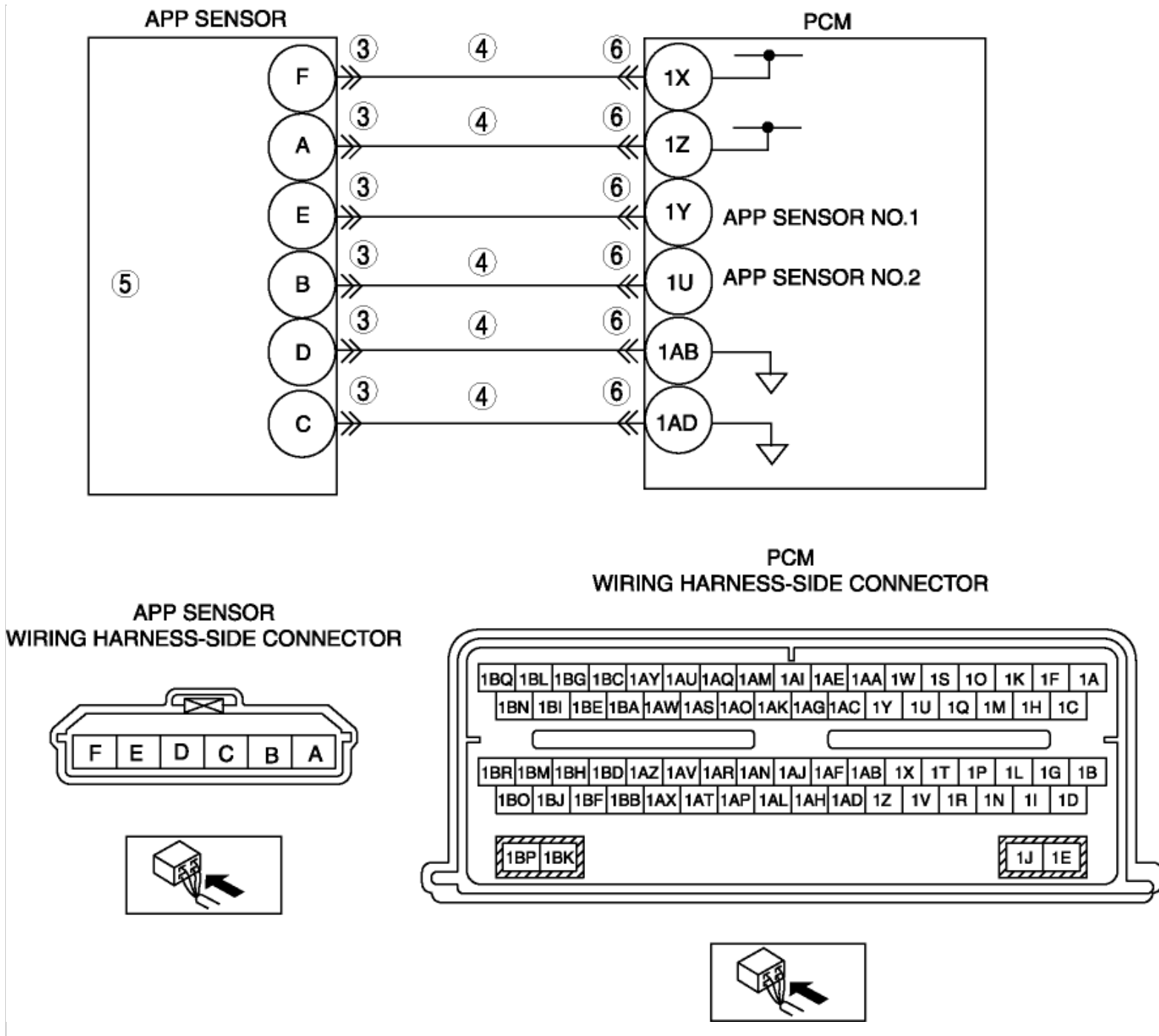


2012 - Mazda6 - Engine

DTC P2127:00 [MZI 3.7 V6]

DTC P2127:00	APP sensor No.2 circuit low input
DETECTION CONDITION	• APP sensor No.2 is out of self-test range low.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground circuit between APP sensor terminal A and PCM terminal 1Z • Short to ground circuit between APP sensor terminal B and PCM terminal 1U • APP sensor 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.	Yes Perform repair or diagnosis according to the available Service Bulletins. If the vehicle is not repaired, go to the next step.

