

**SECTION** **LT**  
**LIGHTING SYSTEM**

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# PRECAUTIONS

## PRECAUTIONS

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### 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.

### General Precautions for Service Operations

GKS0000Q

- Never work with wet hands.
- Turn the lighting switch OFF before disconnecting and connecting the connector.
- When checking the headlamp on/off operation, check it on vehicle and with the power connected to the vehicle-side connector.
- Do not touch the headlamp bulb glass surface with bare hands or allow oil or grease to get on it. Do not touch the headlamp bulb just after the headlamp is turned off, because it is very hot.
- When the bulb has burned out, wrap it in a thick vinyl bag and discard. Do not break the bulb.
- Leaving the bulb removed from the headlamp housing for a long period of time can deteriorate the performance of the lens and reflector (dirt, clouding). Always prepare a new bulb and have it on hand when replacing the bulb.
- Do not use organic solvent (paint thinner or gasoline) to clean lamps and to remove old sealant.

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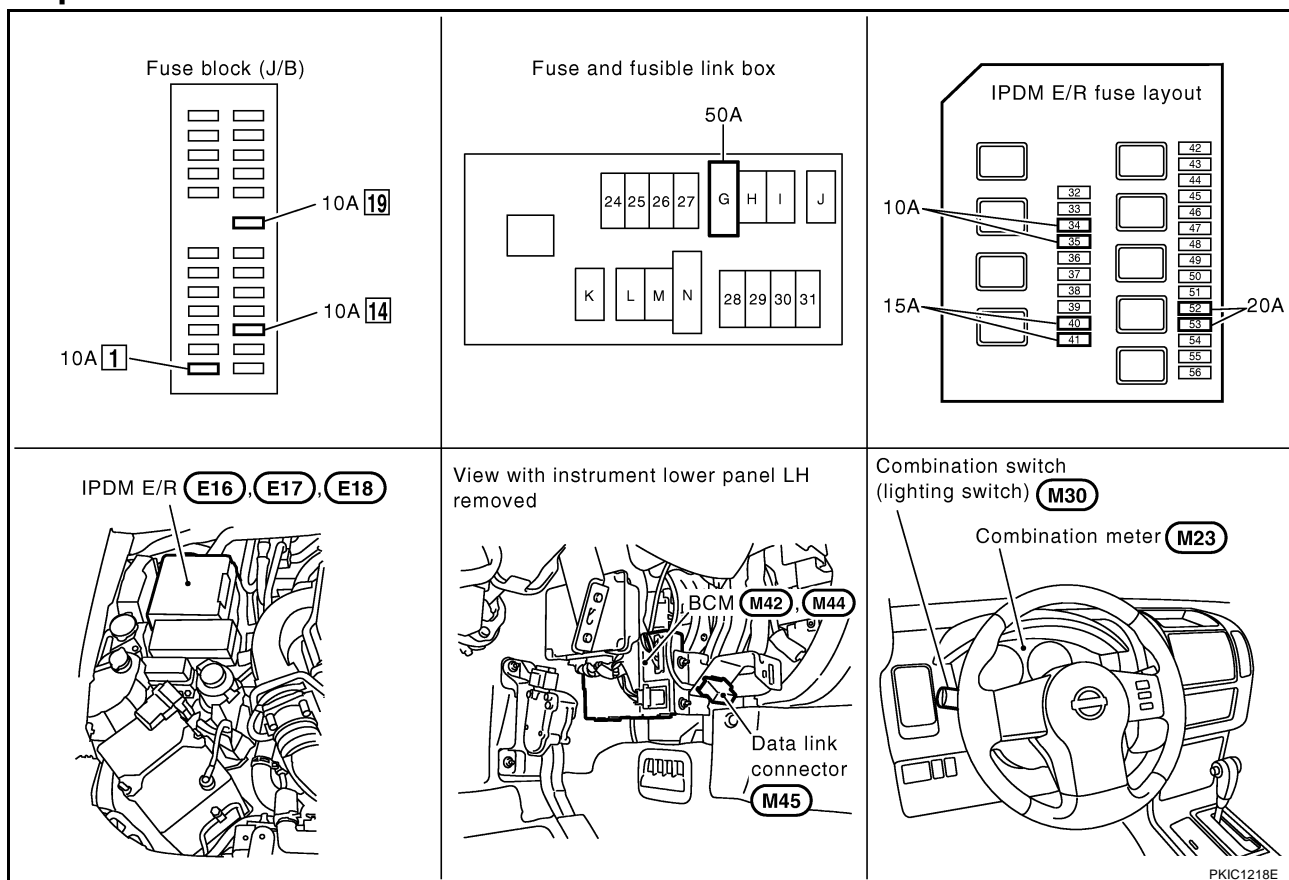
# HEADLAMP

## HEADLAMP

PFP:26010

### Component Parts and Harness Connector Location

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## System Description

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The control of the headlamp system operation is dependent upon the position of the combination switch (lighting switch). When the lighting switch is placed in the 2ND position, the BCM (body control module) receives input requesting the headlamps (and tail lamps) illuminate. This input is communicated to the IPDM E/R (intelligent power distribution module engine room) through the CAN communication. The CPU (central processing unit) of the IPDM E/R controls the headlamp high and headlamp low relay coils. When energized, these relays direct power to the respective headlamps, which then illuminate.

## HEADLAMP OPERATION

### Low Beam Operation

With the lighting switch in 2ND position, the BCM receives input requesting the headlamps to illuminate. This input is communicated to the IPDM E/R through the CAN communication. The CPU of the IPDM E/R controls the headlamp low relay coil. When energized, this relay directs power

- through 15A fuse (No. 41, located in IPDM E/R)
- through IPDM E/R terminal 54
- to front combination lamp RH terminal 1,
- through 15A fuse (No. 40, located in IPDM E/R)
- through IPDM E/R terminal 52
- to front combination lamp LH terminal 1.

Ground is supplied

- to front combination lamp RH and LH terminals 3
- through grounds E21, E41 and E61.

With power and ground supplied, low beam headlamps illuminate.

# HEADLAMP

## High Beam Operation/Flash-to-Pass Operation

With the lighting switch in 2ND position and placed in HIGH or PASS position, the BCM receives input requesting the headlamp high beams to illuminate. This input is communicated to the IPDM E/R through the CAN communication. The CPU of the IPDM E/R controls the headlamp high relay coil. When energized, this relay directs power

- through 10A fuse (No. 34, located in IPDM E/R)
- through IPDM E/R terminal 56
- to front combination lamp RH terminal 2,
- through 10A fuse (No. 35, located in IPDM E/R)
- through IPDM E/R terminal 55
- to front combination lamp LH terminal 2.

Ground is supplied

- to front combination lamp RH and LH terminals 3
- through grounds E21, E41 and E61.

With power and ground supplied, the high beam headlamps illuminate.

Combination meter that received high beam request signal by BCM through the CAN communication makes a high beam indicator lamp turn on in combination meter.

## FRIENDLY LIGHTING FUNCTION

This function starts timer function of BCM by operating passing switch, and illuminates headlamps (LOW beam) for a given length of time.

Headlamps (LOW beam) stay ON for a given length of time by operating passing switch when ignition switch is OFF and lighting switch is OFF.

Headlamps (LOW beam) stays ON for two minutes at a maximum by operating passing switch repeatedly.

CONSULT-II is capable of setting a lighting time. Refer to [LT-15, "WORK SUPPORT"](#) .

## CAN Communication System Description

GKS0000U

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

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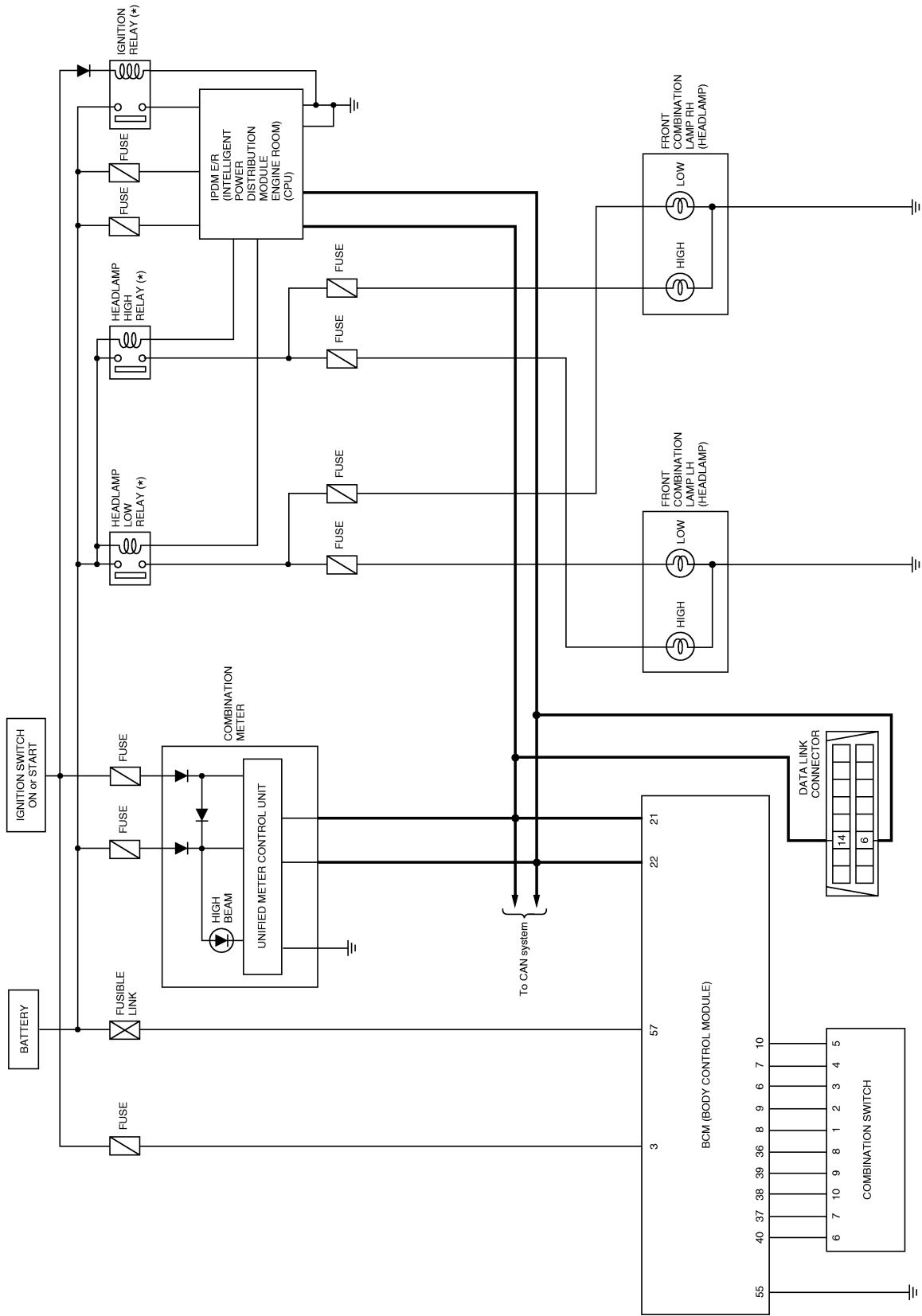
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# HEADLAMP

## Schematic

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\* : This relay is build into the IPDM E/R (Intelligent power distribution module engine room).

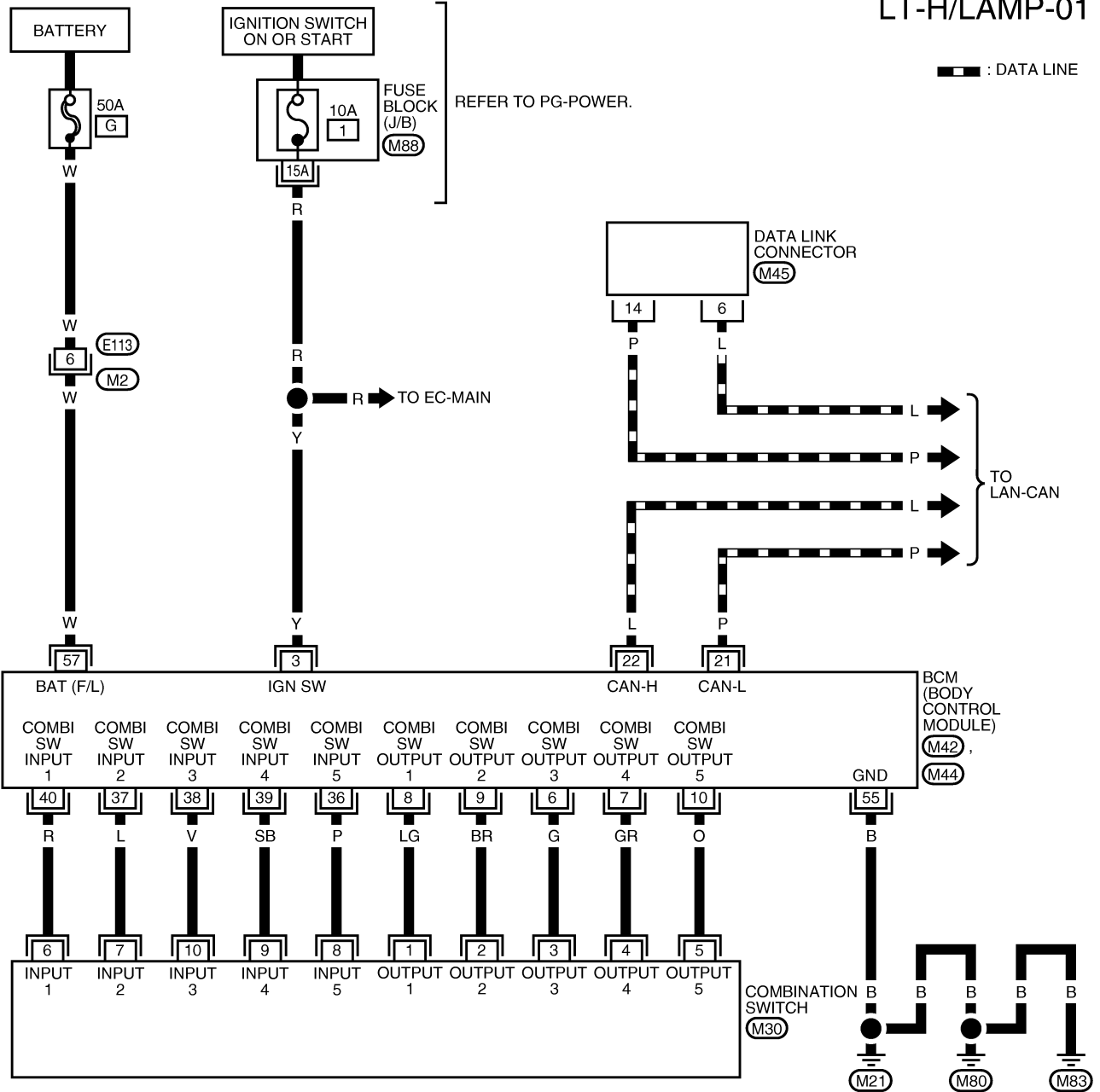
MKWA4176E

# HEADLAMP

## Wiring Diagram - H/LAMP -

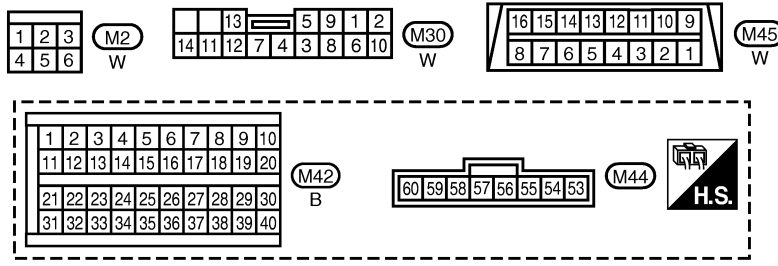
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### LT-H/LAMP-01



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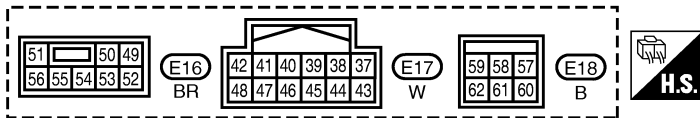
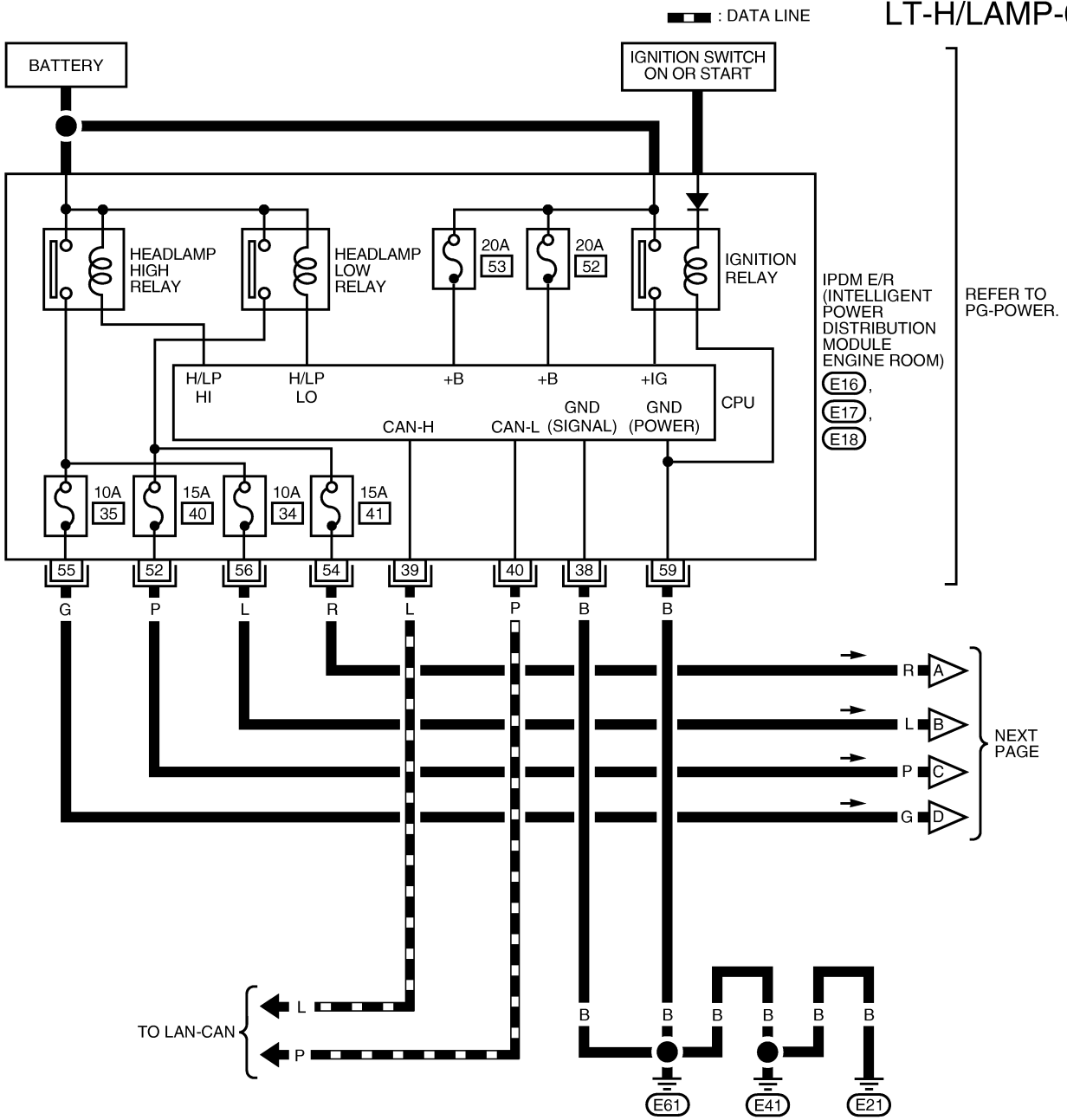


REFER TO THE FOLLOWING.  
 (M88) - FUSE BLOCK - JUNCTION BOX (J/B)

MKWA4177E

# HEADLAMP

LT-H/LAMP-02

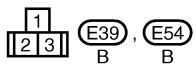
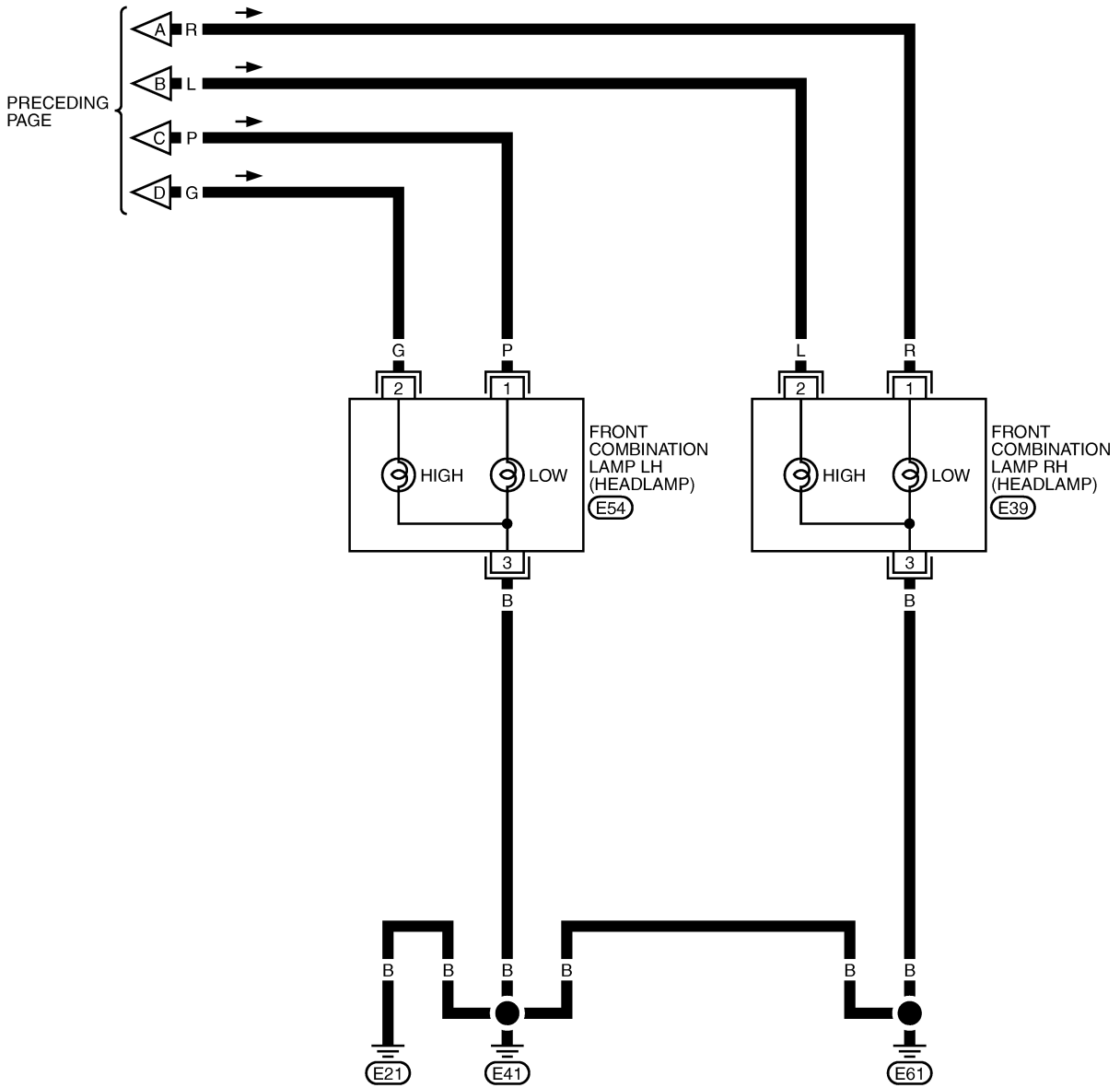




# HEADLAMP

LT-H/LAMP-03

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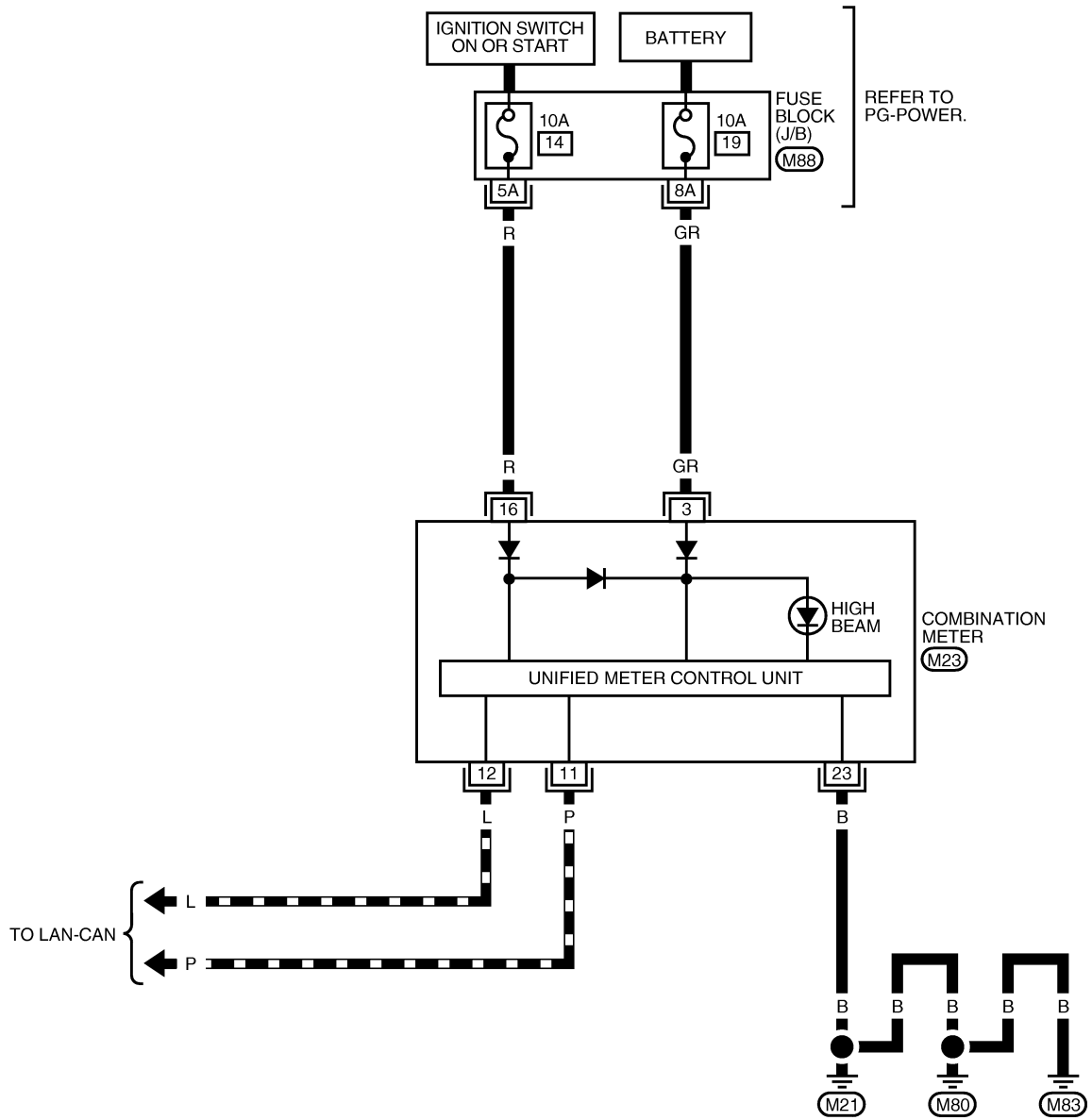


MKWA3555E

# HEADLAMP

LT-H/LAMP-04

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	M23
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	W

REFER TO THE FOLLOWING.  
 (M88) - FUSE BLOCK-  
 JUNCTION BOX (J/B)

MKWA3556E

# HEADLAMP

## Terminals and Reference Value for BCM

GKS0000Y

Terminal No.	Wire color	Signal name	Measuring condition		Reference value
			Ignition switch	Operation or condition	
3	Y	Ignition switch (ON)	ON	—	Battery voltage
6	G	Combination switch output 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	
7	GR	Combination switch output 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
8	LG	Combination switch output 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
9	BR	Combination switch output 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
10	O	Combination switch output 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	
21	P	CAN- L	—	—	—
22	L	CAN- H	—	—	—
36	P	Combination switch input 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	
37	L	Combination switch input 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
38	V	Combination switch input 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	
39	SB	Combination switch input 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
40	R	Combination switch input 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
55	B	Ground	ON	—	Approx. 0V
57	W	Battery power supply (fusible link)	OFF	—	Battery voltage

## Terminals and Reference Values for IPDM E/R

GKS0000Y

Terminal No.	Wire color	Signal name	Measuring condition		Reference value
			Ignition switch	Operation or condition	
38	B	Ground	ON	—	Approx. 0V
39	L	CAN- H	—	—	—
40	P	CAN- L	—	—	—
52	P	Headlamp low (LH)	ON	Lighting switch 2ND position OFF	Approx. 0V
				ON	Battery voltage
54	R	Headlamp low (RH)	ON	Lighting switch 2ND position OFF	Approx. 0V
				ON	Battery voltage
55	G	Headlamp high (LH)	ON	Lighting switch HIGH or PASS position OFF	Approx. 0V
				ON	Battery voltage
56	L	Headlamp high (RH)	ON	Lighting switch HIGH or PASS position OFF	Approx. 0V
				ON	Battery voltage
59	B	Ground	ON	—	Approx. 0V

# HEADLAMP

## How to Proceed With Trouble Diagnosis

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1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to [LT-4, "System Description"](#) .
3. Perform the Preliminary Check. Refer to [LT-12, "Preliminary Check"](#) .
4. Check symptom and repair or replace the cause of malfunction.
5. Does the headlamp operate normally? If YES: GO TO 6. If NO: GO TO 4.
6. INSPECTION END

## Preliminary Check

GKS00010

### CHECK POWER SUPPLY AND GROUND CIRCUIT

#### 1. CHECK FUSES OR FUSIBLE LINK

Check for blown fuses or fusible link.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	G
	Ignition switch ON or START position	1
IPDM E/R	Battery	34
		35
		40
		41
		52
		53
Combination meter	Battery	19
	Ignition switch ON or START position	14

Refer to [LT-7, "Wiring Diagram - H/LAMP -"](#) .

#### OK or NG

OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link. Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) .

# HEADLAMP

## 2. CHECK POWER SUPPLY CIRCUIT

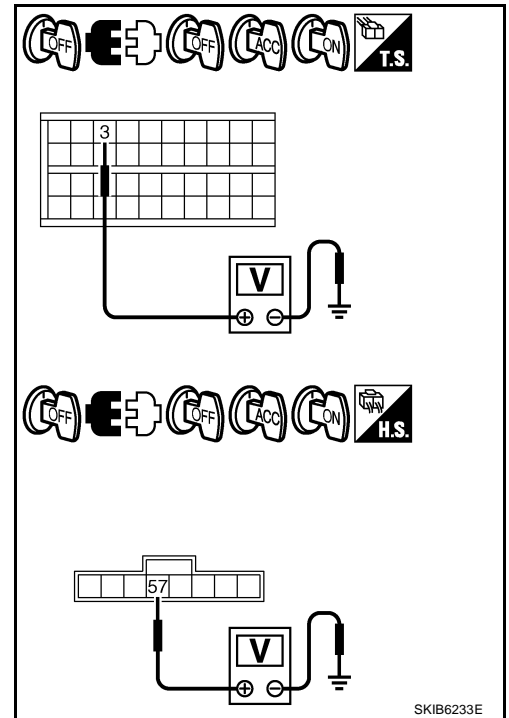
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

Terminal		(-)	Ignition switch position		
(+)	OFF		ACC	ON	
BCM connector	Terminal	Ground	0V	0V	Battery voltage
M42	3		Battery voltage	Battery voltage	Battery voltage
M44	57		Battery voltage	Battery voltage	Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.



## 3. CHECK GROUND CIRCUIT

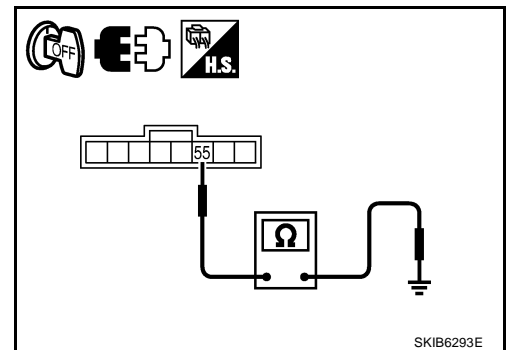
Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M44	55		Yes

OK or NG

OK >> INSPECTION END

NG >> Repair harness or connector.



# HEADLAMP

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## CONSULT-II Functions (BCM)

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

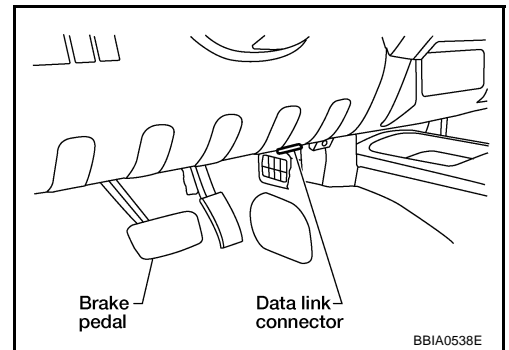
BCM diagnosis part	Diagnosis mode	Description
HEADLAMP	WORK SUPPORT	Changes the setting for each function.
	DATA MONITOR	Displays BCM input data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
BCM	SELF-DIAG RESULTS	BCM performs self-diagnosis of CAN communication.
	CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.

## CONSULT-II BASIC OPERATION

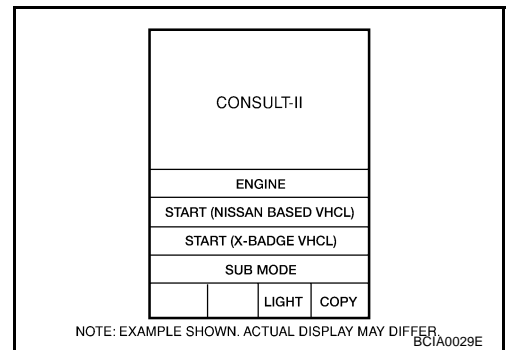
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

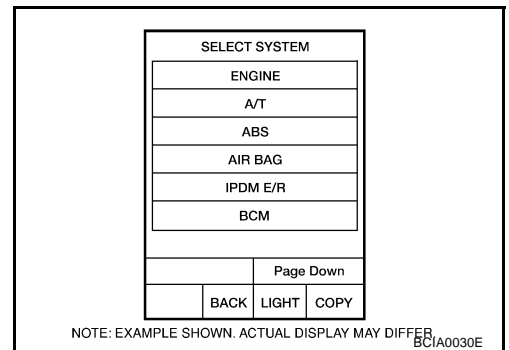
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, and then turn ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

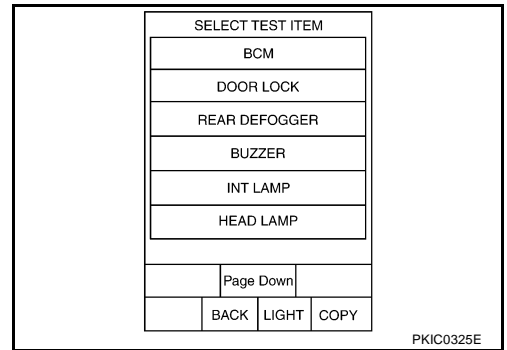


3. Touch "BCM" on "SELECT SYSTEM" screen. If "BCM" is not indicated, refer to [GI-47, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



# HEADLAMP

4. Touch "HEADLAMP" on "SELECT TEST ITEM" screen.



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## WORK SUPPORT

### Operation Procedure

1. Touch "HEAD LAMP" on "SELECT TEST ITEM" screen.
2. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen.
3. Touch "HEAD LIGHT TIMER" on "SELECT WORK ITEM" screen.
4. Touch "START".
5. Touch "MODE 1-2" of setting to be changed.
6. Touch "CHANGE SET".
7. The setting will be changed and "CUSTOMIZING COMPLETED" will be displayed.
8. Touch "END".

### Work Support Setting Item

Work item	Description
HEAD LIGHT TIMER	Friendly lighting function headlamp OFF timer period can be changed in this time. Selects friendly lighting function headlamp OFF timer period two modes. ● MODE 1 (10sec.)/ MODE 2 (30sec.) <sup>NOTE</sup>

#### NOTE:

Factory setting

## DATA MONITOR

### Operation Procedure

1. Touch "HEADLAMP" on "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on "DATA MONITOR" screen.

ALL SIGNALS	Monitors all the signals.
SELECTION FROM MENU	Selects items and monitors them.

4. When "SELECTION FROM MENU" is selected, touch individual items to be monitored. When "ALL SIGNALS" is selected, all the items will be monitored.
5. Touch "START".
6. Touch "RECORD" while monitoring, then the status of the monitored item can be recorded. To stop recording, touch "STOP".

### Display Item List

Monitor item	Contents
IGN ON SW "ON/OFF"	Displays status (ignition switch IGN position: ON/other: OFF) of ignition switch judged from the ignition switch signal.
ACC ON SW "ON/OFF"	Displays status (ignition switch ACC or IGN position: ON/other: OFF) of ignition switch judged from the ignition switch signal.
HI BEAM SW "ON/OFF"	Displays status (lighting switch high beam position: ON/other: OFF) of high beam switch judged from the lighting switch signal.

