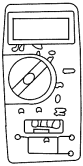
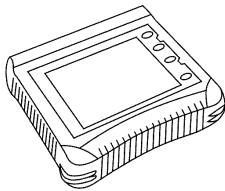
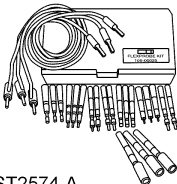


DIAGNOSIS AND TESTING

Fog Lamps

Refer to Wiring Diagrams Cell 86 for schematic and connector information.

Special Tool(s)

 <p>ST1137-A</p>	<p>73III Automotive Meter 105-R0057 or equivalent</p>
 <p>ST2332-A</p>	<p>Worldwide Diagnostic System (WDS) Vehicle Communication Module (VCM) with appropriate adapters, or equivalent diagnostic tool</p>
 <p>ST2574-A</p>	<p>Flex Probe Kit 105-R025B or equivalent</p>

Inspection and Verification

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

Visual Inspection Chart

Mechanical	Electrical
<ul style="list-style-type: none"> • Headlamp switch 	<ul style="list-style-type: none"> • Bussed electrical center (BEC) fuse 58 (15A) • Circuitry • Fog lamp relay • Bulbs • BEC • Smart junction box (SJB)

3. If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step.

NOTE: Make sure the headlamp switch is in the OFF position.

NOTE: Make sure the multifunction switch is in the LOW BEAM position.

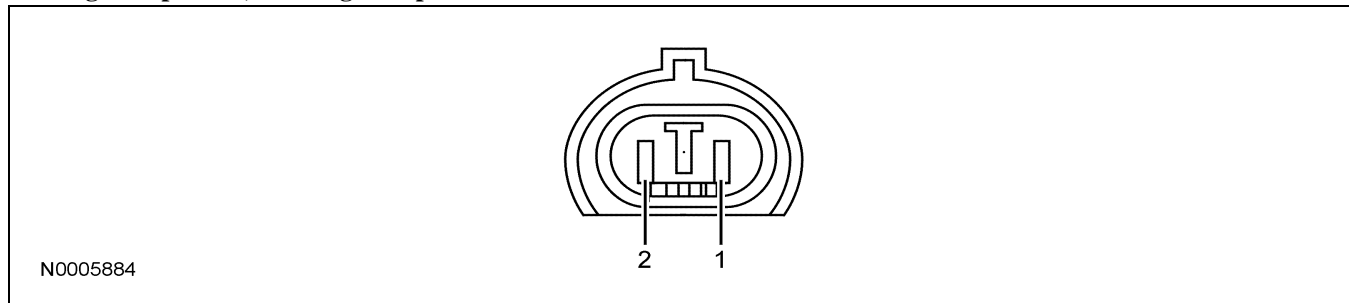
4. If the cause is not visually evident, connect the diagnostic tool to the data link connector (DLC) and select the vehicle to be tested from the diagnostic tool menu. If the diagnostic tool does not communicate with the vehicle:
 - check that the program card is correctly installed.
 - check the connections to the vehicle.
 - check the ignition switch position.
5. If the diagnostic tool still does not communicate with the vehicle, refer to the diagnostic tool operating manual.
6. Carry out the diagnostic tool data link test. If the diagnostic tool responds with:
 - CAN circuit 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 the 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.
8. If no DTCs related to the concern are retrieved, GO to [Symptom Chart](#).

DIAGNOSIS AND TESTING (Continued)**Smart Junction Box (SJB) Diagnostic Trouble Code (DTC) Index**

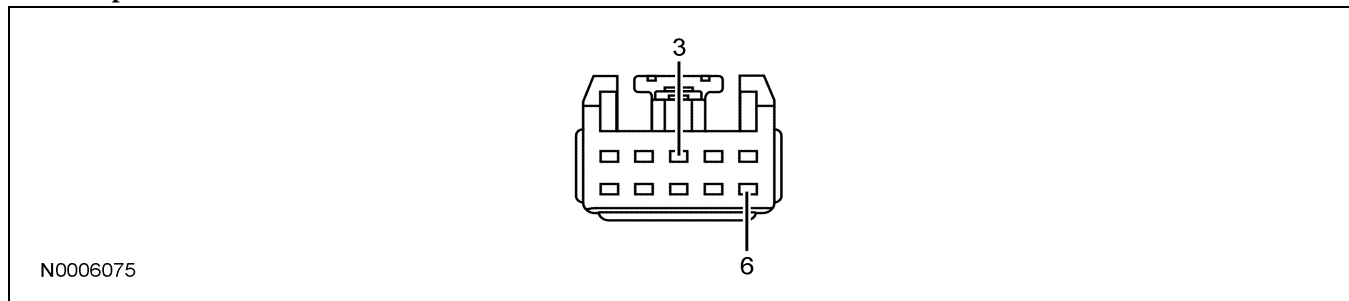
DTC	Description	Action
B1342	ECU is Faulted	CLEAR the DTCs. RETRIEVE the DTCs. If DTC B1342 is retrieved again, INSTALL a new SJB. REFER to Section 419-10. TEST the system for normal operation.
B2030	Front Fog Lamp Relay Ckt Failure	If the fog lamps are inoperative, GO to Pinpoint Test P. If the fog lamps are always on, GO to Pinpoint Test R.
B2254	Front Fog Lamp Switch Failure	GO to Pinpoint Test R.
All other DTCs	—	REFER to Section 419-10.

