

## 6. Subaru Select Monitor

### A: OPERATION

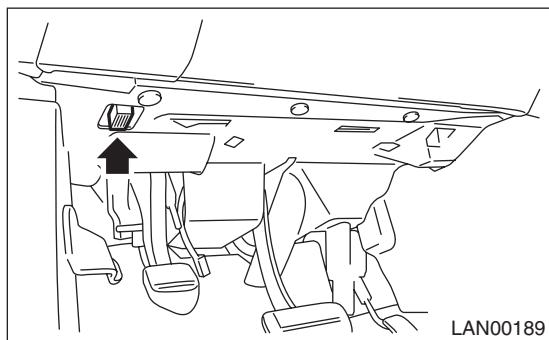
#### 1. READ DIAGNOSTIC TROUBLE CODE (DTC)

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)-30, 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)-28, 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

| Items 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<br>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<br>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<br>(Temporarily)  | CAN data input value               | It is normal when DTC is not been input even if<br>this code is displayed.<br>Reception from VDC  |
| Blower Fan Steps        | 0 — 2 levels                  | CAN data input value               | 0: OFF, 1: Low, 2: 2 levels or more<br>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<br>monitor  |
| Coolant Temp.           | -40 — 130°C                   | CAN data input value               | Reception from ECM  |
| Vehicle longitudinal G  | m/s <sup>2</sup>              | CAN data input value               | Reception from VDC unit   |
| SPORT Shift Stages      | 0 — 7 levels                  | CAN data input value               | Manual mode operating information (0: Light<br>OFF; 1 — 5: Gear display; 6: Fail;<br>7: ATF temperature High/Low)<br>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<br>position (There is no 8 input.)<br>8 is displayed in manual mode.<br>Reception from TCM |
| Off delay time          | OFF, Short,<br>Normal, Long   | Body integrated unit setting items | Customize setting   |
| Auto lock time          | 20, 30, 40, 50,<br>60 seconds | Body integrated unit setting items | Customize setting   |

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## LAN SYSTEM (DIAGNOSTICS)

### 4. DISPLAY OF ON/OFF DATA

| Items 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 rear gate/trunk 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<br>Except for 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<br>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   |
| 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 a 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 relay 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<br>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   |

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## LAN SYSTEM (DIAGNOSTICS)

| Items to be displayed    | Unit of measure         | Description                       | Note   |
|--------------------------|-------------------------|-----------------------------------|--|
| 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 to 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 to 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 illumin. 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   |
| 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<br>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<br>Reception from ECM and transmission to combination meter  |
| SPORT Lamp               | On/Off                  | CAN data input value              | SPORT mode switch ON<br>Reception from TCM and transmission to combination meter   |
| SPORT Blink              | Blink/Off               | CAN data input value              | Blinks when there is an AT failure<br>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<br>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<br>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<br>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<br>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 | When standard tire is large (18 in. or more)<br>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   |

