DTC C1248/48 Open Circuit in Rear Differential Lock

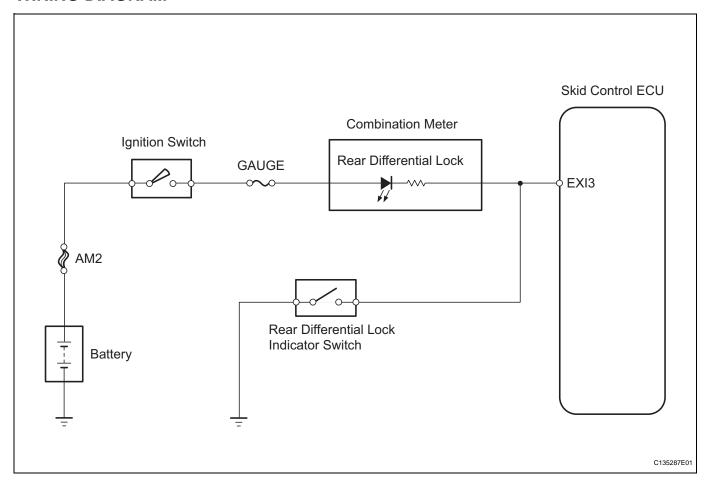
DESCRIPTION

The 4WD control ECU stimulates the actuator to lock the rear differential in accordance with the rear differential lock switch. The skid control ECU monitors the transfer indicator switch (rear differential lock) and if the rear differential is locked, at which time the rear differential lock indicator light is illuminated, prohibits ABS, TRAC and VSC controls. At the same time, the skid control ECU illuminates the ABS warning light, VSC OFF indicator light and SLIP indicator light.



DTC No.	DTC Detecting Condition	Trouble Areas	
C1248/48	At vehicle speed of 31 mph (50 km/h) or more, 3 seconds or more elapse after rear differential changes from free to lock.	• F	Rear differential lock indicator switch Rear differential lock indicator switch circuit Master cylinder solenoid (skid control ECU)

WIRING DIAGRAM

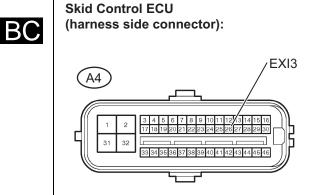


INSPECTION PROCEDURE

NOTICE:

When replacing the master cylinder solenoid, perform zero point calibration (See page BC-24).

1 **INSPECT SKID CONTROL ECU TERMINAL VOLTAGE (EXI3)**



- (a) Disconnect the skid control ECU connector.
- (b) Turn the ignition switch on.
- (c) Measure the voltage.

Standard voltage

Skid Control ECU (harness side connector):	
1 2 3 4 5 6 7 8 9 1011 12/3 14 15 16 17 18 9 1011 12/3 14 15 16 17 18 9 1011 12/3 14 15 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	
	C121700E52

Tester Connection	Vehicle Condition	Rear Differential Lock Indicator Light	Specified Condition
A4-26 (EXI3) - Body ground	Rear Differential free	OFF	8 to 14 V
A4-26 (EXI3) - Body ground	Rear Differential locked	ON	1.5 V

NG Go to step 3

OK

RECONFIRM DTC

- (a) Clear the DTC (See page BC-45).
- (b) Drive the vehicle at 31 mph (50 km/h) or more for 3 seconds or more with the rear differential free.
- (c) Check if the same DTC is detected (See page BC-45).

Result

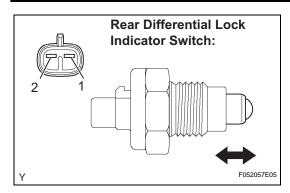
Result	Proceed to
DTC output	A
DTC not output	В

END В



REPLACE MASTER CYLINDER SOLENOID

3 INSPECT REAR DIFFERENTIAL LOCK INDICATOR SWITCH



- (a) Disconnect the rear differential lock indicator switch connector.
- (b) Remove the rear differential lock indicator switch.
- (c) Measure the resistance.

Standard resistance

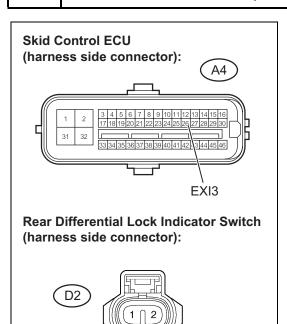
Tester Connection	Condition	Specified Condition
D2-1 - D2-2	Pushed	Below 1 Ω
D2-1 - D2-2	Free	10 kΩ or higher

NG)

REPLACE REAR DIFFERENTIAL LOCK INDICATOR SWITCH



4 CHECK HARNESS AND CONNECTOR (SKID CONTROL ECU - REAR DIFFERENTIAL LOCK INDICATOR SWITCH)



- (a) Disconnect the skid control ECU connector.
- (b) Disconnect the rear differential lock indicator switch connector.
- (c) Measure the resistance.

Standard resistance

Tester Connection	Specified Condition
A4-26 (EXI3) - D2-2	Below 1 Ω
D2-1 - Body ground	10 k Ω or higher

NG

C138458E01

REPAIR OR REPLACE HARNESS OR CONNECTOR

ОК

REPLACE MASTER CYLINDER SOLENOID