

SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

PFP:00011

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

EKS007NJ

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

Wiring Diagrams and Trouble Diagnosis

EKS007NK

When you read wiring diagrams, refer to the following:

- Refer to [GI-15, "How to Read Wiring Diagrams"](#) in GI section.
- Refer to [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#) for power distribution.

When you perform trouble diagnosis, refer to the following:

- Refer to [GI-11, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#) in GI section.
- Refer to [GI-27, "How to Perform Efficient Diagnosis for an Electrical Incident"](#) in GI section.

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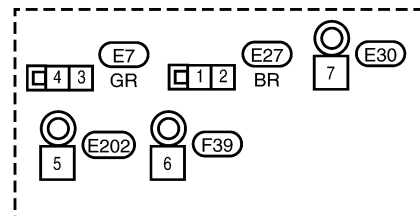
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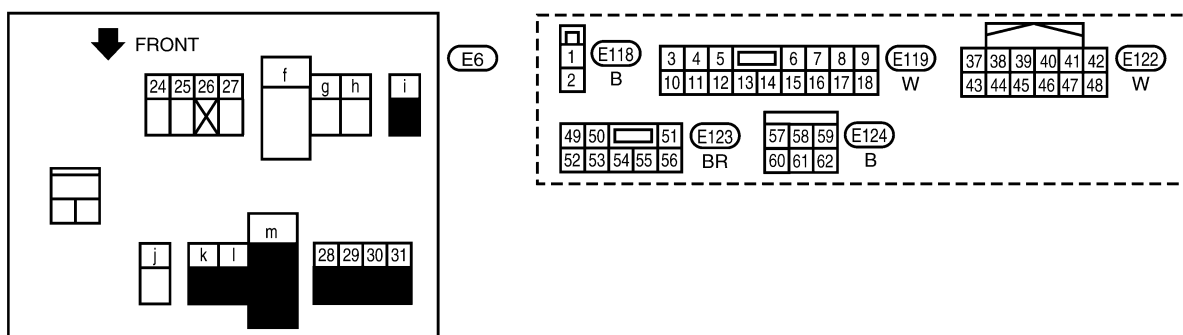
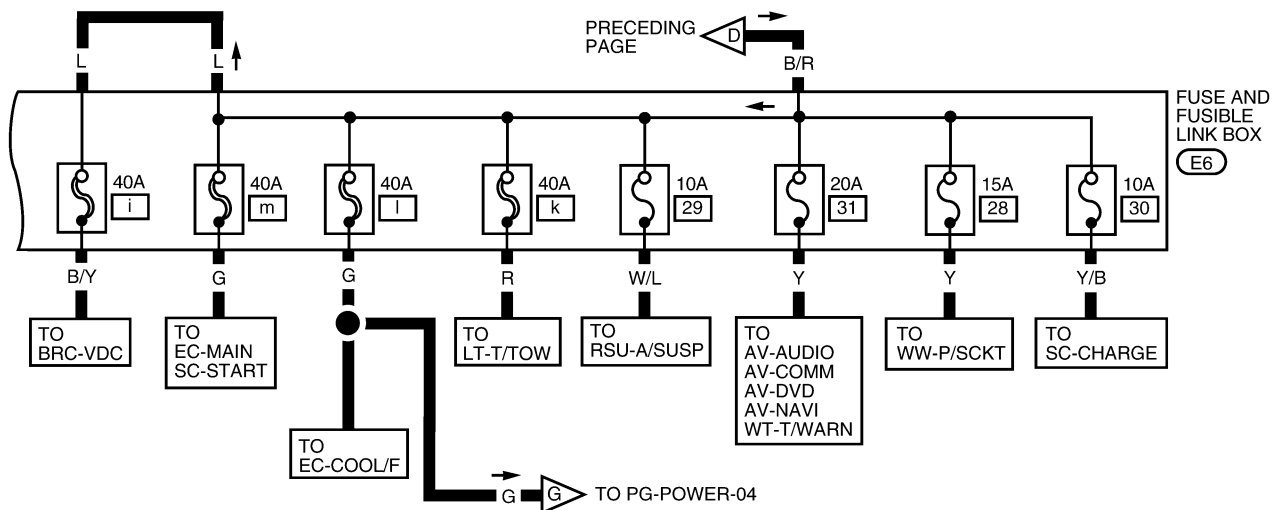
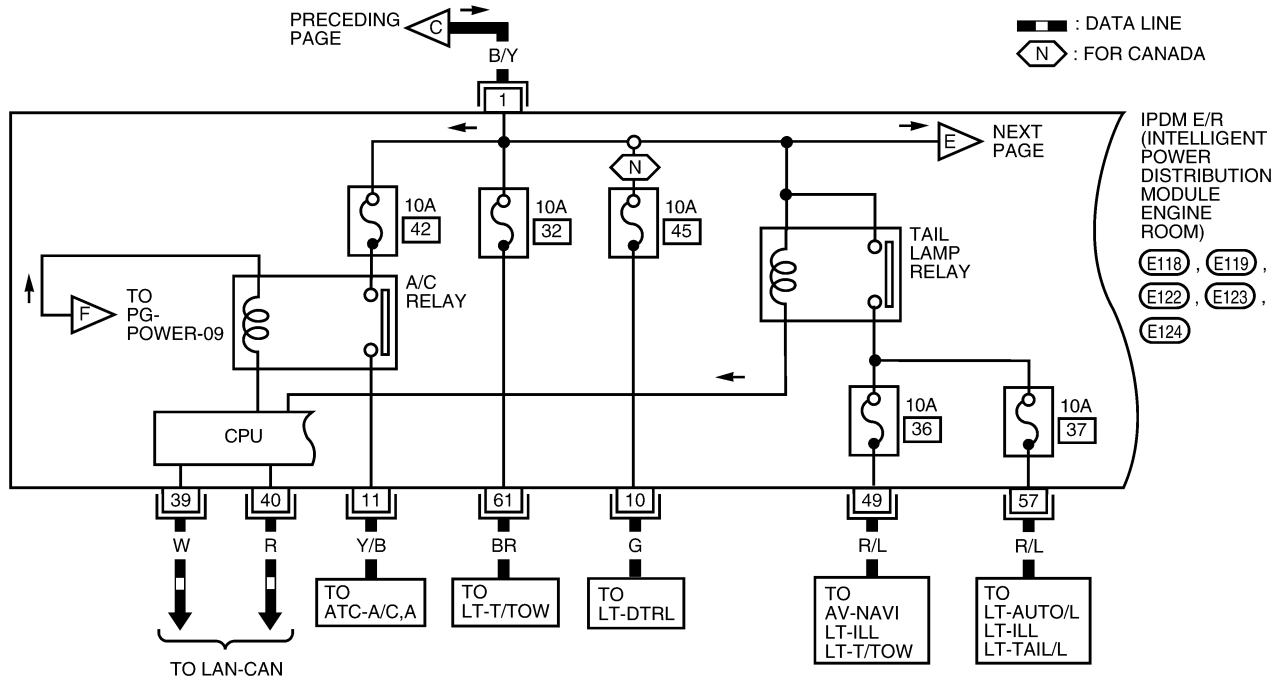


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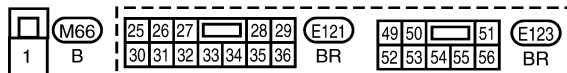
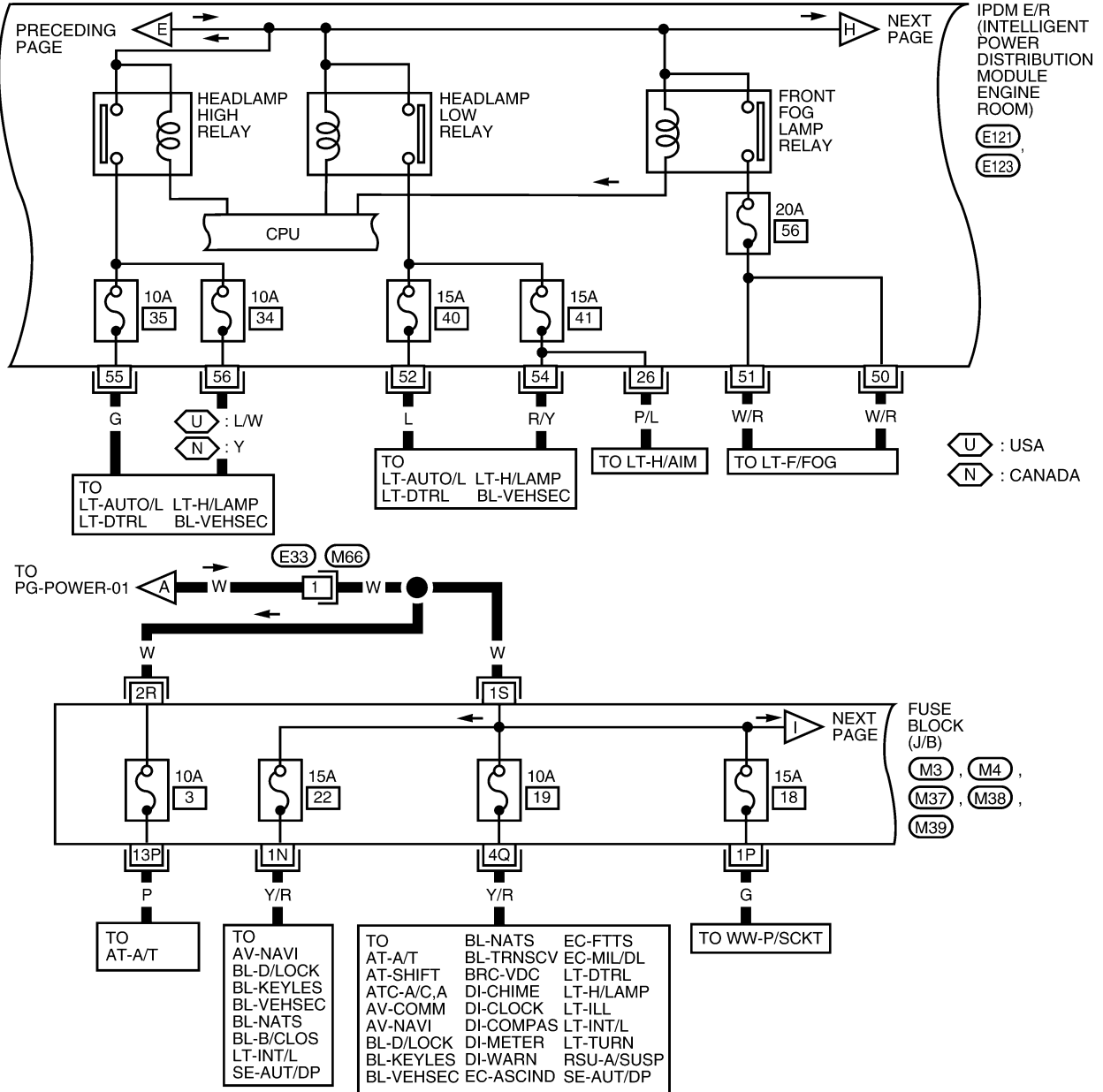
* FUSIBLE LINK





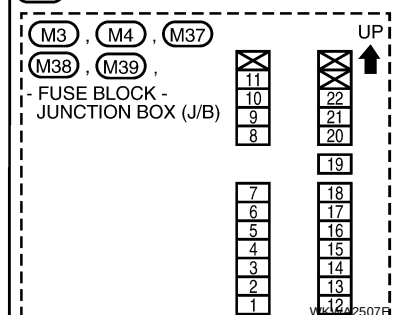
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03

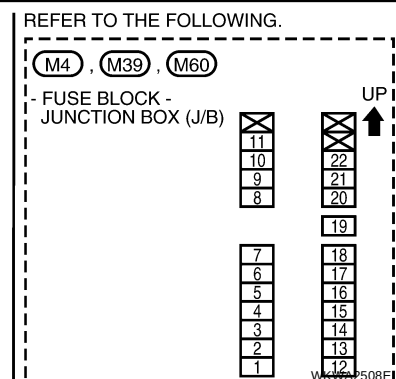


REFER TO THE FOLLOWING.

(M31) - SUPER MULTIPLE JUNCTION (SMJ)

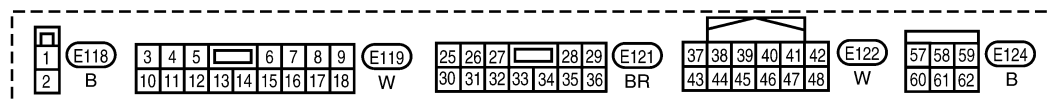
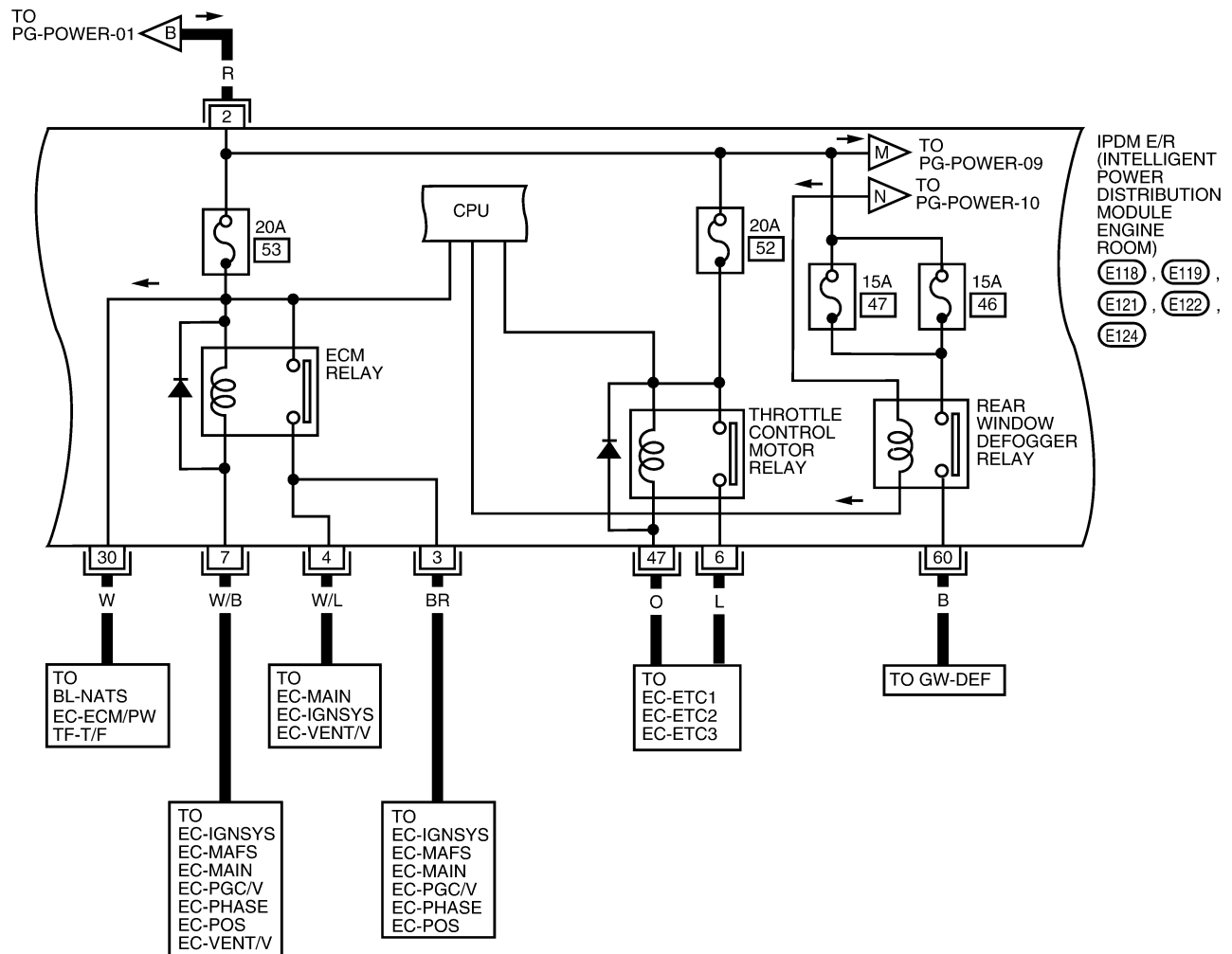


IC : WITH ICC



POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05

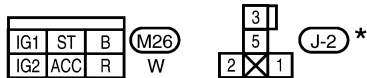
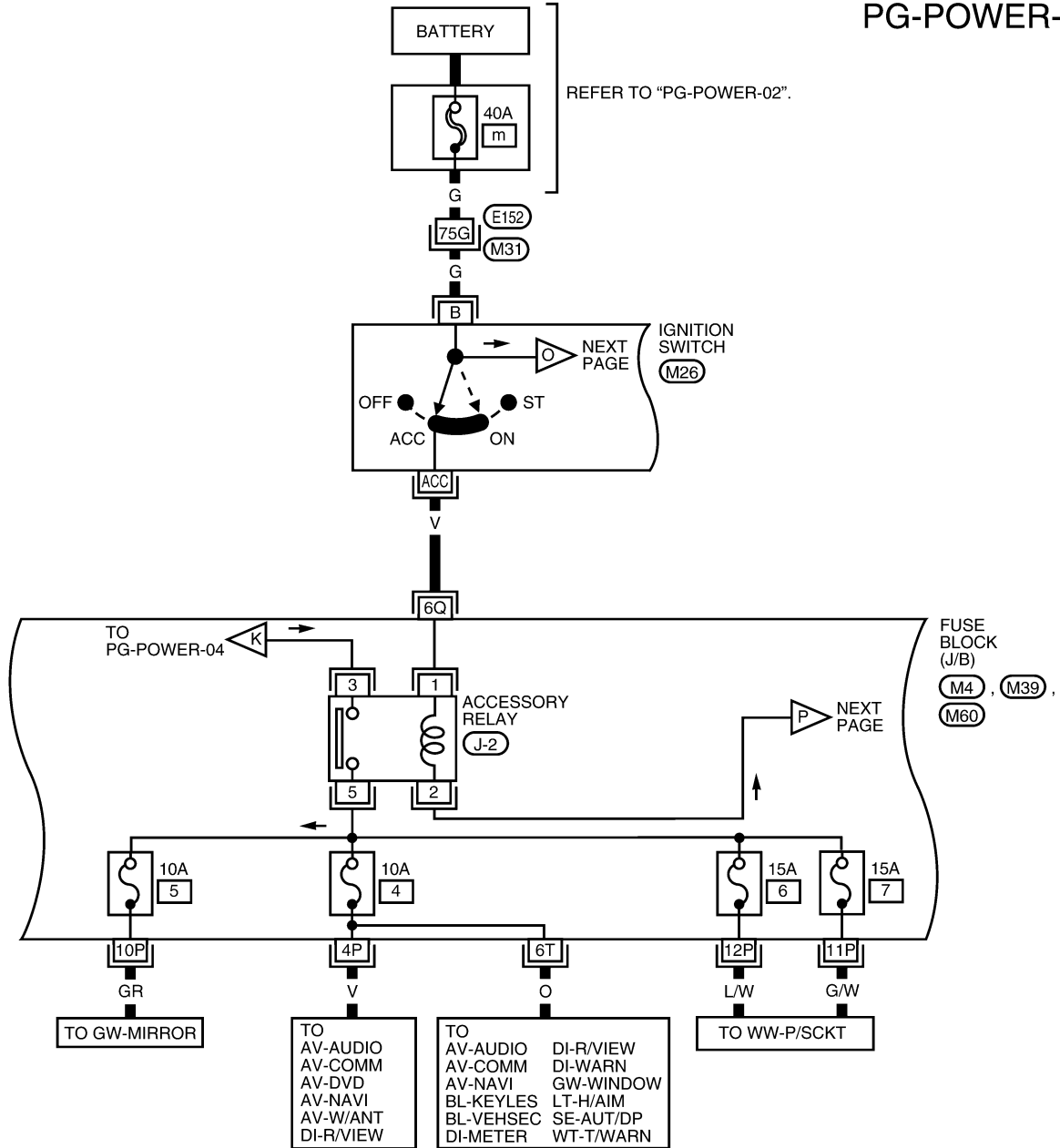


WKWA2509E

POWER SUPPLY ROUTING CIRCUIT

ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

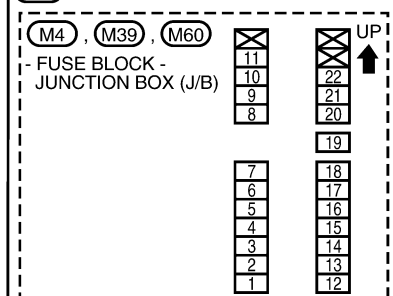
PG-POWER-06



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

REFER TO THE FOLLOWING.

(M31) - SUPER MULTIPLE JUNCTION (SMJ)

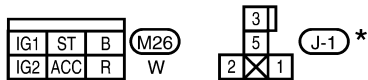
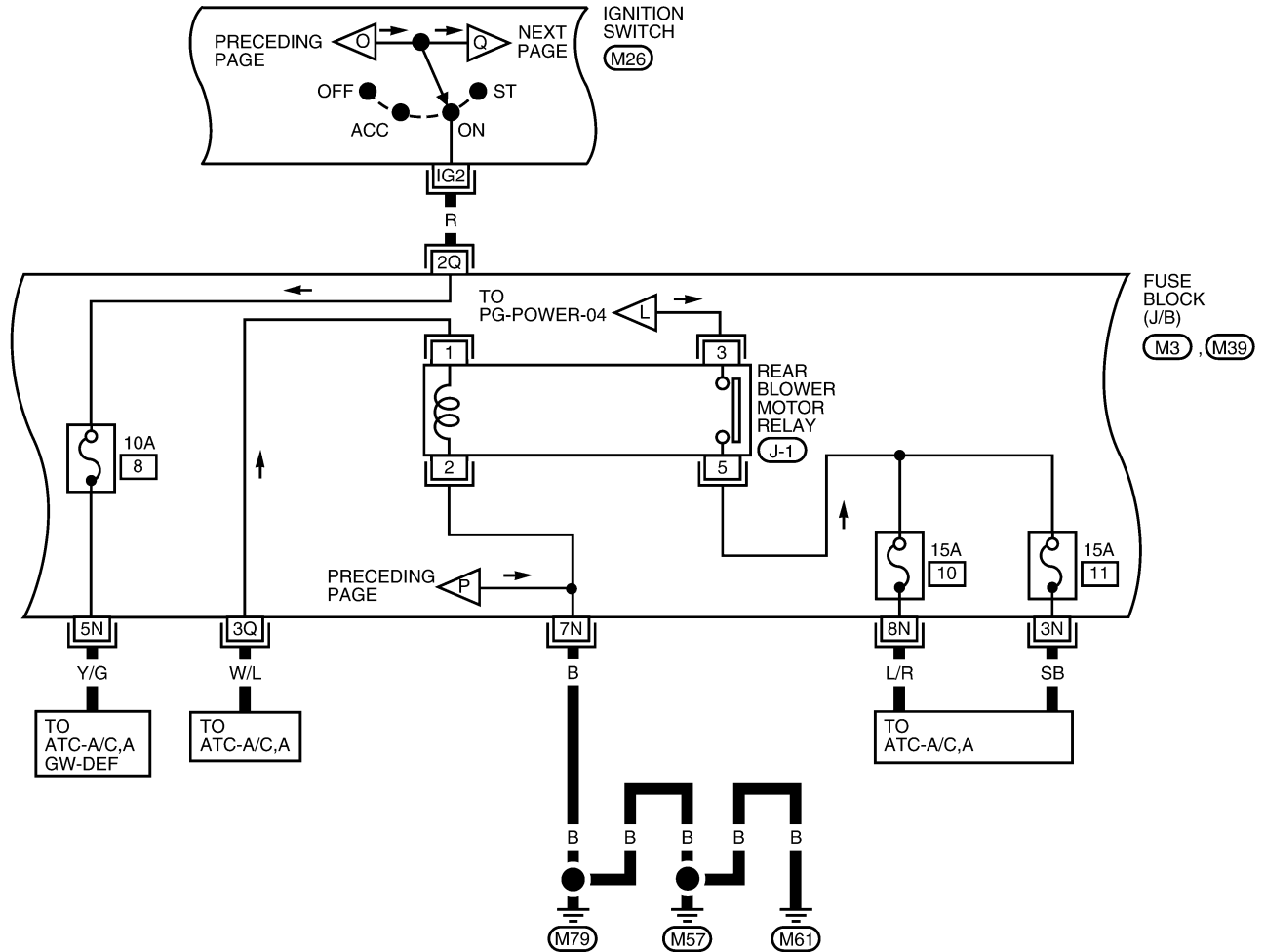


WKWA2510E

POWER SUPPLY ROUTING CIRCUIT

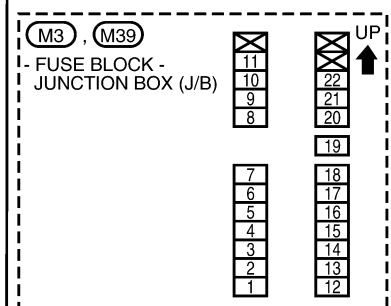
IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-07



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

REFER TO THE FOLLOWING.



