



Vehicle Standard (Australian Design Rule – Definitions and Vehicle Categories) 2005

I, JAMES ERIC LLOYD, Minister for Local Government, Territories and Roads,
determine this vehicle standard under subsection 7 (1) of the *Motor Vehicle
Standards Act 1989*.

Dated 21st November 2005

[SIGNED]

James Eric Lloyd
Minister for Local Government, Territories and Roads

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1. LEGISLATIVE PROVISIONS

1.1 NAME OF STANDARD

- 1.1.1 This Standard is the Vehicle Standard (Australian Design Rule – Definitions and Vehicle Categories) 2005.
- 1.1.2 This Standard may also be cited as Australian Design Rule — Definitions and Vehicle Categories.

1.2 COMMENCEMENT

- 1.2.1 This Standard commences on the day after it is registered.

1.3 REPEAL

- 1.3.1 This Standard repeals the Australian Design Rules 3rd Edition Part B Definitions and Vehicle Categories that is:
- (a) made under section 7 of the Motor Vehicles Standard Act 1989; and
 - (b) in force at the commencement of this Standard.
- 1.3.2 This Standard also repeals each instrument made under section 7 of the Motor Vehicles Standard Act 1989 that creates Definitions and Vehicle Categories, if there are no other vehicle standards created by that instrument, or amendments to vehicle standards made by that instrument, that are still in force at the commencement of this Standard.

2. SCOPE

- 2.1. The role of this vehicle standard is to set out matters, such as definitions of key terms, which apply in common to particular Australian Design Rules. It contains material that needs to be read in conjunction with particular Australian Design Rules in order to establish rights and obligations to which those rules give rise.

3. DEFINITIONS

Where a term is defined within an ADR as well as in this list of defined terms, the definition in the ADR takes precedence for the purposes of that ADR

125 HOURS - means 125 ± 8 hours (ADR 36)

50TH PERCENTILE 6 YEARS OLD CHILD - a dummy whose dimensions comply with the appropriate dimensions in Table 1 of ADR 4/..., or a person with dimensions which are less than the appropriate dimensions in Table 1 of ADR 4/...

5TH PERCENTILE ADULT FEMALE - a dummy whose dimensions comply with the appropriate dimensions in Table 1 of ADR 4/..., or a person with dimensions which are less than the appropriate dimensions in Table 1 of ADR 4/... .

95TH PERCENTILE ADULT MALE - a dummy whose dimensions comply with the appropriate dimensions in Table 1 of ADR 4/..., or a person with dimensions which are greater than the appropriate dimensions in Table 1 of ADR 4/... .

95th PERCENTILE EYE ELLIPSES - defined and positioned as in SAE documents J941 (November 1965); J941a (August 1967); J941b (February 1969); J941c (June 1972); J941d (February 1975); J941e (March 1977); J941 MAR 81 - "... Driver's Eye Range"; or in ISO 4513 - 1978(E) - "Road Vehicles - Visibility - Method for establishment of eye ellipses for driver's eye location", suitably handed for right-hand steering.

ACCESSIBLE - a point on a seatbelt component is considered to be '*Accessible*' if (Figure 2 refers of ADR 4/...) either: it is located above Line J; or it is capable of being enclosed by a straight 100 mm external diameter tube, a point of which extends to Line J and the centre line of which can intersect Line G at a point not more than 100 mm forward nor more than 300 mm rearward of Point O.

ADJUSTABLE SUSPENSION - a suspension capable of providing adjustment of the trim height of a vehicle by virtue of special design features built into the suspension system other than the trim height difference that may be caused by load variations.

ADMINISTRATOR – refer to section 22 of the Motor Vehicle Standards Act 1989.

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.

ANALYSER GAS - either '*Zero-grade Air*' or '*Zero-grade Nitrogen*'; a '*Span Gas*' used with an analyser; or an analyser service gas.

ANCHOR FITTING -the terminal part of a '*Seatbelt Assembly*' designed to be attached to a vehicle or '*Seat*.'

ANCHOR POINT - the point where the centre of the '*Strap*' passes into the '*Anchor Fitting*' or changes direction at the '*Anchor Fitting*' except that in the case of '*Anchor Fittings*' which are designed to pivot or are attached by a single bolt, the '*Anchor Point*' shall be regarded as the intersection of the axis of rotation, or the centreline of the bolt, with the surface of the vehicle structure.

ANCHORAGE - that part of a vehicle designed to transfer loads from a '*Seatbelt Assembly*' to the vehicle or '*Seat*' and includes bolts, '*Spacers*' and other hardware designed for the attachment of a '*Seatbelt Assembly*'.

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.

APPROACH ANGLE – the smallest angle, in a side view of a vehicle formed by the level surface on which the vehicle is standing and a line tangent to the front tyre '*Static Loaded Tyre Radius*' arc and touching the underside of the vehicle forward of the front tyre.

- APPROPRIATE STABILISATION DISTANCE ACCUMULATION FUEL - the '*Stabilisation Distance Accumulation Fuel*' equivalent to that advised by the vehicle '*Manufacturer*' for the operation of vehicles of that '*Engine Family*'.
- APPROPRIATE STANDARD TEST FUEL - the '*Standard Test Fuel*' equivalent to that advised by the vehicle '*Manufacturer*' for the operation of the vehicles of that '*Engine Family*'.
- APPROVED - approved by the '*Administrator*'.
- AREA A and AREA B - areas established in accordance with clause 5.9 (Figures 1 and 2 of ADR 5/... "Anchorage for Seatbelts and Child Restraints") and clause 11 (Figure 1 and 2 of ADR 5/... "Anchorage for Seatbelts").
- ARTICULATED OMNIBUS - an omnibus consisting of 2 or more rigid sections with access between the sections for passengers and the rear sections of which is connected to the front section so as to allow rotary movement between the sections.
- ARTICULATED VEHICLE - a combination of '*Prime Mover*' and '*Semi-trailer*'.
- ASYMMETRICAL TYRE - a tyre which, through '*Tread*' pattern or construction, is required to be fitted to a vehicle such that one particular '*Sidewall*' faces outwards.
- ATTACHING CLIP - the device shown in Figure 1 of ADR 34/... which is part of the '*Child Restraint*' and is designed to be attached to the '*Child Restraint Anchor Fitting*'.
- ATTACHMENT BOLT - a standard 5/16 inch 18 UNC - 2A hexagon headed bolt 30 mm in length. The length is measured from the underside of the head to the end of the threaded shank.
- ATTACHMENT SECTIONS - angle or other sections used for attachment of the baseplate, subchassis or sliding subassembly of the '*Fifth Wheel Assembly*' to the vehicle chassis.
- AUDIBLE INDICATOR - a device incorporated in a '*Brake Power Unit 35/...*' system which indicates to the operator by an intermittent or continuous audible signal that the supply pressure of the working fluid in the system has fallen below a predetermined level.
- AUTOMATIC LENGTH ADJUSTING AND LOCKING RETRACTOR - a retractor incorporating a self actuating mechanism which automatically locks the retractor at the webbing extension selected by the user.
- 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.
- AUTOMATIC TRANSMISSION - a transmission in which there is no driver-controlled system for disconnecting the drive between the engine and the driving wheels other than the system for selecting gear ratios.
- AVERAGE DECELERATION - the number determined by dividing the square of the initial vehicle speed by twice the stopping distance expressed in compatible units.

- AVERAGE OPERATING PRESSURE** - the arithmetic average of the '*Manufacturer's*' specified maximum and minimum pressures in the operating pressure range.
- AVERAGE RETARDATION COEFFICIENT** - is the average braking deceleration, from initial movement of the brake '*Control*' to the trailer becoming stationary, expressed as a proportion of the acceleration due to gravity.
- AXIS OF REFERENCE** (or "reference axis") - the characteristic axis of the lamp signal determined by the manufacturer of the lamp for use as the direction of reference ($H = 0^\circ$, $V = 0^\circ$) for angles of field for photometric measurements and for installing the lamp on the vehicle.
- 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*'.
- BEAD** - that part of the tyre usually made of steel wires, wrapped or reinforced by '*Ply Cords*', that is shaped to fit the '*Rim*'.
- BEAD SEPARATION** - a breakdown of bond between components in the '*Bead*' area.
- BELT** - a layer or layers of '*Cord*' or other reinforcement under the '*Tread*' to stiffen the tyre structure.
- BELT SEPARATION** - a parting of rubber compound between '*Belt*' layers or between '*Belts*' and '*Plies*'.
- BIAS-BELTED TYRE** - a '*Pneumatic Tyre*' in which the '*Cords*' in the tyre '*Carcass*' are laid at alternate angles which are substantially less than 90 degrees to the centreline of the '*Tread*'. In addition '*Cord*' reinforcing strips are incorporated into the tyre under the '*Tread*' such that these '*Cords*' make an included angle with the tyre centreline not greater than the same angle made by the '*Carcass*' '*Cords*'.
- BRAKE DEVICE**- one element of the '*Brake System*' that may consist of more than one part but which is designed to perform one or more discrete functions.
- BRAKE POWER ASSIST UNIT** - a device installed in a hydraulic brake system that reduces the operator effort required to actuate the system and that if inoperative does not prevent the operator from braking the vehicle by a continued application of muscular force on the service brake '*Control*'.

- BRAKE POWER UNIT 31/00** - a device installed in a brake system that provides the energy required to actuate the brakes, either directly or indirectly through an auxiliary device, with the operator action consisting only of modulating the energy application level.
- BRAKE POWER UNIT 35/...** - a device installed in a brake system that stores the energy required to actuate the brakes and provides the energy either directly or indirectly through an auxiliary device, with the operator action consisting only of modulating the energy application level.
- 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'.
- BRAKE SYSTEM** - all those systems and devices attached to the vehicle whose primary function is to translate energy and/or muscular effort of the driver, or in the case of trailers, energy and/or information supplied by the towing vehicle into a force that restrains vehicle movement.
- BRAKES** - those 'Friction Elements' that are forced together by the influence of the remainder of the 'Brake System' so as to apply a restraining torque to the vehicle wheels.
- BRAKING EFFORT** - the force applied to the service brake 'Control'.
- BRAKING INTERVAL** - the distance measured from one point of application of 'Braking Effort' to the next point of application of 'Braking Effort'.
- BREAKOVER ANGLE** - the supplement of the largest angle, in the side view of vehicle, that can be formed by two lines tangent to the front and rear 'Static Loaded Tyre Radius' arcs and intersecting at a point on the underside of the vehicle.
- BUCKLE COMPONENT** - each one of the 2 parts of the buckle assembly designed to be latched to each other to complete the buckle assembly.
- CALIBRATION GAS** - a gas of known concentration which is used to establish the response curve of an analyser.
- CARAVAN** - any enclosed trailer designed primarily for human occupation whilst stationary.
- CARCASS** - the tyre structure except 'Tread' and 'Sidewall' rubber.
- CENTRE HIGH-MOUNTED STOP LAMP** - a supplementary lamp on the rear of a vehicle to provide an additional indication to other road user that the driver of the vehicle is applying the service brakes.
- CENTRE OF AN AXLE GROUP**
- (i) in the case of a 'Single Axle' the centre of that 'Axle';
 - (ii) in the case of a two 'Axle', 'Close Coupled Axle Group' or a 'Tandem Axle Group':
 - (a) where both 'Axles' are fitted with an equal number of tyres, a line located midway between those two 'Axles';
 - (b) where one 'Axle' is fitted with twice the number of tyres, a line located one third of the way from the 'Axle' fitted with the greater number of tyres, towards the 'Axle' fitted with the lesser number of tyres;

(iii) in the case of a three 'Axle', 'Close Coupled Axle Group' or a 'Triaxle Axle Group', a line located midway between the extreme 'Axles' of the group.

Where any Rear 'Axle Group' includes a steerable 'Axle' in conjunction with one or more non-steerable 'Axles', only the non-steerable 'Axles' shall be considered in determining the 'Centre of an Axle Group'.

CERTIFICATION VEHICLE - a vehicle selected in accordance with Part 37.4 of ADR 37/00 or Part 7 of ADR 37/01, and tested by a vehicle 'Manufacturer' for the purpose of demonstrating that the vehicle does not exceed the specified emissions standards.

