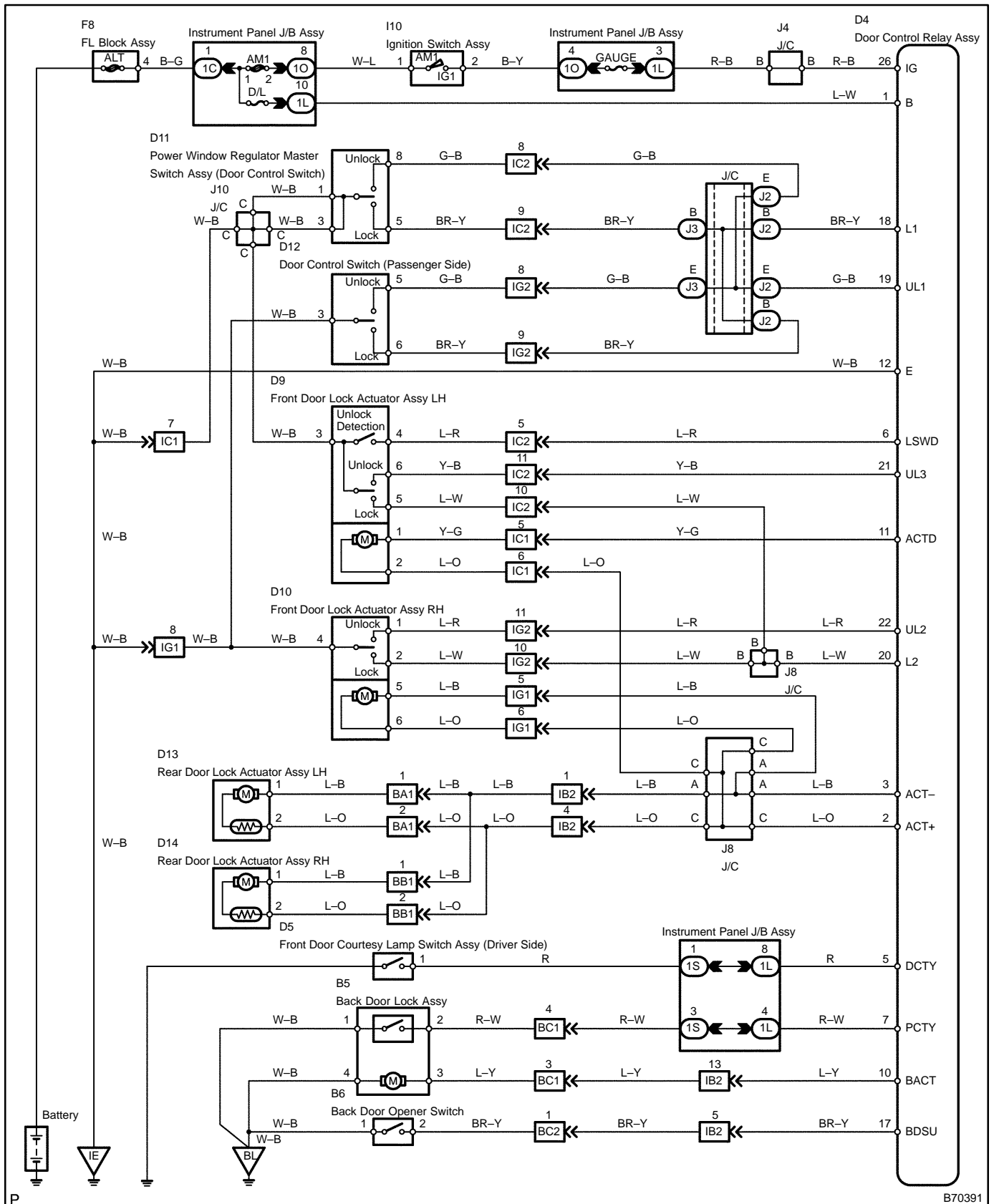


ALL DOORS CANNOT BE LOCKED/UNLOCKED SIMULTANEOUSLY

CIRCUIT DESCRIPTION

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

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT ALL 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.

