

DTC	C1319/35	CHANGEOVER SOLENOID MALFUNCTION
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CIRCUIT DESCRIPTION

The stroke simulator solenoid (SCSS) generates pedal reactive effort during ECB control. If one of the 4 wheels loses brake booster function, the stroke simulator operation is prohibited.

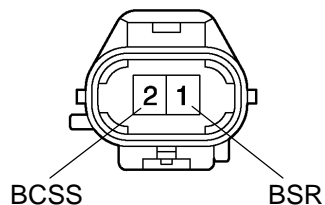
DTC No.	Detailed Code	DTC Detecting Condition	Trouble Area
C1319/35	71	<ul style="list-style-type: none"> • SCSS drive circuit is malfunctioning for 0.05 sec. or more. • Short to +B in SCSS. 	<ul style="list-style-type: none"> • Stroke simulator • Skid control ECU • Harness and connector
C1319/35	72	Current leaks for 0.05 sec. or more when SCSS is off.	<ul style="list-style-type: none"> • Stroke simulator • Skid control ECU • Harness and connector
C1319/35	73	Open circuit in SCSS continues for 0.05 sec. or more.	<ul style="list-style-type: none"> • Stroke simulator • Skid control ECU • Harness and connector
C1319/35	74	Over current in SCSS continues for 0.05 sec. or more.	<ul style="list-style-type: none"> • Stroke simulator • Skid control ECU • Harness and connector

The diagram illustrates the electrical system for the 2007 Toyota Hilux 2.5 D-4D 4x4, focusing on the brake and skid control components. Key elements include:

- Brake Actuator (A2):** Connected to the Brake Master Stroke Simulator Cylinder Assembly (B17) and the Skid Control ECU (SCSS).
- Brake Master Stroke Simulator Cylinder Assembly (B17):** Features terminals BCSS, BSR, and BS1, connected to various relays and connectors.
- Brake Control Power Supply (B18):** Provides power to the system, including the ABS NO.1 Relay and the Skid Control ECU.
- Skid Control ECU:** Controls the skid control system, connected to the Brake Actuator and the Engine Room R/B.
- Engine Room R/B:** Contains the ABS NO.1 Relay and the DC/DC converter, which powers the ABS MAIN.
- Driver Side J/B:** Houses the ECU-IG, IG1 Relay, and AM1, which manage the ignition and auxiliary power.
- Auxiliary Battery:** Provides additional power to the system, connected to the DC/DC converter and the ABS MAIN.

The diagram shows the flow of power and signals between these components, including the use of relays, connectors, and various terminals to ensure proper system operation.

INSPECTION PROCEDURE

1 INSPECT BRAKE MASTER STROKE SIMULATOR CYLINDER ASSYBrake Master Stroke Simulator
Cylinder Assy

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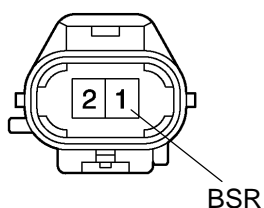
- (a) Disconnect brake master stroke simulator cylinder assy connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
1 (BSR) - 2 (BCSS)	22.3 to 38 Ω

NG**REPLACE BRAKE MASTER STROKE
SIMULATOR CYLINDER ASSY****OK****2 INSPECT BRAKE MASTER STROKE SIMULATOR CYLINDER ASSY(BSR
TERMINAL VOLTAGE)**Brake Master Stroke Simulator
Cylinder Assy

(B18)



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- (a) Connect the brake master stroke simulator cylinder assy connector.
- (b) Measure the voltage according to the value(s) in the table below.

HINT:

Measure the voltage from the behind the connector with the connector connected.

Standard:

Tester Connection	Condition	Specified Condition
B17-1 (BSR) - Body ground	Power switch ON (READY)	10 to 14 V

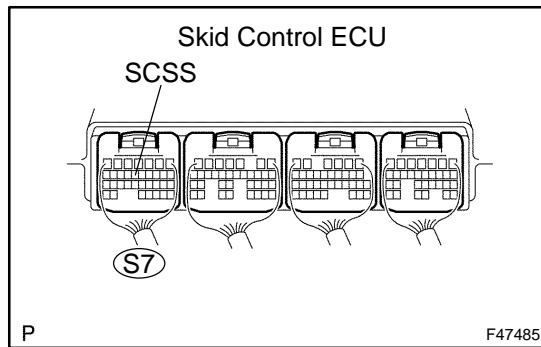
NG**REPAIR OR REPLACE HARNESS OR
CONNECTOR****OK**

3 INSPECT SKID CONTROL ECU TERMINAL VOLTAGE(SCSS TERMINAL)

- (a) Connect the hand-held tester to the DLC3.
 (b) Select the ACTIVE TEST mode on the hand-held tester.

Item	Vehicle Condition / Test Details	Diagnostic Note
ACC PATTERN	Stroke simulator cut valve pattern activation ON / OFF	Operation of solenoid (clicking sound) can be heard

- (c) Using hand-held tester, turn the stroke simulator cylinder assy ON/OFF.



- (d) Measure the voltage according to the value(s) in the table below.

Standard:

Tester Connection	Condition	Specified Condition
S7-13 (SCSS) - Body ground	Brake Master Stroke Simulator Cylinder assy ON	Below 1.5 V
S7-13 (SCSS) - Body ground	Brake Master Stroke Simulator Cylinder assy OFF	10 to 14 V

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REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

REPLACE SKID CONTROL ECU ASSY (SEE PAGE 32-68)

NOTICE:

When replacing the skid control ECU assy, perform initialization of linear solenoid valve and calibration (see page 05-956).