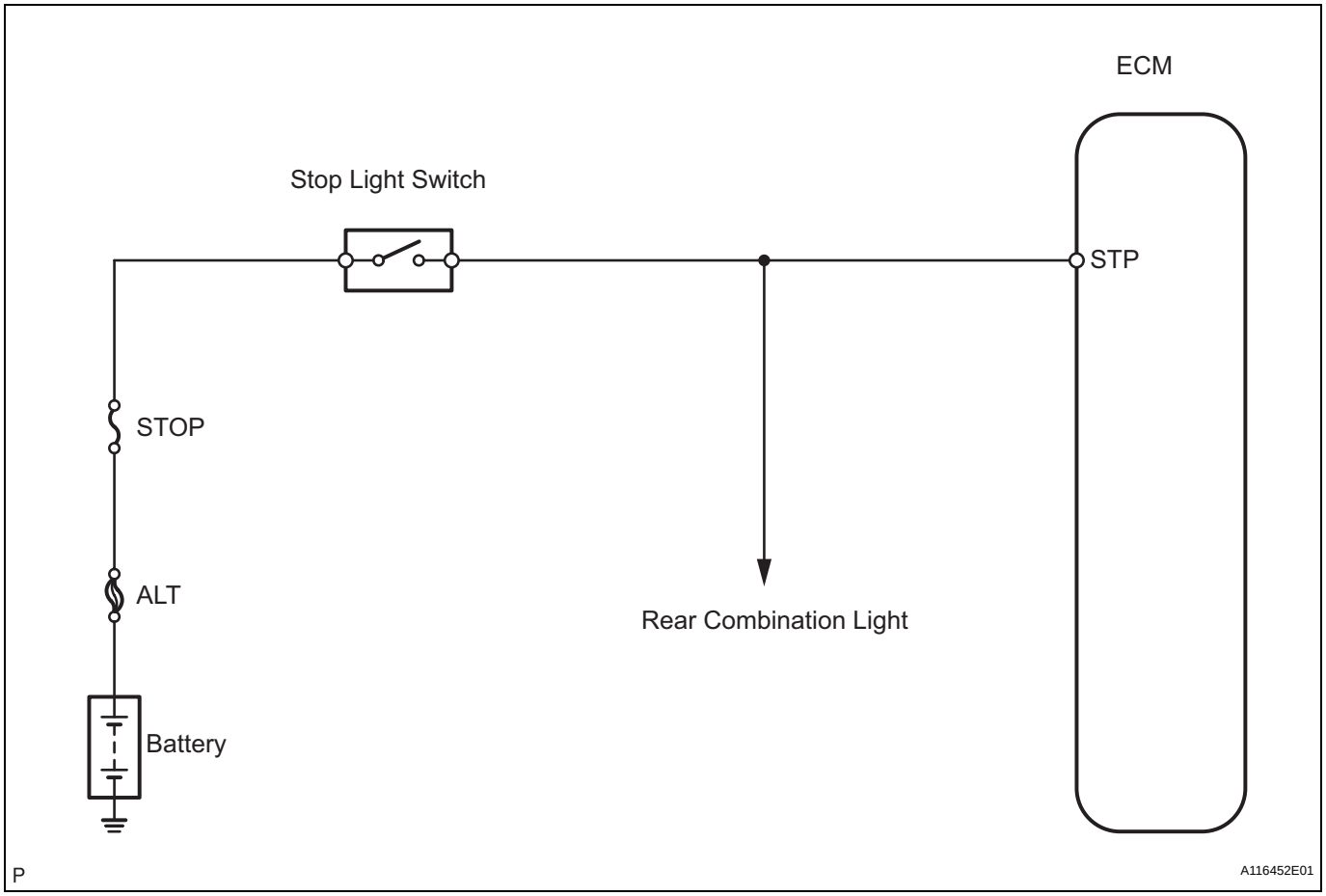
Stop Light Switch Circuit

DESCRIPTION

When the brake pedal is depressed, the stop light switch turns on and transmits an STP signal to the ECM. Upon receipt of the STP signal, the ECM determines that the brakes have been applied. The signal voltage level is the same as that of the voltage which is applied to the stop lights. In addition, the STP signal is used to control the fuel cut-off engine speed. Therefore, the fuel cut-off engine speed is slightly reduced when the vehicle is braking.

