

POWER DOOR LOCK CONTROL SYSTEM

HOW TO PROCEED WITH TROUBLESHOOTING

057TD-01

1	VEHICLE BROUGHT IN
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2	CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK (See page 05-671)
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3	PROBLEM SYMPTOMS TABLE (See page 05-676)
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- (a) Without applicable symptoms, proceed to "A"
- (b) With applicable symptoms, proceed to "B"

B	GO TO STEP 5
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A

4	PERFORM TROUBLESHOOTING IN THE FOLLOWING METHOD, DEPENDING ON MALFUNCTION SYMPTOM
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- (a) Terminals of ECU (See page [05-673](#))
- (b) Inspection (See page [73-3](#))
- (c) On-vehicle inspection (See page [73-1](#))

5	ADJUSTMENT, REPAIR OR REPLACEMENT
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END

CUSTOMER PROBLEM ANALYSIS CHECK

POWER DOOR LOCK CONTROL SYSTEM Check Sheet

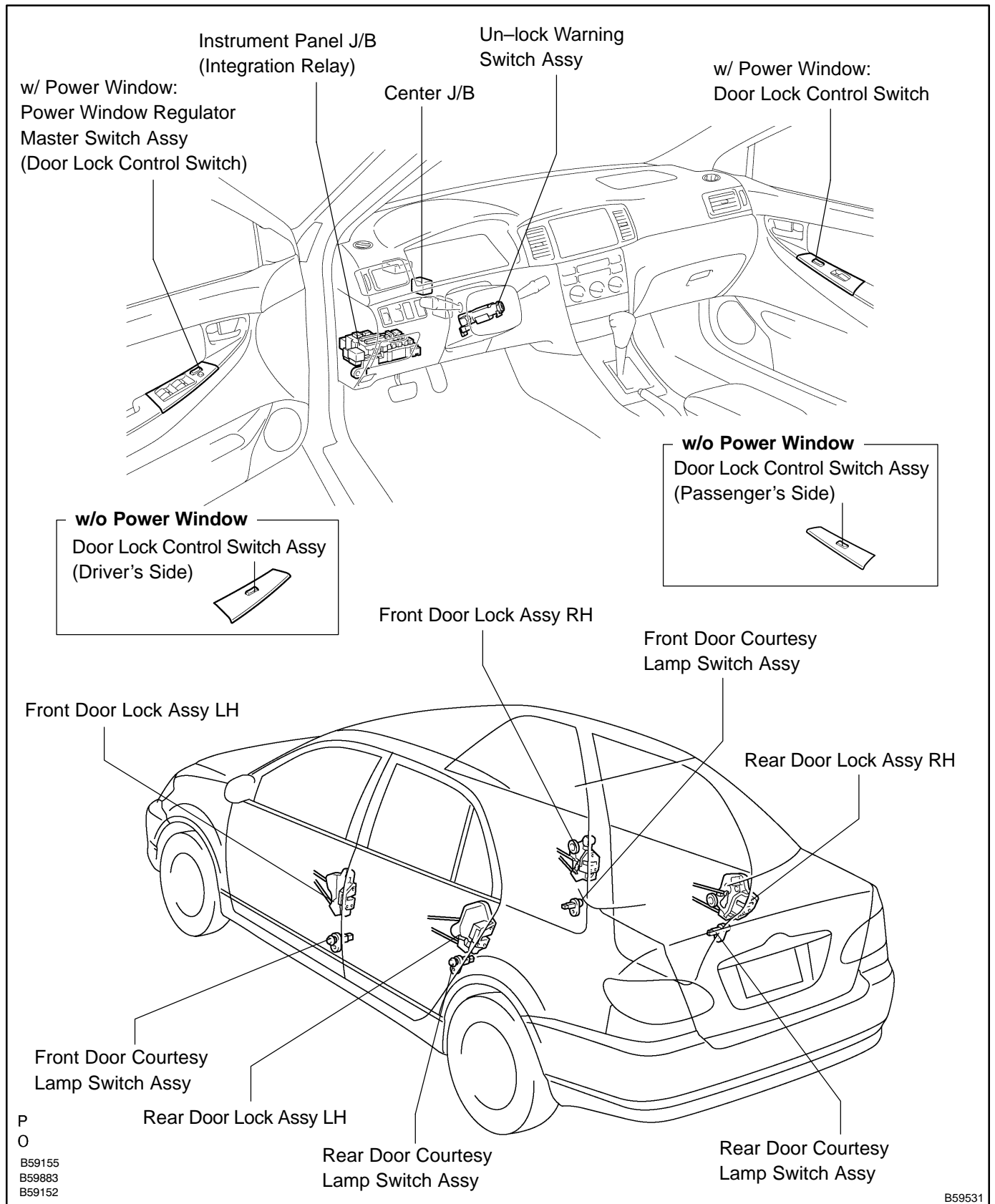
Inspector's name: _____

Customer's Name		Registration No.	
		Registration Year	
		Frame No.	
Date Vehicle Brought in	/ /	Odometer Reading	km Mile

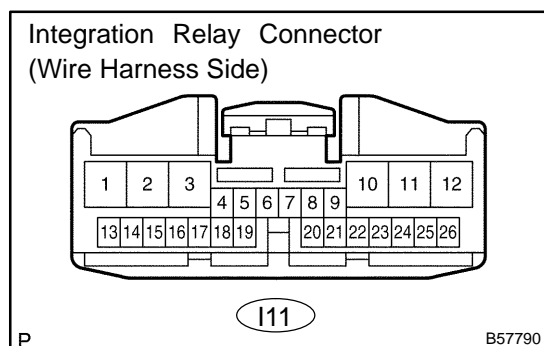
Date Problem First Occurred	/ /
Frequency Problem Occurs	<input type="checkbox"/> Constant <input type="checkbox"/> Sometimes (Times per day, month) <input type="checkbox"/> Once only
Weather Conditions When Problem Occurred	Weather <input type="checkbox"/> Fine <input type="checkbox"/> Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Snowy <input type="checkbox"/> Various/Others
	Outdoor temperature <input type="checkbox"/> Hot <input type="checkbox"/> Warm <input type="checkbox"/> Cool <input type="checkbox"/> Cold (Approx. °F (°C))

Problem Symptom	<input type="checkbox"/> Malfunction in Door Lock/Unlock Operation Using Door Lock Control Switch.	<input type="checkbox"/> Driver's side door lock control switch. <input type="checkbox"/> Passenger's side door lock control switch.	<input type="checkbox"/> Driver's side door <input type="checkbox"/> Passenger's side door <input type="checkbox"/> Driver's side door <input type="checkbox"/> Passenger's side door
	<input type="checkbox"/> Malfunction in Door Lock/Unlock Operation Using Key.	<input type="checkbox"/> Driver's side door key lock and unlock control switch.	<input type="checkbox"/> Driver's side door <input type="checkbox"/> Passenger's side door
		<input type="checkbox"/> Passenger's side door key lock and unlock control switch.	<input type="checkbox"/> Driver's side door <input type="checkbox"/> Passenger's side door
		<input type="checkbox"/> 2-step unlocking function of driver's side door key lock and unlock switch.	
	<input type="checkbox"/> Malfunction in Key Confinement Prevention Function.		
<input type="checkbox"/> Others.			

LOCATION



TERMINALS OF ECU



1. INSPECT INTEGRATION RELAY

(a) Disconnect the connector and check the continuity of each terminal of the disconnected connector.

Standard :

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
L1 (I11-9) ⇔ Body ground	L-W ⇔ Body ground	[w/ power window] Master switch (Manual door lock operation) OFF → LOCK	No continuity → Continuity
		[w/o power window] Driver's door control switch (Manual operation) OFF → LOCK	
		Passenger's door control switch (Manual operation) OFF → LOCK	
L2 (I11-7) ⇔ Body ground	G ⇔ Body ground	Key in driver's door lock cylinder LOCK → Other position	Continuity → No continuity
		Key in passenger's door lock cylinder LOCK → Other position	
UL1 (I11-8) ⇔ Body ground	L ⇔ Body ground	[w/ power window] Master switch (Manual door lock operation) OFF → UNLOCK	No continuity → Continuity
		[w/o power window] Door control switch (Manual operation) OFF → UNLOCK	
		Passenger's door control switch (Manual operation) OFF → UNLOCK	
UL2 (I11-5) ⇔ Body ground	L-B ⇔ Body ground	Key in passenger's door lock cylinder UNLOCK → Other position	Continuity → No continuity
UL3 (I11-6) ⇔ Body ground	L-Y ⇔ Body ground	Key in driver's door lock cylinder UNLOCK → Other position	
LSWD (I11-19) ⇔ Body ground	W ⇔ Body ground	Driver's door lock control knob LOCK → UNLOCK	No continuity → Continuity
LSWP (I11-18) ⇔ Body ground	W-R ⇔ Body ground	Passenger's door lock control knob LOCK → UNLOCK	
PCTY (I11-13) ⇔ Body ground	R-W ⇔ Body ground	Passenger's door fully closed → Opened	No continuity → Continuity

If the result is not as specified, the vehicle's side may malfunction.

