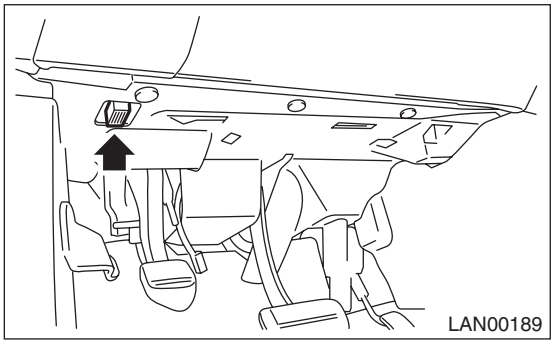
6. Subaru Select Monitor

A: OPERATION

1. READ DIAGNOSTIC TROUBLE CODE (DTC)

NOTE:
• DTC is displayed in the sequence of inputting. (When entering two DTCs or more simultaneously, they are displayed in the sequence of priority.)
• When more than two DTCs are displayed, perform the diagnosis of top one.
1) Prepare the Subaru Select Monitor kit.
2) Connect the diagnosis cable to the Subaru Select Monitor.
3) Connect the Subaru Select Monitor to data link connector.
The data link connector is located in the lower portion of the instrument panel (on the driver's side).



CAUTION:
Do not connect the scan tools except for Subaru Select Monitor.
4) Turn the ignition switch to ON (engine OFF) and run the Subaru Select Monitor.
5) On the «Main Menu» display screen, select {Each System Check}.
6) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
7) On the «Integ. unit mode failure diag.» display screen, select the {Diagnostic Code(s) Display}.

NOTE:
It is possible to read the DTC at the {All System Diagnosis} on the «Main Menu», and then find the contents to check from the DTC table. <Ref. to LAN(diag)-34, DTC TABLE, LIST, List of Diagnostic Trouble Code (DTC).>

NOTE:
• For details concerning the operation procedure, refer to the "PC application help for Subaru Select Monitor".
• For details concerning DTCs, refer to the List of Diagnostic Trouble Code (DTC). <Ref. to LAN(diag)-32, List of Diagnostic Trouble Code (DTC).>

2. READ CURRENT DATA

1) Select {Each System Check} in «Main Menu» display screen.
2) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
3) On the «Integ. unit mode failure diag.» display screen, select the {Current Data Display & Save}.
4) Using the scroll key, scroll the display screen up or down until the desired data is shown.
• A support list contains both of analog and digital data, and they are shown in the following table.

3. DISPLAY OF ANALOG DATA

Contents to be displayed	Unit of measure	Description	Note
BATT voltage (control)	10 — 15 V	Body integrated unit input value	Always
BATT voltage (BACKUP)	10 — 15 V	Body integrated unit input value	Always
ABS_CM Power Voltage	10 — 15 V	Body integrated unit input value	Ignition switch ON
ACC voltage	10 — 15 V	Body integrated unit input value	Ignition switch ACC
Illumination VR Voltage	0 — 5 V	Body integrated unit output value	Small light switch ON
Illumi. output d-ratio	0 — 100%	Body integrated unit input value	Small light ON Illumination volume is other than bright.
ambient temp sensor V	0 — 5 V	Body integrated unit input value	Ignition switch ON
Ambient Temperature	–40 — 87.5°C	Body integrated unit output value	Ignition switch ON
Fuel level voltage	0 — 8 V	Body integrated unit input value	Ignition switch ON
Fuel level resistance	0 — 102.3 Ω	Body integrated unit input value	Ignition switch ON
key-lock solenoid V	6 — 12 V	Body integrated unit output value	Key warning switch ON, other than parking range Ignition ON
number of regist.	0 — 4	Number of keyless key registered	
Front Wheel Speed	km/h	CAN data input value	Reception from VDC unit
VDC/ABS latest f-code	DTC display (Temporarily)	CAN data input value	It is normal when DTC is not been input even if this code is displayed. Reception from VDC
Blower Fan Steps	0 — 2 levels	CAN data input value	0: OFF, 1: Low, 2: 2 levels or more Reception from air conditioner ECM
Fuel level resistance 2	0 — 102.3 Ω	CAN data output value	Reception from body integrated unit
Fuel consumption	cc/s	CAN data input value	Reception from ECM and transmission to center monitor
Coolant Temp.	–40 — 130°C	CAN data input value	Reception from ECM
Vehicle lateral G	m/s^2	CAN data input value	Reception from VDC unit
SPORT Shift Stages	0 — 7 levels	CAN data input value	Manual mode operating information (0: Light OFF; 1 — 5: Gear display; 6: Fail; 7: ATF temperature High/Low) Reception from TCM
Shift Position	0 — 7 levels	CAN data input value	0: 1; 1: 2; 2: 3; 3: 4; 4: D; 5: N; 6: R; 7: P shift position (There is no 8 input.) 8 is displayed in manual mode. Reception from TCM
Off delay time	OFF, Short, Normal, Long	Body integrated unit setting items	Customize setting
Auto lock time	20, 30, 40, 50, 60 seconds	Body integrated unit setting items	Customize setting

