

# Managing motor vehicle noise

If your vehicle is too noisy you can be fined. Here's how to stay legal.

# Vehicle noise is controlled by law

A motor vehicle makes noise with its exhaust system, engine, horn, brakes and sound system. If you own or operate a vehicle you're responsible for keeping this noise to reasonable levels.

The laws and rules covering vehicle noise are:

- Protection of the Environment Operations (Noise Control) Regulation 2017 (the Regulation)
- Protection of the Environment Operations Act 1997
- Road rules made under the Road Transport Act 2013.

Tables 1 to 3 show the offences relating to vehicle noise, the penalties and who enforces the law.

#### **Defect notices**

As well as the penalties in the tables you may get an extra penalty. Police can issue a defect notice for a noisy vehicle. This tells the owner or operator to fix the problem. If they don't fix it the NSW Environment Protection Authority (EPA) can temporarily cancel ('suspend') the vehicle's registration. The vehicle is then considered to be unregistered and driving it is against the law.

### What is noise control equipment?

Table 1 mentions 'noise control equipment'. This means exhaust systems and engine components.

**Defective noise control equipment** is defined in the Regulation: it includes equipment that makes more noise than the original equipment fitted by the vehicle's manufacturer.<sup>1</sup> If you own or operate a vehicle you need to make sure it doesn't have defective noise control equipment.

Table 1 Summary of offences under the Protection of the Environment Operations (Noise Control) Regulation 2017

Offence	Penalty for an individual (Corporations pay double.)	Who enforces the law?
Selling a vehicle that, for example, has noise control equipment that is inappropriately modified, defective or missing (clause 10). (See also the <i>What is noise control equipment?</i> and <i>Exhaust systems</i> sections in this fact sheet.)	\$300	EPA
Using a vehicle on a road or road-related area that exceeds the prescribed noise limit (clause 5) by:  • less than 5dB(A)  • 5 to 14dB(A)  • 15dB(A) or more	\$150 \$250 \$600	EPA EPA EPA

Offence	Penalty for an individual (Corporations pay double.)	Who enforces the law?
Using a vehicle that emits offensive noise (e.g. a trail bike) in a place that is not a road or road-related area (clause 6)	\$200	Local council, EPA or police
Using a vehicle on residential premises (other than for entering or leaving) that can be heard inside a neighbour's residence – between 8 pm and 8 am on a Saturday, Sunday or public holiday or between 8 pm and 7 am on any other day – after a warning by an authorised officer or enforcement officer (clause 8)	\$300	Local council or police
Using a refrigeration unit on a vehicle that can be heard inside a neighbour's residence – between 8 pm and 8 am on a Saturday, Sunday or public holiday, or between 8 pm and 7 am on any other day – after a warning by an authorised officer or enforcement officer (clause 9)	\$300	Local council or police
Causing or permitting offensive noise to be emitted from a vehicle sound system (clause 31)	\$300	Local council or police
Emitting offensive noise from a vehicle sound system while driving or while using a vehicle on a road or road-related area (clause 33)	\$200 and 2 licence demerit points (no penalty applicable to corporations)	EPA or police
Causing or permitting a vehicle to be used when its noise control equipment is defective, is not securely in place or is missing or the vehicle has temporary noise reduction devices or packing fitted (clause 14)	\$200	EPA or police
Modifying or repairing a vehicle so that its noise control equipment is made defective, is not securely in place, is missing, or has temporary noise reduction devices or packing fitted (clause 15)	\$200	EPA
Attaching a horn to a vehicle or permitting a vehicle to be used if it is fitted with a horn that is capable of emitting noise at a level greater than 120dB(A) for noise at a single non-varying loudness and pitch, or 85dB(A) in any other case (clause 27)	\$300	EPA

Table 2 Summary of offences under the Protection of the Environment Operations Act 1997

Offence	Penalty for an individual (Corporations pay double.)	Who enforces the law?
Selling a vehicle that emits noise in excess of the level prescribed for that type of vehicle in the Regulation (section 136 of the Act):  • less than 5dB(A)  • 5dB(A) or more	\$200	EPA
Selling a motor vehicle intruder alarm that emits noise in excess of the level prescribed in clause 19 or having the characteristics prescribed in clauses 20, 21 and 22 (section 136 of the Act)	\$400 \$300	EPA EPA

Table 3 Offences under Road Rules made under the Road Transport Act 2013

Offence	Penalty for an individual	Who enforces the law?
Drivers must not use the horn unless it is necessary to warn other road users or animals of the vehicle's approach, or if the horn is being used as a part of an anti-theft device (Road Rule 224)	\$337	Police
A person must not start, or drive, a vehicle in a way that makes unnecessary noise or smoke (Road Rule 291)	3 demerit points	Police
(This would include actions such as revving a vehicle unnecessarily when it is stationary or repeatedly opening and closing the throttle when the vehicle is in motion.).		

# What happens if someone reports my vehicle?

Someone may report you to the NSW Environment Protection Authority (EPA) for having a noisy vehicle. If this happens you may have to take your vehicle to an EPA-approved inspection station to get it tested. If your vehicle is too noisy you'll have to pay the penalty related to the problem. Penalties are in Tables 1 and 2.

