

Rear Cross Traffic

# What is Rear Cross Traffic

## **What:**

A system that utilizes a radar sensors to recognize when a vehicle is in close proximity when backing from a parking space

## **Why:**

To improve passenger safety by providing warnings to potentially tired or distracted drivers.

## **Benefits:**

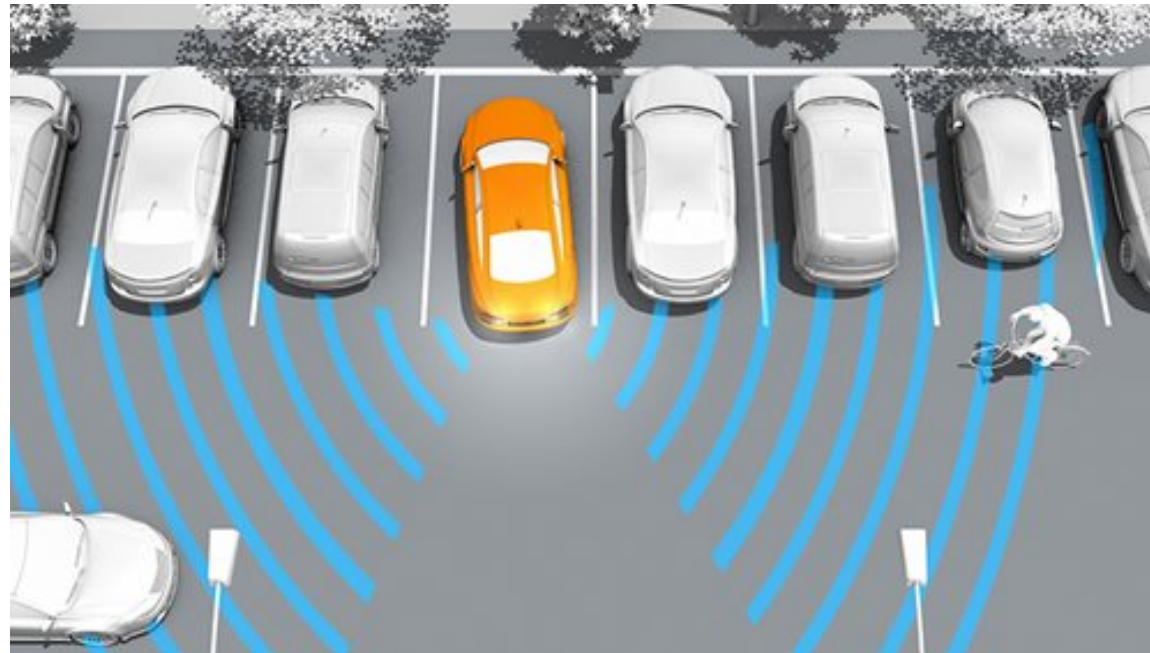
Decrease in accidents / injuries / deaths caused by tired or distracted drivers

## **How:**

Utilization of sensors and electronically controlled systems can interpret and react to changing conditions faster than a human driver in many situations reacts. System is “Passive” (Provide audio, visual or haptic feedback) to notify driver of a pending situation or can be “Active” (Intervention braking) as the situation dictates.

# Rear Cross Traffic Operation

Rear facing radar sensors recognize cross traffic vehicles when the vehicle is backing from a parking space. System will alert driver and may be able to apply brakes if necessary.



# Rear Cross Traffic Components

Radar sensors

Module(s)

