

## 3. Door Lock Control System

### A: WIRING DIAGRAM

For wiring diagrams related to the door lock control system, refer to the following items.

Keyless entry system: <Ref. to WI-215, WIRING DIAGRAM, Keyless Entry System.>

Keyless access system: <Ref. to WI-208, WIRING DIAGRAM, Keyless Access 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)-7, 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. 7 (in fuse &amp; relay box)</li><li>• No. 10 (in main fuse box)</li><li>• No. 19 (in main fuse box)</li></ul> | If the fuse is blown out, replace the fuse with a new part.<br>When there is no defective with the fuse, check the power supply and ground circuit. <Ref. to SL-14, 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-14, CHECK POWER SUPPLY AND GROUND CIRCUIT, INSPECTION, Door Lock Control System.>   |
|   | 3. Check the door lock switch and the circuit.  | <Ref. to SL-15, CHECK DOOR LOCK SWITCH, INSPECTION, Door Lock Control System.>  |
|   | 4. Check the rear gate/trunk opener button and the circuit.   | <Ref. to SL-16, CHECK REAR GATE/TRUNK OPENER BUTTON CIRCUIT, INSPECTION, Door Lock Control System.>   |
|   | 5. Check the door lock actuator and the circuit.  | <Ref. to SL-17, CHECK DOOR LOCK ACTUATOR AND CIRCUIT (WITHOUT DOUBLE LOCK), INSPECTION, Door Lock Control System.>  |
| A specific door lock actuator does not operate. | Check the door lock actuator and circuit.   | <Ref. to SL-17, CHECK DOOR LOCK ACTUATOR AND CIRCUIT (WITHOUT DOUBLE LOCK), INSPECTION, Door Lock Control System.>  |

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## SECURITY AND LOCKS

### 2. CHECK POWER SUPPLY AND GROUND CIRCUIT

| Step   | Check                                     | Yes   | No   |
|--|---|---|--|
| <b>1 CHECK POWER SUPPLY.</b><br>1) Disconnect the connector of body integrated unit.<br>2) Measure the voltage between body integrated unit connector and chassis ground.<br><b>Connector &amp; terminal</b><br><i>(i84) No. 6 (+) — Chassis ground (-):</i><br><i>(i171) No. 1 (+) — Chassis ground (-):</i><br><i>(B281) No. 7 (+) — Chassis ground (-):</i> | Is the voltage 10 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><br>Measure the resistance between body integrated unit connector and chassis ground.<br><b>Connector &amp; terminal</b><br><i>(i84) No. 1 — Chassis ground:</i><br><i>(i171) No. 29 — Chassis ground:</i><br><i>(B280) No. 1 — Chassis ground:</i><br><i>(B281) No. 31 — Chassis ground:</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</b><br><b>CHECK DOOR LOCK SWITCH.</b><br>1) Prepare the Subaru Select Monitor kit.<br>2) Turn the ignition switch to ON (engine OFF) and run the "PC application for Subaru Select Monitor".<br>3) On «System Selection Menu» display, select {Integ. unit mode}.<br>4) Select {Current Data Display & Save}.<br>5) Select {Manual lock SW input}. | Does the display change to OFF $\longleftrightarrow$ ON, when the door lock switch is moved to LOCK? | Go to step <b>2</b> .  | Go to step <b>3</b> .   |
| <b>2</b><br><b>CHECK DOOR LOCK SWITCH.</b><br>From the condition in step 1, operate the door lock switch 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</b><br><b>CHECK POWER WINDOW MAIN SWITCH.</b><br>1) Disconnect the power window main switch connector.<br>2) Measure the resistance between terminals when moving the power window switch (door lock switch) to LOCK direction.<br><br><i>Connector &amp; terminal<br/>(D95) No. 10 — (D7) No. 3:</i>  | Does the resistance changes from 1 M $\Omega$ or more to less than 10 $\Omega$ ?                     | Go to step <b>4</b> .  | Replace the power window main switch. <Ref. to GW-12, Power Window Control Switch.> |
| <b>4</b><br><b>CHECK POWER WINDOW MAIN SWITCH.</b><br>Measure the resistance between terminals when moving the power window switch (door lock switch) to UNLOCK direction.<br><br><i>Connector &amp; terminal<br/>(D95) No. 2 — (D7) No. 3:</i>   | Does the resistance changes from 1 M $\Omega$ or more to less than 10 $\Omega$ ?                     | Go to step <b>5</b> .  | Replace the power window main switch. <Ref. to GW-12, Power Window Control Switch.> |
| <b>5</b><br><b>CHECK HARNESS.</b><br>Measure the resistance between power window main switch connector and chassis ground.<br><br><i>Connector &amp; terminal<br/>(D7) No. 3 — Chassis ground:</i>  | Is the resistance less than 10 $\Omega$ ?  | Go to step <b>6</b> .  | Repair or replace the harness.  |
| <b>6</b><br><b>CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector.<br>2) Measure the resistance between body integrated unit connector and power window switch connector.<br><br><i>Connector &amp; terminal<br/>(D95) No. 10 — (i84) No. 9:<br/>(D95) No. 2 — (i84) No. 20:</i>  | Is the resistance less than 10 $\Omega$ ?  | Replace the body integrated unit. <Ref. to SL-84, Body Integrated Unit.> | Repair or replace the harness.  |

