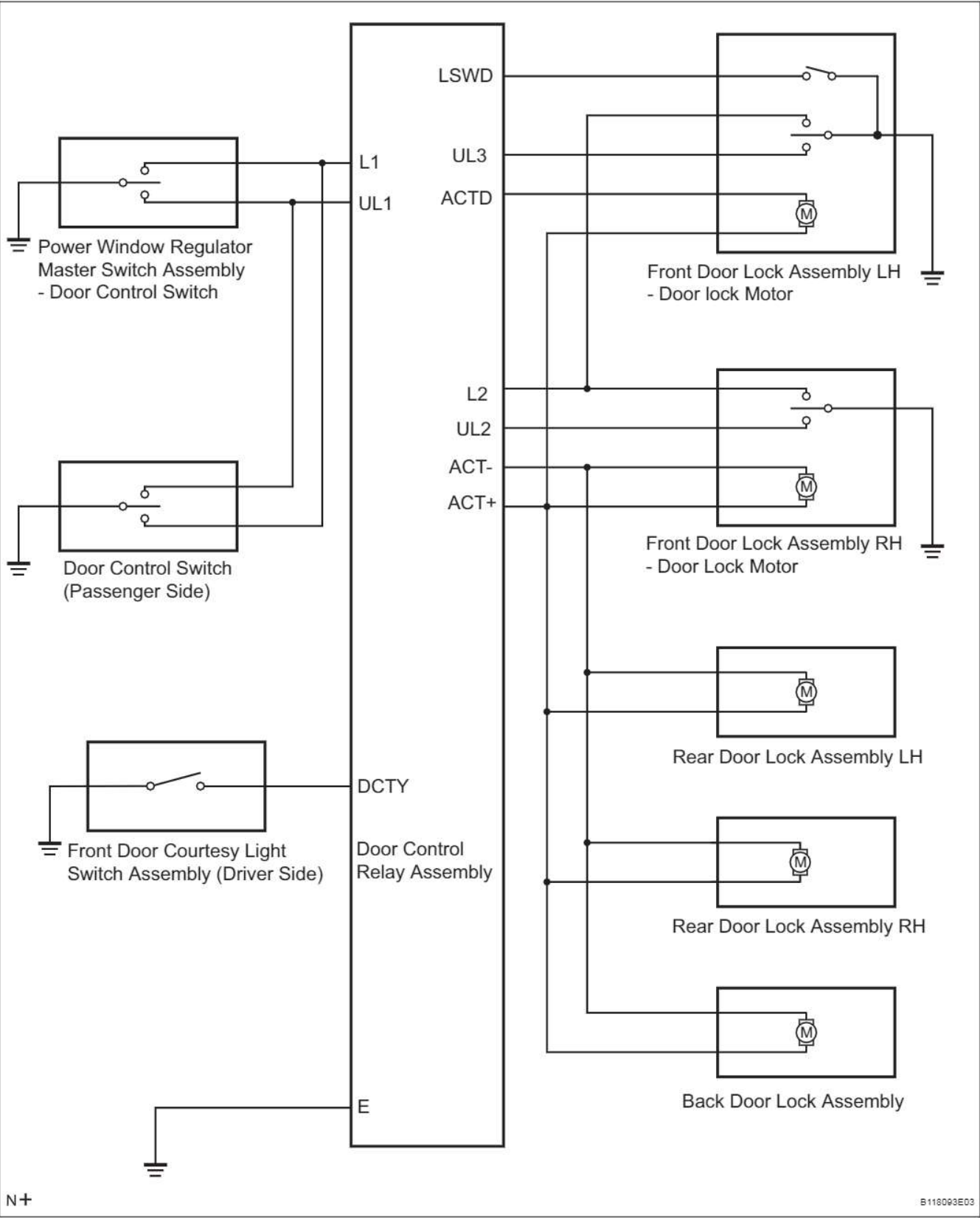


DL-4

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

SYSTEM DIAGRAM



SYSTEM DESCRIPTION

1. POWER DOOR LOCK CONTROL SYSTEM DESCRIPTION

The power door lock system locks / unlocks all the doors simultaneously.
The master switch and the door control switch on the passenger side door send lock / unlock request signals to the door lock control relay. Then, the door lock control relay sends these requests to the lock motors in each door to lock / unlock all the doors simultaneously.
Inserting the key into the driver side or passenger side door key cylinder and performing a lock / unlock operation also sends lock / unlock request signals to the door lock control relay.

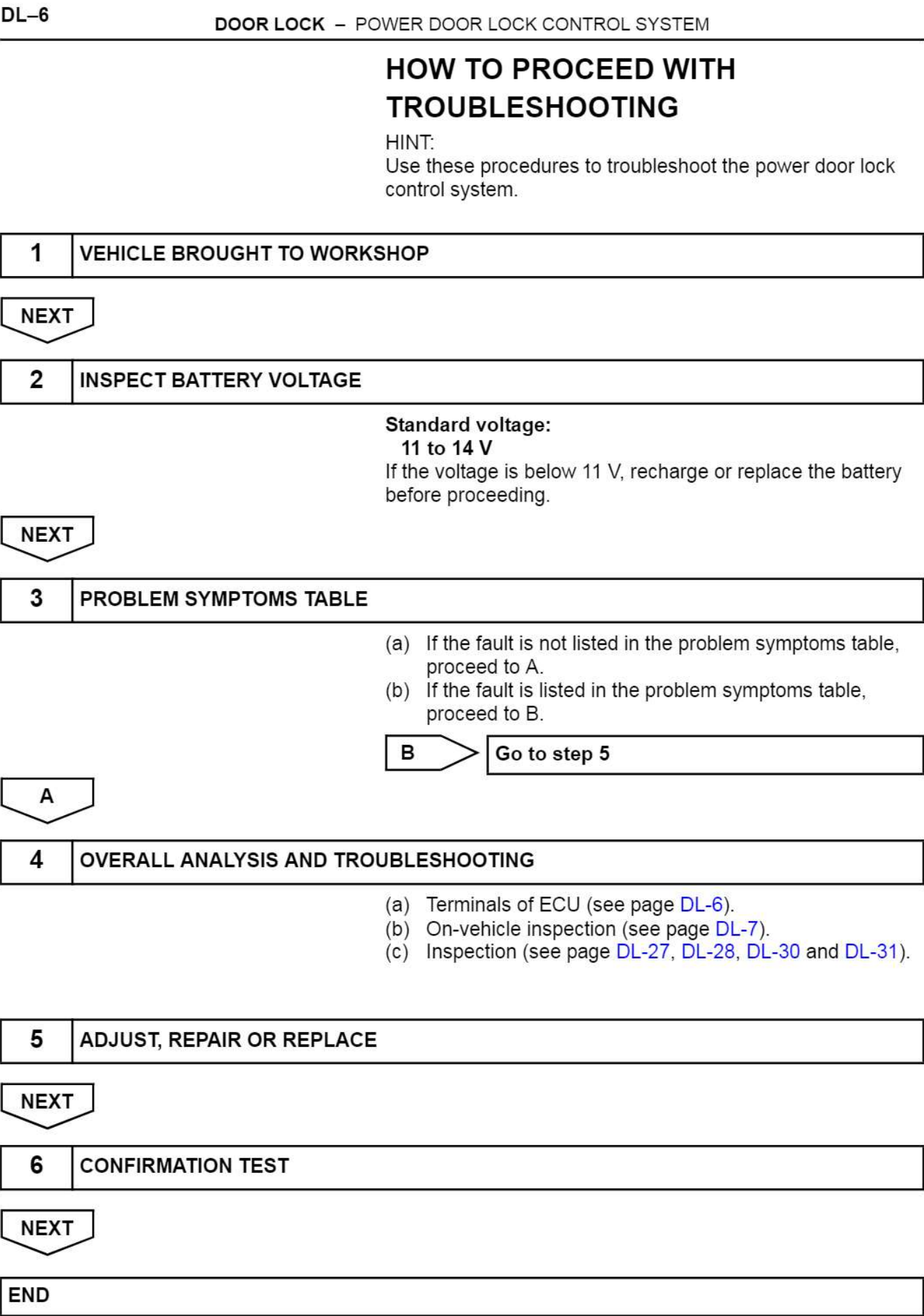
DL

2. DESCRIPTION

The power door lock control system has the following functions:

Function	Description
Key-linked lock and unlock function	This function locks / unlocks all doors at once when key cylinder on driver side door linked with driver side door lock is turned with key
Key lock-in prevention function	When key is inserted into ignition key cylinder and you perform door lock operation with driver side door open, all doors will be unlocked
Door control switch* unlock prohibition function	Performing door lock operation with transmitter or key will prohibit unlock operation by door lock control switch
2-step unlock function	Driver side door can be unlocked by turning key cylinder once; remaining doors can be unlocked by turning key cylinder a second time

HINT:
*: Master switch and door control switch (passenger side)



PROBLEM SYMPTOMS TABLE

HINT:
Use the table below to help determine the cause of the problem symptom. The potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Power Door Lock Control System

Symptom	Suspected area	See page
All doors cannot be locked / unlocked simultaneously	1. D/L fuse	DL-28
	2. GAUGE fuse	DL-28
	3. Power window regulator master switch assembly	DL-27
	4. Front door lock assembly LH	DL-28
	5. Door control switch assembly	DL-27
	6. Front door lock assembly RH	DL-29
	7. Door control relay assembly	DL-6
	8. Wire harness	DL-9

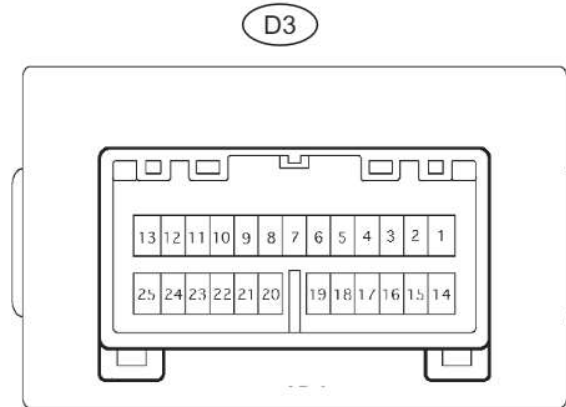
DL

DL-8

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

TERMINALS OF ECU

1. CHECK DOOR CONTROL RELAY ASSEMBLY



B071978E02

- (a) Disconnect the D3 relay connector.
- (b) Measure the voltage and resistance of the wire harness side connector.

