

SECTION 417-01: Exterior Lighting  
DIAGNOSIS AND TESTING

1998 Mark VIII Workshop Manual

## Turn Signal/Cornering/Hazard Lamps

Refer to Wiring Diagrams Cell [58](#), Lighting Control Module for schematic and connector information.

Refer to Wiring Diagrams Cell [90](#), Turn/Stop/Hazard Lamps for schematic and connector information.

Refer to Wiring Diagrams Cell [91](#), Cornering Lamps for schematic and connector information.

### Special Tool(s)

 ST1137-A	73 Digital Multimeter or equivalent 105-R0051
 ST1217-A	New Generation STAR (NGS) Tester or equivalent 418-F048 (007-00500)

### Inspection and Verification

1. **NOTE:** If the headlamp switch loses power, the steering column/ignition/lighting (SCIL) module will automatically default to the autolamp mode. With the ignition switch in RUN, the autolamp function will turn on the exterior lamps and the instrument panel lighting depending on the input of the light sensor amplifier as in normal operation. However, the exit delay will be defaulted to the full three minutes.

Verify the customer concern by operating the turn signal/hazard flasher lamps to duplicate the condition.

2. Inspect to determine if any of the following electrical concerns apply:

### Visual Inspection Chart

Electrical
<ul style="list-style-type: none"> <li>● Circuitry open/shorted</li> <li>● Damaged fuse: Fuse Junction Panel fuse 7 (15A), 13 (15A), 31 (10A), 12 (15A), 26 (15A), 1 (10A), 25 (10A)</li> <li>● Damaged multi-function switch</li> <li>● Miniature bulb open</li> <li>● Damaged SCIL module</li> </ul>

3. If the concern remains after the inspection, connect the New Generation STAR (NGS) Tester to the data link connector (DLC) located beneath the instrument panel and select the vehicle to be tested from the NGS menu. If the NGS does not communicate with the vehicle:
  - checked that the program card is properly installed.
  - check the connections to the vehicle.
  - check the ignition switch position.
4. If the NGS still does not communicate with the vehicle, refer to the New Generation STAR Tester manual.
5. Perform the DATA LINK DIAGNOSTIC TEST. If the NGS responds with:
  - CKT914, CKT915 or CKT70 = ALL ECUS NO RESP/NOT EQUIP, refer to [Section 418-00](#).
  - NO RESP/NOT EQUIP for SCIL module, go to Pinpoint Test H.
  - SYSTEM PASSED, retrieve and record the continuous diagnostic trouble codes (DTCs), erase the continuous DTCs and perform self-test diagnostics for the SCIL module.
6. If the DTCs retrieved are related to the concern, go to SCIL Diagnostic Trouble Code (DTC) Index to continue diagnostics.
7. If no DTCs related to the concern are retrieved, proceed to Symptom Chart to continue diagnostics.

### SCIL Diagnostic Trouble Code (DTC) Index

#### SCIL Diagnostic Trouble Code (DTC) Index

DTC	Description	DTC Caused By	Action
C1446	Brake Switch Circuit Failure	SCIL	REFER to <a href="#">Section 206-05</a> .
B1246	Panel Dim Potentiometer Switch Circuit Failure	SCIL	REFER to <a href="#">Section 417-02</a> .
B1312	Lamp Headlamp Input Circuit Short to Battery	SCIL	GO to <a href="#">Pinpoint Test G</a> .
B1334	Luggage Compartment Door Ajar Circuit Short to Ground	SCIL	REFER to <a href="#">Section 417-02</a> .
B1342	ECU is Defective	SCIL	GO to <a href="#">Pinpoint Test A</a> .
B1353	Ignition Key-In Circuit Open	SCIL	REFER to <a href="#">Section 501-12</a> .
B1360	Ignition Run/ACC Circuit Open	SCIL	REFER to <a href="#">Section 501-12</a> .
B1364	Ignition Run/Start Circuit Open	SCIL	REFER to <a href="#">Section 501-12</a> .
B1446	Wiper Park Sense Circuit Failure	SCIL	GO to <a href="#">Pinpoint Test B</a> .
B1485	Brake Pedal Input Short to B+	SCIL	GO to <a href="#">Pinpoint Test R</a> .
B1490	Right Front Door Handle Short to Ground	SCIL	This is an invalid DTC. Do not attempt to repair.
B1498	Luggage Compartment Door Punch Out Sensor Shorted to Ground	SCIL	This is an invalid DTC. Do not attempt to repair.
B1509	Flash-to-Pass Switch Circuit Short to	SCIL	GO to <a href="#">Pinpoint Test C</a> .

	Battery		
B1522	Hood Switch Circuit Short to Ground	SCIL	REFER to <a href="#">Section 419-01A</a> .
B1562	Door Lock Cylinder Circuit Short to Ground	SCIL	REFER to <a href="#">Section 419-01A</a> .
B1566	Door Ajar Circuit Short to Ground	SCIL	REFER to <a href="#">Section 417-02</a> .
B1600	PATS Ignition Key Transponder Signal Is Not Received	SCIL	REFER to <a href="#">Section 419-01B</a> .
B1601	PATS Received Incorrect Key Code From Ignition Key Transponder	SCIL	REFER to <a href="#">Section 419-01B</a> .
B1676	Battery Voltage Out of Range	SCIL	GO to <a href="#">Pinpoint Test D</a> .
B1682	PATS is Disabled (Check Link Between PATS and Transponder)	SCIL	REFER to <a href="#">Section 419-01B</a> .
B1687	Dome Lamp Input Circuit Short to Battery	SCIL	REFER to <a href="#">Section 417-02</a> .
B1689	Autolamp Delay Circuit Failure	SCIL	GO to <a href="#">Pinpoint Test E</a> .
B1796	Headlamp Low Beam Circuit Short to Battery	SCIL	GO to <a href="#">Pinpoint Test G</a> .
B1875	Turn Signal/Hazard Switch Signal Circuit Short to Battery	SCIL	GO to <a href="#">Pinpoint Test V</a> .
B1980	Bulb Outage Condition Detected	SCIL	GO to <a href="#">Pinpoint Test F</a> .
B2328	Steering Column Reach Feedback Potentiometer Circuit Failure	SCIL	REFER to <a href="#">Section 211-05</a> .
B2332	Steering Column Tilt Feedback Potentiometer Circuit Failure	SCIL	REFER to <a href="#">Section 211-05</a> .
B2351	Steering Column Switch Signal Circuit Failure	SCIL	REFER to <a href="#">Section 211-05</a> .
U1027	SCP Invalid or Missing Data for Engine RPM	PCM	REFER to Powertrain Control/Emissions Diagnosis (PC/ED) manual.
U1041	SCP Invalid or Missing Data for Vehicle Speed	ABS	REFER to <a href="#">Section 206-09</a> , Inspection and Verification to continue diagnosis.
U1057	SCP Invalid or Missing Data for Vehicle Configuration	SCIL	REFER to <a href="#">Section 501-16</a> , Inspection and Verification to continue diagnosis.
U1059	SCP Invalid or Missing Data for Transmission/Transaxle/PRNDL	PCM	REFER to Powertrain Control/Emissions Diagnosis (PC/ED) manual.
U1123	SCP Invalid or Missing Data for Odometer	ABS	REFER to <a href="#">Section 206-09</a> , Inspection and Verification to continue diagnosis.
U1147	SCP Invalid or Missing Data for Vehicle Security	PCM	PERFORM J1850 Communication Network Diagnostics. GO to Communication Network Diagnostics in <a href="#">Section 418-00</a> .
U1180	SCP Invalid or Missing Data for Personalization (Memory) Features	DDM	GO to <a href="#">Section 501-09</a> , Inspection and Verification to continue diagnosis.
U1181	SCP Invalid or Missing Data for Personalization (Memory) Features	DDM	GO to <a href="#">Section 501-09</a> , Inspection and Verification to continue diagnosis.
U1197	SCP Invalid or Missing Data for Door Locks	DDM	GO to <a href="#">Section 501-14B</a> , Inspection and Verification to continue diagnosis.
U1198	SCP Invalid or Missing Data for External Access (Doors)	DDM	GO to <a href="#">Section 501-14B</a> , Inspection and Verification to continue diagnosis.

