side assist

Lane change assist feature

Applies to vehicles: with side assist

Description

The side assist function assists the driver when changing lanes

Fig. 178 Rear bumper: Position of radar sensors (not externally visible)

Fig. 179 Warning lamp on exterior mirror (driver's side)

The side assist function employs radar sensors ⇒ fig. 178 to monitor following traffic and the blind spots on both sides of the car ⇒ *page 168*, fig. 181.

Warning lamps are incorporated in the two exterior mirrors ⇒ fig. 179. The warning lamp on the left-hand mirror assists the driver when changing lane towards the left and the warning lamp on the right-hand mirror assists the driver when changing lane towards the right.

When one of these lamps lights up, this is to inform you that the side assist has detected a vehicle on that side and calculates that a lane change would be critical. This is the first stage of the warning, referred to as the **information mode** ⇒ *page 168*. This stage of the warning is designed to be visible only when you look in the exterior mirror.

If you operate the turn signal when the side assist has registered what it judges to be a critical vehicle, the lamp on the exterior mirror will then flash several times with greater intensity. This is the **warning mode** ⇒ *page 168*. ■

Applies to vehicles: with side assist

Switching side assist on and off

Fig. 180 Driver's door: Button for side assist

Switching on

– Press the button ⇒ fig. 180. The red indicator lamp in the button will light up.

Switching off

– Press the button again. The indicator lamp in the button will go out.

The system is designed to provide assistance on motorways and other out-of-town roads, so it only operates at speeds above about 60 km/h.

WARNING

- **Please note that the sensors are not always able to detect all vehicles which may represent a potential hazard (accident risk).**

WARNING (continued)

- **Please note that the side assist is not able to give adequate warning of vehicles approaching very fast from behind, or vehicles that you are overtaking rapidly.**
- **The radar sensor's *"field of vision"* can be impaired by rain, snow or a lot of water on the road. This results in vehicles not being reliably recognised or, in some circumstances, not being detected at all by the side assist. Always give your full attention to the position of your vehicle on the road and other nearby traffic.**
- **The side assist only gives a warning of approaching vehicles and vehicles in the blind spots when road speed is above 60 km/h.**
- **Please note that the side assist does not operate in tight bends (with a radius of less than 200 metres).**
- **The side assist feature is not a substitute for the full concentration of the driver. The driver is always responsible for the safety of lane changes and other manoeuvres. Always give your full attention to the position of your vehicle on the road and other nearby traffic.**

Caution

- To avoid impairing the function of the side assist, do not attach any objects (e.g. stickers or bicycle carriers) in such a way that they might interfere with the radar sensors in the rear bumper.
- Make sure that the warning lamps on the exterior mirrors are not obscured by stickers or other objects.

Note

- To ensure that the side assist function works properly, do not allow snow and ice to accumulate on the rear bumper near the radar sensors. Please observe the additional notes on ⇒ *page 175*.
- The side assist function will be switched off automatically when the electrical connector for the trailer socket is plugged in on vehicles with a factory-fitted towing bracket. ▶

- The side assist should be switched off manually when towing a trailer if the vehicle is equipped with a towing bracket which was not factory-fitted.
- The side assist system will switch off automatically if it detects an obstruction that impairs the function of the radar sensors.
- The warning lamps on the exterior mirrors may not be properly visible if tinted foil is affixed to the side windows on the driver's or passenger's side. ■

Applies to vehicles: with side assist

Area covered by the radar sensors

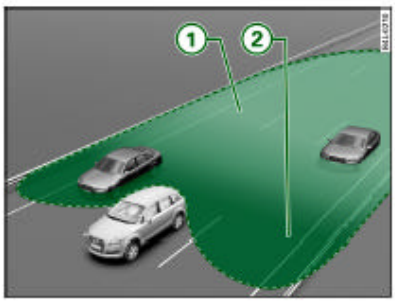

Fig. 181 Schematic diagram: Area covered by the radar sensors

The area covered by the radar sensors ⇒ fig. 181 consists of:

- The rearward approach zone (light green area: up to about 50 metres) (1) and
- Blind spots (dark green area) (2).

The radar sensors monitor the lanes immediately to the left and right of your vehicle. Other lanes are *not* covered by the sensors.

