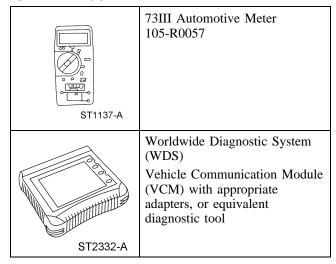
DIAGNOSIS AND TESTING

Anti-Theft

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

Special Tool(s)



Principles of Operation — Perimeter Alarm

The smart junction box (SJB) monitors the door ajar switches circuits 1314 (YE/LG), 1312 (LG/BK), the anti-theft hood switch circuit 1711 (PK/OG), the luggage compartment lid ajar switch circuit 1350 (TN), and the intrusion/inclination sensor circuit 340 (RD/LB).

If any intrusion is detected without the alarm being shut off, the SJB energizes circuit 1324 (BK/LG) sounding the anti-theft alarm horn and the traffic horn while causing the turn signal lamps to flash.

The system can be disarmed by opening the driver door with the key, grounding circuit 1313 (LB/BK) through the door disarm switch, unlocking the doors with the RKE transmitter, or turning the ignition switch to the ON position with a valid key.

The system arms when the driver door is locked with the key (no intrusion or inclination protection), the doors are locked with the RKE transmitter, or the doors are locked with the door lock control switch and then the doors are closed. The SJB monitors the status of all entry points. If any entry point is open, the alarm arms excluding inputs from the open entry point. The SJB adds the entry point to the protected status when the closure of the open entry point is detected.

NOTE: The intrusion sensing feature is not activated if either door or the convertible top (if equipped) is open when the vehicle is armed.

The SJB inhibits the intrusion/inclination sensor and the luggage compartment lid ajar inputs if the luggage compartment lid is opened with a key or the RKE transmitter. Once the luggage compartment lid is closed the intrusion/inclination sensor and the luggage compartment lid ajar switch are monitored by the SJB.

Inspection and Verification

NOTE: The SJB must be configured upon replacement. Refer to Section 418-01.

- 1. Verify the customer concern.
- 2. Visually inspect for obvious signs of mechanical or electrical damage.

Visual Inspection Chart

Mechanical	Electrical
 Anti-theft hood switch Driver door disarm switch Ignition switch Anti-theft alarm horn Door ajar switch(es) Luggage compartment lid ajar switch Convertible top ajar switch. Remote keyless entry (RKE) transmitter 	 Bussed electrical center (BEC) fuse(s): 4 (30A) 7 (40A) Intrusion sensor SJB Circuitry

- 3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.
- 4. If the cause is not visually evident, connect the diagnostic tool to the data link connector (DLC) and select the vehicle to be tested from the diagnostic tool menu. If the diagnostic tool does not communicate with the vehicle:
 - check that the program card is correctly installed.
 - check the connections to the vehicle.
 - check the ignition switch position.
- If the diagnostic tool still does not communicate with the vehicle, refer to the diagnostic tool operating manual.

- Carry out the diagnostic tool data link test. If the diagnostic tool responds with:
 - CAN or ISO circuits fault; all electronic control units no response/not equipped, refer to Section 418-00.
 - No response/not equipped for SJB, refer to Section 419-10.
- System passed, retrieve and record the continuous diagnostic trouble codes (DTCs), erase the continuous DTCs, and carry out self-test diagnostics for the SJB.
- 7. If the DTCs retrieved are related to the concern, go to the Smart Junction Box (SJB) Diagnostic Trouble Code (DTC) Index.
- If no DTCs related to the concern are retrieved, GO to Symptom Chart.

Smart Junction Box (SJB) Diagnostic Trouble Code (DTC) Index

DTC	Description	Source	Action
B1519	Hood Switch Circuit Failure	SJB	GO to Pinpoint Test E.
B1833	Drivers Unlock Disarm Switch Circuit Short to Ground	SJB	GO to Pinpoint Test A.
B200A	VSM Inclination Failure	SJB	GO to Pinpoint Test G.
B200B	VSM Ultrasonic Failure	SJB	GO to Pinpoint Test G.
B200C	VSM Module Failure	SJB	GO to Pinpoint Test G.
U2033	VSM communication Link Failure	SJB	GO to Pinpoint Test G.
All Other DTCs	_	SJB	REFER to Section 419-10.

Symptom Chart

Symptom Chart

Condition	Possible Sources	Action
• The anti-theft system does not arm/disarm — door disarm switch	CircuitrySmart junction box (SJB)Door disarm switch	GO to Pinpoint Test A.
• The anti-theft system does not arm/disarm — using the remote keyless entry (RKE) transmitter	RKE transmitterSmart junction box (SJB)	GO to Pinpoint Test B.
The anti-theft system does not disarm — using the ignition lock cylinder	 Controller area network (CAN) error Passive anti-theft system (PATS) transceiver Defective/unprogrammed key Powertrain control module (PCM) Circuitry Smart junction box (SJB) 	REFER to Section 419-01B to continue diagnosis of the PATS.
The anti-theft system does not operate correctly — no anti-theft alarm horn	 Bussed electrical center (BEC) fuse(s): — 4 (30A) — 7 (40A) Circuitry Traffic horn Anti-theft alarm horn Smart junction box (SJB) 	GO to Pinpoint Test C.