CHASSIS - the basic operating motor vehicle including engine frame & other essential structural and mechanical parts but exclusive of body and all appurtenances for the accommodation of driver, property and passengers appliances, or equipment related to other than control.

CHASSIS-CAB - a 'Partially Completed Vehicle' with a completed occupant compartment, that requires only the addition of cargo-carrying or load-bearing components to perform its intended work-performing functions.

CHASSIS-COWL - a 'Partially Completed Vehicle' with a partially completed occupant compartment with at least the windscreen and seats fitted, that requires only the completion of the occupant compartment and the addition of cargo-carrying, work performing or load bearing components to perform its intended functions.

CHILD RESTRAINT - a device to restrain a child passenger of a motor vehicle in the event of a vehicle impact and thus minimise the risk of bodily injury.

CHILD RESTRAINT ANCHOR FITTING - the fitting which allows the attachment of the 'Attaching Clip' to the vehicle, usually attached to the 'Child Restraint Anchorage' using components in the 'Child Restraint Anchor Fitting Package'. Details of the profile within which the 'Child Restraint Anchor Fitting' must be contained are shown in Figure 2 of ADR 34/... .

CHILD RESTRAINT ANCHOR FITTING PACKAGE - a standard package of components to enable the installation of the 'Child Restraint Anchor Fitting' onto the 'Child Restraint Anchorage'. The package consists of: one 'Attachment Bolt' one 'Child Restraint Anchor Fitting' one 'Lock Washer' of 2.21 mm thickness max. one 'Spacer' of 5 mm thickness one 'Spacer' of 10 mm thickness.

CHILD RESTRAINT ANCHORAGE - the part of the vehicle designed to transfer loads from the upper part of the 'Child Restraint' to the vehicle structure.

CHILD SAFETY LOCK - a device incorporated in a rear door lock such that when the child safety lock lever is in the lock position the rear door lock cannot be opened from the inside. It can be opened only from the outside.

CHUNKING - the breaking away of pieces of the 'Tread'.

- CLOSE COUPLED AXLE GROUP - 2 'Axles' with centres not more than 1.0 m apart shall be regarded as equivalent to a 'Single Axle'; 3 'Axles' with centres not more than 2.0 m apart shall be regarded as equivalent to a 'Tandem Axle Group'; 4 or more 'Axles' with centres not more than 3.2 metres apart shall be regarded as equivalent to a 'Triaxle Group'.
- COLD-STARTING DEVICE - A device which when activated increases the amount of fuel (excluding special starting fuels) supplied to the engine and is intended to facilitate starting of the engine (ADR 30).
- COMBINATION VEHICLE - either a combination of a rigid goods vehicle and one trailer (other than a 'Semi-trailer'); or an 'Articulated Vehicle'
- COMPLIANCE PLATE - refer to section 10 of the Motor Vehicle Standards Act 1989.
- COMPONENT - means one of the individual constituent parts whose assembly constitutes the 'Noise Reduction System' (ADR 28/01).
- CONFIGURATION - the possible combinations of load carrying 'Axle(s)' and tyre type for vehicles with a 'Retractable Axle' e.g. for a triaxle group that incorporates both a front and rear 'Retractable Axle', the group is said to have three 'Configurations':
one - a non-retractable axle and two 'Retractable Axle' raised
two - a non-retractable axle with one 'Retractable Axle' in the 'Fully-down' position and one 'Retractable Axle' raised or
three - a non-retractable axle with two 'Retractable Axles' in the 'Fully-down' position.
- CONTACTABLE – For the purposes of ADR 11 Clauses 11.2 and 11.3.2 to 11.3.4 a portion of a 'Sun Visor' is 'Contactable' if it can be contacted by a 165 mm diameter head form for a position to which the 'Sun Visor' can be adjusted when installed in the vehicle. For the purpose of Clause 11.4 the 'Sun Visor' shall be tested if there is any "point of contact" as defined in ECE Regulation 21/01, "Interior Fittings" including when the length of the arm of the measuring apparatus is increased to 1000 mm as provided for in paragraph 1.4.1.1 of Annex 4 to that Regulation, on its surface in any position to which it may be adjusted.
- For the purposes of ADR 3/02 those surfaces situated in the areas defined in clause 6.5 of ADR 3/02 which can be contacted by a 165 mm diameter sphere when the 'Seat' is mounted in the vehicle.
- CONTROL - a component actuated directly by the operator to transmit the force required to activate a system.
- CONTROL LINE - the device that transmits the 'Control Signal' from the towing vehicle to the first other device, or between other devices on the trailer as a boosted or relayed signal not involving significant amounts of 'Stored Energy' transfer. (Often called the service line in the case of compressed air brake systems).
- CONTROL LINE 35/...- the device that transmits the 'Control Signal' to the 'Coupling Head'. (Often called the service line in the case of compressed air brake systems).

CONTROL SIGNAL - means the signal that is provided by the towing vehicle to the trailer for control of the '*Service Brake System*' in normal operation.

CONTROL SYSTEM - means all the '*Brake Devices*' between the trailer '*Brake System*' couplings (supply and control) and the '*Brakes*' actuators, including front coupling hoses for trailers with drawbars.

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

CORD - the strands forming the '*Plies*' in the tyre.

CORD SEPARATION - '*Cord*' parting away from adjacent rubber compounds.

CORRECTIVE ACTION - action, other than '*Scheduled Maintenance*', taken to correct malfunctioning of the engine, '*Fuel system*', or emissions control system(s) during an emissions test, including '*Stabilisation Distance*' accumulation (refer Appendix 7 of ADR 37/...).

CORRECTLY FITTED- the design configuration of the '*Seatbelt Assembly*' as installed in the vehicle using the '*Anchorage*' and '*Sash Guide*' devices, and adjusted around the occupant of the seating position to eliminate slack, with the occupant seated such that his centreline lies in the '*Seating Reference Plane*' of the seating position.

COUPLING - a mechanical assembly which provides connection between a drawing vehicle and a trailer.

COUPLING HEAD - the brake line couplings to which a trailer's braking system would normally be attached. For the purpose of testing the '*Coupling Head*' must be positioned as near as practical to the position in which it is most likely to be mounted -in service. Vehicles intended to tow semi-trailers must be equipped with flexible pipes for making the connection to semi-trailers. The coupling heads will therefore be at the extremity of those flexible pipes.

CRANE - a machine for raising and lowering heavy weights.

CRITICAL AREA A - In the case of LEP, MA and MC vehicles, it is the area of the windscreen bounded by a plane tangential to the bottom of the '*95th Percentile Eye Ellipses*' which includes a line at ground level transverse to the longitudinal axis of the vehicle 11 m forward of the rearmost '*95th Percentile Eye Ellipses*' point, and 2 diverging vertical planes tangential to and inclined 18° to the outboard and 56° to the inboard '*95th Percentile Eye Ellipses*' and a plane tangential to the top of the '*95th Percentile Eye Ellipses*' inclined upwards at 10° to the horizontal.

In the case of other vehicles, it is the area of the windscreen bounded by a plane tangential to the bottom of the '*95th Percentile Eye Ellipses*' which includes a line at ground level transverse to the longitudinal axis of the vehicle 11 m forward of the rearmost '*95th Percentile Eye Ellipses*' point, and 2 diverging vertical planes tangential to and inclined 18° to the outboard and 56° to the inboard '*95th Percentile Eye Ellipses*', and a plane tangential to the top of the '*95th Percentile Eye Ellipses*' inclined upwards at 5° or $\arctan(3-H)/11$ (where H is the height in metres of the top of the '*95th Percentile Eye Ellipses*' above ground level) whichever is the greater (ADR 15).

CRITICAL AREA B - that part of '*Critical Area A*' within diverging vertical planes inclined 15° left and right and tangential to the inboard and outboard '*95th Percentile Eye Ellipses*' (ADR 15).

CROSS PLY TYRE - see '*Diagonal Ply Tyre*'.

D - VALUE - the theoretical horizontal reference force between towing vehicle and trailer.

DATE OF MANUFACTURE - means the date the vehicle is available in Australia in a condition which will enable a '*Compliance Plate*' to be lawfully affixed to the vehicle.

DAYLIGHT OPENING - the maximum unobstructed opening through any glass aperture, including reveal or garnish mouldings adjoining the glass, according to a given direction or projection. If not specified the dimension will be the vertical projection (ADR 16).

DAYTIME RUNNING LAMP - Means a higher intensity front position (side) lamps, which may be mandatory in some countries, for improved daytime conspicuity.

DEMIST - the restoration of visibility following a '*Mist*' condition, by the operation of '*Demisting*' equipment and signified by a dry windscreen (ADR 15).

DEPARTURE ANGLE - the smallest angle, in a side view of a vehicle formed by the level surface on which the vehicle is standing and a line tangent to the rear tyre '*Static Loaded Tyre Radius*' arc and touching the underside of the vehicle rearward of the rear tyre.

DESIGN LINE OF ACTION - the centre line of the '*Child Restraint*' '*Upper Anchorage Strap*', in side elevation and with '*Seat*' installed, from the '*Shoulder Reference Point*' to the '*Child Restraint Anchor Fitting*' '*Interface Profile*'.

DIAGONAL PLY TYRE - a '*Pneumatic Tyre*' in which the '*Cords*' in the tyre '*Carcass*' are laid at alternate angles which are substantially less than 90 degrees to the centreline of the '*Tread*'.

DIESEL ENGINE - an engine which works on the compression-ignition principle, and which operates on automotive diesel fuel.

DILUTION FACTOR - a correction factor used in '*Exhaust Emissions 37/00*' calculations; it is calculated by using Equation 7.14 of clause 37.7.3 of ADR 37/00 or Equation 14 of clause 10.3 of ADR 37/01 .

DISTANCE ACCUMULATION FUEL - see '*Stabilisation Distance Accumulation Fuel*'.

DIURNAL BREATHING LOSS - the '*Fuel Evaporative Emissions*' resulting from the daily variation in temperature to which the '*Fuel System*' is exposed.

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 leading '*Axle Group*' of the trailer.

DRIVE TRAIN - The vehicle components which transmit engine power to the driven wheels (ADR 28).

DRIVER'S EYE POSITION – The position for eyes corresponding to the rearmost eye position on the '*95th Percentile Eye Ellipse*' (ADR 12).

DRY BREAKING STRENGTH - the tensile strength of a webbing strap conditioned in an atmosphere at $20 \pm 5^{\circ}\text{C}$ and relative humidity not more than 67%.

E - is a nominal unit of '*Control Signal*' strength which, for compressed air brake systems, is shown in the table below:

Table: 'E' VALUES OF CONTROL SIGNAL STRENGTH

Nominal Conversions

0.0E	Zero Compressed Air Energy Level
0.15E	15psi = 100kPa
0.20E	19psi = 130kPa
0.24E	22psi = 155kPa
0.31E	29psi = 200kPa
0.65E	61psi = 420kPa
1.00E	94psi = 650kPa
1.06E	100psi = 690kPa

For the purpose of ADR 35/.. and ADR 38/.. 1.0 'E' has been equated to the '*Nominal Minimum Energy Level*' of compressed air brakes which for vehicles, has been nominated as 650 kPA. Values appearing in brackets after 'E' values in ADR 35/.. and ADR 38/... are the equivalent kPA values for compressed air '*Brake Systems*'. The relationship between 'E' and the other brake control mediums has not been set in ADR 35/.. and ADR 38/...

ECE REGULATION - (UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE REGULATION) - an addendum to the United Nations Agreement Concerning the Adoption of Uniform Conditions of Approval and Reciprocal Recognition of Approval for Motor Vehicle Equipment and Parts, done at Geneva on 20 March 1958. See Part 3 of the "ADR Definitions" for nomenclature used for ECE Regulations in ADR system.

EMERGENCY BRAKE SYSTEM: that part of the '*Brake system*' which automatically applies in the event of trailer break-away.

EMERGENCY LOCKING RETRACTOR - a retractor incorporating a locking mechanism that is designed to lock under abnormal operating conditions.

ENGINE FAMILY - a basic classification of vehicles having similar characteristics as defined in clauses 37.4.3.1 to 37.4.3.2 of ADR 37/00 or clauses 7.3.1 to 7.3.2 of ADR 37/01.

