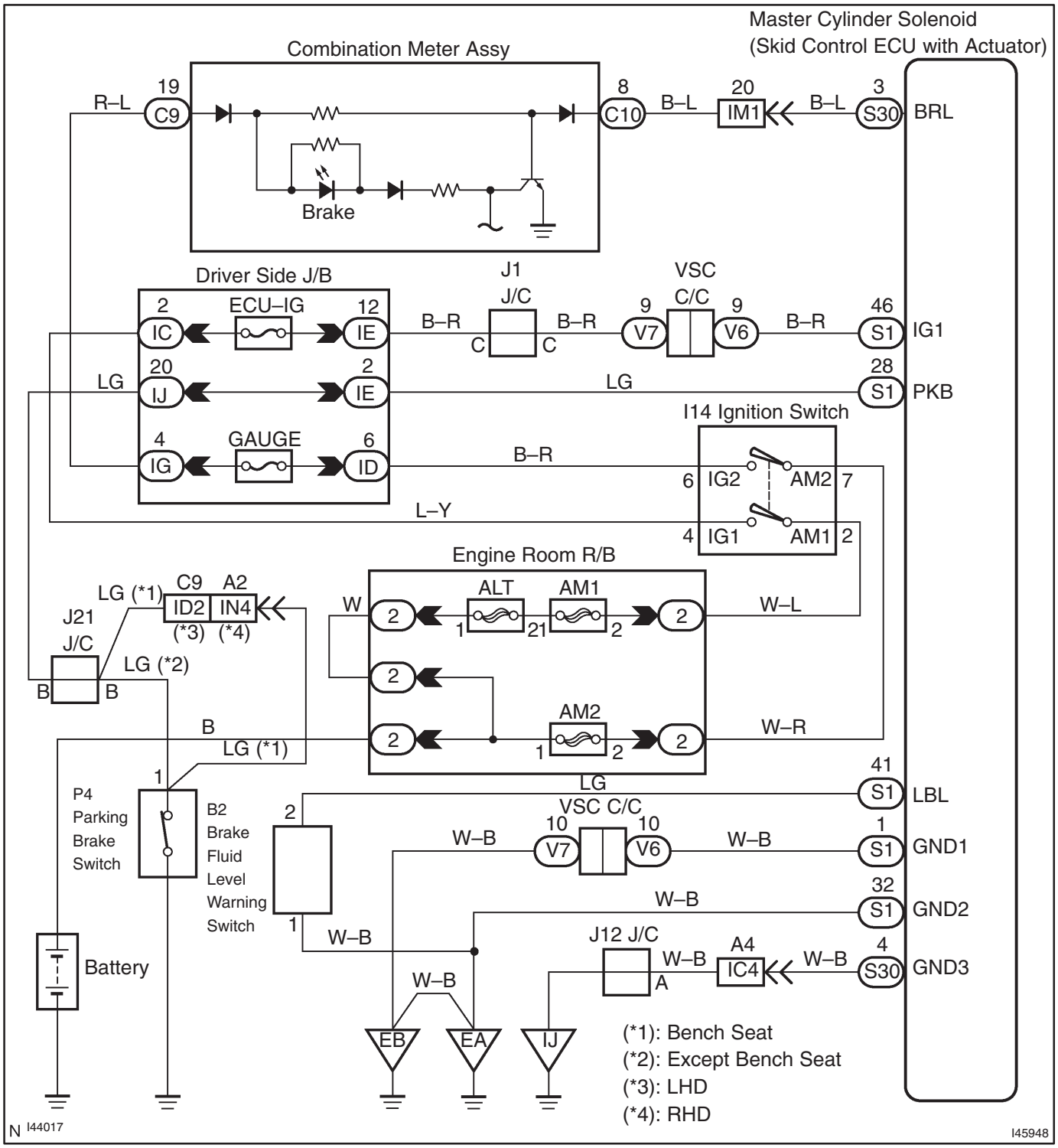
BRAKE WARNING LIGHT CIRCUIT (REMAINS ON)

CIRCUIT DESCRIPTION

The brake warning light comes on when brake fluid is insufficient, the parking brake is applied or the EBD is defective.