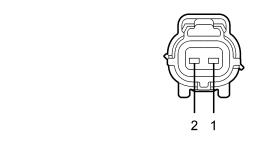
Symptom Chart (Continued)

Condition	Possible Sources	Action
• The anti-theft system does not operate correctly — anti-theft alarm horn and traffic horn is continuously on	 Circuitry Traffic horn Anti-theft alarm horn Smart junction box (SJB) 	GO to Pinpoint Test D.
The anti-theft system does not operate correctly — turn signals do not flash when arming	 Bussed electrical center (BEC) fuse(s): — 4 (30A) — 7 (40A) Circuitry Anti-theft hood switch Door ajar switch(es) Luggage compartment lid ajar switch Smart junction box (SJB) 	GO to Pinpoint Test E.
• The alarm system does not operate correctly — the alarm activates when the luggage compartment is opened with the key	 Luggage compartment lid anti-theft inhibit switch Smart junction box (SJB) Circuitry 	GO to Pinpoint Test F.
The alarm system does not operate correctly — intrusion sensing	 Convertible top ajar switch (if equipped) Intrusion sensor module Smart junction box (SJB) Circuitry 	GO to Pinpoint Test G.
• The alarm system does not operate correctly — inclination sensing	Intrusion sensor moduleSmart junction box (SJB)Circuitry	GO to Pinpoint Test G.

Connector Circuit Reference

Anti-Theft Hood Switch C127

N0012766



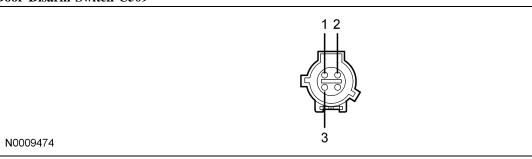
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
1	1711 (VT/OG) smart junction box (SJB) to anti-theft hood switch circuit	Less than 5 ohms between the SJB and anti-theft hood switch. Greater than 10,000 ohms to ground with the SJB and the anti-theft hood switch disconnected.
2	1205 (BK) ground circuit for anti-theft hood switch	0 volts, less than 5 ohms to ground with the anti-theft hood switch disconnected.

Luggage Compartment Lid Anti-Theft Inhibit Switch C483



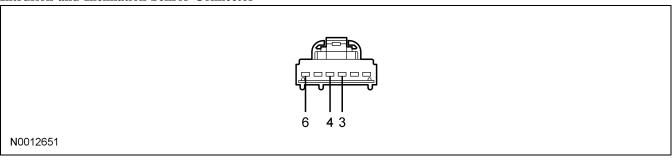
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
1	1205 (BK) ground	0 volts, less than 5 ohms to ground with the luggage compartment lid anti-theft inhibit switch disconnected.
2	1350 (WH/PK) signal circuit to the smart junction box (SJB)	Less than 5 ohms between the SJB and luggage compartment lid anti-theft inhibit switch. Greater than 10,000 ohms to ground with the SJB and the luggage compartment lid anti-theft inhibit switch disconnected.

Door Disarm Switch C509



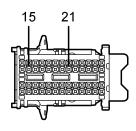
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
1	1313 (LB/BK) transmits disarm signal to the smart junction box (SJB)	0 volts, 5 ohms or less between the SJB and the door disarm switch. Greater than 10,000 ohms to ground with the door disarm switch and the SJB disconnected.
2	1315 (LB/PK) transmits arm signal to the SJB	0 volts, 5 ohms or less between the SJB and the door disarm switch. Greater than 10,000 ohms to ground with the door disarm switch and the SJB disconnected.
3	1205 (BK) ground circuit for the door disarm switch	0 volts, less than 5 ohms to ground.

Intrusion and Inclination Sensor Connector



Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
3	340 (RD/LB) receive and transmit circuit to the smart junction box (SJB)	12 volts at all times.
4	1205 (BK) ground	0 volts, less than 5 ohms between the intrusion and inclination sensor and the SJB.
6	645 (WH/LB) voltage	12 volts at all times.

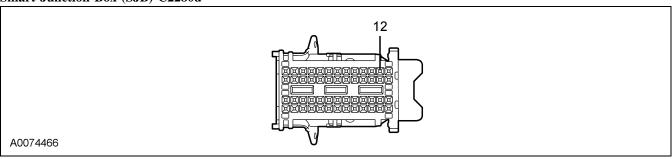
Smart Junction Box (SJB) C2280c



N0009477

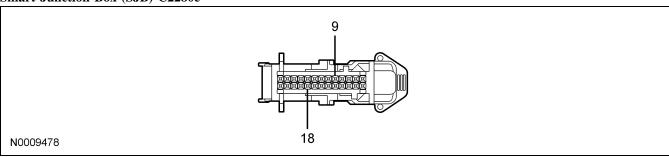
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
15	1711 (VT/OG) signal for the anti-theft hood switch	0 volts, greater than 10,000 ohms to ground with the SJB and the anti-theft hood switch disconnected.
21	1350 (WH/PK) signal for the luggage compartment lid anti-theft inhibit switch	0 volts, greater than 10,000 ohms to ground with the SJB and the luggage compartment lid anti-theft inhibit switch disconnected.

