

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

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

INFOID:000000003110960

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

Precaution for Power Generation Variable Voltage Control System

INFOID:000000003110961

CAUTION:

For this model, the battery current sensor that is installed to the negative battery cable measures the charging/discharging current of the battery and performs various engine controls. If an electrical component is connected directly to the negative battery terminal, the current flowing through that component will not be measured by the battery current sensor. This condition may cause a malfunction of the engine control system and battery discharge may occur. Do not connect an electrical component or ground wire directly to the battery terminal.

PREPARATION


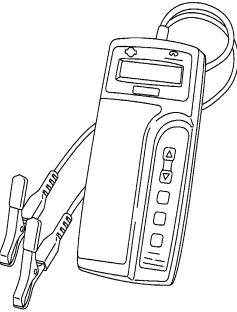
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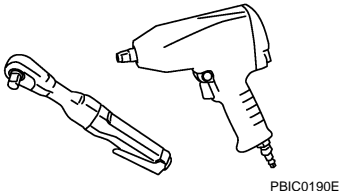
Special Service Tool

INFOID:000000003110962

Tool number (Kent-Moore No.) Tool name	Description
<p>— (J-48087) Battery Service Center</p>  <p style="text-align: right;">WKIA5280E</p>	<p>Tests battery. For operating instructions, refer to Technical Service Bulletin and Battery Service Center User Guide.</p>
<p>— (J-44373) Model 620 Starting/Charging system tester</p>  <p style="text-align: right;">SEL403X</p>	<p>Tests starting and charging systems. For operating instructions, refer to Technical Service Bulletin.</p>

Commercial Service Tool

INFOID:000000003110963

Tool name	Description
<p>Power tool</p>  <p style="text-align: right;">PBIC0190E</p>	<p>Loosening bolts and nuts</p>

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BATTERY

< BASIC INSPECTION >

BASIC INSPECTION

BATTERY

How to Handle Battery

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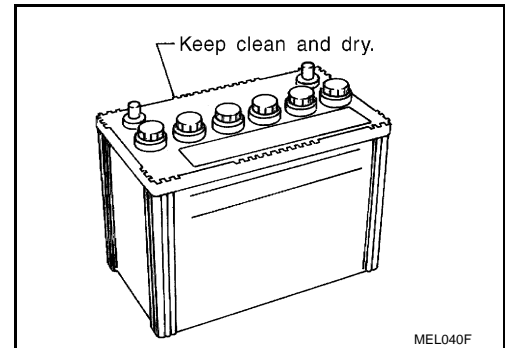
CAUTION:

- If it becomes necessary to start the engine with a booster battery and jumper cables, use a 12-volt booster battery.
- After connecting battery cables, ensure that they are tightly clamped to battery terminals for good contact.
- Never add distilled water through the hole used to check specific gravity.

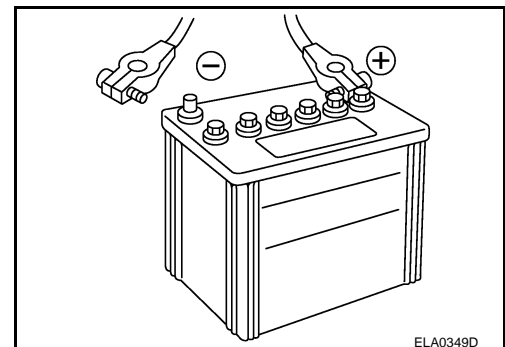
METHODS OF PREVENTING OVER-DISCHARGE

The following precautions must be taken to prevent over-discharging a battery.

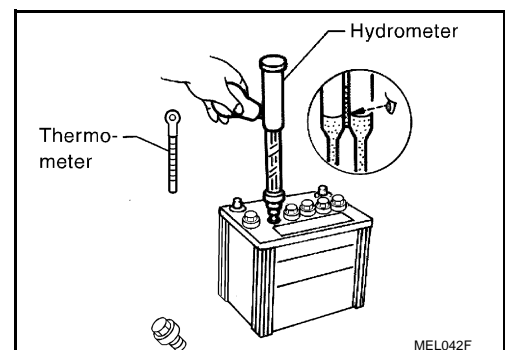
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level. This also applies to batteries designated as "low maintenance" and "maintenance-free".



- When the vehicle is not going to be used over a long period of time, disconnect the battery cable from the negative terminal. (If the vehicle has an extended storage switch, turn it off.)



- Check the charge condition of the battery. Periodically check the specific gravity of the electrolyte. Keep a close check on charge condition to prevent over-discharge.



CHECKING ELECTROLYTE LEVEL

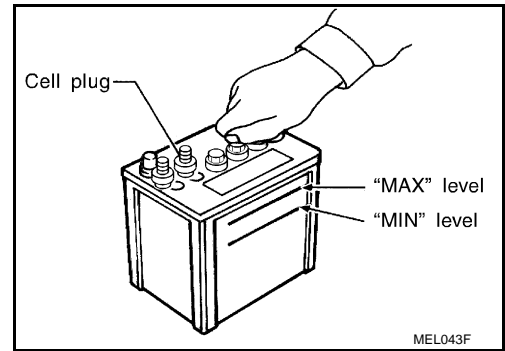
WARNING:

Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

BATTERY

< BASIC INSPECTION >

- Remove the cell plug using a suitable tool.
- Add distilled water up to the MAX level.

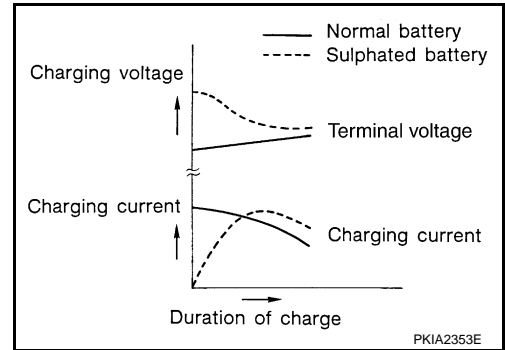


Sulphation

A battery will be completely discharged if it is left unattended for a long time and the specific gravity will become less than 1.100. This may result in sulphation on the cell plates.

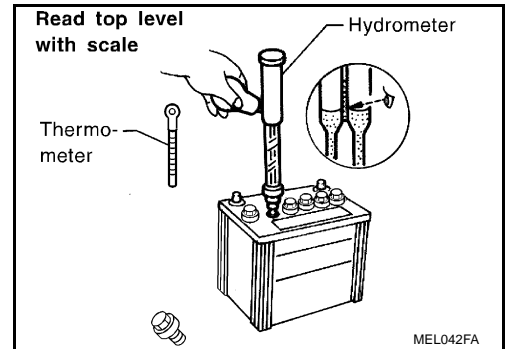
To determine if a battery has been “sulphated”, note its voltage and current when charging it. As shown in the figure, less current and higher voltage are observed in the initial stage of charging sulphated batteries.

A sulphated battery may sometimes be brought back into service by means of a long, slow charge, 12 hours or more, followed by a battery capacity test.



SPECIFIC GRAVITY CHECK

1. Read hydrometer and thermometer indications at eye level.
2. Use the chart below to correct your hydrometer reading according to electrolyte temperature.



Hydrometer Temperature Correction

Battery electrolyte temperature [°C (°F)]	Add to specific gravity reading
71 (160)	0.032
66 (150)	0.028
60 (140)	0.024
54 (130)	0.020
49 (120)	0.016
43 (110)	0.012
38 (100)	0.008
32 (90)	0.004
27 (80)	0
21 (70)	-0.004
16 (60)	-0.008
10 (50)	-0.012
4 (40)	-0.016
-1 (30)	-0.020
-7 (20)	-0.024

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BATTERY

< BASIC INSPECTION >

Battery electrolyte temperature [°C (°F)]	Add to specific gravity reading
-12 (10)	-0.028
-18 (0)	-0.032

Corrected specific gravity	Approximate charge condition
1.260 - 1.280	Fully charged
1.230 - 1.250	3/4 charged
1.200 - 1.220	1/2 charged
1.170 - 1.190	1/4 charged
1.140 - 1.160	Almost discharged
1.110 - 1.130	Completely discharged

CHARGING THE BATTERY

CAUTION:

- Never “quick charge” a fully discharged battery.
- Keep the battery away from open flame while it is being charged.
- When connecting the charger, connect the leads first, then turn on the charger. Never turn on the charger first, as this may cause a spark.
- If battery electrolyte temperature rises above 55 °C (131 °F), stop charging. Always charge battery at a temperature below 55 °C (131 °F).

Charging Rates

Amps	Time
50	1 hour
25	2 hours
10	5 hours
5	10 hours

Do not charge at more than 50 ampere rate.

NOTE:

The ammeter reading on your battery charger will automatically decrease as the battery charges. This indicates that the voltage of the battery is increasing normally as the state of charge improves. The charging amps indicated above refer to initial charge rate.

- If, after charging, the specific gravity of any two cells varies more than 0.050, the battery should be replaced.

Work Flow

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TROUBLE DIAGNOSIS WITH BATTERY SERVICE CENTER

For battery testing, use Battery Service Center (J-48087). For details and operating instructions, refer to Technical Service Bulletin and/or Battery Service Center User Guide.

Special Repair Requirement

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Required Procedure After Battery Disconnection

System	Item	Reference
Engine Control	Accelerator Pedal Released Position Learning	QR25DE: Refer to EC-24 VQ40DE: Refer to EC-464
	Throttle Valve Closed Position Learning	QR25DE: Refer to EC-24 VQ40DE: Refer to EC-464
	Idle Air Volume Learning	QR25DE: Refer to EC-24 VQ40DE: Refer to EC-464
Brake Control	Steering Angle Sensor Neutral Position	Type 3: Refer to BRC-163
Roof	Sunroof Memory Reset/Initialization	Refer to RF-5
Audio-Visual System	Audio (Radio Preset)	Refer to Owner's Manual

POWER SUPPLY ROUTING CIRCUIT

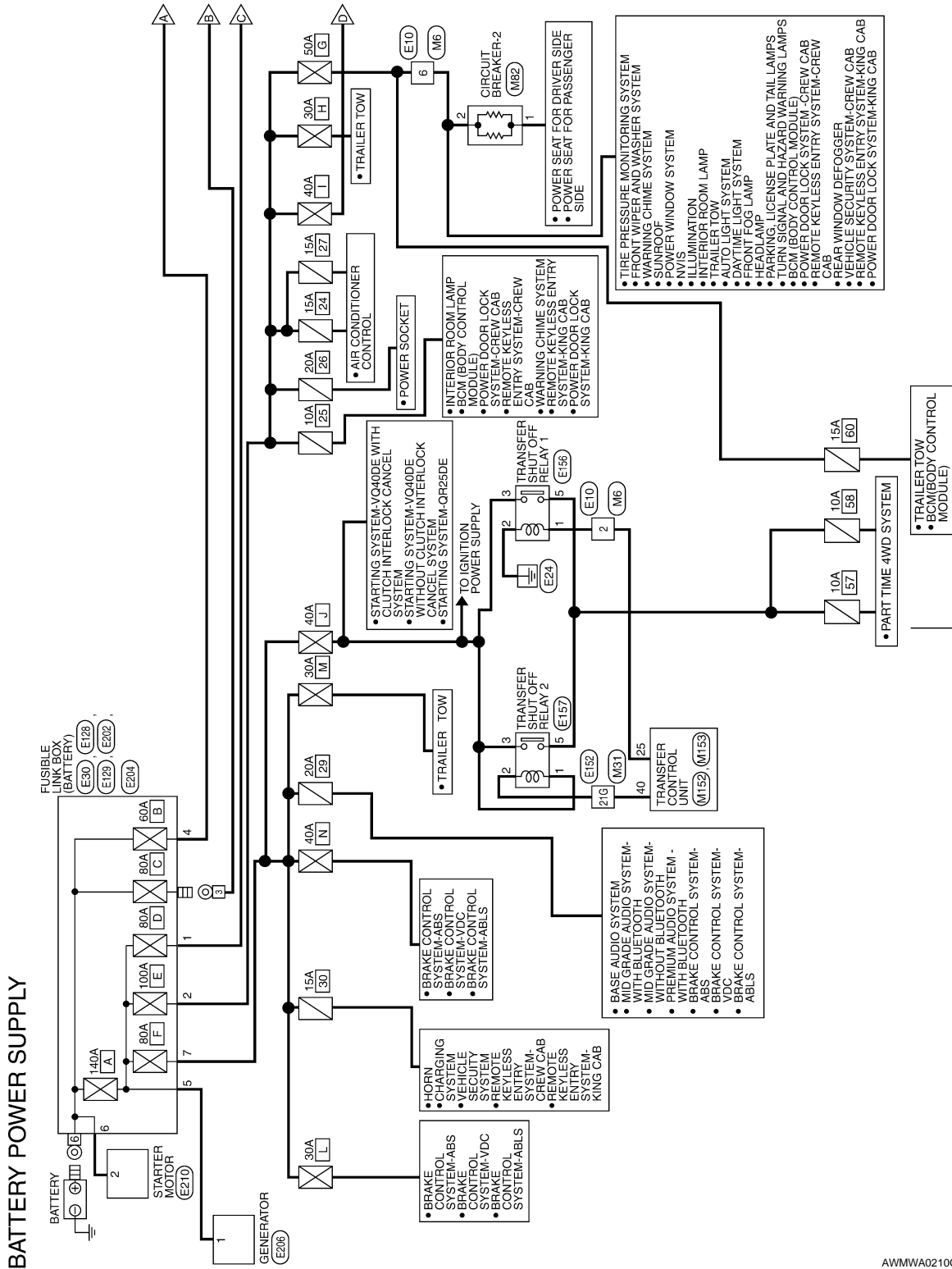
< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY ROUTING CIRCUIT

Wiring Diagram—Battery Power Supply

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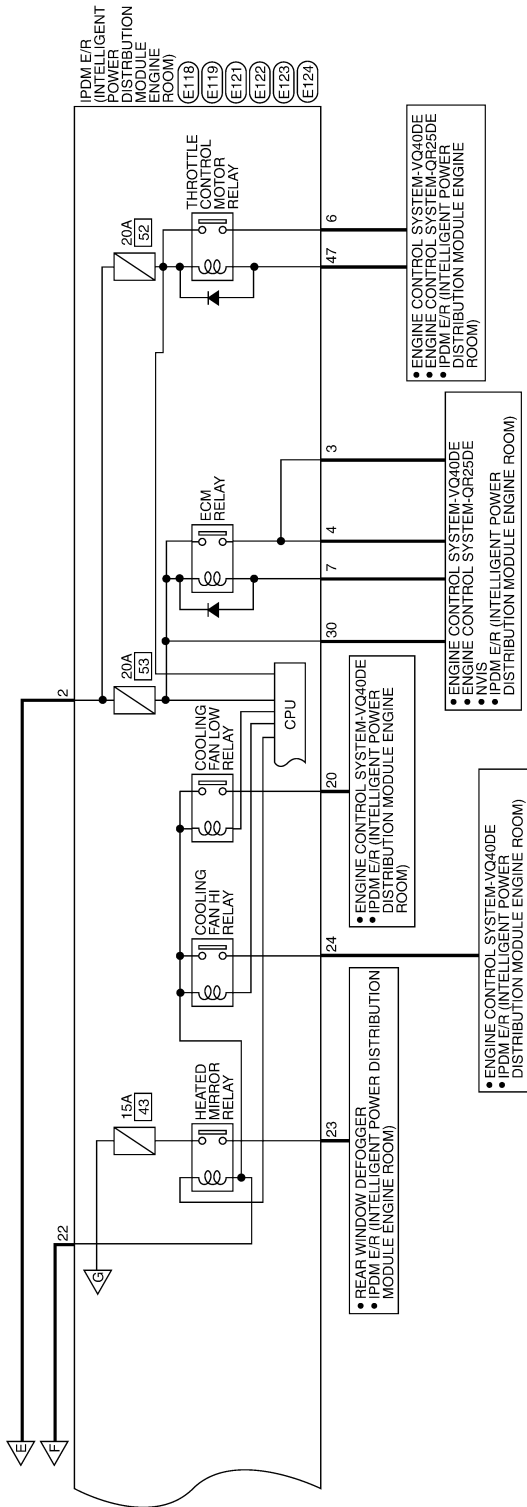


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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >



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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E30
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-



3

Terminal No.	Color of Wire	Signal Name
3	R	-

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3
4	5	6

Terminal No.	Color of Wire	Signal Name
2	W/G	-
6	W	-

Connector No.	M153
Connector Name	TRANSFER CONTROL UNIT
Connector Color	WHITE



32	31	30	29	27					
42	41	40	39	38	37	36	35	34	33
50	49	48	47	46	45	44	43		

Terminal No.	Color of Wire	Signal Name
40	V	SSOF

Connector No.	E120
Connector Name	IPDM E/R(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



21	20	19
24	23	22

Terminal No.	Color of Wire	Signal Name
20	BR	MOTOR FAN1
22	G	F/L M/FAN
23	LG	HEATED MIRROR
24	P	MOTOR FAN2

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



9	8	7	6	5	4	3		
18	17	16	15	14	13	12	11	10

Terminal No.	Color of Wire	Signal Name
3	G	IGN COIL
4	P	ENG SUPPLY
6	V	ETC
7	BR	ECM RLY CONT
10	R/B	DTRL RLY SUPPLY

Connector No.	E118
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



1	2
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Terminal No.	Color of Wire	Signal Name
1	W	F/LUSM
2	R	F/LMAIN


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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >


Connector No.	E123
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



51	50	49
58	55	54
53	52	

Terminal No.	Color of Wire	Signal Name
49	GR	ILLUMINATION
50	W	FR FOG LAMP LH
51	V	FR FOG LAMP RH
52	P	H/LAMP LO LH
54	R	H/LAMP LO RH
55	G	H/LAMP HI LH
56	L	H/LAMP HI RH


Connector No.	E122
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



42	41	40	39	38	37
48	47	46	45	44	43

Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
47	O	ETC RLY CONT

Connector No.	E121
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



28	28	27	26	25
38	35	34	33	32
31	30			

Terminal No.	Color of Wire	Signal Name
28	R	ILLUMINATION
29	G	TRAILER RLY CONT
30	R/B	ECM BAT

Connector No.	E129
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



2	1
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Terminal No.	Color of Wire	Signal Name
1	W	-
2	R	-

Connector No.	E128
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



4	7
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Terminal No.	Color of Wire	Signal Name
4	W	-
7	W	-

Connector No.	E124
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



59	58	57
62	61	60

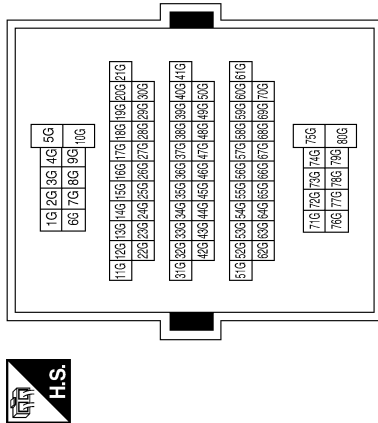
Terminal No.	Color of Wire	Signal Name
57	GR	TAIL LAMP
59	B	GND (POWER)
61	R/B	TRAIL RLY SUPPLY

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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



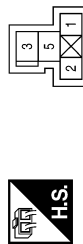
Terminal No.	21G	Color of Wire	V	Signal Name	-
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Connector No.	E156
Connector Name	TRANSFER SHUT OFF RELAY1
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	W/G	-
2	B	-
3	B	-
5	W	-

Connector No.	E157
Connector Name	TRANSFER SHUT OFF RELAY2
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	G	-
2	V	-
3	B	-
5	W	-

Connector No.	E158
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



Terminal No.	1S	Color of Wire	W	Signal Name	-
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Connector No.	E160
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	8Q	Color of Wire	R/B	Signal Name	-
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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E202
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-



5

Terminal No.	5	Color of Wire	B/R	Signal Name	-
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Connector No.	E204
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-



6

Terminal No.	6	Color of Wire	B/R	Signal Name	-
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Connector No.	E206
Connector Name	GENERATOR
Connector Color	-



1

Terminal No.	1	Color of Wire	B/R	Signal Name	B
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Connector No.	E210
Connector Name	STARTER MOTOR
Connector Color	-



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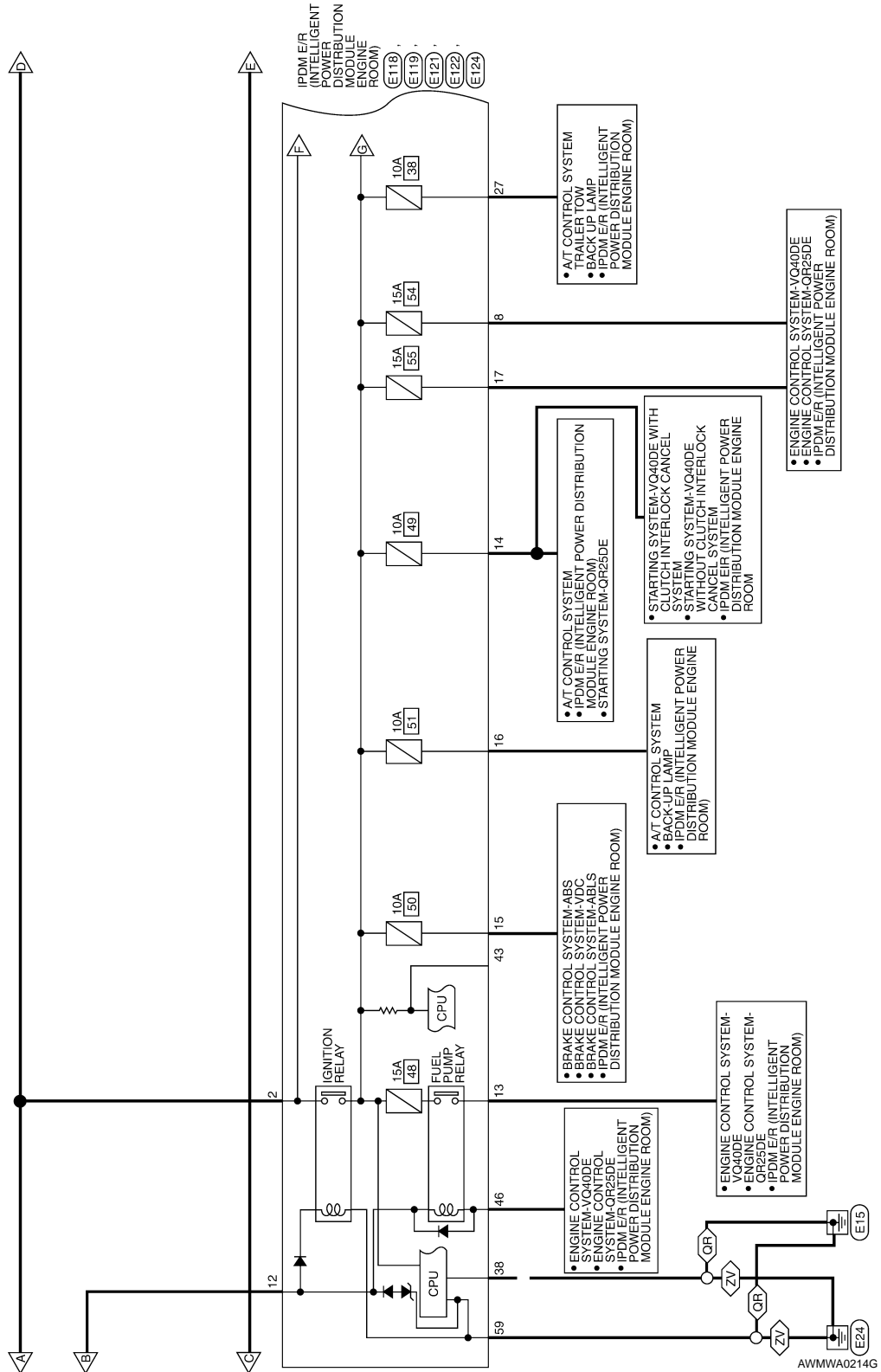
Terminal No.	2	Color of Wire	B/R	Signal Name	-
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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

(OR) : WITH QR25DE
 (ZV) : WITH VQ40DE
 (M) : WITH M/T

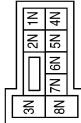


POWER SUPPLY ROUTING CIRCUIT

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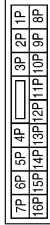
IGNITION POWER SUPPLY CONNECTORS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
5N	W/G	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2P	W/G	-
5P	W/G	-
6P	W/R	-
9P	W/G	-
13P	W/G	-
15P	W/R	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	W/G	-
4	G	-
5	R	-

Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
B	G	-
ST	GR	-
IG1	W/G	-
IG2	R	-

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
2	W/G	-
4	G	-
5	R	-

Connector No.	E118
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	W	F/LUSM
2	R	F/LMAIN

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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E120
Connector Name	IPDM E/R(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

21	20	19
24	23	22



Terminal No.	Color of Wire	Signal Name
19	W	STARTER MTR
21	GR	IGN SW (ST)

Terminal No.	Color of Wire	Signal Name
15	W/R	ABS IGN SUPPLY
16	W/G	REVERSE LAMP
17	W/G	INJECTOR

Connector No.	E119
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

9	8	7	6	5	4	3
18	17	16	15	14	13	12
11	10	9	8	7	6	5



Terminal No.	Color of Wire	Signal Name
8	W/R	O2 SENS
11	Y	A/C COMPRESSOR
12	W/G	IGN SW (IG1)
13	R	FUEL PUMP
14	W/G	A/T ECU IGN SUPPLY

Connector No.	E124
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK

59	58	57
62	61	60



Terminal No.	Color of Wire	Signal Name
59	B	GND (POWER)
60	GR	RR DEF

Connector No.	E122
Connector Name	IPDM E/R(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

42	41	40	39	38	37
48	47	46	45	44	43



Terminal No.	Color of Wire	Signal Name
38	B	GND (SIGNAL)
39	L	CAN-H
40	P	CAN-L
43	G	AUTO STOP SW
46	V	FUEL PUMP RLY CONT
48	R	INHIBIT

Connector No.	E121
Connector Name	IPDM E/R(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

29	28	27	26	25
36	35	34	33	32
31	30			



Terminal No.	Color of Wire	Signal Name
27	W	T TOW REV LAMP
32	GR	FR WIPER LO
35	L	FR WIPER HI

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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E160
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1Q	W/G	-
2Q	R	-
5Q	W/R	-

Connector No.	E159
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1R	W/B	-
2R	GR	-

