

PROBLEM SYMPTOMS TABLE

POWER DOOR LOCK CONTROL SYSTEM:

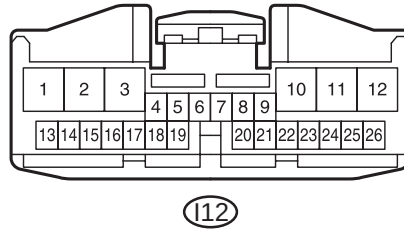
Symptom	Suspected area	See page
All doors are not operated by drivers door key cylinder interlocked with key	1. Door lock control switch assembly	DL-10
	2. Front door lock assembly LH (Drivers door lock)	DL-10
	3. Wire harness	DL-10
	4. Integration relay	DL-10
Key confinement prevention function does not work properly (Unlock warning switch circuit)	1. Unlock warning switch assembly	DL-16
	2. Front door courtesy light switch assembly	DL-16
	3. Wire harness	DL-16
	4. Integration relay	DL-16

TERMINALS OF ECU

1. CHECK INTEGRATION RELAY

(a) Disconnect the I12 relay connector.

Integration Relay Connector (Wire Harness Side)



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(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
L1 (I12-9) - Body ground	L-W - Body ground	with Power window Master switch (Manual door lock operation) OFF → LOCK	10 k Ω or higher → Below 1 Ω
L1 (I12-9) - Body ground	L-W - Body ground	without Power window Driver's door control switch (Manual operation) OFF → LOCK	10 k Ω or higher → Below 1 Ω
L1 (I12-9) - Body ground	L-W - Body ground	Passenger's door control switch (Manual operation) OFF → LOCK	10 k Ω or higher → Below 1 Ω
L2 (I12-7) - Body ground	G - Body ground	Key in driver's door key cylinder LOCK → Other position	Below 1 Ω → 10 k Ω or higher
L2 (I12-7) - Body ground	G - Body ground	Key in passenger's door key cylinder LOCK → Other position	Below 1 Ω → 10 k Ω or higher
UL1 (I12-8) - Body ground	L - Body ground	with Power window Master switch (Manual door lock operation) OFF → UNLOCK	10 k Ω or higher → Below 1 Ω
UL1 (I12-8) - Body ground	L - Body ground	without Power window Door control switch (Manual operation) OFF → UNLOCK	10 k Ω or higher → Below 1 Ω
UL1 (I12-8) - Body ground	L - Body ground	Passenger's door control switch (Manual operation) OFF → UNLOCK	10 k Ω or higher → Below 1 Ω
UL2 (I12-5) - Body ground	L-B - Body ground	Key in passenger's door key cylinder UNLOCK → Other position	Below 1 Ω → 10 k Ω or higher
UL3 (I12-6) - Body ground	L-Y - Body ground	Key in driver's door key cylinder UNLOCK → Other position	Below 1 Ω → 10 k Ω or higher
LSWD (I12-19) - Body ground	W - Body ground	Driver's door lock control knob LOCK → UNLOCK	10 k Ω or higher → Below 1 Ω
LSWP (I12-18) - Body ground	W-R - Body ground	Front passenger's door lock control knob LOCK → UNLOCK	10 k Ω or higher → Below 1 Ω
PCTY (I12-13) - Body ground	R-W - Body ground	Front passenger's door fully closed → Opened	10 k Ω or higher → Below 1 Ω
GL5 (I12-23) - Body ground	L-W - Body ground	Glass hatch opener switch OFF → ON	10 k Ω or higher → Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

(c) Reconnect the I12 relay connector.

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(d) Measure the voltage according to the value(s) in the table below.

Standard voltage

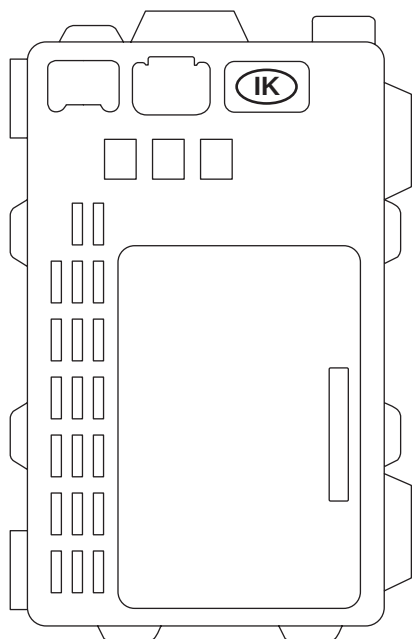
Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
ACTD (I12-1) - Body ground	R - Body ground	Key in driver's door lock cylinder OFF → LOCK	0 V → 10 to 14 V → Below 1 V
ACTG (I12-2) - Body ground	W - Body ground	Glass hatch opener switch OFF → ON	0 V → 10 to 14 V → Below 1 V