Smart Junction Box (SJB) C2280d



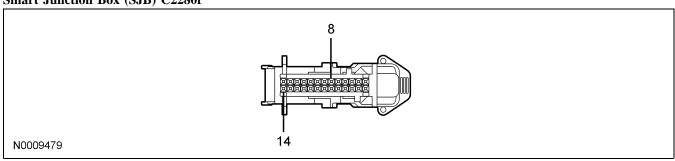
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
12	1324 (BK/LG) anti-theft alarm horn voltage	0 ohms between the SJB and the anti-theft alarm horn. Greater than 10,000 ohms to ground with the SJB and the anti-theft horn disconnected.

Smart Junction Box (SJB) C2280e



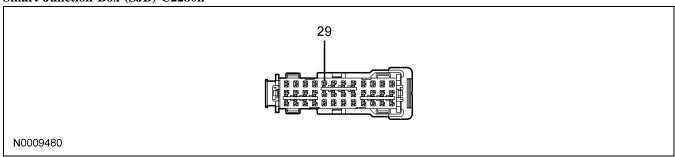
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
9	1313 (LB/BK) door disarm switch disarm signal circuit	0 volts, greater than 10,000 ohms to ground with the SJB and the door disarm switch disconnected.
18	1315 (LB/PK) door disarm switch disarm signal circuit	0 volts, greater than 10,000 ohms to ground with the SJB and the door disarm switch disconnected.

Smart Junction Box (SJB) C2280f



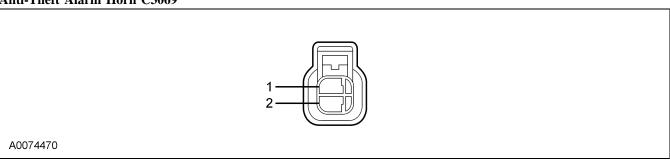
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
8	645 (WH/LB) voltage	12 volts at all times.
14	340 (RD/LB) receive and transmit circuit to the intrusion and inclination	0 volts, less than 5 ohms between the intrusion and inclination sensor and the SJB.

Smart Junction Box (SJB) C2280h



Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
29		12 volts to the SJB. Greater than 10,000 ohms to ground with the SJB disconnected.

Anti-Theft Alarm Horn C3069



Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
1	1205 (BK) ground circuit for the anti-theft alarm horn	0 volts, less than 5 ohms to ground.
2	1324 (BK/LG) voltage circuit to the anti-theft alarm horn	0 volts, 5 ohms or less between the SJB and the anti-theft alarm horn. Greater than 10,000 ohms to ground with the anti-theft alarm horn and the SJB disconnected.

Pinpoint Test A: The Anti-Theft System Does Not Arm/Disarm — Door Disarm Switch

Normal Operation

NOTE: The intrusion/inclination protection features cannot be activated with the door disarm switch. This feature is used to allow raising the vehicle on a hoist, transporting or towing the vehicle, or when authorized motion inside the vehicle is likely.

The door disarm switch is located in the driver door lock cylinder and grounds circuit 1315 (LB/PK) or circuit 1313 (LB/BK) to the smart junction box (SJB) which arms or disarms the system. The ajar switches are monitored by the SJB. When an arm request is received by the SJB, the switch positions are queried. If any door, hood, or luggage compartment lid is ajar, the lights do not flash and all closed doors arm, or the horn chirps twice and the doors arm if the remote keyless entry (RKE) transmitter is pressed twice within 3 seconds.

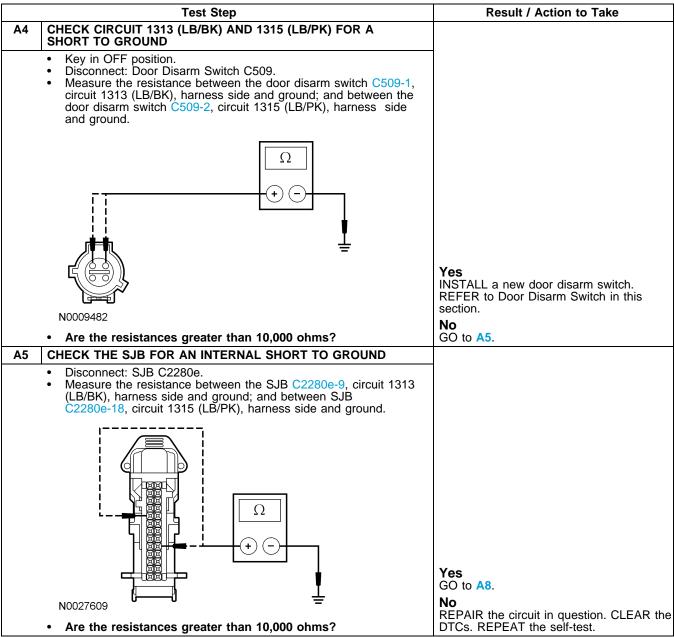
Possible Causes

- circuit 1313 (LB/BK) open or short to ground
- circuit 1315 (LB/PK) open or short to ground
- circuit 1205 (BK) open
- · door disarm switch
- SJB

