


# DTC C2003:13 [START STOP UNIT]

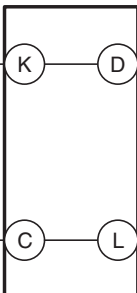
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|                             |  |  |
|-----------------------------|--|--|
| System malfunction location | Open circuit in steering switch  |  |
| Detection condition         | • The start stop unit detects an open circuit in the steering switch circuit for <b>5 s or more</b> with the ignition switched ON (engine off or on).  |  |
| Fail-safe                   | —  |  |
| Possible cause              | <ul style="list-style-type: none"><li>• Clock spring connector or terminal malfunction</li><li>• Clock spring malfunction</li><li>• Start stop unit connector or terminal malfunction</li><li>• Open circuit in wiring harness between the following terminals:<ul style="list-style-type: none"><li>— Start stop unit terminal 1AA and clock spring (start stop unit side) terminal K</li><li>— Start stop unit terminal 1AB and clock spring (start stop unit side) terminal C</li></ul></li><li>• Steering switch malfunction</li><li>• Start stop unit malfunction</li></ul> |  |

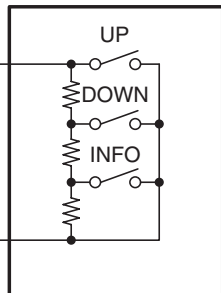
START STOP UNIT



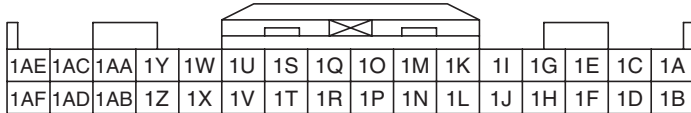
CLOCK SPRING

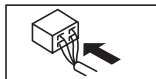


STEERING SWITCH

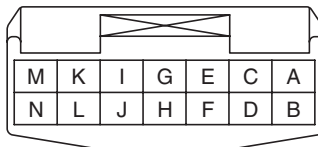


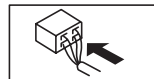
START STOP UNIT  
WIRING HARNESS-SIDE CONNECTOR





CLOCK SPRING  
WIRING HARNESS-SIDE CONNECTOR





## Diagnostic Procedure

| Step | Inspection  | Action |   |
|------|---|--------|---|
| 1    | <b>INSPECT CLOCK SPRING CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <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>• Disconnect the clock spring 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    | Go to the next step.                                |
|      |   | No     | Repair or replace the connector, then go to Step 6. |

| Step | Inspection  |     | Action   |
|------|---|-----|--|
| 2    | <b>INSPECT CLOCK SPRING</b> <ul style="list-style-type: none"> <li>Inspect the clock spring.<br/>(See CLOCK SPRING INSPECTION.)</li> <li>Is the clock spring normal?</li> </ul>   | Yes | Go to the next step.   |
|      |   | No  | Replace the clock spring, then go to Step 6.<br>(See CLOCK SPRING REMOVAL/INSTALLATION.)   |
| 3    | <b>INSPECT START STOP UNIT CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Disconnect the start stop unit 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 | Go to the next step.   |
|      |   | No  | Repair or replace the connector, then go to Step 6.  |
| 4    | <b>INSPECT STEERING SWITCH CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>Verify that the clock spring and start stop unit connectors are disconnected.</li> <li>Inspect the wiring harness between the following terminals (vehicle wiring harness side) for continuity. <ul style="list-style-type: none"> <li>Start stop unit terminal 1AA and clock spring (start stop unit side) terminal K</li> <li>Start stop unit terminal 1AB and clock spring (start stop unit side) terminal C</li> </ul> </li> <li>Is there continuity?</li> </ul>   | Yes | Go to the next step.   |
|      |   | No  | Repair or replace the wiring harness which has an open circuit, then go to Step 6.   |
| 5    | <b>INSPECT STEERING SWITCH</b> <ul style="list-style-type: none"> <li>Inspect the steering switch.<br/>(See STEERING SWITCH INSPECTION.)</li> <li>Is the steering switch normal?</li> </ul>   | Yes | Go to the next step.   |
|      |   | No  | Replace the steering switch, then go to the next step.<br>(See STEERING SWITCH REMOVAL/INSTALLATION.)  |
| 6    | <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 DTC for the start stop unit using the M-MDS.<br/>(See CLEARING DTC [START STOP UNIT].)</li> <li>Switch the ignition ON (engine off or on) and wait for <b>5 s or more</b>.</li> <li>Perform the DTC inspection for the start stop unit using the M-MDS.<br/>(See DTC INSPECTION [START STOP UNIT].)</li> <li>Is DTC C2003:13 displayed?</li> </ul> | Yes | Repeat the inspection from Step 1.<br>• If the malfunction recurs, replace the start stop unit, then go to the next step.<br>(See START STOP UNIT REMOVAL/INSTALLATION.) |
|      |   | No  | Go to the next step.   |
| 7    | <b>VERIFY IF OTHER DTCs DISPLAYED</b> <ul style="list-style-type: none"> <li>Are any other DTCs displayed?</li> </ul>   | Yes | Repair the malfunctioning part according to the applicable DTC troubleshooting.<br>(See DTC TABLE [START STOP UNIT].)  |
|      |   | No  | DTC troubleshooting completed.   |