**Technische Commissie** 

#### Citroën C6 Saloon buying guide.

People who think as individuals, don't follow convention and appreciate that with the C6 Citroën offers them something genuinely different.

The Citroën C6 Genootschap (Association) is convinced therefore that you do make the right choice indeed, should you consider investing in a Citroën C6, after all the cream of the crop. The C6 is another big Citroën and as such after all, the successor of her illustrious predecessors like the DS, CX, SM and the XM.

This being the case, the Citroën C6 Association would very much like to draw your attention to the following points worth knowing, i.e.:

- On avarage, the price of parts that need to be replaced as a result of wear and tear like tyres, exhaust and so on, are of a higher level compared to smaller cars.
  This obviously also goes for running costs (fuel, insurance, road tax et c.).
- Like many modern cars, the C6 contains vehicle-specific wiring (CAN-bus = Car Area Network) which implies that fitting of for instance, a tow bar is simply not just possible. Note that a seperate module has to be installed and is to be configurated by a Citroën dealership. Due to the same reason, modifying the radio is not feasible because of the integrated head-up display and sat-nav / NaviDrive system.
- The C6 is equipped with some 27 computers, linked to a central computer, called BSI (Body Service Interface), the electronic brains of the vehicle and controls the essential functions regarding comfort and safety.

In case of malfunction of electronic systems, official Citroën dealerships and even some BOVAG garages (NL) have the appropriate state-of-the-art diagnosis equipment at their disposal. Naturally, one is free to purchase an interface diagnosis equipment for oneself, though sufficient technical knowledge is imperative.

– When a C6 is purchased, make sure that both instruction manuals (the car's own and the Navidrive booklet) as well as the CD needed to install Naviteq are given. Note that the car's manual is available in PDF format from our site, the Navidrive manual however is not available in an on-line version.

Cars constructed from approximately 2010, the Navidrive (RT5) instruction manual has been integrated in the regular manual.

Instruction manuals of C6 models constructed as from 2007 may be found on the Citroën service site (http://service.citroen.com).

- Over the years a number of improvements were introduced, some out of technical necessity, a few others for quality improvements or just for modernization purposes.
- A clear survey of various C6's and relative points for emphasis is given by CitroExpert Magazine (#115 Jan/Feb 2016) – which is only in Dutch, more's the pity.
- Below survey shows a number of points of emphasis so typical C6.

telefoon: 078 6162463 KvK nr.66672775 mail: contact@citroenc6-genootschap.nl

Bank: Rabobank NL76RABO 0314 1966 25 www.citroenc6-genootschap.nl



Citroën C6 Genootschap

**Technische Commissie** 

The regular Citroën dealership is able to determine what the service history of the car is (judging from the VIN (Vehicle Indentification Number, or chassis number) and the NAP (National Auto Pass), provided the car has been maintained by the same dealership.

General points of emphasis.

- Replacement of the Xenon headlights may prove to be a lengthy job, if the front bumper is to be disassembled altogether. A clever mechanic however should be able to manage bulb replacement without disassembling the front bumper. Such lights have a lifetime expectancy of some five years or 63,000 miles /100.000 kms. In the latter case, light failure or flickering of one of the bulbs is characteristic and turning the lights off and on again will give the impression that everything is all right again. The truth however is, that it is an indication that the bulbs are worn out.
- Suspension sensor jack bushes may prove to be susceptible to water / watervapour and may corrode.

(This goes for the early years of construction, 2006/2007). This may cause suspension failure.

- The bearings of the spindle bushing of the initial series C6 (2006/2007) are susceptible to moist and dirt and may damage the bearings. Replacing the entire spindle bearing is inevitable. Indicative of bearing damage is the steering wheel being out of alignment when driving straight on an even road. Only disassembly will finally determine what the actual damage is.
- Its front left wheelarch, all C6's 2.7 and 3.0HDi versions (regardless of date of construction) hold a cooling-water pipe leading from radiator to the heatingradiator and is susceptible to corrosion, unless this has been properly treated after delivery. Replacement may prove to be time-consuming and consequently a costly affair.

On time inspection and treatment or replacement is required for when its surface is corroded, the entire cooling system will run dry.

The petrol and 2.2 HDi powered C6's have no such cooling-water pipe.

