How to use these reviews

Acomplete sample review is displayed in miniature on the opposite page. Let's get through the review item by item, starting with

The Heading:

Suzuki Swift & SX4 current models

The Suzuki Swift and the SX4 are slightly different versions of the same car. Therefore it's easier for us and more useful for you if we put both of these vehicles into the same review.

It's not just Suzuki that sells one car under several different names: most of the carmakers do it, and this can be really confusing if you're a car buyer. Where a car is sold in different countries under different names, we put that country's flag or country shape next to the name. For example, for Australia and for Japan, and so on.

Note that in the heading above, the word *Suzuki Swift* is in bold red while the other name is not. In every review, the name in **bold red** is the *main listing*. Where a same, or similar,



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vehicle is also sold under another name, this other name gets listed in plain black following the main listing.

Sometimes we list two cars, sold by two different manufacturers, under the same review. For example, the 1988-94 Suzuki Swift was also sold in some countries as the Holden Barina. Why? Often two different manufacturers (eg, Suzuki & Holden) will share the same car under different model names. In the case of the Barina. it meant that Holden could offer its customers a small car without having to spend billions developing and building it. Holden simply bought the cars off Suzuki. As the cars left the Suzuki factory, Holden Barina badges were glued on in place of the Suzuki Swift badges, and that was the only significant difference between the two cars. This process is called *re-badging*. So, you would say that the 1988-94 Holden Barina was a rebadged Suzuki Swift.

continued two pages over



Here's a complete review in miniature







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continued from two pages back

Below is a sample 'snapshot' section of the review, designed to give you most of the information you need straight away.

Quick Summary

Swifts aren't just practical, they're fun. Sadly, however, they're lightly built and expensive to fix after an accident.

How Reliable?

Dodgy, see 'what goes wrong'

How Safe?

Good, but see our safety summary

Overall Rating:

NOT RECOMMENDED









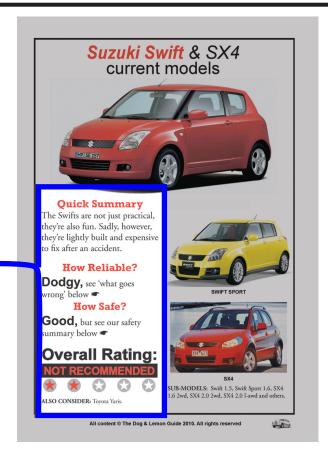


Quick Summary

This is just what it says: a quick summary of what we think of the vehicle.

How Reliable?

Reliability means different things to different people. To us, the 'how reliable' rating compares this vehicle to *all other makes and models of a similar age and mileage*. More about this subject a little later.



How Safe?

Some vehicles are far safer than others. In most cases we also include a more detailed safety summary just above the 'tech specs' at the end of the review.

Overall Rating

Overall Rating:

NOT RECOMMENDED











Will the majority of likely buyers find happiness or sorrow with this particular vehicle? That's what the 'Overall Rating' means. Note that there are five stars beneath the words: three are grey, two are red. So, 'Not recommended' means the same as 'two stars out of a possible five'. In practice we rarely give five star (highly recommended) ratings. Like honest politicians, perfect cars are rare.



Please note that we tend to be very tough on unsafe or unreliable cars, regardless of how wonderful these vehicles may be in other ways.

However, generally our reviews are based on FITNESS FOR PURPOSE, not economy, speed, styling or whatever. They do the job they were designed to do for the people most likely to own them. It's silly comparing a Toyota to a Ferrari and then saying one is better or worse – it's good or bad depending on whether it does what it is meant to do.

A Toyota Yaris is a small, economical, unadventurous car designed to provide cheap, reliable transport. It's silly to condemn it because it lacks sportscar performance.

You may disapprove of the Yaris, but the fact is, it runs well and cheaply – that's what it's designed to do. The Ferrari goes very fast, handles well, and makes people look at you enviously. That's what it is designed to do.

