3. Door Lock Control System

A: WIRING DIAGRAM

Refer to “Keyless Entry System” in the wiring diagram. <Ref. to WI-163, WIRING DIAGRAM, Keyless Entry System.>

B: ELECTRICAL SPECIFICATION

1. BODY INTEGRATED UNIT

Refer to the Control Module I/O Signal of the BODY CONTROL SYSTEM (DIAGNOSIS). <Ref. to BC(diag)-9, 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 check the following fuses. • No. 7 (in fuse & relay box) • No. 10 (in main fuse box) • No. 19 (in main fuse box)	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-10, 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-10, CHECK POWER SUPPLY AND GROUND CIRCUIT, INSPECTION, Door Lock Control System.>
	3. Check the door lock switch and the circuit.	<Ref. to SL-11, CHECK DOOR LOCK SWITCH, INSPECTION, Door Lock Control System.>
	4. Check the rear gate/trunk opener button and the circuit.	<Ref. to SL-12, CHECK REAR GATE/TRUNK OPENER BUTTON SWITCH CIRCUIT, INSPECTION, Door Lock Control System.>
	5. Check the door lock actuator and the circuit.	<Ref. to SL-13, 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-13, CHECK DOOR LOCK ACTUATOR AND CIRCUIT., INSPECTION, Door Lock Control System.>

2. CHECK POWER SUPPLY AND GROUND CIRCUIT

	Step	Check	Yes	No
1	**CHECK POWER SUPPLY.** 1) Disconnect the connector of body integrated unit. 2) Measure the voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 6 (+) — Chassis ground (–):*** ***(i171) No. 1 (+) — Chassis ground (–):*** ***(B281) No. 7 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Go to step **2**.	Check the harness for open or short circuit between body integrated unit and fuse.
2	**CHECK GROUND CIRCUIT.** Measure the resistance between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 1 — Chassis ground:*** ***(i171) No. 29 — Chassis ground:*** ***(B280) No. 1 — Chassis ground:*** ***(B281) No. 31 — Chassis ground:***	Is the resistance less than 10 Ω?	The power supply and ground circuit are OK.	Repair or replace the harness.

3. CHECK DOOR LOCK SWITCH

	Step	Check	Yes	No
1	**CHECK DOOR LOCK SWITCH.** 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF) and run the “PC application for Subaru Select Monitor”. 3) On «System Selection Menu» display, select {Integ. unit mode}. 4) Select the {Current Data Display & Save}. 5) Select the {Manual lock SW input}.	Does the display switch between OFF ⇔ ON when each door lock switch is moved to LOCK?	Go to step **2**.	Go to step **3**.
2	**CHECK DOOR LOCK SWITCH.** From the condition in step 1), operate each door lock switch in the UNLOCK direction.	Does the display switch between OFF ⇔ ON?	The door lock switch is OK.	Go to step **4**.
3	**CHECK DOOR LOCK SWITCH.** 1) Disconnect the door lock switch connector. 2) Check the continuity when the door lock switch is operated to the LOCK direction. ***Connector & terminal*** ***Driver’s side:*** ***(D7) No. 2 — (D7) No. 3:*** ***Passenger’s side:*** ***(D125) No. 4 — (D125) No. 5:***	Did the indicator change from “No continuity” (1 MΩ or more) to “Continuity exists” (less than 10 Ω)?	Go to step **4**.	Replace the power window main switch or door lock switch.
4	**CHECK DOOR LOCK SWITCH.** Check the continuity when the door lock switch is operated to the UNLOCK direction. ***Connector & terminal*** ***Driver’s side:*** ***(D17) No. 1 — (D7) No. 3:*** ***Passenger’s side:*** ***(D125) No. 2 — (D125) No. 5:***	Did the indicator change from “No continuity” (1 MΩ or more) to “Continuity exists” (less than 10 Ω)?	Go to step **5**.	Replace the power window main switch or door lock switch.
5	**CHECK HARNESS.** Measure the resistance between the door lock switch connector and chassis ground. ***Connector & terminal*** ***Driver’s side:*** ***(D7) No. 3 — Chassis ground:*** ***Passenger’s side:*** ***(D125) No. 5 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **6**.	Repair or replace the harness.
6	**CHECK HARNESS.** 1) Disconnect the connector of body integrated unit. 2) Measure the resistance between body integrated unit connector and door lock switch connector. ***Connector & terminal*** ***Driver’s side:*** ***(D7) No. 2 — (i84) No. 9:*** ***(D7) No. 1 — (i84) No. 20:*** ***Passenger’s side:*** ***(D125) No. 4 — (i84) No. 9:*** ***(D125) No. 2 — (i84) No. 20:***	Is the resistance less than 10 Ω?	Replace the body integrated unit. <Ref. to SL-72, Body Integrated Unit.>	Repair or replace the harness.

