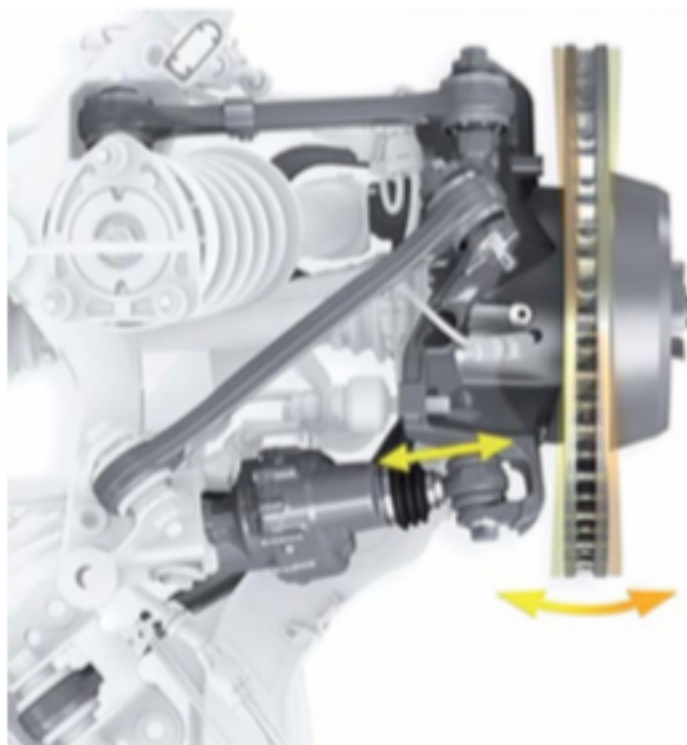


4.2 Rear axle steering (RAS)

Rear axle steering is optional on the new 911 Carrera S models.

The system comprises two electromechanical actuators, which are installed in the left and right of the rear axle instead of the conventional toe control arms. Using these actuators, the system steers the rear axle of the new 911 Carrera models either in the opposite or same direction as the steering angle at the front axle with an interval of +2 degrees to -1.5 degrees, depending on the driving speed.

The steering angle at the rear axle therefore depends above all on the steering angle at the steering wheel, the driving situation and the driving speed.



Operating principle of rear axle steering

4_15_16

The maximum wheel angle movement of the rear axle on the 911 Carrera 2/4 S MY 2017 is 2.00° (max. 2.92° on the 911 Turbo and GT3). The adjustment ratio at the wheel [degrees] / spindle stroke [mm] is 1:4.6. This means that the spindle must be moved by 4.6 mm to adjust the wheel by one degree.

One motor revolution achieves a travel distance (spindle stroke) of 0.795 mm.