

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

PRECAUTIONS

PFP:00011

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

EKS00BMY

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

EKS00BMZ

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.

A

B

C

D

E

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I

J

PG

L

M

POWER SUPPLY ROUTING CIRCUIT

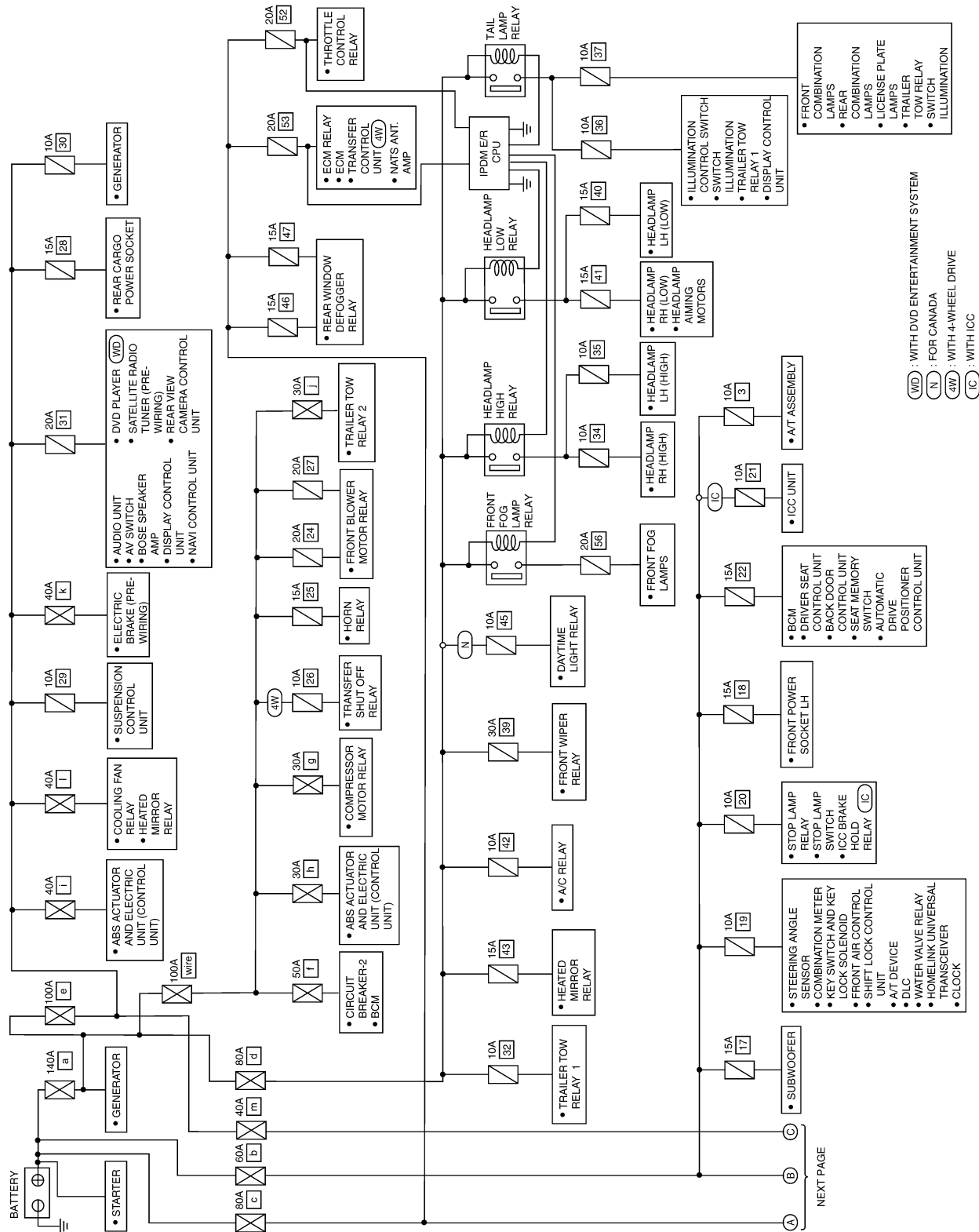
PF:24110

EKS00BN0

POWER SUPPLY ROUTING CIRCUIT

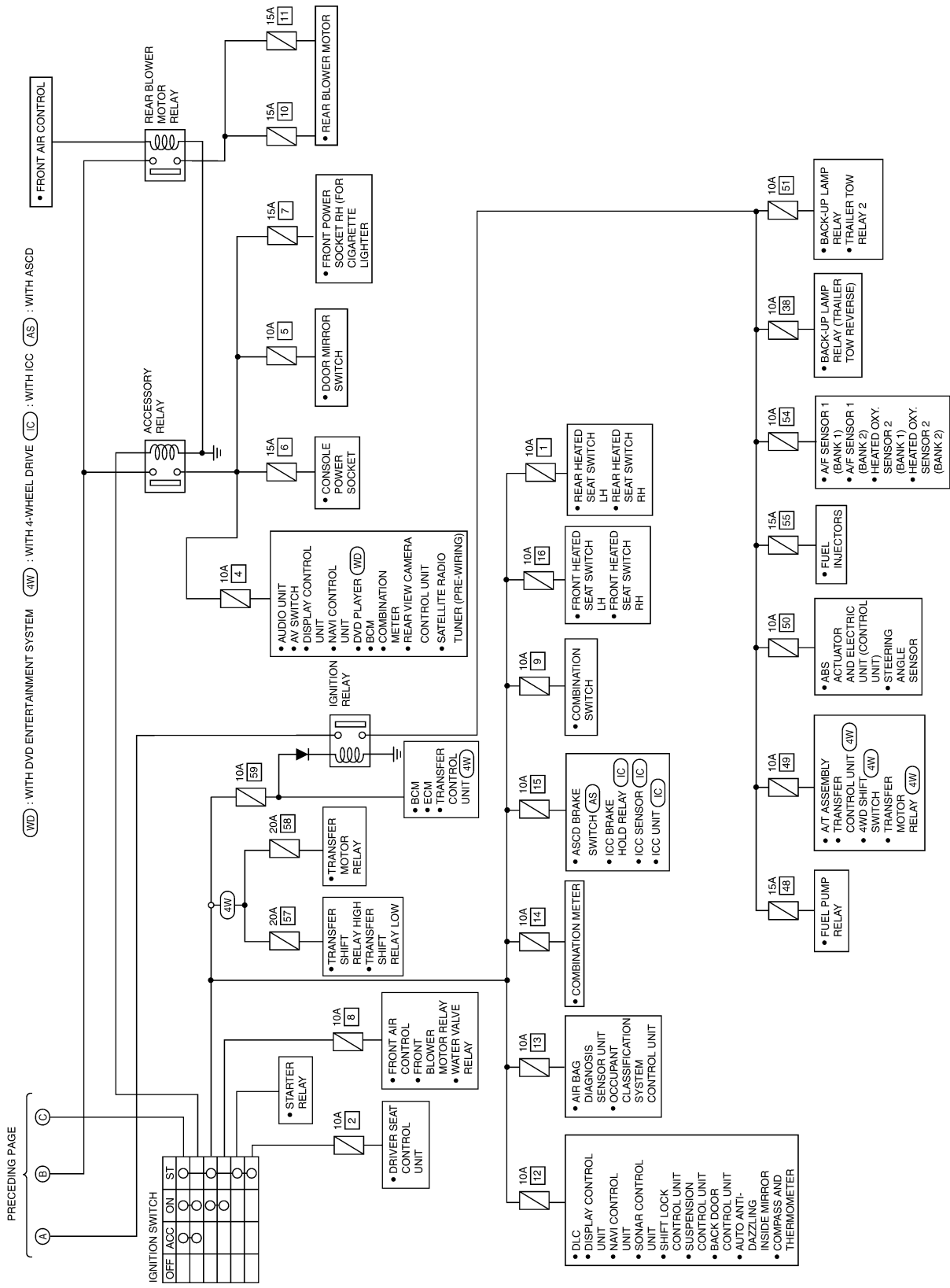
Schematic

For detailed ground distribution, refer to [PG-29, "Ground Distribution"](#).



WKWA2616E

POWER SUPPLY ROUTING CIRCUIT



A
B
C
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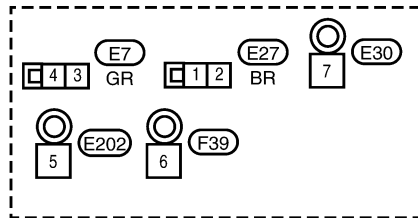
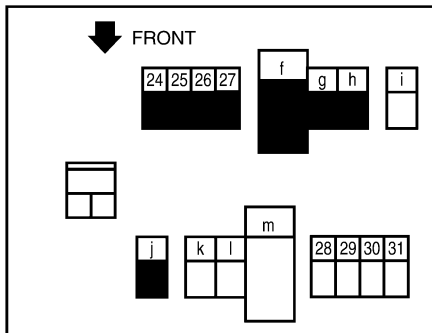
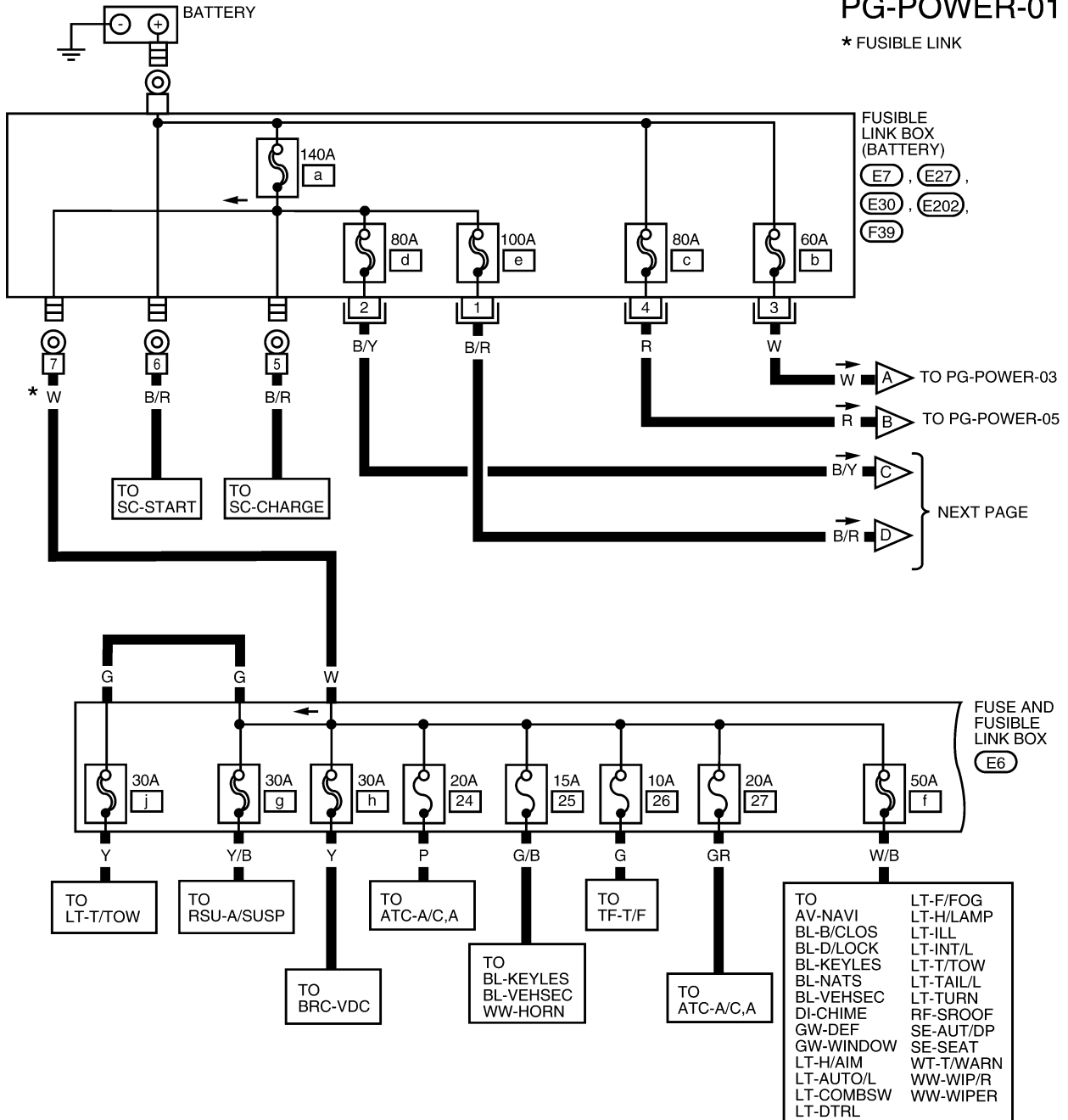
POWER SUPPLY ROUTING CIRCUIT

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

EKS00BN1

PG-POWER-01

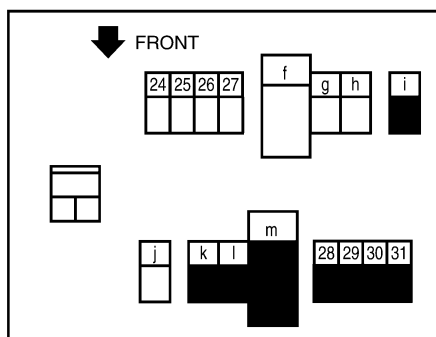
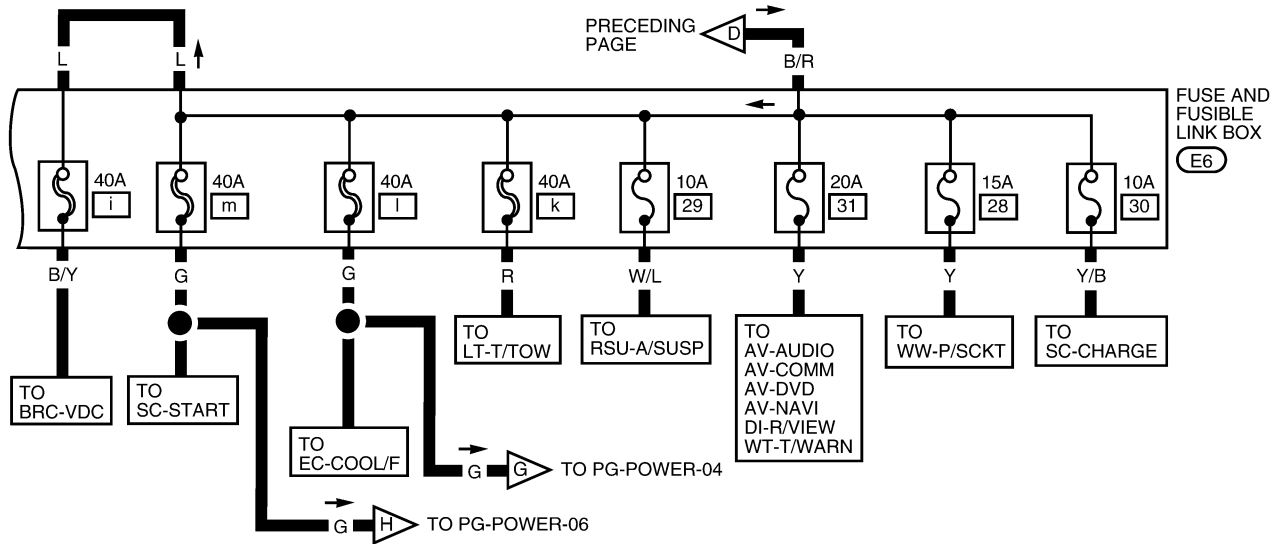
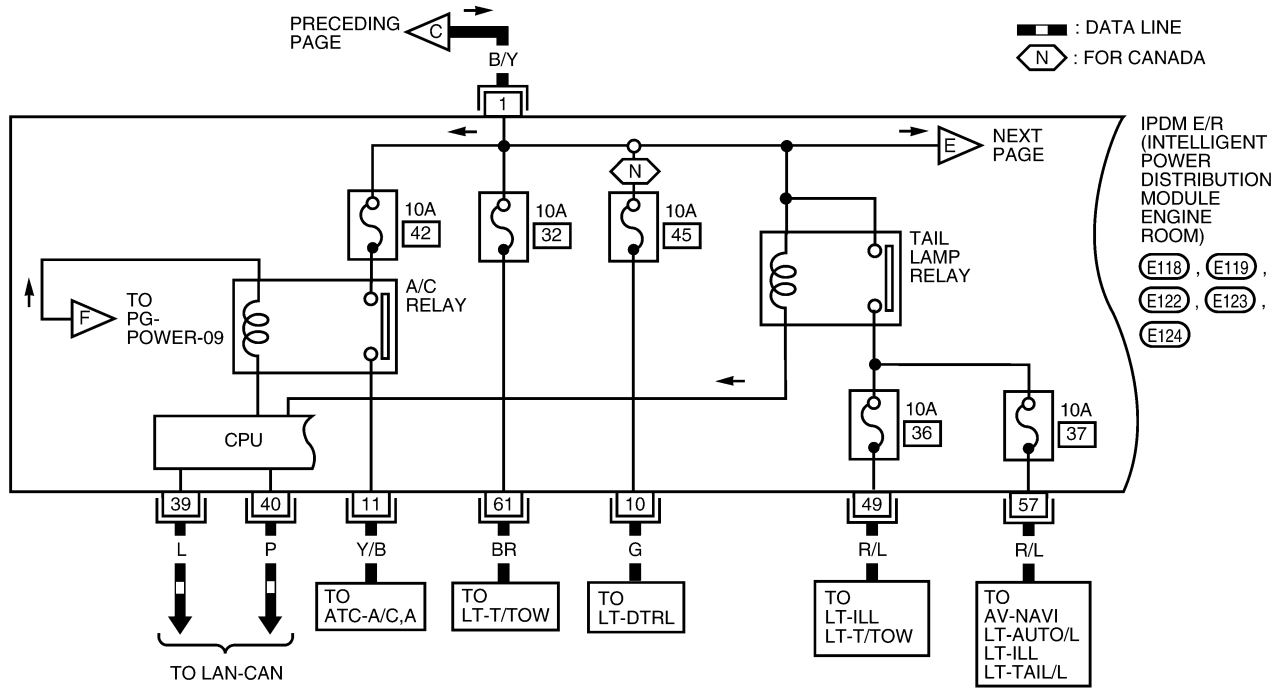
* FUSIBLE LINK



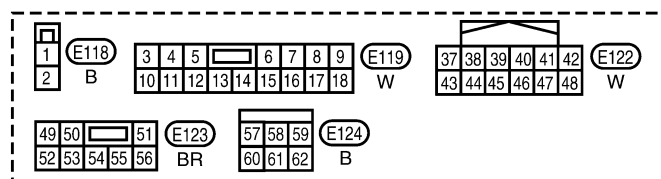
WKWA2618E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02



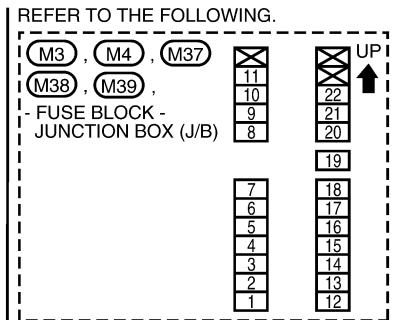
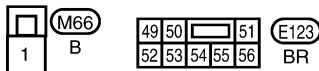
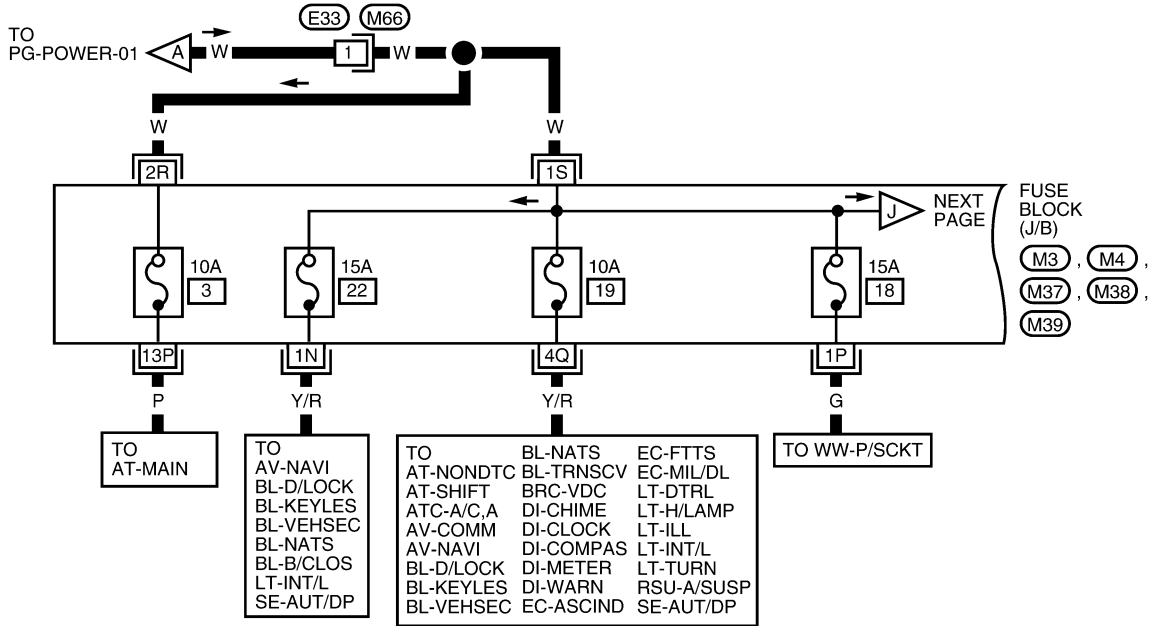
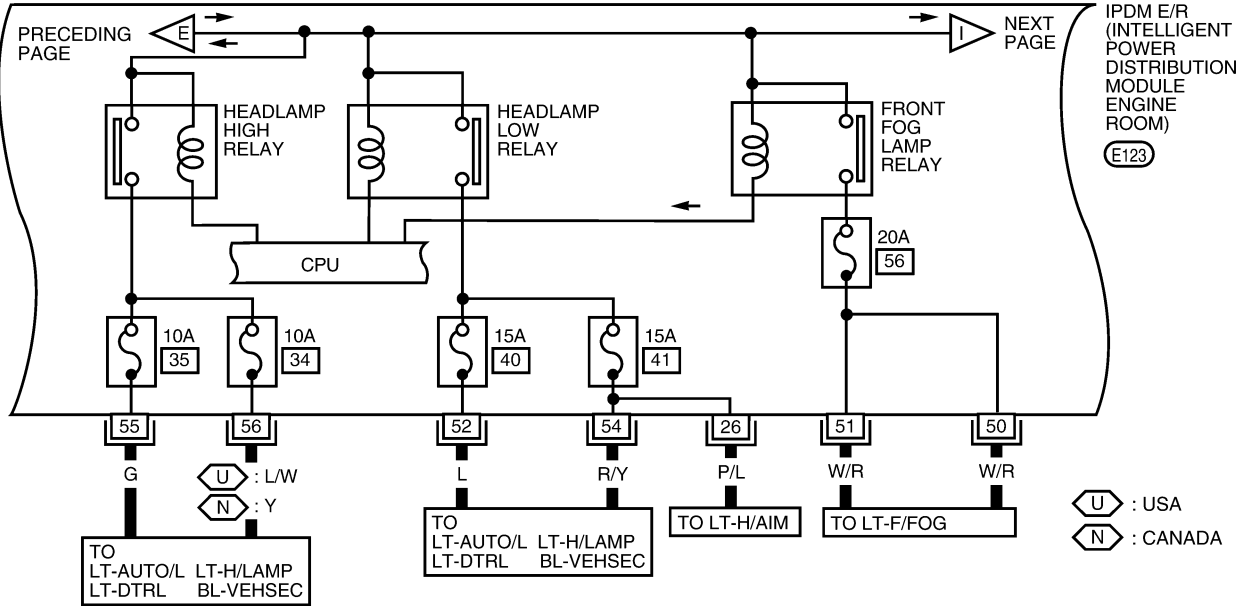
(E6)



WKWA2619E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03

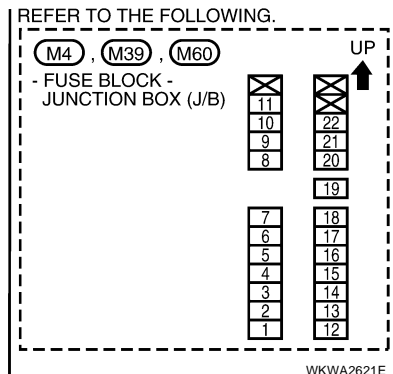
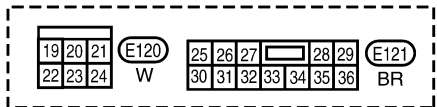
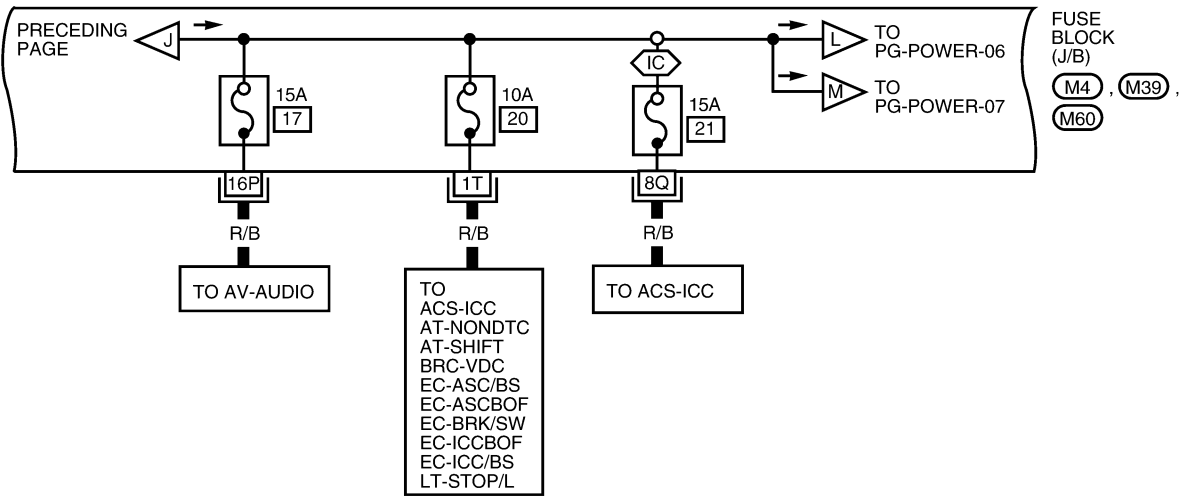
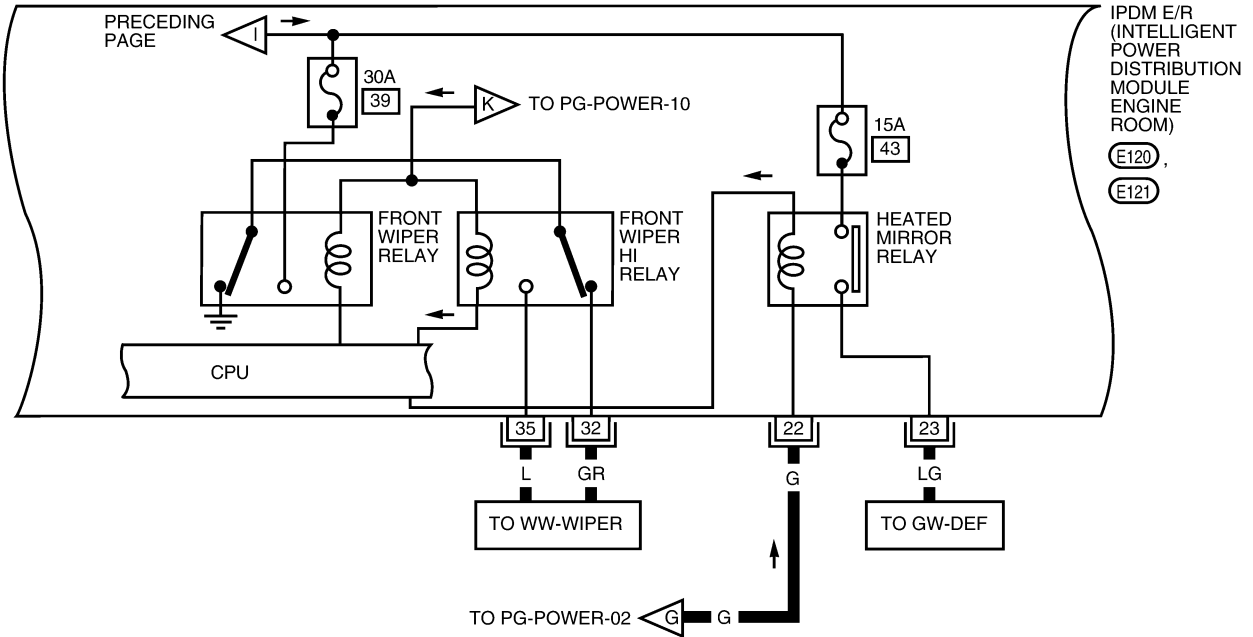


