# Land Rover Freelander 1997-06



### **Quick Summary**

Possibly the most incompetently designed and built four-wheel drive in history.

## **How Reliable?**

Appalling. See 'what goes wrong' below -

## How Safe?

**Dodgy:** see the safety summary below •



**ALSO CONSIDER:** Hyundai Santa Fe (late models), Honda CR-V, or Toyota Rav4.



### Should you buy this vehicle?





The Land Rover Freelander was possibly the most incompetently designed and built four-wheel drive in history. If you buy one of these vehicles, you deserve everything you get.

• This section is repeated at the end of this review.







The Freelander was offered in two basic versions: a three-door and a five-door, with variations such as convertible roof on three-door versions.



Most customers opted for five-door versions, due to the near-total lack of space in the rear of three-door models.





The Freelander had a visual freshen-up in 2002 and again in 2004, with some of the more dire mechanical bits replaced with bits that were almost as bad.













### 1998-01

😝 £800-£2000

🖨 £250–£1500

# 2002-06

😝 £2000–£6000

🖨 £1000–£5000

(for used car dealers add around 10-20%, incl. VAT)





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**I**N 1997, the Land Rover Freelander was released onto the market with over 132 serious faults, all of which were known to management as the vehicles rolled out the door.

Early versions for motoring journalists were handpicked, because anything else was likely to break down.

You'd think that the people who produced this car would be in prison. But that's not how it works in the motor industry.

For producing one of the most incompetently designed and built four-wheel drives in history, Land Rover was rewarded with record sales. In fact, between 1997 and 2002, the Freelander was Europe's best-selling four-wheel drive.





Why didn't the motoring press expose this scam? Because – mostly – they're part of it.

Even when motoring journalists – especially British journalists – acknowledge Land Rover's appalling track record, they tend to use euphemisms such as: "The Land Rover's reliability hasn't always been perfect".

The tone of the review is always that of a stern headmaster with a twinkle in his eye, mildly rebuking a bright but mischievous pupil.

And so, the reviews for Land Rover vehicles emphasise the style and the offroad ability, without ever coming out and saying the obvious: these cars are essentially suckerbait for fools.

The entire Land Rover range hovers, gloriously, around the bottom of any reliability survey.

Reliability is important on any vehicle, but is especially important on vehicles that might go offroad.



If there's any justice in heaven, the journalists who recommended these vehicles will spend all eternity fixing broken down Land Rovers in the middle of some hellish wilderness, with hyenas snapping at their heels. Because that's the fate that many Land Rover owners have suffered.



Most owners who say their Land Rovers have been reliable are English and they are frequently in a state of near-total denial. Just after telling you that their vehicle has been very reliable, they'll acknowledge that it might have had 'one or two issues'. That's a bit like an alcoholic saying he might have had one or two drinks.



And yet, people keep buying Land Rovers, including the Freelander.

Not only are most Europeans in denial about how bad Land Rovers and other Euro models are, but they seem to believe that considering a car from Japan or Korea would mean a loss of face.

This is because European – and especially British – car purchases are based on snobbery: I'm better than you, higher up the food chain than you, wealthier than you, more fashionable than you – and I can prove it by my vehicle.

Thus, when you point out to many wealthy English folk that a Honda or Toyota will leave any European car for dead when it comes to both value and reliability, your words will fall on deaf ears.

Affordability and reliability, to the English snob, are obsessions of the poor and needy – if those considerations are a high priority, it proves that you're in the lower part of the food chain.





This snobbish pomposity, of course, costs them dearly. Every European carmaker is dedicated to emptying the wallets of gullible fools.

In exchange for the temporary thrill of having the latest model in the office carpark, the snobbish buyer is probably going to have to put in several extra months or years of hard grind in order to pay the inflated purchase price plus the exorbitant interest on the hire purchase.

This shiny piece of fragile automotive status will be out of date in two or three years, and will have lost most of its value by then.

Madness.











Land Rover built its image by building tough four-wheel drives.



Then Land Rover traded off this image with pathetic vehicles such as the Freelander.





Many of the Freelander's owners have been urban women, which is unsurprising, because the Freelander is more suited to small-to-average sized rather than tall people.



In order to gain that SUV sense of elevation and importance, the front seats have been positioned far too high, so that tall people will find their heads hitting the roof.



Tall people will also find it difficult to see clearly out the front windscreen. Worse, there's no height adjustment for the front seats. There's no need for this high seating position; it's just designed to make small people feel bigger.

For small-to-average sized people, the Freelander's front seats are comfortable and reasonably supportive.









The Freelander's rear passengers are treated as second-class citizens. The doorways are too small, while the seats themselves are small, flat, unsupportive benches.





The Freelander's cabin is a strange combination of simple functionality and weird dysfunctionality. Many of the switches seem to have been positioned by someone throwing them at random towards the front of the vehicle.

Much of the switchgear was of dubious quality, even when new, and these vehicles are a long way from new.

Depending on how much you spent, your Freelander could get leather and other luxury add-ons, none of very good quality.





Behind the seats is a pretty small luggage area, even on the five-door version.



When the rear seats are not in use, they split and fold for extra luggage storage. With the rear seats folded, you have a slightly more feasible luggage storage area.



However, the tapered luggage compartment entrance effectively blocks the unused storage space ahead.

The rear door has another problem: the hatch opens sideways like a gate.

In tight car parking spaces, such as in a domestic garage, there simply isn't enough room to open the rear door wide. Dumb.







There were four engine options with the Freelander: a 1.8-litre petrol, a 2.5-litre V6 petrol, a lethargic Rover 2-litre diesel and a more sprightly BMW-sourced 2-litre diesel.

Of the four engines, the two diesels are easily the best of a very bad bunch.

The Rover 1.8 and 2.5 V6 petrol engines were designed by Satan and assembled by monkeys. Many Freelander owners needed new petrol engines from as little as 10,000km from new. Few engines made it to 50,000km; almost none made it to 70,000km.



Due to design flaws within these engines, a total – and very expensive – rebuild is the only option once they blow their head gaskets, which they all do.

The diesels, as we have said, are the best of a bad bunch, although they, too, are a long way from perfect.

Early Rover diesel engines have a nasty habit of breaking timing belts at low mileages, destroying much of the engine in the process.

Later (BMW) diesel engines often blow their turbochargers and they're massively expensive to fix.







Gearbox options were a five-speed manual and a five-speed automatic.

The automatics have a 'Steptronic' option that allows the driver to select when the automatic changes gear.