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# HEADLAMP

Monitor item	Contents
HEAD LAMP SW 1	"ON/OFF" Displays status (lighting switch 2ND position: ON/other: OFF) of headlamp 1 switch judged from the lighting switch signal.
HEAD LAMP SW 2	"ON/OFF" Displays status (lighting switch 2ND position: ON/other: OFF) of headlamp 2 switch judged from the lighting switch signal.
LIGHT SW 1ST	"ON/OFF" Displays status (lighting switch 1ST or 2ND position: ON/other: OFF) of lighting switch 1ST position switch judged from the lighting switch signal.
PASSING SW	"ON/OFF" Displays status (lighting switch passing position: ON/other: OFF) of passing switch judged from the lighting switch signal.
FR FOG SW	"ON/OFF" Displays status (lighting switch front fog lamp ON position: ON/others: OFF) of front fog lamp switch judged from the lighting switch signal.
RR FOG SW <sup>NOTE</sup>	"OFF" —
DOOR SW - DR	"ON/OFF" Displays status (door is open: ON/door is closed: OFF) of driver side door switch judged from the driver side door switch signal.
DOOR SW - AS	"ON/OFF" Displays status (door is open: ON/door is closed: OFF) of passenger side door switch judged from the passenger side door switch signal.
DOOR SW - RR	"ON/OFF" Displays status (door is open: ON/door is closed: OFF) of rear door switch (RH) judged from the rear door switch (RH) signal.
DOOR SW - RL	"ON/OFF" Displays status (door is open: ON/door is closed: OFF) of rear door switch (LH) judged from the rear door switch (LH) signal.
BACK DOOR SW	"ON/OFF" Displays status (door is open: ON/door is closed: OFF) of back door switch judged from the back door switch signal.
TURN SIGNAL R	"ON/OFF" Displays status (turn signal switch right position: ON/other: OFF) of turn RH switch judged from the turn signal switch signal.
TURN SIGNAL L	"ON/OFF" Displays status (turn signal switch left position: ON/other: OFF) of turn LH switch judged from the turn signal switch signal.
CARGO LAMP SW <sup>NOTE</sup>	"OFF" —
HD LIGHT TIMER	"10 sec/ 30 sec" Displays status (MODE 1: 10 sec./ MODE 2: 30 sec.) of head light timer.
LIT-SEN FAIL <sup>NOTE</sup>	"OK" —
AUT LIGHT SYS <sup>NOTE</sup>	"OFF" —

**NOTE:**

This item is displayed, but cannot be monitored.

## ACTIVE TEST

### Operation Procedure

1. Touch "HEADLAMP" on "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on "SELECT DIAG MODE" screen.
3. Touch item to be tested and check operation of the selected item.
4. During the operation check, touching "OFF" deactivates the operation.

### Display Item List

Test item	Description
TAIL LAMP	Allows tail lamp relay to operate by switching ON-OFF.
HEAD LAMP (HI, LO)	Allows headlamp relay to operate by switching ON-OFF.
RR FOG LAMP <sup>NOTE</sup>	—
FR FOG LAMP	Allows front fog lamp relay to operate by switching ON-OFF.

**NOTE:**

This item is displayed, but cannot be monitored.



# HEADLAMP

GKS00012

## CONSULT-II Functions (IPDM E/R)

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

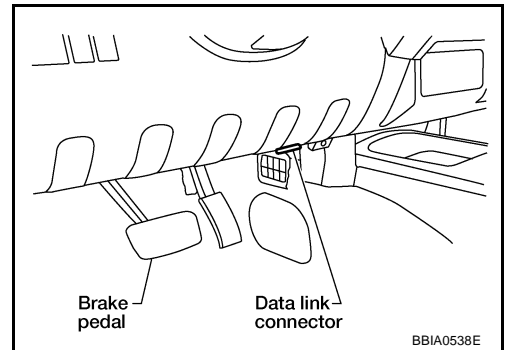
Diagnosis Mode	Description
SELF-DIAGNOSTIC RESULTS	Refer to <a href="#">PG-17, "SELF-DIAGNOSTIC RESULTS"</a> .
DATA MONITOR	The input/output data of IPDM E/R is displayed in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	IPDM E/R sends a drive signal to electronic components to check their operation.

## CONSULT-II BASIC OPERATION

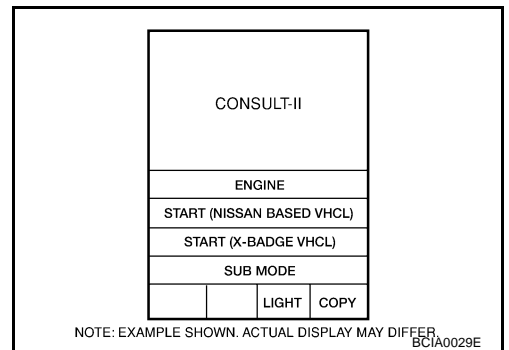
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

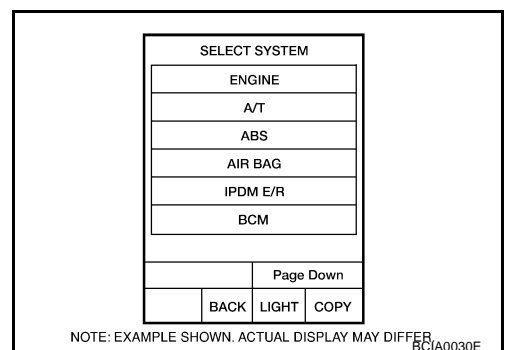
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, and then turn the ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

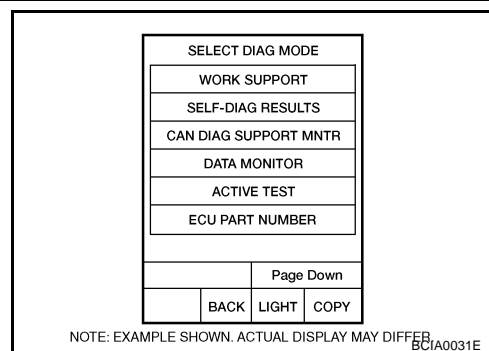


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen. If "IPDM E/R" is not displayed, refer to [GI-47, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#) .



# HEADLAMP

- Select the desired part to be diagnosed on the “SELECT DIAG MODE” screen.



## DATA MONITOR

### Operation Procedure

- Touch “DATA MONITOR” on “SELECT DIAG MODE ” screen.
- Touch “ALL SIGNALS”, “MAIN SIGNALS” or “SELECT FROM MENU” on “SELECT MONITOR ITEM” screen.

ALL SIGNALS	Monitors all items.
MAIN SIGNALS	Monitor the predetermined item.
SELECTION FROM MENU	Selects items and monitors them.

- When “SELECTION FROM MENU” is selected, touch individual items to be monitored. In “ALL SIGNALS”, all items are monitored. In “MAIN SIGNALS”, predetermined items are monitored.
- Touch “START”.
- Touch “RECORD” while monitoring to record the status of the item being monitored. To stop recording, touch “STOP”.

### All Items, Main Items, Selection From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECTION FROM MENU	
Position lights request	TAIL&CLR REQ	ON/OFF	×	×	×	Signal status input from BCM
Headlamp low beam request	HL LO REQ	ON/OFF	×	×	×	Signal status input from BCM
Headlamp high beam request	HL HI REQ	ON/OFF	×	×	×	Signal status input from BCM
Front fog lights request	FR FOG REQ	ON/OFF	×	×	×	Signal status input from BCM
Daytime lights request*	DTRL REQ	OFF	×	×	×	—

#### NOTE:

- Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is at ACC, the display may not be correct.
- \* : This item is displayed, but cannot be monitored.

## ACTIVE TEST

### Operation Procedure

- Touch “ACTIVE TEST” on “SELECT DIAG MODE” screen.
- Touch “EXTERNAL LAMPS” on “SELECT TEST ITEM” screen.
- Touch item to be tested, and check operation.
- Touch “START”.
- Touch “STOP” while testing to stop the operation.

# HEADLAMP

CONSULT-II screen display		Test item	Description
EXTERNAL LAMP	TAIL	Tail lamp relay operation	Allows tail lamp relay to operate by switching operation ON.
	HI, LO	Headlamp relay (HI, LO) operation	Allows headlamp relay (HI, LO) to operate by switching operation (HI, LO) ON. (Headlamp highbeam repeats ON-OFF every 1 second)
	FOG	Front fog lamp relay operation	Allows front fog lamp relay to operate by switching operation ON.
	OFF	—	Stop the active test.

## Headlamp High Beam Does Not Illuminate (Both Sides)

GKS00013

### 1. CHECK COMBINATION SWITCH INPUT SIGNAL

☑ With CONSULT-II

1. Select "BCM" on CONSULT-II. Select "HEAD LAMP" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure that "HI BEAM SW" turns ON-OFF linked with operation of lighting switch.

**When lighting switch is HIGH position : HI BEAM SW ON**

DATA MONITOR			
MONITOR			
HI BEAM SW	ON		
RECORD			
MODE	BACK	LIGHT	COPY

PKIA7585E

☒ Without CONSULT-II

Refer to [LT-71, "Combination Switch Inspection"](#).

OK or NG

OK >> GO TO 2.

NG >> Check combination switch (lighting switch). Refer to [LT-71, "Combination Switch Inspection"](#).

### 2. HEADLAMP ACTIVE TEST

☑ With CONSULT-II

1. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
3. Touch "HI" screen.
4. Make sure headlamp high beam operation.

**Headlamp high beam should operate (Headlamp high beam repeats ON-OFF every 1 second).**

ACTIVE TEST			
EXTERNAL LAMPS		OFF	
		TAIL	
LO		HI	
FOG			
MODE	BACK	LIGHT	COPY

PKIC0936E

☒ Without CONSULT-II

1. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
2. Make sure headlamp high beam operation.

**Headlamp high beam should operate.**

OK or NG

OK >> GO TO 3.

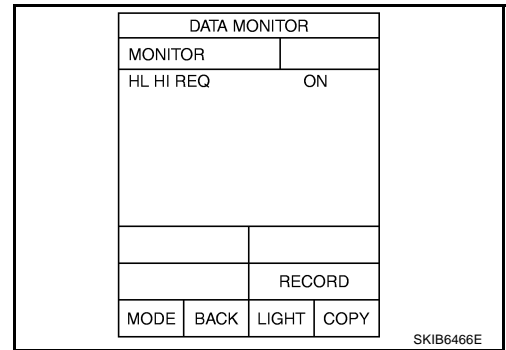
NG >> GO TO 4.

# HEADLAMP

## 3. CHECK IPDM E/R

1. Select "IPDM E/R" on CONSULT-II. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
2. Make sure "HL LO REQ" and "HL HI REQ" turns ON when lighting switch is in HI position.

**When lighting switch is in HI position : HL HI REQ ON**



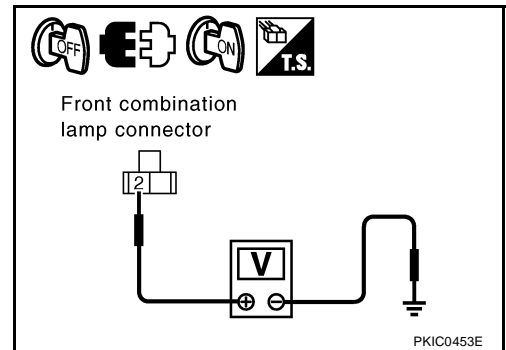
OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).
- NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).

## 4. CHECK FRONT COMBINATION LAMP INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front combination lamp RH and LH connector.
3. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
4. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
5. Touch "HI" screen.
6. When headlamp high beam is operating, check voltage between front combination lamp (RH and LH) harness connector and ground.

Terminal (+)		Terminal	Terminal (-)	Voltage
Front combination lamp connector				
RH	E39	2	Ground	Battery voltage
LH	E54			



OK or NG

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

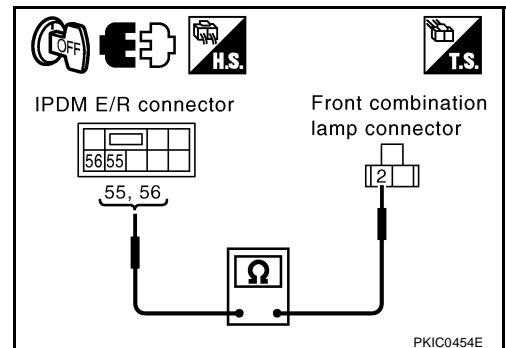
## 5. CHECK FRONT COMBINATION LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and front combination lamp (RH and LH) harness connector.

Circuit	IPDM E/R		Front combination lamp		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E16	56	E39	2	Yes
LH		55	E54		

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).
- NG >> Repair harness or connector.



# HEADLAMP

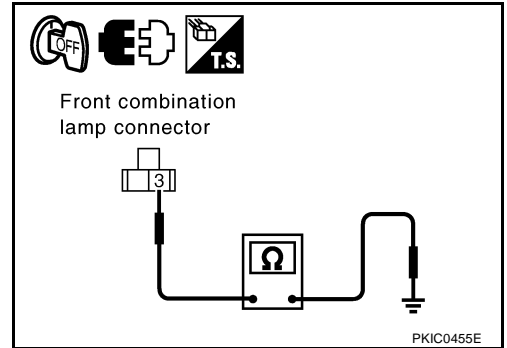
## 6. CHECK FRONT COMBINATION LAMP GROUND

1. Turn ignition switch OFF.
2. Check continuity between front combination lamp (RH and LH) connector and ground.

Front combination lamp connector		Terminal	Ground	Continuity
RH	E39	3		Ground
LH	E54			

### OK or NG

- OK >> Check connector for connection, bend and loose fit. If it is normal, check headlamp bulb.
- NG >> Repair harness or connector.



## Headlamp HI Beam Does Not Illuminate (One Side)

GKS00014

### 1. CHECK BULB

Check bulb of lamp which does not illuminate.

### OK or NG

- OK >> GO TO 2.
- NG >> Replace headlamp bulb.

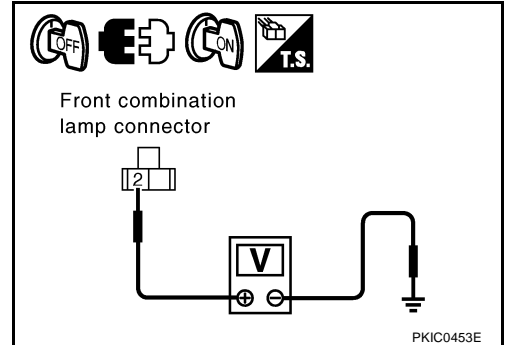
## 2. CHECK FRONT COMBINATION LAMP INPUT SIGNAL

1. Disconnect front combination lamp RH or LH connector.
2. Turn lighting switch to HIGH position.
3. Check voltage between front combination lamp (RH or LH) harness connector and ground.

Terminal (+)		Terminal (-)	Voltage
Front combination lamp connector	Terminal		
RH	E39	2	Ground
LH	E54		
			Battery voltage

### OK or NG

- OK >> GO TO 3.
- NG >> GO TO 4.



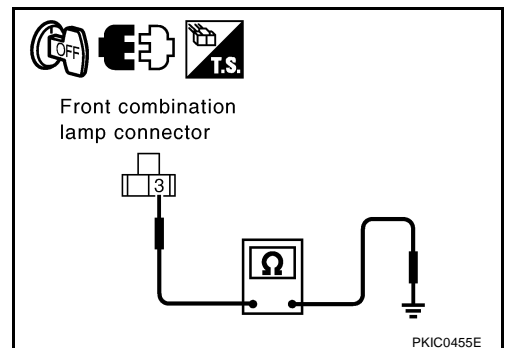
## 3. CHECK FRONT COMBINATION LAMP GROUND

1. Turn lighting switch OFF.
2. Check continuity between front combination lamp (RH or LH) harness connector and ground.

Front combination lamp connector		Terminal	Ground	Continuity
RH	E39	3		Ground
LH	E54			

### OK or NG

- OK >> Check connector for connection, bend and loose fit.
- NG >> Repair harness or connector.





# HEADLAMP

## 2. HEADLAMP ACTIVE TEST

☑ With CONSULT-II

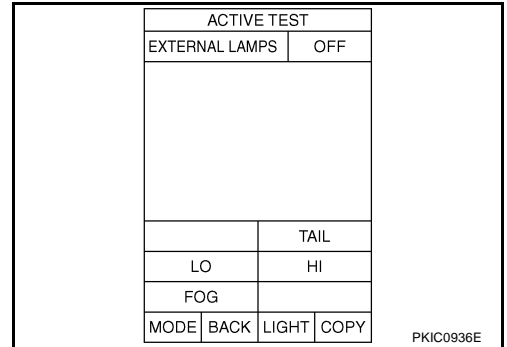
1. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
3. Touch "LO" screen.
4. Make sure headlamp low beam operation.

**Headlamp low beam should operate.**

☒ Without CONSULT-II

1. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
2. Make sure headlamp low beam operation.

**Headlamp low beam should operate.**



OK or NG

- OK >> GO TO 3.
- NG >> GO TO 4.

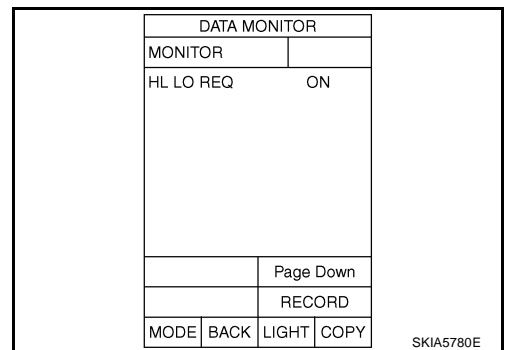
## 3. CHECK IPDM E/R

1. Select "IPDM E/R" on CONSULT-II. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
2. Make sure "HL LO REQ" turns ON when lighting switch is in 2ND position.

**When lighting switch is in 2ND position : HL LO REQ ON**

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).
- NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).



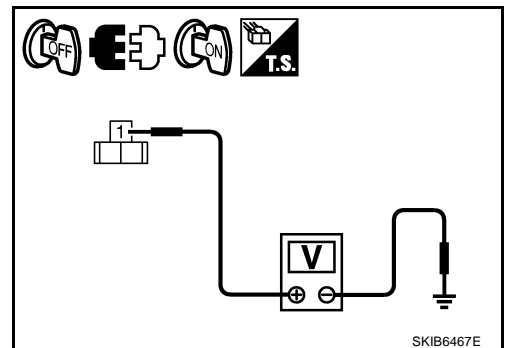
## 4. CHECK FRONT COMBINATION LAMP INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front combination lamp RH and LH connector.
3. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
4. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
5. Touch "LO" screen.
6. When headlamp low beam is operating, check voltage between front combination lamp (RH and LH) harness connector and ground.

Terminal				Voltage
(+)		Terminal	(-)	
Front combination lamp connector				
RH	E39	1	Ground	Battery voltage
LH	E54			

OK or NG

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



# HEADLAMP

## 5. CHECK FRONT COMBINATION LAMP CIRCUIT

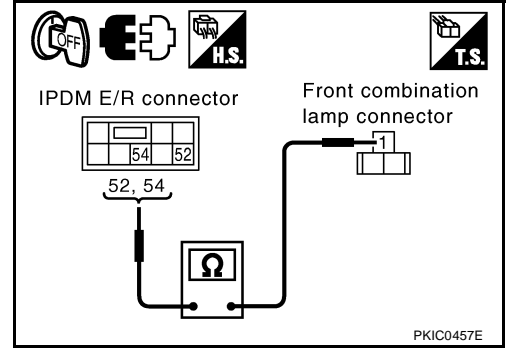
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and front combination lamp (RH and LH) harness connector.

Circuit	IPDM E/R		Front combination lamp		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E16	54	E39	1	Yes
LH		52	E54		

OK or NG

OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

NG >> Repair harness or connector.



## 6. CHECK FRONT COMBINATION LAMP GROUND

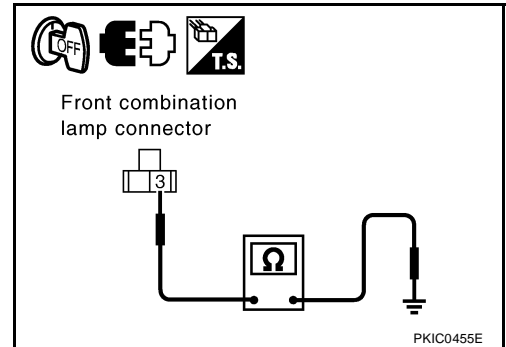
1. Turn ignition switch OFF.
2. Check continuity between front combination lamp (RH and LH) harness connector and ground.

Front combination lamp connector		Terminal	Ground	Continuity
RH	E39	3		Yes
LH	E54			

OK or NG

OK >> Check connector for connection, bend and loose fit. If it is normal, check headlamp bulb.

NG >> Repair harness or connector.



## Headlamp LO Beam Does Not Illuminate (One Side)

### 1. CHECK BULB

Check bulb of lamp which does not illuminate.

OK or NG

OK >> GO TO 2.

NG >> Replace headlamp bulb.

### 2. CHECK FRONT COMBINATION LAMP INPUT SIGNAL

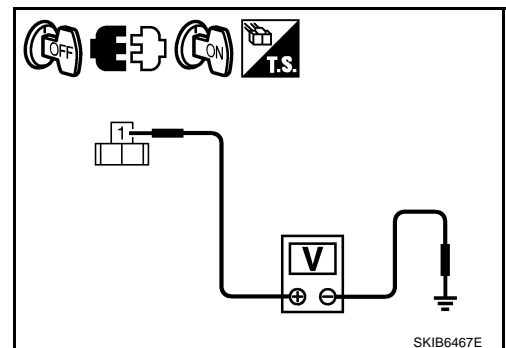
1. Disconnect front combination lamp RH or LH connector.
2. Turn lighting switch to 2ND position.
3. Check voltage between front combination lamp (RH or LH) harness connector and ground.

		Terminal		Voltage
		(+)	(-)	
Front combination lamp connector		Terminal	Ground	Battery voltage
RH	E39	1		
LH	E54			

OK or NG

OK >> GO TO 3.

NG >> GO TO 4.





# HEADLAMP

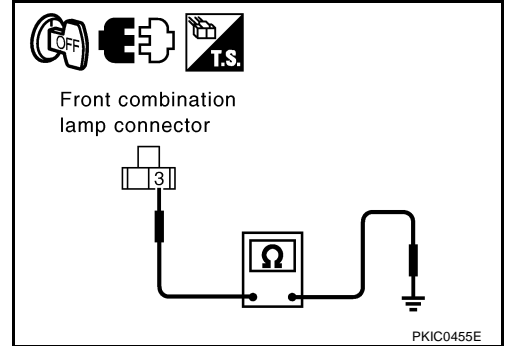
## 3. CHECK FRONT COMBINATION LAMP GROUND

1. Turn lighting switch OFF.
2. Check continuity between front combination lamp (RH or LH) harness connector and ground.

Front combination lamp connector		Terminal	Ground	Continuity
RH	E39	3		Yes
LH	E54			

### OK or NG

- OK >> Check connector for connection, bend and loose fit.  
 NG >> Repair harness or connector.



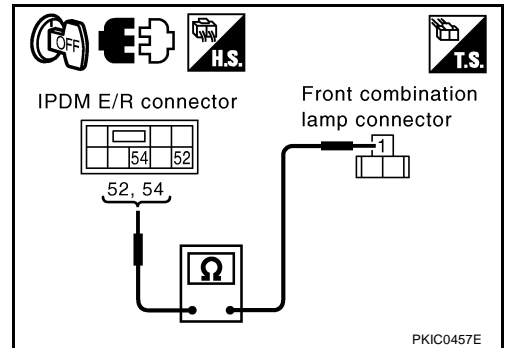
## 4. CHECK FRONT COMBINATION LAMP CIRCUIT

1. Turn lighting switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector and front combination lamp (RH or LH) harness connector.

Circuit	IPDM E/R		Front combination lamp		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E16	54	E39	1	Yes
LH		52	E54		

### OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#) .  
 NG >> Repair harness or connector.



## Headlamps Do Not Turn OFF

### 1. CHECK HEADLAMP TURN OFF

Make sure that lighting switch is OFF. And make sure headlamp turns off when ignition switch is turned OFF.

### OK or NG

- OK >> GO TO 3.  
 NG >> GO TO 2 .

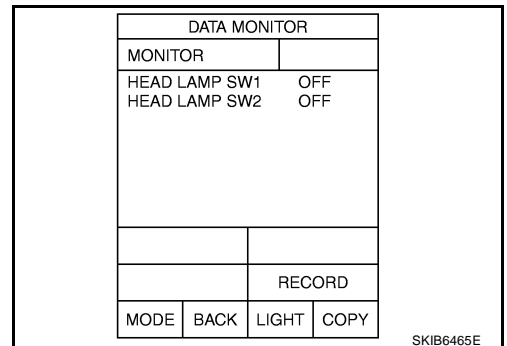
## 2. CHECK COMBINATION SWITCH INPUT SIGNAL

1. Select "BCM" on CONSULT-II. Select "HEAD LAMP" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure that "HEAD LAMP SW 1" and "HEAD LAMP SW 2" turns ON-OFF linked with operation of lighting switch.

**When lighting switch is OFF : HEAD LAMP SW 1 OFF position : HEAD LAMP SW 2 OFF**

### OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#) .  
 NG >> GO TO 2.



# HEADLAMP

## 3. CHECKING CAN COMMUNICATIONS BETWEEN BCM AND IPDM E/R

Select "BCM" on CONSULT-II, and perform self-diagnosis for "BCM".

### Display of self-diagnosis results

NO DTC>> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

CAN COMM CIRCUIT>> Refer to [BCS-14, "CAN Communication Inspection Using CONSULT-II \(Self-Diagnosis\)"](#).

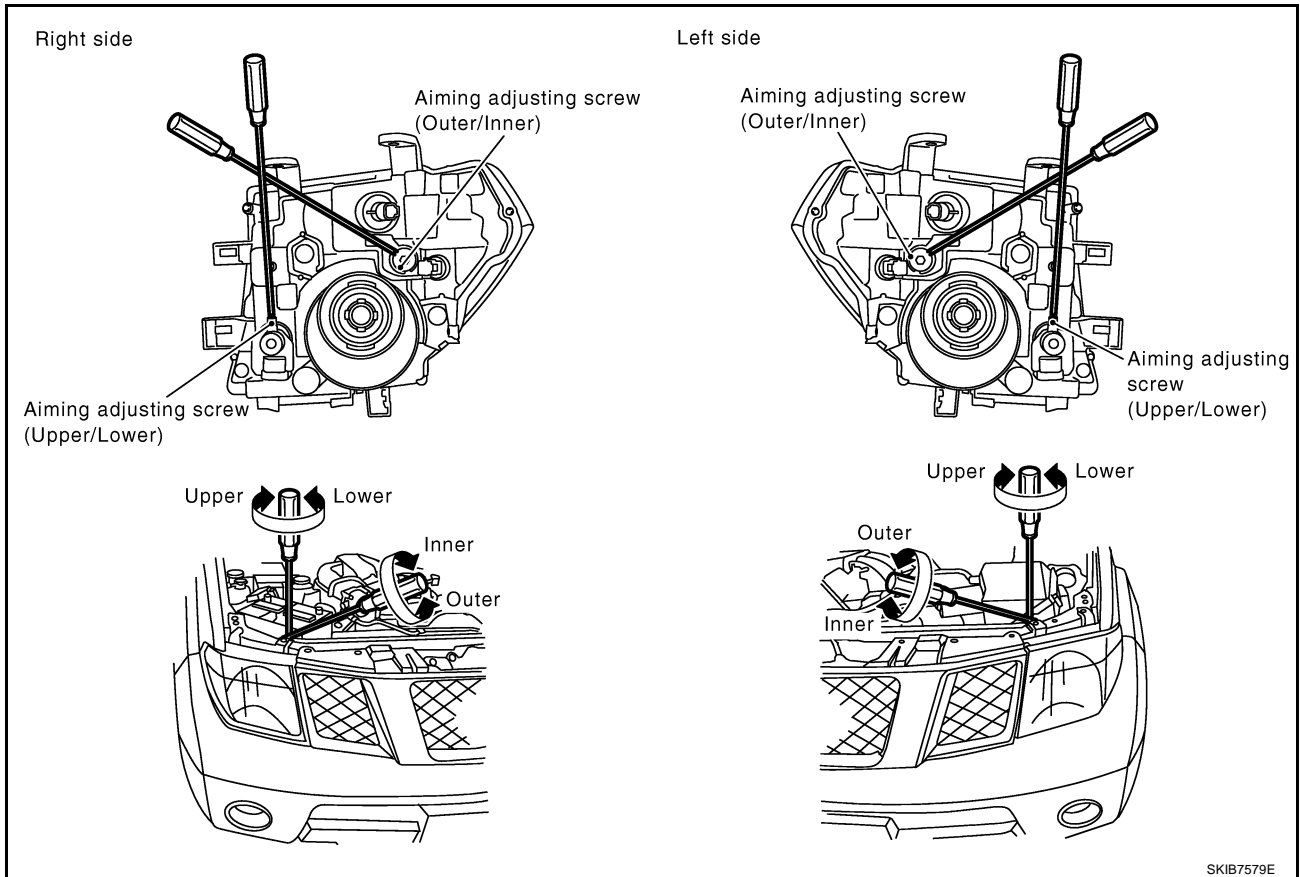
SELF-DIAG RESULTS			
DTC RESULTS		TIME	
CAN COMM CIRCUIT [U1000]		PAST	
ERASE		PRINT	
MODE	BACK	LIGHT	COPY

SKIA1039E

# HEADLAMP

## Aiming Adjustment

GKS00019



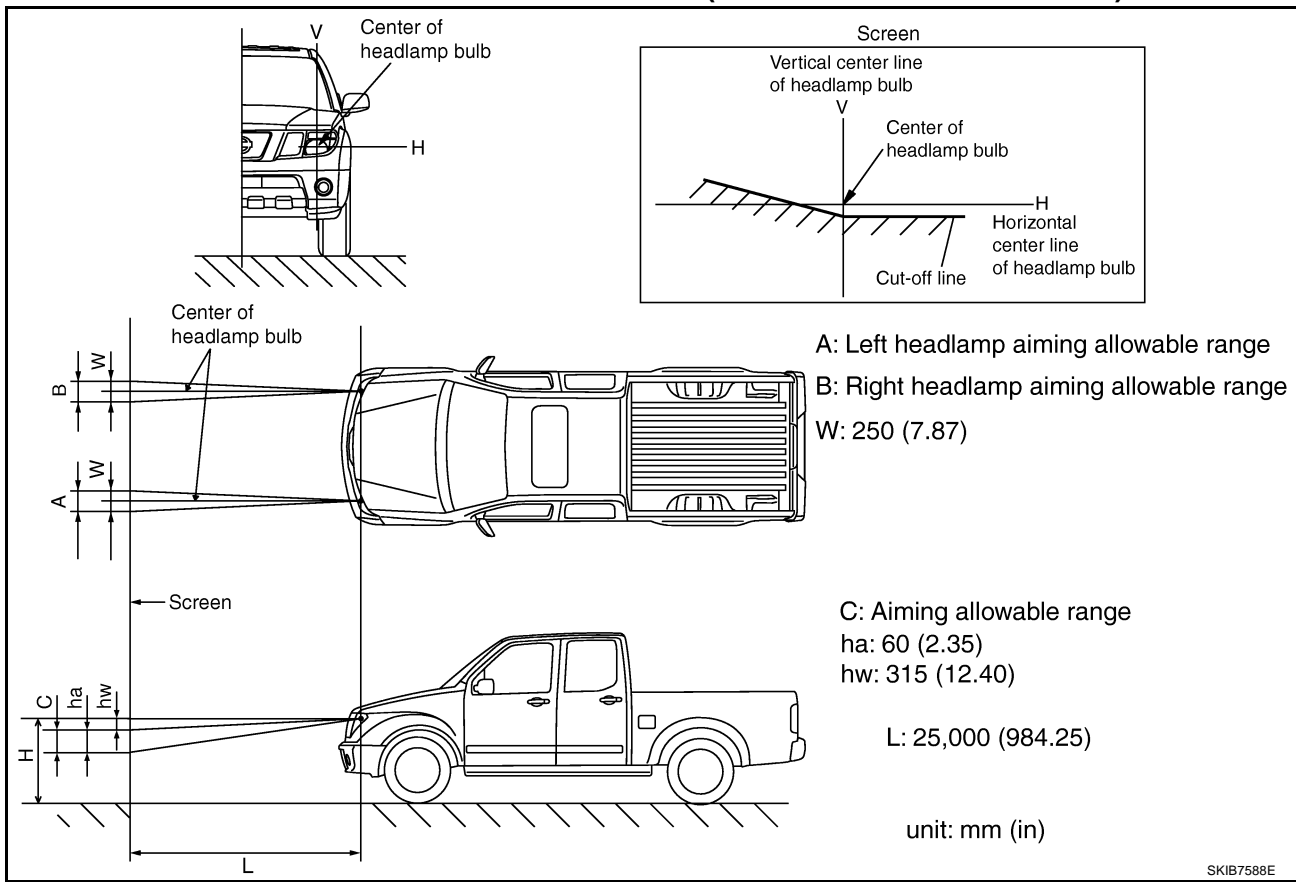
**For details, refer to the regulations in your state.**

Before performing aiming adjustment, check the following.

1. Ensure all tires are inflated to correct pressure.
2. Place vehicle and screen on level surface.
3. Ensure there is no load in vehicle other than the driver (or equivalent weight placed in driver's position). Coolant and engine oil filled to correct level, and fuel tank full.
4. Confirm spare tire, jack and tools are properly stowed.

# HEADLAMP

## ADJUSTMENT USING AN ADJUSTMENT SCREEN (LIGHT/DARK BORDERLINE)



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.

- Basic illumination area for adjustment should be within the range shown on the aiming chart. Adjust headlamp accordingly.

### Bulb Replacement HEADLAMP HIGH/LOW BEAM

GKS0001A

1. Turn lighting switch OFF.
2. Disconnect headlamp connector.
3. Remove back cover.
4. Unlock retaining spring, then remove bulb.
5. Installation is the reverse order of removal.

**Headlamp high/low beam (Halogen) : 12V - 60 / 55W (H4LL)**

### FRONT TURN SIGNAL LAMP

1. Turn bulb socket counterclockwise to unlock it.
2. Pull bulb to remove it from the socket.
3. Installation is the reverse order of removal.

**Front turn signal lamp : 12V - 21W**

### CLEARANCE LAMP

1. Turn bulb socket counterclockwise to unlock it.
2. Pull bulb to remove it from the socket.
3. Installation is the reverse order of removal.

**Clearance lamp : 12V - 5W**

# HEADLAMP

---

**CAUTION:**

After installing bulb, be sure to install bulb socket securely to ensure watertightness.

A

B

C

D

E

F

G

H

I

J

**LT**

L

M

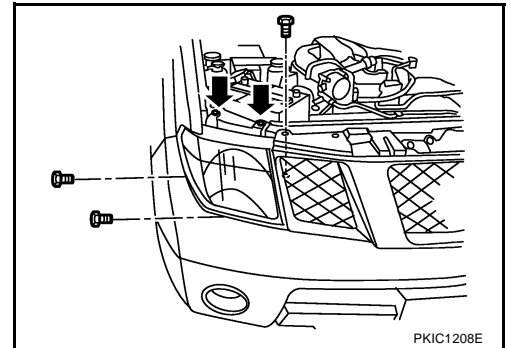
# HEADLAMP

GKS0001B

## Removal and Installation

### REMOVAL

1. Remove front grille. Refer to [EI-19, "FRONT GRILLE"](#) .
2. Remove front bumper. Refer to [EI-15, "FRONT BUMPER"](#) .
3. Disconnect headlamp connector.
4. Remove headlamp mounting bolts.



### INSTALLATION

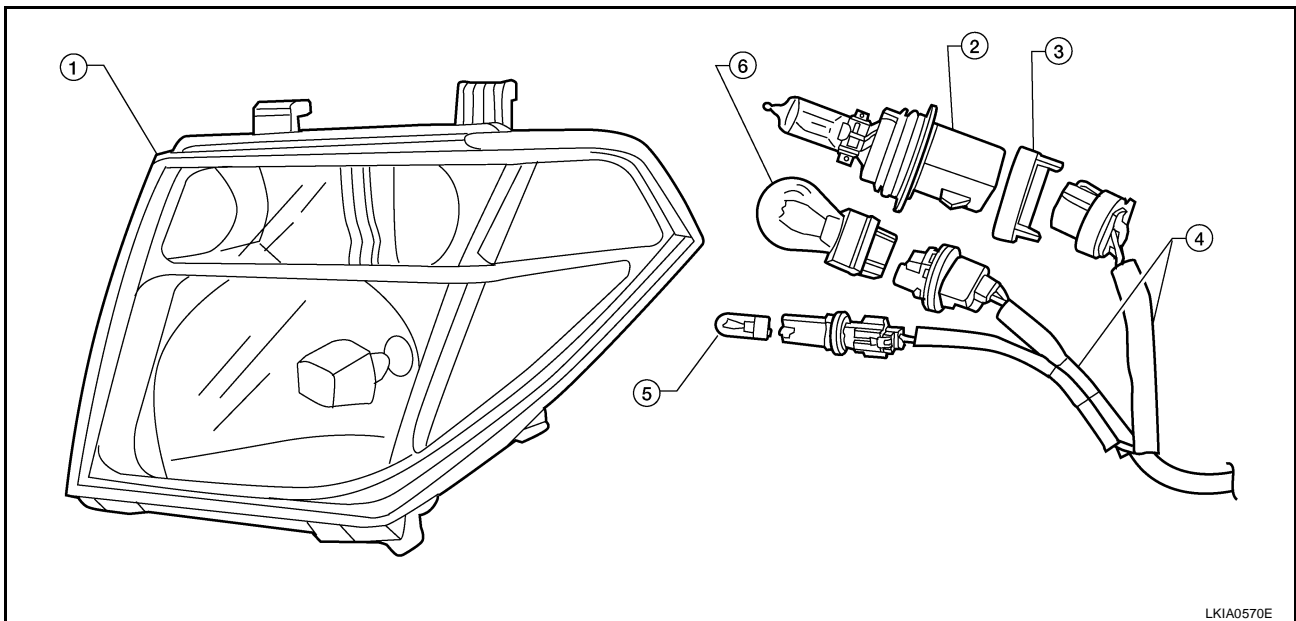
Installation is the reverse order of removal.

