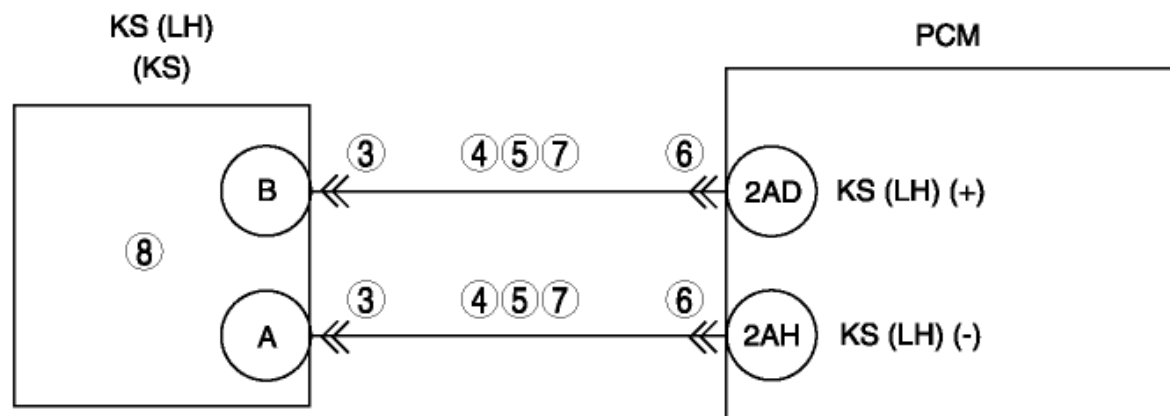


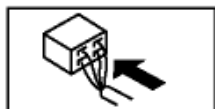
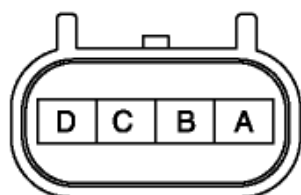
2012 - Mazda6 - Engine

DTC P0330:00 [MZI 3.7 V6]

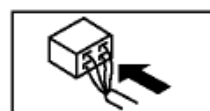
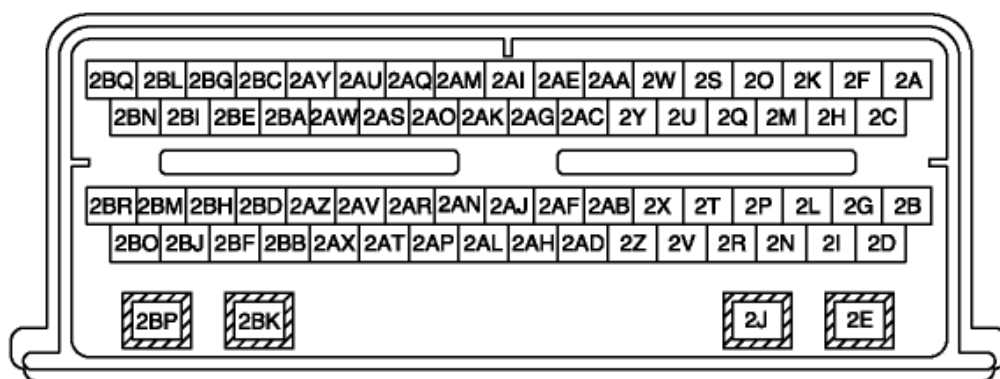
DTC P0330:00	KS circuit (LH)
DETECTION CONDITION	• The KS detects vibrations upon increase and decrease in engine RPM. The KS generates a voltage based on this vibration. A DTC is set if the voltage goes outside a calibrated level.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to power supply in wiring harness between KS terminal A and PCM terminal 2AH • Short to power supply in wiring harness between KS terminal B and PCM terminal 2AD • Short to ground circuit between KS terminal A and PCM terminal 2AH • Short to ground circuit between KS terminal B and PCM terminal 2AD • Open circuit wiring harness between KS terminal A and PCM terminal 2AH • Open circuit wiring harness between KS terminal B and PCM terminal 2AD • KS malfunction



KS
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. - 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 KS CONNECTOR FOR POOR CONNECTION Switch the ignition to off.	Yes Repair or replace suspected part, then go to Step 9.

