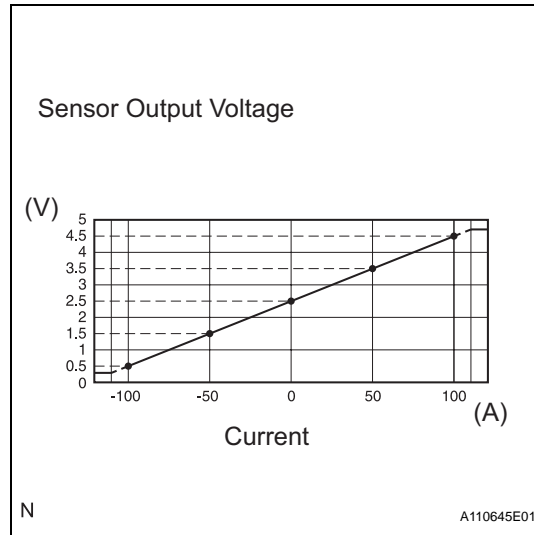


DTC	P1550	Battery Current Sensor Circuit
DTC	P1551	Battery Current Sensor Circuit Low
DTC	P1552	Battery Current Sensor Circuit High

DESCRIPTION

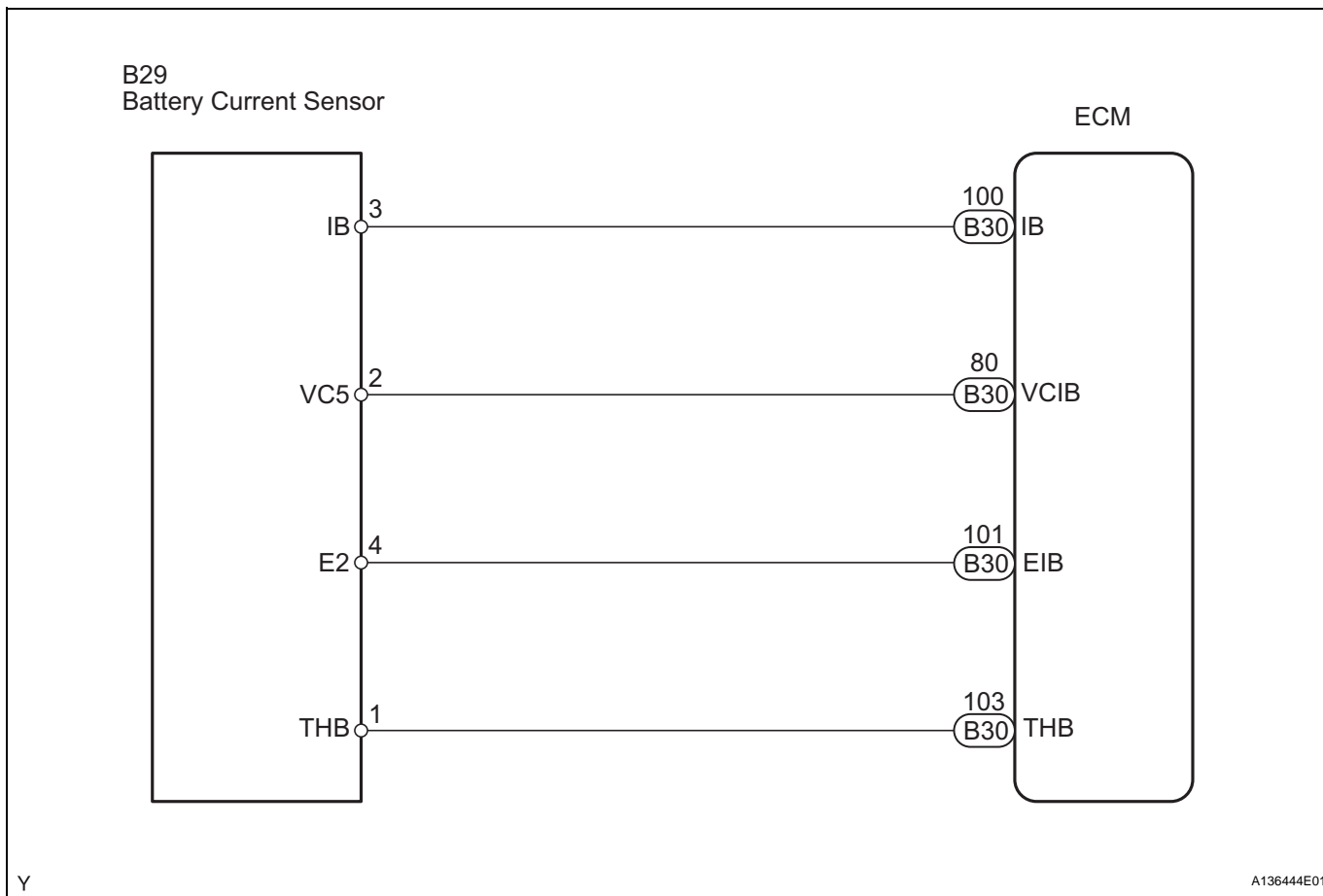


The battery current sensor installed on the positive (+) battery terminal detects the amount of current supplied from the generator.

