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POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000012519611

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.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery and wait at least three minutes before performing any service.

PREPARATION

< PREPARATION >

PREPARATION

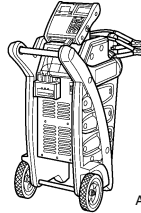
PREPARATION

Special Service Tool

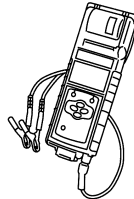
INFOID:0000000012519612

The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (—) Model GR8-1200 NI Multitasking battery and electrical diagnostic station	Tests batteries, starting and charging systems and charges batteries. For operating instructions, refer to diagnostic station instruction manual.
— (—) Model EXP-800 NI Battery and electrical diagnostic analyzer	Tests batteries and charging systems. For operating instructions, refer to diagnostic analyzer instruction manual.



AWI1A1239ZZ



JSMIA0806ZZ

Commercial Service Tool

INFOID:0000000012519613

Tool name	Description
Power tool	Loosening nuts, screws and bolts



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ELECTRICAL UNITS LOCATION

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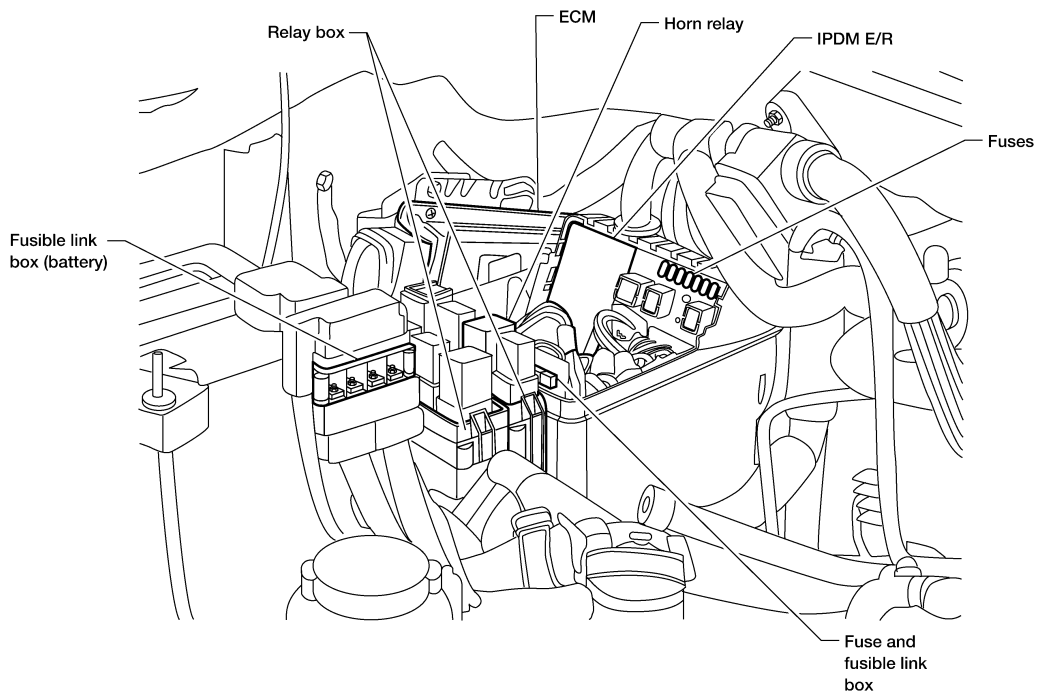
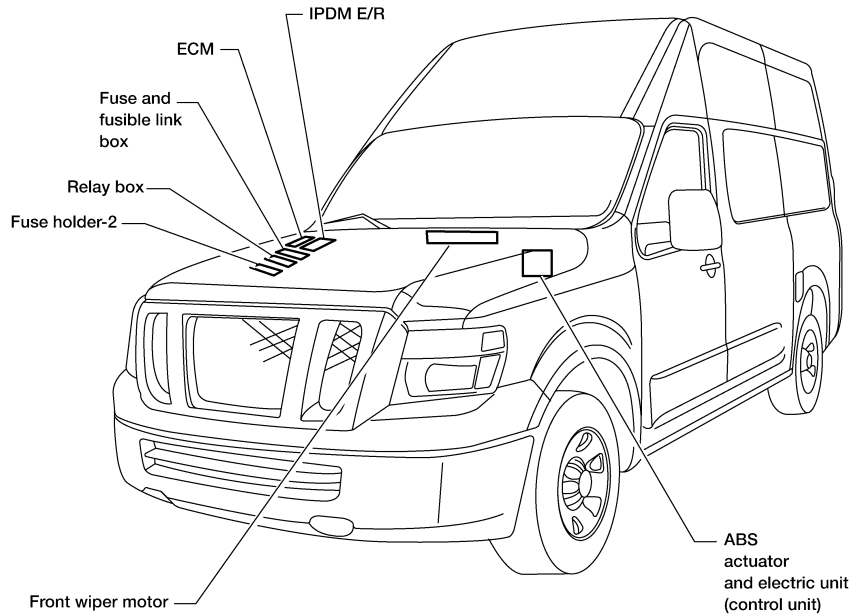
SYSTEM DESCRIPTION

ELECTRICAL UNITS LOCATION

Electrical Units Location

INFOID:000000012519614

ENGINE COMPARTMENT

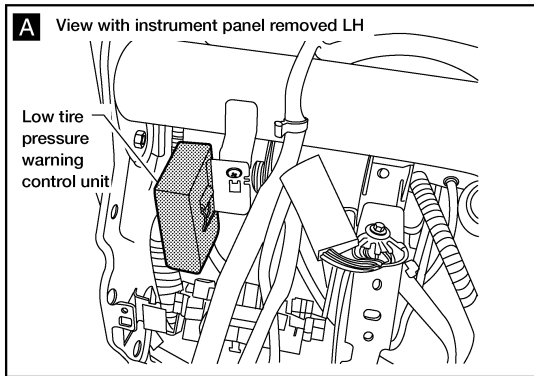
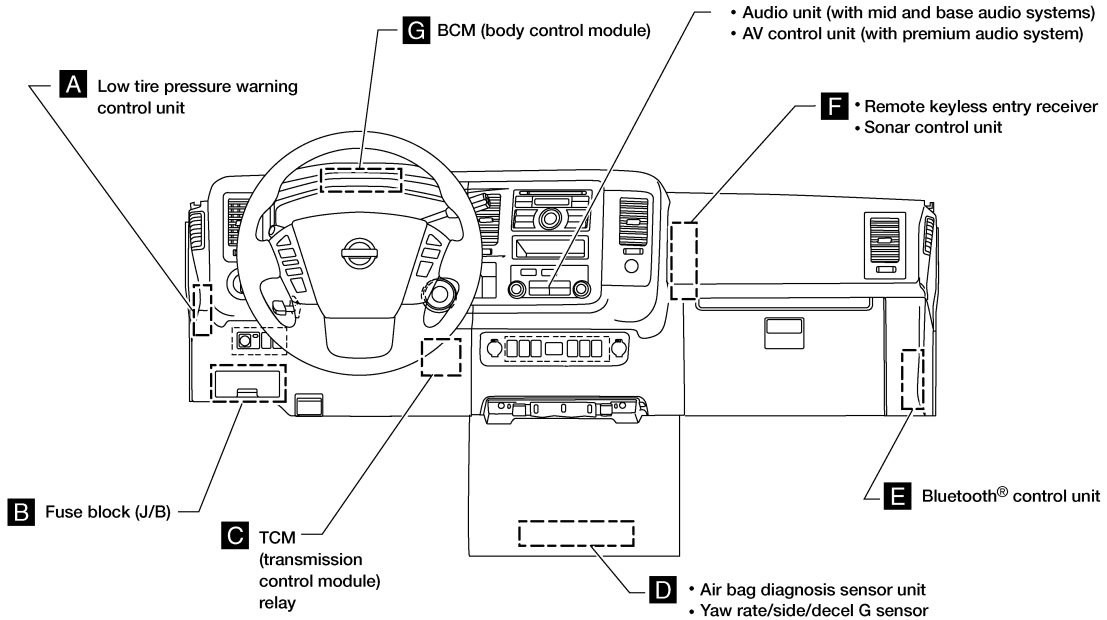


AAMIA1061GB

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >

PASSENGER COMPARTMENT



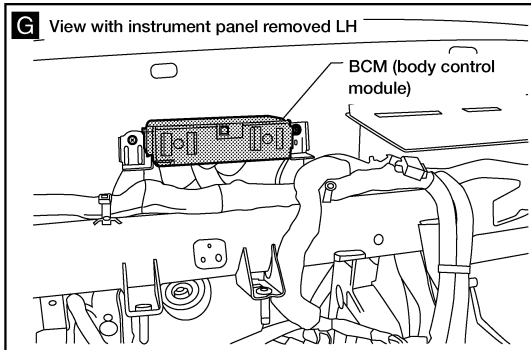
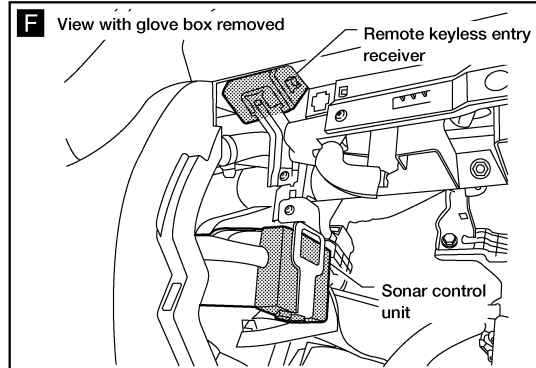
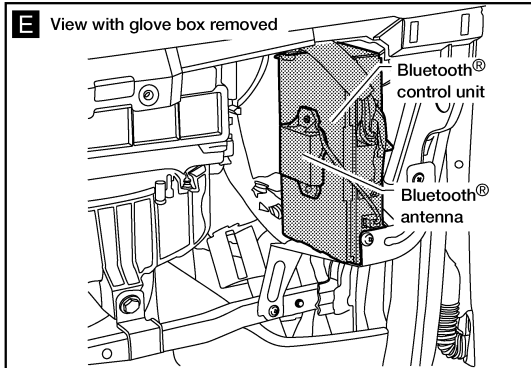
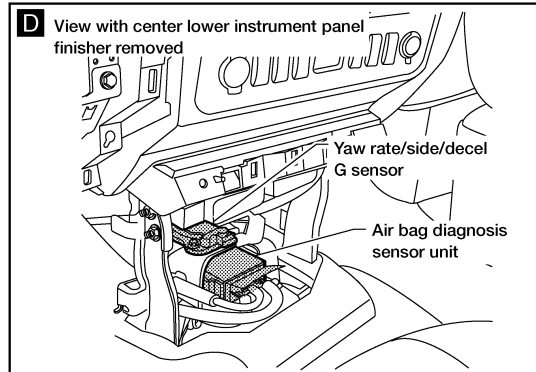
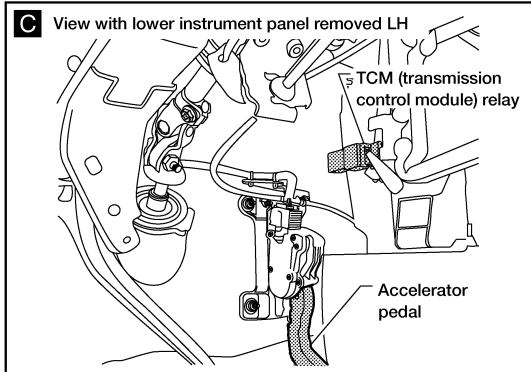
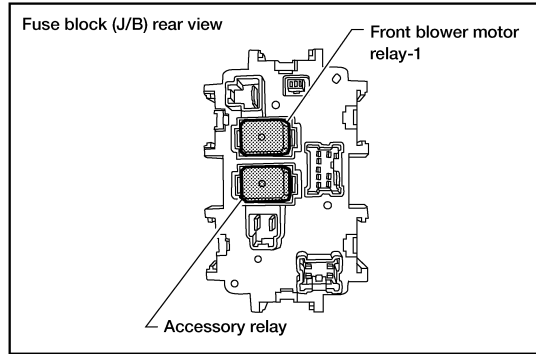
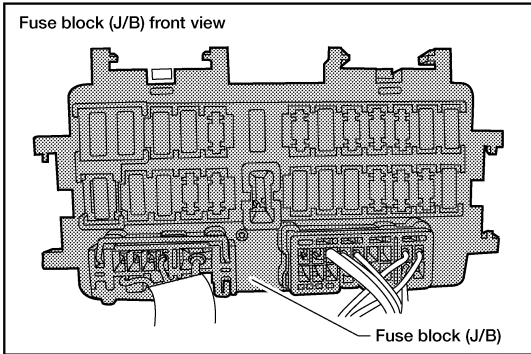
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ABMIA5736GB

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >

B Instrument panel side LH



ABMIA5737GB

COMPONENT PARTS

< SYSTEM DESCRIPTION >

COMPONENT PARTS

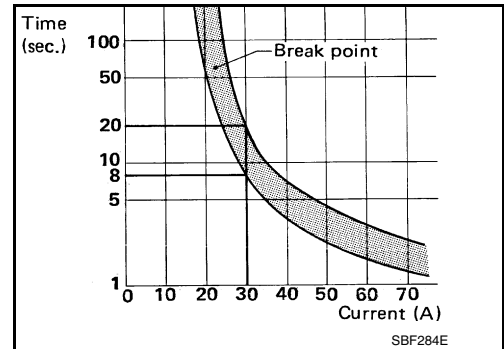
Circuit Breaker (Built Into BCM)

INFOID:000000012519615

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

This circuit breaker is used for the following systems:

- Power windows
- Power moonroof
- Power seat
- Power lumbar
- Power sunshade



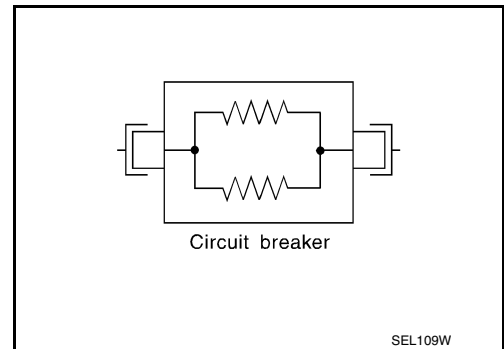
Circuit Breaker (External to BCM)

INFOID:000000012519616

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

This circuit breaker is used for the following systems:

- Power memory seat
- Power back door



Harness Connector

INFOID:000000012519617

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.

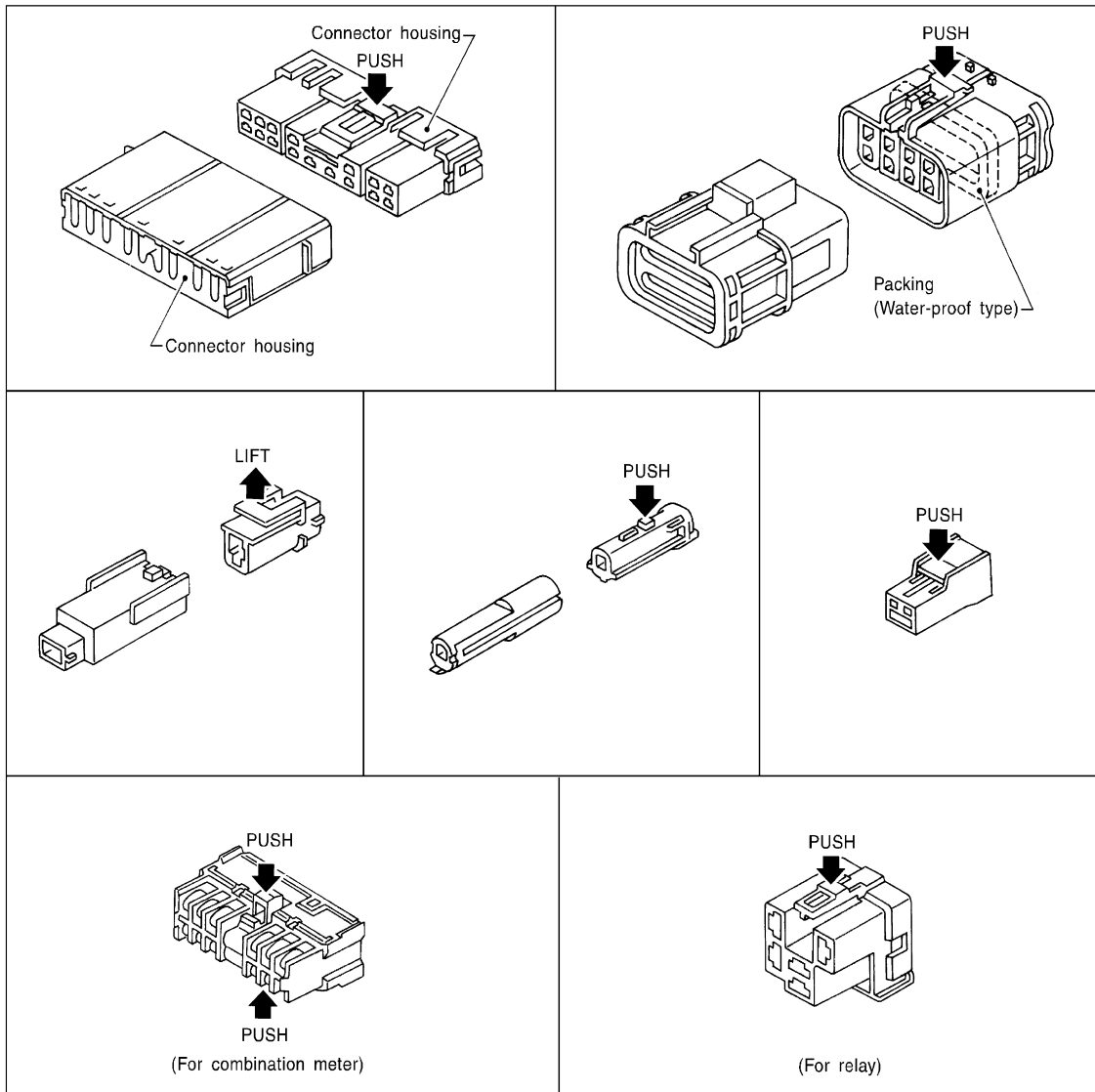
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COMPONENT PARTS

< SYSTEM DESCRIPTION >

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

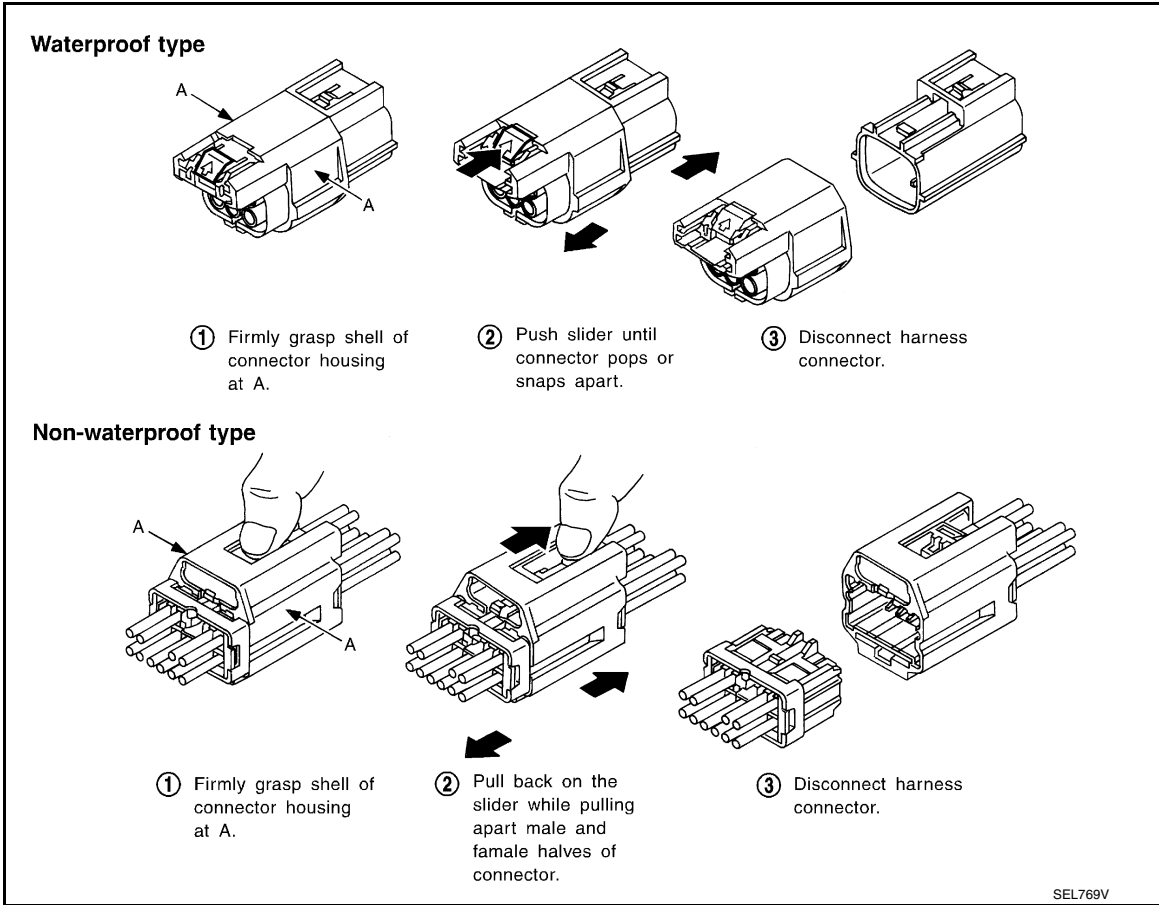
CAUTION:

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

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[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:

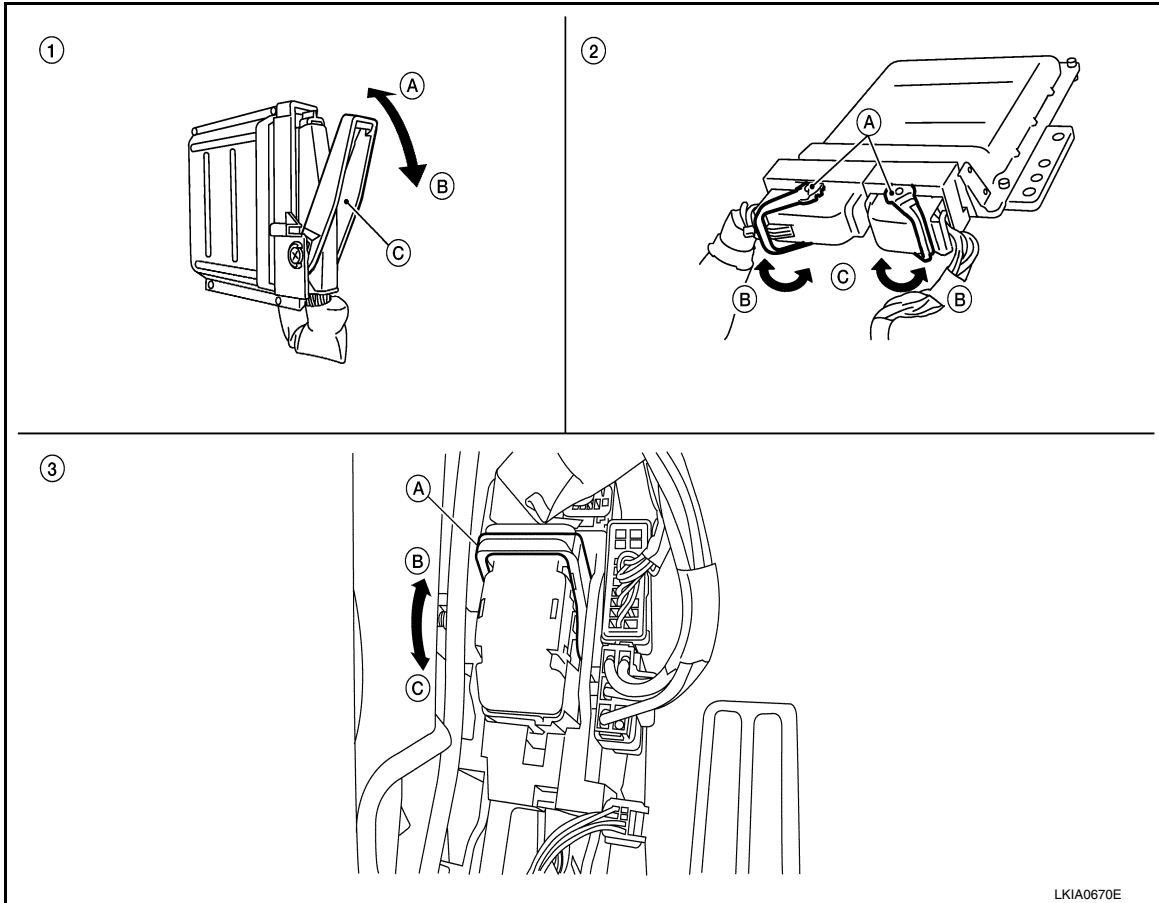
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COMPONENT PARTS

< SYSTEM DESCRIPTION >

- 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.



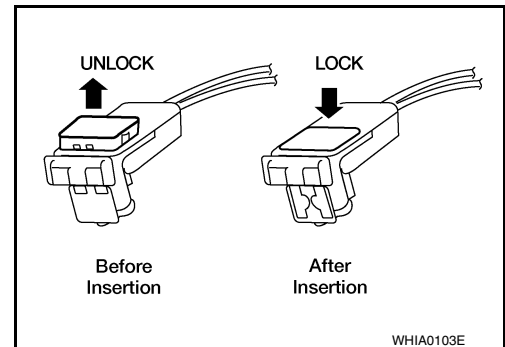
- | | | |
|-----------------------------------|---------------------------------|------------------|
| 1. Control unit with single lever | 2. Control unit with dual lever | 3. SMJ connector |
| A. Fasten | A. Lever | A. Lever |
| B. Loosen | B. Fasten | B. Fasten |
| C. Lever | C. Loosen | C. Loosen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

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS 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.



Standardized Relay

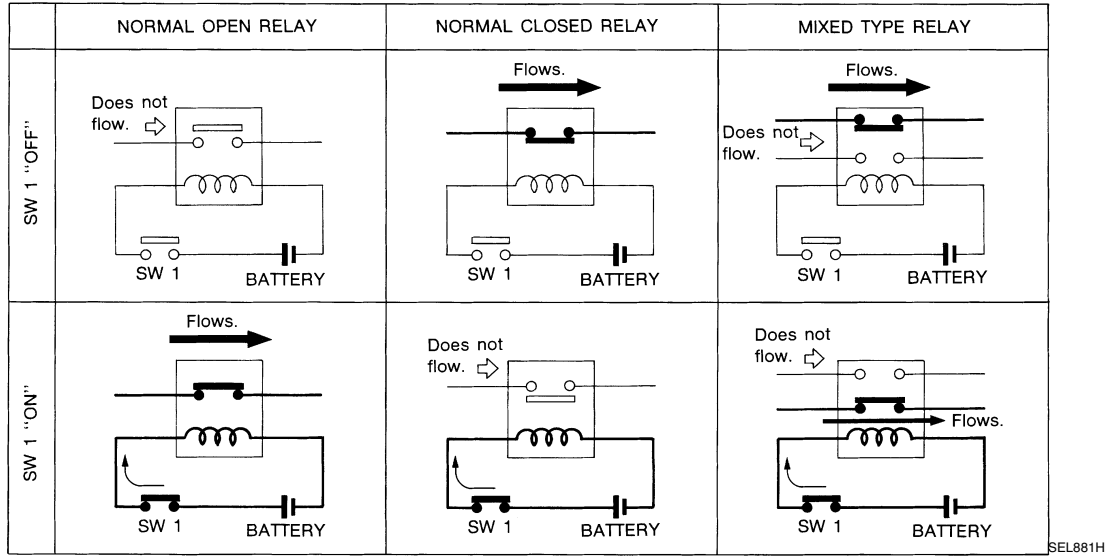
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NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

COMPONENT PARTS

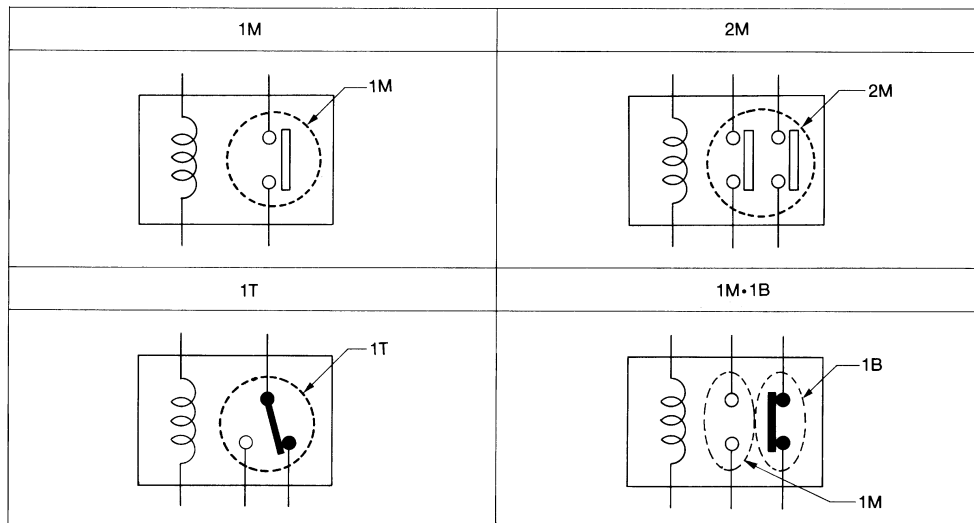
< SYSTEM DESCRIPTION >

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



TYPE OF STANDARDIZED RELAYS

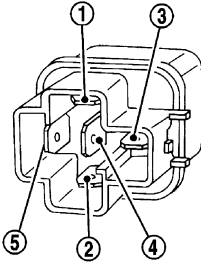
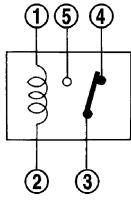
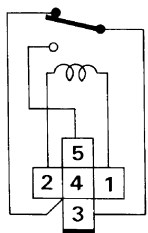
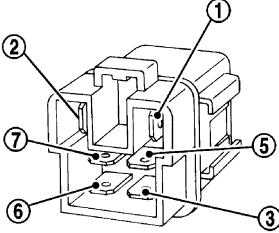
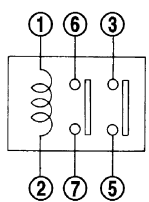
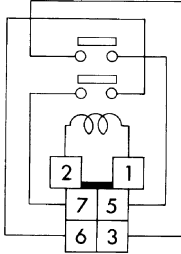
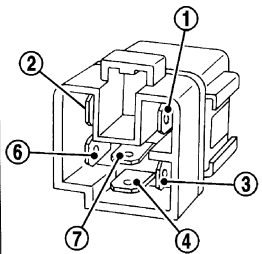
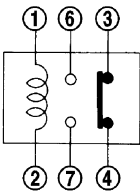
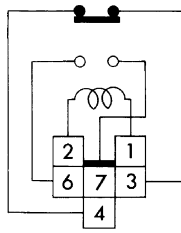
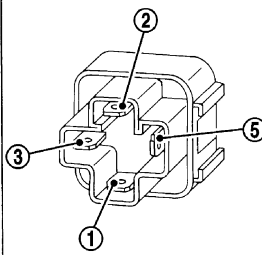
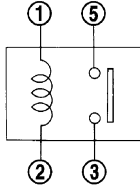
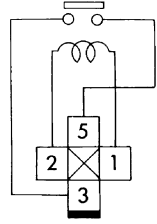
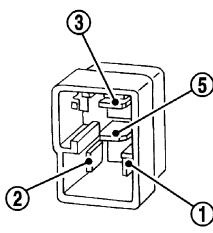
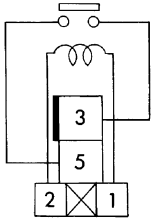
- 1M 1 Make
- 1T 1 Transfer
- 2M 2 Make
- 1M-1B 1 Make 1 Break



