

2012 - Mazda6 - Engine

DTC P061C:00 [MZI 3.7 V6]

DTC P061C:00	Internal control module engine RPM performance
DETECTION CONDITION	Indicates that a calculation error occurred in the PCM.
POSSIBLE CAUSE	- CKP sensor malfunction - CKP sensor circuit is open or short. - CKP sensor circuit intermittent - PCM malfunction - CMP sensor circuit is open or short. - CMP sensor circuit intermittent - CMP 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. - 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 DTCs Switch the ignition off then to the ON	Yes Go to the appropriate DTC troubleshooting. (See DTC TABLE [MZI 3.7 V6] .)

	position (Engine off). • Verify related pending code or stored DTCs. • Are other DTCs present?		No Go to the next step.
4	INSPECT CKP SENSOR SIGNAL SENT TO PCM NOTE: • The battery should be fully charged and the starting system should be functioning properly. • Disable the inertia switch. • Switch the ignition ON (Engine off) • Access the PCM and monitor the RPM PID. • Crank the engine. • Is the RPM greater than 150 rpm?	Yes	Go to the next step.
		No	Inspect the CKP sensor or related harness. Repair or replace suspected part, then go to the next step.
5	INSPECT FOR CORRECT PCM OPERATION • Disconnect all the PCM connectors. • Visually inspect for: ▪ Pushed out pins ▪ Corrosion • Connect all the PCM connectors and verify that they seat correctly. • Retrieve DTCs using the M-MDS. • Is the PENDING CODE for this DTC present?	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/ INSTALLATION [MZI 3.7 V6].)
		No	Go to the next step.
6	VERIFY TROUBLESHOOTING OF DTC P061C:00 HAS BEEN COMPLETED • Verify that all disconnected connectors are reconnected. • Switch the ignition ON (Engine off). • 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].)	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.

	• Retrieve the DTCs using the M-MDS. • Is the PENDING CODE for this DTC present?		
7	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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