

# Clearance Warning Sonar Sensor False Detection

**Service Category** Audio/Visual/Telematics

**Section** Park Assist/Monitoring

**Market** USA

Toyota Supports  
 ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2014 - 2017	Tundra	

## Introduction

Some 2014 – 2017 model year Tundra vehicles equipped with clearance warning sonar ultrasonic sensors mounted in metal bumpers may alert that an object is detected when no objects are in the detection area. Follow the procedure in this bulletin to address this condition.

## Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

- All 2014 – 2016 model year Tundra vehicles.
- 2017 model year vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Tundra	TMMTX	5TF##5F1#HX655005

## Clearance Warning Sonar Sensor False Detection

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL1705	Install Ultrasonic Sensor Spacers (Front)	1.0	89341-0C020	87	99
EL1706	Install Ultrasonic Sensor Spacers (Rear)	0.8			
EL1705A	Install Ultrasonic Sensor Spacers (Front and Rear)	1.8			

#### APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

### Parts Information

PART NUMBER	PART NAME	QTY*
89345-0C010	Spacer, Ultrasonic Sensor	2
89348-0C011	Retainer, Ultrasonic Sensor	2

\*Quantities listed are for the repair of one bumper.

### Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

\* Essential SST.

#### NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 12.20.024 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

## Clearance Warning Sonar Sensor False Detection

### Inspection Procedure

1. Does the clearance warning sonar display indicate there is an object in a detection area when no objects are present in the detection areas?
  - **YES** — Continue to step 2.
  - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

Figure 1.



<b>1</b>	<b>Detection Area and Sensor Location</b>
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2. Are the affected sensors mounted in steel portions of the bumper?
  - **YES** — Continue to step 3.
  - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
3. Use the following table to determine the procedure(s) to be completed.

Table 1.

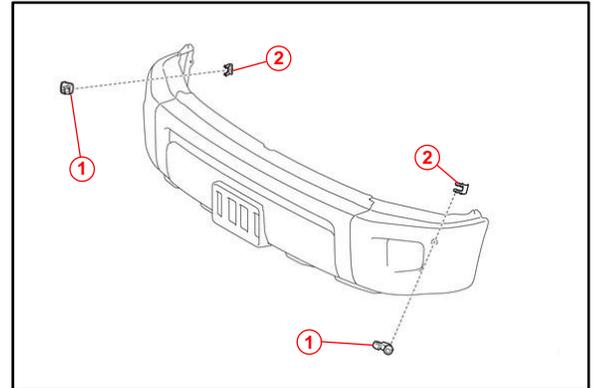
POSITION OF AFFECTED SENSOR	REPAIR PROCEDURE TO BE COMPLETED
Front Bumper	Repair Procedure A
Rear Bumper	Repair Procedure B
Front and Rear Bumpers	Repair Procedures A and B

## Clearance Warning Sonar Sensor False Detection

### Repair Procedure A – Install Spacers on Front Bumper Sensors

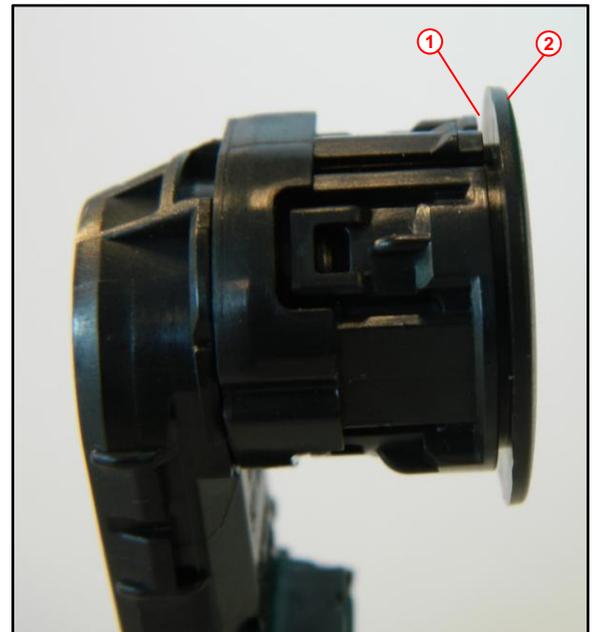
1. Remove the No. 1 ultrasonic sensors.  
Refer to the Technical Information System (TIS), applicable model and model year Repair Manual:
  - [2014](#) / [2015](#) / [2016](#) / [2017](#) Tundra: *Audio/Visual/Telematics – Park Assist/Monitoring – “Park Assist / Monitoring: Ultrasonic Sensor(for Front Side): Removal”*
  
2. Clean any debris from the sensor assembly groove and bumper surface.

**Figure 2.**



<b>1</b>	<b>No. 1 Ultrasonic Sensor</b>
<b>2</b>	<b>No. 1 Ultrasonic Sensor Retainer</b>

**Figure 3. Ultrasonic Sensor Without Spacer**



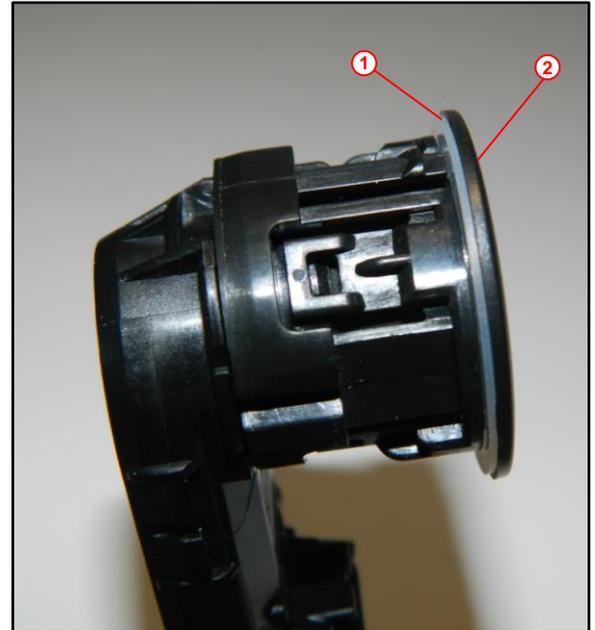
<b>1</b>	<b>Groove</b>
<b>2</b>	<b>Sensor</b>

## Clearance Warning Sonar Sensor False Detection

### Repair Procedure A – Install Spacers on Front Bumper Sensors (Continued)

3. Install a spacer in the groove on the ultrasonic sensor.

**Figure 4. Ultrasonic Sensor With Spacer Installed\***



<b>1</b>	<b>Silicon Rubber Spacer</b>
<b>2</b>	<b>Sensor</b>

\*White-colored spacer is for demonstration only.

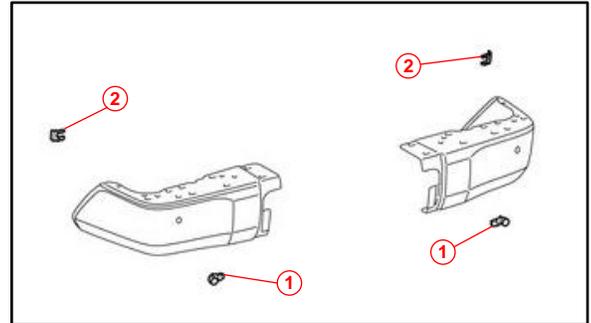
4. Install the No. 1 ultrasonic sensors with NEW retainers.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2014 / 2015 / 2016 / 2017](#) Tundra:  
*Audio/Visual/Telematics – Park Assist/Monitoring – “Park Assist / Monitoring: Ultrasonic Sensor(for Front Side): Installation”*
5. Verify the clearance warning sonar operation.

## Clearance Warning Sonar Sensor False Detection

### Repair Procedure B – Install Spacers on Rear Bumper Sensors

1. Remove the No. 2 ultrasonic sensors.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2014 / 2015 / 2016 / 2017](#) Tundra:  
*Audio/Visual/Telematics – Park Assist/Monitoring – “Park Assist / Monitoring: Ultrasonic Sensor(For Rear Side): Removal”*

**Figure 5.**



<b>1</b>	<b>No. 1 Ultrasonic Sensor</b>
<b>2</b>	<b>No. 1 Ultrasonic Sensor Retainer</b>

2. Clean any debris from the sensor assembly groove and bumper surface.
3. Install a spacer in the groove on the ultrasonic sensor (refer to Figures 2 and 3).
4. Install the No. 2 ultrasonic sensors with NEW retainers.  
Refer to TIS, applicable model and model year Repair Manual:
  - [2014 / 2015 / 2016 / 2017](#) Tundra:  
*Audio/Visual/Telematics – Park Assist/Monitoring – “Park Assist / Monitoring: Ultrasonic Sensor(For Rear Side): Installation”*
5. Verify the clearance warning sonar operation.