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COMPONENT PARTS

< SYSTEM DESCRIPTION >

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

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

SEL188W

POWER SUPPLY ROUTING CIRCUIT

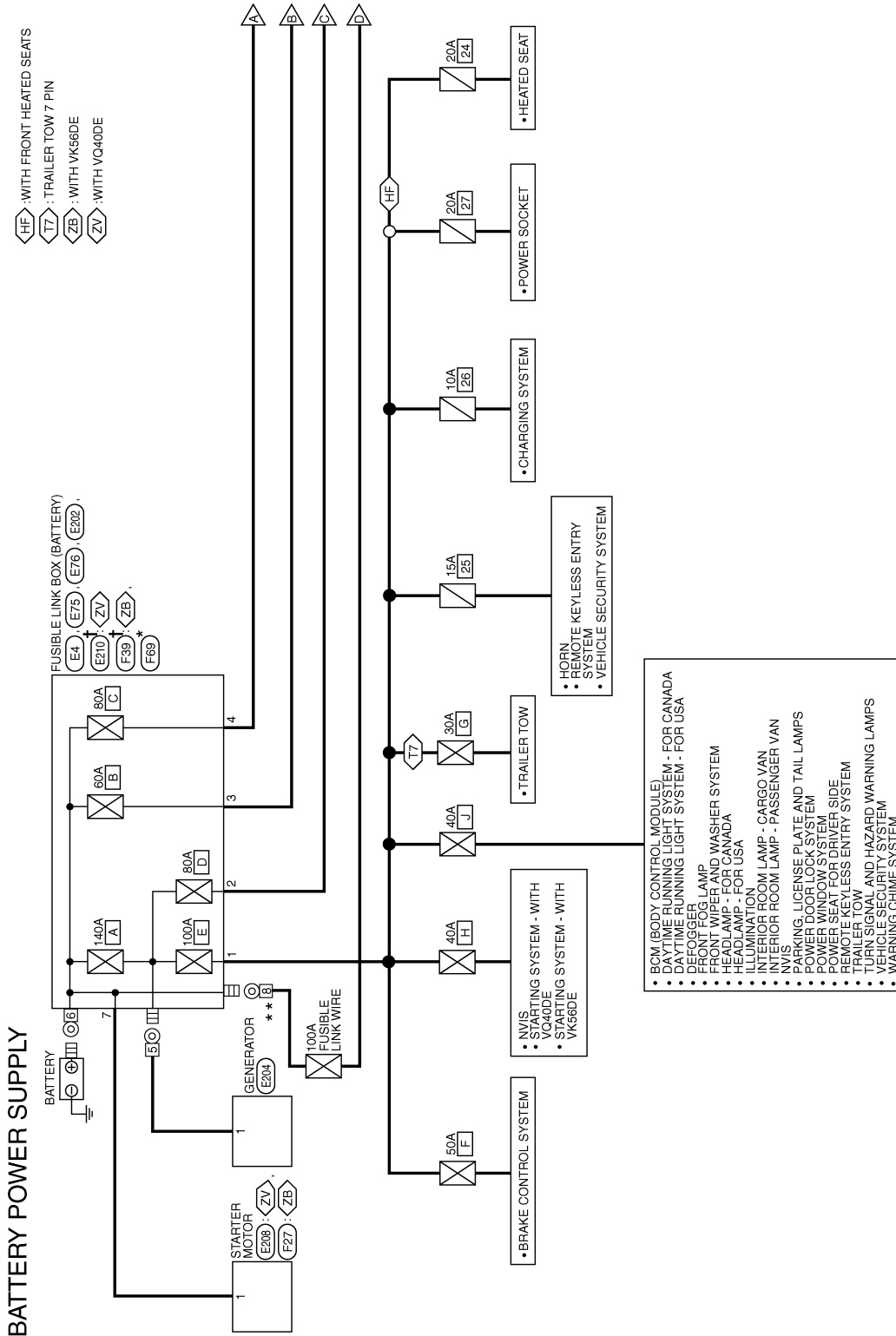
< WIRING DIAGRAM >

WIRING DIAGRAM

POWER SUPPLY ROUTING CIRCUIT

Wiring Diagram—BATTERY POWER SUPPLY—

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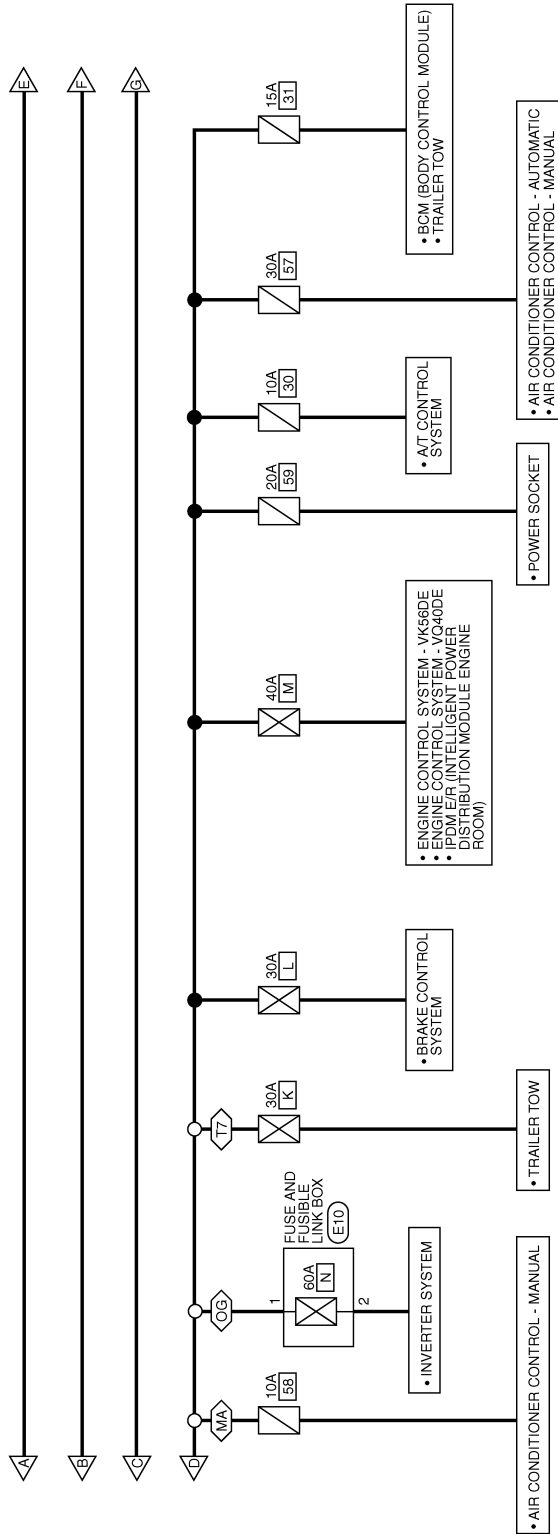
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

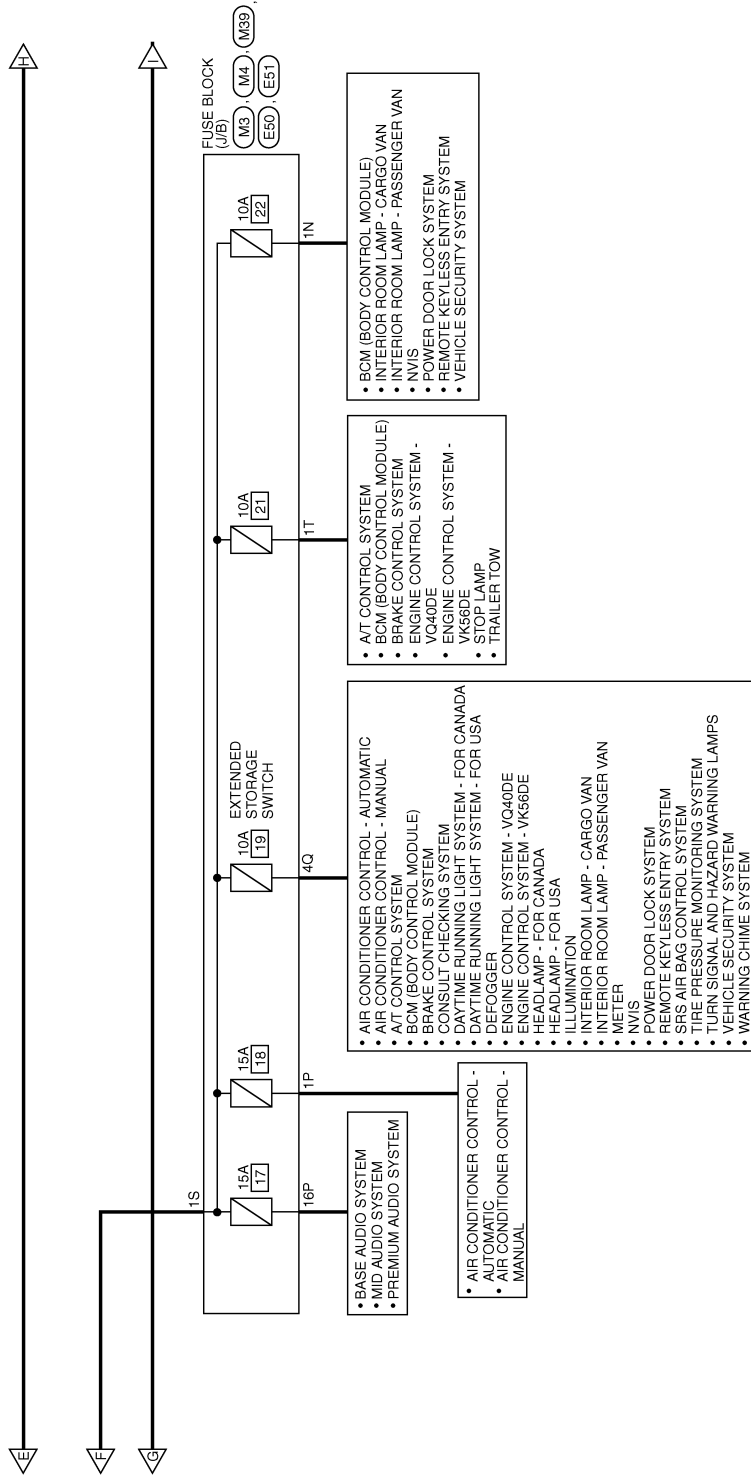
MA : WITHOUT AUTO A/C
 OG : WITH INVERTER SYSTEM
 T7 : TRAILER TOW 7 PIN



AAMWA1905GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



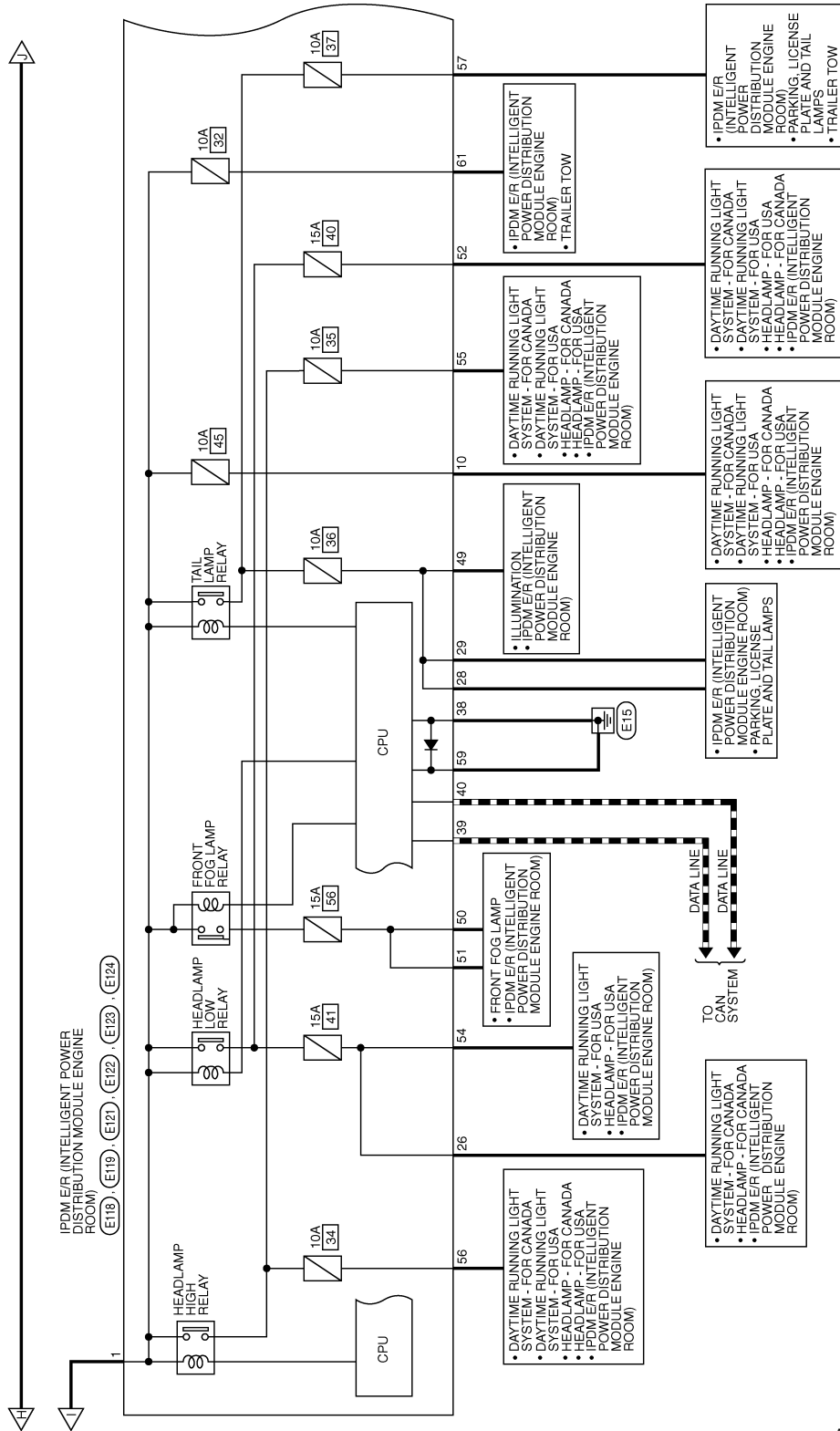
ABMWA3226GB

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POWER SUPPLY ROUTING CIRCUIT

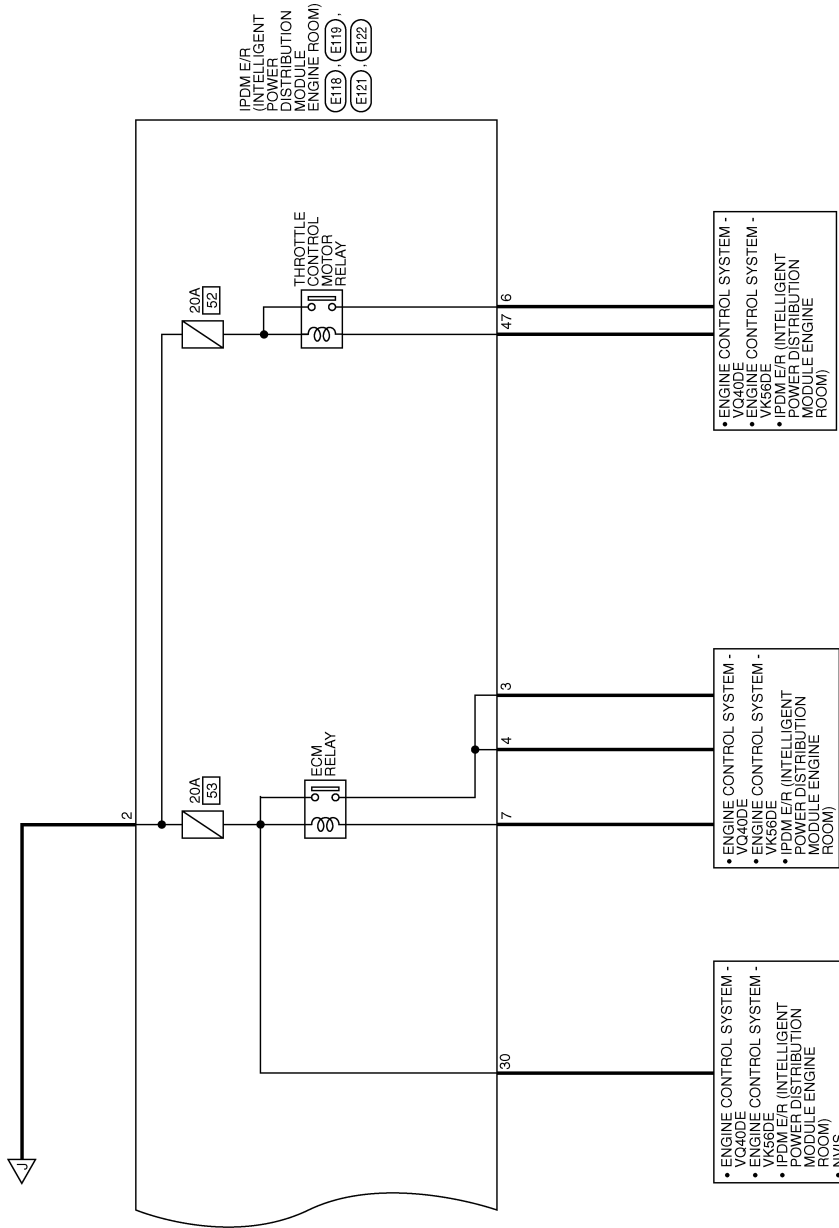
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ABMWA3227GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



ABMWA2460GB

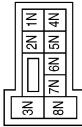
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

BATTERY POWER SUPPLY CONNECTORS

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



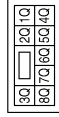
Terminal No.	1N	Color of Wire	LG	Signal Name	-
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Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	1P	Color of Wire	L	Signal Name	-
Terminal No.	16P	Color of Wire	Y	Signal Name	-

Connector No.	M39
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	4Q	Color of Wire	Y	Signal Name	-
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Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



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

Connector No.	E10
Connector Name	FUSE AND FUSIBLE LINK BOX
Connector Color	BLACK



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

Connector No.	E50
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



Terminal No.	1S	Color of Wire	W	Signal Name	-
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	E76
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



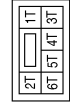
Terminal No.	Color of Wire	Signal Name
3	W	-
4	R	-

Connector No.	E75
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-



Terminal No.	Color of Wire	Signal Name
8	W	-

Connector No.	E51
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



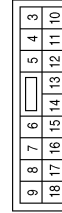
Terminal No.	Color of Wire	Signal Name
1T	O	-

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



Terminal No.	Color of Wire	Signal Name
26	R	LEVELIZER
28	O	CLEARANCE/L RH
29	R	CLEARANCE/L LH
30	R	ECM BAT

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



Terminal No.	Color of Wire	Signal Name
3	O	IGN COIL
4	BR	ECM VB
6	L	ETC
7	W	ECM RLY CONT
10	G	DTRL RLY SUPPLY

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/R	F/L USM

ABMIA7388GB

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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

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	R	TAIL
59	B	GND (POWER)
61	BR	TRAIL RLY SUPPLY

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

51	50	49
56	55	54
53	52	



Terminal No.	Color of Wire	Signal Name
49	V	ILLUMINATION
50	L	FR FOG LAMP LH
51	Y	FR FOG LAMP RH
52	L	HEAD/L LO LH
54	V	HEAD/L LO RH
55	R	HEAD/L HI LH
56	Y	HEAD/L 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)
39	L	CAN-H
40	P	CAN-L
47	O	ETC RLY CONT

Connector No.	E208
Connector Name	STARTER MOTOR (WITH VQ40DE)
Connector Color	-



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

Connector No.	E204
Connector Name	GENERATOR
Connector Color	-



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

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



Terminal No.	Color of Wire	Signal Name
5	B/R	-

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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	F39
Connector Name	FUSIBLE LINK BOX (BATTERY) (WITH VK56DE)
Connector Color	-



Terminal No.	7	Color of Wire	B/R	Signal Name	-
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Connector No.	F27
Connector Name	STARTER MOTOR (WITH VK56DE)
Connector Color	-



Terminal No.	1	Color of Wire	B/R	Signal Name	-
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Connector No.	E210
Connector Name	FUSIBLE LINK BOX (BATTERY) (WITH VQ40DE)
Connector Color	-



Terminal No.	7	Color of Wire	B/R	Signal Name	-
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Connector No.	F69
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-



Terminal No.	6	Color of Wire	-	Signal Name	-
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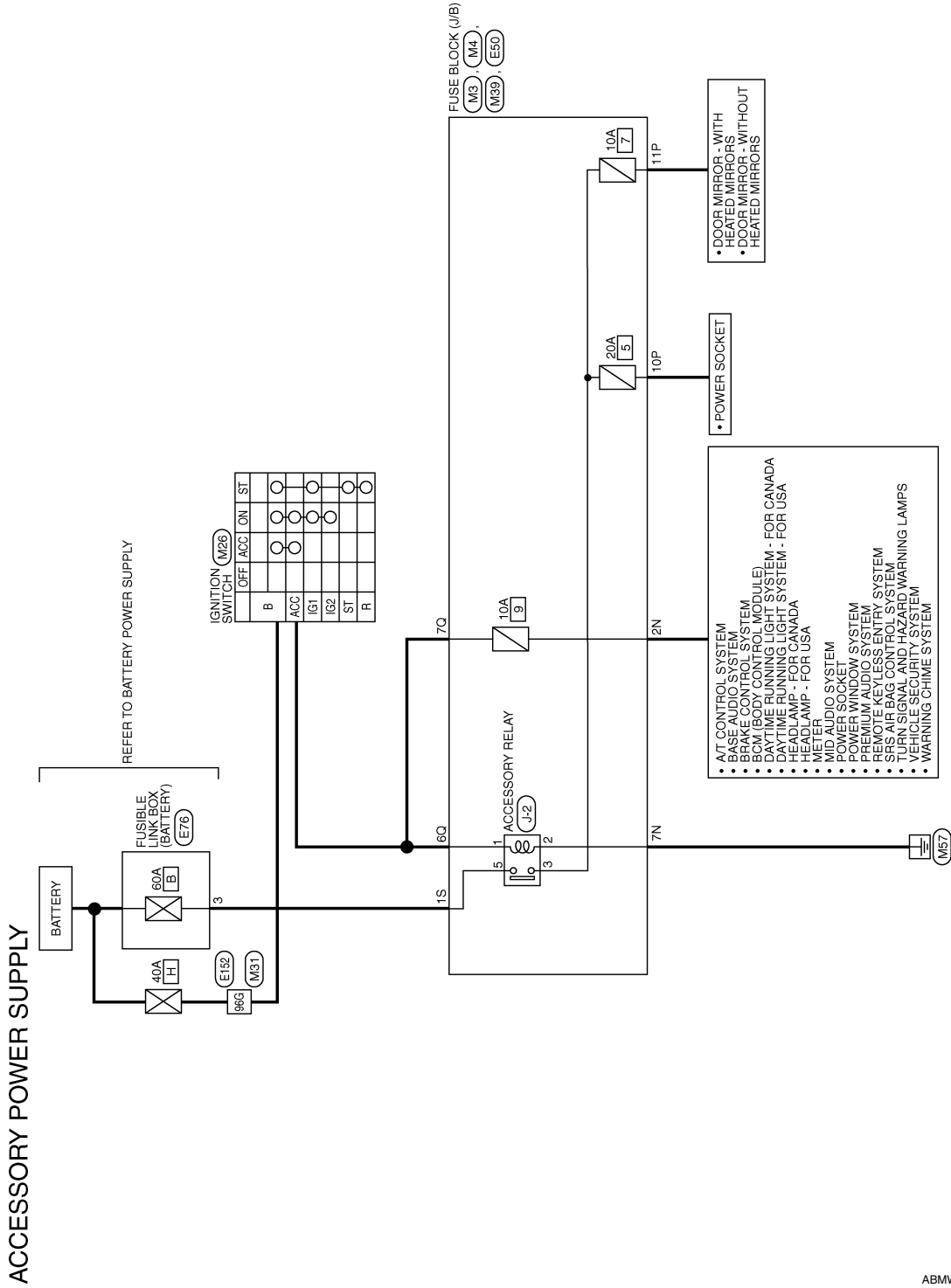
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Wiring Diagram—ACCESSORY POWER SUPPLY—

INFOID:000000012519620



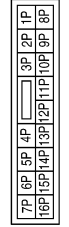
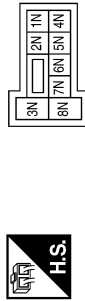
ABMWA3223GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

ACCESSORY POWER SUPPLY CONNECTORS

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



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



Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE

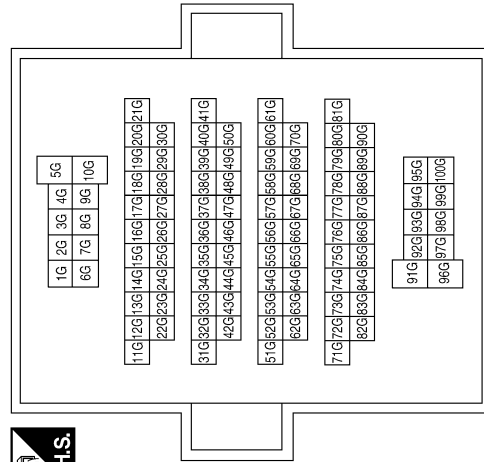


Terminal No.	Color of Wire	Signal Name
2N	O	-
7N	B	-

Terminal No.	Color of Wire	Signal Name
10P	G	-
11P	LG	-

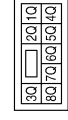
Terminal No.	Color of Wire	Signal Name
B	G	-
ACC	V	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
96G	G	-

Connector No.	M39
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6Q	V	-
7Q	V	-

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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	E76
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



Terminal No.	3	Color of Wire	W	Signal Name	-
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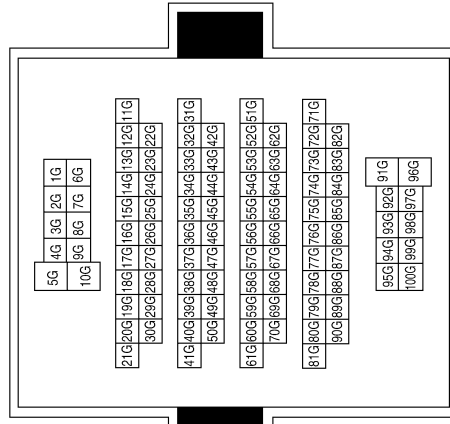
Connector No.	E50
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



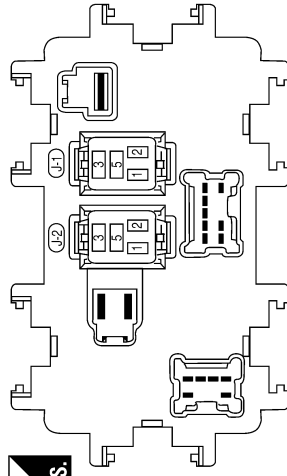
Terminal No.	1S	Color of Wire	W	Signal Name	-
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Terminal No.	96G	Color of Wire	G	Signal Name	-
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Connector No.	E152
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	J-2
Connector Name	FUSE BLOCK (J/B) (ACCESSORY RELAY)
Connector Color	-



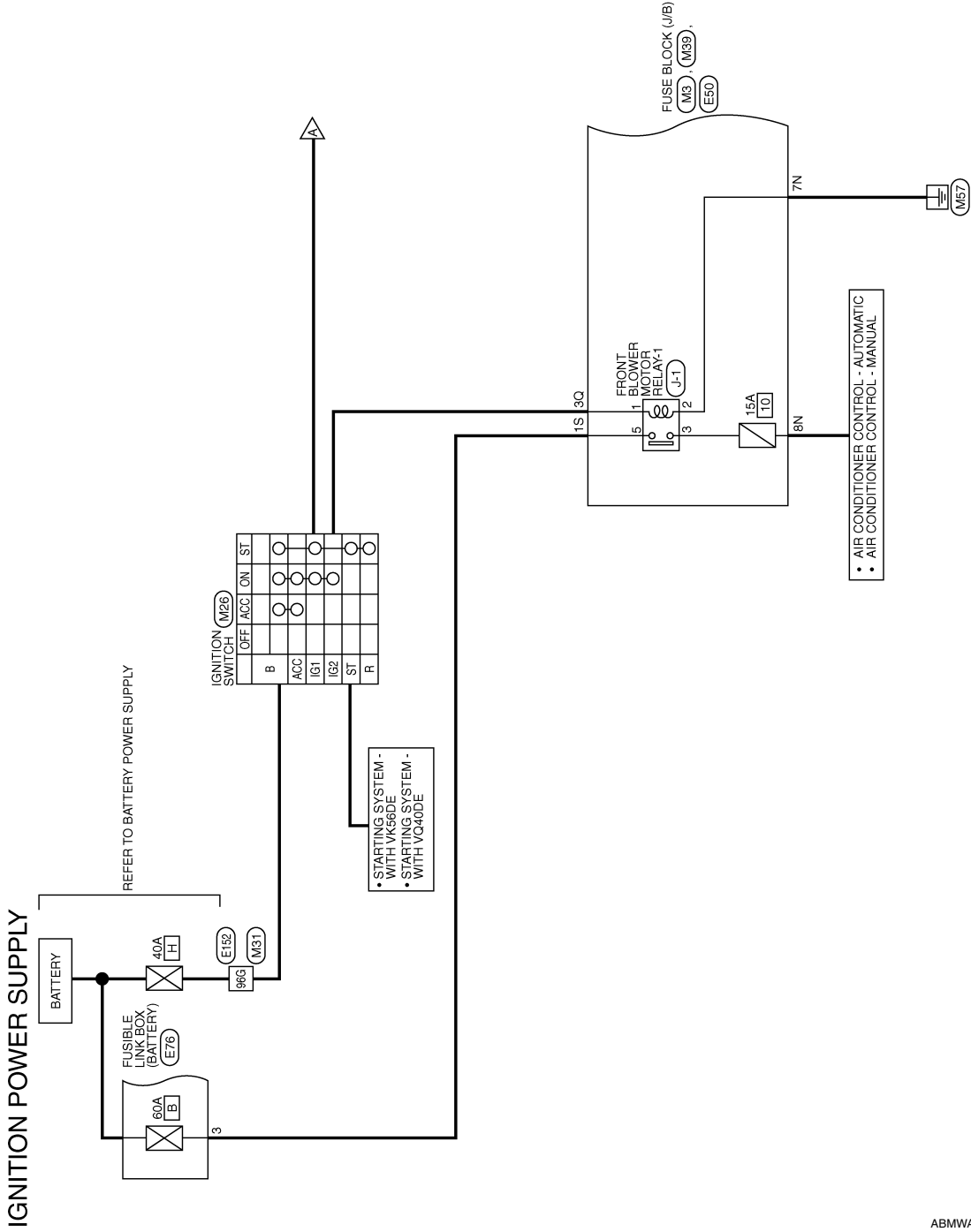
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Wiring Diagram—IGNITION POWER SUPPLY—

INFOID:000000012519621

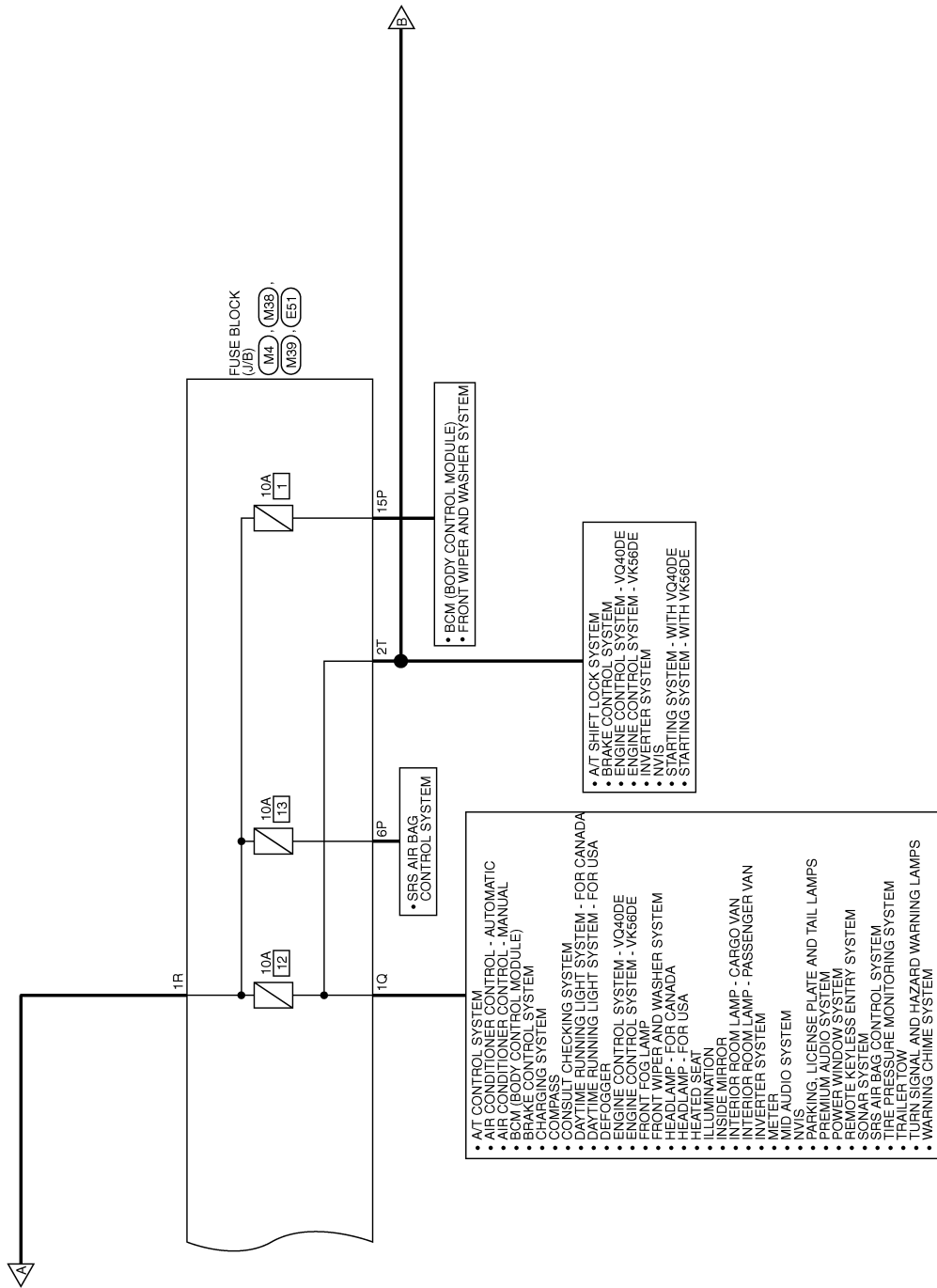


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POWER SUPPLY ROUTING CIRCUIT

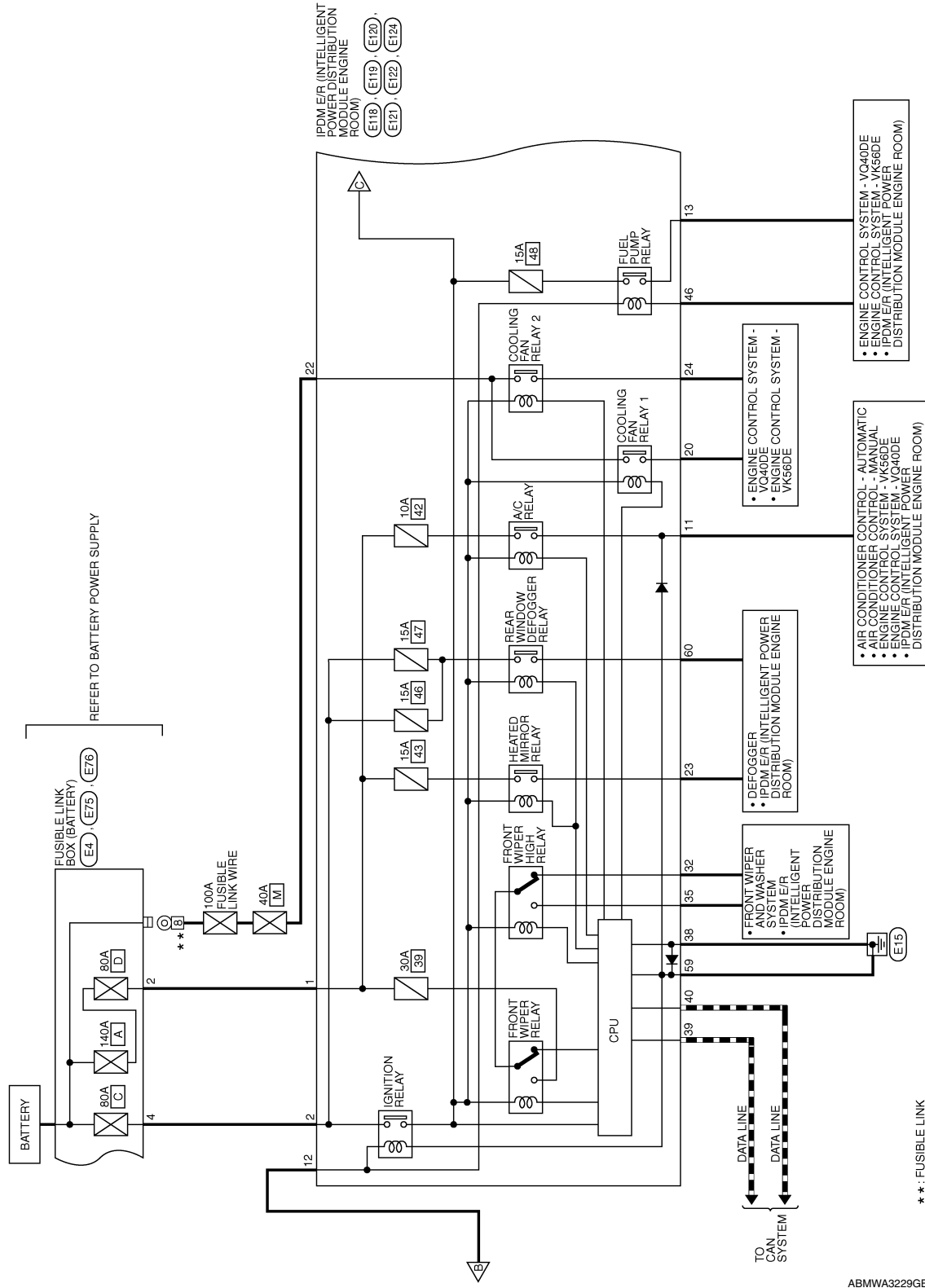
< WIRING DIAGRAM >



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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



