

DTC No.	Detecting item	Detecting condition (DTC will set when detecting)	A	B
☞ △P0602	Control module Programming Error	Data programming error.	—	—
☞ P0705	Transmission range sensor circuit malfunction (PRNDL input)	Multiple signals are inputted simultaneously.	1 driving cycle	1 driving cycle
☞ P0707	Transmission range sensor circuit low	No sensor signal is inputted.	2 driving cycles	2 driving cycles
☞ *P0711	Transmission Fluid Temperature Sensor "A" circuit Range / Performance	Transmission temperature sensor signal is no change for specified time continuously.	2 driving cycles	2 driving cycles*
☞ P0712	Transmission fluid temperature sensor circuit low	Sensor output voltage is too low.	1 driving cycle	1 driving cycle
☞ P0713	Transmission fluid temperature sensor circuit high	Sensor output voltage is too high.	1 driving cycle	1 driving cycle
☞ P0717	Input / Turbine speed sensor circuit no signal	No sensor signal is detected although output speed sensor signal is inputted.	1 driving cycle	1 driving cycle
☞ P0722	Output speed sensor circuit no signal	No sensor signal is inputted although input speed sensor signal is inputted.	1 driving cycle	1 driving cycle
☞ *P0741	Torque converter clutch circuit performance or stuck off	Difference in revolution between engine and input shaft is too large although TCM is commanding TCC solenoid valve to turn ON.	2 driving cycles	2 driving cycles*
☞ *P0742	Torque converter clutch circuit stuck on	Difference in revolution between engine and input shaft is too small although TCM is commanding TCC solenoid valve to turn OFF.	2 driving cycles	2 driving cycles*
☞ *P0751	Shift solenoid-A (No.1) performance or stuck off	Actual gear position is 3rd gear although TCM command is for 2nd gear.	2 driving cycles	2 driving cycles*
☞ *P0752	Shift solenoid-A (No.1) stuck on	Actual gear position is 2nd gear although TCM command is for 3rd gear.	2 driving cycles	2 driving cycles*
☞ *P0756	Shift solenoid-B (No.2) performance or stuck off	Actual gear position is 3rd gear although TCM command is for 4th gear.	2 driving cycles	2 driving cycles*
☞ *P0757	Shift solenoid-B (No.2) stuck on	Actual gear position is 4th gear although TCM command is for 3rd gear.	2 driving cycles	2 driving cycles*
☞ P0787	Shift / Timing solenoid control circuit low	Voltage of timing solenoid terminal is low although TCM is commanding timing solenoid to turn ON.	1 driving cycle	1 driving cycle
☞ P0788	Shift / Timing solenoid control circuit high	Voltage of timing solenoid terminal is high although TCM is commanding timing solenoid to turn OFF.	1 driving cycle	1 driving cycle
☞ P0961	Pressure Control Solenoid "A" Control Circuit Range / Performance	Difference between actual current of control solenoid valve circuit and current of control solenoid valve circuit calculated by ECM is more than specification.	1 driving cycle	1 driving cycle
☞ P0962	Pressure control solenoid control circuit low	No electric flow is detected on pressure control solenoid circuit.	1 driving cycle	1 driving cycle
☞ P0963	Pressure control solenoid control circuit high	Too much electric flow is detected on pressure control solenoid circuit.	1 driving cycle	1 driving cycle
☞ P0973	Shift solenoid-A (No.1) control circuit low	Voltage of shift solenoid terminal is low although TCM is commanding shift solenoid to turn ON.	1 driving cycle	1 driving cycle
☞ P0974	Shift solenoid-A (No.1) control circuit high	Voltage of shift solenoid terminal is high although TCM is commanding shift solenoid to turn OFF.	1 driving cycle	1 driving cycle
☞ P0976	Shift solenoid-B (No.2) control circuit low	Voltage of shift solenoid terminal is low although TCM is commanding shift solenoid to turn ON.	1 driving cycle	1 driving cycle
☞ P0977	Shift solenoid-B (No.2) control circuit high	Voltage of shift solenoid terminal is high although TCM is commanding shift solenoid to turn OFF.	1 driving cycle	1 driving cycle
☞ P1702	Internal control module memory check sum error	Calculation of current data stored in TCM is not correct comparing with pre-stored checking data in TCM.	1 driving cycle	1 driving cycle

