



Vehicle Standard (Australian Design Rule 14/00 – Rear Vision Mirrors) 2006

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 31 July 2006

[SIGNED]

James Eric Lloyd

Minister for Local Government, Territories and Roads

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0. LEGISLATIVE PROVISIONS**0.1. NAME OF STANDARD**

- 0.1.1. This Standard is the Vehicle Standard (Australian Design Rule 14/00 – Rear Vision Mirrors) 2006.
- 0.1.2. This Standard may also be cited as Australian Design Rule 14/00 — Rear Vision Mirrors.

0.2. COMMENCEMENT

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

0.3. REPEAL

- 0.3.1. This Standard repeals each vehicle standard with the name Australian Design Rule 14/00 — Rear Vision Mirrors that is:
 - (a) made under section 7 of the Motor Vehicle Standards Act 1989; and
 - (b) in force at the commencement of this Standard.
- 0.3.2. This Standard also repeals each instrument made under section 7 of the Motor Vehicle Standards Act 1989 that creates a vehicle standard with the name Australian Design Rule 14/00 — Rear Vision Mirrors, 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.

PURPOSE AND SCOPE

This Australian Design Rule (ADR) is part of the Australian motor vehicle standards system and is a national standard for the purpose of the Motor Vehicle Standards Act 1989.

The function of this Australian Design Rule is to specify requirements for rear vision mirrors to provide the driver with a clear and reasonably unobstructed view to the rear.

APPLICABILITY

This ADR applies to the design and construction of vehicles a set out in the table hereunder.

Vehicle Category	ADR Category Code *	UNECE Category Code *	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	1 July 1988	Nil
Moped 3 wheels	LB	L2	1 July 1988	Nil
Motor cycle	LC	L3	1 July 1988	Nil
Motor cycle and sidecar	LD	L4	1 July 1988	Nil
Motor tricycle	LE	L5	1 July 1988	Nil
Passenger car	MA	M1	1 July 1988	Nil
Forward-control passenger vehicle	MB	M1	1 July 1988	Nil
Off-road passenger vehicle	MC	M1	1 July 1988	Nil
Light omnibus	MD	M2		
up to 3.5 tonnes 'GVM' and up to 12 seats	MD1		1 July 1988	Nil
up to 3.5 tonnes 'GVM' and more than 12 seats	MD2		1 July 1988	Nil
over 3.5 tonnes and up to 4.5 tonnes 'GVM'	MD3		1 July 1988	Nil
over 4.5 tonnes and up to 5 tonnes 'GVM'	MD4		1 July 1988	Nil
Heavy omnibus	ME	M3	1 July 1988	Nil
Light goods vehicle	NA	N1	1 July 1988	Nil
Medium goods vehicle	NB	N2		
over 3.5 tonnes up to 4.5 tonnes 'GVM'	NB1		1 July 1988	Nil
over 4.5 tonnes up to 12 tonnes 'GVM'	NB2		1 July 1988	Nil
Heavy goods vehicle	NC	N3	1 July 1988	Nil
Very light trailer	TA	O1	Not Applicable	
Light trailer	TB	O2	Not Applicable	
Medium trailer	TC	O3	Not Applicable	
Heavy trailer	TD	O4	Not Applicable	

14.1. DEFINITIONS

Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005.

14.2. REQUIREMENTS FOR VEHICLE CATEGORIES MA; MB; MC; AND MD1 ONLY

Any mirror fitted to a vehicle and intended to provide the driver with a view of following or overtaking vehicles shall be designed with a flat reflecting surface

* The category code may also be in the format L₁, L_A etc.

