

## **Car batteries: After the summer heat comes the deadly freeze**

- 40 percent of car breakdowns are caused by battery failure
- Heat shortens the life-span of car batteries
- Battery replacement should be carried out by a workshop

When temperatures start drop bringing cold winter weather, it is time to take your car to the workshop and get it ready for the season. While changing tyres, testing lights and refilling fluids are standard procedures, the battery is often overlooked – yet the continuous operation of windshield heaters, rear window defrosters, headlights and wipers puts it under a constant strain. According to the RAC the second most common cause of vehicle breakdown in the United Kingdom is a flat or dead battery, second only to a punctured tyre. The only way to ensure your batter will make it through the winter is to have it professionally checked by a workshop.

### **Batteries age in summer and fail in winter**

Winter's cold weather often proves too harsh for a weak battery to survive – especially when preceded by an extraordinary long and hot summer as this year was. Heat dramatically shortens the life-span of a battery, so by the time winter comes, older batteries are close to their limit. “Many drivers think that cold weather does damage to the battery, but it is the heat that is the start of its downfall,” explains Dr. Christian Rosenkranz, Vice President Engineering at Johnson Controls Power Solutions. An outside temperature of +20°C is optimal for a car battery. This summer the temperature often climbed over +30°C.

High temperatures lead to self-discharge of the battery and cause its electrochemical parts to age more quickly. “These effects may not cause the battery to fail immediately, but they can jump-start the deterioration,” says Rosenkranz. Whilst this development remains unnoticed throughout summer and autumn, the problems start to show in winter, when more energy is needed to start the engine. For this reason, the battery should be checked regularly throughout the whole year.

### **The Battery is part of a complex electrical system**

As the battery ages, its performance decreases as corrosion and sulfation prevent it from fully charging. In today’s cars, the role of the battery has changed: it not only provides energy for the ignition to start the vehicle, but it’s part of a complex electrical system – powering a wide range of comfort and fuel-saving functions such as air conditioning, seat heaters and Start-Stop systems.

Furthermore, the battery is no longer easily accessible under the bonnet and is often installed in the boot or under a seat. As a result, special tools and expertise are needed to replace batteries in modern cars. In order to ensure a problem-free and safe replacement, this task should be carried out by a specialist, with testing and replacement handled in a workshop.

“Battery testing helps to indicate upcoming failure. Therefore, drivers should have their batteries checked by workshops at least once a year before winter,” says Rosenkranz. “This keeps them on the road and protects them from additional costs and hassle. Nothing is more annoying than a battery that is still strong enough to turn on the lights, but too weak to spin the starter.”

- END -

*For more information please contact:*

# Press release



*Johnson Controls Power Solutions EMEA*

*Anja Heidmann*

*Am Leineufer 51*

*30419 Hannover*

*Tel: +49 (0)511 975 1032*

*E-Mail: [anja.heidmann@jci.com](mailto:anja.heidmann@jci.com)*

## **About Johnson Controls Power Solutions**

Johnson Controls Power Solutions is a world leader working in partnership with our customers to meet increasing market demands for energy storage on a global scale. We create the most-advanced battery technologies for virtually every type of vehicle on the planet. Our employees develop, manufacture and distribute the smartest portfolio of lead-acid and lithium-ion technologies in the world. These technologies deliver uniquely sustainable, next-generation performance. We partner with our customers at every link in the supply chain, contributing to the communities we serve and the planet we share. For additional information, please visit [www.johnsoncontrols.com](http://www.johnsoncontrols.com) or follow us [@JCI\\_BatteryBeat](https://twitter.com/JCI_BatteryBeat) on Twitter.