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## 2010 FORD Focus RS OEM Service and Repair Workshop Manual

[Go to manual page](#)

## NOTICE

Use the correct probe adapter(s) when making measurements. Failure to use the correct probe adapter(s) may damage the connector.

### AJ1 CHECK FOR MECHANICAL DAMAGE

- Ignition OFF.
- Inspect fuel filler door for damage near the ajar switch.

**Is any damage present?**

<b>Yes</b>	REPAIR or INSTALL a new fuel filler door housing as necessary.
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<b>No</b>	GO to <a href="#">AJ2</a>
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### AJ2 CHECK THE PCM (POWERTRAIN CONTROL MODULE) THE CUSTOMER IS REQUESTING OR HAS RECENTLY REQUESTED TO OPEN OR UNLOCK THE FUEL FILL DOOR (FUELDR\_REQ) PID (PARAMETER IDENTIFICATION)

- Ignition ON.
- Access the PCM (powertrain control module) and monitor the FUELDR\_REQ (The Customer Is Requesting Or Has Recently Requested To Open Or Unlock The Fuel Fill Door) (none) PID (parameter identification)
- Monitor the PCM (powertrain control module) FUELDR\_REQ PID (parameter identification) while pressing and releasing the fuel filler door release button.

**Does the PID (parameter identification) momentarily indicate Yes?**

<b>Yes</b>	GO to <a href="#">AJ3</a>
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<b>No</b>	<a href="#">GO to Pinpoint Test AH</a>
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### AJ3 CHECK THE FUEL FILLER DOOR RELEASE USING THE PCM (POWERTRAIN CONTROL MODULE) FUEL FILL DOOR UNLOCK CONTROL OUTPUT IS COMMANDED TO ENABLE STATE (FUELDR\_UNLOCK) PID (PARAMETER IDENTIFICATION)

inside luggage compartment area.

- Ignition OFF.
- Disconnect Fuel Filler Door Release Solenoid C4089 .
- Disconnect PCM (powertrain control module) C175B .
- Ignition ON.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C4089-2	$\bar{V}$	Ground
C4089-3	$\bar{V}$	Ground

**Is any voltage present?**

<b>Yes</b>	REPAIR the circuit in question.
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<b>No</b>	GO to <a href="#">AJ6</a>
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#### **AJ6 CHECK THE FUEL FILLER DOOR AJAR CIRCUITS FOR A SHORT TO GROUND**

- Ignition OFF.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C4089-2	$\Omega$	Ground
C4089-3	$\Omega$	Ground

- Operate the system and determine if the concern is still present.

#### Is the concern still present?

<b>Yes</b>	CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) , or FSA (Field Service Action) . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new PCM (powertrain control module) .
<b>No</b>	The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

### PINPOINT TEST AK : THE KEYLESS ENTRY KEYPAD ILLUMINATION IS INOPERATIVE

Refer to Wiring Diagrams Cell 117for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: [Handles, Locks, Latches and Entry Systems - System Operation and Component Description](#)

(501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

#### DTC Fault Trigger Conditions

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
BCM (body control module) B121A:11	Keypad Illumination Output: Circuit Short To Ground	Sets when the BCM (body control module) detects a short to ground from the keyless entry keypad illumination output circuit.
BCM (body control module) B121A:15	Keypad Illumination Output: Circuit Short To Battery Or Open	Sets when the BCM (body control module) detects an open from the keyless entry keypad illumination output circuit.

#### Possible Sources

- Wiring, terminals or connectors
- Keyless entry keypad
- BCM (body control module)

### AK1 CHECK THE KEYLESS ENTRY KEYPAD OPERATION

#### AK4 CHECK THE KEYLESS ENTRY KEYPAD ILLUMINATION OUTPUT CIRCUIT FOR A SHORT TO GROUND

- Ignition OFF.
- Disconnect: BCM (body control module) C2280E.
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C500-2	$\Omega$	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to <a href="#">AK7</a>
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No	REPAIR the circuit.
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#### AK5 CHECK THE BCM (BODY CONTROL MODULE) OUTPUT USING THE KEYPAD LAMP OUTPUT STATUS (KEY\_PAD\_LMP) PID (PARAMETER IDENTIFICATION)

- Ignition OFF.
- Disconnect: Keyless Entry Keypad C500.
- Ignition ON.
- Access the BCM (body control module) and monitor the KEY\_PAD\_LMP (Keypad Lamp Output Status) PID (parameter identification)
- Measure:

Positive Lead	Measurement / Action	Negative Lead
C500-2	$\bar{V}$	Ground

Is the voltage greater than 11 volts?

Yes	INSTALL a new keyless entry keypad. REFER to: <a href="#">Keyless Entry Keypad</a>
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<b>Yes</b>	<p>CHECK OASIS (Online Automotive Service Information System) for any applicable service articles: TSB (Technical Service Bulletin) , GSB (General Service Bulletin) , SSM (special service message) , or FSA (Field Service Action) . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new BCM (body control module) .</p> <p>REFER to: <a href="#">Body Control Module (BCM)</a> (419-10 Multifunction Electronic Modules, Removal and Installation).</p>
<b>No</b>	<p>The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.</p>

#### PINPOINT TEST AL : THE SMART UNLOCK IS INOPERATIVE

##### Normal Operation and Fault Conditions

##### Vehicles equipped with push button start,

- REFER to: [Passive Anti-Theft System \(PATS\) - System Operation and Component Description](#)(419-01C Passive Anti-Theft System (PATS) - Vehicles With: Push Button Start, Description and Operation).

