

2012 - Mazda6 - Engine

DTC P0114:00 [MZI 3.7 V6]

DTC P0114:00	IAT sensor Intermittent/erratic
DETECTION CONDITION	Indicates the sensor signal was intermittent during the CCM.
POSSIBLE CAUSE	- Connector or terminal malfunction - IAT sensor malfunction - Harness malfunction

Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED Has FREEZE FRAME DATA been recorded?	YesGo to the next step.
		NoRecord 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?	YesPerform repair or diagnosis according to the available Service Bulletins. If the vehicle is not repaired, go to the next step.
		NoGo to the next step.
3	INSPECT CONNECTOR FOR POOR CONNECTION - Switch the ignition to off. - Disconnect the PCM connector and IAT sensor connectors. - Inspect for poor connection (such as damaged, pulled-out pins, and corrosion).	YesGo to the next step.
		NoRepair or replace suspected part, then go to Step 6.

	Is there any malfunction?		
4	INTERMITTENT INSPECTION - Switch the ignition to ON (Engine off). - Access the PCM and monitor the IAT PID. - While observing the PID, perform the following: - Tap on the sensor to simulate road shock - Wiggle the sensor connector - Is there a large change in the voltage reading?	Yes	Inspect the IAT sensor. (See INTAKE AIR TEMPERATURE (IAT) SENSOR INSPECTION [MZI 3.7 V6] .) Replace if necessary, then go to Step 6.
		No	Go to the next step.
5	INSPECT ELECTRONIC ENGINE CONTROL WIRING HARNESS - Access the PCM and monitor the IAT PID. - While observing the PID, wiggle, shake, and bend small sections of the wiring harness while working from the sensor to the PCM. - Is there a large change in the voltage reading?	Yes	Repair if necessary, then go to Step 6.
		No	Go to the next step.
6	VERIFY TROUBLESHOOTING OF DTC P0114:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Switch the ignition to 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".	Yes	Go to the applicable DTC inspection. (See DTC TABLE [MZI 3.7 V6] .)
		No	Troubleshooting completed.

	(See AFTER REPAIR PROCEDURE [MZI 3.7 V6] .)		
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- Are any DTCs present?

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