



## Reasons for a pre-purchase check

Long ago, John Muir's wonderful book "How to keep your Volkswagen alive" recommended sitting cross-legged on the roof of the car and saying "omm" a lot. It may not have helped to read the vehicle's karma, but it sure confused the hell out of the seller. There are perhaps less exotic ways of checking out a used Land Rover. Here are some of them:

**Get a pre-purchase check.** Do NOT get this done by a mate, or the local friendly service station. Land Rover dealers are also to be avoided, for reasons best left unstated. Go to a Land Rover expert shop and pay the money. The cost might seem like a lot, but it is nothing compared to the potential cost if you buy a heap of junk. However, be warned that even the best of specialists cannot diagnose every problem, even if potentially major, so be sure to drive the vehicle in as wide a range of conditions as possible in order to detect potential faults.

No doubt the seller will provide all kinds of reasons why you cannot have the vehicle for a day to conduct the check. His mother is ill. The kids need to be driven to school. He will suffer pangs of anxiety. His dog will bite him. Inventiveness is the key to avoidance. In any of these or similar cases, walk away. It is a buyer's market and if he wants to sell the car, he needs to demonstrate that the sale is not a result of something horrible he does not want you to know



## The value of being suspicious

It is better to be difficult to please than to become destitute. Assume the worst then whatever actually happens will be a pleasant surprise.

*Things to do yourself:*

Check for obvious rust. The workshop will perform a more extensive check but you can save that cost if you identify any major rust issues yourself. A physical check of the door bottoms and frames, also under the carpets for rust is essential. A vehicle that has been driven on sand can be an absolute rust bucket and will literally be un-roadworthy.

If the vehicle has been set up for extensive cruising or bush driving, that can be an advantage for you. However, be suspicious of massive suspension lifts, ultra wide tyres, roof-bars with a zillion driving lights and so on. These may just be urban-cowboy enhancements, but it might also mean a hard life. That is not a reason to reject the vehicle if it has been well maintained, but once again, assume the worst.

Test-drive the vehicle and be sure to observe any noise, vibration or engine misfire. Also be sure to identify any steering vibration or wandering. The workshop will check these things but you can avoid any obvious problems yourself.

Drive the vehicle as hard as possible and/or sit with the engine running to identify any tendency for it to overheat. This because some overheating problems may not be detected until the vehicle is pushed hard, something a pre-purchase check may not reveal. This is especially true of early diesel engines that take a long time to get to normal operating temperature. Be sure to test it yourself under these conditions.

Look at the exhaust for smoke –blue smoke means oil is burning. In a diesel engine, that may be caused by an intercooler or intercooler hose. White smoke will generally be caused by coolant in a cylinder or low compression.

Be sure that braking is smooth and the vehicle does not pull badly to one side. This may not be a deal breaker but it may help on the price negotiation.

Look under the bonnet for burned or loose wiring, badly worn belts and hoses, coolant and oil leaks. These can serve as indicators of poor maintenance.

Test all of the lights as per a rego check. This will identify any blown globes, but it may also point to bad wiring or switches.

Test the air conditioning to be sure it gets cold and that the fan switches work properly. “Re-gassing” is rarely as simple as it sounds, because there may be a leak requiring anything from replacement seals and/or hoses to a new compressor.

Never kid yourself that the purchase price will cover everything that is needed. If you get the vehicle at a reasonable price, it is prudent to spend a bit more money with a professional Land Rover specialist to ensure it is safe and totally roadworthy. For the last time - GET A PRE-PURCHASE CHECK. It will save a lot of angst and money later.

#### *Things the workshop will do:*

The following list is far from complete and a good workshop will do more than the absolute basics. This is another reason to deal with a workshop with proven experience in servicing Land Rovers. They will know precisely, where to look and what to expect.

- They will probably start on the hoist to identify any problems with the steering and suspension. They will examine the exhaust for fixing and leaks, inspect the drive train and the source of any oil, fuel or coolant leaks.
- Loss of coolant means trouble. It can only go a few places –from a busted hose, leaking radiator, worn water pump etc OR through the engine. The latter is by far the more expensive fix, usually involving head and/or valley gaskets. Water on the floor of the car may be rainwater coming through a sunroof or window but more likely, a blown heater hose or heater core. The parts to fix these problems are cheap, but the labour time to fix them is frightening
- Off the hoist, a full electronic diagnostic test will be conducted. This will identify any problems with cylinder pressures as well as many other faults including the cause of smoke from the exhaust. White smoke can be an engine using coolant or from low compression. . If the smoke is blue, the engine may require a new set of rings and

bearings. In a petrol vehicle, black smoke probably means the injectors need work or replacement. In a diesel, it may be the Intercooler or Intercooler hoses.

- You will already have conducted a simple test for overheating (see above). Further checks will be needed by the workshop because engine overheating could mean many things, from a viscous coupling on the fan, a blocked radiator, defective thermostat or a blown head gasket (plus several other causes).
- Heater hoses will be examined for hardening and coolant hoses for softening. These will be minor but necessary repair jobs
- The vehicle will be test driven by a professional who will identify any noise, vibration or misfire for attention. The same applies to vibration or wandering steering that could be tyre damage, a bearing, worn bushes or a cracked universal joint.
- If the engine misfires or cuts out, it could mean several things, mostly expensive to fix. A fuel pump is only a few hundred dollars but a set of injectors might require a new mortgage.
- The driver will again test for smooth and efficient braking. Pulling one way might be a worn pad, but it might also be a leaking hub seal or ball joint. If there are nasty noises the disks (rotators) may need replacing or maybe a calliper is broken. If the vehicle has ABS, the workshop will check to ensure the motor, pump and relay all work correctly.
- If the vehicle has air suspension, the workshop will check for a leaking air-spring or seal. However, it might be the valve block, compressor or EAS computer. If you buy the vehicle without identifying this, you might have to sell the house and move into the car.

Whassat? You bought the vehicle *without* getting these things checked? Maybe you didn't notice the advice to *get a pre-purchase check*.

This article is one of many written by [ASPAC Consulting](#) in collaboration with the technical experts at [Graeme Cooper Automotive](#).

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