PINPOINT TEST A: THE ANTI-THEFT SYSTEM DOES NOT ARM/DISARM — DOOR DISARM SWITCH

	Test Step	Result / Action to Take
A1	RETRIEVE THE RECORDED SJB DTCs FROM BOTH CONTINUOUS AND ON-DEMAND SELF-TESTS	
	 Retrieve the recorded SJB DTCs from the continuous and on-demand self-tests. Are any DTCs recorded? 	Yes If DTC B1833, GO to A4.
	All any 5100 rosorada.	If any other DTCs are recorded, REFER to Section 419-10.
		No GO to A2.
A2	CHECK CIRCUIT 1205 (BK) FOR AN OPEN	
	 Disconnect: Door Disarm Switch C509. Measure the resistance between the door disarm switch C509-3, circuit 1205 (BK), harness side and ground. 	
	Ω + =	Yes GO to A3. No
		REPAIR the circuit. CLEAR the DTCs.
A3	Is the resistance less than 5 ohms? CHECK THAT THE DRIVER DOOR LOCK AND UNLOCK PIDS	REPEAT the self-test.
A3	CHECK THAT THE DRIVER DOOR LOCK AND UNLOCK PIDS READ CORRECTLY	
	 Connect: Door Disarm Switch C509. Monitor the SJB PIDs D_DSRM and DRLKCYL while turning the key in the driver door lock cylinder to the LOCK and UNLOCK positions. 	Yes GO to A8. No
	 Do the SJB PID values agree with the LOCK positions? 	GO to A6.

PINPOINT TEST A: THE ANTI-THEFT SYSTEM DOES NOT ARM/DISARM — DOOR DISARM SWITCH (Continued)



PINPOINT TEST A: THE ANTI-THEFT SYSTEM DOES NOT ARM/DISARM — DOOR DISARM SWITCH (Continued)

Test Step	Result / Action to Take
A6 CHECK THE DOOR DISARM SWITCH	
 Monitor the SJB PIDs D_DSRM and DRLKCYL while connecting a jumper wire between the door disarm switch C509-1, circuit 1313 (LB/BK) harness side and ground; and between the door disarm switch C509-2, circuit 1315 (LB/PK) harness side and ground. 	
	Yes INSTALL a new door disarm switch.
	REFER to Door Disarm Switch in this section.
N0009483	No
Do the SJB PID values agree with the LOCK positions?	GO to A7.
A7 CHECK CIRCUITS 1313 (LB/BK) AND 1315 (LB/PK) • Disconnect: SJB C2280e.	-
 Measure the resistance between the SJB C2280e-9, circuit 1313 (LB/BK), harness side and the door disarm switch C509-1, circuit 1313 (LB/BK), harness side; and between the SJB C2280e-18, circuit 1315 (LB/PK), harness side and the door disarm switch C509-2, circuit 1315 (LB/PK), harness side. 	
Ω +	Yes GO to A8. No REPAIR the circuit in question. CLEAR the
Are the resistances less than 5 ohms? ARE LOUIS OF THE RESISTANCE OF THE PROPERTY OF THE	DTCs. REPEAT the self-test
A8 CHECK FOR CORRECT SJB OPERATION Disconnect all the SJB connectors.	Yes
 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. 	INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test. No The system is operating correctly at this time. The concern may have been caused
Is the concern still present?	by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

Pinpoint Test B: The Anti-Theft System Does Not Arm/Disarm — Using The Remote Keyless Entry Transmitter

Normal Operation

The smart junction box (SJB) receives lock/unlock commands from the remote keyless entry (RKE) transmitter. The SJB then arms/disarms the perimeter alarm system.

Possible Causes

- RKE transmitter
- SJB

PINPOINT TEST B: THE ANTI-THEFT SYSTEM DOES NOT ARM/DISARM — USING THE REMOTE KEYLESS ENTRY TRANSMITTER

	Test Step	Result / Action to Take
B1	CHECK THE REMOTE KEYLESS ENTRY (RKE) TRANSMITTER FOR DOOR LOCK OPERATION	
	 Lock and unlock the door locks using the RKE transmitter. Do the door locks operate correctly? 	Yes GO to B2.
		No REFER to Section 501-14.
B2	CHECK THE COURTESY LAMP OPERATION	
	 Verify the doors are locked. Press the UNLOCK button on the RKE transmitter. Do the courtesy lamps illuminate? 	Yes GO to B3. No REFER to Section 417-02.
В3	CHECK THE ALARM SYSTEM FOR PROPER OPERATION USING THE RKE TRANSMITTER	
	 Verify both windows are down. Arm the perimeter anti-theft system using the RKE transmitter. Trigger the alarm by opening the driver or passenger door from the inside after the 20 second pre-arm phase. Does the alarm operate correctly? 	Yes The anti-theft system is operating correctly. CLARIFY the concern with the customer. No GO to B4.
B4	CHECK FOR CORRECT SJB OPERATION	
	 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. Is the concern still present? 	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test. No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR

Pinpoint Test C: The Anti-Theft System Does Not Operate Correctly — No Anti-Theft Alarm Horn

Normal Operation

When the system is armed, the door ajar, the anti-theft hood, and the luggage compartment lid ajar switches are monitored by the smart junction box (SJB). If the SJB detects an opening of any of these entry points without a disarm order, or if the ignition switch is cycled to the RUN position without the powertrain control module (PCM) sensing a valid passive anti-theft system (PATS) key, the SJB supplies voltage to the anti-theft alarm horn and grounds the horn relay control circuit for the traffic horn.

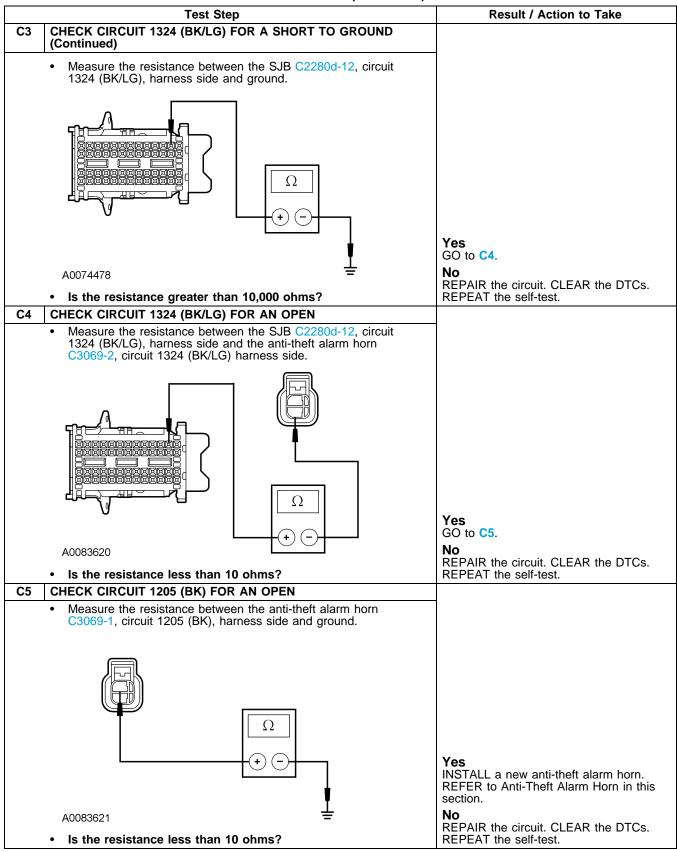
Possible Causes

- circuit 1205 (BK) open
- circuit 1324 (BK/LG) open or short to ground
- anti-theft alarm horn
- traffic horn
- SJB

PINPOINT TEST C: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — NO ANTI-THEFT ALARM HORN

ALARIM HORN	
Test Step	Result / Action to Take
C1 TEST THE TRAFFIC HORN OPERATION	
Press the horn button.Does the traffic horn sound?	Yes GO to C2.
	No REFER to Section 413-06 to continue diagnosis of the horn.
C2 CHECK ANTI-THEFT ALARM HORN OPERATION	
 Key in OFF position. Disconnect: SJB C2280h and C2280d. Connect a fused (5A) jumper wire between the SJB C2280d-12, circuit 1324 (BK/LG), harness side and the SJB C2280h-29, circuit 1679 (WH/YE), harness side. 	
N0009485 • Does the anti-theft alarm horn sound?	Yes GO to C6. No GO to C3.
C3 CHECK CIRCUIT 1324 (BK/LG) FOR A SHORT TO GROUND	4
Disconnect: Anti-Theft Alarm Horn C3069.	

PINPOINT TEST C: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — NO ANTI-THEFT ALARM HORN (Continued)



PINPOINT TEST C: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — NO ANTI-THEFT ALARM HORN (Continued)

	Test Step	Result / Action to Take
C6	CHECK FOR CORRECT SJB OPERATION	
	 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. Is the concern still present? 	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test. No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

Pinpoint Test D: The Anti-Theft System Does Not Operate Correctly — Anti-Theft Alarm Horn and Traffic Horn Continuously On

Normal Operation

When the system is armed, the door ajar switches, the anti-theft hood switch, the luggage compartment lid ajar switch, the vehicle inclination sensor and the interior motion sensor are monitored by the smart junction box (SJB). If the SJB detects an unauthorized activity without a disarm order, or if the ignition switch is cycled to the RUN position without the powertrain control module (PCM) sensing a valid passive anti-theft system (PATS) key, the SJB supplies voltage to the anti-theft alarm and grounds the horn relay control circuit for the traffic horns.