ENGINE FAMILY - means a basic classification of engines having similar characteristics as defined in ADR 36 clauses 36.3.4.1 to 36.3.4.4.

ENGINE SPEED AT MAXIMUM POWER - ADRs 28/01, 39 and 56 (exclusive definitions in each ADR).

ENGINE SYSTEM - ADR 30

ENGINE-SYSTEM COMBINATION - a combination of '*Engine Family*'; '*Exhaust Emissions 37/00*' control system; and '*Fuel Evaporative Emissions Control System*' (where applicable).

EQUIPMENT - equipment fitted to a vehicle for a special purpose and not fitted by the original vehicle '*Manufacturer*' as either standard equipment or as a regular production option (e.g. a crane mounted on a vehicle or a chute on a cement mixer, fitted by a second '*Manufacturer*').

EQUIVALENT TEST INERTIA MASS - the figure shown in clause 37.8.4, Table 8.2 of ADR 37/00 or clause 11.4, Table 4 of ADR 37/01, corresponding to the '*Reference Mass*' of the vehicle.

ESTABLISHED RETARDATION COEFFICIENT (ERC) - is the average braking deceleration calculated from when the energy level in the least favoured '*Brakes*' actuator reaches 65% of '*Average Operating Pressure*' (AOP) to when the vehicle becomes stationary, expressed as a proportion of the acceleration due to gravity.

EXHAUST EMISSIONS - means substances emitted to the atmosphere from the exhaust of a motor vehicle engine (ADR 36).

EXHAUST EMISSIONS 37/00 - substances emitted to the atmosphere from any opening downstream from the exhaust port of a vehicle engine.

EXTERNAL CABIN LAMP - means lamps on the roof of the cabin, which may be mandatory in some countries, for identifying a heavy vehicle from the front.

FIELD OF VIEW – the area within a cone of vision having an included apex angle of 40° and the axis horizontal and parallel to the longitudinal axis of the vehicle loaded to the design load on horizontal ground. The apex of the cone shall be a point midway between the eyes of the '*Driver's Eye Position*' (ADR 12).

FIFTH WHEEL ASSEMBLY - a '*Fifth Wheel Coupling*' including any turn-table, 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 Sections*'.

FIFTH WHEEL COUPLING - a device, other than the '*Skid Plate*' and the kingpin (which are parts of a '*Semi-Trailer*'), used with a '*Prime Mover*', '*Semi-Trailer*' or a '*Converter Dolly*' to permit quick coupling and uncoupling and to provide for articulation.

FILLED TANK - the '*Fuel Tank*' when filled to the point of overflow (ADR 17).

FINAL TORSO ANCHORAGE - an '*Anchorage*' located in the vehicle to receive the '*Anchor Fitting*' of the upper torso '*Strap*' of a '*Lap-Sash Belt*'.

FOLDING SEAT - an auxiliary '*Seat*' intended for occasional use and normally folded.

FORWARD - (when referenced to a '*Seat*') - the direction relative to that which an occupant faces when seated.

- FORWARD-CONTROL VEHICLE** - a motor vehicle in which the centre of the steering wheel is in the forward quarter of the vehicle's '*Total Length*'.
- FOUNDATION BRAKES** - the '*Brakes*' and associated mechanical parts supplied as a unit and which are usually incorporated into a '*Brake System*' design without change. In the case of an '*S-cam*' air '*Brake System*' the cam shaft would be included but not the slack adjuster and actuator.
- FRICION ELEMENT** - a part of the system designed for replacement and which contacts another part of the system in such a way that either vehicle kinetic energy is dissipated or the vehicle is restrained from moving.
- FRONT AXLE CLEARANCE AND REAR AXLE CLEARANCE** - the vertical distance from the level surface on which vehicle is standing to the lowest point on the '*Axle*' differential (when applicable in case of a front '*Axle*') of the vehicle.
- FRONT END** - the foremost point on the vehicle including the bumper bar; overriders; tow hook; and bull bar if standard equipment.
- FUEL EVAPORATIVE EMISSION CONTROL SYSTEM** - a system which incorporates a particular principle of operation to control or cause the reduction of '*Fuel Evaporative Emissions*'.
- FUEL EVAPORATIVE EMISSIONS** - vaporised fuel emitted to the atmosphere from the '*Fuel System*' of a vehicle.
- FUEL SYSTEM** - the combination of fuel tank, fuel pump, fuel lines and carburettor or fuel injection components, and includes all '*Fuel System*' vents and '*Fuel Evaporative Emission Control Systems*'.
- FUEL SYSTEM 17/00** - any component of the motor vehicle which is exposed to '*Liquid Fuel 17/00*'.
- FUEL TANK** - any single tank on the motor vehicle for storing '*Liquid Fuel 17/00*' to be used by the power unit of the motor vehicle. It includes any fittings which are integral with the storage unit but excludes components other than any filler neck extension designed for removal by hand or by the use of tools (ADR 17).
- FULL LOAD** - The condition at which the engine, as specified for certification, in accordance with ADR 30/00 clause 30.3.1.3 produces the maximum power possible at a given speed (ADR 30).
- FULL POWER STEERING EQUIPMENT** - A steering system in which the steering forces are provided solely by one or more energy supplies and where it is not possible to steer the vehicle by the muscular effort of the driver alone.
- FULLY-DOWN** - the position of a '*Retractable Axle*' when lowered and locked and sharing the load imposed on the '*Axle Group*' and providing proportional braking effort.
- FUNCTIONAL COMPONENT** - a component essential to the satisfactory operation of the '*Seatbelt Assembly*' and without which the '*Seatbelt Assembly*' would no longer meet the requirements of ADR 4/....

- FUNCTIONAL DIMENSIONS** - are dimensions derived from the size designation of the '*Wheels*' and/or tyres (e.g., diameter width, aspect ratio) and from the '*Unit*' to the vehicle (e.g., '*Wheel*' offset).
- GAS FLOW MEASURING DEVICE** - a Positive Displacement Pump; Critical Flow Venturi; or other '*Approved*' system.
- GOODS-TYPE DOOR** - a side door designed primarily to accommodate goods loading including, but not limited to, a 2-part door that latched itself.
- GROOVE** - the space between 2 adjacent '*Tread*' ribs.
- 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** - 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 under side 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*'.
- H POINT** - the point simulating the actual pivot centre of a human torso and thigh as determined by SAE J826 November 1962 or J826 APR80 - "Manikins for Use in Defining Vehicle Seating Accommodation".
- HARNESS BELT** -A '*Seatbelt Assembly*' consisting of at least one '*Strap*' designed to provide pelvic restraint and 2 or more torso '*Straps*' designed to provide upper torso restraint.
- HARNESS TORSO ANCHORAGE** - an '*Anchorage*' designed to facilitate upper torso restraint using a harness assembly.
- HEAD IMPACT AREA** - all non-glazed surfaces of the interior of a vehicle that are statically contactable by a 165 mm diameter spherical head form of a measuring device having a pivot point to "top of head" dimension infinitely adjustable from 740 mm to 835 mm in accordance with the following procedure, or its graphic equivalent:
- (1) At each designated seating position, place the pivot point of the measuring device:

(a) For 'Seats' that are adjustable fore and aft, at the 'Seating Reference Point' and a point 127 mm horizontally 'Forward' of the 'Seating Reference Point' and vertically above the 'Seating Reference Point' an amount equal to the rise which results from either a 127 mm 'Forward' adjustment of the 'Seat' or 19 mm; and

(b) For 'Seats' that are not adjustable fore and aft, at the 'Seating Reference Point'.

(2) With the pivot point to "top of head" dimensions at each value allowed by the device and the interior dimensions of the vehicle determine all contact points above the lower windscreen glass line and 'Forward' of the 'Seating Reference Point'.

(3) With the head form at each contact point, and with the device in a vertical position if no contact point exists for a particular adjusted length, pivot the measuring device 'Forward' and downward through all arcs in the vertical planes to 90 degrees each side of the vertical longitudinal plane through the 'Seating Reference Point', until the head form contacts an interior surface or until it is tangential to a horizontal plane 26 mm above the 'Seating Reference Point' whichever occurs first.

HEAD REFERENCE LINE - the reference line used for measuring head deflections of a dummy in dynamic testing. It is the extension of the superimposed 'Torso Line' when the dummy is located with the head and the back in contact with a common flat surface.

HEAD RESTRAINT - a device either mounted on or integral with the 'Seat' back. Its function is to minimise 'Rearward' movement of the head.

HEIGHT OF DEVICE - the vertical distance between the centre of the device concerned and the level of the ground upon which the vehicle rests, when the vehicle is unladen.

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

HOT SOAK LOSS - the 'Fuel Evaporative Emissions' after a 'Simulated Trip' (a CVS-CH Driving Schedule) and measured during the 60 minutes period which begins after the 'Simulated Trip'.

HYBRID II - 'Test Dummy' which conforms to the requirements of US Federal Motor Vehicle Regulation Part 572, Test Dummy Specifications - Anthropomorphic Test Dummy for Applicable Test Procedures, Sub Part B - Hybrid II Test Dummy - 50th Percentile Male, published by the National Highway Traffic Safety Administration (400 Seventh St, Southwest, Washington DC 20590). The drawings referred to in clause 9 of ADR 69/... are in Part 572 Subpart B.

HYBRID III - 'Test Dummy' which conforms to the requirements of US Federal Motor Vehicle Regulation Part 572, Test Dummy Specifications - Anthropomorphic Test Dummy for Applicable Test Procedures, Sub Part E - Hybrid III Test Dummy - 50th Percentile Male, published by the National Highway Traffic Safety Administration (400 Seventh St, Southwest, Washington DC 20590). The drawings referred to in clause 7 and 8 of ADR 69/... are in Part 572 Subpart E.

HYDRAULIC BRAKE SYSTEM - a system that uses hydraulic fluid as medium for transmitting force in any part of the system from the 'Control' to the 'Friction Elements' and may incorporate either a 'Brake Power Assist Unit', a 'Brake Power Unit' or a 'Brake Power Unit 31/00'.

INITIAL BRAKE CONTROL LOCATION - the location of the brake 'Control' within the first 3 mm of travel of the centre of the brake pedal pad.

INTERFACE PROFILE - interface of the 'Attaching Clip' and 'Child Restraint Anchor Fitting' shown in Figure 1 and Figure 2 of ADR 34/... respectively to ensure correct fitment.

INTERNAL LAMP - lamp(s) to illuminate the interior of the vehicle for the convenience of the driver and passengers.

KERB MASS - see 'Unladen Mass'

LADEN MASS - the mass of a vehicle and its load borne on the surface on which it is standing or running.

LADEN MOTOR CYCLE MASS - (LMCM) - the mass of the unladen motor cycle or other L-group vehicle with a full capacity of lubricating oil, coolant and fuel, plus 90 kg (including driver and instrumentation) distributed in the saddle or carrier if so equipped.

For LEM and LEP vehicles the 'Laden Motor Cycle Mass' ('LMCM') is to be taken to mean the value specified by the vehicle manufacturer as the loaded mass of the vehicle, provided such mass is not less than the mass of the unladen vehicle together with the heaviest factory installed options if such individual options have a mass of 2.3 kg or more, with a full capacity of lubricating oil and coolant and at least 75 per cent capacity of fuel plus additional mass equivalent to 68 kg located in each unoccupied seating position.

For LEG vehicles the 'Laden Motor Cycle Mass' ('LMCM') is to be taken to mean the mass of the laden vehicle loaded to 'GVM' rating with a load so distributed over the load bearing area of the vehicle as not to exceed the 'Manufacturers' nominated individual 'Axle Loads'.

LAP ANCHORAGE - An 'Anchorage' provided to facilitate pelvic restraint.

LAP BELT - a 'Seatbelt Assembly' designed to provide pelvic restraint only.

LAP SASH POINT - the point representing the intersection of the lap and torso 'Straps' of a 'Lap-Sash Belt'.

LAP-SASH BELT - a 'Seatbelt Assembly' combining a lap 'Strap' designed to provide pelvic restraint, and a torso 'Strap' designed to provide upper torso restraint.

LARGE OMNIBUS - an omnibus having an occupant capacity of over 25 persons, including the driver (ADR 58).

LEADED PETROL NOZZLE - a filling nozzle which meets the parameters set out in Appendix 9 of ADR 37/... .