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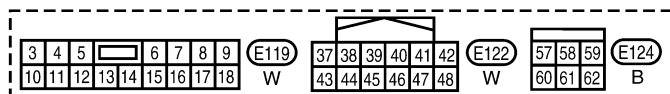
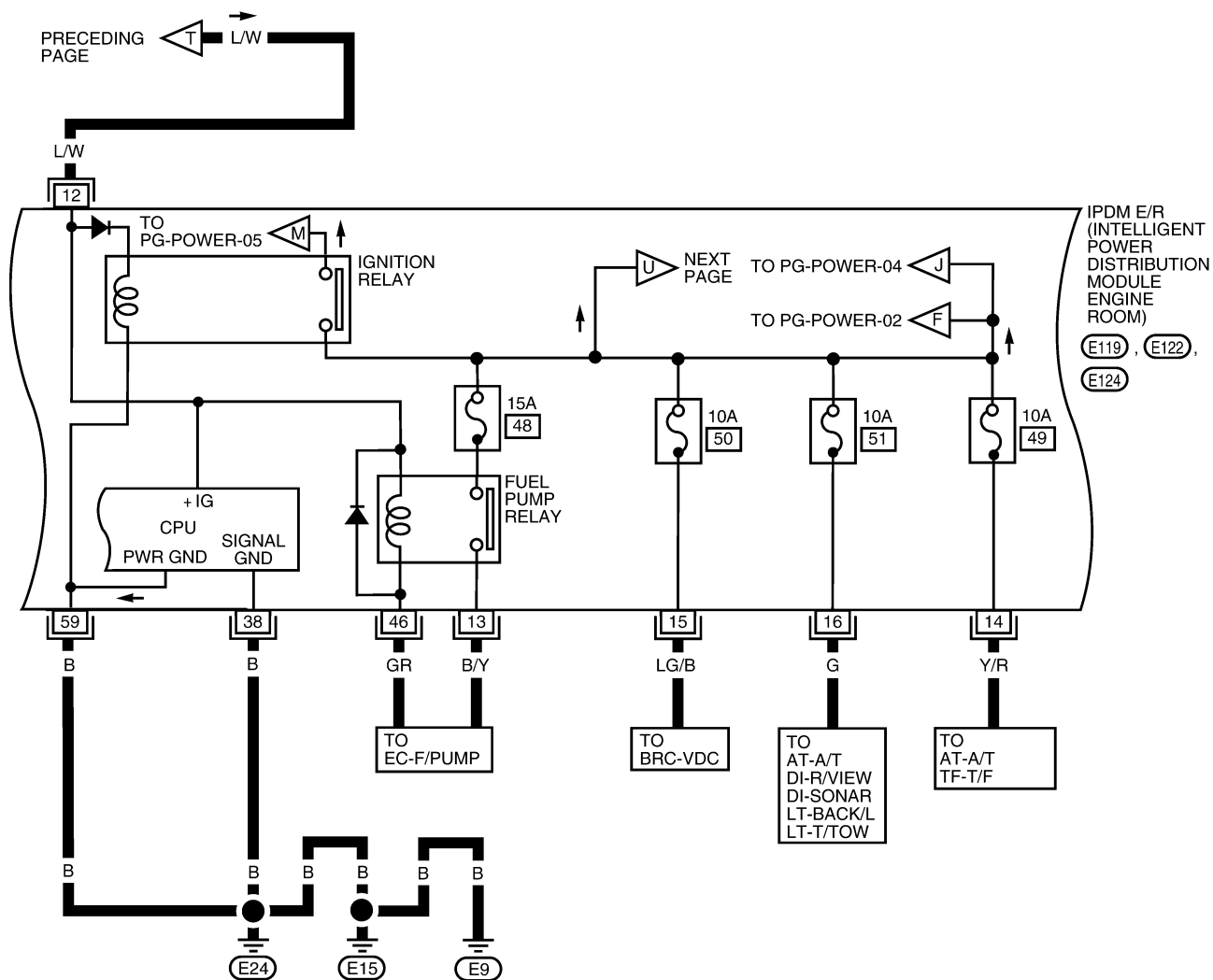
4W : WITH 4-WHEEL DRIVE



IG1	ST	B	M26 W
IG2	ACC	R	

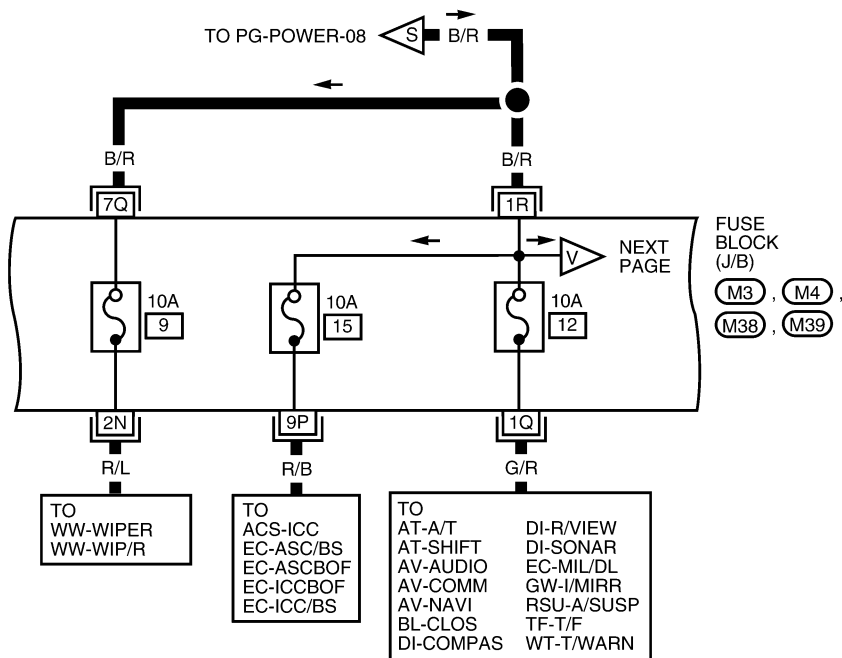
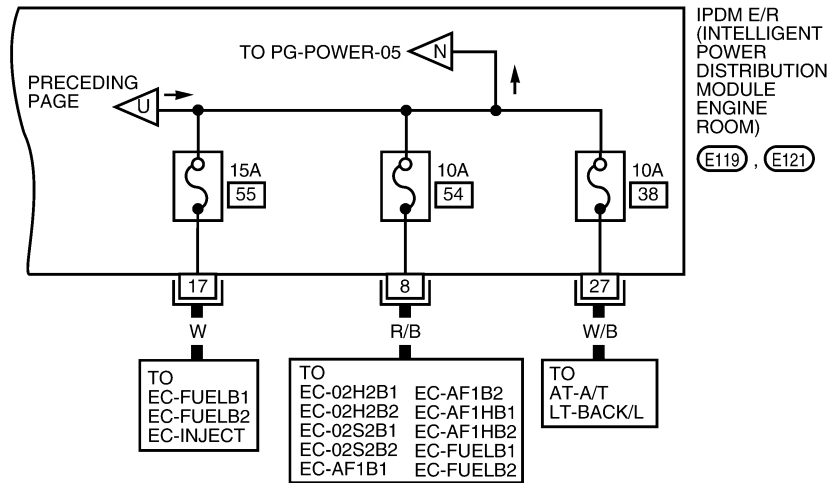
M31 - SUPER MULTIPLE
JUNCTION (SMJ)

WKWA2512E



POWER SUPPLY ROUTING CIRCUIT

PG-POWER-10



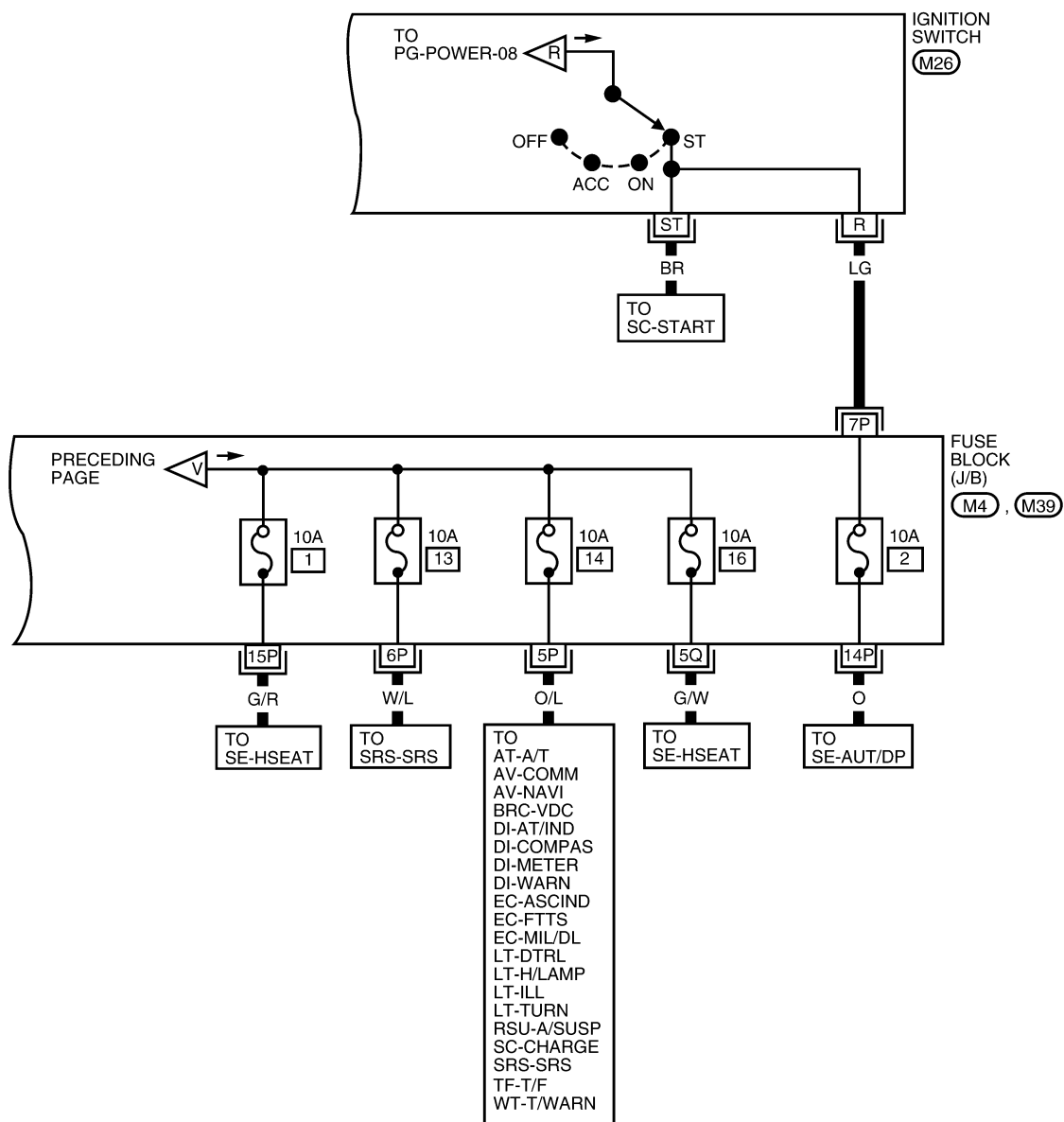
3	4	5	6	7	8	9	E119	25	26	27	28	29	E121
10	11	12	13	14	15	16	W	30	31	32	33	34	BR

REFER TO THE FOLLOWING.

M3	M4	M38				UP
M39				11	22	
				10	21	
				9	20	
				8		
					19	
				7	18	
				6	17	
				5	16	
				4	15	
				3	14	
				2	13	
				1	12	

FUSE BLOCK - JUNCTION BOX (J/B)

WKWA2514E



IG1	ST	B	M26 W
IG2	ACC	R	

REFER TO THE FOLLOWING.

M4 , M39
- FUSE BLOCK -
- JUNCTION BOX (J/B)

UP
↑

WKWA2515F

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

PFP:284B7

EKS007NN

System Description

- 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 relays via IPDM E/R control circuits.
- IPDM E/R-integrated control circuits perform ON-OFF operation of relays, CAN communication control, etc.
- It controls operation of each electrical component 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 lines, it receives signals from the BCM and controls the following lamps:
 - Headlamps (Hi, Lo)
 - Parking lamps
 - Tail lamps
 - Front fog lamps
2. Wiper control
Using CAN communication lines, it receives signals from the BCM and controls the front wipers.
3. Rear window defogger relay control
Using CAN communication lines, it receives signals from the BCM and controls the rear window defogger relay.
4. A/C compressor control
Using CAN communication lines, it receives signals from the ECM and controls the A/C compressor (magnetic clutch).
5. Starter control
Using CAN communication lines, it receives signals from the ECM and controls the starter relay.
6. Cooling fan control
Using CAN communication lines, it receives signals from the ECM and controls the cooling fan relays.
7. Horn control
Using CAN communication lines, it receives signals from the BCM and controls the 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 a 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 returns to normal operation, 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	● With the ignition switch ON, the headlamp (low) is ON. ● With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	● With the ignition switch ON, the tail and parking lamps are ON. ● With the ignition switch OFF, the tail and parking lamps are OFF.
Cooling fan	● With the ignition switch ON, the cooling fan HI operates. ● With the ignition switch OFF, the cooling fan stops.
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

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

Controlled system	Fail-safe mode
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

IPDM E/R STATUS CONTROL

In order to save power, IPDM E/R switches status automatically 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 1 second has elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
 - IPDM E/R operates in low current-consumption mode.
 - CAN communication is stopped.
 - When a change in CAN communication signal is detected, mode switches to CAN communication status.
 - When a change in ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

EKS007NO

Refer to [LAN-5, "CAN COMMUNICATION"](#) .

Function of Detecting Ignition Relay Malfunction

EKS007NP

- When the integrated ignition relay is stuck in a "closed contact" position and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.
- When the state of the integrated ignition relay does not agree with the state of the ignition switch signal received via CAN communication, the IPDM E/R activates the tail lamp relay.

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.

CONSULT-II Function (IPDM E/R)

EKS007NQ

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

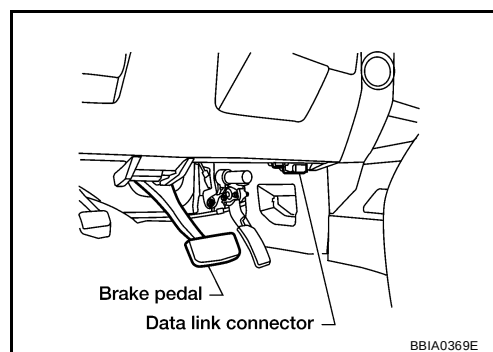
IPDM E/R diagnostic mode	Description
SELF-DIAG RESULTS	Displays IPDM E/R self-diagnosis results.
DATA MONITOR	Displays IPDM E/R input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.

CONSULT-II BASIC OPERATION

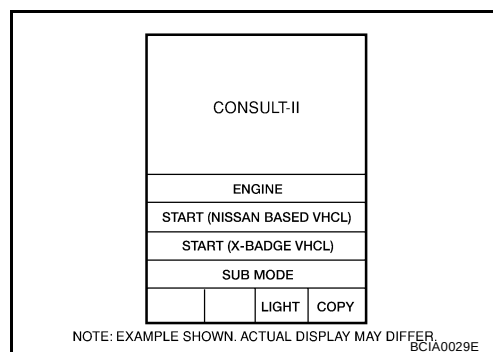
CAUTION:

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

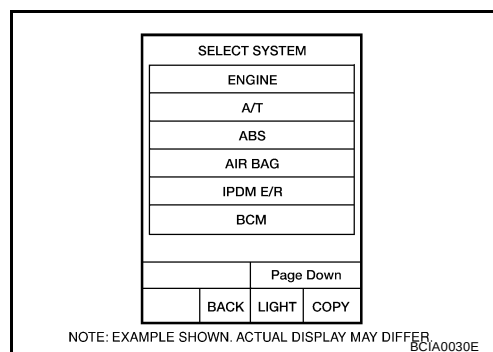
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn ignition switch ON.



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

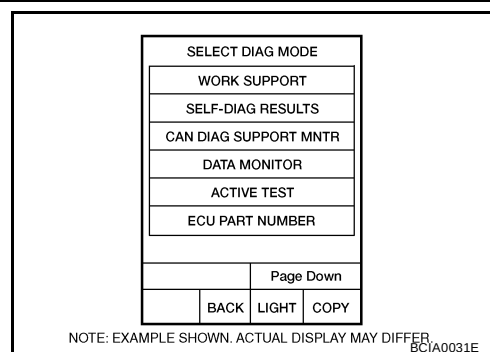


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, print "SELECT SYSTEM" screen, then refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#) .



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

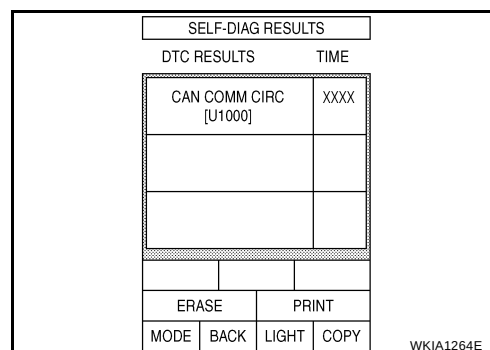
4. Select the desired part to be diagnosed on the "SELECT DIAG MODE" screen.



SELF-DIAGNOSTIC RESULTS

Operation Procedure

1. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
2. Self-diagnosis results are displayed.



Display Item List

Display items	CONSULT-II display code	Malfunction detection	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	—	—	—	—	—
CAN COMM CIRC	U1000	● If CAN communication reception/transmission data has a malfunction, or if any of the control units fail, data reception/transmission cannot be confirmed. ● When the data in CAN communication is not received before the specified time.	X	X	Any of items listed below have errors: ● TRANSMIT DIAG ● ECM ● BCM/SEC

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 placed in IPDM E/R memory.

DATA MONITOR

Operation Procedure

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

ALL SIGNALS	All signals will be monitored.
MAIN SIGNALS	Monitors the predetermined item(s).
SELECTION FROM MENU	Selects and monitors individual signal(s).

3. Touch "START".
4. Touch the required monitoring item on "SELECTION FROM MENU".

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

5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

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

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	X	X	X	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	X	X	X	Signal status input from ECM
Position lights request	TAIL & CLR REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp low beam request	HL LO REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp high beam request	HL HI REQ	ON/OFF	X	X	X	Signal status input from BCM
Front fog lights request	FR FOG REQ	ON/OFF	X	X	X	Signal status input from BCM
Front wiper request	FR WIP REQ	STOP/1LOW/LOW/HI	X	X	X	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	X	X	X	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/Block	X	X	X	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	X		X	Status of input signal ^{NOTE}
Ignition relay status	IGN RLY	ON/OFF	X	X	X	Ignition relay status monitored with IPDM E/R
Rear defogger request	RR DEF REQ	ON/OFF	X	X	X	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	X		X	Signal status input from IPDM E/R (function is not enabled)
Hood switch	HOOD SW	OFF	X			Signal status input from IPDM E/R (function is not enabled)
Theft warning horn request	THFT HRN REQ	ON/OFF	X		X	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	X		X	Output status of IPDM E/R
Daytime running lamp request	DTRL REQ	ON/OFF	X		X	Signal status input from BCM

NOTE:

Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is in ACC position, display may not be correct.

ACTIVE TEST

Operation Procedure

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

Test name	CONSULT-II screen display	Description
Rear defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear defogger relay can be operated.
Front wiper (HI, LO) output	FRONT WIPER	With a certain operation (OFF, HI, LO), the front wiper relay (Lo, Hi) can be operated.
Cooling fan output	MOTOR FAN	With a certain operation (1, 2, 3, 4), the cooling fan can be operated.
Lamp (HI, LO, TAIL, FOG) output	EXTERNAL LAMPS	With a certain operation (OFF, TAIL, LO, HI, FOG), the lamp relay (Low, High, Tail, Fog) can be operated.

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

Test name	CONSULT-II screen display	Description
Cornering lamp output	CORNERING LAMP	—
Horn output	HORN	With a certain ON-OFF operation, the horn relay can be operated.

Auto Active Test DESCRIPTION

EKS007NR

- 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
 - Tail and parking lamps
 - Front fog lamps
 - Headlamps (Hi, Lo)
 - A/C compressor (magnet clutch)
 - Cooling fan

OPERATION PROCEDURE

1. Close hood and front door RH, and 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 front door switch LH 10 times. 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.
6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

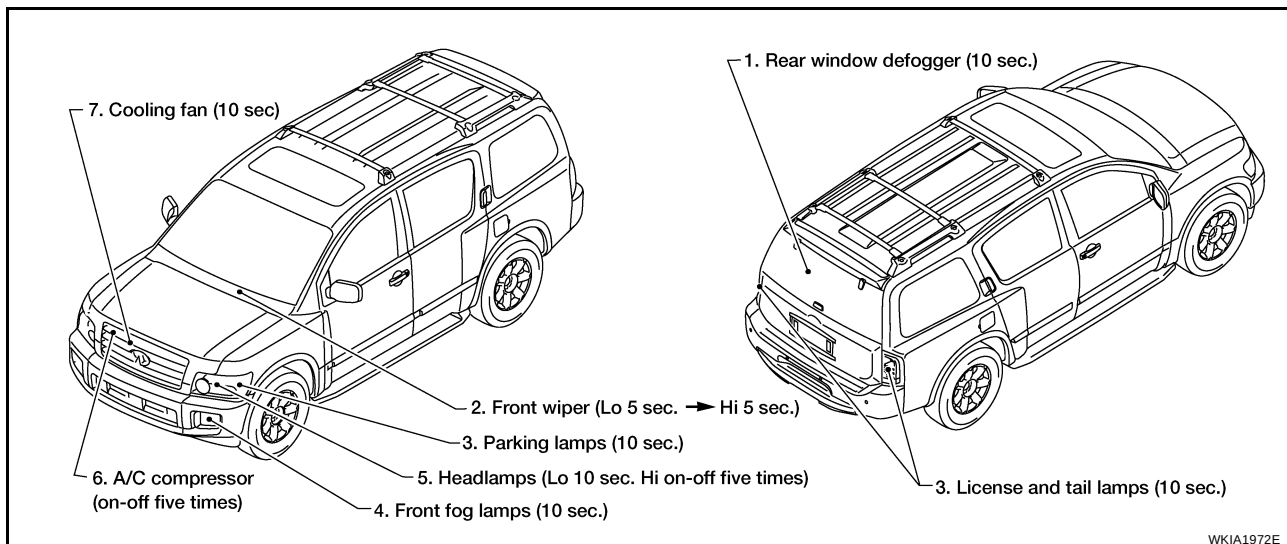
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform [BL-93, "Door Switch Check"](#) when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

- When auto active test mode is actuated, the following seven 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 the systems controlled by IPDM E/R cannot be operated, possible cause can be easily diagnosed using auto active test.

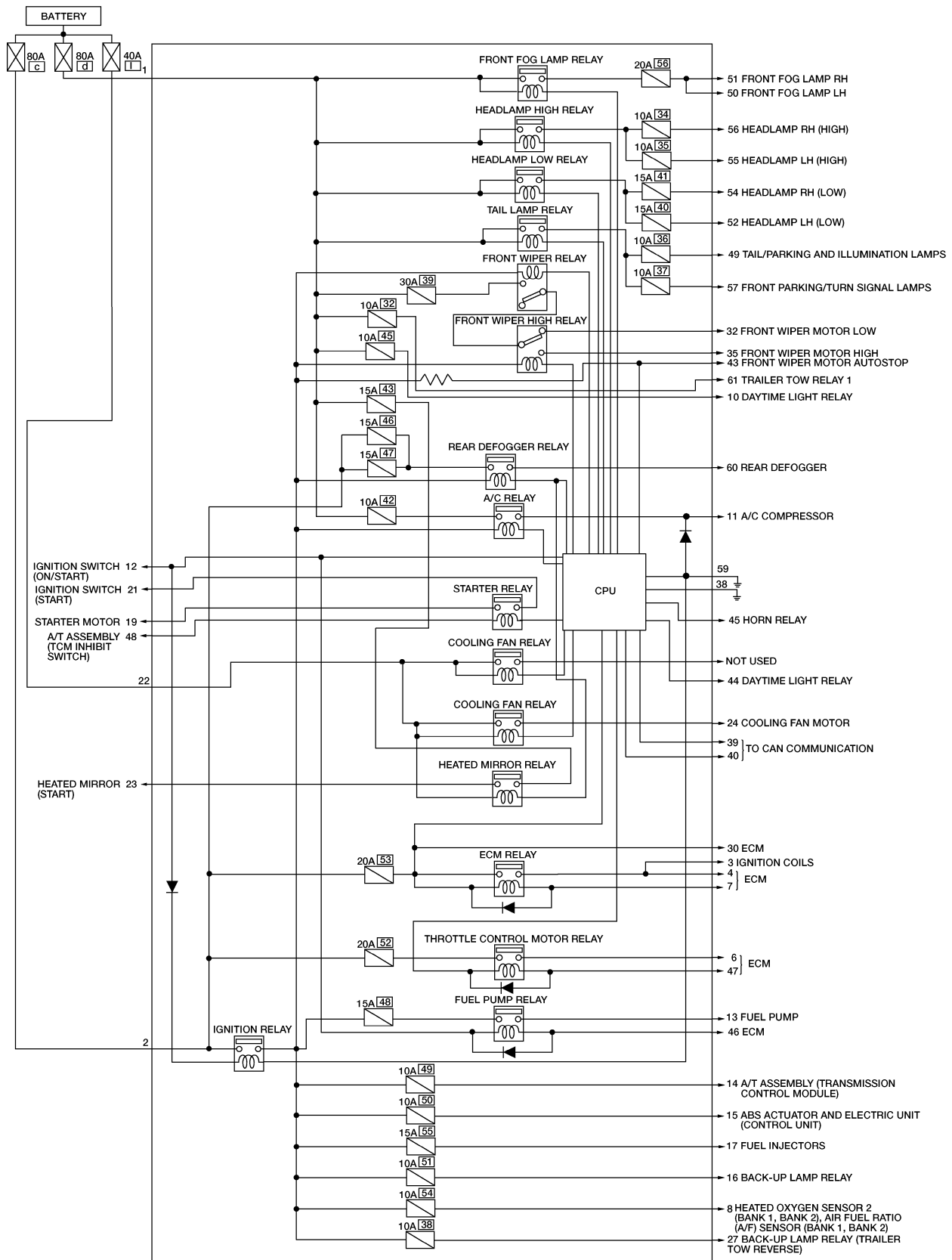
Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES
		● BCM signal input circuit
		NO
		● Rear window defogger relay ● Open circuit of rear window defogger ● IPDM E/R malfunction ● Harness or connector malfunction between IPDM E/R and rear window defogger
Any of front wipers, tail and parking lamps, front fog lamps, and headlamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES
		● BCM signal input system
		NO
		● Lamp/wiper motor malfunction ● Lamp/wiper motor ground circuit malfunction ● Harness/connector malfunction between IPDM E/R and system in question ● IPDM E/R (integrated relay) malfunction
A/C compressor does not operate.	Perform auto active test. Does magnet clutch operate?	YES
		● BCM signal input circuit ● CAN communication signal between BCM and ECM ● CAN communication signal between ECM and IPDM E/R
		NO
		● Magnet clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnet clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES
		● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO
		● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction

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

Schematic

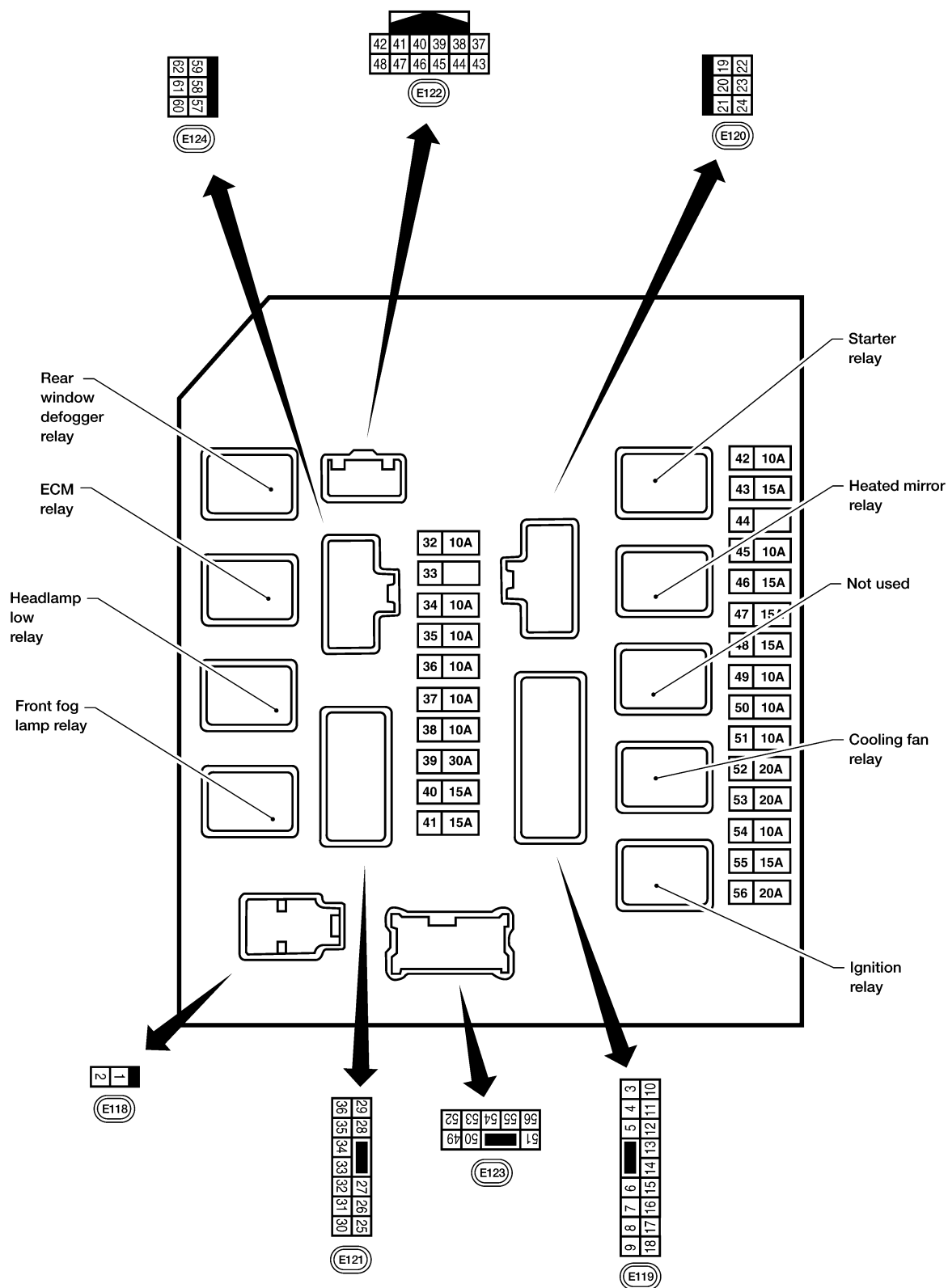
EKS007NS



WK1A4249E

IPDM E/R Terminal Arrangement

EKS007NT



WKIA4231E

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

IPDM E/R Power/Ground Circuit Inspection

EKS007NU

1. FUSE AND FUSIBLE LINK INSPECTION

Check that the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Signal name	Fuse, fusible link No.
1, 2	Battery power	a, c, d

OK or NG

OK >> GO TO 2.

