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PRECAUTION

PRECAUTION PFP:00011

Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

 To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.

Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.

 Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

Precaution

- Do not touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- Do not leave bulb out of headlamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of the headlamp. When replacing the bulb, be sure to replace it with a new one.
- Adjust aiming by tightening aiming screw. (To adjust it toward loosening side, first loosen adjusting screw, and then make adjustment by tightening.)
- To remove soil or sealant of bulbs, do not use organic solvent (thinner, gasoline, etc.)
- When replacing bulb, be sure to hold bulb socket and pull it out straight. If wiring harness of the bulb is pulled at an angle, the bulb may be caught in the lamp, making it difficult to take out.

Wiring Diagrams and Trouble Diagnosis

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When you read wiring diagrams, refer to the followings:

- Refer to GI-14, "How to Read Wiring Diagrams" in GI section
- Refer to <u>PG-2</u>, "<u>POWER SUPPLY ROUTING</u>" for power distribution circuit in PG section

When you perform trouble diagnosis, refer to the followings:

- Refer to GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES" in GI section
- Refer toGI-23. "How to Perform Efficient Diagnosis for an Electrical Incident" in GI section

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HEADLAMP PFP:26010

System Description DESCRIPTION

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The headlamps are controlled by the lighting switch which is built into the combination switch. Power is supplied at all times

- through 15A fuse (No. 40, located in the fuse and fusible link box)
- to lighting switch terminal 8
- through 15A fuse (No. 41, located in the fuse and fusible link box)
- to lighting switch terminal 5
- through 15A fuse (No. 38, located in the fuse and fusible link box)
- to driving lamp relay terminal 3.

LOW BEAM OPERATION

When the lighting switch is turned to the 2ND position and placed in LOW position, power is supplied

- from lighting switch terminal 10
- to headlamp LH terminal 3
- from lighting switch terminal 7
- to headlamp RH terminal 3

Each headlamp terminal 2 supplies ground through grounds E24 and E50.

With power and ground supplied, the low beams will illuminate.

HIGH BEAM OPERATION/FLASH-TO-PASS OPERATION

When the lighting switch is turned to the 2ND position and placed in HIGH position or PASS position, power is supplied

- from lighting switch terminal 6
- to headlamp RH terminal 1
- from lighting switch terminal 9
- to headlamp LH terminal 1and
- to combination meter terminal 20 for the HIGH BEAM indicator.

Ground is supplied

- to combination meter terminal 19 through grounds M27 and M70.
- to each headlamp terminal 2 through grounds E24 and E50.

With power and ground supplied, the high beams and the HIGH BEAM indicator illuminate.

DRIVING LAMP OPERATION

To turn the driving lamp on, push the driving lamp switch when the lighting switch is turned to the 2ND position and placed in HIGH position or PASS position, power is supplied

- from lighting switch terminal 9
- to headlamp LH terminal 1
- to driving lamp relay-1 terminal 1
- to driving lamp switch terminal 7
- to combination meter terminal 20 for the HIGH BEAM indicator
- to driving lamp relay-2 terminal 5
- to driving lamp relay-2 terminal 3
- through driving lamp switch terminal 6
- from driving lamp relay-1 terminal 5
- to driving lamp LH and RH terminal 2

Ground is supplied

- to driving lamp relay-1 terminal 2, through driving lamp relay-2 terminal 7
- to driving lamp relay-2 terminal 6, through grounds E24 and E50
- to driving lamp switch terminal 4, through driving lamp relay-2 terminal 1

- to driving lamp relay-2 terminal 2, through grounds E24 and E50
- to driving lamp LH terminal 1, through ground R8
- to driving lamp RH terminal 1 and 3, through ground R8
- to combination meter terminal 19, through grounds M27 and M70
- to each headlamp terminal 2, through grounds E24 and E50.

With power and ground supplied, the high beams, driving lamp and the HIGH BEAM indicator illuminate.

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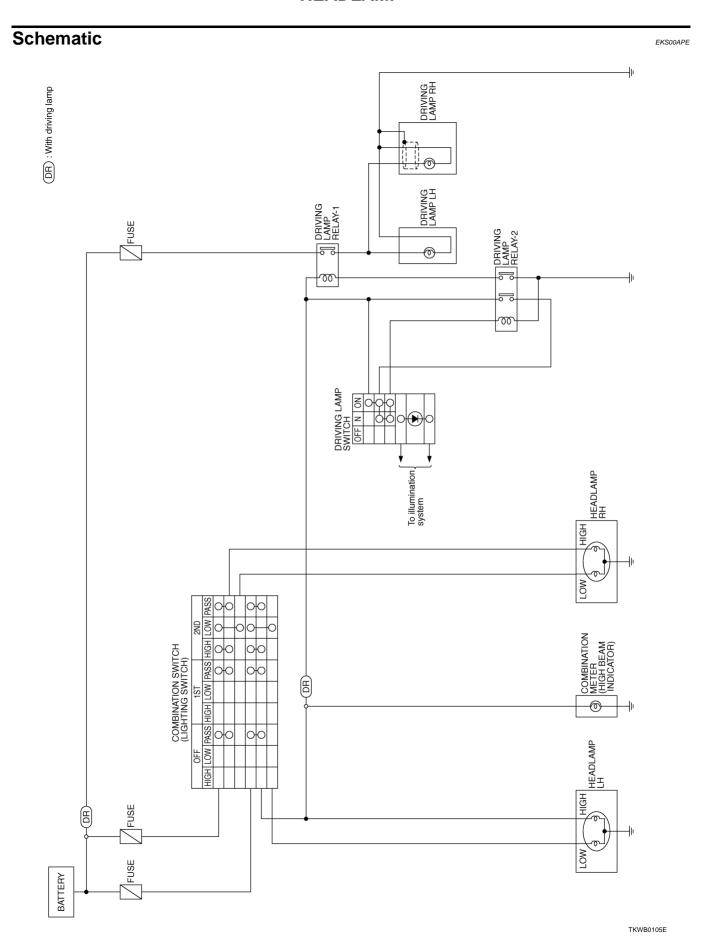
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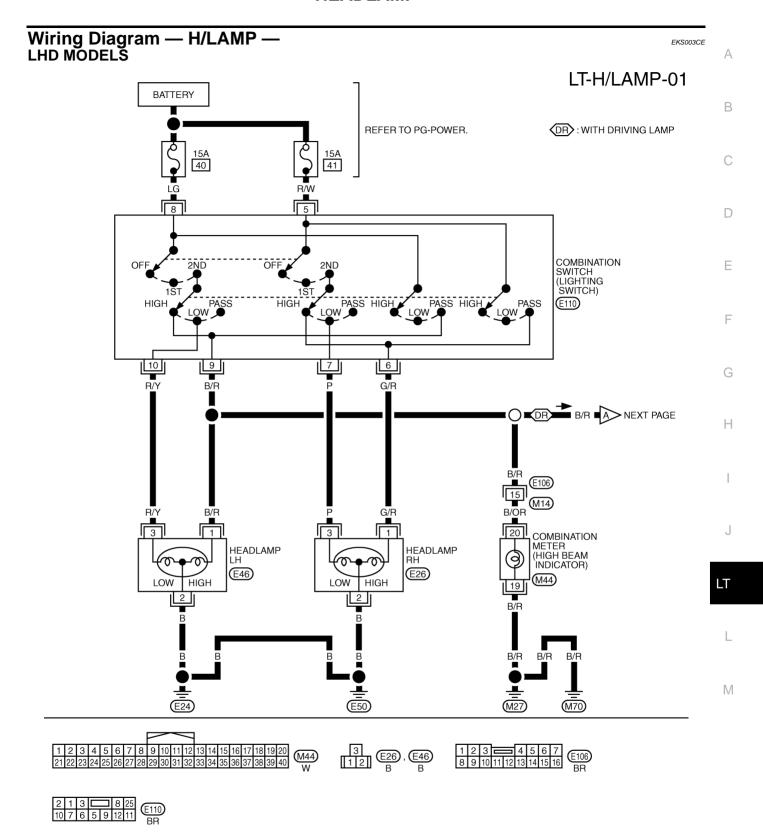
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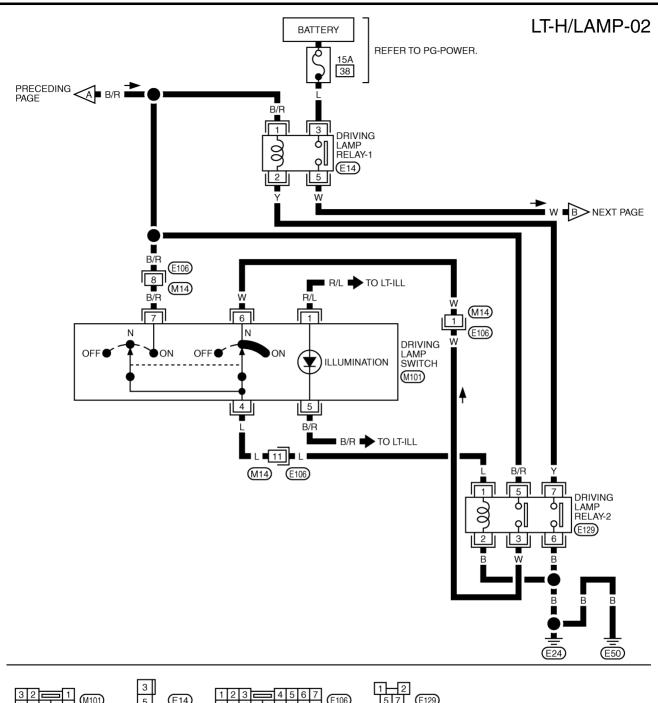
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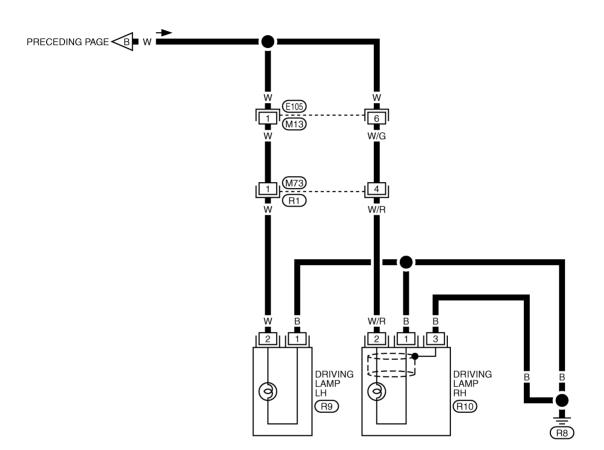
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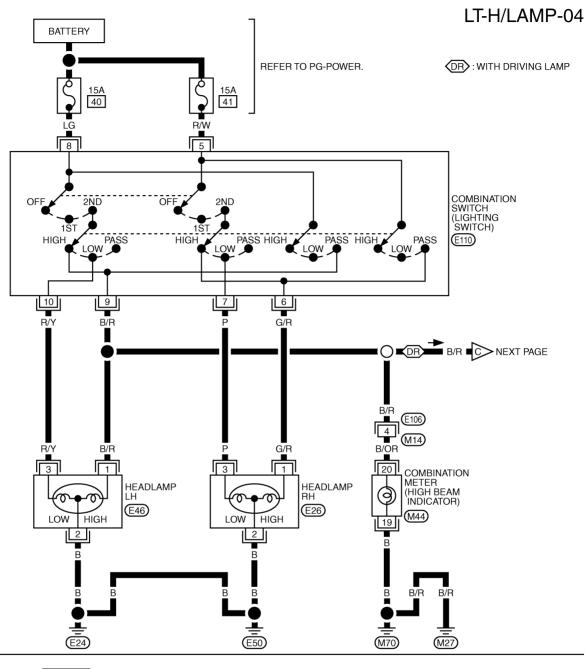
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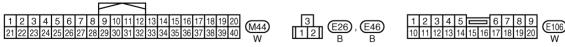
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1 2 3 4 5 6 7 8 9 10 11 12 W 1 2 1 R9 GY W

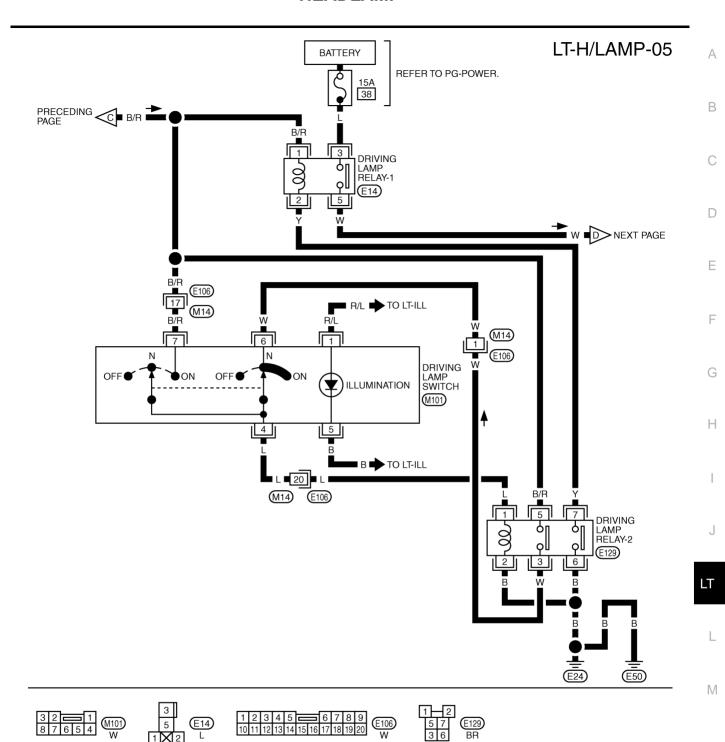
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RHD MODELS



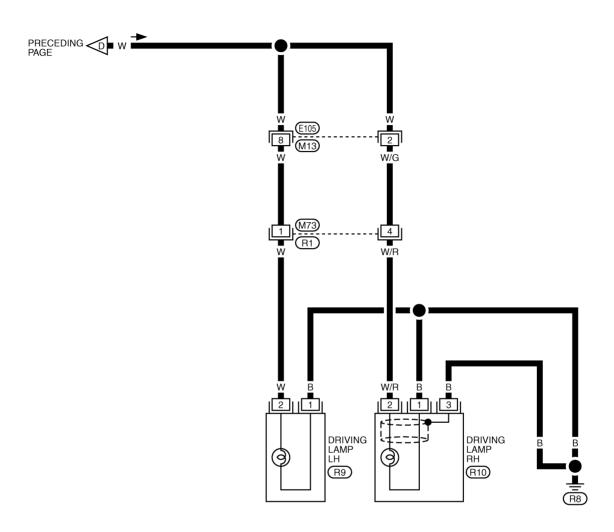


2 1 3 8 25 10 7 6 5 9 12 11 E110 BR



TKWA1519E

LT-H/LAMP-06





TKWA1520E

Symptom	Possible cause	Repair order	
Headlamp LH do not operate.	1. Bulb	Check bulb. Check grounds E24 and E50.	
	2. Grounds E24 and E50 3. 15A fuse 4. Lighting switch	 Check 15A fuse (No. 40, located in fuse and fusible link box). Verify battery positive voltage is present at terminal 8 of lighting switch. 	
		4. Check lighting switch.	
	1. Bulb 2. Grounds E24 and E50 3. 15A fuse 4. Lighting switch	1. Check bulb.	
		2. Check grounds E24 and E50.	
Headlamp RH do not operate.		 Check 15A fuse (No. 41, located in fuse and fusible link box). Verify battery positive voltage is present at terminal 5 of lighting switch. 	
		4. Check lighting switch.	
High beam LH do not operate, but low beam LH operates.	Bulb Open in high beam LH circuit Lighting switch	1. Check bulbs.	
		Check the wire between lighting switch terminal 9 an headlamp LH terminal 1 for an open circuit.	
		3. Check lighting switch.	
Low beam LH does not operate, but high beam LH operates.	Bulb Open in low beam LH circuit Lighting switch	1. Check bulb.	
		Check the wire between lighting switch terminal 10 and headlamp LH terminal 3 for an open circuit.	
		3. Check lighting switch.	
High beam RH do not operate, but low beam RH operates.	Bulb Open in high beam RH circuit Lighting switch	1. Check bulbs.	
		Check the wire between lighting switch terminal 6 and headlamp RH terminal 1 for an open circuit.	
		3. Check lighting switch.	
Low beam RH does not operate, but high beam RH operates.	Bulb Open in low beam RH circuit Lighting switch	1. Check bulb.	
		2. Check the wire between lighting switch terminal 7 and headlamp RH terminal 3 for an open circuit.	
		3. Check lighting switch.	

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Symptom	Possible cause	Repair order
High beam indicator does not work.	1. Bulb 2. Grounds M27 and M70 3. Open in high beam circuit	Check bulb in combination meter. Check grounds M27 and M70. Check the wire between lighting switch terminal 9 and combination meter terminal 20 for an open circuit.
Driving lamp does not operate, but high beam LH operates.	 1. 15A fuse 2. Open in driving lamp switch 3. Driving lamp switch circuit 4. Driving lamp relay-2 5. Open in driving lamp relay-2 circuit 6. Grounds E24 and E50 7. Driving lamp relay-1 8. Open in driving lamp relay-1 circuit 9. Open driving lamp circuit 10.Ground R8 11.Bulb 	 Check 15A fuse (No. 38, located in fuse and fusible link box). Verify battery positive voltage is present at terminal 3 of driving lamp relay-1. Check the wire between lighting switch terminal 9 and driving lamp switch terminal 7 for an open circuit. Check driving lamp switch. Check driving lamp relay-2. Check the wire between driving switch terminal 4 and driving lamp relay-2 terminal 1 for an open circuit. Check the wire between driving switch terminal 6 and driving lamp relay-2 terminal 3 for an open circuit. Check the wire between lighting switch terminal 9 and driving lamp relay-2 terminal 5 for an open circuit. Check the wire between driving lamp relay-1 terminal 2 and driving lamp relay-2 terminal 7 for an open circuit. Check grounds E24 and E50. Check driving lamp relay-1. Check the wire between lighting switch terminal 9 and driving lamp relay-1 terminal 1 for an open circuit. Check the wire between driving lamp relay-1 terminal 5 and driving lamp terminal 2 for an open circuit. Check ground R8. Check bulbs.