4. DISPLAY OF ON/OFF DATA

Contents to be displayed	Unit of measure	Description	Note
key-lock warning SW	ON/OFF	Body integrated unit input value	ON when ignition key is inserted
Stop Light Switch	ON/OFF	Body integrated unit input value	ON when brake pedal is depressed
Front fog lamp SW input	ON/OFF	Body integrated unit input value	When front fog light switch is ON
TPMS input	ON/OFF	Body integrated unit input value	ON when TPMS registration completed
lighting SW input	ON/OFF	Body integrated unit input value	ON when headlight is ON from the combination switch
Door key-lock SW input	ON/OFF	Body integrated unit input value	Not supported by North American specifications
Door unlock SW input	ON/OFF	Body integrated unit input value	ON when door key cylinder is moved to the UNLOCK side
Driver's door SW input	ON/OFF	Body integrated unit input value	ON when driver's door is open
P-door SW input	ON/OFF	Body integrated unit input value	ON when passenger's door is open
Rear right door SW input	ON/OFF	Body integrated unit input value	ON when rear right door is open
Rear left door SW input	ON/OFF	Body integrated unit input value	ON when rear left door is open
R Gate SW input	ON/OFF	Body integrated unit input value	ON when trunk/rear gate is open
Manual lock SW input	ON/OFF	Body integrated unit input value	Manual lock switch ON
Manual unlock SW input	ON/OFF	Body integrated unit input value	Manual unlock switch ON
Lock SW (front hood)	ON/OFF	Body integrated unit input value	Not supported by North American specifications
Bright SW input	ON/OFF	Body integrated unit input value	ON when bright switch is ON Except automatic A/C
Shift Button SW Input	ON/OFF	Body integrated unit input value	ON when shift lever lock button is operated
Tiptronic Mode Switch	ON/OFF	Body integrated unit input value	SPORT shift mode ON
TIP UP SW input	ON/OFF	Body integrated unit input value	SPORT shift ON and ON at up operation
TIP DOWN SW input	ON/OFF	Body integrated unit input value	SPORT shift ON and ON at down operation
P SW	ON/OFF	Body integrated unit input value	ON when shift range is in parking Shift lever P SW signal
R wiper ON SW input	ON/OFF	Body integrated unit input value	Rear wiper switch ON
R wiper INT SW input	ON/OFF	Body integrated unit input value	Rear wiper switch INT ON
R washer SW input	ON/OFF	Body integrated unit input value	Rear washer switch ON
wiper deicer SW input	ON/OFF	Body integrated unit input value	Wiper deicer switch ON
Rear Defogger SW	ON/OFF	Body integrated unit input value	Rear defogger switch ON

Contents to be displayed	Unit of measure	Description	Note
Driver's Seat SW input	ON/OFF	Body integrated unit input value	Driver's seat buckle switch ON
P seatbelt SW input	ON/OFF	Body integrated unit input value	With passenger's seat occupied and buckle switch ON
Fr wiper input	ON/OFF	Body integrated unit input value	ON when front wiper is operating
Identification SW input	ON/OFF	Body integrated unit input value	ON when the body type is wagon
Rr defogger output	ON/OFF	Body integrated unit output value	ON when rear defogger relay is operating
lock actuat. LOCK output	ON/OFF	Body integrated unit output value	ON when lock signal is output
All seat UNLOCK output	ON/OFF	Body integrated unit output value	ON when unlock signal is output
D-seat UNLOCK output	ON/OFF	Body integrated unit output value	ON when unlock signal is output
R gate/trunk UNLK output	ON/OFF	Body integrated unit output value	ON when rear gate/trunk unlock signal is output
R wiper output	ON/OFF	Body integrated unit output value	ON when rear wiper motor is operating
Shift Lock Solenoid	ON/OFF	Body integrated unit output value	ON when shift lock solenoid is operating
Key locking output	ON/OFF	Body integrated unit output value	Not supported by North American specifications
wiper deicer output	ON/OFF	Body integrated unit output value	ON when wiper deicer is operating
Starter cutting output	ON/OFF	Body integrated unit output value	ON when immobilizer is operating
Hazard Output	ON/OFF	Body integrated unit output value	ON when keyless answer back signal is received or when hazard is operating
Keyless Buzzer Output	ON/OFF	Body integrated unit output value	ON when keyless lock/unlock signal is received
Belt buzzer output	ON/OFF	Body integrated unit output value	ON when signal is output to the belt buzzer
Horn Output	ON/OFF	Body integrated unit output value	ON when security warning is operating
Siren Output	ON/OFF	Body integrated unit output value	ON when siren is installed, customize settings are enabled, and security warning is operating
D-belt warning light O/P	ON/OFF	Body integrated unit output value	ON when ignition switch is turned to ON, and buckle switch is turned OFF
P-belt warning light O/P	ON/OFF	Body integrated unit output value	ON when ignition switch is turned to ON, occupant is seated, and buckle switch is turned OFF
Illumination lamp O/P	ON/OFF	Body integrated unit output value	ON when illumination is illuminated
Room lamp output	ON/OFF	Body integrated unit output value	ON when keyless lock/unlock signal is received (When keyless switch connector is removed)
key illumi. lamp o/p	ON/OFF	Body integrated unit output value	ON when key illumination light is illuminated
Immobilizer lamp output	ON/OFF	Body integrated unit output value	ON when immobilizer pilot light blinks