NG >> Replace fuse or fusible link.

2. POWER CIRCUIT INSPECTION

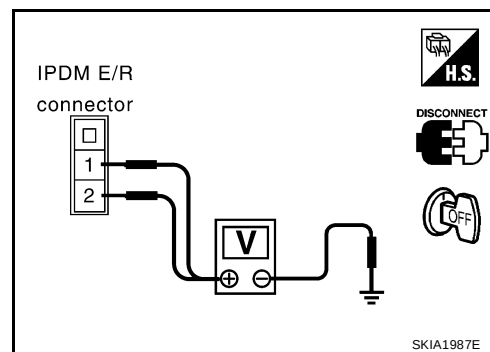
1. Disconnect IPDM E/R harness connector E118.
2. Check voltage between IPDM E/R harness connector E118 terminals 1 (B/Y), 2 (R) and ground.

Battery voltage should exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace IPDM E/R power circuit harness.



3. GROUND CIRCUIT INSPECTION

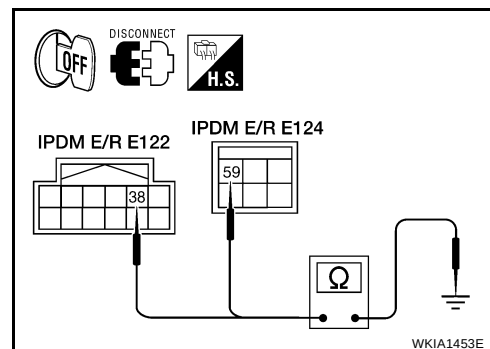
1. Disconnect IPDM E/R harness connectors E122 and E124.
2. Check continuity between IPDM E/R harness connector E122 terminal 38 (B), and E124 terminal 59 (B) and ground.

Continuity should exist.

OK or NG

OK >> Inspection End.

NG >> Repair or replace ground circuit harness of IPDM E/R.



Inspection with CONSULT-II (Self-Diagnosis)

EKS007NV

CAUTION:

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

1. SELF-DIAGNOSIS RESULT CHECK

1. Connect CONSULT-II and select "IPDM E/R" on the Diagnosis System Selection screen.
2. Select "SELF-DIAG RESULTS" on the diagnosis mode selection screen.
3. Check display content in self-diagnosis 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	X	X	Any of items listed below have errors: ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The Details for Display for the Period are as follows:

- CRNT: Error currently detected by IPDM E/R.
- PAST: Error detected in the past and stored in IPDM E/R memory.

Contents displayed

NO DTC DETECTED. FURTHER TESTING MAY BE REQUIRED.>>Inspection End.

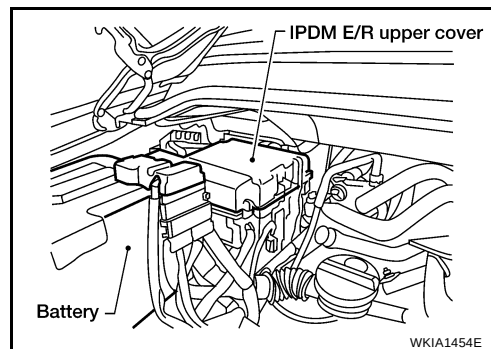
CAN COMM CIRC>>Print out the self-diagnosis result and refer to [LAN-5, "CAN COMMUNICATION"](#) .

Removal and Installation of IPDM E/R

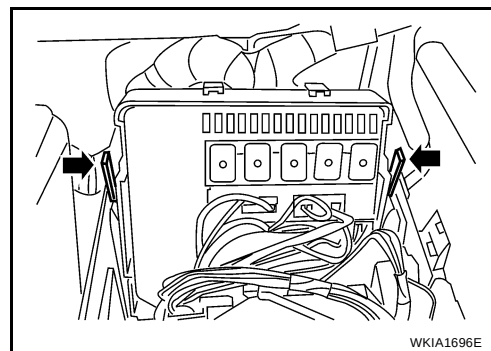
EKS007NW

REMOVAL

1. Disconnect negative battery cable.
2. Remove IPDM E/R upper cover.



3. Release 2 clips and pull IPDM E/R up from case.
4. Disconnect IPDM E/R connectors and remove the IPDM E/R.



INSTALLATION

Installation is in the reverse order of removal.

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

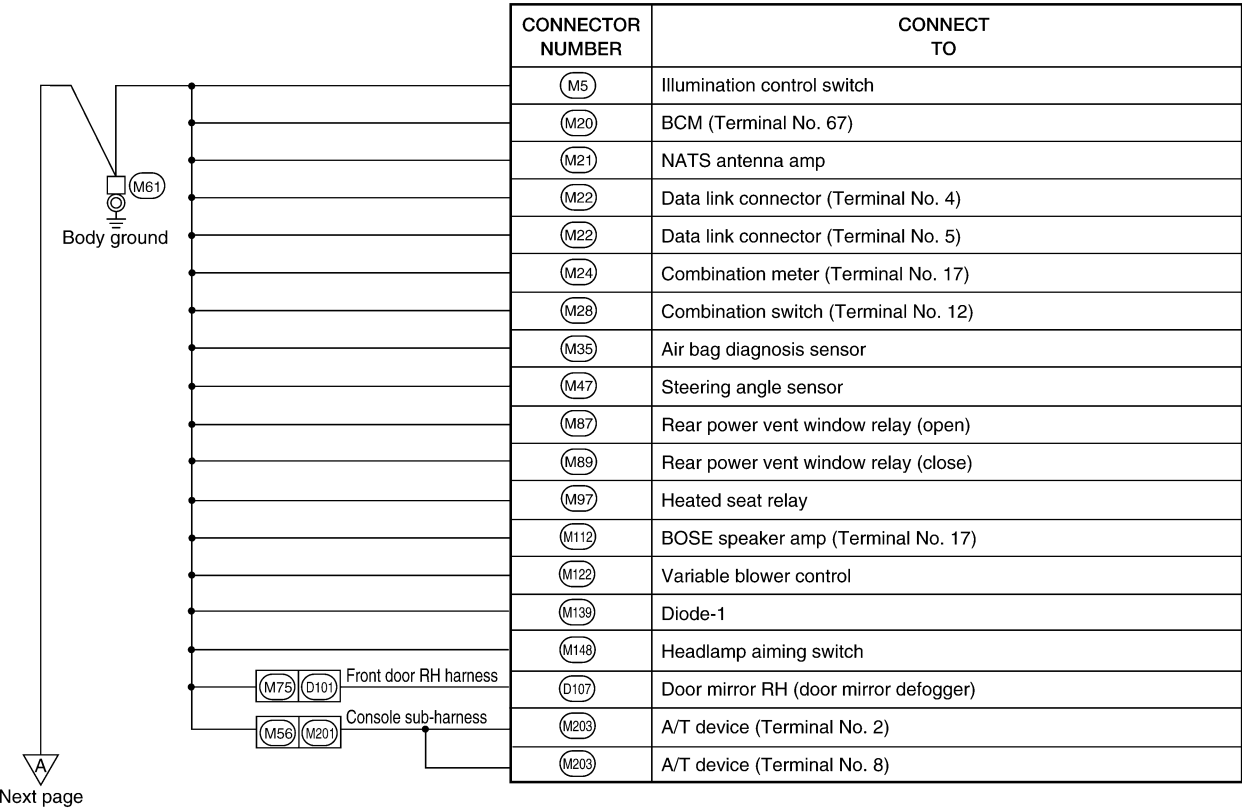
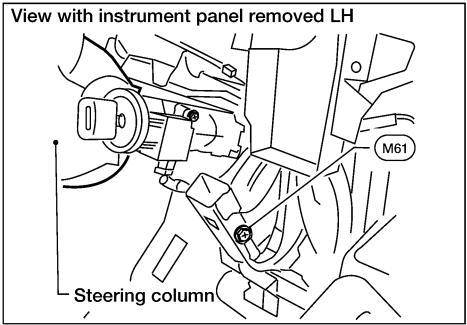
GROUND CIRCUIT

PFP:24080

EKS007NX

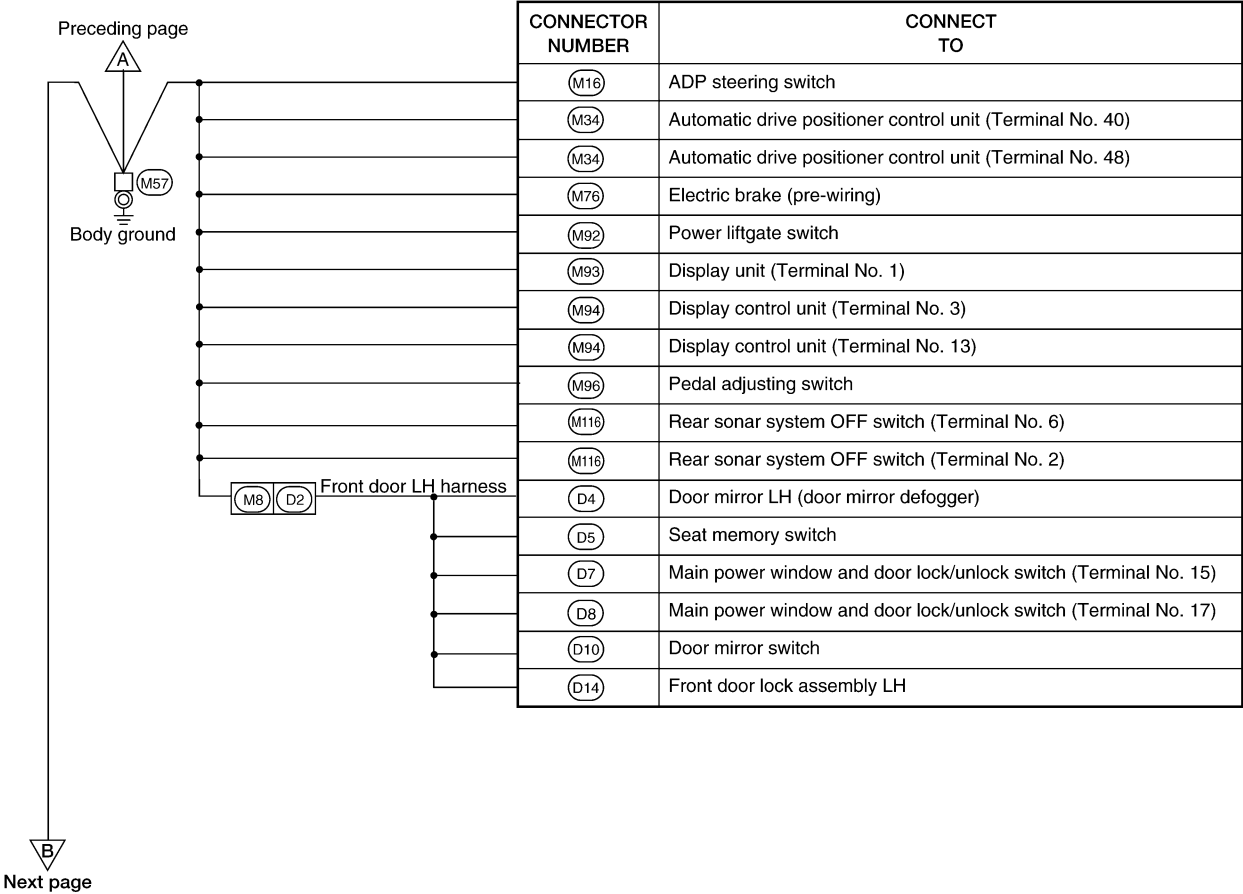
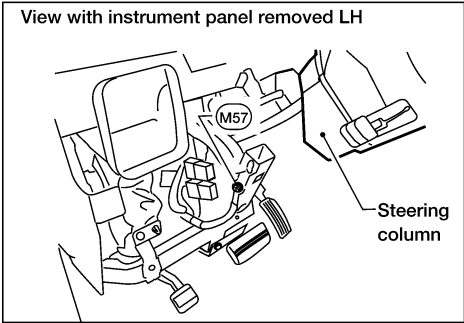
GROUND CIRCUIT

Ground Distribution MAIN HARNESS



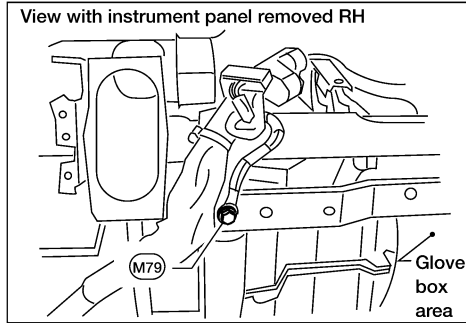
WKIA3525E

GROUND CIRCUIT

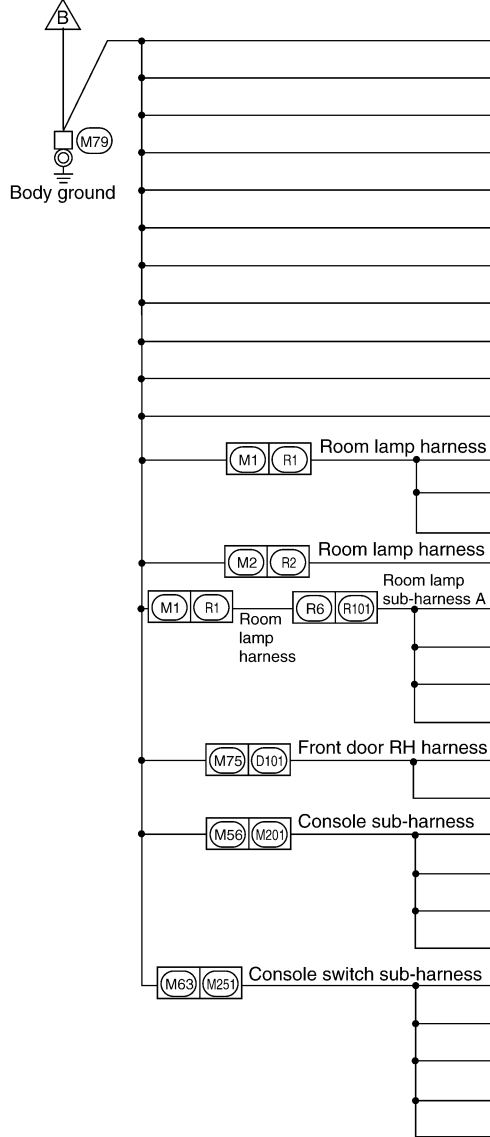


WK1A3526E

GROUND CIRCUIT



Preceding page

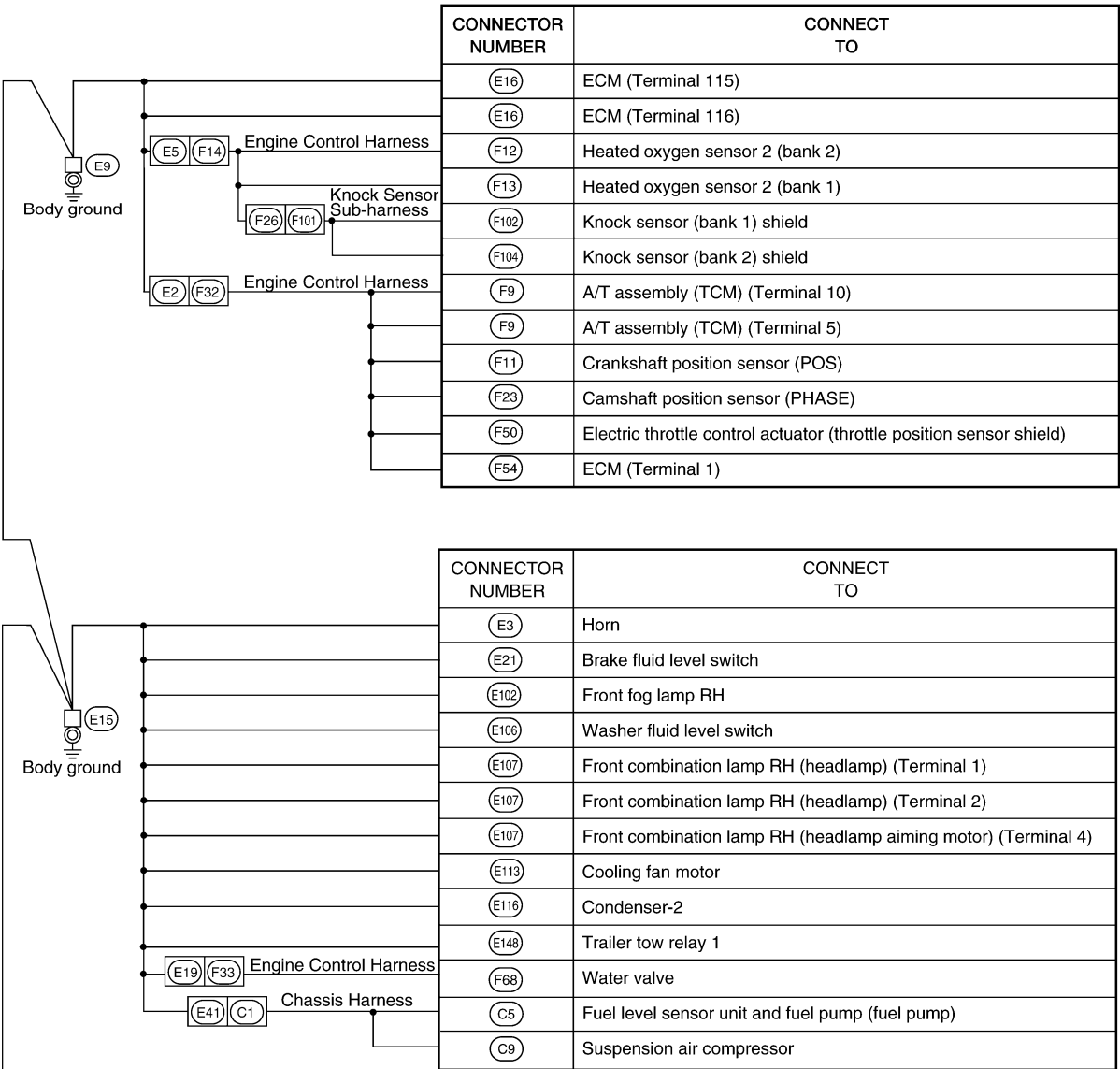
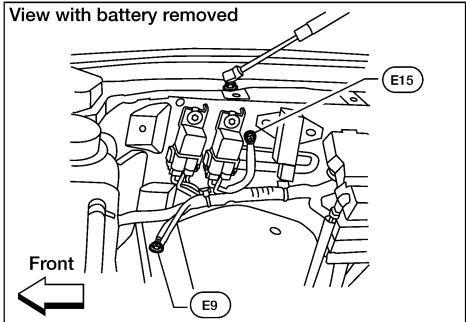


CONNECTOR NUMBER	CONNECT TO
(M3)	Fuse block J/B
(M13)	Front passenger air bag off indicator
(M49)	Front air control (Terminal No. 1)
(M52)	Rear blower switch (front)
(M53)	Front power socket LH
(M54)	Front power socket RH (for cigarette lighter)
(M55)	Hazard switch
(M59)	Glove box lamp
(M81)	Shift lock control unit
(M98)	AV switch
(M149)	Clock
(R3)	Vanity lamp LH
(R7)	Auto anti-dazzling inside mirror
(R8)	Vanity lamp RH
(R4)	Sunroof motor
(R102)	Front room/map lamp assembly
(R103)	Rear power vent window switch
(R105)	Compass and thermometer
(R106)	HOMELINK universal transceiver
(D105)	Power window and door lock/unlock switch RH
(D107)	Door mirror RH (door mirror defogger)
(M206)	DVD player (Terminal No. 22)
(M207)	Console power socket
(M208)	Rear heated seat switch LH
(M209)	Rear heated seat switch RH
(M252)	Front heated seat switch RH
(M253)	VDC OFF switch
(M254)	Tow mode switch (Terminal No. 2)
(M254)	Tow mode switch (Terminal No. 6)
(M255)	Front heated seat switch LH

WKIA3527E

GROUND CIRCUIT

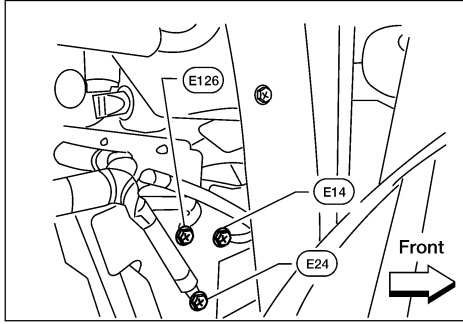
ENGINE ROOM HARNESS



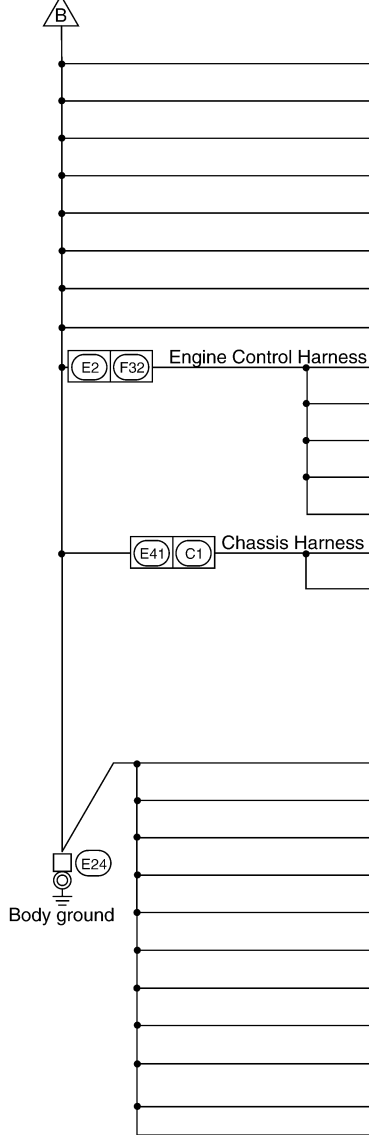
B
Next page

WKIA4232E

GROUND CIRCUIT



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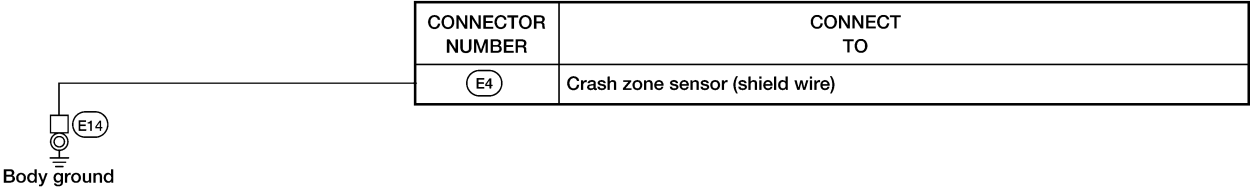
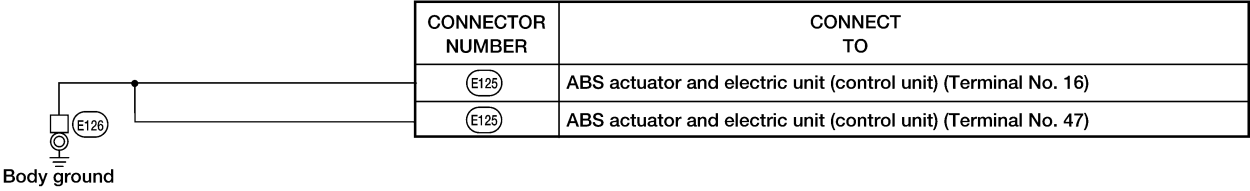
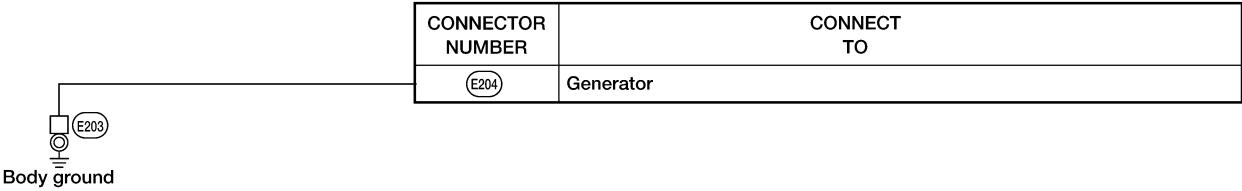
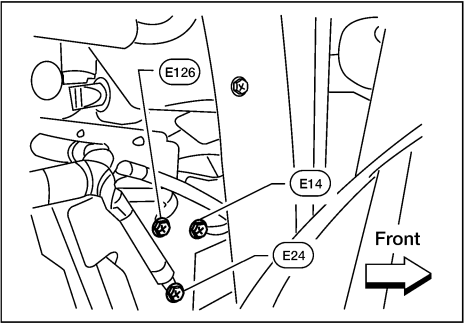
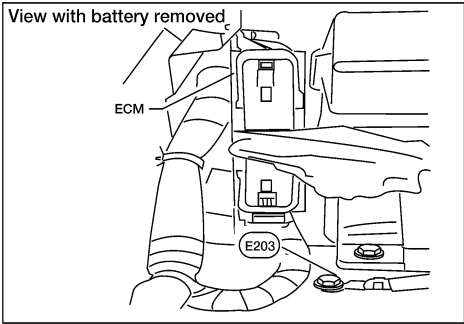


CONNECTOR NUMBER	CONNECT TO
(E46)	Transfer shift high relay (Terminal No. 2)
(E46)	Transfer shift high relay (Terminal No. 4)
(E47)	Transfer shift low relay (Terminal No. 2)
(E47)	Transfer shift low relay (Terminal No. 4)
(E130)	Compressor motor relay
(E140)	Trailer tow relay 2
(E148)	Trailer tow relay 1
(E142)	Transfer control unit
(F55)	ATP switch
(F57)	Transfer motor
(F58)	Transfer control device (actuator position switch) (Terminal No. 22)
(F59)	Wait detection switch
(F60)	Neutral-4LO switch
(C2)	Trailer
(C9)	Suspension air compressor

CONNECTOR NUMBER	CONNECT TO
(E6)	Hood switch
(E11)	Front combination lamp LH (headlamp) (Terminal No. 1)
(E11)	Front combination lamp LH (headlamp) (Terminal No. 2)
(E11)	Front combination lamp LH (headlamp aiming motor) (Terminal No. 4)
(E23)	Front wiper motor
(E42)	ICC sensor
(E46)	Front fog lamp LH
(E46)	Daytime light relay
(E47)	IPDM E/R (Terminal No. 38)
(E47)	IPDM E/R (Terminal No. 59)
(E101)	ICC brake hold relay