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
B (D3-14) - Body ground	L-O - Body ground	+B (B) power supply	Always	10 to 14 V
E (D3 - 25) - Body ground	W-B - Body ground	Ground	Always	Below 1 Ω
IG (D3-3) - Body ground	R-B - Body ground	Ignition power supply	Ignition switch ON	10 to 14 V
DCTY (D3-18) - Body ground	R-W - Body ground	Driver side courtesy switch input	Driver side door CLOSED $\rightarrow$ OPEN	10 k Ω or higher $\rightarrow$ Below 1 Ω
L1 (D3-7) - Body ground	BR-W - Body ground	Door control switch (master switch and passenger side switch) lock input	Door control switch (master switch or passenger side switch) OFF $\rightarrow$ LOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω
UL1 (D3-8) - Body ground	G-W - Body ground	Door control switch (master switch and passenger side switch) unlock input	Door control switch (master switch or passenger side switch) OFF $\rightarrow$ UNLOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω
LSWD (D3-5) - Body ground	L-R - Body ground	Driver side door lock position switch input	Driver side door UNLOCK $\rightarrow$ LOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω
L2 (D3-9) - Body ground	BR-Y - Body ground	Driver and passenger side door key linked door lock input	Driver or passenger side door key cylinder OFF $\rightarrow$ LOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω
UL3 (D3-10) - Body ground	Y-B - Body ground	Driver side door key linked door unlock input	Driver side door key cylinder OFF $\rightarrow$ UNLOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω
UL2 (D3-11) - Body ground	G-B - Body ground	Passenger side door key linked door unlock input	Passenger side door key cylinder OFF $\rightarrow$ UNLOCK	10 k Ω or higher $\rightarrow$ Below 1 Ω

- If the result is not as specified, there may be a malfunction on the wire harness side.
- (c) Reconnect the D3 relay connector.

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM**DL-9**

(d) Measure the voltage of the connector.

Symbols (Terminal No.)	Wiring Color	Terminal Description	Condition	Specified Condition
ACT+ (D3-1) - Body ground	L-W - Body ground	Door lock motor LOCK drive output (driver, passenger, rear LH, rear RH and back doors)	Door control switch (master switch or passenger side switch) or door key cylinder (driver or passenger) OFF → LOCK → OFF	Below 1 V → 10 to 14 V → Below 1 V
ACTD (D3-2) - Body ground	Y-G - Body ground	Door lock motor UNLOCK drive output (driver door)	Door control switch (master switch or passenger side switch) or door key cylinder (driver or passenger) OFF → UNLOCK → OFF	Below 1 V → 10 to 14 V → Below 1 V
ACT- (D3-13) - Body ground	L-B - Body ground	Door lock motor UNLOCK drive output (passenger, rear LH, rear RH and back doors)		

DL

If the result is not as specified, the relay may have a malfunction.

POWER DOOR LOCK CONTROL SYSTEM

PRECAUTION

CAUTION:
When disconnecting the cable from the negative (-) battery terminal, initialize the following system after the cable is reconnected.

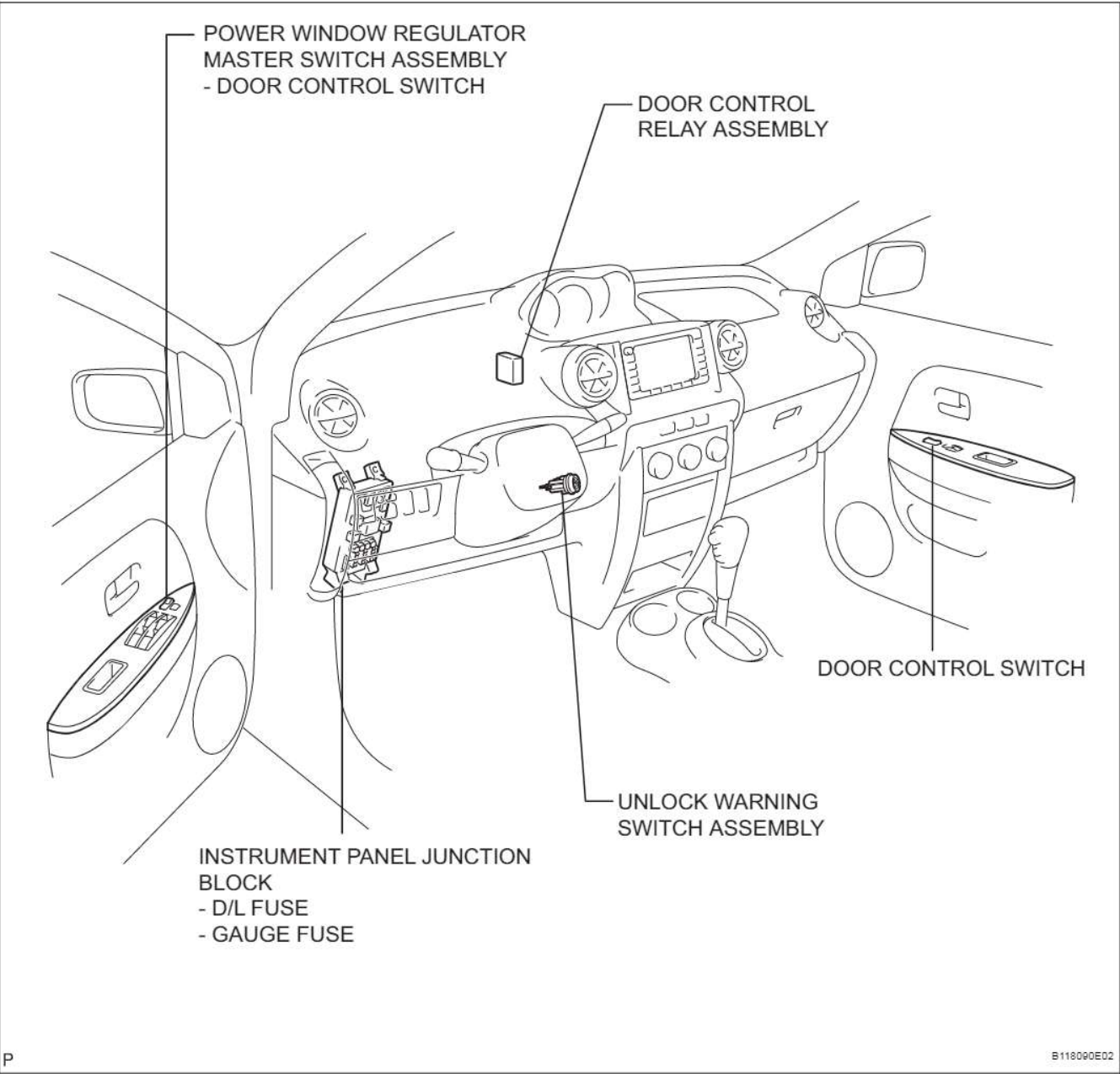
System Name	See procedure
Sliding Roof System	IN-23