Both the Yaris and the Ferrari get good reviews because they do what they are meant to do.

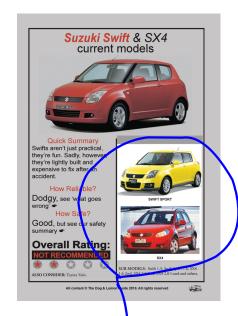
The problem with many vehicles is that they get passed from owner to owner, and end up being used for purposes for which they were never designed.

For example, if you're a rich businessman, then a fancy new BMW will probably suit your needs perfectly. It was designed for you and thus has superb fitness for purpose. The trouble is, a few years after you sell it, your new BMW ceases to have this same fitness for purpose – it is no longer a smooth–running luxury sedan for the discerning businessman – it is a semi–worn out former luxury car which is purchased as a 'bargain' at a car auction, and may prove to be a liability to whomever owns it.



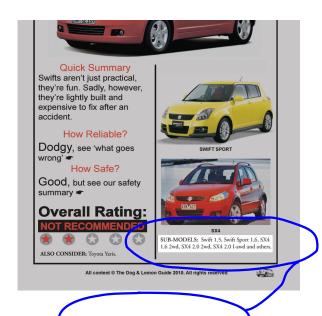
Also Consider

'Also Consider' offers you alternative vehicles that may also suit your needs.



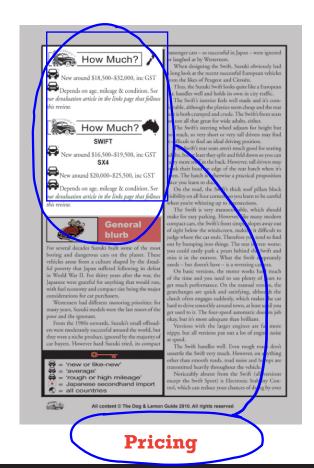
Additional pictures are placed here. These may help you to distinguish between the various versions of this vehicle.

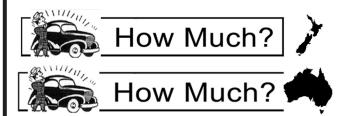




Sub Models

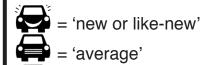
Sub models are variations on the basic vehicle. Such descriptions mean a lot to some people and next to nothing to others. You don't need to know all the sub models in order to use the review. If you want to know what terms like *sedan* or *hardtop* refer to, take a look at the sillhouette guide in our article **Types of Vehicles**.





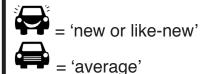
We hope the above two icons are self-explanatory:

We use three icons for New Zealand pricing:



👣 = 'rough or high mileage'

and two for Australia:



Here's why: Australia is a big country with higher priced vehicles, so its vehicles tend to travel much higher mileages than New Zealand ones and they tend to stay on the road for much longer.

If an Australian vehicle is old, then it's usually very high mileage. Thus, *average* means different things in both countries. An 'average' condition 1998 Toyota Corolla in Australia is almost inevitiably a very high mileage car. Therefore, 'average' in Australia generally means that the vehicle is still usuable but has worn out at more or less the same rate as most other examples of that make and model. At the bottom end of 'average' for a 1998 Toyota Corolla the vehicle will be both rough and high mileage.

That is not necessarily true in New Zealand, where 'average' generally means 'not new but not ultra high mileage or a wreck'. Therefore, the New Zealand prices get a third category 'rough or high mileage', to distinguish them from midquality vehicles.



How much is a car worth? The answer is: however much someone is prepared to pay for it. No two car valuers anywhere in the world will ever completely agree on the theoretical value of a vehicle. The true value of a car is dictated by the marketplace.

Car buyers as a group can be clearly divided into those who naturally drift towards the convenience of a car dealer and those who would rather brave the private car market.