WIRING DIAGRAM



ES

1	CHECK OPERATION OF STOP LIGHT

(a) Check whether the stop lights turn on and off normally when the brake pedal is depressed and released.

OK:

Stop lights turn ON when brake pedal is depressed.

NG → **REPAIR OR REPLACE STOP LIGHT SWITCH CIRCUIT**

OK

2	READ VALUE OF INTELLIGENT TESTER (STP SIGNAL)

(a) Connect the intelligent tester to the DLC3.
(b) Turn the ignition switch ON and turn the tester ON.
(c) On the tester, enter the following menus: DIAGNOSIS / ENHANCED OBD II / DATA LIST / PRIMARY / STOP LIGHT SW.
(d) Read the value displayed on the tester.

Standard

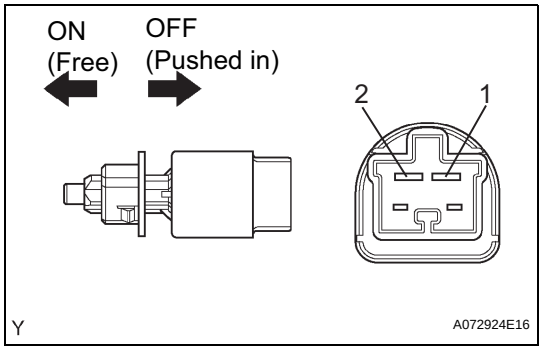
Brake Pedal Operation	Specified Condition
Depressed	STP Signal ON
Released	STP Signal OFF

ES

OK → CHECK FOR INTERMITTENT PROBLEMS

NG

3	INSPECT STOP LIGHT SWITCH ASSEMBLY



(a) Check the resistance when the stop light switch is ON and OFF.

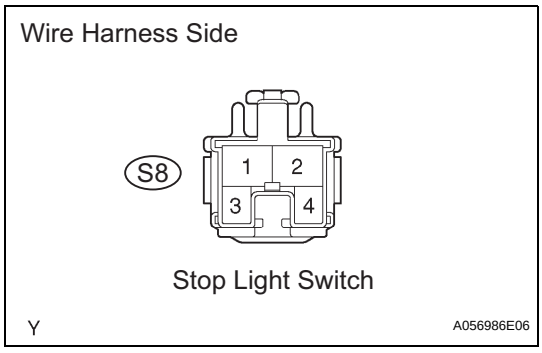
Standard resistance

Switch Position	Tester Connection	Specified Condition
ON (Free)	1 - 2	Below 1 Ω
OFF (Pushed in)	1 - 2	10 kΩ or higher

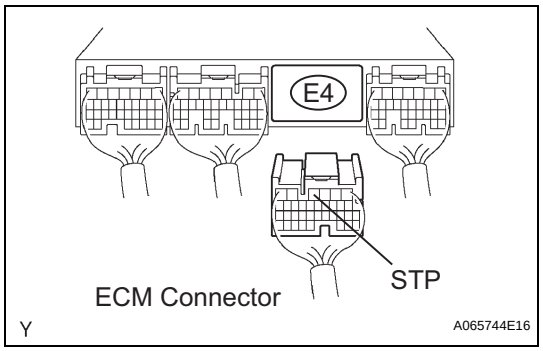
NG → REPLACE STOP LIGHT SWITCH ASSEMBLY

OK

4	CHECK HARNESS AND CONNECTOR (STOP LIGHT SWITCH - ECM)



(a) Disconnect the S8 stop light switch connector.



(b) Disconnect the E4 ECM connector.
(c) Measure the resistance of the wire harness side connector.

Standard resistance (Check for open)

Tester Connection	Specified Condition
S8-1 - STP (E4-4)	Below 1 Ω

Standard resistance (Check for short)

Tester Connection	Specified Condition
S8-1 or STP (E4-4) - Body ground	10 kΩ or higher

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

OK

REPLACE ECM