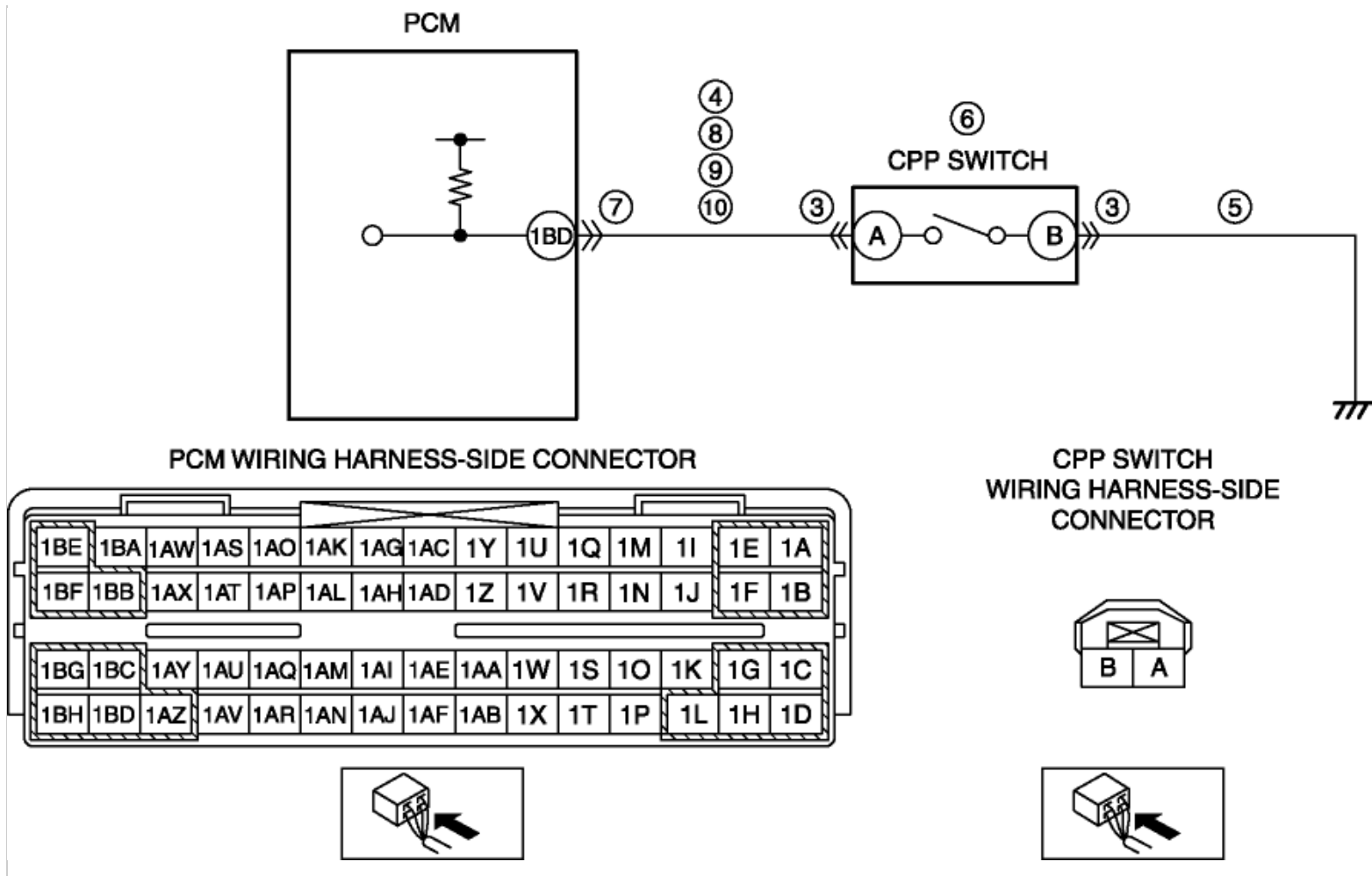


2012 - Mazda6 - Engine

DTC P0704:00 [MZR 2.5]

