

## 3. Door Lock Control System

### A: WIRING DIAGRAM

Refer to "Keyless Entry System" in the wiring diagram. <Ref. to WI-289, WIRING DIAGRAM, Keyless Entry System.>

### B: ELECTRICAL SPECIFICATION

#### 1. BODY INTEGRATED UNIT

Refer to "Control Module I/O Signal" of "BODY CONTROL SYSTEM (DIAGNOSTICS)" section. <Ref. to BC(diag)-6, ELECTRICAL SPECIFICATION, Control Module I/O Signal.>

### C: INSPECTION

#### 1. SYMPTOM CHART

Symptoms	Repair order	Reference
The door lock control system does not operate.	1. Remove and visually inspect the following fuses. <ul style="list-style-type: none"><li>• No. 3 (in fuse &amp; relay box)</li><li>• No. 7 (in fuse &amp; relay box)</li><li>• No. 15 (in fuse &amp; relay box) (K/L)</li></ul>	If the fuse is blown out, replace the fuse with a new part. When there is no defective with the fuse, check the power supply and ground circuit. <Ref. to SL-12, CHECK POWER SUPPLY AND GROUND CIRCUIT, INSPECTION, Door Lock Control System.>
	2. Check the power supply and ground circuit for body integrated unit.	<Ref. to SL-12, CHECK POWER SUPPLY AND GROUND CIRCUIT, INSPECTION, Door Lock Control System.>
	3. Check the door lock switch and the circuit.	<Ref. to SL-12, CHECK DOOR LOCK SWITCH, INSPECTION, Door Lock Control System.>
	4. Check the rear gate opener button and the circuit.	<Ref. to SL-13, CHECK REAR GATE OPENER BUTTON CIRCUIT, INSPECTION, Door Lock Control System.>
	5. Check the door lock actuator and the circuit.	<Ref. to SL-14, CHECK DOOR LOCK ACTUATOR AND CIRCUIT, INSPECTION, Door Lock Control System.>
A specific door lock actuator does not operate.	Check the door lock actuator and circuit.	<Ref. to SL-14, CHECK DOOR LOCK ACTUATOR AND CIRCUIT, INSPECTION, Door Lock Control System.>

# Door Lock Control System

## SECURITY AND LOCKS

### 2. CHECK POWER SUPPLY AND GROUND CIRCUIT

Step	Check	Yes	No
<b>1 CHECK POWER SUPPLY.</b> 1) Disconnect the connector of body integrated unit. 2) Measure the voltage between the body integrated unit connector and chassis ground. <b>Connector &amp; terminal</b> <i>(i84) No. 6 (+) — Chassis ground (-):</i> <i>(i171) No. 1 (+) — Chassis ground (-):</i> <i>(B281) No. 7 (+) — Chassis ground (-):</i> <i>(K/L)</i>	Is the voltage 9 V or more?	Go to step <b>2</b> .	Check the harness for open or short circuit between body integrated unit and fuse.
<b>2 CHECK GROUND CIRCUIT.</b> Measure the resistance between the body integrated unit connector and chassis ground. <b>Connector &amp; terminal</b> <i>(i84) No. 1 — Chassis ground:</i> <i>(i171) No. 29 — Chassis ground:</i> <i>(B280) No. 1 — Chassis ground:</i> <i>(B281) No. 31 — Chassis ground: (K/L)</i>	Is the resistance less than 10 $\Omega$ ?	The power supply and ground circuit are OK.	Repair or replace the harness.