WIRING DIAGRAM



INSPECTION PROCEDURE

NOTICE:

When replacing the master cylinder solenoid, perform zero point calibration (see page 05–744).

1 CHECK DTC

(a) Check the DTCs (see page 05–766).

Result:

DTC is not output	A
DTC is output	B

B → **REPAIR CIRCUIT ACCORDING TO OUTPUT CODE (SEE PAGE 05–776)**

A

2 INSPECT IF SKID CONTROL ECU CONNECTOR IS SECURELY CONNECTED

(a) Check the skid control ECU connector's connecting condition.

OK:

The connector should be securely connected.

NG → **CONNECT CONNECTOR TO ECU**

OK

3 INSPECT BATTERY

(a) Check the battery voltage.

Standard:

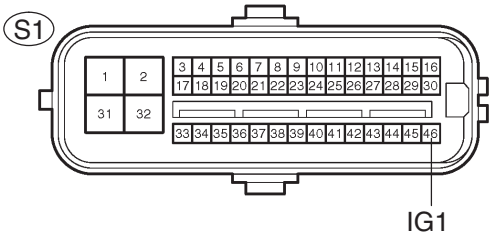
Voltage: 11 to 14 V

NG → **GO TO CHARGING SYSTEM (SEE PUB. NO. RM1017E, PAGE 19–6) (SEE PUB. NO. RM990E, PAGE 19–36)**

OK

4 INSPECT SKID CONTROL ECU (IG1 TERMINAL VOLTAGE)

Skid Control ECU (Wire Harness Side)
Connector Front View:



(a) Disconnect the skid control ECU connector.
(b) Turn the ignition switch to the ON position.
(c) Measure the voltage according to the value(s) in the table below.

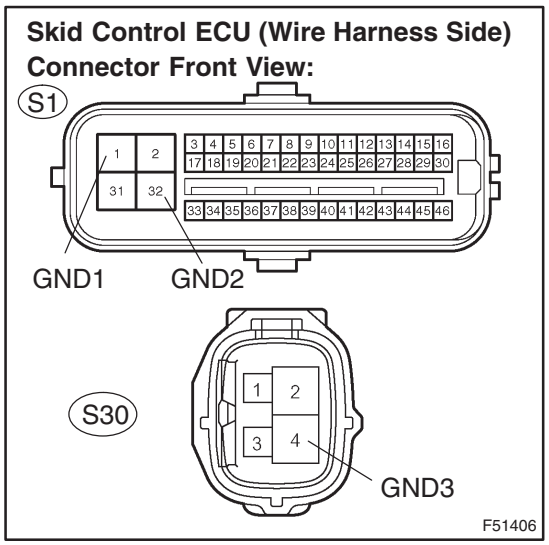
Standard:

Tester Connection	Specified Condition
S1–46 (IG1) – Body ground	10 to 14 V

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (IG1 CIRCUIT)**

OK

5 INSPECT SKID CONTROL ECU (GND TERMINAL CONTINUITY)



(a) Disconnect the skid control ECU (S30) connector.
(b) Measure the resistance according to the value(s) in the table below.