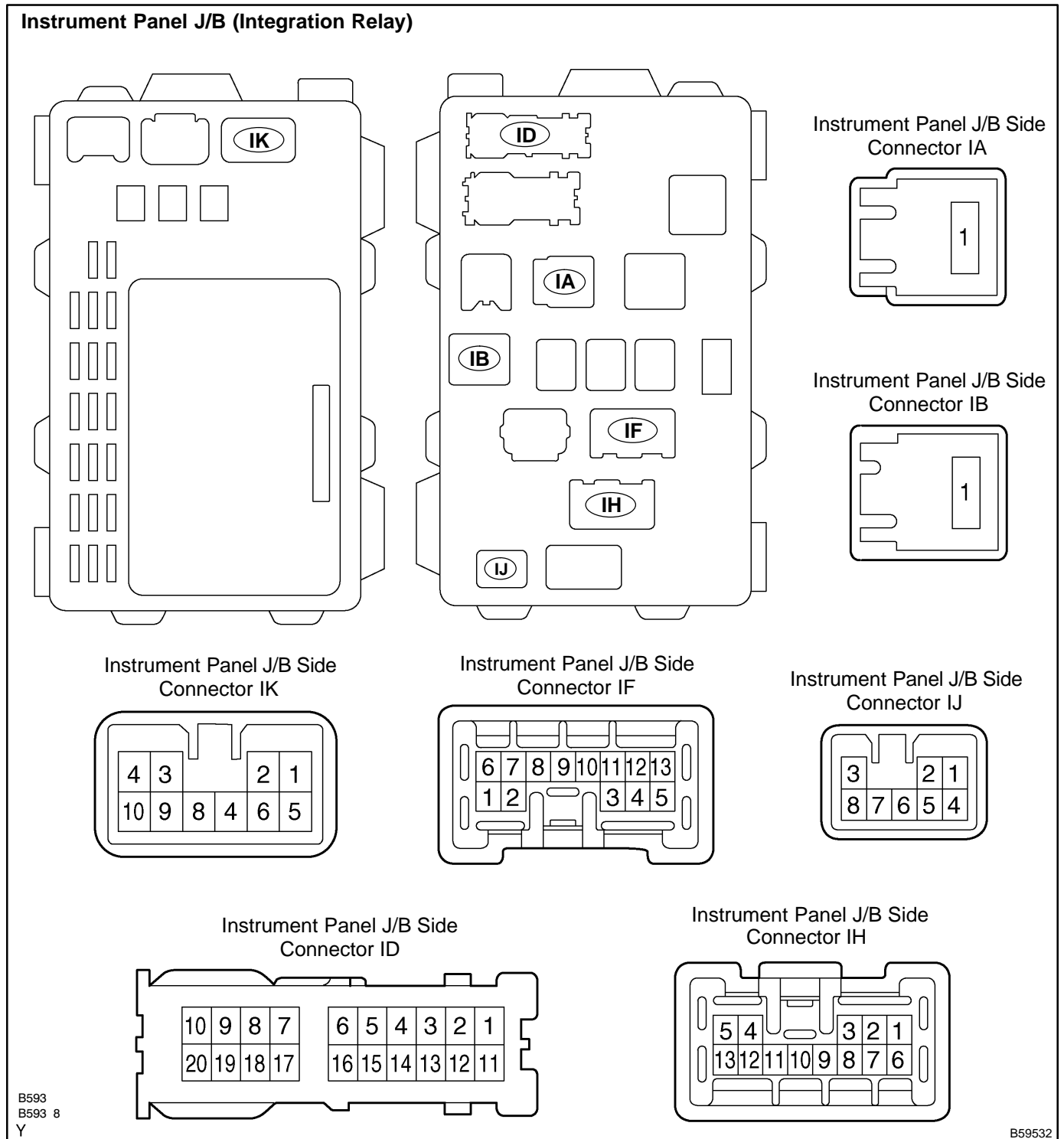
(b) Reconnect the connector and check each terminal.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
ACTD (I11-1) ↔ Body ground	R ↔ Body ground	Key in driver's door lock cylinder OFF → LOCK	0 V → 10 - 14 V → 1 V or less

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

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



- (a) Inspect the DOOR fuse.
 (b) Disconnect connectors ID, IF, IH and IJ of the instrument panel J/B.
 (c) Check each terminal of the disconnected connectors.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified Condition
KSW (IJ-8) ⇔ Body ground	L-B ⇔ Body ground	No key in ignition switch lock cylinder → Inserted	No continuity → Continuity
GND (IF-4) ⇔ Body ground	W-B ⇔ Body ground	Constant	Continuity
GND (IH-10) ⇔ Body ground	W-B ⇔ Body ground		
DCTY (ID-1) ⇔ Body ground	R-W ⇔ Body ground	Driver's door fully closed → Opened	No continuity → Continuity
PRCTY (ID-14) ⇔ Body ground	R-B ⇔ Body ground	Rear LH door fully closed → Opened	
PRCTY (ID-15) ⇔ Body ground	R-Y ⇔ Body ground	Rear RH door fully closed → Opened	

If the result is not as specified, the vehicle's side may malfunction.

- (d) Reconnect the connectors and check each terminal.

Standard:

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

If the result is not as specified, the instrument panel J/B (integration relay) assembly may malfunction.

PROBLEM SYMPTOMS TABLE

Symptom	Suspected Area	See page
All doors are not operated by driver's door key cylinder interlocked with key	<ol style="list-style-type: none">1. Door lock control switch2. Front door lock assy LH3. Wire harness4. Integration relay	05-677
Key confinement prevention function does not work properly (Unlock warning switch circuit)	<ol style="list-style-type: none">1. Un-lock warning switch assy2. Front door courtesy lamp switch assy3. Wire harness4. Integration relay	05-682

ALL DOOR LOCK AND UNLOCK DO NOT OPERATE BY THE MASTER SWITCH OR THE DRIVER'S DOOR KEY

CIRCUIT DESCRIPTION

The integration relay receives a switch signal from the master switch, door lock control switch or the driver's door key and then drives the door lock motor.

INSPECTION PROCEDURE

1 CHECK DOOR LOCK

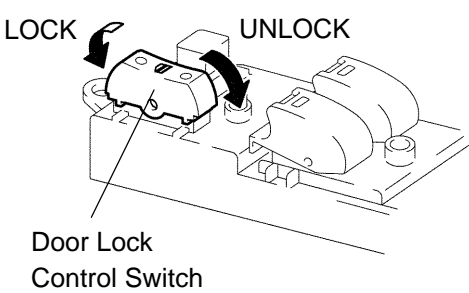
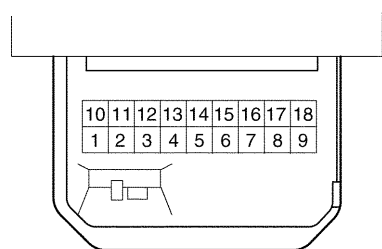
- (a) When the door does not operate manually, proceed to "A".
- (b) When the door does not operate via the key, proceed to "B".

B → Go to step 4

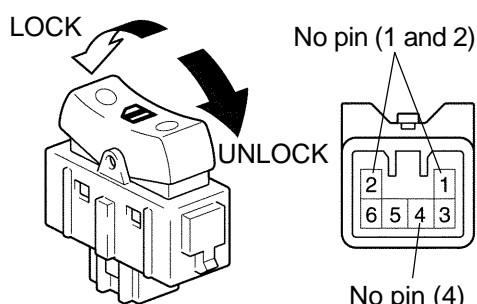
A

2 INSPECT DOOR LOCK CONTROL SWITCH

w/ Power Window

w/o Power Window



P
B59539
B59538

B59540

- (a) w/ Power window:
Remove the power window regulator master switch assy.
(1) Inspect the master switch (door lock control switch) continuity, as shown in the illustration and table.

