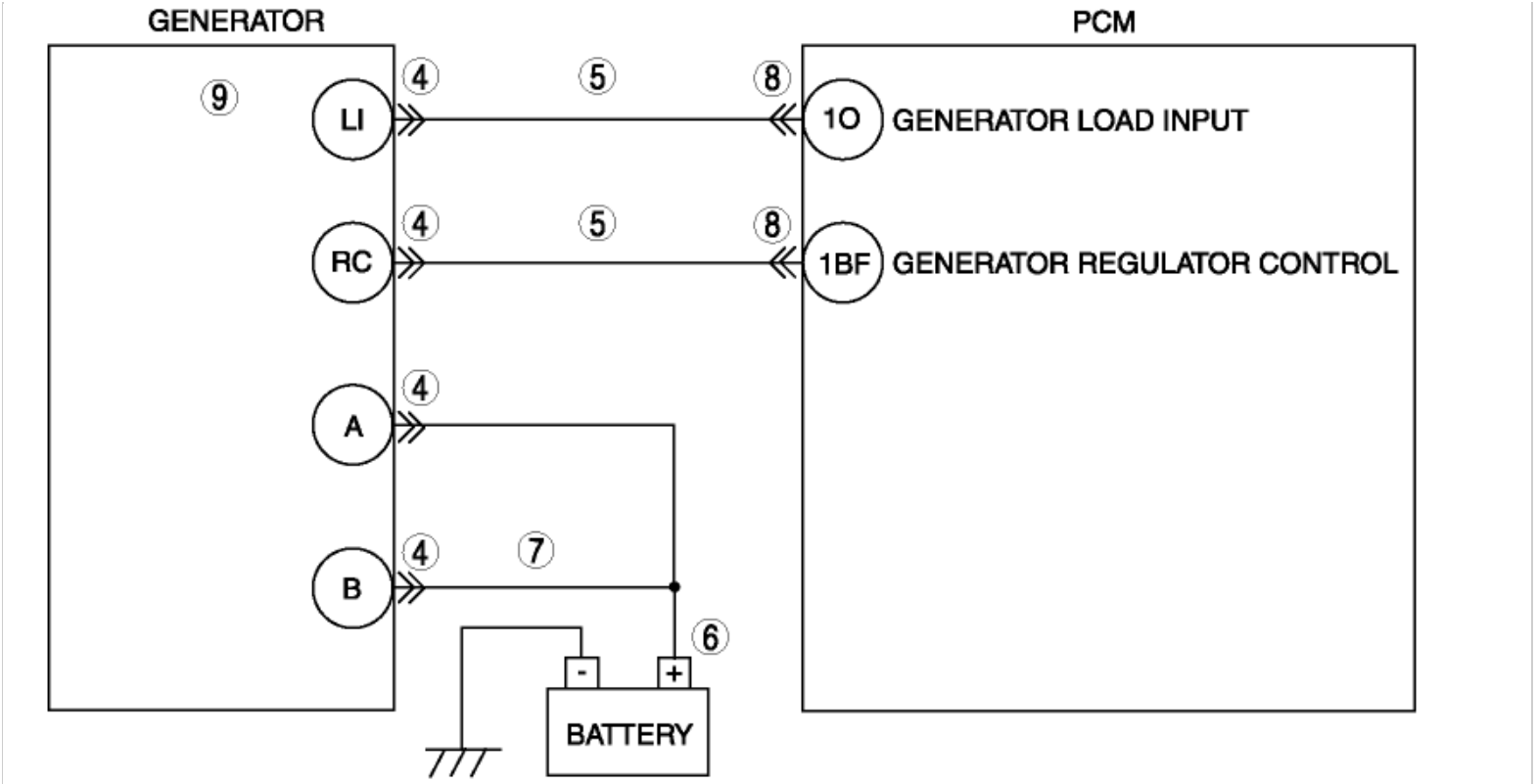
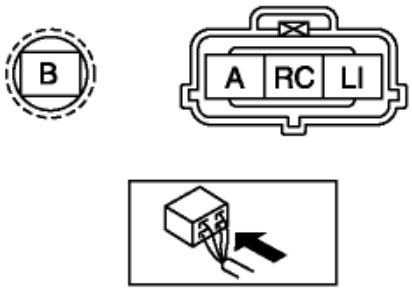
2012 - Mazda6 - Engine

