

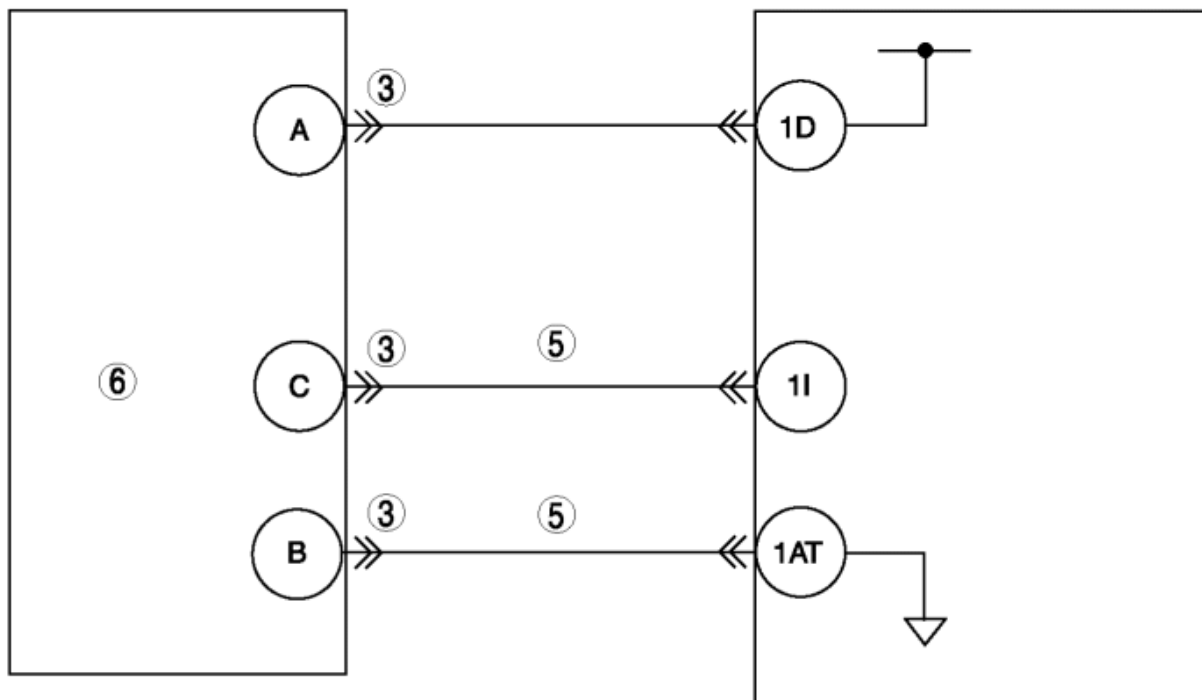
2012 - Mazda6 - Engine

DTC P0452:00 [MZI 3.7 V6]

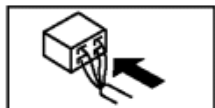
DTC P0452:00	Fuel tank pressure sensor low input
DETECTION CONDITION	• The PCM monitors the evaporative emission (EVAP) control system fuel tank pressure sensor input signal to the PCM. The test fails when the signal average drops below a minimum allowable calibrated parameter.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground between fuel tank pressure sensor terminal C and PCM terminal 1I • Fuel tank pressure sensor signal circuit and ground circuit for short each other • Fuel tank pressure sensor malfunction

FUEL TANK PRESSURE SENSOR

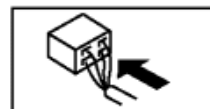
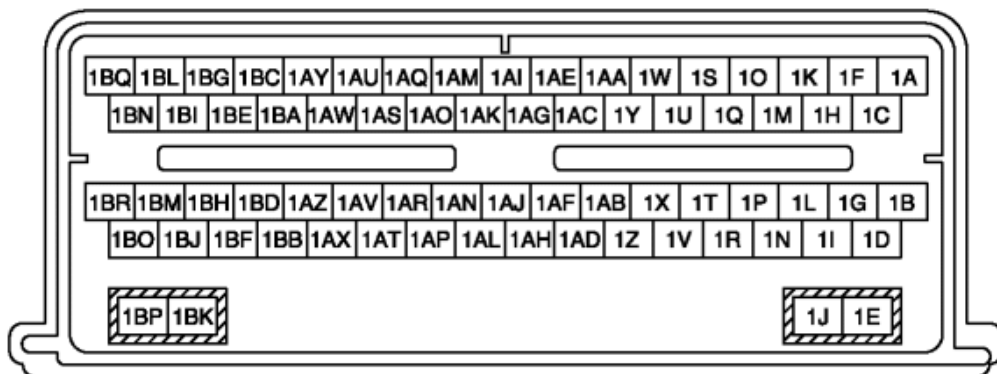
PCM



FUEL TANK PRESSURE SENSOR WIRING HARNESS-SIDE CONNECTOR



PCM WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED Has the 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	Yes Perform the repair or diagnosis according to the available repair information.