Malfunctioning part	Proceed to
Door control switch on master switch	A
Door control switch on front passenger side	B
Door key cylinder on driver side	C
Door key cylinder on front passenger side	D
Door control switch on master switch and door key cylinder on driver side	E
Door control switch and door key cylinder on front passenger side	F
All items listed above are malfunctioning	G

B Go to step 4

C Go to step 6

D Go to step 9

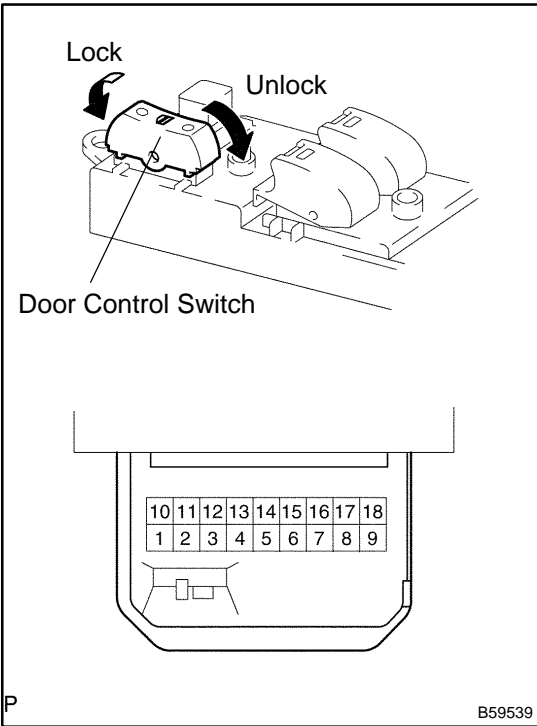
E Go to step 12

F Go to step 17

G Go to step 22

A

2 INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY



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

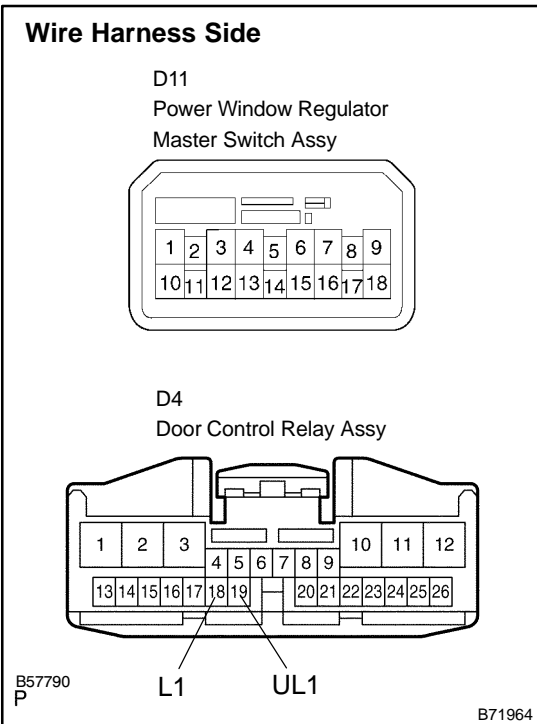
Standard:

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

NG → REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY

OK

3 CHECK WIRE HARNESS (POWER WINDOW REGULATOR MASTER SWITCH ASSY - DOOR CONTROL RELAY ASSY AND BODY GROUND)



- (a) Disconnect the D11 switch and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

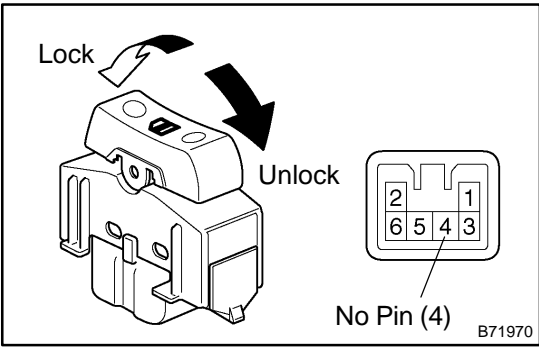
Tester Connection	Specified Condition
D11-5 - D4-18 (L1)	Below 1 Ω
D11-8 - D4-19 (UL1)	
D11-1 - Body ground	
D11-3 - Body ground	