WKIA3528E

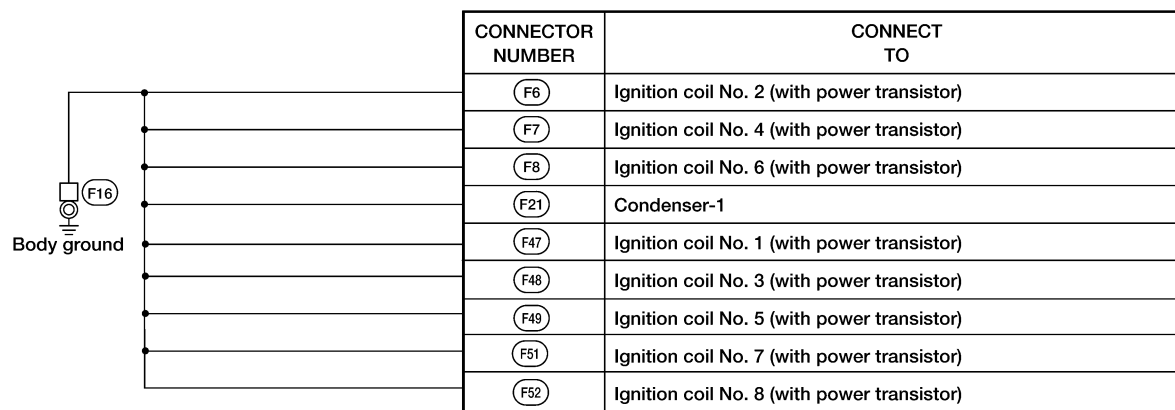
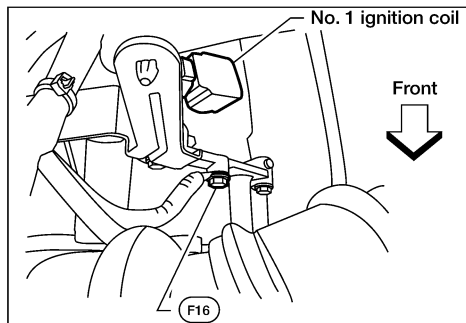
GROUND CIRCUIT



WKIA1459E

GROUND CIRCUIT

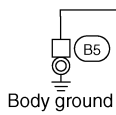
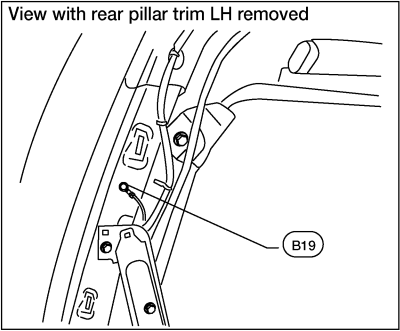
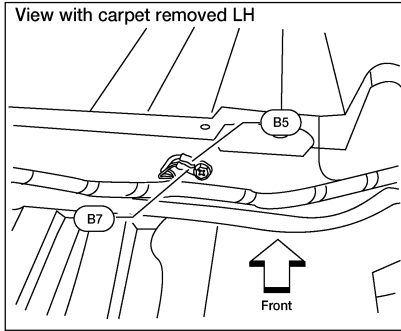
ENGINE CONTROL HARNESS



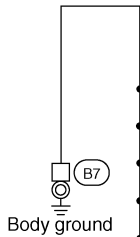
WKIA1460E

GROUND CIRCUIT

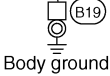
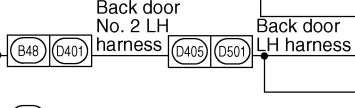
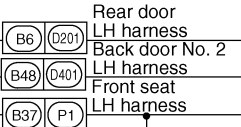
BODY HARNESS



CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag satellite sensor (shield wire)



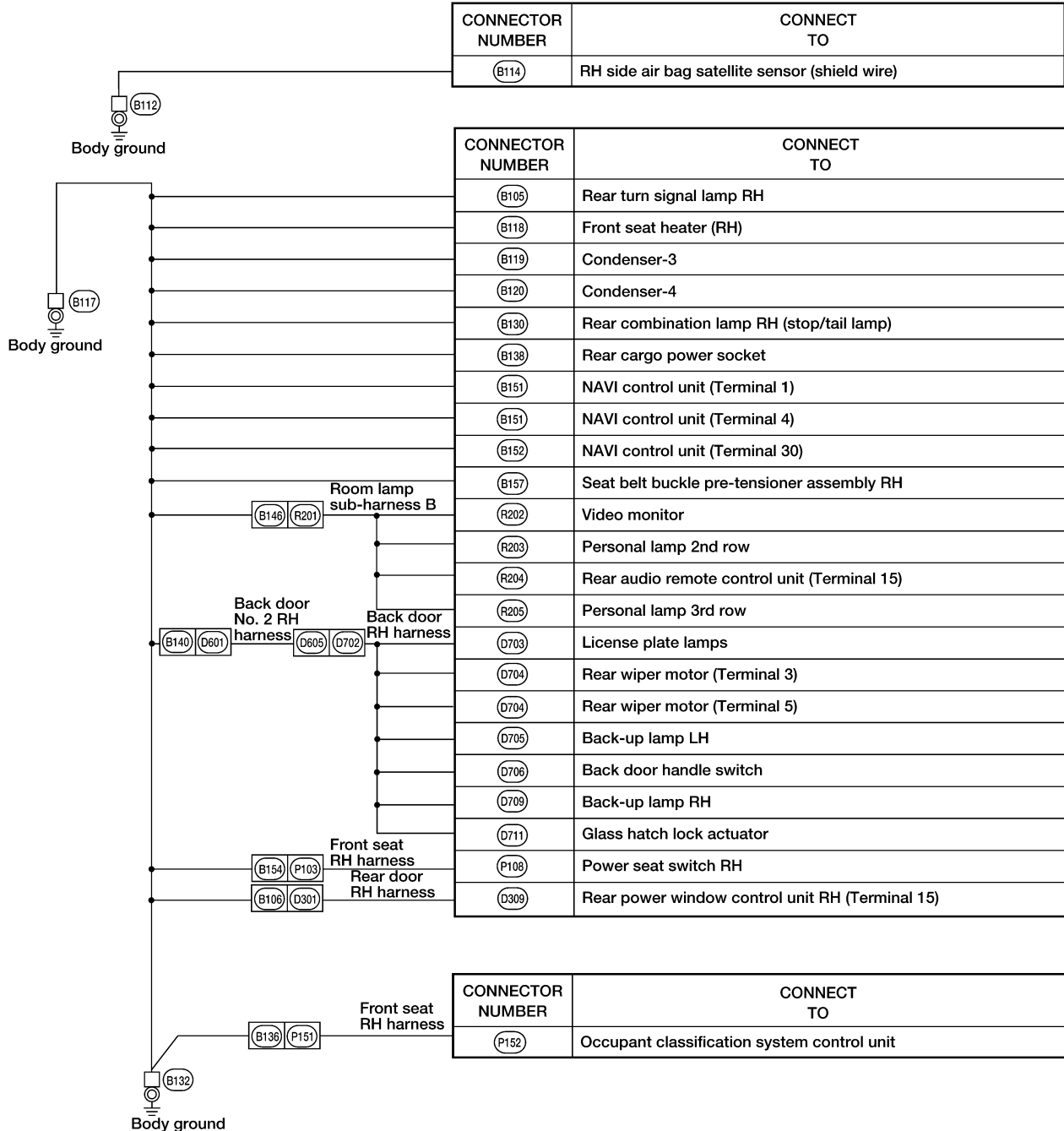
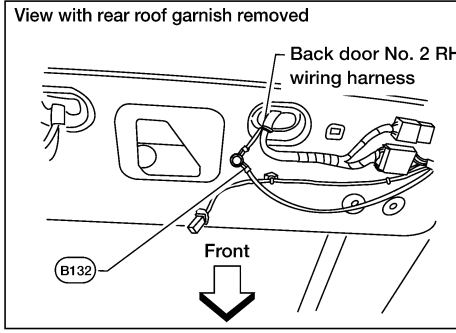
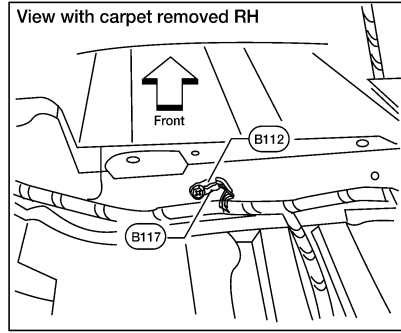
CONNECTOR NUMBER	CONNECT TO
B3	Suspension control unit (Terminal 16)
B13	ICC unit (Terminal 46)
B17	ICC unit (Terminal 19)
B17	ICC unit (Terminal 20)
B35	Rear turn signal lamp LH
B55	Back door control unit (Terminal 1)
B55	Back door control unit (Terminal 2)
B56	Sonar control unit
B63	Back door close switch
B70	Rear combination lamp LH (stop/tail lamp)
B72	Subwoofer
B73	Rear view camera control unit (Terminal 3)
B74	Seat belt buckle pre-tensioner assembly LH
B75	Rear seat heater LH
B76	Rear seat heater RH
D209	Rear power window control unit LH (Terminal 15)
D403	High mounted stop lamp
P2	Driver seat control unit (signal ground) (Terminal 32)
P3	Driver seat control unit (power ground) (Terminal 48)
P8	Power seat switch LH (Terminal 3)
P9	Front seat heater LH
D503	Back door latch
D504	Rear view camera



WKIA1991E

GROUND CIRCUIT

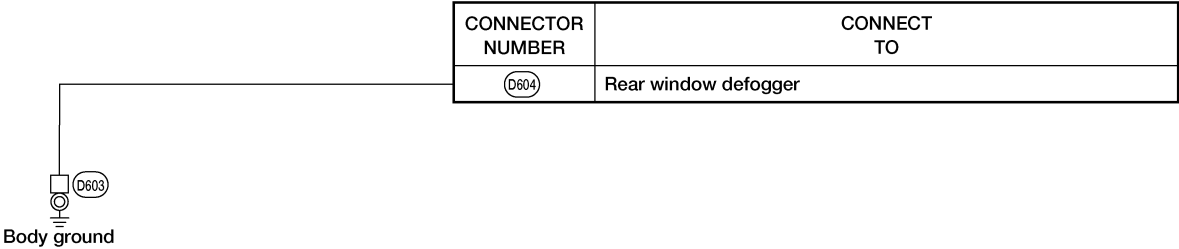
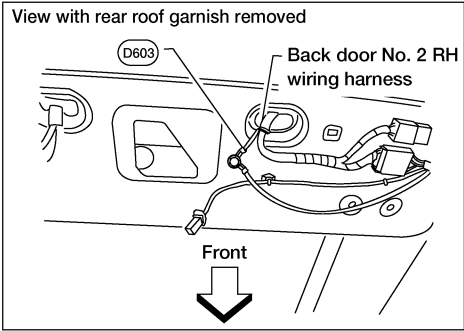
BODY NO. 2 HARNESS



WKIA4250E

GROUND CIRCUIT

BACK DOOR NO. 2 RH HARNESS



WKIA1975E

PG

HARNESS

Harness Layout

HOW TO READ HARNESS LAYOUT

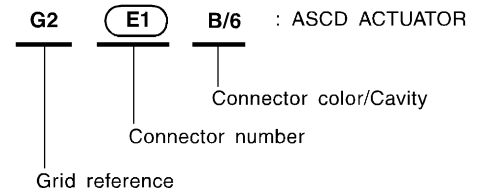
The following Harness Layouts use a map style grid to help locate connectors on the drawings:

- Main Harness
- Engine Room Harness LH View (Engine Compartment)
- Engine Room Harness RH View (Engine Compartment)
- Engine Control Harness
- Chassis Harness
- Body Harness
- Body No. 2 Harness

To use the grid reference

1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the drawing, 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.

Example:



SEL252V

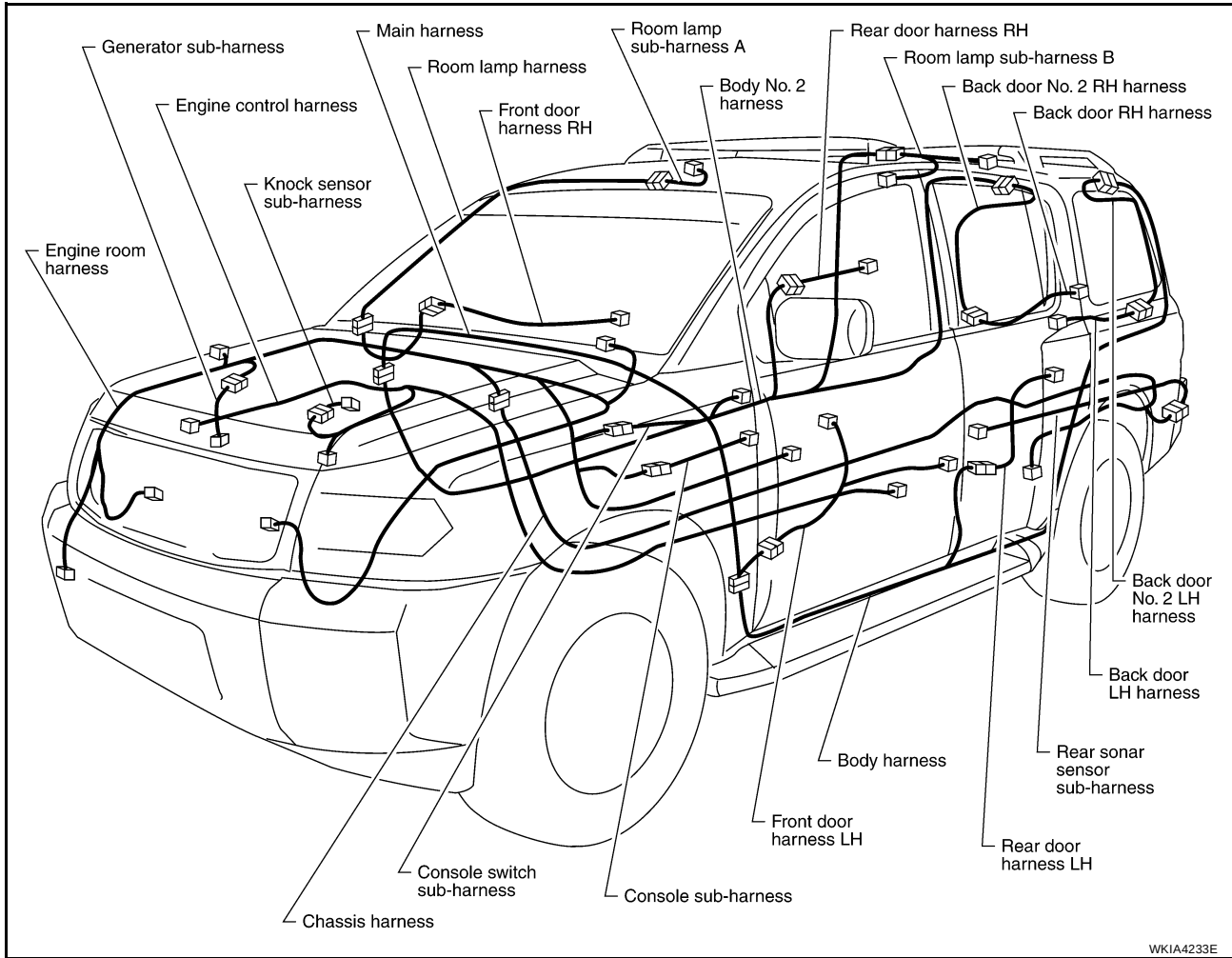
CONNECTOR SYMBOL

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

Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
• Cavity: 4 or Less • Relay connector				
• Cavity: From 5 to 8				
• Cavity: 9 or More				
• Ground terminal etc.	—			

HARNESS

OUTLINE



A
B
C
D
E
F
G
H
I
J

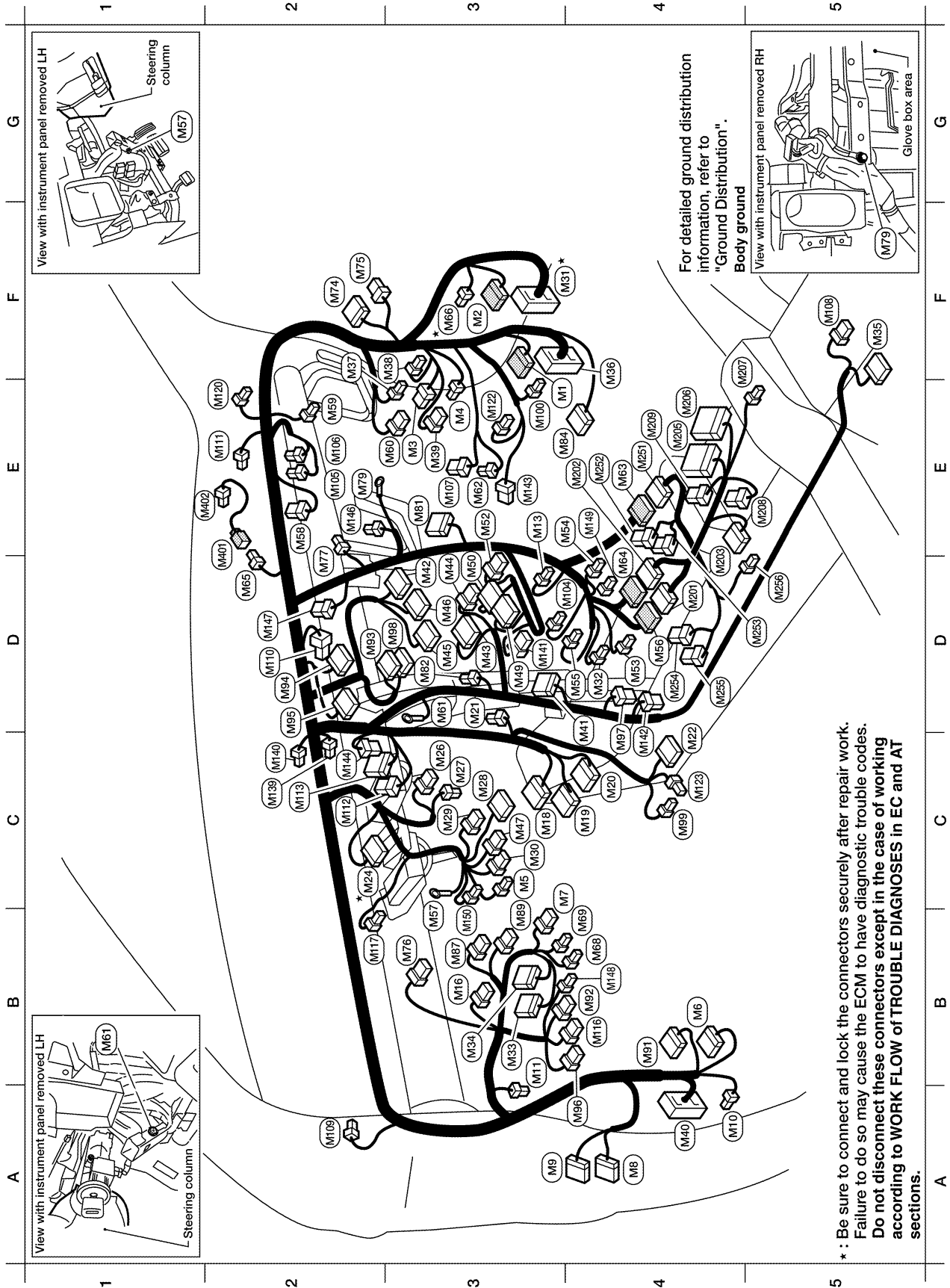
PG

L

M

HARNESS

MAIN HARNESS



WKIA4251E

E4 (M1)	W/16	: To (R1)	D3 (M50)	W/18	: Front air control	E3 (M107)	BR/6	: Front blower motor relay
F3 (M2)	W/12	: To (R2)	E3 (M52)	W/8	: Rear blower switch (front)	F5 (M108)	B/6	: Yaw rate/side decel G-sensor
E3 (M3)	W/8	: Fuse block (J/B)	D4 (M53)	B/2	: Front power socket LH	A2 (M109)	BR/2	: Front tweeter LH
E3 (M4)	W/16	: Fuse block (J/B)	E3 (M54)	B/2	: Front power socket RH	D2 (M110)	BR/2	: Center speaker
C3 (M5)	W/3	: Illumination control switch	D4 (M55)	W/8	: Hazard switch	E2 (M111)	BR/2	: Front tweeter RH
B4 (M6)	W/10	: To (E10)	D4 (M56)	W/16	: To (M201)	C2 (M112)	W/8	: BOSE speaker amp.
B4 (M7)	L/5	: Water valve relay	B3 (M57)	-	: Body ground	C2 (M113)	L/24	: BOSE speaker amp.
A4 (M8)	W/16	: To (D2)	E2 (M58)	B/6	: Intake door motor	B4 (M116)	GR/8	: Rear sonar system OFF switch
A3 (M9)	BR/24	: To (D1)	E2 (M59)	BR/2	: Glove box lamp	B3 (M117)	B/2	: Sonar buzzer
A4 (M10)	Y/4	: To (E29)	E3 (M60)	W/6	: Fuse block (J/B)	E2 (M120)	W/4	: Remote keyless entry receiver
B3 (M11)	B/1	: Parking brake switch	D3 (M61)	-	: Body ground	E3 (M122)	B/4	: Variable blower control
E3 (M13)	W/3	: Front passenger air bag off indicator	E3 (M62)	B/2	: Front blower motor	C4 (M123)	W/2	: Tire pressure warning check connector
B3 (M16)	GR/6	: ADP steering switch	E4 (M63)	BR/20	: To (M25)	C2 (M139)	B/2	: Diode-1
C3 (M18)	W/40	: BCM (body control module)	D4 (M64)	BR/24	: To (M202)	C2 (M140)	B/2	: Diode-2
C4 (M19)	W/15	: BCM (body control module)	D2 (M65)	W/4	: To (M401)	D3 (M141)	W/8	: 4WD shift switch
C4 (M20)	B/15	: BCM (body control module)	F3* (M66)	B/1	: To (E33)	C4 (M142)	B/6	: Mode door motor
D3 (M21)	W/4	: NATS antenna amplifier	B4 (M68)	W/2	: Tilt motor	E3 (M143)	B/6	: Air mix door motor (passenger)
C4 (M22)	W/16	: Data link connector	B4 (M69)	W/3	: Tilt motor	C2 (M144)	B/6	: Defroster door motor
C2* (M24)	W/40	: Combination meter	F2 (M74)	BR/20	: To (D102)	E2 (M146)	W/2	: Intake sensor
C3 (M26)	W/6	: Ignition switch	F2 (M75)	W/8	: To (D101)	D2 (M147)	B/6	: Air mix door motor (driver)
C3 (M27)	W/4	: Key switch and key lock solenoid	B3 (M76)	W/6	: Electric brake (pre-wiring)	B4 (M148)	W/4	: Headlamp aiming switch
C3 (M29)	Y/6	: Combination switch (spiral cable)	D2 (M77)	Y/4	: Front passenger air bag module (service replacement)	E4 (M149)	W/4	: Clock
C3 (M30)	GR/8	: Combination switch (spiral cable)	E2 (M79)	-	: Body ground	B3 (M150)	BR/2	: Ignition keyhole illumination
F3* (M31)	SMJ	: To (E152)	E3 (M81)	GR/12	: Shift lock control unit	Console sub-harness		
D4 (M32)	W/4	: In-vehicle sensor	D3 (M82)	W/2	: Circuit breaker-2	D4 (M201)	W/16	: To (M56)
B3 (M33)	W/32	: Auto. drive positioner control unit	E4 (M84)	W/16	: To (G101)	E4 (M202)	BR/24	: To (M64)
B3 (M34)	W/16	: Auto. drive positioner control unit	B3 (M87)	W/5	: Rear power vent window relay (open)	D4 (M203)	W/12	: A/T device
F5 (M35)	Y/28	: Air bag diagnosis sensor unit	B3 (M89)	W/5	: Rear power vent window relay (close)	E4 (M205)	GR/16	: DVD player
E4 (M36)	SMJ	: To (G149)	B4 (M91)	W/16	: To (E26)	E4 (M206)	L/16	: DVD player
F2 (M37)	B/1	: Fuse block (J/B)	B4 (M92)	GR/6	: Power liftgate switch	F4 (M207)	B/2	: Console power socket
F3 (M38)	B/2	: Fuse block (J/B)	D2 (M93)	W/24	: Display unit	E5 (M208)	BR/6	: Rear heated seat switch LH
E3 (M39)	W/8	: Fuse block (J/B)	D2 (M94)	W/24	: Display control unit	E4 (M209)	BR/6	: Rear heated seat switch RH
A4 (M40)	SMJ	: To (E69)	D2 (M95)	W/32	: Display control unit	Console switch sub-harness		
C4 (M41)	W/16	: Satellite radio tuner (pre-wiring)	A4 (M96)	BR/6	: Pedal adjusting switch	E4 (M251)	BR/20	: To (M63)
D3 (M42)	W/12	: Audio unit	C4 (M97)	BR/7	: Heated seat relay	E4 (M252)	BR/6	: Front heated seat switch RH
D3 (M43)	W/10	: Audio unit	D3 (M98)	W/24	: AV switch	D5 (M253)	GR/6	: VDC OFF switch
D3 (M44)	W/6	: Audio unit	C4 (M99)	BR/2	: Foot lamp LH	D4 (M254)	GR/8	: Tow mode switch
D3 (M45)	W/16	: Audio unit	E3 (M100)	BR/2	: Foot lamp RH	D4 (M255)	BR/6	: Front heated seat switch LH
D3 (M46)	W/20	: Audio unit	E2 (M105)	Y/2	: Front passenger air bag module	D5 (M256)	B/2	: A/T device illumination
C3 (M47)	W/8	: Steering angle sensor	E2 (M106)	O/2	: Front passenger air bag module	Optical sensor sub-harness		
D3 (M49)	B/26	: Front air control				D2 (M401)	W/4	: To (M65) * : Refer to previous page
						E2 (M402)	B/4	: Optical sensor

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ENGINE ROOM HARNESS (LH VIEW)

Engine Compartment

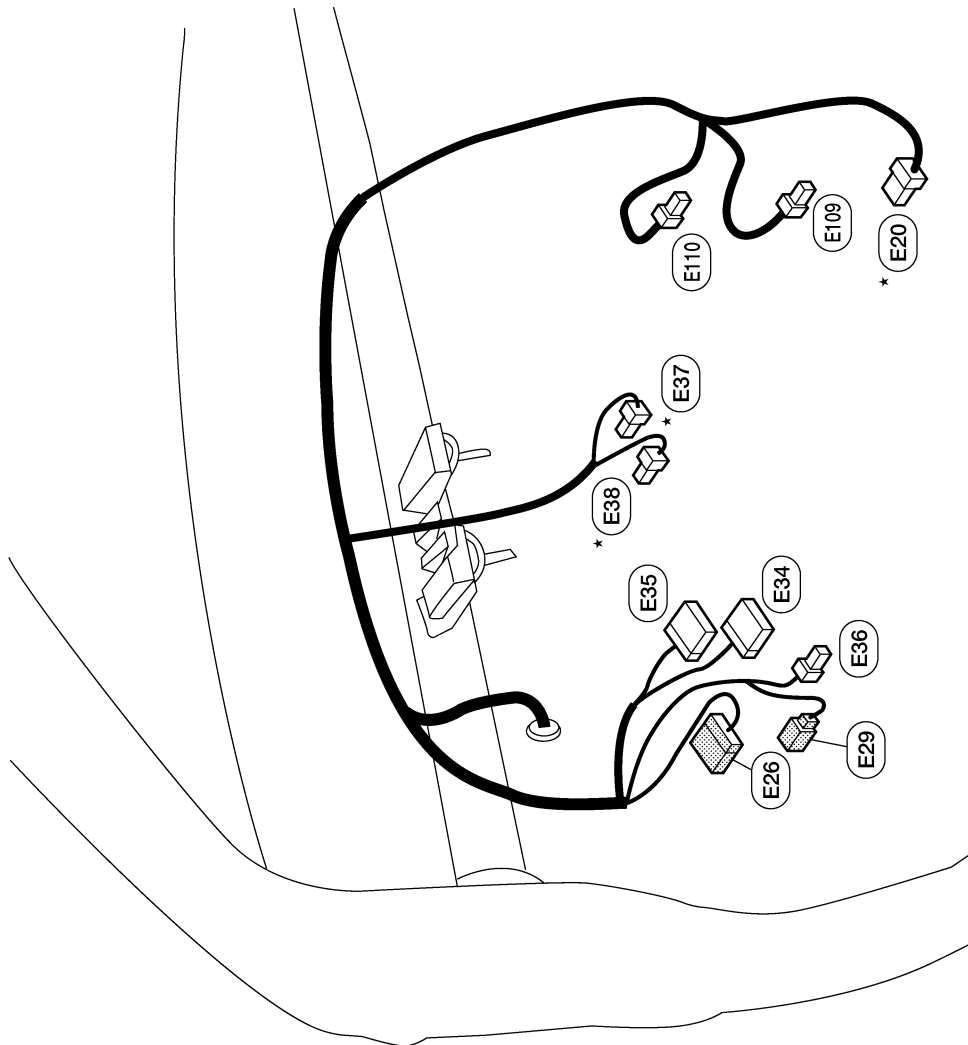


F4	(E1)	B/2	: Ambient sensor 1
E4	(E4)	Y/2	: Crash zone sensor
G4	(E11)	B/8	: Front combination lamp LH
F4	(E13)	GR/2	: Ambient sensor 2
F3	(E14)	-	: Body ground
D3	(E18)	GR/2	: Front wheel sensor LH
E2	(E21)	GR/2	: Brake fluid level switch
D2	(E23)	GR/6	: Front wiper motor
F3	(E24)	-	: Body ground
D3	(E31)	B/3	: Front pressure sensor
E3	(E32)	B/3	: Rear pressure sensor
D3	(E49)	B/6	: Active booster
G5	(E101)	B/2	: Front fog lamp LH
F3	(E105)	GR/2	: Front and rear washer motor
G3	(E106)	BR/2	: Washer fluid level switch
E2	(E114)	B/6	: Delta stroke sensor
E2	(E125)	B/47	: ABS actuator and electric unit (control unit)
F2	(E126)	-	: 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.

