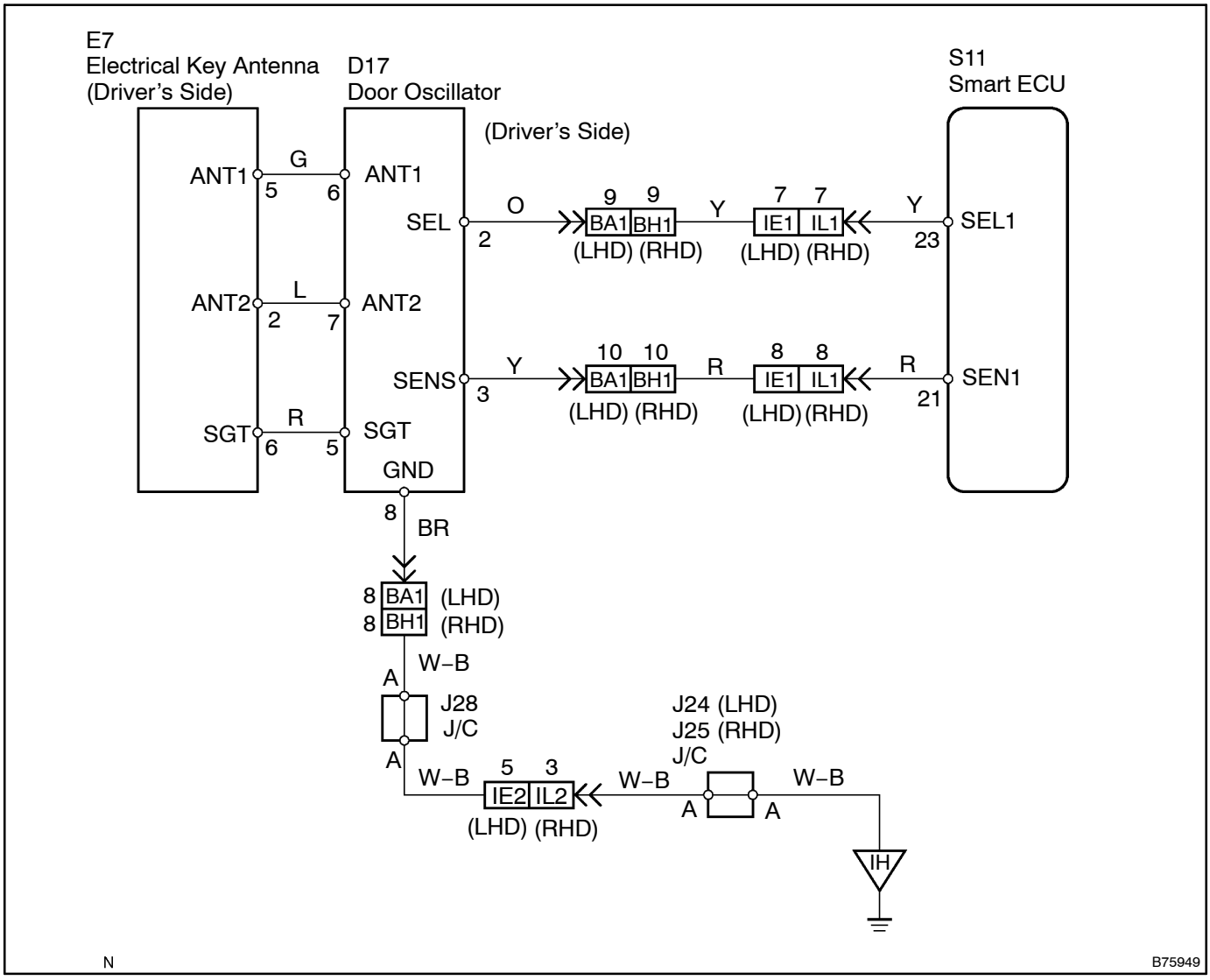
SMART UNLOCK FUNCTION DOES NOT OPERATE ON DRIVER DOOR

CIRCUIT DESCRIPTION

When an ID code from the driver door outside oscillator matches an ID code from the smart key, the smart ECU outputs a SEL signal (Lo when output) to the driver door outside oscillator, activates the touch sensor inside the outside handle, and enters unlock standby condition. When the touch sensor is touched, the outside oscillator sends SENS signal (Lo when output) to the smart ECU and the smart ECU sends unlock signals to the door lock assemblies on all doors.

