

FORENZA

Technical Bulletin

Division: Automotive Category: Technical Section Title: Engine TSB No. TS 28 10220

SUBJECT:	ON-BOARD DIAGNOSTIC (OBD) SYSTEM DTC CONFIRMATION PROCEDURE: CATALYST SYSTEM
MODEL(S): YEAR:	FORENZA, FORENZA WAGON, RENO (RQ420) 2004~2008
CONDITION:	Diagnostic readiness status is "Incomplete".
CAUSE:	Requirements have not been met under the specific vehicle conditions and procedures.
CORRECTION:	Please follow the attached DTC Confirmation Procedures outlining what is required for the readiness status to complete.
	required for the readiness status to complete.

The conditions and procedures are exclusive to the model(s) listed above, and apply only to setting the readiness status of the Catalyst System to the "YES" condition.

Due to changes to Emission Regulations and/or the vehicles emission control system, be sure to use the procedure that applies to your model year vehicle, as they may vary.

- For 2004 and 2005 model years use: AA. MY04~MY05
- For 2006 2008 model years use: BB. MY06~MY08

Note: The following specifications and procedures do not relate to any specific repair or failure state, they represent the minimum requirements that the system must experience during the self diagnostic sequence for this specific component.

Technical Service Department Dealership Circulation – Initial and file:

Service Manager	Parts Manager	Service Advisor	Technicians					

Suzuki bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your authorized Suzuki dealer for information on whether your vehicle may benefit from the information. Suzuki reserves the right to change technical specifications at any time without prior notice.

AA. MY04~MY05

Catalyst System

Description

The purpose of this procedure is to satisfy the enable criteria necessary in order to execute the Catalyst System diagnostic. Ensure the vehicle meets the requirements listed in Conditions for Running before performing this test. Failure to meet the necessary requirements may produce inaccurate test results.

Conditions for Running

Check to make sure that following conditions are satisfied when using this DTC CONFIRMATION PROCEDURE:

- > Intake air temp. : between -5 °C and 105 °C (23 °F and 221 °F)
- ➢ Coolant temp. : between 70 ℃ and 112 ℃ (158 ℃ and 233 ℃)
- > Atmospheric pressure : higher than 540 mmHg (Altitude : lower than 2,790 m (9,150 ft))
- > The engine is in Closed Loop fuel control
- The battery voltage is more than 11 volts

Diagnostic Aids

- The control module runs a maximum of 12 tests per trip until the Catalyst System readiness status updates to YES. If the status does not update, the test outlined in this procedure can be repeated until the I readiness status updates to YES. The readiness status does not indicate whether the test has passed or failed, only that a decision was made. When all of the diagnostics for a specific system have run and passed, the readiness status will update to YES. If a test for a specific system has failed, the I/M System Status will update to YES, indicating a determination was made, even if all of the required tests have not run. When a failure occurs, scan tool will output the DTC and malfunction indicator lamp (MIL) status.
- The first failure of a type B DTC does not constitute a final determination of pass or fail, and will not update the readiness status to YES. A second trip is required, and all the conditions to run must be met in order for the test to run again. These conditions may include a partial to complete engine cool down.
- The readiness system status will update only when the DTC fails the second time, or when all of the tests pass. If there is an impending failure, the system may require more time to run the diagnostic than was allotted in the set procedure. If the test does not run after numerous attempts, and if no DTC is set, review the appropriate scan tool data list and review the service information for an indication of why the test does not complete. Some tests may abort due to changes in the conditions while the test is running. For example, changes in engine load such as a cooling fan or an A/C compressor clutch turning on may cause the test to abort.
- If a diagnostic test is difficult to run, observe the scan tool display while maintaining the necessary enable conditions until the system status updates to YES.

