

DTC	C0278/11	Open in ABS Solenoid Relay Circuit
DTC	C0279/12	Short to B+ in ABS Solenoid Relay Circuit

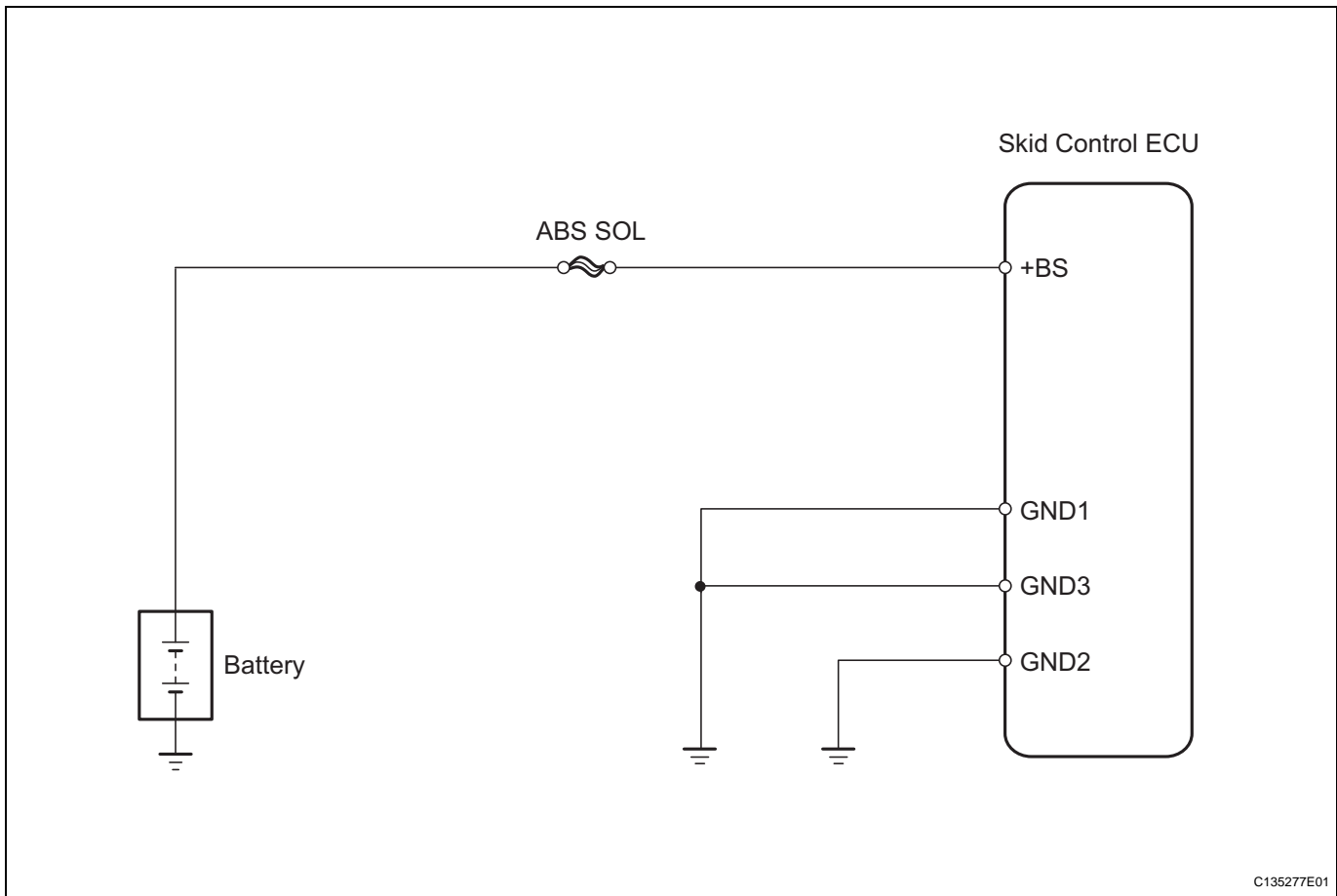
DESCRIPTION

The solenoid relay supplies power to the ABS solenoid and TRAC solenoid. After the ignition switch is turned on, the vehicle speed has reached 4 mph (6 km/h) and the solenoid is determined to be normal by the initial check self- diagnosis, the relay switches on. If any open or short circuits are detected, the relay switches off. These DTCs may be set if the voltage supply to the solenoid relay (+BS) falls below the DTC detection threshold due to the battery or generator outputs being insufficient.