# How to stay legal

## **Exhaust systems**

#### **Buying your vehicle**

Listen to the exhaust system when buying a vehicle. If it sounds noisier than you'd expect then someone may have:

- replaced the original system with a noisier one e.g. a sports system
- altered or removed baffles from the muffler.

If you think it's been altered, ask the seller.

You could be fined for a noisy exhaust system so get it checked by a qualified person (for example, a licensed muffler repairer, an EPA-approved mechanic or an RMS-licensed vehicle certifier).

#### Running your vehicle

How much noise an exhaust system is allowed to make depends on the vehicle's age. See *What's allowed?* below for details.

Keep exhaust noise within limits by maintaining your vehicle's muffler. Don't fit non-standard components that make it noisier.

#### Modifying and repairing your vehicle

It's illegal to use temporary noise-reduction devices or packing in motor vehicle exhausts.<sup>2</sup> For example, you mustn't put into the exhaust system:

- items (e.g. baffles) that are not welded or riveted into place
- · valves or other adjustable items
- materials (e.g. steel wool).

Exceptions include:

- replacement items equivalent to the ones fitted by the manufacturer
- baffles bolted into a motorbike's exhaust system.

#### Selling your vehicle

It's illegal to sell a vehicle that has defective noise control equipment. This includes an exhaust system that makes more noise than the manufacturer's original.

#### What's allowed?

The allowed noise levels for vehicle exhaust systems are given by the Protection of the Environment Operations (Noise Control) Regulation 2017, clause 4 and Schedule 1. They are shown in Table 4.

The allowed level for a vehicle depends on:

- whether the vehicle is certified to Australian Design Rule 83/00 (which came into force progressively from 2005) or to an earlier Australian Design Rule
- when the vehicle was built.

Table 4 Allowed noise levels for vehicle exhaust systems

Australian Design Rule (ADR) that applies	Vehicle type and date	Maximum exhaust noise level
Earlier than ADR 83/00	Cars built before 1 January 1983	96dB(A)
	Cars built on 1 January 1983 or later	90dB(A)
	Motorcycles designed or manufactured for use on a road, and built on or after 1 March 1984	94dB(A)
	Other motorcycles	100dB(A)
ADR 83/00	Vehicles with compliance plate dates on or before 1 September 2011	<ul> <li>The higher of:</li> <li>the level in Schedule 1 of the Regulation</li> <li>ADR 83/00 signature level plus 5dB(A)*</li> </ul>
	Vehicles with compliance plate dates after 1 September 2011	ADR 83/00 signature level plus 5dB(A)*

<sup>\*</sup>Note: ADR 83/00 signature noise levels are on the <u>Vehicle noise</u> webpage of the Commonwealth Department of Infrastructure, Regional Development and Cities.

# **Engine components**

Engine components are part of a vehicle's noise control equipment. Aftermarket engine components can add noise. It's illegal to fit components that make more noise than the manufacturer's original equipment.<sup>3</sup>

#### Air filters

A pod-type air filter can increase noise from the air-intake system. Instead use a filter that's well encased or boxed in.

#### Blow-off valves

You mustn't fit blow-off valves that vent directly into the atmosphere or which can be adjusted to vent into the atmosphere. Blow-off valves that vent back into the induction system are much quieter.

You also mustn't fit turbo wastegates that vent directly into the atmosphere or which can be adjusted to vent into the atmosphere. Wastegates must vent gases into the exhaust system upstream of the mufflers and/or catalytic converter. But beware! On late-model vehicles, waste exhaust gases that vent to the atmosphere upstream of the catalytic converter may also bypass control equipment and be illegal too.<sup>4</sup>

#### Gear drives and belts

Take care when you change engine gear drives, engine belts and auxiliary belts (e.g. alternator belts). Non-standard belts and drives can add noise.

## Brakes on heavy vehicles

If you drive a heavy vehicle, don't use exhaust brakes, engine compression or 'jake' brakes near residential areas and noise-sensitive areas (e.g. hospitals and schools) unless you have to for safety reasons.

#### Horns

Except on police and emergency vehicles, it's illegal to install or use horns if they are louder than:

- 120dB(A) for noise made up of a single nonvarying loudness and pitch
- 85dB(A) in any other case.<sup>5</sup>

It's also illegal to sell a vehicle with a horn or intruder alarm louder than this.

#### Off-road vehicles

Off-road vehicles – motorbikes and others – are often noisy due to the design of their mufflers.

They can be annoying when used on trails that run near homes.

Never use an unregistered trail bike on:

- roads, shoulders of roads, footpaths or nature strips
- areas that are not roads and are open to the public for driving, riding and parking vehicles
- areas open to the public that are intended for use by cyclists or animals.

Motorbikes operating off road can't be louder than 100dB(A).6

It's also illegal for off-road vehicles to emit 'offensive noise' away from roads.<sup>7</sup> ('Offensive noise' is defined at the end of this sheet.) If you get a penalty notice for this offence you'll need to say who was the driver in control of the vehicle at the time.

