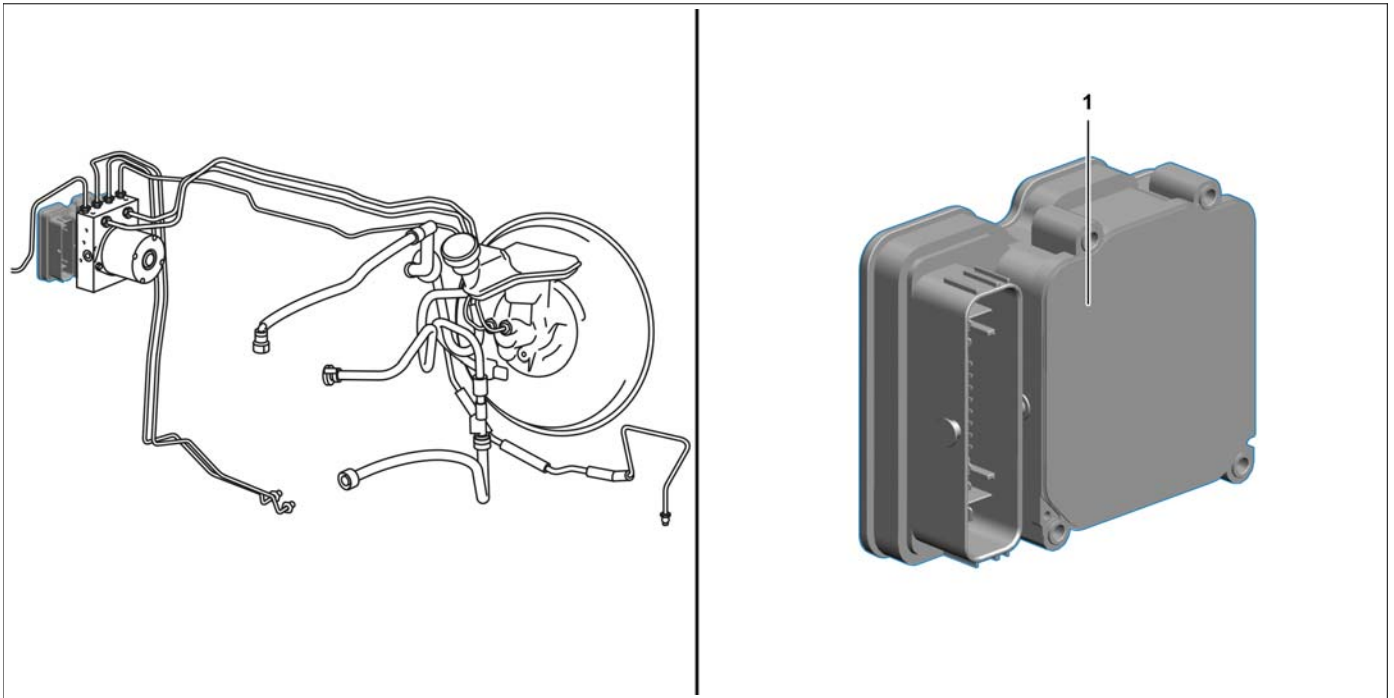


Model all (CAR)



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Example illustration

1 ESP® control unit

Overview

This document contains information on:

- General
- Function

General

The ESP® control unit processes the inputs required for the Electronic Stability Program and actuates the respective outputs for any necessary intervention in the brake system.

Function

The powertrain control unit primarily intervenes in the following functions:

- Brake and traction system (ADAPTIVE BRAKE)
- Electric parking brake
- Electronic Stability Program (ESP®)
- Electronic brake force distribution (EBD)
- Anti-lock braking system (ABS)
- Traction control
- Brake Assist System (BAS)
- Hill Start Assist
- Flash Adaptive Brake Lights
- Dry braking
- Precharge brake system
- HOLD function
- Stabilize trailer
- PRE-SAFE® system
- Standstill control (SSC)
- Tire pressure loss warning (RDW)

- Rear axle steering (HAL)

In order to carry out these functions, the ESP® control unit primarily processes the following input factors:

- Ignition ON (circuit 15)
- Circuit 30
- Circuit 31
- Stop lamp switch
- Left front axle rpm sensor
- Right front axle rpm sensor
- Left rear axle rpm sensor
- Right rear axle rpm sensor
- Accelerator pedal sensor
- Brake vacuum sensor
- Exterior lights and electric parking brake switch group
- With manual transmission: Main shifter shaft position sensor
- Front axle steering angle

The ESP® control unit processes these input factors and primarily transmits the following actuations:

- Supplemental restraint system (SRS) control unit
- Electrical ignition lock control unit
- Drivetrain control unit
- Brake pedal signal
- Left electric parking brake actuator motor
- Right electric parking brake actuator motor
- Rear axle steering angle