

# DTC P0704:00 [SKYACTIV-D 2.2]

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<b>DTC P0704:00</b>	<b>CPP switch input circuit problem</b>
<b>DETECTION CONDITION</b>	<ul style="list-style-type: none"> <li>The PCM monitors changes in input voltage from the CPP switch. If the PCM does not detect a voltage change while the vehicle runs with vehicle speed <b>above 30 km/h {19 mph}</b> and stops <b>10 times</b> alternately, the PCM determines that the CPP switch circuit has a malfunction.</li> </ul> <p><b>Diagnostic support note</b></p> <ul style="list-style-type: none"> <li>This is a continuous monitor (CCM).</li> <li>The check engine light illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM.</li> <li>PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle.</li> <li>FREEZE FRAME DATA (Mode 2)/Snapshot data is available.</li> <li>DTC is stored in the PCM memory.</li> </ul>
<b>FAIL-SAFE FUNCTION</b>	<ul style="list-style-type: none"> <li>Inhibits engine-stop by operating the i-stop function.</li> </ul>
<b>POSSIBLE CAUSE</b>	<p><b>Caution</b></p> <ul style="list-style-type: none"> <li>Inspect the CPP switch with it installed to the clutch pedal, otherwise the CPP switch may not operate normally after inspection. If the CPP switch is removed from the clutch pedal, replace the CPP switch with a new one.</li> </ul> <ul style="list-style-type: none"> <li>CPP switch connector or terminals malfunction</li> <li>Foreign object lodged between clutch switch plunger and clutch pedal contact surface</li> <li>CPP switch malfunction</li> <li>Open circuit in wiring harness between CPP switch terminal B and body ground</li> <li>Short to ground in wiring harness between CPP switch terminal A and PCM terminal 2AG</li> <li>PCM connector or terminals malfunction</li> <li>Open circuit in wiring harness between CPP switch terminal A and PCM terminal 2AG</li> <li>Driver continues to depress clutch pedal causing mistaken detection by PCM</li> <li>PCM malfunction</li> </ul>

## Diagnostic Procedure

STEP	INSPECTION	ACTION
1	<b>VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED</b> <ul style="list-style-type: none"> <li>Has the FREEZE FRAME DATA (Mode 2)/ snapshot data been recorded?</li> </ul>	Yes Go to the next step. No Record the FREEZE FRAME DATA (Mode 2)/snapshot data on the repair order, then go to the next step.
2	<b>VERIFY RELATED SERVICE INFORMATION AVAILABILITY</b> <ul style="list-style-type: none"> <li>Verify related Service Information availability.</li> <li>Is any related Service Information available?</li> </ul>	Yes Perform repair or diagnosis according to the available Service Information. • If the vehicle is not repaired, go to the next step. No Go to the next step.

STEP	INSPECTION		ACTION
3	<b>INSPECT CPP SWITCH CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Switch the ignition off.</li> <li>Disconnect the CPP switch connector.</li> <li>Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>Is there any malfunction?</li> </ul>	Yes	Repair or replace the connector and/or terminals, then go to Step 11.
		No	Go to the next step.
4	<b>VERIFY IF MALFUNCTION OCCURS DUE TO FOREIGN OBJECT LODGED BETWEEN CLUTCH SWITCH PLUNGER AND CLUTCH PEDAL CONTACT SURFACE</b> <ul style="list-style-type: none"> <li>Visually verify the area between the clutch switch plunger and clutch pedal contact surface.</li> <li>Is there a lodged foreign object?</li> </ul>	Yes	Remove the foreign object, then go to the next step.
		No	Go to the next step.
5	<b>INSPECT CPP SWITCH</b> <ul style="list-style-type: none"> <li>Inspect the CPP switch. (See CLUTCH PEDAL POSITION (CPP) SWITCH INSPECTION [SKYACTIV-D 2.2].)</li> <li>Is there any malfunction?</li> </ul>	Yes	Replace the CPP switch, then go to Step 11. (See CLUTCH PEDAL POSITION SWITCH REMOVAL/INSTALLATION [D66M-R, D66MX-R].)
		No	Go to the next step.
6	<b>INSPECT CPP SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>Verify that the CPP switch connector is disconnected.</li> <li>Inspect for continuity between CPP switch terminal B (wiring harness-side) and body ground.</li> <li>Is there continuity?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 11.
7	<b>INSPECT CPP SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND</b> <ul style="list-style-type: none"> <li>Verify that the CPP switch connector is disconnected.</li> <li>Inspect for continuity between CPP switch terminal A (wiring harness-side) and body ground.</li> <li>Is there continuity?</li> </ul>	Yes	If the short to ground circuit could be detected in the wiring harness: <ul style="list-style-type: none"> <li>Repair or replace the wiring harness for a possible short to ground.</li> </ul> If the short to ground circuit could not be detected in the wiring harness: <ul style="list-style-type: none"> <li>Replace the PCM (short to ground in the PCM internal circuit). (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].)</li> </ul> Go to Step 11.
		No	Go to the next step.
8	<b>INSPECT PCM CONNECTOR CONDITION</b> <ul style="list-style-type: none"> <li>Disconnect the PCM connector.</li> <li>Inspect for poor connection (such as damaged/pulled-out pins, corrosion).</li> <li>Is there any malfunction?</li> </ul>	Yes	Repair or replace the connector and/or terminals, then go to Step 11.
		No	Go to the next step.
9	<b>INSPECT CPP SWITCH SIGNAL CIRCUIT FOR OPEN CIRCUIT</b> <ul style="list-style-type: none"> <li>Verify that the CPP switch and PCM connectors are disconnected.</li> <li>Inspect for continuity between CPP switch terminal A (wiring harness-side) and PCM terminal 2AG (wiring harness-side).</li> <li>Is there continuity?</li> </ul>	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 11.
10	<b>VERIFY THAT THERE IS NO PROBLEM WITH CUSTOMER CLUTCH PEDAL OPERATION</b> <ul style="list-style-type: none"> <li>Is the clutch pedal depressed after operating the shift lever during a traffic jam?</li> </ul>	Yes	Explain to the customer that it is necessary to remove the foot from the clutch pedal completely after operating the shift lever. Go to the next step.
		No	Go to the next step.

STEP	INSPECTION	ACTION
11	<b>VERIFY DTC TROUBLESHOOTING COMPLETED</b> <ul style="list-style-type: none"> <li>• Always reconnect all disconnected connectors.</li> <li>• Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)</li> <li>• Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [SKYACTIV-D 2.2].)</li> <li>• Is the PENDING CODE for this DTC present?</li> </ul>	Yes Repeat the inspection from Step 1. • If the malfunction recurs, replace the PCM. (See PCM REMOVAL/INSTALLATION [SKYACTIV-D 2.2].) Go to the next step.
		No Go to the next step.
12	<b>VERIFY AFTER REPAIR PROCEDURE</b> <ul style="list-style-type: none"> <li>• Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [SKYACTIV-D 2.2].)</li> <li>• Are any DTCs present?</li> </ul>	Yes Go to the applicable DTC inspection. (See DTC TABLE [SKYACTIV-D 2.2].)
		No DTC troubleshooting completed.