Standard:

Switch position	Terminal No.	Specified condition
Lock	1 ↔ 3 ↔ 5	Continuity
OFF	-	-
Unlock	1 ↔ 3 ↔ 8	Continuity

- (b) w/o Power window:
Remove the door lock control switch.
(1) Inspect the door lock control switch continuity, as shown in the illustration and table.

Standard:

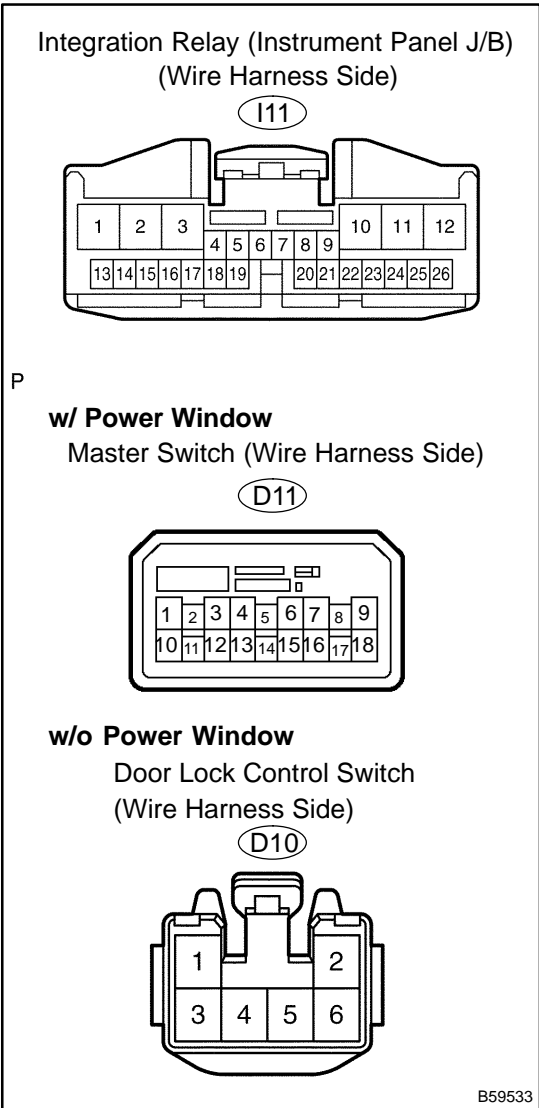
Switch position	Terminal No.	Specified condition
Lock	3 ↔ 6	Continuity
OFF	-	-
Unlock	3 ↔ 5	Continuity

NG → REPLACE POWER WINDOW REGULATOR MASTER SWITCH ASSY (W/ POWER WINDOW)

NG → REPLACE DOOR LOCK CONTROL SWITCH (W/O POWER WINDOW)

OK

3 CHECK WIRE HARNESS (SWITCH ↔ INTEGRATION RELAY)



- (a) w/ Power window:
Disconnect the power window regulator master switch assy and integration relay connectors.
w/o Power window:
Disconnect the door lock control switch and integration relay connectors.
- (b) Check the continuity between the terminals of the power window regulator master switch assy or door lock control switch and integration relay connectors, as shown in the illustration and tables.

[w/ Power Window]

Standard (Check for open):

Symbols (Terminal No.) (Master switch ↔ Integration relay)	Specified condition
L (D11-5) ↔ L1 (I11-9)	Continuity
UL (D11-8) ↔ UL1 (I11-8)	
E (D11-1) ↔ Body ground	
E (D11-3) ↔ Body ground	

[w/o Power Window]

Standard (Check for open):

Symbols (Terminal No.) (Door lock control switch ↔ Integration relay)	Specified condition
L (D10-6) ↔ L1 (I11-9)	Continuity
UL (D10-5) ↔ UL1 (I11-8)	
E (D10-3) ↔ Body ground	

OK → **REPLACE INTEGRATION RELAY**

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

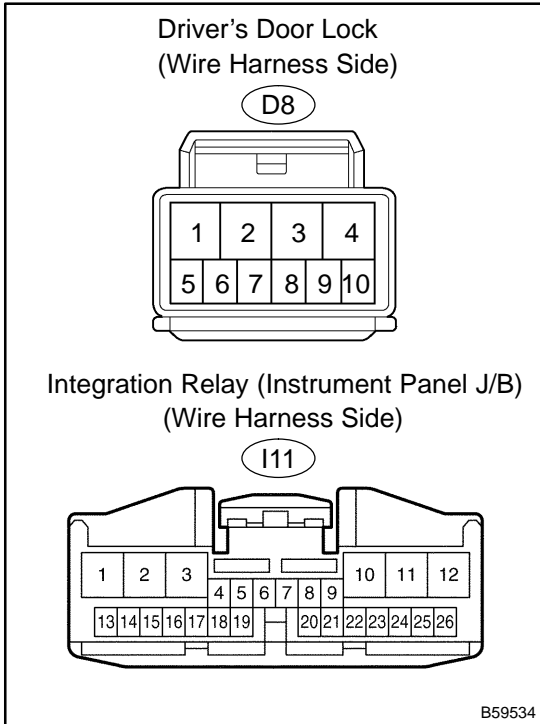
4 INSPECT DRIVER'S DOOR LOCK (See page 73-3)

- (a) Inspect the driver's door lock key switch.
- (b) Inspect the driver's door lock position switch.

NG → **REPLACE DRIVER'S DOOR LOCK**

OK

5 CHECK WIRE HARNESS (DRIVER'S DOOR LOCK ↔ INTEGRATION RELAY)



- (a) Disconnect the driver's door lock and integration relay connectors.
- (b) Check the continuity between the terminals of the driver's door lock and integration relay connectors, as shown in the illustration and table.

Standard (Check for open):

Symbols (Terminal No.) (Driver's door lock ↔ Integration relay)	Specified condition
(D8-9) ↔ L2 (I11-7)	Continuity
(D8-10) ↔ UL3 (I11-6)	
(D8-8) ↔ LSWD (I11-19)	
(D8-7) ↔ Body ground	

