

Vauxhall Cavalier/Opel

Things you should know if you are contemplating buying a Cavalier/Calibre/Opel 4x4

Here are some of the items you will need to understand to be able to decide if the individual offering you a 4x4 has been maintaining the vehicle properly with regard to the transfer box. It is not a guarantee but if anything here stops you buying a 4x4 you may have been extremely lucky.

The information here is intended as a guide only and no responsibility is implied or accepted.

PS Don't forget to check out the rest of the car while you are deciding on the 4x4 system.

Questions

What is the recorded mileage of the vehicle? - is it genuine?, how do you know?

A normal check as you would expect, but you can start to determine the usefulness when considering the Accumulator should be changed every 54k or six years, whichever comes first.

What is the condition of the tyres? Have any of them been changed? When were they last changed? When were they last changed round? How were they changed round? If it's a turbo variant are the tyres 'Z' rated?

The tyres should be evenly matched. The same make & size. A faulty tyre on a 4x4 means the whole set has to be changed. Tread wear should be within 2mm front to back. The tyres should be changed front to back every 1500 miles to even the wearing process. It is good practise to keep the tyres on the same side when changing and essential for 'Z' rated tyres as they are directional - they have an arrow on the casing.

When was the txb oil level last checked? Has the oil been changed? When? What sort of oil is/was used?

It would be reasonable to check the txb oil level annually. If the vehicle has synthetic oil GM recommends it is only necessary to top it up. The earlier txb's had ATF fluid which should have been changed for the synthetic.

When was the accumulator last changed?

Should be every 54k or six years, which ever comes first.

Observation

When the ignition is switched on, does the 4x4 dashboard indicator illuminate? Does it go out and stay out when the engine is started?

With the ignition on you are proving there is a working bulb in the warning light. When the engine starts and fluid pressure delivered to engage the txb, the light goes out and should never come on again, while the engine is running. If it does the txb has been disabled and fault codes stored.

Is there a yellow sticky GM label under the bonnet as a reminder to changing the accumulator?

If the Accumulator has been changed, the new one would have been supplied with a sticky yellow label warning of the next change. Anyone reading this site would get the idea it is extremely important to the pocket. (There is a sample label in the 'Accumulator' section of the site)

Has the accumulator got a white ring or white dots on it?

If not it is an expired recall item and there is every chance it is damaging the txb pressure plate seal. If it has white dots on it it should be OK but would be an earlier version than the ones with a large white ring. There is a good chance the white dot accumulators are time expired.

Is there evidence of oil under the car, behind the front wheel i.e. under the drivers floorpan?

If yes, the transfer box may have overflowed if the pressure plate seal has failed recently. The steering ATF fluid is pumped into the txb until it fills up, and the only way out is through the filler/breather which is a rubber pipe tucked in behind the water header tank (offside bulkhead). The oil flows down the back of the bulkhead and will spread in the immediate area of the floorpan. The pipe outlet may also be wet. - Investigate!

Physical checks

Ask the seller to set the vehicle up to check the steering fluid level. Do they know how? - and check it. Is it dirty? When was it last changed?

Make yourself aware of the procedure on this web site, ensure the engine has been running for at least a minute and use the same procedure for the next item

How many 'whooshes' does it take to empty the accumulator?

Check the 'bleeding the hydraulic system' section to determine the correct way to set the vehicle up for steering fluid level checking. This process involves discharging the accumulator and counting the 'whooshes'. Do not get confused with the servo emptying. It should be in the order of

25 applications of the footbrake - if it is much less the accumulator must be suspect.

Do a visual check of the tyres, and take a good look. Is there excessive wear on the inside edges (rear)? Is the tread depth even front to back?

This is a follow up from the question above - i.e. do the checks yourself.

Test Drive

When reversing slowly on full lock e.g. out of a driveway, there should be significant drag experienced. Almost as if the handbrake was partially on.

This is because the car is in 4WD from when the engine is started. There is significant drag when turning in such a manner because the transfer box is 'winding up'. The viscous coupling will release the 'wind up' but quite slowly in this instance.

If the vehicle is a Gsi or turbo, what is the effect of accelerating hard over the crown of the road? i.e. overtaking. Does the vehicle snake over the camber. If it is wet, do the front wheels spin under power 2nd/3rd gear?

A 4WD vehicle does not spin its wheels if the transfer box is functioning properly. You may assume all is not well if you can get the wheels to spin in the wet. (Unless you are a complete maniac!)

Do the front wheels spin on a loose surface from a standstill?

Any spinning here will be minimal if functioning correctly.

If you can persuade the owner to allow the 'rolling road test', as set out on this site, what was the result?

Should be quite a significant 'clonk' for the right reasons. The clutch is holding and the clonk is caused by releasing the 'wind up'.

Do you get a clonk on over run in second gear when you apply the foot brake.

Usually indicates transmission 'wind up' because the tyres are uneven front to back. If it clonk's in normal running it will be because the 'wind up' is overcoming the txb clutch, which will damage (strip) the txb clutch plate material.

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