##### Vehicles equipped with keyed ignition,

- REFER to: [Message Center - System Operation and Component Description](#)(413-01 Instrumentation, Message Center and Warning Chimes, Description and Operation).

##### Possible Sources

- Smart Unlock Inoperative

**Diagnostic steps are not provided for this symptom or DTC. REFER to: Diagnostic Methods (100-00 General Information, Description and Operation).**

#### PINPOINT TEST AM : THE DOOR LOCKS OPERATE ONLY ONE WAY OR ALL DOOR LOCKS ARE INOPERATIVE FROM ONE DOOR LOCK CONTROL SWITCH (WITHOUT ONE-TOUCH OPEN AND CLOSE FRONT WINDOWS)

Refer to Wiring Diagrams Cell 110for schematic and connector information.

**Normal Operation and Fault Conditions** REFER to: [Handles, Locks, Latches and Entry Systems - System Operation and Component Description](#)

(501-14 Handles, Locks, Latches and Entry Systems, Description and Operation).

##### DTC Fault Trigger Conditions

Positive Lead	Measurement / Action	Negative Lead
C605-2	$\Omega$	Ground


**Is the resistance less than 3 ohms?**

<b>Yes</b>	For the concern with the door lock feature, GO to <a href="#">AM3</a> For the concern with the door unlock feature, GO to <a href="#">AM5</a>
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<b>No</b>	REPAIR the circuit.
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### AM3 CHECK THE LOCK REQUEST INPUT CIRCUIT

- For the driver door lock control switch, momentarily connect a fused jumper wire:

Positive Lead	Measurement / Action	Negative Lead
C505-2		C505-3

- For the passenger door lock control switch, momentarily connect a fused jumper wire:


Positive Lead	Measurement / Action	Negative Lead
C605-3		C605-2

- Remove the fused jumper wire.

**Do the doors lock?**

<b>Yes</b>	INSTALL a new door lock control switch. REFER to: <a href="#">Front Door Lock Control Switch</a> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
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- For the passenger door lock control switch, momentarily connect a fused jumper wire:

Positive Lead	Measurement / Action	Negative Lead
C605-3		C605-2

- Remove the fused jumper wire.

#### Do the doors unlock?

<b>Yes</b>	INSTALL a new door lock control switch. REFER to: <a href="#">Front Door Lock Control Switch</a> (501-14 Handles, Locks, Latches and Entry Systems, Removal and Installation).
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<b>No</b>	GO to <a href="#">AM6</a>
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#### AM6 CHECK THE UNLOCK REQUEST INPUT CIRCUIT FOR AN OPEN

- Disconnect BCM (body control module) C2280E .
- For the driver door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
C505-4	$\Omega$	C2280E-4

- For the passenger door lock control switch, measure:

Positive Lead	Measurement / Action	Negative Lead
C605-3	$\Omega$	C2280E-4

#### Is the resistance less than 3 ohms?





# Door Latch Lubrication

<i>501-14 Handles, Locks, Latches and Entry Systems</i>	<i>2022 F-150</i>
<i>General Procedures</i>	<i>Procedure revision date: 07/28/2016</i>

## Door Latch Lubrication

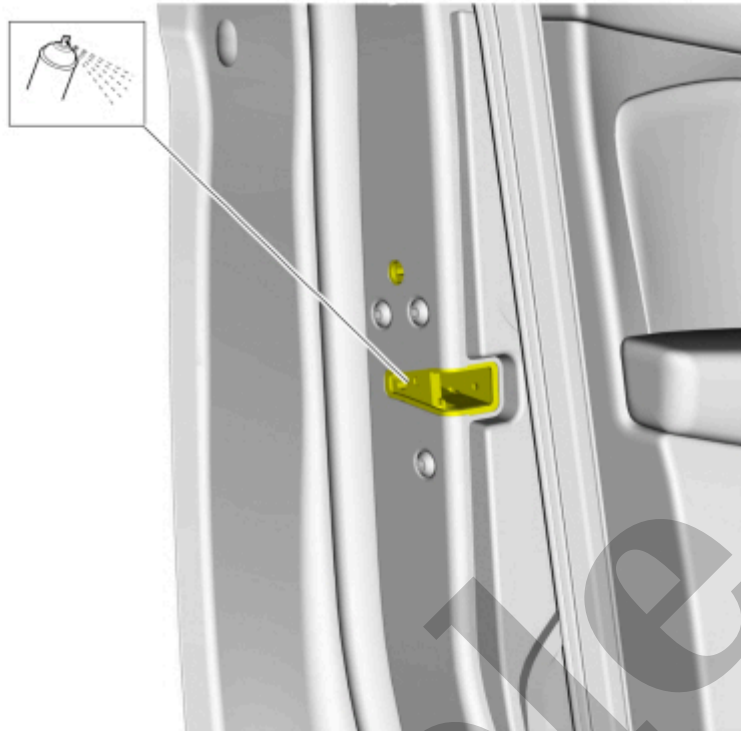
### Activation

#### NOTE

Typical left front door shown, others similar.

1. Open the door.





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

#### 4. **NOTE**

Some exterior door handles are operated mechanically while other exterior door handles are operated electronically.

Open the latch using the exterior door handle.