DTC No.	Detecting item	Detecting condition (DTC will set when detecting)	A	B
☞ ΔP1723	Range select switch malfunction	"3" position switch ON signal is inputted although transmission range switch signal is inputted P, R, N or L. range.	1 driving cycle*	1 driving cycle*
☞ Δ*P1878	Torque converter clutch shudder	Variation in the output revolution speed of the specified amplitude and specified cycle is detected under slip lock-up condition.	20 driving cycles*	20 driving cycles*
☞ P2762	Torque Converter Clutch (TCC) Pressure Control Solenoid Control Circuit Range / Performance	Difference between actual current of TCC solenoid valve circuit and current of TCC solenoid valve circuit calculated by ECM is more than specification.	1 driving cycle	1 driving cycle
☞ P2763	Torque converter clutch pressure control solenoid control circuit high	Too much electric flow is detected on TCC solenoid valve circuit.	1 driving cycle	1 driving cycle
☞ P2764	Torque converter clutch pressure control solenoid control circuit low	No electric flow is detected on TCC solenoid valve circuit.	1 driving cycle	1 driving cycle
☞ U0073	Control Module Communication Bus Off	Transmission error that is inconsistent between transmission data and transmission monitor (CAN bus monitor) data is detected more than specified time continuously.	1 driving cycle	1 driving cycle
☞ U0100	Lost Communication with ECM / PCM "A"	Receiving error from ECM detected to TCM for specified time continuously.	1 driving cycle	1 driving cycle

DTC Check

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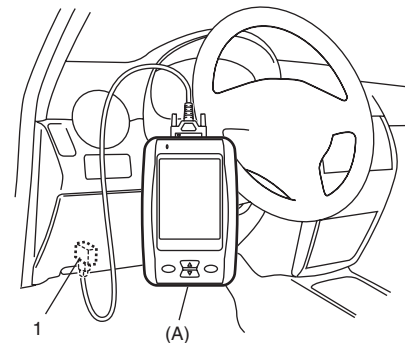
NOTE

- There are two types of OBD system depending on the vehicle specification. For identification, refer to "Precaution on On-Board Diagnostic (OBD) System in Section 1A".
- For Euro-OBD model, the MIL is turned on when the ECM and/or TCM detect malfunction(s). Each control module stores diagnostic information as the diagnostic trouble code (DTC) in its memory and outputs the DTC to the scan tool. Therefore, check both of the control modules for any DTC with the SUZUKI scan tool because the DTC stored in ECM and TCM is not read and displayed at a time. However, each of the control modules needs not to be checked with the CAN communication OBD generic scan tool because the DTC stored in ECM and TCM is read and displayed at a time. In case using CAN communication OBD generic scan tool, refer to "DTC Table in Section 1A".

- 1) Turn ignition switch to OFF position.
- 2) Connect scan tool to data link connector (DLC) (1).

Special tool

(A): SUZUKI scan tool (SUZUKI-SDT)



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- 3) Turn ignition switch ON.
- 4) Read DTC, pending DTC and freeze frame data according to instructions displayed on scan tool and print it down. Refer to scan tool operator's manual for further details.
 If communication between scan tool and TCM is not possible, check if scan tool is communicable by connecting it to TCM in another vehicle. If communication is possible in this case, scan tool is in good condition. Then check data link connector and serial data line (circuit) in the vehicle with which communication was not possible.
- 5) After completing the check, turn ignition switch off and disconnect scan tool from data link connector.

DTC Clearance

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▲ WARNING

When performing a driving test, select a safe place where there is neither any traffic nor any traffic accident possibility and be very careful during testing to avoid occurrence of an accident.

After repair or replace malfunction part(s), clear all DTCs by performing the following procedure.

- 1) Connect SUZUKI scan tool to data link connector in the same manner as when making this connection for "DTC Check".
- 2) Turn ignition switch ON.

- 3) Erase DTC and pending DTC according to instructions displayed on scan tool. Refer to scan tool operator's manual for further details.
- 4) After completing the clearance, turn ignition switch OFF and disconnect scan tool from data link connector (DLC).

NOTE

DTC and freeze frame data stored in TCM memory are also cleared in the following cases. Be careful not to clear them before keeping their record.

- **When the same malfunction (DTC) is not detected again during 40 engine warm-up cycles.**

Fail-Safe Table

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This function is provided by the safe mechanism that assures safe driveability even when the solenoid valve, sensor or its circuit fails. The following table shows the fail-safe function for each fail condition of sensor, solenoid or its circuit.

