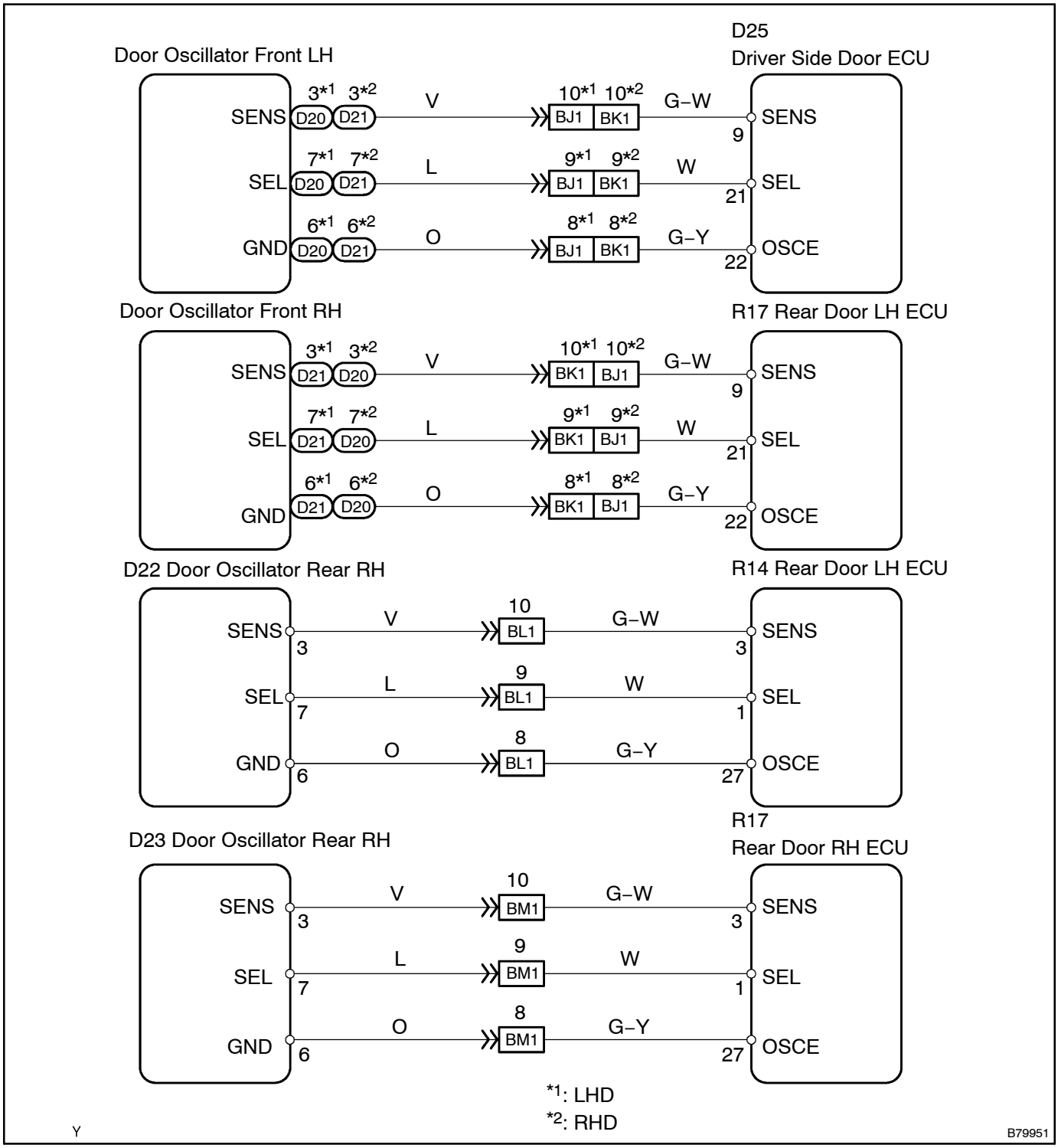
TOUCH SENSOR CIRCUIT

CIRCUIT DESCRIPTION

This circuit receives the signal indicating whether or not a touch sensor signal is detected.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	READ VALUE OF INTELLIGENT TESTER II

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch ON and press the intelligent tester II main switch ON.
(c) Select the items below in the DATA LIST and read the displays on the intelligent tester II.

Theft warning ECU:

Item	Test Details	Normal Condition	(Diagnostic Note)
Touch sensor	Outside door handle touched/not touched	ON: Touched OFF: Not touched	–

OK: "ON" (sensor is touched) appears on the screen.

NG → **Go to step 2**

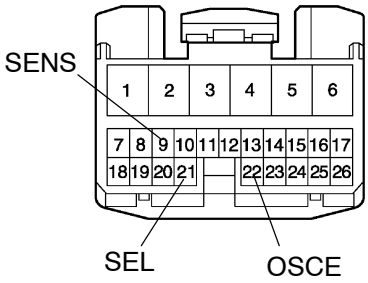
OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE
(See page 05–2634)

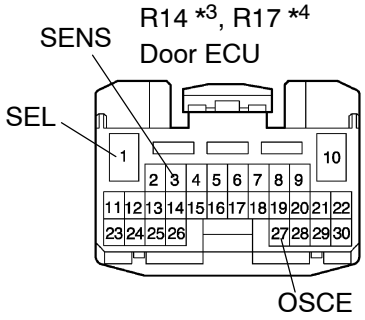
2 CHECK WIRE HARNESS (DOOR OSCILLATOR – DOOR ECU)

Wire Harness Side

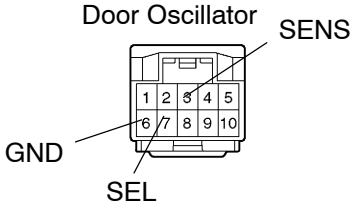
D25 *1, *5, F17 *2, *6
Door ECU



R14 *3, R17 *4
Door ECU



D20 *1, *6, D21 *2, *5
D22 *3, D23 *4
Door Oscillator



*1: Driver Side (LHD)
*2: Passenger Side (LHD)
*3: Rear LH
*4: Rear RH
*5: Driver Side (RHD)
*6: Passenger Side (RHD)

B80304

(a) Disconnect the D25, F17, R14 and R17 door ECU connectors.
(b) Disconnect the D20, D21, D22 and D23 door oscillator connectors.
(c) Measure the resistance of between the wire harness side connectors.