The manual gearbox was notchy (hard to select gears) from new and is prone to early failure, although it's still light years ahead of its automatic sibling.



for more info, see 'What goes wrong?' below







Compared to many modern equivalents, the Freelander is not an especially pleasant drive. Even when new, the engines and gearboxes felt a bit old. Now they feel archaic. And many of them are untrustworthy friends.

Reliability aside, the petrol engines aren't especially frugal.

The 1.8 petrol is always working too hard and therefore drinks too much.

The 2.5 petrol is more relaxed and is pleasant to drive on all types of roads, but still drinks like a fish.

The two diesel engines are both brilliantly economical and moderately pleasant to drive on the open road.



The early (Rover) diesel engine feels a bit like a pensioner and doesn't like sudden overtaking.

The later (BMW) diesel is in its element on the open road.

However, neither of the two diesels like city traffic. The drive becomes lurchy and buzzy and there's invariably a long pause between putting your foot down and anything useful happening. This long pause, known as turbo lag, often makes it very stressful to try and enter a stream of fastmoving traffic.

In stop-start rush hour traffic you proceed in a series of low-speed lurches.







The spare wheel lives on the rear door. With the spare wheel on the rear door, it's more easily accessible in the event of a puncture.

However, the rear door is extremely vulnerable to damage when you're reversing. If you back into a lamppost, the spare tyre will quite likely distort the whole rear door. This won't be cheap to repair.

Also, due to the appalling rear visibility, it would also be frighteningly easy to reverse straight over a child.

Our advice, if you end up owning a Freelander, is to simply fit your own aftermarket reversing camera. You might save a child's life.









The nicest thing you can say about the Freelander is that it's a nice drive on long, straight roads.



However, on other roads, things are messy: the ride is roly-poly on bends, the steering is slow and, under pressure, the Freelander prefers continuing in a straight line instead of navigating sharp corners.





In line with Land Rover's vast experience with four-wheel drive vehicles, the Freelander's offroad handling is surprisingly good.

We say 'surprisingly', because although all Freelanders have sort-of four-wheel drive, it's a roadoriented system: most of the time, the Freelander's front wheels are the only ones doing anything useful. The rear wheels only wake up when the front wheels begin slipping.

However, while the Freelander is great on muddy paddocks and sand dunes, it lacks the low gearing required to navigate the really tricky bits.

Moreover, the Freelander's *Hill Descent Control*, which is meant to ensure that you don't start skidding while descending slippery banks, operates at too high a speed to be of much use in many reallife offroad situations.



Even if this vehicle were reliable, you'd be brave taking it anywhere more rugged than a farmer's field.

It's not just the crude four-wheel drive system that will let you down. Early versions quickly developed cracks in the chassis even after being driven around town.

On versions before 2004, a large hunk of the rear suspension (the cross member) is liable to unceremoniously part company with the rest of the vehicle as you drive down the road. Or across a field.

Remember that underneath the butch offroad looks, the Freelander is really a modified 1980s Honda Civic body on stilts. It simply can't stand the rough stuff; you'd be unwise to trust this vehicle on important trips offroad.

Or anywhere else, for that matter.









The Land Rover Freelander was possibly the most incompetently designed and built four-wheel drive in history. If you buy one of these vehicles, you deserve everything you get.

• This section is repeated at the start of this review.

See also our comments on Land Rover at the end of this review.





# what goes wrong?

# **Engine problems**

• Blown head gaskets are very common on Rover Kseries petrol engines, due to abysmal engine design. All Rover K-series engines use steel cylinder liners in an aluminium block. Because the engine block and cylinder head are composed of different materials, they expand at different rates when they heat up during running of the vehicle. Because the steel liners are harder than the alloy block, they gradually work their way down into the block. When they get low enough, the cylinder liners leave a gap at the top that allows exhaust gases to leak out of the combustion chamber.

Eventually these leaking exhaust gases eat away at the head gasket, causing the head gasket to fail. By the time the head gasket blows, the damage to the engine block means that **the entire engine must be rebuilt** (there is no economically viable way of repairing this damage). A secondhand engine is likely to be nearly as bad as the one you are replacing

• See our general head gasket warning at the end of this review.

• Inlet manifold gaskets die young on 1.8 petrol motors, leading to coolant loss, and then overheating and blown head gaskets. Early models are worst. Later models are better, but only by comparison. The head gaskets on earlier vehicles can be upgraded, but often by the time a head gasket is blown, the engine block is wrecked as well.

• The accelerator of 1.8 petrol models jams on. This has been linked to a number of accidents.

• The spark plug leads on petrol versions are prone to chafing against the engine or air intake, causing misfiring.

• The **timing belt** on petrol engines must be replaced (along with all accompanying parts, including tensioners and water pump) at 115,000km or catastrophic engine damage may occur (that's in theory; in practice, few petrol engines ever get to this ripe old age without blowing up from other causes).

On early (Rover-sourced) diesel engines the recommended replacement interval is 75,000km, but many specialists replace the timing belt and all its accessories at least every 60,000km in order to avoid catastrophe. A replacement kit that extends the life of the belt is available, but it is extremely labour-intensive to install.



Later (BMW-sourced) diesel engines use a timing chain, not a belt, and this is meant to last the lifetime of the engine. • See our article 'A Question of Timing' in the links page that follows this review.

• The early diesel engines (an L-series Rover unit) have a number of issues: they develop oil leaks, which tend to mean a tired engine, especially if accompanied by rattles and blue smoke. However, they frequently leak around the oil filter simply because the oil filter wasn't tightened enough. More seriously, the ECU and air flow meter lose the plot with time, and replacement is often your only option. Symptoms include loss of power and/or hard starting and/or rough idle. Please note that the ECU is extremely prone to damage caused by jump starting.

L-series cylinder heads sometimes go porous around the glow plugs. It is also important that the cooling system is bled properly after coolant change, or air locks may cause the engine to overheat. Overheating one of these will cause head gasket / cylinder head failure, which is often extremely expensive to fix.

• See our general head gasket warning at the end of this review.

#### See also our timing belt warning above.

Like any diesel, injectors and glow plugs die with time. Therefore, if these have not already been replaced, they'll probably need doing soon. Diesel pumps for these engines are now dying regularly and are increasingly difficult to buy cheaply. Turbochargers rarely last as long as the engine they're bolted to.

• The BMW-sourced TD4 diesel engine is prone to problems earlier than the Rover diesel engine simply because it works harder.

The TD4's electric diesel pumps fail regularly. The engine wiring harness is also prone to connection problems and damage caused by rubbing against the engine. Land Rover put out a modified harness in an attempt to solve these problems (see the recall below, which regrettably only covers a limited number of petrol-engined cars).

