



Vehicle Acceptance Body

CERTIFICATE OF ENGINEERING ACCEPTANCE

This certificate formally records that the following vehicle conform with the appropriate mandatory requirements as set out in **Railway Group Standards**

NAME OF CERTIFICATION BODY
Network Rail Vehicle Acceptance Body

ACCREDITATION CODE
RT

Vehicle Type & Class: Road Rail Vehicle Rexquote Komatsu PW160 Megarailer – Type 9B

Vehicle Number(s): 99709 940711-3

Vehicle Operator: L & W Contractors Ltd

Vehicle Owner: L & W Contractors Ltd

Issue Date: 4th March 2013

Authorised by:

A.V. Kemp

Expiry Date: 25th February 2017

Print Name:

A. V. Kemp

NETWORK RAIL VAB

OFFICIAL STAMP



VEHICLE ACCEPTANCE BODY

Special Limitations:

A. CONFIGURATION

1. Vehicle is Rexquote rail-conversion of road excavator with 5.02m mono-boom, and 2.1 m dipper.
2. RRV is fitted with a Prolec RCI No. 323133 which must be operational during all lifting duties and when used with attachments which affect machine stability (see E), RCI software version V2.09, and Duty Charts Komatsu PW160 V04/2305. Lifting duties shall only be undertaken through the permanently affixed Miller quick hitch. Maximum safe working load - 10 tonnes.
3. It may work with a range of attachments through the quick hitch, see E.
4. It operates on rail in high-mode only. It has no load carrying capability.
5. Permitted number of personnel to be carried: 2 in cab.

B. ON & OFF TRACKING AND EMERGENCY RECOVERY

1. For on/off tracking, a site-specific work plan for one of the following conditions shall be used. The work plan shall be in compliance with the Rexquote Manual RQM10047 and Network Rail Specification NR/L2/RVE/0007;
> Maximum track cant 100mm and/or gradient 1:29, on an approved RRAP.

Page Number		Certificate Number
1 of 4		RT/EA/0110/13

~~Owner Copy / Customer Copy / Network Rail VAB Copy~~



Vehicle Acceptance Body

OR

> A risk assessed procedure that is specific to the on and off tracking point.

2. For recovery refer to the Rexquote Manual. Maximum speed 3mph (5km/h) to avoid damage to the RRV.

C. GAUGE

1. Travelling mode - RRV is within W6a gauge and exception for road wheels as RIS-1530-PLT. When travelling, mirrors must be folded in.
2. Working mode - the counterweight, boom, dipper and attachments can be out of gauge, dependent on the Prolec Rated Capacity Indicator (RCI)/slew settings in use.

D. LIMITATIONS OF USE

1. It shall only operate inside possessions.
2. It shall NOT on/off track or work, if adjacent lines are open to traffic.
3. It shall NOT on/off-track, travel and work on live conductor-rail lines.
4. It shall NOT on/off-track, travel or work under live OLE, except as D5.
5. It may on/off-track at a level crossing or 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 a minimum OLE wire height of 4.165m.
6. 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 safe system of work to be adopted takes account of adequate clearances to adjacent lines.
7. Permitted speed.
 - Maximum - 20mph (32km/h);
 - Switches & Crossings, and Raised Check Rails - 5mph (8km/h);
 - Towing/Propelling - 10mph (16km/h).
8. Travelling Mode.

The RRV may travel on track that does not exceed:

 - cant 200mm;
 - gradient 1:29
9. Working Mode.

The RRV shall not work on track that exceeds any combination of:

 - cant 150mm;
 - twist 1/150 over the RRV wheelbase (27mm twist);
 - gradient 1:29.
10. Limitation to ensure stability:
 - Controlled by Prolec RCI which shall be active when the RRV is in use, except as E1.
 - Movement of boom towards backward stability limit shall be at moderate/low speed.
 - Permitted to lift and carry through 360 degrees operation, see Duty Charts.
11. It is permitted to tow or propel rail trailers with compatible coupling and hydraulic-operated brake systems, in one of the following consists:-
 - > Trailers with emergency/parking brake only.
 - Maximum weight shall not exceed 22.8 tonnes/4 trailers.
 - Hydraulic supply pressure for park brake release is 40bar.
 - > Trailers with emergency/parking brake and service brake.
 - Maximum weight shall not exceed 22.8 tonnes/4 trailers.
 - Hydraulic supply pressure for park brake release is 40bar.
 - Hydraulic supply pressure for service brake is 140bar.

Page Number		Certificate Number
2 of 4		RT/EA/0110/13

Owner Copy / ~~Customer Copy~~ / Network Rail VAB Copy



Vehicle Acceptance Body

All trailers shall have the service brake connected and functional.

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

E. ATTACHMENTS

The RRV may work with attachments. Their use in modes E1 or E2 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 (eg: bucket full of ballast) shall be moved through the planned range of movements to confirm that the working mode is within the vehicle's lifting capacity.
- Except for the Quick Hitch, attachments 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.

E1. The Prolec RCI may be switched OFF, typically digging mode including:

- General purpose earth moving buckets.
- Ballast profiling bucket.

NOTE: Caution must be exercised with this type of attachment as its use may adversely affect the stability of the RRV when it is working.

E2. The Prolec RCI shall be switched ON, lifting mode:

- Lifting accessories (LOLER Regulations).
- An attachment that is mechanically fixed to 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 1 Clause 8.4.

Previous Certificate of Engineering Acceptance: RT/EA/0026/13

Vehicle Data:

Route Availability No:	(Laden) No Change	(Tare) No Change
Maximum Speed mph:	(Laden) 20	(Tare) 20
Applicable Gauge:	W6a with exception as RIS-1530-PLT	
Applicable Braking Curves:	Road/Rail Vehicles RIS-1530-PLT Clause 5.6.2.1	
Minimum Curve Radius:	80m	

First of class:

Page Number		Certificate Number
3 of 4		RT/EA/0110/13

Owner Copy / ~~Customer Copy~~ / Network Rail VAB Copy



Vehicle Acceptance Body

Scope of Certificate:

Accepted in accordance with the requirements of RIS-1530-PLT Issue 1.

Scope of work:

Fitment of direct wheel braking system in accordance with Rexquote General Arrangement Drawings ASY-2707, ASY-2656 (fixed axle) and ASY-2659 (oscillating axle).
Scrutiny of associated maintenance plan RQMA0043 Issue 10.
Correction to issue date.

Maintenance Plan Documentation:

Rexquote Operating and Maintenance Manual Komatsu PW160 RQM10047, Issue 4, dated 26th January 2010.
Maintenance Plan Addendum RQMA0043, Issue 10, dated 2nd October 2012. – Rail Wheel Braking System

Additional Information:

Serial No. H55146. Rexquote No. 2305.

Authorised By:

A.V. Kemp

Print Name: A. V. Kemp

**NETWORK RAIL VAB
OFFICIAL STAMP**



VEHICLE ACCEPTANCE BODY

Page Number

4 of 4

Certificate Number

RT/EA/0110/13

Owner Copy / ~~Customer Copy~~ / Network Rail VAB Copy