Road Departure Mitigation (RDM) System

Alerts and helps to assist you when the system detects a possibility of your vehicle unintentionally crossing over detected lane markings and/or leaving the roadway altogether.

How the System Works



The front camera behind the rearview mirror monitors left and right lane markings (in white or yellow). If your vehicle is getting too close to detected lane markings without a turn signal activated, the system, in addition to a visual alert, applies steering torque and alerts you with rapid vibrations on the steering wheel, to help you remain within the detected lane.

Customized Features P. 326

As a visual alert, the **Lane Departure** message appears on the driver information interface.

If the system determines that its steering input is insufficient to keep your vehicle on the roadway, it may apply braking.

► Braking is applied only when the lane markings are solid continuous lines. The system cancels assisting operations when you turn the steering wheel to avoid crossing over detected lane markings.

If the system operates several times without detecting driver response, the system beeps to alert you.

➢Road Departure Mitigation (RDM) System

Important Safety Reminder

Like all assistance systems, the RDM system has limitations.

Over-reliance on the RDM system may result in a collision. It is always your responsibility to keep the vehicle within your driving lane.

The RDM system only alerts you when lane drift is detected without a turn signal in use. The RDM system may not detect all lane markings or lane or roadway departures; accuracy will vary based on weather, speed and lane marker condition. It is always your responsibility to safely operate the vehicle and avoid collisions.

You can read about handling information for the camera equipped with this system.

The RDM system may not work properly or may work improperly under the certain conditions:

RDM Conditions and Limitations P. 457

There are times when you may not notice RDM functions due to your operation of the vehicle, or road surface conditions.

In the following case, a beeper sounds, a message related to the ACC with Low Speed Follow appears on the driver information interface, and the braking function controlled by the RDM system is canceled.

• The vehicle has repeatedly applied the brakes to maintain the set speed (for example, you are descending a long slope).

How the System Activates

The system activates when all the following conditions are met:

- The vehicle is traveling between about 45 and 90 mph (72 and 145 km/h).
- The vehicle is on a straight or slightly curved road.
- The turn signals are off.
- The brake pedal is not depressed.
- The wipers are not in continuous operation.
- The system makes a determination that the driver is not actively accelerating, braking or steering.

Road Departure Mitigation (RDM) System

If LKAS is off and you have selected **Narrow** from the customized options using the audio/information screen, the message below will appear in case the system determines a possibility of your vehicle crossing over detected lane markings.

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➢How the System Activates

The RDM system may automatically shut off and the safety support indicator (amber) comes and stays on. Indicators P. 82

RDM system function can be impacted when the vehicle is:

- Not driven within a traffic lane.
- Driven on the inside edge of a curve, or outside of a lane.
- Driven in a narrow lane.

RDM On and Off



When you turn the RDM on and off, do the following.

- **1.** Press the safety support switch.
- **2.** Roll the left selector wheel to the $\boxed{|\underline{\hat{x}}|}$ symbol and push it.
 - The message appears on the driver information interface when the system turns on or off.

The RDM is in the previously selected **ON** or **OFF** setting each time you turn the power system on.

➢RDM On and Off

When you have selected **Warning Only** from the customized options using the audio/information screen, the system does not operate the steering wheel and braking.

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The vehicle stability assist[™] (VSA[®]) system, vehicle stability assist[™] (VSA[®]) OFF, adaptive cruise control (ACC) with low speed follow, safety support and low tire pressure/TPMS indicators may come on in amber along with a message in the driver information interface when you set the power mode to ON after re-connecting the 12-volt battery.

Drive a short distance at more than 12 mph (20 km/h). Each indicator should go off. If any do not, have your vehicle checked by a dealer.

RDM Conditions and Limitations

The system may not properly detect lane markings and the position of your vehicle under certain conditions. Some examples of these conditions are listed below.

Environmental conditions

- Driving in bad weather (rain, fog, snow, etc.).
- Sudden changes between light and dark, such as an entrance or exit of a tunnel.
- There is little contrast between lane lines and the roadway surface.
- Driving into low sunlight (e.g., at dawn or dusk).
- Strong light is reflected onto the roadway.
- Driving in the shadows of trees, buildings, etc.
- Shadows of adjacent objects are parallel to lane markings.
- Roadway objects or structures are misinterpreted as lane markers.
- Reflections on the interior of the windshield.
- Driving at night or in a dark condition such as a tunnel.

Roadway conditions

- Driving on a snowy or wet roadway (obscured lane marking, vehicle tracks, reflected lights, road spray, high contrast).
- Driving on a road with temporary lane markings.
- Faint, multiple, or varied lane markings are visible on the roadway due to road repairs or old lane markings.
- The roadway has merging, split, or crossing lines (e.g., such as at an intersection or crosswalk).
- The lane markings are extremely narrow, wide, or changing.
- The vehicle in front of you is driving near the lane lines.
- The road is hilly or the vehicle is approaching the crest of a hill.
- Driving on rough or unpaved roads, or over bumpy surfaces.
- When objects on the road (curb, guard rail, pylons, etc.) are recognized as white lines (or yellow lines).
- Driving on roads with double lines.

Vehicle conditions

- Headlight lenses are dirty or the headlights are not properly adjusted.
- The outside of the windshield is streaked or blocked by dirt, mud, leaves, wet snow, etc.
- The inside of the windshield is fogged.
- The camera temperature gets too high.
- An abnormal tire or wheel condition (incorrect sizes, varied sizes or construction, improperly inflated, compact spare tire^{*}, etc.).
- The vehicle is tilted due to a heavy load or suspension modifications.
- When tire chains are installed.

Driving

* Not available on all models