

SECTION **PG**

**POWER SUPPLY, GROUND & CIRCUIT ELEMENTS**

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# POWER SUPPLY ROUTING CIRCUIT

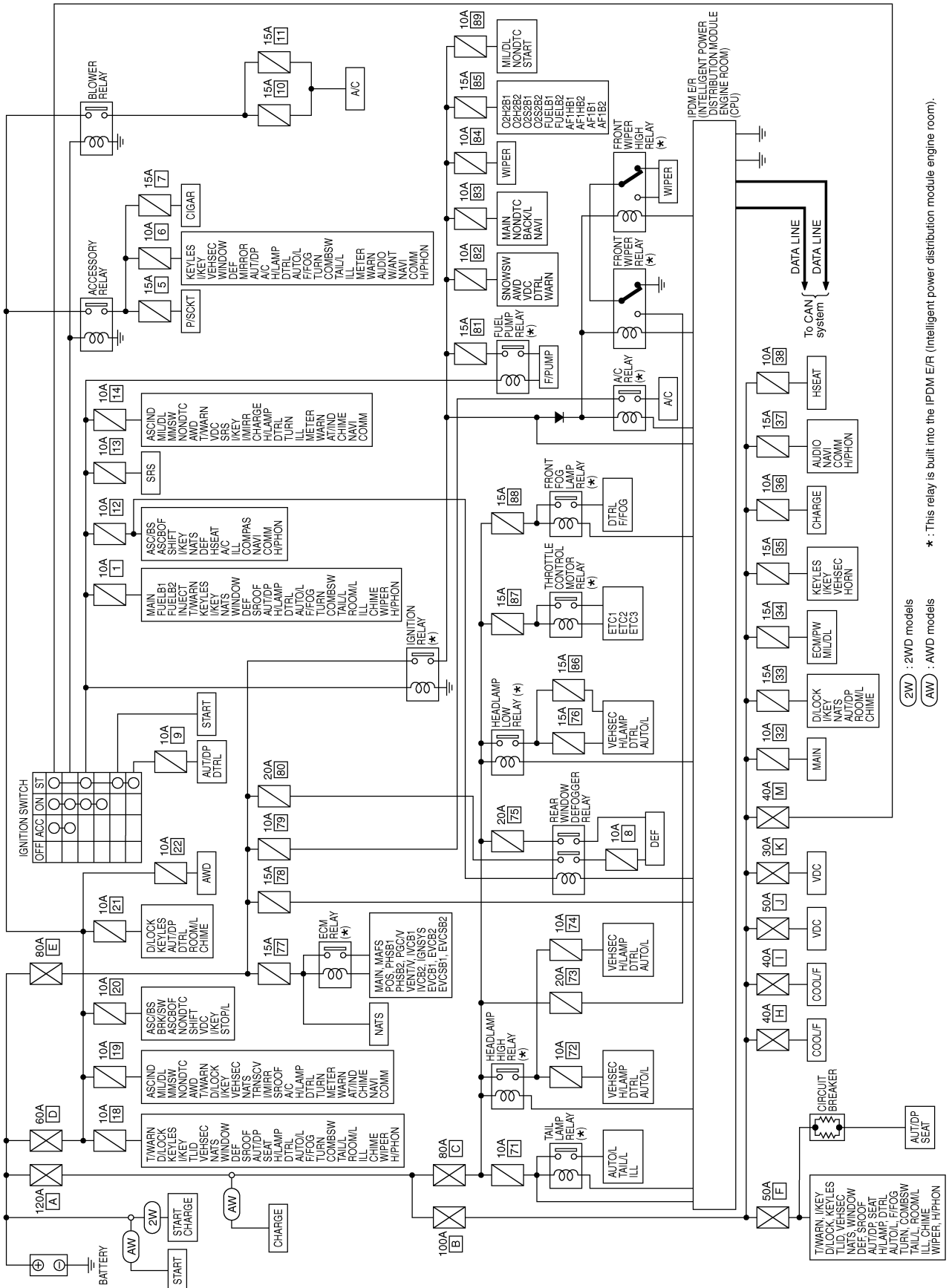
## POWER SUPPLY ROUTING CIRCUIT

PPF:24110

### Schematic

NKS0015K

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



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

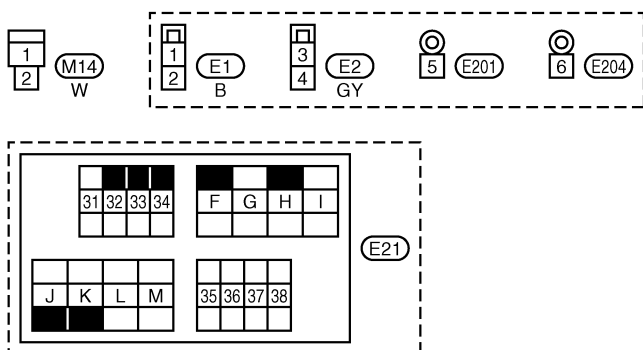
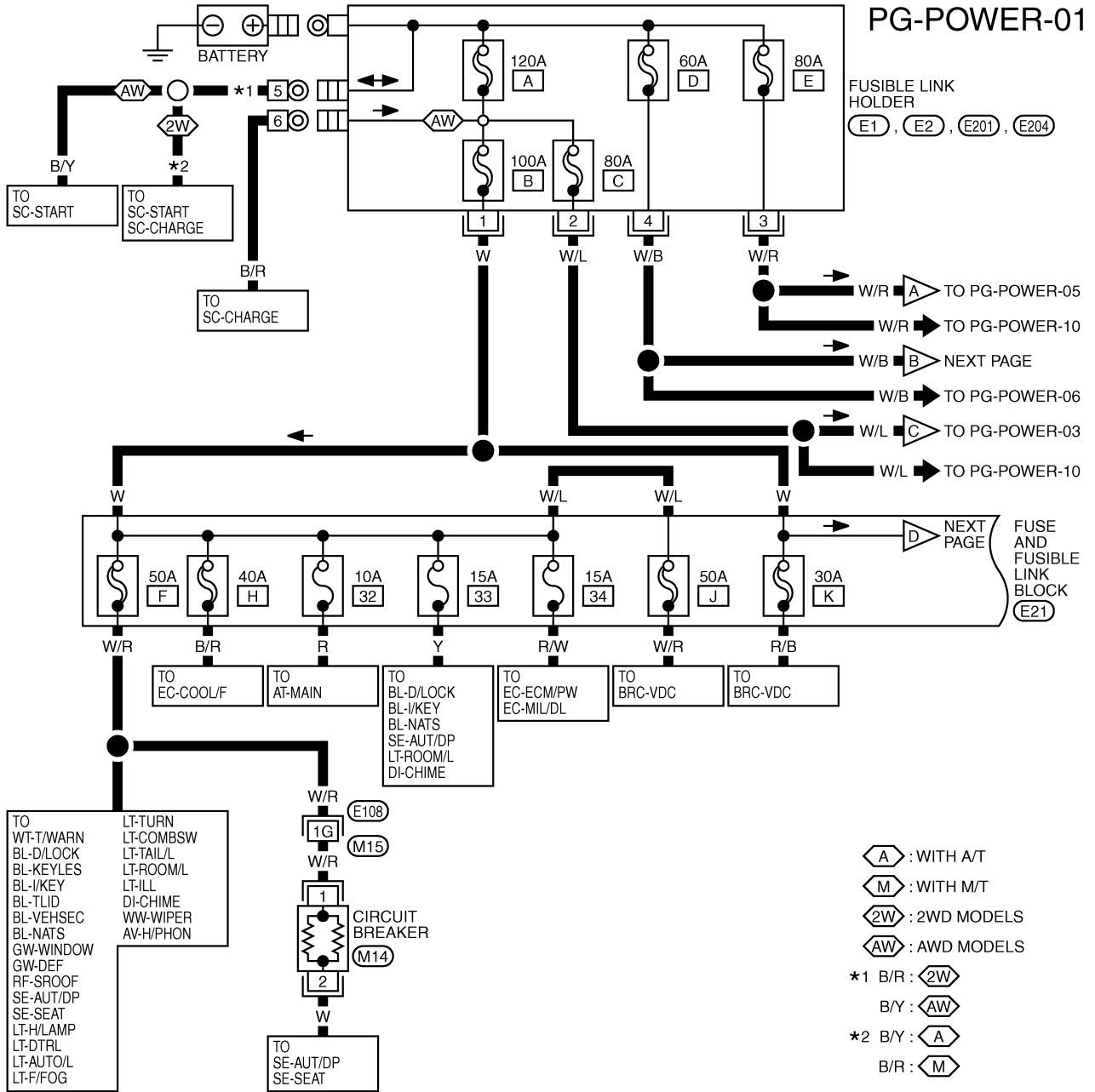
(2W) : 2WD models  
(AW) : AWD models

TKWM3436E

# POWER SUPPLY ROUTING CIRCUIT

NKS0015L

## Wiring Diagram — POWER — BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION

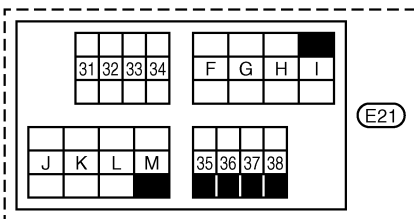
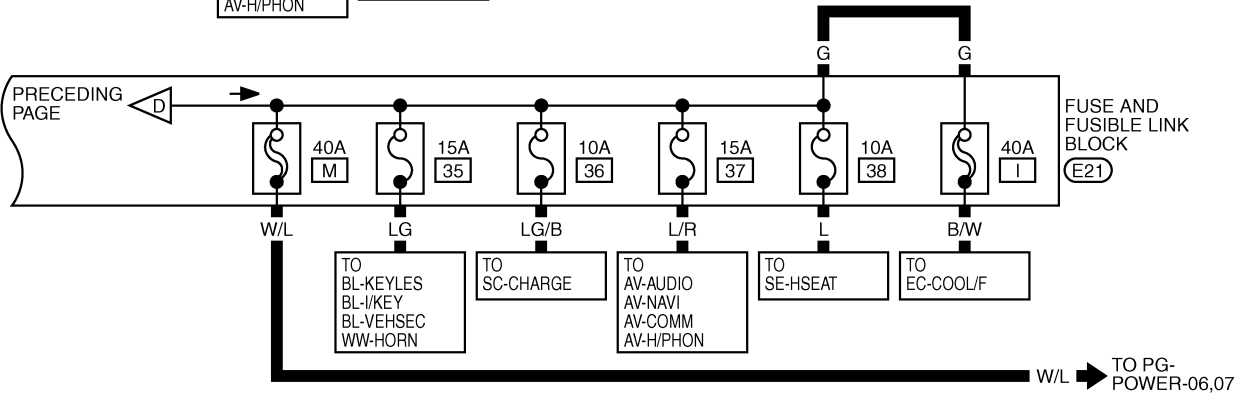
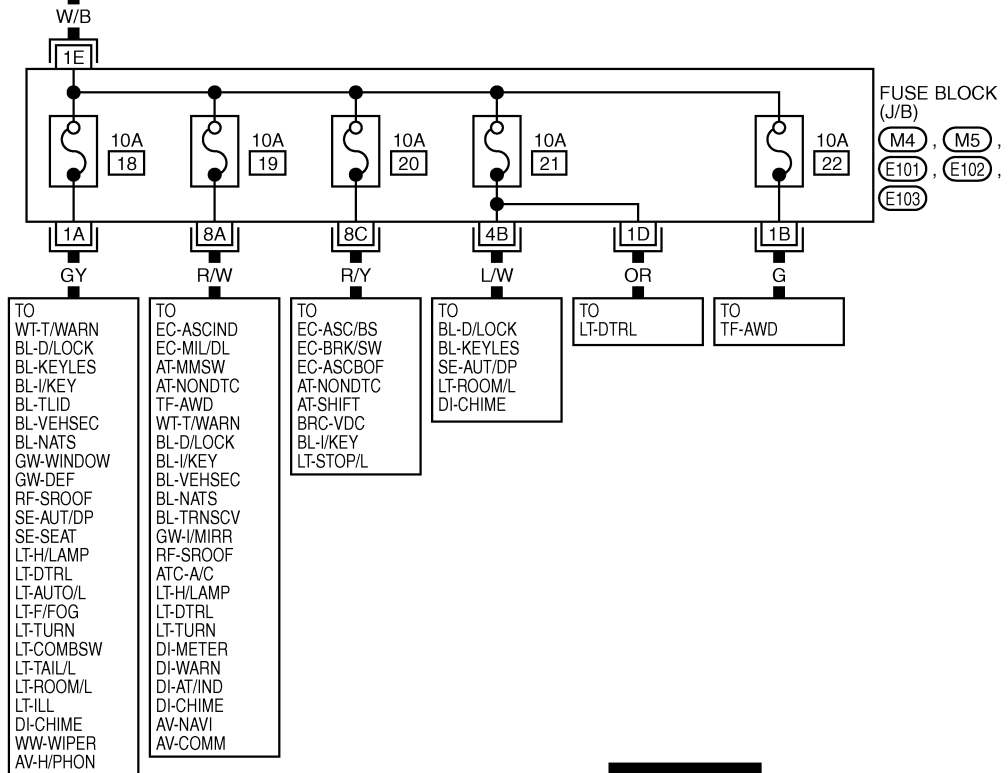


REFER TO THE FOLLOWING.  
(E108) -SUPER MULTIPLE JUNCTION (SMJ)

# POWER SUPPLY ROUTING CIRCUIT

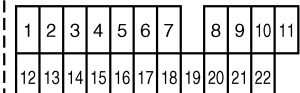
PG-POWER-02

PRECEDING PAGE



REFER TO THE FOLLOWING.

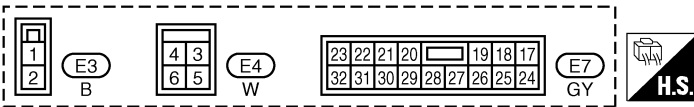
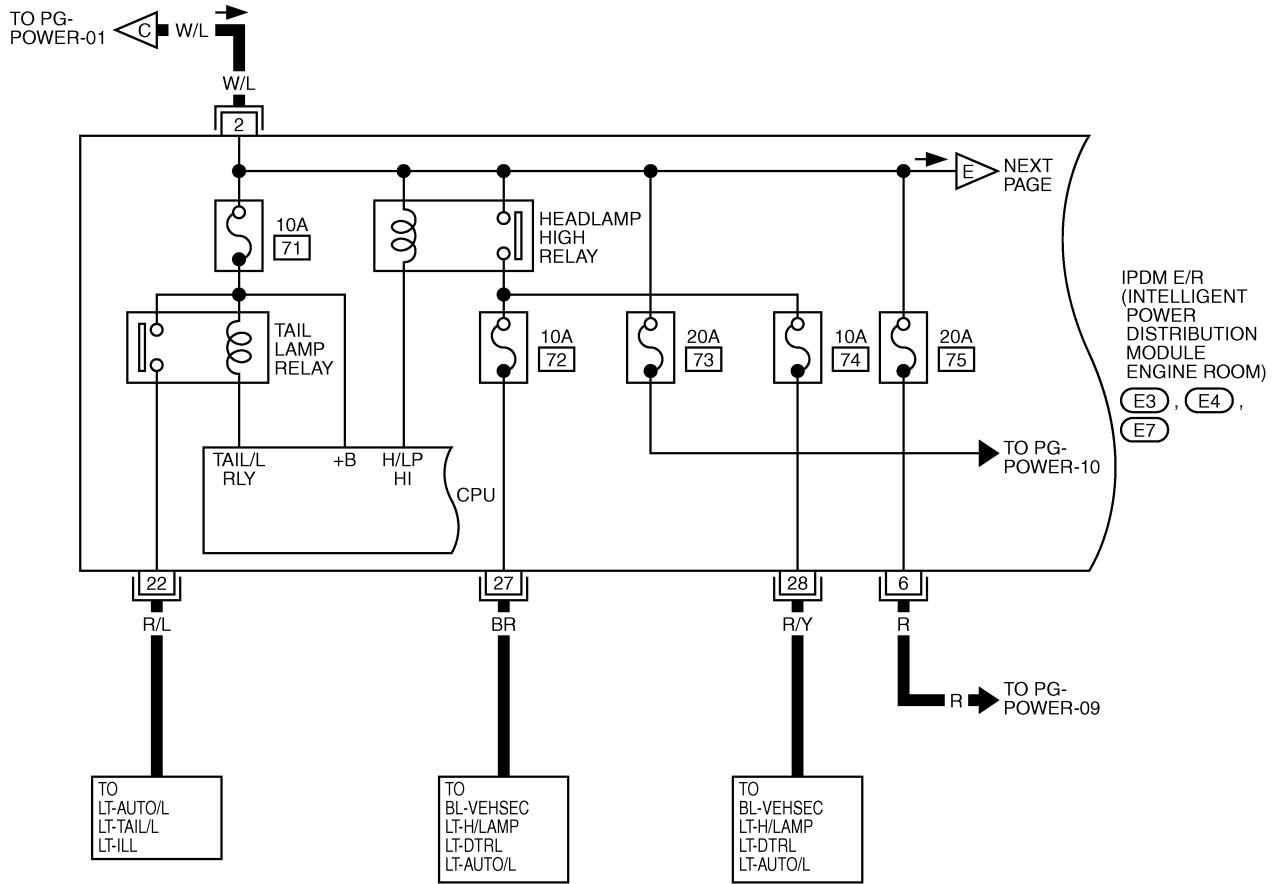
(M4), (M5), (E101), (E102), (E103) - FUSE BLOCK-JUNCTION BOX (J/B)



TKWM3438E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03

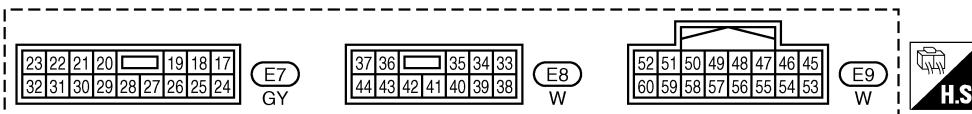
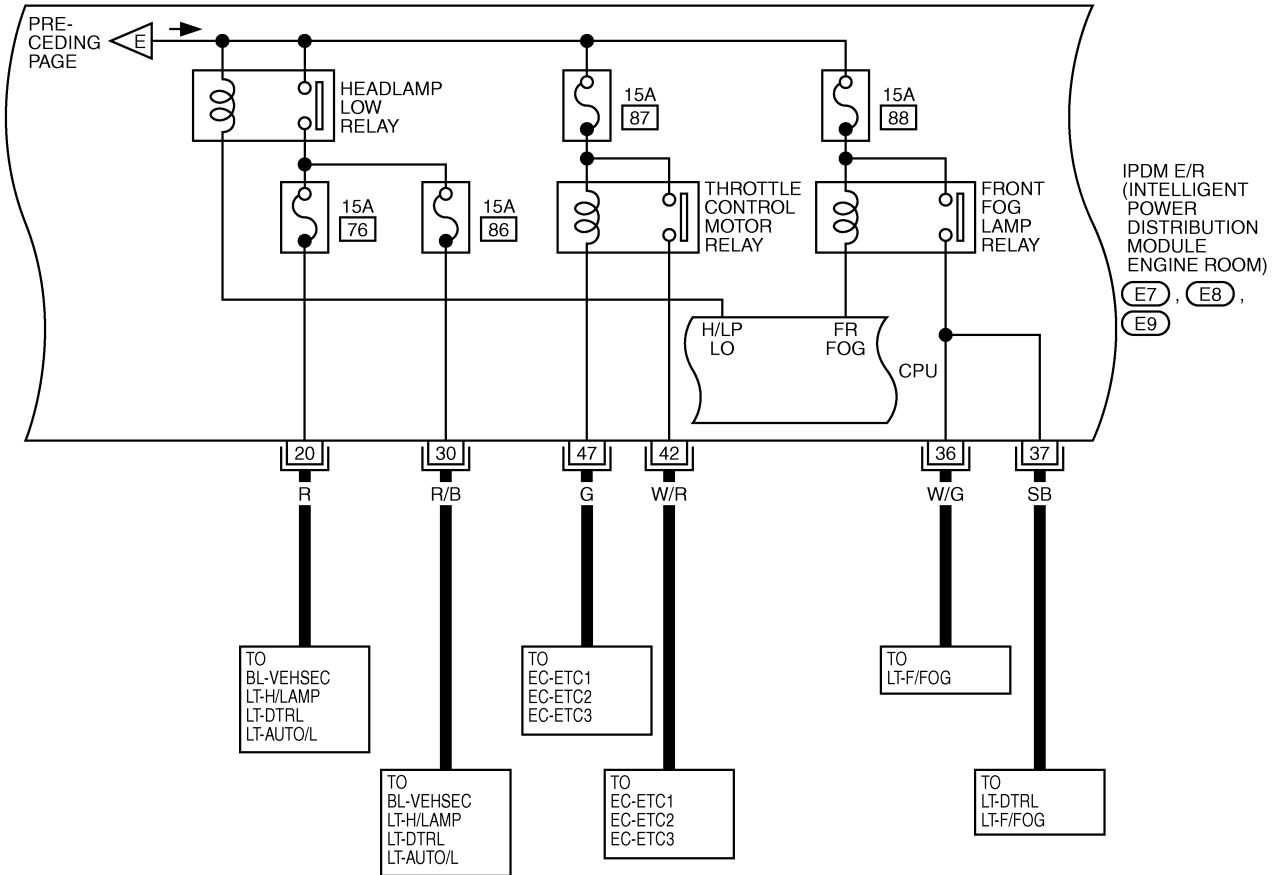


TKWM2140E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-04

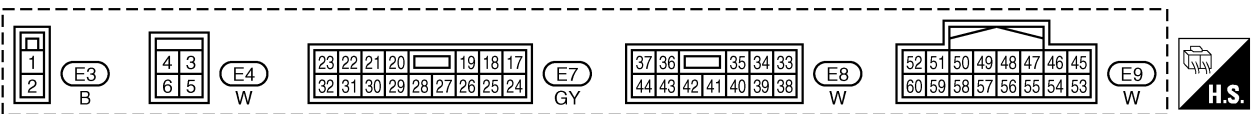
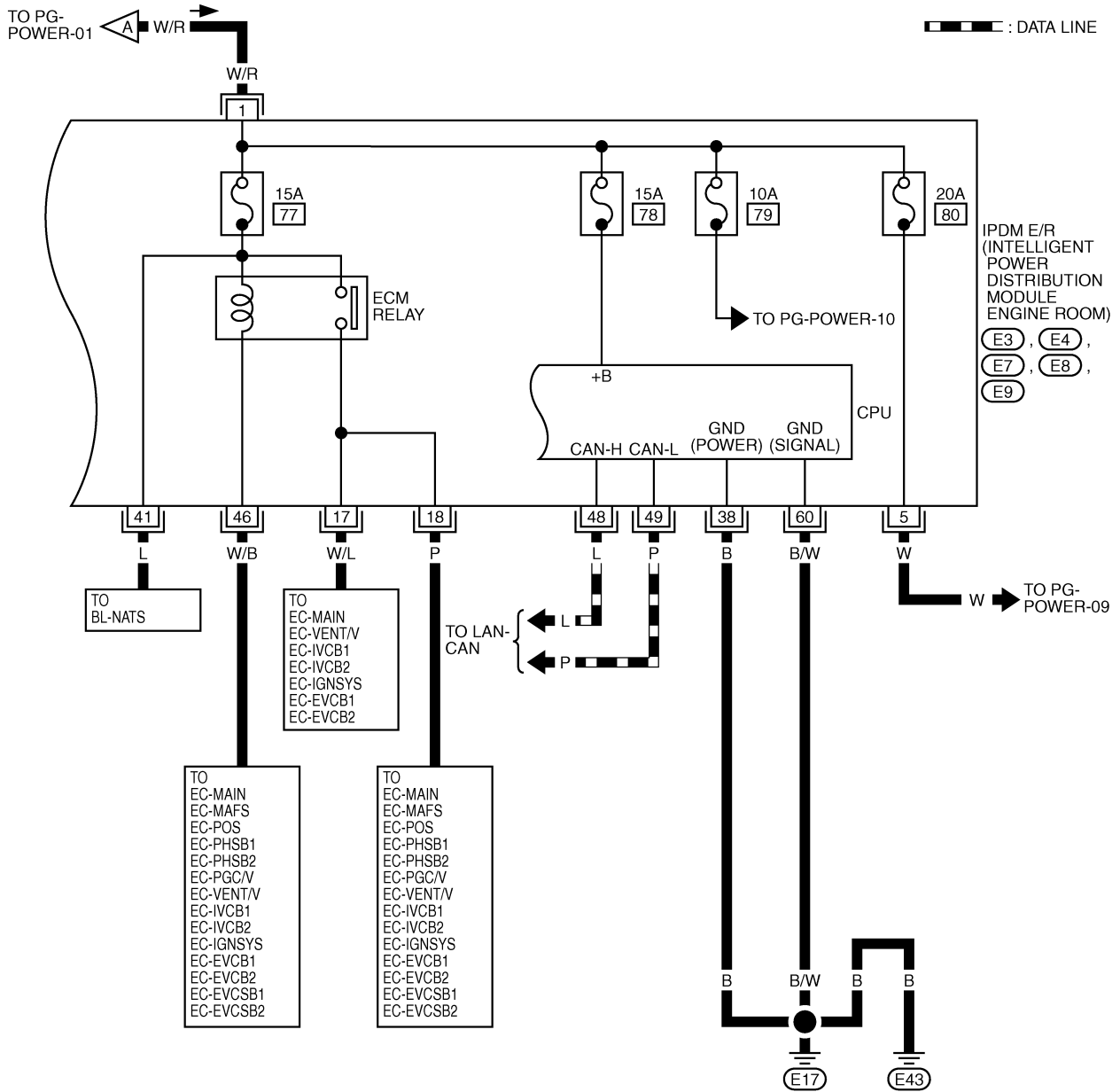
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
PG  
L  
M



TKWT1570E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05



TKWM2141E

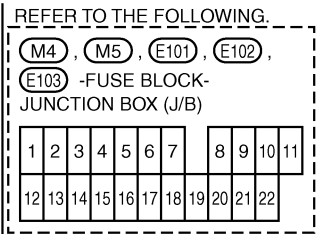
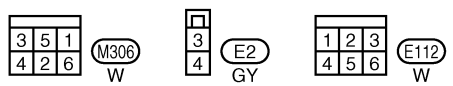
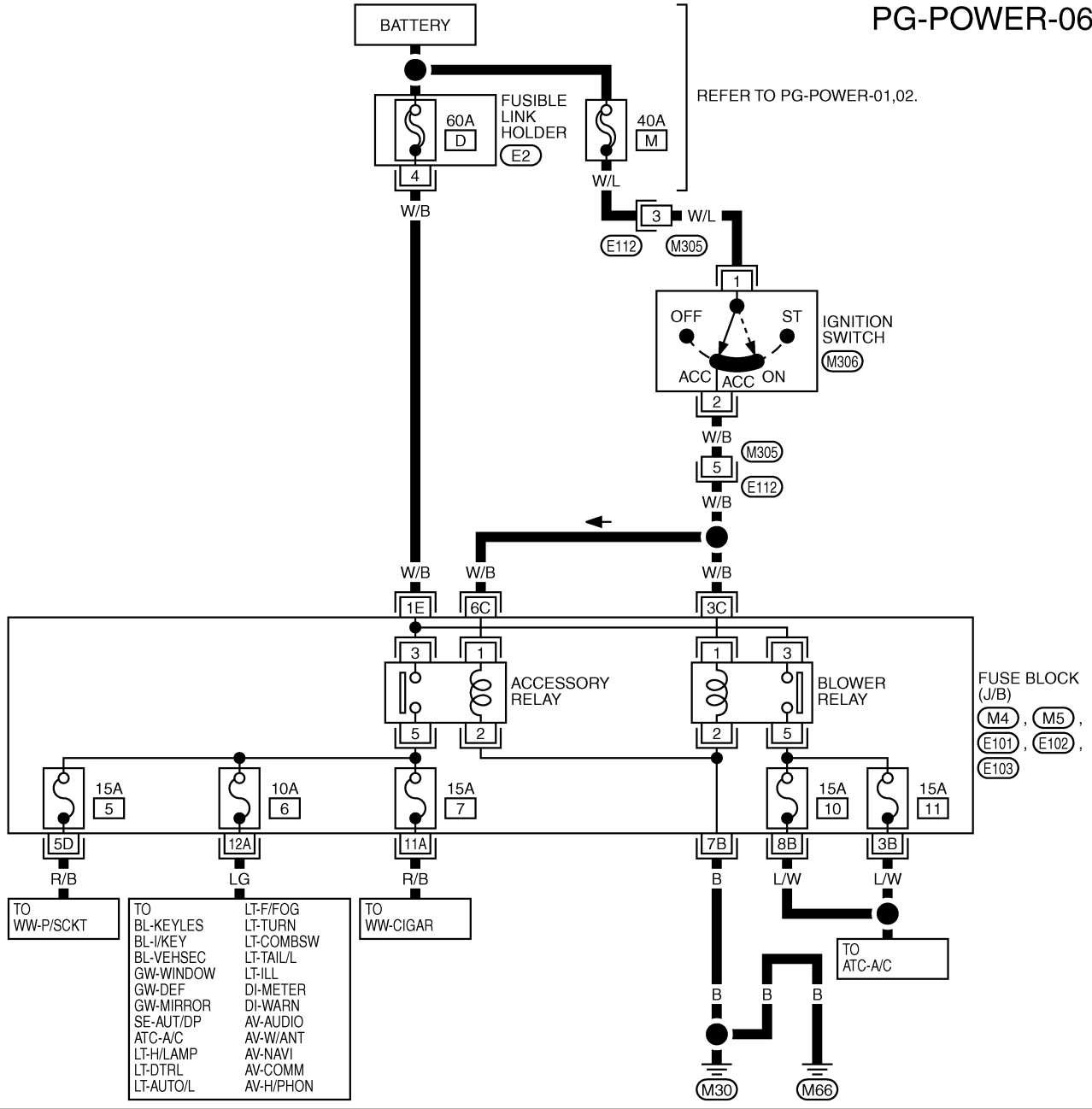


# POWER SUPPLY ROUTING CIRCUIT

## ACCESSORY POWER SUPPLY — IGNITION SW. IN “ACC” OR “ON”

PG-POWER-06

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

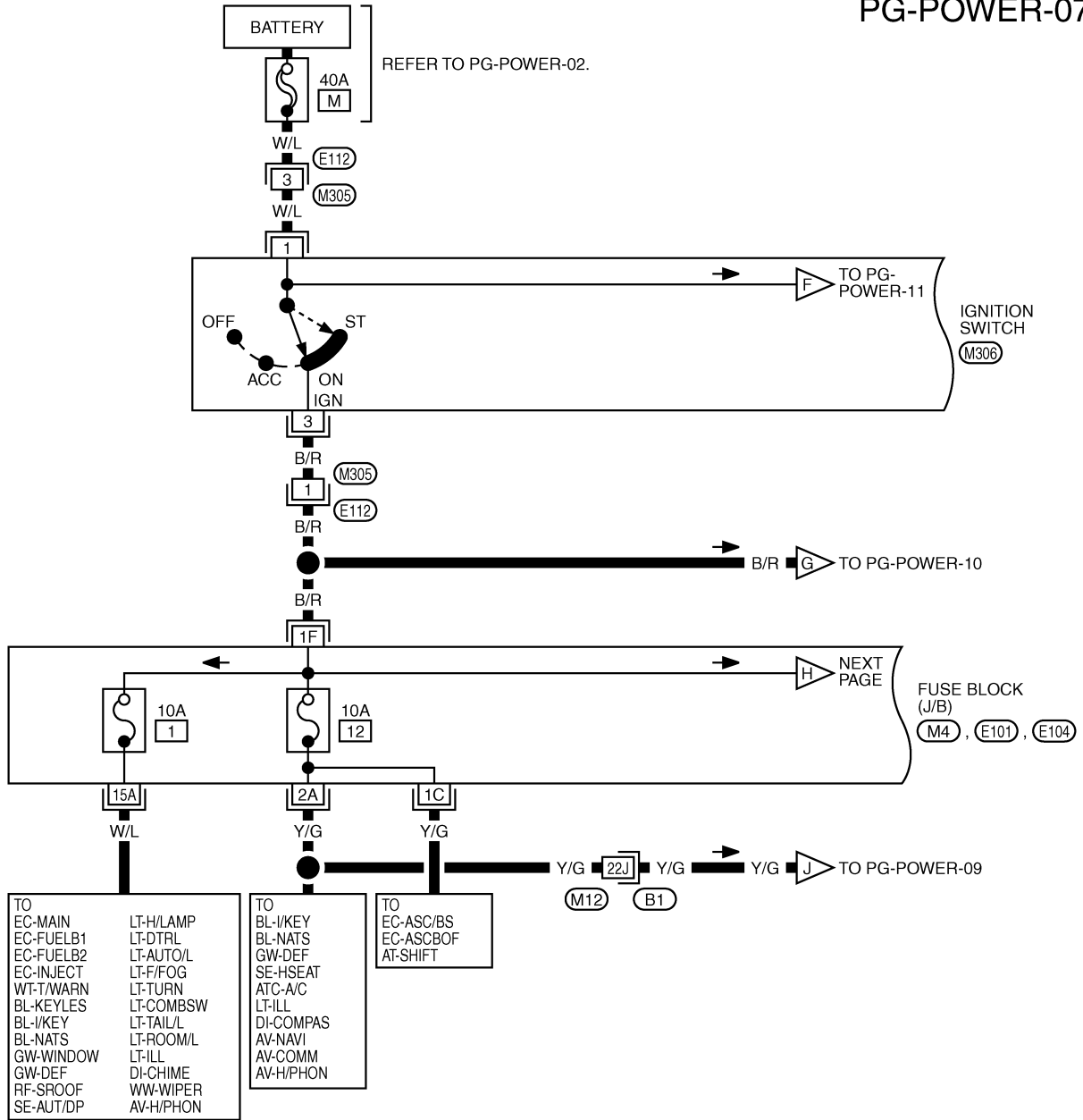


TKWM3439E

# POWER SUPPLY ROUTING CIRCUIT

## IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”

PG-POWER-07



(M306)  
W

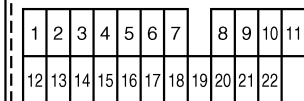


(E112)  
W

REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE  
JUNCTION (SMJ)

(M4), (E101), (E104)  
-FUUSE BLOCK-JUNCTION BOX  
(J/B)

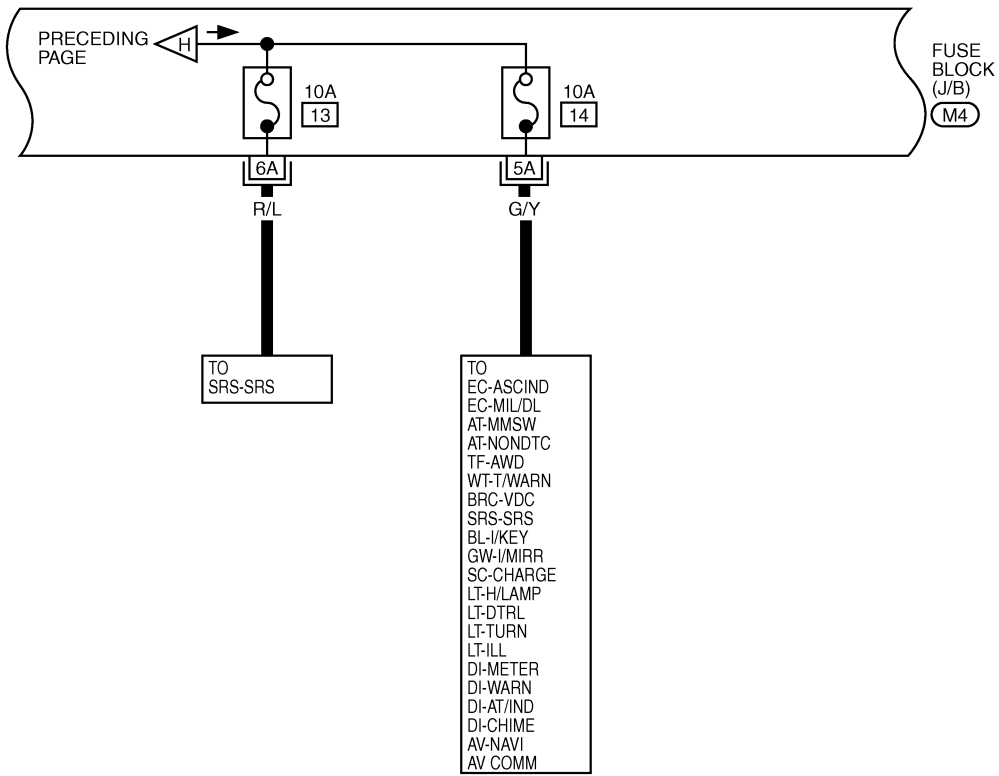


TKWM3440E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08

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



REFER TO THE FOLLOWING.