### 3. CHECK DOOR LOCK SWITCH

Step	Check	Yes	No
<b>1 CHECK CURRENT DATA.</b> Using the Subaru Select Monitor, display the data of «Manual lock SW input». <b>NOTE:</b> For detailed procedures, refer to “PC application help for Subaru Select Monitor”.	Does the display switch between OFF $\longleftrightarrow$ ON when each door lock switch is moved to LOCK?	Go to step <b>2</b> .	Go to step <b>3</b> .
<b>2 CHECK DOOR LOCK SWITCH.</b> From the condition in step 1), operate each door lock switch (driver's and passenger's) in the UNLOCK direction.	Does the display switch between OFF $\longleftrightarrow$ ON?	The door lock switch is OK.	Go to step <b>4</b> .
<b>3 CHECK POWER WINDOW MAIN SWITCH (DOOR LOCK SWITCH).</b> 1) Disconnect the power window main switch (door lock switch) connector. 2) Measure the continuity between terminals when moving the power window main switch (door lock switch) in LOCK direction. <b>Connector &amp; terminal</b> <b>Driver's seat</b> <i>(D7) No. 3 — (D7) No. 1:</i> <b>Passenger's seat</b> <i>(D125) No. 4 — (D125) No. 5:</i>	Did the indicator change from “No continuity” (1 $M\Omega$ or more) to “Continuity exists” (less than 10 $\Omega$ )?	Go to step <b>4</b> .	Replace the power window main switch. <Ref. to GW-11, Power Window Control Switch.>
<b>4 CHECK POWER WINDOW MAIN SWITCH (DOOR LOCK SWITCH).</b> Measure the continuity between terminals when moving the power window main switch (door lock switch) in UNLOCK direction. <b>Connector &amp; terminal</b> <b>Driver's seat</b> <i>(D7) No. 9 — (D7) No. 1:</i> <b>Passenger's seat</b> <i>(D125) No. 2 — (D125) No. 5:</i>	Did the indicator change from “No continuity” (1 $M\Omega$ or more) to “Continuity exists” (less than 10 $\Omega$ )?	Go to step <b>5</b> .	Replace the power window main switch. <Ref. to GW-11, Power Window Control Switch.>

# Door Lock Control System

## SECURITY AND LOCKS

Step	Check	Yes	No
5 <b>CHECK HARNESS.</b> Measure the resistance between the power window main switch (door lock switch) connector and chassis ground.  <i>Connector &amp; terminal</i> <i>Driver's seat</i> <i>(D7) No. 1 — Chassis ground:</i> <i>Passenger's seat</i> <i>(D125) No. 5 — Chassis ground:</i>	Is the resistance less than 10 $\Omega$ ?	Go to step 6.	Repair or replace the harness.
6 <b>CHECK HARNESS.</b> Check the harness between body integrated unit and power window switch (door lock switch).  <i>Connector &amp; terminal</i> <i>Driver's seat</i> <i>(D7) No. 3 — (i84) No. 9:</i> <i>(D7) No. 9 — (i84) No. 20:</i> <i>Passenger's seat</i> <i>(D125) No. 4 — (i84) No. 9:</i> <i>(D125) No. 2 — (i84) No. 20:</i>	Is harness normal?	Replace the body integrated unit. <Ref. to SL-74, Body Integrated Unit.>	Repair or replace the harness.

## 4. CHECK REAR GATE OPENER BUTTON CIRCUIT

Step	Check	Yes	No
1 <b>CHECK CURRENT DATA.</b> Using the Subaru Select Monitor, display the data of «R Gate Release SW input».  NOTE: For detailed procedures, refer to "PC application help for Subaru Select Monitor".	Does the display change to OFF $\longleftrightarrow$ ON, when the rear gate opener button is operated?	Rear gate opener button is normal.	Go to step 2.
2 <b>CHECK HARNESS.</b> 1) Disconnect the connectors of body integrated unit and rear gate opener button. 2) Check the harness between the body integrated unit and rear gate opener button.  <i>Connector &amp; terminal</i> <i>Keyless access model</i> <i>(i84) No. 10 — (D77) No. 5:</i> <i>Keyless entry model</i> <i>(i84) No. 10 — (D47) No. 1:</i>	Is harness normal?	Go to step 3.	Repair or replace the harness.
3 <b>CHECK HARNESS.</b> Measure the resistance between the rear gate opener button connector and chassis ground.  <i>Connector &amp; terminal</i> <i>Keyless access model</i> <i>(D77) No. 6 — Chassis ground:</i> <i>Keyless entry model</i> <i>(D47) No. 2 — Chassis ground:</i>	Is the resistance less than 10 $\Omega$ ?	Go to step 4.	Repair or replace the harness.
4 <b>CHECK REAR GATE OPENER BUTTON.</b> Measure the resistance between terminals both when the rear gate opener button is pressed and when not pressed.  <i>Terminals</i> <i>Keyless entry model</i> <i>No. 5 — No. 6:</i> <i>Keyless entry model</i> <i>No. 1 — No. 2:</i>	Is the resistance less than 10 $\Omega$ when the switch is pressed and 1 $M\Omega$ or more when not pressed?	Replace the body integrated unit. <Ref. to SL-74, Body Integrated Unit.>	Replace the rear gate opener button.

