

2010.0 X351, 413-09

WARNING DEVICES

BLINDSPOT MONITORING SYSTEM - SYSTEM OPERATION AND COMPONENT DESCRIPTION

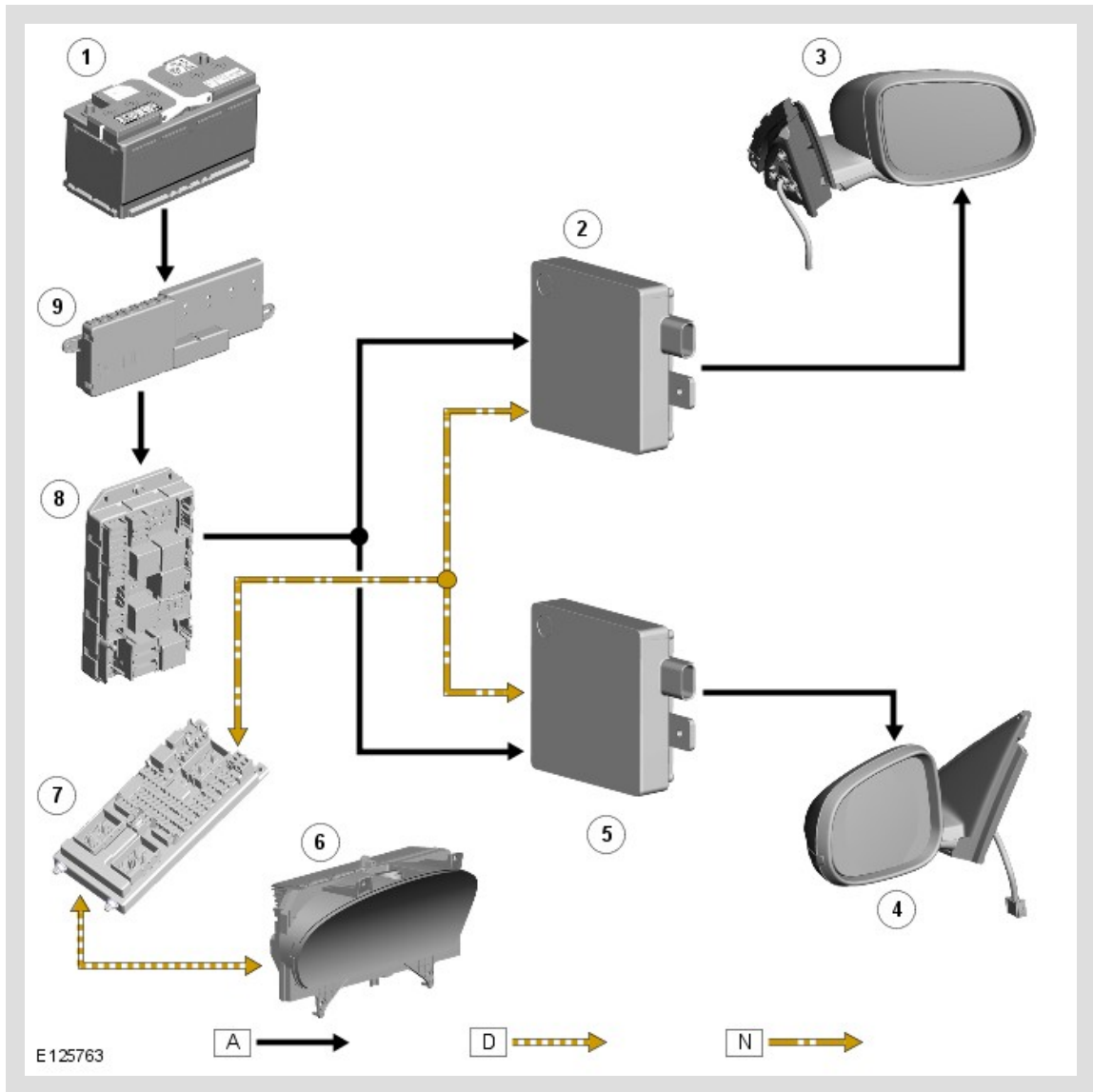
(G1188457)

DESCRIPTION AND OPERATION

CONTROL DIAGRAM

NOTE:

A = Hardwired: D = High speed CAN bus: N = Medium speed CAN bus



ITEM	DESCRIPTION
1	Battery
2	RH (right-hand) blind spot monitoring module
3	RH (right-hand) door mirror
4	LH (left-hand) door mirror
5	LH (left-hand) blind spot monitoring module
6	Instrument cluster
7	CJB (central junction box)
8	RJB (rear junction box)
9	BJB (battery junction box)

SYSTEM OPERATION

PRINCIPLES OF OPERATION

Blind spot monitoring system detects overtaking vehicles relative to the radar modules, on either side of the vehicle, at a distance of up to 2.5 meters laterally and in an area from the door mirror up to 6.0 meters behind the module. These criteria identify an overtaking vehicle within the blind-spot area and within a typical carriageway lane width, while eliminating other objects that are not relevant, either because of their position, they are stationary, traveling in the opposite direction. A vehicle is classed as a heavy goods vehicle, car or motorcycle. A motorcycle is defined as a minimum size of 2.0m long, 0.8m wide (widest point) and 1.1m high. The system is not affected by the mass of the overtaking vehicle providing all identification criteria, including relative velocity of (16km/h - 10mph) or above, is met.

