



Gloucestershire Warwickshire Steam Railway Plc
Risk Assessment for Limited park brake on RRV trailer - Permanent Way

Risk Assessment - Limited park brake on RRV trailer

Reference No: PER-44963-30

Version No: 1

Assessment Approver: Kevin 'Kev' Jarvis

The RRV trailer has hydraulic-spring park brakes and no service brakes; this was the original specification for this equipment (circa 2002). During a training session in January 2023 it was noted that during a brake test only one of the trailer park brakes was working properly. Further investigation has shown that one of the two park brakes has been damaged and is no longer functional.

Department: Permanent Way

Date Of Assessment: 06 February 2023

Review Due Before: 14 April 2026

Lead Assessor: Andy Sworn

Team: Paul Fuller, Andy Stratford, David French

Using the RRV & trailer to move heavy loads on the running line.

Type	Hazard Cause	Persons Affected	Control Measures	L S T			Additional Control Measures	L S T			Owner/Action Overall
				Overall	Overall	Overall		Overall	Overall	Overall	
Health and Safety	Trailer becomes disconnected from the RRV and braking is inadequate to halt trailer immediately. Heavy load on trailer on a gradient which is larger than the reduced park braking can resist. Failed tow bar whilst towing loaded trailer. .	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: Trailer not to be uncoupled from RRV on the running line. - Improvable 2) CRITICAL - Elimination: Trailer to be marshalled north of RRV if possible when operating south of Greet tunnel (main downhill gradient on line) - Improvable 3) CRITICAL - Engineering: Wheel chocks to be used if trailer is left on gradient or parked in sidings. - Improvable 4) CRITICAL - Engineering: Payload restricted to 50% (6.5ton) to reduce braked load - Effective 5) CRITICAL - Engineering: Use a safety chain/wire between RRV and trailer as backup for failed tow bar. - Effective	2 x 3 = 6	None	Medium - Risk to be minimised and controlled so far as is reasonably practical.		2 x 3 = 6	None	Medium - Risk to be minimised and controlled so far as is reasonably practical.	n/a

Score and Control Measure Notes.

Risk frequency based on current park brake condition and left with typical 3-5 ton load.

This additional mitigation is procedural and may only improve frequency of occurrence by a factor of 5. The risk remains medium risk, but lower frequency.

Loading the RRV trailer in the WInchcombe sidings

Type	Hazard Cause	Persons Affected	Control Measures	L S T			Additional Control Measures	L S T			Owner/Action Overall
				Overall	Overall	Overall		Overall	Overall	Overall	
Health and Safety	RRV trailer runaway in the sidings whilst being loaded and not connected to the RRV. Trailer brakes not adequate to prevent trailer movement on incline.	Volunteers, Staff & Contractors	1) CRITICAL - Elimination: Trailer has an automatic parking brake - Improvable 2) Elimination: WInchcombe and Toddington sidings are downhill from running line and have flank protection when route not set. - Effective 3) CRITICAL - Engineering: Wheel chocks used if trailer is being loaded. - Improvable 4) CRITICAL - Engineering: Trailer load capacity reduced to 6.5 tons (50%) to reduce brake loading. - Improvable 5) CRITICAL - Administrative: Personnel and vehicles kept away from trailer whilst being loaded in sidings. - Improvable	2 x 2 = 4	None	Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.		2 x 2 = 4	None	Low - Risk to be monitored to ensure it remains adequately controlled to an acceptable level.	n/a

COSHH Assessments

There are no COSHH assessments associated with this risk assessment.

Ends