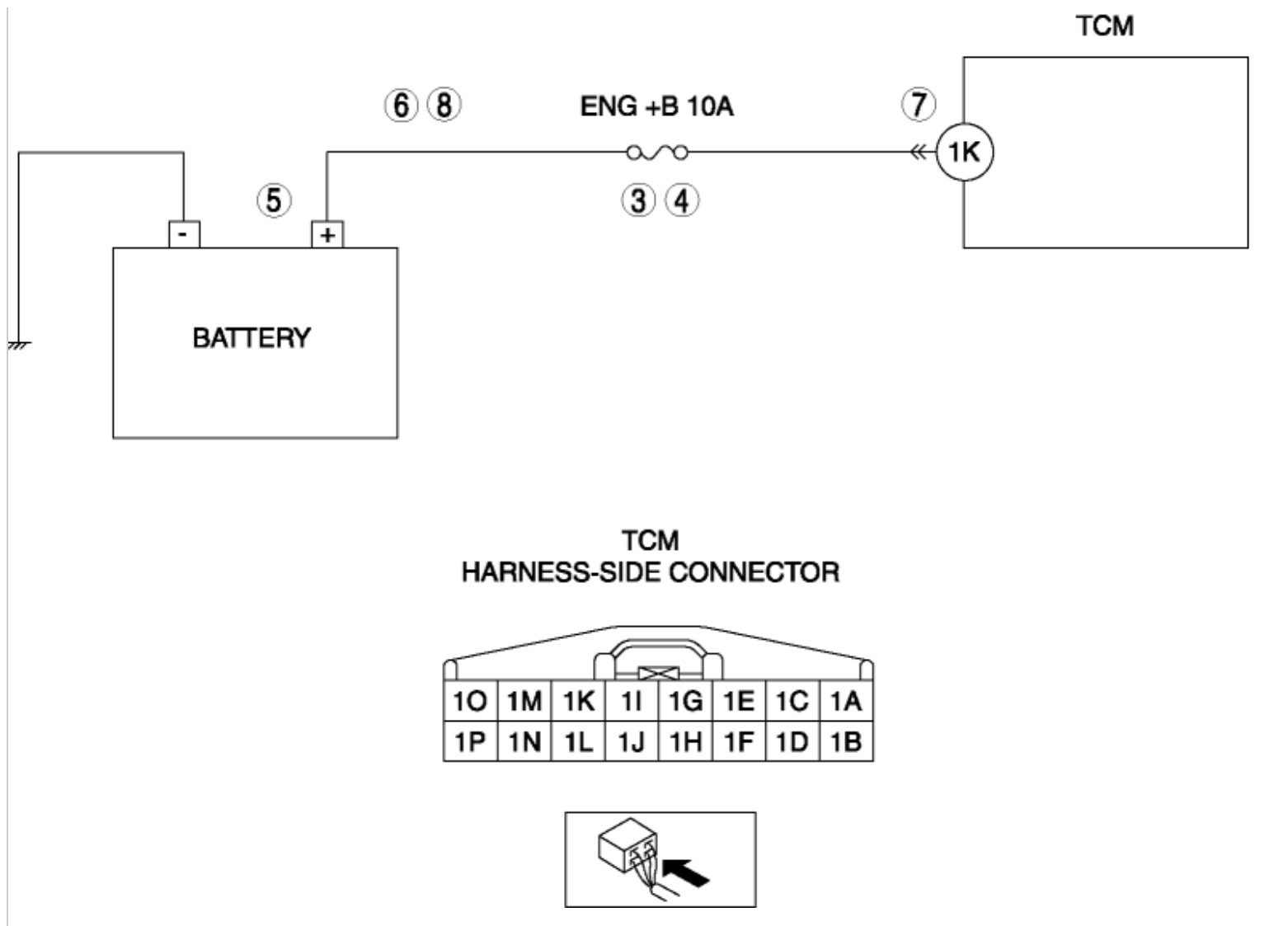


2012 - Mazda6 - Transmission/ Transaxle

DTC P0882:00 [FS5A-EL]

DTC P0882:00	Battery back-up voltage low
DETECTION CONDITION	• The TCM detects that battery back-up voltage is 2.5 V or less for 2 s. Diagnostic support note • The MIL illuminates if the TCM detects the above malfunction condition during the first drive cycle. • The AT warning light does not illuminate. • PENDING CODE is available. • FREEZE FRAME DATA is available. • The DTC is stored in the TCM memory.
POSSIBLE CAUSE	• Melt down ENG +B 10A fuse • ENG +B 10A fuse connector or terminal malfunction • Battery positive terminal malfunction • Battery malfunction • Short to GND in wiring harness between battery positive terminal and TCM terminal 1K • TCM connector or terminal malfunction • Open circuit in wiring harness between battery positive terminal and TCM terminal 1K • TCM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED Has the FREEZE FRAME DATA been recorded on the repair order?	Yes Go to the next step.
		No Record the 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 repair information available?	Yes Perform repair or diagnosis according to the available repair information. If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT ENG + B 10A FUSE	Yes Go to the next step.

