

INTERIOR ROOM LAMP

PDF:26410

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System Description

AKS000W0

When spot lamp switch is in DOOR position, spot lamp ON/OFF is controlled by timer according to signals from switches including key switch, front door switch driver side and assist side, unlock and lock signal from key fob, door lock and unlock switch, key cylinder lock and unlock switch, ignition switch.

When spot lamp turns ON, there is a gradual brightening over 1 second. When spot lamp turns OFF, there is a gradual dimming over 1 second.

The spot lamp timer is controlled by the BCM.

Spot lamp timer control settings can be changed with CONSULT-II.

POWER SUPPLY AND GROUND

Power is supplied at all times:

- through 10A fuse [No.21, located in the fuse block (J/B)]
- to key switch terminal 2.
- through 40A fusible link [letter F, located in the fuse and fusible link box]
- to BCM terminal 7.

When the key is removed from ignition key cylinder, power is interrupted:

- through key switch terminal 1
- to BCM terminal 62.

With the ignition switch in the ON or START position, power is supplied:

- through 10A fuse [No.1, located in the fuse block (J/B)]
- to BCM terminal 35.

When all door is closed, power is supplied at times.

- through BCM terminal 24
- to stop lamp terminal 3 and
- to vanity mirror lamp terminal 1.

Ground is supplied:

- to BCM terminal 8
- through grounds E17,E43 and F152.

When the front driver side door is opened, ground is supplied:

- through case ground of front door switch (driver side)
- to BCM terminal 14.

When the front passenger side door is opened, ground is supplied:

- through case ground of front door switch (passenger side)
- to BCM terminal 10.

When the back door is opened, ground is supplied:

- through case ground of back door switch
- to BCM terminal 18.

When the front driver side door or passenger side is unlocked by the door lock and unlock switch, BCM receives unlock signal with power window serial link

- through grounds M30 and M66
- to power window main switch terminal 15 (door lock and unlock switch) or power window sub switch 11
- from power window main switch terminal 12 or power window sub switch16
- to BCM terminal 74

When the front driver side door is unlocked by the front door key cylinder switch, BCM receives information by communicating with power window main switch:

- through grounds M30 and M66
- to front door key cylinder switch terminal 2
- from front door key cylinder switch terminal 1
- to power window main switch terminal 7

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- from power window main switch terminal 12
- to BCM terminal 74.

When a signal, or combination of signals is received by BCM, ground is supplied:

- through BCM terminal 32
- to spot lamp terminal 2.

With power and ground are supplied, the interior lamp illuminates.

SWITCH OPERATION

When spot lamp switch is ON, ground is supplied:

- through grounds M30 and M66
- to spot lamp terminal 1.

And power is supplied:

- from BCM terminal 24
- to spot lamp terminal 3.

When vanity mirror lamp (driver side and/or passenger side) is ON, ground is supplied:

- through grounds M30 and M66
- to vanity mirror lamp terminal 2.

And power is supplied:

- from BCM terminal 24
- to vanity mirror lamp terminal 1.

SPOT LAMP TIMER OPERATION

When spot lamp switch is in DOOR position, and when all conditions below are met, BCM performs timer control (maximum 30 seconds) for spot lamp ON/OFF.

In addition, when spot lamp turns ON or OFF there is gradual brightening or dimming over 1 second.

Power is supplied

- to 10A fuse [No. 21 (located in the fuse block (J/B))]
- through key switch terminal 2.

When all doors are closed (all door switches OFF) and key is removed from key cylinder (key switch OFF), power will not be supplied to BCM terminal 62.

Ground is supplied

- from BCM terminal 74
- to power window main switch (front door lock and unlock switch) terminal 12 (door lock and unlock switch with interruption detection function for all door window).

At this time, BCM detects that driver door is unlocked. It determines that spot lamp timer operation conditions are met, and turns the spot lamp ON for 30 seconds.

When all doors are closed (all door switches OFF) and key is in key cylinder (key switch ON),

Power is supplied

- through key switch terminal 1
- to BCM terminal 62.

When key is removed from key switch (key switch OFF), power supply to BCM terminal 62 is terminated. BCM detects that key has been removed. It determines that spot lamp timer conditions are met, and turns the spot lamp ON for 30 seconds.

When driver door opens → closes, and the key is not inserted in the key switch (key switch OFF), BCM terminal 14 changes between 0V (door open) → 5V (door closed). The BCM determines that conditions for spot lamp operation are met and turns the interior lamp ON for 30 seconds.

Timer control is canceled under the following conditions.

- Driver door is locked (When locked key fob or power window main switch (doorlock and unlock switch, door key cylinder switch)
- Driver door is opened (driver door switch turns ON)
- Ignition switch ON.

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INTERIOR LAMP BATTERY SAVER CONTROL

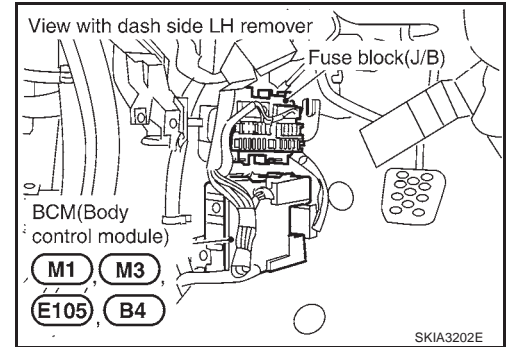
If the room lamp remains illuminated by the door switch open signal, or if the room lamp switch is in the ON position for more than 30 minutes after the ignition switch is turned to the OFF position, the BCM will automatically turn off the spot lamp, step lamp, and/or personal lamp and vanity mirror lamp.

After lamps turn OFF by the battery saver system, the lamps illuminate again when:

- signal from key fob, or door lock and unlock switch, or key cylinder is locked or unlocked,
- door is opened or closed,
- key is removed from ignition key cylinder or inserted in ignition key cylinder.

Interior lamp battery saver control period can be changed by the function setting of CONSULT-II.

Component Parts and Harness Connector Location



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