UGL REGIONAL LINX

TOC Section 11 - Infrastructure Maintenance Vehicle Data

CRN-MPN-ROL-713026361-2225

TOC 11

LINKING COMMUNITIES. CONNECTING CUSTOMERS.

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Document Control

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Revision	Issue Date	Revision Description
3.2	28.01.2022	UGLRL Operational Standards Template applied
4	28.01.2022	First approved and issued UGLRL version
5	23.03.2022	General revision: table of content updated; minor formatting improvements
6	03.06.2022	Periodic update – incorporated waiver 22-119.
7	04.10.2022	Periodic update - Minor wording changes for clarity
8	31.03.2023	Incorporated waivers 23-011 & 23-013.
9	03.10.2023	Incorporated waiver 23-050
10	21.12.2023	Incorporated waiver 22-150. Removed vehicles M2256 & M395.
11	03.04.2024	Incorporated waiver 24-013.
12	01.07.2024	Incorporated waiver 24-025.
13	03/04/2025	TOC quarterly update - see revision log for full list of changes.

Summary of changes made from previous version

Section	Summary of change
All	Incorporated waivers 25-004 & 25-006.

This Section of the Train Operating Conditions (TOC) Manual, along with UGLRL issued TOC Waivers, lists all track-bound infrastructure maintenance vehicles authorised to operate on the Country Regional Network (CRN). Only rollingstock under the direct control of the RSO listed here-in will be permitted to access the network. To gain listing in this document, rolling stock must apply for CRN approval and demonstrate compliance with the CRN Minimum Operating Requirements for Rolling Stock in standards CRN RS 005.

Refer to Section 12 of the TOC Manual for road/rail, trolley, trailer and quadricycle listings.

1 OPERATING CONDITION NOTES

NOTE: All Track Maintenance Vehicles must operate in accordance with network rule CNWT 316 ("Track Vehicles") and under MANUAL BLOCK WORKING CONDITIONS as per network rule CNSY 512, unless exempted by the conditions specified in NOTE T3.

T1	Vehicle can be removed from rail using portable takeoff.
T2	Vehicle can be coupled into a train consist. Refer to specified maximum trailing load.
T3	Vehicles with this note are permitted to operate under the control of track signalling. Note: to be deemed to be able to reliably activate track circuits a vehicle must: • Weigh in excess of 120 tonne • Have eight (8) or more load bearing axles in normal operation • Be fitted with Track Circuit Actuators (TCA)
T4, T5	These notes are not relevant to the CRN
T6	Maximum speed of vehicle when coupled in a train consist 80 km/h
T7	Maximum speed of vehicle when coupled in a train consist 50 km/h
T8	Not in use
T9	Vehicle can be removed from the track by hand.
T10	Maximum speed of vehicles when coupled in a train consist 60 km/h
T11	This note is not relevant to the CRN
T12	This vehicle is restricted to a maximum speed of 20 km/h in the forward direction, and 5 km/h in the reverse direction when traversing track fitted with check rails or guard rails such as at points, crossings, bridges and level crossings.
T13	Not in use.
T14	This vehicle is restricted to operation within a possession area only. All movements shall be controlled by the **possession officer.** No other vehicles will be permitted to pass this vehicle on any adjacent lines until the **possession officer** has been advised that the vehicle has come to a stand and is clear of the adjacent line. The maximum speed permitted within a **possession area** is 15 km/h.
T15	**These vehicles comply with the CRN Narrow Square Rolling Stock outline and their operation may be restricted on certain track corridors.** The Operator must gain authority from the Track Manager where it is proposed to operate this type of vehicle on the CRN.
T16	This vehicle is fitted with an automatic coupler and air brake coupling hoses on the rear end and air compressor. This vehicle can be used to shunt rail vehicles.
T17	This vehicle can be marshalled within a train consist provided it is positioned in the train consistent with its draw capacity and the train is able to operate under the control of track signalling. If this vehicle is marshalled within the last three (3) vehicles on the train, the train **must operate under block working conditions** and the normal brake retention tests applicable to the last three (3) vehicles, must also be carried out on this vehicle. The owner/operator of the vehicle must ensure that the vehicle is set up correctly for "in-train" operation in accordance with manufacturer's recommended operating procedures. Such procedures may include, but are not limited to, the following requirements: • All gearboxes have been disengaged. • All drive axle lock outs have been engaged.

