

2012 - Mazda6 - Engine

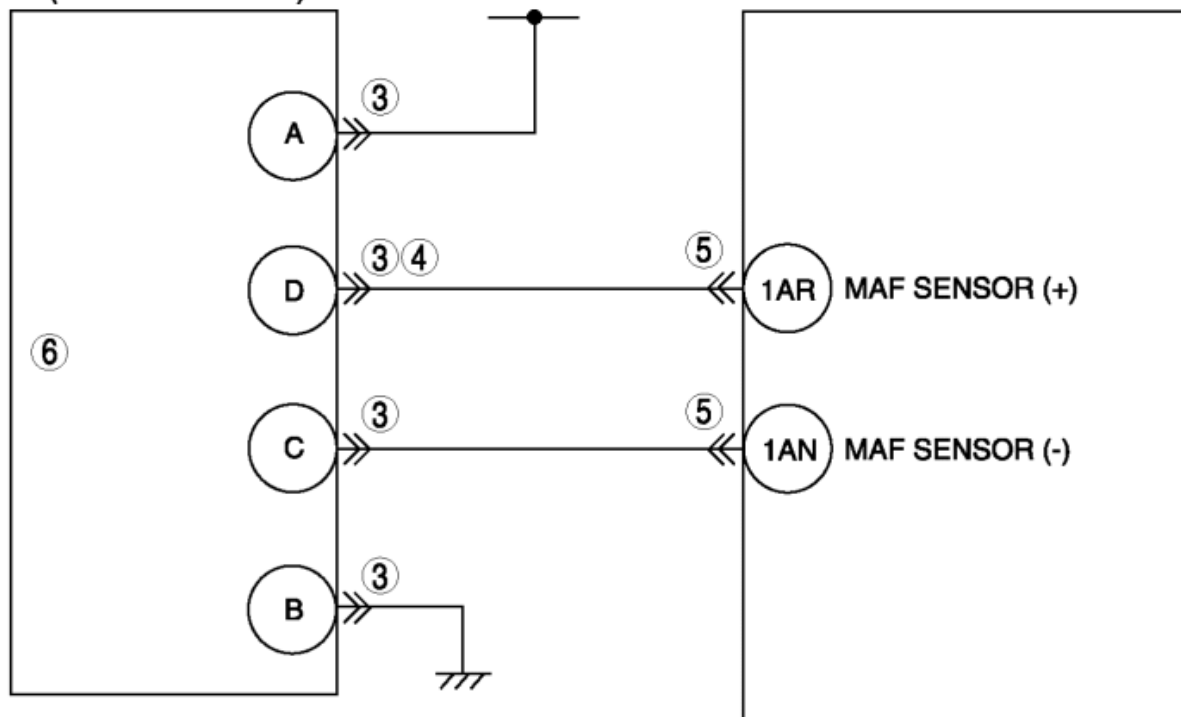
DTC P0103:00 [MZI 3.7 V6]

DTC P0103:00	MAF circuit high input
DETECTION CONDI TION	The MAF sensor circuit is monitored by the PCM for high air flow (or voltage) input through the CCM. If during KOEO, or KOER, the air flow (or voltage) changes above a maximum calibrated limit, the test fails.
POSSIBLE CAUSE	- Connector or terminal malfunction - Short to power supply in wiring harness between MAF sensor terminal D and PCM terminal 1AR - MAF sensor malfunction

MAF SENSOR (MAF/IAT SENSOR)

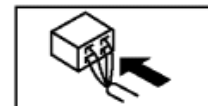
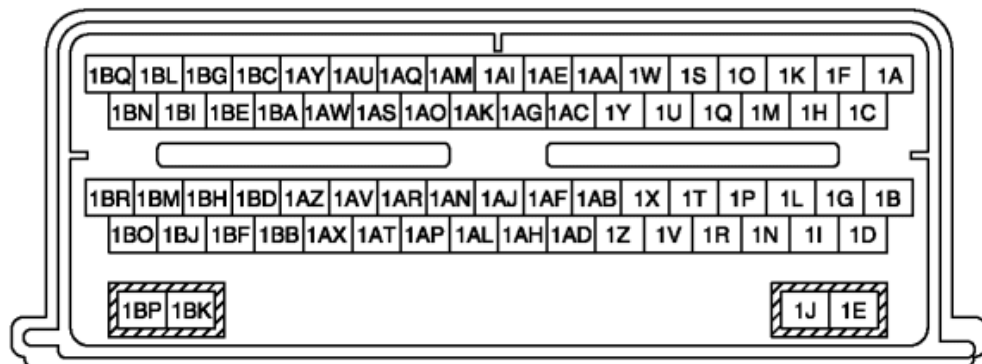
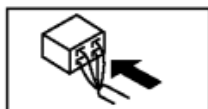
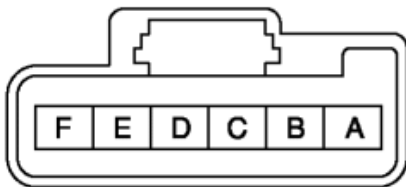
MAIN RELAY

PCM



PCM WIRING HARNESS-SIDE CONNECTOR

MAF/IAT SENSOR WIRING HARNESS-SIDE CONNECTOR



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED	YesGo to the next step.
	• Has FREEZE FRAME DATA been recorded?	No Record FREEZE FRAME DATA on the repair order, then go to the next step.
2	VERIFY RELATED REPAIR INFORMATION AVAILABILITY	YesPerform repair or diagnosis according to the available Service Bulletins.