U1199	SCP Invalid or Missing Data for External Access (Doors)	DDM	GO to <a href="#">Section 417-02</a> , Inspection and Verification to continue diagnosis.
U1211	SCP Invalid or Missing Data for Restraints	DSM	GO to <a href="#">Section 413-08</a> , Inspection and Verification to continue diagnosis.
U1222	SCP Invalid or Missing Data for Interior Lamps	DDM	GO to <a href="#">Section 501-14B</a> , Inspection and Verification to continue diagnosis.

### SCIL Parameter Identification (PID) Index

#### SCIL Parameter Identification Index

PID	Description	Expected Values
CCNTSCI	Number of Continuous DTCs on SCIL	one count per bit
BOO_SCI	Brake Switch Input	ON, OFF
PRK_BRK	Parking Brake Switch Input	ON, OFF
TILT	Steering Column Tilt Switch	SHORT, UP, DOWN, OFF
TELESCP	Steering Column Telescope Switch	SHORT, IN, OUT, OFF
TILTPOS	Tilt Position Sensor	SENSED, notSEN
TELEPOS	Telescope Position Sensor	SENSED, notSEN
TURN_SW	Left and Right Turn Signal Switch	OFF, LEFT, RIGHT, SHORT
LBEAMSW	Low Beam Switch	ON, OFF
HBEAMSW	High Beam Switch	ON, OFF
PARK_SW	Parking Lamp Switch	ON, OFF
LIGHTSN	Ambient Light	DAY, NIGHT
FLASH	Flash to Pass Switch	ON, OFF
FTURN_L	Left and Right Front Turn Lamp	R_OPEN, L_OPEN, L/R_OPEN OK
RTURN_L	Left and Right Rear Turn Lamp	R_OPEN, L_OPEN, L/R_OPEN OK
TAILLMP	Left and Right Tail Lamp	OPEN, OK
LOWBEAM	Low Beam Lamp	R_OPEN, L_OPEN, L/R_OPEN OK
AUTOLMP	Autolamp Switch	ON, OFF
ALP_IMP	Autolamp Analog Input	0-100%
DOMESW	Dome Lamp Switch	ACTIVE, notACT
PANLDIM	Panel Dim Intensity Switch	0-100%
HOOD_SW	Hood Ajar Switch	AJAR, CLOSED
DECKLID	Decklid Ajar Switch	AJAR, CLOSED
P_DR_SW	Passenger Door Ajar Switch	AJAR, CLOSED
IGN_KEY	Ignition Key In/Out	IN, OUT
IGN_SCI	Ignition Switch	START, RUN, OFF, ACCSSY
WPPRKS	Windshield Wiper Park Sense	notPRK, PARKED
NUMKEYS	Number of Ignition Key Codes Supported	BCD (valid range 0-16)

DRLKCYL	Door Lock Cylinder	ON, OFF
ENABLE	PATS System Status	ON, OFF
FAILSAF	PATS System Status	ON, OFF

### SCIL Active Command Index

#### SCIL Active Command Index

Active Command	Display	Action
PID LATCH	PID LATCH	ON, OFF
ONE TOUCH WINDOW DWN & ACCY DELAY	ACCY RLY	ON, OFF
WARNING LAMPS AND CHIME	CHIME	ON, OFF
	ANTI-THEFT	ON, OFF
	AUTOLMP	ON, OFF
	HIGH BEAM	ON, OFF
INTERIOR COURTESY LAMPS	INT LAMPS MIRRORLMP	ON, OFF ON, OFF
DECKLID RELEASE	RELEASE	ON, OFF
TURN SIGNAL AND MARKER LAMPS	LF TURN	ON, OFF
	RF TURN	ON, OFF
	LR TURN	ON, OFF
	RR TURN	ON, OFF
	PARKLAMPS	ON, OFF
HEADLAMP CONTROL	LEFT LOW	ON, OFF
	RIGHT LOW	ON, OFF
	HIGH BEAM	ON, OFF
	DRUN LAMP	ON, OFF
	LF CORNER	ON, OFF
	RF CORNER	ON, OFF
HORN CONTROL	HORN	ON, OFF
BACKLIGHTING INTENSITY	INTENSITY	0%-100%
COURTESY LAMP INTENSITY	INTENSITY	0%-100%
DOOR AJAR SIGNAL	DOOR AJAR	ON, OFF
TRANSMIT SIGNAL COMMAND	TRANSMIT	ON, OFF
BRAKE SYSTEM	BRK/SHIFT	ON, OFF
	PARK BRK	ON, OFF
STEERING COLUMN CONTROL	TILT UP	ONE SECOND TIME OUT
	TILT DOWN	ONE SECOND TIME OUT
	TELSCP IN	ONE SECOND TIME OUT

	TELSPOUT	ONE SECOND TIME OUT
KEYCODE ERASE TIME SET	MINUTES	8-63 MINUTES

**Symptom Chart**

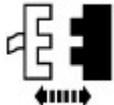
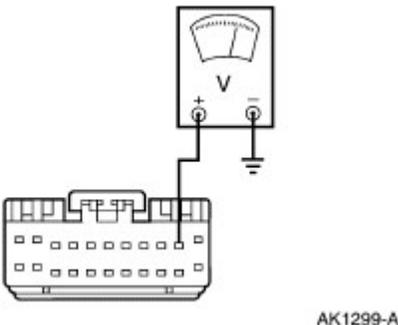
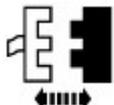
**Symptom Chart**