Contents to be displayed	Unit of measure	Description	Note
TL alarm output	ON/OFF	Body integrated unit output value	Alarm output of the door alarm function. ON when the locked door is improperly opened
CC Main Lamp	On/Off	CAN data input value	Cruise control switch ON Reception from ECM and transmission to combination meter
CC Set Lamp	On/Off	CAN data input value	ON when cruise control vehicle speed is set Reception from ECM and transmission to combination meter
SPORT Lamp	On/Off	CAN data input value	SPORT mode switch ON Reception from TCM and transmission to combination meter
SPORT Blink	Blink/Off	CAN data input value	Blinks when there is an AT failure Reception from TCM and transmission to combination meter
ATF Temperature Lamp	On/Off	CAN data input value	Not supported by North American specifications
ATF Blink	Blink/Off	CAN data input value	Blinks when there is an AT failure Reception from TCM and transmission to combination meter
Tire diameter abnormal 1	On/Off	CAN data input value	Not supported by North American specifications
Tire diameter abnormal 2	Blink/Off	CAN data input value	Blinks when the difference in rotation between front and rear wheels is 4% or more Reception from TCM and transmission to combination meter
Shift Up Indication	UP/OFF	Body integrated unit input value	ON when shift lever can be operated up
Shift Down Indication	DOWN/OFF	Body integrated unit input value	ON when shift lever can be operated down
SPORT Shift (buzzer 1)	ON/OFF	CAN data input value	ON while the shift change prohibited warning buzzer is operating Reception from TCM and transmission to combination meter
SPORT Shift (buzzer 2)	ON/OFF	CAN data input value	ON when the ATF high temperature warning buzzer is operating Reception from TCM and transmission to combination meter
ABS/VDC Judging	ABS/VDC	CAN data input value	Transmission from vehicle dynamic control (VDC) to high speed control module
ADA Existence Judging	Yes/No	CAN data input value	Not supported by North American specifications
Small Light SW	ON/OFF	Body integrated unit input value	ON when small light is illuminated
Rr Defogger SW	ON/OFF	Body integrated unit output value	Rear defogger switch ON
Australia Judging Flag	Australia/Others	Body integrated unit output value	North American specifications have others
large Diameter Tire	Large diameter/others	Body integrated unit output value	Large diameter when the standard tire is 18 in Reception from combination meter
Number of cylinders	4 cylinders/6 cylinders	CAN data input value	6 cylinders
Cam shaft specification	SOHC/DOHC	CAN data input value	DOHC
Turbo	Turbo/Non-turbo	CAN data input value	OFF

Contents to be displayed	Unit of measure	Description	Note
E/G displacement (2.5L)	2.5 L/ OFF	CAN data input value	OFF
E/G displacement (3.0L)	3.0 L/ OFF	CAN data input value	3.0 L
AT Vehicle ID Signal	AT model / MT model	CAN data input value	AT
Blower fan information	ON/OFF	CAN data input value	ON when blower fan is operating Reception from ECM
Keyless buzzer	ON/OFF	Body integrated unit output value	ON when keyless answer-back buzzer operates (When keyless switch connector is removed)
Bright Request	ON/OFF	CAN data input value	ON when operating illumination SW or BRIGHT SW while small light is ON
Door lock SW (Open)	ON/OFF	Body integrated unit input value	Not supported by North American specifications
Door lock SW (Close)	ON/OFF	Body integrated unit input value	Not supported by North American specifications
Unlock request	ON/OFF	Body integrated unit input value	Not supported by North American specifications
Center display failure	OK/NG	CAN data input value	NG when there is a center display failure Reception from center display (NAVI monitor and MFD)
NAVI Failure	OK/NG	CAN data input value	NG when there is a navigation system failure Reception from Center Display
IE Bus failure	Can not use	CAN data input value	Reception from Center Display
Auto A/C failure	OK/NG	CAN data input value	NG when there is a failure in auto air conditioning system Reception from auto A/C module
EBD Warning Light	OK/OFF	CAN data input value	OK when EBD warning light is illuminated Reception from VDC/ABS and transmission to combination meter
ABS Warning Light	OK/OFF	CAN data input value	OK when ABS warning light is illuminated Reception from VDC/ABS and transmission to combination meter
VDC OFF flag	ON/OFF	CAN data input value	Vehicle dynamics control OFF SW is ON Reception from VDC/ABS and transmission to combination meter
VDC/ABS OK B	OK/NG	CAN data input value	NG when there is an error in VDC/ABS system Reception from VDC/ABS
VDC/ABS condition	0 — 4	CAN data input value	Reception from VDC/ABS and transmission to combination meter
Destination:	0 — 16	CAN data input value	Reception from combination meter
Touch SW	0 — 64	CAN data input value	Displays the number when operating the navigation monitor touch switch Reception from monitor (Except for MFD)

NOTE:
For details concerning the operation procedure, refer to the “PC application help for Subaru Select Monitor”.