WKWA2620E

POWER SUPPLY ROUTING CIRCUIT

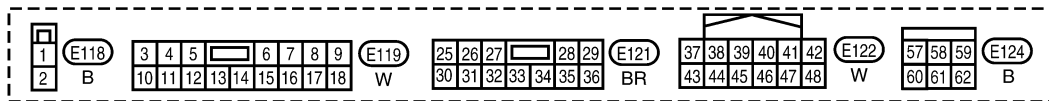
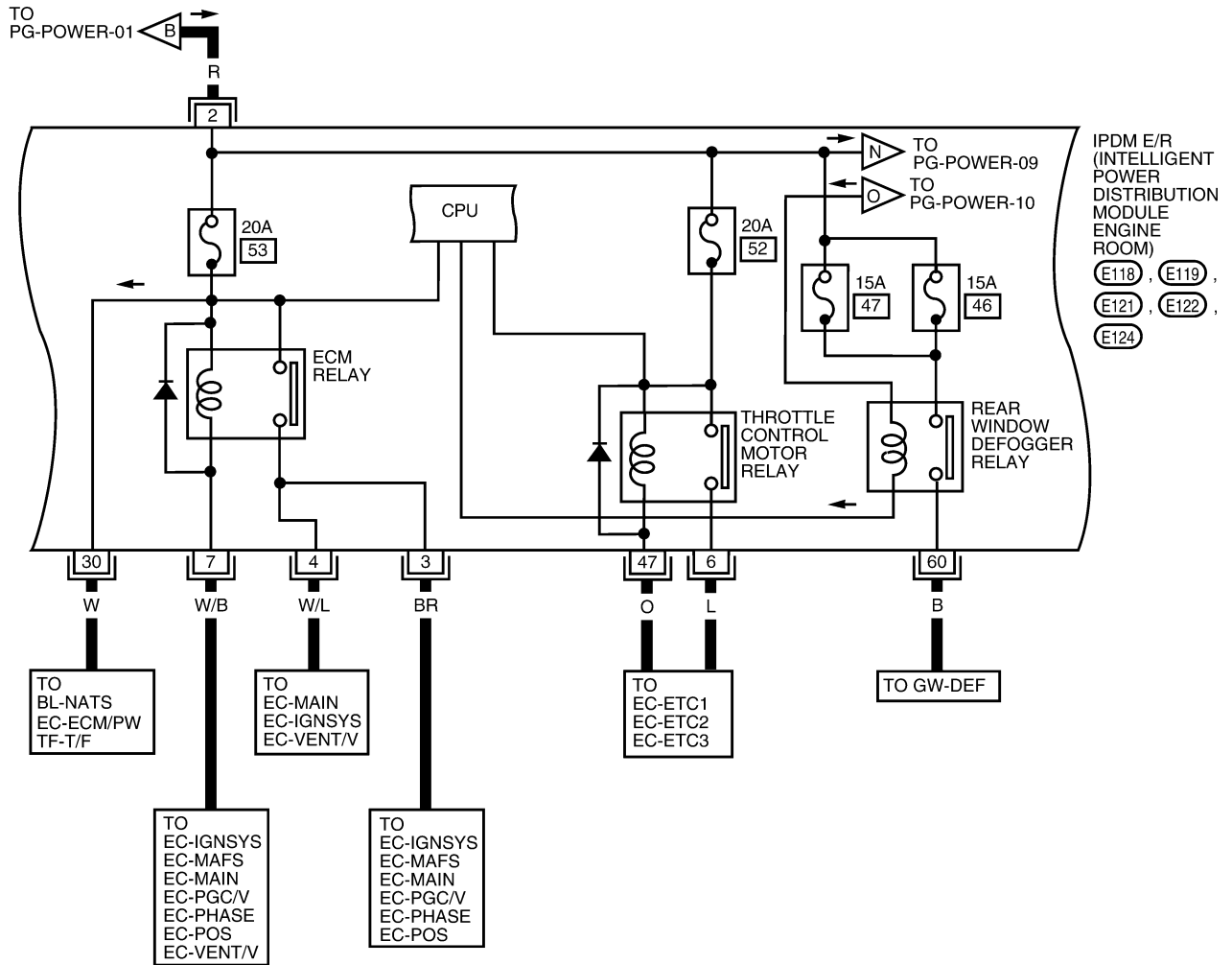
PG-POWER-04

⊠ IC : WITH ICC



POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05

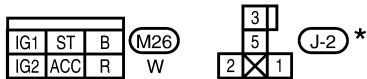
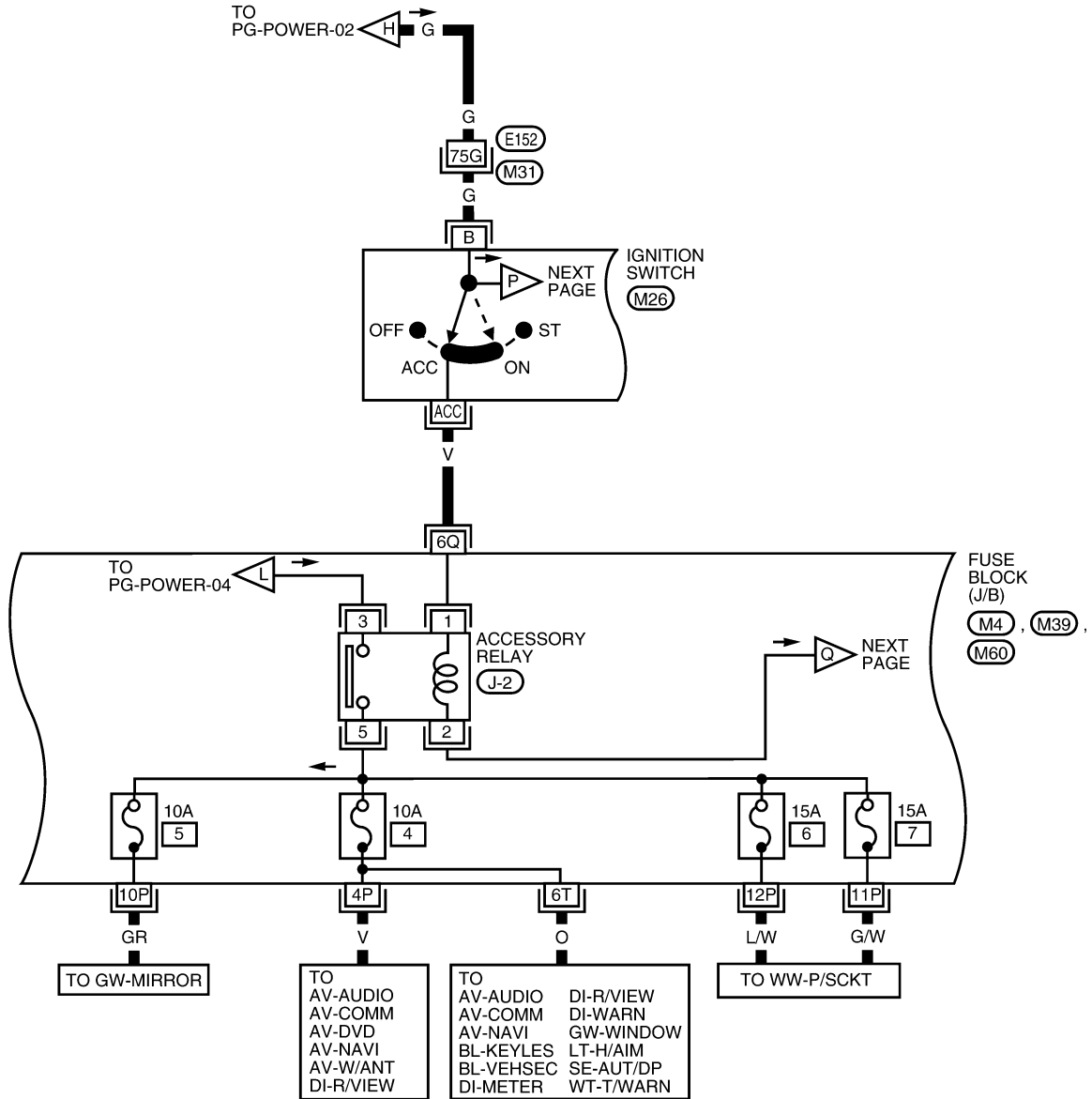


WKWA2622E

POWER SUPPLY ROUTING CIRCUIT

ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

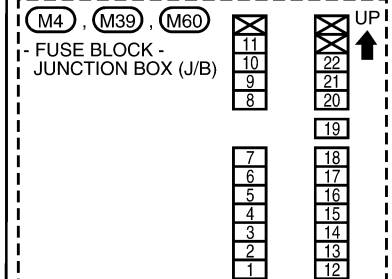
PG-POWER-06



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

REFER TO THE FOLLOWING.

(M31) - SUPER MULTIPLE JUNCTION (SMJ)

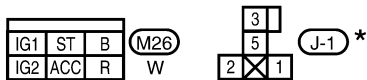
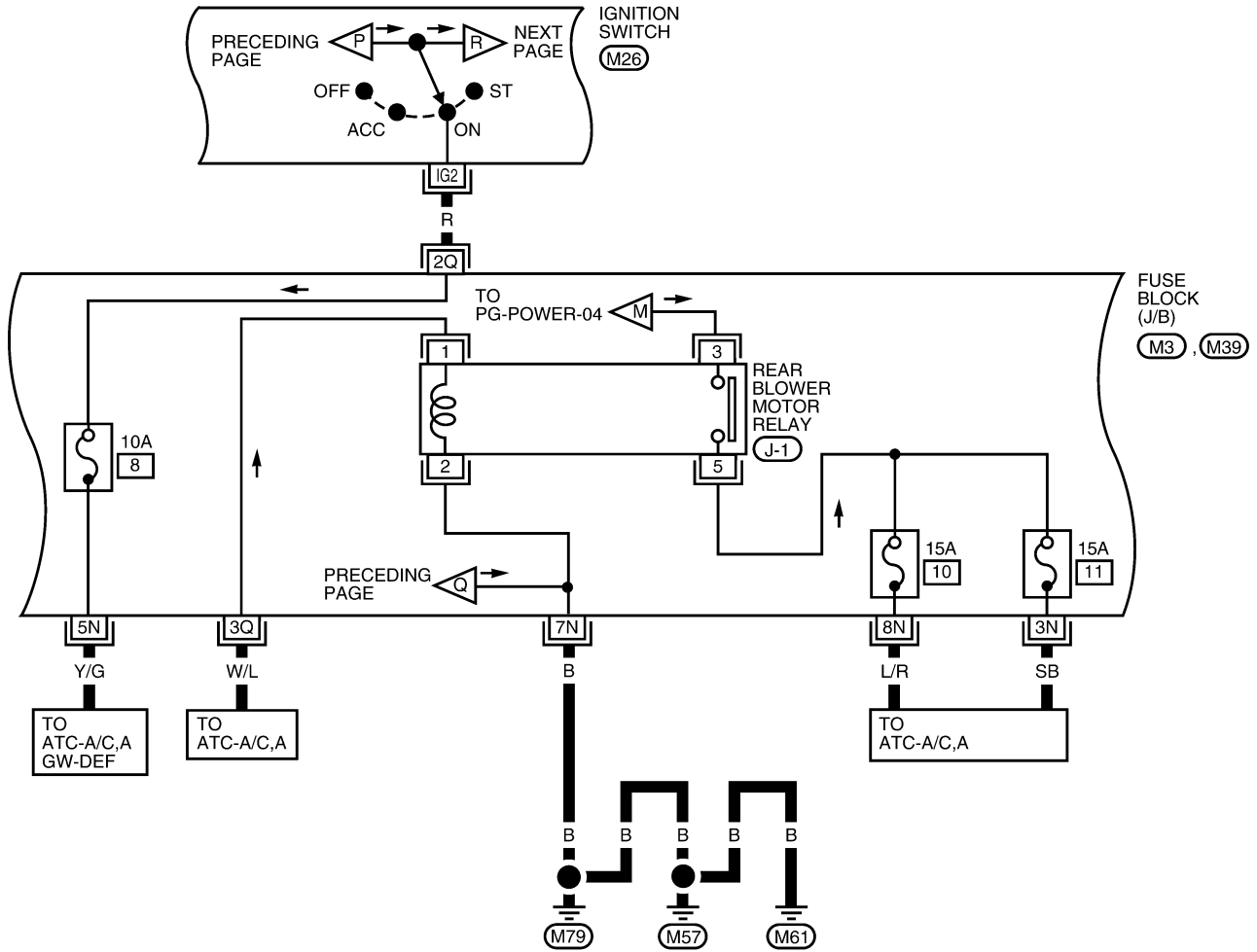


WKWA2623E

POWER SUPPLY ROUTING CIRCUIT

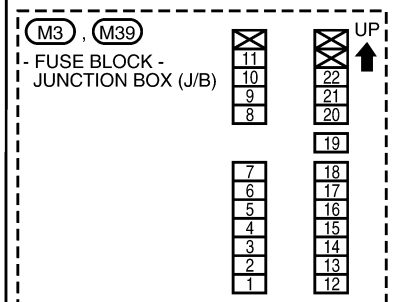
IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-07



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

REFER TO THE FOLLOWING.




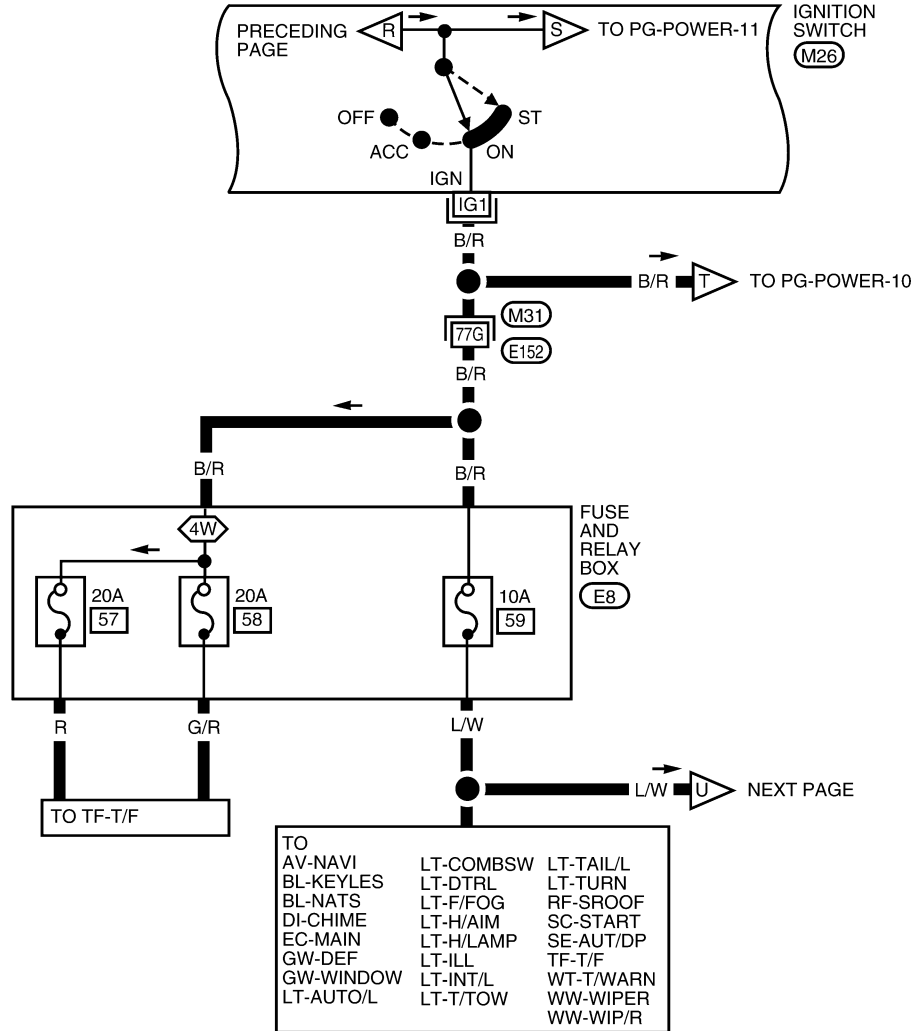
WKWA2624E

POWER SUPPLY ROUTING CIRCUIT

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


PG-POWER-08

 : WITH 4-WHEEL DRIVE



IG1	ST	B	(M26)
IG2	ACC	R	
			W

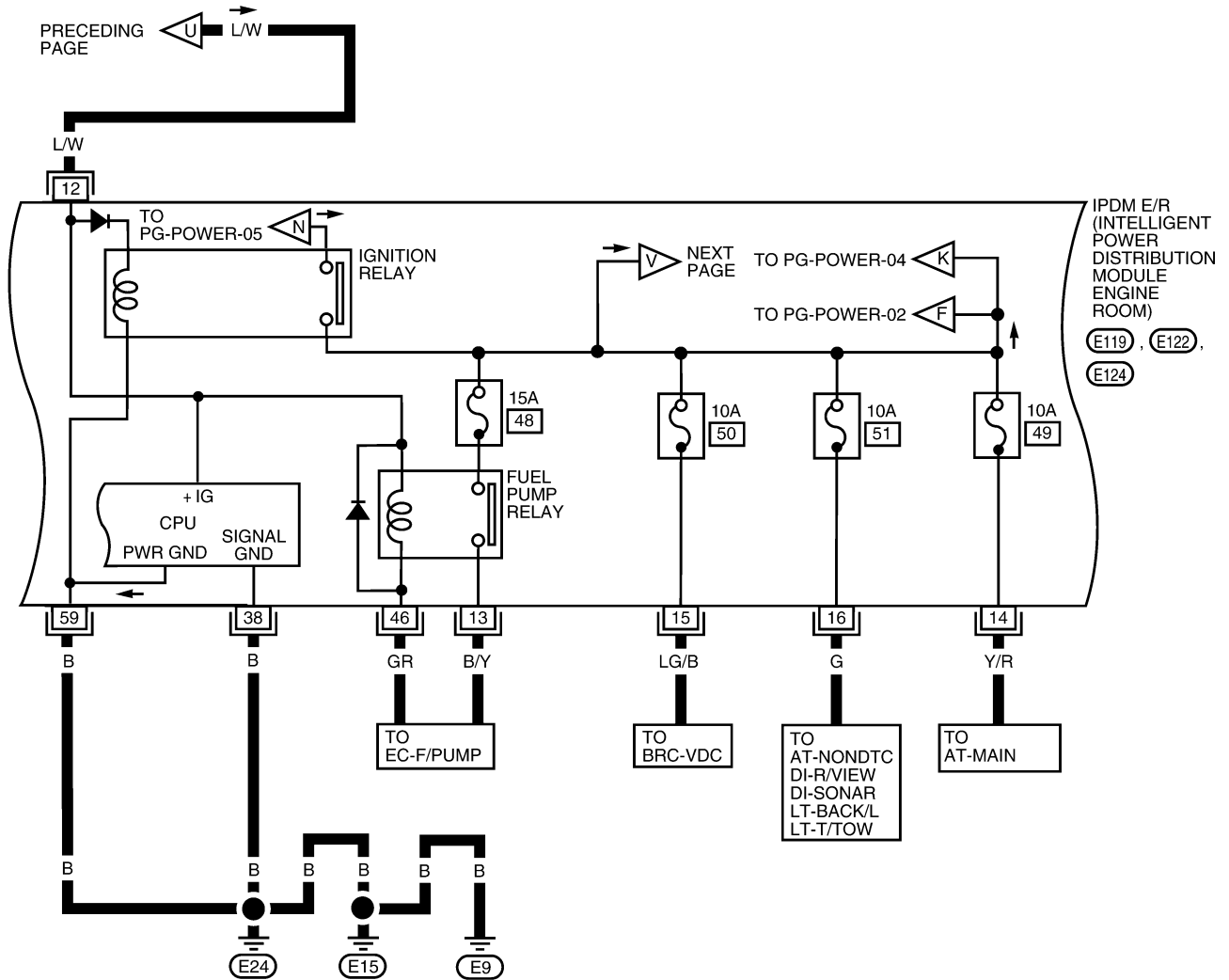
REFER TO THE FOLLOWING.

 - SUPER MULTIPLE JUNCTION (SMJ)

WKWA2625E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-09

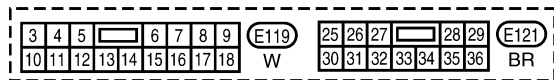
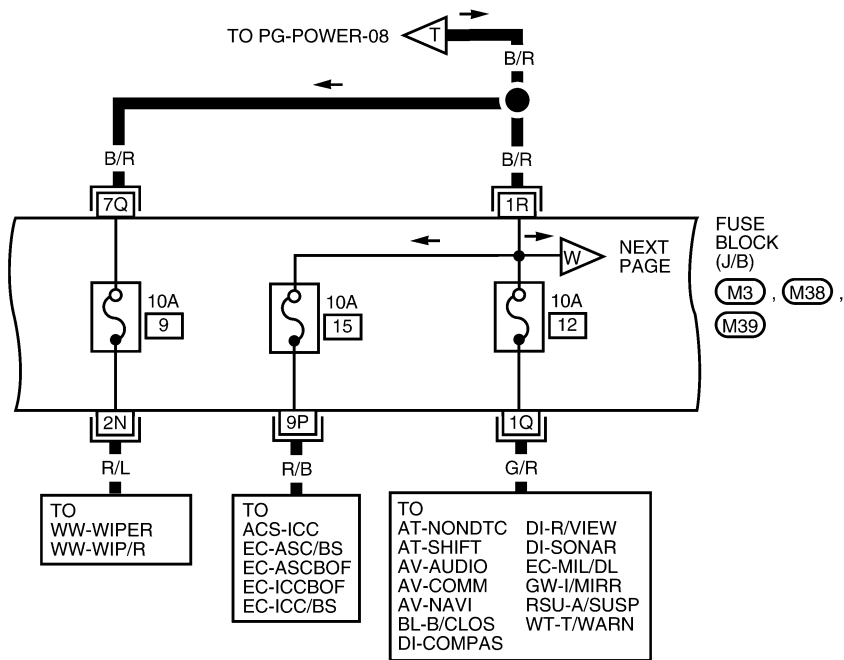
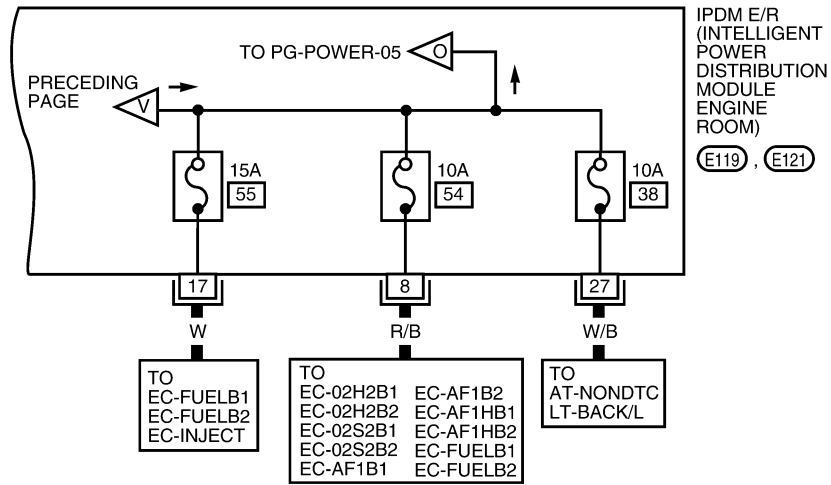


3	4	5	6	7	8	9	E119	37	38	39	40	41	42	E122	57	58	59	E124		
10	11	12	13	14	15	16	17	18	W	43	44	45	46	47	48	W	60	61	62	B

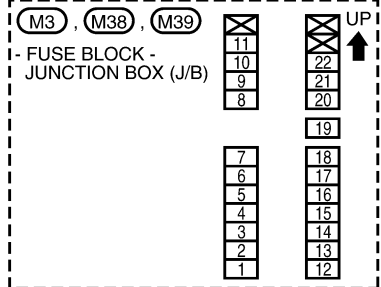
WKWA2626E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-10



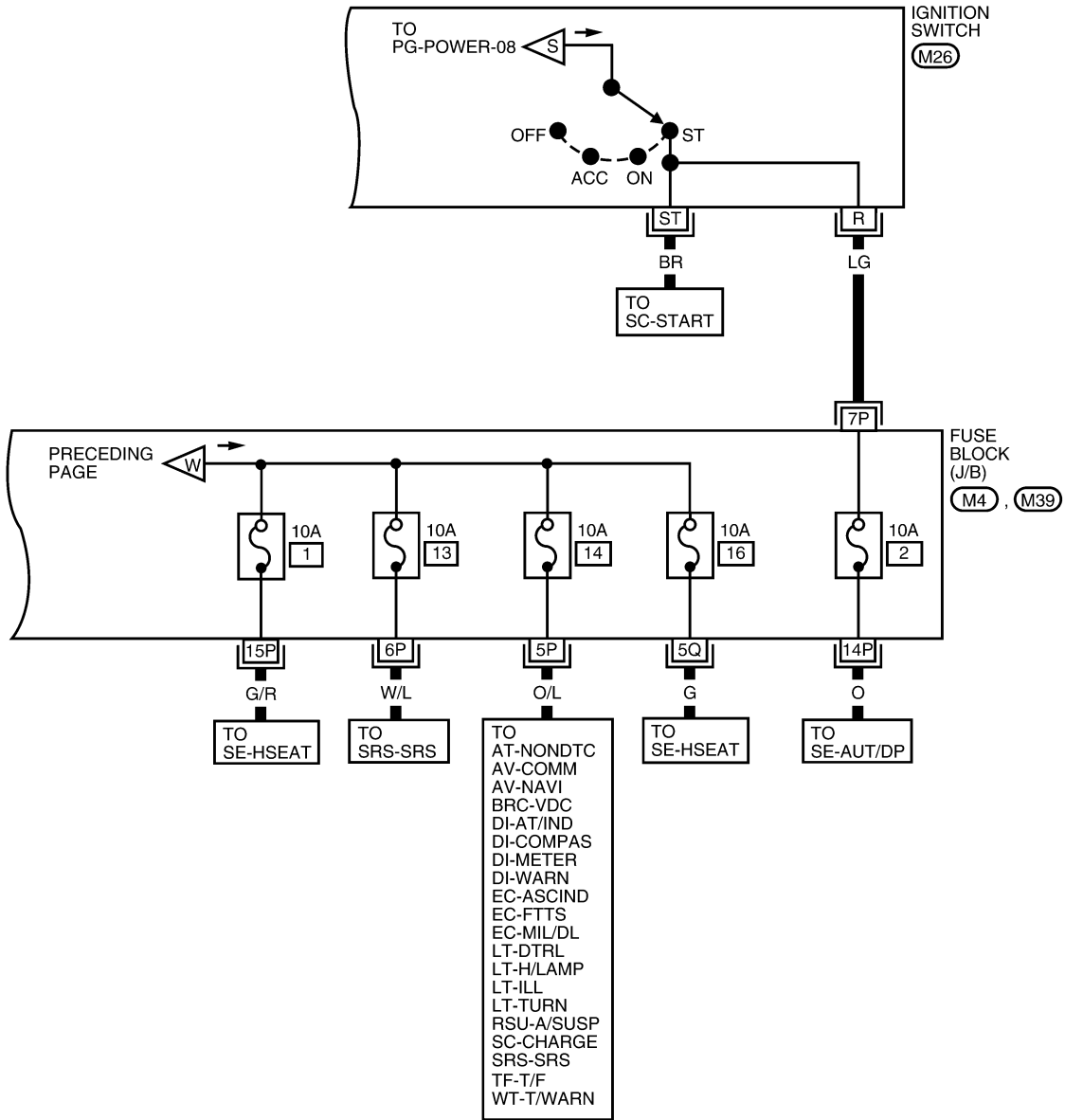
REFER TO THE FOLLOWING.



WKWA2627E

POWER SUPPLY ROUTING CIRCUIT

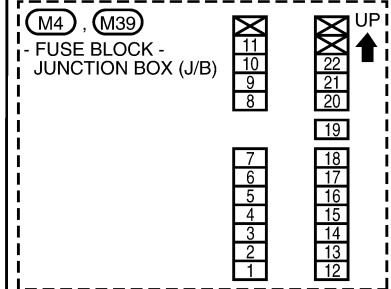
PG-POWER-11



IG1	ST	B	(M26)
IG2	ACC	R	

W

REFER TO THE FOLLOWING.



WKWA2628E

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

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

PFP:284B7

System Description

EKS00BN2

- 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	<ul style="list-style-type: none"> ● With the ignition switch ON, the headlamp (low) is ON. ● With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● 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

EKS00BN3

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

Function of Detecting Ignition Relay Malfunction

EKS00BN4

- 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.

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

CONSULT-II Function IPDM E/R

EKS00BN5

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

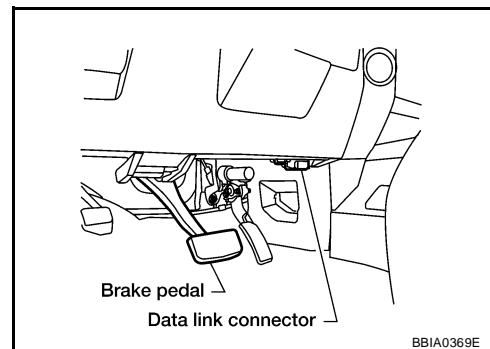
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.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

CONSULT-II BASIC OPERATION

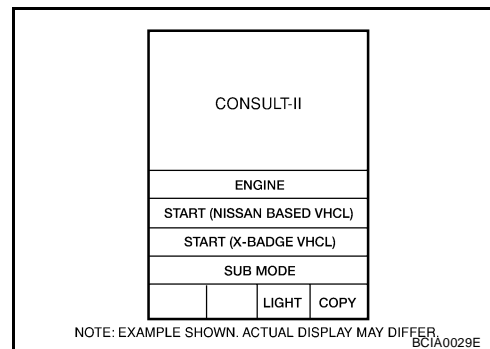
CAUTION:

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

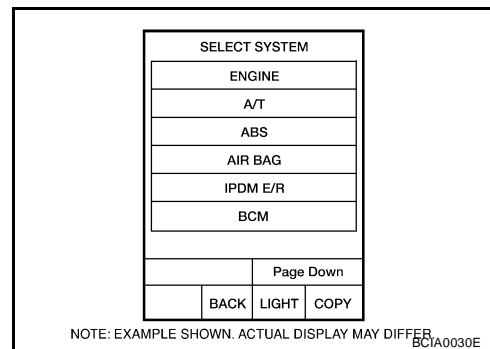
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn ignition switch ON.



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

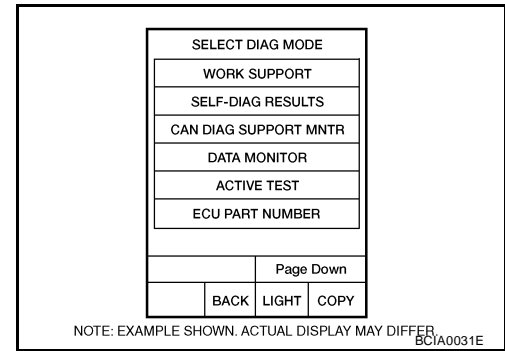


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, print "SELECT SYSTEM" screen, then refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



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

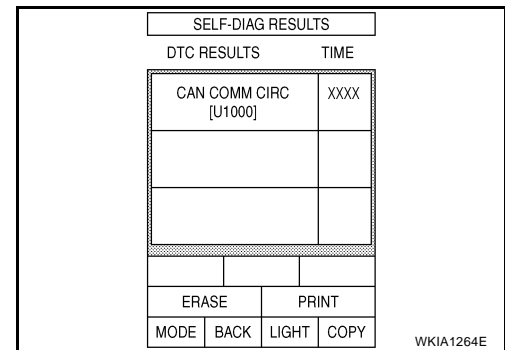
4. Select "SELF-DIAG RESULTS" or "DATA MONITOR".