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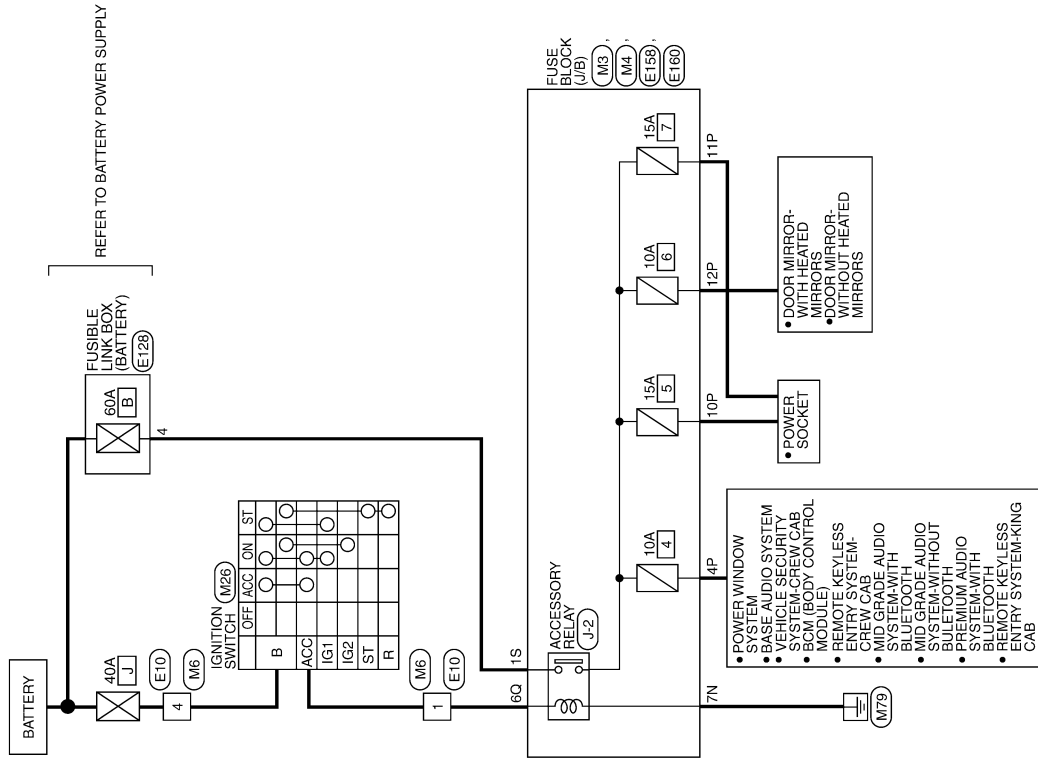
POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Wiring Diagram—Accessory Power Supply

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ACCESSORY POWER SUPPLY



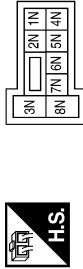
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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

ACCESSORY POWER SUPPLY CONNECTORS

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7N	B	-

Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4P	G/B	-
10P	G/Y	-
11P	G/B	-
12P	G/Y	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G/Y	-
4	G	-

Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
B	G	-
ACC	G/Y	-

Connector No.	E10
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	G/Y	-
4	G	-

Connector No.	E128
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

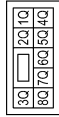


Terminal No.	Color of Wire	Signal Name
4	W	-

POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E160
Connector Name	FUSE BLOCK(J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6Q	G/Y	-

Connector No.	E158
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1S	W	-

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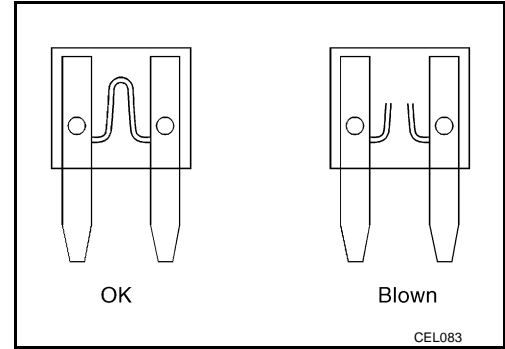
POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Fuse

INFOID:000000003110968

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



Fusible Link

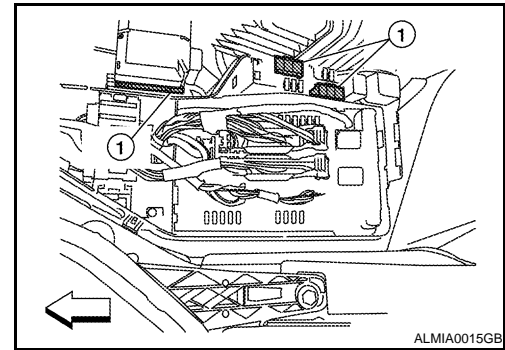
INFOID:000000003110969

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.

1 : Fusible link

CAUTION:

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



GROUND

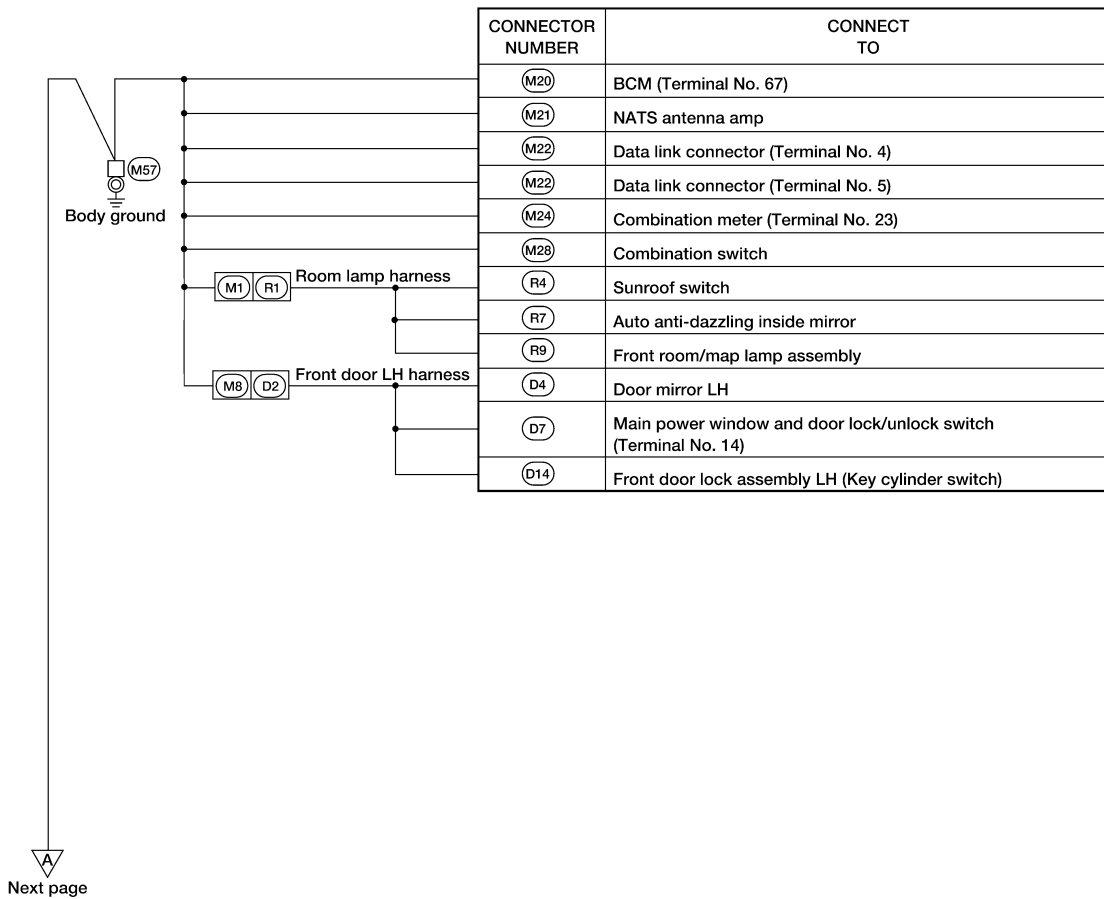
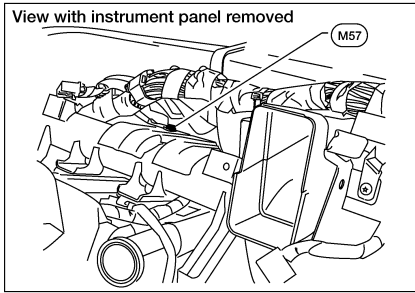
< COMPONENT DIAGNOSIS >

GROUND

Ground Distribution

INFOID:000000003110970

MAIN HARNESS

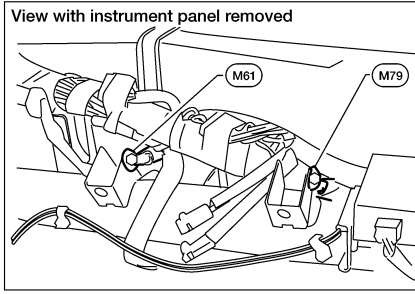


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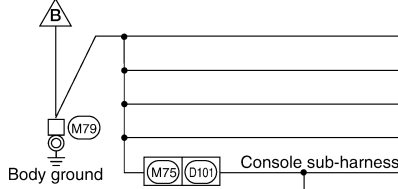
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GROUND

< COMPONENT DIAGNOSIS >



Preceding page



CONNECTOR NUMBER	CONNECT TO
M53	Lower front power socket
M54	Upper front socket
M59	Glove box lamp
M76	Electric brake (Pre-wiring)
D105	Power window and door lock/unlock switch RH
D107	Door mirror RH

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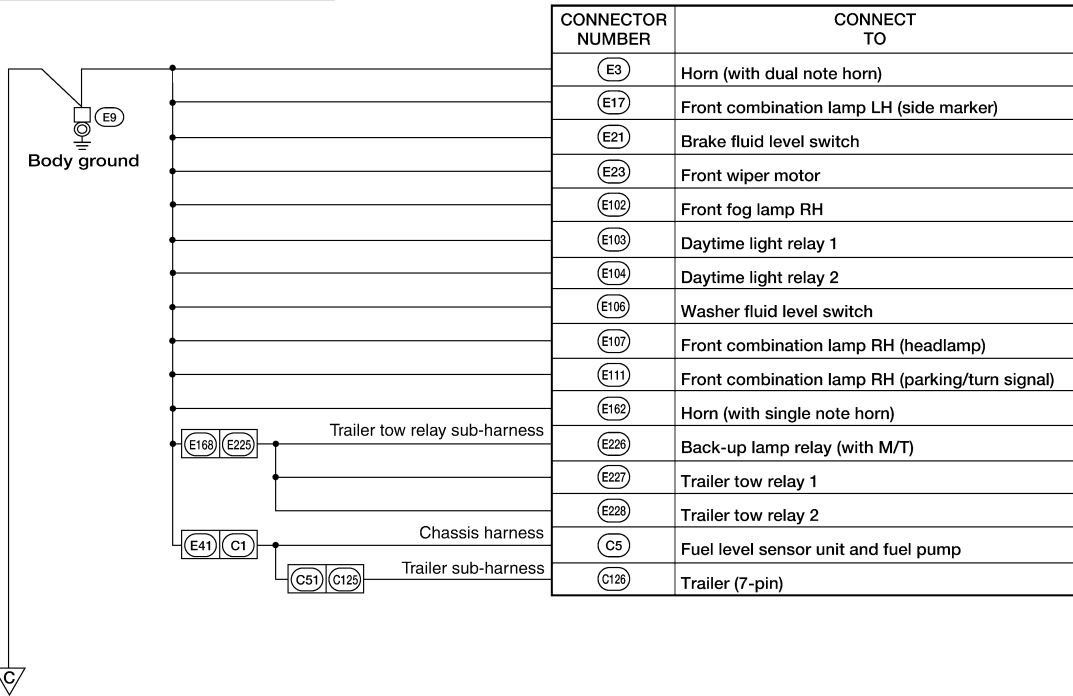
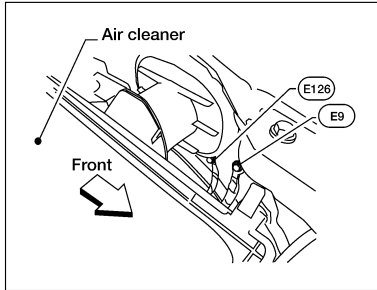
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GROUND

< COMPONENT DIAGNOSIS >

ENGINE ROOM HARNESS

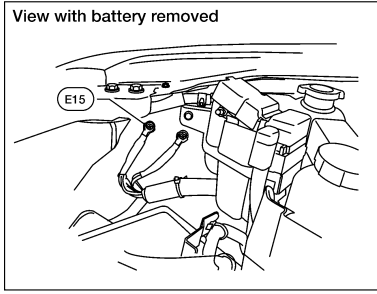


CONNECTOR NUMBER	CONNECT TO
(E3)	Horn (with dual note horn)
(E17)	Front combination lamp LH (side marker)
(E21)	Brake fluid level switch
(E23)	Front wiper motor
(E102)	Front fog lamp RH
(E103)	Daytime light relay 1
(E104)	Daytime light relay 2
(E106)	Washer fluid level switch
(E107)	Front combination lamp RH (headlamp)
(E111)	Front combination lamp RH (parking/turn signal)
(E162)	Horn (with single note horn)
(E226)	Back-up lamp relay (with M/T)
(E227)	Trailer tow relay 1
(E228)	Trailer tow relay 2
(C5)	Fuel level sensor unit and fuel pump
(C126)	Trailer (7-pin)

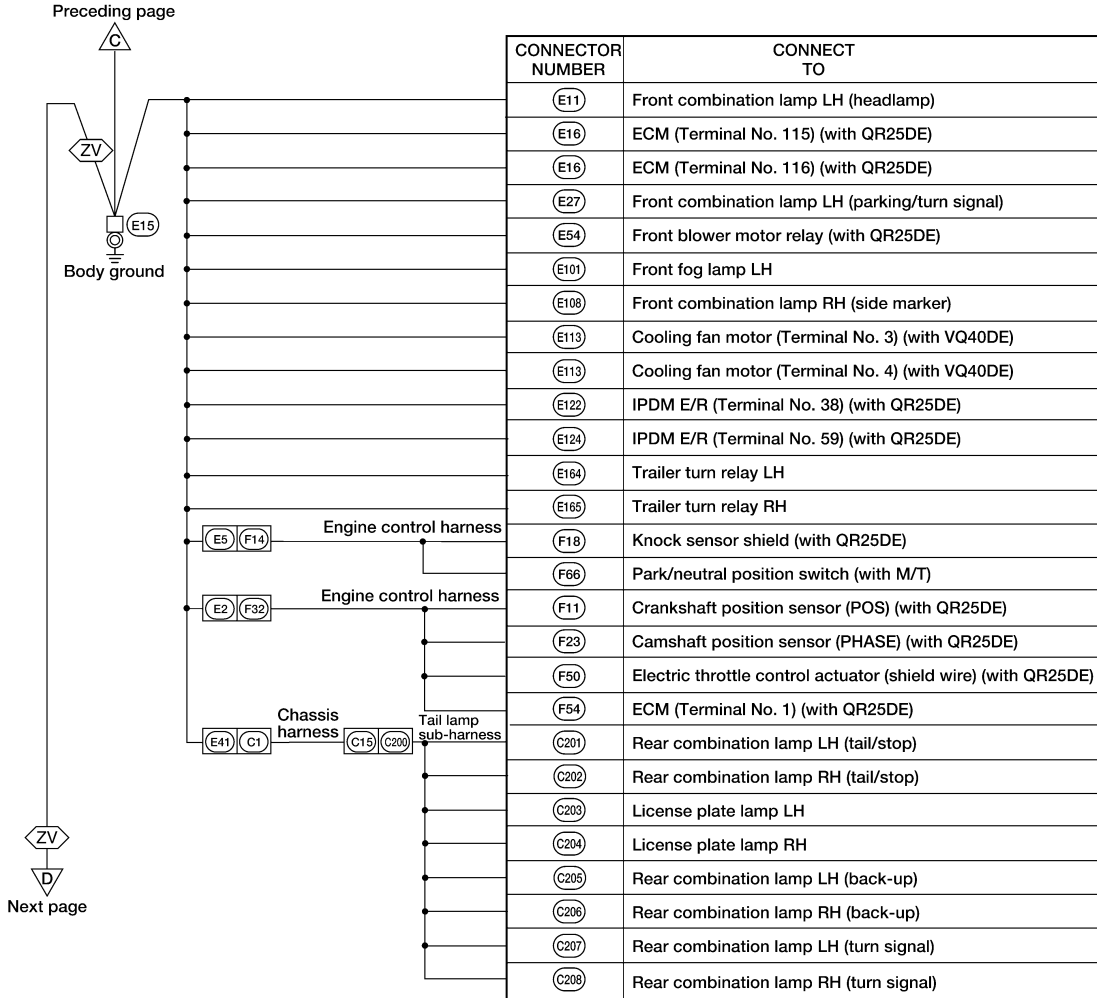
Next page

GROUND

< COMPONENT DIAGNOSIS >



: WITH VQ40DE



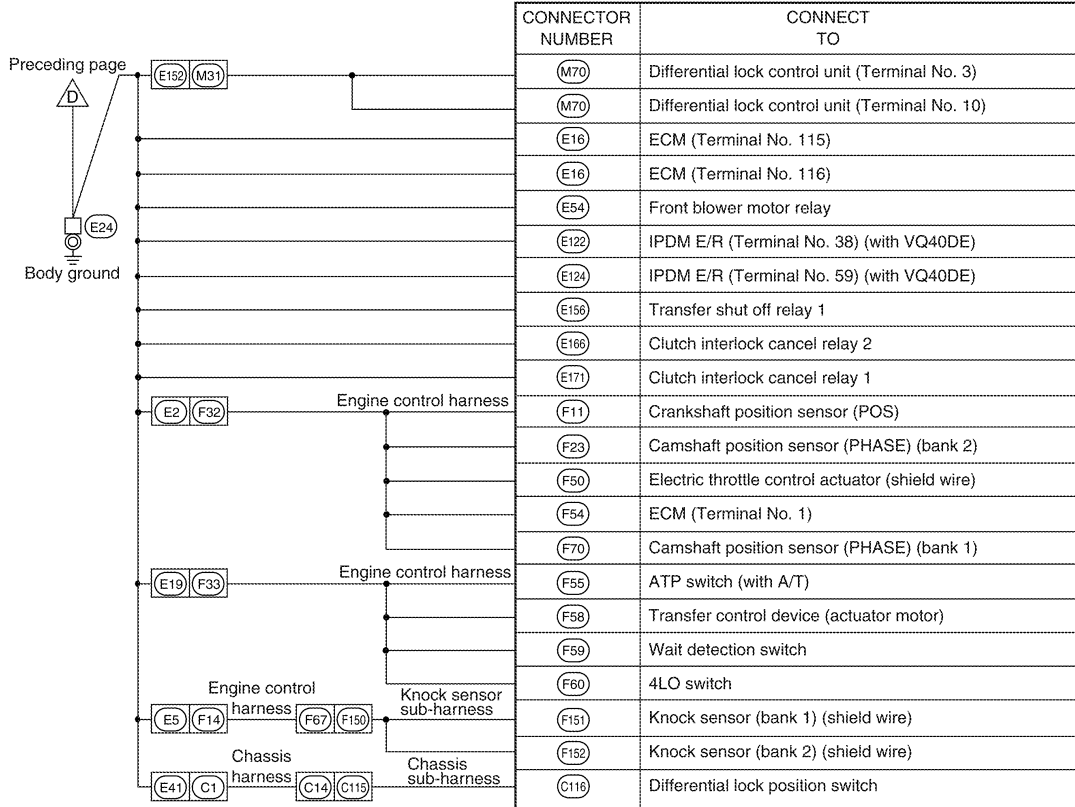
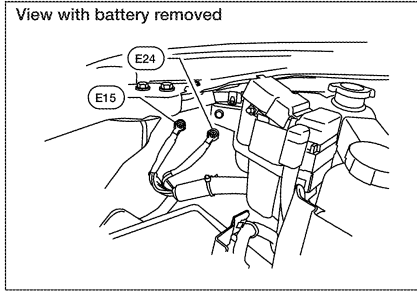
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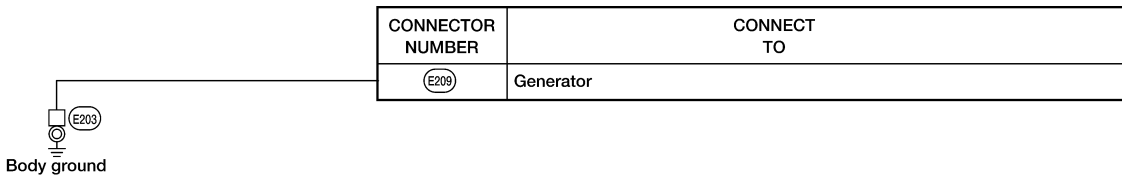
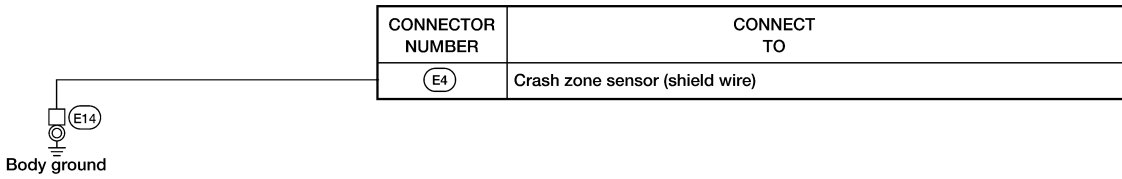
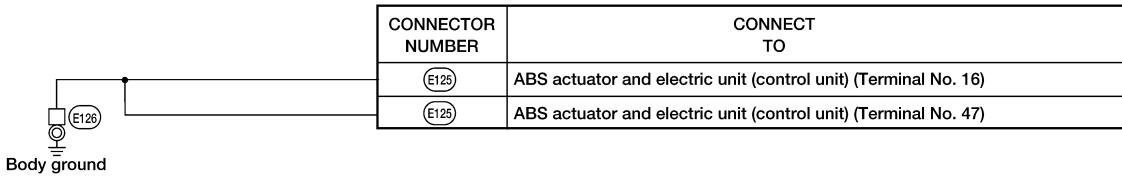
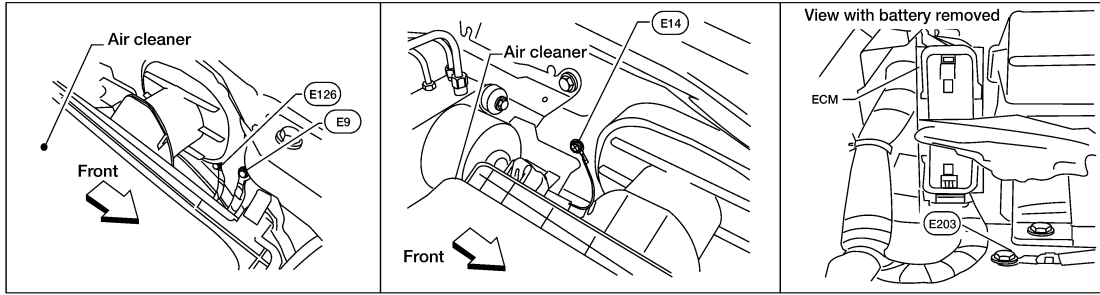
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GROUND

< COMPONENT DIAGNOSIS >



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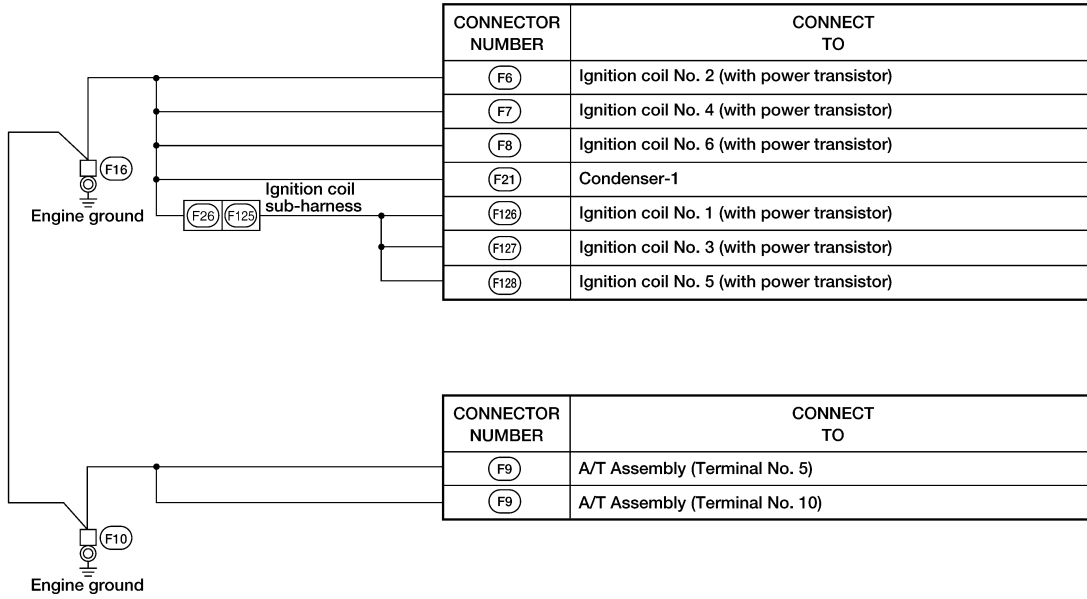
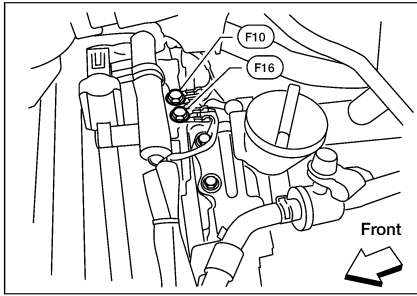
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< COMPONENT DIAGNOSIS >

ENGINE CONTROL HARNESS (VQ40DE MODELS)

