

Car Inspection

- **Tires/Wheels**
 - Tread depth
 - Air pressure
 - Other
- **Brake system**
 - Storing tank
 - Brake test
 - Parking brake
- **Illumination**
 - Brightness levels
 - Checking the lights
- **Signal and warning fixtures**
 - Actuation of the headlight flasher
 - Actuation of the hazard warning flasher
 - Actuation of the signal-horn
- **Adequate vision**
 - Windshield wiper
 - Windshield washer system
 - Windshield blower
 - Windshield heater
- **Liquid status**
 - Motor oil
 - Cooling liquid
 - Windshield washer system
 - Fuel
- **Battery**
 - Pole/Connections
 - Liquid status
 - State of charge at maintenance-free battery
- **Other**
 - § 57a KFG vehicle inspection sticker
 - Vignette
 - Accessories
- **Inspection structure**
 - Functional inspection and meaning
- **Internal inspections**
 - Sitting position / mirrors
 - Headrest
 - Seat belt
- **Steering**
 - free travel
 - steering assistance

Tires / Wheels

Profile depth:

- Summer tires need at least 1,6 mm
- Winter tires (mud and snow); radial ply tires at least 4mm & conventional tires at least 5mm
- There must still be enough depth on 75% of the tread
- Indicator = ridge in profile (shows the minimum profile depth)
- Tread depth gauge = measuring device for determining the exact profile depth

Winter tires are compulsory from November 1st to April 15th (in wintry road conditions)

Air Pressure:

- The exact value can be found either in the tank cap or on the inside of the driver's door, but in any case, in the instruction manual
- Depends on the load (more load → more pressure) and tire size
- Pressure should be checked with the manometer (at a gas station) once a month

The right pressure is important!!! Incorrect pressure impairs drivability, shortens the life of tires and increases braking distances.

Too little pressure: Tires are more worn at the edges

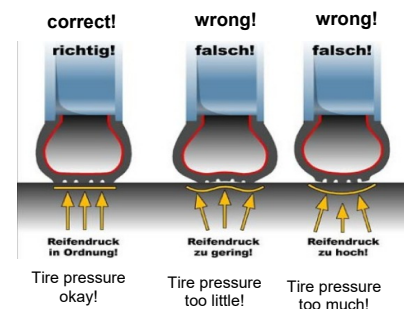
Too much pressure: Tires are more worn in the middle

If the profile is worn unevenly, the camber or the track is misaligned (e.g., by hitting the curb)

Other:

Meaning of tire dimension: 205 / 55 R 16 91 H

- 205 – width of the rite in millimeters
- 55 – percent of height in relation to the width
- R – radial ply tires
- 16 – rim diameter in inches
- 90 – load capacity index
- H – speed index



Furthermore, you should check the tire for **external damage** such as cracks, cuts, inclusions (e.g. nails) and dents before each journey.

Explaining wheel change

- Secure car by activating the parking brake and put it in gear
- Park on even ground (otherwise put something – e.g., a board of wood - underneath)
- In certain circumstances: hazard warning lights, warning triangle, safety vest
- Remove decorative caps (if existing)
- Loosen wheel nuts
- Raise the vehicle with the car jack
- Screw off wheel nuts, take off wheel
- Attach spare wheel, screw on wheel nuts crosswise
- Lower vehicle, tighten wheel nuts
- Tighten wheel nuts again after a short driving distance

Showing the spare wheel / emergency wheel / repair kit

Showing the necessary tools and car jack for changing a wheel (in the trunk under the cover)

Balancing weights:


- Equalizing weights which are attached to the rim to guarantee the concentricity of the wheel
- The tire is balanced in the repair shop immediately after being wound up on the rim
- In the case of steel rims, the weights are hammered up

In the case of aluminum rims, they are glued to the inside - they can therefore fall off. This is noticeable when the steering wheel starts to flutter at higher speeds.

Brake system

Storing tank:

Inspection: There are markings on the container for min. and max. (the exact liquid level cannot be seen on the Audi because it's built in).

If there is not enough brake fluid, the corresponding symbol lights up on the dashboard. 
(Caution: Active parking brake - same symbol)

The brake fluid has the function of transferring the pressure from the pedal to the brakes and must be replaced in a professional workshop every 2-3 years.

Causes of insufficient brake fluid: worn brake pads, system leaking

Stationary brake check:

Free travel: should be as small as possible. If it keeps getting bigger, do a leak test. (1/3 free travel, 1/3 brake effect, 1/3 spare)

Leak test: Press the brake pedal several times and then keep it pressed for approx. 30 seconds. The pedal must not subside, otherwise there is a leak in the brake circuit system.

Brake booster: Press the pedal several times, keep it pressed and start the engine. The pedal must subside by several centimeters.


Brake lights: Inspection by another person, with a shop window, house walls or similar.

The correct function of the foot brake and the even braking effect can only be checked by a **coasting / driving brake test**.

