

Description and Operation

General information

The [ABS \(anti-lock brake system\)](#) system in the new Transit Custom includes the following functions:

- [ABS](#)
- [EBD \(electronic brake force distribution\)](#)
- Emergency Brake Assist
- Traction control
- Dynamic cornering control
- Rollover protection
- Trailer stabilization system
- Hill launch assist

Dynamic cornering control

While cornering, ongoing measurements of the steering angle sensor and the yaw rate sensor are taken. If the vehicle begins to understeer or oversteer, in that the actual yaw rate differs from the yaw rate required by the driver, the dynamic cornering control system initiates the necessary measures to bring the vehicle back into the required lane. Among others, these are individual braking of single wheels, as well as a reduction in the engine torque.

The dynamic cornering control system, which is controlled by the stability assist module, processes signals from the steering angle sensor which it receives via the [CAN \(controller area network\)](#) data bus. In addition, it receives information from the [RCM \(restraints control module\)](#) module about the yaw rate and the longitudinal and lateral acceleration rates. This information is transmitted via a private [CAN](#) data bus between the stability assist module and the [RCM](#) module.

Furthermore, the stability assist module can require a reduction in engine torque by the [CAN](#) via the [PCM \(powertrain control module\)](#) data bus as well as cause direct braking of individual wheels via the corresponding [ABS](#) valves.