DTC P0625:00 [MZI 3.7 V6]

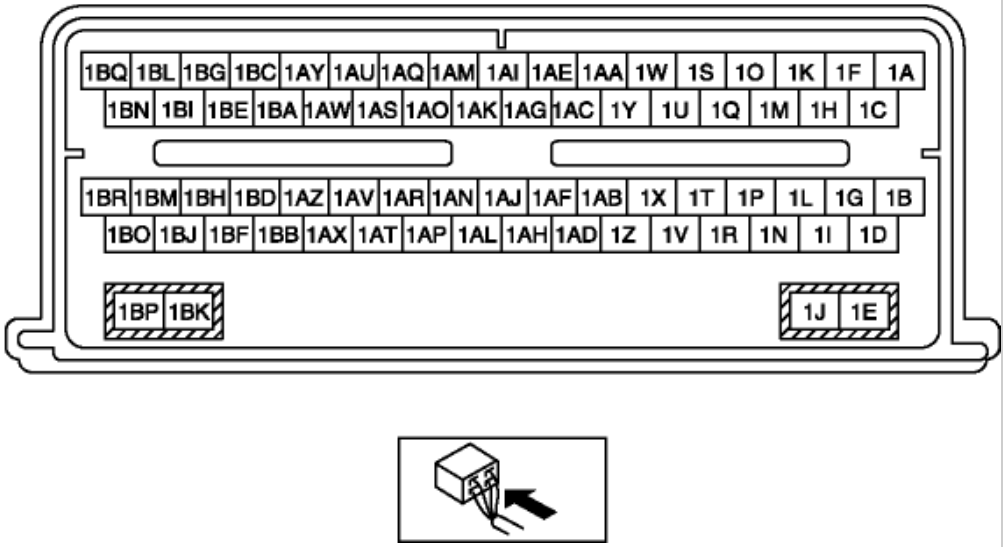
DTC P0625:00	Generator field terminal circuit low
DETECTION CONDITION	• The PCM monitors generator load from the generator/regulator in the form of frequency. The concern indicates the input is lower than the load should be in normal operation. The load input could be low when no generator output exists.
POSSIBLE CAUSE	• Drive belt damaged • Short to ground between generator terminal RC and PCM terminal 1BF • Short to ground between generator terminal LI and PCM terminal 1O • Connector or terminal malfunction • Open circuit between terminal B and battery positive terminal • Low system voltage • Generator malfunction



GENERATOR
WIRING HARNESS-SIDE CONNECTOR



PCM
WIRING HARNESS-SIDE CONNECTOR



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 DRIVE BELT DAMAGED** • Verify inspect the drive belt for damage. • Is the drive belt normal?	Yes	Go to the next step.
		No	Replace the drive belt, then go to Step 10. (See **DRIVE BELT REMOVAL/ INSTALLATION [MZI 3.7 V6]**.)
4	**INSPECT GENERATOR TERMINAL FOR POOR INSTALLATION** • Switch the ignition off. • Inspect generator terminal B for looseness. • Are there any malfunction?	Yes	Connect generator terminal B correctly, then go to Step 10.
		No	Go to the next step.
5	**INSPECT GENERATOR CIRCUIT FOR SHORT TO GROUND** • Inspect for continuity between the following terminal: ▪ Generator terminal RC (wiring harness–side) and body ground. ▪ Generator terminal LI (wiring harness–side) and body ground. • Are there continuity?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
6	**INSPECT BATTERY POSITIVE TERMINAL FOR POOR INSTALLATION** • Switch the ignition 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.
7	**INSPECT GENERATOR CIRCUIT FOR OPEN CIRCUIT** • Inspect the continuity between generator terminal B (wiring harness-side) and battery positive terminal (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 PCM CONNECTOR FOR POOR CONNECTION** • Switch the ignition 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.

9	**INSPECT GENERATOR** • Inspect the generator. (See **GENERATOR INSPECTION [MZI 3.7 V6]**.) • Is there any malfunction?	Yes	Replace the generator, then go to Step 10. (See **GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6]**.)
		No	Go to the next step.
10	**VERIFY TROUBLESHOOTING OF DTC P0625:00 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 the 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.

