

# Vehicle Standard (Australian Design Rule 25/01 – Anti-Theft Lock) 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 25/01 Anti-Theft Lock) 2006.
- 0.1.2. This Standard may also be cited as Australian Design Rule 25/01 Anti-Theft Lock.
- 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 25/01 Anti-Theft Lock 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 25/01 Anti-Theft Lock, 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 nation standard for the purposes of the Motor Vehicle Standards Act 1989.

The function of this Australian Design Rule is to specify requirements for a lock to inhibit unauthorised use of a vehicle and to minimise the possibility of inadvertent adjustment of steering locks to the anti-theft position when the vehicle is in motion.

#### APPLICABILITY AND IMPLEMENTATION

This ADR applies to the design and construction of vehicles as set out in the table hereunder. The /01 Rule differs from the /00 Rule in that it adds new technical requirements (Section 25.3 - a wear producing test and a torque strength test) derived from ECE Regulation 18/01. The ECE R 18/01 is an acceptable Alternative Standard

There are no 'Acceptable Prior Rules' in the Applicability Table. The Package 9 issue differs only in the explanatory text of this Applicability Section.

Vehicle Category	ADR Category Code *	UNECE Category Code*	Manufactured on or After	Acceptable Prior Rules
Moped 2 wheels	LA	L1	Not Applicable	
Moped 3 wheels	LB	L2	Not Applicable	
Motor cycle	LC	L3	Not Applicable	
Motor cycle and sidecar	LD	L4	Not Applicable	
Motor tricycle	LE	L5	Not Applicable	
Passenger car	MA	M1	1 Jan 1991	Nil
Forward-control passenger vehicle	MB	M1	1 Jan 1991	Nil
Off-road passenger vehicle	MC	M1	1 Jan 1991	Nil
Light omnibus	MD	M2		
up to 3.5 tonnes 'GVM' and up to 12 seats	MD1		1 Jan 1991	Nil
up to 3.5 tonnes 'GVM' and more than 12 seats	MD2		Not Applicable	
over 3.5 tonnes and up to 4.5 tonnes 'GVM'	MD3		Not Applicable	
over 4.5 tonnes and up to 5 tonnes 'GVM'	MD4		Not Applicable	
Heavy omnibus	ME	M3	Not Applicable	
Light goods vehicle	NA	N1	Not Applicable	
Medium goods vehicle	NB	N2		
over 3.5 tonnes up to 4.5 tonnes 'GVM'	NB1		Not Applicable	
over 4.5 tonnes up to 12 tonnes 'GVM'	NB2		Not Applicable	
Heavy goods vehicle	NC	N3	Not Applicable	
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	

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 $<sup>^{\</sup>ast}$  The category code may also be in the format  $L_{l},\,L_{A}$  etc.

#### 25.0. **DEFINITIONS**

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

#### 25.1. FUNCTIONS OF LOCK POSITIONS

- 25.1.1. An 'engine on' position shall permit the normal functioning of the engine.
- 25.1.2. An 'engine off' position shall prevent normal functioning of the engine.
- 25.1.3. An 'anti-theft' position shall prevent normal functioning of the engine and also inhibit unauthorised use of the vehicle.

#### 25.2. DESIGN OF LOCK

- 25.2.1. The lock shall be a 5 or more tumbler lock or other lock of 'Approved' type giving equivalent protection. The probability of the key operating the lock of another vehicle in the same model range shall be not greater than one in out thousand.
- 25.2.2. The lock shall provide for at least the functions nominated in Section 25.1
- 25.2.3. It shall not be possible to adjust the lock from the 'engine on' position to the 'anti-theft' position without passing through the 'engine off' position.
- 25.2.4. When the key is removed the lock shall be in the 'anti-theft' position,
- 25.2.5. With the lock in the 'anti-theft' position it shall be impossible either to steer the vehicle, or to engage the forward drive gears, or to release a brake, without removal or destruction of the device.
- 25.2.6. Where the requirements of Clause 25.2.5 are met by a device which prevents steering of the vehicle, the following additional requirements shall apply.
- 25.2.6.1. It shall not be possible to adjust the lock from the 'engine on' position to the 'anti-theft' position by a single rotary or linear motion of the key.
- 25.2.6.2. Where the design of the lock to achieve the requirements of Clause 25.2.6.1 embodies 2 or more separate rotary movements of the locking device, adjustment from the 'engine-oft position to the 'anti-theft' position must require either.
- 25.2.6.2.1. a design linear axial movement of the key of not less than 2 mm; or
- 25.2.6.2.2. actuation of an additional blocking device separately controlled. The gear selector may constitute such a blocking device.

#### 25.3. PERFORMANCE REQUIREMENTS FOR STEERING LOCKS

- 25.3.1. A steering lock shall be subjected to 2,500 cycles in each direction of the wear producing test specified in Appendix 1.
  - After completion of the test the steering lock shall continue to comply with the requirements of Clauses 25.2.4, 25.2.5, 25.2.6 and 25.3.2.
- 25.3.2. When the steering lock is activated in the anti-theft position, it shall withstand without damage to the steering mechanism likely to

compromise safety, the application of a minimum torque of 20 daN.m in both directions under static conditions.

#### 25.4. ALTERNATIVE STANDARDS

The technical requirements of ECE R. 18/01 'Power Driven Vehicles - Protection Against Unauthorised Use, shall be deemed to be equivalent to the technical requirements of this Rule.

#### **APPENDIX 1**

(Clause 253.1 refers.)

## WEAR-PRODUCING TEST PROCEDURE FOR PROTECTIVE DEVICES ACTING ON THE STEERING

#### 1. TEST EQUIPMENT

- 1.1. The test equipment shall consist of:
- 1.1.1. a fixture suitable for mounting the sample steering complete with the protective device attached.
- 1.1.2. a means for activating and de-activating the protective device which shall include the use of the key.
- 1.1.3. a means for rotating the steering shaft relative to the protective device.

#### 2. TEST METHOD

2.1. A sample of the steering complete with the protective device is attached to the fixture referred to in paragraph 1.1.1 above.

- 2.2. One cycle of the test procedure shall consist of the following operations:
- 2.2.1. Start position. The protective device shall be de-activated and the steering shaft shall be rotated to a position which prevents engagement of the protective device, unless it is of the type which permits locking in any position of the steering.
- 2.2.2. Set to activate. The protective device shall be moved from the de-activated to the activated position, using the key.
- 2.2.3. \*\ Activated. The steering shaft shall be rotated such that the torque on it, at the instant of engagement of the protective device shall be 5.88 Nm  $\pm$  025.
- 2.2.4. De-activated. The protective device shall be de-activated by the normal means, the torque being reduced to zero to facilitate disengagement.
- 2.2.5. \*\*/ Return. The steering shaft shall be rotated to a position which prevents engagement of the protective device.
- 2.2.6. Opposite rotation. Repeat procedures described in paragraphs 2.2.2, 2,2.3, 2.2.4, and 2.2.5, but in the opposite direction of rotation of the steering shaft.
- 2.2.7. The time interval between two successive engagements of the device shall be at least 10 seconds.
- 2.3. The wear-producing cycle shall be repeated for the number of times specified in Clause 25.3.1 of this Rule.

\*/ If the protective device permits locking in any position of the steering, the procedures described in this paragraph and in paragraph 2.2.5. shall be omitted.

\*\*/ If the protective device permits locking in any position of the steering the procedures described in paragraphs 2.2.3. and 2.2.5. shall be omitted.