SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000005153282

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 3 minutes before performing any service.**

Precaution Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000005212330

NOTE:

- This Procedure is applied only to models with Intelligent Key system and NATS (NISSAN ANTI-THEFT SYSTEM).
- Remove and install all control units after disconnecting both battery cables with the ignition knob in the ″LOCK″ position.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If DTC is detected, perform trouble diagnosis according to self-diagnostic results.

For models equipped with the Intelligent Key system and NATS, an electrically controlled steering lock mechanism is adopted on the key cylinder.
For this reason, if the battery is disconnected or if the battery is discharged, the steering wheel will lock and steering wheel rotation will become impossible.
If steering wheel rotation is required when battery power is interrupted, follow the procedure below before starting the repair operation.

OPERATION PROCEDURE

1. Connect both battery cables.
   NOTE:
   Supply power using jumper cables if battery is discharged.
2. Use the Intelligent Key or mechanical key to turn the ignition switch to the ″ACC″ position. At this time, the steering lock will be released.
3. Disconnect both battery cables. The steering lock will remain released and the steering wheel can be rotated.
4. Perform the necessary repair operation.

5. When the repair work is completed, return the ignition switch to the ″LOCK″ position before connecting the battery cables. (At this time, the steering lock mechanism will engage.)
6. Perform a self-diagnosis check of all control units using CONSULT-III.

Precaution for Power Generation Variable Voltage Control System

INFOID:0000000004918857

CAUTION:

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

PREPARATION

PREPARATION

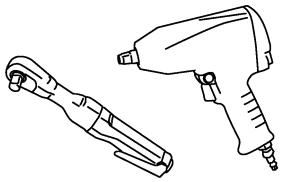
Special Service Tool

INFOID:0000000004918858

Tool number (Kent-Moore No.) Tool name	Description
— (—) Model GR-8 Multitasking Battery Diagnostic Station  AWIIA1239ZZ	Tests batteries, starting and charging systems. For operating instructions, refer to diagnostic station instruction manual.

Commercial Service Tool

INFOID:0000000004918859

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:0000000004918860

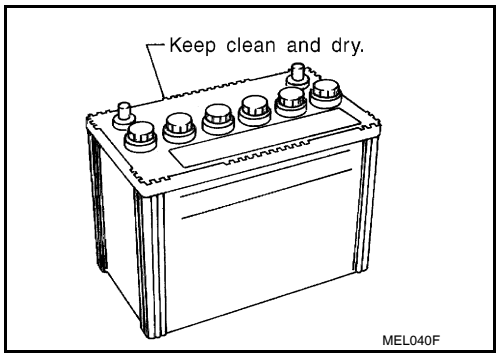
CAUTION:

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

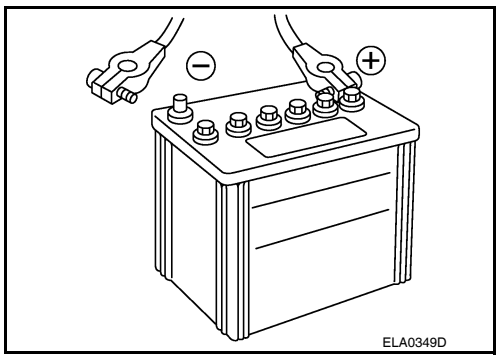
METHODS OF PREVENTING OVER-DISCHARGE

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

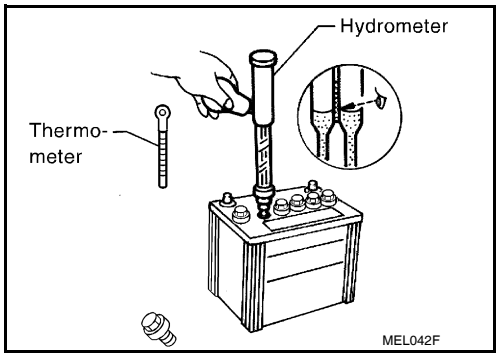
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level.
  This also applies to batteries designated as “low maintenance” and “maintenance-free”.



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



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

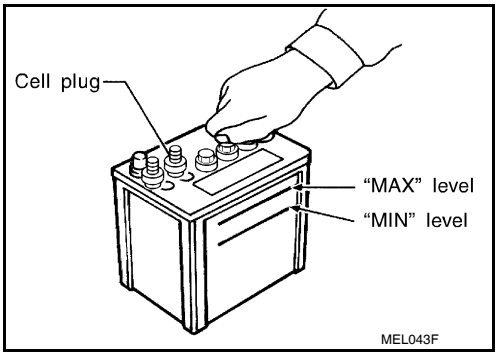


CHECKING ELECTROLYTE LEVEL

WARNING:

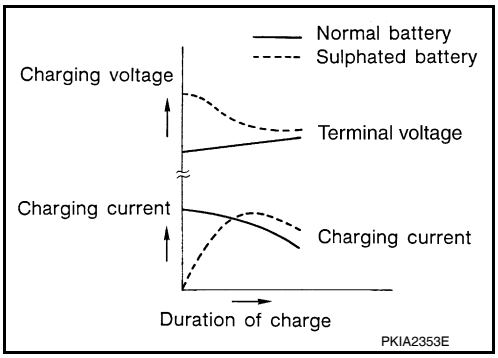
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

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



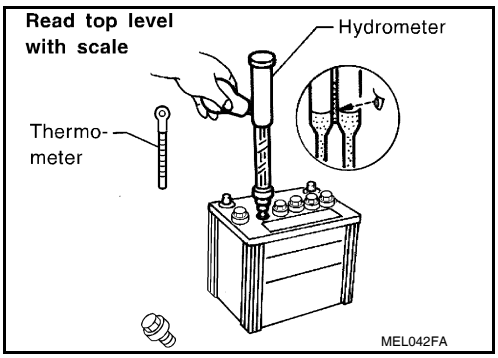
Sulphation

A battery will be completely discharged if it is left unattended for a long time and the specific gravity will become less than 1.100. This may result in sulphation on the cell plates.
To determine if a battery has been "sulphated", note its voltage and current when charging it. As shown in the figure, less current and higher voltage are observed in the initial stage of charging sulphated batteries.
A sulphated battery may sometimes be brought back into service by means of a long, slow charge, 12 hours or more, followed by a battery capacity test.



SPECIFIC GRAVITY CHECK

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



Hydrometer Temperature Correction

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

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

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

CHARGING THE BATTERY

CAUTION:

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

Charging Rates

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

Do not charge at more than 50 ampere rate.

NOTE:

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

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

Work Flow

INFOID:0000000004918861

TROUBLE DIAGNOSIS WITH MULTITASKING BATTERY DIAGNOSTIC STATION

Refer to diagnostic station instruction manual.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000005188409

Required Procedure After Battery Disconnection

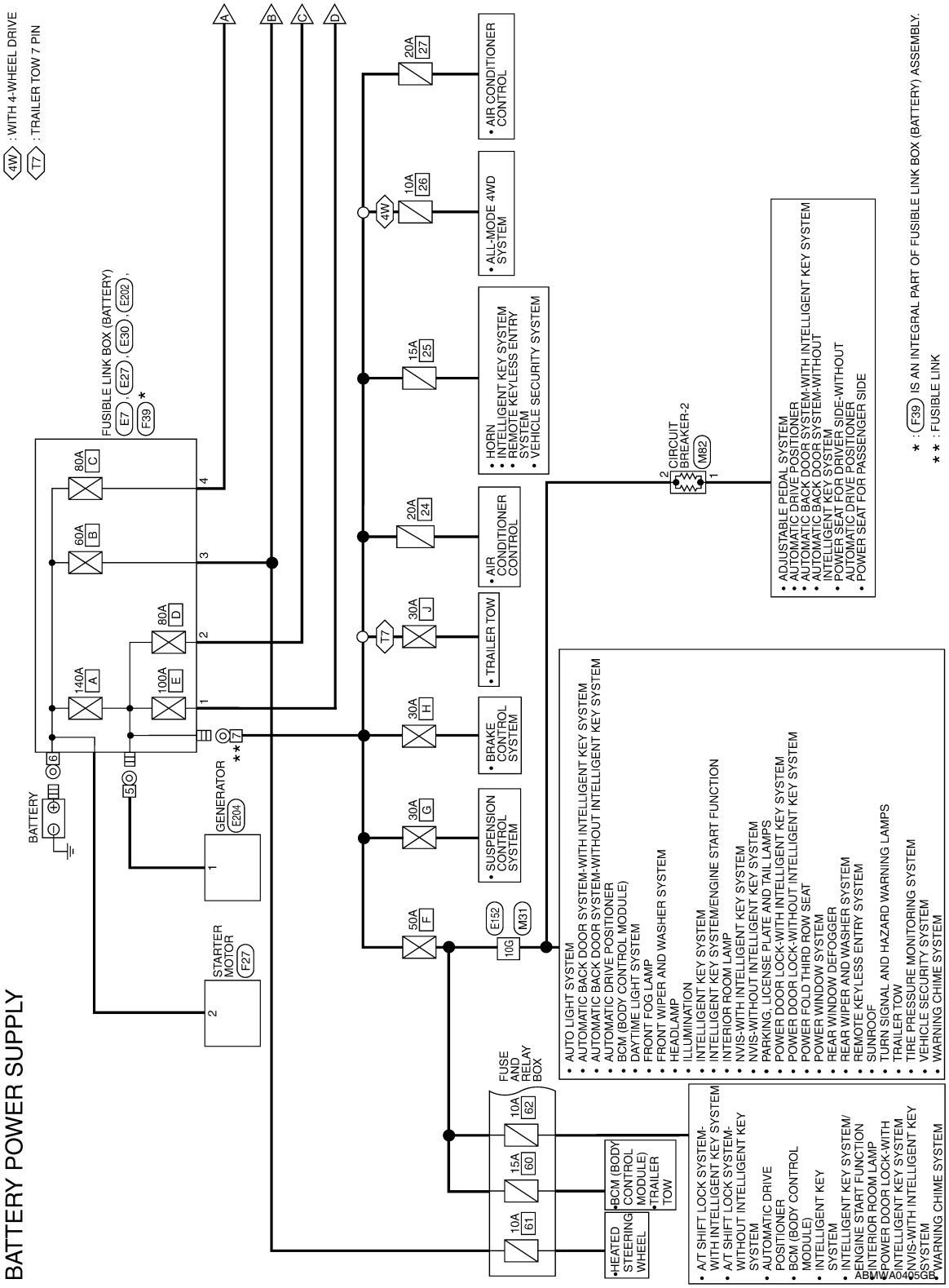
System	Item	Reference
Engine Control	Idle Air Volume Learning	Refer to EC-23, "Idle Air Volume Learning".
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement".
Roof	Sunroof Memory Reset/Initialization	Refer to RF-5, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".
Seats	Automatic Drive Positioner System Initialization	Refer to Owner's Manual.
Audio-Visual System	Audio (Radio Preset)	Refer to Owner's Manual.
	Navigation System	Refer to Owner's Manual.
	Rear View Monitor Guiding Line Adjustment	Refer to AV-277, "REAR VIEW MONITOR GUIDING LINE ADJUSTMENT : Special Repair Requirement".