Passenger Compartment

- * (E20) B/8 : Accelerator pedal position (APP) sensor
- (E26) W/16 : To (M91)
- (E29) Y/4 : To (M10)
- (E34) W/24 : To (B40)
- (E35) W/12 : To (B41)
- (E36) W/2 : To (B42)
- * (E37) BR/2 : ASCD brake switch (with ASCD)
- * (E37) BR/2 : ICC brake switch (with ICC)
- * (E38) B/2 : Stop lamp switch
- (E09) W/2 : Pedal adjusting motor
- (E10) W/3 : Pedal adjusting motor

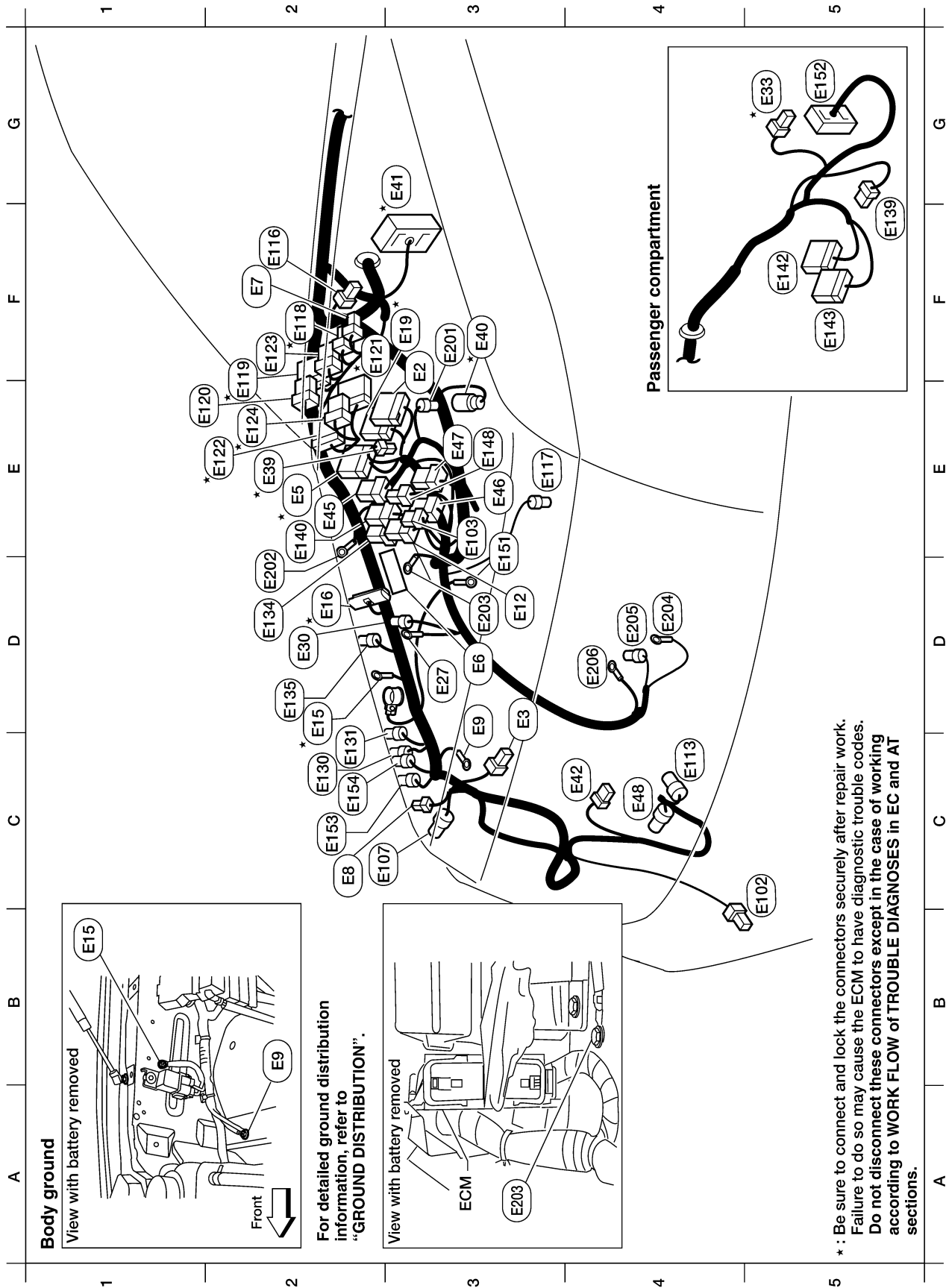


* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

WKIA2706E

HARNESS

ENGINE ROOM HARNESS (RH VIEW) Engine Compartment



Refer to [PG-44, "ENGINE ROOM HARNESS \(LH VIEW\)"](#) for continuation of engine room harness.

E2 *	E122	W/12	: IPDM E/R (intelligent power distribution module engine room)
F2	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)
E2 *	E124	B/6	: IPDM E/R (intelligent power distribution module engine room)
C2	E130	W/2	: Compressor motor relay
C2	E131	W/2	: Compressor motor relay
D2	E134	GR/7	: ICC brake hold relay
D2	E135	GR/2	: Transfer dropping resistor
F5	E139	W/8	: To E107
E2	E140	BR/6	: Trailer tow relay 2
F5	E142	L/24	: Transfer control unit
F5	E143	G/24	: Transfer control unit
E3	E148	L/4	: Trailer tow relay 1
D3	E151	-	: Battery ground
G5	E152	SMJ	: To M31
C2	E153	GR/2	: Transfer motor relay
C2	E154	GR/2	: Transfer motor relay
	H-1	-	: Horn relay

Generator sub-harness

F3	E201	GR/2	: To E40
D2	E202	B/1	: Fusible link box (battery)
D3	E203	-	: Body ground
D4	E204	-	: Generator
D4	E205	GR/2	: Generator
D4	E206	-	: Generator

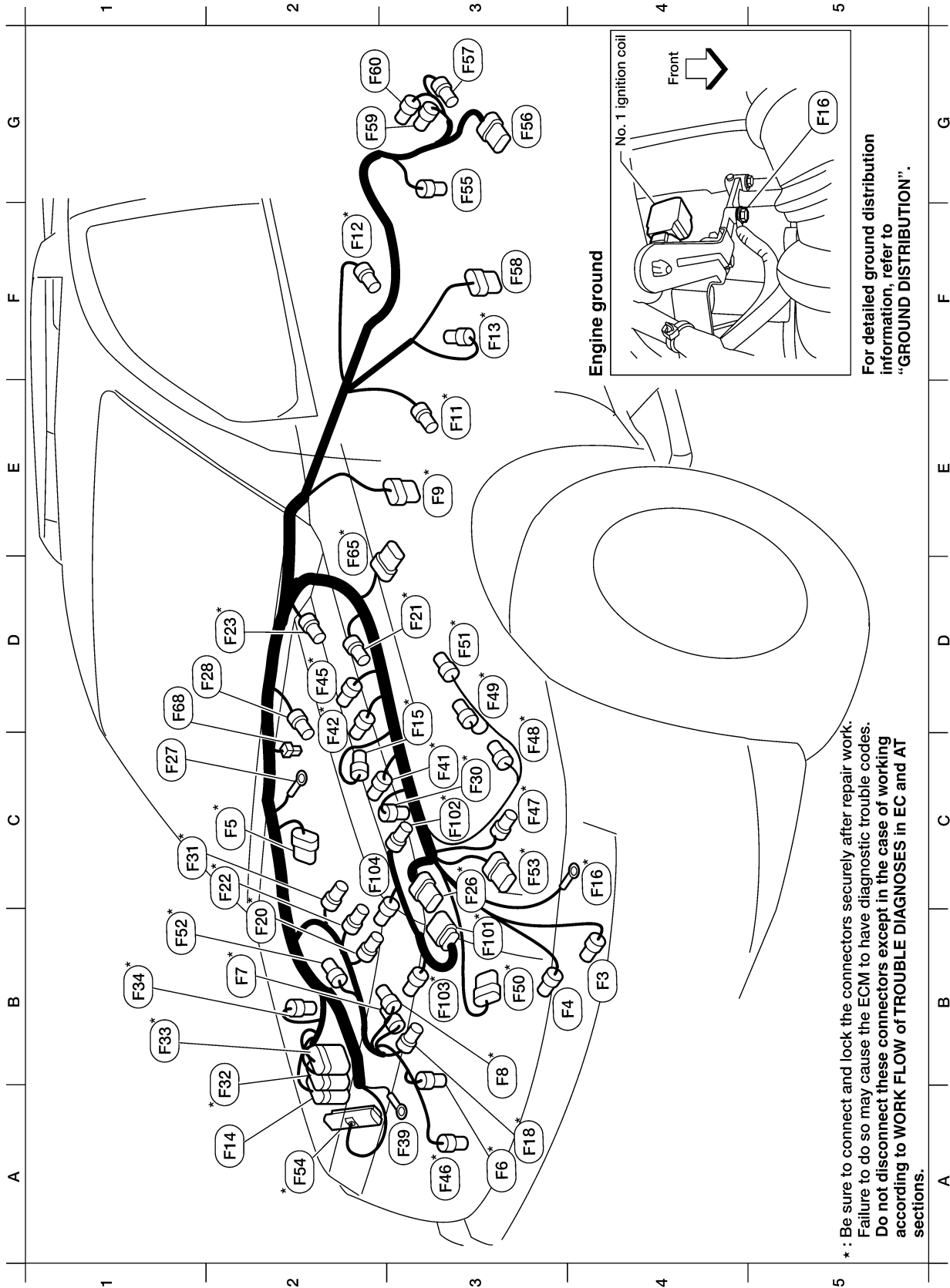
* : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

F3	E2	W/16	: To F32
D3	E3	B/2	: Horn
E2 *	E5	W/24	: To F14
D3	E6	-	: Fuse and fusible link box
F2	E7	GR/2	: Fusible link box (battery)
C2	E8	W/2	: Hood switch
C3	E9	-	: Body ground
D3	E12	B/5	: Stop lamp relay
C2 *	E15	-	: Body ground
D2 *	E16	B/32	: ECM
F3 *	E19	W/16	: To F33
D3	E27	BR/2	: Fusible link box (battery)
D2	E30	-	: Fusible link box (battery)
G5 *	E33	B/1	: To M66
E2 *	E39	W/2	: To F34
F3 *	E40	GR/2	: To E201
G3 *	E41	SMJ	: To C1 (located RH rear of engine compartment)
C4	E42	B/6	: ICC sensor
E2	E45	BR/6	: Back-up lamp relay
E3	E46	B/5	: Transfer shift high relay
E3	E47	B/5	: Transfer shift low relay
C4	E48	B/3	: Refrigerant pressure sensor
C5	E102	B/2	: Front fog lamp RH
E3	E103	B/5	: Daytime light relay
C2	E107	B/8	: Front combination lamp RH
C4	E113	GR/2	: Cooling fan motor
F2	E116	W/2	: Condenser-2
E3	E117	GR/2	: Front wheel sensor RH
F2 *	E118	B/2	: IPDM E/R (intelligent power distribution module engine room)
E2 *	E119	W/16	: IPDM E/R (intelligent power distribution module engine room)
E2	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)
F3 *	E121	BR/12	: IPDM E/R (intelligent power distribution module engine room)

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HARNESS

ENGINE CONTROL HARNESS



WKIA4237E

C3	* (F48)	GR/3	: Ignition coil No. 3 (with power transistor)
D3	* (F49)	GR/3	: Ignition coil No. 5 (with power transistor)
B3	* (F50)	B/6	: Electric throttle control actuator
D3	* (F51)	GR/3	: Ignition coil No. 7 (with power transistor)
B1	* (F52)	GR/3	: Ignition coil No. 8 (with power transistor)
C3	* (F53)	B/6	: Mass air flow sensor
A2	* (F54)	B/81	: ECM
G3	(F55)	B/2	: ATP switch (4WD only)
G3	(F56)	B/8	: Terminal cord assembly (4WD only)
G3	(F57)	B/2	: Transfer motor (4WD only)
F3	(F58)	GR/6	: Transfer control device (4WD only)
G2	(F59)	B/2	: Wait detection switch (4WD only)
G2	(F60)	GR/2	: Neutral-4LO switch (4WD only)
D2	* (F65)	B/6	: Air fuel ratio (A/F) sensor 1 (bank 1)
D1	(F68)	B/2	: Water valve

Knock sensor sub-harness

B3	* (F101)	B/6	: To (F26)
C3	* (F102)	GR/2	: Knock sensor (bank 1)
B3	* (F103)	GR/2	: Engine coolant temperature sensor
C2	(F104)	GR/2	: Knock sensor (bank 2)

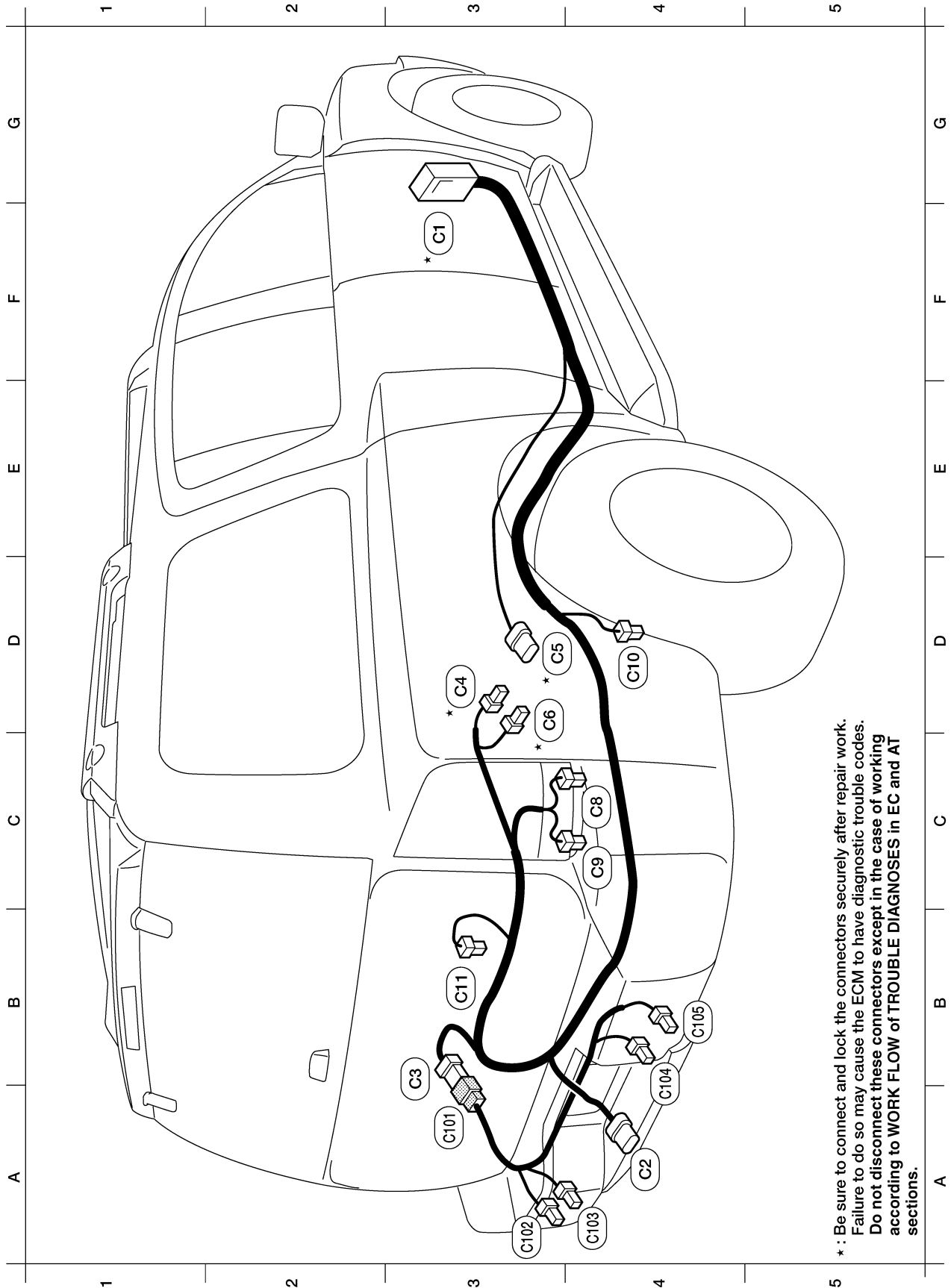
B4	(F3)	B/1	: A/C Compressor
B4	(F4)	B/3	: Oil pressure sensor
C2	* (F5)	B/6	: Air fuel ratio (A/F) sensor 1 (bank 2)
A3	* (F6)	GR/3	: Ignition coil No. 2 (with power transistor)
B2	* (F7)	GR/3	: Ignition coil No. 4 (with power transistor)
B3	* (F8)	GR/3	: Ignition coil No. 6 (with power transistor)
E3	* (F9)	G/10	: A/T assembly
E3	* (F11)	B/3	: Crankshaft position sensor (POS)
F2	* (F12)	G/4	: Heated oxygen sensor 2 (bank 2)
F3	* (F13)	G/4	: Heated oxygen sensor 2 (bank 1)
A2	(F14)	W/24	: To (E5)
C3	* (F15)	L/2	: EVAP canister purge volume control solenoid valve
C4	* (F16)	-	: Engine ground
A3	* (F18)	GR/2	: Injector No. 2
B2	* (F20)	GR/2	: Injector No. 4
D3	* (F21)	GR/2	: Condenser-1
C2	* (F22)	GR/2	: Injector No. 6
D2	* (F23)	B/3	: Camshaft position sensor (PHASE)
C3	* (F26)	B/6	: To (F101)
C1	(F27)	B/1	: Starter motor
D2	(F28)	GR/1	: Starter motor
C3	* (F30)	GR/2	: Injector No. 1
C1	* (F31)	GR/2	: Injector No. 8
A2	* (F32)	W/16	: To (E2)
B1	* (F33)	W/16	: To (E19)
B1	* (F34)	W/2	: To (E39)
A3	(F39)	-	: Fusible link box (battery)
C3	* (F41)	GR/2	: Injector No. 3
C2	* (F42)	GR/2	: Injector No. 5
D2	* (F45)	GR/2	: Injector No. 7
A3	* (F46)	B/3	: Power steering pressure sensor
C3	* (F47)	GR/3	: Ignition coil No. 1 (with power transistor)

* : 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.

WK1A4238E

HARNESS

CHASSIS HARNESS



WKIA2710E

- F3 * C1 SMJ : To E41 (located RH rear of engine compartment)
- A4 C2 B/7 : Trailer
- B3 C3 GR/6 : To C101
- D3 * C4 GR/3 : EVAP control system pressure sensor
- D4 * C5 GR/5 : Fuel level sensor unit and fuel pump
- C3 * C6 B/2 : EVAP canister vent control valve
- C4 C8 B/3 : Height sensor
- C4 C9 B/4 : Suspension air compressor
- D4 C10 BR/2 : Rear wheel sensor RH
- B3 C11 BR/2 : Rear wheel sensor LH

Rear sonar sensor sub-harness

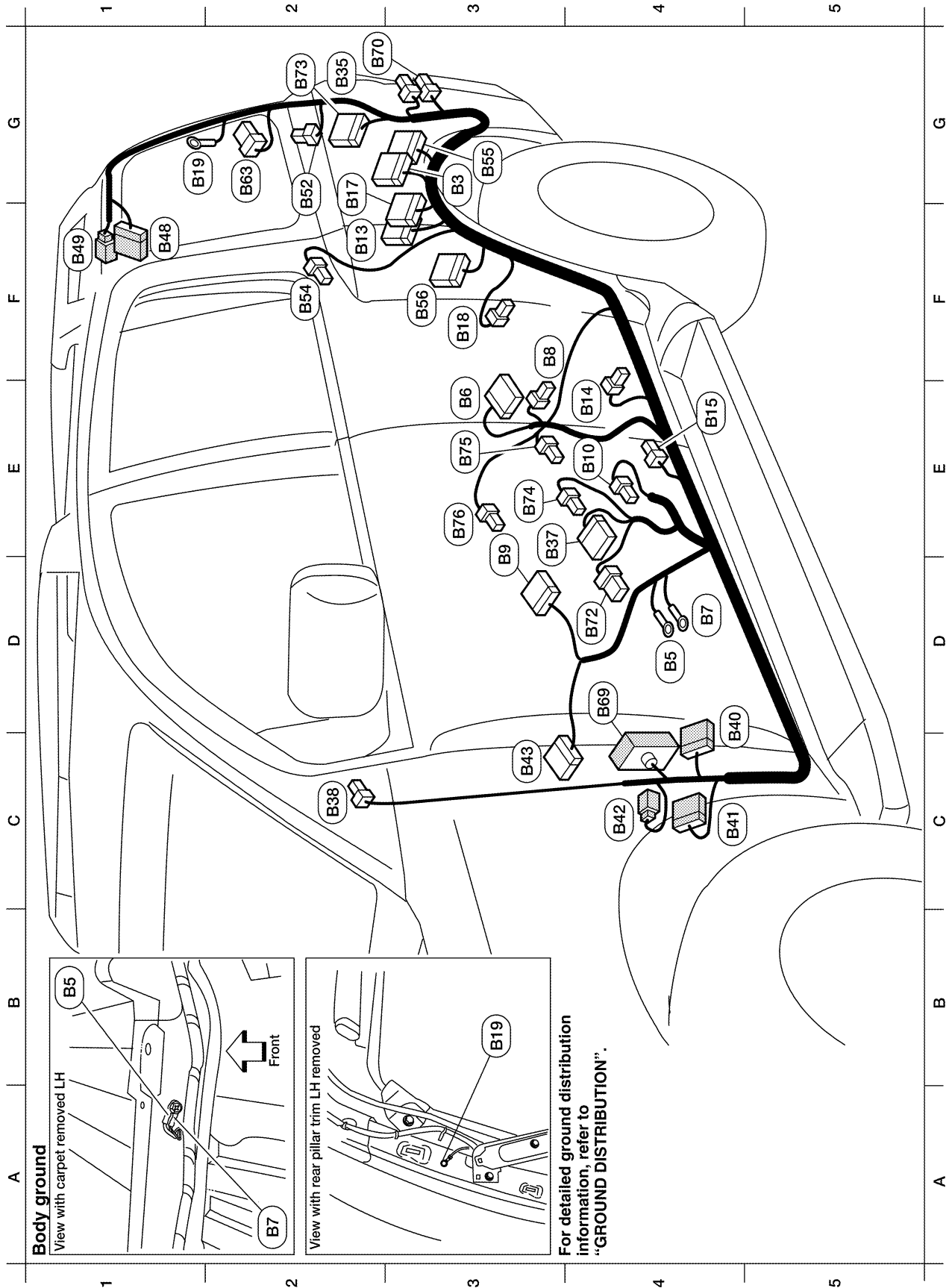
- A3 C101 GR/6 : To C3
- A3 C102 B/3 : Rear sonar sensor LH outer
- A4 C103 B/3 : Rear sonar sensor LH inner
- B4 C104 B/3 : Rear sonar sensor RH inner
- B4 C105 B/3 : Rear sonar sensor RH outer

* : 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.