DL

DL-2

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

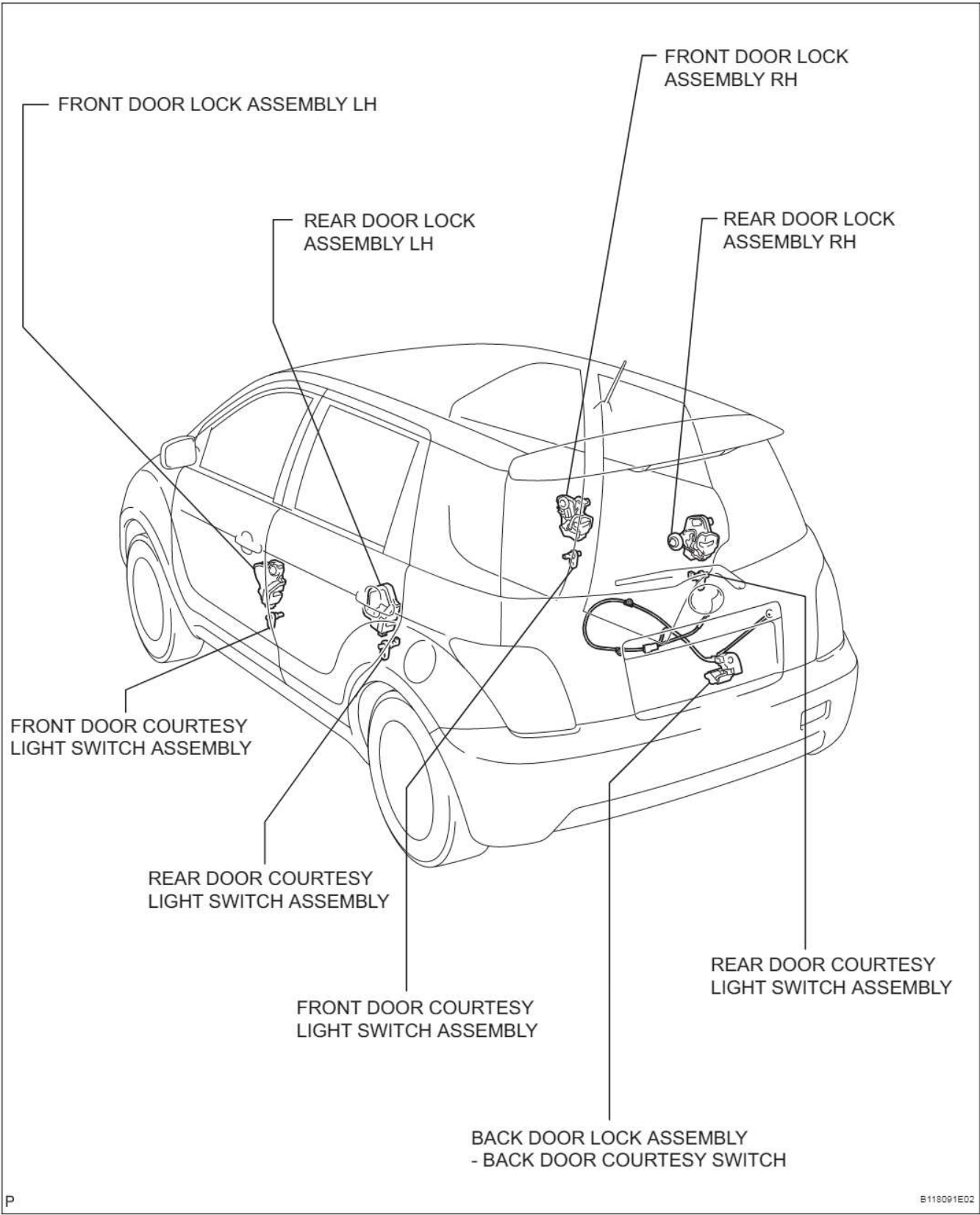
PARTS LOCATION



DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

DL-3

DL



DL-10

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

ON-VEHICLE INSPECTION**1. CHECK POWER DOOR LOCK OPERATION**

- (a) Check these basic functions.
- (1) For the door control switch (manual operation):
1) pushing LOCK causes all the doors to lock and 2) pushing UNLOCK causes all the doors to unlock.
 - (2) For the driver side key cylinder lock function:
turning the driver side door lock key cylinder to LOCK causes all the doors to lock.
 - (3) For the driver side key cylinder unlock function:
1) turning to UNLOCK once causes the driver side door to unlock, and 2) turning again to UNLOCK within 3 seconds causes all the doors to unlock (2-step unlock function).
- (b) Check the key lock-in prevention function.

NOTICE:

In order to prevent the key from actually being locked in the vehicle, the inspection should be made with the driver side door window open.

- (1) Insert the key into the ignition key cylinder.
 - (2) With the driver side door open, turn the driver side door lock knob to LOCK and check that all the doors unlock immediately.
 - (3) With the driver side door open, push LOCK on the door control switch (manual operation) and check that all the doors unlock immediately.
 - (4) With the driver side door open, turn the driver side door lock knob to LOCK, hold it for 2 seconds or more and then close the driver side door. Check that all the doors unlock.
- (c) Check the security function.
- (1) Close all doors and leave the driver side door window open so that the door control switch can be operated from outside the vehicle.
 - (2) Pull out the key, open the driver side door, lock it using the door lock knob and close it. Check that when the door control switch (manual operation) is turned to UNLOCK from outside the vehicle, all doors do not unlock.
 - (3) Pull out the key, close and lock the driver side door by key operation. Check that when the door control switch (manual operation) is turned to UNLOCK from outside the vehicle, all doors do not unlock.
 - (4) Pull out the key, close the driver side door and lock the door by wireless door lock operation. Check that when the door control switch (manual operation) is turned to UNLOCK from outside the vehicle, all doors do not unlock.

HINT:

Check that the security function is canceled under the following conditions.

- The ignition switch is turned ON.

DL

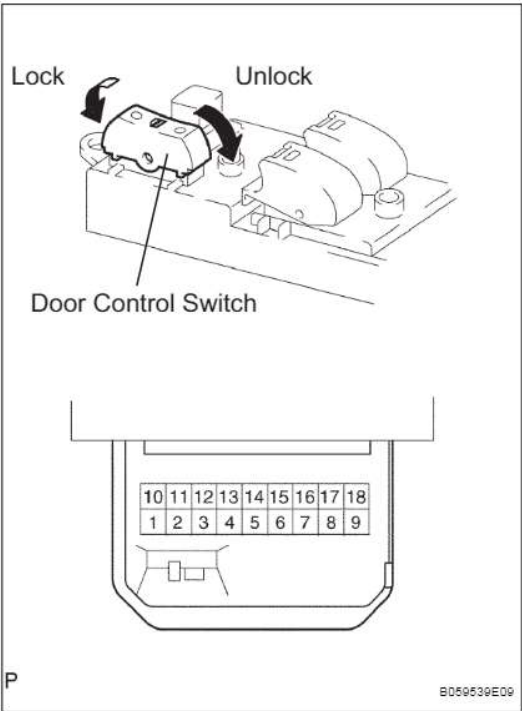
DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM**DL-11**

- The driver side door is unlocked using the key.
- The door control switch (manual operation) is turned to UNLOCK after the door control knob is turned to UNLOCK manually.
- The doors are unlocked by wireless operation.

2. CHECK ILLUMINATION

- (a) Check the illumination function.
 - (1) Set the room light switch to the DOOR position.
 - (2) With all doors closed, check that the room light turns on when a door is opened, and turns off when it is closed.

DL



DOOR CONTROL SWITCH

INSPECTION

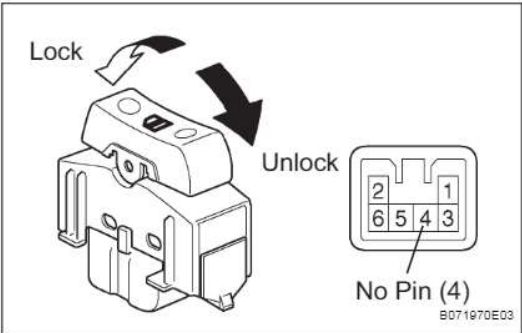
1. INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY (DOOR CONTROL SWITCH)

- (a) Measure the resistance of the door control switch.
Standard resistance

Tester Connection	Switch Condition	Specified Condition
1 - 5, 3 - 5	Lock	Below 1 Ω
1 - 5, 3 - 5 1 - 8, 3 - 8	OFF	10 kΩ or higher
1 - 8, 3 - 8	Unlock	Below 1 Ω

If the result is not as specified, replace the switch assembly.

DL



2. INSPECT DOOR CONTROL SWITCH ASSEMBLY

- (a) Measure the resistance of the door control switch.
Standard resistance

Tester Connection	Switch Condition	Specified Condition
3 - 6	Lock	Below 1 Ω
3 - 5	Unlock	Below 1 Ω

If the result is not as specified, replace the switch assembly.

DL-12

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

All Doors cannot be Locked / Unlocked Simultaneously**DESCRIPTION**

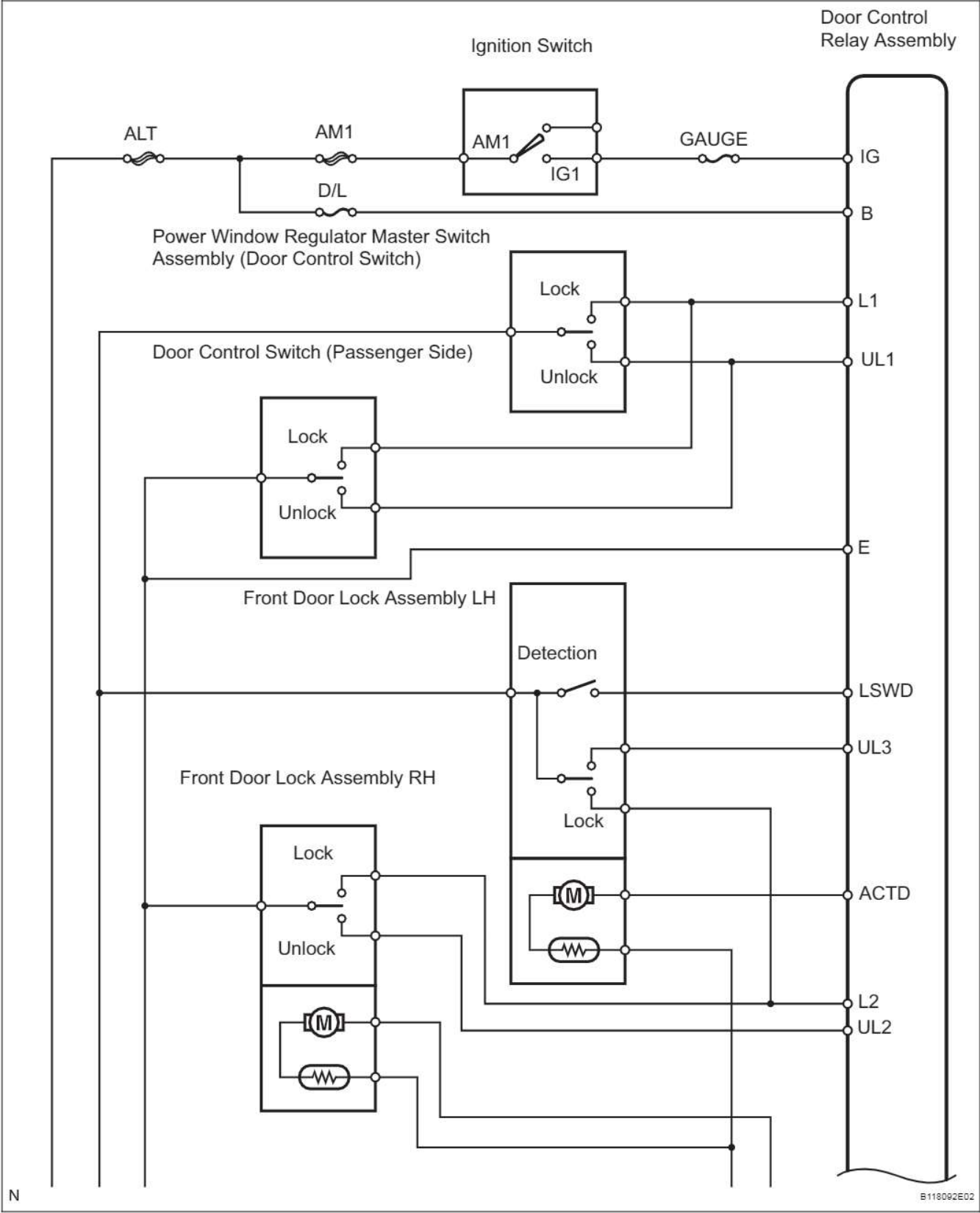
The door control relay drives the door lock motors with switch signals from master switch, door control switch, and driver / passenger side door key cylinder.