#### Refrigeration units

Refrigeration units on parked trucks can disturb residents at night. Residents shouldn't be able to hear them (even through open windows):

- before 8 am and after 8 pm on any Saturday, Sunday or public holiday
- before 7 am or after 8 pm any other day.<sup>8</sup>

Drivers who break this rule may be issued a warning. If they break it again they may be fined.

#### Sound systems

The biggest problem with sound systems is lowpitched (bass) noise. This travels further than high-pitched noise. It also travels more easily into buildings and other vehicles.

It's illegal for a vehicle sound system to make 'offensive noise' (defined at the end of this sheet).<sup>9</sup> The sound is likely to be offensive if:

- it can be heard clearly outside the vehicle, and
- it contains low-pitched noise.

If your vehicle sound system makes offensive noise you could:

- lose two (2) demerit points
- be fined \$200 by the EPA or police.

If you get a penalty notice and you weren't driving the vehicle at the time, you can say who was.

# Top tips for keeping your vehicle quiet

- Keep your exhaust system maintained.
- Only use exhaust systems the same as the vehicle's original one.
- Ask a reputable supplier for advice before you buy aftermarket components.
- Don't fit your engine with
  - non-standard belt drives or gears
  - pod-type air cleaners
  - waste gates or blow-off valves that vent to the atmosphere.
- Use your horn only to avoid collisions.
- Think about places you drive past and if noise will bother people there.
- Don't speed off or slam on the brakes except in emergencies.
- Don't use your off-road vehicle where its noise will be offensive.
- In residential and noise-sensitive areas (e.g. schools and hospitals)
  - o avoid exhaust and compression braking
  - limit the use of truck refrigeration units.
- Use your vehicle's sound system responsibly.

# Complaining about vehicle noise

Table 5 lists different kinds of motor vehicle noise and who to contact about them.

Table 5 Kinds of motor vehicle noise and who to contact about them

Location of noise source	Noise source	When is noise not allowed?*	Who to contact
Residential premises	Motor vehicles (except when entering or leaving residential premises*)	Before 8 am and after 8 pm on weekends and public holidays Before 7 am and after 8 pm on any other day	<ul><li>Council, or</li><li>NSW Police Assistance Line, phone 131 444</li></ul>

Location of noise source	Noise source	When is noise not allowed?*	Who to contact
Non-residential premises	Noisy vehicles (e.g. trail bikes) in a public place (e.g. roads, verges, car parks or off road, such as parks and reserves)	Not applicable	<ul> <li>EPA Environment Line, phone 131 555, or</li> <li>NSW Police Assistance Line, phone 131 444, or</li> <li>Council</li> </ul>
	Noisy vehicles (e.g. trail bikes) on private property	Not applicable	<ul><li>NSW Police Assistance Line, phone: 131 444, or</li><li>Council</li></ul>
	Road traffic:  • local roads  • freeways, tollways and main roads	Not applicable	<ul> <li>Council (local roads)</li> <li>Transport for NSW (other roads), phone 131 782</li> </ul>
	Intruder alarms for vehicles	Not applicable	<ul><li>Council, or</li><li>NSW Police Assistance Line, phone 131 444</li></ul>
Residential and non- residential premises	Refrigeration units fitted to vehicles	Before 8 am and after 8 pm on weekends and public holidays Before 7 am and after 8 pm on any other day	<ul> <li>Council, or</li> <li>NSW Police Assistance Line, phone 131 444</li> </ul>

<sup>\*</sup>These times are when noise from residential premises should not be heard in a 'habitable room' in a neighbour's residence. A habitable room means any room other than a garage, storage area, bathroom, laundry, toilet or pantry.

#### What is 'offensive noise'?

'Offensive noise' is defined in the dictionary at the end of the <u>Protection of the Environment</u> <u>Operations Act 1997</u> (POEO Act). It is noise:

- that by reason of its level, nature, character or quality, or the time at which it was made or any other circumstance
  - i. is harmful to (or is likely to be harmful to) a person who is outside the premises from which it is emitted, or
  - ii. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted, or
- b. that is of a level, nature, character or quality prescribed by the regulations or that is made at a time, or in other circumstances, prescribed by the regulations.

Authorised officers decide if noise is offensive by considering:

- its loudness
- its character
- the time of day it's heard

- how long it lasts
- how often it occurs
- whether it's typical for the area
- how many people it affects.

For more about offensive noise see section 2.1 of the EPA's <u>Noise guide for local government</u>.

#### References

- 1 Noise control equipment is defined in clause 3 of the Protection of the Environment Operations (Noise Control) Regulation 2017 (the Regulation)
- 2 Clause 12 of the Regulation
- 3 Clause 12 of the Regulation
- 4 Under the Protection of the Environment (Clean Air)

Regulation 2010, clause 21 or 23

- 5 Clauses 27 and 28 of the Protection of the Environment Operations (Noise Control) Regulation 2017 (the Regulation)
- 6 Schedule 1 of the Regulation
- 7 Clauses 6 and 7 of the Protection of the Environment
- Operations (Noise Control) Regulation 2017 (the Regulation)]
- 8 Clause 9 of the Regulation
- 9 Clauses 31 and 33 of the Regulation

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