Parking brake (Hand brake):

Efficacy: You try to start with the handbrake on. If the car lifts on one side or the engine dies, it works.

Free travel: By applying the handbrake you can hear the lever engage; the number should correspond to the information in the instruction manual (normally 3-6 times) otherwise visit a specialist workshop!

Control light: When the handbrake is applied, a control light lights up on the dashboard. 

Illumination

Brightness levels:

DRL = daytime running light

Only the position lights at the front of the Audi light up.

AUTO = automatic light

The car controls the lights by itself

 = position lights (sidelights)


In the front: position lights are lit


In the back: taillights and license plate light are lit


Interior space: dashboard lights are lit


 = low beam

Only works when the ignition is on. In addition to the of the 4 position lights, the low beam lights up at the front. Sidelights and low beams must light up together. If the low beam fails, the sidelights can make the vehicle recognizable to oncoming traffic as a multi-lane vehicle at the front and sides.

 = fog lights: If you pull out the light switch once, the front fog lights light up (for new Audi: press button)

 = rear fog light: If you pull out the switch again, the fog lights and rear fog lights light up. (for new Audi: press button)

 = high beam: Activated by pushing the blinker-lever away

 = blinker: If you tap it, it blinks 3 times

Brake lights: Only light up when the *footbrake* is active (not handbrake)

Reversing lights: Light up **white** when reverse gear is engaged



Checking the lights:

Before each journey, all lights must be checked for function and cleanliness.

The height of the low beam can be adjusted using the rotary wheel next to the light switch. If the vehicle is heavily loaded or if you are towing a trailer, the low beam must be readjusted so that oncoming traffic is not blinded.

You can also adjust the brightness of the dashboard lights.

L Signal and warning fixtures

Actuation of the headlight flasher:

The headlight flasher is activated by pulling the blinker-lever. (draw 2-3 times)

Used to alert oncoming traffic to a hazard.

E.g.: obstacle on the road, someone else forgot to switch off their high beam, ...

Actuation of the hazard warning flasher:

The hazard warning lights are switched on by pressing this button:



All turn-signals flash (2 front, 2 back and 2 on the side).

If one of them is broken, the system flashes very quickly.

E.g. breakdown, securing the scene of the accident, a traffic jam builds up in front of me, ...

Actuation of the signal-horn:

The horn is operated on the steering wheel. Used when the headlight flasher and hazard lights are no longer sufficient to warn of a hazard.

e.g.: person pulling out of a parking space overlooks me, car rolls back in the intersection, ...

L Adequate vision

Windshield wiper & windshield washer system

Pushing the lever down: one swipe

Pushing 1st level up: interval wipes every few seconds.

the intervals can be controlled using a smaller switch

2nd level up: wiper runs slowly

3rd level up: wiper runs fast

Pulling the lever towards you: front washer

Pushing the lever away from you: rear wiper (only one speed setting)

Pushing the lever even further away from you: rear washer

Windshield blower

Needed when the windows start to tarnish or are iced over in winter.

Windshield heater

The wires in the *rear* window get hot.

Required when the *rear* window is fogged up or iced over.

temperature controller for driver

temperature controller for co-driver




windshield blower

air circulation

windshield heater

air condition

Liquid status

Motor oil:  (used to lubricate the engine)

Inspection: Turn off the engine on an horizontal surface for a few minutes so that the oil in the oil pan can collect. Now pull out the dipstick (orange ring), wipe it, insert it, pull it out again and read the oil level. (Should be between min. and max.)

Cooling liquid: (used to cool the engine)

Inspection: There is a mark for min. and max. on the liquid container. If the level is below the minimum, refill with coolant and water (according to the instruction manual). Only open the expansion tank when it is cold, otherwise you could scald yourself from the pressure in the tank.

The operating temperature is 90-95°C. If it gets warmer than that, the remote thermometer lights up.