Possible Causes

- SJB
- circuit 1324 (BK/LG) short to voltage

PINPOINT TEST D: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — ANTI-THEFT ALARM HORN AND TRAFFIC HORN CONTINUOUSLY ON

	Test Step	Result / Action to Take
D1	CHECK FOR CORRECT SJB OPERATION	
	 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. Is the concern still present? 	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test. No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

Pinpoint Test E: The Anti-Theft System Does Not Operate Correctly — Turn Signals Do Not Flash When Arming

Normal Operation

When the system is armed, the door ajar, the anti-theft hood, the luggage compartment lid ajar switches, and the intrusion/inclination sensor (if armed) are monitored by the smart junction box (SJB). If the SJB detects an opening of any of these entry points, a change in vehicle inclination, or motion inside the vehicle without a disarm order, or if the ignition switch is cycled to the RUN position without the powertrain control module (PCM) sensing a valid passive anti-theft system (PATS) key, the SJB supplies voltage to the anti-theft alarm and grounds the horn relay control circuit for the traffic horns.

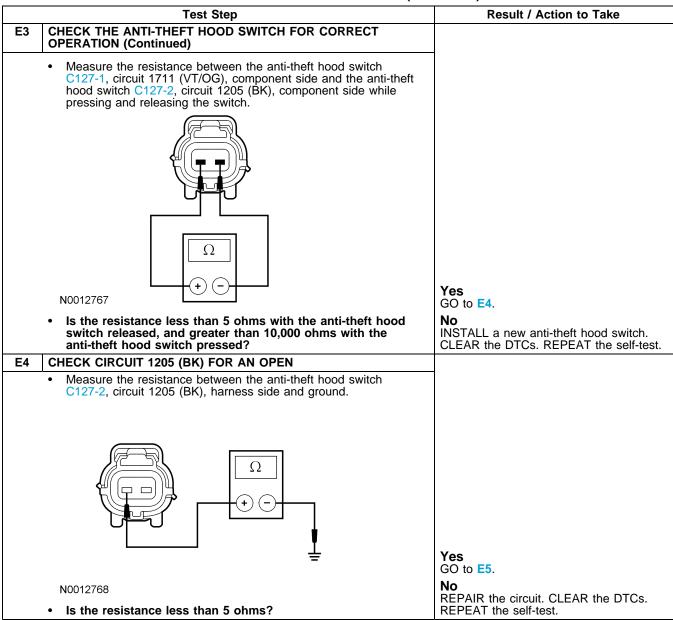
Possible Causes

- circuit 1205 (BK) open
- circuit 1711 (VT/OG) open or short to ground
- · anti-theft hood switch
- door ajar switches
- luggage compartment lid ajar switch
- SJB

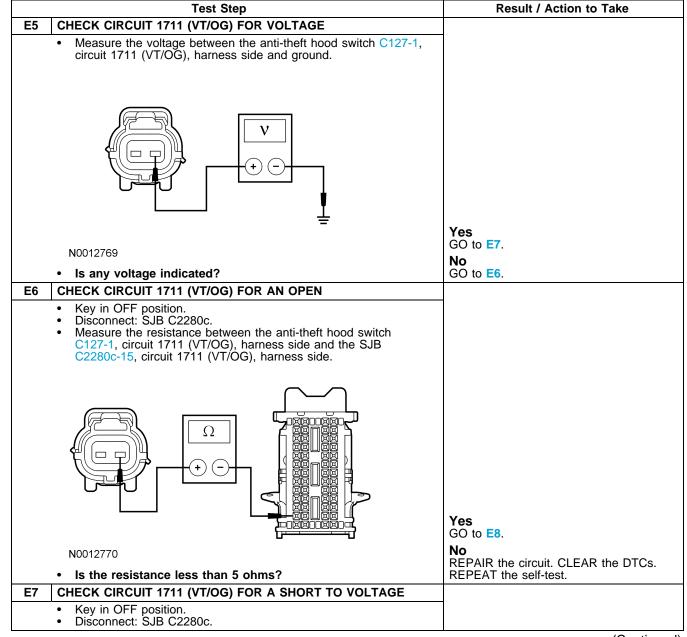
PINPOINT TEST E: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — TURN SIGNALS DO NOT FLASH WHEN ARMING

	Test Step	Result / Action to Take
E1	CHECK THE AJAR SWITCH STATUS TO THE SMART JUNCTION BOX (SJB)	
	 Close the hood, luggage compartment lid and the doors. Key in ON position. Enter the following diagnostic mode on the diagnostic tool: SJB PIDs. Monitor the SJB PIDs for the door ajar switches, luggage compartment lid ajar switch and the hood switch. Do the PIDS indicate the doors, luggage compartment and the hood closed? 	Yes GO to E2. No To diagnose the door ajar switches and the luggage compartment lid ajar switch, REFER to Section 417-02
E2	RETRIEVE THE RECORDED SJB DTCs FROM BOTH THE CONTINUOUS AND ON-DEMAND SELF-TESTS	
	 Retrieve the recorded SJB DTCs from the continuous and on-demand self-tests. Is DTC B1519 recorded? 	Yes GO to E3. No REFER to Section 417-01 to continue diagnosis of the turn signal lamps.
E3	CHECK THE ANTI-THEFT HOOD SWITCH FOR CORRECT OPERATION	
	Disconnect: Anti-Theft Hood Switch C127.	

