



ATA - ITC TECHNICAL DICTIONARY:

AGGREGATE TRAILER MASS (ATM): The total mass of the laden trailer when carrying the maximum load recommended by the *'Manufacturer'*. This will include any mass imposed onto the drawing vehicle when the *'Combination Vehicle'* is resting on a horizontal supporting plane.

ANTILOCK SYSTEM: A portion of a *'Service Brake System'* that automatically controls the degree of rotational wheel slip relative to the road at one or more road wheels of the vehicle during braking.

ARTICULATED VEHICLE: A combination of *'Prime Mover'* and *'Semi-trailer'*.

AUTOMATIC PIN COUPLING: A *'Coupling'* which utilises a vertical pin through a towing eye attached to the *'Drawbar'* with a *'Drawbar'* eye guidance socket and a self-engaging pin and locking mechanism.

AXLE: One or more shafts positioned in a line across a vehicle, on which one or more wheels intended to support the vehicle turn.

AXLE GROUP: Either a *'Single Axle'*, *'Tandem Axle Group'*, *'Triaxle Group'*, or *'Close Coupled Axle Group'*.

AXLE LOAD: Total load transmitted to the road by all the tyres of all the wheels whose centres may be included between 2 transverse parallel vertical planes less than one metre apart.

BALL COUPLING: A *'Coupling'* comprising a ball and complementary body which clamps only on the outer surface of the ball.

B-DOUBLE: A combination of vehicles consisting of a prime mover towing 2 *'Semi-trailers'*.

BRAKE REACTIVE SUSPENSION: A suspension in which there is a transfer of vertical loading from one *'Axle'* to another *'Axle'* in the same *'Axle Group'* due to the application of the *'Brakes'*.

COMBINATION CONFIGURATIONS: Refer to Technical Advisory Procedure – Description of Truck Configurations

<http://www.truck.net.au/sites/default/files/TAPs%20-%20description%20of%20truck%20configuration%20September%202016.pdf>

COMBINATION VEHICLE: Either a combination of a rigid goods vehicle and one trailer (other than a *'Semi-trailer'*); or an *'Articulated Vehicle'*

CONVERTER DOLLY: A *'Pig Trailer'* with a *'Fifth Wheel Coupling'*, designed to convert a *'Semi-trailer'* into a *'Dog Trailer'*.

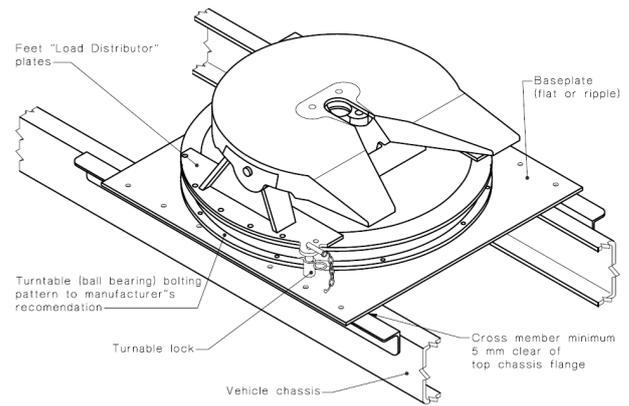
DOG TRAILER: A trailer with 2 *'Axle groups'* of which the front *'Axle Group'* is steered by connection to the drawing vehicle.

DRAWBAR: Portion of a trailer that connects the trailer body to the *'Coupling'* for towing purposes.

DRAWBAR LENGTH: Horizontal distance from the centreline of the towing pivot to the centreline of the *'Axle Group'* of the trailer; or, leading *'Axle Group'* of a dog trailer.

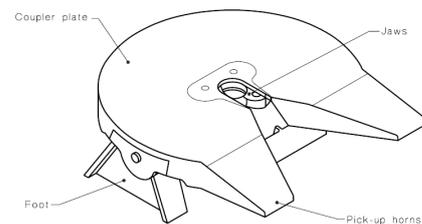
FIFTH WHEEL ASSEMBLY: A fifth wheel coupling including any turntable (ballrace), mounting plate, sliding assembly, load cell and other equipment mounted between the towing vehicle chassis and the trailer skid plate, but not including any attachment angles or other sections used for the same purpose.

NOTE: This includes any mechanism which allows the adjustment of the longitudinal location of the fifth wheel.



FIFTH WHEEL COUPLING: A device fitted to a towing vehicle to permit quick coupling and uncoupling of a semitrailer, provide articulation for the combination, and provide stability and support to the semi-trailer.

Where a fifth wheel is specially designed to have a turntable base as an integral part, the term "fifth wheel assembly" includes that turntable base. It does not include the skid plate and kingpin, which are parts of the semi-trailer.



NOTE: Frequently, a fifth wheel is incorrectly referred to as a Turntable.

GROSS AXLE LOAD RATING (GALR): The 'Manufacturer's' specified maximum 'Axle Load' for each 'Axle' for which compliance with applicable Australian Design Rules has been or can be established.

GROSS COMBINATION MASS (GCM): Value specified for the vehicle by the 'Manufacturer' as being the maximum of the sum of the 'Gross Vehicle Mass' of the drawing vehicle plus the sum of the 'Axle Loads' of any vehicle capable of being drawn as a trailer.

GROSS ROAD TRAIN MASS: The sum of the laden masses of each of the vehicle units of a 'Road Train'.

GROSS TRAILER MASS (GTM): The mass transmitted to the ground by the 'Axle' or 'Axles' of the trailer when coupled to a drawing vehicle and carrying its maximum load approximately uniformly distributed over the load bearing area, and at which compliance with the appropriate Australian Design Rules has been or can be established.