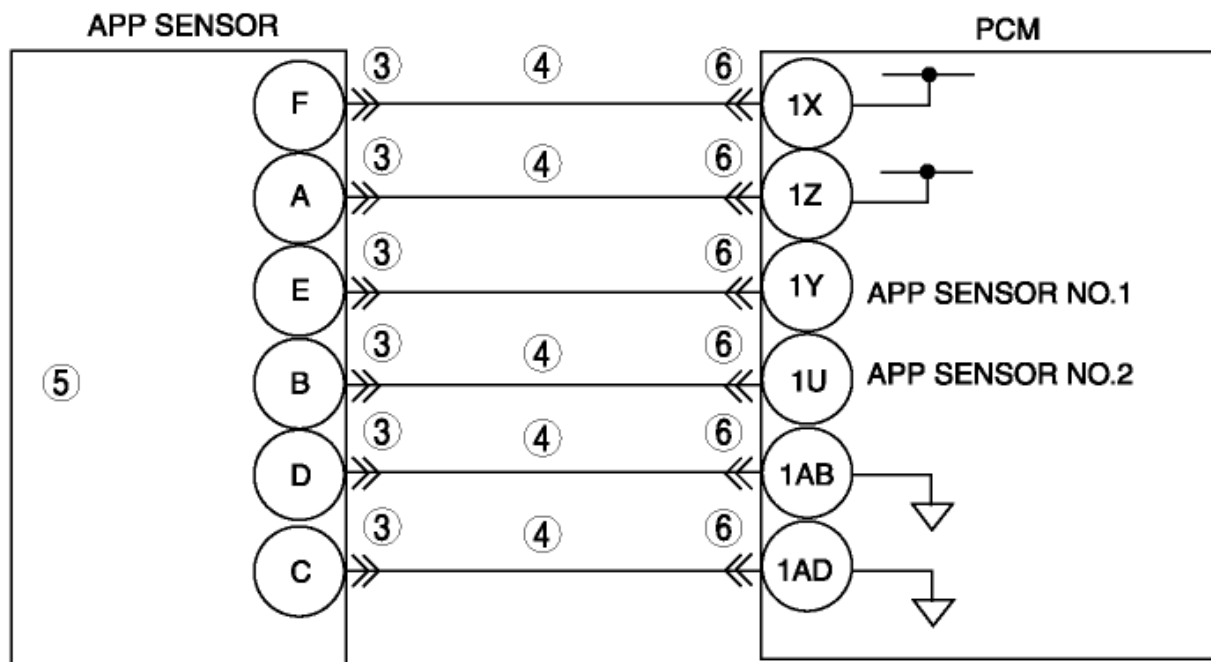
	Is any related Service Bulletins available?	No	Go to the next step.
3	INSPECT APP SENSOR CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the APP sensor connector. - Inspect for poor connection (such as damaged/pulled-out pins, corrosion). - Are there any malfunction?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
4	INSPECT APP SENSOR NO.2 CIRCUIT FOR SHORT TO GROUND - Switch the ignition off. - Inspect for continuity between the following terminals: - APP sensor terminal A (wiring harness-side) and body ground. - APP sensor terminal B (wiring harness-side) and body ground. - Are there continuity?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
5	INSPECT APP SENSOR NO.2 - Inspect APP sensor No.2. (See ACCELERATOR PEDAL POSITION (APP) SENSOR INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes	Replace the accelerator pedal, then go to Step 7. (See ACCELERATOR PEDAL REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the PCM 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.
7	VERIFY TROUBLESHOOTING OF DTC P2127:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Start the engine. - Is the 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	DTC troubleshooting completed.

2012 - Mazda6 - Engine

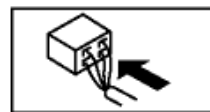
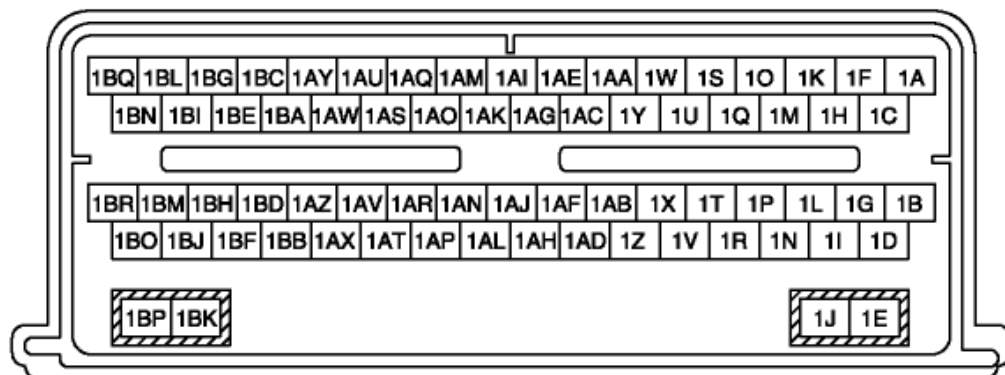
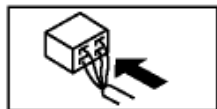
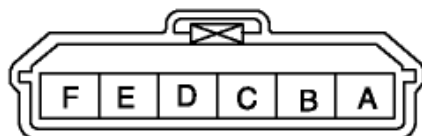
DTC P2127:00 [MZI 3.7 V6]

DTC P2127:00	APP sensor No.2 circuit low input
DETECTION CONDITION	• APP sensor No.2 is out of self-test range low.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to ground circuit between APP sensor terminal A and PCM terminal 1Z • Short to ground circuit between APP sensor terminal B and PCM terminal 1U • APP sensor malfunction



**APP SENSOR
WIRING HARNESS-SIDE CONNECTOR**

**PCM
WIRING HARNESS-SIDE CONNECTOR**



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.	Yes Perform repair or diagnosis according to the available Service Bulletins. If the vehicle is not repaired, go to the next step.

	Is any related Service Bulletins available?	No	Go to the next step.
3	INSPECT APP SENSOR CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the APP 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	INSPECT APP SENSOR NO.2 CIRCUIT FOR SHORT TO GROUND - Switch the ignition off. - Inspect for continuity between the following terminals: - APP sensor terminal A (wiring harness-side) and body ground. - APP sensor terminal B (wiring harness-side) and body ground. - Are there continuity?	Yes	Repair or replace suspected part, then go to Step 7.
		No	Go to the next step.
5	INSPECT APP SENSOR NO.2 - Inspect APP sensor No.2. (See ACCELERATOR PEDAL POSITION (APP) SENSOR INSPECTION [MZI 3.7 V6] .) - Is there any malfunction?	Yes	Replace the accelerator pedal, then go to Step 7. (See ACCELERATOR PEDAL REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION - Switch the ignition off. - Disconnect the PCM 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.
7	VERIFY TROUBLESHOOTING OF DTC P2127:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Start the engine. - Is the 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	DTC troubleshooting completed.