Symptom Chart**Symptom Chart**

Condition	Possible Sources	Action
<ul style="list-style-type: none"> No communication with the smart junction box (SJB) 	<ul style="list-style-type: none"> Circuitry SJB 	<ul style="list-style-type: none"> REFER to Section 419-10.
<ul style="list-style-type: none"> The fog lamps are inoperative 	<ul style="list-style-type: none"> Fuse Circuitry Fog lamp relay Headlamp switch Bussed electrical center (BEC) SJB 	<ul style="list-style-type: none"> GO to Pinpoint Test P.
<ul style="list-style-type: none"> An individual fog lamp is inoperative 	<ul style="list-style-type: none"> Circuitry BEC 	<ul style="list-style-type: none"> GO to Pinpoint Test Q.
<ul style="list-style-type: none"> The fog lamps are on continuously 	<ul style="list-style-type: none"> Circuitry Fog lamp relay Headlamp switch BEC SJB 	<ul style="list-style-type: none"> GO to Pinpoint Test R.
<ul style="list-style-type: none"> The fog lamp on indicator is inoperative 	<ul style="list-style-type: none"> Circuitry Headlamp switch BEC 	<ul style="list-style-type: none"> GO to Pinpoint Test S.

DIAGNOSIS AND TESTING (Continued)**Connector Circuit Reference****LH Fog Lamp C152, RH Fog Lamp C162**

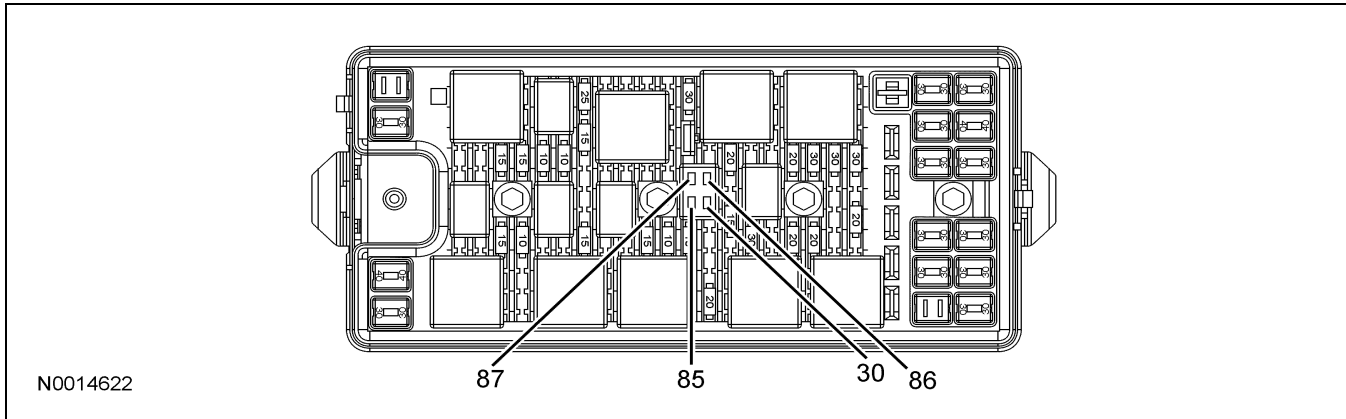
Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
1 (C152)	1721 (LB/BK) fog lamp voltage feed	0 volts, less than 5 ohms between the fog lamp and the bussed electrical center (BEC).
1 (C162)	1776 (TN/OG) fog lamp voltage feed	0 volts, less than 5 ohms between the fog lamp and the BEC.
2	1205 (BK) fog lamp ground	Less than 5 ohms between the fog lamp and ground.

Headlamp Switch C205

Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
3	2024 (VT/OG) fog lamp indicator voltage feed	0 volts, less than 5 ohms between the headlamp switch and the BEC.
6	1669 (OG/LG) fog lamp on request	Less than 5 ohms between the headlamp switch and the smart junction box (SJB). Greater than 10,000 ohms between the headlamp switch and ground.