Dealers tend to offer higher quality cars, or at least cars that *appear to be* of higher quality. Some dealer-advertised cars are offered at higher prices because they are low-mileage, good condition examples, whereas the average model will be quite rough and therefore cheaper. However, car dealers will charge whatever the market will stand, and because many people assume that dealer cars are better, dealers regularly sell tarted up rubbish at outrageous prices, and then use a variety of creative ways of avoiding payouts under guarantee when this rubbish breaks down.

See also the following linked articles:

- Bargain Hunting
- Types of Vehicles
- The Five Minute Car Check
- Finance
- Buying New

General Blurb



General blurb

The General Blurb icon means exactly what it says: we give you our general opinion on the vehicle in a way that will be useful and possibly amusing to you.

What Goes Wrong?



What goes wrong?

There's a laughable myth that modern cars are reliable. Nothing could be further from the truth. Some vehicles, notably Toyota, can go for decades without major repairs. Others, like Alfa Romeo, spend much of their time at the garage, especially as they grow older.

An unreliable vehicle is one that has problems that affect the pleasure or practicality of ownership. Some cars break down all the time. Some go for years and then break something that costs thousands to fix. Some leak water. On the receiving end they all add up to an unpleasant experience that everyone is anxious to avoid. The easiest way to avoid problems is to avoid the types of vehicles that give problems; it's as simple as that.

Except on some very new cars, when we simply don't know, we run a list of likely problem areas. Some of these may be understandable by you, many may not. That's okay. The 'What Goes Wrong' listings are there partly to enlighten you, partly so that you can compare our listings with your actual experience and partly so that the mechanic that you employ to check out any secondhand version will have a handy reference. We also list recalls under this section (more about this below).

You may notice we run certain warnings on virtually every review. These warnings, on matters like blown head gaskets, automatic transmissions, timing belts together with airbag & ABS brake problems are so important that we keep repeating them because our otherwise smart readers keep buying cars with these problems, and they are often very expensive problems indeed.



It's important to understand that our reliability ratings are based on the experiences of thousands of motorists, not just you. People often write to us in outrage and say that they have owned a particular make and model of car for years and it has never broken down. The implication is that we're somehow picking on their car. Not so. We are interested in how your own car runs, but we are more interested in how much your experience fits in with the experience of a much wider group of people.

Please don't take it personally when we say that a car is unreliable, but facts are facts: generally any older (and many new) British cars are hopelessly unreliable. So are most other European cars including German models. Traditionally, Australian-built cars like the Ford Falcon and Holden Commodore have been among the least reliable on the road. That's the conclusion of a survey of nearly 27,000 Australian car owners. Jap cars are consistently more reliable, which doesn't mean that if you buy a Jap car it won't break down, it's just less likely to, that's all. So please don't send us abusive letters because you loved your old Ford Falcon or Mitsubishi Magna and you don't like us rubbishing it. We're just doing our job.

Most Jap cars are reliable when new and up to, say, 120,000km, but after that a consistent pattern emerges: the more complex the design, the more problems you have as the car ages. After 120,000km Toyotas eclipse the opposition, with Mazdas a close second provided they have not been overheated. The complex makes like Subaru, Mitsubishi and Honda, which are very reliable when new, tend to get distinctly grumpy as they age. That doesn't mean that a Honda is suddenly going to drop dead at 120,000km. Many do far greater mileages, but they are not the cars to own when they do go bang.

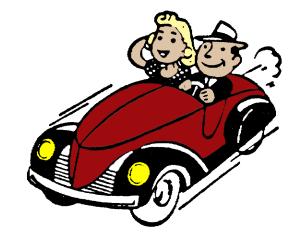
If you have to buy *budget*, then our advice is to buy *simple*. The more sophisticated the vehicle,

the more parts there are to break and the more they will cost to fix when they do go wrong. That's why relatively simple cars like Toyota Corollas and Camrys go such long distances.

