

Performance Based Standards (PBS) Vehicle Approval

Heavy Vehicle National Law Section 23

Heavy Vehicle (General) National Regulation Section 17

This is not an authorisation to access the road network.

You must comply with the relevant Notice or if required, obtain an access permit.

8 March 2023

Ref No: PBS – VA13067 – V220118 – v1A

This PBS Vehicle Approval modifies any previously issued approval for the vehicle(s) listed herein operating under Application Number V220118 and is a modification of VA11202.

Design Approval Holder	Ivan Tarrant AUSTRALIAN TRAILER SOLUTIONS GROUP OPERATIONS PTY LTD	Address	233-243 Learmonth Rd Wendouree VIC 3355
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Application Number	V220118	Vehicle	A-Double (3-2-3)
Load	Containers (Uniform Density); Containers (Mixed Freight); Containers (Empty); Unladen	Length (mm)	≤ 33500
Assessor	Philip Roper	Height (mm)	≤ 4300

Combination Matrix

For each Prime Mover and Trailer Set, the corresponding drawing reference number, dimension set number and mass table number/s are listed below. The dimension set number e.g., 'Option 1' indicates the maximum allowable payload heights and/or allowable tyre options for the corresponding Prime Mover and Trailer Set - refer to the Operating Conditions and Approved Tyre Options sections on this VA.

New VINs added in this VA are listed in bold.

Prime Mover 1	Make	GCM (t)	Prime Mover 2	Make	GCM (t)
XLRTTM430MG362331 XLRTTM430MG356241 XLRTTM430LG337229 XLRTTM430MG347968 XLRTTM430MG347969 XLRTTM430MG347970	DAF	90	6F5000000JA464411	KW	97

Prime Mover 3	Make	GCM (t)
XLRTTM430LG329080 XLRTTM430MG364583 XLRTTM430MG376775 XLRTTM430MG376776 XLRTTM430MG376777 XLRTTM430MG376778 XLRTTM430MG380191 XLRTTM430MG384462	DAF	90

Lead Trailer 1	ATM (t)	Lead Trailer 2	ATM (t)
6F80000000B094769	38	6F80000000B091315 6F80000000B091321	38

Dolly 1	ATM (t)	Dolly 2	ATM (t)
6F80000000B094770	18.5	6F80000000B091316 6F80000000B091322	18

Rear Trailer 1	ATM (t)	Rear Trailer 2	ATM (t)
6F80000000B094771	38	6F80000000B091317 6F80000000B091323	38

Trailer Sets			
Trailer Set 1	Lead Trailer 1	Dolly 1	Rear Trailer 1
Trailer Set 2	Lead Trailer 2	Dolly 2	Rear Trailer 2

	Trailer Set 1	Trailer Set 2
Prime Mover 1	MALEC BROS 29AB Option 1 Table 1, 2, 5	NA
Prime Mover 2	MALEC BROS 29AB1 Option 1 Table 1, 3, 5	NA
Prime Mover 3	NA	BTT01125-ADouble01 Option 3 Table 1, 4, 5

Table 1
Prime Mover 1, 2 and Trailer Set 1
Prime Mover 3 and Trailer Set 2

Mass Limits	Level 2		Axle Group Masses	Level 2		
				GML	CML	HML
GML (t)	79.5		Steer (t)	6.5	6.5	6.5
CML (t)	81.5		Drive (t)	16.5	17.0	17.0
HML (t)	85.0		Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 2/3		Dolly (t)	16.5	17.0	17.0
			Rear Trailer (t)	20.0	21.0	22.5