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HARNESS

BODY HARNESS



HARNESS

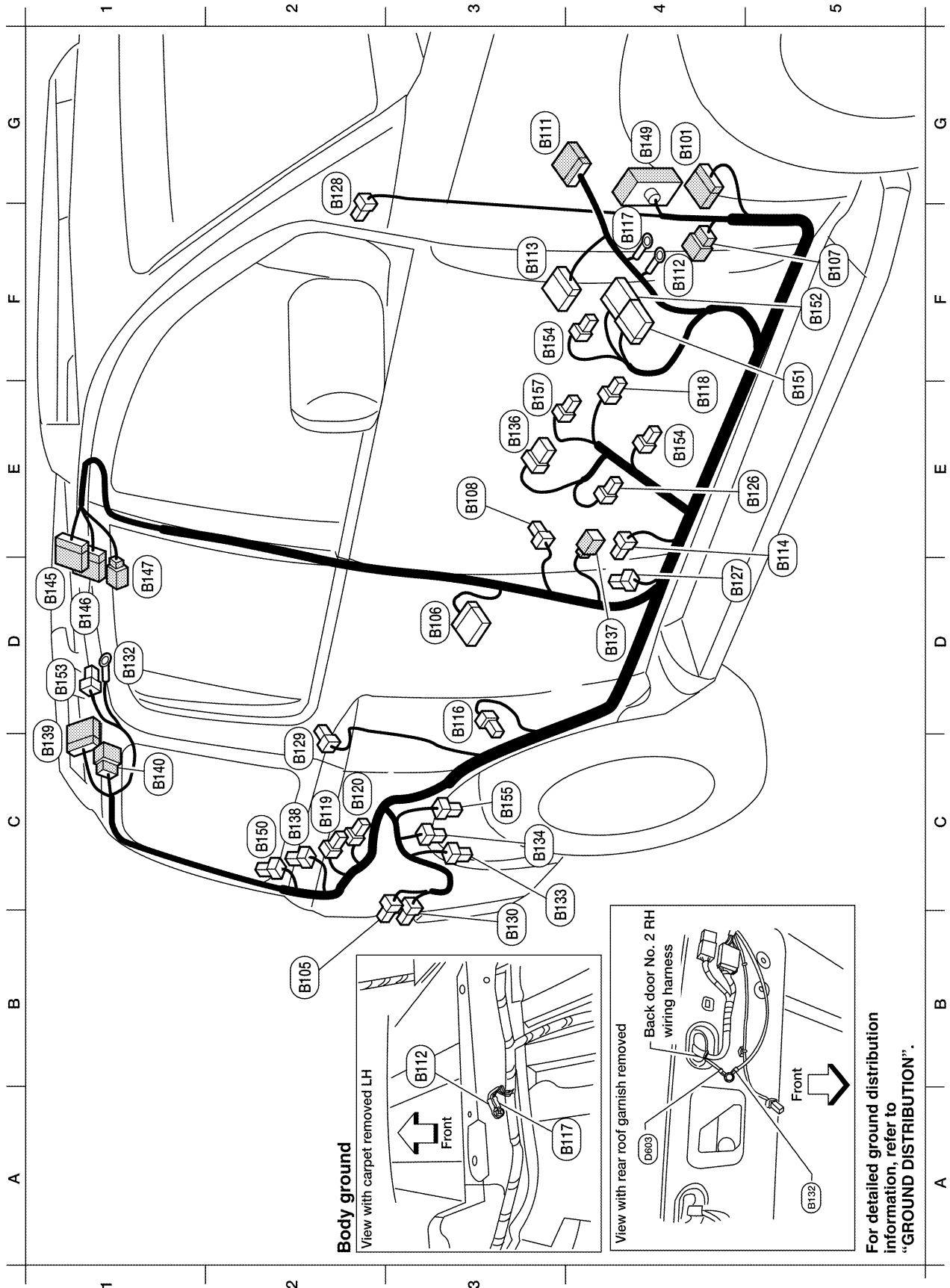
G2 (B73) W/16 : Rear view camera control unit
 E3 (B74) Y/4 : Seat belt buckle pre-tensioner assembly
 E3 (B75) W/3 : Rear seat heater LH
 E3 (B76) W/3 : Rear seat heater RH

G3 (B3) W/16 : Suspension control unit
 D4 (B5) - : Body ground
 E3 (B6) W/18 : To (D20)
 D4 (B7) - : Body ground
 F3 (B8) W/3 : Front door switch LH
 E3 (B9) Y/12 : Air bag diagnosis sensor unit
 E4 (B10) Y/2 : Front LH side air bag module
 F2 (B13) W/24 : ICC unit
 E4 (B14) Y/2 : Front LH seat belt pre-tensioner
 E4 (B15) Y/2 : LH side air bag (satellite) sensor
 G2 (B17) GR/24 : ICC unit
 F3 (B18) W/3 : Rear door switch LH
 G1 (B19) - : Body ground
 G2 (B35) B/3 : Rear turn signal lamp LH
 E4 (B37) W/16 : To (F1)
 C2 (B38) Y/2 : LH side curtain air bag module
 C4 (B40) W/24 : To (E34)
 C4 (B41) W/12 : To (E35)
 C4 (B42) W/2 : To (E36)
 C3 (B43) W/12 : To (B11)
 F1 (B48) W/16 : To (D40)
 F1 (B49) W/2 : To (D402)
 F2 (B52) W/2 : Rear power vent window motor LH
 F2 (B54) Y/2 : LH side curtain air bag module
 G3 (B55) W/26 : Back door control unit
 F3 (B56) W/16 : Sonar control unit
 G2 (B63) W/6 : Back door close switch
 D4 (B69) SMJ : To (N40)
 G3 (B70) B/3 : Rear combination lamp LH (stop/tail)
 D4 (B72) BR/6 : Subwoofer

WKIA2713E

HARNESS

BODY NO. 2 HARNESS



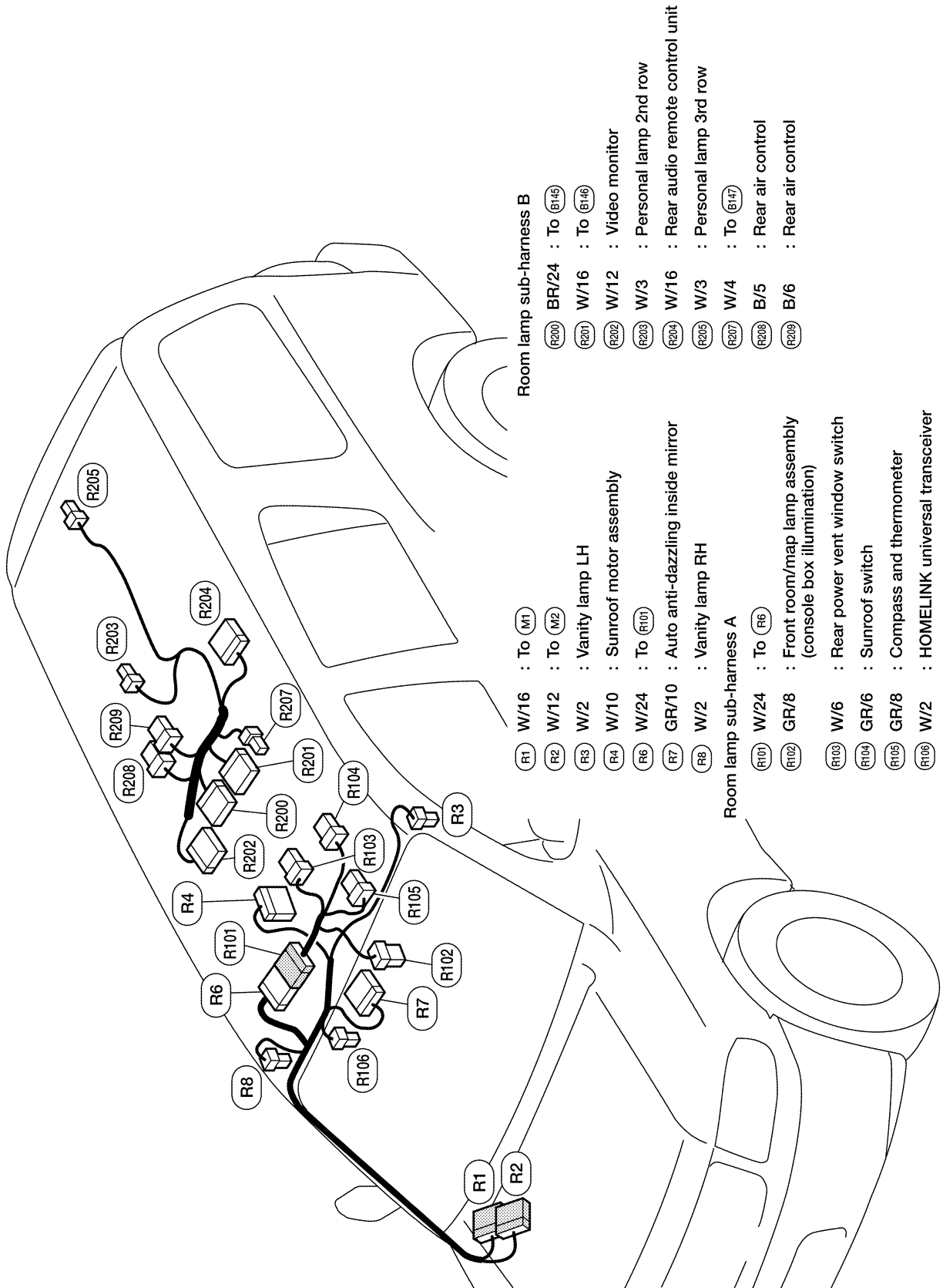
WKIA3538E

HARNESS

G4 (B101)	W/16	: To (M84)	G4 (B149)	SMJ	: To (M36)
B2 (B105)	B/3	: Rear turn signal lamp RH	C2 (B150)	W/2	: Rear power vent window motor RH
D3 (B106)	W/18	: To (O307)	F5 (B151)	W/24	: NAVI control unit
F5 (B107)	W/8	: To (E139)	F5 (B152)	GR/24	: NAVI control unit
E3 (B108)	W/3	: Front door switch RH	D1 (B153)	W/2	: Cargo lamp
G3 (B111)	W/12	: To (B43)	F3 (B154)	GR/2	: NAVI control unit
F4 (B112)	-	: Body ground (RH satellite sensor)	C3 (B155)	B/6	: Air mix door motor (rear)
F3 (B113)	Y/12	: Air bag diagnosis sensor unit	E3 (B157)	Y/4	: Seat belt buckle pre-tensioner assembly
D5 (B114)	Y/2	: RH side air bag (satellite) sensor			
D3 (B116)	GR/2	: Rear door switch RH			
F4 (B117)	-	: Body ground			
E4 (B118)	W/3	: Front seat heater RH			
C2 (B119)	W/2	: Condenser-3			
C2 (B120)	W/2	: Condenser-4			
E5 (B126)	Y/2	: Front RH side air bag module			
D4 (B127)	Y/2	: Front RH seat belt pre-tensioner			
G2 (B128)	Y/2	: RH side rear curtain air bag module			
C2 (B129)	Y/2	: RH side front curtain air bag module			
B3 (B130)	B/3	: Rear combination lamp RH (stop/tail)			
D1 (B132)	-	: Body ground			
C3 (B133)	W/4	: Rear blower motor resistor			
C3 (B134)	W/2	: Rear blower motor			
E3 (B136)	W/8	: To (P151)			
D4 (B137)	B/3	: Belt tension sensor			
C2 (B138)	B/2	: Rear cargo power socket			
C1 (B139)	W/20	: To (R802)			
C1 (B140)	W/6	: To (R601)			
D1 (B145)	BR/24	: To (R200)			
D1 (B146)	W/16	: To (R201)			
D1 (B147)	W/4	: To (R207)			

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ROOM LAMP HARNESS

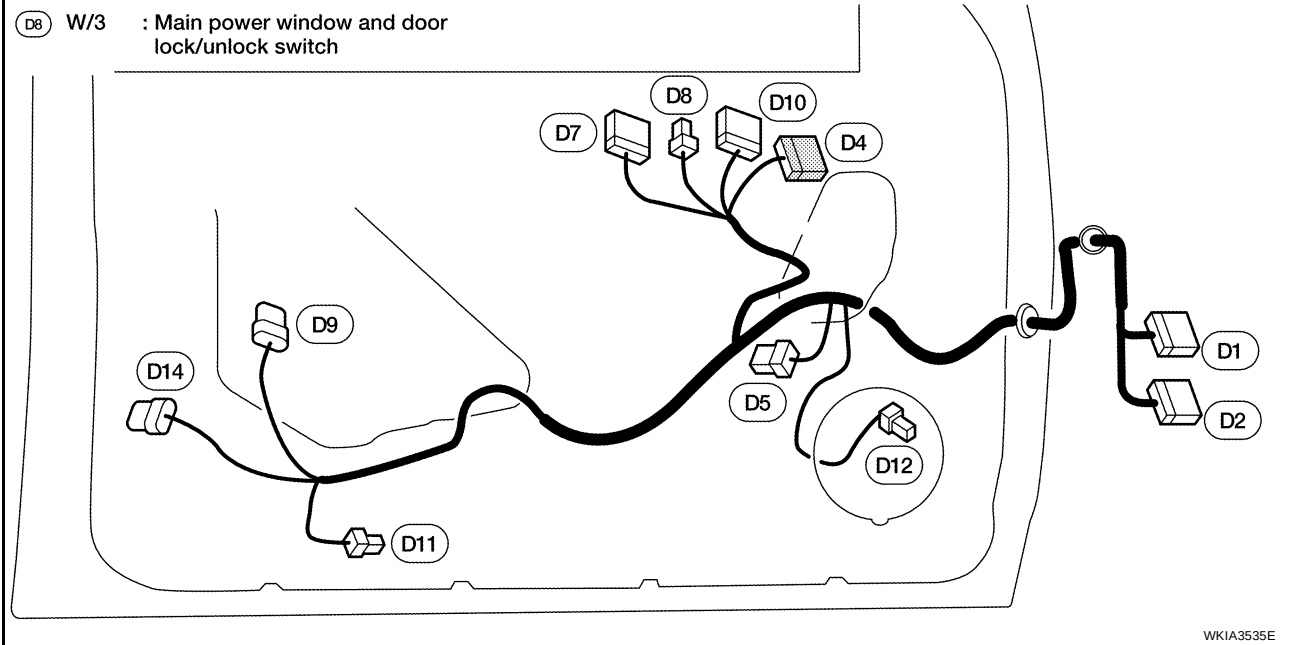


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HARNESS

FRONT DOOR LH HARNESS

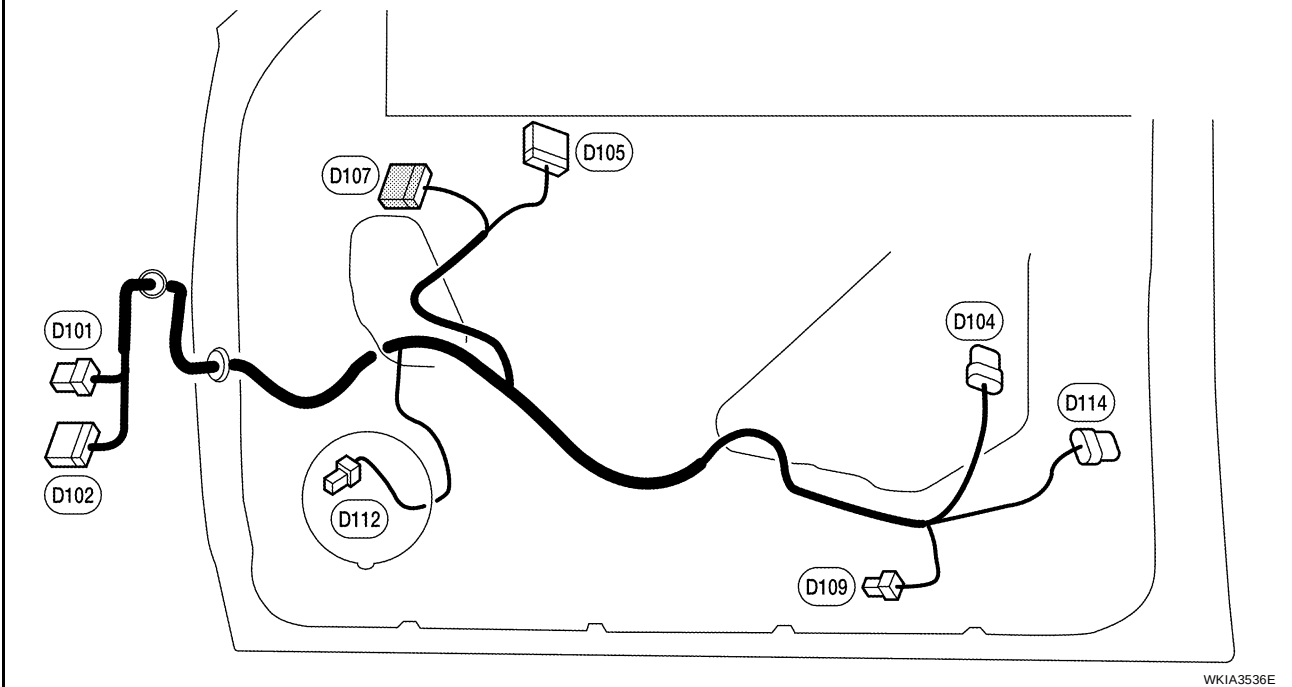
- | | |
|---|--|
| (D1) W/24 : To (M9) | (D9) GR/6 : Front power window motor LH |
| (D2) W/16 : To (M8) | (D10) W/10 : Door mirror remote control switch |
| (D4) W/16 : Door mirror LH | (D11) W/2 : Front step lamp LH |
| (D5) W/8 : Seat memory switch | (D12) W/2 : Front door speaker LH |
| (D7) W/16 : Main power window and door lock/unlock switch | (D14) B/6 : Front door lock assembly LH |
| (D8) W/3 : Main power window and door lock/unlock switch | |



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FRONT DOOR RH HARNESS

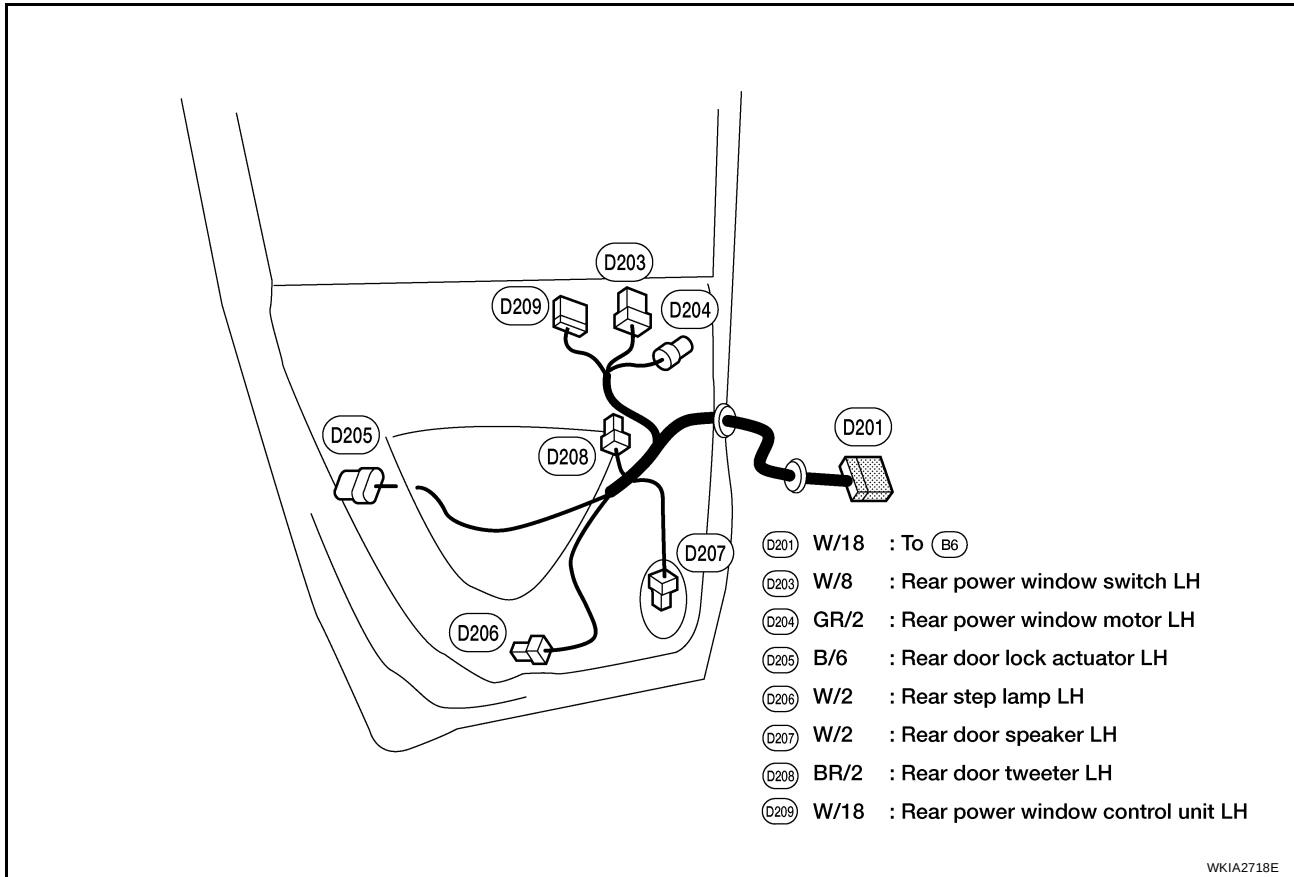
- | | |
|---|--|
| (D101) W/8 : To (M75) | (D107) W/16 : Door mirror RH |
| (D102) W/20 : To (M74) | (D109) W/2 : Front step lamp RH |
| (D104) GR/6 : Front power window motor RH | (D112) W/2 : Front door speaker RH |
| (D105) W/16 : Power window and door lock/unlock switch RH | (D114) B/6 : Front door lock actuator RH |



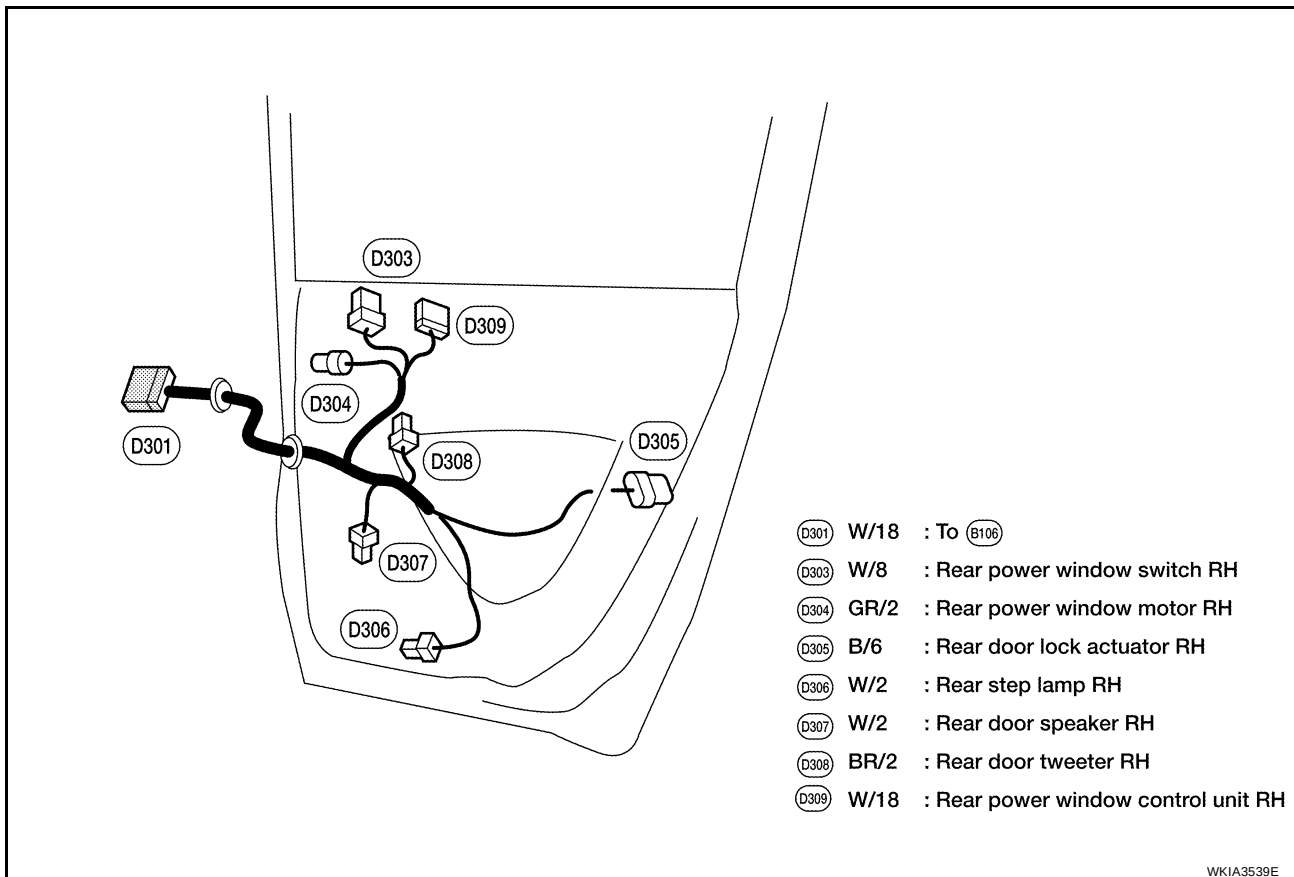
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HARNESS

REAR DOOR LH HARNESS

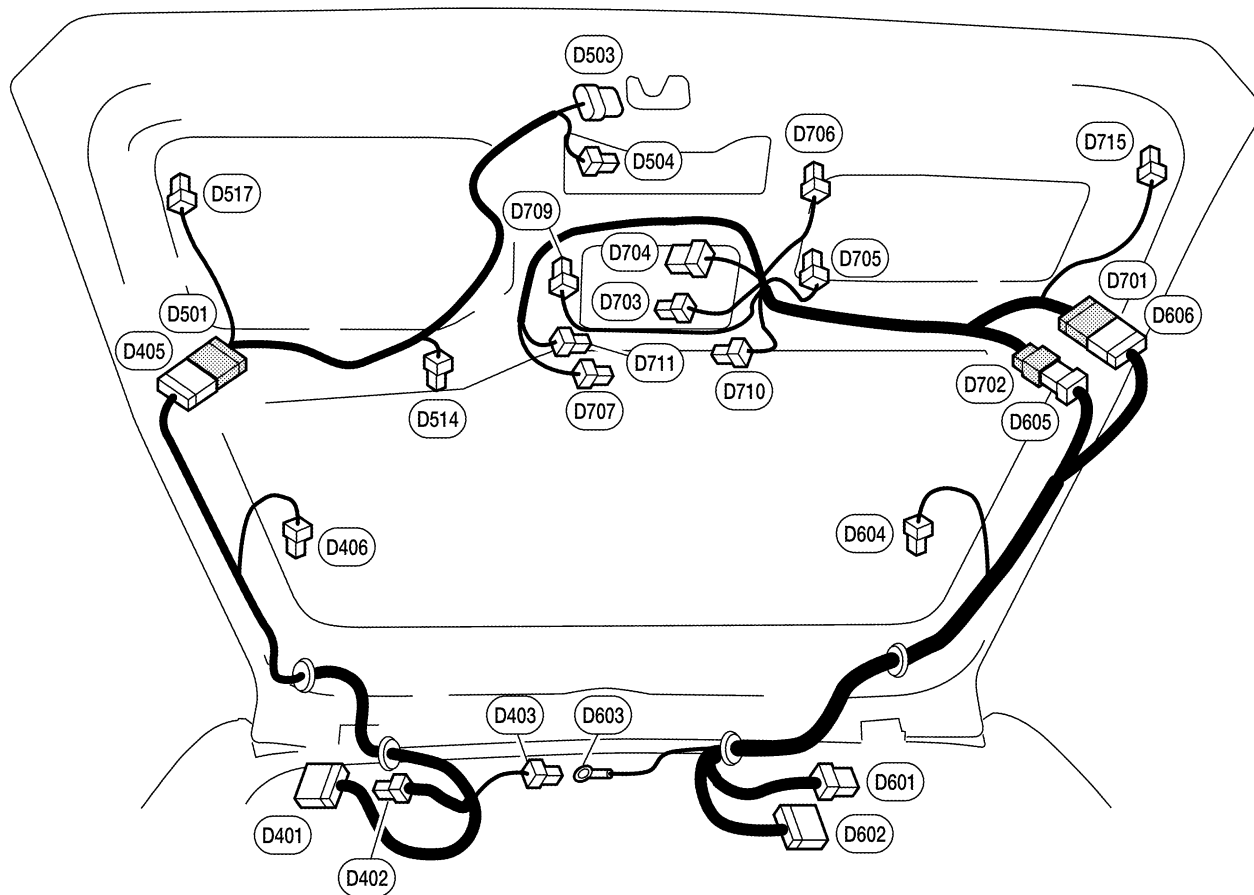


REAR DOOR RH HARNESS



HARNESS

BACK DOOR HARNESS



Back door No. 2 LH harness

- (D401) W/16 : To (B48)
- (D402) W/2 : To (B49)
- (D403) GR/2 : High-mounted stop lamp
- (D405) W/16 : To (D501)
- (D406) B/1 : Rear window defogger

Back door LH harness

- (D501) W/16 : To (D405)
- (D503) W/26 : Back door latch
- (D504) W/4 : Rear view camera
- (D514) BR/2 : Back door warning chime
- (D517) BR/2 : Pinch strip LH

