of work for the possession.
 - Use of the attachment shall not involve exceeding the vehicle's rated capacity for lifting. Before switching **OFF** the RCI, the attachment and its contents (e.g. bucket full of ballast) shall be moved through the planned range of movements to confirm that the working mode is within the vehicles lifting and stability capacity.
 - Except for the quick hitch, the attachment should not be connected to the vehicle during on or off tracking, unless safe to do so.
 - The attachment shall be maintained in accordance with the manufacturer's and/or other approved instructions.

18.1 The GKD 3RCI RCI may be switched **OFF**, typically digging mode.

NOTE: Caution must be exercised with attachments as their use may adversely affect the stability of the RRV when it is working.

18.2 The GKD 3RCI Rated Capacity Indicator system (RCI) shall be switched **ON** for lifting mode;

 - Lifting accessories (LOLER Regulations)
 - An attachment that is mechanically fixed or and/or powered from the RRV or which may adversely affect the stability of the RRV.
 - Any such attachment and its use shall only be with the approval of the infrastructure controller. See RIS-1530-PLT Issue 4, clause 8.4.

RCI information:

 - Manufacturer – GKD 3RCI – Display serial number – 811T - RCI Software I/D – 8.35
 - Duty chart reference – Case 988 – 231397 Plant Number 84, CC587, 04-Jun-2014, for all load lifting points.- 19. Reverse movement in travelling mode must be controlled by ground staff. However a CCTV Camera system is fitted to this RRV.
- 20. The machine will brake differently to non rail wheel braking machines. Operators **MUST** familiarise themselves with the brake system before starting work. Use of Owner/Operator "In-House" test track capability (where available) is recommended – see Supplementary Information, item 2.
- 21. Except for the cab, when the RRV is under live OLE access is **NOT** permitted onto any surface higher than 1.4m above rail.
- 22. It may work with a range of attachments through the dipper link pins or quick hitch, see Limitation 18.

Supplementary Information

1. Vehicle is a rail-conversion of road excavator with an offset monoboom and 2.1m dipper.
2. This machine is fitted with **DIRECT** rail wheel braking. It does not use the brakes applied to the road wheels acting on the tread of the rail wheel as the primary means of braking.
3. Load lifting point at dipper end, rated capacity 10 tonnes SWL. Auxiliary lift point 5 tonnes SWL.
4. Minimum height of underside of rotating superstructure above rail level – 1430 mm.
5. Maximum tail swing exceedance; 600mm.
6. Manufacturer serial / chassis number: Serial No. CGG0231397 Rexquote No. 1445. William Bradshaw Plant Hire No.84.
7. Maximum travelling cant – 200mm
8. Maximum working cant – 150mm
9. Maximum working track twist – 1/150 over the RRV wheelbase.
10. Maximum working and travelling gradient – 1 in 25

11. Maximum speeds on rail not to exceed:
20 mph (32km/h) travelling plain line; 5 mph(8km/h) travelling through switches and crossings
5 mph (8 km/h) travelling through raised check/guard rails; 5 mph (8km/h) working/towing/propelling
12. Minimum Curve Radius: 80m
13. This machine is fitted with **DIRECT** rail wheel braking. It does not use the brakes applied to the road wheels acting on the tread of the rail wheel as the primary means of braking.
14. Route Availability: No Change.
15. Applicable Braking Curve: RIS-1530-PLT Issue 4. Section 5.6.2.1.
16. Applicable Gauge or Portfolio Reference: W6a as RIS-1530-PLT.
17. Details for on/off tracking and emergency recovery can be found in RQM10094.
18. The vehicle does have a tandem lift mode.

Authorised By:

A handwritten signature in blue ink, appearing to read "S. P. Rice".

Name of Signatory: S P Rice