

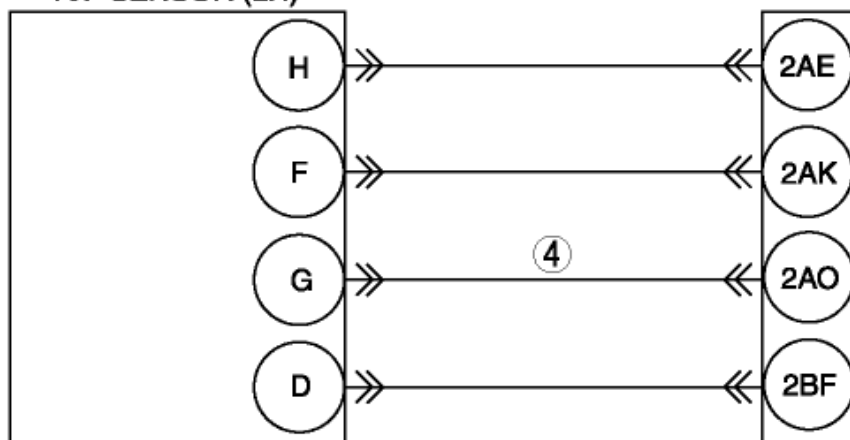
2012 - Mazda6 - Engine

DTC P2237:00, P2240:00 [MZI 3.7 V6]

DTC P2237:00 DTC P2240:00	P2237:00: A/F sensor (RH) positive current control circuit/open P2240:00: A/F sensor (LH) positive current control circuit/open
DETECTION CONDITION	• P2237:00 indicates that A/F sensor (RH) positive current control circuit/open • P2240:00 indicates that A/F sensor (LH) positive current control circuit/open • The powertrain control module (PCM) monitors the universal heated oxygen sensor (HO2S) for a circuit concern. This DTC sets when the PCM detects a concern with the circuit used to determine the oxygen content in the exhaust gas.
POSSIBLE CAUSE	• A/F sensor connector or terminals malfunction • Open circuit in wiring harness between the following terminals: ▪ A/F sensor (RH) terminal G—PCM terminal 2AS ▪ A/F sensor (LH) terminal G—PCM terminal 2AO • Damaged A/F sensor • PCM malfunction

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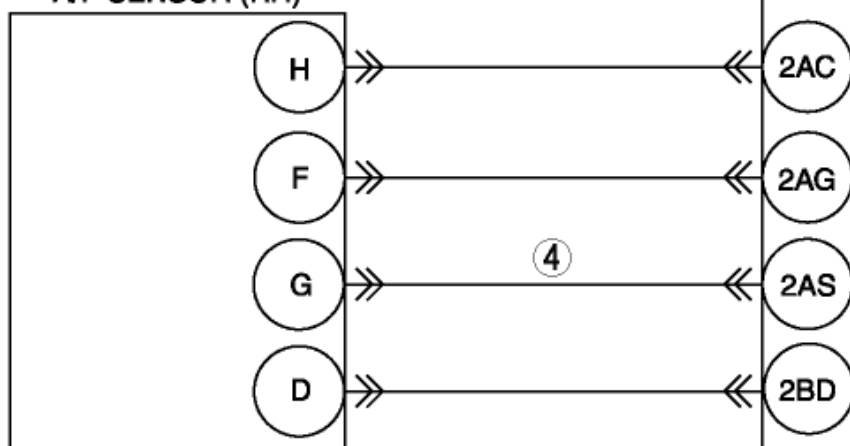
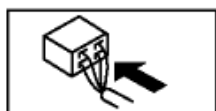
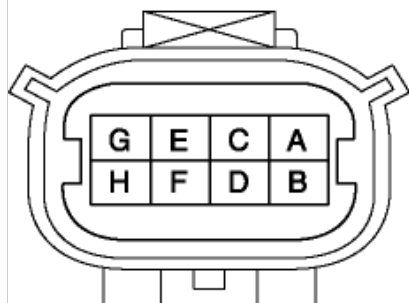
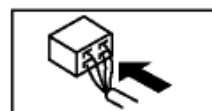
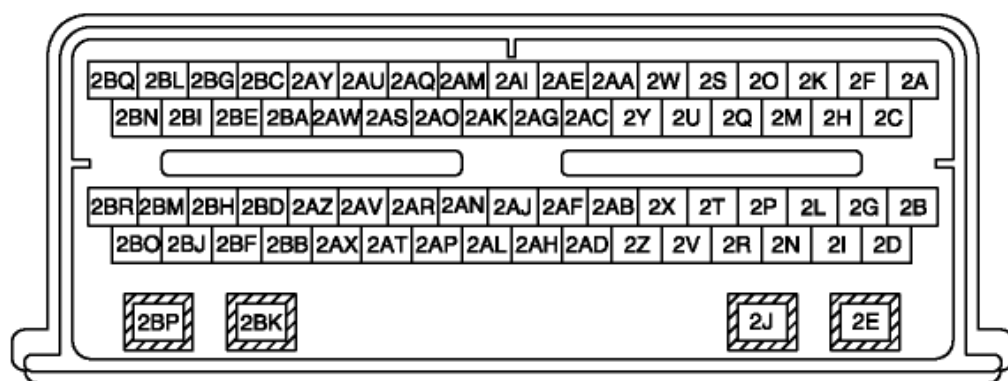
A/F SENSOR (LH)