Aiming Adjustment for Headlamp

EKS003CG

When performing headlamp aiming adjustment, use an aiming machine, aiming wall screen or headlamp tester. Aimers should be in good repair, calibrated and operated in accordance with respective operation manuals.

If any aimer is not available, aiming adjustment can be done as follows:

For details, refer to the regulations in your own country.

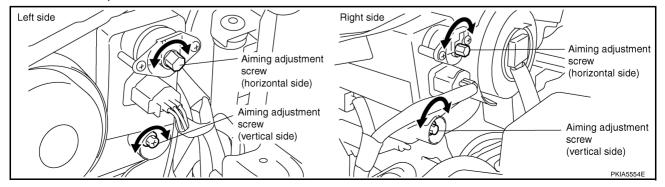
- Keep all tires inflated to correct pressures.
- Place vehicle and tester on one and same flat surface.
- See that there is no-load in vehicle (coolant, engine oil filled up to correct level and full fuel tank) other than the driver (or equivalent weight placed in driver's position).

CAUTION:

Be sure aiming switch is set to "0" when performing aiming adjustment.

LOW BEAM

Turn headlamp low beam on.



- Use adjusting screws to perform aiming adjustment.
 - First tighten the adjusting screw all the way and then make adjustment by loosening the screw. If the vehicle front body has been repaired and/or the headlamp assembly has been replaced, check aiming. Use the aiming chart shown in the figure.
 - Adjust headlamps so that main axis of light is parallel to center line of body and is aligned with point P shown in illustration.
 - Figure to the right shows headlamp aiming pattern for driving on right side of road; for driving on left side of road, aiming pattern is reversed.
 - Dotted lines to point P in illustration show center of headlamp.

"H" : Horizontal center line of headlamps

"WL" : Distance between each headlamp center

"L" : 25,000mm (984.25 in)

"C" : 315mm (12.40 in) – 315mm(12.40in)+60mm

(2.36 in)

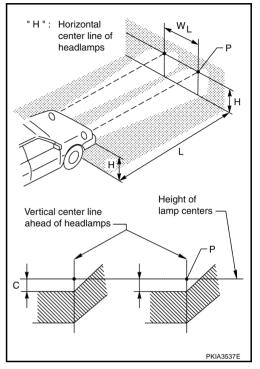
 Basic illuminating area for adjustment should be within the range shown at right. Adjust headlamps accordingly.

CAUTION:

Be sure aiming switch is set to "0" when preforming aiming adjustment.

Aiming Adjustment for Driving Lamp

- Turn the aiming adjusting screw to adjust.
- For positions of the adjustment screws and direction to turn, refer to the figures.
- When adjusting for right or left side, adjust upper and lower adjustment screws at the same time.



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(Left)Down :Up (Right)

Left Right

PREPARATION BEFORE ADJUSTING

For details, refer to the regulations in your own country.

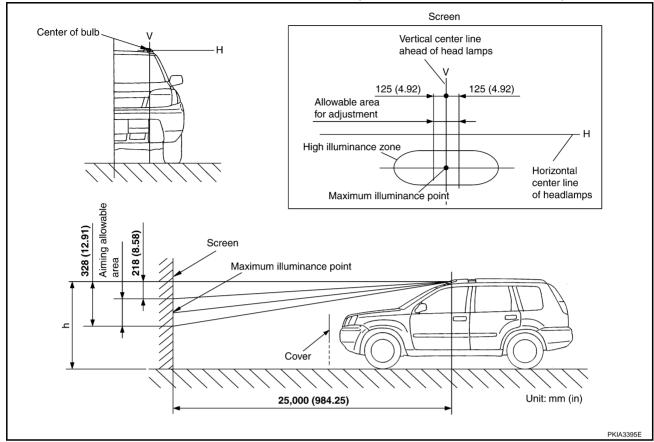
Before performing aiming adjustment, check the following.

- 1. Keep all tires inflated to correct pressures.
- 2. Place vehicle on level ground.
- 3. Set that there is no-load in vehicle other than the driver (or equivalent weight placed in driver's position), coolant, engine oil filled up to correct level, full fuel tank and spare tire, jack, and tools.

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ADJUSTMENT USING AN ADJUSTMENT SCREEN (LIGHT/DARK BORDERLINE)



ADJUSTING

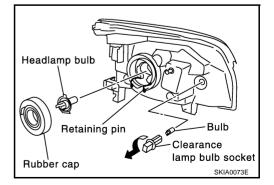
- 1. Set the distance between the screen and the center of the driving lamp lens as shown in the figure.
- 2. Turn head lamp switch high and driving lamp switch ON so that front driving lamps turn ON.
- Adjust driving lamps using adjusting screws make sure of the following.
 - When performing this adjustment, cover the headlamps and the opposite driving lamp, if necessary.
 - Vertical deflection of maximum illuminance point to be adjusted to stand at 21.8cm (8.58in) below driving lamp height (h).
 - Horizontal deflection of maximum illuminance point to be adjusted to stand within 0 ± 12.5cm (0±8.58in) against line (V) on screen where a line passing through driving lamp center, parallel to vehicle center line, cross screen.

Bulb Replacement for Headlamp and Clearance lamp HEAD LAMP

EKS003CH

- 1. Disconnect connector of headlamp.
- 2. Remove rubber cap.
- 3. Unlock retaining spring, then remove bulb.

Headlamp (High/Low) : 12V 60/55 W(H4)



CLEARANCE LAMP

- Turn the RH and LH bulb sockets counterclockwise and unlock them.
- 2. Remove the bulb from its socket.

Clearance lamp : 12V 5W

CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- When replacing bulb, prepare new bulb first of all. Do not leave bulb out of headlamp housing for a long period, because dust, moisture or smoke will cause performance lowering (fouling, cloud, etc.) of headlamp reflector and lens.
- When bulb is installed, be sure to lock rubber cap to ensure watertightness.

Bulb Replacement for Driving Lamp

- 1. Remove the driving lamp. Refer to <u>LT-18</u>, "Removal and Installation for Driving Lamp" in "HEADLAMP".
- Disconnect driving lamp connector.
- Turn bulb socket counterclockwise and unlock it.

Driving lamp : 12 V - 65 W (H1R1 halogen)

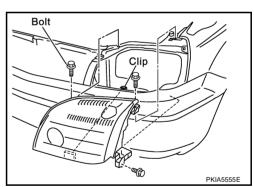
4. Install in the reverse order of removal.

CAUTION:

- Do not touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- When replacing bulb, prepare new bulb first of all. Do not leave bulb out of driving lamp housing
 for a long period, because dust, moisture or smoke will cause performance lowering (fouling,
 cloud, etc.) of driving lamp reflector and lens.

Removal and Installation for Headlamp REMOVAL

- 1. Remove the front turn signal lamps. Refer to LT-38, "Removal and Installation for Front Turn Signal Lamp".
- 2. Disconnect connector of headlamp and clearance lamp.
- 3. Remove the front grille. Refer to <u>EI-19, "FRONT GRILLE"</u> in "EXTERIOR & INTERIOR (EI)" section.
- 4. Remove the headlamp mounting bolts.
- 5. Pull the headlamp toward the front of the vehicle.



INSTALLATION

Install in the reverse order of removal, taking care of the following points.

Headlamp mounting bolts

Headlamp mounting bolts

Tightening torque : 2 5.5 N·m (0.55 kg-m, 48 in-lb)

Driving lamp bulb

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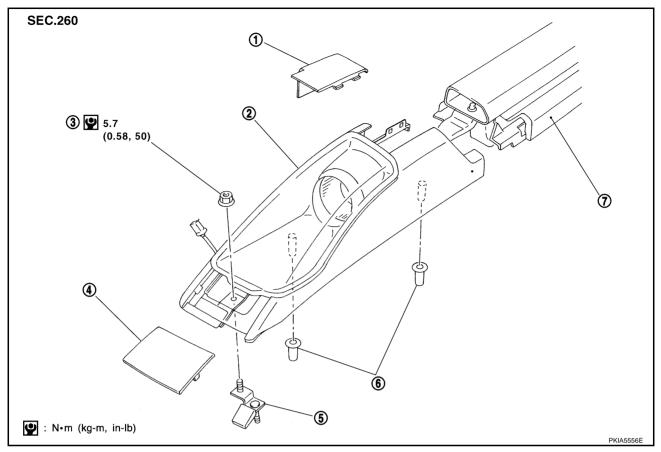
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Removal and Installation for Driving Lamp

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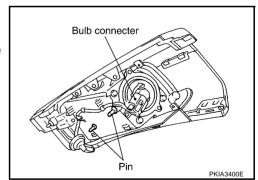


- 1. Cap (rear)
- 4. Cap (front)
- 7. Roof rail

- 2. Driving lamp assembly
- 5. Driving lamp bracket
- 3. Nut
- 6. Grommet

REMOVAL

- 1. Remove cap (front) and cap (rear).
- 2. Remove driving lamp mounting nut.
- 3. Pull the front of driving lamp toward upper side so that undo the pin from the roof panel.
- 4. Remove rear end of driving lamp from roof rail.
- 5. Pull out driving lamp from vehicle and disconnect connector.



INSTALLATION

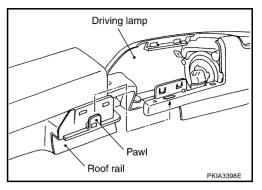
• Install driving lamp in the reverse order of removal, observing the tightening torque shown below.

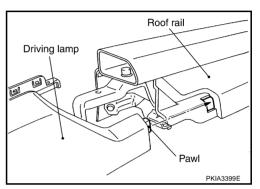
Driving lamp mounting nut Tightening torque

: **9** 5.7 N·m (0.58 kg-m, 50 in-lb)

CAUTION:

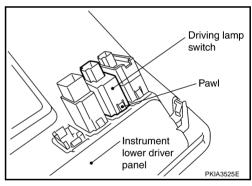
• Make sure the pawl shown in figure be connected correctly.





Removal and Installation for Driving Lamp Switch

- Remove the Instrument lower driver panel. Refer to IP-11, "Removal and Installation" in "INSTRUMENT PANEL ASSEM-BLY (IP)" section.
- 2. Press the driving lamp switch fixing pawls and remove it from the Instrument lower driver panel.



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HEADLAMP - DAYTIME LIGHT SYSTEM -

PFP:26010

System Description DESCRIPTION

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The headlamp system on vehicles for North Europe contains a daytime light control unit. The unit activates the following whenever the engine is running with the lighting switch in the OFF position:

- Low beam headlamps
- Parking, license, tail and illumination lamps

Power is supplied at all times

- through 10A fuse (No. 31, located in the fuse and fusible link box)
- to daytime light control unit terminal 1 and
- to lighting switch terminal 11.

Power is also supplied at all times

- through 15A fuse (No. 41, located in the fuse and fusible link box)
- to daytime light control unit terminal 3 and
- to lighting switch terminal 5.

Power is also supplied at all times

- through 15A fuse (No. 40, located in the fuse and fusible link box)
- to daytime light control unit terminal 2 and
- to lighting switch terminal 8.

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

- through 10A fuse [No. 13, located in the fuse block (J/B)]
- to daytime light control unit terminal 7.

With the ignition switch in the START position, power is supplied

- through 10A fuse [No. 7, located in the fuse block (J/B)]
- to daytime light control unit terminal 6.

HEADLAMP OPERATION (DAYTIME LIGHT CANCEL OPERATION)

When the lighting switch is turned to the 1st or 2nd position, power is supplied

- through lighting switch terminal 12
- to daytime light control unit terminal 11.

Then daytime light will be canceled. And the lighting system operation will be the same as no daytime light system.

DAYTIME LIGHT OPERATION

With the engine running and the lighting switch in the OFF position, power is supplied

- from alternator terminal 3
- to daytime light control unit terminal 8,
- through daytime light control unit terminal 5
- to terminal 3 of headlamp LH,
- through daytime light control unit terminal 4
- to terminal 3 of headlamp RH and
- through daytime light control unit terminal 10
- to tail lamp and illumination.

Ground is supplied to terminal 2 of each headlamp through body grounds E24 and E50.

DRIVING LAMP OPERATION

To turn the driving lamp on, push the driving lamp switch when the lighting switch is turned to the 2ND position and placed in HIGH position or PASS position, power is supplied

- from lighting switch terminal 9
- to headlamp LH terminal 1
- to driving lamp relay-1 terminal 1

to driving lamp switch terminal 7
to combination meter terminal 20 for the HIGH BEAM indicator
to driving lamp relay-2 terminal 5
to driving lamp relay-2 terminal 3
through driving lamp switch terminal 6
from driving lamp relay-1 terminal 5
to driving lamp LH and RH terminal 2.
Ground is supplied
to driving lamp relay-1terminal 2, through driving lamp relay-2 terminal 7
to driving lamp relay-2 terminal 6, through grounds E24 and E50
to driving lamp switch terminal 4, through driving lamp relay-2 terminal 1
to driving lamp relay-2 terminal 2, through grounds E24 and E50
to driving lamp LH terminal 1, through ground R8
to driving lamp RH terminal 1 and 3, through ground R8
to combination meter terminal 19, through grounds M27 and M70
to each headlamp terminal 2, through grounds E24 and E50.
With power and ground supplied, the high beams, driving lamp and the HIGH BEAM indicator illuminate.

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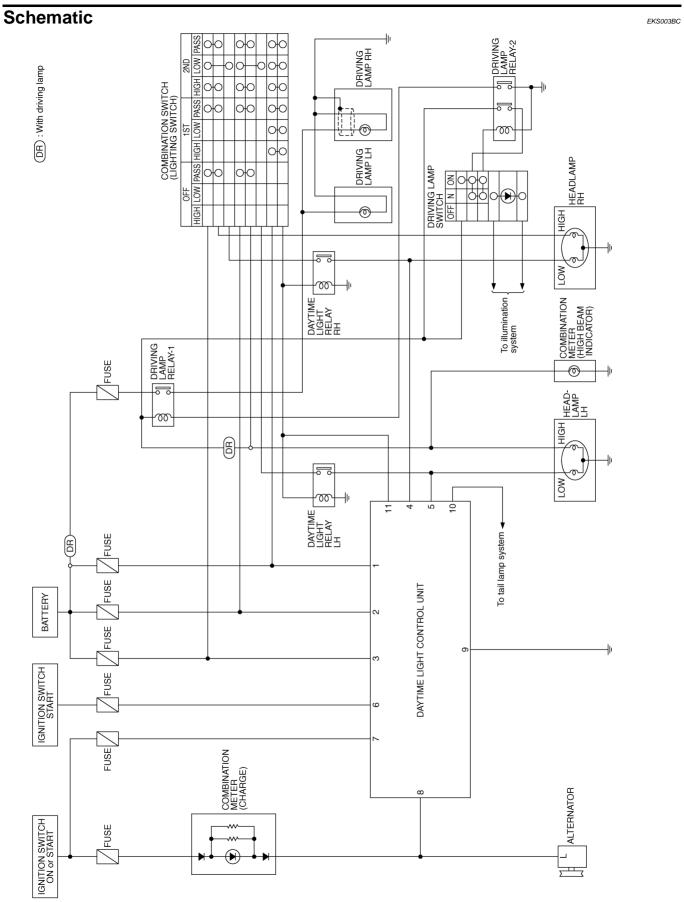
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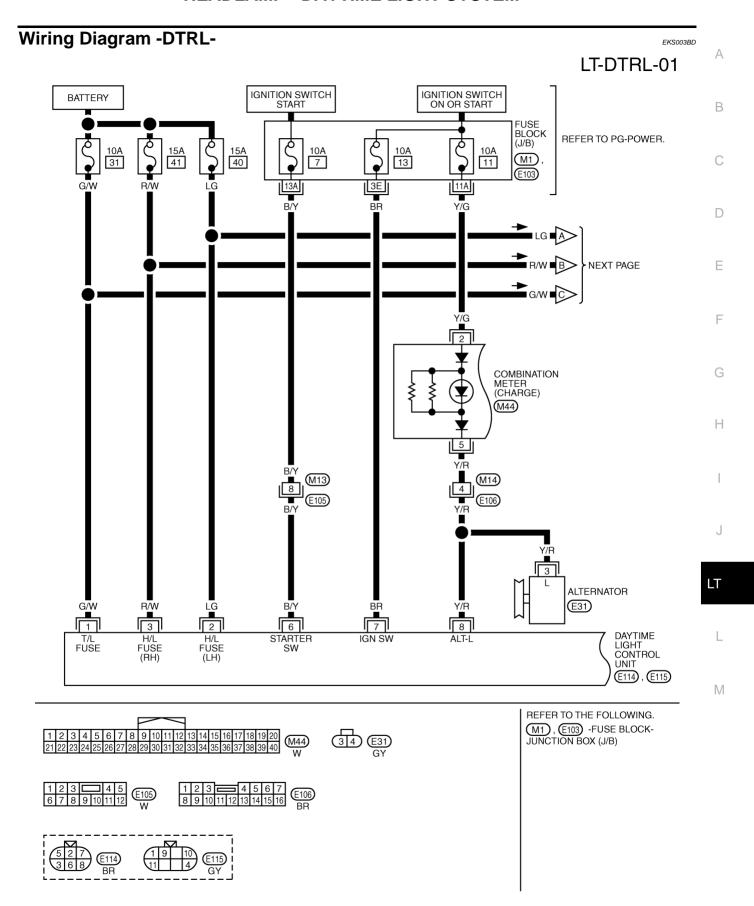
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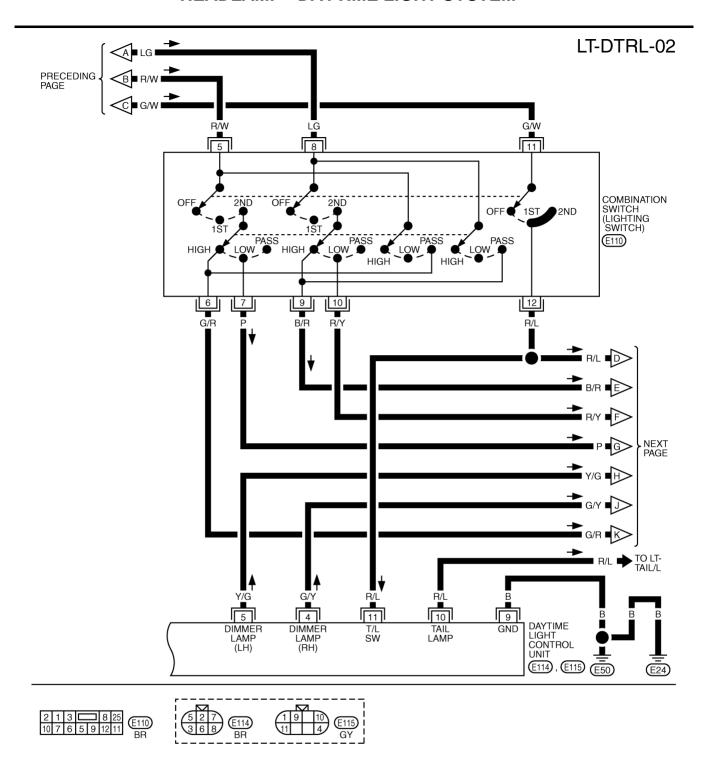
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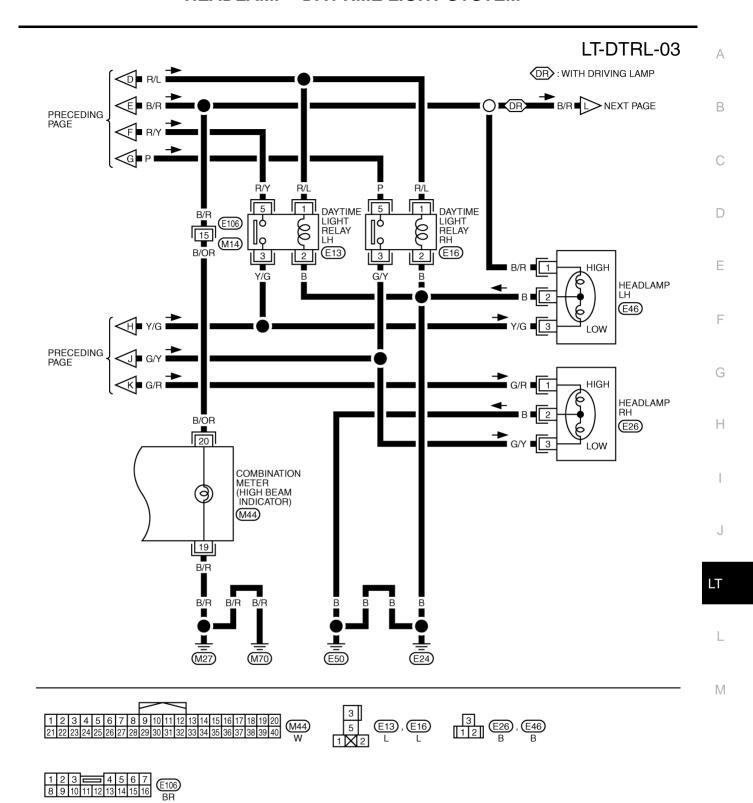
TKWA1521E