5. CONFIRMATION OF CURRENT SETTING

1) On the «Main Menu» display screen, select {Each System Check}.
2) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
3) On the «Integ. unit mode failure diag» display screen, select the {Current Data Display & Save}.
4) On the «Current Data Display & Save» display screen, select the {Data Display}.
5) Using the scroll key, scroll the display screen up or down until the desired data is shown.
6) Display the following item and record the settings.

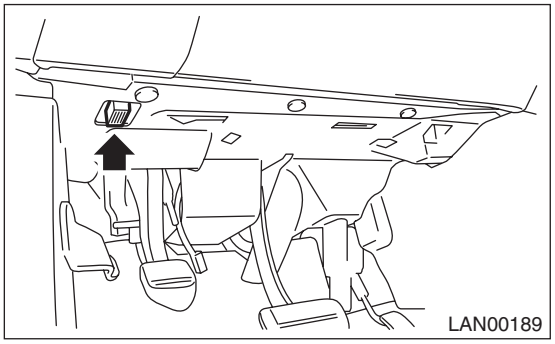
Required items for new registration (Except for system not equipped)

Item	Item to confirm				Remarks
# of reg key	1	2	3	4	Registered ID type
Off delay time	OFF	Long	Normal	Short	Setting for lighting off time
Auto lock	60,50,40,30,20		OFF		Not supported by North American specifications (Unit: seconds)
Rr defogger op. mode	normal		continuous		Normal: Off at 15 minutes of operation Continuous: Operations from switch ON to OFF
Wiper deicer op. mode	normal		continuous		Normal: Off at 15 minutes of operation Continuous: Operations from switch ON to OFF, repeats ON for 15 minutes, OFF for 2 minutes
Security Alarm Setup	ON		OFF		ON: Warning device operation possible OFF: Warning device does not operate
Impact Sensor Setup	ON		OFF		ON: Impact sensor operation possible OFF: Impact sensor does not operate Turn OFF for vehicles not equipped with an impact sensor
Alarm delay setup	ON		OFF		ON: Monitor after a fixed period of time from reception of the keyless lock signal OFF: Monitor after reception of the keyless lock signal
Lockout prevention	ON		OFF		Not supported by North American specifications
Impact sensor	support		no support		support: Impact sensor equipped no support: Impact sensor not equipped Always set to no support for vehicles not equipped with the impact sensor.
Siren setting	support		no support		Not supported by North American specifications
Answer-back buzzer setup	ON		OFF		ON: Answer-back buzzer operation possible OFF: Answer-back buzzer not operated
Hazard answer-back setup	ON		OFF		ON: Hazard answer-back buzzer operation possible OFF: Hazard answer-back buzzer not operated
Automatic locking setup	ON		OFF		Not supported by North American specifications
Ans.-back Buzzer	support		no support		support: Vehicle equipped with answer-back buzzer no support: Vehicle not equipped with answer-back buzzer
Auto locking	support		no support		Not supported by North American specifications (Set to no support)

Item	Item to confirm		Remarks
Door open warning (prevention of battery run-out)	support	no support	support: Door interlocked room light goes off when on for 10 minutes consecutively when door is open. no support: Room light remains illuminated until door is closed.
Dome Light Alarm Setting	support	no support	support: Room light continuously lit while the alarm is triggered. no support: Even if the alarm is triggered, the room light illuminates and then turns off.
Map Light Setting	support	no support	support: The map light illuminates together with the door interlocked room light. no support: Does not illuminate together with the door interlocked room light.
A/C ECM setting	support	no support	Model with auto A/C (Set to 'support')
P/W ECM setting	support	no support	Not supported in North American specifications (Set to no support)
Center display setting	support	no support	support: Vehicle equipped with MFD and navigation display no support: Vehicle not equipped with MFD nor navigation display
Wiper deicer	support	no support	support: Vehicle equipped with wiper deicer no support: Vehicle not equipped with wiper deicer
Rear fog light setting	support	no support	Not supported in North American specifications (Set to no support)
Factory or Market setting	Factory	Market	Do not change to the factory mode. Set to market when using normally.
Security setup	support	no support	Not supported by North American specifications

6. REGISTRATION BODY INTEGRATED UNIT (EQUIPMENT SETTING)

CAUTION:
Body integrated unit is core of LAN system, and also can select the function of all vehicle system control. To perform normal operation of vehicle and diagnosis, the above settings must match the actual vehicle equipment.
If registrations and function setting are different from vehicle equipment, vehicle system does not operate normally and diagnosis cannot be performed correctly. Pay attention to following item.
• Be sure to correspond registrations and function settings to vehicle equipment.
• Do not change the settings of vehicle improperly.
• Confirm key illumination does not blink or "Factory or Market setting" of body integrated unit registrations is "Market". If "Factory or Market setting" is set to "Factory", key illumination blinks when ignition key is turned ON to notify that the settings are unconfirmed.
• Key illumination does not blink with ignition switch turned to ON and go off with door closed.
• Be sure to register immobilizer if body integrated unit is replaced with a new part. (Model with immobilizer)
• Make a registration of immobilizer when the parts related to immobilizer have been replaced. Refer to the "PC application help for Subaru Select Monitor".
• Do not install or register an immobilizer related module of other registered vehicles in order to diagnose failures or inspect functions.
1) Turn the ignition switch to OFF.
2) Connect the Subaru Select Monitor to data link connector.