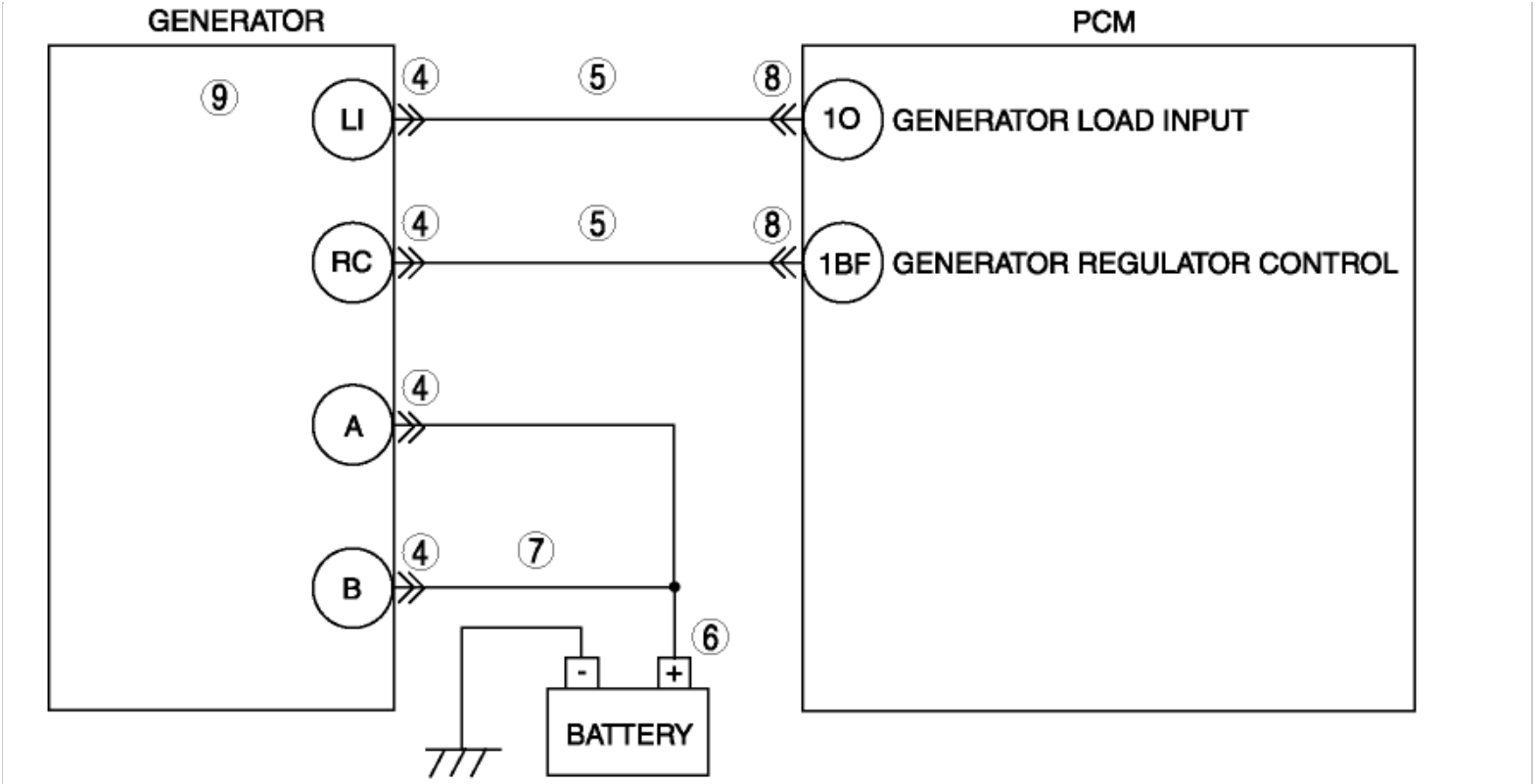
< Previous **Next >**

Back to Top

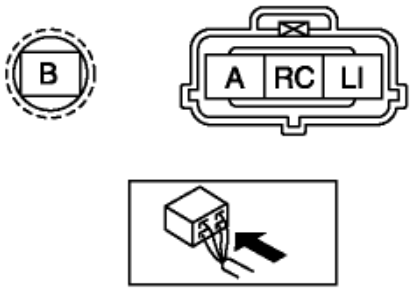
2012 - Mazda6 - Engine

DTC P0625:00 [MZI 3.7 V6]