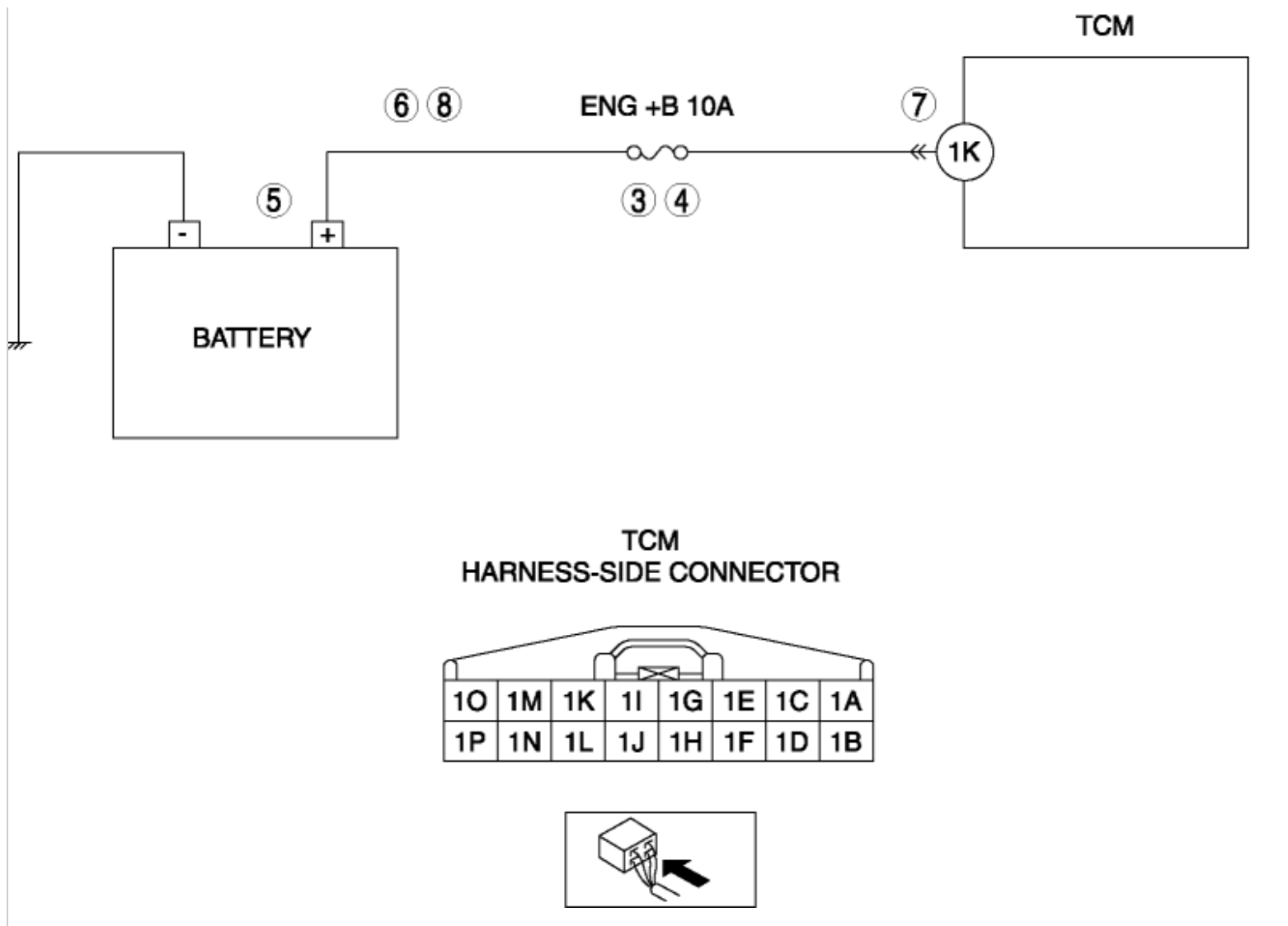
	• Switch the ignition off. • Disconnect the negative battery cable. • Inspect the ENG +B 10A fuse for proper installation and failure. • Is it normal?		
		No	• If the fuse is not installed correctly, install it correctly, then go to Step 9. • If fuse has been melted, replace it, then go to Step 9.
4	INSPECT ENG + B 10A FUSE TERMINAL FOR POOR CONNECTION • Switch the ignition off. • Inspect for poor connection (such as damaged, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
5	INSPECT BATTERY POSITIVE TERMINAL FOR POOR CONNECTION • Switch the ignition off. • Inspect for poor connection (such as damaged, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
6	INSPECT BATTERY POSITIVE CIRCUIT FOR SHORT TO GND • Switch the ignition off. • Disconnect the battery positive terminal. • Inspect for continuity between the battery positive terminal (wiring harness-side) and body GND. • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to GND, then go to Step 9.
		No	Go to the next step.
7	INSPECT TCM CONNECTOR FOR POOR CONNECTION • Switch the ignition off. • Disconnect the TCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
8	INSPECT BATTERY POSITIVE CIRCUIT FOR OPEN CIRCUIT • Switch the ignition off. • Disconnect the battery positive terminal. • Inspect for continuity between battery positive terminal (wiring harness-side) and	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.

