

DIAGNOSTIC TROUBLE CODE CHART

NOTICE:

When removing the part, turn the ignition switch OFF.

HINT:

- Using SST 09843 –18020, connect the terminals Tc and E¹ of the check connector.
- If any abnormality is not found when inspecting parts, inspect the ECU.
- If a malfunction code is displayed during the DTC check, check the circuit listed for that code. For details of each code, turn to the page referred to under the "See page" for respective "DTC No." in the DTC chart.

DTC chart of ABS:

DTC No. (See Page)	Detection Item	Trouble Area
C0278 / 11 □	Open or short circuit in ABS solenoid relay circuit	<ul style="list-style-type: none"> ABS solenoid relay ABS solenoid relay circuit
C0279 / 12 □	B+ short circuit in ABS solenoid relay circuit	<ul style="list-style-type: none"> ABS solenoid relay ABS solenoid relay circuit
C0226/21 □	Open or short circuit in hydraulic brake booster solenoid circuit (SFR circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SFR or SFRH circuit
C0236/22 □	Open or short circuit in hydraulic brake booster solenoid circuit (SFL circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SFLR or SFLH circuit
C0246/23 □	Open or short circuit in hydraulic brake booster solenoid circuit (SRR circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SRR or SRRH circuit
C0256/24 □	Open or short circuit in hydraulic brake booster solenoid circuit (SRL circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SRL or SRLH circuit
C1225/25 □	Open or short circuit in hydraulic brake booster solenoid circuit (SA1 circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SA1 circuit
C1226/26 □	Open or short circuit in hydraulic brake booster solenoid circuit (SA2 circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SA2 circuit
C1227/27 □	Open or short circuit in hydraulic brake booster solenoid circuit (SA3 circuit)	<ul style="list-style-type: none"> Hydraulic brake booster SA3 circuit
C1228/28 □	Open or short circuit in hydraulic brake booster solenoid circuit (STR circuit)	<ul style="list-style-type: none"> Hydraulic brake booster STR circuit
C0200 / 31* ¹ (DI-79)	Right front wheel speed sensor signal malfunction	<ul style="list-style-type: none"> Right front speed sensor Speed sensor circuit Sensor rotor
C0205/32* ¹ (DI-79)	Left front wheel speed sensor signal malfunction	<ul style="list-style-type: none"> Left front speed sensor Speed sensor circuit Sensor rotor
C0210/33* ¹ (DI-79)	Right rear wheel speed sensor signal malfunction	<ul style="list-style-type: none"> Right rear speed sensor Speed sensor circuit Sensor rotor
C0215/34* ¹ (DI-79)	Left rear wheel speed sensor signal malfunction	<ul style="list-style-type: none"> Left rear speed sensor Speed sensor circuit Sensor rotor
C1235 / 35 (DI-79)	Foreign matter is attached on the tip of the right front sensor	<ul style="list-style-type: none"> Right front speed sensor Speed sensor rotor
C1236 / 36 (DI-79)	Foreign matter is attached on the tip of the left front sensor	<ul style="list-style-type: none"> Left front speed sensor Speed sensor rotor
C1237 / 37 □	Some tire is different size from the other tires	Tire size

C1238 / 38 (DI-79)	Foreign matter is attached on the tip of the right rear sensor	• Right rear speed sensor • Speed sensor rotor
C1239 / 39 (DI-79)	Foreign matter is attached on the tip of the left rear sensor	• Left rear speed sensor • Speed sensor rotor
C1241 / 41 □	Low battery voltage or abnormally high battery voltage	• Battery • IC regulator • Power source circuit
C1242 / 42* ² □	Open circuit in IG2 circuit	• Battery • IC regulator • Power source circuit
C1243 / 43 □	Malfunction in deceleration sensor (constant output)	• Deceleration sensor • Wire harness for deceleration sensor system
C1244 / 44 □	Open or short circuit in deceleration sensor circuit	• Deceleration sensor • Deceleration sensor circuit
C1245 / 45 □	Malfunction in deceleration sensor	• Deceleration sensor • Wire harness for deceleration sensor system
C1246 / 46 □	Malfunction in master cylinder pressure sensor	• Master cylinder pressure sensor • Master cylinder pressure sensor circuit
C1249 / 49 □	Open circuit in stop light switch circuit	Stop light switch circuit
C1251 / 51* ² □	Pump motor is locked Open circuit in pump motor ground	Hydraulic brake booster pump motor
C1252 / 52* ² □	Hydraulic brake booster pump motor malfunction	• Hydraulic brake booster pump motor • Hydraulic brake booster pump motor circuit • Pressure switch (PH or PL)
C1253 / 53* ² □	Hydraulic brake booster pump motor relay malfunction	• ABS motor 1 or ABS motor 2 relay • ABS motor 1 or ABS motor 2 relay circuit • Hydraulic brake booster pump motor circuit
C1254 / 54* ² □	Pressure switch malfunction	• Pressure switch (PH or PL) • Pressure switch circuit
C1256 / 56* ² □	Accumulator low pressure malfunction	• Accumulator • Pressure switch (PH or PL) • Hydraulic brake booster pump motor
C1257 / 57* ² □	Power supply drive circuit malfunction	• Battery • Power source circuit • Skid control ECU
C1203 / 59 □	Engine and ECT ECU communication circuit malfunction	• TRC+ or TRC- circuit • ENG+ or ENG- circuit • Engine and ECT ECU
C1268 / 68 □	Transfer L4 position signal transmission failure	• Transfer L4 position switch • Transfer L4 position switch circuit
Always ON □	Malfunction in skid control ECU	• Battery • IC regulator • Power source circuit • Skid control ECU

* : As the DTC cannot be erased by replacing parts alone do either of the following operations.