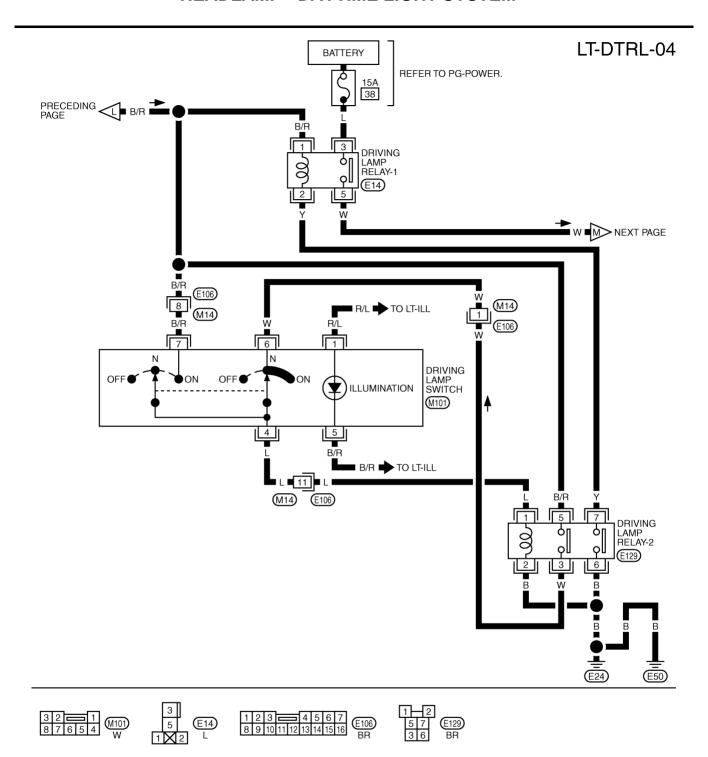
TKWA1522E



TKWA0062E



TKWA1523E



TKWA1524E

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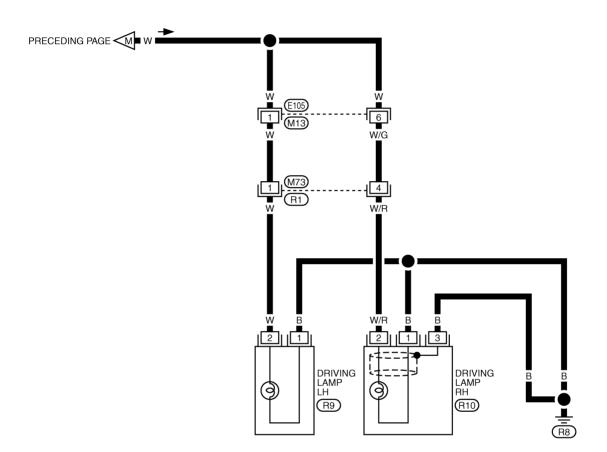
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TKWB0081E

Trouble Diagnoses DAYTIME LIGHT CONTROL UNIT INSPECTION TABLE

EKS003CO

Terminal No.	Wire color	Connections	INPUT (I)/ OUTPUT (O)	Operated condition		Voltage
1	G/W	Power source for illumination & tail lamp	_	_		Battery voltage
2	LG	Power source for headlamp LH		_		Battery voltage
3	R/W	Power source for headlamp RH	_	_		Battery voltage
4	G/Y	Hoodlamp DH	0	ON (daytime light op		Battery voltage
4	4 G/Y Headlamp RH	пеашатр кп	0	OFF		Approx. 0V
5	5 Y/G Headlamp LH	Hoodlamp I H	0	ON (daytime light operating*)		Battery voltage
5		пеасіапір сп	O	OFF		Approx. 0V
6 B/Y Start sig	Chart signal	I	Ignition switch	START	Battery voltage	
	Start signal			ON, ACC or OFF	Approx. 0V	
7	7 BR IGN power supply		I amitian avvitab	ON or START	Battery voltage	
1		IGN power supply	_	Ignition switch	ACC or OFF	Approx. 0V
-	2 1/2 1/2 1/2 1/2 1/2		En sin s	Running	Battery voltage	
8 Y/R Alternator "L" terminal	I	Engine	Stopped	Approx. 0V		
9	В	Ground		_		_
40	40 D/I Illustication 9 tail I	0	ON (daytime light operating*)		Battery voltage	
10 R/L Illumination & tail lamp	mummation & tall lamp		OFF		Approx. 0V	
11	A4 D/Limbin movitab	Lighting awitch	I ·	1ST-2ND position		Battery voltage
II K	K/L	R/L Lighting switch		OFF		Approx. 0V

^{*:} Daytime light operating: Lighting switch in "OFF" position with engine running.

Bulb Replacement

EKS003CP

Refer to <u>LT-16</u>, "Bulb Replacement for Headlamp and Clearance lamp" or <u>LT-17</u>, "Bulb Replacement for Driving Lamp".

Aiming Adjustment

EKS003BE

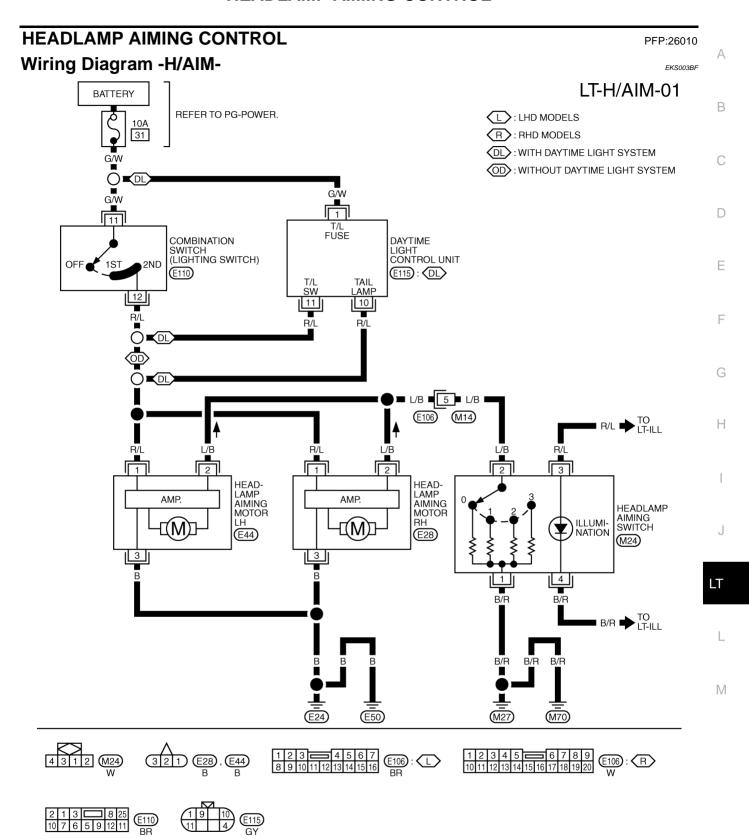
Refer to LT-14, "Aiming Adjustment for Headlamp" or LT-15, "Aiming Adjustment for Driving Lamp" .

Removal and Installation

EKS00ES8

Refer to LT-17, "Removal and Installation for Headlamp" or LT-18, "Removal and Installation for Driving Lamp"

HEADLAMP AIMING CONTROL

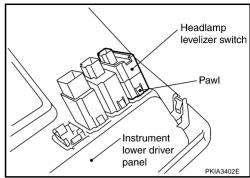


TKWA1525E

HEADLAMP AIMING CONTROL

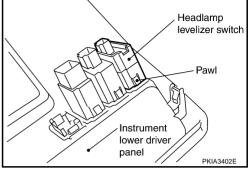
Removal and Installation

- 1. Remove the Instrument lower driver panel. Refer to IP-11. "Removal and Installation" in "INSTRUMENT PANEL ASSEMBLY (IP)" section.
- 2. Press the headlamp aiming switch fixing pawls and remove it from the Instrument lower driver panel.



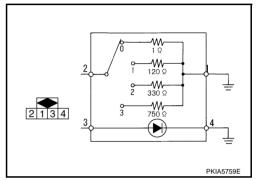
Switch Circuit Inspection

Using a circuit tester, check continuity between the headlamp aiming switch connector terminals in each operation status of the aiming switch.



EKS003CB

EKS003CA



TURN SIGNAL AND HAZARD WARNING LAMPS PFP:26120 Α **System Description** EKS003BX TÚRN SIGNAL OPERATION With the hazard switch in the OFF position and the ignition switch in the ON or START position, power is supplied through 10A fuse [No. 2, located in the fuse block (J/B)] to hazard switch terminal 2 through hazard switch terminal 1 to combination flasher unit terminal 1 through combination flasher unit terminal 3 to turn signal switch terminal 1. Ground is supplied F to combination flasher unit terminal 2 through grounds M27 and M70. **LH Turn** When the turn signal switch is moved to the LH position, power is supplied from turn signal switch terminal 3 to front turn signal lamp LH terminal 1 to side turn signal lamp LH terminal 1 to combination meter terminal 52 to rear combination lamp LH terminal 2. Ground is supplied Н to the front turn signal lamp LH terminal 2 through grounds E24 and E50 to the side turn signal lamp LH terminal 2 through grounds E24 and E50 to the rear combination lamp LH terminal 4 through grounds B8 and B18 to combination meter terminal 64 through grounds M27 and M70. With power and ground supplied, the combination flasher unit controls the flashing of the LH turn signal lamps. J **RH Turn** When the turn signal switch is moved to the RH position, power is supplied from turn signal switch terminal 2 to front turn signal lamp RH terminal 1 LT to side turn signal lamp RH terminal 1 to combination meter terminal 18 to rear combination lamp RH terminal 2. Ground is supplied to the front turn signal lamp RH terminal 2 through grounds E24 and E50 to the side turn signal lamp RH terminal 2 through grounds E24 and E50 M to the rear combination lamp RH terminal 4 through grounds B8 and B18 to combination meter terminal 64 through grounds M27 and M70. With power and ground supplied, the combination flasher unit controls the flashing of the RH turn signal lamps. **HAZARD LAMP OPERATION** Power is supplied at all times to hazard switch terminal 3 through 10A fuse (No. 35, located in the fuse and fusible link box). With the hazard switch in the ON position, power is supplied through hazard switch terminal 1 to combination flasher unit terminal 1 through combination flasher unit terminal 3 to hazard switch terminal 4.

to combination flasher unit terminal 2 through grounds M27 and M70.

Ground is supplied

Power is supplied

- through hazard switch terminal 5
- to front turn signal lamp LH terminal 1
- to side turn signal lamp LH terminal 1
- to combination meter terminal 52
- to rear combination lamp LH terminal 2.

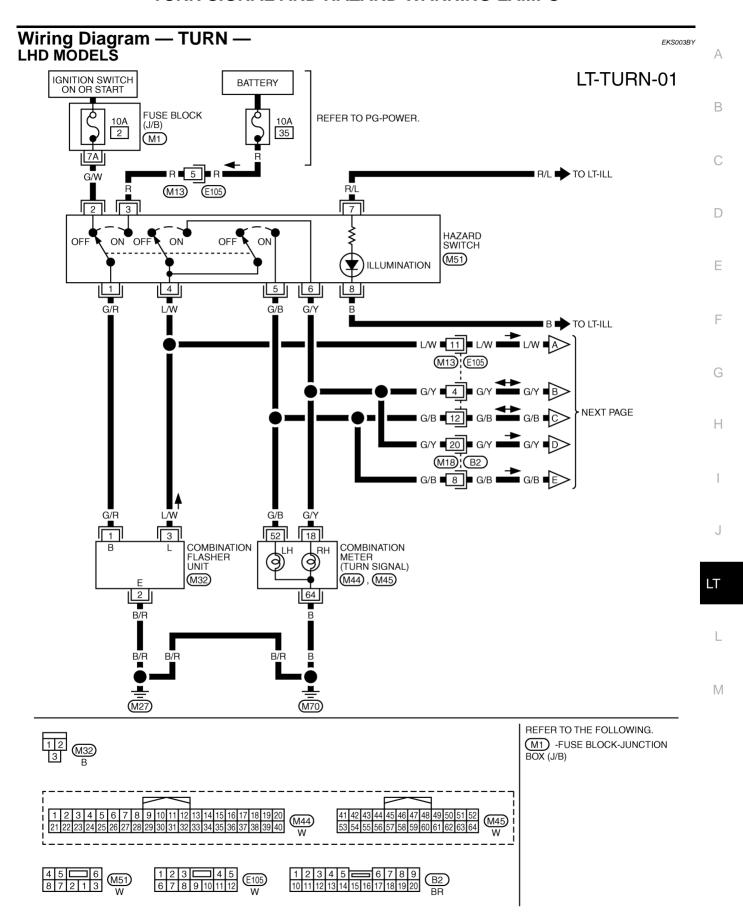
Power is supplied

- through hazard switch terminal 6
- to front turn signal lamp RH terminal 1
- to side turn signal lamp RH terminal 1
- to combination meter terminal 18
- to rear combination lamp RH terminal 2.

Ground is supplied

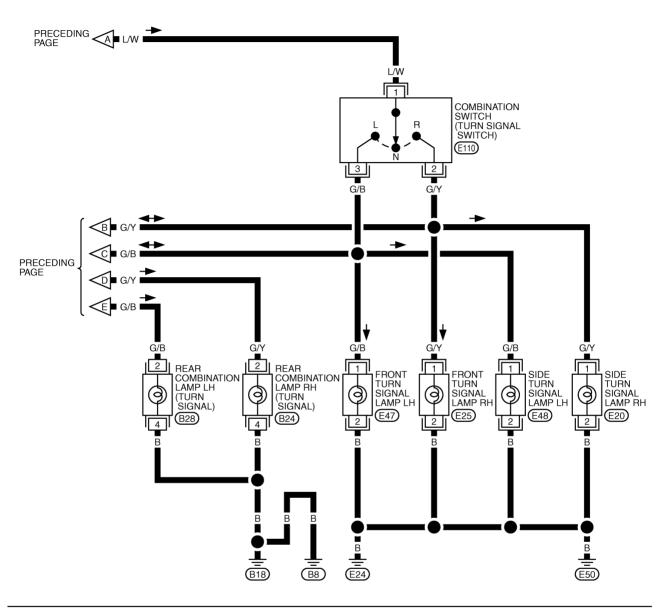
- to each front and side turn signal lamp terminal 2 through grounds E24 and E50
- to each rear combination lamp terminal 4 through grounds B8 and B18
- to combination meter terminal 64 through grounds M27 and M70.