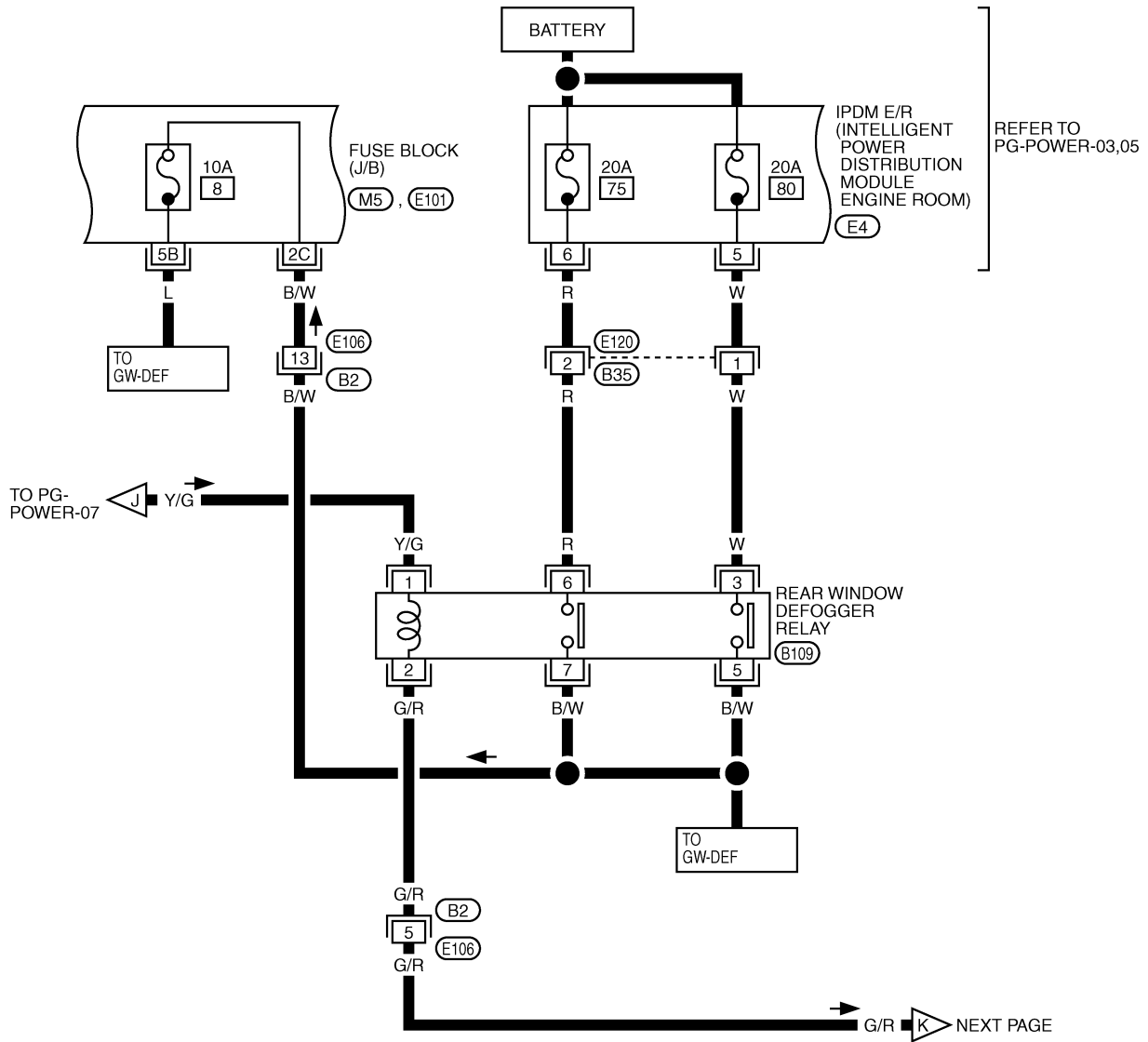
M4 - FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWM2144E

# POWER SUPPLY ROUTING CIRCUIT

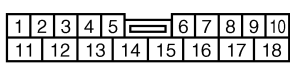
PG-POWER-09



(E4)  
W



(E120)  
W



(B2)  
W



(B109)  
BR

REFER TO THE FOLLOWING.

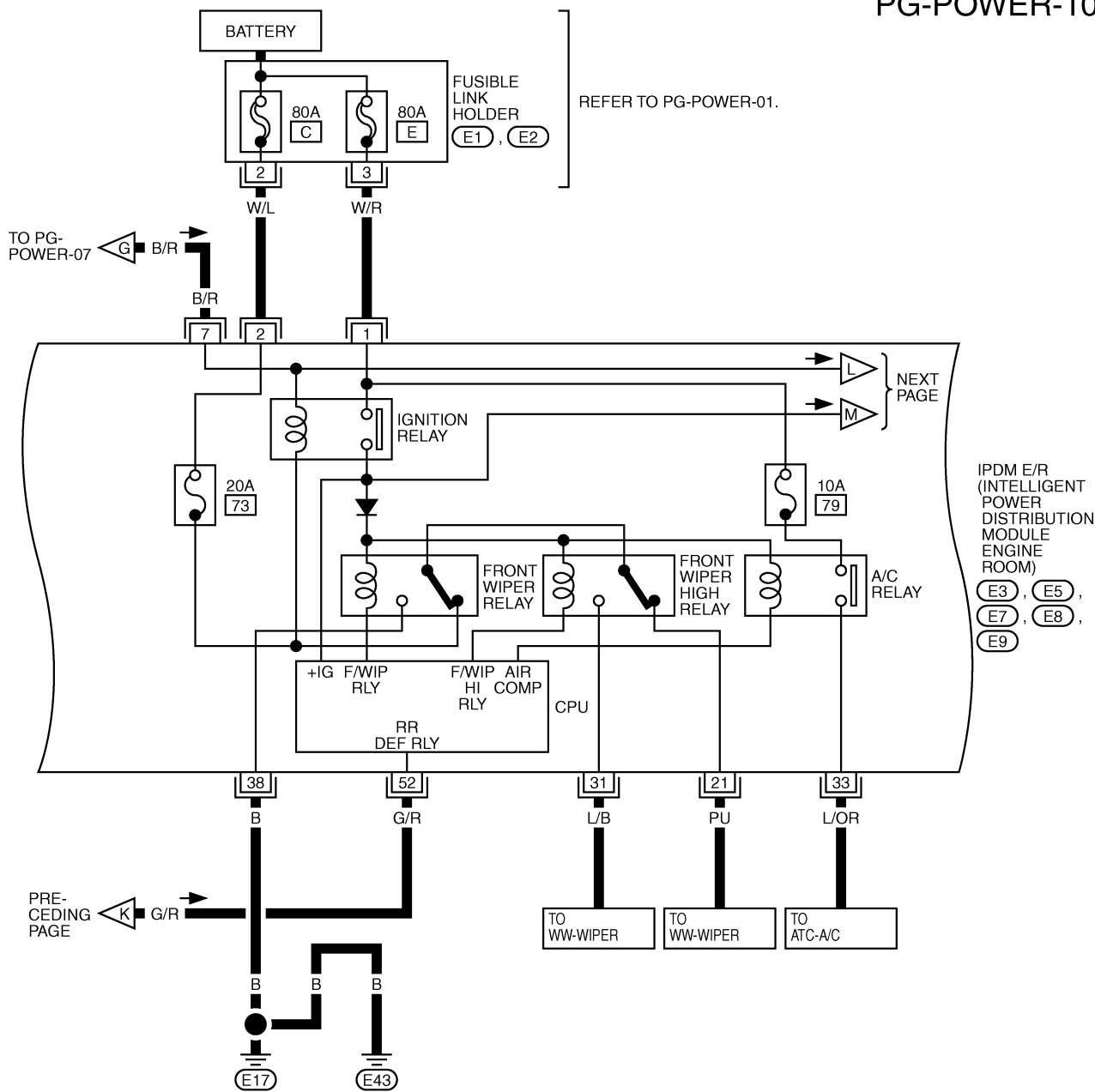
(M5), (E101) - FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

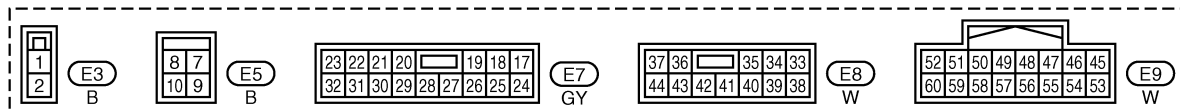
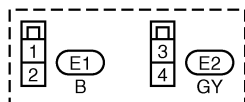
TKWT1575E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-10



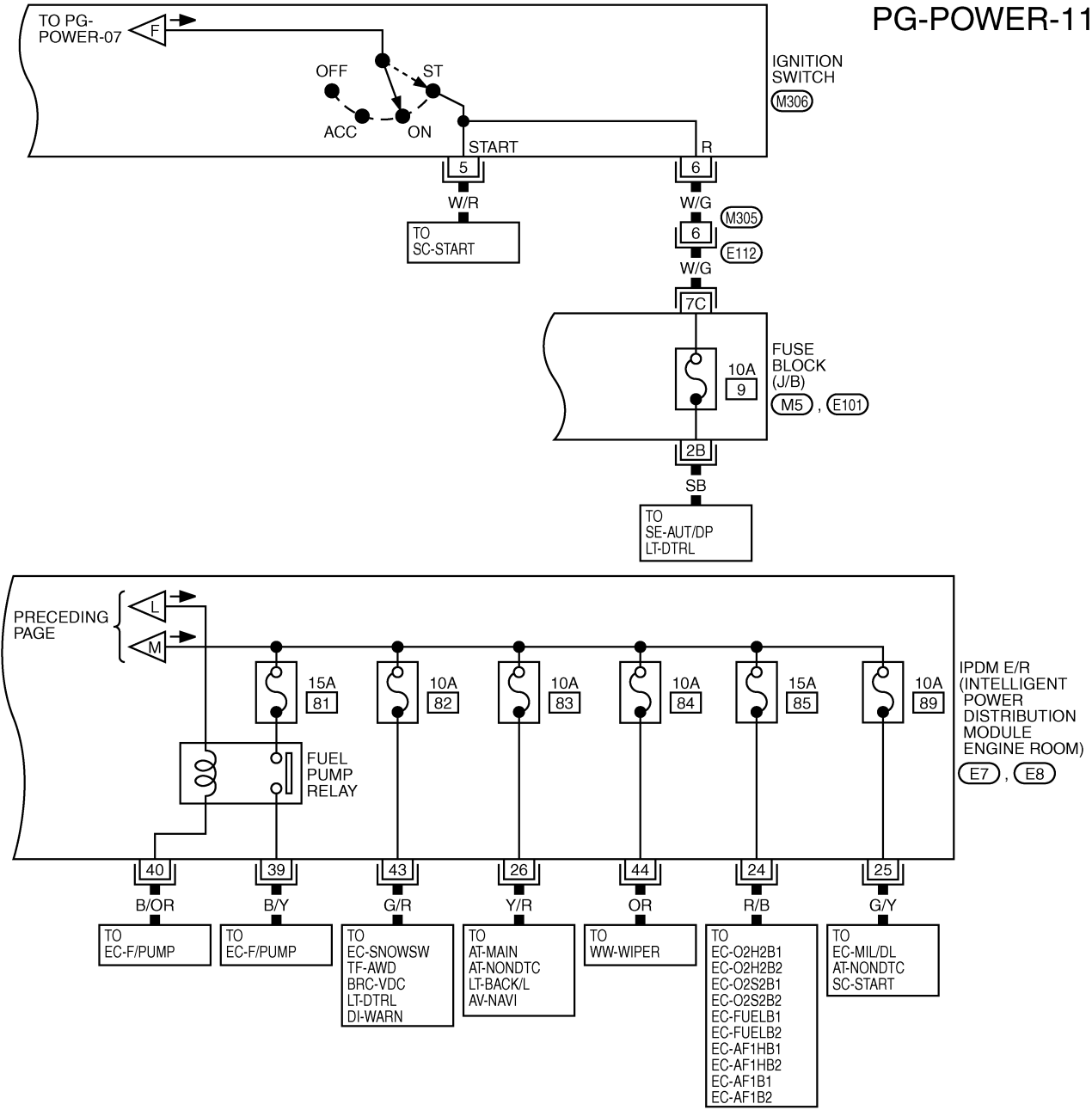
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)  
 E3, E5, E7, E8, E9



TKWM2145E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-11



3	5	1
4	2	6

(M306)  
W

23	22	21	20	19	18	17		
32	31	30	29	28	27	26	25	24

(E7)  
GY

37	36	35	34	33		
44	43	42	41	40	39	38

(E8)  
W



1	2	3
4	5	6

(E112)  
W

REFER TO THE FOLLOWING.

(M5), (E101) - FUSE BLOCK-JUNCTION BOX (J/B)

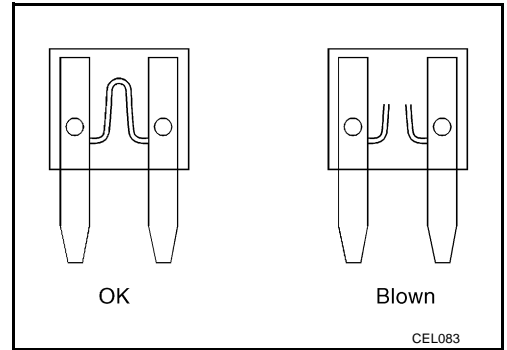
1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWM2146E

# POWER SUPPLY ROUTING CIRCUIT

## Fuse

- If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.

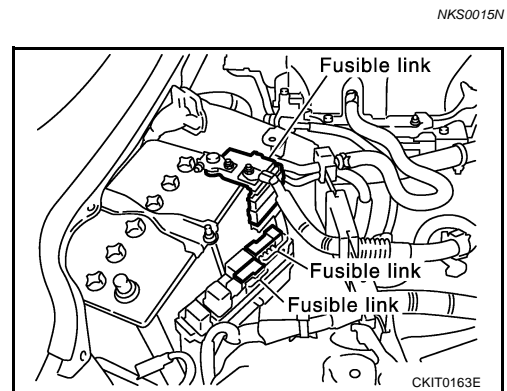


## Fusible Link

A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is questionable, use circuit tester or test lamp.

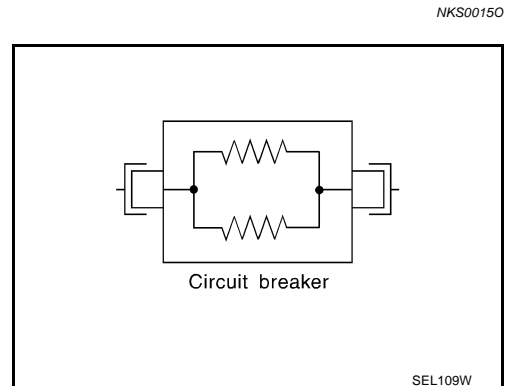
### CAUTION:

- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring harness, vinyl or rubber parts.



## Circuit Breaker

The PTC thermistor generates heat in response to current flow. The temperature (and resistance) of the thermistor element varies with current flow. Excessive current flow will cause the element's temperature to rise. When the temperature reaches a specified level, the electrical resistance will rise sharply to control the circuit current. Reduced current flow will cause the element to cool. Resistance falls accordingly and normal circuit current flow is allowed to resume.



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

## IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

PFP:284B7

### System Description

NKS0015P

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine compartment. It controls integrated relay via IPDM E/R control circuit.
- IPDM E/R-integrated control circuit performs ON-OFF operation of relay, CAN communication control, oil pressure switch signal, and hood switch signal reception, etc.
- It controls operation of each electrical part via ECM, BCM and CAN communication lines.

#### CAUTION:

**None of the IPDM E/R-integrated relays can be removed.**

### SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control  
Using CAN communication line, it receives signal from BCM and controls the following lamps:
  - Head lamps (Hi, Lo)
  - Parking, license plate, side marker and tail lamps
  - Front fog lamps
2. Wiper control  
Using CAN communication line, it receives signals from BCM and controls the front wiper.
3. Rear window defogger relay control  
Using CAN communication line, it receives signals from BCM and controls the rear window defogger relay.
4. A/C compressor control  
Using CAN communication line, it receives signals from ECM and controls the A/C compressor.
5. Cooling fan control  
Using CAN communication line, it receives signals from ECM and controls cooling fan.
6. Horn control  
Using CAN communication line, it receives signals from BCM and controls horn relay.

### CAN COMMUNICATION LINE CONTROL

With CAN communication, by connecting each control unit using two communication lines (CAN L-line, CAN H-line), it is possible to transmit maximum amount of information with minimum wiring. Each control unit can transmit and receive data, and reads necessary information only.

1. Fail-safe control
  - When CAN communication with other control units is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.
  - Operation of control parts by IPDM E/R during fail-safe mode is as follows:

Controlled system	Fail-safe mode
Headlamp	<ul style="list-style-type: none"> <li>● With the ignition switch ON, the headlamp (low) is ON.</li> <li>● With the ignition switch OFF, the headlamp (low) is OFF.</li> </ul>
Parking, license plate, side marker and tail lamps	<ul style="list-style-type: none"> <li>● With the ignition switch ON, the parking, license plate, side marker and tail lamps is ON.</li> <li>● With the ignition switch OFF, the parking, license plate, side marker and tail lamps is OFF.</li> </ul>
Cooling fan	<ul style="list-style-type: none"> <li>● With the ignition switch ON, the cooling fan HI operates.</li> <li>● With the ignition switch OFF, the cooling fan stops.</li> </ul>
Front wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it was in just before fail-safe control was initiated.
Rear window defogger	Rear window defogger relay OFF
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF



# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## IPDM E/R STATUS CONTROL

In order to save power, IPDM E/R switches status by itself based on each operating condition.

1. CAN communication status
  - CAN communication is normally performed with other control units.
  - Individual unit control by IPDM E/R is normally performed.
  - When sleep request signal is received from BCM, mode is switched to sleep waiting status.
2. Sleep waiting status
  - Process to stop CAN communication is activated.
  - All systems controlled by IPDM E/R are stopped. When 3 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
  - IPDM E/R operates in low power mode.
  - CAN communication is stopped.
  - When a change in CAN communication line is detected, mode switches to CAN communication status.
  - When a change hood switch or ignition switch signal is detected, mode switches to CAN communication status.

## CAN Communication System Description

NKS0015Q

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicles are equipped with many electronic control units and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

## CAN Communication Unit

NKS0015R

Refer to [LAN-27, "CAN Communication Unit"](#).

## Function of Detecting Ignition Relay Malfunction

NKS0015S

- When contact point of integrated ignition relay is stuck and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate ignition relay malfunction.
- When a state of ignition relay having built-in does not agree with a state of Ignition switch signal input by a CAN communication from BCM, IPDM E/R lets tail lamp relay operate.

Ignition switch signal	Ignition relay status	Tail lamp relay
ON	ON	—
OFF	OFF	—
ON	OFF	—
OFF	ON	ON (10 minutes)

### NOTE:

When the ignition switch is turned ON, the tail lamps are OFF.

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

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

NKS0015T

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

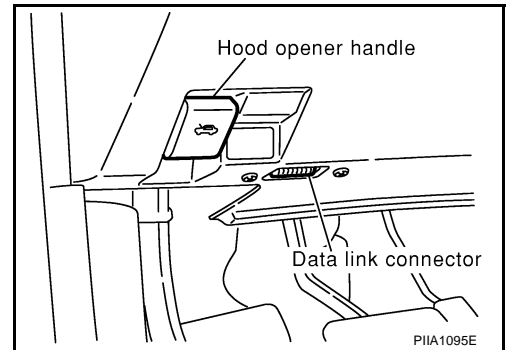
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of the CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.

## CONSULT-II BASIC OPERATION

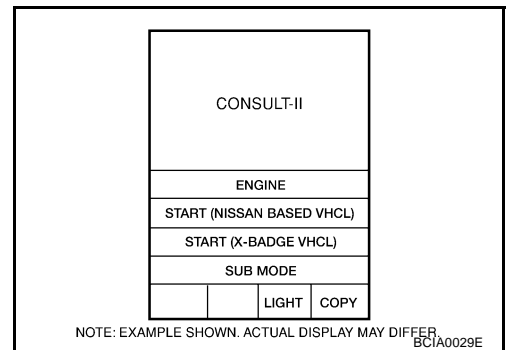
### CAUTION:

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

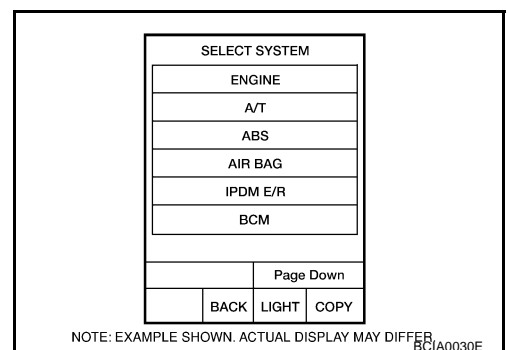
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



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

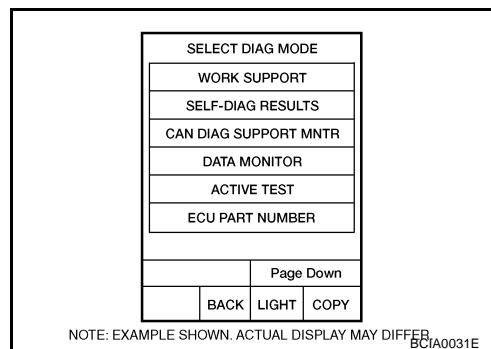


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
  - If "IPDM E/R" is not indicated, refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

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



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

## SELF-DIAG RESULTS

### Operation Procedure

1. Touch “SELF-DIAG RESULTS” on “SELECT DIAG MODE” screen.
2. Check display content in self-diagnostic results.

### Display Item List

Display Items	CONSULT-II display code	Malfunction detecting condition	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.	-	-	-	-	-
CAN COMM CIRC	U1000	<ul style="list-style-type: none"> <li>● If CAN communication reception/transmission data has a malfunction, or if any of the control units malfunction, data reception/transmission cannot be confirmed.</li> <li>● When the data in CAN communication is not received before the specified time</li> </ul>	×	×	Any of or several items below have errors. <ul style="list-style-type: none"> <li>● TRANSMIT DIAG</li> <li>● ECM</li> <li>● BCM/SEC</li> </ul>

#### NOTE:

The details for display of the period are as follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## DATA MONITOR

### Operation Procedure

1. Touch "DATA MONITOR" on "SELECT MONITOR ITEM" screen.
2. Touch "ALL SIGNALS", "MAIN SIGNALS" or "SELECTION FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	All items will be monitored.
MAIN SIGNALS	Monitor the predetermined item.
SELECTION FROM MENU	Select any item for monitoring.

3. Touch the required monitoring item on "SELECTION FROM MENU". In "ALL SIGNALS", all items are monitored. In "MAIN SIGNALS", predetermined items are monitored.
4. Touch "START".
5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

### All Signals, Main Signals, Selection From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECTION FROM MENU	
Motor fan request	MOTOR FAN REQ	1/2/3/4	×	×	×	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	×	×	×	Signal status input from ECM
Position lights request	TAIL&CLR REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	×	×	×	Signal status input from BCM
FR fog request	FR FOG REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L washer request	HL WASHER REQ*1	OFF	×		×	—
FR wiper request	FR WIP REQ	STOP/LOW/HI	×	×	×	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	×	×	×	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/BLOCK	×	×	×	Control status of IPDM E/R
Starter request	ST RLY REQ*2	ON/OFF	×		×	Status of input signal
Ignition relay status	IGN RLY	ON/OFF	×	×	×	Ignition relay status monitored with IPDM E/R
Rear window defogger request	RR DEF REQ	ON/OFF	×	×	×	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	×		×	Signal status input in IPDM E/R
DTLR request	DTRL REQ*1	ON/OFF	×		×	—
Hood switch	HOOD SW	ON/OFF	×		×	Input signal status
Theft warning horn request	THFT HRN REQ	ON/OFF	×		×	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	×		×	Output status of IPDM E/R

#### 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.
- \*1: This item is displayed, but does not function.
- \*2: The vehicle without Intelligent key system Displays only ON without change.

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## ACTIVE TEST

### Operation Procedure

1. Touch "ACTIVE TEST" on "SELECT DIAG MODE" screen.
2. Touch item to be tested.
3. Touch "START", and confirm its operation.
4. Touch "STOP" while testing to stop the operation.

Test item	CONSULT-II screen display	Description
Tail lamp operation	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be operated.
Rear window defogger operation	REAR DEFOGGER	With a certain ON-OFF operation, the rear window defogger relay can be operated.
Front wiper (HI, LO) operation	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON), the front wiper relay (Lo, Hi) can be operated.
Cooling fan operation	MOTOR FAN	With a certain operation (1,2,3,4), the cooling fan can be operated.
Headlamp washer operation	HEAD LAMP WASHER <sup>NOTE</sup>	—
Lamp (HI, LO, FOG) operation	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON), the lamp relay (Lo, Hi, Fog) can be operated.
Horn operation	HORN	Push "ON" button, horn relay operates 20ms.

**NOTE:**

This item is displayed, but cannot be tested.

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## Auto Active Test DESCRIPTION

In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the following systems:

- Rear window defogger
- Front wipers
- Parking, license plate, side marker and tail lamps
- Front fog lamps
- Headlamps (Hi, Lo)
- A/C compressor (magnetic clutch)
- Cooling fan

## OPERATION PROCEDURE

1. Close hood and front door (passenger side) and then lift wiper arms away from windshield (to prevent glass damage by wiper operation).

### NOTE:

When auto active test is performed with hood opened, sprinkle water on windshield beforehand.

2. Turn ignition switch OFF.
3. Turn ignition switch ON, and within 20 seconds, press drivers door switch 10 times (close other doors). Then turn ignition switch OFF.
4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
5. When auto active test mode is actuated, horn chirps once. Oil pressure warning lamp starts blinking.
6. After a series of operations is repeated three times, auto active test is completed.

### NOTE:

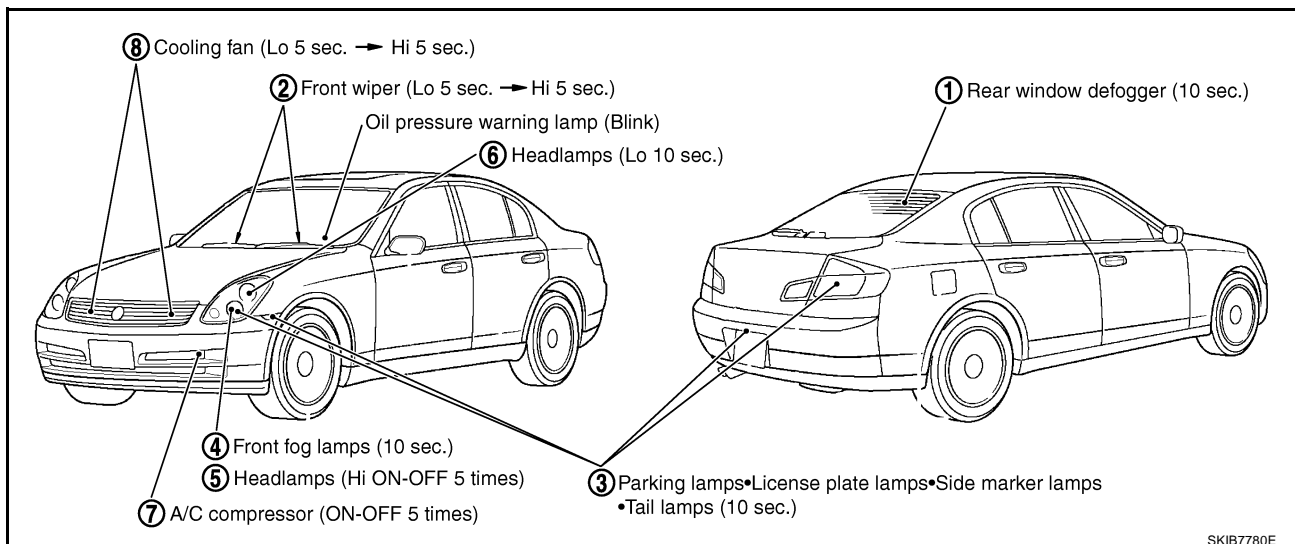
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

### CAUTION:

Be sure to inspect **BL-41, "Check Door Switch"** when the auto active test cannot be performed.

## INSPECTION IN AUTO ACTIVE TEST MODE

When auto active test mode is actuated, the following eight steps are repeated three times.



# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## Concept of Auto Active Test

- IPDM E/R actuates auto active test mode when it receives door switch signal from BCM via CAN communication line. Therefore, when auto active test mode is activated successfully, CAN communication between IPDM E/R and BCM is normal.
- If any of systems controlled by IPDM E/R cannot be operated, possible cause can be easily diagnosed using auto active test.

