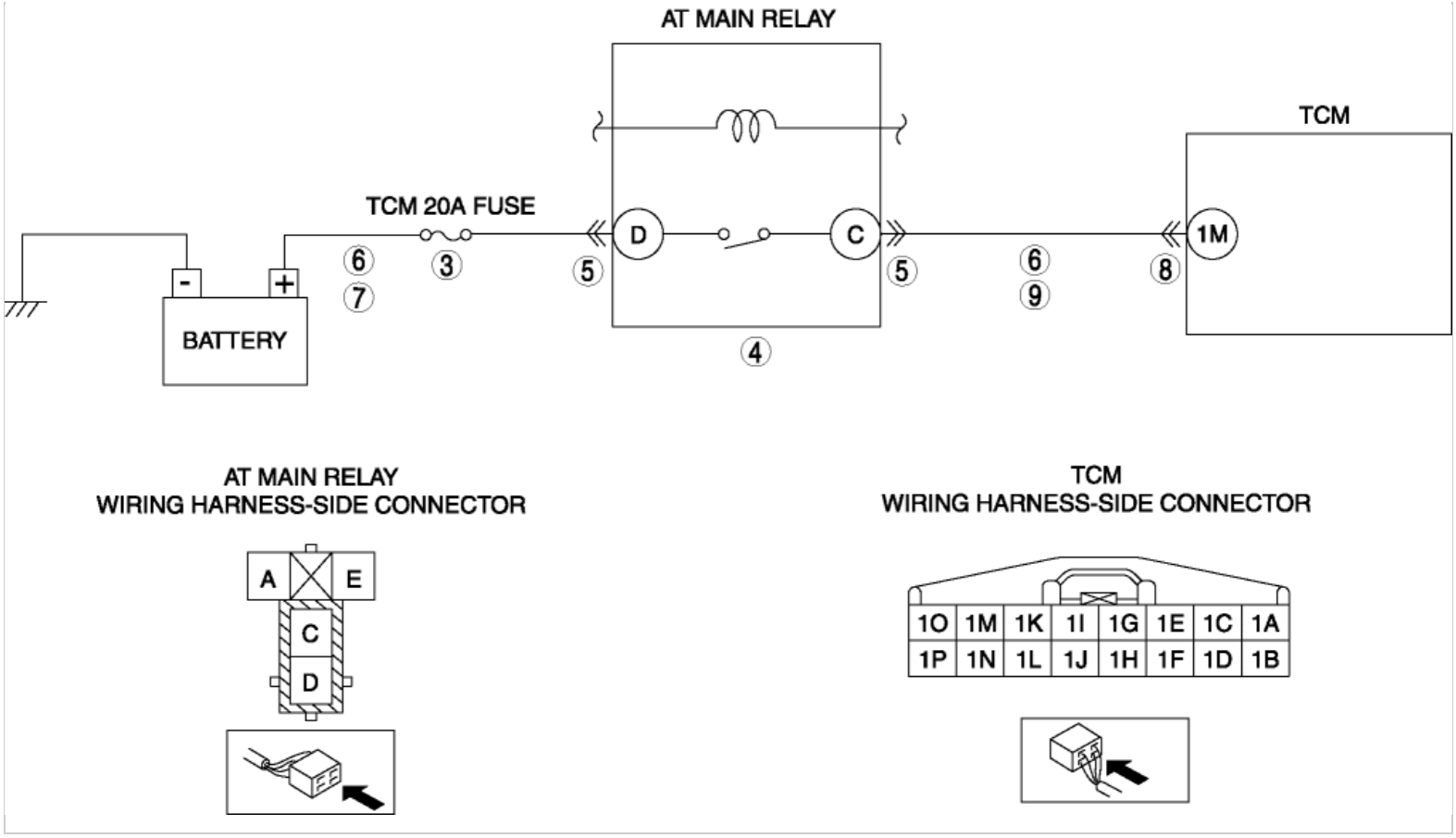
2012 - Mazda6 - Transmission/ Transaxle

DTC P0884:00 [FS5A-EL]

DTC P0884:00	Battery voltage low
DETECTION CONDITION	• The TCM detects that battery voltage is 8.25 V or less for 10 s when ATF temperature is 90 °C {194 °F} or less at engine speed 500 rpm or more. **Diagnostic support note:** • The MIL illuminates if the TCM detects the above malfunction conditions during the first drive cycle. • The AT warning light illuminates. • PENDING CODE is available. • FREEZE FRAME DATA is available. • The DTC is stored in the TCM memory.
POSSIBLE CAUSE	• Melt down TCM 20A fuse • AT main relay malfunction • AT main relay connector or terminal malfunction • Short to GND in wiring harness between battery positive terminal and TCM terminal 1M • Open circuit in wiring harness between battery positive terminal and TCM terminal 1M • TCM connector or terminal malfunction • TCM malfunction