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

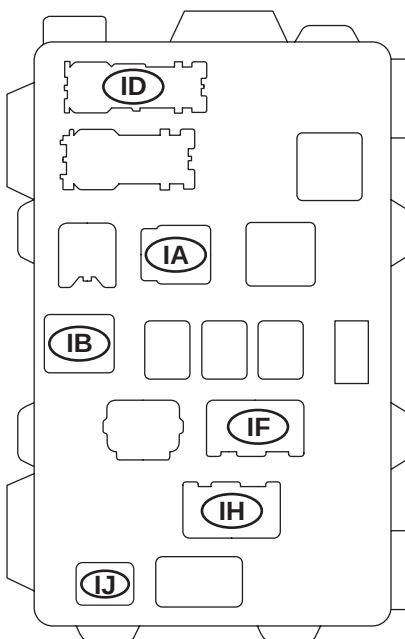
2. CHECK INSTRUMENT PANEL J/B (INTEGRATION RELAY)

(a) Inspect the ID, IF, IH and IJ J/B connectors.

Instrument Panel J/B (Integration Relay)

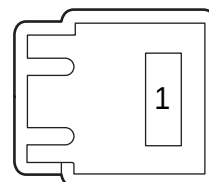


Instrument Panel J/B Side Connector IK

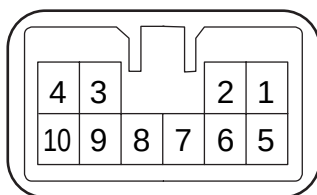
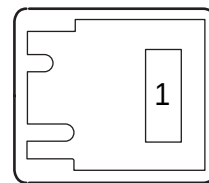


Instrument Panel J/B Side Connector IF

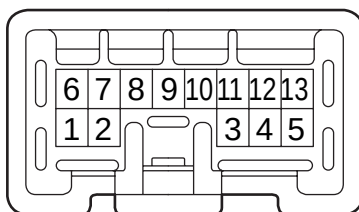
Instrument Panel J/B Side Connector IA



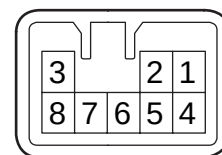
Instrument Panel J/B Side Connector IB



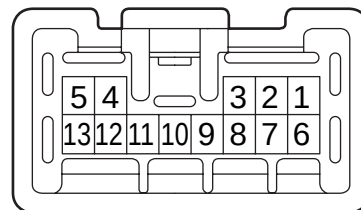
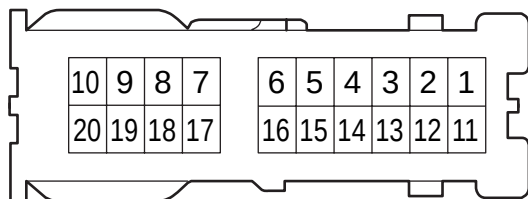
Instrument Panel J/B Side Connector ID



Instrument Panel J/B Side Connector IJ



Instrument Panel J/B Side Connector IH



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(b) Measure the resistance according to the value(s) in the table below.

Standard resistance

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
KSW (IJ-8) - Body ground	L-B - Body ground	No key in ignition switch lock cylinder → Yes	10 kΩ or higher → Below 1 Ω
GND (IF-4) - Body ground	W-B - Body ground	Always	Below 1 Ω

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
GND (IH-10) - Body ground	W-B - Body ground	Always	Below 1 Ω
DCTY (ID-1) - Body ground	R-W - Body ground	Driver's door fully closed → Opened	10 k Ω or higher → Below 1 Ω
P-DR (ID-14) - Body ground	R-B - Body ground	Rear LH door fully closed → Opened	10 k Ω or higher → Below 1 Ω
P-DR (ID-15) - Body ground	R-Y - Body ground	Rear RH door fully closed → Opened	10 k Ω or higher → Below 1 Ω
P-DR (ID-16) - Body ground	R - Body ground	- Back door fully closed → Opened - Glass hatch fully closed → Opened	10 k Ω or higher → Below 1 Ω

If the result is not as specified, there may be a malfunction on the wire harness side.

- (c) Reconnect the connectors.
- (d) Measure the voltage according to the value(s) in the table below.

Standard voltage

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
IG (IA-1) - Body ground	W - Body ground	Always	10 to 14 V
B (IB-1) - Body ground	W - Body ground	Always	10 to 14 V
KSW (IJ-8) - Body ground	L-B - Body ground	No key in ignition switch key cylinder → Yes	10 to 14 V → 0 V →
ACT+ (IK-2) - Body ground	L - Body ground	Key in driver's door lock cylinder OFF → LOCK	0 V → 10 to 14 V → Below 1 V
ACT+ (ID-9) Body ground	L - Body ground	Key in driver's door lock cylinder OFF → UNLOCK	0 V → 10 to 14 V → Below 1 V
ACT- (IK-5) - Body ground	R - Body ground	Key in driver's door lock cylinder OFF → LOCK	0 V → 10 to 14 V → Below 1 V
ACT- (ID-20) - Body ground	R - Body ground	Key in driver's door lock cylinder OFF → UNLOCK	0 V → 10 to 14 V → Below 1 V

If the result is not as specified, the integration relay or instrument panel J/B may have a malfunction.