INTRODUCTION

The information provided in this Vehicle Standards Information (VSI) sheet applies primarily to motor cycles and mopeds built before July 1988. It is a summary of the minimum standards a motor cycle or moped must comply with to be eligible for normal registration.

Vehicles built after June 1988 must comply with the applicable Australian Design Rules (ADR) except that the ADR for lighting requirements does not apply to vehicles built before October 1991. A summary of the ADRs together with application dates is contained in VSI 22.

An approved compliance plate must also be fitted to vehicles manufactured after June 1988 when presented for first registration.

DEFINITIONS

"Motor cycle" means a two wheeled motor vehicle and includes a motor cycle with a trailer, fore car or side car attached.

"Moped" means a two or three wheeled motor vehicle, not being a power-assisted pedal cycle, with a cylinder capacity not exceeding 50ml (50cc) and a maximum speed not exceeding 50km/h.

Note

(i) Apart from some specific construction requirements for a moped set out in this information sheet, all safety, registration and driver licence requirements for a motor cycle also apply to a moped.

(ii) Some motor cycles and mopeds are manufactured for agricultural or off road use and do not comply with the Standards for Registration. These vehicles are not eligible for normal registration.

(iv) Vehicles fitted with an engine capacity of 200 watts or less have been declared not to be motor vehicles for the purposes of registration. However, although these vehicles are exempt from registration they must still comply with the applicable construction and use requirements for that type of vehicle if they are to be used on any road or in a public place.

REQUIREMENTS

1. General Safety:
A vehicle must be constructed so that it meets the requirements of the applicable standards, is safe to use and unlikely to cause a danger to any person.

2. Tyres:
All tyres must be of a type suitable for highway use, have load and speed ratings appropriate to the vehicle and be free from any feature likely to make use of the vehicle unsafe. Tyres carrying markings or codes indicating the tyre is unsuitable for highway use are not acceptable.

3. Lighting Equipment and Reflectors:
3.1 General

• Where two or more lamps of the same kind or type are fitted, they must be at the same height and be symmetrically located about the vehicle's longitudinal axis. Where only one lamp of a type or kind is fitted it must be mounted centrally. Lighting requirements for motor cycles and mopeds manufactured after September 1991 are contained in Vehicle Standards Information sheet No 10.

3.2 Head Lamps

• Motor cycles and mopeds must be fitted with at least one forward facing headlamp. The centre of a low beam headlamp fitted to a vehicle manufactured after June 1953 must not be less than 500mm and not more than 1.4m above the ground. Two headlamps may be fitted within the above dimensions, either one above the other or side by side at the same level above the ground and at equal distances from the longitudinal axis of the motor cycle.

Motor cycles manufactured after 1934 that are capable of a maximum speed exceeding 60km/h must have headlamps providing both dipped and undipped beams, and must be equipped with a headlamp dipping device.
• The effective range of headlamps must be at least the following:
  (i) high beam headlamp: not less than 50 metres
  (ii) no dipping device fitted: not less than 25 metres
  (iii) dipped headlamp: not less than 25 metres
  (iv) headlamp on a motor cycle built before 1931: not less than 12 metres
  (v) headlamp on a moped: not less than 12 metres

3.3 Brake Lamps
• Motor cycles and mopeds manufactured after 1934 must be fitted with at least one red brake lamp. Brake lamps must be fitted so that they are not less than 350mm and not more than 1.5m above the ground.
• For motor cycles and mopeds manufactured after 1974 the brake lamps should operate when either the front or rear brake is applied. However, motor cycles or mopeds manufactured before this date may be fitted with brake lamps that are operated only when the rear brake is applied.
• In addition to being switched by brake application, the brake lamps may also be switched by a device sensing sudden deceleration.

3.4 Red Rear Lamps
• All motor cycles and mopeds must be fitted with at least one red rear lamp (tail lamp), which when lit shows a clear red light visible from 200 metres to the rear and does not use more than 7 watts of power.
• The lamp must be mounted so that it is not higher than 1.5m above the ground.

3.5 Number Plate Lamp
• All motor cycles and mopeds must be fitted with a number plate lamp which when lit illuminates the rear number plate with a white light so that the letters and figures are easily discernible at a distance of 20 metres. The lamp must not project white light directly to the rear. The tail lamp, brake lamp and number plate lamp may be incorporated in one housing.