DL

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

DL-13

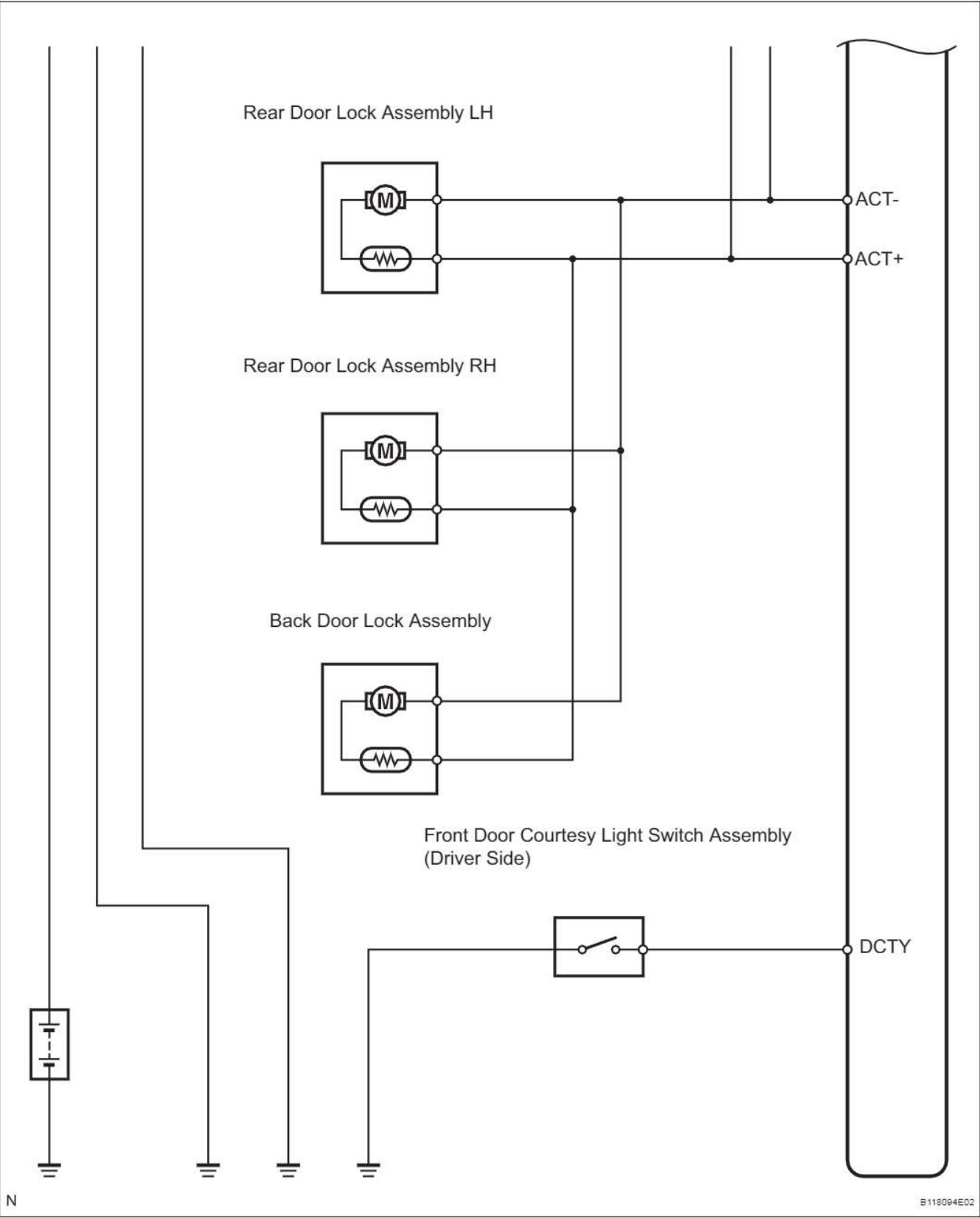
WIRING DIAGRAM



DL-14

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

DL



DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM**DL-15****INSPECTION PROCEDURE****1 CHECK DOORS LOCK / UNLOCK OPERATION**

- (a) All doors can be locked / unlocked at once using the following:
- Door control switch on the master switch (switch operation)
 - Door control switch on the front passenger side (switch operation)
 - Door key cylinder linked with door lock on the driver side (key operation)
 - Door key cylinder linked with door lock on the front passenger side (key operation)
- (b) Proceed to the next step according to the symptom if all the doors cannot be locked / unlocked at once.

Symptom	Proceed to
All doors cannot be locked / unlocked at once using door control switch on master switch or key cylinder on driver side	A
All doors cannot be locked / unlocked at once using door control switch on front passenger side or key cylinder on passenger side	B
Both items listed above are malfunctioning	C

B**Go to step 3****C****Go to step 24****A****2 CHECK DRIVER SIDE SWITCH AND KEY OPERATION**

- (a) Proceed to the next step according to the symptom listed in the table below.

Symptom	Proceed to
All doors cannot be locked / unlocked at once using door control switch on master switch	A
All doors cannot be locked / unlocked at once using door key cylinder on driver side	B
All doors cannot be locked / unlocked at once using door control switch on master switch and door key cylinder on driver side	C

A**Go to step 4****B****Go to step 8****C****Go to step 14****DL**

DL-16

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

3

CHECK FRONT PASSENGER SWITCH AND KEY

(a) Proceed to the next step according to the symptom listed in the table below.

Symptom	Proceed to
All doors cannot be locked / unlocked at once using door control switch on front passenger side	A
All doors cannot be locked / unlocked at once using door key cylinder on front passenger side	B
All doors cannot be locked / unlocked at once using door control switch and door key cylinder on front passenger side	C

DL

A

Go to step 6

B

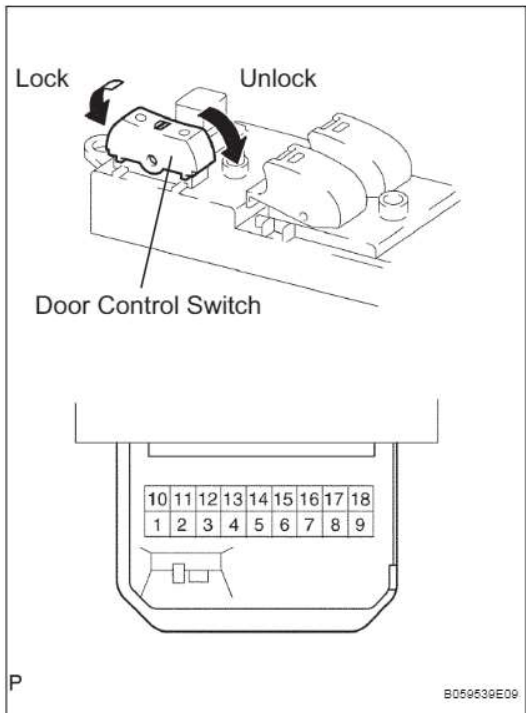
Go to step 11

C

Go to step 19

4

INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY



- (a) Remove the master switch.
(b) Measure the resistance of the door control switch.
Standard resistance

Tester Connection	Switch Condition	Specified Condition
1 - 5, 3 - 5	Lock	Below 1 Ω
1 - 5, 3 - 5 1 - 8, 3 - 8	OFF	10 k Ω or higher
1 - 8, 3 - 8	Unlock	Below 1 Ω

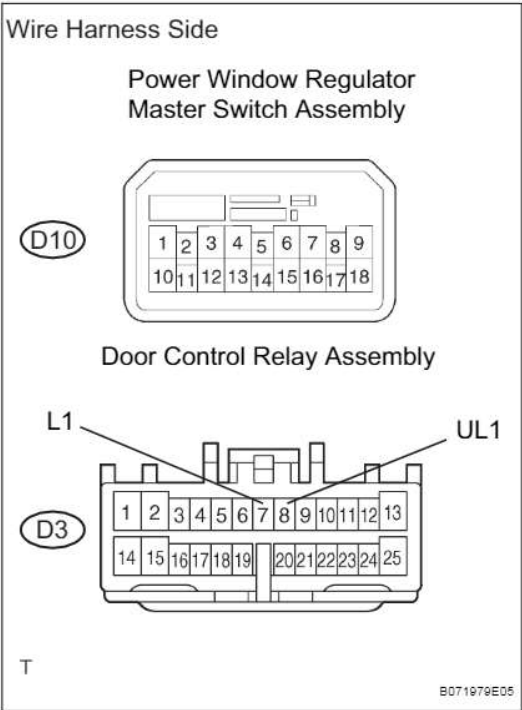
NG

REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY

OK

5

CHECK WIRE HARNESS (MASTER SWITCH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D10 switch connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D10-5 - D3-7 (L1)	Below 1 Ω
D10-8 - D3-8 (UL1)	Below 1 Ω
D10-3 - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

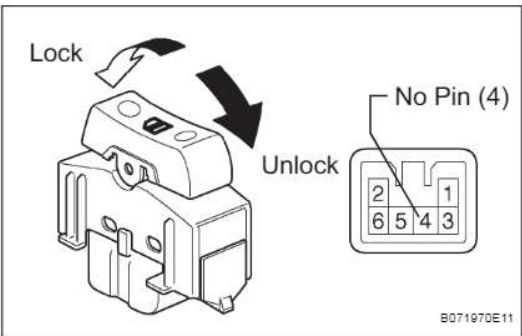
DL

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

6

INSPECT DOOR CONTROL SWITCH ASSEMBLY



- (a) Remove the door control switch.
- (b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
3 - 6	Lock	Below 1 Ω
3 - 5	Unlock	Below 1 Ω

