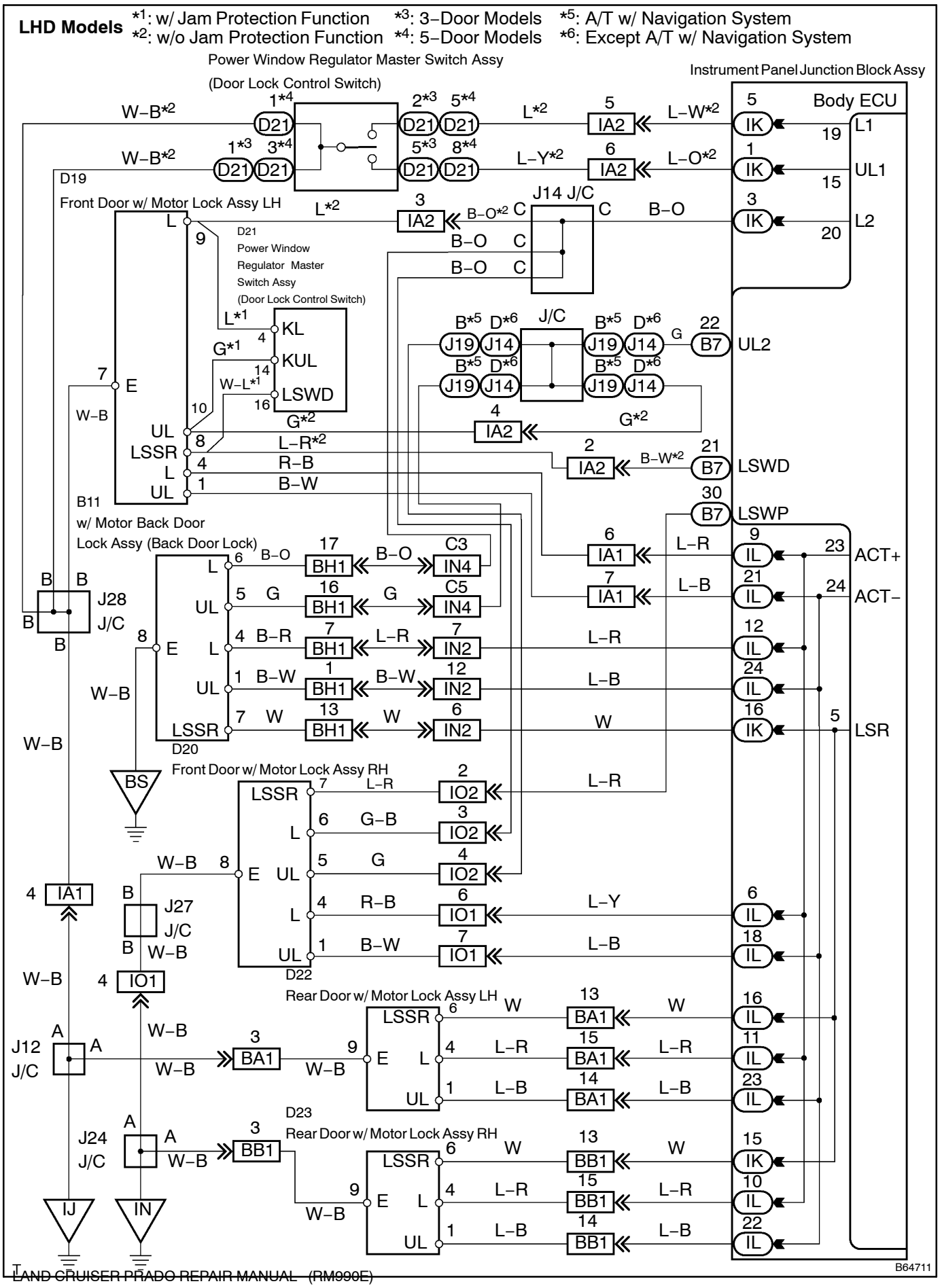
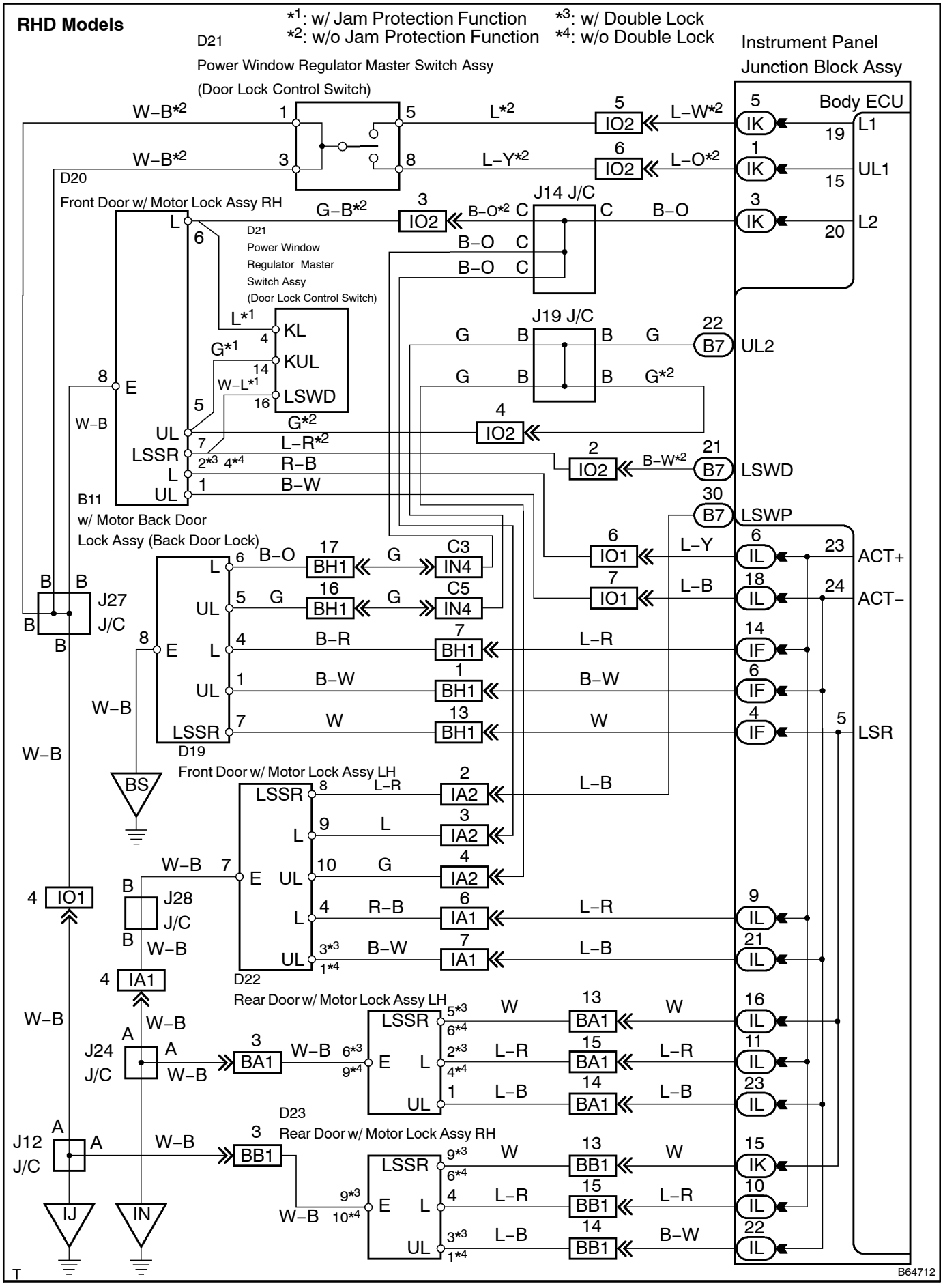
ALL DOORS LOCK AND UNLOCK FUNCTIONS DO NOT OPERATE VIA MASTER SWITCH OR DRIVER SIDE DOOR KEY CYLINDER