	• All driver's brake valve levers, (in all cabs) have been moved to the "neutral" position. • The vehicle to be accompanied by an authorised representative.
T18	Vehicles identified with this note shall operate in travel mode with a driver safety system incorporating two independent safety features, consisting of: • a vigilance system (task linked preferred) plus a suitable authorised person, An authorised person in this case, is a second person, accompanying the vehicle driver/operator, with sufficient knowledge of the vehicle to take control and bring the vehicle to a stand in case of an emergency. OR • a task linked vigilance system plus a driver enabling device ('deadman'). This is a mandatory requirement for driver only operation.
T19	This note is not relevant to the CRN
T20	This vehicle **must** operate as the **leading vehicle** when travelling in a convoy with other infrastructure maintenance vehicles. This limitation does not apply when in work mode.
T21	This vehicle is not fitted with height restrictors to limit the travel of its moveable elements. This vehicle therefore can infringe the minimum safe approach distances when working under overhead wiring and is only permitted to work on non-electrified track or on track where an electrical permit to work has been issued (Overhead wiring is isolated)
T22	Trolleys do not require lights during daylight operation, however during conditions of poor visibility, night operations and within tunnels, suitable front and rear lights must be fitted and used.
T23	This note is not relevant to the CRN
T24	This vehicle is fitted with an elevated work platform (EWP) that shall not be utilised when the vehicle is on rail. Travel of the vehicle on rail, with the EWP stowed in the travel position, is permitted. For road/rail vehicles, the EWP may be used if the vehicle is in road mode not utilising the rail wheels.
T25	This vehicle is fitted with an elevated work platform (EWP) that is permitted to be utilised when on rail. The EWP is not permitted to be utilised while the vehicle is in motion (vehicle shall be stationary for EWP use). Travel of the vehicle on rail, with the EWP stowed in the travel position, is permitted.
T26	This vehicle is not permitted to work for the whole of the CRN and must only operate on approved routes. The approved routes are: • Bowenfels ⇔ Orange • Orange ⇔ Parkes • Orange ⇔ Dubbo

2 A

2.1 Abigroup Contractors – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
70000	Pandrol Jackson Tamper	20	34	14.6		
70006	Two axle ballast hopper	15	39.8	10.8	T14	
70007	Two axle ballast hopper	15	39.8	10.8	T14	
70034	Kershaw 46-2 Ballast Regulator	15	17.7	10.5	T14	

2.2 Aurizon – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
MMY-034	Loram RG331 Rail Grinder	80	796	211.6	T3, T20	See additional notes below

1. If required the vehicle may be locomotive hauled in an emergency or as the last vehicle on a train. The maximum speed of the train in this case is:
   - 80 km/h when hauled from the FCC (Front Control Car) end
   - 30 km/h when hauled from the Caboose end
   - 10 km/h on a 1 in 30 grade
2. The maximum speed shall be as above or in the case of any lower class line speed, as specified for an S3 locomotive category
3. Multiple pass-bys adjacent to residential premises must be minimised. In this instance a “pass-by” is defined as one movement in each direction per 24 hour period.

2.3 Australian Rail Track Corporation – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
BX0031,033	Plasser USP 3000C ballast regulator	50	26.5	14.0	T4	
BX043-054 (except 046 & 052)	Plasser PBR 203 ballast regulator	50	22.5	11.0	T4	
CS098,100-102	Tamper/Compair (on track) Compressor	30	4	2.9		
DS005	Plasser DTS62N dynamic track stabiliser	80	62	19.0	T2	0.10 draw capacity
HOX244	Permaquip ACI MkV elevating work platform	30		3.2		
ML 54-56,58,59	Kershaw 19.1 sleeper trailer	30	1.4	2.85	T1	Towed by resleepering machine
PHX68	Techniplan Fast Clipping machine	30	6.0	2.6		
PJ012, 22, 26, 28, 29, 32, 33	Plasser MUMMUT track jack	30	1.5	2.0	T1	
PJ 047, 49, 55, 56	Plasser HGR 230 track jack	30	1.5	2.0	T1	
PJ054, 57, 58, 60, 61-64	Gemco track jack	30	3	3.0		
PN 300 - 303	Nordco LS dog spike puller	30	5.5	5.0	T1	
SF 051	Nordco Super B lock spike driver	30	11	8.0	T1	
SM008, SM010	Comeng tie scarifier	30	3.5	3.6	T1	
SM009	Comeng / Gemco scarifier	30	3.5	4.0		
SM015-17	Kershaw 345 scarifier	30	6.5	7.0	T1	
SX070	Aresco tie handler	30	3			
SX077,79-81	Gemco Model 30 tie handler	30	3	2.7	T1	
SX089,97-101	Comeng Aresco tie handler	30		3.0	T1	
SX105 - 108	Kershaw Model 47/3 tie handler	30	12	9.0	T1	
SX109-114	Kershaw model 12/5 tie crane	30	7.5	6.0	T1	