Table 2
Prime Mover 1 and Trailer Set 1

Prime Mover 1 and Trailer Set 1		Tier 1	Axle Group Masses	Level 2		
Mass Limits	Level 2			GML	CML	HML
GML (t)	73.0		Steer (t)	6.5	6.5	6.5
CML (t)	75.0		Drive (t)	16.5	17.0	17.0
HML (t)	79.0		Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1		Dolly (t)	16.5	17.0	17.0
			Rear Trailer (t)	20.0	21.0	22.5
The mass across axle groups is limited to -						
		Axle Groups	GML	CML	HML	
		1 to 4	59.05	61.05	62.55	
		2 to 5	67.70	69.70	73.70	
		3 to 5	56.00	58.00	61.50	

Table 3
Prime Mover 2 and Trailer Set 1

Prime Mover 2 and Trailer Set 1		Tier 1	Axle Group Masses	Level 2		
Mass Limits	Level 2			GML	CML	HML
GML (t)	73.1		Steer (t)	6.5	6.5	6.5
CML (t)	75.1		Drive (t)	16.5	17.0	17.0
HML (t)	79.1		Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1		Dolly (t)	16.5	17.0	17.0
			Rear Trailer (t)	20.0	21.0	22.5
The mass across axle groups is limited to -						
		Axle Groups	GML	CML	HML	
		1 to 4	59.15	61.15	62.65	
		2 to 5	67.15	69.15	73.15	
		3 to 5	56.00	58.00	61.50	

Table 4
Prime Mover 3 and Trailer Set 2

Mass Limits	Level 2	Axle Group Masses	Level 2		
			GML	CML	HML
GML (t)	76.45	Steer (t)	6.5	6.5	6.5
CML (t)	78.45	Drive (t)	16.5	17.0	17.0
HML (t)	82.45	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5
		The mass across axle groups is limited to -			
		Axle Groups	GML	CML	HML
		2 to 5	71.15	73.15	77.15

Table 5
Prime Mover 1, 2 and Trailer Set 1
Prime Mover 3 and Trailer Set 2

Mass Limits	Level 3	Axle Group Masses	Level 3		
			GML	CML	HML
GML (t)	79.5	Steer (t)	6.5	6.5	6.5
CML (t)	81.5	Drive (t)	16.5	17.0	17.0
HML (t)	85.5	Lead Trailer (t)	20.0	21.0	22.5
Bridge Assessment	Tier 1	Dolly (t)	16.5	17.0	17.0
		Rear Trailer (t)	20.0	21.0	22.5

Operating conditions

The NHVR approves the vehicles listed herein for the level(s) shown in the “Mass Limits” table with the following operating conditions:

1. The total combination mass must not exceed the limits in the “Mass Limits” table.
2. The axle group masses must not exceed the limits in the “Axle Group Masses” table.
3. If the “Mass Limits” table specifies Tier 2 or Tier 3, a bridge assessment is required.
4. Maximum payload heights measured from the ground must not exceed: (m)

Option 1	Lead Trailer		Rear Trailer	
	Uniform Density	Mixed Freight	Uniform Density	Mixed Freight
TCM ≤ GML	3.580	4.120	3.840	4.300
TCM ≤ CML	3.540	4.080	3.720	4.300
TCM ≤ HML	3.470	3.990	3.690	4.270

Option 3	Lead Trailer		Rear Trailer	
	Uniform Density	Mixed Freight	Uniform Density	Mixed Freight
TCM ≤ GML	3.640	4.200	3.850	4.300
TCM ≤ CML	3.540	4.080	3.750	4.300
TCM ≤ HML	3.490	4.010	3.690	4.270

TCM – Total Combination Mass

Uniform Density payloads have the mass equally distributed throughout the volume of the load space. Examples of uniform density products include, but are not limited to - grain, gravel sand, boxed ceramic tiles and canned drinks.

Mixed Freight payloads have heavier items placed on the bottom of the load and lighter items on top. For example, a mix of boxes of different weights, with heavier boxes placed on the bottom while lighter and smaller are placed on the top.

