



Fahrschule Easy Drivers Krems

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Learning Aid T-ROC



Driver Side

Lightswitch

Warning lights



Switch for exterior mirror adjustment

Windshield defrost function (upper button)

Start/Stop-system

Rear window heating (lower button)

Dashboard

Rev counter












Speedometer



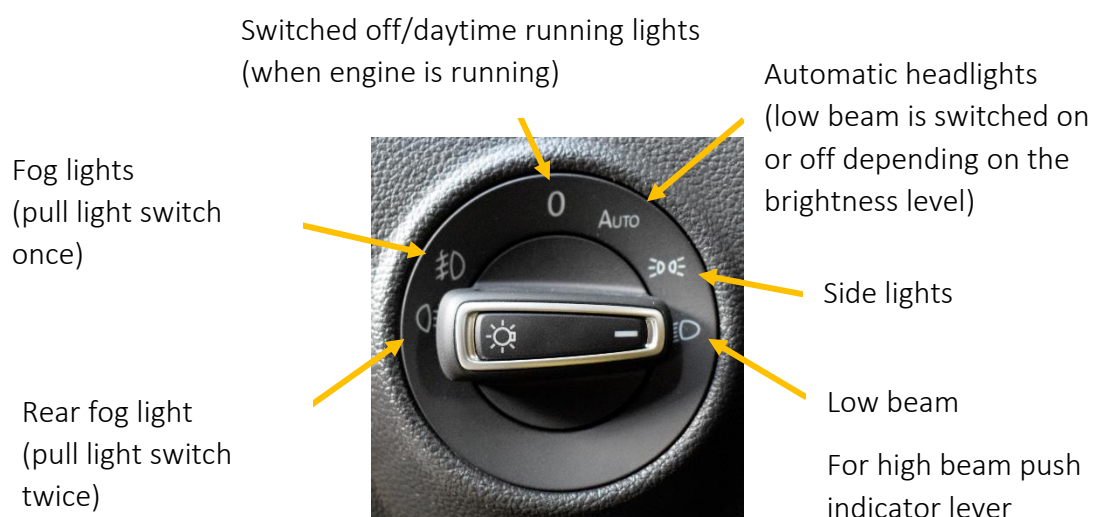
Coolant temperature gauge

Fuel gauge

Warning lamps

	Electronic handbrake activated		Lights up: engine preheats Flashing: engine control fault
	Unfastened seat belt (driver or passenger seat)		Exhaust system fault
	Low brake fluid or other brake system fault		Lights up: ESC fault Flashing: ESC active
	Low engine oil pressure		ESC switched off manually
	Fault in the generator or battery		Failure in anti-lock brake system
	Steering function reduced		High beam switched on
	Low coolant level or fault in the coolant system		Indicator signal
	Press brake pedal!		Fog lights switched on
	Tyre pressure loss or tyre monitoring system fault		Rear fog light(s) switched on
	Check brake pads		Central warning lamp. Check additional information on dashboard
	Auto hold activated		Start/Stop system active

Lighting





Daytime running lights/Side lights



Low beam



Fog lights



Rear fog light

Regular lighting checks

What can you check concerning the lighting?

- Condition and function of the lighting

How far must the low beam shine?