3.6 Turn Signal Lamps
• Motor cycles and mopeds manufactured after June 1975 must be fitted with turn signal lamps. The two front lamps must show amber or white light and the two rear lamps must show amber light. Pairs of lamps must be not less than 300mm apart, and must be between 350mm and 1.5m above the ground.
• When operated the signal lamps must flash at a rate of between 45 and 120 times per minute and be visible from a distance of 30 metres.
• All turn signal lamps must be operable by the rider from the normal riding position, and must be equipped with an audible or visible tell-tale indicator.

3.7 Fog Lamps
• Vehicles may be fitted with one or two white or amber front fog lamps and one or two red rear fog lamps.
• The centre of the front fog lamps must not be higher than the centre of the low beam headlamp. If two lamps of a kind are fitted they must be at the same height and symmetrically mounted. The centre of a rear fog lamp must not be higher than 1.5m above the ground and not closer than 100mm from the centre of any brake lamp.

3.8 Reflectors
• At least one red reflector must be fitted to the rear of a motor cycle, sidecar or moped. The centre of a reflector fitted to a motor cycle or moped must not be more than 1.5m above the ground.

3.9 Front Lamp on a Side Car
• A side car attached to a motor cycle or moped built after June 1953 must be fitted with a lamp not exceeding 7 watts which when lit shows a white or yellow light to the front of the vehicle visible from a distance of 200 metres.
• The lamp must be fitted to the front of the side car so that the centre is not more than 150mm from the extreme left edge of the side car.

4. Horn: (Audible Warning Instrument)
• An efficient horn must be fitted which when operated is capable of warning other road users of the presence of the vehicle.
• Sirens, whistles or horns which emit an alternating or variable tone, or sound like a warning device fitted to emergency vehicles, are not allowed.

5. Rear Vision Mirrors
• At least one effective rear vision mirror must be fitted on the right hand side of the motor cycle or moped. Two mirrors must be fitted to any motor cycle or moped manufactured after June 1975, or in all other cases if any feature of the motor cycle or its load renders one mirror by itself ineffective.

Where more than one rear vision mirror is fitted, every mirror must be flat or every mirror must be convex. A combination of flat and convex is not allowed.

The radius of curvature of convex mirrors must be not less than 1.2m.

6. Braking Equipment:
• All motor cycles and mopeds must have a braking system which has either:
  (i) two independent braking systems operated by a foot pedal and hand lever or two hand levers; or
  (ii) one braking system operating on all wheels but which retains braking on at least one wheel after any component failure.
The braking system of motor cycles and mopeds manufactured after February 1976 must comply with the appropriate issue of Australian Design Rule No. 33.

Hydraulic brake hoses fitted to motor cycles and mopeds manufactured after June 1975 must comply with the appropriate issue of Australian Design Rule No. 7.

7. **Guards**

7.1 **Mudguards**

- A mudguard which effectively prevents objects being thrown upward and to the rear must be fitted to each wheel. A mudguard is also required on all side-car wheels.

7.2 **Chain guard**

- All chain driven motor cycles and mopeds must have effective provision to prevent any part of a rider's body or clothing being caught in the chain or sprockets. This protection may be provided by the frame or by a separate chain guard.

- The chain guard should extend from and including the front sprocket to a point not less than 300mm to the rear of the rearmost footrest or, to a point vertically above the centre of the rear sprocket.

8. **Noise Prevention:**

- An effective exhaust muffler must be securely fitted so that all the exhaust gases pass through it. The muffler must not be fitted with a cut-out or bypass.

- All motor cycles and mopeds manufactured after June 1975 must comply with the applicable Australian Design Rule for noise emissions.

9. **Miscellaneous:**

- All motor cycles and moped must have an engine stop switch.

- All motor cycles and mopeds manufactured after June 1988 must have a clutch which enables the driver to disengage the engine from the transmission at any speed.

- Australian Design Rule No. 57/00, covering special requirements for motor cycles and mopeds, applies to vehicles manufactured after June 1988.

- All motor cycles and mopeds manufactured after June 1988, apart from Individually Constructed Vehicles (ICVs), must be fitted with an approved Compliance Plate when presented for first registration.

- All motor cycles and mopeds must be fitted with footrests for the driver and for any passenger for whom a seating position is provided.

- Handlebars on all motor cycles and mopeds must be at least 500mm wide and not more than 900mm wide, and must be mounted symmetrically. The handgrips must be not more than 380mm higher than the point of attachment of the handlebars to the vehicle.

The horizontal distance from the mid-point between the head-stem bearings to the front axle must be not more than 550 mm.

- Every motor cycle and moped should be fitted with a stand capable of supporting the vehicle substantially upright when stationary. Any stand must have effective provision for holding it clear of the road under normal operating conditions.