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TDX100	Plasser 09-3X Dynamic Tamper Stabiliser 1 Maximum trailing load not to exceed 120t	80	165	39.9	T1, T17	
TJ048	Tamper Vibratool spot tamper	30	5.5	5.0	T1	
TJ060, TJ062	Plasser 07-275 turn-out tie tamper	80	36.5	19.0		
TJ063 – 066	Plasser PTT16 spot tie tamper	30	11	7.0	T1	
TJ075	Plasser 07-16 production tie tamper	80	29	15.0	T4	
TJ085-088	Plasser 08-16 production tie tamper	80	31	15.0	T4	
TJ089	Plasser 79-800W turnout tie tamper	80	33.5	15.0	T4	

2.4 Azbuild – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
X11	Track Jack	4	`.6	1.9	T14	

3 B

3.1 Blue Scope Steel – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
234	Plasser 79.800W Tamping machine	60	33.4	12.8	T4	
331	Plasser PBR 201 Ballast regulator	50	22.5	10.2	T4	

3.2 Brimble Rail Pty Ltd – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TMS201	Ballast Regulator	40	19.7	10.1		For 'B' end leading, driver to be accompanied by an observer to assist with signal visibility. Increase in max speed listed herein shall be subject to dynamic testing and/or simulation.
TMS277	Mechanised Track Patrol Vehicle	115	48	15	T3, T18	
TMS313	Plassar PBR 203 Ballast Regulator	50	22.5	11.0	T4	Plant number previously BX046
TMS324	Plassar PBR 203 Ballast Regulator	50	22.5	11.0	T4	Plant number previously BX052
TMS373	Tamper	90	71.2	30.1		For 'B' end leading, driver to be accompanied by an observer to assist with signal visibility.
TMS188	Plasser 07-275 Turnout Tamper	80	38	19	T18	Limited to 30km/h on Class 5 Lines
TMS290	Plasser 79-800W tamper/production	80	33.5	15		
TMS3433	Plasser 08-16 4sTurnout Tamper	50	67.5	22.5	N/A	Underframe mounted sensors to be removed while on CRN. A second driver to be present in the cab who can operate the controls in an emergency.
TMS 60107 (ex. REG-001)	Kershaw 46-2 Ballast Regultor	15	17.7	10.5	T14	-
TMS466 (Ex. BJ006)	Plasser RM 900-HD ballast cleaner	80	506	131	T3	See Notes below:

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	NOTES: 1 TMS466 shall operate self propelled or loco hauled. 2 Movements shall be under block working conditions unless operating in a train with at least three (3) vehicles trailing TMS466. 3 The maximum trailing load behind TMS466 shall not exceed 1440 tonnes. 4 The maximum speed on crossovers, loops, sidings and yards shall be 15 km/h. 5 Maximum speed on goods lines shall be 60 km/h. 6 Sidings which do not see regular rail traffic (eg stabling sidings, mark-off sidings) must be inspected before use by a person qualified to record and analyse track parameters, checking for any potential centre throw obstacles up to 1.5m high. 7 TMS466 shall not run over the turnout route of any turnouts or crossovers at or within 20m of platforms due to possible platform strikes.					

4 C

4.1 Corfad Civil & Construction – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
421001	Harsco Rotary Scarifier	30	8.95	6.96	T14	
421002	Harsco Rotary Scarifier	30	8.95	6.96	T14	
423000	Kershaw 47-6 Tie Inserter	30	16	10.98	T14	
423001	Kershaw 47-6 Tie Inserter	30	16	10.98		
M119820	Material Handler	15	8.5	6.4	T14	
M119824	Material Handler	15	8.5	6.4	T14	

5 D

5.1 Daracon Rail Pty Ltd – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
3579	Jackson HTT 6700 Tamper	15	32.0	15.7		
3580	Kershaw 46 – 2 Ballast Regulator	15	17.7	10.6		

5.2 Downer EDI Rail – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TMP 05	Jackson Mk3 Tamper	22	32.0	15.0		See notes below

1. The tamper shall be limited to a maximum speed of 5 km/h when traversing points and crossings
2. A second ground based person shall be used to pilot the tamper when reversing
3. Tamping tynes to be clear when in travel mode.

6 H

6.1 Harbinger Plant – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TAMP-001	Jackson HTT 6700 Tamper	15	34	15.7	T14	

6.2 Harsco Track Technologies – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
FT3	Harsco tamper	35	16	9.2		
FT9	Harsco rail bending machine	25	6	5.4		
RGHC2	Rail Bound Grinder	50	50	27.36	T3, T7	

7 J

7.1 John Holland

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
RG 9	48 Stone Rail grinder	80	335.0	76	T3	Must have two crew members
32029	International Tractor	10	5.5	5.1	T16	
340114	# PEM807 (Units 1-6) Turnout gantry crane	6	24	2.1	T14, T21	# When on rail the PEM807 must be marshalled (coupled)
	# LEM460 (Units 7-12) Powered lifting trolley	6	24.2	3.5	T14, T21	