PINPOINT TEST E: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — TURN SIGNALS DO NOT FLASH WHEN ARMING (Continued)



PINPOINT TEST E: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — TURN SIGNALS DO NOT FLASH WHEN ARMING (Continued)



PINPOINT TEST E: THE ANTI-THEFT SYSTEM DOES NOT OPERATE CORRECTLY — TURN SIGNALS DO NOT FLASH WHEN ARMING (Continued)

	Test Step	Result / Action to Take
E7	CHECK CIRCUIT 1711 (VT/OG) FOR A SHORT TO VOLTAGE (Continued)	
	 Measure the voltage between the SJB C2280c-15, circuit 1711 (VT/OG), harness side and ground. 	
	A0074482	Yes REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.
	Is any voltage indicated?	GO to E8.
E8	CHECK FOR CORRECT SJB OPERATION	
	 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins 	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test.
	 Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. Is the concern still present? 	No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

Pinpoint Test F: The Alarm System Does Not Operate Correctly — The Alarm Activates When The Luggage Compartment Lid Is Opened With The Key

Normal Operation

The smart junction box (SJB) monitors the luggage compartment lid anti-theft inhibit switch status. The luggage compartment lid anti-theft inhibit switch grounds circuit 1350 (WH/PK) when the luggage compartment lid lock cylinder is turned to open with the key. The SJB receives this ground signal and inhibits the alarm from activating from the luggage compartment lid and the intrusion and inclination sensor only. When the luggage compartment lid is closed the luggage compartment lid and the intrusion and inclination sensor are again monitored by the SJB.

Possible Causes

- circuit 1205 (BK) open
- circuit 1350 (WH/PK) open
- luggage compartment lid anti-theft inhibit switch
- SJB

PINPOINT TEST F: THE ALARM SYSTEM DOES NOT OPERATE CORRECTLY — THE ALARM ACTIVATES WHEN THE LUGGAGE COMPARTMENT LID IS OPENED WITH THE KEY

	Test Step	Result / Action to Take
F1	CHECK THE LUGGAGE COMPARTMENT LID ANTI-THEFT INHIBIT SWITCH TO THE SJB	
	 Disconnect: Luggage Compartment Lid Anti-Theft Inhibit Switch C483. Measure the resistance between the luggage compartment lid anti-theft inhibit switch C483-1, circuit 1205 (BK), harness side and ground. 	
		Yes GO to F2.
	N0009502	No
	• Is the resistance less than 5 ohms?	REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.
F2	CHECK THE LUGGAGE COMPARTMENT LID ANTI-THEFT INHIBIT SWITCH	
	Measure the resistance between the luggage compartment lid anti-theft inhibit switch C483 pin 1 and pin 2, component side.	
	N0009486	Yes GO to F3.
	 Is the resistance less than 5 ohms with the key unlocking the luggage compartment lid and greater than 10,000 ohms otherwise? 	No INSTALL a new luggage compartment lock cylinder. REFER to Section 501-14. CLEAR the DTCs. REPEAT the self-test.
F3	CHECK CIRCUIT 1350 (WH/PK) FOR AN OPEN	
	Disconnect: SJB C2280c.	

PINPOINT TEST F: THE ALARM SYSTEM DOES NOT OPERATE CORRECTLY — THE ALARM ACTIVATES WHEN THE LUGGAGE COMPARTMENT LID IS OPENED WITH THE KEY (Continued)

Test Step	Result / Action to Take
F3 CHECK CIRCUIT 1350 (WH/PK) FOR AN OPEN (Continued)	
 Measure the resistance between the luggage compartment lid anti-theft inhibit switch C483-2, circuit 1350 (WH/PK), harness side and the SJB C2280c-21, circuit 1350 (WH/PK), harness side. 	
	Yes GO to F4.
N0009487	No
Is the resistance less than 5 ohms?	REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.
F4 CHECK FOR CORRECT SJB OPERATION	
Disconnect all the SJB connectors. Check for: corrosion pushed-out pins Connect all the SJB connectors and make sure they seat correctly.	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test. No The system is operating correctly at this
 Operate the system and verify the concern is still present. Is the concern still present? 	time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.

Pinpoint Test G: The Alarm System Does Not Operate Correctly — Intrusion Sensing and Inclination Sensing

Normal Operation

NOTE: Arming the system by using the door lock cylinder (door disarm switch) inhibits the motion and inclination sensing features. The motion and inclination sensing features can be activated with the remote keyless entry (RKE) transmitter or the door lock control switch. The convertible top, luggage compartment, and all the doors must be closed for the intrusion and inclination sensing feature to activate.