TD4s also give the usual diesel problems such as faulty air flow meter, fuel cut-off solenoids, air-contaminated fuel, blocked fuel filter, leaky vacuum pipes, faulty injectors, camshaft position sensors, glow plugs and, more expensively, the ECU. The injectors are a common failure point. The worst fault on the TD4, however, is turbocharger failure, which is reasonably common. Due to access problems, to replace the turbocharger you need to remove the injectors, rocker cover, air cleaner box and intercooler. This is a very expensive repair.

Turbocharger failure is often caused by a blocked or restricted engine breather system. On the TD4, there's a crankcase breather assembly mounted within the camshaft valve cover. Most diesel specialists recommend that this breather assembly be replaced regularly.



The EGR valve must also be regularly cleaned and/or replaced, because if either the breather system or EGR stops working properly, the crankcase may become over-pressurised and blow the turbo.

The other really expensive repair is camshaft replacement (there are two), which also requires the timing chain and tensioners to be replaced and is horrifically labour-intensive. Camshaft repair is usually done on engines that are being overhauled anyway but sometimes occurs where owners haven't changed the oil regularly, meaning the lobes start wearing out. The engine then starts getting really rattly.

Last but not least, these engines blow head gaskets at high mileages or if overheated badly and some will need a replacement cylinder head afterwards as well • See our general head gasket warning at the end of this review.

• Rattly exhausts often require replacement or repair.



# Gearbox & drivetrain problems



# **Manual gearbox problems**

• Manual gearboxes should change gear quickly and smoothly. If they crunch, won't go into gear, or jump out of gear, you have problems. If the clutch feels stiff, floppy and/or if there are unpleasant noises when you press the clutch, you have problems. You should try doing a hill start in second gear. If the vehicle stalls, that's okay. If the vehicle doesn't move forward when you let the clutch out, the clutch is dead or dying. Total manual gearbox failure is common. The common symptoms are an excessively notchy gearchange, a noisy gearbox and/or oil leaks.


• Dual-mass flywheels (fitted to diesel versions) are an accident waiting to happen.

The symptoms of dual-mass flywheel failure include a slipping clutch, a squeaking or squealing noise, vibrations through the engine and clutch pedal, gear crunching then, eventually, no gears.

Failure of the dual-mass flywheel is likely to occur in as little as 25,000km from new. The exact mileage at which they fail depends on how and where the vehicle has been driven; if fitted to a vehicle that is driven gently over long, straight roads, the dual-mass flywheel can last a very long time. If the vehicle is used for towing, carrying heavy loads, or in rough driving situations, the flywheel will fail sooner rather than later.

These flywheels are extremely expensive to fix, and once replaced, the problem is likely to re-occur.

After failure of the dual-mass flywheel, angry owners typically throw out the dual-mass unit and fit a conventional flywheel in its place. This solves the clutch failure problem, but slightly increases the risk of a broken crankshaft in the engine and accelerated wear in the gearbox,



• The clutch slave cylinder lives on a fragile bracket on the bellhousing. This bracket frequently breaks, leaving you suddenly without a clutch.

The slave cylinder also frequently leaks. Symptoms of slave cylinder failure are soft (or no) clutch pedal, plus brake fluid leaking from the bellhousing.

Not all clutch hydraulic problems are caused by a faulty slave cylinder. The clutch piping sometimes leaks, but the most frequent problem if it's not the slave is the master cylinder. There's likely to be fluid seeping or leaking out of the rear of the master cylinder, immediately above the clutch pedal.

If the problem is the master cylinder, it will still need to be replaced, but that's a much easier job. Be aware, however, that if the master cylinder fails, the clutch slave may not be far behind.





# Jatco JF506E automatic transmission problems

• The five-speed transmission fitted to these vehicles is a Jatco *JF506E* unit, also known as the Volkswagen-Audi *09A* and *09B* and several other names, including *JA5A-EL* and *Steptronic*. All these units are much the same under the skin, but are programmed differently depending on which vehicle they're fitted to.

• When fitted to the Freelander, these transmissions give major grief. **Total failure anytime from 60,000km is commonplace.** 

This gearbox wasn't a rock of stability to start with, and things haven't improved with age. Using one of these transmissions for significant amounts of towing all but guarantees expensive failure (check for scratches on the towball).

Typical symptoms of problems with these transmissions are a delay when engaging gears, slippage (the engine revs rise but the vehicle doesn't go much faster), loss of gears, jerking between gear changes, internal noises and vibration at low speed. Fault warnings will also display on the dashboard.





JF506E problems tend to take three forms: electronic, electrical and internal. On early vehicles (around 2002-2004), the transmission, which is electronically controlled, wasn't programmed correctly at the factory. This led to a number of problems. Left unfixed, these problems could quickly wreck the transmission. Therefore, the programming was often updated after the vehicle left the factory.

Electrical components, especially solenoids, are a major cause of grief on these transmissions. Typical symptoms of solenoid problems are a difficulty selecting some gears when cold, or jerky gearshifts when cold. Usually 3rd, 4th and 5th go first. If you're very lucky, simply replacing the pressure-control solenoid (which can be accessed without removing the transmission) will solve many problems.

However, there are a total of nine solenoids on this transmission: diagnosis and replacement requires an expert.

Internal failure is very common on higher mileage versions of these transmissions, especially early models.

If you can't select reverse gear, if you lose third, fourth or fifth gears, if there's a noticeable delay before anything happens when you shift from first to reverse and back again, if the shift from second to third is rough, or if there's a noticeable delay before the transmission goes into fourth or fifth gear, if there's a whining or rattling noise from the transmission, the chances are the transmission is stuffed and will require a very expensive overhaul.



Later versions (2005-on) were sometimes modified, but these modifications delayed the failure rather than solving the inherent problems. The bottom line is: many internal components on these transmissions are simply too lightweight for the job.

This transmission is also prone to failure caused by overheating, even during normal operation. For this reason, the use of one of these transmissions for towing is likely to end in tears.

These transmissions require expert service and it is generally inadvisable to take them to a regular garage for servicing.

It is important that the transmission is serviced: if the transmission fluid drops below minimum, failure due to overheating is likely. The transmission fluid requires replacement every 40,000km, and this job is by no means as easy as it sounds. Jatco, the company that built the transmission, advises that it's critical that the correct amount of the correct fluid is added.

The problem is, the gearbox fluid level needs to be checked at the correct temperature, and this requires diagnostic equipment that most owners and some garages don't have.

This transmission requires different transmission fluid (LRN-402) to other Land Rover vehicles, and using the wrong fluid can harm the transmission. As if that wasn't bad enough, the transfer case is cooled via an oil cooler hooked up to the rest of the cooling system.



