

Vehicle Standard (Australian Design Rule 42/04 – General Safety Requirements) 2005

Made under section 7 of the Motor Vehicle Standards Act 1989

Explanatory Statement

Issued by the authority of the Minister for Transport and
Regional Service

November 2005

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1. LEGISLATIVE CONTEXT

Vehicle Standard (Australian Design Rule 42/04 — General Safety Requirements) 2005 is made under the *Motor Vehicle Standards Act 1989* (the Act). The Act enables the Australian Government to establish nationally uniform standards for road vehicles when they are first supplied to the market in Australia. The Act applies to such vehicles whether they are manufactured in Australia or are imported as new or second hand vehicles.

The making of the vehicle standards necessary for the Act's effective operation is provided for in section 7 which empowers the Minister to "determine vehicle standards for road vehicles or vehicle components".

Australian Design Rule (ADR) 42/04 was originally determined in *Road Vehicle (National Standard) Determination No 5 of 2003*. ADR 42/04 is being remade to comply with the requirements of the *Legislative Instruments Act 2003* (LIA) and to enable its registration in accordance with the requirements of the Federal Register of Legislative Instruments. Additionally several minor amendments to the existing content are being made.

2. IMPACT OF THE LEGISLATIVE INSTRUMENTS ACT 2003

Until now ADRs have been determined in “packages”, that is, a single determination will create, amend and repeal multiple ADRs. In example, Determination 1 of 1991 amended 32 ADRs and Determination 2 of 2003 created one new ADR and amended 13. The determination is the legislative instrument, not the ADR itself.

The intent of the LIA is to allow easy access to all legislative instruments and to be able to track their history and changes. The current form of determination used to create vehicle standards does not allow for this as it is difficult to isolate the change history of individual ADRs and the legislative instruments (the determinations) do not contain the information of importance to those using the ADRs – the vehicle standards.

In consultation with the Attorney General’s Department it has been agreed that the most effective solution is to remake each ADR as a separate vehicle standard determined under section 7 of the Act. In doing this, there is no need to backcapture the old determinations and the new layout better fits the intent of the LIA. With each ADR as a separate vehicle standard it will be possible for interested parties to view the ADR and its change history on the Federal Register of Legislative Instruments.

3. CONTENT AND EFFECT OF ADR 42/04 - GENERAL SAFETY REQUIREMENTS

3.1. Overview of the ADR

The function of this Australian Design Rule is to specify design and construction requirements to ensure safe operation of vehicles. This includes bonnet latches, diesel engines, controls, rear bumpers for semi-trailers, electrical wiring, exhaust outlets, external and internal protrusions, field of view, lavatory closets, urinals basins and sinks, wheel guards, brake tubing and hoses, reverse gear, sleeper berths, television and visual display units, windows and ventilation, audible warning devices, stability requirements, retractable axle, demisting of windscreens, windscreen wipers and

washers and tyre and rim selection. This ADR is a repository for many safety issues that do not warrant a standard in their own right.

3.2. Changes to the ADR

The following changes have been made to the ADR.

- Format. The ADR is now presented as a single column of text rather than two columns.
- Spelling and grammar. Several typographical errors have been corrected.
- Replace clause 1 with the following.

“ 1. LEGISLATIVE PROVISIONS

1.1 NAME OF STANDARD

1.1.1 This Standard is the Vehicle Standard (Australian Design Rule 42/04 – General Safety Requirements) 2005.

1.1.2 This Standard may also be cited as Australian Design Rule 42/04 — General Safety Requirements.

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 each vehicle standard with the name Australian Design Rule 42/04 — General Safety Requirements 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 a vehicle standard with the name Australian Design Rule 42/04 — General Safety Requirements, 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. “

- Replace clause 4.1 with “Refer to Vehicle Standard (Australian Design Rule Definitions and Vehicle Categories) 2005”
 - Add the following definition to clause 4.1 “ *‘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. “
 - Replace clauses 7.1.2 and 7.1.2.1 with the following:
 - “ 7.1.2. Failure of any non-mechanical component of the steering system must not prevent effective steering of the vehicle.
 - 7.1.3. Vehicles with *‘full-power steering equipment’* shall be capable of providing steering failure and defect visual warning signals to the driver.
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7.1.4. Vehicles complying with the technical requirements of UNECE R 79 shall be deemed to comply with Clauses 7.1.2 and 7.1.3. “

The text of clause 1 has been provided by the Attorney General’s Department to facilitate remaking each ADR as a separate legislative instrument. This text repeals and replaces each ADR as a vehicle standard independently of the Determination under which it was made. Once all ADRs made under a particular Determination have been remade, that Determination is repealed.

Changes to clause 4.1 have been made to reference the ADR Definitions and Vehicle Categories as remade for the LIA requirements.

The replacement of clauses 7.1.2 and 7.1.2.1 with 7.1.2 – 7.1.4 allow for the use of “steer-by-wire” control systems, that is a combination of mechanical and electrical systems to control a vehicle.

3.3. Documents Incorporated by Reference

This section lists any documents referenced in the vehicle standard and how they can be obtained.