5. Option 1 -The loading of the vehicle must be managed by application of ‘PBS Payload Management Procedure, Document reference: DA3348 – V220118 – MALEC BROS Transport Group’ dated 24/05/22, received by NHVR on 30/05/22.
6. Option 2 -The loading of the vehicle must be managed by application of ‘PBS Payload Management Procedure Malec Holdings Pty Ltd’ dated 7/03/23, received by NHVR on 7/02/23.
7. 6.5 tonne complying steer axle requirements:
 - an engine that complies with the engine emission standards of Australian Design Rule (ADR) 80/01 (Euro 4) or a later version of ADR 80; and
 - a front underrun protection device (FUPD) that complies with UN ECE Regulation 93 or ADR 84; and
 - a cabin that complies with UN ECE Regulation 29.

8. Concessional Mass Limits (CML) requirements:
 - a National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Accreditation must be in force for all motor vehicles listed on this vehicle approval.
9. Higher Mass Limits (HML) requirements:
 - for tandem axles groups, road friendly suspensions;
 - for tri-axle groups, road friendly suspensions and a National Heavy Vehicle Accreditation Scheme (NHVAS) – Mass Management Accreditation must be in force for all motor vehicles listed on this vehicle approval.
10. If steerable axles are fitted to the semitrailer(s), they must be locked at speeds above 40km/h and unlocked below 35km/h.
11. When operating at Level 2, there is a minimum mass requirement for the drive axle group. The mass on the drive axle group must be at least 19.6% of the total combination mass e.g. at 79.5t total combination mass, $79.5 \times 0.196 = 15.58\text{t}$ is required on the drive axle group. This clause does not apply to an unladen vehicle.
12. When operating at Level 3, there is a minimum mass requirement for the drive axle group. The mass on the drive axle group must be at least 16% of the total combination mass e.g. at 79.5t total combination mass, $79.5 \times 0.16 = 12.72\text{t}$ is required on the drive axle group. This clause does not apply to an unladen vehicle.
13. If overall length exceeds 30m, a “ROAD TRAIN” sign must be displayed at the front and rear of the vehicle.
14. If drawbar length exceeds 5m, the outermost surface of the drawbar must be fitted with yellow reflective material that complies with Class C material requirements of United National Economic Commission for Europe Regulation No. 104 Uniform provisions concerning the approval of retro-reflective markings for vehicles of category M, N and O.
15. Due to the vehicle’s length (33.499m) exceeding the maximum permitted length for Level 2 access as prescribed by the Network Classification Guidelines, the access of this vehicle will be limited and an individual route assessment will be required. The operation of the vehicle on the road network will require a permit subject to Road Manager Consent, unless otherwise specified by the Road Manager.