IPDM/ER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
 (E118), (E119), (E120), (E121), (E122), (E124)

ENGINE CONTROL SYSTEM - VQ40DE
 ENGINE CONTROL SYSTEM - VK56DE
 IPDM/ER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

AIR CONDITIONER CONTROL - AUTOMATIC
 AIR CONDITIONER CONTROL - MANUAL
 ENGINE CONTROL SYSTEM - VQ40DE
 ENGINE CONTROL SYSTEM - VK56DE
 IPDM/ER (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

TO CAN SYSTEM
 DATA LINE
 DATA LINE

** : FUSIBLE LINK

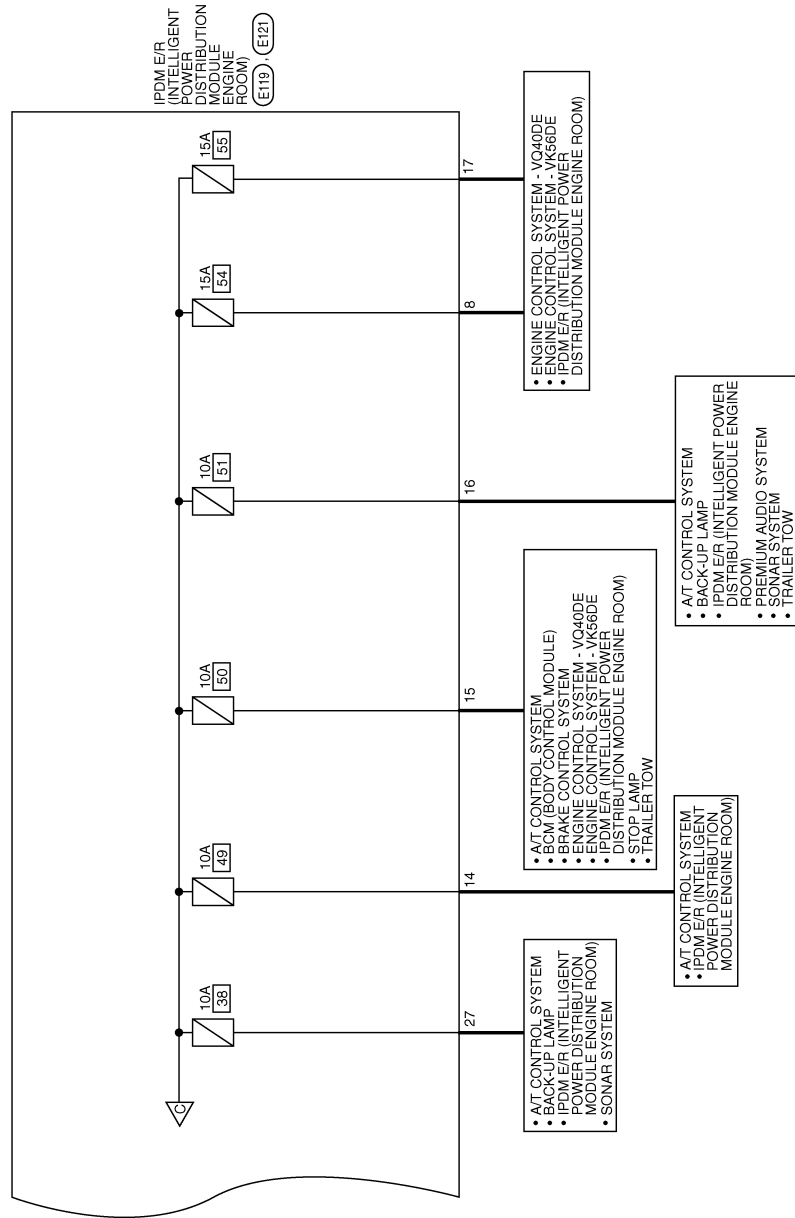
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



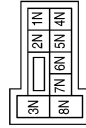
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

IGNITION POWER SUPPLY CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
7N	B	-
8N	G	-

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



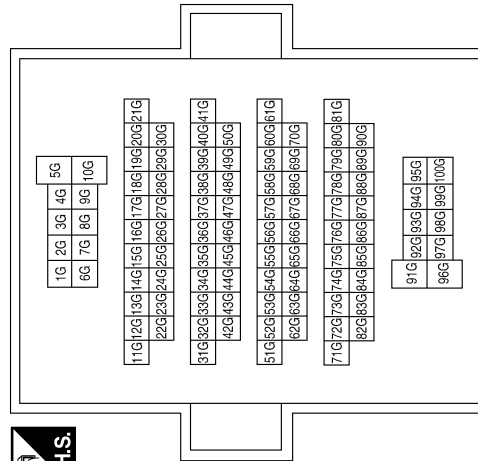
Terminal No.	Color of Wire	Signal Name
6P	W	-
15P	R	-

Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
B	G	-
ST	Y	-
IG1	L	-
IG2	R	-

Connector No.	M31
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	96G
Color of Wire	G
Signal Name	-

Connector No.	M38
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



Terminal No.	1R
Color of Wire	L
Signal Name	-

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POWER SUPPLY ROUTING CIRCUIT



< WIRING DIAGRAM >

Connector No.	E50
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK


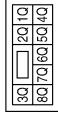
Terminal No.	1S	Color of Wire	W	Signal Name	-
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Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



Terminal No.	2	Color of Wire	W/R	Signal Name	-
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Connector No.	M39
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	1Q	Color of Wire	R	Signal Name	-
Terminal No.	6Q	Color of Wire	V	Signal Name	-

Connector No.	E76
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY


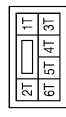
Terminal No.	3	Color of Wire	W	Signal Name	-
Terminal No.	4	Color of Wire	R	Signal Name	-

Connector No.	E75
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	-

Terminal No.	8	Color of Wire	W	Signal Name	-
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Connector No.	E51
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

Terminal No.	2T	Color of Wire	W	Signal Name	-
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POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

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	Y	MOTOR FAN 1
22	G	F/L MOTOR FAN
23	G	HEATED MIRROR
24	W	MOTOR FAN 2

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	V	O2 SENSOR IGN
11	W	A/C CLUTCH
12	W	IGN SW (G1)
13	R	FUEL PUMP MTR
14	Y	A/T ECU IGN
15	GR	ABS ECU IGN
16	G	REVERSE LAMP IGN
17	W	INJECTOR

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/R	F/L USM
2	R	F/L MAIN

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	R	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
46	GR	FUEL RLY CONT

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			

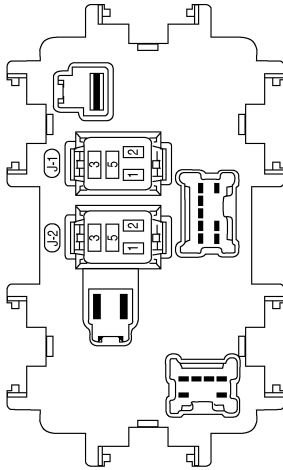
Terminal No.	Color of Wire	Signal Name
27	SB	TTOW REV LAMP
32	L	FR WIPER LO
35	SB	FR WIPER HI

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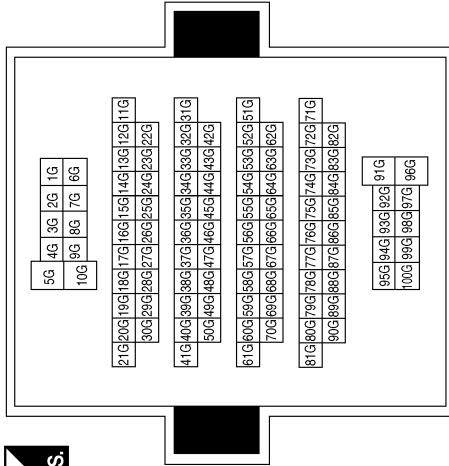
POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	J-1
Connector Name	FUSE BLOCK (J/B) (FRONT BLOWER MOTOR RELAY-1)
Connector Color	-



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



Terminal No.	96G	Color of Wire	G	Signal Name	-
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GROUND

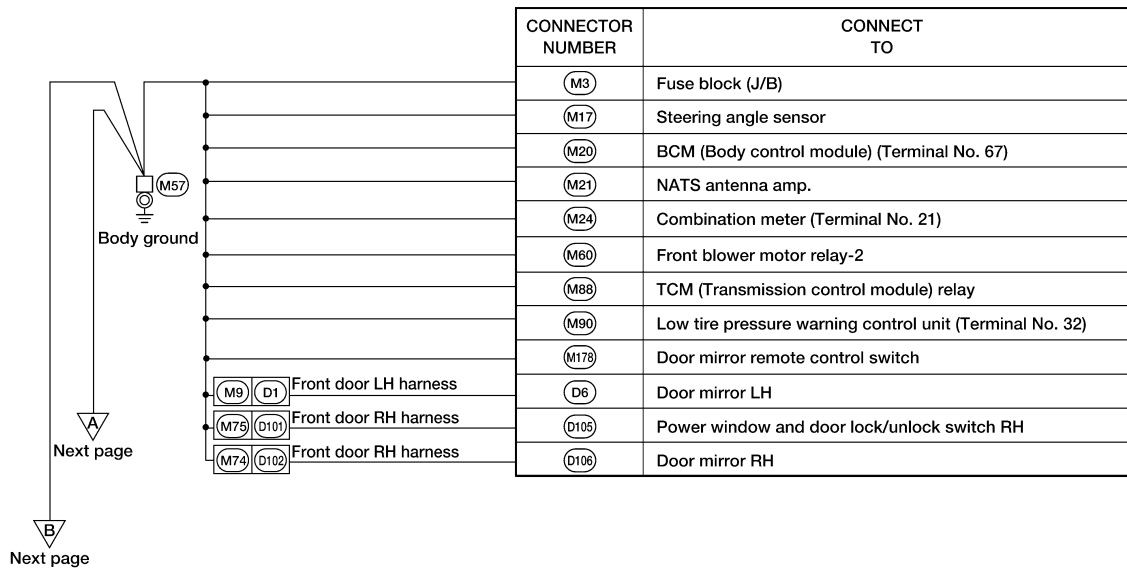
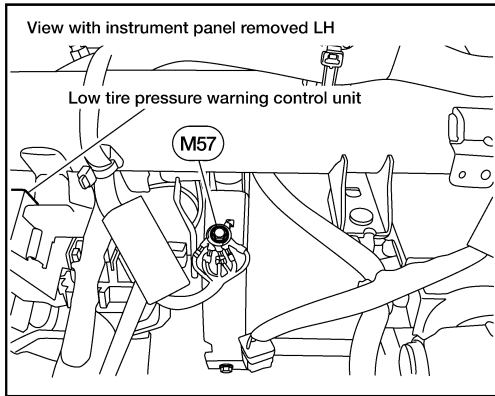
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GROUND

Ground Distribution

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MAIN HARNESS



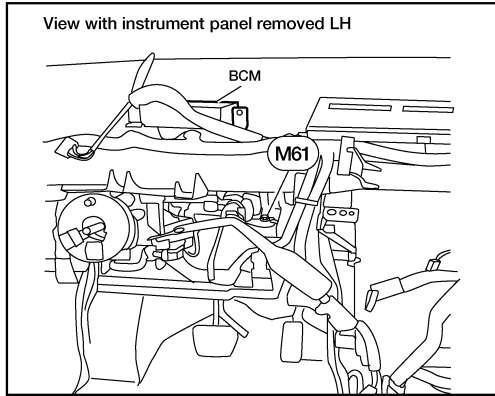
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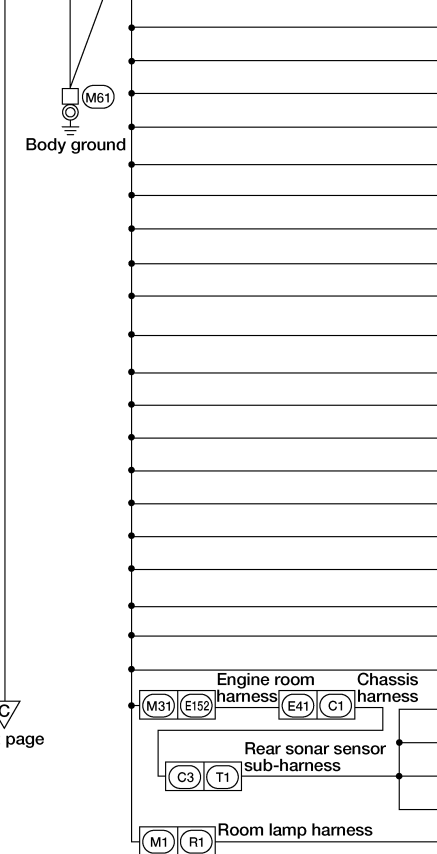
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Body ground

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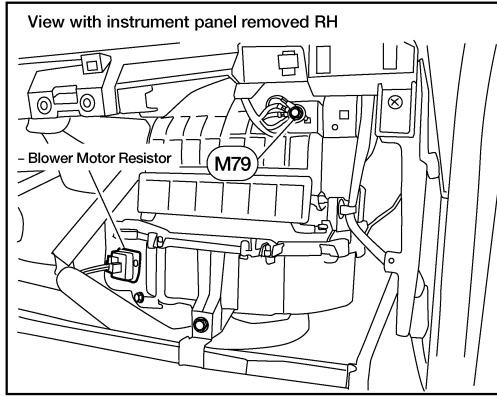


CONNECTOR NUMBER	CONNECT TO
(M7)	Pre-wiring for telematics control module (Terminal No. 22)
(M12)	Heated seat relay
(M22)	Data link connector (Terminal No. 4)
(M22)	Data link connector (Terminal No. 5)
(M23)	Combination meter (Terminal No. 31)
(M35)	Air bag diagnosis sensor unit (Terminal No. 2) (cargo van)
(M36)	Front heated seat switch LH
(M37)	Front heated seat switch RH
(M42)	Audio unit (Terminal No. 20) (with base audio system)
(M44)	AV control unit (Terminal No. 20) (with premium audio system)
(M50)	Audio unit (Terminal No. 20) (with mid audio system)
(M55)	Hazard switch
(M67)	Aux in jack shield
(M68)	A/T shift selector (Terminal No. 1)
(M68)	A/T shift selector (Terminal No. 2)
(M85)	Bluetooth® control unit (Terminal No. 4)
(M85)	Bluetooth® control unit (Terminal No. 22)
(M85)	Bluetooth® control unit (Terminal No. 27)
(M108)	Yaw rate/side/decel G sensor
(M179)	Accessory socket relay
(M181)	Air bag diagnosis sensor unit (Terminal No. 2) (passenger van)
(T2)	Rear sonar sensor LH outer shield
(T3)	Rear sonar sensor RH outer shield
(T4)	Rear sonar sensor RH inner shield
(T5)	Rear sonar sensor LH inner shield
(R22)	Microphone shield

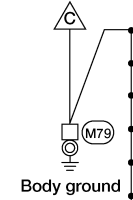
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< WIRING DIAGRAM >



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CONNECTOR NUMBER	CONNECT TO
(M6)	Tow mode switch
(M49)	Front air control (Terminal No. 3) (without auto A/C)
(M49)	Front air control (Terminal No. 4) (without auto A/C)
(M52)	Power transistor
(M53)	Front air control (Terminal No. 3) (with auto A/C)
(M53)	Front air control (Terminal No. 4) (with auto A/C)
(M54)	Front power socket
(M58)	Intake door motor
(M59)	Rear blower motor relay
(M64)	Air mix door motor (driver)
(M66)	Air mix door motor (passenger)
(M115)	Sonar control unit (Terminal No. 24)
(M116)	Sonar system OFF switch
(M117)	VDC OFF switch
(M142)	Front mode door motor
(M147)	Front air mix door motor
(M31) (E152)	Engine room harness
(E160) (E170)	Corner sensor sub-harness
(E161) (E171)	Corner sensor sub-harness
(M32) (B20)	Body harness
(B25) (E200)	Rear HVAC sub-harness
(M8) (D2)	Front door LH harness
(M9) (D1)	Front door LH harness
(E158)	Front sonar sensor LH outer shield
(E159)	Front sonar sensor RH outer shield
(E175)	Front sonar sensor LH inner shield
(E176)	Front sonar sensor RH inner shield
(B201)	Rear mode door motor
(B202)	Rear air mix door motor
(D7)	Main power window and door lock/unlock switch (Terminal No. 10)
(D14)	Front door lock assembly LH

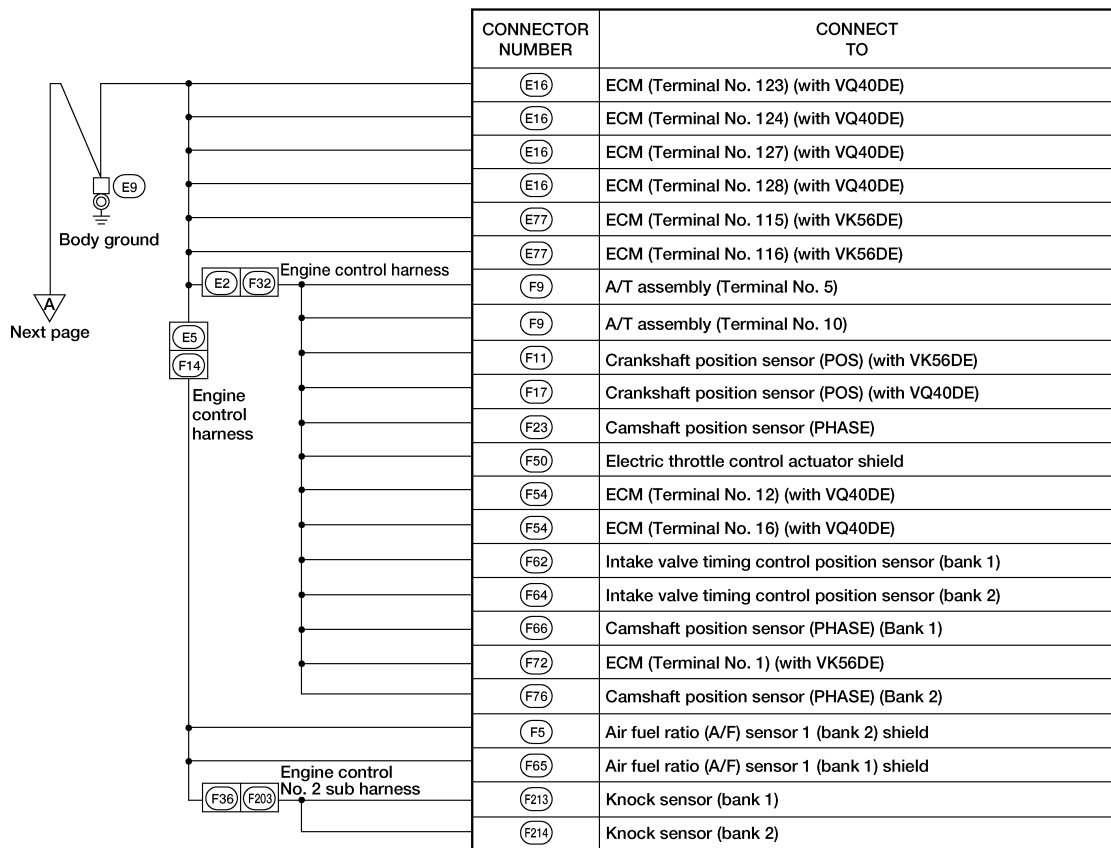
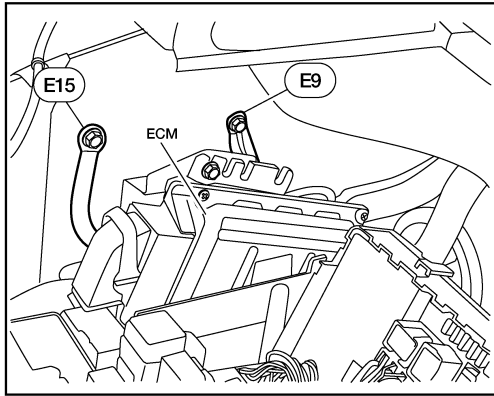
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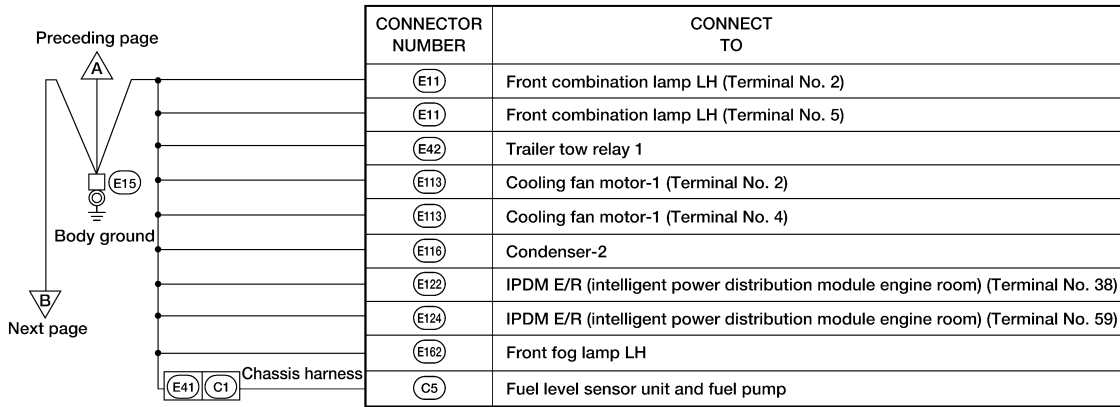
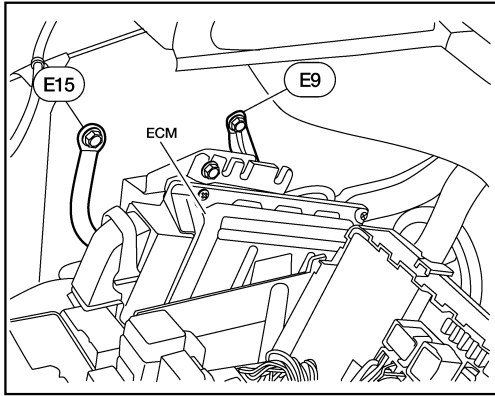
ENGINE ROOM HARNESS



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GROUND

< WIRING DIAGRAM >



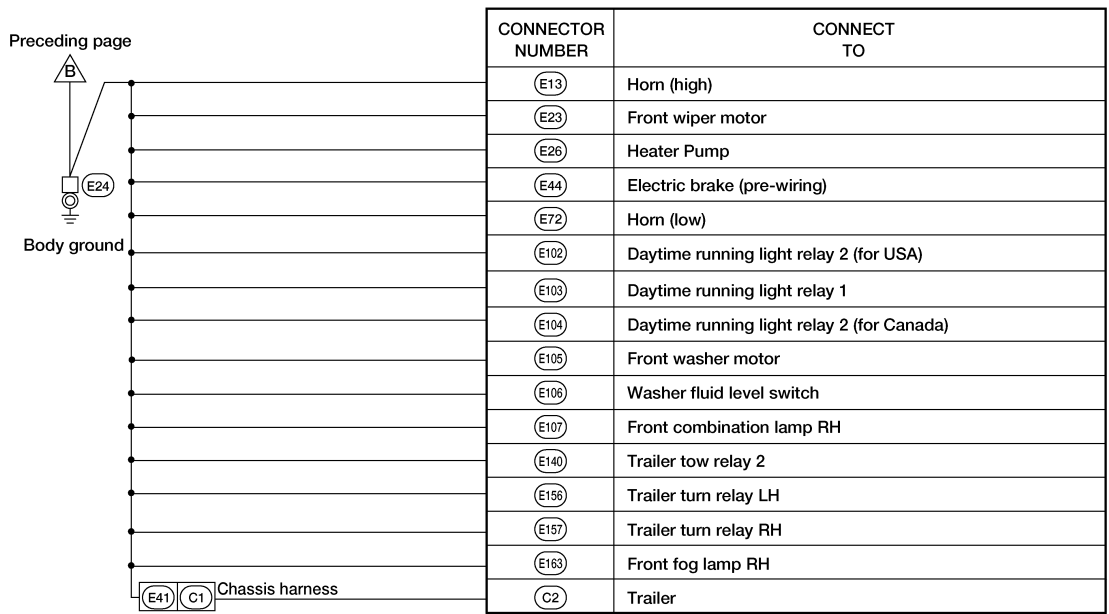
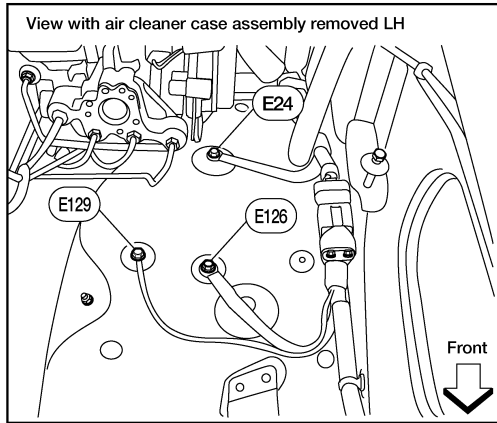
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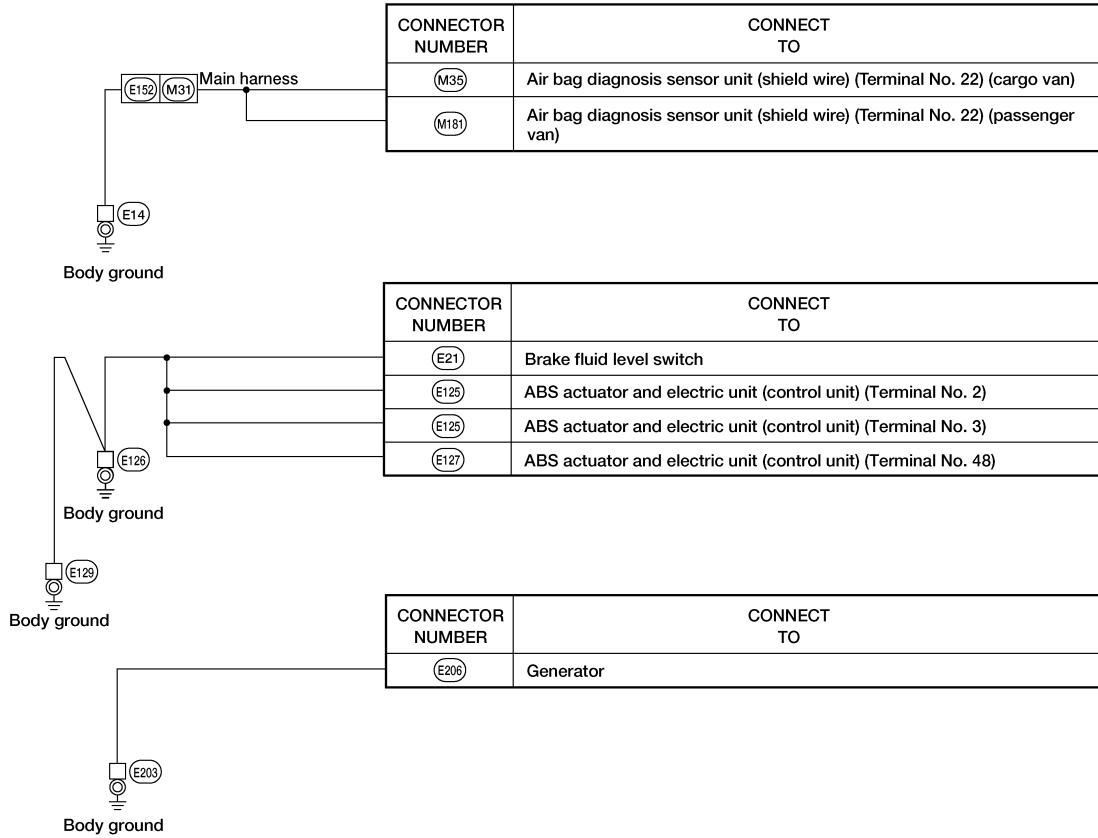
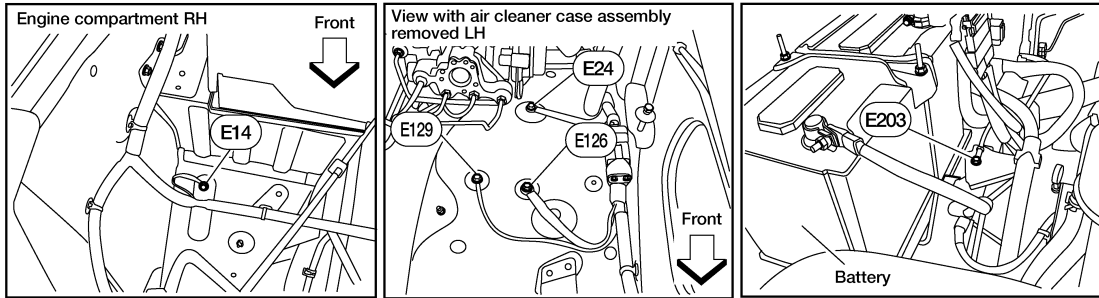
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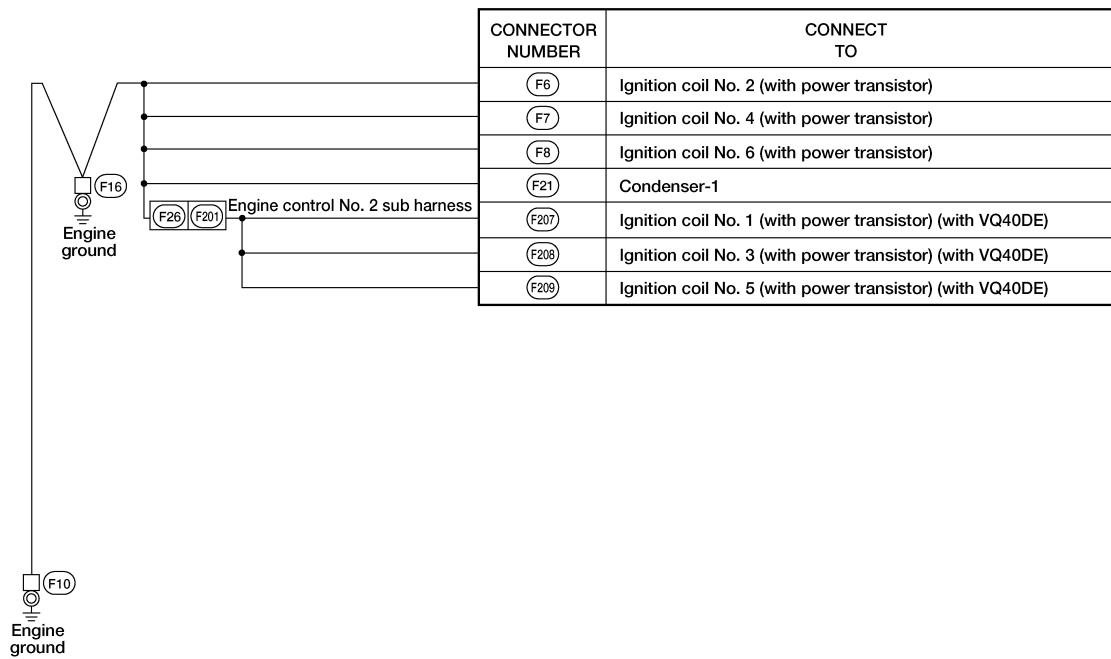
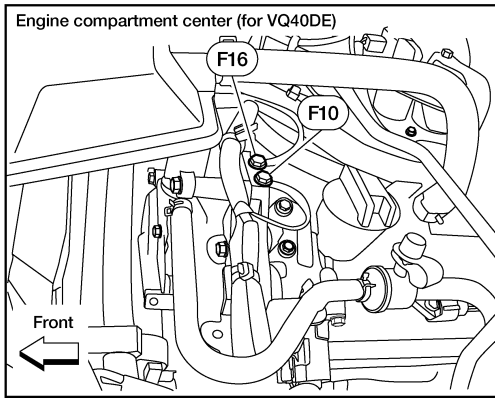
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ENGINE CONTROL HARNESS (VQ40DE)

