

2012 - Mazda6 - Engine

DTC P1450:00 [MZR 2.5]

DTC P1450:00	Unable to bleed up fuel tank vacuum
DETECTION CONDITION	- P1450:00 indicates the Self Test has detected that the EVAP system is unable to bleed up fuel tank vacuum. Diagnostic support note - This is an intermittent monitor (EVAP system). - The MIL illuminates if the PCM detects the above malfunction conditions in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM. - PENDING CODE is available if the PCM detects the above malfunction condition during first drive cycle. - FREEZE FRAME DATA (Mode 2)/Snapshot data is available. - The DTC is stored in the PCM memory.
POSSIBLE CAUSE	- Excessive fuel tank vacuum - Kinks or bends in the fuel vapor hoses and tubes - Charcoal canister inlet port, CV solenoid valve, EVAP dust separator or outlet hose for contamination or foreign material - CV solenoid valve malfunction - Stuck open or close - Fuel tank pressure sensor malfunction (built-in evaporative hose component) - PCM malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA (MODE 2)/ SNAPSHOT DATA AND DIAGNOSTIC MONITORING TEST RESULTS HAVE BEEN	YesGo to the next step.

	RECORDED Have the FREEZE FRAME DATA (Mode 2)/snapshot data and DIAGNOSTIC MONITORING TEST RESULTS (EVAP system related) been recorded?	No	Record the FREEZE FRAME DATA (Mode 2)/snapshot data and DIAGNOSTIC MONITORING TEST RESULTS 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 repair information available?	Yes	Perform repair or diagnosis according to the available repair information. If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	VERIFY RELATED PENDING AND STORED DTC - Switch the ignition to off, then to ON (engine off). - Verify pending and stored DTCs using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5] .) - Are any other DTCs present?	Yes	Go to the applicable DTC inspection. (See DTC TABLE [MZR 2.5] .)
		No	Go to the next step.
4	INSPECT FUEL TANK VACUUM - Verify kinks or bends in the fuel vapor hoses and tubes. - Visually inspect the charcoal canister inlet port, CV solenoid valve, EVAP dust separator or outlet hose for contamination or foreign material. - Is a concern evident?	Yes	Remove any contamination or foreign material around fuel vapor hoses and tubes. Repair the hoses, tubes or components if necessary, then go to Step 9.
		No	Go to the next step.
5	PERFORM EVAP SYSTEM LEAK INSPECTION - Connect the leak tester to the fuel filler pipe. - Switch the ignition to ON (engine off). - Access the EVAPCV PID using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5] .) - Close the CV solenoid valve. - Pressurize the EVAP system to	Yes	Go to the next step.
		No	Replace the CV solenoid valve if necessary, then go to Step 9. (See CHARCOAL CANISTER, CANISTER VENT (CV) SOLENOID VALVE, AIR FILTER COMPONENT REMOVAL/ INSTALLATION [MZR 2.5] .)

	3.48 kPa { 26.1 mmHg, 1.03 inHg} . Does the pressure reach 3.48 kPa { 26.1 mmHg, 1.03 inHg} ?		
6	INSPECT CV SOLENOID VALVE - Switch the ignition to ON (engine off). - Access the EVAPCV PID using the M-MDS. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) - Open the CV solenoid valve. - Does the pressure drop immediately?	YesGo to the next step. No Replace the CV solenoid valve if necessary, then go to Step 9. (See CHARCOAL CANISTER, CANISTER VENT (CV) SOLENOID VALVE, AIR FILTER COMPONENT REMOVAL/ INSTALLATION [MZR 2.5].)	
7	INSPECT FUEL TANK PRESSURE SENSOR - Disconnect the charcoal canister outlet tube at the charcoal canister. - Switch the ignition to ON (engine off). - Select the Diagnostic Data Link using the M-MDS. - Select the PCM. - Access the FTP PID and record the reading. (See ON-BOARD DIAGNOSTIC TEST [MZR 2.5].) - Is the reading between 2.4 to 2.8 V?	YesGo to the next step. No Replace the evaporative hose component, then go to Step 9. (See FUEL TANK REMOVAL/ INSTALLATION [MZR 2.5].)	
8	PERFORM EVAP SYSTEM LEAK INSPECTION - Reconnect the disconnected connectors and hoses. - Perform the EVAP system leak Inspection. (See ENGINE CONTROL SYSTEM OPERATION INSPECTION [MZR 2.5].) - Is the test result normal?	YesGo to the next step. No Leakage still exists. - Locate the leak point and repair. - Repeat this step.	
9	VERIFY DTC TROUBLESHOOTING COMPLETED Make sure to reconnect all	YesRepeat the inspection from Step 1.	

	disconnected connectors. • Clear the DTC from the PCM memory using the M-MDS. (See AFTER REPAIR PROCEDURE [MZR 2.5].) • Perform the Drive Mode 06 (EVAP System Repair Verification Drive Mode). (See OBD-II DRIVE MODE [MZR 2.5].) • Is the PENDING CODE for this DTC present?		• If the malfunction recurs, replace the PCM. (See PCM REMOVAL/ INSTALLATION [MZR 2.5].) 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 [MZR 2.5].) • Are any DTCs present?	Yes	Go to the applicable DTC inspection.
		No	DTC troubleshooting completed.

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		No	Go to the next step.
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		No	Replace the CV solenoid valve if necessary, then go to Step 9. (See CHARCOAL CANISTER, CANISTER VENT (CV) SOLENOID VALVE, AIR FILTER COMPONENT REMOVAL/ INSTALLATION [MZR 2.5] .)

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		No	Go to the next step.
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