

No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.
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DIAGNOSIS AND TESTING > PARKING AID > PINPOINT TEST(S) > PINPOINT TEST K : THE LH (LEFT-HAND) AND/OR RH (RIGHT-HAND) SIDE PARKING AID CAMERA IS INOPERATIVE OR DOES NOT OPERATE CORRECTLY

Refer to Parking Aid for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Parking Aid - System Operation and Component Description .

IPMB DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B14A4:11	Camera Power: Circuit Short To Ground	A continuous and on-demand DTC that sets in the IPMB when an excessive current draw is detected on the LH and RH side parking aid camera voltage supply circuit.

Possible Causes

- Wiring, terminals or connectors
- Side parking aid camera
- Communication concern
- TR input concern
- Vehicle speed input concern
- IPMB



NOTE: Before disconnecting any of the cameras, verify the connectors are properly seated and latched.

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K1 CHECK FOR CORRECT GEAR INPUT AT THE IPC (INSTRUMENT PANEL CLUSTER)

Ignition ON.

While monitoring the IPC PRNDL indicator, briefly select each gear in the entire range.

Does the IPC PRNDL indicator match the actual gear selection?

Yes	GO to K2
No	REFER to: Instrumentation, Message Center and Warning Chimes .

K2 CHECK FOR CORRECT SPEEDOMETER OPERATION

Verify the operation of the speedometer.

Does the speedometer operate correctly?

Yes	GO to K3
No	REFER to: Instrumentation, Message Center and Warning Chimes .

K3 PERFORM A NETWORK TEST

Using a diagnostic scan tool, perform a network test.

Do all modules pass the network test?

Yes	GO to K4
No	REFER to: Communications Network .

K4 CHECK FOR DIAGNOSTIC TROUBLE CODES (DTCS) FROM THE IPMB (IMAGE PROCESSING MODULE B) SELF-TEST

Using the diagnostic scan tool, perform the IPMB self-test.

Are any Diagnostic Trouble Codes (DTCs) retrieved?

Yes	For DTC B14A4:11, GO to K5 For all other Diagnostic Trouble Codes (DTCs), REFER to the IPMB DTC Chart .
No	GO to K8

K5 CHECK THE IPMB (IMAGE PROCESSING MODULE B) DIAGNOSTIC TROUBLE CODES (DTCS) WITH THE LH (LEFT-HAND) SIDE PARKING AID CAMERA DISCONNECTED

Ignition OFF.

Disconnect LH Side Parking Aid Camera C5104 .

Ignition ON.

Using the diagnostic scan tool, clear the IPMB Diagnostic Trouble Codes (DTCs) and perform the self-test.

Is DTC B14A4:11 still present?

Yes	GO to K6
No	GO to K15

K6 CHECK THE IPMB (IMAGE PROCESSING MODULE B) DIAGNOSTIC TROUBLE CODES (DTCs) WITH THE RH (RIGHT-HAND) SIDE PARKING AID CAMERA DISCONNECTED

Ignition OFF.

Disconnect RH Side Parking Aid Camera C6104 .

Ignition ON.

Using the diagnostic scan tool, clear the IPMB Diagnostic Trouble Codes (DTCs) and perform the self-test.

Is DTC B14A4:11 still present?

Yes	GO to K7
No	GO to K15

K7 CHECK FOR THE LH (LEFT-HAND) AND RH (RIGHT-HAND) SIDE PARKING AID CAMERA VOLTAGE SUPPLY CIRCUITS FOR A SHORT TO GROUND

Ignition OFF.

Disconnect IPMB C2512B .

Measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-4	Ω	Ground

RH

Positive Lead	Measurement / Action	Negative Lead
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C6104-4	Ω	Ground
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Is the resistance greater than 10, 000 ohms?

Yes	GO to K17
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No	REPAIR the circuit.
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K8 CHECK FOR VOLTAGE AT THE LH (LEFT-HAND) AND RH (RIGHT-HAND) SIDE PARKING AID CAMERA

Ignition OFF.

Disconnect LH Side Parking Aid Camera C5104 .

Disconnect RH Side Parking Aid Camera C6104 .

