

Vehicle Standards Instruction (Motorbike 5.3)

Noise Emissions for Motorbikes

Released June 2016



Purpose of this Vehicle Standards Instruction (VSI) is to provide improved understanding of the regulations related to limits on noise emission from “L” group vehicles (motorbike).

Definitions:

ESMP - “Engine Speed at Maximum Power”

Motorbike: for the purpose of this document motorbikes will include; Motortrike and Moped.

Legal Requirements:

Motorbikes operating on Queensland roads must comply with the legal requirements detailed in the *Transport Operations (Road Use Management—Vehicle Standards and Safety) Regulation 2010*. The requirements include the limits on external noise.

Section 1: Motorbikes manufactured prior to 1 March 1985.

The *Transport Operations (Road Use Management—Vehicle Standards and Safety) Regulation 2010*, Schedule 1, requires that the stationary noise level must not exceed: 100 dB(A) at 50% of Engine Speed at Maximum Power (ESMP).

Markings: No marking or labelling requirements apply.

Section 2: Motorbikes manufactured after 1 March 1985 (Second Edition ADR 39) but before 1 March 1988.

Stationary noise level requirements: Motorbike sound level must not exceed: 94dB(A) at 50% of ESMP.

Markings: No marking or labelling requirements apply.

Section 3: Motorbikes manufactured after 1 March 1988 (Second Edition ADR 39A) but before July 1988.

Stationary noise level requirements: Motorbike sound level must not exceed: 94dB(A) at 50% of ESMP.

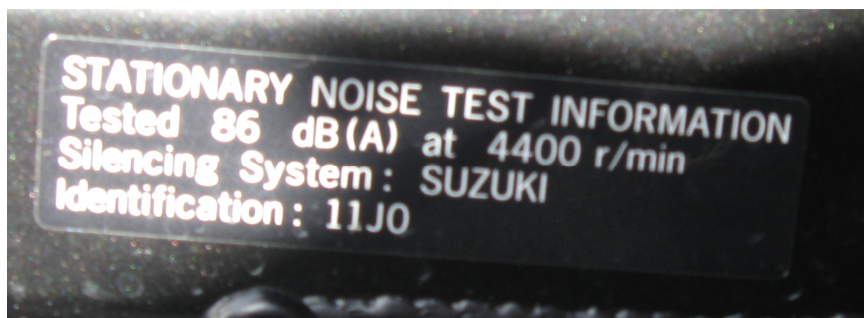
Markings: The silencing system components shall be marked with;

- The trade name or mark of the manufacturer of the silencing system and of its components; and the trade description given by the manufacturer. Such markings shall be clearly legible and be indelible.

Labelling: The motorbikes shall carry information in accordance with the following requirements;

- The information shall be embossed or etched in a readily visible position or carried on a label of plastic or metal which is welded, riveted or otherwise permanently attached in a similar visible position;
- The information shall be affixed so that it cannot be removed without being destroyed or defaced;
- The information shall be in English language in block letters and numerals which shall be of a colour contrasting with their background and which shall be not less than 3 mm in height; and
- The information shall comprise the heading “STATIONARY NOISE TEST INFORMATION” and a statement containing the recorded stationary sound level value and the 50 percent ESMP value in the following format;

TesteddB(A) atrpm
Silencing System: (manufacturer)
Identification: (trade description)



Section 4: Motorbikes manufactured after the introduction of Third Edition ADR 39/00 (July 1988) but before the introduction of the Third Edition ADR 83/00 (January 2006).

Stationary noise level requirements: Motorbike sound level must not exceed: 94dB(A) at 50% of ESMP.

Markings & Labelling: Same as Section 3

Section 5: Motorbikes manufactured after 1 January 2006 (Third Edition ADR 83/00).

For motorbikes built after 1 January 2006, stationary noise level must be within the signature stationary noise level certified by the manufacturer. The certified signature stationary noise levels are published on RVCS website:

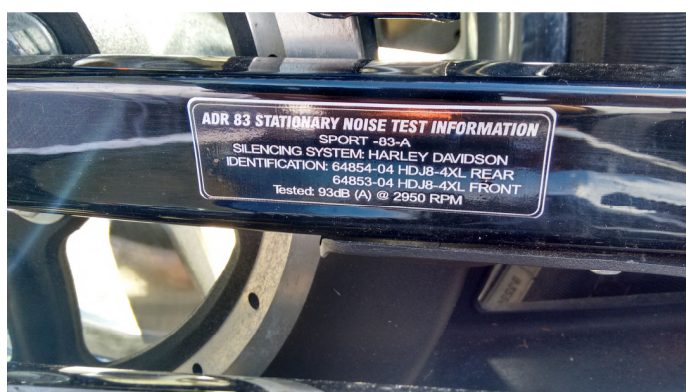
<http://rvcs-prodweb.dot.gov.au/stationarynoise.htm>

Markings: The components of the exhaust or silencing system shall bear:

- The trade name or mark of the manufacturer of the exhaust or silencing system and of its components; and the trade description given by the manufacturer.
- Where the exhaust silencing system is certified to appropriate UN ECE regulation, the approval mark and the ECE approval number is required. However this is not required if the system is not certified to UN ECE regulation.
- The approval number must correspond to the number of the ECE type approval certificate issued for the type of exhaust or silencing system in question.
- Such markings shall be clearly legible and be indelible.

Labelling: The following information shall be provided on the motorbike in an easily accessible, but not necessarily immediately visible location:

- (a) the manufacturer's name
- (b) the value in dB(A) recorded during the certification stationary test
- (c) the engine speed at 3/4 ESMP if ESMP does not exceed 5 000 rpm, or at 1/2 ESMP if ESMP exceeds 5 000 rpm



Guideline for conducting an In-Service Stationary Noise Test:

The National Transport Commission (NTC) has developed a comprehensive guideline on how to conduct stationary noise test to verify that vehicles comply with Australian Vehicle Standards Rules (AVSR). The guideline can be accessed from NTC website by following the link below:

<http://www.ntc.gov.au/Media/Reports/%289745A524-E60D-9B7C-835B-CDAF7DC19D8B%29.pdf>

Limitations on Replacement Exhaust Silencers:

Replacement exhaust silencer, if fitted, must meet the same marking and labelling requirements that originally applied to the motorbike. Replacement exhaust silencer can be fitted to a motorbike but only (a) if the motorbike continues to comply with the noise level requirements that applied to the unmodified motorbike and (b) if acceptable certified evidence can be presented to confirm that the specific motorbike make/model has been tested to the requirements of external noise level with the replacement exhaust silencer. This often involves testing for drive-by and stationary noise level.

Practical Tips:

Tip-1: If you intend to purchase and fit an aftermarket exhaust system/muffler to your motorbike, ensure the system has been tested to the Queensland standards and marked appropriately for your make/model.

Tip-2: Remember to get your silencer checked during regular servicing. Any packing, if fitted, inside a silencer can deteriorate over time, causing increased exhaust noise. You may be subject to enforcement action in spite of having the necessary marking and labelling.

Tip-3: Generally, if your motorbike system/muffler has a label showing the words “Not for Road Use” or similar, this system/muffler may not be suitable for road use in Queensland.



Please Note:

Under the *Transport Operations (Road Use Management - Vehicle Standards and Safety) Regulation 2010*, the owner/operator of a vehicle must ensure any modification has been appropriately approved before the vehicle is used on a road.

Additionally, failure to comply with the above requirements may render your vehicle defective in Queensland as well as other state jurisdictions and could incur a monetary penalty.

Further Information:

For further information, please contact the TMR Call Centre on 132380.