Electromechanical brake servo

Design and function

An electromechanical brake servo of the 2nd generation is fitted as standard. A key benefit of this system is that it offers dynamic advantages when building up pressure compared to conventional vacuum-based systems. The faster build-up of brake pressure represents a considerable safety gain due to the shorter braking distances which result. In addition to this, greater play between the brake pistons and brake pads reduce the residual braking torque values (quicker reduction of braking force/torque) and improve braking comfort.

The general layout and the functional principle are essentially the same as the first-generation electromechanical brake servo already used in the Audi A3 e-tron. Power transmission has been converted to spindle drive instead of worm gear.

As no recuperation is performed in combination with blended braking on vehicles with conventional drive systems, an active accumulator is not necessary. The electromechanical brake servo supplies brake pressure for external requirements from other applications/systems (e.g. ACC, parking brake function). For the parking brake function, the brake pressure is built up by the electromechanical brake servo and the final “locking” is performed by the EPB. This means that smaller EPB actuators can be used than on the previous model.

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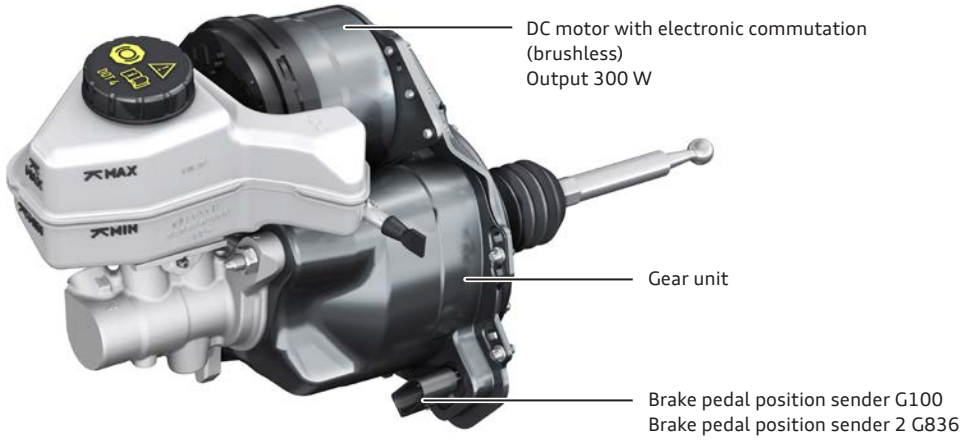

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