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
						between the LEM460 units.
340130, 32, 34, 36, 38, 40	# PEM Jack (dual gauge)	6	24.2	3.5	T14, T21	# When on rail the PEM Jack must be marshalled (coupled) between the LEM Trolley units.
340131, 33, 35, 37, 39, 41	# LEM Trolley (dual gauge)	6	24.2	3.5	T14, T21	
41108	Plasser USP 3000C ballast regulator	50	39.5	15	T18	
41112	Plasser PBR201 ballast regulator	50	19.3	11.0		with broom
41113	Plasser PBR201 ballast regulator	50	19.6	9.4		with broom
41115	Plasser PBR201 ballast regulator	50	14.1	7.7		
41119	Tamper BE-VR Ballast regulator	50	12	7.4		
	1 This vehicle is out of gauge in width and therefore must be stationary when being passed by other traffic in dual track areas. **2** The vehicle shall not be passed by other traffic if the vehicle is moving or is stationary on a track curvature of 400 metres or less **3** Whilst operating on a work site in dual track areas, the vehicle shall cease operations when there is a likelihood of passing traffic. **4** Infrastructure personnel shall ensure there is adequate clearance for a passing movement or in the case of item 2 above, the vehicle is to be moved to a safe location clear of the curve, before such a movement takes place **5** During passing movements the maximum speed for passing the stationary ballast regulator shall be 30km/hr for all other trains					
41134	1. Plasser SSP 305 Ballast Regulator (M518)	80	69	28	T17, T18,T20	
	1. Operation is limited to 15 km/h when operating as a single self-propelled vehicle or if the brush/broom end of the vehicle is not coupled to another vehicle or train. **2.** Maximum trailing load not to exceed 120t **3.** When the vehicle is hauled in a train consist, the vehicle shall be prepared as per the manufacturers procedures for operation within a train consist					
41135	Plasser SSP-110 Ballast Regulator	80	43.2	14.4		

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	1 When at the tare mass of 36 tonnes, the ballast regulator can traverse the CRN Network Class 1 and 2 lines. 2 When loaded to greater than 36 tonnes, the ballast regulator is restricted to Class 1 track or better. 3 The maximum loaded mass shall not exceed 43.2 tonnes. 4 When broom end is leading a second crew member competent in signal recognition and train protection procedure is required.					
41140	Plasser SSP 302 Ballast Regulator	60	53	22.7	T2, T17	
	1. Maximum trailing load not to exceed 120t					
411001	Plasser SSP-303 Ballast Regulator (M519)	50	69	28	T17, T18,T20	
412001	Plasser Unimat 08475/4S track and crossing tamper (Serial M520)	100	98	32.3	T18	
412005	Geismar 4131M Spot Tamper	25	6.4	5.3	T14	
41217	Plasser Beaver 79-800W tamper	50	36	13.7		
41219	Plasser 08-16B tamper	80	32	14.2		
41228	Plasser 08-475/4s tamper	80	78	28.2	T18	
41264	Plasser 09-32 CSM tamper	80	69	27.5		
	1, When the trailer end is leading a second crew member competent in signal recognition and train protection procedure is required.					
41268	Plasser 08-16 SH Tamper	80	42	15.6	T18	See below
	1. This vehicle is fitted with a straight air brake system and is not suitable for operation in conjunction any other vehicle fitted with an automatic brake system. 2. This vehicle must have a main reservoir hose and appropriate connections on board to permit the connection of an external main reservoir supply in the event of an engine or compressor failure. 3. This vehicle is fitted with an automatic coupler (with no draft gear) and thus the coupler can only be used for emergency towing purposes only. 4. In the event of emergency rescue this vehicle must be accompanied by a competent person in control of the braking system.					

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
42106	BHB Ballast scarifier	15	4.50	4.7	T14	
42110	Comeng Scarifier	10	3.5	4.0	T14	
42116	Comeng Scarifier	15	4.0	3.9	T14	
42303	Combo Sleeper Scarafier	10	5.1	3.9	T14	
42312	Gemco Tie Extractor	15	3.3	2.7	T14 ##	
	##This vehicle is out of gauge on vehicle width below platform height. Caution must be exercised by operators for obstacles in this area.					
42318	Tamper TR10 Sleeper extractor	25	15	9.9	T11, T14+	
	+ This machine may be passed by other trains on adjacent lines, at a speed not exceeding 30km/hr, however the machine must be in the stationary non operable condition with all its hydraulics folded into the narrow position. This machine may pass other stationary trains location on adjacent lines at a speed not exceeding 25km/hr.					
42320	Tamper TR10 Sleeper extractor	25	15	9.9	T11, T14+	
	+ This machine may be passed by other trains on adjacent lines, at a speed not exceeding 30km/hr, however the machine must be in the stationary non operable condition with all its hydraulics folded into the narrow position. This machine may pass other stationary trains located on adjacent lines at a speed not exceeding 25km/hr.					
42328	Gemco sleeper inserter	15	4.00	2.9	T14	
42637	Tamper Ride on dog spike puller	15	5.5	5.2	T14	