PCM

④

A/F SENSOR (RH)

A/F SENSOR (LH, RH)
WIRING HARNESS-SIDE
CONNECTORPCM
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. - 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	VISUALLY INSPECT A/ F SENSOR HARNESS - Switch the ignition to off. - Disconnect the suspect A/F sensor connector. - Visually inspect suspect A/F sensor for: - Pinched, shorted, and corroded wiring and pins - Oil or water contamination - Crossed sensor wires - Damaged A/F sensor - Is a concern present?	Yes	Repair or replace the malfunctioning part according to the inspection results, then go to Step 5.
		No	Go to the next step.
4	CHECK UO2SPC CIRCUIT FOR AN OPEN IN THE HARNESS - Suspect A/F sensor connector is disconnected. - Switch the ignition to off. - Disconnect the PCM connector. - Measure the resistance between the following terminals (wiring harness-side): - A/F sensor (RH) terminal G—PCM terminal 2AS - A/F sensor (LH) terminal G—PCM terminal 2AO - Is the resistance less than 5 ohm?	Yes	Replace the A/F sensor, then go to the next step. (See AIR FUEL RATIO (A/ F) SENSOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Repair for open circuit, then go to the next step.
5	VERIFY TROUBLESHOOTING OF DTC P2237:00, P2240:00 HAS BEEN COMPLETED - Verify that all disconnected connectors are reconnected. - Switch the ignition to ON (Engine off).	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the PCM. (See PCM REMOVAL/ INSTALLATION)

	• Clear the DTC from the PCM memory using the M-MDS. • Perform the KOER self-test. (See KOE0/ KOER SELF TEST [MZI 3.7 V6] .) • Is the PENDING CODE for this DTC present?		[MZI 3.7 V6] .) Go to the next step.
		No	Go to the next step.
6	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.

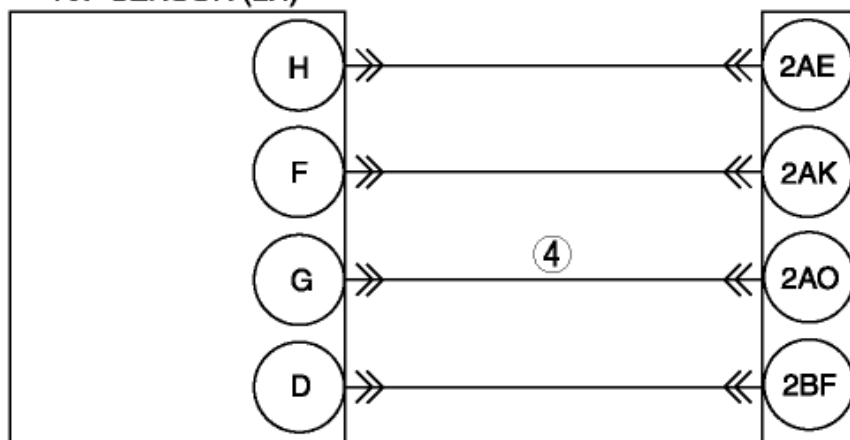
2012 - Mazda6 - Engine

DTC P2237:00, P2240:00 [MZI 3.7 V6]

