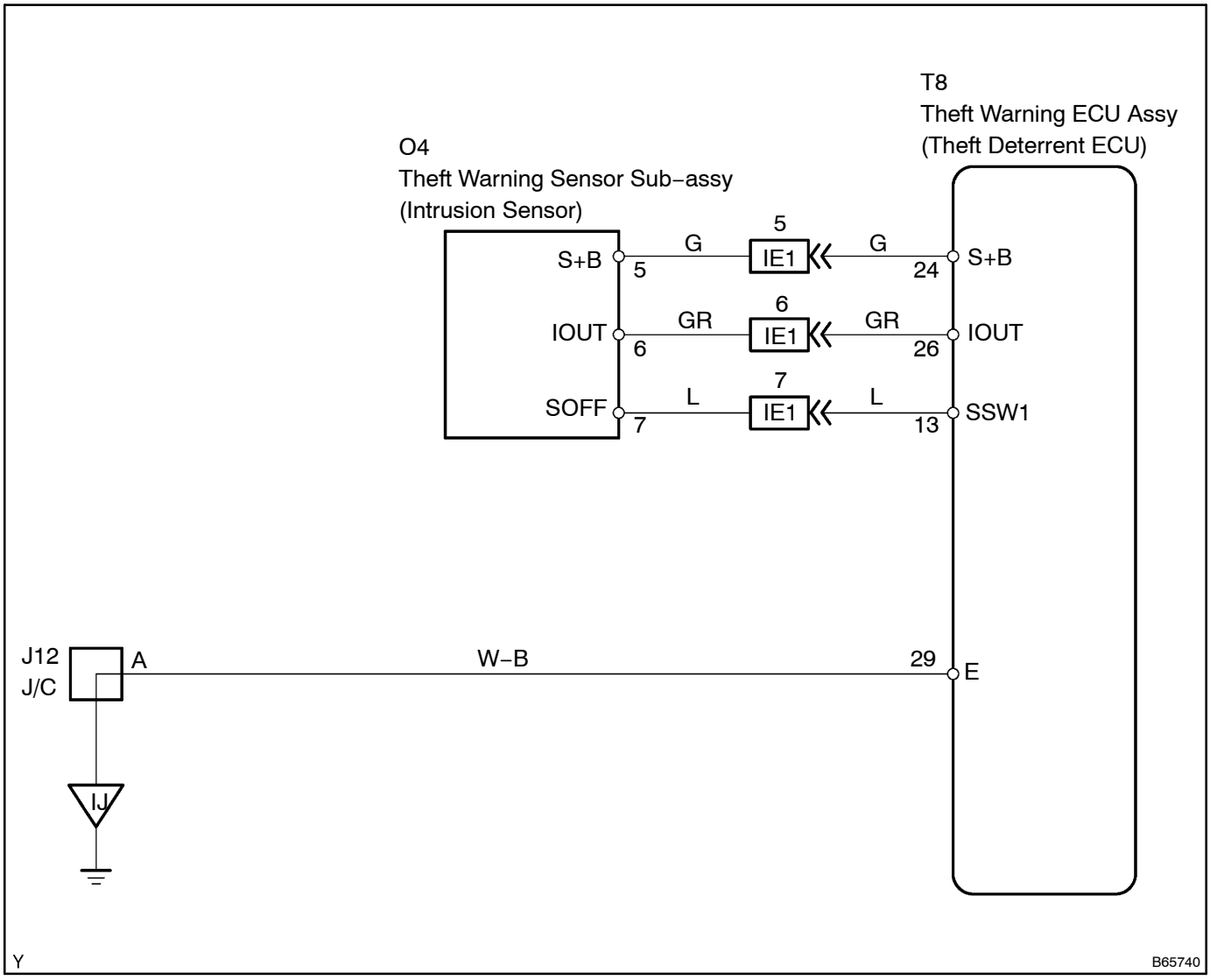
INTRUSION SENSOR CIRCUIT

CIRCUIT DESCRIPTION

The intrusion sensor senses any moving object by using ultrasonic waves and outputs the signals to communicate an intrusion to the theft warning ECU assy, so that the theft deterrent system can set off the alarm. When the theft deterrent system is switched to the arming preparation state, the intrusion sensor is supplied with +B by the theft warning ECU assy. This causes the theft deterrent system to set off the alarm when the signal is input from the intrusion sensor in such a situation as the window glass being broken.

