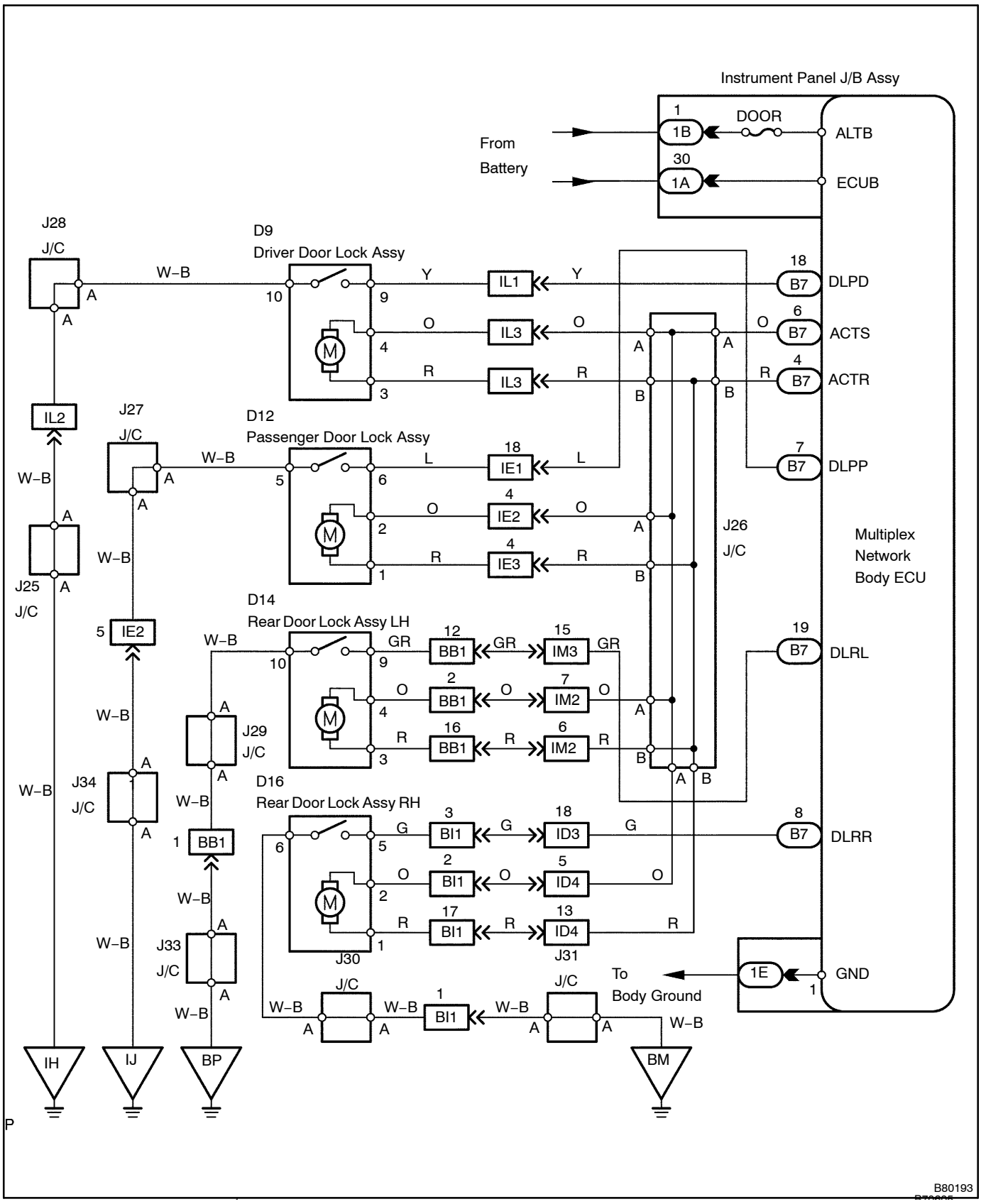
DOUBLE LOCK FUNCTION DOES NOT OPERATE PROPERLY*

HINT:
*: w/ Double lock system

CIRCUIT DESCRIPTION

All the doors except the luggage compartment door use the double lock system. The multiplex network body ECU controls this system. When the body ECU receives a request signal that indicates to set or unset the double lock system from the transmitter, it activates the double lock motor in each door lock assembly to set or unset the double lock system, according to the request and the conditions of all the double lock position switches.