NG

REPLACE DOOR CONTROL SWITCH ASSEMBLY

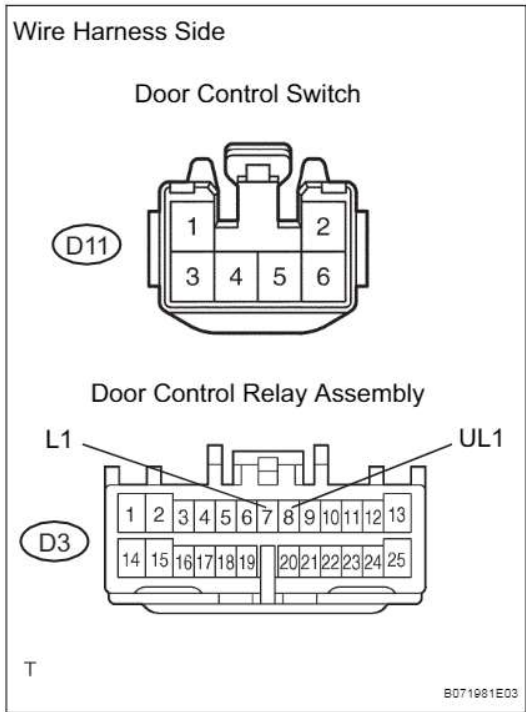
OK

DL-18

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

7

CHECK WIRE HARNESS (DOOR CONTROL SWITCH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D11 switch connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D11-5 - D3-8 (UL1)	Below 1 Ω
D11-6 - D3-7 (L1)	Below 1 Ω
D11-3 - Body ground	Below 1 Ω

NG

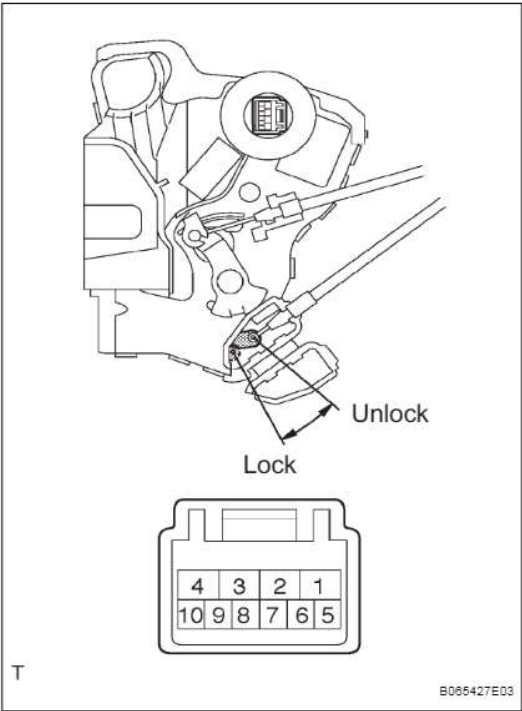
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

8 INSPECT FRONT DOOR LOCK ASSEMBLY LH (DOOR LOCK MOTOR)



- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

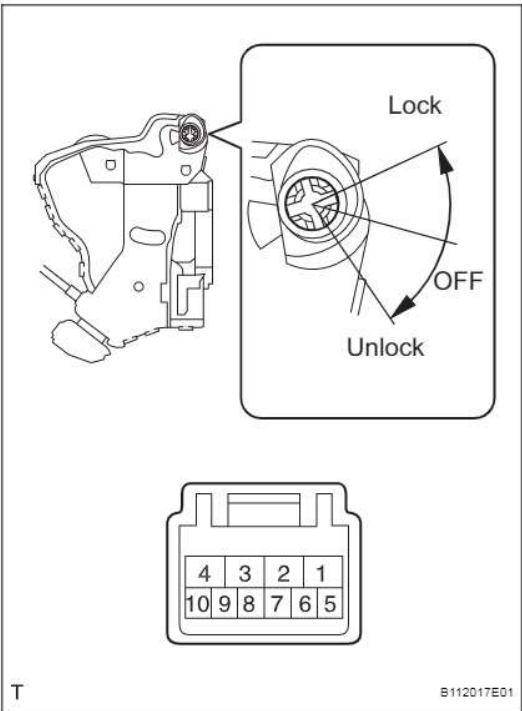
NG

REPLACE FRONT DOOR LOCK ASSEMBLY LH

DL

OK

9 INSPECT FRONT DOOR LOCK ASSEMBLY LH (DOOR LOCK AND UNLOCK SWITCH AND DETECTION SWITCH)



- (a) Measure the resistance of the door lock and unlock switch and detection switch.

Standard resistance:

Door lock and unlock switch

Tester Connection	Door Lock Condition	Specified Condition
7 - 9	Lock	Below 1 Ω
7 - 9, 7 - 10	OFF	10 kΩ or higher
7 - 10	Unlock	Below 1 Ω

Detection switch

Tester Connection	Door Lock Condition	Specified Condition
7 - 8	Lock	10 kΩ or higher
7 - 8	Unlock	Below 1 Ω

NG

REPLACE FRONT DOOR LOCK ASSEMBLY LH

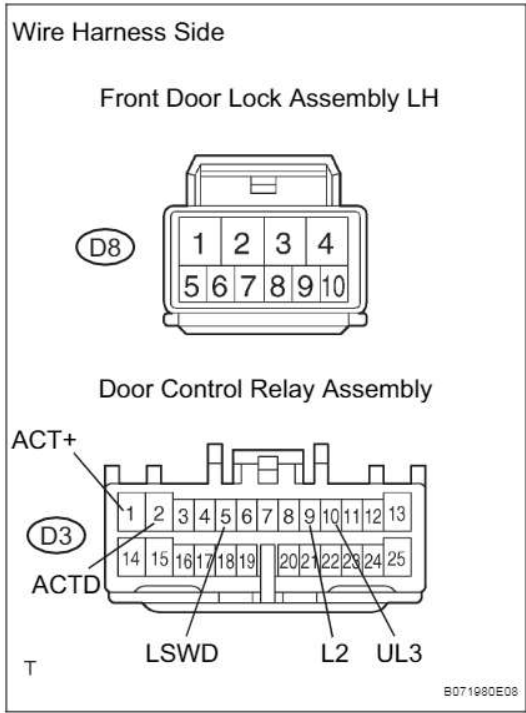
DL-20

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

OK

10

CHECK WIRE HARNESS (FRONT DOOR LOCK LH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D8 lock connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D8-1 - D3-2 (ACTD)	Below 1 Ω
D8-4 - D3-1 (ACT+)	Below 1 Ω
D8-8 - D3-5 (LSWD)	Below 1 Ω
D8-9 - D3-9 (L2)	Below 1 Ω
D8-10 - D3-10 (UL3)	Below 1 Ω
D8-7 - Body ground	Below 1 Ω

NG

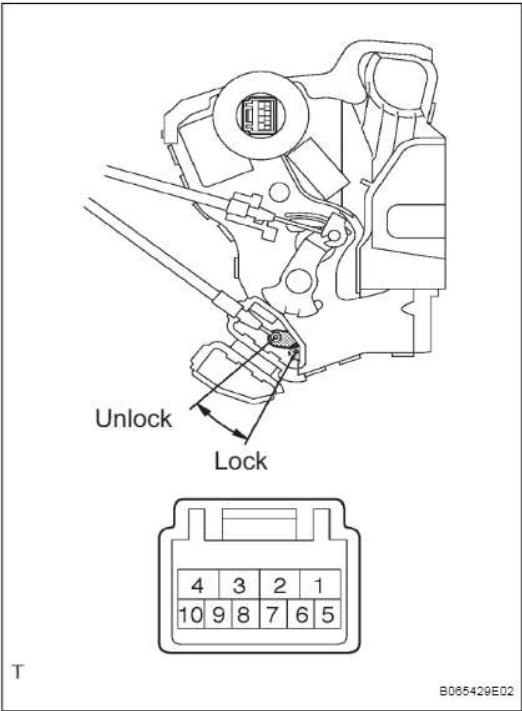
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

11

INSPECT FRONT DOOR LOCK ASSEMBLY RH (DOOR LOCK MOTOR)



- (a) Apply battery voltage to the door lock and check operation of the door lock motor.
- OK**

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

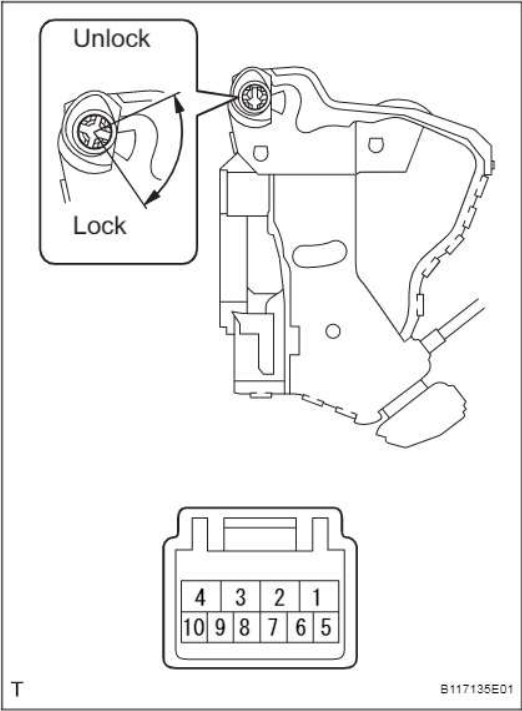
NG → **REPLACE FRONT DOOR LOCK ASSEMBLY RH**

DL

OK

12

INSPECT FRONT DOOR LOCK ASSEMBLY RH (DOOR LOCK AND UNLOCK SWITCH)



- (a) Measure the resistance of the door lock and unlock switch.
- Standard resistance**

Tester Connection	Door Lock Condition	Specified Condition
6 - 8	Lock	Below 1 Ω
5 - 8, 6 - 8	OFF	10 k Ω or higher
5 - 8	Unlock	Below 1 Ω