	Verify related Service Bulletins and/or on-line repair information availability. Is any related repair information available?		If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT FUEL TANK PRESSURE SENSOR CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the fuel tank pressure sensor connector. - Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Are there any malfunction?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
4	VERIFY FUEL TANK PRESSURE SIGNAL CIRCUIT FOR SHORT TO GROUND - Switch the ignition off. - Inspect for continuity between fuel tank pressure sensor terminal C (wiring harness-side) and body ground. - Is there continuity?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
5	INSPECT FUEL TANK PRESSURE SENSOR SIGNAL CIRCUIT AND GROUND CIRCUIT FOR SHORT EACH OTHER - Switch the ignition off. - Disconnect the fuel tank pressure sensor and PCM connector. - Measure resistance between PCM terminal 1I (wiring harness-side) and PCM terminal 1AT (wiring harness-side) - Is the resistance more than 10 kilohms?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 7.
6	INSPECT FUEL TANK PRESSURE SENSOR - Perform the fuel tank pressure sensor inspection. (See FUEL TANK PRESSURE SENSOR INSPECTION [MZI 3.7 V6].) - Is the fuel tank pressure sensor normal?	Yes	Go to the next step.
		No	Replace the evaporative hose component, then go to the next step. (See FUEL TANK REMOVAL/ INSTALLATION [MZI 3.7 V6].)
7	VERIFY TROUBLESHOOTING OF DTC P0452:00 COMPLETED - Make sure to reconnect all disconnected connectors. - Switch the ignition ON (Engine off). - Clear the DTC from the PCM memory using the M-MDS. - Start the engine and warm it up completely. - Is same DTC present?	Yes	Repeat the inspection from Step 1. 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.

8	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.

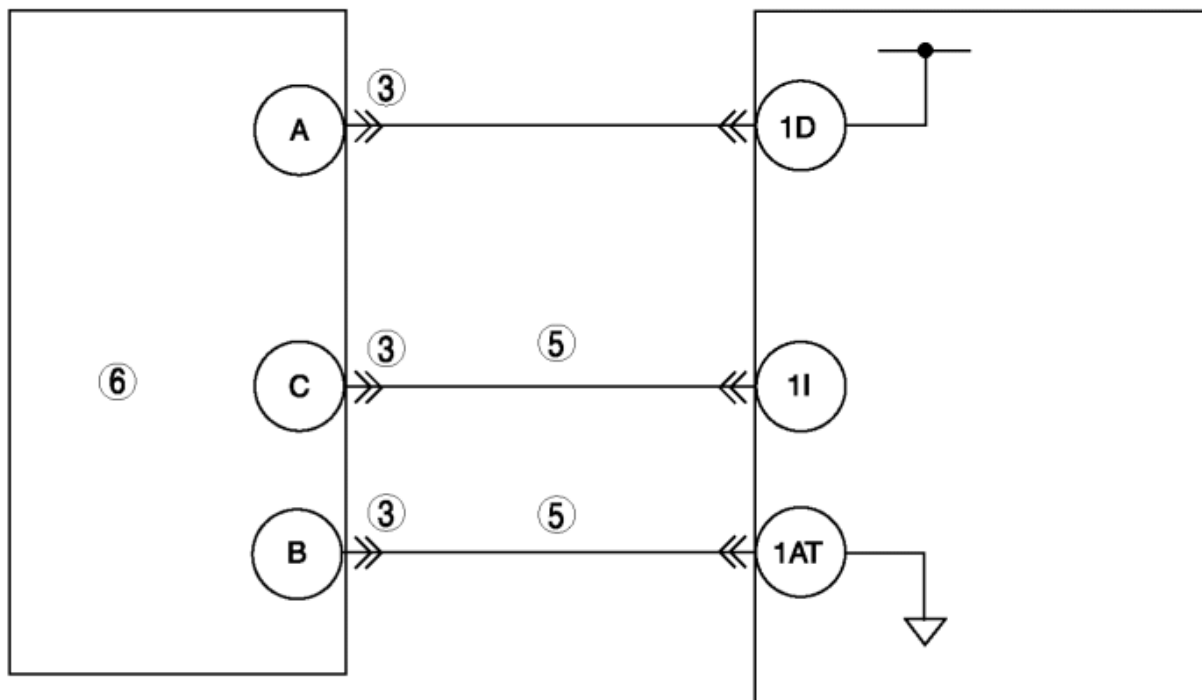
2012 - Mazda6 - Engine

DTC P0452:00 [MZI 3.7 V6]