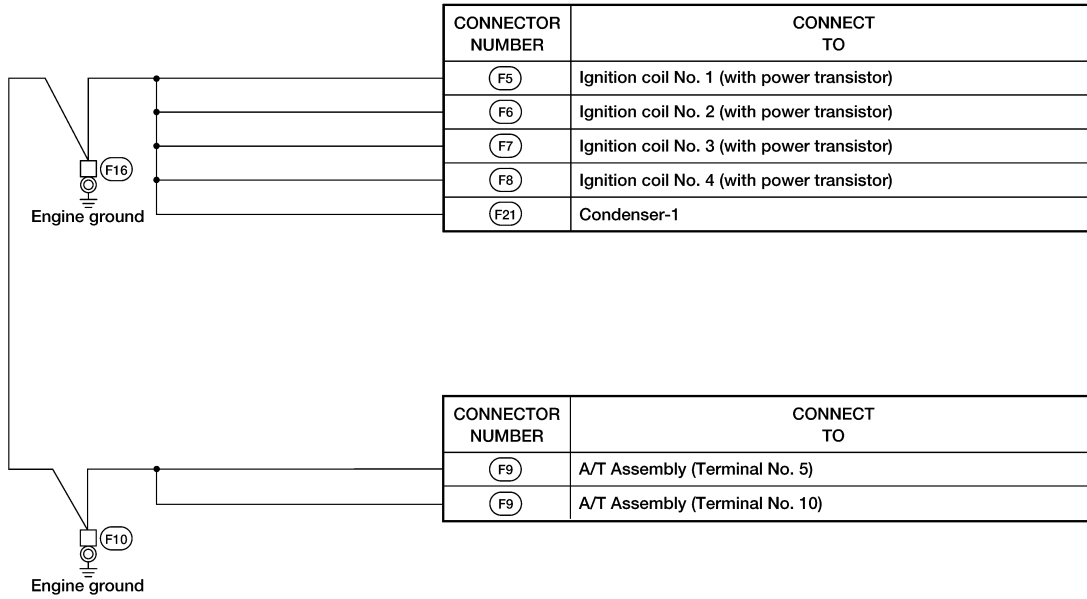
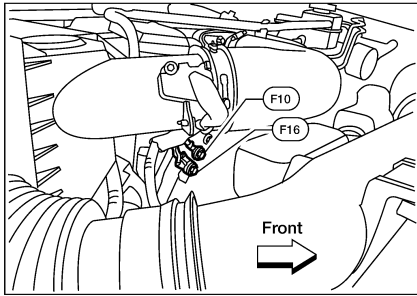


WKIA5876E

GROUND

< COMPONENT DIAGNOSIS >

ENGINE CONTROL HARNESS (QR25DE MODELS)



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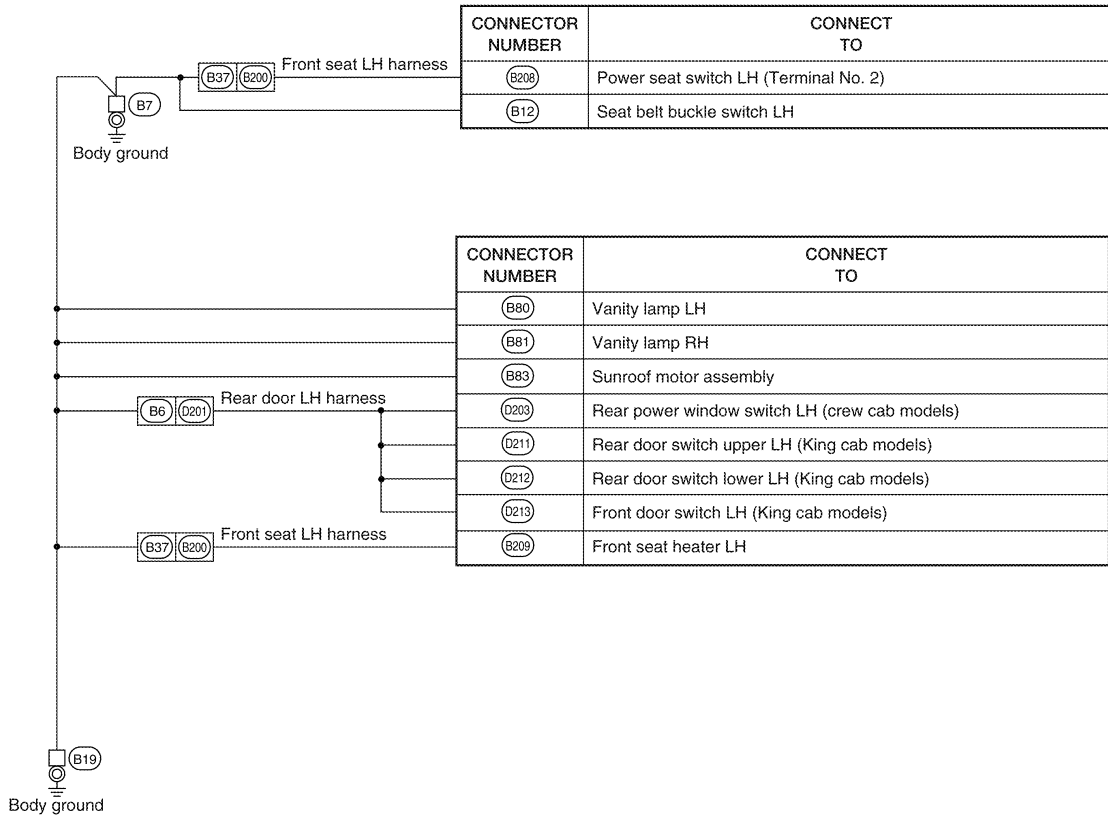
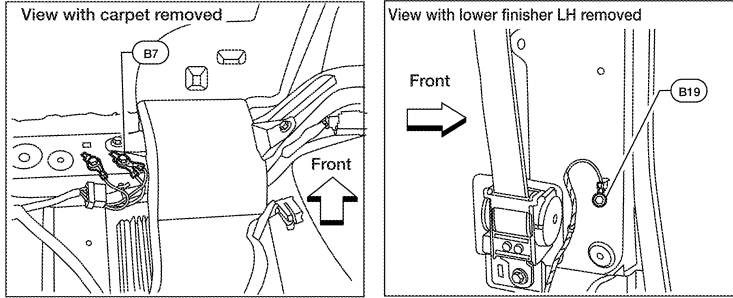
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GROUND

< COMPONENT DIAGNOSIS >

BODY HARNESS

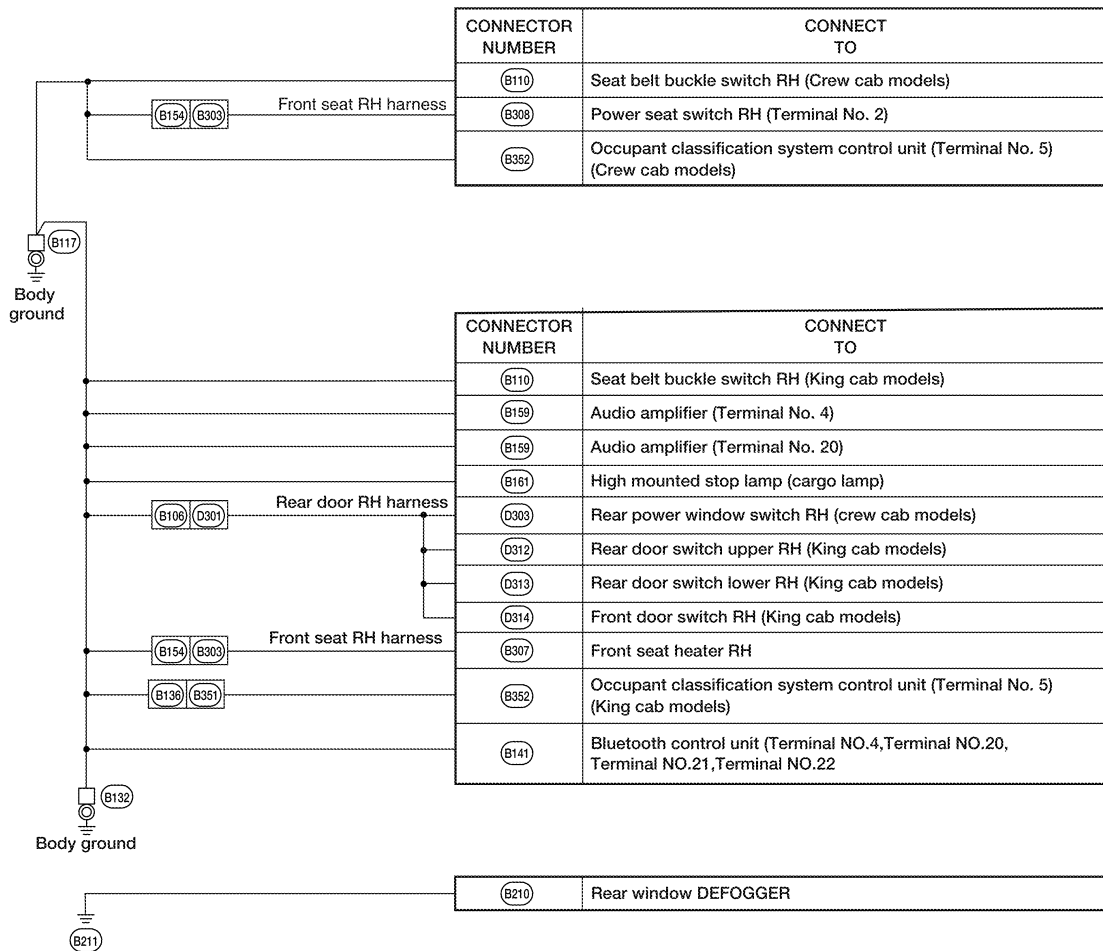
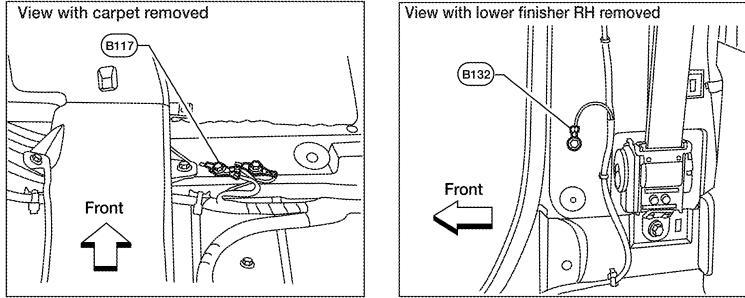


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GROUND

< COMPONENT DIAGNOSIS >

BODY NO. 2 HARNESS



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HARNESS

< COMPONENT DIAGNOSIS >

HARNESS

Harness Layout

INFOID:000000003296914

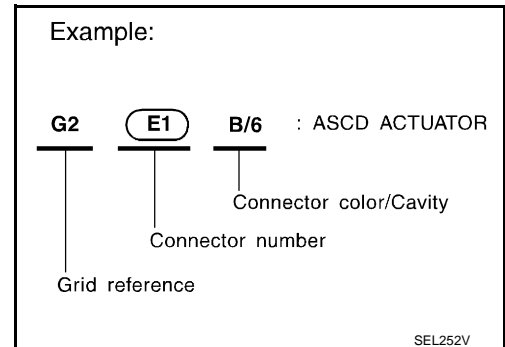
HOW TO READ HARNESS LAYOUT

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

- Main Harness and Console Sub-harness
- Engine Room Harness (RH View) Engine Compartment, Generator Sub-harness and Trailer Tow Harness
- Engine Room Harness (Passenger Compartment)
- Engine Room Harness (LH View) Engine Compartment
- Engine Control Harness (QR25DE Models) and Injector Sub-harness
- Engine Control Harness (VQ40DE Models), Injector Sub-harness, Ignition Coil Sub-harness and Knock Sensor Sub-harness
- Chassis Harness, Differential Lock Sub-harness, Trailer Sub-harness and Tail Lamp Sub-harness
- Body Harness (King Cab Models)
- Body Harness (Crew Cab Models)
- Body No. 2 Harness (King Cab Models)
- Body No. 2 Harness (Crew Cab Models)
- Room Lamp Harness

To use the grid reference

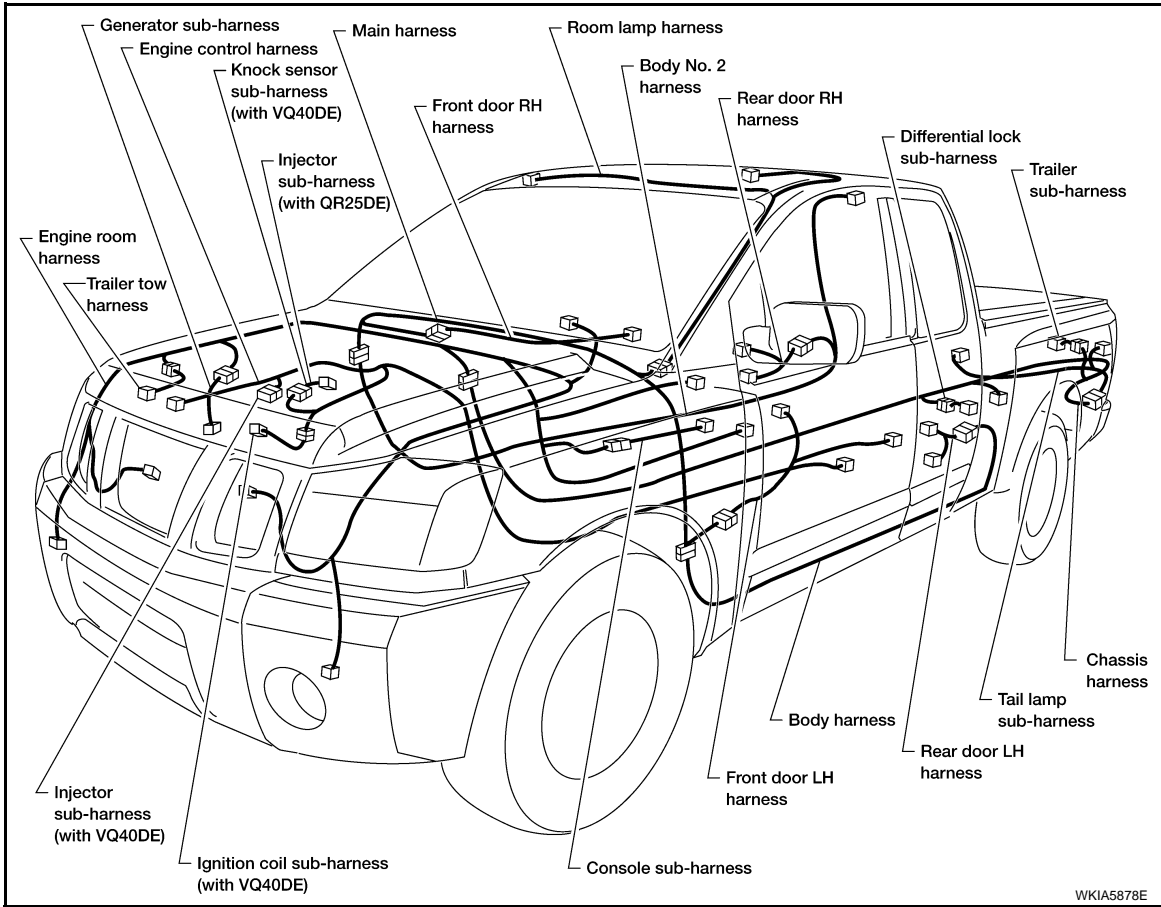
1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the drawing, find the crossing of the grid reference letter column and number row.
4. Find the connector number in the crossing zone.
5. Follow the line to the connector.



HARNESS

< COMPONENT DIAGNOSIS >

OUTLINE (KING CAB MODELS)



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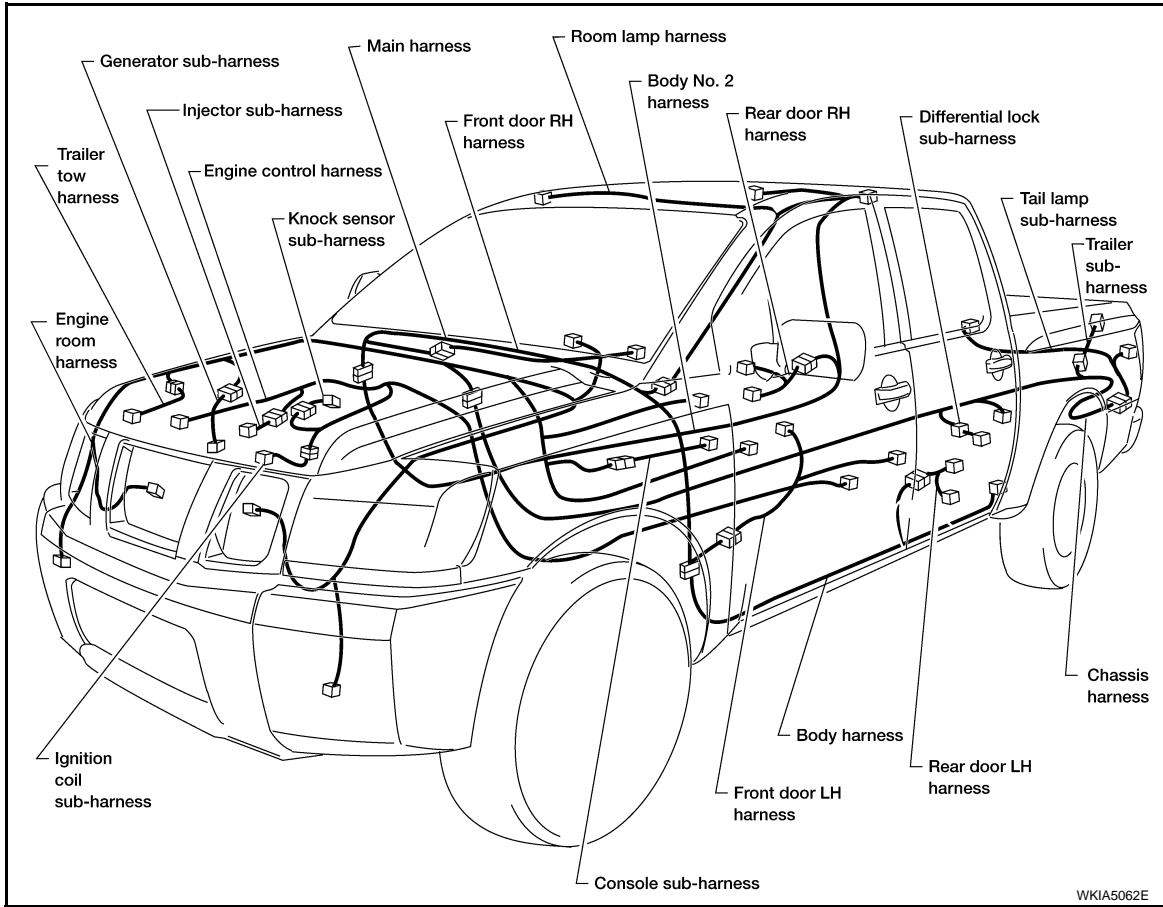
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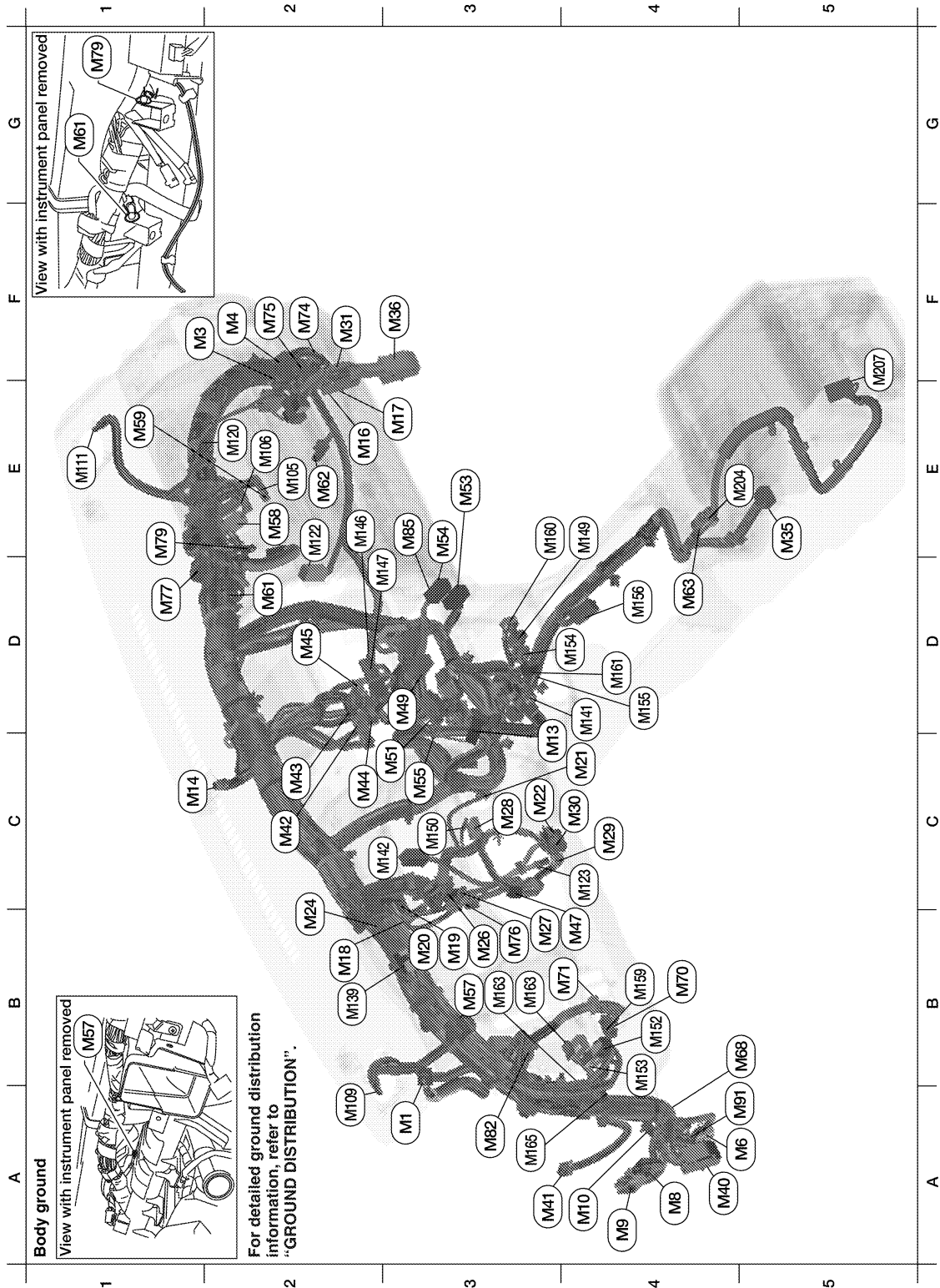
OUTLINE (CREW CAB MODELS)



HARNESS

< COMPONENT DIAGNOSIS >

MAIN HARNESS



AWMIA0451GB

A3	M1	W/24	: To R1	B5	M68	V/1	: To M250
F1	M3	W/8	: Fuse block (J/B)	B4	M70	W/26	: Differential lock control unit
F2	M4	W/16	: Fuse block (J/B)	B4	M71	W/6	: Cargo lamp switch
A5	M6	W/6	: To E10	F2	M74	W/16	: To D102
A4	M8	BR/12	: To D2	F2	M75	W/12	: To D101