CIRCUIT DESCRIPTION

The body ECU receives a switch signal from the master switch and the driver door key, and then drives the door lock motor.

WIRING DIAGRAM




RHD Models
*1: w/ Jam Protection Function
*2: w/o Jam Protection Function
*3: w/ Double Lock
*4: w/o Double Lock
D21
Power Window Regulator Master Switch Assy
(Door Lock Control Switch)
Instrument Panel Junction Block Assy
Body ECU
D20
Front Door w/ Motor Lock Assy RH
D21
Power Window Regulator Master Switch Assy
(Door Lock Control Switch)
J14 J/C
J19 J/C
B11
w/ Motor Back Door Lock Assy (Back Door Lock)
J27 J/C
D19
Front Door w/ Motor Lock Assy LH
J28 J/C
D22
Rear Door w/ Motor Lock Assy LH
J24 J/C
D23
Rear Door w/ Motor Lock Assy RH
J12 J/C
BS
IJ
IN
W–B*2
L*2
L–W*2
W–B*2
L–Y*2
L–O*2
G–B*2
B–O*2
B–O
L*1
G*1
W–L*1
G*2
L–R*2
R–B
B–W
B–O
G
L–Y
L–B
B–R
L–R
W
B–W
L–B
R–B
W
B–W
L–R
L–B
W
L–R
L–B
W
B–W
L–R
B–W
L1
UL1
L2
UL2
LSWD
LSWP
ACT+
ACT–
LSR
B64712

INSPECTION PROCEDURE

w/ Jam Protection Function:

1	PERFORM ACTIVE TEST BY HAND–HELD TESTER

(a) Select the active test, and then check that the power door lock operates.

HINT:

During the active test, the hand–held tester sends a signal to the body ECU to drive all the power door lock motors. If the power door lock operates, the power door lock motor itself and the wire harness between the power door lock motor and body ECU are considered normal.

Standard (Body ECU):

Item	Test Details	Diagnostic Note
DOOR LOCK	Drive door lock motor at all doors OFF/LOCK/UNLOCK	–

NG → **REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY**

OK

2	MASTER SWITCH OR KEY CYLINDER OPERATION

(a) When manual door lock/unlock operation via the master switch can not be performed, proceed to A.

(b) When manual door lock/unlock operation interlocked with the driver side door lock key cylinder can not be performed. proceed to B.

B → **Go to step 4 (for w/o Jam Protection Function)**

A

3	INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY

(a) Check that all the power window switches on the master switch except the door lock control switch function normally.

OK → **REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY**

NG

4	CHECK DTC

(a) Check that there is no abnormality in the communication system by inspecting the communication function of the multiplex communication system with the hand–held tester.
  (1) (ECU unconnected, communication line abnormal) Without code outputs, proceed to A.
  (2) (ECU unconnected, communication line abnormal) With code outputs, proceed to B.

B → **GO TO MULTIPLEX COMMUNICATION SYSTEM (See page 05–1822)**

A

REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY

w/o Jam Protection Function:

1	PERFORM ACTIVE TEST BY HAND–HELD TESTER

(a) Select the active test, and then check that the power door lock operates.

HINT:

During the active test, the hand–held tester sends a signal to the body ECU to drive all the power door lock motors. If the power door lock operates, the power door lock motor itself and the wire harness between the power door lock motor and body ECU are considered normal.

Standard (Body ECU):

Item	Test Details	Diagnostic Note
DOOR LOCK	Drive door lock motor at all doors OFF/LOCK/UNLOCK	–

NG → **REPLACE INSTRUMENT PANEL JUNCTION BLOCK ASSY**

OK

2	MASTER SWITCH OR KEY CYLINDER OPERATION

(a) When manual door lock/unlock operation via the master switch can not be performed, proceed to A.

