
ESC with electronic limited slip differential

Many Audi front-wheel-drive models come equipped with sporty suspension technology as standard. The ESC stabilization program with electronic limited slip differential is an intelligent software solution.

On detecting that the front inside wheel in a turn is relieved too much, the control unit arranges for a small and precise brake intervention there, not more than a slight application of the pads to the disk with minimum pressure, smoothly and continuously. The intervention takes place before greater slip occurs; that would consume significantly more energy.

The braking action causes the excess torque to flow to the outside wheel, which can apply more power to the road. At the same time, the car turns into corners with ease. It stays neutral for longer at the limit, and understeering is practically neutralized when turning inward and accelerating, improving the traction. The ESC stabilization program intervenes later and more gently, if it is even necessary at all. Meanwhile, subjective confidence in the car increases even more.

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