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| Items to be displayed   | Unit of measure        | Description                       | Note  |
|-------------------------|------------------------|-----------------------------------|---|
| Turbo                   | Turbo/Non-turbo        | CAN data input value              | OFF   |
| 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 /<br>MT model | CAN data input value              | AT  |
| Blower fan information  | ON/OFF                 | CAN data input value              | ON when blower fan is operating<br>Reception from ECM   |
| Keyless buzzer          | ON/OFF                 | Body integrated unit output value | ON when keyless answer-back buzzer operates<br>(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<br>Reception from center display (NAVI monitor and MFD)                 |
| NAVI Failure            | OK/NG                  | CAN data input value              | NG when there is a navigation system failure<br>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<br>Reception from auto A/C module                      |
| EBD Warning Light       | OK/OFF                 | CAN data input value              | OK when EBD warning light is illuminated<br>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<br>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<br>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<br>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<br>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     |            |            |       | Not supported by North American specifications<br>(Unit: seconds)   |  |  |
| Rr defogger op. mode                                 | normal                 |            | continuous |       | Normal: Off at 15 minutes of operation<br>Continuous: Operations from switch ON to OFF  |  |  |
| Wiper deicer op. mode                                | normal                 |            | continuous |       | Normal: Off at 15 minutes of operation<br>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<br>OFF: Warning device not operated   |  |  |
| Impact Sensor Setup                                  | ON                     | OFF        |            |       | ON: Impact sensor operation possible<br>OFF: Impact sensor not operated<br>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<br>OFF: Monitor after reception of the keyless lock signal           |  |  |
| Lockout prevention                                   | ON                     | OFF        |            |       | Not supported by North American specifications  |  |  |
| Impact sensor  | support                | no support |            |       | Yes: Impact sensor equipped<br>No: Impact sensor not equipped<br>Always set to NO 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<br>OFF: Answer-back buzzer not operated   |  |  |
| Hazard answer-back setup                             | ON                     | OFF        |            |       | ON: Hazard answer-back operation possible<br>OFF: Hazard answer-back not operated   |  |  |
| Automatic locking setup                              | ON                     | OFF        |            |       | Not supported by North American specifications  |  |  |
| Ans.-back Buzzer                                     | support                | no support |            |       | Yes: Vehicle equipped with answer-back buzzer<br>No: Vehicle not equipped with answer-back buzzer   |  |  |
| Auto locking   | support                | no support |            |       | Not supported by North American specifications (Set to No)  |  |  |
| Door open warning<br>(prevention of battery run-out) | support                | no support |            |       | Yes: Door interlocked room light goes off when door is open for 10 minutes consecutively.<br>No: Room light remains illuminated until door is closed.   |  |  |
| Dome Light Alarm Setting                             | support                | no support |            |       | Yes: Room light continuously lit while the alarm is triggered.<br>No: Even if the alarm is triggered, the room light illuminates and then turns off.    |  |  |
| Map Light Setting                                    | support                | no support |            |       | Yes: The map light illuminates together with the door interlocked room light.<br>No: Does not illuminate together with the door interlocked room light. |  |  |
| A/C ECM setting                                      | support                | no support |            |       | Model with auto A/C (Set to 'Yes')  |  |  |
| P/W ECM setting                                      | support                | no support |            |       | Not supported in North American specifications (Set to No)  |  |  |
| Center display setting                               | support                | no support |            |       | Yes: Vehicle equipped with MFD and navigation display<br>No: Vehicle not equipped with MFD nor navigation display                                       |  |  |

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| Item                      | Item to confirm |            | Remarks   |
|---------------------------|-----------------|------------|---|
| Wiper deicer              | support         | no support | Yes: Vehicle equipped with wiper deicer<br>No: Vehicle not equipped with wiper deicer |
| Rear fog light setting    | support         | no support | Not supported in North American specifications (Set to No)                            |
| 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)

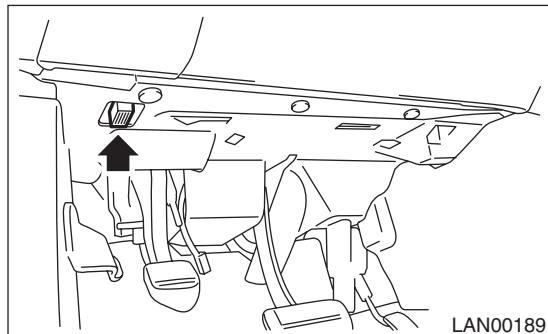
### CAUTION:

**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 and the 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                   |  |
| wiperdeicer  | 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<br>(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<br>(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 concociting with room light and going off with ignition switch turned to ON.

7) Perform the Factory or Market setting. On the «ECU 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)-21, 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 {Clear 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 {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 {ECU 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.

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

# Subaru Select Monitor

## LAN SYSTEM (DIAGNOSTICS)

| Data  | Initial setting value | Customize setting | Remarks  | Destination Specifications  |
|---|-----------------------|-------------------|--|---|
| 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. (Set Auto locking to "OFF" in model without auto locking.)  |   |
| 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               | If detecting door open for 30 minutes, room light, key illumination and door warning light are turned off to prevent battery run-out.  |   |
| Door open warning (prevention of battery run-out) | OFF                   | ON                | Room light, key illumination and door warning light is not turned off.   |   |
|   |                       | OFF               | The room light lights by being interlocked with the activation of the alarm.   |   |
| Dome Light Alarm Setting                          | OFF                   | ON                | Room light does not illuminate even if the alarm is activated.   |   |
|   |                       | OFF               |  |   |

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.