Note

The side assist system is programmed for lanes of a fixed width, and is not able to measure differing lane widths. It monitors a zone equivalent to one normal lane width on either side. If the lanes are narrower than this, or if vehicles are not travelling in the centre of the lanes, the system may register vehicles that are *not* in fact travelling in an adjacent lane ⇒ *page 174*. ■

Applies to vehicles: with side assist

How the system works

When other vehicles are detected, the side assist system registers their distance and how fast they are approaching. The warning lamp on the relevant exterior mirror will light up whenever the side assist calculates that the distance and the speed differential of approaching vehicles would be critical in the event of a lane change.

The warning lamp may light up when you are being overtaken and when you are overtaking another vehicle.

If you are overtaking slowly, with a speed differential of less than 15 km/h, the warning lamp will light up as soon as the other vehicle enters your blind spot and is detected by the sensors. If you are overtaking with a speed differential which is greater than this the lamp will not give a warning. ■

Applies to vehicles: with side assist

Information mode and warning mode

The side assist has two modes of operation

- The information mode and
- The warning mode

The side assist will respond in the appropriate mode, depending on whether or not you operate the turn signal to indicate an intended lane change.

Information mode

As long as you do not operate the turn signal, the side assist will merely inform you of the presence of vehicles that it has detected and judges to be critical in the event of a lane change. The warning lamp on the relevant exterior mirror will light up with low intensity whenever the side assist calculates that the distance and the speed differential of an approaching vehicle are critical.

The intensity of the warning lamp in this information mode is deliberately kept relatively low, so that it does not distract you while you are looking at the road in front and do not intend to change to a different lane. The information mode is clearly visible when you look in the exterior mirror.

Warning mode

If you operate the turn signal when the side assist has detected a vehicle on that side that it judges to be critical in the event of a lane change, the warning lamp on the relevant exterior mirror will flash brightly several times. This is the warning mode: if the lamp flashes brightly it warns you that you should check the situation again in the mirror and by looking back over your shoulder ⇒ ⚠ in "Safety notes" on *page 175*.

Note

You can adjust the brightness of the warning lamps on the exterior mirrors via the MMI ⇒ *page 172*. ■

Applies to vehicles: with side assist

Situation with vehicle approaching rapidly from behind

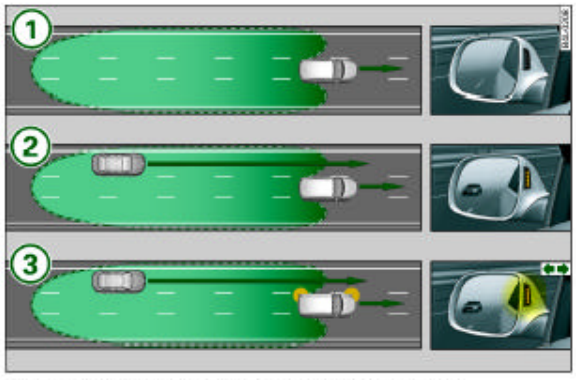

Fig. 182 side assist: Vehicles approaching rapidly from behind

(1) Warning lamp on exterior mirror does not light up

The sensors have not detected any vehicles. The warning lamp on the exterior mirror does not light up ⇒ ⚠ in "Safety notes" on *page 175*.

(2) Warning lamp lights up in information mode

The sensors have detected a rapidly approaching vehicle - in this example in the left-hand lane. Because of its approach speed, this vehicle is already judged to be critical in the event of a lane change even though it is still some distance away. The warning lamp on the exterior mirror lights up in the information mode ⇒ *page 168*.

③ Warning lamp flashes in warning mode

If you operate the turn signal in situation ②, the warning lamp on the exterior mirror will flash briefly several times. This calls your attention to the presence of a vehicle which you may have overlooked.