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	<ul style="list-style-type: none"> ● 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: <ul style="list-style-type: none"> ● 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 "SELECT FROM MENU" on the "DATA MONITOR" screen.

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

3. Touch "START".
4. Touch the required monitoring item on "SELECT ITEM MENU".
5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

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

All Signals, Main Signals, Select From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECT 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
Tail & clear request	TAIL & CLR REQ	ON/OFF	X	X	X	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	X	X	X	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	X	X	X	Signal status input from BCM
FR fog request	FR FOG REQ	ON/OFF	X	X	X	Signal status input from BCM
FR 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
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 ON, LO ON), 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, HI ON, LO ON, TAIL ON, FOG ON), 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

EKS00BN6

- 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:

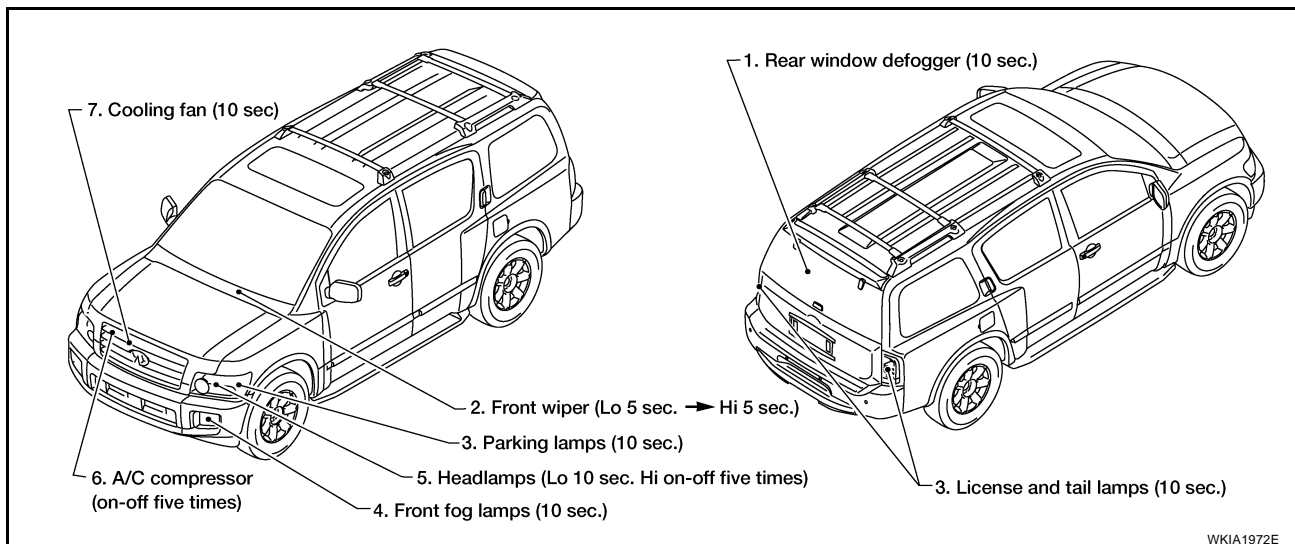
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform [BL-92, "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

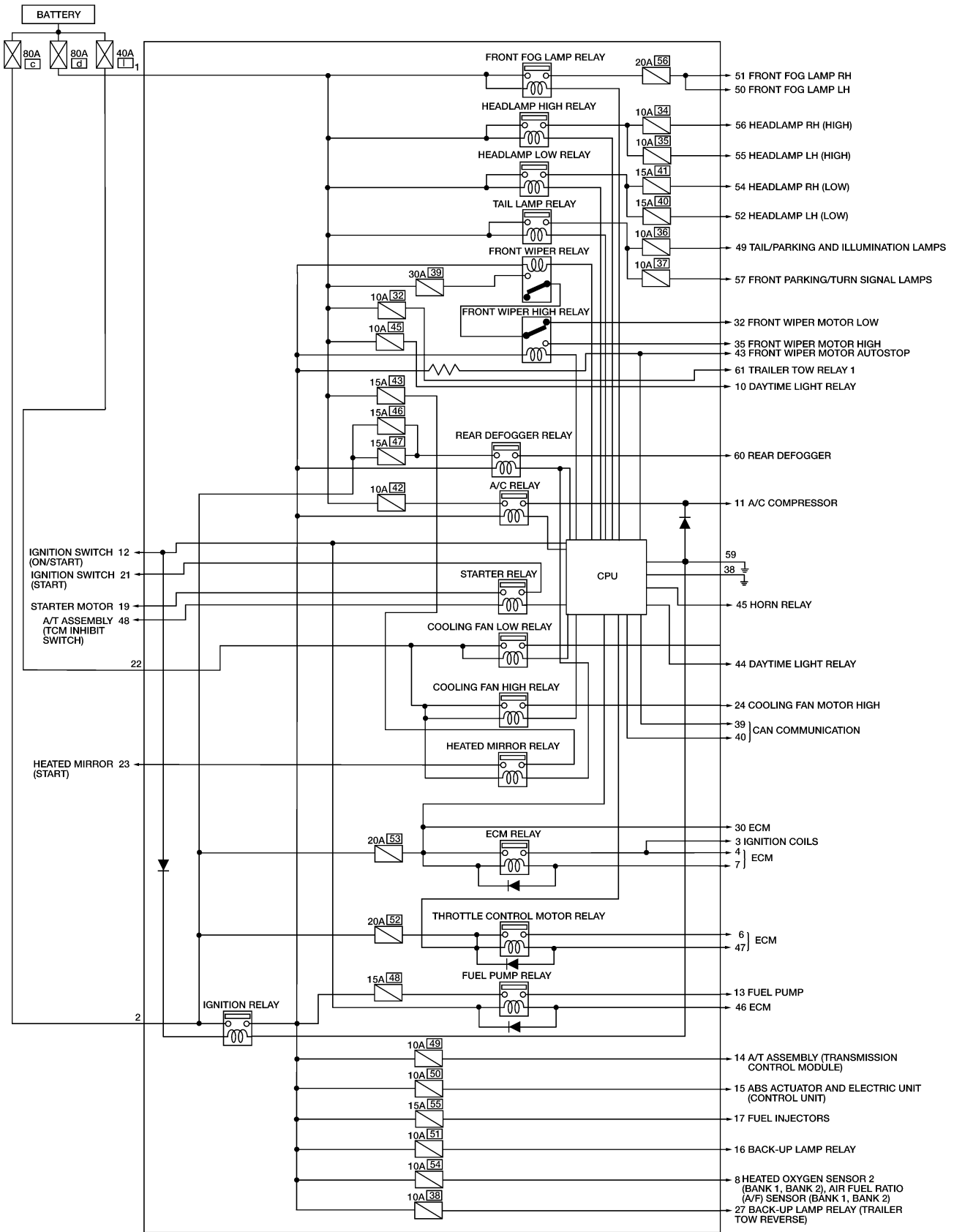
Symptom	Inspection contents	Possible cause	
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	<ul style="list-style-type: none"> ● Rear window defogger relay ● Open circuit of rear window defogger ● IPDM E/R malfunction ● Harness or connector malfunction between IPDM E/R and rear window defogger
Any of front wipers, tail and parking lamps, front fog lamps, and head-lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES	● BCM signal input system
		NO	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● BCM signal input circuit ● CAN communication signal between BCM and ECM ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● 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	<ul style="list-style-type: none"> ● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction

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

Schematic

EKS00BN7

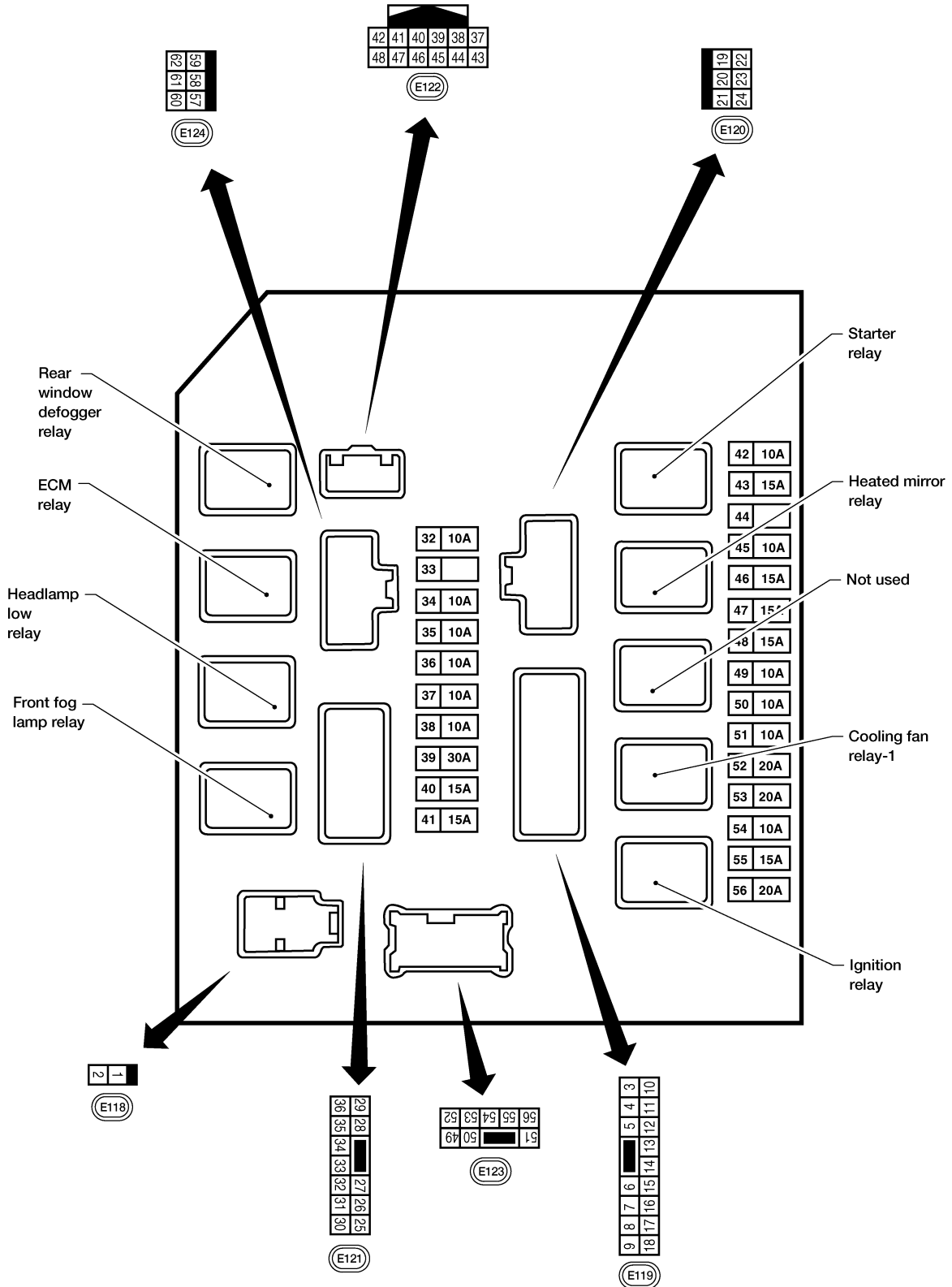


WKWA2630E

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

IPDM E/R Terminal Arrangement

EKS00BN8



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

EKS00BN9

IPDM E/R Power/Ground Circuit Inspection

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, 22	Battery power	a, c, d, e, l

OK or NG

- OK >> GO TO 2.
- NG >> Replace fuse or fusible link.

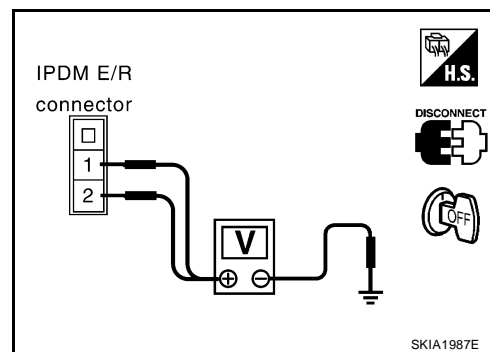
2. POWER CIRCUIT INSPECTION

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.



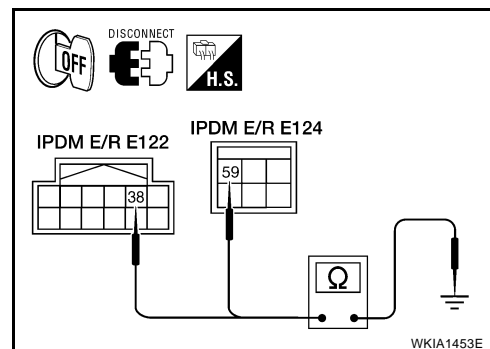
3. GROUND CIRCUIT INSPECTION

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)

EKS00BNA

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: <ul style="list-style-type: none"> ● 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"](#) .

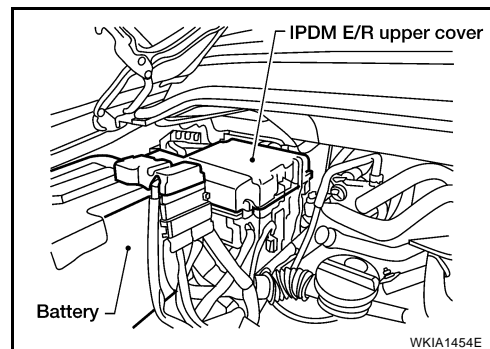
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

EKS00BNB

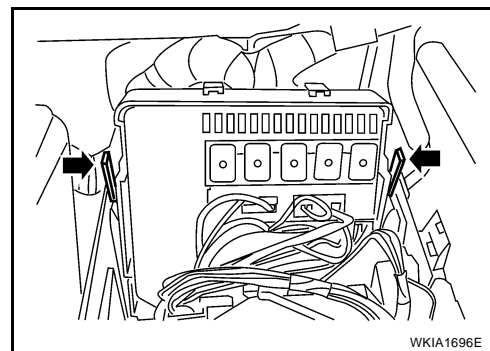
Removal and Installation of IPDM E/R

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

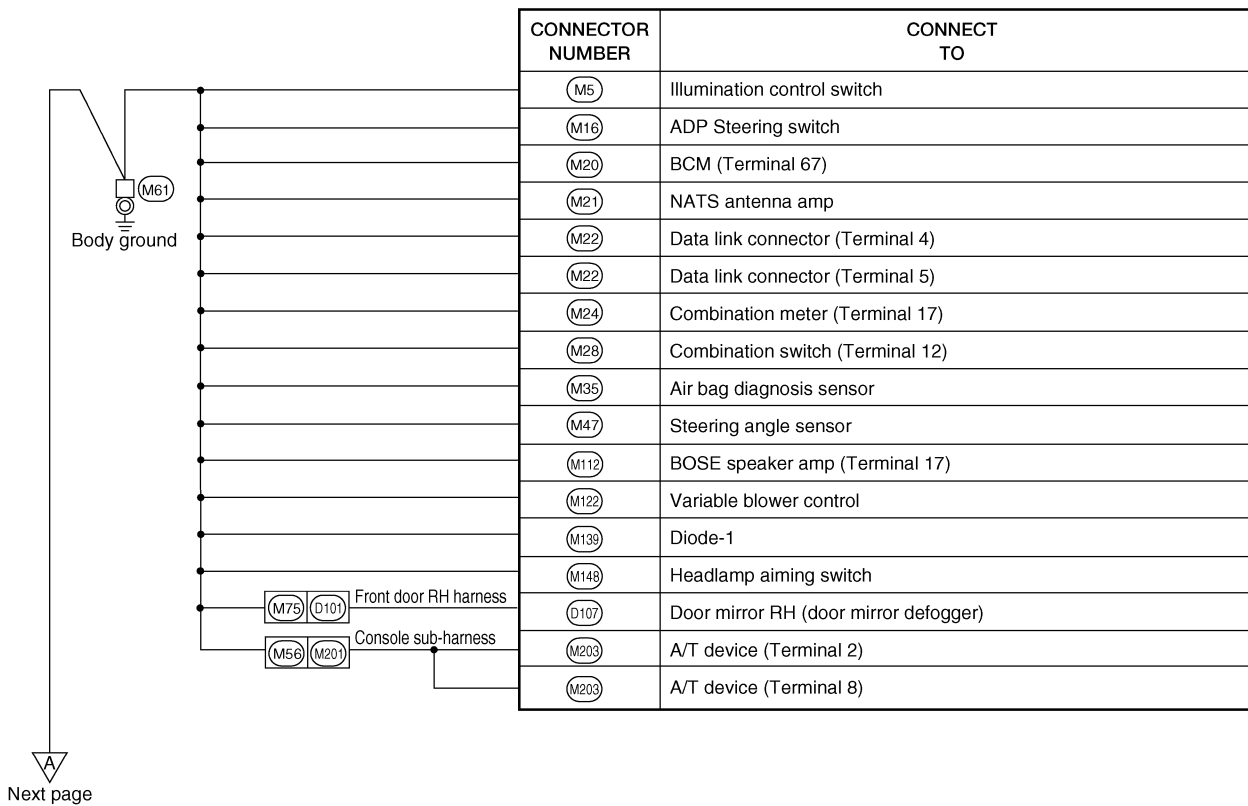
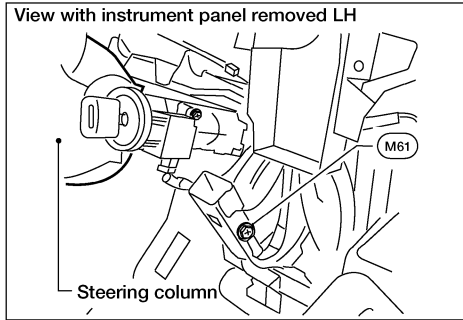
Installation is in the reverse order of removal.

GROUND CIRCUIT

PFP:24080

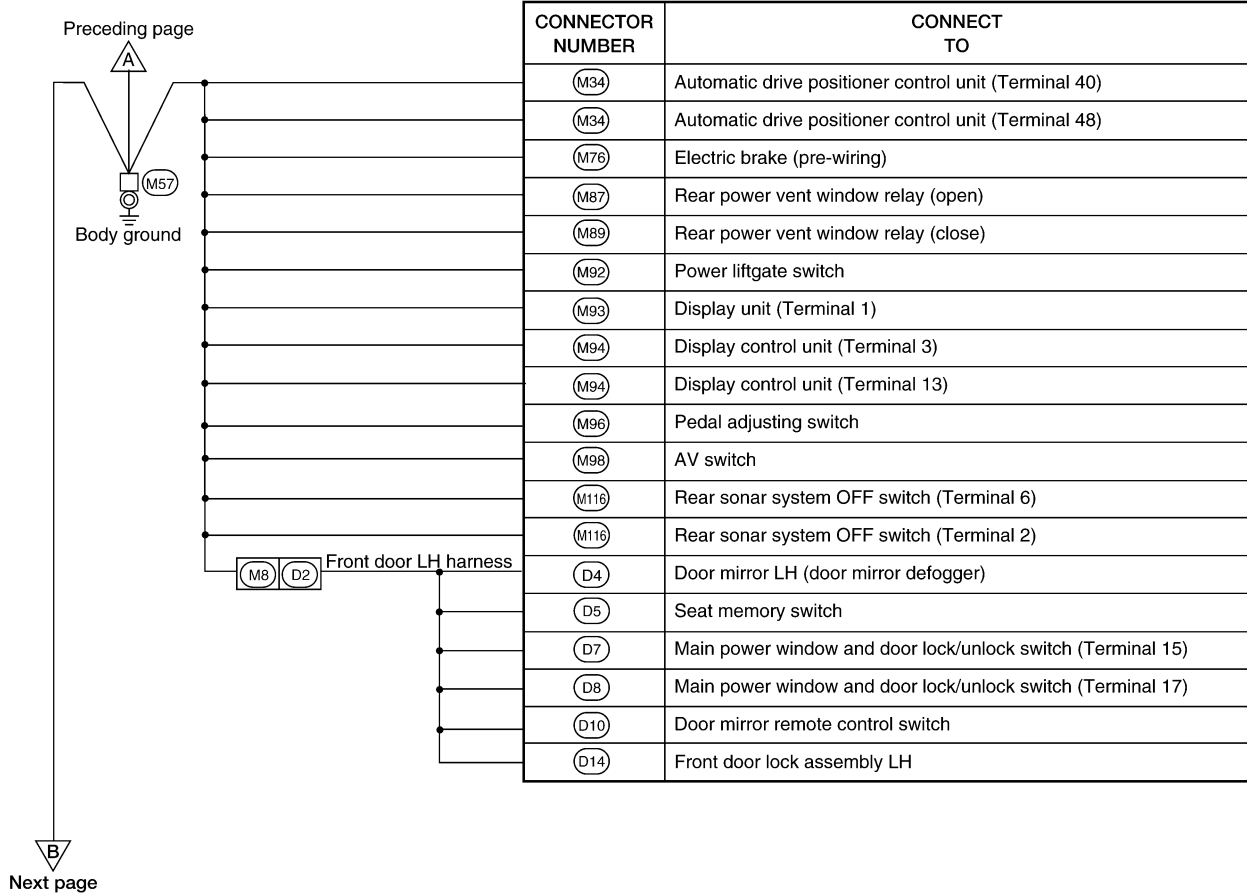
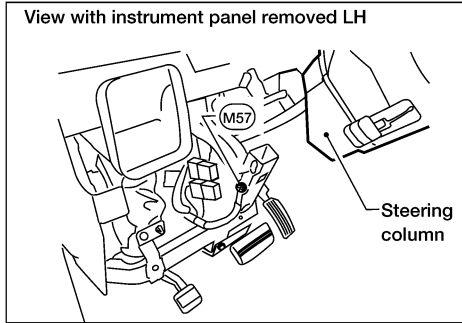
EKS00BNC

GROUND CIRCUIT Ground Distribution MAIN HARNESS



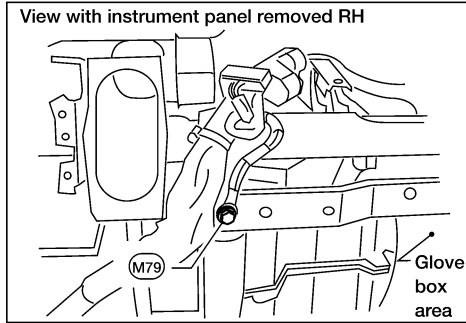
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GROUND CIRCUIT

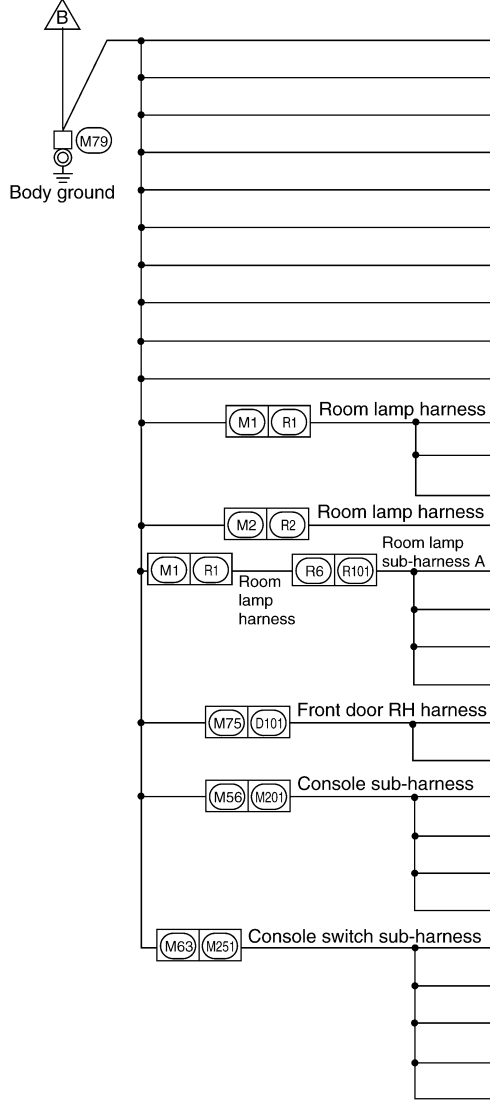


WKIA3620E

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 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
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 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 2)
M254	Tow mode switch (Terminal 6)
M255	Front heated seat switch LH

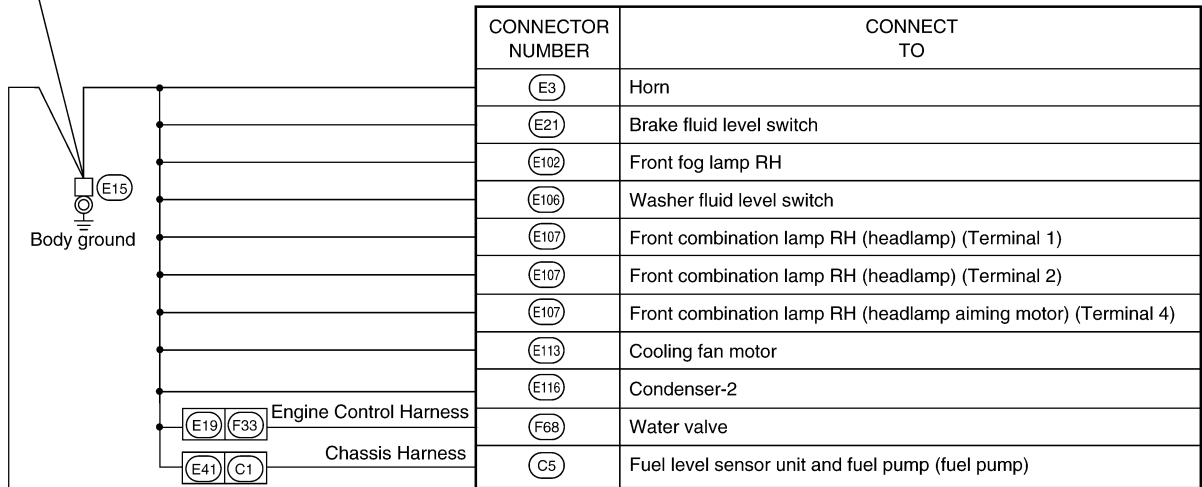
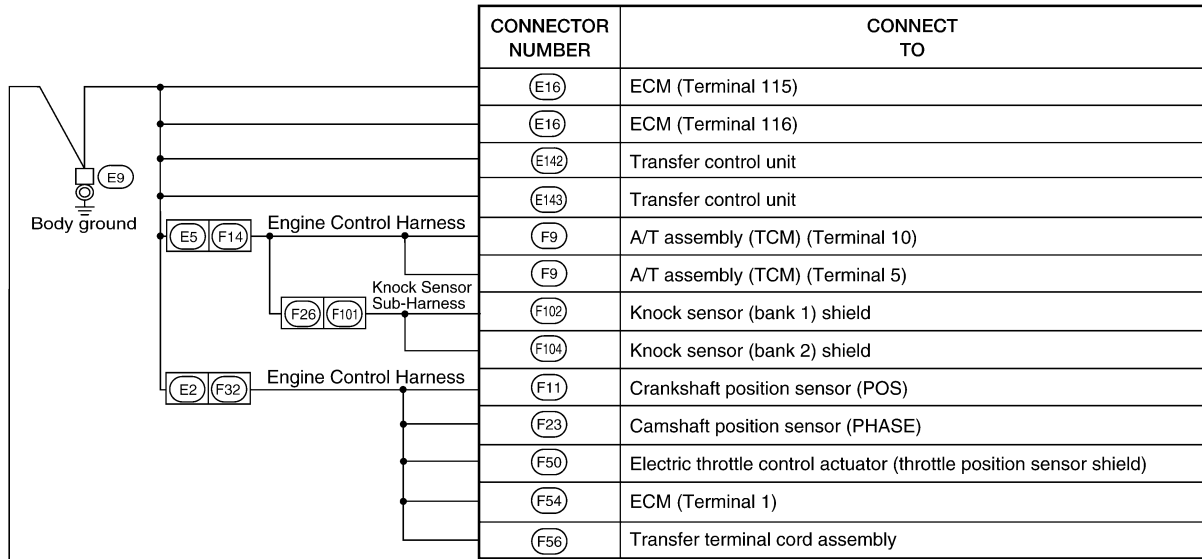
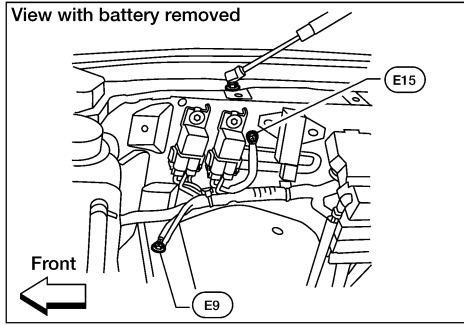
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GROUND CIRCUIT

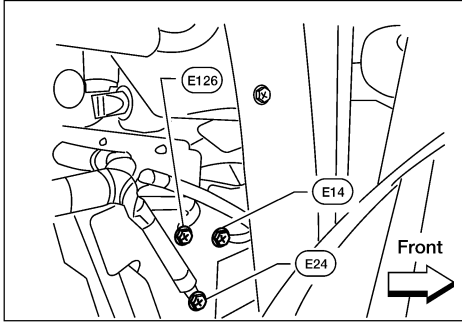
ENGINE ROOM HARNESS



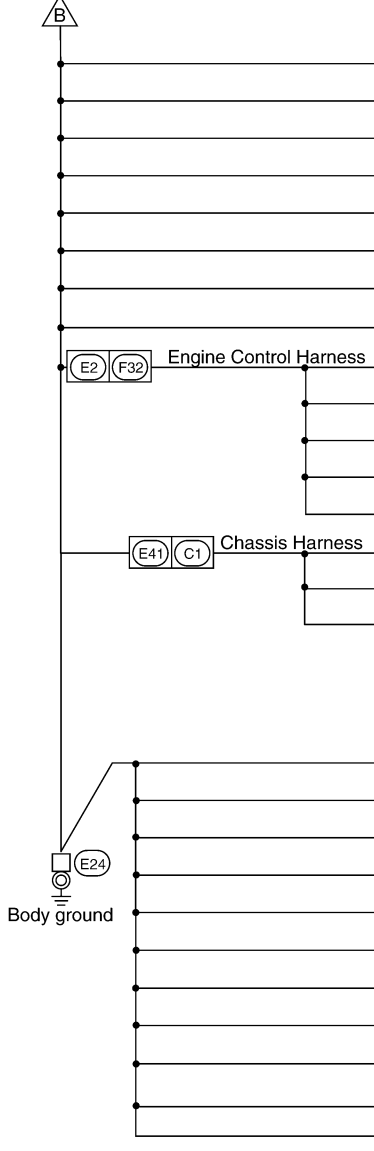

 Next page

WKIA3622E

GROUND CIRCUIT



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CONNECTOR NUMBER	CONNECT TO
(E46)	Transfer shift high relay (Terminal 2)
(E46)	Transfer shift high relay (Terminal 4)
(E47)	Transfer shift low relay (Terminal 2)
(E47)	Transfer shift low relay (Terminal 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 22)
(F59)	Wait detection switch
(F60)	Neutral-4LO switch
(C2)	Trailer
(C9)	Suspension air compressor (Terminal 1)
(C9)	Suspension air compressor (Terminal 2)