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### 4. CHECK REAR GATE/TRUNK OPENER BUTTON CIRCUIT

| Step   | Check  | Yes   | No   |
|--|--|---|--|
| 1 <b>CHECK REAR GATE/TRUNK OPENER BUTTON.</b><br>1) Prepare the Subaru Select Monitor kit.<br>2) Turn the ignition switch to ON (engine OFF) and run the "PC application for Subaru Select Monitor".<br>3) On «System Selection Menu» display, select {Integ. unit mode}.<br>4) Select {Current Data Display & Save}.<br>5) Select the {Rear gate/Trunk release switch}.             | Does the display switch between OFF $\longleftrightarrow$ ON when the rear gate/trunk opener button is operated? | The rear gate/trunk opener button is normal.<br>Go to step 2.               |  |
| 2 <b>CHECK HARNESS.</b><br>1) Disconnect the body integrated unit connector and rear gate/trunk opener button connector.<br>2) Check the harness between body integrated unit connector and rear gate/trunk opener button connector.<br><b>Connector &amp; terminal</b><br><b>Sedan model</b><br>(i84) No. 10 — (i162) No. 4:<br><b>OUTBACK model</b><br>(i84) No. 10 — (D77) No. 5: | Is harness normal?   | Go to step 3.   | Repair or replace the harness.             |
| 3 <b>CHECK HARNESS.</b><br>Measure the resistance between the rear gate/trunk opener button connector and chassis ground.<br><b>Connector &amp; terminal</b><br><b>Sedan model</b><br>(i162) No. 2 — <i>Chassis ground</i> :<br><b>OUTBACK model</b><br>(D77) No. 6 — <i>Chassis ground</i> :  | Is the resistance less than 10 $\Omega$ ?  | Go to step 4.   | Repair or replace the harness.             |
| 4 <b>CHECK REAR GATE/TRUNK OPENER BUTTON.</b><br>Measure the resistance between switch terminals both when the rear gate/trunk opener button is pressed and when not pressed.<br><b>Connector &amp; terminal</b><br><b>Sedan model</b><br>(i162) No. 4 — (i162) No. 2:<br><b>OUTBACK model</b><br>(D77) No. 5 — (D77) No. 6:   | 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.<br><Ref. to SL-84, Body Integrated Unit.> | Replace the rear gate/trunk opener button. |

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## 5. CHECK DOOR LOCK ACTUATOR AND CIRCUIT (WITHOUT DOUBLE LOCK)

