

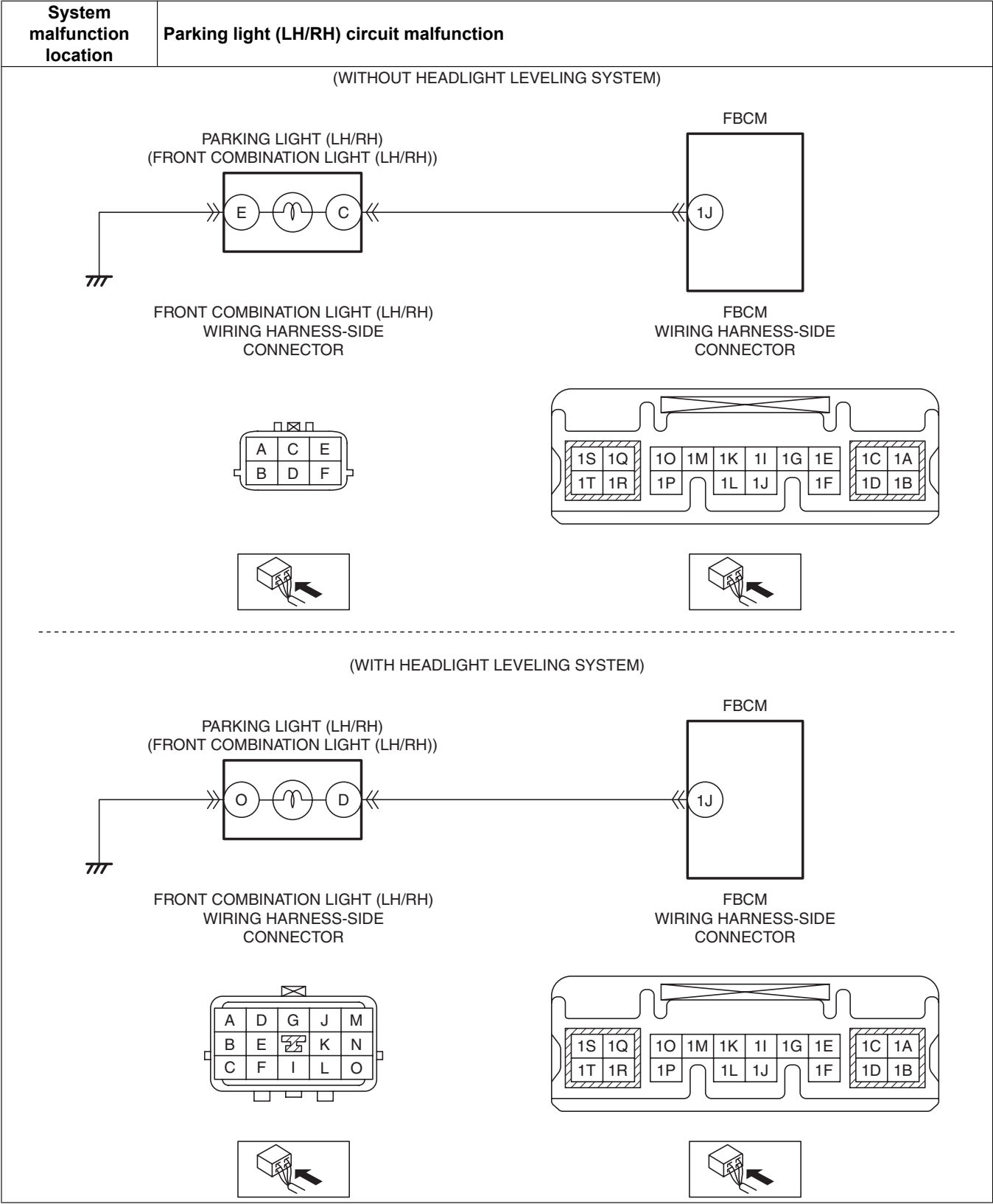
## DTC C1126:13 [FRONT BODY CONTROL MODULE (FBCM)]

id0902p2010000

### Servicing Pointers

- If a parking light is replaced with an LED bulb, the front body control module (FBCM) will determine that there is an open circuit in the parking light circuit and DTC C1126:13 may be detected because the power consumption is low even if the LED is illuminated normally.

| System malfunction location | Parking light (LH/RH) circuit malfunction  |
|-----------------------------|--|
| Detection condition         | • The front body control module (FBCM) detects an open or short to power supply in the parking light (LH/RH) circuit with the ignition switched ON (engine off or on).   |
| Fail-safe                   | —  |
| Possible cause              | <ul style="list-style-type: none"><li>• LED bulb is installed to parking light</li><li>• Front combination light (LH/RH) connector or terminal malfunction</li><li>• Parking light bulb (LH/RH) malfunction</li><li>• Front body control module (FBCM) connector or terminal malfunction</li><li>• Short to power supply in wiring harness between the following terminals:<ul style="list-style-type: none"><li>— Front combination light (LH/RH) terminal C and front body control module (FBCM) terminal 1J (without headlight leveling system)</li><li>— Front combination light (LH/RH) terminal D and front body control module (FBCM) terminal 1J (with headlight leveling system)</li></ul></li><li>• Open circuit in wiring harness between the following terminals:<ul style="list-style-type: none"><li>— Front combination light (LH/RH) terminal C and front body control module (FBCM) terminal 1J (without headlight leveling system)</li><li>— Front combination light (LH/RH) terminal D and front body control module (FBCM) terminal 1J (with headlight leveling system)</li></ul></li><li>• Front body control module (FBCM) malfunction</li></ul> |