	• Disconnect the KS connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Are there any malfunction?	No	Go to the next step.
4	INSPECT KS (LH) SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between the following terminals: ▪ KS terminal A (wiring harness-side) and body ground. ▪ KS terminal B (wiring harness-side) and body ground. • Are there voltage B+?	Yes	Repair or replace suspected part, then go to Step 9.
		No	Go to the next step.
5	INSPECT KS (LH) CIRCUIT FOR SHORT TO GROUND • Switch the ignition to ON (Engine off). • Inspect for continuity between the following terminals: ▪ KS terminal A (wiring harness-side) and body ground. ▪ KS terminal B (wiring harness-side) and body ground. • Are there continuity?	Yes	Repair or replace suspected part, then go to Step 9.
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Switch the ignition to 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 9.
		No	Go to the next step.
7	INSPECT KS (LH) CIRCUIT FOR OPEN CIRCUIT • Switch the ignition to off. • Inspect for continuity between the following terminals: ▪ KS terminal A (wiring harness-side) and PCM terminal 2AH (wiring harness-side) ▪ KS terminal B (wiring harness-side) and PCM terminal 2AD (wiring harness-side) • Are there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 9.
8	INSPECT THE KS (LH) • Inspect the KS (LH). (See KNOCK SENSOR (KS) INSPECTION [MZI 3.7 V6].)	Yes	Replace the KS, then go to the next step. (See KNOCK SENSOR (KS) REMOVAL/ INSTALLATION [MZI 3.7 V6] .)

	Is there malfunction?	No	Go to the next step.
9	VERIFY TROUBLESHOOTING OF DTC P0330:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Perform the KOEO or KOER self-test. (See KOEO/ KOER SELF TEST [MZI 3.7 V6].) - Is the PENDING CODE for the 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.
10	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.

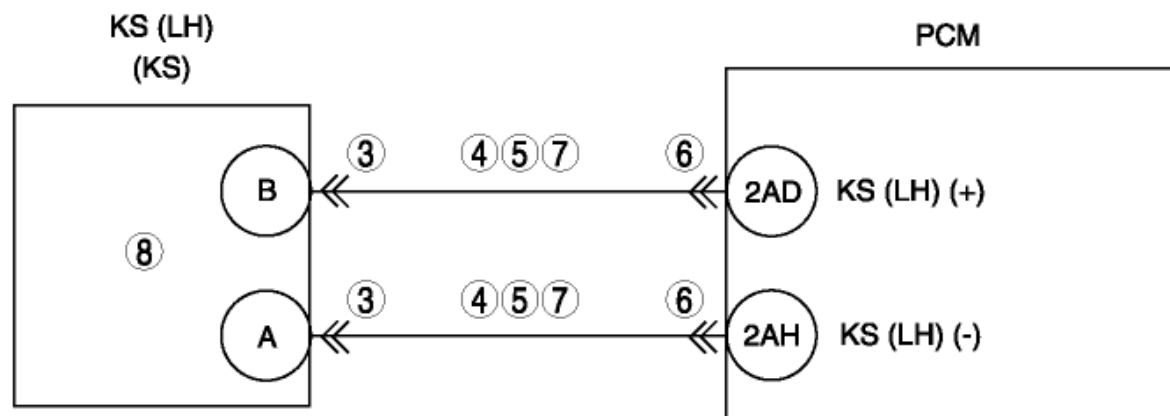
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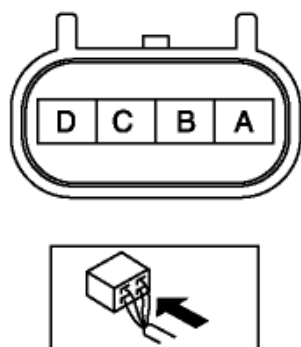
2012 - Mazda6 - Engine

DTC P0330:00 [MZI 3.7 V6]