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

OK

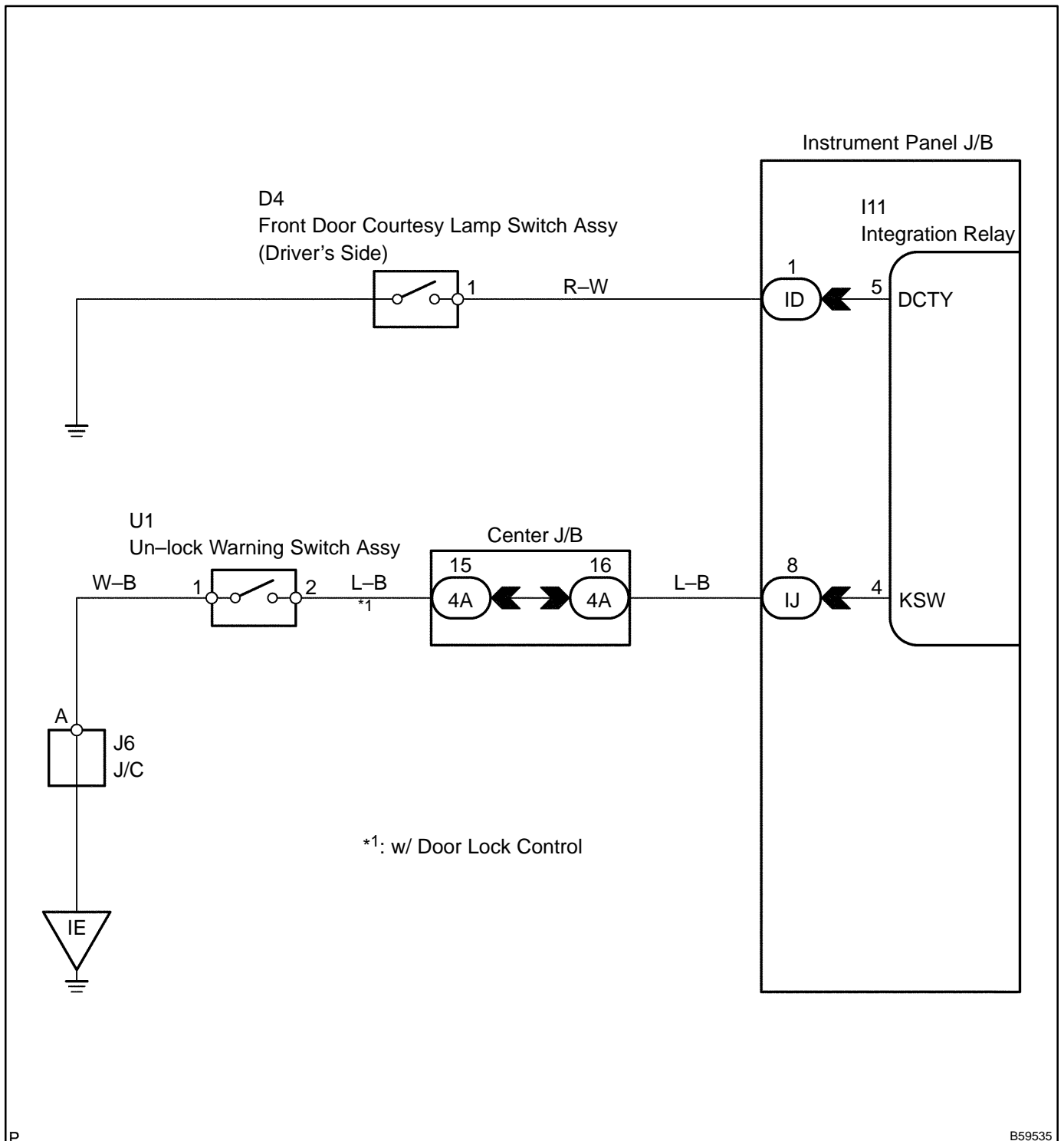
REPLACE INTEGRATION RELAY

KEY CONFINEMENT PREVENTION FUNCTION DOES NOT WORK PROPERLY (UNLOCK WARNING SWITCH CIRCUIT)

CIRCUIT DESCRIPTION

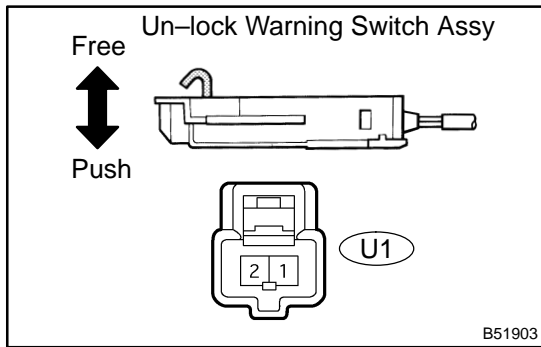
The unlock warning switch turns on when the key is inserted in the ignition key cylinder and the door courtesy switch turns on when the driver's door is opened, and the integration relay monitors both switches conditions. According to these switches conditions, the integration relay controls the door locking operation not to lock the doors while both switches are on, in order to prevent the key from being confined.

WIRING DIAGRAM



INSPECTION PROCEDURE

1 INSPECT UN-LOCK WARNING SWITCH ASSY



- (a) Remove the un-lock warning switch assy.
- (b) Inspect the un-lock warning switch assy continuity, as shown in the illustration and table.

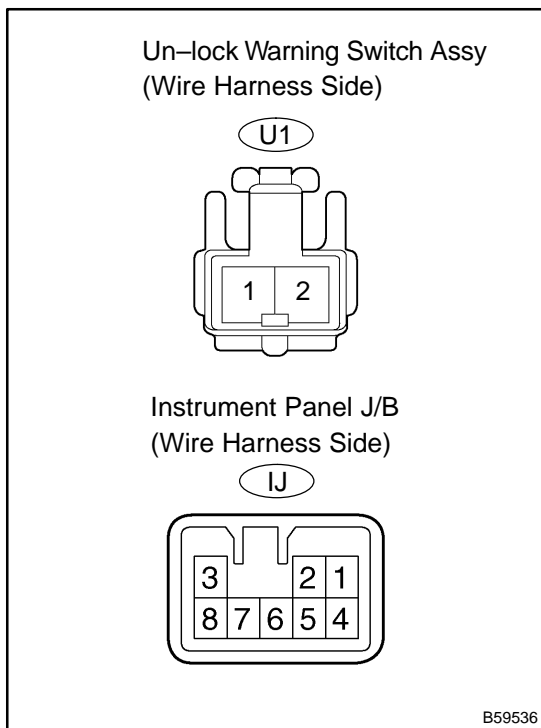
Standard:

Terminal No.	Condition	Specified condition
U1-1 ↔ U1-2	Free	No continuity
	Push	Continuity

NG → REPLACE UN-LOCK WARNING SWITCH ASSY

OK

2 CHECK WIRE HARNESS (UN-LOCK WARNING SWITCH ↔ INSTRUMENT PANEL J/B)



- (a) Disconnect the un-lock warning switch assy and instrument panel J/B connectors.
- (b) Check the continuity between the terminals of the un-lock warning switch assy and instrument panel J/B connectors, as shown in the illustration and table.

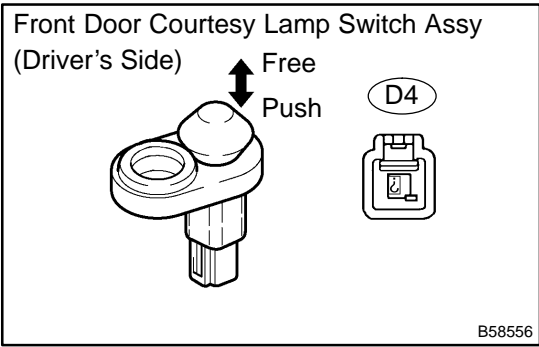
Standard (Check for open):

Symbols (Terminal No.) (Un-lock warning switch ↔ Instrument panel J/B)	Specified condition
(U1-2) ↔ KSW (IJ-8)	Continuity
(U1-1) ↔ Body ground	

NG → REPAIR OR REPLACE WIRE HARNESS AND CONNECTOR

OK

3 INSPECT FRONT DOOR COURTESY LAMP SWITCH ASSY (DRIVER'S SIDE)



- (a) Remove the courtesy lamp switch.
- (b) Inspect the courtesy lamp switch continuity, as shown in the illustration and table.

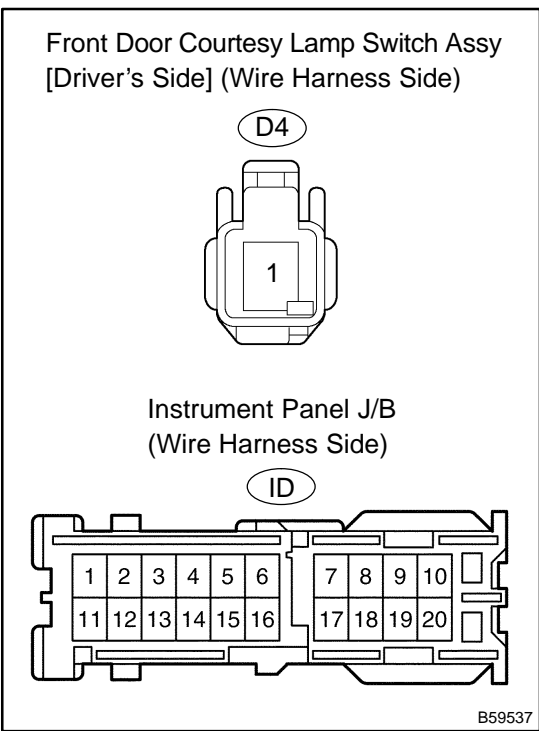
Standard:

Terminal No.	Condition	Specified condition
D4-1 ↔ Body ground	Free	Continuity
	Push	No continuity

NG → **REPLACE FRONT DOOR COURTESY LAMP SWITCH ASSY**

OK

4 CHECK WIRE HARNESS (FRONT DOOR COURTESY LAMP SWITCH ASSY [DRIVER'S SIDE] ↔ INSTRUMENT PANEL J/B)



- (a) Disconnect the courtesy lamp switch and instrument panel J/B connectors.
- (b) Check the continuity between the terminals of the courtesy lamp switch and instrument panel J/B connectors, as shown in the illustration and table.

Standard (Check for open):

Symbols (Terminal No.) (Courtesy lamp switch ↔ Instrument panel J/B)	Specified condition
(D4-1) ↔ DCTY (ID-1)	Continuity

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

OK

REPLACE INTEGRATION RELAY

WIRELESS DOOR LOCK CONTROL SYSTEM

05DUB-01

HOW TO PROCEED WITH TROUBLESHOOTING

HINT:

- Troubleshooting of the wireless door lock control system is based on the premise that the power door lock system is operating normally. Therefore, before troubleshooting the wireless door lock control system, first make certain that the power door lock system is operating normally.
- Use this procedure to troubleshoot the wireless door lock control system.