Note

- The faster a vehicle approaches, the earlier the warning will appear on the exterior mirror. In all cases, the side assist will give a warning for the vehicles it has detected at the latest when they enter the "blind spot".
- If a vehicle is approaching at high speed it is possible that a lane change may be critical, even though no warning is given. ■

Applies to vehicles: with side assist

Situation with vehicle approaching slowly from behind

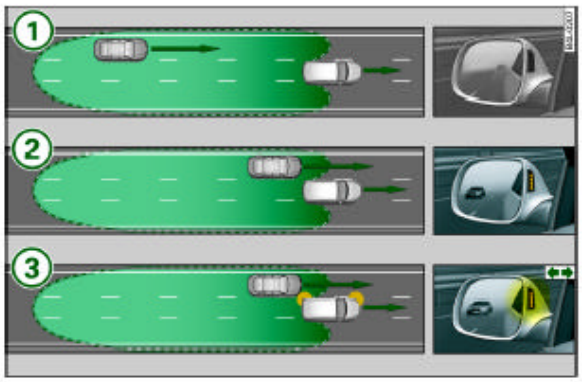

Fig. 183 side assist: Vehicles approaching slowly from behind and vehicles in the blind spot

① Warning lamp on exterior mirror does not light up

The sensors have detected a slowly approaching vehicle - in this example in the left-hand lane. Because it is relatively far away and only approaching slowly, no warning will appear on the exterior mirror ⇒ ⚠ in "Safety notes" on *page 175*.

② Warning lamp lights up in information mode

The slowly approaching vehicle is now closer. The warning lamp on the exterior mirror lights up in the information mode.

The warning lamp on the exterior mirror will only light up if the side assist calculates that the distance and the speed differential of approaching vehicles would be critical in the event of a lane change. ▶

In all cases, the side assist will light up to indicate the vehicles it has detected at the latest when they enter the "blind spot".

③ Warning lamp flashes in warning mode

If you operate the turn signal in situation ②, the warning lamp on the exterior mirror will flash briefly several times. This calls your attention to the presence of a vehicle which you may have overlooked.

Note

- The faster a vehicle approaches, the earlier the warning will appear on the exterior mirror. The side assist will give a warning for the approaching vehicles it has detected at the latest when they enter the "blind spot".
- If a vehicle is approaching at high speed it is possible that a lane change may be critical, even though no warning is given. ■

Applies to vehicles: with side assist

Situation when you are slowly overtaking other vehicles

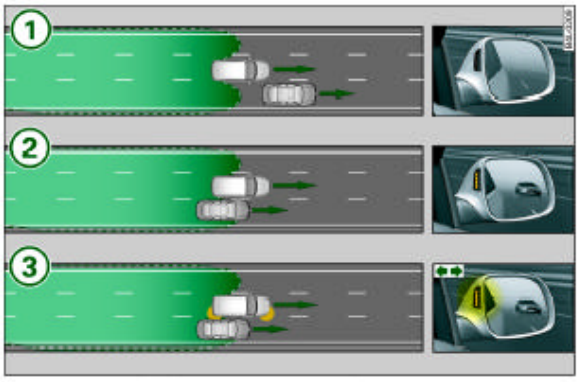

Fig. 184 side assist: Other vehicles being overtaken slowly

① Warning lamp on exterior mirror does not light up

The vehicle you are overtaking has not yet been detected by the side assist. The warning lamp on the exterior mirror does not light up ⇒ ⚠ in "Safety notes" on *page 175*.

② Warning lamp lights up in information mode

The vehicle you are passing slowly (with a speed differential less than 15 km/h) is detected by the side assist. The warning lamp on the exterior mirror lights up in the information mode.

③ Warning lamp flashes in warning mode

If you operate the turn signal in situation ②, the warning lamp on the exterior mirror will flash briefly several times. This calls your ▶

attention to the presence of a vehicle which you may have overlooked. ■

Applies to vehicles: with side assist

Situation when you are rapidly overtaking other vehicles

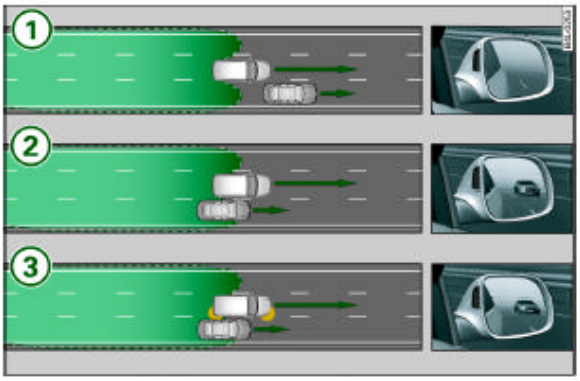

Fig. 185 side assist: Other vehicles being overtaken rapidly

① Warning lamp on exterior mirror does not light up

The vehicle you are overtaking has not yet been detected by the side assist. The warning lamp on the exterior mirror does not light up ⇒ ⚠ in "Safety notes" on *page 175*.