DTC No.	Trouble area	Fail-safe operation
P0705	Transmission range sensor circuit malfunction (PRNDL input)	<ul style="list-style-type: none"> • Selected range is set in priority order shown below. D> 2> L> R> N> P • Slip controlled lock-up function is inhibited to operate. • Learning control is inhibited.
P0707	Transmission range sensor circuit low	<ul style="list-style-type: none"> • Selected range is assumed to be "D" range. • Slip controlled lock-up function is inhibited to operate. • Learning control is inhibited.
P0712 P0713	Transmission fluid temperature sensor circuit low	<ul style="list-style-type: none"> • A/T fluid temperature is assumed to be 200 °C (392 °F). • Upshifting to 4th gear is inhibited. • Lock-up function is inhibited to operate. • Garage shift control is inhibited. • Learning control is inhibited.
P0717	Input / Turbine speed sensor circuit no signal	<ul style="list-style-type: none"> • Upshifting to 4th gear is inhibited. • Lock-up function is inhibited to operate. • Line pressure control at gear shifting is inhibited. • Torque reducing request to ECM (torque reduction control) is inhibited. • Garage shift control is inhibited. • Learning control is inhibited.
P0722	Output speed sensor circuit no signal	<ul style="list-style-type: none"> • Vehicle speed which is calculated by input shaft speed sensor signal is used for gear shifting control instead of vehicle speed calculated by output shaft speed sensor (VSS) signal. • Upshifting to 4th gear is inhibited. • Lock-up function is inhibited to operate. • Line pressure control at gear shifting is inhibited. • Torque reducing request to ECM (torque reduction control) is inhibited. • Garage shift control is inhibited. • Learning control is inhibited.

DTC No.	Trouble area	Fail-safe operation
☞ P0787	Shift / Timing solenoid Control Circuit Low	<ul style="list-style-type: none"> • Power supply for all solenoid valves is cut. • Gear position is fixed in 3rd gear. • Line pressure control at gear shifting is inhibited. • Look-up function is inhibited to operate.
☞ P0788	Shift / Timing solenoid Control Circuit High	
☞ P0962	Pressure control solenoid control circuit low	
☞ P0963	Pressure control solenoid control circuit high	
☞ P0973	Shift solenoid-A (No.1) control circuit low	
☞ P0974	Shift solenoid-A (No.1) control circuit high	
☞ P0976	Shift solenoid-B (No.2) control circuit low	
☞ P0977	Shift solenoid-B (No.2) control circuit high	
☞ P0961	Pressure Control Solenoid "A" Control Circuit Range / Performance	<ul style="list-style-type: none"> • Upshifting to 4th gear is inhibited. • Lock-up function is inhibited to operate. • Slip controlled lock-up function is inhibited to operate. • Line pressure control at gear shifting is inhibited. • Torque reducing request to ECM (torque reduction control) is inhibited. • Garage shift control is inhibited. • Leaning control is inhibited.
☞ P1702	Internal control module memory check sum error	<ul style="list-style-type: none"> • Power supply for all solenoid valves is cut. • Gear position is fixed in 3rd gear. • Line pressure control at gear shifting is inhibited. • Lock-up function is inhibited to operate.
☞ P1723	Range select switch malfunction	"3" position switch is assumed to be OFF.
☞ P1878	Torque converter clutch shudder	Slip controlled lock-up function is inhibited to operate.
☞ P2762	Torque Converter Clutch (TCC) Pressure Control Solenoid Control Circuit Range / Performance	<ul style="list-style-type: none"> • Lock-up function is inhibited to operate. • Slip controlled lock-up function is inhibited to operate. • Upshifting to 4th gear is inhibited when Transmission Fluid Temperature is 150 °C (302 °F) or more. • Gear position is fixed in 1st gear when vehicle speed is 10 km/h (6 mile/h) or less.
☞ P2763	Torque converter clutch pressure control solenoid control circuit high	<ul style="list-style-type: none"> • Lock-up function is inhibited to operate. • Upshifting to 4th gear is inhibited when A/T fluid temperature is more than 150 °C (302 °F). • Vehicle speed is slower than 10 km/h (6 mile/h), gear position is fixed in 1st gear for prevention of engine stall.
☞ P2764	Torque converter clutch pressure control solenoid control circuit low	<ul style="list-style-type: none"> • Lock-up function is inhibited to operate. • Upshifting to 4th gear is inhibited when A/T fluid temperature is more than 150 °C (302 °F).
☞ U0073	Control module communication bus off	<ul style="list-style-type: none"> • Throttle opening used for line pressure control is assumed to be 100%. • Throttle opening used for gear shifting control is assumed to be 0%. • Engine revolution is assumed to be 0 RPM. • After 15 minutes pass from detecting malfunction, engine coolant temperature is assumed to be 90 °C (194 °F). • Lock-up function is inhibited to operate. • Line pressure control at gear shifting is inhibited. • Torque reducing request to ECM (torque reduction control) is inhibited. • Upshifting to 4th gear is inhibited. • Garage shift control is inhibited. • Learning control is inhibited.