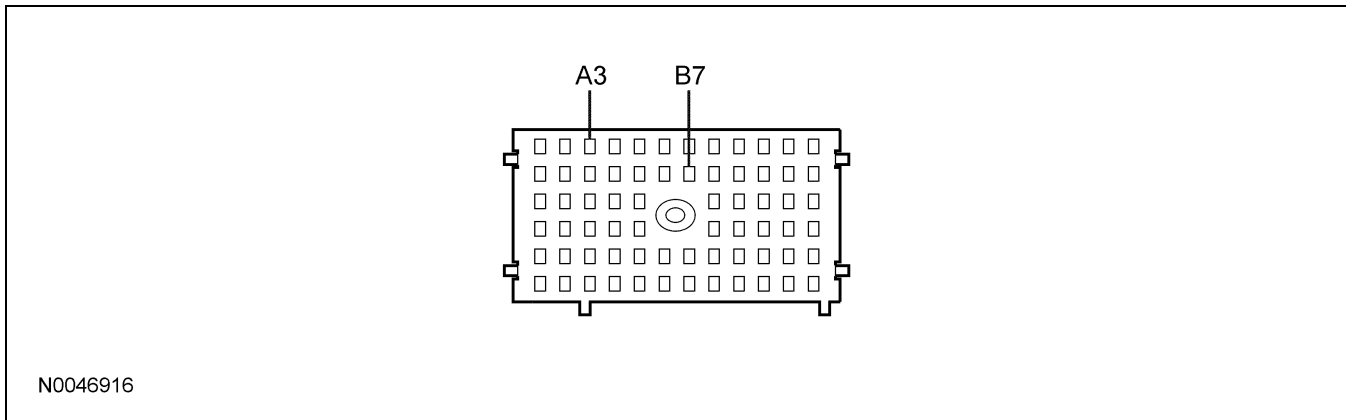
DIAGNOSIS AND TESTING (Continued)

Fog Lamp Relay C1007



Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
30	1776 (TN/OG)/1721 (LB/BK)/2024 (VT/OG) fog lamps and indicator voltage feed	0 volts, less than 5 ohms between the fog lamp relay and the fog lamps.
85	1347 (DB/WH) fog lamp relay coil control ground	0 volts, less than 5 ohms between the fog lamp relay and the SJB.
86	Battery voltage feed circuit	Greater than 10 volts at all times.
87	Battery voltage feed circuit	Greater than 10 volts at all times.

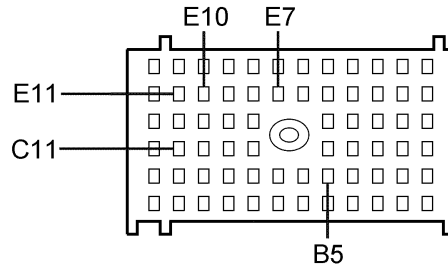
BEC C1035a



Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
A3	1347 (DB/WH) fog lamp relay coil ground control circuit	0 volts, less than 5 ohms between the BEC and the SJB.
B7	2024 (VT/OG) fog lamp indicator voltage feed	0 volts, less than 5 ohms between the BEC and the headlamp switch.

DIAGNOSIS AND TESTING (Continued)

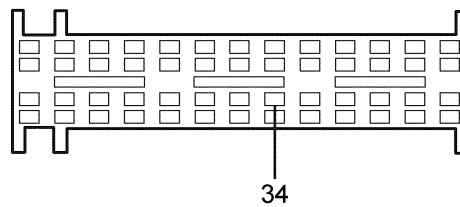
BEC C1035c



N0046917

Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
B5	1721 (LB/BK) LH fog lamp voltage feed	0 volts, less than 5 ohms between the BEC and the fog lamp.
C11	1205 (BK) RH fog lamp ground	Less than 5 ohms between the BEC and the fog lamp.
E7	1776 (TN/OG) RH fog lamp voltage feed	0 volts, less than 5 ohms between the BEC and the fog lamp.
E10	1205 (BK) LH fog lamp ground	Less than 5 ohms between the BEC and the fog lamp.
E11	1205 (BK) fog lamps ground	Less than 5 ohms between the BEC and ground.

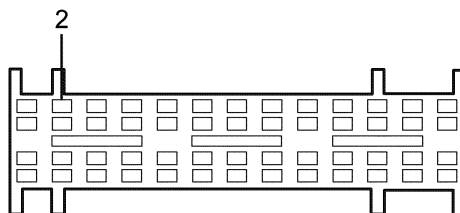
SJB C2280b



N0046918

Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
34	1669 (OG/LG) fog lamp on request	0 volts, less than 5 ohms between the SJB and the headlamp switch. Greater than 10,000 ohms between the SJB and ground.

SJB C2280c



N0046919

DIAGNOSIS AND TESTING (Continued)

Pin Number(s)	Circuit Designation/Description	Normal Condition/Measurement
2	1347 (DB/WH) fog lamp relay coil control ground	Greater than 10 volts at all times.

Pinpoint Tests**Pinpoint Test P: The Fog Lamps Are Inoperative****Normal Operation**

The smart junction box (SJB) sends a voltage reference signal to the headlamp switch through circuit 1669 (OG/LG). When the fog lamp switch is engaged, the voltage signal is routed to ground. The fog lamp relay is provided voltage through the bussed electrical center (BEC). When the parking lamps are on and the SJB detects a request for the fog lamps, the SJB provides a ground for the fog lamp relay coil through circuit 1347 (DB/WH).

When the relay is energized, voltage is routed through circuits 1721 (LB/BK) and 1776 (TN/OG) to the LH and RH fog lamps, respectively. The fog lamps share a common ground provided through the BEC on circuit 1205 (BK).