**Headlamp mounting bolt**  : 6.0 N·m (0.61 kg·m, 53 in·lb)

## Disassembly and Assembly

### DISASSEMBLY

GKS0001C



- |                            |                        |                                |
|----------------------------|------------------------|--------------------------------|
| 1. Headlamp assembly       | 2. Headlamp bulb       | 3. Headlamp retaining ring     |
| 4. Wiring harness assembly | 5. Clearance lamp bulb | 6. Front turn signal lamp bulb |

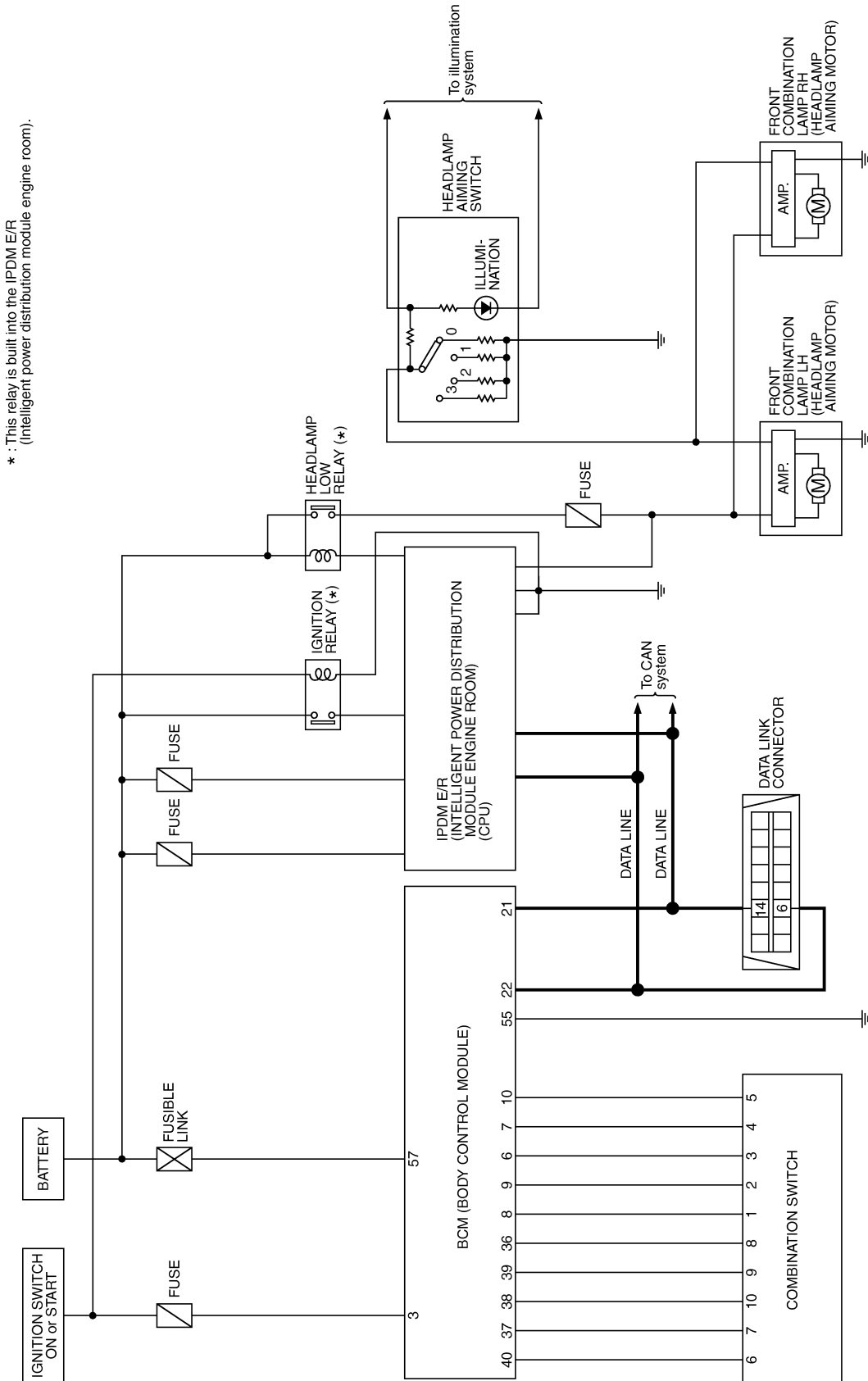
# HEADLAMP AIMING CONTROL (MANUAL)

## HEADLAMP AIMING CONTROL (MANUAL)

PFP:25190

### Schematic

GKS00029



\* : This relay is built into the IPDM E/R (Intelligent power distribution module engine room).

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

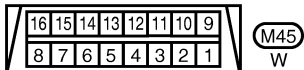
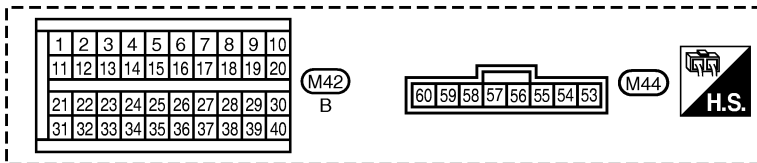
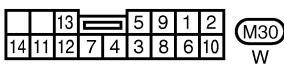
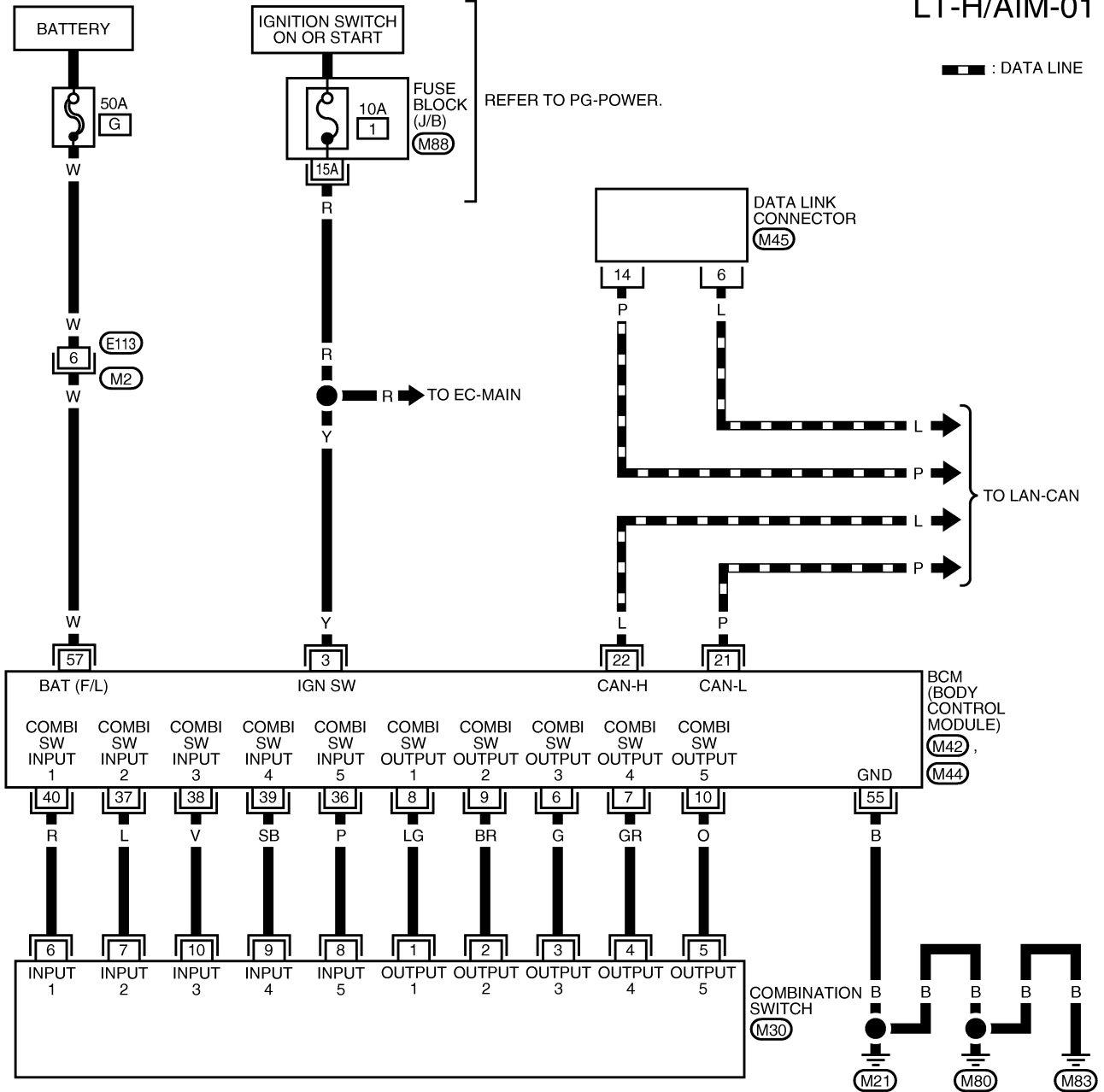
# HEADLAMP AIMING CONTROL (MANUAL)

GKS0002A

## Wiring Diagram — H/AIM —

LT-H/AIM-01

▬ : DATA LINE



REFER TO THE FOLLOWING.

(M88) - FUSE BLOCK - JUNCTION BOX (J/B)

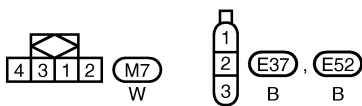
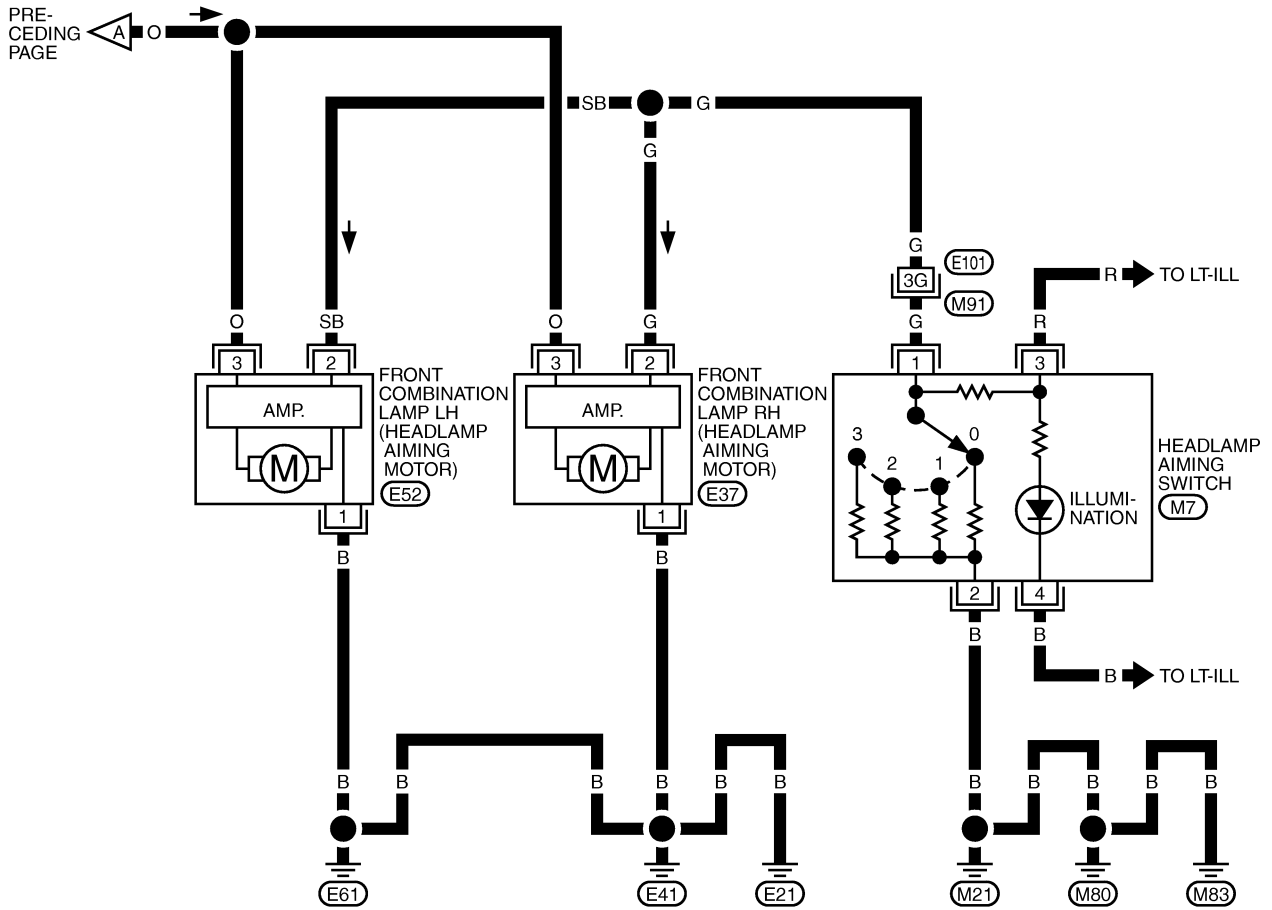
MKWA4179E





# HEADLAMP AIMING CONTROL (MANUAL)

LT-H/AIM-03



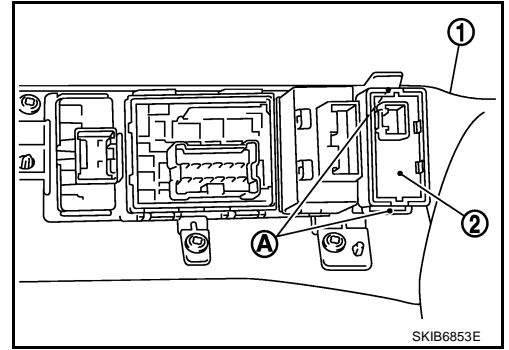
REFER TO THE FOLLOWING.  
 (M91) -SUPETR, MULTIPLE  
 JUNCTION (SMJ)

MKWA3568E

# HEADLAMP AIMING CONTROL (MANUAL)

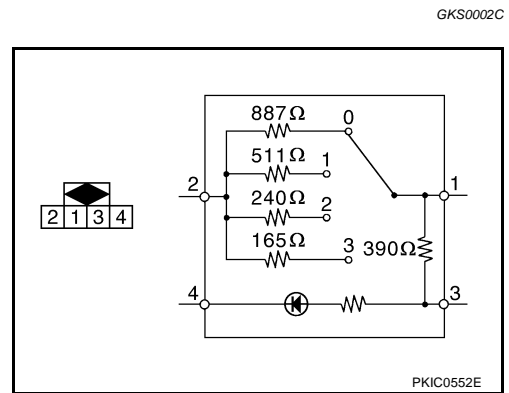
## Removal and Installation

1. Remove lower instrument panel (driver side) (1). Refer to [IP-10](#), "[Removal and Installation](#)".
2. Press headlamp aiming switch (2) fixing pawl (A) and remove unit from lower instrument panel (driver side) (1).



## Switch Circuit Inspection

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



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

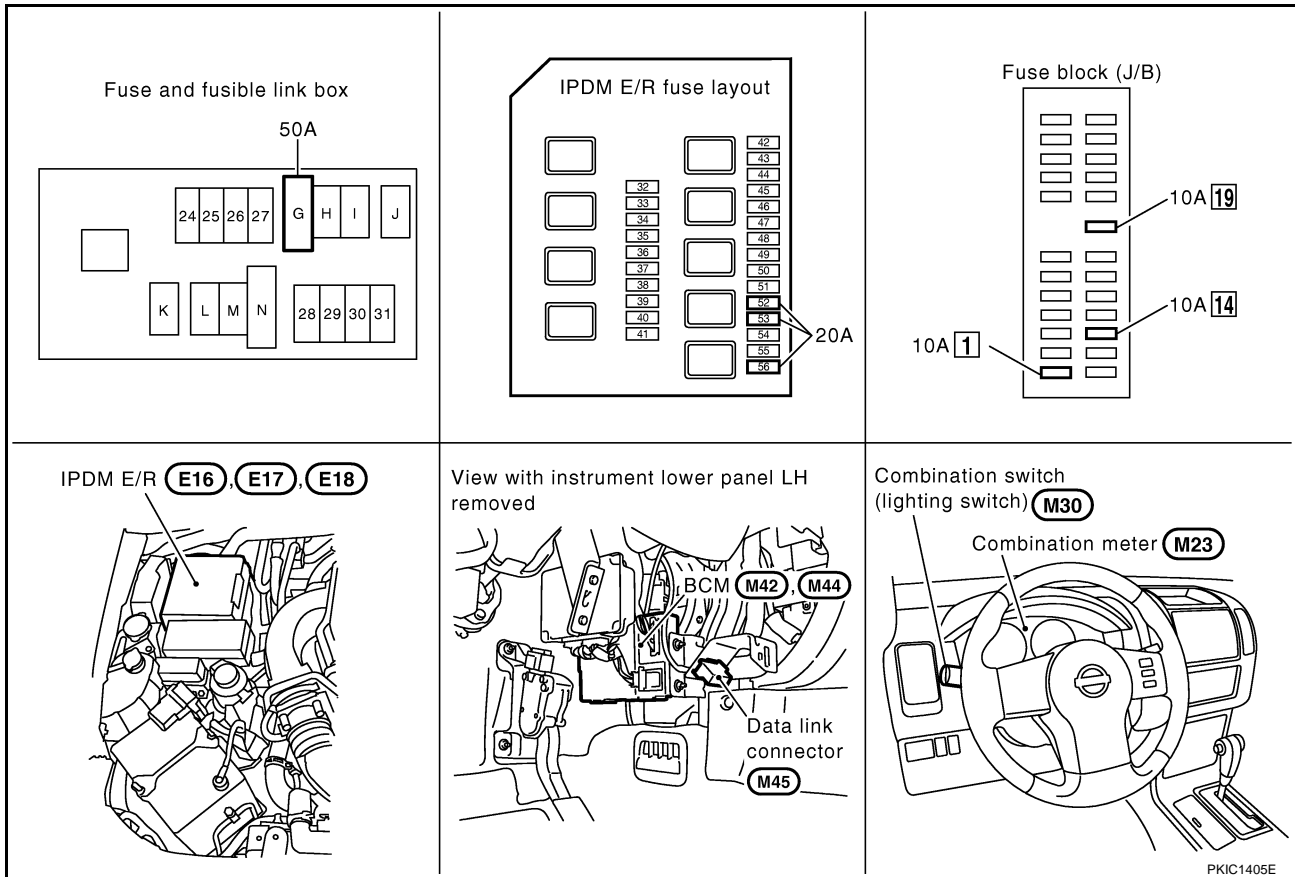
# FRONT FOG LAMP

## FRONT FOG LAMP

PF26150

### Component Parts and Harness Connector Location

GKS0002D



## System Description

GKS0002E

The control of the front fog lamps is dependent upon the position of the combination switch (lighting switch). The lighting switch must be in the 1ST position or 2ND position for front fog lamp operation. When the lighting switch is placed in the front fog lamp position, the BCM (body control module) receives input signal requesting the front fog lamps to illuminate. When the headlamps are illuminated, this input signal is communicated to the IPDM E/R (intelligent power distribution module engine room) through the CAN communication. The CPU (central processing unit) of the IPDM E/R controls the front fog lamp relay coil. When activated, this relay directs power to the front fog lamps.

## FOG LAMP OPERATION

The front fog lamp switch is built into the combination switch. The lighting switch must be in the 1ST position, 2ND position or AUTO position (LOW beam is ON) and the front fog lamp switch must be ON for front fog lamp operation.

With the front fog lamp switch in the ON position, the CPU of the IPDM E/R grounds the coil side of the front fog lamp relay. The front fog lamp relay then directs power

- through 20A fuse (No. 56, located in IPDM E/R)
- through IPDM E/R terminal 50
- to front fog lamp LH terminal 1 and
- through IPDM E/R terminal 51
- to front fog lamp RH terminal 1.

Ground is supplied at all times

- to front fog lamp RH and LH terminal 2
- through grounds E21, E41 and E61.

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

# FRONT FOG LAMP

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## COMBINATION SWITCH READING FUNCTION

Refer to [BCS-3, "COMBINATION SWITCH READING FUNCTION"](#) .

## CAN Communication System Description

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

A

GKS0002F

B

C

D

E

F

G

H

I

J

LT

L

M

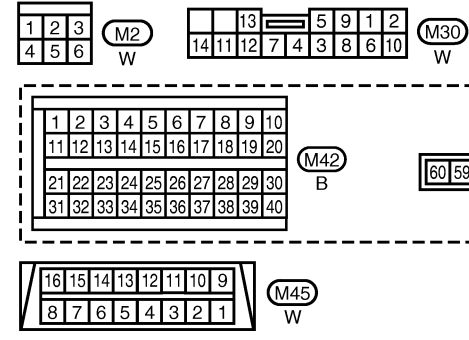
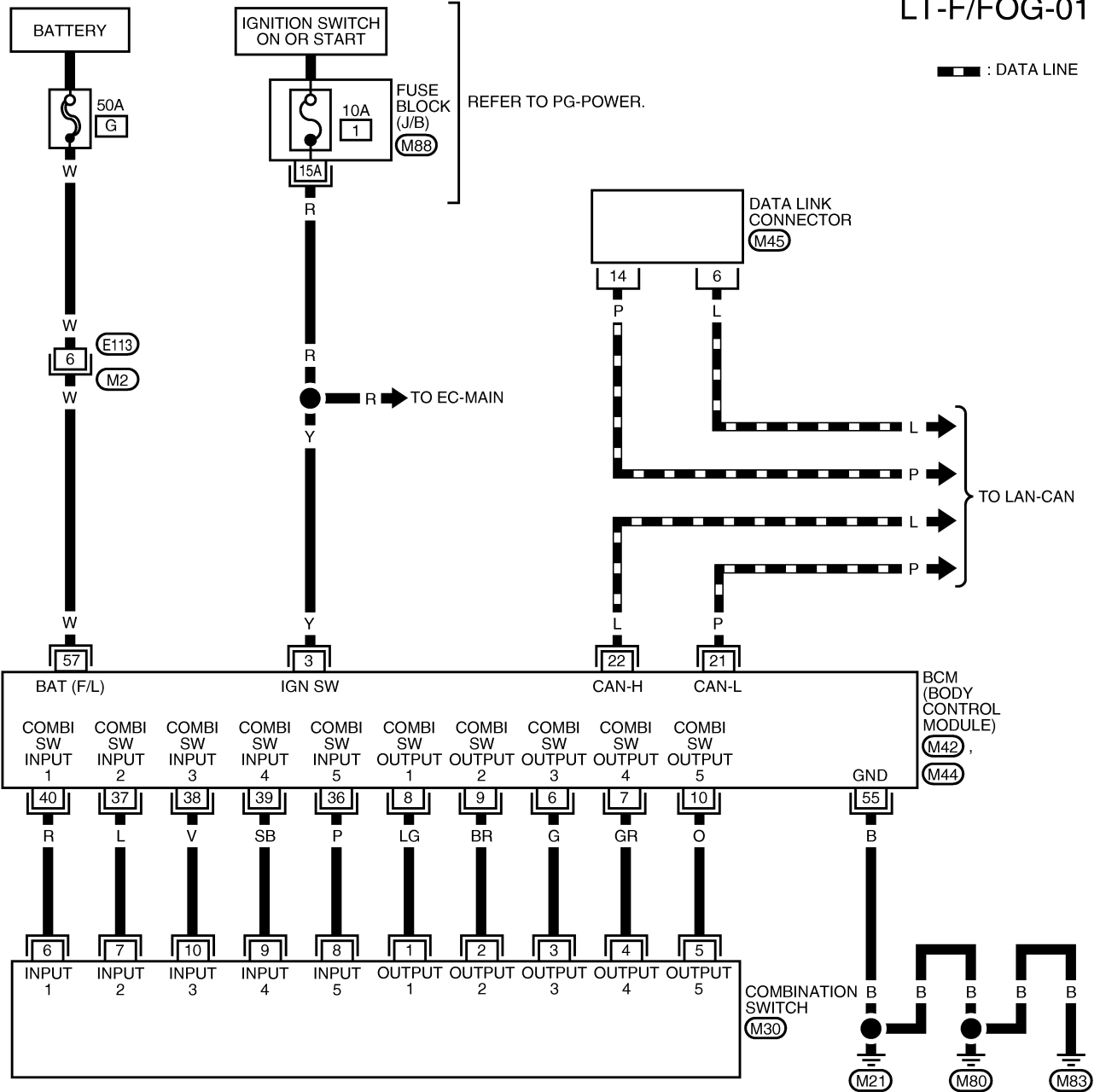


# FRONT FOG LAMP

## Wiring Diagram — F/FOG —

GKS0002H

LT-F/FOG-01



REFER TO THE FOLLOWING.

M88 - FUSE BLOCK - JUNCTION BOX (J/B)

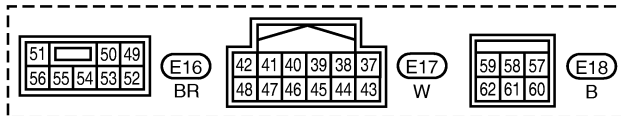
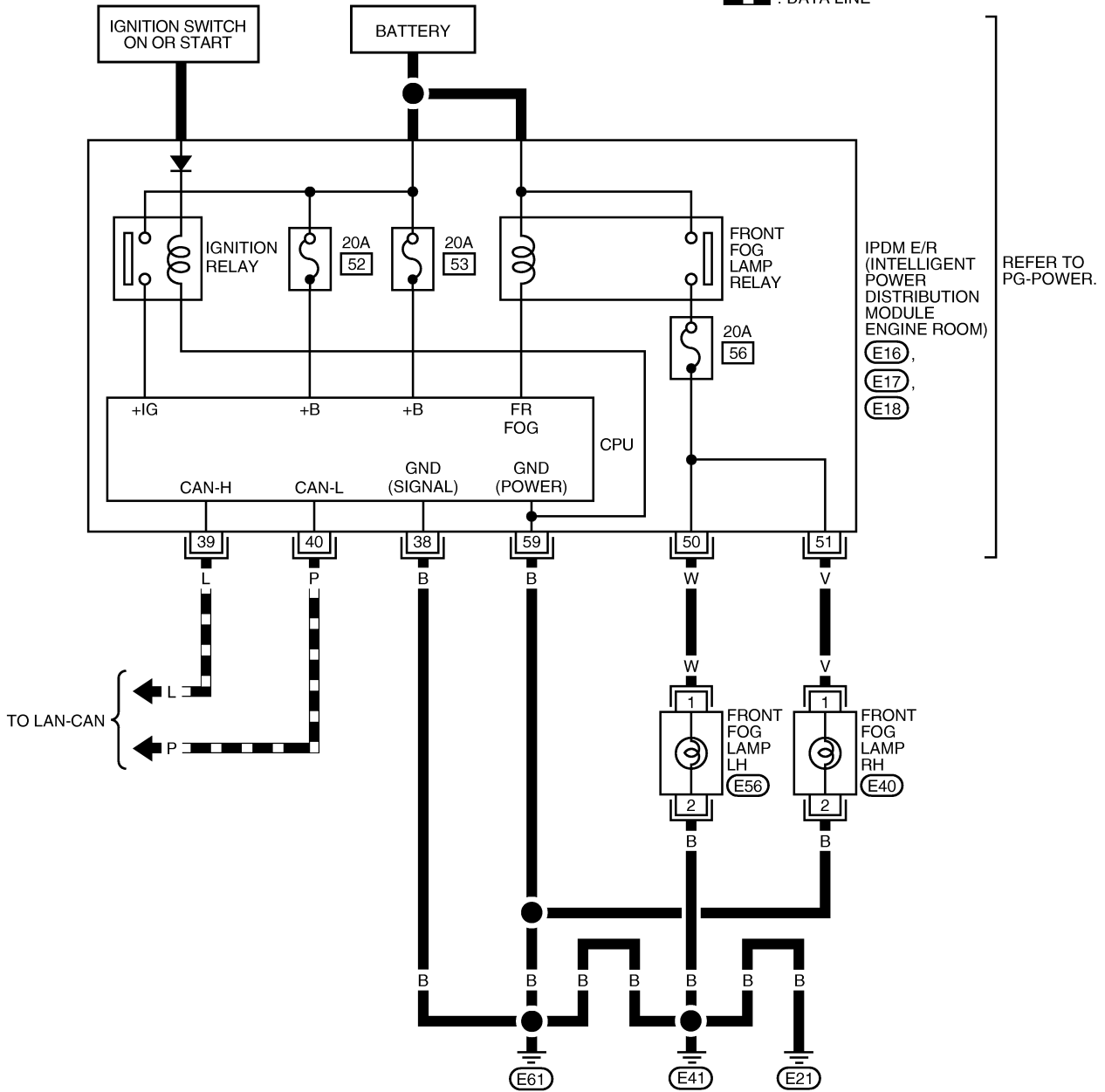
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

MKWA4181E

# FRONT FOG LAMP

LT-F/FOG-02

— : DATA LINE



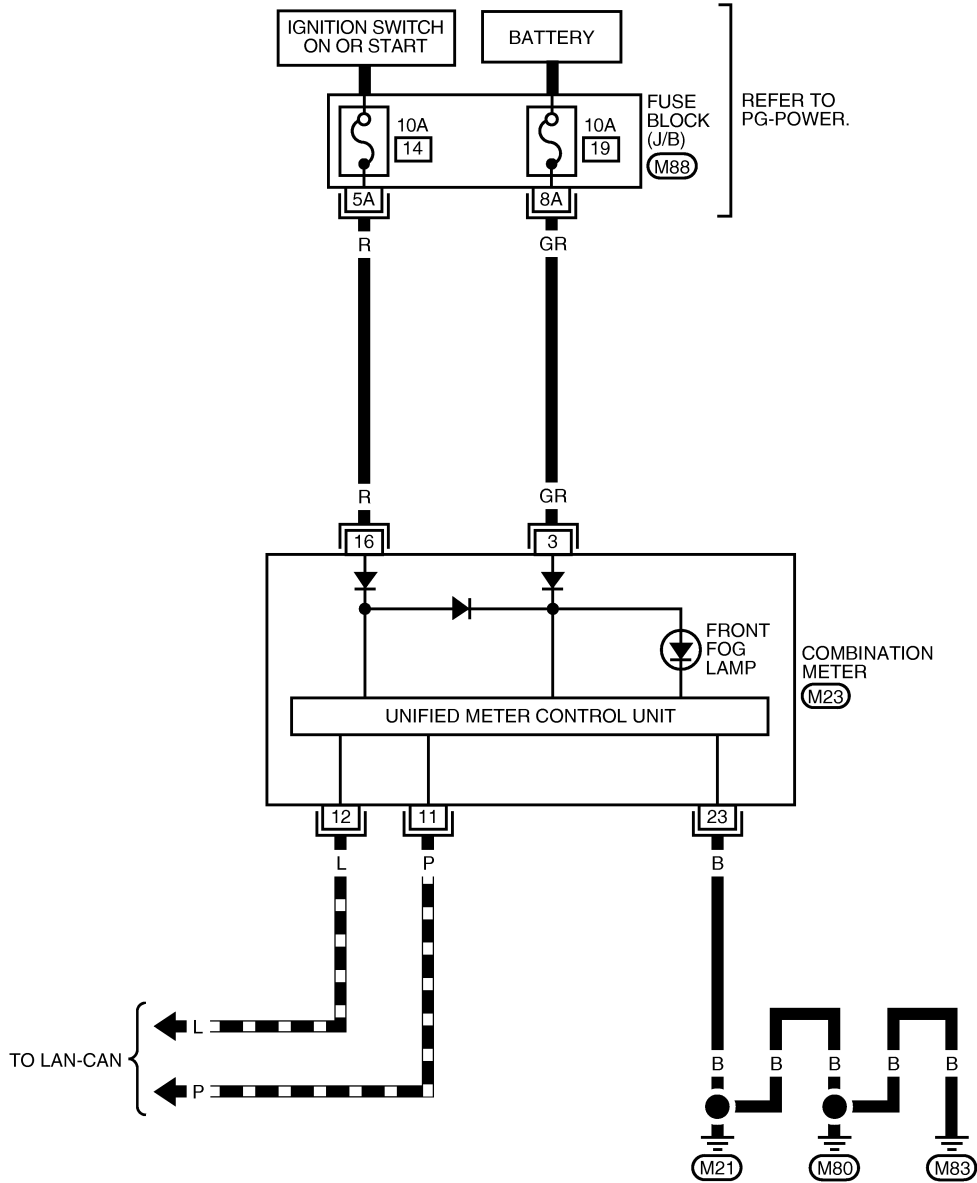
MKWA3570E



# FRONT FOG LAMP

LT-F/FOG-03

▬ : DATA LINE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	(M23)
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	W

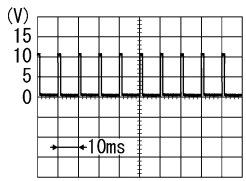
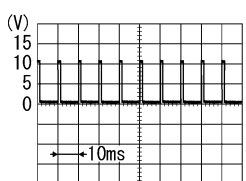
REFER TO THE FOLLOWING.

(M88) - FUSE BLOCK-  
JUNCTION BOX (J/B)

# FRONT FOG LAMP

## Terminals and Reference Values for BCM

GKS0002I

Terminal No.	Wire color	Signal name	Measuring condition		Reference value
			Ignition switch	Operation or condition	
3	Y	Ignition switch (ON)	ON	—	Battery voltage
6	G	Combination switch output 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right;">PKIB4958J</p>
7	GR	Combination switch output 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
8	LG	Combination switch output 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
9	BR	Combination switch output 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
10	O	Combination switch output 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	
21	P	CAN- L	—	—	—
22	L	CAN- H	—	—	—
36	P	Combination switch input 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right;">PKIB4958J</p>
37	L	Combination switch input 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
38	V	Combination switch input 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	
39	SB	Combination switch input 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
40	R	Combination switch input 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
55	B	Ground	ON	—	Approx. 0V
57	W	Battery power supply (fusible link)	OFF	—	Battery voltage

## Terminals and Reference Values for IPDM E/R

GKS0002J

Terminal No.	Wire color	Signal name	Measuring condition		Reference value	
			Ignition switch	Operation or condition		
38	B	Ground	ON	—	Approx. 0V	
39	L	CAN- H	—	—	—	
40	P	CAN- L	—	—	—	
50	W	Front fog lamp (LH)	ON	Lighting switch must be in the 1ST position, 2ND position or AUTO position (LOW beam is ON)	Front fog lamp switch: OFF	Approx. 0V
					Front fog lamp switch: ON	Battery voltage
51	V	Front fog lamp (RH)	ON	Lighting switch must be in the 1ST position, 2ND position or AUTO position (LOW beam is ON)	Front fog lamp switch: OFF	Approx. 0V
					Front fog lamp switch: ON	Battery voltage
59	B	Ground	ON	—	Approx. 0V	

# FRONT FOG LAMP

## How to Proceed With Trouble Diagnosis

GKS0002K

1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to [LT-36, "System Description"](#) .
3. Perform the Preliminary Check. Refer to [LT-43, "Preliminary Check"](#) .
4. Check symptom and repair or replace the cause of malfunction.
5. Does the front fog lamp operate normally? If YES: GO TO 6. If NO: GO TO 4.
6. INSPECTION END

## Preliminary Check

GKS0002L

### CHECK POWER SUPPLY AND GROUND CIRCUIT

#### 1. CHECK FUSES OR FUSIBLE LINK

Check for blown fuses or fusible link.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	G
	Ignition switch ON or START position	1
IPDM E/R	Battery	52
		53
	Battery (Fog lamps ON)	56
Combination meter	Battery	19
	Ignition switch ON or START position	14

Refer to [LT-39, "Wiring Diagram — F/FOG —"](#) .

#### OK or NG

OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link. Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) .

#### 2. CHECK POWER SUPPLY CIRCUIT

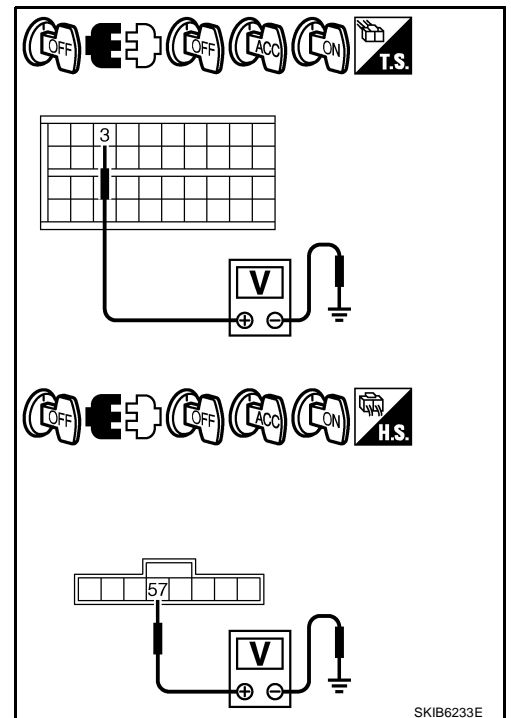
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

Terminal		(-)	Ignition switch position		
(+)			OFF	ACC	ON
Connector	Terminal	Ground	0V	0V	Battery voltage
M42	3		Battery voltage	Battery voltage	Battery voltage
M44	57				

#### OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.



SKIB6233E

# FRONT FOG LAMP

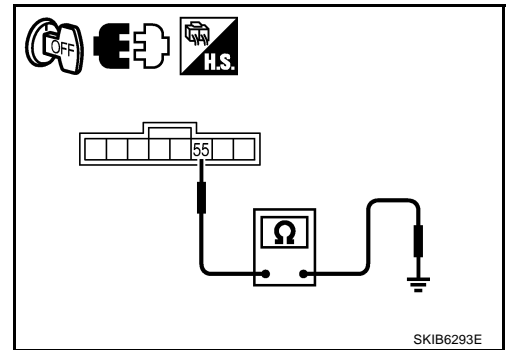
## 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

Connector	Terminal	Ground	Continuity
M44	55		Yes

OK or NG

- OK >> INSPECTION END
- NG >> Repair harness or connector.



