

Stop-start battery technology

What is a stop-start system?

A stop-start system automatically switches off the engine when a vehicle is stationary, such as in traffic and at red lights etc. The engine shuts off after about 1.5 seconds and the system automatically switches the engine back on when the driver is ready to move off, by pressing the accelerator or clutch, depending on the design.

A vehicle that utilises this system typically offers 5 – 10% reductions in both fuel consumption and CO2 emissions.

Are the battery designs different?

The development and introduction of stop start technology on automotive vehicles has produced major changes in battery technology. The traditional battery technology is no longer suitable for Stop start technology and the replacement of stop start batteries is not as simple as traditional battery technology.

As Stop Start technology has become more prominent in automotive technology two types of battery technology in AGM (Absorbent Glass Mat) and EFB (Enhanced Flooded Battery) have become a prominent force in Stop Start vehicles. As with most aspects of the automotive trade the correct battery for the application is vital. It is essential to replace stop start batteries with like for like technology, AGM technology may not replace EFB and vice versa. Best practice is to check with the vehicle manufacturer for battery specification and correct fitting equipment. Not following the manufacturer specifications can result in error messages on the dashboard, failure to charge the battery and non start issues of which can sometimes be incorrectly associated with Valeo alternators, starter motors, ReStart reinforced starters and reversible alternators.

The vehicles battery is intricately linked to the vehicles on-board electric systems via a battery management system (BMS) or an intelligent battery sensor (IBS), so when a new battery is fitted, it needs to be introduced to the vehicle electrical system and sometimes this requires vehicle specific specialist equipment.