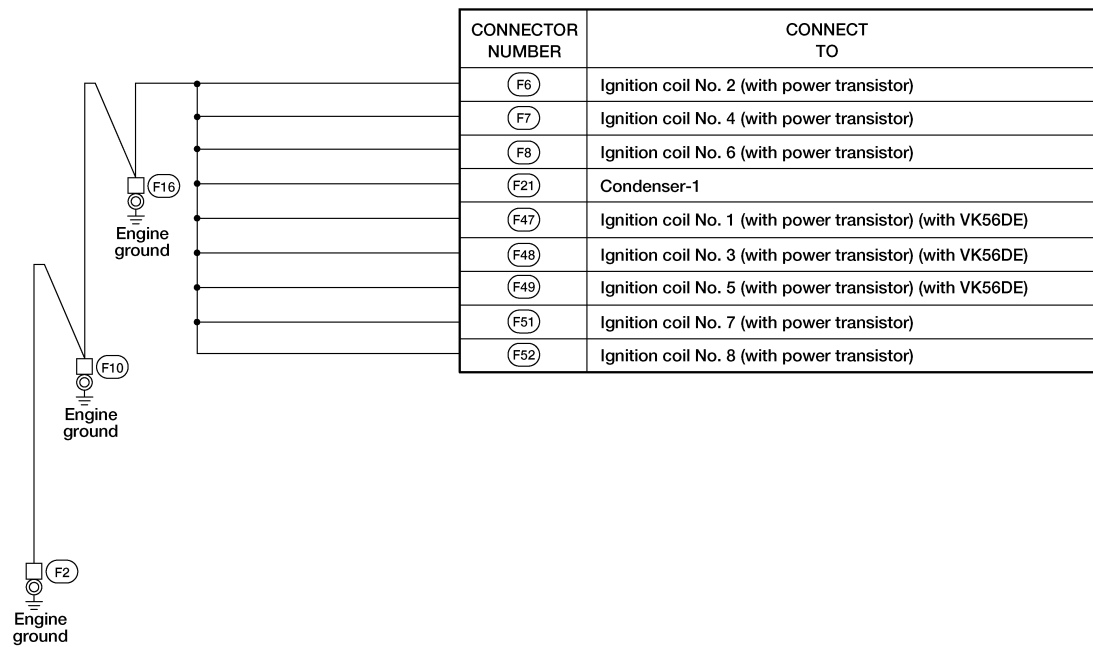
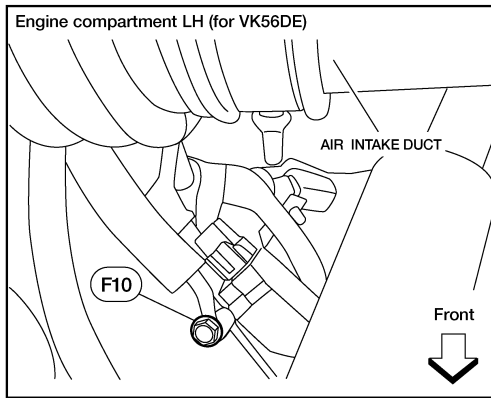
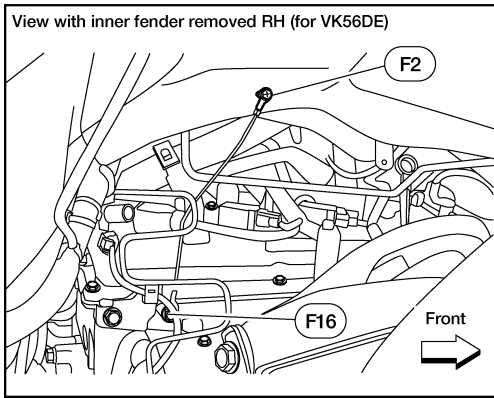


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GROUND

< WIRING DIAGRAM >

ENGINE CONTROL HARNESS (VK56DE)



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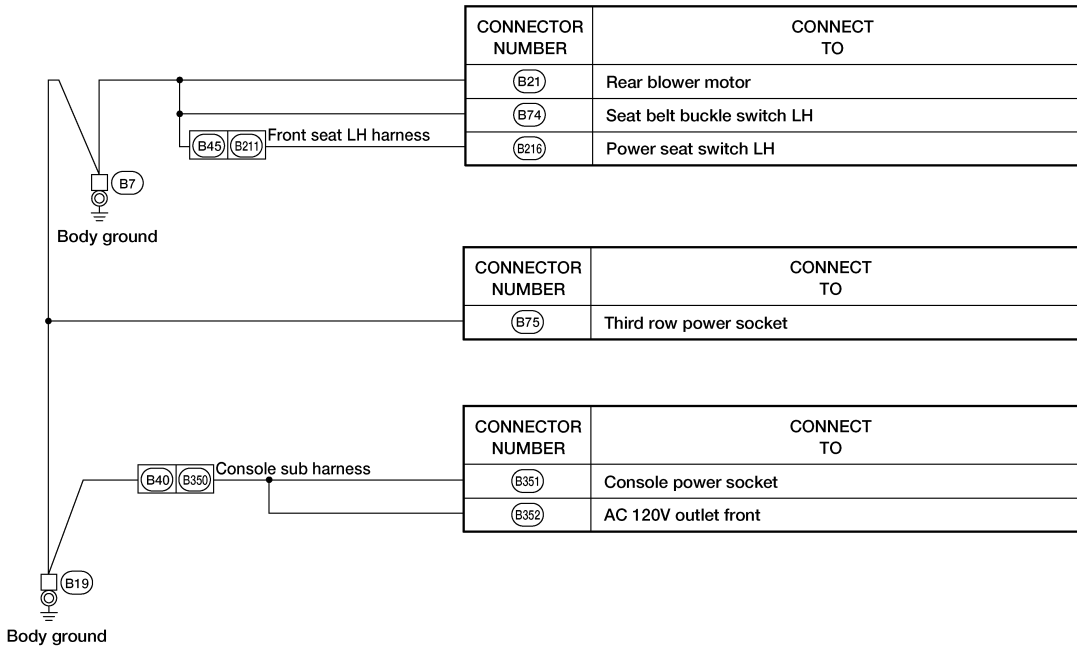
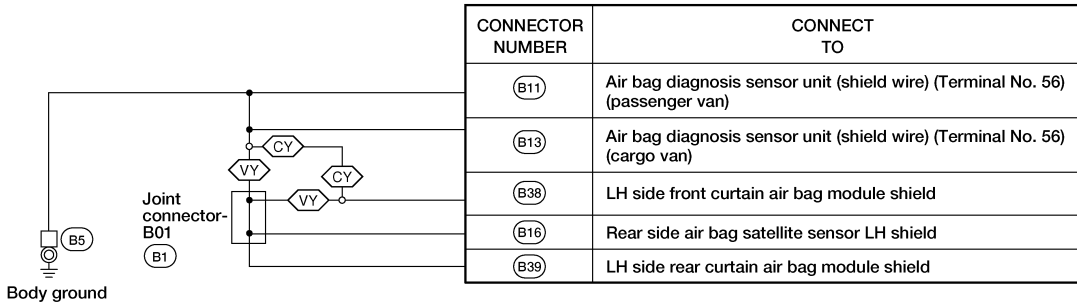
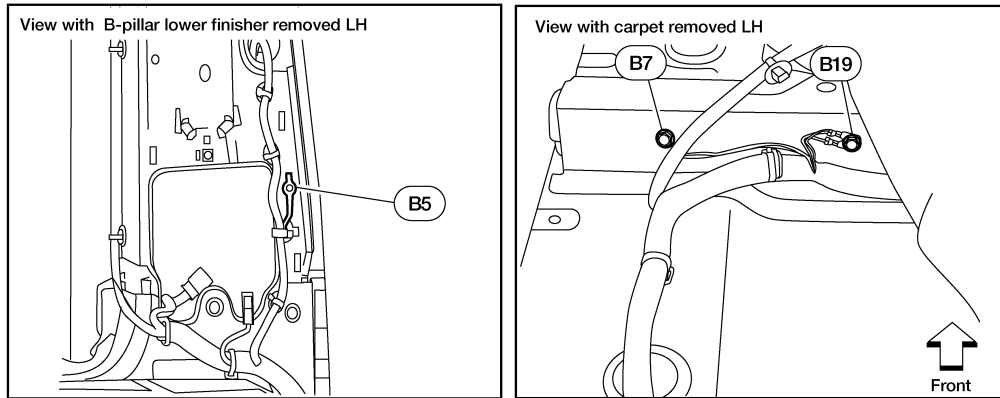
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GROUND

< WIRING DIAGRAM >

BODY HARNESS

CY : CARGO VAN
VY : PASSENGER VAN

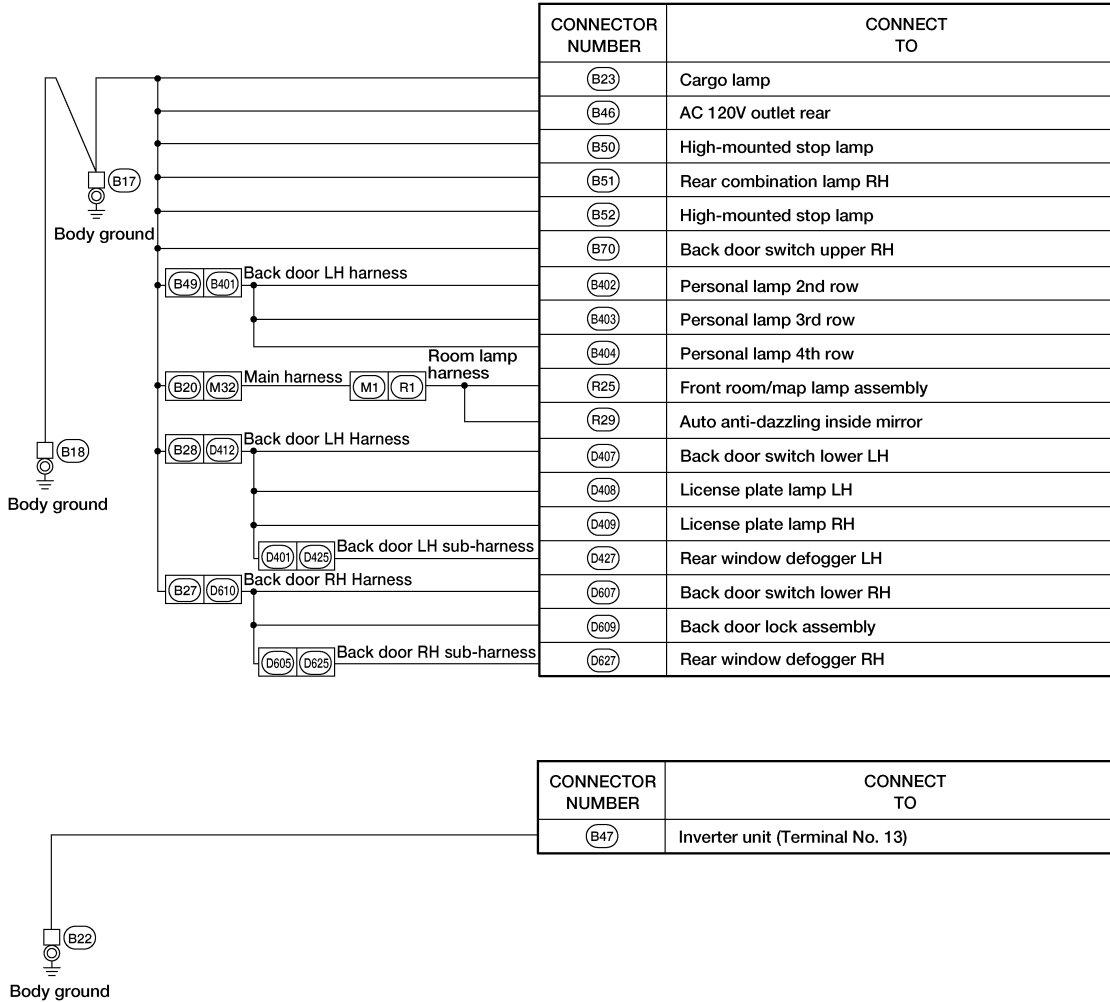
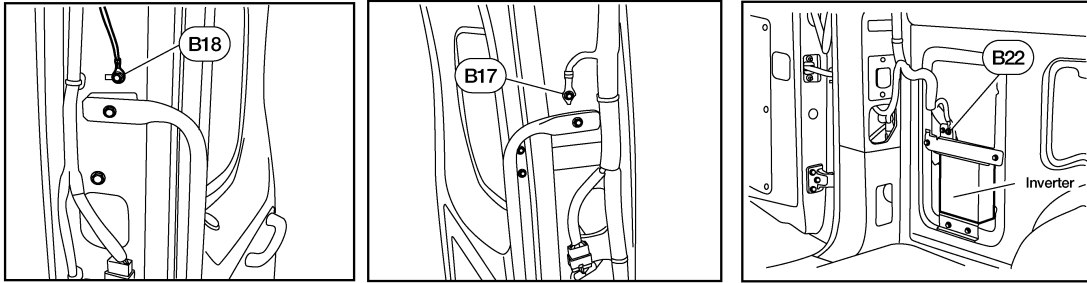


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GROUND

< WIRING DIAGRAM >

BODY HARNESS (PASSENGER VAN)

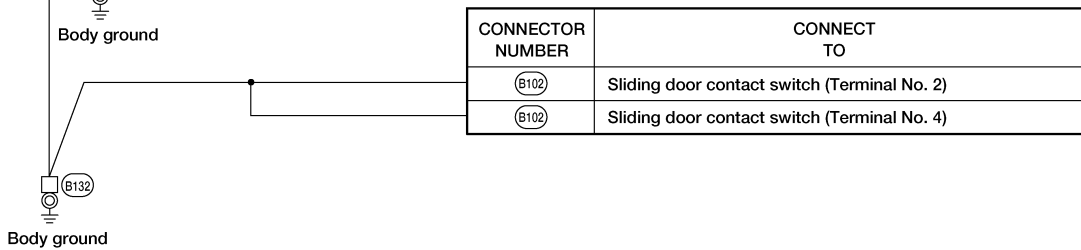
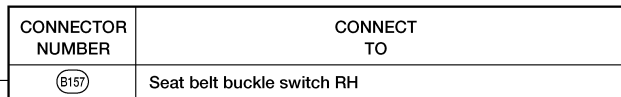
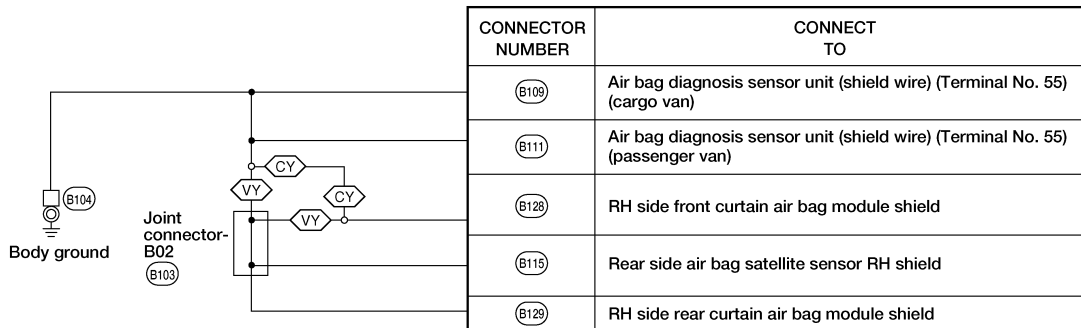
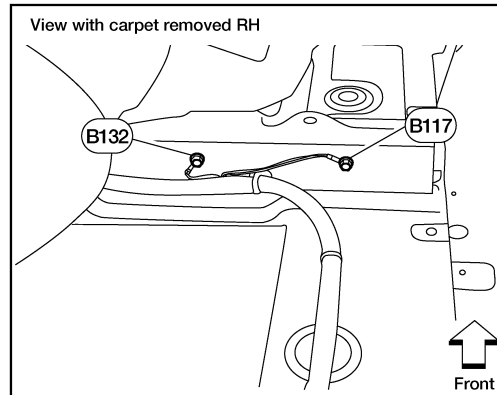
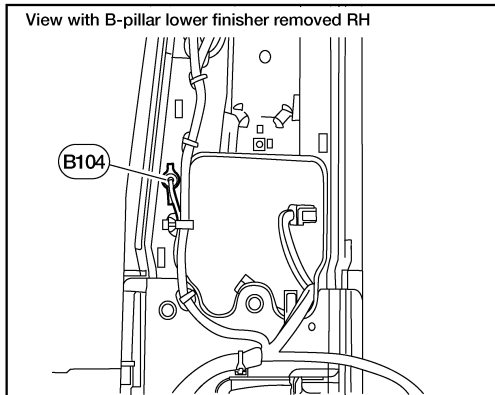


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GROUND

< WIRING DIAGRAM > BODY NO. 2 HARNESS

CY : CARGO VAN
VY : PASSENGER VAN

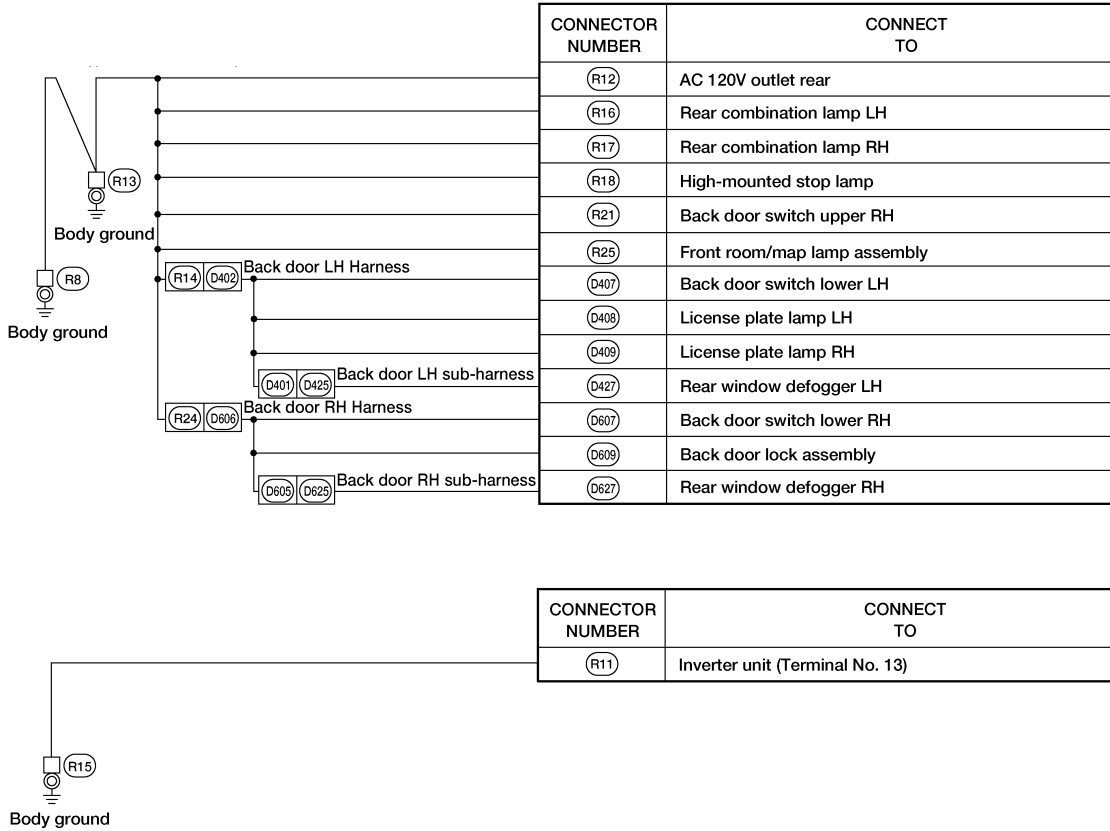
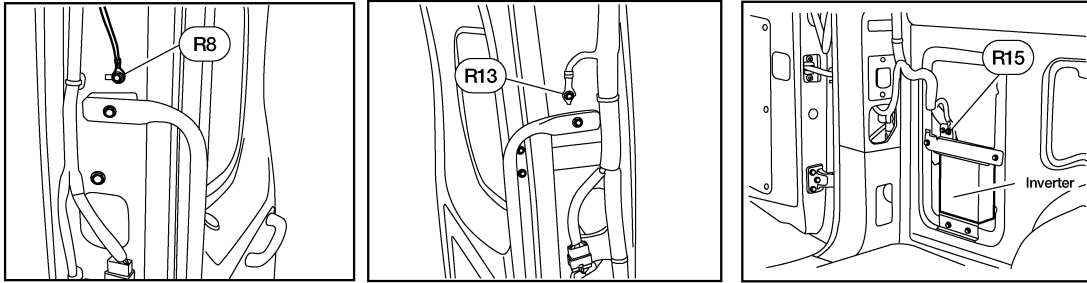


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GROUND

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ROOM LAMP HARNESS (CARGO VAN)



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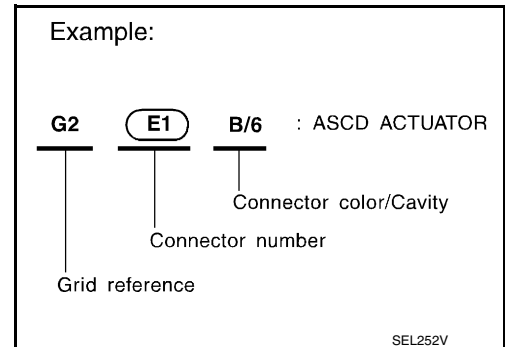
Harness Layout

INFOID:000000012519623

HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness, Engine Room Sub-harness, Corner Sensor Sub-harness, and Generator Sub-harness
- Engine Room Harness (Passenger Compartment)
- Engine Control Harness (VK56DE) and Engine Control Sub-harness
- Engine Control Harness (VQ40DE) and Engine Control Sub-harness
- Chassis Harness, Tire Pressure Monitor Sub-harness, and Rear Sonar Sensor Sub-harness
- Body Harness (High Roof), Front Seat LH Harness and Front Seat LH Recliner Sub-harness
- Body Harness (Standard Roof) Passenger Van, Console Sub-harness, Front Seat LH Harness, and Front Seat LH Recliner Sub-harness
- Body Harness (Standard Roof) Cargo Van, Console Sub-harness, Front Seat LH Harness, and Front Seat LH Recliner Sub-harness
- Body No. 2 Harness (High Roof)
- Body No. 2 Harness (Standard Roof) Passenger Van and Front seat RH harness
- Body No. 2 Harness (Standard Roof) Cargo Van
- Room Lamp Harness (High Roof)
- Room Lamp Harness (Standard Roof) Passenger Van and Room Lamp Sub-harness
- Room Lamp Harness (Standard Roof) Cargo Van



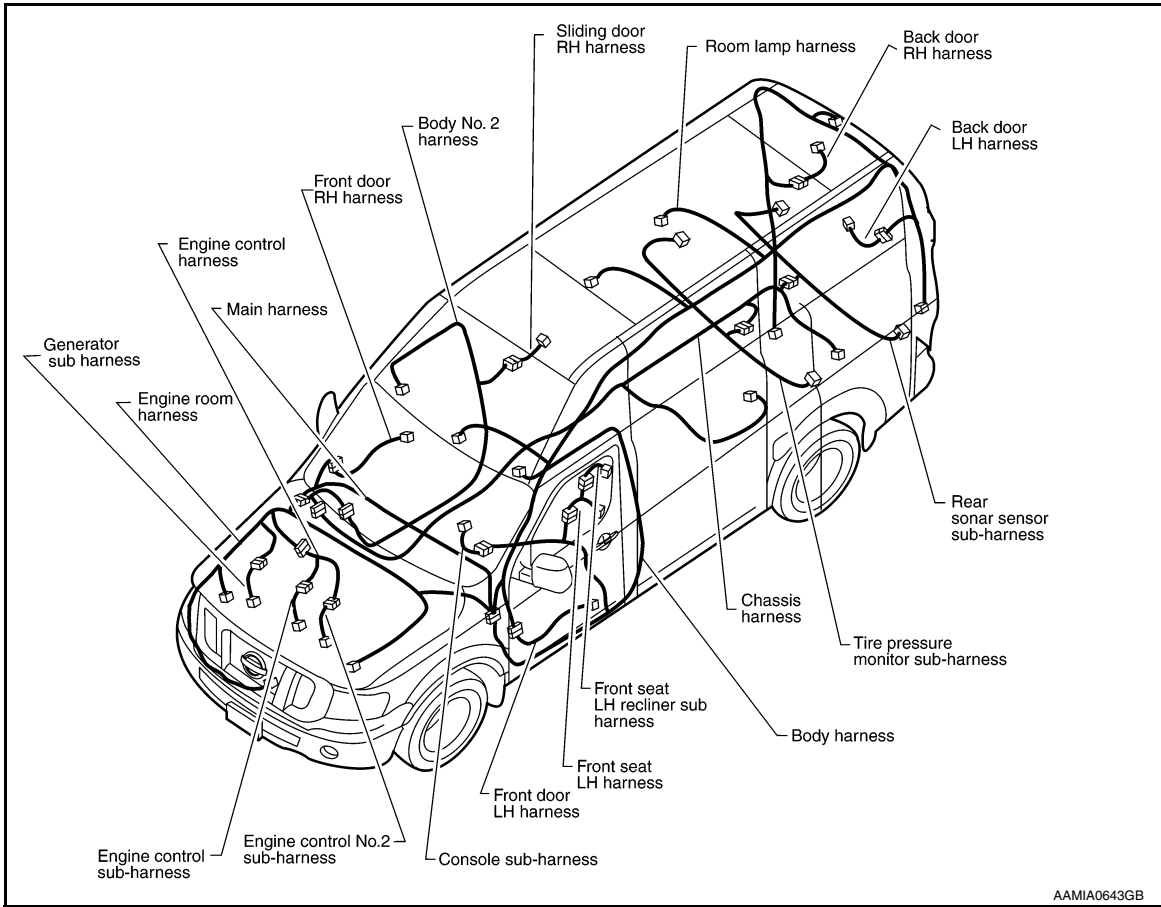
To use the grid reference

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.

HARNESS

< WIRING DIAGRAM >

OUTLINE (HIGH ROOF)



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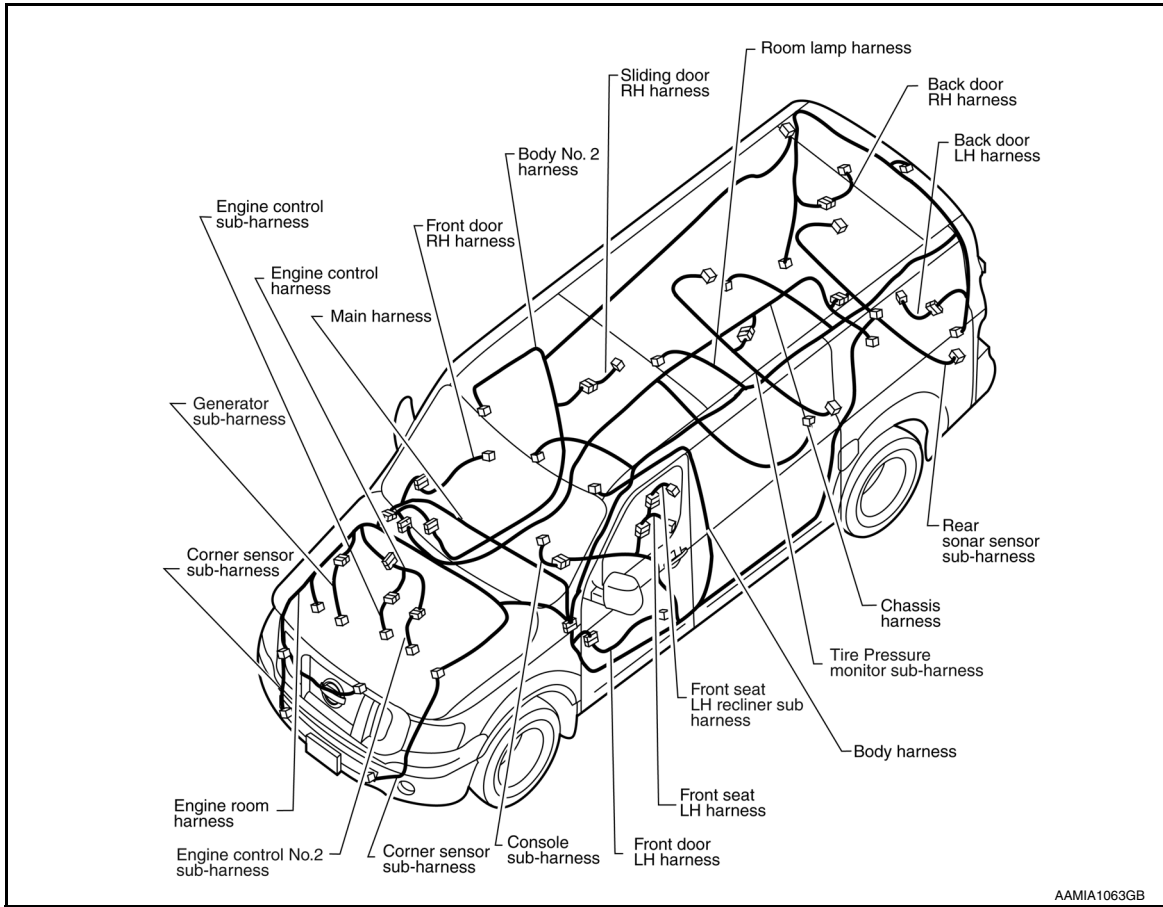
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HARNESSES

< WIRING DIAGRAM >

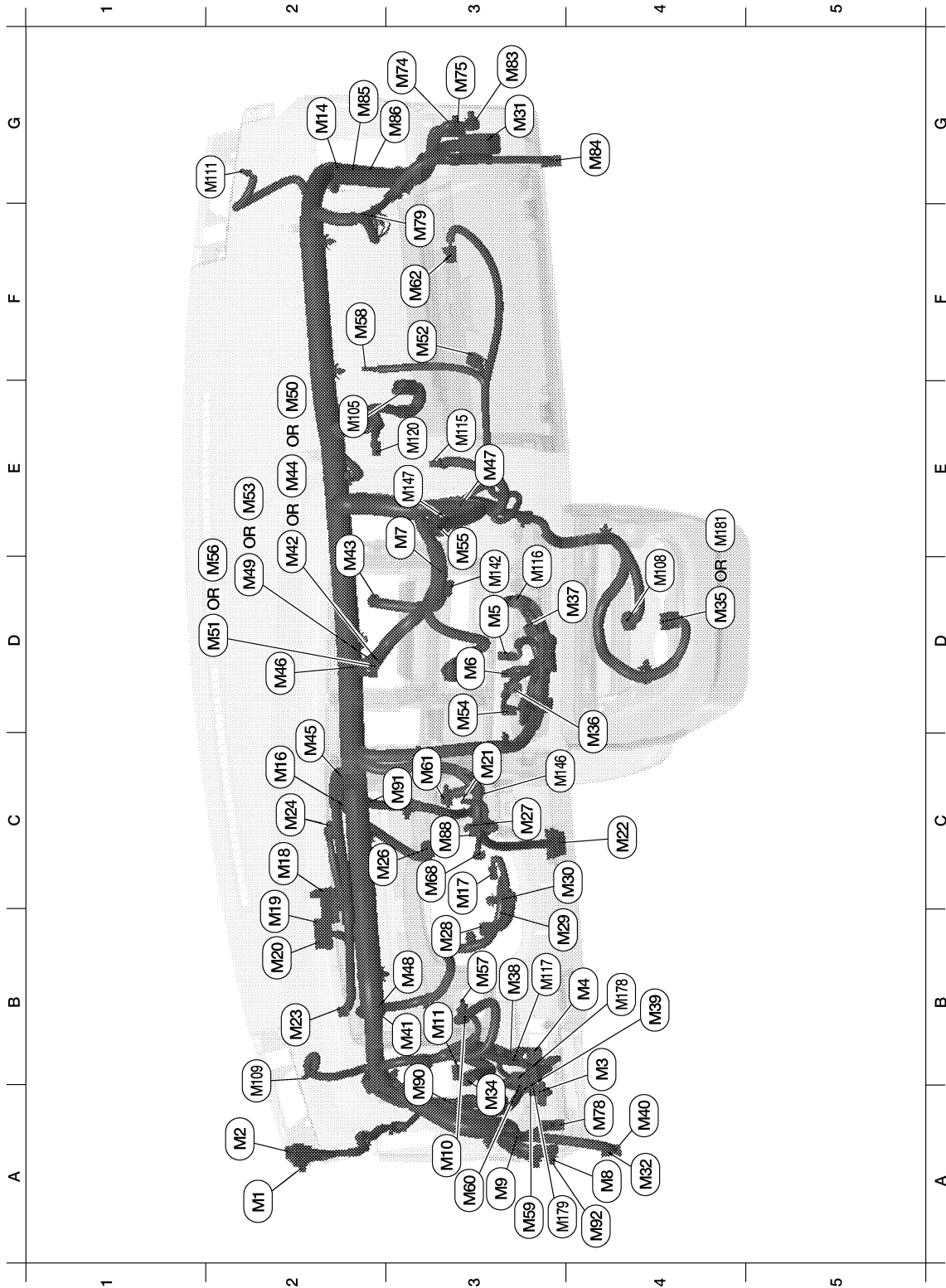
OUTLINE (STANDARD ROOF)



HARNESS

< WIRING DIAGRAM >

MAIN HARNESS



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A2	M1	W/32	: To R1	B3	M48	W/2	: Diode-2
A2	M2	W/8	: To R2	D2	M49	W/24	: Front air control (without auto A/C)
B4	M3	W/8	: Fuse block (J/B)	E2	M50	W/20	: Audio unit (with mid audio system)
B4	M4	W/16	: Fuse block (J/B)	D2	M51	W/12	: Front air control (without auto A/C)

