



Introduction

Motorcycle riders are vulnerable road users who are less protected than car drivers and have a greater chance of being seriously injured in a crash.

Crash data for the period 2017 – 2019 indicates that motorcycle rider fatalities accounted for 17 per cent of all road fatalities in NSW over this period and 22 per cent of serious injuries. Young riders and novice riders are over-represented in crash statistics, accounting for 44 per cent of all rider casualties.

The Motorcycle Graduated Licensing Scheme (MGLS) prepares novice riders to be safe, low risk road users through a staged approach to rider licensing. It requires new riders to pass through three licensing stages before obtaining an unrestricted rider licence with restrictions eased as they pass through each stage. It involves training and testing which is specifically designed to help new riders gain basic riding skills before riding on the road.

The Learner Approved Motorcycle Scheme (LAMS) is one of the MGLS components that identifies motorcycles that are considered suitable for motorcycle learners and novice riders after progressing from a motorcycle learner licence. It is aimed at improving the safety of motorcycle riders.

Under the *Road Transport (Driver Licensing) Regulation 2017*, a novice rider must not ride a motorcycle or a motor trike on a road or road related area unless the motorcycle or the motor trike is listed in the Transport for NSW's publication *Approved Motorcycles for Novice Riders* (the LAMS list).

Learner Approved Motorcycle Scheme (LAMS)

A motorcycle or a motor trike is only eligible to be included on the LAMS list if it:

- is a production motorcycle that has an internal combustion engine with a capacity of not more than 660 cubic centimetres (cc); and
- has a power-to-weight ratio that does not exceed 150kW/tonne, and
- has not been modified (other than for an allowable modification; see below).

Motorcycles produced prior to 1960 that do not exceed 660 cc are included in the scheme.

All models under 250cc are included in the LAMS list except:

- Suzuki RGV250
- Kawasaki KR250 (KR-1 and KR1s models)
- Honda NSR250
- Yamaha TZR250
- Aprilia RS250

Motorcycles fitted with electric motors with a power output not in excess of 25kW are also included.

Individually built (custom made) motorcycles will not be considered for inclusion on the LAMS list.

What does the power-to-weight ratio mean?

The power-to-weight ratio is a measure of a vehicle's performance. It is a better indicator of motorcycle performance than engine capacity alone.

The power-to-weight ratio is determined by dividing the power output (kilowatts) by the tare weight of the motorcycle (kg) + 90kg (for rider and fuel). The result is then multiplied by 1000 (to convert to kW per tonne), see example below.

$$\frac{\text{Engine power (kW)}}{\text{Tare weight (ie mass of motorcycle in kg) + 90kg (80kg rider weight + 10kg fuel)}} \times 1000$$

Note:

- The manufacturer determines the engine power and tare weight of the motorcycle. The data are sourced from the Australian Design Rules compliance.
- 90kg is the laden weight used in Australian Design Rule ADR 33 'Brake Systems for Motorcycles and Mopeds'. This figure is applied regardless of the actual weight of the rider.

Modifications are not permitted

For a motorcycle to be approved for use by novice riders, it must not be modified from its manufacturer's standard specifications, other than the following allowable modifications:

Accessibility modifications

An accessibility modification of a Learner Approved Motorcycle is allowed provided it does not increase the power output of the motorcycle, nor reduce the tare weight of the motorcycle by more than one percent from the original tare weight. The exemption is provided to ensure fair and equitable access for customers with disability. Any vehicle modifications completed must be approved by a licensed certifier.

Minor modifications

A learner approved motorcycle that is modified by incorporating optional components offered by its manufacturer, or otherwise modified so that it continues to comply with the manufacturer's specifications is allowed, so long as it does not increase the power output of the motorcycle, nor reduce the tare weight of the motorcycle.

The following other minor modifications are also allowed provided it does not increase the power nor reduce the weight:

- a) Replacement of parts or components by identical parts or components.

- b) Replacement parts or components with parts or components with equivalent functional performance.
 - c) Optional parts or components as prescribed by the motorcycle's manufacturer.
- Minor modifications that are allowed do not need to be approved by a licensed certifier.

Where can I find a list of LAMS approved motorcycles?

You can access the LAMS approved motorcycles list from Transport for NSW website at:

<https://roads-waterways.transport.nsw.gov.au/roads/licence/rider/approved-novice-motorcycles.html>