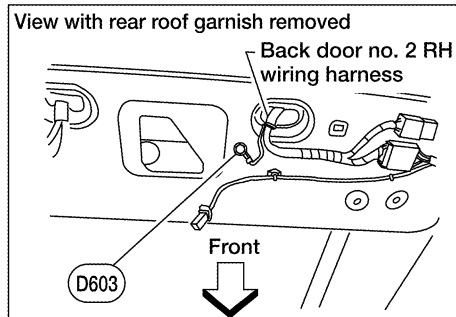
Back door No. 2 RH harness

- (D601) W/6 : To (B140)
- (D602) W/20 : To (B139)
- (D603) - : Body ground
- (D604) B/1 : Rear window defogger (ground)
- (D605) W/8 : To (D702)
- (D606) W/20 : To (D701)

Back door RH harness

- (D701) W/20 : To (D606)
- (D702) W/8 : To (D605)
- (D703) W/2 : License plate lamps
- (D704) W/6 : Rear wiper motor
- (D705) B/2 : Back-up lamp LH
- (D706) GR/2 : Back door handle switch
- (D707) B/1 : Glass hatch ajar switch
- (D709) B/2 : Back-up lamp RH
- (D710) W/4 : Glass hatch switch
- (D711) W/4 : Glass hatch lock actuator
- (D715) BR/2 : Pinch strip RH

Body ground



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

WKIA3540E

HARNESS

Wiring Diagram Codes (Cell Codes)

EKS007NZ

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,A	ATC	Auto Air Conditioner
A/SUSP	RSU	Rear Air Suspension
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 (Bank 1)
AF1HB2	EC	Air Fuel Ratio Sensor 1 (Bank 2)
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASC/BS	EC	ASCD Brake Switch
ASC/SW	EC	ASCD Steering Switch
ASCBOF	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
A/T	AT	A/T Assembly
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUTO/DP	SE	Automatic Drive Positioner
AUTO/L	LT	Auto Light Control
B/CLOS	BL	Back Door Auto Closure System
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CLOCK	DI	Clock
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication System
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
DVD	AV	DVD Entertainment System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Bank 1
FUELB2	EC	Fuel Injection System Bank 2
H/AIM	LT	Headlamp Aiming Control
H/LAMP	LT	Headlamp
HORN	WW	Horn

HARNESS

HSEAT	SE	Heated Seat
IATS	EC	Intake Air Temperature Sensor
ICC	ACS	Intelligent Cruise Control
ICCBOF	EC	ICC Brake Switch
ICC/BS	EC	ICC Steering Switch
ICC/SW	EC	ICC Brake Switch
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
INT/L	LT	Room/Map, Vanity, Cargo, Personal, Foot, Step, and Puddle Lamps
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
MAFS	EC	Mass Air Flow Sensor
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges
MIL/DL	EC	Malfunction Indicator Lamp
MIRROR	GW	Door Mirror
NATS	BL	Nissan Anti-Theft System
NAVI	AV	Navigation System
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Rear 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
PHASE	EC	Camshaft Position Sensor (PHASE) (Bank 1)
PNP/SW	EC	Park/Neutral Position Switch
POS	EC	Crankshaft Position Sensor (POS)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor
PS/SEN	EC	Power Steering Pressure Sensor
R/VIEW	DI	Rear View Monitor
RP/SEN	EC	Refrigerant Pressure Sensor
SEAT	SE	Power Seat (Without Memory)
SEN/PW	EC	Sensor Power Supply
SHIFT	AT	A/T Shift Lock System
SONAR	DI	Rear Sonar System
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
START	SC	Starting System
STOP/L	LT	Stop Lamp
T/TOW	LT	Trailer Tow
T/WARN	WT	Low Tire Pressure Warning System
TAIL/L	LT	Parking, License and Tail Lamps
T/F	TF	Transfer Case
TPS1	EC	Throttle Position Sensor
TPS2	EC	Throttle Position Sensor
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	HOMELINK® Universal Transceiver
TURN	LT	Turn Signal and Hazard Warning Lamps
VDC	BRC	Vehicle Dynamic Control System

HARNESS

VEHSEC	BL	Vehicle security (theft warning) system
VENT/V	EC	EVAP Canister Vent Control Valve
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIP/R	WW	Rear Wiper and Washer
WIPER	WW	Front Wiper and Washer

A

B

C

D

E

F

G

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I

J

PG

L

M

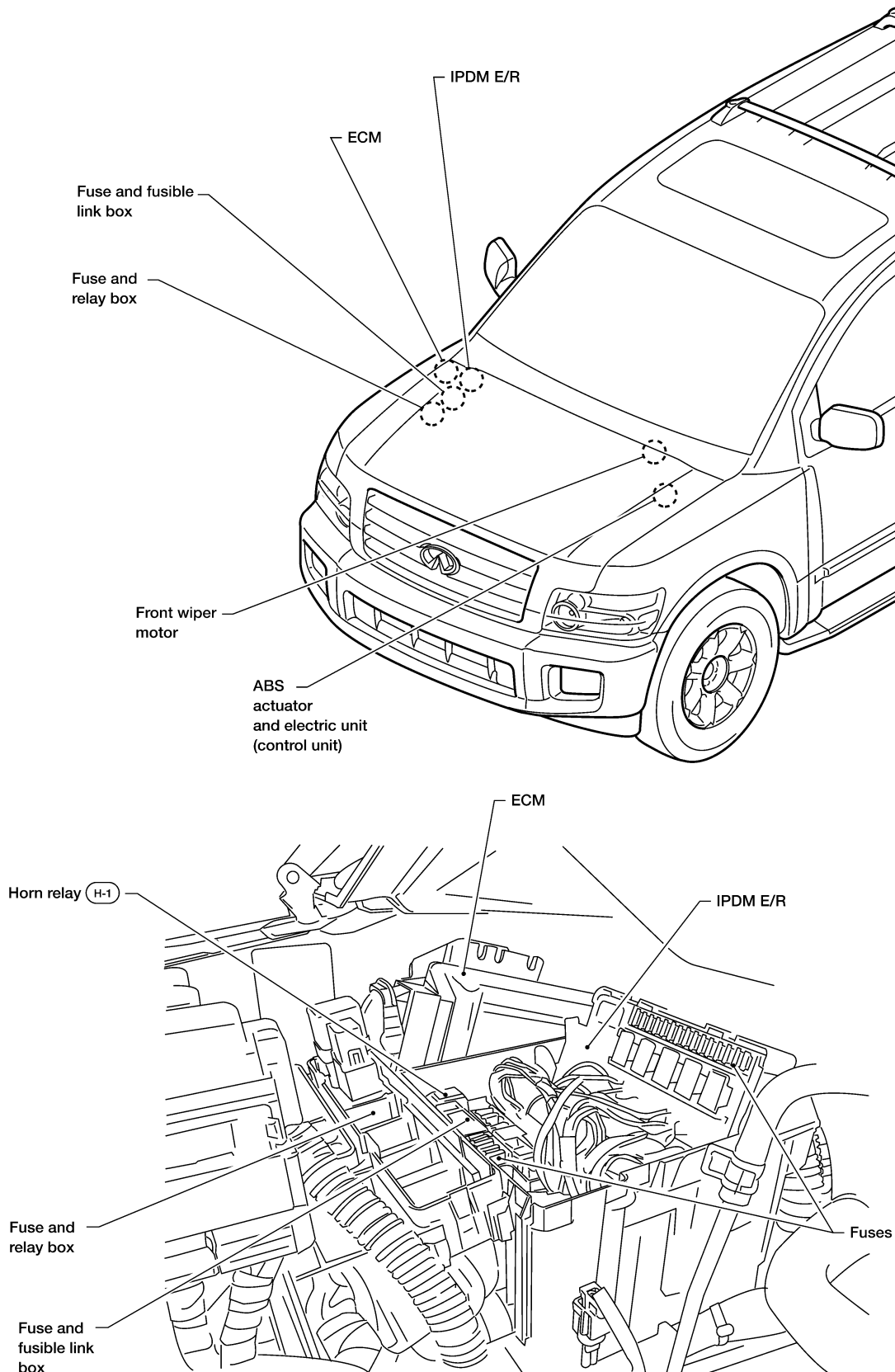
ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

PFP:25230

Electrical Units Location ENGINE COMPARTMENT

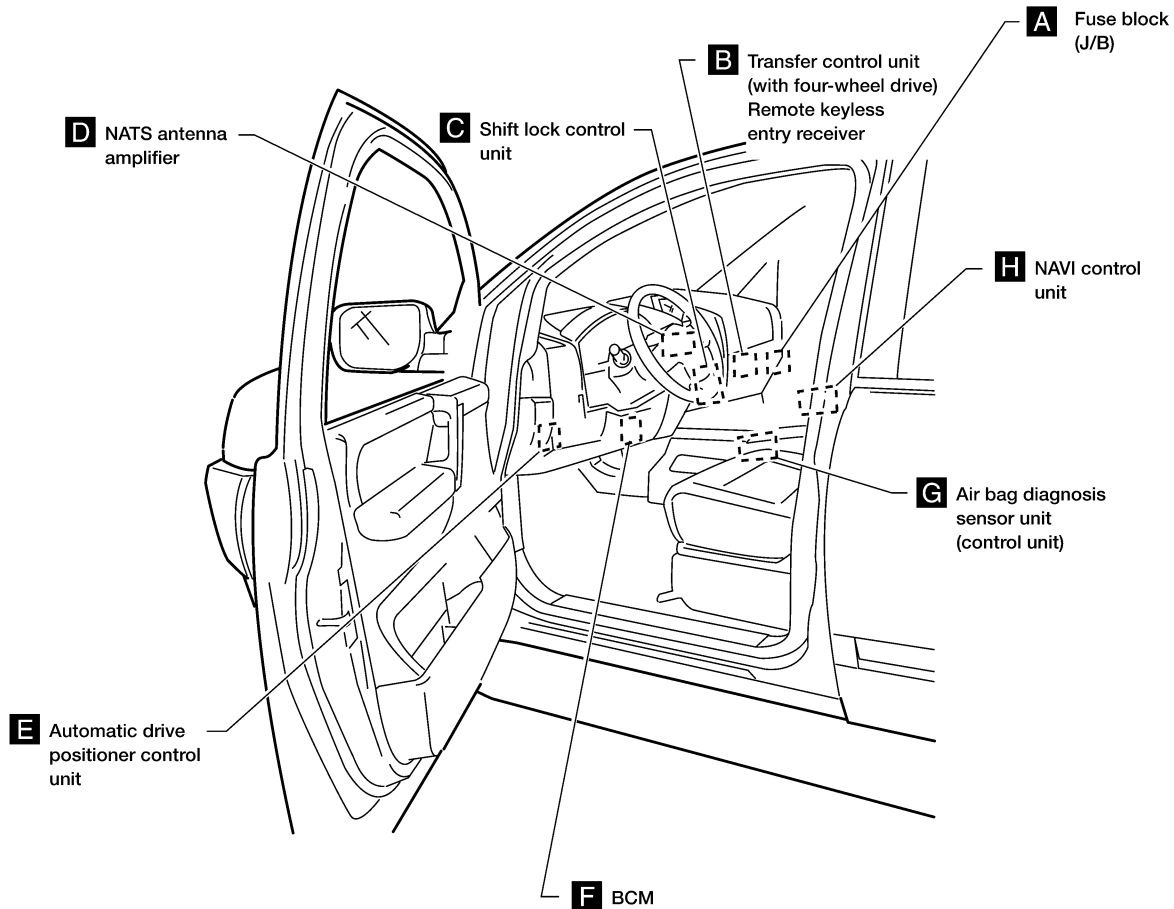
EKS00700



WKIA2014E

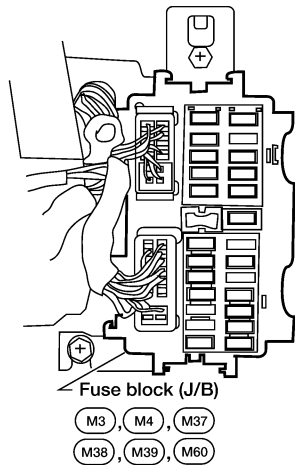
ELECTRICAL UNITS LOCATION

PASSENGER COMPARTMENT

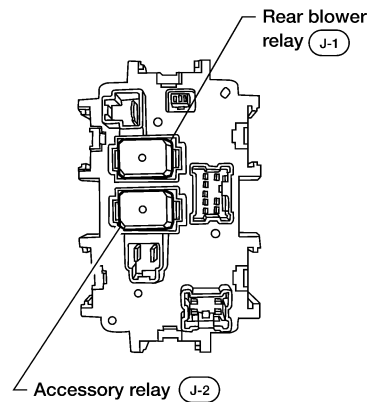


A Instrument panel side RH

Fuse block (J/B) front view



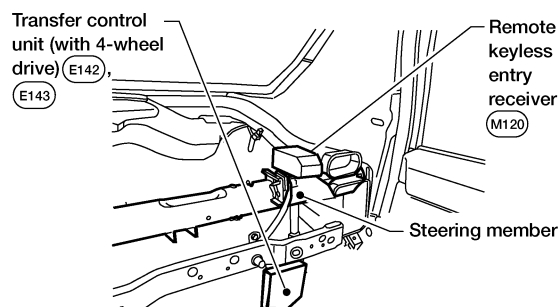
Fuse block (J/B) rear view



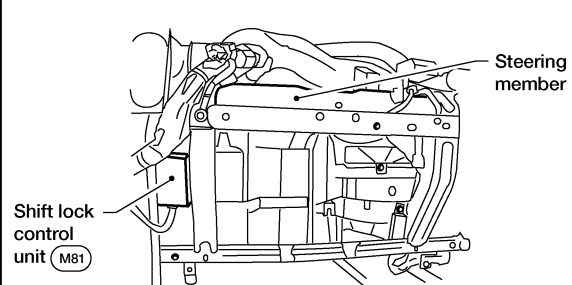
WKIA4240E

ELECTRICAL UNITS LOCATION

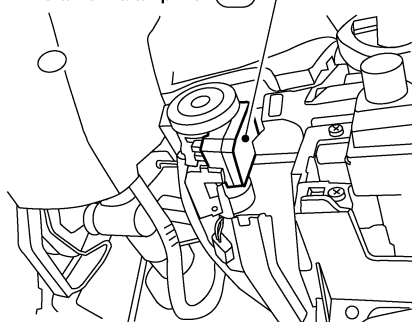
B View with instrument panel removed RH



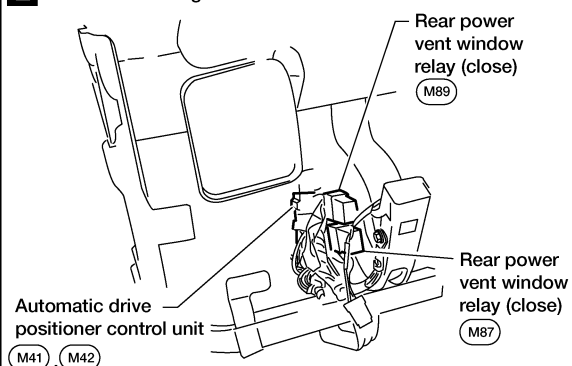
C View with instrument panel removed RH



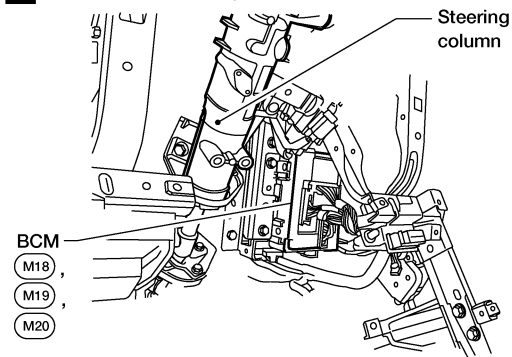
D View with lower driver instrument panel removed
NATS antenna amplifier (M21)



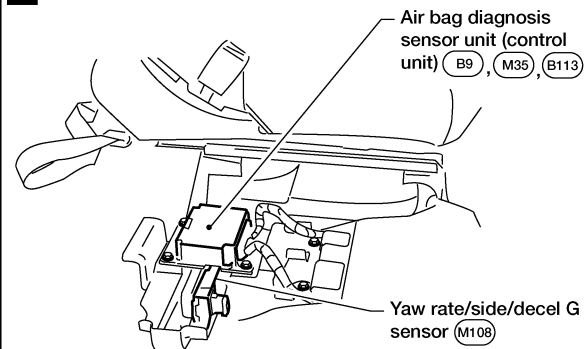
E View with steering member removed LH



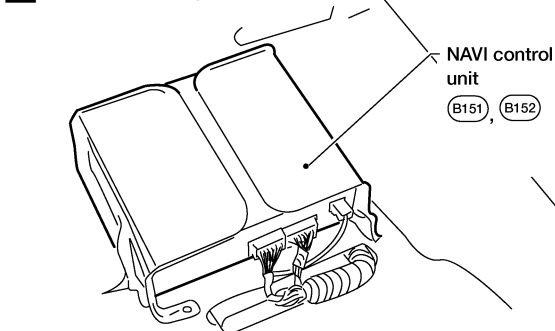
F View with instrument panel removed



G View with center console removed



H View with passenger seat removed



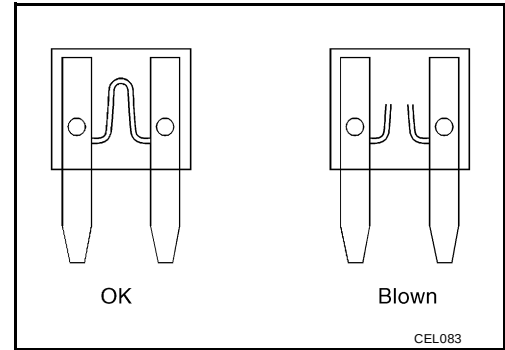
WKIA2015E

ELECTRICAL UNITS LOCATION

Fuse

EKS00701

- If fuse is blown, be sure to eliminate cause of incident 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

EKS00702

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 incident.
- Never wrap outside of fusible link with vinyl tape.
- Never let fusible link touch any other wiring harness, vinyl or rubber parts.

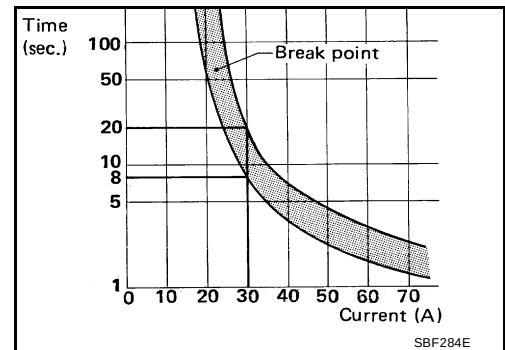
Circuit Breaker (Built Into BCM)

EKS00703

For example, when current is 30A, the circuit is broken within 8 to 20 seconds.

A circuit breaker is used for the following systems:

- Power windows
- Power door locks
- Remote keyless entry system
- Power sunroof
- Rear window wiper



HARNESS CONNECTOR

PFP:B4341

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

EKS00704

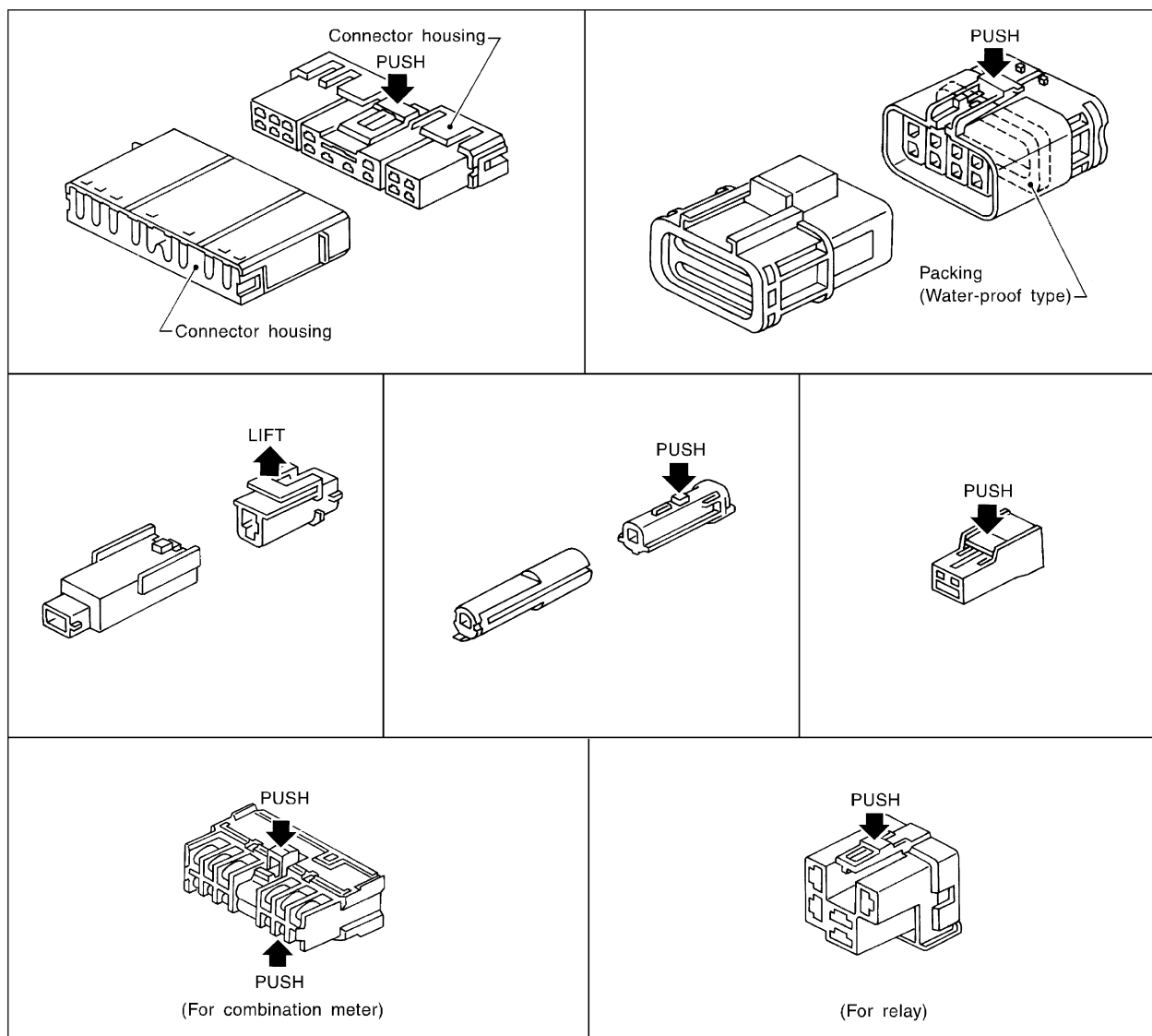
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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

CAUTION:

Do not pull the harness or wires when disconnecting the connector.

[Example]



SEL769DA

HARNESS CONNECTOR

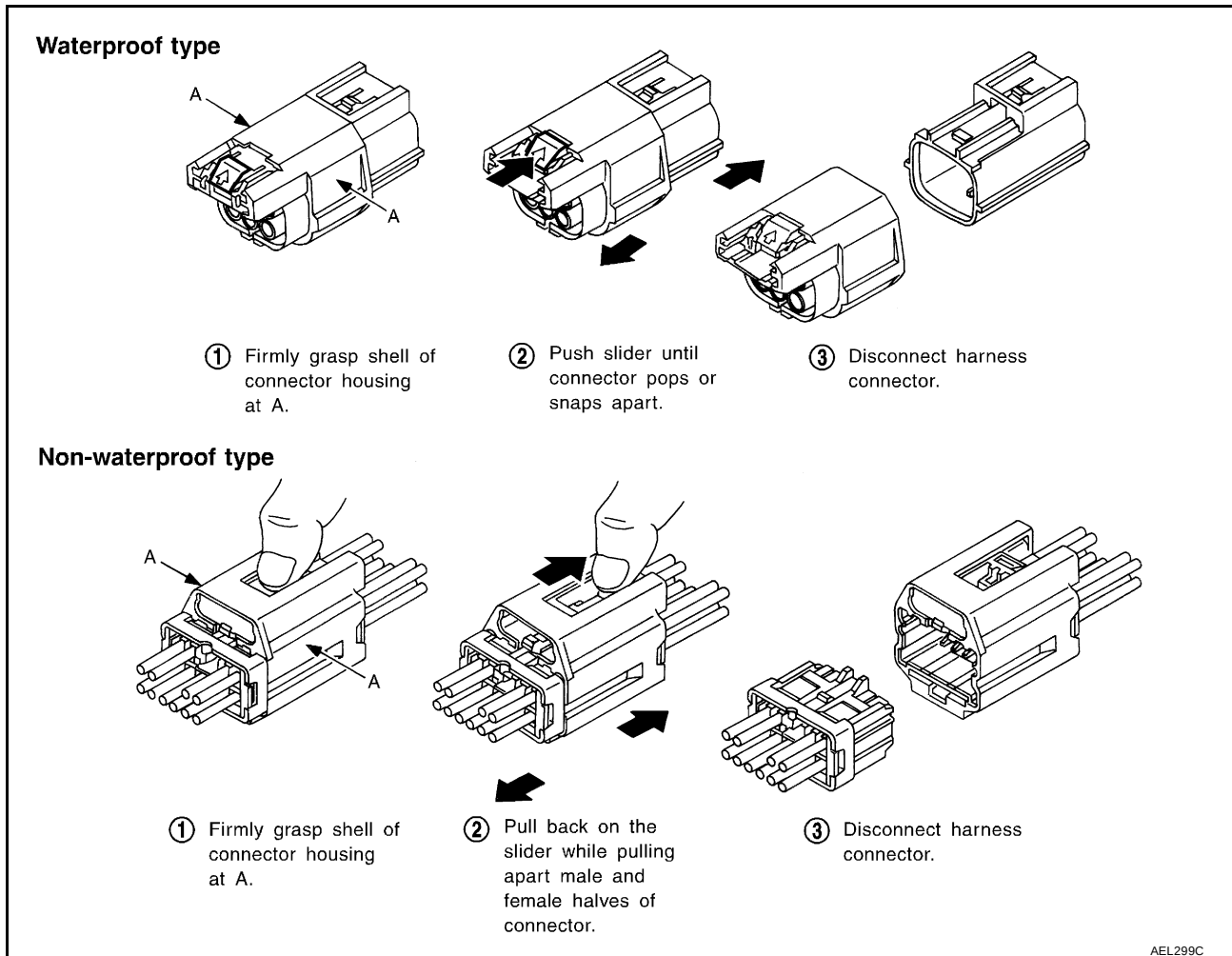
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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 illustration below.

CAUTION:

- Do not pull the harness or wires when disconnecting the connector.
- Be careful not to damage the connector support bracket when disconnecting the connector.

[Example]



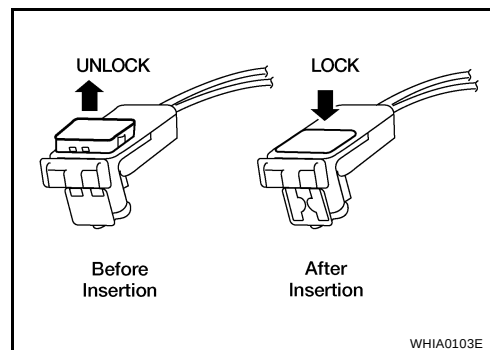
HARNESS CONNECTOR

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS component.
- Always push down to lock black locking tab after installing connector to SRS component. When locked, the black locking tab is level with the connector housing.