Condition	Possible Sources	Action
<ul style="list-style-type: none"> <li>No Communication With the Steering Column/Ignition/Lighting Control Module</li> </ul>	<ul style="list-style-type: none"> <li>Steering column/ignition/lighting (SCIL) control module.</li> <li>Circuitry.</li> </ul>	<ul style="list-style-type: none"> <li>GO to <a href="#">Pinpoint Test H.</a></li> </ul>
<ul style="list-style-type: none"> <li>The Turn Signal Lamps Are Never On — One Or More</li> </ul>	<ul style="list-style-type: none"> <li>Circuitry.</li> <li>SCIL module.</li> <li>Multi-function switch .</li> <li>Fuse.</li> </ul>	<ul style="list-style-type: none"> <li>GO to <a href="#">Pinpoint Test W.</a></li> </ul>
<ul style="list-style-type: none"> <li>The Hazard Flasher Lamps Are Never On — Turn Signals Are Operative</li> </ul>	<ul style="list-style-type: none"> <li>SCIL module.</li> <li>Multi-function switch.</li> </ul>	<ul style="list-style-type: none"> <li>REPAIR the multi-function switch; REFER to <a href="#">Section 211-05.</a></li> </ul>
<ul style="list-style-type: none"> <li>The Individual Cornering Lamp Is Inoperative</li> </ul>	<ul style="list-style-type: none"> <li>Circuitry open.</li> <li>Damaged miniature bulb .</li> <li>SCIL module.</li> </ul>	<ul style="list-style-type: none"> <li>GO to <a href="#">Pinpoint Test X.</a></li> </ul>
<ul style="list-style-type: none"> <li>The Individual Cornering Lamp Is On Continuously</li> </ul>	<ul style="list-style-type: none"> <li>Circuitry open/shorted.</li> <li>SCIL module.</li> </ul>	<ul style="list-style-type: none"> <li>GO to <a href="#">Pinpoint Test Y.</a></li> </ul>

**Pinpoint Tests**

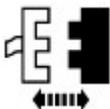
**PINPOINT TEST V: DTC B1875: TURN SIGNAL/HAZARD SWITCH SIGNAL CIRCUIT SHORT TO BATTERY**

CONDITIONS	DETAILS/RESULTS/ACTIONS
V1 CHECK FOR DTC B1509	<p>1 Check the continuous DTCs recorded during Inspection and Verification.</p> <ul style="list-style-type: none"> <li><b>Are both DTCs B1509 and B1875 stored as continuous DTCs?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 1041 (BR/O). RETEST the system.</p> <p>→ <b>No</b></p>

GO to <a href="#">V2</a> .	
<b>V2 CHECK TURN_SW PID</b>	
<p>1</p>  <p>SCIL Module PID TURN_SW</p>	<ul style="list-style-type: none"> <li>• Does PID TURN_SW read OFF?</li> </ul> <p>→ <b>Yes</b> GO to <a href="#">V3</a>.</p> <p>→ <b>No</b> GO to <a href="#">V4</a>.</p>
<b>V3 CHECK CIRCUIT 375 (Y/LG) FOR A SHORT TO VOLTAGE</b>	
<p>1</p>  <p>SCIL Module C286</p> <p>2</p>  <p>AK1299-A</p>	<p>2</p> <p>Connect a voltmeter between steering column/ignition/lighting control (SCIL) module C286-10, circuit 375 (Y/LG), and ground.</p> <ul style="list-style-type: none"> <li>• Is the voltage reading B+?</li> </ul> <p>→ <b>Yes</b> REPAIR circuit 375 (Y/LG). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
<b>V4 CHECK PID TURN_SW WITH THE MULTI-FUNCTION SWITCH DISCONNECTED</b>	
<p>1</p>  <p>Multi-Function Switch Connector C215</p>	

<p>2</p>  <p>SCIL Module PID TURN_SW</p>	<ul style="list-style-type: none"> <li>• Does PID TURN_SW read OFF?</li> </ul> <p>→ <b>Yes</b> REPLACE the multi-function switch. REFER to <a href="#">Section 211-05</a>. RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">V5</a>.</p>
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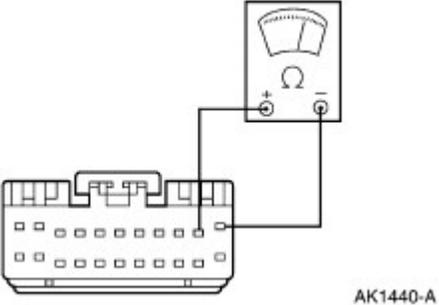
**V5 CHECK PID TURN\_SW WITH SCIL MODULE DISCONNECTED**

<p>1</p>  <p>SCIL Module C286</p> <p>2</p>  <p>SCIL Module PID TURN_SW</p>	<ul style="list-style-type: none"> <li>• Does PID TURN_SW read OFF?</li> </ul> <p>→ <b>Yes</b> REPAIR the short between circuit 1041 (BR/O) and circuit 375 (Y/LG). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
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**PINPOINT TEST W: THE TURN SIGNAL LAMPS ARE NEVER ON — ONE OR MORE**

CONDITIONS	DETAILS/RESULTS/ACTIONS
<b>W1 CHECK ALL TURN SIGNALS</b>	
<p>1</p> 	<p>1 Activate the left turn signals.</p> <p>2 Activate the right turn signals.</p>

	<ul style="list-style-type: none"> <li>• Are all turn signals inoperative?</li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W25</a>.</p> <p>→ <b>No</b> GO to <a href="#">W2</a>.</p>
<p><b>W2 CHECK THE LEFT TURN SIGNALS</b></p>	
<p>1</p> 	<p>1 Activate the left turn signals.</p> <ul style="list-style-type: none"> <li>• Are both LH front and rear turn signals inoperative?</li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W3</a>.</p> <p>→ <b>No</b> GO to <a href="#">W10</a>.</p>
<p><b>W3 COMMAND THE LH TURN SIGNAL ON</b></p>	
<p>1</p>  <p>SCIL Module Active Command TURN SIGNAL AND MARKER LAMPS</p> <p>2</p>  <p>Trigger LF TURN ON</p>	<ul style="list-style-type: none"> <li>• Does the LH front turn signal lamp turn on?</li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W4</a>.</p> <p>→ <b>No</b> GO to <a href="#">W5</a>.</p>
<p><b>W4 CHECK THE MULTI-FUNCTION SWITCH</b></p>	
<p>1</p>  <p>SCIL Module C286</p>	

