

2012 - Mazda6 - Engine

DTC P1336:00 [MZI 3.7 V6]

DTC P1336:00	CKP/CMP sensor range/performance
DETECTION CONDITION	The input signal to the PCM from the CKP sensor or the CMP sensor is erratic.
POSSIBLE CAUSE	- Base engine malfunction - CKP sensor malfunction - CMP sensor malfunction - Connector or terminal 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	VERIFY RELATED PENDING CODE OR STORED DTC - Verify the related PENDING CODE or stored DTCs. - Are other DTCs present?	Yes Go to appropriate DTC inspection. (See DTC TABLE [MZI 3.7 V6] .)
		No Go to the next step.
	INSPECT THE CKP SENSOR SIGNAL SENT TO THE	

4	PCM NOTE: • The battery should be fully charged and the starting system should be functioning properly. • Connect the M-MDS to the DLC-2. • Access RPM PID. • Crank the engine. • Is the reading more than 150 rpm?	Yes	Go to Step 8.
		No	Go to the next step.
5	INSPECT THE FRONT COVER, CKP SENSOR AND CKP SENSOR PULSE WHEEL FOR OBVIOUS PHYSICAL DAMAGE • Switch the ignition off. • Visually inspect the front cover, CKP sensor and CKP sensor pulse wheel for obvious physical damage. • Do any parts appear physically damaged?	Yes	Repair if necessary, then go to Step 11.
		No	Go to the next step.
6	INSPECT CKP SENSOR CONNECTOR FOR POOR CONNECTION • Disconnect the CKP sensor 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 11.
		No	Go to the next step.
7	INSPECT CKP SENSOR • Inspect the CKP sensor. (See CRANKSHAFT POSITION (CKP) SENSOR INSPECTION [MZI 3.7 V6] .) • Is there any malfunction?	Yes	Replace the CKP sensor, then go to Step 11. (See CRANKSHAFT POSITION (CKP) SENSOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
8	INSPECT CMP SENSOR CONNECTOR FOR POOR CONNECTION • Disconnect the CMP sensor connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion).	Yes	Repair or replace suspected part, then go to Step 11.
		No	Go to the next step.

	Is there any malfunction?		
9	INSPECT CMP SENSOR Inspect the CMP sensor. (See CAMSHAFT POSITION (CMP) SENSOR INSPECTION [MZI 3.7 V6] .)	Yes	Replace the CMP sensor, then go to Step 11. (See CAMSHAFT POSITION (CMP) SENSOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .)
		No	Go to the next step.
10	INSPECT PCM CONNECTOR FOR POOR CONNECTION - Disconnect the PCM connector. - Inspect for poor connection (such as damaged/ pulled-out pins, corrosion). - Are any malfunction?	Yes	Repair or replace suspected part, then go to the next step.
		No	Go to the next step.
11	VERIFY TROUBLESHOOTING OF DTC P1336:00 HAS BEEN COMPLETED - Make sure to reconnect all disconnected connectors. - 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.
12	VERIFY AFTER REPAIR PROCEDURE Perform the "AFTER REPAIR PROCEDURE". (See AFTER REPAIR PROCEDURE [MZI 3.7 V6] .)	Yes	Go to the applicable DTC inspection. (See DTC TABLE [MZI 3.7 V6] .)
		No	Troubleshooting completed.
	Are any DTCs present?		

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4	PCM NOTE: • The battery should be fully charged and the starting system should be functioning properly. • Connect the M-MDS to the DLC-2. • Access RPM PID. • Crank the engine. • Is the reading more than 150 rpm?	Yes	Go to Step 8.
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		No	Go to the next step.
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		No	Go to the next step.
8	INSPECT CMP SENSOR CONNECTOR FOR POOR CONNECTION • Disconnect the CMP sensor connector. • Inspect for poor connection (such as damaged/ pulled-out pins, corrosion).	Yes	Repair or replace suspected part, then go to Step 11.
		No	Go to the next step.

	Is there any malfunction?		
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		No	Troubleshooting completed.
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