HARNESS

< COMPONENT DIAGNOSIS >

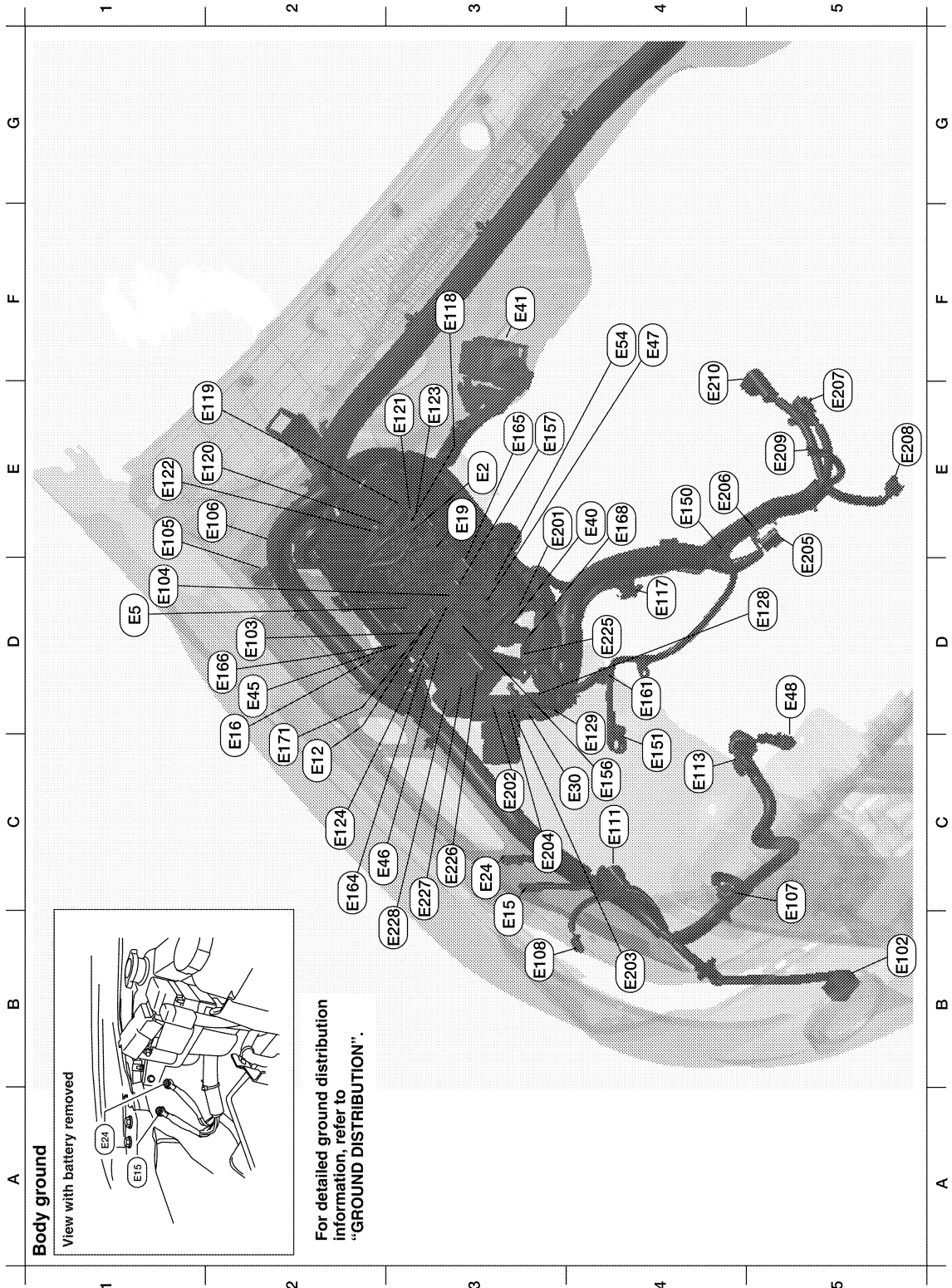
A4	M9	W/24	: To D1	B3	M76	W/6	: Electric brake (pre-wiring)
A4	M10	Y/4	: To E29	D1	M77	Y/4	: Front passenger air bag module (service replacement)
C3	M13	BR/3	: Front passenger air bag OFF indicator	E1	M79	—	: Body ground
C1	M14	B/4	: Optical sensor	A3	M82	W/2	: Circuit breaker-2
E2	M16	W/12	: To B162	E3	M85	W/4	: Aux in jack
E3	M17	W/16	: To B163	A4	M91	W/16	: To E26
B2	M18	W/40	: BCM (body control module)	E2	M105	Y/2	: Front passenger air bag module
B3	M19	W/15	: BCM (body control module)	E2	M106	O/2	: Front passenger air bag module
B3	M20	B/15	: BCM (body control module)	A2	M109	BR/2	: Front tweeter LH
C4	M21	W/4	: NATS antenna amp.	E1	M111	BR/2	: Front tweeter RH
C3	M22	W/16	: Data link connector	E2	M120	W/4	: Remote keyless entry receiver
B2	M24	W/40	: Combination meter	E2	M122	B/4	: Front blower motor resistor
B3	M26	W/6	: Ignition switch	C4	M123	W/2	: Tire pressure warning check connector
B3	M27	W/2	: Key switch	B4	M129	V/1	: Satellite radio tuner (with XM satellite radio tuner)
C3	M28	W/16	: Combination switch	B2	M139	B/2	: Doide-6
C4	M29	Y/6	: Combination switch (spiral cable)	D4	M141	GR/8	: 4WD shift switch
C4	M30	GR/8	: Combination switch (spiral cable)	C3	M142	B/6	: Mode door motor
F2	M31	W/80	: To E152	E2	M146	B/2	: Intake sensor
E5	M35	Y/28	: Air bag diagnosis sensor unit	D2	M147	B/6	: Air mix door motor front
F3	M36	W/80	: To B149	E4	M149	W/6	: Differential lock mode switch
A4	M40	W/80	: To B69	C3	M150	B/2	: Ignition keyhole illumination (without power door locks)
A3	M41	W/16	: Pre-wiring for satellite radio tuner	C3	M150	W/2	: Ignition keyhole illumination (with power door locks)
A3	M41	W/16	: Satellite radio tuner	B4	M152	W/26	: Transfer case control unit
C2	M42	W/12	: Audio unit	B4	M153	W/24	: Transfer case control unit
C2	M43	W/10	: Audio unit	D4	M154	GR/6	: VDC off switch
C2	M44	W/6	: Audio unit	D4	M155	W/8	: HDC switch
D2	M45	W/16	: Audio unit	D4	M156	W/10	: A/T device
B4	M47	W/8	: Steering angle sensor	B4	M159	W/16	: Door mirror remote control switch
D3	M49	B/26	: Front air control	E3	M160	BR/6	: Front heated seat switch RH
C3	M51	W/8	: Front blower switch	D4	M161	W/6	: Front heated seat switch LH
E3	M53	B/3	: Lower front power socket	B3	M163	W/8	: Clutch interlock cancel switch
E3	M54	GR/3	: Upper front power socket	A3	M165	L/4	: Cargo lamp relay
C3	M55	W/4	: Hazard switch	Console sub-harness			
B3	M57	—	: Body ground	E5	M204	W/6	: To M63
E2	M58	B/6	: Intake door motor	F5	M207	B/2	: Console power socket
E1	M59	BR/2	: Glove box lamp				
D2	M61	—	: Body ground				
E2	M62	B/2	: Front blower motor				
D4	M63	W/6	: To M204				

ENGINE ROOM HARNESS (RH VIEW)

HARNESS

< COMPONENT DIAGNOSIS >

Engine Compartment



Refer to "ENGINE ROOM HARNESS (LH VIEW)" for continuation of engine room harness.

AWMIA0452GB

E3	E2	W/16	: To F32	C4	E156	L/4	: Transfer shut off relay 1
D1	E5	W/24	: To F14	E3	E157	L/4	: Transfer shut off relay 2
C2	E12	L/4	: Stop lamp relay	C3	E161	B/3	: Battery current sensor
B3	E15	—	: Body ground	C2	E164	L/4	: Trailer turn relay LH
D2	E16	B/40	: ECM	E3	E165	L/4	: Trailer turn relay RH

HARNESS

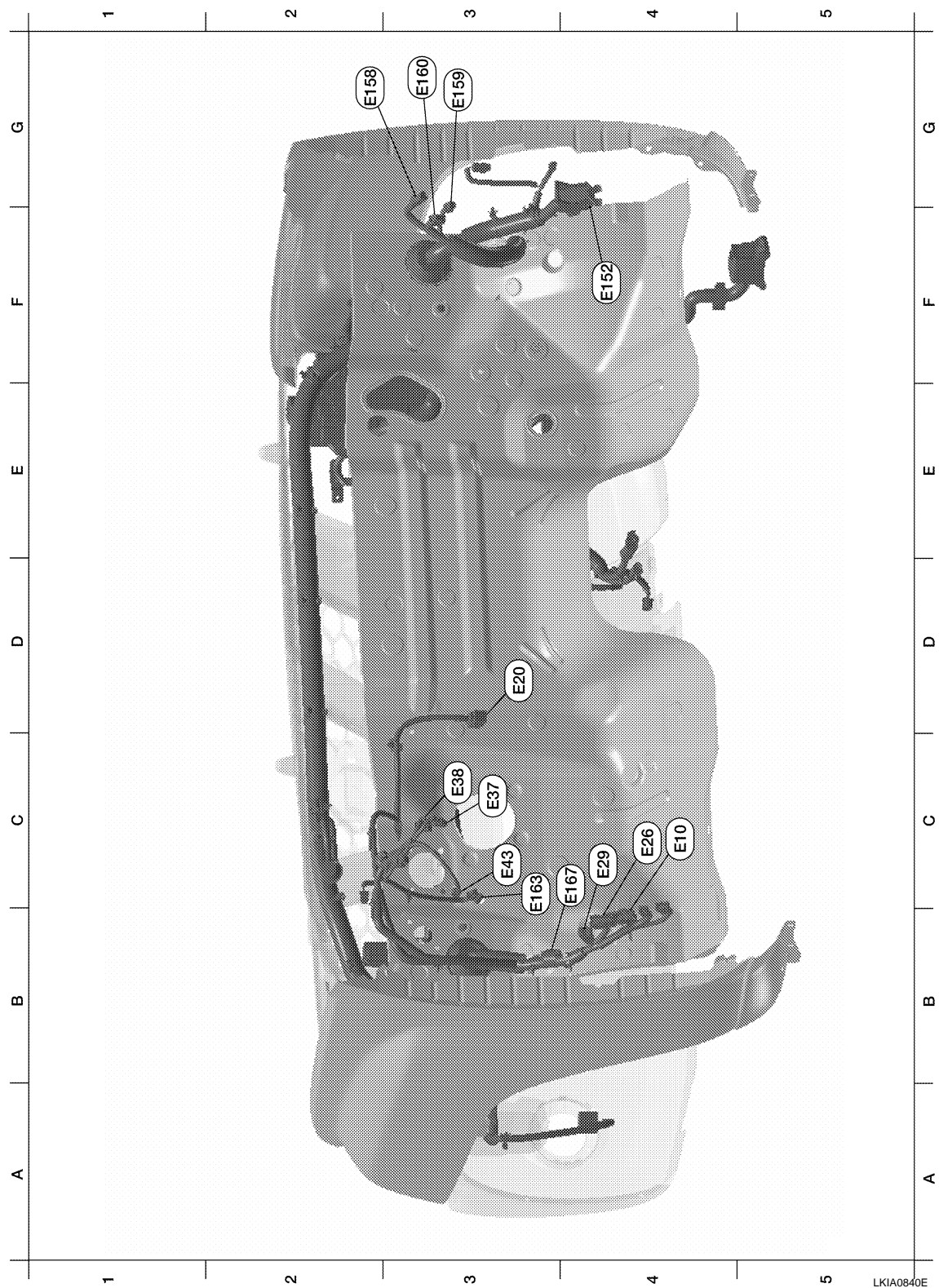
< COMPONENT DIAGNOSIS >

E4	E19	W/16	: To F33	D2	E166	BR/6	: Clutch interlock cancel relay 2 (with M/T)
C3	E24	—	: Body ground	E4	E168	W/12	: To E225
C3	E30	—	: Fusible link box (battery)	C2	E171	B/5	Clutch interlock cancel relay 1
E4	E40	GR/9	: To E201	Generator sub-harness			
F3	E41	B/48	: To C1 (located RH rear of engine compartment)	E3	E201	GR/9	: To E40
C2	E45	BR/6	: Back-up lamp relay	C3	E202	—	: Fusible link box (battery)
C3	E46	B/5	: Transfer shift high relay	B4	E203	—	: Body ground
F4	E47	B/5	: Transfer shift low relay	C3	E204	—	: Generator
D5	E48	B/3	: Refrigerant pressure sensor	E6	E205	B/3	: Generator
F4	E54	BR/6	: Front blower motor relay	E4	E206	B/1	: Generator
B5	E102	B/2	: Front fog lamp RH	F5	E207	GR/1	: Starter motor
C2	E103	B/5	: Daytime light relay 1	E4	E208	GR/1	: Oil pressure switch
D1	E104	L/4	: Daytime light relay 2	E5	E209	B/1	: Generator
E1	E105	B/2	: Front washer motor	E4	E210	B/1	: Starter motor
E2	E106	BR/2	: Washer fluid level switch	Trailer tow harness			
C5	E107	B/3	: Front combination lamp RH (head lamp)	D4	E225	W/12	: To E168
B3	E108	GR/2	: Front combination lamp RH (side marker)	C3	E226	L/4	: Back-up lamp relay
C4	E111	GR/3	: Front combination lamp RH	C3	E227	L/4	: Trailer tow relay 1
C4	E113	GR/4	: Cooling fan motor	B3	E228	BR/6	: Trailer tow relay 2
D4	E117	GR/2	: Front wheel sensor RH				
F2	E118	B/2	: IPDM E/R (intelligent power distribution module engine room)				
E1	E119	W/16	: IPDM E/R (intelligent power distribution module engine room)				
E1	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)				
E3	E121	BR/12	: IPDM E/R (intelligent power distribution module engine room)				
E1	E122	W/12	: IPDM E/R (intelligent power distribution module engine room)				
E3	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)				
C2	E124	B/6	: IPDM E/R (intelligent power distribution module engine room)				
D5	E128	GR/2	: Fusible link box (battery)				
D4	E129	BR/2	: Fusible link box (battery)				
E4	E150	—	: Battery ground				
C4	E151	—	: Negative battery cable				

HARNESS

< COMPONENT DIAGNOSIS >

Passenger Compartment



LKIA0840E

C4	E10	W/10	: To M6	C3	E43	L/2	: ASCD clutch switch
D3	E20	B/6	: Accelerator pedal position (APP) sensor	F4	E152	W/80	: To M31
C4	E26	W/16	: To M91	G2	E158	B/1	: Fuse block (J/B)
C4	E29	Y/4	: To M10	G3	E159	B/2	: Fuse block (J/B)
C3	E37	BR/2	: ASCD brake switch	G3	E160	W/8	: Fuse block (J/B)

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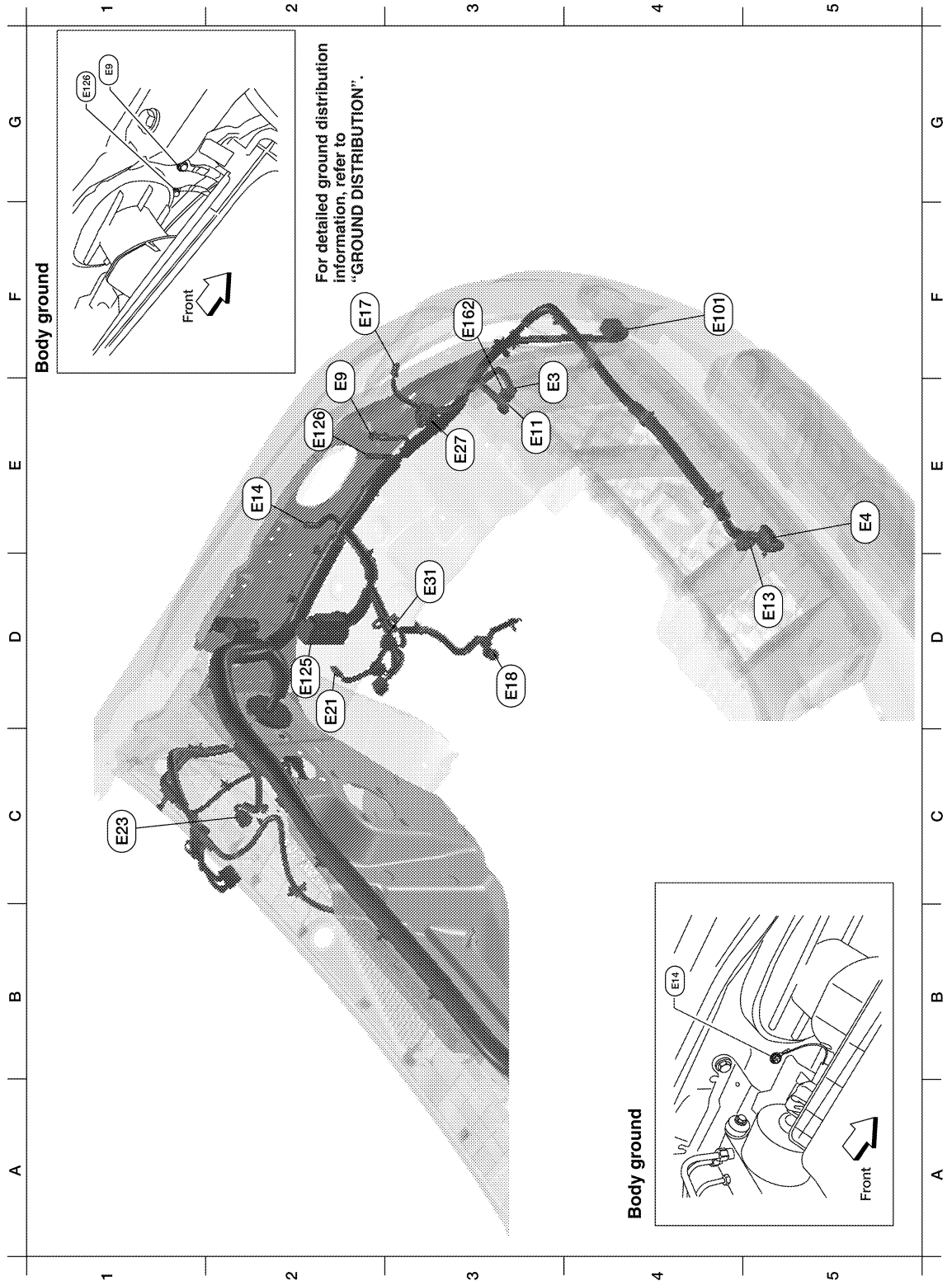
HARNESS

< COMPONENT DIAGNOSIS >

C3	E38	W/4	: Stop lamp switch (with A/T)	C3	E163	L/2	: Clutch interlock switch
C3	E38	B/2	: Stop lamp switch (with M/T)	C4	E167	B/2	: Diode-3

ENGINE ROOM HARNESS (LH VIEW)

Engine Compartment



Refer to "ENGINE ROOM HARNESS (RH VIEW)" for continuation of engine room harness.

AWMIA0453GB

HARNESS

< COMPONENT DIAGNOSIS >

E3	E3	B/1	: Horn (with single note horn)	D2	E21	GR/2	: Brake fluid level switch	A
E3	E3	B/2	: Horn (with dual note horn)	C1	E23	GR/5	: Front wiper motor	
E5	E4	Y/2	: Crash zone sensor	E3	E27	GR/3	: Front combination lamp LH	B
F2	E9	—	: Body ground	D3	E31	B/3	: Front pressure sensor	
E3	E11	B/3	: Front combination lamp LH (headlamp)	F4	E101	B/2	: Front fog lamp LH	
D5	E13	GR/2	: Ambient sensor 2	D2	E125	B/47	: ABS actuator and electric unit (control unit)	C
E2	E14	—	: Body ground	E2	E126	—	: Body ground	
F2	E17	GR/2	: Front combination lamp LH (side marker)	F3	E162	B/1	: Horn (with dual note horn)	D
D3	E18	GR/2	: Front wheel sensor LH					

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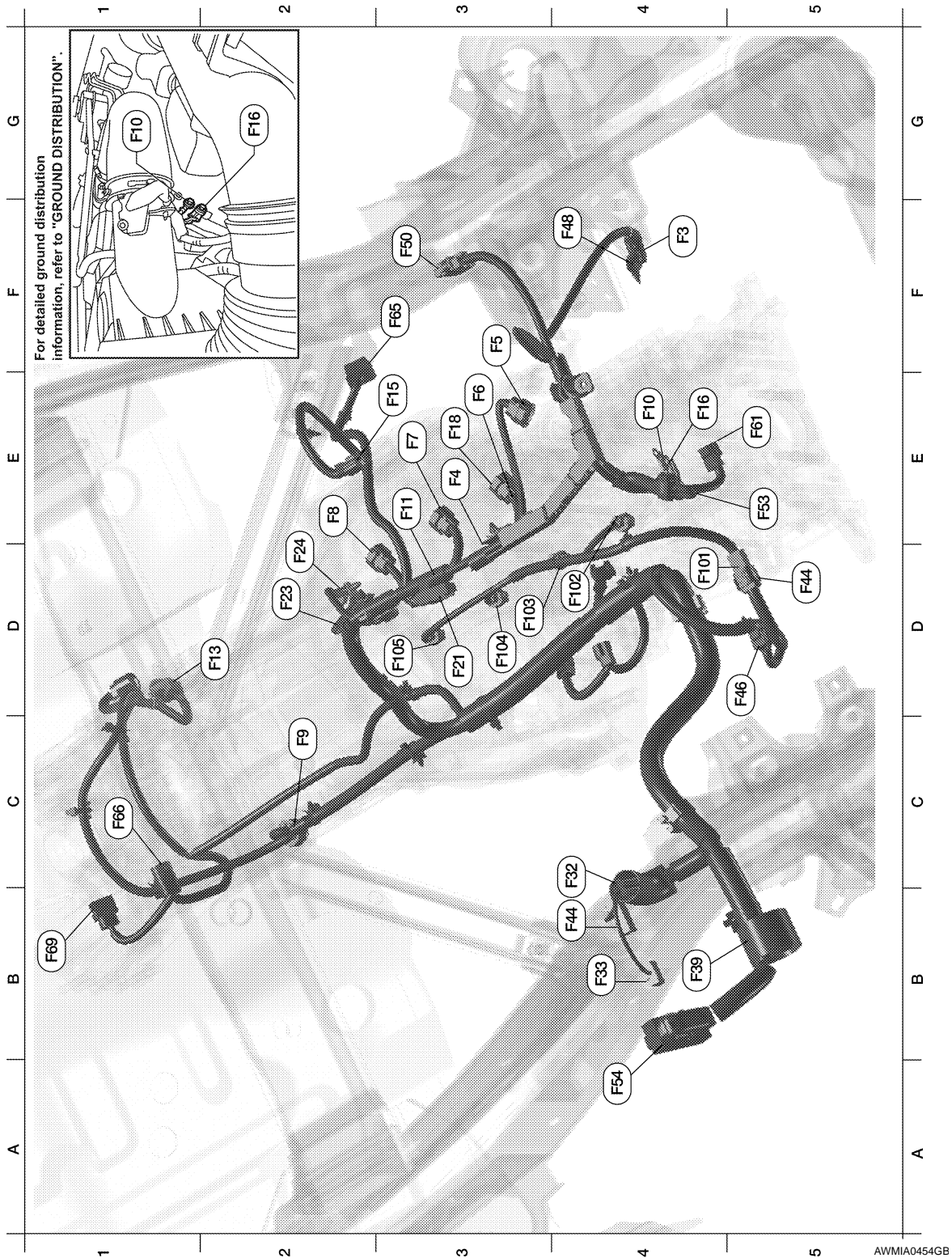
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HARNESS

< COMPONENT DIAGNOSIS >

ENGINE CONTROL HARNESS (QR25DE MODELS)



F4	F3	B/1	: A/C Compressor	B4	F33	W/6	: To E19
E3	F4	GR/1	: Oil pressure switch	B4	F39	—	: Fusible link box (battery)
E3	F5	GR/3	: Ignition coil No. 1 (with power transistor)	D5	F44	B/6	: To F101
E3	F6	GR/3	: Ignition coil No. 2 (with power transistor)	C5	F46	B/2	: Power steering pressure sensor

HARNESS

< COMPONENT DIAGNOSIS >

D3	F7	GR/3	: Ignition coil No. 3 (with power transistor)	F4	F48	G/3	: Refrigerant pressure sensor	A
E3	F8	GR/3	: Ignition coil No. 4 (with power transistor)	F3	F50	B/6	: Electric throttle control actuator	B
C2	F9	G/10	: A/T assembly	E5	F53	B/6	: Mass air flow sensor	C
C4	F10	—	: Engine ground	A4	F54	B/81	: ECM	D
E3	F11	B/3	: Crankshaft position sensor (POS)	E5	F61	GR/2	: Intake valve timing control solenoid valve	E
D2	F13	G/4	: Heated oxygen sensor 2	F3	F65	GR/6	: Air fuel ratio (A/F) sensor	F
B4	F14	W/24	: To E5	C1	F66	B/2	: Park/neutral position (PNP) switch	G
E3	F15	L/2	: EVAP canister purge volume control solenoid valve	B1	F69	W/2	: Back-up lamp switch	H
E4	F16	—	: Engine ground	Injector sub-harness				I
E3	F18	L/2	: Knock sensor	D4	F101	B/6	: To F44	J
D2	F21	W/2	: Condenser-1	D4	F102	GR/2	: Fuel injector No. 1	K
D2	F23	B/3	: Camshaft position sensor (PHASE)	D3	F103	GR/2	: Fuel injector No. 2	L
D2	F24	GR/2	: Engine coolant temperature sensor	D3	F104	GR/2	: Fuel injector No. 3	
B4	F32	W/16	: To E2	D3	F105	GR/2	: Fuel injector No. 4	

PG

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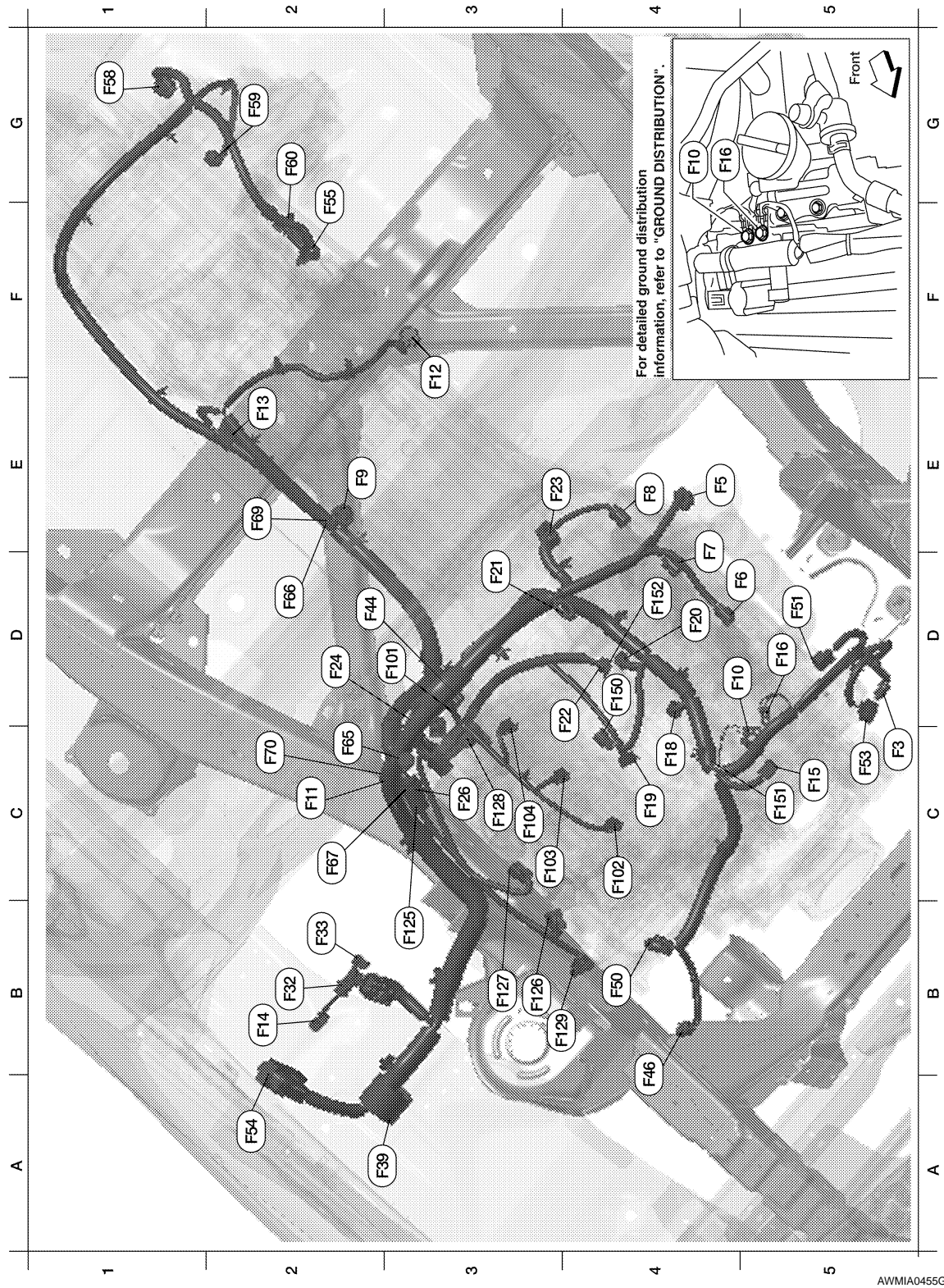
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HARNESS