With power and ground supplied, the combination flasher unit controls the flashing of the hazard warning lamps.



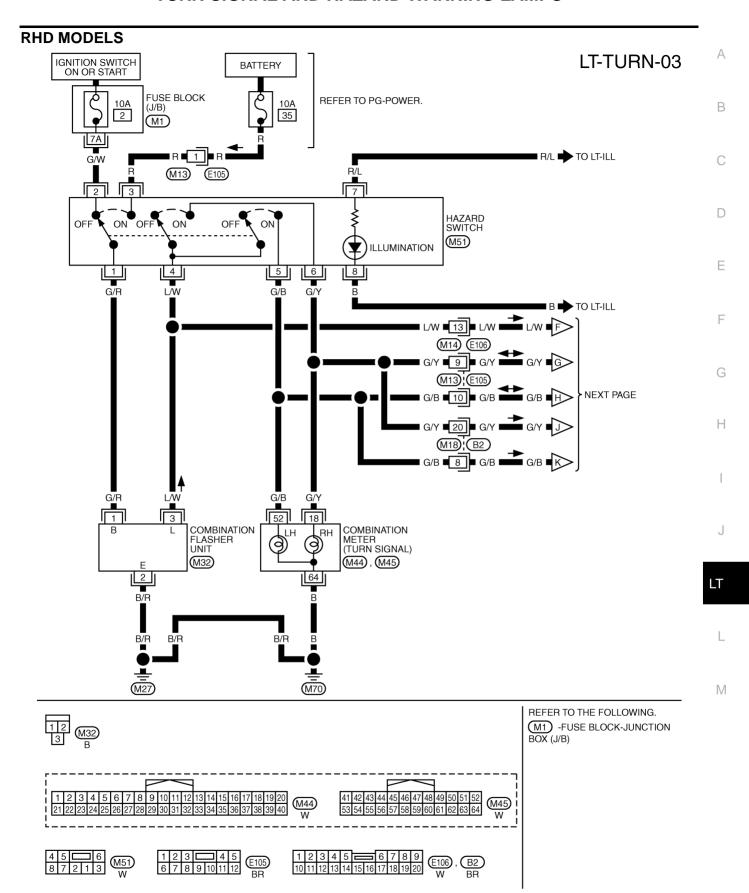
TKWA1526E

LT-TURN-02



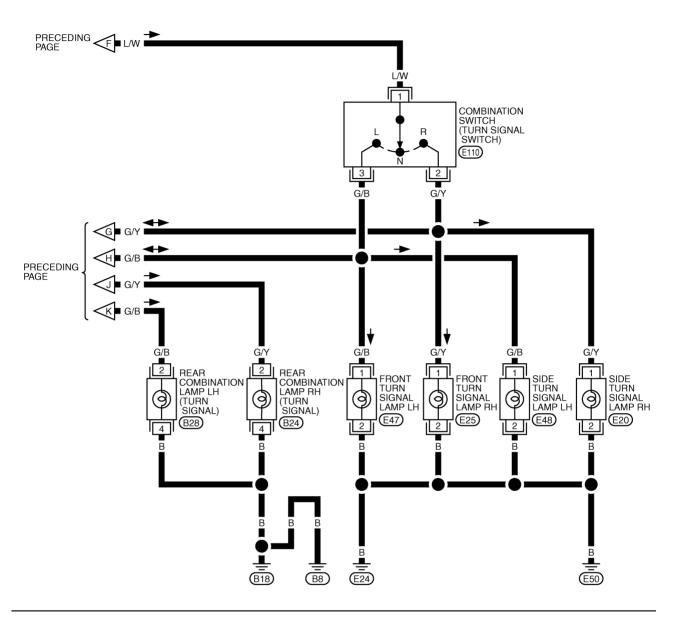


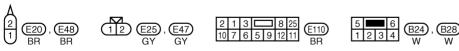
TKWA0073E



TKWA1527E

LT-TURN-04





TKWA1528E

TURN SIGNAL AND HAZARD WARNING LAMPS

Symptom	Possible cause	Repair order	
Turn signal and hazard warning lamps do not operate.	Hazard switch Combination flasher unit Open in combination flasher unit circuit	Check hazard switch. Refer to combination flasher unit check. Check wiring to combination flasher unit for open circuit.	
Turn signal lamps do not operate but haz- ard warning lamps operate.	1. 10A fuse 2. Hazard switch 3. Turn signal switch 4. Open in turn signal switch circuit	Check 10A fuse [No. 2, located in fuse block (J/B)]. Turn ignition switch ON and verify battery positive voltage is present at terminal 2 of hazard switch. Check hazard switch. Check turn signal switch. Check the wire between combination flasher unit terminal 3 and turn signal switch terminal 1 for open circuit.	
Hazard warning lamps do not operate but turn signal lamps operate.	 1.10A fuse 2. Hazard switch 3. Open in hazard switch circuit 	Check 10A fuse (No. 35, located in the fuse and fusible link box). Verify battery positive voltage is present at terminal 3 of hazard switch. Check hazard switch. Check the wire between combination flasher unit terminal 3 and hazard switch terminal 4 for open circuit.	
Front turn signal lamp LH or RH does not operate.	1. Bulb 2. Grounds E24 and E50	Check bulb. Check grounds E24 and E50.	
Rear turn signal lamp LH or RH does not operate.	1. Bulb 2. Grounds B8 and B18	Check bulb. Check grounds B8 and B18.	
Side turn signal lamp LH or RH does not operate.	1. Bulb 2. Grounds E24 and E50	Check bulb. Check grounds E24 and E50.	
LH and RH turn indicators do not operate.	1. Ground	1. Check grounds M27 and M70.	
LH or RH turn indicator does not operate.	1. Bulb	Check bulb in combination meter.	

Electrical Components Inspection COMBINATION FLASHER UNIT CHECK

EKS0034C

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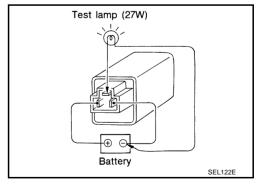
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- Before checking, ensure that bulbs meet specifications.
- Connect a battery and test lamp to the combination flasher unit, as shown. Combination flasher unit is properly functioning if it blinks when power is supplied to the circuit.



LT-37

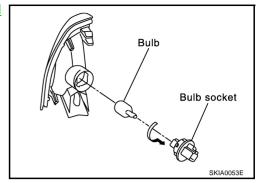
TURN SIGNAL AND HAZARD WARNING LAMPS

Bulb Replacement FRONT TURN SIGNAL LAMP

EKS0034D

- 1. Remove the front turn signal lamp. Refer to LT-38, "Removal and Installation for Front Turn Signal Lamp"
- 2. Turn the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from its socket.

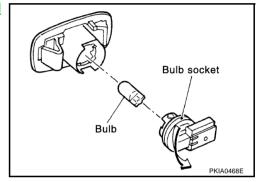
Front turn signal lamp : 12V 21W (amber)



SIDE TURN SIGNAL LAMP

- 1. Remove side turn signal lamp. Refer to LT-38, "Removal and Installation for Side Turn Signal Lamp"
- Turn the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from its socket.

Side turn signal lamp : 12V 5W



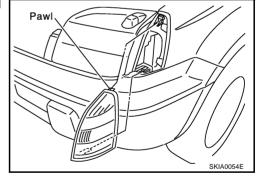
REAR TURN SIGNAL LAMP

Refer to LT-63, "Bulb Replacement".

Removal and Installation for Front Turn Signal Lamp REMOVAL

EKS003BH

- 1. Press the upper pawl to remove front turn signal lamp toward the front of the vehicle.
- 2. Disconnect front turn signal lamp connector.



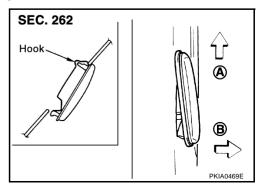
INSTALLATION

- 1. Connect front turn signal lamp connector.
- 2. Insert the pawl into head lamp hole, and install front turn signal lamp.

Removal and Installation for Side Turn Signal Lamp

EKS003BI

- 1. Push the side turn signal lamp toward A direction in the figure, and pull up B direction in the figure.
- 2. Disconnect the side turn signal lamp connector.



TURN SIGNAL AND HAZARD WARNING LAMPS

Removal and Installation for Rear Turn Signal Lamp

EKS003BJ

Refer to LT-63, "Removal and Installation".

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LIGHTING AND TURN SIGNAL SWITCH

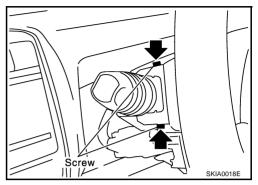
LIGHTING AND TURN SIGNAL SWITCH

PFP:25540

Removal and Installation

EKS0034F

- Remove the steering column cover. Refer to <u>PS-10</u>, "STEER-<u>ING COLUMN"</u> in "POWER STEERING SYSTEM (PS)" section.
- 2. Remove two screws, then remove the lighting and turn signal switch from the spiral cable.
- 3. Disconnect the lighting and turn signal switch connector.



Switch Circuit Inspection

EKS0034G

Using circuit tester, check continuity between the lighting and turn signal switch connector terminals in each operation status of the switch.

Lighting switch is refer to LT-7, "Wiring Diagram — H/LAMP —".

Turn signal lamp switch is refer to LT-33, "Wiring Diagram — TURN —"

Front fog lamp switch is refer to LT-53, "Wiring Diagram — F/FOG —" .

Rear fog lamp switch is refer to LT-57, "Wiring Diagram -R/FOG-/Without Front Fog Lamp" ,LT-58, "Wiring Diagram -R/FOG-/With Front Fog Lamp" .

HAZARD SWITCH

HAZARD SWITCH PFP:25290

Removal and Installation REMOVAL

EKS003BZ

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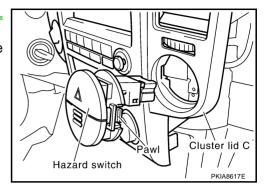
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- 1. Remove cluster lid C. Refer to <u>IP-10, "INSTRUMENT PANEL ASSEMBLY"</u> in "INSTRUMENT PANEL (IP)" section.
- ASSEMBLY" in "INSTRUMENT PANEL (IP)" section.

 2. Press the hazard switch fixing pawls and remove it from the



INSTALLATION

cluster lid C.

Installation is in the reverse order of removal.

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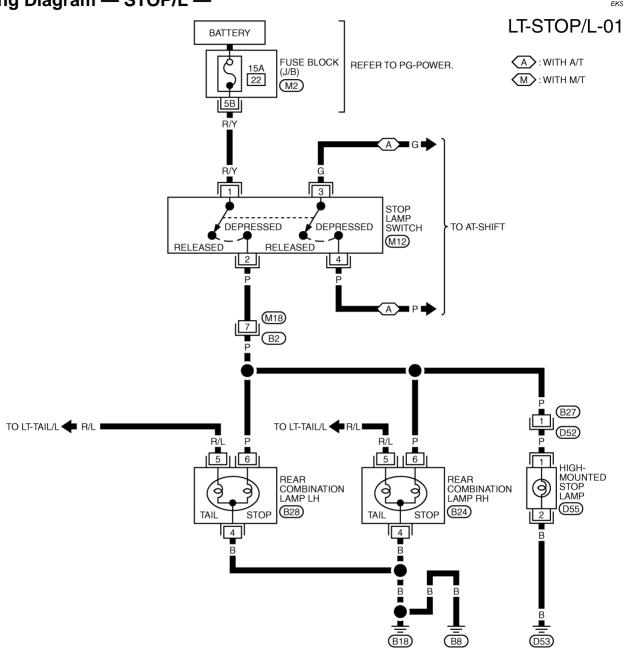
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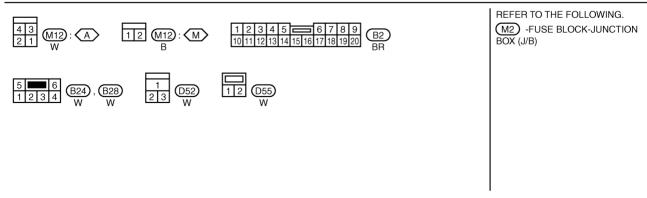
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STOP LAMP
Wiring Diagram — STOP/L —

EKS0034/





STOP LAMP

Bulb Replacement STOP LAMP

EKS0034K

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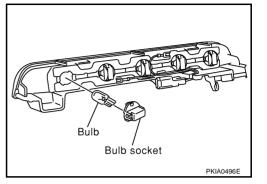
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Refer to LT-63, "Bulb Replacement".

HIGH-MOUNTED STOP LAMP

- 1. Remove the high-mounted stop lamp cover. Refer to <u>LT-43</u>, "HIGH-MOUNTED STOP LAMP" .
- 2. Turn the high-mounted stop lamp bulb socket counterclockwise and unlock it.
- 3. Remove the bulb.

High-mounted Stop Lamp : 12V 5W



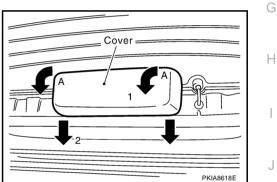
FKS0034L

Removal and Installation STOP LAMP

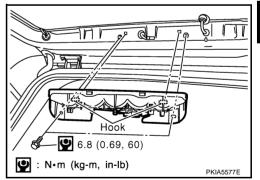
Refer to LT-63, "Removal and Installation".

HIGH-MOUNTED STOP LAMP

- 1. Pull the edge of the cover (A in the figure below) to each side in turn downward until the pawls inside the cover are released.
- 2. Pull down the cover toward under the vehicle.



- 3. Remove the high-mounted stop lamp mounting bolts.
- 4. Disconnect the high-mounted stop lamp connector and remove it from the vehicle.



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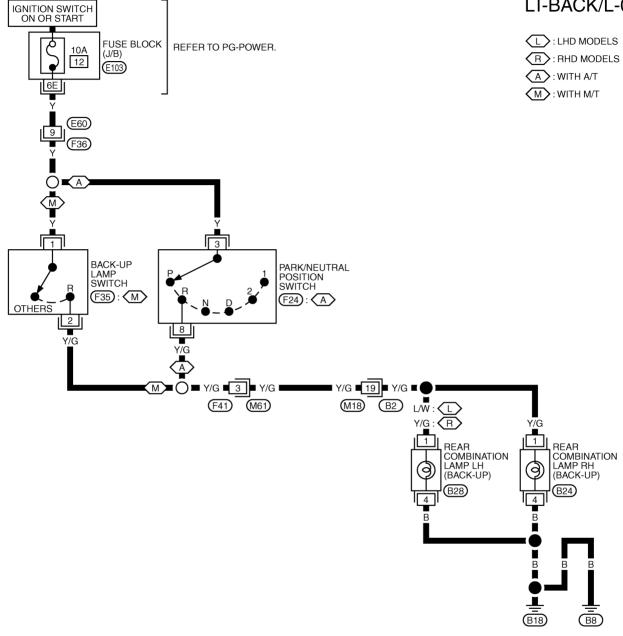
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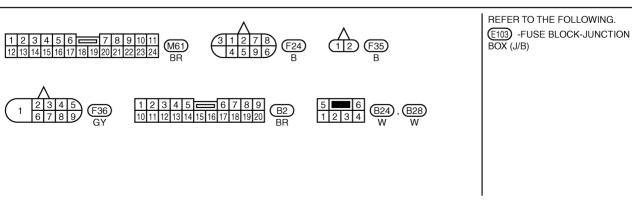
BACK-UP LAMP PFP:26550

Wiring Diagram — BACK/L — GASOLINE ENGINE

EKS003C3

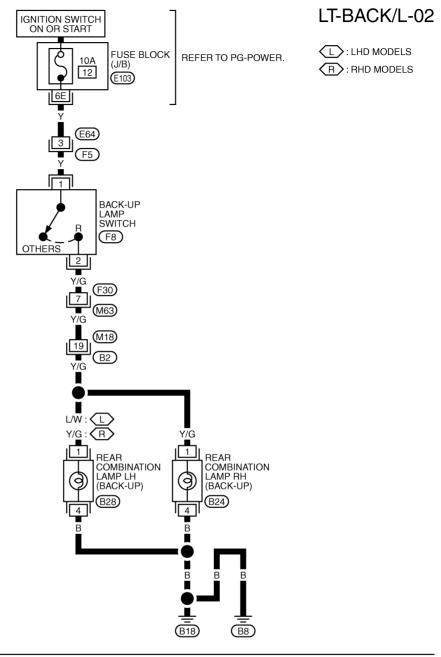


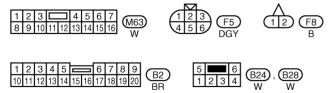




BACK-UP LAMP

DIESEL ENGINE





REFER TO THE FOLLOWING.