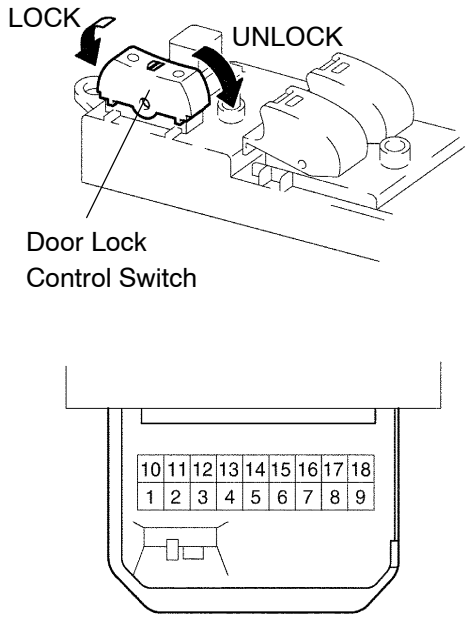
(b) When manual door lock/unlock operation interlocked with the driver side door lock key cylinder can not be performed. proceed to B.

B → **Go to step 4**

A

3 INSPECT POWER WINDOW REGULATOR MASTER SWITCH ASSY

5–Door Models

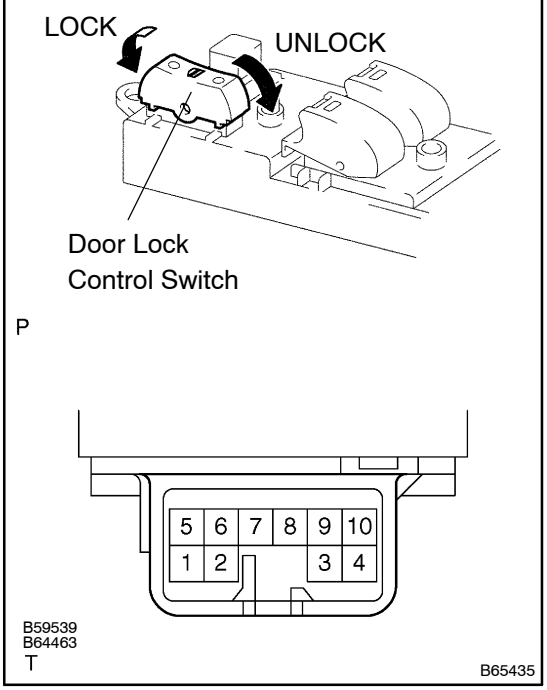


(a) Remove the master switch.
(b) Check the continuity of each terminal of the switch when the door control switch is operated.

Standard (5–Door Models):

Terminal No.	Door Control Switch	Specified Condition
1 ⇔ 5	Lock	Continuity
1 ⇔ 8	Unlock	Continuity

3–Door Models



Standard (3–Door Models):

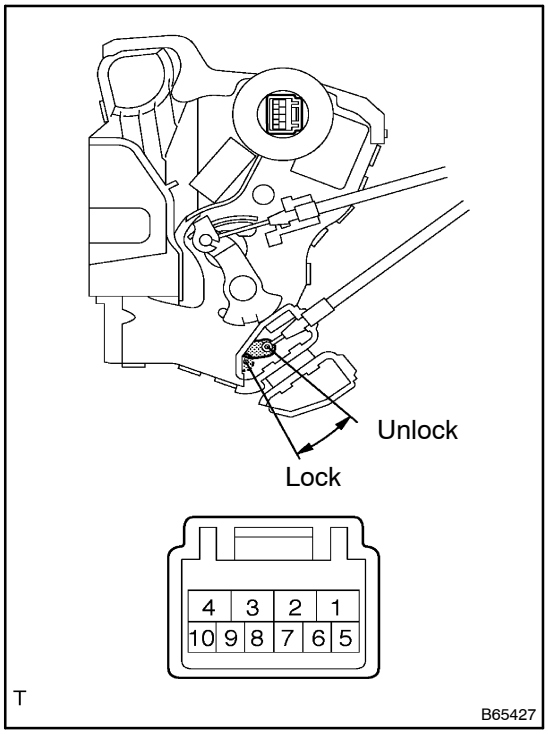
Terminal No.	Door Control Switch	Specified Condition
1 ⇔ 2	Lock	Continuity
1 ⇔ 5	Unlock	Continuity

