

## SYSTEM DESCRIPTION

### 1. LIGHTING SYSTEM

- (a) Illumination control system (Illuminated entry system):

When the doors are unlocked by a key or transmitter operation, or when a door is opened or closed, the illuminated entry system turns on the room light, map light, foot light and ignition key cylinder light\*1 or transponder key amplifier\*2.

- (1) The main body ECU receives the following signals (A).
- Door courtesy switch signal
  - Door detection switch signal
  - Ignition switch signal
- (2) The main body ECU controls the following signal based on the signals listed in A.
- Illumination operation signal
- (3) The main body ECU controls the on/off and fade-in/fade-out operation of the following parts.
- Room light
  - Map light
  - Foot light
  - Ignition key cylinder light\*1 or transponder key amplifier\*2

HINT:

\*1: w/o Engine immobiliser system

\*2: w/ Engine immobiliser system

- (b) Battery saver system:

When the ignition switch is turned off and any of the doors is open continuously for 20 minutes, the main body ECU turns the illumination operation signal off. As a result, the room light, map light, foot light and ignition key cylinder lights\*1 or transponder key amplifier\*2 turn off.

HINT:

\*1: w/o Engine immobiliser system

\*2: w/ Engine immobiliser system

- (1) The main body ECU receives the following signals (B).
- Door courtesy switch signal
  - Ignition switch signal
- (2) The main body ECU controls the following signal based on the signals listed in B (C).
- Illumination operation signal
- (3) The main body ECU controls the illumination period of the following parts based on the signals listed in C.
- Room light
  - Map light
  - Foot light
  - Ignition key cylinder light\*1 or transponder key amplifier\*2

HINT:

\*1: w/o Engine immobiliser system

\*2: w/ Engine immobiliser system

- (c) Manual light control system:  
This system functions when lights such as the headlights and taillights are illuminated by manual operation of the light control switch.
- (1) The main body ECU receives the following signals (D).
    - Light control switch signal
    - Headlight dimmer switch signal
    - Front fog light switch signal
  - (2) The main body ECU controls the following signals based on the signals listed in D (E).
    - Headlight relay operation signal
    - Taillight relay operation signal
    - Daytime running light No. 2 relay operation signal
    - Daytime running light No. 3 relay operation signal
    - Daytime running light No. 4 relay operation signal
    - Front fog light relay operation signal
  - (3) The main body ECU controls the on/off operation of the following parts based on the signals listed in E.
    - Headlight (LOW)
    - Headlight (HIGH)
    - Side marker light (front and rear)
    - Front fog light
- (d) Light auto turn off system:  
When the headlights and taillights are illuminated by the operation of the light control switch, if the ignition switch is turned OFF, this system continues illuminating the headlights and taillights for approximately 30 seconds, and then turns off the lights. However, when all the doors are locked manually, using the door lock button, using the key or pressing LOCK on the transmitter turns the headlights and taillights off immediately.
- (1) The main body ECU receives the following signals (F).
    - Door courtesy switch signal
    - Ignition switch signal
  - (2) The main body ECU controls the following signals based on the signals listed in F (G).
    - Headlight relay operation signal
    - Taillight relay operation signal
    - Daytime running light No. 2 relay operation signal
    - Daytime running light No. 3 relay operation signal
    - Daytime running light No. 4 relay operation signal
    - Front fog light relay operation signal

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- (3) The main body ECU controls the illumination period of the following parts based on the signals listed in G.
- Headlight (LOW)
  - Headlight (HIGH)
  - Side marker light (front and rear)
  - Front fog light
- (e) Daytime running light system:  
This system is directly connected to the high-beam headlights and is designed to automatically activate the daytime running lights in order to increase the visibility of the vehicle.
- (1) The main body ECU receives the following (H).
- Ignition switch signal
  - Engine speed
  - Parking brake switch signal
  - Light control switch signal
- (2) The main body ECU controls the following signal based on the signals listed in H (I).
- Daytime running light No. 2 relay operation signal
- (3) The main body ECU controls the on/off operation of the following part based on the signal listed in I.
- Headlight (HIGH)