4. CHECK REAR GATE/TRUNK OPENER BUTTON SWITCH CIRCUIT

	Step	Check	Yes	No
1	**CHECK REAR GATE/TRUNK OPENER BUTTON SWITCH.** 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF) and run the “PC application for Subaru Select Monitor”. 3) On «System Selection Menu» display, select {Integ. unit mode}. 4) Select the {Current Data Display & Save}. 5) Select the {Rear gate/Trunk release switch}.	Does the display switch between OFF ⇔ ON when the rear gate/trunk opener button is operated?	The rear gate/trunk opener button is normal.	Go to step **2**.
2	**CHECK HARNESS.** 1) Disconnect the body integrated unit connector and rear gate/trunk opener button connector. 2) Measure the resistance between body integrated unit connector and rear gate/trunk opener button connector. ***Connector & terminal*** ***Sedan model*** ***(i84) No. 10 — (i162) No. 4:*** ***OUTBACK model*** ***(i84) No. 10 — (D77) No. 5:***	Is the resistance less than 10 Ω?	Go to step **3**.	Repair or replace the harness.
3	**CHECK HARNESS.** Measure the resistance between the rear gate/trunk opener button connector and chassis ground. ***Connector & terminal*** ***Sedan model*** ***(i162) No. 2 — Chassis ground:*** ***OUTBACK model*** ***(D77) No. 6 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **4**.	Repair or replace the harness.
4	**CHECK REAR GATE/TRUNK OPENER BUTTON SWITCH.** Measure the resistance between connector terminals both when the rear gate/trunk opener button is pressed and when not pressed. ***Connector & terminal*** ***Sedan model*** ***(D162) No. 4 — (D162) No. 2:*** ***OUTBACK model*** ***(D77) No. 5 — (D77) No. 6:***	Is the resistance less than 10 Ω when the switch is pressed and 1 MΩ or more when not pressed?	Replace the body integrated unit. <Ref. to SL-72, Body Integrated Unit.>	Replace the rear gate/trunk opener button.