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

4 INSPECT DOOR CONTROL SWITCH ASSY



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

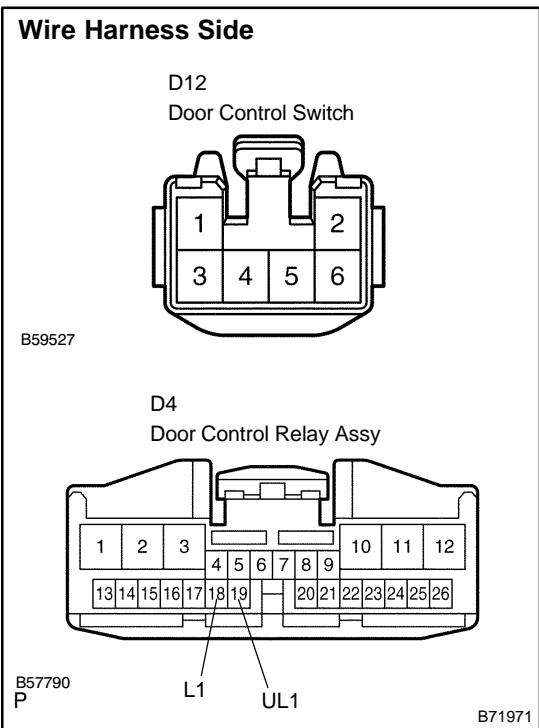
Standard:

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

NG → REPLACE DOOR CONTROL SWITCH ASSY

OK

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



- (a) Disconnect the D12 switch and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

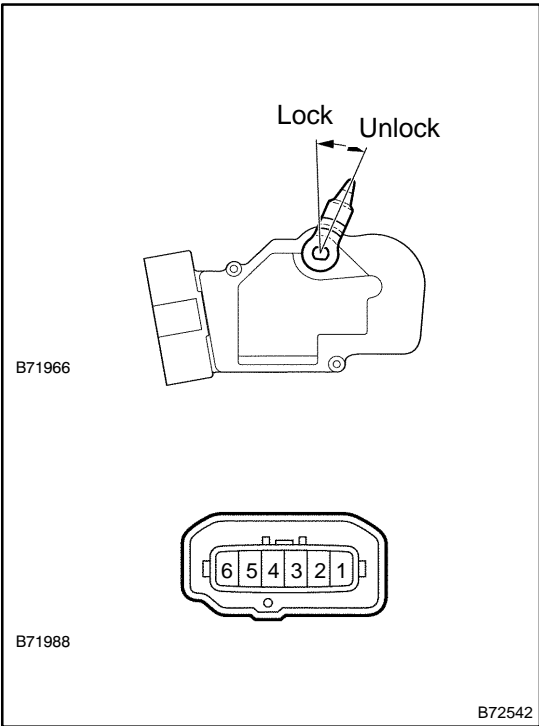
Tester Connection	Specified Condition
D12-5 - D4-19 (UL1)	Below 1 Ω
D12-6 - D4-18 (L1)	
D12-3 - Body ground	

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

6 INSPECT FRONT DOOR LOCK ACTUATOR ASSY LH (DOOR LOCK MOTOR)



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

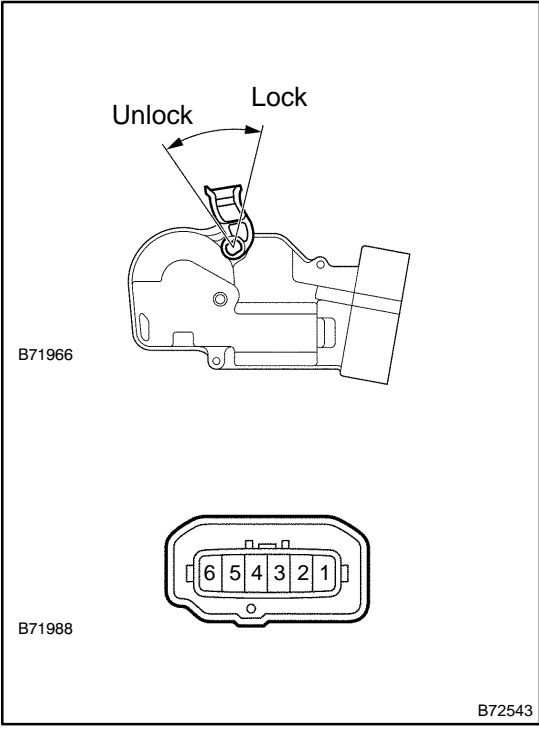
Standard:

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

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY LH

OK

7 INSPECT FRONT DOOR LOCK ACTUATOR ASSY LH (DOOR LOCK AND UNLOCK SWITCH AND POSITION SWITCH)



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

Standard:

Door lock and unlock switch

Tester Connection	Switch Condition	Specified Condition
3 - 5	Lock	Below 1 Ω
3 - 5, 3 - 6	OFF	10 kΩ or higher
3 - 6	Unlock	Below 1 Ω