NG → **REPAIR OR REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY**

OK

REPLACE HARNESS AND CONNECTOR (POWER WINDOW REGULATOR MASTER SWITCH ASSY ⇔ INSTRUMENT PANEL JUNCTION BLOCK ASSY (BODY ECU))

4	INSPECT DRIVER DOOR LOCK (FRONT DOOR W/MOTOR LOCK ASSY LH, RH)



(a) w/o Wireless Door Lock, w/o Double Lock:
Inspect the front door w/motor lock assy LH.

(1) Apply battery voltage and inspect operation of the door lock motor.

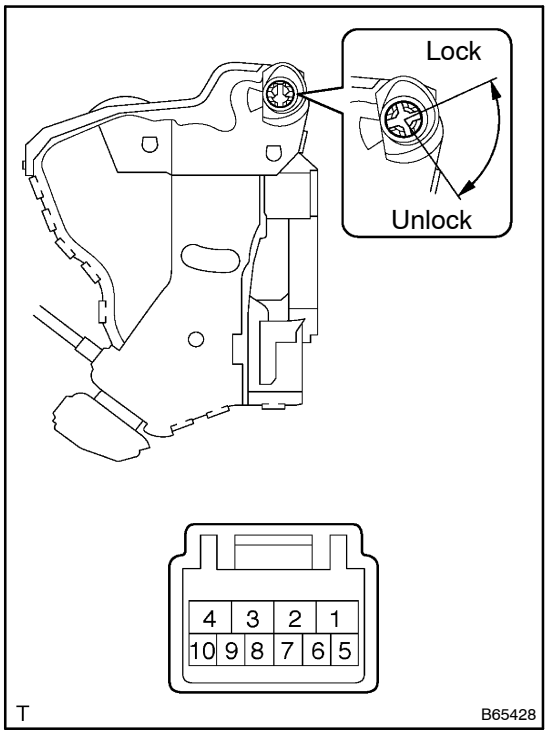
Standard:

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

(2) Inspect the position switch continuity.

Standard:

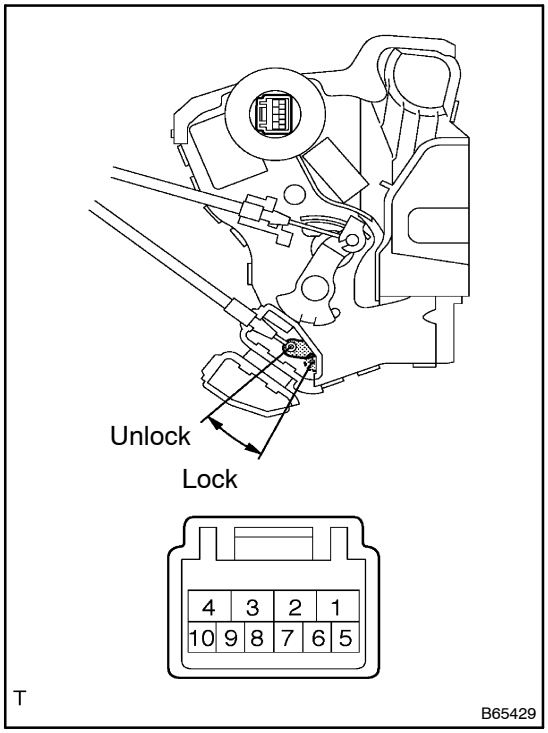
Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 8	Lock	No continuity
	Unlock	Continuity



(3) Inspect the door lock and unlock switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 9	Lock	Continuity
–	OFF	–
7 ⇔ 10	Unlock	Continuity



(b) w/o Wireless Door Lock, w/o Double Lock:
Inspect the front door w/motor lock assy RH.