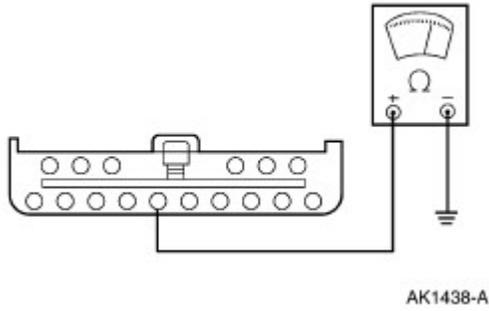
<p><b>2</b></p>  <p style="text-align: right;">AK1440-A</p>	<p><b>2</b> Connect an ohmmeter between steering column/ignition/lighting (SCIL) module C286-11, circuit 1041 (BR/O), and SCIL C286-10, circuit 375 (Y/LG).</p> <p><b>3</b> Actuate the turn signal lever to the LH turn position.</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance reading between 300-360 ohms?</b></li> </ul> <p>→ <b>Yes</b> REPLACE the SCIL module. RETEST the system.</p> <p>→ <b>No</b> REPLACE the multi-function switch. REFER to <a href="#">Section 211-05</a>. RETEST the system.</p>
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**W5 CHECK FUSE JUNCTION PANEL FUSE 7 (15A)**

<p><b>1</b></p>  <p style="text-align: center;">Fuse Junction Panel Fuse 7 (15A)</p>	<ul style="list-style-type: none"> <li>• <b>Is the fuse OK?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 1057 (O/BK). RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">W6</a>.</p>
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**W6 CHECK CIRCUIT 1057 (O/BK) FOR A SHORT TO GROUND**

<p><b>1</b></p>  <p style="text-align: center;">SCIL Module C289</p> <p><b>2</b></p>	<p><b>2</b> Connect an ohmmeter between SCIL module C289-6, circuit 1057 (O/BK), and ground.</p>
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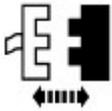
- Is the resistance 5 ohms or less?

→ **Yes**  
REPAIR circuit 1057 (O/BK). RETEST the system.

→ **No**  
GO to [W7](#).

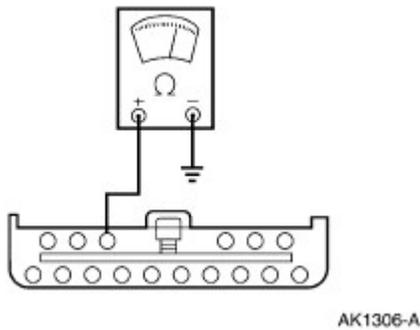
**W7 CHECK CIRCUIT 380 (P/Y) FOR A SHORT**

1



LH Cornering Lamp Bulb

2



2 Connect an ohmmeter between SCIL module C289-14, circuit 380 (P/Y), and ground.

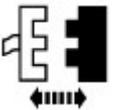
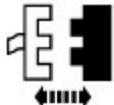
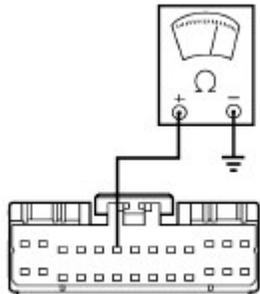
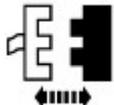
- Is the voltage reading 10 kohms or less?

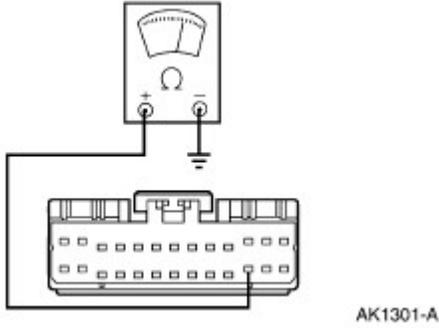
→ **Yes**  
REPAIR circuit 380 (P/Y). RETEST the system.

→ **No**  
GO to [W8](#).

**W8 CHECK CIRCUIT 3 (LG/W) FOR A SHORT**

1

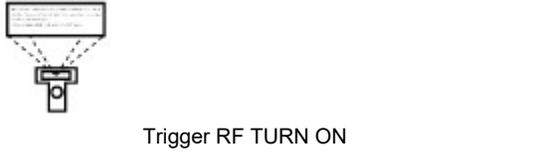
 <p>SCIL Module C287</p> <p>2 </p> <p>LH Front Turn Signal Bulb</p> <p>3 </p> <p>LH Outside Rear View Mirror C509</p> <p>4 </p> <p>Hybrid Electronic Instrument Cluster C293</p> <p>5 </p> <p>AK1302-A</p>	<p>5 Connect an ohmmeter between SCIL module C287-6, circuit 3 (LG/W), and ground.</p> <ul style="list-style-type: none"> <li>• Is the voltage reading 10 kohms or less?</li> </ul> <p>→ <b>Yes</b> REPAIR circuit 3 (LG/W). RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">W9</a>.</p>
<p><b>W9 CHECK CIRCUIT 9 (LG/R) FOR A SHORT TO GROUND</b></p>	
<p>1 </p> <p>LH Rear Turn Signal Bulb</p> <p>2</p>	<p>2 Connect an ohmmeter between SCIL module</p>

 <p>AK1301-A</p>	<p>C287-24, circuit 9 (LG/R), and ground.</p> <ul style="list-style-type: none"> <li>• Is the voltage reading 10 kohms or less?</li> </ul> <p>→ <b>Yes</b> REPAIR circuit 9 (LG/R). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
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**W10 CHECK THE RIGHT TURN SIGNALS**

<p>1</p> 	<p>1 Activate the right turn signals.</p> <ul style="list-style-type: none"> <li>• Are both RH front and rear turn signals inoperative?</li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W11</a>.</p> <p>→ <b>No</b> GO to <a href="#">W18</a>.</p>
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**W11 COMMAND THE RH TURN SIGNAL ON**

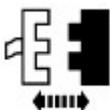
<p>1</p>  <p>SCIL Module Active Command TURN SIGNAL AND MARKER LAMPS</p> <p>2</p>  <p>Trigger RF TURN ON</p>	<ul style="list-style-type: none"> <li>• Does the RH front turn signal lamp turn on?</li> </ul>
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→ **Yes**  
GO to [W12](#).

→ **No**  
GO to [W13](#).

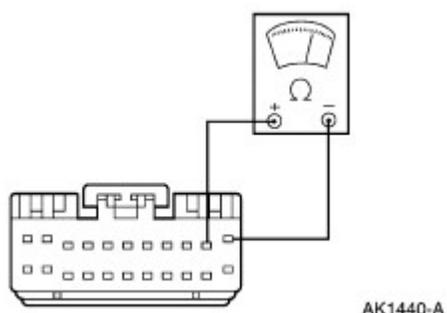
**W12 CHECK THE MULTI-FUNCTION SWITCH**

1



SCIL Module Connector C286

2



2 Connect an ohmmeter between SCIL module C286-11, circuit 1041 (BR/O), and Pin C286-10, circuit 375 (Y/LG).

3 Actuate the turn signal lever to the RH turn position.

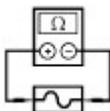
- **Is the resistance reading between 2000 - 2400 ohms?**

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

→ **No**  
REPLACE the multi-function switch. REFER to [Section 211-05](#). RETEST the system.