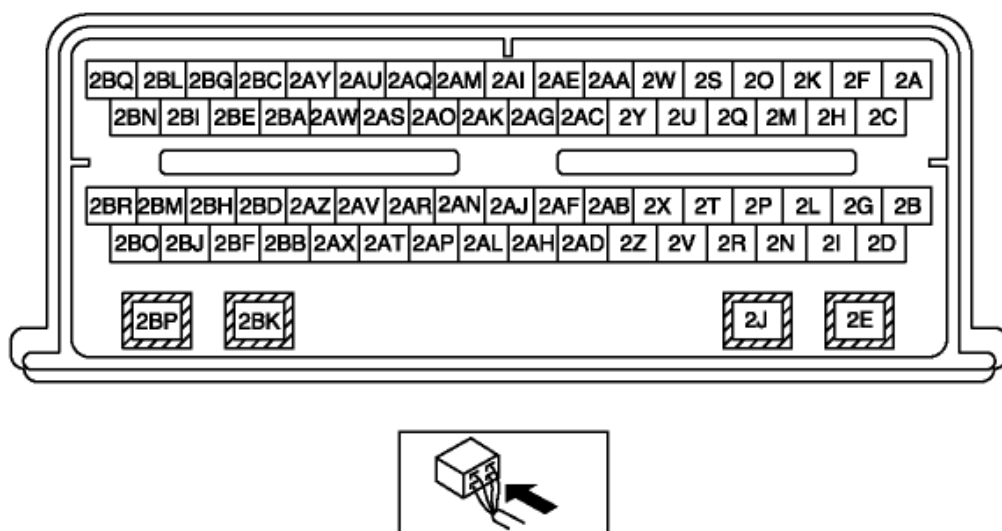
DTC P0330:00	KS circuit (LH)
DETECTION CONDITION	• The KS detects vibrations upon increase and decrease in engine RPM. The KS generates a voltage based on this vibration. A DTC is set if the voltage goes outside a calibrated level.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to power supply in wiring harness between KS terminal A and PCM terminal 2AH • Short to power supply in wiring harness between KS terminal B and PCM terminal 2AD • Short to ground circuit between KS terminal A and PCM terminal 2AH • Short to ground circuit between KS terminal B and PCM terminal 2AD • Open circuit wiring harness between KS terminal A and PCM terminal 2AH • Open circuit wiring harness between KS terminal B and PCM terminal 2AD • KS malfunction



KS
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. - 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 KS CONNECTOR FOR POOR CONNECTION Switch the ignition to off.	Yes Repair or replace suspected part, then go to Step 9.

	• Disconnect the KS connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Are there any malfunction?	No	Go to the next step.
4	INSPECT KS (LH) SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between the following terminals: ▪ KS terminal A (wiring harness-side) and body ground. ▪ KS terminal B (wiring harness-side) and body ground. • Are there voltage B+?	Yes	Repair or replace suspected part, then go to Step 9.
		No	Go to the next step.
5	INSPECT KS (LH) CIRCUIT FOR SHORT TO GROUND • Switch the ignition to ON (Engine off). • Inspect for continuity between the following terminals: ▪ KS terminal A (wiring harness-side) and body ground. ▪ KS terminal B (wiring harness-side) and body ground. • Are there continuity?	Yes	Repair or replace suspected part, then go to Step 9.
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Switch the ignition to 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 9.
		No	Go to the next step.
7	INSPECT KS (LH) CIRCUIT FOR OPEN CIRCUIT • Switch the ignition to off. • Inspect for continuity between the following terminals: ▪ KS terminal A (wiring harness-side) and PCM terminal 2AH (wiring harness-side) ▪ KS terminal B (wiring harness-side) and PCM terminal 2AD (wiring harness-side) • Are there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 9.
8	INSPECT THE KS (LH) • Inspect the KS (LH). (See KNOCK SENSOR (KS) INSPECTION [MZI 3.7 V6].)	Yes	Replace the KS, then go to the next step. (See KNOCK SENSOR (KS) REMOVAL/ INSTALLATION [MZI 3.7 V6] .)

	Is there malfunction?	No	Go to the next step.
9	VERIFY TROUBLESHOOTING OF DTC P0330:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Perform the KOEO or KOER self-test. (See KOEO/ KOER SELF TEST [MZI 3.7 V6].) - Is the PENDING CODE for the 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.
10	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.