# Door Lock Control System

## SECURITY AND LOCKS

### 5. CHECK DOOR LOCK ACTUATOR AND CIRCUIT

Step	Check	Yes	No
<b>1</b> <b>CHECK HARNESS (DOOR LOCK).</b> 1) Disconnect the body integrated unit and each door lock actuator connector. 2) Check the harness between body integrated unit and each door lock actuator. <i>Connector &amp; terminal</i> <i>Front door LH</i> <i>(i171) No. 2 — (D72) No. 4:</i> <i>Front door RH</i> <i>(i171) No. 2 — (D18) No. 4:</i> <i>Rear door LH</i> <i>(i171) No. 2 — (D26) No. 4:</i> <i>Rear door RH</i> <i>(i171) No. 2 — (D32) No. 4:</i>	Is harness normal?	Go to step <b>2</b> .	Repair or replace the harness.
<b>2</b> <b>CHECK HARNESS (DOOR UNLOCK).</b> Check the harness between body integrated unit and each door lock actuator. <i>Connector &amp; terminal</i> <i>Front door LH</i> <i>(i171) No. 4 — (D72) No. 1:</i> <i>Front door RH (keyless access model)</i> <i>(i171) No. 6 — (D18) No. 1:</i> <i>Front door RH (keyless entry model)</i> <i>(i171) No. 3 — (D18) No. 1:</i> <i>Rear door LH</i> <i>(i171) No. 3 — (D26) No. 1:</i> <i>Rear door RH</i> <i>(i171) No. 3 — (D32) No. 1:</i>	Is harness normal?	Go to step <b>3</b> .	Repair or replace the harness.
<b>3</b> <b>CHECK HARNESS (REAR GATE UNLOCK).</b> Check the harness between the body integrated unit and rear gate lock actuator. <i>Connector &amp; terminal</i> <i>(i171) No. 7 — (D46) No. 1:</i>	Is harness normal?	Go to step <b>4</b> .	Repair or replace the harness.
<b>4</b> <b>CHECK HARNESS (REAR GATE UNLOCK).</b> Measure the resistance between the rear gate lock actuator connector and chassis ground. <i>Connector &amp; terminal</i> <i>(D46) No. 2 — Chassis ground:</i>	Is the resistance less than 10 $\Omega$ ?	Go to step <b>5</b> .	Repair or replace the harness.
<b>5</b> <b>CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b> 1) Connect the body integrated unit connector. 2) Measure the voltage between terminals of the body integrated unit when operating the door lock switch to LOCK direction. <i>Connector &amp; terminal</i> <i>Except for front door LH</i> <i>(i171) No. 2 (+) — (i171) No. 3 (-):</i> <i>Front door LH</i> <i>(i171) No. 2 (+) — (i171) No. 4 (-):</i>	Does the voltage change from less than 1 V $\rightarrow$ 9 V or more? (During lock output)	Go to step <b>6</b> .	Replace the body integrated unit. <Ref. to SL-74, Body Integrated Unit.>

# Door Lock Control System

## SECURITY AND LOCKS

Step	Check	Yes	No
<b>6 CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b> Measure the voltage between terminals of the body integrated unit when operating the door lock switch to UNLOCK direction. <i>Connector &amp; terminal</i> <i>Except for front door LH</i> <i>(i171) No. 3 (+) — (i171) No. 2 (-):</i> <i>Front door LH</i> <i>(i171) No. 4 (+) — (i171) No. 2 (-):</i>	Does the voltage change from less than 1 V → 9 V or more? (During unlock output)	Go to step 7.	Replace the body integrated unit. <Ref. to SL-74, Body Integrated Unit.>
<b>7 CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b> Measure the voltage between body integrated unit and chassis ground when operating the rear gate opener button. <i>Connector &amp; terminal</i> <i>(i171) No. 7 (+) — Chassis ground (-):</i>	Does the voltage change from less than 1 V → 9 V or more? (During unlock output)	Go to step 8.	Replace the body integrated unit. <Ref. to SL-74, Body Integrated Unit.>
<b>8 CHECK DOOR LOCK ACTUATOR.</b> Check the door lock actuator. <ul style="list-style-type: none"><li>Front door lock actuator: &lt;Ref. to SL-40, INSPECTION, Front Door Latch and Door Lock Actuator Assembly.&gt;</li><li>Rear door lock actuator: &lt;Ref. to SL-47, INSPECTION, Rear Door Latch and Door Lock Actuator Assembly.&gt;</li></ul>	Is the door lock actuator OK?	Go to step 9.	Replace the door latch and door lock actuator assembly.
<b>9 CHECK REAR GATE LOCK ACTUATOR.</b> Check the rear gate lock actuator. <Ref. to SL-50, Rear Gate Latch and Actuator Assembly.>	Is the rear gate lock actuator normal?	Check the connection status of the harness and connector that may have a temporary poor contact.	Replace the rear gate latch and actuator assembly.