4. Security System

A: WIRING DIAGRAM

<Ref. to WI-162, WIRING DIAGRAM, Security System.>

B: ELECTRICAL SPECIFICATION

1. BODY INTEGRATED UNIT

Refer to Control Module I/O Signal in the LAN SYSTEM (DIAGNOSTICS). <Ref. to LAN(diag)-9, ELECTRICAL SPECIFICATION, Control Module I/O Signal.>

C: INSPECTION

1. BASIC DIAGNOSTIC PROCEDURE

	Step	Check	Yes	No
1	**INITIAL CHECK.** Check keyless entry system.	Does the keyless entry system operate normally?	Go to step **2**.	Check keyless entry system. <Ref. to SL-14, INSPECTION, Keyless Entry System.>
2	**CHECK SECURITY ON/OFF SETTING.** 1) Press the LOCK button of the transmitter. 2) Check the security indicator light blinking patterns.	Is the security indicator light blinking patterns as follows? •When monitoring lag is set to 0 seconds: Blinks twice within 0.5 seconds at 2 second intervals. •When monitoring lag is set to 30 seconds: repeats the turning on for 0.2 seconds and turning off for 0.2 seconds for 30 seconds.	Go to step **5**.	Go to step **3**.
3	**CHANGE SETTING OF SECURITY SYSTEM.** Change the setting of security system to ON. <Ref. to SL-27, SECURITY SYSTEM ON/OFF SETTING, INSPECTION, Security System.>	Is setting change completed correctly?	Go to step **4**.	• Check the ignition switch circuit. <Ref. to SL-28, CHECK IGNITION SWITCH CIRCUIT, INSPECTION, Security System.> • Check the door lock switch circuit. <Ref. to SL-21, CHECK DOOR LOCK SWITCH, INSPECTION, Keyless Entry System.>
4	**CHECK SETTING CHANGE OF SECURITY SYSTEM.** 1) Remove the key from ignition switch, and then close all doors. 2) Press the LOCK button of the transmitter. 3) Check the security indicator light blinking patterns.	Is the security indicator light blinking patterns as follows? •When monitoring lag is set to 0 seconds: Blinks twice within 0.5 seconds at 2 second intervals. •When monitoring lag is set to 30 seconds: repeats the turning on for 0.2 seconds and turning off for 0.2 seconds for 30 seconds.	Go to step **5**.	Check the security indicator light circuit. <Ref. to SL-27, CHECK SECURITY INDICATOR LIGHT CIRCUIT, INSPECTION, Security System.>

	Step	Check	Yes	No
5	**CHECK SECURITY SYSTEM OPERATION.** Press the LOCK button of keyless transmitter, and wait for 30 seconds.	Does the security indicator light blink twice within 0.5 seconds in 2 second intervals?	Go to step **6**.	Replace the body integrated unit. <Ref. to SL-48, Body Integrated Unit.>
6	**CHECK SECURITY ALARM OPERATION.** 1) Unlock all doors using the door lock switch on driver's door. 2) Open any door or rear gate.	Does the security alarm operate when opening any door or rear gate?	Go to step **7**.	• Check the door switch. <Ref. to SL-27, CHECK DOOR SWITCH, INSPECTION, Security System.> • Check the rear gate latch switch. <Ref. to SL-27, CHECK REAR GATE LATCH SWITCH, INSPECTION, Security System.>
7	**CHECK SECURITY ALARM OPERATION.** Check the security alarm operation.	Does all of the following security alarm operate? •Horn sounds •Hazard light blinks •Security indicator light illuminates	Go to step **8**.	• Check the horn. <Ref. to SL-28, CHECK HORN, INSPECTION, Security System.> • Check the hazard light. <Ref. to SL-28, CHECK HAZARD LIGHT OPERATION, INSPECTION, Security System.>
8	**CHECK SECURITY ALARM CANCEL OPERATION.** Press any button of transmitter while operating security alarm. Or turn the ignition switch to OFF → ON once.	Does all of the following security alarm stop? •Horn stops •Hazard light stops	Go to step **9**.	Check the ignition switch circuit. <Ref. to SL-28, CHECK IGNITION SWITCH CIRCUIT, INSPECTION, Security System.>
9	**CHECK SECURITY SYSTEM CONDITION MEMORY.** Check that the system functions properly even when the battery is not connected temporarily. <Ref. to SL-27, CHECK SECURITY SYSTEM CONDITION MEMORY, INSPECTION, Security System.>	Does the system function properly when the battery is not connected temporarily?	Go to step **10**.	Replace the body integrated unit. <Ref. to SL-48, Body Integrated Unit.>
10	**CHECK IMPACT SENSOR.** Check the sensibility of impact sensor. <Ref. to SL-44, CHECK IMPACT SENSOR, ADJUSTMENT, Impact Sensor.>	Is the sensibility set properly?	Press the UNLOCK button of keyless transmitter, and finish the diagnosis.	Adjust the sensitivity. <Ref. to SL-45, IMPACT SENSITIVITY ADJUSTMENT, ADJUSTMENT, Impact Sensor.>

NOTE:
Check the function settings of the body integrated unit if any of the following symptoms appear. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>
- The horn does not sound even when the security system operates.
- The horn sounds when setting the security to ON using the keyless transmitter.