- Australian Design Rules can be purchased on CD-ROM from the Department of Transport and Regional Services. As the ADRs are remade, they will also be available at <http://www.comlaw.gov.au>.
 - Australian Design Rule – Definitions and Vehicle Categories
 - SAI Global can provide both Australian standards and English translations of many international standards. Their website is accessible at <http://www.standards.com.au/catalogue/script/search.asp>.
 - Australian Standard 2513: 1982 Electrical Connections for Trailer Vehicles
 - Australian Standard 3001-1981 Electrical Installations in Caravans and Caravan Parks
 - Australian Standard 1973-1993 “Pneumatic Tyres – Passenger Car, Light Truck and Truck/Bus – Retreading and Repair Process”
 - Australian Standard 2230-1979: “New Pneumatic Highway Tyres other than Passenger Car Tyres”
 - Australian Standard 2230-1990 “Pneumatic Tyres Light Truck and Truck/Bus-New”
 - International Standards Organisation ISO 1185 – 1997 Road vehicles -- Connectors for the electrical connection of towing and towed vehicles -- 7-pole connector type 24 N (normal) for vehicles with 24 V nominal supply voltage
 - Japanese Industrial Standards (JIS-D4202) “Dimensions of Tires” and (JIS-D4218) “Contours of Rims”
 - Japanese Industrial Standard JIS D4230-1986 – “Tires for Automobiles”
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- Society of Automotive Engineers documents can be purchased from their website <http://www.sae.org>.
 - Society of Automotive Engineers SAE J 560 – 1998 Primary and Auxiliary Seven Conductor Electrical Connector for Truck-Trailer Jumper Cable
- Federal Motor Vehicle Safety Standards can be obtained from the US Department of Transport, <http://www.nhtsa.dot.gov/>.
 - FMVSS 118-FR VOL36 No. 232-02.12.1971- Power Operated Window System
 - FMVSS 118-FR VOL58 No. 60-31.03.1998
 - (US) Federal Motor Vehicle Safety Standard 119 – 1973; FR38-218: “New Pneumatic Tyres for Vehicles other than Passenger Cars”
- UNECE Regulations are available from their website, <http://www.unece.org/trans/main/wp29/wp29regs.html>.
 - UN ECE Regulation 54/00 – “Tyres for Commercial Vehicles”
- European Tyre and Rim Technical Organisation (E.T.R.T.O.) Data Book can be purchased from ETRTO <http://www.etrto.org/>.
- Tyre and Rim Standards Manual - Tyre and Rim Association of Australia
- (US) Tire and Rim Association Inc. Year Book
- Japan Automobile Tire Manufacturers Association Year Book

4. CONSULTATION ARRANGEMENTS

4.1. General Consultation Arrangements

It has been longstanding practice to consult widely on proposed new or amended vehicle standards. For many years there has been active collaboration between the Federal and the State/Territory Governments, as well as consultation with industry and consumer groups. Much of the consultation takes place within institutional arrangements established for this purpose. The analysis and documentation prepared in a particular case, and the bodies consulted, depend on the degree of impact the new or amended standard is expected to have on industry or road users.

Depending on the nature of the proposed changes, consultation could involve the Technical Liaison Group (TLG), Transport Agencies Chief Executives (TACE), and the Australian Transport Council (ATC).

- TLG consists of representatives of government (Australian and State/Territory), the manufacturing and operational arms of the industry (including organisations such as the Federal Chamber of Automotive Industries and the Australian Trucking Association) and of representative organisations of consumers and road users (particularly through the Australian Automobile Association).
 - TACE consists of the chief executives of Australian and State/Territory departments of transport and road vehicle administrations.
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- ATC consists of the Australian, State/Territory and New Zealand Ministers with responsibility for transport issues.

Editorial changes and changes to correct errors are settled by agreement between the Department of Transport and Regional Services and the National Transport Commission. This process is only invoked where the amendments do not vary the intent of the vehicle standard.

New standards, or significant changes that increase the stringency of existing standards, are subject to a vote by ATC Ministers. Unless disapproved by a majority of ATC Ministers, the Minister for Local Government, Territories and Roads, can then determine the new or amended standards, under the authority of the Minister for Transport and Regional Services. Proposals that are regarded as significant need to be supported by a Regulation Impact Statement meeting the requirements of the Office of Regulation Review as published in *A Guide to Regulation*.

4.2. Specific Consultation Arrangements for this Vehicle Standard

The amendments to the technical content of this ADR have been discussed with TLG and TACE and their comments have been taken into account. No consultation has been carried out with regards to the necessary changes to comply with the LIA as they are purely administrative.

The Department of Transport and Regional Services has sought advice and assistance from the Office of Legislative Drafting and the Federal Register of Legislative Instruments on how best to handle the backcapture requirements of the LIA.

The Office of Regulation Review has agreed that a regulation impact statement is not required as only minor amendments that do not increase the stringency of the ADR have been made.

4.3. Summary of Changes to the Technical Content

The original rule insists on the steering system having a direct mechanical connection between the steering wheel and the road wheels. There is a growing trend of vehicles equipped with steer-by-wire steering systems, which have no direct mechanical linkage and instead rely on electrical signals sent from the steering wheel to controllers acting directly on the road wheels. The change allows for such steering systems.