(E103) -FUSE BLOCK-JUNCTION
BOX (J/B)

TKWA1531E

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BACK-UP LAMP

Bulb Replacement

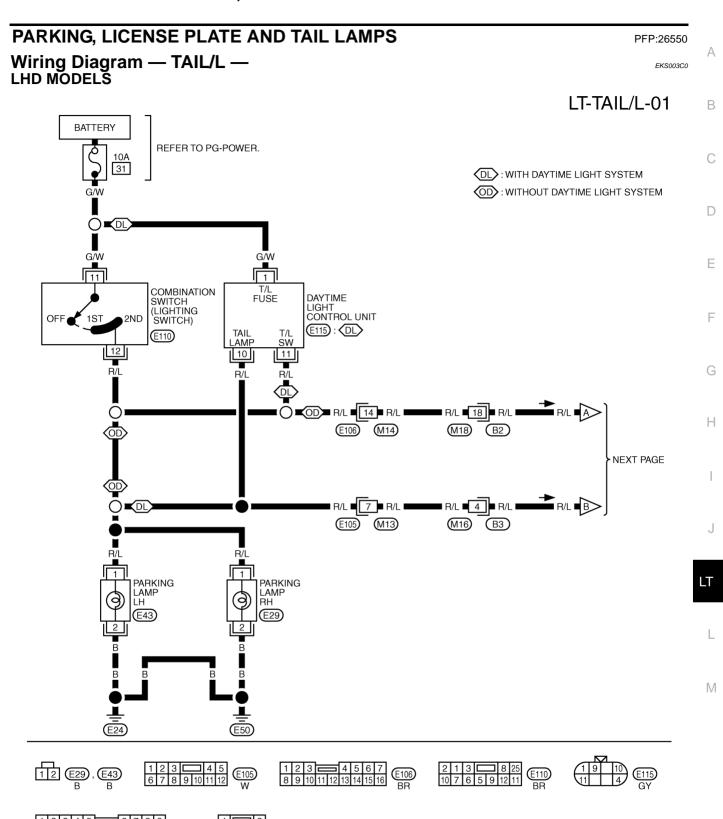
EKS003C4

Refer to LT-63, "Bulb Replacement" .

Removal and Installation

EKS003C5

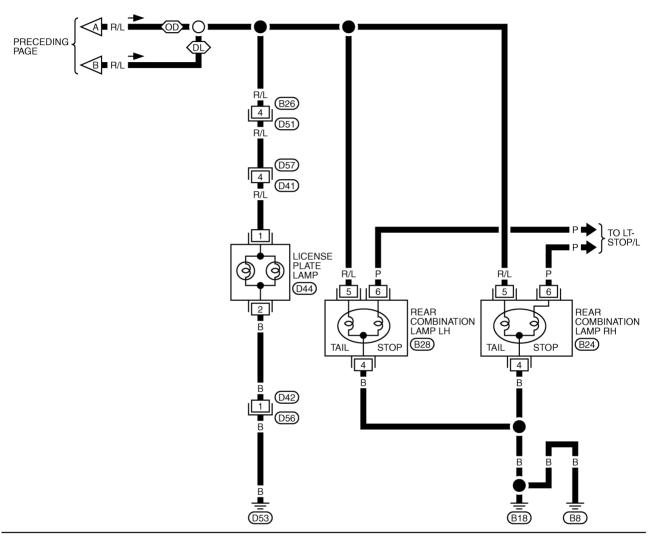
Refer to LT-63, "Removal and Installation" .



LT-TAIL/L-02

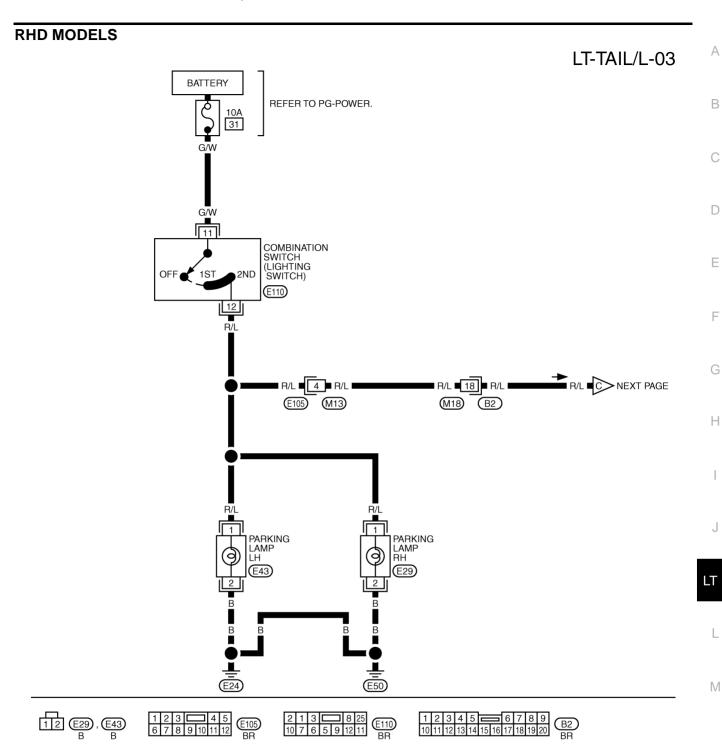
(DL): WITH DAYTIME LIGHT SYSTEM

OD: WITHOUT DAYTIME LIGHT SYSTEM



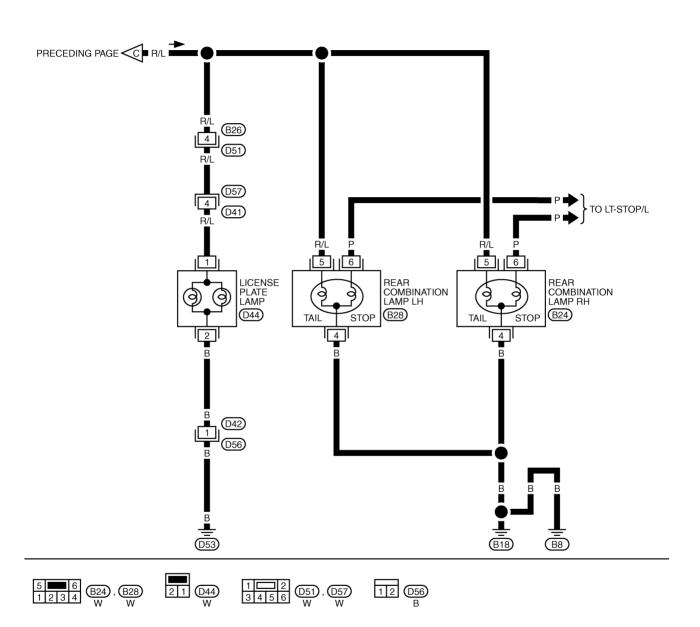


TKWA0066E



TKWA1533E

LT-TAIL/L-04



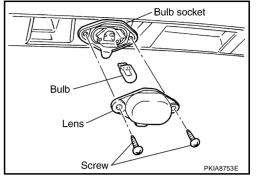
Bulb Replacement PARKING AND TAIL LAMPS

Refer to LT-63, "Bulb Replacement".

LICENSE PLATE LAMP

- 1. Remove license plate lamp mounting screws (2).
- 2. Remove lens of license plate lamp.
- 3. Remove bulb from its socket.
- 4. Installation is the reverse of removal.

License plate lamp : 12V 5W



FKS003C2

EKS003C1

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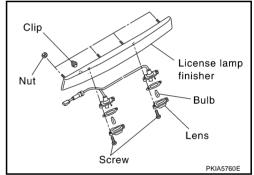
Removal and Installation PARKING AND TAIL LAMPS

Refer to LT-63, "Removal and Installation".

LICENSE PLATE LAMP

Removal

- 1. Remove the license lamp finisher. Refer to <u>EI-31, "LICENSE LAMP FINISHER"</u> in "EXTERIOR & INTERIOR (EI)" section.
- 2. Remove the harness from installation pawl for harness.
- Remove license plate lamp mounting screws (2 each, RH and LH).
- 4. Pull out license plate lamp from license lamp finisher.



Installation

Install license plate lamp in the reverse order of removal, observing the tightening torque shown below.

License plate lamp mounting screws

Tightening torque : 1.4 N·m (0.15 kg-m, 13 in-lb)

LT

FRONT FOG LAMP

FRONT FOG LAMP
PFP:00011

System Description DESCRIPTION

EKS003DF

Power is supplied at all times to front fog lamp relay terminal 3

through 15A fuse (No. 42, located in the fuse and fusible link box).

With the lighting switch in the 2ND position and LOW position, power is supplied

- through 10A fuse (No. 31, located in the fuse and fusible link box)
- to lighting switch terminal 11
- through lighting switch terminal 12
- to fog lamp switch terminal 32
- through fog lamp switch terminal 31
- to front fog lamp relay terminal 2.

FOG LAMP OPERATION

The front and rear fog lamp switch is built into the combination switch. The lighting switch must be in the 1st or 2nd position for front fog lamp operation.

With the fog lamp switch in the ON position, ground is supplied

- to front fog lamp relay terminal 1
- through the fog lamp switch and grounds E24 and E50.

The front fog lamp relay is energized and power is supplied

- from front fog lamp relay terminal 5
- to each fog lamp terminal 1
- to combination meter terminal 15.

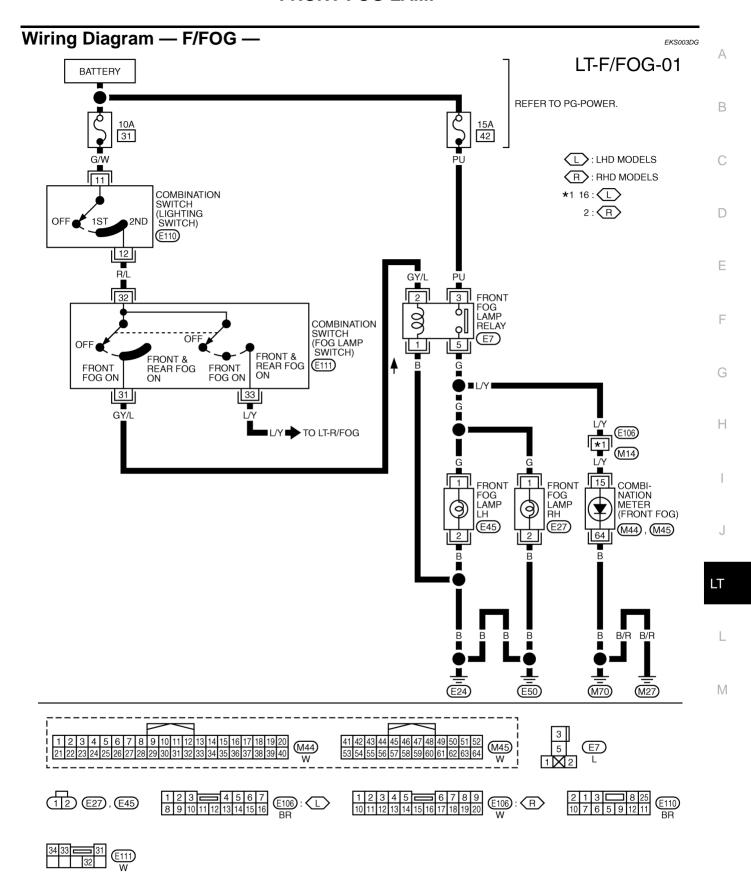
Ground is supplied

to each fog lamp terminal 2 through grounds E24 and E50.

With power and ground supplied, the front fog lamps illuminate. Ground is supplied

to combination meter terminal 64 through grounds M27 and M70.

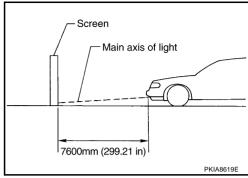
FRONT FOG LAMP



TKWA1535E

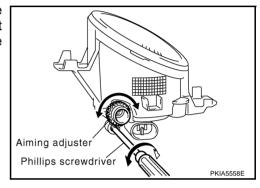
Aiming Adjustment

- 1. Set the distance between the screen and the center of the fog lamp lens as shown at left.
- 2. Turn front fog lamps ON.

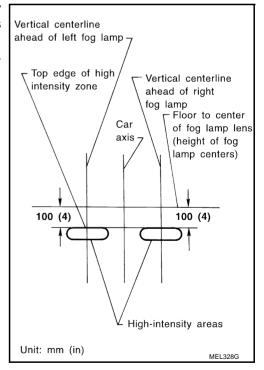


EKS003DH

 Insert a phillips screwdriver into the access hole and enage the tip of the screwdriver with the gear of the adjuster as shown at left. The aiming adjuster can now be turned by turning the screwdriver.



- 4. Adjust front fog lamps so that the top edge of the high intensity zone is 100 mm (4 in) below the height of the fog lamp centers as shown at left.
 - When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.



FRONT FOG LAMP

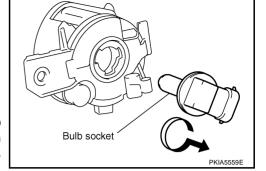
Bulb Replacement

- 1. Remove fog lamp. Refer to LT-55, "Removal and Installation" .
- 2. Turn the bulb socket counterclockwise and unlock it.
- 3. Remove the bulb from its socket.
- 4. Install in the reverse order of removal.

Front fog lamp :12V 55W (H11)

CAUTION:

 Do not touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.



Do not leave bulb out of fog lamp housing for a long time because dust, moisture smoke, etc. May
affect the performance of fog lamp. When replacing bulb, be sure to replace it with new one.

Removal and Installation REMOVAL

211000020

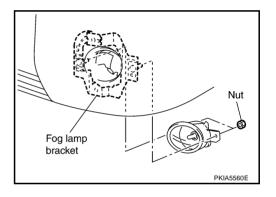
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EKS003DI

- 1. Remove fender protector. Refer to EI-21, "FENDER PROTECTOR".
- 2. Disconnect fog lamp connector.
- 3. Remove fog lamp mounting nuts from fog lamp bracket.
- 4. Pull out fog lamp from vehicle and disconnect connector.



INSTALLATION

• Install fog lamp in the reverse order of removal, observing the tightening torque shown below.

Fog lamp mounting bolt

Tightening torque : 5.5 N·m (0.56 kg-m, 49 in-lb)

LT

REAR FOG LAMP
PFP:26550

System Description DESCRIPTION

EKS00ESB

Power is supplied at all times to rear fog lamp relay terminal 3

through 10A fuse (No. 36, located in the fuse and fusible link box).

With the lighting switch in the 2ND position and LOW ("B") position, power is supplied

- through 10A fuse (No. 31, located in the fuse and fusible link box)
- to lighting switch terminal 11
- through lighting switch terminal 12
- to fog lamp switch terminal 32
- through fog lamp switch terminal 33
- to rear fog lamp relay terminal 2.

FOG LAMP OPERATION

The front and rear fog lamp switch is built into the combination switch. The lighting switch must be in the 1st or 2nd position for rear fog lamp operation.

With the fog lamp switch in the ON position, ground is supplied

- to rear fog lamp relay terminal 1
- through the fog lamp switch and grounds E24 and E50.

The rear fog lamp relay is energized and power is supplied

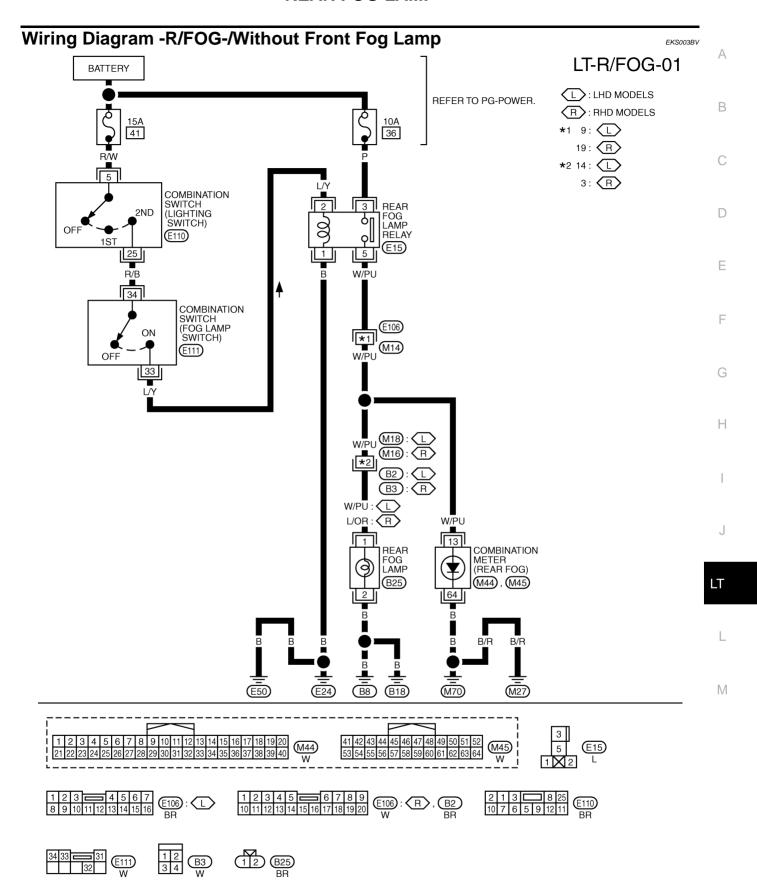
- from rear fog lamp relay terminal 5
- to rear fog lamp terminal 1
- to combination meter terminal 13.

