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The life-saving click – a comforting sound!

Ensuring the comforting click of the seat belt is still one of the most important tasks a motorist has to perform before setting off. And the advent of the airbag, ESP, emergency assist etc. has done nothing to change this. However, around 200 road deaths and 1,500 serious injuries could have been avoided if everybody had been correctly belted up.

Driving in the wet – a slippery business

Motorists are more likely to skid in rainy rather than dry weather. The reason for this is the lower friction coefficient of the tires on wet road surfaces. "A hard stop undertaken at 80km/h on a dry road results in a braking path of around 31 metres for a car; in the wet, however, this extends to 50 metres and more," says DEKRA tire expert Christian Koch.

DEKRA battery quick test: unbeatable speed and precision

Developed by DEKRA, the battery quick test has established clarity in the used electric car trade. It now makes it possible to quickly and reliably determine the condition of the drive battery. It provides a precise figure for the residual capacity of the battery in just 15 minutes. No other procedure is as quick and precise.

Other topics

- Risk of poisoning during barbecues: A breath of fresh air!
- Number of road deaths falling too slowly: Focus on the human factor
- Bus stop: Lower speed when bus signals



Comforting click? A correctly worn belt could avoid up to 200 road deaths and 1,500 serious injuries a year .

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How a safety belt can save your life

The life-saving click -a comforting sound!

Ensuring the comforting click of the seat belt is still one of the most important tasks that a motorist has to perform before setting off. And the advent of the airbag, ESP, emergency assist etc. have done nothing to change this. Nonetheless, accident researchers at the German Insurance Association estimate that around 200 road deaths and 1,500 serious injuries could be avoided every year if all car occupants were correctly belted up. Car occupants adopting an all too relaxed seating position or driving with damaged belts may well be taking some unnecessary risks. DEKRA accident researcher Stefanie Ritter sets out the following points that will enable the sturdy nylon strap to offer optimal protection when required.

- **Setting.** The belt height is to be set so that the safety belt does not lie across your neck, but rather over the shoulder, passing across the collarbone. The belt should always lie close to the body, even in vehicles equipped with a belt tightener.
- **Head rests.** The height of the head rests also needs to be correct. And this means when the top edge is more or less level with the crown of the person's head. This enables the rest to support the head when it springs back in a collision. Ensuring that the seat is vertical enough so that the back of the head rests on the head rest will not overstretch the back of the neck.
- **Guidance.** The belt should never be passed underneath the armpit but over the shoulder. If this is not the case, the airbag and belt will not interact properly and the person will be insufficiently restrained during a collision. In a worst-case scenario, the incorrect positioning of the belt can also lead to injury.
- **Seating position.** An all too relaxed seating position comes at a safety cost. Anybody on the front passenger's seat lounging with their feet up on the dashboard can expect to suffer serious injuries in the event of an accident. A triggered airbag will catapult the knee towards the head and the lap belt will penetrate deep into the stomach. The upshot is "lying and lounging are hazardous to life in an accident," stresses Ritter. If the rear back rest is set flat, the occupant can suffer submarining, i.e. slip out under the belt, again risking serious injury.
- **Child seat.** Children up to 12 years of age and smaller than 1.50 metres must always be secured in a child seat suitable for the age in question; again, pay attention to the correct positioning of the belt. (DEKRA Info)



*Driving in the rain:
longer braking distance, impaired
vision, lower lateral guidance*

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Driving in the rain

A slippery business

Drivers are more likely to skid in wet weather than in dry weather. This is due to the lower friction coefficient of tires on wet roads. "A hard stop at 80 km/h on a dry road results in a braking distance of about 31 meters for a car; in the wet, this increases to 50 meters and more," says DEKRA tire expert and accident researcher Christian Koch. Rain proved to be the cause of 4,580 accidents involving personal injury in 2021. The German Federal Statistics Officer reports that this led to 42 fatalities.

"The lesson to be drawn? The motorist needs to drive more carefully and increase the distance to the vehicle in front if the road is wet or damp," emphasizes the expert. In curves, in particular, a less energetic driving behaviour is required. Apart from lower deceleration longitudinally, the generated lateral forces are also lower so that a vehicle can more easily depart from the road surface. Moreover, rain can also considerably restrict the driver's vision. According to the Federal Court of Justice, 80 km/h on the motorway can be too fast in heavy rain.

Dimmed headlights even in daylight

In order to ensure that motorists are easily recognisable for other road users, the road traffic regulations also stipulate that they must drive with dimmed headlights if visibility is greatly reduced, and this also even applies during the day. Visibility can be affected by rain, fog or snowfall. Court judgements deem greatly reduced visibility as just 80 meters, and on highways merely 150 metres. Should visibility worsen still further, the well-known rule comes into action for rain and fog: visibility of less than 50 meters equates to a permitted maximum speed of 50 km/h, even on highways. This also includes an overtaking ban for vehicles over 7.5 tons.

Aquaplaning is a real danger if the water cannot swiftly flow away from the road surface and begins to collect in recesses such as tire tracks. Already at around 80 km/h, worn tires can build up a wedge of water and make the vehicle unsteerable. "When this happens, immediately reduce your speed, depress the clutch and whatever you do continue steering in a straight line until the tires finally grip – and obviously continue driving at a slower speed," reminds Koch. (DEKRA Info)



*At the barbecue party: Ensure
adequate ventilation*

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Risk of poisoning at barbecue **A breath of fresh air!**

Many grilling enthusiasts can hardly wait for the barbecue season to begin and will fire up the grill even on cold days. However, people who do this on a semi-open patio or in the garage are literally playing with fire. If the area is not properly ventilated, the barbecue cook may be at risk for life-threatening carbon monoxide poisoning. This gas is produced wherever charcoal, wood, gas, pellets or oil are burned and simultaneously deprived of oxygen. Every year in Germany, several hundred people die from carbon monoxide poisoning and thousands are taken to hospital with symptoms.