1 VEHICLE BROUGHT TO WORKSHOP



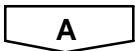
2 CUSTOMER PROBLEM ANALYSIS CHECK AND SYMPTOM CHECK
(See page 05-686)



3 PROBLEM SYMPTOMS TABLE (See page 05-691)

- (a) If the fault is not listed on the problem symptoms table, proceed to A.
- (b) If the fault is listed on the problem symptoms table, proceed to B.

B Go to step 5



4 OVERALL ANALYSIS AND TROUBLESHOOTING

- (a) Terminals of ECU (See page 05-688)
- (b) On-vehicle inspection (See page 73-8)

5 ADJUST, REPAIR OR REPLACE



6 CONFIRMATION TEST



END

CUSTOMER PROBLEM ANALYSIS CHECK

WIRELESS DOOR LOCK CONTROL SYSTEM Check Sheet

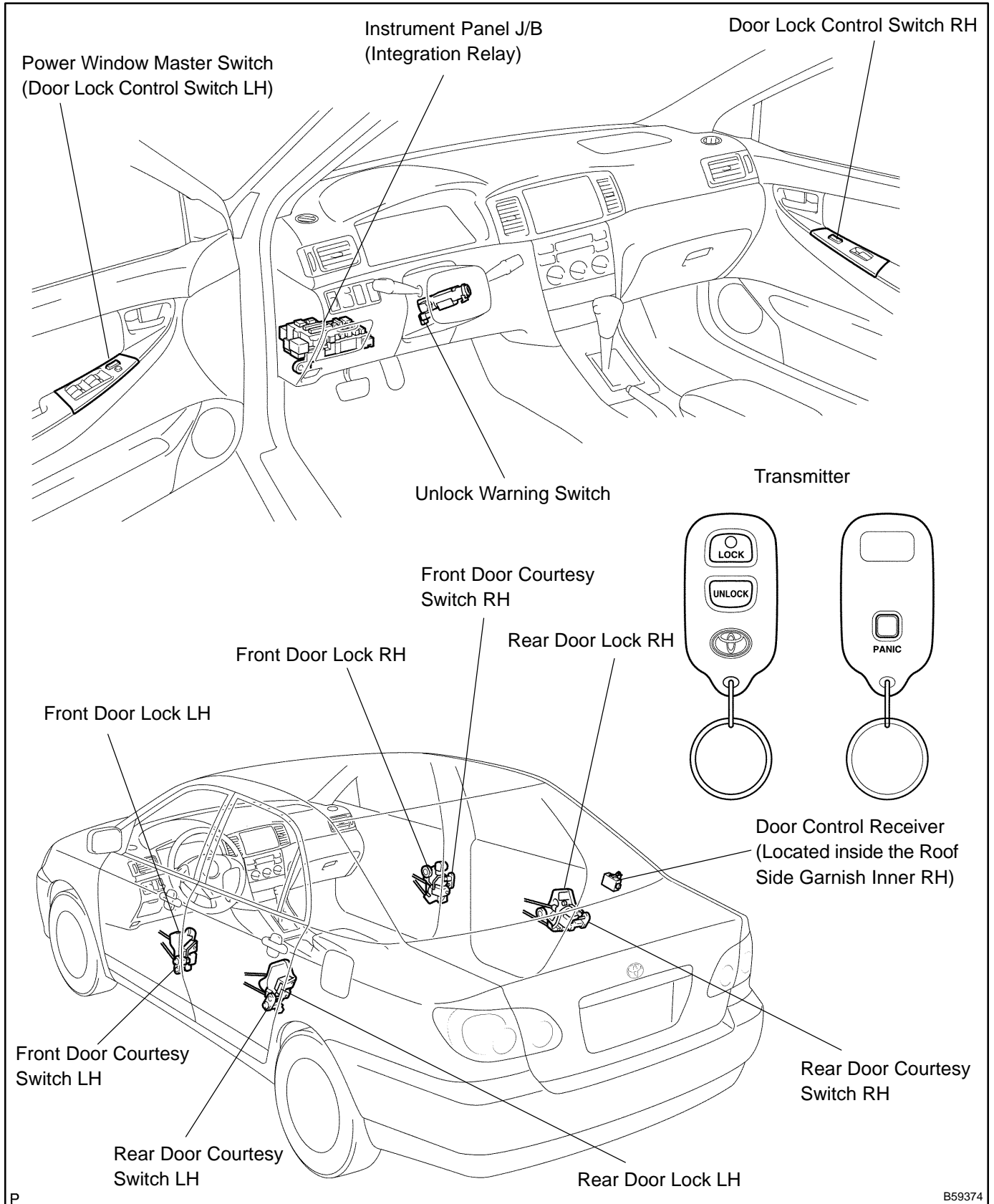
Inspector's Name _____

Customer's Name		VIN	
		Production Date	/ /
		Licence No.	
Date Vehicle Brought in	/ /	Odometer Reading	km miles

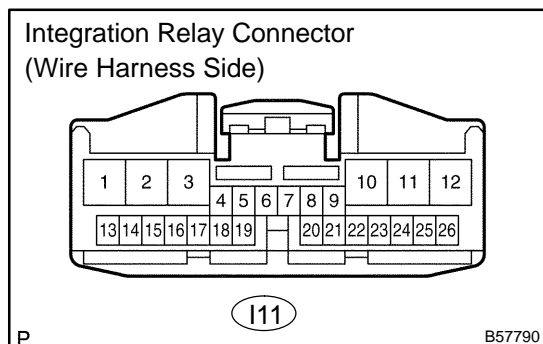
Date Problem First Occurred	/ /
Frequency Problem Occurs	<input type="checkbox"/> Constant <input type="checkbox"/> Sometimes (times/per day, month) <input type="checkbox"/> Once only
Weather Conditions When Problem Occurred	Weather <input type="checkbox"/> Fine <input type="checkbox"/> Cloudy <input type="checkbox"/> Rainy <input type="checkbox"/> Snowy <input type="checkbox"/> Various/Others
	Outdoor Temperature <input type="checkbox"/> Hot <input type="checkbox"/> Warm <input type="checkbox"/> Cool <input type="checkbox"/> Cold (Approx. °C (°F))
	Place <input type="checkbox"/> Everywhere <input type="checkbox"/> Specific Locality ()
Date Transmitter Battery Last Replaced	/ /

Problem Symptoms	<input type="checkbox"/> Whole wireless door lock control system does not operate.
	<input type="checkbox"/> Only door unlock function does not operate.
	<input type="checkbox"/> Only door lock function does not operate.
	<input type="checkbox"/> Doors are locked by wireless door lock operation even when doors are open.
	<input type="checkbox"/> Wireless door lock functions abnormally.
	<input type="checkbox"/> Others

LOCATION



TERMINALS OF ECU



1. INSPECT INTEGRATION RELAY

- (a) Disconnect the connector from the integration relay.
- (b) Check the continuity between each terminal of the disconnected connector and the body ground, as shown in the illustration and table.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified condition
LSWD (I11-19) ⇔ Body ground	W ⇔ Body ground	Driver's door lock control knob LOCK → UNLOCK	No continuity → Continuity
LSWP (I11-18) ⇔ Body ground	W-R ⇔ Body ground	Front passenger's door lock control knob LOCK → UNLOCK	
L1 (I11-9) ⇔ Body ground	L-W ⇔ Body ground	Door lock control switch (Manual operation) OFF → LOCK	
UL1 (I11-8) ⇔ Body ground	L ⇔ Body ground	Door lock control switch (Manual operation) OFF → UNLOCK	
L2 (I11-7) ⇔ Body ground	G ⇔ Body ground	Using key, front door lock cylinder LOCK → Other position	Continuity → No continuity
UL3 (I11-6) ⇔ Body ground	L-Y ⇔ Body ground	Using key, driver's door lock cylinder UNLOCK → Other position	Continuity → No continuity
UL2 (I11-5) ⇔ Body ground	L-B ⇔ Body ground	Using key, front passenger's door lock cylinder UNLOCK → Other position	
PCTY (I11-13) ⇔ Body ground	R-W ⇔ Body ground	Front passenger's door fully closed → Opened	No continuity → Continuity

If the result is not as specified, the vehicle's side may malfunction.