- 14.2.1. An external mirror complying with the requirements of Clause 14.2.3 shall be fitted on the driver's side of the vehicle. An internal rear vision mirror shall also be provided except where the design of the motor vehicle does not provide for internal rear vision. In any case where the requirements of Clause 14.2.2 are not met the vehicle shall be equipped with a passenger's side external rear vision mirror complying with Clause 14.2.3.2.
- 14.2.2. Internal Rear Vision Mirrors
- 14.2.2.1. Field of view - A internal mirror shall be installed that provides all drivers (with eyes located by the '*95th Percentile Eye Ellipses*' tangent contours) with a view to the rear, with an included horizontal angle of at least 20 degrees and sufficient vertical angle to provide a view of a level road surface extending to the horizon beginning at a point not greater than 61 m to the rear of the vehicle when the vehicle is occupied by the driver and 4 passengers or the designated '*Seating Capacity*', if less, based on 68 kg average occupant mass. The line of sight may be partially obscured by seated occupants or by '*Head Restraints*'.
- 14.2.2.2. Mounting
- 14.2.2.2.1. The mirror mounting shall provide a stable support for the mirror, and shall provide for adjustment by tilting in both horizontal and vertical directions.
- 14.2.2.2.2. If the mirror is in the '*Head Impact Area*', the mounting shall deflect, collapse or break away without leaving sharp edges when the reflective surface of the mirror is subjected to a force of not more than 400 N in any '*Forward*' direction that is not more than 45 degrees from the '*Forward*' longitudinal direction.
- 14.2.3. External Rear Vision Mirrors
- 14.2.3.1. Driver's Side
- 14.2.3.1.1. Field of View - An external mirror shall be installed that provides all drivers (with eyes located by the '*95th Percentile Eye Ellipses*' tangent contours) with a view of a level road surface extending to the horizon from a line perpendicular to a plane tangential to the driver's side of the vehicle at the widest point and parallel to the longitudinal axis of the vehicle, extending 2.4 metres out from the tangential plane 11 metres behind the driver's eyes with the '*Seat*' in the rearmost position. The line of sight may be partially obscured by rear body or wheel guard contours.
- 14.2.3.1.2. Mounting - The mirror mounting shall provide a stable support for the mirror and neither the mirror nor the mounting shall protrude further than the widest part of the vehicle body, except to the extent necessary to produce a field of view meeting the requirements of Clause 14.2.3.1.1. The mirror shall not be obscured by the unwiped portion of the windscreen, and shall be adjustable from the driver's seating position. The mirror and mounting shall be free of sharp points or edges that could contribute to pedestrian injury.

- 14.2.3.2. Passenger's Side - Where a left-hand external mirror is provided in compliance with Clause 14.2.1 its mounting shall provide a stable support for the mirror. The mirror and mount shall be free of sharp points or edges that could contribute to pedestrian injury. The mirror need not be adjustable from the driver's seating position.
- 14.2.4. Mirror Construction - The reflectance value of the reflective film employed shall be at least 35 percent. If a mirror is of the selective position prismatic type, the reflectance value in the night driving position shall be at least 4 percent.

14.3. TEST PROCEDURES FOR VEHICLE CATEGORIES MA; MB; MC; AND MD1 ONLY

- 14.3.1. Reflectance shall be determined in accordance with SAE document J964 'Test Procedure for Determining Reflectivity of Rearview Mirror' June 1966.
- 14.3.2. The horizontal angle is measured from the projected eye point rather than the plane of the mirror.

14.4. REQUIREMENTS FOR VEHICLE CATEGORIES MD2; MD3; ME; AND N-GROUP VEHICLES ONLY

- 14.4.1. There shall be affixed to every vehicle a mirror or mirrors so designed and fitted and of such dimensions as to be capable of reflecting to the driver as far as practicable a clear view of the road to the rear of the driver and of any following or overtaking vehicle.
- 14.4.2. At least one such mirror shall be affixed to each side of the vehicle and may project 150 mm beyond the point of '*Overall Width*' of the vehicle, or the '*Overall Width*' of any trailer it may be drawing
- 14.4.2.1. if the vehicle is a goods vehicle or an omnibus;
- 14.4.2.2. if the trailer be of greater width than the drawing vehicle: or
- 14.4.2.3. in any case where, because of the manner in which the vehicle is constructed or equipped, or the fact that it is drawing a trailer or for any other reason, the driver could not, by means of a mirror affixed to the inside of the vehicle, have reflected to the driver as far as practicable a clear view of the road to the rear of the driver and of any following or overtaking vehicle.
- 14.4.3. The mirrors may project 230 mm on each side beyond the point of '*Overall Width*' of the vehicle provided that the mirror is capable of collapsing to 150 mm.
- 14.4.4. All such mirrors fitted to vehicles shall be at least 150 square centimetres in area.
- 14.4.5. Any mirror fitted to a vehicle intended to provide the driver with a view of following or overtaking vehicles, shall be designed with a flat reflecting surface.

14.5. REQUIREMENTS FOR L-GROUP VEHICLES ONLY

All vehicles shall be equipped with 2 rear vision mirrors having the same curvature (including flatness), symmetrically placed relative to the centre of the steering control and of such dimensions as to be capable of reflecting to the driver as far as practicable a clear view of the road to the rear of him and of any following or overtaking vehicle. If a mirror has a convex surface it shall have a radius of curvature of not less than 1.2 metres.

14.6. ALTERNATIVE STANDARDS

The technical requirements of ECE R 46/00 or 46/01 'Rear View Mirrors' - shall be deemed to be equivalent to the technical requirements of this Rule, except that all mirrors must have a flat reflecting surface.