Soft close automatic for boot (rear) lid on series E38

Function

The automatic soft close function makes it possible to open and close the boot lid by means of an electric drive.

The boot lid can only be opened when the vehicle is unlocked. In addition, the boot lid lock must not be in the workshop/hotel position (= locking cylinder horizontal). "Open" boot lid is triggered by:

- Pressing the release button in the vehicle interior. Precondition, speed < 6 km/h.
- Pressing the lock cylinder in the boot (rear) lid
- Radio remote control. Precondition, speed < 6 km/h and ignition lock in position 0

The rear (boot) lid is closed by lightly pressing the lid. The rotary latch of the rear (boot) lid is turned to its initial position. The rear lid contact signals to the general module that the rear lid is closed. An electric motor connected to the lock striker of the rear lid is activated by means of a relay in the general module. The electric motor turns the lock striker downward thus pulling the rear lid closed.

The electrical closing function is also active when the vehicle is locked.

Drive

The drive for automatic soft-close is an electric motor which turns the lock striker of the rear lid. The drive is activated by means of a relay in the general module. The direction of rotation of the motor is the same for opening and closing.

A microswitch is initially integrated in the drive in order to detect the position of the motor and thus of the lock striker and to signal this to the general module. The switch switches ground to the general module when the motor has reached the "lock striker in bottom dead centre".

Emergency operation

To enable emergency operation in the case of power failure to the automatic soft-lock system, a linkage connection is provided between the lock cylinder and the rotary latch of the rear lid. This linkage mechanically unlocks and opens the rotary latch by turning the key as far as it will go (approx. 90°) in anticlockwise direction.