7. Security System

A: WIRING DIAGRAM

Refer to “Security System” in the wiring diagram.
- Gasoline engine model: <Ref. to WI(w/o HEV)-199, WIRING DIAGRAM, Security System.>
- HEV model: <Ref. to WI(HEV)-203, WIRING DIAGRAM, Security System.>

B: ELECTRICAL SPECIFICATION

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. BASIC DIAGNOSTIC PROCEDURE

	Step	Check	Yes	No
1	**INITIAL CHECK.** Check the keyless entry system or keyless access system operation.	Does the keyless entry system or keyless access system operate normally?	Go to step **2**.	Check the keyless entry system or keyless access system. • Keyless entry system: <Ref. to SL-22, INSPECTION, Keyless Entry System.> • Keyless access system: <Ref. to KPS(diag)-5, KEYLESS ACCESS WITH PUSH BUTTON START SYSTEM, CAUTION, General Description.>
2	**CHECK SECURITY ON/OFF SETTING.** 1) Remove the key from ignition switch or turn the power OFF, and then close all doors. 2) Check the status of security indicator light. 3) Press the LOCK button of the keyless transmitter or access key. 4) Check the security indicator light blinking patterns.	Is the security indicator light blinking patterns as follows? • Before pressing the LOCK button: Blinks once within 3 seconds • After pressing the LOCK button: When monitoring lag is set to 0 second, flashes twice within 0.5 seconds in 2 second intervals / When monitoring lag is set to 30 seconds, flashes once within 0.4 seconds in 30 seconds.	Go to step **4**.	Go to step **3**.
3	**CHANGE SETTING OF SECURITY SYSTEM.** Change the setting of security system to ON using Subaru Select Monitor. <Ref. to SL-37, SECURITY SYSTEM ON/OFF SETTING, INSPECTION, Security System.>	Is setting change completed correctly?	Go to step **4**.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>
4	**CHECK SECURITY SYSTEM OPERATION.** 1) Remove the key from ignition switch or turn the power OFF, and then close all doors. 2) Press the LOCK button on the keyless transmitter or access key, then wait for 30 seconds. 3) Check the security indicator light blinking patterns.	Does the security indicator light blink twice within 0.5 seconds in 2 second intervals?	Go to step **5**.	Check the security indicator light. <Ref. to SL-38, CHECK SECURITY INDICATOR LIGHT CIRCUIT, INSPECTION, Security System.>

	Step	Check	Yes	No
5	**CHECK SECURITY ALARM OPERATION.** 1) Operate the driver's door lock switch to the UNLOCK side. 2) Open any door, trunk lid or rear gate.	Does the security alarm operate when opening any door, trunk lid, or rear gate?	Go to step **6**.	Check the following parts. <Ref. to SL-25, CHECK DOOR SWITCH, INSPECTION, Keyless Entry System.> • Door switches • Trunk lid latch switch • Rear gate latch switch
6	**CHECK SECURITY ALARM OPERATION.** Check the security alarm operation status.	During the operation, does the horn keep sounding and the hazard light blink?	Go to step **7**.	Check the following parts. <Ref. to SL-25, CHECK DOOR SWITCH, INSPECTION, Keyless Entry System.> • Horn: <Ref. to SL-38, CHECK HORN, INSPECTION, Security System.> • Hazard light: <Ref. to SL-38, CHECK HAZARD LIGHT OPERATION, INSPECTION, Security System.>
7	**CHECK SECURITY ALARM CANCEL OPERATION.** Press any button of the transmitter or access key while the security alarm is operating.	Do the horn sound and the blinking of the hazard light stop?	Go to step **8**.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>
8	**CHECK IMPACT SENSOR (DEALER OPTION).** Check the sensibility of impact sensor. <Ref. to SL-82, CHECK IMPACT SENSOR, ADJUSTMENT, Impact Sensor.>	Is the sensibility set properly?	Go to step **9**.	Adjust the sensitivity. <Ref. to SL-82, IMPACT SENSITIVITY ADJUSTMENT, ADJUSTMENT, Impact Sensor.>
9	**CHECK SECURITY SYSTEM CONDITION MEMORY.** 1) Remove the key from ignition switch or turn the power OFF, and then close all doors. 2) Open the front hood. 3) Press the LOCK button on the keyless transmitter or access key, then wait for 30 seconds. 4) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.> NOTE: For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor. 5) Connect the ground cable to battery. <Ref. to NT-5, BATTERY, NOTE, Note.> 6) Check the status of security indicator light.	Does the security indicator light blinks twice within 0.5 seconds at 2 second intervals?	Go to step **10**.	Replace the body integrated unit. <Ref. to SL-87, Body Integrated Unit.>