WIRING DIAGRAM



INSPECTION PROCEDURE

1	INSPECT WIRELESS DOOR LOCK OPERATION

(a) Check that the doors can be locked and unlocked normally by the wireless operation.
OK: Doors can be locked and unlocked wireless operation.

NG	Go to WIRELESS DOOR CONTROL SYSTEM (See page 05–1953 or 05–2001)

OK

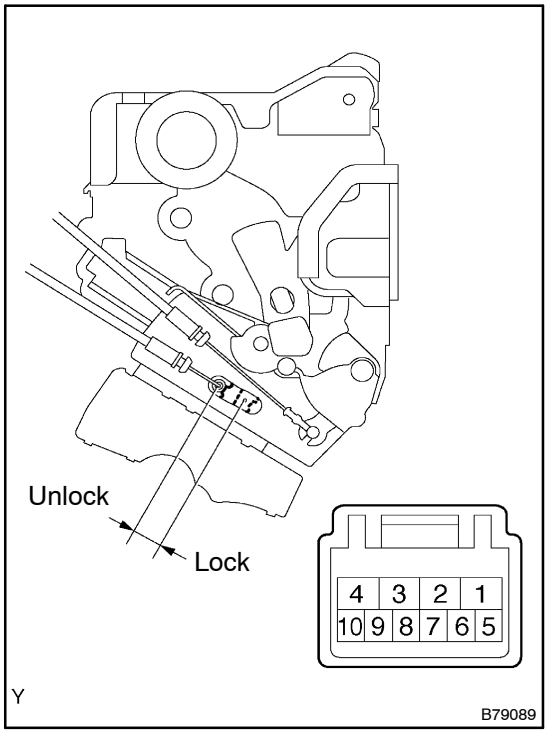
2	INSPECT FUSE (DOOR)

(a) Remove the DOOR fuse from the instrument panel J/B.
(b) Measure the resistance.
Standard: Below 1 Ω

NG	REPLACE FUSE

OK

3 INSPECT DRIVER DOOR LOCK ASSY (DOUBLE LOCK MOTOR)



(a) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock and set the door lock motor to the lock position.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Unlock

(2) Apply battery voltage to the door lock and check operation of the double lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Double lock system is set
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Double lock system is unset

(3) While the double lock system is set, check that the doors cannot be unlocked by operating the control cable.

NG → **REPLACE DRIVER DOOR LOCK ASSY**

OK

4 INSPECT DRIVER DOOR LOCK ASSY (DOUBLE LOCK POSITION SWITCH)

(a) Measure the resistance of the double lock position switch.

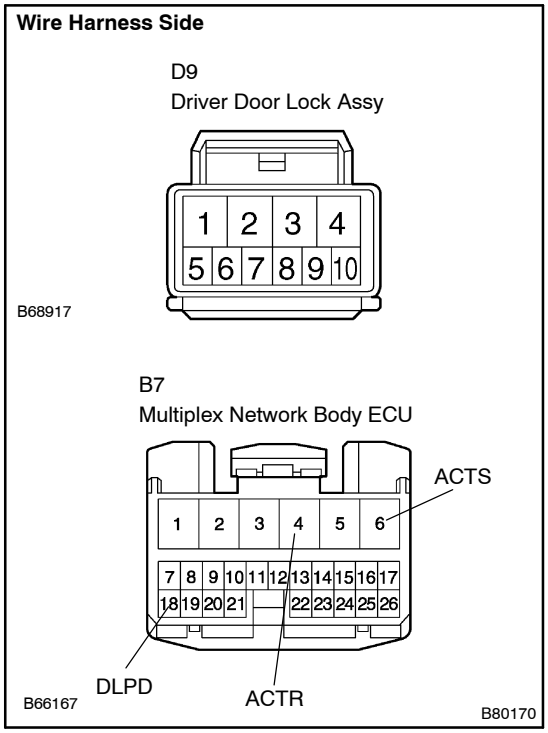
Standard:

Tester Connection	Double Lock Condition	Specified Condition
9 – 10	Set	Below 1 Ω
9 – 10	Unset	10 kΩ or higher

NG → **REPLACE DRIVER DOOR LOCK ASSY**

OK

5 CHECK WIRE HARNESS (DRIVER DOOR LOCK ASSY – MULTIPLEX NETWORK BODY ECU)



(a) Disconnect the D9 lock and B7 ECU connectors.

