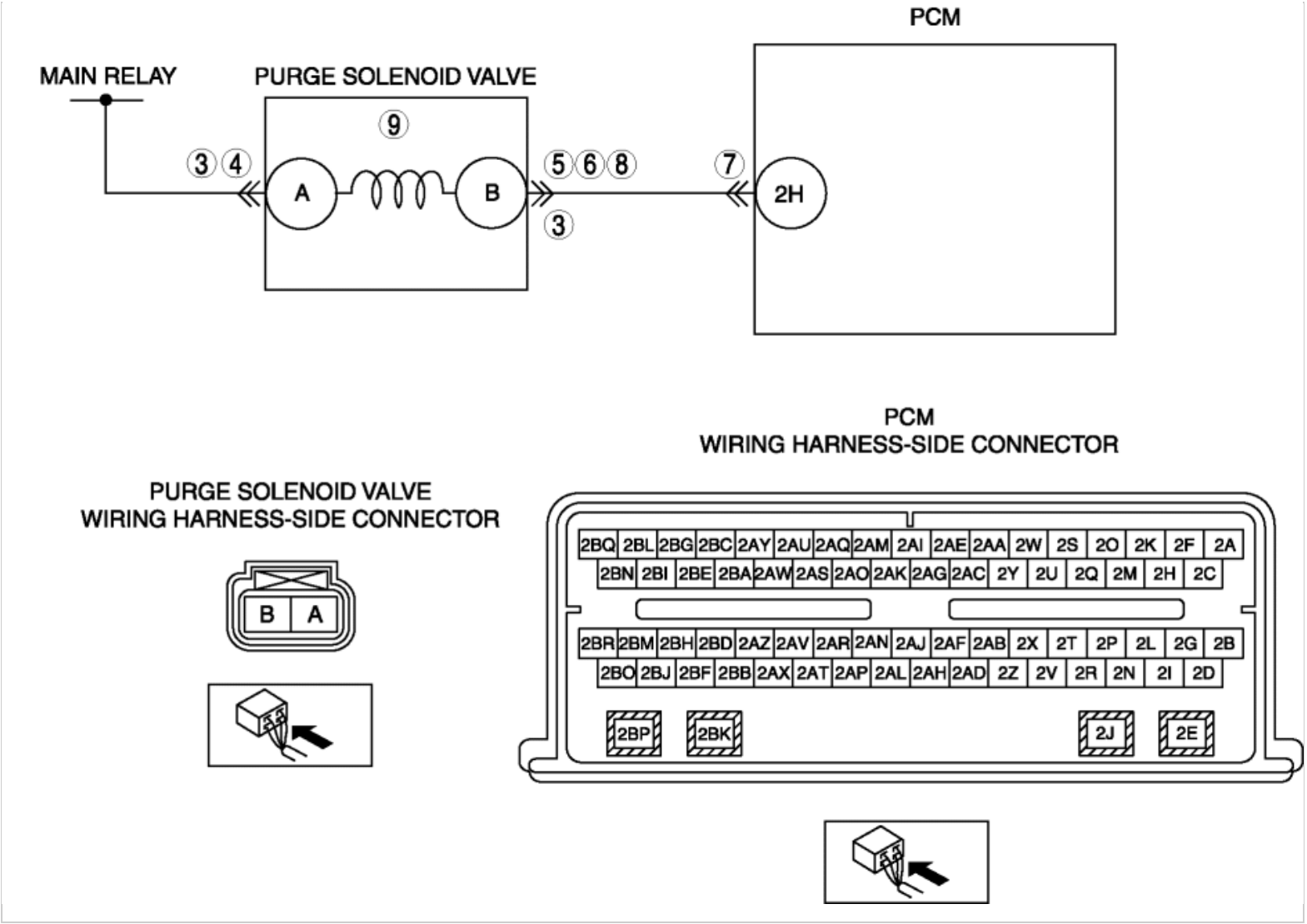
2012 - Mazda6 - Engine

DTC P0443:00 [MZI 3.7 V6]

DTC P0443:00	Purge solenoid valve circuit
DETECTION CONDITION	• The PCM monitors the state of the purge solenoid valve circuit output driver. The test fails when the signal moves outside the minimum or maximum limit for the commanded state.
POSSIBLE CAUSE	• Purge solenoid valve malfunction • Connector or terminal malfunction • Short to ground between purge solenoid valve terminal B and PCM terminal 2H • Open circuit between main relay terminal A and purge solenoid valve terminal A • Short to power supply between purge solenoid valve terminal B and PCM terminal 2H • Open circuit between purge solenoid valve terminal B and PCM terminal 2H • PCM malfunction



Diagnostic procedure

STEP	INSPECTION		ACTION
1	**VERIFY FREEZE FRAME DATA HAS BEEN RECORDED** • Has FREEZE FRAME DATA been recorded?	Yes	Go to the next step.
		No	Record FREEZE FRAME 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 Service Bulletins available?	Yes	Perform repair or diagnosis according to the available Service Bulletins. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	**INSPECT PURGE SOLENOID VALVE CONNECTOR FOR POOR CONNECTION** • Switch the ignition to off. • Disconnect purge solenoid valve connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion).	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.