Possible Causes

- Fuse
- Circuit 1205 (BK) open
- Circuit 1347 (DB/WH) open or short to voltage
- Circuit 1669 (OG/LG) open
- Fog lamp relay
- Headlamp switch
- BEC
- SJB

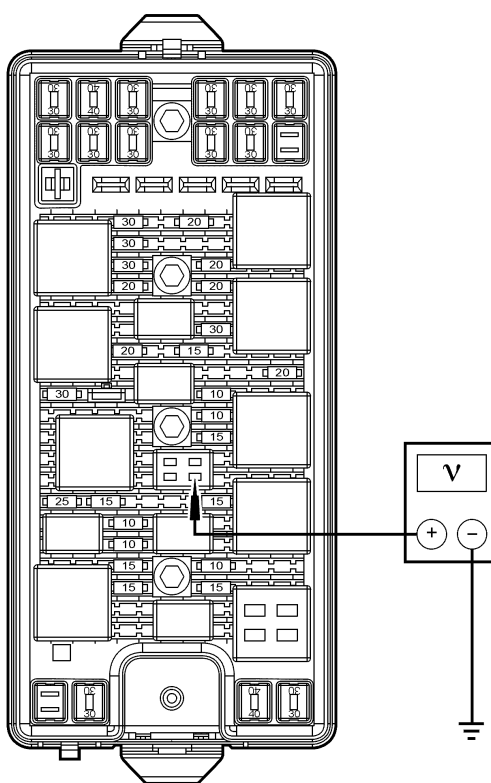
PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE

Test Step		Result / Action to Take
P1	USE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCs) FROM THE SJB SELF-TEST	
	<ul style="list-style-type: none"> • Key in OFF position. • Using the recorded results from the SJB self-test: • Was DTC B2030 present? 	Yes GO to P2 . No GO to P8 .
P2	CHECK THE FOG LAMP RELAY (DTC B2030)	
	<ul style="list-style-type: none"> • Disconnect: Fog Lamp Relay C1007. • Carry out the fog lamp relay component test. Refer to Wiring Diagrams Cell 149 for component testing. • Is the fog lamp relay OK? 	Yes GO to P3 . No INSTALL a new fog lamp relay. CLEAR the DTCs. REPEAT the self-test.

(Continued)

DIAGNOSIS AND TESTING (Continued)

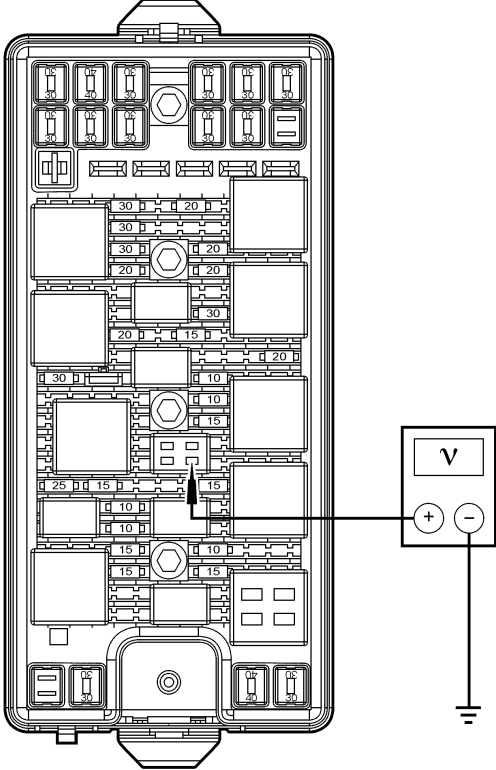
PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE (Continued)

	Test Step	Result / Action to Take
P4	<p>CHECK THE FOG LAMP RELAY COIL GROUND CONTROL CIRCUIT FOR SHORT TO VOLTAGE (Continued)</p>	
	<ul style="list-style-type: none"> Measure the voltage between the fog lamp relay C1007-85, circuit 1347 (DB/WH), harness side and ground.  <p>N0014616-</p> <ul style="list-style-type: none"> Is any voltage present? 	<p>Yes GO to P5.</p> <p>No GO to P6.</p>
P5	<p>CHECK CIRCUIT 1347 (DB/WH) FOR SHORT TO VOLTAGE</p> <ul style="list-style-type: none"> Key in OFF position. Disconnect: BEC C1035a. Key in ON position. 	

(Continued)

DIAGNOSIS AND TESTING (Continued)

