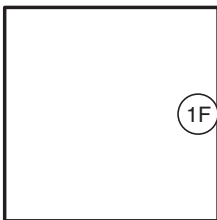
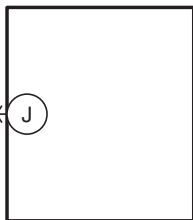
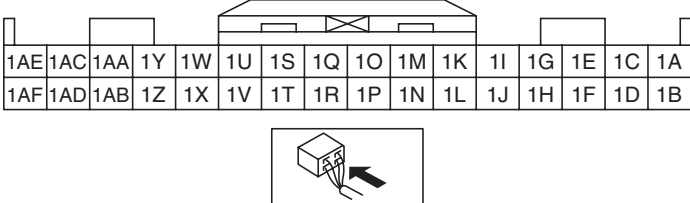
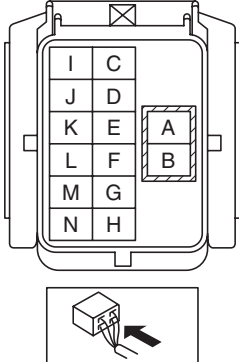


# DTC P0850:23 [START STOP UNIT]

id0902p6023200

<b>System malfunction location</b>	<b>TCM circuit malfunction</b>
<b>Detection condition</b>	<ul style="list-style-type: none"> <li>With the ignition switched ON (engine off or on), it is detected that the transaxle range sensor CAN signal is P or N position for <b>1 s or more</b> continuously for a continuous <b>5 or more times</b> even though the TCM CAN signal is other than P and N position.</li> </ul>
<b>Fail-safe</b>	<ul style="list-style-type: none"> <li>Perform control of the internal signal for control of the transaxle range sensor as position other than P, N positions.</li> </ul>
<b>Possible cause</b>	<ul style="list-style-type: none"> <li>TCM connector or terminal malfunction</li> <li>Start stop unit connector or terminal malfunction</li> <li>Short to power supply in wiring harness between start stop unit terminal 1F and TCM terminal J</li> <li>Transaxle range sensor malfunction</li> <li>Start stop unit malfunction</li> </ul>
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>START STOP UNIT</p>  </div> <div style="text-align: center;"> <p>TCM</p>  </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 20px;"> <div style="text-align: center;"> <p>START STOP UNIT WIRING HARNESS-SIDE CONNECTOR</p>  </div> <div style="text-align: center;"> <p>TCM WIRING HARNESS-SIDE CONNECTOR</p>  </div> </div>	

## Diagnostic Procedure

Step	Inspection	Action
1	<b>INSPECT TCM 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 TCM 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 5.

Step	Inspection	Action	
2	<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 5.
3	<b>INSPECT TCM CIRCUIT FOR SHORT TO POWER SUPPLY</b> <ul style="list-style-type: none"> <li>• Reconnect all the disconnected connectors.</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>• Operate the selector lever to positions P or N.</li> <li>• Measure the voltage at start stop unit terminal 1F (vehicle wiring harness side).</li> <li>• Is the voltage <b>1.0 V or less</b>?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness which is shorted to power supply, then go to Step 5.
4	<b>PERFORM DTC INSPECTION AND VERIFY IF MALFUNCTIONING PART IS TRANSAXLE RANGE SENSOR</b> <ul style="list-style-type: none"> <li>• Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].)</li> <li>• Switch the ignition ON (engine off).</li> <li>• Perform the following work five or more times. <ul style="list-style-type: none"> <li>— Operate the selector lever to positions P or N and wait for <b>1 s or more</b>.</li> <li>— Operate the selector lever to positions R or D and wait for <b>1 s or more</b>.</li> <li>— Operate the selector lever to positions P or N.</li> </ul> </li> <li>• Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].)</li> <li>• Is DTC P0850:23 displayed?</li> </ul>	Yes	Replace the TCM, then go to the next step. (See CONTROL VALVE BODY REMOVAL/ INSTALLATION [FW6A-EL, FW6AX-EL].)
		No	Go to Step 6.

Step	Inspection	Action	
5	<b>VERIFY THAT REPAIRS HAVE BEEN COMPLETED</b> <ul style="list-style-type: none"><li>• Reconnect all the disconnected connectors.</li><li>• Reconnect 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>• Clear DTC for the start stop unit using the M-MDS. (See CLEARING DTC [START STOP UNIT].)</li><li>• Switch the ignition ON (engine off).</li><li>• Perform the following work five or more times.<ul style="list-style-type: none"><li>— Operate the selector lever to positions P or N and wait for <b>1 s or more</b>.</li><li>— Operate the selector lever to positions R or D and wait for <b>1 s or more</b>.</li><li>— Operate the selector lever to positions P or N.</li></ul></li><li>• Perform the DTC inspection for the start stop unit using the M-MDS. (See DTC INSPECTION [START STOP UNIT].)</li><li>• Is DTC P0850:23 displayed?</li></ul>	Yes	Replace the start stop unit, then go to the next step. (See START STOP UNIT REMOVAL/INSTALLATION.)
		No	Go to the next step.
6	<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. (See DTC TABLE [START STOP UNIT].)
		No	DTC troubleshooting completed.