8 K

8.1 Kennards – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
207063	Rosenquist CD500 Pandrol Fast clip machine	15	5	4.9	T14	
207064	Rosenquist CD500 Pandrol Fast clip machine	15	5	4.9	T14	

9 L

9.1 Laing O'Rourke Pty Ltd – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
BTL01	Pony express track layer	80	57	27.6	T17	
	This vehicle is classified as out-of-gauge. A route clearance check will be required and the exact route specified for all movements, including working of the vehicle. All movements will be as an out of gauge vehicle under single line working conditions, with special conditions applying. A TOC Waiver and Special Train Notice (STN) will be required for all movements of this vehicle. The transfer of this vehicle must be accompanied by supervising personnel. The transfer of this vehicle must be with the vehicle in non-working mode. Unless otherwise indicated, the maximum speed of this vehicle is 80 km/h. A minimum of one cover vehicle must be attached to this vehicle at all times, due to inadequate parking brake on Track Laying machine					
BTL02	Plasser tracklayer SVM1000	50	84	27.0	T2, T17	
	The following operating conditions apply: Where the length of the hauling train does not exceed 20 wagons, the SVM 1000 track layer must be marshalled as the last vehicle. In this case the SVM 1000 **must have brakes cut in and operational**. For the purposes of this note and note 2 below, any multi-pack wagons included in the hauling train consist, shall be counted as the number of platforms. For example, a 5 pack wagon shall be counted as 5 wagons. Where the hauling train exceeds 20 wagons in length (See note 1 above), the SVM 1000 must be marshalled as follows: **Locomotives / Train / SVM 1000 Track Layer (Brakes cut out) / 3 Match trucks of minimum mass 17 tonnes each.** (This requirement is due to the SVM 1000 having a low sensitivity to changes in brake pipe pressure. The sensitivity decreases as the train length increases.) The air brake and hand brake must be cut in and fully operative on all match trucks. The brake pipe must be continuous throughout the train. The total unbraked mass of the hauling train, including the mass of the SVM 1000 track layer, shall not exceed 10% of the total train mass.					
BTM07	Pandrol Jackson 6700 stitch tamper	30	30.2	14.2		
PEM	# 001 – 008 PEM807 Turnout gantry crane	6	24	2.1	T14,T21	# When on rail the PEM807 must be marshalled (coupled) between the LEM460 units.
LEM	# 001 – 008 LEM460 Powered lifting trolley	6	24.2	3.5	T14,T21	
REG002	Harsco BE-AD Ballast regulator	80	18	10.1		
REG006	Knox Kershaw KBR 875 Ballast regulator	60	16.0	12.4		

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
REG007	Knox Kershaw KBR 875 Ballast regulator	60	16.0	12.4		
REG010	Knox Kershaw KBR-925 Ballast Regulator	30	20.2	11.2		
TAMP005	Aresco car shunter				T16	
TAMP007	Jackson 6700 Point Tamper	50	31.7	14.8		
TAMP009	Plasser 09-32 CSM Tamper	80	69	27.4		Trailing load not to exceed 69t
TAMP030	Jackson (HTT) 6700S Production Tamper	30	31.8	15.9	T14,T18 T23,T24	
TAMP031	Jackson (HTT) 6700S Production Tamper	15	31.8	13.4		
	1 Due to signal visibility, this vehicle requires two operators or an operator and second person that is competent in signal recognition					
TRIP001	Nordco Trip tie inserter TRIPP model C	30	17.5	10.7		
TRIP002	Nordco Trip tie inserter TRIPP model C	30	17.5	10.7		

9.2 Loram – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
MMY032	Loram Rail Grinder	70	176	53	T17	
RG419	Rail Grinding Train	80	935	201	T15, T20	See below. Operated as 10 vehicle consist with Control, Power and Water Car each end plus four intermediate grinding wagons
	1. The vehicle operator shall be accompanied in the cab by a Pilot and/or Possessions Officer with intimate road knowledge. 2. This vehicle requires robust recovery and incident response procedures from the operator. It may be locomotive hauled in an emergency or marshalled only as the last vehicle on a train. The maximum speed of the train in this case is: • 80 km/h when hauled from the FCC (Front Control Car) end • 30 km/h when hauled from the Caboose end					

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	• 10 km/h on a 1 in 30 grade 3. This vehicle is prohibited from Class 5 track corridors as defined in standard CRN CS200. 4. To avoid environmental noise complaints, multiple passes-by adjacent to residential premises must be minimised. In this instance a “pass-by” is defined as one movement in each direction per 24 hour period. The operator shall maintain an awareness of community impact and adjust works accordingly. 5. The vehicle in work mode must be supported by appropriate vehicles, staff and procedures for controlling the risk of spot fires. It is the responsibility of the operator to manage this provision and adjust works accordingly.					

