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Tests carried out by experts at the DEKRA Technology Center at the Lausitzring in Brandenburg have revealed that the minutest misalignment of a camera or an inaccurately calibrated radar system can lead to life-threatening faults on vehicles equipped with assistance systems. This is a clear argument for making sensors an integral part of the periodic vehicle inspection.

Cozy candlelight: Heightened risk of fire at Advent

The public holidays around the Christmas period will once again see the risk of fire rise considerably in living rooms across Germany. Statistics compiled by the Association of Insurers found that fire damage regularly increases by between 40 and 50 percent around Christmas and New Year. It is all too frequently the lack of care when handling burning wax candles that turn the Advent wreaths and Christmas trees into dangerous incendiary devices.

Christmas car decorations: Christmas vibe, but remember – safety first

During the holiday season, festive lights can be seen all around. Some drivers enjoy adorning their vehicles with fairy lights, miniature Christmas trees, or even reindeer costumes, letting their creativity shine. However, it is important to pay attention to DEKRA's advice and carefully consider the legality of vehicle decorations, as not all that glitters is allowed.

Other topics:

- What to watch out for when buying toys
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*Fairy lights in the car:
significant defect at
periodic inspection*

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Christmas car decorations

Christmas vibe, but remember – safety first

During the holiday season, festive lights can be seen all around. Some drivers enjoy adorning their vehicles with fairy lights, miniature Christmas trees, or even reindeer costumes, letting their creativity shine. However, it is important to pay attention to DEKRA's advice and carefully consider the legality of vehicle decorations, as not all that glitters is allowed.

The German Road Traffic Licensing Regulations are unforgiving where colorful illumination and fairy lights are concerned. The regulations state that "Motor vehicles and their trailers are only permitted to have light systems fitted that are approved and permissible. Violations entail a fine and, at worst, even the invalidation of the operation license; and insurance protection can also be compromised. Moreover, anybody heading for a car test center in a car decked out in Christmas deco should not be surprised when they find that their Christmas lights are categorized as a "considerable defect" at the periodic vehicle inspection, something that will mean the test sticker cannot be awarded.

The reason for this is road safety. According to Markus Egelhaaf, an accident researcher at DEKRA, fairy lights and other decorative lighting could distract drivers and other road users, leading to misjudgments and accidents. It is also important to avoid obstructing the driver's view with reflections on the windshield or excessive light in the interior.

Are unlit Christmas decorations allowed in and on the car? It all depends: A large star pendant on the rearview mirror or a Christmas tree on the dashboard must not restrict the driver's view under any circumstances, as the decoration could all too easily obscure a pedestrian or cyclist. And that's not all: "If drivers are distracted by objects that are constantly moving, they might not be able to detect movement outside the vehicle properly or early enough, and they could easily miss seeing a pedestrian or cyclist," explains Egelhaaf. Also, it's vital to securely fasten any decorative objects on the dashboard or rear shelf to prevent detachment during extreme driving situations. These objects could obstruct the steering wheel or pedals or turn into dangerous projectiles in case of a collision. It's important to keep in mind that covers for side mirrors should not obstruct the builtin signal lights.



Testing toys in the laboratory

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What to watch out for when buying toys

You must pay attention to this

When selecting toys for children, safety and avoidance of harmful substances should be a top priority, in addition to enjoyment. To make sure that gifts do not pose any potential danger or harm, buyers should carefully assess their toy options. DEKRA experts offer crucial guidelines to guarantee a secure and reassuring purchase of children's toys:

- Test marks help when shopping for toys. All toys sold in the EU must have the CE mark. This shows that the manufacturer meets the minimum requirements in the EU. The GS mark means "Tested Safety" and only neutral, authorized test centers such as DEKRA may award it. The Ökotex Standard 100 ensures that textiles are free from health risks, while the "Spiel gut" seal assesses potential health hazards.
- Pay attention to quality. For example, buy from specialist retailers or from renowned manufacturers. An internet purchase could turn out to be a fake product that fails to fulfill the required standard as regards safety and harmful substance exposure. It is important to have a contact partner in the EU with the requisite contact details for complaints or queries.
- Many toys not only require clear markings but also instructions for use and warning symbols. Checking the age group details given will provide information on whether the toy is suitable for the child in question.
- Take the toy in your hand and check whether it sticks, smears, smells conspicuously or whether paint comes off when you touch it. Other aspects may include an LED light that is too bright, noises that are too loud, sharp edges or sharp corners. Ribbons, cords or foils can pose a choking hazard. Also avoid small detachable parts that small children could easily swallow.
- The European Rapid Alert System (RAPEX) website allows you to check which consumer products, including toys, have been reported as dangerous and non-compliant. For more information, you can find tests or comments about products on the Internet. (<https://ec.europa.eu/safety-gate-alerts/screen/webReport>).