Exemptions

Heavy Vehicle National Law Section 24

Heavy Vehicle (General) National Regulation Section 28

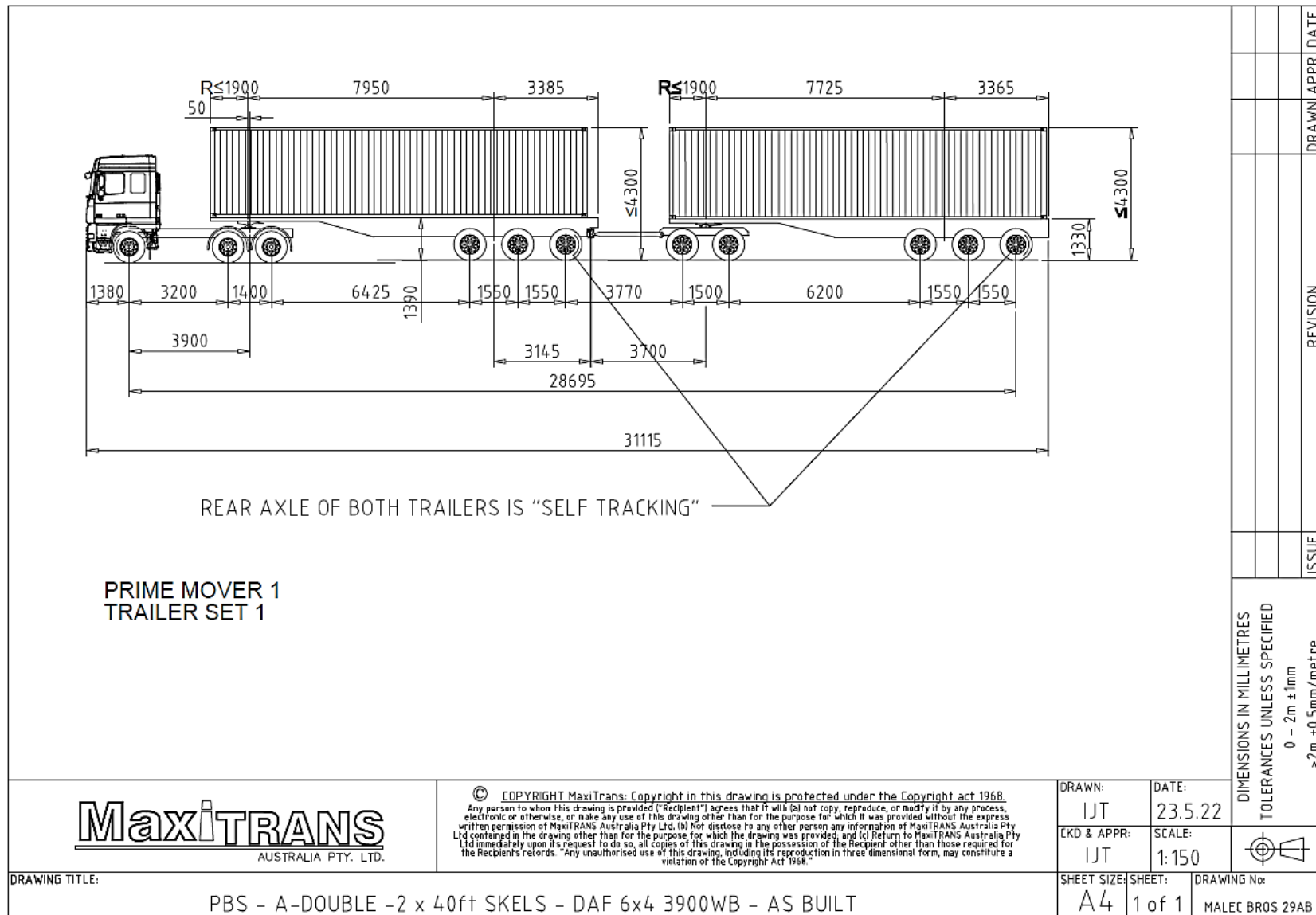
The following table lists exemptions from prescribed vehicle standards that have been granted for the vehicle(s) in this vehicle approval.