10 M

10.1 Martinus Rail - Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
MR-3020	Harsco 6700 Tamper	50	33.6	15.6	-	See below
	MR-3020 is not permitted on Class 5 Lines (refer standard CS-200). This vehicle is not equipped with AEI tags. The vehicle must be operated with cameras as a visual aid to mitigate blind spots. When traveling with the long end leading, a second operator must also be present in the cabin.					
MR-3026	Kershaw 2600 Ballast Regulator	50	19.9	12.6	-	See below
	MR-3026 is not equipped with AEI tags. The vehicle must be operated with cameras as a visual aid to mitigate blind spots.					

10.2 McConnell Dowell – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
MV0331	Plasser Track Jack	15	1.7	1.5	T14	
MV0332	Plasser Track Jack	15	1.7	1.9	T14	
MV8049	Robel rail threader type 43.32	13	1.5	2.2	T14	This vehicle must not operate over points or crossings as it has double flanged wheels
z040/457	Kershaw 46-2 Ballast regulator	30	17.5	10.7	T18	

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
z040/458	Kershaw 46-2 Ballast regulator	15	17.5	10.5	T14	
z040/461	Jackson 6700 Tamper	15	32.5	14.9	T14	
z040/463	Jackson (HTT) 6700 Tamper	30	32.5	14.7		

11 Q

11.1 Queensland Rail – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
MMK 20	Harsco Sleeper Crane	25	9.0	3.4	T14	
MML 85	Harsco MBTX Sleeper Renewer	30	6.45	4.1	T14	

12 P

12.1 Plasser – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
411002	Plasser USP 5000 RT Regulator	80	100	26.3	T3,T17, T18,T20	Draw Capacity 1.17 MN
	1 The maximum trailing load is not to exceed 120 t **2** The USP5000 Regulator and 08-16 Tamper shall be marshalled in pairs **3** The vehicles can either be self-propelled or hauled by a suitable locomotive When locomotive hauled the vehicles shall be dead attached and shall be set in locomotive hauled mode. That is any drives disengaged or locked out and any other equipment set as required for locomotive hauling					
411003	Plasser USP 5000 RT Regulator	80	100	26.3	T3,T17, T18,T20	Draw Capacity 1.17 MN
	1 The maximum trailing load is not to exceed 120 t **2** The USP5000 Regulator and 09-16 Tamper shall be marshalled in pairs **3** The vehicles can either be self-propelled or hauled by a suitable locomotive					

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	When locomotive hauled the vehicles shall be dead attached and shall be set in locomotive hauled mode. That is, any drives disengaged or locked out and any other equipment set as required for locomotive hauling					
411004	Plasser USP 5000 RT Regulator	80	100	26.3	T3,T17, T18,T20	Draw Capacity 1.17 MN
	1 The maximum trailing load is not to exceed 120 t **2** The USP5000 Regulator and 09-16 Tamper shall be marshalled in pairs **3** The vehicles can either be self-propelled or hauled by a suitable locomotive When locomotive hauled the vehicles shall be dead attached and shall be set in locomotive hauled mode. That is any drives disengaged or locked out and any other equipment set as required for locomotive hauling					
412004	Plasser 08-16 4x4 C100-RT Tamper	80	70	18.2	T20	Draw Capacity 1.17 MN
412007	Plasser 09-16 RT Tamper	80	100	30.5	T3, T20	Draw Capacity 1.17 MN
	1 The maximum trailing load is not to exceed 120 t **2** The 09-16 Tamper and the USP5000 Regulator shall be marshalled in pairs **3** The vehicles can either be self-propelled or hauled by a suitable locomotive When locomotive hauled the vehicles shall be dead attached and shall be set in locomotive hauled mode. That is any drives disengaged or locked out and any other equipment set as required for locomotive hauling					
412008	Plasser 09-16 RT Tamper	80	100	30.5	T3, T20	Draw Capacity 1.17 MN
	1 The maximum trailing load is not to exceed 120 t **2** The 09-16 Tamper and the USP5000 Regulator shall be marshalled in pairs **3** The vehicles can either be self-propelled or hauled by a suitable locomotive When locomotive hauled the vehicles shall be dead attached and shall be set in locomotive hauled mode. That is any drives disengaged or locked out and any other equipment set as required for locomotive hauling					