LEFT-HAND SIDE - that side of the vehicle to the left of the longitudinal centreline thereof when viewed from the rear.

LIGHT ABSORPTION COEFFICIENT - ADR 30

LIGHTLY LADEN TEST MASS ('*LLTM*') is the mass of the trailer in its normal unladen condition.

LIGHTLY LOADED TEST MASS - the mass of the unladen vehicle with a full capacity of lubricating oil and coolant and not less than 75 percent of full fuel capacity but without goods, occupants or options except those options which are essential for the test procedures specified, plus additional loading distributed in the seating position adjacent to the driver's seating position so that the mass of such loading plus the mass of the driver and instrumentation mounted in the vehicle is 155 ± 30 kg.

LIGHTLY LOADED TEST MASS 35/... - the mass of the unladen vehicle with a full capacity of lubricating oil and coolant and not less than 75 percent of full fuel capacity, but without goods, occupants or options except those options which are essential for the test procedures specified, plus additional loading distributed in the seating position adjacent to the driver's seating position so that the mass of such loading plus the mass of the driver and instrumentation mounted in the vehicle is 155 ± 30 kg. In the case of a vehicle in "cab and chassis" condition an additional load not exceeding 7.5 percent of the '*GVM*' shall be located with its centre of mass within 200 mm of the '*Manufacturer(s)*' designated load centre, measured in a horizontal plane.

LINE X, POINT Y - a line or point of a family, established in clause 4.13 of ADR 4/00 and 4/01 and clause 16 of ADR 4/02 and represented in figure 2, where X and Y represent a symbol listed in clause 4.13 of ADR 4/00 and 4/01 and clause 16 of ADR 4/02

LIQUID FUEL 17/00 - a fuel which is liquid at a temperature of 0 degrees Celsius and pressure of one bar (ADR 17).

LIVESTOCK TRAILER - a '*Trailer*' specially designed to carry cattle, sheep or pigs.

LOAD CAPACITY - the difference between '*GVM*' of the vehicle and its '*Tare Mass*'.

LOAD INDEX - a numerical code associated with the '*Maximum Load Rating*' assigned to the tyre, as set out in Table 2 of ADR 23/... "Passenger Car Tyres".

LOAD SHARING SUSPENSION - an '*Axle Group*' suspension system that utilises hydraulic, pneumatic, mechanical or other means to effect substantially equal sharing, by all the ground contact surfaces of the '*Axle Group*', of the total load carried by the '*Axle Group*' and has effective damping characteristics on all '*Axles*' of the '*Axle Group*'.

LOADED TEST MASS ('*LTM*') - the mass of the laden trailer when loaded such that each of its '*Axle Groups*' is loaded to the specified '*GGALRS*'.

LOCK ACTUATOR - a device which ensures braking operating of the parking brake by mechanically locking the brake piston rod.

LOCK WASHER - means, for the purposes of ADR 34/..., a Helical Spring Lock Washer of nominal size 8 mm as set out in Table 1 clause 4.2 Washer Section in Australian Standard AS 1968-1976 "Helical Spring Lock Washers - Metric".

LUGGAGE MASS - a mass equal to a minimum of 13.5 kg per seating position or the '*Manufacturer's*' recommended figure.

LUMINOUS FRACTIONAL REFLECTANCE - the ratio of the luminous flux reflected from, to that incident on, a specimen for specified solid angles, expressed as a percentage.

MANIFOLD PRESSURE - means the pressure measured in the engine induction system (ADR 36).

MANIKIN - the 2-dimensional manikin as specified in SAE Standard J826 APR80 - "Devices for Use in Defining and Measuring Vehicle Seating Accommodation".

MANUAL ADJUSTING DEVICE - a device other than a retractor designed to be operated by the wearer to adjust the length of a '*Strap*' of a '*Seatbelt Assembly*'.

MANUFACTURER - the name of the person or company who accepts responsibility for compliance with the Australian Design Rules and to whom the '*Compliance Plate*' approval certificate is issued.

MAXIMUM LADEN VEHICLE SPEED - the speed attainable at 1.6 km from a standing start under maximum acceleration with the vehicle at '*Maximum Loaded Test Mass 35/...*', established by either test or calculation.

MAXIMUM LOAD RATING - the maximum load which the tyre is rated to carry.

MAXIMUM LOADED TEST MASS - the value specified by the vehicle manufacturer as the loaded mass of the vehicle, provided such mass is not less than the mass of the unladen vehicle together with the heaviest factory installed options if such individual options have a mass of 2.3 kg or more, with a full capacity of lubricating oil and coolant and at least 75 percent capacity of fuel plus additional mass equivalent to 68 kg located in each unoccupied seating position.

MAXIMUM LOADED TEST MASS

- of LEP vehicles is the value specified by the vehicle manufacturer as the loaded mass of the vehicle, provided such mass is not less than the mass of unladen vehicle together with the heaviest factory installed options if such individual options have a mass of 2.3 kg or more, with a full capacity of lubricating oil and coolant and at least 75 percent capacity of fuel plus additional mass equivalent to 68 kg located in each unoccupied seating position.

- of LEM and LEG vehicles is the '*Gross Vehicle Mass*'.

MAXIMUM LOADED TEST MASS ('*MLTM*') - means, for the purposes of ADR 38/..., the mass of the trailer loaded to '*Gross Trailer Mass*' such that the trailer '*Axle Loads*' do not exceed the trailer '*Manufacturer's*' nominated individual '*Axle Loads*' ('*GALR*').

MAXIMUM LOADED TEST MASS 35/... - The mass of the laden vehicle loaded to '*GVM*' rating with the load so distributed over the load bearing area of the vehicle as not to exceed the '*Manufacturer's*' nominated individual '*Axle Loads*' ('*GALR*').

MAXIMUM LOADED VEHICLE MASS (of a passenger vehicle) - the sum of: the '*Unladen Mass*' together with: the heaviest regular production options, if such individual options have a mass of 2.3 kg or more, with a full capacity of lubricating oil, coolant and fuel; plus additional loading equivalent to 68 kg at each seating position; plus the number of seating positions times 13.6 kg for luggage in the appropriate luggage space, with the centre of gravity of the luggage load at the centre of the luggage space.

MAXIMUM LOADED VEHICLE MASS (of a vehicle other than a passenger vehicle) - the '*Gross Vehicle Mass*' or '*Gross Trailer Mass*'.

MAXIMUM MOPED SPEED - see '*Maximum Motor Cycle Speed*'.

MAXIMUM MOTOR CYCLE SPEED - the speed attainable by a motor cycle or other L- group vehicle established by calculation or on the basis of a test, under maximum acceleration from a standing start for 1.6 km, at '*Laden Motor Cycle Mass*'.

MAXIMUM VEHICLE SPEED 24/00 - the maximum speed attainable without exceeding the maximum permissible engine speed established by calculation or on the basis of a test under maximum vehicle acceleration from a standing start for 1.6 km at the relevant '*Normal Loaded Vehicle Mass*'.

MAXIMUM VEHICLE SPEED 31/00 - the speed attainable, established by calculation or on the basis of a test, under maximum vehicle acceleration from a standing start for 1.6 km at '*Normal Loaded Vehicle Mass 31/00*'.

MEASUREMENTS - all measurements shall be considered relative to the vehicle's design attitude at design load on level ground. Any vertical adjustment provided for the driver's seat in excess of the seat slide rise provided for in SAE document J941b Feb 1969 or SAE J941 MAR81 "Motor Vehicle Drivers Eye Range" may be considered in determining compliance with ADR 15.

MEASURING RIM - any '*Rim*' with a width as specified for the design or measuring '*rim*' for a particular tyre size designation, and with the '*Bead*' seat and flange dimensions for that '*Rim*', as shown in one or more of the following documents or, in case of obsolete sizes no longer listed, in any editions of the following documents prior to the dates listed:

- the Tyre and Rim Standards Manual of the Tyre and Rim Association of Australia, 1995 Edition;
- the 1995 (US) Tire and Rim Association Inc. Year Book;
- the Japan Automobile Tire Manufacturers Association Year Book, 1995 Edition;
- the Japanese Industrial Standards (JIS - D4202) dated 1982 Dimensions of Tires, and (JIS - D4218) dated 1981 Contours of Rims; or
- the European Tyre and Rim Technical Organisation (E.T.R.T.O.) Data Book dated 1995.

MIST - a film of condensation on the inside surface of glazed area of a vehicle (ADR 15).

MODE - means a particular operating condition during the dynamometer test cycle (ADR 36).

MOTOR CYCLE - for the purposes of ADR 39, this term includes vehicle categories LC, LD and LE (ADR 39)

MOTOR CYCLE TYPE - for the purpose of type approval, '*Motor Cycles*' shall be of the same '*Motor Cycle Type*' if they do not differ in such essential respects as:

- the kind of engine (two-stroke or four-stroke etc.; number and capacity of cylinders; number of carburettors; arrangement of valves; '*Net Engine Power*', and '*Engine Speed at Maximum Power*');
- number and ratios of gears; and
- '*Silencing Systems Type*' (ADR 39)

MOUNTED HEIGHT - see '*Height Of Device*'

MUDGUARD - see '*Wheel Guard*'

NET ENGINE POWER (NEP) - ADR 28/00, 28/01 39 and 56 (exclusive definitions in each ADR).

NOISE REDUCTION SYSTEM - means a complete set of '*Components*' necessary for limiting the noise made by a motor vehicle and its exhaust (ADR 28/01).

NOMINAL FUEL TANK CAPACITY - the volume of the fuel tank, specified by the '*manufacturer*' to the nearest 0.5 litre, which may be filled with fuel through the petrol tank filler inlet.

NOMINAL MINIMUM ENERGY LEVEL - is the nominal operating minimum level of the energy storage devices which in the case of a compressed air '*Brake System*' must be taken as 1.0 '*E*' (650 kPa).

NOMINATED STANDARD - any one of the standards documents referenced in the definition for '*Measuring Rims*' in ADR 23/... "*Passenger Car Tyres*".

NORMAL LOADED VEHICLE MASS (*of a passenger vehicle*) - the sum of: the '*Unladen Mass*' together with :
the heaviest regular production options, if such individual options have a mass of 2.3 kg or more; plus
68 kg for each of 2 front '*Seat*' occupants; plus
if the designated '*Seating Capacity*' is 5 or more, 68 kg for a rear '*Seat*' passenger.

NORMAL LOADED VEHICLE MASS (*of a vehicle other than a passenger vehicle*) - the sum of: the '*Unladen Mass*' together with: the heaviest regular production options, if such individual options have a mass of 2.3 kg or more; plus 68 kg for the front '*Seat*' occupant if only one front seating position is provided; or 68 kg for each of 2 front '*Seat*' occupants if more than one front seating position is provided; plus:
one third of the difference between this mass and the '*Maximum Loaded Vehicle Mass of a Vehicle other than a Passenger Vehicle*' distributed evenly over the loading space area or in the case of '*Partially Completed Vehicles*' over the rear '*Axle*' or '*Axle Group*'

- NORMAL LOADED VEHICLE MASS 31/00** - or (*NLVM 31/00*) - the mass of the unladen vehicle with a full capacity of lubricating oil, coolant and fuel together with the heaviest factory installed options, if such individual options have a mass of 2.3 kg or more; plus 68 kg for each of 2 front '*Seat*' occupants; plus, if the designated '*Seating Capacity*' is 5 or more, 68 kg for a rear '*Seat*' passenger.
- NORMAL MINIMUM ENERGY LEVEL** is the normal operating minimum level of the energy storage devices as defined by the normal cut-in level of the storage charging system and in the case of a compressed air '*Brake System*', is to be taken as 650 kPa.
- OFF-ROAD USE** - means the type of use requiring a vehicle to have the special design features listed in the definition of '*Off-road Passenger Vehicle*' (ADR 28/01).
- OPACIMETER** - An instrument designed for continuous measurement of the '*Light Absorption Coefficients*' of the exhaust gases emitted by '*Engine Systems*' (ADR 30).
- OPENING** - is the maximum unobstructed aperture between the top edge of a power window and any part of the structure which forms the boundary of the window when viewed from the interior of the vehicle. To measure an opening, cylindrical test rods must be placed (without exerting force) from the interior of the vehicle as shown in figure 6 in ADR 42/03.
- OUTBOARD SEATING POSITION** - a front- or rear-facing seating position nearest a vehicle side wall where any part of the top surface of the '*Seat*' cushion is within 200 mm of this side wall.
- OVERALL GEAR RATIO** – the ratio of the engine output shaft rotational speed to the vehicle driven with rotational speed calculated disregarding slip in any fluid coupling device (ADR 28).
- OVERALL TYRE WIDTH** - the linear distance between the exteriors of the '*Sidewalls*' of an inflated tyre, including elevations due to labelling, decorations, or protective bands or rib.
- OVERALL WIDTH** - the maximum distance measured across the body including wheel guards, but excluding rear vision mirrors, signalling devices and side-mounted lamps.
- OVERDRIVE** – any device additional to the normal gear box which if engaged would result in a higher vehicle speed for the same engine speed, in the gear selected for test (ADR 28).
- OVER-RUN BRAKING SYSTEM** - means a braking system actuated by the forces generated when the towing vehicle commences to decelerate and the trailer applies a longitudinal force to the towing vehicle through the '*Coupling*'.
- OXIDES OF NITROGEN** - the sum of the nitric oxide and nitrogen dioxide contained in a gas sample as if the nitric oxide were in the form of nitrogen dioxide.