**W13 CHECK FUSE 13 (15A)**

1



Fuse Junction Panel Fuse 13 (10A)

- **Is the fuse OK?**

→ **Yes**  
REPAIR circuit 1058 (BR/W). RETEST the system.

→ **No**  
GO to [W14](#).

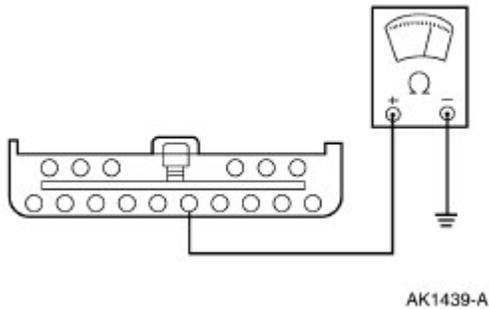
**W14 CHECK CIRCUIT 1058 (BR/W) FOR A SHORT TO GROUND**

1



SCIL Module C289

2



2

Connect an ohmmeter between SCIL module C289-5, circuit 1058 (BR/W), and ground.

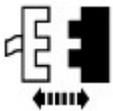
- Is the resistance 5 ohms or less?

→ **Yes**  
REPAIR circuit 1058 (BR/W). RETEST the system.

→ **No**  
GO to [W15](#).

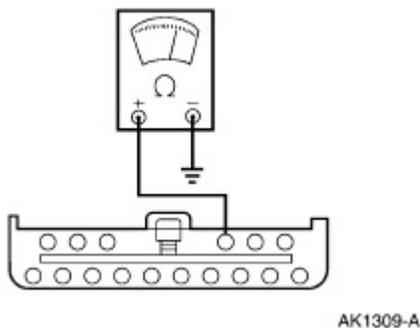
**W15 CHECK CIRCUIT 379 (BR/W) FOR A SHORT**

1



RH Cornering Lamp Bulb

2



2

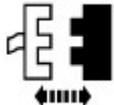
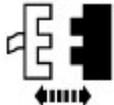
Connect an ohmmeter between SCIL module C289-13, circuit 379 (BR/W), and ground.

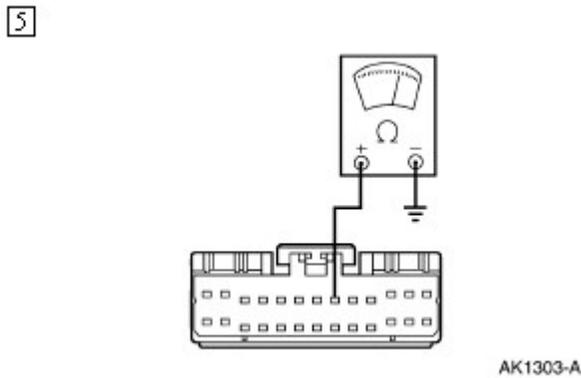
- Is the voltage reading 10 kohms or less?

→ **Yes**  
REPAIR circuit 379 (BR/W). RETEST the system.

→ **No**  
GO to [W16](#).

**W16 CHECK CIRCUIT 2 (W/LB) FOR A SHORT**

- 1   
SCIL Module C287
- 2   
RH Front Turn Signal Bulb
- 3   
RH Outside Rear View Mirror C600
- 4   
Hybrid Electronic Instrument Cluster C294

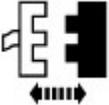
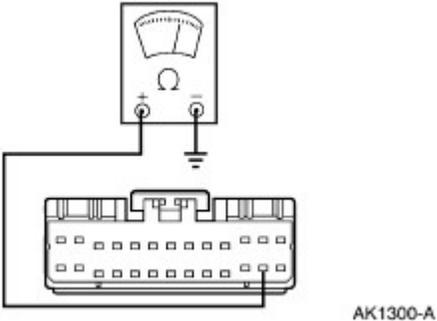


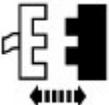
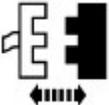
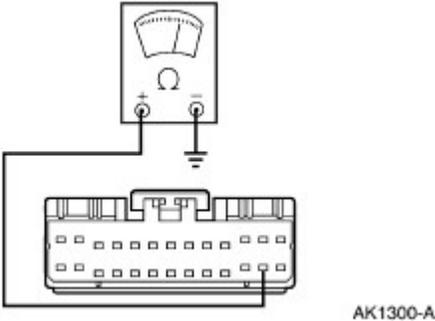
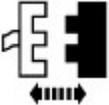
5 Connect an ohmmeter between SCIL module C287-8, circuit 2 (W/LB), and ground.

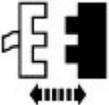
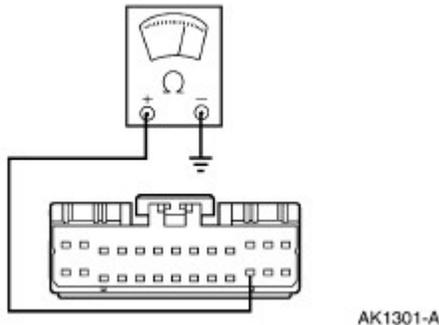
• Is the voltage reading 10 kohms or less?

→ **Yes**  
REPAIR circuit 2 (W/LB). RETEST the system.

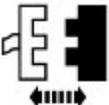
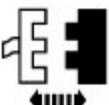
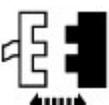
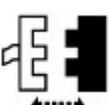
→ **No**  
GO to [W17](#).

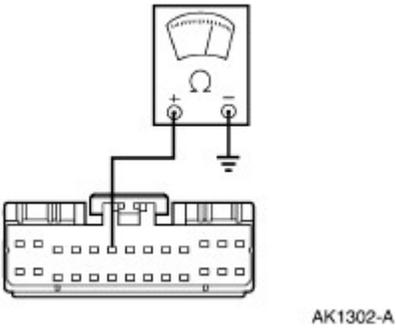
<b>W17 CHECK CIRCUIT 5 (O/LB) FOR A SHORT TO GROUND</b>	
<p><b>1</b></p>  <p>RH Rear Turn Signal Bulb</p> <p><b>2</b></p>  <p style="text-align: right;">AK1300-A</p>	<p><b>2</b> Connect an ohmmeter between SCIL module C287-25, circuit 5 (O/LB), and ground.</p> <ul style="list-style-type: none"> <li>• <b>Is the voltage reading 10 kohms or less?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 5 (O/LB). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
<b>W18 CHECK THE LH FRONT TURN SIGNALS</b>	
	<p><b>1</b> Activate the left turn signals.</p> <ul style="list-style-type: none"> <li>• <b>Are the LH front turn signals inoperative?</b></li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W23</a>.</p> <p>→ <b>No</b> GO to <a href="#">W19</a>.</p>
<b>W19 CHECK THE LH REAR TURN SIGNALS</b>	
	<p><b>1</b> Activate the left turn signals.</p> <ul style="list-style-type: none"> <li>• <b>Is the LH rear turn signal inoperative?</b></li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W22</a>.</p> <p>→ <b>No</b> GO to <a href="#">W20</a>.</p>