A lot depends on how well a vehicle is maintained, how hard it's driven and most importantly, where it's driven. If you drive a car only on the open road and treat it well, you could easily get 300,000km out of it without major work. The same applies to cars which are well-maintained and driven hot by a skilful driver. Take taxis for example. They tend to get much higher mileages without repairs because most wear on cars occurs when the vehicle is cold. As it warms up it becomes much more efficient and if you keep everything moving most of the time it will outlast cars with half the mileage.

The reliability of a vehicle is always compared to the other vehicles that were around at the time of purchase and have done a similar mileage. This is important to understand. A twenty year old Toyota gets a reasonable reliability rating whereas a brand new Alfa Romeo gets a lousy rating. This does not mean that an old Corolla will be more reliable than a new Alfa Romeo. It means that the old Corolla is likely to give reasonable reliability *compared to other, well-maintained twenty year old cars with a similar mileage.*

Nothing lasts forever – reliability is always good or bad compared to other vehicles.





The five reliability sins



There are five basic types of problems with cars:

1) Things that lessen the appeal of the vehicle to you (or prospective buyers you may try to sell your car to in the future).

Rattles, squeaks and plastic panels that warp or fall off probably won't make a jot of difference to the way a vehicle runs, but they will certainly lessen your enjoyment. This type of problem is worst if it's on a new car and is often close to irrelevant at the cheapie end of the market. We mark down newish vehicles that cause this type of problem, because:

- a) You have a right to expect that a newish car will be free from this sort of problem.
- b) Manufacturers that can't get the squeaks out often leave in other problems too; therefore the skill with which a vehicle is made often gives strong clues as to its long-term prospects.
- c) Things that reduce a vehicle's value to you will probably turn off prospective buyers in the future, too. Therefore that warped plastic panel or rattle may significantly lower the value of a vehicle. It should be the manufacturer's problem, not yours.
- 2) Things that cause operational difficulties while the vehicle is under guarantee.

Even if it doesn't actually break down, a vehicle can drive you crazy if it gives little problems that affect your ability to operate it properly. Seats that refuse to adjust. Engines that are hard to start or stall at the lights. Gearboxes that won't change gear properly. These sorts of problems probably won't strand you at the side of the road, but they can make you hate your vehicle. Such problems may also seriously affect its value to both you and other people. Often, problems like this require frequent trips to the garage and the frustrating loss of the vehicle while the automotive technicians try and sort them out. Again, this type of problem is worse if it's on a new car and is less serious at the cheapie end of the market.

3) Recalls and things that require repair under guarantee.

You probably think that new cars don't give many problems, but you're being a bit naive. Many vehicles, especially American, Australian and European cars, are frequently recalled by the manufacturers to solve problems that should have been sorted out long before the model was released. These problems usually won't strand you at the side of the road, but it means a trip to the dealer and one or more days without your car. The same applies to repairs under warranty – they may not require a tow truck, but they are a pain in the backside that no owner should have to live with. See our further comments on recalls below.

4) Mechanical breakdowns.

These can be serious, stranding you at the side of the road, unable to go anywhere. You may be miles from home on a wet night; you may lose your engine, your brakes or your steering. Or the problem may be simply a battery that keeps going flat. Regardless, this sort of problem is just as serious on an old car as on a new car. In our reliability ratings, we really hammer vehicles that are likely to break down in this manner.



5) Long-term reliability problems/ uneconomic repairs.

Anyone will tell you that a new Honda is a dream to own. It's true, too, generally. However, ten years and a couple of hundred thousand kilometres down the track it may be a nightmare to own. Why? Because it's designed to work perfectly for the first few owners, and then you're on your own. That's why we never recommend old Hondas (and that's why it's rare to see a Honda taxi).

Ideally, we think a vehicle should run reliably and should be able to be easily & cheaply maintained and repaired throughout its possible life. We believe that a well-designed and built vehicle should be good for up to 30 years and 500,000km. Don't laugh. There are plenty of old Holden Kingswoods and Toyota Coronas that have done this mileage and more. It can be done – the only rule is that you have to keep the car simple.