Clear the DTC (see Pub. No. RM970E, page DI –185).

At a vehicle speed of 20 km/h (12 mph), drive the vehicle for 30 seconds or more.

□ : Refer to LAND CRUISER Repair Manual Pub. No. RM970E

*² : Using the following table, troubled parts can be specified.

DTC		42		51		52		53		54		56		57	
BRAKE warning light and buzzer		Light	Buzzer												
Pressure switch	PH					□	□			□		□	□		
	PL					□	□			□		□	□		
Pump motor circuit	Pump motor			□	□	□	□					□	□		
	MTT wire harness														
	MT+ wire harness			□											
	MT- wire harness			□											
Accumulator malfunction												□	□		
Motor relay circuit	MR1 open circuit							□							
	MR2 open circuit							□							
	MR1 welded contact					□	□	□							
	MR2 welded contact					□	□	□							
Hydraulic brake booster	Pressure leaks					□	□					□	□		
Power source*	IG2 open circuit	□													
ECU	Power supply circuit												□		

*: When IG1 circuit is open, the ABS warning light and BRAKE warning light come on.

DTC chart of VSC:

DTC No. (See Page)	Detection Item	Trouble Area
C1231 / 31 <input type="checkbox"/>	Malfunction in steering angle sensor	<ul style="list-style-type: none"> • Steering angle sensor • Steering angle sensor circuit
C1232 / 32 <input type="checkbox"/>	Malfunction in deceleration sensor	<ul style="list-style-type: none"> • Deceleration sensor • Deceleration sensor circuit
C1233 / 33 <input type="checkbox"/>	Open or short circuit in yaw rate sensor circuit	<ul style="list-style-type: none"> • Yaw rate sensor • Yaw rate sensor circuit
C1234 / 34 <input type="checkbox"/>	Malfunction in yaw rate sensor	<ul style="list-style-type: none"> • Yaw rate sensor • Yaw rate sensor circuit
C1335 / 35 <input type="checkbox"/>	Malfunction in steering angle sensor communication circuit	<ul style="list-style-type: none"> • Steering angle sensor • Steering angle sensor circuit
C1210 / 36 <input type="checkbox"/>	Zero point calibration of yaw rate sensor undone	<ul style="list-style-type: none"> • Yaw rate sensor • Yaw rate sensor circuit • Neutral start switch circuit (P range)
C1336 / 39 <input type="checkbox"/>	Zero point calibration of deceleration sensor	<ul style="list-style-type: none"> • Deceleration sensor • Deceleration sensor circuit • Neutral start switch (P range) circuit
C1289 / 41* <input type="checkbox"/>	Malfunction in VGRS control system	VGRS control system
C1223 / 43 <input type="checkbox"/>	Malfunction in ABS control system	ABS control system
C1224 / 44 <input type="checkbox"/>	Open or short circuit in NE signal circuit	<ul style="list-style-type: none"> • NEO circuit • Engine and ECT ECU • Skid control ECU
C1340 / 47 <input type="checkbox"/>	Open circuit in center differential lock signal	<ul style="list-style-type: none"> • Center differential lock system • Center differential lock circuit
C1291 / 48* <input type="checkbox"/>	VGRS ECU communication circuit malfunction	<ul style="list-style-type: none"> • VSC+ or VSC – circuit • AFS+ or AFS – circuit • Engine and ECT ECU
C1201 / 51 <input type="checkbox"/>	Engine and ECT ECU system malfunction	Engine control system
C1203 / 53 <input type="checkbox"/>	Engine and ECT ECU communication circuit malfunction	<ul style="list-style-type: none"> • TRC+ or TRC – circuit • ENG+ or ENG – circuit • Engine and ECT ECU
C1290 / 66 (DI-87)	Zero point calibration of steering sensor undone	<ul style="list-style-type: none"> • Steering angle sensor zero point calibration undone • Yaw rate sensor zero point calibration undone
Always ON <input type="checkbox"/>	Malfunction in skid control ECU Open circuit in VSC TRC warning light circuit	<ul style="list-style-type: none"> • Power source circuit • VSC TRC warning light circuit

*: w/ VGRS only

HINT:

There is a case that hand –held tester cannot be used when the VSC TRC warning light is always on.

 : Refer to LAND CRUISER Repair Manual Pub. No. RM970E.