Position switch

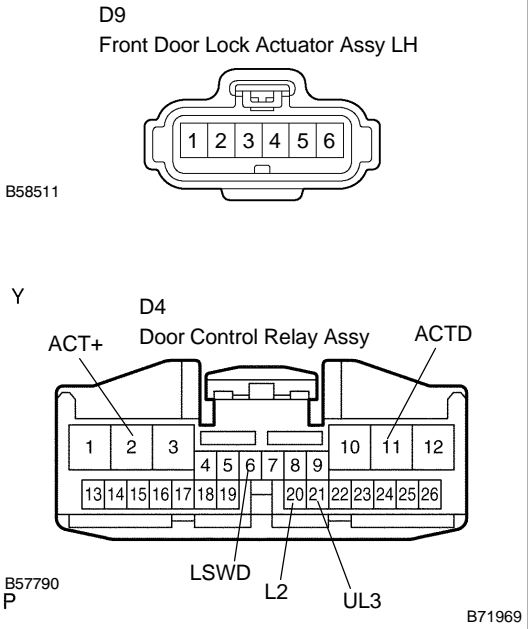
Tester Connection	Switch Condition	Specified Condition
3 - 4	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY LH

OK

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

Wire Harness Side



- (a) Disconnect the D9 door lock and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

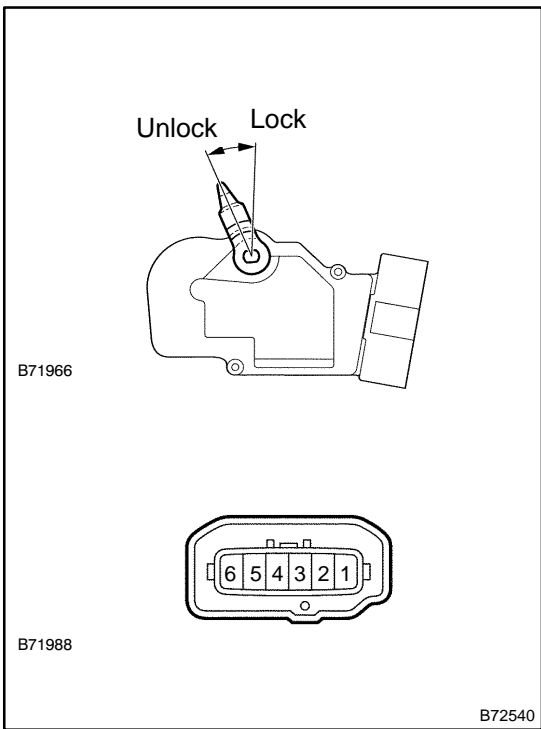
Tester Connection	Specified Condition
D9-1 - D4-11 (ACTD)	Below 1 Ω
D9-2 - D4-2 (ACT+)	
D9-4 - D4-6 (LSWD)	
D9-5 - D4-20 (L2)	
D9-6 - D4-21 (UL3)	
D9-3 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

9 INSPECT FRONT DOOR LOCK ACTUATOR ASSY RH (DOOR LOCK MOTOR)



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

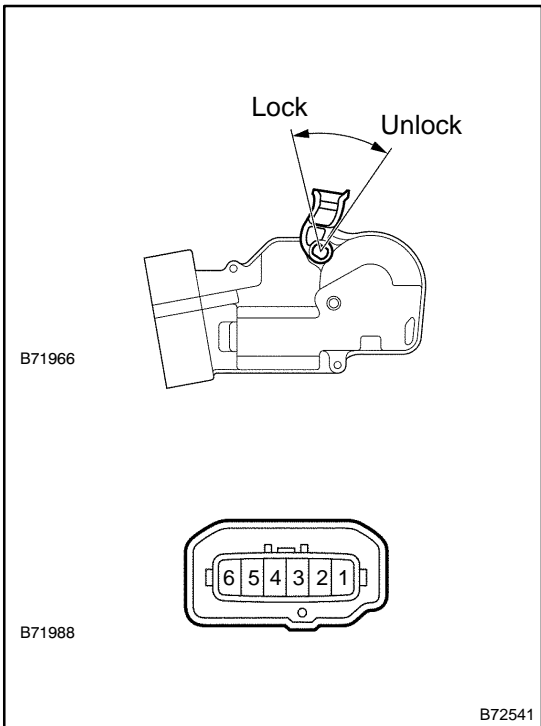
Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 6 Battery negative (-) → Terminal 5	Lock
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 6	Unlock

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY RH

OK

10 INSPECT FRONT DOOR LOCK ACTUATOR ASSY RH (DOOR LOCK AND UNLOCK SWITCH)



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

Standard:

Tester Connection	Switch Condition	Specified Condition
2 - 4	Lock	Below 1 Ω
1 - 4, 2 - 4	OFF	10 kΩ or higher
1 - 4	Unlock	Below 1 Ω

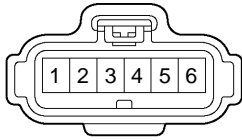
NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY RH

OK

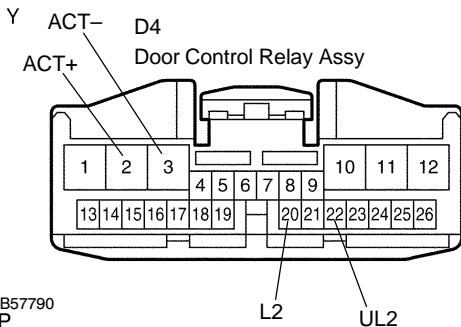
11 CHECK WIRE HARNESS (FRONT DOOR LOCK ACTUATOR ASSY RH - DOOR CONTROL RELAY ASSY AND BODY GROUND)

Wire Harness Side

D16
Front Door Lock Actuator Assy RH



B58511



B57790
P

B71969

- (a) Disconnect the D16 door lock and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

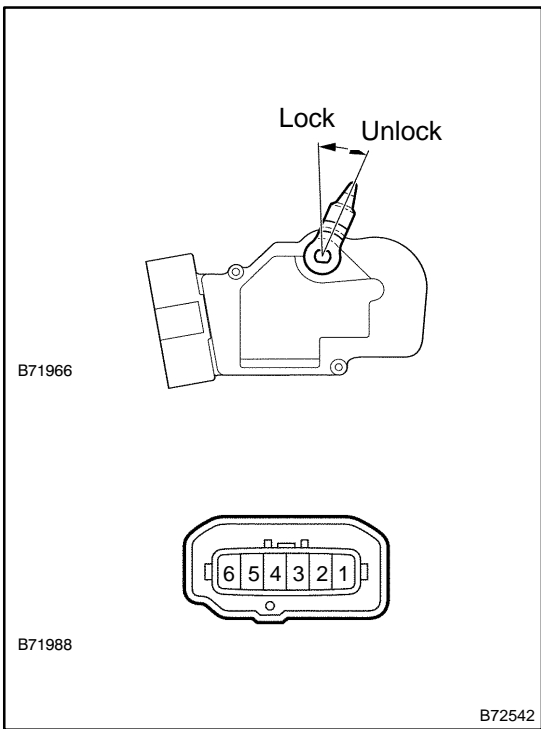
Tester Connection	Specified Condition
D16-1 - D4-22 (UL2)	Below 1 Ω
D16-2 - D4-20 (L2)	
D16-5 - D4-3 (ACT-)	
D16-6 - D4-2 (ACT+)	
D16-4 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

12 INSPECT FRONT DOOR LOCK ACTUATOR ASSY LH (DOOR LOCK MOTOR)



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

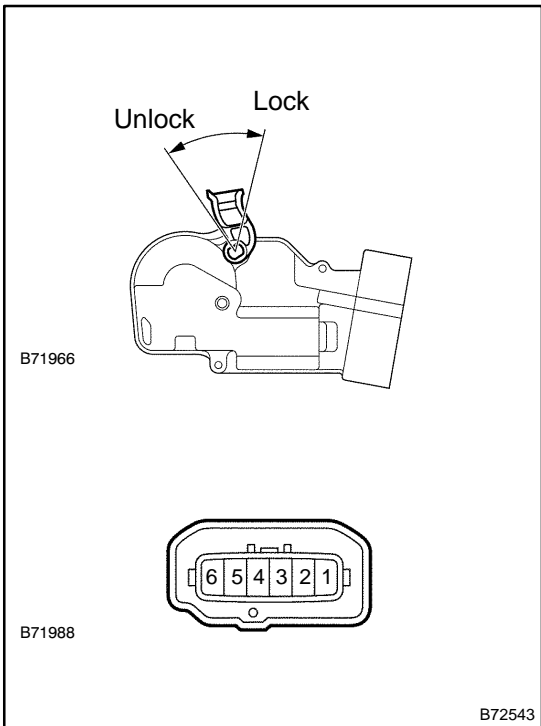
Standard:

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

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY LH

OK

13 INSPECT FRONT DOOR LOCK ACTUATOR ASSY LH (DOOR LOCK AND UNLOCK SWITCH AND POSITION SWITCH)



- (a) Check the resistance of the door lock and unlock switch and position switch.