DTC P2237:00	P2237:00: A/F sensor (RH) positive current control circuit/open
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POSSIBLE CAUSE	• A/F sensor connector or terminals malfunction • Open circuit in wiring harness between the following terminals: ▪ A/F sensor (RH) terminal G—PCM terminal 2AS ▪ A/F sensor (LH) terminal G—PCM terminal 2AO • Damaged A/F sensor • PCM malfunction

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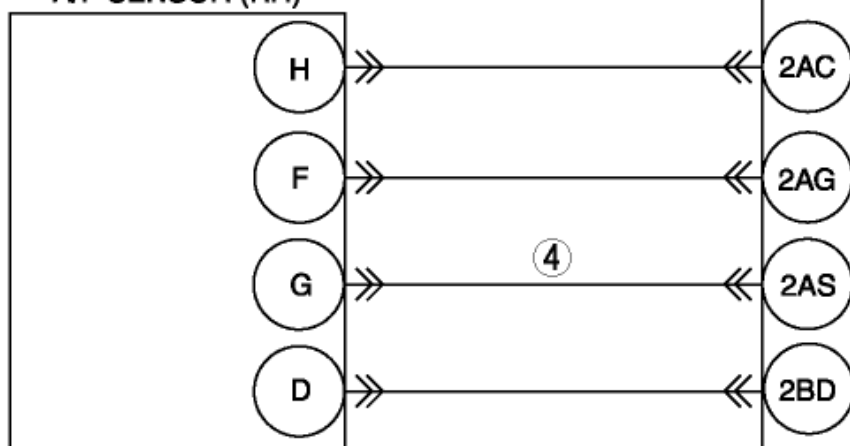
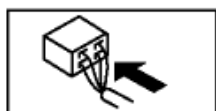
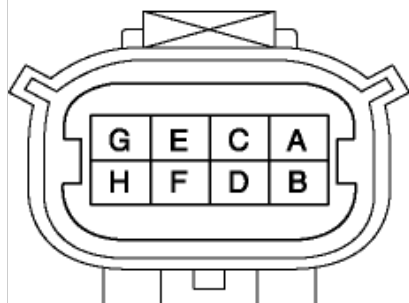
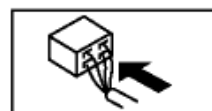
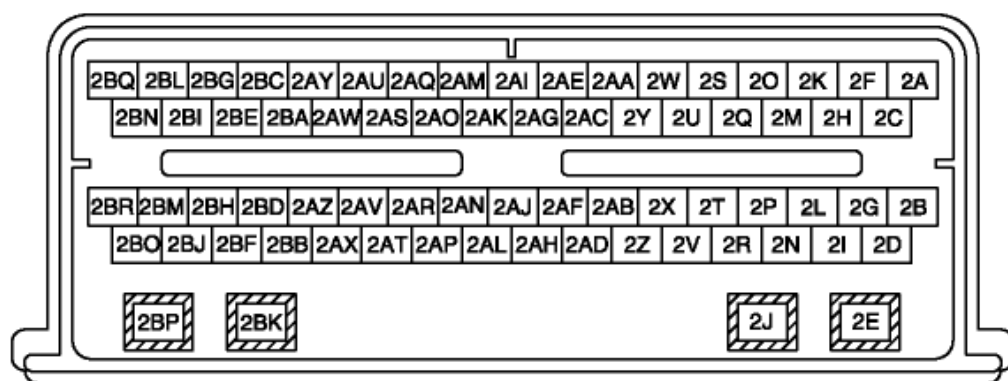
A/F SENSOR (LH)



PCM

④

A/F SENSOR (RH)

A/F SENSOR (LH, RH)
WIRING HARNESS-SIDE
CONNECTORPCM
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.
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		No	Go to the next step.
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5	VERIFY TROUBLESHOOTING OF DTC P2237:00, P2240:00 HAS BEEN COMPLETED - Verify that all disconnected connectors are reconnected. - Switch the ignition to ON (Engine off).	Yes	Repeat the inspection from Step 1. If the malfunction recurs, replace the PCM. (See PCM REMOVAL/ INSTALLATION)

	• Clear the DTC from the PCM memory using the M-MDS. • Perform the KOER self-test. (See KOE0/ KOER SELF TEST [MZI 3.7 V6] .) • Is the PENDING CODE for this DTC present?		[MZI 3.7 V6] .) Go to the next step.
		No	Go to the next step.
6	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.