DTC P0704:00	CPP switch input circuit problem
DETECTION CONDITION	• The PCM monitors changes in input voltage from the CPP switch. If the PCM does not detect the voltage changes while the vehicle runs with vehicle speed above 30 km/ h { 19 mph} and stops 8 times alternately, the PCM determines that the CPP switch circuit has a malfunction. Diagnostic support note • This is a continuous monitor (CCM). • The MIL 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. • PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle. • FREEZE FRAME DATA (Mode 2)/Snapshot data is available. • The DTC is stored in the PCM memory.
POSSIBLE CAUSE	• CPP switch connector or terminal malfunction • Open circuit in wiring harness between CPP switch terminal B and body ground • CPP switch malfunction • Short to ground in wiring harness between CPP switch terminal A and PCM terminal 1BD • PCM connector or terminal malfunction • Short to power supply in wiring harness between CPP switch terminal A and PCM terminal 1BD • Open circuit in wiring harness between CPP switch terminal A and PCM terminal 1BD • PCM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded?	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	VERIFY RELATED REPAIR INFORMATION AVAILABILITY - Verify related Service Bulletins and/or on-line repair information availability. - Is any related repair information available?	Yes Perform repair or diagnosis according to the available repair information. If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT CPP SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the CPP switch connector. - Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the terminal and/or connector, then go to Step 11.
		No Go to the next step.

