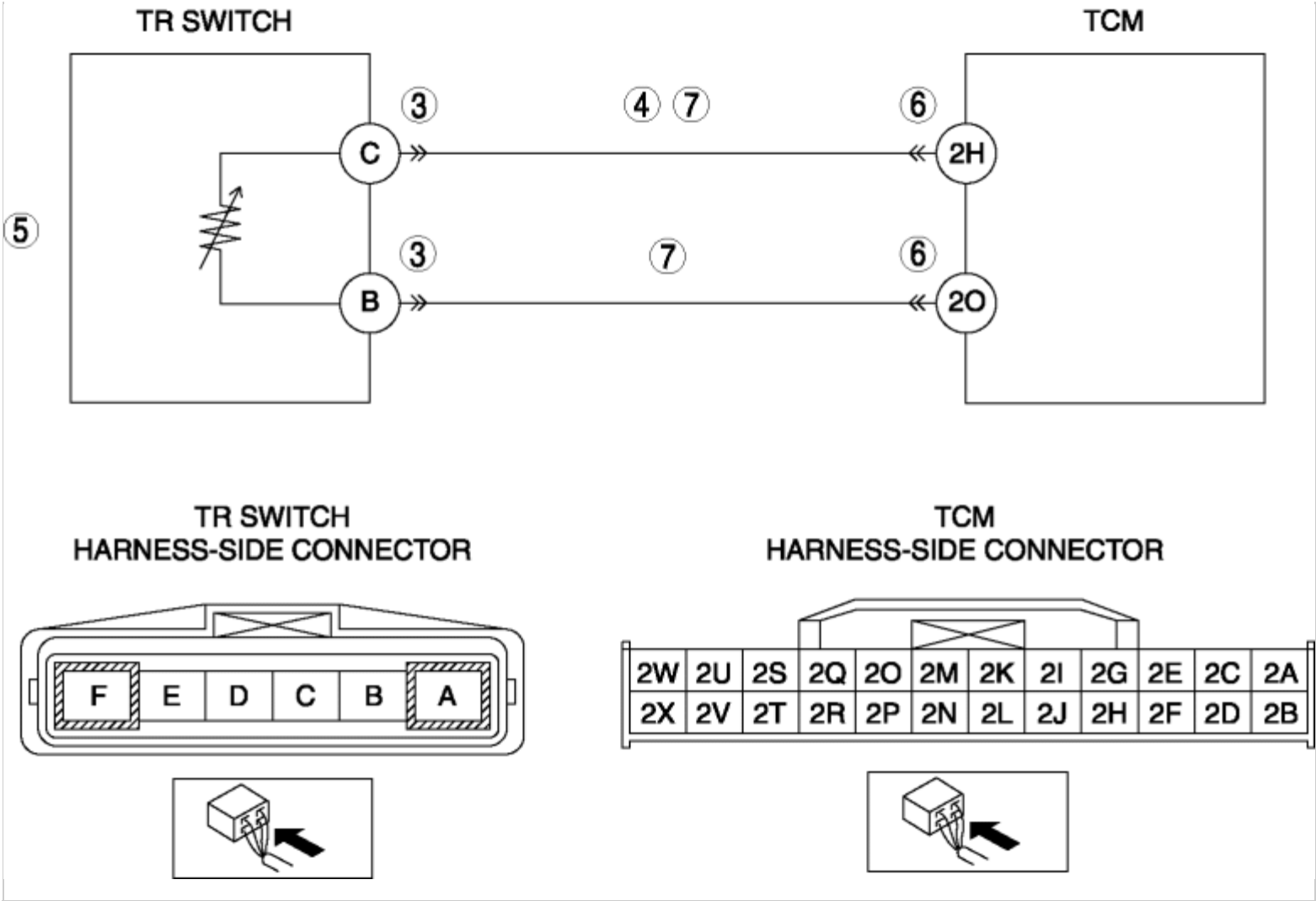


2012 - Mazda6 - Transmission/ Transaxle

DTC P0708:00 [FS5A-EL]

