

1-Tonne Tri-Axle Mass Transfer Allowance

The 1-Tonne Tri-Axle Mass Transfer Allowance (1TMTA) provides heavy vehicle operators with flexibility in loading certain heavy vehicle combinations. It is a mass exception under the *Heavy Vehicle (Mass, Dimension and Loading) National Regulation – Schedule 5A*.

The 1TMTA allows increased mass on tri-axle groups so that they may be loaded by up to 1 tonne (t) above the tri-axle group 20t General Mass Limit (GML) provided any additional mass loaded onto each tri-axle group is offset onto other non-steer axle or axle groups.

The 1TMTA does not allow an increase to the total mass but provides flexibility in how mass may be distributed across axle groups.

Eligible vehicles

The 1TMTA applies to heavy vehicle combinations, including multi-combination vehicles, that have a tri-axle group(s) which qualify under GML to be loaded up to 20t.

Non-eligible vehicles

It does not apply to vehicles operating:

- under Concessional Mass Limits (CML) or Higher Mass Limits (HML)
- under a permit or notice that provides for increased mass
- Performance Based Standards (PBS); or
- pig trailers.

1TMTA conditions

- The 1TMTA does not apply to a steer axle or axle group.
- The mass must not exceed the applicable GML for the heavy vehicle combination.
- Any increase in mass on a tri-axle group above the 20t cannot exceed 1t.
- Any mass above 20t on a tri-axle group will decrease the mass limit allowed for other axles or axle groups.
- The maximum reduction that can be applied to the mass of an axle or axle group is 1t.

The 1TMTA does not change to the total allowable GML for the heavy vehicle combination.

What happens if the vehicle does not comply with all the conditions?

The mass exception will no longer apply, and the heavy vehicle combination will be assessed against GML axle limits.

What roads can be used?

Vehicles operating under the 1TMTA can access all roads in the ACT, NSW, SA, TAS and VIC unless travel is restricted by load limiting signs.

For vehicles operating in Queensland, the 1TMTA applies to certain declared routes. For details of approved routes in Queensland, refer to the “1TMT route” on the NHVR National Network Map (<https://maps.nhvr.gov.au>).

The 1TMTA does not apply to vehicles operating in WA or NT.



Figure 1: Portable roadside weigh

Can more than one tri-axle group benefit under the 1TMTA?

The mass transfer allowance can apply to all tri-axle groups in the combination. Refer to example scenarios below.

Is mass measurement adjustment applied to vehicles operating under the 1TMTA?

Yes, [mass measurement adjustment](#) is applied in the same manner as it would to other heavy vehicle combinations.

For more information:

Visit: www.nhvr.gov.au
 Subscribe: www.nhvr.gov.au/subscribe
 Email: info@nhvr.gov.au
 Phone: 13 NHVR (13 64 87)*

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Example Scenarios

Scenario 1: 6-axle prime mover semi-trailer combination

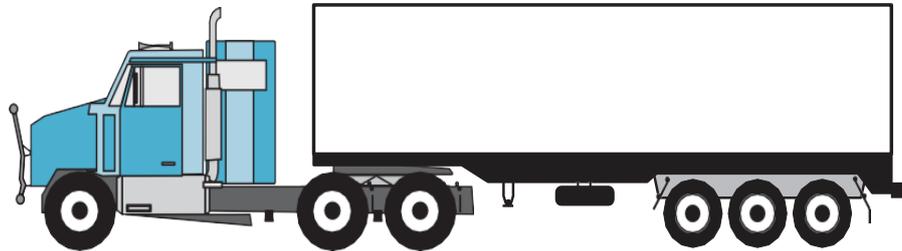


Figure 2: 6-axle prime mover semi-trailer combination

	Steer	Drive	Tri-Axle
GML	6.0t	16.5t	20.0t
✘ Example A - actual mass	6.0t	15.2t	21.3t
✘ Example B - actual mass	6.0t	15.9t	20.8t
✔ Example C - actual mass	6.0t	15.0t	21.0t

Example A – The tri-axle has been loaded to 21.3t, and the full 1.3t has been offset to the drive axle group. This exceeds the allowed 1t mass transfer, both for the increase on the tri-axle group and the decreased mass limit on the drive axle group, therefore the 1TMTA does not apply.