- When doorwindows do not perfectly fit to the rubber linings, noise of wind will be heard. Adjustment of the windowpanes is not an easy job and requires great skill. Sometimes replacement of door rubbersmay suffice.
- The automatic gearbox should change gears without noticable jolts or 'surging' in between gears. Investigations by Center C6 in Aalsmeer (NL) have revealed that the oil content of the automatic gearboxes are best dialyzed (flushed) every 37,500 to 50,000 miles 60,000 to 80,000 Kms It appears to be beneficial to the life span of the box.
- Switching on the Cruise Control (or Limiter) should go easy. Malfunction may be caused by the steering wheel switches, sometimes caused by one of the components underneath the steering column. (i.e. the so called Com 2000) or the switch underneath the brake pedal.
- The rear wheels should run true for if they don't, tyre wear will accelerate and should be checked. Therefore. In contrast to previous posts: rest assured that they are adjustable.
- Cupped or scalloped dips around the surface of the tyre appear more often on front-wheel driven cars and inevitably also with the C6. Over enthousiastic cornering, cause tyres to wring on the road surface. Those scalloped patches cause an annoying sound (though hardly audible in a C6) and can be easily felt by hand.

Since the C6's are front-wheel driven, it goes without saying that front tyres must have the best

telefoon: 078 6162463 KvK nr.66672775 mail: contact@citroenc6-genootschap.nl

Bank: Rabobank NL76RABO 0314 1966 25 www.citroenc6-genootschap.nl



Citroën C6 Genootschap

**Technische Commissie** 

profile which makes rotation of tyres (rear to front v.v.) totally pointless.

- It may be considered though, to have adjustable rods mounted to the rear axle, allowing for an adjustment according to factory specifications.
- Wheel rim sensors monitor the air pressure in your tyres. Note that whilst loosening the valve cap, the valve nipple may break due to corrosion, particularly when metal valve caps are used. Such nipple cannot be replaced. Repair sets may help to restore the damage, provided however that sufficient thread is left. If not, the entire sensor must be replaced. Life span of the sensor batteries is approximately 5 years and cannot be replaced separately but are integral part of the sensor. It is possible to disable this warning system with the use of Lexia equipment or diabox and the failure messagewill no longer appear.
- The tension pulley of the timing belt is to be replaced in one go with the timing belt. This is to be carried out every 10 years or 150,000 miles 240.000 Kms respectively, according to the factory code.

In practise however, it has occurred (as an exception) that the tension pulley broke after only 7 years and 100,000 miles or 160.000 Kms...

• Both the upper as well as the lower coolant reservoir will start leaking, sooner or later. Its is recommended to have them timely replaced.

Since the C6 has no separate coolant level sensor make sure to check it's liquid level visually. When the engine is sufficiently warmed, press on the end of the windscreenwiper stalk, and the oil temperature, coolant temperature as well as the tyre deflation detection will become visible on your Navi/ Drive colour display.

• The hydraulic LDS storage tank may start leaking when too much LDS liquid is added. (Re-)fill of this tank cannot be done and rely upon the naked eye; the correct level can only be determined with the appropriate electronic equipment, i.e. Lexia or Diagbox.

It is strongly recommended to at least loosen the cap of the tank, prior to jacking up one or more wheels, and so prevent the tank from splitting.

- The ABS sensors sometimes seem to be broke. When warning lamp lights up it does not necessarily mean a total failure of the system!
- Lock bolts of the wheels can turn 'soft' over time and may brake whilst loosening. Removal of the remainder is tricky and need to be bored out. The preventive measure is to replace them which will cost you next to nothing.
- Sometimes the swiveling Xenon headlight height sensors are at fault. Check carefully if they function properly when turning the steering wheel; bear in mind however that unlike the DS! the car must be moving.
- An array of issues may be the cause of short-circuit in the dashboard display. When blinking, the unit may need to be replaced.