CAUTION:

- **Do not pull the harness or wires when removing connectors from SRS components.**



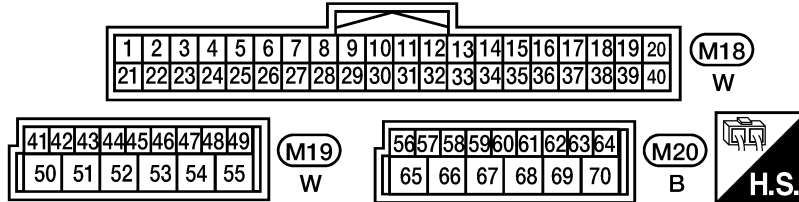
ELECTRICAL UNITS

ELECTRICAL UNITS Terminal Arrangement

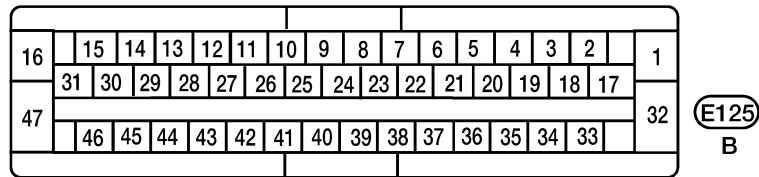
PFP:23710

EKS00705

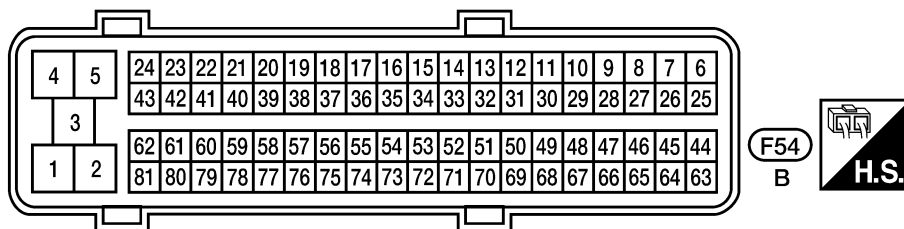
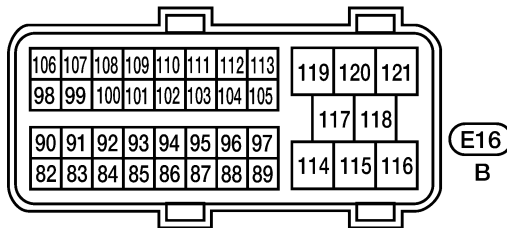
BCM (BODY CONTROL MODULE)



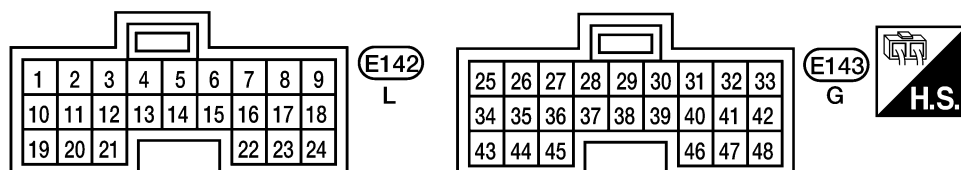
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



ECM



TRANSFER CONTROL UNIT



WK1A3542E

STANDARDIZED RELAY

PFP:25230

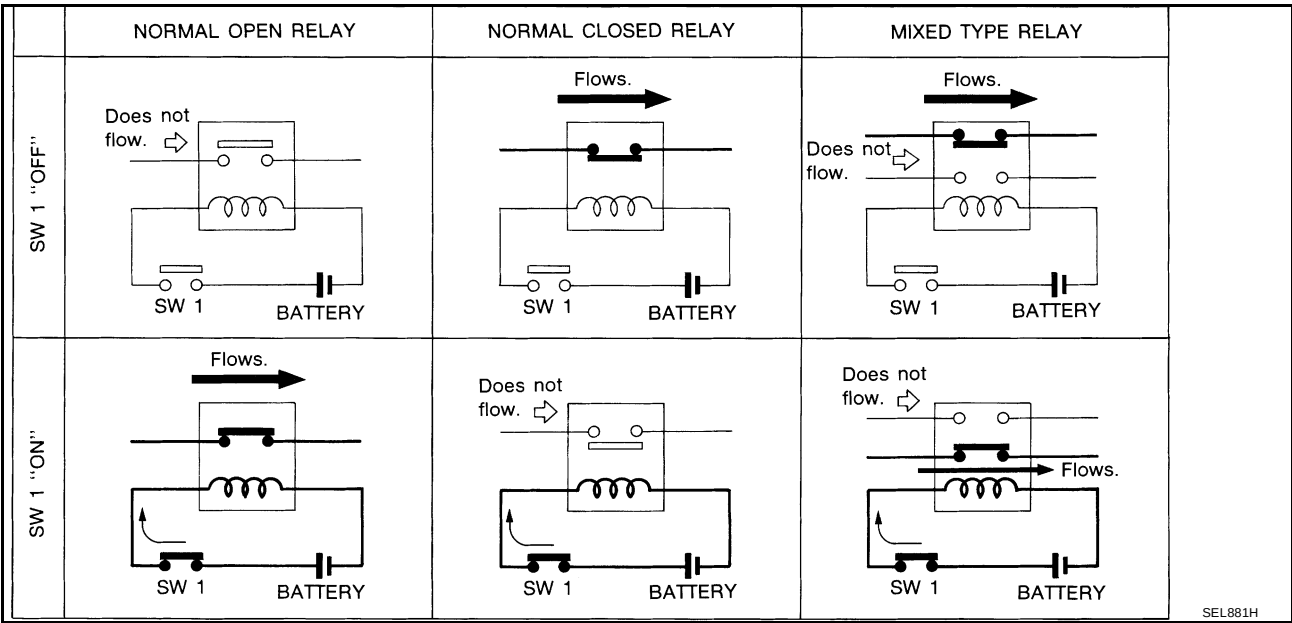
EKS00706

STANDARDIZED RELAY

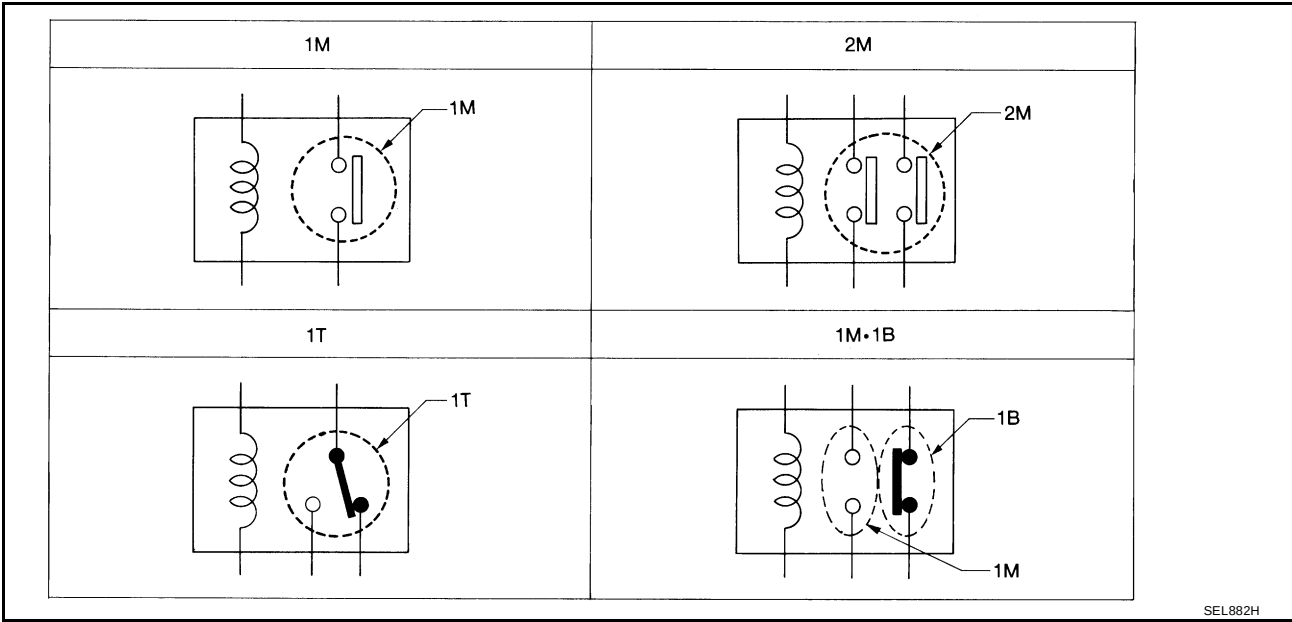
Description

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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

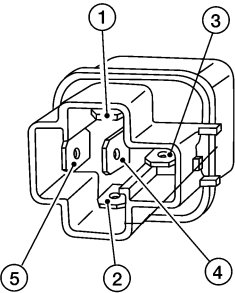
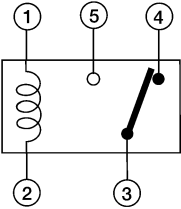
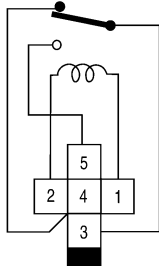
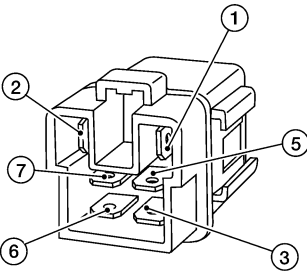
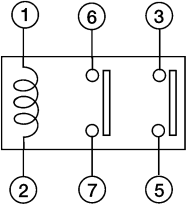
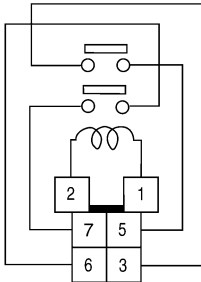
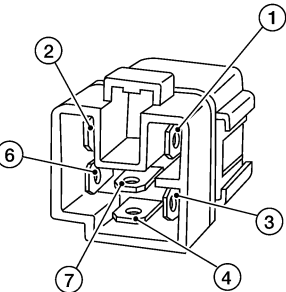
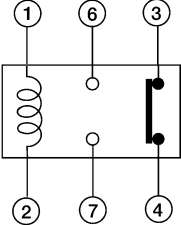
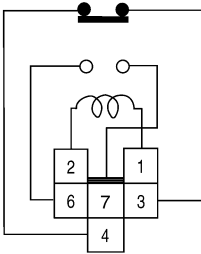
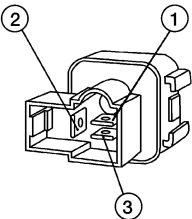
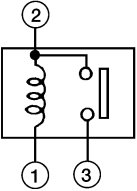
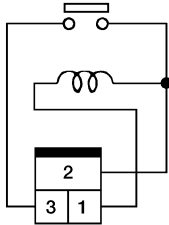
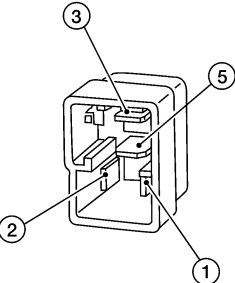
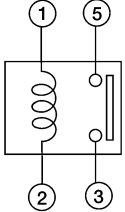
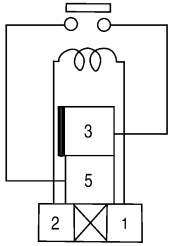


TYPE OF STANDARDIZED RELAYS



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

STANDARDIZED RELAY

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

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

WKIA0253E

A
B
C
D
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F
G
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I
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PG
L
M

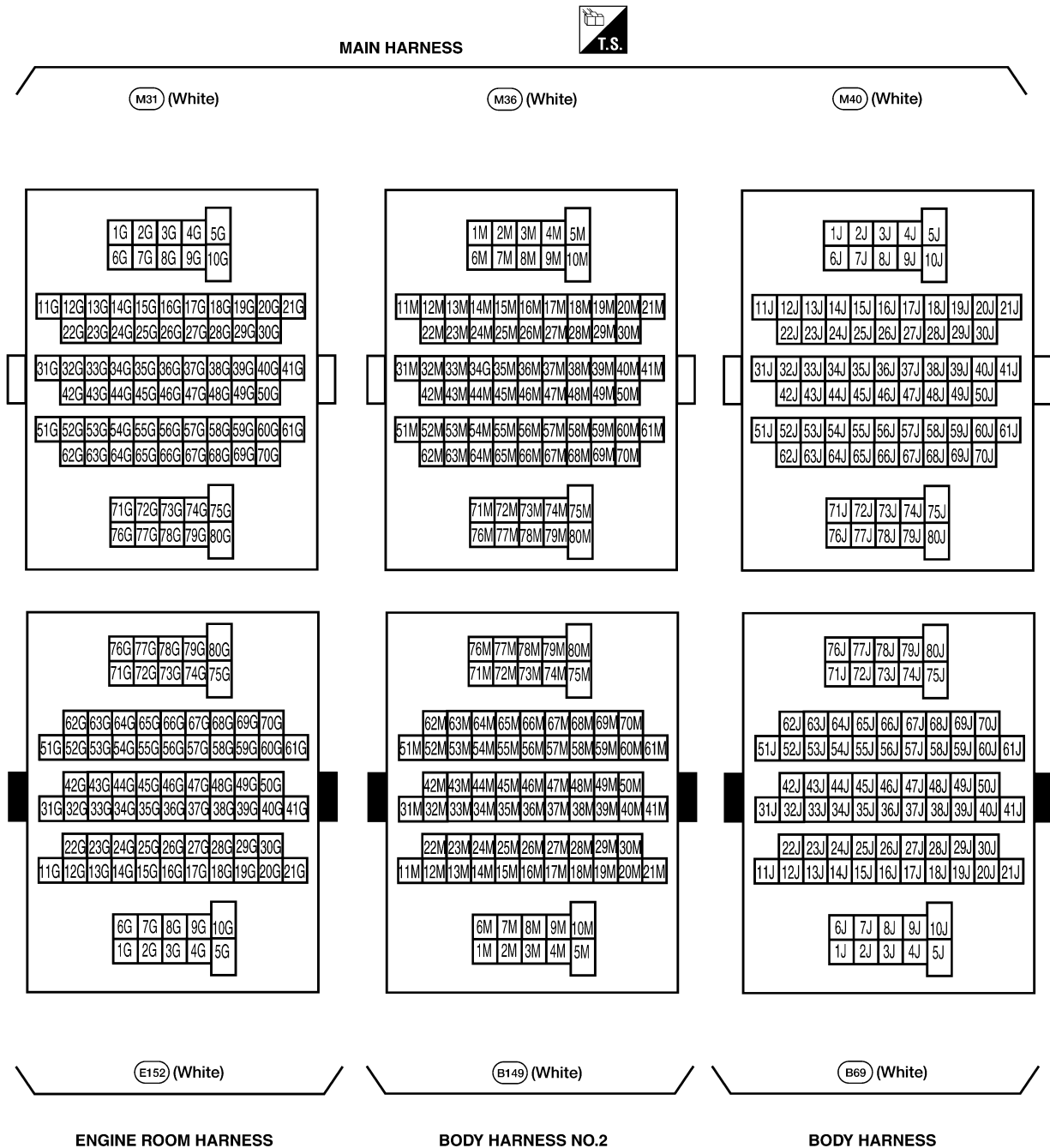
SUPER MULTIPLE JUNCTION (SMJ)

SUPER MULTIPLE JUNCTION (SMJ)

PFP:84341

Terminal Arrangement

EKS00707



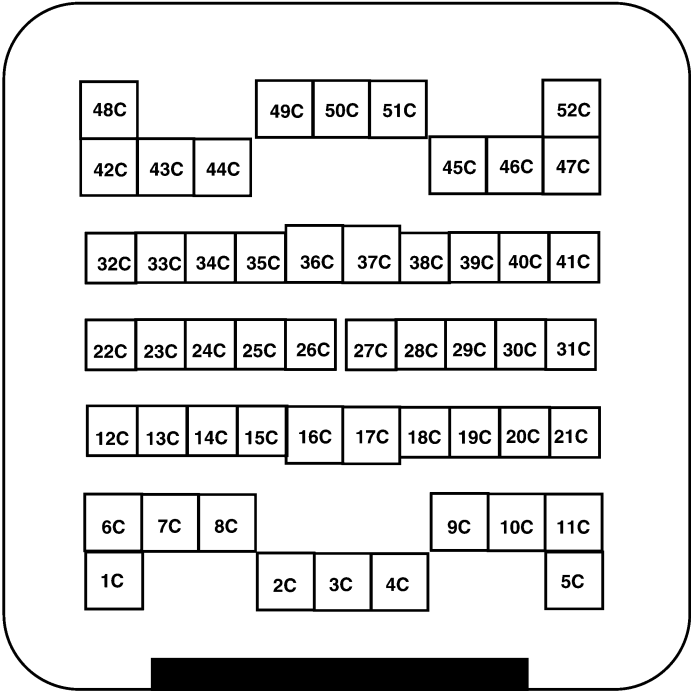
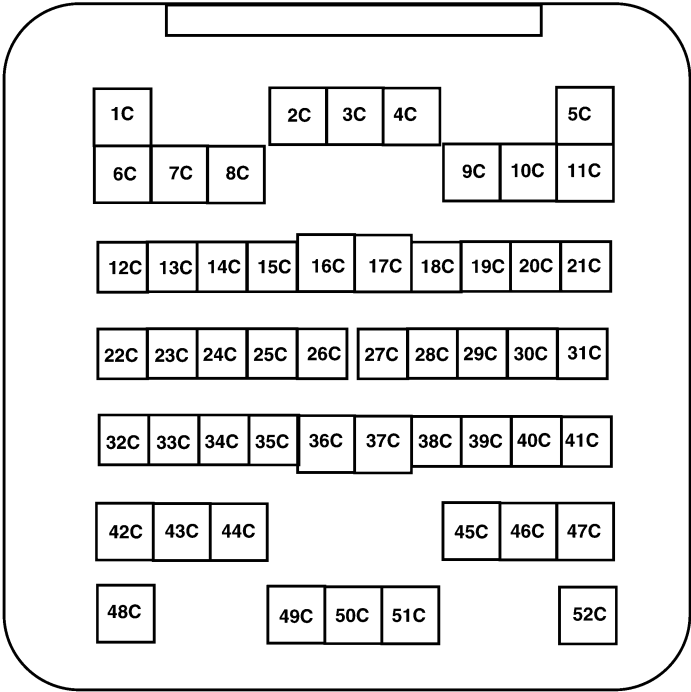
LKIA0385E

SUPER MULTIPLE JUNCTION (SMJ)

CHASSIS HARNESS



C1 (Gray)



E41 (Gray)

ENGINE ROOM HARNESS

WKIA1845E

A
B
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D
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M

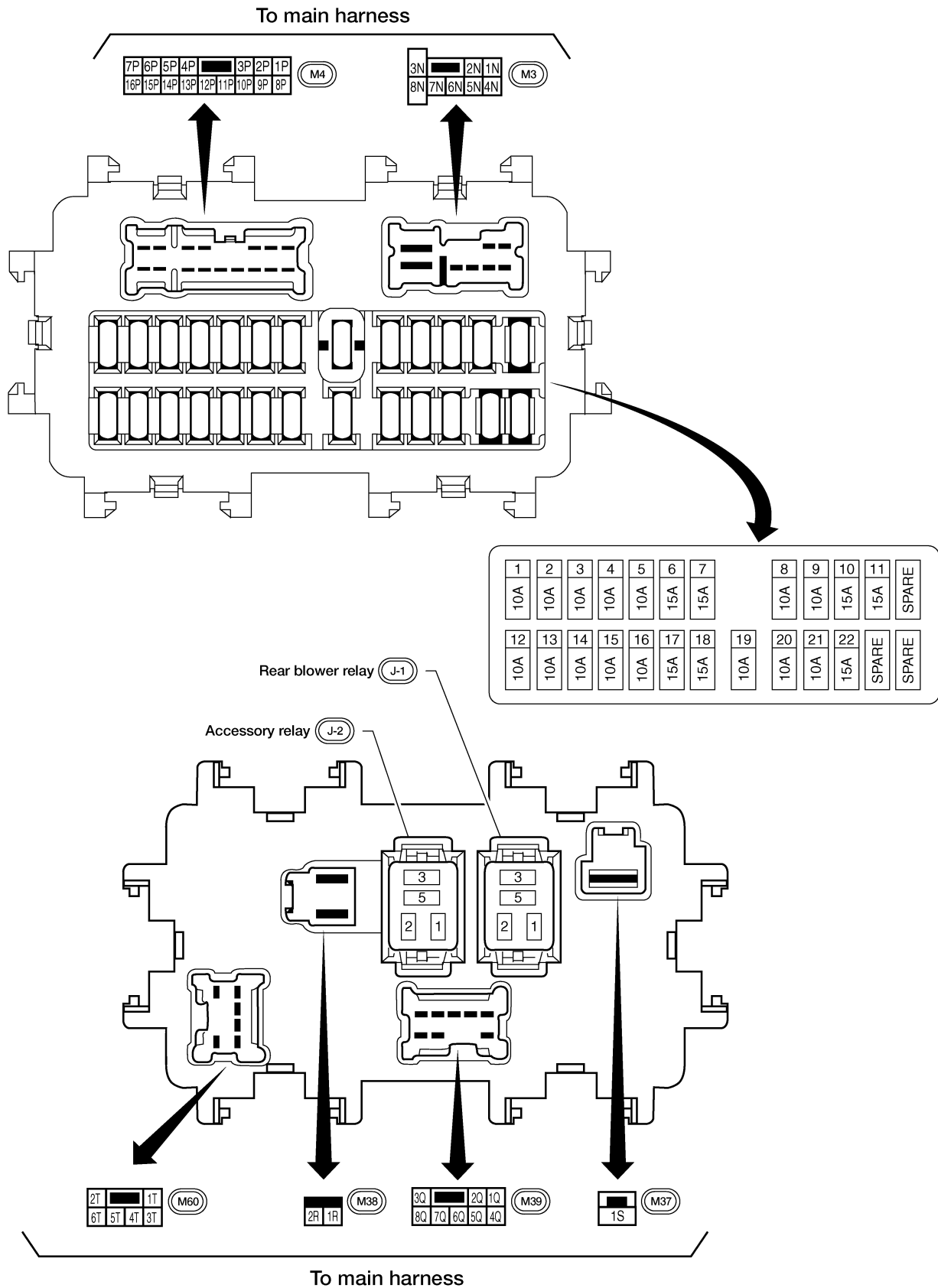
FUSE BLOCK-JUNCTION BOX(J/B)

FUSE BLOCK-JUNCTION BOX(J/B)

PFP:24350

Terminal Arrangement

EKS00708

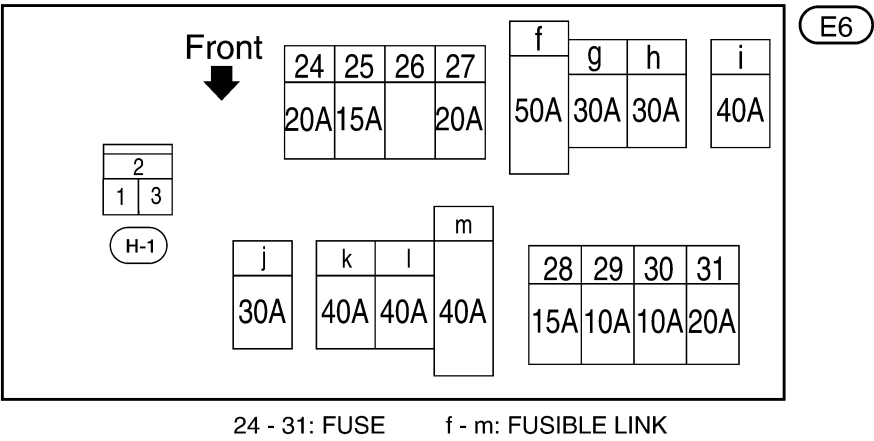


WKIA2016E

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX
Terminal Arrangement

PFP:24381
EKS00709



A
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PG
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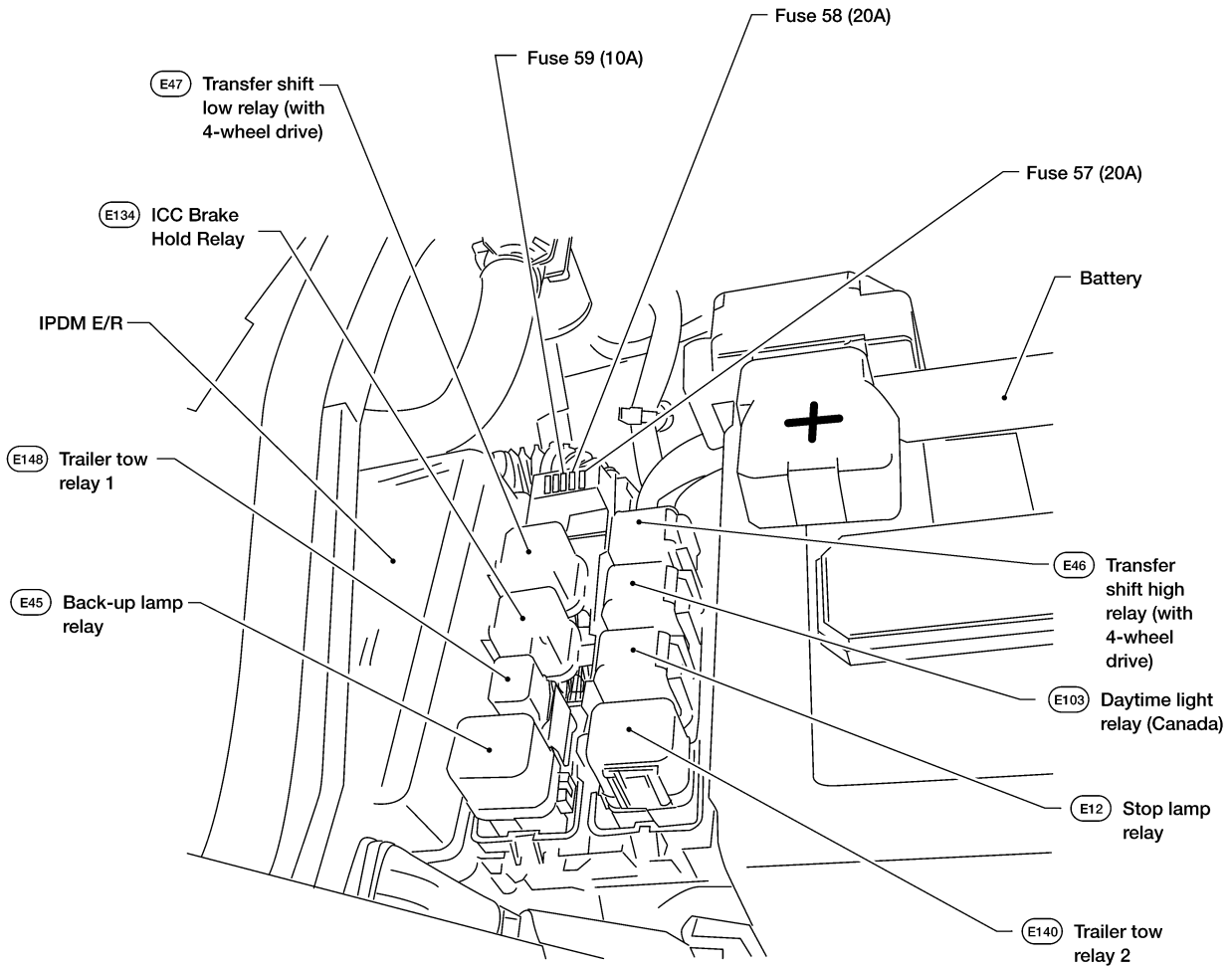
FUSE AND RELAY BOX

FUSE AND RELAY BOX

PFP:24012

Terminal Arrangement

EKS0070A



WKIA4248E