HARNESS

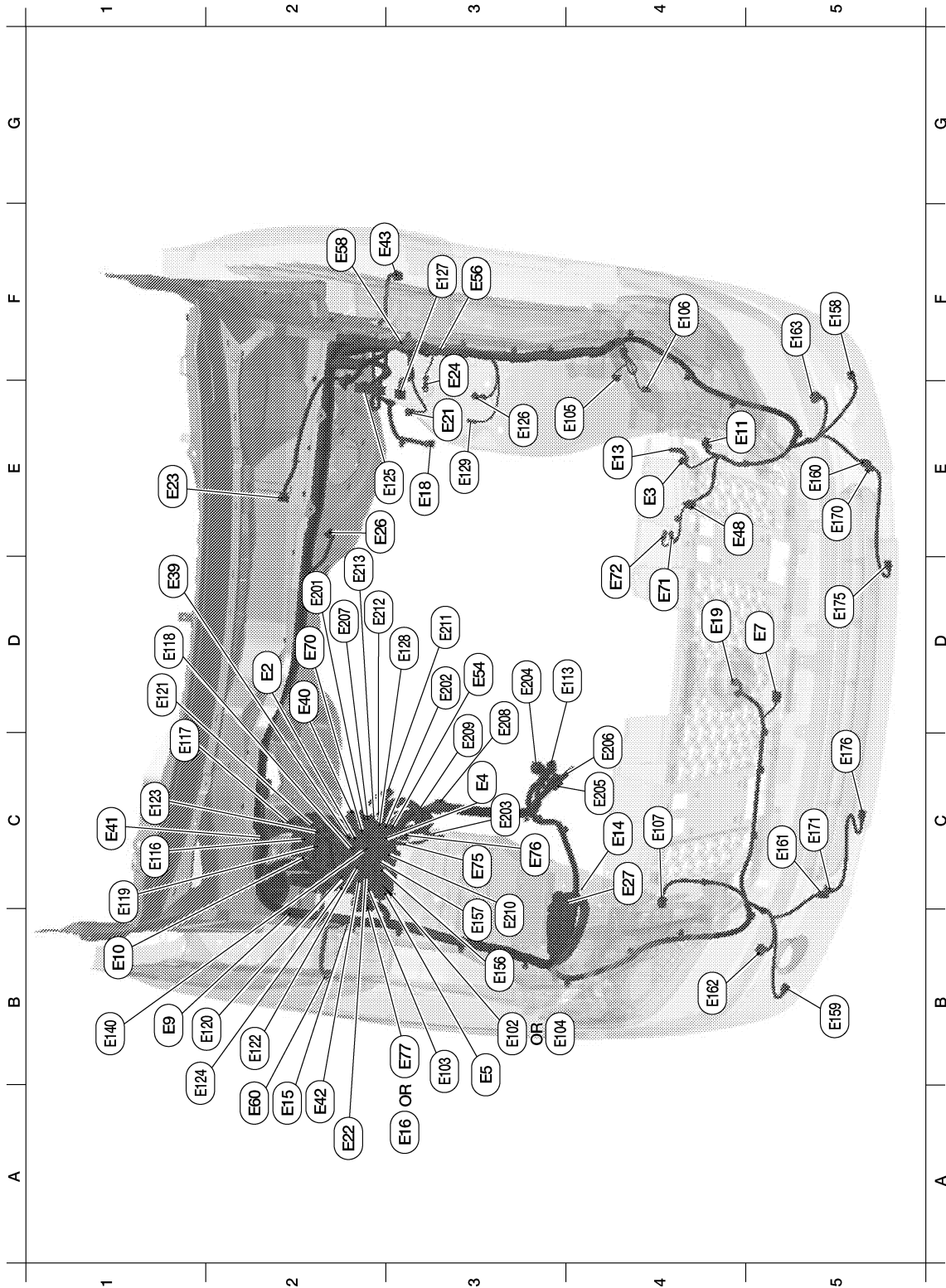
< WIRING DIAGRAM >

D3	M5	W/12	: AC 120V outlet main switch	F3	M52	W/4	: Power transistor
D3	M6	GR/8	: Tow mode switch	E2	M53	W/24	: Front air control (with auto A/C)
E3	M7	W/24	: Pre-wiring for telematics control module	D3	M54	GR/3	: Front power socket
A4	M8	W/12	: To D2	E3	M55	W/4	: Hazard switch
A3	M9	W/12	: To D1	D2	M56	W/12	: Front air control (with auto A/C)
A3	M10	W/8	: Front fog lamp switch	B3	M57	—	: Body ground
B3	M11	B/1	: Parking brake switch	F2	M58	W/3	: Intake door motor
G2	M14	L/20	: Joint connector-M04	A3	M59	BR/6	: Rear blower relay
C2	M16	L/20	: Joint connector-M03	A3	M60	L/4	: Front blower motor relay-2
C3	M17	W/8	: Steering angle sensor	C3	M61	—	: Body ground
C2	M18	W/40	: BCM (body control module)	F3	M62	W/2	: Front blower motor
B2	M19	W/15	: BCM (body control module)	C3	M68	W/8	: A/T shift selector
B2	M20	B/15	: BCM (body control module)	G3	M74	W/12	: To D102
C3	M21	W/4	: NATS antenna amp.	G3	M75	W/8	: To D101
C4	M22	W/16	: Data link connector	A4	M78	W/16	: To E55
B2	M23	W/12	: Combination meter	F3	M79	—	: Body ground
C2	M24	W/24	: Combination meter	G3	M83	Y/4	: To D110
C2	M26	W/6	: Ignition switch	G4	M84	W/12	: To B101
C3	M27	W/2	: Key switch	G2	M85	W/32	: Bluetooth® control unit
B3	M28	W/16	: Combination switch	G3	M86	W/8	: Bluetooth® control unit
B3	M29	Y/6	: Combination switch (spiral cable)	C3	M88	L/4	: TCM (transmission control module) relay
C4	M30	GR/8	: Combination switch (spiral cable)	A3	M90	W/32	: Low tire pressure warning control unit
G3	M31	SMJ	: To E152	C3	M91	W/2	: Diode-3
A4	M32	SMJ	: To B20 (passenger van)	A4	M92	Y/4	: To D15
A3	M34	W/8	: Lighting switch	E2	M105	Y/2	: Front passenger air bag module
D4	M35	Y/28	: Air bag diagnosis sensor unit (cargo van)	D4	M108	B/6	: Yaw rate/ side/ decel G sensor
C4	M36	W/6	: Front heated seat switch LH	B2	M109	BR/2	: Tweeter LH
D4	M37	BR/6	: Front heated seat switch RH	G2	M111	BR/2	: Tweeter RH
B3	M38	B/2	: Fuse block (J/B)	E3	M115	W/24	: Sonar control unit
B4	M39	W/8	: Fuse block (J/B)	D3	M116	W/8	: Sonar system OFF switch
A4	M40	W/12	: To B69	B3	M117	GR/6	: VDC OFF switch
B3	M41	W/2	: Diode-1	E3	M120	W/4	: Remote keyless entry receiver
E2	M42	W/20	: Audio unit (with base audio system)	D3	M142	W/3	: Mode door actuator
E2	M43	W/16	: Audio unit (with mid audio system)	C3	M146	W/2	: Intake sensor
E2	M44	W/20	: AV control unit (with premium audio system)	E3	M147	W/3	: Air mix door motor
C2	M45	L/20	: Joint connector-M01	B4	M178	W/16	: Door mirror remote control switch
D2	M46	W/24	: AV control unit (with premium audio system)	A3	M179	L/4	: Accessory socket relay
E3	M47	G/20	: Joint connector-M02	B4	M181	Y/28	: Air bag diagnosis sensor unit (passenger van)

HARNESS

< WIRING DIAGRAM >

ENGINE ROOM HARNESS



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D2	E2	W/10	: To F32	C1	E116	W/2	: Condenser-2
E4	E3	B/1	: Horn (high)	C1	E117	B/2	: Front wheel sensor RH
C3	E4	BR/2	: Fusible link box (battery)	D1	E118	B/2	: IPDM E/R (intelligent power distribution module engine room)
B3	E5	W/24	: To F14	C1	E119	W/16	: IPDM E/R (intelligent power distribution module engine room)

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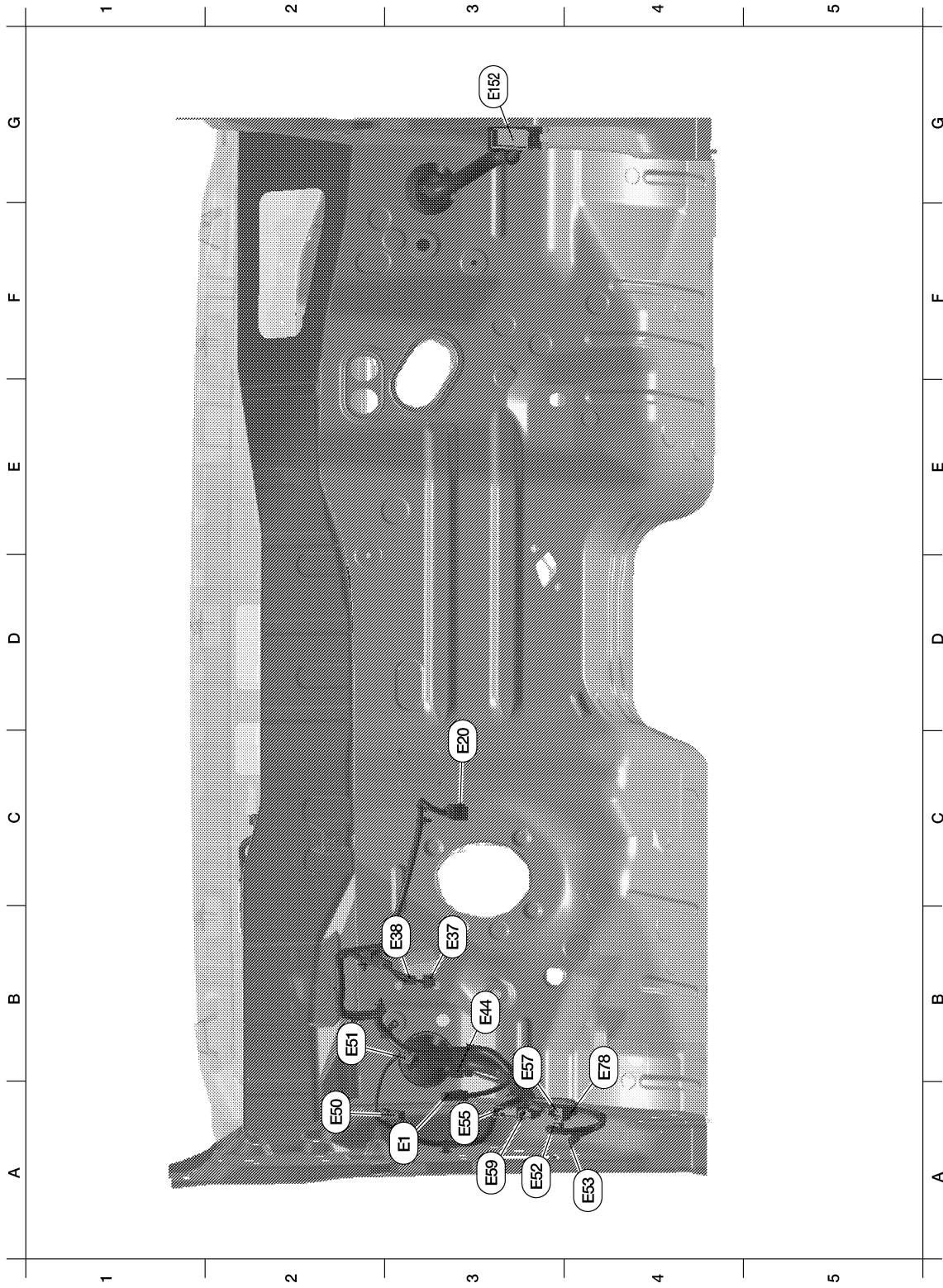
< WIRING DIAGRAM >

D5	E7	Y/2	: Crash zone sensor	B1	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)
B1	E9	—	: Body ground	D1	E121	BR/12	: IPDM E/R (intelligent power distribution module engine room)
B1	E10	B/2	: Fuse and fusible link box	B2	E122	W/12	: IPDM E/R (intelligent power distribution module engine room)
E4	E11	GR/6	: Front combination lamp LH	C1	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)
E4	E13	B/1	: Horn (high)	A1	E124	B/6	: IPDM E/R (intelligent power distribution module engine room)
C4	E14	—	: Body ground	E3	E125	B/46	: ABS actuator and electric unit (control unit)
A2	E15	—	: Body ground	E3	E126	—	: Body ground
A3	E16	GR/32	: ECM (with VQ40DE)	F3	E127	B/4	: ABS actuator and electric unit (control unit)
E3	E18	B/2	: Front wheel sensor LH	D3	E128	L/4	: Stop lamp relay
D4	E19	B/2	: Ambient sensor	E3	E129	—	: Body ground
E3	E21	B/2	: Brake fluid level switch	B1	E140	BR/6	: Trailer tow relay 2
A2	E22	L/5	: Inverter relay	B3	E156	L/4	: Trailer turn relay LH
E1	E23	GR/5	: Front wiper motor	B3	E157	L/4	: Trailer turn relay RH
E3	E24	—	: Body ground	F5	E158	B/2	: Front sonar sensor LH outer
E3	E26	B/2	: Heater pump (with VQ40DE)	B5	E159	B/2	: Front sonar sensor RH outer
B4	E27	L/4	: Heater pump relay (with VQ40DE)	E5	E160	B/4	: To E170
D1	E39	W/2	: To F34	C5	E161	B/4	: To E171
D2	E40	BR/3	: To E201	B4	E162	B/2	: Front fog lamp LH
C1	E41	SMJ	: To C1	F5	E163	B/2	: Front fog lamp RH
A2	E42	L/4	: Trailer tow relay 1	Corner sensor sub-harness			
F2	E43	B/4	: Tire pressure receiver front LH	E5	E170	B/4	: To E160
E4	E48	B/3	: Refrigerant pressure sensor	C5	E171	B/4	: To E161
D3	E54	BR/6	: Back-up lamp relay	D4	E175	B/2	: Front sonar sensor LH inner
F3	E56	GR/2	: Upfitter 1	C5	E176	B/2	: Front sonar sensor RH inner
F2	E58	G/4	: Upfitter 3	Generator sub-harness			
A2	E60	B/4	: Tire pressure receiver front RH	D2	E201	BR/3	: To E40
D2	E70	GR/9	: To E207	D3	E202	-/1	: Fusible link box (battery)
D4	E71	B/1	: Horn (low)	C3	E203	—	: Body ground
D4	E72	B/1	: Horn (low)	D3	E204	-/1	: Generator
C3	E75	-/1	: Fusible link box (battery)	C4	E205	B/3	: Generator
C3	E76	GR/2	: Fusible link box (battery)	C4	E206	-/1	: Generator
B3	E77	B/40	: ECM (with VK56DE)	D2	E207	GR/9	: To E70
B3	E102	L/4	: Daytime running light relay 2 (for USA)	C3	E208	-/1	: Starter motor (with VQ40DE)
B3	E103	B/5	: Daytime running light relay 1	C3	E209	GR/1	: Starter motor (with VQ40DE)
B3	E104	L/4	: Daytime running light relay 2 (for Canada)	B3	E210	-/1	: Fusible link box (battery) (with VQ40DE)
E4	E105	B/2	: Front washer motor	D3	E211	B/1	: Oil pressure switch (with VQ40DE)
F4	E106	BR/2	: Washer fluid level switch	D2	E212	B/1	: To E213
C4	E107	GR/6	: Front combination lamp RH	D2	E213	B/1	: To E212
D4	E113	GR/4	: Cooling fan motor-1				

HARNESS

< WIRING DIAGRAM >

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



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A3	E1	B/1	: To R5	A3	E52	BR/1	: To R23
C3	E20	B/6	: Accelerator pedal position (APP) sensor	A4	E53	W/4	: To R9
B3	E37	BR/2	: ASCD brake switch	A3	E55	W/16	: To M78
B3	E38	W/4	: Stop lamp switch	B3	E57	B/2	: Upfitter 2
B3	E44	W/6	: Electric brake pre-wiring	A3	E59	W/4	: Upfitter 4

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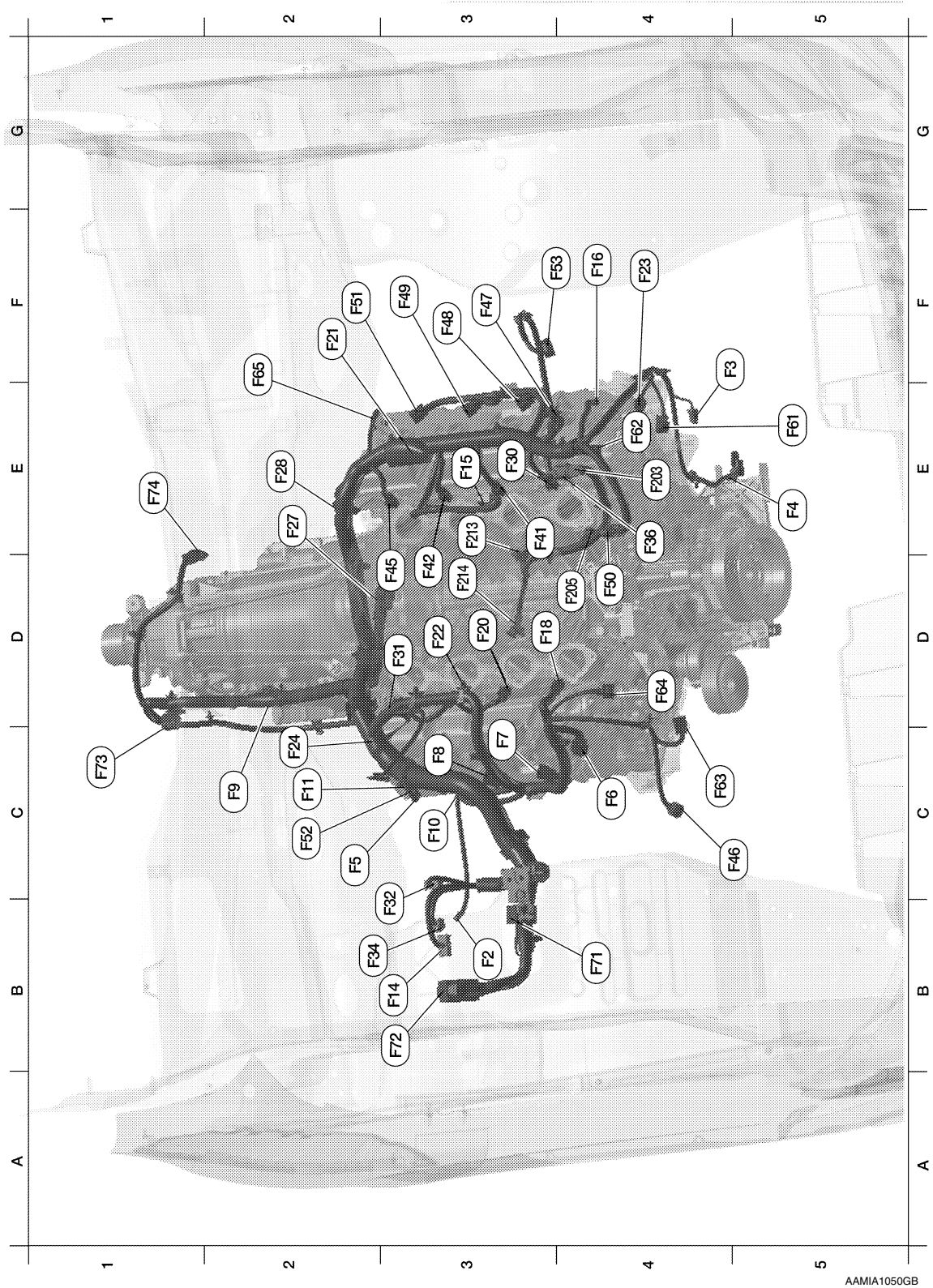
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< WIRING DIAGRAM >

A2	E50	B/1	: Fuse block J/B	B4	E78	L/2	: To B26
B2	E51	W/6	: Fuse block J/B	G3	E152	SMJ	: To M31

ENGINE CONTROL HARNESS (VK56DE)



B3	F2	—	: Body ground	E3	F41	GR/2	: Fuel injector No. 3 (with VK56DE)
F5	F3	B/1	: A/C Compressor	D3	F42	GR/2	: Fuel injector No. 5 (with VK56DE)
E5	F4	GR/1	: Oil pressure switch (with VK56DE)	D3	F45	GR/2	: Fuel injector No. 7

HARNESS

< WIRING DIAGRAM >

C2	F5	BR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	C4	F46	B/3	: Power steering pressure sensor	A	
C4	F6	GR/3	: Ignition coil No. 2 (with power transistor)	F3	F47	GR/3	: Ignition coil No. 1 (with power transistor) (with VK56DE)	B	
C3	F7	GR/3	: Ignition coil No. 4 (with power transistor)	F3	F48	GR/3	: Ignition coil No. 3 (with power transistor) (with VK56DE)	C	
C3	F8	GR/3	: Ignition coil No. 6 (with power transistor)	F3	F49	GR/3	: Ignition coil No. 5 (with power transistor) (with VK56DE)	D	
C2	F9	G/10	: A/T assembly	D4	F50	B/6	: Electric throttle control actuator	E	
C3	F10	—	: Engine ground	F2	F51	GR/3	: Ignition coil No. 7 (with power transistor)	F	
C2	F11	B/3	: Crankshaft position sensor (POS) (with VK56DE)	C2	F52	GR/3	: Ignition coil No. 8 (with power transistor)	G	
B3	F14	W/24	: To E5	F3	F53	B/6	: Mass air flow sensor	H	
E3	F15	GR/2	: EVAP canister purge volume control solenoid valve	E5	F61	G/2	: Intake valve timing control solenoid valve (bank 1) (with VK56DE)	I	
F4	F16	—	: Engine ground	E4	F62	B/3	: Intake valve timing control position sensor (bank 1)	J	
D3	F18	GR/2	: Fuel injector No. 2	C4	F63	G/2	: Intake valve timing control solenoid valve (bank 2) (with VK56DE)	K	
D3	F20	GR/2	: Fuel injector No. 4	D4	F64	B/3	: Intake valve timing control position sensor (bank 2)	L	
F2	F21	W/2	: Condenser-1	F2	F65	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)		
D3	F22	GR/2	: Fuel injector No. 6	B4	F71	B/10	: Joint connector-F01		
F4	F23	B/3	: Camshaft position sensor (PHASE)	B3	F72	B/81	: ECM (with VK56DE)		
C2	F24	GR/2	: Water valve	C1	F73	B/4	: Heated oxygen sensor 2 (bank 2) (with VK56DE)		
E2	F27	-/1	: Starter motor (with VK56DE)	E1	F74	B/4	: Heated oxygen sensor 2 (bank 1) (with VK56DE)		
E2	F28	GR/1	: Starter motor (with VK56DE)	Engine control sub-harness					
E3	F30	GR/2	: Fuel injector No. 1	E4	F203	B/6	: To F36		
D3	F31	GR/2	: Fuel injector No. 8	D4	F205	GR/2	: Engine coolant temperature sensor		
B3	F32	W/10	: To E2	E3	F213	GR/2	: Knock sensor (bank 1)		
B2	F34	W/2	: To E39	D3	F214	GR/2	: Knock sensor (bank 2)		
E4	F36	B/6	: To F203						

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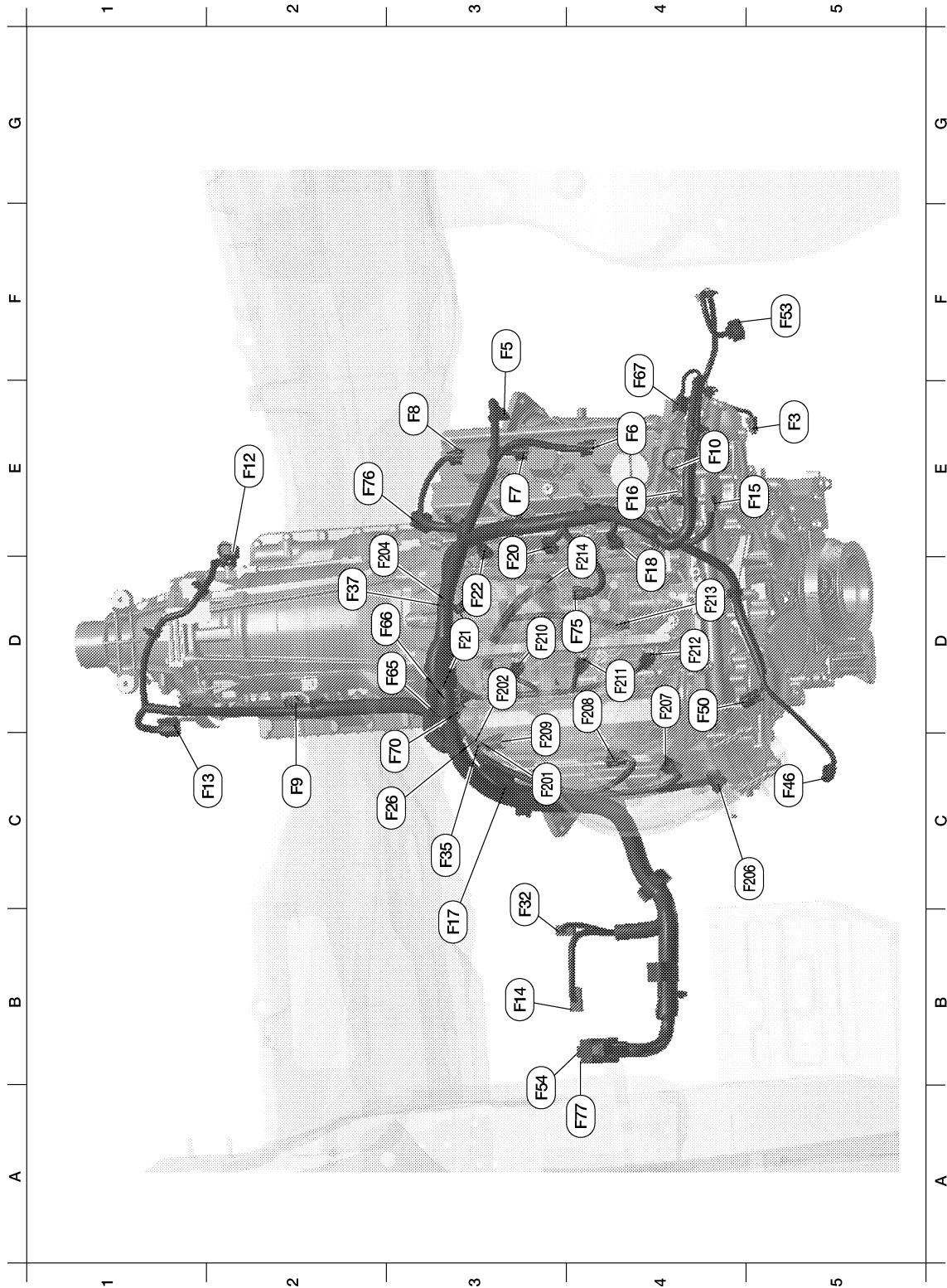
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< WIRING DIAGRAM >

ENGINE CONTROL HARNESS (VQ40DE)



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E5	F3	B/1	: A/C Compressor	F5	F53	B/6	: Mass air flow sensor
F3	F5	BR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	A3	F54	B/48	: ECM (with VQ40DE)
E4	F6	GR/3	: Ignition coil No. 2 (with power transistor)	D3	F65	BR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)
E3	F7	GR/3	: Ignition coil No. 4 (with power transistor)	D3	F66	B/3	: Camshaft position sensor (PHASE) (bank 1)

HARNESS

< WIRING DIAGRAM >

E3	F8	GR/3	: Ignition coil No. 6 (with power transistor)	F4	F67	GR/2	: Intake valve timing control solenoid valve (bank 1) (with VQ40DE)
C2	F9	G/10	: A/T assembly	C3	F70	GR/2	: Engine coolant temperature sensor (with VQ40DE)
E4	F10	—	: Engine ground	D4	F75	B/2	: Vias control solenoid valve
E2	F12	G/4	: Heated oxygen sensor 2 (bank 2) (with VQ40DE)	E2	F76	B/3	: Camshaft position sensor (PHASE) (bank 2)
C2	F13	L/4	: Heated oxygen sensor 2 (bank 1) (with VQ40DE)	A4	F77	BR/48	: ECM (with VQ40DE)
B3	F14	W/24	: To E5	Engine control sub-harness			
E5	F15	GR/2	: EVAP canister purge volume control solenoid valve	C3	F201	G/8	: To F26
E4	F16	—	: Engine ground	D3	F202	L/4	: To F35
B3	F17	B/3	: Crankshaft position sensor (POS) (with VQ40DE)	D2	F204	G/4	: To F37
D4	F18	GR/2	: Fuel injector No. 2	C5	F206	G/2	: Intake valve timing control solenoid valve (bank 2) (with VQ40DE)
D3	F20	GR/2	: Fuel injector No. 4	D4	F207	GR/3	: Ignition coil No. 1 (with power transistor) (with VQ40DE)
D3	F21	W/2	: Condenser-1	D4	F208	GR/3	: Ignition coil No. 3 (with power transistor) (with VQ40DE)
D3	F22	GR/2	: Fuel injector No. 6	C3	F209	GR/3	: Ignition coil No. 5 (with power transistor) (with VQ40DE)
C3	F26	G/8	: To F201	D3	F210	GR/2	: Fuel injector No. 5 (with VQ40DE)
B3	F32	W/10	: To E2	D4	F211	GR/2	: Fuel injector No. 3 (with VQ40DE)
C3	F35	L/4	: To F202	D4	F212	GR/2	: Fuel injector No. 1 (with VQ40DE)
D2	F37	G/4	: To F204	D4	F213	GR/2	: Knock sensor (bank 1)
C5	F46	B/3	: Power steering pressure sensor	E4	F214	GR/2	: Knock sensor (bank 2)
D4	F50	B/6	: Electric throttle control actuator				

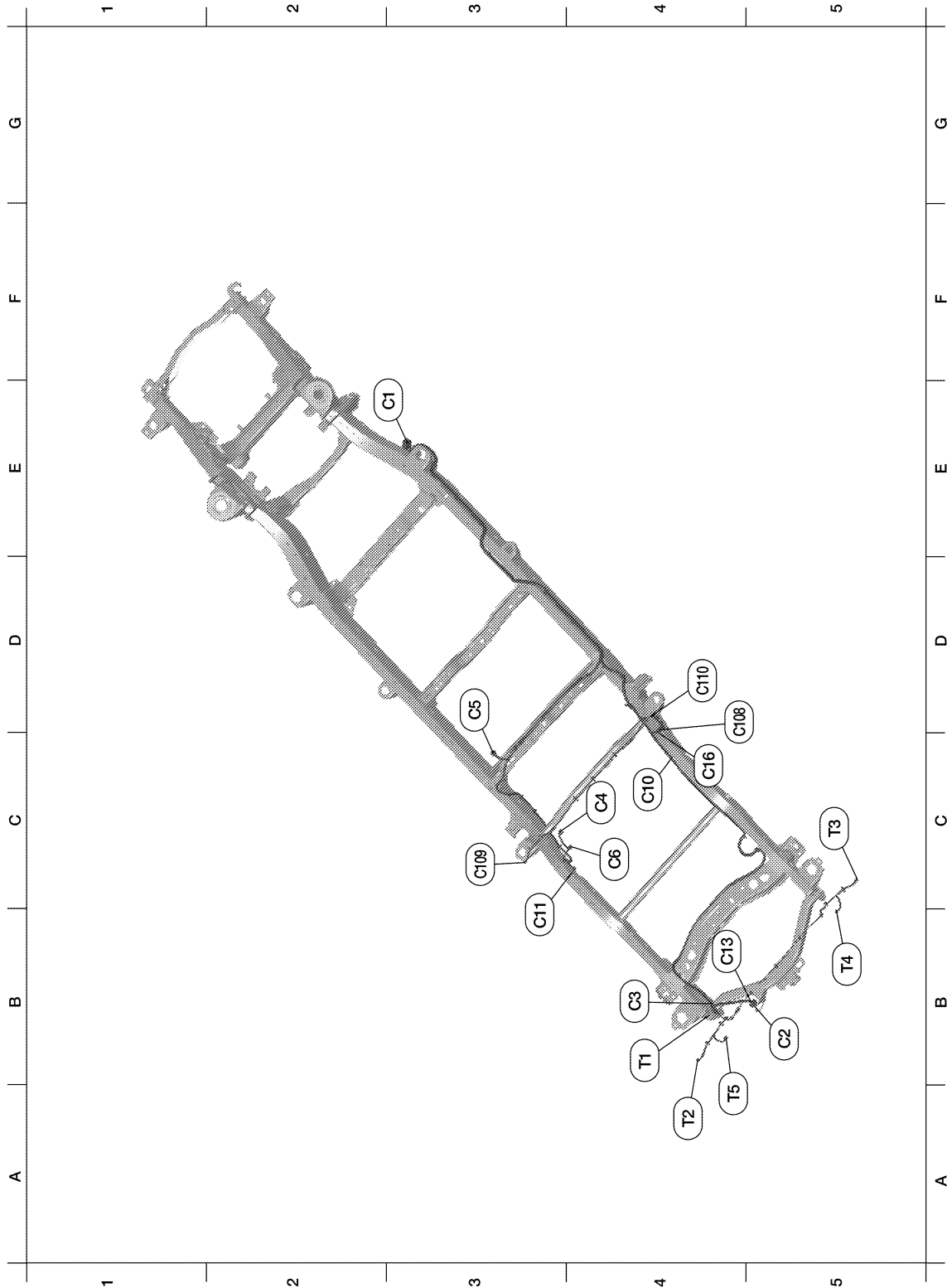
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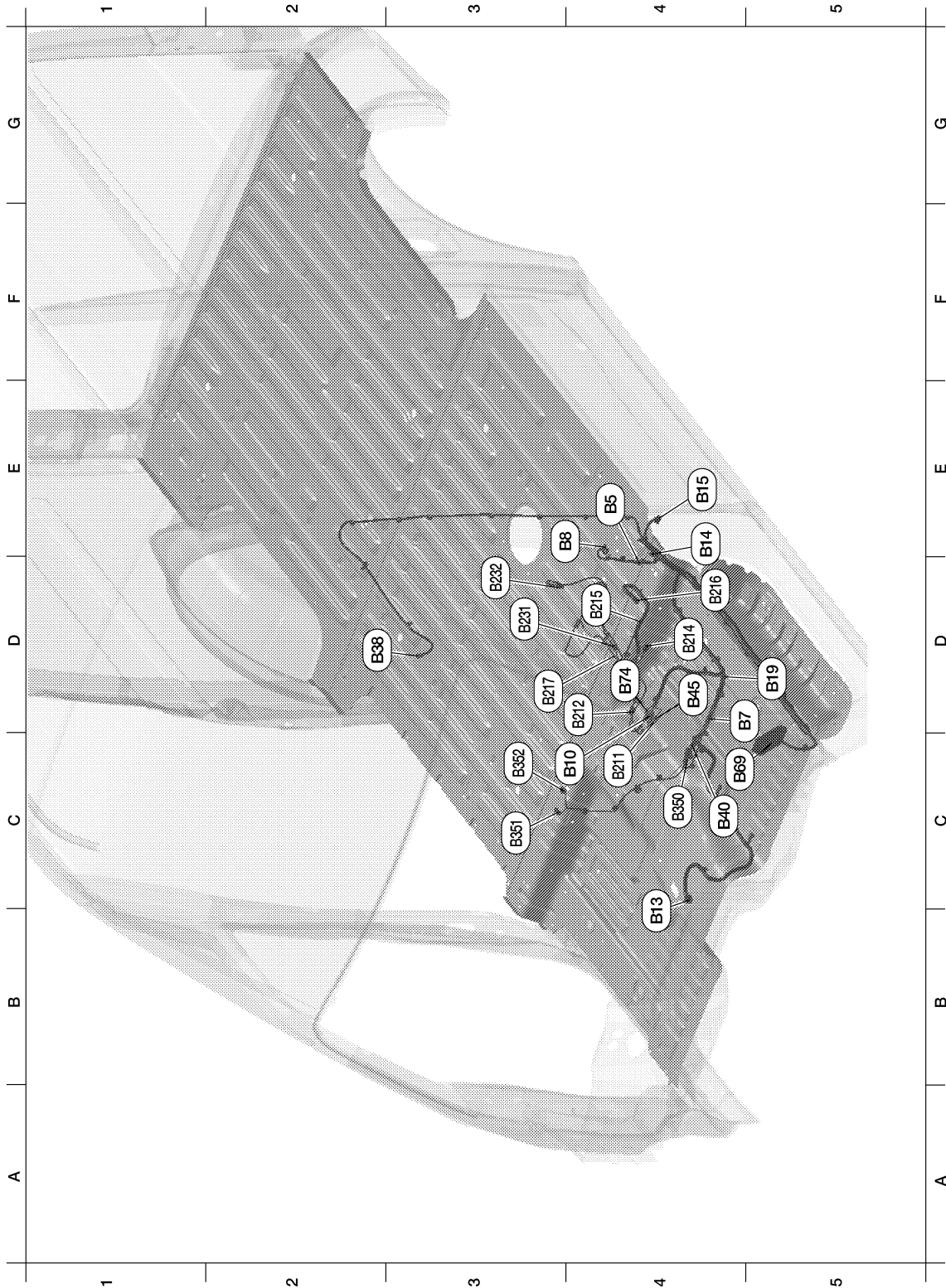
E3	C1	SMJ	: To E41	Tire pressure monitor sub-harness		
B5	C2	B/7	: Trailer	D4	C108	B/8 : To C16
B4	C3	GR/6	: To T1	C3	C109	B/4 : Tire pressure receiver rear LH
C4	C4	GR/3	: Evap control system pressure sensor	D4	C110	B/4 : Tire pressure receiver rear RH
D3	C5	GR/5	: Fuel level sensor unit and fuel pump	Rear sonar sensor sub-harness		