Points for emphasis, specifically for the three different diesel engines are :

telefoon: 078 6162463 KvK nr.66672775 mail: contact@citroenc6-genootschap.nl

Bank: Rabobank NL76RABO 0314 1966 25 www.citroenc6-genootschap.nl



Citroën C6 Genootschap

**Technische Commissie** 

**2.2** L HDi 4 cylinders, 170bhp – **2.7** L HDi V6, 208bhp and – **3.0** L HDi V6, 241bhp.

- The **2.2**HDi has a smooth and economical engine. And yet, precise maintenance is required. The twin- turbo can break when driving on with a polluted oil and/or airfilter.
- 2.7 L HDi V6. A problem-free engine which requires however proper maintenance. Pay attention and make sure that the turbo supply lines aren't blocked up. There is the danger that the middle cylinders get too little oil and the bearing half-liners of the connecting rods will run dry.

Regular maintenance prevents this from happening.

Citroën does not deliver bearing half-liners seperately. Overhaul shops can. At any rate, make sure to always buy high quality oil with 5W30 viscosity.

- The **3.0** L HDi V6 (on the market from June 2009) is an even smoother, more powerful and even more economical (.!.) than the 2.7 L engine but quite rare. Both engines are in line with their Jaguar/ Land Rover siblings.
- The EGR (Exhaust Gas Recirculation) valve-system may get soiled (carbon residue) as with all modern diesels especially when frequently only short distances are driven. This may cause several failures, e.g. sensors showing a faulty emission, which affects the fuel mixture supply (protection of the catalyst).

In order to avoid such problems and its consequences, it is recommended to use Premium fuel. And yet an extra measure to avoid said problems is to have a carbon cleaning treatment carried out once a year.

• It is very comforting to know that the petrol powered 3.0 L V6 (211bhp – 290Nm) engines are solid and reliable and last 188,000 miles easily. (The XM and Xantia are equipped with same engines).

Many people think this engine noticeably weaker if compared to its diesel counterpart; on the other hand however, the sound of this V6 is highly appreciated when high rpm's are made!

• The ignition coils (mostly by Sagem, ex-factory) often want to break after some 22,000 miles. This may be caused by its very location which causes them to become very hot with the inevitable result. Replacing them by an other brand may be an improvement (e.g. Beru or Delphi).

For that matter though, in case of a broken igniton coil make sure to replace them all at the same

• Camshaft adjustment valves are to be replaced after every 38,000 miles – 60,000 Kms. Significant oil leakage can occur when said valves brake, which will result in damage of the engine.

A regular check is recommended.

From the above, one may derive that the Citroën C6 is not only an outstanding vehicle in terms of design, it is also a rather complex car when it comes to maintenance.

The C6 Genootschap finally likes to point out to you therefore that, given the relatively small number of C6's that have appeared on the various markets since its introduction in 2005, not all Citroën garages have had the opportunity to acquire extensive technical knowledge and experience.

telefoon:

telefoon: 078 6162463 KvK nr.66672775

mail: contact@citroenc6-genootschap.nl

Bank: Rabobank NL76RABO 0314 1966 25

www.citroenc6-genootschap.nl



Citroën C6 Genootschap

**Technische Commissie** 

And please note that although this buying guide is in English, its content is based on experiences gained by the members of the Dutch the C6 Genootschap.

And yet, we are definitely not guilty of special pleading when below remarks may be taken into account, viz.:

- Both the Centre C6 in Aalsmeer (Citroën Gert de Jong Automobielen) and Garage Johan Oldehage B.V. in Nieuw Vennep have many C6's in maintenance.
   The former C6 Centre (Aalsmeer) is also well acqainted with customers from abroad like Germany, France, Switzerland, Belgium and even Norway.
- As for the latter (Garage Oldenhage) goes the same for they also have customers from abroad such like Norway, Portugal, Sweden, Germany and even as far as Turkey.
- Also D. & O. Services (Almere) have obtained experience with various C6's.

However, there are quite a few C6 drivers who nevertheless have their car maintained by their prefer – red (local) garage and quite to their satisfaction.

Needless to say that members of our society are happy to share their experiences with you.

In any event, do check carefully whether maintenance has been run with such garage – it tells a lot about how the previous owner has cared for his car.

Although we have formulated these point for emphasis to the best of our knowledge, we cannot be held responsible nor can we accept any liability for any inaccuracies or omissions.

We trust you appreciate.

Last update: 24 January 2019. ©RvB

Ce

telefoon: 078 6162463 KvK nr.66672775

mail: contact@citroenc6-genootschap.nl

Bank: Rabobank NL76RABO 0314 1966 25

www.citroenc6-genootschap.nl