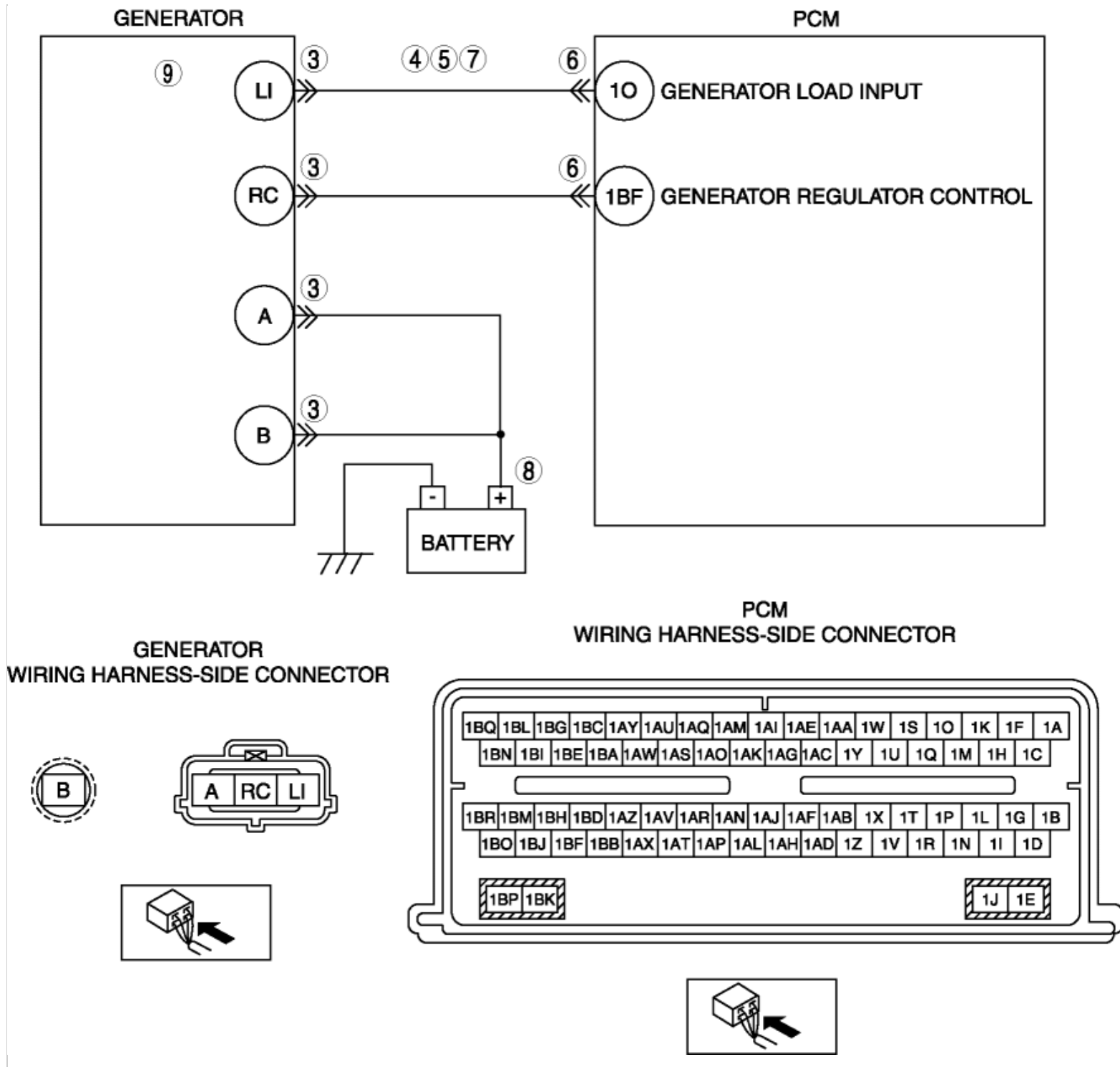


2012 - Mazda6 - Engine

DTC P065B:00 [MZI 3.7 V6]

DTC P065B:00	Generator control circuit range/performance
DETECTION CONDITION	• The PCM reads the generator and sends a DTC through the network when the generator indicates a concern.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to power supply between generator terminal LI and PCM terminal 10 • Short to ground between generator terminal LI and PCM terminal 10 • Open circuit between generator terminal LI and PCM terminal 10 • Generator malfunction • 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	Yes Perform repair or diagnosis according to the available Service Bulletins.