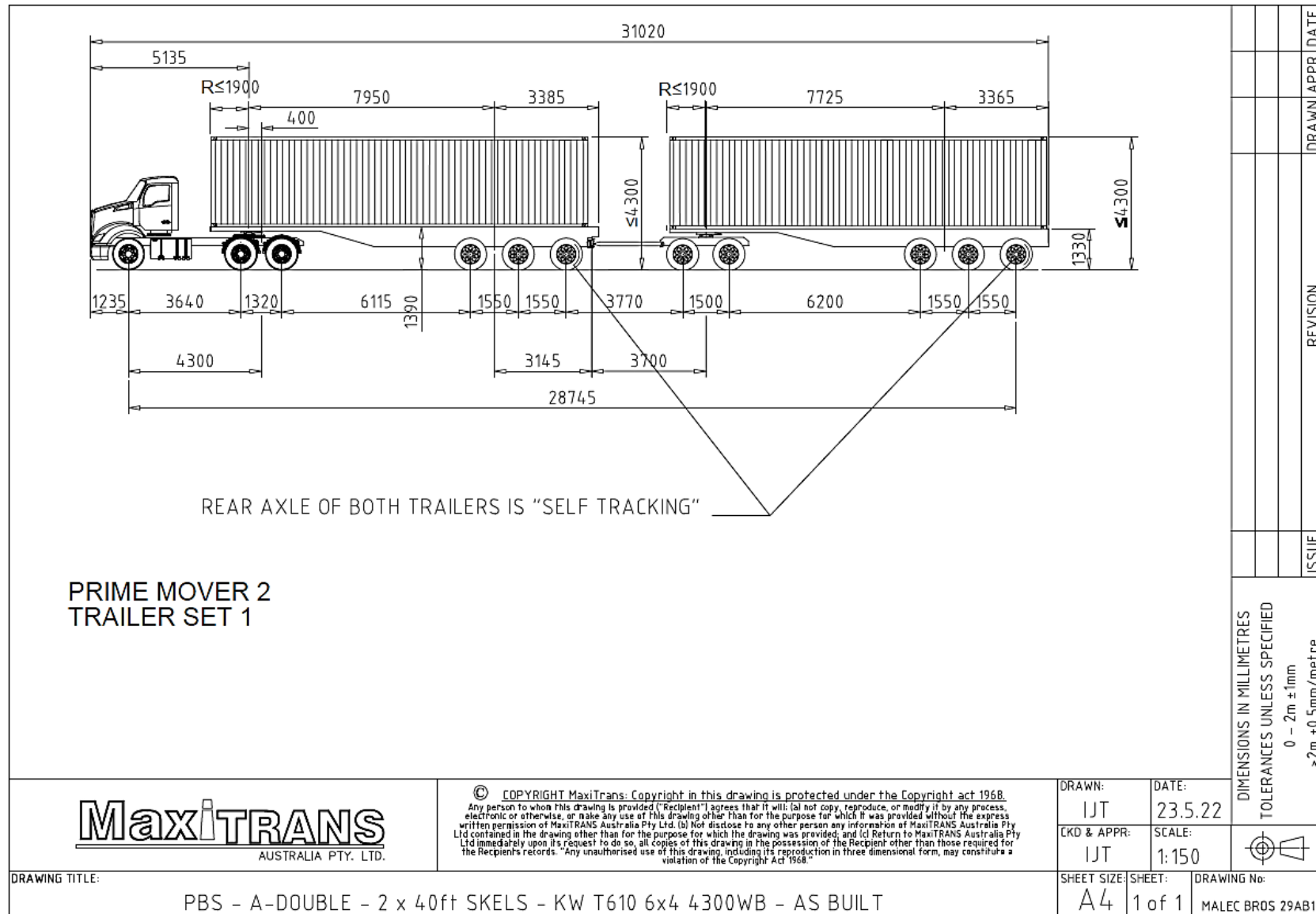
Exemptions	
ADR	Rule 43, Clause 6.2.3 (Rear overhang – Trailers) Rule 43, Clause 6.2.2 (Drawbar length – Trailers) Rule 63, Clause 5.1 (Tow coupling location)
HV(MDL)NR	Schedule 6, Section 5 (Length – Rear overhang) Schedule 6, Section 6 (Length – Trailer drawbars)
HV(VS)NR	Schedule 3, Section 29 (Attachment of couplings and drawbar eyes on road trains) Schedule 3, Section 31 (Tow coupling overhang on road trains)