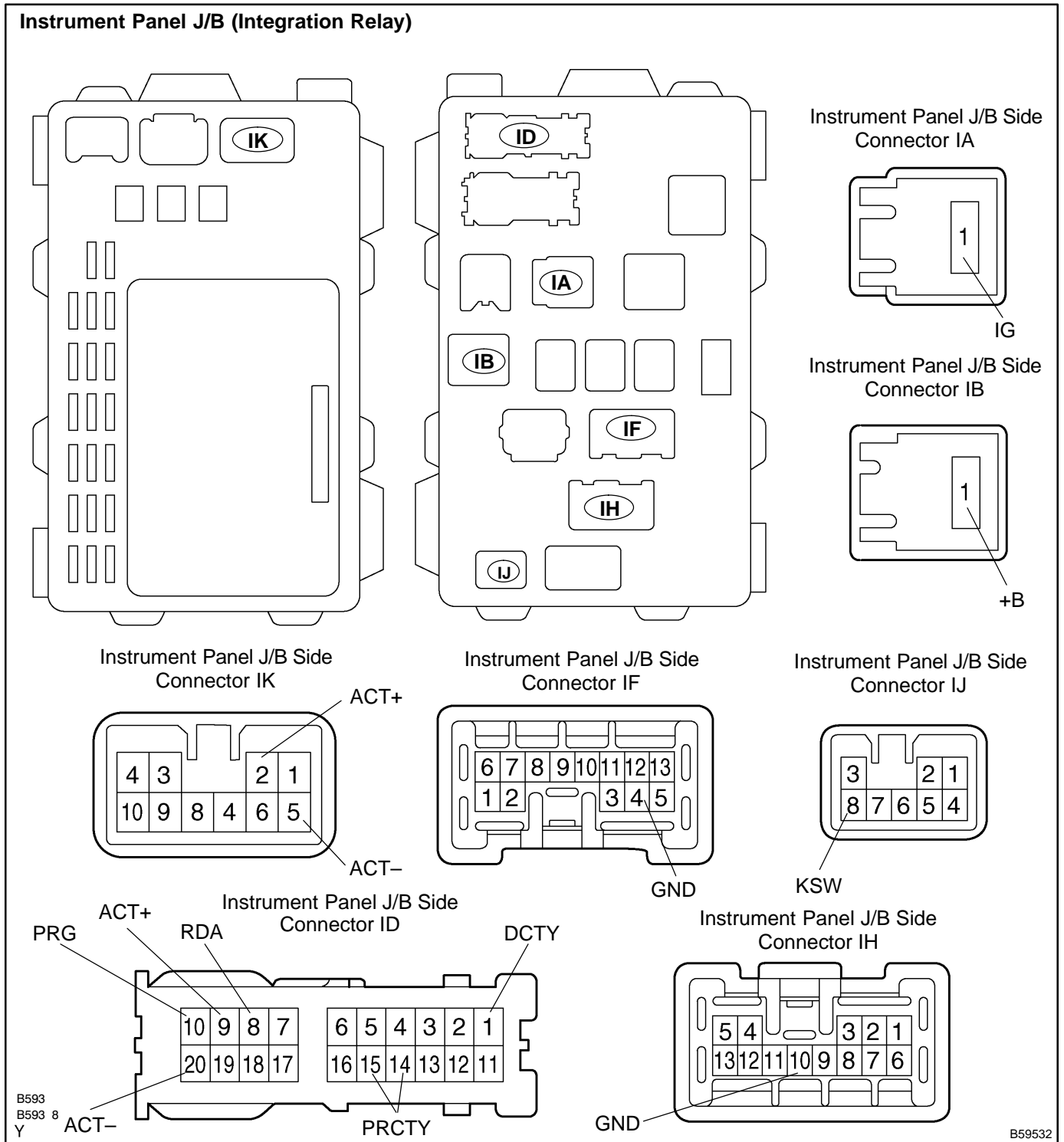
- (c) Reconnect the connector and check the voltage between each terminal and the body ground, as shown in the illustration and table.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified condition
ACTD (I11-1) ⇔ Body ground	R ⇔ Body ground	Driver's door lock OFF → ON	0 V → 10 – 14 V → 1 V or less
HAZ (I11-25) ⇔ Body ground	Y-B ⇔ Body ground	Transmitter LOCK or UNLOCK switch is pushed Hazard warning switch ON	0 V (Hazard not flashing) → 10 – 14 V (Hazard flashing)

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

2. INSPECT INSTRUMENTAL PANEL J/B (INTEGRATION RELAY)



- (a) Disconnect the connectors IA, IB, ID, IF, IH and IJ of the instrument panel J/B.
 (b) Check the continuity between each terminal of the disconnected connectors and the body ground, as shown in the illustration and table.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified condition
DCTY (ID-1) ⇔ Body ground	R-W ⇔ Body ground	Driver's door fully closed → Opened	No continuity → Continuity
PRCTY (ID-14) ⇔ Body ground	R-B ⇔ Body ground	Rear LH door fully closed → Opened	
PRCTY (ID-15) ⇔ Body ground	R-Y ⇔ Body ground	Rear RH door fully closed → Opened	
KSW (IJ-8) ⇔ Body ground	L-B ⇔ Body ground	No key in ignition switch cylinder → Key inserted	No continuity → Continuity
+B (IB-1) ⇔ Body ground	W ⇔ Body ground	Constant	10 – 14 V
IG (IA-1) ⇔ Body ground	W ⇔ Body ground		
GND (IF-4) ⇔ Body ground	W-B ⇔ Body ground	Constant	Continuity
GND (IH-10) ⇔ Body ground	W-B ⇔ Body ground		

If the result is not as specified, the vehicle's side may malfunction.

- (c) Reconnect the connectors and check the voltage between each terminal and the body ground, as shown in the illustration and table.

Standard:

Symbols (Terminal No.)	Wiring color	Condition	Specified condition
ACT+ (IK-2) ⇔ Body ground	L ⇔ Body ground	<ul style="list-style-type: none"> • Front door lock OFF → ON • Rear RH door lock OFF → ON 	0 V → 10 – 14 V → 1 V or less
ACT- (IK-5) ⇔ Body ground	R ⇔ Body ground	<ul style="list-style-type: none"> • Front passenger's door lock OFF → ON • Rear RH door lock OFF → ON 	
ACT+ (ID-9) ⇔ Body ground	L ⇔ Body ground	Rear LH door lock OFF → ON	
ACT- (ID-20) ⇔ Body ground	R ⇔ Body ground		
RDA (ID-8) ⇔ Body ground	L-R ⇔ Body ground	No key in ignition key cylinder, all doors closed and transmitter switch OFF → ON	1 V or less → Approx. 6 – 7 V → 1 V or less

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

PROBLEM SYMPTOMS TABLE

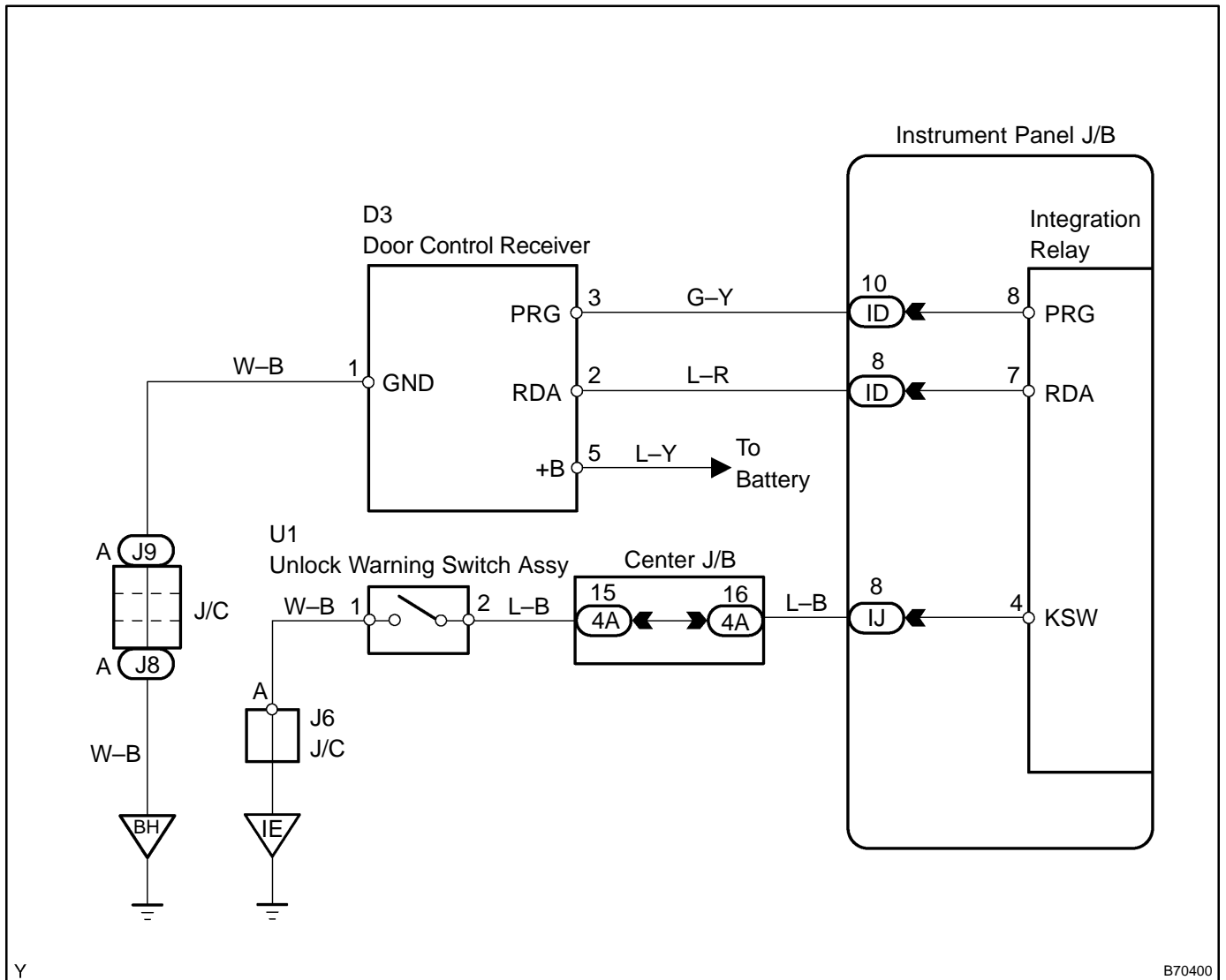
Symptom	Suspected area	See page
Only wireless control function is inoperative (Prepare new or normal transmitter of the same type vehicle)	<ol style="list-style-type: none"> 1. Transmitter battery 2. Door control transmitter 3. Door control receiver 4. Unlock warning switch 5. Integration relay 6. Wire harness 	05-692