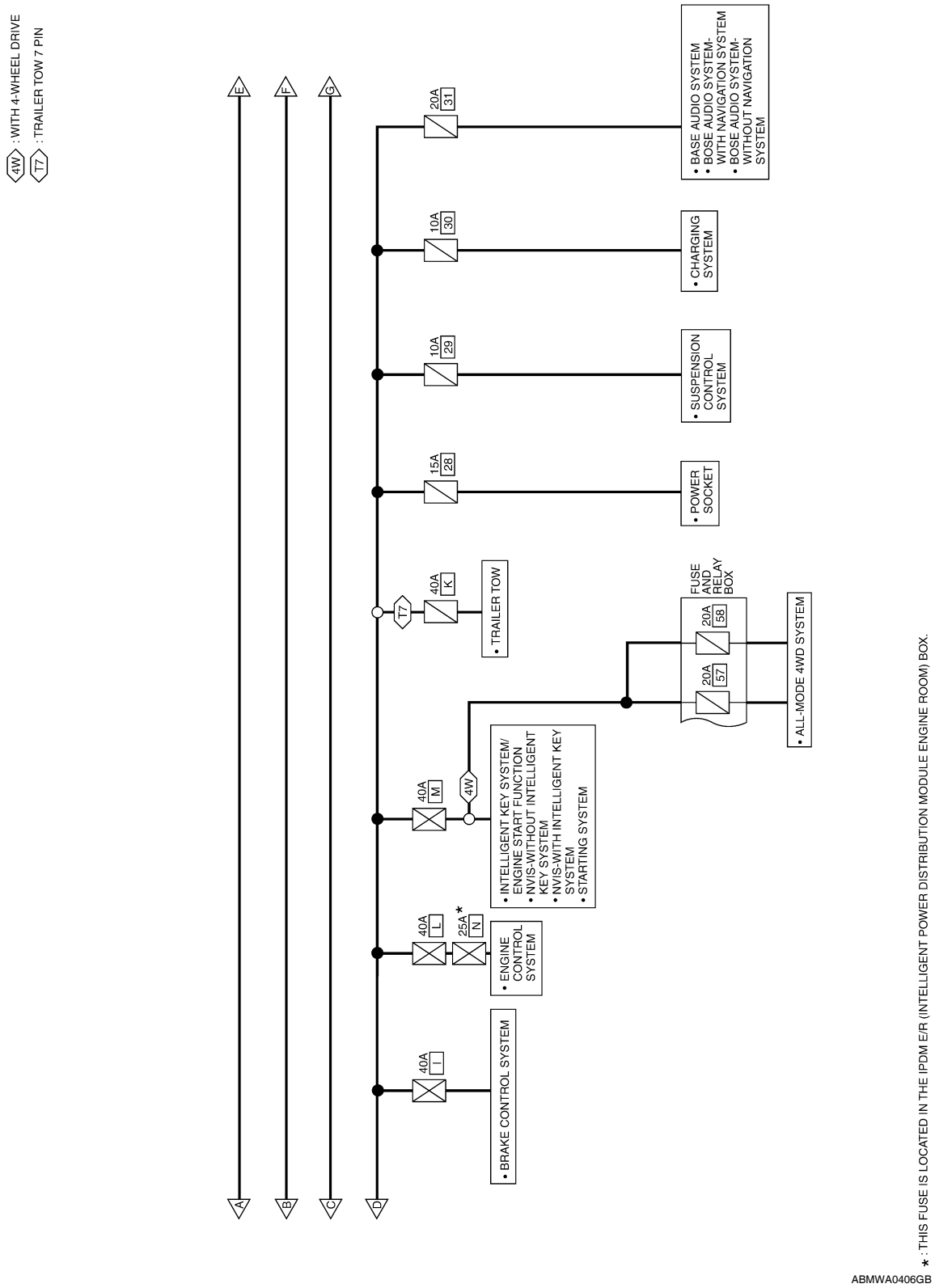
COMPONENT DIAGNOSIS

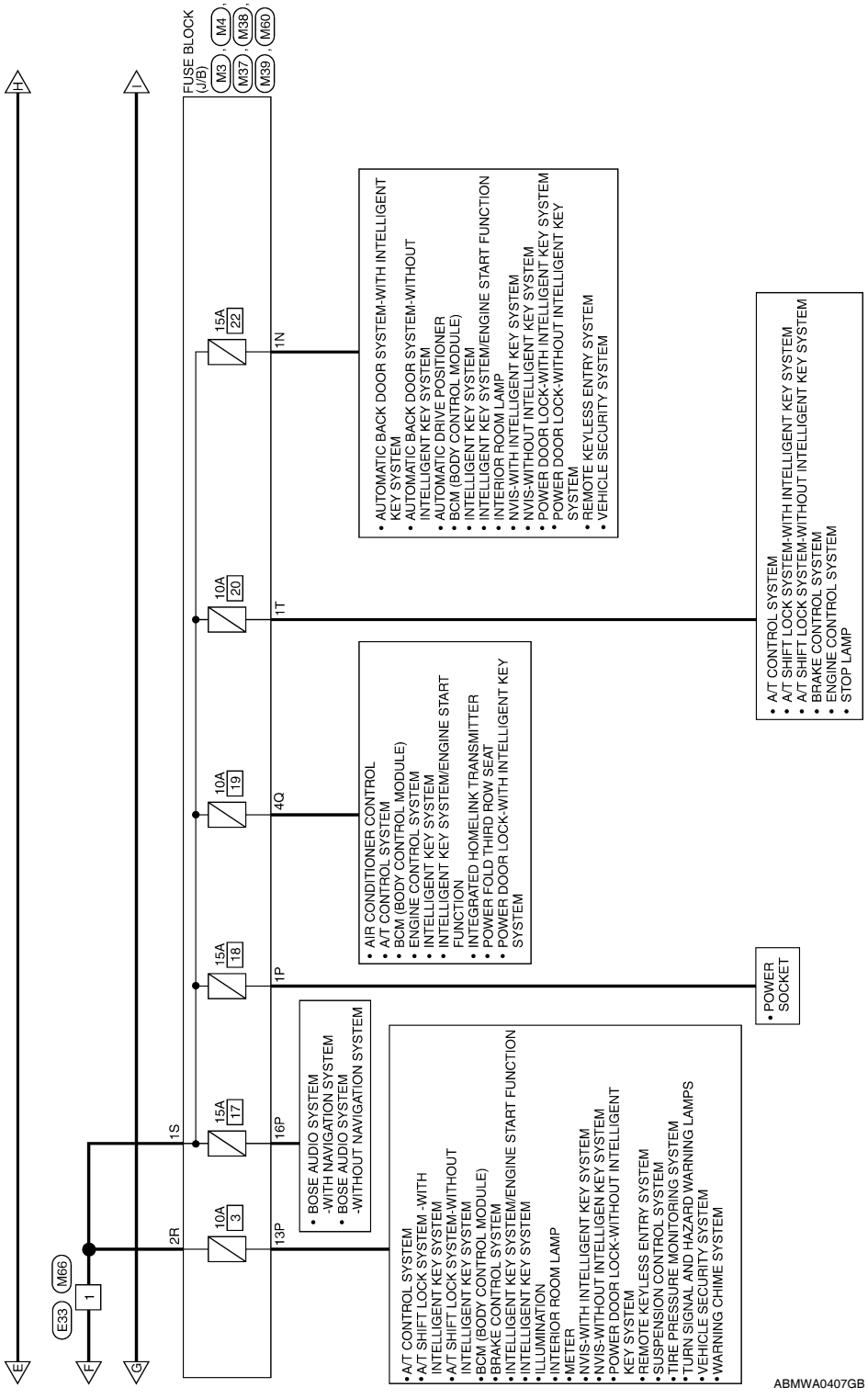
POWER SUPPLY ROUTING CIRCUIT

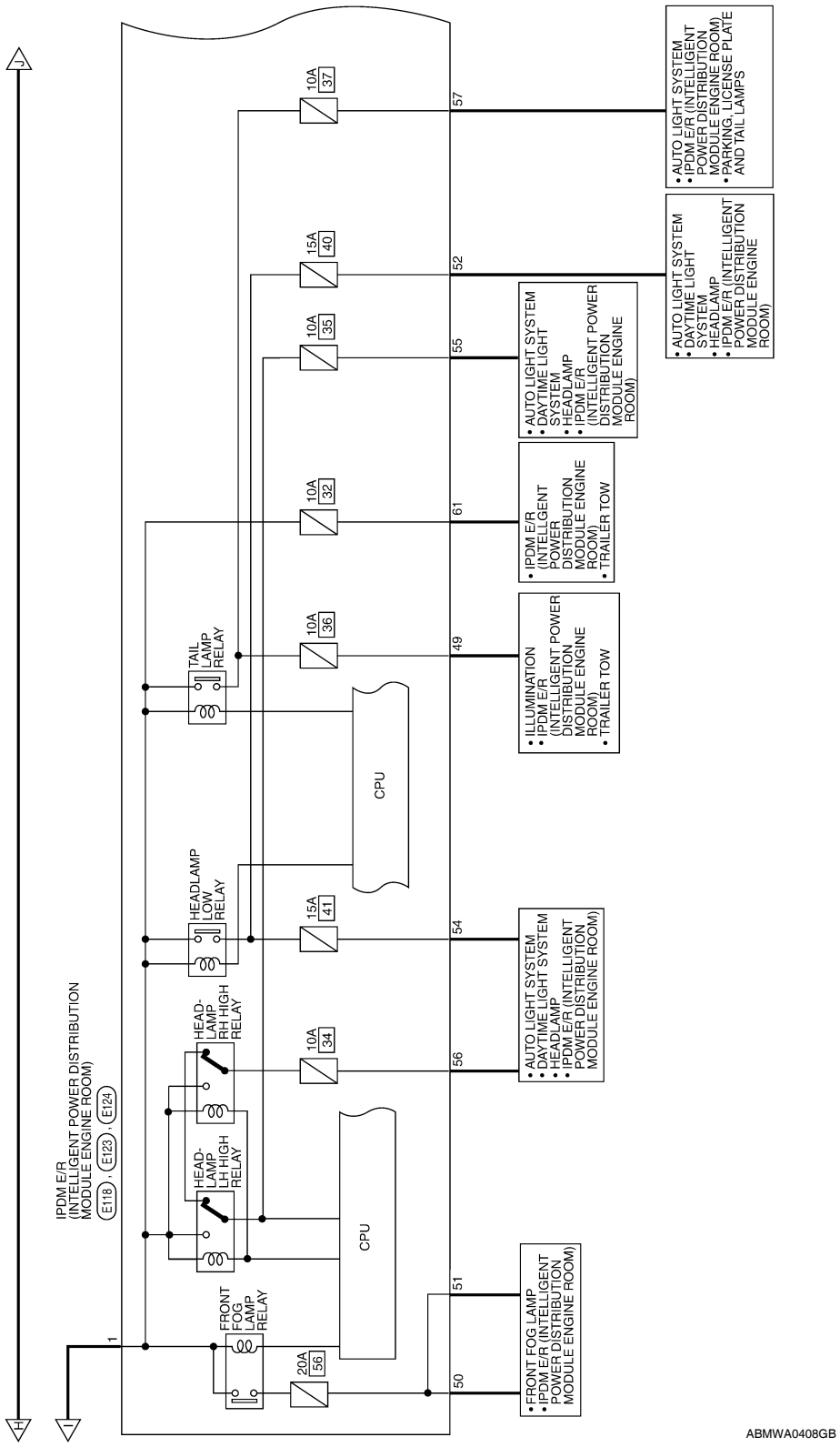
Wiring Diagram —Battery Power Supply —

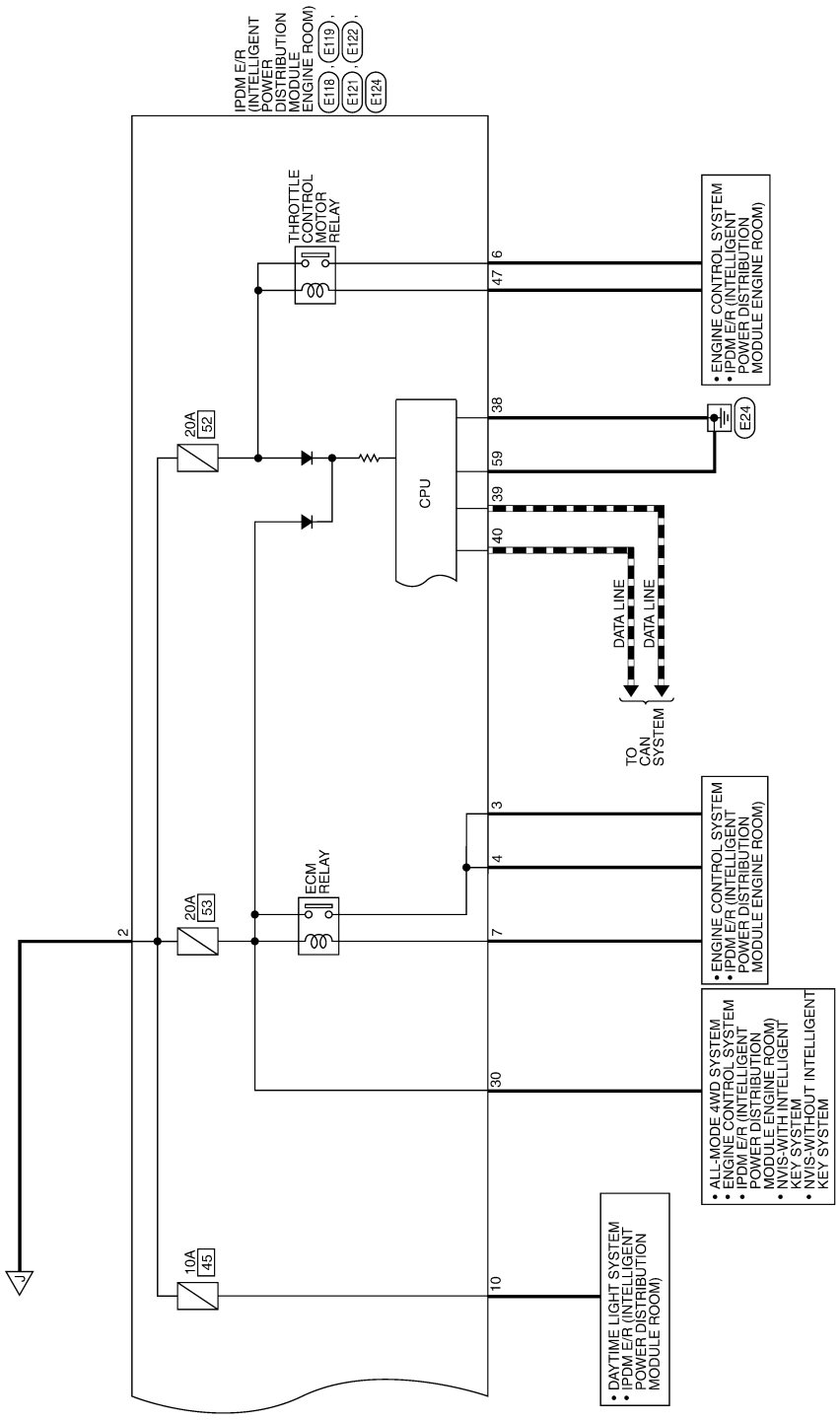
INFOID:0000000004918863




4W : WITH 4-WHEEL DRIVE
T7 : TRAILER TOW 7 PIN
E
F
G
A
B
C
D
20A 31
• BASE AUDIO SYSTEM
• BOSE AUDIO SYSTEM-WITH NAVIGATION SYSTEM
• BOSE AUDIO SYSTEM-WITHOUT NAVIGATION SYSTEM
10A 30
• CHARGING SYSTEM
10A 29
• SUSPENSION CONTROL SYSTEM
15A 28
• POWER SOCKET
40A K
T7
• TRAILER TOW
FUSE AND RELAY BOX
20A 58
20A 57
• ALL-MODE 4WD SYSTEM
40A M
4W
• INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION
• NVIS-WITHOUT INTELLIGENT KEY SYSTEM
• NVIS-WITH INTELLIGENT KEY SYSTEM
• STARTING SYSTEM
40A L
25A N
*
• ENGINE CONTROL SYSTEM
40A 1
• BRAKE CONTROL SYSTEM
*: THIS FUSE IS LOCATED IN THE IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) BOX.
ABMWA0406GB


FUSE BLOCK (J/B)
M3, M4, M37, M38, M39, M60
E33
M66
1
2R
1S
10A 3
15A 17
15A 18
10A 19
10A 20
15A 22
13P
16P
1P
4Q
1T
1N
• BOSE AUDIO SYSTEM -WITH NAVIGATION SYSTEM • BOSE AUDIO SYSTEM -WITHOUT NAVIGATION SYSTEM
• A/T CONTROL SYSTEM • A/T SHIFT LOCK SYSTEM -WITH INTELLIGENT KEY SYSTEM • A/T SHIFT LOCK SYSTEM-WITHOUT INTELLIGENT KEY SYSTEM • BCM (BODY CONTROL MODULE) • BRAKE CONTROL SYSTEM • INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION • INTELLIGENT KEY SYSTEM • ILLUMINATION • INTERIOR ROOM LAMP • METER • NVIS-WITH INTELLIGENT KEY SYSTEM • NVIS-WITHOUT INTELLIGEN KEY SYSTEM • POWER DOOR LOCK-WITHOUT INTELLIGENT KEY SYSTEM • REMOTE KEYLESS ENTRY SYSTEM • SUSPENSION CONTROL SYSTEM • TIRE PRESSURE MONITORING SYSTEM • TURN SIGNAL AND HAZARD WARNING LAMPS • VEHICLE SECURITY SYSTEM • WARNING CHIME SYSTEM
• AIR CONDITIONER CONTROL • A/T CONTROL SYSTEM • BCM (BODY CONTROL MODULE) • ENGINE CONTROL SYSTEM • INTELLIGENT KEY SYSTEM • INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION • INTEGRATED HOMELINK TRANSMITTER • POWER FOLD THIRD ROW SEAT • POWER DOOR LOCK-WITH INTELLIGENT KEY SYSTEM
• AUTOMATIC BACK DOOR SYSTEM-WITH INTELLIGENT KEY SYSTEM • AUTOMATIC BACK DOOR SYSTEM-WITHOUT INTELLIGENT KEY SYSTEM • AUTOMATIC DRIVE POSITIONER • BCM (BODY CONTROL MODULE) • INTELLIGENT KEY SYSTEM • INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION • INTERIOR ROOM LAMP • NVIS-WITH INTELLIGENT KEY SYSTEM • NVIS-WITHOUT INTELLIGENT KEY SYSTEM • POWER DOOR LOCK-WITH INTELLIGENT KEY SYSTEM • POWER DOOR LOCK-WITHOUT INTELLIGENT KEY SYSTEM • REMOTE KEYLESS ENTRY SYSTEM • VEHICLE SECURITY SYSTEM
• A/T CONTROL SYSTEM • A/T SHIFT LOCK SYSTEM-WITH INTELLIGENT KEY SYSTEM • A/T SHIFT LOCK SYSTEM-WITHOUT INTELLIGENT KEY SYSTEM • BRAKE CONTROL SYSTEM • ENGINE CONTROL SYSTEM • STOP LAMP
• POWER SOCKET
E
F
G
ABMWA0407GB


IPDM E/R
(INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM)
E118, E123, E124
1
10A 37
15A 40
10A 35
10A 32
10A 36
15A 41
10A 34
20A 56
TAIL LAMP RELAY
HEADLAMP LOW RELAY
HEAD-LAMP RH HIGH RELAY
HEAD-LAMP LH HIGH RELAY
FRONT FOG LAMP RELAY
CPU
CPU
57
52
55
61
49
54
56
51
50
• AUTO LIGHT SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM
• HEADLAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM
• HEADLAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• TRAILER TOW
• ILLUMINATION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• TRAILER TOW
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM
• HEADLAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT FOG LAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
ABMWA0408GB



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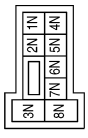
BATTERY POWER SUPPLY CONNECTORS

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

H.S.



Terminal No.	Color of Wire	Signal Name
1N	Y/R	–

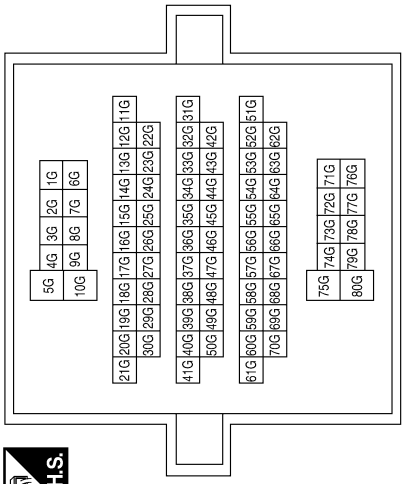
Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1P	G	–
13P	P	–
16P	R	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
10G	W/B	–

Connector No.	M37
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
2R	W	–

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

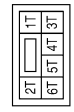
H.S.

Terminal No.	Color of Wire	Signal Name
4Q	Y/R	–

ABMIA1118GB

Connector No.	M60
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1T	R/Y	–

Connector No.	M66
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

Connector No.	M82
Connector Name	CIRCUIT BREAKER-2
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
1	L/B	–
2	W/B	–

Connector No.	E7
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

H.S.

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

Connector No.	E27
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN

H.S.

Terminal No.	Color of Wire	Signal Name
1	B/R	–
2	B/Y	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
7	W	–

ABMIA1119GB

Connector No.	E33
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	B/Y	F/L_USM
2	R	F/L_MAIN

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
30	W	ECM BAT

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

H.S.

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.	E123
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN

H.S.

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

AWMIA0877GB

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

H.S.

59	58	57
62	61	60

Terminal No.	Color of Wire	Signal Name
57	R/L	TAIL_LAMP
59	B	GND(POWER)
61	BR	TRAILER RLY SUPPLY

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

H.S.

1G	2G	3G	4G	5G
6G	7G	8G	9G	10G

11G	12G	13G	14G	15G	16G	17G	18G	19G	20G	21G
	22G	23G	24G	25G	26G	27G	28G	29G	30G	

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

51G	52G	53G	54G	55G	56G	57G	58G	59G	60G	61G
	62G	63G	64G	65G	66G	67G	68G	69G	70G	

71G	72G	73G	74G	75G
76G	77G	78G	79G	80G

Terminal No.	Color of Wire	Signal Name
10G	W/B	–

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

H.S.

5

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

Connector No.	E204
Connector Name	GENERATOR
Connector Color	–

H.S.

1

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

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	BLACK

H.S.

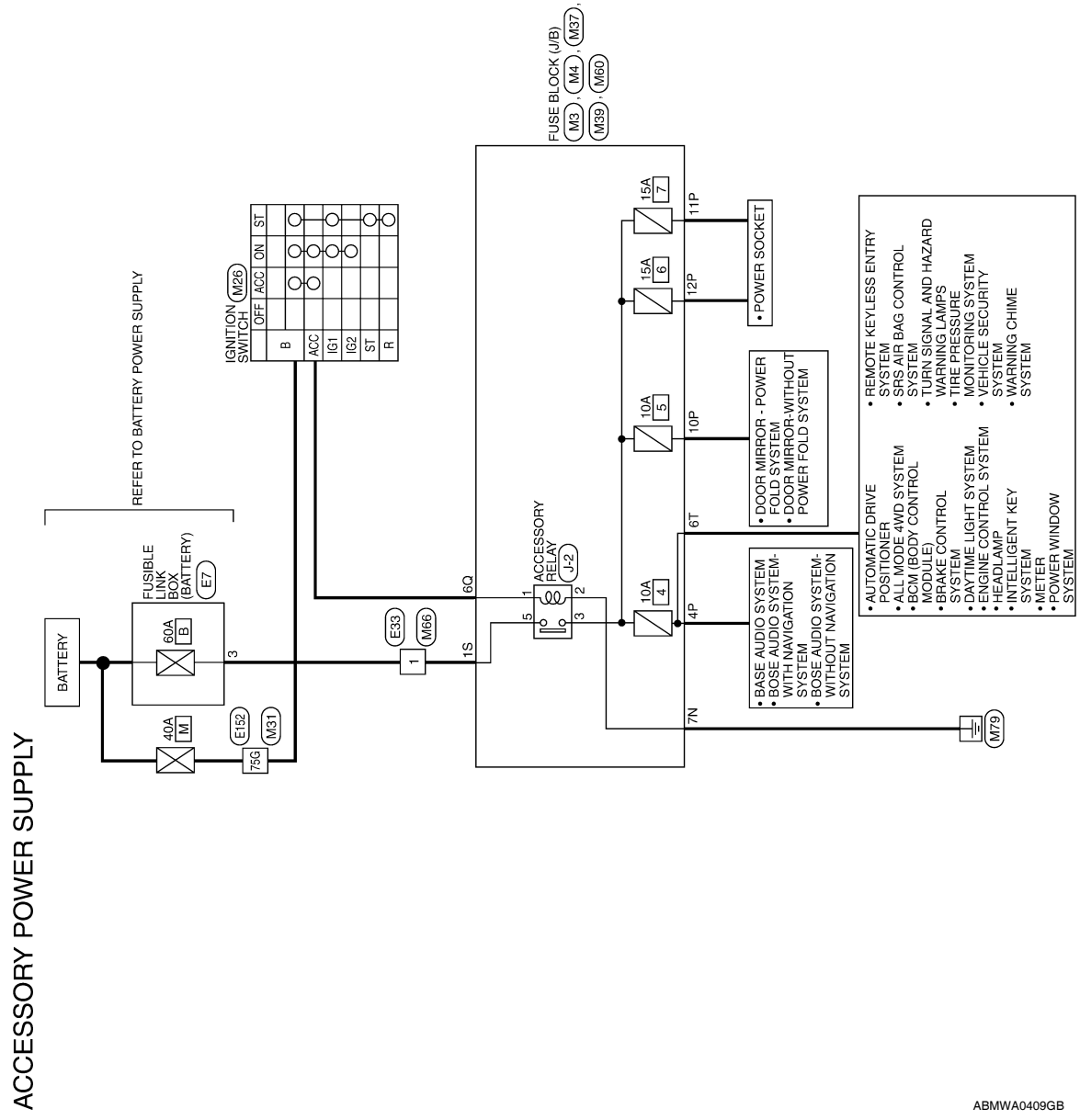
2

Terminal No.	Color of Wire	Signal Name
2	B/R	–

ABMIA0061GB

Wiring Diagram —Accessory Power Supply —

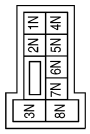
INFOID:0000000004918864



ACCESSORY POWER SUPPLY CONNECTORS

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

H.S.



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

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

H.S.

Terminal No.	Color of Wire	Signal Name
4P	V	–
10P	O	–
11P	G/W	–
12P	L/W	–

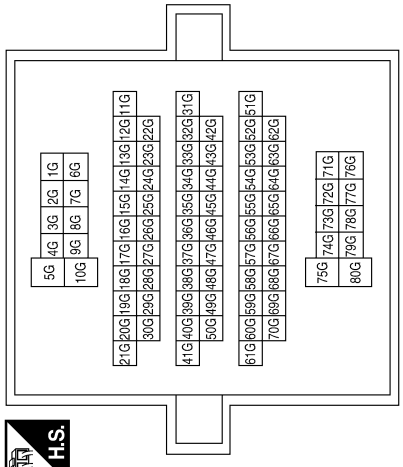
Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE

H.S.

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

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

H.S.



Terminal No.	Color of Wire	Signal Name
75G	G	–

Connector No.	M37
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK

H.S.

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

ABMIA1122GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
6Q	V	–

Connector No.	M60
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
6T	O	–

Connector No.	M66
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

Connector No.	E7
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

H.S.

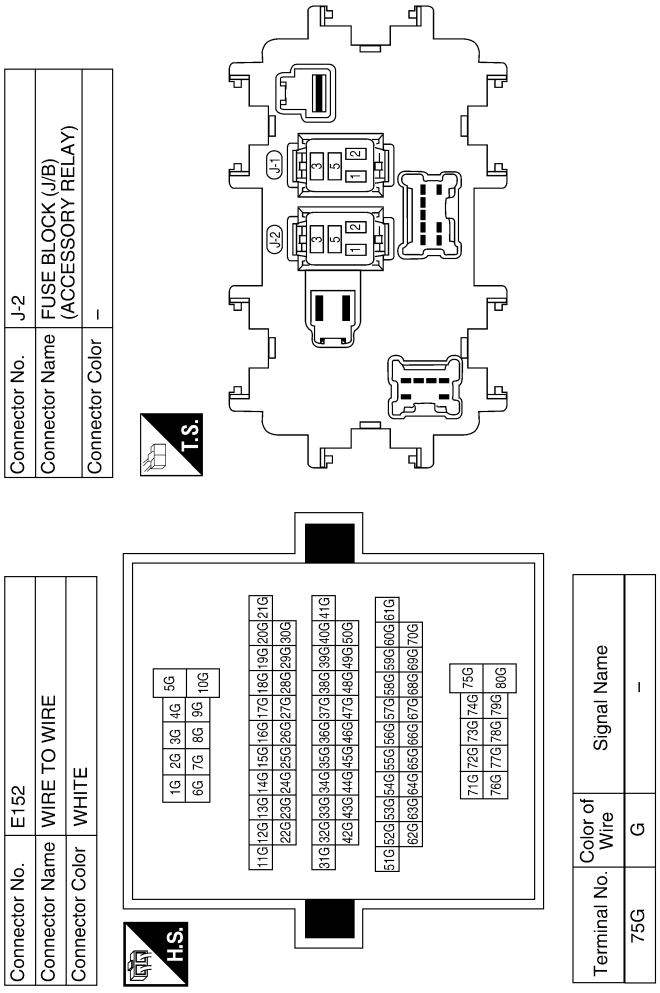
Terminal No.	Color of Wire	Signal Name
3	W	–