	• Are there any malfunction?		
4	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Switch the ignition to ON (Engine off). • Measure voltage between purge solenoid valve terminal A (wiring harness-side) and body ground. • Is voltage **B+** ?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
5	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR SHORT TO POWER SUPPLY** • Switch the ignition to ON (Engine off). • Measure the voltage between purge solenoid valve control terminal B (wiring harness-side) and body ground. • Is voltage B+?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
6	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR SHORT TO GROUND** • Switch the ignition to off. • Inspect for continuity between purge solenoid valve control terminal B (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
7	**INSPECT PCM CONNECTOR FOR POOR CONNECTION** • Switch the ignition to off. • Disconnect PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
8	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR OPEN CIRCUIT** • Switch the ignition to off. • Inspect continuity between purge solenoid valve terminal B (wiring harness-side) and PCM terminal 2H (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
9	**INSPECT PURGE SOLENOID VALVE** • Inspect the purge solenoid valve. (See **PURGE SOLENOID VALVE INSPECTION [MZI 3.7 V6]**.) • Is there any malfunction?	Yes	Replace purge solenoid valve (See **PURGE SOLENOID VALVE REMOVAL/ INSTALLATION [MZI 3.7 V6]**.), then go to Step 10.
		No	Go to the next step.
10	**VERIFY TROUBLESHOOTING OF DTC**	Yes	Repeat the inspection from Step 1.

	P0443:00 COMPLETED • Make sure to reconnect all disconnected connectors. • Clear DTC from PCM memory using M-MDS. • Perform the KOEO or KOER self-test. (See **KOEO/ KOER SELF TEST [MZI 3.7 V6]**.) • Is the PENDING CODE same DTC present?		• If the malfunction recurs, replace the PCM. (See **PCM REMOVAL/ INSTALLATION [MZI 3.7 V6]**.) Go to the next step.
		No	Go to the next step.
11	**VERIFY AFTER REPAIR PROCEDURE** • Perform the "AFTER REPAIR PROCEDURE". (See **AFTER REPAIR PROCEDURE [MZI 3.7 V6]**.) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See **DTC TABLE [MZI 3.7 V6]**.)
		No	Troubleshooting completed.

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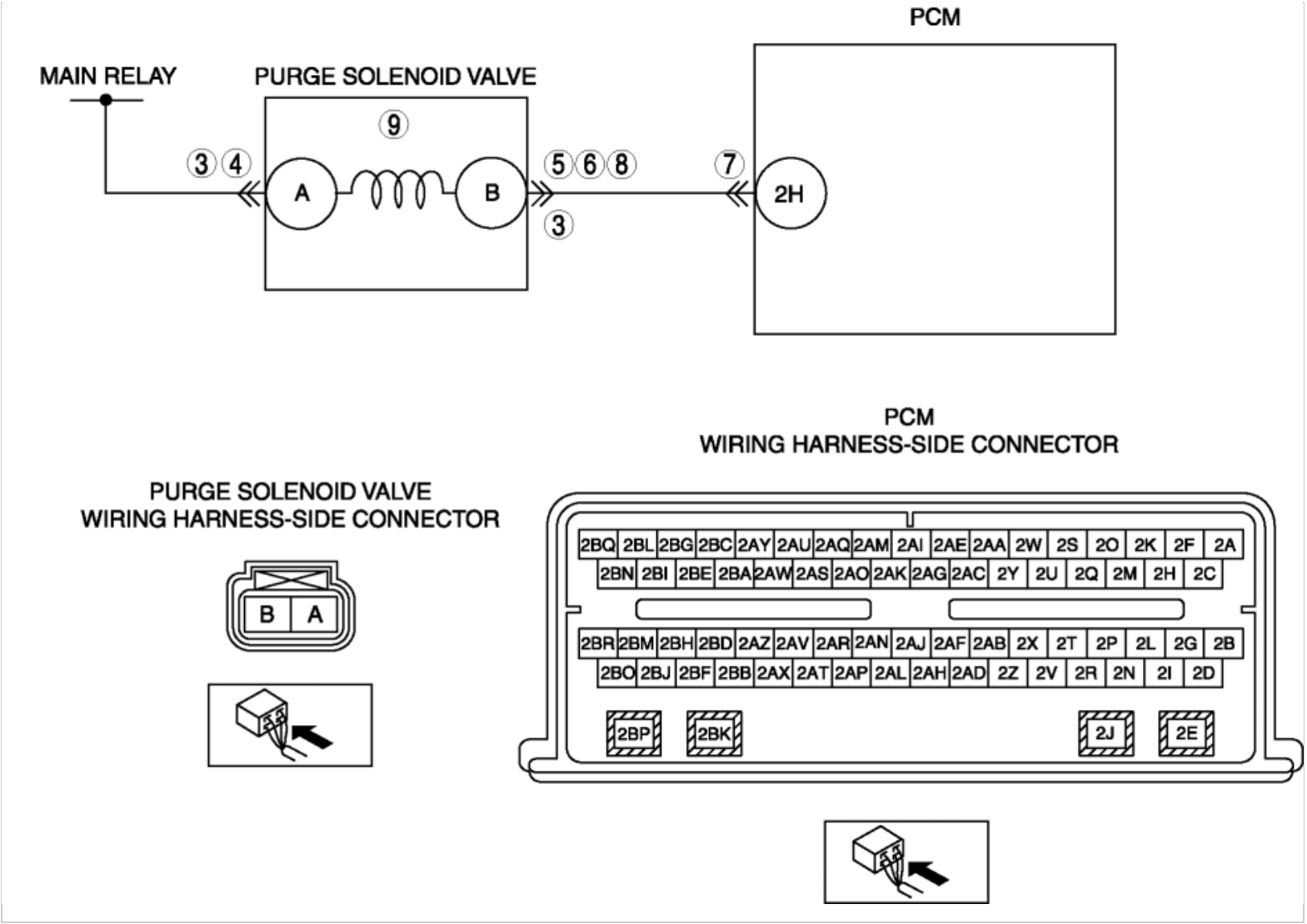
2012 - Mazda6 - Engine