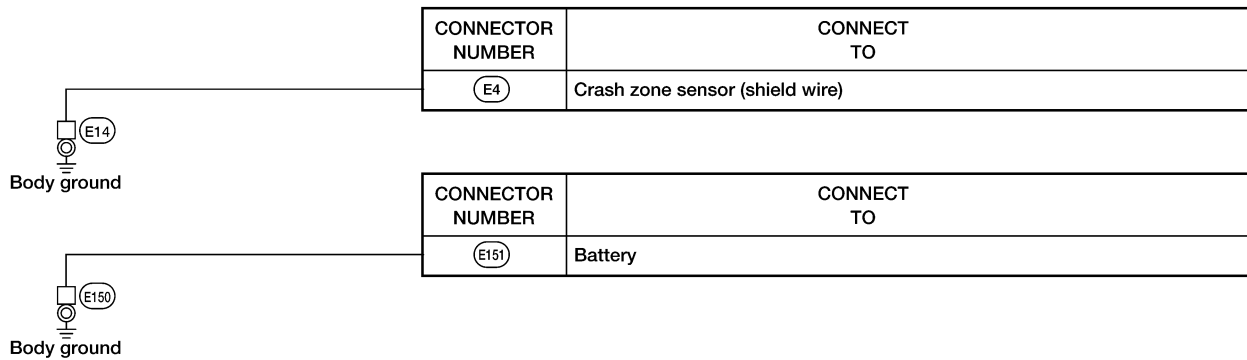
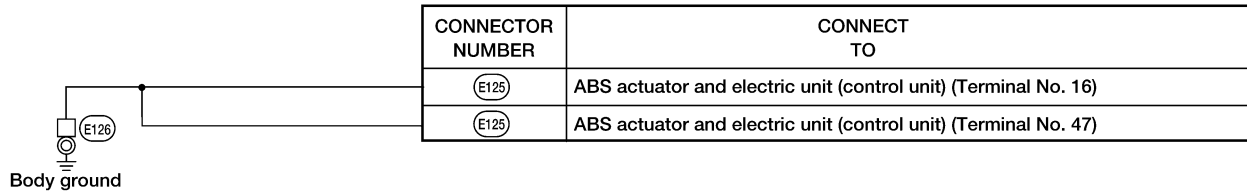
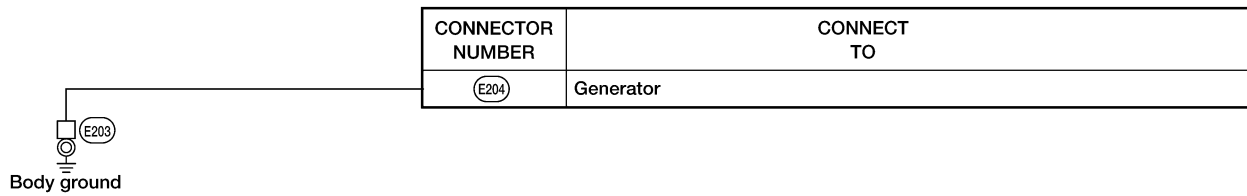
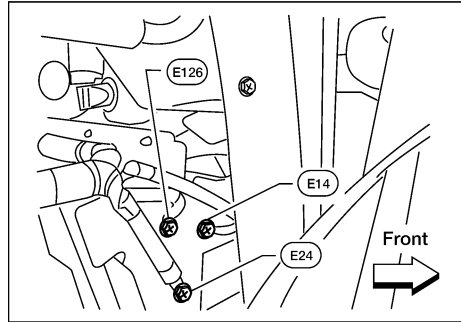
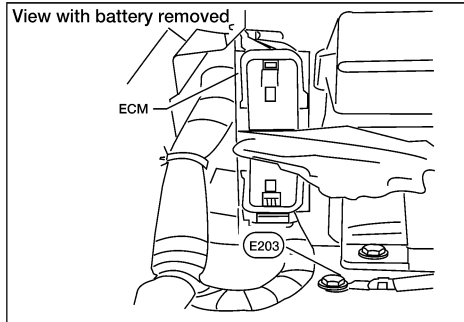
CONNECTOR NUMBER	CONNECT TO
(E6)	Hood switch
(E11)	Front combination lamp LH (headlamp) (Terminal 1)
(E11)	Front combination lamp LH (headlamp) (Terminal 2)
(E11)	Front combination lamp LH (headlamp aiming motor) (Terminal 4)
(E23)	Front wiper motor
(E42)	ICC sensor
(E101)	Front fog lamp LH
(E103)	Daytime light relay
(E122)	IPDM E/R
(E124)	IPDM E/R
(E134)	ICC brake hold relay

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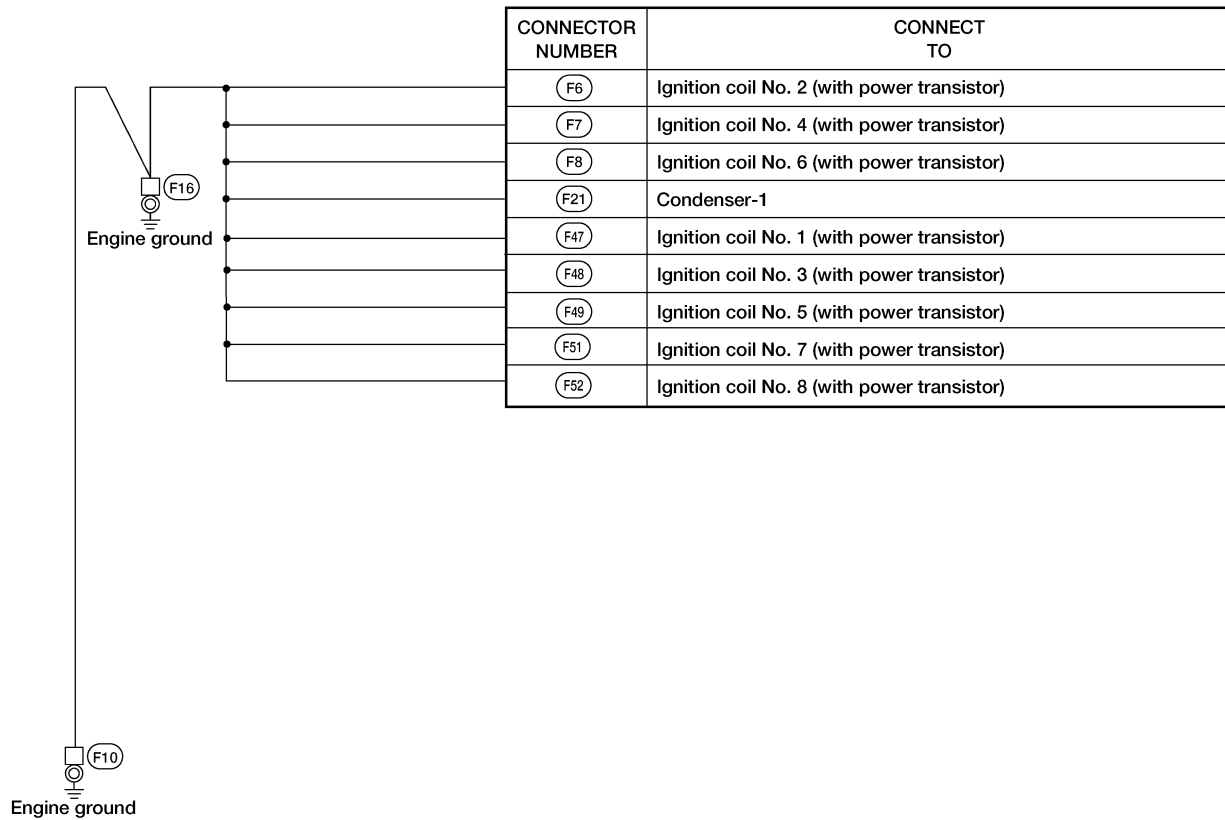
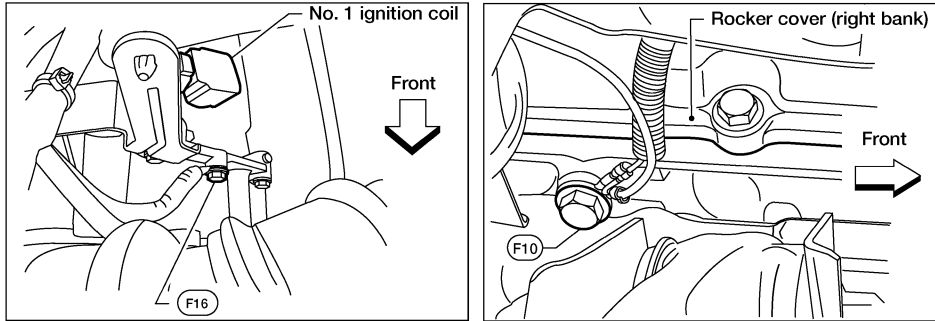
GROUND CIRCUIT



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GROUND CIRCUIT

ENGINE CONTROL HARNESS

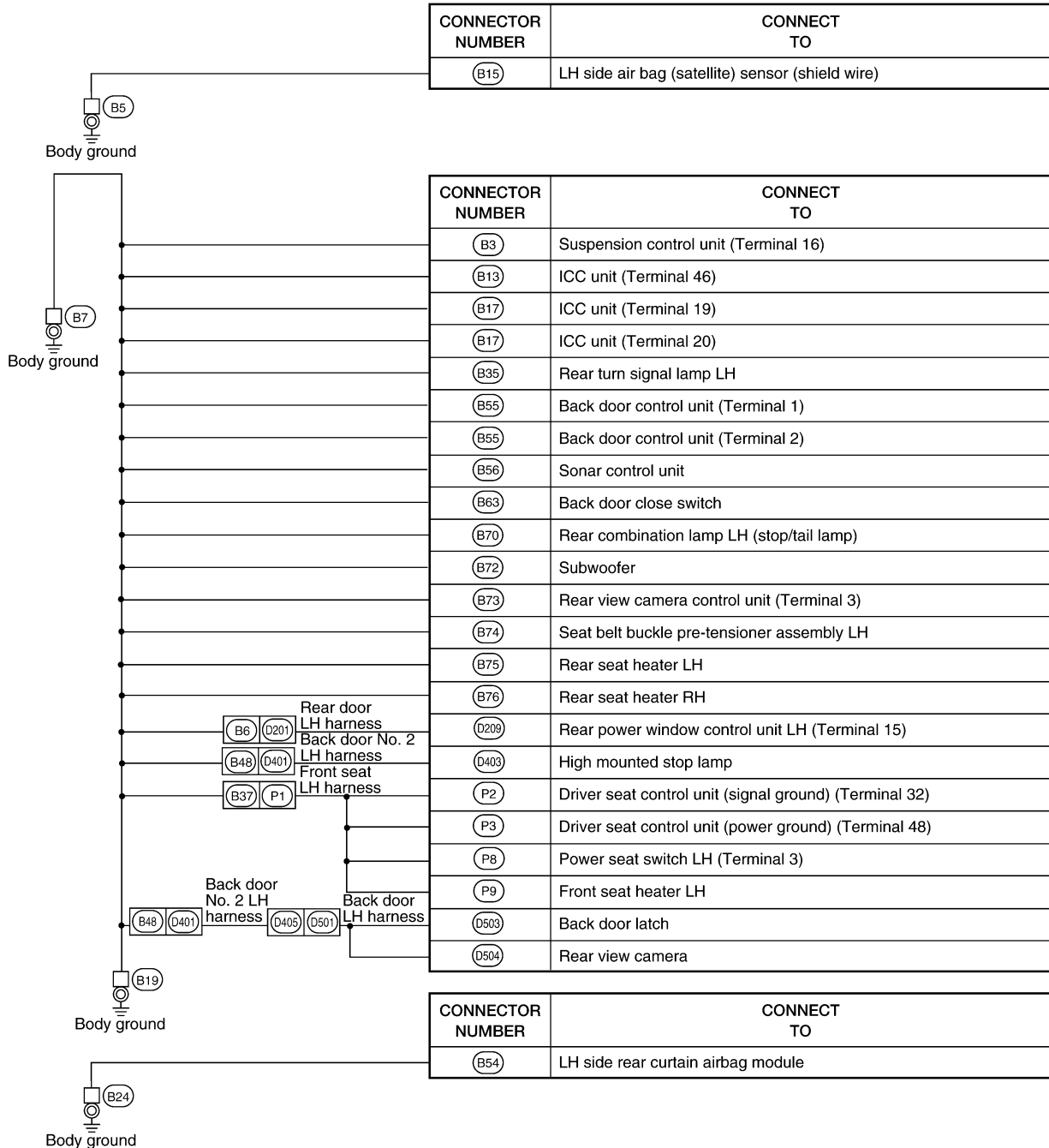
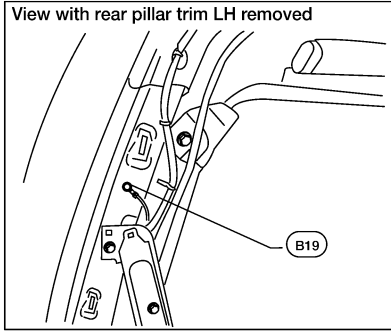
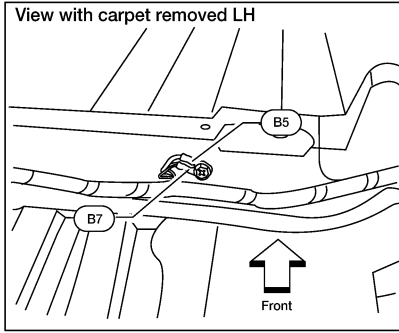


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GROUND CIRCUIT

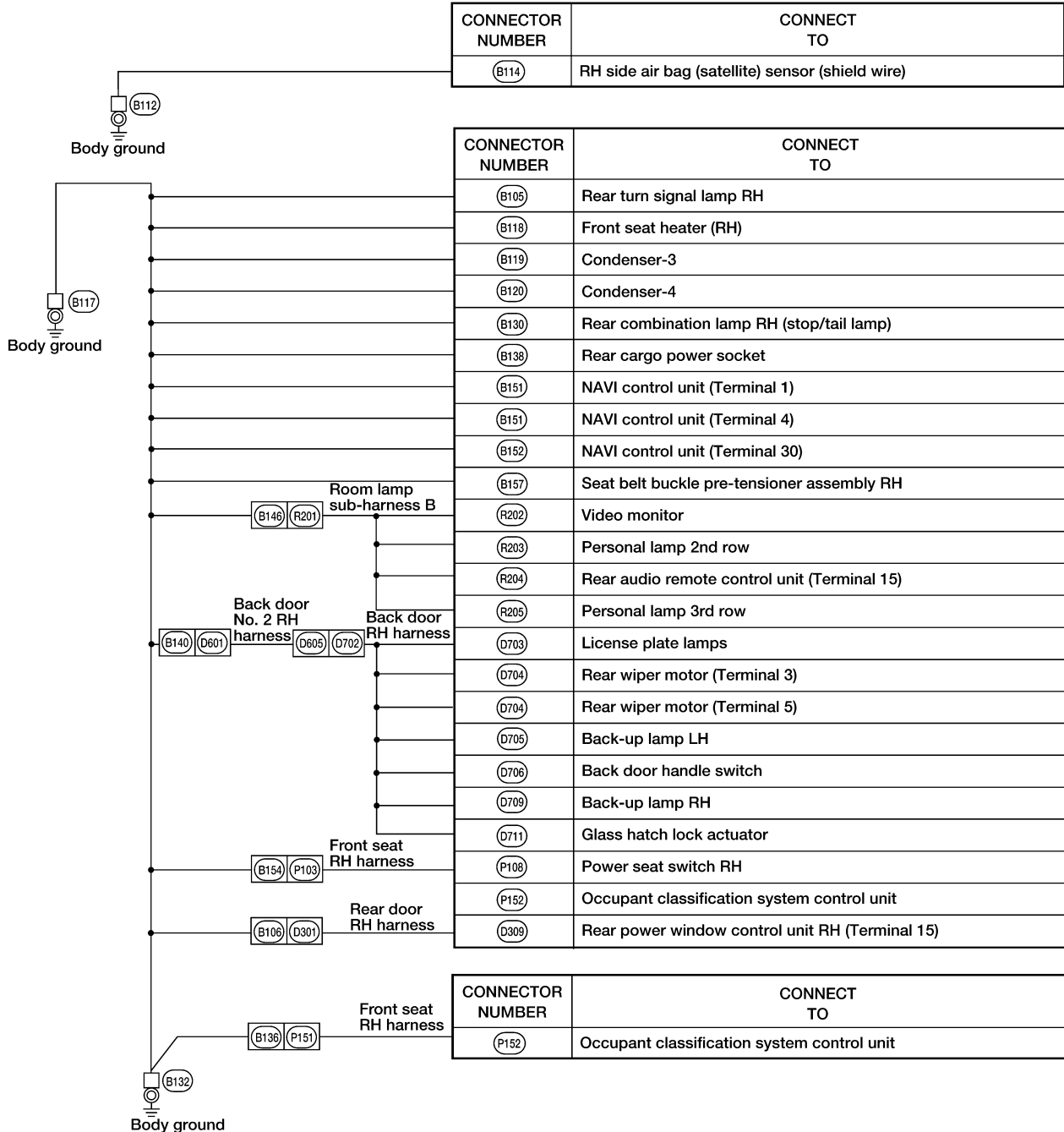
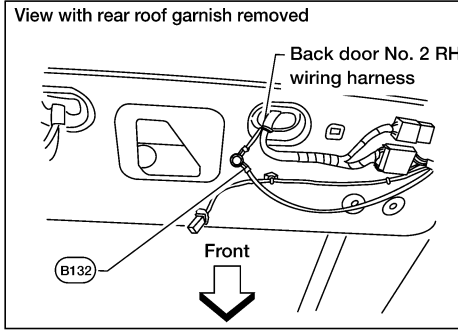
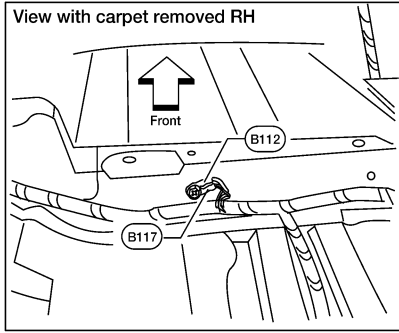
BODY HARNESS



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GROUND CIRCUIT

BODY NO. 2 HARNESS



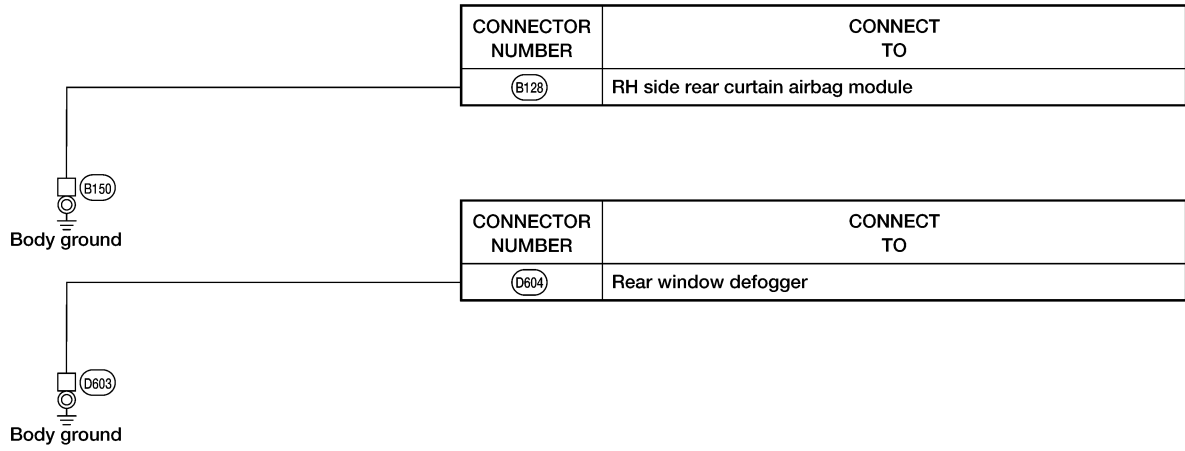
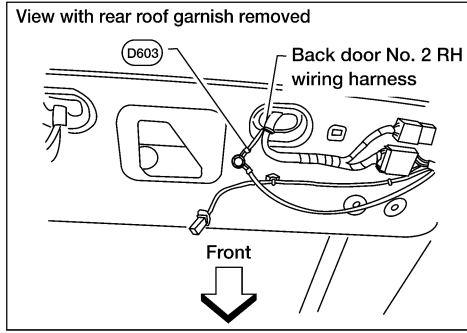
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GROUND CIRCUIT

BACK DOOR NO. 2 RH HARNESS



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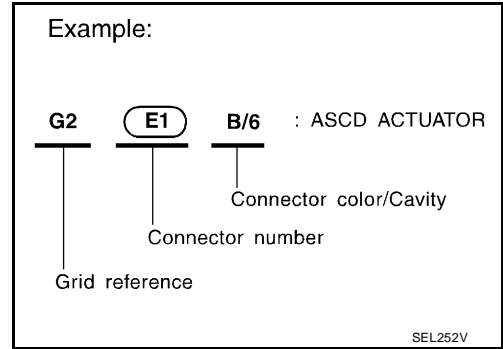
HARNESS

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, Console Sub-harness, Console Switch Sub-harness and Optical Sensor Sub-harness
- Engine Room Harness LH View (Engine Compartment)
- Engine Room Harness RH View (Engine Compartment) and Generator Sub-harness
- Engine Control Harness and Engine Control Sub-harness
- Chassis Harness and Rear Sonar Sensor Sub-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.

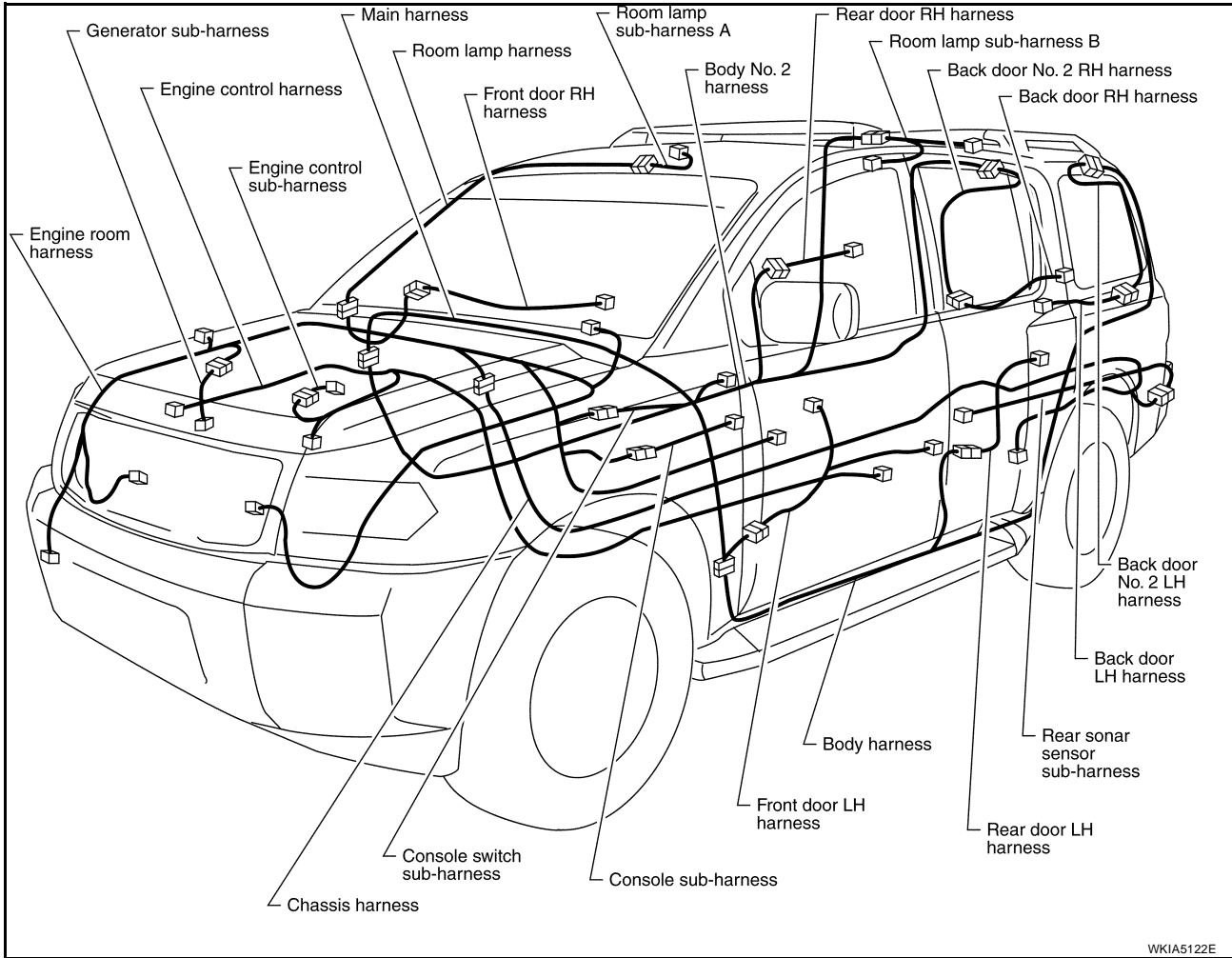
CONNECTOR SYMBOL

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

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

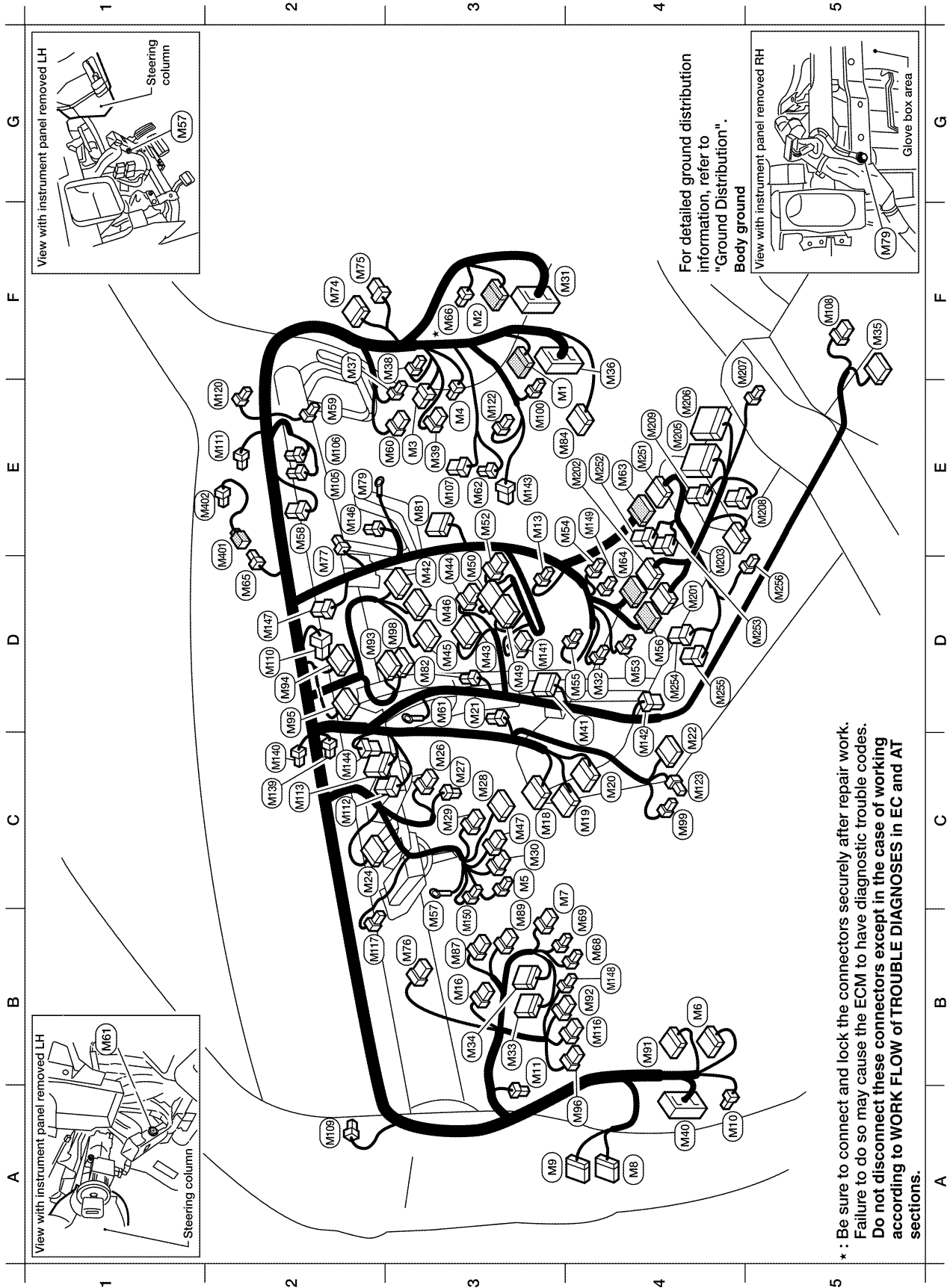
HARNESS

OUTLINE



HARNESS

MAIN HARNESS



For detailed ground distribution information, refer to "Ground Distribution".
Body ground
 View with instrument panel removed 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.

