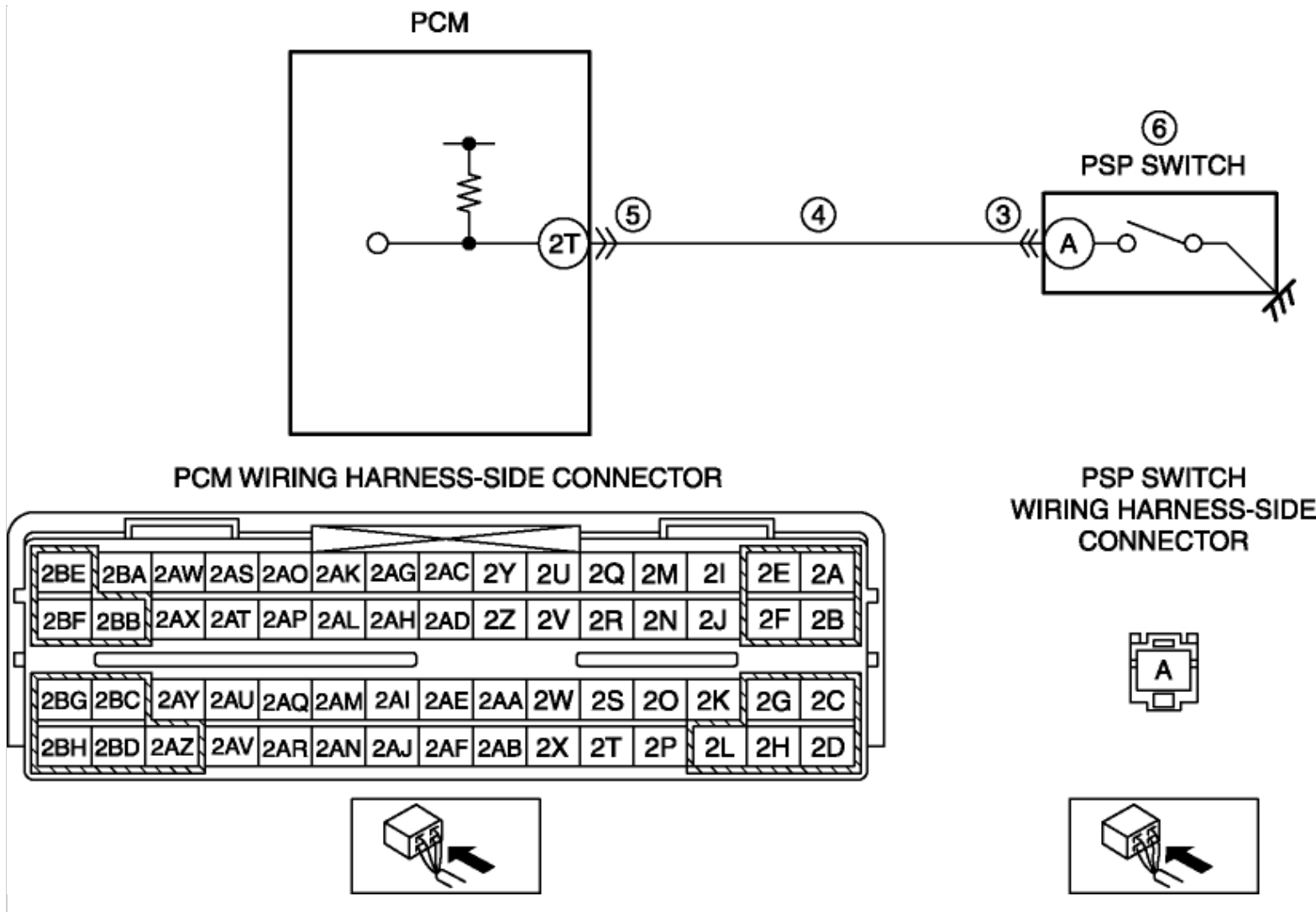


2012 - Mazda6 - Engine

DTC P0550:00 [MZR 2.5]

DTC P0550:00	PSP switch circuit problem
DETECTION CONDI TION	• The PCM monitors the PSP switch signal, if the input voltage is low voltage (switch stays on) for 1 min when the VSS is above 60 km/ h { 37 mph} and the ECT is above 60 °C { 140 °F} , the PCM determines that the PSP 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.
POSSI BLE CAUSE	• PSP switch connector or terminal malfunction • Short to ground in wiring harness between PSP switch terminal A and PCM terminal 2T • PCM connector or terminal malfunction • PSP switch malfunction • 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?	YesGo 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?	YesPerform 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 PSP SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the PSP switch connector.	YesRepair or replace the terminal and/or connector, then go to Step 7.