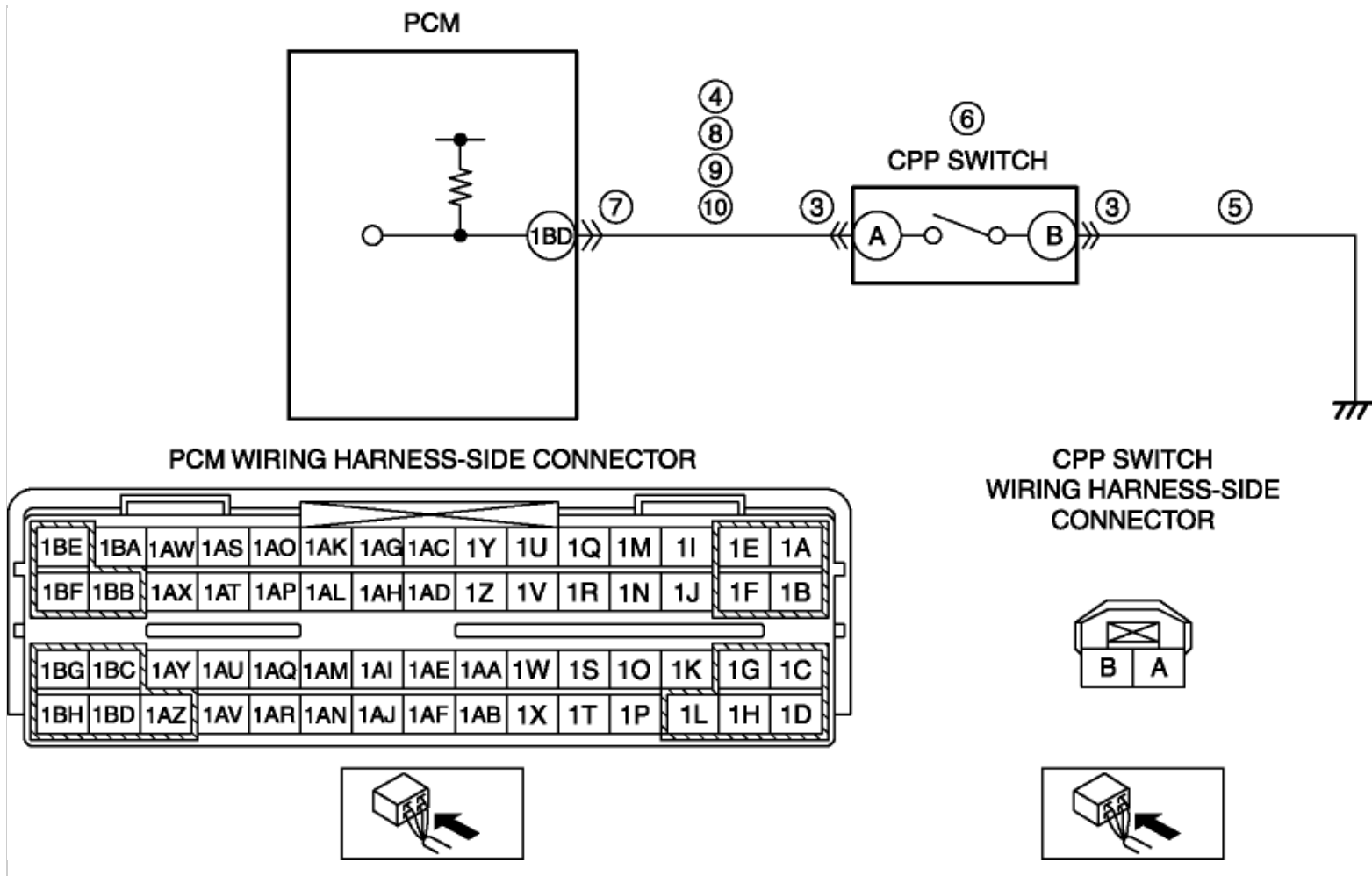
4	CLASSIFY MALFUNCTION IS SIGNAL CIRCUIT SIDE OR GROUND CIRCUIT SIDE • CPP switch connector is disconnected. • Switch the ignition to ON (engine off). • Measure the voltage between CPP switch terminal A (wiring harness-side) and body ground. • Is there any voltage?	YesMalfunction location is ground circuit side: • Go to the next step. NoMalfunction location is signal circuit side: • Go to Step 7.
5	INSPECT CPP SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT • CPP switch connector is disconnected. • Switch the ignition to off. • Inspect for continuity between CPP switch terminal B (wiring harness-side) and body ground. • Is there continuity?	YesGo to the next step. NoRepair or replace the wiring harness for a possible open circuit, then go to Step 11.
6	INSPECT CPP SWITCH • Inspect the CPP switch. (See CLUTCH PEDAL POSITION (CPP) SWITCH INSPECTION [MZR 2.5].) • Is there any malfunction?	YesReplace the CPP switch, then go to Step 11. (See CLUTCH PEDAL REMOVAL/ INSTALLATION [G66M-R].) NoGo to Step 11.
7	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND • CPP switch connector is disconnected. • Switch the ignition to off. • Inspect for continuity between CPP switch terminal A (wiring harness-side) and body ground. • Is there continuity?	YesIf the short to ground circuit could be detected: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected: • Replace the PCM (short to ground in PCM internal circuit). (See PCM REMOVAL/ INSTALLATION [MZR 2.5].) Go to Step 11. NoGo to the next step.
8	INSPECT PCM CONNECTOR CONDITION • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	YesRepair or replace the terminal and/or connector, then go to Step 11. NoGo to the next step.
9	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY • CPP switch and PCM connectors are disconnected.	YesRepair or replace the wiring harness for a possible short to power supply, then go to Step 11.

	- Switch the ignition to ON (engine off). - Measure the voltage between CPP switch terminal A (wiring harness-side) and body ground. - Is there any voltage?	No	Go to the next step.
10	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR OPEN CIRCUIT - CPP switch and PCM connectors are disconnected. - Switch the ignition to off. - Inspect for continuity between CPP switch terminal A (wiring harness-side) and PCM terminal 1BD (wiring harness-side). - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
11	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Start the engine. - Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Operate the clutch pedal while the vehicle runs and stops 8 times alternately. - Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) - Is the PENDING CODE for this DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the PCM. (See PCM REMOVAL/ INSTALLATION [MZR 2.5] .) Go to the next step.
		No	Go to the next step.
12	VERIFY AFTER REPAIR PROCEDURE - Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [MZR 2.5] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Engine

DTC P0704:00 [MZR 2.5]

