

Road Efficiency



Active Brake Assist 4

Until now, it has only been possible to mitigate accidents when trucks are moving at high speed. With the introduction of ABA4, we are also focussed on urban environments and vulnerable road users.

What is it?

The Active Brake Assist 4 system assists the driver when an accident hazard is detected. It reduces the vehicle speed, within the system limits, via a stage-based warning concept up to full braking. It starts to evaluate the traffic situation in front of the vehicle as soon as the vehicle drives off. In addition to Active Brake Assist 3, ABA4 can now detect moving pedestrians.

The system uses its own vehicle data for this purpose and also monitors the distances from vehicles driving in front as well as their speeds. It can also detect stationary obstacles within the system limits and can reduce the consequences of collisions or completely avoid such accidents through prompt initiation of full braking.

This innovative safety system exceeds the requirements of General Safety Regulations that will come into effect in 2018.

ABA4 will detect pedestrians crossing ahead of the vehicle and in turning situations. On detection, partial braking and acoustic/visual warnings are applied at the same time. Full braking cannot be applied when pedestrians are detected.

What are the benefits?


Safety:

- Possible avoidance and reduction of collisions.
- Possible reduction in accident severity within the system limits.

In comparison to the legally required Active Brake Assist, Active Brake Assist 4 has the potential to prevent collisions with stationary obstacles within the system limits when driving at higher speeds. It can also detect pedestrians, thereby mitigating collisions.

Economy:

- Possible reduction of unscheduled workshop visits due to accident damage.
- Possible reduction in material damage.
- Possible reduction of vehicle insurance premiums due to discounts granted by some insurance companies.
- Possible reduction of injury-related absence times of personnel.

 A demonstration video is available on the Truck Sales Gateway and TruckPad

*For rigid vehicles 07R includes Roll Control Assist.
For rigid vehicles that do not require Roll Control Assist use code 07S.
For tractor units code 07R does not include Roll Control Assist.
**Only available on rigid vehicles.

07R/07S* The Safety Pack

With the introduction of General Safety Regulations in November 2015, all trucks are legally required to be fitted with Active Brake Assist and Lane Keeping Assist as standard.

We now need to talk to customers about Active Brake Assist 4 which exceeds the General Safety Regulations of 2018 and can detect moving pedestrians. At the time of printing, Active Brake Assist 4 is currently benchmark in the industry as no other competitor can offer such a system.

Active Brake Assist 4 is one element of the Safety Pack. When sold as a pack, the safety features are 30% cheaper than the individual options.

It includes:

- Active Brake Assist 4
- Proximity Control Assist
- Roll Control Assist**
- Driver's airbag

**Only available on rigid vehicles

30% cheaper when sold as a pack



Guide to safety features



Mercedes-Benz
Trucks you can trust



The Safety Pack

Continued



Proximity Control Assist

What is it?


Proximity Control Assist helps the driver to maintain the desired speed when the road ahead is clear. If the vehicle approaches a detected vehicle driving in front, the cruise control automatically restricts the speed and maintains the preset distance. If vehicles suddenly appear in front, it can intervene with predefined decelerations.

With the stop-and-go function, Proximity Control Assist automatically controls starting and stopping in traffic queues. If the standstill time in stop-and-go traffic is less than two seconds, the vehicle starts moving again without the operation of the accelerator pedal. The driver retains control over the vehicle at all times. The system does not detect stationary obstacles.

A seat occupancy sensor and the monitoring of both vehicle doors ensure that the system is activated only when the driver is present. Mercedes-Benz PowerShift 3 is a prerequisite for the system.

What are the benefits?

- Enhanced traffic safety and reduced risk of rear-end collisions thanks to the automatic adaptation of the vehicle speed to the traffic situation.
- Contribution to enhanced driving dynamics thanks to comfortable, stress-free driving in nose-to-tail traffic.
- Simple handling thanks to the integration of proximity control in the intuitive operating concept.
- Relieves strain on the driver in stop-and-go traffic.
- Compared with the previous adaptive cruise control, the proximity control now automatically controls starting and stopping in traffic queues.

