

IPAC-8 | Vehicle Labelling Protocol for PBS Certifications

Audience: PBS Certifiers

Effective Date: February 2021

This IPAC sets out a vehicle labelling protocol for PBS Certifications. It applies to the Certifier's Certificate, Combination Matrix, Assessor Sign-Off (ASO), Part B, and as-built drawings. Certifiers are responsible for ensuring consistent label usage across all these documents.

Summary

To ensure the structure of the VA is clear, vehicles are to be grouped by use of labels i.e., Truck 1 or Trailer 1. This allows a vehicle or a group of vehicles to be referred to by their label throughout the PBS Vehicle Approval (VA) and the certification package.

A label consists of two parts:

- 1) Primary label: Must be numerical.
- 2) Sub-label: Must be a lower-case letter.

Certifications containing only one vehicle combination, i.e., one truck and one trailer, must be labelled as Truck 1 and Trailer 1.

The correct use of sub-labels in a series is Trailer 1a and Trailer 1b; not Trailer 1 and Trailer 1a.

Primary label

The primary label is used for vehicles that are dimensionally identical: The key principle for the use of a primary label is that vehicles can be grouped on the same as-built drawing as they are dimensionally identical. If vehicles cannot be grouped on the same drawing due to dimensional differences, these vehicles must be separated by unique primary labels.

Same bin height and body type: To be considered identical, vehicles must also have the same body type and bin heights, for example, a single drop deck and double drop deck cannot be grouped under the same primary label.

Tolerances do not apply: All vehicle dimensions must be identical, including axle spacings, FOH, ROH and bin/body height.

Steerable Axles Exception: Dimensionally identical trailers where one is fitted with a steerable axle and another trailer is not, are considered 'non-

dimensionally-identical' as the presence of a steerable axle changes the Rear Overhang Line position.

The definition of 'identical' for labelling purposes is different to 'identical-footprint' term used to determine the VA application type, i.e. 'add identical'.

For labelling, vehicles must be completely identical in all dimensions.

For VA application type, i.e. 'add identical', a vehicle is 'identical' if it shares the same vehicle footprint or axle spacings. Variations in the FOH and ROH are acceptable, as long as the OAL remains within the original length bracket.

Sub-label

Sub-label refers to differences in components or vehicle specifications.

Use sub-labels to distinguish differences in components and in the following scenarios.

GCM or ATM Reduction affecting mass tables.

Example: four prime movers are identical in all respects except for GCM rating. The DA requires a minimum of 85.5t.

As all four prime movers are dimensionally identical, they can be grouped under the same primary label – Prime Mover 1. In this scenario, the use of sub-label is also required because some prime movers do not meet the minimum GCM requirements and as a result will require separate mass tables.

The first two prime movers can be grouped under Prime Mover 1a as they both meet the minimum DA requirement of 85.5t and can be both listed in the same mass table on the VA.

Prime Mover 1b and Prime Mover 1c have a GCM lower than the minimum DA requirement of 85.5t and each will require a separate mass table.

Example 1: How vehicles are to be labelled in a Certifier's Certificate for the above scenario.

Prime Mover				Table 1
1	Prime Mover 1a			<wb>
N	VIN	Make	Model	GCM (t)
1	EXAMPLE1111111114	KW	K200	90
2	EXAMPLE1111111111	KW	K200	85.5

Prime Mover				Table 2
1	Prime Mover 1b			<wb>
N	VIN	Make	Model	GCM (t)
1	EXAMPLE1111111112	KW	K200	85

Prime Mover				Table 3
1	Prime Mover 1c			<wb>
N	VIN	Make	Model	GCM (t)
1	EXAMPLE1111111113	KW	K200	80

Steer Axle Concession affecting mass tables.

Example: two trucks are identical in all respects except for one truck is eligible for 6.5t complying steer axle and the other is not, the two vehicles must be labelled as Truck 1a and Truck 1b, as they would require separate mass tables on the VA.

Different suspensions requiring different Payload Heights (PH) tables.

Example: One prime mover is fitted with Drive Suspension A and another prime mover is fitted with Drive Suspension B, and the DA stipulates different PH tables for the two difference suspensions, these vehicles must be labelled as Prime Mover 1a and Prime Mover 1b respectively, as they would require separate PH tables on the VA.

Vehicle Unit Labels

Individual vehicles units must use the following labels:

- A-Double / B-Double:
 - Lead Trailer
 - Rear Trailer
- Triple Road Train
 - Lead Trailer
 - Middle Trailer
 - Rear Trailer
- Quad Road Train
 - Lead Trailer
 - Second Trailer
 - Third Trailer
 - Rear Trailer
- Any Trailer that can be used in multiple positions:
 - Trailer 1 (Lead/Rear)
 - Trailer 2 (Middle/Rear)

Prime Mover Fifth Wheel Off-Set

If a prime mover or a group of prime movers under the same primary label can be used with multiple Fifth

Wheel Off-Set (FWO) positions – the FWO dimension must be added to the label in brackets after the label.

Lead – for FWO forward of the centre of an axle group.

Lag – for FWO rear of the centre of an axle group.

Use '0' - for FWO at the centre of an axle group.

Example 2:

Prime Mover				Table 2
1	Prime Mover 1 (FWO- LEAD 50)			<wb>
N	VIN	Make	Model	GCM (t)
1	EXAMPLE1111111112	KW	K200	80

Prime Mover				Table 3
1	Prime Mover 1 (FWO - 0)			<wb>
N	VIN	Make	Model	GCM (t)
1	EXAMPLE1111111112	KW	K200	80

Dolly Retractable Drawbar

If a dolly or group of dollies has an extendable drawbar that can be used in multiple positions, the position of the drawbar must be added to the label.

Example 3

Dolly				Table Number
3	Dolly 1 (Retracted Drawbar)			4200
N	VIN	Make	Model	ATM (t)
1	EXAMPLE1111111113	EX	200	18

Dolly				Table Number
3	Dolly 1 (Extended Drawbar)			5300
N	VIN	Make	Model	ATM (t)
1	EXAMPLE1111111113	EX	200	18

Variations to FWO or drawbar dimension may create combinations that differ in axle spacings and OAL. These differences may affect Tier 1 bridge compliance and allowable masses, as well as DA dimension-set compliance, therefore they must be distinctly labelled.

Labelling of Trailer Sets

For multi-trailer combinations, only the primary labels should be used for Trailer Sets. As-built drawings should display the Trailer Set label only.

Example: a B-Double Trailer Set consists of Lead Trailer 1a and Rear Trailer 1a – the Trailer Set must be labelled as 'Trailer Set 1', not 'Trailer Set 1a'.

Labelling of Drawings

Labelling of as-built drawings is optional, however, if labelled, they must only show the primary label i.e., Prime Mover 1 Trailer Set 1.

Grandfathering

For continuity, certifications where a different naming convention was used prior to implementation of this IPAC in February 2021, can be grandfathered. Certifiers are not required to amend previously used labels. However, all certifications after February 2021 must

conform to the labelling requirements outlined in this document.

For clarity and consistency purposes we strongly recommend that any previously approved combinations using a different labelling protocol are brought to this standard.

Contact

This IPAC was produced by the PBS Operations Team, for queries please email at pbs@nhvr.gov.au.

IPAC-8: Revision history	
First Published	February 2021
Version 2	December 2021
Version 3	February 2022
Version 4	March 2022
Version 5	November 2022
Version 6	May 2023
Version 7	December 2023

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