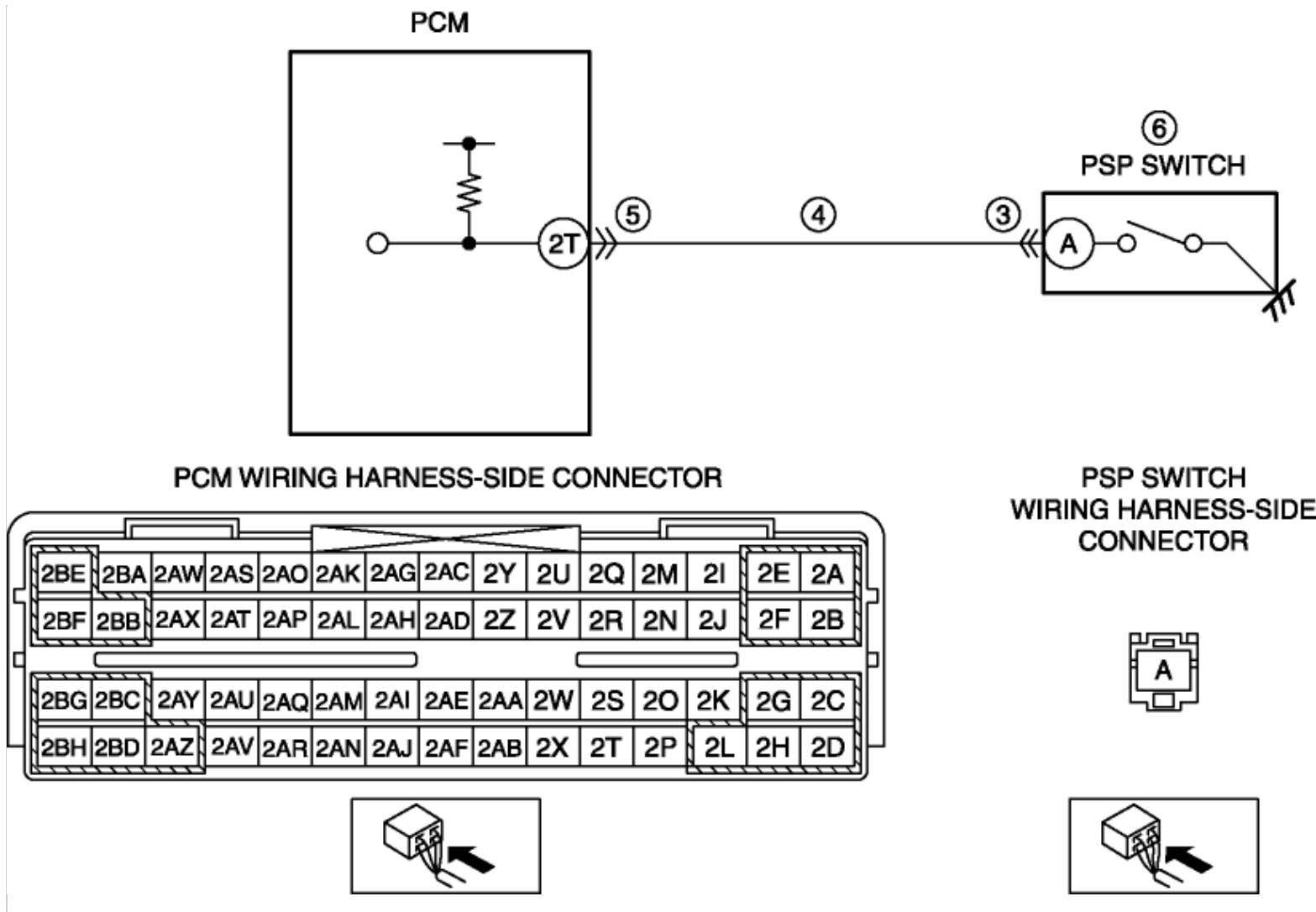
	- Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Is there any malfunction?	No	Go to the next step.
4	INSPECT PSP SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND - PSP switch connector is disconnected. - Inspect for continuity between PSP switch terminal A (wiring harness-side) and body ground. - Is there continuity?	Yes	If 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 7.
		No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION - Disconnect the PCM 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 7.
		No	Go to the next step.
6	INSPECT PSP SWITCH - Inspect the PSP switch. (See POWER STEERING PRESSURE (PSP) SWITCH INSPECTION [MZR 2.5].) - Is there any malfunction?	Yes	Replace the PSP switch, then go to the next step.
		No	Go to the next step.
7	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Start the engine and warm it up completely. - Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Drive the vehicle above 60 km/ h { 37 mph} for 1 min. - Verify that the ECT PID is above 60	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.

	°C { 140 °F} using the M-MDS. • Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) • Is the PENDING CODE for this DTC present?		
8	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 P0550:00 [MZR 2.5]

DTC P0550:00	PSP switch circuit problem
DETECTION CONDITION	- The PCM monitors the PSP switch signal, if the input voltage is low voltage (switch stays on) for 1 min when the VSS is above 60 km/ h { 37 mph } and the ECT is above 60 °C { 140 °F } , the PCM determines that the PSP 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	- PSP switch connector or terminal malfunction - Short to ground in wiring harness between PSP switch terminal A and PCM terminal 2T - PCM connector or terminal malfunction - PSP switch malfunction - 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 PSP SWITCH CONNECTOR CONDITION - Switch the ignition to off. - Disconnect the PSP switch connector.	Yes Repair or replace the terminal and/or connector, then go to Step 7.

	- Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Is there any malfunction?	No	Go to the next step.
4	INSPECT PSP SWITCH SIGNAL CIRCUIT FOR SHORT TO GROUND - PSP switch connector is disconnected. - Inspect for continuity between PSP switch terminal A (wiring harness-side) and body ground. - Is there continuity?	Yes	If 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 7.
		No	Go to the next step.
5	INSPECT PCM CONNECTOR CONDITION - Disconnect the PCM 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 7.
		No	Go to the next step.
6	INSPECT PSP SWITCH - Inspect the PSP switch. (See POWER STEERING PRESSURE (PSP) SWITCH INSPECTION [MZR 2.5].) - Is there any malfunction?	Yes	Replace the PSP switch, then go to the next step.
		No	Go to the next step.
7	VERIFY DTC TROUBLESHOOTING COMPLETED - Make sure to reconnect all disconnected connectors. - Start the engine and warm it up completely. - Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [MZR 2.5].) - Drive the vehicle above 60 km/ h { 37 mph} for 1 min. - Verify that the ECT PID is above 60	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.

	°C { 140 °F} using the M-MDS. • Perform the Pending Trouble Code Access Procedure. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) • Is the PENDING CODE for this DTC present?		
8	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.