(1) Apply battery voltage and inspect operation of the door lock motor.

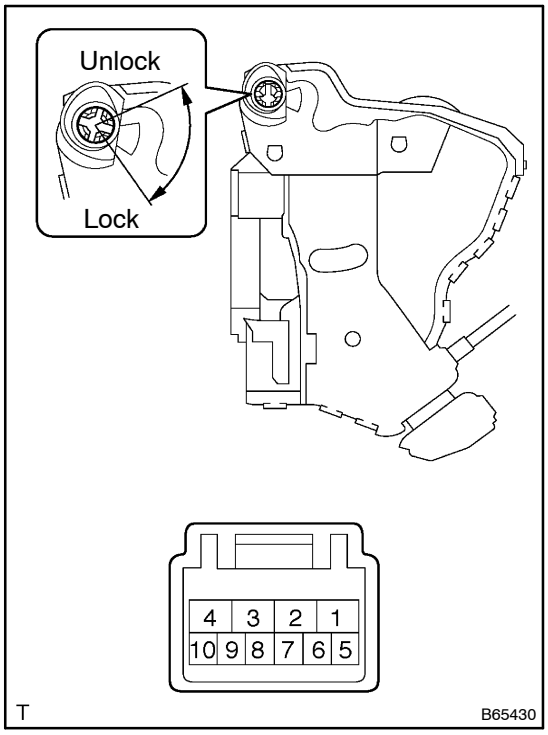
Standard:

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

(2) Inspect the position switch continuity.

Standard:

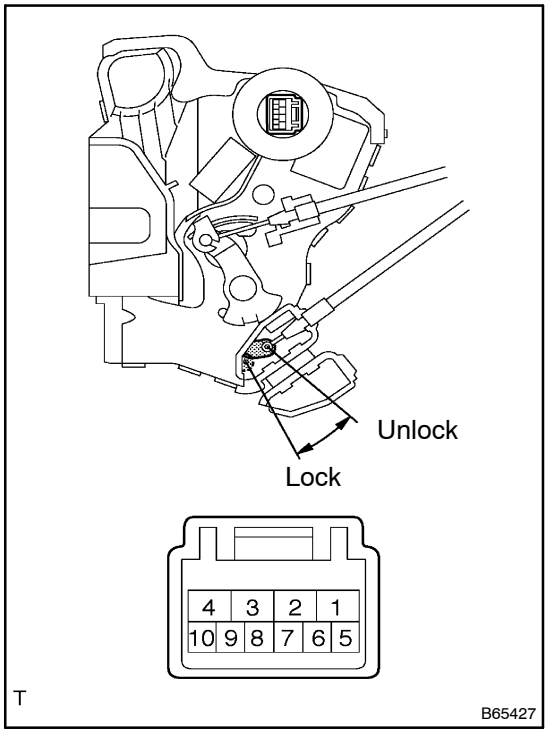
Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 8	Lock	No continuity
	Unlock	Continuity



(3) Inspect the door lock and unlock switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
6 ⇔ 8	Lock	Continuity
–	OFF	–
5 ⇔ 8	Unlock	Continuity



(c) w/ Wireless Door Lock, w/o Double Lock:
Inspect the front door w/motor lock assy LH.

(1) Apply battery voltage and inspect operation of the door lock motor.