DTC P0443:00 [MZI 3.7 V6]

DTC P0443:00	Purge solenoid valve circuit
DETECTION CONDITION	• The PCM monitors the state of the purge solenoid valve circuit output driver. The test fails when the signal moves outside the minimum or maximum limit for the commanded state.
POSSIBLE CAUSE	• Purge solenoid valve malfunction • Connector or terminal malfunction • Short to ground between purge solenoid valve terminal B and PCM terminal 2H • Open circuit between main relay terminal A and purge solenoid valve terminal A • Short to power supply between purge solenoid valve terminal B and PCM terminal 2H • Open circuit between purge solenoid valve terminal B and PCM terminal 2H • PCM malfunction



Diagnostic procedure

STEP	INSPECTION		ACTION
1	**VERIFY FREEZE FRAME DATA HAS BEEN RECORDED** • Has FREEZE FRAME DATA been recorded?	Yes	Go to the next step.
		No	Record FREEZE FRAME 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 Service Bulletins available?	Yes	Perform repair or diagnosis according to the available Service Bulletins. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	**INSPECT PURGE SOLENOID VALVE CONNECTOR FOR POOR CONNECTION** • Switch the ignition to off. • Disconnect purge solenoid valve connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion).	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.

	• Are there any malfunction?		
4	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Switch the ignition to ON (Engine off). • Measure voltage between purge solenoid valve terminal A (wiring harness-side) and body ground. • Is voltage **B+** ?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
5	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR SHORT TO POWER SUPPLY** • Switch the ignition to ON (Engine off). • Measure the voltage between purge solenoid valve control terminal B (wiring harness-side) and body ground. • Is voltage B+?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
6	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR SHORT TO GROUND** • Switch the ignition to off. • Inspect for continuity between purge solenoid valve control terminal B (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
7	**INSPECT PCM CONNECTOR FOR POOR CONNECTION** • Switch the ignition to off. • Disconnect PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
8	**INSPECT PURGE SOLENOID VALVE CONTROL CIRCUIT FOR OPEN CIRCUIT** • Switch the ignition to off. • Inspect continuity between purge solenoid valve terminal B (wiring harness-side) and PCM terminal 2H (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
9	**INSPECT PURGE SOLENOID VALVE** • Inspect the purge solenoid valve. (See **PURGE SOLENOID VALVE INSPECTION [MZI 3.7 V6]**.) • Is there any malfunction?	Yes	Replace purge solenoid valve (See **PURGE SOLENOID VALVE REMOVAL/ INSTALLATION [MZI 3.7 V6]**.), then go to Step 10.
		No	Go to the next step.
10	**VERIFY TROUBLESHOOTING OF DTC**	Yes	Repeat the inspection from Step 1.

	P0443:00 COMPLETED • Make sure to reconnect all disconnected connectors. • Clear DTC from PCM memory using M-MDS. • Perform the KOEO or KOER self-test. (See **KOEO/ KOER SELF TEST [MZI 3.7 V6]**.) • Is the PENDING CODE same DTC present?		• If the malfunction recurs, replace the PCM. (See **PCM REMOVAL/ INSTALLATION [MZI 3.7 V6]**.) Go to the next step.
		No	Go to the next step.
11	**VERIFY AFTER REPAIR PROCEDURE** • Perform the "AFTER REPAIR PROCEDURE". (See **AFTER REPAIR PROCEDURE [MZI 3.7 V6]**.) • Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See **DTC TABLE [MZI 3.7 V6]**.)
		No	Troubleshooting completed.

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