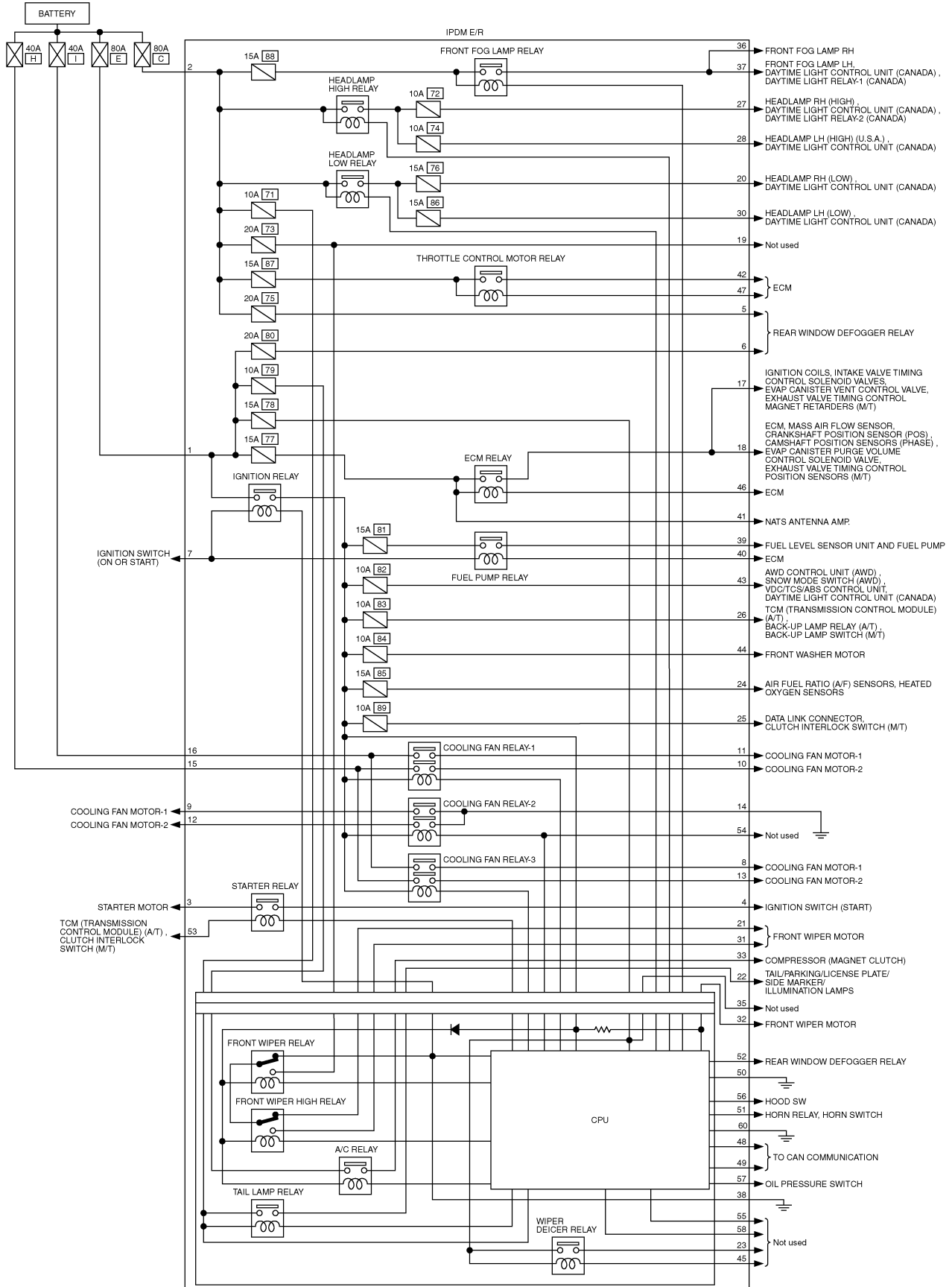
Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES <ul style="list-style-type: none"> <li>● BCM signal input circuit malfunction</li> </ul>
		NO <ul style="list-style-type: none"> <li>● Rear window defogger relay malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and rear window defogger relay</li> <li>● Open circuit of rear window defogger</li> <li>● IPDM E/R malfunction</li> </ul>
Any of front wipers, tail and parking lamps, front fog lamps, and head lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES <ul style="list-style-type: none"> <li>● BCM signal input system malfunction</li> </ul>
		NO <ul style="list-style-type: none"> <li>● Lamp/wiper motor malfunction</li> <li>● Lamp/wiper motor ground circuit malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and system in question</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES <ul style="list-style-type: none"> <li>● BCM signal input circuit malfunction</li> <li>● CAN communication signal between BCM and ECM.</li> <li>● CAN communication signal between ECM and IPDM E/R</li> </ul>
		NO <ul style="list-style-type: none"> <li>● Magnetic clutch malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and magnetic clutch</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES <ul style="list-style-type: none"> <li>● ECM signal input circuit</li> <li>● CAN communication signal between ECM and IPDM E/R</li> </ul>
		NO <ul style="list-style-type: none"> <li>● Cooling fan motor malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and cooling fan motor</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pressure warning lamp blink?	YES <ul style="list-style-type: none"> <li>● Harness/connector malfunction between IPDM E/R and oil pressure switch</li> <li>● Oil pressure switch malfunction</li> <li>● IPDM E/R malfunction</li> </ul>
		NO <ul style="list-style-type: none"> <li>● CAN communication signal between IPDM E/R and combination meter</li> <li>● Combination meter</li> </ul>

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## Schematic

NKS0015V

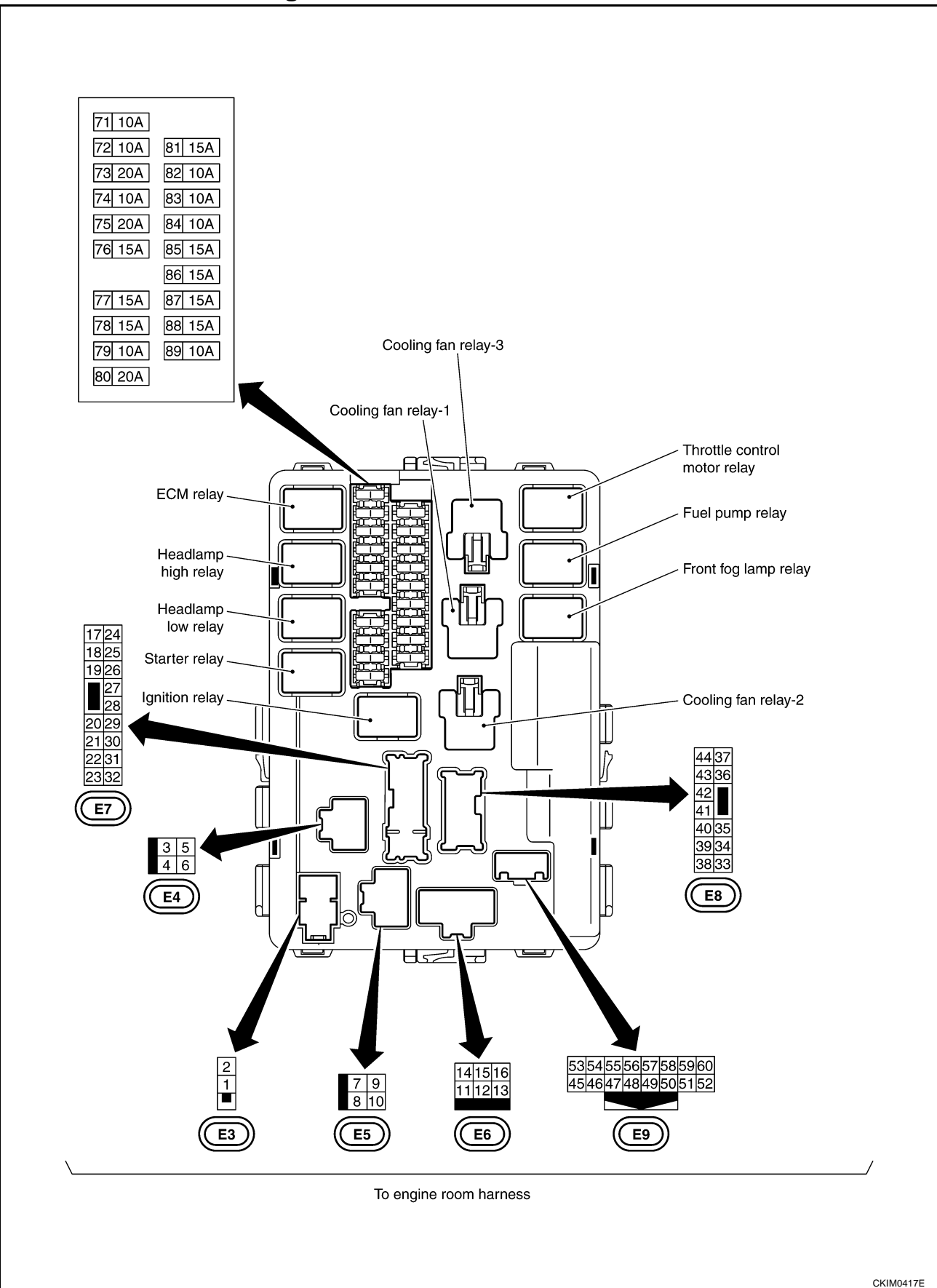


TKWM2957E



## IPDM E/R Terminal Arrangement

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CKIM0417E

# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## IPDM E/R Power/Ground Circuit Inspection

NKS0015X

### 1. CHECK FUSE AND FUSIBLE LINK

Make sure the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Power source	Fuse and fusible link No.
1	Battery power	C
2		E
—		71
—		78

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 one.

### 2. CHECK POWER SUPPLY CIRCUIT

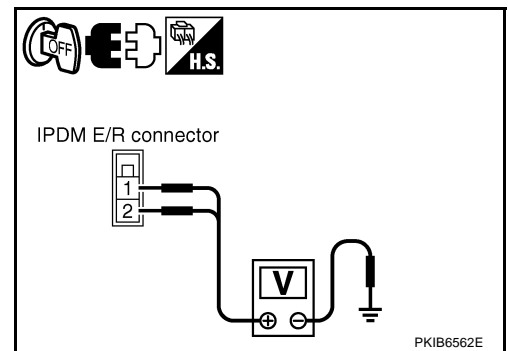
1. Turn ignition switch OFF.
2. Disconnect IPDM E/R harness connector E3.
3. Check voltage between IPDM E/R harness connector E3 terminals 1, 2 and ground.

**1, 2 – Ground : Battery voltage**

OK or NG

OK >> GO TO 3.

NG >> Replace IPDM E/R power supply circuit harness.



### 3. CHECK GROUND CIRCUIT

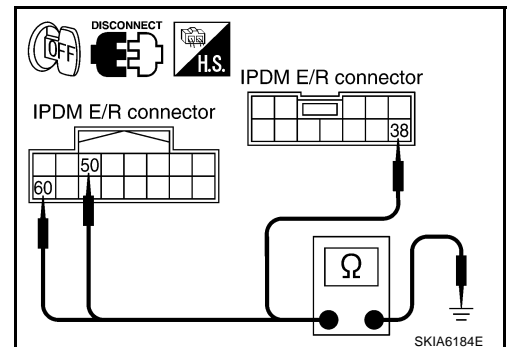
1. Disconnect IPDM E/R harness connectors E8 and E9.
2. Check continuity between IPDM E/R harness connectors E8 terminal 38, E9 terminal 50, 60 and ground.

**38, 50, 60 – Ground : Continuity should exist.**

OK or NG

OK >> INSPECTION END

NG >> Replace ground circuit harness of IPDM E/R.



## Inspection With CONSULT-II (Self-Diagnosis)

NKS0015Y

### 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. CHECK SELF DIAGNOSTIC RESULT

1. Connect CONSULT-II and select "IPDM E/R" on the "SELECT SYSTEM" screen.
2. Select "SELF-DIAG RESULTS" on the "SELECT DIAG MODE" screen.
3. Check display content in self diagnostic results.

CONSULT-II display	CONSULT-II display code	TIME		Details of diagnosis result
		CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	-	-	-	No malfunction
CAN COMM CIRC	U1000	×	×	Any of or several items below have errors. <ul style="list-style-type: none"> <li>● TRANSMIT DIAG</li> <li>● ECM</li> <li>● BCM/SEC</li> </ul>

#### NOTE:

The details for display of the period are as follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

#### Contents displayed

NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END

CAN COMM CIRC>>After print-out of the monitor items, refer to [LAN-3, "Precautions When Using CONSULT-II"](#) .

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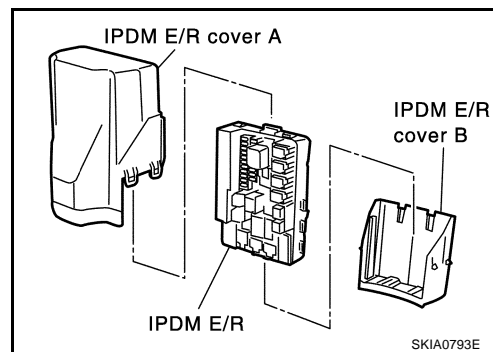
# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

NKS0015Z

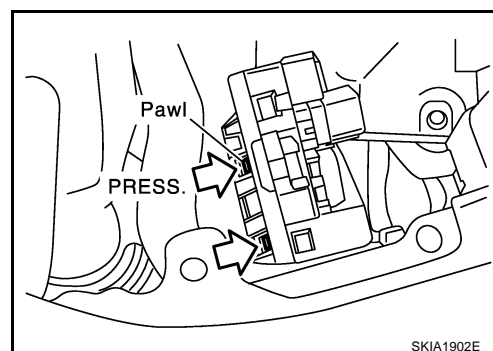
## Removal and Installation of IPDM E/R

### REMOVAL

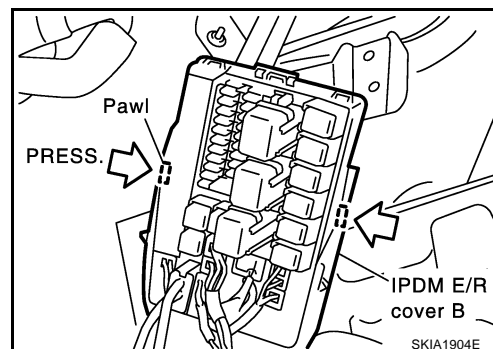
1. Remove battery. Refer to [SC-8. "Removal and Installation"](#) in "Starting and Charging System (SC)" section.



2. Remove IPDM E/R cover A. While pushing pawl on backside of IPDM E/R cover B toward vehicle front to unlock, lift up IPDM E/R.



3. While pushing tabs on right and left side of IPDM E/R, remove IPDM E/R cover B from IPDM E/R.
4. Remove harness connector from IPDM E/R.



### INSTALLATION

Installation is the reverse order of removal.

# GROUND

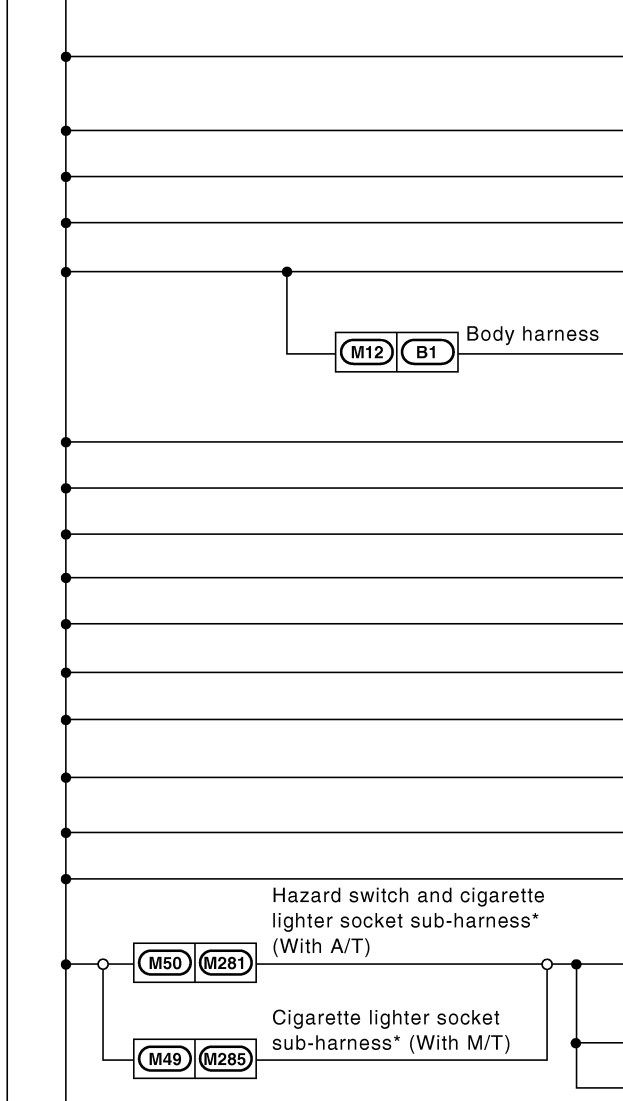
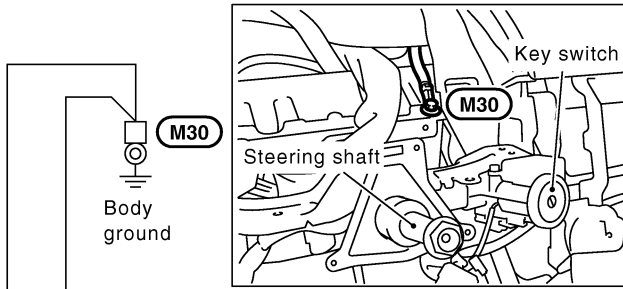
## GROUND

PFP:00011

### Ground Distribution MAIN HARNESS

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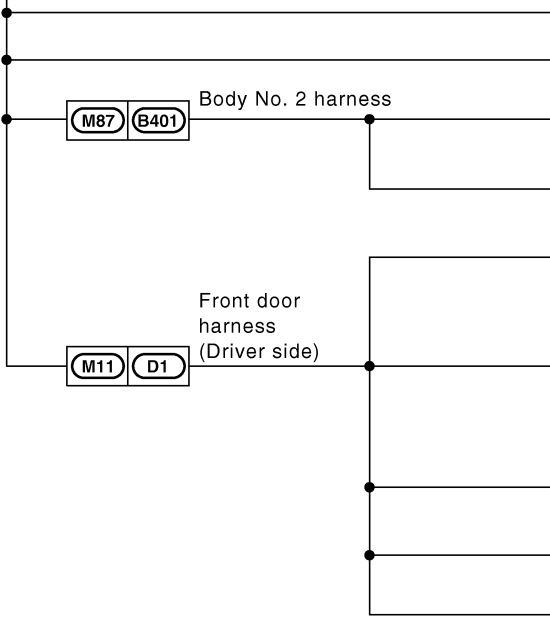
CON-NECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal No. 7B) • Accessory relay • Blower relay
M7	Illumination control switch
M8	Data link connector (Terminal No. 4)
M9	VDC off switch
M19	Combination meter (Terminal No. 1)
B27	Fuel level sensor unit and fuel pump (Terminal No. 5) • Fuel level sensor (Main) • Fuel tank temperature sensor
M19	Combination meter (Terminal No. 24)
M19	Combination meter (Terminal No. 25)
M22	Steering angle sensor
M28	Door mirror remote control switch
M29	Combination switch
M38	A/C and audio controller
M55	Air bag diagnosis sensor unit
M56	Trunk lid opener cancel switch (With Intelligent Key)
M81	Compass
M84	Trunk lid opener switch (Without Intelligent Key)
M284	Cigarette lighter socket
—	Cigarette lighter socket illumination
—	Ashtray illumination

\*: This sub-harness is not shown in "HARNESS LAYOUT".

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Next page

# GROUND

Preceding page



CON-NECTOR NUMBER	CONNECT TO
M93	VDC/TCS/ABS control unit (Terminal No. 28)
M93	VDC/TCS/ABS control unit (Terminal No. 29)
B424	TEL adapter unit (Terminal No. 4) (With telephone system)
B424	TEL adapter unit (Terminal No. 23) (With telephone system)
D2	Door mirror (Driver side) • Door mirror defogger
D8	Power window main switch • CPU • Power window lock switch • Door lock and unlock switch • Illumination
D11	Front door lock assembly (Driver side) (With Intelligent Key) • Door unlock sensor
D12	Front door key cylinder switch (Driver side)
D13	Outside key antenna and front door request switch (Driver side) (With Intelligent Key)

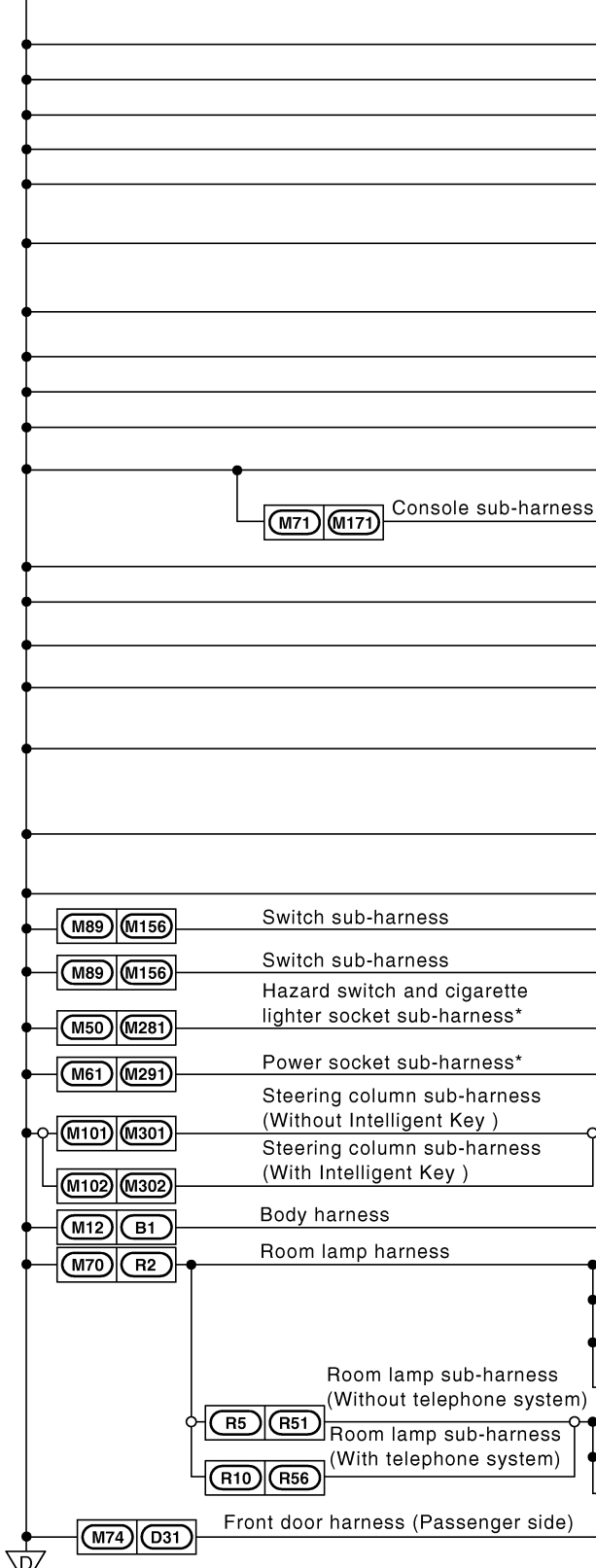


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CKIM0592E

# GROUND

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CON-NECTOR NUMBER	CONNECT TO
(M2)	BCM (Body control module)
(M10)	AWD control unit (Terminal No. 10) (AWD models)
(M10)	AWD control unit (Terminal No. 11) (AWD models)
(M37)	NAVI switch
(M46)	Hazard switch (With M/T)
(M47)	A/T device (Terminal No. 1) • Park position switch • Shift lock solenoid
(M47)	A/T device (Terminal No. 9) • Mode select switch
(M52)	Power socket (With A/T)
(M53)	Heated seat switch (Passenger side) (With A/T)
(M54)	Heated seat switch (Driver side) (With A/T)
(M69)	Shield wire (Inside key antenna (Dashboard)) (With Intelligent Key)
(M172)	Shield wire (Inside key antenna (Center console)) (With Intelligent Key)
(M75)	Intelligent Key unit (With Intelligent Key)
(M85)	Heated seat relay
(M92)	Snow mode switch (AWD models) • Snow indicator lamp
(M95)	Up-and-down unit (Display unit)
(M97)	Automatic drive positioner control unit (With automatic drive positioner) (Terminal No. 40)
(M97)	Automatic drive positioner control unit (With automatic drive positioner) (Terminal No. 48)
(M100)	ADP steering switch (With automatic drive positioner)
(M154)	Heated seat switch (Driver side) (With M/T)
(M155)	Heated seat switch (Passenger side) (With M/T)
(M282)	Hazard switch (With A/T)
(M292)	Power socket (With M/T)
(M308)	NATS antenna amp.
(B114)	Shield wire (Inside key antenna (Trunk room)) (With Intelligent Key)
(R4)	Vanity mirror lamp RH
(R6)	Sunroof motor assembly
(R7)	Auto anti-dazzling inside mirror • Homelink universal transceiver
(R9)	Vanity mirror lamp LH
(R52)	Map lamp
(R54)	Personal lamp LH
(R55)	Personal lamp RH
(D41)	Outside key antenna and front door request switch (Passenger side) (With Intelligent Key)

\*: This sub-harness is not shown in "HARNES LAYOUT".

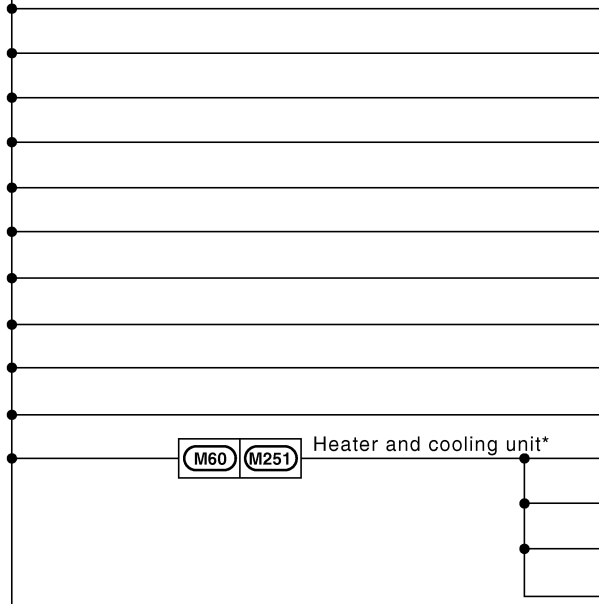
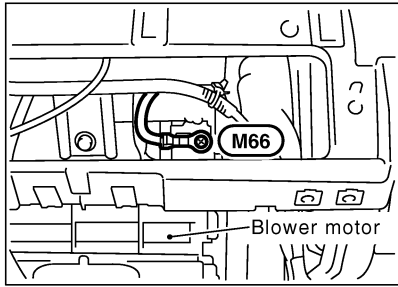
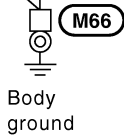
CKIM0593E

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CON-NECTOR NUMBER	CONNECT TO
M8	Data link connector (Terminal No. 5)
M31	Display and A/C auto amp. (Terminal No. 5)
M31	Display and A/C auto amp. (Terminal No. 24)
M35	Display unit (Terminal No. 22)
M35	Display unit (Terminal No. 24)
M57	NAVI control unit (Terminal No. 1)
M57	NAVI control unit (Terminal No. 21)
M62	Blower motor
M64	Glove box lamp
M68	Upper glove box lamp
M252	Mode door motor
M253	Air mix door motor (Passenger side)
M254	Air mix door motor (Driver side)
M255	Intake door motor

\*:This sub-harness is not shown in "HARNESS LAYOUT".



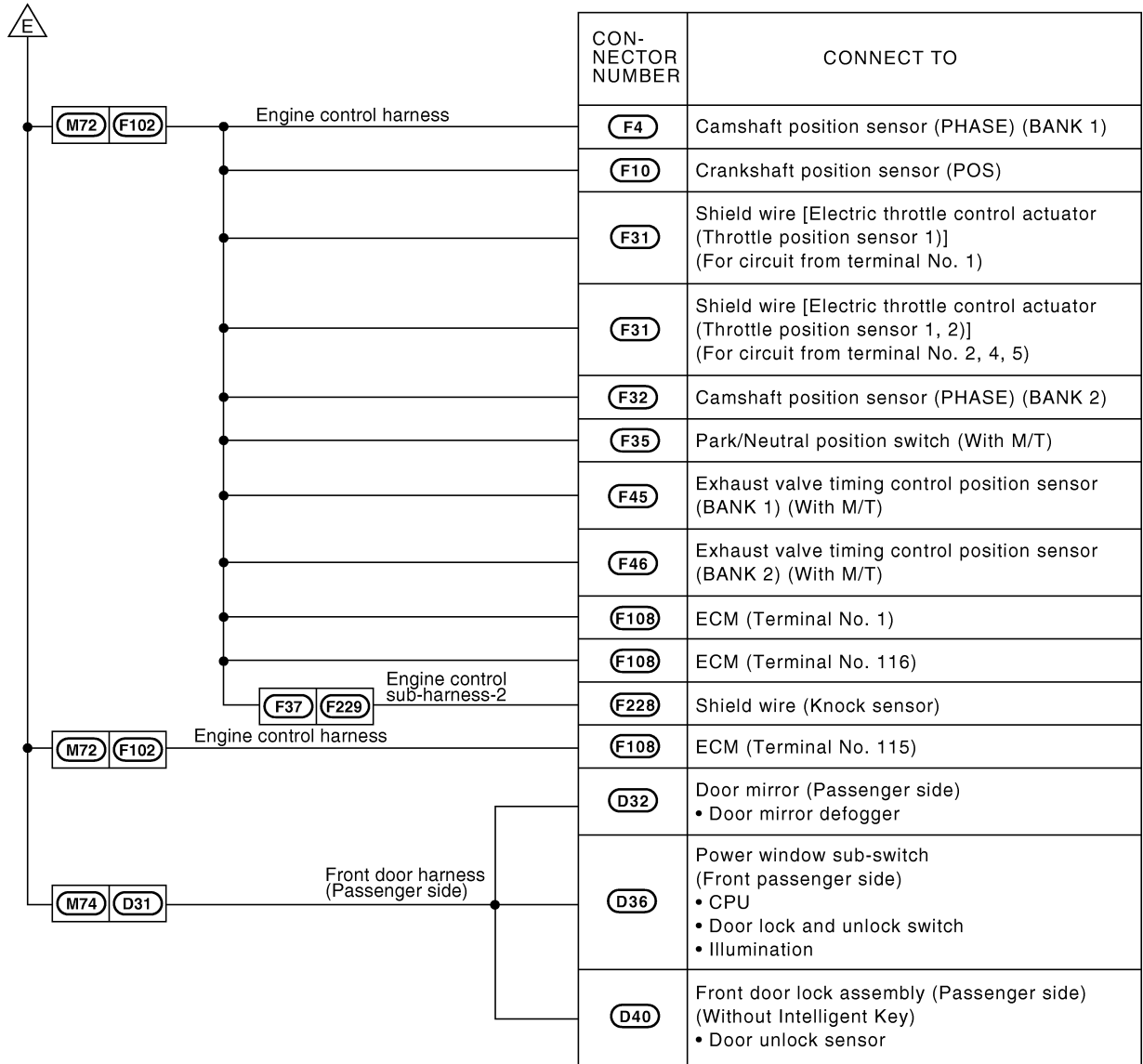
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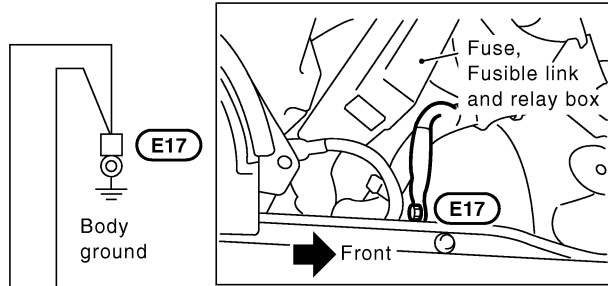


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# GROUND

## ENGINE ROOM HARNESS



CON-NECTOR NUMBER	CONNECT TO
E6	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 14) • Cooling fan relay-2
E8	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 38) • CPU • Ignition relay • Front wiper relay
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 50) • CPU
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 60) • CPU
E14	Daytime light relay-1
E16	Daytime light relay-2
E23	Hood switch
E24	Front combination lamp RH (Terminal No. 4) • Headlamp
E26	Daytime light control unit
E30	Washer level sensor
E41	Front combination lamp LH (Terminal No. 8) (For U.S.A.) • Fog lamp • Headlamp (High) • Turn signal • Parking

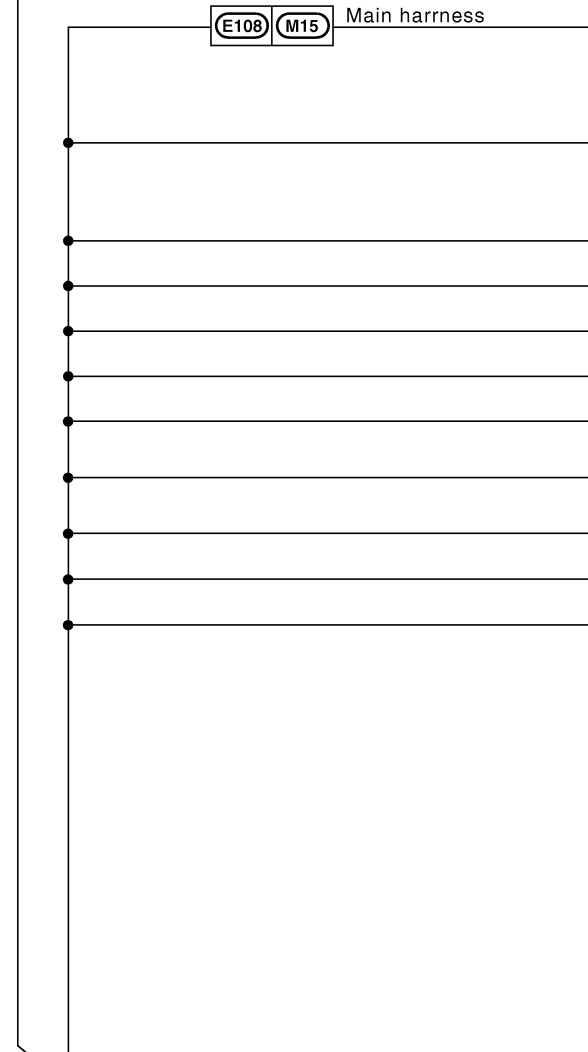


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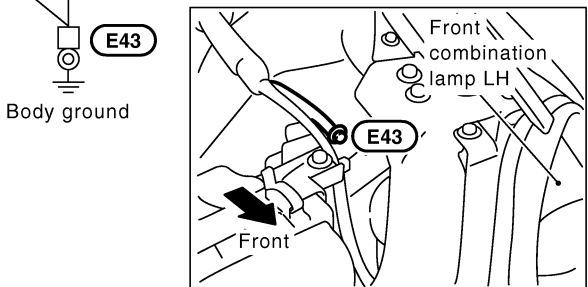
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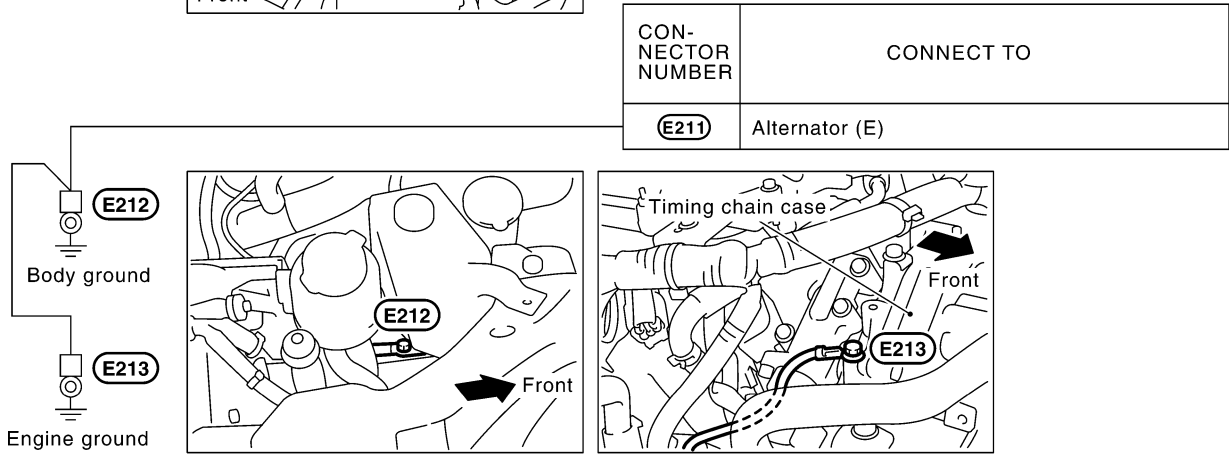
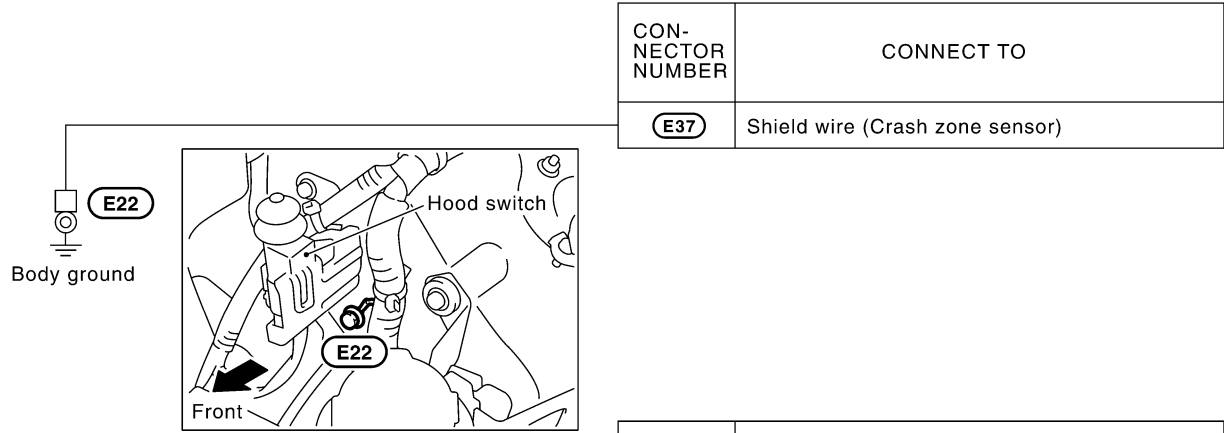
CON-NECTOR NUMBER	CONNECT TO
<b>(M31)</b>	Display and A/C auto amp. (Terminal No. 36) (For Canada)
<b>(E24)</b>	Front combination lamp RH (Terminal No. 8) <ul style="list-style-type: none"> <li>• Fog lamp</li> <li>• Headlamp (High)</li> <li>• Turn signal</li> <li>• Parking</li> </ul>
<b>(E28)</b>	Front side marker lamp RH
<b>(E33)</b>	Horn (Low)
<b>(E36)</b>	Horn (High)
<b>(E39)</b>	Cooling fan motor-1
<b>(E40)</b>	Front side marker lamp LH
<b>(E41)</b>	Front combination lamp LH (Terminal No. 4) <ul style="list-style-type: none"> <li>• Headlamp</li> </ul>
<b>(E44)</b>	Brake fluid level switch
<b>(E52)</b>	Front wiper motor
<b>(E53)</b>	Cooling fan motor-2



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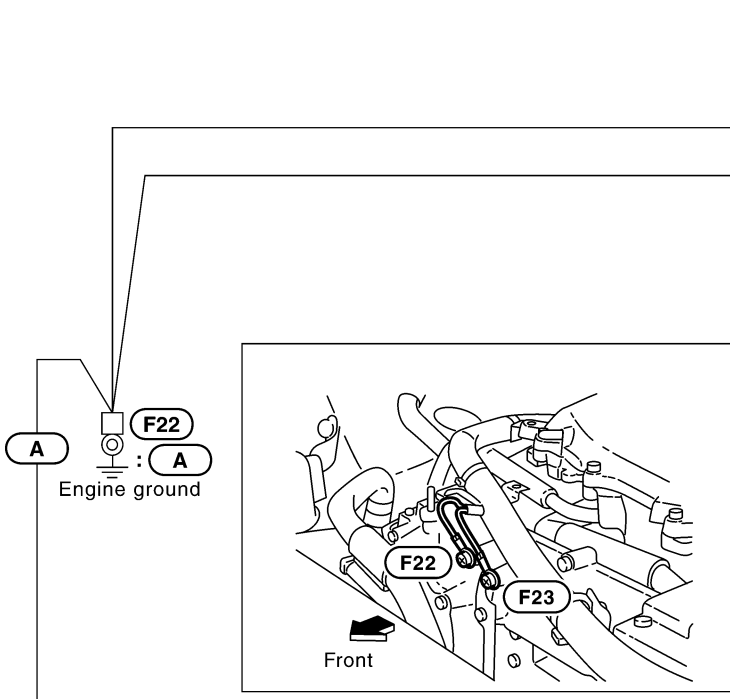


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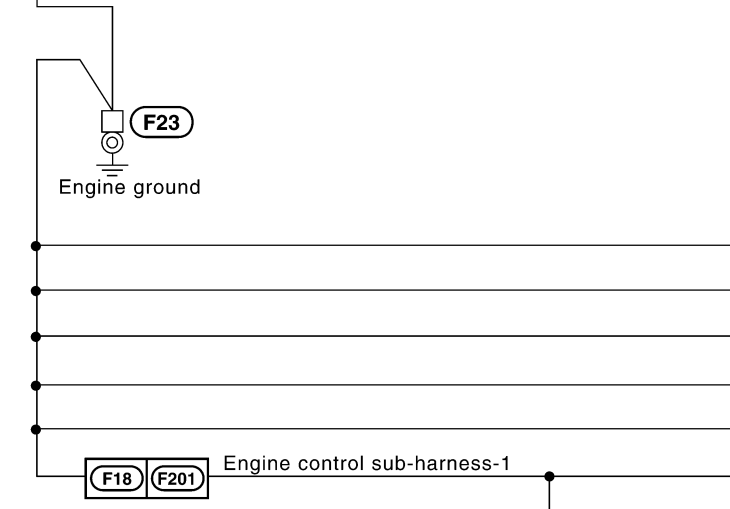
# GROUND

## ENGINE CONTROL HARNESS

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CON-NECTOR NUMBER	CONNECT TO
F42	A/T assembly (Terminal No. 5)
F42	A/T assembly (Terminal No. 10)



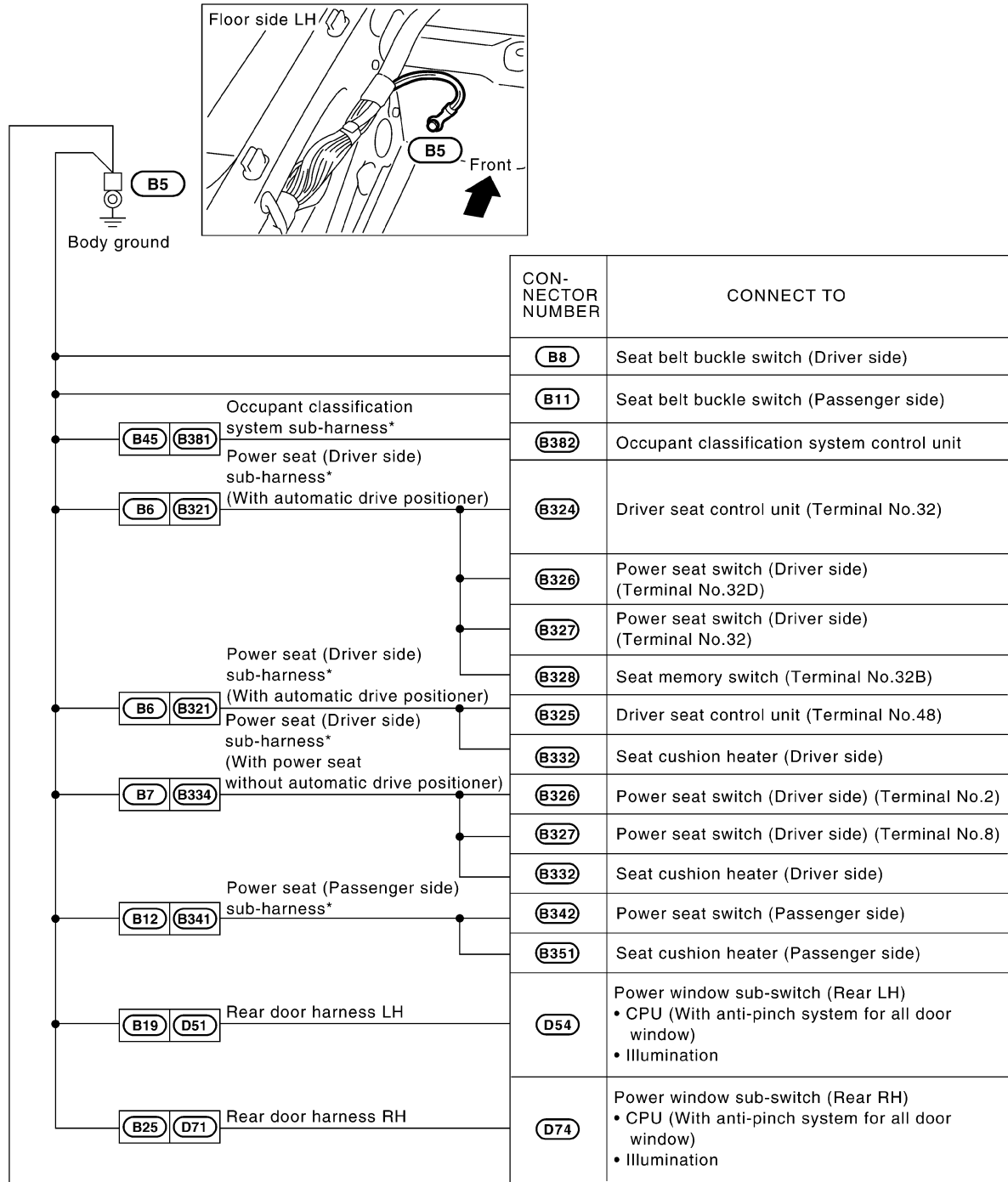
CON-NECTOR NUMBER	CONNECT TO
F15	Ignition coil No. 5 (With power transistor)
F27	Ignition coil No. 2 (With power transistor)
F28	Ignition coil No. 4 (With power transistor)
F29	Ignition coil No. 6 (With power transistor)
F38	Condenser
F202	Ignition coil No. 3 (With power transistor)
F203	Ignition coil No. 1 (With power transistor)

**A** : With A/T

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# GROUND

## BODY HARNESS



\*: This sub-harness is not shown in "HARNES LAYOUT".



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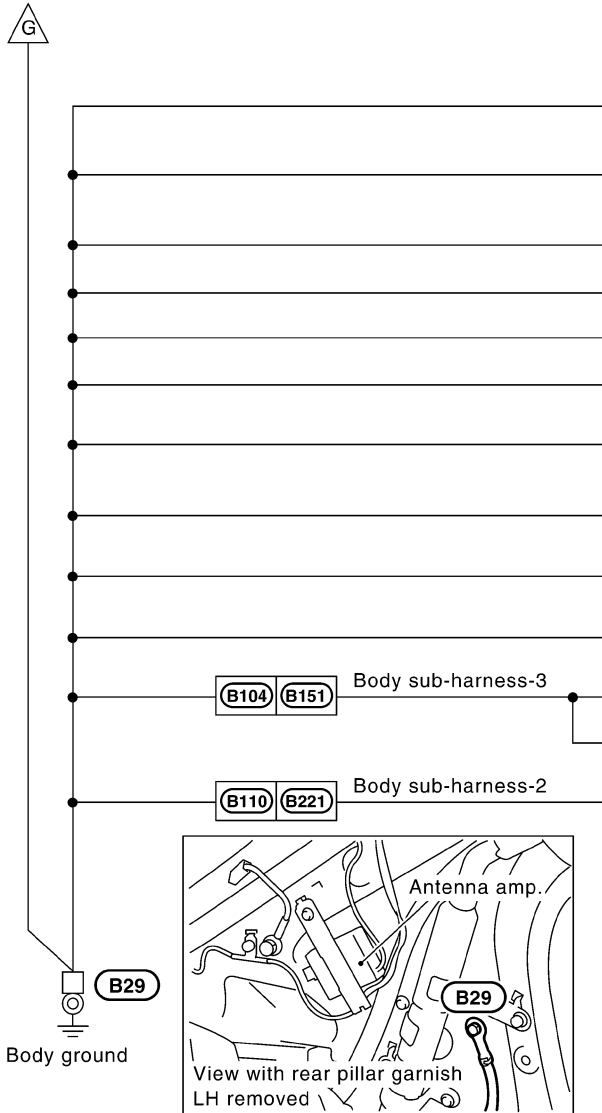
# GROUND

Up to Vehicle Identification Number JNKCV51E26M 516168

Up to Vehicle Identification Number JNKCV51F36M 612030

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CON-NECTOR NUMBER	CONNECT TO
B26	Condenser
B27	Fuel level sensor unit and fuel pump (Terminal No.3) • Fuel pump
B102	Back-up lamp LH
B105	Trunk room lamp switch
B106	Trunk lid opener actuator
B112	Back-up lamp RH
B114	Shield wire (Inside key antenna (Trunk room)) (With Intelligent Key)
B116	High-mounted stop lamp (On the rear parcel shelf)
B123	Bose speaker amp.
B130	Trunk opener request switch (With Intelligent Key)
B152	License plate lamp LH
B153	License plate lamp RH
B222	High-mounted stop lamp (In the rear air spoiler)

CON-NECTOR NUMBER	CONNECT TO
B15	Shield wire [LH side air bag (Satellite) sensor]

\*: This sub-harness is not shown in "HARNESS LAYOUT".

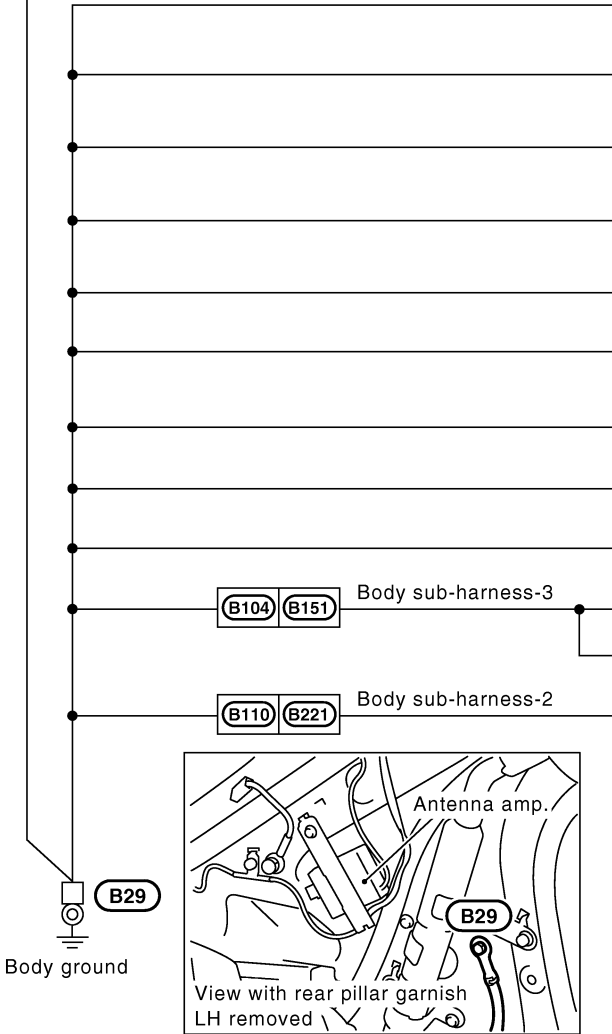
CKIM0426E

# GROUND

From Vehicle Identification Number JNKCV51E26M 516169

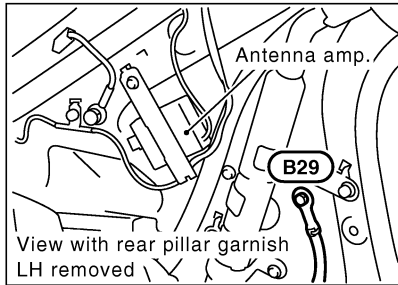
From Vehicle Identification Number JNKCV51F36M 612031

Preceding page

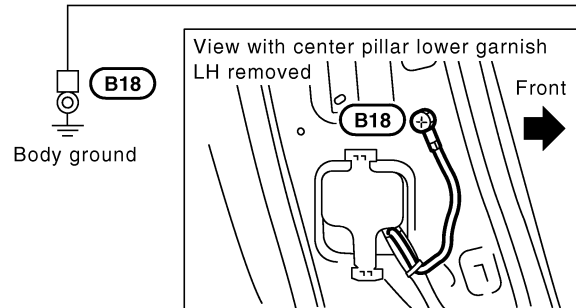


Body ground

CON-NECTOR NUMBER	CONNECT TO
B26	Condenser
B27	Fuel level sensor unit and fuel pump (Terminal No. 3) • Fuel pump
B102	Back-up lamp LH
B105	Trunk lid lock assembly • Trunk room lamp switch • Trunk lid opener actuator
B112	Back-up lamp RH
B114	Shield wire (Inside key antenna (Trunk room)) (With Intelligent Key)
B116	High-mounted stop lamp (On the rear parcel shelf)
B123	Bose speaker amp.
B130	Trunk opener request switch (With Intelligent Key)
B152	License plate lamp LH
B153	License plate lamp RH
B222	High-mounted stop lamp (In the rear air spoiler)



CON-NECTOR NUMBER	CONNECT TO
B15	Shield wire [LH side air bag (Satellite) sensor]



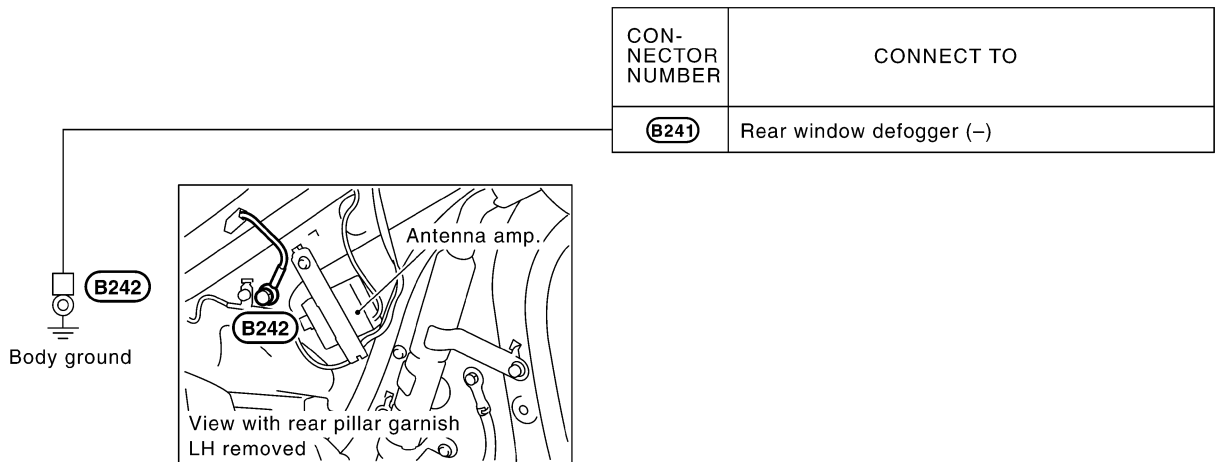
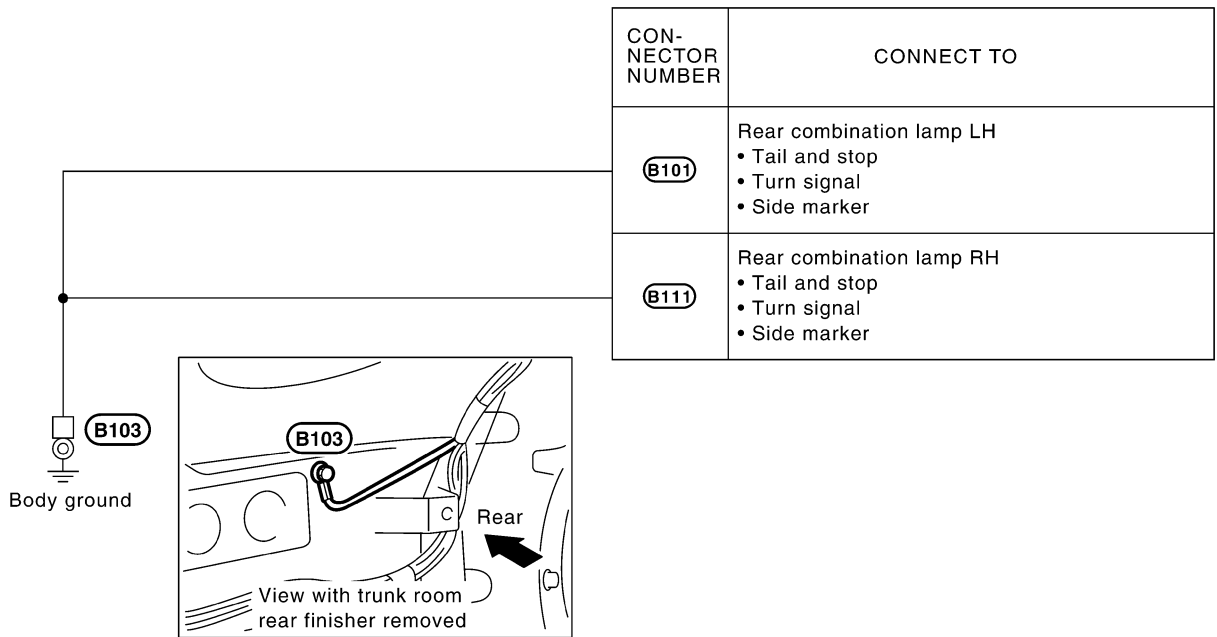
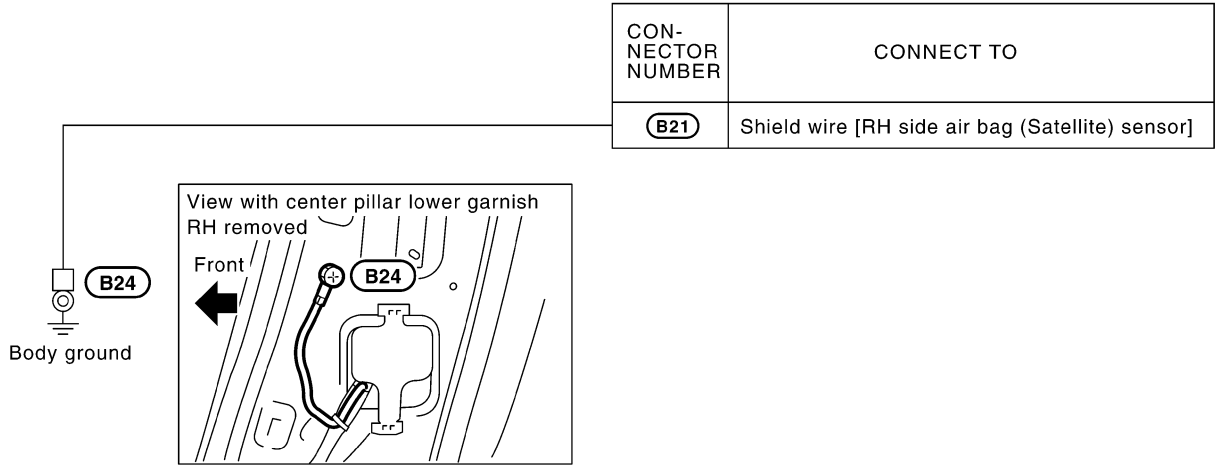
Body ground

\*: This sub-harness is not shown in "HARNES LAYOUT".

CKIB0425E



# GROUND



CKIT0340E

# HARNESS

## HARNESS

PFP:00011

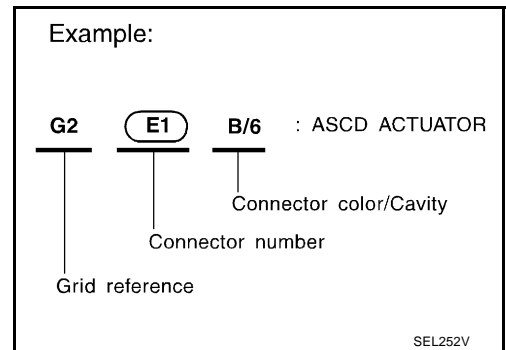
### Harness Layout

NKS00161

#### HOW TO READ HARNESS LAYOUT

The following Harness Layouts use a map style grid to help locate connectors on the figures:

- Main Harness
- Engine Room Harness (Engine Compartment)
- Engine Control Harness
- Body Harness (Passenger Compartment)



#### To Use the Grid Reference

1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the figure, find the crossing of the grid reference letter column and number row.
4. Find the connector number in the crossing zone.
5. Follow the line (if used) to the connector.

#### CONNECTOR SYMBOL

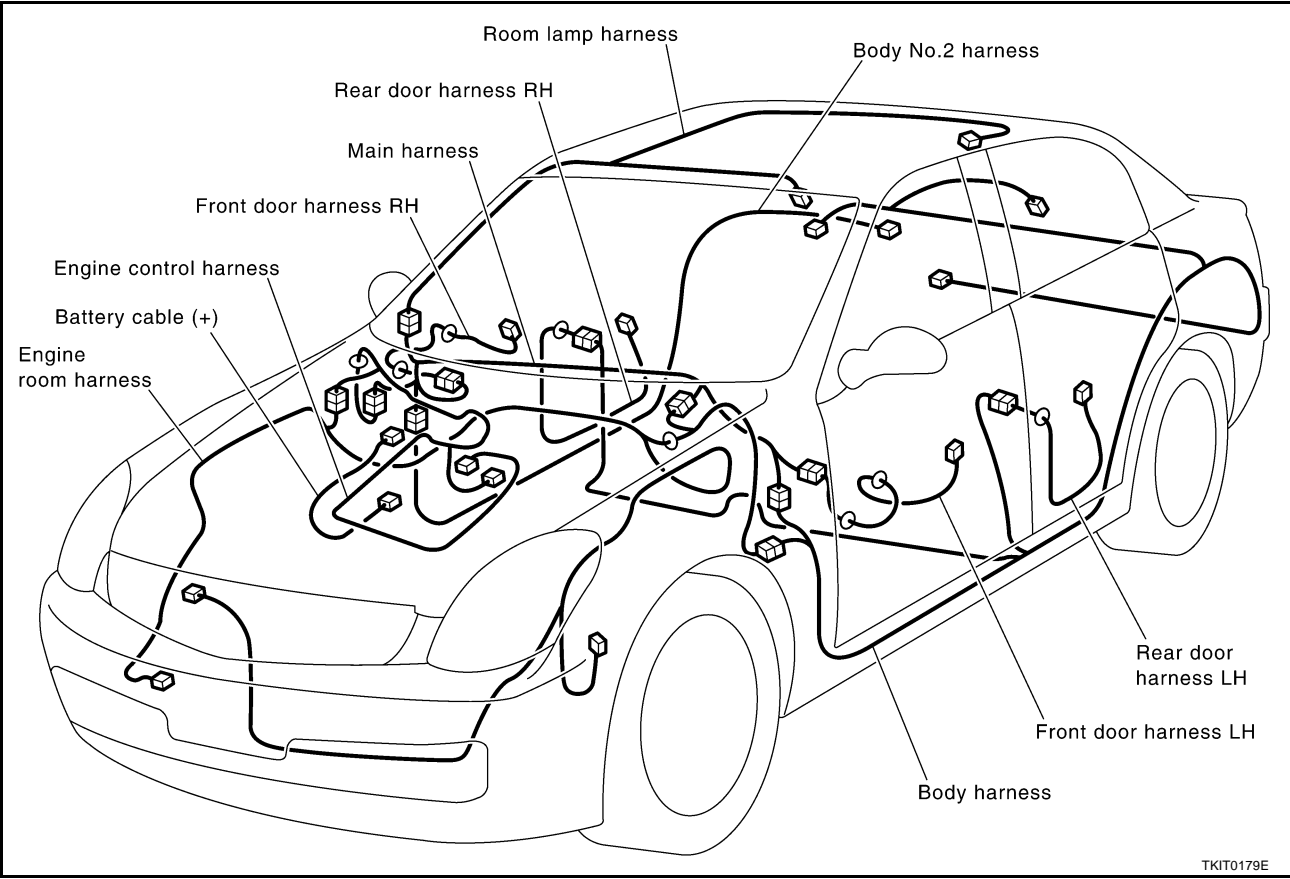
Main symbols of connector (in Harness Layout) are indicated in the below.

Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
<ul style="list-style-type: none"> <li>• Cavity: Less than 4</li> <li>• Relay connector</li> </ul>				
<ul style="list-style-type: none"> <li>• Cavity: From 5 to 8</li> </ul>				
<ul style="list-style-type: none"> <li>• Cavity: More than 9</li> </ul>				
<ul style="list-style-type: none"> <li>• Ground terminal etc.</li> </ul>	—			

CKIT0108E

# HARNESS

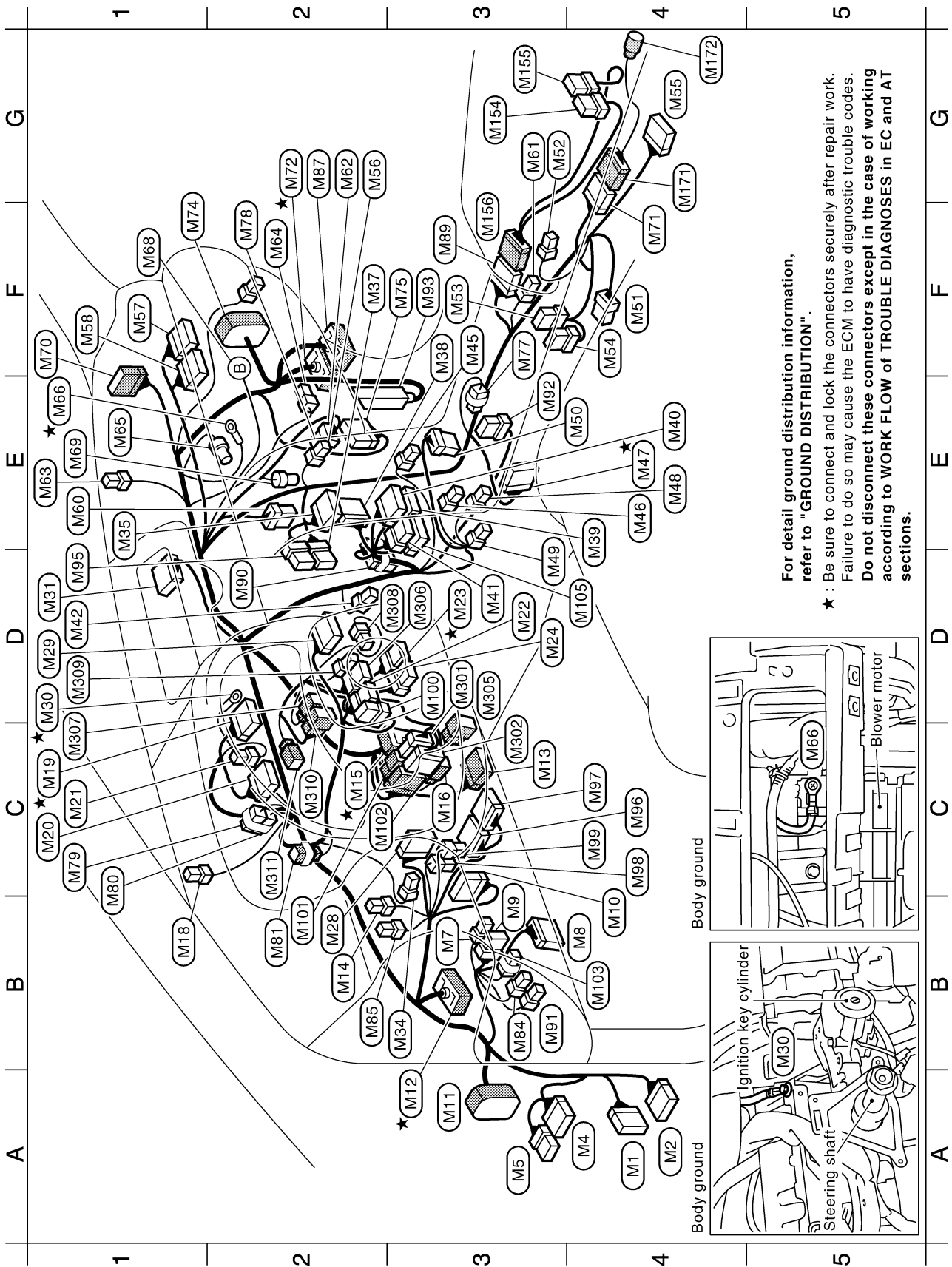
## OUTLINE



A  
B  
C  
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I  
J  
PG  
L  
M

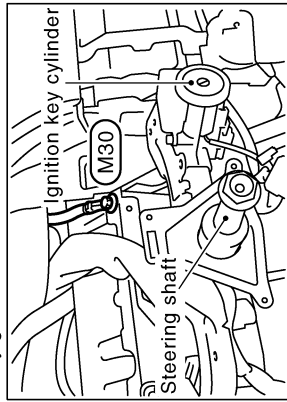
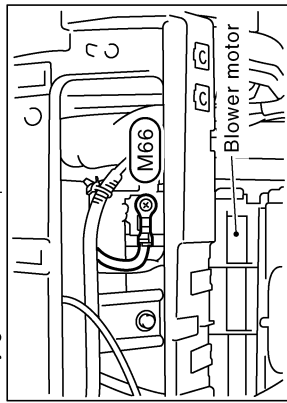
# HARNESS

## MAIN HARNESS



For detail ground distribution information, refer to "GROUND DISTRIBUTION".

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.



TKIM0519E

# HARNESSES

A4	(M1)	W/40 : BCM (Body control module)	D3	(M49)	W/3 : Cigarette lighter socket (Via sub-harness) (With M/T)	B2	(M81)	W/4 : Compass
A4	(M2)	B/15 : BCM (Body control module)	E4	(M50)	W/8 : Hazard switch and Cigarette lighter socket (Via sub-harness) (With A/T)	B3	(M84)	W/4 : Trunk lid opener switch
A4	(M4)	W/16 : Fuse block (J/B)	F4	(M51)	B/6 : Yaw rate / Side G sensor	B2	(M85)	L/4 : Heated seat relay
A3	(M5)	W/8 : Fuse block (J/B)	G3	(M52)	B/2 : Power socket (With A/T)	G2	(M87)	SMJ : To (B401) (For U.S.A.)
B3	(M7)	W/3 : Illumination control switch	F3	(M53)	BR/6 : Heated seat switch (Passenger side)	F3	(M89)	W/12 : To (W156) (With M/T)
B4	(M8)	W/16 : Data link connector	F4	(M54)	W/6 : Heated seat switch (Driver side)	D2	(M90)	W/12 : Option connector for audio unit (Without satellite radio system) (For U.S.A.)
B3	(M9)	GY/6 : VDC off switch	F4	(M55)	Y/28 : Air bag diagnosis sensor unit	B3	(M91)	W/2 : Tire pressure warning check connector
B4	(M10)	W/16 : AWD control unit (AWD models)	G2	(M56)	W/2 : Trunk lid opener cancel switch	E3	(M92)	W/8 : Snow mode switch (AWD models)
A3	(M11)	SMJ : To (D1)	F1	(M57)	W/40 : NAVI control unit (With navigation system)	F3	(M93)	SMJ : VDC/TCS/ABS control unit
A3	(M12)	SMJ : To (B1)	F1	(M58)	W/32 : NAVI control unit (With navigation system)	D1	(M95)	GY/6 : Up-and-down unit (Display unit) (With navigation system)
C3	(M13)	BR/16 : To (E105)	G4	(M55)	Y/28 : Air bag diagnosis sensor unit	C4	(M96)	W/32 : Automatic drive positioner control unit
B2	(M14)	W/2 : Circuit breaker (With automatic drive positioner)	G2	(M56)	W/2 : Trunk lid opener cancel switch	C4	(M97)	W/16 : Automatic drive positioner control unit
C2	(M15)	SMJ : To (E108)	F1	(M57)	W/40 : NAVI control unit (With navigation system)	C4	(M98)	W/4 : Tilt motor and telescopic motor (With automatic drive positioner)
C3	(M16)	Y/4 : To (E109)	E1	(M60)	W/6 : Heater and cooling unit (Via sub-harness)	C4	(M99)	W/4 : Tilt sensor and telescopic sensor (With automatic drive positioner)
B1	(M18)	B/2 : Sunload sensor	G3	(M61)	W/2 : Power socket (Via sub-harness) (With M/T)	D3	(M100)	GY/6 : ADP steering switch (With automatic drive positioner)
C1	(M19)	W/40 : Combination meter	G2	(M62)	W/6 : Blower motor	B2	(M101)	W/8 : To (M301) (Without Intelligent Key)
C1	(M20)	W/12 : Combination meter	E1	(M63)	W/3 : Optical sensor	C2	(M102)	W/12 : To (M302) (With Intelligent Key)
C1	(M21)	W/3 : Intelligent Key warning buzzer (Instrument panel) (With Intelligent Key)	F2	(M64)	W/2 : Glove box lamp	B4	(M103)	-/2 : Resistor
D3	(M22)	W/8 : Steering angle sensor	E1	(M65)	Y/4 : Front passenger air bag module	D4	(M105)	W/12 : Audio unit (With satellite radio system)
D3	(M23)	GY/8 : Combination switch (Spiral cable)	E1	(M66)	— : Body ground			
D3	(M24)	Y/6 : Combination switch (Spiral cable)	F1	(M68)	Bulb : Upper glove box lamp (Without navigation system)			
B2	(M28)	W/10 : Door mirror remote control switch	E1	(M69)	GY/2 : Inside key antenna (Dashboard) (With Intelligent Key)			
D1	(M29)	W/16 : Combination switch	F1	(M70)	W/18 : To (R2)			
D1	(M30)	— : Body ground	F4	(M71)	W/32 : To (M171) (With Intelligent Key)			
D1	(M31)	W/40 : Display and A/C auto amp.	G2	(M72)	SMJ : To (F102)			
B3	(M34)	W/2 : Security indicator lamp	F1	(M74)	SMJ : To (D31)			
E1	(M35)	W/24 : Display unit (With navigation system)	F3	(M75)	W/40 : Intelligent Key unit (With Intelligent Key)			
F2	(M37)	W/8 : NAVI switch (With navigation system)	F3	(M77)	W/2 : Diode (With A/T)			
F3	(M38)	W/12 : A/C and audio controller	F2	(M78)	W/4 : Remote keyless entry receiver			
E4	(M39)	W/16 : Audio unit	C1	(M79)	W/2 : Diode			
E4	(M40)	W/10 : Audio unit	C1	(M80)	W/2 : Diode			
D3	(M41)	W/6 : Audio unit						
D1	(M42)	W/2 : In-vehicle sensor						
F3	(M45)	BR/2 : Antenna amp. (Via sub-harness)						
E4	(M46)	W/4 : Hazard switch (With M/T)						
E4	(M47)	W/10 : A/T device (With A/T)						
E4	(M48)	BR/2 : A/T illumination (With A/T)						

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

TKIM0520E

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

PG

## Switch sub-harness (With M/T)

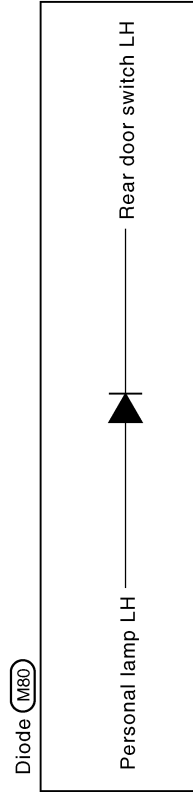
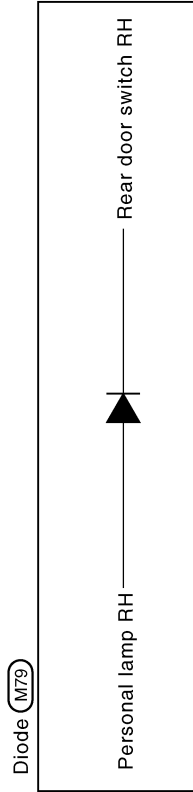
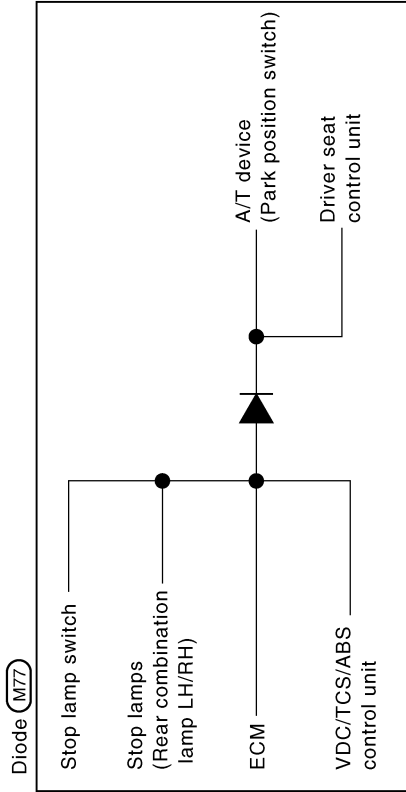
- G3 (M154) W/6 : Heated seat switch (Driver side)  
 G3 (M155) BR/6 : Heated seat switch (Passenger side)  
 F3 (M156) W/12 : To (M89)

## Console sub-harness (With Intelligent Key)

- G4 (M171) W/32 : To (M71)  
 G4 (M172) GY/2 : Inside key antenna (Center console)

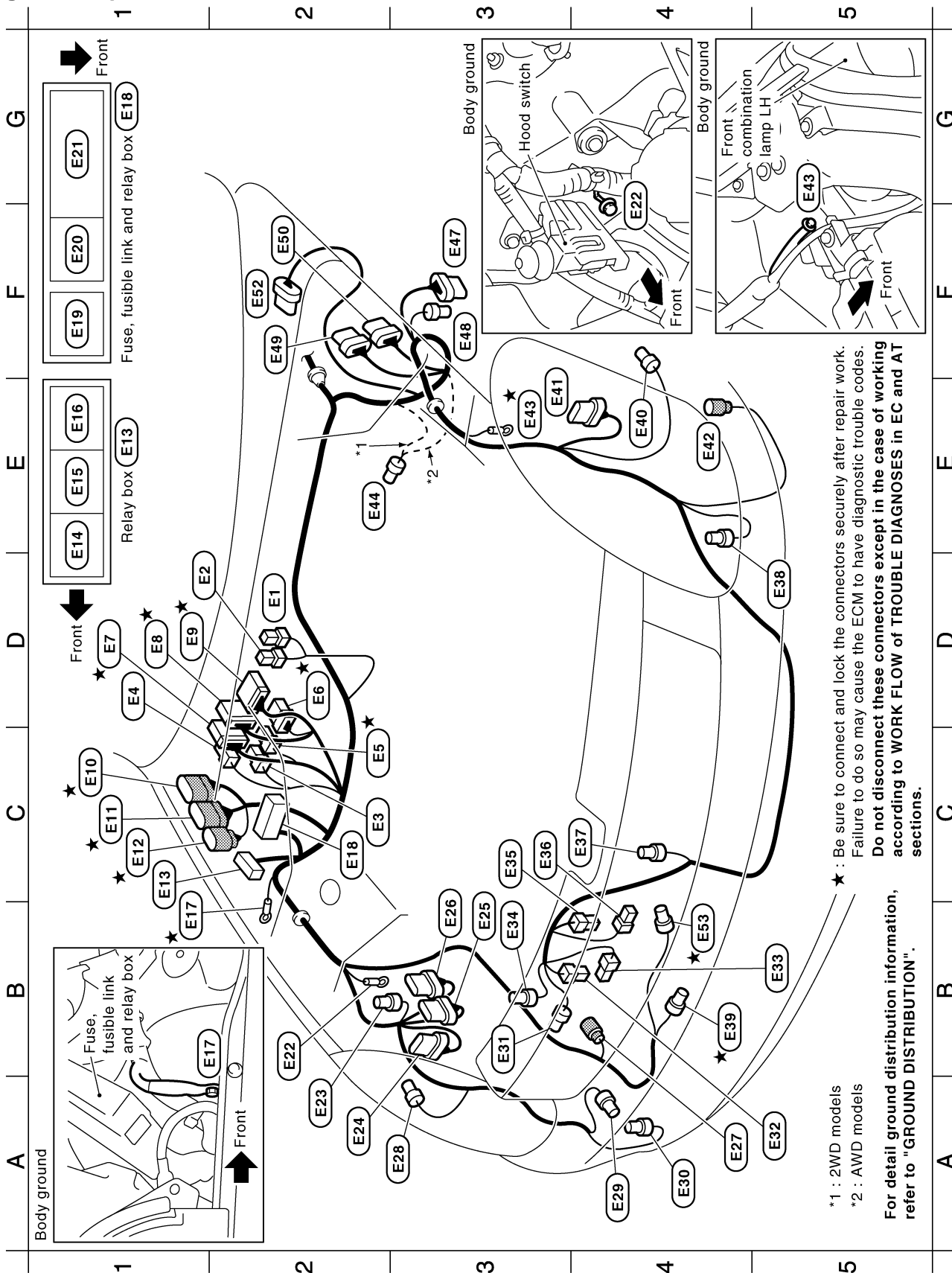
## Steering column sub-harness

- D3 (M301) W/8 : To (M101) (Without Intelligent Key)  
 C3 (M302) W/12 : To (M102) (With Intelligent Key)  
 D3 (M305) W/6 : To (E112)  
 D3 (M306) W/6 : Ignition switch  
 C1 (M307) BR/2 : Key switch (Without Intelligent Key)  
 D3 (M308) W/4 : NATS antenna amp.  
 D1 (M309) W/2 : Ignition keyhole illumination  
 C2 (M310) GY/6 : Key switch and ignition knob switch (With Intelligent Key)  
 C2 (M311) W/4 : Steering lock unit (With Intelligent Key)



# HARNESS

## ENGINE ROOM HARNESS Engine Compartment



TKIM0308E

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z  
PG

# HARNESSES

D2	(E1)	B/2	: Fusible link holder	B4	★ (E39)	GY/4	: Cooling fan motor-1
D1	(E2)	GY/2	: Fusible link holder	E4	(E40)	DGY/2	: Front side marker lamp LH
C2	(E3)	B/2	: IPDM E/R (Intelligent power distribution module engine room)	E3	(E41)	B/8	: Front combination lamp LH
D1	(E4)	W/4	: IPDM E/R (Intelligent power distribution module engine room)	E4	(E42)	B/2	: Front wheel sensor LH
C2	★ (E5)	B/4	: IPDM E/R (Intelligent power distribution module engine room)	E3	★ (E43)	—	: Body ground
D2	★ (E6)	W/6	: IPDM E/R (Intelligent power distribution module engine room)	E2	(E44)	GY/2	: Brake fluid level switch
D1	★ (E7)	GY/16	: IPDM E/R (Intelligent power distribution module engine room)	F3	(E47)	B/8	: VDC relay box
D1	★ (E8)	W/12	: IPDM E/R (Intelligent power distribution module engine room)	F3	(E48)	B/2	: VDC relay box
D1	★ (E9)	W/16	: IPDM E/R (Intelligent power distribution module engine room)	F2	(E49)	GY/8	: VDC actuator
C1	★ (E10)	GY/9	: To (F1)	F2	(E50)	B/8	: VDC actuator
C1	★ (E11)	GY/10	: To (F2)	F2	(E52)	GY/5	: Front wiper motor
C1	★ (E12)	B/8	: To (F3)	B4	★ (E53)	GY/4	: Cooling fan motor-2
C1	(E13)	—	: Relay box				
E1	(E14)	L/4	: Daytime light relay-1 (For Canada)				
E1	(E15)	B/5	: Passenger side select unlock relay (With Intelligent Key)				
E1	(E16)	L/4	: Daytime light relay-2 (For Canada)				
B1	★ (E17)	—	: Body ground				
C2	(E18)	—	: Fuse, fusible link and relay box				
F1	(E19)	L/4	: Back-up lamp relay (With A/T)				
F1	(E20)	W/3	: Horn relay				
G1	(E21)	—	: Fuse and fusible link block				
B2	(E22)	—	: Body ground				
A2	(E23)	GY/2	: Hood switch				
A2	(E24)	B/8	: Front combination lamp RH				
B3	(E25)	GY/6	: Daytime light control unit (For Canada)				
B3	(E26)	GY/8	: Daytime light control unit (For Canada)				
A4	(E27)	GY/2	: Front wheel sensor RH				
A3	(E28)	DGY/2	: Front side marker lamp RH				
A4	(E29)	GY/2	: Front washer motor				
A4	(E30)	BR/2	: Washer level sensor				
B3	(E31)	B/3	: Refrigerant pressure sensor				
A5	(E32)	B/1	: Horn (Low)				
B5	(E33)	B/1	: Horn (Low)				
B3	(E34)	B/2	: Ambient sensor				
C3	(E35)	B/1	: Horn (High)				
C3	(E36)	B/1	: Horn (High)				
C4	(E37)	Y/2	: Crash zone sensor				
D5	(E38)	DGY/3	: Intelligent Key warning buzzer (Engine room) (With Intelligent Key)				

★ : Be sure to connect and lock the connectors securely after repair work.  
Failure to do so may cause the ECM to have diagnostic trouble codes.  
**Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

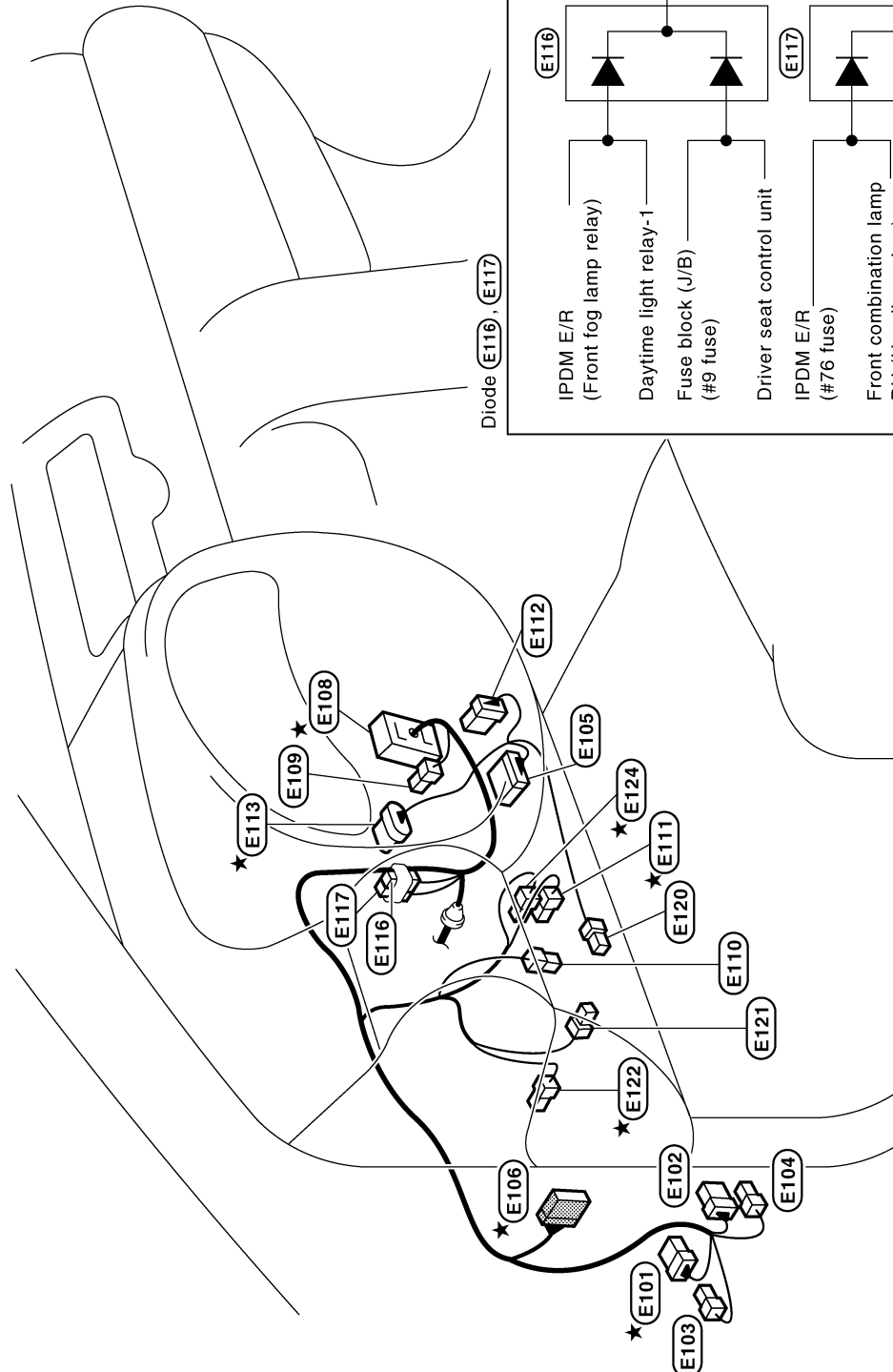
TKIM0309E



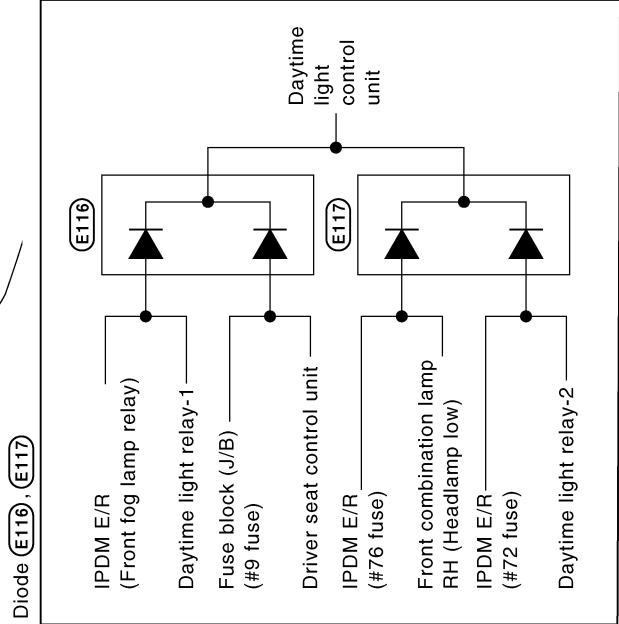
# HARNESS

## Passenger Compartment

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



- ★ E101 : Fuse block (J/B)
- E102 : Fuse block (J/B)
- E103 : Fuse block (J/B)
- E104 : Fuse block (J/B)
- E105 : BR/16 : To M13
- ★ E106 : W/18 : To B2
- ★ E108 : SMJ : To M15
- E109 : Y/4 : To M16
- E110 : W/1 : Parking brake switch (With A/T)
- ★ E111 : BR/2 : ASCD brake switch
- ★ E112 : W/8 : Fuse block (J/B)
- ★ E113 : W/6 : To M305
- E116 : GY/6 : Accelerator pedal position sensor
- E119 : -/3 : Diode (For Canada)
- E117 : -/3 : Diode (For Canada)
- E120 : W/2 : To B35
- E121 : L/2 : Clutch interlock switch (With M/T)
- ★ E122 : L/2 : ASCD clutch switch (With M/T)
- ★ E124 : W/4 : Stop lamp switch

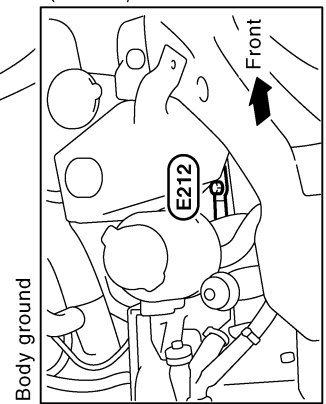
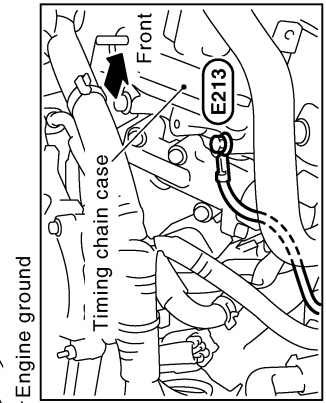
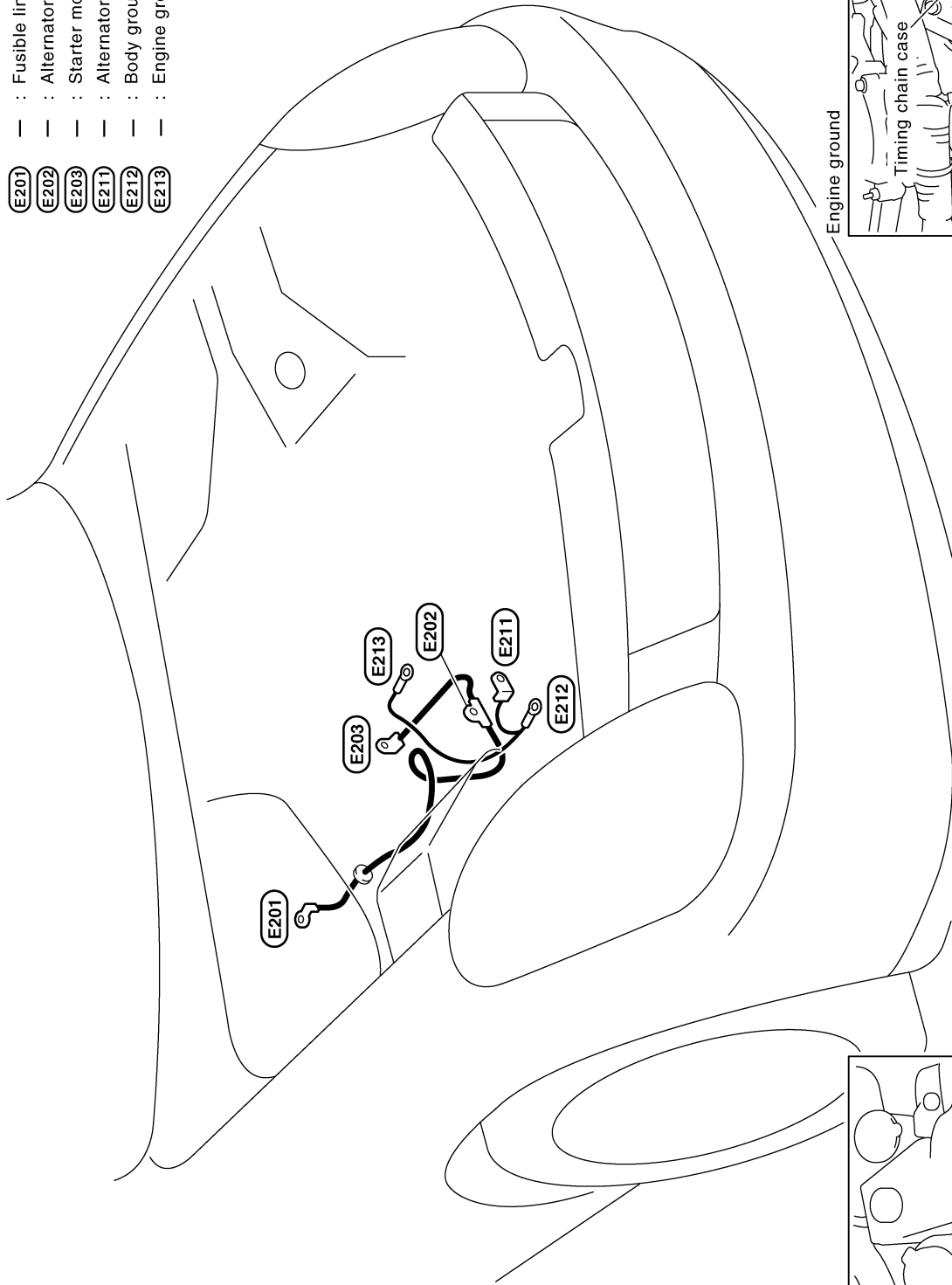


★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

# HARNESS

## Battery Cable (2WD)

- (E201)** : Fusible link holder
- (E202)** : Alternator (B)
- (E203)** : Starter motor
- (E211)** : Alternator (E)
- (E212)** : Body ground
- (E213)** : Engine ground



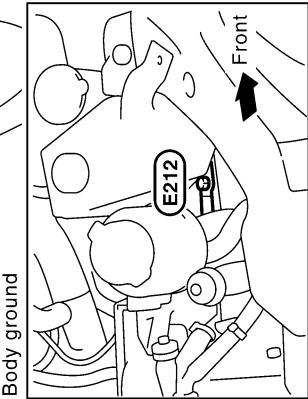
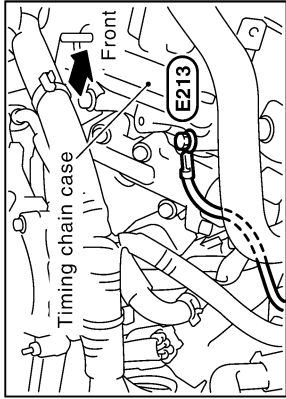
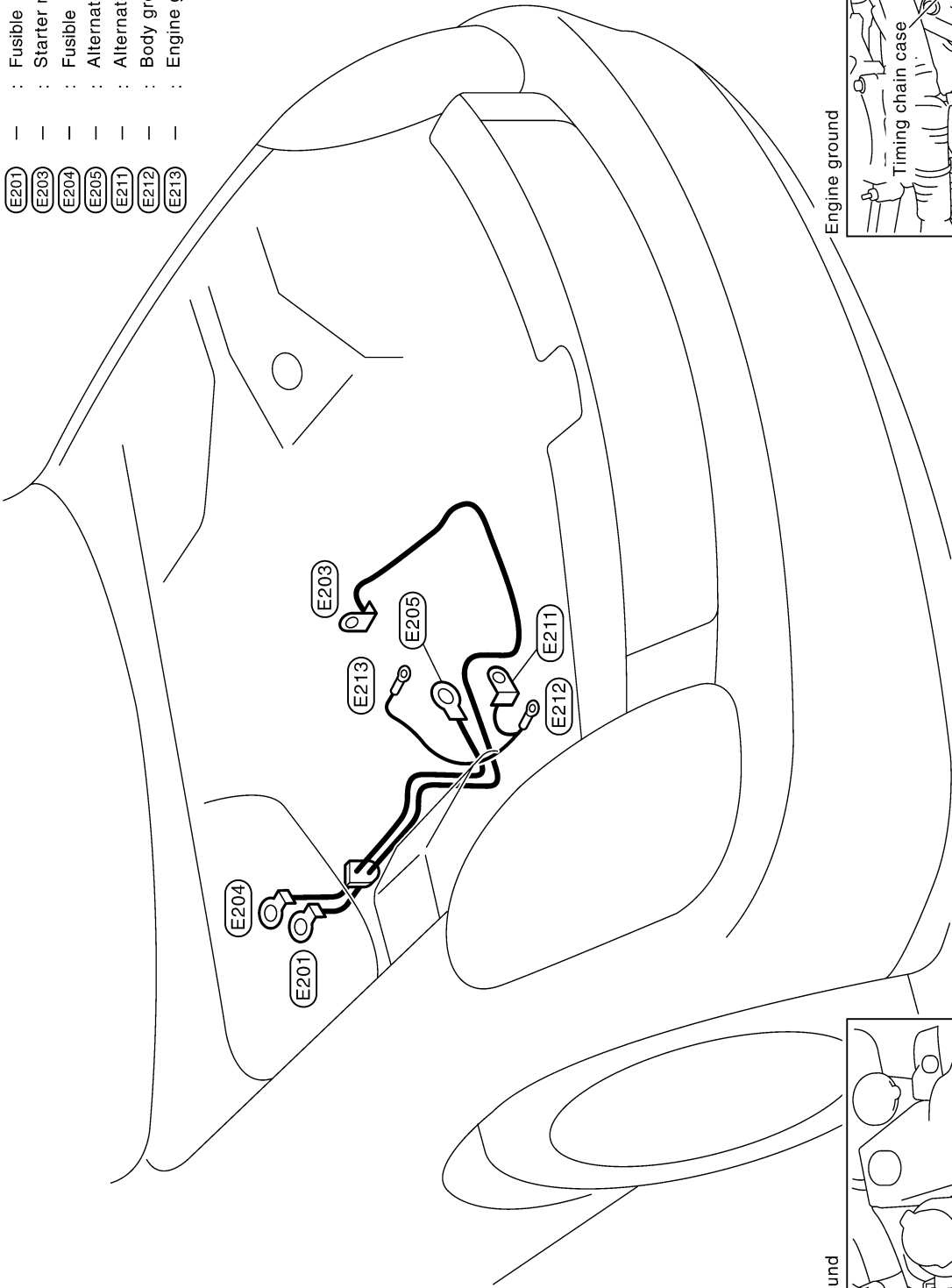
For detail ground distribution information, refer to "GROUND DISTRIBUTION".

TKIT0031E

# HARNESS

## Battery Cable (AWD)

- (E201) : Fusible link holder
- (E203) : Starter motor
- (E204) : Fusible link holder
- (E205) : Alternator (B)
- (E211) : Alternator (E)
- (E212) : Body ground
- (E213) : Engine ground

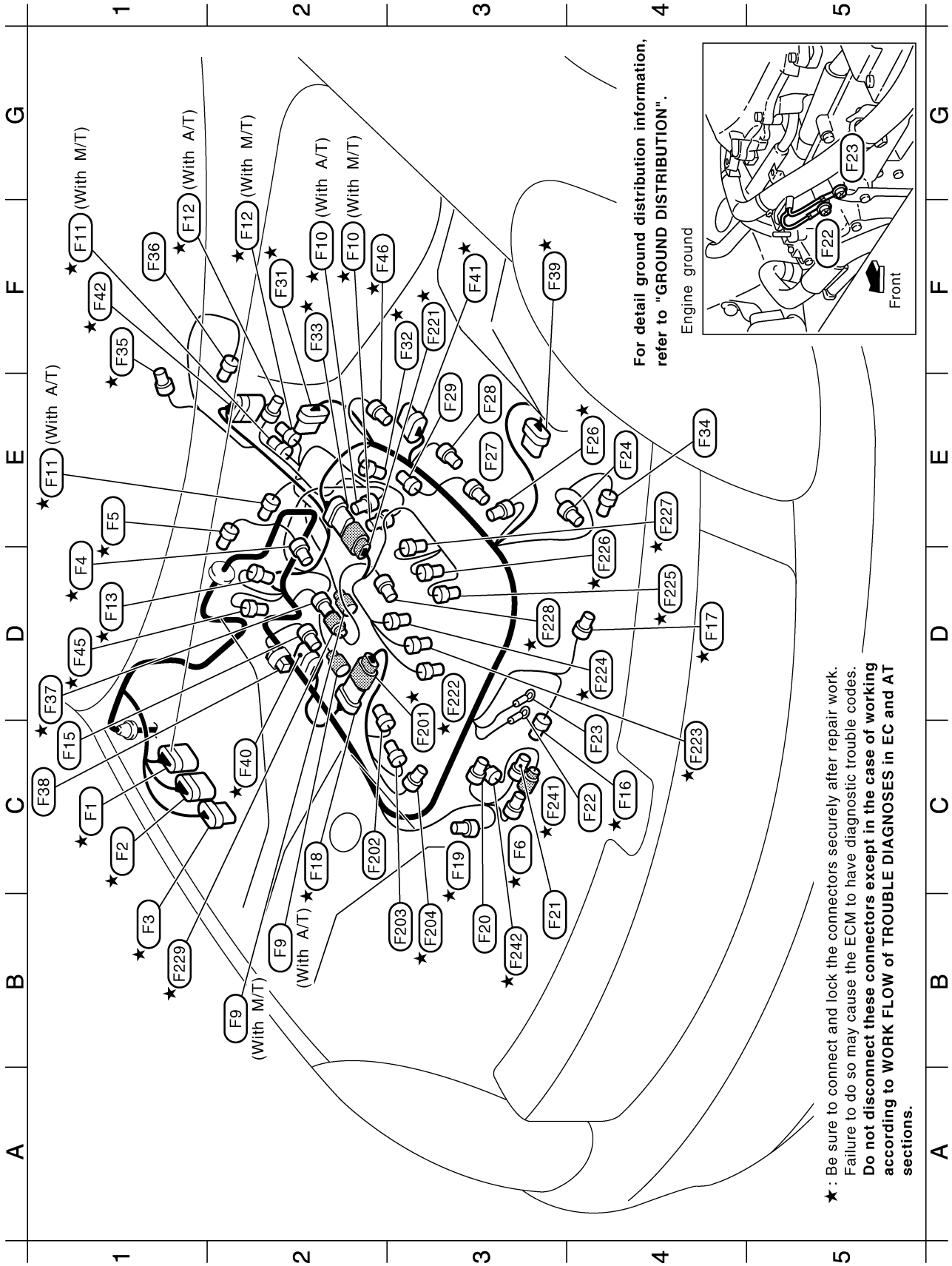


For detail ground distribution information, refer to "GROUND DISTRIBUTION".

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

# HARNESS

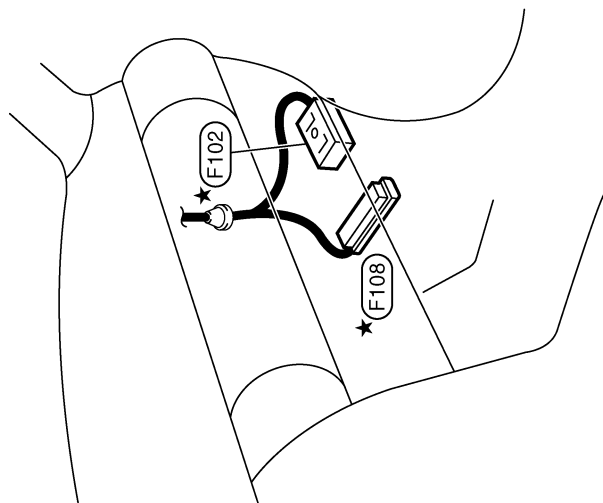
## ENGINE CONTROL HARNESS (2WD)



★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

TKIM0522E

## Passenger compartment



C1	★	(F1)	GY/9	:	To	(E10)
C1	★	(F2)	GY/10	:	To	(E11)
B1	★	(F3)	B/8	:	To	(E12)
D1	★	(F4)	G/3	:	Camshaft position sensor (PHASE) (Bank 1)	
E1	★	(F5)	LG/Y/2	:	EVAP canister purge volume control solenoid valve	
C3	★	(F6)	BR/2	:	To (F241) (With M/T)	
B2	★	(F9)	GY/1	:	Starter motor	
F2	★	(F10)	B/3	:	Crankshaft position sensor (POS)	
E1,F1	★	(F11)	B/4	:	Heated oxygen sensor 2 (Bank 1)	
F1,F2	★	(F12)	GY/4	:	Heated oxygen sensor 2 (Bank 2)	
D1	★	(F13)	GY/2	:	Engine coolant temperature sensor	
C1	★	(F15)	GY/3	:	Ignition coil No. 5	
C4	★	(F16)	G/4	:	(With power transistor)	
D4	★	(F17)	L/4	:	Exhaust valve timing control magnet retarder (Bank 1) (With M/T)	
C2	★	(F18)	B/6	:	To (F201)	
C3	★	(F19)	B/3	:	Power steering pressure sensor	
B3	★	(F20)	GY/2	:	Alternator (S, L)	
B3	★	(F21)	GY/1	:	Oil pressure switch	
C4	★	(F22)	—	:	Engine ground (With A/T)	
C4	★	(F23)	—	:	Engine ground	
E4	★	(F24)	B/1	:	Compressor	
E4	★	(F26)	LG/Y/2	:	Intake valve timing control solenoid valve (Bank 2)	
E3	★	(F27)	GY/3	:	Ignition coil No. 2	
E3	★	(F28)	GY/3	:	(With power transistor)	
E3	★	(F29)	GY/3	:	Ignition coil No. 4	
E3	★	(F29)	GY/3	:	(With power transistor)	
E3	★	(F29)	GY/3	:	Ignition coil No. 6	
E3	★	(F29)	GY/3	:	(With power transistor)	
F2	★	(F31)	DGY/6	:	Electric throttle control actuator	
F3	★	(F32)	B/3	:	Camshaft position sensor (PHASE) (Bank 2)	
F2	★	(F33)	GY/8	:	To (F221)	
E4	★	(F34)	B/2	:	Compressor	
F1	★	(F35)	B/2	:	Park/Neutral position switch (With M/T)	
F1	★	(F36)	B/2	:	Back-up lamp switch (With M/T)	

D1	★	(F37)	B/2	:	To (F229)
C1	★	(F38)	W/2	:	Condenser
F3	★	(F39)	B/6	:	Mass air flow sensor
C2	★	(F40)	B/6	:	Air fuel ratio (A/F) sensor 1 (Bank 1)
F3	★	(F41)	B/6	:	Air fuel ratio (A/F) sensor 1 (Bank 2)
F1	★	(F42)	DGY/10	:	A/T assembly (With A/T)
D1	★	(F45)	B/3	:	Exhaust valve timing control position sensor (Bank 1) (With M/T)
F2	★	(F46)	G/3	:	Exhaust valve timing control position sensor (Bank 2) (With M/T)

### Engine control sub-harness-1

C3	★	(F201)	L/6	:	To (F18)
C2	★	(F202)	GY/3	:	Ignition coil No. 3 (With power transistor)
B3	★	(F203)	GY/3	:	Ignition coil No. 1 (With power transistor)
B3	★	(F204)	G/2	:	Intake valve timing control solenoid valve (Bank 1)

### Engine control sub-harness-2

F3	★	(F221)	G/8	:	To (F33)
D3	★	(F222)	GY/2	:	Fuel injector No. 1
C4	★	(F223)	GY/2	:	Fuel injector No. 3
D4	★	(F224)	GY/2	:	Fuel injector No. 5
D4	★	(F225)	GY/2	:	Fuel injector No. 2
D4	★	(F226)	GY/2	:	Fuel injector No. 4
E4	★	(F227)	GY/2	:	Fuel injector No. 6
D3	★	(F228)	L/2	:	Knock sensor
B1	★	(F229)	SB/2	:	To (F37)

### Engine control sub-harness-3 (With M/T)

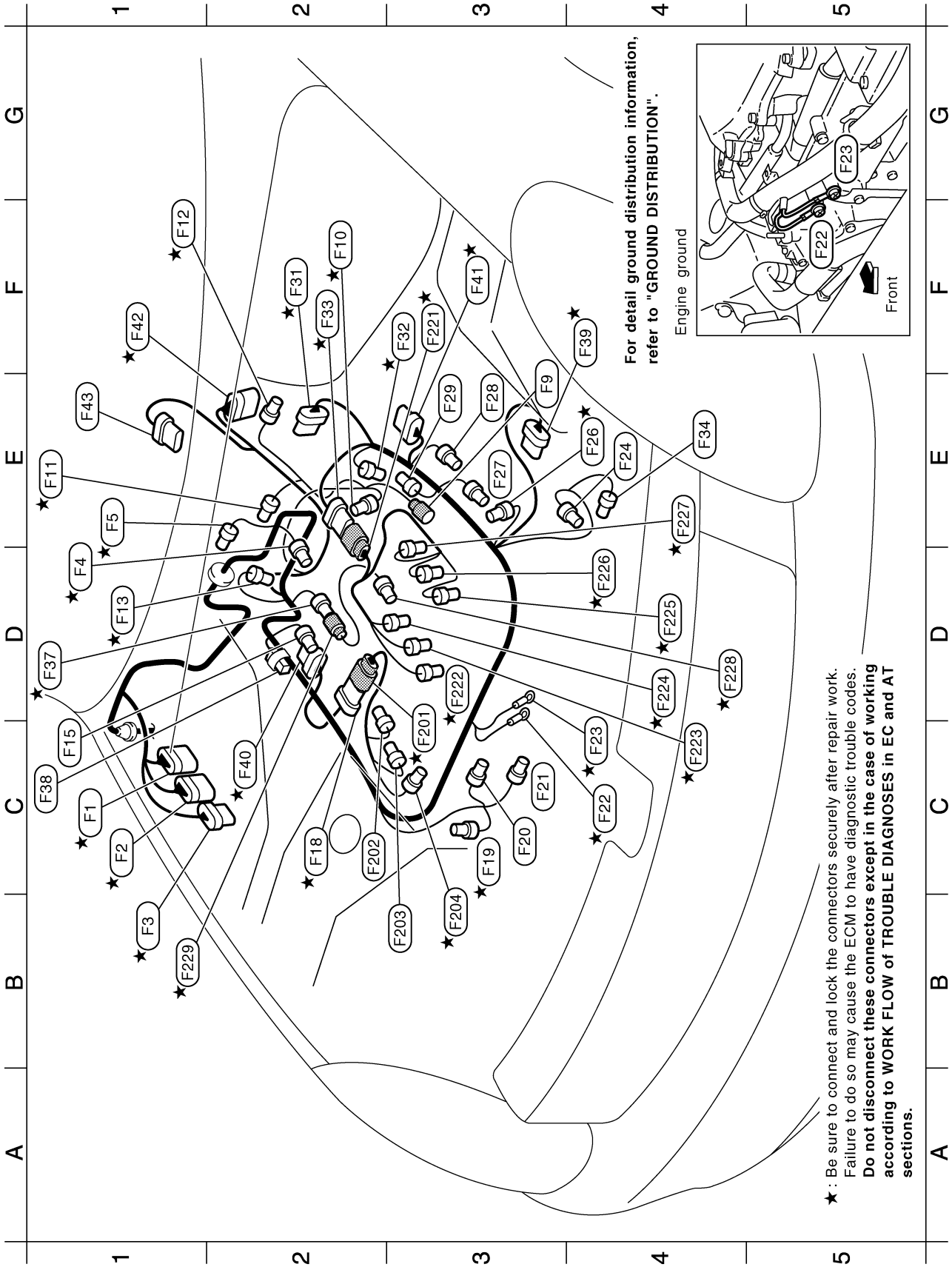
C3	★	(F241)	BR/2	:	To (F6)
B3	★	(F242)	GY/2	:	Engine oil temperature sensor

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

★ (F102) SMJ : To (M72)  
★ (F108) SMJ : ECM

# HARNESS

## ENGINE CONTROL HARNESS (AWD)



★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

TKIM0524E

## Passenger compartment

- C1 (F38) W/2 : Condenser
- F4 (F39) B/6 : Mass air flow sensor
- C2 (F40) B/6 : Air fuel ratio (A/F) sensor 1 (Bank 1)
- F3 (F41) B/6 : Air fuel ratio (A/F) sensor 1 (Bank 2)
- F1 (F42) DGY/10 : A/T assembly
- E1 (F43) B/8 : Transfer assembly

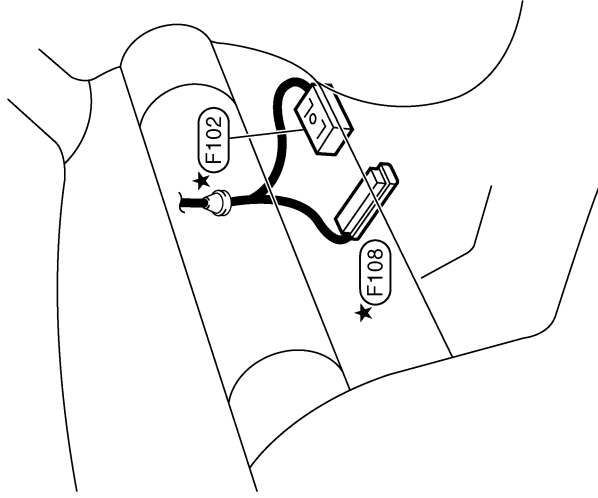
### Engine control sub-harness-1

- C3 (F201) L/6 : To (F18)
- C2 (F202) GY/3 : Ignition coil No. 3 (With power transistor)
- B3 (F203) GY/3 : Ignition coil No. 1 (With power transistor)
- B3 (F204) G/2 : Intake valve timing control solenoid valve (Bank 1)

### Engine control sub-harness-2

- F3 (F221) G/8 : To (F33)
- D3 (F222) GY/2 : Fuel injector No. 1
- C4 (F223) GY/2 : Fuel injector No. 3
- D4 (F224) GY/2 : Fuel injector No. 5
- D4 (F225) GY/2 : Fuel injector No. 2
- D4 (F226) GY/2 : Fuel injector No. 4
- E4 (F227) GY/2 : Fuel injector No. 6
- D4 (F228) L/2 : Knock sensor
- B1 (F229) SB/2 : To (F37)

- C1 (F1) GY/9 : To (E10)
- C1 (F2) GY/10 : To (E11)
- B1 (F3) B/8 : To (E12)
- D1 (F4) G/3 : Camshaft position sensor (PHASE) (Bank 1)
- E1 (F5) LGY/2 : EVAP canister purge volume control solenoid valve
- E3 (F9) GY/1 : Starter motor
- F2 (F10) B/3 : Crankshaft position sensor (POS)
- E1 (F11) B/4 : Heated oxygen sensor 2 (Bank 1)
- F1 (F12) GY/4 : Heated oxygen sensor 2 (Bank 2)
- D1 (F13) GY/2 : Engine coolant temperature sensor
- C1 (F15) GY/3 : Ignition coil No. 5 (With power transistor)
- C2 (F18) B/6 : To (F201)
- C3 (F19) B/3 : Power steering pressure sensor
- C3 (F20) GY/2 : Alternator (S, L)
- C3 (F21) GY/1 : Oil pressure switch
- C4 (F22) - : Engine ground
- C4 (F23) - : Engine ground
- E4 (F24) B/1 : Compressor
- E4 (F26) LGY/2 : Intake valve timing control solenoid valve (Bank 2)
- E3 (F27) GY/3 : Ignition coil No. 2 (With power transistor)
- E3 (F28) GY/3 : Ignition coil No. 4 (With power transistor)
- E3 (F29) GY/3 : Ignition coil No. 6 (With power transistor)
- F2 (F31) DGY/6 : Electric throttle control actuator
- F3 (F32) B/3 : Camshaft position sensor (PHASE) (Bank 2)
- F2 (F33) GY/8 : To (F221)
- E4 (F34) B/2 : Compressor
- D1 (F37) B/2 : To (F229)



- ★ (F102) SMJ : To (M72)
- ★ (F108) SMJ : ECM

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

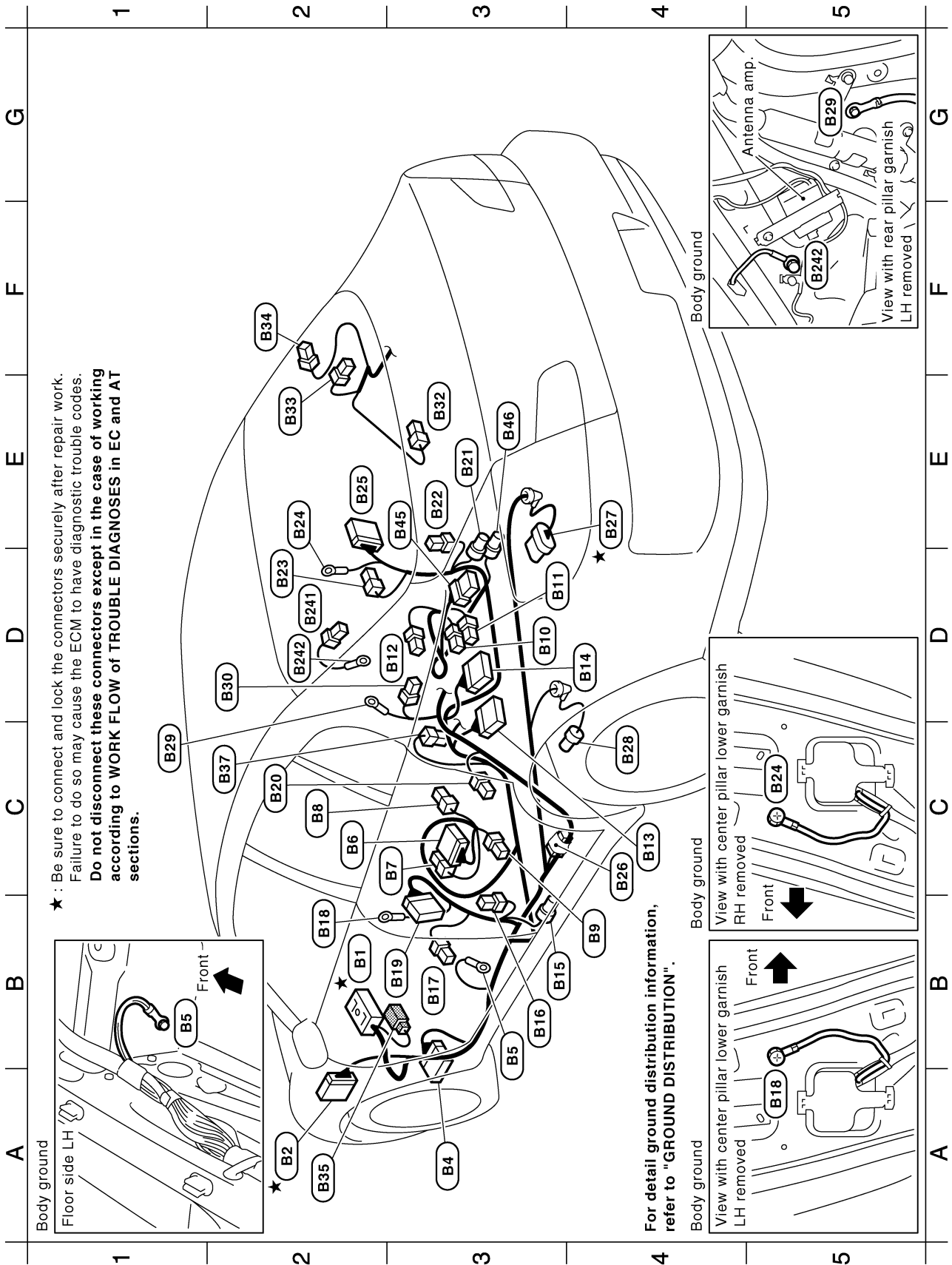
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

PG

# HARNESS

## BODY HARNESS

### Passenger Compartment



TKIM0315E



B2 ★	(B1)	SMJ	:	To	(M12)
A2 ★	(B2)	W/18	:	To	(E106)
A3	(B4)	W/15	:	BCM	(Body control module)
B3	(B5)	—	:	Body	ground
C2	(B6)	W/12	:	Front power seat	(Driver side) (With automatic drive positioner)
C3	(B7)	W/4	:	Front power seat	(Driver side) (Without automatic drive positioner)
C2	(B8)	W/3	:	Seat belt buckle switch	(Driver side)
B4	(B9)	Y/2	:	Front LH side air bag module	
D3	(B10)	Y/2	:	Front RH side air bag module	
D3	(B11)	W/3	:	Seat belt buckle switch	(Passenger side)
D3	(B12)	W/4	:	Front power seat	(Passenger side)
C4	(B13)	Y/12	:	Air bag diagnosis sensor unit	
D4	(B14)	Y/12	:	Air bag diagnosis sensor unit	
B3	(B15)	Y/2	:	LH side air bag	(Satellite) sensor
B3	(B16)	Y/2	:	Front LH seat belt pre-tensioner	
B3	(B17)	W/3	:	Front door switch driver side	
B2	(B18)	—	:	Body	ground
B3	(B19)	W/18	:	To	(D51)
C2	(B20)	W/3	:	Rear door switch	LH
E3	(B21)	Y/2	:	RH side air bag	(Satellite) sensor
E3	(B22)	Y/2	:	Front RH seat belt pre-tensioner	
D2	(B23)	W/3	:	Front door switch passenger side	
E2	(B24)	—	:	Body	ground
E2	(B25)	W/18	:	To	(D71)
C4	(B26)	W/2	:	Condenser	
E4 ★	(B27)	GY/5	:	Fuel level sensor unit and fuel pump	
C4	(B28)	GY/2	:	Fuel level sensor unit	(Sub)
C1	(B29)	—	:	Body	ground
D2	(B30)	Y/2	:	LH side curtain air bag module	
E3	(B32)	W/3	:	Rear door switch	RH
E2	(B33)	Y/2	:	RH side curtain air bag module	
F2	(B34)	W/1	:	Condenser	
A2	(B35)	W/2	:	To	(E120)
C2	(B37)	B/1	:	Parking brake switch	(With M/T)
E3	(B45)	W/8	:	Occupant classification system control unit	(Via sub-harness)
E3	(B46)	B/3	:	Belt tension sensor	

### Body sub-harness

D2	(B241)	B/1	:	Rear window defogger	(-)
D2	(B242)	—	:	Body	ground

★ : Be sure to connect and lock the connectors securely after repair work.  
 Failure to do so may cause the ECM to have diagnostic trouble codes.  
**Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

TKIM0316E

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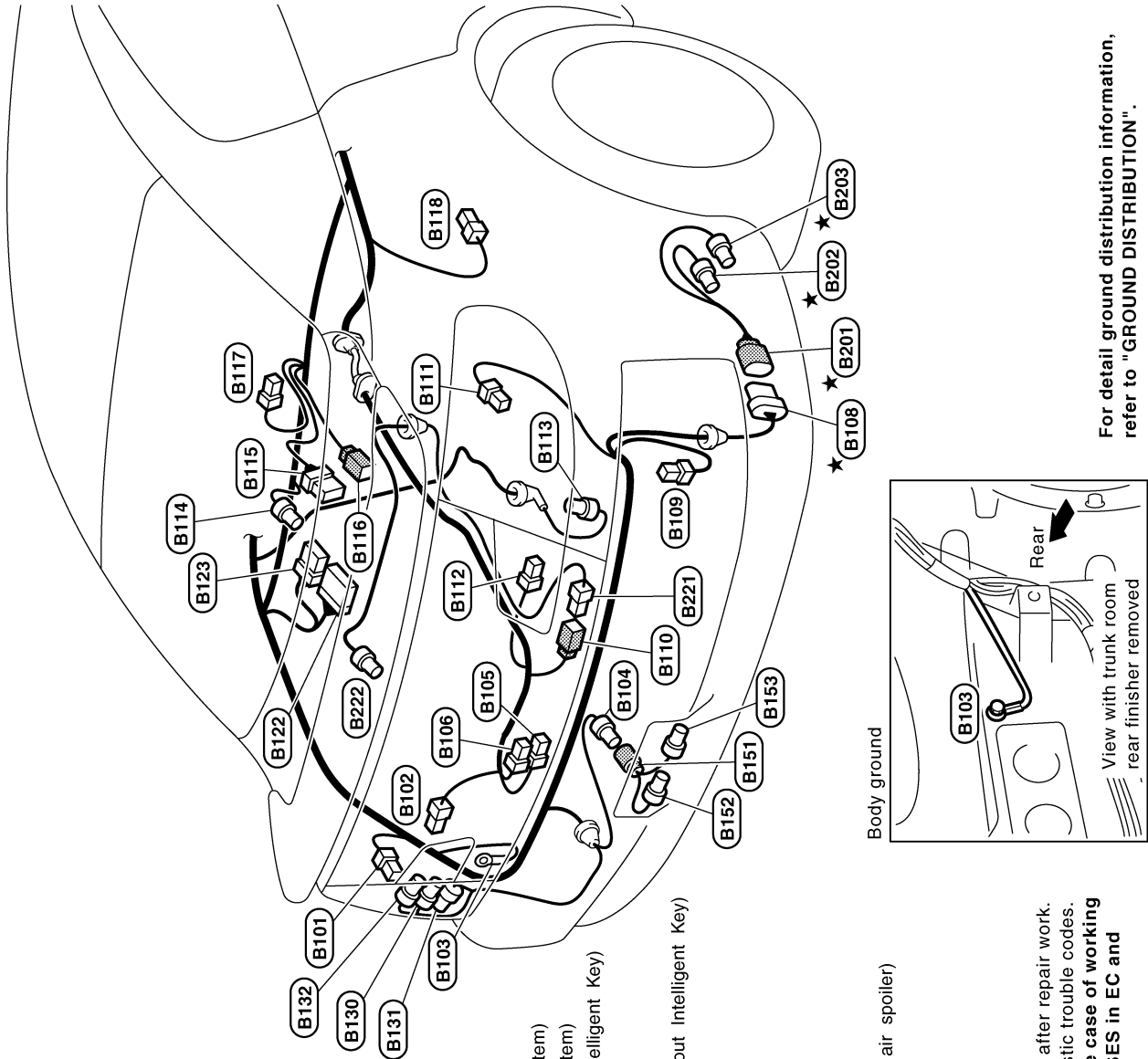
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# HARNESSES

## Trunk Room

Up to Vehicle Identification Number JNKCV51E26M 516168

Up to Vehicle Identification Number JNKCV51F36M 612030



- B101 W/4 : Rear combination lamp LH
- B102 W/2 : Back-up lamp LH
- B103 - : Body ground
- B104 GY/2 : To B151
- B105 W/2 : Trunk room lamp switch
- B106 B/2 : Trunk lid opener actuator
- ★ B108 G/6 : To B201
- B109 BR/6 : Rear window defogger relay
- B110 GY/2 : To B221 (With rear air spoiler)
- B111 W/4 : Rear combination lamp RH
- B112 W/2 : Back-up lamp RH
- B113 SB/4 : Rear wheel sensor
- B114 GY/2 : Inside key antenna (Trunk room) (With Intelligent Key)
- B115 BR/6 : Woofer (With BOSE system)
- B116 BR/2 : High-mounted stop lamp (On the rear parcel shelf)
- B117 W/2 : Trunk room lamp
- B118 W/4 : Fuel lid lock actuator
- B122 B/24 : BOSE speaker amp. (With BOSE system)
- B123 GY/8 : BOSE speaker amp. (With BOSE system)
- B130 L/2 : Trunk opener request switch (With Intelligent Key)
- B131 GY/2 : Outside key antenna (Rear bumper) (With Intelligent Key)
- B132 L/2 : Outside trunk lid opener switch (Without Intelligent Key)

### Body sub-harness-1

- ★ B201 G/6 : To B108
- ★ B202 GY/3 : EVAP control system pressure sensor
- ★ B203 B/2 : EVAP canister vent control valve

### Body sub-harness-2

- B221 GY/2 : To B110
- B222 GY/2 : High-mounted stop lamp (In the rear air spoiler)

### Body sub-harness-3

- B151 GY/2 : To B104
- B152 BR/2 : License plate lamp LH
- B153 BR/2 : License plate lamp RH

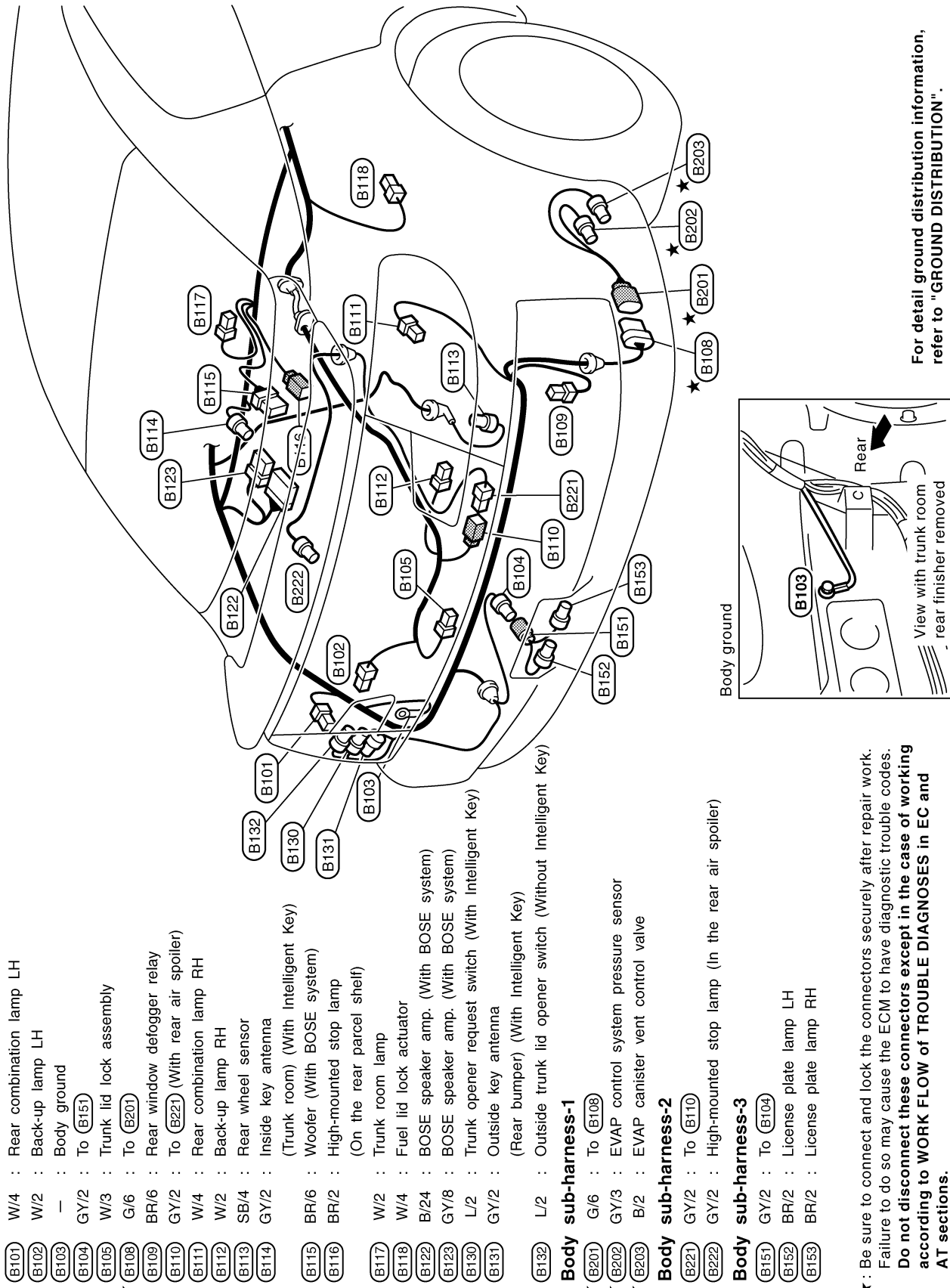
★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

For detail ground distribution information, refer to "GROUND DISTRIBUTION".

# HARNESSES

From Vehicle Identification Number JNKCV51E26M 516169

From Vehicle Identification Number JNKCV51F36M 612031



B101 : Rear combination lamp LH

B102 : Back-up lamp LH

B103 : Body ground

B104 : To (B151)

B105 : Trunk lid lock assembly

\* B108 : To (B201)

B109 : Rear window defogger relay

B110 : To (B221) (With rear air spoiler)

B111 : Rear combination lamp RH

B112 : Back-up lamp RH

B113 : Rear wheel sensor

B114 : Inside key antenna

(Trunk room) (With Intelligent Key)

B115 : Woofer (With BOSE system)

B116 : High-mounted stop lamp

(On the rear parcel shelf)

B117 : Trunk room lamp

B118 : Fuel lid lock actuator

B122 : BOSE speaker amp. (With BOSE system)

B123 : BOSE speaker amp. (With BOSE system)

B130 : Trunk opener request switch (With Intelligent Key)

B131 : Outside key antenna

(Rear bumper) (With Intelligent Key)

B132 : Outside trunk lid opener switch (Without Intelligent Key)

L/2 : Outside trunk lid opener switch (Without Intelligent Key)

### Body sub-harness-1

\* B201 : To (B108)

\* B202 : EVAP control system pressure sensor

\* B203 : EVAP canister vent control valve

### Body sub-harness-2

B221 : To (B110)

B222 : High-mounted stop lamp (In the rear air spoiler)

### Body sub-harness-3

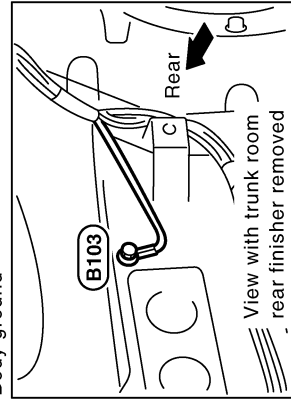
B151 : To (B104)

B152 : License plate lamp LH

B153 : License plate lamp RH

\* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

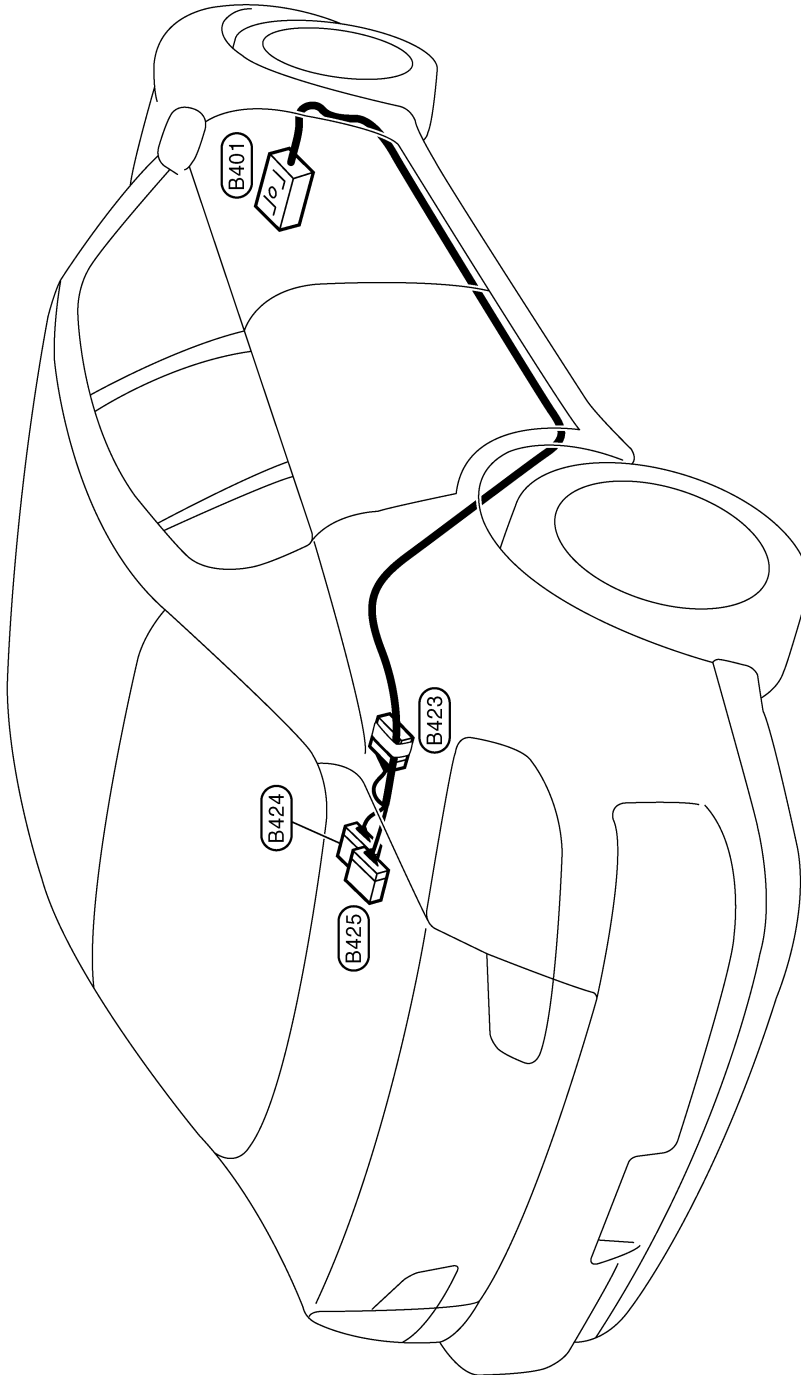
For detail ground distribution information, refer to "GROUND DISTRIBUTION".



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# HARNESS

## BODY NO. 2 HARNESS



- (B401) SMJ : To (MB7)  
(B423) W/16 : Option connector for satellite radio tuner (Without satellite radio)  
(B424) W/32 : TEL adapter unit (With telephone system)  
(B425) W/16 : Satellite radio tuner (With satellite radio system)

TKIM0526E

# HARNESS

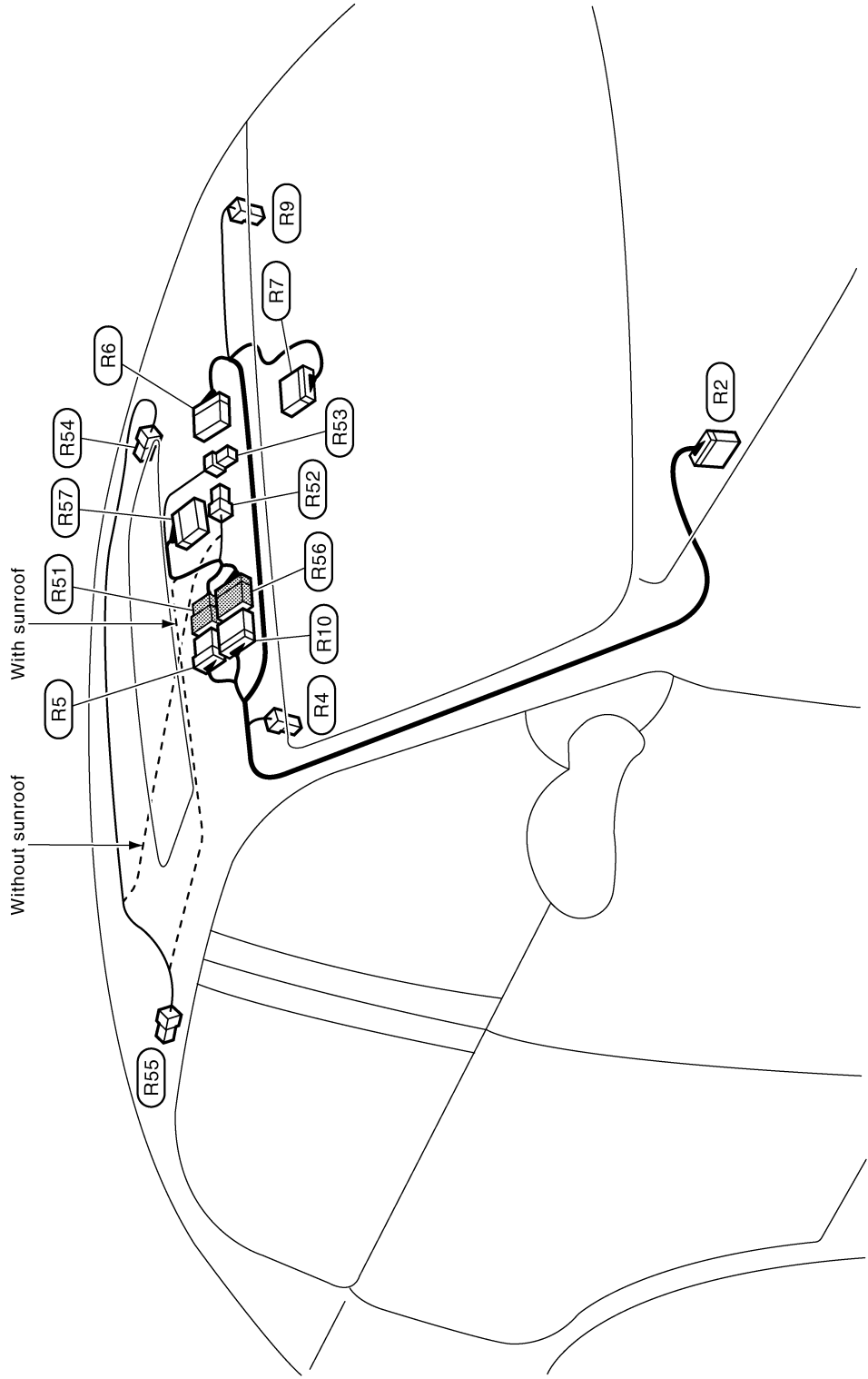
## ROOM LAMP HARNESS

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### Room lamp sub-harness

- (R51) W/8 : To (R5) (Without telephone system)
- (R52) W/3 : Map lamp
- (R53) W/3 : Sunroof switch (With sunroof)
- (R54) W/3 : Personal lamp LH
- (R55) W/3 : Personal lamp RH
- (R56) W/16 : To (R10) (With telephone system)
- (R57) W/12 : Microphone (With telephone system)

- (R2) W/18 : To (M70)
- (R4) W/2 : Vanity mirror lamp RH
- (R5) W/8 : To (R51) (Without telephone system)
- (R6) B/12 : Sunroof motor assembly (With sunroof)
- (R7) B/10 : Auto anti-dazzling inside mirror (With automatic drive positioner)
- (R9) W/2 : Vanity mirror lamp LH
- (R10) W/16 : To (R56) (With telephone system)



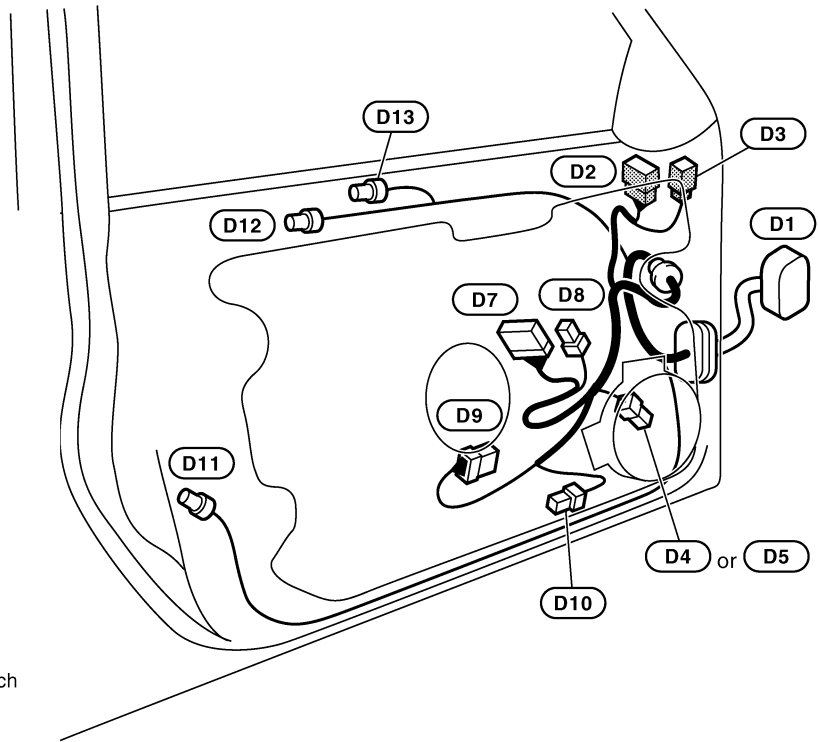
TKIM0527E

# HARNESS

## FRONT DOOR HARNESS

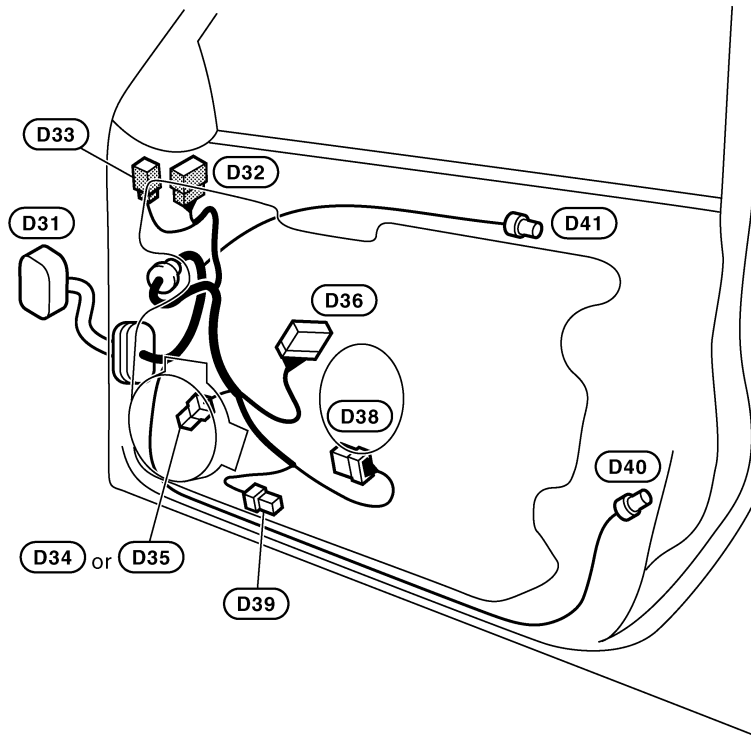
### LH Side

- D1** SMJ : To **(M11)**
- D2** W/8 : Door mirror (Driver side)
- D3** BR/2 : Tweeter LH
- D4** W/2 : Front door speaker LH  
(Without BOSE system)
- D5** BR/2 : Front door speaker LH  
(With BOSE system)
- D7** W/16 : Power window main switch
- D8** W/3 : Power window main switch
- D9** W/6 : Power window motor  
(Front driver side)
- D10** W/2 : Step lamp  
(Driver side)
- D11** SB/4 : Front door lock assembly  
(Driver side)
- D12** BR/3 : Front door key cylinder switch  
(Driver side)
- D13** B/4 : Outside key antenna  
and front door request switch  
(Driver side)



TKIM0319E

### RH Side



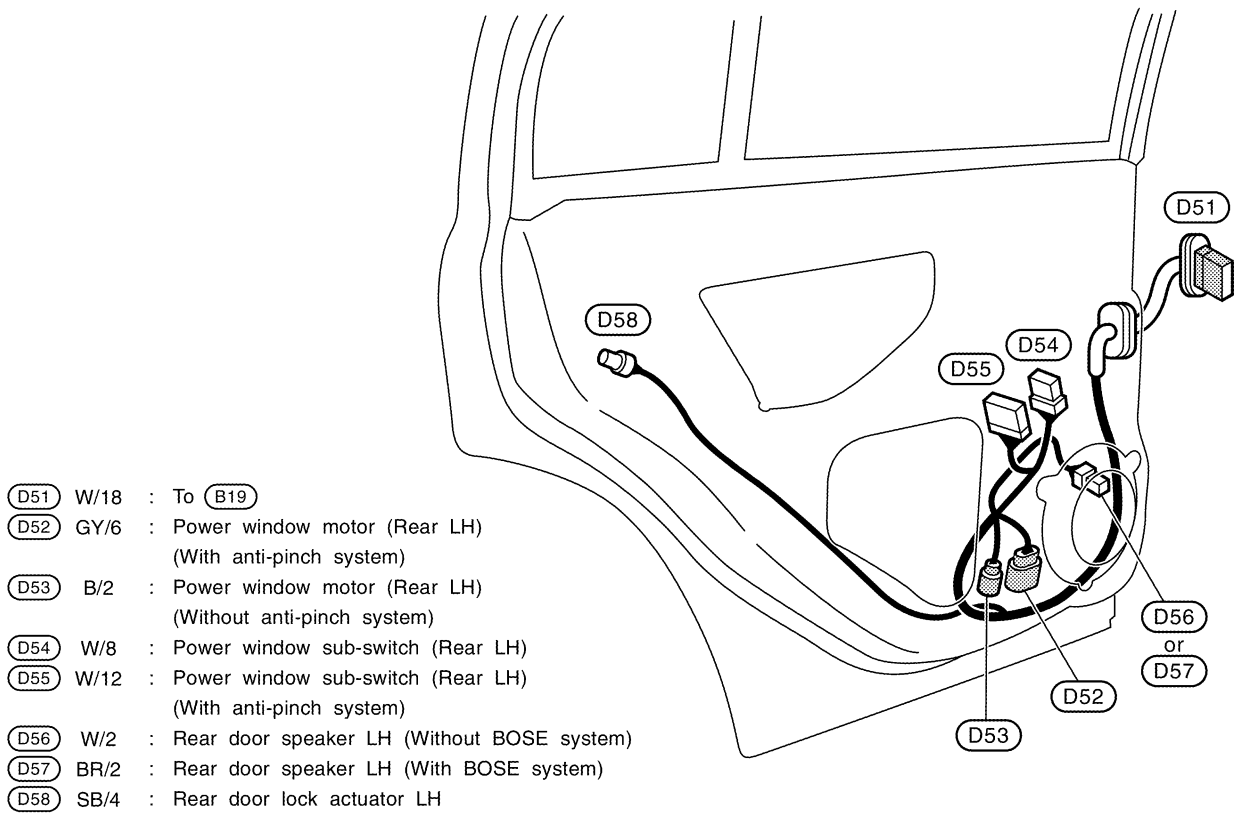
- D31** SMJ : To **(M74)**
- D32** W/8 : Door mirror (Passenger side)
- D33** BR/2 : Tweeter RH
- D34** W/2 : Front door speaker RH  
(Without BOSE system)
- D35** BR/2 : Front door speaker RH  
(With BOSE system)
- D36** W/16 : Power window sub-switch  
(Front passenger side)
- D38** W/6 : Power window motor  
(Front passenger side)
- D39** W/2 : Step lamp (Passenger side)
- D40** SB/4 : Front door lock assembly  
(Passenger side)
- D41** B/4 : Outside key antenna  
and front door request switch  
(Passenger side)

TKIM0320E

# HARNESS

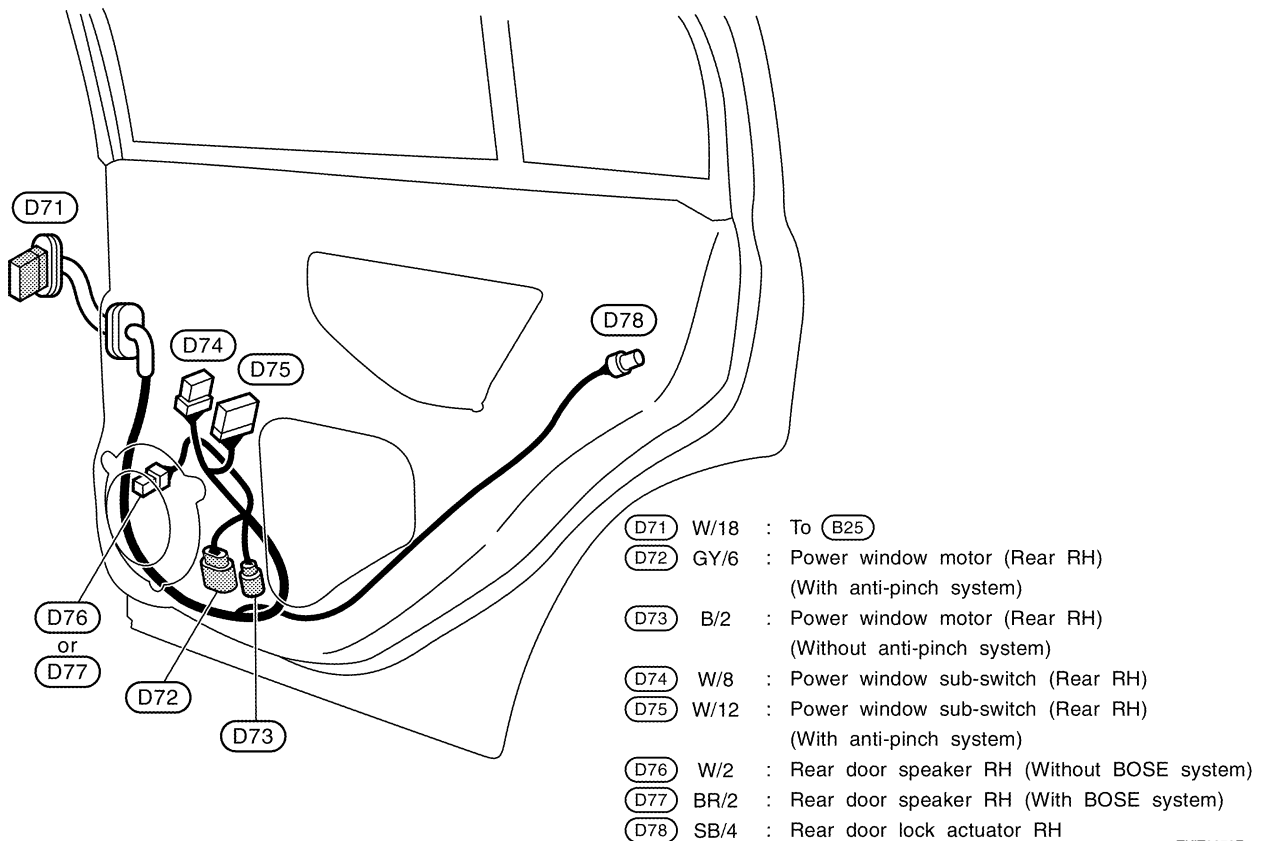
## REAR DOOR HARNESS

### LH Side



TKIT0275E

### RH Side



TKIT0276E

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# HARNESS

## Wiring Diagram Codes (Cell Codes)

NKS00162

Use the chart below to find out what each wiring diagram code stands for.

Refer to the wiring diagram code in the alphabetical index to find the location (page number) of each wiring diagram.

Code	Section	Wiring Diagram Name
A/C	ATC	Air Conditioner
AF1B1	EC	Air Fuel Ratio Sensor 1 Bank 1
AF1B2	EC	Air Fuel Ratio Sensor 1 Bank 2
AF1HB1	EC	Air Fuel Ratio Sensor 1 Heater Bank 1
AF1HB2	EC	Air Fuel Ratio Sensor 1 Heater Bank 2
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUT/DP	SE	Automatic Drive Positioner
AUTO/L	LT	Automatic Light System
AWD	TF	AWD Control System
BACK/L	LT	Back-Up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication Line
COMPAS	DI	Compass and Thermometer
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Electric Throttle Control Motor Relay
ETC3	EC	Electric Throttle Control Motor
EVCB1	EC	Exhaust Valve Timing Control Magnet Retarder (Bank 1)
EVCB2	EC	Exhaust Valve Timing Control Magnet Retarder (Bank 2)
EVCSB1	EC	Exhaust Valve Timing Control Position Sensor (Bank 1)
EVCSB2	EC	Exhaust Valve Timing Control Position Sensor (Bank 2)



# HARNESS

Code	Section	Wiring Diagram Name
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FTS	AT	A/T Fluid Temperature Sensor Circuit
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
H/PHON	AV	Hands Free Telephone
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/KEY	BL	Intelligent Key System
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges
MIL/DL	EC	MIL & Data Link Connector
MIRROR	GW	Door Mirror
MMSW	AT	Manual Mode Switch
NATS	BL	Nissan Anti-Theft System
NAVI	AV	Navigation System
NONDTC	AT	Non-Detective Items
O2H2B1	EC	Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Heated Oxygen Sensor 2 Heater Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2
P/SCKT	WW	Power Socket
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHSB1	EC	Camshaft Position Sensor (PHASE) (Bank 1)
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank 2)
PNP/SW	AT	Park/Neutral Position Switch
PNP/SW	EC	Park/Neutral Position Switch
POS	EC	Crankshaft Position Sensor (CKPS) (POS)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor
PS/SEN	EC	Power Steering Pressure Sensor

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# HARNESS

Code	Section	Wiring Diagram Name
ROOM/L	LT	Interior Room Lamp
RP/SEN	EC	Refrigerant Pressure Sensor
SEAT	SE	Power Seat
SEN/PW	EC	Sensor Power Supply
SHIFT	AT	A/T Shift Lock System
SNOWSW	EC	Snow Mode Switch
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
START	SC	Starting System
STOP/L	LT	Stop Lamp
STSIG	AT	Start Signal Circuit
T/WARN	WT	Low Tire Pressure Warning System
TAIL/L	LT	Parking, License and Tail Lamps
TLID	BL	Trunk Lid Opener
TPS1	EC	Throttle Position Sensor (Sensor 1)
TPS2	EC	Throttle Position Sensor (Sensor 2)
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	Homelink Universal Transceiver
TURN	LT	Turn Signal and Hazard Warning Lamp
VDC	BRC	Vehicle Dynamics Control System
VEHSEC	BL	Vehicle Security System
VENT/V	EC	EVAP Canister Vent Control Valve
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

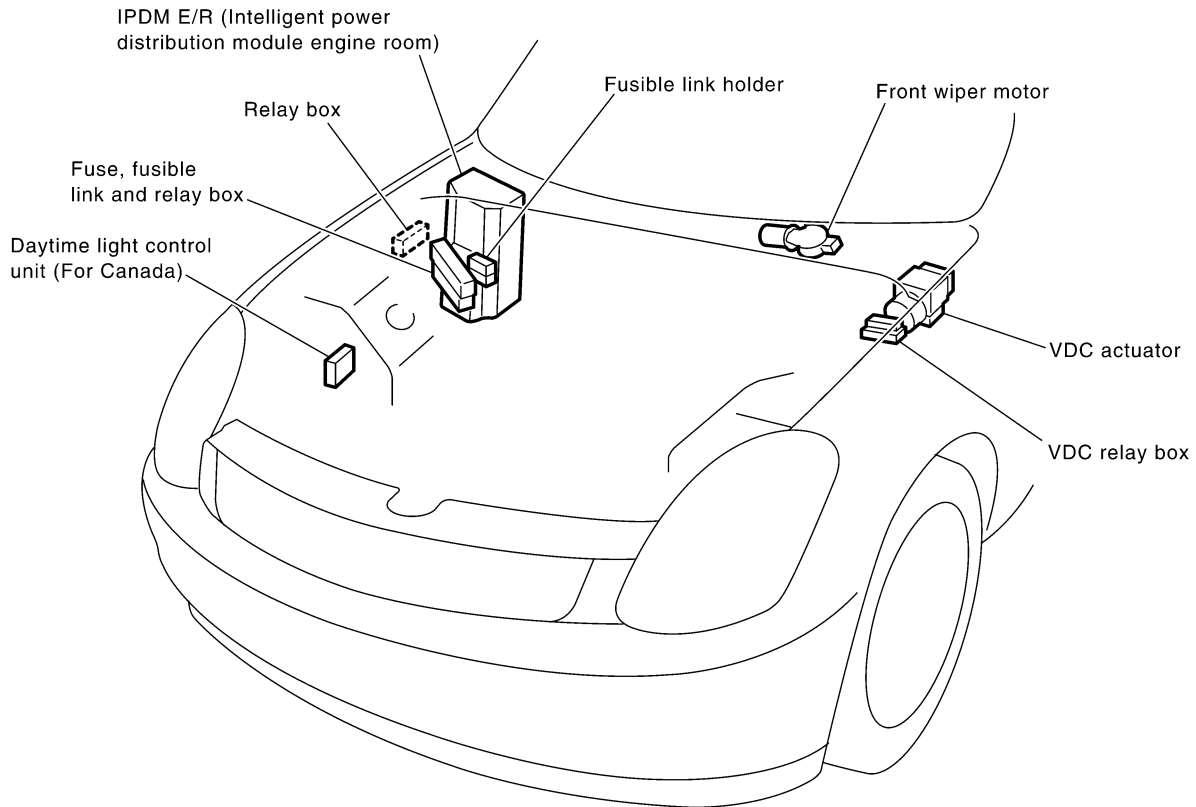
# ELECTRICAL UNITS LOCATION

## ELECTRICAL UNITS LOCATION

PF25230

### Electrical Units Location ENGINE COMPARTMENT

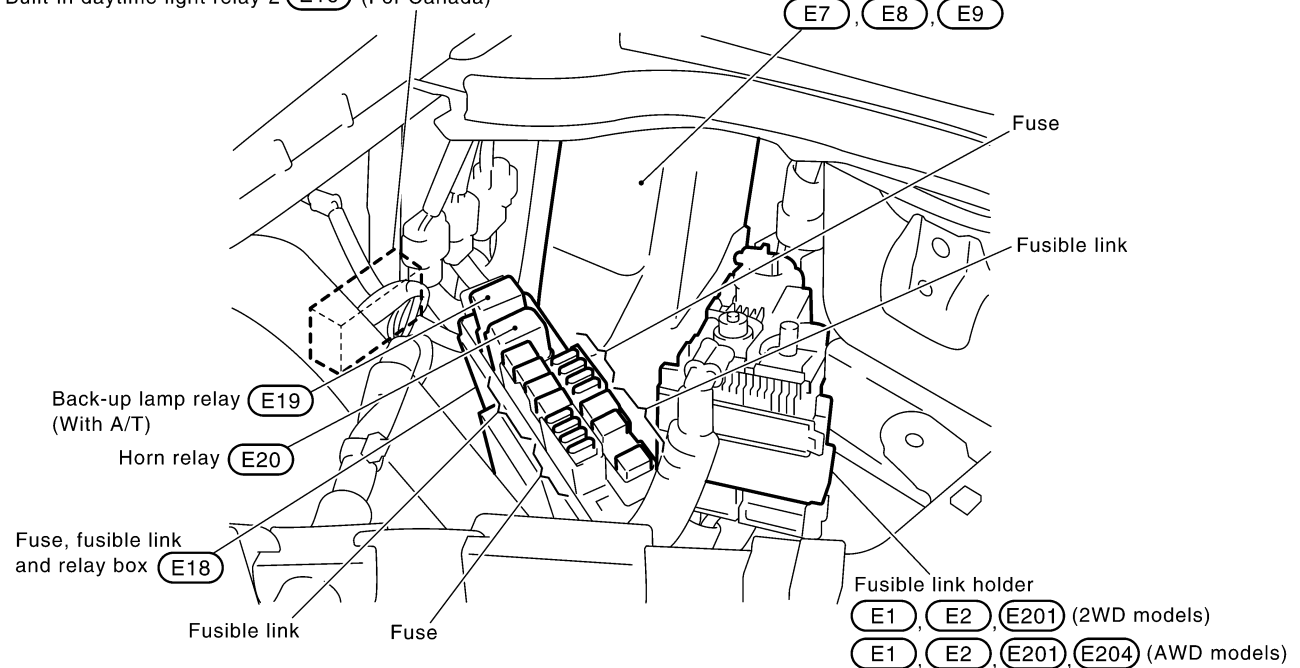
NKS00163



- Relay box (E13)
- Built-in daytime light relay-1 (E14) (For Canada)
- Built-in passenger side select unlock relay (E15) (With Intelligent Key)
- Built-in daytime light relay-2 (E16) (For Canada)

IPDM E/R (Intelligent power distribution module engine room)

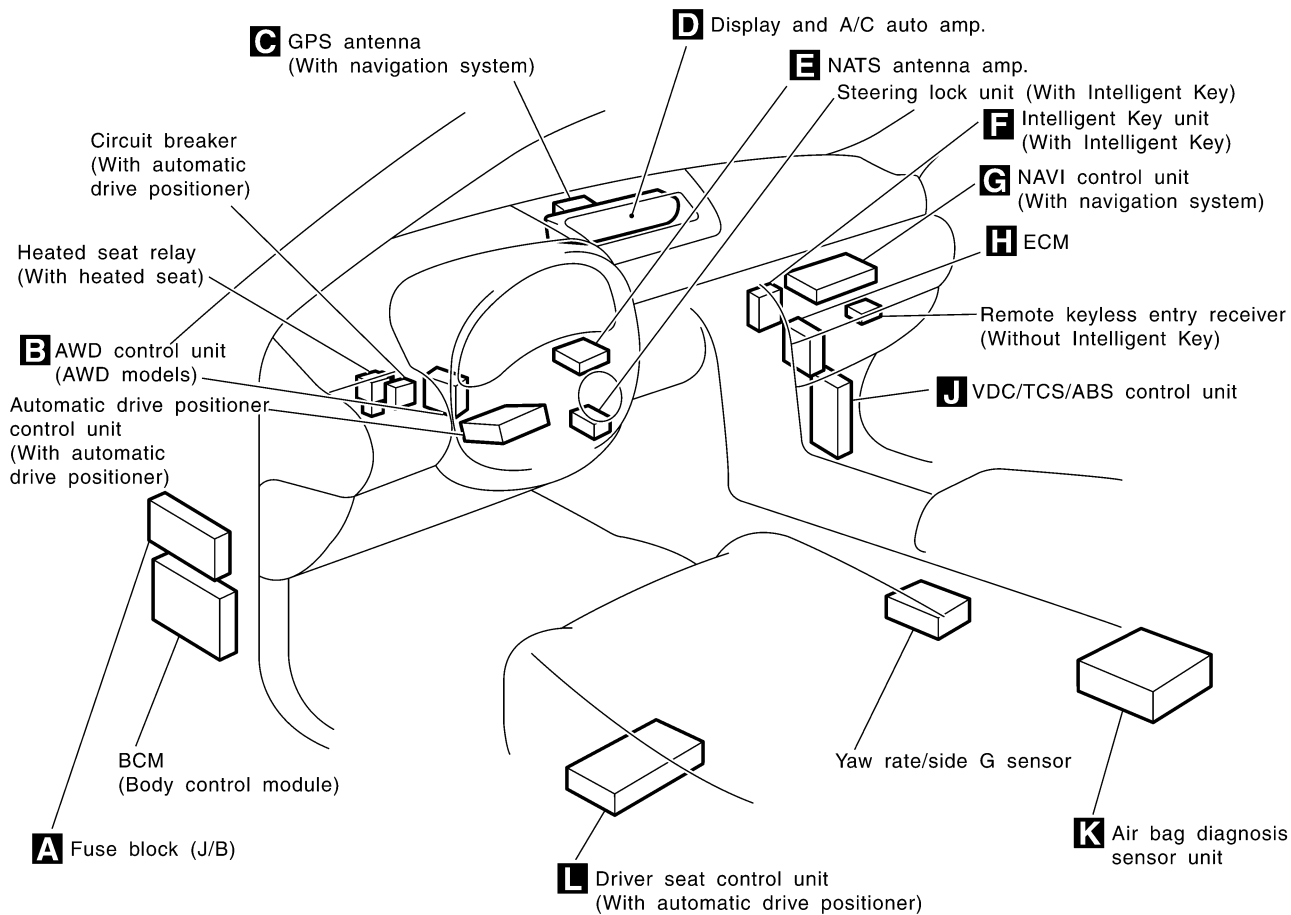
- (E3), (E4), (E5), (E6), (E7), (E8), (E9)



CKIM0416E

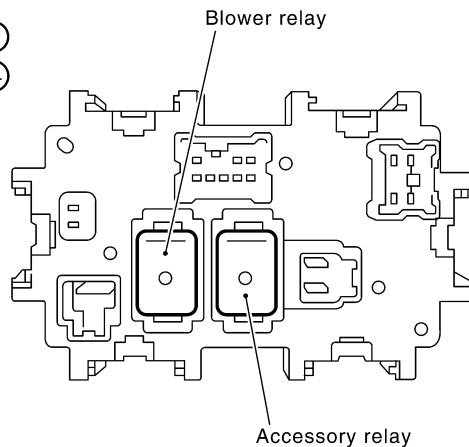
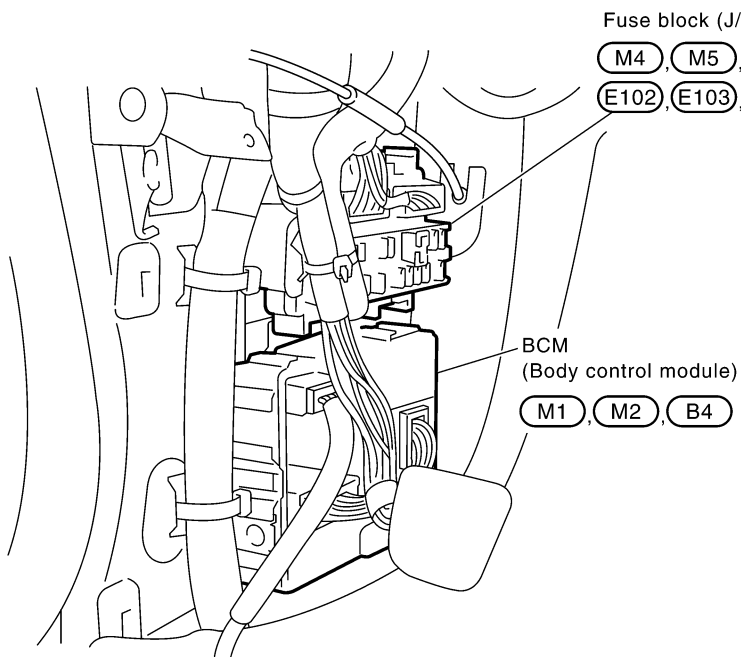
# ELECTRICAL UNITS LOCATION

## PASSENGER COMPARTMENT



**A** Behind the dash side lower LH finisher

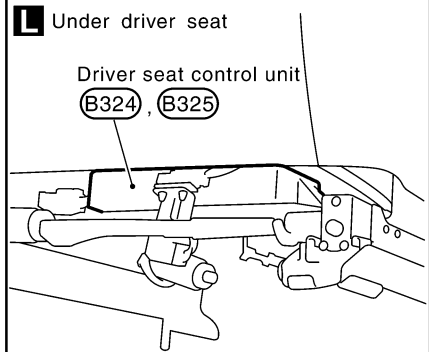
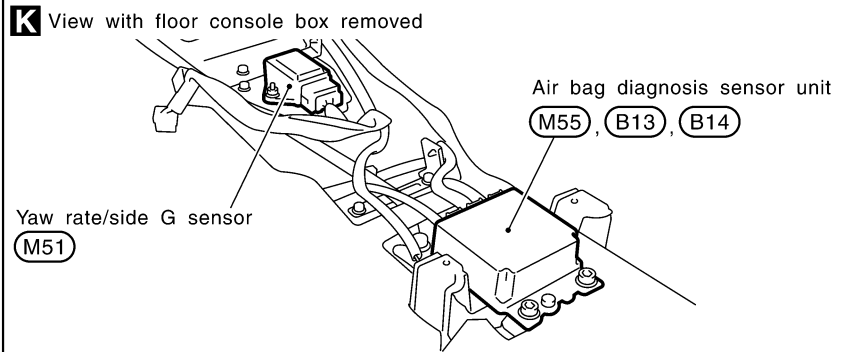
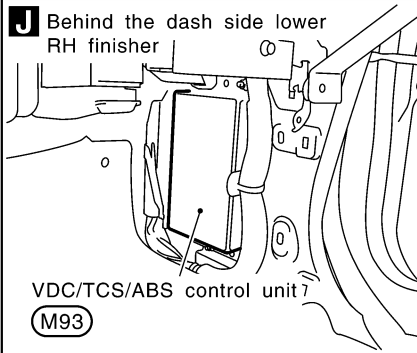
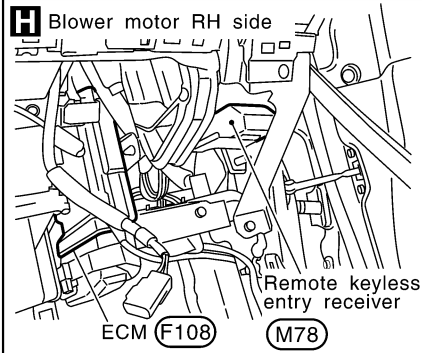
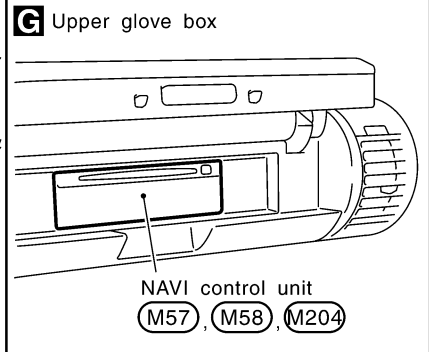
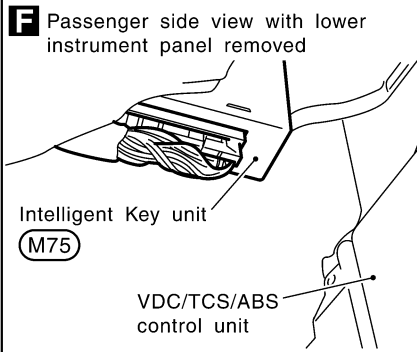
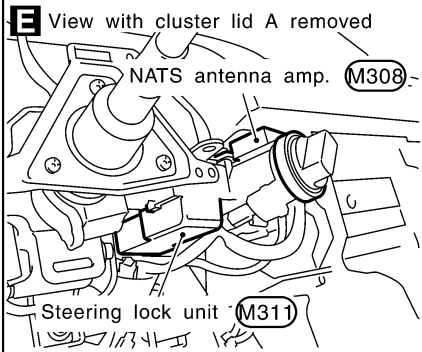
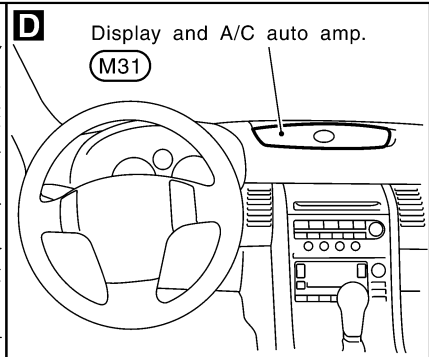
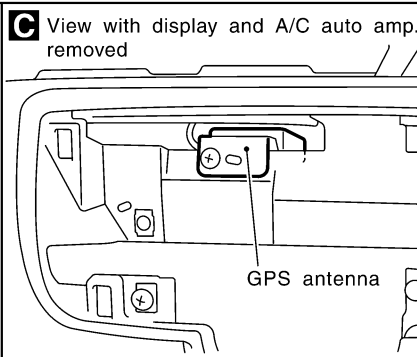
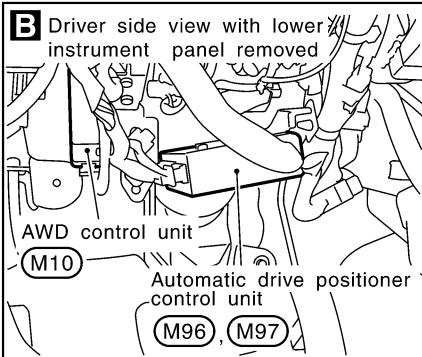
Fuse block (J/B) rear view



CKIM0427E

# ELECTRICAL UNITS LOCATION

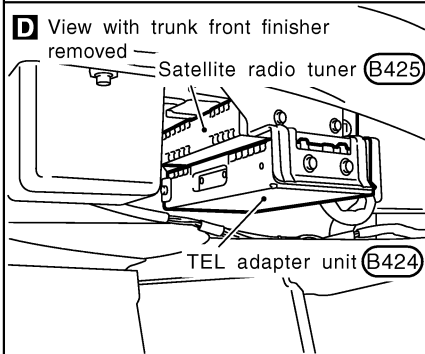
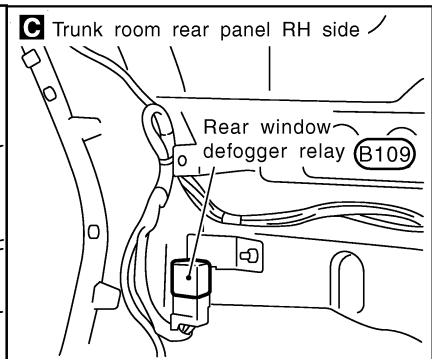
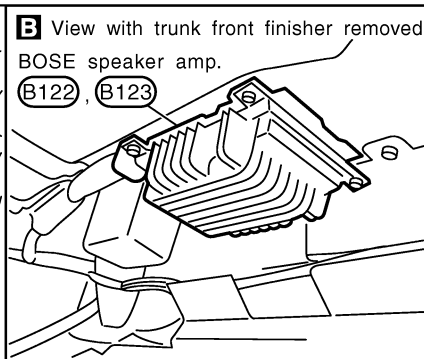
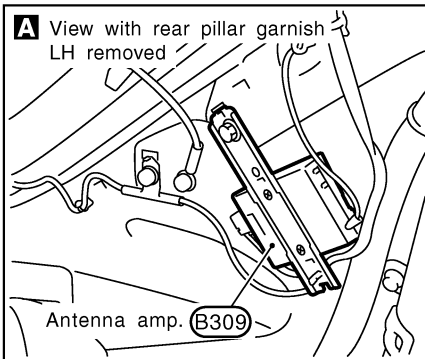
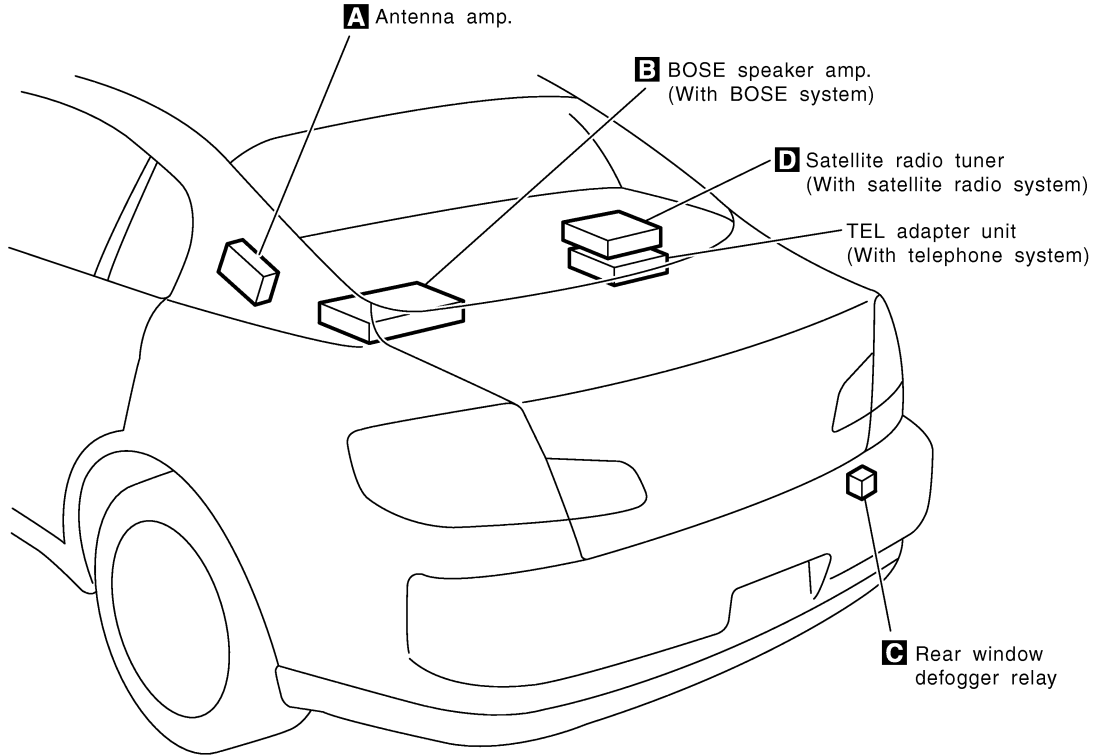
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
PG



CKIM0428E

# ELECTRICAL UNITS LOCATION

## LUGGAGE COMPARTMENT



CKIM0598E

# HARNESS CONNECTOR

## HARNESS CONNECTOR

PFP:00011

### Description

#### HARNESS CONNECTOR (TAB-LOCKING TYPE)

NKS00164

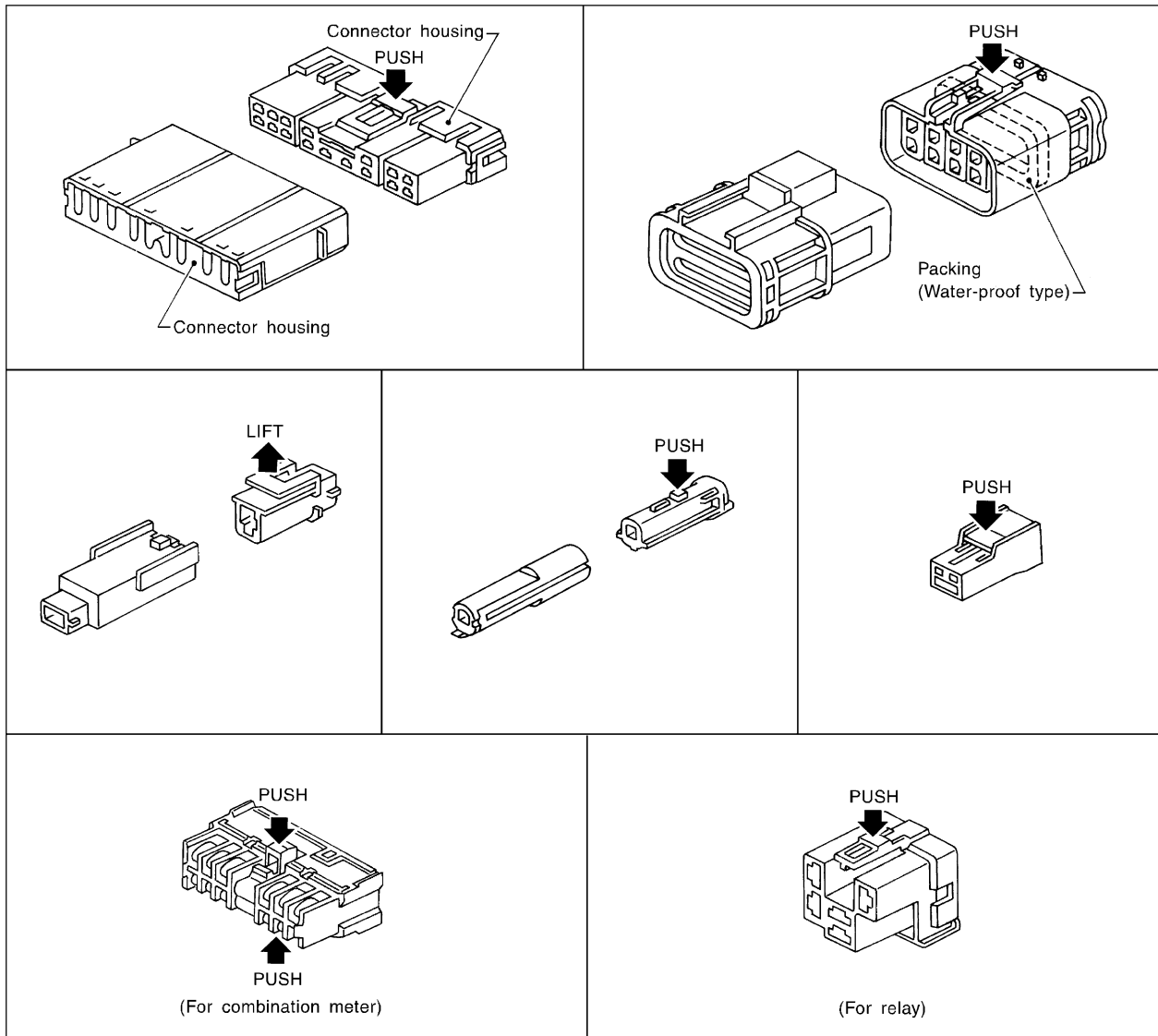
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

Refer to the next page for description of the slide-locking type connector.

#### CAUTION:

Never pull the harness or wires when disconnecting the connector.

[Example]



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

PG

SEL769DA

# HARNESS CONNECTOR

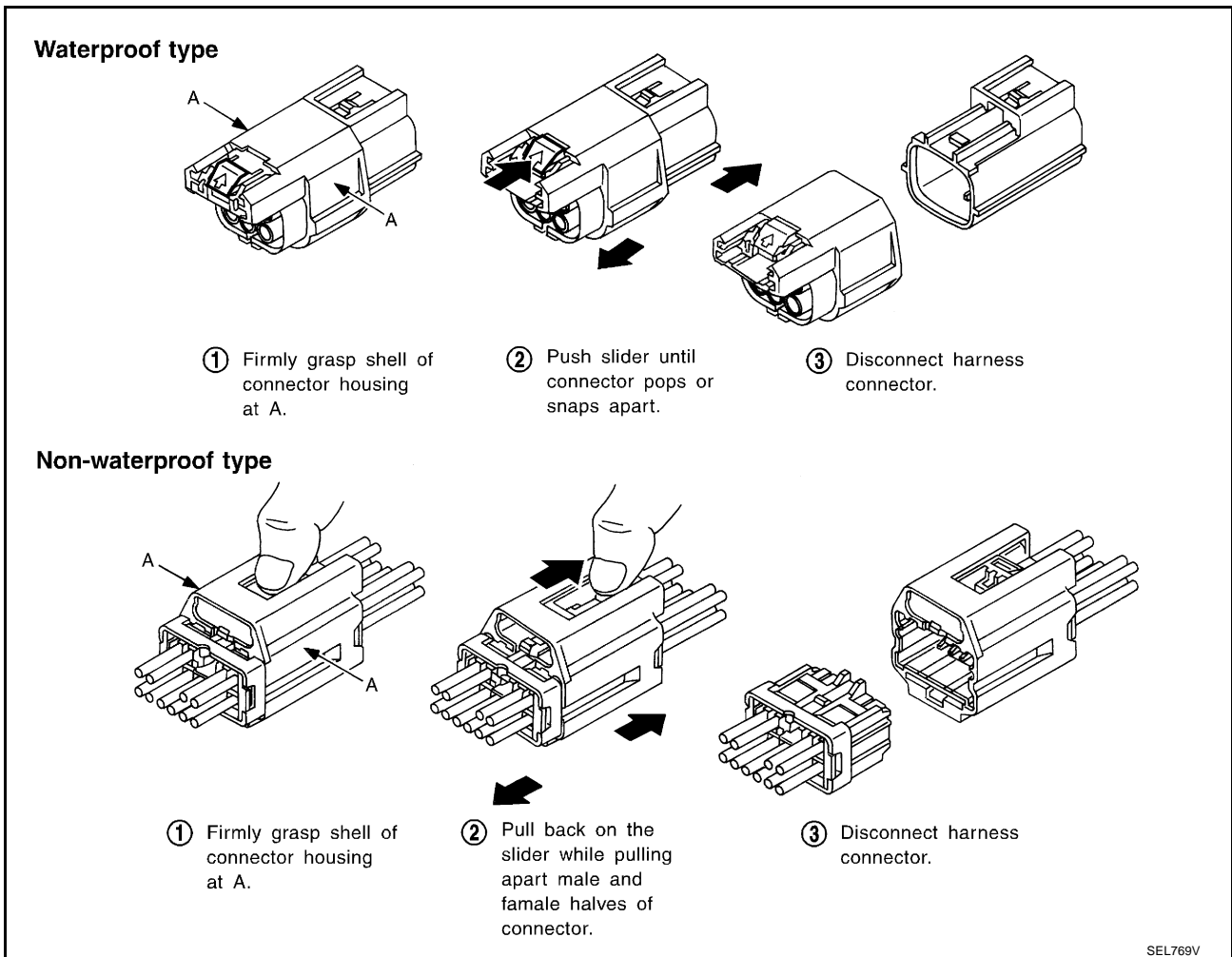
## HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.
- The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the figure below.

### CAUTION:

- **Never pull the harness or wires when disconnecting the connector.**
- **Be careful not to damage the connector support bracket when disconnecting the connector.**

[Example]





# ELECTRICAL UNITS

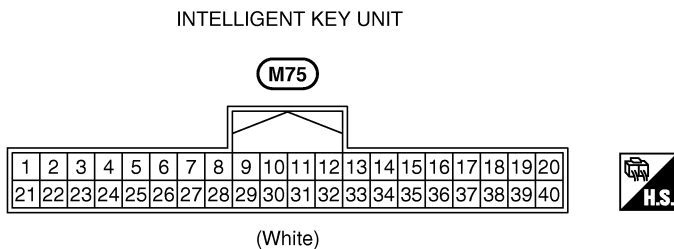
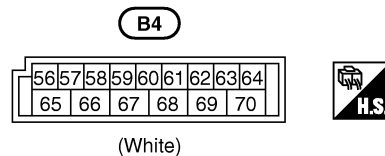
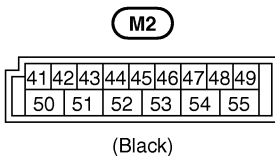
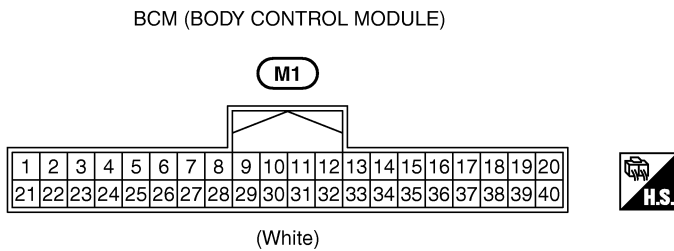
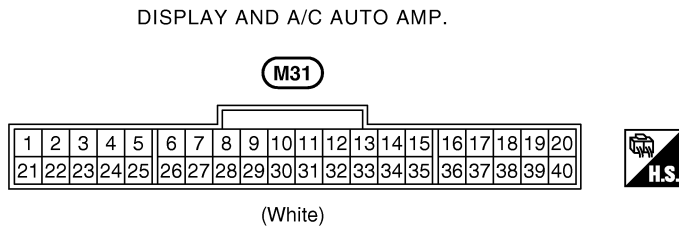
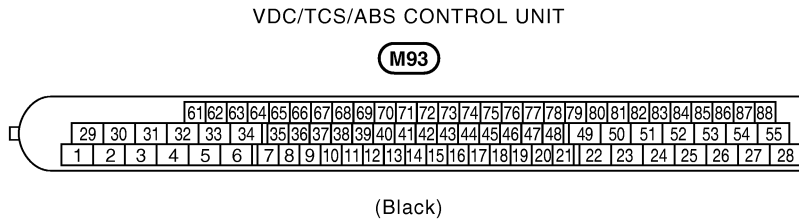
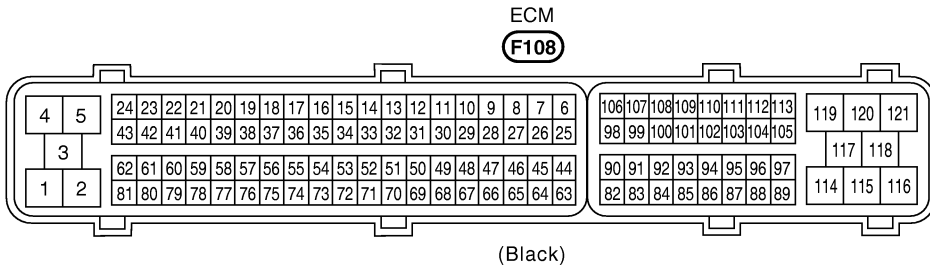
## ELECTRICAL UNITS

### Terminal Arrangement

PFP:00011

NKS00165

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



CKIM0522E

# SMJ (SUPER MULTIPLE JUNCTION)

## SMJ (SUPER MULTIPLE JUNCTION)

PF P:B4341

### Terminal Arrangement

NKS00166

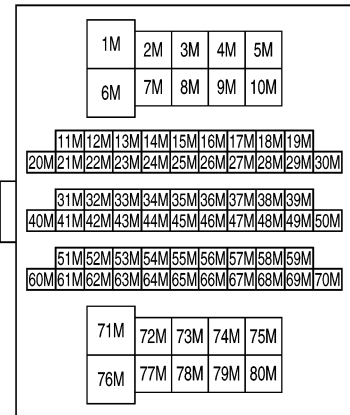
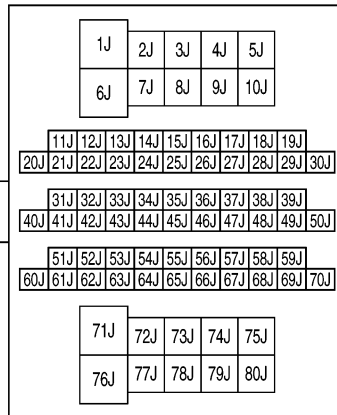
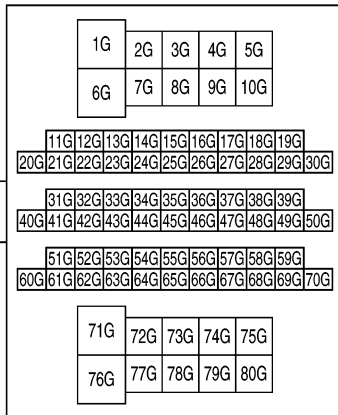
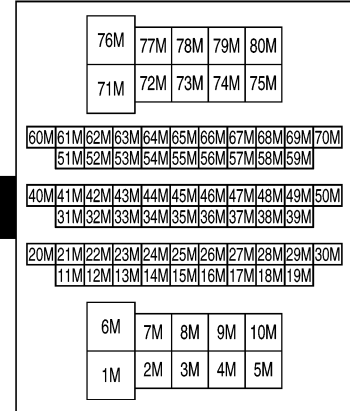
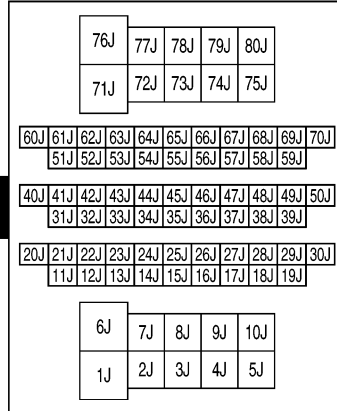
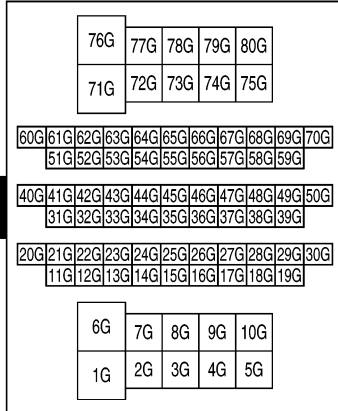
MAIN HARNESS



**M15** (White)

**M12** (White)

**M87** (White)



**E108** (White)

**B1** (White)

**B401** (White)

ENGINE ROOM HARNESS

BODY HARNESS

BODY No.2 HARNESS

CKIM0430E

# SMJ (SUPER MULTIPLE JUNCTION)



## MAIN HARNESS

**M72** (White)

6H	7H	8H	9H	10H	21H	22H	23H	24H	25H	26H	27H	28H	29H	39H	40H	41H	42H	43H	44H	45H	46H		
1H	2H	3H	4H	5H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	30H	31H	32H	33H	34H	35H	36H	37H	38H

1H	2H	3H	4H	5H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	30H	31H	32H	33H	34H	35H	36H	37H	38H
6H	7H	8H	9H	10H	21H	22H	23H	24H	25H	26H	27H	28H	29H	39H	40H	41H	42H	43H	44H	45H	46H		

**F102** (White)

## ENGINE CONTROL HARNESS



## MAIN HARNESS

**M11** (White)

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

**M74** (White)

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

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

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

**D1** (White)

## FRONT DOOR HARNESS (DRIVER SIDE)

**D31** (White)

## FRONT DOOR HARNESS (PASSENGER SIDE)

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

# STANDARDIZED RELAY

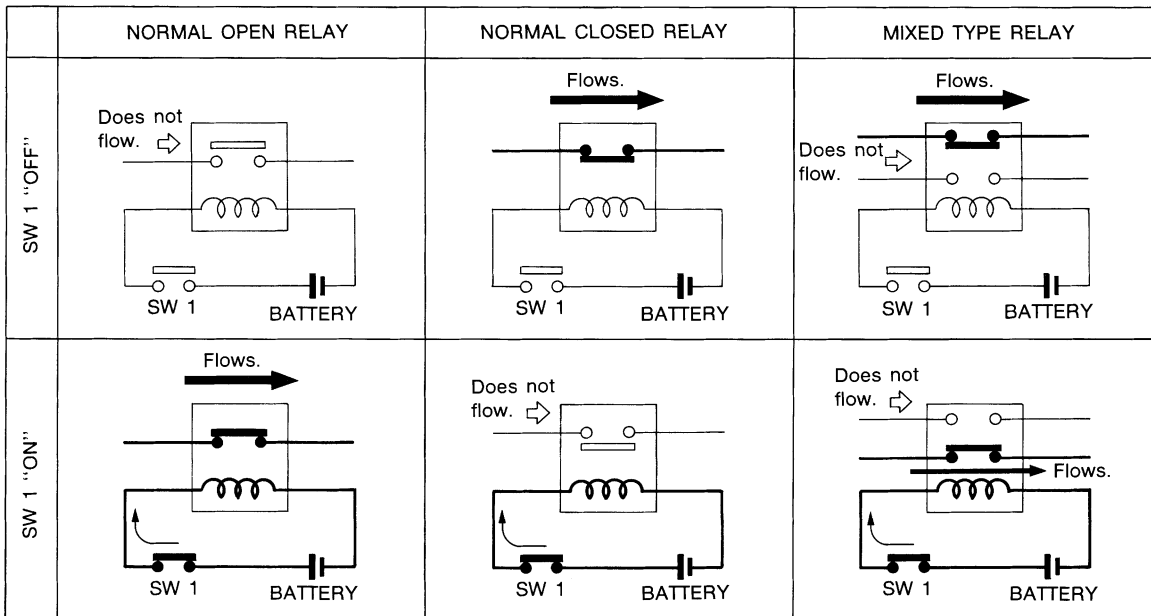
PFP:00011

NKS00167

## STANDARDIZED RELAY

### Description NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

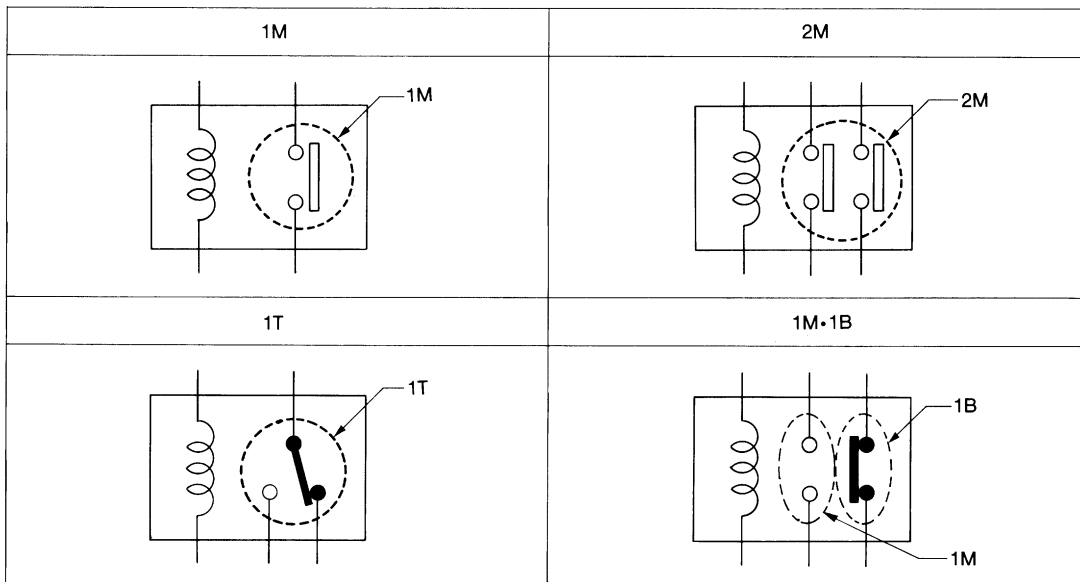
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

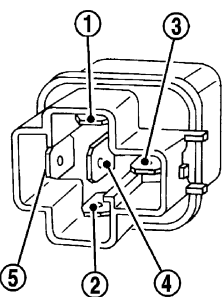
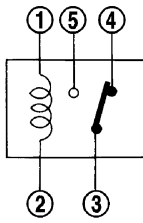
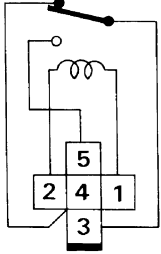
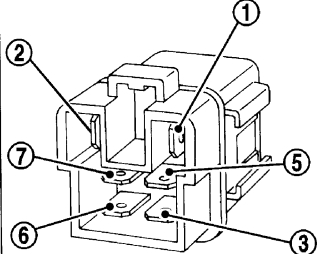
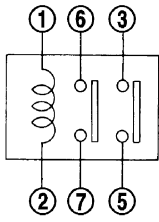
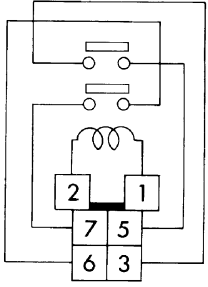
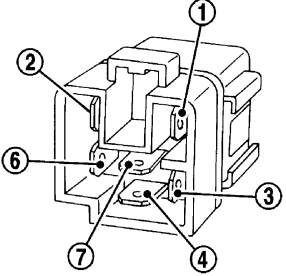
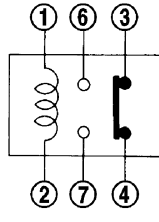
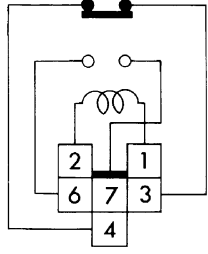
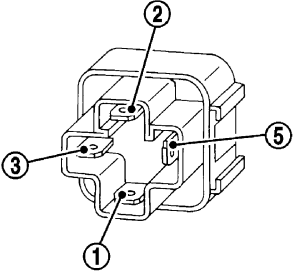
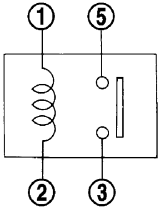
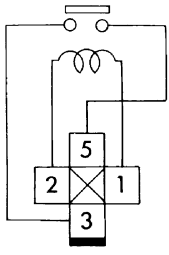
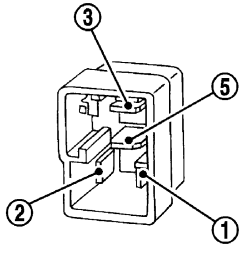
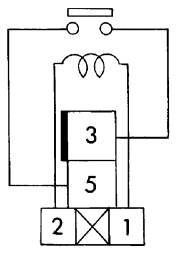
### TYPE OF STANDARDIZED RELAYS

- 1M ..... 1 Make
- 2M ..... 2 Make
- 1T ..... 1 Transfer
- 1M·1B ..... 1 Make 1 Break



SEL882H

# STANDARDIZED RELAY

Type	Outer view	Circuit	Connector symbol and connection	Case color
1T				BLACK
2M				BROWN
1M•1B				GRAY
1M				BLUE
				

The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

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

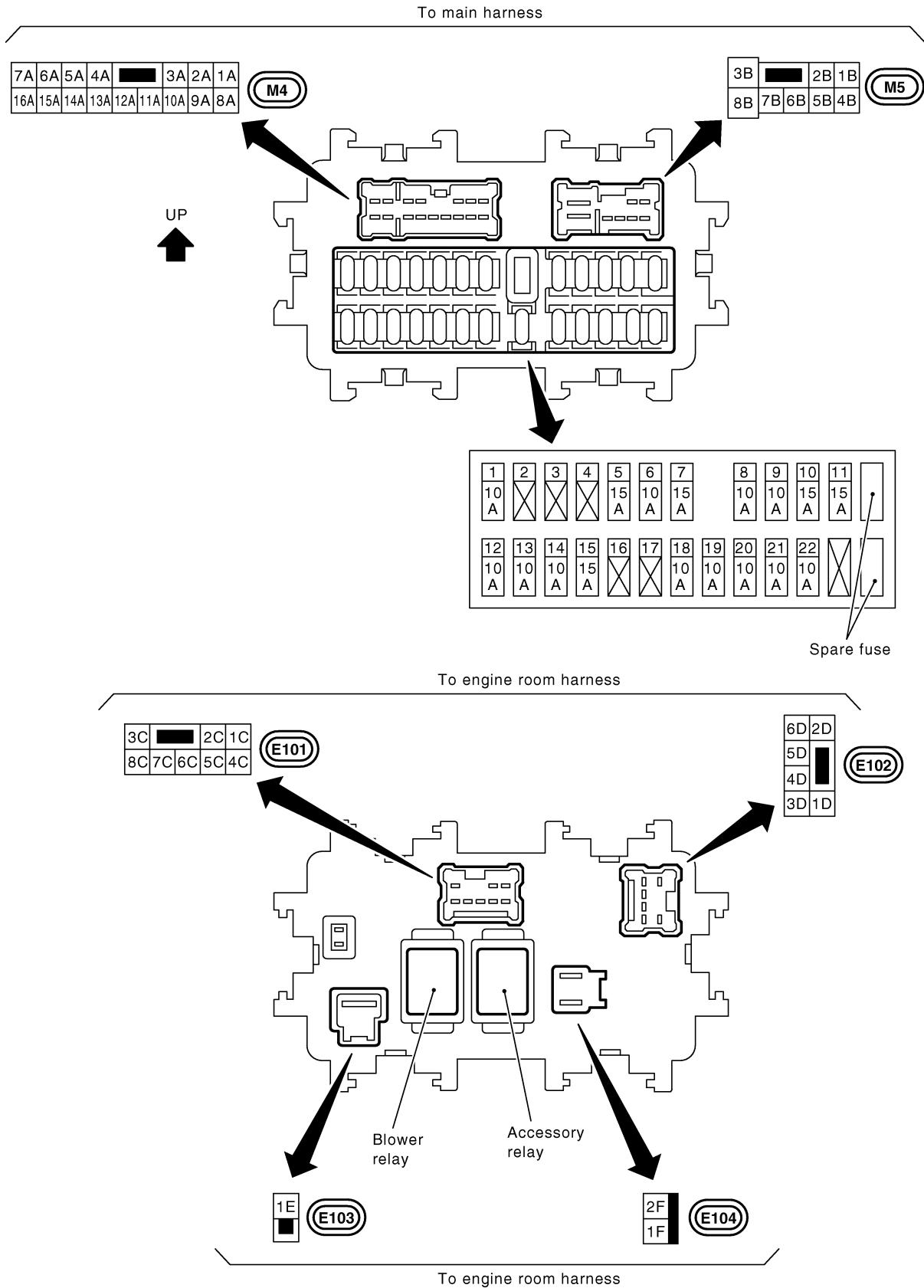
# FUSE BLOCK - JUNCTION BOX (J/B)

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

PF24350

### Terminal Arrangement

NKS00168



CKIM0599E

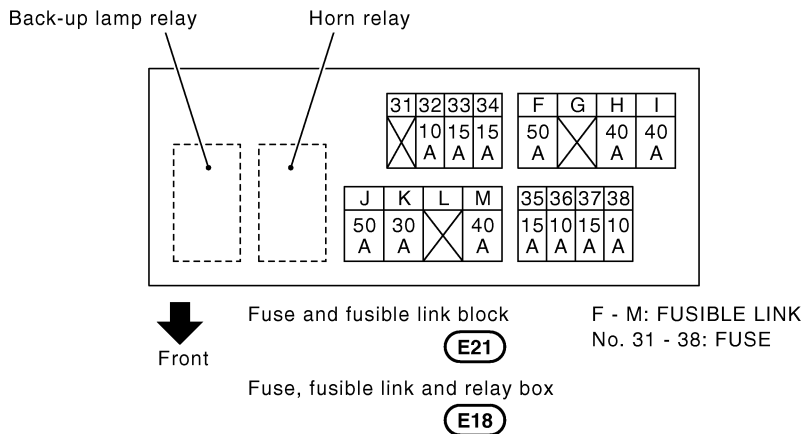
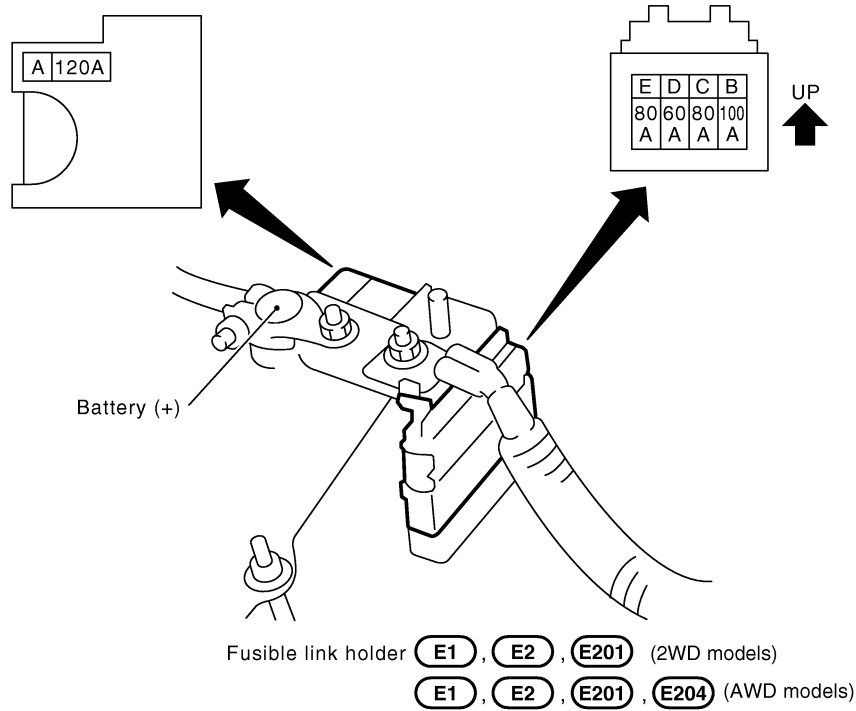
# FUSE, FUSIBLE LINK AND RELAY BOX

## FUSE, FUSIBLE LINK AND RELAY BOX

PFP:24382

### Terminal Arrangement

NKS00169



PG

L

M

CKIM0600E

# FUSE, FUSIBLE LINK AND RELAY BOX

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