Reference	SSM72378
Models	Discovery Sport / L550
Title	Autonomous Emergency Brake (AEB) System operation
Category	Accessories
Last modified	25-Aug-2015 00:00:00
Symptom	Electrical Accessories

Content

Issue:
Customer may suggest that the Autonomous Emergency Brake (AEB) system does not operate as expected.

Cause:
JLR are investigating sources of information from formal EPQR and TA reports and social media in order to align expectations through the correct means when the customer is purchasing and receiving a handover from the Sales teams.

Action:
1. Please read and share the information below with your Sales, Parts and Service teams.
Note: JLR is currently working towards further communications for you and your customers to understand the system and its parameters.

Retailer Information:

- AEB uses a stereo camera system to detect a collision risk. It does not use radar (even if the vehicle is fitted with Active Cruise Control (ACC) radar equipment).
- The stereo camera system is calibrated to detect vehicles in the path ahead, and will not react to anything that doesn't have the attributes of a vehicle (see Thatcham video for details) - https://www.youtube.com/watch?v=5xxP8LkqNn4.
- Anything that restricts the field of view of either camera will prevent the AEB system from working (stickers on the screen, snow, dirt, extreme poor visibility etc.).
- AEB is designed to reduce the risk of the vehicle rear impacting another vehicle, or to reduce the impact speed where avoidance through emergency braking is not possible.
- During an AEB event (while the car is braking automatically), the system will emit an audible warning and will display the 'Forward Alert' message/green icon. This has nothing to do with the 'Forward Alert' system fitted to ACC equipped cars (AEB Forward Collision Warning shares the same visual warnings as Forward Alert in ACC). The warning can be turned off separately, but it is not advisable to do so.
- The system is supported with a comprehensive array of on-board diagnostics, such that any system failure will be accompanied with messages to the effect that AEB is unavailable.
- Audible and visual warnings of system operation occur only when an AEB event is inevitable, so no attempt should be made to demonstrate system operation.
    - If required, retailers may make reference to the Thatcham video in order to explain how the system will operate to mitigate a rear collision

Customer Communication and Advice:

- Your vehicle may be equipped with an Autonomous Emergency Braking (AEB) system. To find out if your car is equipped, either contact your Land Rover Retailer, or select 'Driving Features' in the Instrument Panel Menu (See Owner's Handbook) - http://www.ownerinfo.landrover.com/. Cars equipped with AEB will show AEB in the menu.
  Note: Always leave AEB selected (ticked), unless driving off-road.
- In the above menu, you will also see a 'Forward Alert' option. This is not related to the 'Forward Alert' system used on some Land Rover vehicles with Adaptive Cruise Control (ACC), but is an element of the AEB system which controls the visual and audible warnings active during an Autonomous Emergency Braking event. This is referred to as Forward Collision Warning in the Owner's Handbook.
  Note: Always leave 'Forward Alert' active (ticked).
- AEB uses a stereo camera system to detect vehicles in the path ahead which may pose a risk of rear impact collision. The system is designed to mitigate for the most common causes of rear impact collision into vehicles, and will therefore not react to anything which does not carry the visual signature of the rear end of another road vehicle.
- Even if your car is equipped with Adaptive Cruise Control (ACC), the AEB system relies solely on the stereo camera system to detect vehicles ahead, so does not use the ACC radar system.

- The AEB system will not operate if:

1. The vehicle is negotiating a tight corner.
2. Dynamic Stability Control (DSC) is switched off.
3. The forward-facing cameras are dirty or obstructed.
4. The vehicle's speed is below 5 km/h (3 mph) or above 80 km/h (50 mph).
5. The object in front is not detectable as a vehicle.
6. Visibility is impaired due to severe weather conditions (for example, heavy rain, fog, snow, etc.).

- During an AEB intervention you will receive the following messages displayed:
  - 5 kph (3mph) to 35kph (21mph): "AEB is active" during the intervention and then "AEB was activated" afterwards.
  - 35kph (21mph) to 80 kph (50 mph): "Forward Alert" message with green icon, plus a red central icon before the intervention and for the full duration of the intervention. Again, the message "AEB was activated" will be displayed after the AEB event.

CAUTION:
The AEB system is a driving aid only. It remains the driver's responsibility to drive with due care and attention, in a manner that is safe for the vehicle, the occupants, and other road users. The driver should observe all road signs, road markings and any potential emergency braking situations, and act appropriately.