GROSS VEHICLE MASS (GVM): The maximum laden mass of a motor vehicle as specified by the 'Manufacturer'.

GROUND CLEARANCE: The minimum distance to the ground from the underside of a vehicle excluding its tyres, wheels, wheel hubs, brake backing plates and flexible mudguards or mudflaps.

GROUP GROSS AXLE LOAD RATING (GGALR): The least of the values allowed by 'GALR', Table 1 of ADR 38/... or that determined by 'Gross Trailer Mass'.

HOOK COUPLING: A 'Coupling' comprising a hook and towing ring where the hook has a retaining device.

KINGPIN: A pin (including retention plate and bolts, where applicable) attached to the skid plate of a semi-trailer and used for connecting the semi-trailer to the fifth wheel of a towing vehicle.

The kingpin 'transfers lateral forces between the towing vehicle and the towed trailer', the towing and braking forces.

OVERALL LENGTH: The maximum distance measured longitudinally; length includes everything (except front blind spot mirrors that protrude less than 150 mm).

OVERALL WIDTH: The maximum distance measured across the body including wheel guards, but excluding:

- rear vision mirrors, signalling devices and side-mounted lamps and reflectors;
- anti-skid devices mounted on wheels, central tyre inflation systems, tyre pressure gauges;
- permanently fixed webbing-assembly-type devices – such as curtain-side devices, provided that the maximum distance measured across the body including any part of the devices does not exceed 2.55m.

PIG TRAILER: A trailer having one 'Axle Group' near the middle of the length of the goods-carrying surface.

PRIME MOVER: A motor vehicle built to tow a 'Semi-trailer'.

QUAD AXLE GROUP: A quad axle group means a group of four axles in which the horizontal distance between the centre lines of the end axles is between 3.2 and 4.9 metres.

REAR OVERHANG: The distance measured horizontally and parallel to the longitudinal axis of the vehicle between the 'Rear End' of the vehicle and the 'Centre of an Axle Group' (See diagram under 'Wheelbase').

ROAD TRAIN: A combination of vehicles, other than a 'B-Double', consisting of a motor vehicle towing at least 2 trailers (counting as one trailer a 'Converter Dolly' supporting a 'Semi-trailer').

'S' DIMENSION: Measurement from the front articulation point to the rear overhang line (*centre of rear axle group*)

SEMI-TRAILER: A trailer (including a pole-type trailer) that has:

- (i) one 'Axle Group' or single axle towards the rear; and
- (ii) a means of attachment to a 'Prime Mover' that would result in some of the load being imposed on the 'Prime Mover'.

SKID PLATE: The plate structure on the 'Semi-trailer' which houses the kingpin, and which mounts on to the 'Fifth Wheel Coupling' coupler plate to form the connection between the towing vehicle and the 'Semi-trailer'.

The Skid plate transfers vertical force (the weight) from the trailer to the towing vehicle through the fifth wheel assembly.

SKID PLATE LOCKING KEY: A steel block attached to the underside of the skid plate. It is located rearward of the king pin to key into the throat of the coupler plate of a turntable based fifth wheel, to prevent relative rotation of these two components.

A skid plate locking key is sometimes referred to as the "block".

TAG TRAILER: Is a semi-trailer with a GTM greater than 4.5 tonnes, includes a cargo carrying load space and is so constructed that:

- the design unladen coupling height is $\leq 950\text{mm}$;
- the trailer's rated imposed static vertical load at the coupling is:
 - $\geq 10\%$ of the trailer GTM:

TANDEM AXLE GROUP: A group of at least 2 'Axles', in which the horizontal distance between the centre lines of the outermost axles is at least 1.0 metre, but not more than 2.0 metre.

TOW COUPLING OVERHANG: The horizontal distance from the centre of the rearmost 'Axle Group', or the centre line of the single axle, to the pivot point of the coupling near the rear of the vehicle.

TRIAXLE GROUP: A combination of 3 'Axles' in which the front and rear 'Axles' are not less than 2.0 m and not more than 3.2 m apart.

TURNTABLE: A bearing built to carry vertical and horizontal loads, but that does not allow quick separation of its upper and lower rotating elements (*typically, a Ball-race or greasy plate*) and is used to connect and allow articulation between -

- (a) a prime mover and a semitrailer; or
- (b) the front axle group or axle of a dog trailer and the body of the trailer; or
- (c) a fifth wheel coupling and the vehicle to which it is mounted.

Note: A ball-race type turntable may also be referred to as a slewing ring by the manufacturer.

WHEELBASE: The dimension measured horizontally and parallel to the longitudinal axis of the vehicle between the front and rear wheel centrelines at '*Unladen Mass*'. In the case of the rear '*Axle Group*' the dimension must be to the '*Centre of an Axle Group*'. For a steerable front '*Axle*' or '*Axle Group*' the dimension shall be to the centreline of the foremost '*Axle*' (See illustration Appendix 1).

WIDE SINGLE TYRE: A single truck tyre having a '*Specified Design Section Width*' of 375 mm or more which is intended to perform the function of a pair of dual truck tyres. There are 2 ranges of '*Specified Design Section Width*', viz 375 mm to 450 mm and over 450 mm.

Additional Resources:

- Third Edition Australian Design Rule – Definitions and Categories
<https://www.legislation.gov.au/Details/F2016C00487>
- NHVR - Glossary of common terms

<https://www.nhvr.gov.au/files/201612-0062-nhvr-glossary-of-common-terms.pdf>

APPENDIX 1:

