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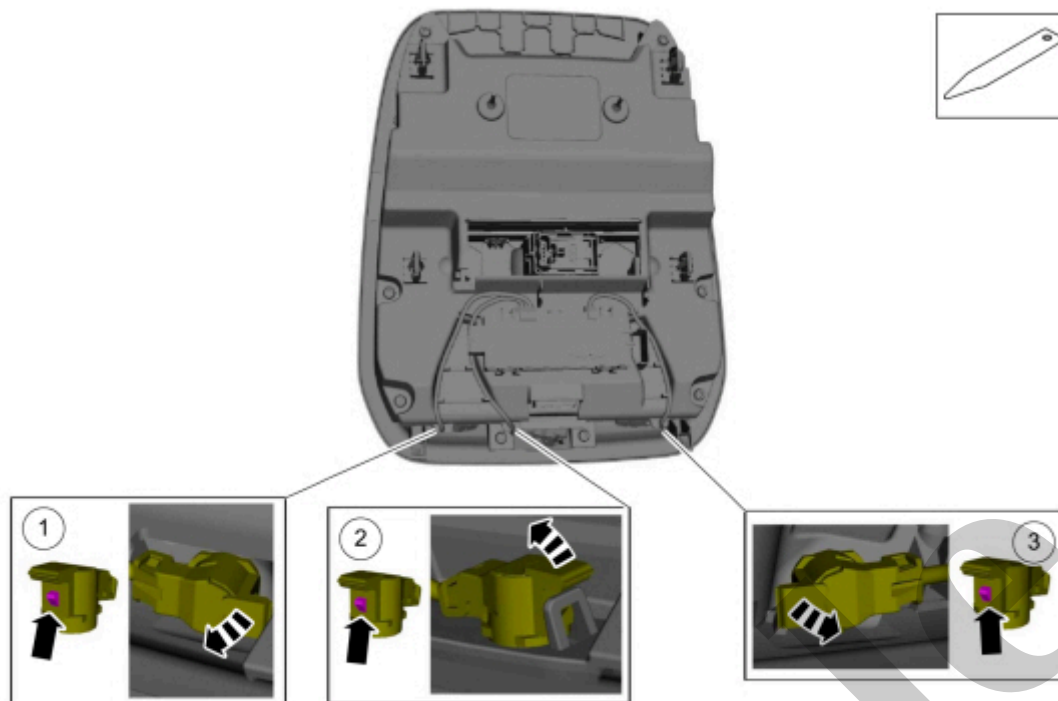
2009 FORD F-150 Super Crew OEM Service and Repair Workshop Manual

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connections. ADDRESS the root cause of any connector or pin issues.

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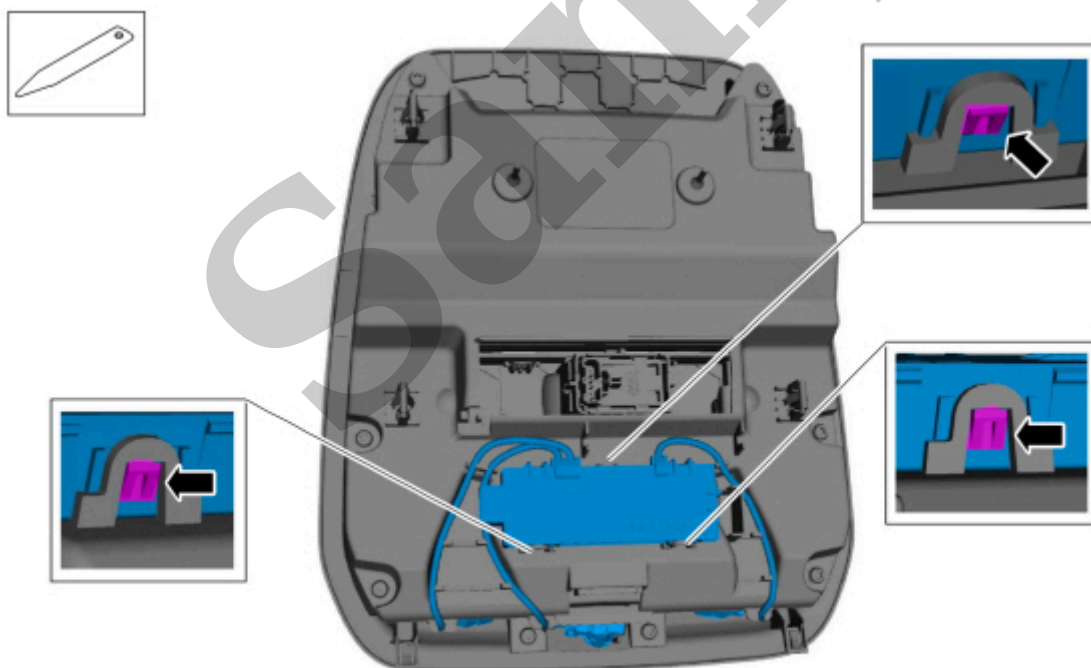
Sample



E334522

[Click here to learn about symbols, color coding, and icons used in this manual.](#)

3. Release the tabs and remove the intrusion sensor.



E334527

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Installation



Universal Transmitter - Overview

<i>419-02 Remote Convenience</i>	<i>2022 F-150</i>
<i>Description and Operation</i>	<i>Procedure revision date: 04/6/2012</i>

Universal Transmitter - Overview

Overview

The universal transmitter operates garage doors, gates and home or office lighting and security systems.

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Universal Transmitter

419-02 Remote Convenience	2022 F-150
Diagnosis and Testing	Procedure revision date: 08/17/2021

Universal Transmitter

Global Customer Symptom Code (GCSC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Global Customer Symptom Code Chart

Customer Symptom	Action
Driver Aides & Information > Universal Remote > Performance > Inoperative	GO to Pinpoint Test A

Symptom Chart(s)

Symptom Chart: Universal Home Transmitter

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Symptom Chart

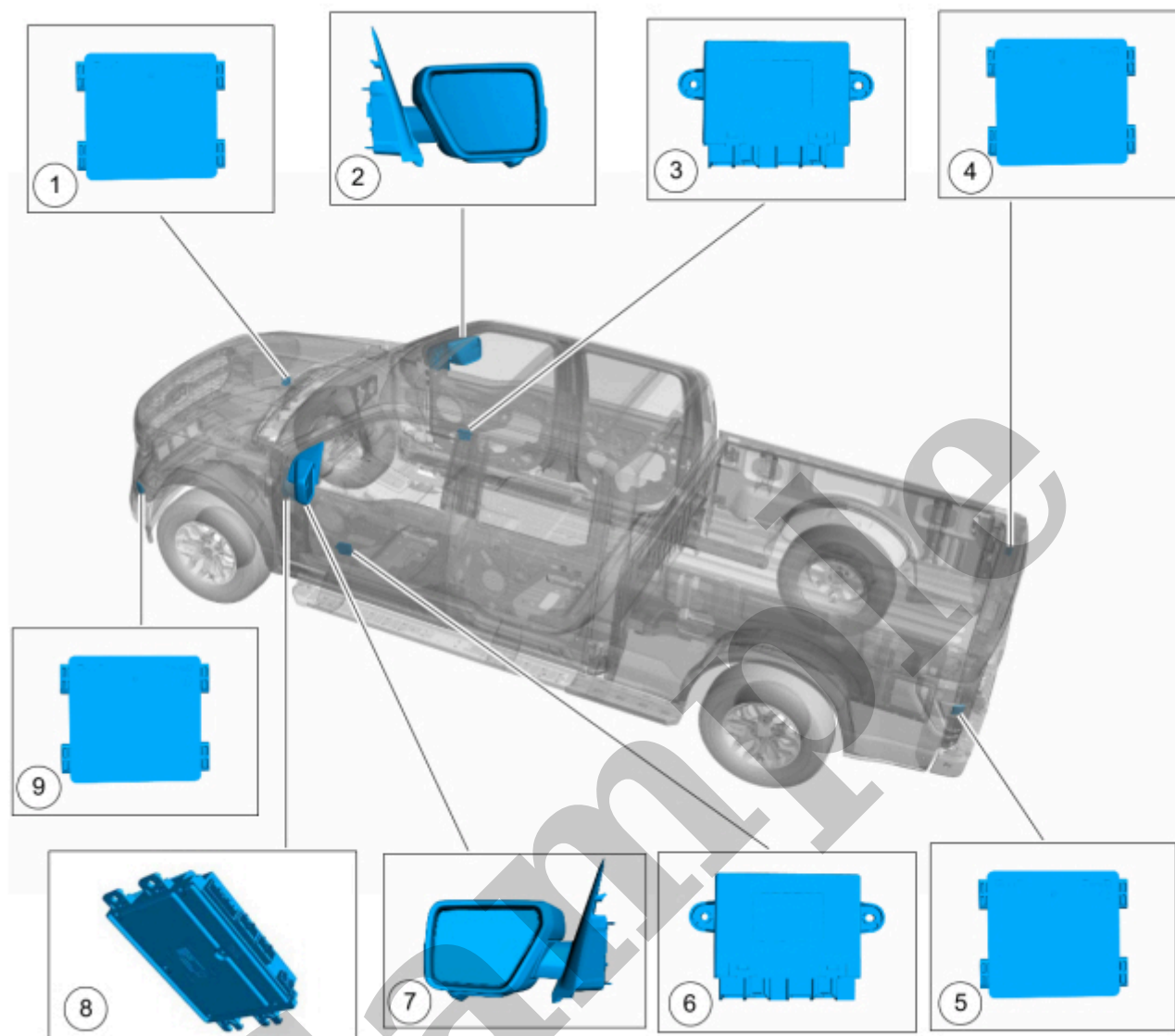
Condition	Actions
The universal transmitter is inoperative	GO to Pinpoint Test A