< COMPONENT DIAGNOSIS >

ENGINE CONTROL HARNESS (VQ40DE MODELS)



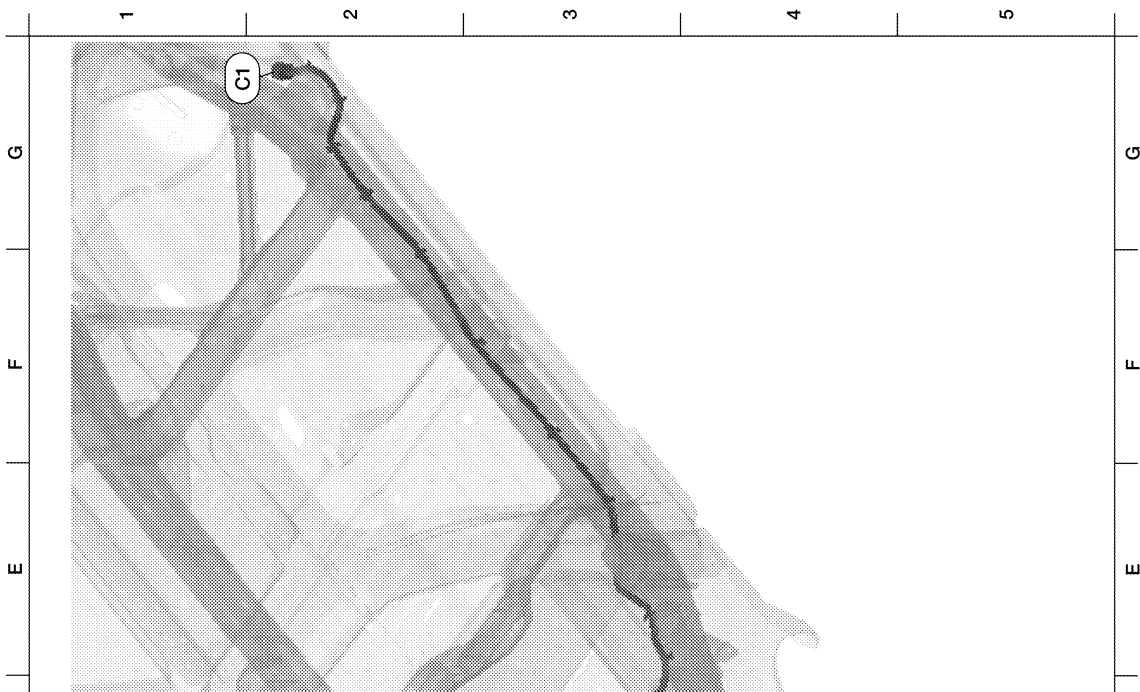
C5	F3	B/1	: A/C Compressor	D5	F51	G/2	: Intake valve timing control solenoid valve
E4	F5	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	C5	F53	B/6	: Mass air flow sensor
D5	F6	GR/3	: Ignition coil No. 2 (with power transistor)	A2	F54	B/81	: ECM

HARNESS

< COMPONENT DIAGNOSIS >

E4	F7	GR/3	: Ignition coil No. 4 (with power transistor)	F2	F55	B/2	: ATP switch	A
E4	F8	GR/3	: Ignition coil No. 6 (with power transistor)	G1	F58	B/8	: Transfer control device (actuator motor)	B
E2	F9	G/10	: A/T assembly	G2	F59	GR/2	: Wait detection switch	C
C5	F10	—	: Engine ground	G3	F60	GR/2	: 4LO switch	D
C2	F11	B/3	: Crankshaft position sensor (POS)	C2	F65	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	E
F3	F12	L/4	: Heated oxygen sensor 2 (bank 2)	D2	F66	B/2	: Park/neutral position (PNP) switch	F
E2	F13	L/4	: Heated oxygen sensor 2 (bank 1)	C2	F67	L/4	: To F150	G
B2	F14	W/24	: To E5	E2	F69	W/2	: Back-up lamp switch	H
C5	F15	L/2	: EVAP canister purge volume control solenoid valve	C2	F70	G/3	: Camshaft position sensor (PHASE) (bank 1)	I
D5	F16	—	: Engine ground	Injector sub-harness				J
C4	F18	GR/2	: Fuel injector No. 2	D2	F101	GR/4	: To F44	K
C4	F19	B/2	: VIAS control solenoid valve	C4	F102	GR/2	: Fuel injector No. 1	L
D4	F20	W/2	: Fuel injector No. 4	C4	F103	GR/2	: Fuel injector No. 3	M
D3	F21	GR/2	: Condenser-1	C3	F104	GR/2	: Fuel injector No. 5	N
D4	F22	GR/2	: Fuel injector No. 6	Ignition coil sub-harness				O
E4	F23	B/3	: Camshaft position sensor (PHASE) (bank 2)	B3	F125	G/8	: To F26	P
C2	F24	GR/2	: Engine coolant temperature sensor	B3	F126	GR/3	: Ignition coil No. 1 (with power transistor)	Q
C3	F26	G/8	: To F125	B3	F127	GR/3	: Ignition coil No. 3 (with power transistor)	R
B2	F32	W/16	: To E2	C3	F128	GR/3	: Ignition coil No. 5 (with power transistor)	S
A2	F33	W/16	: To E19	B3	F129	G/2	: Intake valve timing control solenoid valve (bank 1)	T
A2	F39	—	: Fusible link box (battery)	Knock sensor sub-harness				U
D2	F44	G/4	: To F101	D4	F150	L/4	: To F67	V
B4	F46	B/3	: Power steering pressure sensor	C5	F151	B/2	: Knock sensor (bank 1)	W
B4	F50	B/6	: Electric throttle control actuator	D4	F152	B/2	: Knock sensor (bank 2)	X

CHASSIS HARNESS



HARNES

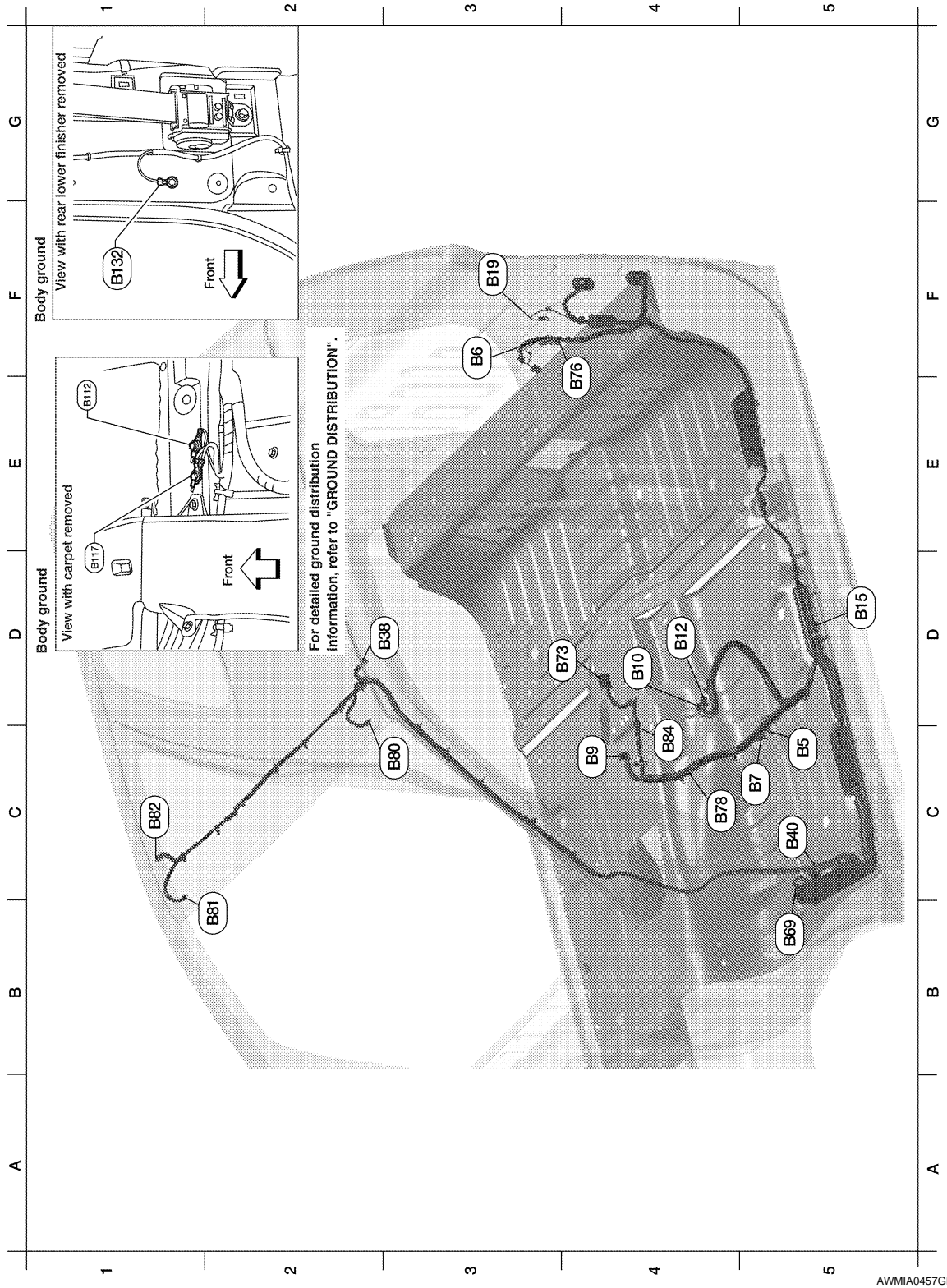
< COMPONENT DIAGNOSIS >

G2	C1	B/148	: To E41	Trailer sub-harness			
D3	C5	GR/5	: Fuel level sensor unit and fuel pump (fuel lever sensor)	A4	C125	GR/8	: To C51
C3	C6	B/2	: EVAP canister vent control valve	B5	C126	B/7	: Trailer
C3	C7	GR/3	: EVAP control system pressure sensor	A4	C150	B/2	: To C52
D4	C10	GR/2	: Rear wheel sensor RH	Tail lamp sub-harness			
C3	C11	GR/2	: Rear wheel sensor LH	A3	C200	GR/8	: To C15
B3	C14	GR/4	: To C115	A3	C201	BR/3	: Rear combination lamp LH
B4	C15	GR/8	: To C200	C4	C202	BR/3	: Rear combination lamp RH
B4	C51	GR/8	: To C125	A4	C203	GR/2	: License plate lamp LH
A4	C52	B/2	: To C150	B5	C204	GR/2	: License plate lamp RH
Differential lock sub-harness				A4	C205	GR/2	: Rear combination lamp LH (back-up)
B4	C115	GR/4	: To C14	C5	C206	GR/2	: Rear combination lamp RH (back-up)
D4	C116	GR/2	: Differential lock position switch	A3	C207	GR/2	: Rear combination lamp LH (turn signal)
D4	C117	B/2	: Differential lock solenoid	C4	C208	GR/2	: Rear combination lamp RH (turn signal)

HARNESS

< COMPONENT DIAGNOSIS >

BODY HARNESS (KING CAB MODELS)



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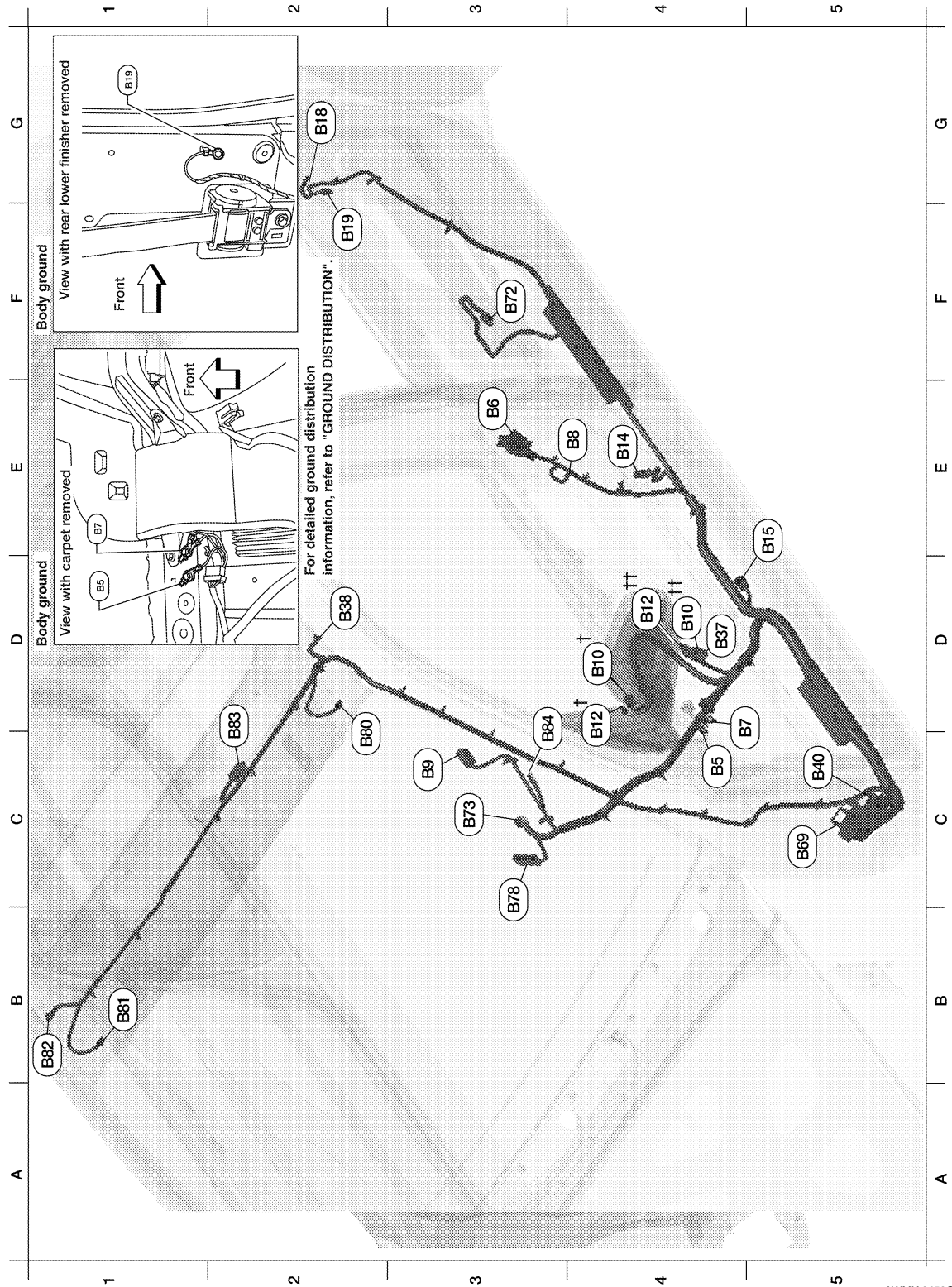
C5	B5	—	: Body ground (LH satellite sensor)	C5	B40	W/8	: To E34
F3	B6	W/8	: To D201	B5	B69	W/80	: To M40
C5	B7	—	: Body ground	D4	B73	B/6	: Yaw rate/side/decel G sensor
C4	B9	Y/12	: Air bag diagnosis sensor unit	F3	B76	W/2	: Rear door speaker LH
D4	B10	Y/2	: Front LH side air bag module	C4	B78	Y/2	: To B157

HARNESS

< COMPONENT DIAGNOSIS >

D4	B12	W/3	: Seat belt buckle switch LH	C2	B80	W/2	: Vanity lamp LH
D5	B15	Y/2	: LH side air bag (satellite) sensor	B2	B81	W/2	: Vanity lamp RH
F3	B19	—	: Body ground	C1	B82	Y/2	: RH side curtain air bag module
D2	B38	Y/2	: LH side curtain air bag module	C3	B84	B/1	: Parking brake switch

BODY HARNESS (CREW CAB MODELS)



AWMIA0458GB

HARNESS

< COMPONENT DIAGNOSIS >

C4	B5	—	: Body ground (LH satellite sensor)	A
E3	B6	W/12	: To D201	
D4	B7	—	: Body ground	B
E4	B8	W/3	: Front door switch LH	
C3	B9	Y/12	: Air bag diagnosis sensor unit	
D4	B10†	Y/2	: Front LH side air bag module (without power seat)	C
D4	B10††	Y/2	: Front LH side air bag module (with power seat)	
D4	B12†	W/3	: Seat belt buckle switch LH (without power seat)	D
D4	B12††	W/3	: Seat belt buckle switch LH (with power seat)	
E4	B14	Y/2	: Front LH seat belt pre-tensioner	E
E5	B15	Y/2	: LH side air bag (satellite) sensor	
G2	B18	W/3	: Rear door switch LH	F
F2	B19	—	: Body ground	
D4	B37	W/16	: To P1	G
D2	B38	Y/2	: LH side curtain air bag module	
C5	B40	W/8	: To E34	H
C5	B69	W/80	: To M40	
F3	B72	GR/4	: Subwoofer	I
C3	B73	B/6	: Yaw rate/side/decel G sensor	
C3	B78	Y/2	: To B157	J
C2	B80	W/2	: Vanity lamp LH	
B1	B81	W/2	: Vanity lamp RH	K
B1	B82	Y/2	: RH side curtain air bag module	
C2	B83	B/10	: Sunroof motor assembly	L
D3	B84	B/1	: Parking brake switch	

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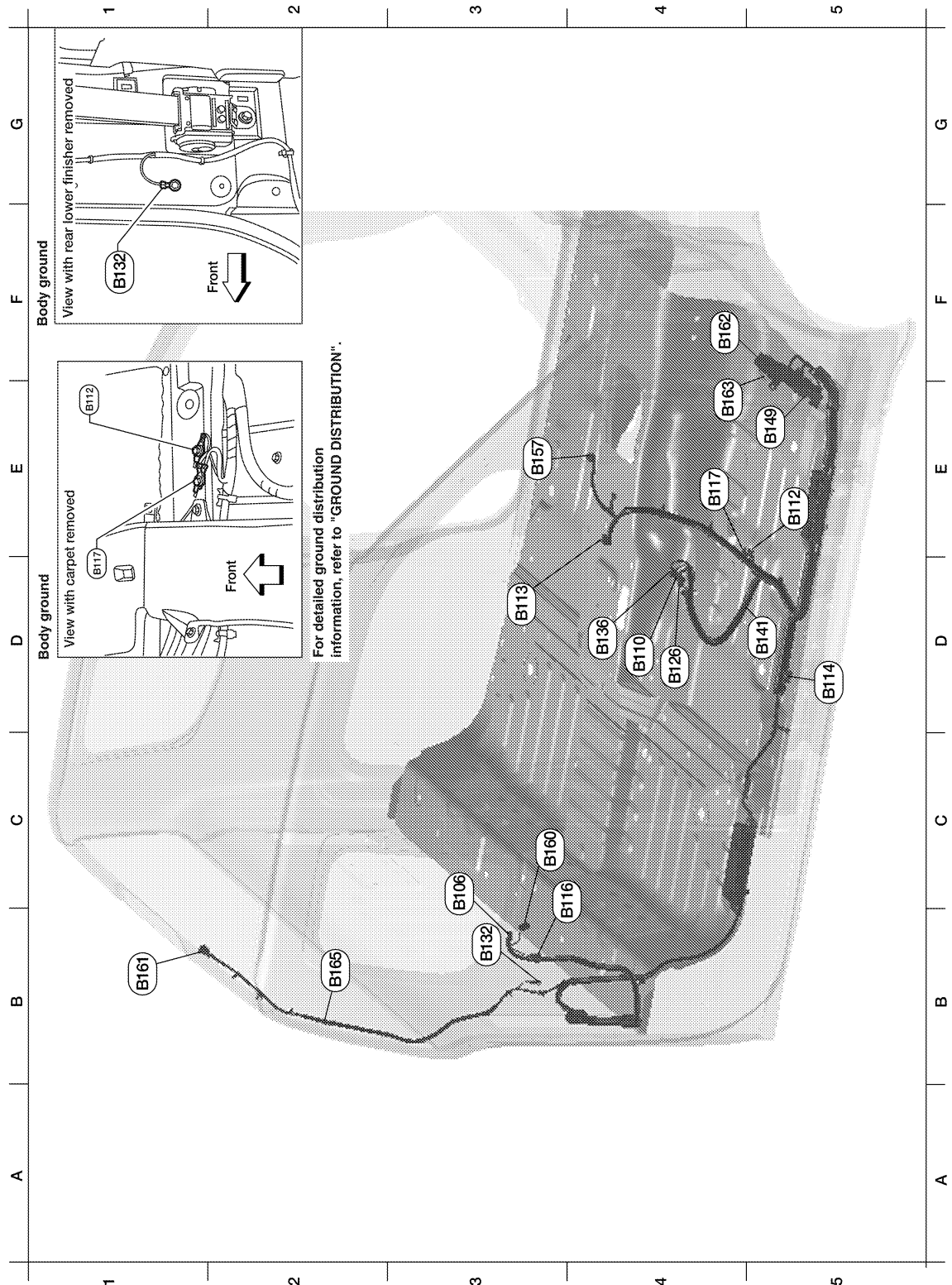
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BODY NO. 2 HARNESS (KING CAB MODELS)



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C3	B106	W/8	: To D301
D4	B110	W/3	: Seat belt buckle switch RH
E5	B112	—	: Body ground (RH satellite sensor)
D3	B113	Y/12	: Air bag diagnosis sensor unit
D5	B114	Y/2	: RH side air bag (satellite) sensor

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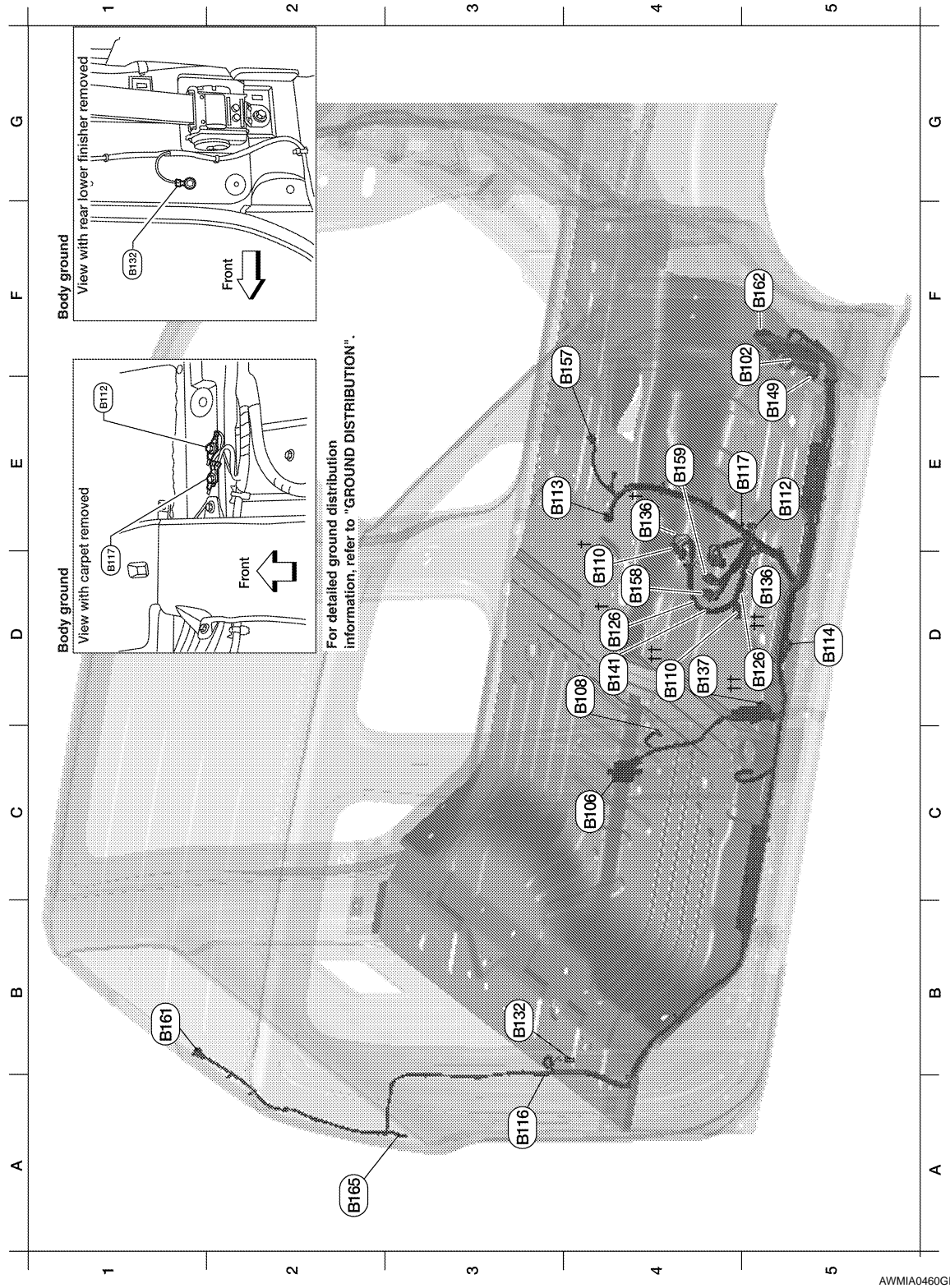
C3	B116	W/3	: Rear door switch RH		A
E5	B117	—	: Body ground		B
D4	B126	Y/2	: Front RH side air bag module		C
B3	B132	—	: Body ground		D
E4	B136	W/16	: To B351		E
D5	B141	W/32	: Bluetooth control unit		F
E5	B149	W/80	: To M36		G
E3	B157	Y/2	: To B78		H
C3	B160	W/2	: Rear door speaker RH		I
B1	B161	W/3	: High-mounted stop lamp		J
F4	B162	W/12	: To M16		K
e4	B163	W/16	: To M17		L
B2	B165	B/1	: Rear window defogger		PG

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BODY NO. 2 HARNESS (CREW CAB MODELS)