- At least 40 meters

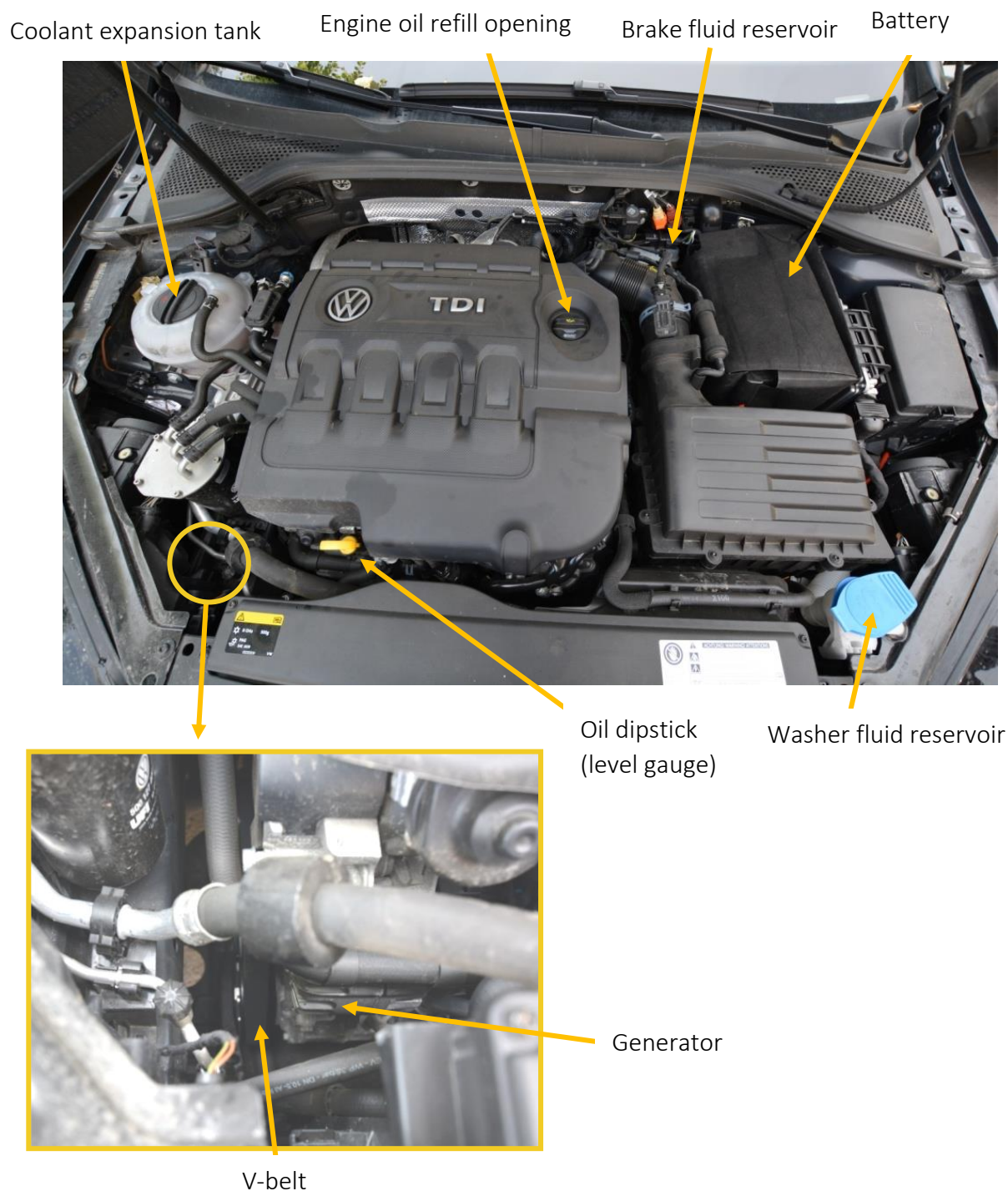
What signal- and warning indications are there?

- Warning lights (all indicators flash)
- Headlight flasher (pull indicator lever several times)
- Horn

Which lights shine when low beam is switched on?

- Low beam, Side lights, Rear lights, License plate lights

Engine compartment



Battery:



- Positive-/negative pole?
- Tight fit of both poles and the cables?
- Poles must be clean
- Tight fit of the battery?
- Battery in school cars are non-refillable
(if refillable: check fluid level, refill distilled water)

Regular fluid checks

What if the brake fluid level is too low?

- Do not refill! Have the brake system checked.
- Brake tests while standing (page 8)

What if the coolant level is too low?

- Refill with coolant
- In emergency: refill with water and have it checked.

How to check the engine oil level?