DTC P0704:00	CPP switch input circuit problem
DETECTION CONDITION	• The PCM monitors changes in input voltage from the CPP switch. If the PCM does not detect the voltage changes while the vehicle runs with vehicle speed above 30 km/ h { 19 mph } and stops 8 times alternately, the PCM determines that the CPP switch circuit has a malfunction. Diagnostic support note • This is a continuous monitor (CCM). • The MIL 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. • PENDING CODE is available if the PCM detects the above malfunction condition during the first drive cycle. • FREEZE FRAME DATA (Mode 2)/Snapshot data is available. • The DTC is stored in the PCM memory.
POSSIBLE CAUSE	• CPP switch connector or terminal malfunction • Open circuit in wiring harness between CPP switch terminal B and body ground • CPP switch malfunction • Short to ground in wiring harness between CPP switch terminal A and PCM terminal 1BD • PCM connector or terminal malfunction • Short to power supply in wiring harness between CPP switch terminal A and PCM terminal 1BD • Open circuit in wiring harness between CPP switch terminal A and PCM terminal 1BD • PCM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA HAS BEEN RECORDED Has the FREEZE FRAME DATA (Mode 2)/snapshot data been recorded?	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	VERIFY RELATED REPAIR INFORMATION AVAILABILITY - Verify related Service Bulletins and/or on-line repair information availability. - Is any related repair information available?	Yes Perform repair or diagnosis according to the available repair information. If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT CPP SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the CPP switch connector. - Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Is there any malfunction?	Yes Repair or replace the terminal and/or connector, then go to Step 11.
		No Go to the next step.

4	CLASSIFY MALFUNCTION IS SIGNAL CIRCUIT SIDE OR GROUND CIRCUIT SIDE • CPP switch connector is disconnected. • Switch the ignition to ON (engine off). • Measure the voltage between CPP switch terminal A (wiring harness-side) and body ground. • Is there any voltage?	YesMalfunction location is ground circuit side: • Go to the next step. NoMalfunction location is signal circuit side: • Go to Step 7.
5	INSPECT CPP SWITCH GROUND CIRCUIT FOR OPEN CIRCUIT • CPP switch connector is disconnected. • Switch the ignition to off. • Inspect for continuity between CPP switch terminal B (wiring harness-side) and body ground. • Is there continuity?	YesGo to the next step. NoRepair or replace the wiring harness for a possible open circuit, then go to Step 11.
6	INSPECT CPP SWITCH • Inspect the CPP switch. (See CLUTCH PEDAL POSITION (CPP) SWITCH INSPECTION [MZR 2.5].) • Is there any malfunction?	YesReplace the CPP switch, then go to Step 11. (See CLUTCH PEDAL REMOVAL/ INSTALLATION [G66M-R].) NoGo to Step 11.
7	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND • CPP switch connector is disconnected. • Switch the ignition to off. • Inspect for continuity between CPP switch terminal A (wiring harness-side) and body ground. • Is there continuity?	YesIf the short to ground circuit could be detected: • Repair or replace the wiring harness for a possible short to ground. If the short to ground circuit could not be detected: • Replace the PCM (short to ground in PCM internal circuit). (See PCM REMOVAL/ INSTALLATION [MZR 2.5].) Go to Step 11. NoGo to the next step.
8	INSPECT PCM CONNECTOR CONDITION • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	YesRepair or replace the terminal and/or connector, then go to Step 11. NoGo to the next step.
9	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY • CPP switch and PCM connectors are disconnected.	YesRepair or replace the wiring harness for a possible short to power supply, then go to Step 11.

	- Switch the ignition to ON (engine off). - Measure the voltage between CPP switch terminal A (wiring harness-side) and body ground. - Is there any voltage?	No	Go to the next step.
10	INSPECT CPP SWITCH SIGNAL CIRCUIT FOR OPEN CIRCUIT - CPP switch and PCM connectors are disconnected. - Switch the ignition to off. - Inspect for continuity between CPP switch terminal A (wiring harness-side) and PCM terminal 1BD (wiring harness-side). - Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.
11	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Start the engine. - Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Operate the clutch pedal while the vehicle runs and stops 8 times alternately. - Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) - Is the PENDING CODE for this DTC present?	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the PCM. (See PCM REMOVAL/ INSTALLATION [MZR 2.5] .) Go to the next step.
		No	Go to the next step.
12	VERIFY AFTER REPAIR PROCEDURE - Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [MZR 2.5] .)
		No	DTC troubleshooting completed.