5. CHECK DOOR LOCK ACTUATOR AND CIRCUIT.

	Step	Check	Yes	No
1	**CHECK HARNESS (DOOR LOCK).** 1) Disconnect the body integrated unit connector and each door lock actuator connector. 2) Check the harness between body integrated unit connector and each door lock actuator connector. ***Connector & terminal*** ***Front door RH*** ***(i171) No. 2 — (D72) No. 1:*** ***Front door LH*** ***(i171) No. 2 — (D18) No. 1:*** ***Rear door RH*** ***(i171) No. 2 — (D32) No. 1:*** ***Rear door LH*** ***(i171) No. 2 — (D26) No. 1:***	Is harness normal?	Go to step **2**.	Repair or replace the harness.
2	**CHECK HARNESS (DOOR UNLOCK).** Check the harness between body integrated unit connector and each door lock actuator connector. ***Connector & terminal*** ***Front door RH*** ***(i171) No. 3 — (D72) No. 2:*** ***Front door LH*** ***(i171) No. 4 — (D18) No. 2:*** ***Rear door RH*** ***(i171) No. 3 — (D32) No. 2:*** ***Rear door LH*** ***(i171) No. 3 — (D26) No. 2:***	Is harness normal?	OUTBACK model Go to step **3**. Sedan model:Go to step **5**.	Repair or replace the harness.
3	**CHECK HARNESS (REAR GATE UNLOCK).** Check the harness between body integrated unit connector and rear gate lock actuator connector. ***Connector & terminal*** ***(i171) No. 7 — (D47) No. 1:***	Is harness normal?	Go to step **4**.	Repair or replace the harness.
4	**CHECK HARNESS (REAR GATE UNLOCK).** Measure the resistance between the rear gate lock actuator connector and chassis ground. ***Connector & terminal*** ***(D47) No. 2 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the harness.
5	**CHECK HARNESS (TRUNK UNLOCK).** Check the harness between body integrated unit connector and trunk lid lock actuator connector. ***Connector & terminal*** ***(i171) No. 7 — (R186) No. 1:***	Is harness normal?	Go to step **6**.	Repair or replace the harness.
6	**CHECK HARNESS (TRUNK UNLOCK).** Measure the resistance between the trunk lid lock actuator connector and chassis ground. ***Connector & terminal*** ***(R186) No. 2 — Chassis ground:***	Is the resistance less than 10 Ω?	Go to step **7**.	Repair or replace the harness.

	Step	Check	Yes	No
7	**CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.** 1) Connect the body integrated unit connector. 2) Measure the voltage between the terminals of the body integrated unit connector when operating the door lock switch to LOCK direction. ***Connector & terminal*** ***Except for front door LH*** ***(i171) No. 2 (+) — (i171) No. 3 (–):*** ***Front door LH*** ***(i171) No. 2 (+) — (i171) No. 4 (–):***	Does the voltage change from less than 1 V → 9 V or more? (During lock output)	Go to step **8**.	Replace the body integrated unit. <Ref. to SL-72, Body Integrated Unit.>
8	**CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.** Measure the voltage between the terminals of the body integrated unit connector when operating the door lock switch to UNLOCK direction. ***Connector & terminal*** ***Except for front door LH*** ***(i171) No. 3 (+) — (i171) No. 2 (–):*** ***Front door LH*** ***(i171) No. 4 (+) — (i171) No. 2 (–):***	Does the voltage change from less than 1 V → 9 V or more? (During unlock output)	Go to step **9**.	Replace the body integrated unit. <Ref. to SL-72, Body Integrated Unit.>
9	**CHECK BODY INTEGRATED UNIT OUTPUT SIGNAL.** Measure the voltage between body integrated unit connector and chassis ground when operating the rear gate/trunk opener button. ***Connector & terminal*** ***(i171) No. 7 (+) — Chassis ground (–):***	Does the voltage change from less than 1 V → 9 V or more? (During unlock output)	Go to step **10**.	Replace the body integrated unit. <Ref. to SL-72, Body Integrated Unit.>
10	**CHECK DOOR LOCK ACTUATOR.** Check the door lock actuator. • Front door lock actuator <Ref. to SL-37, INSPECTION, Front Door Latch and Door Lock Actuator Assembly.> • Rear door lock actuator <Ref. to SL-43, INSPECTION, Rear Door Latch and Door Lock Actuator Assembly.>	Is the door lock actuator OK?	OUTBACK model Go to step **11**. Sedan model:Go to step **12**.	Replace the door latch and door lock actuator assembly.
11	**CHECK REAR GATE LOCK ACTUATOR.** Check the rear gate lock actuator. <Ref. to SL-48, 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.
12	**CHECK TRUNK LID LOCK ACTUATOR.** Check the trunk lid lock actuator. <Ref. to SL-50, 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.