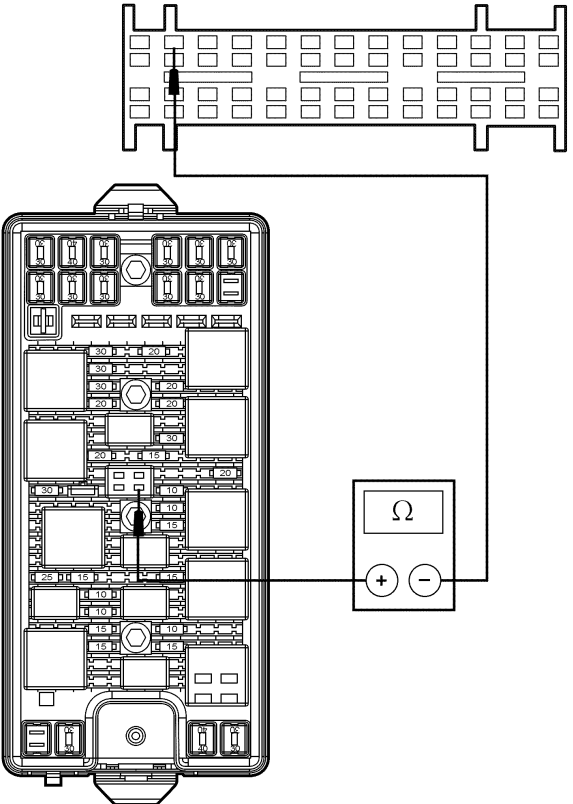
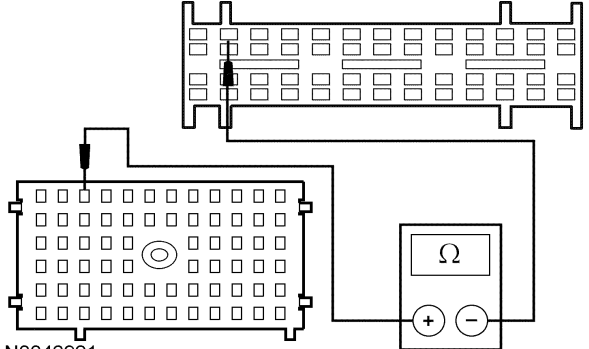
PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE (Continued)

Test Step		Result / Action to Take
P5	<p>CHECK CIRCUIT 1347 (DB/WH) FOR SHORT TO VOLTAGE (Continued)</p> <ul style="list-style-type: none"> Measure the voltage between the fog lamp relay C1007-85, circuit 1347 (DB/WH), harness side and ground.  <p>N0014616-</p> <ul style="list-style-type: none"> Is any voltage present? 	<p>Yes INSTALL a new BEC. CLEAR the DTCs. REPEAT the self-test.</p> <p>No REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.</p>
P6	<p>CHECK THE FOG LAMP RELAY COIL GROUND CONTROL CIRCUIT 1347 (DB/WH) FOR AN OPEN</p> <ul style="list-style-type: none"> Key in OFF position. 	

(Continued)

DIAGNOSIS AND TESTING (Continued)

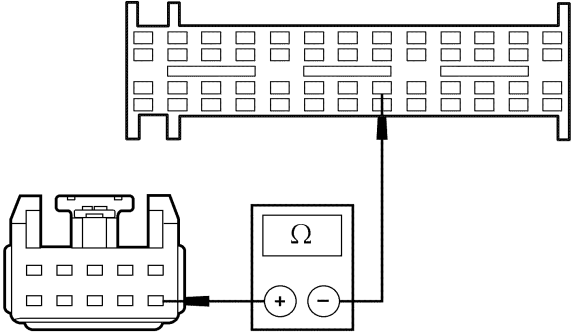
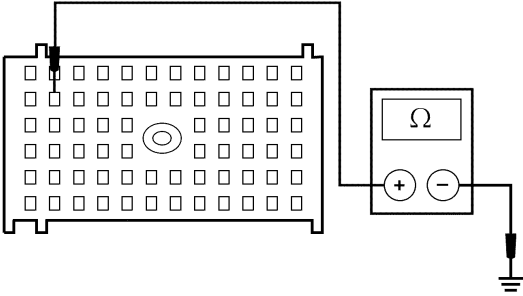
PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE (Continued)

Test Step	Result / Action to Take
<p>P6 CHECK THE FOG LAMP RELAY COIL GROUND CONTROL CIRCUIT 1347 (DB/WH) FOR AN OPEN (Continued)</p> <ul style="list-style-type: none"> Measure the resistance between the fog lamp relay C1007-85, circuit 1347 (DB/WH), harness side and the SJB C2280c-2, circuit 1347 (DB/WH), harness side.  <p>N0046920</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 	<p>Yes GO to P13.</p> <p>No GO to P7.</p>
<p>P7 CHECK CIRCUIT 1347 (DB/WH) FOR AN OPEN</p> <ul style="list-style-type: none"> Disconnect: BEC C1035a. Measure the resistance between the BEC C1035a-A3, circuit 1347 (DB/WH), harness side and the SJB C2280c-2, circuit 1347 (DB/WH), harness side.  <p>N0046921</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 	<p>Yes INSTALL a new BEC. CLEAR the DTCs. REPEAT the self-test.</p> <p>No REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.</p>
<p>P8 CHECK THE FOG LAMP SWITCH INPUT</p> <ul style="list-style-type: none"> Key in ON position. 	