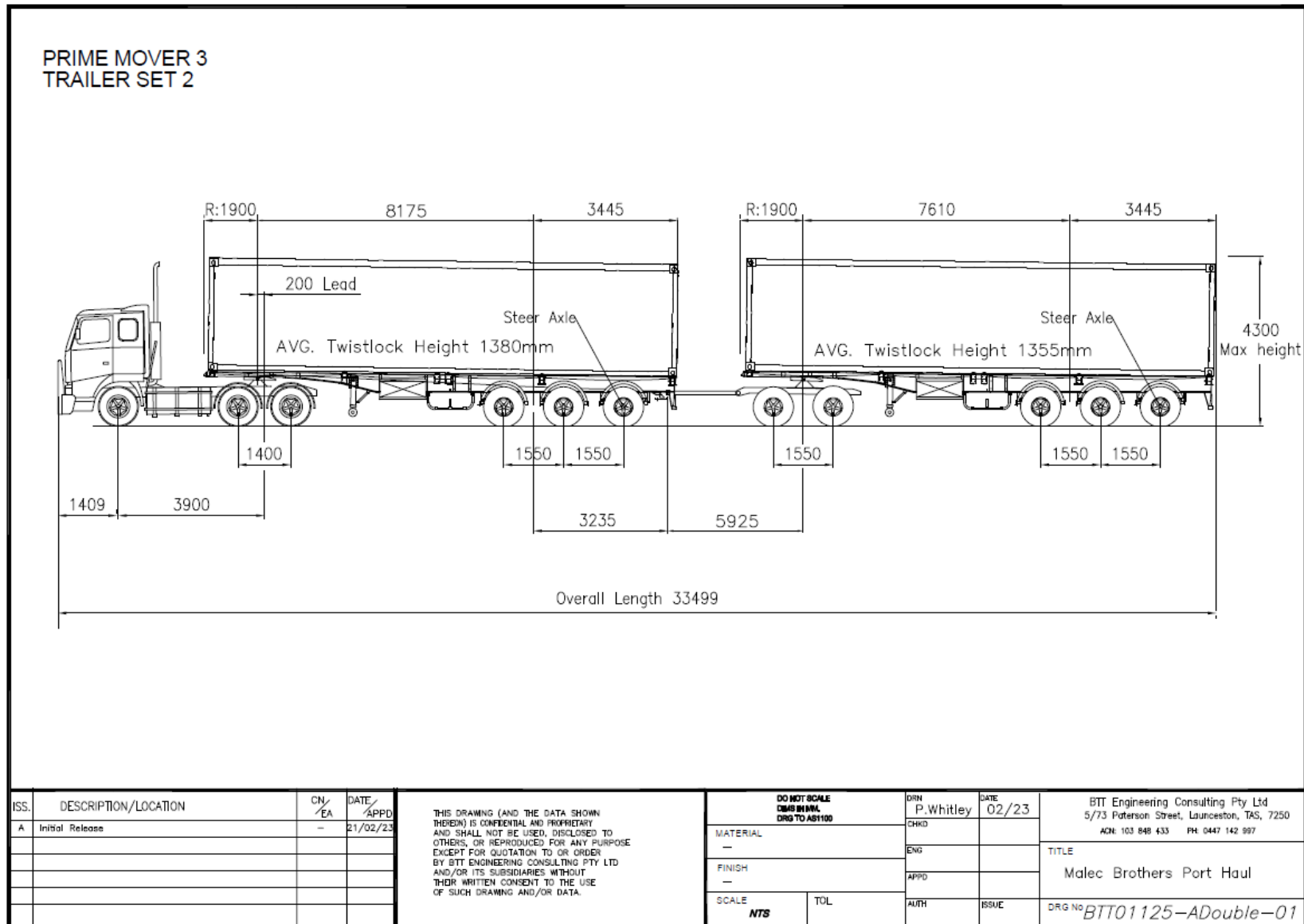
ADR Australian Design Rules

HV(MDL)NR *Heavy Vehicle (Mass, Dimension and Loading) National Regulation*

HV(VS)NR *Heavy Vehicle (Vehicle Standards) National Regulation*







Approved tyre options

Steer –

- **295/80R22.5** (Load Index **149** or higher, single configuration)
- **305/70R22.5** (Load Index **149** or higher, single configuration)
- **315/80R22.5** (Load Index **149** or higher, single configuration)
- **385/65R22.5** (Load Index **149** or higher, single configuration)

Drive –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **315/80R22.5** (Load Index **140** or higher, single configuration)

Trailer –

- **11R22.5** (Load Index **140** or higher, dual configuration)
- **295/80R22.5** (Load Index **140** or higher, dual configuration)
- **305/70R22.5** (Load Index **140** or higher, dual configuration)
- **275/70R22.5** (Load Index **140** or higher, dual configuration)
- **315/80R22.5** (Load Index **140** or higher, dual configuration)

Tyre load index and inflation pressure must be appropriate for the axle mass (inflation pressures must be within legal inflation limits)

Retread tyres are only permitted on the drive, dolly and trailer axles.