② Warning lamp on exterior mirror does not light up

The vehicle you are passing rapidly (with a speed differential greater than 15 km/h) is detected by the side assist but is not judged to be critical in the event of a lane change since it is dropping back quickly. The warning lamp on the exterior mirror does not light up ⇒ ⚠ in "Safety notes" on *page 175*.

③ Warning lamp on exterior mirror does not light up

If you operate the turn signal in situation ②, the warning lamp on the exterior mirror will still not give any warning ⇒ ⚠ in "Safety notes" on *page 175*. ■

Applies to vehicles: with side assist

Changing settings in the MMI

You can adjust the brightness level of the warning lamps on the exterior mirrors via the MMI.

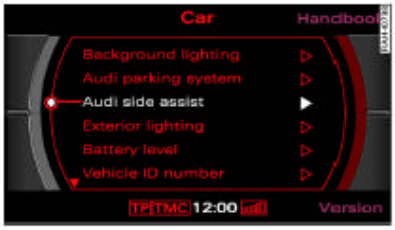

Fig. 186 MMI display: Selection menu

Fig. 187 MMI display: Adjusting brightness of warning lamp

– Press the function selector button marked CAR.

– Select **Systems*** from the CAR menu.

– Select **Audi side assist**.

– Select **Warning lamp: brightness**.

– Turn the rotary pushbutton to set the desired brightness for the warning lamp on the exterior mirror ⇒ *page 172*, fig. 187.

The brightness of the warning lamp in both the information and warning modes is regulated automatically according to the ambient light level. You can also adjust the basic *brightness level* of the warning lamp yourself via the function **Warning lamp: brightness**.

The new brightness level will be displayed briefly while you are making the adjustment. The brightness level that is shown at this point is the intensity of the lamp when it comes on in the information mode. The intensity of the lamp in the warning mode is linked to the intensity in the information mode.

The brightness of the lamp in the information mode should be set so that you can see the lamp when you glance at the exterior mirror, but are not aware of it when looking forwards through the windscreen.

If you are in very dark or very light surroundings when you adjust the brightness of the warning lamp, the automatic brightness control may already have reached the lowest or the brightest setting. Under these circumstances the brightness of the warning lamp on the exterior mirror may not change visibly when you alter the basic *brightness level*.

If you adjust the basic *brightness level* while the vehicle is in in very dark or very light surroundings, the change in the setting may only become visible in surroundings of more moderate brightness.

Note

- The side assist is not active while you are changing the brightness setting; the brief flash of the warning lamp is only intended to help you make the desired setting.
- Your personal settings are stored automatically and assigned to the remote control key which is being used. ■

Applies to vehicles: with side assist

General notes

The side assist system has inherent limitations in some situations. For this reason, please take particular care:

- When driving through bends ⇒ *page 173*
- On roads with varying lane widths ⇒ *page 174*. ■

Applies to vehicles: with side assist

When driving through bends

The side assist cannot detect vehicles in tight bends (with a radius of less than 200 metres).

When driving through a bend, the side assist may react to a vehicle that is two lanes away and activate the warning lamp in the exterior mirror. ■

Applies to vehicles: with side assist

Lane widths

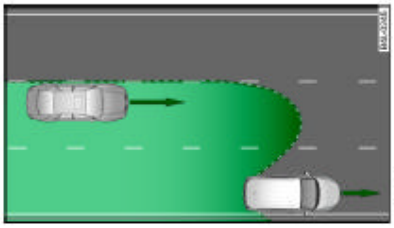

Fig. 188 Lanes of normal width are covered by the sensors

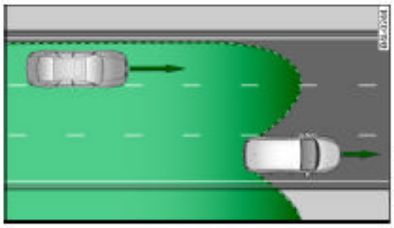

Fig. 189 Narrow lanes: side assist may react to vehicles travelling two lanes away

The side assist system is designed to cover adjacent lanes of normal width on both sides of your vehicle (left and right), regardless of whether you are driving directly in the centre of your lane or further to one side.