DTC P0708:00	TR switch circuit high input
DETECTION CONDITION	• The TCM detects that input voltage from the TR switch is 4.78 V or more for 5 s when the following conditions are met. ▪ Input voltage from the battery: 9 V or more ▪ Vehicle speed: 8 km/h {5 mph} or more Diagnostic support note • The MIL illuminates if the TCM detects the above malfunction condition 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	• TR switch connector or terminal malfunction • Short to power supply in wiring harness between TR switch terminal C and TCM terminal 2H • TR switch malfunction • TCM connector or terminal malfunction • Open circuit in wiring harness between TR switch terminal C and TCM terminal 2H • Open circuit in wiring harness between TR switch terminal B and TCM terminal 2O • 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 TR SWITCH CONNECTOR FOR POOR CONNECTION Switch the ignition off.	Yes Repair or replace the terminal, then go to Step 8.

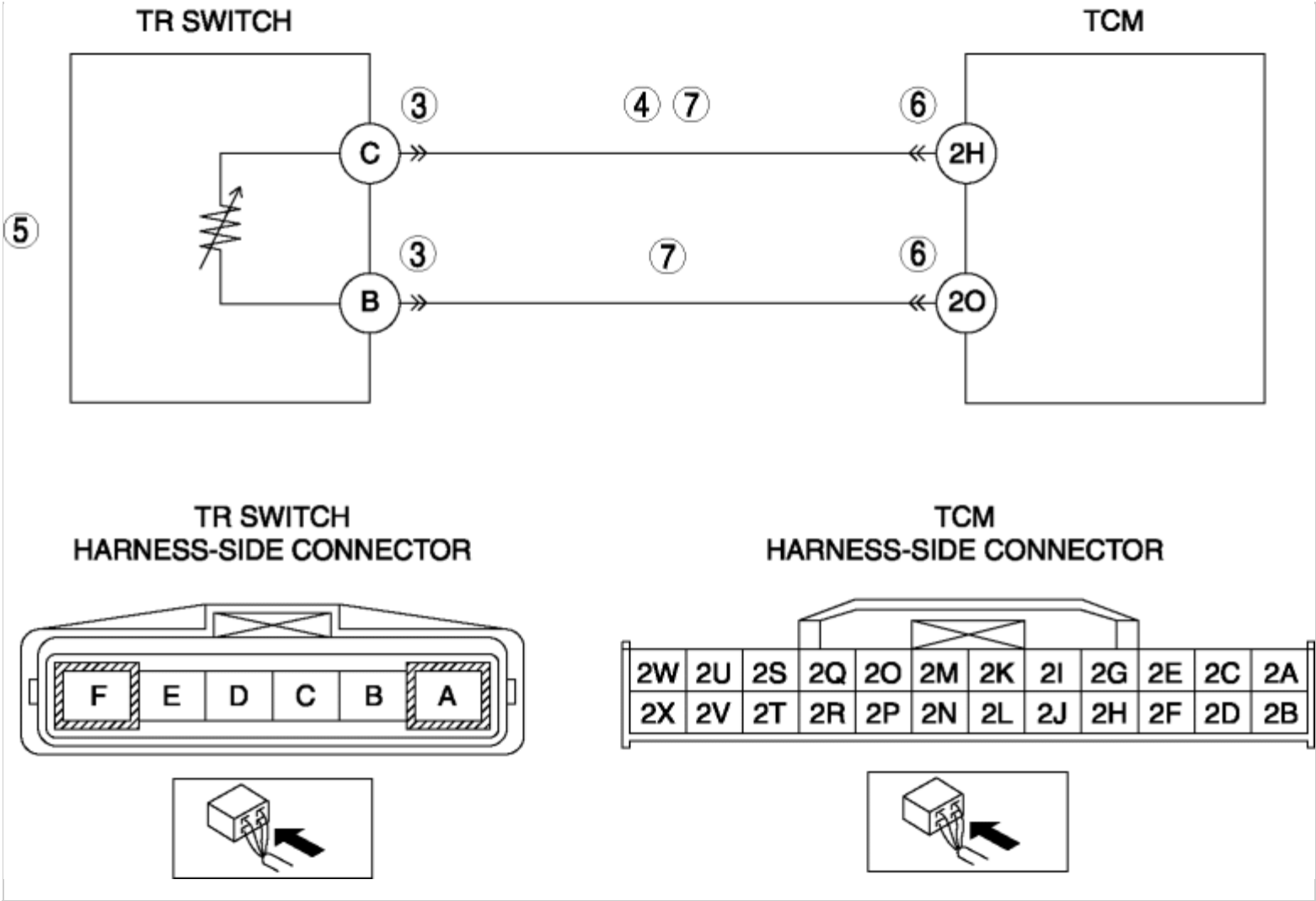
	• Disconnect the TR switch connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion) • Is there any malfunction?	No	Go to the next step.
4	INSPECT TR SWITCH CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between TR switch terminal C (wiring harness-side) and body GND. • Is the voltage B+ ?	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to Step 8.
		No	Go to the next step.
5	INSPECT TR SWITCH • Inspect the TR switch. (See TRANSAXLE RANGE (TR) SWITCH INSPECTION [FS5A-EL] .) • Is there any malfunction?	Yes	Replace the TR switch, then go to Step 8. (See TRANSAXLE RANGE (TR) SWITCH REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
6	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 8.
		No	Go to the next step.
7	INSPECT TR SWITCH CIRCUIT FOR OPEN CIRCUIT • Switch the ignition off. • Inspect for continuity between the following circuits: ▪ TR switch terminal C (wiring harness-side) and TCM terminal 2H (wiring harness-side) ▪ TR switch terminal B (wiring harness-side) and TCM terminal 2O (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 the next step.
8	VERIFY TROUBLESHOOTING OF DTC P0708:00 COMPLETED	Yes	Replace the TCM, then go to the next step.

