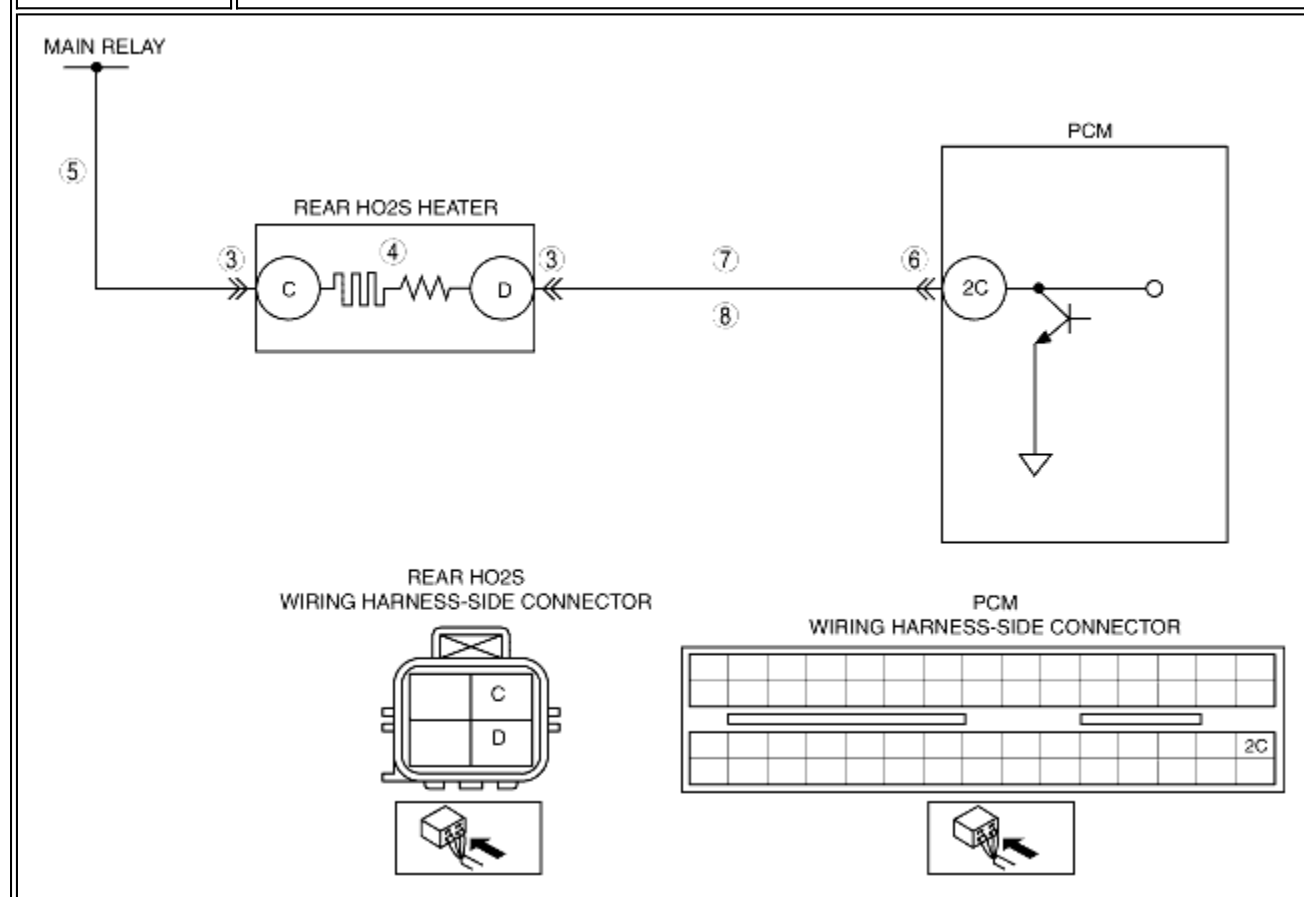


DTC P0037 [LF]