Reliability and older vehicles

As explained above, when we give a predicted reliability rating, we rate the vehicle according to its age and likely mileage. However, in terms of our overall recommendations for that vehicle, we rate all vehicles as A, B or C class, even though we may not mention these 'class' ratings in the review.

A-class vehicles

No one expects that a vehicle will last forever; however, certain vehicles like Toyotas generally don't give many of the problems described above, and, just as important, their reliability often remains long after the guarantee is expired. And when they do break, they are generally (but not always) cheap and simple to fix. Recent Toyotas have been poorly assembled compared to earlier models, but the main bits tend to keep working regardless.

B-class vehicles

Vehicles such as Hondas, Mitsubishis and Subarus are absolutely brilliant throughout and often beyond their guarantee period, but they may become absolute nightmares when old. It's not that they give lots of problems; its just that when they do go wrong they are often neither easy nor cheap to fix. On old or high mileage vehicles the cost of repairs may exceed the value of the vehicle.

C-class vehicles

Some makers just can't get it right. For example, the original Land Rover Freelander was released onto the market with over 132 serious faults, all of which were known to Land Rover management as the vehicles rolled out the door. Their reliability has gradually improved, but they are still near the bottom of most reliability surveys. It's bad enough when they are under guarantee, but what happens when the guarantee finishes? The answer is that you get left with both a potentially dysfunctional vehicle and huge bills for fixing it. It's mind-boggling how much cars like old Land Rover Discoverys and Freelanders cost to keep on the road when they get old!

We use five main categories to describe the reliability of a vehicle:

Excellent, good, okay, dodgy and dreadful/diabolical/appalling. Dreadful/diabolical/appalling are all variations of the same rating and mean that the vehicle concerned is a lemon and should be avoided.

Obviously, no vehicle is going to last forever without maintenance, but some vehicles like the older Toyota Land Cruisers practically thrived on mistreatment. However, allmost all modern vehicles need more maintenance, such as high quality oil changes, but some are more sensitive to lack of maintenance than others. We warn you of these models.



Which are the reliable brands?



When you're looking for a reliable car, it's important not to get fooled by customer satisfaction surveys.

Reliability surveys ask whether a particular make or model has given problems. Customer satisfaction surveys ask whether a customer likes his or her car. These are two separate issues.

For example, customer satisfaction surveys in Germany often rate Porsche very highly. That's because the survey asks: "Do you like owning and driving this vehicle?" The answer is often "Yes". However, if you ask: "Was your Porsche reliable?", you often get a different answer (often, "No").

You should also be cautious about reliability surveys that only deal with the first few months of ownership. Although these surveys can sometimes highlight reliability problems that occur on a new vehicle, they are generally a poor predictor of the long term reliability of a car. For example, a few short-term surveys have shown makes like Jaguar as being reliable. This is nonsense. There's no credible long term reliability survey on the planet that rates Jaguars as reliable.

By comparison, the independent British consumer group *Which*? publishes an annual reliability index, based on breakdowns, faults and niggles that occur in cars owned by its members.

Here's their latest list of reliable brands, from the best to the worst:

- 1) Honda
- 2) Daihatsu
- 3) Toyota
- 4) Lexus
- 5) Mazda
- 6) Suzuki
- 7) Mitsubishi
- 8) Hyundai
- 9) Subaru
- 10)Porsche
- 11)BMW Mini
- 12) Nissan
- 13) Mercedes-Benz
- 14) Skoda
- 15) Ford
- 16) BMW
- 17) Chevrolet (mostly built by Daewoo)
- 18) Kia
- 19) Volvo
- 20) Jaguar
- 21) Seat
- 22) Daewoo
- 23) Proton
- 24) Volkswagen
- 25) Vauxhall
- 26) Smart
- 27) Citroën
- 29) Audi
- 30) Jeep
- 31) Peugeot
- 32) Saab
- 33) Fiat
- 34) MG
- 35) Alfa Romeo
- 36) Chrysler
- 37) Rover
- 38) Renault
- 39) Land Rover

Note that there are no European models at the top of the list, and note how many 'prestige' brands have really poor reliability.