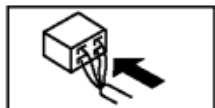
DTC P0452:00	Fuel tank pressure sensor low input
DETECTION CONDITION	• The PCM monitors the evaporative emission (EVAP) control system fuel tank pressure sensor input signal to the PCM. The test fails when the signal average drops below a minimum allowable calibrated parameter.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground between fuel tank pressure sensor terminal C and PCM terminal 1I • Fuel tank pressure sensor signal circuit and ground circuit for short each other • Fuel tank pressure sensor malfunction

FUEL TANK PRESSURE SENSOR

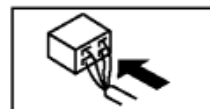
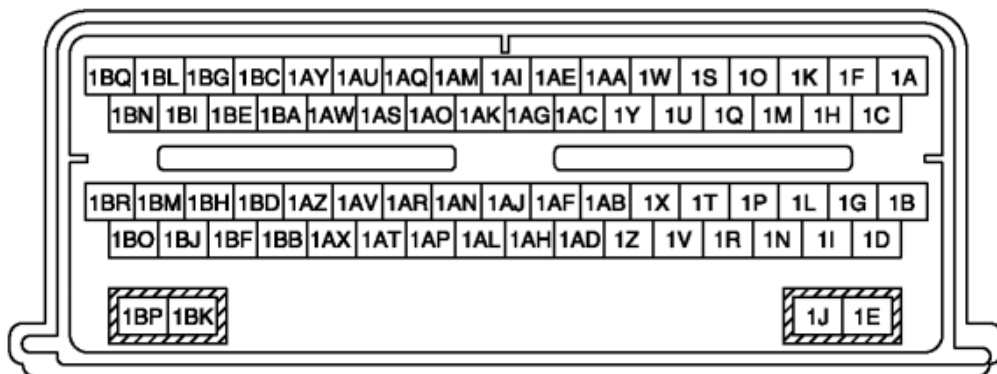
PCM



FUEL TANK PRESSURE SENSOR WIRING HARNESS-SIDE CONNECTOR



PCM WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED Has the 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	Yes Perform the repair or diagnosis according to the available repair information.

	Verify related Service Bulletins and/or on-line repair information availability. Is any related repair information available?		If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT FUEL TANK PRESSURE SENSOR CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the fuel tank pressure sensor connector. - Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Are there any malfunction?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
4	VERIFY FUEL TANK PRESSURE SIGNAL CIRCUIT FOR SHORT TO GROUND - Switch the ignition off. - Inspect for continuity between fuel tank pressure sensor terminal C (wiring harness-side) and body ground. - Is there continuity?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
5	INSPECT FUEL TANK PRESSURE SENSOR SIGNAL CIRCUIT AND GROUND CIRCUIT FOR SHORT EACH OTHER - Switch the ignition off. - Disconnect the fuel tank pressure sensor and PCM connector. - Measure resistance between PCM terminal 1I (wiring harness-side) and PCM terminal 1AT (wiring harness-side) - Is the resistance more than 10 kilohms?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 7.
6	INSPECT FUEL TANK PRESSURE SENSOR - Perform the fuel tank pressure sensor inspection. (See FUEL TANK PRESSURE SENSOR INSPECTION [MZI 3.7 V6].) - Is the fuel tank pressure sensor normal?	Yes	Go to the next step.
		No	Replace the evaporative hose component, then go to the next step. (See FUEL TANK REMOVAL/ INSTALLATION [MZI 3.7 V6].)
7	VERIFY TROUBLESHOOTING OF DTC P0452:00 COMPLETED - Make sure to reconnect all disconnected connectors. - Switch the ignition ON (Engine off). - Clear the DTC from the PCM memory using the M-MDS. - Start the engine and warm it up completely. - Is same DTC present?	Yes	Repeat the inspection from Step 1. 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.

8	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.