If the lane widths are reduced, the sensors may also detect vehicles in additional lanes, especially if you are driving further to one side of your lane ⇒ fig. 189. In such situations the system may react to vehicles travelling two lanes away, so that the side assist activates the information or the warning mode.

Side assist does not measure actual lane width. The system assumes a fixed lane width. Detection in the left and right lanes is based on this assumed lane width. When driving on narrow roads or when driving to the left or right of the center of a travel lane, it is possible that vehicles will be detected that are *not* in the lane next to the lane you are using.

WARNING

- **Improper reliance on the side assist system can cause collisions and serious personal injury:**
  - **Never rely only on side assist when changing lanes.**
  - **Always check rear view mirrors to make sure that it is safe to change lanes.**
- **Side assist cannot detect all vehicles under all conditions - danger of accident!**
- **Side assist cannot detect vehicles in time to alert you when they approach from behind at very high speed, or fall drop back very quickly.**
- **The radar sensor's *vision* can be reduced or entirely blocked by rain, snow, and heavy spray. This can result in side assist not adequately detecting vehicles or, in some cases, not detecting them at all. Always keep an eye on the direction you are traveling and the relevant area around the vehicle.**
- **Please note that side assist indicates there are approaching vehicles, or vehicles in your blind spot, only after your vehicle has reached a driving speed of at least 37 mph (60 km/h).**
- **Side assist signal does not work around tight corners (turning radius less than 218 yards, or 200 m).**
- **Side assist is no replacement for the driver's full attention. The driver alone is responsible for lane changes and similar driving maneuvers. Always keep an eye on the direction you are traveling and the relevant area around the vehicle.**

Similarly, if the lanes are very wide, it is possible that the system may not detect vehicles in the adjacent lane because they are outside the area covered by the sensors. ■

Notes

Applies to vehicles: with side assist

Messages in the instrument cluster display

Should the side assist be deactivated automatically, the indicator lamp in the button will go out and a message will appear in the instrument cluster display:

Audi side assist not available: sensors blocked

The sensors, which are not externally visible, are incorporated on either side of the rear bumper ⇒ *page 166*, fig. 178. To ensure the proper function of the side assist system, do not attach any objects (such as stickers or bicycle carriers, etc.) to the rear bumper in such a way that they might obstruct these sensors. Should the function of the system be impaired, the instrument cluster display will show this message. Please check whether anything is obstructing the sensors and remove the obstruction if necessary.

Audi side assist currently not available

The side assist is temporarily inoperative and cannot be switched on (for instance if the battery is not sufficiently charged).

Audi side assist: system fault

The system should be checked by an Audi dealership or other qualified workshop.

Audi side assist not available when towing

On vehicles with a factory-fitted towing bracket the side assist function will be switched off automatically when the electrical connector for the trailer is plugged in, and this message will appear in the instrument cluster display. The side assist function may not be ▶

Note

To ensure that side assist is not adversely affected, you should not block the area on the rear bumper where the radar sensors are located with foreign objects (such as with stickers or bicycle racks).

Tips

If the positions of the radar sensors have been changed as a result of a rear end-collision, for instance, have side assist checked by an authorized Audi dealer for safety reasons. ■

Applies to vehicles: with Audi side assist

Declaration of compliance

The Audi side assist system is based on radar sensors which operate in one of two frequency bands at 24 GHz. In some countries only one of both bands is allowed. Depending on the country in which you are driving, the Audi side assist system may not be legally activated unless the frequency band permitted has been set by an authorized Audi dealer. Operation in the US and Canada is only permitted on the 24075 MHz to 24175 MHz frequency band. The correct frequency band was set by Audi or an authorized Audi dealer in the country where your vehicle was originally purchased and may have been reset if the vehicle was operated outside the US or Canada. Changes or modifications not expressly approved by Audi can void the user's authority to operate the Audi side assist system.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- this device may not cause harmful interference, and
- this device must accept any interference received, including interference that may cause undesired operation. ■