(b) Measure the resistance of the wire harness side connectors.

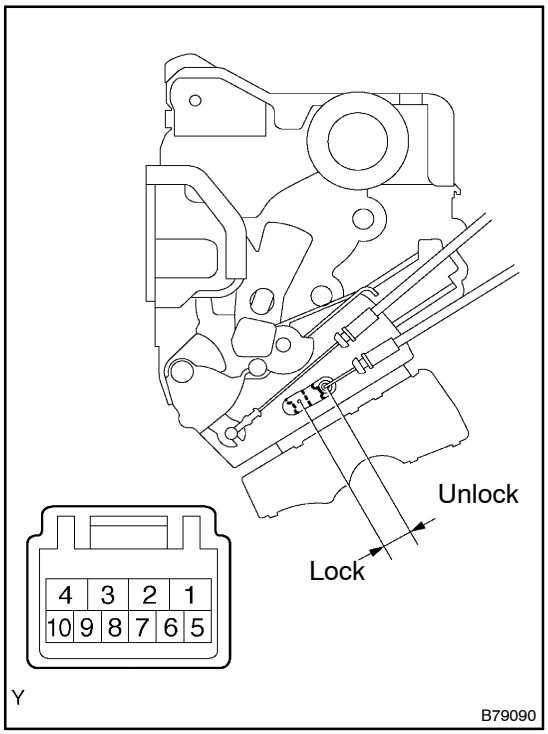
Standard:

Tester Connection	Specified Condition
D9–4 – B7–6 (ACTS)	Below 1 Ω
D9–3 – B7–4 (ACTR)	Below 1 Ω
D9–9 – B7–18 (DLPD)	Below 1 Ω
D9–10 – Body ground	Below 1 Ω

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

OK

6 INSPECT PASSENGER DOOR LOCK ASSY (DOUBLE LOCK MOTOR)



(a) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock and set the door lock motor to the lock position.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Lock

(2) Apply battery voltage and inspect operation of the double lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Double lock system is set
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Double lock system is unset

(3) While the double lock system is set, check that the doors cannot be unlocked by operating the control cable.

NG → **REPLACE PASSENGER DOOR LOCK ASSY**

OK

7 INSPECT PASSENGER DOOR LOCK ASSY (DOUBLE LOCK POSITION SWITCH)

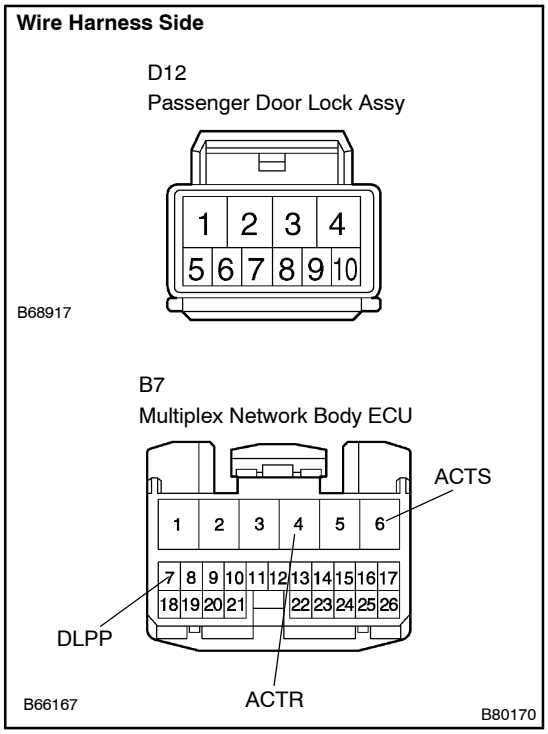
(a) Measure the resistance of the double lock position switch.
Standard:

Tester Connection	Double Lock Condition	Specified Condition
5 – 6	Set	Below 1 Ω
5 – 6	Unset	10 kΩ or higher