13 R

13.1 Rhomberg Rail – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
# M437	09-3X continuous action mainline tamping machine	80	77	23.1		
# M438	DTS62N dynamic track stabilizer	80	60	18.6		
# M439	BT102 broom trailer	80	20	13.0		% Must operate with M437 or M438
# M440	PT200 ballast ploughing trailer	80	12	10.0		% Must operate with M437 or M438
	# Instructions for the locomotive hauling of M437, M438, M439 and M440 1 Three (3) empty wagons of minimum mass 20 tonnes shall be marshalled between the hauling locomotive and the Rhomberg Rail consist to provide braking effort. 2 A Main Reservoir run around hose will be required to run from the hauling locomotives to the Rhomberg Rail consist to release the spring applied brakes of the machines. 3 The Rhomberg Rail consist will have operators on board and will be under power. 4 The braking system of the Rhomberg Rail consist is not compatible with that of the hauling train and will be unbraked, however, the operators on board the Rhomberg Rail consist will apply its brakes independently, if required, in cooperation with the driver of the hauling train . 5 As the Rhomberg Rail vehicles will be manned and have spring parking brakes, the brake retention test will not be required. 6 The crew of the hauling locomotive must have discreet radio communication with the crew of the Rhomberg Rail consist at all times. 7 This train must operate under manual block working conditions.					
M521	Plasser SSP - 303 Ballast Regulator	80	69	28	T17,T18	
M580	Plasser SSP - 303 Ballast Regulator	90	77	29	T17,T18	
M524	09-3X Dynamic Tamper Stabiliser	80	150	41.4	T17,T18	
M525	Plasser SSP - 305 Ballast Regulator	80	67.4	29.1	T17,T18	
M946	Plasser Unimat 08-475/4s tamper	80	105	33.0	T18	$ See note below
	$ Note for M946 1 **NOTES:** All self propelled vehicle movements shall be block worked in accordance with Rules CNWT 316, or CNSY 512, whichever is appropriate for the chosen route.					

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	2 When this vehicle is locomotive hauled, the train shall be block worked if this vehicle is in the last three vehicles on the train. 3 A Rhomberg Rail Operator is to ride aboard this vehicle to monitor vehicle movements and shall have discreet radio communication with the train crew at all times. 4 The operator of this vehicle shall ensure the following and advise the train crew of the hauling locomotive: • All gearboxes have been disengaged. • All drive axle lock outs have been engaged. • All driver's brake valve levers, (in all cabs) have been moved to the "neutral" position. 5 Normal brake retention tests shall be carried out on all train consists.					
PJ018	Plasser Mammut track jack	10	1.5	2.0	T14	
TJ097	Brad 4131 tamper	15	6.8	5.3	T14	

13.2 RKR Engineering – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
25	Tracklift – Self propelled 25t m Crane	80	14	11.8	T14	

14 S

14.1 Speno – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
RR24-M21	24 stone rail grinder	80	186	52.3	T3	Couple with M22. Operates as RR48
RR24-M22	24 stone rail grinder	80	186	52.3	T3	
RR36-M24A	24 stone rail grinder	80	206	52.3	T3	
RR24-M30	24 stone rail grinder	60	151	44.9	T3,T18, T20	
RR24MT2A	24 stone rail grinder	80	157.4	44.9	T3,T18, T20	
RR24-M31A	24 stone rail grinder	60	157.1	40.6	T3	Couple with RR36-M24A Operates as RR60M1A
	NOTE: If required this vehicle may be locomotive hauled in an emergency, however the vehicle shall not be hauled within a train.					
RR32A	32 stone rail grinder	50	32.5	14.7		

14.2 Swietelsky – Track Maintenance Vehicles

VEHICLE CODE or PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
DR73112	Plasser 09-3X Dynamic Tamper	80	129.5	34.2	T3	
DR73113	Plasser SSP 303 Ballast Regulator (M529)	80	67	28.1	T2,T17	
	1 Operation is limited to 15 km/h when operating as a single self-propelled vehicle or if the brush/broom end of the vehicle is not coupled to another vehicle or train 2 Vehicle shall be blocked worked when operated under its own power. 3 Maximum trailing load is 120 tonnes 4 When the vehicle is hauled in a train consist the vehicle shall be prepared as per manufacturers procedures for operation within a train consist.					

