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Porsche Panamera: More Technical Innovation



In a month's time, the much-vaunted new Porsche Panamera will be unveiled in the metal at the Shanghai Auto Show. In advance of that world debut, Porsche has announced some truly innovative technologies which will feature on its new front-engined, four-door GT sportscar.

The key innovations include automatic start/stop in conjunction with PDK auto transmission, air suspension with additional air volume on demand, plus 'active' aerodynamics with a multi-stage, adjustable rear spoiler on the Panamera Turbo.

The Panamera's PDK (Porsche Doppelkupplungsgetriebe) double-clutch transmission is a first for this market segment, offering a long overdrive top gear for enhanced fuel economy. But the real milestone is the start/stop system which, combined with very low friction in the engine, low-rolling-resistance tyres and disc brakes with minimal residual brake forces, ups fuel economy in the PDK-equipped Panamera S to 26.2mpg – outstanding for the performance.





Economy is also helped by the Panamera's lightweight body, built from a careful mix of various grades of steel, along with aluminium and magnesium alloys – and plastics. The 'intelligent' structure is illustrated by the doors, with their load-bearing frame of laser-treated pressure-cast aluminium, an aluminium outer skin and window frames in thin-walled pressure-cast magnesium. Hence the Panamera S, for example, weighs just 1770kg – despite the Porsche performance, four seats and a through-loading luggage capacity of up to 1263 litres.



Meanwhile, the chassis and suspension of the Panamera aim for a high standard of comfort but – at the touch of a button on the active PASM damper system – the settings switch to a fully sports suspension. Adaptive air suspension with 'extra volume' when required – a refreshingly new idea – comes as standard on the Turbo and an option on the other models.

But the most obviously visible highlight of all the technical innovations is the Panamera Turbo's active four-way rear spoiler. By managing the rear spoiler's angles and surface geometry, and making multi-stage changes depending on driving conditions, Porsche offers a new level of aerodynamic control on a production car.

The Porsche Panamera goes on sale in the UK and Ireland from September 12th 2009, priced from £72,266.

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