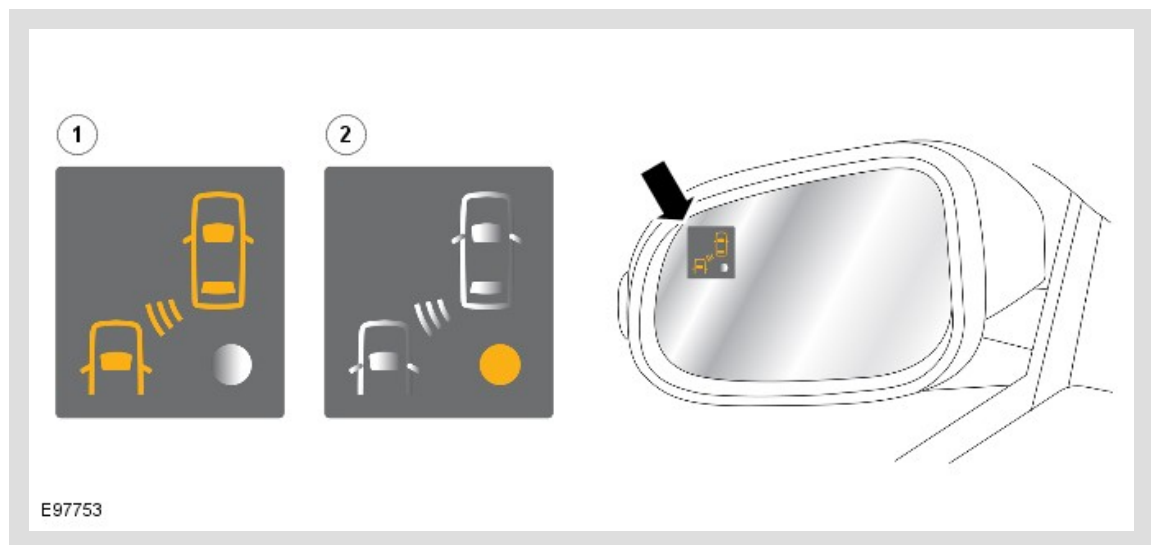
The system emits radar pulses and analyses the reflections, identifying objects of interest that move into the blind spot zone. Having detected another vehicle in the defined blind spot zone it alerts the driver by illuminating the amber alert icon located in the appropriate exterior mirror.

NOTE:

If an overtaking vehicle is detected on both sides of the vehicle simultaneously, the warning alert icons in both mirrors will illuminate.

The blind spot monitoring system lenses are shaped so as to minimize the visibility to other drivers. The LED (light emitting diode)'

s are located towards the outside extremity of the mirror face, within the peripheral view of the driver but not in any area of the mirror where they could obscure or distract from the image.



ITEM	DESCRIPTION
1	Warning alert icon
2	System status warning indicator

The LED (light emitting diode) lighting sequence is as follows;

- Amber alert LED (light emitting diode) icon permanently lit - system operational, vehicle detected in blind spot area
- No LED (light emitting diode) 's lit – system active no vehicle detected in blind spot area
- Amber status LED (light emitting diode) permanently lit - system not active or faulty

The system has operating limitations and is automatically turned off under certain operating conditions. During these operating conditions the amber status LED (light emitting diode) is permanently lit.

The system operating limitations are as follows;

- The area surrounding the radar face of the module must be clear of metallic items

- The system is inactive until vehicle speed is greater than 16km/h - 10mph (amber status LED (light emitting diode) permanently lit)
- The system is inactive if an approved trailer is connected to the vehicle (amber status LED (light emitting diode) permanently lit)
- The system is inactive when reverse gear or park is selected (amber status LED (light emitting diode) permanently lit)

If either of the radar signals are blocked or distorted, for example by water, the radar face of the module is covered in mud, sleet or snow the system may detect this and be disabled with the amber status LED (light emitting diode) permanently lit together with a 'blind spot monitoring blocked' message displayed in the instrument cluster message center. The system is disabled until the blockage is cleared.

If there is a fault in the system the amber status LED (light emitting diode) is permanently lit and a 'blind spot monitoring not available' message displayed in the instrument cluster message center. The system is disabled until the fault is rectified.

System fault and blockage warnings are as follows;

- The system is disabled when the radar module signal is blocked (amber status LED (light emitting diode) permanently lit and instrument cluster message)
- The system is disabled by a fault (amber status LED (light emitting diode) permanently lit and instrument cluster message)

If there is a failure in the communication network and the warning LED (light emitting diode) 's cannot be displayed in the mirror, a failure message will be displayed in the instrument cluster message center.

When any faults are present in the system DTC (diagnostic trouble code) 's are stored in both blind spot monitoring modules appropriate to each module. Replacement of modules requires the right hand module to be configured using the Jaguar approved diagnostic equipment. Due to the fact that all modules are supplied as left hand

modules the replacement left hand modules do not require configuring.

Calibration of the modules using the Jaguar approved diagnostic equipment enables updates to be downloaded as new technology becomes available or any fault concerns require software updates.