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE (Continued)

	Test Step	Result / Action to Take
P8	CHECK THE FOG LAMP SWITCH INPUT (Continued)	
	<ul style="list-style-type: none"> Enter the following diagnostic mode on the diagnostic tool: SJB Headlamp Switch PID. Monitor the headlamp switch PID while placing the headlamp switch in the PARKING LAMPS ON position and engaging the fog lamp switch. Does the PID indicate the fog lamp switch is active? 	<p>Yes GO to P11.</p> <p>No GO to P9.</p>
P9	CHECK THE HEADLAMP SWITCH	
	<ul style="list-style-type: none"> Key in OFF position. Place the headlamp switch in the OFF position. Disconnect: Headlamp Switch C205. Carry out the headlamp switch component test. Refer to Wiring Diagrams Cell 149 for component testing. Is the headlamp switch OK? 	<p>Yes GO to P10.</p> <p>No INSTALL a new headlamp switch. TEST the system for normal operation.</p>
P10	CHECK CIRCUIT 1669 (OG/LG) FOR AN OPEN	
	<ul style="list-style-type: none"> Disconnect: SJB C2280b. Measure the resistance between the headlamp switch C205-6, circuit 1669 (OG/LG), harness side and the SJB C2280b-34, circuit 1669 (OG/LG), harness side.  <p>N0046922</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 	<p>Yes GO to P13.</p> <p>No REPAIR the circuit. TEST the system for normal operation.</p>
P11	CHECK THE FOG LAMP RELAY (NO DTCs)	
	<ul style="list-style-type: none"> Key in OFF position. Place the headlamp switch in the OFF position. Disconnect: Fog Lamp Relay C1007. Carry out the fog lamp relay component test. Refer to Wiring Diagrams Cell 149 for component testing. Is the fog lamp relay OK? 	<p>Yes GO to P12.</p> <p>No INSTALL a new fog lamp relay. TEST the system for normal operation.</p>
P12	CHECK CIRCUIT 1205 (BK) FOR AN OPEN	
	<ul style="list-style-type: none"> Disconnect: BEC C1035c. Measure the resistance between the BEC C1035c-E11, circuit 1205 (BK), harness side and ground.  <p>N0046923</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 	<p>Yes INSTALL a new BEC. TEST the system for normal operation.</p> <p>No REPAIR the circuit. TEST the system for normal operation.</p>

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST P: THE FOG LAMPS ARE INOPERATIVE (Continued)

Test Step		Result / Action to Take
P13	CHECK FOR CORRECT SJB OPERATION	<p>Yes INSTALL a new SJB. REFER to Section 419-10. TEST the system for normal operation.</p> <p>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.</p>
	<ul style="list-style-type: none"> • Key in OFF position. • Disconnect all the SJB connectors. • Check for: <ul style="list-style-type: none"> — 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? 	

Pinpoint Test Q: An Individual Fog Lamp Is Inoperative

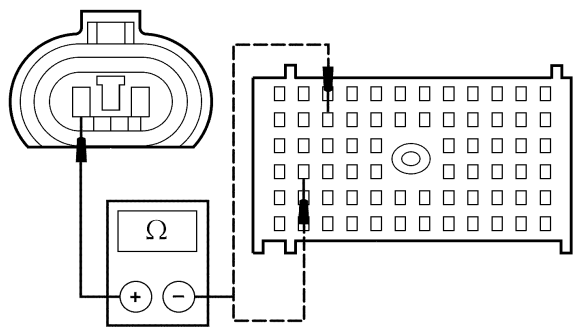
Normal Operation

When the fog lamp relay is energized, voltage is routed through circuits 1721 (LB/BK) and 1776 (TN/OG) to the LH and RH fog lamps, respectively. The fog lamps are provided ground through circuit 1205 (BK).

Possible Causes

- Circuit 1205 (BK) open
- Circuit 1721 (LB/BK) open
- Circuit 1776 (TN/OG) open
- BEC

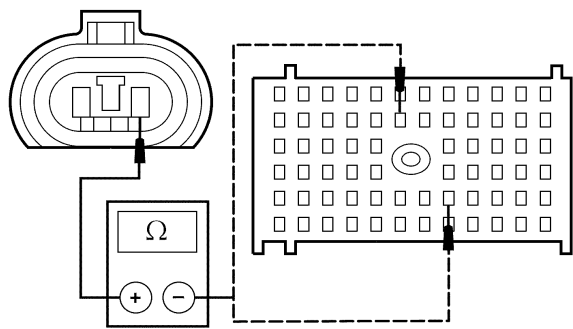
PINPOINT TEST Q: AN INDIVIDUAL FOG LAMP IS INOPERATIVE

Test Step		Result / Action to Take
Q1	CHECK CIRCUIT 1205 (BK) FOR AN OPEN	<p>Yes GO to Q2.</p> <p>No REPAIR the circuit. TEST the system for normal operation.</p>
	<ul style="list-style-type: none"> • Key in OFF position. • Disconnect: Inoperative Fog Lamp. • Disconnect: BEC C1035c. • Measure the resistance between the LH fog lamp C152-2, circuit 1205 (BK), harness side and the BEC C1035c-E10, circuit 1205 (BK), harness side; or between the RH fog lamp C162-2, circuit 1205 (BK), harness side and the BEC C1035c-C11, circuit 1205 (BK), harness side.  <p>N0046924</p> <ul style="list-style-type: none"> • Is the resistance less than 5 ohms? 	