"The barbecue chefs cannot rely on their senses to pick up the warning signals. The highly toxic gas has no smell, color or taste and usually goes unnoticed by those present when it begins to spread," explains DEKRA expert Lars Inderthal. It is not only dangerous to be in the immediate vicinity of the grill itself. The combustion gases can also spread to adjacent rooms that are not sufficiently ventilated, leading to the risk of poisoning there as well.

Therefore, charcoal and gas grills should never be used indoors. Even individual and underground garages pose a high risk, even if the doors are left open. If the smoke from the grill is not replaced by fresh air quickly enough, carbon monoxide levels can rise to life-threatening levels. Even grills with dying embers should not be stored indoors to cool down. Carbon monoxide can even travel through walls.

The danger of carbon monoxide poisoning is not restricted to grilling devices. Risks can also arise due to a lack of maintenance or blocked air pipes from gas boilers and oil heaters. By the same token, shisha fans should also be aware of the risks and should ensure sufficient room ventilation.

If you want to protect yourself from carbon monoxide poisoning in rooms with wood-burning stoves, oil or gas heating, you can install a special CO alarm, which works in a similar way to a smoke detector, but reacts to increased CO concentrations. If it emits a warning signal, you should leave the house immediately and call the fire department on 112. CO alarms should not be installed under the ceiling like smoke alarms, but at 'head height' of people. Further information can be found in the operating instructions for the device. (DEKRA Info)



DEKRA battery quick test: How much capacity does the battery still have?

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DEKRA battery quick test for used electric cars

Unbeatable speed and precision – made possible by AI

The traction battery is the most important component of an electric car. Not only is it responsible for the vehicle's range, but it is also by far the most expensive component of an electric car. If you are considering buying a used electric car, you need to consider the condition of the battery. As the battery ages, its charging capacity tends to decrease. Nevertheless, manufacturers usually offer long warranties; the standard is about eight years or 160,000 kilometers.

The battery quick test, developed by the technical services organization DEKRA, provides peace of mind. It can be used to determine quickly and reliably the state of the traction battery. The procedure provides a precise calculation of the remaining capacity of a traction battery in just 15 minutes. No other procedure in the world is as fast and as accurate. The reading provides the state of the health of the battery. The procedure was validated by the Technical University of Rhineland Westphalia in Aachen (Rheinisch-Westfälische Technische Hochschule (RWTH) and has also been granted an international patent.

The test merely requires a brief acceleration over 100 meters to enable a readout of various key battery data via the on-board diagnosis interface. The actual know-how, however, is the categorisation of the readings on the basis of extensive test journeys with new vehicles. This takes place with the aid of AI-based calculations, in turn, based on a complex algorithm as well as a comprehensive database.

The German Association of Transport Science (DVWG) considers the battery quick test so remarkable that it has awarded it the Innovation Prize of the German Mobility Industry. "Electromobility plays a key role in climate-neutral transportation. This makes the contribution made by the DEKRA battery quick test to sustainability and economy all the more important," said Prof. Knut Ringat, chairman of the jury and initiator of the award.

DEKRA is initially offering this service to predominantly commercial customers, for example, large-scale users like leasing companies that market electric vehicles, or car dealerships dealing in electric vehicles. However, end customers can also arrange an appointment and have the test carried out at a local DEKRA center in Germany. (DEKRA Info)



Accident figures are falling too slowly. DEKRA wants to focus on cyclists and pedestrians

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The number of road deaths is falling too slowly **DEKRA: Focus on the human factor**

The number of road deaths is currently well above the target set by the National Road Safety Campaign. The Federal Statistical Office expects around 2,750 road deaths in 2023. However, the target set for 2030 means that the number should have fallen to less than 2,300 by now. DEKRA experts therefore recommend focusing on the human factor in the short term. People play a key role in ensuring road safety. Measures in the area of vehicle technology and infrastructure would be more effective in the medium and long term. "We need to pay more attention to vulnerable road users such as pedestrians, cyclists and e-scooter users," explains Jann Fehlauer, Managing Director of DEKRA Automobil GmbH. (DEKRA Info)



**Bus stops: only pass by carefully
– this also applies to oncoming
traffic**

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Caution, bus stop **Slow down when the bus signals**

DEKRA experts remind drivers that they need to be extra vigilant when passing a bus stop, and this also applies to traffic on the other side of the road. For example, the Highway Code (paragraph 20) requires drivers to be extremely cautious when overtaking a stopping bus or tram. This means that when overtaking on the right, a walking pace (4 - 7 km/h) and a distance that does not endanger passengers must be maintained. If necessary, the vehicle must wait. It is also important to note that a driver cannot overtake a bus when it is approaching a bus stop with its warning lights activated. If the bus is stopped and has activated its warning lights, the car driver can only pass at a walking pace – a rule that, by the way, also applies to oncoming traffic on the other side of the road. The bus also has the right of way when rejoining traffic. (DEKRA Info)