Standard:

Door lock and unlock switch

Tester Connection	Switch Condition	Specified Condition
3 - 5	Lock	Below 1 Ω
3 - 5, 3 - 6	OFF	10 kΩ or higher
3 - 6	Unlock	Below 1 Ω

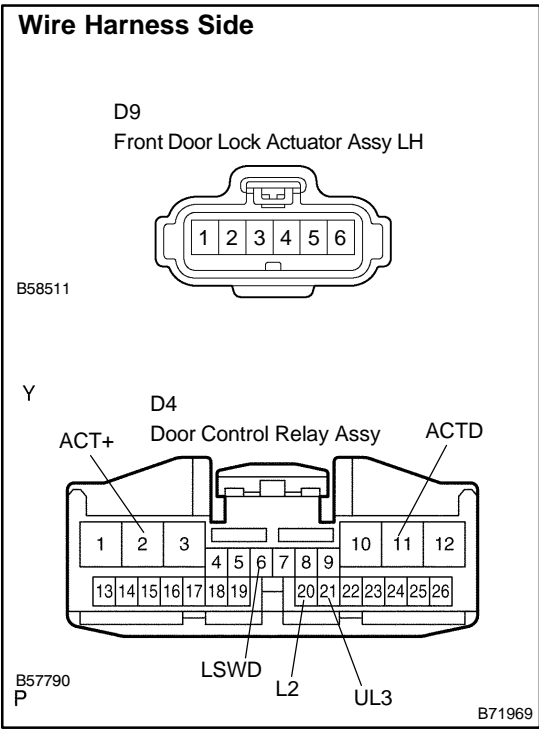
Position switch

Tester Connection	Switch Condition	Specified Condition
3 - 4	Lock	10 kΩ or higher
	Unlock	Below 1 Ω

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY LH

OK

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



- (a) Disconnect the D9 door lock and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

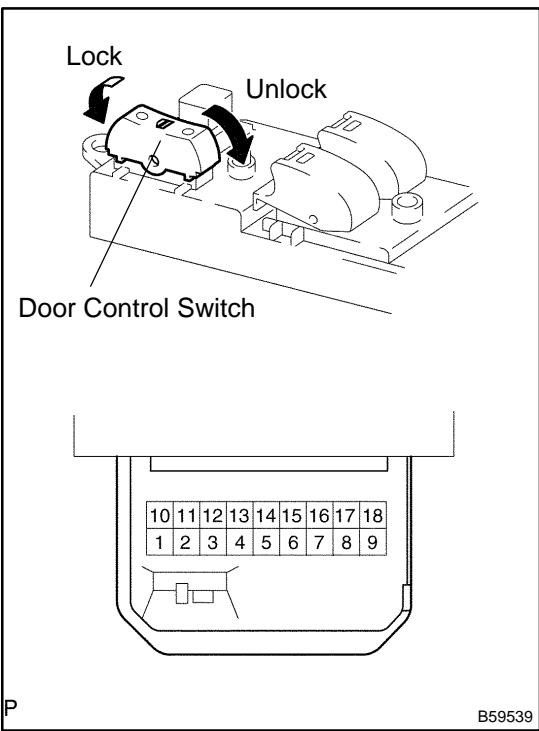
Standard:

Tester Connection	Specified Condition
D9-1 - D4-11 (ACTD)	Below 1 Ω
D9-2 - D4-2 (ACT+)	
D9-4 - D4-6 (LSWD)	
D9-5 - D4-20 (L2)	
D9-6 - D4-21 (UL3)	
D9-3 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

15 INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY



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

Standard:

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

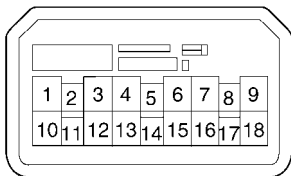
NG REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY

OK

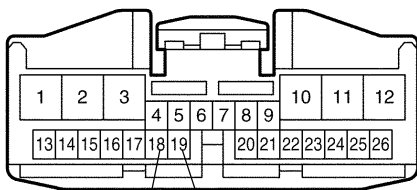
16 CHECK WIRE HARNESS (POWER WINDOW REGULATOR MASTER SWITCH ASSY - DOOR CONTROL RELAY ASSY AND BODY GROUND)

Wire Harness Side

D11
Power Window Regulator
Master Switch Assy



D4
Door Control Relay Assy



B57790
P

L1
UL1

B71964

- (a) Disconnect the D11 switch and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