Connector No.	E33
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

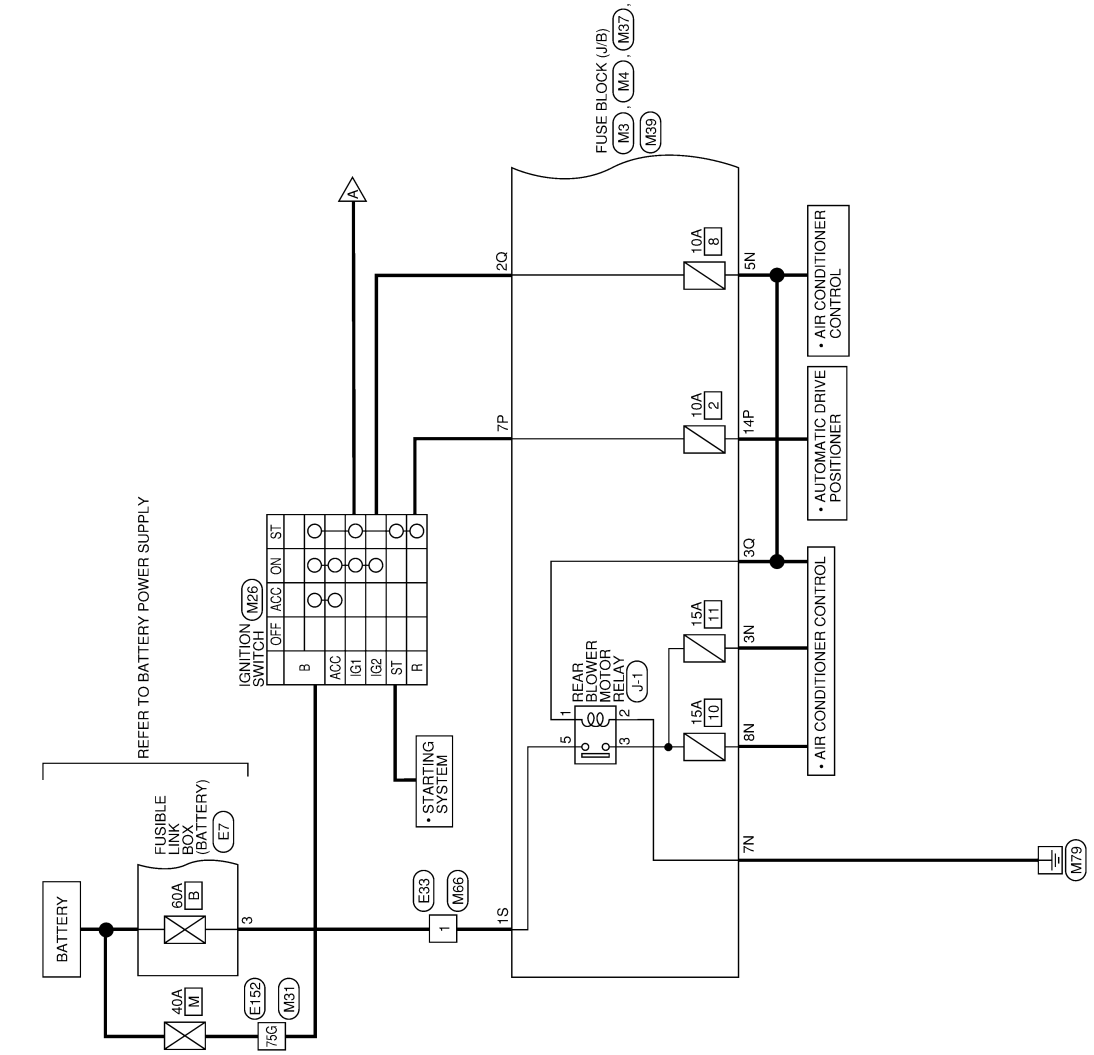
ABMIA1123GB

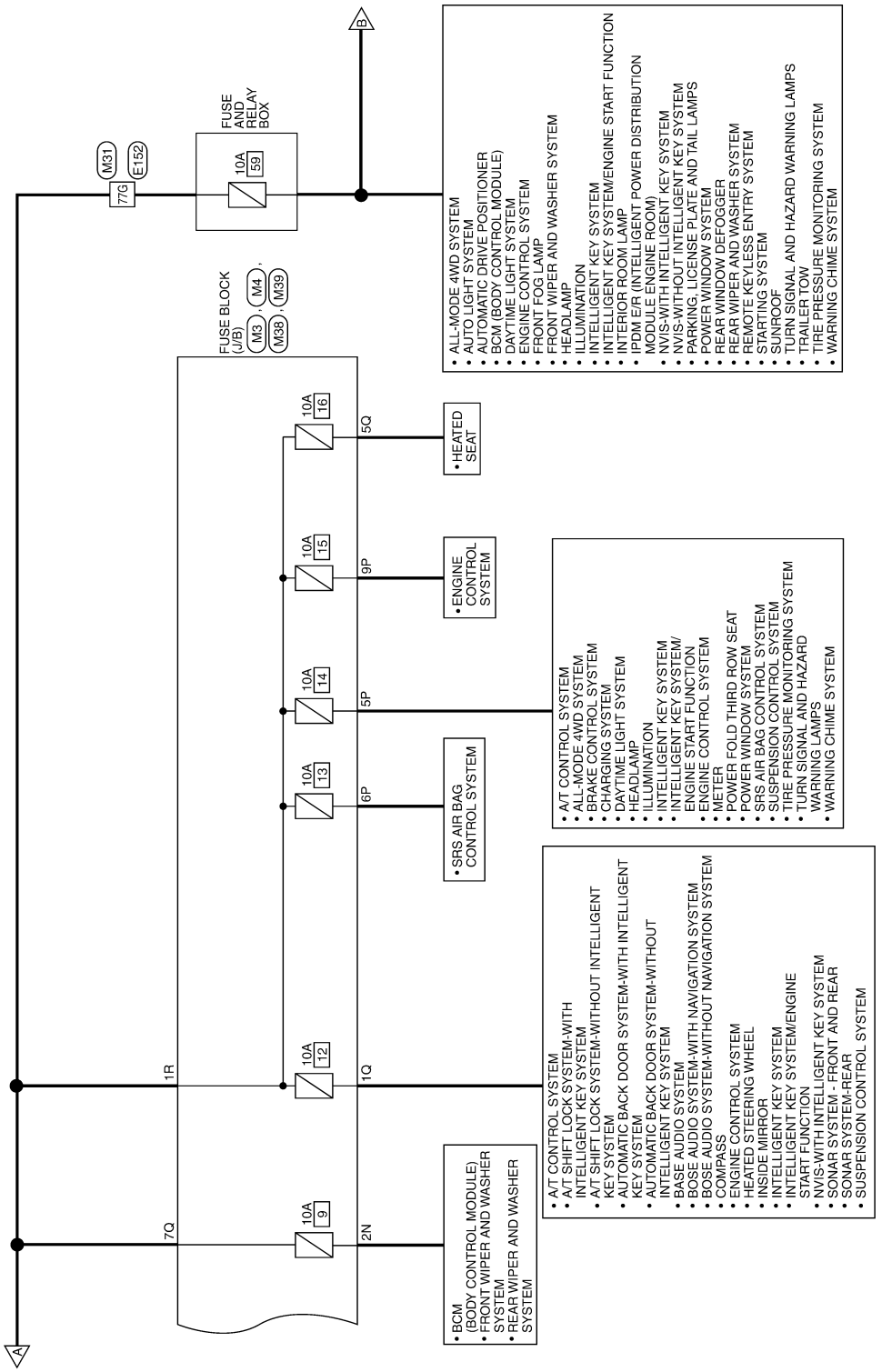


ABMIA1124GB

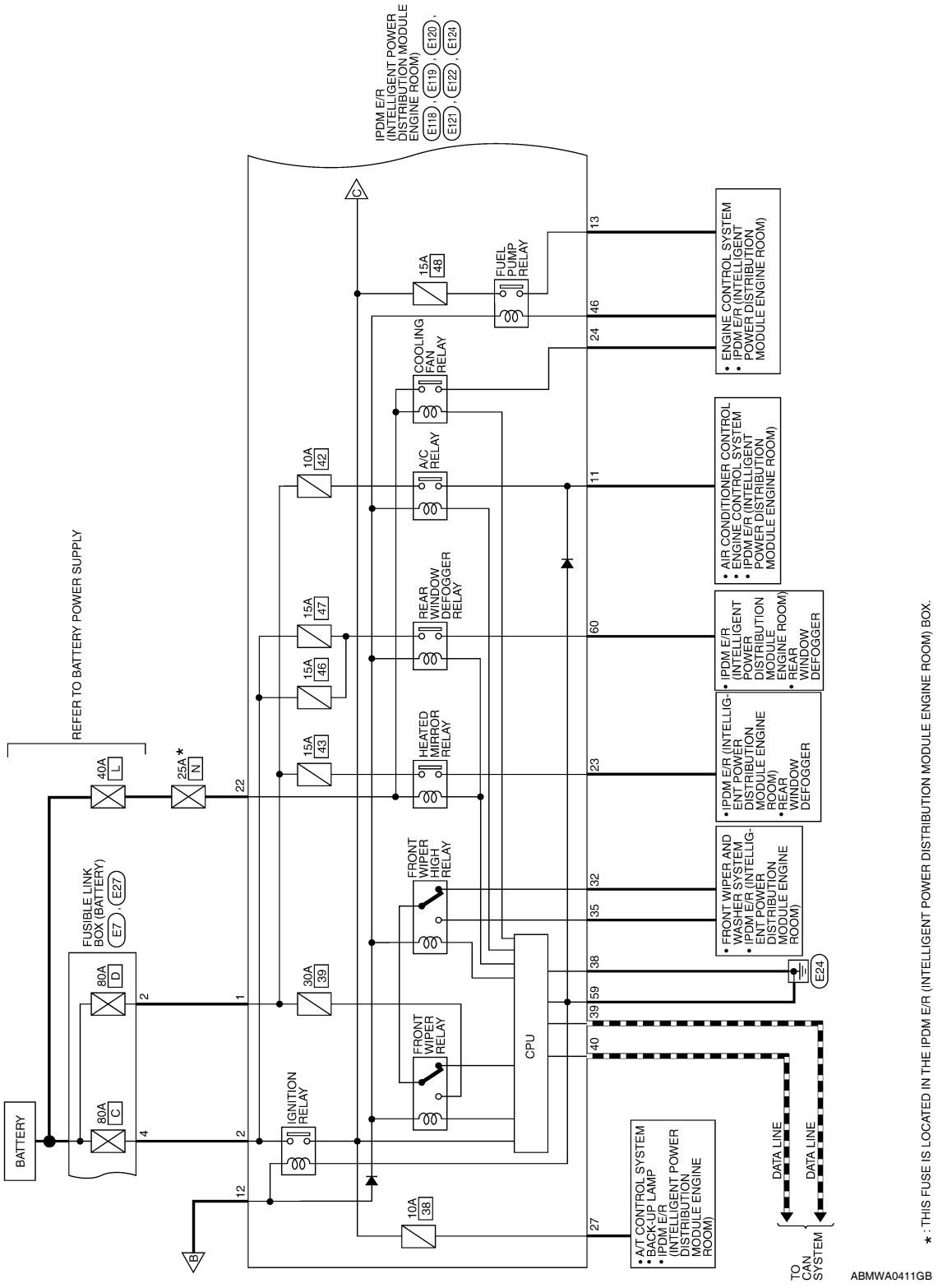
Wiring Diagram —Ignition Power Supply —

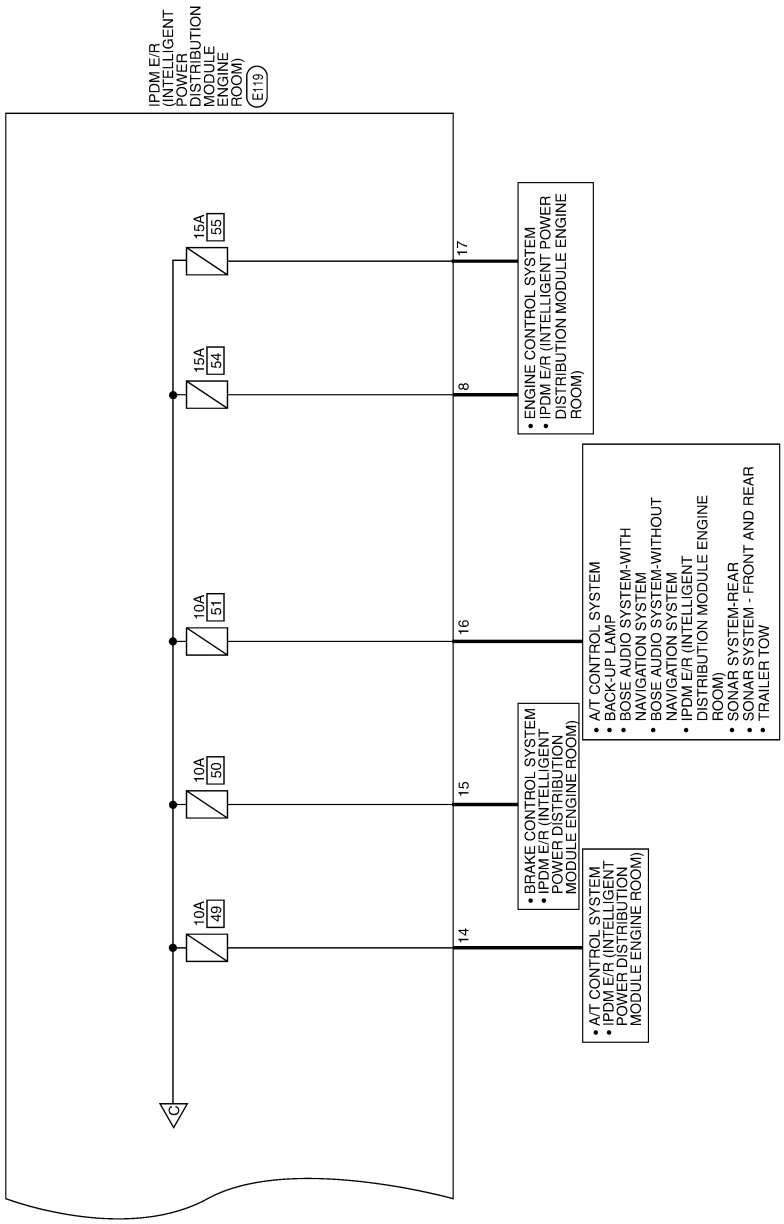
INFOID:0000000004918865





ABMWA0410GB


IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E118, E119, E120, E121, E122, E124
REFER TO BATTERY POWER SUPPLY
BATTERY
FUSIBLE LINK BOX (BATTERY)
E7, E27
40A L
25A * N
80A D
80A C
30A 39
10A 42
15A 43
15A 46
15A 47
15A 48
10A 38
IGNITION RELAY
HEATED MIRROR RELAY
REAR WINDOW DEFOGGER RELAY
A/C RELAY
COOLING FAN RELAY
FUEL PUMP RELAY
FRONT WIPER HIGH RELAY
FRONT WIPER RELAY
CPU
E24
DATA LINE
DATA LINE
TO CAN SYSTEM
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AIR CONDITIONER CONTROL
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• REAR WINDOW DEFOGGER
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• REAR WINDOW DEFOGGER
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• A/T CONTROL SYSTEM
• BACK-UP LAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
* : THIS FUSE IS LOCATED IN THE IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) BOX.
ABMWA0411GB

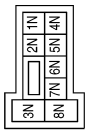


ABMWA0412GB

IGNITION POWER SUPPLY CONNECTORS

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

H.S.



Terminal No.	Color of Wire	Signal Name
2N	W/R	–
3N	SB	–
5N	Y/G	–
7N	B	–
8N	L/R	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
5P	O/L	–
6P	W/L	–
7P	LG	–
9P	R/B	–
14P	O	–

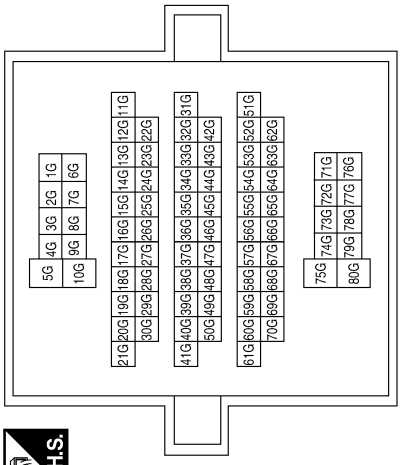
Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
IG1	B/R	–
IG2	R	–
ST	BR	–
B	G	–
R	LG	–

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

H.S.



Terminal No.	Color of Wire	Signal Name
75G	G	–
77G	B/R	–

Connector No.	M37
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK

H.S.

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

ABMIA1125GB

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

H.S.

2R 1R

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

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

H.S.

3Q 2Q 1Q
8Q 7Q 6Q 5Q 4Q

Terminal No.	Color of Wire	Signal Name
1Q	G/R	–
2Q	R	–
3Q	Y/G	–
5Q	G	–
7Q	B/R	–

Connector No.	M66
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	W	–

Connector No.	E7
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

H.S.

4 3

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

Connector No.	E27
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN

H.S.

1 2

Terminal No.	Color of Wire	Signal Name
2	B/Y	–

Connector No.	E33
Connector Name	WIRE TO WIRE
Connector Color	BLACK

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	W	–

ABMIA1126GB

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

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
1	B/Y	F/L_USM
2	R	F/L_MAIN

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
8	R/B	O2 SENSOR
11	Y/B	A/C COMPRESSOR
12	L/W	IGN SW (IG)
13	B/Y	FUEL PUMP
14	Y/R	A/T CU IGN SUPPLY
15	LG/B	ABS IGN SUPPLY
16	G	REVERSE LAMP
17	W	INJECTOR

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

H.S.

21	20	19
24	23	22

Terminal No.	Color of Wire	Signal Name
22	G	F/L MOTOR FAN
23	GR/W	HEATED MIRROR
24	L	MOTOR FAN2

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

H.S.

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

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

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

H.S.

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 PUMP RLY CONT

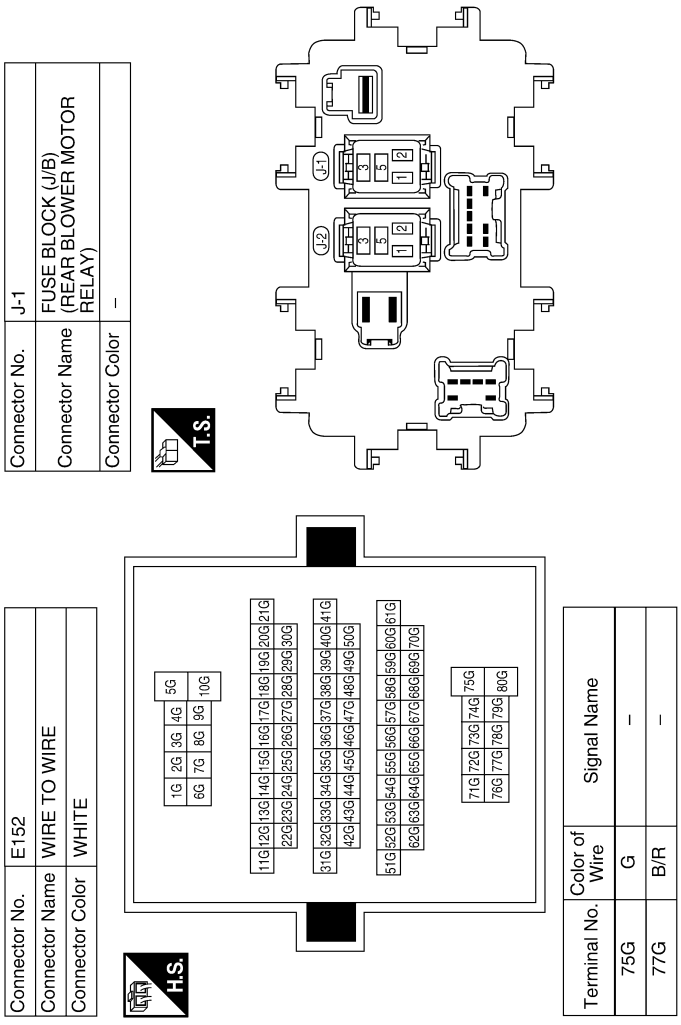
Connector No.	E124
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK

H.S.

59	58	57
62	61	60

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

ABMIA1127GB

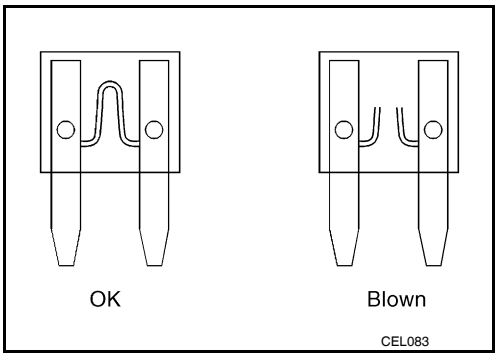


ABMIA1165GB

Fuse

INFOID:0000000004918866

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

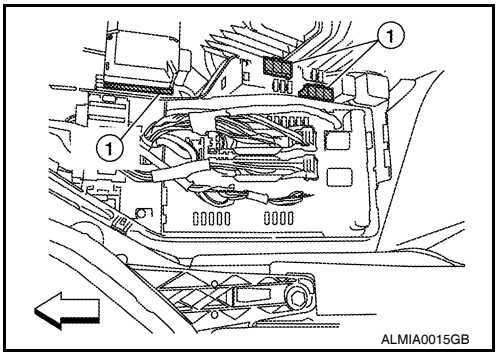


Fusible Link

INFOID:0000000004918867

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

1 : Fusible link



CAUTION:

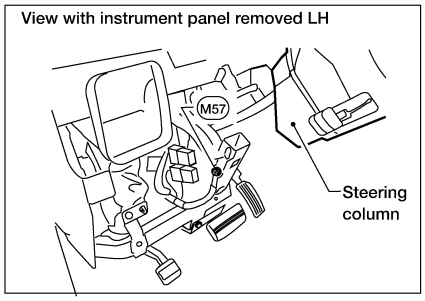
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

