

Audi A6'05 - Running Gear

Self-Study Programme 324

### **General information**

The basic version of the Audi A6'05 is equipped with a steel spring chassis. There are three different types of running gear:

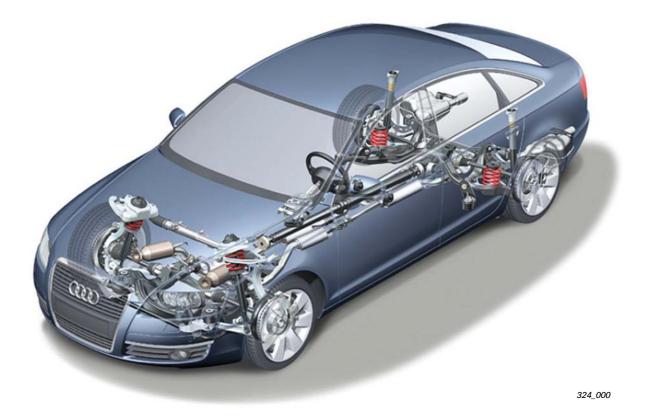
Normal running gear: Designation: 1BA

**Sports-style running gear:** Designation: 1BE, vehicle trim is positioned 20 mm lower than on the normal

running gear

Rough-terrain running gear: Designation: 1BR, vehicle trim is positioned 13 mm higher than on the normal

running gear



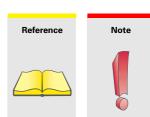
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The Self-Study Programme provides information on the fundamentals of the design and function of new vehicle models, new vehicle components or new technologies.

The Self-Study Programme is not a Workshop Manual! Specified values serve only to make the information easier to understand and relate to the software version that was valid at the time the Self-Study Programme (SSP) was created.

For maintenance and repair work, please make sure to use the current technical documentation.

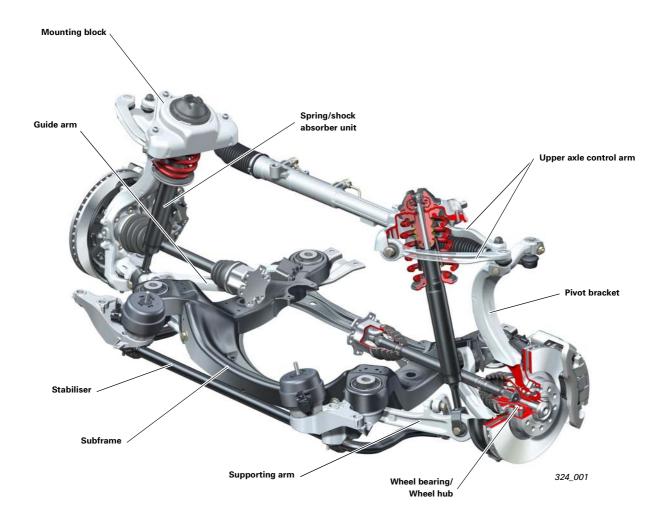


# Front axle

### Overview

The well-known four-link front axle is also used in the new Audi A6'05 (see SSP 161). Given the geometric and kinematic changes compared to the predecessor vehicle, all axle components except for the top-level axle control arms and the wheel hubs (adopted from the Audi A8) are new parts.

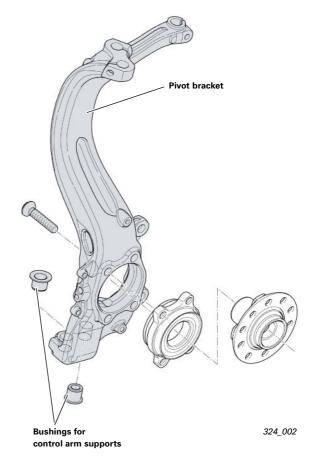
In addition to improved spring and shock absorber settings, spring travel has been increased by 30 mm. This results in a significant improvement in driving comfort and driving stability. With regard to the passenger compartment, the axle was moved forward by 83 mm. This provides better axle load distribution and has advantages from the point of view of driving dynamics.



## System components

#### **Pivot bracket**

The pivot bracket is an aluminium forged part, while the support for the trailing arm mount for the guide and supporting joints is formed from pressed zinc/iron-coated bushings. Because of the different wheel bearing dimensions, there are two types of pivot brackets.

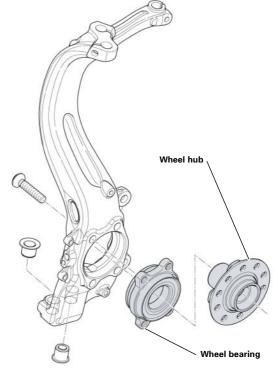


### Wheel bearing

A 2nd generation wheel bearing (double-flange bearing) is used. Because of the different axle loads, an 85-mm  $\emptyset$  bearing is used for all 4-cylinder engines and for 6-cylinder petrol engines. All other engines (higher axle loads) have a bearing  $\emptyset$  of 92 mm. The ring for wheel speed sensing is part of the wheel bearing.

### Wheel hub

The wheel hub for the 85 mm Ø wheel bearing is the same part that is used in the Audi A8'02. The larger wheel hub (Ø = 92 mm) is adopted from the Audi A8'03).



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