When the coolant fluid is changed, it's easy for air locks to form in the thin pipes linking the oil cooler to the main radiator. There are bleed nipples for the oil cooler, but they are a hassle to locate and operate. Many garages don't know they exist.

If bubbles block the oil cooler, the transfer case, transmission and sometimes the engine itself can overheat, with disastrous consequences.

Unwary mechanics can damage the transmission through ignorance: on the back of the transmission, above the driveshaft, is a 19mm special-torx bolt. Mechanics sometimes remove this bolt, thinking that it's the oil level plug. Unfortunately, this plug actually holds the internal brake band in place. If this plug is removed, the transmission will instantly lose reverse gear and the transmission will need to be removed and stripped to solve the problem.

The actual level plug is on the bottom of the transmission and is covered by a 5mm Allen-head bolt.

• The viscous coupling (fitted inline with the rear driveshaft) often dies young. It's expensive of course, but if not replaced in time it trashes the transfer case and/or rear differential.

The viscous coupling hanger bearings almost invariably need replacing at the same time. The easiest test of the viscous coupling is to drive the vehicle forward at a low speed and turn the steering wheel from lock to lock. A failed viscous coupling will cause the transmission to 'wind up', which has the effect of gently bringing the vehicle to a halt as if the handbrake had been lightly applied. The tyres will often show signs of unusual wear as well. If there's the slightest doubt about the viscous coupling, it must be replaced, or the resultant damage will be horrific:

• The transfer case – called the Intermediate Reduction Drive (IRD) on the Freelander – is a common failure point. The problem is usually caused by seizure of the viscous coupling unit on the driveshaft. This causes the transmission to wind up, and the IRD is the part that breaks first. The IRD is very expensive to replace and secondhand versions are a poor option. If the IRD is fitted without replacing the seized viscous coupling, then the IRD will re-fail within a short time. The oil in the IRD needs replacing roughly every 20,000km, and failure to change the oil will wreck the unit. Whining is a sure sign of impending doom. However, a vibration from the transmission at speed may simply be a broken upper support bracket at the transfer case.



• The rear differential commonly fails, at great expense. The symptom is a whining or rumbling from the rear while driving. Differential failure may also be caused by a seizure of the viscous coupling unit on the driveshaft.

There are two rear differentials fitted to the Freelander: the earlier version is the worst. After repeated failures a stronger replacement was fitted. However, the later differential is still prone to failure. As with the transfer case, if the seized viscous coupling is not replaced, the problem will recur. The oil in the differential needs replacing roughly every 20,000km, and failure to change the oil will wreck the unit. There's no drain plug, so the backing plate must be removed or the oil sucked out through the filler plug.

• Driveshaft bearings can fail at very low mileages. Noise from the driveshafts may also be worn hanger support bearings.

• Hill descent control dies young on many versions. This problem is often caused by a failure of the ABS unit (see *brake and safety problems*).

• Freelanders have a heavy appetite for front tyres, due to the poor design of the four-wheel drive system. Later models are better, but only by comparison.

# Steering & suspension problems

• Dysfunctional power steering is common. The power steering reservoir tends to leak from the bottom hose. This is a hassly job due to access problems. The steering pump also dies. Please note that there are multiple versions of the Freelander steering pump, and they're generally not interchangeable. The steering rack itself is also fairly prone to problems, and they're not always obvious. Even if the rack doesn't leak a drop, the torque collar sometimes comes adrift inside and the rack begins to behave erratically.

You're likely to get heavy steering at parking and overly light steering at speed. There may also be a screech as you turn in one direction.

Complete rack replacement is the only option. Please note that there are also several different versions of the Freelander steering rack, and they're generally not interchangeable. However, a slight noise when turning at low speeds may be simply caused by vibration of the power steering pipes.

• Suspension damage is common if the vehicle has been used on rough roads or offroad.

• Typical front suspension failure points are the lower arm bushes, anti-roll bar link arms and mounting bushes, steering rack ends and struts.

• Typical rear suspension failure points are the rear trailing arm bushes, rear inner & outer lower link bushes, rear adjusting link bushes, together with the rear shock absorbers. A knocking from the back of the vehicle is likely to be broken differential mounts.

• Unevenly worn or scrubbed tyres suggests that the rear driveshaft viscous coupling is dead. Viscous coupling failure will also wreck large parts of the drivetrain *(see drivetrain problems above)*.

• Road noise is often the result of suspension bush wear. Low profile tyres also compromise the ride quality and produce noise on rough road surfaces. However, the problem may also be worn wheel bearings:

• Wheel bearings are frequently worn out and it's not always obvious when you jack up the wheel and spin or wobble it. If in doubt, you need to jack up all four wheels at once and get someone to start the engine and run through the gears while you crouch near each wheel in turn. Worn wheel bearings can then be easily heard.



However, it's important that the driver doesn't use the brakes to slow the wheels down after the test is done, or it may confuse the ABS system and cause error messages to be displayed. Just let the wheels spin to a halt on their own. It's also worth noting that it's sometimes hard to distinguish between wheel bearing noise and driveshaft noise. Moreover, both the wheel and driveshaft bearings are often worn out at the same time.

• On early models, a creak from the rear end while cornering at slow speeds means the rear subframe is loose in its mountings. This problem was the subject of a recall (see below), which means it's Land Rover's problem, not yours.

Some garages were unaware of the recall and simply welded the rear subframe in place, which is effective, but not an ideal solution.



### SAFETY A RECALL

Land Rover Freelander models built between 12 & 29 August 2003.

 The rear subframe may not be correctly fastened to the body and could potentially come loose.

#### VIN numbers:

 not disclosed
 not disclosed
 SALLNABE13A286419–SALLNAB-G23A289164

• Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search recalls.gov.au PRA 2004/7207
Google recalls.gov.uk R/2004/165



### SAFETY A RECALL

Land Rover Freelander models built between 12 & 29 August 2003.

• The vehicle rear suspension may come lose.

• A weld holding the rear suspension links may fracture. Therefore the rear hub assembly may come loose, resulting in driver losing control.

#### VIN numbers:

l not disclosed

not disclosed

K 000471 to LN 622408

• Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search recalls.gov.au PRA 1999/3765
Google recalls.recalls.eu
R/1998/080



# Brake & safety problems

• Front brakes commonly bind on early versions.

• The handbrake cables and adjusters can bind on all versions.

• The front brake lines (under the plastic front guards) sometimes rust.