Ground is supplied

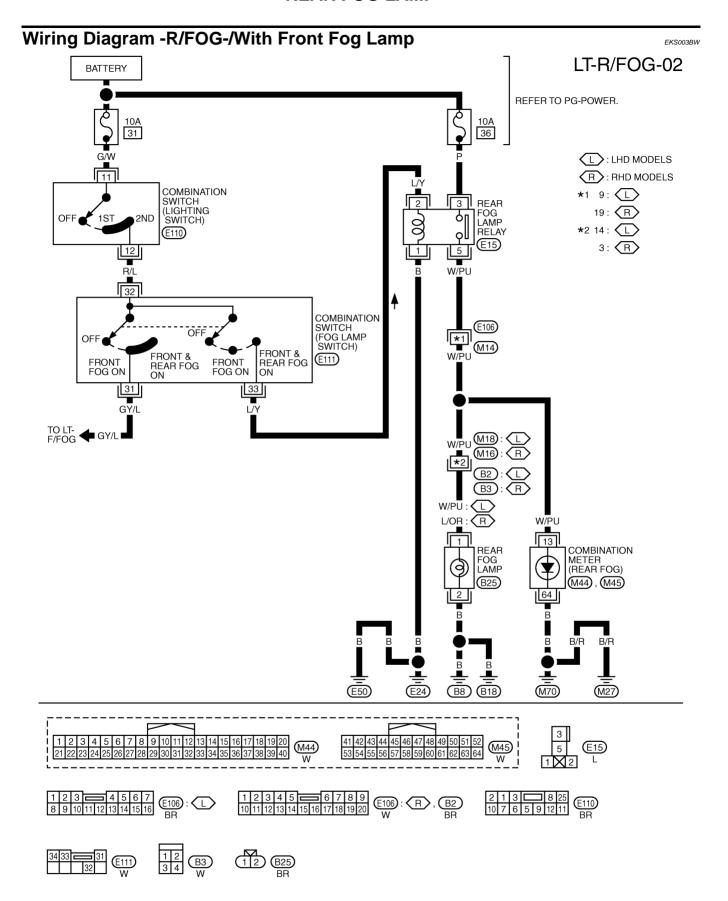
to each fog lamp terminal 2 through grounds E24 and E50.

With power and ground supplied, the rear fog lamps illuminate. Ground is supplied

to combination meter terminal 64 through grounds M27 and M70.



TKWA1536E

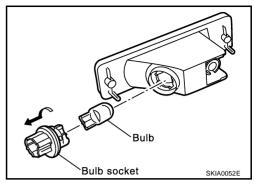


TKWA1537E

Bulb Replacement

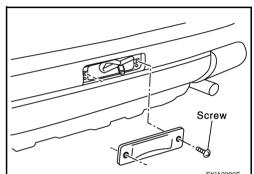
- 1. Remove rear fog lamp. Refer to LT-59, "Removal and Installation".
- 2. Turn bulb socket counterclockwise and unlock it.
- Remove bulb.

Rear fog lamp : 12V 21W



Removal and Installation **REMOVAL**

- 1. Remove rear fog lamp mounting screws (2).
- 2. Take out rear fog lamp from bumper, then disconnect connector.



INSTALLATION

Install in the reverse order of removal, paying attention to the following.

Rear fog lamp mounting screws

Tightening torque : 1.4 N·m (0.14 kg-m, 12 in-lb) SKIA0090E

FKS0015M

EKS0015L

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CLEARANCE LAMP/TAIL LAMP

CLEARANCE LAMP/TAIL LAMP

Bulb Replacement (Clearance Lamp)

PFP:26010 EKS001UR

Refer to LT-16, "Bulb Replacement for Headlamp and Clearance lamp" .

Bulb Replacement (Tail lamp)

EKS001US

Refer to LT-63, "Bulb Replacement".

Removal and Installation of Clearance Lamp

EKS001UT

Refer to LT-17, "Removal and Installation for Headlamp" .

Removal and Installation of Tail lamp

EKS001UU

Refer to LT-63, "Removal and Installation".

HIGH-MOUNTED STOP LAMP

THEIT-WOONTED STOP LAWIP				
HIGH-MOUNTED STOP LAMP	PFP:26590			
Bulb Replacement	EKS0034W			
Refer to LT-43, "Bulb Replacement".				
Removal and Installation	EKS0034X			
Refer to LT-43, "Removal and Installation".				

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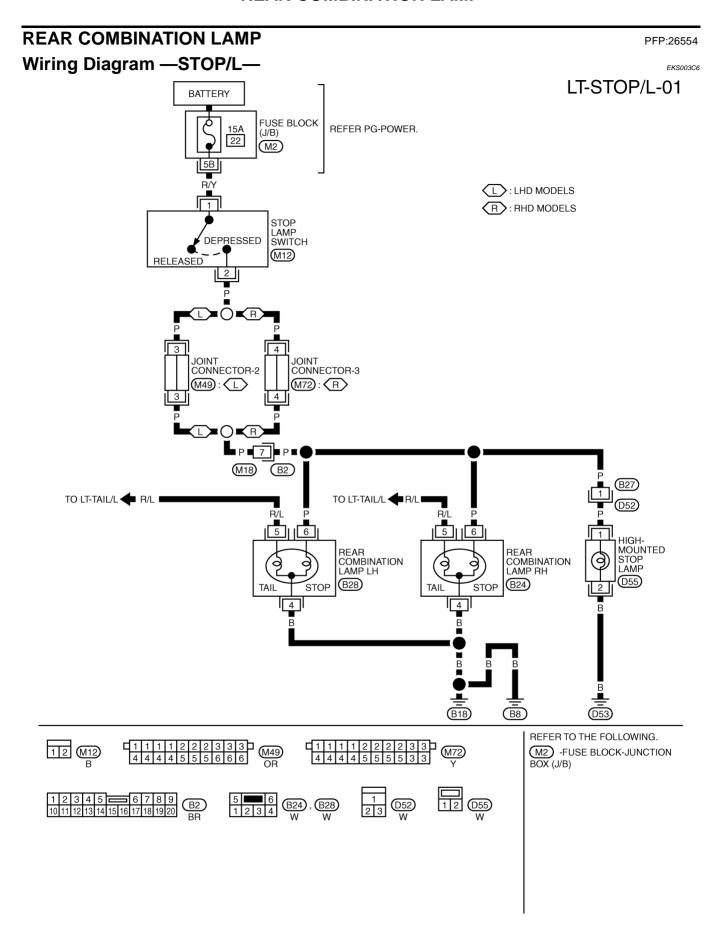
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REAR COMBINATION LAMP



REAR COMBINATION LAMP

Bulb Replacement

- 1. Remove rear combination lamp mounting bolts (2).
- 2. Pull rear combination lamp toward rear of vehicle. Disengage locating pins (3).
- 3. Turn bulb socket counterclockwise and unlock it.
- Remove bulb.

Stop/taillight : 12V 21/5W
Rear turn signal lamp : 12V 21W
Backup lamp : 12V 21W

Stop/tail lamp bulb socket Rear turn signal lamp bulb socket Bulb Bulb SKIA0057E

EKS00165

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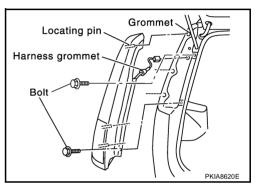
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EKS00164

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Removal and Installation REMOVAL

- 1. Remove luggage-side lower finisher. Refer to <u>EI-35, "BODY SIDE TRIM"</u> in "EI EXTERIOR & INTERIOR" section.
- 2. Disconnect rear combination lamp connector.
- 3. Remove rear combination lamp mounting bolts (2).
- 4. Pull rear combination lamp toward rear of vehicle. Disengage locating pins (3).
- 5. From outside the vehicle, pull harness grommet rearward, and remove harness.



INSTALLATION

Install in the reverse order of removal, paying attention to the following.

Rear combination lamp mounting bolts

Tightening torque : 95.4 N·m (0.55 kg-m, 48 in-lb)

LT

COMBINATION SWITCH

COMBINATION SWITCH

PFP:25567

Removal and Installation

EKS001V6

Refer to SRS-33, "SPIRAL CABLE" in "SUPPLEMENTAL RESTRAINT SYSTEM (SRS)" section for details.

Switch Circuit Inspection

FKS001V

Refer to <u>LT-40, "Switch Circuit Inspection"</u> in "LIGHTING AND TURN SIGNAL SWITCH" section, and <u>WW-8, "Terminal and Reference Values for Combination Switch"</u>, <u>WW-16, "Terminal and Reference Values for Combination Switch"</u> in "WW Wiper/Washer Horn" section for details.

ASHTRAY ILLUMINATION

ASHTRAY ILLUMINATION

PFP:25860

Bulb Replacement, Removal and Installation

EKS00F86

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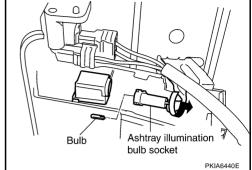
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Remove the instrument center lower panel. Refer to <u>IP-10</u>, <u>"INSTRUMENT PANEL ASSEMBLY"</u> in "IP" section.

- Turn bulb socket counterclockwise and unlock it.
- 3. Pull the bulb from socket.

Ashtray illumination lamp : 12V - 1.4W

4. Install in the reverse order of removal.



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ILLUMINATION PFP:27545

System Description

EKS003C7

Power is supplied at all times

- through 10A fuse [No. 31, located in the fuse and fusible link box]
- to lighting switch terminal 11.

The lighting switch must be in the 1ST or 2ND position for illumination.

The following chart shows the power and ground connector terminals for the components included in the illumination system.

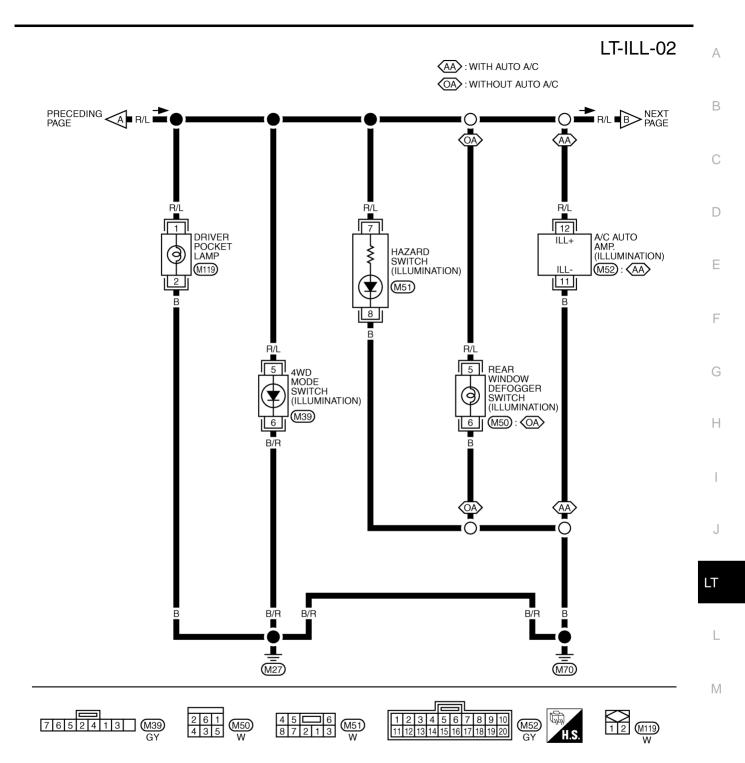
Component	Connector No.	Power terminal	Ground terminal
Headlamp washier switch	M23	3	4
Headlamp aiming switch	M24	3	4
Door mirror remote control switch	M26	10	1
ESP off switch	M25	3	4
Hazard switch	M51	7	8
4WD mode switch	M39	4	3
Rear window defogger switch	M50	5	6
A/C auto amp.	M52	12	11
Combination meter (LHD models)	M46	56	66
Combination meter (RHD models)	M46	45	56
Audio	M42	2	1
CD auto changer	M82	34	35
Heater control panel	M55	2	6
A/T device	M58	3	4
Cigarette lighter	M56	3	2
Heated seat switch LH (LHD models)	B131	5	6
Heated seat switch RH (LHD models)	B132	5	6
Heated seat switch LH (RHD models)	B35	5	6
Heated seat switch RH (RHD models)	B34	5	6

Schematic EKS003BL Α A/C AUTO AMP. (ILLUMINATION): (AA) HEATED SEAT SWITCH RH (ILLUMINATION): HS В 4 (H) REAR WINDOW DEFOGGER SWITCH (ILLUMINATION) : OA 8 .. o HEATED SEAT SWITCH LH (ILLUMINATION): HS * ζ, 8 £ (CS): With cassette deck (OC): Without cassette deck (NV): With NAVI D NAVI SWITCH: (NV) HAZARD SWITCH (ILLUMINATION) HS <u>{</u>} (≥) w (N) Е NAVI CONTROL UNIT : (NV) 4WD MODE SWITCH (ILLUMINATION) ≥ 25 F (AA): With auto A/C (OA): Without auto A/C (HS): With heated seat A/T DEVICE ILLUMINATION : A DRIVER POCKET LAMP G **⊕** {⋖} 0 DOOR MIRROR REMOTE CONTROL SWITCH (ILLUMINATION) Н ASHTRAY ILLUMINATION \bigcirc **⊕** (ES): With ESP (HW): With Headlamp washer DRIVING LAMP SWITCH (ILLUMINATION) CIGARETTE LIGHTER (ILLUMINATION) **⊚** A): With A/T J AUDIO UNIT (ILLUMINATION) ESP OFF SWITCH (ILLUMINATION): ES LT HEADLAMP AIMING SWITCH (ILLUMINATION) HEATER CONTROL PANEL (ILLUMINATION): OA 4 $\overline{()}$ $\stackrel{\text{\tiny }}{\equiv}$ HEADLAMP WASHER SWITCH (ILLUMINATION) : (HW) COMBINATION METER (ILLUMINATION) M **⊕** ODO/TRIP METER ILLUMI-NATION lacksquareCOMBINATION SWITCH (LIGHTING SWITCH) METER ILLUMI-NATION 151 00 00 00 00 00 \bigcirc OFF BATTERY

TKWA1538E

Wiring Diagram -ILL-LHD MODELS EKS003BM LT-ILL-01 BATTERY REFER TO PG-POWER. 31 G/W (HW): WITH HEADLAMP WASHER (ES): WITH ESP 11 COMBINATION SWITCH (LIGHTING SWITCH) 1ST (E110) 12 R/L M13 R/L A NEXT R/I R/I DOOR MIRROR REMOTE DRIVING LAMP SWITCH (ILLUMINATION) 4 10 HEADLAMP WASHER SWITCH (ILLUMINATION) HEADLAMP ESP OFF SWITCH (ILLUMINATION) AIMING SWITCH (ILLUMINATION) CONTROL SWITCH (ILLUMINATION) (M25) : (ES) (M101) (M23) : (HW) (M24) 5 3 | 4 4 | 3 |_| (M₂₆) B/R B/R B/R B/R ■ B/R (M27) (M70) 2 1 3 8 25 10 7 6 5 9 12 11 E110 BR