Example B – The tri-axle has been loaded to 20.8t, an increase of 0.8t but the mass offset to the drive axle group is only 0.6t. The 1TMTA conditions require that the increased mass on the tri-axle must be offset onto another axle or axle group. There has only been a mass offset of 0.6t to the drive axle group, rather than the required 0.8t, therefore the 1TMTA does not apply.

Example C – The tri-axle has been loaded to 21.0t, and the mass has been offset to the drive axle group. The actual mass on the drive axle group is less than the reduced mass limit of 15.5t, therefore this vehicle is operating in compliance with the conditions of the 1TMTA.

Scenario 2: Compliant 9-axle B-double

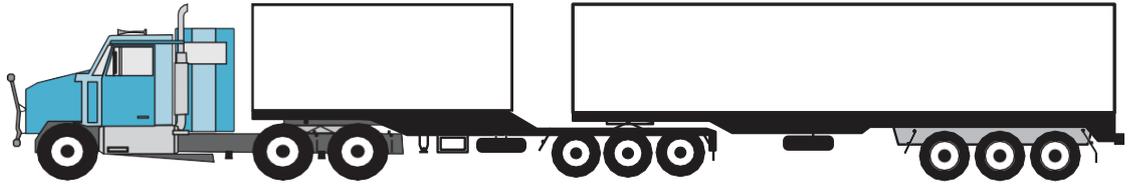


Figure 3: 6-axle prime mover semi-trailer combination

	Steer	Drive	Tri-Axle	Tri-Axle
GML	6.0t	16.5t	20.0t	20.0t
✓ Example A - actual mass	6.0t	16.5t	21.0t	19.0t
✓ Example B - actual mass	6.0t	16.0t	21.0t	19.5t
✓ Example C - actual mass	6.0t	15.5t	20.7t	20.3t

Scenario 3: Non-compliant 9-axle B-double

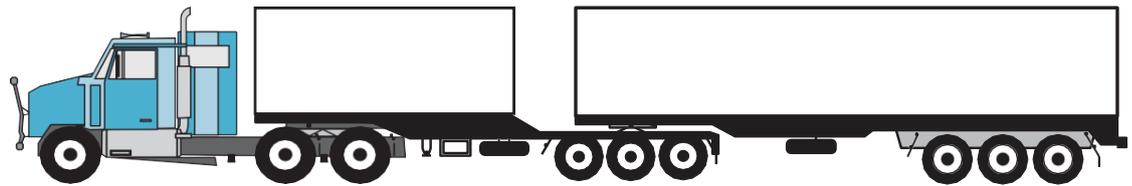


Figure 4: 6-axle prime mover semi-trailer combination

	Steer	Drive	Tri-Axle	Tri-Axle
GML	6.0t	16.5t	20.0t	20.0t
✗ Example A - actual mass	5.5t	16.5t	20.5t	20.0t
✗ Example B - actual mass	6.0t	16.5t	21.0t	20.0t
✗ Example C - actual mass	6.0t	14.5t	21.0t	21.0t

Example A – The vehicle has been loaded with an additional 0.5t on the first tri-axle group which has been offset onto the steer axle. The 1TMTA conditions do not allow for any mass to be offset to a steer axle or steer axle group, therefore the 1TMTA does not apply.

Example B – The vehicle has been loaded with an additional 1t on the first tri-axle group without any mass being offset onto another axle group or groups. The 1TMTA conditions require that the additional mass loaded onto a tri-axle group must be offset onto another axle or axle group, therefore the 1TMTA does not apply.

Example C – The vehicle has been loaded with an additional 1t on both tri-axle groups but the increased mass from both tri-axle groups has been offset onto the drive axle. The 1TMTA conditions only allow for a maximum of 1t reduction of the mass limits on an axle or axle group to offset any increased mass on a tri-axle group, therefore the 1TMTA does not apply.