AT MAIN RELAY
WIRING HARNESS-SIDE CONNECTOR

TCM
WIRING HARNESS-SIDE CONNECTOR

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 TCM 20A FUSE** • Switch the ignition off. • Disconnect the battery negative cable. • Inspect the TCM 20A fuse for proper installation and failure. • Is the TCM 20A fuse normal?	Yes	Go to the next step.
		No	• If the TCM 20A fuse is not installed correctly, install it correctly. Then go to Step 10. • If the TCM 20A fuse has melted down, replace it. Then go to Step 10.
4	**INSPECT AT MAIN RELAY** • Remove the AT main relay. • Inspect the AT main relay. (See **RELAY INSPECTION**.) • Is the AT main relay normal?	Yes	Go to the next step.
		No	Replace the AT main relay, then go to Step 10.

5	**INSPECT AT MAIN RELAY CONNECTOR FOR POOR CONNECTION** • Inspect for poor connection (such as damaged/pulled-out pins, and corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 10.
		No	Go to the next step.
6	**INSPECT POWER SUPPLY CIRCUIT FOR SHORT TO GND** • Disconnect the battery positive cable. • Inspect for continuity between the following circuits: ▪ AT main relay terminal D (wiring harness-side) and body GND ▪ AT main relay terminal C (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 10.
		No	Go to the next step.
7	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Inspect for continuity between AT main relay terminal D (wiring harness-side) and battery positive terminal (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 10.
8	**INSPECT TCM CONNECTOR FOR POOR CONNECTION** • Disconnect the TCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, and corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 10.
		No	Go to the next step.
9	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Inspect for continuity between AT main relay terminal C (wiring harness-side) and TCM terminal 1M (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to next step.
10	**VERIFY TROUBLESHOOTING OF DTC P0884:00 COMPLETED** • Make sure to reconnect all the disconnected connectors. • Clear the DTC from the TCM memory using the M-MDS. • Perform the following procedure to ensure that the DTC has been resolved: ▪ Start the engine. ▪ Idle the engine for 10 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.
11	**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.