3) Turn the ignition switch to ON and run the Subaru Select Monitor.
4) On the «Main Menu» display screen, select {Each System Check}.
5) On the «Each System Check» display screen, select the {Integ. Unit mode} and then select the «ECM customizing».

6) Change the setting with UP/DOWN key and select the [OK].
Also, it is possible to set by changing to factory mode and pressing the wiper deicer switch, rear defogger switch, rear fog light switch and door lock switch.

NOTE:
Center display setting can be set only by the Select Monitor.
- List of body integrated unit registration item

NOTE:
Setting is different depending on grade of vehicle and what is equipped.

Data	Initial setting	Registration	Remarks
A/C ECM setting	OFF	ON	Illumination control does not operate if A/C ECM setting is set to “OFF” in case of model with auto A/C.
		OFF	If A/C ECM setting is set to “ON” in case of model without auto A/C, illumination change to night illumination and it is difficult to be recognized.
P/W ECM setting	OFF	ON	Set to “OFF”.
		OFF	
Center display setting	OFF	ON	If center display setting is set to “OFF”, diagnosis for MFD and navigation display cannot be performed.
		OFF	
wiper deicer	OFF	ON	ON signal does not output with operation of wiper deicer switch if wiper deicer is set to “OFF” in models with a wiper deicer.
		OFF	
Rear fog light setting	OFF	ON	Set to “OFF”.
		OFF	
Factory or Market setting (Reset of body integrated unit)	Factory	Factory (Reset)	If Factory or Market setting is set to “Factory”, registrations of items above is changed to “OFF”. After setting, be sure to set to “Market”.
		Market (Confirmed)	

CAUTION:
- **To perform normal operation of vehicle and diagnosis, the above settings must match the actual vehicle equipment.**
- **When body integrated unit is a new part or “Factory” mode, key illumination blinks to show equipment settings have not been completed.**
- **Be sure not to change Factory or Market setting except installation of new body integrated unit.**

NOTE:
“Factory” mode:
- Body integrated unit has not been set yet. It can be recognized by key illumination blinking with ignition switch turned to ON.
- All replacement body integrated units are set to “Factory” mode. When replacing a body integrated unit, be sure to perform the registration operation.

“Market” mode:
Each settings have been set. It can be recognized by key illumination coming on in concocting with room light and going off with ignition switch turned to ON.
7) Perform the Factory or Market setting. On the «ECM customizing» display screen of Subaru Select Monitor, select the {Factory or Market setting}.
8) Change the mode from Factory to Market.
9) Register the immobilizer key.
10) Perform the operation according to the “PC application help for Subaru Select Monitor”.
11) When the key registration is completed, perform the function setting (ECM customizing). <Ref. to LAN(diag)-22, FUNCTION SETTING (ECM CUSTOMIZING), OPERATION, Subaru Select Monitor.>

7. CLEAR MEMORY MODE

1) On the «Main Menu» display screen, select the {Each System Check}.
2) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
3) Select the [OK] after the information of body integrated unit type is displayed.
4) On the «Integ. unit mode failure diag» display screen, select the {Clearing Memory}.

Display	Contents to be displayed
Clear Memory ?	Clear function of DTC and freeze frame data

5) When “Done” is shown on the display screen, turn the ignition switch to OFF.

NOTE:
For details concerning the operation procedure, refer to the “PC application help for Subaru Select Monitor”.

8. FUNCTION SETTING (ECM CUSTOMIZING)

1) On the «Main Menu» display screen, select the {Each System Check}.
2) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
3) On the «Integ. unit mode failure diag» display screen, select the {ECM customizing}.
4) Change the setting.
- List of function setting item (ECM customizing)

NOTE:
Even if changes are made to items that are not equipped, the contents are not confirmed and do not operate.