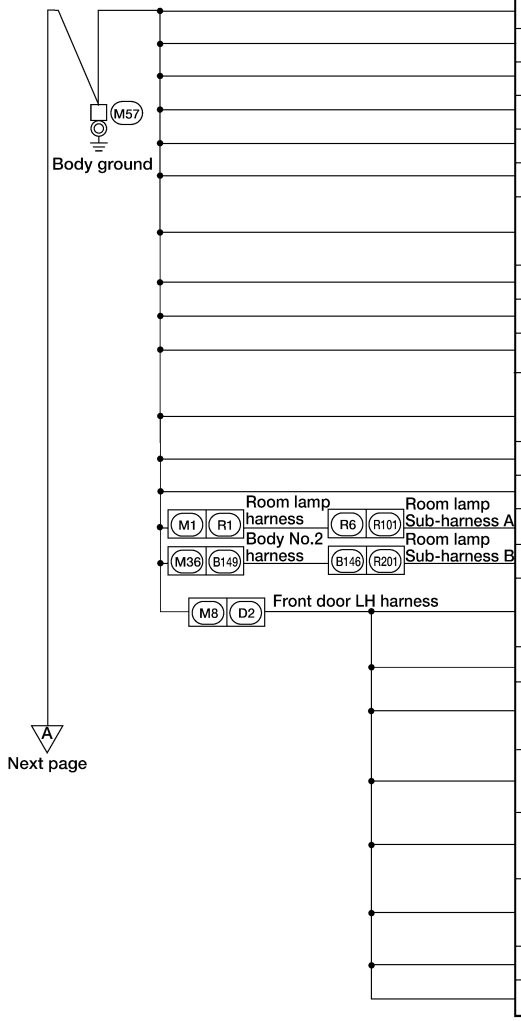
GROUND

Ground Distribution

INFOID:0000000004918868

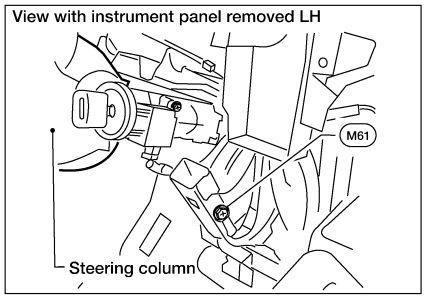
MAIN HARNESS

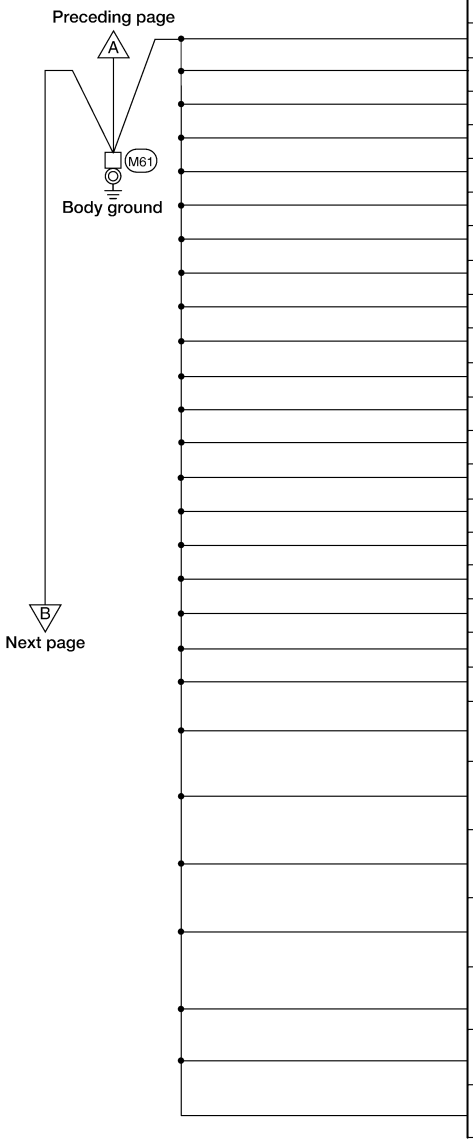




CONNECTOR NUMBER	CONNECT TO
M15	Steering lock solenoid
M32	In-vehicle sensor
M34	Automatic drive positioner control unit (Terminal No. 40)
M34	Automatic drive positioner control unit (Terminal No. 48)
M52	Combination switch (spiral cable)
M76	Electric brake (pre-wiring)
M83	Pedal adjusting switch (Terminal No. 4) (without automatic drive positioner)
M87	Rear power vent window relay (open)
M89	Rear power vent window relay (close)
M92	Power liftgate switch
M96	Pedal adjusting switch (Terminal No. 1) (with automatic drive positioner)
M116	Sonar system OFF switch (Terminal No. 2)
M116	Sonar system OFF switch (Terminal No. 6)
R108	Rear air control (front)
R209	Rear air control (rear)
D4	Door mirror LH (Terminal No. 11) (with automatic drive positioner)
D5	Seat memory switch
D6	Door mirror LH (Terminal No. 6) (without automatic drive positioner)
D8	Main power window and door lock/unlock switch (Terminal No. 17)
D10	Door mirror remote control switch (Terminal No. 7) (with automatic drive positioner)
D13	Door mirror remote control switch (Terminal No. 1) (without automatic drive positioner)
D14	Front door lock assembly LH
D16	Front door request switch LH

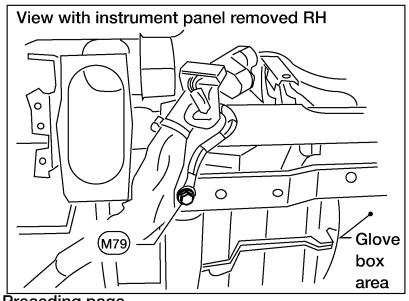
ABMIA1128GB

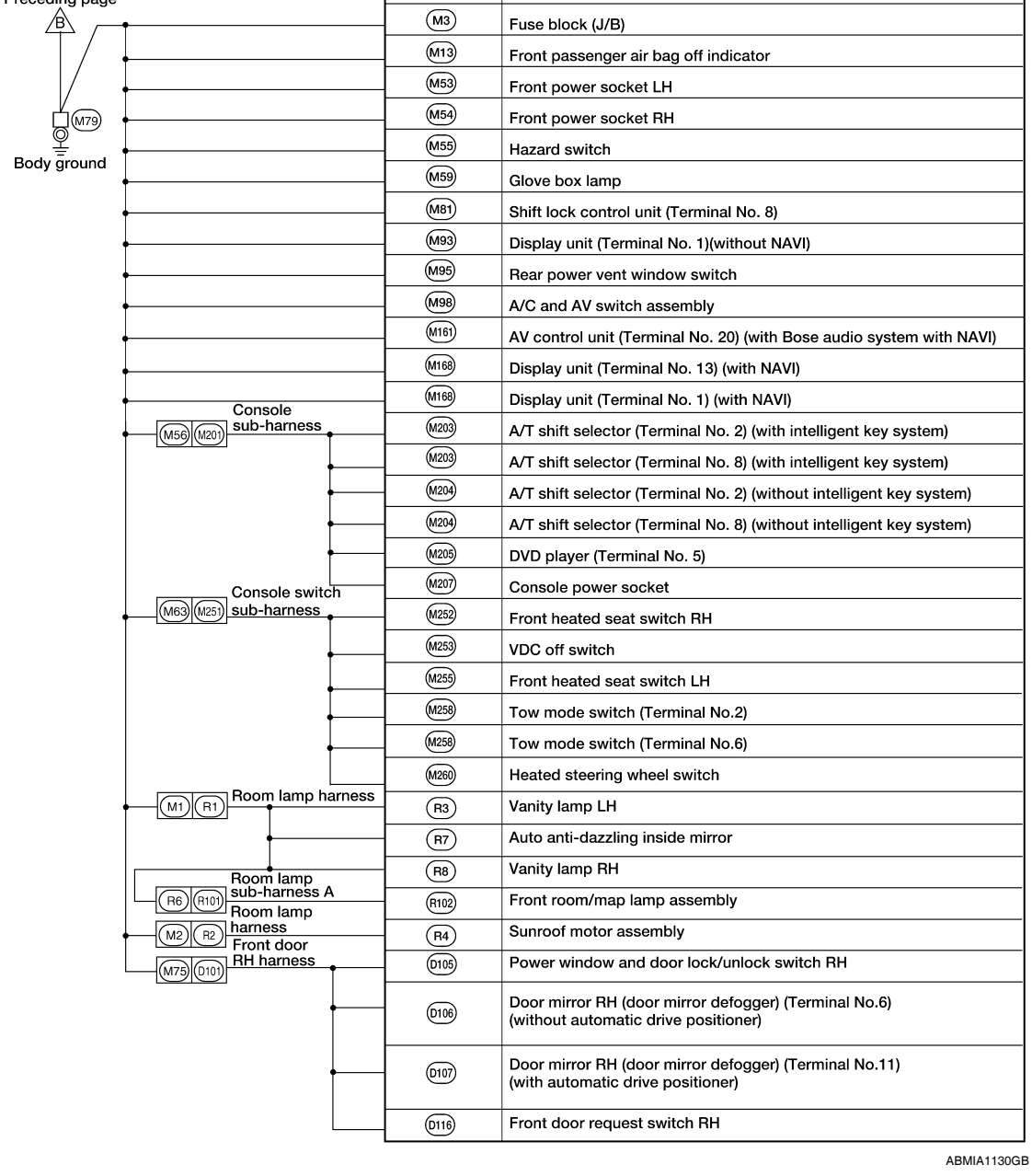




CONNECTOR NUMBER	CONNECT TO
M17	Steering angle sensor
M20	BCM (body control module) (Terminal No. 67)
M21	NATS antenna amp.
M22	Data link connector (Terminal No. 4)
M22	Data link connector (Terminal No. 5)
M23	Combination meter (Terminal No. 52)
M24	Combination meter (Terminal No. 9)
M28	Combination switch
M35	Air bag diagnosis sensor unit (Terminal No. 2)
M42	AV control unit (Terminal No. 20) (with base audio system)
M44	AV control unit (Terminal No. 54) (with base audio system)
M46	AV control unit (Terminal No. 85) (with base audio system)
M47	Sonar buzzer
M50	A/C auto amp. (Terminal No. 36)
M51	Trailer tow relay 1
M70	Intelligent key unit (Terminal No. 12)
M107	Front blower relay
M112	BOSE speaker amp. (Terminal No. 12)
M122	Variable blower control (front)
M139	Diode-1
M160	AV control unit (Terminal No. 20) (with BOSE audio system without NAVI)
M165	AV control unit (Terminal No. 65) (with BOSE audio system with NAVI)
M165	AV control unit (Terminal No. 67) (with BOSE audio system with NAVI)
M165	AV control unit (Terminal No. 86) (with BOSE audio system with NAVI)
M165	AV control unit (Terminal No. 87) (with BOSE audio system with NAVI)
M166	AV control unit (Terminal No. 85) (with BOSE audio system without NAVI)
M171	AV control unit (Terminal No. 54) (with BOSE audio system without NAVI)

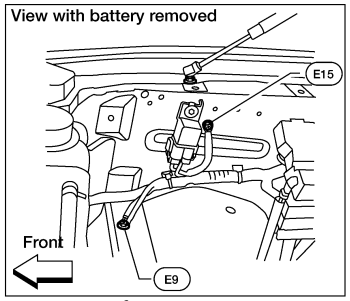
ABMIA1129GB

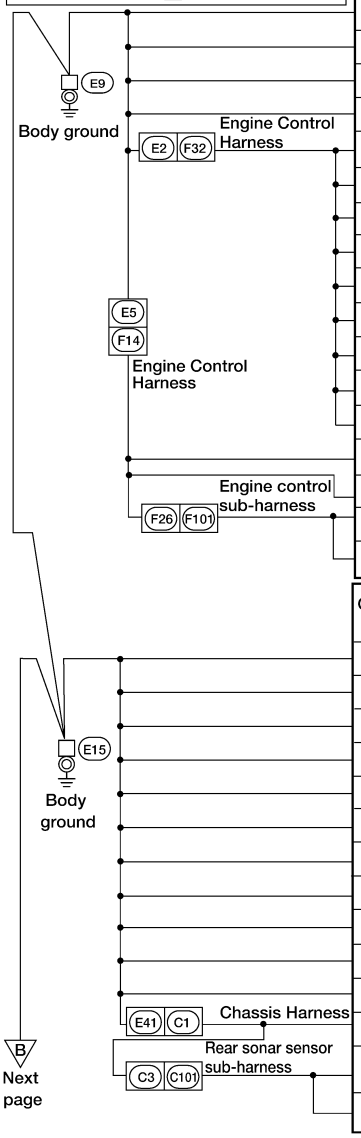




CONNECTOR NUMBER	CONNECT TO
M3	Fuse block (J/B)
M13	Front passenger air bag off indicator
M53	Front power socket LH
M54	Front power socket RH
M55	Hazard switch
M59	Glove box lamp
M81	Shift lock control unit (Terminal No. 8)
M93	Display unit (Terminal No. 1)(without NAVI)
M95	Rear power vent window switch
M98	A/C and AV switch assembly
M161	AV control unit (Terminal No. 20) (with Bose audio system with NAVI)
M168	Display unit (Terminal No. 13) (with NAVI)
M168	Display unit (Terminal No. 1) (with NAVI)
M203	A/T shift selector (Terminal No. 2) (with intelligent key system)
M203	A/T shift selector (Terminal No. 8) (with intelligent key system)
M204	A/T shift selector (Terminal No. 2) (without intelligent key system)
M204	A/T shift selector (Terminal No. 8) (without intelligent key system)
M205	DVD player (Terminal No. 5)
M207	Console power socket
M252	Front heated seat switch RH
M253	VDC off switch
M255	Front heated seat switch LH
M258	Tow mode switch (Terminal No.2)
M258	Tow mode switch (Terminal No.6)
M260	Heated steering wheel switch
R3	Vanity lamp LH
R7	Auto anti-dazzling inside mirror
R8	Vanity lamp RH
R102	Front room/map lamp assembly
R4	Sunroof motor assembly
D105	Power window and door lock/unlock switch RH
D106	Door mirror RH (door mirror defogger) (Terminal No.6) (without automatic drive positioner)
D107	Door mirror RH (door mirror defogger) (Terminal No.11) (with automatic drive positioner)
D116	Front door request switch RH

ABMIA1130GB

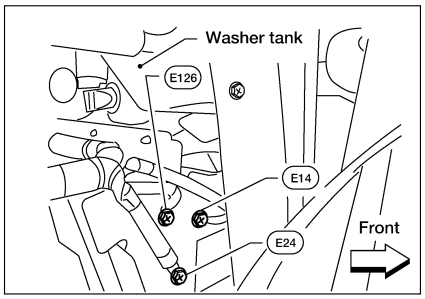




CONNECTOR NUMBER	CONNECT TO
E16	ECM (Terminal No. 115)
E16	ECM (Terminal No. 116)
E142	Transfer control unit (Terminal No. 6)
E143	Transfer control unit (Terminal No. 45)
F9	A/T assembly (Terminal No. 10)
F9	A/T assembly (Terminal No. 5)
F11	Crankshaft position sensor (POS)
F23	Camshaft position sensor (PHASE)
F50	Electric throttle control actuator (throttle position sensor shield)
F54	ECM (Terminal No. 1)
F56	Transfer terminal cord assembly
F62	Intake valve timing control position sensor (bank 1)
F64	Intake valve timing control position sensor (bank 2)
F5	Air fuel ratio (A/F) sensor 1 (bank 2) shield
F65	Air fuel ratio (A/F) sensor 1 (bank 1) shield
F102	Knock sensor (bank 1) shield
F104	Knock sensor (bank 2) shield

CONNECTOR NUMBER	CONNECT TO
E3	Horn
E6	Front combination lamp LH (Terminal No.4) (with daytime light system)
E8	Dropping resistor
E11	Front combination lamp LH (Terminal No. 3) (without daytime light system)
E11	Front combination lamp LH (Terminal No. 4) (without daytime light system)
E17	Fuel pump control module (FPCM) (Terminal No. 1)
E21	Brake fluid level switch
E102	Front fog lamp RH
E103	Daytime light relay
E113	Cooling fan motor
E116	Condenser-2
C5	Fuel level sensor unit and fuel pump (without flex fuel)
C106	License plate lamp LH
C107	License plate lamp RH

ABMIA1131GB



Preceding page

B

CONNECTOR NUMBER	CONNECT TO
E46	Transfer shift high relay (Terminal No. 2)
E46	Transfer shift high relay (Terminal No. 4)
E47	Transfer shift low relay (Terminal No. 2)
E47	Transfer shift low relay (Terminal No. 4)
E130	Compressor motor relay
E140	Trailer tow relay 2
E142	Transfer control unit (Terminal No. 3)
E156	Trailer turn relay LH
E157	Trailer turn relay RH
F55	ATP switch
F57	Transfer motor
F58	Transfer control device (Terminal No. 22)
F59	Wait detection switch
F60	Neutral-4LO switch
C2	Trailer
C9	Suspension air compressor (Terminal No. 1)
C9	Suspension air compressor (Terminal No. 3)

E2 F32 Engine Control Harness

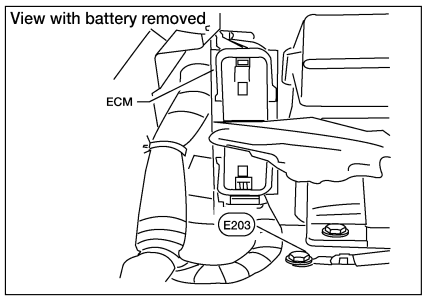
E41 C1 Chassis Harness

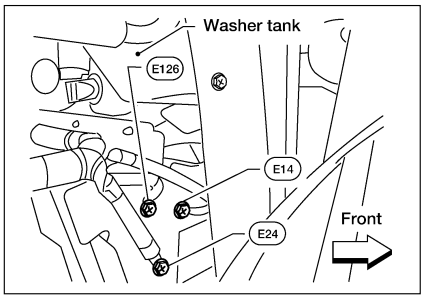
CONNECTOR NUMBER	CONNECT TO
E23	Front wiper motor
E101	Front fog lamp LH
E106	Washer fluid level switch
E107	Front combination lamp RH (headlamp) (Terminal No.3) (without daytime light system)
E107	Front combination lamp RH (headlamp) (Terminal No.4) (without daytime light system)
E108	Front combination lamp RH (headlamp) (Terminal No.3) (with daytime light system)
E108	Front combination lamp RH (headlamp) (Terminal No.4) (with daytime light system)
E122	IPDM E/R (intelligent power distribution module engine room) (Terminal No. 38)
E124	IPDM E/R (intelligent power distribution module engine room) (Terminal No. 59)

E24

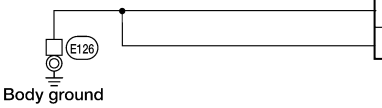
Body ground

ABMIA1132GB





CONNECTOR NUMBER	CONNECT TO
E4	Cash zone sensor shield
M35	Air bag diagnosis sensor unit (shield wire) (Terminal No.16)



CONNECTOR NUMBER	CONNECT TO
E125	ABS actuator and electric unit (control unit) (Terminal No. 16)
E125	ABS actuator and electric unit (control unit) (Terminal No. 47)

CONNECTOR NUMBER	CONNECT TO
E206	Generator

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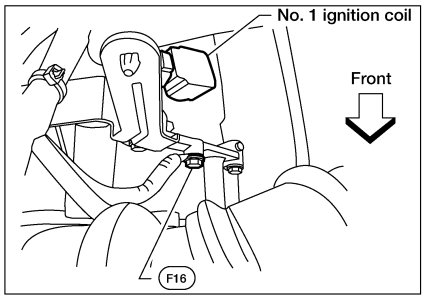

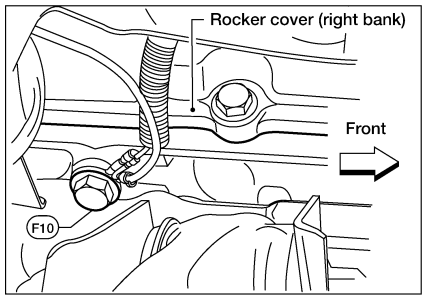

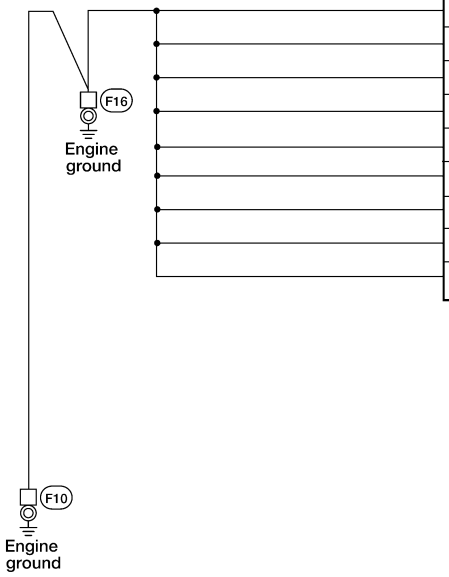

CONNECTOR NUMBER	CONNECT TO
F6	Ignition coil No. 2 (with power transistor)
F7	Ignition coil No. 4 (with power transistor)
F8	Ignition coil No. 6 (with power transistor)
F21	Condenser-1
F47	Ignition coil No. 1 (with power transistor)
F48	Ignition coil No. 3 (with power transistor)
F49	Ignition coil No. 5 (with power transistor)
F51	Ignition coil No. 7 (with power transistor)
F52	Ignition coil No. 8 (with power transistor)

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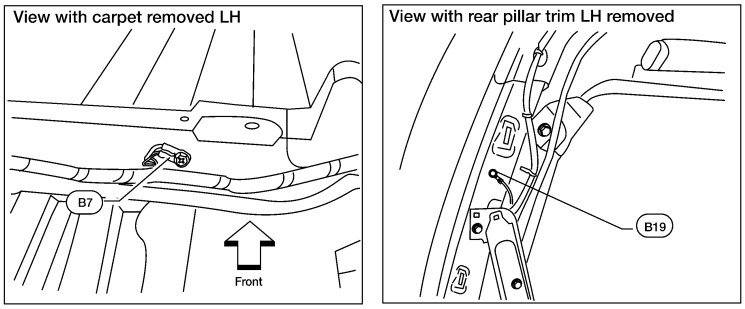

