

Warn and Brake Assist (WBA)

General Safety Instructions



WARNING

System not available or has restricted availability

The system supports the driver within the limits of the system but cannot prevent an accident under all circumstances.

Responsibility for appropriate driving reactions aimed at avoiding an accident always lies with the driver.

- ▶ Drive with extreme care.
- ▶ Always pay attention to the traffic situation and the area around the vehicle.
- ▶ The driver must be ready at all times to assume control of the vehicle if the system is not available or fails to function as expected.

System limitations

Within the system limits, the system can warn against impending head-on collisions and initiate the appropriate braking manoeuvres (depending on the country) or steering assistance (depending on equipment). Not all road users and dangerous situations can be recognised correctly and in time.

The lateral vehicle areas and the rear area are not monitored.

In complex driving situations, the system can issue undesired warnings and perform undesired brake interventions.

Not all Warn and Brake Assist protection measures are triggered, depending on the hazardous situation.

The system is available above walking speed and can react to pedestrians or cyclists up to a speed of

85 km/h (53 mph). It can react to vehicles up to a speed of 250 km/h (156 mph).

The system does **not** respond to animals, crossing vehicles, oncoming vehicles and objects such as bars, fences and rail vehicles.

The function is not available:

- when reversing
- if the brake lights are defective
- if PSM malfunctions and if PSM is switched off
- if the airbag control unit malfunctions

The function may be restricted, or unavailable:

- up to 10 seconds after establishing readiness for operation
- if the seat belts are not fastened
- in sharp bends
- in the presence of reflective objects such as guardrails or when entering a tunnel
- in heavy rain, snow, fog and ice
- in the event of damage to the windscreen
- in the event of damage to the bumper, e.g. through parking bumps
- in the event of damaged or soiled radar sensors
- if the Adaptive Cruise Control (ACC) malfunctions

Responding to warning messages

Always heed any warning and information messages displayed in the vehicle.

- ▶ Please refer to chapter "Warning and information messages" on page 271.

Operating principle

Warn and Brake Assist (WBA) can initiate measures to protect the occupants and other road users in certain dangerous situations.

Warn and Brake Assist (WBA) includes the following functions depending on the country:

- Distance warning (depending on equipment)
- Collision warning
- Acute warning (warning jolt)
- Automatic braking and brake assistance
- Swerve Assist (depending on equipment)
- Turn Assist (depending on equipment)
- Preventive occupant protection functions (depending on equipment)

The camera behind the windscreen and the radar sensor of the Adaptive Cruise Control (ACC) (depending on the equipment) detect the surroundings in front of the vehicle. An impending frontal collision with other road users (vehicles, pedestrians or cyclists) can be detected.



Information


A warning time can be set for the distance and collision warning. This varies depending on the traffic situation and driver behaviour.

i Information

Observe the following information:

- ▶ Turn off Warn and Brake Assist while the vehicle is being used off public roads or being loaded onto car transporters, trains, ships or the like. This can prevent any undesired intervention by the system.
- ▶ Observe any applicable country-specific regulations, especially regarding driving, vehicle distance, speed, etc. The driver is always responsible for complying with the relevant regulations that apply in each country.
- ▶ Deactivate Warn and Brake Assist (WBA) during transport.

Distance warning

If Warn and Brake Assist (WBA) detects a safety hazard due to driving too closely to the car in front, the driver is warned by the  symbol on the instrument cluster.¹

Detection can take place within a speed range from approx. 65 km/h (40 mph) – 250 km/h (155 mph).

Collision warning

Fig. 219: Collision warning on the instrument cluster

If the system detects a possible collision, it can warn the driver by issuing a warning tone and displaying a warning on the instrument cluster.

Urgent warning (warning jolt)

If the driver does not respond to the collision warning, a warning jolt is performed in addition to the warning tone and display of the symbol on the instrument cluster.

With the warning jolt, the system draws attention to the increasing danger of collision.

In the event of this warning, it may still be possible to prevent a collision through the driver avoiding the pedestrian or braking sharply.

The urgent warning function is automatically active and cannot be manually adjusted.

Automatic braking and brake assistance (availability depending on country)

If the driver does not respond to the acute warning or does not brake sufficiently, the Warn and Brake Assist can support the driver while braking or brake the vehicle to a standstill by applying progressively increasing braking force.

Additionally, a warning tone is emitted and a symbol appears on the instrument cluster.

By reducing the vehicle speed, the consequences of a possible accident are mitigated.

i Information

Automatic braking interventions can be aborted with the following measures:

- ▶ Pressing the brake pedal
- ▶ Fully depress the accelerator pedal
- ▶ steer actively

i Information

Once the vehicle has reached a standstill, it is not held permanently by the brake system.

- ▶ If necessary, actuate the brake and resume control of the vehicle.

Swerve Assist

Swerve Assist can help in hazardous situations to steer the vehicle around an obstacle.

If the system detects a critical situation and the driver actively avoids the obstacle after the urgent warning, Swerve Assist will support the driver by selectively braking individual wheels and correcting

1. Not available in some country versions.