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
CONTENTS

0. LEGISLATIVE PROVISIONS ................................................................. 3

PURPOSE AND SCOPE ................................................................. 3

APPLICABILITY ................................................................................. 3

14.1. DEFINITIONS ................................................................................. 4

14.2. REQUIREMENTS FOR VEHICLE CATEGORIES MA; MB; MC; AND
      MD1 ONLY .................................................................................... 4

14.3. TEST PROCEDURES FOR VEHICLE CATEGORIES MA; MB; MC; AND
      MD1 ONLY .................................................................................... 6

14.4. REQUIREMENTS FOR VEHICLE CATEGORIES MD2; MD3; ME; AND
      N-GROUP VEHICLES ONLY ......................................................... 6

14.5. REQUIREMENTS FOR L-GROUP VEHICLES ONLY ...................... 7

14.6. ALTERNATIVE STANDARDS ....................................................... 7
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.
<table>
<thead>
<tr>
<th>Vehicle Category</th>
<th>ADR Category Code</th>
<th>UNECE Category Code</th>
<th>Manufactured on or After</th>
<th>Acceptable Prior Rules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moped 2 wheels</td>
<td>LA</td>
<td>L1</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Moped 3 wheels</td>
<td>LB</td>
<td>L2</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Motor cycle</td>
<td>LC</td>
<td>L3</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Motor cycle and sidecar</td>
<td>LD</td>
<td>L4</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Motor tricycle</td>
<td>LE</td>
<td>L5</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Passenger car</td>
<td>MA</td>
<td>M1</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Forward-control passenger vehicle</td>
<td>MB</td>
<td>M1</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Off-road passenger vehicle</td>
<td>MC</td>
<td>M1</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Light omnibus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 3.5 tonnes ‘GVM’ and up to 12 seats</td>
<td>MD1</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>up to 3.5 tonnes ‘GVM’ and more than 12 seats</td>
<td>MD2</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>over 3.5 tonnes and up to 4.5 tonnes ‘GVM’</td>
<td>MD3</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>over 4.5 tonnes and up to 5 tonnes ‘GVM’</td>
<td>MD4</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Heavy omnibus</td>
<td>ME</td>
<td>M2</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Light goods vehicle</td>
<td>NA</td>
<td>N1</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Medium goods vehicle</td>
<td>NB</td>
<td>N2</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>over 3.5 tonnes up to 4.5 tonnes ‘GVM’</td>
<td>NB1</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>over 4.5 tonnes up to 12 tonnes ‘GVM’</td>
<td>NB2</td>
<td></td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Heavy goods vehicle</td>
<td>NC</td>
<td>N3</td>
<td>1 July 1988</td>
<td>Nil</td>
</tr>
<tr>
<td>Very light trailer</td>
<td>TA</td>
<td>O1</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Light trailer</td>
<td>TB</td>
<td>O2</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Medium trailer</td>
<td>TC</td>
<td>O3</td>
<td>Not Applicable</td>
<td></td>
</tr>
<tr>
<td>Heavy trailer</td>
<td>TD</td>
<td>O4</td>
<td>Not Applicable</td>
<td></td>
</tr>
</tbody>
</table>

### 14.1 DEFINITIONS


### 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, L2, 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 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 minor 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 minor 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 windscreens, 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 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 minors 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 minors 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 fatness), 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 m 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.