Step		Check	Yes	No
10	**CHECK SECURITY SYSTEM MANUAL ON/OFF SETTING.** 1) Press the UNLOCK button of the keyless transmitter or access key. 2) Change the setting of security system. <Ref. to SL-37, SECURITY SYSTEM ON/OFF SETTING, INSPECTION, Security System.>	Is setting change completed correctly?	Restore the security system settings to those before the diagnosis and finish the diagnosis.	Check the following parts. • Ignition switch circuit: <Ref. to SL-74, INSPECTION, Ignition Key Lock.> • Door lock switch circuit: <Ref. to SL-16, CHECK DOOR LOCK SWITCH, INSPECTION, Door Lock Control System.>

NOTE:
If the horn sounds when the security is turned on (monitor condition) using the keyless transmitter or access key, check the function setting of the body integrated unit. As a cause, it is possible that the impact sensor present (ON) / not present (OFF) setting is set to ON in the customization function though there is no impact sensor. <Ref. to BC(diag)-18, User Customizing.>

2. CHECK SECURITY SYSTEM CONDITION MEMORY

1) Pull out the key from the ignition switch, or turn the ignition to OFF.
2) Close all the doors, trunk lid or rear gate.
3) Open the front hood.
4) Press the LOCK button of the keyless transmitter or access key.

NOTE:
Wait until the security indicator light blinks twice within 0.5 seconds at 2 second intervals.
If the 30 second monitoring lag has been set, wait for 30 seconds.
5) Disconnect the ground cable from battery. <Ref. to NT-5, BATTERY, NOTE, Note.>

NOTE:
For the 12 volt engine restart battery of HEV model, disconnect the ground terminal from 12V engine restart battery sensor.
6) Connect the ground cable to battery. <Ref. to NT-5, BATTERY, NOTE, Note.>
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

NOTE:
It can be set by «Security Alarm Setup» in unit customizing using Subaru Select Monitor.
For detailed procedures, refer to “PC application help for Subaru Select Monitor”.
1) Close all doors, trunk lid or rear gate, and sit down on the driver seat. Press the UNLOCK button of the keyless transmitter or access key.
2) Turn the ignition to ON.
3) Press the central door unlock switch and open the driver’s door simultaneously. (Keep the central door unlock switch pressed down.)
4) When the condition in step 3) continues for 10 seconds, the system switches to a mode reverse to the current mode.

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

4. CHECK DOOR SWITCH

For operation procedure, refer to “CHECK DOOR SWITCH” of “Keyless Entry System”. <Ref. to SL-25, CHECK DOOR SWITCH, INSPECTION, Keyless Entry System.>

5. CHECK SECURITY INDICATOR LIGHT CIRCUIT

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

6. 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 BODY INTEGRATED UNIT.** Select and perform the «Horn Output» using Subaru Select Monitor. NOTE: For detailed procedures, refer to “PC application help for Subaru Select Monitor”.	Does the horn sound?	Horn circuit is OK.	Go to step **3**.
3	**CHECK HORN RELAY CIRCUIT.** 1) Turn the ignition switch to OFF or turn the power to OFF. 2) Disconnect the connector of body integrated unit. 3) Remove the horn relay. 4) Check the harness between body integrated unit and horn relay. ***Connector & terminal*** ***(B280) No. 24 — Horn relay No. 4:***	Is harness normal?	Check body integrated unit. <Ref. to BC(diag)-2, Basic Diagnostic Procedure.>	Repair or replace the harness.

7. CHECK HAZARD LIGHT OPERATION

For operation procedure, refer to “CHECK HAZARD LIGHT OPERATION” of “Keyless Entry System”. <Ref. to SL-29, CHECK HAZARD LIGHT OPERATION, INSPECTION, Keyless Entry System.>

8. CHECK IGNITION SWITCH CIRCUIT

	Step	Check	Yes	No
1	**CHECK CURRENT DATA.** Display the data of «BATT voltage» and «IG power supply voltage» using the Subaru Select Monitor. NOTE: For detailed procedures, refer to “PC application help for Subaru Select Monitor”.	Does the «IG power supply voltage» indicate 0 V when the ignition is OFF, and fall within a range of ±1 V from the «BATT voltage» when the ignition is ON?	The ignition switch input circuit is OK.	Go to step **2**.
2	**CHECK IGNITION SWITCH CIRCUIT.** 1) Turn the ignition switch to OFF or turn the power to OFF. 2) Disconnect the connector of body integrated unit. 3) Turn the ignition switch to ON. 4) Measure the voltage between the body integrated unit connector and chassis ground. ***Connector & terminal*** ***(B281) No. 3 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Check body integrated unit. <Ref. to BC(diag)-2, Basic Diagnostic Procedure.>	Check the harness for open or short circuit between body integrated unit and fuse.