

## SYSTEM DESCRIPTION

### 1. LIGHTING SYSTEM

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

When a door is unlocked through a key or transmitter operation, or if a door is opened or closed, the illuminated entry system turns on the interior lamp and the ignition key illumination.

- (1) The multiplex network body ECU receives the following.
  - Door courtesy switch signal
  - Door detection switch signal
  - Ignition switch signal
- (2) The multiplex network body ECU controls the following based on the signals listed in (1).
  - Illumination operation signal
- (3) The multiplex network body ECU controls the on/off and fade-in/fade-out operation of the following.
  - Room lamp assy No.1
  - Ignition key cylinder lamp
  - Personal lamp (Overhead J/B)

#### (b) Manual light control system:

This system functions if lights such as the headlamps and taillamps come on by manual operation of the light control switch.

- (1) The multiplex network body ECU receives the following.
  - Light control switch signal
  - Fog lamp switch signal
- (2) The multiplex network body ECU controls the following based on the signals listed in (1).
  - HEAD relay operation signal
  - TAIL relay operation signal
  - FOG relay operation signal
  - DRL relay No.2
  - DRL relay No.3
  - DRL relay No.4
- (3) The multiplex network body ECU controls the on/off operation of the following signals based on the signals listed in (2).
  - Headlamp (Low)
  - Clearance lamp
  - Taillamp
  - License plate lamp
  - Fog lamp

#### (c) Light auto turn off system:

When the headlamps and taillamps are on through the operation of the automatic light control system or through the light control switch, if the ignition switch is turned off and driver side door is opened, this system will turn the headlamps and taillamps off immediately.

- (1) The multiplex network body ECU receives the following.
  - Door courtesy switch signal
  - Ignition switch signal
- (2) The multiplex network body ECU controls the following based on the signals listed in (1).
  - HEAD relay operation signal
  - TAIL relay operation signal

- (3) The multiplex network body ECU controls the illuminating period based on the signals listed in (2).
  - Headlamp (Low)
  - Headlamp (Hi)
  - Clearance lamp
  - Taillamp
  - License plate lamp
  - Fog lamp
- (d) Automatic light control system:

When the light control switch is in the AUTO position, the automatic light control sensor detects ambient light and automatically turns the headlamps and taillamps on or off accordingly.

  - (1) The multiplex network body ECU receives the following.
    - Light control switch signal
    - Automatic light control sensor signal
  - (2) The multiplex network body ECU controls the following based on the signals listed in (1).
    - HEAD relay operation signal
    - TAIL relay operation signal
  - (3) The multiplex network body ECU controls the on/off operation of the following.
    - Headlamp (Low)
    - Clearance lamp
    - Taillamp
    - License plate lamp
- (e) Daytime running light system:

This system is directly connected to the high-beam headlamps and is designed to automatically activate the daytime running light in order to remain highly visible to other vehicles.

  - (1) The multiplex network body ECU receives the following.
    - Ignition switch signal
    - Generator signal
    - Parking brake switch signal
    - Light control switch signal
  - (2) The multiplex network body ECU controls the following based on the signals listed in (1).
    - DRL relay operation signal
  - (3) The multiplex network body ECU controls the on/off operation of the following.
    - Headlamp (Hi)