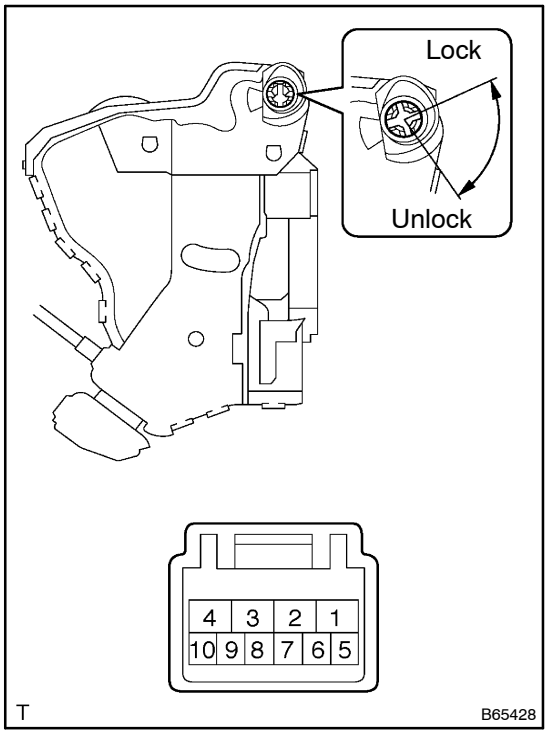
Standard:

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

(2) Inspect the position switch continuity.

Standard:

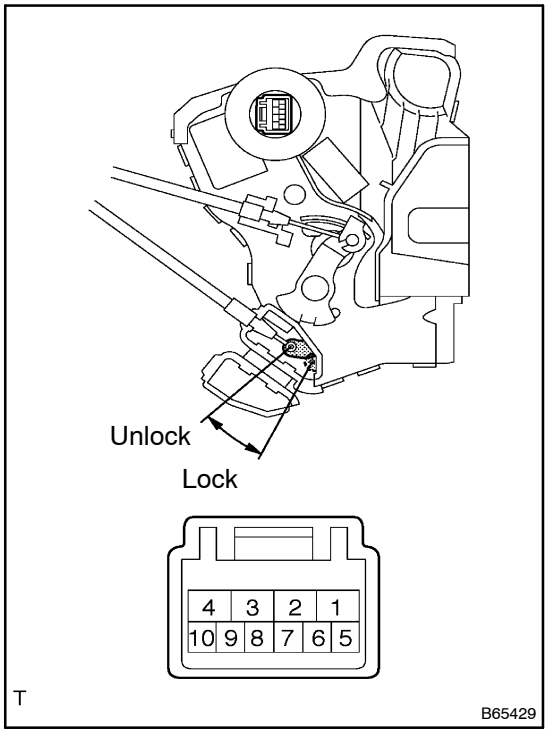
Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 8	Lock	No continuity
	Unlock	Continuity



(3) Driver side:
Inspect the door lock and unlock switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 9	Lock	Continuity
–	OFF	–
7 ⇔ 10	Unlock	Continuity



(d) w/ Wireless Door Lock, w/o Double Lock:
Inspect the front door w/motor lock assy RH.

(1) Apply battery voltage and inspect operation of the door lock motor.

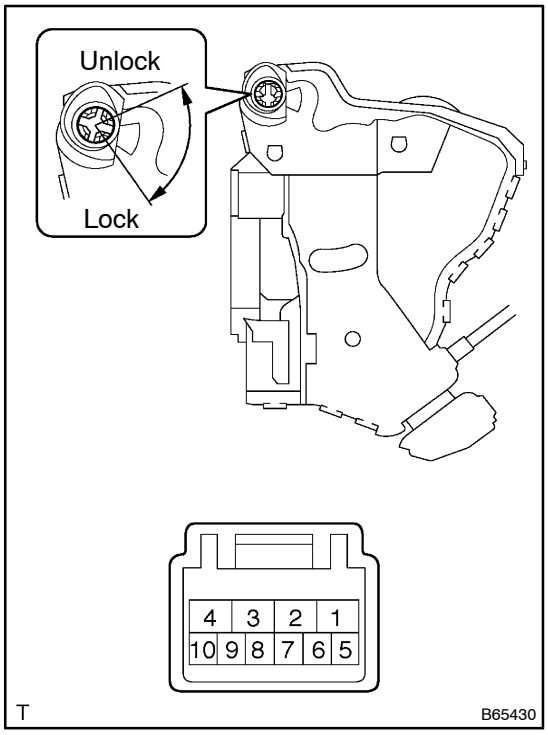
Standard:

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

(2) Inspect the position switch continuity.