GKS0002M

### CONSULT-II Functions (BCM)

Refer to [LT-14, "CONSULT-II Functions \(BCM\)"](#).

### CONSULT-II Functions (IPDM E/R)

Refer to [LT-17, "CONSULT-II Functions \(IPDM E/R\)"](#).

GKS0002N

# FRONT FOG LAMP

GKS00020

## Front Fog Lamps Do Not Illuminate (Both Sides)

### 1. CHECK COMBINATION SWITCH INPUT SIGNAL

☑ With CONSULT-II

1. Select "BCM" on CONSULT-II. Select "HEAD LAMP" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure "FR FOG SW" turns ON-OFF linked with operation of front fog lamp switch.

**When front fog lamp switch : FR FOG SW ON is ON**

DATA MONITOR			
MONITOR			
FR FOG SW	ON		
		RECORD	
MODE	BACK	LIGHT	COPY

PKIA7598E

☒ Without CONSULT-II

Refer to [LT-71, "Combination Switch Inspection"](#).

OK or NG

OK >> GO TO 2.

NG >> Check combination switch (lighting switch). Refer to [LT-71, "Combination Switch Inspection"](#).

### 2. FRONT FOG LAMP ACTIVE TEST

☑ With CONSULT-II

1. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
3. Touch "FOG" screen.
4. Make sure front fog lamp operation.

**Front fog lamps should operate.**

ACTIVE TEST			
EXTERNAL LAMPS		OFF	
		TAIL	
LO	HI		
FOG			
MODE	BACK	LIGHT	COPY

PKIC0936E

☒ Without CONSULT-II

1. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
2. Make sure front fog lamp operation.

**Front fog lamp should operate.**

OK or NG

OK >> GO TO 3.

NG >> GO TO 4.

### 3. CHECK IPDM E/R

1. Select "IPDM E/R" on CONSULT-II. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
2. Make sure "FR FOG REQ" turns ON when front fog lamp switch is in ON position.

**When front fog lamp switch : FR FOG REQ ON is ON position**

DATA MONITOR			
MONITOR			
FR FOG REQ	ON		
		Page Down	
		RECORD	
MODE	BACK	LIGHT	COPY

SKIA5898E

OK or NG

OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).

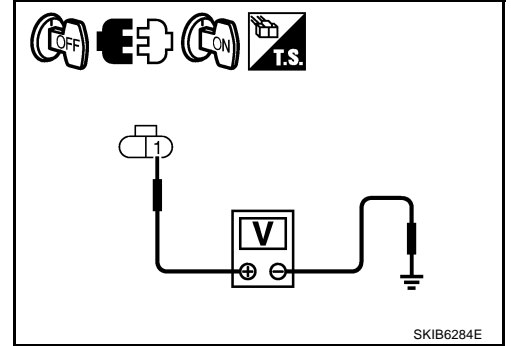
# FRONT FOG LAMP

## 4. CHECK FOG LAMP INPUT SIGNAL

④ With CONSULT-II

1. Turn ignition switch OFF.
2. Disconnect front fog lamp RH and LH connector.
3. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
4. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
5. Touch "FOG" screen.
6. Check voltage between front fog lamp (RH and LH) harness connector and ground.

Terminal			(-)	Voltage
(+)		Terminal		
Front fog lamp connector				Ground
RH	E40	1		
LH	E56	1		



⊗ Without CONSULT-II

1. Turn ignition switch OFF.
2. Disconnect front fog lamp RH and LH connector.
3. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
4. When fog lamp is operating, check voltage between front fog lamp (RH and LH) harness connector and ground.

Terminal			(-)	Voltage
(+)		Terminal		
Front fog lamp connector				Ground
RH	E40	1		
LH	E56	1		

OK or NG

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

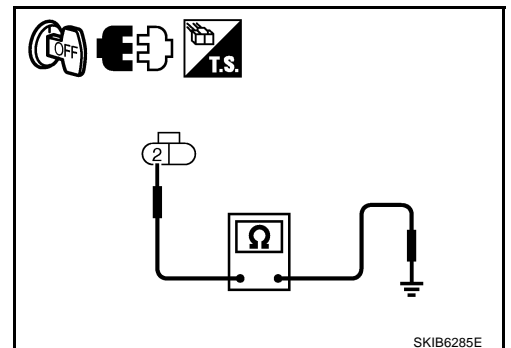
## 5. CHECK FRONT FOG LAMP GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between front fog lamp (RH and LH) harness connector and ground.

Front fog lamp connector		Terminal	Ground	Continuity
RH	E40	2		Ground
LH	E56	2		

OK or NG

- OK >> Check connector for connection, bend and loose fit. If it is normal, check front fog lamp bulbs.  
 NG >> Repair harness or connector.



# FRONT FOG LAMP

## 6. CHECK FRONT FOG LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector (A) and front fog lamp (RH and LH) harness connector (B).

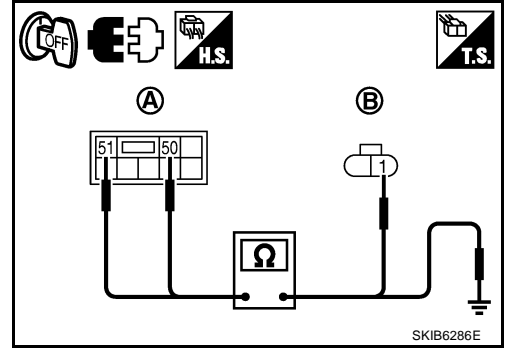
Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E16	51	E40	1	Yes
LH		50	E56	1	

4. Check harness continuity between IPDM E/R harness connector (A) terminal and ground.

A			Ground	Continuity
Connector		Terminal		
RH	E16	51		No
LH		50		

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#) .  
 NG >> Repair harness or connector.



## Front Fog Lamp Does Not Illuminate (One Side)

GKS0002P

### 1. CHECK BULB

Check bulb of front fog lamp which does not illuminate.

OK or NG

- OK >> GO TO 2.  
 NG >> Replace front fog lamp bulb.

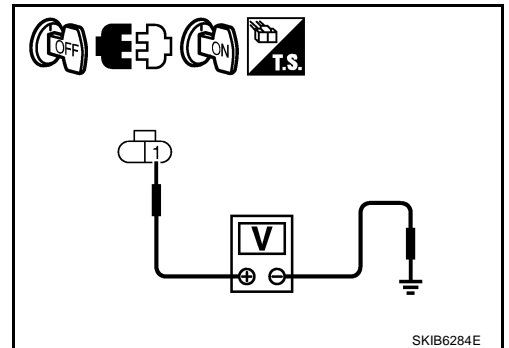
### 2. CHECK FOG LAMP INPUT SIGNAL

1. Turn ignition switch OFF.
2. Disconnect front fog lamp RH or LH connector.
3. Turn ignition switch ON.
4. Front fog lamp switch is turned ON position.
5. Check voltage between front fog lamp (RH or LH) harness connector and ground.

Terminal			Voltage
(+)		(-)	
Front fog lamp connector	Terminal		
RH	E40	1	Ground Battery voltage
LH	E56	1	

OK or NG

- OK >> GO TO 3.  
 NG >> GO TO 4.



# FRONT FOG LAMP

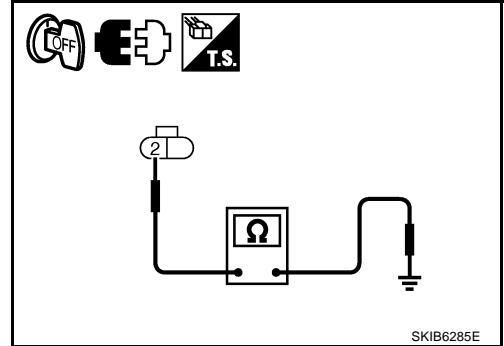
## 3. CHECK FRONT FOG LAMP GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between front fog lamp (RH or LH) harness connector and ground.

Front fog lamp connector		Terminal	Ground	Continuity
RH	E40	2		Yes
LH	E56	2		

OK or NG

- OK >> Check connector for connection, bend and loose fit.  
 NG >> Repair harness or connector.



## 4. CHECK FOG LAMP CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector (A) and front fog lamp (RH or LH) harness connector (B).

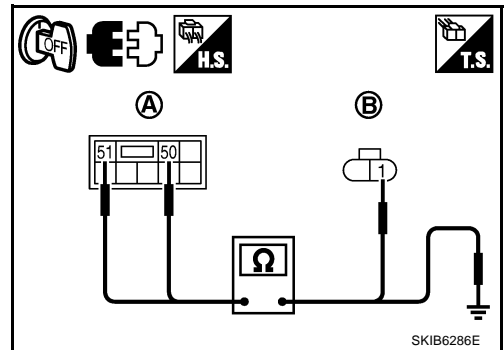
Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E16	51	E40	1	Yes
LH		50	E56	1	

4. Check harness continuity between IPDM E/R harness connector (A) and ground.

A		Ground	Continuity
Connector	Terminal		
RH	E16	51	No
LH		50	

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#) .  
 NG >> Repair harness or connector.



## Front Fog Lamp Indicator Lamp Does Not Illuminate

GKS0002Q

### 1. CHECK CAN COMMUNICATION

1. Select "BCM" on CONSULT-II. Select "BCM" on "SELECT TEST ITEM" screen.
2. Select "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.

Display of self-diagnostic results

- NO DTC>> Replace combination meter. Refer to [DI-31, "Removal and Installation of Combination Meter"](#) .  
 CAN COMM CIRCUIT>> Refer to [BCS-14, "CAN Communication Inspection Using CONSULT-II \(Self-Diagnosis\)"](#) .



# FRONT FOG LAMP

GKS0002R

## Front Fog Lamps Do Not Turn OFF

### 1. CHECK FRONT FOG LAMP TURN OFF

Make sure that lighting switch is OFF. And make sure front fog lamp turns off when ignition switch is turned OFF.

OK or NG

OK >> GO TO 3.

NG >> GO TO 2.

### 2. CHECK COMBINATION SWITCH INPUT SIGNAL

1. Select "BCM" on CONSULT-II.
2. Select "HEAD LAMP" on "SELECT TEST ITEM" screen. Then select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure "FR FOG SW" turns ON-OFF linked with operation of front fog lamp switch.

**When front fog lamp switch : FR FOG SW OFF is OFF position**

OK or NG

OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

NG >> Check combination switch (lighting switch). Refer to [LT-71, "Combination Switch Inspection"](#).

DATA MONITOR			
MONITOR			
FR FOG SW		OFF	
		RECORD	
MODE	BACK	LIGHT	COPY

PKIB9378E

### 3. CHECK CAN COMMUNICATIONS BETWEEN BCM AND IPDM E/R

Select "BCM" on CONSULT-II, and perform self-diagnosis for "BCM".

Display of self-diagnosis results

NO DTC>> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

CAN COMM CIRCUIT>> Refer to [BCS-14, "CAN Communication Inspection Using CONSULT-II \(Self-Diagnosis\)"](#).

SELF-DIAG RESULTS			
DTC RESULTS		TIME	
CAN COMM CIRCUIT [U1000]			
ERASE		PRINT	
MODE	BACK	LIGHT	COPY

PKIA7627E

# FRONT FOG LAMP

## Aiming Adjustment

GKS0002S

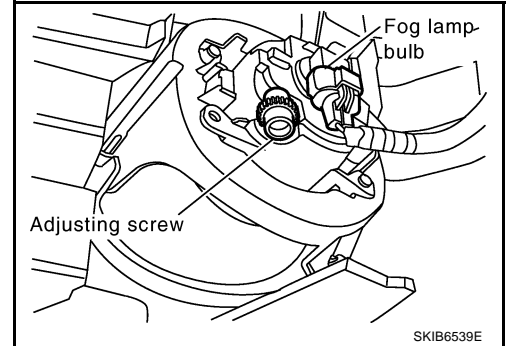
The fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb. Before performing aiming adjustment, make sure of the following.

- Keep all tires inflated to correct pressure.
- Place vehicle on level surface.
- See that vehicle is unloaded (except for full levels of coolant, engine oil and fuel, and spare tire, jack, and tools). Have the driver or equivalent weight placed in driver's seat.

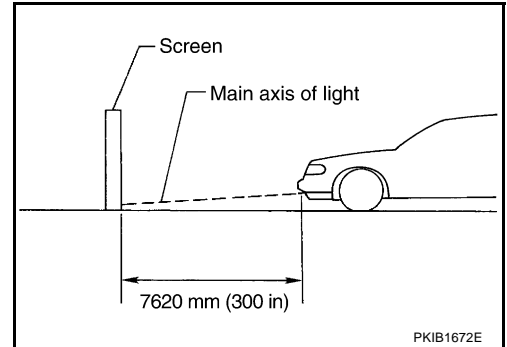
Adjust aiming in the vertical direction by turning the adjustment screw.

### NOTE:

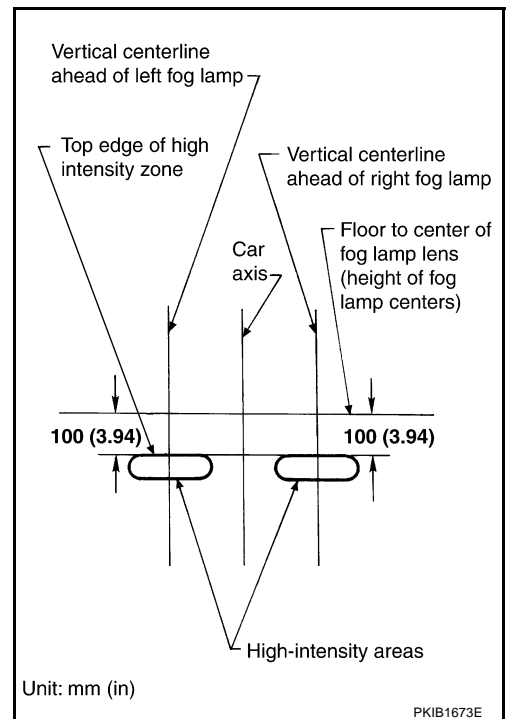
Use a Phillips screwdriver to adjust. Turn screw clockwise to raise pattern and counterclockwise to lower pattern.



1. Set the distance between the screen and the center of the fog lamp lens as shown.
2. Turn front fog lamps ON.
3. Remove front portion of fender protector(s) for adjusting screw access. Refer to [EI-22, "Removal and Installation of Front Fender Protector"](#).



4. Adjust front fog lamps using adjusting screw 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.
- When performing adjustment, if necessary, cover the headlamps and opposite fog lamp.



# FRONT FOG LAMP

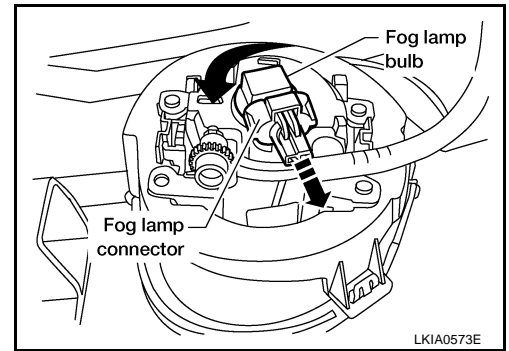
## Bulb Replacement

1. Disconnect front fog lamp connector.
2. Turn the bulb socket counterclockwise to remove it.

**Front fog lamp : 12V - 55W (H11)**

### CAUTION:

- Never touch the glass of bulb directly by hand. Keep grease and other oily substances away from it. Do not touch bulb by hand while it is lit or right after being turned off. Burning may result.
- Never leave bulb out of fog lamp reflector 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.

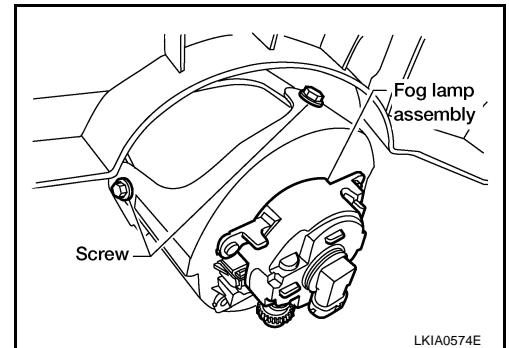


## Removal and Installation of Front Fog Lamp REMOVAL

The front fog lamp is a semi-sealed beam type which uses a replaceable halogen bulb.

### CAUTION:

- Never leave fog lamp assembly without bulb for a long period of time. Dust, moisture, smoke, etc. entering the fog lamp body may affect the performance. Remove the bulb from the headlamp assembly just before replacement bulb is installed.
  - Grasp only the plastic base when handling the bulb. Never touch the glass envelope. Touching the glass could significantly affect the bulb life and/or fog lamp performance.
1. Remove front portion of fender protector. Refer to [EI-22, "Removal and Installation of Front Fender Protector"](#).
  2. Disconnect front fog lamp connector.
  3. Remove front fog lamp screws and pull fog lamp rearward out of front bumper.



## INSTALLATION

Installation is the reverse order of removal.

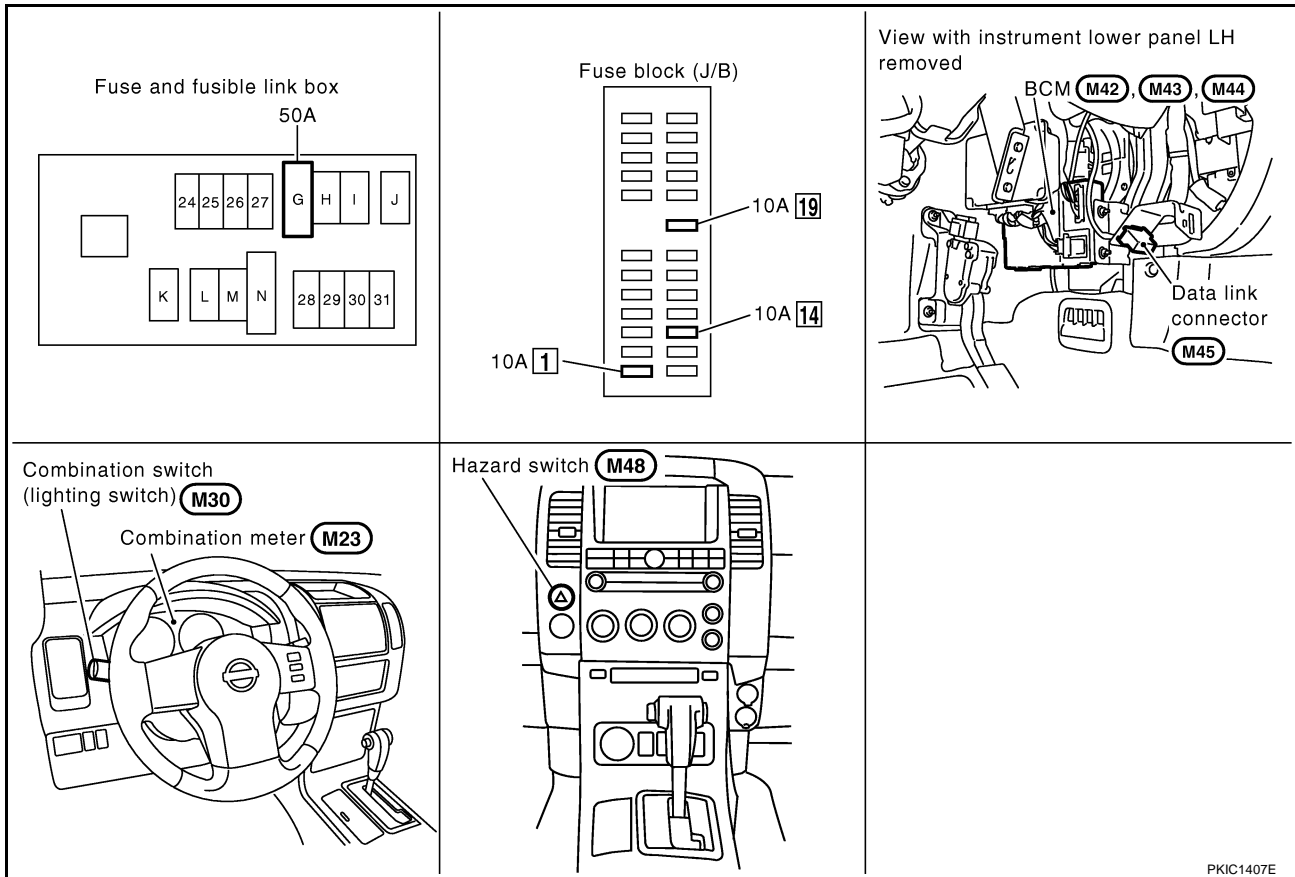
# TURN SIGNAL AND HAZARD WARNING LAMPS

## TURN SIGNAL AND HAZARD WARNING LAMPS

PFP:26120

### Component Parts and Harness Connector Location

GKS00039



## System Description

### TURN SIGNAL OPERATION

GKS0003A

#### LH Turn

When the turn signal switch is moved to the left position, BCM receives input signal requesting left turn signals to flash.

BCM then supplies power

- through BCM terminal 47
- to front combination lamp LH terminal 1
- to side turn signal lamp LH terminal 1 and
- to rear combination lamp LH terminal 2.

Ground is supplied

- to front combination lamp LH terminal 2
- to side turn signal lamp LH terminal 2
- to rear combination lamp LH terminal 3 and 4
- through ground E21, E41 and E61.

The BCM also supplies input to combination meter terminals 11 and 12 through the CAN communication. This input is processed by unified meter control unit in combination meter, which in turn supplies ground to the left turn signal indicator lamp.

With power and input supplied, BCM controls flashing of LH turn signal lamps.

# TURN SIGNAL AND HAZARD WARNING LAMPS

## RH Turn

When the turn signal switch is moved to the right position, BCM receives input signal requesting right turn signals to flash.

BCM then supplies power

- through BCM terminal 48
- to front combination lamp RH terminal 1
- to side turn signal lamp RH terminal 1 and
- to rear combination lamp RH terminal 2.

Ground is supplied

- to front combination lamp RH terminal 2
- to side turn signal lamp RH terminal 2
- to rear combination lamp RH terminal 3 and 4
- through ground E21, E41 and E61.

The BCM also supplies input to combination meter terminals 11 and 12 through the CAN communication. This input is processed by unified meter control unit in combination meter, which in turn supplies ground to the right turn signal indicator lamp.

With power and input supplied, BCM controls flashing of RH turn signal lamps.

## HAZARD LAMP OPERATION

Power is supplied at all times

- through 50A fusible link (letter G, located in fuse and fusible link box)
- to BCM terminal 57,
- through 10A fuse [No. 19, located in fuse block (J/B)]
- to combination meter terminal 3.

Ground is supplied

- to BCM terminal 55 and
- to combination meter terminal 23
- through grounds M21, M80 and M83.

When the hazard switch is depressed, ground is supplied

- to BCM terminal 33
- through hazard switch terminal 2
- through hazard switch terminal 1
- through grounds M21, M80 and M83.

When the hazard switch is depressed, BCM receives input signal requesting turn signals to flash.

BCM then supplies power

- through BCM terminal 47
- to front combination lamp LH terminal 1
- to side turn signal lamp LH terminal 1 and
- to rear combination lamp LH terminal 2,
- through BCM terminal 48
- to front combination lamp RH terminal 1
- to side turn signal lamp RH terminal 1 and
- to rear combination lamp RH terminal 2.

Ground is supplied

- to front combination lamp RH and LH terminals 2
- to side turn signal lamp RH and LH terminals 2
- to rear combination lamp RH and LH terminals 3 and 4
- through ground E21, E41 and E61.

The BCM also supplies input to combination meter terminals 11 and 12 through the CAN communication. This input is processed by unified meter control unit in combination meter, which in turn supplies ground to the left and right turn signal indicator lamps.

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# TURN SIGNAL AND HAZARD WARNING LAMPS

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With power and input supplied, BCM controls flashing of hazard warning lamps.

## **REMOTE KEYLESS ENTRY SYSTEM OPERATION**

Refer to [BL-48, "MULTI-REMOTE CONTROL SYSTEM"](#) .

## **COMBINATION SWITCH READING FUNCTION**

Refer to [BCS-3, "COMBINATION SWITCH READING FUNCTION"](#) .

## **CAN Communication System Description**

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

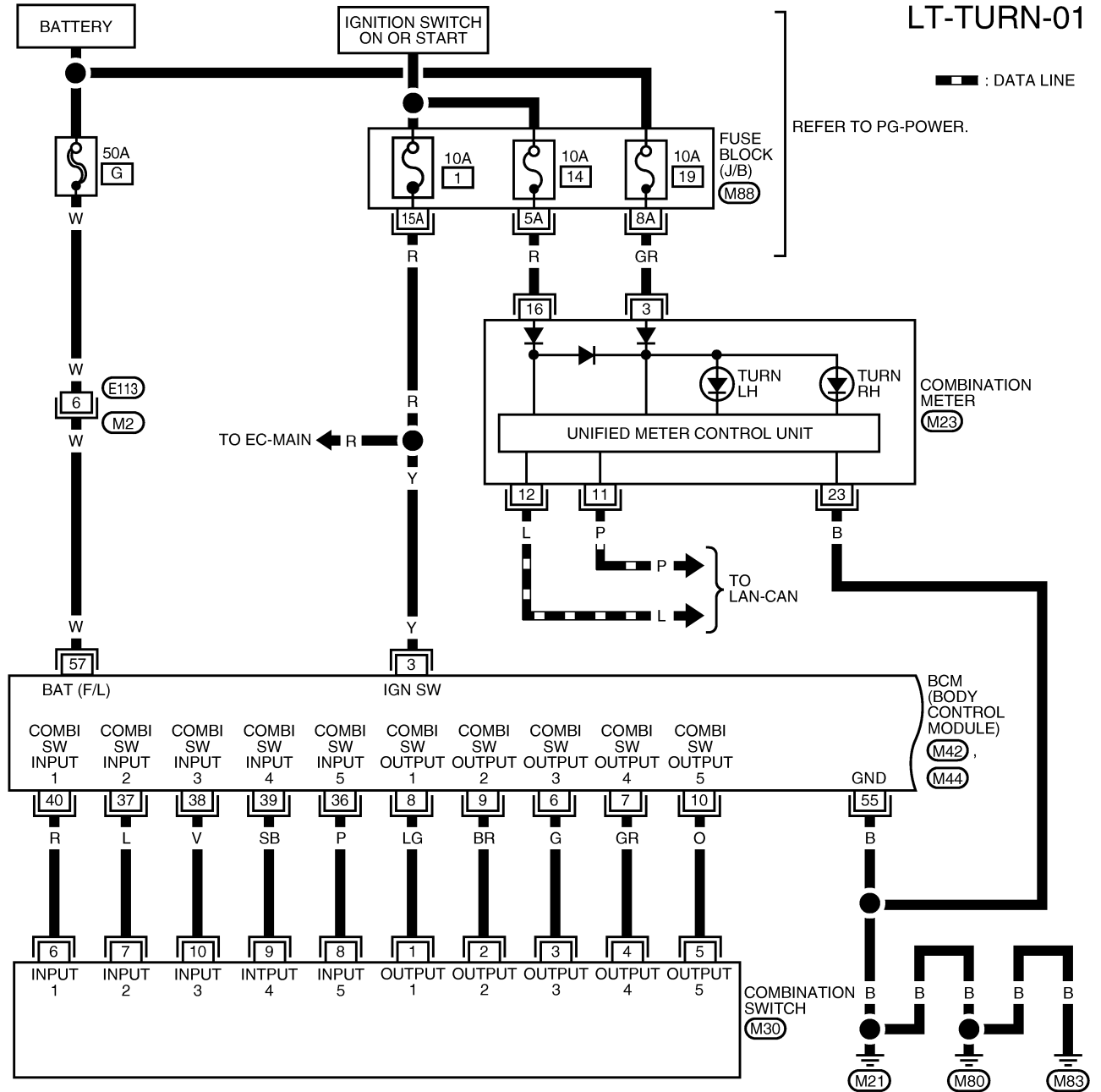
GKS0003B

# TURN SIGNAL AND HAZARD WARNING LAMPS

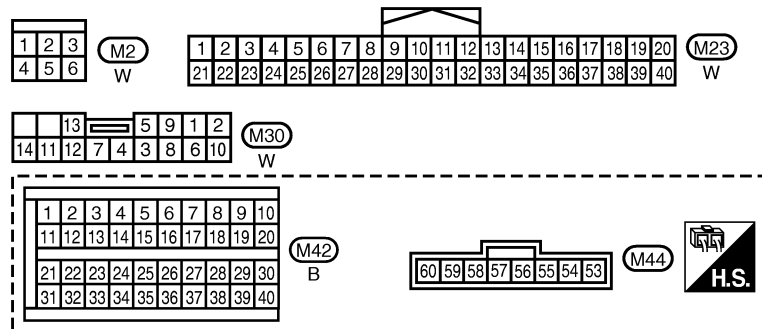
GKS0003C

## Wiring Diagram — TURN —

LT-TURN-01



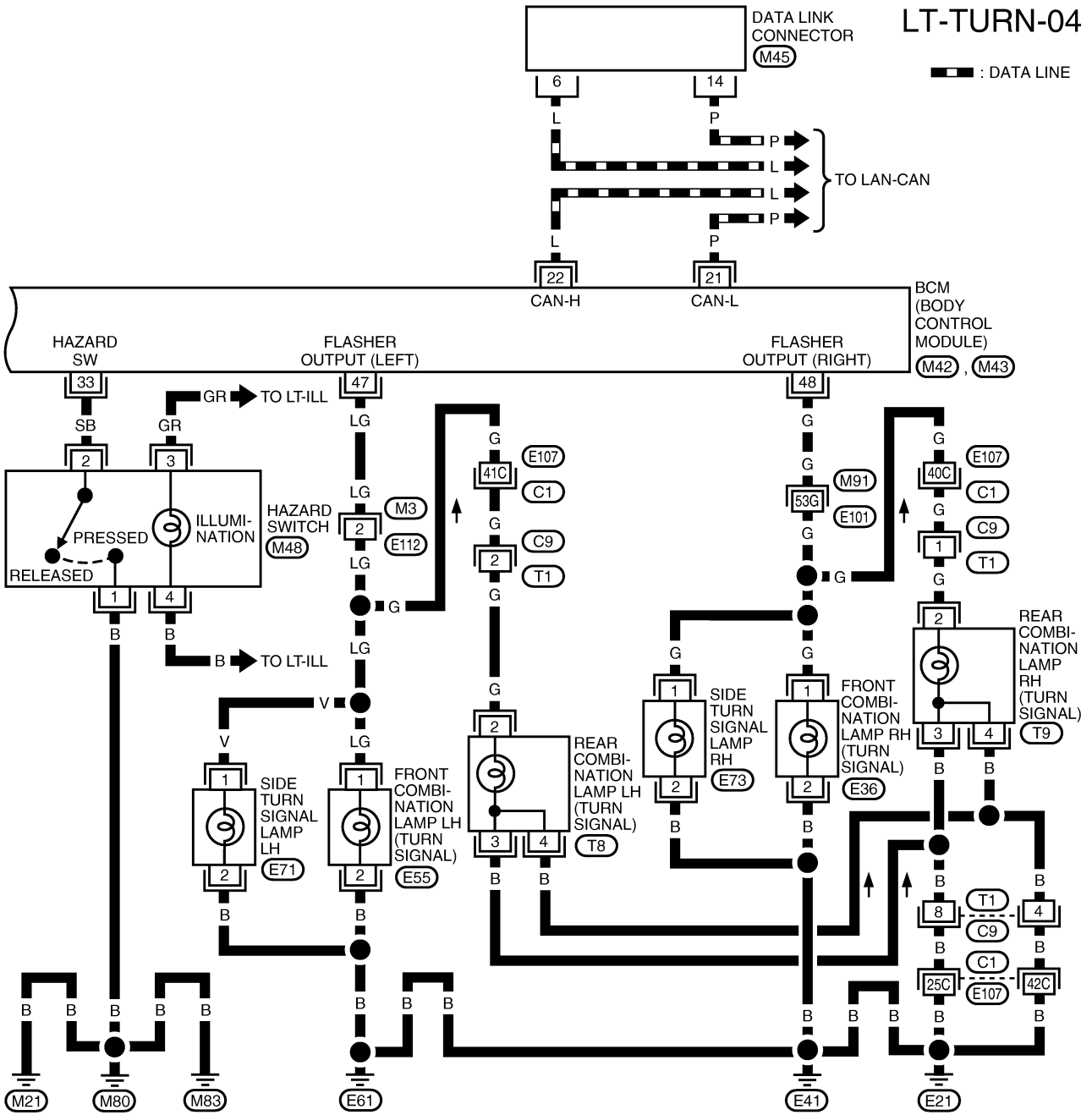
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REFER TO THE FOLLOWING.  
 (M88) - FUSE BLOCK - JUNCTION BOX (J/B)

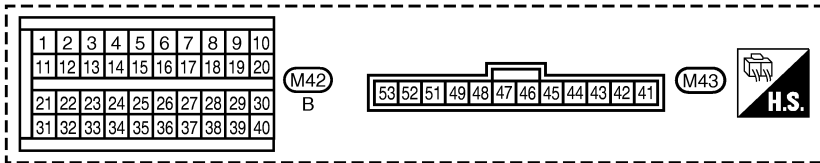
# TURN SIGNAL AND HAZARD WARNING LAMPS

LT-TURN-04



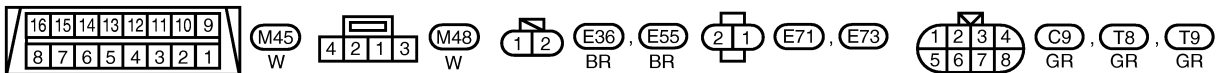
1	2	3	4	5	6	7		
8	9	10	11	12	13	14	15	16

(M3)  
GR



REFER TO THE FOLLOWING.

(C1), (M91) - SUPER MULTIPLE JUNCTION (SMJ)

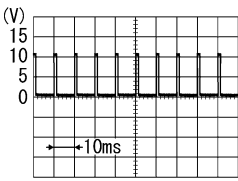
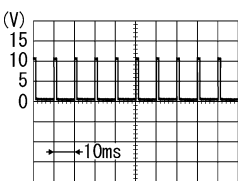
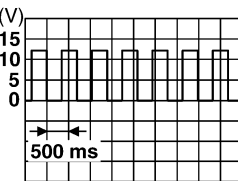
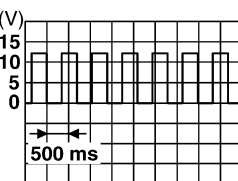




# TURN SIGNAL AND HAZARD WARNING LAMPS

## Terminals and Reference Values for BCM

GKS0003D

Terminal No.	Wire color	Signal name	Measuring condition		Reference value	
			Ignition switch	Operation or condition		
3	Y	Ignition switch (ON)	ON	—	Battery voltage	
6	G	Combination switch output 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">PKIB4958J</p>	
7	GR	Combination switch output 4	ON	Lighting, turn, wiper OFF Wiper dial position 4		
8	LG	Combination switch output 1	ON	Lighting, turn, wiper OFF Wiper dial position 4		
9	BR	Combination switch output 2	ON	Lighting, turn, wiper OFF Wiper dial position 4		
10	O	Combination switch output 5	ON	Lighting, turn, wiper OFF Wiper dial position 4		
21	P	CAN- L	—	—	—	
22	L	CAN- H	—	—	—	
33	SB	Hazard switch signal	OFF	Hazard switch	ON	Approx. 0V
				OFF	OFF	Approx. 5V
36	P	Combination switch input 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right; font-size: small;">PKIB4958J</p>	
37	L	Combination switch input 2	ON	Lighting, turn, wiper OFF Wiper dial position 4		
38	V	Combination switch input 3	ON	Lighting, turn, wiper OFF Wiper dial position 4		
39	SB	Combination switch input 4	ON	Lighting, turn, wiper OFF Wiper dial position 4		
40	R	Combination switch input 1	ON	Lighting, turn, wiper OFF Wiper dial position 4		
47	LG	Turn signal (left)	ON	Combination switch	Turn left ON	 <p style="text-align: right; font-size: small;">SKIA3009J</p>
48	G	Turn signal (right)	ON	Combination switch	Turn right ON	 <p style="text-align: right; font-size: small;">SKIA3009J</p>
55	B	Ground	ON	—	Approx. 0V	
57	W	Battery power supply (fusible link)	OFF	—	Battery voltage	

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# TURN SIGNAL AND HAZARD WARNING LAMPS

GKS0003E

## How to Proceed With Trouble Diagnosis

1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to [LT-52, "System Description"](#) .
3. Perform preliminary check. Refer to [LT-58, "Preliminary Check"](#) .
4. Check symptom and repair or replace the cause of malfunction.
5. Do turn signal and hazard warning lamps operate normally? If YES, GO TO 6. If NO, GO TO 4.
6. INSPECTION END

## Preliminary Check

GKS0003F

### CHECK POWER SUPPLY AND GROUND CIRCUIT

#### 1. CHECK FUSES OR FUSIBLE LINK

Check for blown fuses or fusible link.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	G
	Ignition switch ON or START position	1
Combination meter	Battery	19
	Ignition switch ON or START position	14

Refer to [LT-55, "Wiring Diagram — TURN —"](#) .

OK or NG

OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link. Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) .

#### 2. CHECK POWER SUPPLY CIRCUIT

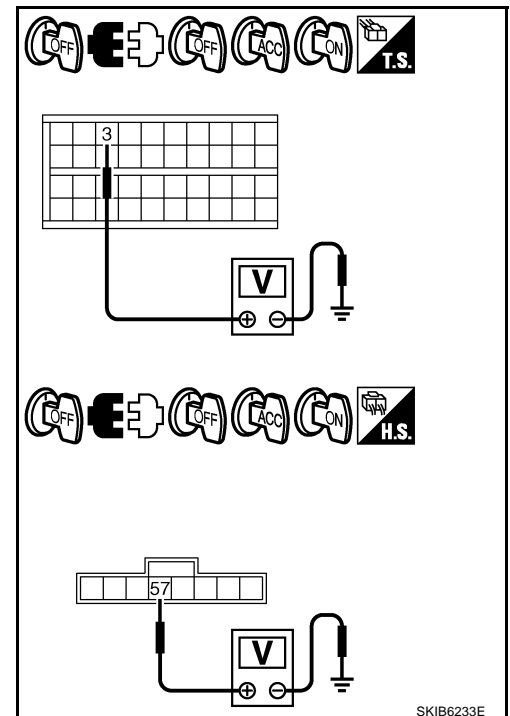
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

Terminal		Ignition switch position			
(+)		(-)	OFF	ACC	ON
BCM connector	Terminal		OFF	ACC	ON
M42	3	Ground	0V	0V	Battery voltage
M44	57		Battery voltage	Battery voltage	Battery voltage

OK or NG

OK >> GO TO 3

NG >> Repair harness or connector.



SKIB6233E

# TURN SIGNAL AND HAZARD WARNING LAMPS

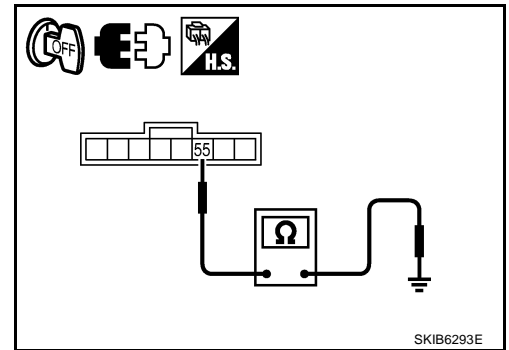
## 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M44	55		Yes

OK or NG

- OK >> INSPECTION END
- NG >> Repair harness or connector.



## CONSULT-II Function (BCM)

GKS0003G

CONSULT-II can display each diagnostic item using the diagnostic test mode shown following.

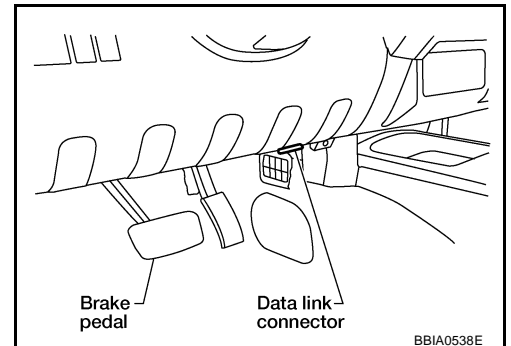
BCM diagnostic part	Diagnostic mode	Description
FLASHER	DATA MONITOR	Displays BCM input/output data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.

## CONSULT-II OPERATION

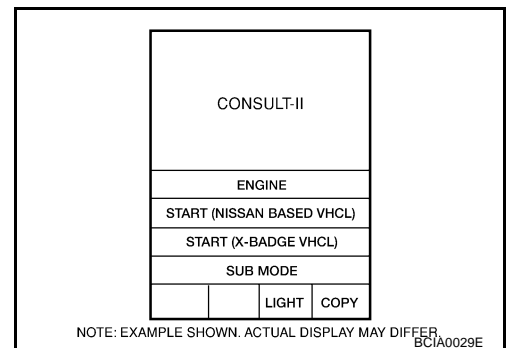
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

- With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, and then turn ignition switch ON.

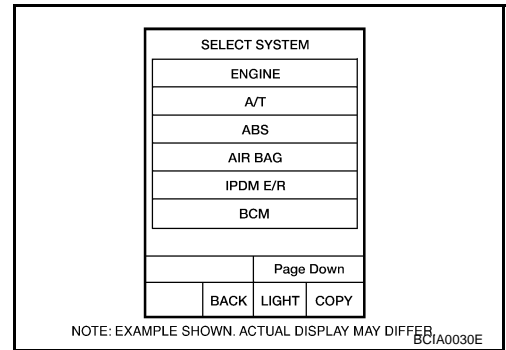


- Touch "START (NISSAN BASED VHCL)".

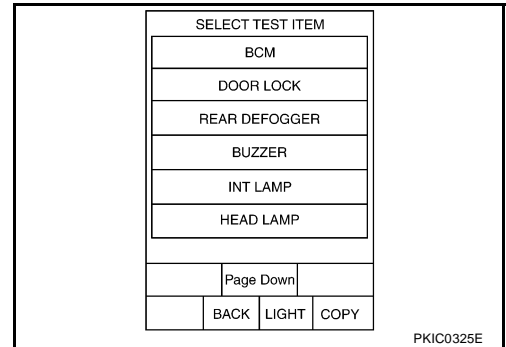


# TURN SIGNAL AND HAZARD WARNING LAMPS

3. Touch "BCM" on "SELECT SYSTEM" screen.  
If "BCM" is not indicated, refer to [GI-47, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



4. Touch "FLASHER" on "SELECT TEST ITEM" screen.



## DATA MONITOR

### Operation Procedure

1. Touch "FLASHER" on "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on "SELECT MONITOR ITEM" screen.

ALL SIGNALS	Monitors all the signals.
SELECTION FROM MENU	Selects items and monitors them.

4. When "SELECTION FROM MENU" is selected, touch items to be monitored. When "ALL SIGNALS" is selected, all the items will be monitored.
5. Touch "START".
6. Touch "RECORD" while monitoring, then the status of the monitored item can be recorded. To stop recording, touch "STOP".

### Display Item List

Monitor item	Contents
IGN ON SW "ON/OFF"	Displays status (ignition switch IGN position: ON/other: OFF) of ignition switch judged from the ignition switch signal.
HAZARD SW "ON/OFF"	Displays status (hazard switch ON position: ON/other: OFF) of hazard switch judged from the hazard switch signal.
TURN SIGNAL R "ON/OFF"	Displays status (turn signal switch right position: ON/other: OFF) of turn RH switch judged from the turn signal switch signal.
TURN SIGNAL L "ON/OFF"	Displays status (turn signal switch left position: ON/other: OFF) of turn LH switch judged from the turn signal switch signal.
BRAKE SW "ON/OFF"	Displays status of stop lamp switch.

## ACTIVE TEST

### Operation Procedure

1. Touch "FLASHER" on "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on "SELECT DIAG MODE" screen.
3. Touch item to be tested and check operation of the selected item.
4. During the operation check, touching "OFF" deactivates the operation.

# TURN SIGNAL AND HAZARD WARNING LAMPS

## Display Item List

Test item	Description
FLASHER (RH)	Turn signal lamp (right) can be operated by any ON-OFF operations.
FLASHER (LH)	Turn signal lamp (left) can be operated by any ON-OFF operations.

## Turn Signal Lamp Does Not Operate

GKS0003H

### 1. CHECK BULB

Check bulb standard of each turn signal lamp is correct.

OK or NG

- OK >> GO TO 2.
- NG >> Replace turn signal lamp bulb.

### 2. CHECK COMBINATION SWITCH INPUT SIGNAL

☑ With CONSULT-II

- Select "BCM" on CONSULT-II. Select "FLASHER" on "SELECT TEST ITEM" screen.
- Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
- Make sure "TURN SIGNAL R" and "TURN SIGNAL L" turns ON-OFF linked with operation of lighting switch.

**When lighting switch is : TURN SIGNAL R ON  
TURN RH position**

**When lighting switch is : TURN SIGNAL L ON  
TURN LH position**

DATA MONITOR			
MONITOR			
TURN SIGNAL R	ON		
TURN SIGNAL L	ON		
		RECORD	
MODE	BACK	LIGHT	COPY

PKIA7600E

⊗ Without CONSULT-II

Refer to [LT-71, "Combination Switch Inspection"](#).

OK or NG

- OK >> GO TO 3.
- NG >> Check combination switch (lighting switch). Refer to [LT-71, "Combination Switch Inspection"](#).

### 3. ACTIVE TEST

☑ With CONSULT-II

- Select "BCM" on CONSULT-II. Select "FLASHER" on "SELECT TEST ITEM" screen.
- Select "ACTIVE TEST" on "SELECT DIAG MODE" screen. Select "FLASHER" on "SELECT TEST ITEM" screen.
- Make sure operation of turn signal lamps.

**Turn signal lamp should operate.**

⊗ Without CONSULT-II

GO TO 4.

OK or NG

- OK >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).
- NG >> GO TO 4.

ACTIVE TEST			
FLASHER	OFF		
		RECORD	
RH	LH		
MODE	BACK	LIGHT	COPY

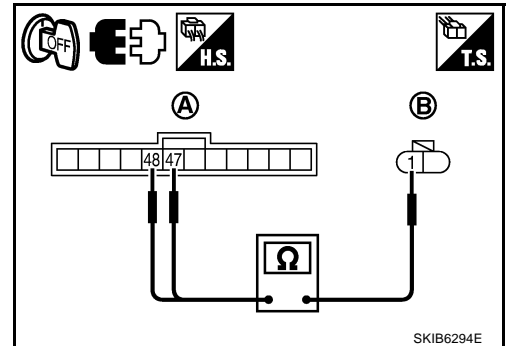
SKIA6190E

# TURN SIGNAL AND HAZARD WARNING LAMPS

## 4. CHECK TURN SIGNAL LAMP CIRCUIT

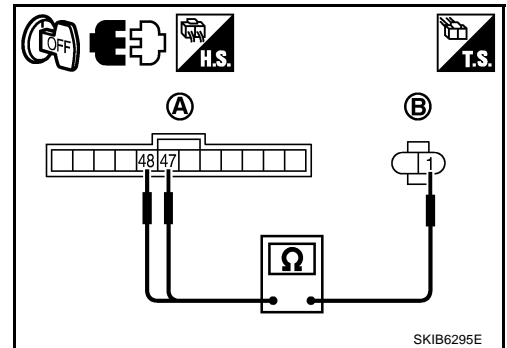
1. Turn ignition switch OFF.
2. Disconnect BCM connector, front combination lamp (RH and LH) connector, side turn signal lamp (RH and LH) connector and rear combination lamp (RH and LH) connector.
3. Check continuity between BCM harness connector (A) and front combination lamp (RH and LH) harness connector (B).

Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	M43	48	E36	1	Yes
LH		47	E55		



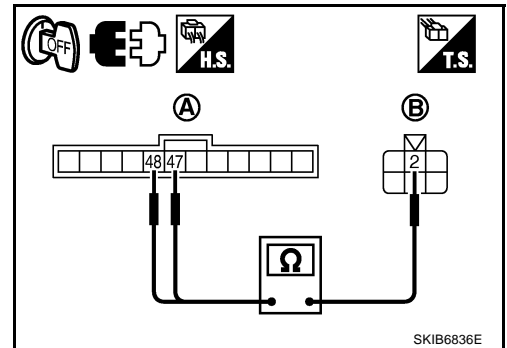
4. Check continuity between BCM harness connector (A) and side turn signal lamp (RH and LH) harness connector (B).

Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	M43	48	E73	1	Yes
LH		47	E71		



5. Check continuity between BCM harness connector (A) and rear combination lamp (RH and LH) harness connector (B).

Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	M43	48	T5	2	Yes
LH		47	T2		



**OK or NG**

- OK >> GO TO 5.
- NG >> Repair harness or connector.

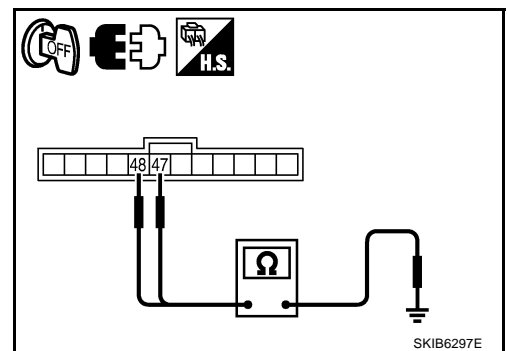
## 5. CHECK SIGNAL LAMP CIRCUIT (SHORT CIRCUIT)

Check continuity between BCM harness connector and ground.

BCM connector		Terminal	Ground	Continuity
RH	M43	48		No
LH		47		

**OK or NG**

- OK >> Replace BCM if turn signal lamp does not work after setting the connector again. Refer to [BCS-15, "Removal and Installation of BCM"](#).
- NG >> Repair harness or connector.



# TURN SIGNAL AND HAZARD WARNING LAMPS

## Hazard Warning Lamp Does Not Operate But Turn Signal Lamps Operate

GKS0003I

### 1. CHECK BULB

Make sure bulb standard of each turn signal lamp is correct.

OK or NG

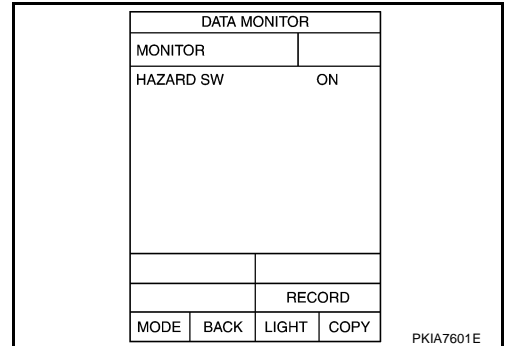
- OK >> GO TO 2.
- NG >> Replace turn signal lamp bulb.

### 2. CHECK HAZARD SWITCH INPUT SIGNAL

With CONSULT-II

1. Select "BCM" on CONSULT-II. Select "FLASHER" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure "HAZARD SW" turns ON-OFF linked with operation of multifunction switch (hazard switch).

**When hazard switch is in ON position : HAZARD SW ON**



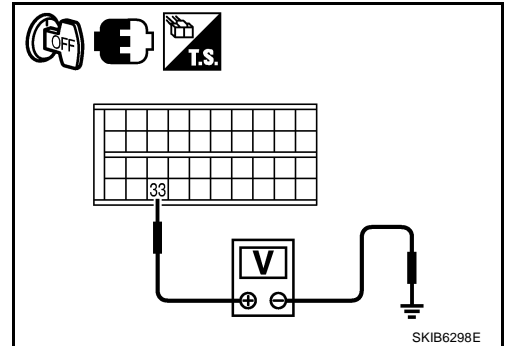
Without CONSULT-II

Check voltage between BCM harness connector and ground.

Terminal (+)		Terminal (-)	Condition	Voltage
Connector	Terminal			
M42	33	Ground	Hazard switch is ON	Approx. 0V
			Hazard switch is OFF	Approx. 5V

OK or NG

- OK >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).
- NG >> GO TO 3.



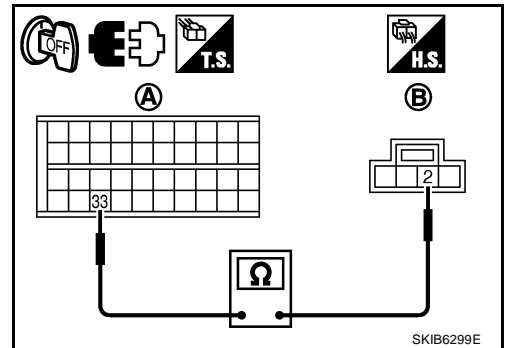
### 3. CHECK HAZARD SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector and hazard switch connector.
3. Check continuity between BCM harness connector (A) and hazard switch harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M42	33	M48	2	Yes

OK or NG

- OK >> GO TO 4.
- NG >> Repair harness or connector.



# TURN SIGNAL AND HAZARD WARNING LAMPS

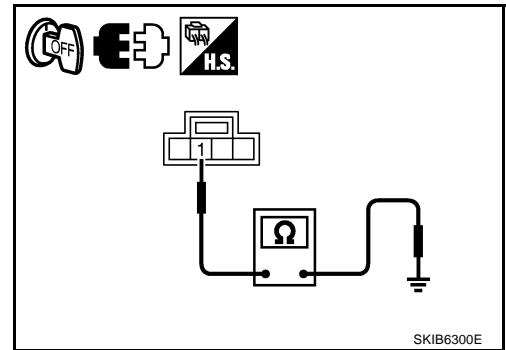
## 4. CHECK GROUND CIRCUIT

Check continuity between hazard switch harness connector and ground.

Hazard switch connector	Terminal	Ground	Continuity
M48	1		Yes

OK or NG

- OK >> GO TO 5.
- NG >> Repair harness or connector.



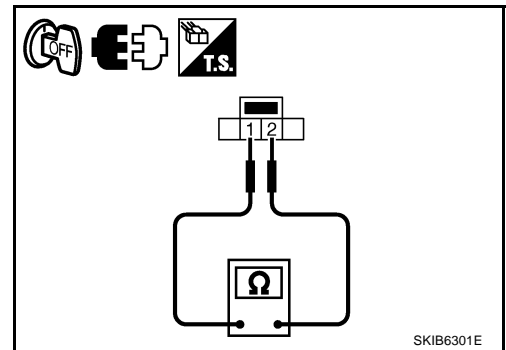
## 5. CHECK HAZARD SWITCH

Check continuity of hazard switch.

Hazard switch		Condition	Continuity
Terminal			
1	2	Hazard switch is ON	Yes
		Hazard switch is OFF	No

OK or NG

- OK >> Replace BCM if turn signal lamps does not work after setting the connector again. Refer to [BCS-15, "Removal and Installation of BCM"](#) .
- NG >> Replace hazard switch. Refer to [LT-67, "Removal and Installation"](#) .



## Turn Signal Indicator Lamp Does Not Operate

### 1. CHECK CAN COMMUNICATION

1. Select "BCM" on CONSULT-II. Select "BCM" on "SELECT TEST ITEM" screen.
2. Select "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.

Display of self-diagnostic results

- NO DTC>> Replace combination meter. Refer to [DI-31, "Removal and Installation of Combination Meter"](#) .
- CAN COMM CIRCUIT>> Refer to [BCS-14, "CAN Communication Inspection Using CONSULT-II \(Self-Diagnosis\)"](#) .

### Bulb Replacement (Front Turn Signal Lamp)

GKS0003K

Refer to [LT-28, "Bulb Replacement"](#) .

### Bulb Replacement (Rear Turn Signal Lamp)

GKS0003L

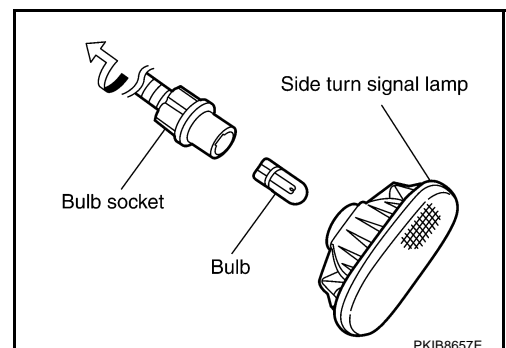
Refer to [LT-91, "Bulb Replacement"](#) .

### Bulb Replacement (Side Turn Signal Lamp)

GKS0003M

1. Remove side turn signal lamp. Refer to [LT-65, "Removal and Installation of Side Turn Signal Lamp"](#) .
2. Turn bulb socket counterclockwise and unlock it.
3. Remove the bulb from the socket.

**Side turn signal lamp : 12V 5W**





# TURN SIGNAL AND HAZARD WARNING LAMPS

## Removal and Installation of Front Turn Signal Lamp

GKS0003N

Refer to [LT-30, "Removal and Installation"](#) .

## Removal and Installation of Rear Turn Signal Lamp

GKS0003O

Refer to [LT-92, "Removal and Installation"](#) .

## Removal and Installation of Side Turn Signal Lamp REMOVAL

GKS0003P

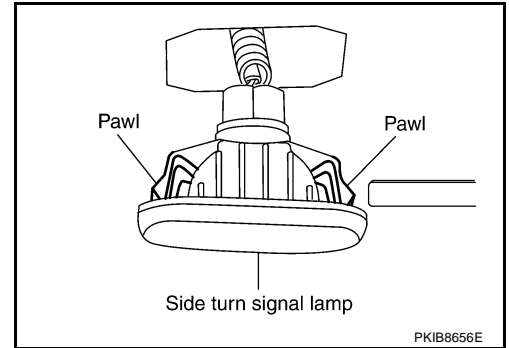
1. Insert a spatula or the similar tool under the side turn signal lamp. While pushing the pawl of the lamp, pull off the lamp from the vehicle.
2. Disconnect side turn signal lamp.

### NOTE:

Support side turn signal lamp harness with tape so that it won't fall into the front fender.

### CAUTION:

**Install the lamp housing with the bead facing up.**



## INSTALLATION

Installation is the reverse order of removal.

A

B

C

D

E

F

G

H

I

J

LT

L

M

# LIGHTING AND TURN SIGNAL SWITCH

## LIGHTING AND TURN SIGNAL SWITCH

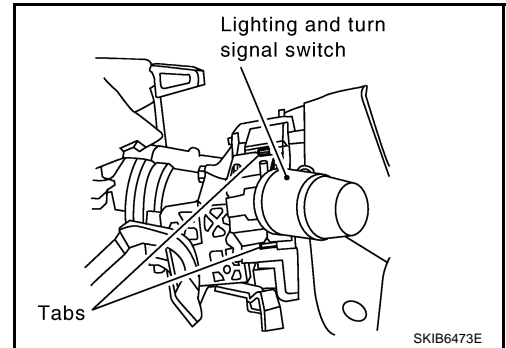
PFP:25540

### Removal and Installation

GKS0003Q

#### REMOVAL

1. Remove steering column cover. Refer to [IP-10, "INSTRUMENT PANEL ASSEMBLY"](#).
2. Disconnect lighting and turn signal switch connector.
3. While pressing tabs, pull lighting and turn signal switch toward driver door and release from the steering column.



#### INSTALLATION

Installation is the reverse order of removal.

# HAZARD SWITCH

## HAZARD SWITCH

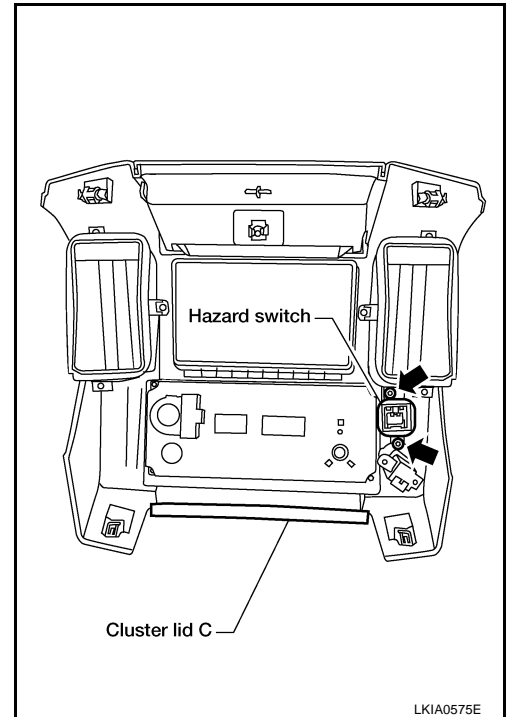
PFP:25290

### Removal and Installation

GKS0003R

#### REMOVAL

1. Remove cluster lid C. Refer to [IP-11, "CLUSTER LID C"](#) .
2. Disconnect hazard switch connector.
3. Remove screws and remove hazard switch.



#### INSTALLATION

Installation is the reverse order of removal.

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

# COMBINATION SWITCH

PFP:25567

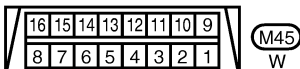
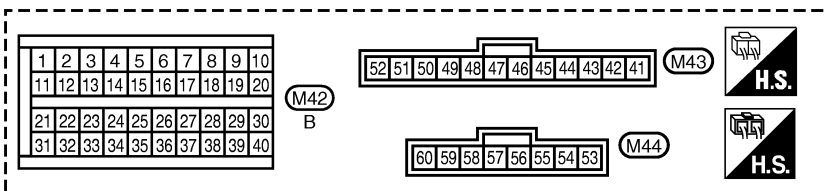
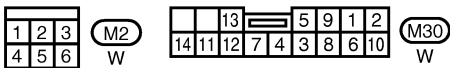
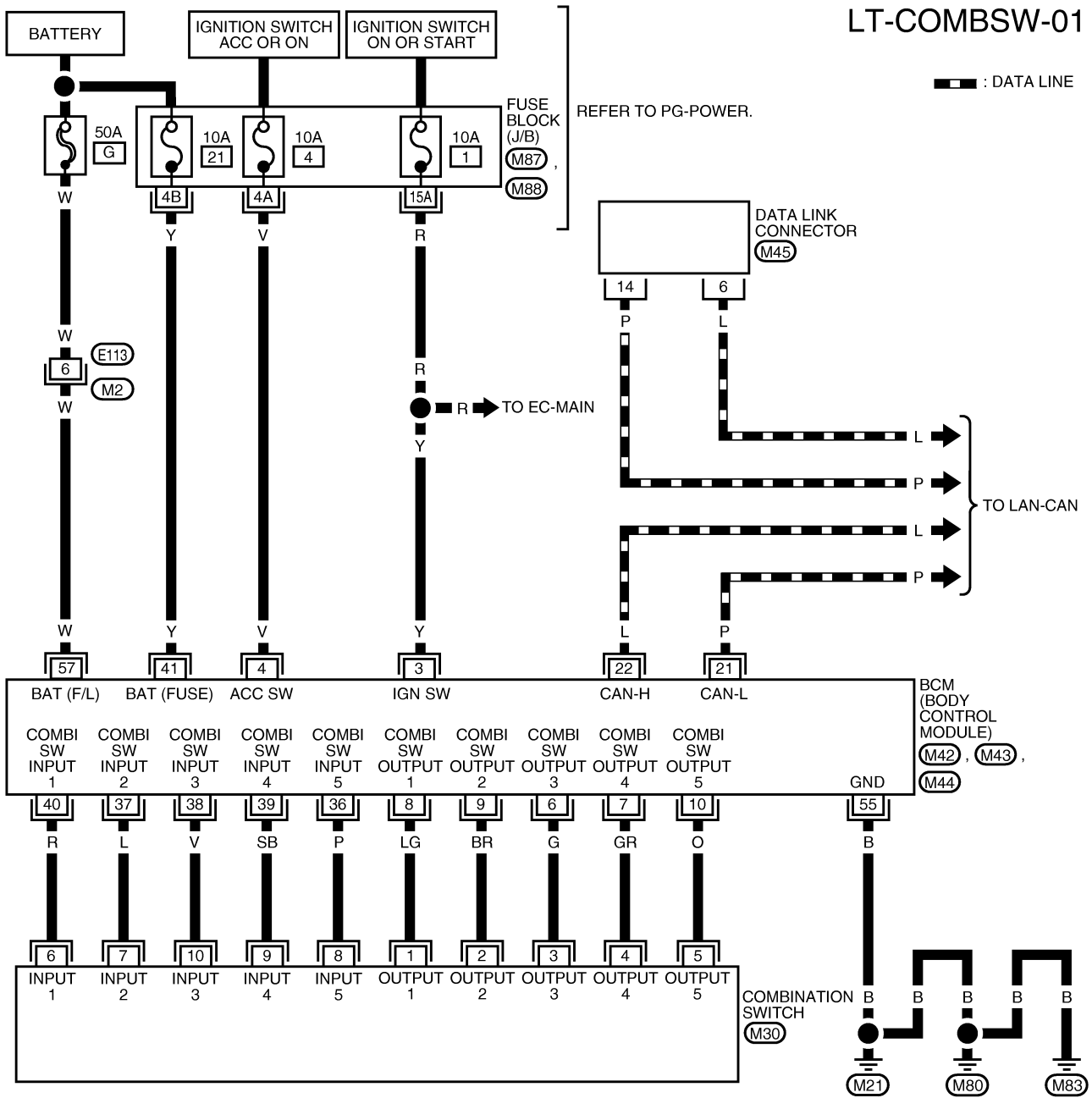
GKS0003S

## COMBINATION SWITCH

### Wiring Diagram — COMBSW —

## LT-COMBSW-01

— : DATA LINE



REFER TO THE FOLLOWING.  
 (M87), (M88) - FUSE BLOCK - JUNCTION BOX (J/B)

MKWA4184E

# COMBINATION SWITCH

## Combination Switch Reading Function

GKS0003T

Refer to [BCS-3, "COMBINATION SWITCH READING FUNCTION"](#) .

## CONSULT-II Function (BCM)

GKS0003U

CONSULT-II can display each diagnostic item using the diagnostic test mode shown following.

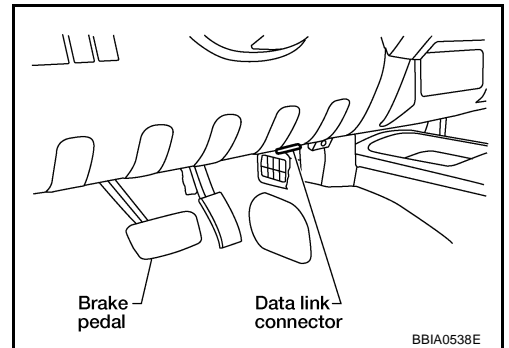
BCM diagnostic part	Diagnostic mode	Description
COMBINATION SWITCH	DATA MONITOR	Displays BCM input/output data in real time.

## CONSULT-II OPERATION

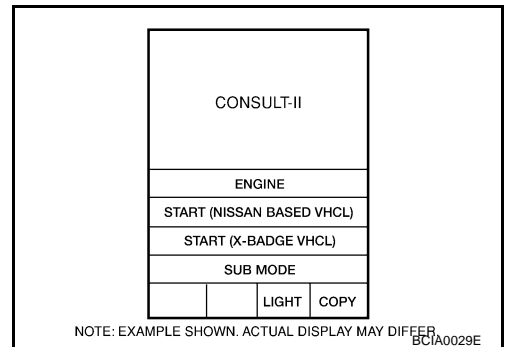
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

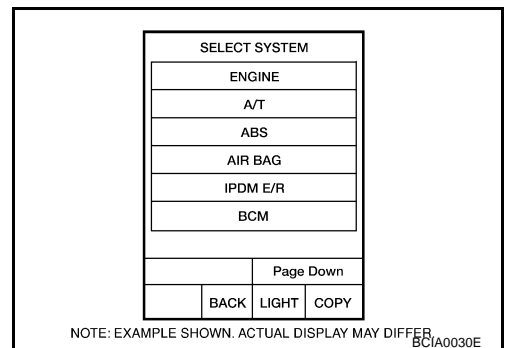
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, and then turn ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

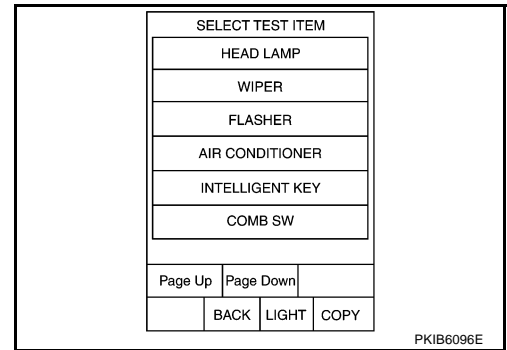


3. Touch "BCM" on "SELECT SYSTEM" screen.  
If "BCM" is not indicated, refer to [GI-47, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#) .



# COMBINATION SWITCH

4. Touch "COMB SW" on "SELECT TEST ITEM" screen.



## DATA MONITOR

### Operation Procedure

1. Touch "COMB SW" on "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on "SELECT MONITOR ITEM" screen.

ALL SIGNALS	Monitors all the signals.
SELECTION FROM MENU	Selects and monitors individual signal.

4. When "ALL SIGNALS" is selected, all the signals will be monitored. When "SELECTION FROM MENU" is selected, touch items to be monitored.
5. Touch "START".
6. Touch "RECORD" while monitoring, then the status of the monitored item can be recorded. To stop recording, touch "STOP".

### Display Item List

Monitor item	Contents
TURN SIGNAL R "ON/OFF"	Displays status (turn signal switch right position: ON/other: OFF) of turn RH switch judged from the turn signal switch signal.
TURN SIGNAL L "ON/OFF"	Displays status (turn signal switch left position: ON/other: OFF) of turn LH switch judged from the turn signal switch signal.
HI BEAM SW "ON/OFF"	Displays status (lighting switch high beam position: ON/other: OFF) of high beam switch judged from the lighting switch signal.
HEAD LAMP SW 1 "ON/OFF"	Displays status (lighting switch 2ND position: ON/other: OFF) of headlamp 1 switch judged from the lighting switch signal.
HEAD LAMP SW 2 "ON/OFF"	Displays status (lighting switch 2ND position: ON/other: OFF) of headlamp 2 switch judged from the lighting switch signal.
LIGHT SW 1ST "ON/OFF"	Displays status (lighting switch 1ST or 2ND position: ON/other: OFF) of lighting switch 1ST position switch judged from the lighting switch signal.
PASSING SW "ON/OFF"	Displays status (lighting switch passing position: ON/other: OFF) of passing switch judged from the lighting switch signal.
FR FOG SW "ON/OFF"	Displays status (lighting switch front fog lamp ON position: ON/others: OFF) of front fog lamp switch judged from the lighting switch signal.
RR FOG SW "ON/OFF"	Displays status (rear fog lamp switch position: ON/other: OFF) of rear fog switch judged from the lighting switch signal.
FR WIPER HI "ON/OFF"	Displays status (front wiper switch high position: ON/other: OFF) of front wiper high switch judged from the wiper switch signal.
FR WIPER LOW "ON/OFF"	Displays status (front wiper switch low position: ON/other: OFF) of front wiper low switch judged from the wiper switch signal.
FR WIPER INT "ON/OFF"	Displays status (front wiper switch intermittent position: ON/other: OFF) of front wiper intermittent switch judged from the wiper switch signal.
FR WASHER SW "ON/OFF"	Displays status (front washer switch ON position: ON/other: OFF) of front washer switch judged from the wiper switch signal.

# COMBINATION SWITCH

Monitor item		Contents
INT VOLUME	"1 - 7"	Displays status (wiper intermittent dial position setting 1-7) of intermittent volume switch judged from the wiper switch signal.
RR WIPER ON	"ON/OFF"	Displays status (rear wiper switch ON position: ON/other: OFF) of rear wiper switch judged from the wiper switch signal.
RR WIPER INT	"ON/OFF"	Displays status (rear wiper switch intermittent position: ON/other: OFF) of rear wiper intermittent switch judged from the wiper switch signal.
RR WASHER SW	"ON/OFF"	Displays status (rear washer switch ON position: ON/other: OFF) of rear washer switch judged from the wiper switch signal.

## Combination Switch Inspection

GKS0003V

### 1. SYSTEM CHECK

Referring to table below, check to which system the malfunctioning switch belongs.

System 1	System 2	System 3	System 4	System 5
—	FR WASHER	FR WIPER LO	TURN LH	TURN RH
FR WIPER HI	—	FR WIPER INT	PASSING	HEAD LAMP1
INT VOLUME 1	—	—	HEAD LAMP2	HI BEAM
—	INT VOLUME 3	—	—	LIGHT SW 1ST
INT VOLUME 2	—	—	FR FOG	—

>> GO TO 2.

### 2. SYSTEM CHECK

 With CONSULT-II

#### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Connect CONSULT-II, and select "COMB SW" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR".
3. Select "START", and confirm that other switches in malfunctioning system operate normally.

Example: When the HI BEAM switch is malfunctioning, confirm that "TURN RH", "HEAD LAMP 1" and "LIGHT SW 1ST" in system 5, to which the HI BEAM switch belongs, turn ON-OFF normally.

DATA MONITOR	
MONITOR	
TURN SIGNAL R	OFF
TURN SIGNAL L	OFF
HIBEAM SW	OFF
HEAD LAMP SW1	OFF
HEAD LAMP SW2	OFF
LIGHT SW 1ST	OFF
PASSING SW	OFF
AUTO LIGHT SW	OFF
FR FOG SW	OFF
	Page Down
	RECORD
MODE	BACK LIGHT COPY

SKIA7075E

 Without CONSULT-II

Operating combination switch, and confirm that other switches in malfunctioning system operate normally.

Example: When the HI BEAM switch is malfunctioning, confirm that "TURN RH", "HEAD LAMP 1" and "LIGHT SW 1ST" in system 5, to which HI BEAM switch belongs, turn ON-OFF normally.

#### Check results

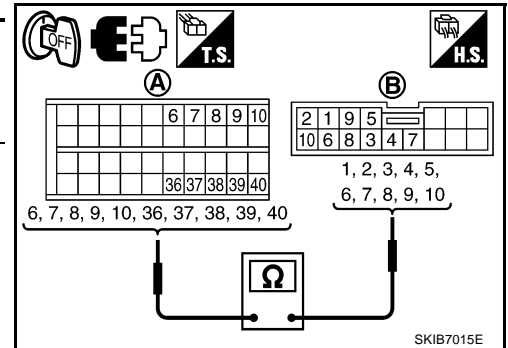
- Other switches in malfunctioning system operate normally.>> Replace lighting switch or wiper switch.
- Other switches in malfunctioning system do not operate normally.>> GO TO 3.

# COMBINATION SWITCH

## 3. HARNESS INSPECTION

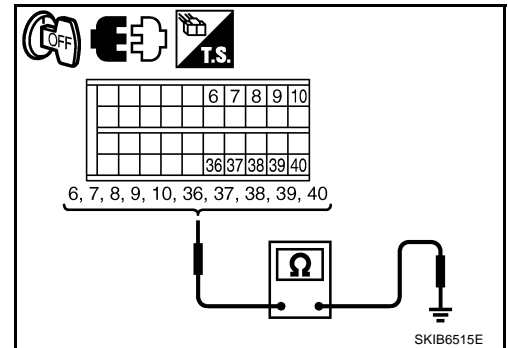
1. Turn ignition switch OFF.
2. Disconnect BCM and combination switch connectors.
3. Check for continuity between BCM harness connector (A) of the suspect system and the corresponding combination switch harness connector (B).

Suspect system	Terminal				Continuity	
	A		B			
	Connector	Terminal	Connector	Terminal		
1	M42	output 1	8	M30	1	Yes
		input 1	40		6	
2		output 2	9		2	
		input 2	37		7	
3		output 3	6		3	
		input 3	38		10	
4		output 4	7		4	
		input 4	39		9	
5		output 5	10		5	
		input 5	36		8	



4. Check for continuity between each terminal of BCM harness connector in suspect malfunctioning system and ground.

Suspect system	BCM connector	Terminal			Continuity
1	M42	output 1	8	Ground	No
		input 1	40		
2		output 2	9		
		input 2	37		
3		output 3	6		
		input 3	38		
4		output 4	7		
		input 4	39		
5		output 5	10		
		input 5	36		



OK or NG

OK >> GO TO 4.

NG >> Check harness between BCM and combination switch for open or short circuit.



# COMBINATION SWITCH

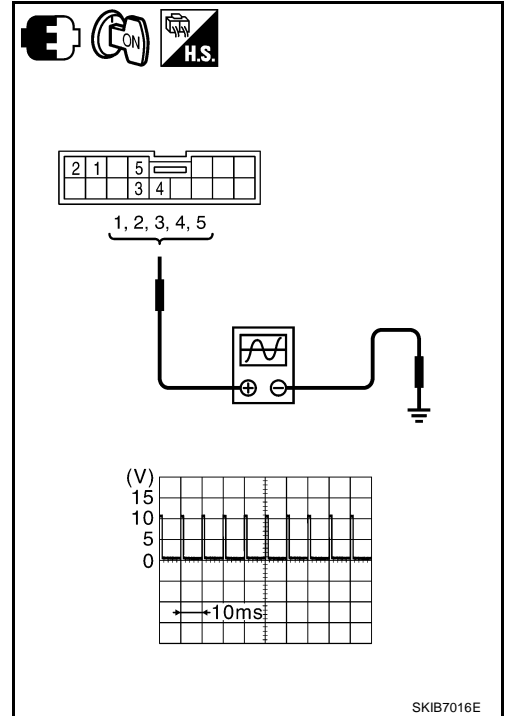
## 4. BCM OUTPUT TERMINAL INSPECTION

1. Connect BCM and combination switch connectors.
2. Turn ignition switch ON.
3. Turn lighting switch and wiper switch to OFF.
4. Set wiper dial to position 4.
5. Check BCM connector output terminal voltage waveform of suspect malfunctioning system.

Suspect system	Terminal			
	(+)			(-)
	Combination switch connector	Terminal		
1	M30	Output 1	1	Ground
2		Output 2	2	
3		Output 3	3	
4		Output 4	4	
5		Output 5	5	

OK or NG

- OK >> Open circuit in combination switch, GO TO 5.  
 NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#) .



## 5. COMBINATION SWITCH INSPECTION

Referring to table below, perform combination switch inspection.

Procedure									
1	2		3	4		5	6		7
Replace lighting switch	Confirm check results	OK	INSPECTION END	Confirm check results	OK	INSPECTION END	Confirm check results	OK	INSPECTION END
		NG	Replace wiper switch		NG	Replace switch base		NG	Confirm symptom again

>> INSPECTION END

### Removal and Installation

Refer to [LT-66, "Removal and Installation"](#) .

### Switch Circuit Inspection

Refer to [LT-71, "Combination Switch Inspection"](#) .



# STOP LAMP

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## Bulb Replacement

GKS0003Z

Refer to [LT-91, "Bulb Replacement"](#) .

A

## Removal and Installation

GKS00040

Refer to [LT-92, "Removal and Installation"](#) .

B

C

D

E

F

G

H

I

J

LT

L

M



# BACK-UP LAMP

---

## Bulb Replacement

GKS00042

Refer to [LT-91, "Bulb Replacement"](#) .

A

## Removal and Installation

GKS00043

Refer to [LT-92, "Removal and Installation"](#) .

B

C

D

E

F

G

H

I

J

**LT**

L

M

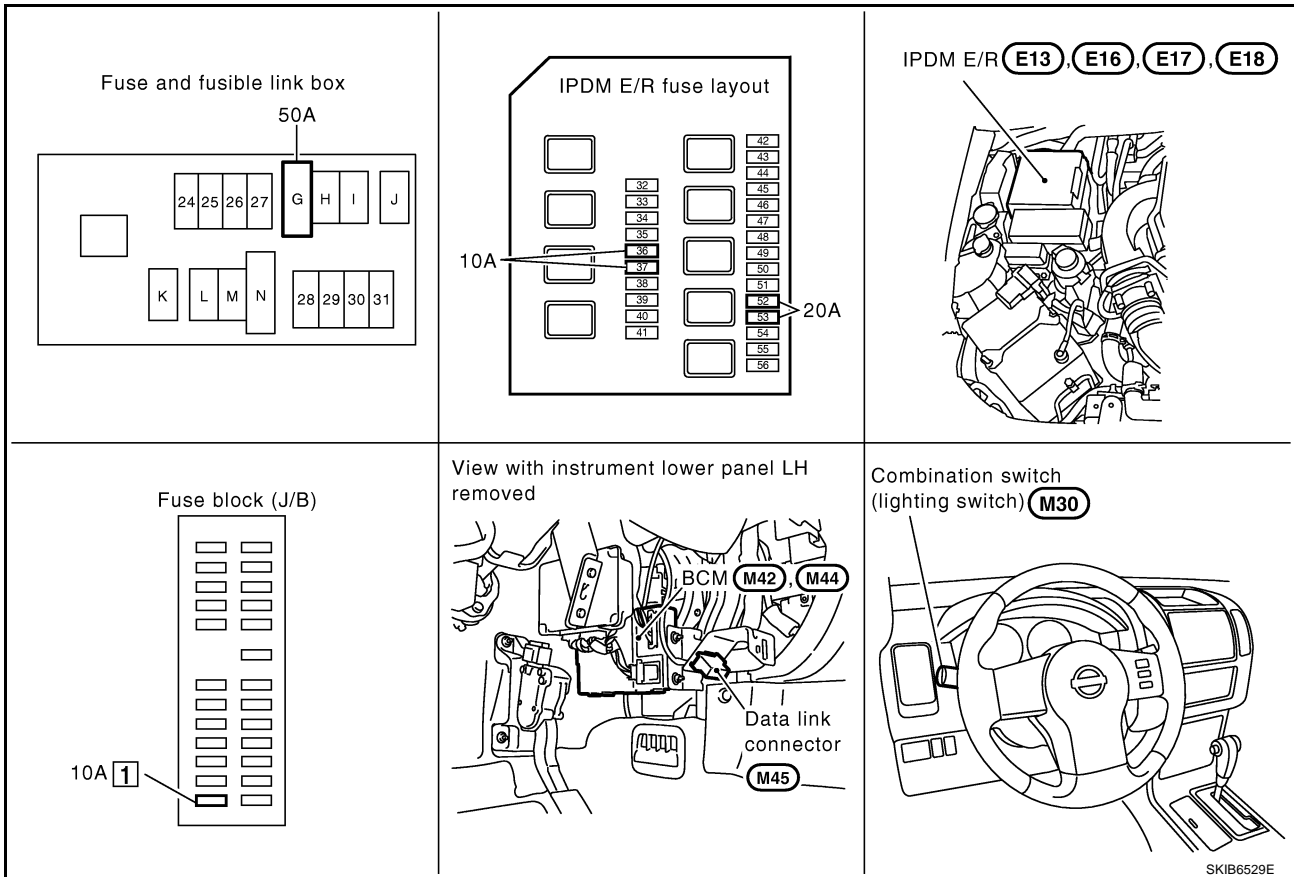
# PARKING, LICENSE PLATE AND TAIL LAMPS

## PARKING, LICENSE PLATE AND TAIL LAMPS

PF:26550

### Component Parts and Harness Connector Location

GKS00044



### System Description

GKS00045

Control of the clearance, license plate, and tail lamps operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 1ST position, the BCM (body control module) receives input signal requesting the clearance, license plate and tail lamps to illuminate. This input signal is communicated to the IPDM E/R (intelligent power distribution module engine room) through the CAN communication. The CPU (central processing unit) of the IPDM E/R controls the tail lamp relay coil. This relay, when energized, directs power to the clearance, license plate and tail lamps, which then illuminate.

### OPERATION BY LIGHTING SWITCH

With the lighting switch in the 1ST position, 2ND position or AUTO position (when the auto light system is activated), the BCM receives input signal requesting the clearance, license plate and tail lamps to illuminate. This input signal is communicated to the IPDM E/R through the CAN communication. The CPU in the IPDM E/R controls the tail lamp relay coil, which when energized, directs power

- through IPDM E/R terminal 28
- to front combination lamp LH terminal 1,
- through IPDM E/R terminal 49
- to front combination lamp RH terminal 1,
- through IPDM E/R terminal 57
- to rear combination lamp RH and LH terminals 1 and
- to license plate lamp RH and LH terminals 1.

Ground is supplied

- to front combination lamp RH and LH terminals 2
- to rear combination lamp RH and LH terminals 3, 4 and
- to license plate lamp RH and LH terminals 2
- through grounds E21, E41 and E61.

# PARKING, LICENSE PLATE AND TAIL LAMPS

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With power and ground supplied, the clearance, license plate and tail lamps illuminate.

## COMBINATION SWITCH READING FUNCTION

Refer to [BCS-3, "COMBINATION SWITCH READING FUNCTION"](#) .

## CAN Communication System Description

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

A

B

GKS00046

C

D

E

F

G

H

I

J

LT

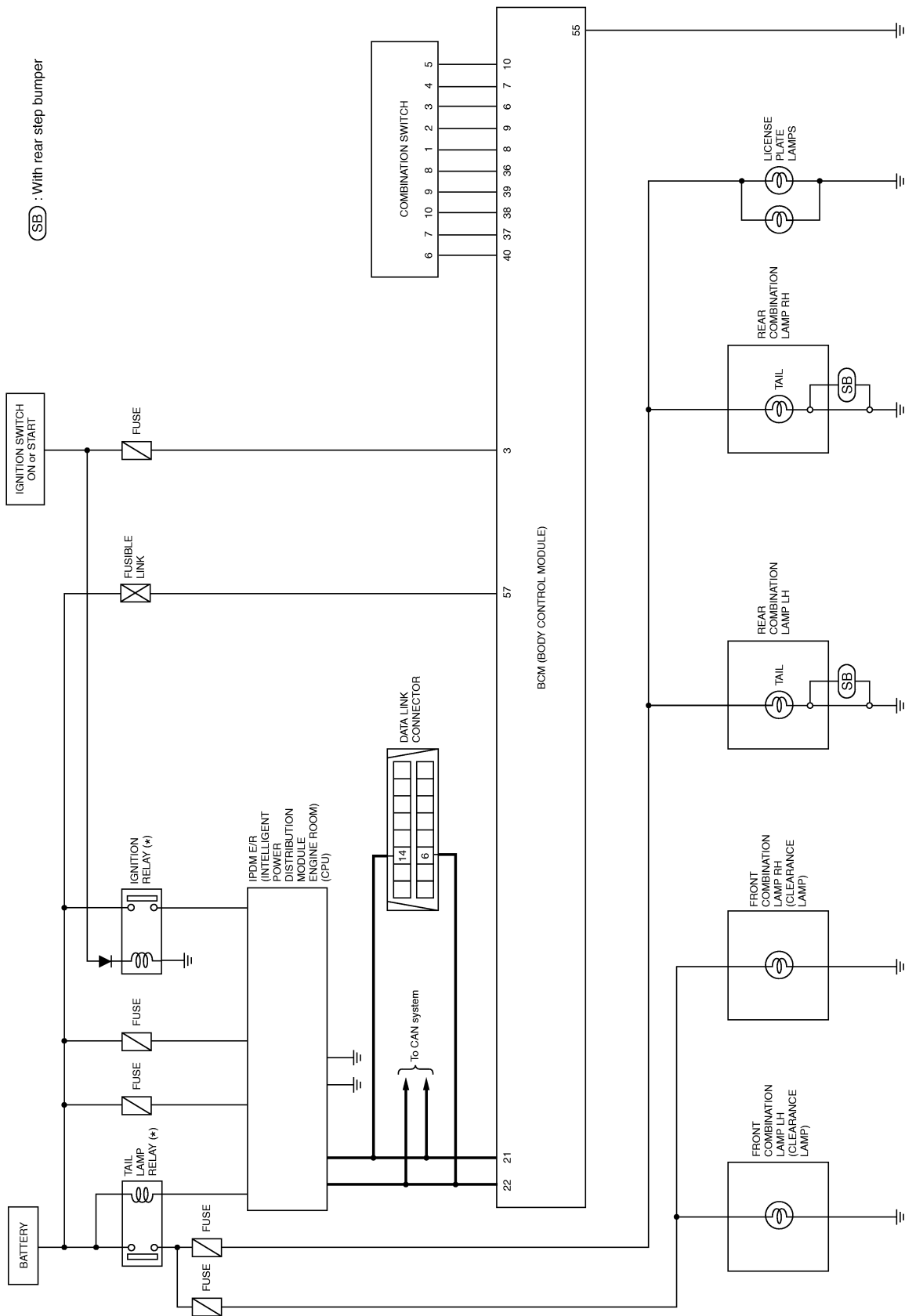
L

M

# PARKING, LICENSE PLATE AND TAIL LAMPS

## Schematic

GKS00047



\*: This relay is build into the IPDM E/R (Intelligent power distribution module engine room).



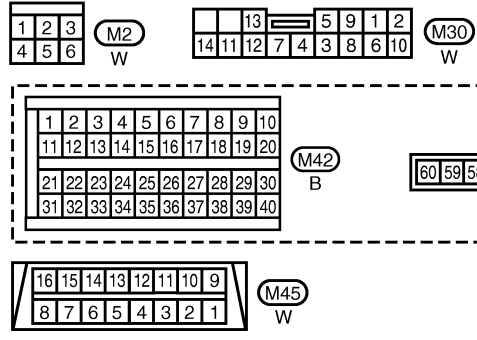
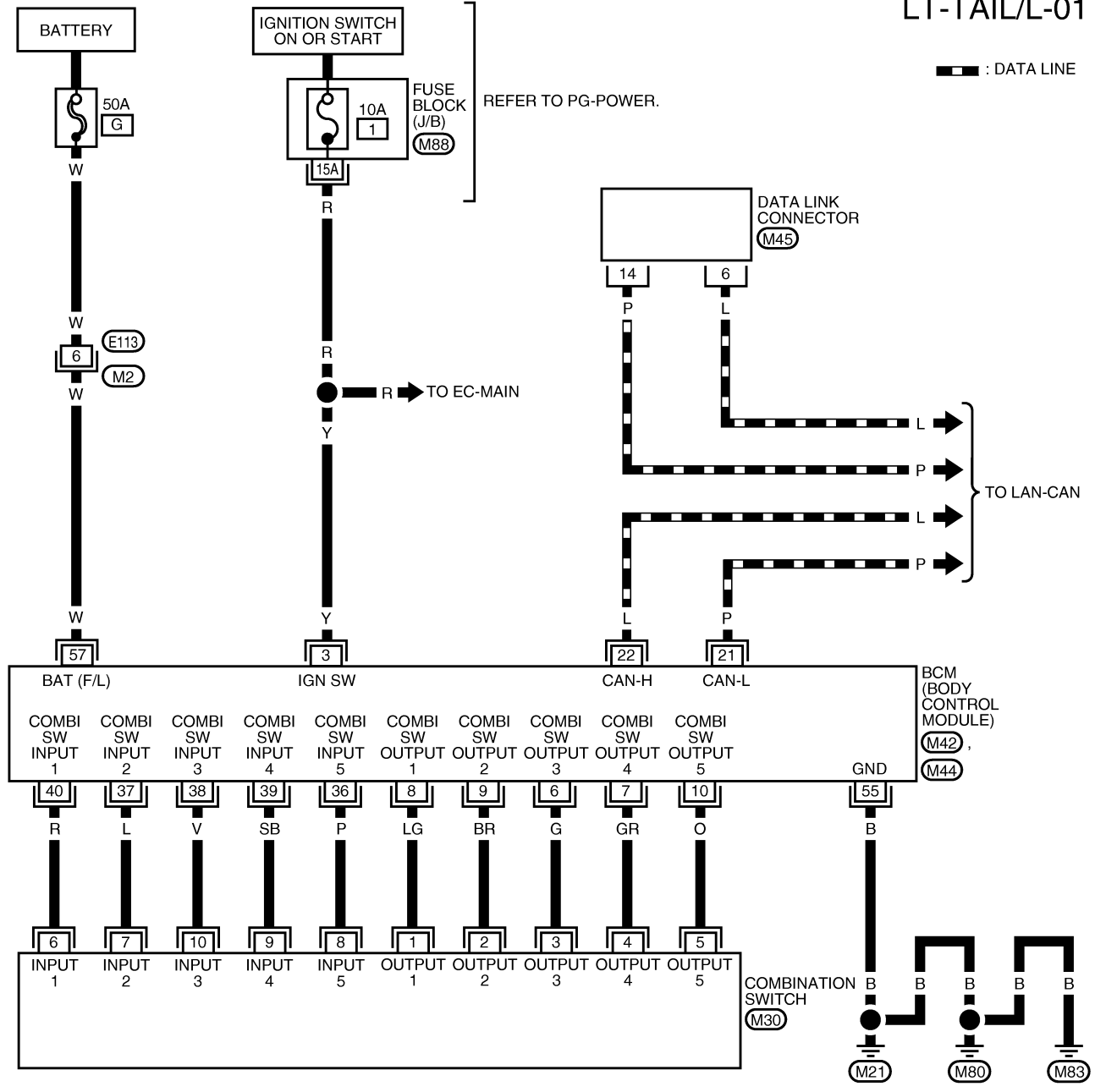
# PARKING, LICENSE PLATE AND TAIL LAMPS

## Wiring Diagram — TAIL/L —

GKS00048

### LT-TAIL/L-01

▬ : DATA LINE

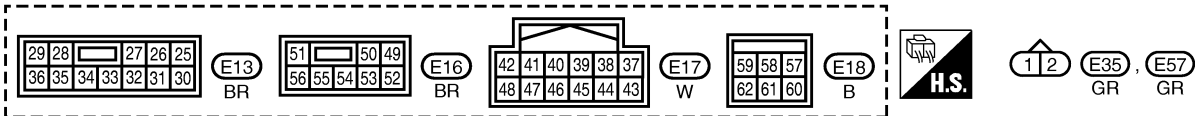
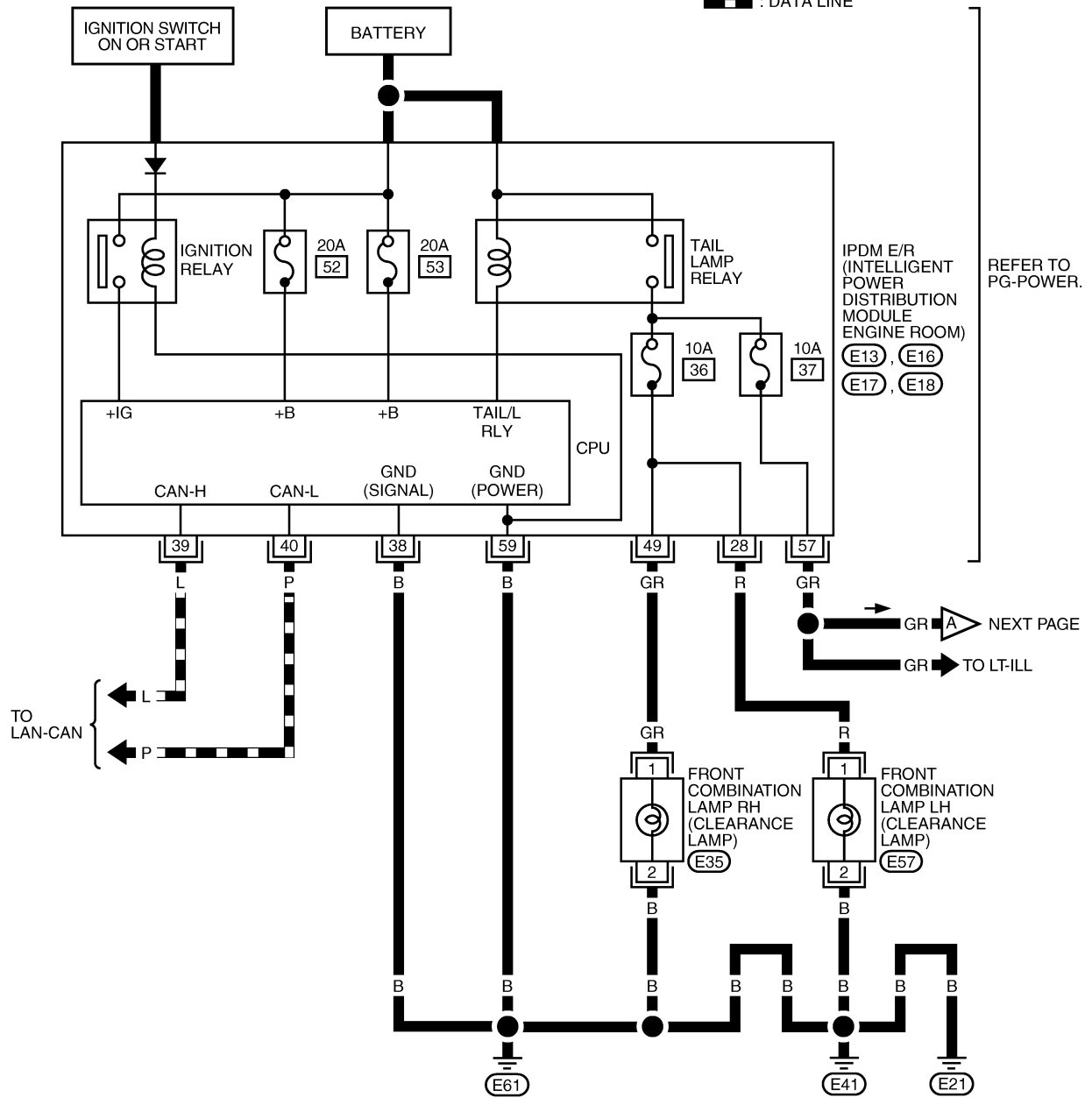


REFER TO THE FOLLOWING.  
 (M88) - FUSE BLOCK - JUNCTION BOX (J/B)

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

# PARKING, LICENSE PLATE AND TAIL LAMPS

LT-TAIL/L-02



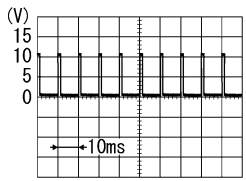
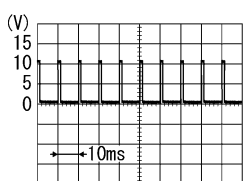
MKWA3580E



# PARKING, LICENSE PLATE AND TAIL LAMPS

## Terminals and Reference Values for BCM

GKS0004B

Terminal No.	Wire color	Signal name	Measuring condition		Reference value
			Ignition switch	Operation or condition	
3	Y	Ignition switch (ON)	ON	—	Battery voltage
6	G	Combination switch output 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right;">PKIB4958J</p>
7	GR	Combination switch output 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
8	LG	Combination switch output 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
9	BR	Combination switch output 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
10	O	Combination switch output 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	
21	P	CAN-L	—	—	—
22	L	CAN-H	—	—	—
36	P	Combination switch input 5	ON	Lighting, turn, wiper OFF Wiper dial position 4	 <p style="text-align: right;">PKIB4958J</p>
37	L	Combination switch input 2	ON	Lighting, turn, wiper OFF Wiper dial position 4	
38	V	Combination switch input 3	ON	Lighting, turn, wiper OFF Wiper dial position 4	
39	SB	Combination switch input 4	ON	Lighting, turn, wiper OFF Wiper dial position 4	
40	R	Combination switch input 1	ON	Lighting, turn, wiper OFF Wiper dial position 4	
55	B	Ground	ON	—	Approx. 0V
57	W	Battery power supply (fusible link)	OFF	—	Battery voltage

## Terminals and Reference Values for IPDM E/R

GKS0004C

Terminal No.	Wire color	Signal name	Measuring condition		Reference value	
			Ignition switch	Operation or condition		
28	R	Front combination lamp LH (clearance lamp)	ON	Lighting switch 1ST position	OFF	Approx. 0V
					ON	Battery voltage
38	B	Ground	ON	—	Approx. 0V	
39	L	CAN-H	—	—	—	
40	P	CAN-L	—	—	—	
49	GR	Front combination lamp RH (clearance lamp)	ON	Lighting switch 1ST position	OFF	Approx. 0V
					ON	Battery voltage
57	GR	Rear combination lamp (RH and LH) (tail) and license plate lamp (RH and LH)	ON	Lighting switch 1ST position	OFF	Approx. 0V
					ON	Battery voltage
59	B	Ground	ON	—	Approx. 0V	

# PARKING, LICENSE PLATE AND TAIL LAMPS

## How to Proceed With Trouble Diagnosis

GKS0004D

1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to [LT-78, "System Description"](#) .
3. Carry out the Preliminary Check. Refer to [LT-85, "Preliminary Check"](#) .
4. Check symptom and repair or replace the cause of malfunction.
5. Do the clearance, license plate and tail lamps operate normally? If YES, GO TO 6. If NO, GO TO 4.
6. INSPECTION END

## Preliminary Check

GKS0004E

### CHECK POWER SUPPLY AND GROUND CIRCUIT

#### 1. CHECK FUSES OR FUSIBLE LINK

Check for blown fuses or fusible link.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	G
	Ignition switch ON or START position	1
IPDM E/R	Battery	52
		53
		36
		37

Refer to [LT-81, "Wiring Diagram — TAIL/L —"](#) .

#### OK or NG

OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link. Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) .

#### 2. CHECK POWER SUPPLY CIRCUIT

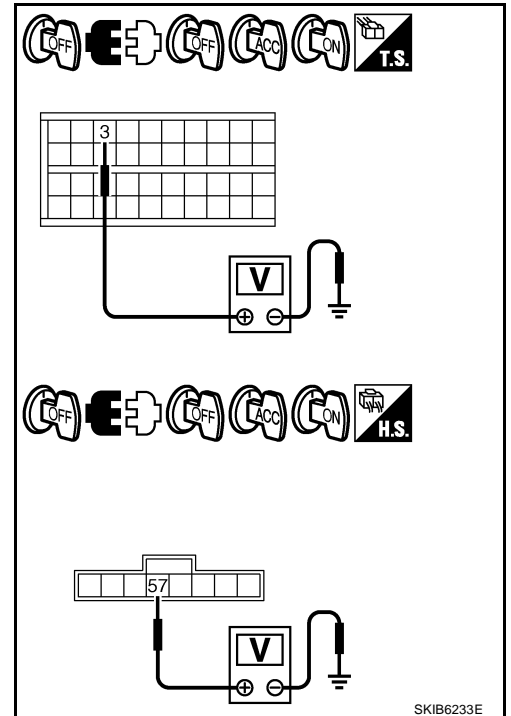
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

Terminal (+)		Terminal (-)	Ignition switch position		
BCM connector	Terminal		OFF	ACC	ON
M42	3	Ground	0V	0V	Battery voltage
M44	57		Battery voltage	Battery voltage	Battery voltage

#### OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.



SKIB6233E

# PARKING, LICENSE PLATE AND TAIL LAMPS

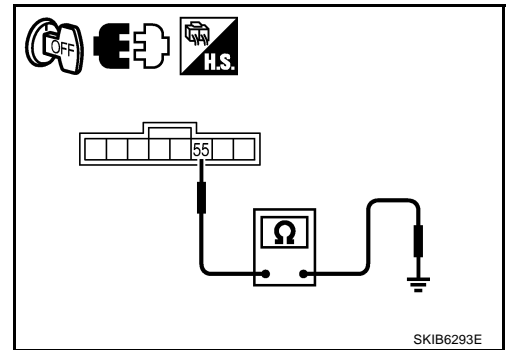
## 3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M44	55		Yes

OK or NG

- OK >> INSPECTION END
- NG >> Repair harness or connector.



SKIB6293E

GKS0004F

### CONSULT-II Functions (BCM)

Refer to [LT-14, "CONSULT-II Functions \(BCM\)"](#).

### CONSULT-II Functions (IPDM E/R)

Refer to [LT-17, "CONSULT-II Functions \(IPDM E/R\)"](#).

GKS0004G

## clearance, License Plate and Tail Lamps Do Not Illuminate

GKS0004H

### 1. CHECK COMBINATION SWITCH INPUT SIGNAL

Ⓜ With CONSULT-II

1. Select "BCM" on CONSULT-II. Select "HEADLAMP" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure "LIGHT SW 1ST" turns ON-OFF linked with operating lighting switch.

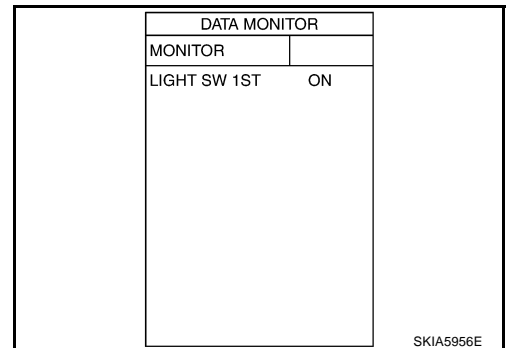
**When lighting switch is in 1ST position : LIGHT SW 1ST ON**

ⓧ Without CONSULT-II

Refer to [LT-71, "Combination Switch Inspection"](#).

OK or NG

- OK >> GO TO 2.
- NG >> Check lighting switch. Refer to [LT-71, "Combination Switch Inspection"](#).



SKIA5956E

# PARKING, LICENSE PLATE AND TAIL LAMPS

## 2. ACTIVE TEST

☑ With CONSULT-II

1. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
3. Touch "TAIL" on "ACTIVE TEST" screen.
4. Make sure operations of clearance, license plate and tail lamps.

**Clearance, license plate and tail lamps should operate.**

☒ Without CONSULT-II

1. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
2. Make sure operations of clearance, license plate and tail lamps.

**Clearance, license plate and tail lamps should operate.**

OK or NG

- OK >> GO TO 3.  
 NG >> GO TO 4.

## 3. CHECK IPDM E/R

1. Select "IPDM E/R" on CONSULT-II. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
2. Make sure "TAIL & CLR REQ" turns ON when lighting switch is in 1ST position.

**When lighting switch is in 1ST position : TAIL & CLR REQ ON**

OK or NG

- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).
- NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#).

ACTIVE TEST			
EXTERNAL LAMPS		OFF	
		TAIL	
LO		HI	
FOG			
MODE	BACK	LIGHT	COPY

PKIC0936E

DATA MONITOR			
MONITOR			
TAIL&CLR REQ		ON	
		RECORD	
MODE	BACK	LIGHT	COPY

SKIA5958E

A  
B  
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J  
LT  
L  
M

# PARKING, LICENSE PLATE AND TAIL LAMPS

## 4. CHECK INPUT SIGNAL

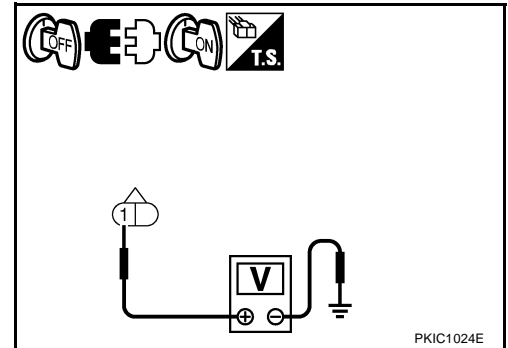
☑ With CONSULT-II

1. Turn ignition switch OFF.
2. Disconnect connectors of front combination lamps, license plate lamps and rear combination lamps.
3. Select "IPDM E/R" on CONSULT-II. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
4. Select "EXTERNAL LAMPS" on "SELECT TEST ITEM" screen.
5. Touch "TAIL" on "ACTIVE TEST" screen.
6. When tail lamp is operating, check voltage between ground and each lamp harness connector (front combination lamp, license plate lamp and rear combination lamp).

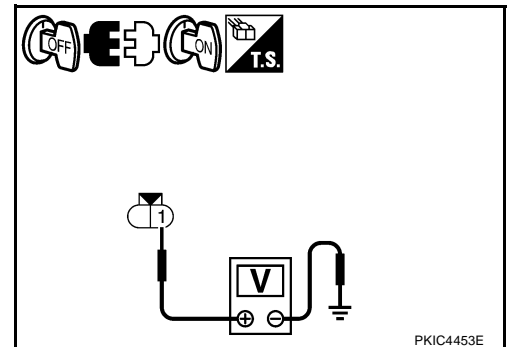
☒ Without CONSULT-II

1. Turn ignition switch OFF.
2. Disconnect connectors of front combination lamps, license plate lamps and rear combination lamps.
3. Start auto active test. Refer to [PG-19, "Auto Active Test"](#).
4. When tail lamp is operating, check voltage between ground and each lamp harness connector (front combination lamp, license plate lamp and rear combination lamp).

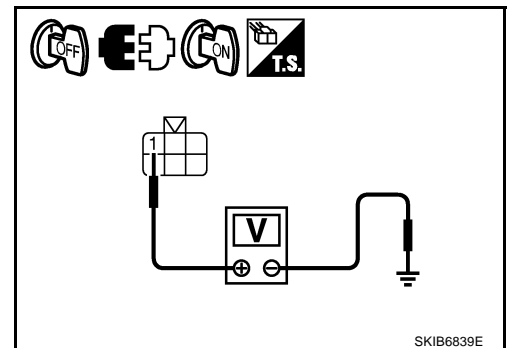
Terminal				Voltage
(+)		Terminal	(-)	
Front combination lamp (clearance) connector				1
RH	E35			
LH	E57			



Terminal				Voltage
(+)		Terminal	(-)	
License plate lamp connector				1
RH	T7			
LH	T6			



Terminal				Voltage
(+)		Terminal	(-)	
Rear combination lamp (tail) connector				1
RH	T5			
LH	T2			



OK or NG

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

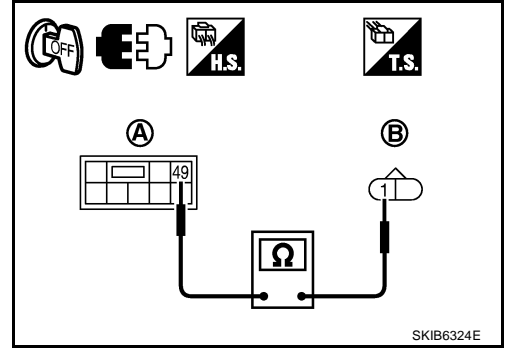


# PARKING, LICENSE PLATE AND TAIL LAMPS

## 5. CHECK CLEARANCE, LICENSE PLATE AND TAIL LAMP CIRCUIT

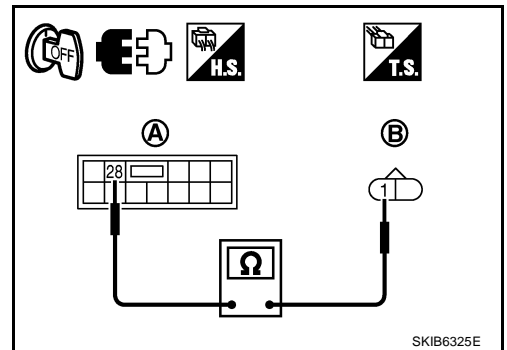
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check continuity between IPDM E/R harness connector (A) and front combination lamp RH (clearance) harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
E16	49	E35	1	Yes



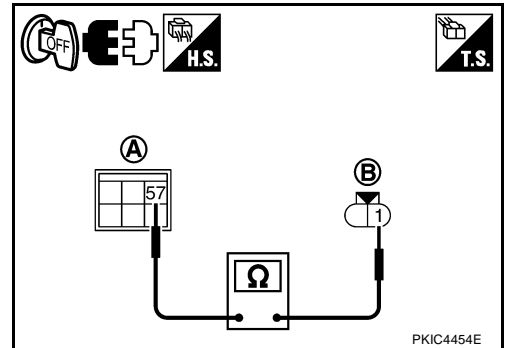
4. Check continuity between IPDM E/R harness connector (A) and front combination lamp LH (clearance) harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
E13	28	E57	1	Yes



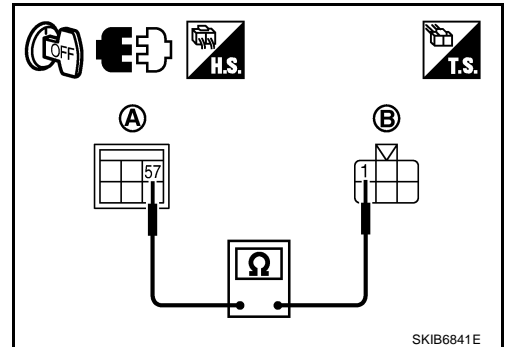
5. Check continuity between IPDM E/R harness connector (A) and license plate lamp harness connector (B).

Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E18	57	T7	1	Yes
LH			T6		



6. Check continuity between IPDM E/R harness connector (A) and rear combination lamp (tail) harness connector (B).

Circuit	A		B		Continuity
	Connector	Terminal	Connector	Terminal	
RH	E18	57	T5	1	Yes
LH			T2		



OK or NG

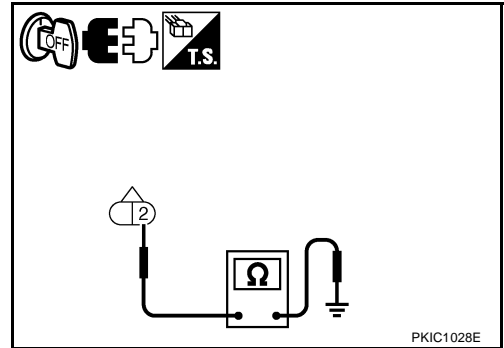
- OK >> Replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).
- NG >> Repair harness or connector.

# PARKING, LICENSE PLATE AND TAIL LAMPS

## 6. CHECK GROUND CIRCUIT

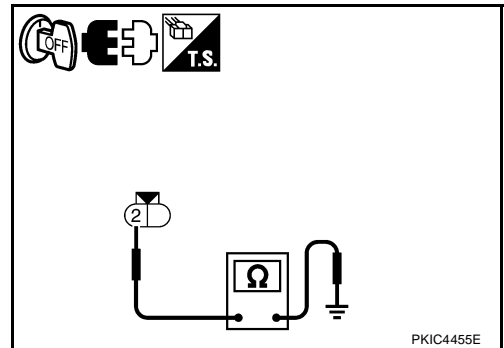
1. Check continuity between front combination lamp (clearance) and ground.

Front combination lamp (clearance) connector		Terminal	Ground	Continuity
RH	E35	2		Yes
LH	E57			



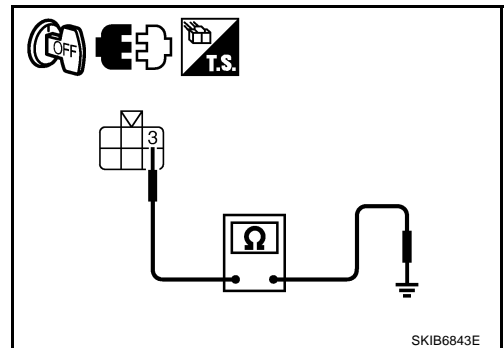
2. Check continuity between license plate lamp harness connector and ground.

License plate lamp connector		Terminal	Ground	Continuity
RH	T7	2		Yes
LH	T6			



3. Check continuity between rear combination lamp (tail) harness connector and ground.

Rear combination lamp (tail) connector		Terminal	Ground	Continuity
RH	T5	3		Yes
LH	T2			



### OK or NG

- OK >> Check connector for connection, bend and loose fit. If it is normal, check bulbs.
- NG >> Repair harness or connector.

## Clearance, License Plate and Tail Lamps Do Not Turn OFF (After Approx. 10 Minutes)

GKS0004I

- This symptom indicates the malfunction of ignition relay in IPDM E/R. Refer to [PG-15, "Function of Detecting Ignition Relay Malfunction"](#).
- Select "BCM" on CONSULT-II. Select "HEADLAMP" on "SELECT TEST ITEM" screen. Select "DATA MONITOR" on "SELECT DIAG MODE" screen. If "LIGHT SW 1ST" is OFF when lighting switch is OFF, replace IPDM E/R. Refer to [PG-26, "Removal and Installation of IPDM E/R"](#).

## Front Clearance Lamp BULB REPLACEMENT

GKS0004J

Refer to [LT-28, "Bulb Replacement"](#).

## Tail Lamp BULB REPLACEMENT

GKS0004K

Refer to [LT-91, "Bulb Replacement"](#).

# REAR COMBINATION LAMP

## REAR COMBINATION LAMP

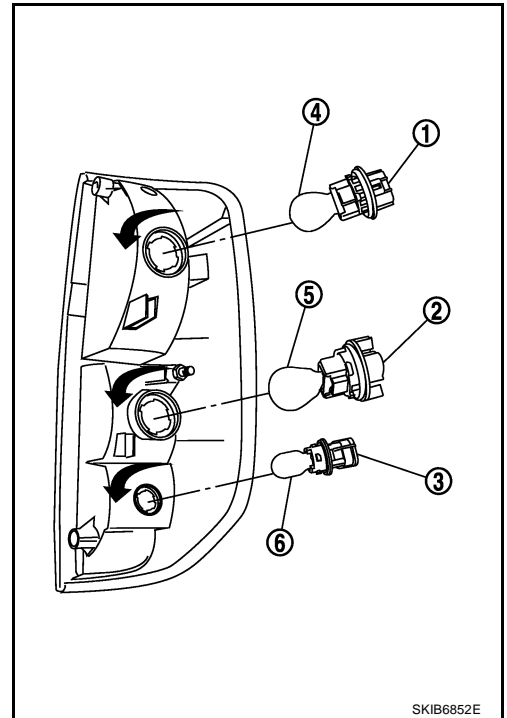
PFP:26554

### Bulb Replacement REMOVAL

GKS0004L

1. Remove rear combination lamp. Refer to [LT-92, "Removal and Installation"](#) .
2. Turn bulb socket (1), (2) and (3) counterclockwise and unlock it.
3. Remove bulb (4), (5) and (6).

<b>Stop/ tail lamp</b>	<b>: 12V - 21/ 5W</b>
<b>Rear turn signal lamp</b>	<b>: 12V - 21W</b>
<b>Buck up lamp (or rear fog lamp)</b>	<b>: 12V - 16W (21W)</b>



### INSTALLATION

Installation is the reverse order of removal.

A  
B  
C  
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LT  
L  
M

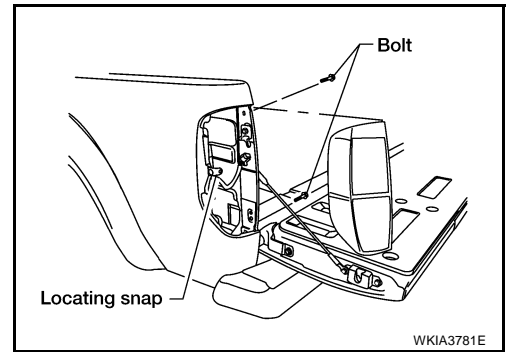
# REAR COMBINATION LAMP

GKS0004M

## Removal and Installation

### REMOVAL

1. Remove rear combination lamp mounting bolts.
2. Pull rear combination lamp to remove from the vehicle.
3. Disconnect rear combination lamp connector.



### INSTALLATION

Installation is the reverse order of removal.

**Rear combination lamp mounting bolts**



**: 2.4 N·m (0.24 kg - m, 21 in -lb)**

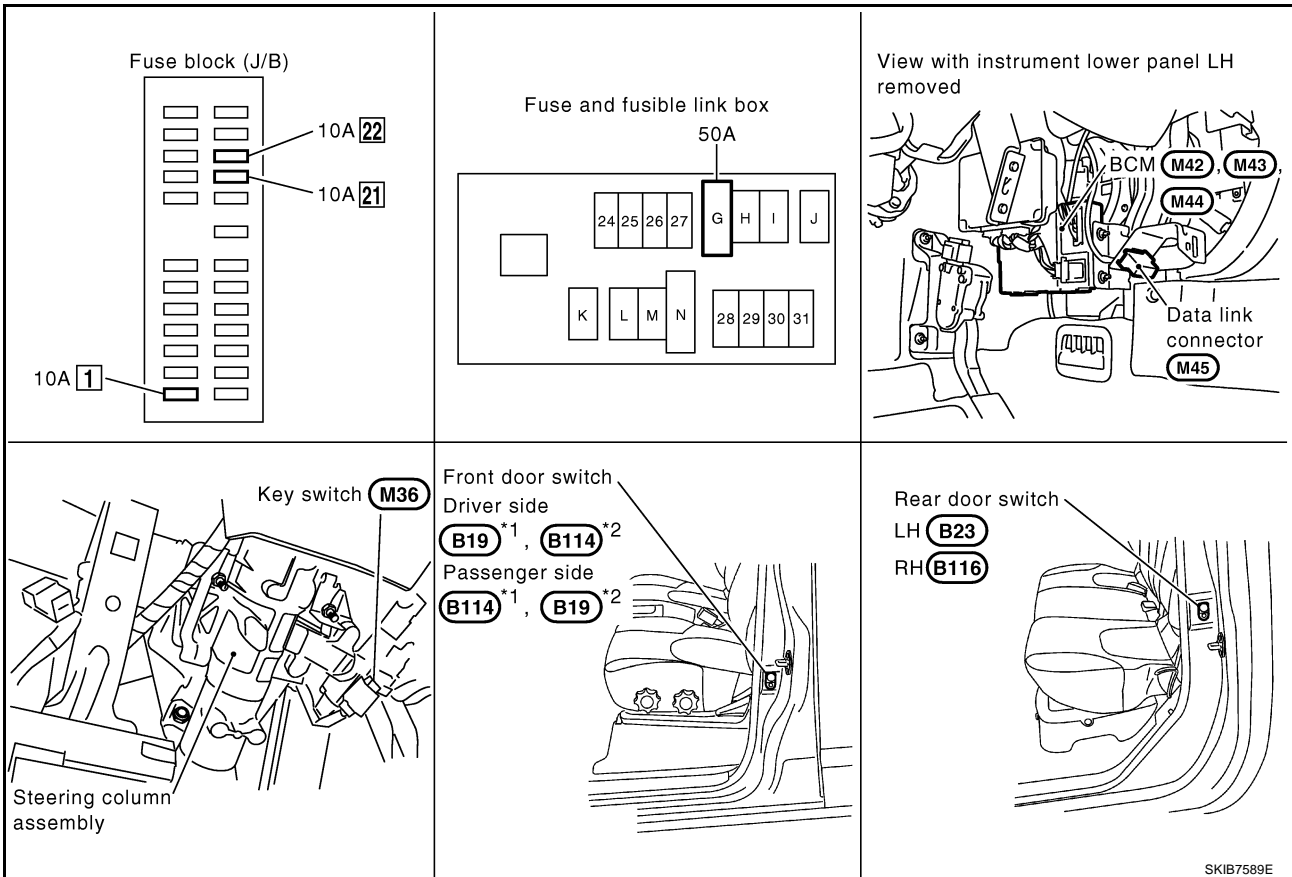
# INTERIOR ROOM LAMP

## INTERIOR ROOM LAMP

PF26410

### Component Parts and Harness Connector Location

GKS0004N



SKIB7589E

### System Description

GKS0004O

When front map lamp and room lamp switch is in DOOR position, front map lamp and room lamp ON/OFF is controlled by timer according to signals from switches including key switch, front door switch (driver side), rear door switch (driver side)No.1\*, rear door switch (driver side)No.2\*, unlock signal from keyfob, ignition switch. When front map lamp and room lamp turns ON, there is a gradual brightening over 1 second. When front map lamp and room lamp turns OFF, there is a gradual dimming over 1 second.

Front map lamp and room lamp timer is controlled by the BCM (body control module).  
Front map lamp and room lamp timer control settings can be changed with CONSULT-II.

### ROOM LAMP TIMER OPERATION

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

Power is supplied

- through 10A fuse [No. 22, located in fuse block (J/B)]
- to key switch terminal 2.

Key is removed from ignition key cylinder (key switch OFF), power will not be supplied to BCM terminal 5.

At the time that driver's door is opened, BCM detects that driver's door is unlocked. It determines that room lamp timer operation conditions are met, and turns the interior room lamps ON for 30 seconds.

Key is in ignition key cylinder (key switch ON), power is supplied

- through key switch terminal 1
- to BCM terminal 5.

When key is removed from key switch (key switch OFF), power supply to BCM terminal 5 is terminated. BCM detects that key has been removed, determines that room lamp timer conditions are met, and turns the interior room lamps ON for 30 seconds.

When driver's door opens → closes, and the key is not inserted in the key switch (key switch OFF), BCM terminal 15 changes between 0V (door open) → 12V (door closed). The BCM determines that conditions for room lamp operation are met and turns the room lamp ON for 30 seconds.

## INTERIOR ROOM LAMP

---

Timer control is canceled under the following conditions.

- Driver's door is opened [front door switch (driver side)].
- Ignition switch ON.
- Keyfob

### INTERIOR LAMP BATTERY SAVER CONTROL

If interior lamp is left ON, it will not be turned off even when door is closed.

BCM turns off interior lamp automatically to save battery 30 minutes after ignition switch is turned off.

BCM controls interior lamps listed below:

- Front map lamp
- Room lamp
- Key ring lamp

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

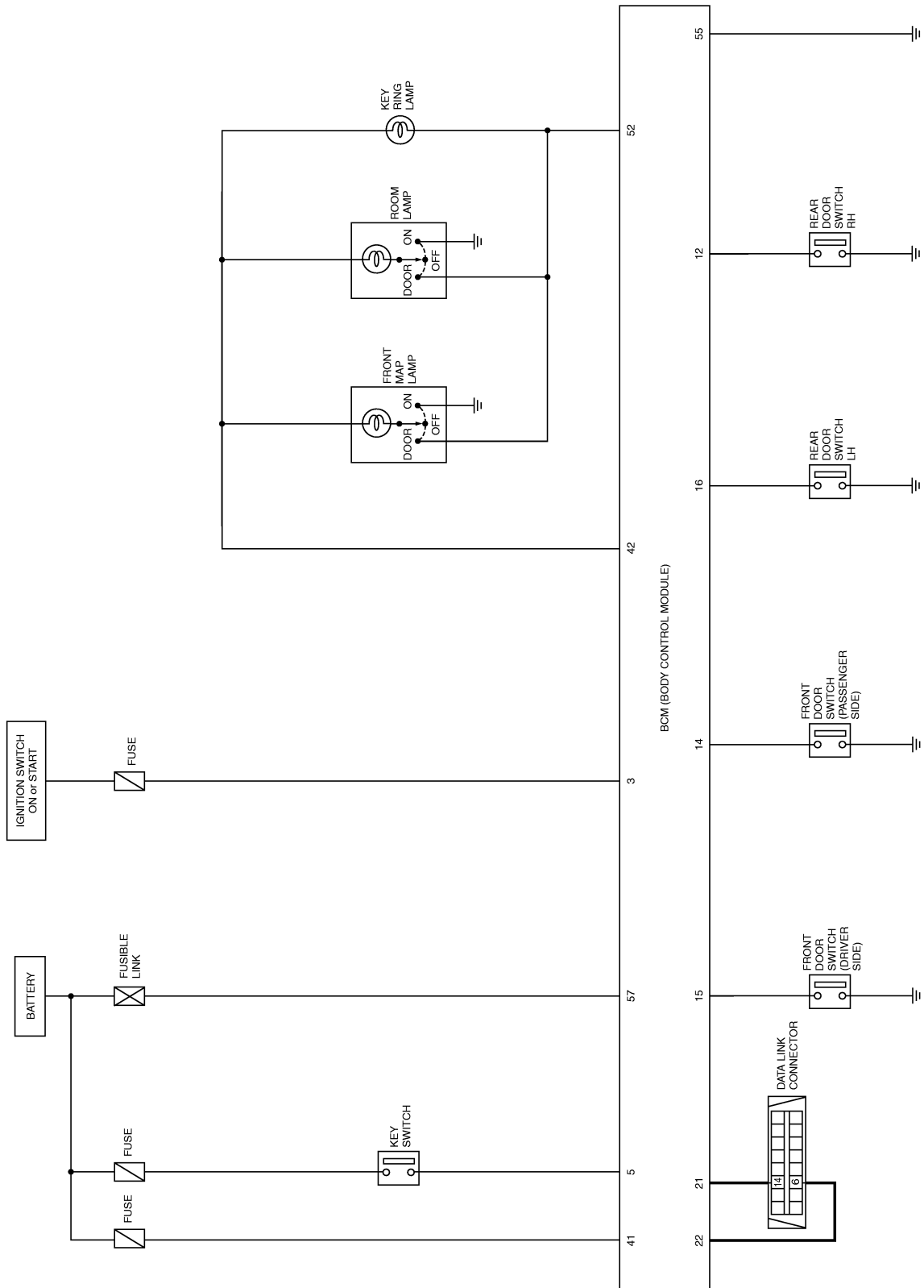
- signal received from keyfob or key cylinder is locked or unlocked,
- door is opened or closed,
- key is removed from ignition key cylinder or inserted in ignition key cylinder.

Interior lamp battery saver control period can be changed by the function setting of CONSULT-II. Refer to [LT-103, "WORK SUPPORT"](#) .

# INTERIOR ROOM LAMP

## Schematic

GKS0004P



A  
B  
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LT  
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MKWA4190E

# INTERIOR ROOM LAMP

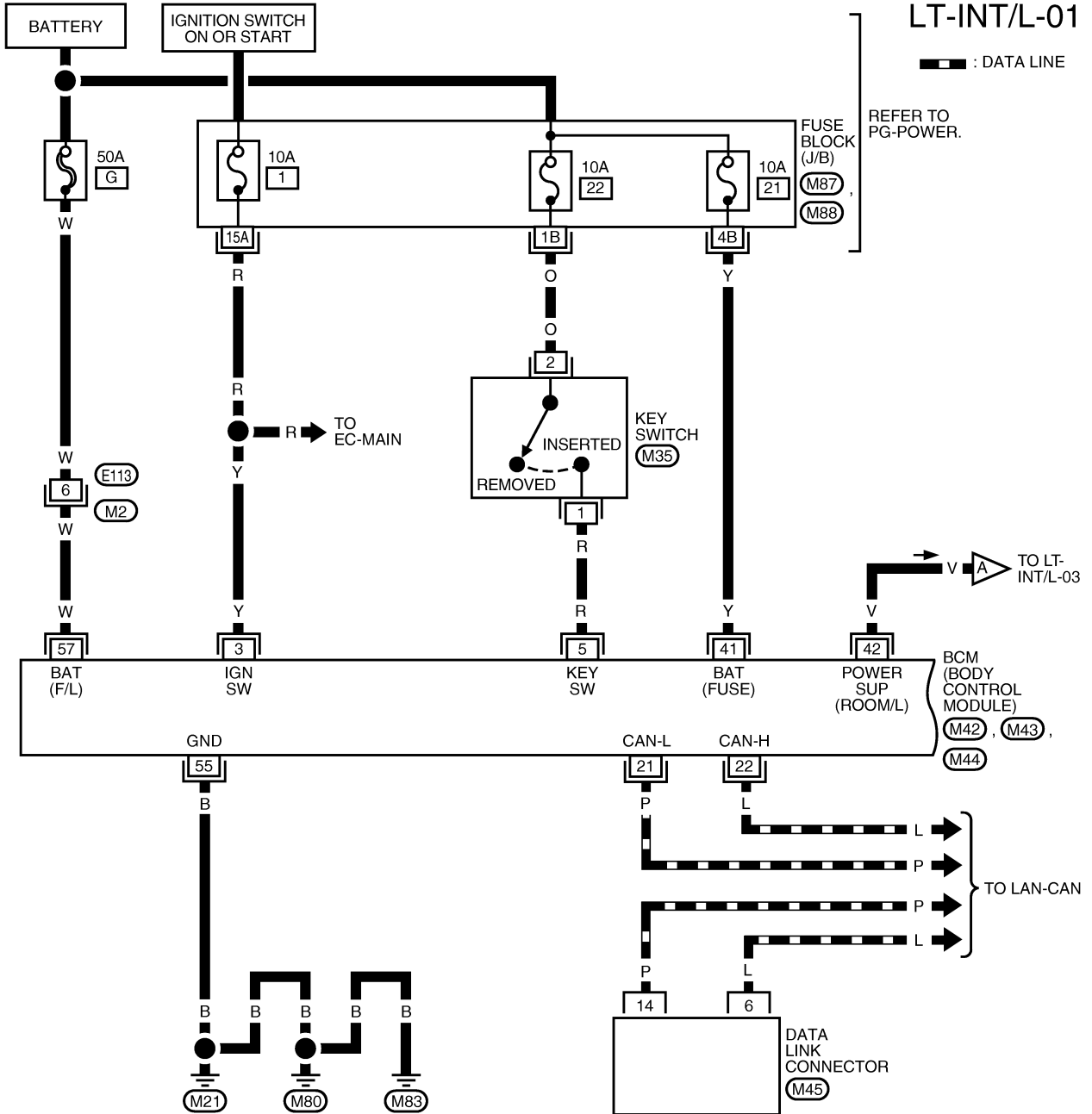
GKS0004Q

## Wiring Diagram — INT/L —

LT-INT/L-01

— : DATA LINE

REFER TO PG-POWER.



1	2	3
4	5	6

M2  
W

1	2
---	---

M35  
W

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

M42  
B

52	51	50	49	48	47	46	45	44	43	42	41
----	----	----	----	----	----	----	----	----	----	----	----

M43



60	59	58	57	56	55	54	53
----	----	----	----	----	----	----	----

M44



16	15	14	13	12	11	10	9
8	7	6	5	4	3	2	1

M45  
W

REFER TO THE FOLLOWING.

(M87), (M88) - FUSE BLOCK-JUNCTION BOX (J/B)

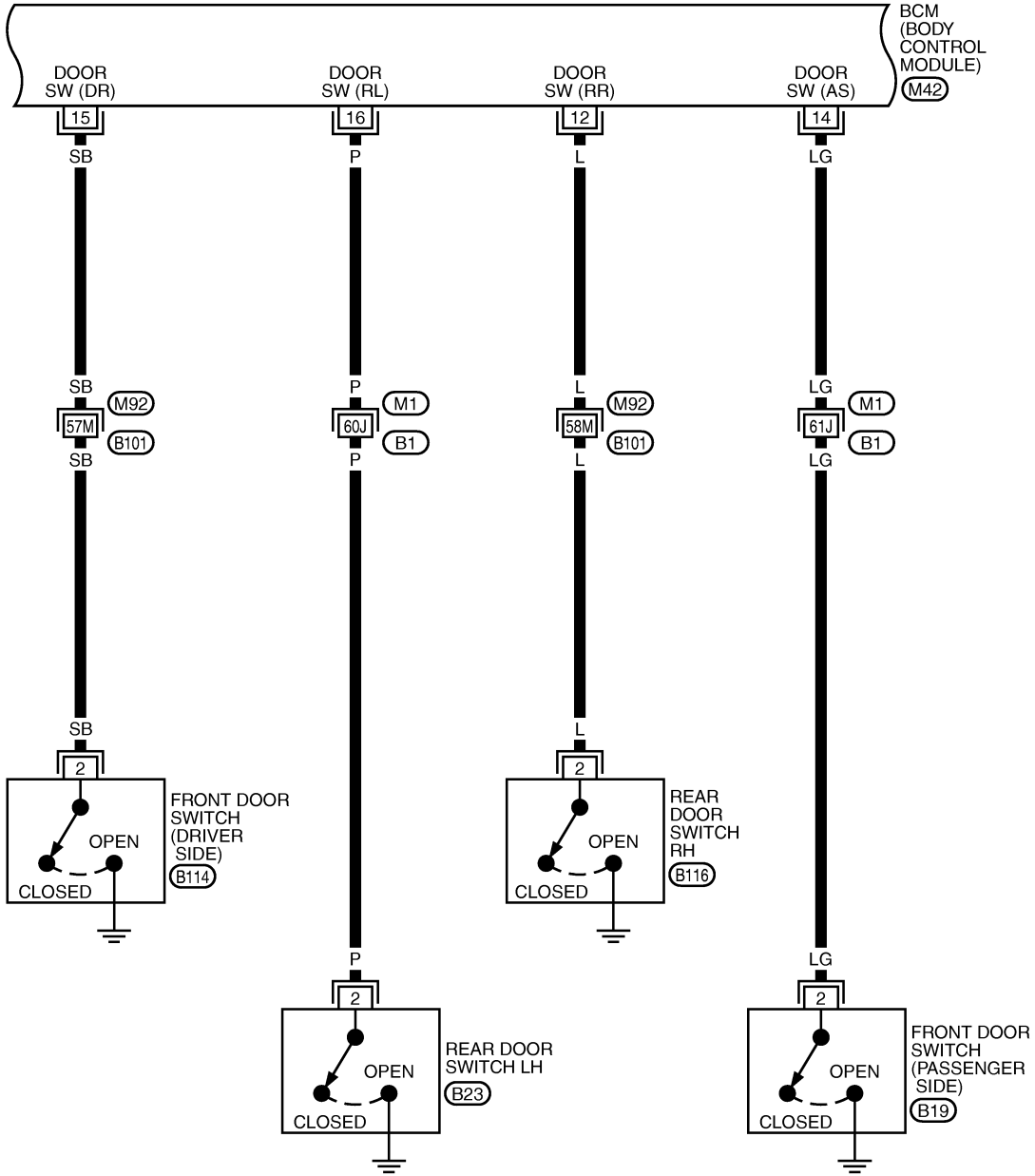
MKWA3586E



# INTERIOR ROOM LAMP

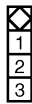
LT-INT/L-02

A  
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E  
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G  
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I  
J  
LT  
L  
M



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

M42  
B

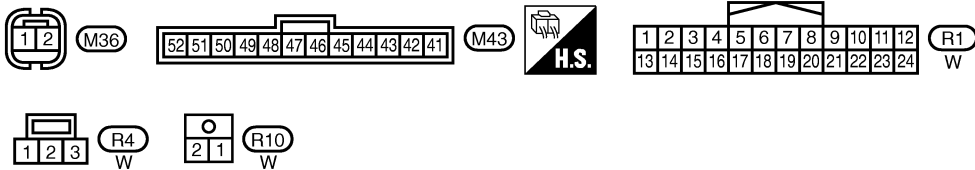
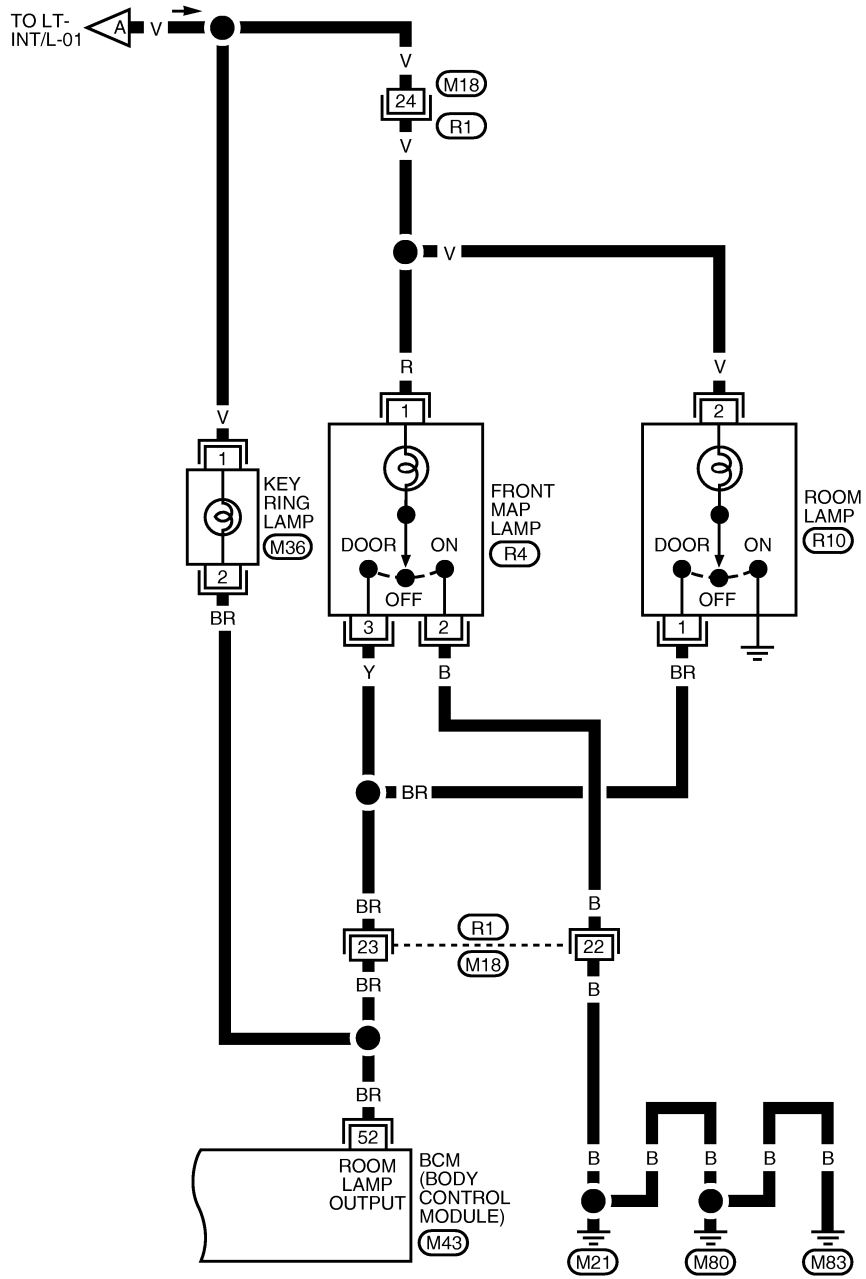


B19, B23, B114, B116  
W W W W

REFER TO THE FOLLOWING.  
M1, M92 - SUPER MULTIPLE  
JUNCTION (SMJ)

# INTERIOR ROOM LAMP

LT-INT/L-03



MKWA4192E

# INTERIOR ROOM LAMP

## Terminals and Reference Values for BCM

GKS0004R

Terminal No.	Wire color	Signal name	Measuring condition			Reference value
			Ignition switch	Operation or condition		
3	Y	Ignition switch (ON)	ON	—		Battery voltage
5	R	Key switch signal	OFF	Vehicle key is removed		Approx. 0V
				Vehicle key is inserted		Battery voltage
12	L	Door switch (RR) signal*1	OFF	Rear door switch RH	ON (open)	Approx. 0V
					OFF (closed)	
14	LG	Door switch (AS) signal	OFF	Front door switch (passenger side)	ON (open)	Approx. 0V
					OFF (closed)	
15	SB	Door switch (DR) signal	OFF	Front door switch (driver side)	ON (open)	Approx. 0V
					OFF (closed)	
16	P	Door switch (RL) signal*1	OFF	Rear door switch LH	ON (open)	Approx. 0V
					OFF (closed)	
21	P	CAN – L	—	—		—
22	L	CAN – H	—	—		—
41	Y	Battery power supply	OFF	—		Battery voltage
42	V	Map lamp power supply	OFF	Each map lamp switch in door position	Any door switch ON (open)	Approx. 0V
					Any door switch OFF (closed)	Battery voltage
52	BR	Map lamp signal	OFF	Each map lamp switch in door position	Any door switch ON (open)	Approx. 0V
					Any door switch OFF (closed)	Battery voltage
55	B	Ground	ON	—		Approx. 0V
57	W	Battery power supply	OFF	—		Battery voltage

A  
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LT  
L  
M

# INTERIOR ROOM LAMP

GKS0004S

## How to Proceed With Trouble Diagnosis

1. Confirm the symptom or customer complaint.
2. Understand operation description and function description. Refer to [LT-93, "System Description"](#) .
3. Carry out the Preliminary Check. Refer to [LT-100, "Preliminary Check"](#) .
4. Check symptom and repair or replace the cause of malfunction.
5. Does the interior room lamp operate normally? If YES: GO TO 6. If NO: GO TO 4.
6. INSPECTION END

## Preliminary Check

GKS0004T

### INSPECTION FOR POWER SUPPLY AND GROUND CIRCUIT

#### 1. CHECK FUSES OR FUSIBLE LINK

Check for blown fuses or fusible link.

Unit	Power source	Fuse and fusible link No.
BCM	Battery	G
		21
		22
	Ignition switch ON or START position	1

Refer to [LT-96, "Wiring Diagram — INT/L —"](#) .

OK or NG

OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link. Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) .

#### 2. CHECK POWER SUPPLY CIRCUIT

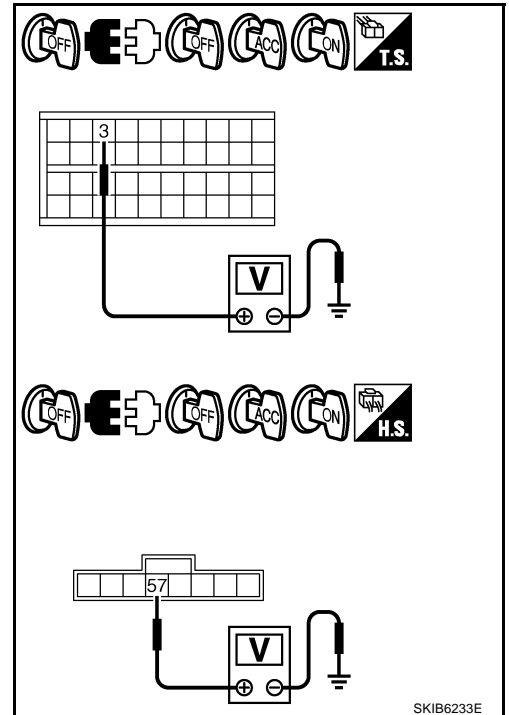
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM harness connector and ground.

Terminal		Ignition switch position			
(+)		(-)	OFF	ACC	ON
BCM connector	Terminal				
M42	3	Ground	0V	0V	Battery voltage
M44	57		Battery voltage	Battery voltage	Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.



SKIB6233E

# INTERIOR ROOM LAMP

## 3. CHECK GROUND CIRCUIT

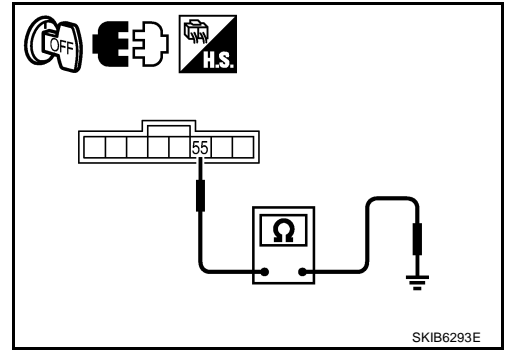
Check continuity between BCM harness connector and ground.

BCM connector	Terminal	Ground	Continuity
M44	55		Yes

OK or NG

OK >> INSPECTION END

NG >> Repair harness or connector.



A  
B  
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LT  
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M

# INTERIOR ROOM LAMP

GKS0004U

## CONSULT-II Function

CONSULT-II can display each diagnostic item using the diagnostic test mode shown following.

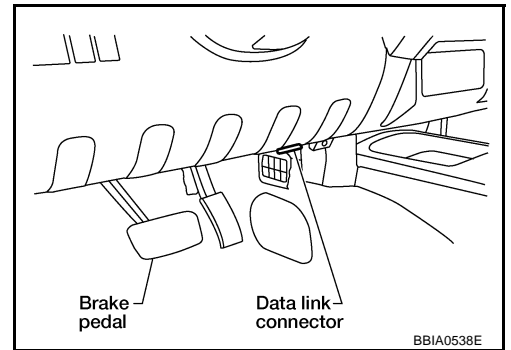
BCM diagnosis part	Diagnosis mode	Description
INT LAMP	WORK SUPPORT	Changes the setting for each function.
	DATA MONITOR	Displays BCM input data in real time.
	ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.

## CONSULT-II OPERATION

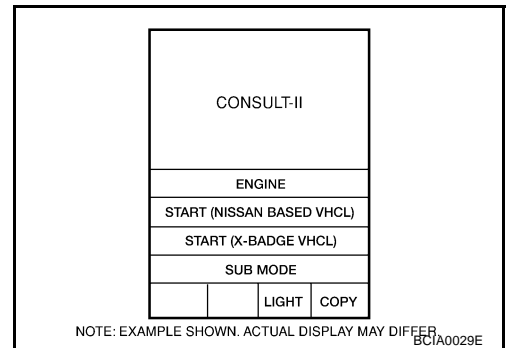
### CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carries out CAN communication.

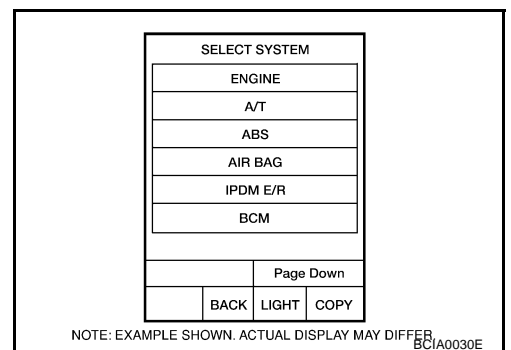
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, and then turn ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

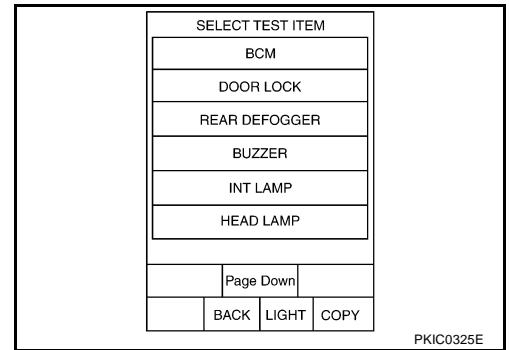


3. Touch "BCM" on "SELECT SYSTEM" screen. If "BCM" is not indicated, refer to [GI-47, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



# INTERIOR ROOM LAMP

4. Touch "INT LAMP" on "SELECT SYSTEM" screen.



A  
B  
C  
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H  
I  
J  
LT  
L  
M

## WORK SUPPORT

### Operation Procedure

1. Touch "INT LAMP" on "SELECT SYSTEM" screen.
2. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen.
3. Touch "SET I/L D-UNLCK INTCON" on "SELECT WORK ITEM" screen.
4. Touch "START".
5. Touch "CHANGE SETT".
6. The setting will be changed and "CUSTOMIZING COMPLETED" will be displayed.
7. Touch "END".

### Display Item List

Item	Description	CONSULT-II
SET I/L D-UNLCK INTCON	The 30 seconds operating function of the interior room lamps and the ignition keyhole illumination can be selected when driver's door is released (unlocked).	ON/OFF
ROOM LAMP ON TIME SET	The time in order to escalate illumination can be selected when the interior room lamps and the ignition keyhole illumination is turned on.	MODE 1 - 7
ROOM LAMP OFF TIME SET	The time in order to diminish illumination can be selected when the interior room lamps and the ignition keyhole illumination is turned off.	MODE 1 - 7

Reference between "MODE" and "TIME" for "TURN ON/OFF".