The battery current sensor changes current to voltage (at the positive (+) battery terminal) and sends it to the ECM. The ECM controls the voltage of the generator based on the signals from the battery current sensor.

DTC No.	DTC Detection Condition	Trouble Area
P1550	The following condition continues for 10 seconds or more with the ignition switch ON (1 trip detection logic): <ul style="list-style-type: none"> Difference between the maximum and minimum current values of the battery current sensor is 1 A or less 	<ul style="list-style-type: none"> Open or short in battery current sensor circuit Battery current sensor assembly ECM
P1551	Battery current sensor output value is 0.2 V or less for 0.5 seconds or more with the ignition switch ON (1 trip detection logic)	<ul style="list-style-type: none"> Short in battery current sensor circuit Battery current sensor assembly ECM
P1552	Battery current sensor output value is 4.8 V or more for 0.5 seconds or more with the ignition switch ON (1 trip detection logic)	<ul style="list-style-type: none"> Open in battery current sensor circuit Battery current sensor assembly ECM

WIRING DIAGRAM



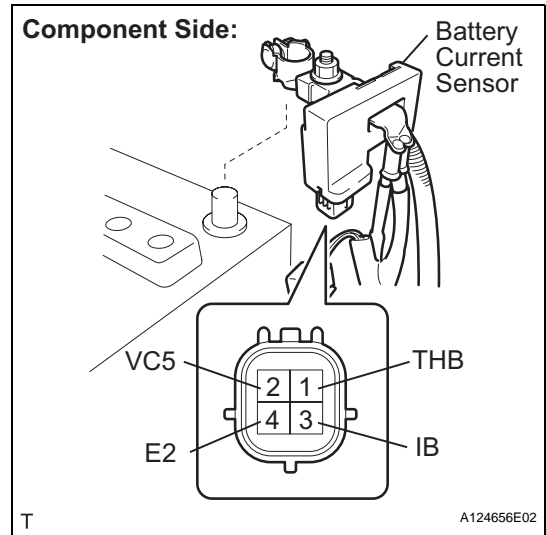
ES

INSPECTION PROCEDURE

HINT:

- If DTCs related to different systems that have terminal E2 as the ground terminal are output simultaneously, terminal E2 may have an open circuit.
- Read freeze frame data using the intelligent tester. Freeze frame data records the engine conditions when malfunctions are detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air-fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1 INSPECT BATTERY CURRENT SENSOR ASSEMBLY



- (a) Disconnect the B29 battery current sensor connector.
- (b) Measure the resistance of the battery current sensor.

Standard resistance

Tester Connection	Specified Condition
2 (VC5) - 4 (E2)	3 to 10 kΩ
2 (VC5) - 3 (IB)	Below 0.5 kΩ
3 (IB) - 4 (E2)	3 to 10 kΩ

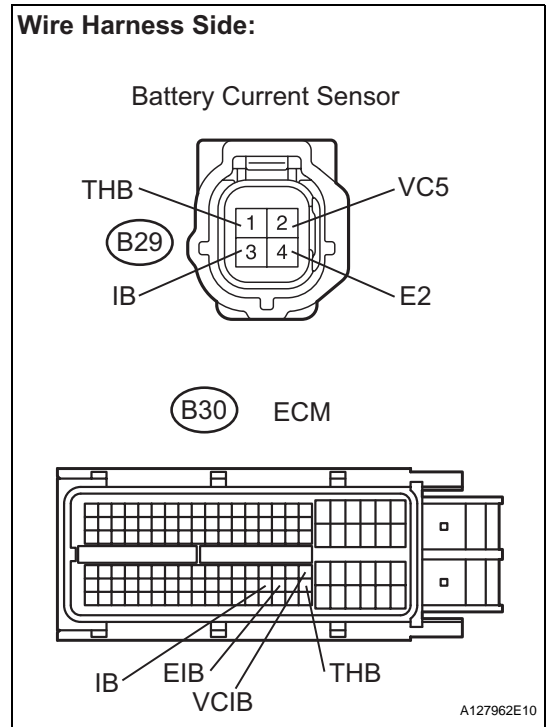
HINT:

The resistance differs according to the tester type.

NG → **REPLACE BATTERY CURRENT SENSOR ASSEMBLY**

OK

2 CHECK WIRE HARNESS (BATTERY CURRENT SENSOR - ECM)



- (a) Disconnect the B29 battery current sensor connector.
- (b) Disconnect the B30 ECM connectors.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
B29-3 (IB) - B30-100 (IB)	Below 1 Ω
B29-2 (VC5) - B30-80 (VCIB)	Below 1 Ω
B29-4 (E2) - B30-101 (EIB)	Below 1 Ω
B29-1 (THB) - B30-103 (THB)	Below 1 Ω
B29-3 (IB) or B30-100 (IB) - Body ground	10 kΩ or higher
B29-2 (VC5) or B30-80 (VCIB) - Body ground	10 kΩ or higher
B29-1 (THB) or B30-103 (THB) - Body ground	10 kΩ or higher

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

OK

REPLACE ECM