Standard:

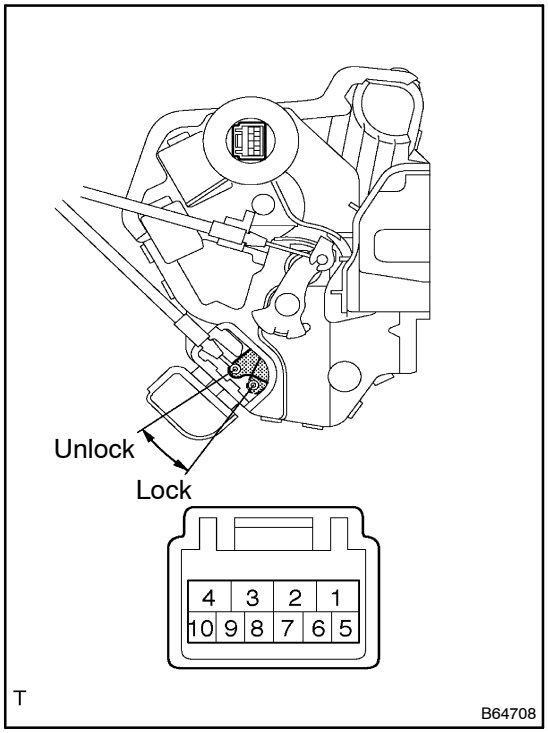
Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 8	Lock	No continuity
	Unlock	Continuity



(3) Driver side:
Inspect the door lock and unlock switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
6 ⇔ 8	Lock	Continuity
–	OFF	–
5 ⇔ 8	Unlock	Continuity



(e) w/ Double Lock:

Inspect the front door w/motor lock assy RH.

(1) Apply battery voltage and inspect operation of the door lock motor.

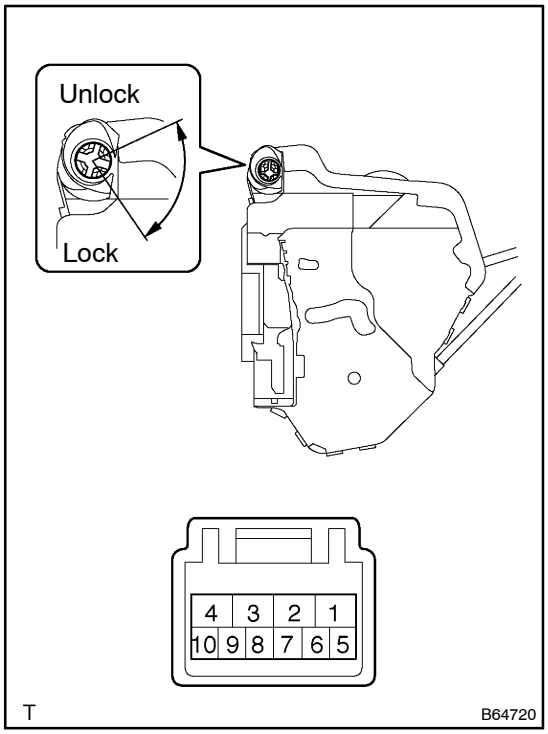
Standard:

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

(2) Inspect the position switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
7 ⇔ 8	Lock	No continuity
	Unlock	Continuity



(3) Inspect the door lock and unlock switch continuity.

Standard:

Terminal No.	Door Lock Position	Specified Condition
6 ⇔ 8	Lock	Continuity
–	OFF	–
5 ⇔ 8	Unlock	Continuity

NG → **REPLACE DRIVER DOOR LOCK**

OK

REPLACE HARNESS AND CONNECTOR (DRIVER DOOR LOCK ⇔ INSTRUMENT PANEL JUNCTION BLOCK ASSY (BODY ECU))