Here are the headings that appear in the 'What goes wrong' category:

Fuel system problems

• Items listed under this heading are for anything fuel-related between the fuel tank and the engine

Engine problems

• Items listed under this heading are for the engine and anything to do with the engine that lives under the bonnet

Gearbox & drivetrain problems

• Items listed under this heading are for the clutch, gearbox, driveshafts, differential, axles, wheels and tyres

Steering & suspension problems

• We hope this is self-explanatory

Brake & safety problems

• Items listed under this heading are for the brakes, and also safety items such as seatbelts, airbags, etc

Body problems

• Items listed under this heading are the body and anything that can go wrong with it, including rust, dents, leaks, paint problems etc

Interior problems

• Items listed under this heading are for the things you have to live with inside the vehicle, including window problems, air conditioning problems, gauge problems, squeaks, rattles, interior trim problems and certain leaks and interior electric problems

Electrical problems

• Items listed under this heading are for major electrical problems. However, electrical problems may also be listed under other categories. For example, an engine computer problem is an engine problem as far as we are concerned and an air conditioning problem is an interior problem

Miscellaneous problems

• Items listed under this heading don't fit easily in any of the other main categories

Recalls



A recall is when the seller of a vehicle (either voluntarily or because it is legally required to do so) asks owners of defective vehicles to arrange to have their cars repaired at the seller's expense.

Not all recalls are for safety defects, although often a mechanical defect like a defective engine will be listed as a safety recall. This is because it's often very dangerous for a vehicle to break down. For example, if you're on the 'fast' lane of a motorway and the engine stops, you are in a potentially deadly situation.

Regarding recalls on Japanese domestic models (that is, vehicles that were originally sold IN JAPAN to a customer IN JAPAN and then exported secondhand when the vehicle was older): the Japanese have an obsession with customer service, which is why they are now the world's most successful car manufacturing nation. Because of this obsession, they tend to recall vehicles at the drop of a hat: one vehicle in Tokyo will have a problem with a heater and suddenly half a million cars are instantly recalled. Therefore, there are lots of recalls listed for Japanese domestic models, but many of them are not particularly serious, and most of them will have been fixed in Japan.



Most, however, does not mean all. A bunch of ex-Japanese Mitsubishis imported secondhand into New Zealand a while ago started losing their brakes due to an unresolved safety recall. Mitsubishi New Zealand initially refused to fix the affected cars on the grounds that they did not import them. There was a national outcry and under heavy pressure from The Dog & Lemon Guide and others, Mitsubishi relented and agreed to fix the vehicles concerned. Since then the Japanese manufacturers present in New Zealand have agreed to fix unresolved Japanese recalls on vehicles of up to seven years old, and after that it's the new owner's problem.

Not all recalls are listed: we decide on a caseby-case basis which recalls we include with your review. Some recalls are so minor as to be largely irrelevant. Others may seem minor but are actually quite important. For example, if a modern car has a defective brake light switch then the chances are you won't be able to start it. This is because many modern cars require that you have your foot on the brakes before you start the vehicle. If the brake light switch is defective, then the car thinks you don't have your foot on the brake and won't let the engine start.

Manufacturers usually recall vehicles when a significant fault has been noticed in a range of vehicles. For example, a while ago, some Ford Explorer vehicles were recalled because they sometimes rolled over when fitted with certain tyres. As part of the recall, the offending tyres were replaced free of charge.

Sometimes recalls are initiated voluntarily by the motor company, but often they are is done after bad publicity, legal action or pressure by government agencies.