WKIA3683E



HARNESSES

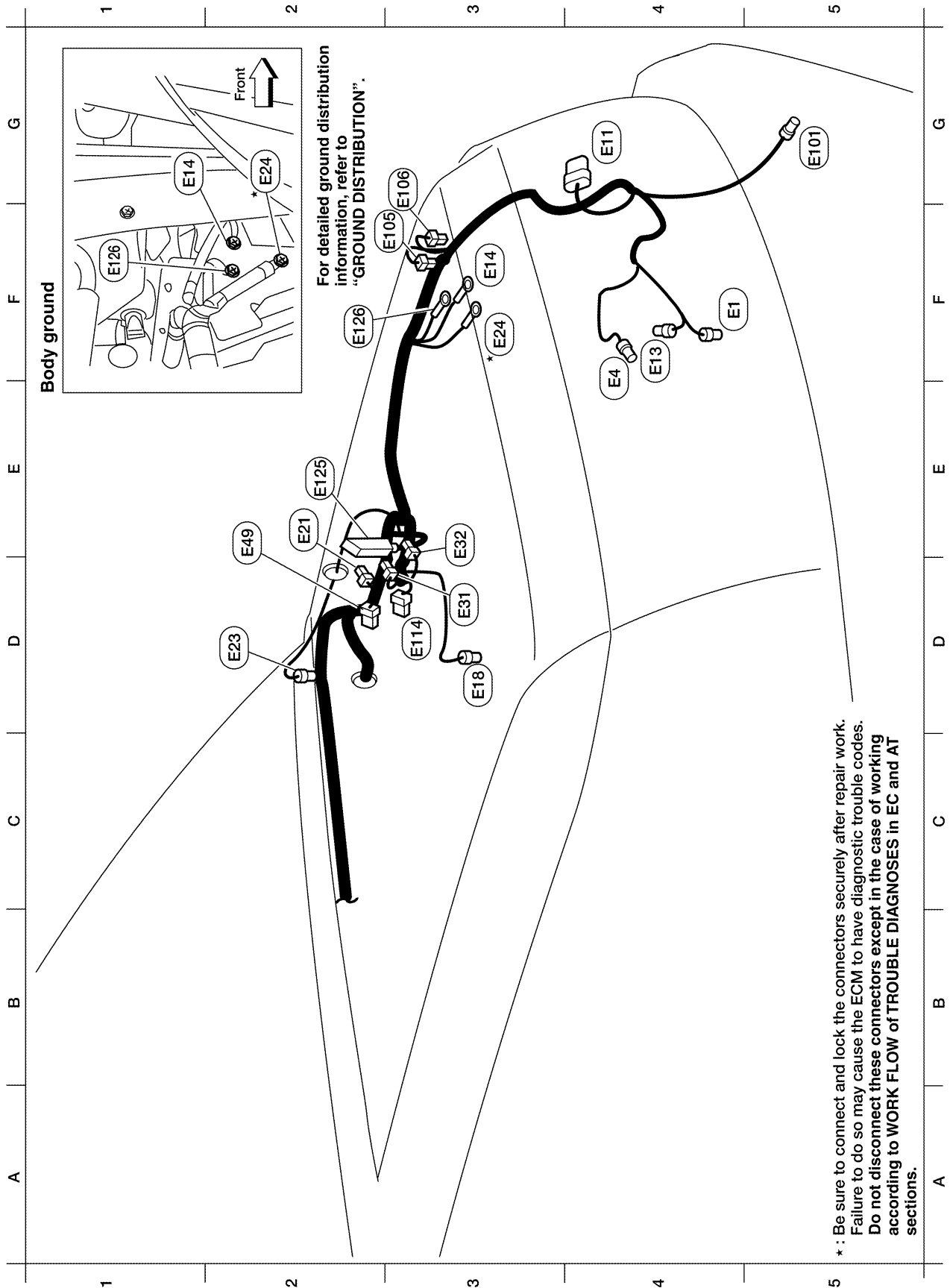
E4 (M1)	W/16	: To (R1)	D3 (M50)	W/18	: Front air control	E3 (M107)	BR/6	: Front blower motor relay
F3 (M2)	W/12	: To (R2)	E3 (M52)	W/8	: Rear blower switch (front)	F5 (M108)	B/6	: Yaw rate/side/decel G sensor
E3 (M3)	W/8	: Fuse block (J/B)	D4 (M53)	B/2	: Front power socket LH	A2 (M109)	BR/2	: Front tweeter 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			(for cigarette lighter)	E2 (M111)	BR/2	: Front tweeter RH
B4 (M6)	W/10	: To (E10)	D4 (M55)	W/4	: Hazard switch	C2 (M112)	W/8	: BOSE speaker amp.
B4 (M7)	L/5	: Water valve relay	D4 (M56)	W/16	: To (M201)	C2 (M113)	L/24	: BOSE speaker amp.
A4 (M8)	W/16	: To (D2)	B3 (M57)	-	: Body ground	B4 (M116)	GR/8	: Rear sonar system OFF switch
A4 (M9)	BR/24	: To (D1)	E2 (M58)	B/6	: Intake door motor	B3 (M117)	B/2	: Sonar buzzer
A4 (M10)	Y/4	: To (E29)	E2 (M59)	BR/2	: Glove box lamp	E2 (M120)	W/4	: Remote keyless entry receiver
B3 (M11)	B/1	: Parking brake switch	E3 (M60)	W/6	: Fuse block (J/B)	E3 (M122)	B/4	: Variable blower control
E3 (M13)	W/3	: Front passenger air bag off indicator	D3 (M61)	-	: Body ground	C4 (M123)	W/2	: Tire pressure warning check connector
B3 (M15)	GR/6	: ADP steering switch	E3 (M62)	B/2	: Front blower motor	C2 (M139)	B/2	: Diode-1
C3 (M18)	W/40	: BCM (body control module)	E4 (M63)	BR/20	: To (M25)	C2 (M140)	B/2	: Diode-2
C4 (M19)	W/15	: BCM (body control module)	D4 (M64)	BR/24	: To (M202)	D3 (M141)	W/8	: 4WD shift switch
C4 (M20)	B/15	: BCM (body control module)	D2 (M65)	W/4	: To (M40)	C4 (M142)	B/6	: Mode door motor
C3 (M21)	W/4	: NATS antenna amp.	F3 (M66)	B/1	: To (E33)	E3 (M143)	B/6	: Air mix door motor (passenger)
C4 (M22)	W/16	: Data link connector	B4 (M68)	W/2	: Tilt motor	C2 (M144)	B/6	: Defroster door motor
C2 (M24)	W/40	: Combination meter	B4 (M69)	W/3	: Tilt motor	E2 (M146)	GR/2	: Intake sensor
C3 (M26)	W/6	: Ignition switch	F2 (M74)	BR/20	: To (D102)	D2 (M147)	B/6	: Air mix door motor (driver)
C3 (M27)	W/4	: Key switch and key lock solenoid	F2 (M75)	W/8	: To (D101)	B4 (M148)	W/4	: Headlamp aiming switch
C3 (M28)	W/16	: Combination switch	B3 (M76)	W/6	: Electric brake (pre-wiring)	E4 (M149)	W/4	: Clock
C3 (M29)	Y/6	: Combination switch (spiral cable)	D2 (M77)	Y/4	: Front passenger air bag module (service replacement)	B3 (M150)	W/2	: Ignition keyhole illumination
C3 (M30)	GR/8	: Combination switch (spiral cable)						Console sub-harness
F3 (M31)	SMJ	: To (E132)	E2 (M79)	-	: Body ground	D4 (M201)	W/16	: To (M56)
D4 (M32)	W/4	: In-vehicle sensor	E3 (M81)	GR/10	: Shift lock control unit	E4 (M202)	BR/24	: To (M64)
B3 (M33)	W/32	: Automatic drive positioner control unit	D3 (M82)	GR/2	: Circuit breaker-2	D4 (M203)	W/12	: A/T device
B3 (M34)	W/16	: Automatic drive positioner control unit	E4 (M84)	W/16	: To (E10)	E4 (M205)	GR/16	: DVD player
F5 (M35)	Y/28	: Air bag diagnosis sensor unit	B3 (M87)	W/5	: Rear power vent window relay (open)	E4 (M206)	L/16	: DVD player
E4 (M36)	SMJ	: To (E149)	B3 (M89)	W/5	: Rear power vent window relay (close)	F4 (M207)	B/2	: Console power socket
E2 (M37)	B/1	: Fuse block (J/B)	B4 (M91)	W/16	: To (E26)	E5 (M208)	BR/6	: Rear heated seat switch LH
E3 (M38)	B/2	: Fuse block (J/B)	B4 (M92)	GR/6	: Power liftgate switch	E4 (M209)	BR/6	: Rear heated seat switch RH
E3 (M39)	W/8	: Fuse block (J/B)	D2 (M93)	W/24	: Display unit			Console switch sub-harness
A4 (M40)	SMJ	: To (E69)	D2 (M94)	W/24	: Display control unit	E4 (M251)	BR/20	: To (M63)
C4 (M41)	W/16	: Satellite radio tuner (pre-wiring)	C2 (M95)	W/32	: Display control unit	E4 (M252)	BR/6	: Front heated seat switch RH
D3 (M42)	W/12	: Audio unit	A4 (M96)	BR/6	: Pedal adjusting switch	D5 (M253)	GR/6	: VDC OFF switch
D3 (M43)	W/10	: Audio unit	D3 (M98)	W/24	: AV switch	D4 (M254)	GR/8	: Tow mode switch
D3 (M44)	W/6	: Audio unit	C4 (M99)	BR/2	: Foot lamp LH	D4 (M255)	BR/6	: Front heated seat switch LH
D3 (M45)	W/16	: Audio unit	E3 (M100)	BR/2	: Foot lamp RH	D5 (M256)	B/2	: A/T device illumination
D3 (M46)	W/20	: Audio unit	E2 (M105)	Y/2	: Front passenger air bag module			Optical sensor sub-harness
C3 (M47)	W/8	: Steering angle sensor	E2 (M106)	O/2	: Front passenger air bag module	D2 (M401)	W/4	: To (M65)
D3 (M48)	B/26	: Front air control				E2 (M402)	B/4	: Optical sensor

WKIA3684E

HARNESS

ENGINE ROOM HARNESS (LH VIEW)

Engine Compartment



* : 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.

Refer to [PG-46, "ENGINE ROOM HARNESS \(RH VIEW\)"](#) for continuation of engine room harness.

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HARNESS

F4	(E1)	GR/2	: Ambient sensor
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
E2	(E49)	B/6	: Active booster
G5	(E10)	B/3	: Front turn/fog lamp LH
F3	(E105)	BR/2	: Front and rear washer motor
G3	(E106)	BR/2	: Washer fluid level switch
D3	(E114)	B/6	: Delta stroke sensor
E2	(E125)	B/47	: ABS actuator and electric unit (control unit)
F2	(E126)	-	: Body ground

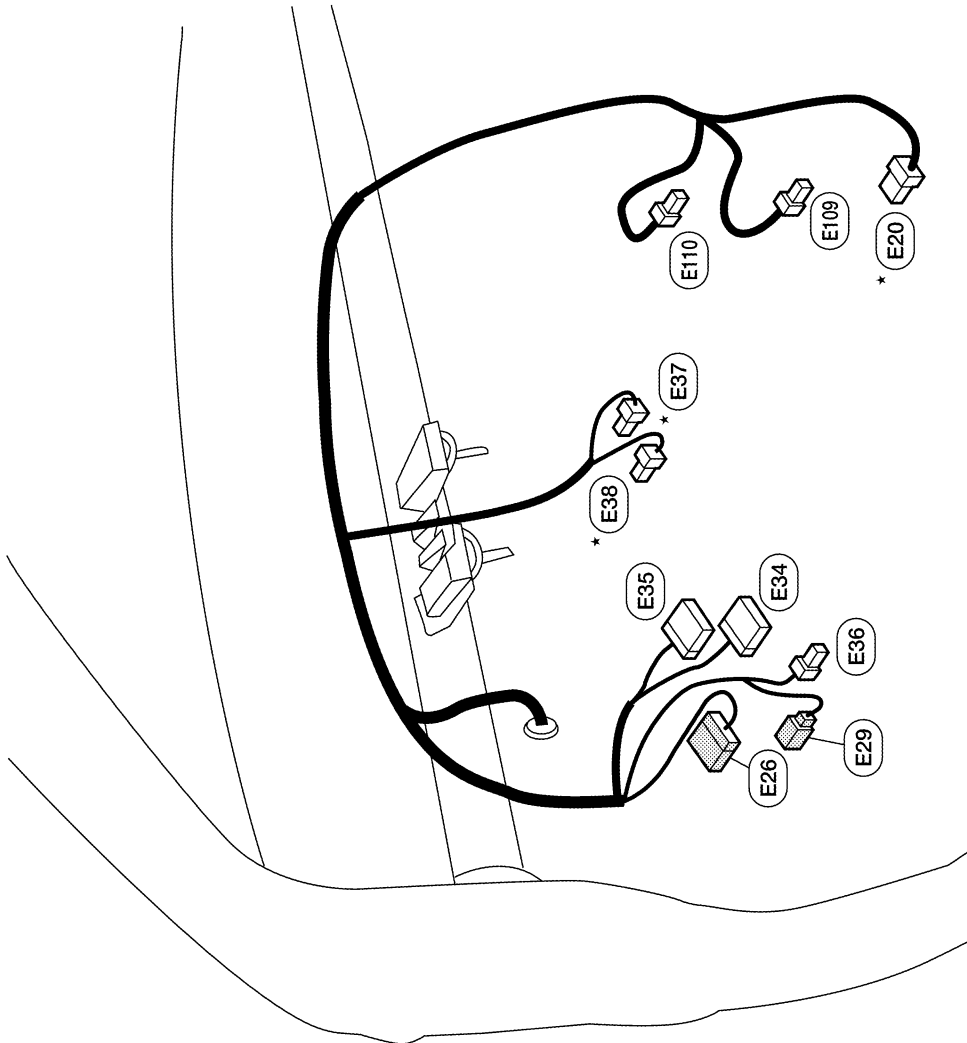
* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

WKIA3688E

HARNESS

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) W/4 : Stop lamp switch
- (E109) GR/2 : Pedal adjusting motor
- (E110) 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.

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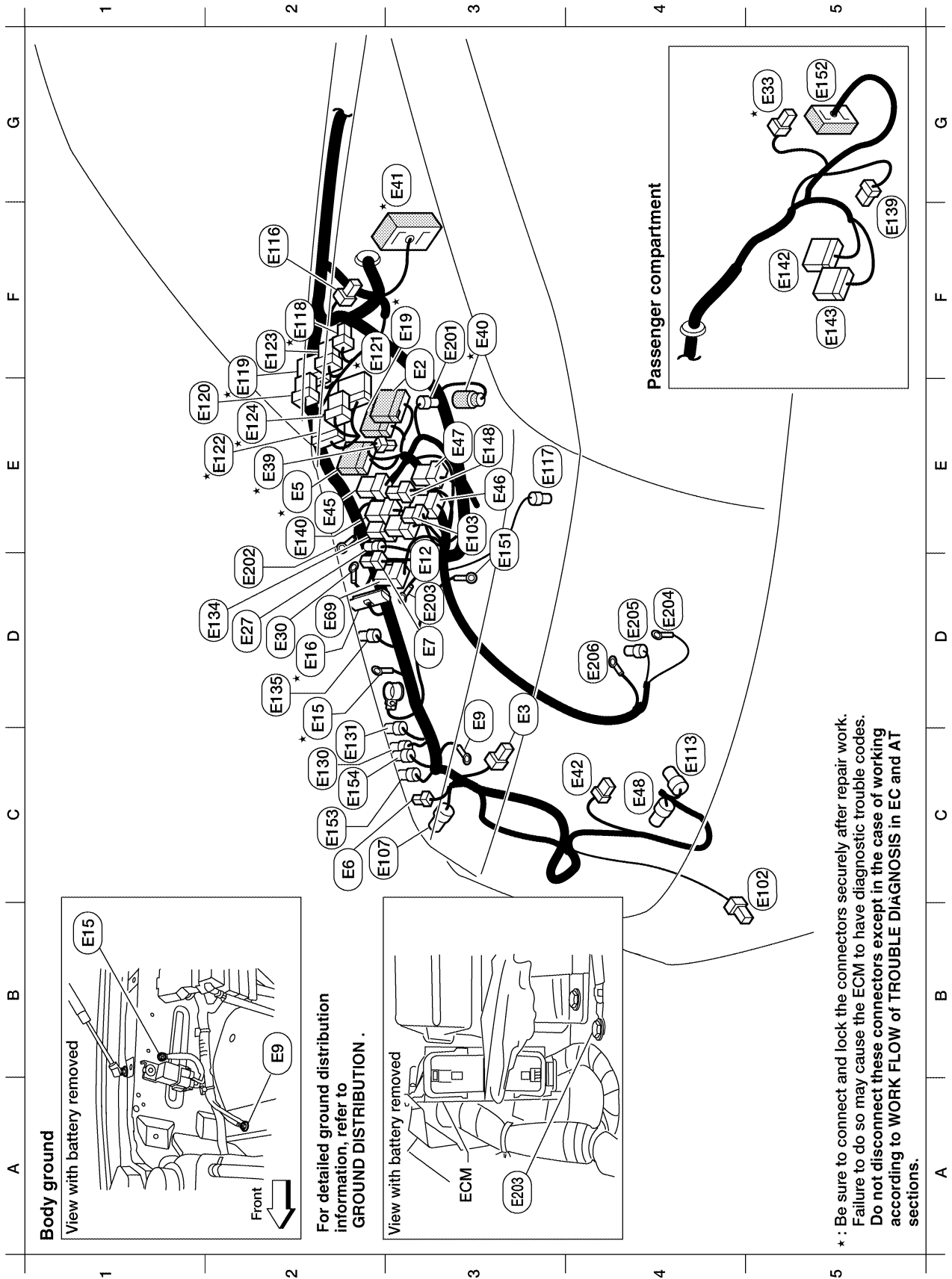
PG

WKIA3687E

HARNESS

ENGINE ROOM HARNESS (RH VIEW)

Engine Compartment



Refer to [PG-43, "ENGINE ROOM HARNESS \(LH VIEW\)"](#) for continuation of engine room harness.

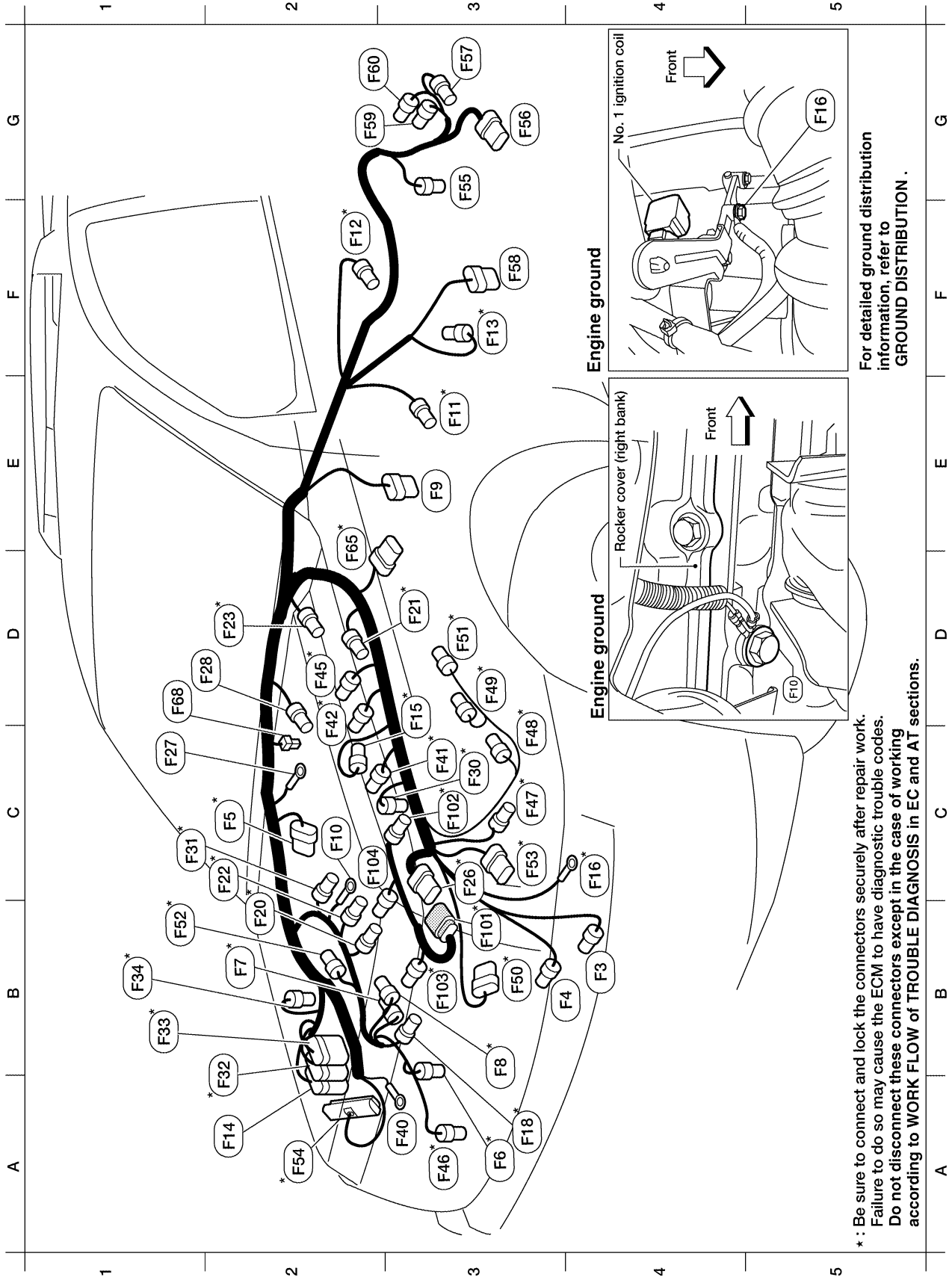
WKIA5123E

E3	(E2)	W/16	: To (F32)	
C3	(E3)	B/2	: Horn	
E2	(E5)	W/24	: To (F14)	
C2	(E6)	W/2	: Hood switch	
D3	(E7)	GR/2	: Fusible link box (battery)	
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)	
D2	(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	
D2	(E69)	L/5	: Transfer shutoff relay	
C5	(E02)	B/3	: Front turn/fog lamp RH	
E3	(E03)	B/5	: Daytime light relay	
C2	(E07)	B/8	: Front combination lamp RH	
C4	(E13)	W/2	: Cooling fan motor	
F2	(E16)	W/2	: Condenser-2	
E3	(E17)	GR/2	: Front wheel sensor RH	
F2	(E18)	B/2	: IPDM E/R (intelligent power distribution module engine room)	
E2	(E19)	W/16	: IPDM E/R (intelligent power distribution module engine room)	
E2	(E20)	W/6	: IPDM E/R (intelligent power distribution module engine room)	
F3	(E21)	BR/12	: IPDM E/R (intelligent power distribution module engine room)	
E2	(E22)	W/12	: IPDM E/R (intelligent power distribution module engine room)	
F2	(E23)	BR/8	: IPDM E/R (intelligent power distribution module engine room)	
E2	(E24)	B/6	: IPDM E/R (intelligent power distribution module engine room)	
C2	(E30)	W/2	: Compressor motor relay	
C2	(E31)	W/2	: Compressor motor relay	
D2	(E34)	GR/7	: ICC brake hold relay	
D2	(E35)	GR/2	: Transfer dropping resistor	
F5	(E39)	W/8	: To (E107)	
E2	(E40)	BR/6	: Trailer tow relay 2	
F5	(E42)	L/24	: Transfer control unit	
F5	(E43)	G/24	: Transfer control unit	
E3	(E48)	L/4	: Trailer tow relay 1	
D3	(E51)	-	: Battery ground	
G5	(E52)	SMJ	: To (M31)	
C2	(E59)	GR/2	: Transfer motor relay	
C2	(E54)	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 DIAGNOSIS in EC and AT
 sections.

HARNESS

ENGINE CONTROL HARNESS



For detailed 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 DIAGNOSIS** in EC and AT sections.

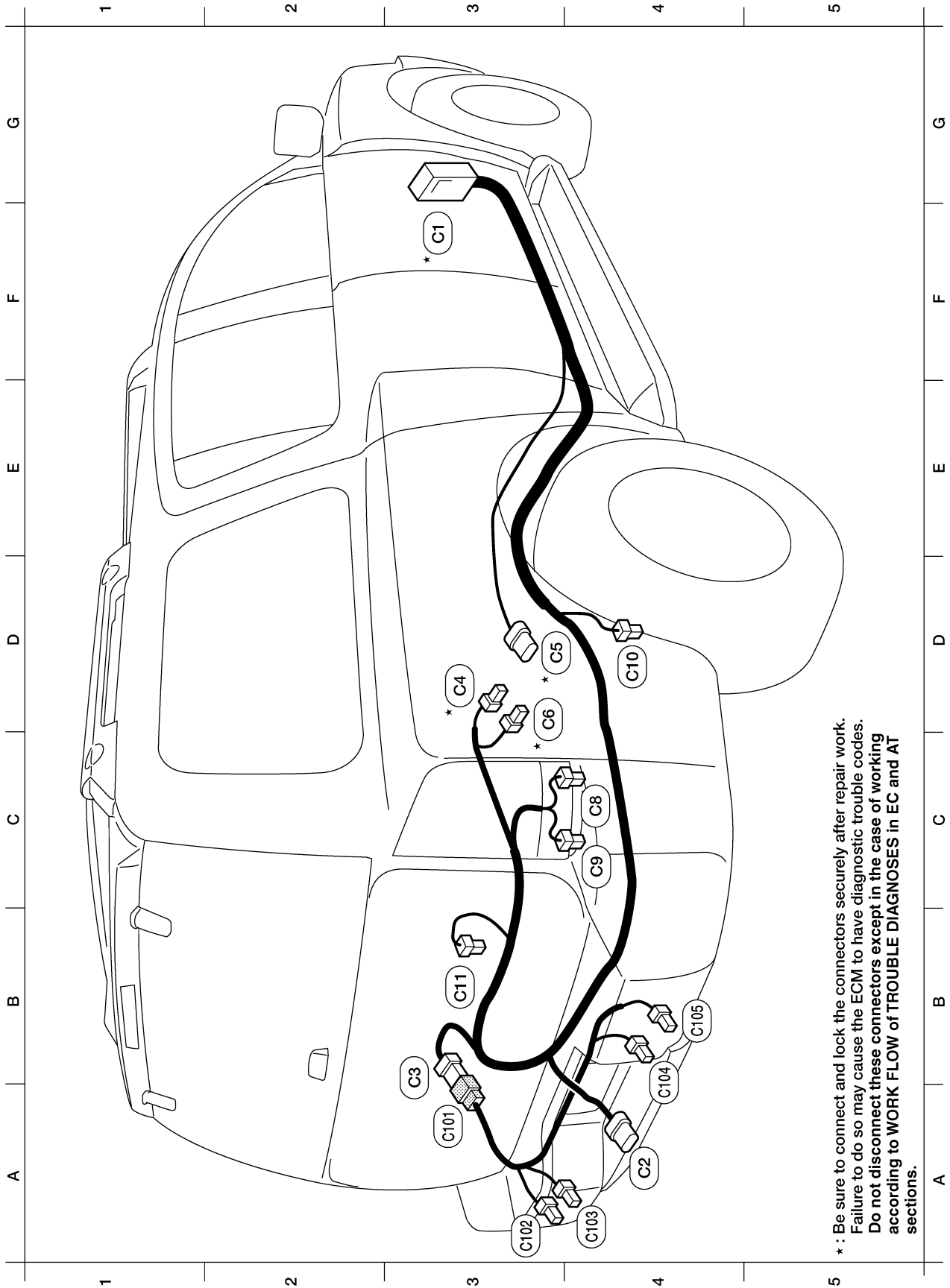
WKIA5152E

B4	(F3)	B/1	: A/C Compressor	C3	*(F48)	GR/3	: Ignition coil No. 3 (with power transistor)
B4	(F4)	B/3	: Oil pressure sensor	D3	*(F49)	GR/3	: Ignition coil No. 5 (with power transistor)
C2	*(F5)	B/6	: Air fuel ratio (A/F) sensor 1 (bank 2)	B3	*(F50)	B/6	: Electric throttle control actuator
A3	*(F6)	GR/3	: Ignition coil No. 2 (with power transistor)	D3	*(F51)	GR/3	: Ignition coil No. 7 (with power transistor)
B2	*(F7)	GR/3	: Ignition coil No. 4 (with power transistor)	B1	*(F52)	GR/3	: Ignition coil No. 8 (with power transistor)
B3	*(F8)	GR/3	: Ignition coil No. 6 (with power transistor)	C3	*(F53)	B/6	: Mass air flow sensor
E3	(F9)	G/10	: A/T assembly	A2	*(F54)	B/81	: ECM
C2	(F10)	-	: Engine ground	G3	(F55)	B/2	: ATP switch (4WD only)
E3	*(F11)	B/3	: Crankshaft position sensor (POS)	G3	(F56)	B/8	: Terminal cord assembly (4WD only)
F2	*(F12)	G/4	: Heated oxygen sensor 2 (bank 2)	G3	(F57)	B/2	: Transfer motor (4WD only)
F3	*(F13)	G/4	: Heated oxygen sensor 2 (bank 1)	F3	(F58)	GR/6	: Transfer control device (4WD only)
A2	(F14)	W/24	: To (E5)	G2	(F59)	B/2	: Wait detection switch (4WD only)
C3	*(F15)	L/2	: EVAP canister purge volume control solenoid valve	G2	(F60)	GR/2	: Neutral-4LO switch (4WD only)
C4	*(F16)	-	: Engine ground	D2	*(F65)	B/6	: Air fuel ratio (A/F) sensor 1 (bank 1)
A3	*(F18)	GR/2	: Injector No. 2	D1	(F68)	B/2	: Water valve
B2	*(F20)	GR/2	: Injector No. 4	Engine control sub-harness			
D3	*(F21)	GR/2	: Condenser-1	B3	*(F101)	B/6	: To (F26)
C2	*(F22)	GR/2	: Injector No. 6	C3	*(F102)	GR/2	: Knock sensor (bank 1)
D2	*(F23)	B/3	: Camshaft position sensor (PHASE)	B3	*(F103)	GR/2	: Engine coolant temperature sensor
C3	*(F26)	B/6	: To (F101)	C2	(F104)	GR/2	: Knock sensor (bank 2)
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 DIAGNOSIS in EC and AT
 sections.

HARNESS

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* : 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.

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 DIAGNOSIS in EC and AT
 sections.