NOTE: All the windows must be closed for correct motion sensing operation.

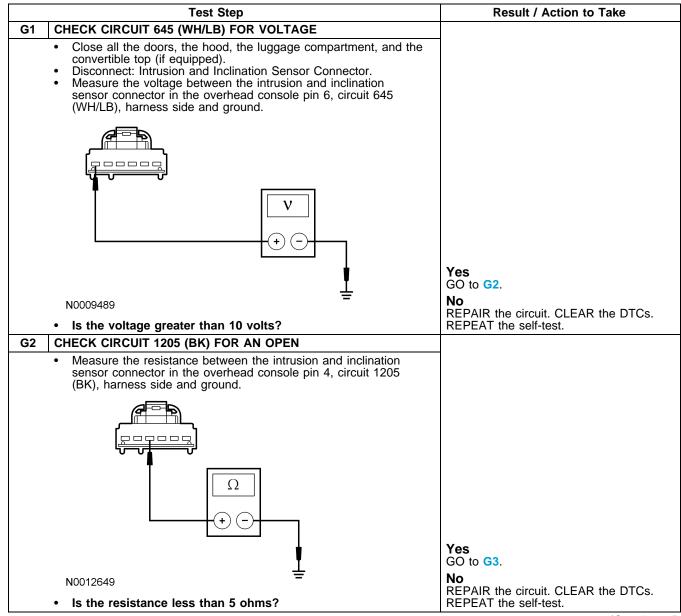
NOTE: The inclination sensing feature must be disarmed before raising the vehicle on a hoist to prevent false alarms.

The intrusion and inclination sensor receives voltage on circuit 645 (WH/LB) and ground on circuit 1205 (BK). The sensor begins monitoring the interior volume and senses an intrusion through a change in interior volume or a change in vehicle inclination. When the intrusion and inclination sensor senses a change in state, the change is communicated to the smart junction box (SJB) through circuit 340 (RD/LB). The SJB then sounds the horns and flashes the turn signal lamps.

Possible Causes

- circuit 340 (RD/LB) open or short to ground
- circuit 645 (WH/LB) open or short to ground
- circuit 1205 (BK) open
- intrusion and inclination sensor
- SJB

PINPOINT TEST G: THE ALARM SYSTEM DOES NOT OPERATE CORRECTLY - INTRUSION AND INCLINATION SENSING



PINPOINT TEST G: THE ALARM SYSTEM DOES NOT OPERATE CORRECTLY - INTRUSION AND INCLINATION SENSING (Continued)

Test Step		Result / Action to Take
G3	CHECK THE COMMUNICATION LINK CIRCUIT 340 (RD/LB) FOR	TOOMIT / TOTAL TO TOTAL
	Measure the voltage between the intrusion and inclination sensor connector in the overhead console pin 3, circuit 340 (RD/LB), harness side and ground.	
		V
	N0009494	Yes GO to G5.
	• Is the voltage greater than 10 volts?	No GO to G4.
G4	CHECK THE COMMUNICATION LINK CIRCUIT 340 (RD/LB) FOR AN OPEN	
	 Disconnect: SJB C2280f. Measure the resistance between the intrusion and inclination sensor connector in the overhead console pin 3, circuit 340 (RD/LB), harness side and the SJB C2280f-14 circuit 340 (RD/LB), harness side. 	
	N0012650	Yes REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.
	Is the resistance less than 10,000 ohms?	No GO to G6.
G5	CHECK FOR AN INTRUSION SENSE ACTIVE SIGNAL	
	Enter the following diagnostic mode on the diagnostic tool: SJB Active Command.	
	Trigger the SJB active command ISM ACTIVE ON.	

PINPOINT TEST G: THE ALARM SYSTEM DOES NOT OPERATE CORRECTLY - INTRUSION AND INCLINATION SENSING (Continued)

Test Step	Result / Action to Take
G5 CHECK FOR AN INTRUSION SENSE ACTIVE SIGNAL (Continued)	
 Measure the voltage between the intrusion and inclination sensor connector in the overhead console pin 3, circuit 340 (RD/LB), harness side and ground while triggering the active command ON. 	
v	
N0009494	Yes INSTALL a new intrusion and inclination sensor. REFER to Intrusion and Inclination Sensor in this section.
	No
Does the voltage momentarily go less than 10 volts?	GO to G6.
G6 CHECK FOR CORRECT SJB OPERATION	V ₂ a
 Disconnect all the SJB connectors. Check for: corrosion pushed-out pins 	Yes INSTALL a new SJB. REFER to Section 419-10. CLEAR the DTCs. REPEAT the self-test.
 Connect all the SJB connectors and make sure they seat correctly. Operate the system and verify the concern is still present. Is the concern still present? 	No The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. CLEAR the DTCs. REPEAT the self-test.