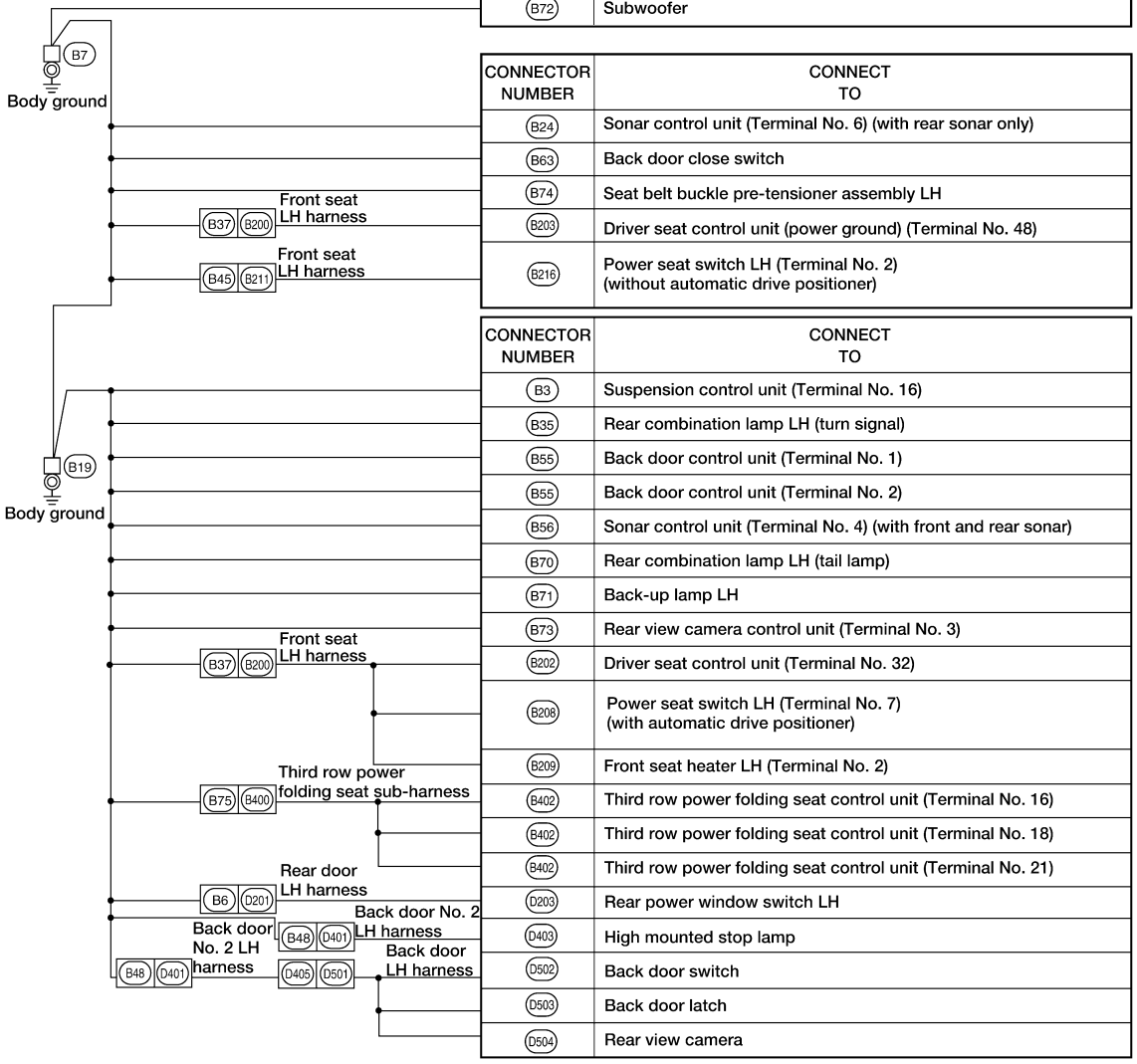

CONNECTOR NUMBER	CONNECT TO
B72	Subwoofer

CONNECTOR NUMBER	CONNECT TO
B24	Sonar control unit (Terminal No. 6) (with rear sonar only)
B63	Back door close switch
B74	Seat belt buckle pre-tensioner assembly LH
B203	Driver seat control unit (power ground) (Terminal No. 48)
B216	Power seat switch LH (Terminal No. 2) (without automatic drive positioner)

CONNECTOR NUMBER	CONNECT TO
B3	Suspension control unit (Terminal No. 16)
B35	Rear combination lamp LH (turn signal)
B55	Back door control unit (Terminal No. 1)
B55	Back door control unit (Terminal No. 2)
B56	Sonar control unit (Terminal No. 4) (with front and rear sonar)
B70	Rear combination lamp LH (tail lamp)
B71	Back-up lamp LH
B73	Rear view camera control unit (Terminal No. 3)
B202	Driver seat control unit (Terminal No. 32)
B208	Power seat switch LH (Terminal No. 7) (with automatic drive positioner)
B209	Front seat heater LH (Terminal No. 2)
B402	Third row power folding seat control unit (Terminal No. 16)
B402	Third row power folding seat control unit (Terminal No. 18)
B402	Third row power folding seat control unit (Terminal No. 21)
D203	Rear power window switch LH
D403	High mounted stop lamp
D502	Back door switch
D503	Back door latch
D504	Rear view camera

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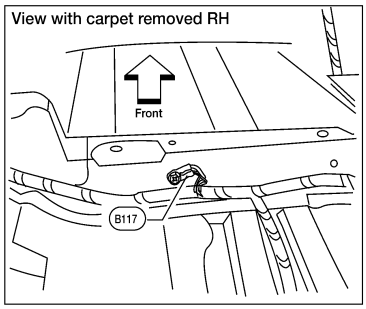

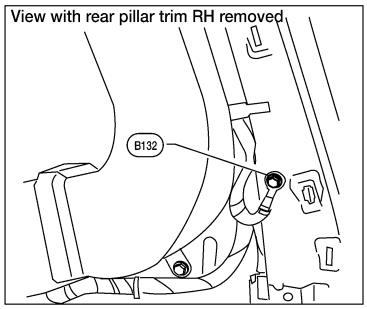

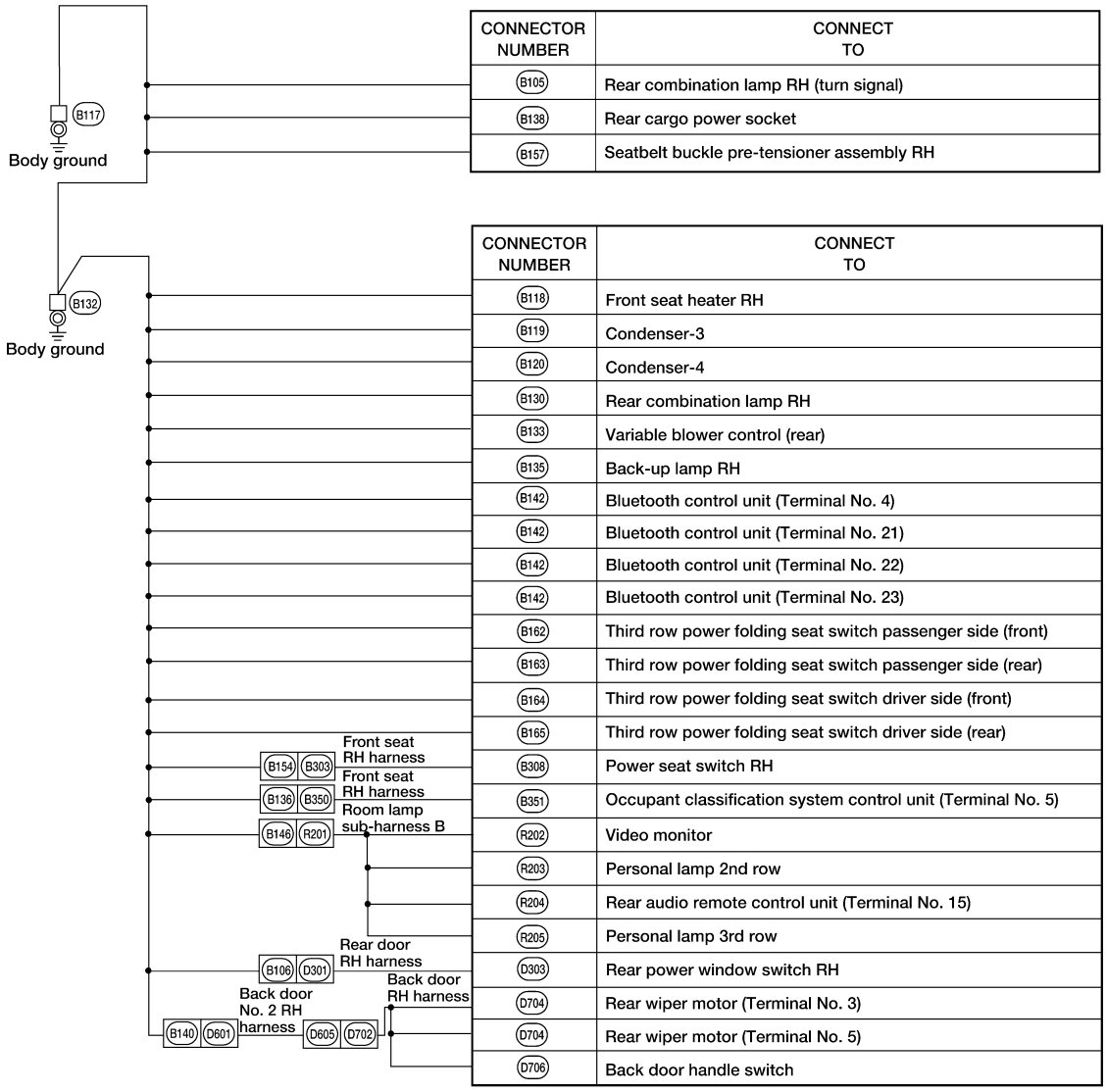

CONNECTOR NUMBER	CONNECT TO
B105	Rear combination lamp RH (turn signal)
B138	Rear cargo power socket
B157	Seatbelt buckle pre-tensioner assembly RH

CONNECTOR NUMBER	CONNECT TO
B118	Front seat heater RH
B119	Condenser-3
B120	Condenser-4
B130	Rear combination lamp RH
B133	Variable blower control (rear)
B135	Back-up lamp RH
B142	Bluetooth control unit (Terminal No. 4)
B142	Bluetooth control unit (Terminal No. 21)
B142	Bluetooth control unit (Terminal No. 22)
B142	Bluetooth control unit (Terminal No. 23)
B162	Third row power folding seat switch passenger side (front)
B163	Third row power folding seat switch passenger side (rear)
B164	Third row power folding seat switch driver side (front)
B165	Third row power folding seat switch driver side (rear)
B308	Power seat switch RH
B351	Occupant classification system control unit (Terminal No. 5)
R202	Video monitor
R203	Personal lamp 2nd row
R204	Rear audio remote control unit (Terminal No. 15)
R205	Personal lamp 3rd row
D303	Rear power window switch RH
D704	Rear wiper motor (Terminal No. 3)
D704	Rear wiper motor (Terminal No. 5)
D706	Back door handle switch

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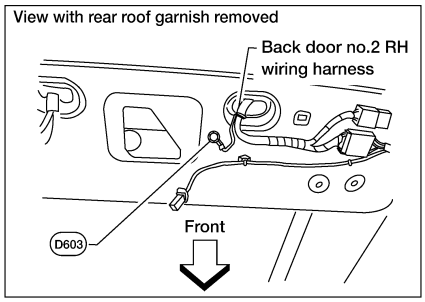
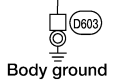


CONNECTOR NUMBER	CONNECT TO
D604	Rear window defogger



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HARNESS

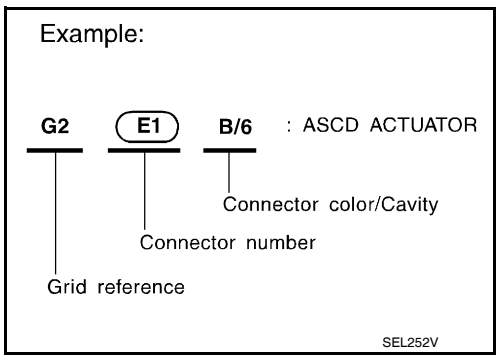
Harness Layout

INFOID:0000000004918869

HOW TO READ HARNESS LAYOUT

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

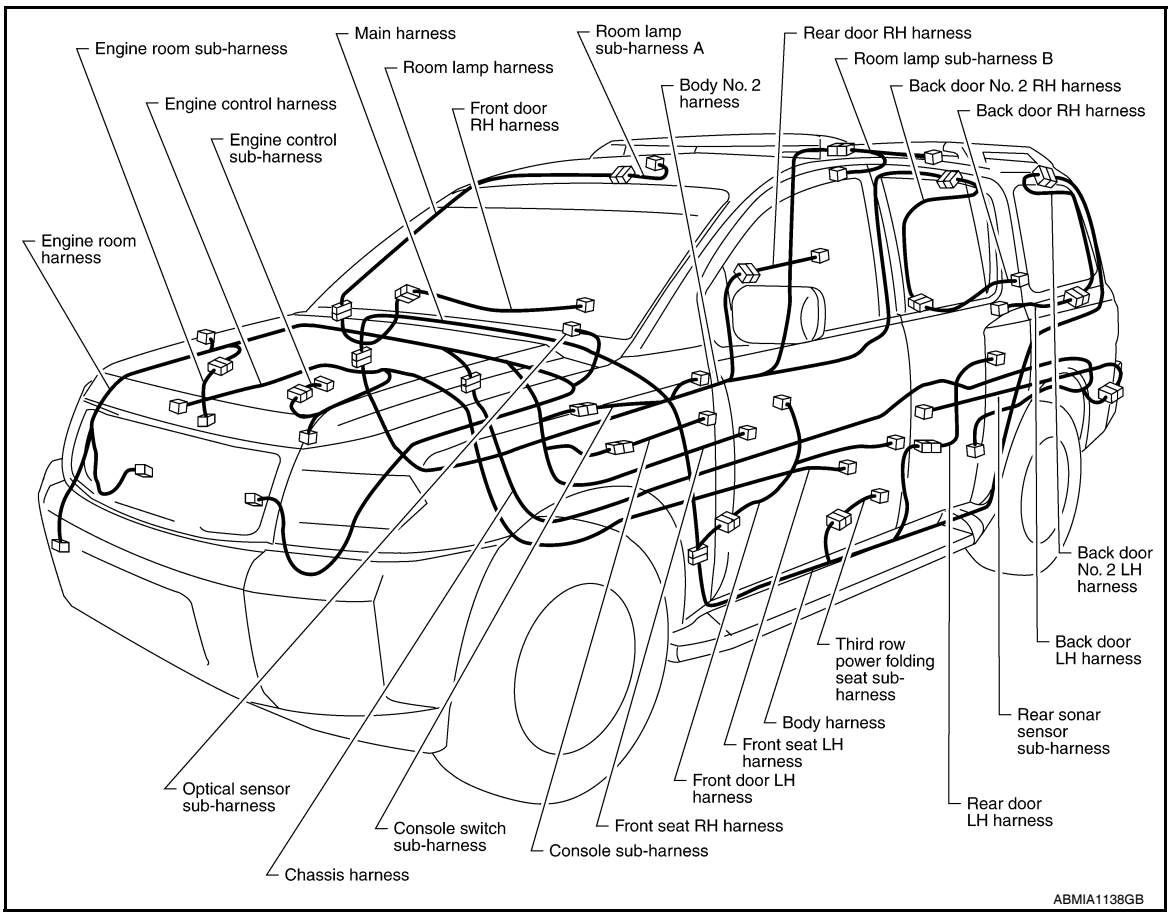
- Main Harness, Console Sub-harness, Console Switch Sub-harness and Optical Sensor Sub-harness
- Engine Room Harness and Engine Room Sub-harness
- Engine Room Harness (Passenger Compartment)
- Engine Control Harness and Engine Control Sub-harness
- Chassis Harness and Rear Sonar Sensor Sub-harness
- Body Harness, Left Front Seat Harness and Third Row Power Folding Seat Sub-harness
- Body No. 2 Harness and Right Front Seat Harness
- Room Lamp Harness, Room Lamp Sub-harness A and Room Lamp Sub-harness B
- Back Door Harness, Back Door No. 2 Harness, Back Door RH Harness, Back Door LH Harness and Back Door No. 2 RH Harness

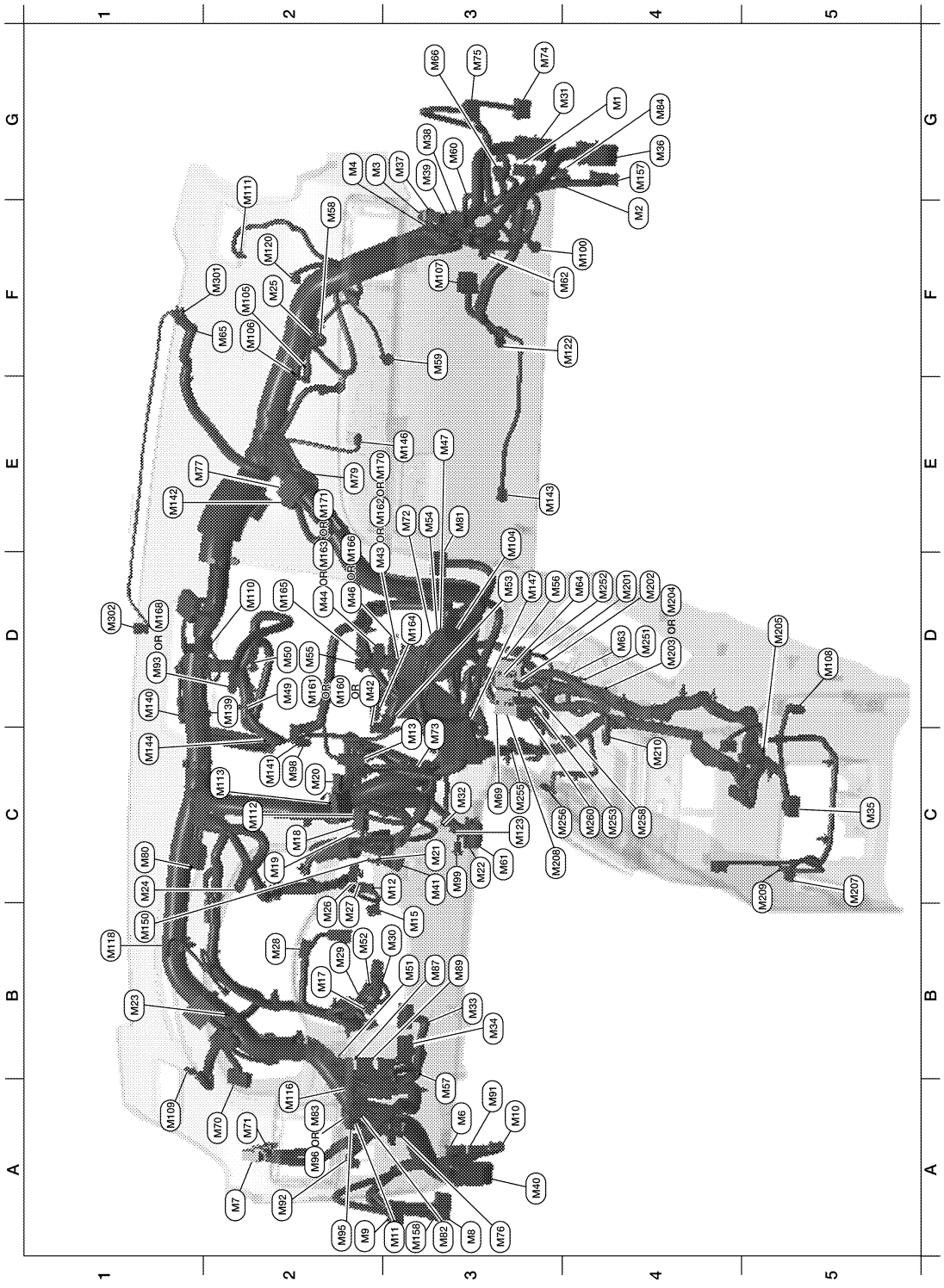


To use the grid reference

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

OUTLINE





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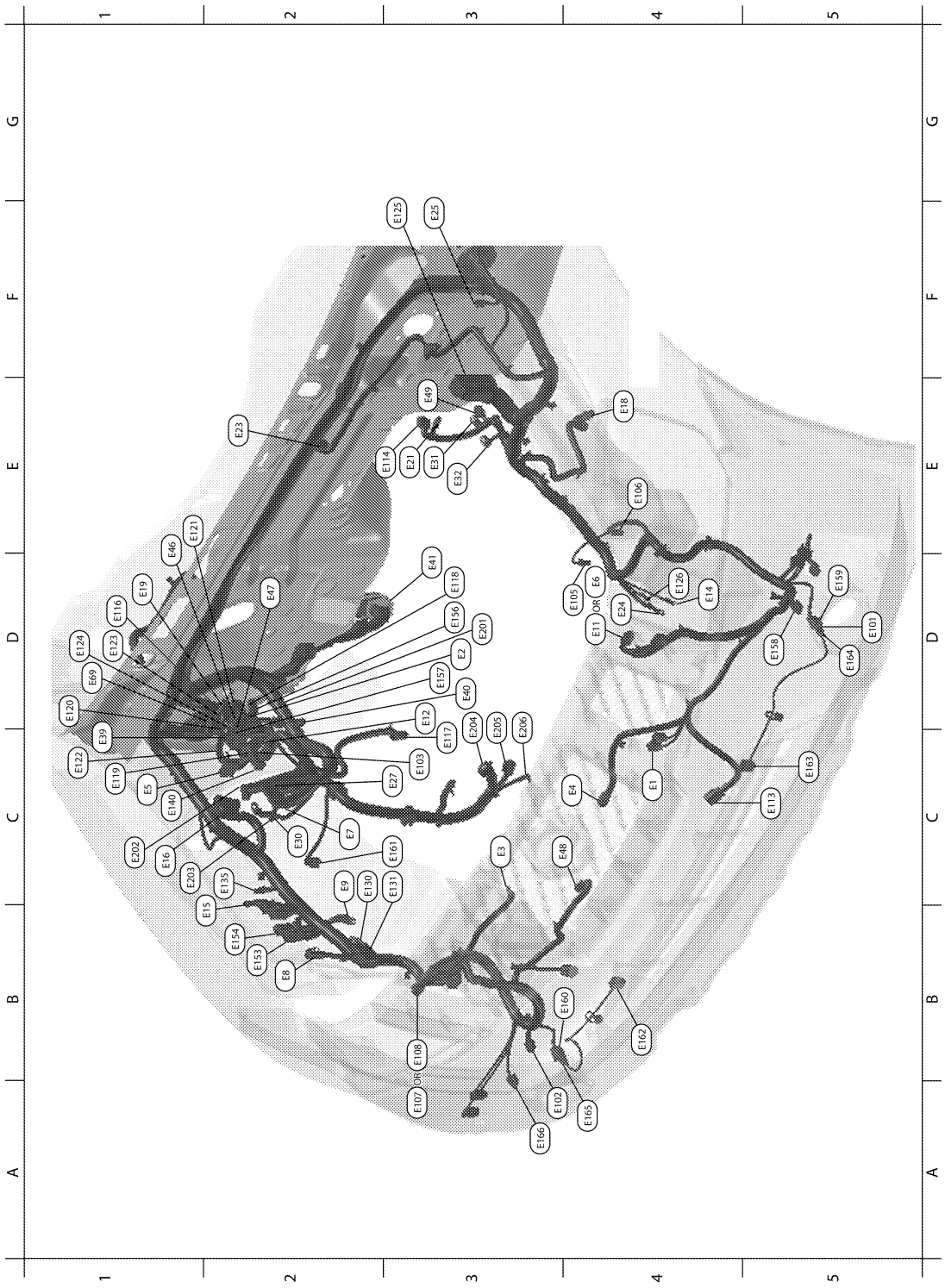
G4	M1	W/16	: To R1	E3	M81	GR/10	: Shift lock control unit
F4	M2	W/12	: To R2	A3	M82	W/2	: Circuit breaker-2
G2	M3	W/8	: Fuse block (J/B)	A2	M83	BR/6	: Pedal adjusting switch (without automatic drive positioner)
G2	M4	W/16	: Fuse block (J/B)	G4	M84	W/16	: To B101