HARNESS

< WIRING DIAGRAM >

C4	C6	B/2	: Evap canister vent control valve	B4	T1	GR/6	: To C3
C4	C10	GR/2	: Rear wheel sensor RH	A4	T2	B/2	: Rear sonar sensor LH outer
B3	C11	B/2	: Rear wheel sensor LH	C5	T3	B/2	: Rear sonar sensor RH outer
B4	C13	B/7	: Trailer receptacle	B5	T4	B/2	: Rear sonar sensor RH inner
C4	C16	B/8	: To C108	A4	T5	B/2	: Rear sonar sensor LH inner

BODY HARNESS (HIGH ROOF)



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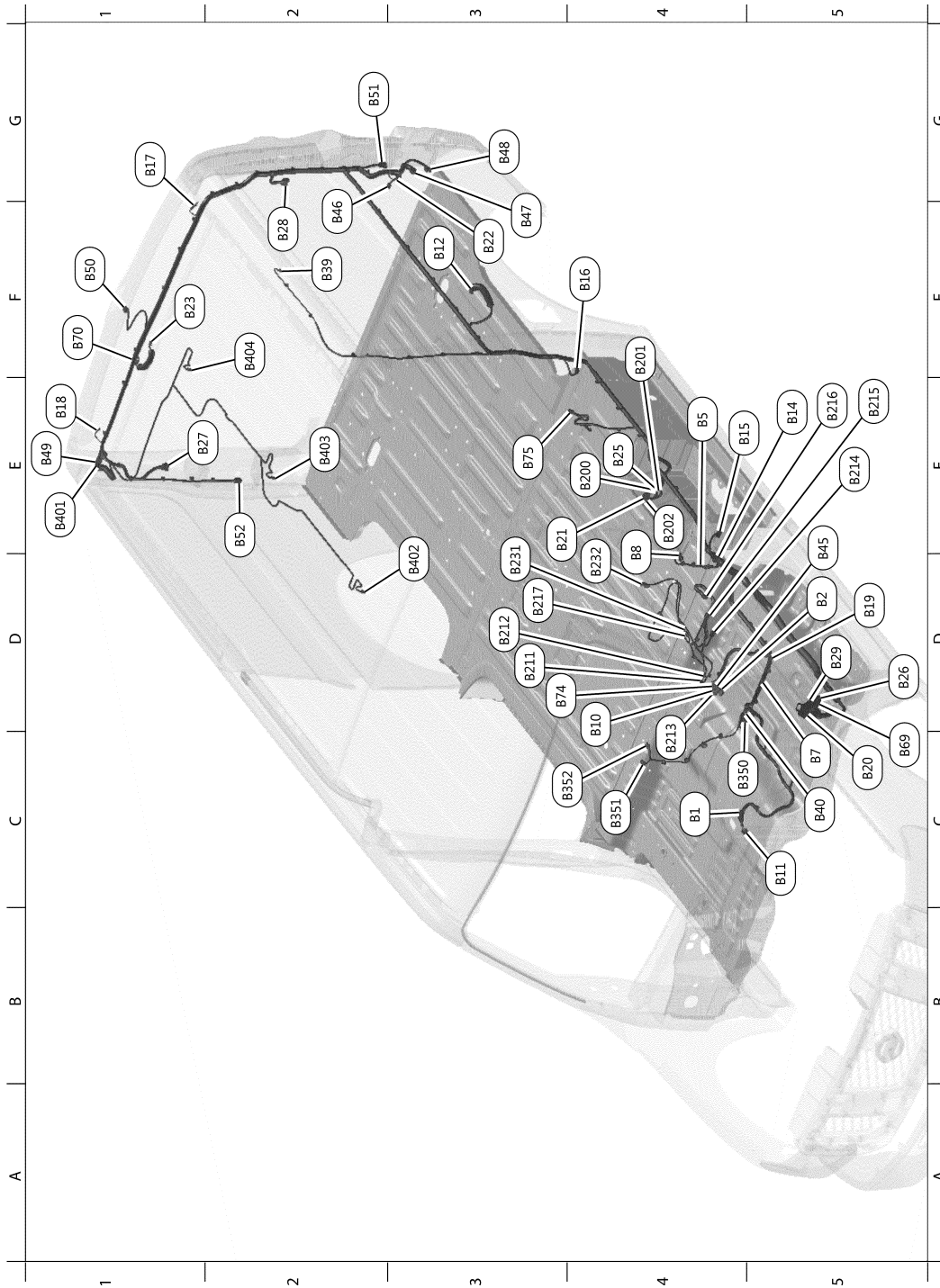
< WIRING DIAGRAM >

E4	B5	—	: Body ground	C4	B211	W/2	: To B45
D4	B7	—	: Body ground	D4	B212	W/6	: Sliding motor LH
E4	B8	W/3	: Front door switch LH	D4	B214	W/6	: Lifting motor (front)
C3	B10	Y/2	: Front LH side air bag module	D4	B215	W/6	: Lifting motor (rear)
C4	B13	Y/22	: Air bag diagnosis sensor unit (cargo van)	D4	B216	GR/10	: Power seat switch LH
E4	B14	Y/2	: Front LH seat belt pre-tensioner	D3	B217	W/2	: To B231
E4	B15	Y/2	: Front side air bag satellite sensor LH	Front seat LH recliner sub-harness			
D5	B19	—	: Body ground	D3	B231	W/2	: To B217
D2	B38	Y/2	: LH side front curtain air bag module	D3	B232	W/2	: Reclining motor LH
C4	B40	GR/4	: To B350	Console sub-harness			
D4	B45	W/2	: To B211	C4	B350	GR/4	: To B40
C4	B69	W/12	: To M40	C3	B351	GR/3	: Console power socket
D4	B74	W/4	: Seat belt buckle switch LH	C3	B352	W/4	: AC 120V outlet front
Front seat LH harness							

HARNESS

< WIRING DIAGRAM >

BODY HARNESS (STANDARD ROOF) PASSENGER VAN



AAMIA0564ZZ

C4	B1	W/4	: Joint connector-B01	G2	B51	W/6	: Rear combination lamp LH
D5	B2	W/4	: To B213	E2	B52	W/6	: Rear combination lamp RH
E4	B5	—	: Body ground	C5	B69	W/12	: To M40
C5	B7	—	: Body ground	F1	B70	W/2	: Back door switch upper RH (Passenger van)
E4	B8	W/3	: Front door switch LH	D3	B74	W/4	: Seat belt buckle switch LH

HARNES

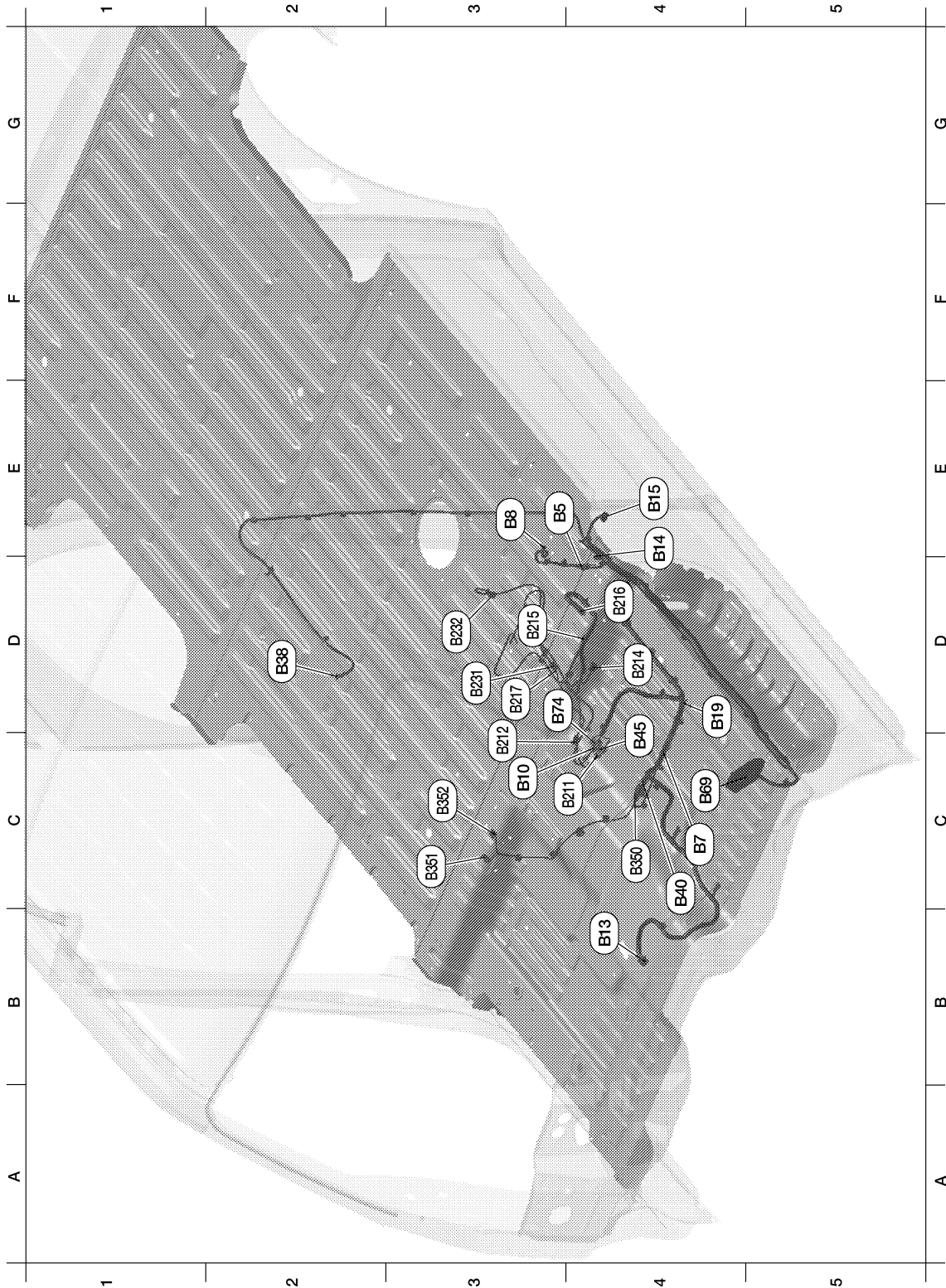
< WIRING DIAGRAM >

D4	B10	Y/2	: Front LH side air bag module	E3	B75	GR/3	: Third row power socket
C5	B11	Y/14	: Air bag diagnosis sensor unit (Passenger van)	Rear HVAC sub-harness			
F3	B12	W/2	: Rear speaker LH	E4	B200	W/3	: To B25
E5	B14	Y/2	: Front LH seat belt pre-tensioner	F4	B201	W/3	: Rear mode door motor
E4	B15	Y/2	: Front side air bag satellite sensor LH	E4	B202	W/3	: Rear air mix door motor
F4	B16	Y/2	: Rear side air bag satellite sensor LH	Front seat LH harness			
G1	B17	—	: Body ground	D3	B211	W/2	: To B45
E1	B18	—	: Body ground	D3	B212	W/6	: Sliding motor LH
D5	B19	—	: Body ground	C4	B213	W/4	: Wire to wire
C5	B20	SMJ	: To M32	E5	B214	W/6	: Lifting motor (Front)
E3	B21	W/6	: Rear blower motor	E5	B215	W/6	: Lifting motor (Rear)
F3	B22	—	: Body ground	E5	B216	W/10	: Power seat switch LH
F1	B23	—	: Cargo lamp	D3	B217	W/2	: To B231
E4	B25	W/3	: To B200	Front seat LH recliner sub-harness			
D5	B26	B/2	: To E78	D3	B231	W/2	: To B217
E1	B27	W/12	: To D610	D4	B232	W/2	: Reclining motor LH
F2	B28	W/12	: To D412	Console sub-harness			
D5	B29	Y/4	: To R30	C4	B350	GR/4	: To B40
F2	B39	Y/2	: LH side rear curtain air bag module	C4	B351	GR/3	: Console power socket
C5	B40	GR/4	: To B350	C4	B352	W/4	: AC 120V outlet front
E5	B45	W/2	: To B211	Room lamp sub-harness			
F2	B46	W/4	: AC 120V outlet rear	E1	B401	W/4	: To B49
F3	B47	W/2	: Inverter unit	D3	B402	W/3	: Personal lamp 2nd row
G3	B48	W/12	: Inverter unit	E2	B403	W/3	: Personal lamp 3rd row
E1	B49	W/4	: To B401	F2	B404	W/3	: Personal lamp 4th row
F1	B50	B/2	: High-mounted stop lamp				

HARNESS

< WIRING DIAGRAM >

BODY HARNESS (STANDARD ROOF) CARGO VAN



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E3	B5	—	: Body ground	C4	B211	W/2	: To B45
C4	B7	—	: Body ground	C3	B212	W/6	: Sliding motor LH
E3	B8	W/3	: Front door switch LH	D4	B214	W/6	: Lifting motor (front)
C3	B10	Y/2	: Front LH side air bag module	D3	B215	W/6	: Lifting motor (rear)
C4	B13	Y/22	: Air bag diagnosis sensor unit (cargo van)	D4	B216	GR/10	: Power seat switch LH

HARNESS

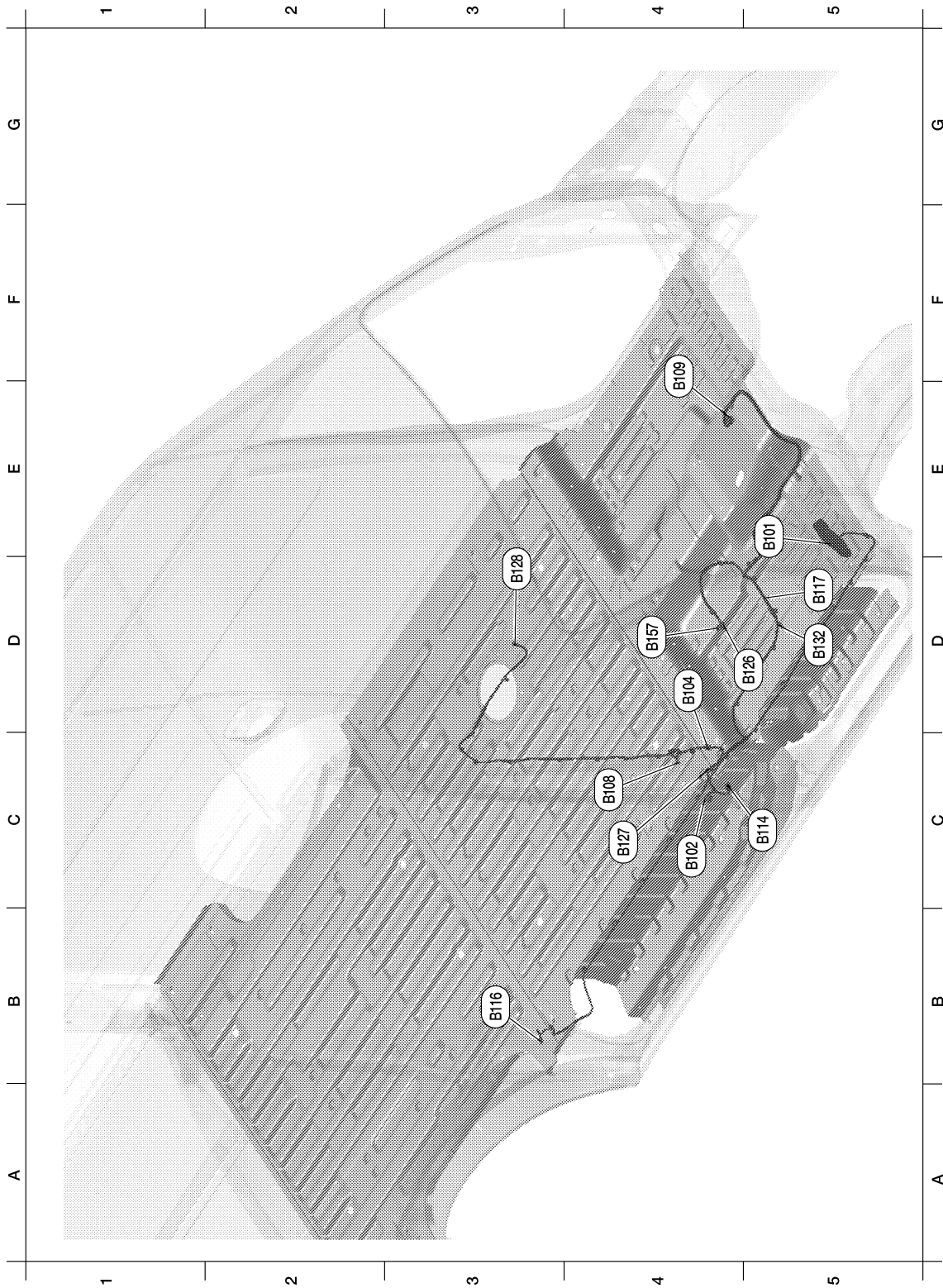
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E4	B14	Y/2	: Front LH seat belt pre-tensioner	D3	B217	W/2	: To B231
E4	B15	Y/2	: Front side air bag satellite sensor LH	Front seat LH recliner sub-harness			
D4	B19	—	: Body ground	D3	B231	W/2	: To B217
D2	B38	Y/2	: LH side curtain air bag module	D3	B232	W/2	: Reclining motor LH
C4	B40	GR/4	: To B350	Console sub-harness			
C4	B45	W/2	: To B211	C4	B350	GR/4	: To B40
C4	B69	W/12	: To M40	C3	B351	GR/3	: Console power socket
D3	B74	W/4	: Seat belt buckle switch LH	D3	B352	W/4	: AC 120V outlet front
Front seat LH harness							

HARNESS

< WIRING DIAGRAM >

BODY NO. 2 HARNESS (HIGH ROOF)



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E5	B101	W/12	: To M84	D5	B117	—	: Body ground
C4	B102	W/8	: Sliding door contact switch	D4	B126	Y/2	: Front RH side air bag module
D4	B104	—	: Body ground	C4	B127	Y/2	: Front RH seat belt pre-tensioner
C4	B108	W/3	: Front door switch RH	D3	B128	Y/2	: RH side curtain air bag module
F4	B109	Y/22	: Air bag diagnosis sensor unit (cargo van)	D5	B132	—	: Body ground

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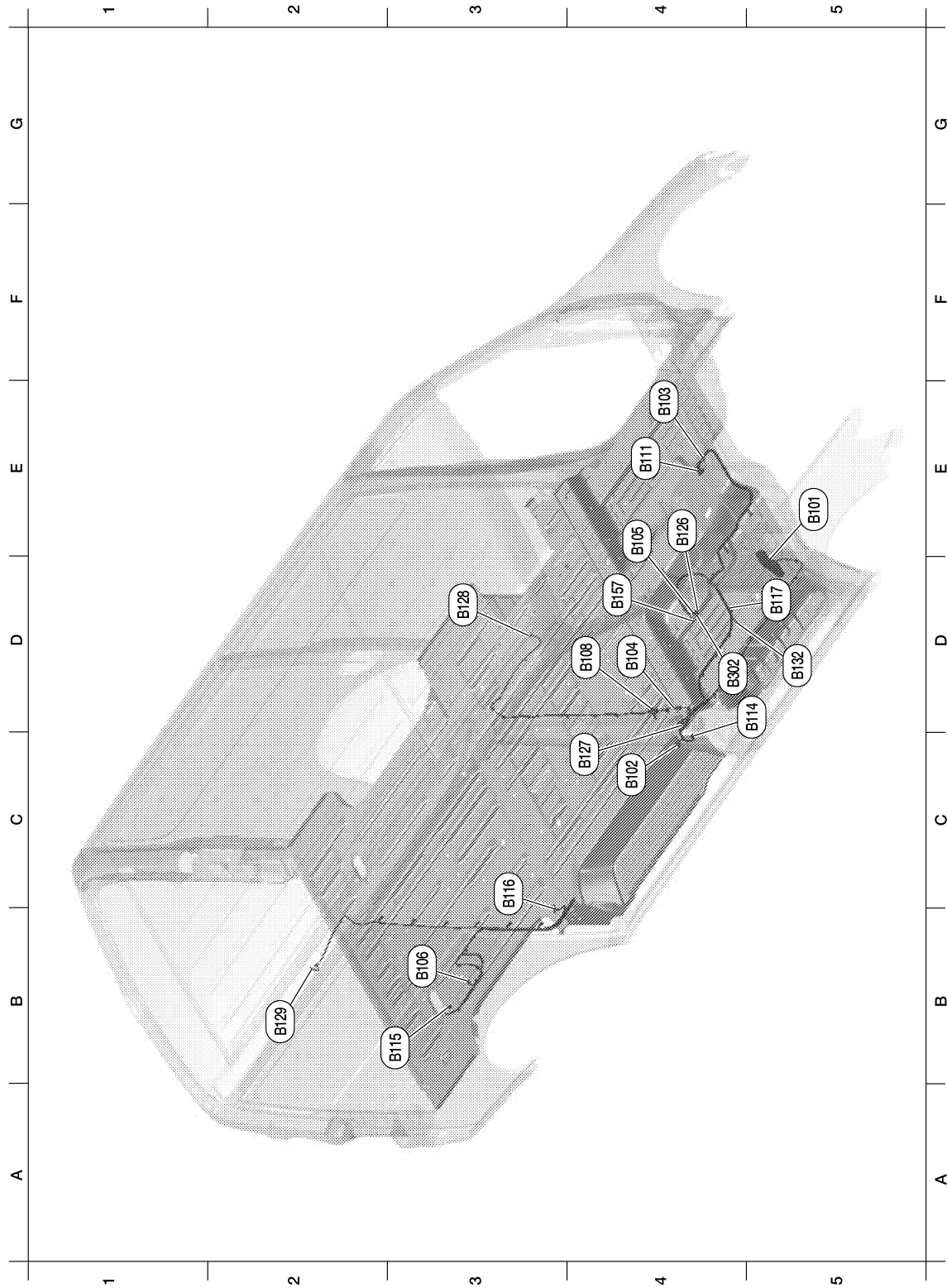
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C4	B114	Y/2	: Front side air bag satellite sensor RH	D4	B157	W/4	: Seat belt buckle switch RH
B3	B116	W/3	: Sliding door switch				

BODY NO. 2 HARNESS (STANDARD ROOF) PASSENGER VAN



ABMIA0075ZZ

E5	B101	W/12	: To M84	B3	B116	W/3	: Sliding door switch
C4	B102	W/8	: Sliding door contact switch	D5	B117	—	: Body ground
E4	B103	W/4	: Joint connector-B02	E4	B126	Y/2	: Front RH side air bag module

HARNESS

< WIRING DIAGRAM >

D4	B104	—	: Body ground	C4	B127	Y/2	: Front RH seat belt pre-tensioner
E4	B105	W/4	: To B302	D3	B128	Y/2	: RH side curtain air bag module
B3	B106	W/2	: Rear speaker RH	B2	B129	Y/2	: RH side rear curtain air bag module
D3	B108	W/3	: Front door switch RH	D5	B132	—	: Body ground
E4	B111	Y/22	: Air bag diagnosis sensor unit (passenger van)	D4	B157	W/4	: Seat belt buckle switch
D5	B114	Y/2	: Front side air bag satellite sensor RH	Front seat RH harness			
B3	B115	Y/2	: Rear side air bag satellite sensor RH	D4	B302	W/4	: To B105

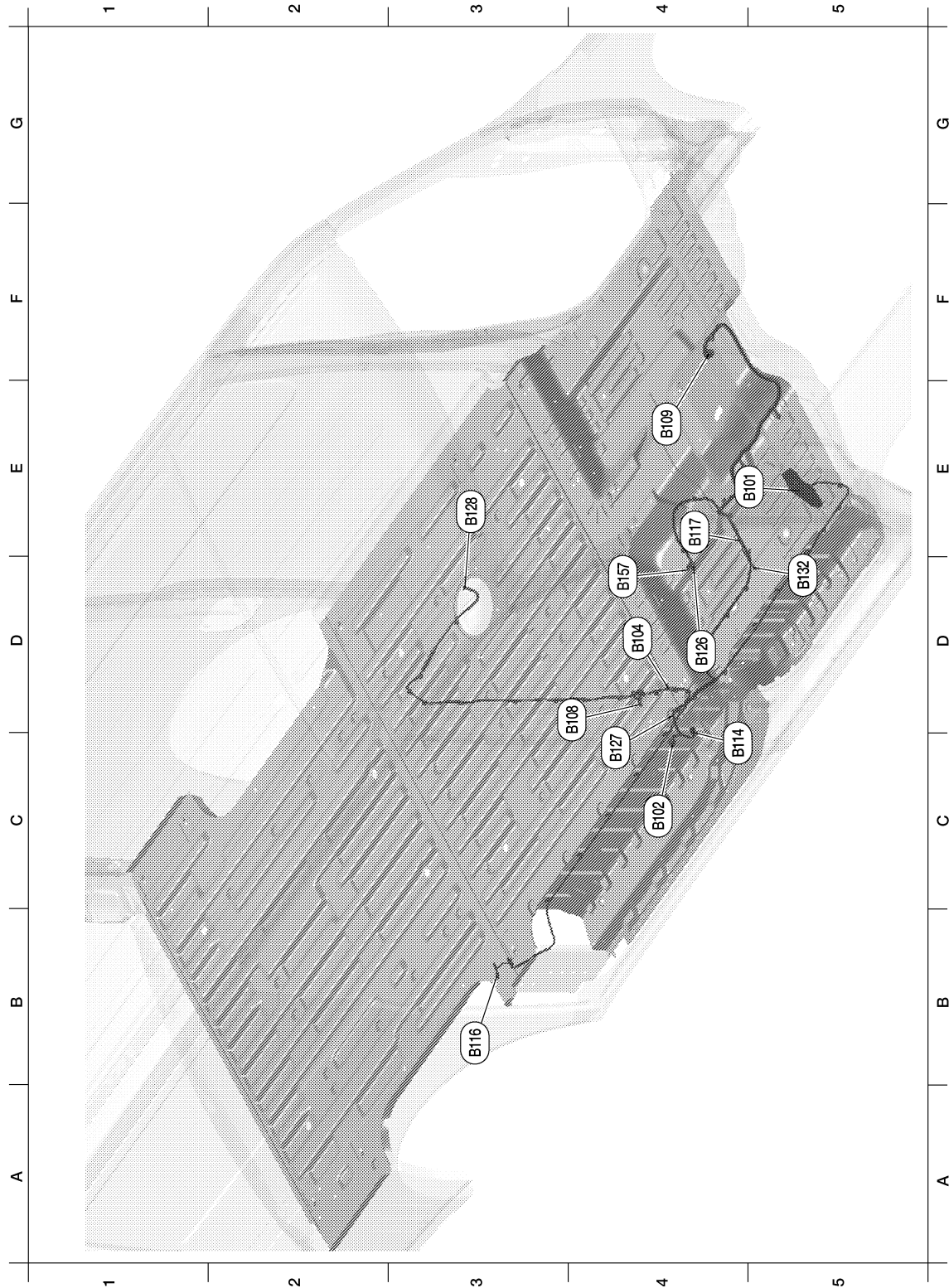
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BODY NO. 2 HARNESS (STANDARD ROOF) CARGO VAN



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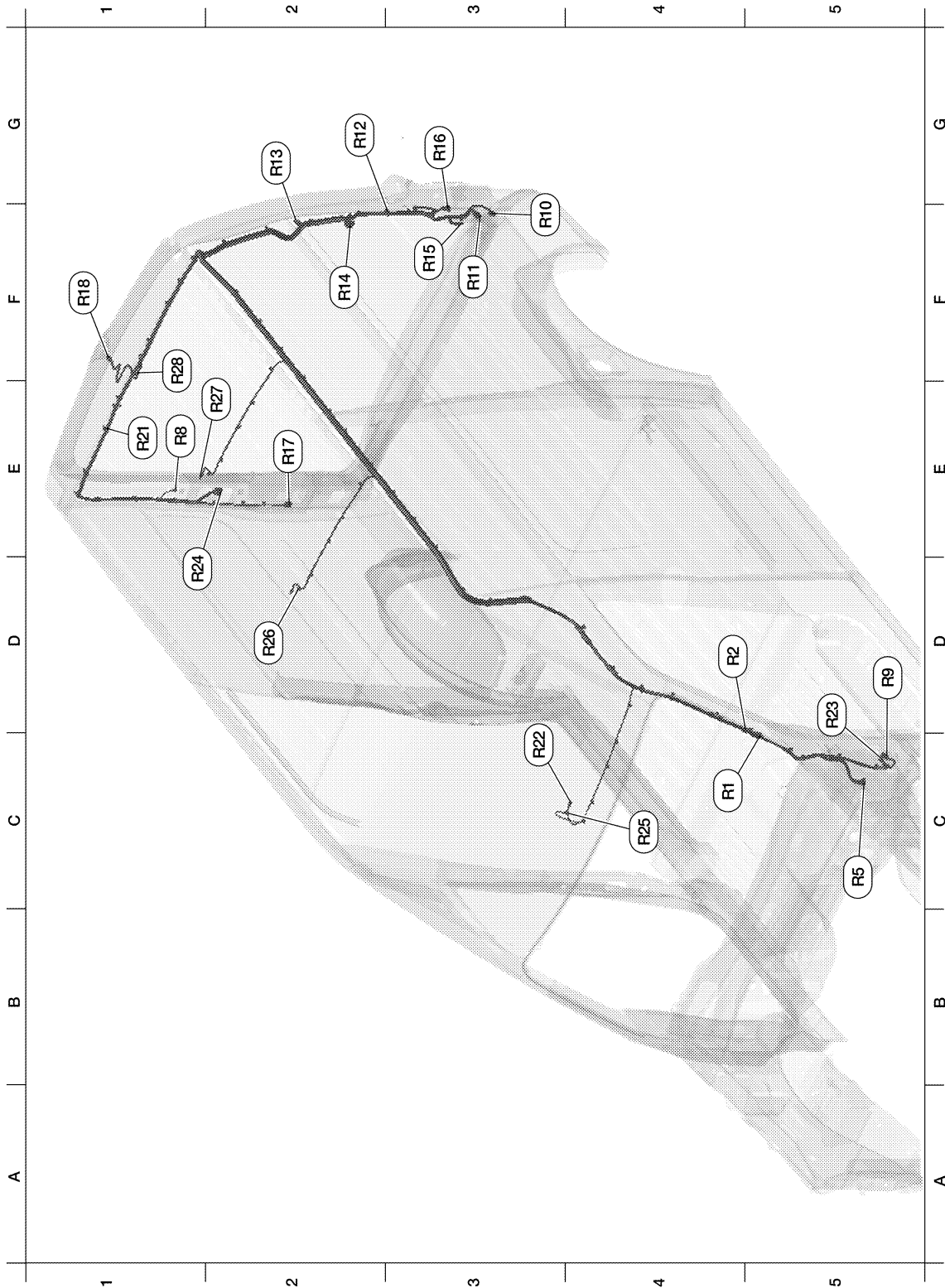
E4	B101	W/12	: To M84	E4	B117	—	: Body ground
C4	B102	W/8	: Sliding door contact switch	D4	B126	Y/2	: Front RH side air bag module
D4	B104	—	: Body ground	C4	B127	Y/2	: Front RH seat belt pre-tensioner
D3	B108	W/3	: Front door switch RH	E3	B128	Y/2	: RH side curtain air bag module
E4	B109	Y/22	: Air bag diagnosis sensor unit (cargo van)	D5	B132	—	: Body ground

HARNESS

< WIRING DIAGRAM >

C4	B114	Y/2	: Front side air bag satellite sensor RH	D4	B157	W/4	: Seat belt buckle switch RH
B3	B116	W/3	: Sliding door switch				

ROOM LAMP HARNESS (HIGH ROOF)



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C4	R1	W/32	: To M1	G3	R16	W/6	: Rear combination lamp LH
D4	R2	W/8	: To M2	E2	R17	W/6	: Rear combination lamp RH
C5	R5	B/1	: To E1	F1	R18	B/2	: High-mounted stop lamp