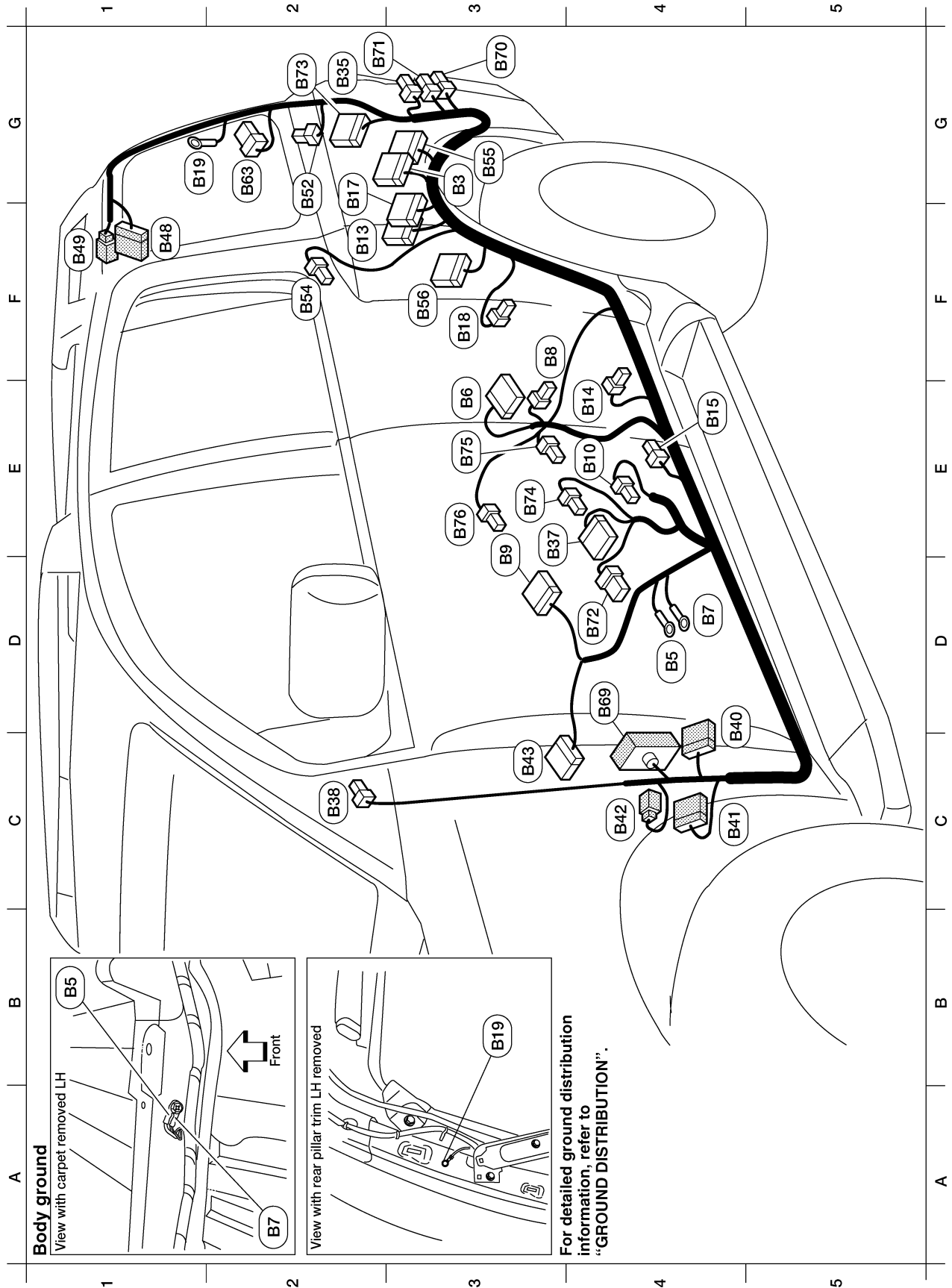
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HARNESS

BODY HARNESS



WKIA2712E

HARNESS

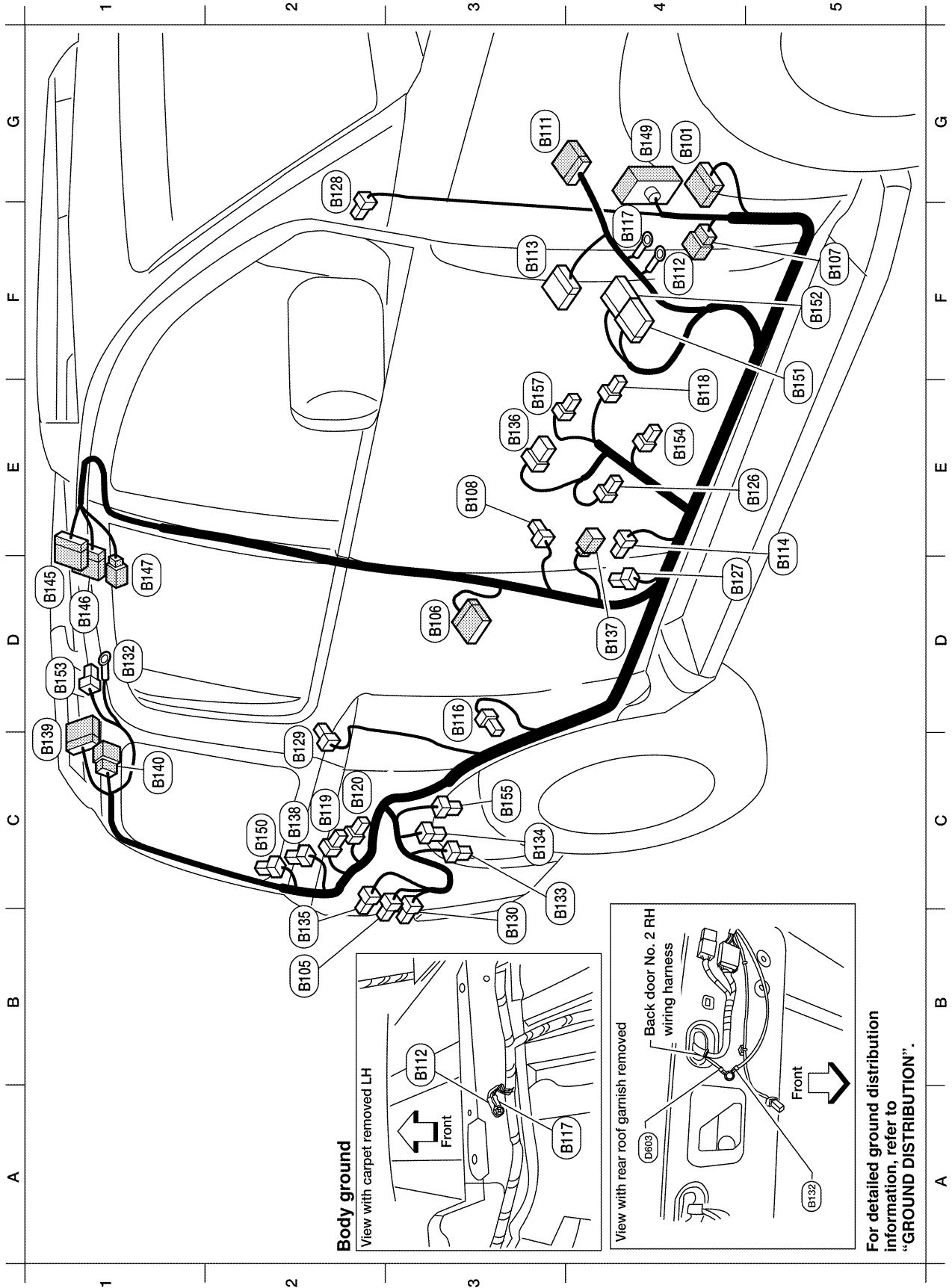
G2 (B73) W/16 : Rear view camera control unit
 E3 (B74) Y/4 : Seat belt buckle pre-tensioner assembly LH
 E3 (B75) W/3 : Rear seat heater LH
 E3 (B76) W/3 : Rear seat heater RH

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 (P1)
 C2 (B38) Y/2 : LH side front 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 (B46) 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 rear 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 (B68) SMJ : To (W40)
 G3 (B70) GR/3 : Rear combination lamp LH (stop/tail)
 D4 (B72) BR/6 : Subwoofer

WKIA3691E

HARNESS

BODY NO. 2 HARNESS



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

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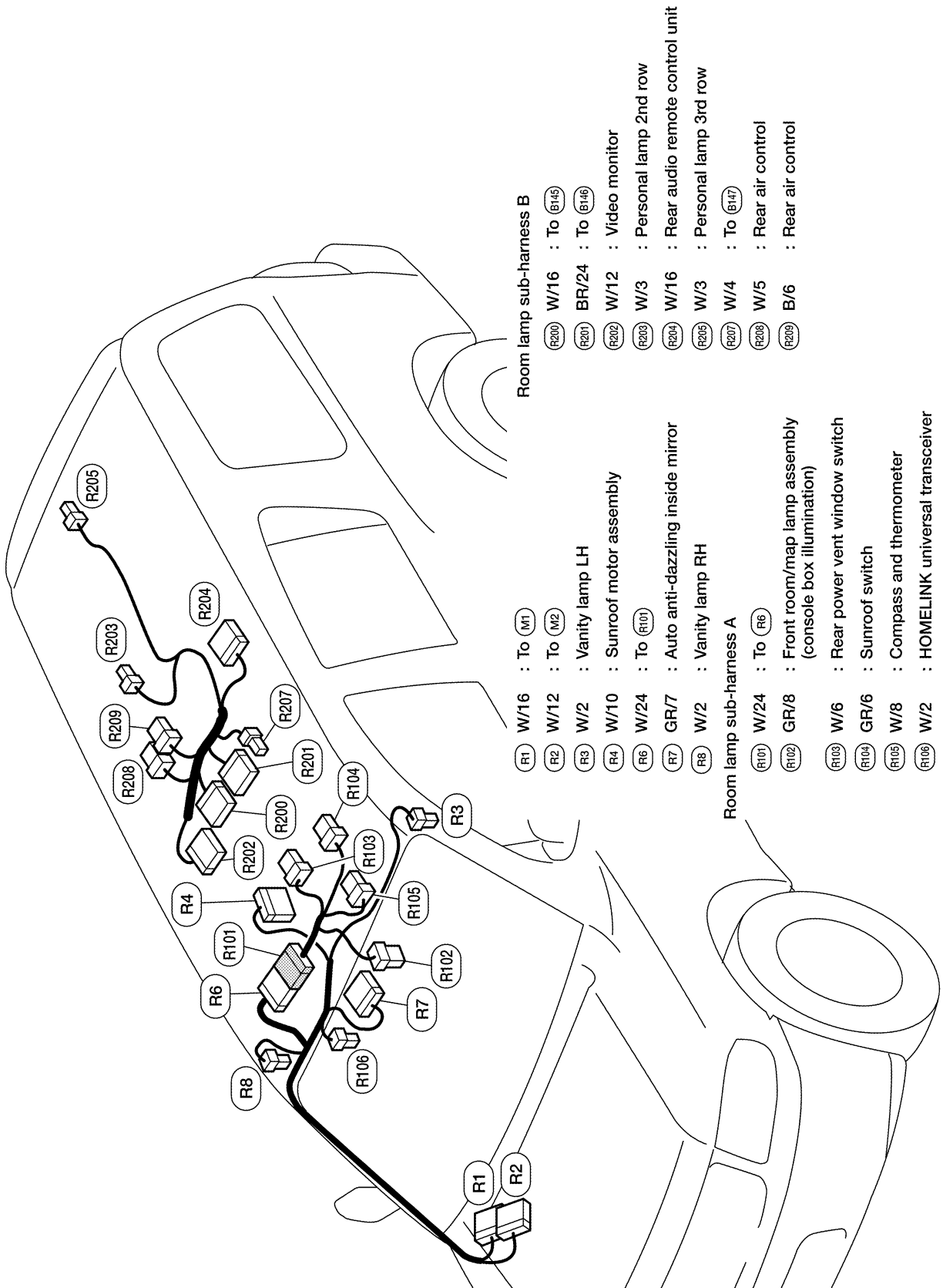
HARNESSES

(B101)	W/16	: To (M84)	G4 (B149)	SMJ	: To (M39)
(B109)	B/3	: Rear turn signal lamp RH	C2 (B150)	W/2	: Rear power vent window motor RH
(B106)	W/18	: To (D301)	F5 (B151)	W/24	: NAVI control unit
(B107)	W/8	: To (E139)	F5 (B152)	GR/24	: NAVI control unit
(B108)	W/3	: Front door switch RH	D1 (B153)	W/2	: Cargo lamp
(B111)	W/12	: To (B43)	C3 (B155)	B/6	: Air mix door motor (rear)
(B112)	-	: Body ground (RH satellite sensor)	E3 (B157)	Y/4	: Seat belt buckle pre-tensioner assembly RH
(B113)	Y/12	: Air bag diagnosis sensor unit			
(B114)	Y/2	: RH side air bag (satellite) sensor			
(B116)	W/3	: Rear door switch RH			
(B117)	-	: Body ground			
(B118)	W/3	: Front seat heater RH			
(B119)	W/2	: Condenser-3			
(B120)	W/2	: Condenser-4			
(B126)	Y/2	: Front RH side air bag module			
(B127)	Y/2	: Front RH seat belt pre-tensioner			
(B128)	Y/2	: RH side rear curtain air bag module			
(B129)	Y/2	: RH side front curtain air bag module			
(B130)	GR/3	: Rear combination lamp RH (stop/tail)			
(B132)	-	: Body ground			
(B133)	W/4	: Rear blower motor resistor			
(B134)	W/2	: Rear blower motor			
(B136)	W/8	: To (P151)			
(B137)	B/3	: Belt tension sensor			
(B138)	B/2	: Rear cargo power socket			
(B139)	W/16	: To (D602)			
(B140)	W/6	: To (D601)			
(B145)	W/16	: To (R200)			
(B146)	BR/24	: To (R201)			
(B147)	W/4	: To (R207)			

WKIA3693E

HARNESS

ROOM LAMP HARNESS

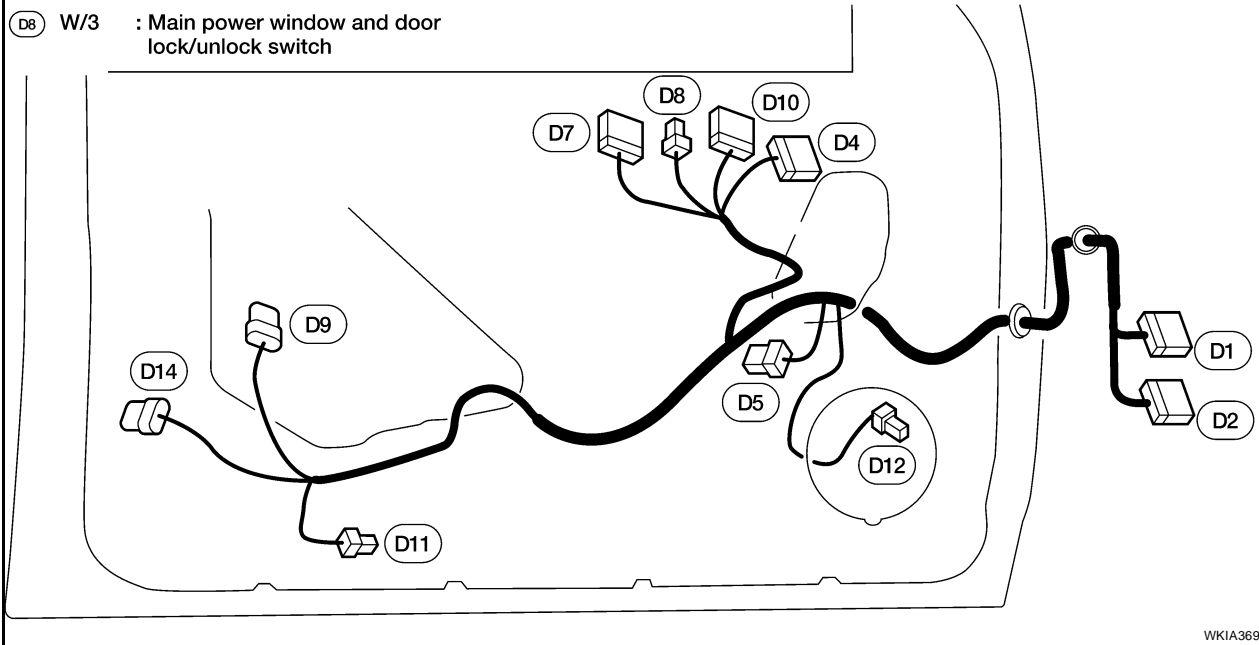


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HARNESS

FRONT DOOR LH HARNESS

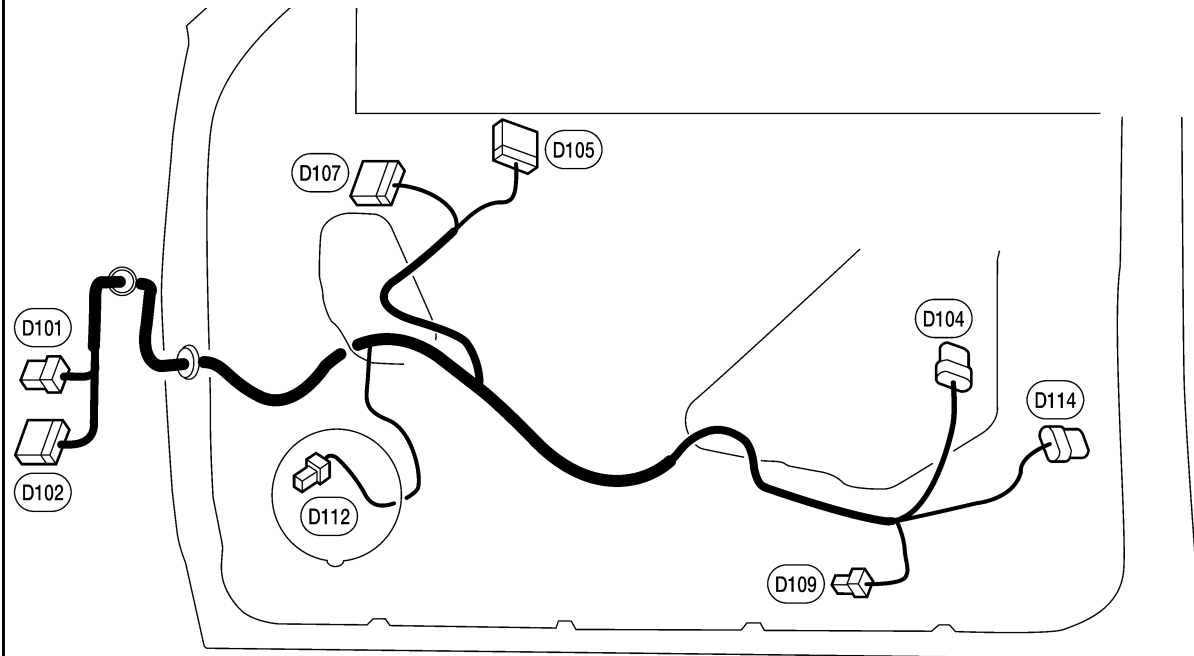
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|---|--|
| (D1) BR/24 : To (M8) | (D9) GR/6 : Front power window motor LH |
| (D2) W/16 : To (M8) | (D10) W/16 : Door mirror remote control switch |
| (D4) W/16 : Door mirror LH | (D11) W/2 : Front step lamp LH |
| (D5) W/8 : Seat memory switch | (D12) 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 | |



WKIA3695E

FRONT DOOR RH HARNESS

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| (D101) W/8 : To (M75) | (D107) W/16 : Door mirror RH |
| (D102) BR/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 |

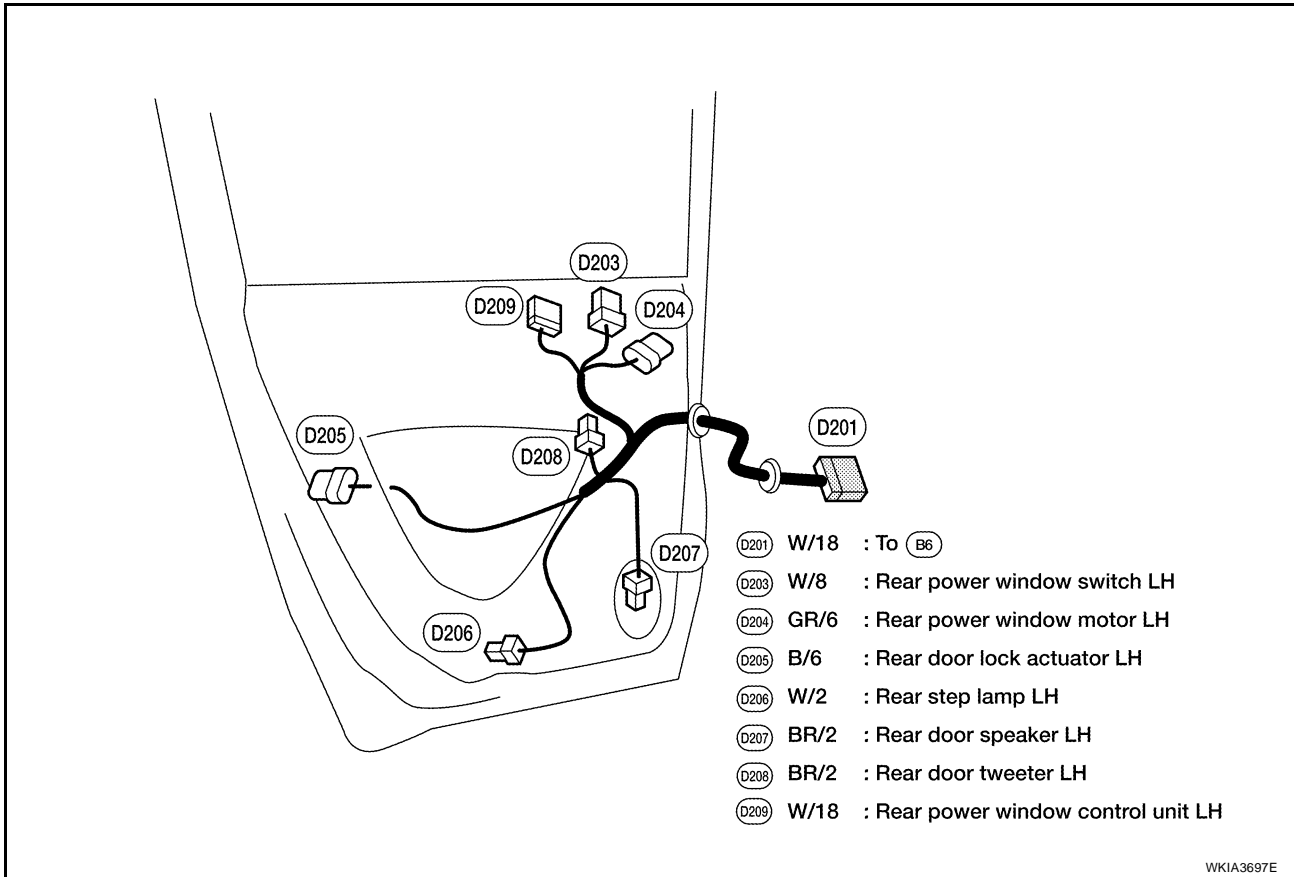


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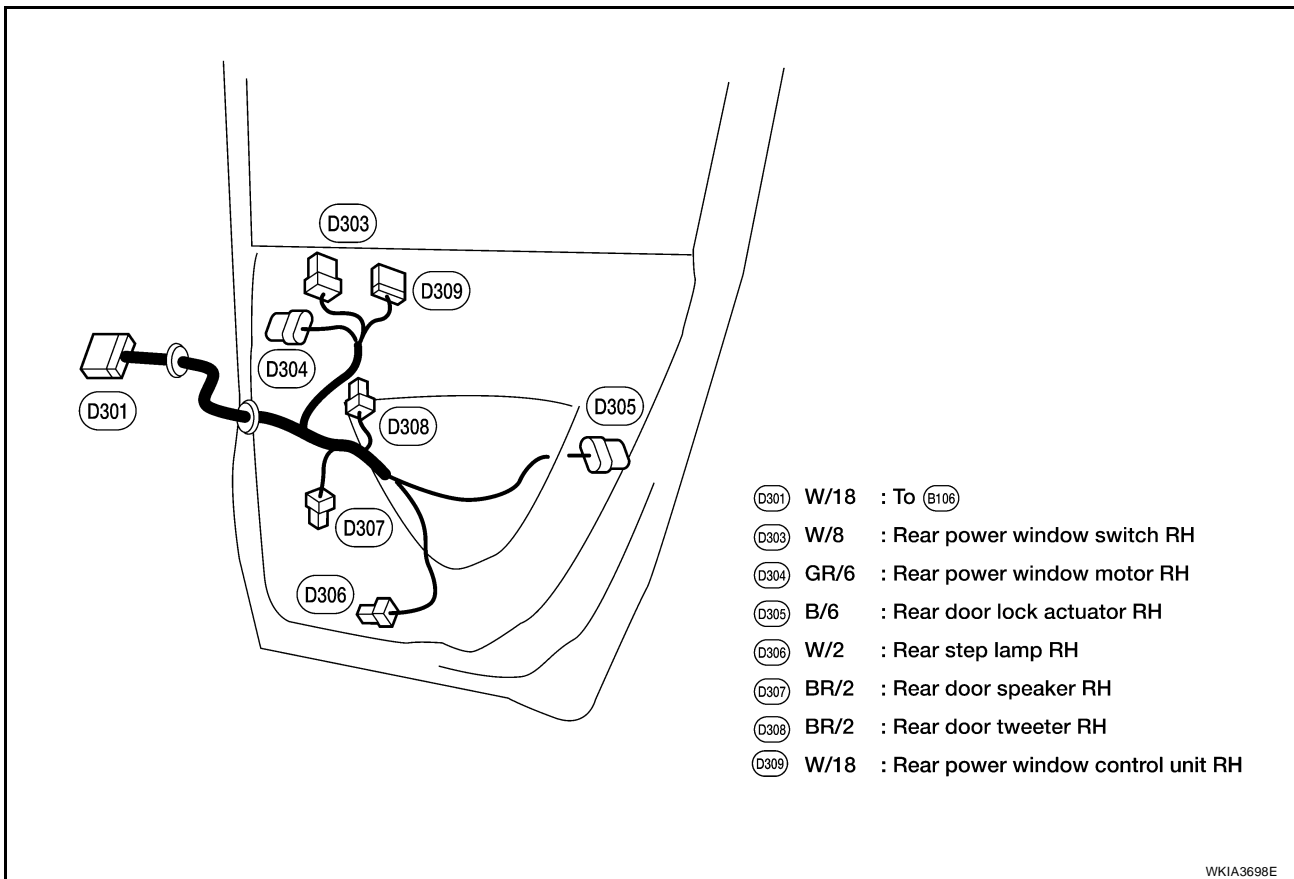
HARNESS

REAR DOOR LH HARNESS



WKIA3697E

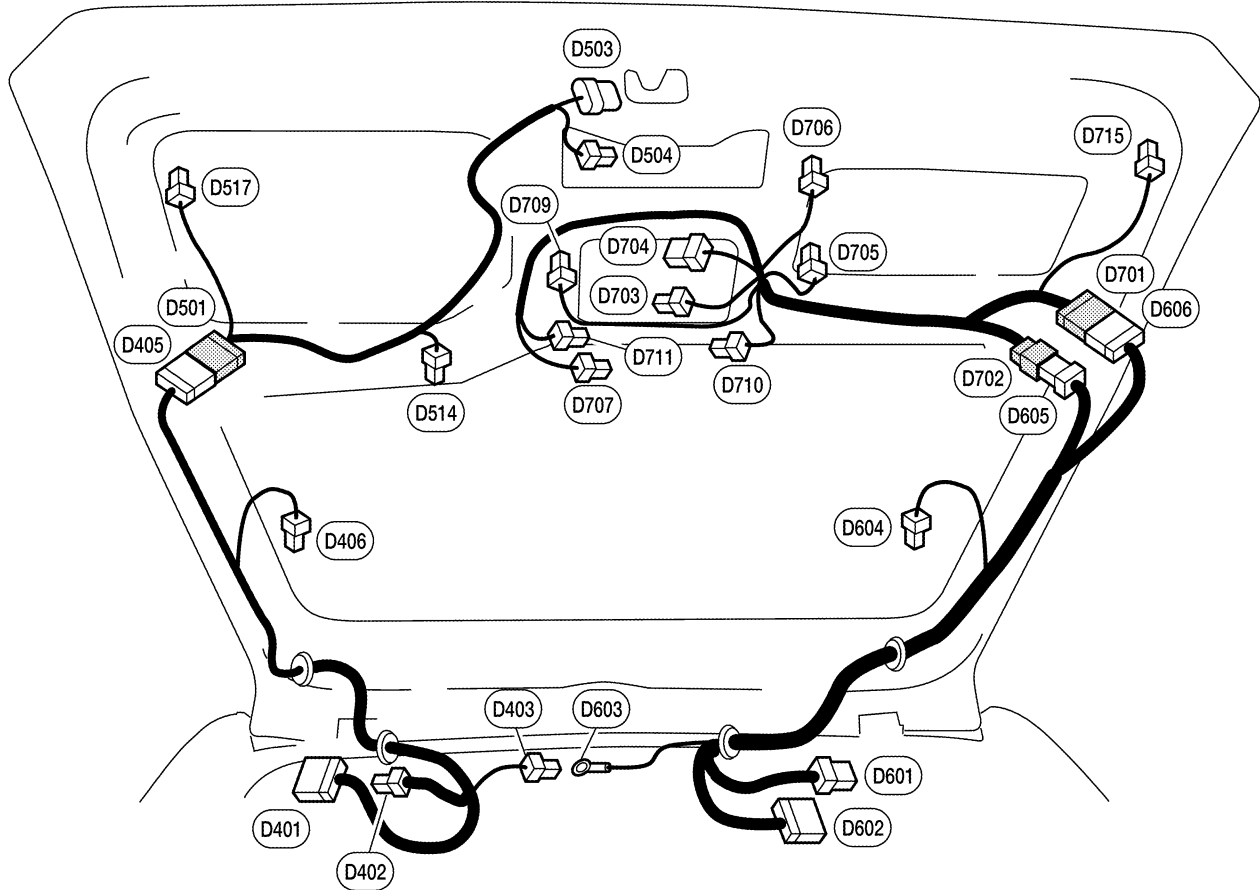
REAR DOOR RH HARNESS



WKIA3698E

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/8 : Back door latch (door ajar switch)
- (D504) W/4 : Rear view camera
- (D514) BR/2 : Back door warning chime
- (D517) BR/2 : Pinch strip LH

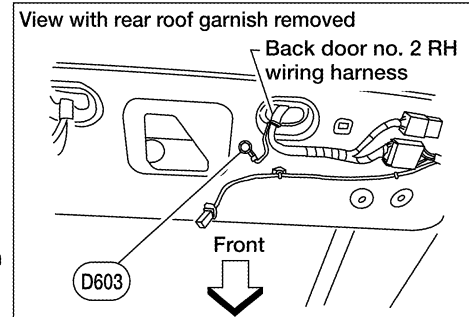
Back door No. 2 RH harness

- (D601) W/6 : To (B140)
- (D602) W/16 : To (B139)
- (D603) - : Body ground
- (D604) B/1 : Rear window defogger (ground)
- (D605) W/6 : To (D702)
- (D606) W/16 : To (D701)

Back door RH harness

- (D701) W/16 : To (D606)
- (D702) W/6 : To (D605)
- (D703) W/2 : License plate lamps
- (D704) W/6 : Rear wiper motor
- (D705) B/2 : Back-up lamp LH
- (D706) W/4 : 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".