• The airbag control ECU is prone to failure due to receiving corrupt calibration data and the symptom is the airbag warning light coming on.

Replacement is often the only option, although it's wise to check the various connections to make sure the problem is not simply a loose wire. The ECU is on the transmission tunnel under the heater box below the dashboard. Theoretically, getting the ECU out requires dashboard removal, but many mechanics instead discreetly cut the carpet to get to the ECU. Please note also that this problem may be triggered by other warning systems within the vehicle.

• The ABS unit is prone to both electronic and mechanical problems. The Wabco ABS unit combines the ECU, pump & modulators and also handles the Hill Descent Control. The ABS wheel sensors die with age.



If the ABS warning light is on, the problem may be any or all of the above. However if the ABS/ Hill Descent Control warning light is on and the Hill Descent Control is not working, the chances are that the problem is the main ABS unit, which will require replacement, probably at great expense. One frequent mechanical problem in the ABS/Hill Descent Control unit is a sticky shuttle valve. Occasionally this can be freed by taking the vehicle into sand or mud and applying the brakes a few times. Worth a shot. Before you write off the ABS unit, it's also worth checking that the Hill Descent Control switch and wires are functioning correctly. A defective brake pedal position switch will also cause the ABS warning light to illuminate.

• See our general airbag and ABS warning at the end of this review.





 Land Rover Freelander models built between 1 October 1997 & 28 February 2001.
 The handbrake may self-release.

**VIN numbers:** 

not disclosed

not disclosed

🗮 not disclosed

• Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search recalls.gov.au PRA 2001/5037
Search recalls.gov.uk PRA 2001/5037
Search recalls.gov.uk P/2001/107



#### SAFETY 🥂 RECALL

📕 🚟 Land Rover Freelander models built between December 1997 & July 2000.

 The child restraint anchor fitting was installed upside down and may come off in use.

#### **VIN numbers:**



not disclosed not disclosed 🗮 not disclosed

Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search 🖝 recalls.gov.au PRA 2000/4427 😹 Google 🖝 dft.gov.uk VOSA UK R/2004/184





## **Freelander models built between 26 August & 1 October 2004**

• The passenger airbag may not have been manufactured properly and may fail to operate properly in a collision.

#### VIN numbers:

SALLNFAE85A449222 – SALLNABE85A456738

Google COSA UK R/2004/184



### **Body problems**

• The **front chassis cracks** around the chassis rails on early versions (later versions were strengthened to help prevent this problem). All versions before 2004 crack around the rear suspension attachment points if the rear subframe issue is not addressed (see *suspension problems*).

• Underbody damage is common if the vehicle has been used on rough roads or offroad.



# Interior & electrical problems

• Air conditioning dies easily and may be very expensive to fix.

• The alarm remote and central locking system were something of a bad joke from new. Many owners never got the system working reliably for any length of time. Sometimes the problem is the remote, sometimes the problem is the door locks and sometimes the problem is the central locking ECU, or a combination of the three, at random.



• Heater failure is common and may also be a symptom of a major cooling system/head gasket problem (an overheating engine – especially one with a leaking head gasket – will pressurise the cooling system, and the Freelander's cheap and nasty heater matrix is the weakest link in an already fairly weak system). The heater matrix then dumps its contents onto the floor of the cab. This is a major repair, because the heater matrix is located deep inside the centre of the dashboard. In hot climates some people just block off the heater. However, many owners underestimate how important a heater can be when driving in the outback at night.

Bear in mind also that the heater is part of the cooling system; a leaking heater allows the cooling system to depressurise and therefore potentially overheat or exacerbate a system that is already overheating.

• Water leaks into the vehicle are common, especially from the sunroof, tailgate and softtops. The water tends to collect in the rear of the vehicle, but the condensation will gradually rot out the entire interior and play havoc with the electrics. It's worth checking the tool compartment hatch in the rear floor for water. If it's wet, the rear tailgate seal needs replacing, and maybe other seals as well. The rear door seals die young, especially on three-door versions. • When you operate the tailgate handle, the window should drop about 10mm and then rise again automatically when the tailgate closes. If this doesn't happen, the electric motor and/or wiring is faulty. Expensive, of course. If the window goes up and down at random, the multi function control module is defective.

• Softtops on convertible versions are fairly fragile: the hood splits and the side windows go cloudy. These hoods are expensive to replace.

• The sunroof often jams open, due to the plastic rail breaking and distorting.

## • The electric windows rarely work properly for long.

• The electric clock display breaks up, meaning you can't read the time.

- The stereo fascia sagged from new on early models.
- Dashboards warp horribly in the sun.

• The windscreen demister was only marginal on early versions even when new and is often dead by now, often due to fan failure.

• The driver's seat back sometimes becomes insecure, which you can check by wobbling it. *See recall below.* 





Land Rover Freelander models built between 1 August 2000 & 28 February 2001.
 The seatback may fold forward without warning.

• The front seat backrest may not latch properly after using the seat tip lever, and could attempt to fold forward if the vehicle stops suddenly.

#### VIN numbers:



not disclosed

not disclosed

1A578669 - 1A599999; 1A300000 - 1A320519

#### Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search recalls.gov.au PRA 2001/5038 Google https://uk.car-recalls.eu/listing/ land-rover-freelander-insecurity-of-frontseat-backrest/





#### 📕 🗮 Land Rover Freelander models built between August & November 2000 Many electronic components may stop working without warning.

 The engine wiring harness rubs against the fusebox, possibly causing failure of half the car's electronics, including headlamps, engine management, cooling fans, fuel pump, ignition circuit, air-conditioning, anti-lock braking (although brakes will still function) and hill descent control.

#### VIN numbers:



not disclosed not disclosed

1A576764 - 1A599999; 1A200000 - 1A312726

#### Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

Search 🖝 recalls.gov.au PRA 2001/5039 😹 Google 🖝 dft.gov.uk R/2001/018



### SAFETY A RECALL

#### Land Rover Freelander models built between 1 November 2000 & 30 April 2005 (but possibly sold until 2006).

## • The child safety lock on the left rear door may fail.

• In certain conditions, the left hand rear door lock in these vehicles could be opened from the inside of the vehicle when the child lock was engaged.

#### VIN numbers:



l not disclosed

not disclosed

SALLNABE82A00225225–SALLNABE82A00238171 SALLNABH21A300642–SALLNFBE85A486387

#### Further information:

https://www.vehiclerecallsafety.nzta.govt. nz/SafetyRecallsDatabase.aspx

 Search recalls.gov.au PRA 2005/7887 and PRA 2005/8055
 Google VOSA UK R/2004/076 and VOSA UK R/2005/083





#### **Freelander petrol models built between 7** July 2000 & 18 March 2002

• Pin 5 of the diagnostic socket was not fitted with a ground. A pin must be fitted to position 5 and wired to earth.