WIRING DIAGRAM



INSPECTION PROCEDURE

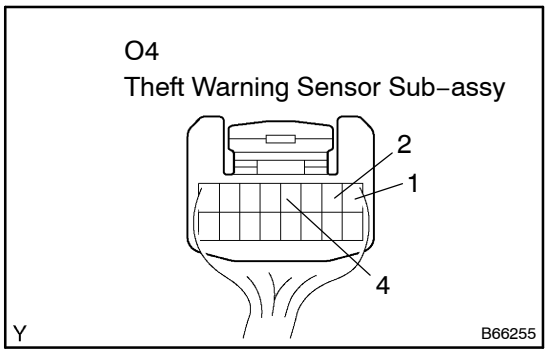
1	CHECK THEFT WARNING SENSOR SUB–ASSY (INSTRUSION SENSOR) (OPERATION)

(a) Set the theft deterrent system with a window open, and after 30 seconds insert your hand through the window and shake it near the sensor to check if the alarm is triggered.

OK ⇒ **NO PROBLEM**

NG

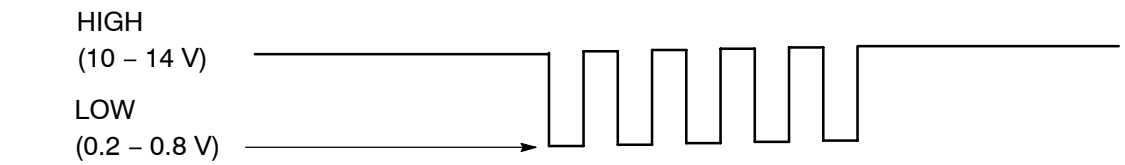
2	CHECK THEFT WARNING SENSOR SUB–ASSY (INTRUSION SENSOR) (VOLTAGE, CONTINUITY)



(a) Check the intrusion sensor.

Terminal No.	Condition	Specified Condition
O4–2 ⇔ Ground	Arming preparation state or armed state	Battery voltage
	Disarmed state	Below 1 V
O4–1 ⇔ Ground	When sensor does not detect any movement	10 – 12 V
	When sensor detects movement when in arming preparation state or armed state	Using an oscilloscope *
O4–4 ⇔ Ground	Constant	Continuity

*: Wave Pattern



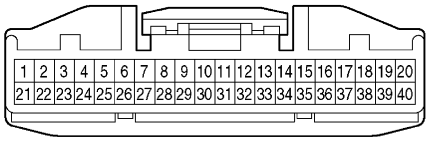
NG ⇒ **REPLACE THEFT WARNING SENSOR SUB–ASSY**

OK

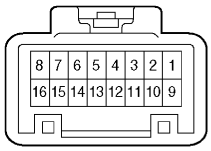
3 CHECK WIRE HARNESS (THEFT WARNING ECU ASSY ⇔ THEFT WARNING SENSOR ASSY)

Wire Harness Side

T8
Theft Warning ECU Assy
(Theft Deterrent ECU)



O4
Theft Warning Sensor Assy
(Intrusion Sensor)



B63408
B65745
B66146

(a) Disconnect the T8 ECU connector.
(b) Disconnect the O4 sensor connector.
(c) Check the continuity between the wire harness side connectors.

Standard:

Symbols (Terminal No.)	Specified Condition
S+B (T8–24) ⇔ S+B (O4–5)	Continuity
IOUT (T8–26) ⇔ IOUT (O4–6)	Continuity
SSW1 (T8–25) ⇔ SOFF (O4–7)	Continuity

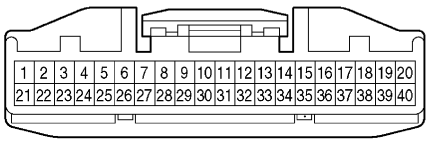
NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

4 CHECK WIRE HARNESS (THEFT WARNING ECU ASSY ⇔ BODY GROUND)

Wire Harness Side

T8
Theft Warning ECU Assy
(Theft Deterrent ECU)



B63408

(a) Disconnect the T8 ECU connector.
(b) Check the continuity between the wire harness side connector and body ground.

Standard:

Symbols (Terminal No.)	Specified condition
E (T8–29) ⇔ Body ground	Continuity

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

OK

REPLACE THEFT WARNING ECU ASSY