A3	M6	W/10	: To E10	B3	M87	B/5	: Rear power vent window relay (open)
A2	M7	B/5	: Passenger select unlock relay	B3	M89	B/5	: Rear power vent window relay (close)
A3	M8	W/16	: To D2	A3	M91	W/16	: To E26
A2	M9	BR/24	: To D1	A2	M92	GR/6	: Power liftgate switch
A3	M10	Y/4	: To E29	D1	M93	W/24	: Display unit (without NAVI)
A3	M11	B/1	: Parking brake switch	A2	M95	W/6	: Rear power vent window switch
C3	M12	GR/6	: Key switch and ignition knob switch	A2	M96	BR/6	: Pedal adjusting switch (with automatic drive positioner)
D3	M13	BR/2	: Front passenger air bag OFF indicator	C2	M98	W/16	: A/C and AV switch assembly
B3	M15	W/4	: Steering lock solenoid	C3	M99	BR/2	: Foot lamp LH
B2	M17	W/8	: Steering angle sensor	F4	M100	BR/2	: Foot lamp RH
C2	M18	W/40	: BCM (body control module)	E3	M104	W/4	: Aux jack
C2	M19	W/15	: BCM (body control module)	F2	M105	Y/2	: Front passenger air bag module
C2	M20	B/15	: BCM (body control module)	F2	M106	O/2	: Front passenger air bag module
C3	M21	W/4	: NATS antenna amp.	F3	M107	B/5	: Front blower relay
C3	M22	W/16	: Data link connector	D5	M108	B/6	: Yaw rate/ side/ decel G sensor
B1	M23	W/12	: Combination meter	A1	M109	BR/2	: Front tweeter LH
C1	M24	W/40	: Combination meter	D2	M110	BR/2	: Center speaker
F2	M25	B/4	: Remote keyless entry receiver	F2	M111	BR/2	: Front tweeter RH
B2	M26	W/6	: Ignition switch	C2	M112	BR/14	: BOSE speaker amp.
B2	M27	W/4	: Key switch and key lock solenoid	C2	M113	BR/23	: BOSE speaker amp.
B2	M28	W/16	: Combination switch	A2	M116	GR/8	: Sonar system OFF switch
B2	M29	Y/6	: Combination switch (spiral cable)	B1	M118	B/2	: Front sonar buzzer
B3	M30	GR/8	: Combination switch (spiral cable)	F2	M120	W/4	: Remote keyless entry receiver
G4	M31	SMJ	: To E152	F4	M122	W/4	: Variable blower control (front)
C3	M32	W/4	: In-vehicle sensor	C3	M123	W/2	: Tire pressure warning check connector
B3	M33	W/32	: Automatic drive positioner control unit	D2	M139	B/2	: Diode-1
B3	M34	W/16	: Automatic drive positioner control unit	D1	M140	B/2	: Diode-2
C5	M35	Y/28	: Air bag diagnosis sensor unit	C2	M141	GR/8	: 4WD shift switch
G4	M36	SMJ	: To B149	E1	M142	B/6	: Mode door motor (front)
G3	M37	B/1	: Fuse block (J/B)	E3	M143	B/6	: Air mix door motor (passenger)
G3	M38	B/2	: Fuse block (J/B)	C1	M144	B/6	: Defroster door motor
G3	M39	W/8	: Fuse block (J/B)	E3	M146	GR/2	: Intake sensor
A3	M40	SMJ	: To B69	D3	M147	B/6	: Air mix door motor (driver)
C3	M41	W/16	: Satellite radio tuner or pre-wiring for satellite radio tuner	B1	M150	W/2	: Ignition keyhole illumination
D2	M42	W/20	: AV control unit (with base audio system)	G4	M157	W/20	: To B161
D2	M43	W/12	: AV control unit (with base audio system)	A3	M158	W/10	: To D3
D2	M44	W/24	: AV control unit (with base audio system)	D2	M160	W/20	: AV control unit (with Bose audio system-without NAVI)
D2	M46	W/32	: AV control unit (with base audio system)	D2	M161	W/20	: AV control unit (with Bose audio system with NAVI)
E3	M47	B/2	: Sonar buzzer	D2	M162	W/12	: AV control unit (with Bose audio system with NAVI)
D2	M49	B/26	: A/C auto amp.	D2	M163	W/32	: AV control unit (with Bose audio system with NAVI)

D2	M50	L/26	: A/C auto amp.	D3	M164	W/16	: AV control unit (with Bose audio system-without NAVI)
B3	M51	L/4	: Trailer tow relay 1	D2	M165	W/40	: AV control unit (with Bose audio system with NAVI)
B2	M52	W/2	: Combination switch (spiral cable)	D2	M166	W/32	: AV control unit (with Bose audio system-without NAVI)
D3	M53	B/3	: Front power socket LH	D1	M168	W/24	: Display unit (with NAVI)
E3	M54	B/3	: Front power socket RH	D2	M170	W/12	: AV control unit (with Bose audio system-without NAVI)
D2	M55	W/4	: Hazard switch	D2	M171	W/24	: AV control unit (with Bose audio system-without NAVI)
D4	M56	W/16	: To M201	Console sub-harness			
A3	M57	—	: Body ground	D4	M201	W/16	: To M56
F2	M58	B/6	: Intake door motor	D4	M202	BR/24	: To M64
F3	M59	BR/2	: Glove box lamp	D4	M203	W/12	: A/T shift selector (with intelligent key system)
G3	M60	W/6	: Fuse block (J/B)	D4	M204	W/12	: A/T shift selector (without intelligent key system)
C3	M61	—	: Body ground	D5	M205	W/32	: DVD player
F4	M62	B/2	: Front blower motor	C5	M207	B/3	: Console power socket
D4	M63	BR/20	: To M251	C4	M208	BR/20	: To M69
D4	M64	BR/24	: To M202	C5	M209	W/2	: Center console area antenna (rear)
F2	M65	W/4	: To M301	C4	M210	GR/2	: Center console area antenna (front)
G3	M66	B/1	: To E33	Console switch sub-harness			
C3	M69	BR/20	: To M208	D4	M251	BR/20	: To M63
A2	M70	W/40	: Intelligent key unit	D4	M252	BR/6	: Front heated seat switch RH
A2	M71	L/4	: Heated steering relay	C4	M253	GR/6	: VDC OFF switch
E3	M72	W/12	: AV control unit (with Bose audio system-without NAVI)	C3	M255	W/6	: Front heated seat switch LH
D3	M73	BR/6	: Back-up lamp relay	C4	M256	B/2	: A/T shift selector
G3	M74	BR/20	: To D102	C4	M258	GR/8	: Tow mode switch
G3	M75	W/10	: To D101	C4	M260	W/6	: Heated steering wheel switch
A3	M76	W/6	: Electric brake (pre-wiring)	Optical sensor sub-harness			
E2	M77	Y/4	: Front passenger air bag module (service replacement)	F2	M301	W/4	: To M65
E2	M79	—	: Body ground	F2	M302	W/4	: Optical sensor
C1	M80	B/2	: Resistor				



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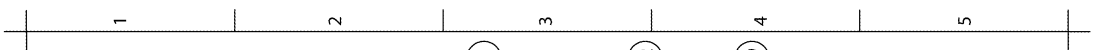
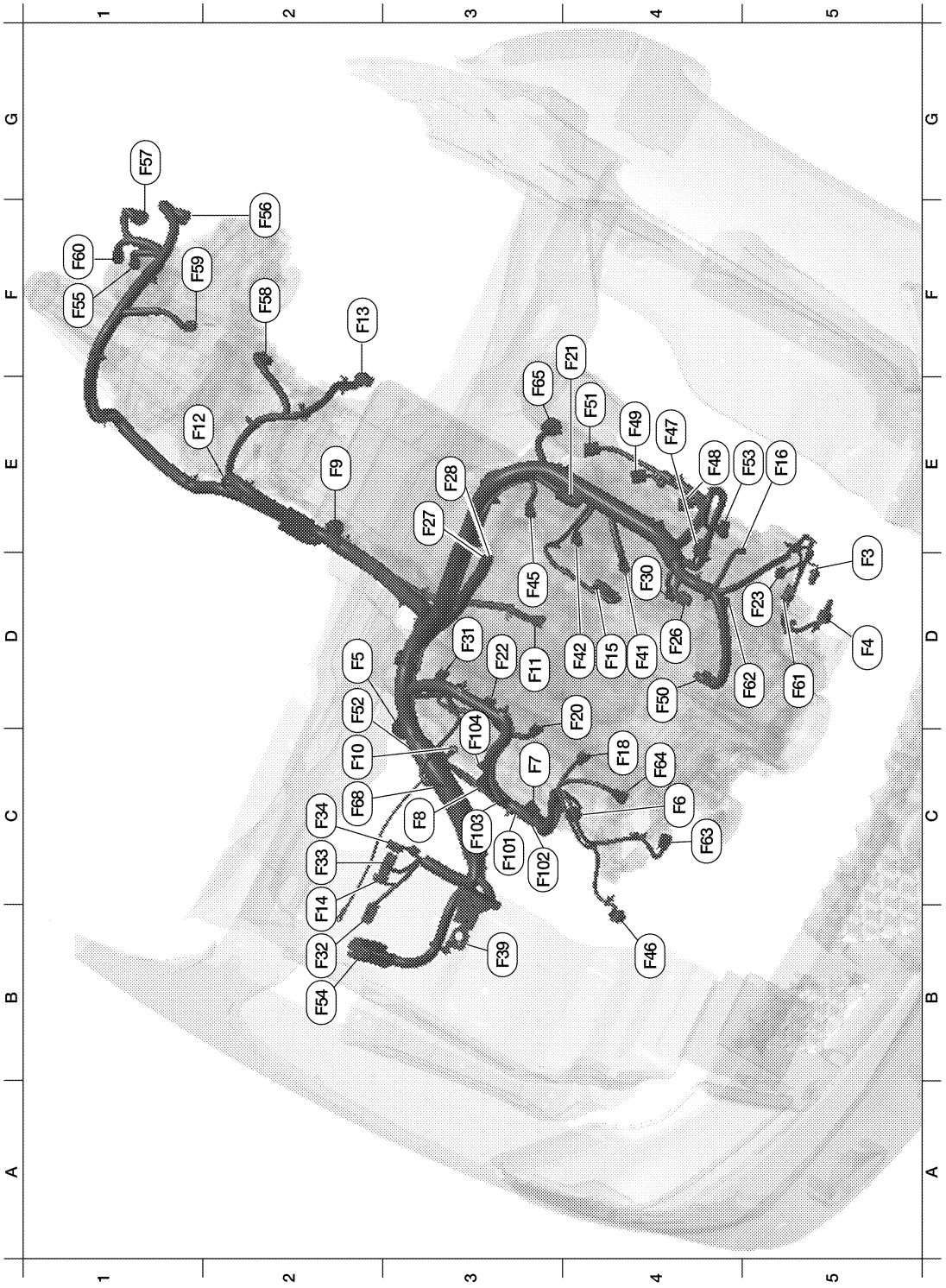
C4	E1	GR/2	: Ambient sensor	E3	E114	B/6	: Delta stroke motor
D3	E2	W/16	: To F32	D1	E116	W/2	: Condenser-2
C3	E3	B/2	: Horn	D3	E117	GR/2	: Front wheel sensor RH
C3	E4	Y/2	: Crash zone sensor	D3	E118	B/2	: IPDM E/R (intelligent power distribution module engine room)

C1	E5	W/24	: To F14	C1	E119	W/16	: IPDM E/R (intelligent power distribution module engine room)
D4	E6	B/6	: Front combination lamp LH (with daytime light system)	D1	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)
C2	E7	GR/2	: Fusible link box (battery)	D1	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)
B2	E8	GR/2	: Dropping resistor	E1	E121	BR/12	: IPDM E/R (intelligent power distribution module engine room)
C2	E9	—	: Body ground	C1	E122	W/12	: IPDM E/R (intelligent power distribution module engine room)
D4	E11	B/6	: Front combination lamp LH (without daytime light system)	D1	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)
D3	E12	B/5	: Stop lamp relay	D1	E124	B/6	: IPDM E/R (intelligent power distribution module engine room)
D4	E14	—	: Body ground	F3	E125	B/47	: ABS actuator and electric unit (control unit)
B2	E15	—	: Body ground	D4	E126	—	: Body ground
C1	E16	B/40	: ECM	C2	E130	W/2	: Compressor motor relay
E4	E18	GR/2	: Front wheel sensor LH	C3	E131	W/2	: Compressor motor relay
D1	E19	W/16	: To F33	C2	E135	GR/2	: Transfer dropping resistor
E3	E21	GR/2	: Brake fluid level switch	C1	E140	BR/6	: Trailer tow relay 2
E2	E23	GR/6	: Front wiper motor	B2	E153	W/2	: Transfer motor relay
D4	E24	—	: Body ground	B2	E154	W/2	: Transfer motor relay
F3	E25	BR/3	: Intelligent key warning buzzer	D3	E156	L/4	: Trailer turn relay LH
C3	E27	BR/2	: Fusible link box (battery)	D3	E157	L/4	: Trailer turn relay RH
C2	E30	/1	: Fusible link box (battery)	D5	E158	B/3	: Front sonar sensor LH outer
E3	E31	GR/3	: Front pressure sensor	D5	E159	GR/3	: To E164
E3	E32	GR/3	: Rear pressure sensor	B4	E160	GR/3	: To E165
C1	E39	W/2	: To F34	C3	E161	B/3	: Battery current sensor
D3	E40	B/3	: To E201	B4	E162	B/3	: Front sonar sensor LH inner
D3	E41	SMJ	: To C1	C5	E163	B/3	: Front sonar sensor RH inner
E1	E46	B/5	: Transfer shift high relay	D5	E164	GR/3	: To E159
D2	E47	B/5	: Transfer shift low relay	A4	E165	GR/3	: To E160
C3	E48	B/3	: Refrigerant pressure sensor	A3	E166	B/3	: Front sonar sensor RH outer
E3	E49	B/6	: Active booster	Engine room sub-harness			
D1	E69	L/4	: Transfer shut off relay	D3	E201	B/3	: To E40
D5	E101	B/2	: Front fog lamp LH	C1	E202	/1	: Fusible link box (battery)
A3	E102	B/2	: Front fog lamp RH	C1	E203	—	: Engine ground
C3	E103	B/5	: Daytime light relay	C3	E204	/1	: Generator
D4	E105	BR/2	: Front and rear washer motor	C3	E205	B/3	: Generator
E4	E106	BR/2	: Washer fluid level switch	C3	E206	/1	: Generator
B3	E107	B/6	: Front combination lamp RH				
B3	E108	B/6	: Front combination lamp RH (without daytime light system)				
C5	E113	W/2	: Cooling fan motor				

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



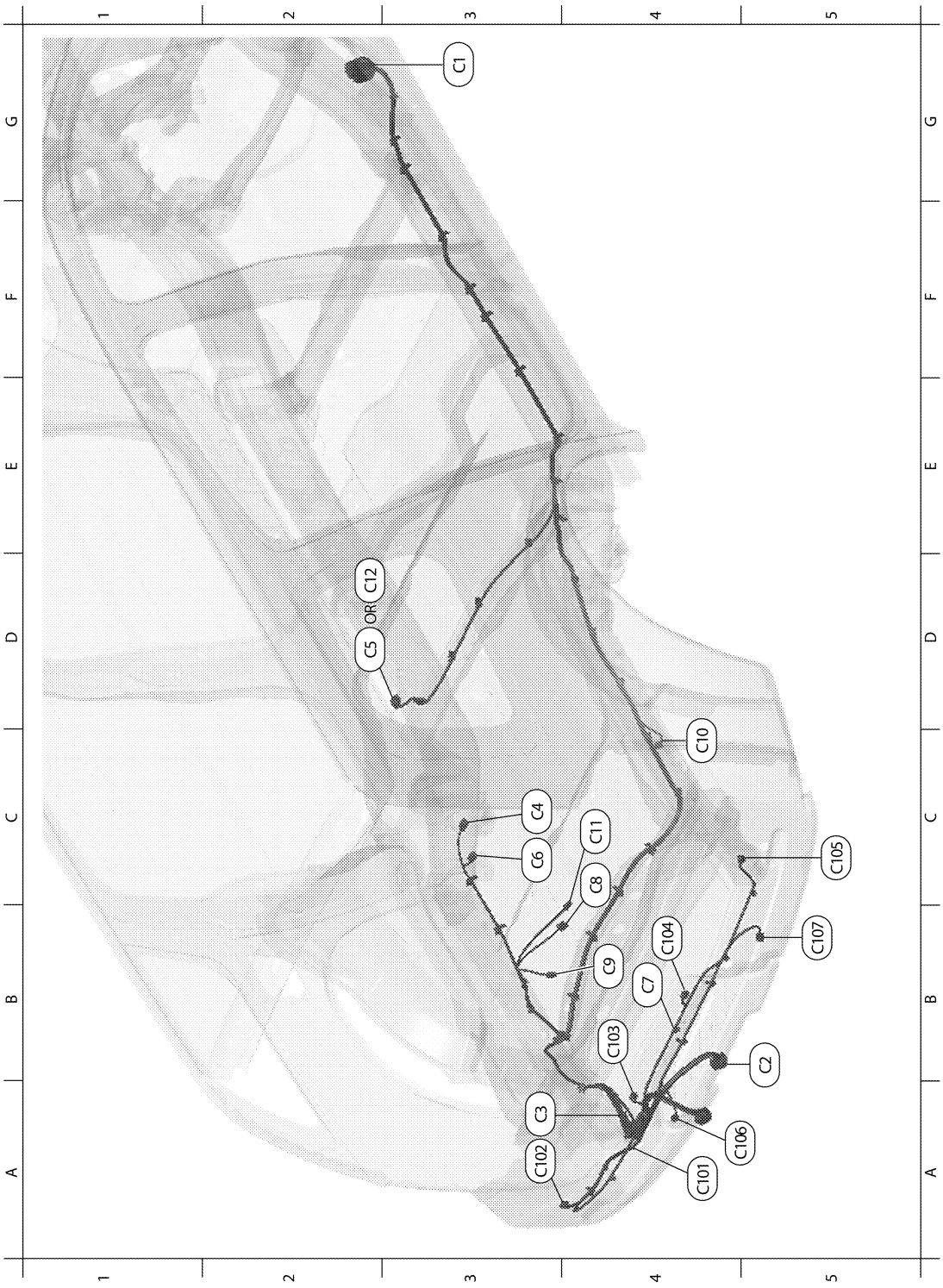
A3	E10	W/10	: To M6				
G3	E17	W/4	: Fuel pump control module (FPCM)				
C4	E20	B/8	: Accelerator pedal position (APP) sensor				
A3	E26	W/16	: To M91				
A3	E29	Y/4	: To M10				
G3	E33	B/1	: To M66				
A3	E34	W/24	: To B40				
A4	E35	W/12	: To B41				
A4	E36	W/2	: To B42				
B3	E37	BR/2	: ASCD brake switch				
B3	E38	B/2	: Stop lamp switch				
B3	E109	GR/2	: Pedal adjusting motor assembly (with automatic drive positioner)				
C4	E110	GR/3	: Pedal adjusting motor assembly				
G4	E139	W/8	: To B107				
F3	E142	W/24	: Transfer control unit				
F3	E143	GR/24	: Transfer control unit				
G3	E152	SMJ	: To M31				
B3	E167	GR/2	: Pedal adjusting motor (without automatic drive positioner)				



ABMIA1142GB

D5	F3	B/1	: A/C Compressor	D4	F42	GR/2	: Fuel injector No. 5
D5	F4	GR/1	: Oil pressure switch	D3	F45	GR/2	: Fuel injector No. 7
D2	F5	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	B4	F46	B/3	: Power steering pressure sensor
C4	F6	GR/3	: Ignition coil No. 2 (with power transistor)	E4	F47	GR/3	: Ignition coil No. 1 (with power transistor)
C3	F7	GR/3	: Ignition coil No. 4 (with power transistor)	E4	F48	GR/3	: Ignition coil No. 3 (with power transistor)