<table>
<tr><th>Data</th><th>Initial setting value</th><th>Customize setting</th><th colspan="2">Remarks</th><th>Destination Specifications</th></tr>
<tr><td rowspan="6">Off delay time</td><td rowspan="6">Normal</td><td></td><td colspan="2">Delay time below can be selected by setting.</td><td rowspan="6"></td></tr>
<tr><td></td><td>After door closed</td><td>After keyless unlock</td></tr>
<tr><td>OFF</td><td>0 seconds</td><td>0 seconds</td></tr>
<tr><td>Short</td><td>3 seconds</td><td>10 seconds</td></tr>
<tr><td>Normal</td><td>5 seconds</td><td>20 seconds</td></tr>
<tr><td>Long</td><td>8 seconds</td><td>30 seconds</td></tr>
<tr><td>Auto lock time</td><td>30 seconds</td><td>0 — 60 sec.</td><td colspan="2">Workable when Auto locking is set to “ON” and Automatic locking setup is “ON”. Time can be changed by 10 seconds: 0 (OFF) — 60 (maximum).</td><td>Not supported by North American specifications</td></tr>
<tr><td rowspan="2">Rr defogger op. mode</td><td rowspan="2">15 min.</td><td>15 min.</td><td colspan="2">Wiper deicer stops in 15 minutes automatically after switch is turned to ON.</td><td rowspan="2"></td></tr>
<tr><td>Continuous</td><td colspan="2">The wiper deicer activates for 15 minutes and turns inactive for 2 minutes repeatedly until the switch is turned OFF.</td></tr>
<tr><td rowspan="2">Wiper deicer op. mode</td><td rowspan="2">15 min.</td><td>15 min.</td><td colspan="2">Wiper deicer stops in 15 minutes automatically after switch is turned to ON.</td><td rowspan="2"></td></tr>
<tr><td>Continuous</td><td colspan="2">The wiper deicer activates for 15 minutes and turns inactive for 2 minutes repeatedly until the switch is turned OFF.</td></tr>
<tr><td rowspan="2">Security Alarm Setup</td><td rowspan="2">ON</td><td>ON</td><td colspan="2">Security alarm (hazard, horn or siren) in active condition</td><td rowspan="2"></td></tr>
<tr><td>OFF</td><td colspan="2">Security alarm in inactive condition</td></tr>
<tr><td rowspan="2">Impact Sensor Setup</td><td rowspan="2">OFF</td><td>ON</td><td colspan="2">Enabled when the Impact Sensor Setup is set to “ON”. Impact sensor function becomes activated.</td><td rowspan="2"></td></tr>
<tr><td>OFF</td><td colspan="2">Impact sensor in inactive condition (Set Impact Sensor Setup of model without impact sensor to “OFF”.)</td></tr>
<tr><td rowspan="3">Alarm delay setup</td><td rowspan="3">ON</td><td></td><td colspan="2">After the keyless lock operation, the alarm monitor starts after the following delay time has passed.</td><td rowspan="3"></td></tr>
<tr><td>ON</td><td colspan="2">Delay time is 30 seconds.</td></tr>
<tr><td>OFF</td><td colspan="2">Delay time is 0 seconds.</td></tr>
</table>

Data	Initial setting value	Customize setting	Remarks	Destination Specifications
Lockout prevention	ON	ON	Lockout prevention in active condition (Lockout prevention does not operate if safety knob is locked by hand.)	
		OFF	Lockout prevention in inactive condition	
Impact sensor	OFF	ON	Vehicle is controlled in impact sensor equipped mode. (Set impact sensor to “OFF” in model without impact sensor. When set to ON, hazard, the horn or siren will operate after doors are locked by the keyless entry system operation (Alarm monitor start).)	Set to “ON” when an optional impact sensor is installed.
		OFF	Vehicle is controlled in no impact sensor mode.	
Siren setting	OFF	ON	Siren sounds when alarm operates. (Set siren setting to “OFF” in model without siren. When alarm operates horn does not sound if siren setting is set to “ON”.)	Not supported by North American specifications
		OFF	Horn sounds when alarm operates.	
Answer-back buzzer setup	ON	ON	Workable when answer-back buzzer setup is set to “ON”. When lock/unlock is selected by keyless entry system operated, hazard answer-back buzzer operates.	
		OFF	When lock/unlock is selected by keyless entry system operated, answer-back buzzer does not sound.	
Hazard answer-back setup	ON	ON	Workable when hazard answer-back setup is set to “ON” When lock/unlock is selected by keyless entry system operated, hazard answer-back buzzer operates.	
		OFF	When lock/unlock is selected by keyless entry system operated, hazard answer-back does not operate.	
Automatic locking setup	ON	ON	Workable when Automatic locking setup is set to “ON” Automatic locking operates.	Not supported by North American specifications
		OFF	Automatic locking does not operate.	
Ans.-back Buzzer	ON	ON	Vehicle is controlled in answer-back buzzer equipped mode.	Not supported by North American specifications
		OFF	Vehicle is controlled in answer-back buzzer non-equipped mode. (Set Ans.-back Buzzer to “OFF” in model without answer back buzzer.)	
Auto locking	ON	ON	Vehicle is controlled in auto locking equipped mode.	Not supported by North American specifications
		OFF	Vehicle is controlled in auto locking non-equipped mode. (Make sure to set to OFF on vehicles not equipped with the auto lock feature.)	
Initial keyless setting	—	—	—	
		Execution	Settings of keyless entry system are initialized. (Auto-lock time: 30 sec., Answer-back buzzer setup: ON, Hazard answer-back setup: ON, Automatic locking setup: ON, Ans.-back Buzzer: ON)	
Initial button setting	—	—	—	(Off delay time: Normal, Rr defogger op. mode: 15 min., Wiper deicer op. mode: 15 min., Lockout prevention: ON)
		Execution	Settings of each function are initialized.	
Initial Security setting	—	—	—	Not supported by North American specifications
		Execution	Settings of security system are initialized.	
Passive Alarm	OFF	ON	Enabled when passive arming is set to “ON”.	
		OFF		