WIRING DIAGRAM



INSPECTION PROCEDURE

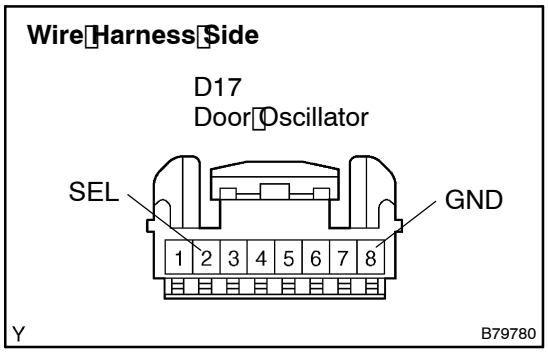
1	CHECK MANUAL DOOR UNLOCK OPERATION

(a) Check that the manual door unlock function operates normally.
OK: Manual door unlock function operates normally.

NG → **Go to POWER DOOR LOCK CONTROL SYSTEM (See page 05–1776)**

OK

2	INSPECT DOOR OSCILLATOR ON DRIVER SIDE



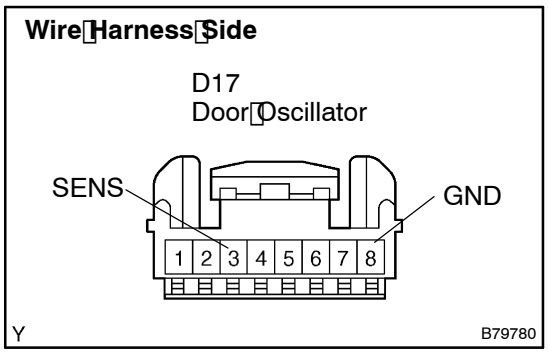
(a) Measure the voltage between the terminals of the connector when the smart key is operated.
Standard:

Tester Connection	Condition	Specified Condition
D17–2 (SEL) – D17–8 (GND)	Smart key at 5 m away from door → near door	10 to 14 V → Below 1 Ω

NG → **Go to step 7**

OK

3	INSPECT DOOR OSCILLATOR ON DRIVER SIDE



(a) Measure the voltage between the terminals of the connector when the outside door handle is touched.
Standard:

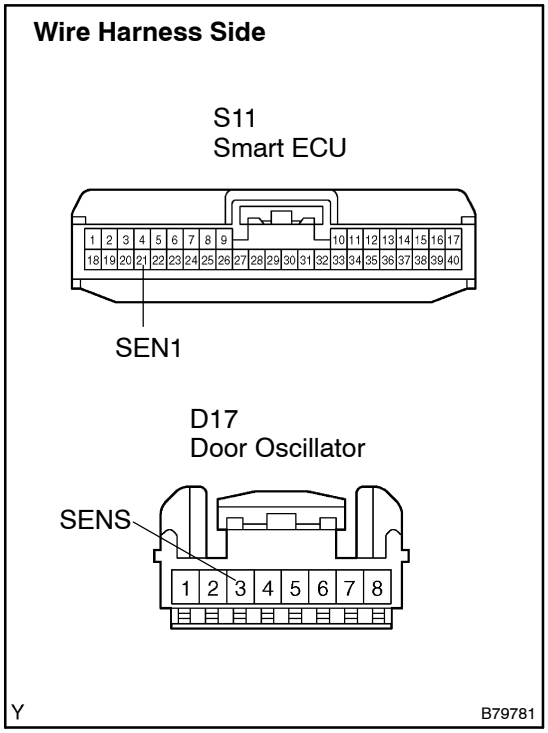
Tester Connection	Condition	Specified Condition
D17–3 (SENS) – D17–8 (GND)	Outside door handle not touched → touched	10 to 14 V → Below 1 Ω

NG → **Go to step 4**

OK

Go to step 5

4	CHECK WIRE HARNESS (DOOR OSCILLATOR ON DRIVER SIDE – SMART ECU AND BODY GROUND)



(a) Disconnect the D17 oscillator connector.
(b) Disconnect the S11 ECU connector.
(c) Measure the resistance between the wire harness side connectors and body ground.