WKIA3699E

HARNESS

EKS00BNE

Wiring Diagram Codes (Cell Codes)

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
COOL/F	EC	Cooling Fan Control
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication System
COMPAS	DI	Compass and Thermometer
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
FSTS	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

HARNESSES

HSEAT	SE	Heated Seat	
ICC	ACS	Intelligent Cruise Control	A
ICCBOF	EC	ICC Brake Switch	
ICC/BS	EC	ICC Steering Switch	
ICC/SW	EC	ICC Brake Switch	B
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)	
IATS	EC	Intake Air Temperature Sensor	
IGNSYS	EC	Ignition System	C
ILL	LT	Illumination	
INJECT	EC	Injector	
INT/L	LT	Room/Map, Vanity, Cargo, Personal, Foot, Step, and Puddle Lamps	D
KEYLES	BL	Remote Keyless Entry System	
KS	EC	Knock Sensor	
MAFS	EC	Mass Air Flow Sensor	E
MAIN	EC	Main Power Supply and Ground Circuit	
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges	F
MIL/DL	EC	Malfunction Indicator Lamp	
MIRROR	GW	Door Mirror	
NATS	BL	Nissan Anti-Theft System	G
NAVI	AV	Navigation System	
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1	
O2H2B2	EC	Rear Heated Oxygen Sensor 2 Heater Bank 2	H
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1	
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2	
P/SCKT	WW	Power Socket	I
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	J
POS	EC	Crankshaft Position Sensor (POS)	
POWER	PG	Power Supply Routing	
PRE/SE	EC	EVAP Control System Pressure Sensor	PG
PS/SEN	EC	Power Steering Pressure Sensor	
R/VIEW	DI	Rear View Monitor	
RP/SEN	EC	Refrigerant Pressure Sensor	L
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SONAR	DI	Rear Sonar System	M
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	
VEHSEC	BL	Vehicle security (theft warning) system	

HARNESSES

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

ELECTRICAL UNITS LOCATION

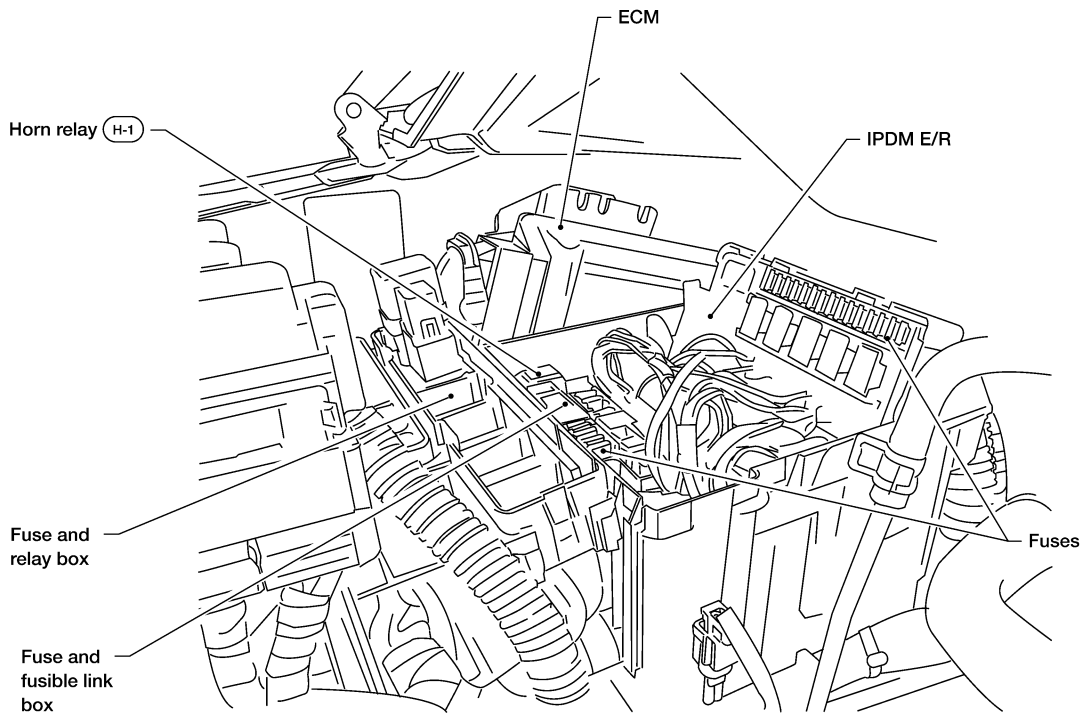
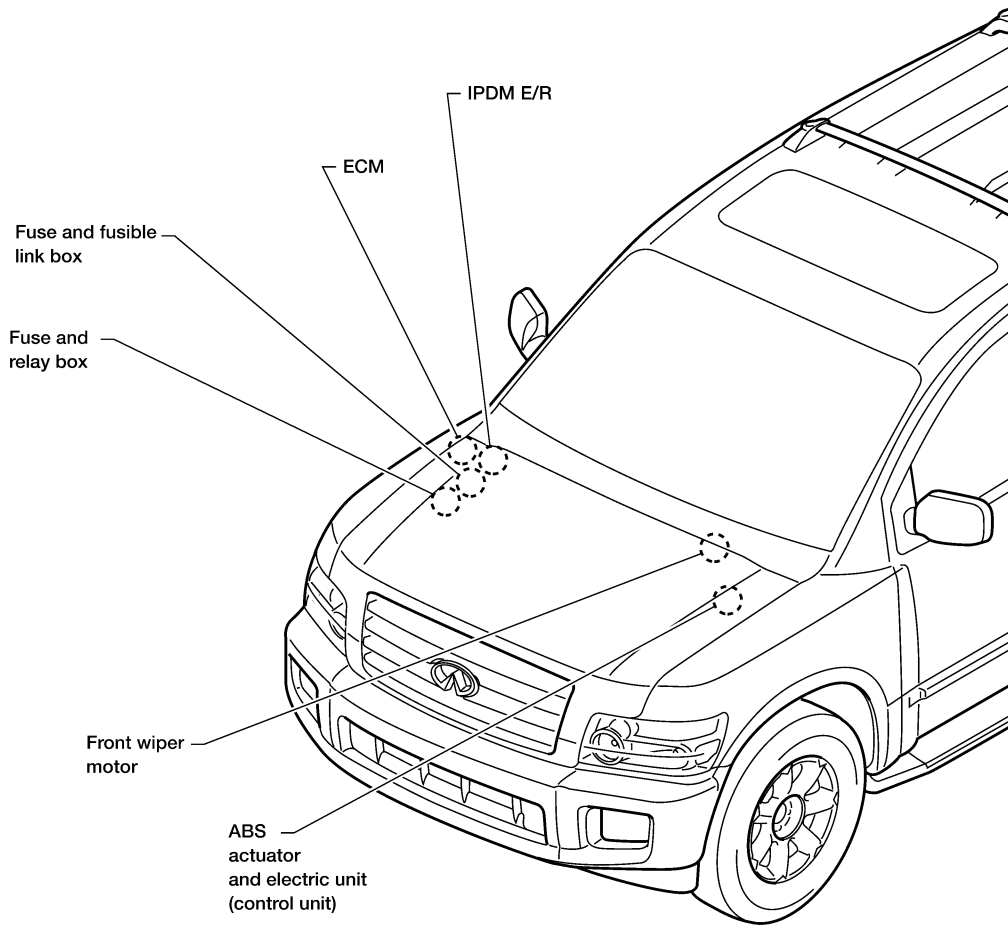
ELECTRICAL UNITS LOCATION

Electrical Units Location ENGINE COMPARTMENT

PFP:25230

EKS00BNF

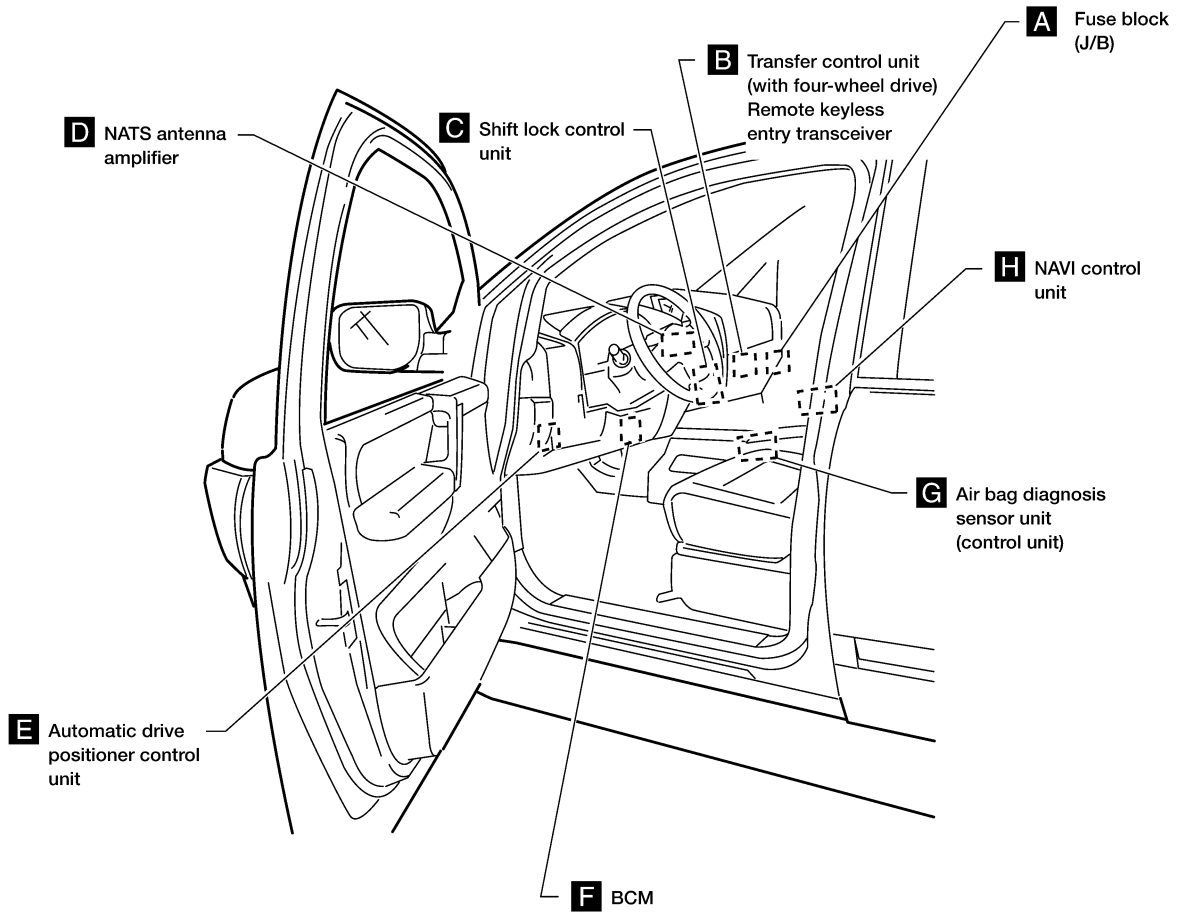
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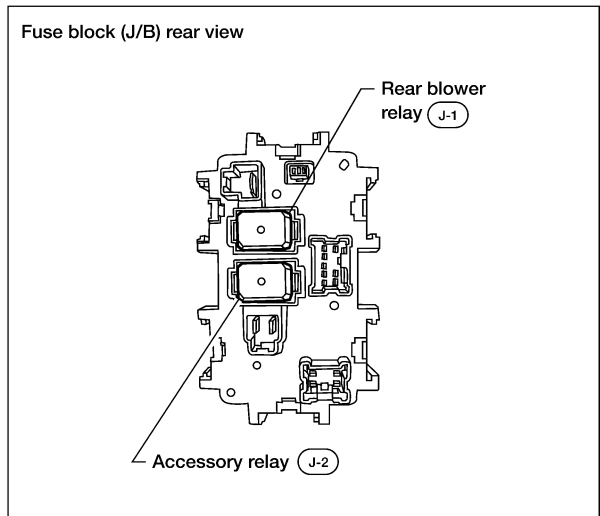
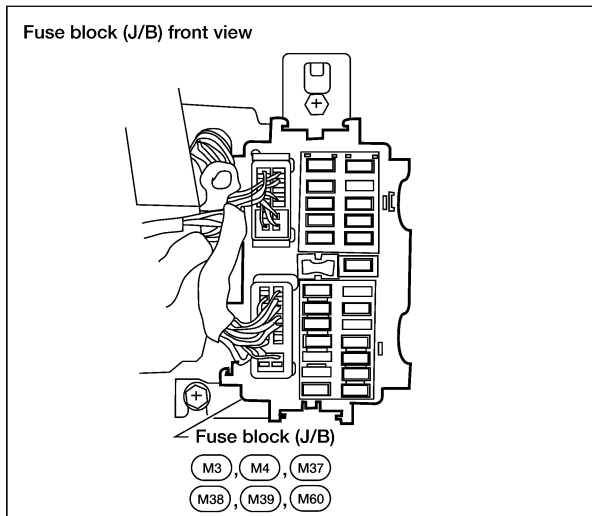
WKIA2014E

ELECTRICAL UNITS LOCATION

PASSENGER COMPARTMENT



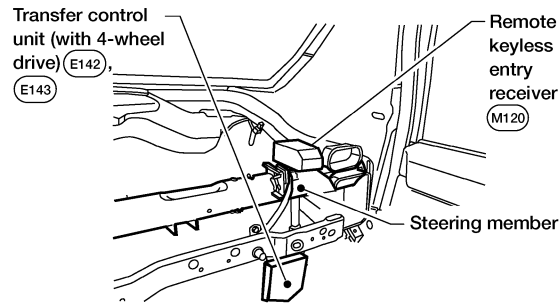
A Instrument panel side RH



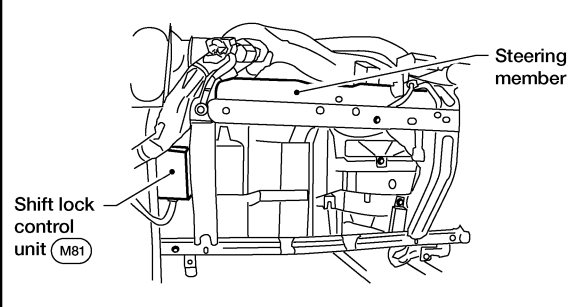
WKIA3630E

ELECTRICAL UNITS LOCATION

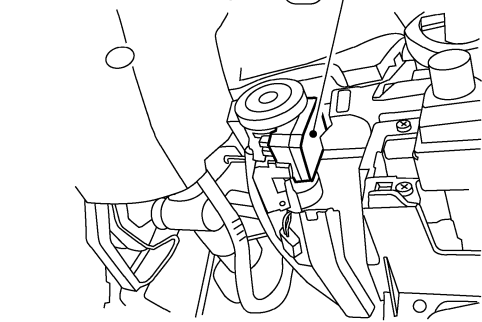
B View with instrument panel removed RH



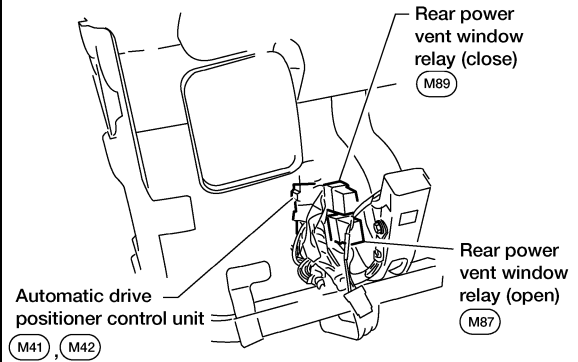
C View with instrument panel removed RH



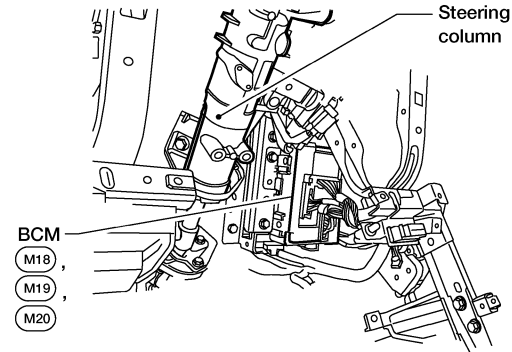
D View with lower driver instrument panel removed
NATS antenna amplifier (M21)



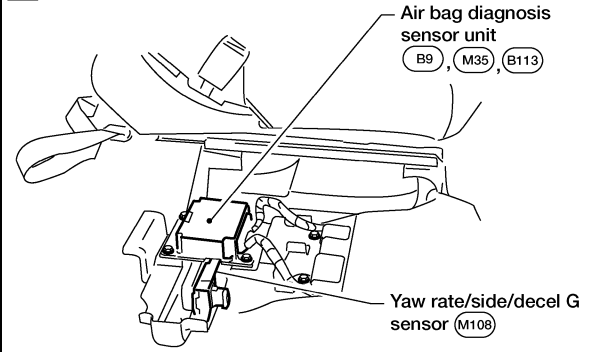
E View with steering member removed LH



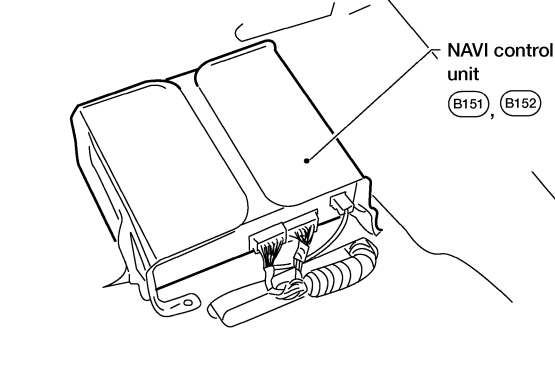
F View with instrument panel removed



G View with center console removed



H View with passenger seat removed



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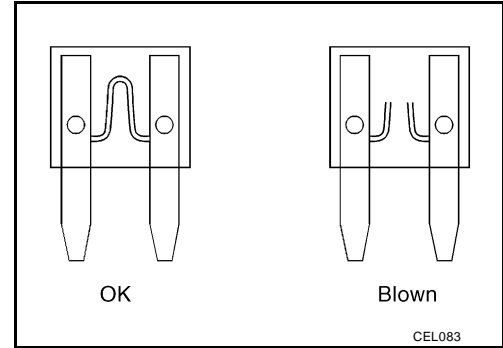
WKIA5126E

ELECTRICAL UNITS LOCATION

Fuse

EKS00BNG

- 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

EKS00BNH

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.

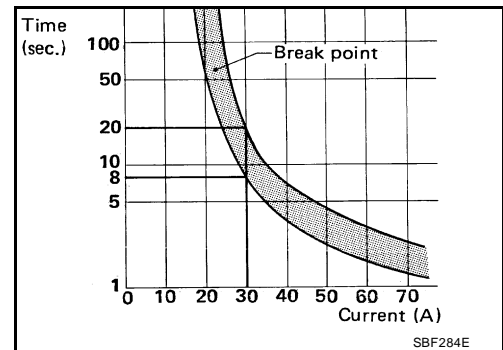
Circuit Breaker (Built Into BCM)

EKS00BNI

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



HARNESS CONNECTOR

PF P:B4341

EKS00BNJ

HARNESS CONNECTOR

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

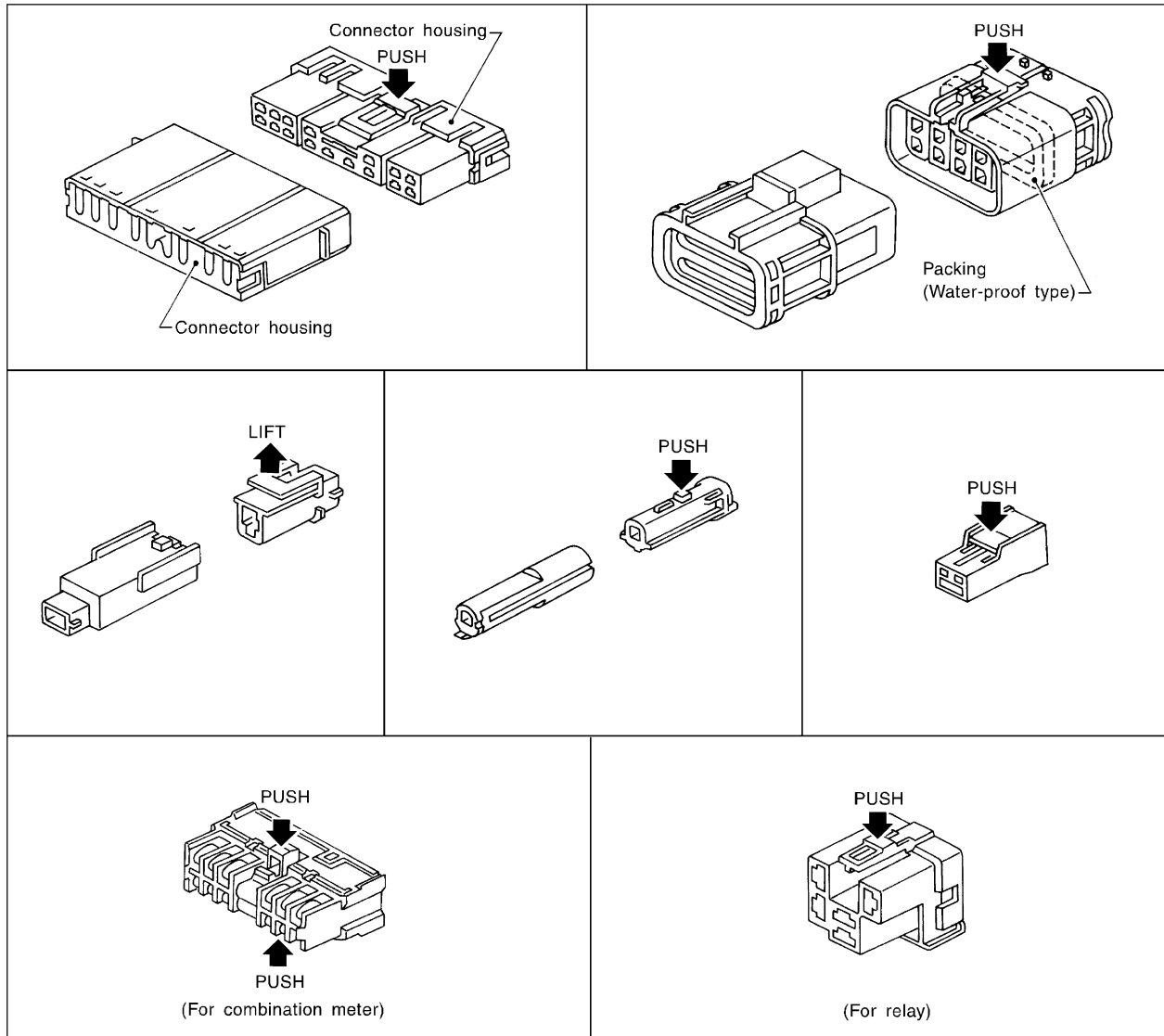
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



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HARNESS CONNECTOR

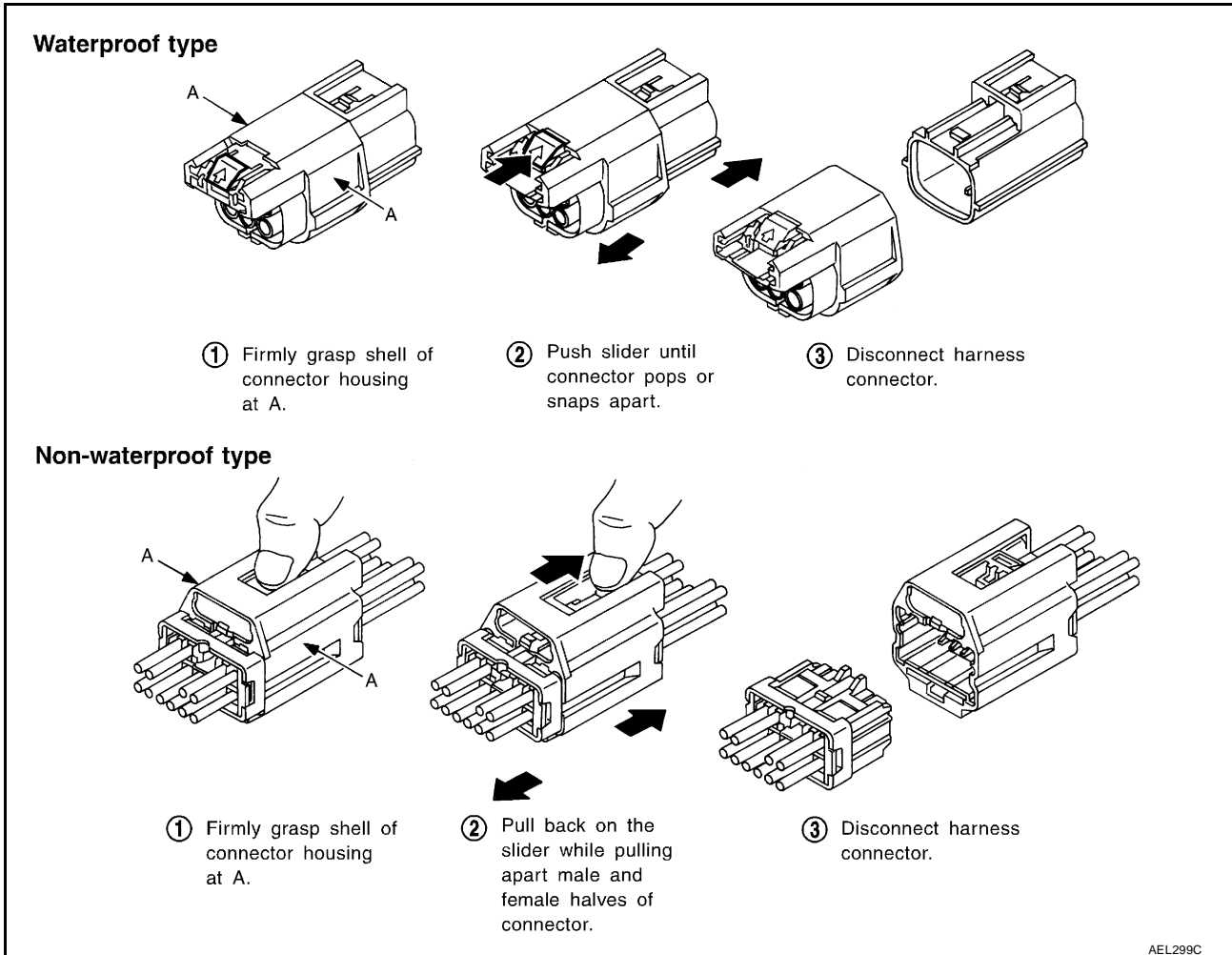
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



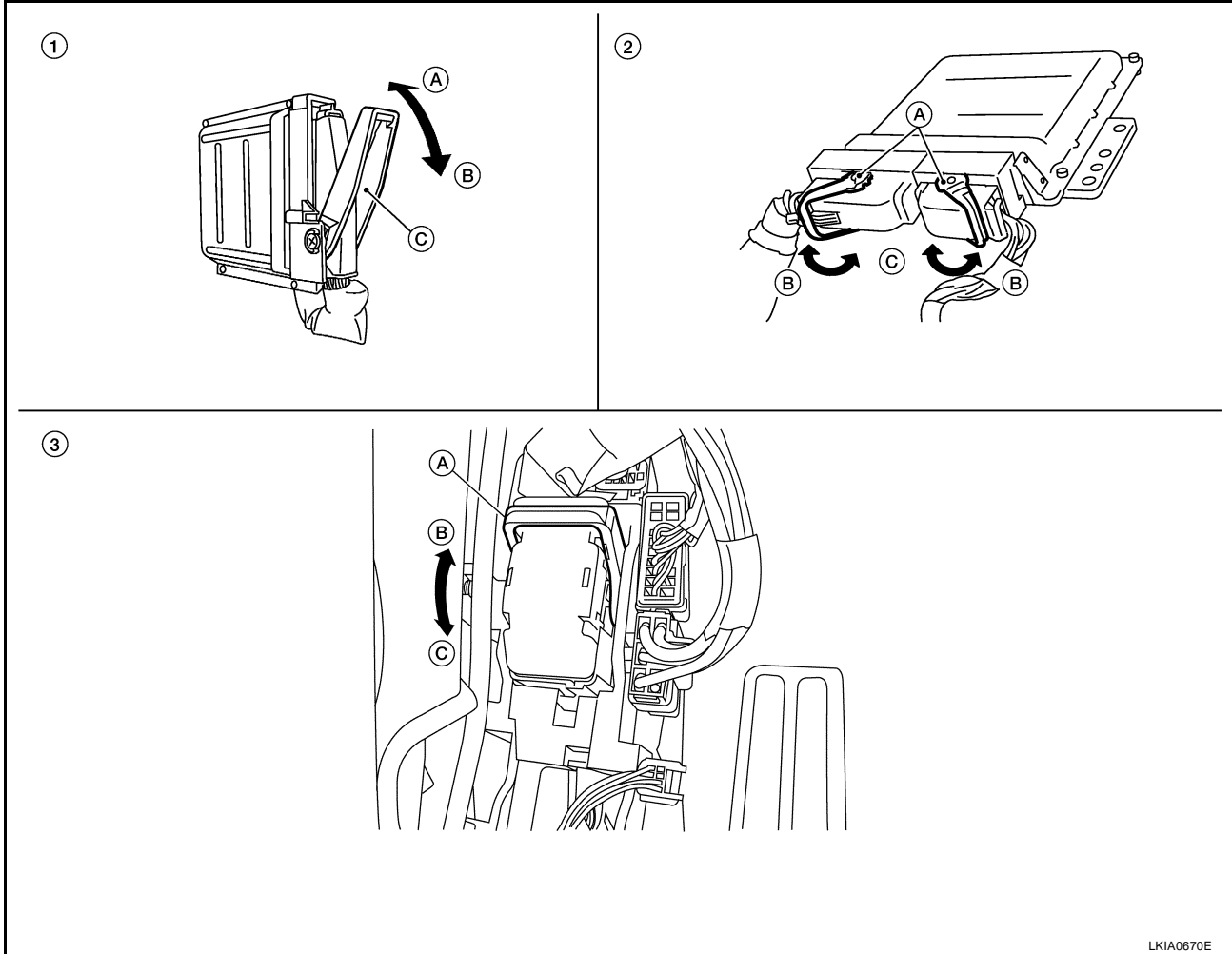
HARNESS CONNECTOR

HARNESS CONNECTOR (LEVER LOCKING TYPE)

- Lever locking type harness connectors are used on certain control units and control modules such as ECM, ABS actuator and electric unit (control unit), etc.
- Lever locking type harness connectors are also used on super multiple junction (SMJ) connectors.
- Always confirm the lever is fully locked in place by moving the lever as far as it will go to ensure full connection.