	TCM terminal 1K (wiring harness-side).		
	Is there continuity?		
9	VERIFY TROUBLESHOOTING OF DTC P0882:00 COMPLETED - Make sure to reconnect all the disconnected connectors. - Clear the DTC using the M-MDS. - Perform the following procedure to ensure that the DTC has been resolved: - Start the engine. - Idle the engine for 2 s or more. - Is the same DTC present?	Yes	Replace the TCM, then go to the next step. (See TCM REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
10	VERIFY NO DTCs ARE PRESENT - Perform the "Reading DTCs Procedure". (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FS5A-EL] .) - Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FS5A-EL] .)
		No	DTC troubleshooting completed.

2012 - Mazda6 - Transmission/ Transaxle

DTC P0882:00 [FS5A-EL]

DTC P0882:00	Battery back-up voltage low
DETECTION CONDITION	• The TCM detects that battery back-up voltage is 2.5 V or less for 2 s. Diagnostic support note • The MIL illuminates if the TCM detects the above malfunction condition during the first drive cycle. • The AT warning light does not illuminate. • PENDING CODE is available. • FREEZE FRAME DATA is available. • The DTC is stored in the TCM memory.
POSSIBLE CAUSE	• Melt down ENG +B 10A fuse • ENG +B 10A fuse connector or terminal malfunction • Battery positive terminal malfunction • Battery malfunction • Short to GND in wiring harness between battery positive terminal and TCM terminal 1K • TCM connector or terminal malfunction • Open circuit in wiring harness between battery positive terminal and TCM terminal 1K • TCM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED Has the FREEZE FRAME DATA been recorded on the repair order?	Yes Go to the next step.
		No Record the 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 repair information available?	Yes Perform repair or diagnosis according to the available repair information. If the vehicle is not repaired, go to the next step.
		No Go to the next step.
3	INSPECT ENG + B 10A FUSE	Yes Go to the next step.

	• Switch the ignition off. • Disconnect the negative battery cable. • Inspect the ENG +B 10A fuse for proper installation and failure. • Is it normal?		
		No	• If the fuse is not installed correctly, install it correctly, then go to Step 9. • If fuse has been melted, replace it, then go to Step 9.
4	INSPECT ENG + B 10A FUSE TERMINAL FOR POOR CONNECTION • Switch the ignition off. • Inspect for poor connection (such as damaged, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
5	INSPECT BATTERY POSITIVE TERMINAL FOR POOR CONNECTION • Switch the ignition off. • Inspect for poor connection (such as damaged, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
6	INSPECT BATTERY POSITIVE CIRCUIT FOR SHORT TO GND • Switch the ignition off. • Disconnect the battery positive terminal. • Inspect for continuity between the battery positive terminal (wiring harness-side) and body GND. • Is there continuity?	Yes	Repair or replace the wiring harness for a possible short to GND, then go to Step 9.
		No	Go to the next step.
7	INSPECT TCM CONNECTOR FOR POOR CONNECTION • Switch the ignition off. • Disconnect the TCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion) • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 9.
		No	Go to the next step.
8	INSPECT BATTERY POSITIVE CIRCUIT FOR OPEN CIRCUIT • Switch the ignition off. • Disconnect the battery positive terminal. • Inspect for continuity between battery positive terminal (wiring harness-side) and	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to the next step.

	TCM terminal 1K (wiring harness-side).		
	Is there continuity?		
9	VERIFY TROUBLESHOOTING OF DTC P0882:00 COMPLETED - Make sure to reconnect all the disconnected connectors. - Clear the DTC using the M-MDS. - Perform the following procedure to ensure that the DTC has been resolved: - Start the engine. - Idle the engine for 2 s or more. - Is the same DTC present?	Yes	Replace the TCM, then go to the next step. (See TCM REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
10	VERIFY NO DTCs ARE PRESENT - Perform the "Reading DTCs Procedure". (See ON-BOARD DIAGNOSTIC SYSTEM DTC INSPECTION [FS5A-EL] .) - Are any DTCs present?	Yes	Go to the applicable DTC inspection. (See ON-BOARD DIAGNOSTIC SYSTEM DTC TABLE [FS5A-EL] .)
		No	DTC troubleshooting completed.