- Park the vehicle on a firm and level surface, switch off the engine and let it cool down for a minute, check with oil dipstick

What if the oil level is too low?

- Refill with engine oil (as stated in the Car owner's manual)

Other possible questions

Dead range of the steering wheel?

- When steering sometimes it takes a while for the tyres to follow. This is called the dead range (empty run or free travel). How to check: switch off engine (active ignition) and steer until the tyres follow. The dead range maximum should only be the width of approximately two fingers.

What are regular checks of the steering wheel?

- Unusual noises
- Autonomous recentring

What can cause the steering wheel to favour a direction?

- Street bumps
- Uneven tyre pressure
- Crosswind

What can you check concerning the V-belt?

- The tension (not more than 1cm), cracks, brittleness caused by age

Where is the V-belt positioned?

Which objects and documents are you responsible for always carrying with you while driving?

- Warning triangle, First aid kit, highly visible vest, driving license, registration papers

Which protection devices do you know inside of a car?

- Airbag
- Headrest
- Seatbelt

Wheels/Tyres

Tyre lettering:



195 = tyre width [mm]

65 = tyre height [% of the tyre width]

R = radial tyre (belt type of the tyre, alternative: diagonal)

15 = rim diameter [inch]

91 = load index (in this example: 615 kg)

H = speed index (in this example: 210 km/h)

Regular wheels/tyres checks

What can you check concerning the tyres?

- Tyre pressure
- Profile depth
- Regular wear of the profile
- If there are damages to the tyre

How do you know how high the tyre pressure should be?

- Car owner's manual
- Tyre pressure sticker on the driver door pillar (alternatively on the inside of the tank flap)

What is used to measure or change the tyre pressure?

- Air pressure manometer (petrol station)

What should be considered when measuring tyre pressure?

- Check the tyre pressure when the tyres are cold
- Note different air pressures for the tyres on the front axle/rear axle
- Adjust the tyre pressure to the load level (weight) of the car

How often should the tyre pressure be measured?

- At least once a month

What is the minimum profile depth of the tyres on the training vehicle?

- Summer tyre: at least 1,6 mm
- Winter tyre: at least 4,0 mm (radial tyre)

How can you determine whether the minimum profile depth is still available?

- With a profile depth gauge
- Based on the tread wear indicators (TWI) on the tyre

Point to the tread wear indicators on the tyre!

How do the tread wear indicators indicate that the minimum profile depth has been reached?

- When the profile is worn down to the height of the tread wear indicators

What kind of tyre damages cause the need to replace a tyre?

- Cuts on the tyre that reach the tyre fabric
- Cracks and bumps

How do you know if you have summer or winter tyres?

- Winter tyres are marked with “M+S” for Mud and Snow on the side of the tyre

When are you obligated to use winter tyres?

- From November 1st to April 15th (during winter road conditions such as ice or snow). You are also allowed to use summer tyres during this time when you have no winter road conditions. This is called situational or weather-dependent winter tyre obligation.

What are balancing weights on tyres for?

- They balance the tyre to run smoothly and circular (unbalanced tyres cause unpleasant vibrations at the steering wheel)

How do you change a wheel?

- Secure the car (switch on the electronic handbrake, switch off the engine, 1st gear)
- Pre-arrange (temporary) spare wheel
- Loosen wheel bolts with a box spanner
- Lift the car with a jack
- Change wheel
- Slightly tighten the wheel bolts
- Lower the car with the jack
- Fully tighten the wheel bolts

Brake system

Regular brake system checks

What can you check at the brake system?

- Brake tests while standing
 - brake fluid level
 - dead range of the brake pedal
 - leakage test
 - brake booster
 - brake lights and handbrake check
- Brake tests while rolling
 - check if all 4 tyres brake evenly

How do you perform a leakage test?

- When the engine is switched off you press the brake pedal a few times until you feel resistance. Then you stay on the pedal for approximately 30 seconds and it should not give in, but maintain its former resistance.

