# Collision warning systems

### General

Depending on the equipment, the vehicle has different systems that can help prevent an imminent collision.

- ▶ Front-collision warning, see page 189.
- ▶ Exit warning, see page 200.
- ▶ Lane Departure Warning, see page 202.
- ▶ Lane Change Warning, see page 206.
- Side collision warning, see page 209.
- ▶ Road Priority Warning, see page 212.
- Wrong-way Warning, see page 215.
- ▶ Rear Collision Prevention, see page 211.

## Safety notes

#### M WARNING

The system does not relieve you of your personal responsibility to assess the visibility conditions and traffic situation correctly. There is a risk of accident. Adapt your driving style to the traffic conditions. Observe the traffic situation and intervene actively if the situation warrants it.

### ↑ WARNING

Displays and warnings do not relieve you of your personal responsibility. System limitations can mean that warnings or system responses are not issued or are issued too late, incorrectly or without justification. There is a risk of accident. Adapt your driving style to the traffic conditions. Observe the traffic situation and intervene actively if the situation warrants it.

#### ↑ WARNING

Due to system limits, individual functions can malfunction during tow-starting/tow-away when the front-collision warning is activated. There is a risk of accident. Turn the front-collision warning off prior to tow-starting/towing.

# Turning on/turning off collision warning systems

Some of the systems are automatically active after every departure.

Some systems activate according to the last set-

The following functions are adjustable.



Press the button.

- 2. "Driver assistance"
- 3. "Safety and warnings" Make the desired settings.

# Front-collision warning

## Principle

The front-collision warning can help prevent accidents. If an accident cannot be avoided, the system may help reduce the severity of the accident.

The system can issue a warning of a possible risk of collision and may activate the brakes independently.

#### General

Depending on the equipment version, the frontcollision warning includes the following functions:

- ▶ Warning function in rear-end collision situations, see page 192.
- Warning function for oncoming traffic, see page 194.

- Warning function for turning with oncoming traffic, see page 195.
- Warning function for pedestrians, see page 196.
- Warning function at road junctions, see page 197.
- ▶ Evasion Assistant, see page 199.

## Speed range

The system issues a warning of a possible risk of collision at speeds above approx. 5 km/h/3 mph.

The system is temporarily disabled at speeds over approx. 250 km/h. 155 mph.

Some functions are deactivated earlier.

As soon as the speed drops below these values again, the system will respond again according to its settings.

## Safety notes

#### MARNING

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#### MARNING

Due to system limits, individual functions can malfunction during tow-starting/tow-away when the front-collision warning is activated. There is a risk of accident. Turn the front-collision warning off prior to tow-starting/towing.

### Overview

#### Sensors

Depending on the equipment, the system is controlled by the following sensors:

- Camera behind the windscreen.
- Front radar sensor.
- Side radar sensors, front.

For further information:

Sensors in the vehicle, see page 48.

## Turning the front-collision warning on/off

## Turning on the system automatically

The system is automatically activated at the start of each journey.

## Manually deactivating/activating the system

The system can be deactivated temporarily.



Press the button.

- 2. "Driver assistance"
- "Safety and warnings"
- 4. "Front collision warning"
- 5. "Off"

# Setting the warning time



Press the button.

- 2. "Driver assistance"
- 3. "Safety and warnings"
- 4. "Front collision warning"
- 5. Select the desired setting.

"Late": only acute warnings are displayed.

The higher the sensitivity of the warning time settings the more warnings are displayed. As a result, there may also be an increased number of premature or unjustified warnings and responses.

The system checks for visual impairments. In addition, the Driver Attention Camera in the instrument cluster captures the driver's field of view. Visibility conditions and field of vision also affect the timing of the warnings.

# Turning the warning signal on/off

Depending on the equipment, system warning signals can be turned off.



Press the button.

- "Driver assistance"
- 3. "Safety and warnings"
- 4. "Front collision warning"
- 5. "Warning tone"

# Display in the instrument cluster

Depending on the equipment, the following icons are displayed in the instrument cluster and Head-up display:

### Icon Meaning



Depending on the national-market version:

System is restricted or has failed.



Depending on the national-market version:

System is deactivated.



Risk of collision, for example, with a pedestrian.



Risk of collision, for example, with an oncoming or a vehicle driving in front.



Risk of collision, for example, with a crossing vehicle.



General risk of collision.

The image of the respective icon may vary, because the system may detect multiple objects.

## Warning function

The front-collision warning warns on different warning levels, depending on the respective hazardous situation.

In the event of a system warning, the driver must intervene immediately and in accordance with the situation.

Red icon illuminates:

A hazardous situation has been detected. Increased awareness is required.

Red icon flashes:

There is a risk of collision. Intervene yourself immediately.

A warning signal sounds:

There is a risk of collision. Intervene yourself immediately.

Automatic brake intervention:

Depending on the equipment and situation in case of an imminent danger of collision, the system can also intervene with an automatic brake intervention and automatically decelerate the vehicle, if necessary, to a complete stop.

When the brake is operated during a warning, the maximum necessary brake force is applied. This requires the brake pedal to be pressed sufficiently quickly and firmly.

## Automatic brake intervention

In case of a risk of collision, the system can assist with an automatic brake intervention. if necessary.

At low speeds, the vehicle can be braked to a stop.

A brake intervention can be cancelled by stepping on the accelerator pedal, releasing the brake pedal or with an active steering movement.

Depending on the equipment and situation, the brake intervention can occur at speeds of up to approx. 250 km/h/155 mph.

At speeds above approx. 210 km/h/130 mph, only a brief brake intervention will occur.

## System limits

## Safety note



#### MARNING

The system may not respond at all, or may respond too late, incorrectly or without justification due to system limitations. There is a risk of accident or material damage. Observe the information on the system limits and intervene actively if necessary.

## Detection capability

The detection capability of the system is limited.

Only objects within the detection range and that are detected by the system are taken into account.

For this reason, the system may fail to respond or only respond after a delay.

## System limits of the sensors

For further information:

Sensors in the vehicle, see page 48.

### **Functional limitations**

The system may have restricted functionality in situations such as the following:

- On sharp bends.
- With restriction of the driving stability control systems.
- ▶ Up to 10 seconds after switching on driveready state using the Start/Stop button

### Malfunction

In the event of a system fault, a Check Control message or indicator/warning lights will generally be displayed.

A system fault can be triggered by the failure of individual components, for example:

- Sensors, for example camera.
- ▶ Control units, for instance for the Dynamic Stability Control.

# Warning function in rear-end collision situations

## Principle

The system sounds a warning before a risk of collision and activates brakes independently, if needed. If an accident cannot be avoided, this reduces the collision speed.