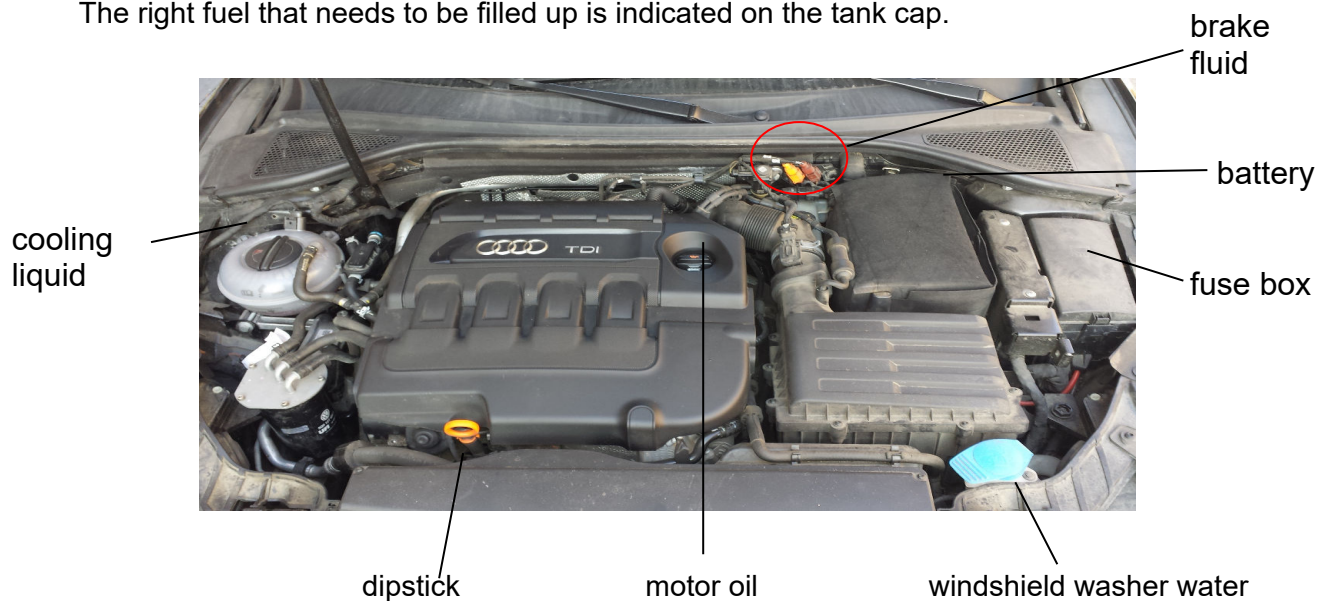
Windshield washer system:



Top up with water and cleaning agent at the latest when the container is empty or the indicator lamp lights up. Because ice expands it is important to additionally add antifreeze in winter, so that the lines don't freeze and break open.

Fuel:

The right fuel that needs to be filled up is indicated on the tank cap.



Battery



Pole/Connections:

Check connections for tight fit.

The poles must be clean and rust-free in order to guarantee conductivity (otherwise clean with a wire brush and lubricate with "pole grease")

Liquid status:

There are 2 types of batteries:

- Maintenance-free batteries cannot be refilled. Pay attention to the control sign (inspection glass) on the battery and the instruction manual.

- In the case of non-maintenance-free batteries, the liquid level must be checked. It must always be approx. ½ cm above the lead plates, otherwise refill with distilled water.

The V-belt should be checked regularly for tension (max. leeway of 1 cm) and damage (cracks, brittleness).

Other

§ 57a KFG vehicle inspection sticker:

The month of the next assessment is perforated.

You can also have the inspection 1 month in advance or 4 months afterwards.

With a new car, the first sticker has to be done after 3 years, then after 2 years and then every year thereafter

Attention: Do not drive abroad with an expired sticker (tolerance only applies in Austria)!

Vignette:


The annual vignette for the car is valid for 14 months (vignette from 2016 is valid from 1.12.15 - 31.1.17)


Accessories:

The driver must always carry a high-visibility vest (abroad: one high-visibility vest per person), bandages (pay attention to the expiration date) and a breakdown triangle in the vehicle.

Inspection structure

Functional inspection and meaning:

 **Charging indicator light:** Lights up if, for example: the alternator is broken, the V-belt is torn or the connection between the alternator and the battery is defective. Under observation of the remote-reading thermometer, you can continue driving to the next workshop.


 **Oil pressure warning light:** if it lights up, stop the car immediately and check the oil level.

Not enough oil: If there is oil, top up, otherwise do not continue driving.

enough oil: possibly broken oil pump, do not continue under any circumstances. Call breakdown service.

If you continue driving despite the lamp lighting up, it can lead to engine damage.

Furthermore, the engine or the tires could lock up and the vehicle could skid.

 **Brake control light:** Handbrake applied, brake fluid below minimum, a brake circuit has failed or brake lines are leaking.

Internal inspections

When at the practical test, please pay attention to the exact seating position, mirror adjustment, adjustment of the headrest and seat belt!

Steering

Inspection of free travel and steering assistance:

Inspection of free travel: Stand next to the car and steer the car through the open door/window with the engine running. A steering backlash, i.e. the area in which the wheels do not move, should hardly be noticeable. It may be a maximum of 2 fingers wide.

Steering assistance: The *power / servo steering* enables the driver to steer with little effort. It is only effective when the engine is running. The servo oil level should be checked regularly and refilled with oil if necessary (the Audi does have electric power steering though).

Furthermore, the steering should be self-restoring (it should straighten itself out after a curve), it should not flutter and should not pull.

Fluttering: Lost balancing weight or defective shock absorbers

Pulling: Unequal air pressure, track or camber misaligned (curb got hit)

Steering wheel lock: Protection against unauthorized use. To unlock, turn the steering wheel and the ignition key at the same time.