Standard:

LHD models (Driver side)

Tester Connection	Specified Condition
D25–9 (SENS) – D20–3 (SENS)	Below 1 Ω
D25–21 (SEL) – D20–7 (SEL)	Below 1 Ω
D25–22 (OSCE) – D20–6 (GND)	Below 1 Ω

LHD models (Passenger side)

Tester Connection	Specified Condition
F17–9 (SENS) – D21–3 (SENS)	Below 1 Ω
F17–21 (SEL) – D21–7 (SEL)	Below 1 Ω
F17–22 (OSCE) – D21–6 (GND)	Below 1 Ω

LHD models (Rear LH)

Tester Connection	Specified Condition
R14–3 (SENS) – D22–3 (SENS)	Below 1 Ω
R14–1 (SEL) – D22–7 (SEL)	Below 1 Ω
R14–27 (OSCE) – D22–6 (GND)	Below 1 Ω

LHD models (Rear RH)

Tester Connection	Specified Condition
R17–3 (SENS) – D23–3 (SENS)	Below 1 Ω
R17–1 (SEL) – D23–7 (SEL)	Below 1 Ω
R17–27 (OSCE) – D23–6 (GND)	Below 1 Ω

RHD models (Driver side)

Tester Connection	Specified Condition
D25–9 (SENS) – D21–3 (SENS)	Below 1 Ω
D25–21 (SEL) – D21–7 (SEL)	Below 1 Ω
D25–22 (OSCE) – D21–6 (GND)	Below 1 Ω

RHD models (Passenger side)

Tester Connection	Specified Condition
F17–9 (SENS) – D20–3 (SENS)	Below 1 Ω
F17–21 (SEL) – D20–7 (SEL)	Below 1 Ω
F17–22 (OSCE) – D20–6 (GND)	Below 1 Ω

RHD models (Rear LH)

Tester Connection	Specified Condition
R14–3 (SENS) – D22–3 (SENS)	Below 1 Ω
R14–1 (SEL) – D22–7 (SEL)	Below 1 Ω
R14–27 (OSCE) – D22–6 (GND)	Below 1 Ω

RHD models (Rear RH)

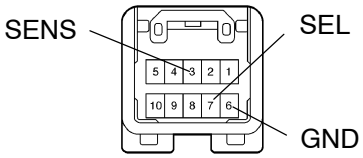
Tester Connection	Specified Condition
R17–3 (SENS) – D23–3 (SENS)	Below 1 Ω
R17–1 (SEL) – D23–7 (SEL)	Below 1 Ω
R17–27 (OSCE) – D23–6 (GND)	Below 1 Ω

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

3 INSPECT DOOR OSCILLATOR

D20*1,*6, D21*2,*5
D22*3, D23*4
Door Oscillator



*1: Driver Side (LHD)
*2: Passenger Side (LHD)
*3: Rear LH
*4: Rear RH
*5: Driver Side (RHD)
*6: Passenger Side (RHD)

B80326

(a) Measure the voltage of between wire harness side connectors.

Standard:

LHD models (Driver side)

Tester Connection	Condition	Specified Condition
D20–7 (SEL) – D20–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D20–3 (SENS) – D20–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

LHD models (Passenger side)

Tester Connection	Condition	Specified Condition
D21–7 (SEL) – D21–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D21–3 (SENS) – D21–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

LHD models (Rear LH)

Tester Connection	Condition	Specified Condition
D22–7 (SEL) – D22–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D22–3 (SENS) – D22–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

LHD models (Rear RH)

Tester Connection	Condition	Specified Condition
D23–7 (SEL) – D23–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D23–3 (SENS) – D23–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

RHD models (Driver side)

Tester Connection	Condition	Specified Condition
D21–7 (SEL) – D21–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → placed close to door	10 to 14 V → 0 V
D21–3 (SENS) – D21–6 (GND)	Outside door handle touched → not touched	10 to 14 V → 0 V

RHD models (Passenger side)

Tester Connection	Condition	Specified Condition
D20–7 (SEL) – D20–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → placed close to door	10 to 14 V → 0 V
D20–3 (SENS) – D20–6 (GND)	Outside door handle touched → not touched	10 to 14 V → 0 V

RHD models (Rear LH)

Tester Connection	Condition	Specified Condition
D22–7 (SEL) – D22–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D22–3 (SENS) – D22–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

RHD models (Rear RH)

Tester Connection	Condition	Specified Condition
D23–7 (SEL) – D23–6 (GND)	Smart key placed at least 5 m (16 ft) away from door → Placed close to door	10 to 14 V → 0 V
D23–3 (SENS) – D23–6 (GND)	Outside door handle touched → Not touched	10 to 14 V → 0 V

NG → **REPLACE DOOR OSCILLATOR**

OK

PROCEED TO NEXT CIRCUIT INSPECTION SHOWN ON PROBLEM SYMPTOMS TABLE
(See page 05–2634)