Ignition ON.

Press the camera selection switch.

Measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-4		Ground

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-4		Ground

Is the voltage greater than 11 volts?

Yes	GO to K10
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No	GO to K9
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K9 CHECK THE LH (LEFT-HAND) AND RH (RIGHT-HAND) SIDE PARKING AID CAMERA VOLTAGE SUPPLY CIRCUITS FOR AN OPEN

Ignition OFF.

Disconnect IPMB C2512B .

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-4	Ω	C2512B-10

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-4	Ω	C2512B-10

Is the resistance less than 3 ohms?

Yes	GO to K17
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No	REPAIR the circuit in question
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K10 CHECK FOR GROUND AT THE LH (LEFT-HAND) AND RH (RIGHT-HAND) SIDE PARKING AID CAMERA

Ignition OFF.

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-1	Ω	Ground

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-1	Ω	Ground

Is the resistance less than 3 ohms?

Yes	GO to K12
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No	GO to K11
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K11 CHECK THE GROUND/SHIELD CIRCUIT FOR AN OPEN BETWEEN THE SIDE PARKING AID CAMERA AND IPMB (IMAGE PROCESSING MODULE B)

Disconnect IPMB C2512B .

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-1	Ω	C2512B-1

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-1	Ω	C2512B-7

Is the resistance less than 3 ohms?

Yes	GO to K17
No	REPAIR the circuit in question.

K12 CHECK THE VIDEO SIGNAL CIRCUITS FOR A SHORT TO VOLTAGE AT THE LH (LEFT-HAND) AND RH (RIGHT-HAND) SIDE PARKING AID CAMERA

Ignition OFF.

Disconnect IPMB C2512B .

Ignition ON.

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-2		Ground
C5104-3		Ground

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-2		Ground
C6104-3		Ground

Is any voltage present?

Yes	REPAIR the circuit in question.
No	GO to K13

K13 CHECK THE VIDEO SIGNAL CIRCUITS FOR A SHORT TO GROUND BETWEEN THE SIDE PARKING AID CAMERA AND IPMB (IMAGE PROCESSING MODULE B)

Ignition OFF.

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-2	Ω	Ground
C5104-3	Ω	Ground

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-2	Ω	Ground
C6104-3	Ω	Ground

Are the resistances greater than 10, 000 ohms?

Yes	GO to K14
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No	REPAIR the circuit in question.
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K14 CHECK THE VIDEO SIGNAL CIRCUITS FOR AN OPEN BETWEEN THE FRONT PARKING AID CAMERA AND IPMB (IMAGE PROCESSING MODULE B)

For the inoperative camera, measure:

LH

Positive Lead	Measurement / Action	Negative Lead
C5104-2	Ω	C2512B-3
C5104-3	Ω	C2512B-2

RH

Positive Lead	Measurement / Action	Negative Lead
C6104-2	Ω	C2512B-9
C6104-3	Ω	C2512B-8

Are the resistances less than 3 ohms?

Yes	GO to K15
No	REPAIR the circuit in question.

K15 CHECK THE EXTERIOR MIRROR JUMPER HARNESS

Ignition OFF.

Inspect the exterior mirror jumper harness between the vehicle harness and the side parking aid camera for:

Open or short circuits

Damaged or pushed out pins

Corrosion

Is the harness OK?

Yes	GO to K16
No	REPAIR the harness as necessary. If the harness cannot be repaired, INSTALL a new exterior mirror. REFER to: Exterior Mirror - Vehicles With: Long Arm Mirrors . REFER to: Exterior Mirror - Vehicles With: Short Arm Mirrors .

K16 CHECK FOR CORRECT SIDE PARKING AID CAMERA OPERATION

Ignition OFF.

Disconnect and inspect the side parking aid camera and related in-line connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)

damaged or bent pins - install new terminals/pins

pushed-out pins - install new pins as necessary

Reconnect the side parking aid camera and related in-line connectors. Make sure they seat and latch correctly.

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

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new side parking aid camera. REFER to: Side Parking Aid Camera . If the concern is still present after camera replacement, GO to K17
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