Data	Initial setting value	Customize setting	Remarks	Destination Specifications
Door open warning (prevention of battery run-out)	OFF	ON	If detecting door open for 30 minutes, room light, key illumination and door warning light are turned off to prevent battery run-out.	
		OFF	Room light, key illumination and door warning light is not turned off.	
Dome Light Alarm Setting	OFF	ON	The room light lights by being interlocked with the activation of the alarm.	
		OFF	Room light does not illuminate even if the alarm is activated.	

5) After setting, make sure that vehicle equipment matches the changed settings in the {Current Data Display & Save}.

CAUTION:
- **The above settings must match the actual vehicle equipment for proper operation.**
- **Do not change settings other than the above while setting the functions.**
- **Be sure not to change Factory or Market setting except installation of new body integrated unit.**

NOTE:
For details concerning the operation procedure, refer to the “PC application help for Subaru Select Monitor”.

9. FUNCTION CHECK

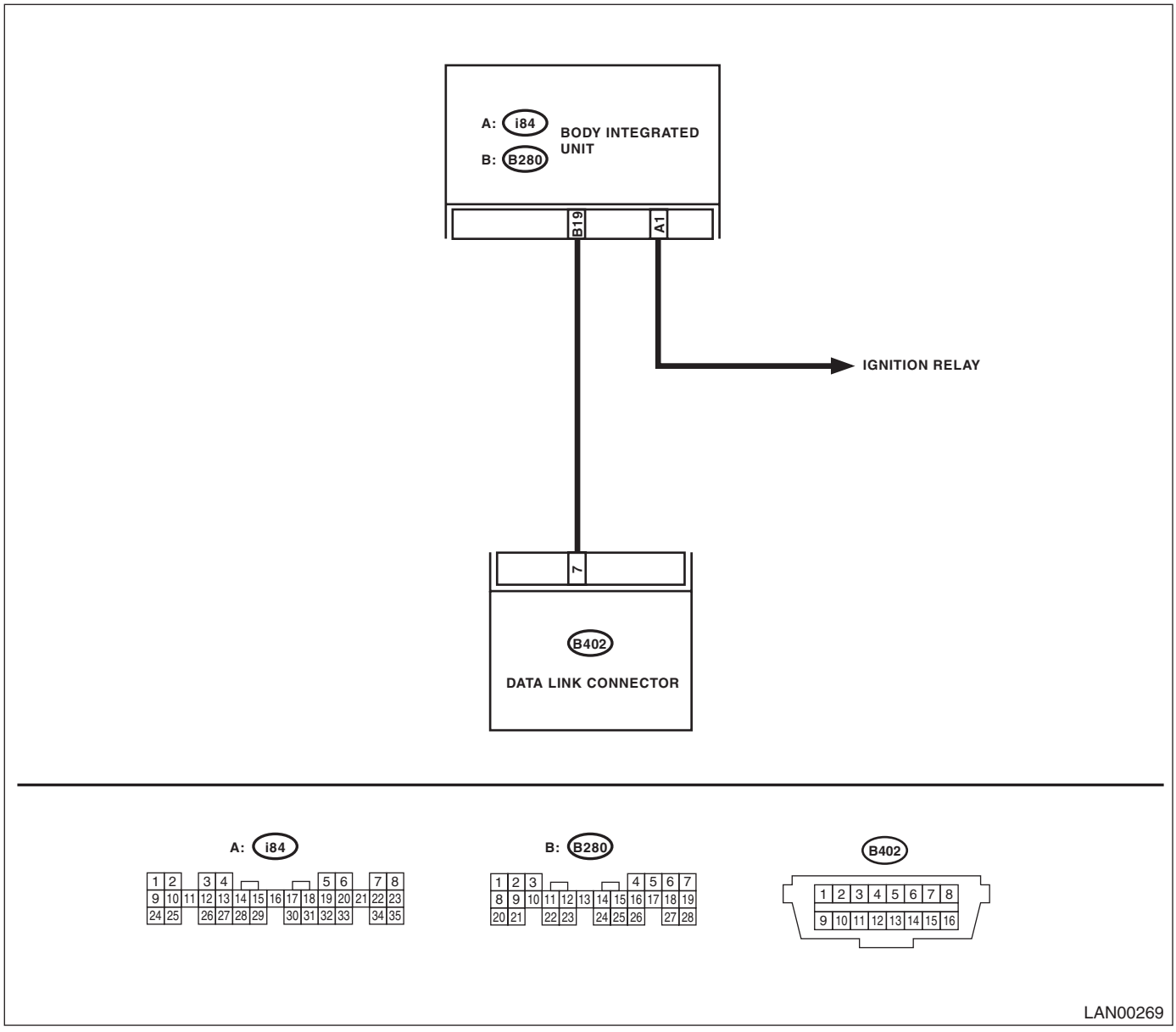
In order to check the body integrated unit function, inspect the body integrated unit and actuator using Subaru Select Monitor without operating switches.
1) On the «Main Menu» display screen, select {Each System Check}.
2) On the «System Selection Menu» display screen, select the {Integ. unit mode}.
3) On the «Integ. unit mode failure diag.» display screen, select the {Function check}.
4) Select the item to be operated on the «Function check» display screen and select the [OK].
5) Pressing [OK] starts, [NO] cancels the operation and [OK] returns to the System Operation Check Mode display screen.