CAUTION:

Always confirm the lever is fully released (loosened) before attempting to disconnect or connect these connectors to avoid damage to the connector housing or terminals.



1. Control unit with single lever

- A. Fasten
- B. Loosen
- C. Lever

2. Control unit with dual levers

- A. Levers
- B. Fasten
- C. Loosen

3. SMJ connector

- A. Lever
- B. Fasten
- C. Loosen

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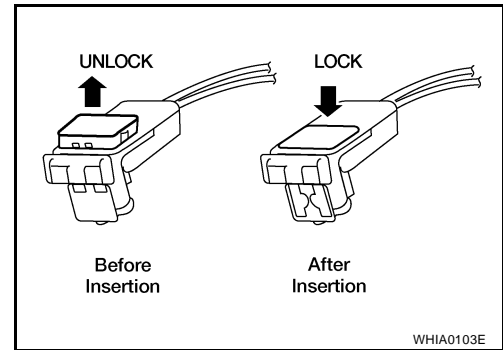
HARNES CONNECTOR

HARNES 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.**



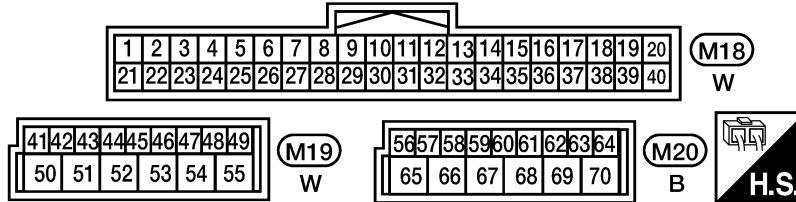
ELECTRICAL UNITS

ELECTRICAL UNITS Terminal Arrangement

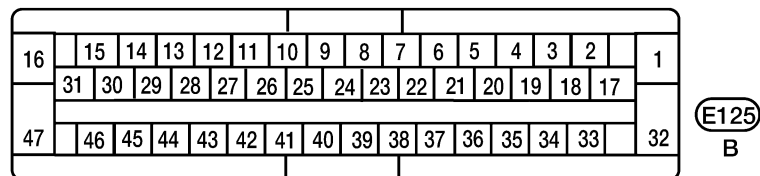
PFP:23710

EKS00BNK

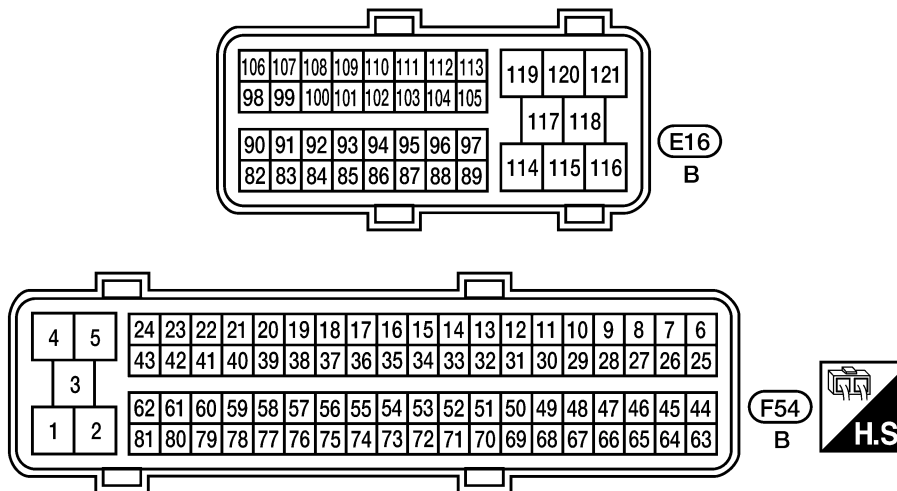
BCM (BODY CONTROL MODULE)



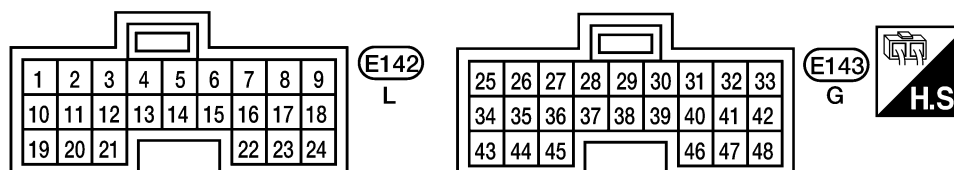
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



ECM



TRANSFER CONTROL UNIT



WKIA3638E

STANDARDIZED RELAY

PFP:25230

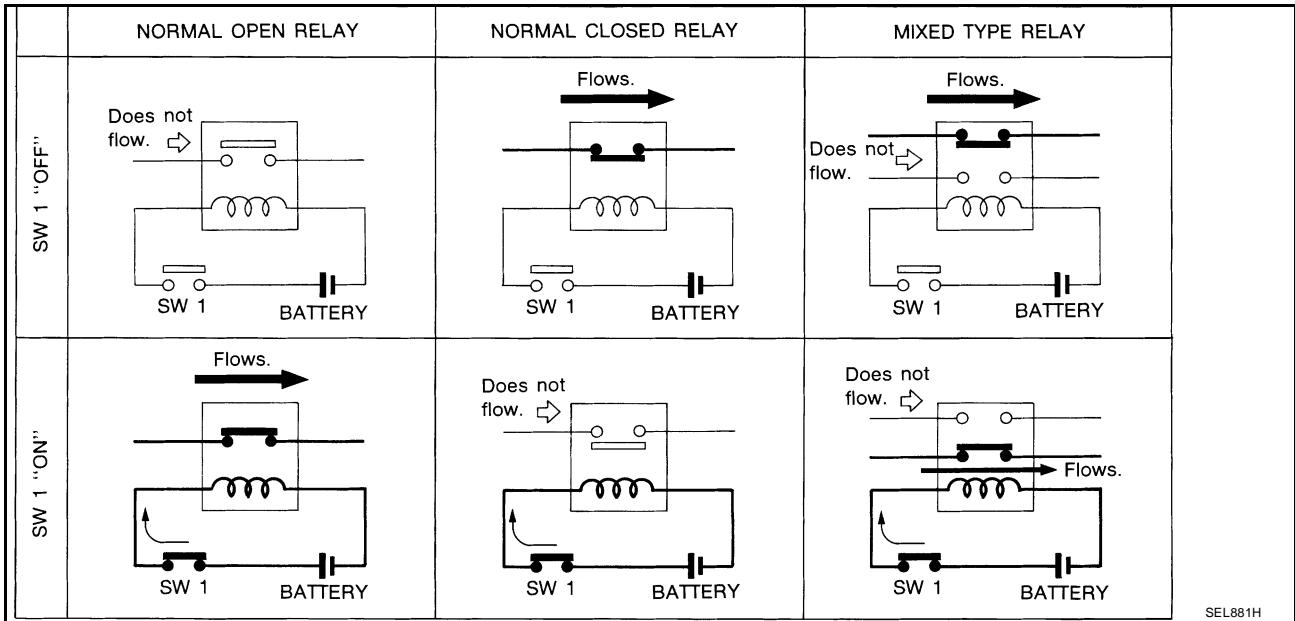
EKS00BNL

STANDARDIZED RELAY

Description

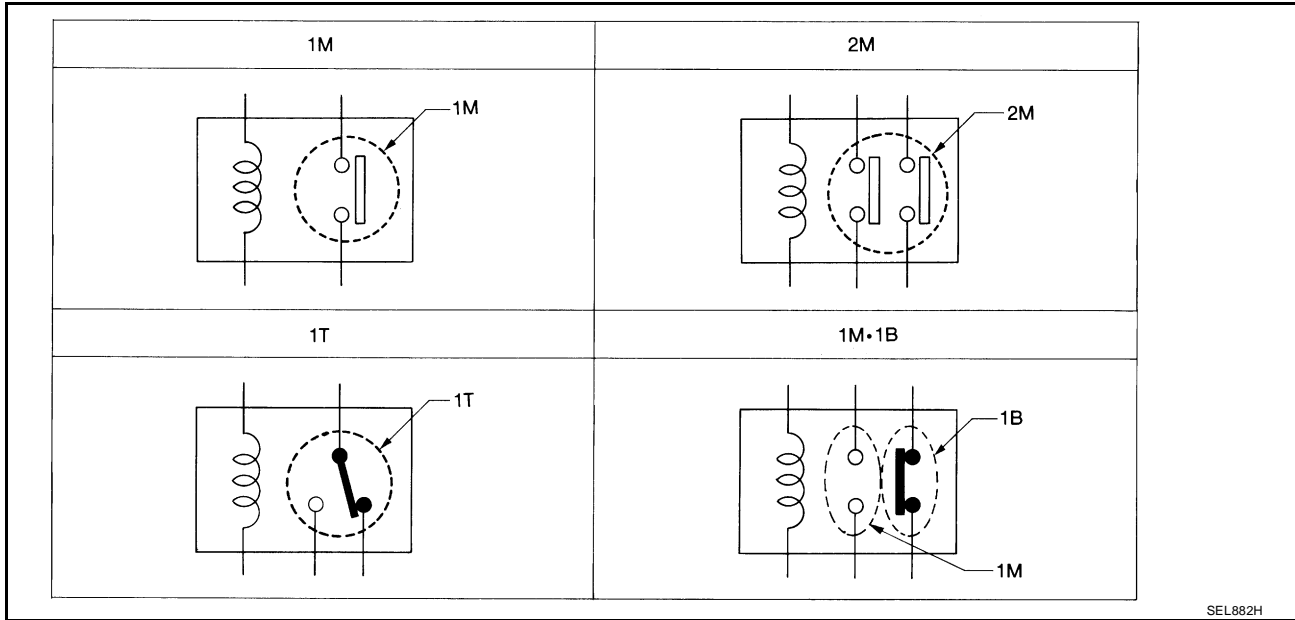
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



SEL881H

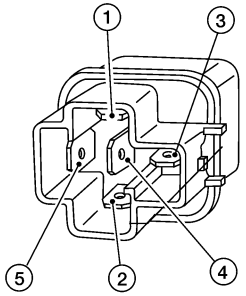
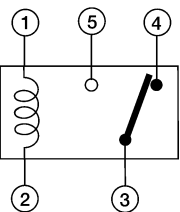
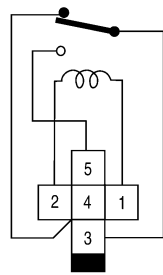
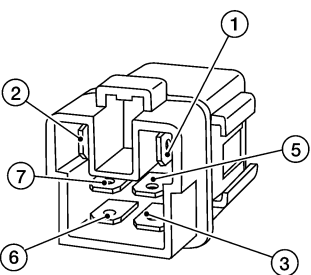
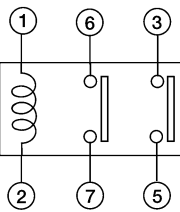
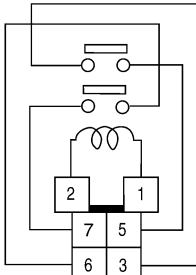
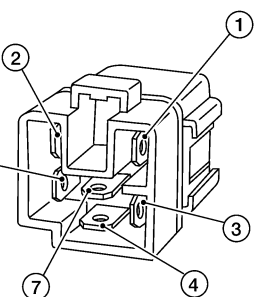
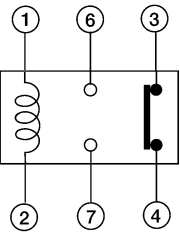
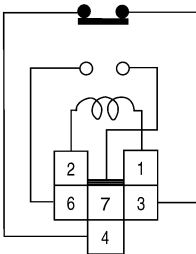
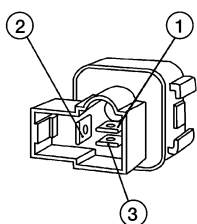
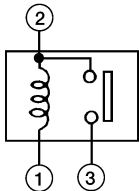
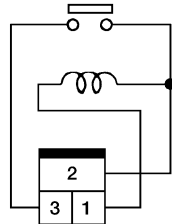
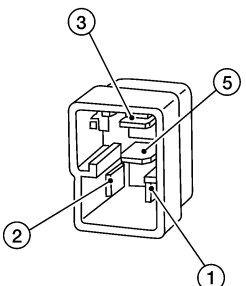
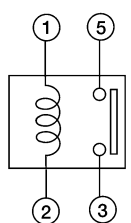
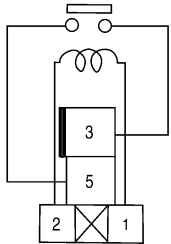
TYPE OF STANDARDIZED RELAYS



SEL882H

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

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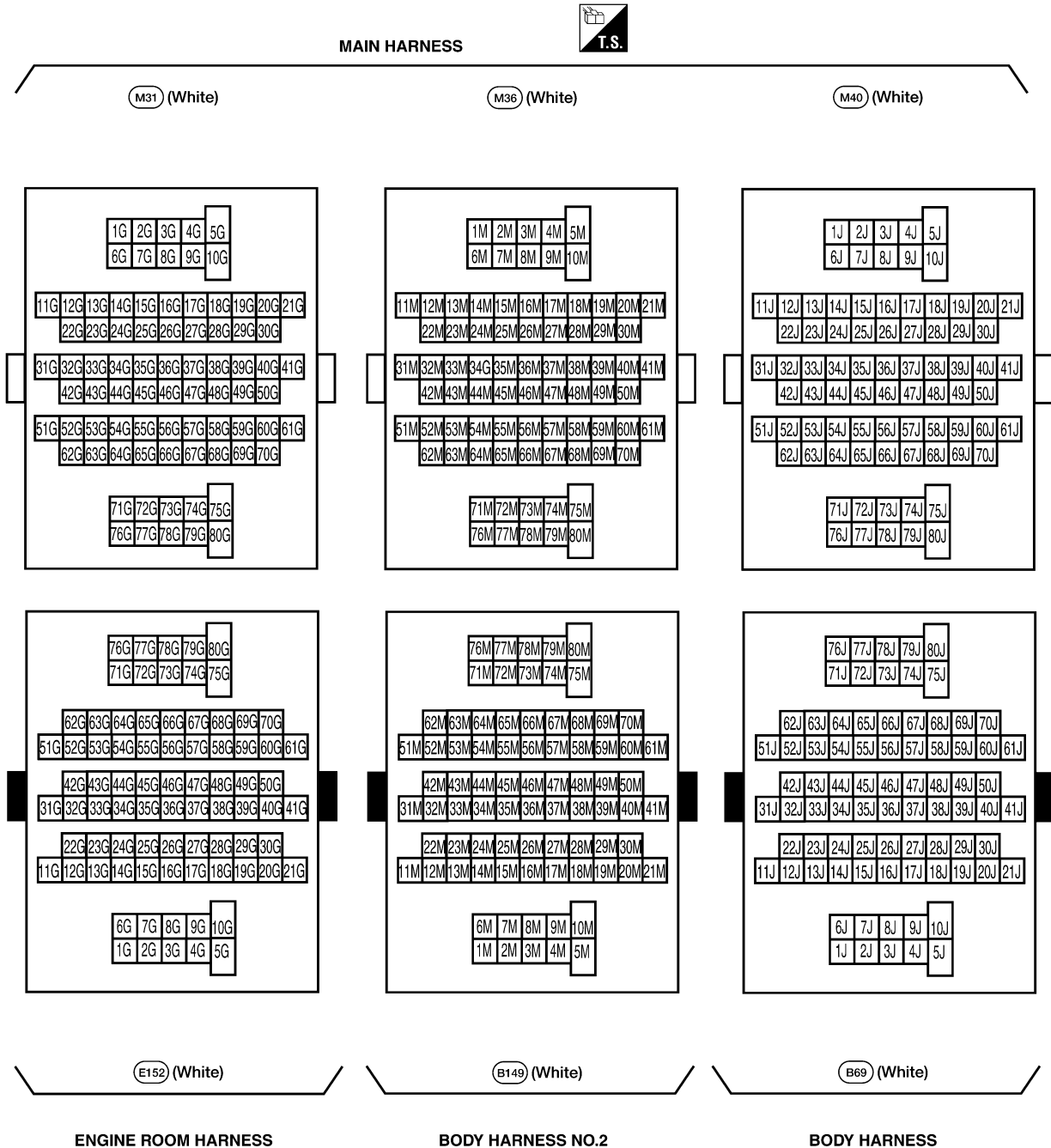
SUPER MULTIPLE JUNCTION (SMJ)

SUPER MULTIPLE JUNCTION (SMJ)

PFJ:84341

Terminal Arrangement

EKS00BNM



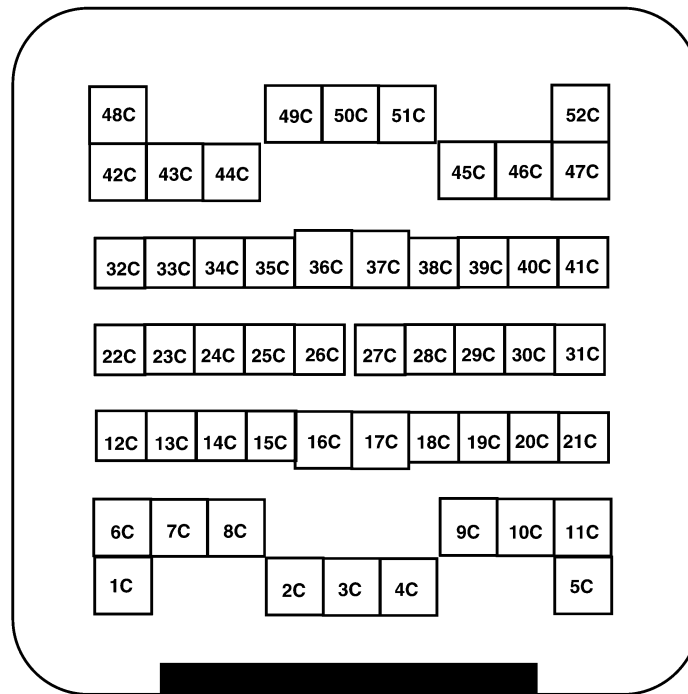
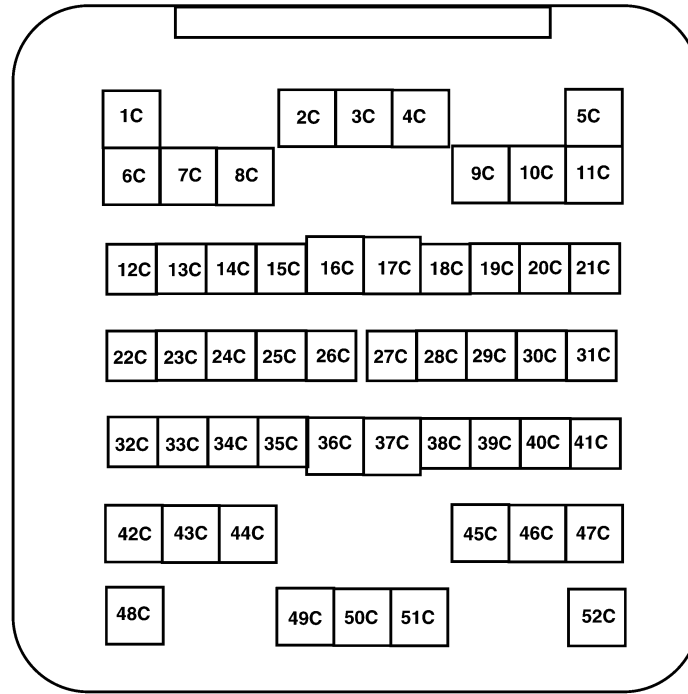
LKIA0385E

SUPER MULTIPLE JUNCTION (SMJ)

CHASSIS HARNESS



(C1) (Gray)



(E41) (Gray)

ENGINE ROOM HARNESS

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WKIA1845E

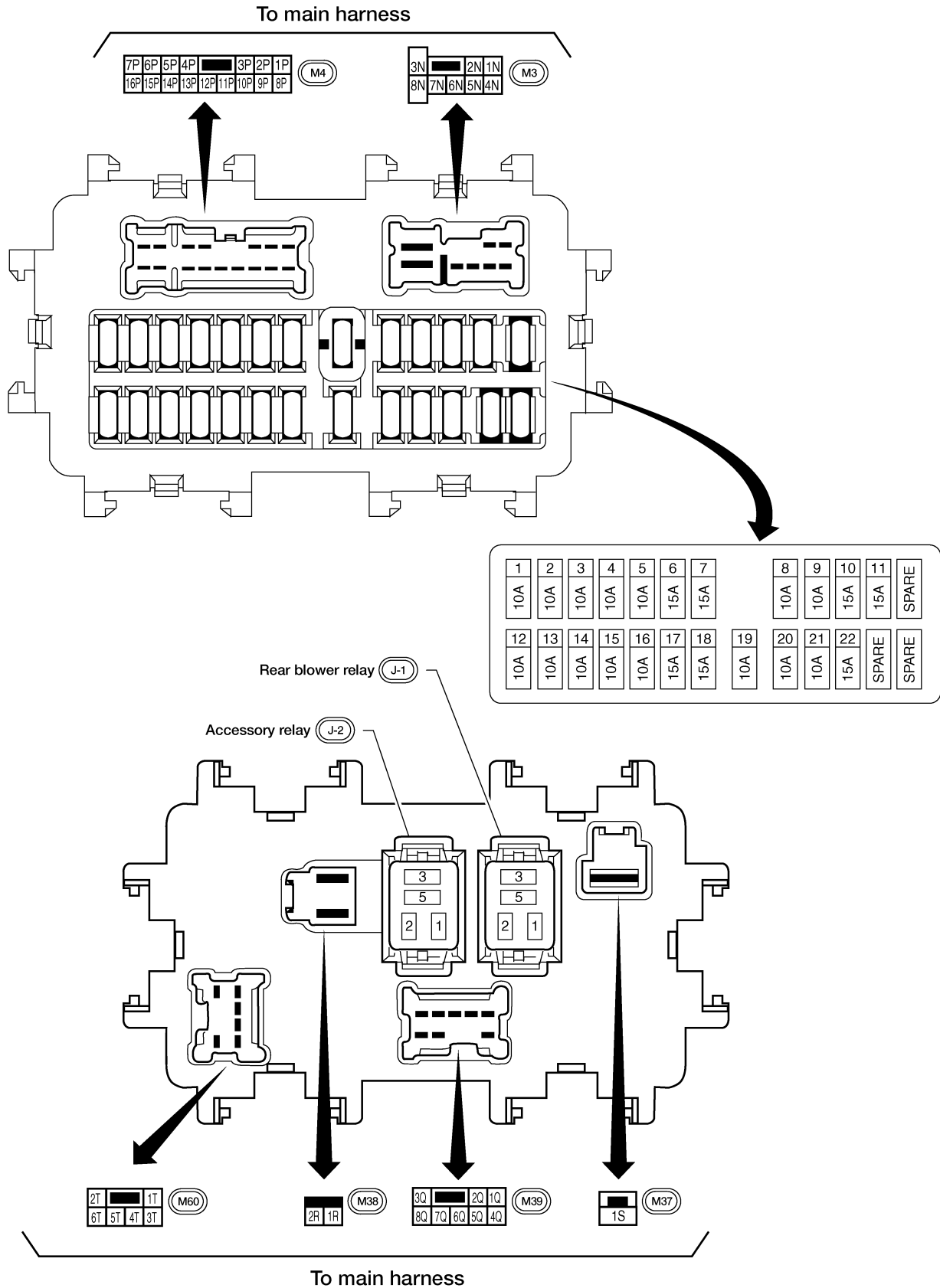
FUSE BLOCK-JUNCTION BOX(J/B)

PF24350

EKS00BNN

FUSE BLOCK-JUNCTION BOX(J/B)

Terminal Arrangement



WKIA2016E

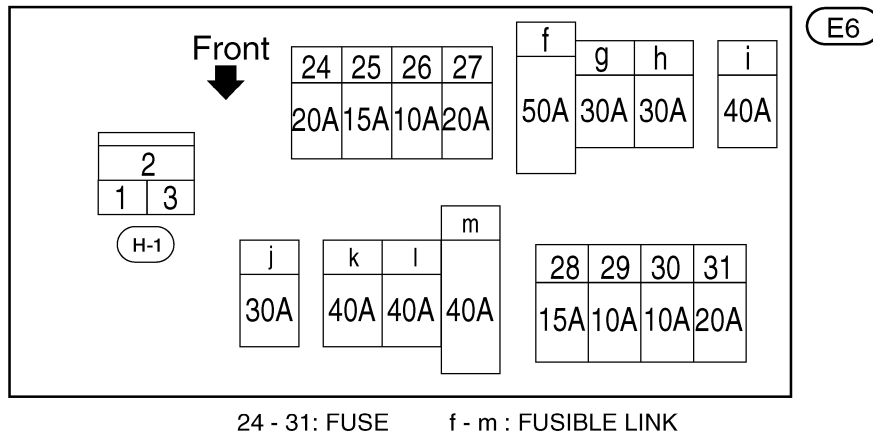
FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX

PFP:24381

Terminal Arrangement

EKS00BNO



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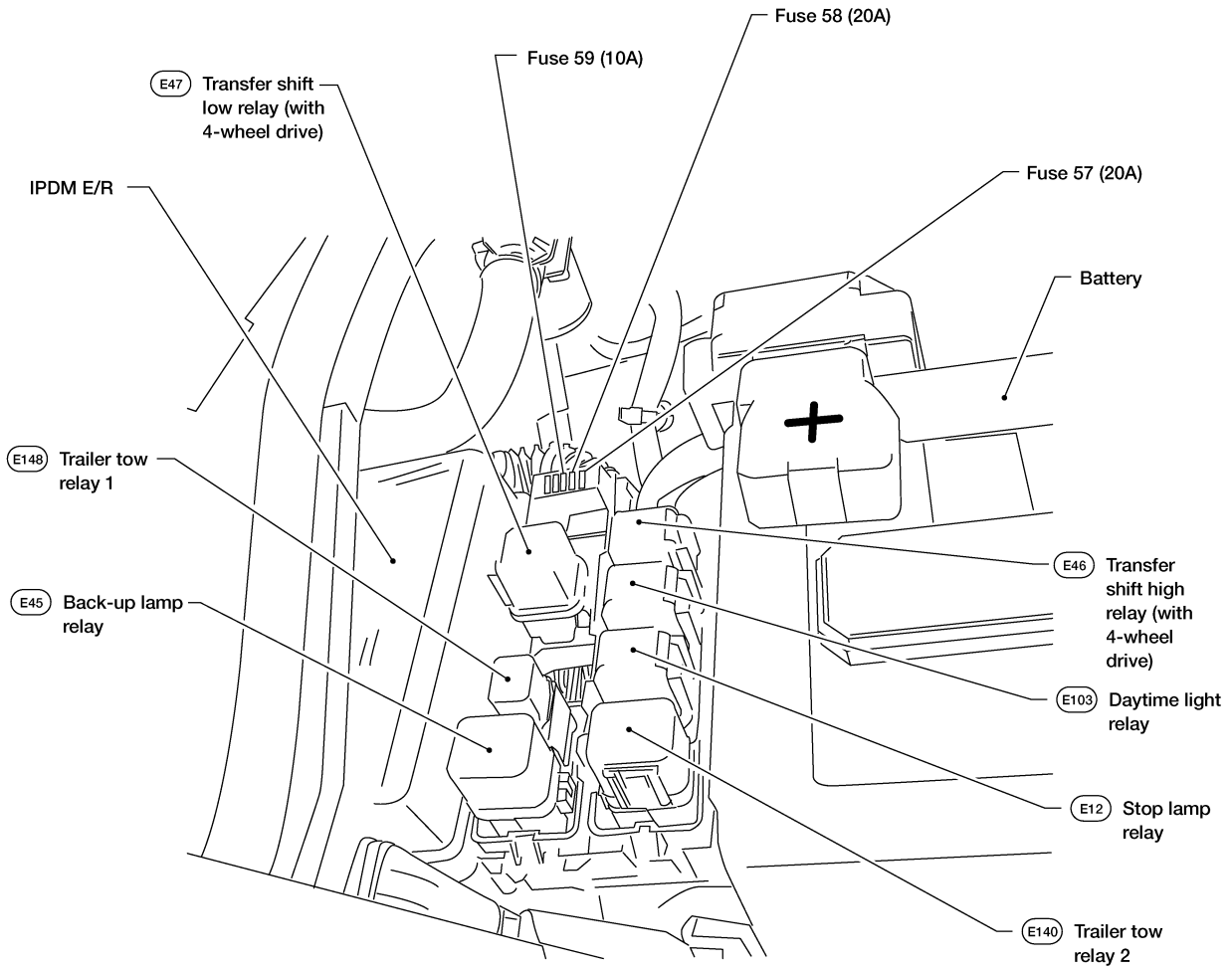
FUSE AND RELAY BOX

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FUSE AND RELAY BOX

Terminal Arrangement



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