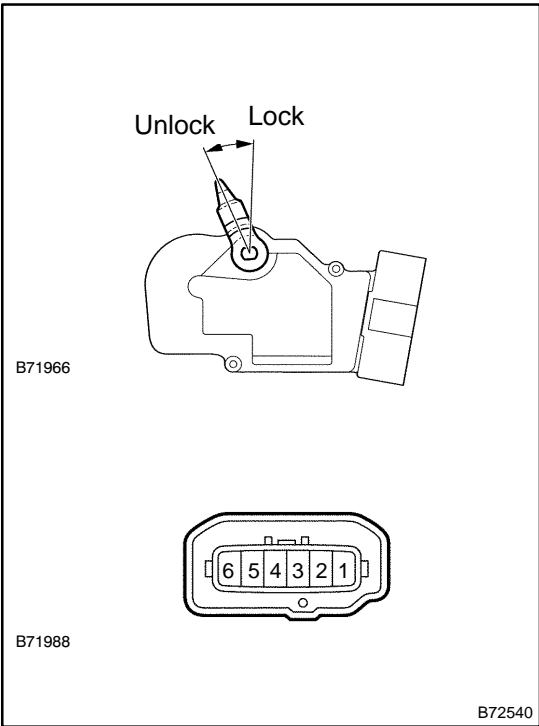
Tester Connection	Specified Condition
D11-5 - D4-18 (L1)	Below 1 Ω
D11-8 - D4-19 (UL1)	
D11-1 - Body ground	
D11-3 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

17 INSPECT FRONT DOOR LOCK ACTUATOR ASSY RH (DOOR LOCK MOTOR)



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

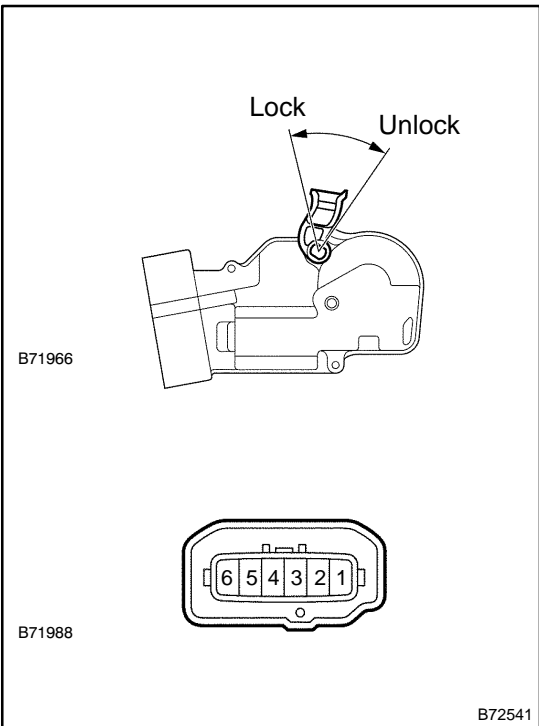
Standard:

Measurement Condition	Specified Condition
Battery positive (+) → Terminal 6 Battery negative (-) → Terminal 5	Lock
Battery positive (+) → Terminal 5 Battery negative (-) → Terminal 6	Unlock

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY RH

OK

18 INSPECT FRONT DOOR LOCK ACTUATOR ASSY RH (DOOR LOCK AND UNLOCK SWITCH)



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

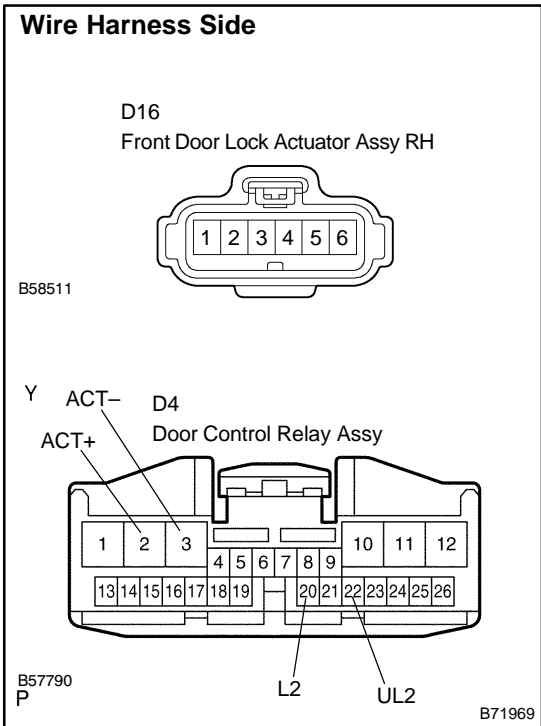
Standard:

Tester Connection	Door Lock Condition	Specified Condition
2 - 4	Lock	Below 1 Ω
1 - 4, 2 - 4	OFF	10 kΩ or higher
1 - 4	Unlock	Below 1 Ω

NG → REPLACE FRONT DOOR LOCK ACTUATOR ASSY RH

OK

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



- (a) Disconnect the D16 door lock and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

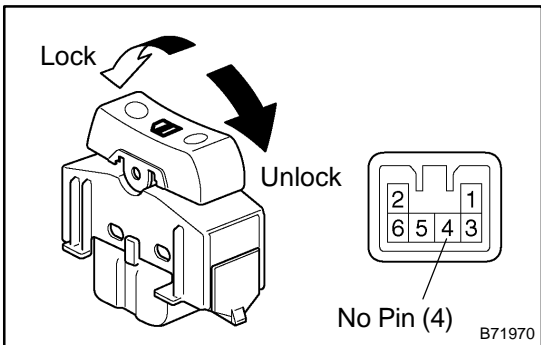
Standard:

Tester Connection	Specified Condition
D16-1 - D4-22 (UL2)	Below 1 Ω
D16-2 - D4-20 (L2)	
D16-5 - D4-3 (ACT-)	
D16-6 - D4-2 (ACT+)	
D16-4 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

20 INSPECT DOOR CONTROL SWITCH ASSY



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

Standard:

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

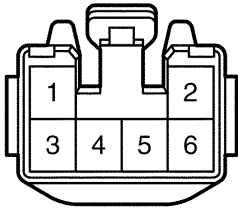
NG REPLACE DOOR CONTROL SWITCH ASSY

OK

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

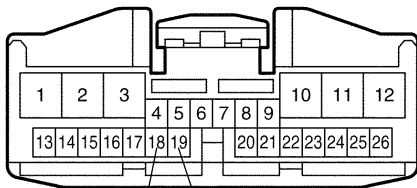
Wire Harness Side

D12
Door Control Switch



B59527

D4
Door Control Relay Assy



B57790
P

L1 UL1

B71971

- (a) Disconnect the D12 switch and D4 relay connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
D12-5 - D4-19 (UL1)	Below 1 Ω
D12-6 - D4-18 (L1)	
D12-3 - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY

22 INSPECT FUSE (D/L, GAUGE)

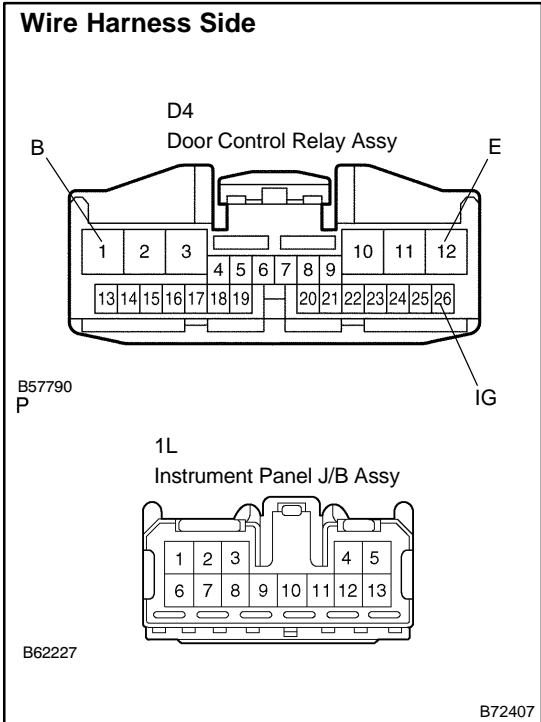
- (a) Remove the D/L and GAUGE fuses from the instrument panel J/B.
- (b) Check the resistance.

Standard: Below 1 Ω

NG REPLACE FUSE

OK

23 CHECK WIRE HARNESS (DOOR CONTROL RELAY ASSY - INSTRUMENT PANEL J/B AND BODY GROUND)



- (a) Disconnect the D4 relay and 1L J/B connectors.
- (b) Check the resistance of the wire harness side connectors.

Standard:

Tester Connection	Specified Condition
D4-1 (B) - 1L-10	Below 1 Ω
D4-26 (IG) - 1L-3	
D4-12 (E) - Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

REPLACE DOOR CONTROL RELAY ASSY