	• Verify related Service Bulletins and/or on-line repair information availability. • Is any related Service Bulletins available?	• If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT MAF SENSOR CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Disconnect the MAF/IAT sensor connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Are there any malfunction?	Yes Repair or replace suspected part, then go to Step 7. No Go to the next step.
4	INSPECT MAF SIGNAL CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure voltage between MAF sensor terminal D (wiring harness-side) and body ground. • Is voltage B+?	No Repair or replace suspected part, then go to Step 7. Yes Go to the next step.
5	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Are there any malfunction?	No Repair or replace suspected part, then go to Step 7. Yes Go to the next step.
6	INSPECT THE MAF SENSOR • Inspect the MAF sensor. (See MASS AIR FLOW (MAF) SENSOR INSPECTION [MZI 3.7 V6].) • Is there malfunction?	Yes Replace the MAF/IAT sensor (See MASS AIR FLOW (MAF)/ INTAKE AIR TEMPERATURE (IAT) SENSOR REMOVAL/ INSTALLATION [MZI 3.7 V6] .), then go to Step 7. No Go to the next step.
7	VERIFY TROUBLESHOOTING OF DTC P0103:00 HAS BEEN COMPLETED • Verify that all disconnected connectors reconnected.	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.

	• Switch the ignition to ON (Engine off). • Clear the DTC from the PCM memory using the M-MDS. • Start engine and warm it up completely. • Is same DTC present?	No	Go to the next step.
8	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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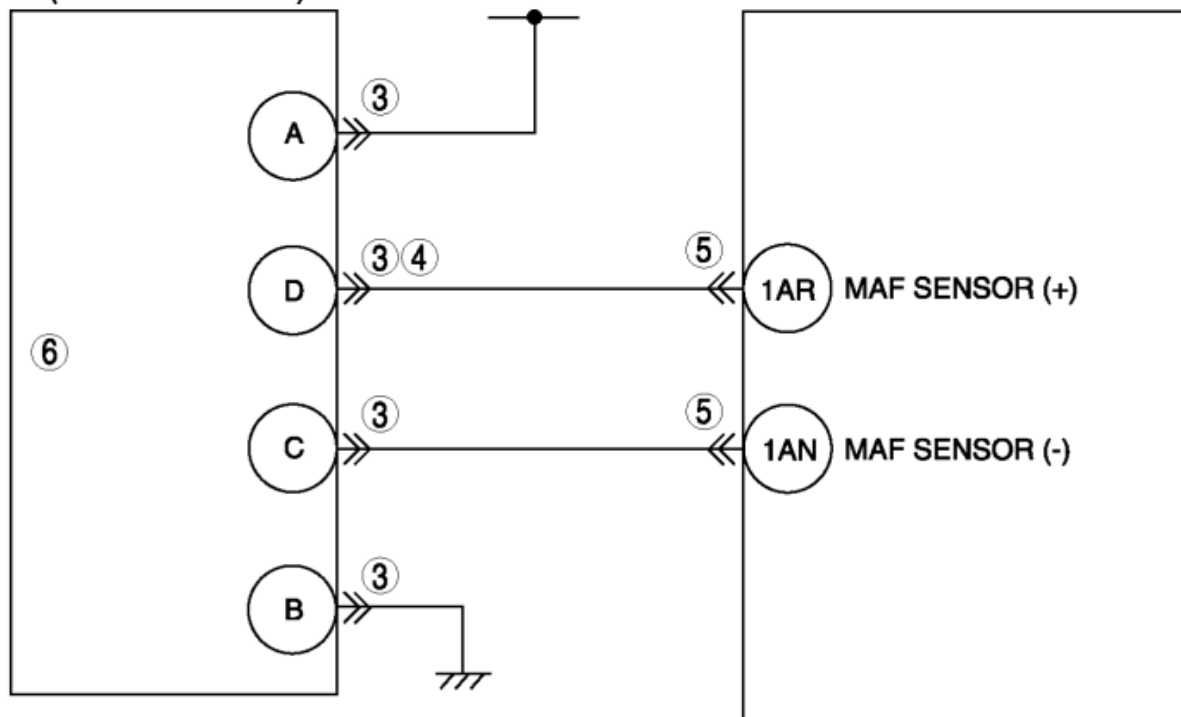
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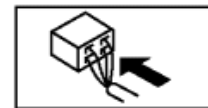
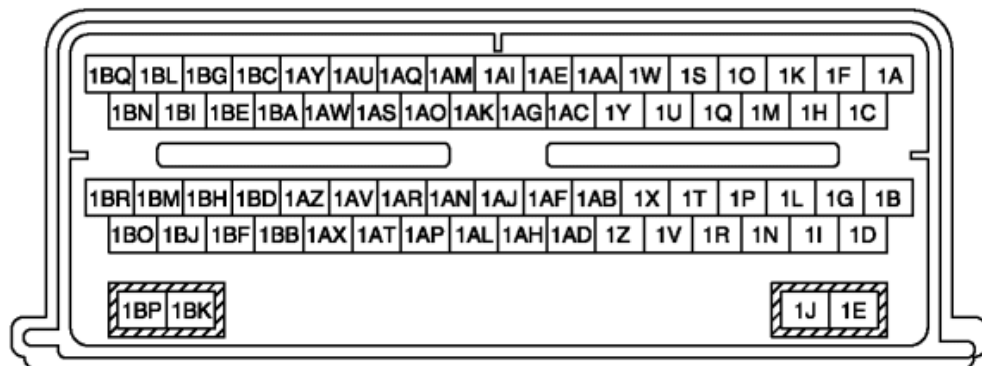
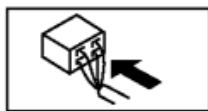
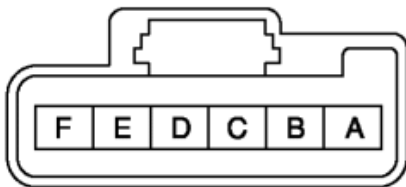
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