<p><b>W20 CHECK THE RH REAR TURN SIGNALS</b></p>	
	<p>1 Activate the right turn signals.</p> <ul style="list-style-type: none"> <li>• <b>Are the RH front turn signals inoperative?</b></li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W24</a>.</p> <p>→ <b>No</b> GO to <a href="#">W21</a>.</p>
<p><b>W21 CHECK CIRCUIT 5 (O/LB) FOR A SHORT TO GROUND</b></p>	
<p>1</p>  <p>RH Rear Turn Signal Lamp Bulb</p> <p>2</p>  <p>SCIL Module C287</p> <p>3</p>  <p>AK1300-A</p>	<p>3 Connect an ohmmeter between SCIL module C287-25, circuit 5 (LG/O), and ground.</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance 10 kohms or less?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 5 (O/LB). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
<p><b>W22 CHECK CIRCUIT 9 (LG/O) FOR A SHORT TO GROUND</b></p>	
<p>1</p> 	

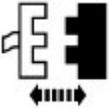
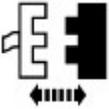
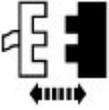
<p style="text-align: center;">LH Rear Turn Signal Lamp Bulb</p> <p><b>2</b> </p> <p style="text-align: center;">SCIL Module C287</p> <p><b>3</b> </p> <p style="text-align: right; margin-right: 50px;">AK1301-A</p>	<p><b>3</b> Connect an ohmmeter between SCIL module C287-24, circuit 9 (LG/O), and ground.</p> <p><b>• Is the resistance 10 kohms or less?</b></p> <p>→ <b>Yes</b> REPAIR circuit 9 (LG/O). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p>
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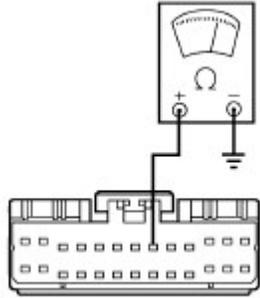
**W23 CHECK CIRCUIT 3 (LG/W) FOR A SHORT TO GROUND**

<p><b>1</b> </p> <p style="text-align: center;">LH Front Turn Signal Lamp Bulb</p> <p><b>2</b> </p> <p style="text-align: center;">LH Outside Rear View Mirror C509</p> <p><b>3</b> </p> <p style="text-align: center;">Hybrid Electronic Instrument Cluster C293</p> <p><b>4</b> </p>	
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<p style="text-align: center;">SCIL Module C287</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">5</div>  </div>	<div style="border: 1px solid black; padding: 10px;"> <div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">5</div> <div> <p>Connect an ohmmeter between SCIL module C287-6, circuit 3 (LG/W), and ground.</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance 10 kohms or less?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 3 (LG/W). RETEST the system.</p> <p>→ <b>No</b> REPLACE the SCIL module. RETEST the system.</p> </div> </div> </div>
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**W24 CHECK CIRCUIT 2 (W/LB) FOR A SHORT TO GROUND**

<div style="display: flex; flex-direction: column; gap: 10px;"> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">1</div>  </div> <p style="text-align: center;">RH Front Turn Signal Lamp Bulb</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">2</div>  </div> <p style="text-align: center;">RH Outside Rear View Mirror C600</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">3</div>  </div> <p style="text-align: center;">Hybrid Electronic Instrument Cluster C294</p> <div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">4</div>  </div> <p style="text-align: center;">SCIL Module C287</p> <div style="display: flex; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">5</div> </div> </div>	<div style="border: 1px solid black; padding: 10px;"> <div style="display: flex; align-items: flex-start;"> <div style="border: 1px solid black; padding: 2px; margin-right: 10px;">5</div> <div> <p>Connect an ohmmeter between SCIL module C287-8, circuit 2 (W/LB), and ground.</p> </div> </div> </div>
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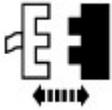
AK1303-A

- Is the resistance 10 kohms or less?

- **Yes**  
REPAIR circuit 2 (W/LB). RETEST the system.
- **No**  
REPLACE the SCIL module. RETEST the system.

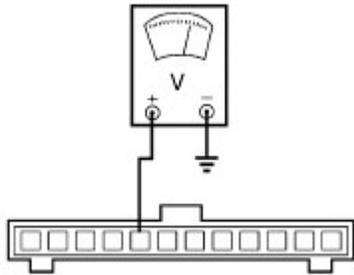
**W25 CHECK CIRCUIT 1041 (BR/O) FOR VOLTAGE**

1



Multi-Function Switch C215

2



AK1250-A

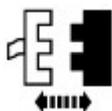
2 Connect a voltmeter between multi-function switch C215-5, circuit 1041 (BR/O), and ground.

- Is the voltage between 4.7 and 5.3 volts?

- **Yes**  
GO to [W28](#).
- **No**  
GO to [W26](#).

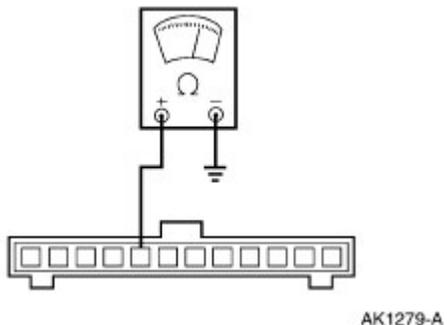
**W26 CHECK CIRCUIT 1041 (BR/O) FOR A SHORT TO GROUND**

1



SCIL Module C286

2



2

Connect an ohmmeter between multi-function switch C215-5, circuit 1041 (BR/O), and ground.

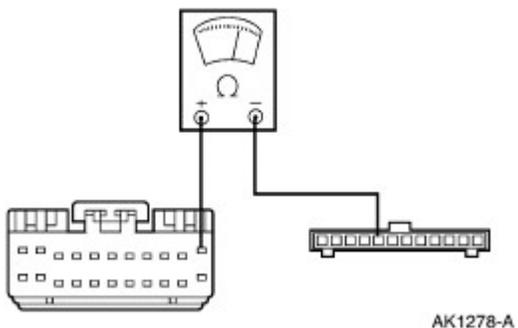
• Is the resistance 10 kohms or less?

→ **Yes**  
REPAIR circuit 1041 (BR/O). RETEST the system.

→ **No**  
GO to [W27](#).

**W27 CHECK CIRCUIT 1041 (BR/O) FOR AN OPEN**

1



1

Connect an ohmmeter between SCIL module C286-11 and multi-function switch C215-5, circuit 1041 (BR/O).

• Is the resistance 5 ohms or less?

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

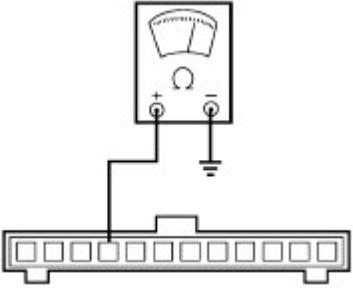
→ **No**  
REPAIR circuit 1041 (BR/O). RETEST the system.