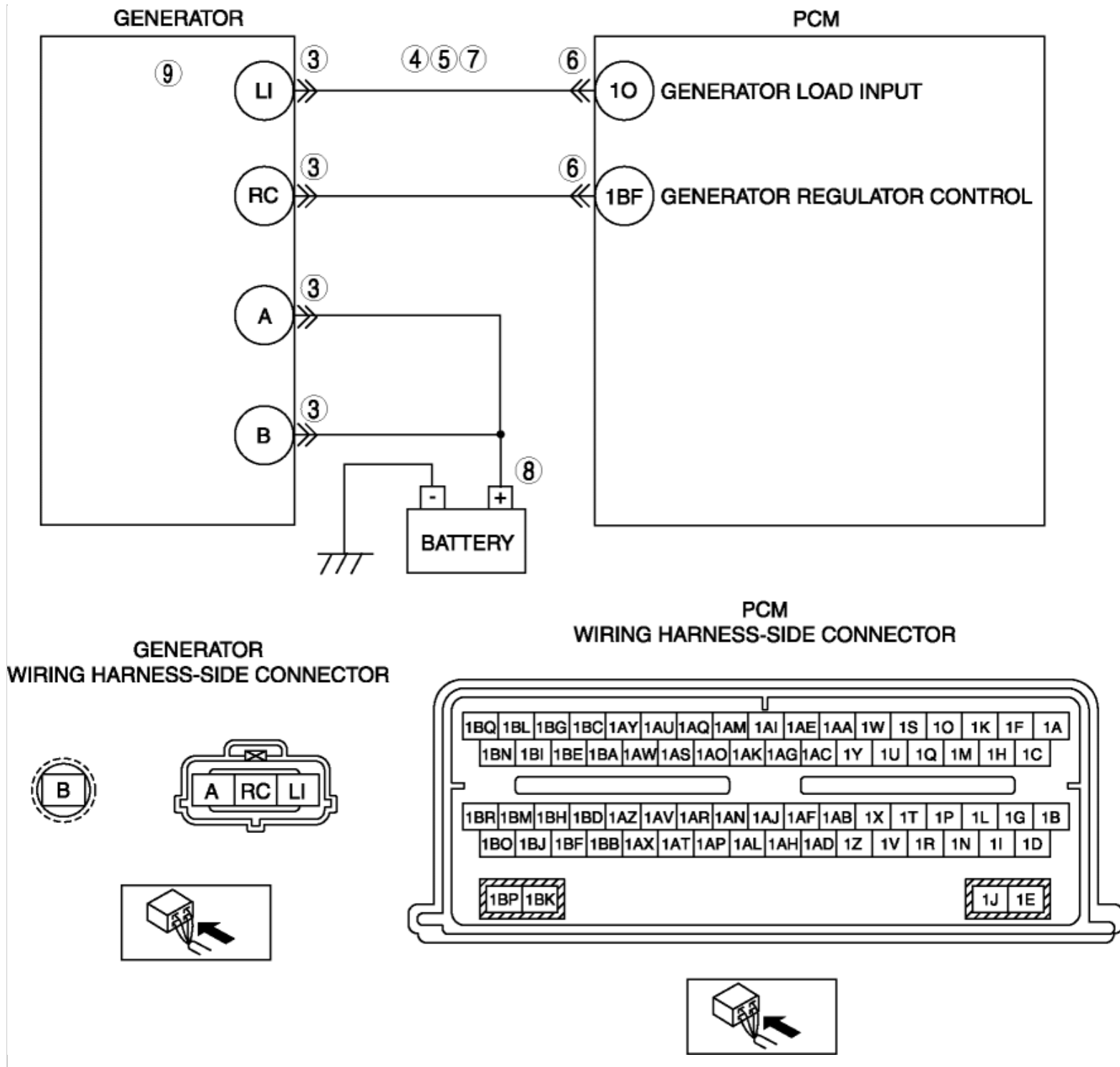
	• Verify related Service Bulletins and/or on-line repair information availability. • Is any related Service Bulletins available?		• If the vehicle is not repaired, go to the next step.
		No	Go to the next step.
3	INSPECT GENERATOR CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Disconnect the generator 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 10.
		No	Go to the next step.
4	INSPECT GENERATOR CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between generator terminal LI (wiring harness-side) and body ground. • Is the voltage B+ ?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
5	INSPECT GENERATOR CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between generator terminal LI (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace suspected part, then go to the next step.
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Inspect for poor connection (such as damaged/pulled-out terminals, corrosion). • Are there any malfunction?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
7	INSPECT GENERATOR CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between generator terminal LI (wiring harness-side) and PCM terminal 1O (wiring harness-side) • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
8	INSPECT BATTERY POSITIVE TERMINAL FOR POOR INSTALLATION • Switch the ignition to off. • Inspect the battery positive terminal for looseness. • Is there any malfunction?	Yes	Connect the battery positive terminal correctly, then go to Step 10.
		No	Go to the next step.