Tyres listed herein are specific for PBS application number V220118.

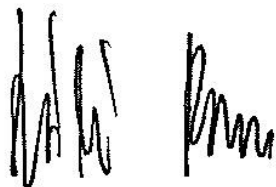
A different list of tyres will apply for other combination types and different PBS application numbers.

Axle spacings for as-built combinations - A-double (1-2-3-2-3)

PM	TS	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	OAL
1	1	3200	1400	6425	1550	1550	3770	1500	6200	1550	1550	31115
2	1	3640	1320	6115	1550	1550	3770	1500	6200	1550	1550	31020
3	2	3200	1400	6500	1550	1550	6060	1550	6060	1550	1550	33499

Declaration

I, Laszlo Bruzsa Chief Engineer, delegate of the National Heavy Vehicle Regulator, approve this PBS Vehicle Approval PBS–V220118 –VA13067.



Laszlo (Les) Bruzsa

Chief Engineer

National Heavy Vehicle Regulator

Dated: 08/03/23

Revision table

N	VA	Vers	Brief description	Date
1	11202	1A	First issue.	02/06/22
2	13067	1A	Adding 8x prime movers, 4x trailers, 2x dollies to VA11202 (additional VINs listed in bold).	08/03/23

Important information

The driver must keep in the driver's possession a copy of this Vehicle Approval and be able to produce it for inspection by compliance officers. Penalties can apply.

If changes or modifications are required, these are limited to the specifications contained in the relevant PBS Design Approval and the Application for Design Approval Part A and B. Contact the applicant (see the cover page on this document) for information related to the allowed specifications.

A change of components and/or dimensions must be certified by an approved [PBS Certifier](#) and an updated version of this Vehicle Approval must be obtained. A change of tyres, outside of the list contained on this Vehicle Approval, also requires approval but will not require an inspection by a PBS Certifier.

If VA contains multiple tyre option tables, all tyre selections must be chosen from the same tyre options table. Tyres from different tyre options tables are not interchangeable.

Road access

The PBS Vehicle Approval is not an authorisation to access the road network. You must comply with the relevant Notice or obtain an access permit. To apply for an access permit, visit the [NHVR Portal](#).

For more information on PBS Notices visit:

[National Class 2 PBS Level 1 & 2a Truck and Dog Trailer Authorisation Notice 2021 \(No.1\)](#)

[National Class 2 Performance Based Standards \(High Productivity\) Authorisation Notice](#)

[National Class 2 Performance Based Standards \(Tier 1\) Authorisation Notice 2021](#)

If you add vehicles to your PBS Vehicle Approval, the PBS Vehicle Approval number may change depending on the new vehicles added. If the PBS Vehicle Approval number has changed, and your access permit references a PBS Vehicle Approval number, your access permit will need to be amended to reflect the latest Vehicle Approval number. Note that most truck and dog access permits will not reference a PBS Vehicle Approval number and therefore changes to the Vehicle Approval do not require an update to the access permit. For more information, watch [Adding vehicles to a PBS Vehicle Approval](#) video on our YouTube channel.

For more information, please visit our website at www.nhvr.gov.au or call 13 NHVR (13 64 87).

For queries relating to this document please contact the PBS Operations Team at pbs@nhvr.gov.au.

Manage your PBS Vehicle Approval

Please visit our [website](#) to view a list of available options and associated forms to manage your PBS Vehicle Approval.