**W28 CHECK CIRCUIT 375 (Y/LG) FOR A SHORT TO GROUND**

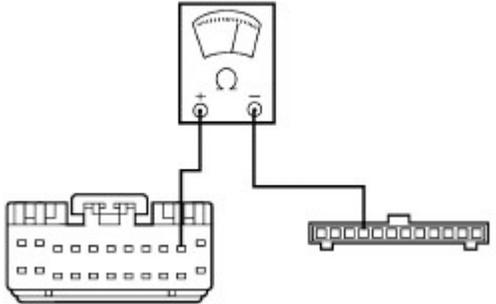
1

1

Connect an ohmmeter between multi-function switch C215-4, circuit 375 (Y/LG), and

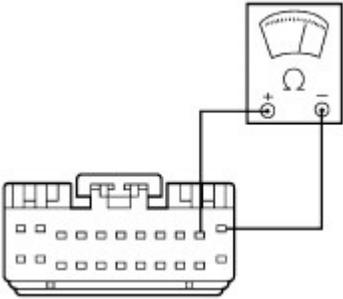
 <p style="text-align: center;">AK1317-A</p>	<p>ground.</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance 10 kohms or less?</b></li> </ul> <p>→ <b>Yes</b> REPAIR circuit 375 (Y/LG). RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">W29</a>.</p>
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**W29 CHECK CIRCUIT 375 (Y/LG) FOR AN OPEN**

<p><b>1</b></p>  <p style="text-align: center;">AK1304-A</p>	<p><b>1</b> Connect an ohmmeter between SCIL module C286-10 and multi-function switch C215-4, circuit 375 (Y/LG).</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance 5 ohms or less?</b></li> </ul> <p>→ <b>Yes</b> GO to <a href="#">W30</a>.</p> <p>→ <b>No</b> REPAIR circuit 375 (Y/LG). RETEST the system.</p>
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**W30 CHECK THE MULTI-FUNCTION SWITCH**

<p><b>1</b></p>  <p style="text-align: center;">Multi-Function Switch Connector</p> <p><b>2</b></p>	<p><b>2</b> Connect an ohmmeter between SCIL module C286-11, circuit 1041 (BR/O), and SCIL module C286-10, circuit 375 (Y/LG).</p>
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AK1440-A

**3** Measure the resistance with the multi-function switch in LH turn, RH turn and hazard positions.

- **Is the resistance between 300 and 360 ohms in LH turn, between 2000 and 2400 ohms in RH turn and greater than 10,000 ohms in hazard?**

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

→ **No**  
REPLACE the multi-function switch. REFER to [Section 211-05](#). RETEST the system.

**PINPOINT TEST X: THE INDIVIDUAL CORNERING LAMP IS INOPERATIVE**

CONDITIONS	DETAILS/RESULTS/ACTIONS
<b>X1 CHECK TURN SIGNAL OPERATION</b>	
<p><b>1</b></p> 	<p><b>2</b> Operate the left and right turn signals.</p> <ul style="list-style-type: none"> <li>• <b>Do the turn signals operate properly?</b></li> </ul> <p>→ <b>Yes</b> GO to <a href="#">X2</a>.</p> <p>→ <b>No</b> GO to Turn Signal/Cornering/Hazard Lamps.</p>
<b>X2 CHECK THE LH CORNERING LAMPS</b>	
<p><b>1</b></p>	



2 Turn the headlamp switch to the HEAD position.

3 Actuate the multi-function switch to the left turn position.

• Does the LH cornering lamp come on?

→ Yes  
GO to X8.

→ No  
GO to X3.

**X3 COMMAND THE LH FRONT CORNERING LAMP ON**

1



SCIL Module Active Command HEADLAMP CONTROL

2



Trigger LF CORNER ON

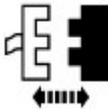
• Does the LH cornering lamp come on?

→ Yes  
REPLACE the steering column/ignition/lighting (SCIL) module. RETEST the system.

→ No  
TRIGGER LF CORNER OFF. GO to X4.

**X4 CHECK FOR SUPPLY TO THE LH CORNERING LAMP**

1

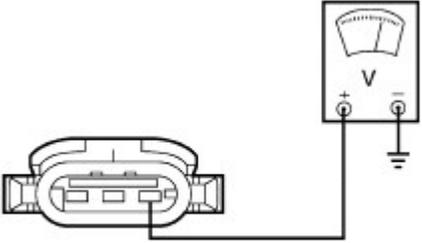


LH Cornering Lamp

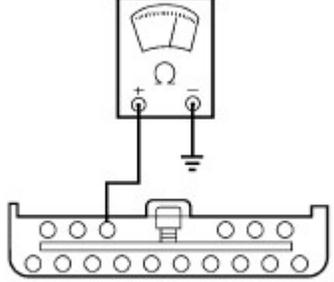
2



SCIL Module Active Command HEADLAMP CONTROL

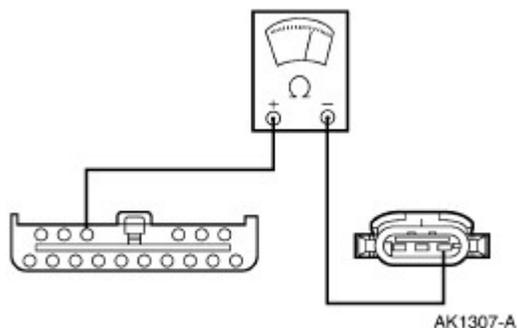
<p><b>3</b></p>  <p>Trigger LF CORNER ON</p> <p><b>4</b></p>  <p>AK1305-A</p>	<p><b>4</b> Connect a voltmeter between LH cornering lamp connector C107, circuit 380 (P/Y), and ground.</p> <ul style="list-style-type: none"> <li>• Is the voltage reading B+?</li> </ul> <p>→ <b>Yes</b> TRIGGER LF CORNER OFF. GO to <a href="#">X7</a>.</p> <p>→ <b>No</b> TRIGGER LF CORNER OFF. GO to <a href="#">X5</a>.</p>
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**X5 CHECK CIRCUIT 380 (P/Y) FOR A SHORT TO GROUND**

<p><b>1</b></p>  <p>SCIL Module C289</p> <p><b>2</b></p>  <p>AK1306-A</p>	<p><b>2</b> Connect an ohmmeter between SCIL module C289-14, circuit 380 (P/Y), and ground.</p> <ul style="list-style-type: none"> <li>• Is the resistance 10 kohms or less?</li> </ul> <p>→ <b>Yes</b> REPAIR circuit 380 (P/Y). RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">X6</a>.</p>
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**X6 CHECK CIRCUIT 380 (P/Y) FOR AN OPEN**

1



1

Connect an ohmmeter between SCIL module C289-14, circuit 380 (P/Y), and LH cornering lamp C107, circuit 380 (P/Y).