*Dripping candles are
potential fire hazards*

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Never leave burning candles unattended **Increased fire risk in the Advent season**

The risk of fire in German homes increases significantly during the holiday season. According to statistics from the German Insurance Association, fire claims regularly increase by 40 to 50 percent around Christmas and New Year's Eve. In many cases, careless handling of burning wax candles turns the atmospheric Advent decorations and Christmas trees into dangerous fire hazards. The most important rule: "Never leave burning candles unattended or alone in a room with children or pets," remind the DEKRA experts.

If you can't provide the necessary supervision, it's better to rely on electric fairy lights, a wide variety of which are available in retail stores and come with energy-saving LED technology. However, for those who simply love the authenticity of wax candles – and according to surveys, this is a sizeable group at 40 percent of Germans – it is necessary to keep the candles away from branches, curtains, tablecloths and decorations. It is also important to keep the area above the candle free of obstructions, as this is the hottest part of the flame. It is also a good idea to place the wreath on a fireproof base. This will ensure that if something goes wrong, the fire will not spread as easily.

Low quality candles can also constitute a danger if they leak or the burning wick tips over. The purchaser is recommended to pay attention to quality. Safety has a name called the "RAL quality symbol candle", which is indicated by a stylistic candle flame logo. The experts likewise recommend that the candle should not be blown out, but put out with a candle snuffer. A wick that is still glowing has frequently been relit by a gust of air. And be prepared for the worst-case scenario; keep a fire extinguisher or a bucket of water handy.

However, electric fairy lights also need attention, especially as they age. Kinked or worn cables can lead to short circuits, smoldering, or electric shock. These types of lights should only be used outdoors if specifically permitted by the manufacturer and if they are adequately protected from moisture.



*Motorists also need to
listen to their “senses”*

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Car sensors

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Once vehicles are correctly calibrated, they can reliably avoid accidents. However, even a slight misalignment of the sensors can result in collisions with stationary objects, hitting pedestrian dummies, or delayed reactions to possible collisions when changing lanes. Such misalignments can stem from gentle knocks during parking or incorrect windshield exchanges, and they are frequently not visibly obvious.

The sensors in modern vehicles act as “sensory organs” that are essential for the functioning of driver assistance systems. Their main task is to identify traffic situations, allowing the system to send a warning or activate emergency braking when necessary. The most common types of sensors currently in use are cameras, radar, and lidar sensors.

If something is not quite right with them, the self-diagnosis of the vehicle registers this automatically and warns of a system failure. However, recent tests have shown that if the sensors are only slightly misaligned, the vehicle fails to report any error. This means that the motorist would believe that everything was functioning safely, unaware that the affected assistance system was suffering a serious malfunction.

Experts at the Technology Center conducted tests simulating a rear end collision with a stationary vehicle on three different vehicles at speeds of 20, 40 and 60 km/h. Also, the systems had to detect a pedestrian dummy crossing the road. This proved no problem for a correctly fitted camera. All three vehicles warned the driver in good time and applied the brakes, coming to a stop in front of the obstacle.

However, things were very different after the front camera had been ever so slightly misadjusted, though still within the self-diagnosis threshold. A vehicle collided with the obstacle at all three speeds, i.e., even at 20 km/h and another one at 60 km/h. Only one vehicle issued a warning and braked in sufficient time in all situations. At 60 km/h the pedestrian would have been hit by all three vehicles with slightly misaligned sensors,” reports Christoph Bahnert, team leader for assis-



tance systems and highly automated driving at DEKRA Lausitzring. It is concerning that two out of three tested vehicles did not issue a warning or trigger a braking intervention at 40 km/h. What's more, the rear radar had issues due to minimal adjustment. When changing lanes, the warning provided by the system was far too late to avoid a collision with a vehicle that was approaching from behind.

DEKRA's findings show that sensor functions should be part of mandatory periodic inspections. As automation continues to advance, this concern will only become more urgent. Currently, DEKRA is developing its own methodology for testing.



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How to bring the Christmas tree home safely

If you transport your Christmas tree on top of your car, it should be firmly secured to prevent any dangerous projectile in the event of a braking or evasive maneuver, according to DEKRA experts. To achieve this, it is advisable to use tear-resistant lashing straps as crash tests have shown that rubber expanders usually cannot withstand the forces involved. Furthermore, the branches must not obstruct the driver's view, and the load must not protrude to the side or front of the vehicle. Mounted with the tip facing the back of the vehicle and covered in a net, the tree presents the smallest surface area for the wind to resist.

If the tree protrudes more than one meter above the reflectors, it must be marked with a red flag or sign measuring 30 by 30 centimeters if it is bright. In poor visibility, twilight or darkness, a red light or a red reflector is required at the top of the tree, which may hang a maximum of 1.5 meters above the road. Care must also be taken to ensure that neither lights nor indicators or the license plate are obscured. Anyone transporting the tree in the passenger compartment must position it in such a way that it neither obstructs the driver nor restricts visibility.