## Diagnostic Procedure

| Step | Inspection  | Action   |
|------|---|--|
| 1    | <b>VERIFY FRONT BODY CONTROL MODULE (FBCM) DTCs AGAIN</b> <ul style="list-style-type: none"> <li>Clear front body control module (FBCM) DTCs using the M-MDS.<br/>(See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].)</li> <li>Switch the ignition ON (engine off or on).</li> <li>Operate the light switch in TNS position.</li> <li>Perform the front body control module (FBCM) DTC inspection using the M-MDS.<br/>(See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].)</li> <li>Is DTC C1126:13 displayed?</li> </ul>   | Yes<br>Go to the next step.  |
|      |   | No<br>Go to Step 10.   |
| 2    | <b>VERIFY ILLUMINATION CONDITION OF PARKING LIGHTS</b> <ul style="list-style-type: none"> <li>Operate the light switch to the TNS position.</li> <li>Are the parking lights illuminated?</li> </ul>   | Yes<br>Go to Step 4.   |
|      |   | No<br>Go to the next step.   |
| 3    | <b>INSPECT FRONT COMBINATION LIGHT (LH/RH) CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition to off.</li> <li>Disconnect the negative battery cable.<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].)<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>Disconnect the front combination light (LH/RH) connector.</li> <li>Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.</li> <li>Is the connector normal?</li> </ul> | Yes<br>Go to Step 5.   |
|      |   | No<br>Repair or replace the connector, then go to Step 9.  |
| 4    | <b>VERIFY THAT LED BULB IS INSTALLED TO PARKING LIGHT</b> <ul style="list-style-type: none"> <li>Remove the parking light bulb.<br/>(See PARKING LIGHT BULB REMOVAL/INSTALLATION.)</li> <li>Is the LED bulb installed?</li> </ul>   | Yes<br>The circuit is normal, complete the DTC troubleshooting.  |
|      |   | No<br>Go to the next step.   |
| 5    | <b>INSPECT PARKING LIGHT BULB (LH/RH)</b> <ul style="list-style-type: none"> <li>Inspect the parking light bulb (LH/RH).</li> <li>Is the parking light bulb (LH/RH) normal?</li> </ul>  | Yes<br>Go to the next step.  |
|      |   | No<br>Replace the parking light bulb (LH/RH), then go to Step 9.<br>(See PARKING LIGHT BULB REMOVAL/INSTALLATION.) |
| 6    | <b>INSPECT FRONT BODY CONTROL MODULE (FBCM) CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Disconnect the front body control module (FBCM) connector.</li> <li>Inspect the connector engagement and connection condition and inspect the terminals for damage, deformation, corrosion, or disconnection.</li> <li>Is the connector normal?</li> </ul>   | Yes<br>Go to the next step.  |
|      |   | No<br>Repair or replace the connector, then go to Step 9.  |

| Step | Inspection   | Action |   |
|------|--|--------|---|
| 7    | <b>INSPECT PARKING LIGHT (LH/RH) CONTROL CIRCUIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Verify that the front combination light (LH/RH) and front body control module (FBCM) connectors are disconnected.</li> <li>• Connect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Switch the ignition ON (engine off or on).</li> <li>• Measure the voltage at front body control module (FBCM) 1J terminal (vehicle wiring harness side).</li> <li>• Is the voltage <b>0 V</b>?</li> </ul>   | Yes    | Go to the next step.  |
|      |  | No     | Repair or replace the wiring harness, then go to Step 9.        |
| 8    | <b>INSPECT PARKING LIGHT (LH/RH) CONTROL CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>• Verify that the front combination light (LH/RH) and front body control module (FBCM) connectors are disconnected.</li> <li>• Switch the ignition to off.</li> <li>• Disconnect the negative battery cable. (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].) (See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. <ul style="list-style-type: none"> <li>— Front combination light (LH/RH) terminal C and front body control module (FBCM) terminal 1J (without headlight leveling system)</li> <li>— Front combination light (LH/RH) terminal D and front body control module (FBCM) terminal 1J (with headlight leveling system)</li> </ul> </li> <li>• Is there continuity?</li> </ul> | Yes    | Go to the next step.  |
|      |  | No     | Repair or replace the wiring harness, then go to the next step. |

| Step | Inspection  | Action  |
|------|---|---|
| 9    | <b>VERIFY THAT REPAIRS HAVE BEEN COMPLETED</b> <ul style="list-style-type: none"> <li>• Reconnect all the disconnected connectors.</li> <li>• Reconnect the disconnected negative battery cable.<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5 (WITHOUT i-stop)].)<br/>(See NEGATIVE BATTERY CABLE DISCONNECTION/CONNECTION [SKYACTIV-D 2.2].)</li> <li>• Clear front body control module (FBCM) DTCs using the M-MDS.<br/>(See CLEARING DTC [FRONT BODY CONTROL MODULE (FBCM)].)</li> <li>• Switch the ignition ON (engine off or on).</li> <li>• Operate the light switch in TNS position.</li> <li>• Perform the front body control module (FBCM) DTC inspection using the M-MDS.<br/>(See DTC INSPECTION [FRONT BODY CONTROL MODULE (FBCM)].)</li> <li>• Is DTC C1126:13 displayed?</li> </ul> | Yes<br>Repeat the inspection from Step 1.<br>• If the malfunction recurs, replace the front body control module (FBCM), then go to the next step.<br>(See FRONT BODY CONTROL MODULE (FBCM) REMOVAL/INSTALLATION.) |
|      |   | No<br>Go to the next step.  |
| 10   | <b>VERIFY IF OTHER DTCs DISPLAYED</b> <ul style="list-style-type: none"> <li>• Are any other DTCs displayed?</li> </ul>   | Yes<br>Repair the malfunctioning part according to the applicable DTC troubleshooting.<br>(See DTC TABLE [FRONT BODY CONTROL MODULE (FBCM)].)   |
|      |   | No<br>DTC troubleshooting completed.  |