ONLY WIRELESS CONTROL FUNCTION DOES NOT OPERATE (PREPARE NEW OR NORMAL TRANSMITTER OF THE SAME TYPE VEHICLE)

CIRCUIT DESCRIPTION

The door control receiver receives a signal from the transmitter and sends this signal to the integration relay. Then, the integration relay controls door operation by sending a door LOCK/UNLOCK signal to each door lock motor.

WIRING DIAGRAM



Y

B70400

INSPECTION PROCEDURE

HINT:

The switch described in this text is a switch for transmitting signals which is built in the door control transmitter.

1 CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS (See page 73-8)

NG → Go to step 2

OK

NORMAL

2 REPLACE TRANSMITTER BATTERY WITH NORMAL ONE

- (a) After replacing the transmitter battery with a new or normal one, check that the doors can lock and unlock by using the transmitter LOCK/UNLOCK switch.

NG → Go to step 3

OK

REPLACE TRANSMITTER BATTERY

3 CHECK WIRELESS DOOR LOCK CONTROL FUNCTIONS

- (a) Check if UNLOCK-LOCK operates in standard operation.

NOTICE:

Standardized test procedure: Press the transmitter switch for 1 second, directing the beam to driver side door outside handle from a distance of 1 m (39.4 in.). The transmitter should be pointed directly at the door handle, i.e at 90° angle to the vehicle body.

NG → REPLACE DOOR CONTROL TRANSMITTER

OK

4 CONFIRM ROOM LAMP ON

- (a) Check that the wireless door lock buzzer sounds.

OK

5	SWITCH TO SELF-DIAGNOSTIC MODE
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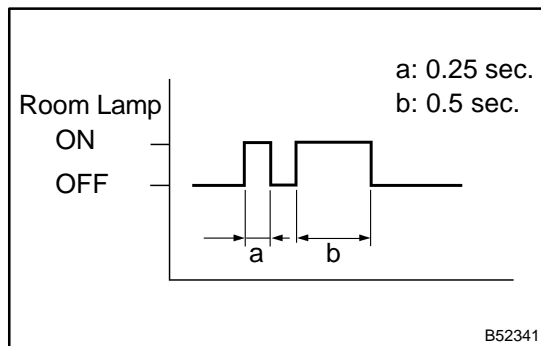
- (a) Switch to self-diagnostic mode by operating the ignition key cylinder.
- (1) Put the vehicle under the vehicle's initial condition (See page 73-8), insert the key into the ignition key cylinder and remove it.
 - (2) Within 5 seconds after the key is removed (step 1), insert the key into the ignition key cylinder (ignition key OFF) and perform the following once: Turn the ignition switch to ON and return it to OFF.
 - (3) Within 30 seconds after the ignition switch is returned to OFF (step 2), perform the following 9 times: Turn the ignition switch to ON and return it to OFF.

NOTICE:

If operation has failed, the system will return to normal mode.

HINT:

- Turning the ignition switch ON after step 3 has been completed will end self-diagnostic mode.
- Do not lock or unlock doors during self-diagnostic mode.



- (b) Check that the system has switched to self-diagnostic mode by the blinking frequency of the room lamp.

NG

Go to step 9

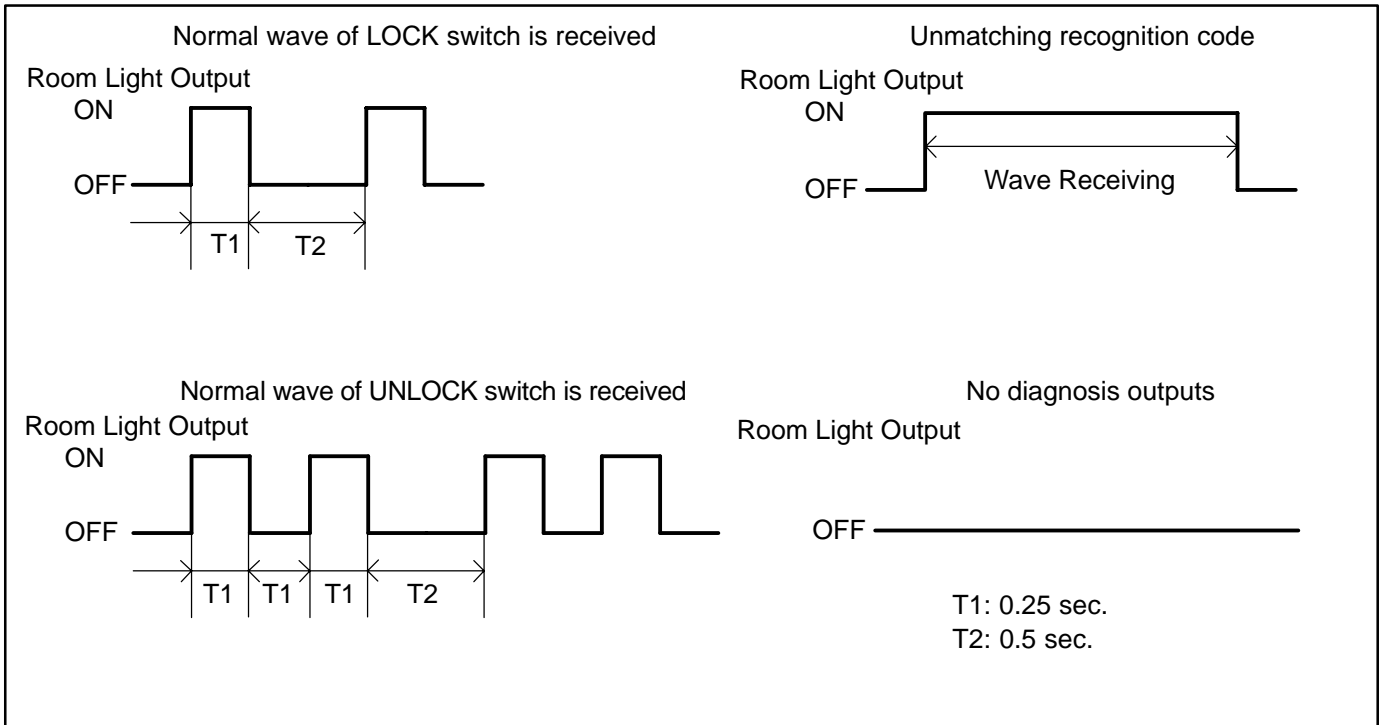
OK

6 CHECK BY SELF-DIAGNOSTIC MODE

(a) Inspect the diagnosis outputs when the door control transmitter switch is held down (The diagnosis outputs can be checked with the outputs of the room lamp).