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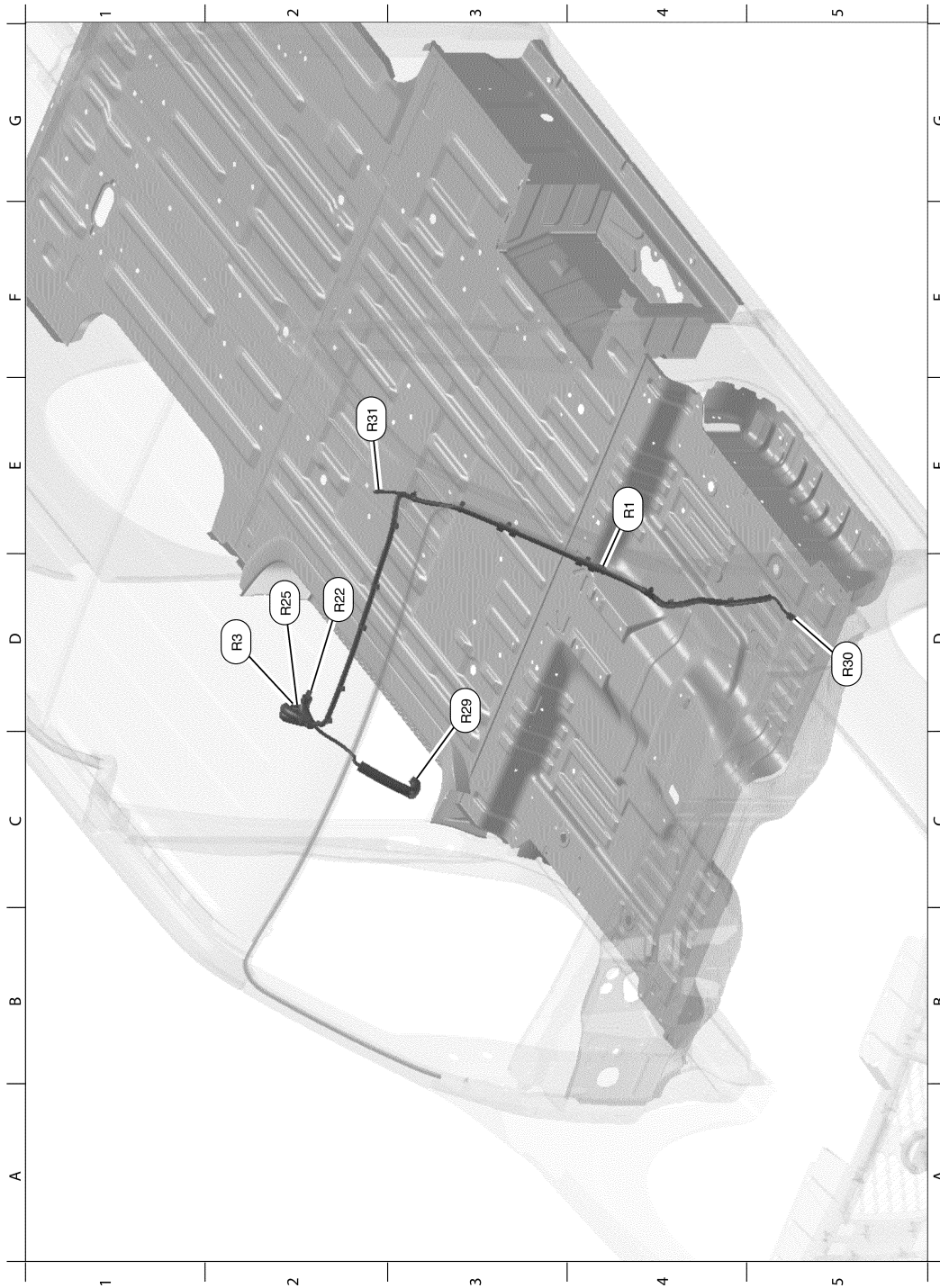
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E1	R8	—	: Body ground	E1	R21	W/2	: Back door switch upper RH
D5	R9	W/4	: To E53	C3	R22	W/4	: Microphone
F3	R10	W/12	: Inverter unit	D5	R23	BR/1	: To E52
F3	R11	W/2	: Inverter unit	D2	R24	W/12	: To D606
G2	R12	W/4	: AC 120V outlet rear	C4	R25	W/3	: Front room/map lamp assembly
G2	R13	—	: Body ground	D2	R26	W/2	: Front cargo lamp
F2	R14	W/12	: To D402	E2	R27	W/2	: Center cargo lamp
F3	R15	—	: Body ground	F1	R28	W/2	: Rear cargo lamp

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ROOM LAMP HARNESS (STANDARD ROOF) PASSENGER VAN



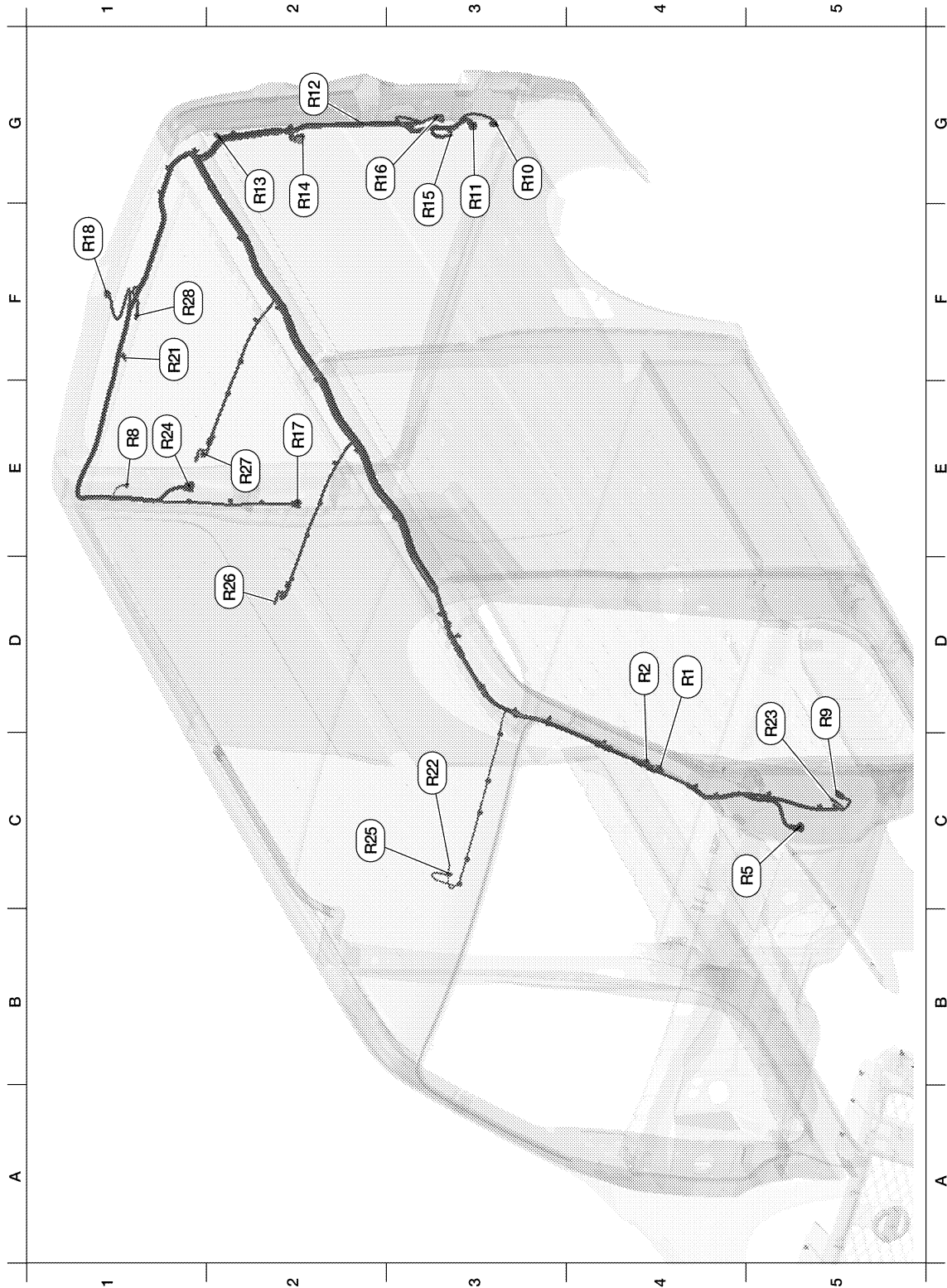
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E4	R1	W/32	: To M1	D3	R29	B/2	: Auto anti-dazzling inside mirror
D2	R3	W/12	: Rear air control	D5	R30	Y/4	: To B29
D2	R22	W/4	: Microphone	E2	R31	Y/2	: LH side front curtain air bag module
D2	R25	W/3	: Front room/map lamp assembly				

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ROOM LAMP HARNESS (STANDARD ROOF) CARGO VAN



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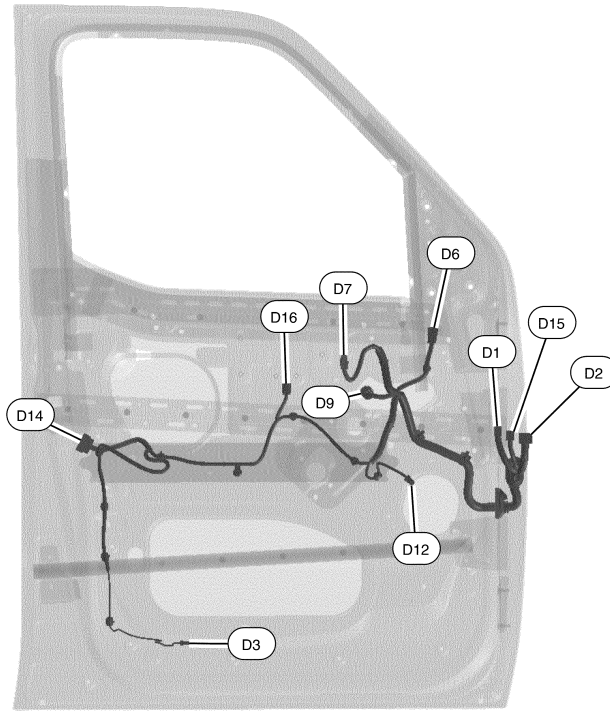
D4	R1	W/32	: To M1	G2	R16	W/6	: Rear combination lamp LH
D4	R2	W/8	: To M2	E2	R17	W/6	: Rear combination lamp RH
C4	R5	B/1	: To E1	F1	R18	B/2	: High-mounted stop lamp
E1	R8	—	: Body ground	F1	R21	W/2	: Back door switch upper RH
D5	R9	W/4	: To E53	C3	R22	W/4	: Microphone

HARNESS

< WIRING DIAGRAM >

G3	R10	W/12	: Inverter unit	D5	R23	BR/1	: To E52
G3	R11	W/2	: Inverter unit	E1	R24	W/12	: To D606
G2	R12	W/4	: AC 120V outlet rear	C2	R25	W/3	: Front room/map lamp assembly
G2	R13	—	: Body ground	D2	R26	W/2	: Front cargo lamp
G2	R14	W/12	: To D402	E2	R27	W/2	: Center cargo lamp
G3	R15	—	: Body ground	F1	R28	W/2	: Rear cargo lamp

FRONT DOOR LH HARNESS



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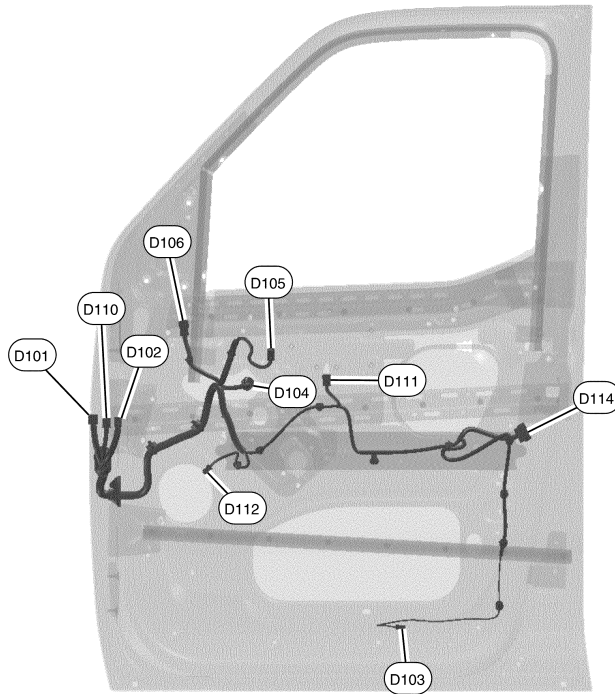
D1	W/12	: To M9	D9	G/6	: Front power window motor LH
D2	W/12	: To M8	D12	W/2	: Front door speaker LH
D3	W/2	: Front step lamp LH	D14	GR/6	: Front door lock assembly LH
D6	W/16	: Door mirror LH	D15	Y/4	: To M92
D7	W/16	: Main power window and door lock/unlock switch	D16	Y/2	: Front door satellite sensor LH

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FRONT DOOR RH HARNESS



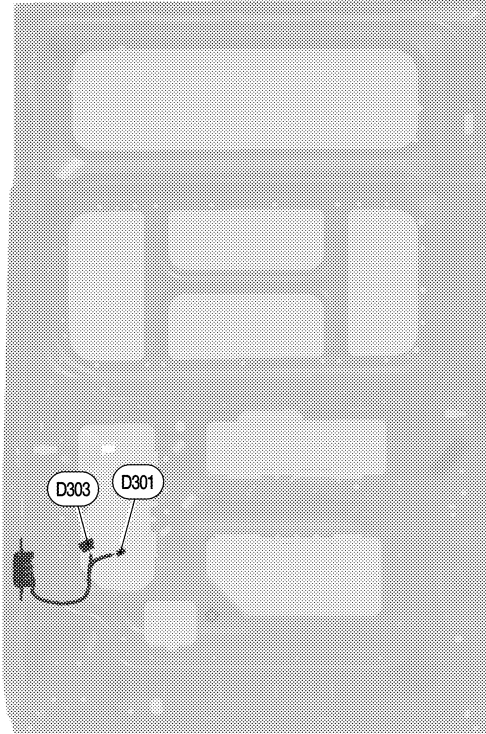
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D101	W/8	: To M75	D106	W/16	: Door mirror RH
D102	W/12	: To M74	D110	Y/4	: To M83
D103	W/2	: Front step lamp RH	D111	Y/2	: Front door satellite sensor RH
D104	G/6	: Front power window motor RH	D112	W/2	: Front door speaker RH
D105	W/12	: Power window and door lock/unlock switch RH	D114	GR/6	: Front door lock actuator RH

HARNESS

< WIRING DIAGRAM >

SLIDING DOOR RH HARNESS (HIGH ROOF)



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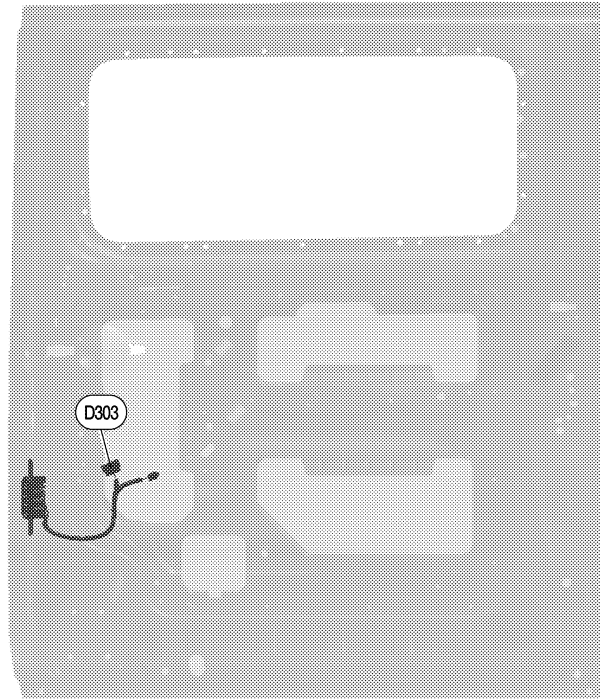
D301	B/2	: Secondary sliding door switch	D303	GR/6	: Sliding door lock assembly
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SLIDING DOOR RH HARNESS (STANDARD ROOF)



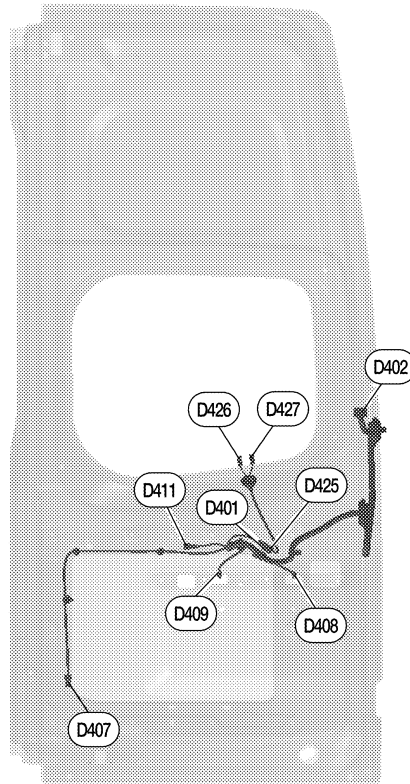
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D303	GR/6	: Sliding door lock assembly			
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BACK DOOR LH HARNESS (HIGH ROOF)



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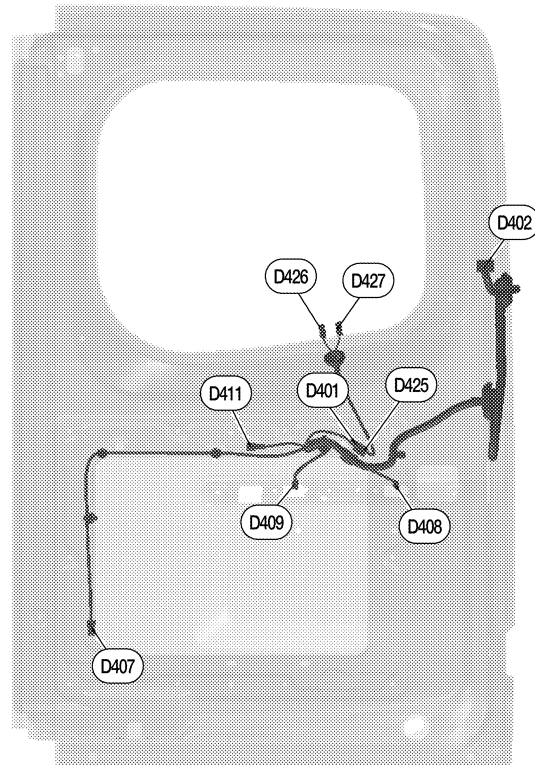
D401	W/2	: To D425	D411	W/4	: Rear view camera
D402	W/12	: To R14	Rear window defogger LH sub-harness		
D407	B/2	: Back door switch lower LH	D425	W/2	: To D401
D408	BR/2	: License plate lamp LH	D426	B/1	: Rear window defogger LH
D409	BR/2	: License plate lamp RH	D427	B/1	: Rear window defogger LH

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BACK DOOR LH HARNESS (STANDARD ROOF)



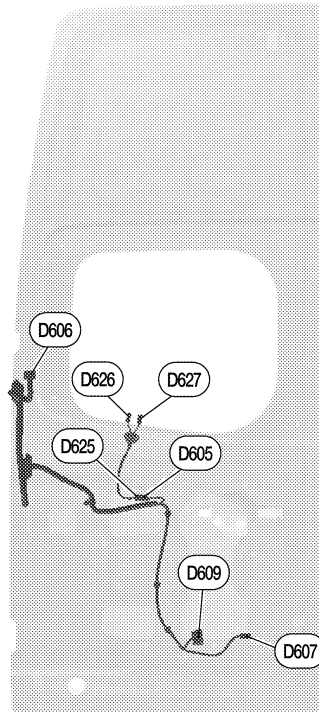
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D401	W/2	: To D425	D411	W/4	: Rear view camera
D402	W/12	: To R14	Rear window defogger LH sub-harness		
D407	B/2	: Back door switch lower LH	D425	W/2	: To D401
D408	BR/2	: License plate lamp LH	D426	B/1	: Rear window defogger LH
D409	BR/2	: License plate lamp RH	D427	B/1	: Rear window defogger LH

HARNESS

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BACK DOOR RH HARNESS (HIGH ROOF)



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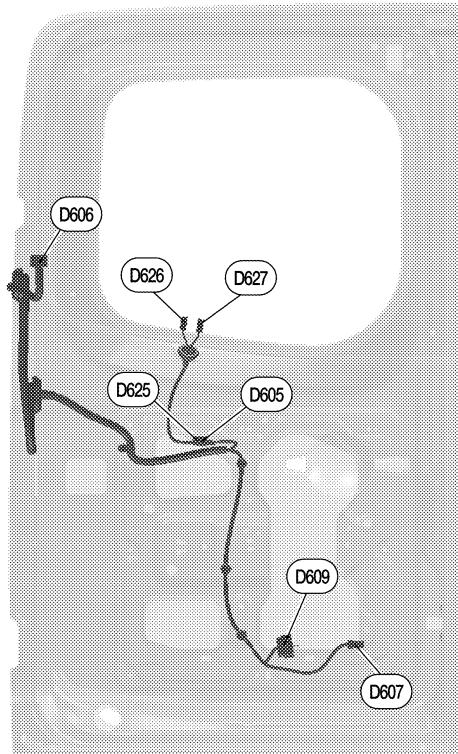
D605	W/2	: To D625	Rear window defogger LH sub-harness		
D606	W/12	: To R24	D625	W/2	: To D605
D607	B/2	: Back door switch lower RH	D626	B/1	: Rear window defogger RH
D609	GR/6	: Back door lock assembly	D627	B/1	: Rear window defogger RH

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BACK DOOR RH HARNESS (STANDARD ROOF)



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D605	W/2	: To D625	Rear window defogger LH sub-harness		
D606	W/12	: To R24	D625	W/2	: To D605
D607	B/2	: Back door switch lower RH	D626	B/1	: Rear window defogger RH
D609	GR/6	: Back door lock assembly	D627	B/1	: Rear window defogger RH

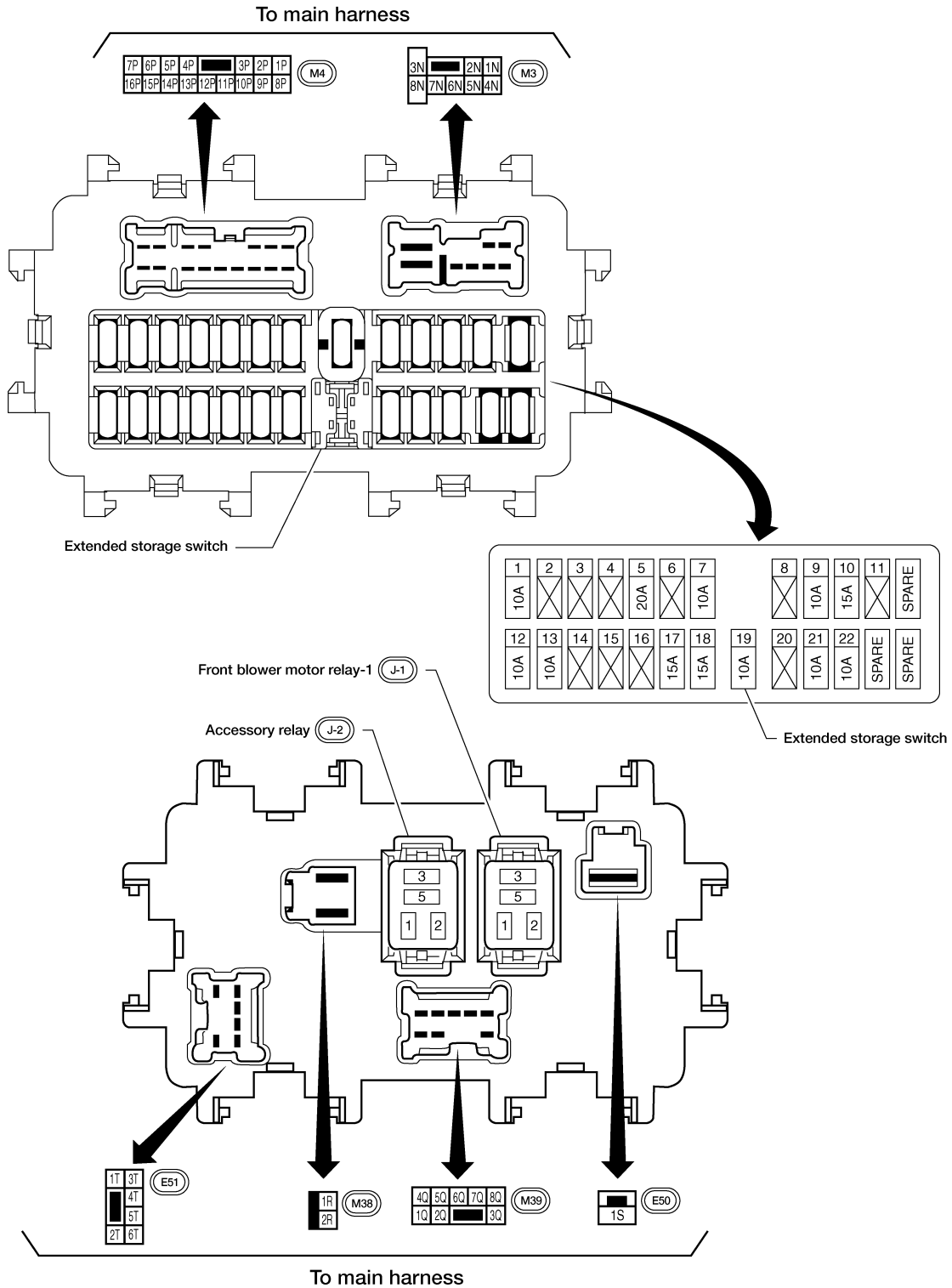
FUSE BLOCK - JUNCTION BOX (J/B)

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FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

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FUSE, FUSIBLE LINK AND RELAY BOX

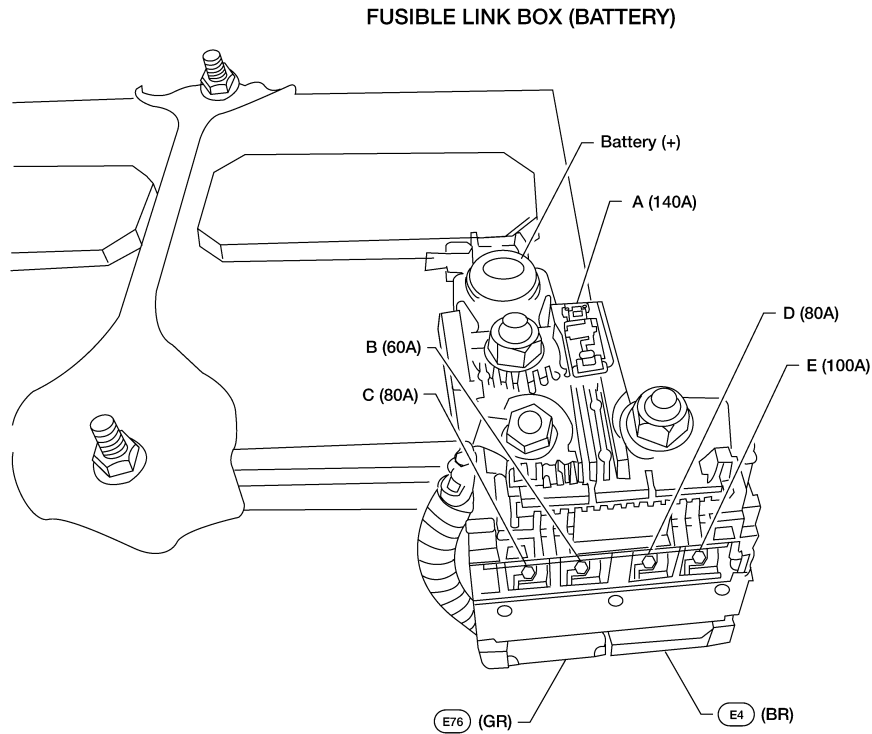
< WIRING DIAGRAM >

FUSE, FUSIBLE LINK AND RELAY BOX

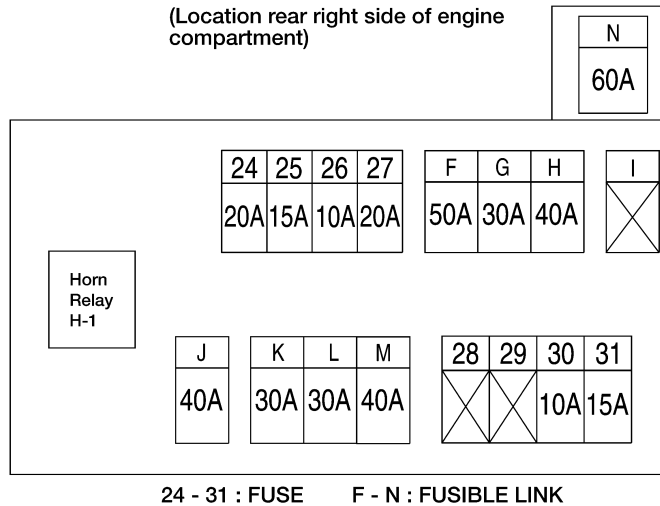
Terminal Arrangement

INFOID:000000012519625

FUSE, FUSIBLE LINK AND RELAY BOX



FUSE AND FUSIBLE LINK BOX
(Location rear right side of engine compartment)

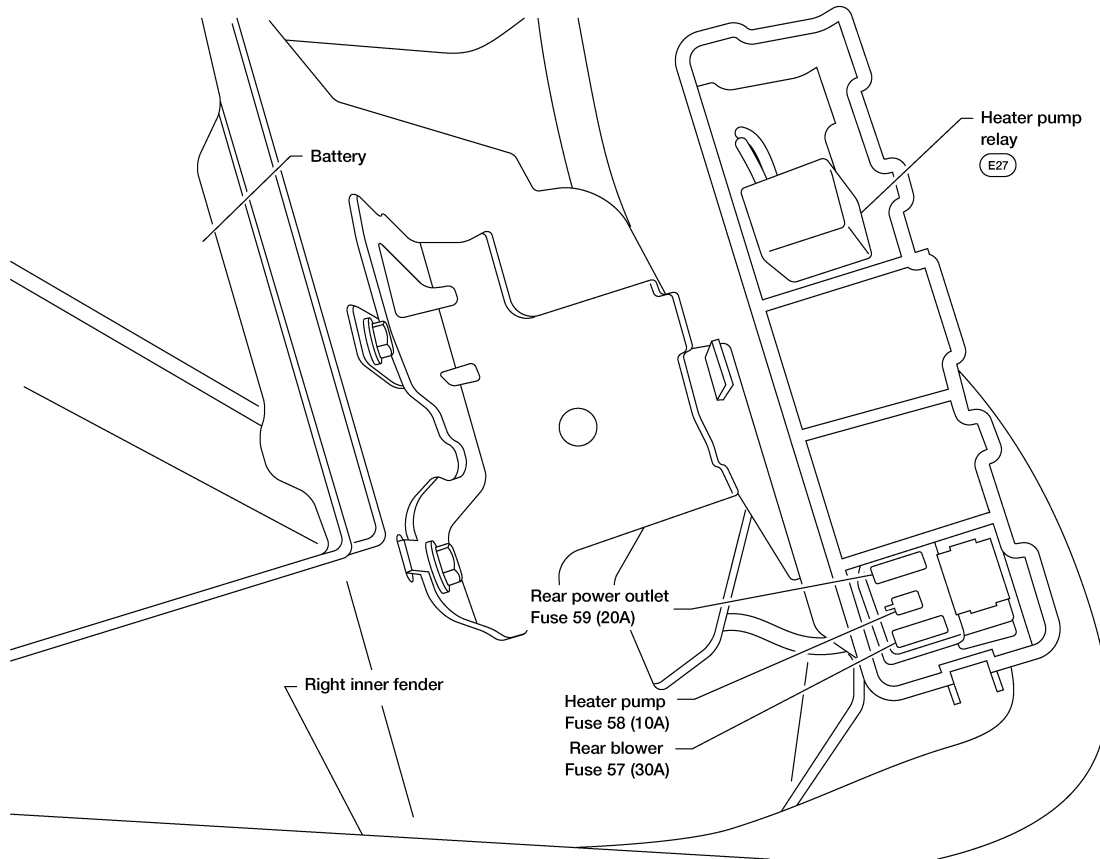


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FUSE, FUSIBLE LINK AND RELAY BOX

< WIRING DIAGRAM >

FUSE HOLDER-2



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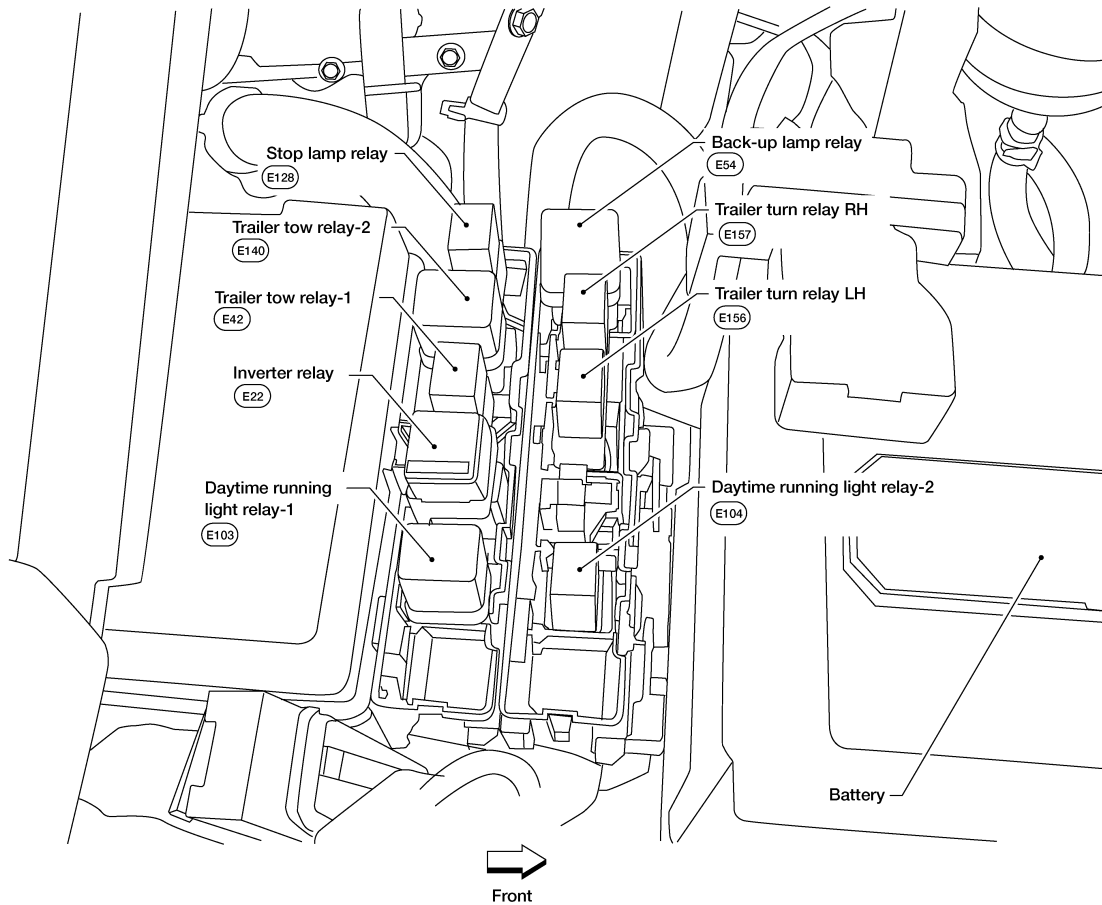
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FUSE, FUSIBLE LINK AND RELAY BOX