 A demonstration video is available on the Truck Sales Gateway, TruckPad and RoadStars



Roll Control Assist**

What is it?

Roll Control Assist is an electronically controlled suspension and damping system. It has an adaptive damper adjustment for partially and fully air-sprung vehicles.

It automatically adapts damping to the loading condition and responds to the current driving situation and road conditions. In conjunction with the suspension and brake system, it is able to reduce roll movements and vertical accelerations.

Driver's Airbag

What is it?

The airbag, integrated in the steering wheel, is linked to a control unit. This ignites several propellants, within a period of 30 milliseconds, as from a precisely defined minimum deceleration in the event of an impact.

One propellant deploys the airbag and a further propellant activates the pre-tensioning device and draws the safety belt as close as possible to the driver's body.

What are the benefits?

- Enhanced driving safety and driving dynamics on vehicles with high centre of gravity or dynamic cargo (e.g. liquids or suspended goods).
- Good damping of roll build-up after abrupt steering manoeuvres and reduction in vertical accelerations on the frame when driving over closely spaced bumps.
- Enhanced ride comfort and protection of sensitive cargo.

What are the benefits?

- Reduces risk of injury in the event of an accident because the airbag, safety belt and pre-tensioning device absorb kinetic energy. Consequently, it can prevent direct contact between the upper body and the steering wheel subject to a correct sitting position and a correctly adjusted seat belt.

Availability

The safety pack is available for Actros, Antos and Arocs on-road vehicles, typically where Active Brake Assist 3 has been available.

What additional safety features are available?



S1Y Tyre Pressure Monitoring


What is it?

The wireless tyre pressure monitoring system on the front axle and rear axle(s) is an electronic safety system that permanently monitors the air pressure of all tyres on the towing vehicle as well as on the semi-trailer/trailer.

The wheel electronics are located on the valve on the inner side of the rim in each case. The sensors detect the data relevant for the tyre pressure and forward this information, via antennas, on the vehicle to the instrument cluster, where it is displayed.

What are the benefits?

- Contribution to active safety as the system can prevent burst tyres due to insufficient inflation pressure.
- Relieves the driver's workload thanks to tyre pressure monitoring from the cab.
- Increased tyre service life thanks to correct air pressure.
- Lower fuel consumption thanks to reduced rolling resistance.

 A demonstration video is available on the Truck Sales Gateway, TruckPad and RoadStars

F8Z Alarm System with interior monitoring

What is it?

The alarm system is a multifunction monitoring system for the motor vehicle, vehicle interior and semi-trailer/trailer. The alarm system has three additional ultrasonic sensors in the cab. These are located at the front right in the upper roof area and are connected with the alarm system via a data line. Every tripped alarm is recorded on the multifunction display, with date and time, and is displayed on the instrument panel after the ignition is switched on. The system offers an interface for the connection of external motion detectors and door contact switches for the bodybuilder.

It provides increased safety for driver, vehicle and cargo because potential thieves are discouraged by the vehicle's visual and audible alarm systems.

What are the benefits?

- Protection of the motor vehicle, cab interior and semi-trailer/trailer against unauthorised manipulation and intrusion.
- Increased safety for driver, vehicle and cargo because potential thieves are discouraged by the vehicle's visual and audible alarm systems.

J9J Pre-installation for reversing camera

What is it?

The preparation for the reversing camera consists of a standardised interface with camera input for subsequent connection of commercially available camera systems. The 'Instrument Cluster, 12.7cm, with video function' (J1C) is required for image display on the instrument.

What are the benefits?

- Simplified retrofitting of a reversing camera thanks to camera input at the interface.
- Eliminates the need for an additional video monitor due to image display on the instrument cluster.
- Increased working and traffic safety with retrofitted camera.