- PARKING BRAKE SYSTEM 35/... - a system that, through the medium of a '*Control*' independent of the service brake '*Control*', applies a restraining force to 2 or more road wheels of the vehicle to prevent rotation of the braked wheels.
- PARKING BRAKE SYSTEM 38/00 - that part of the trailer '*Brake System*' which is able to apply and maintain a restraining force at two or more trailer road wheels with and without the trailer being separated from the towing vehicle.
- PARKING MECHANISM 31/00 - a component or sub-system of the drive train that locks the drive train when the transmission control is placed in the "park" position or other gear position and the ignition key is removed.
- PARKING MECHANISM 35/... - a component or sub-system of the drive train that locks the drive train of the vehicle when the transmission control is placed in the park position.
- PARTIALLY COMPLETED VEHICLE - a vehicle which has been manufactured to a stage where, although it is registrable, additional work will be necessary to be able to put it into service (e.g., a '*Chassis-cab*' without a tray).
- PASSENGER CAR SIDE MARKER LAMP - lamps on the side of a passenger vehicle, which may be mandatory in some countries, for improving the side conspicuity of the vehicle
- PEDAL EFFORT 31/00 - the force applied to the service brake '*Control*'. The force may be measured by a force transducer located centrally on the brake pedal pad.
- PEDAL EFFORT 35/... - the force applied to any foot operated brake '*Control*', measured in the direction of pedal movement.
- PELVIS REFERENCE LOCUS - the locus of a point fixed relative to the '*Seat*', coincident with the '*Pelvis Reference Point*' when the '*Seat*' is in the rearmost design position and extending over the design or riding range of '*Seat*' travel.
- PELVIS REFERENCE POINT - a point used in simulating the correct position of a lap '*Strap*' or the lap '*Strap*' of a '*Lap-Sash Belt*'. It is the point which is located at a height of 95 mm above and 70 mm '*Forward*' of the '*Seating Reference Point*'.
- PERMANENT STRUCTURE - structure that cannot be readily removed within a short time using hand tools.
- PIG TRAILER - a trailer having one '*Axle Group*' near the middle of the length of the goods-carrying surface.
- PLY - a layer of rubber-coated substantially parallel '*Cords*' forming a tyre body.
- PLY SEPARATION - a parting of rubber compound between adjacent '*Plies*'.
- PNEUMATIC TYRE - a mechanical device made of rubber, chemicals, fabric and steel or other materials, which when mounted on an automotive rim provides the traction and contains the gas or fluid that sustains the load.

POINT OF ARTICULATION - the axis of a '*Fifth Wheel*' king pin or the axis of rotation of a '*Turntable*' assembly.

POLE-TYPE TRAILER - a trailer that:

- (i) is attached to the towing vehicle by means of a pole or by an attachment fitted to such pole; and
- (ii) is ordinarily used for transporting loads, such as logs, pipes or structural members or other long objects, that are generally capable of supporting themselves like beams between supports.

PRESCRIBED - prescribed in the Australian Design Rules.

PRESCRIBED TRANSITION MASS - the maximum permissible mass imposed by an '*Axle Group*' on the ground that causes a '*Retractable Axle*' to lower automatically to the '*Fully-down*' position.

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

PROTECTED SEAT - a front-facing '*Seat*' where the total area of the "screen zones" within the "protection area" is not less than 800 cm²; where:

"protection area": - the space in front of a '*Seat*' and contained:

Between 2 horizontal planes, one through the '*H Point*' and the other 400 mm above it;

Between 2 vertical longitudinal planes which are symmetrical in relation to the '*H Point*' and 400 mm apart; and

Behind a transverse vertical plane 1.3 m from the '*H Point*'; and

within any transverse vertical plane, "screen zone" means a continuous surface such that, if a sphere of 165 mm diameter is projected in a longitudinal horizontal direction through any point of the zone and through the centre of the sphere, there is no aperture anywhere in the "protection area" through which the sphere can be passed.

QUICK RELEASE COUPLING - a '*Coupling*' which is designed to be engaged and disengaged without the use of tools.

RADIAL PLY TYRE - a '*Pneumatic Tyre*' in which the '*Ply*' '*Cords*' extend to the '*Bead*' and are laid at an angle of substantially 90 degrees to the centreline of the '*Tread*', the '*Carcass*' being stabilised by a circumferential '*Belt*' comprising 2 or more layers of substantially inextensible '*Cord*' material.

RATED SPEED - the speed at which the '*Manufacturer*' specifies the maximum rated power of the engine.

RATED TOWING CAPACITY - the lesser of either;

- the rating given to the towing equipment fitted to the motor vehicle or,
- the difference between '*Gross Combination Mass*' and '*Gross Vehicle Mass*'.

REAR AXLE CLEARANCE - See '*Front Axle Clearance*'.

REAR END - the rearmost point on the vehicle including the bumper bar, over-riders and tow hook or '*Towbar*' if standard equipment.

REAR MARKING PLATE - a plate faced with retro reflective materials as prescribed in the ADR for "Light and Light-signalling devices not covered by ECE Regulations".

- 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'*).
- REAR SEAT - any front facing *'Seat'* which lies immediately to the rear of the seating position of the driver or the front seat passenger(s).
- REAR SEAT (MB/MD1) - any front facing *'Seat'* in a forward-control passenger vehicle (MB) or light omnibus (MD1) which lies immediately to the rear of the seating position of the driver or the front seat passenger(s).
- REARWARD (when referenced to a *'Seat'*) - the direction relative to that which an occupant faces when seated.
- REFERENCE HEIGHT means the height of the top of the *'Seat'* above the *'Reference Plane'*.
- REFERENCE MASS OF A NON-MA VEHICLE - the actual or the *'Manufacturer's'* estimated mass of the vehicle in operative status with all standard equipment, and mass of fuel at *'Nominal Fuel Tank Capacity'*, and the mass of options where it is expected that more than 33% of an *'Engine Family'* will be equipped with that option, plus a mass of 136 kg.
- REFERENCE MASS OF A MA VEHICLE - the mass of the vehicle with a full capacity of lubricating oil, coolant and fuel but without occupants or options, except those options which are essential to the emissions test and where it is expected that more than 33% of an *'Engine Family'* will be equipped with that option, e.g. air-conditioning, plus a mass of 136 kg.
- REFERENCE PLANE means the horizontal plane passing through the points of contact of the heels of the *'Hybrid III'* when seated according to the requirements of clauses 7.3.5 to 7.3.8. of ADR 68/00
- RETRACTABLE AXLE - means an *'Axle'* with a means of adjustment enabling it to be raised or lowered relative to the other *'Axles'* in the *'Axle Group'*.
- RIGHT-HAND SIDE - that side of the vehicle to the right of the longitudinal centreline thereof when viewed from the rear.
- RIM - a support for a tyre or a tyre and tube assembly upon which the tyre *'Beads'* are seated.
- 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'*).
- ROUND OFF, ROUNDED OFF, ROUNDING OFF - the mathematical procedure as set out in ASTM E29-67.
- ROUTE SERVICE OMNIBUS - an omnibus specially designed with spaces for standing passengers.
- RUNNING CLEARANCE - the distance from the surface on which an unladen vehicle is standing to the lowest point on the vehicle excluding unsprung mass.
- SASH GUIDE - a system of one or more devices which locates the torso strap of a *'Lap-sash Belt'*. Any device which alters the direction of the *'Strap'* between the *'Upper Torso Reference Point'* and the *'Final Torso'*

Anchorage is a *'Sash Guide'* device. The *'Anchor Fitting'* at the *'Final Torso Anchorage'* is always a *'Sash Guide'* device and may be the only *'Sash Guide'* device in the system.

SASH LOCATION POINT - the point where the centreline of the *'Strap'* first changes direction after leaving the *'Upper Torso Reference Point'*.

S-CAM - means a foundation brake unit which utilises the rotation of an S shaped cam to actuate the brakes.

S-TYPE TEMPORARY-USE SPARE TYRE - a type of pneumatic *'Temporary-Use Spare Tyre'* with a higher *'Load Index'* than those established for normal tyres.

SCHEDULED MAINTENANCE - any adjustment, repair, removal, cleaning, or replacement of vehicle components or systems which is performed to prevent component failure or vehicle malfunction, to the extent recommended by, and at intervals recommended by, the vehicle *'Manufacturer'* to the ultimate vehicle purchaser, as detailed in clause 37.3.5 of ADR 37/00 or clause 6.5 of ADR 37/0. It does not include *'Corrective Action'*.

SEARCH LAMP - A lamp for the temporary purpose of reading signs, examining and/or making adjustments or repairs to the vehicle and /or handling its load.

SEAT - a structure provided to seat the driver and/ or passengers.

SEAT ADJUSTER - a device anchored to the motor vehicle structure which supports the *'Seat Frame'* and provides for *'Seat'* adjustments.

SEAT BACK ANGLE - the angle between the *'Torso Reference Line'* and the vertical line through the *'Seating Reference Point'*.

SEAT FRAME - the structural portion of a *'Seat'* assembly.

SEATBELT ASSEMBLY - an arrangement of *'Straps'*, *'Anchor Fittings'*, securing buckle, adjusting devices and where the assembly is required to provide an upper torso restraint at least one *'Sash Guide'* device, designed to restrain a motor vehicle occupant in the event of an impact. Devices for absorbing energy or for retracting the *'Strap'* shall be considered as part of the *'Seatbelt Assembly'*.

SEATING CAPACITY - the number of seated adult persons which the vehicle is designed to carry and for which seating positions (established in accordance with clause 5.7 of ADR 5/... "Anchorages for Seatbelts and Child Restraints" and clause 10 of ADR 5/... "Anchorages for Seatbelts") are provided.

SEATING REFERENCE LOCUS - the locus of a point fixed relative to the *'Seat'*, which is coincident with the *'Seating Reference Point'* when the *'Seat'* back is at the design *'Seat Back Angle'* and when the *'Seat'* is in the rearmost driving or riding position, as the *'Seat'* traverses over the riding or driving range of *'Seat'* travel.

SEATING REFERENCE PLANE: -

(I) *'Driver's'* seating position - the vertical longitudinal plane through the geometric centre of the *'95th Percentile Eye Ellipses'* except that in case of

'Seats' designed for one seating position only, it may be the longitudinal plane through the geometric centre of the 'Seat'.

(II) Front passenger's 'Outboard Seating Position' on a 'Seat' which also provides for the driver's seating position - the vertical plane parallel to the 'Seating Reference Plane' of the driver's seating position and equidistant from the centre of the vehicle.

(III) 'Seats' designed for one seating position only - the vertical plane through the geometric centre of the 'Seat', except that in the case of the front passenger 'Outboard Seating Position', it may be the vertical plane parallel to the 'Seating Reference Plane' of the driver's seating position and equidistant from the centre of the vehicle.