| Step | Check   | Yes   | No  |
|------|---|---|---|
| 1    | <b>CHECK HARNESS (DOOR LOCK).</b><br>1) Disconnect the body integrated unit connector and each door lock actuator.<br>2) Check the harness between body integrated unit connector and each door lock actuator connector.<br><b>Connector &amp; terminal</b><br><b>Front door RH</b><br>(i171) No. 2 — (D72) No. 1:<br><b>Front door LH</b><br>(i171) No. 2 — (D18) No. 1:<br><b>Rear door RH</b><br>(i171) No. 2 — (D32) No. 1:<br><b>Rear door LH</b><br>(i171) No. 2 — (D26) No. 1: | Is harness normal?  | Go to step 2.<br><br>Repair or replace the harness.   |
| 2    | <b>CHECK HARNESS (DOOR UNLOCK).</b><br>Check the harness between body integrated unit connector and each door lock actuator connector.<br><b>Connector &amp; terminal</b><br><b>Front door RH</b><br>(i171) No. 3 — (D72) No. 2:<br><b>Front door LH</b><br>(i171) No. 3 — (D18) No. 2:<br><b>Rear door RH</b><br>(i171) No. 3 — (D32) No. 2:<br><b>Rear door LH</b><br>(i171) No. 3 — (D26) No. 2:   | Is harness normal?  | OUTBACK model:<br>Go to step 3.<br>Sedan model: Go to step 5.<br><br>Repair or replace the harness. |
| 3    | <b>CHECK HARNESS (REAR GATE UNLOCK).</b><br>Check the harness between body integrated unit connector and rear gate lock actuator connector.<br><b>Connector &amp; terminal</b><br>(i171) No. 7 — (D47) No. 1:   | Is harness normal?  | Go to step 4.<br><br>Repair or replace the harness.   |
| 4    | <b>CHECK HARNESS (REAR GATE UNLOCK).</b><br>Measure the resistance between the rear gate lock actuator connector and chassis ground.<br><b>Connector &amp; terminal</b><br>(D47) No. 2 — <b>Chassis ground:</b>   | Is the resistance less than 10 $\Omega$ ?   | Go to step 7.<br><br>Repair or replace the harness.   |
| 5    | <b>CHECK HARNESS (TRUNK UNLOCK).</b><br>Check the harness between body integrated unit connector and trunk lid lock actuator connector.<br><b>Connector &amp; terminal</b><br>(i171) No. 7 — (R186) No. 1:  | Is harness normal?  | Go to step 6.<br><br>Repair or replace the harness.   |
| 6    | <b>CHECK HARNESS (TRUNK UNLOCK).</b><br>Measure the resistance between the trunk lid lock actuator connector and chassis ground.<br><b>Connector &amp; terminal</b><br>(R186) No. 2 — <b>Chassis ground:</b>  | Is the resistance less than 10 $\Omega$ ?   | Go to step 7.<br><br>Repair or replace the harness.   |
| 7    | <b>CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b><br>1) Connect the body integrated unit connector.<br>2) Measure the voltage between the terminals of the body integrated unit connector when moving the door lock switch to LOCK.<br><b>Connector &amp; terminal</b><br>(i171) No. 2 (+) — (i171) No. 3 (-):   | Does the voltage change from less than 1 V $\rightarrow$ 9 V or more?<br>(During lock output) | Go to step 8.<br><br>Replace the body integrated unit.<br><Ref. to SL-84, Body Integrated Unit.>    |

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| Step   | Check   | Yes  | No  |
|--|---|--|---|
| <b>8 CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b><br>Measure the voltage between the terminals of the body integrated unit connector when moving the door lock switch to UNLOCK.<br><i>Connector &amp; terminal<br/>(i171) No. 3 (+) — (i171) No. 2 (-):</i>  | Does the voltage change from less than 1 V → 9 V or more?<br>(During unlock output) | Go to step <b>9</b> .  | Replace the body integrated unit.<br><Ref. to SL-84, Body Integrated Unit.> |
| <b>9 CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.</b><br>Measure the voltage between body integrated unit connector and chassis ground when moving the rear gate/trunk opener button.<br><i>Connector &amp; terminal<br/>(i171) No. 7 (+) — Chassis ground (-):</i>   | Does the voltage change from less than 1 V → 9 V or more?<br>(During unlock output) | Go to step <b>10</b> .   | Replace the body integrated unit.<br><Ref. to SL-84, Body Integrated Unit.> |
| <b>10 CHECK DOOR LOCK ACTUATOR.</b><br>Check the door lock actuator. <ul style="list-style-type: none"><li>Front door lock actuator: &lt;Ref. to SL-47, INSPECTION, Front Door Latch and Door Lock Actuator Assembly.&gt;</li><li>Rear door lock actuator: &lt;Ref. to SL-54, INSPECTION, Rear Door Latch and Door Lock Actuator Assembly.&gt;</li></ul> | Is the door lock actuator OK?   | OUTBACK model:<br>Go to step <b>11</b> .<br>Sedan model: Go to step <b>12</b> .                  | Replace the door latch and door lock actuator assembly.                     |
| <b>11 CHECK REAR GATE LOCK ACTUATOR.</b><br>Check the rear gate lock actuator. <Ref. to SL-60, 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.                          |
| <b>12 CHECK TRUNK LID LOCK ACTUATOR.</b><br>Check the trunk lid lock actuator. <Ref. to SL-62, Trunk Lid Latch and Actuator Assembly.>   | Is trunk lid lock actuator normal?  | Check the connection status of the harness and connector that may have a temporary poor contact. | Replace the trunk lid latch & actuator assembly.                            |