< WIRING DIAGRAM >

RELAY BOX



ABMIA7379GB

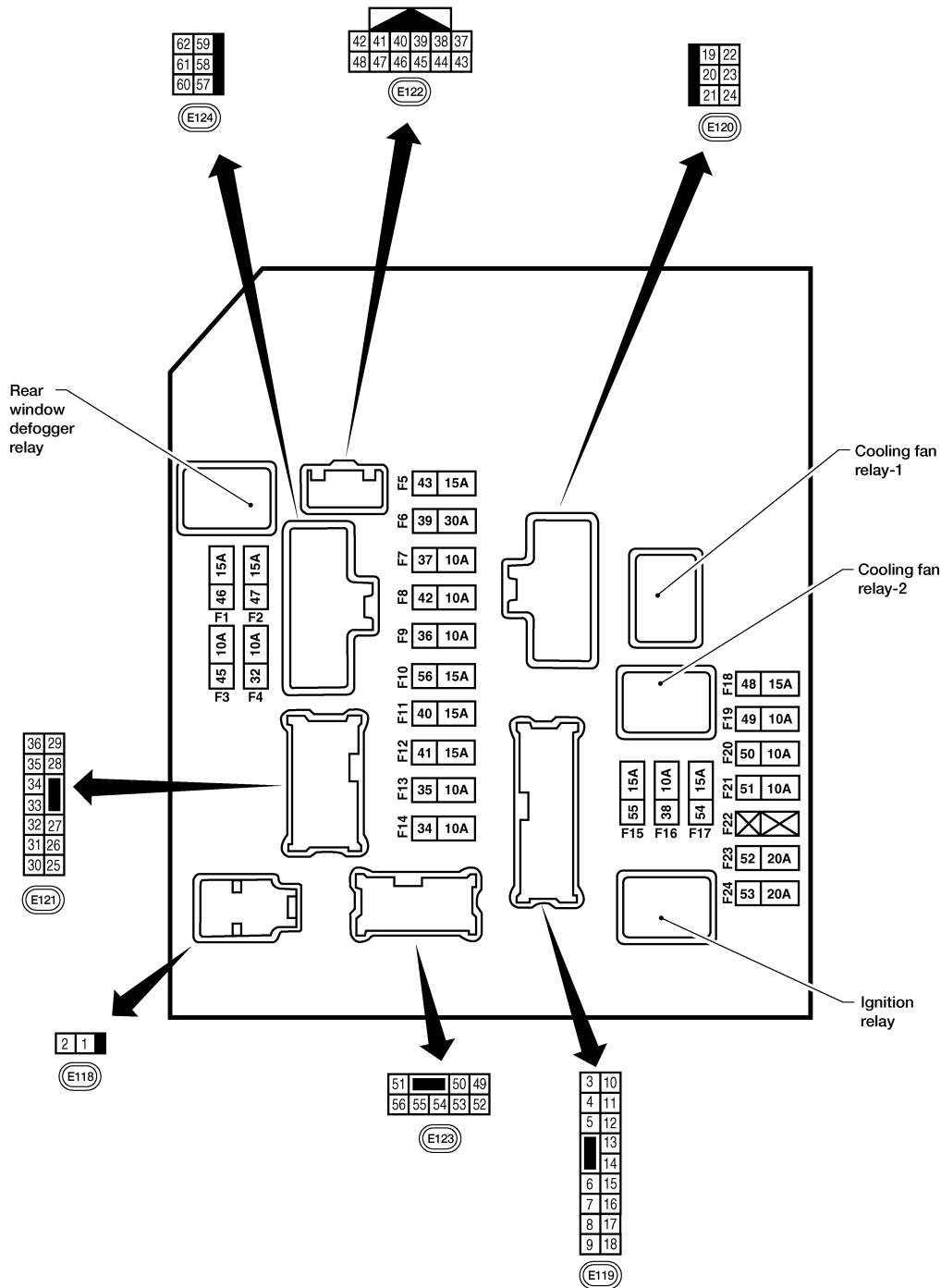
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< WIRING DIAGRAM >

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

IPDM E/R Terminal Arrangement

INFOID:000000012519626



NOTE:

Numbers preceded by an "F" represent the fuse numbers imprinted on the IPDM E/R. The other numbers represent the fuse numbers as they appear in the wiring diagrams.

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BATTERY

< BASIC INSPECTION >

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:000000012519627

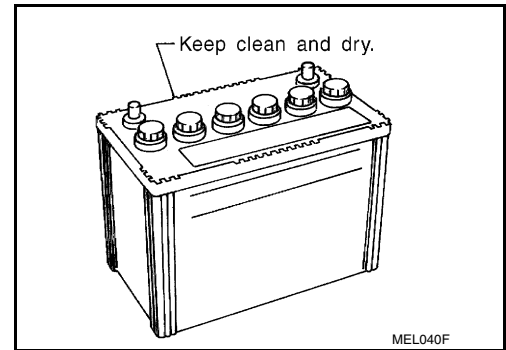
CAUTION:

- 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.
- Do not add distilled water through the hole used to check specific gravity.

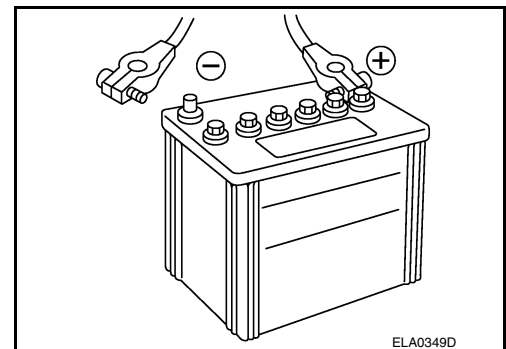
METHODS OF PREVENTING OVER-DISCHARGE

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.)



Work Flow

INFOID:000000012519628

BATTERY DIAGNOSIS WITH EXP-800 NI OR GR8-1200 NI

To diagnose and confirm the condition of the battery, use the following special service tools:

- EXP-800 NI Battery and electrical diagnostic analyzer
- GR8-1200 NI Multitasking battery and electrical diagnostic station

NOTE:

Refer to the applicable Instruction Manual for proper battery diagnosis procedures.

BATTERY DIAGNOSIS WITHOUT EXP-800 NI OR GR8-1200 NI

Checking Electrolyte Level

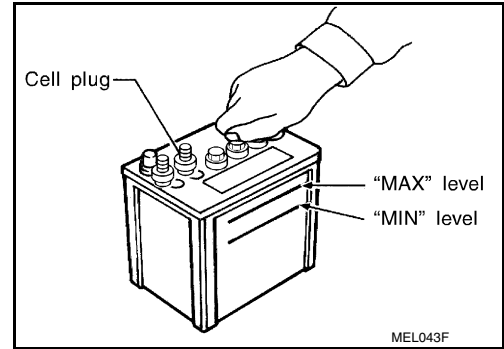
WARNING:

Do not allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, Do not 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. Failure to do this may cause personal injury or damage to clothing or the painted surfaces.

BATTERY

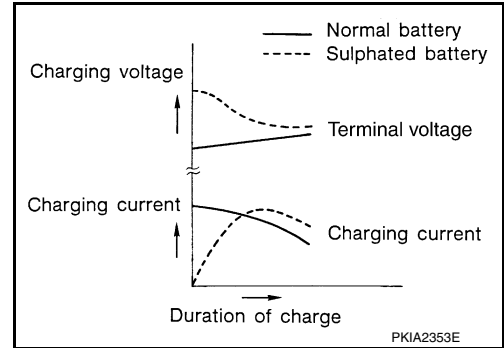
< BASIC INSPECTION >

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



SULFATION

- **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 sulfation on the cell plates.**
- **To determine if a battery has been “sulfated”, 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 sulfated batteries.**
- **A sulfated 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.**



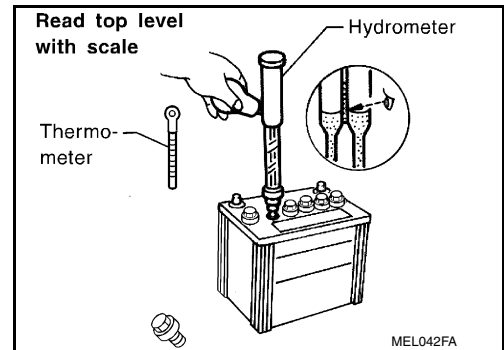
Specific Gravity Check

NOTE:

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.

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

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BATTERY

< BASIC INSPECTION >

Battery electrolyte temperature [°C (°F)]	Add to specific gravity reading
4 (40)	-0.016
-1 (30)	-0.020
-7 (20)	-0.024
-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:

- Do not “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. Do not 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 (Standard Charge)

Approximate charge condition	Charge current (A)	Charge time (h)
Fully charged	7	2
3/4 charged		2.5
1/2 charged		5
1/4 charged		7.5
Almost discharged		9
Completely discharged		10

Charging Rates (Quick Charge)

Approximate charge condition	Charge current (A)	Charge time (h)
Fully charged	—	—
3/4 charged	16	0.5
1/2 charged	33	
1/4 charged		
Almost discharged	—	—
Completely discharged		

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.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:000000012519629

Required Procedure After Battery Disconnection

System	Item	Reference
Engine Control System	Idle Air Volume Learning	EC-139 (VQ40DE) EC-592 (VK56DE)
Heater & Air Conditioning Control System	Foot Position Setting Trimmer	HAC-54 (Automatic Air Conditioner) HAC-165 (Manual Air Conditioner)
	Temperature Setting Trimmer (Front)	HAC-54 (Automatic Air Conditioner)
	Inlet Port Memory Function (FRE)	HAC-54 (Automatic Air Conditioner)
	Inlet Port Memory Function (REC)	HAC-55 (Automatic Air Conditioner)
Audio, Visual & Navigation System	Audio (Radio Preset)	Refer to Owner's Manual.
	Navigation System	Refer to Owner's Manual.

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FUSE INSPECTION

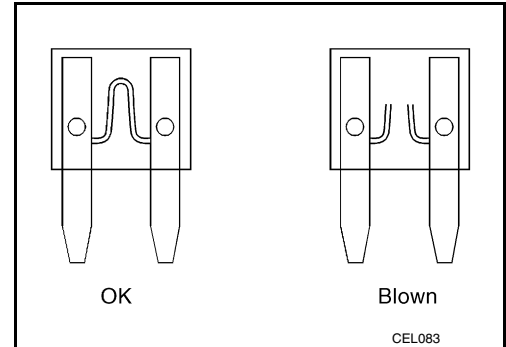
< BASIC INSPECTION >

FUSE INSPECTION

How To Check

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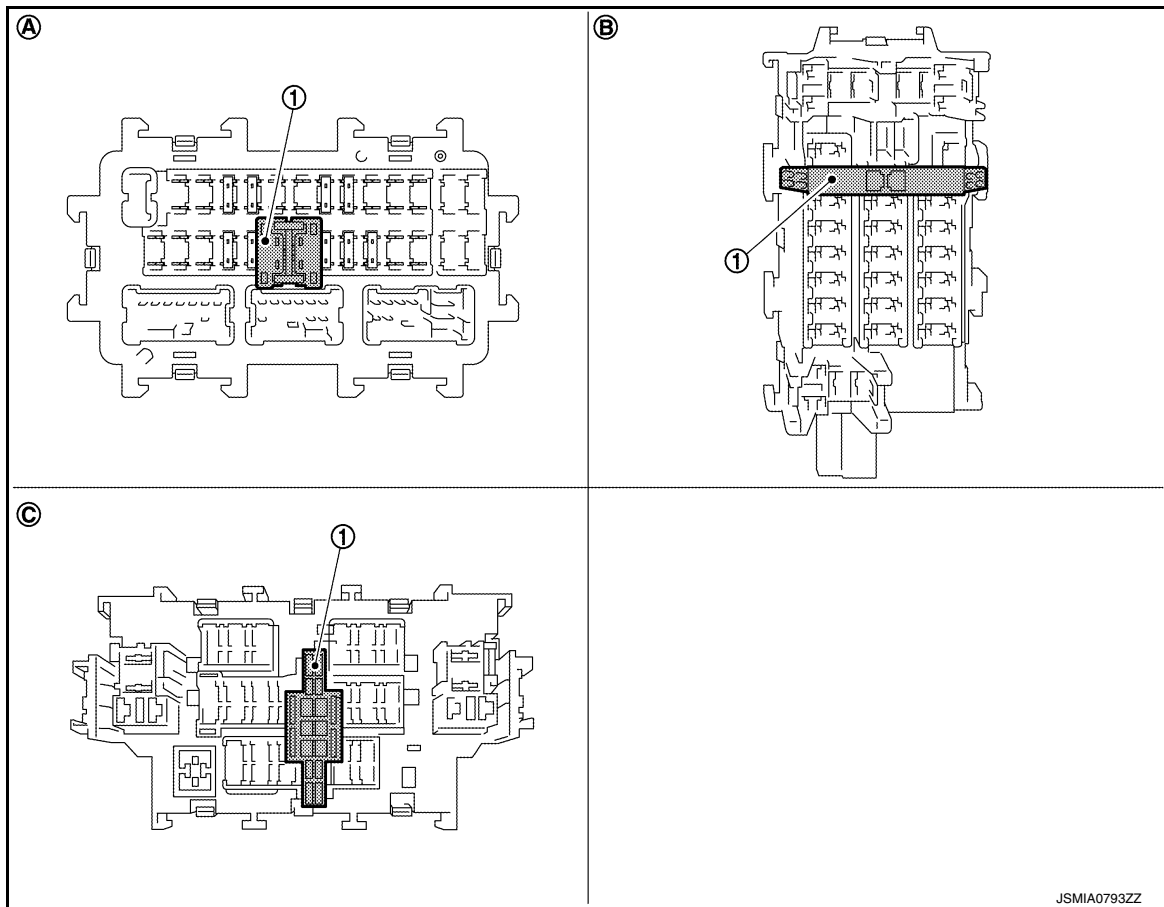
- If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is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



EXTENDED STORAGE SWITCH (IF EQUIPPED)

NOTE:

- When extended storage switch is pulled out, a message may be shown in the meter or display. To turn message/display off, push extended storage switch in.
 - The following information is related to extended storage switch (shipping mode). For information related to BCM transit mode, refer to [BCS-14, "SHIPPING MODE CONTROL SYSTEM : System Description"](#).
- The following switch may be mounted on the fuse block (Junction Box) for transportation and storage.



① Extended storage switch

Ⓐ Type A

Ⓑ Type B

Ⓒ Type C

Remove the extended storage switch if it interferes when checking fuses.

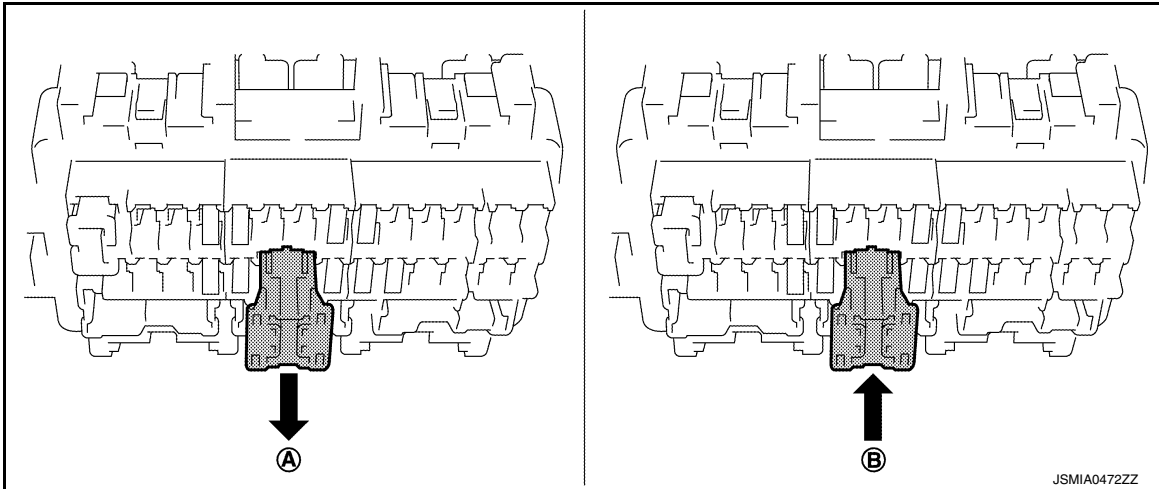
How/When to turn Extended Storage Switch ON/OFF

CAUTION:

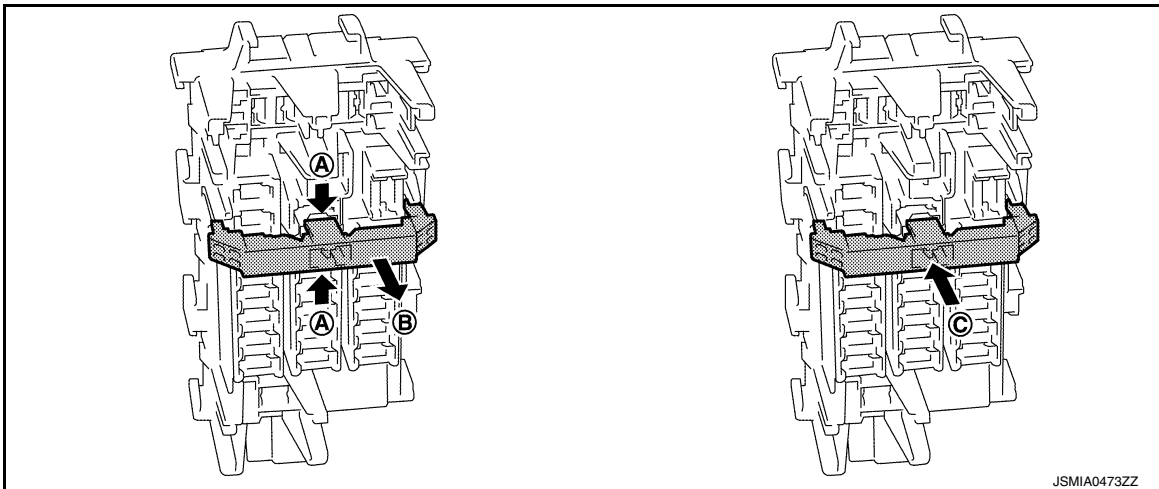
FUSE INSPECTION

< BASIC INSPECTION >

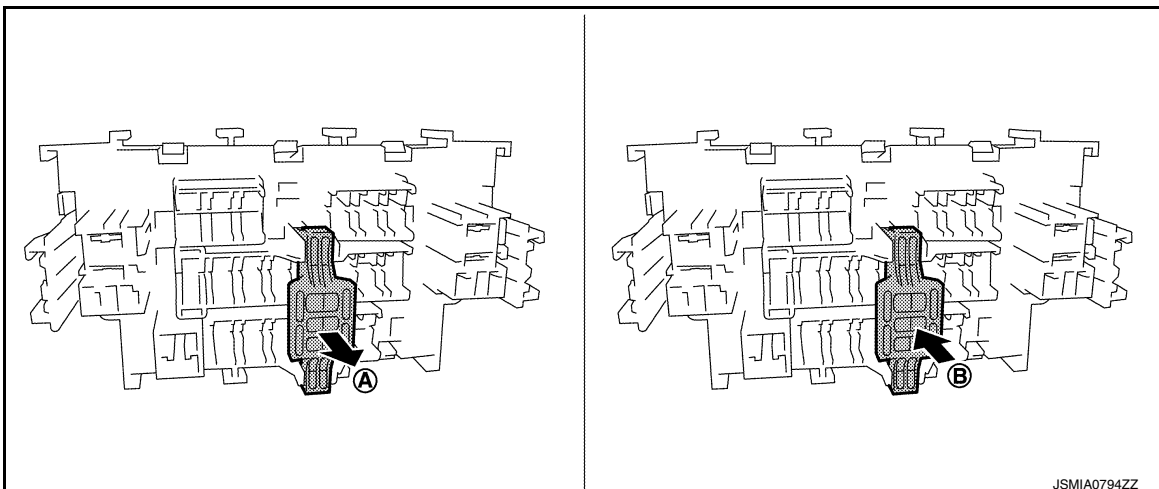
- Turn the ignition switch OFF when operating the extended storage switch.
- Under normal conditions, keep the extended storage switch in ON state. Never operate the extended storage switch except when necessary.
- Type A



- To turn the extended storage switch OFF, pull out in ① direction as shown in the figure.
- To turn the extended storage switch ON, press in ② direction as shown in the figure.
- Type B



- To turn the extended storage switch OFF, pinch tabs ① of the switch and pull out in ② direction as shown in the figure.
- To turn the extended storage switch ON, press in ③ direction as shown in the figure.
- Type C



- To turn the extended storage switch OFF, pull out in ① direction as shown in the figure.
- To turn the extended storage switch ON, press in ② direction as shown in the figure.

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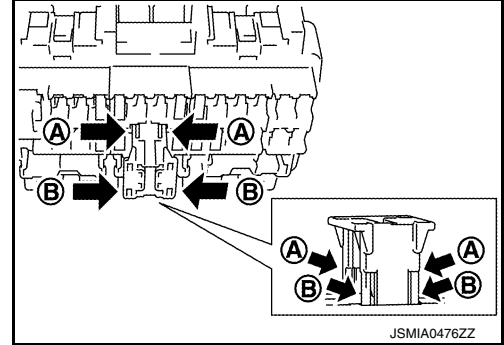
FUSE INSPECTION

< BASIC INSPECTION >

How To Remove Extended Storage Switch

Type A

1. Turn the ignition switch OFF.
2. Turn the extended storage switch OFF.
3. Pinch tabs (A) and tilt to disengage the extended storage switch. Pinch tabs (B) to remove the extended storage switch.



CAUTION:

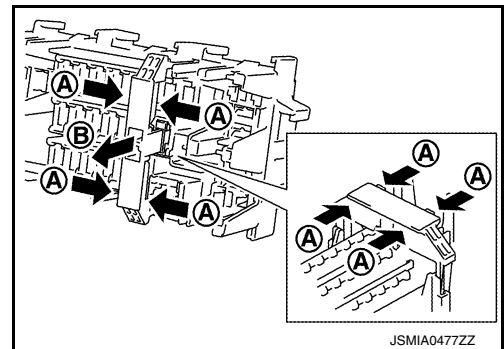
For bus bar type extended storage switch, never replace bus bar with a fuse, or fuse may continually open.

NOTE:

- Extended storage switch and fuse (or bus bar) are removed together. Remove fuse (or bus bar) from extended storage switch, if necessary.
- Install removed fuse (or bus bar) to fuse block.
- Extended storage switch is for transportation and storage. Reinstallation of switch is not required after removal, but fuse (or bus bar) must be reinstalled/pushed back in to activate all electrical systems and turn message off (which may be shown in meter/display).

Type B

1. Turn the ignition switch OFF.
2. Turn the extended storage switch OFF.
3. Pinch tabs (A) and firmly pull out the extended storage switch in (B) direction.



CAUTION:

For bus bar type extended storage switch, never replace bus bar with a fuse, or fuse may continually open.

NOTE:

- Extended storage switch and fuse (or bus bar) may be removed together. Remove fuse (or bus bar) from extended storage switch, if necessary.
- Install removed fuse (or bus bar) to fuse block.
- Extended storage switch is for transportation and storage. Reinstallation of switch is not required after removal, but fuse (or bus bar) must be reinstalled/pushed back in to activate all electrical systems and turn message off (which may be shown in meter/display).

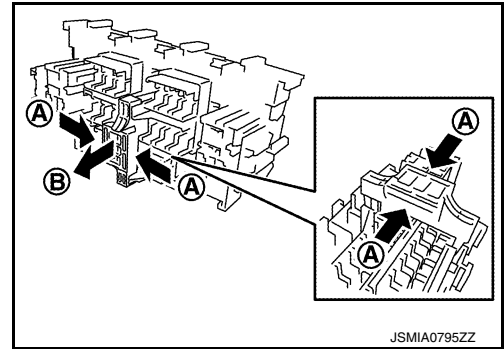
Type C

1. Turn the ignition switch OFF.
2. Turn the extended storage switch OFF.

FUSE INSPECTION

< BASIC INSPECTION >

3. Pinch tabs (A) and firmly pull out the extended storage switch in (B) direction.



CAUTION:

For bus bar type extended storage switch, never replace bus bar with a fuse, or fuse may continually open.

NOTE:

- Extended storage switch and fuse (or bus bar) are removed together. Remove fuse (or bus bar) from extended storage switch, if necessary.
- Install removed fuse (or bus bar) to fuse block.
- Extended storage switch is for transportation and storage. Reinstallation of switch is not required after removal, but fuse (or bus bar) must be reinstalled/pushed back in to activate all electrical systems and turn message off (which may be shown in meter/display).

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FUSIBLE LINK INSPECTION

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FUSIBLE LINK INSPECTION

Fusible Link

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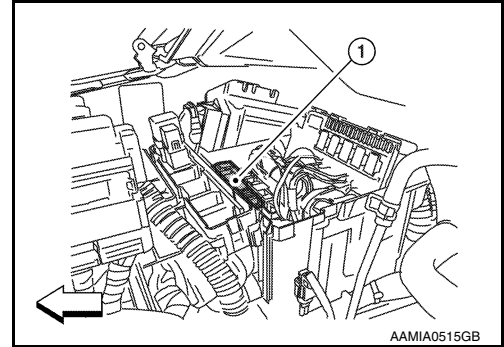
A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is questionable, use circuit tester or test lamp.

1 : Fusible link

←: Vehicle front

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.



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BATTERY

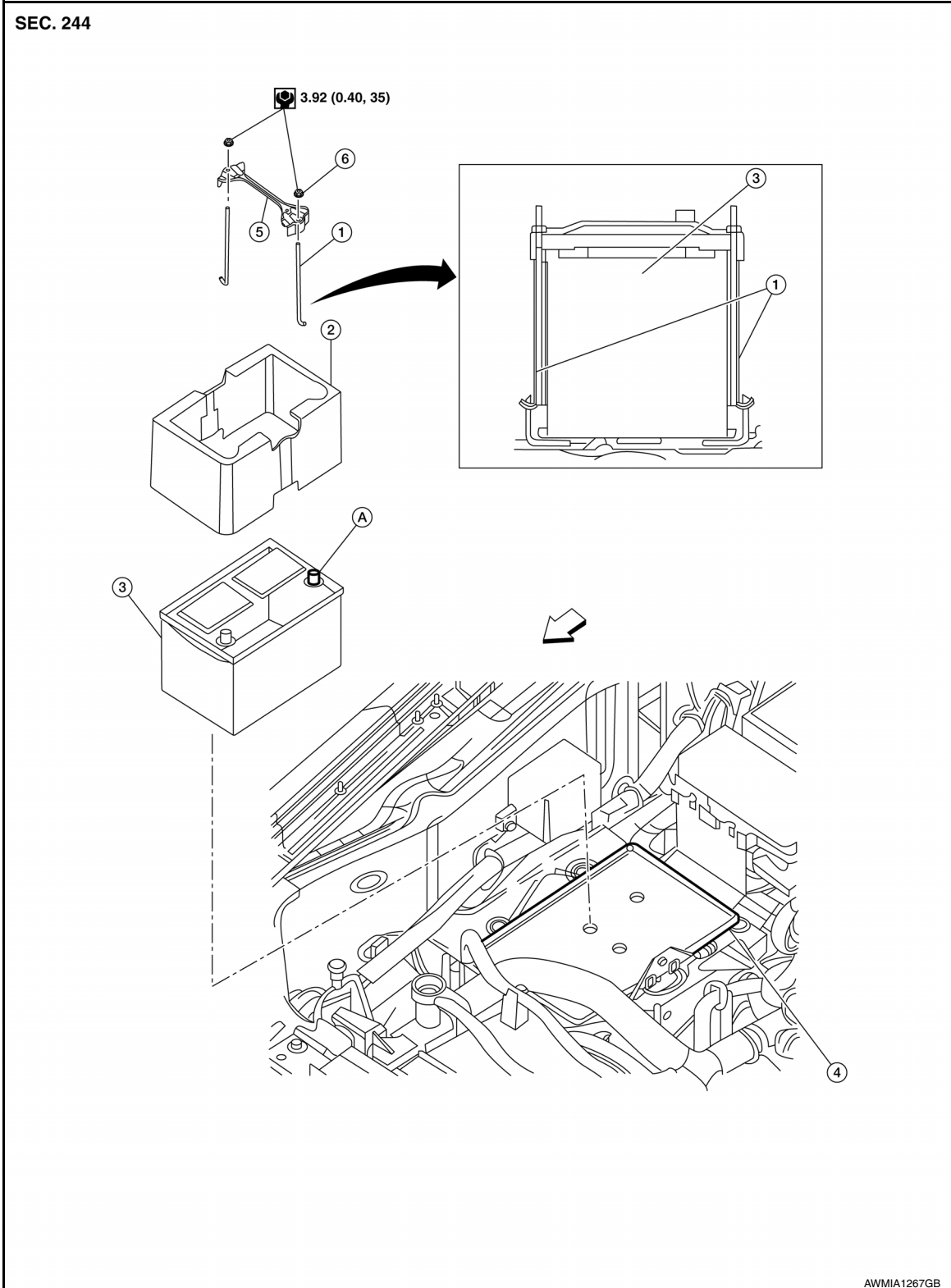
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BATTERY

Removal and Installation

INFOID:000000012519632



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BATTERY

< REMOVAL AND INSTALLATION >

- | | | |
|----------------------|------------------|------------|
| 1. Rod | 2. Battery cover | 3. Battery |
| 4. Battery tray | 5. Battery clamp | 6. Nut |
| A. Positive terminal | ↩ Front | |

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 the battery cover.
4. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

When connecting battery terminals, connect the positive battery terminal first.

Battery terminal nuts : 3.5 N·m (0.36 kg-m, 31 in-lb)

Reset electronic systems as necessary. Refer to [PG-89, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

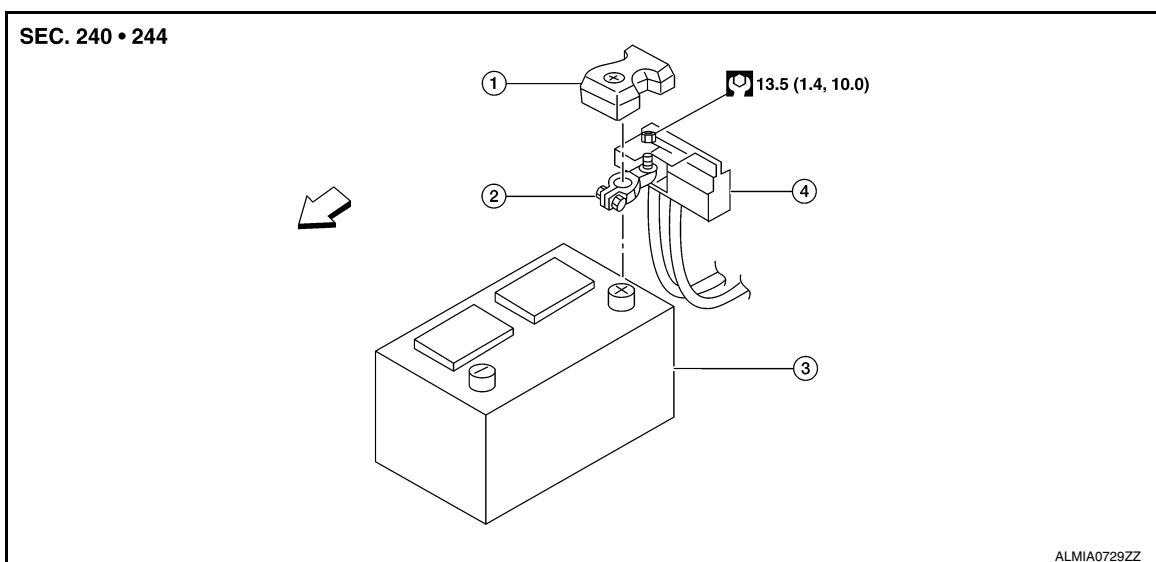
BATTERY TERMINAL WITH FUSIBLE LINK

< REMOVAL AND INSTALLATION >

BATTERY TERMINAL WITH FUSIBLE LINK

Exploded View

INFOID:000000012519633



1. Cover
4. Fusible link box

2. Terminal
⇐ Front

3. Battery

Removal and Installation

INFOID:000000012519634

REMOVAL

1. Disconnect both battery negative and positive terminals. Refer to [PG-95. "Removal and Installation"](#).
CAUTION:
To prevent damage to the parts, disconnect the battery negative terminal first.
2. Disconnect positive cable from fusible link box (battery).
3. Disconnect harness connectors and separate positive terminal from fusible link box (battery).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the fusible link box battery if it has been dropped or sustained and impact.

To install the battery, carefully read the following instructions:

- To prevent damage to the parts, connect the battery cable to the positive terminal first.
 - After connecting battery cables, to securely supply battery voltage, ensure that they are tightly clamped to battery terminals for good contact.
 - To securely supply battery voltage, check battery terminal for poor connection caused by corrosion.
- Reset electronic systems as necessary. Refer to [PG-89. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

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SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Battery

INFOID:0000000012519635

Application	Cargo Van (Standard)	Cargo Van (With Tow Package option and Power Package fleet option)	Passenger Van
Type*	GR 24	GR27	GR 27
Capacity (20 HR) minimum V-AH	12 - 70	12 - 80	12 - 80
Cold cranking current A [For reference value at -18°C (0°F)]	650	710	710

*: Always check with the Parts Department for the latest parts information.