When a recall notice is issued, the owners of affected vehicles are typically asked to bring the vehicle back to the seller for repairs. However, in some cases the agents quietly update the vehicle

while it's in for service, so the owner may never even know there was a problem.

Here's the catch: typically, only around 80% of vehicles covered under a recall are actually repaired. Some owners bring vehicles in for repairs after receiving a recall notice, some defects are fixed as part of regular servicing by the agents of the vehicle & some defects will be fixed later after something breaks. That leaves 20% of the affected vehicles out there and in everyday use, despite possibly having significant, unrepaired safety defects.

That's why we tell you about vehicle recalls. We're not saying that the recall problem will necessarily affect the vehicle you are looking at, but it might. At the very least you should point out any relevant recalls to the mechanic who's checking out your vehicle.

The Japanese, bless their little cotton socks, generally give a clear mark to show when a problem has been fixed under a recall. In the rest of the world there's often little clue as to whether or not a defect has been checked or fixed. If you can't tell whether or not the recall repairs were done from a visual check, you'll have to contact the master agents for that vehicle. They will probably require your vehicle's unique VIN number and should be able to check their records to see if the recall work was carried out.

Don't expect much generosity from the car company; if they can get out of fixing your vehicle for free, they will. However, where a recall has been carried out after government directive, the repair must legally be done regardless of how old the vehicle is.

If you need to locate your vehicle's VIN number, its location is generally listed under 'Tech Specs'.



Tech Specs



Tech Specs

You don't need to know about a vehicle's technical specifications in order to buy it, but we include some important information, such as the safety features for that vehicle and fuel consumption figures.

Here's a quick summary:

VIN PLATE LOCATION

Each vehicle in the world is given a unique identification number when it leaves the factory. This is its Vehicle Identification Number, or VIN for short. The plate where the VIN number is displayed is called the VIN plate (see sample below). This plate is also sometimes known as the vehicle ID plate.



You may need this VIN number in order to buy the correct parts for your car and you may need it if your vehicle is subject to a safety recall. The plate above is from a vehicle similar to the one below. Under 'VIN PLATE LOCATION' we would say: "passenger side of the front windscreen, below the windscreen wiper (designed to be viewed from the outside)."

The VIN plate in the picture below is the tiny white horizontal panel at the centre of the three large arrows (you may have to magnify the image to see it).



Please note that some vehicles, such as secondhand Japanese imports, are given a new identification number by the government when they arrive in a new country. This is not the VIN number we mean. The VIN number we mean is displayed on the original VIN plate put on at the factory. If in doubt, contact your mechanic for help.

ENGINE TYPE & SIZE:

This information is valuable to some people and near-meaningless to others. It's there if you need it.

RECOMMENDED FUEL/S:

This item is useful for distinguishing between vehicles that need special fuels such as Premium petrol instead of Regular petrol.

HOW MUCH FUEL?:

It pays to be skeptical where fuel consumption figures are concerned (we are). We give only urban fuel consumption figures, because that's where most people drive. Combined city and highway figures, as offered by the manufacturers, are often complete fantasy, both because of the way these figures are worked out and because very few drivers actually spend their days on the open road. If you do spend your days on the open road then you'll get far better fuel consumption than our figures indicate. There's more on this subject below.

HOW GREEN?

See our online article:

• It's Not Easy Being Green

Safety PROPER SEATBELTS THROUGHOUT:

See our online article:

• A Tragic Lack of Restraint - seatbelts



PROPER SPARE TYRE:

See our online article:

Tyresome Foolishness

ANTI-SKID BRAKING (ABS):

See our online article:

• Playing it Safe - vehicle safety features

AIRBAGS:

See our online article:

• Playing it Safe - vehicle safety features

ELECTRONIC STABILITY CONTROL (ESC):

See our online article:

• Playing it Safe - vehicle safety features

REVERSING CAMERA:

See our online article:

• Playing it Safe - vehicle safety features

SUITABLE FOR TOWING?