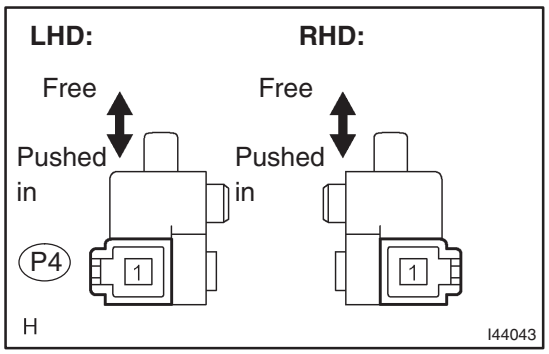
Standard:

Tester Connection	Specified Condition
S1–1 (GND1) – Body ground	Below 1 Ω
S1–32 (GND2) – Body ground	Below 1 Ω
S30–4 (GND3) – Body ground	Below 1 Ω

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR (GND CIRCUIT)**

OK

6 INSPECT PARKING BRAKE SWITCH



(a) Disconnect the parking brake switch connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

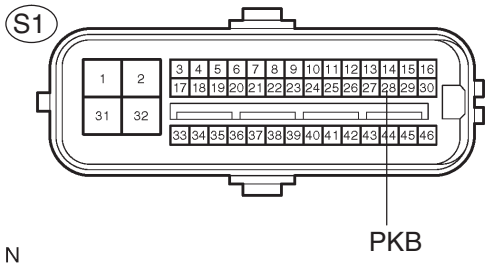
Tester Connection	Condition	Specified Condition
P4–1 – Body ground	Parking brake switch ON (Switch pin free)	Below 1 Ω
P4–1 – Body ground	Parking brake switch OFF (Switch pin pushed in)	10 kΩ or higher

NG → **REPLACE PARKING BRAKE SWITCH**

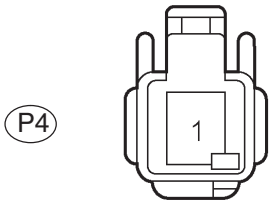
OK

7	CHECK HARNESS AND CONNECTOR (BETWEEN SKID CONTROL ECU AND PARKING BRAKE SWITCH) (SEE PAGE 01–26)

Skid Control ECU (Wire Harness Side)
Connector Front View:



Parking Brake Switch (Wire Harness Side)
Connector Front View:



H F49362
I44033
I45331

(a) Measure the resistance according to the value(s) in the table below.

Standard:

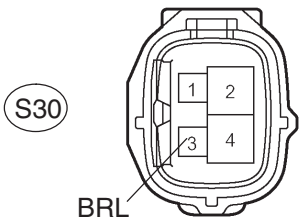
Tester Connection	Specified Condition
S1–28 (PKB) – P4–1	Below 1 Ω
S1–28 (PKB) Body ground	10 kΩ or higher

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

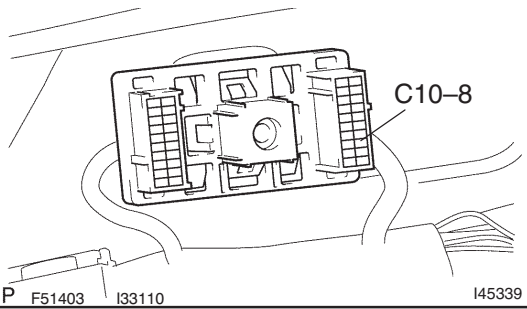
OK

8	CHECK HARNESS AND CONNECTOR (BETWEEN SKID CONTROL ECU AND COMBINATION METER) (SEE PAGE 01–26)

Skid Control ECU (Wire Harness Side)
Connector Front View:



Combination Meter (Left Side of the Vehicle)
Connector Front View:



P F51403 I33110
I45339

(a) Disconnect the combination meter connector.
(b) Measure the resistance according to the value(s) in the table below.

Standard:

Tester Connection	Specified Condition
S30–3 (BRL) – C10–8	Below 1 Ω
S30–3 (BRL) – Body ground	10kΩ or higher

NG → **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK

9	INSPECT COMBINATION METER ASSY

(a) Check the combination meter system (see page 05–1413).

NG → **REPLACE COMBINATION METER ASSY (SEE PUB. NO. RM990E, PAGE 71–24)**

OK

REPLACE MASTER CYLINDER SOLENOID (SEE PAGE 32–12)