14.3 Sydney Trains – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
BJ003,005	Plasser UHR-RM-74 ballast cleaner	60	74	27.3	T2,T17, T18	0.50 draw capacity
BX055-056	Plasser SSP110 ballast regulator	80	36.3	18.0	T2,T5, T7,T18	0.10 draw capacity
BX059	Plasser SSP 300 ballast regulator	80	29.5	14.0	T2,T7, T18	0.10 draw capacity
BX060	Plasser SSP302 ballast regulator	80	42	20.6	T2,T18	0.10 draw capacity
# BX061	Plasser SSP303 ballast regulator	80	66	27.8	T17,T18	
# BX062	Plasser SSP303 ballast regulator	80	66	27.8	T17,T18	
	1 # Operation is limited to 15 km/h when operating as a single self-propelled vehicle or if the brush/broom end of the vehicle is not coupled to another vehicle or train 2 Maximum trailing load not to exceed 120t 3 When the vehicle is hauled in a train consist, the vehicle shall be prepared as per the manufacturers procedures for operation within a train consist					
DS001-004	Plasser DTS62N dynamic track stabiliser	80	62	19.0	T2,T18	0.10 draw capacity
GDX813, 814	Fairmont Tamper Profile grinder	30	4.2	4.87	T14	
HOX172, 214	Permaquip ACI MkV elevating work platform	30		3.2		
MTPV 1	Mermec Roger 800 Mechanised Track Patrol Vehicle	115	69	23.3	T18	See Notes below
MTPV 2	Mermec Roger 800 Mechanised Track Patrol Vehicle	115	69	23.3	T18	See Notes below
	NOTES: 1 These vehicles shall operate to normal speed boards 2 Wheel wear and wheel turning shall require the packing between the vehicle body and Geomatic equipment to be adjusted as required. 3 Operation under track signalling is only permitted when both track circuit actuators (TCA) are functioning. If any of the TCA's are not functioning, the vehicle is not permitted to operate under track signalling and shall be stopped. Operation shall then be block worked as per Block working of single unit diesel cars, TS TOC 1, Section 2.17. 4 MTPV1 is fitted with AIMS (incl. camera/lights), Track Geography System, OHW measuring system, Rail Prof measuring system, Rail Corrugation measuring system.					

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
	5 MTPV2 is fitted with AIMS (incl. camera/lights).					
PJ010,013, 048,051	Plasser HGR 230 track jack	10	1.5	2.0	T1	
PJ079	Plasser Mammut track jack	10	1.5	2.0		
RTX1	Plasser SMD-80G track layer	12	130	53.0	T2,T6, T17	0.50 draw capacity. Loco hauled to 80km/hr
TJ091-092	Plasser CAT continuous tie tamper	80	40.3	18.0	T2,T4, T7,T18	0.10 draw capacity
TJ095	Plasser Unimat 09-32 tamper	80	135	35.1	T18	
TJ096	Plasser Unimat 09-32/4S tamper	80	135	35.1	T18	
TJ107-108	Plasser Unimat 08475/4S turnout tamper	80	114.6	31.1	T18	
# DVE 1,3,5,6,7	Plasser OBW 10 overhead wiring drum vehicle	50	28	8.0		Must be operated with MVE
# MVE 2 to 7	Plasser OBW 10 overhead wiring main vehicle	50	26	12.0	T18	
	# MVE, DVE consist must be last 2 vehicles in a train consist.					

15 T

15.1 Taylor Rail Australia Pty Ltd – Track Maintenance Vehicles

VEHICLE CODE or PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TRA JAX 002	Jackson 6700S Tamper	15	31.8	14.8	T14	Couple with M22. Operates as RR48
TRA JAX 003	Pandrol Model 6700S Switch tamper	30	34.5	13.3	T15	
TRA REG 003	Knox Kershaw KBR 925 Ballast Regulator	15	20.0	11.5	T14	
TRA REG 004	Knox Kershaw KBR 925 Ballast Regulator	15	20.0	11.2	T14	
6700	Jackson (HTT) 6700 Production Tamper	22	31.8	15.9		
KBR925	Knox Kershaw KBR925 Ballast Regulator	28	20	12		

16 U

16.1 UGL Regional Linx – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
411008	Harsco BEKR Regulator	75	25.1	12.2	T18, T21	A BEKR and MKVI may travel or operate as part of a two unit consist. In case of breakdown of one unit, the other in the consist may tow it to the nearest suitable siding at 15km/h or less.
411009	Harsco BEKR Regulator	75	25.1	12.2	T18, T21	
412012	Harsco MKVI Tamper	75	54.0	18.1	T18	
412013	Harsco MKVI Tamper	75	54.0	18.1	T18	
447157	Plasser HGR-230 Track Jack #	15	2.14	1.6	T14	
447158	Plasser HGR-230 Track Jack #	15	2.14	1.6	T14	
M111763	Plasser HGR-230 Track Jack #	15	2.14	1.6	T14	
	# These vehicles are out of gauge by 50mm per side and therefore operating personnel must be aware when positioning the vehicle for passing rail traffic.					

17 V

17.1 Ventia – Track Maintenance Vehicles

PLANT NUMBER	DESCRIPTION OF VEHICLE	MAX SPEED KM/H	LOADED MASS TONNE	LENGTH METRES	NOTES See Page 2	REMARKS
TS10	Regulator	60	18.5	10.5	T14	Vehicles operating within worksites shall be under direction of a worksite supervisor. Vehicle to have approved recovery plan in event of failure.
TS14	Regulator	60	18.5	10.5	T14	
TS24	Tamper	60	37.0	18.5	T14	
TS25	Tamper	60	37.0	18.5	T14	Vehicles to traverse level crossings in accordance with CNWT 316. Tampers to be limited to 30km/h on Class 5 lines.