NG → **REPLACE PASSENGER DOOR LOCK ASSY**

OK

8 CHECK WIRE HARNESS (PASSENGER DOOR LOCK ASSY – MULTIPLEX NETWORK BODY ECU)



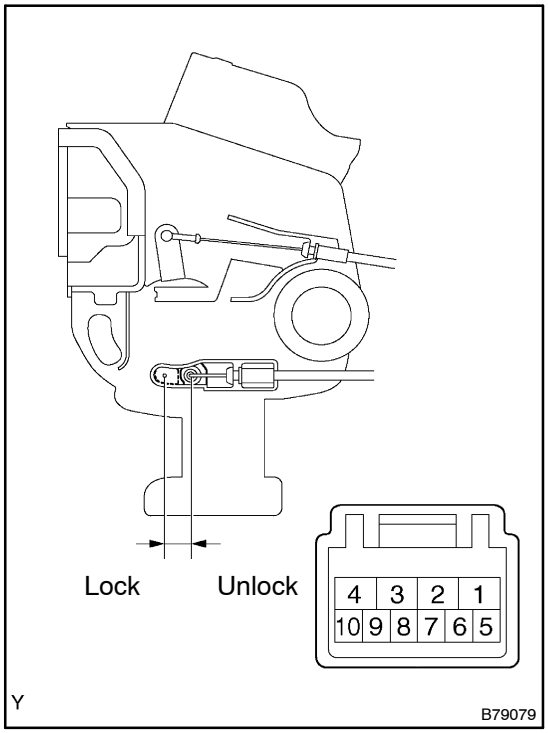
(a) Disconnect the D12 lock and B7 ECU connectors.
(b) Measure the resistance of the wire harness side connectors.
Standard:

Tester Connection	Specified Condition
D12–2 – B7–6 (ACTS)	Below 1 Ω
D12–1 – B7–4 (ACTR)	Below 1 Ω
D12–6 – B7–7 (DLPP)	Below 1 Ω
D12–5 – Body ground	Below 1 Ω

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

OK

9 INSPECT REAR DOOR LOCK ASSY LH (DOUBLE LOCK MOTOR)



(a) Check operation of the double lock motor.

(1) Apply battery voltage to the door lock and set the door lock motor to the lock position.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Lock

(2) Apply battery voltage to the door lock and check operation of the double lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Double lock system is set
Battery positive (+) → Terminal 3 Battery negative (–) → Terminal 4	Double lock system is unset

(3) While the double lock system is set, check that the doors cannot be unlocked by operating the control cable.

NG → **REPLACE REAR DOOR LOCK ASSY LH**

OK

10 INSPECT REAR DOOR LOCK ASSY LH (DOUBLE LOCK POSITION SWITCH)

(a) Measure the resistance of the double lock position switch.

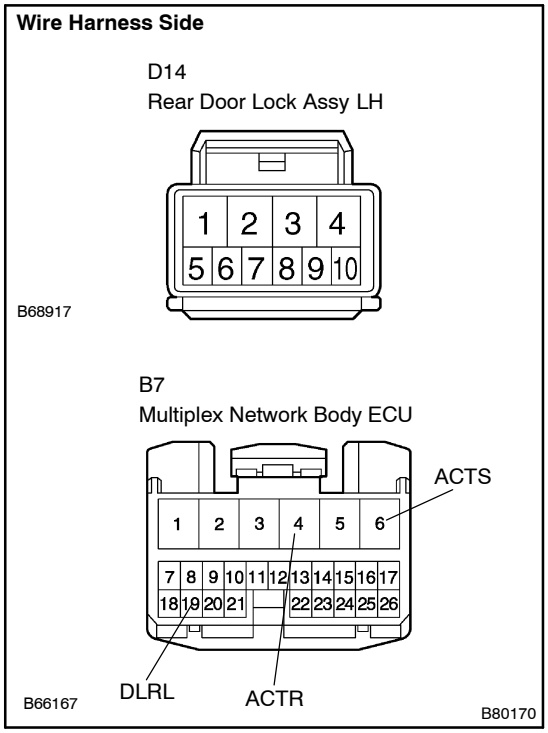
Standard:

Tester Connection	Double Lock Condition	Specified Condition
9 – 10	Set	Below 1 Ω
9 – 10	Unset	10 kΩ or higher

NG → **REPLACE REAR DOOR LOCK ASSY LH**

OK

11 CHECK WIRE HARNESS (REAR DOOR LOCK ASSY LH – MULTIPLEX NETWORK BODY ECU)



(a) Disconnect the D14 door lock and B7 ECU connectors.
(b) Measure the resistance of the wire harness side connectors.

