

**DIAGNOSIS AND TESTING (Continued)**

(Continued) DIAGNOSIS AND TESTING

**LAMP-OUT WARNING SYSTEM: QUICK TEST** Lamp-out warning not displayed when a lamp is burned out OR Lamp-out warning is displayed without an actual lamp failure

TEST STEP		RESULT	ACTION TO TAKE
Step 1	VERIFY THE CONDITION		GO to Step 2.
Step 2	CHECK HEADLAMPS, TAIL LAMPS AND BRAKELAMPS <ul style="list-style-type: none"> <li>● Turn ignition switch to ACC or RUN.</li> <li>● Turn on low beam headlamps and brakelamps.</li> <li>● Are headlamps, rear parking lamps and brakelamps working properly?</li> </ul>	Yes No	GO to Step 3. SERVICE fuses, switches, bulbs, sockets or wiring as necessary. REPEAT test.
Step 3	CHECK WARNING INDICATORS <ul style="list-style-type: none"> <li>● For vehicle with conventional cluster: Is LAMP OUT indicator on?</li> <li>● For vehicle with electronic cluster: Are HEADLAMP OUT and REAR LAMP OUT indicators on?</li> </ul>	Yes No	GO to Step 4. REFER to Pinpoint Test B as outlined to complete system verification.
Step 4	DISCONNECT LAMP-OUT MODULE <ul style="list-style-type: none"> <li>● Turn lamps and ignition OFF.</li> <li>● Disconnect lamp-out module.</li> <li>● Turn lamps and ignition ON.</li> <li>● Is outage warning still being displayed?</li> </ul> <p>NOTE: Voltage measurements must use Rotunda Digital Volt/Ohmmeter 014-00407, 007-00001 or equivalent.</p>	Yes  No	CHECK outage indicator circuits for shorts to ground: 135 (Y/R) (module Pin 5) 132 (O/BK) (module Pin 7) 130 (R/LG) (module Pin 8) SERVICE as necessary. REPEAT test. REFER to Pinpoint Test A as outlined.

TK13184C

**PINPOINT TEST A**  
LAMP-OUT WARNING ILLUMINATED WHEN LAMPS ARE OPERATING PROPERLY

TEST STEP		RESULT	ACTION TO TAKE
A1	CHECK REFERENCE VOLTAGES AT HARNESS CONNECTOR <ul style="list-style-type: none"> <li>● Disconnect module.</li> <li>● Check voltage between ground Circuit 57 (BK) and the reference circuits of the lamp outage module harness connector. The voltage should be between 10 and 15 volts:                             <ul style="list-style-type: none"> <li>— Check voltage between Pin 14 (ground Circuit 57 BK) and Pin 13 (LH brake lamp reference Circuit 9 LG/O).</li> <li>— Check voltage between Pin 14 (ground Circuit 57 BK) and Pin 3 (RH brakelamp reference Circuit 5 O/LB).</li> <li>— Check voltage between Pin 14 (ground Circuit 57 BK) and Pin 15 (parking lamp reference Circuit 14 BR).</li> <li>— Check voltage between Pin 14 (ground Circuit 57 BK) and Pin 16 (headlamp reference Circuit 505 GY/Y).</li> </ul> </li> <li>● Is voltage between 10 and 15 volts?</li> </ul>	Yes No	GO to A2. CHECK circuits for opens or high resistance. CHARGE vehicle if necessary. REPEAT diagnostic test.