HINT:

- In the case of a reception of the normal wave of the door LOCK and UNLOCK switch (room lamp blinking), go to step A.
- In the case of an unmatching recognition code (room lamp ON), go to step B.
- In the case of no diagnosis outputs (room lamp OFF), go to step C.



A → Go to step 16

C → Go to step 8

B

7 REGISTER RECOGNITION CODE

(a) Check that the system can switch to rewrite mode or add mode and whether a recognition code can be registered.

NG → Go to step 15

OK

NORMAL

8 CHECK RESPONSE OF DOOR CONTROL RECEIVER

- (a) When a new or normal door control transmitter switch for the same type vehicle is held down, check that a diagnosis of unmatching recognition code is output.

NG → **Go to step 12**

OK

REPLACE DOOR CONTROL TRANSMITTER

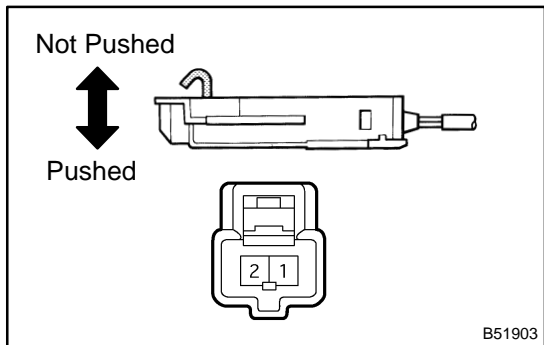
9 CONFIRM INPUT METHOD OF SELF-DIAGNOSTIC MODE

- (a) When the method for switching the system to self-diagnostic mode works, proceed to A.
- (b) When the method for switching the system to self-diagnostic mode does not work, proceed to B.

B → **Go to step 5**

A

10 INSPECT UNLOCK WARNING SWITCH ASSY



- (a) Remove the key unlock warning switch.
- (b) Inspect the key unlock warning switch continuity, as shown in the illustration and table.

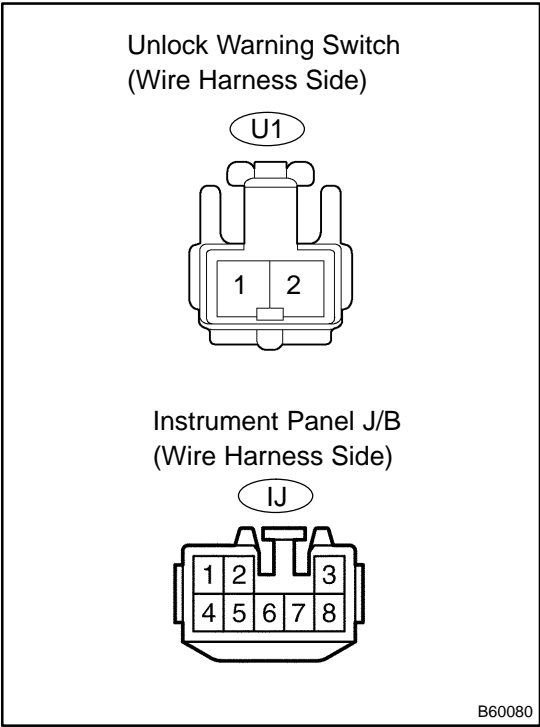
Standard:

Terminal No.	Switch Condition	Specified condition
1 ↔ 2	Not pushed	No continuity
	Pushed	Continuity

NG → **REPLACE UNLOCK WARNING SWITCH ASSY**

OK

11 CHECK WIRE HARNESS (UNLOCK WARNING SWITCH ↔ INSTRUMENT PANEL J/B AND BODY GROUND)



- (a) Disconnect the unlock warning switch and instrument panel J/B connectors.
- (b) Check the continuity between the terminals of the unlock warning switch and instrument panel J/B connectors, as shown in the illustration and table.

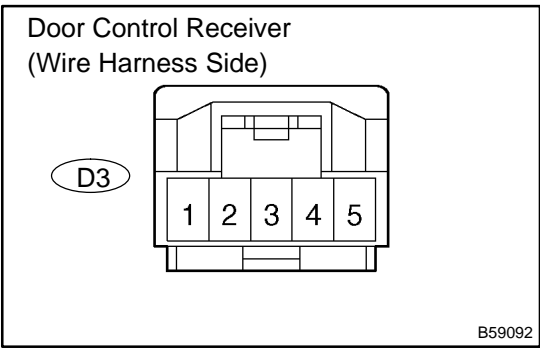
Standard:

Symbols (Terminal No.)	Specified condition
(U1-2) ↔ KSW (IJ-8)	Continuity
(U1-1) ↔ Body ground	

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

12 CHECK WIRE HARNESS (DOOR CONTROL RECEIVER ↔ BODY GROUND)



- (a) Disconnect the connector from the door control receiver.
- (b) Check the voltage and continuity between the terminal of the door control receiver connector and the body ground, as shown in the illustration and table.

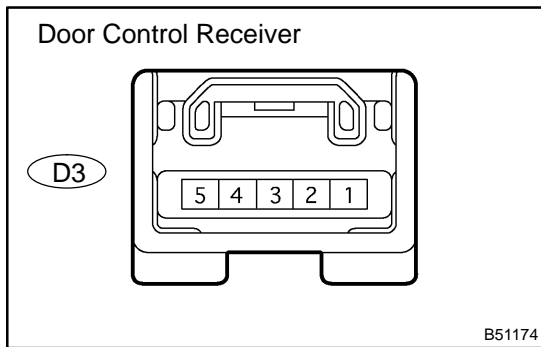
Standard:

Symbols (Terminal No.)	Specified condition
+B (D3-5) ↔ Body ground	10 - 14 V
GND (D3-1) ↔ Body ground	Continuity

NG REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

13 CHECK DOOR CONTROL RECEIVER



- (a) Reconnect the connector to the door control receiver, and check the voltage between the terminal and the body ground, as shown in the illustration and table.

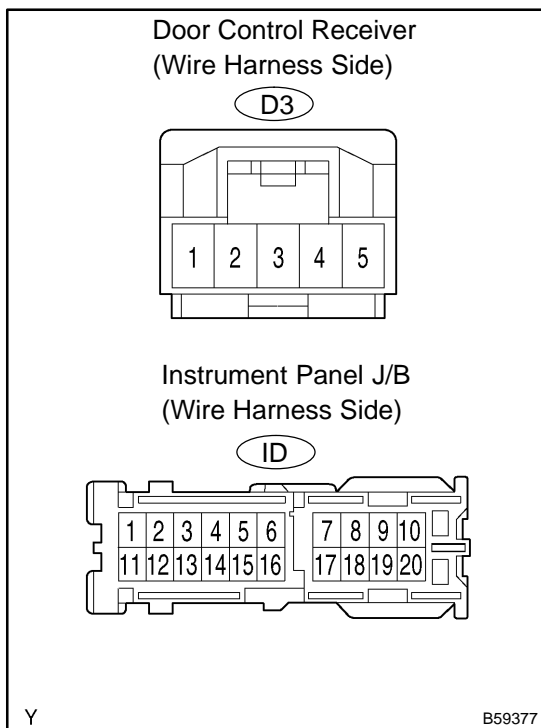
Standard:

Symbols (Terminal No.)	Condition	Specified condition
RDA (D3-2) ↔ Body ground	No key in ignition key cylinder, all doors closed and each transmitter switch OFF → ON	1 V or less → Approx. 6 - 7 V → 1 V or less

NG → Go to step 15

OK

14 CHECK WIRE HARNESS (DOOR CONTROL RECEIVER ↔ INSTRUMENT PANEL J/B) (DOOR CONTROL RECEIVER OR INSTRUMENT PANEL J/B ↔ BODY GROUND)



- (a) Disconnect the door control receiver and instrument panel J/B connectors.
- (b) Check the continuity between the terminals of the door control receiver and instrument panel J/B connectors, as shown in the illustration and table.

Standard:

Symbols (Terminal No.) (Receiver - Instrument panel J/B)	Specified condition
RDA (D3-2) ↔ RDA (ID-8)	Continuity
RDA (D3-2) ↔ Body ground	No continuity
RDA (ID-8) ↔ Body ground	

NG → REPAIR OR REPLACE HARNESS AND CONNECTOR

OK

15 | **REPLACE DOOR CONTROL RECEIVER WITH NORMAL ONE**

NG → **Go to step 16**

OK

REPLACE DOOR CONTROL RECEIVER

16 | **REPLACE INTEGRATION RELAY WITH NORMAL ONE**

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

OK

REPLACE INTEGRATION RELAY