Brake System

For emergency braking

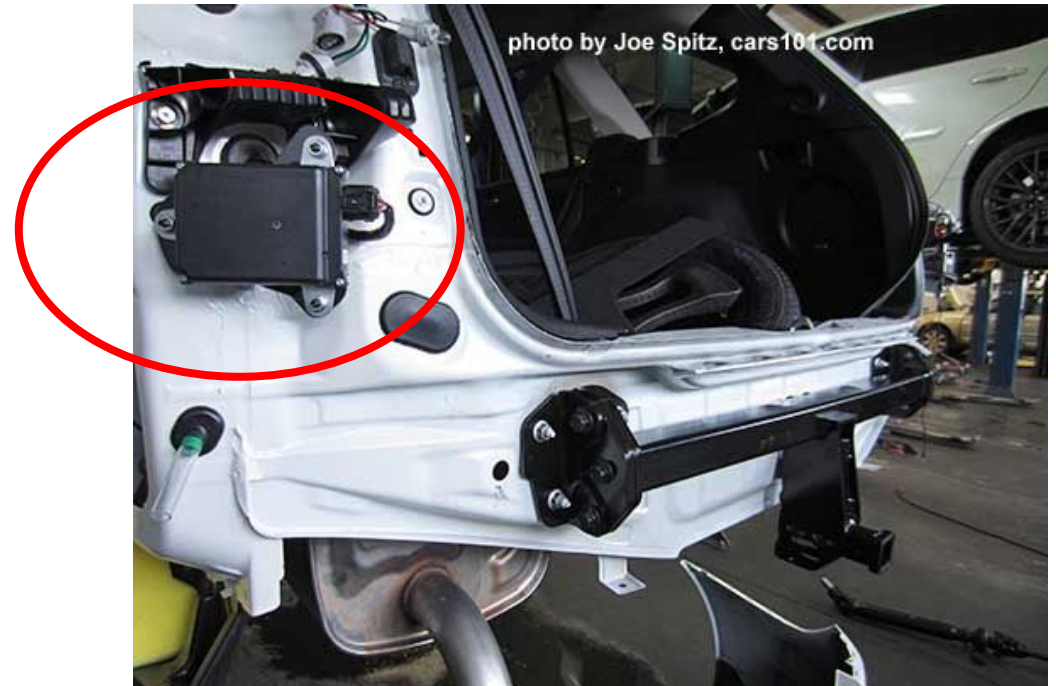
Control Switch

Visual Indicators

Audio

Haptic feedback (Steering wheel shake)

Steering resistance



# Rear Cross Traffic Diagnosis

## Visual inspection

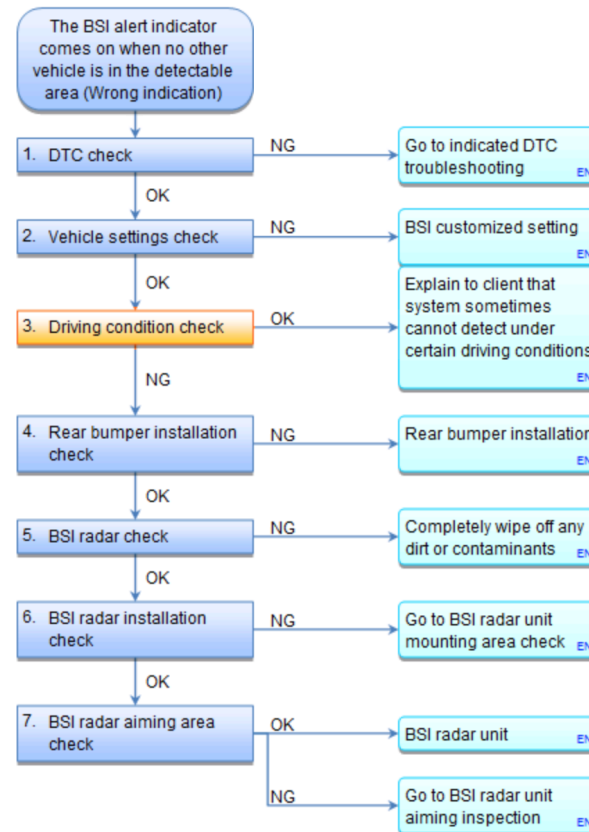
- Damage bumpers
- Damage to sensors

## Fault codes

- OEM
- SAE

## Electrical testing

- Power
- Ground
- Signals
- BUS Communications



### 3. Driving condition check:

- Interview the client about when the symptom occurred to determine if an inspection is needed.

NOTE: The BSI system cannot work properly in the following driving situations:

- In rainy, snowy, or foggy weather.
- When receiving a jamming signal from outside.
- When followed by other vehicles at a curve in a road.
- When another vehicle is getting close to yours when turning right or left.
- When the rear bumper is deformed.
- When the sensor is out of place.
- In places where there is a guardrail, pole, or tree.
- When an area of the bumper around the installed sensor is soiled.

Is an inspection required?

**YES** Go to step 4.

**NO** Explain to the client that the system sometimes cannot detect under certain driving conditions.■

Many systems share sensors, fault tracing can be the same in some cases

# Rear Cross Traffic Service / Calibration

## Mechanical

Targets

Some sensors hard mounted, some may be adjustable

Non-related repairs and services can require calibration

Alignment

Collision

## Self / Auto

Driving