Does the LH (left-hand) vanity mirror lamp operate correctly?

Yes	INSTALL a new LH (left-hand) sun visor.
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No	Diagnose the interior lighting concern. REFER to: Interior Lighting (417-02 Interior Lighting, Diagnosis and Testing).
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Sample



E334684

Item	Description
1	SODCMD (Side Obstacle Detection Control Module D)
2	RH (right-hand) Exterior Mirror
3	PDM (passenger door module) (if equipped)
4	SODR (side obstacle detection control module RH)
5	SODL (side obstacle detection control module LH)



Blind Spot Information System - Overview

419-04A Side and Rear Vision	2022 F-150
Description and Operation	Procedure revision date: 11/4/2020

Blind Spot Information System - Overview

Overview

BLIS (blind spot information system) ®

The BLIS (blind spot information system) ® aids the driver in assessing whether another vehicle is present within a specific area (blind spot) to either side of the vehicle, extending rearward approximately 5 m (16 ft) beyond the rear bumper while driving on roads and highways. The system is not designed to prevent contact with other vehicles or objects. The BLIS (blind spot information system) ® uses the exterior mirror BLIS (blind spot information system) ® Light Emitting Diodes (LEDs) to alert the driver that a vehicle has been detected. The BLIS (blind spot information system) ® provides alerts to the driver when the vehicle is in a forward gear and the vehicle speeds is greater than 10 km/h (6 mph).

BLIS (blind spot information system) ® With Trailer Tow

The BLIS (blind spot information system) ® with Trailer Tow is designed to aid the driver in detecting vehicles that may have entered the detection area zone (A). The detection area is on both sides of the vehicle and trailer, extending rearward from the exterior mirrors to the end of the trailer. When a trailer is attached with Blind Spot Trailer set up through the message center, the BLIS (blind spot information system) ® with Trailer Tow becomes active when driving forward above 10 km/h (6 mph).

CTA (cross traffic alert)

When the vehicle is in REVERSE (R), the CTA (cross traffic alert) system alerts the driver of vehicles that are approaching from the side when backing out of a front-in parking space or backing towards the road. The system can detect a vehicle approaching from 14 m (45 ft) away at a speed up to 60 km/h (37 mph) from the left or right side of the vehicle. The CTA (cross traffic alert) system uses the exterior mirror BLIS (blind spot information system) ® Light Emitting Diodes (LEDs), a warning chime from the audio speakers and a message in the in the information and entertainment display unit to notify the driver of approaching vehicles.



Blind Spot Information System - System Operation and Component Description

<i>419-04A Side and Rear Vision</i>	<i>2022 F-150</i>
<i>Description and Operation</i>	<i>Procedure revision date: 10/18/2022</i>

Blind Spot Information System - System Operation and Component Description

System Operation

BLIS (blind spot information system) ® and CTA (cross traffic alert)

System Diagram - Vehicle With DDM/PDM

2	SODR (side obstacle detection control module RH)
3	SODCMC (Side Obstacle Detection Control Module C)
4	SODCMD (Side Obstacle Detection Control Module D)
5	PCM (powertrain control module)
6	8 or 18 Speaker system
7	GWM (gateway module A)
8	IPMA (image processing module A)
9	BCM (body control module)
10	DDM (driver door module)
11	PDM (passenger door module)
12	IPC (instrument panel cluster)
13	APIM (SYNC module)
14	ACM (audio front control module)
15	DSP (audio digital signal processing module) Module
16	SCCM (steering column control module)
17	TRM (trailer module) (if equipped)
18	LH (left-hand) mirror BLIS (blind spot information system) / CTA (cross traffic alert) LED (light emitting diode)
19	RH (right-hand) mirror BLIS (blind spot information system) / CTA (cross traffic alert) LED (light emitting diode)
20	Display Unit

Network Message Chart - Vehicle With DDM/PDM