Standard:

Tester Connection	Specified Condition
D17–3 (SENS) – S11–21 (SEN1)	Below 1 Ω
D17–3 (SENS) – Body ground	10 kΩ or higher

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

OK

5	CHECK OPERATION OF DOOR OSCILLATOR ON DRIVER SIDE

(a) After replacing the door oscillator on the driver's side with a new one, check that the smart unlock function operates normally.

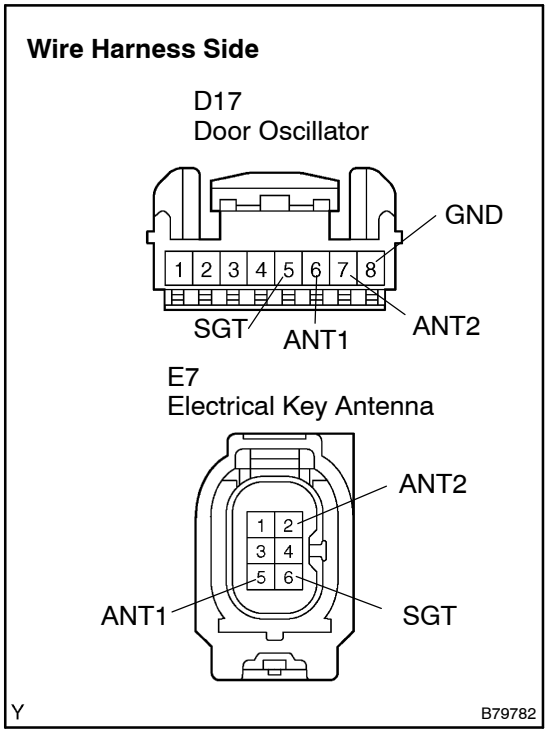
OK: Smart unlock function operates normally.

NG → **Go to step 6**

OK

REPLACE DOOR OSCILLATOR ON DRIVER SIDE

6	CHECK WIRE HARNESS (DOOR OSCILLATOR ON DRIVER SIDE – ELECTRICAL KEY ANTENNA AND BODY GROUND)



(a) Disconnect the D17 oscillator connector.
(b) Disconnect the E7 antenna connector.
(c) Measure the resistance of the wire harness side connectors and body ground.

Standard:

Tester Connection	Specified Condition
D17–6 (ANT1) – E7–5 (ANT1)	Below 1 Ω
D17–7 (ANT2) – E7–2 (ANT2)	Below 1 Ω
D17–5 (SGT) – E7–6 (SGT)	Below 1 Ω
D17–8 (GND) – Body ground	Below 1 Ω
D17–6 (ANT1) – Body ground	10 kΩ or higher
D17–7 (ANT2) – Body ground	10 kΩ or higher
D17–5 (SGT) – Body ground	10 kΩ or higher

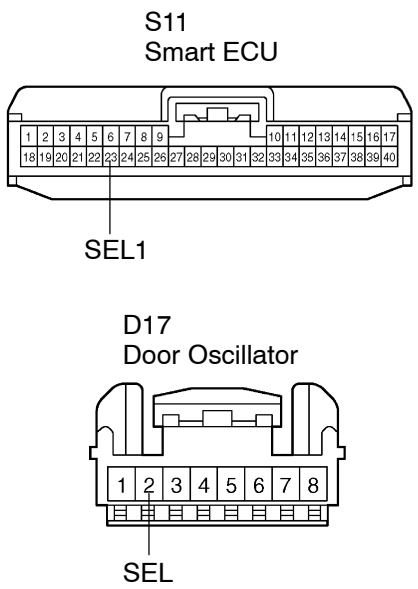
NG → **REPAIR OR REPLACE HARNESS AND CONNECTOR**

OK

REPLACE ELECTRICAL KEY ANTENNA

7	CHECK WIRE HARNESS (DOOR OSCILLATOR ON DRIVER SIDE – SMART ECU AND BODY GROUND)

Wire Harness Side



(a) Disconnect the D17 oscillator connector.
(b) Disconnect the S11 ECU connector.
(c) Measure the resistance between the wire harness side connectors and body ground.

Standard:

Tester Connection	Specified Condition
D17–2 (SEL) – S11–23 (SEL1)	Below 1 Ω
D17–2 (SEL) – Body ground	10 kΩ or higher

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

OK

REPLACE SMART ECU