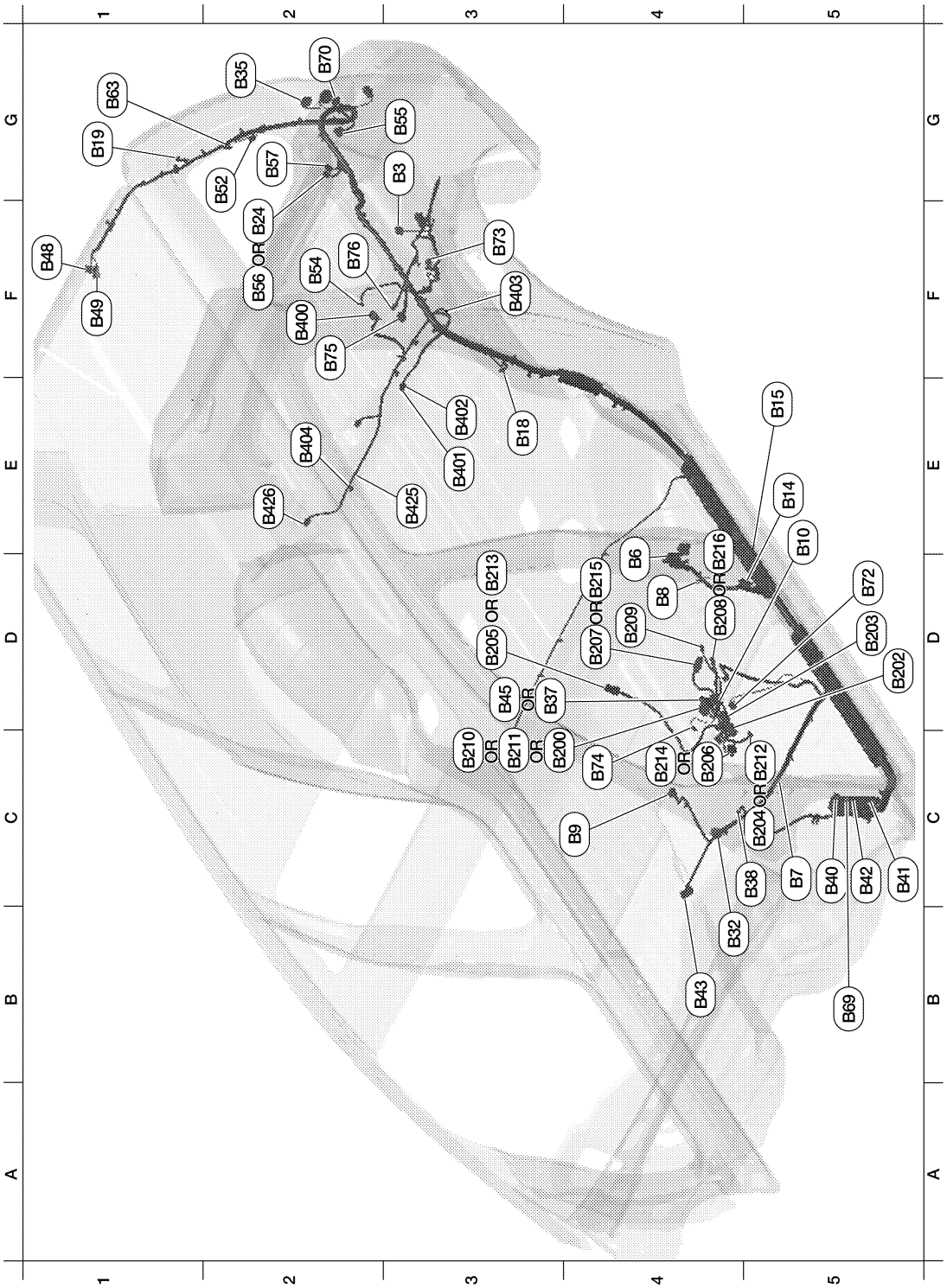
C3	F8	GR/3	: Ignition coil No. 6 (with power transistor)	E4	F49	GR/3	: Ignition coil No. 5 (with power transistor)
E2	F9	G/10	: A/T assembly	D4	F50	W/6	: Electric throttle control actuator
C2	F10	—	: Engine ground	E4	F51	GR/3	: Ignition coil No. 7 (with power transistor)
D3	F11	B/3	: Crankshaft position sensor (POS)	D2	F52	GR/3	: Ignition coil No. 8 (with power transistor)
E1	F12	G/4	: Heated oxygen sensor 2 (bank 2)	E5	F53	B/6	: Mass air flow sensor
F2	F13	G/4	: Heated oxygen sensor 2 (bank 1)	B2	F54	B/81	: ECM
B2	F14	W/24	: To E5	F1	F55	B/2	: ATP switch
D4	F15	GR/2	: EVAP canister purge volume control solenoid valve	F2	F56	B/8	: Transfer terminal cord assembly
E5	F16	—	: Engine ground	G1	F57	B/2	: Transfer motor
C4	F18	GR/2	: Fuel injector No. 2	F2	F58	GR/6	: Transfer control device
D4	F20	GR/2	: Fuel injector No. 4	F1	F59	B/2	: Wait detection switch
F4	F21	GR/2	: Condenser-1	F1	F60	GR/2	: Neutral-4LO switch
D3	F22	GR/2	: Fuel injector No. 6	D5	F61	G/2	: Intake valve timing control solenoid valve (bank 1)
D5	F23	B/3	: Camshaft position sensor (phase)	D5	F62	B/3	: Intake valve timing control position sensor (bank 1)
D4	F26	B/6	: To F101	C4	F63	G/2	: Intake valve timing control solenoid valve (bank 2)
E3	F27	/1	: Starter motor	C4	F64	B/3	: Intake valve timing control position sensor (bank 2)
E3	F28	GR/1	: Starter motor	E3	F65	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)
D4	F30	GR/2	: Fuel injector No. 1	C2	F68	GR/2	: Water valve
D3	F31	GR/2	: Fuel injector No. 8	Engine control sub-harness			
B2	F32	W/16	: To E2	C3	F101	B/6	: To F26
C2	F33	W/16	: To E19	C3	F102	B/2	: Knock sensor (bank 1)
C2	F34	W/2	: To E39	C3	F103	GR/2	: Engine coolant temperature sensor
B3	F39	—	: Fusible link (battery)	C3	F104	B/2	: Knock sensor (bank 2)
D4	F41	GR/2	: Fuel injector No. 3				



ABMIA0079GB

G2	C1	SMJ	: To E41	C4	C11	BR/2	: Rear wheel sensor LH
B5	C2	B/7	: Trailer	D2	C12	GR/5	: Fuel level sensor unit and fuel pump (with flex fuel)
A3	C3	GR/8	: To C101	Rear sonar sensor sub-harness			
C3	C4	GR/3	: Evap control system pressure sensor	A4	C101	GR/8	: To C3

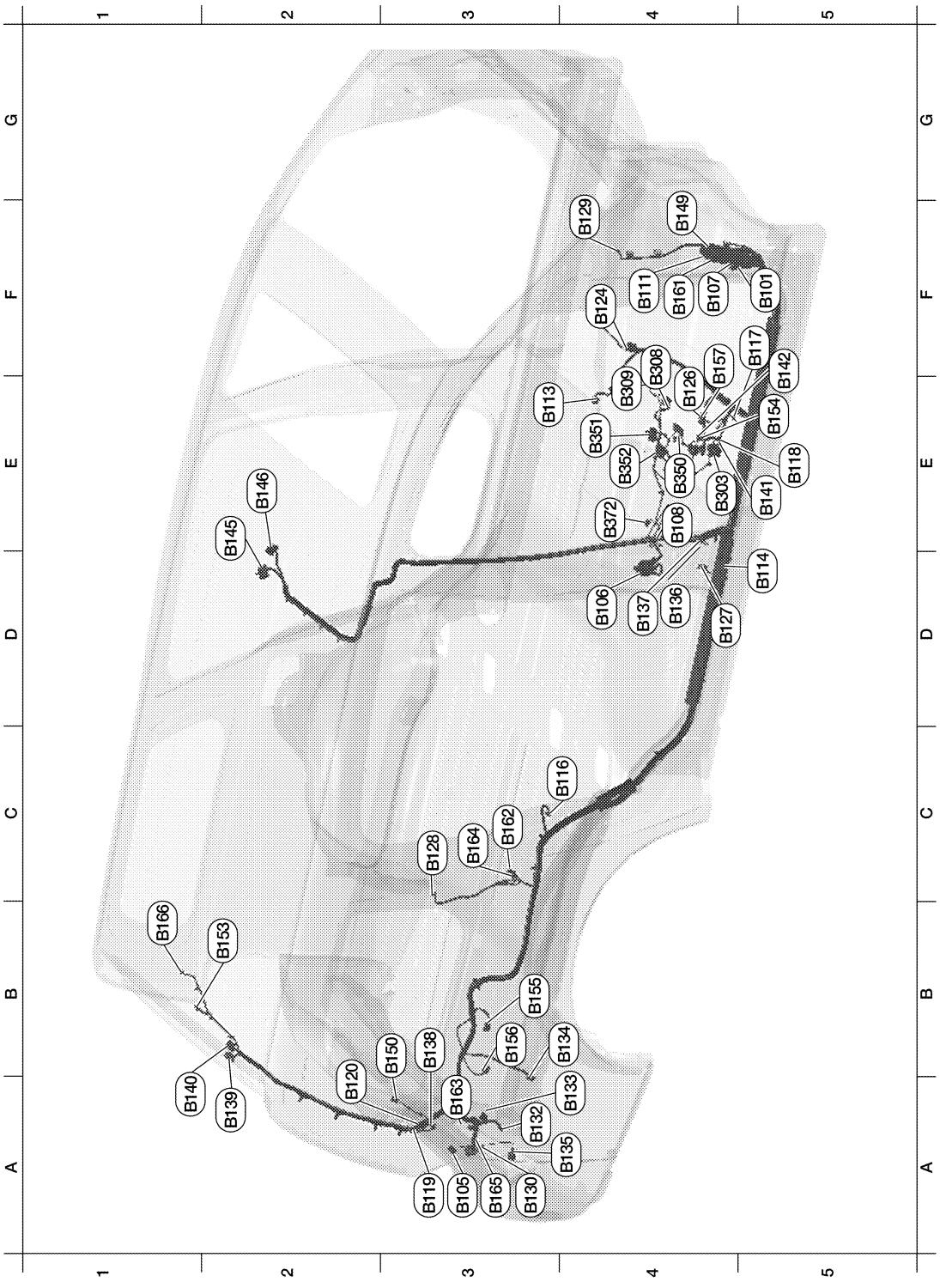
D2	C5	GR/5	: Fuel level sensor unit and fuel pump (without flex fuel)	A3	C102	B/3	: Rear sonar sensor LH outer
C3	C6	B/2	: Evap canister vent control valve	B4	C103	B/3	: Rear sonar sensor LH inner
B4	C7	GR/2	: Rear bumper antenna	B4	C104	B/3	: Rear sonar sensor RH inner
C4	C8	B/3	: Height sensor	C5	C105	B/3	: Rear sonar sensor RH outer
B4	C9	B/4	: Suspension air compressor	A5	C106	GR/2	: License plate lamp LH
C4	C10	BR/2	: Rear wheel sensor RH	B5	C107	GR/2	: License plate lamp RH



ABMIA1143GB

G3	B3	W/16	: Suspension control unit	Front seat LH harness			
D4	B6	W/18	: To D201	C3	B200	W/16	: To B37 (with automatic drive positioner)
C5	B7	—	: Body ground	D5	B202	W/32	: Driver seat control unit
D4	B8	W/3	: Front door switch LH	D5	B203	W/16	: Driver seat control unit
C4	B9	Y/12	: Air bag diagnosis sensor unit	C4	B204	GR/5	: Sliding motor LH (with automatic drive positioner)

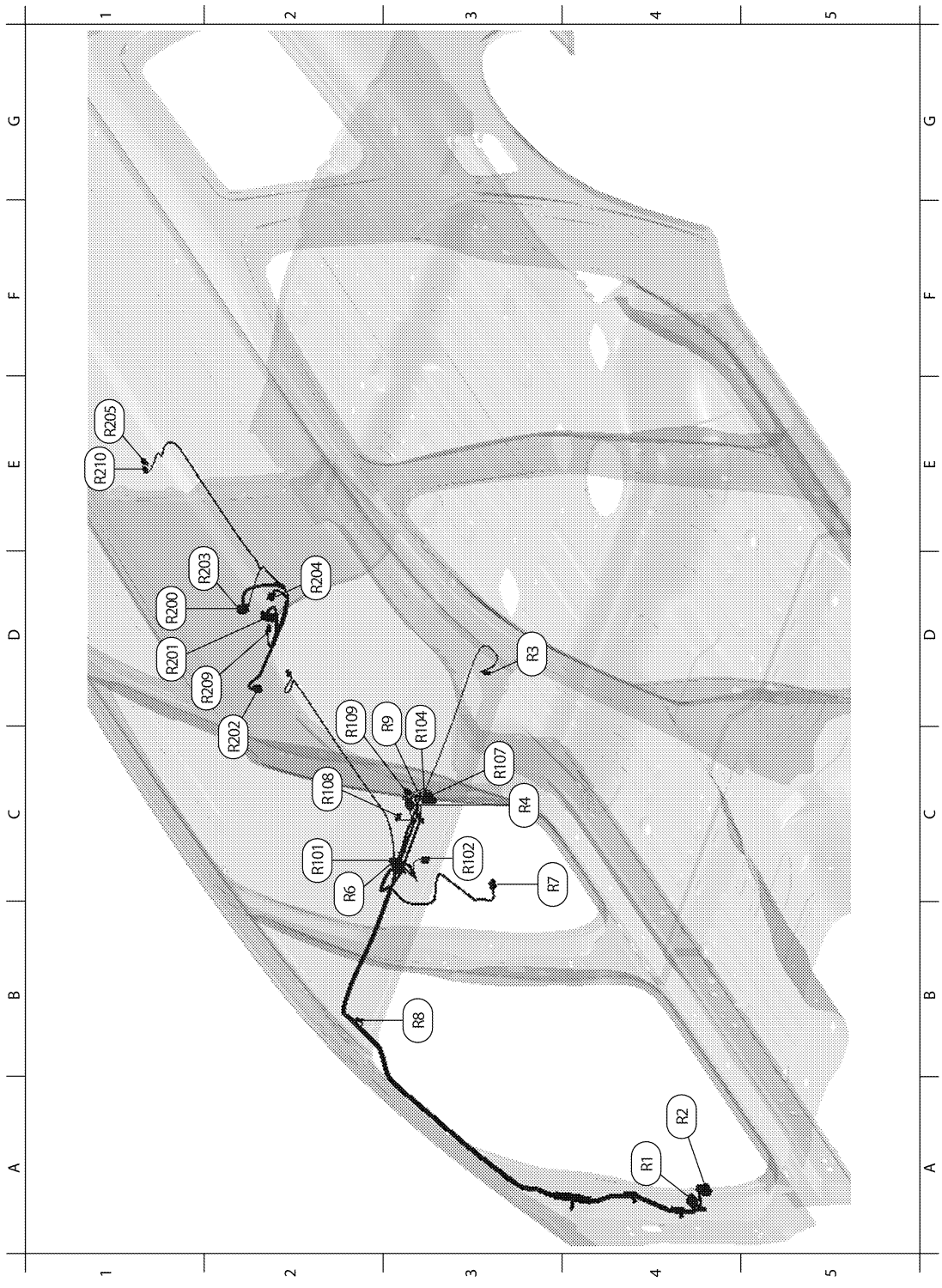
E5	B10	Y/2	: Front LH side air bag module	D3	B205	W/4	: Reclining motor LH (with automatic drive positioner)
E5	B14	Y/2	: Front LH seat belt pre-tensioner	C4	B206	GR/5	: Lifting motor (front) (with automatic drive positioner)
E5	B15	Y/2	: LH side air bag (satellite) sensor	D4	B207	GR/5	: Lifting motor (rear) (with automatic drive positioner)
E3	B18	W/3	: Rear door switch LH	D4	B208	W/10	: Power seat switch LH (with automatic drive positioner)
G1	B19	—	: Body ground	D4	B209	W/3	: Front seat heater LH
F2	B24	W/16	: Sonar control unit (rear)	D3	B211	W/2	: To B45 (without automatic drive positioner)
B4	B32	W/6	: To B124	C5	B212	GR/2	: Sliding motor LH (without automatic drive positioner)
G2	B35	B/3	: Rear combination lamp LH	D3	B213	W/2	: Reclining motor LH (without automatic drive positioner)
D3	B37	W/16	: To B200 (with automatic drive positioner)	C4	B214	GR/2	: Lifting motor (front) (without automatic drive positioner)
C4	B38	Y/2	: LH side front curtain air bag module	D4	B215	GR/2	: Lifting motor (rear) (without automatic drive positioner)
C5	B40	W/24	: To E34	D4	B216	W/10	: Power seat switch LH (without automatic drive positioner)
C5	B41	W/12	: To E35	Third row power folding seat sub-harness			
C5	B42	W/2	: To E36	F2	B400	W/10	: To B75
B4	B43	W/16	: To B111	E3	B401	GR/12	: Third row power folding seat control unit
D3	B45	W/2	: To B211 (without automatic drive positioner)	E3	B402	W/10	: Third row power folding seat control unit
F1	B48	W/18	: To D401	E3	B403	GR/4	: Third row power folding seat motor LH
F1	B49	W/2	: To D402	E2	B404	W/4	: To B425
G2	B52	W/2	: Rear power vent window motor LH	E2	B425	W/4	: To B404
F2	B54	Y/2	: LH side rear curtain air bag module	E3	B426	GR/4	: Third row power folding seat motor RH
G3	B55	W/26	: Back door control unit				
F2	B56	GR/16	: Sonar control unit (front and rear)				
G2	B57	GR/10	: Sonar control unit (front and rear)				
G1	B63	W/6	: Back door close switch				
B5	B69	SMJ	: To M40				
G2	B70	B/3	: Rear combination lamp LH				
G5	B71	B/2	: Back-up lamp LH				
D5	B72	BR/6	: Subwoofer				
F3	B73	W/16	: Rear view camera control unit				
C4	B74	Y/4	: Seat belt buckle pre-tensioner assembly LH				
F2	B75	W/10	: To B400				
F2	B76	GR/2	: Luggage area antenna				



ABMIA0081GB

F5	B101	W/16	: To M84	A1	B140	W/6	: To D601
A3	B105	B/3	: Rear combination lamp RH	E5	B141	W/8	: Bluetooth control unit
D4	B106	W/18	: To D301	E5	B142	W/32	: Bluetooth control unit
F4	B107	W/8	: To E139	E2	B145	W/16	: To R200
E4	B108	W/3	: Front door switch RH	E2	B146	BR/24	: To R201

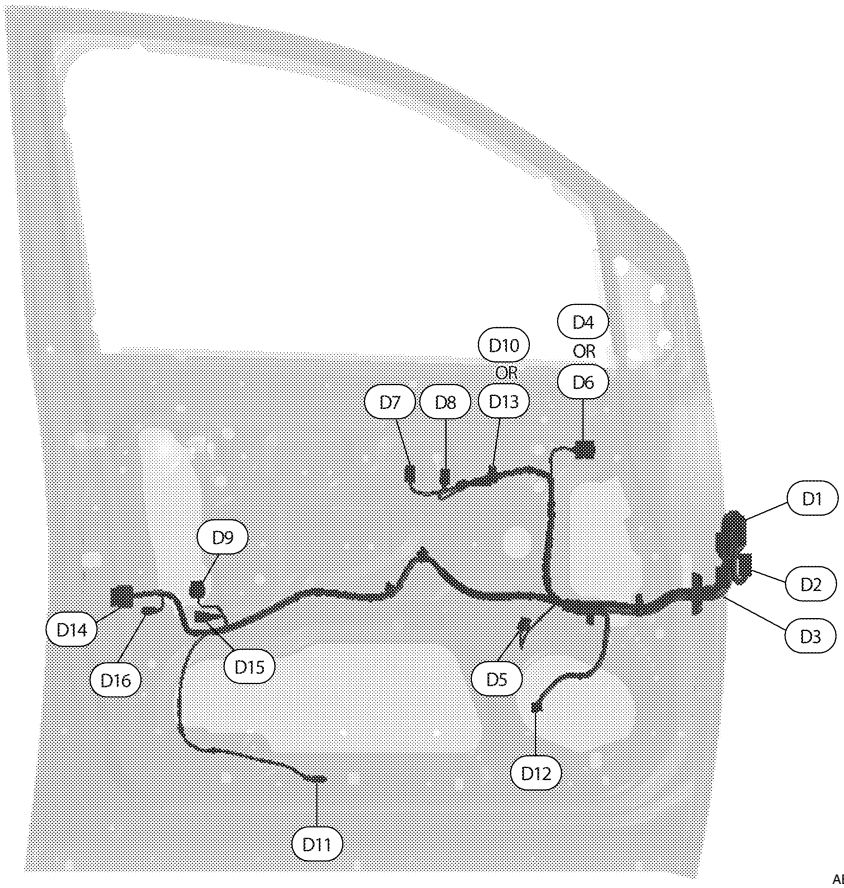
F4	B111	W/16	: To B43	F4	B149	SMJ	: To M36
E3	B113	Y/12	: Air bag diagnosis sensor unit	B3	B150	W/2	: Rear power vent window motor RH
D5	B114	Y/2	: RH side air bag (satellite) sensor	B2	B153	W/2	: Cargo lamp
C4	B116	W/3	: Rear door switch RH	E5	B154	W/2	: To B303
F5	B117	—	: Body ground	B3	B155	B/6	: Air mix door motor (rear)
E5	B118	W/3	: Front seat heater RH	B3	B156	B/6	: Mode door motor (rear)
A3	B119	W/2	: Condenser-3	E4	B157	Y/4	: Seat belt buckle pre-tensioner assembly RH
A2	B120	W/2	: Condenser-4	F4	B161	W/20	: To M157
F4	B124	W/6	: To B32	C3	B162	BR/6	: Third row power folding seat switch passenger side (front)
E4	B126	Y/2	: Front RH side air bag module	A3	B163	W/6	: Third row power folding seat switch passenger side (rear)
D4	B127	Y/2	: Front RH seat belt pre-tensioner	C3	B164	W/6	: Third row power folding seat switch driver side (front)
C3	B128	Y/2	: RH side rear curtain air bag module	A3	B165	BR/6	: Third row power folding seat switch driver side (rear)
F4	B129	Y/2	: RH side front curtain air bag module	B2	B166	B/2	: Rear sonar buzzer
A3	B130	B/3	: Rear combination lamp RH	Front seat RH harness			
A3	B132	—	: Body ground	E4	B303	W/2	: To B154
A4	B133	W/4	: Variable blower control (rear)	F4	B308	W/6	: Power seat switch RH
B4	B134	W/2	: Rear blower motor	E4	B309	GR/2	: Sliding motor RH
A4	B135	B/2	: Back-up lamp RH	E4	B350	Y/8	: To B136
D4	B136	W/8	: To B350	E4	B351	B/18	: Occupant classification system control unit
D4	B137	W/3	: Belt tension sensor	E4	B352	B/3	: Occupant classification system sensor
B3	B138	B/3	: Rear cargo power socket	E4	B372	W/2	: Reclining motor RH
A2	B139	W/16	: To D602				