- VIN numbers: 1A 576764 2A 397466
- Google 🖝 VOSA UK R/2002/041

• Chronic electronic nightmares come standard with many versions of these vehicles.





#### **EuroNCAP crashtests**

#### This rating is not nearly as good as it seems and applies only to models after 2002.

## The Freelander got just 38 out of a possible 100 in its head-on crashtest.

The Freelander's reasonable side-impact rating (72) meant an acceptable overall result, although the good side-impact result has got more to do with the height of the vehicle than with good crash impact design (EuroNCAP testers run a ram into the side of the vehicle. Because this ram is about average car height, if the vehicle being tested is higher than normal, then the ram tends to pass underneath, thereby sparing passengers the impact).

In real life accidents, larger vehicles usually do far better than smaller vehicles. (A classic 1960s Mini weighs about 700kg and a recent Range Rover weighs about 2200kg. **This vehicle weighs about 1600kg, depending on the model**).

See also our comments in the links page that follows this review.



**VIN PLATE LOCATION:** On the passenger side of the dashboard, designed to be viewed from the outside through the windscreen

#### **ENGINE TYPE & SIZE:**

(petrol)

- 1.8 K-series 1796cc OHC EFI
- 2.5 KV V6 2497cc DOHC 24v MPI

#### RECOMMENDED FUEL/S: (petrol) Premium

#### (diesel)

• 2.0 L-series 20T 1998cc SOHC EFI or TD4 1951cc DOHC 16v turbo







#### 1.8 petrol

#### claimed average:

10.1 litres/100km • 9.9km/litre • 28mpg

#### actual averages:

City	19.6 litres/100km • 5.1 km/litre • 14.4mpg
Highway	11.8 litres/100km • 8.5 km/litre • 24mpg
Average	15.6 litres/100km • 6.4 km/litre • 18.2mpg

#### 2.5 petrol

#### claimed average:

12.3 litres/100km • 8.1km/litre • 23mpg

#### actual averages:

City	22.7 litres/100km • 4.4 km/litre •	12.4mpg
Highway	12.8 litres/100km • 7.8 km/litre •	22mpg
Average	16.9 litres/100km • 5.9 km/litre •	16.8mpg

#### • 2.0 diesel

#### claimed average:

7.5 litres/100km • 13.3 km/litre • 37.7mpg

#### actual averages:

City	11.6 litres/100km • 8.6 km/litre • 24.4mpg
Highway	8.3 litres/100km • 12.1 km/litre • 34.2mpg
Average	9.7 litres/100km • 10.3 km/litre • 29.2mpg







**PROPER SEATBELTS THROUGHOUT:** Yes (However, remember that the Freelander seats only four)

PROPER SPARE TYRE: Yes

ANTI-SKID BRAKING (ABS): Standard

**AIRBAGS:** Dual standard, most models. A few have only a driver bag.

ELECTRONIC STABILITY CONTROL (ESC): No REVERSING CAMERA: No







unbraked 750kg,

**braked** (typical) 1800kg, depending on the model. Note: these are generalised international capacities. Please check with your local agents before towing with this vehicle.

**unbraked** If your trailer is unbraked, the maximum you may tow (combined weight of trailer and load) is 750kg or half the kerbside weight of the towing vehicle, whichever is the lower.

braked about 1800kg, depending on the model.

Note: these are generalised international capacities. Please check with your local agents before towing with this vehicle.







Official name: Jaguar Land Rover Automotive LTD

Owned by: Tata Motors.

**Formerly owned by:** British Motor Holdings, British Leyland Motor Corporation, Austin Rover Group, then Ford Motor Co.

**Owns**: Jaguar Cars, Land Rover, plus subsidiaries in India and China.

**Current situation:** Originally farm vehicles, Land Rovers are now a luxury brand. Despite brilliant offroad ability, Land Rovers are generally overpriced, poorly built and unreliable.

Under Ford ownership, efficiency improved but not quality. After years of losses (which contributed to Ford's near-bankruptcy), the Land Rover company made a small profit and was sold to Indian-based Tata Motors.

During the goodtimes, Land Rover was very profitable. Therefore, Tata Group was able to announce high profits for the Jaguar Land Rover group as a whole.

However, sister company Jaguar hasn't made a significant profit in fifty years.

Now, with plunging Land Rover sales worldwide, the whole Jaguar Land Rover group is in trouble.

#### Chances of survival: moderate.

Land Rover will probably survive in some form or other. Jaguar appears doomed. Both companies will most likely be either closed down or sold off •

#### A brief commentary on Land Rover

IN 1948, THE FIRST LAND ROVER rolled off the assembly line. Despite being a fairly blatant copy of the original American army jeep, the Land Rover was better suited to English conditions; it had a small, fuel economic engine and used existing Rover company parts.





Rover was not a manufacturer of offroad vehicles. Rover's customers were solid, middle-class Britons such as bank managers. The Land Rover was intended as a fill-in model until Rover could put its ordinary cars back into production.





The problem was a lack of materials; after World War II, steel was in short supply, but aluminium, no longer needed for fighter aircraft, was freely available. That's why much of the original Land Rover body was built using aluminium. Aside from saving weight, the aluminium didn't rust, so it became a permanent feature on many Land Rover models.



Even from the beginning, Land Rovers were noted for offroad ability; they were, and remain, classleading.

On the road, however, early Land Rovers were unpleasant, even by the standards of the day, with their small engines, bad brakes and roly-poly handling.





But it didn't matter. In the aftermath of World War II, many roads were rough and uneven, and a Land Rover would always get you there, or so the legend went.



Land Rovers were a stunning success, both in Britain and around the world. The former British colonies, with their eager customers and vast undeveloped spaces, were a captive market for Land Rover.




Land Rover offroad vehicles soon dominated throughout Africa, the Middle East and especially the British Commonwealth countries. In the early 1960s, Land Rover held 90% of the Australian four-wheel drive market.



#### Anywhere on earth...

Here on this barren stretch of the desolate "Skeleton Coast" in South West Africa, among rocky hills and dunes whipped into grotesque shapes by the corrosive blast of winds charged with salt and sand, diamonds are mined literally on the sca shore; and wherever men can work, so can the Land-Rover. A mobile or stationary power unit, a load or passenger-carrier, going anywhere . . . pulling anything, the 4-wheel drive Land-Rover can take it. All over the world, the Land-Rover stands for mobility, endurance, *toughness*.