Step Action (Detecting Condition)

- 1. Connect scan tool to DLC with ignition switch OFF.
- 2. Start engine.
- 3. Idle engine for 10 minutes
- 4. Drive vehicle on a level road at a steady throttle position at 40 to 50 mph for 2-3 minutes.
- 5. Return the vehicle to idle for at least 60 seconds
- 6. Repeat Steps 4 and 5 up to 12 times in 1 ignition cycle.
- 7. Check DTC by using scan tool.

Note: The Catalyst Diagnostic is limited to 12 attempts per ignition cycle if the readiness condition has not been met. If another sample is needed after 12 attempts, the ignition must be powered down for 30 seconds before restarting and attempting additional tests (The 10 minute engine run time must be repeated on the additional ignition cycle.)

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Note: The Catalyst Diagnostic is limited to 12 attempts per ignition cycle if the readiness condition has not been met. If another sample is needed after 12 attempts, the ignition must be powered down for 30 seconds before

BB. MY06~MY08

Catalyst System

Description

The purpose of this procedure is to satisfy the enable criteria necessary in order to execute the Catalyst System diagnostic. Ensure the vehicle meets the requirements listed in Conditions for Running before performing this test. Failure to meet the necessary requirements may produce inaccurate test results.

Conditions for Running

Check to make sure that following conditions are satisfied when using this DTC CONFIRMATION PROCEDURE:

- > Intake air temp. : between $-7 \,^{\circ}$ C and $105 \,^{\circ}$ C (19 $^{\circ}$ F and 221 $^{\circ}$ F)
- > Coolant temp. : between 70 $^{\circ}$ C and 109 $^{\circ}$ C (158 $^{\circ}$ F and 228 $^{\circ}$ F)
- Atmospheric pressure : higher than 540 mmHg (Altitude : lower than 2,790 m (9,150 ft))
- The engine is in Closed Loop fuel control
- The battery voltage is more than 11 volts

Diagnostic Aids

- The control module runs a maximum of 12 tests per trip until the Catalyst System readiness status updates to YES. If the status does not update, the test outlined in this procedure can be repeated until the readiness status updates to YES. The readiness status does not indicate whether the test has passed or failed, only that a decision was made. When all of the diagnostics for a specific system have run and passed, the readiness status will update to YES. If a test for a specific system has failed, the readiness status will update to YES, indicating a determination was made, even if all of the required tests have not run. When a failure occurs, the scan tool will output the DTC and malfunction indicator lamp (MIL) status. The first failure of a type B DTC does not constitute a final determination of pass or fail, and will not update the readiness status to YES. A second trip is required, and all the conditions to run must be met in order for the test to run again. These conditions may include a partial to complete engine cool down.
- The readiness status will update only when the DTC fails the second time, or when all of the tests pass. If there is an impending failure, the system may require more time to run the diagnostic than was allotted in the set procedure. If the test does not run after numerous attempts, and if no DTC is set, review the appropriate scan tool data list and review the service information for an indication of why the test does not complete. Some tests may abort due to changes in the conditions while the test is running. For example,

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changes in engine load such as a cooling fan or an A/C compressor clutch turning on may cause the test to abort.

If a diagnostic test is difficult to run, observe the scan tool display while maintaining the necessary enable conditions until the readiness status updates to YES.

Step Action (Detecting Condition)

- 8. Connect scan tool to DLC with ignition switch OFF.
- 9. Start engine.
- 10. Idle engine for 10 minutes
- 11. Drive vehicle on a level road at a steady throttle position at 40 to 50 mph for 2-3 minutes.
- 12. Return the vehicle to idle for at least 60 seconds
- 13. Repeat Steps 4 and 5 up to 12 times in 1 ignition cycle.
- 14. Check DTC by using scan tool.

Note: The Catalyst Diagnostic is limited to 12 attempts per ignition cycle if the readiness condition has not been met. If another sample is needed after 12 attempts, the ignition must be powered down for 30 seconds before restarting and attempting additional tests (The 10 minute engine run time must be repeated on the additional ignition cycle.)