
Audi A6 Sedan – Dynamic All-Wheel Steering

Suspension technology for enhanced maneuverability and agility

Maneuverable in town, sporty on country roads, and poised and comfortable on the highway – the new Audi A6 handles even more dynamically than its predecessor model. The reason is the different suspension components – from the centralized control of all systems via control strategies, newly developed axles through to new features such as optional dynamic all-wheel steering.

The optional dynamic all-wheel steering in the Audi A6 is unrivaled among the competition. It resolves the conflict of objectives between spontaneous steering response and superb handling stability. The system combines dynamic steering at the front axle, which uses an infinitely variable strain wave gearing, with a separate rear axle steering system with a spindle drive and track rods. As such, the steering angle at the front and rear axle can be adjusted independently of each other. At speeds up to 60 km/h (37.3 mph), the rear wheels are turned as much as five degrees in the opposite direction in relation to the front wheels. This reduces the turning circle by up to one meter (3.3 ft) to 11.1 meters (36.4 ft), virtually on a par with the A3. As such, the approximately five-meter long (16.4 ft) Sedan is much more agile in urban traffic, on tight hairpin bends and while parking. At medium and high speeds, the wheels are turned by as many as two degrees in the same direction. Consequently the new Audi A6 is even more stable on the road and also performs abrupt evasive maneuvers with composure. Overall the superimposed steering at the front axle can vary the ratio between 9.5:1 and 16.5:1.

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