1 Parking brake request  A1 Instrument cluster  N3/10 ME-SFI [ME] control unit
2 Emergency braking      A13 Electric parking brake controller (on gasoline engines)
3 Circuit status         A80 Intelligent servo module for DIRECT SELECT
4 Actual position of transmission selector lever
5 Acceleration pedal position  B37 Accelerator pedal sensor
6 Wheel speed signal      L6/1 Left front rpm sensor
7 Engine speed           L6/2 Right front rpm sensor
8 Parking brake status   L6/3 Left rear rpm sensor
                        L6/4 Right rear rpm sensor
                        N3/9 CDI control unit (on diesel engines)

Function
The electric parking brake (EFB) operates the parking brake at the rear axle via cables by an electric motor integrated in the controller unit. Activation takes place manually via the electric parking brake switch or automatically depending on the driving condition. The electronic parking brake is operational as soon as the power supply terminal 30 is present.

Apply and release the parking brake
Function requirement
- Speed less than 3.5 km/h or vehicle stationary
- Terminal 15R On or with code (889) Keyless Go terminal 15 On (only for releasing the parking brake)

Function
When the electric parking brake switch is operated a signal is transmitted directly to the controller unit. Depending on the condition the controller unit releases or tensions the brake cables via the integrated electric motor. The operating period of the electric parking brake switch does not have any influence on the function.

Automatic parking brake release
Function requirement
- Engine runs (terminal 61)
- Selector lever position “D” or “R”
- Engine hood closed
- Trunk lid closed (only in selector lever position “R”)
- Driver door closed (only if driver is not wearing the seat belt)

Function
If terminal 30 has been interrupted, automatic release is not possible. The electronic parking brake must first be woken via the Electric parking brake switch or terminal 87. The controller unit receives the signal terminal 87 directly from the front SAM control unit with fuse and relay module (N10/1).

Emergency case braking with the electric parking brake switch
Function requirement
- Speed greater than 3.5 km/h
The function is triggered when the accelerator pedal position exceeds a certain threshold. The controller unit is awoken via the corresponding CAN-messages and releases the brake cables via the integrated electric motor.

For the case that the electronic parking brake does not release the display "Release parking brake" is displayed in the instrument cluster and a warning tone sounds.

In the event of a service brake malfunction (e.g. CAN communication faulty) the brake application takes place by the controller via the parking brake.

Similar to an ABS a control intervention takes place when blocking of a rear wheel is detected by the rpm sensor.

**Test stand mode**

**Function requirement**
- Front wheels "stationary" and rear wheels turn slowly (roller brake test stand)
- ESP Off switch (S6/2s11) operated

**Function**

When the Electric parking brake switch is operated and held, the braking request is transmitted to the ESP control unit. The vehicle is now braked via the service brake, ABS or ESP interventions are also performed if necessary. The stop lamp actuation is activated.

The display "Release parking brake" appears in the instrument cluster and a warning tone sounds.

Function

The controller unit is actuated by operating the electric parking brake switch. The force is built up at the brake cables in a constantly rising manner until the maximum force is applied.

As a result for example the linings of the parking brake can be bedded in or the deceleration values determined.

The process can be repeated up to 3-times, in which a cooling off time should be maintained between the brake applications.

**Brake cable replacement**

To replace the brake cables the electronic parking brake is either brought into the assembly position or unlocked manually. Once the work is complete the electronic parking brake is again put into the operational condition by pressing the electric parking brake switch.

| Electric parking brake, location of components | GF42.20-P-0001-01SX |
| Electric parking brake, block diagram | GF42.20-P-0001-02SX |
| Electric parking brake controller unit, component description | A13 GF42.20-P-5000SX |
| Intelligent servo module (ISM) component description | A80 Model 221 with transmission 722.9 GF27.19-P-4015SX Model 221 with transmission 722.6 GF27.19-P-4015SX |
| Component description for the accelerator pedal sensor | B37 Model 221.0/1 with engine 642 GF30.20-P-2010SX Model 221 with engine 272.965, 273.961 GF30.20-P-2010V |
| Wheel rpm sensor, component description | L6/1, L6/2, L6/3, L6/4 GF42.45-P-5134SX |
| Description of components in ESP control unit | N47-5 GF42.45-P-5118SX |
| Electronic ignition/starter switch control unit (EIS) component description | N73 GF80.57-P-6000SX |
| Central gateway control unit, component description | N93 GF54.21-P-4170SX |
| Electric parking brake switch, component description | S76/15 GF42.20-P-5001SX |