TKWA1539E



TKWA1540E

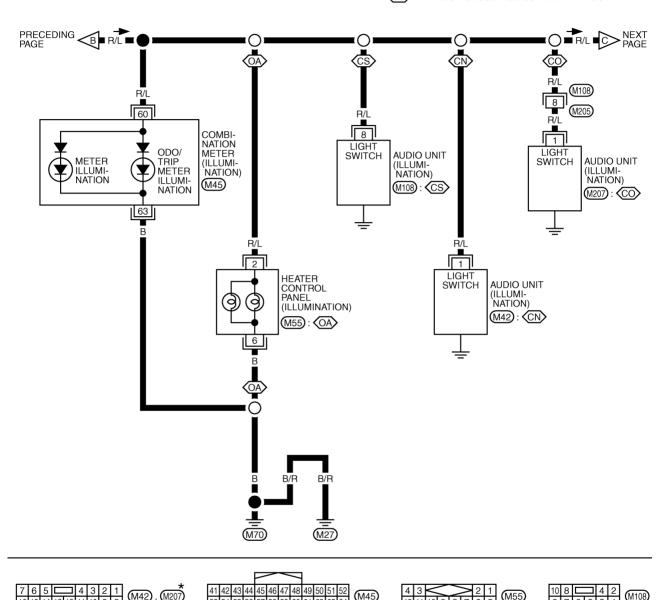
LT-ILL-03

(OA): WITHOUT AUTO A/C

CS: WITH CASSETTE DECK

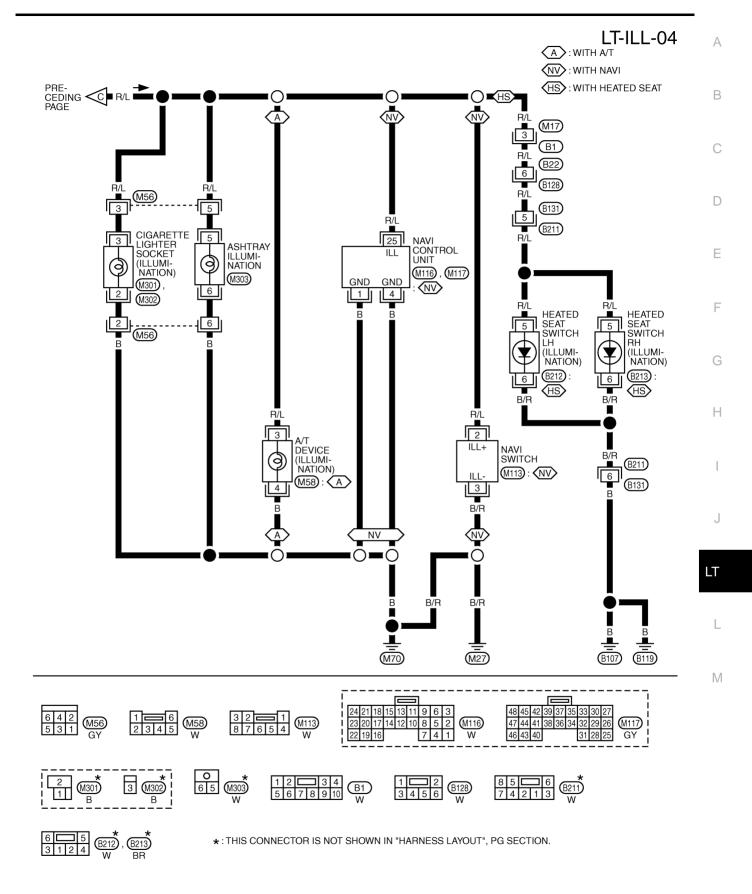
CN: WITHOUT CASSETTE DECK AND WITH NAVI

(CO): WITHOUT CASSETTE DECK AND WITHOUT NAVI

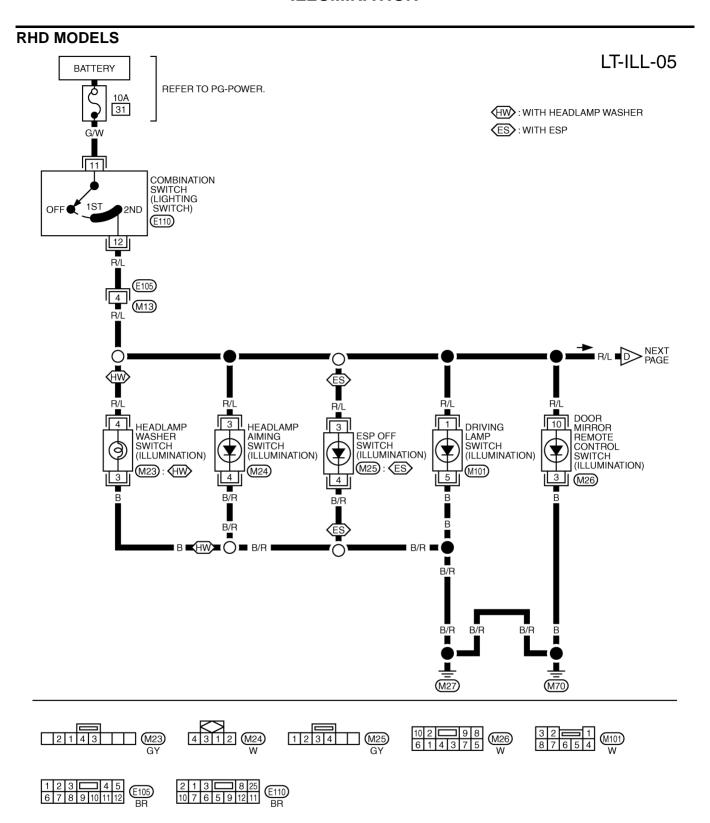


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWA1541E

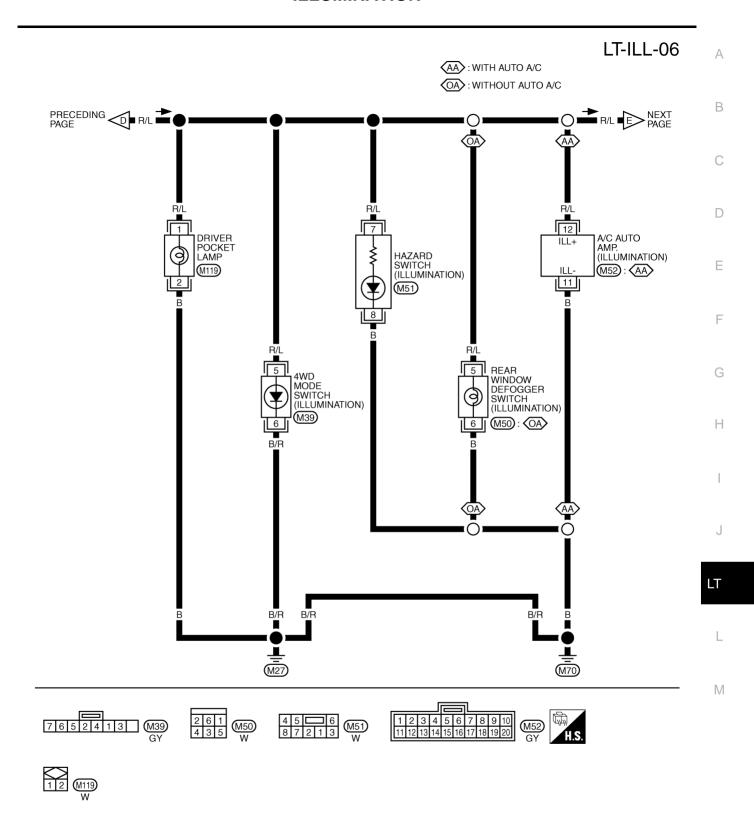


TKWA1542E



TKWA1543E

ILLUMINATION



TKWA1544E

ILLUMINATION

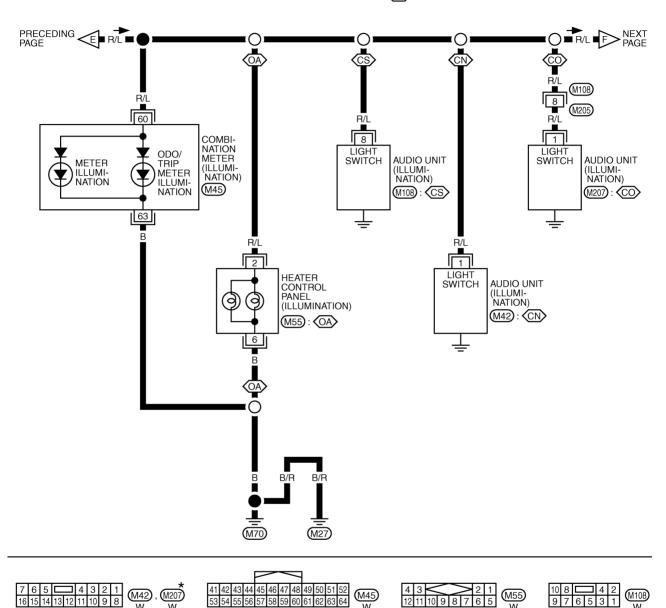
LT-ILL-07

(OA): WITHOUT AUTO A/C

CS: WITH CASSETTE DECK

CN: WITHOUT CASSETTE DECK AND WITH NAVI

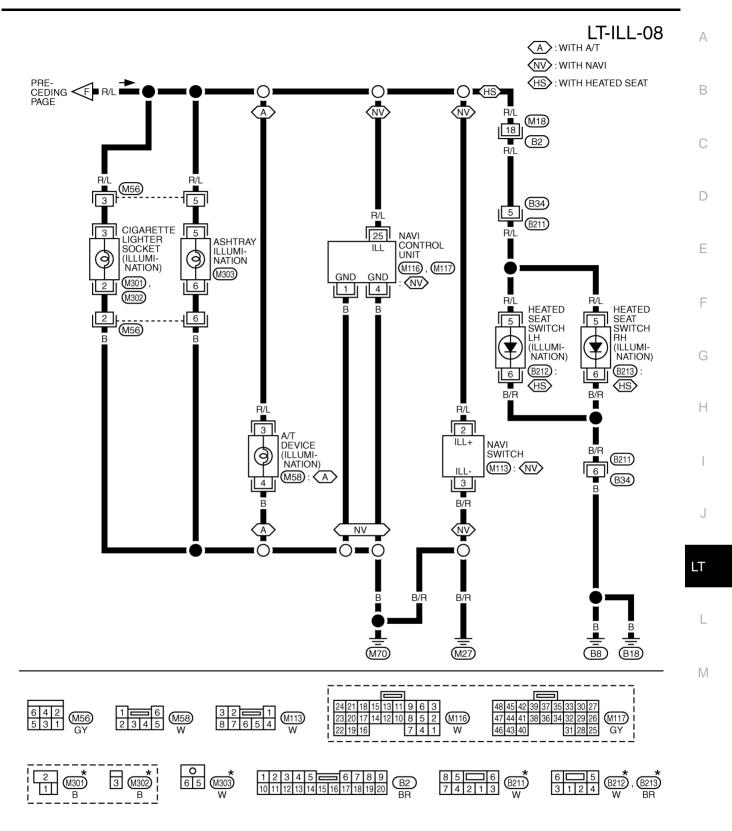
(CO): WITHOUT CASSETTE DECK AND WITHOUT NAVI



*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWA1545E

ILLUMINATION



 $\star:$ THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TKWA1546E

INTERIOR ROOM LAMP

PFP:26410

FKS003BQ

System Description POWER SUPPLY AND GROUND

Power is supplied at all times:

- through 10A fuse [No. 28, located in the fuse block (J/B)]
- to key switch terminal 1 and
- to time control unit terminal 1
- through 10A fuse [No. 26, located in the fuse block (J/B)]
- to interior room lamp terminal 1
- to luggage room lamp terminal 1
- to map lamp terminal 1 (with sunroof models)

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

- through key switch terminal 2
- to time control unit terminal 18.

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

- through 10A fuse [No. 5, located in the fuse block (J/B)]
- to time control unit terminal 17.

Ground is supplied

- through grounds terminals M27 and M70
- to time control unit terminal 16.

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

- through grounds B8 and B18
- to front door switch driver side terminal 3
- from front door switch driver side terminal 2
- to time control unit terminal 30.

When any door (except back door) is opened, ground is supplied

- through case ground of each door switch
- to each door switch terminal 1
- to time control unit terminal 31.

When back door is opened, ground is supplied:

- through ground D53
- to back door switch terminal 3
- from back door switch terminal 1
- to time control unit terminal 31.

When the driver side door is unlocked, the time control unit receives a ground signal

- through grounds terminals M27 and M70
- to front door lock actuator terminal 1
- from front door lock actuator terminal 5
- to time control unit terminal 28.

When a signal, or combination of signals is received by the time control unit, ground is supplied

- through time control unit terminal 26
- to interior room lamp terminal 2.
- to map lamp terminal 3 (with sunroof models)

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

SWITCH OPERATION

When interior room lamp switch is ON, ground is supplied

- through case grounds of interior room lamp
- to interior room lamp.

When map lamp switch is ON, ground is supplied (with sunroof models)

- through ground M27 and M70
- to map lamp terminal 2.

INTERIOR ROOM LAMP TIMER OPERATION

When interior room lamp nad map lamp (with sunroof models) switch is in the "DOOR" position, the time control unit keeps the interior room lamp and map lamp (with sunroof models) illuminated for about 30 seconds when

- unlock signal is supplied from driver's door unlock sensor while all doors are closed and key is out of ignition key cylinder
- key is removed from ignition key cylinder while all doors are closed
- driver's door is opened and then closed while key is out of the ignition key cylinder. (However, if the driver's door is closed with the key inserted in the ignition key cylinder after the driver's door is opened with the key removed, the timer is operated.)

The timer is canceled when

- driver's door is locked.
- driver's door is opened, or
- ignition switch is turned ON.

ON-OFF CONTROL

When the driver side door, front passenger door, rear LH or RH door is opened, the interior room lamp and map lamp (with sunroof models) turns on while the interior room lamp and map lamp (with sunroof models) switch is in the "DOOR" position.

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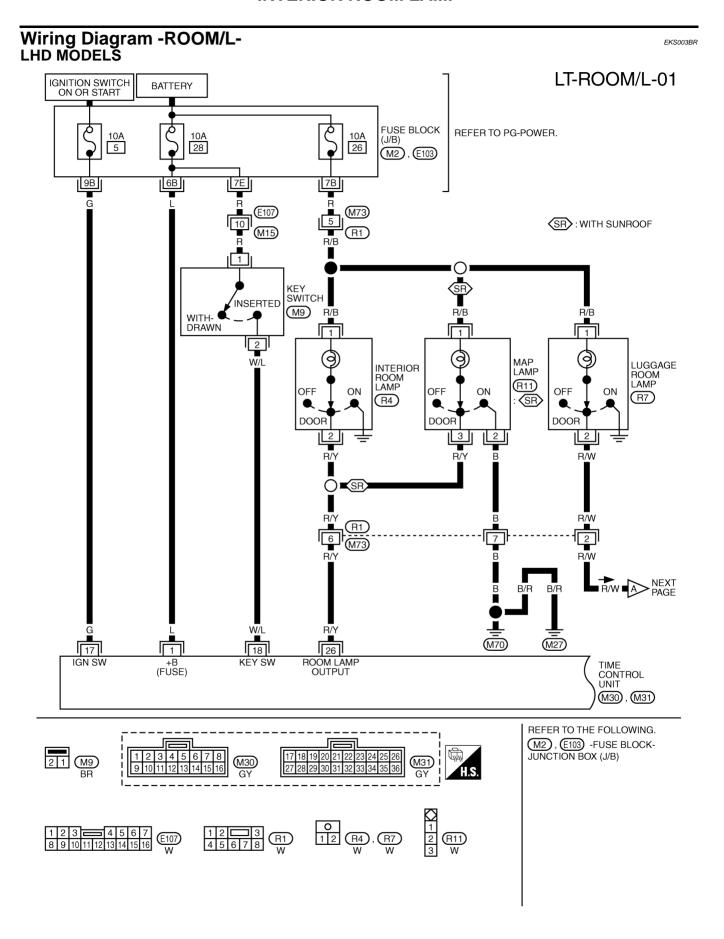
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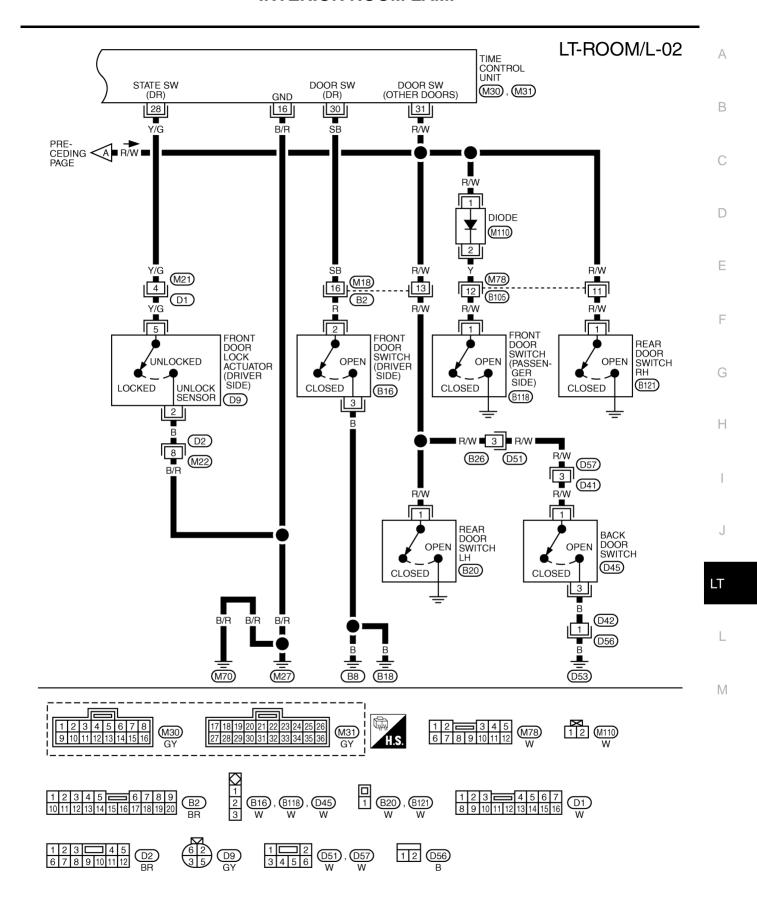
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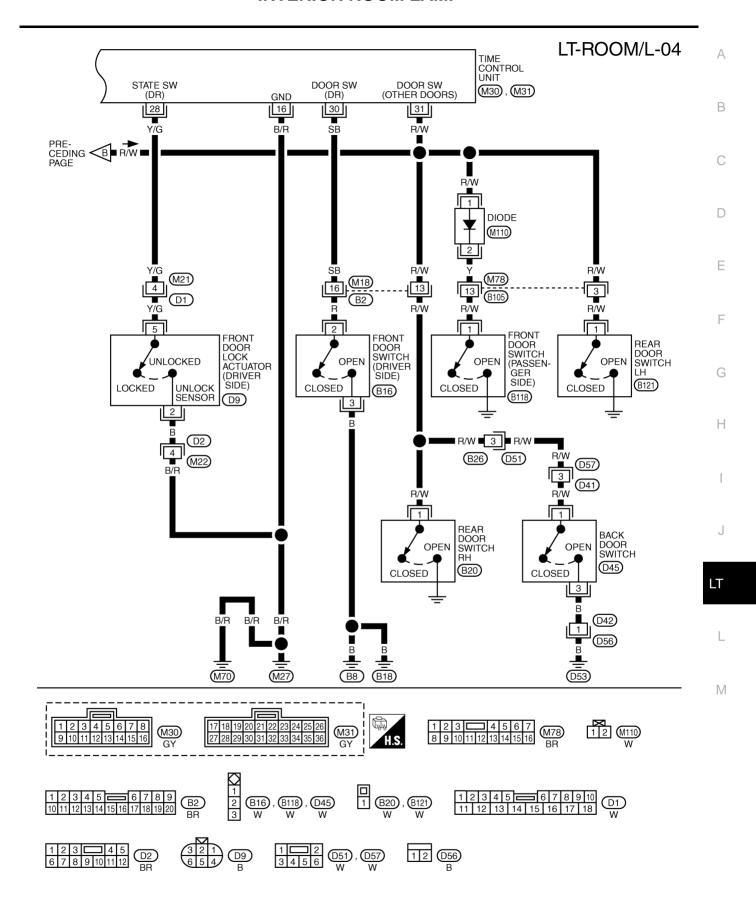
TKWA1547E



TKWA1548E

RHD MODELS LT-ROOM/L-03 IGNITION SWITCH ON OR START BATTERY FUSE BLOCK REFER TO PG-POWER. 10A 10A (J/B) 28 5 26 M2), (E103) 9B 7E 6B (M73) 5 **SR**: WITH SUNROOF (M14) (R1) R/B KEY SWITCH INSERTED R/B (M9) WITH-DRAWN $\overline{1}$ 2 (a) (\mathbf{a}) (9) W/L MAP LUGGAGE ROOM LAMP INTERIOR ROOM LAMP LAMP (R11) OFF ON OFF OFF ON (R7) (R4) (SR) DOOR DOOR DOOR 2 3 R/W R/Y R/Y В () **▼**SR R/W R/Y (R1) 6 7 (M73) R/W ■ R/W ■ B NEXT PAGE В B/R B/R W/L 17 (M70) (M27) 18 26 1 ROOM LAMP OUTPUT +B (FUSE) TIME CONTROL UNIT (M30), (M31) REFER TO THE FOLLOWING. M2, E103 -FUSE BLOCK-12345678 2 1 17 18 19 20 21 22 23 24 25 26 JUNCTION BOX (J/B) M9 (M31) (M30)

TKWA1549E



TKWA1550E

Interior Room Lamp Timer Does Not Operate

1. CHECK POWER SUPPLY SIGNAL

- Turn ignition switch OFF.
- 2. Disconnect time control unit connector.
- Check voltage between time control unit harness connector M30 terminal 1 (L/B) and ground.