... LAND - Con take it

- . FOUR WHEEL DRIVE
- EIGHT SPEEDS FORWARD AND TWO REVERSE
- SPECIAL LONG-LIFE ENGINE FEATURES
- HAULS MANY TIMES ITS OWN WEIGHT



To understand what happened next, you have to understand some British history. At the turn of the twentieth century, Queen Victoria ruled over the largest empire in global history. British warships ruled the oceans and Britain's industrial might made her the envy of the world.

By the end of World War I, Britain had slipped from superpower to fading empire. But it was hard for the British to face this decline.

Even in the 1950s, many British people believed that Britain was still a world leader, with a restoration of greatness just around corner.

This delusion meant that British leaders made some terrible decisions, and Land Rover's management were as bad as any. You see, Land Rover's management assumed that, because the British were world leaders, what was good for England would always be good for everyone else. And, being British, they believed that changes should be made slowly and cautiously, if at all.

Thus, the Land Rover company kept building compact off-roaders with tiny, underpowered engines, non-existent heaters and dreadful brakes, as if life would always be as it was in 1952.

Companies like Toyota did not make the same mistake. From the 1950s onwards, the Land Cruiser was ceaselessly improved, making it more powerful, easier to drive and, above all else, vastly more reliable than its British Land Rover rivals.

# TOYOTA LAND CRUISER



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Land Rover owners used to boast that they could repair their vehicles at the side of the road with just a few basic tools. Toyota Land Cruiser owners boasted that their vehicles rarely needed repairing at the side of the road, or anywhere else.

The same applied to the Land Cruiser's main rival, the Nissan Patrol.



Australian mining companies often used these vehicles for 500,000km, without doing anything beyond basic maintenance. At the end of 500,000km, many early Land Cruisers and Nissan Patrols were still using the original engine, which had never been apart during this time.

The end result was that, from the 1970s onwards, Japanese models gradually pushed Land Rover off the market.



And the British were in no condition to fight back; in the late 1960s, the British economy was in trouble and the British car industry was a battleground.

Successive governments on both sides wanted to simultaneously maintain the goals of full employment and ongoing modernisation, even though the two goals were often in conflict.

Bosses wanted to fire half the workforce and close down unproductive factories.

Unions, still stinging from the poverty of the Great Depression, weren't going to let their workers become scapegoats for previous bad management decisions, even though this resistance to change would ultimately contribute to disaster. And, politicians from all sides wanted to avoid the political consequences of sorting out this mess by culling unsuccessful companies from the economic gene pool.

As a result, in the early 1970s, a British steelworker was producing, on average, 122 tons a year. A European steelworker was producing between 150 and 370 tons per year and a Japanese steelworker was producing around 520 tons per year.

By the time the 1973 oil crisis hit, Britain was already in deep trouble, but the oil crisis hit the car industry hardest. Without petrol and diesel, people couldn't drive their vehicles. And many customers stopped buying new cars.





In 1975, a desperate British government nationalised most of the British car companies, including Rover (and therefore Land Rover). These nationalised companies were turned into a corporation called *British Leyland*.



The new chairman of British Leyland, Sir Michael Edwardes, closed down or sold off most of the British Leyland companies and in 1982 renamed the company as the *Austin Rover Group*, later shortened to just *Rover Group*.

As part of the modernisation of the Rover Group, Edwardes arranged a deal with the Honda Motor Co to share technology and manufacturing facilities in England. One of the Honda-Rover joint projects was a small SUV, to be built using a combination of Honda and Rover parts.

In 1988, the Rover Group was privatised and sold off to British Aerospace. However, by 1991 British Aerospace was in financial trouble as well.

The Rover Group was still bleeding money, so British Aerospace sold the Rover Group to BMW without consulting Honda.



Stunned at this sudden betrayal, Honda withdrew from its arrangement with the Rover Group and retreated back to Japan.

Safe at home, Honda proceeded with its own version of the planned SUV – based on the Honda Civic – and later released it as the original Honda CR-V. Rover – known within BMW as 'The English Patient' – was left to continue with its own SUV project, which became the *Freelander*.

In order to save money, Rover recycled the basic body of the Rover 200, which was in turn a recycled 1980s Honda Civic.



In 1997, the 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.

Early versions for motoring journalists were hand-picked, because anything else was likely to break down.

But, thanks to a sympathetic motoring press and a willing public, the Freelander was rewarded with record sales. In fact, between 1997 and 2002, the Freelander was Europe's best-selling four-wheel drive.



But in most of the rest of the planet, Land Rovers were virtually extinct, not because of a cruel world, but simply because other companies built far better vehicles.

Land Rover would probably have followed the rest of the British car industry into bankruptcy, were it not for a remarkable piece of innovation twenty years earlier.





The 1970 *Range Rover* is a likely candidate for the first modern SUV. It was designed from scratch, as a vehicle for Britain's upper classes.

Range Rover owners could effortlessly tow their horse floats up muddy roads while they rode up front in semi-luxury. When Range Rover owners returned to their mansions, their servants could clean out the interior with a hose (carpets weren't fitted to early models).

And the Range Rover wasn't just a pretty face; it was class-leading when it came to the rugged off-road stuff.

Although the Range Rover was sold as a luxury vehicle, 'luxury' was probably stretching things a bit. While the interior was very comfortable, it also full of plastics that seem crude these days.

Also, while the Range Rover's road manners were very good by the standards of the day, they wouldn't please the driver of a modern SUV.



The 1980s stockmarket boom and bust was the child of British prime minister Margaret Thatcher (above right) and Ronald Reagan (above left), president of the United States.

Both politicians heavily deregulated their economies, especially the banking industries and stockmarkets. This led to a tsunami of economic growth, followed by a severe economic crash.

In the meantime, the stockmarkets went crazy, turning stockbrokers into millionaires overnight, resulting in one of the biggest splurges in luxury items in history.

# Aside from mansions, at the top of the list of luxury items was motor vehicles.



In London, Paris and New York, Range Rovers became the preferred means of transport for many aristocrats, stockbrokers, rock stars and drug dealers.







During the week the husband would drive his Porsche to work while the wife dropped the kids off at the private school in the Range Rover.

These vehicles were perceived to be an upmarket, practical and safe way to move families around at a time when many popular cars were death-traps.

As SUVs gained a largely undeserved reputation for safety, their use spread throughout the Western world, until they became the fastest growing segment in virtually all sections of the luxury car market. Overnight, Land Rover became a luxury car brand, like Rolls-Royce.

Then the stockmarket crashed.

Suddenly, the market for luxury cars all but disappeared. Land Rover, once more, was in deep trouble.