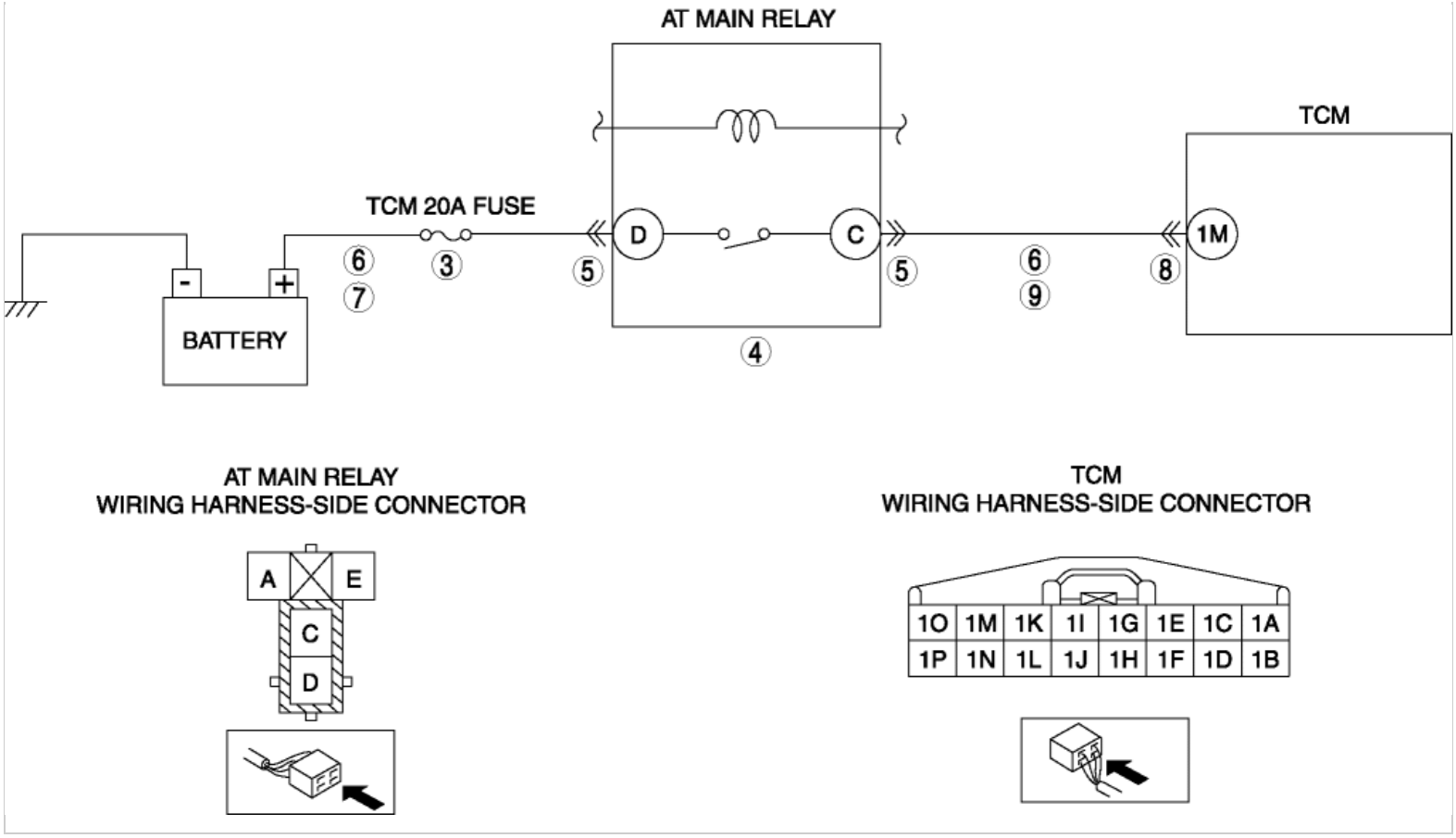
< Previous **Next >**

Back to Top

2012 - Mazda6 - Transmission/ Transaxle

DTC P0884:00 [FS5A-EL]

DTC P0884:00	Battery voltage low
DETECTION CONDITION	• The TCM detects that battery voltage is 8.25 V or less for 10 s when ATF temperature is 90 °C {194 °F} or less at engine speed 500 rpm or more. **Diagnostic support note:** • The MIL illuminates if the TCM detects the above malfunction conditions during the first drive cycle. • The AT warning light illuminates. • PENDING CODE is available. • FREEZE FRAME DATA is available. • The DTC is stored in the TCM memory.
POSSIBLE CAUSE	• Melt down TCM 20A fuse • AT main relay malfunction • AT main relay connector or terminal malfunction • Short to GND in wiring harness between battery positive terminal and TCM terminal 1M • Open circuit in wiring harness between battery positive terminal and TCM terminal 1M • TCM connector or terminal malfunction • TCM malfunction



AT MAIN RELAY
WIRING HARNESS-SIDE CONNECTOR

TCM
WIRING HARNESS-SIDE CONNECTOR

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 TCM 20A FUSE** • Switch the ignition off. • Disconnect the battery negative cable. • Inspect the TCM 20A fuse for proper installation and failure. • Is the TCM 20A fuse normal?	Yes	Go to the next step.
		No	• If the TCM 20A fuse is not installed correctly, install it correctly. Then go to Step 10. • If the TCM 20A fuse has melted down, replace it. Then go to Step 10.
4	**INSPECT AT MAIN RELAY** • Remove the AT main relay. • Inspect the AT main relay. (See **RELAY INSPECTION**.) • Is the AT main relay normal?	Yes	Go to the next step.
		No	Replace the AT main relay, then go to Step 10.

5	**INSPECT AT MAIN RELAY CONNECTOR FOR POOR CONNECTION** • Inspect for poor connection (such as damaged/pulled-out pins, and corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 10.
		No	Go to the next step.
6	**INSPECT POWER SUPPLY CIRCUIT FOR SHORT TO GND** • Disconnect the battery positive cable. • Inspect for continuity between the following circuits: ▪ AT main relay terminal D (wiring harness-side) and body GND ▪ AT main relay terminal C (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 10.
		No	Go to the next step.
7	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Inspect for continuity between AT main relay terminal D (wiring harness-side) and battery positive terminal (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to Step 10.
8	**INSPECT TCM CONNECTOR FOR POOR CONNECTION** • Disconnect the TCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, and corrosion). • Is there any malfunction?	Yes	Repair or replace the terminal, then go to Step 10.
		No	Go to the next step.
9	**INSPECT POWER SUPPLY CIRCUIT FOR OPEN CIRCUIT** • Inspect for continuity between AT main relay terminal C (wiring harness-side) and TCM terminal 1M (wiring harness-side). • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for a possible open circuit, then go to next step.
10	**VERIFY TROUBLESHOOTING OF DTC P0884:00 COMPLETED** • Make sure to reconnect all the disconnected connectors. • Clear the DTC from the TCM memory using the M-MDS. • Perform the following procedure to ensure that the DTC has been resolved: ▪ Start the engine. ▪ Idle the engine for 10 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.
11	**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.

< Previous **Next >**

Back to Top