(IV) Other seating positions - the plane nominated by the a 'Manufacturer' provided that in the case of an 'Outboard Seating Position' on a transverse 'Seat' which is designed for 2 occupants only, it shall be at least 200 mm from the vertical longitudinal plane through the centre of the vehicle and at least 200 mm from the inner panel (or the line of the inner panel) when measured horizontally on a transverse line through the 'Seating Reference Point'.

SEATING REFERENCE POINT (SRP) - the 'Manufacturer's' design reference point which:

- (a) establishes the rearmost normal design driving or riding position for each designated seating position in a vehicle;
- (b) has co-ordinates established relative to the designed vehicle structure;
- (c) simulates the position of the pivot centre of human torso and thigh; and
- (d) is the reference point employed to position the 2-dimensional templates described in SAE document J826, "Manikins for Use in Defining Vehicle Seating Accommodation", November 1962; SAE J826a-August 1970; SAE J826b-January 1978; or SAE J826 APR80.

NOTE: Some difficulties are known to exist in the interpretation of the term "rearmost normal design driving or riding position" in respect of 'Seats' with vertical adjustment and/or capabilities for extended 'Rearward' adjustment.

The following 3 clarifying points are to be used in conjunction with the definition:

- (i) in nominating the 'SRP', the 'Manufacturer' shall give consideration to all modes of adjustment of the 'Seat' - horizontal, vertical and tilt - for the purposes of establishing the "rearmost normal design driving or riding position"
- (ii) the 'SRP', once determined, is the point used to position the 2-dimensional template with the 90th percentile leg as described in the SAE document, for all purposes for which the template is used;
- (iii) the 2-dimensional template with the 95th percentile leg with dimensions as specified in SAE J826b - January 1978 shall be accepted.

SECOND ROW SEAT(S) - that row of front-facing 'Seats' which lies immediately to the rear of the front (first) row 'Seats'. 'Seats' are considered to be in the same row if the distance between them along the longitudinal plane of the vehicle is less than 100 mm .

SECONDARY BRAKE SYSTEM - either

- a system which, in the event of failure of any fluid connected component of the service brake system remains operative and capable of imparting a retarding force to the vehicle; or
- one circuit of a *'Split Brake System'*, except if the vehicle is fitted with only one *'Brake Power Unit 35/...'*.

SECTION WIDTH - the linear distance between the exteriors of the *'Sidewalls'* of an inflated tyre, excluding elevations due to labelling, decoration, or protective bands.

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'*.

SERVICE BRAKE SYSTEM - the *'Brake System'* which in proportion to the signal from the brake *'Control'* or, in the case of a trailer in proportion to the *'Control Signal'*, applies a restraining torque to the vehicle's wheels in normal operation.

SERVICE DESCRIPTION - the combination of *'Load Index'* and *'Speed Category'* symbols.

SET SPEED - the maximum road speed specified in clause 65.5 of ADR 65.

SHED - ("Sealed Housing for Evaporative Determination") - a sealed structure used to enclose a vehicle so that *'Fuel Evaporative Emissions'* can be measured.

SHOULDER POINT - a point 300 mm above the *'Seating Reference Point'*, measured along the *'Torso Reference Line'* and representing the *'Shoulder Point'* of a *'50th Percentile 6 Year Old Child'*.

SHOULDER REFERENCE POINT - the point on the 2-dimensional *'Manikin'* where the *'Torso Line'* meets the shoulder.

SIDE MARKER LAMP - a lamp which lighted indicates the presence and length of the vehicle as viewed from the side.

SIDE MOUNTED TANK - a *'Fuel Tank'* which has at least one part that is not protected by either the cab or the longitudinal chassis side rails. For the purposes of this clause a part of the tank shall be considered to be protected by the cab if it is within the boundaries of the cabin when viewed both in plan and side elevation and to be protected by the side rails if it is within the boundaries of the side rails when viewed in plan (ADR 17).

SIDEWALL - that portion of a tyre between the *'Tread'* and the *'Bead'*.

SILENCING SYSTEM - a complete set of components necessary for limiting the noise made by a *'Motor Cycle'* and its exhaust (ADR 39).

SILENCING SYSTEM COMPONENT - one of the individual constituent parts whose assembly constitutes the *'Silencing System'*. These *'Silencing System Components'* are, in particular, the exhaust manifold, the exhaust piping, the expansion chamber, the silencer proper, etc. If the engine intake is equipped with an air filter and the filter's presence is essential to ensure observance of the prescribed sound level limits, the filter must be

regarded as a '*Silencing System Component*' and bear the markings prescribed in Section 2 of this ADR 39.

SILENCING SYSTEMS TYPE - '*Silencing Systems*' which do not differ in such essential respects as:

- that their components do not bear different trade names or marks;
- that the characteristics of the materials constituting a '*Silencing System Component*' are not different or that the '*Silencing System Components*' do not differ in shape or size;
- that the operating principles of at least one '*Silencing System Component*' are not different; and
- that their '*Silencing System Components*' are not assembled differently (ADR 39).

SIMULATED TRIP - the first 1,372 seconds of the dynamometer driving schedule.

SINGLE AXLE - either one '*Axle*', or 2 '*Axles*' with centres between transverse, parallel, vertical planes spaced less than 1.0 m apart.

SIZE FACTOR - the sum of the '*Section Width*' and the outer diameter of a tyre determined on the '*Measuring Rim*'.

SKID LIMIT - a measurement of the distribution of braking at which wheel lock-up commences.

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*'.

SLEEPER BERTH - A berth situated in a goods vehicle cab or an adjacent compartment to provide the driver, or one of the drivers if there is more than one driver, with sleeping accommodation.

SMALL OMNIBUS - an omnibus having an occupant capacity of up to 25 persons, including the driver (ADR 58).

SMOKE METER - An instrument which determines the smoke density in exhaust gases emitted by '*Engine Systems*' (ADR 30).

SPACER - an annular block used to vary the position of the '*Child Restraint Anchor Fitting(s)*' shown in Figures 4 and 5 of ADR 34/... .

SPAN GAS - a gas of a known concentration which is used routinely to set the output level of an analyser.

SPAN GAS - a gas of known concentration which is used routinely to set the output level of an analyser.

SPARE UNIT is a '*Unit*' which is intended to be exchanged for a '*Second Unit*' in case of malfunction of the latter.

SPARK IGNITION - means positive ignition (ADR 28/01).

SPECIFIED DESIGN SECTION WIDTH - the width specified in the '*Nominated Standard*' for a new tyre of that size designation and type when inflated on its '*Measuring Rim*'.

- SPECULAR GLOSS - the '*Luminous Fractional Reflectance*' of a specimen at the specular direction.
- SPEED CATEGORY - a category assigned to a tyre by a tyre manufacturer which denotes the '*Maximum Vehicle Speed 24/00*' for which the use of the tyre is rated. Details of speed categories and their symbols are set out in Table 4 of ADR 23/... "Passenger Car Tyres".
- SPIKE STOP 31/00 - a stop resulting from the application of a force on the service brake '*Control*' of at least 885 N attained within 400 milliseconds of the commencement of application of such force.
- SPIKE STOP 35/... - in the case of '*Service Brake System*' without a '*Brake Power Unit 35/...*' a stop resulting from the application of a '*Pedal Effort 35/...*' of at least 885 N on the service brake '*Control*' attained within 500 milliseconds from the instant at which the '*Control*' leaves the initial brake '*Control*' location.
- SPLIT SERVICE BRAKE SYSTEM - a '*Brake System*' consisting of 2 or more sub-systems actuated by a single '*Control*' and so designed so that a leakage-type failure of a pressure component in a single sub-system (except structural failure of a housing that is common to all sub-systems) shall not impair the operation of any other sub-systems.
- SPRING BRAKE SYSTEM - a '*Brake System*' utilising one or more springs to store the energy required to actuate the '*Brakes*'.
- STABILISATION DISTANCE - the distance chosen by the vehicle '*Manufacturer*' for testing a '*Certification Vehicle*'.
- STABILISATION DISTANCE ACCUMULATION FUEL - unless otherwise '*Approved*', means one of the grades of fuel complying with a specification of Appendix 3 of ADR 37/... . See also '*Appropriate Stabilisation Distance Accumulation Fuel*'.
- STANDARD SPARE UNIT is a '*Unit*' that conforms to the '*Standard Unit*' of the vehicle.
- STANDARD TEST FUEL - unless otherwise '*Approved*', means one of the grades of fuel complying with a specification of Appendix 2 of ADR 37/... . See also '*Appropriate Standard Test Fuel*'.
- STANDARD UNIT is a '*Unit*' which is capable of being fitted to the vehicle for normal operation.
- STATIC LOADED TYRE RADIUS - the distance from the centre of tyre contact to the wheel centre measured in the wheel plane of a stationary tyre inflated to normal operating pressure.
- STEERING COLUMN - a structural housing that surrounds a '*Steering Shaft*' (ADR 10).
- STEERING SHAFT - a component that transmits steering torque from the steering wheel to the steering gear (ADR 10).
- STOPPING DISTANCE 31/00 - the distance travelled by a vehicle from the point of application of force to the brake '*Control*' to the point at which the vehicle is brought to rest. Its measurement must commence when the

centre of the brake pedal pad has moved no more than 3 mm from its static or rest position.

STOPPING DISTANCE 33/00 - the distance travelled by a vehicle from the point of application of braking effort to the point at which the vehicle is brought to rest.

STOPPING DISTANCE/TIME - the distance travelled or time from the instant the brake '*Control*' leaves the '*Initial Brake Control Location*' to the vehicle becoming stationary.

STOPPING DISTANCE' - the distance travelled by a vehicle from its position at the instant the brake '*Control*' leaves the initial brake '*Control*' location to the position at which the vehicle is brought to rest.

STORED ENERGY - energy stored in a device such as a pressure vessel, vacuum chamber, spring or battery.

STORED FLUID ENERGY - energy stored as compressed air, in hydraulic accumulators, or as any form of electrical energy.

STRAP - a part of a '*Seatbelt Assembly*' designed with flexure to facilitate correct and comfortable wearing.

SUN VISOR - any attachment mounted above the inside of the windscreen and provided for the purpose of shielding the eyes of the driver and other front '*Seat*' passengers from direct solar glare. A "see through" type of '*Sun Visor*' shall constitute a '*Sun Visor*' for the purpose of ADR 11.

SUPERCHARGER - A device which increases the pressure of the engine intake air it passes into the engine and includes turbochargers (ADR 30).

SUPPLY LINE - means the path by which any '*Stored Energy*' required to actuate/release the trailer '*Brakes*' is supplied from the towing vehicle connection to the first other '*Brake Device*' in the trailer '*Brake System*'. (Normally referred to as the emergency line in a 2 line compressed air '*Brake System*').

SUPPLY LINE 35/... - means the path by which any '*Stored Energy*' required to actuate/release the trailer '*Brake System*' is supplied to the '*Coupling Head*' (Normally referred to as the emergency line in a 2 line compressed air '*Brake System*').

SUSPENSION CLEARANCE - the minimum dimension measured from the front and the rear suspensions to the ground.

SUSPENSION HEIGHT - Vertical measurement from the wheel centre to the top of the wheel arch opening.

SUSPENSION SEAT - a structurally integrated '*Seat*' which provides automatic vertical movement of the '*Seat*' frame relative to the vehicle structure as a result of particular vehicle movement.

SUSPENSION TRAVEL - the distance travelled by the centre of a wheel from its position at the '*Unladen Mass*' of the vehicle to its position when the suspension is compressed to the '*Manufacturer's*' recommended limit of travel.