2. CHECK SECURITY SYSTEM CONDITION MEMORY

1) Remove the key from ignition switch.
2) Close all doors and the rear gate.
3) Open the front hood.
4) Press the LOCK button of transmitter, and then wait until the security indicator light flashes twice for 0.5 seconds at intervals of 2 seconds.
5) Disconnect the ground cable from the battery.
6) Connect the battery ground cable to the battery.
7) Check that the security indicator light blinks twice within 0.5 seconds at 2 second intervals. When it does not blink, replace the body integrated unit.

3. SECURITY SYSTEM ON/OFF SETTING

1) Close all doors and rear gate, and sit in the driver's seat. Press the UNLOCK button of the keyless transmitter.
2) Turn the ignition switch to ON.
3) Push the centralized door lock switch down and open the driver's side door at the same time, and hold in this condition for 10 seconds
4) If the security system is ON, it will turn OFF. If OFF, it will turn ON.

Setting	Horn activation	Meter display
ON → OFF	Twice	[AL_OF]
OFF → ON	Once	[AL_ON]

4. CHECK DOOR SWITCH

For operation procedure, refer to the door switch inspection of the keyless entry system. <Ref. to SL-17, CHECK DOOR SWITCH, INSPECTION, Keyless Entry System.>

5. CHECK REAR GATE LATCH SWITCH

For operation procedure, refer to the door switch inspection of the keyless entry system. <Ref. to SL-17, CHECK DOOR SWITCH, INSPECTION, Keyless Entry System.>

6. CHECK SECURITY INDICATOR LIGHT CIRCUIT

For operation procedures, refer to the "SECURITY INDICATOR LIGHT CIRCUIT" of "IMMOBILIZER (DIAGNOSTICS)". <Ref. to IM(diag)-11, CHECK SECURITY INDICATOR LIGHT CIRCUIT, INSPECTION, Diagnostics Chart for Security Indicator Light.>

7. CHECK HORN

	Step	Check	Yes	No
1	**CHECK HORN OPERATION.** Check the horn sounds when the horn switch is pushed.	Does the horn sound?	Go to step **2**.	Check the horn circuit.
2	**CHECK OUTPUT TO HORN RELAY.** 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF), and run the “Application for Subaru Select Monitor III”. 3) On the System Selection Menu, select the {Integ. unit mode}. 4) Select {Function check}. 5) Select {Horn Output} and execute.	Does the horn sound?	Horn circuit is OK.	Go to step **3**.
3	**CHECK HORN RELAY CIRCUIT.** 1) Turn the ignition switch to OFF. 2) Disconnect the harness connector of body integrated unit (B280). 3) Disconnect the main fuse box harness connector (B186). 4) Measure the resistance between harness connector terminals. ***Connector & terminal*** ***(B280) No. 11 — (B186) No. 1:***	Is the resistance less than 10 Ω?	Check the body integrated unit. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Repair the harness.

8. CHECK HAZARD LIGHT OPERATION

For operation procedure, refer to the hazard light inspection of the keyless entry system. <Ref. to SL-19, CHECK HAZARD LIGHT OPERATION, INSPECTION, Keyless Entry System.>

9. CHECK IGNITION SWITCH CIRCUIT

	Step	Check	Yes	No
1	**CHECK IGNITION SWITCH VOLTAGE.** 1) Prepare the Subaru Select Monitor kit. 2) Turn the ignition switch to ON (engine OFF), and run the “Application for Subaru Select Monitor III”. 3) On the System Selection Menu, select the {Integ. unit mode}. 4) Select the {Current Data Display & Save}. 5) Check the {BATT voltage} and {IG power supply voltage}.	Is the {IG power supply voltage} within ±1 V against {BATT voltage}?	The ignition switch input circuit is OK.	Go to step **2**.
2	**CHECK IGNITION SWITCH CIRCUIT.** 1) Turn the ignition switch to OFF. 2) Disconnect the harness connector of body integrated unit (i84). 3) Turn the ignition switch to ON. 4) Measure the voltage between harness connector terminal and chassis ground. ***Connector & terminal*** ***(i84) No. 1 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Check the body integrated unit. <Ref. to LAN(diag)-2, Basic Diagnostic Procedure.>	Check the harness for open or short circuit between body integrated unit and fuse.