	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: ◦ Drive the vehicle at 8 km/h {5 mph} or more for 5 s or more. • Is the same DTC present?		(See TCM REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
9	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 P0708:00 [FS5A-EL]

DTC P0708:00	TR switch circuit high input
DETECTION CONDITION	• The TCM detects that input voltage from the TR switch is 4.78 V or more for 5 s when the following conditions are met. ▪ Input voltage from the battery: 9 V or more ▪ Vehicle speed: 8 km/h {5 mph} or more Diagnostic support note • The MIL illuminates if the TCM detects the above malfunction condition 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	• TR switch connector or terminal malfunction • Short to power supply in wiring harness between TR switch terminal C and TCM terminal 2H • TR switch malfunction • TCM connector or terminal malfunction • Open circuit in wiring harness between TR switch terminal C and TCM terminal 2H • Open circuit in wiring harness between TR switch terminal B and TCM terminal 2O • 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 TR SWITCH CONNECTOR FOR POOR CONNECTION Switch the ignition off.	Yes Repair or replace the terminal, then go to Step 8.

	• Disconnect the TR switch connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion) • Is there any malfunction?	No	Go to the next step.
4	INSPECT TR SWITCH CIRCUIT FOR SHORT TO POWER SUPPLY • Switch the ignition to ON (Engine off). • Measure the voltage between TR switch terminal C (wiring harness-side) and body GND. • Is the voltage B+ ?	Yes	Repair or replace the wiring harness for a possible short to power supply, then go to Step 8.
		No	Go to the next step.
5	INSPECT TR SWITCH • Inspect the TR switch. (See TRANSAXLE RANGE (TR) SWITCH INSPECTION [FS5A-EL] .) • Is there any malfunction?	Yes	Replace the TR switch, then go to Step 8. (See TRANSAXLE RANGE (TR) SWITCH REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
6	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 8.
		No	Go to the next step.
7	INSPECT TR SWITCH CIRCUIT FOR OPEN CIRCUIT • Switch the ignition off. • Inspect for continuity between the following circuits: ▪ TR switch terminal C (wiring harness-side) and TCM terminal 2H (wiring harness-side) ▪ TR switch terminal B (wiring harness-side) and TCM terminal 2O (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 the next step.
8	VERIFY TROUBLESHOOTING OF DTC P0708:00 COMPLETED	Yes	Replace the TCM, then go to the next step.

	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: ◦ Drive the vehicle at 8 km/h {5 mph} or more for 5 s or more. • Is the same DTC present?		(See TCM REMOVAL/ INSTALLATION [FS5A-EL] .)
		No	Go to the next step.
9	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.