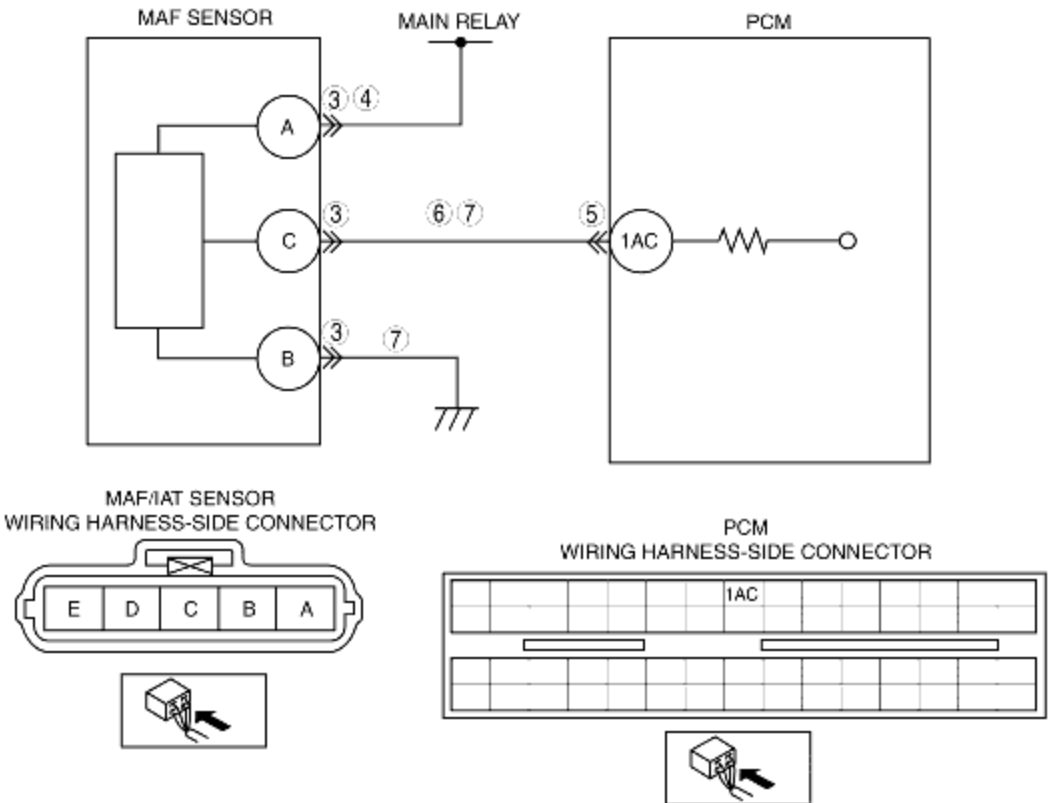


DTC P0102 [LF]

B3E010201084W06

DTC P0102	MAF sensor circuit low input
DETECTION CONDITION	<ul style="list-style-type: none"> The PCM monitors input voltage from the MAF sensor when the engine running. If the input voltage at PCM terminal 1AC is below 0.21 V, the PCM determines that the MAF circuit has malfunction. Diagnostic support note This is a continuous monitor (CCM). The MIL illuminates if the PCM detects the above malfunction condition during first drive cycle. PENDING CODE is available if the PCM detects the above malfunction condition. FREEZE FRAME DATA is available. DTC is stored in the PCM memory.
POSSIBLE CAUSE	<ul style="list-style-type: none"> MAF sensor malfunction Connector or terminal malfunction Short to ground in wiring harness between MAF/IAT sensor terminal C and PCM terminal 1AC Open circuit in wiring harness between MAF/IAT sensor terminal C and PCM terminal 1AC Open circuit in wiring harness between main relay and MAF/IAT sensor terminal A
	

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 the FREEZE FRAME DATA on the repair order, then go to the next step.
	VERIFY RELATED REPAIR INFORMATION	Perform repair or diagnosis according to the

2	AVAILABILITY • Verify related service repair information availability. • Is any related repair information available?	Yes	available repair information. • If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT POOR CONNECTION OF MAF SENSOR CONNECTOR • Turn the ignition switch off. • Disconnect the MAF/IAT sensor connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion.) • Is there any malfunction?	Yes	Repair or replace the terminals, then go to Step 8.
		No	Go to the next step.
4	INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT • Turn the ignition switch to the ON position (Engine off). • Inspect voltage at the MAF/IAT sensor terminal A (wiring harness-side). • Is the voltage B+ ?	Yes	Go to the next step.
		No	Inspect for open circuit in wiring harness between MAF/IAT sensor terminal A (wiring harness-side) and main relay. Repair or replace wiring harness, then go to Step 8.
5	INSPECT POOR CONNECTION OF PCM CONNECTOR • Turn the ignition switch off. • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion.) • Is there any malfunction?	Yes	Repair the terminal, then go to Step 8.
		No	Go to the next step.
6	INSPECT MAF SENSOR SIGNAL CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between MAF/IAT sensor terminal C (wiring harness-side) and PCM terminal 1AC (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness, then go to Step 8.
7	INSPECT MAF SENSOR SIGNAL CIRCUIT FOR SHORTS • Inspect for continuity between following terminals: - MAF/IAT sensor terminal C (wiring harness-side) and body ground - MAF/IAT sensor connector terminal C (wiring harness-side) and B (wiring harness-side) • Is there continuity?	Yes	Repair or the wiring harness, then go to the next step.
		No	Replace the MAF/IAT sensor, then go to the next step.
8	VERIFY TROUBLESHOOTING OF DTC P0102 COMPLETED • Make sure to reconnect all disconnected connectors. • Clear the DTC from the memory using the WDS or equivalent. • Start the engine. • Is the same DTC present?	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [LF] .)
		No	Go to the next step.
9	VERIFY AFTER REPAIR PROCEDURE • Perform the "After Repair Procedure". (See AFTER REPAIR PROCEDURE [LF] .) • Are any DTC present?	Yes	Go to the applicable DTC troubleshooting. (See DTC TABLE [LF] .)
		No	Troubleshooting completed.