NOTE:
If not equipped (based on area or condition), process will not go on.

B: INSPECTION

1. COMMUNICATION FOR INITIALIZING IMPOSSIBLE

DETECTING CONDITION:
Faulty harness connectors
TROUBLE SYMPTOM:
Not communicable with Subaru Select Monitor.
WIRING DIAGRAM:



	Step	Check	Yes	No
1	**CHECK IGNITION SWITCH.**	Is the ignition switch ON?	Go to step **2**.	Turn the ignition switch to ON, and select Integ. Unit mode using Subaru Select Monitor.
2	**CHECK BATTERY.** 1) Turn the ignition switch to OFF. 2) Measure the battery voltage.	Is the voltage 11 V or more?	Go to step **3**.	Charge or replace the battery.
3	**CHECK BATTERY TERMINAL.**	Is there poor contact at the battery terminal?	Repair or tighten the battery terminal.	Go to step **4**.
4	**CHECK COMMUNICATION OF SUBARU SELECT MONITOR.** 1) Turn the ignition switch to ON. 2) Using the Subaru Select Monitor, check whether communication to other system can be executed normally.	Is the system name displayed?	Go to step **7**.	Go to step **5**.
5	**CHECK COMMUNICATION OF SUBARU SELECT MONITOR.** 1) Turn the ignition switch to OFF. 2) Disconnect the body integrated unit connector. 3) Turn the ignition switch to ON. 4) Check whether communication to other system can be executed normally.	Is the system name displayed?	Go to step **7**.	Go to step **6**.
6	**CHECK HARNESS CONNECTOR BETWEEN EACH CONTROL MODULE AND SUBARU SELECT MONITOR.** 1) Turn the ignition switch to ON. 2) Disconnect the body integrated unit connector. 3) Measure the resistance between data link connector and chassis ground. ***Connector & terminal*** ***(B402) No. 7 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **7**.	Repair the harness and connector between each control unit and Subaru Select Monitor.
7	**CHECK OUTPUT SIGNAL TO BODY INTEGRATED UNIT.** 1) Turn the ignition switch to ON. 2) Measure the voltage between body integrated unit and chassis ground. ***Connector & terminal*** ***(B402) No. 7 (+) — Chassis ground (–):***	Is the voltage less than 1 V?	Go to step **8**.	Repair the harness and connector between each control unit and Subaru Select Monitor.
8	**CHECK HARNESS CONNECTOR BETWEEN BODY INTEGRATED UNIT AND DATA LINK CONNECTOR.** Measure the resistance between body integrated unit and data link connector. ***Connector & terminal*** ***(B402) No. 7 — (B280) No. 19:***	Is the resistance less than 1 Ω?	Go to step **9**.	Repair the harness and connector between body integrated unit and Subaru Select Monitor.
9	**CHECK INSTALLATION OF BODY INTEGRATED UNIT CONNECTOR.** Turn the ignition switch to OFF.	Is the body integrated unit connector inserted into body integrated unit until the clamp locks onto it?	Go to step **10**.	Insert the body integrated unit connector into body integrated unit.
10	**CHECK POWER SUPPLY CIRCUIT.** 1) Turn the ignition switch to ON (engine OFF). 2) Measure the ignition voltage between body integrated unit connector and chassis ground. ***Connector & terminal*** ***(i84) No. 1 (+) — Chassis ground (–):***	Is the voltage 10 V or more?	Go to step **11**.	Repair the open circuit of harness between body integrated unit and battery.

	Step	Check	Yes	No
11	**CHECK HARNESS CONNECTOR BETWEEN BODY INTEGRATED UNIT AND CHASSIS GROUND.** 1) Turn the ignition switch to OFF. 2) Disconnect the connector from body integrated unit. 3) Measure the resistance of harness between the body integrated unit and chassis ground. ***Connector & terminal*** ***(B280) No. 19 — Chassis ground:***	Is the resistance 1 MΩ or more?	Go to step **12**.	Repair the poor contact of harness between body integrated unit and ground.
12	**CHECK POOR CONTACT OF CONNECTORS.**	Is there poor contact at control unit ground and Subaru Select Monitor?	Repair the poor contact of connector.	Replace the body integrated unit. <Ref. to SL-51, Body Integrated Unit.>

CAUTION:
When replacing body integrated unit on the model with immobilizer system, refer to the "PC application help for Subaru Select Monitor".