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST Q: AN INDIVIDUAL FOG LAMP IS INOPERATIVE (Continued)

Test Step		Result / Action to Take
Q2	CHECK CIRCUIT 1776 (TN/OG) OR CIRCUIT 1721 (LB/BK) FOR AN OPEN	
<ul style="list-style-type: none"> Measure the resistance between the LH fog lamp C152-1, circuit 1721 (LB/BK), harness side and the BEC C1035c-B5, circuit 1721 (LB/BK), harness side; or between the RH fog lamp C162-1, circuit 1776 (TN/OG), harness side and the BEC C1035c-E7, circuit 1776 (TN/OG), harness side.  <p>N0046925</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 		<p>Yes INSTALL a new BEC. TEST the system for normal operation.</p> <p>No REPAIR the circuit in question. TEST the system for normal operation.</p>

Pinpoint Test R: The Fog Lamps Are On Continuously

Normal Operation

The smart junction box (SJB) sends a voltage reference signal to the headlamp switch through circuit 1669 (OG/LG). When the fog lamp switch is engaged, the voltage signal is routed to ground. The fog lamp relay is provided voltage through the bussed electrical center (BEC). When the parking lamps are on and the SJB detects a request for the fog lamps, the SJB provides a ground for the fog lamp relay coil through circuit 1347 (DB/WH). When the relay is energized, voltage is routed through circuits 1721 (LB/BK) and 1776 (TN/OG) to the LH and RH fog lamps, respectively.

Possible Causes

- Circuit 1347 (DB/WH) short to ground
- Circuit 1669 (OG/LG) short to ground
- Circuit 1721 (LB/BK) short to voltage
- Circuit 1776 (TN/OG) short to voltage
- Circuit 2024 (VT/OG) short to voltage
- Fog lamp relay
- Headlamp switch
- BEC
- SJB

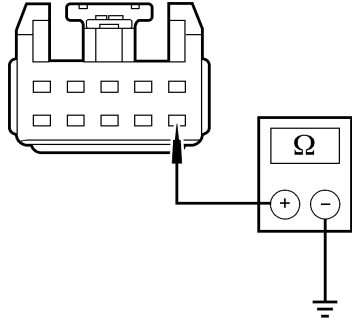
PINPOINT TEST R: THE FOG LAMPS ARE ON CONTINUOUSLY

Test Step		Result / Action to Take
R1	USE THE RECORDED DIAGNOSTIC TROUBLE CODES (DTCs) FROM THE SJB SELF-TEST	
<ul style="list-style-type: none"> Key in OFF position. Using the recorded results from the SJB self-test: Was DTC B2030 or B2254 present? 		<p>Yes For DTC B2254, GO to R2. For DTC B2030, GO to R4.</p> <p>No GO to R6.</p>
R2	CHECK THE HEADLAMP SWITCH	
<ul style="list-style-type: none"> Key in OFF position. Disconnect: Headlamp Switch C205. Carry out the headlamp switch component test. Refer to Wiring Diagrams Cell 149 for component testing. Is the headlamp switch OK? 		<p>Yes GO to R3.</p> <p>No INSTALL a new headlamp switch. CLEAR the DTCs. REPEAT the self-test.</p>

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST R: THE FOG LAMPS ARE ON CONTINUOUSLY (Continued)

Test Step		Result / Action to Take
R3	CHECK CIRCUIT 1669 (OG/LG) FOR A SHORT TO GROUND	
	<ul style="list-style-type: none"> Disconnect: SJB C2280b. Measure the resistance between the headlamp switch C205-6, circuit 1669 (OG/LG), harness side and ground.  <p>N0005420</p> <ul style="list-style-type: none"> Is the resistance greater than 10,000 ohms? 	<p>Yes GO to R9.</p> <p>No REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.</p>
R4	CHECK THE SJB	
	<ul style="list-style-type: none"> Disconnect: SJB C2280c. Key in ON position. Do the fog lamps continue to illuminate? 	<p>Yes GO to R5.</p> <p>No GO to R9.</p>
R5	CHECK CIRCUIT 1347 (DB/WH) FOR A SHORT TO GROUND	
	<ul style="list-style-type: none"> Key in OFF position. Disconnect: BEC C1035a. Key in ON position. Do the fog lamps continue to illuminate? 	<p>Yes INSTALL a new BEC. CLEAR the DTCs. REPEAT the self-test.</p> <p>No REPAIR the circuit. CLEAR the DTCs. REPEAT the self-test.</p>
R6	CHECK THE FOG LAMP RELAY	
	<ul style="list-style-type: none"> Disconnect: Fog Lamp Relay C1007. Key in ON position. Do the fog lamps continue to illuminate? 	<p>Yes GO to R7.</p> <p>No INSTALL a new fog lamp relay. TEST the system for normal operation.</p>
R7	CHECK CIRCUIT 2024 (VT/OG) FOR A SHORT TO VOLTAGE	
	<ul style="list-style-type: none"> Key in OFF position. Disconnect: BEC C1035a. Key in ON position. Do the fog lamps continue to illuminate? 	<p>Yes GO to R8.</p> <p>No REPAIR the circuit. TEST the system for normal operation.</p>
R8	CHECK CIRCUITS 1721 (LB/BK) AND 1776 (TN/OG) FOR A SHORT TO VOLTAGE	
	<ul style="list-style-type: none"> Key in OFF position. Disconnect: BEC C1035c. Key in ON position. Do the fog lamps continue to illuminate? 	<p>Yes REPAIR circuit 1721 (LB/BK) (LH fog lamp) or circuit 1776 (TN/OG) (RH fog lamp) as necessary. TEST the system for normal operation.</p> <p>No INSTALL a new BEC. TEST the system for normal operation.</p>

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST R: THE FOG LAMPS ARE ON CONTINUOUSLY (Continued)

Test Step		Result / Action to Take
R9	CHECK FOR CORRECT SJB OPERATION	<p>Yes INSTALL a new SJB. REFER to Section 419-10. TEST the system for normal operation.</p> <p>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.</p>
	<ul style="list-style-type: none"> • Key in OFF position. • Disconnect all the SJB connectors. • Check for: <ul style="list-style-type: none"> — 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? 	