NG → **REPLACE FRONT DOOR LOCK ASSEMBLY RH**

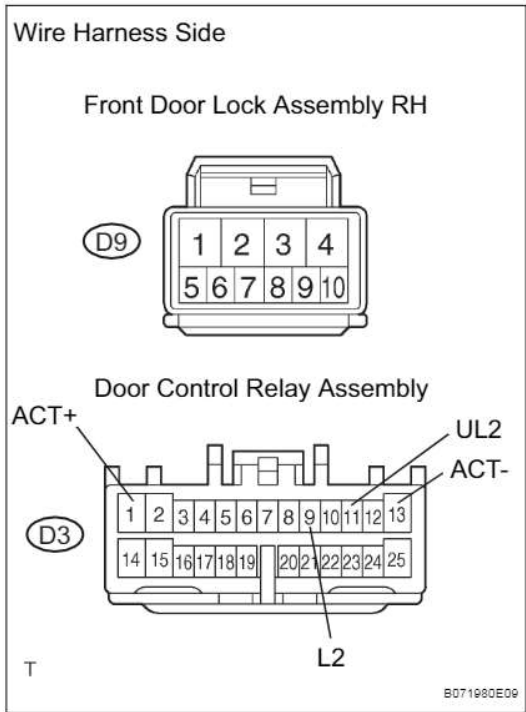
OK

DL-22

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

13

CHECK WIRE HARNESS (FRONT DOOR LOCK RH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D9 lock connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D9-1 - D3-13 (ACT-)	Below 1 Ω
D9-4 - D3-1 (ACT+)	Below 1 Ω
D9-5 - D3-11 (UL2)	Below 1 Ω
D9-6 - D3-9 (L2)	Below 1 Ω
D9-8 - Body ground	Below 1 Ω

NG

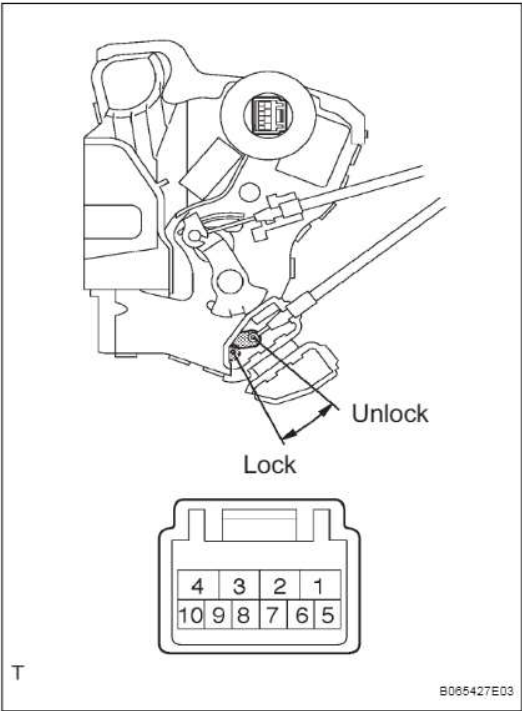
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

14 INSPECT FRONT DOOR LOCK ASSEMBLY LH (DOOR LOCK MOTOR)



- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

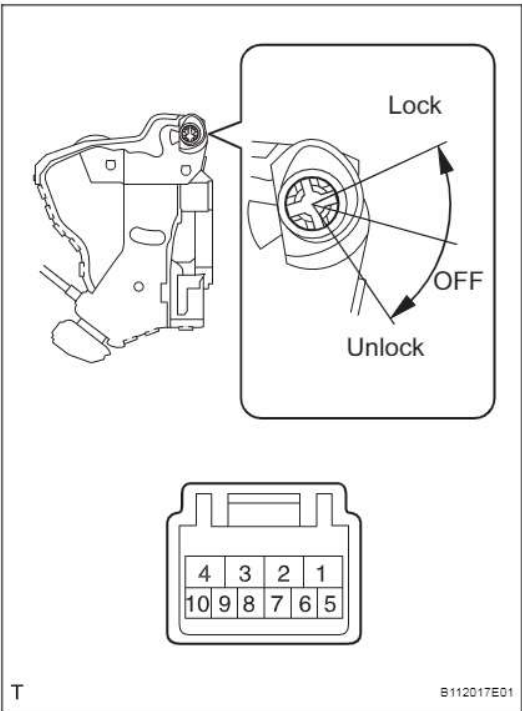
NG

REPLACE FRONT DOOR LOCK ASSEMBLY LH

DL

OK

15 INSPECT FRONT DOOR LOCK ASSEMBLY LH (DOOR LOCK AND UNLOCK SWITCH AND DETECTION SWITCH)



- (a) Measure the resistance of the door lock and unlock switch and detection switch.

Standard resistance:

Door lock and unlock switch

Tester Connection	Door Lock Condition	Specified Condition
7 - 9	Lock	Below 1 Ω
7 - 9, 7 - 10	OFF	10 kΩ or higher
7 - 10	Unlock	Below 1 Ω

Detection switch

Tester Connection	Door Lock Condition	Specified Condition
7 - 8	Lock	10 kΩ or higher
7 - 8	Unlock	Below 1 Ω

NG

REPLACE FRONT DOOR LOCK ASSEMBLY LH

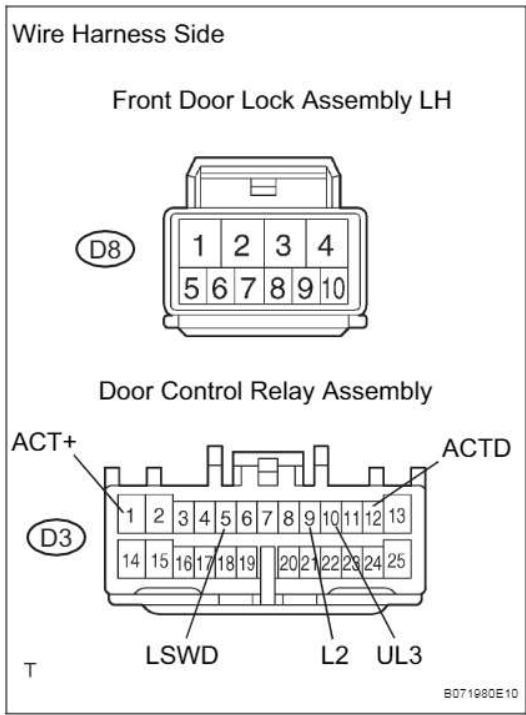
DL-24

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

OK

16

CHECK WIRE HARNESS (FRONT DOOR LOCK LH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D8 lock connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D8-1 - D3-12 (ACTD)	Below 1 Ω
D8-4 - D3-1 (ACT+)	Below 1 Ω
D8-8 - D3-5 (LSWD)	Below 1 Ω
D8-9 - D3-9 (L2)	Below 1 Ω
D8-10 - D3-10 (UL3)	Below 1 Ω
D8-7 - Body ground	Below 1 Ω

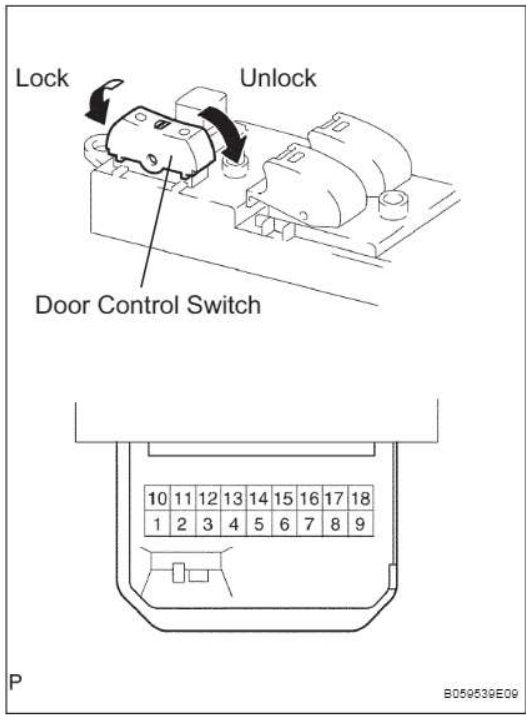
NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

17

INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY



- (a) Remove the master switch.
- (b) Measure the resistance of the door control switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
1 - 5, 3 - 5	Lock	Below 1 Ω
1 - 5, 3 - 5 1 - 8, 3 - 8	OFF	10 kΩ or higher
1 - 8, 3 - 8	Unlock	Below 1 Ω

NG

REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSEMBLY

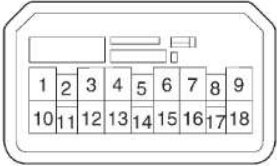
DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

OK

18 CHECK WIRE HARNESS (MASTER SWITCH - DOOR CONTROL RELAY AND BODY GROUND)

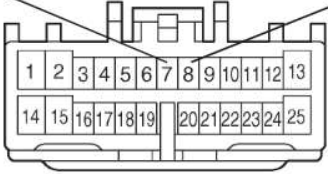
Wire Harness Side

Power Window Regulator Master Switch Assembly



D10

Door Control Relay Assembly



D3

L1

UL1

T

B071979E07

- (a) Disconnect the D10 switch connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D10-5 - D3-7 (L1)	Below 1 Ω
D10-8 - D3-8 (UL1)	Below 1 Ω
D10-3 - Body ground	Below 1 Ω

DL

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

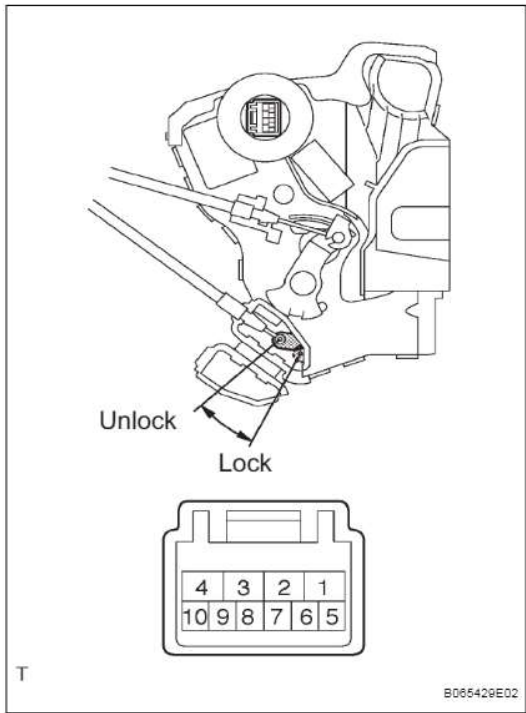
REPLACE DOOR CONTROL RELAY ASSEMBLY

DL-26

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

19

INSPECT FRONT DOOR LOCK ASSEMBLY RH (DOOR LOCK MOTOR)