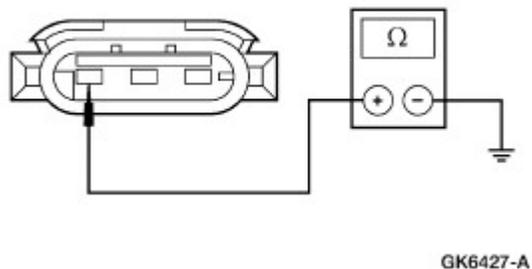
• Is the resistance 5 ohms or less?

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

→ **No**  
REPAIR circuit 380 (P/Y). RETEST the system.

**X7 CHECK CIRCUIT 57 (BK) FOR AN OPEN**

1



1

Connect an ohmmeter between LH cornering lamp C107, circuit 57 (BK), and ground.

• Is the resistance 5 ohms or less?

→ **Yes**  
REPLACE the LH cornering lamp bulb. RETEST the system.

→ **No**  
REPAIR circuit 57 (BK). RETEST the system.

**X8 COMMAND THE RH FRONT CORNERING LAMP ON**

1



SCIL Module Active Command HEADLAMP CONTROL

2



Trigger RF CORNER ON

- Does the RH cornering lamp come on?

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

→ **No**  
TRIGGER RF CORNER OFF. GO to [X9](#).

**X9 CHECK FOR SUPPLY TO THE RH CORNERING LAMP**

1



RH Cornering Lamp

2



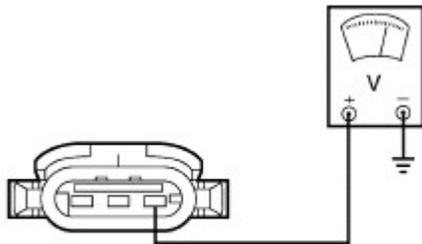
SCIL Module Active Command HEADLAMP CONTROL

3



Trigger RF CORNER ON

4



AK1305-A

4 Connect a voltmeter to RH cornering lamp C1006, circuit 379 (BR/W).

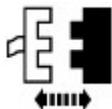
- Is the voltage reading B+?

→ **Yes**  
TRIGGER RF CORNER OFF. GO to [X12](#).

→ **No**  
TRIGGER RF CORNER OFF. GO to [X10](#).

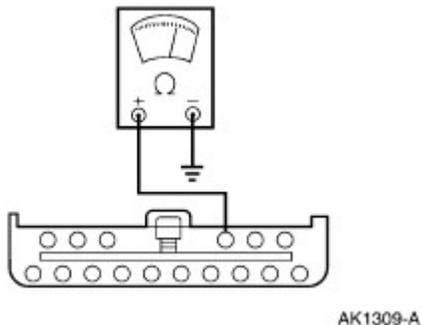
**X10 CHECK CIRCUIT 379 (BR/W) FOR A SHORT TO GROUND**

1



SCIL Module C289

2



2

Connect an ohmmeter between SCIL module C289-13, circuit 379 (BR/W), and ground.

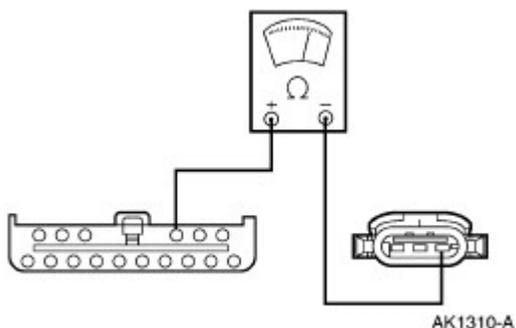
• **Is the resistance 10 kohms or less?**

→ **Yes**  
REPAIR circuit 379 (BR/W). RETEST the system.

→ **No**  
GO to [X11](#).

**X11 CHECK CIRCUIT 379 (BR/W) FOR AN OPEN**

1



1

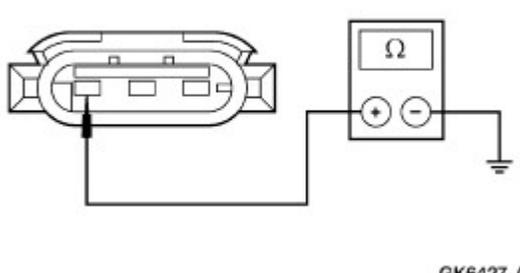
Connect an ohmmeter between SCIL module C289-13, circuit 379 (BR/W), and LH cornering lamp connector C1006, circuit 379 (BR/W).

• **Is the resistance 5 ohms or less?**

→ **Yes**  
REPLACE the SCIL module. RETEST the system.

→ **No**  
REPAIR circuit 379 (BR/W). RETEST the system.

**X12 CHECK CIRCUIT 57 (BK) FOR AN OPEN**

<p><b>1</b></p>  <p style="text-align: center;">GK6427-A</p>	<p><b>1</b> Connect an ohmmeter between RH cornering lamp C1006, circuit 57 (BK), and ground.</p> <ul style="list-style-type: none"> <li>• <b>Is the resistance 5 ohms or less?</b></li> </ul> <p>→ <b>Yes</b> REPLACE the RH cornering lamp bulb. RETEST the system.</p> <p>→ <b>No</b> REPAIR circuit 57 (BK). RETEST the system.</p>
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**PINPOINT TEST Y: THE INDIVIDUAL CORNERING LAMP IS ON CONTINUOUSLY**

CONDITIONS	DETAILS/RESULTS/ACTIONS
<b>Y1 CHECK FOR DTC</b>	
<p><b>1</b></p>  <p>SCIL Module Self-Test</p>	<ul style="list-style-type: none"> <li>• <b>Are any DTCs retrieved?</b></li> </ul> <p>→ <b>Yes</b> REPAIR DTCs. GO to SCIL Diagnostic Trouble Code (DTC) Index.</p> <p>→ <b>No</b> GO to <a href="#">Y2</a>.</p>
<b>Y2 CHECK THE STEERING COLUMN/IGNITION/LIGHTING CONTROL MODULE</b>	
<p><b>1</b></p>  <p>SCIL Module C289</p>	<ul style="list-style-type: none"> <li>• <b>Does the cornering lamp turn off?</b></li> </ul>

	<p>→ <b>Yes</b> REPLACE the SCIL module. RETEST the system.</p> <p>→ <b>No</b> GO to <a href="#">Y3</a>.</p>
<b>Y3 CHECK FOR SHORT TO B+ IN THE LAMP CIRCUIT</b>	
	<p>1 Make sure the multi-function switch is in the neutral position.</p> <ul style="list-style-type: none"><li>• <b>Is the LH cornering lamp always on?</b></li></ul> <p>→ <b>Yes</b> REPAIR circuit 380 (P/Y) for a short to B+. RETEST the system.</p> <p>→ <b>No</b> REPAIR circuit 379 (BR/W) for a short to B+. RETEST the system.</p>

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