B3E010201084W03

DTC P0037	Rear HO2S heater circuit low input
DETECTION CONDITION	<ul style="list-style-type: none"> • The PCM monitors the rear HO2S heater control signal at PCM terminal 2C. If the PCM turns the rear HO2S heater off but the rear HO2S heater circuit has low voltage, the PCM determines that the rear HO2S heater circuit has malfunction. <p>Diagnostic support note</p> <ul style="list-style-type: none"> • This is a continuous monitor (HO2S heater). • The MIL illuminates if the PCM detects the above malfunction condition in two consecutive drive cycles or in one drive cycle while the DTC for the same malfunction has been stored in the PCM. • PENDING CODE is available if the PCM detects the above malfunction condition during first drive cycle. • FREEZE FRAME DATA is available. • The DTC is stored in the PCM memory.
POSSIBLE CAUSE	<ul style="list-style-type: none"> • Rear HO2S malfunction • Open circuit in wiring harness between the main relay and rear HO2S terminal C • Open circuit in wiring harness between rear HO2S terminal D and PCM terminal 2C • Short to ground in wiring harness between rear HO2S terminal D and PCM terminal 2C • Poor connection at the rear HO2S or the PCM connector • PCM malfunction



Diagnostic procedure

STEP	INSPECTION	ACTION
1	VERIFY FREEZE FRAME DATA HAS BEEN RECORDED	Yes

	• Has FREEZE FRAME DATA been recorded?	No	repair order, then go to the next step.
2	VERIFY RELATED REPAIR INFORMATION AVAILABILITY • Verify related service repair information availability. • Is any related repair information available?	Yes	Perform the 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 POOR CONNECTION OF REAR HO2S CONNECTOR • Turn the ignition switch off. • Disconnect the rear HO2S 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.
4	INSPECT REAR HO2S HEATER • Inspect the rear HO2S heater. (See REAR HEATED OXYGEN SENSOR (HO2S) INSPECTION [LF] .) • Is rear HO2S heater normal?	Yes	Go to the next step.
		No	Replace the rear HO2S, then go to Step 9.
5	INSPECT REAR HO2S HEATER POWER CIRCUIT FOR OPEN CIRCUIT • Turn the ignition switch to the ON position (Engine off). • Measure the voltage between rear HO2S terminal C (wiring harness-side) and body ground. • Is the voltage B+ ?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for open circuit, then go to Step 9.
6	INSPECT POOR CONNECTION OF PCM CONNECTOR • Turn the ignition switch off. • Disconnect the PCM connector. • Inspect for poor connection (such as damaged/pulled-out pins, corrosion). • Is there any malfunction?	Yes	Repair terminal, then go to Step 9.
		No	Go to the next step.
7	INSPECT REAR HO2S HEATER CONTROL CIRCUIT FOR SHORT TO GROUND • Inspect for continuity between rear HO2S terminal D (wiring harness-side) and body ground. • Is there continuity?	Yes	Repair or replace the wiring harness for short to ground, then go to Step 9.
		No	Go to the next step.
8	INSPECT REAR HO2S HEATER CONTROL CIRCUIT FOR OPEN CIRCUIT • Inspect for continuity between rear HO2S terminal D (wiring harness-side) and PCM terminal 2C. • Is there continuity?	Yes	Go to the next step.
		No	Repair or replace the wiring harness for open circuit, then go to Step 9.
9	VERIFY TROUBLESHOOTING OF DTC P0037 COMPLETED • Make sure to reconnect all disconnected connectors. • Clear the DTC from the PCM memory using the WDS or equivalent. • Perform the HO2S heater, HO2S, and TWC Repair Verification Drive Mode. (See OBD DRIVE MODE [LF] .) • Is the PENDING CODE for this DTC present?	Yes	Replace the PCM, then go to the next step. (See PCM REMOVAL/INSTALLATION [LF] .)
		No	Go to the next step.
10	VERIFY AFTER REPAIR PROCEDURE • Perform the "After Repair Procedure". (See AFTER REPAIR PROCEDURE [LF] .) • Are any DTC present?	Yes	Go to the applicable DTC troubleshooting. (See DTC TABLE [LF] .)
		No	Troubleshooting completed.