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

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

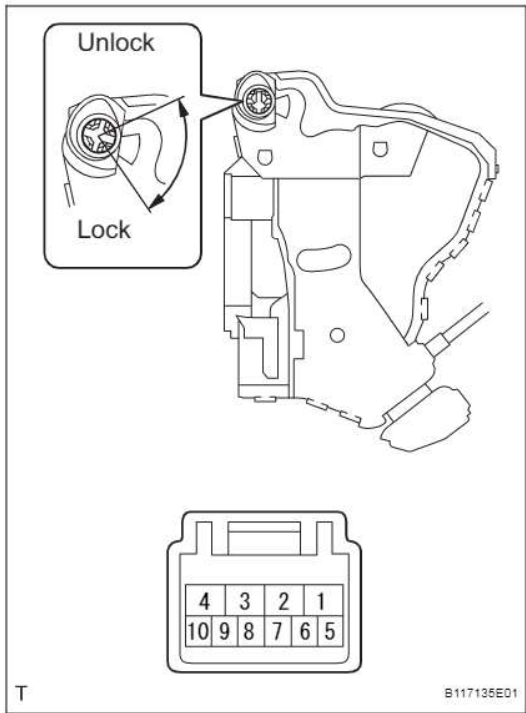
NG

REPLACE FRONT DOOR LOCK ASSEMBLY RH

OK

20

INSPECT FRONT DOOR LOCK ASSEMBLY RH (DOOR LOCK AND UNLOCK SWITCH)



(a) Measure the resistance of the door lock and unlock switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
6 - 8	Lock	Below 1 Ω
5 - 8	OFF	10 kΩ or higher
6 - 8		
5 - 8	Unlock	Below 1 Ω

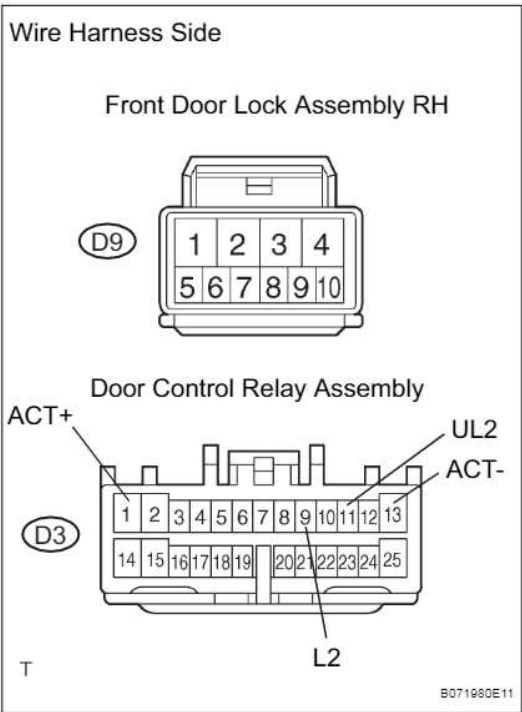
NG

REPLACE FRONT DOOR LOCK ASSEMBLY RH

OK

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

21 CHECK WIRE HARNESS (FRONT DOOR LOCK RH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D9 lock connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

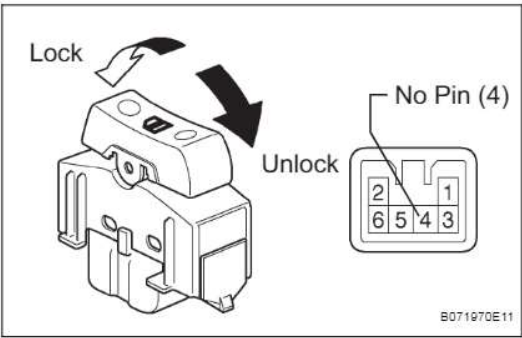
Tester Connection	Specified Condition
D9-1 - D3-13 (ACT-)	Below 1 Ω
D9-4 - D3-1 (ACT+)	Below 1 Ω
D9-5 - D3-11 (UL2)	Below 1 Ω
D9-6 - D3-9 (L2)	Below 1 Ω
D9-8 - Body ground	Below 1 Ω

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

DL

OK

22 INSPECT DOOR CONTROL SWITCH ASSEMBLY



- (a) Remove the door control switch.
- (b) Measure the resistance of the switch.

Standard resistance

Tester Connection	Switch Condition	Specified Condition
3 - 6	Lock	Below 1 Ω
3 - 5	Unlock	Below 1 Ω

NG REPLACE DOOR CONTROL SWITCH ASSEMBLY

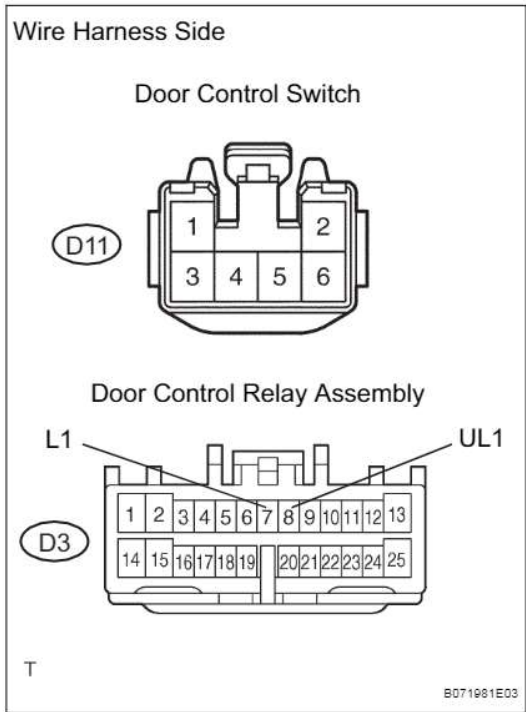
OK

DL-28

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

23

CHECK WIRE HARNESS (DOOR CONTROL SWITCH - DOOR CONTROL RELAY AND BODY GROUND)



- (a) Disconnect the D11 switch connector.
- (b) Disconnect the D3 relay connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D11-5 - D3-8 (UL1)	Below 1 Ω
D11-6 - D3-7 (L1)	Below 1 Ω
D11-3 - Body ground	Below 1 Ω

NG

REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

24

INSPECT FUSE (D/L, GAUGE)

- (a) Remove the D/L and GAUGE fuses from the instrument panel junction block.
- (b) Measure the resistance.

Standard resistance:
Below 1 Ω

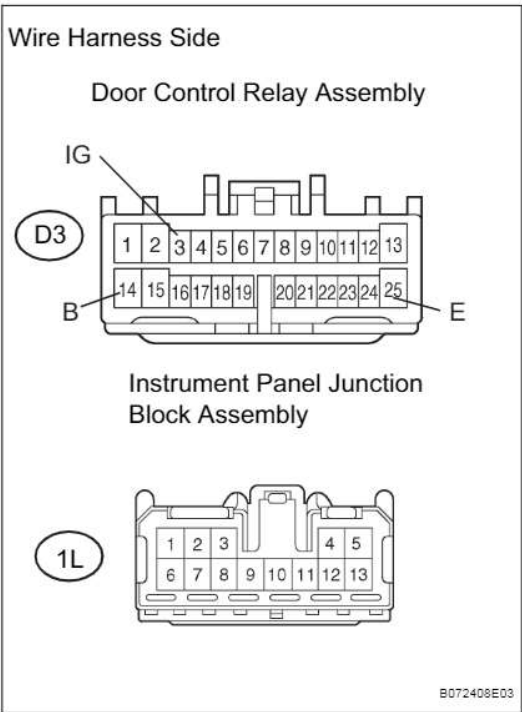
NG

REPLACE FUSE

OK

DOOR LOCK – POWER DOOR LOCK CONTROL SYSTEM

25 CHECK WIRE HARNESS (DOOR CONTROL RELAY - JUNCTION BLOCK AND BODY GROUND)



- (a) Disconnect the D3 relay connector.
- (b) Disconnect the 1L block connector.
- (c) Measure the resistance of the wire harness side connectors.

Standard resistance

Tester Connection	Specified Condition
D3-3 (IG) - 1L-3	Below 1 Ω
D3-14 (B) - 1L-10	
D3-25 (E) - Body ground	

NG

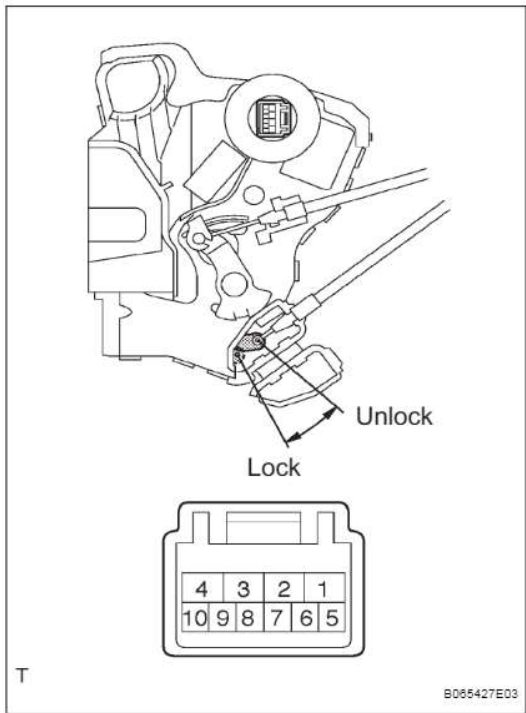
REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSEMBLY

DL

DL



FRONT DOOR LOCK

INSPECTION

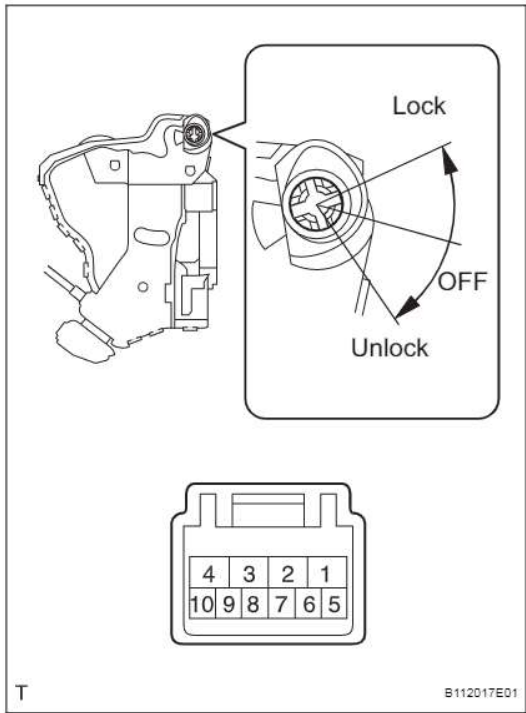
1. INSPECT FRONT DOOR LOCK ASSEMBLY LH

- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

If the result is not as specified, replace the lock assembly.