- SYSTEM 37/00 - includes any vehicle or engine modification which controls or causes the reduction of substances emitted from the vehicle.
- 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.
- TANK FUEL VOLUME - the volume of fuel in the fuel tank(s), which is determined by multiplying the vehicle's '*Nominal Fuel Tank(s) Capacity*' by 0.40, the result being '*Rounded*' to the nearest 0.5 litre.
- TARE MASS - mass of a vehicle other than a L-group vehicle ready for service, unoccupied and unladen, with all fluid reservoirs filled to nominal capacity except for fuel, which shall be 10 litres only, and with all standard equipment and any options fitted.
- TARE MASS OF AN L-GROUP VEHICLE - as for '*Tare Mass*' except that fuel tank is to be empty.
- TAXI - a vehicle manufactured for up to 8 passengers which is to be used for the carriage of passengers for hire and reward. This term embraces vehicles such as "Taxi Cabs" and "Hire Cars" (ADR 44).
- TEMPORARY-USE SPARE TYRE - a tyre different from a tyre intended to be fitted to any vehicle for normal driving conditions but intended only for temporary use under restricted conditions.
- TEMPORARY-USE SPARE UNIT - is a '*Unit*' that differs from the '*Standard Unit*' of the vehicle with regard to its principal characteristics (e.g. size designations, '*Functional Dimensions*', conditions for use or construction). It is intended for use under restricted conditions specified in clause 5.1 of ADR 71/00. A '*Temporary-Use Spare Unit*' may be either of a type intended to be carried on the vehicle with the tyre inflated to the pressure specified for temporary use or may be of a type where the tyre is folded and not inflated.
- TEST DUMMY - anthropomorphic device as defined by either '*Hybrid II - Test Dummy*' or '*Hybrid III - Test Dummy*'
- TEST POINTS - ADR 6
- TEST RIM - any '*Rim*' specified as approved in the '*Nominated Standard*' for a tyre of that size designation and type.
- TEST SEAT DATUM POINT - a point in relation to the '*Seat*' described in Figure 1 of clause 4.11.1 of ADR 4/... . When viewed in side elevation it is located 120 mm above and 115 mm '*Forward*' of the intersection of the planes of the '*Seat*' base and the '*Seat*' back.
- TEST WHEEL SPEED - the peripheral speed of the steel test wheel.
- THROTTLE - the mechanical linkage which either directly or indirectly controls the fuel flow to the engine.
- TORSO LINE - a line parallel to the small of the 2-dimensional manikins back and extending through the '*H Point*' (centreline of probe in full back position on 3-dimensional manikin). The 2- and 3-dimensional manikins are as specified in SAE document J826 - "Manikins for Use in Defining and Measuring Vehicle Seating Accommodation", November 1962 or J826

APR80- "Devices for Use in Defining and Measuring Vehicle Seating Accommodation".

TORSO REFERENCE LINE - a line parallel to the small of the 2-dimensional manikin's back and extending through the '*Seating Reference Point*' when the '*Seat*' back is adjusted to a required '*Seat Back Angle*'. The 2-dimensional manikin is as specified in SAE J826 "Manikins for Use in Defining Vehicle Seating Accommodation", November 1962; SAE J826a, August 1970; SAE J826b, January 1978; or J826 APR80 - "Devices for Use in Defining and Measuring Vehicle Seating Accommodation".

TOTAL COMBINATION MASS (TCM) - the combined mass of the laden or unladen trailer and the towing vehicle as tested.

TOTAL COMBINATION MASS (TCM) - the combined mass of the laden or unladen trailer and the towing vehicle.

TOTAL LENGTH - the longitudinal distance between the '*Front End*' and the '*Rear End*' of a vehicle.

TOTAL TRAILER AXLE LOAD (TTAL) is the total force exerted by the individual axles attached to the trailer when resting on a horizontal supporting plane.

TOTALLY VISIBLE - means that the sum of the view from each of the 2 eyes includes all the '*Visual Indicators*'.

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.

TOW TRUCK – a goods vehicle equipped with a '*Crane*' used or intended to be used for the lifting and carrying or towing of vehicles and includes any goods vehicle to which is attached (temporarily or otherwise) a device or trailer which is used or intended to be used for the lifting and carrying of vehicles (ADR 44).

TOWBAR - a device attached to the drawing vehicle provided for connection of the drawing vehicle to the '*Coupling*' for the towing of a trailer.

TRAILER GROSS AXLE LOAD RATING (TGALR) - the sum of the '*GALR*' of each '*Axle*' attached to the trailer.

TRANSVERSE DIRECTION S - means the shortest transverse distance in mm from the '*Seating Reference Plane*' to the point under consideration.

TRANSVERSE DISTANCE S - the shortest transverse distance in mm from the '*Seating Reference Plane*' to the point under consideration.

TREAD - the portion of the tyre which comes in contact with the road.

TREAD SEPARATION - pulling away of the '*Tread*' from the tyre '*Carcass*'.

TREADWEAR INDICATOR - an indicator incorporated into the '*Tread*' of a tyre which gives a visual indication when the '*Tread*' has worn down to leave a pre-determined minimum '*Groove*' depth.

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.

T-TYPE TEMPORARY-USE SPARE TYRE - means a type of pneumatic '*Temporary-Use Spare Tyre*' designed for use at inflation pressures higher than those established for normal use tyres.

TURNTABLE - a coupling device used between a '*Semi-trailer*' and a '*Prime Mover*', which may not be readily detachable. It includes the upper and lower rotating elements and the king pin. A turntable is also used as a base for a '*Fifth Wheel*', in which case the '*Semi-trailer*' is readily detachable.

TWIN STEER AXLE GROUP - a group of 2 '*Axles*':

- (i) with single tyres; and
- (ii) fitted to a motor vehicle; and
- (iii) connected to the same steering mechanism; and
- (iv) the horizontal distance between the centre lines of which is at least 1.0 m, but not more than 2.0 m.

TYPE 4N RETRACTOR - an '*Emergency Locking Retractor*' which has a higher response threshold - i.e. having special properties as regard its use in vehicles other than passenger cars. Its properties are specified in Appendix A of ADR 4/...

TYRE CARCASS CONSTRUCTION SYMBOL - relates to the type of '*Carcass*' construction used in the manufacture of the tyre, viz:

- D - Diagonal Ply
- B - Bias-Belted
- R - Radial Ply.

TYRE OUTER DIAMETER - the overall diameter of the inflated new tyre.

UNIQUE - a '*Unique*' '*Brake System*' is one consisting of a particular combination of components with particular physical and dimensional properties.

UNIT - means an assembly of a '*Wheel*' and a '*Tyre*'

UNLADEN MASS - the mass of the vehicle in running order unoccupied and unladen with all fluid reservoirs filled to nominal capacity including fuel, and with all standard equipment.

UNLADEN TEST MASS - ADR 38/00

UNLEADED PETROL - petrol containing not more than 0.013 gram of lead (organic) per litre and not more than 0.0013 gram of phosphorus per litre.

UNLEADED PETROL NOZZLE - a filling nozzle which complies with the requirements of Appendix 9 of ADR 37/... .

UNSCHEDULED MAINTENANCE - any adjustment, repair, removal, cleaning, or replacement of vehicle components or systems other than the vehicle engine, '*Fuel System*', or emissions control system, which is performed to correct a component failure or vehicle malfunction. It does not include '*Corrective Action*'.

UPPER ANCHOR FITTING - see '*Child Restraint Anchor Fitting*'.

UPPER ANCHORAGE - see '*Child Restraint Anchorage*'.

UPPER ANCHORAGE STRAP - the flexible component designed to restrain the top portion of the '*Child Restraint*'.

UPPER CROSSBAR - the uppermost horizontal member of a '*Seat Frame*' back.

UPPER TORSO REFERENCE POINT - an arbitrary point representing the last point of contact of a sash '*Strap*' on a torso when the '*Seat*' back is adjusted to the design '*Seat Back Angle*'. It is located at a height of 530 mm above the '*Seating Reference Point*' measured along the '*Torso Reference Line*' 60 mm '*Forward*' of the '*Torso Reference Line*' when measured normal to the '*Torso Reference Line*' and 120 mm from the '*Seating Reference Plane*' when measured normal to the '*Seating Reference Plane*' and towards the '*Sash Guide*'.

VARIABLE PROPORTIONING BRAKE SYSTEM - system that automatically adjusts the braking force at the '*Axles*' to compensate for vehicle static '*Axle Load*' and/or dynamic weight transfer between '*Axles*' during deceleration.

VARIANT (OF A MODEL) - a vehicle with its own marketing designation but included in the '*Compliance Plate*' approval for the "make and model".

VEHICLE IDENTIFICATION NUMBER (VIN) - the number quoted on the '*Compliance Plate*' that uniquely identifies the vehicle and sets it apart from similar vehicles. This number shall correspond to the identification number of the vehicle which is permanently recorded elsewhere on it.

VEHICLE MAXIMUM LOAD ON THE TYRE - that load on an individual tyre that is determined by distributing to each '*Axle*' or '*Axle Group*' its share of the weight arising from the relevant '*Maximum Loaded Vehicle Mass*' and dividing by the number of tyres on that '*Axle*' or '*Axle Group*', as appropriate.

VEHICLE NORMAL LOAD ON THE TYRE - that load on an individual tyre that is determined by distributing to each '*Axle*' or '*Axle Group*' its share of the weight arising from the relevant '*Normal Loaded Vehicle Mass*' and dividing by the number of tyres on the '*Axle*' or '*Axle Group*'. For a passenger vehicle the load attributable to the occupants may be distributed as in Table 1 of ADR 24/....

VEHICLE REAR SEAT - any front-facing '*Seat*' which is to the rear of the seating positions of the driver or the front passenger(s).

VISIBLE INDICATOR - a device incorporated in a '*Service Brake System*' which indicates to the operator by a visible signal a failure of a critical item or component of the system.

VISUAL INDICATOR - that part of an instrument or device intended to display information for the driver and includes any specified label.

V-VALUE - the theoretical vertical reference force between towing vehicle and trailer.

WHEEL - means a complete wheel consisting of a '*Rim*' and a wheel disc.

WHEEL GUARD - a fitting or device which is so constructed and affixed that it will so far as practicable catch or deflect downwards any stone, mud, water or other substance thrown up by the rotation of the wheel for which such fitting or device is provided.

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 over page).

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.

WINTER TREAD (includes tyres known as "Mud and Snow", "M&S" or "Snow") - a tyre whose '*Tread*' pattern and whose structure are primarily designed to ensure in mud and fresh or melting snow a performance better than that of an ordinary (road-type) tyre. The '*Tread*' pattern of a '*Winter Tread*' generally consists of '*Groove*' (rib) and/or solid block elements more widely spaced than on an ordinary (road-type) tyre.

ZERO HOURS – means the point at which testing and controlled service accumulation commence. This shall be a point after normal engine assembly line operations and adjustments and before one additional engine operating hour has been accumulated (ADR 36).

ZERO KM – means that point at which controlled '*Stabilisation Distance*' commences, subject to the requirements of clause 37.3.2.4 of ADR 37/00 or clause 6.2.4 of ADR 37/01, after initial engine starting (not to exceed 150 km of vehicle operation, or 10 hours of engine operation) and at which point normal assembly line operations and adjustments are completed, including pre-delivery procedures.