9	INSPECT GENERATOR - Inspect the generator. (See GENERATOR INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes	Replace the generator, then go to the next step.
		No	Go to the next step.
10	VERIFY TROUBLESHOOTING OF DTC P065B:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Perform the KOEO or KOER self-test. (See KOEO/ KOER SELF TEST [MZI 3.7 V6].) - 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.
11	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.

2012 - Mazda6 - Engine

DTC P065B:00 [MZI 3.7 V6]

DTC P065B:00	Generator control circuit range/performance
DETECTION CONDITION	• The PCM reads the generator and sends a DTC through the network when the generator indicates a concern.
POSSIBLE CAUSE	• Connector or terminal malfunction • Short to power supply between generator terminal LI and PCM terminal 10 • Short to ground between generator terminal LI and PCM terminal 10 • Open circuit between generator terminal LI and PCM terminal 10 • Generator malfunction • 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	Yes Perform 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 GENERATOR CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Disconnect the generator 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 10.
		No	Go to the next step.
4	INSPECT GENERATOR CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between generator terminal LI (wiring harness-side) and body ground. • Is the voltage B+ ?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
5	INSPECT GENERATOR CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between generator terminal LI (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace suspected part, then go to the next step.
		No	Go to the next step.
6	INSPECT PCM CONNECTOR FOR POOR CONNECTION • Switch the ignition to off. • Inspect for poor connection (such as damaged/pulled-out terminals, corrosion). • Are there any malfunction?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
7	INSPECT GENERATOR CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between generator terminal LI (wiring harness-side) and PCM terminal 1O (wiring harness-side) • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace suspected part, then go to Step 10.
8	INSPECT BATTERY POSITIVE TERMINAL FOR POOR INSTALLATION • Switch the ignition to off. • Inspect the battery positive terminal for looseness. • Is there any malfunction?	Yes	Connect the battery positive terminal correctly, then go to Step 10.
		No	Go to the next step.

9	INSPECT GENERATOR - Inspect the generator. (See GENERATOR INSPECTION [MZI 3.7 V6].) - Is there any malfunction?	Yes	Replace the generator, then go to the next step.
		No	Go to the next step.
10	VERIFY TROUBLESHOOTING OF DTC P065B:00 HAS BEEN COMPLETED - Verify that all disconnected connectors reconnected. - Clear the DTC from the PCM memory using the M-MDS. - Perform the KOEO or KOER self-test. (See KOEO/ KOER SELF TEST [MZI 3.7 V6].) - 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.
11	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.