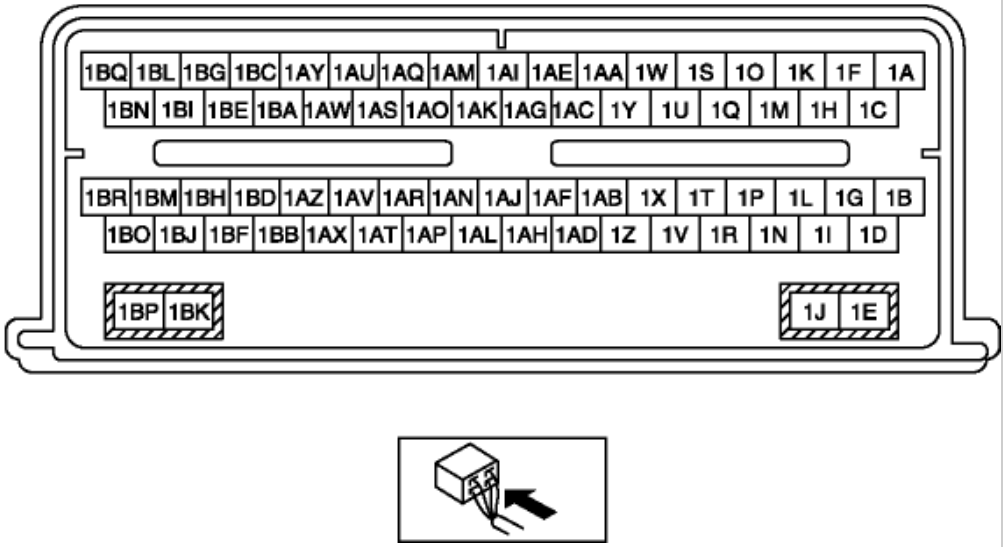
DTC P0625:00	Generator field terminal circuit low
DETECTION CONDITION	• The PCM monitors generator load from the generator/regulator in the form of frequency. The concern indicates the input is lower than the load should be in normal operation. The load input could be low when no generator output exists.
POSSIBLE CAUSE	• Drive belt damaged • Short to ground between generator terminal RC and PCM terminal 1BF • Short to ground between generator terminal LI and PCM terminal 1O • Connector or terminal malfunction • Open circuit between terminal B and battery positive terminal • Low system voltage • Generator malfunction



GENERATOR
WIRING HARNESS-SIDE CONNECTOR



PCM
WIRING HARNESS-SIDE CONNECTOR



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 DRIVE BELT DAMAGED** • Verify inspect the drive belt for damage. • Is the drive belt normal?	Yes	Go to the next step.
		No	Replace the drive belt, then go to Step 10. (See **DRIVE BELT REMOVAL/ INSTALLATION [MZI 3.7 V6]**.)
4	**INSPECT GENERATOR TERMINAL FOR POOR INSTALLATION** • Switch the ignition off. • Inspect generator terminal B for looseness. • Are there any malfunction?	Yes	Connect generator terminal B correctly, then go to Step 10.
		No	Go to the next step.
5	**INSPECT GENERATOR CIRCUIT FOR SHORT TO GROUND** • Inspect for continuity between the following terminal: ▪ Generator terminal RC (wiring harness–side) and body ground. ▪ Generator terminal LI (wiring harness–side) and body ground. • Are there continuity?	Yes	Repair or replace suspected part, then go to Step 10.
		No	Go to the next step.
6	**INSPECT BATTERY POSITIVE TERMINAL FOR POOR INSTALLATION** • Switch the ignition 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.
7	**INSPECT GENERATOR CIRCUIT FOR OPEN CIRCUIT** • Inspect the continuity between generator terminal B (wiring harness-side) and battery positive terminal (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 PCM CONNECTOR FOR POOR CONNECTION** • Switch the ignition 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.

9	**INSPECT GENERATOR** • Inspect the generator. (See **GENERATOR INSPECTION [MZI 3.7 V6]**.) • Is there any malfunction?	Yes	Replace the generator, then go to Step 10. (See **GENERATOR REMOVAL/ INSTALLATION [MZI 3.7 V6]**.)
		No	Go to the next step.
10	**VERIFY TROUBLESHOOTING OF DTC P0625:00 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 the 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.

< Previous **Next >**

Back to Top