2008: Porsche double-clutch transmission (PDK)

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The optionally available Porsche double-clutch transmission (PDK) was featured in a series production sports car for the very first time when it was fitted into the 997 series of the 911 in 2008. It had seven forward gears and one reverse gear and was initially available in the Carrera and Carrera S. Its main advantages were faster gear changes in comparison with manual gearboxes and automatic converter gearboxes. The gears were already engaged when the driver changed gear and drive was not lost during the process. The PDK also provided weight benefits – despite two additional gears in comparison with the manual gearboxes prevalent at that time, it weighs approximately ten kilogrammes less than the Tiptronic S gearbox.

In the 1980s, Porsche was the first manufacturer in the world to use this gearbox technology successfully in motor racing in the 956/962, and therefore it had the most experience with dual-clutch gearboxes for high-performance sports cars. The Porsche Doppelkupplung combined the driving dynamics and the good mechanical efficiency of a manual gearbox with the shifting and ride comfort of an automatic gearbox. The PDK was therefore designed in line with the requirements of a 911 driver, in terms of both sportiness and comfort. The first six of the seven forward gears had a sporty set-up, whereas the seventh gear had a long ratio for maximum fuel economy.