Some vehicles are not very good for towing, especially small cars that are powered through their front wheels. The best cars for towing are powered by their back wheels or all four wheels. Unfortunately, most modern passenger cars drive their front wheels only.

The payoff for **rear**-wheel or **four**-wheel drive is when you have a big load on the back and you're on slippery ground; the weight of the trailer or caravan is pressing the rear wheels down firmly, so you get vastly improved traction just when you need it most. On the other hand, when you've towing a big load in a **front**-wheel drive vehicle, the weight in the rear pulls the back down and the front of the vehicle goes up. This means that the front wheels are being lifted away from the ground at the exact time that you need them to be most firmly planted.

You'll discover this harsh reality if you use a front-wheel drive car to try and tow a heavy boat up a slippery boat ramp. The chances are you'll be sitting there helplessly as your car's front wheels spin around without actually accomplishing anything. If you spin the wheels wheels too often, serious gearbox damage is probable.

TOWING CAPACITY:

If a vehicle is towing is too much weight it can easily go out of control. Therefore, most vehicle manufacturers work out the safe maximum weights that may be towed by each make and model of vehicle. These maximum weights are expressed in two different ways: **unbraked** and **braked**.

The brakes on your car were mainly designed to stop your vehicle when it is carrying an average weight. If you tow a caravan or trailer, your vehicle's brakes suddenly have to deal with a lot of extra weight. This is hard work for your vehicle, and your vehicle can easily lose control as a result. The **unbraked** maximum weight is the safe maximum weight you can tow if you are using only your own vehicle's brakes to stop both your vehicle and the trailer/caravan you are towing. The **unbraked** maximum weight is generally quite low.

We also list the **braked** maximum weight for this make and model: many forms of trailer and caravan have built-in brakes that are activated when the towing vehicle starts to slow down. The **braked** maximum weight is generally much higher, because the trailer/caravan is mostly stopping itself..

You must not exceed these weights or you risk prosecution. You will also lose your insurance.





Many fuel consumption figures are pure fantasy

Think you'll get decent fuel consumption out of the car you're looking at? Don't be too sure.

Few serious motoring writers express much trust in estimated fuel consumption figures, simply because they have been almost invariably proved significantly inaccurate under real world driving conditions.

This is because estimated fuel consumption figures are usually achieved in a laboratory, not on an actual road in everyday conditions. This practice of theoretical fuel consumption testing was developed by governments as an easy way of levelling the playing field between makes and models.

Using a device called a chassis dynamometer, the vehicle stays still while its wheels turn. It goes through a series of acceleration and deceleration manoeuvres that are designed to imitate a daily drive. In practice, it is rare for such figures to accurately reflect real life driving.

Until 2004, Australian fuel consumption figures were measured on a dubious American system that gives wildly optimistic readings compared to the European system that replaced it.

Take the example of the 2003 Hyundai Sonata 2.7 automatic as quoted by the Australian Greenhouse Office, which stated that the Hyundai uses 9.5 litres per 100 kilometres in the city & 7 litres per 100 kilometres on the highway. The same vehicle in England was quoted as using 14.7 litres per 100 kilometres in the city & 8.3 litres per 100 kilometres on the highway.

The differences between the test results were caused by the differences in the way the tests were conducted.

The European test cycle simulates an 11 km trip with an average speed of 33.6km/h. Approximately two thirds of the test time simulates stop-go driving where the average speed is 18.8km/h while the final third of the test drive time is similar to driving on a freeway with the vehicle being taken up to over 100km/h.

In 2004, Australia adopted the European test cycle method for fuel consumption reporting, which speaks for itself, really.

By the way, even the European fuel consumption test is a long way from perfect: it's not based on actual driving – it's still done in a laboratory. Experience shows that the actual fuel consumption will often be far higher than the laboratory test suggests •