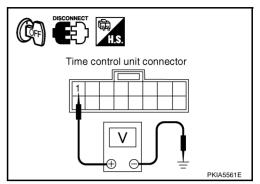
1 (L/B) - Ground : Battery voltage should exist.

OK or NG

OK >> GO TO 2.

NG

>> Check harness for open or short between time control unit and fuse.

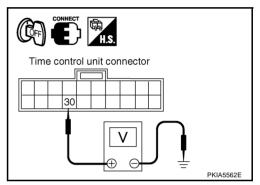


EKS0079F

2. CHECK FRONT DOOR SWITCH (DRIVER SIDE) INPUT SIGNAL

- Connect time control unit connector.
- 2. Check voltage between time control unit harness connector and ground.

	Terminals	0 1111			
	(+)	()	Condition (Driver's door)	Voltage	
Connector	Terminal (Wire color)	(-)	(=		
M31	M31 30 (R)		Closed	Approx. 5V	
W31 30 (K)		Ground	Open	Approx. 0V	



OK or NG

OK >> GO TO 4.

NG >> GO TO 3.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

- Disconnect front door switch connector (driver side).
- Check continuity between front door switch (driver side) termi-2. nals.

Connector	Terminals		Condition	Continuity
B16	2 2	2	Pushed (closed)	No
B10	2	3	Released (open)	Yes

Front door switch connector (driver side) 3 Ω

OK or NG

OK >> Check the following.

- Front door switch (driver side) ground circuit condition
- Harness for open or short between time control unit and front door switch (driver side)

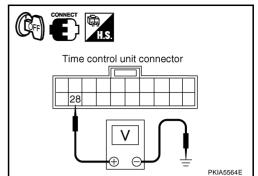
NG >> Replace driver side door switch.

LT-82

4. CHECK FRONT DOOR UNLOCK SENSOR INPUT SIGNAL (DRIVER SIDE)

Check voltage between time control unit harness connector and ground.

	Terminals			
	(+)	()	Condition	Voltage
Connector	Terminal (Wire color)	(-)		
M31	M31 28 (Y/G)		Locked	Approx. 5V
IVIO	20 (1/0)	Ground	Unlocked	Approx. 0V



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OK or NG

OK >> GO TO 6. NG >> GO TO 5.

5. CHECK FRONT DOOR UNLOCK SENSOR (DRIVER SIDE)

- Disconnect front door lock actuator harness connector.
- Check continuity between front door lock actuator terminals.

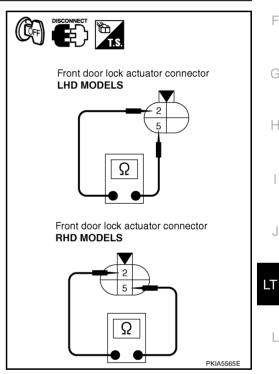
Connector	Term	inals	Condition	Continuity
D9	D9 2 5	Locked	No	
Da		5	Unlocked	Yes

OK or NG

OK

- >> Check the following.
 - Front door lock actuator ground circuit
 - Harness for open or short between time control unit and front door lock actuator

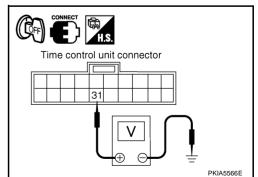
NG >> Replace front door lock actuator.



6. CHECK DOOR SWITCHES INPUT SIGNAL

Check voltage between time control unit harness connector and ground.

	Terminals	0 11.11		
	(+)	()	Condition (All doors)	Voltage
Connector	Terminal (Wire color)	(-)	(
M31	M31 31 (R/W)		Open	Approx. 0V
IVIO	31 (1777)	Ground	Closed	Approx. 5V



OK or NG

OK >> GO TO 8. NG >> GO TO 7.

LT-83

7. CHECK DOOR SWITCHES

- 1. Disconnect door switch harness connector.
- 2. Check continuity between door switch terminal and ground.

Connector		Terminals	Condition	Continuity
B118*1, B121*2	Door	1 - Ground	Closed	No
B20 ^{*3} , D45 ^{*4}	switches	1 - Glound	Open	Yes

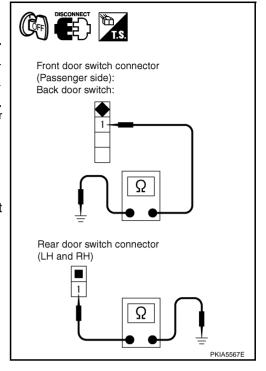
*1:Passenger side, *2:Rear LH (RHD model) or Rear RH (LHD model), *3:Rear RH (RHD model) or Rear LH (LHD model), *4:Back door

OK or NG

OK

- >> Check the following.
 - Door switch ground condition
 - Harness for open or short between time control unit and door switch

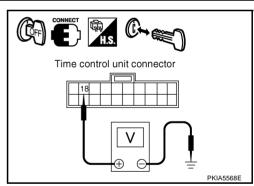
NG >> Replace door switch.



8. CHECK KEY SWITCH INPUT SIGNAL

Check voltage between time control unit harness connector and ground.

	Terminals	0 1111	_		
(+)		(-)	Condition (Key switch)	Voltage	
Connector	Terminal (Wire color)	(-)	,		
M31	31 18 (W/L) G		inserted	Battery voltage	
IVIST	10 (VV/L)	Ground	Removed	Approx. 0V	



OK or NG

OK >> Replace time control unit.

NG >> GO TO 9.

9. CHECK KEY SWITCH (INSERT)

- 1. Disconnect key switch connector.
- 2. Check continuity between terminals.

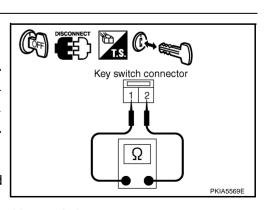
Connector	Term	Terminals Condition (Key switch)		Continuity
M9	1 2	Inserted	Yes	
IVIO	'	2	Removed	No

OK or NG

OK >>

- >> Check the following.
 - Harness for open or short between key switch and fuse
 - Harness for open or short between time control unit and key switch

NG >> Replace key switch.

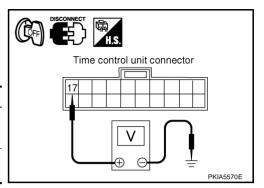


Interior Room Lamp Timer Does Not Cancel

1. CHECK IGNITION ON SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect time control unit connector.
- Check voltage between time control unit harness connector and ground.

Terminals			Ignition switch position		
(+)		(-)	OFF	ACC	ON
Connector	Terminal (Wire color)	()	0	7.00	
M31	17 (G)	Ground	0V	0V	Battery voltage



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OK or NG

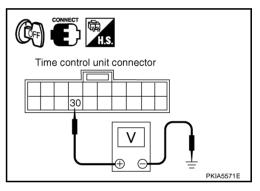
OK >> GO TO 2.

NG >> Check harness for open or short between time control unit and fuse.

2. CHECK DOOR SWITCH INPUT SIGNAL

- Connect time control unit connector.
- Check voltage between time control unit harness connector and ground.

	Terminals	0 1111			
(+)		(-)	Condition (Driver's door)	Voltage	
Connector	Terminal (Wire color)	(-)			
M31	M31 30 (R)		Closed	Approx. 5V	
IVIST	30 (K)	Ground	Open	Approx. 0V	



OK or NG

OK >> GO TO 4.

NG >> GO TO 3.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

- 1. Disconnect front door switch connector (driver side).
- Check continuity between front door switch (driver side) terminals.

Connector	Term	minals Condition		Continuity
B16	B16 2 3	3	Pushed (closed)	No
		Released (open)	Yes	

Front door switch connector (driver side)

OK or NG

OK >> Check the following.

- Driver side door switch ground circuit condition
- Harness for open or short between time control unit and driver side door switch

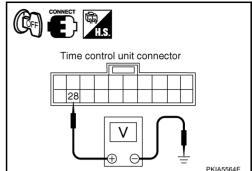
NG >> Replace driver side door switch.

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4. CHECK FRONT DOOR UNLOCK SENSOR INPUT SIGNAL (DRIVER SIDE)

Check voltage between time control unit harness connector and ground.

	Terminals				
(+)			Condition	Voltage	
Connector	Terminal (Wire color)	(-)			
M31 28 (Y/G)		Ground	Locked	Approx. 5V	
IVIOI	20 (1/6)	Giodila	Unlocked	Approx. 0V	



OK or NG

OK >> GO TO 6. NG >> GO TO 5.

5. CHECK FRONT DOOR UNLOCK SENSOR (DRIVER SIDE)

- 1. Disconnect front door lock actuator harness connector.
- 2. Check continuity between front door lock actuator terminals.

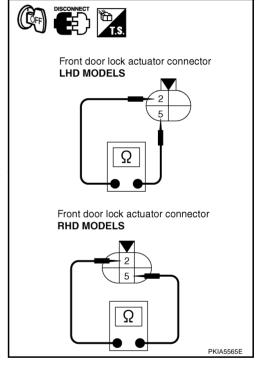
Connector	Terminals		Condition	Continuity	
D9	2	5	Locked	No	
			Unlocked	Yes	

OK or NG

OK

- >> Check the following.
 - Front door lock actuator ground circuit
 - Harness for open or short between time control unit and front door lock actuator

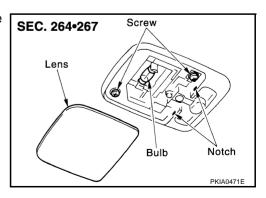
NG >> Replace front door lock actuator.



Bulb Replacement INTERIOR ROOM LAMP

- Insert a narrow slotted screwdriver in the cutout, and remove lens.
- 2. Remove the bulb.

Room lamp : 12V 10W



EKS003DB

LUGGAGE ROOM LAMP

Refer to LT-86, "Bulb Replacement" in "INTERIOR ROOM LAMP".

LT-86

Removal and Installation INTERIOR ROOM LAMP

EKS003DC

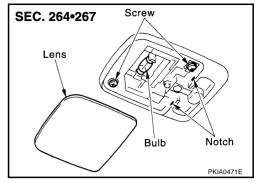
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- I. Insert a narrow slotted screwdriver in the cutout, and remove lens.
- 2. Remove room lamp mounting screws (2), and remove room lamp.
- 3. Disconnect the interior room lamp connector.



LUGGAGE ROOM LAMP

Refer to LT-87, "Removal and Installation" in "INTERIOR ROOM LAMP".

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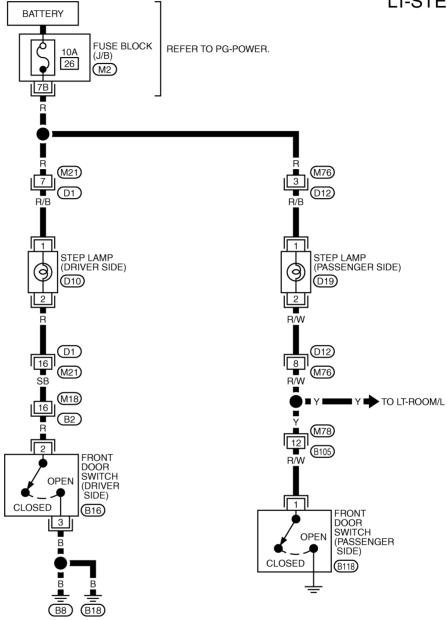
Н

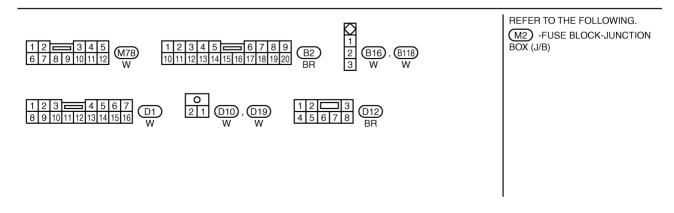
STEP LAMP PFP:26420

Wiring Diagram — STEP/L — LHD MODELS

EKS00F8B

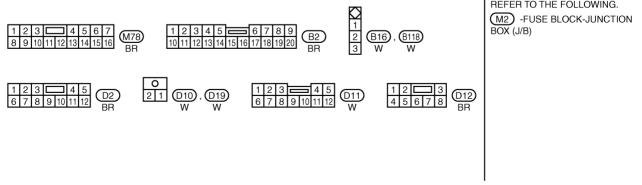






STEP LAMP

RHD MODELS Α LT-STEP/L-02 BATTERY FUSE BLOCK В REFER TO PG-POWER. 10A (J/B) 26 $\overline{(M2)}$ C D (M22) (M77) 12 R/B (D2) **(D11)** Е STEP LAMP (DRIVER SIDE) STEP LAMP (PASSENGER SIDE) (D10) (D19) G (D2) **D12** Н (M22) M18 Y 🔷 TO LT-ROOM/L (B2) (B105) **FRONT** DOOR SWITCH (DRIVER SIDE) J OPEN CLOSED (B₁₆) FRONT DOOR SWITCH (PASSENGER SIDE) 3 LT OPEN CLOSED (B118) (B8) (B18) M REFER TO THE FOLLOWING. (M2) -FUSE BLOCK-JUNCTION BOX (J/B) (B2)



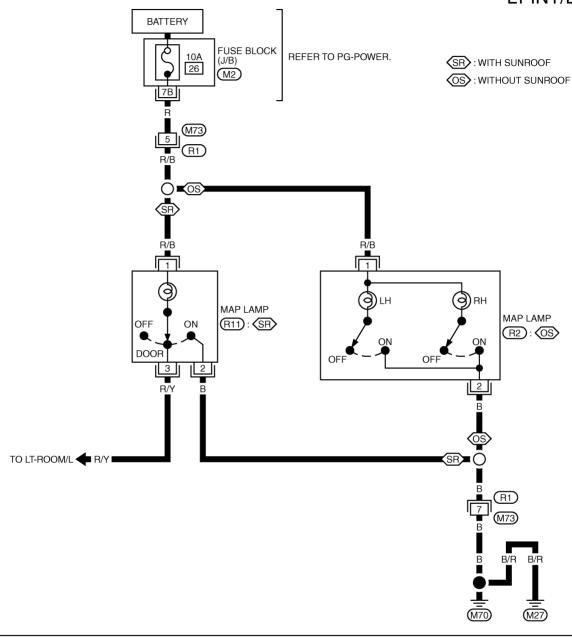
TKWA1552E

MAP LAMP
PFP:26430

Wiring Diagram —INT/L—

EKS00F88

LT-INT/L-01









REFER TO THE FOLLOWING.

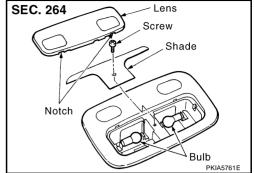
(M2) -FUSE BLOCK-JUNCTION
BOX (J/B)

Bulb ReplacementMAP LAMP (WITHOUT SUNROOF)

1. Remove the lens using a clip driver or a suitable tool.

- 2. Remove the shade mounting screw and remove the shade from the map lamp.
- 3. Remove the bulb.

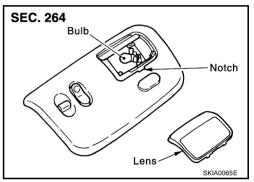
Map lamp (Without sunroof) : 12V 8W



MAP LAMP (WITH SUNROOF)

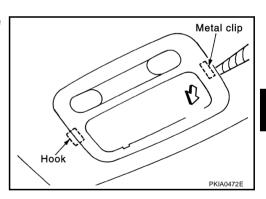
- 1. Remove the lens using a clip driver or a suitable tool.
- 2. Remove the bulb.

Map lamp (With sunroof) : 12V 10W



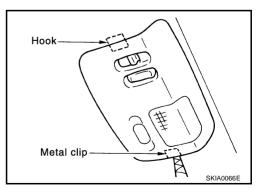
Removal and Installation MAP LAMP (WITHOUT SUNROOF)

- Using a clips driver or a suitable tool, press and remove the metal clip of the map lamp.
- 2. Disconnect the map lamp connector.



MAP LAMP (WITH SUNROOF)

- 1. Using a clips driver or a suitable tool, press and remove the metal clip of the map lamp.
- 2. Disconnect the map lamp connector and sunroof connector.



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BULB SPECIFICATIONS

BULB SPECIFICATION	ONS	PFP:262	PFP:26297	
Headlamp		EKS003GS		
	Item	Wattage (W)	_	
Low/High		55 /60(H4)		
Driving lamp		65(H1R1)		
Exterior Lamp		EKSO	003GT	
	Item	Wattage (W)		
Front combination lamp	Clearance lamp	5		
Front turn signal lamp	,	21(amber)		
Side turn signal lamp		5		
Fac laws	Front fog lamp	55(H11)		
Fog lamp	Rear fog lamp	21		
	Stop/Tail lamp	21/5		
Rear combination lamp	Turn signal lamp	21		
	Back-up lamp	21		
License plate lamp	,	5		
High-mounted stop lamp		5		
Interior Lamp/Illumi	nation	EKSO	103GU	
	Item	Wattage (W)		
Ashtray illumination		1.4		
Interior room lamp		10		
Cnatlemn	Without sunroof	8		
Spot lamp	With sunroof	10		
Luggage room lamp		10		