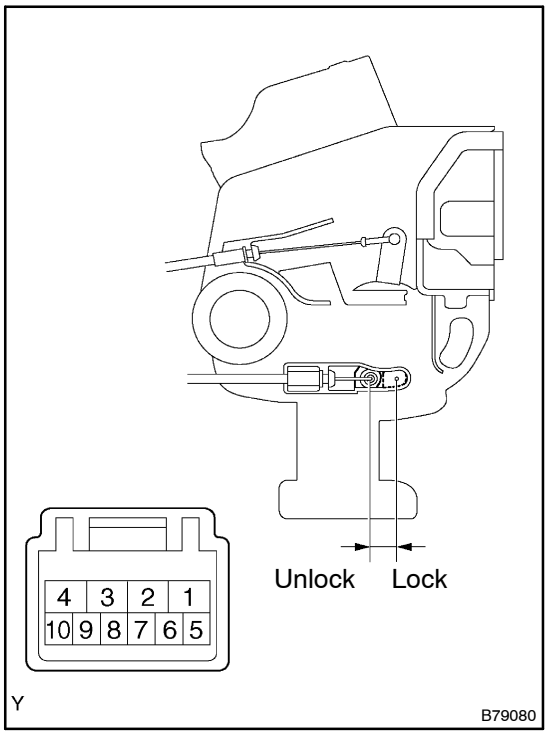
Standard:

Tester Connection	Specified Condition
D14–4 – B7–6 (ACTS)	Below 1 Ω
D14–3 – B7–4 (ACTR)	Below 1 Ω
D14–9 – B7–19 (DLRL)	Below 1 Ω
D14–6 – Body ground	Below 1 Ω

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

OK

12 INSPECT REAR DOOR LOCK ASSY RH (DOUBLE LOCK MOTOR)



(a) Check operation of the double lock motor.
(1) Apply battery voltage to the door lock and set the door lock motor to the lock position.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (–) → Terminal 3	Lock

(2) Apply battery voltage to the door lock and check operation of the double lock motor.

OK:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 2 Battery negative (–) → Terminal 1	Double lock system is set
Battery positive (+) → Terminal 1 Battery negative (–) → Terminal 2	Double lock system is unset

(3) While the double lock system is set, check that the doors cannot be unlocked by operating the control cable.

NG → **REPLACE REAR DOOR LOCK ASSY RH**

OK

13	INSPECT REAR DOOR LOCK ASSY RH (DOUBLE LOCK POSITION SWITCH)

(a) Measure the resistance of the double lock position switch.
Standard:

Tester Connection	Double Lock Condition	Specified Condition
5 – 6	Set	Below 1 Ω
5 – 6	Unset	10 kΩ or higher

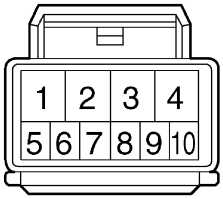
NG → **REPLACE REAR DOOR LOCK ASSY RH**

OK

14	CHECK WIRE HARNESS (REAR DOOR LOCK ASSY RH – MULTIPLEX NETWORK BODY ECU)

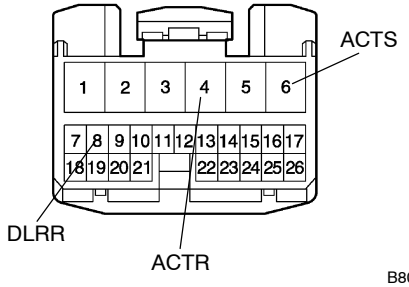
Wire Harness Side

D16
Rear Door Lock Assy RH



B68917

B7
Multiplex Network Body ECU



B66167 B80170

(a) Disconnect the D16 lock and B7 ECU connectors.
(b) Measure the resistance of the wire harness side connectors.
Standard:

Tester Connection	Specified Condition
D16–2 – B7–6 (ACTS)	Below 1 Ω
D16–1 – B7–4 (ACTR)	Below 1 Ω
D16–5 – B7–8 (DLRR)	Below 1 Ω
D16–6 – Body ground	Below 1 Ω

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

OK

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY (MULTIPLEX NETWORK BODY ECU)