Back in England, despite having invented the Range Rover, Land Rover originally had no intention of making it available to the masses. The masses had to make do with the basic Land Rover, with origins dating back to the end of World War II.

This was a mistake.

Limited funds meant the process of developing new models was slow and difficult. And many of Land Rover's traditional models were looking mighty old.

During the 1980s, Mitsubishi put out the Pajero/ Shogun, which was an instant success.



The Pajero could go anywhere a Land Rover could go, but in relative comfort, and with a level of reliability that Land Rover owners could only dream of.

Suddenly Land Rover realised that its traditional market – even in the UK – was about to disappear under a flood of cheaper and often better Japanese models. So, in 1989, Land Rover fought back with the release of the Land Rover *Discovery*.





In the UK, the Discovery (which was effectively a cheapened version of the Range Rover) was an instant hit with explorers and farmers alike. It also made a big impact on the survivors of the 1980s stock market crash, known at the time as *yuppies* (Young Urban Professionals).

Outside the UK, the Discovery created barely a ripple. While it had good offroad ability, the Discovery was still a cobbled-together SUV from a company on the point of collapse. Tellingly, the British military never bought the Discovery in large numbers, preferring instead the older, more durable Land Rover technology.





The Discovery helped save Land Rover, but the rest of the Rover Group was still on death watch.

After struggling for over a decade, a weary BMW finally cut its losses. The Rover company was sold for ten pounds to a consortium that soon went bankrupt.

Land Rover was sold to the Ford Motor Company. Ford had grand plans for Land Rover, which joined Volvo, Aston Martin, Lincoln and Jaguar as part of Ford's *Premier Automotive Group*.





Ford's Premier Automotive Group was a grand, but mad, scheme whereby Ford would control a large share of the world's premium car brands.

The problem was, all the brands within the Premier Automotive Group were in trouble, so Ford had effectively spent US\$11.8 billion on car companies no one else wanted.

In addition, Ford, which had zero experience in selling luxury brands, tried to save money by forcing all the companies in the Premier Automotive Group to share Ford bits.

So, Land Rover vehicles of the era were filled with cheap Ford parts and were often built around existing Ford vehicles.

For example, the second generation Land Rover Freelander shared much of its DNA with the Ford Mondeo of the era.





These cheap Ford parts further damaged the credibility of the companies within the Premier Group, and sales tanked.

In the aftermath of the 2008 global financial crisis, Ford was close to bankruptcy. So, in March 2008, Ford sold Jaguar and Land Rover to Tata Motors of India for just US\$2.3billion, having lost an estimated \$35-\$50 billion on the Premier Automotive Group.

Tata's purchase of Jaguar and Land Rover was a shrewd investment (or, at least, Land Rover was – Jaguar continues to lose heavily each year).

And, once more, Land Rover had a lucky break: after 2008, China, desperate to maintain its position as the world's leading industrial superpower, loaned the West enough money to stop the global economy collapsing.

And, as trade returned to normal, China's millionaires took over as the world's leading buyers of luxury cars, including, of course, Land Rovers.



Chinese buyers, even more so than their counterparts in the West, are naive. To them, status is more important than durability. Up to a point. In 2015, Land Rover was forced to recall nearly 36,500 Discovery Sports in China, after local media reported the British luxury car maker had used faulty gearboxes in its vehicles.

The skill for any business investor is to know when to crank up production and to know when to prepare for the worst. Tata has had a dream run with Land Rover, not just in China, but globally.

But the first rule of economics is: what goes up, must come down. Everyone understands this, though many people deny it during the good times. No one wants to contemplate the gloomy prospect of impermanence. When the good times end, as they always do, Tata is likely to have a tough job selling its overpriced, disposable luxury cars.



However attractive new Land Rovers may seem, they generally have the reliability of a politician's promise. There is scarcely a reliability survey anywhere on the planet that doesn't list Land Rover somewhere near the bottom.





Older Land Rovers – the ones that are actually used offroad by people who aren't rich fools – never really die. That has been their traditional strength; somehow or other, older Land Rovers almost always limp home. Which, by the way, doesn't mean that Land Rovers are, or have ever been, especially reliable. They're more like a troubled marriage that is continually patched up just as it approaches disintegration.

We still love Land Rovers. They have a certain style and character that you'll rarely find in a Japanese offroader. They are also among the world's best offroad vehicles, when working. We just wish that the Land Rover people could make them affordable and reliable as well •

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## Blown head gasket warning

Modern engines work hard. Because of this, they tend to get hot and frequently 'blow their top', especially if the engine has been overheated or run without fresh antifreeze. Head gaskets may be very expensive to fix and if left unfixed you'll probably end up broken down at the side of the road. Worse, blown head gaskets sometimes lead to total engine failure.

The symptoms of a blown head gasket are mysterious coolant loss, sometimes accompanied by rough running and overheating, clouds of white steam coming from the exhaust, oil in the water, water in the oil, and/or white goo under the oil filler cap (see picture opposite). You should also lift out the oil dipstick. If the oil is the colour of the white goo in the middle of the oil filler cap in the picture, you have a cracked cylinder head and/or blown head gasket. You should also be suspicious about any vehicle with a heater that leaks coolant into the interior of the car. A leaking heater is sometimes a symptom of a head gasket problem. So is a blown or leaking radiator or its hoses.



### ABS & airbag warning

• Both the ABS (anti-skid braking) and airbag warning lights should go on and then off when you first start the vehicle. If this does not happen, the vehicle may require a major, extremely expensive repair immediately (if either the ABS or airbag warning lights do not go on at all, someone's probably disconnected them to hide the fact that the ABS or airbag system is faulty). If either warning light comes on while you are driving, this may mean a serious malfunction in the vehicle's safety systems, and the vehicle should not be driven, let alone purchased.



## Automatic transmission warning

• Automatic transmissions that do not shift smoothly during a test drive are probably not long of this earth. Also, with the vehicle at normal operating temperature (so that the engine is not idling too fast) put the handbrake on and try switching the gear selector between forward and reverse – this should happen quickly and smoothly without any clunk – if not, suspect big repair bills in the near future.

Note: the advice below may not apply on some modern cars, because there may be no dipstick to check. For further information, see our articles on automatic transmissions and CVT transmissions in the links page (one page back).

With the transmission in neutral and the engine running at normal operating temperature, lift out the transmission dipstick, wipe it clean, put it back in and then remove it again. The automatic transmission fluid should be a happy cherry red colour & should be within the marked area on the transmission dipstick – if it's not, abuse and/or neglect is pretty likely and the vehicle should be avoided!