How would you check the brake booster?

- When the engine is switched off you press the brake pedal a few times until you feel resistance. Then you stay on the pedal and start the engine. If the brake booster is working properly, the brake pedal gives in a little bit.

What can you check at the handbrake?

- How many notches you hear until handbrake is fully applied (not possible if it's an electronic handbrake)
- Check if it's effective: apply the handbrake and try to drive off → the engine must stop
electronic handbrake: you must keep on pulling the lever while trying to drive off → the engine must stop

What does it mean when this warning lamp lights up?

- Brake fluid level is too low
causes: leak in brake system, or brake pads are worn down

How do you react when this warning lamp lights up?

- Stop immediately
- Check brake fluid level
- Perform a leakage test



Different warning lamps

What does it mean when this warning lamp lights up?

- „Battery control lamp“ - shows that the battery is not getting charged anymore, which means that the generator doesn't work properly and the power for lighting and other power consumers is only drawn from the electric storage of the battery → battery discharges



What does it mean when this warning lamp lights up?

- „Low engine oil pressure“ – caused by too less engine oil or a fault of the oil pump leading to a possible engine breakdown



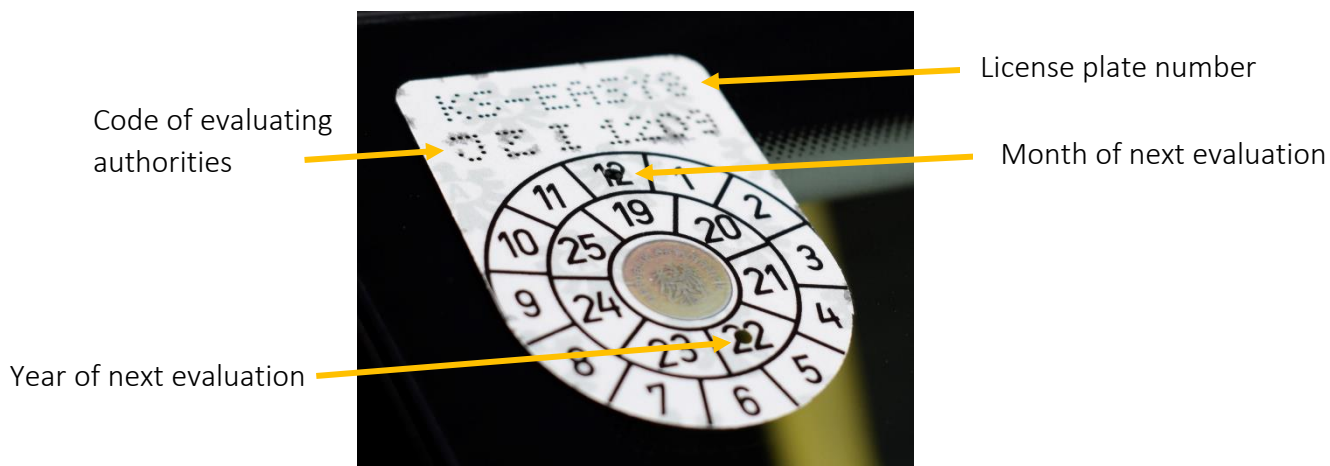
What does it mean when this warning lamp lights up?

- „Coolant control lamp“ – the temperature of the coolant is too hot or there is too less coolant leading to overheating of the engine and a possible engine breakdown



§57a Evaluation

“Pickerl” = safety check sticker in accordance with Section 57a of the Motor Vehicles Act



Validity = 3-2-1-rule

1. First evaluation: after **3** years (from the date of first registration)
2. Second evaluation: **2** years after first evaluation
3. After that: **1** year (needs to get evaluated every year)

The latest time for the evaluation can be up to 4 months after the punched month

At the earliest the evaluation can be done 1 month before the punched month

Training ground

- 1) Target braking
- 2) Reverse
- 3) Backward parking
- 4) Slalom
- 5) Parallel parking