- (b) Measure the resistance of the door lock and unlock switch.

Standard resistance

Tester Connection	Door Lock Condition	Specified Condition
7 - 9	Lock	Below 1 Ω
7 - 9, 7 - 10	OFF	10 kΩ or higher
7 - 10	Unlock	Below 1 Ω

If the result is not as specified, replace the lock assembly.

- (c) Measure the resistance of the detection switch.

Standard resistance

Tester Connection	Door Lock Condition	Specified Condition
7 - 8	Lock	10 kΩ or higher
7 - 8	Unlock	Below 1 Ω

If the result is not as specified, replace the lock assembly.

DOOR LOCK – FRONT DOOR LOCK

2. INSPECT FRONT DOOR LOCK ASSEMBLY RH

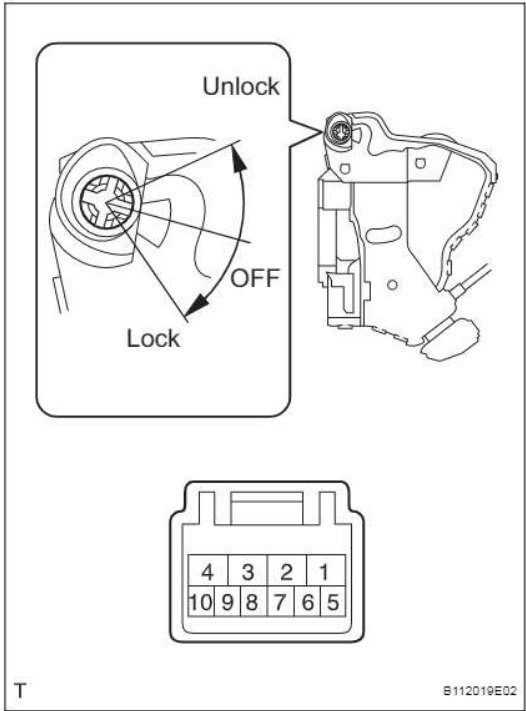
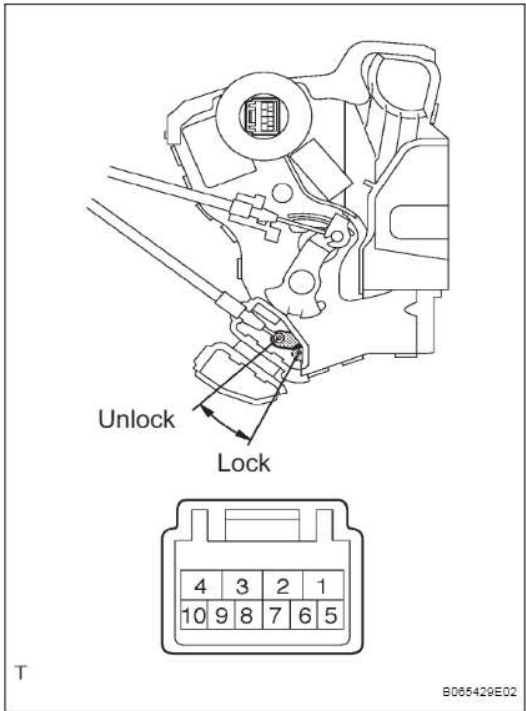
- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

If the result is not as specified, replace the lock assembly.

DL



- (b) Measure the resistance of the door lock and unlock switch.

Standard resistance

Tester Connection	Door Lock Condition	Specified Condition
6 - 8	Lock	Below 1 Ω
5 - 8, 6 - 8	OFF	10 kΩ or higher
5 - 8	Unlock	Below 1 Ω

If the result is not as specified, replace the lock assembly.

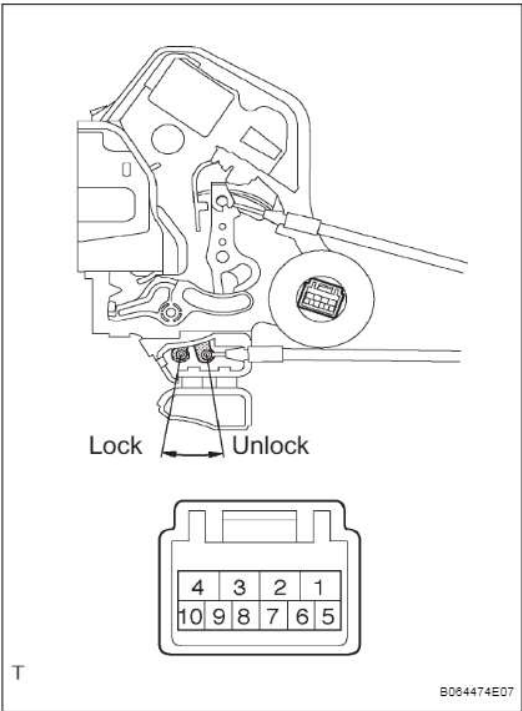
- (c) Measure the resistance of the detection switch.

Standard resistance

Tester Connection	Door Lock Condition	Specified Condition
7 - 8	Lock	10 kΩ or higher
7 - 8	Unlock	Below 1 Ω

If the result is not as specified, replace the lock assembly.

DL



REAR DOOR LOCK

INSPECTION

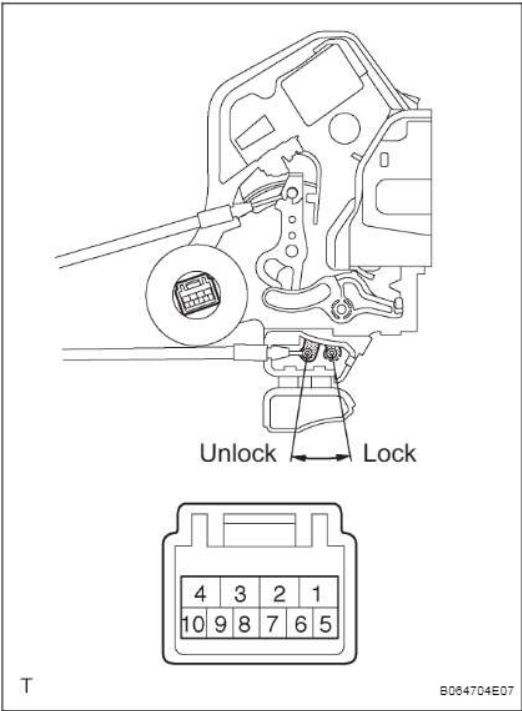
1. INSPECT REAR DOOR LOCK ASSEMBLY LH

- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

If the result is not as specified, replace the lock assembly.



2. INSPECT REAR DOOR LOCK ASSEMBLY RH

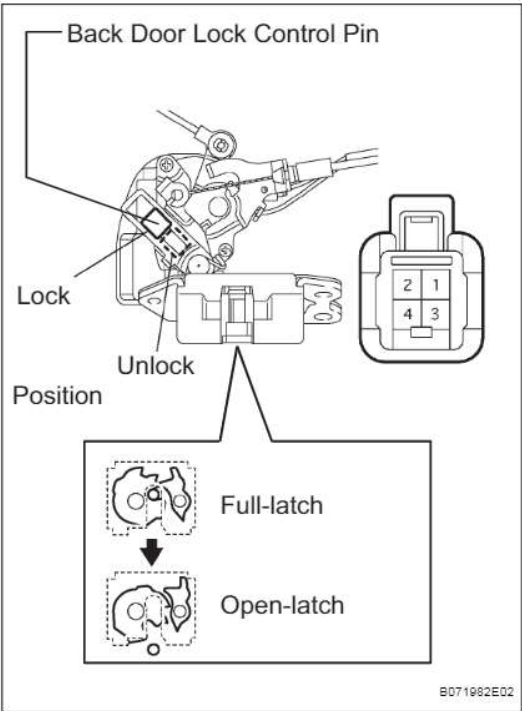
- (a) Apply battery voltage to the door lock and check operation of the door lock motor.

OK

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 4 Battery negative (-) → Terminal 1	Lock
Battery positive (+) → Terminal 1 Battery negative (-) → Terminal 4	Unlock

If the result is not as specified, replace the lock assembly.

DOOR LOCK – BACK DOOR LOCK



BACK DOOR LOCK
INSPECTION

1. INSPECT BACK DOOR LOCK ASSEMBLY

- (a) Apply battery voltage to the door lock and check operation of the latch.
OK

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

If the result is not as specified, replace the door lock assembly.

- (b) Measure the back door courtesy switch resistance.
Standard resistance

Tester Connection	Door Lock Latch Condition	Specified Condition
1 - 2	Full-latch	10 kΩ or higher
1 - 2	Open-latch	Below 1 Ω

If the result is not as specified, replace the door lock assembly.

DL