MODE	1	2	3	4	5	6	7
Time (sec.)	0.5	1	2	3	4	5	0

## DATA MONITOR

### Operation Procedure

1. Touch "INT LAMP" on "SELECT TEST ITEM" screen.
2. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Touch either "ALL SIGNALS" or "SELECTION FROM MENU" on "SELECT MONITOR ITEM" screen.

ALL SIGNALS	Monitors all the signals.
SELECTION FROM MENU	Selects and monitors the individual signal.

4. When "ALL SIGNALS" is selected, all the items will be monitored. When "SELECTION FROM MENU" is selected, touch items to be monitored.
5. Touch "START".
6. Touch "RECORD" while monitoring, then the status of the monitored item can be recorded. To stop recording, touch "STOP".

# INTERIOR ROOM LAMP

## Display Item List

Monitor item		Contents
IGN ON SW	"ON/OFF"	Displays "IGN position (ON)/OFF, ACC position (OFF)" judged from the ignition switch signal.
KEY ON SW	"ON/OFF"	Displays "Key inserted (ON)/key removed (OFF)" status judged from the key switch signal.
DOOR SW-DR	"ON/OFF"	Displays status of the driver's door as judged from the driver door's switch signal. (Door is open: ON/Door is closed: OFF)
DOOR SW-AS	"ON/OFF"	Displays "Door open (ON)/Door closed (OFF)" status, determined from passenger's door switch signal.
DOOR SW-RR	"ON/OFF"	Displays "Door open (ON)/Door closed (OFF)" status, determined from rear door switch RH signal.
DOOR SW-RL	"ON/OFF"	Displays "Door open (ON)/Door closed (OFF)" status, determined from rear door switch LH signal.
BACK DOOR SW	"ON/OFF"	Displays "Door open (ON)/Door closed (OFF)" status, determined from back door switch signal.
KEY CYL LK-SW	"ON/OFF"	Displays "Door locked (ON)" status, determined from key cylinder lock switch in driver door.
KEY CYL UN-SW	"ON/OFF"	Displays "Door unlocked (OFF)" status, determined from key cylinder lock switch in driver door.
CDL LOCK SW	"ON/OFF"	Displays "Door locked (ON)/Door unlocked (OFF)" status, determined from locking detection switch in driver door.
CDL UNLOCK SW	"ON/OFF"	Displays "Door unlocked (OFF)" status, determined from locking detection switch in passenger door.

## ACTIVE TEST

### Operation Procedure

1. Touch "INT LAMP" on "SELECT TEST ITEM" screen.
2. Touch "ACTIVE TEST" on "SELECT DIAG MODE" screen.
3. Touch item to be tested and check operation of the selected item.
4. During the operation check, touching "OFF" deactivates the operation.

## Display Item List

Test item	Description
INT LAMP	Interior room lamp can be operated by any ON-OFF operations.



# INTERIOR ROOM LAMP

GKS0004V

## Map Lamp Control Does Not Operate

### 1. CHECK EACH SWITCH

1. Select "BCM" on CONSULT-II. Select "INT LAMP" on "SELECT TEST ITEM" screen.
2. Select "DATA MONITOR" on "SELECT DIAG MODE" screen.
3. Make sure switches turn ON-OFF linked with switch operation. Refer to [LT-103, "DATA MONITOR"](#) for switches and their functions.

#### OK or NG

- OK >> GO TO 2.  
 NG >> Inspect malfunctioning switch system.

DATA MONITOR			
MONITOR			
IGN ON SW	ON		
KEY ON SW	ON		
DOOR SW-DR	ON		
DOOR SW-AS	ON		
DOOR SW-RR	OFF		
DOOR SW-RL	OFF		
BACK DOOR SW	OFF		
KEY CYL LK-SW	OFF		
KEY CYL UN-SW	OFF		
		Page Down	
RECORD			
MODE	BACK	LIGHT	COPY

PKIB3532E

### 2. ACTIVE TEST

1. Set switches of front map lamp, rear map lamp and cargo lamp to DOOR position.
2. Select "BCM" on CONSULT-II. Select "INT LAMP" on SELECT TEST ITEM" screen.
3. Select "ACTIVE TEST" on "SELECT DIAG MODE" screen.
4. Touch "ON" screen.
5. Check operations of front map lamp, rear map lamp and cargo lamps.

**Front map lamp, rear map lamp and cargo lamps operate normally.**

#### OK or NG

- OK >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#) .  
 NG >> GO TO 3.

ACTIVE TEST			
INT LAMP		ON	
		OFF	
MODE	BACK	LIGHT	COPY

PKIA6366E

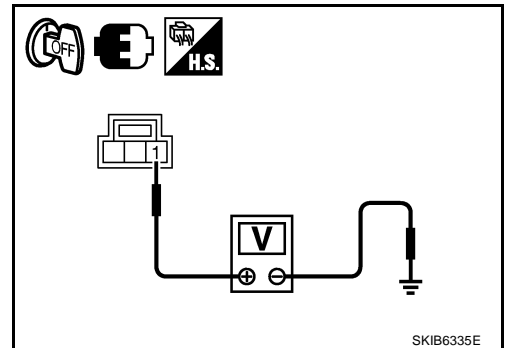
### 3. CHECK INTERIOR FRONT MAP LAMP INPUT

1. Turn ignition switch OFF.
2. Check voltage between front map lamp harness connector and ground.

Terminal		(-)	Voltage
(+)			
Front map lamp connector	Terminal		
R4	1	Ground	Battery voltage

#### OK or NG

- OK >> GO TO 4.  
 NG >> GO TO 5.



# INTERIOR ROOM LAMP

## 4. CHECK INTERIOR ROOM LAMP CIRCUIT

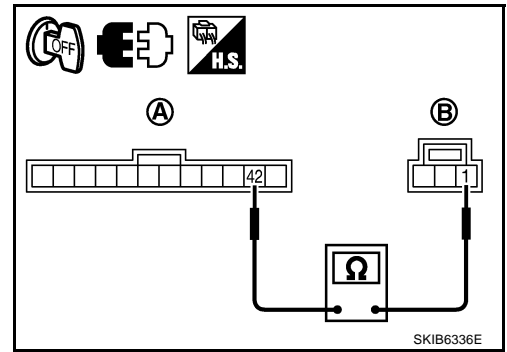
1. Disconnect BCM connector and front map lamp connector.
2. Check continuity between BCM harness connector (A) and front map lamp harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M43	42	R4	1	Yes

OK or NG

OK >> Replace BCM if interior lamp does not work after setting the connector again. Refer to [BCS-15, "Removal and Installation of BCM"](#) .

NG >> Repair harness or connector.



## 5. CHECK INTERIOR ROOM LAMP CIRCUIT

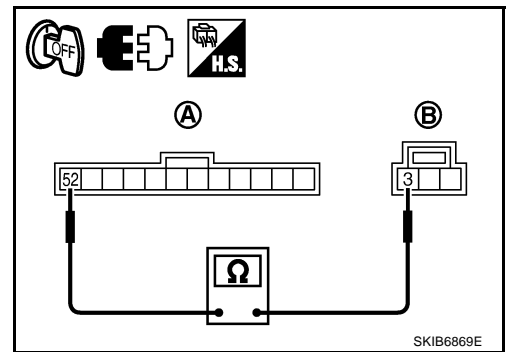
1. Disconnect BCM connector and front map lamp connector.
2. Check continuity between BCM harness connector (A) and front map lamp harness connector (B).

A		B		Continuity
Connector	Terminal	Connector	Terminal	
M43	52	R4	3	Yes

OK or NG

OK >> Replace BCM if interior lamp does not work after setting the connector again. Refer to [BCS-15, "Removal and Installation of BCM"](#) .

NG >> Repair harness or connector between BCM and map lamp.



## All Interior Room Lamps Do Not Operate

GKS0004W

### 1. CHECK POWER SUPPLY CIRCUIT

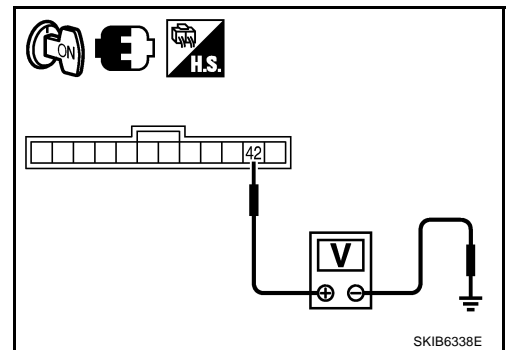
1. All interior room lamp switches are OFF.
2. Turn ignition switch ON.
3. Check voltage between BCM harness connector and ground.

Terminal (+)		Terminal (-)	Voltage
BCM connector	Terminal		
M43	42	Ground	Battery voltage

OK or NG

OK >> Repair harness or connector. In a case of making a short circuit, be sure to disconnect battery negative cable after repairing harness, and then reconnect.

NG >> Replace BCM. Refer to [BCS-15, "Removal and Installation of BCM"](#) .



# ILLUMINATION

## ILLUMINATION

PPF:27545

### System Description

GKS0004X

Control of the illumination lamps operation is dependent upon the position of the lighting switch (combination switch). When the lighting switch is placed in the 1ST position the BCM (body control module) receives input signal requesting the illumination lamps to illuminate. This input signal is communicated to the IPDM E/R (intelligent power distribution module engine room) through the CAN communication. The CPU (central processing unit) of the IPDM E/R controls the tail lamp relay coil. This relay, when energized, directs power to the illumination lamps, which then illuminate.

### CAN Communication System Description

GKS0004Y

Refer to [LAN-21, "CAN COMMUNICATION"](#) .

### CAN Communication Unit

GKS0004Z

Refer to [LAN-26, "CAN Communication Unit"](#) .

A

B

C

D

E

F

G

H

I

J

LT

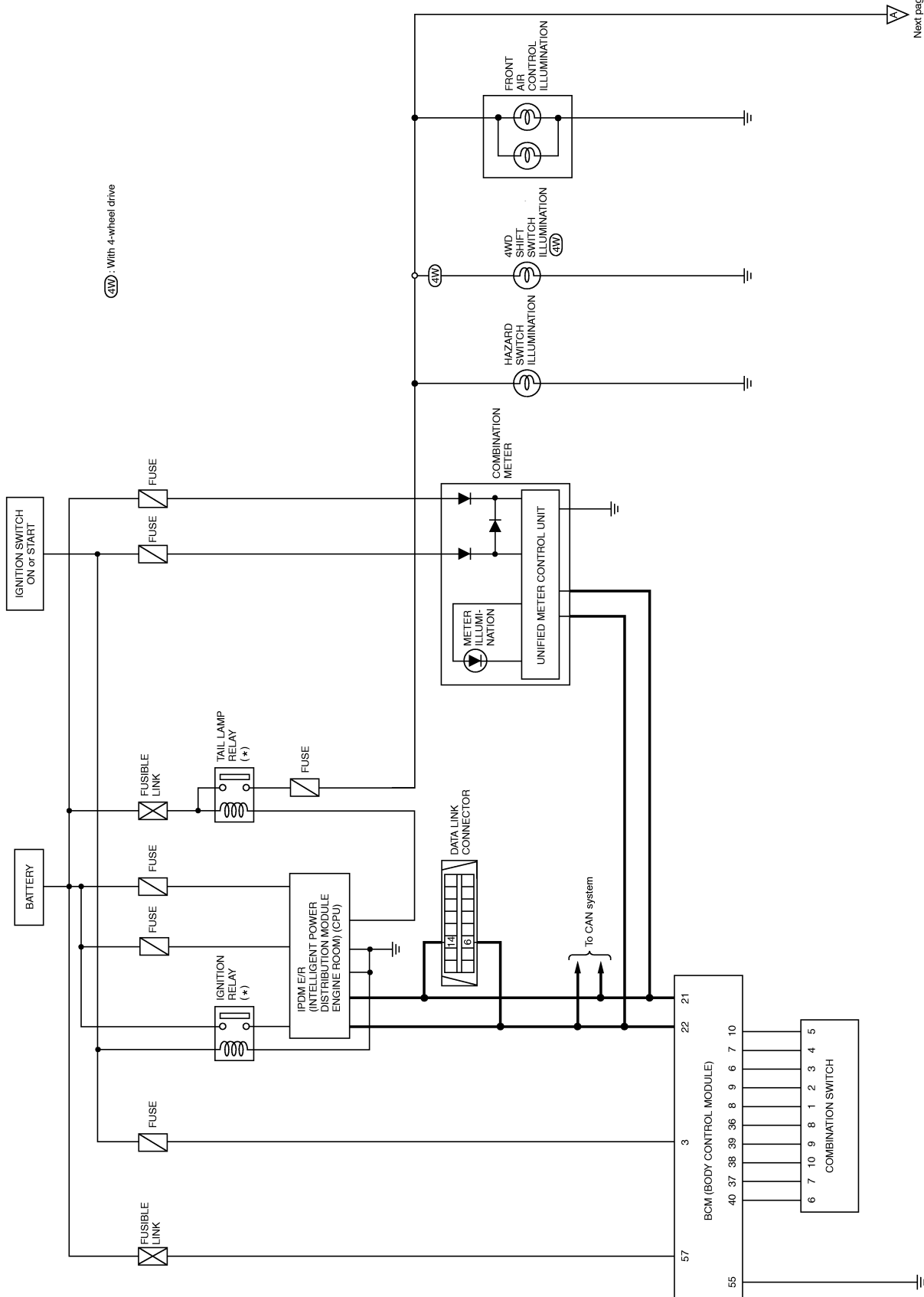
L

M

# ILLUMINATION

## Schematic

GKS00050

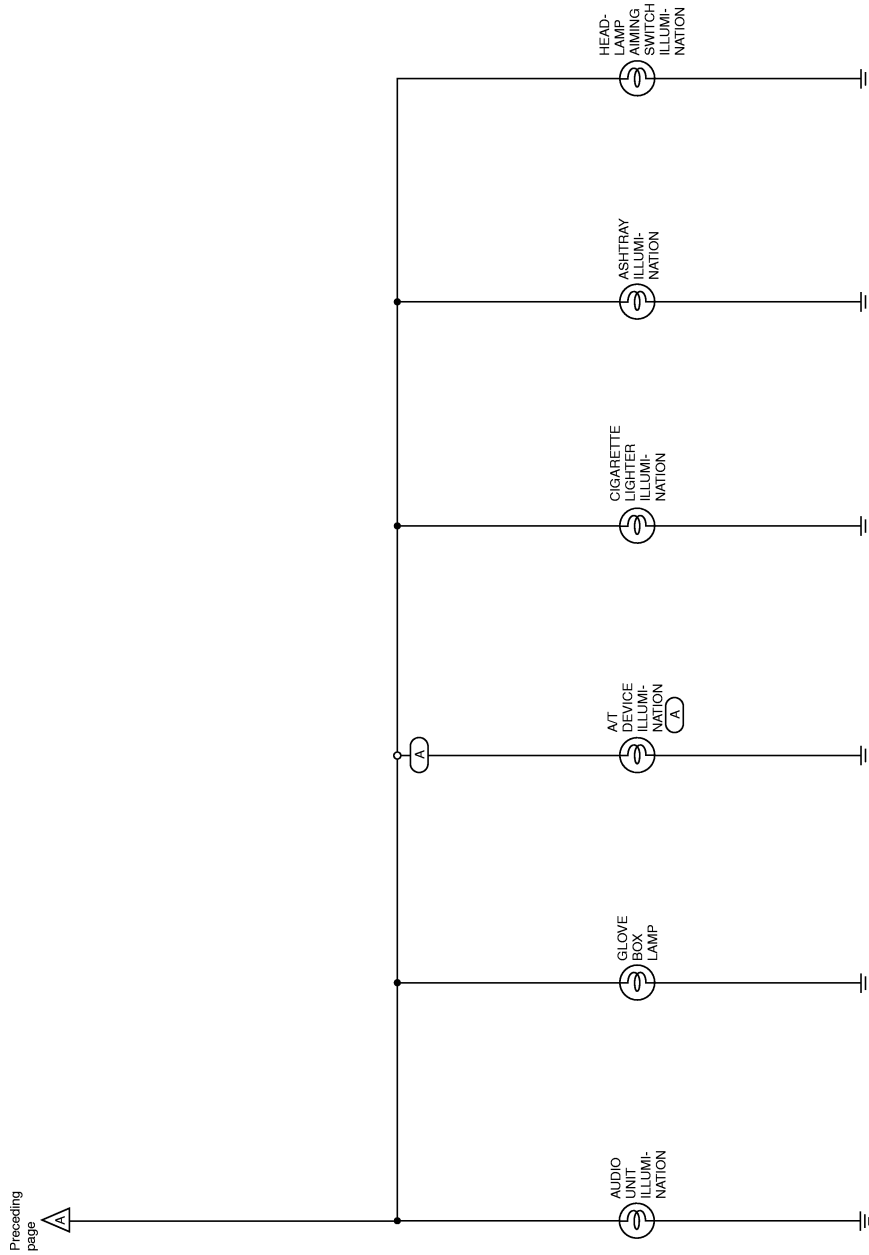


\*: This relay is build into the IPDM E/R (Intelligent power distribution module engine room).

Next page

MKWA4193E

# ILLUMINATION



Preceding  
page



(A) : With AT

A

B

C

D

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M

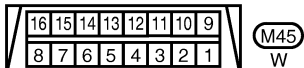
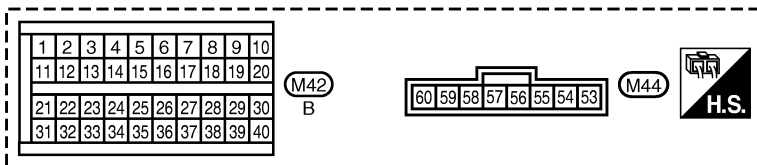
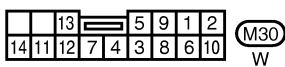
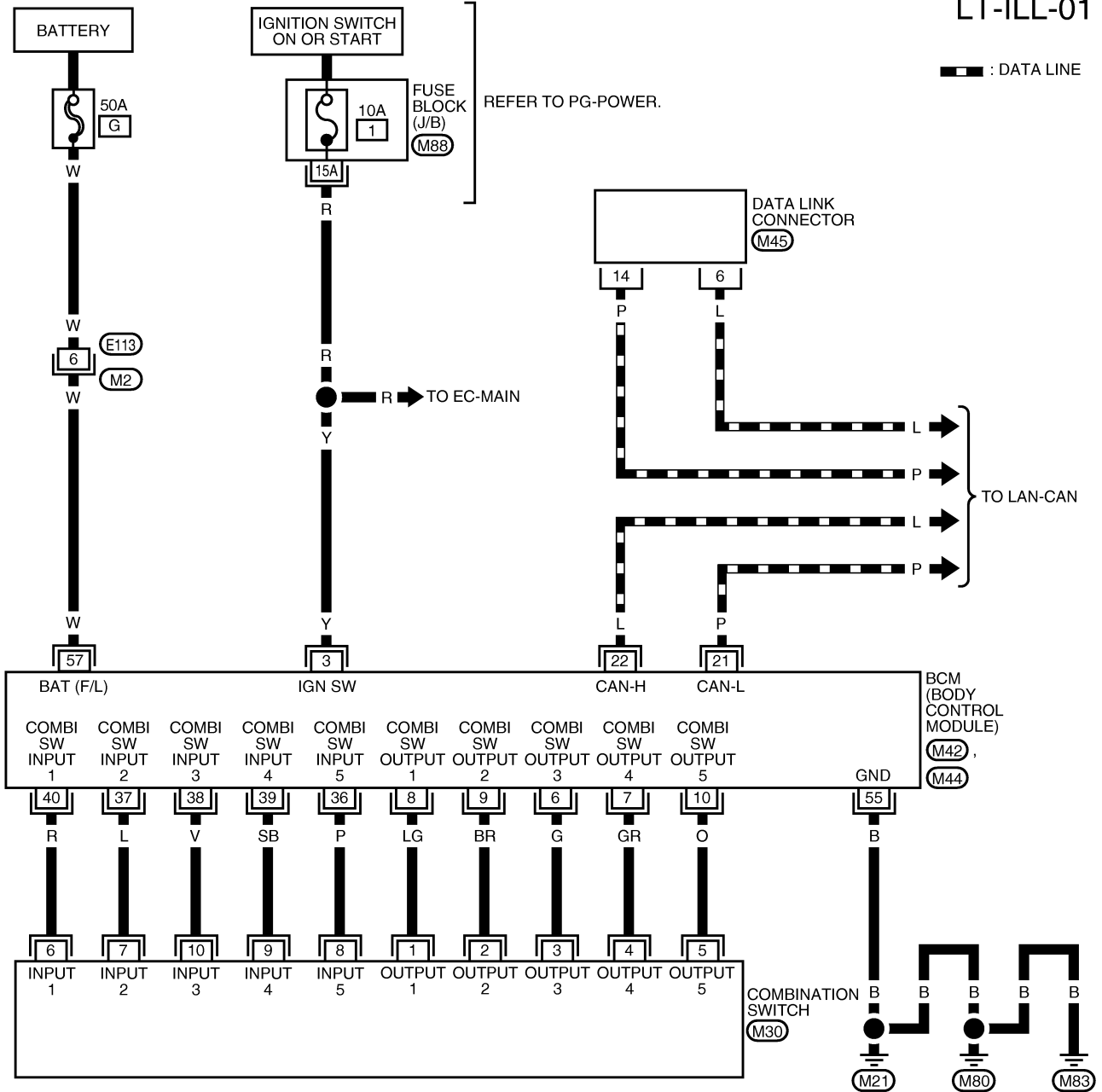
# ILLUMINATION

GKS00051

## Wiring Diagram — ILL —

LT-ILL-01

▬ : DATA LINE

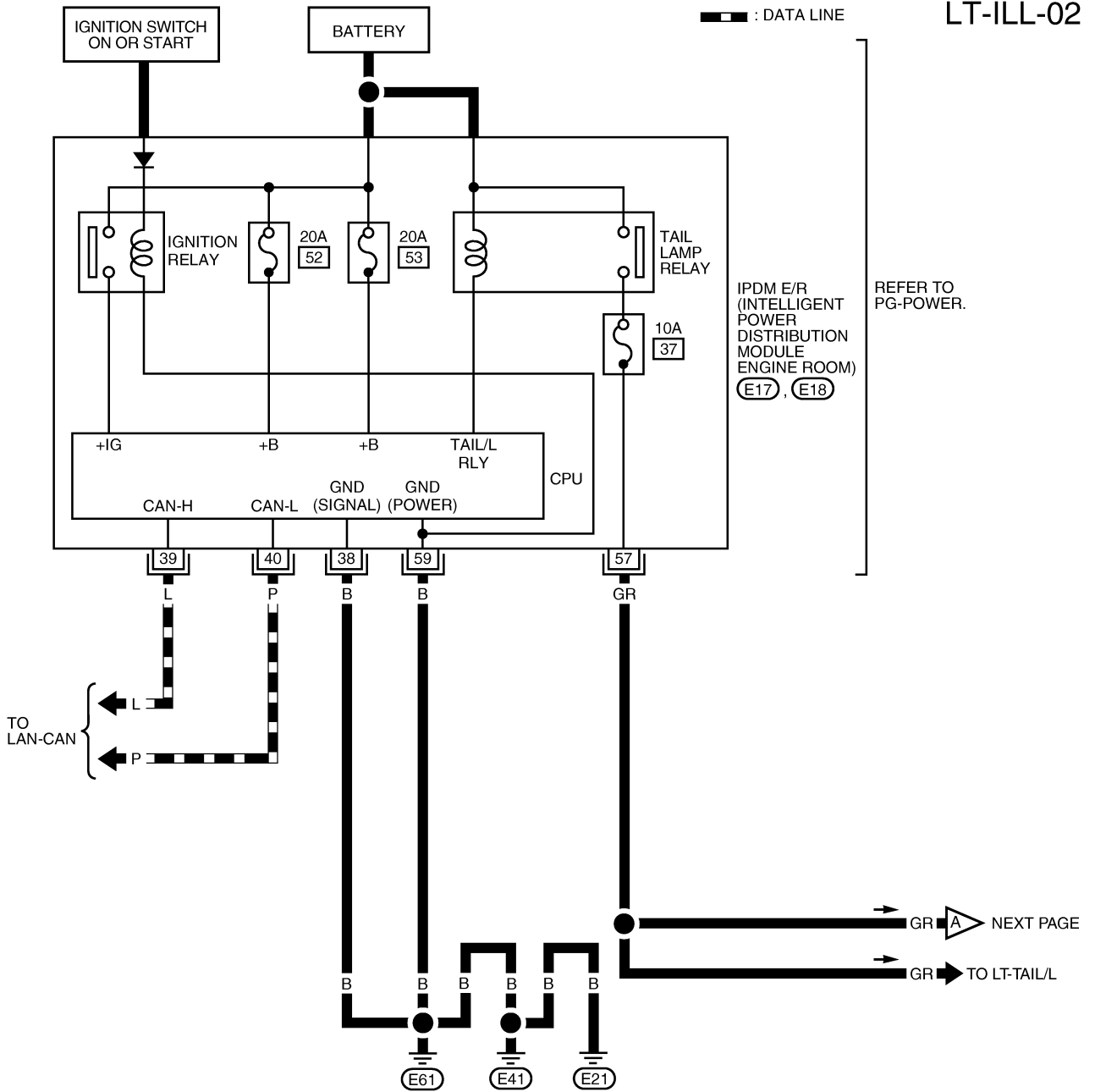


REFER TO THE FOLLOWING.

(M88) - FUSE BLOCK - JUNCTION BOX (J/B)

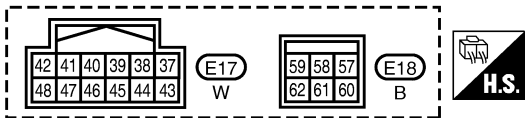
# ILLUMINATION

LT-ILL-02



A  
B  
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K  
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M

LT

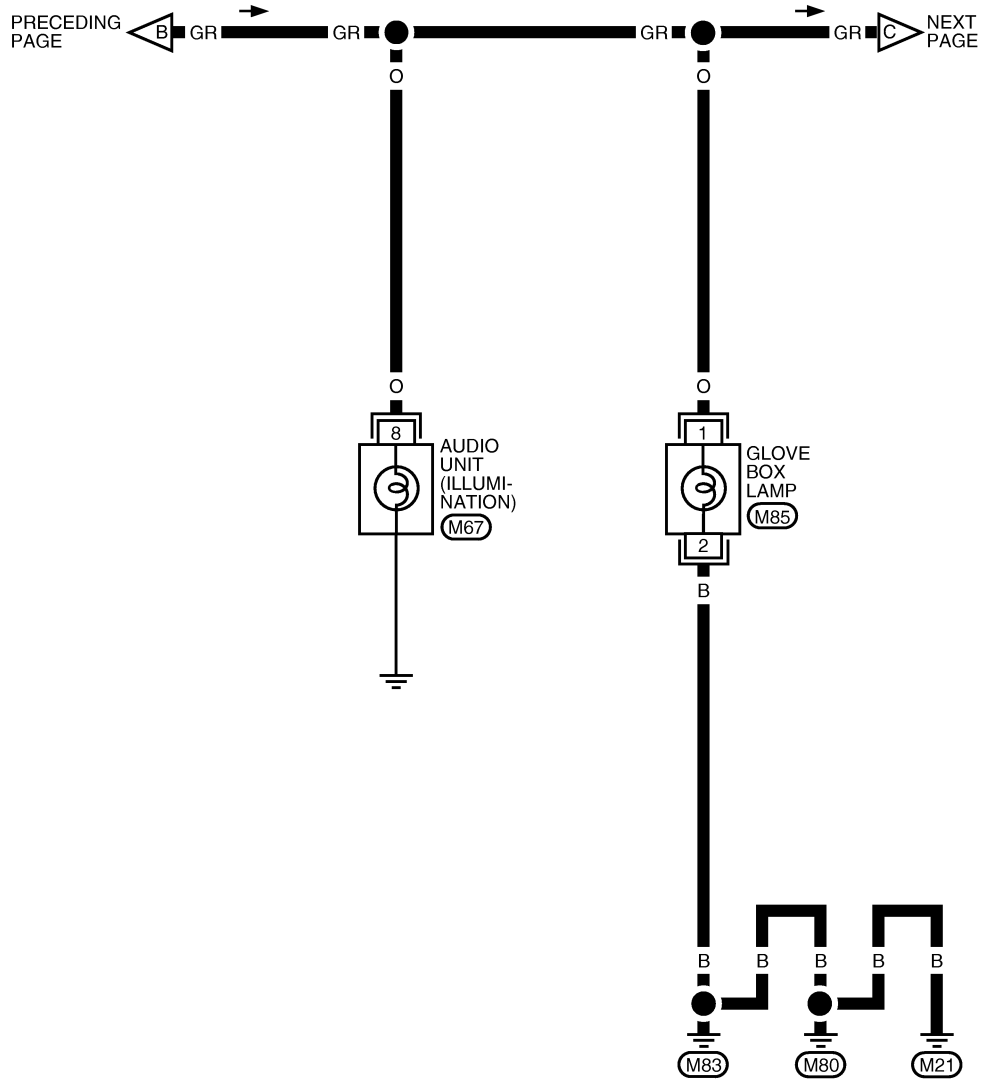




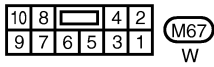


# ILLUMINATION

LT-ILL-04



A  
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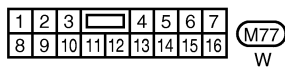
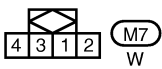
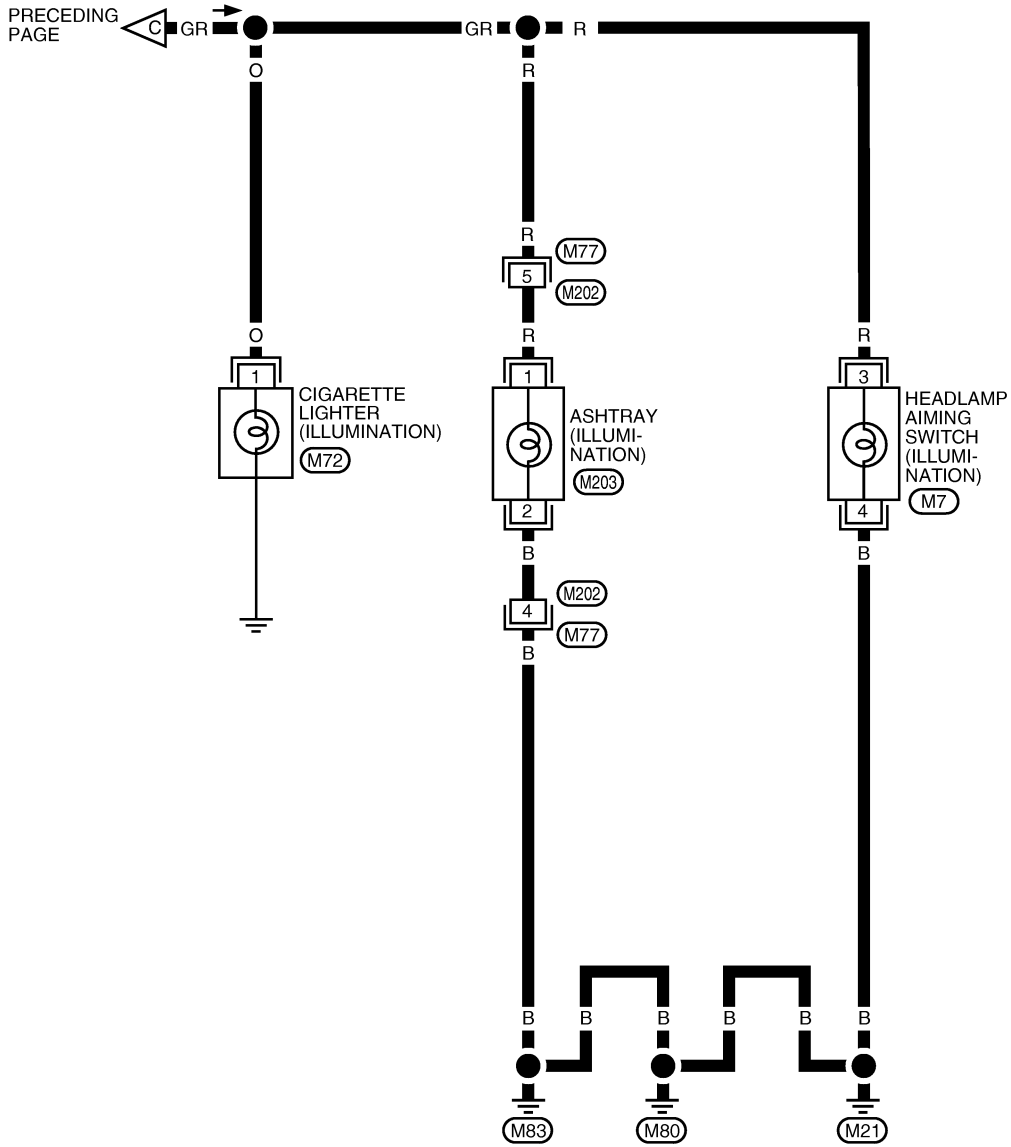


MKWA4198E

# ILLUMINATION

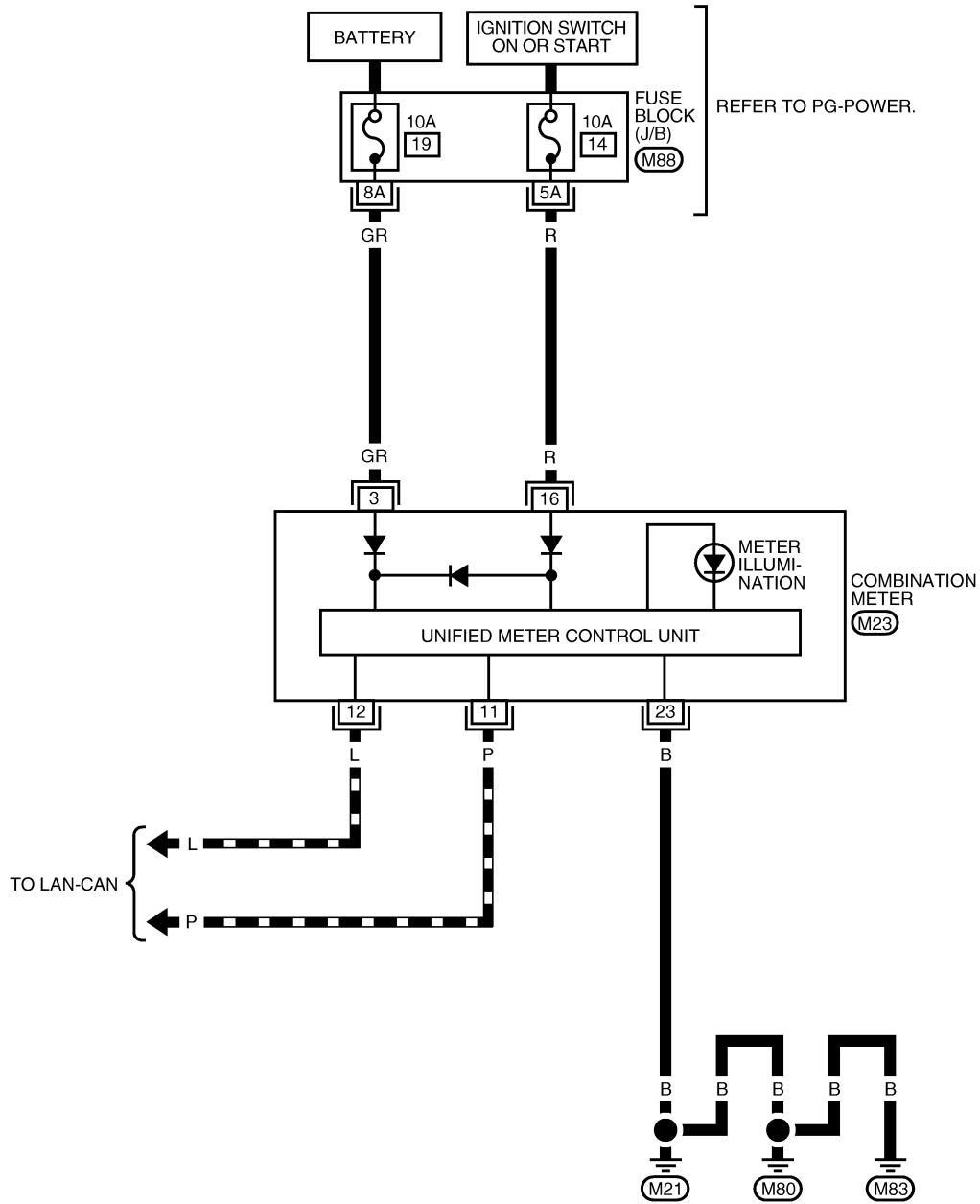
LT-ILL-05

 : WITH NAVI



# ILLUMINATION

LT-ILL-06



— : DATA LINE

REFER TO PG-POWER.

COMBINATION METER (M23)

UNIFIED METER CONTROL UNIT

METER ILLUMINATION

TO LAN-CAN

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	(M23)
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	W

REFER TO THE FOLLOWING.

(M88) - FUSE BLOCK - JUNCTION BOX (J/B)

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
LT  
L  
M

# BULB SPECIFICATIONS

## BULB SPECIFICATIONS

PFP:26297

### Headlamp

GKS00052

Item	Wattage (W)
High/Low	60/55 (H4LL)

### Exterior Lamp

GKS00053

Item	Wattage (W)	
Front combination lamp	Turn signal lamp	21
	Clearance lamp	5
Rear combination lamp	Stop/Tail lamp	21/5
	Turn signal lamp	21
	Back- up lamp	16
Side turn signal lamp	5	
Front fog lamp	55	
License plate lamp	5	

### Interior Lamp/Illumination

GKS00054

Item	Wattage (W)
Glove box lamp	3.4
Room/Map lamp	6
A/T device lamp	3