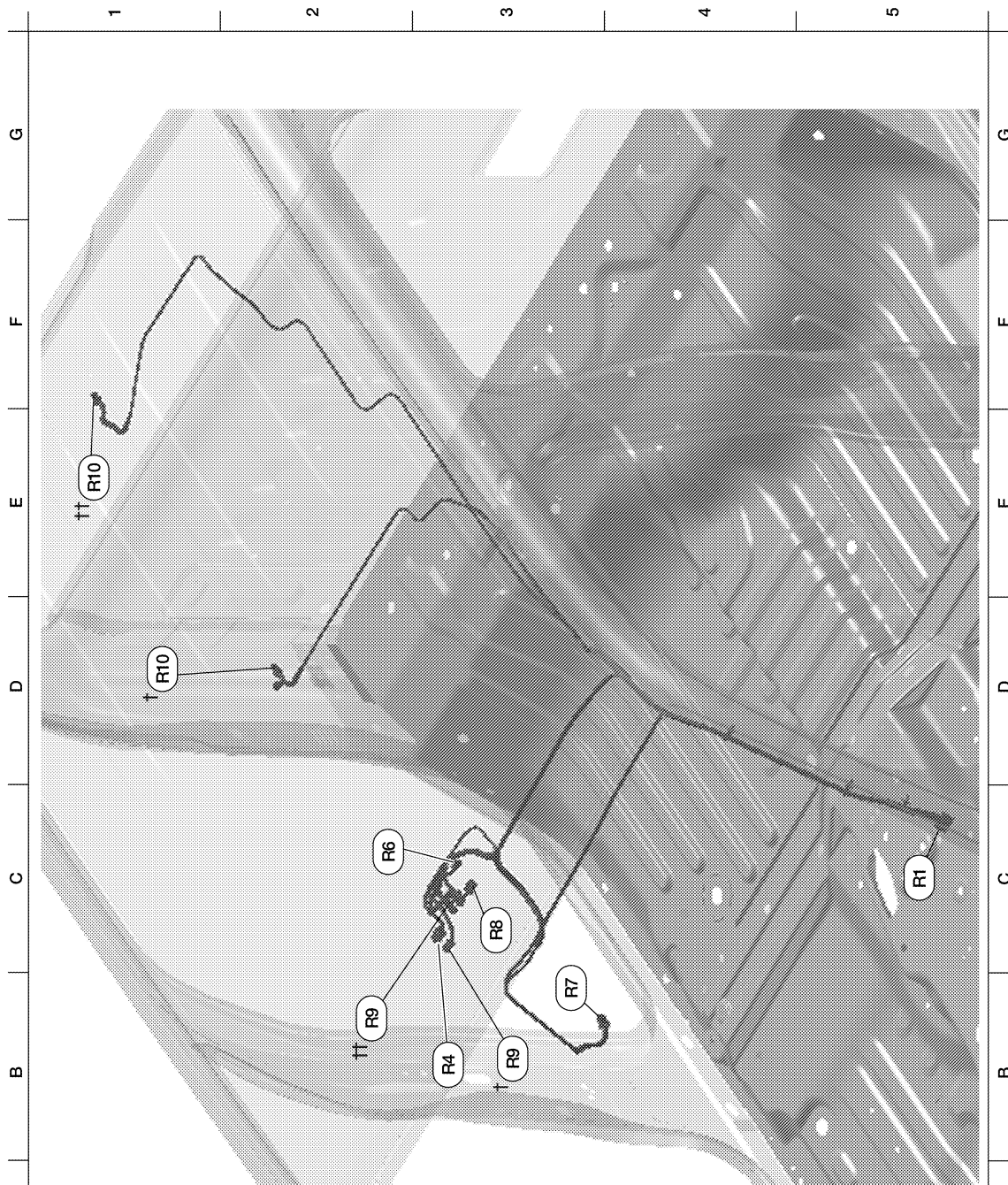
E4	B102	W/2	: To E36	C4	B127	Y/2	: Front RH seat belt pretensioner
C3	B106	W/12	: To D301	B3	B132	—	: Body ground
D4	B108	W/3	: Front door switch RH	E4	B136 †	W/8	: To B351 (without power seat)
D4	B110†	W/3	: Front door switch RH (without power seat)	D5	B136 ††	W/16	: To B351 (with power seat)

HARNESS

< COMPONENT DIAGNOSIS >

D4	B110††	W/3	: Front door switch RH (with power seat)	D4	B137	B/3	: Belt tension sensor	
E5	B112	—	: Body ground (RH satellite sensor)	D4	B141	W/32	: Bluetooth control unit	
E3	B113	Y/12	: Air bag diagnosis sensor unit	E5	B149	W/80	: To M36	
D5	B114	Y/2	: RH side air bag (satellite) sensor	F3	B157	Y/2	: To B78	
A3	B116	W/3	: Rear door switch RH	D4	B158	W/8	: Audio amplifier	
E4	B117	—	: Body ground	E4	B159	W/24	: Audio amplifier	
D4	B126†	Y/2	: Front RH side air bag module (without power seat)	B1	B161	W/3	: High-mounted stop lamp	
D5	B126††	Y/2	: Front RH side air bag module (with power seat)	E5	F4	B162	W/12	: To M16
				E5	A2	B165	B/1	: Rear window defogger

ROOM LAMP HARNESS



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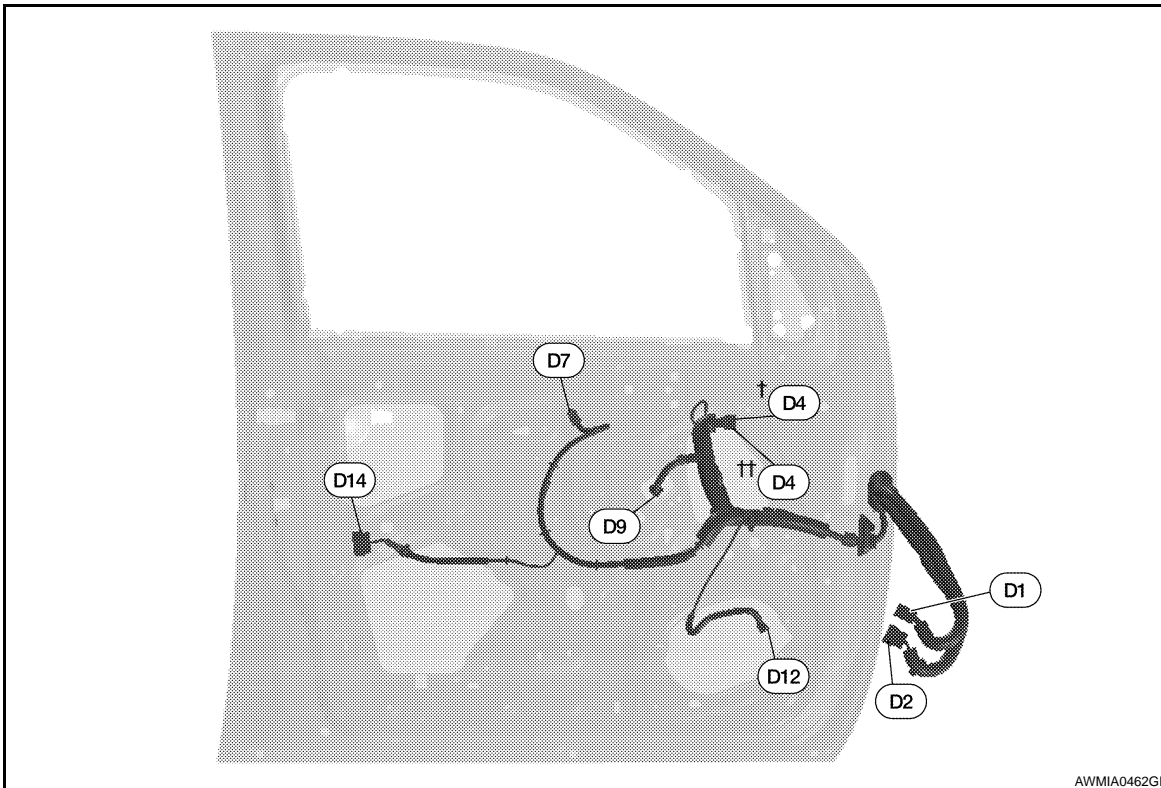
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C5	R1	W/24	: To M1
B3	R4	W/3	: Sunroof switch
C2	R6	W/4	: Bluetooth on indicator
B4	R7	B/10	: Auto anti-dazzling inside mirror
C3	R8	W/4	: Microphone
B3	R9†	W/3	: Front room/map lamp assembly (with sunroof)
B2	R9††	W/3	: Front room/map lamp assembly (without sun roof)
E1	R10††	W/2	: Room lamp 2nd row (Crew cab models)
D1	R10†	W/2	: Room lamp 2nd row (King cab models)

FRONT DOOR LH HARNESS



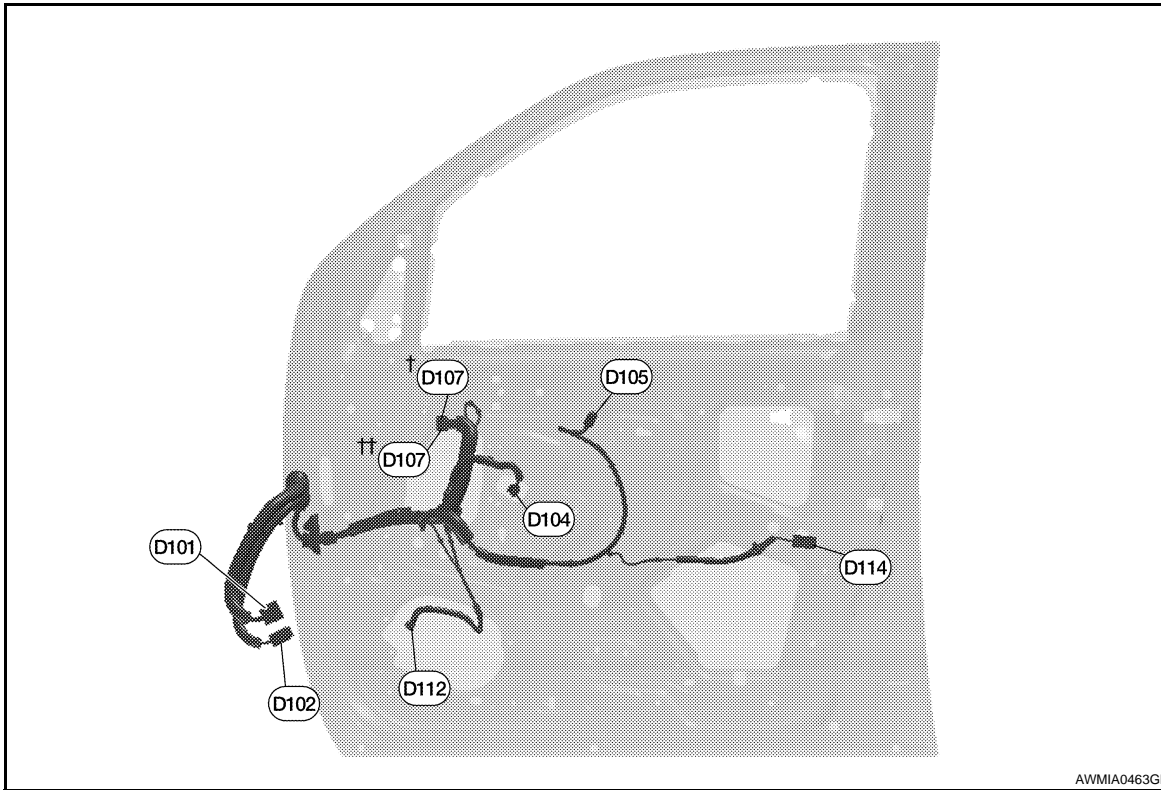
AWMIA0462GB

D1	W/16	: To M9	D7	W/16	: Main power window and door lock/unlock switch
D2	BR/12	: To M8	D9	BR/2	: Front power window motor LH
D4†	B/3	: Door mirror LH (without heated mirror)	D12	W/2	: Front door speaker LH
D4††	B/10	: Door mirror LH (with heated mirror)	D14	GR/6	: Front door lock assembly LH (key cinder switch)

HARNESS

< COMPONENT DIAGNOSIS >

FRONT DOOR RH HARNESS



AWMIA0463GB

D101	W/12	: To M75	D107 †	B/3	Door mirror RH (without heated mirror)
D102	W/16	: To M74	D107 ††	B/10	Door mirror RH (with heated mirror)
D104	BR/2	: Front power window motor RH	D112	W/2	Front door speaker RH
D105	W/12	: Power window and door lock/unlock switch	D114	BR/2	Front door lock actuator RH

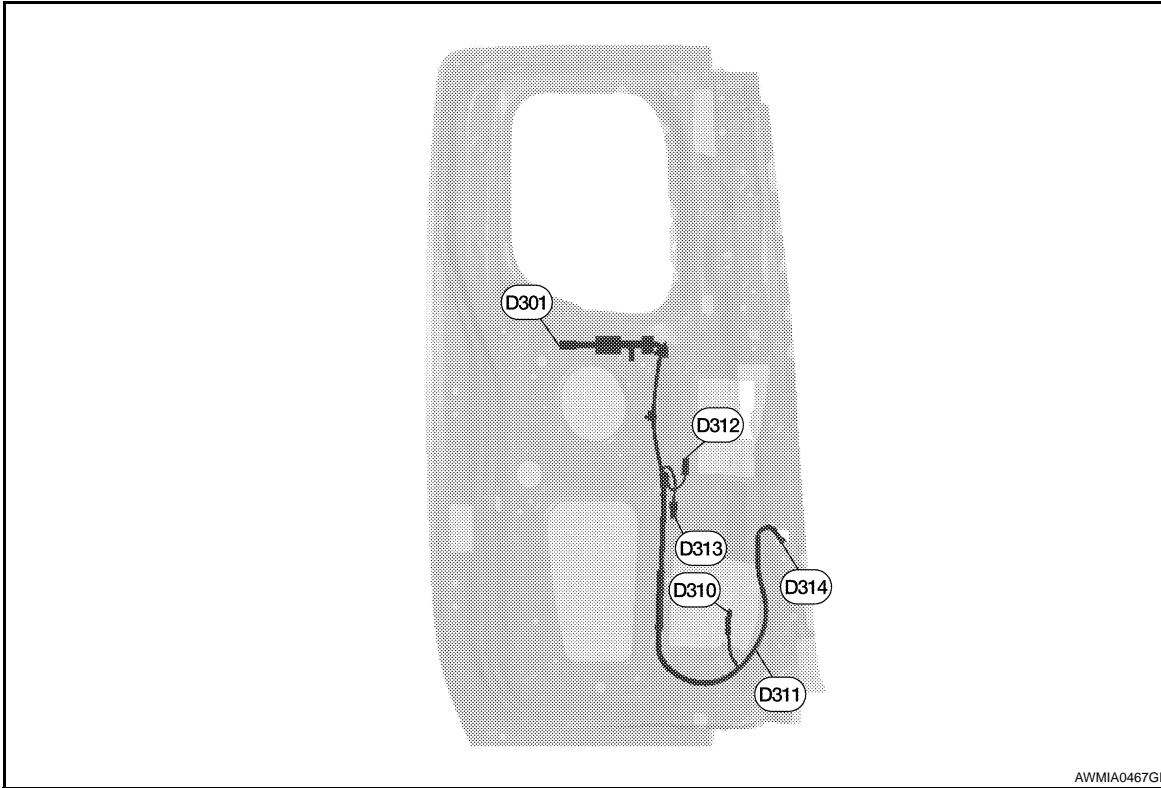
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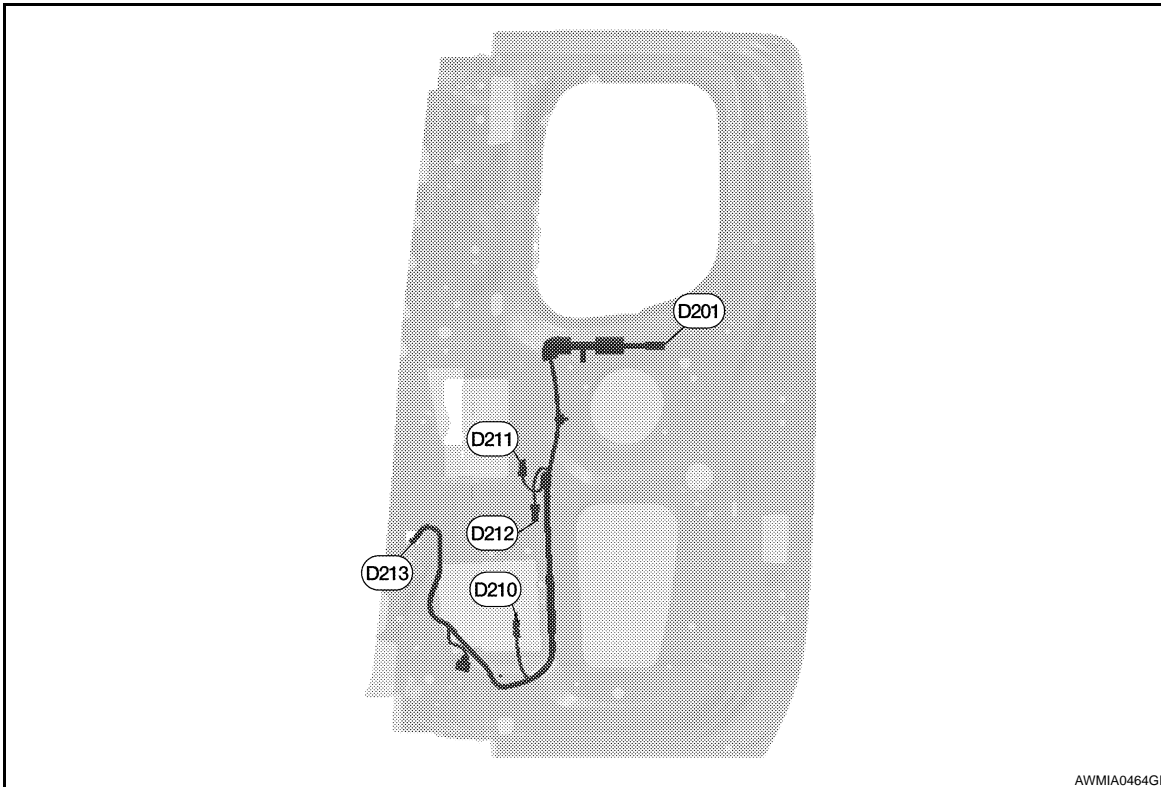
REAR DOOR LH HARNESS (KING CAB MODELS)



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D201	W/8	: To B6	D212	B/2	: Rear door switch lower LH
D210	Y/2	: Front LH seat belt pre-tensioner	D213	W/3	: Front door switch LH
D211	B/2	: Rear door switch upper LH			

REAR DOOR RH HARNESS (KING CAB MODELS)



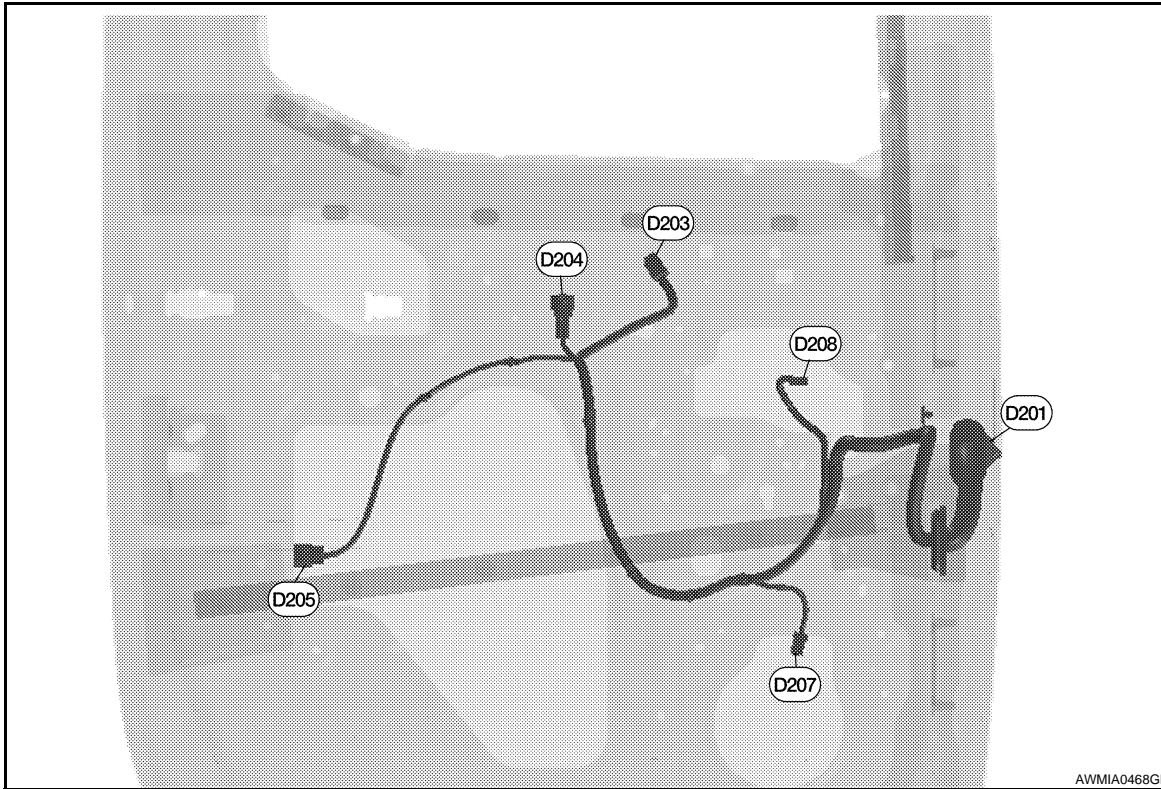
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HARNESS

< COMPONENT DIAGNOSIS >

D301	W/8	: To B106	D312	B/2	: Rear door switch upper RH
D310	Y/2	: Front RH seat belt pre-tensioner	D313	B/2	: Rear door switch lower RH
D311	Y/3	: Belt tension sensor	D314	W/3	: Front door switch RH

REAR DOOR LH HARNESS (CREW CAB MODELS)



D201	W/12	: To B6	D207	W/2	: Rear door speaker LH (base audio)
D203	W/8	: Rear power window switch LH	D207	BR/2	: Rear door speaker LH (premium audio)
D204	B/2	: Rear power window motor LH	D208	BR/2	: Rear door tweeter LH
D205	BR/2	: Rear door lock actuator LH			

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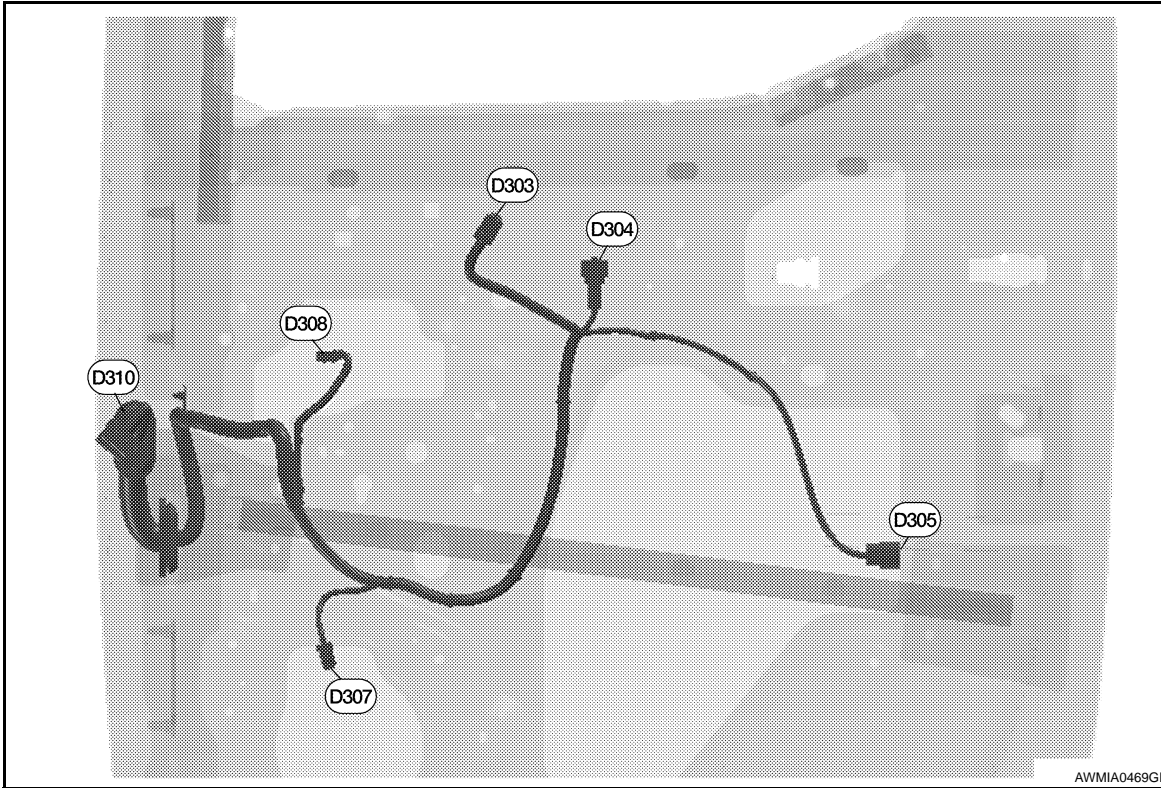
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< COMPONENT DIAGNOSIS >

REAR DOOR RH HARNESS (CREW CAB MODELS)



D301	W/12	: To B106	D307	W/2	: Rear door speaker RH (base audio)
D303	W/8	: Rear power window switch RH	D307	BR/2	: Rear door speaker RH (premium audio)
D304	B/2	: Rear power window motor RH	D308	BR/2	: Rear door tweeter RH
D305	BR/2	: Rear door lock actuator RH			

