

2012 - Mazda6 - Engine

DTC P0457:00 [MZI 3.7 V6]

DTC P0457:00	Evaporative emission system leak detected (fuel cap loose/off)
DETECTION CONDITION	P0457:00 indicates that the initial vacuum could not be achieved after a refueling event and the purge vapor flow is excessive (gross leak).
POSSIBLE CAUSE	- Missing or loose fuel filler cap. - EVAP system leak - PCM 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 position (Engine off). - Verify related pending code or stored DTCs. - Are other DTCs present?	Yes Go to the appropriate DTC troubleshooting. (See DTC TABLE [MZI 3.7 V6] .)
		No Go to the next step.

	NOTE: If DTC P0455:00 is present, diagnose that DTC first.		
4	INSPECT FOR MISSING OR LEAKING FUEL FILLER CAP - Check for missing or loose fuel filler cap. - Check for possible cross-threaded fuel filler cap. - Is a concern present?	Yes	Repair or replace if necessary. Go to the next step.
		No	Go to Step 6.
5	EVAP SYSTEM LEAK TEST - Perform the EVAP system leak test. (See ENGINE CONTROL SYSTEM OPERATION INSPECTION [MZI 3.7 V6].) - Are the test results normal?	Yes	Go to the next step.
		No	Leakage still exists. Go to the P0455:00 Troubleshooting. (See DTC P0442:00, P0455:00, P0456:00 [MZI 3.7 V6] .)
6	VERIFY TROUBLESHOOTING OF DTC P0457:00 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. - Start the engine and run it at idle. - Retrieve DTCs using the M-MDS. - Is the PENDING CODE for this 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.
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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