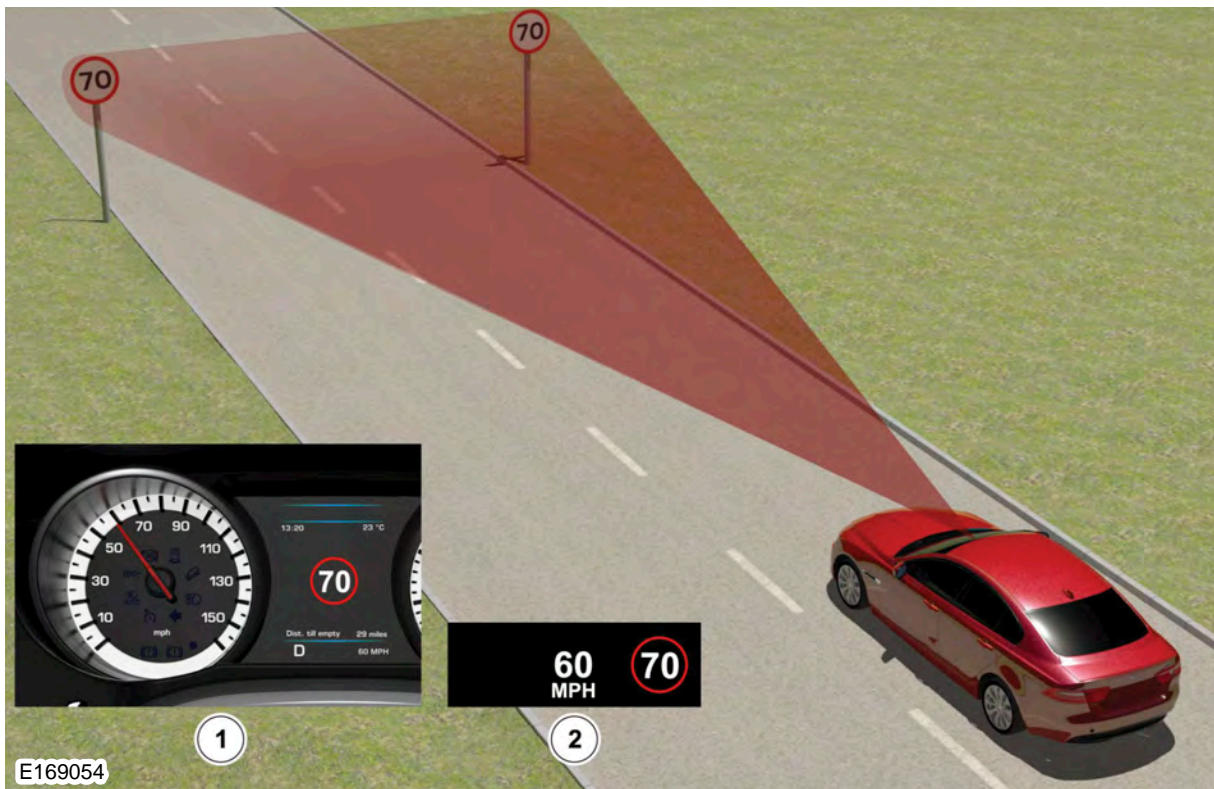


Traffic Sign Recognition

Traffic Sign Recognition (TSR) uses the Image Processing Module to identify traffic signs on either side of the road, providing the driver with information about the latest detected speed limit, cancellation signs and passing regulations via the Head Up Display (HUD) and Instrument Cluster (IC) displays.



Item	Description	Item	Description
1	Instrument Cluster	2	Head Up Display

The IPM captures image data of the road ahead. The camera infers speed limits implied and reads signs from the scene; this is known as the 'Vision System'.

The IPM also obtains information about the current road from the navigation system through the vehicle Controller Area Network (CAN) bus. The IPM combines the available speed limit information from both the navigation and vision systems, providing a more accurate and consistently available speed limit value.

This system is called a 'Fusion System'. Speed limits from either the Vienna Convention countries or North America are displayed to the driver. The driver can also use the system to provide a warning of speeding, configuring the system to flash the speed limit sign in the display when the vehicle exceeds the displayed limit by a set amount.

Speed alert can be switched on and off via the Instrument Cluster menu. When speed alert is switched on, the menu settings can be adjusted by the driver to display three different speed warnings:

- Vehicle speed equals the detected speed limit
- Vehicle speed is 6 mph (10 km/h) above the detected speed limit
- Vehicle speed is 12 mph (20 km/h) above the detected speed limit

Rain and snow speed limits are indicated, when applicable, as are towing speed limits for when a trailer is connected to the vehicle.

Speed limit information from the navigation system is displayed for roads with no signage. If the navigation system is not available, the TSR system will use the camera only, but cannot perform to full functionality. TSR can be switched on and off via the instrument panel menu.

The system will operate up to a maximum speed of 155 mph (250 km/h). The performance of the TSR system may also be affected by the following conditions:

- Signs are rotated greater than 15° in pitch, yaw or roll, compared to the road surface
- Concealed or covered signage
- Non-conforming road signs, accuracy and validity of navigation data
- Travelling in an area not covered by the navigation system
- Driving in direct sunlight, leading to overexposure and reduction in contrast
- Vehicle not in a supported country

In the event of a system fault, the feature is suppressed until the fault is rectified. The driver is informed of the fault via a message in the Instrument Cluster and a warning symbol.

NOTE: TSR is only available on vehicles with navigation. TSR is not available in markets where there is a poor or non-existent map and navigation database.