ELECTRICAL UNITS LOCATION

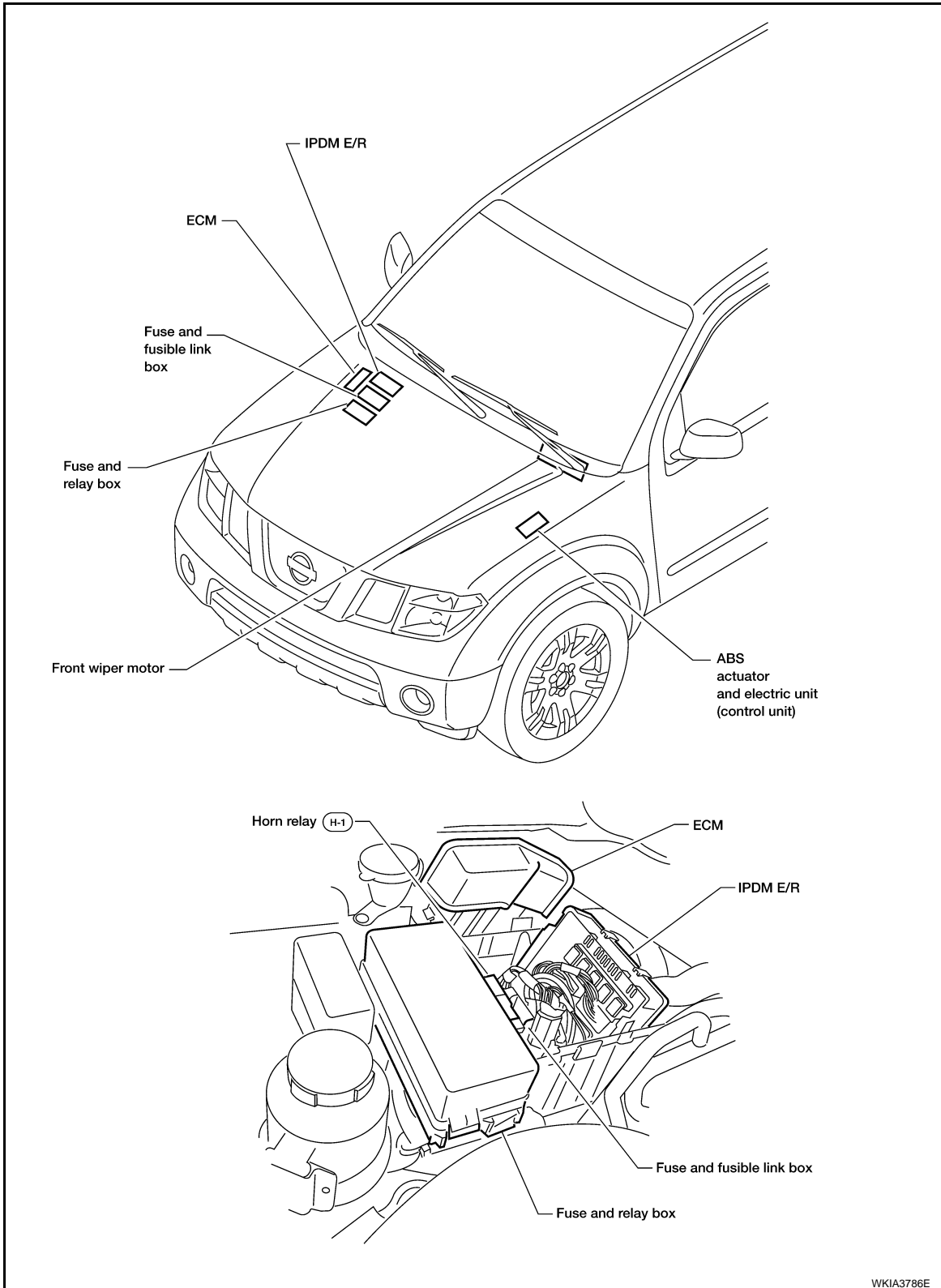
< COMPONENT DIAGNOSIS >

ELECTRICAL UNITS LOCATION

Electrical Units Location

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ENGINE COMPARTMENT

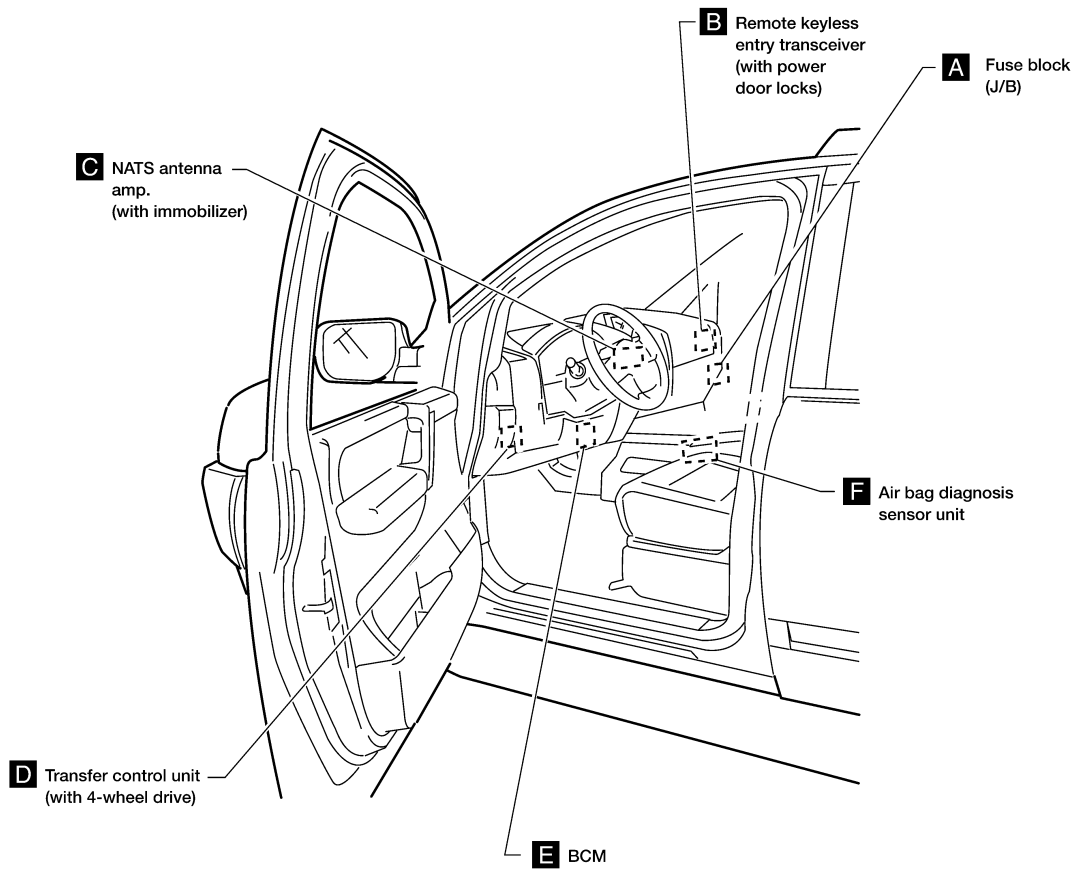


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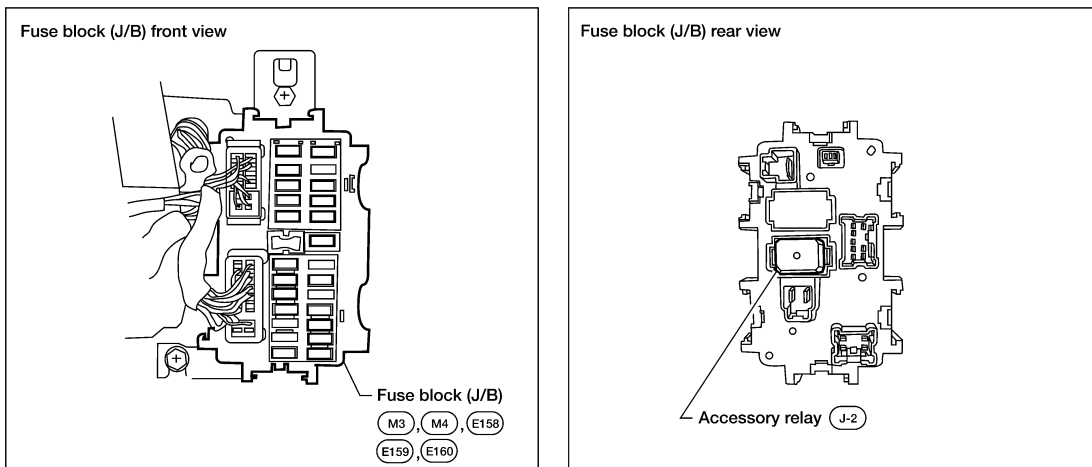
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ELECTRICAL UNITS LOCATION

< COMPONENT DIAGNOSIS > PASSENGER COMPARTMENT



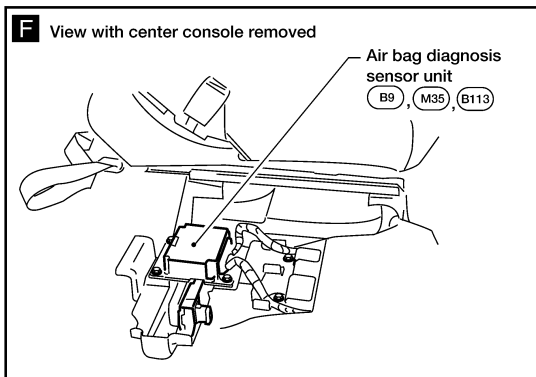
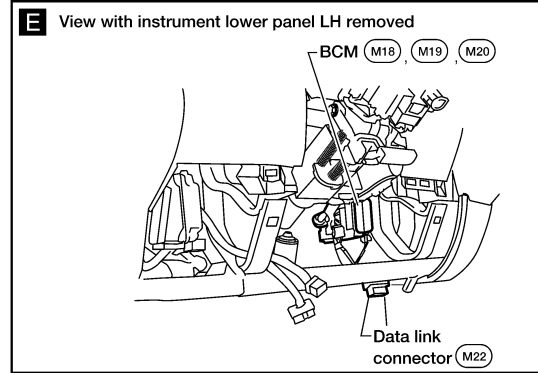
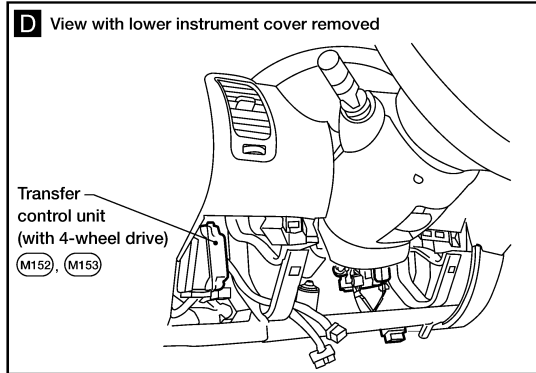
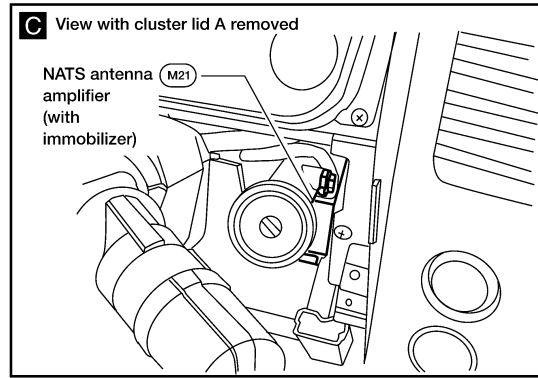
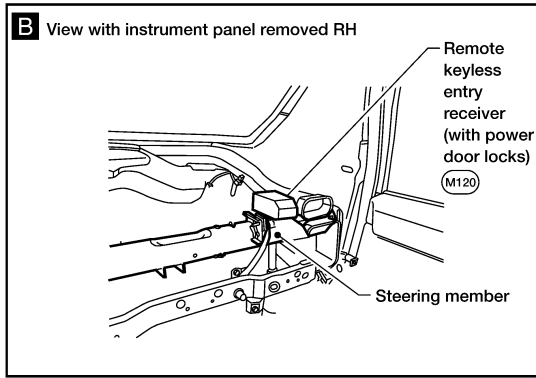
A Instrument panel side RH



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ELECTRICAL UNITS LOCATION

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HARNESS CONNECTOR

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HARNESS CONNECTOR

Description

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HARNESS CONNECTOR (TAB-LOCKING TYPE)

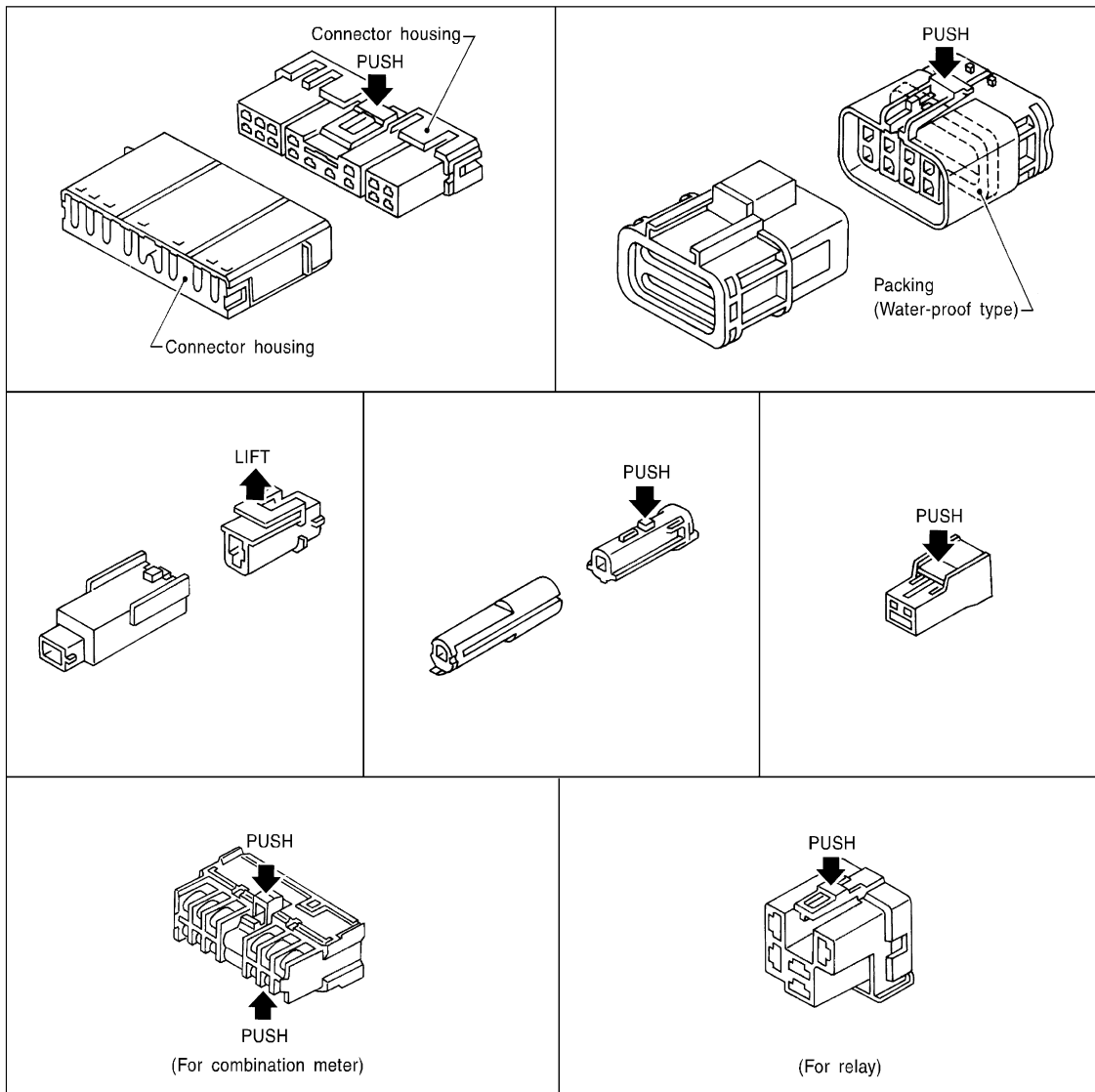
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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 (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.

HARNESS CONNECTOR

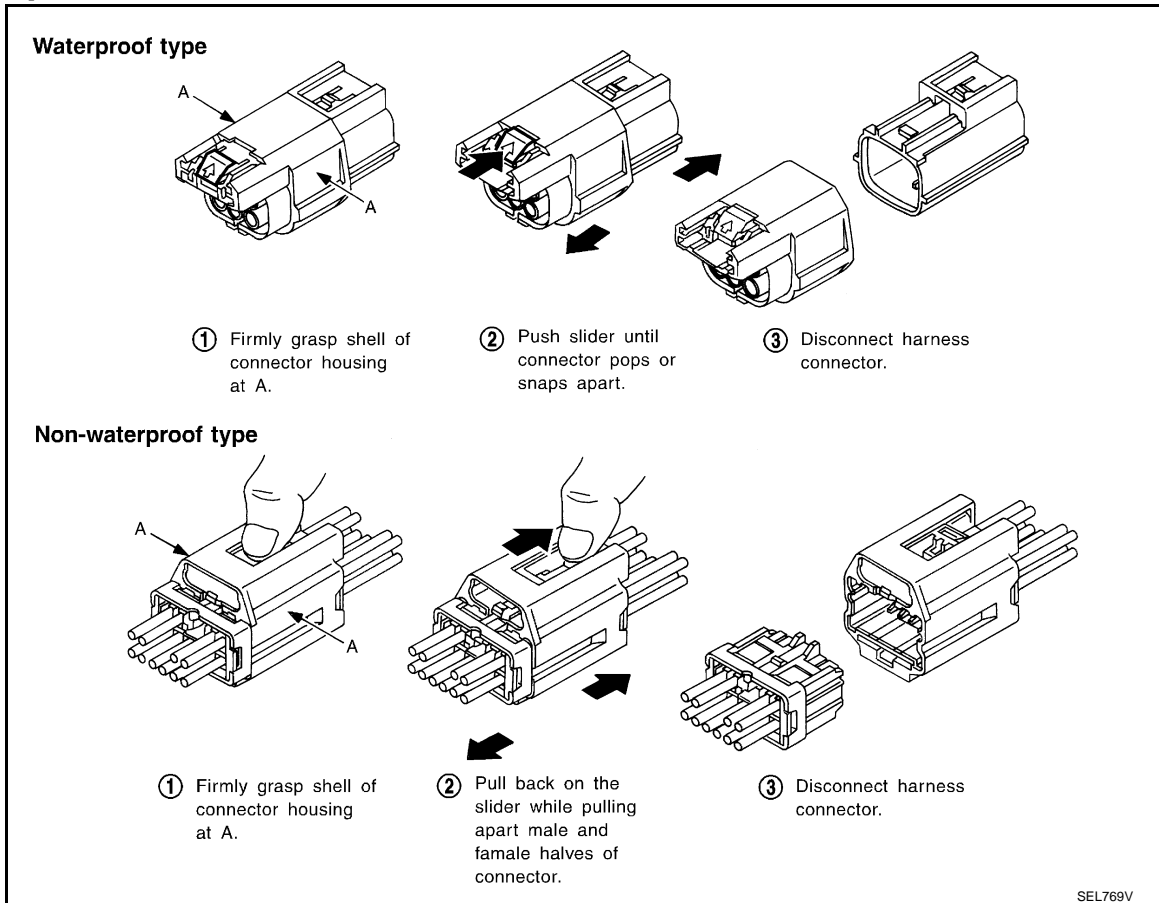
< COMPONENT DIAGNOSIS >

- The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the figure 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 (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.

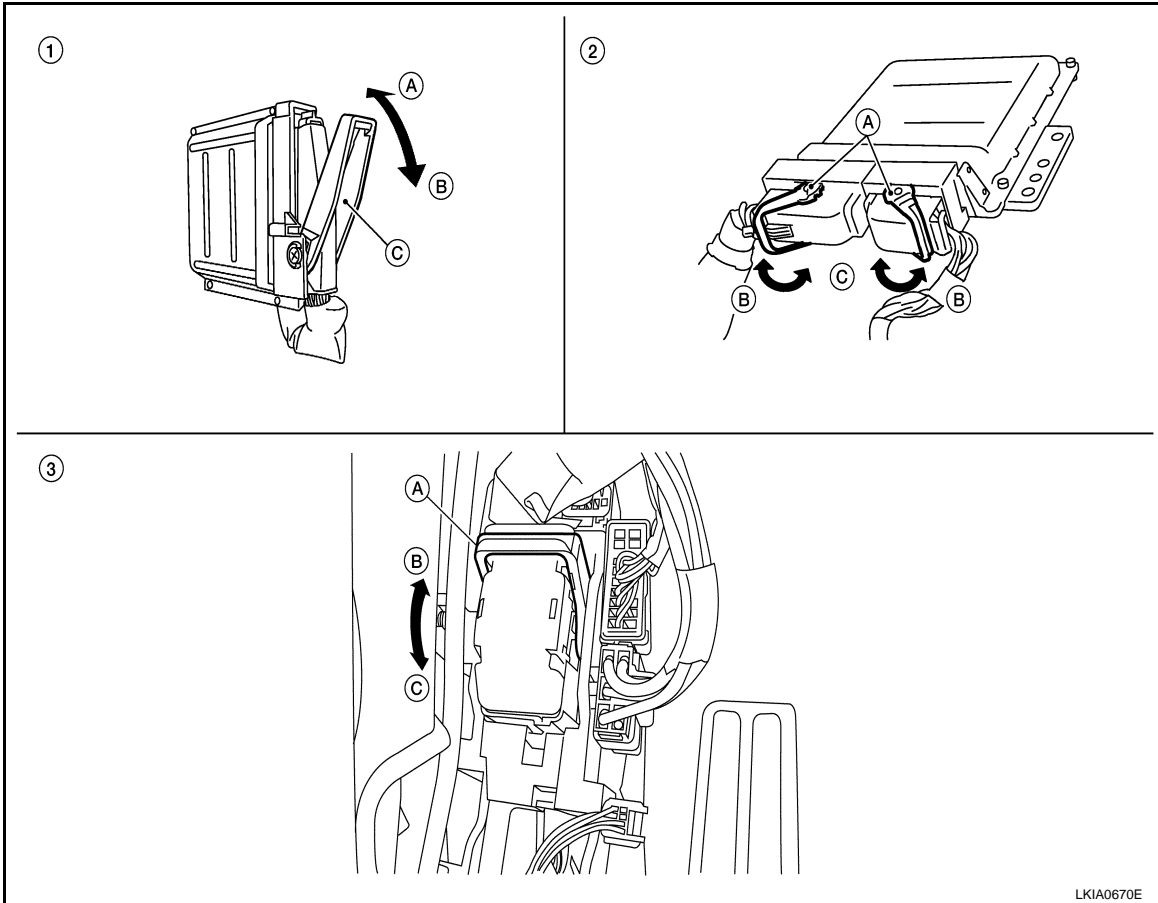
CAUTION:

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HARNES CONNECTOR

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- 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.



LKIA0670E

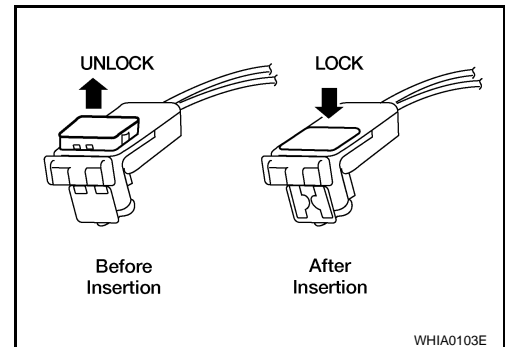
- | | | |
|-----------------------------------|---------------------------------|------------------|
| 1. Control unit with single lever | 2. Control unit with dual lever | 3. SMJ connector |
| A. Fasten | A. Fasten | A. Fasten |
| B. Loosen | B. Loosen | B. Loosen |
| C. Lever | C. Lever | C. Lever |

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 components.
- Always push down to lock black locking tab after installing connector to SRS components. 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.