BC

DTC No.	DTC Detecting Condition	Trouble Areas
C0278/11	When either of following conditions detected: 1. Both of following conditions continue for at least 0.2 seconds. (a) IG voltage between 9.5 V and 17 V. (b) Relay contact open when relay ON 2. Both of following conditions continue for at least 0.2 seconds. (a) IG voltage 9.5 V or less when relay ON. (b) Relay contact remains open.	<ul style="list-style-type: none"> • ABS SOL fuse • +BS terminal circuit • Master cylinder solenoid (skid control ECU)
C0279/12	Following condition continues for at least 0.2 seconds. <ul style="list-style-type: none"> • Relay contact closed immediately after turning IG switch to ON when relay OFF. 	<ul style="list-style-type: none"> • ABS SOL fuse • +BS terminal circuit • Master cylinder solenoid (skid control ECU)

WIRING DIAGRAM



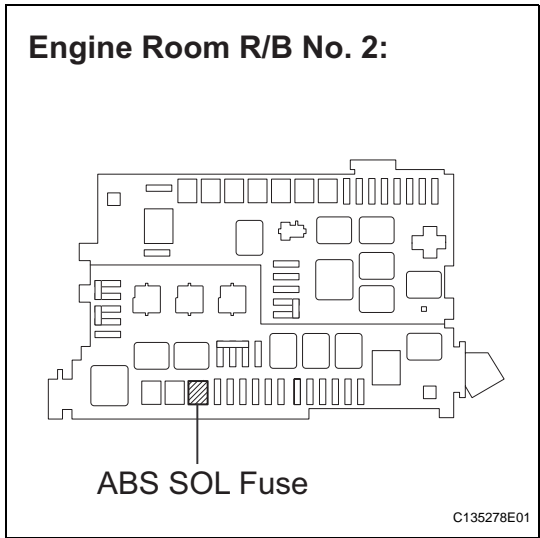
INSPECTION PROCEDURE

NOTICE:

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

BC

1 INSPECT FUSE (ABS SOL)

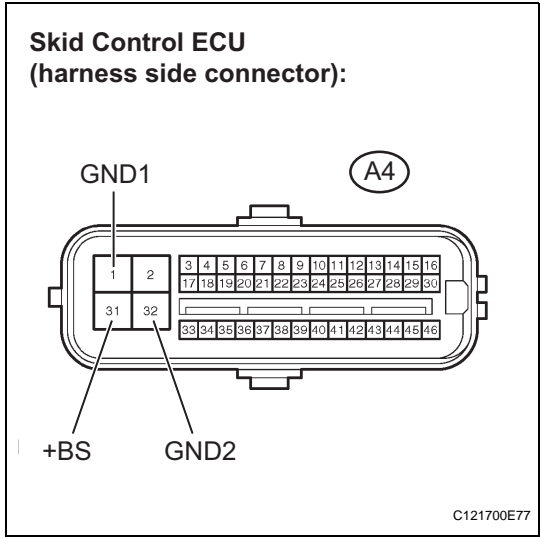


- (a) Remove the ABS SOL fuse from the engine room R/B No. 2.
- (b) Measure the resistance.
Standard resistance:
Below 1 Ω

NG CHECK FOR SHORTS IN ALL HARNESSSES AND CONNECTORS CONNECTED TO FUSE AND REPLACE FUSE

OK

2 CHECK SKID CONTROL ECU TERMINAL VOLTAGE (+BS)



- (a) Disconnect the skid control ECU connector.
- (b) Measure the voltage.
Standard voltage

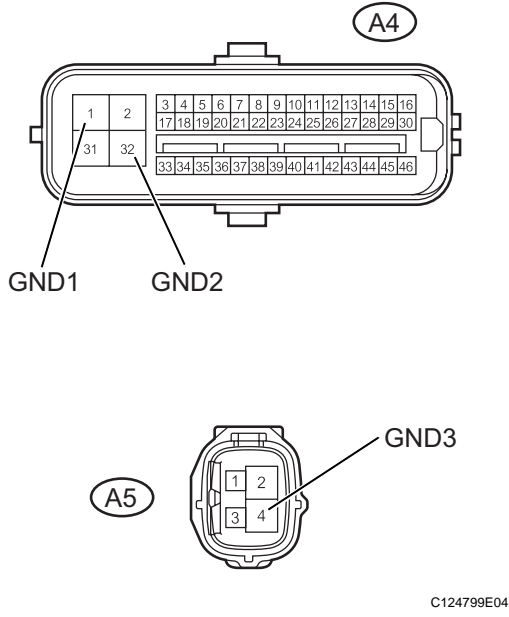
Tester Connection	Specified Condition
A4-31 (+BS) - A4-1, 32 (GND1, GND2)	11 to 14 V

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

3 CHECK HARNESS AND CONNECTOR (SKID CONTROL ECU - BODY GROUND)

Skid Control ECU
(harness side connector):



- (a) Disconnect the skid control ECU connector.
- (b) Measure the resistance.

Standard resistance

Tester Connection	Specified Condition
A4-1, 32 (GND1, GND2) - Body ground	Below 1 Ω
A5-4 (GND3) - Body ground	Below 1 Ω

NG REPAIR OR REPLACE HARNESS OR CONNECTOR

OK

4 RECONFIRM DTC

- (a) Clear the DTC(s) (See page BC-45).
- (b) Check if the same DTC(s) is output (See page BC-45).

B END

OK

REPLACE MASTER CYLINDER SOLENOID