ZERO-GRADE AIR OR ZERO-GRADE NITROGEN - means air and nitrogen gases having allowable impurity concentrations not exceeding:
(A) For measurement of HC concentration in '*Fuel Evaporative Emissions*' test

- 1 ppm equivalent carbon response;

(B) For measurement of HC, CO, CO₂, '*NO_x*' concentrations in '*Exhaust Emissions 37/00*' test:

- 1 ppm equivalent carbon response

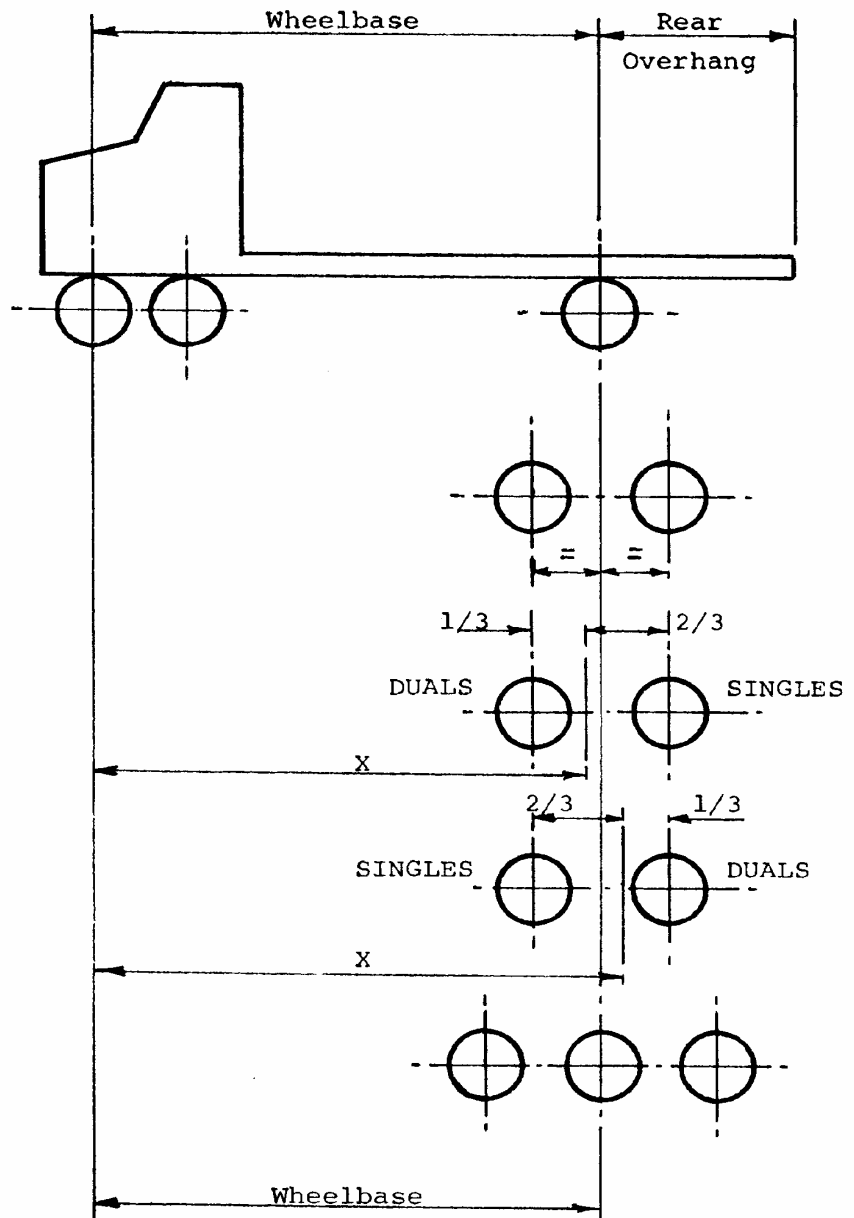
- 1 ppm CO

- 400 ppm (0.04 mole percent) CO₂

- 0.1 ppm NO

For the purpose of this definition, air includes artificial air consisting of a blend of nitrogen and oxygen with the oxygen concentration between 18 and 21 mole (or volume) percent.

'WHEELBASE' AND 'REAR OVERHANG'



X = Distance from front 'Axle' to the line from which the 'Rear Overhang' is measured.

4. VEHICLE CATEGORIES

4.1. A two-character vehicle category code is shown for each vehicle category. This code is used to designate the relevant vehicles in the vehicle standards, as represented by the ADRs, and in related documentation.

4.2. Two-Wheeled and Three-Wheeled Vehicles

4.2.1. PEDAL CYCLE (AA)

A vehicle designed to be propelled through a mechanism solely by human power.

4.2.2. POWER-ASSISTED PEDAL CYCLE (AB)

A pedal cycle to which is attached one or more auxiliary propulsion motors having a combined maximum power output not exceeding 200 watts.

4.2.3. MOPED - 2 Wheels (LA)

A 2-wheeled motor vehicle, not being a power-assisted pedal cycle, with an engine cylinder capacity not exceeding 50 ml and a '*Maximum Motor Cycle Speed*' not exceeding 50 km/h; or a 2-wheeled motor vehicle with a power source other than a piston engine and a '*Maximum Motor Cycle Speed*' not exceeding 50 km/h.

4.2.4. MOPED - 3 wheels (LB)

A 3-wheeled motor vehicle, not being a power-assisted pedal cycle, with an engine cylinder capacity not exceeding 50 ml and a '*Maximum Motor Cycle Speed*' not exceeding 50 km/h; or a 3-wheeled motor vehicle with a power source other than a piston engine and a '*Maximum Motor Cycle Speed*' not exceeding 50 km/h.

4.2.5. MOTOR CYCLE (LC)

A 2-wheeled motor vehicle with an engine cylinder capacity exceeding 50 ml or a '*Maximum Motor Cycle Speed*' exceeding 50 km/h.

4.2.6. MOTOR CYCLE AND SIDE-CAR (LD)

A motor vehicle with 3 wheels asymmetrically arranged in relation to the longitudinal median axis, with an engine cylinder capacity exceeding 50 ml or a '*Maximum Motor Cycle Speed*' exceeding 50 km/h.

4.2.7. SIDE-CAR

A car, box or other receptacle attached to the side of a motor cycle and for the support of which a wheel is provided.

4.2.8. MOTOR TRICYCLE (LE)

A motor vehicle with 3 wheels symmetrically arranged in relation to the longitudinal median axis, with a '*Gross Vehicle Mass*' not

exceeding 1.0 tonne and either an engine cylinder capacity exceeding 50 ml or a '*Maximum Motor cycle Speed*' exceeding 50 km/h.

4.3. Passenger Vehicles (other than Omnibuses)

4.3.1. PASSENGER CAR (MA)

A passenger vehicle, not being an off-road passenger vehicle or a forward-control passenger vehicle, having up to 9 seating positions, including that of the driver.

4.3.2. FORWARD-CONTROL PASSENGER VEHICLE (MB)

A passenger vehicle, not being an off-road passenger vehicle, having up to 9 seating positions, including that of the driver, and in which the centre of the steering wheel is in the forward quarter of the vehicle's '*Total Length*.'

4.3.3. OFF-ROAD PASSENGER VEHICLE (MC)

A passenger vehicle having up to 9 seating positions, including that of the driver and being designed with special features for off-road operation. A vehicle with special features for off-road operation is a vehicle that:

- (a) Unless otherwise '*Approved*' has 4 wheel drive; and
- (b) has at least 4 of the following 5 characteristics calculated when the vehicle is at its '*Unladen Mass*' on a level surface, with the front wheels parallel to the vehicle's longitudinal centreline, and the tyres inflated to the '*Manufacturer's*' recommended pressure:
 - (i) '*Approach Angle*' of not less than 28 degrees;
 - (ii) '*Breakover Angle*' of not less than 14 degrees;
 - (iii) '*Departure Angle*' of not less than 20 degrees;
 - (iv) '*Running Clearance*' of not less than 200 mm;
 - (v) '*Front Axle Clearance*', '*Rear Axle Clearance*' or '*Suspension Clearance*' of not less than 175 mm each.

4.4. Omnibuses

4.4.1. A passenger vehicle having more than 9 seating positions, including that of the driver.

4.4.2. An omnibus comprising 2 or more non-separable but articulated units shall be considered as a single vehicle.

4.4.3. LIGHT OMNIBUS (MD)

An omnibus with a '*Gross Vehicle Mass*' not exceeding 5.0 tonnes.

4.4.4. HEAVY OMNIBUS (ME)

An omnibus with a '*Gross Vehicle Mass*' exceeding 5.0 tonnes.

4.5. Goods Vehicles

- 4.5.1. A motor vehicle constructed primarily for the carriage of goods and having at least 4 wheels; or 3 wheels and a '*Gross Vehicle Mass*' exceeding 1.0 tonne.
- 4.5.2. A vehicle constructed for both the carriage of persons and the carriage of goods shall be considered to be primarily for the carriage of goods if the number of seating positions times 68 kg is less than 50 percent of the difference between the '*Gross Vehicle Mass*' and the '*Unladen Mass*'.
- 4.5.3. The equipment and installations carried on certain special-purpose vehicles not designed for the carriage of passengers (crane vehicles, workshop vehicles, publicity vehicles, etc.) are regarded as being equivalent to goods for the purposes of this definition.
- 4.5.4. A goods vehicle comprising 2 or more non-separable but articulated units shall be considered as a single vehicle.
- 4.5.5. **LIGHT GOODS VEHICLE (NA)**
A goods vehicle with a '*Gross Vehicle Mass*' not exceeding 3.5 tonnes.
- 4.5.6. **MEDIUM GOODS VEHICLE (NB)**
A goods vehicle with a '*Gross Vehicle Mass*' exceeding 3.5 tonnes but not exceeding 12.0 tonnes.
- 4.5.7. **HEAVY GOODS VEHICLE (NC)**
A goods vehicle with a '*Gross Vehicle Mass*' exceeding 12.0 tonnes.

4.6. Trailers

- 4.6.1. A vehicle without motive power constructed to be drawn behind a motor vehicle.
- 4.6.2. **VERY LIGHT TRAILER (TA)**
A single-axled trailer with a '*Gross Trailer Mass*' not exceeding 0.75 tonne.
- 4.6.3. **LIGHT TRAILER (TB)**
A trailer with a '*Gross Trailer Mass*' not exceeding 3.5 tonnes, other than a trailer of Category TA.
- 4.6.4. **MEDIUM TRAILER (TC)**
A trailer with a '*Gross Trailer Mass*' exceeding 3.5 tonnes but not exceeding 10 tonnes.
- 4.6.5. **HEAVY TRAILER (TD)**
A trailer with a '*Gross Trailer Mass*' exceeding 10 tonnes.

- 5. DETAILS OF SUB-CATEGORIES OF VEHICLE CATEGORIES**
- 5.1. 3 Wheeled L-group Vehicles (LB)
- LB1 one wheel at front, 2 at rear.
 - LB2 2 wheels at front, one at rear.
- 5.2. 3 Wheeled L-group Vehicles (LE)
- LE1 one wheel at front, 2 at rear.
 - LE2 2 wheels at front, one at rear.
 - LEM1 up to 450 kg '*Unladen Mass*' and the driver's '*Seat*' is of a saddle type and one wheel at the front, 2 at rear.
 - LEM2 up to 450 kg '*Unladen Mass*' and the driver's '*Seat*' is of a saddle type and 2 wheels at front, one at rear.
 - LEP1 over 450 kg '*Unladen Mass*' and/or the driver's '*Seat*' is not of a saddle type and/or has more than two seating positions and/or has a permanent structure to the rear of and 200 mm above the undeformed upper surface of the driver's '*Seat*' cushion and one wheel at the front, 2 at rear.
 - LEP2 over 450 kg '*Unladen Mass*' and/or the driver's '*Seat*' is not of a saddle type and/or has more than two seating positions and/or has a permanent structure to the rear of and 200 mm above the undeformed upper surface of the driver's '*Seat*' cushion and 2 wheels at front, one at rear.
 - LEG1 over 450 kg '*Unladen Mass*' and constructed primarily for the carriage of goods and one wheel at front, 2 at rear
a vehicle constructed for both the carriage of persons and the carriage of goods shall be considered to be primarily for the carriage of goods if the number of seating positions times 68 kg is less than 50 per cent of the difference between the '*Gross Vehicle Mass*' and the '*Unladen Mass*'.
 - LEG2 over 450 kg '*Unladen Mass*' and constructed primarily for the carriage of goods and 2 wheels at front, one at rear
a vehicle constructed for both the carriage of persons and the carriage of goods shall be considered to be primarily for the carriage of goods if the number of seating positions times 68 kg is less than 50 per cent of the difference between the '*Gross Vehicle Mass*' and the '*Unladen Mass*'.

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- 5.3. Forward-control Passenger Vehicle (MB)
MB1 up to 2.7 tonnes 'GVM'
MB2 over 2.7 tonnes 'GVM'
- 5.4. Off-road Passenger Vehicle (MC)
MC1 up to 2.7 tonnes 'GVM'
MC2 over 2.7 tonnes 'GVM'
- 5.5. Light Omnibus (MD)
MD1 up to 3.5 tonnes 'GVM', up to 12 'Seats'
MD2 up to 3.5 tonnes 'GVM', over 12 'Seats'
MD3 over 3.5 tonnes, up to 4.5 tonnes 'GVM'
MD4 over 4.5 tonnes, up to 5 tonnes 'GVM'
MD5 up to 2.7 tonnes 'GVM'
MD6 over 2.7 tonnes 'GVM'
- 5.6. Light Goods Vehicle (NA)
NA1 up to 2.7 tonnes 'GVM'
NA2 over 2.7 tonnes 'GVM'
- 5.7. Medium Goods Vehicle (NB)
NB1 over 3.5 tonnes, up to 4.5 tonnes 'GVM'
NB2 over 4.5 tonnes, up to 12 tonnes 'GVM'