WHIA0103E

ELECTRICAL UNITS

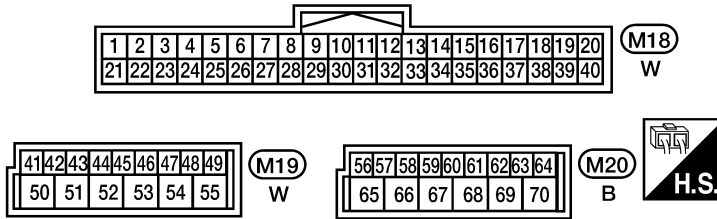
< COMPONENT DIAGNOSIS >

ELECTRICAL UNITS

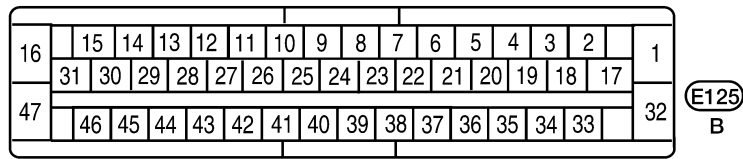
Terminal Arrangement

INFOID:000000003261020

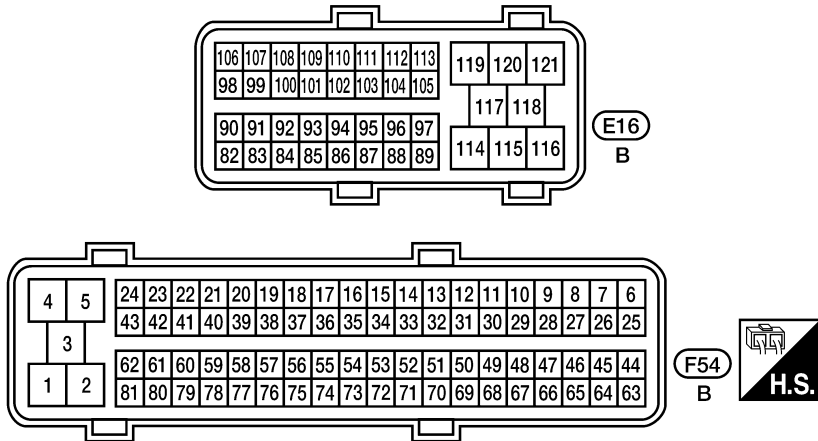
BCM (BODY CONTROL MODULE)



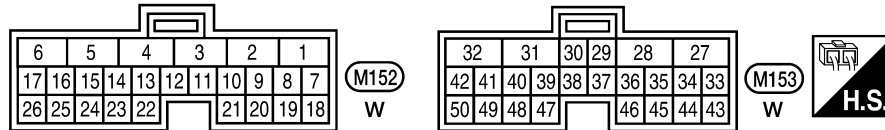
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



ECM



TRANSFER CONTROL UNIT



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WKIA3785E

STANDARDIZED RELAY

< COMPONENT DIAGNOSIS >

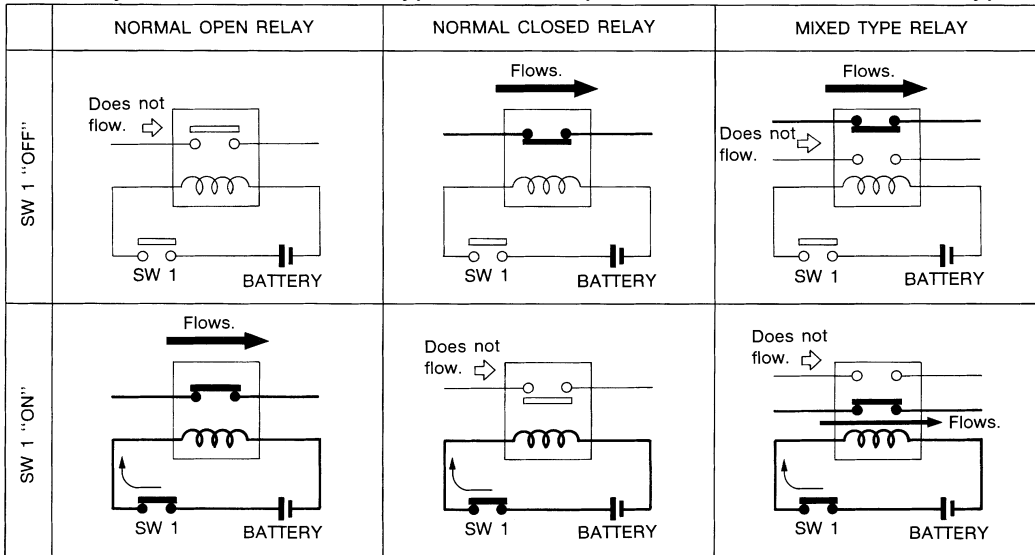
STANDARDIZED RELAY

Description

INFOID:000000003110974

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

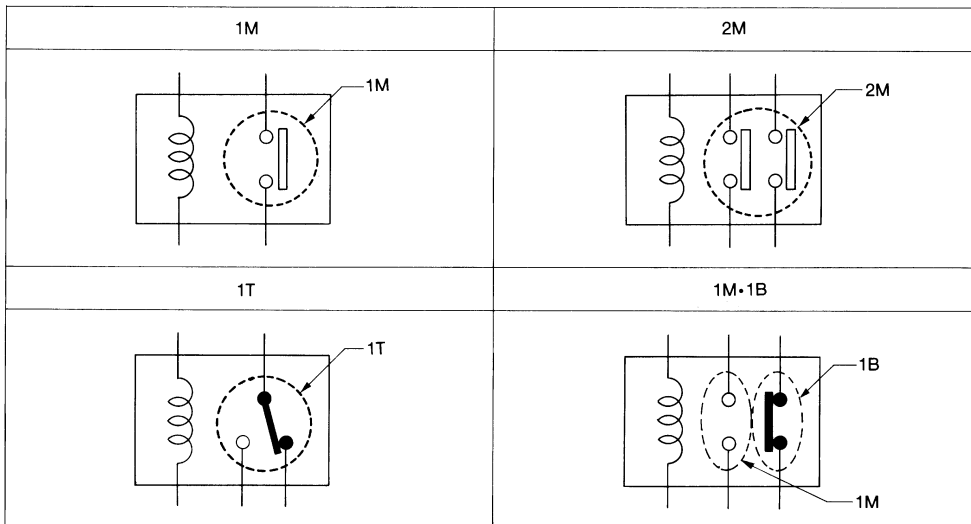
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

TYPE OF STANDARDIZED RELAYS

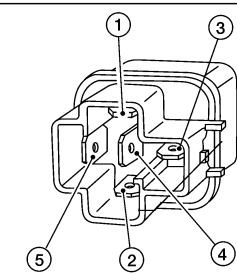
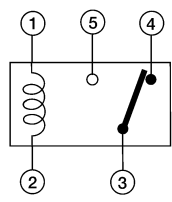
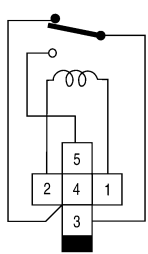
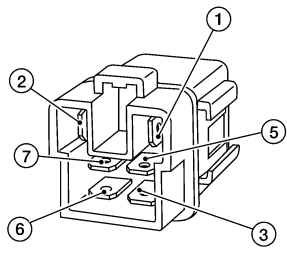
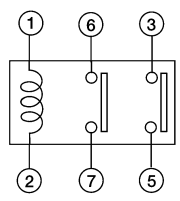
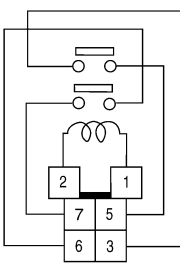
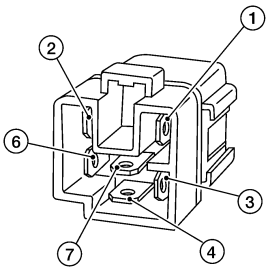
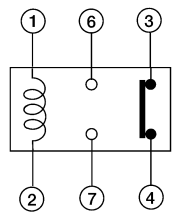
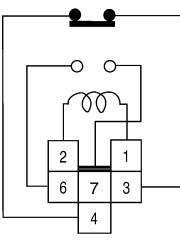
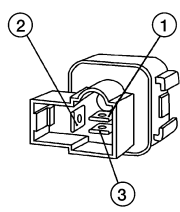
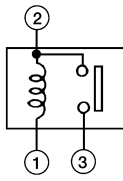
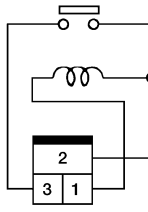
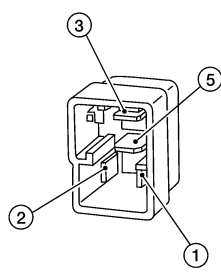
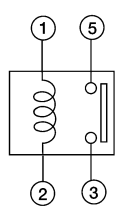
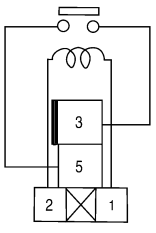
- 1M 1 Make
- 1T 1 Transfer
- 2M 2 Make
- 1M-1B 1 Make 1 Break



SEL882H

STANDARDIZED RELAY

< COMPONENT DIAGNOSIS >

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.

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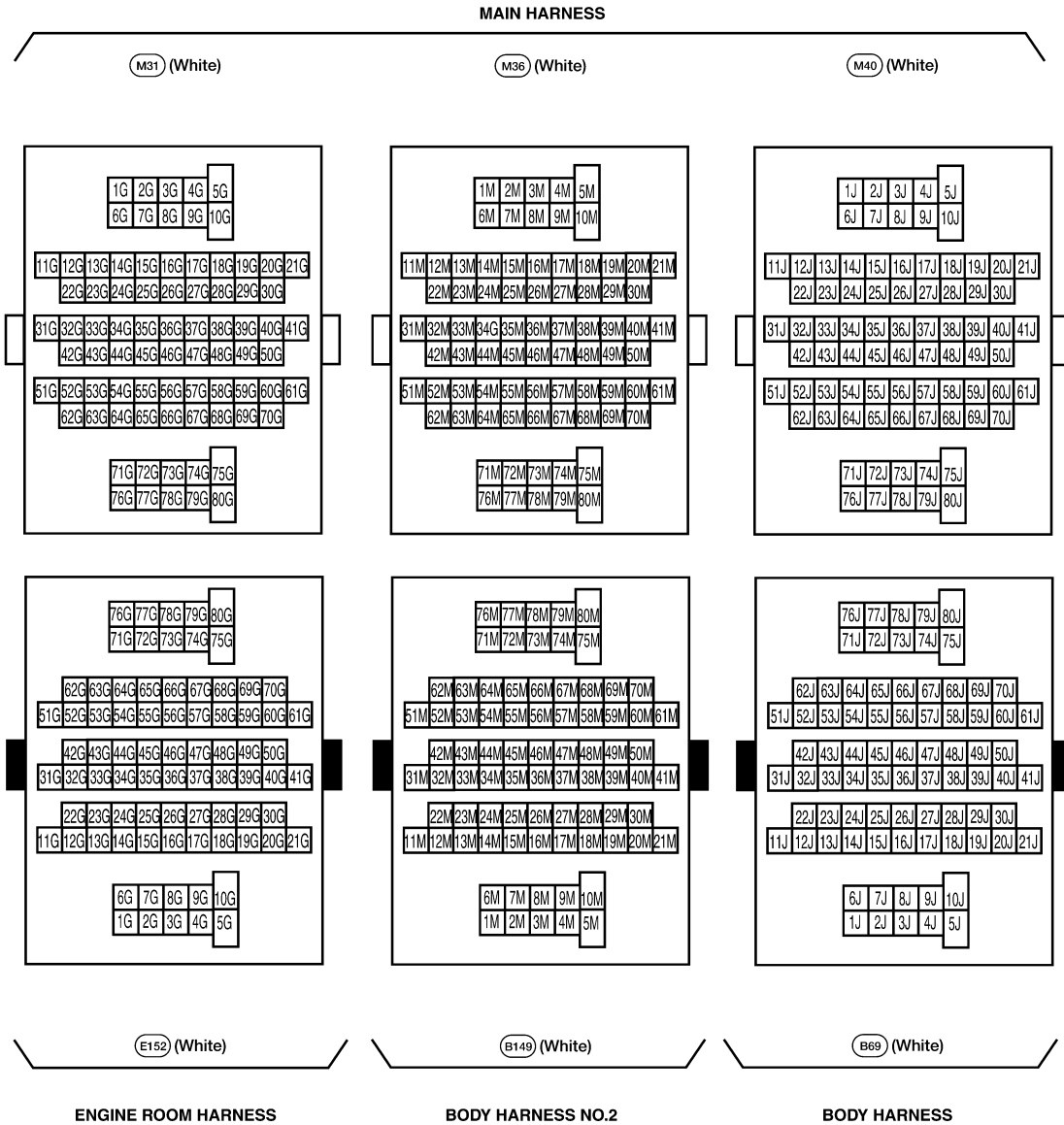
SUPER MULTIPLE JUNCTION (SMJ)

< COMPONENT DIAGNOSIS >

SUPER MULTIPLE JUNCTION (SMJ)

Terminal Arrangement

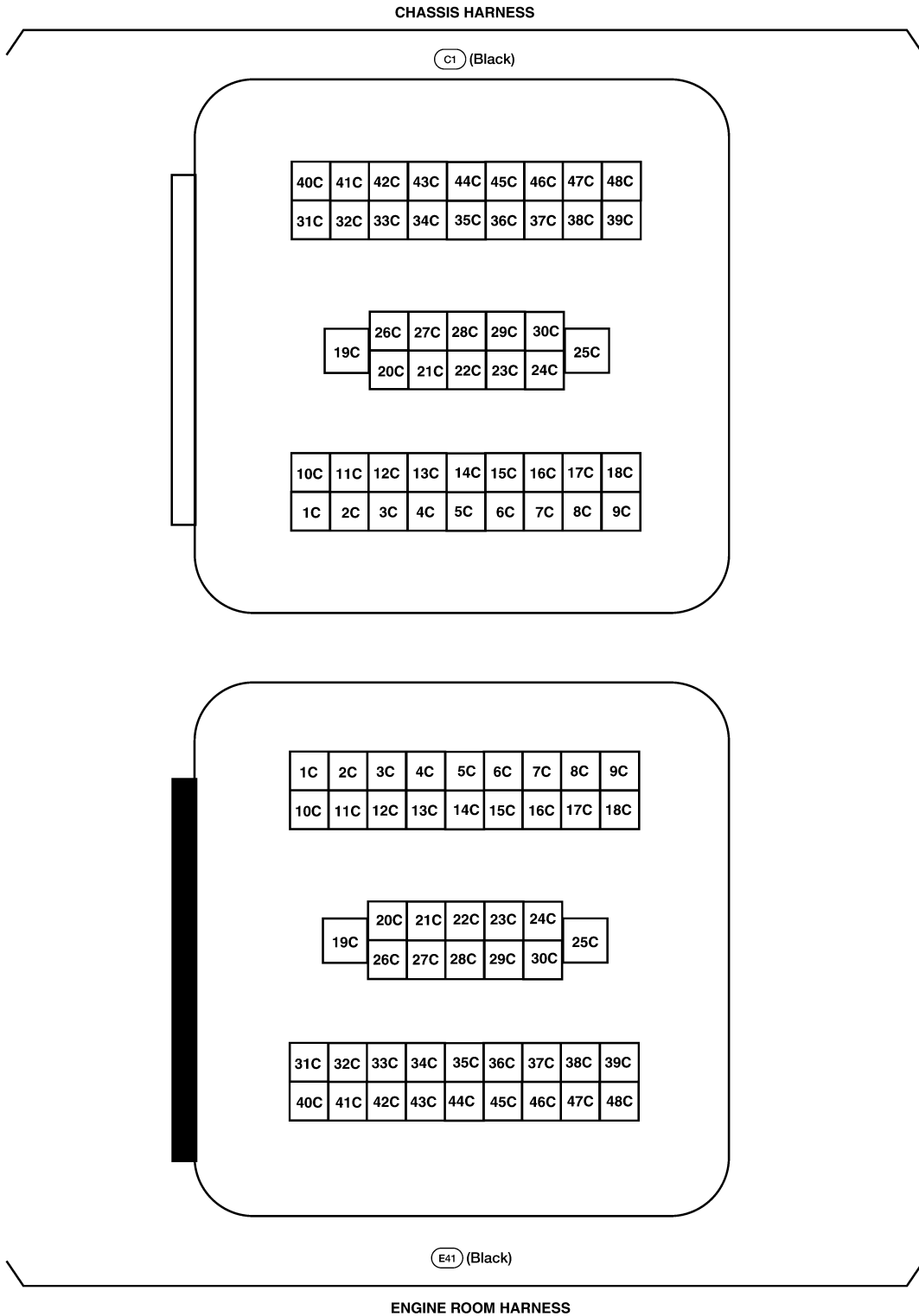
INFOID:000000003261029



WKIA3590E

SUPER MULTIPLE JUNCTION (SMJ)

< COMPONENT DIAGNOSIS >



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WKIA4067E

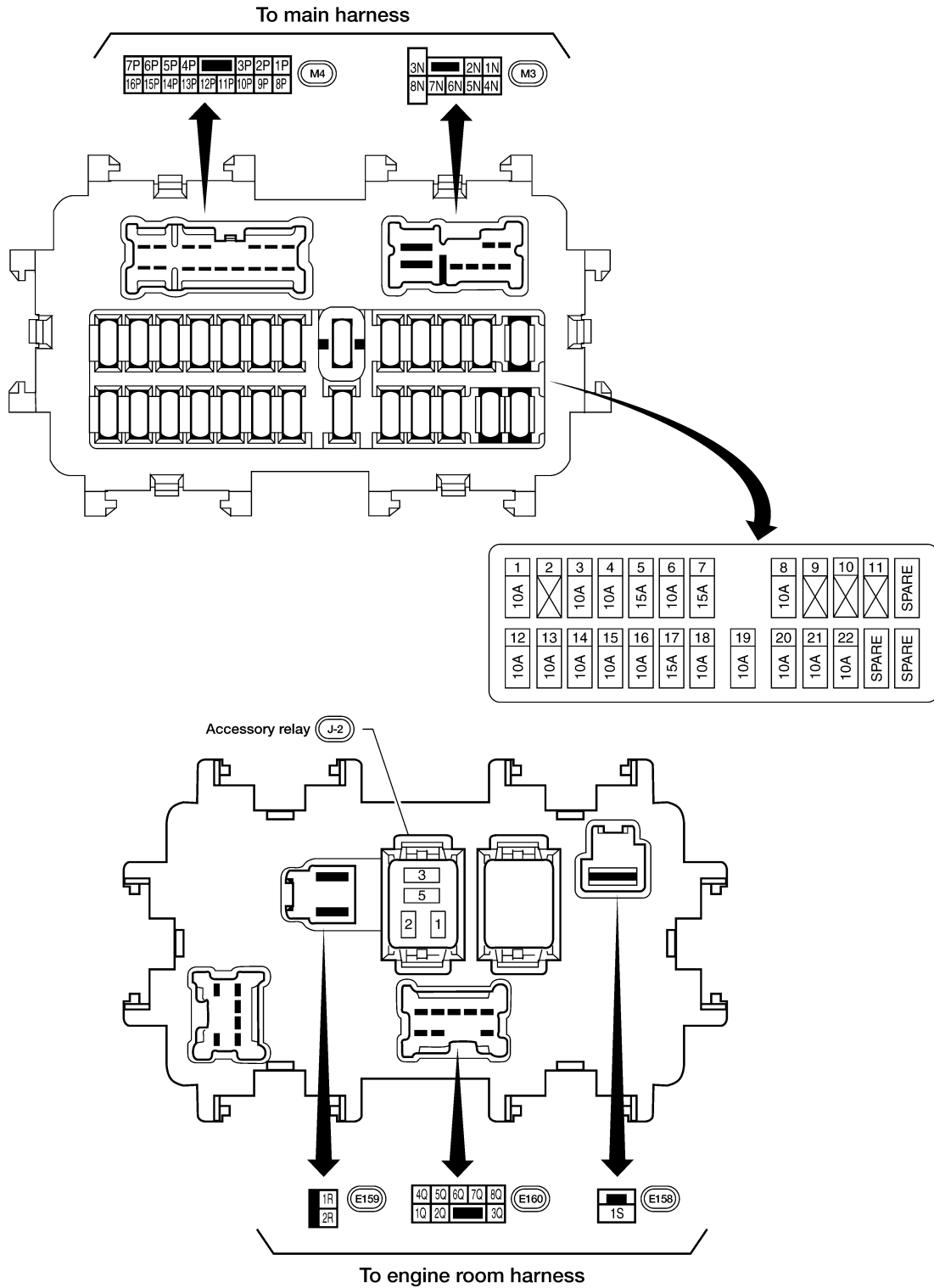
FUSE BLOCK - JUNCTION BOX (J/B)

< COMPONENT DIAGNOSIS >

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:000000003110975



WKIA5068E

FUSE, FUSIBLE LINK AND RELAY BOX

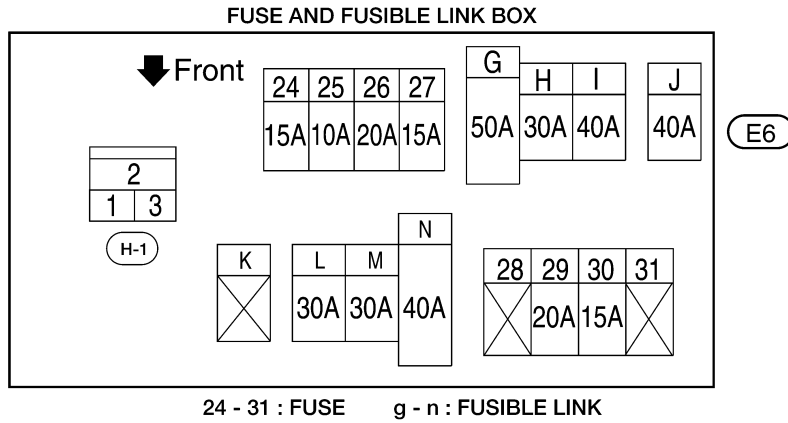
< COMPONENT DIAGNOSIS >

FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement

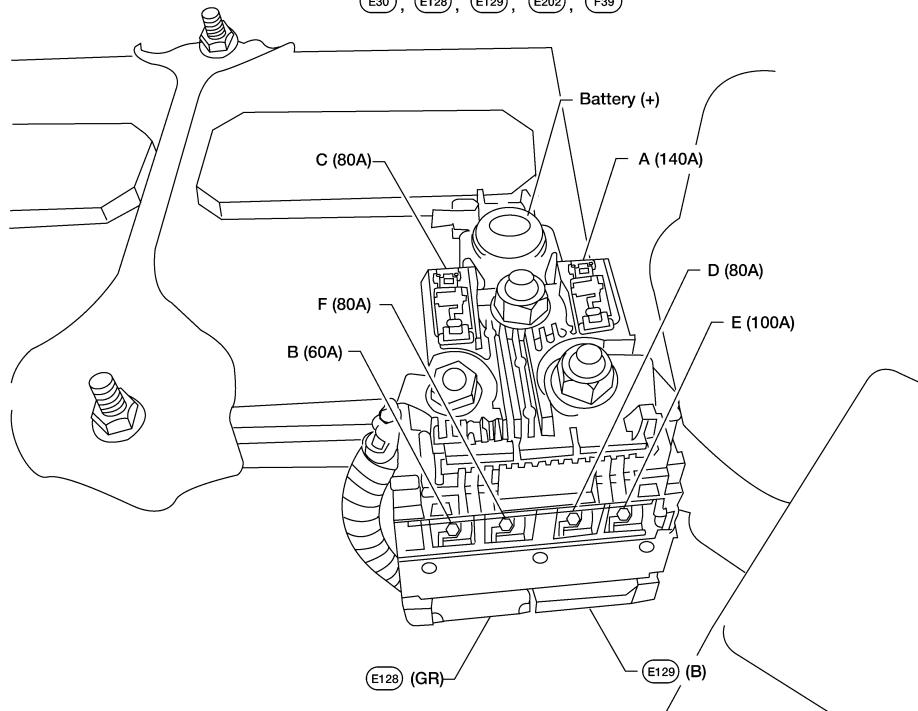
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FUSE AND FUSIBLE LINK BOX



FUSIBLE LINK BOX (BATTERY)

(E30), (E128), (E129), (E202), (F39)

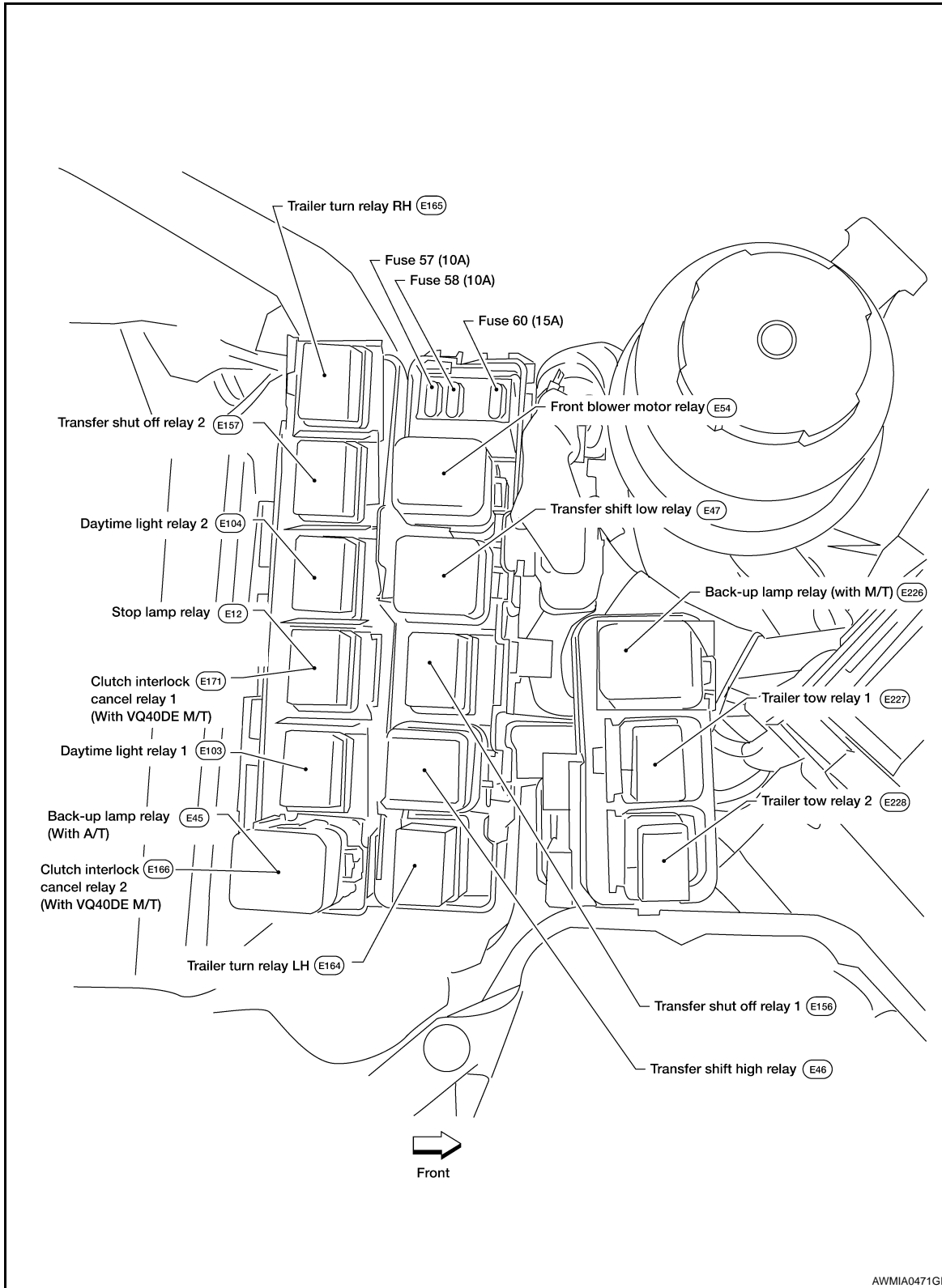


AWMIA0470GB

FUSE, FUSIBLE LINK AND RELAY BOX

< COMPONENT DIAGNOSIS >

FUSE AND RELAY BOX



BATTERY

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

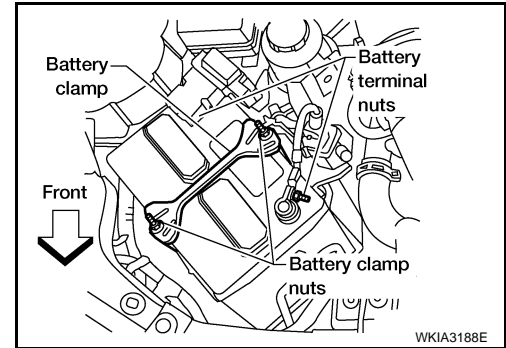
BATTERY

Removal and Installation

INFOID:000000003297116

REMOVAL

1. Disconnect both negative and positive battery terminals.
CAUTION:
Disconnect negative battery terminal first.
2. Remove battery clamp nuts and battery clamp.
3. Remove battery.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
Connect positive battery terminal first.

Battery clamp nuts : 3.4 N·m (0.35 kg-m, 30 in-lb)

Battery terminal nut : 3.4 N·m (0.35 kg-m, 30 in-lb)

Reset electronic systems as necessary. Refer to [PG-6. "Special Repair Requirement"](#).

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SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Battery

INFOID:000000003297117

Application (Standard battery)	VQ40DE	QR25DE
Type	Gr. 24	
Capacity (20 HR) minimum V-AH	72	63
Cold cranking current A (For reference value)	550	