Pinpoint Test S: The Fog Lamp On Indicator Is Inoperative

Possible Causes

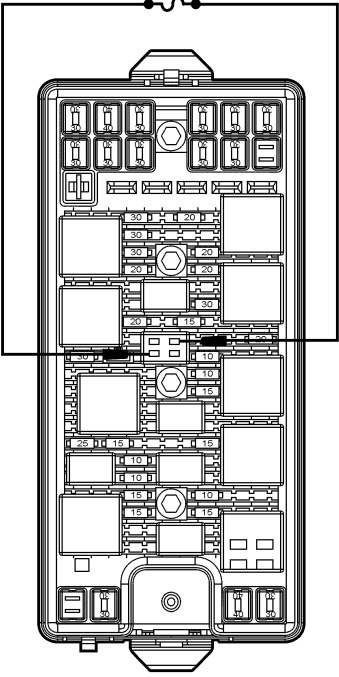
- Circuit 2024 (VT/OG) open
- Headlamp switch
- BEC

Normal Operation

When the fog lamp relay is energized, the bussed electrical center (BEC) routes voltage through circuit 2024 (VT/OG) to the headlamp switch.

PINPOINT TEST S: THE FOG LAMPS ON INDICATOR IS INOPERATIVE

Test Step		Result / Action to Take
S1	CHECK CIRCUIT 2024 (VT/OG) FOR VOLTAGE	
	<ul style="list-style-type: none"> • Key in OFF position. • Disconnect: Fog Lamp Relay C1007. • Disconnect: Headlamp Switch C205. • Connect a fused (15A) jumper wire between the fog lamp relay C1007-87, harness side and the fog lamp relay C1007-30, circuit 2024 (VT/OG), harness side. 	



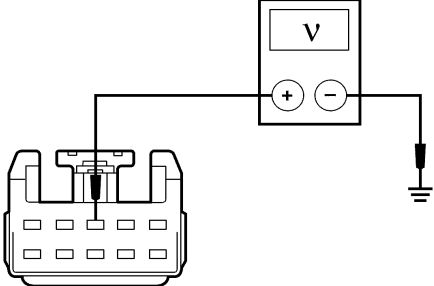
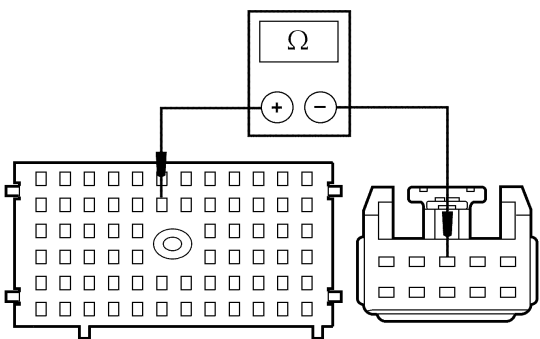
The diagram shows a top-down view of the Bussed Electrical Center (BEC) with various components labeled. A rectangular box highlights the upper portion of the BEC, indicating the area where the diagnostic test is performed. The highlighted area contains the fog lamp relay and the headlamp switch, which are the focus of Pinpoint Test S.

N0046926

(Continued)

DIAGNOSIS AND TESTING (Continued)

PINPOINT TEST S: THE FOG LAMPS ON INDICATOR IS INOPERATIVE (Continued)

Test Step		Result / Action to Take
S1	<p>CHECK CIRCUIT 2024 (VT/OG) FOR VOLTAGE (Continued)</p> <ul style="list-style-type: none"> Measure the voltage between the headlamp switch C205-3, circuit 2024 (VT/OG), harness side and ground.  <p>N0046945</p> <ul style="list-style-type: none"> Is the voltage greater than 10 volts? 	<p>Yes INSTALL a new headlamp switch. TEST the system for normal operation.</p> <p>No REMOVE the jumper wire. GO to S2.</p>
S2	<p>CHECK CIRCUIT 2024 (VT/OG) FOR AN OPEN</p> <ul style="list-style-type: none"> Disconnect: BEC C1035a. Measure the resistance between the BEC C1035a-B7, circuit 2024 (VT/OG), harness side and the headlamp switch C205-3, circuit 2024 (VT/OG), harness side.  <p>N0046927</p> <ul style="list-style-type: none"> Is the resistance less than 5 ohms? 	<p>Yes INSTALL a new BEC. TEST the system for normal operation.</p> <p>No REPAIR the circuit. TEST the system for normal operation.</p>