A4	R1	W/16	: To M1	C3	R107	W/8	: To R9
A4	R2	W/12	: To M2	C2	R108	B/6	: Rear air control (front)
D3	R3	W/2	: Vanity lamp LH	D2	R109	W/4	: Microphone
C3	R4	W/10	: Sunroof motor assembly	Room lamp sub-harness B			
C2	R6	W/16	: To R101	D1	R200	W/16	: To B145

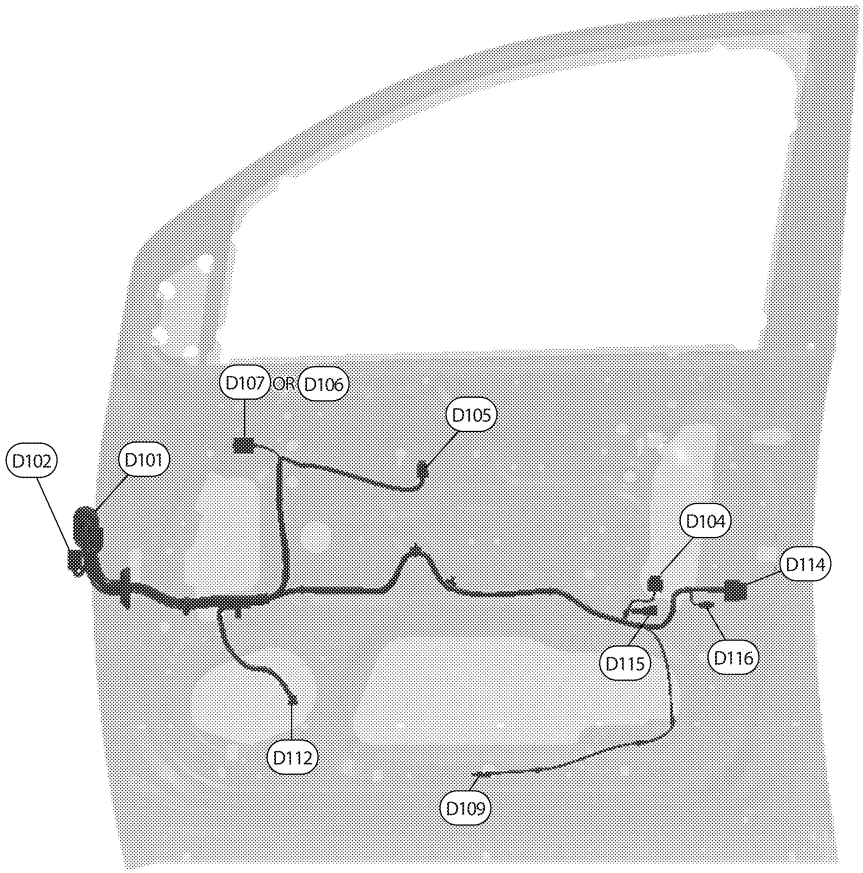
C3	R7	GR/10	: Auto anti-dazzling inside mirror	D1	R201	BR/24	: To B146
B3	R8	W/2	: Vanity lamp RH	C2	R202	W/12	: Video monitor
D3	R9	W/8	: To R107	D1	R203	W/3	: Personal lamp 2ND row
Room lamp sub-harness A				D2	R204	W/16	: Rear audio remote control unit
C2	R101	W/16	: To R6	E1	R205	W/3	: Personal lamp 3RD row
C3	R102	GR/8	: Front room/map lamp assembly	D2	R209	B/6	: Rear air control (rear)
D3	R104	GR/6	: Sunroof switch	E1	R210	W/2	: Over head console area antenna

FRONT DOOR LH HARNESS



D1	BR/24	: To M9	D9	GR/6	: Front power window motor LH
D2	W/16	: To M8	D10	BR/16	: Door mirror remote control switch (with automatic drive positioner)
D3	W/10	: To M158	D11	W/2	: Front step lamp LH
D4	W/16	: Door mirror LH (with automatic drive positioner)	D12	W/2	: Front door speaker LH
D5	W/8	: Seat memory switch	D13	W/16	: Door mirror remote control switch (without automatic drive positioner)
D6	W/6	: Door mirror LH (without automatic drive positioner)	D14	B/6	: Front door lock assembly LH
D7	W/16	: Main power window and door lock/unlock switch	D15	GR/2	: Front outside antenna LH
D8	W/3	: Main power window and door lock/unlock switch	D16	GR/2	: Front door request switch LH

FRONT DOOR RH HARNESS



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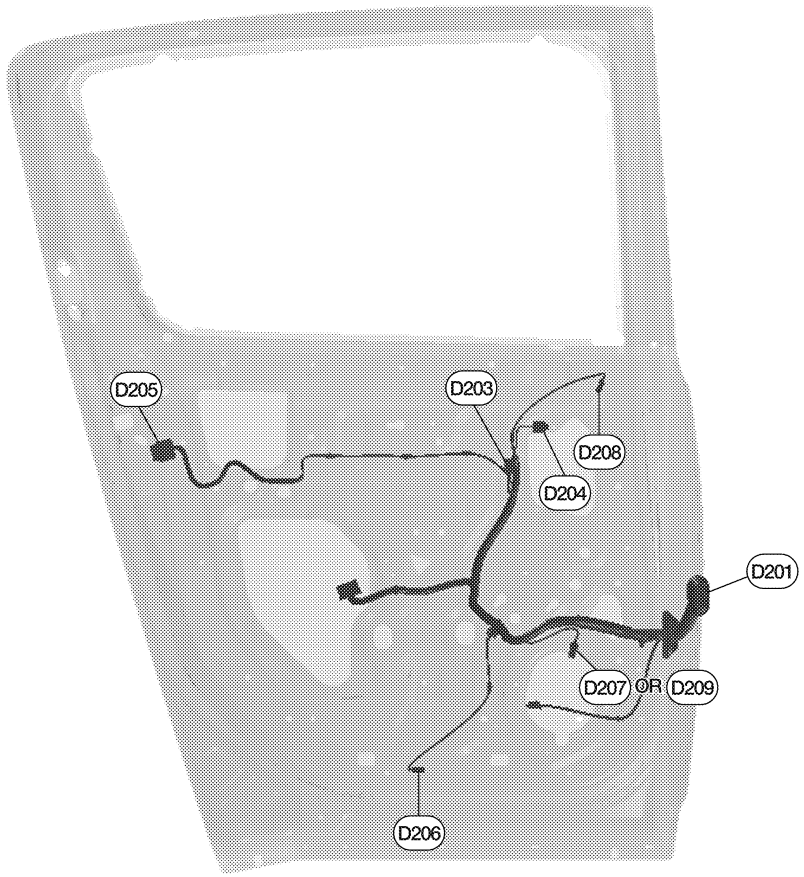
D101	W/10	: To M75	D109	W/2	: Front step lamp RH
D102	BR/20	: To M74	D112	W/2	: Front door speaker RH
D104	GR/6	: Front power window motor RH	D114	B/6	: Front door lock actuator RH
D105	W/16	: Power window and door lock/unlock switch RH	D115	GR/2	: Front outside antenna RH
D106	W/6	: Door mirror RH (without automatic drive positioner)	D116	GR/2	: Front door request switch RH
D107	W/16	: Door mirror RH (with automatic drive positioner)			



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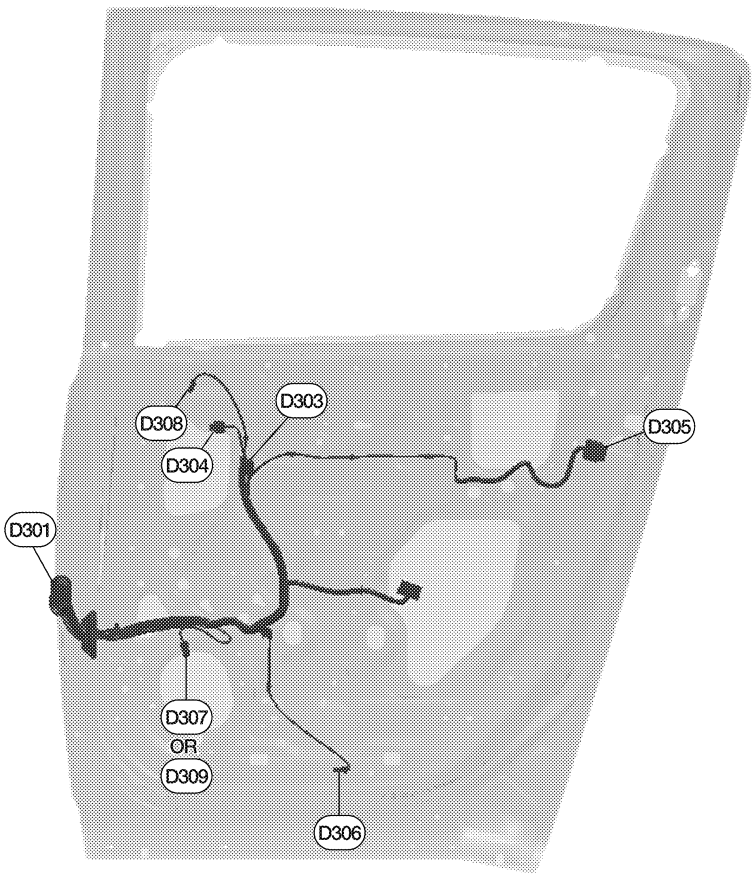
D201	W/18	: To B6			
D203	W/8	: Rear power window switch LH			
D204	GR/2	: Rear power window motor LH			
D205	B/6	: Rear door lock actuator LH			
D206	W/2	: Rear step lamp LH			
D207	BR/2	: Rear door speaker LH (with Bose audio system)			
D208	BR/2	: Rear door tweeter LH			
D209	W/2	: Rear door speaker LH (with base audio system)			

REAR DOOR RH HARNESS



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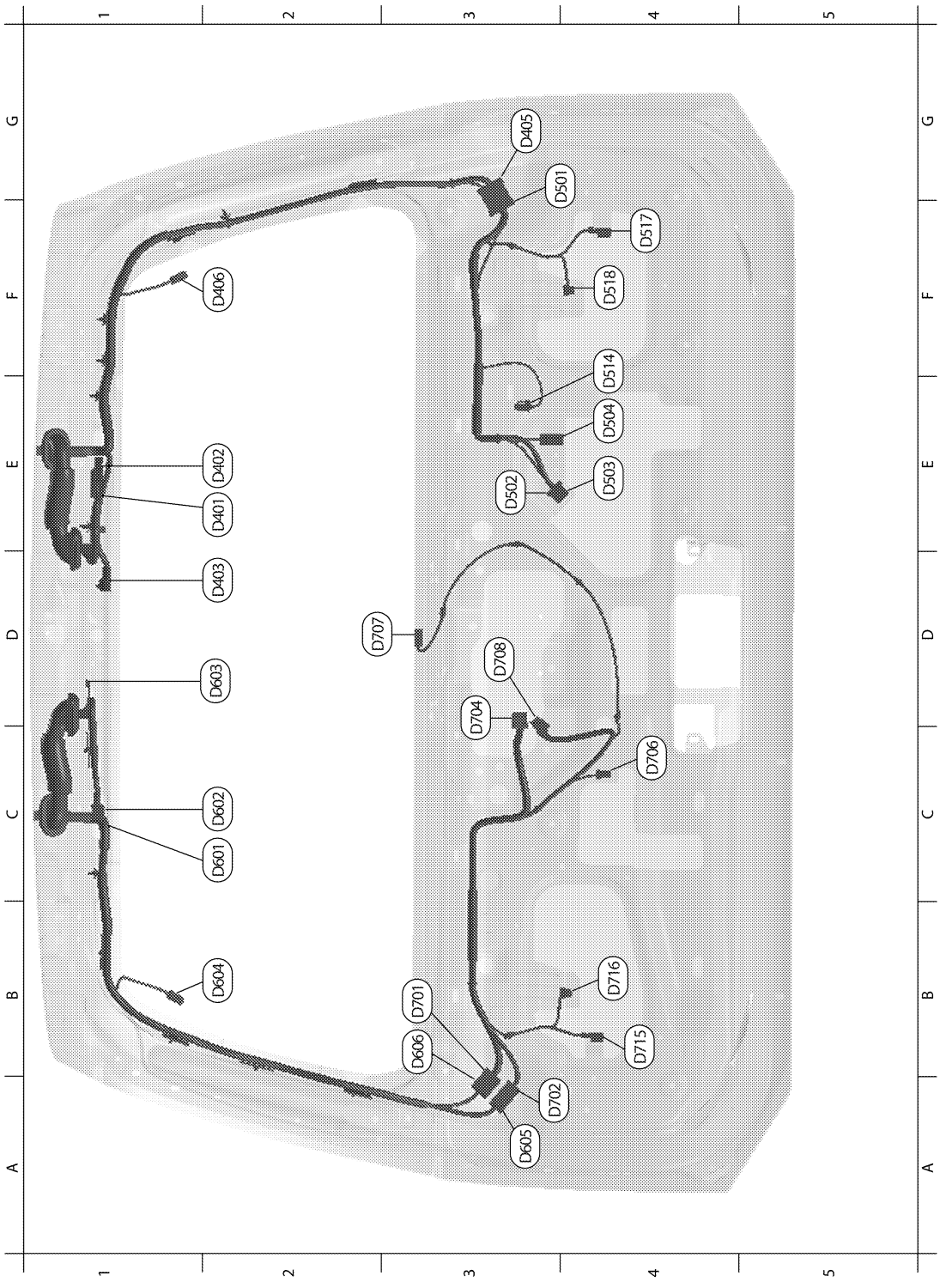
D301	W/18	: To B106			
D303	W/8	: Rear power window switch RH			
D304	GR/2	: Rear power window motor RH			
D305	B/6	: Rear door lock actuator RH			
D306	W/2	: Rear step lamp RH			
D307	BR/2	: Rear door speaker RH (with Bose audio system)			
D308	BR/2	: Rear door tweeter RH			
D309	W/2	: Rear door speaker RH (with base audio system)			



Back door No. 2 LH harness				Back door RH harness			
E2	D401	W/18	: To B48	B3	D701	W/16	: To D606
E2	D402	W/2	: To B49	A3	D702	W/6	: To D605
D2	D403	GR/2	: High-mounted stop lamp	D3	D704	W/6	: Rear wiper motor
G3	D405	W/18	: To D501	C4	D706	GR/2	: Back door handle switch

F2	D406	B/1	: Rear window defogger	D2	D707	B/1	: Glass hatch ajar switch
Back door LH harness				D3	D708	W/4	: Back door lock actuator
G3	D501	W/18	: To D405	B4	D715	BR/2	: Pinch strip RH
E3	D502	W/3	: Back door switch	B4	D716	BR/2	: Back door speaker RH
E4	D503	W/8	: Back door latch				
E4	D504	W/4	: Rear view camera				
F4	D514	BR/2	: Back door warning chime				
F4	D517	BR/2	: Pinch strip LH				
F4	D518	BR/2	: Back door speaker LH				
Back door No. 2 RH harness							
C2	D601	W/6	: To B140				
C2	D602	W/16	: To B139				
D2	D603	—	: Body ground				
B2	D604	B/1	: Rear window defogger				
A3	D605	W/6	: To D702				
B3	D606	W/16	: To D701				

ELECTRICAL UNITS LOCATION

Electrical Units Location

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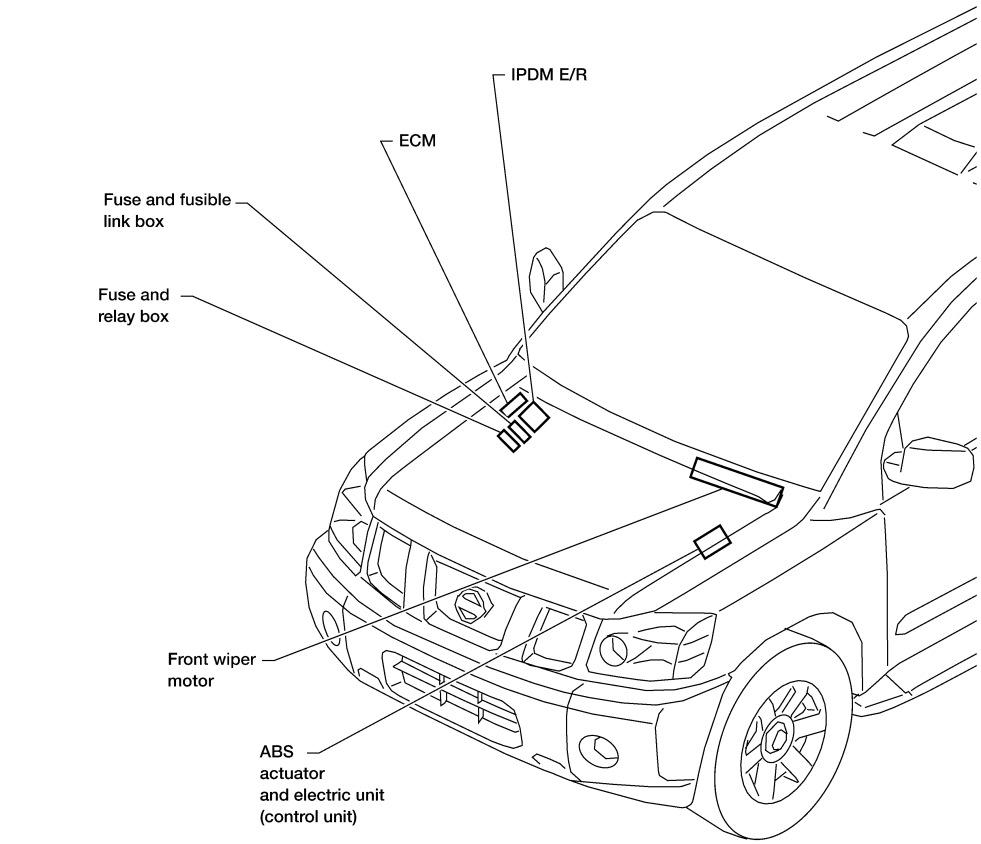
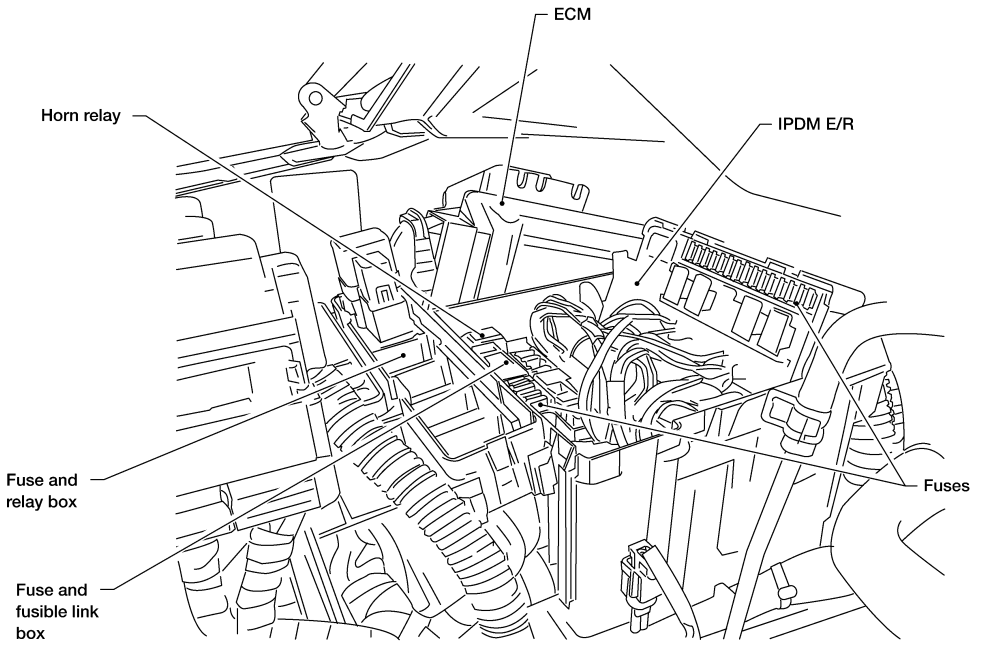
ENGINE COMPARTMENT





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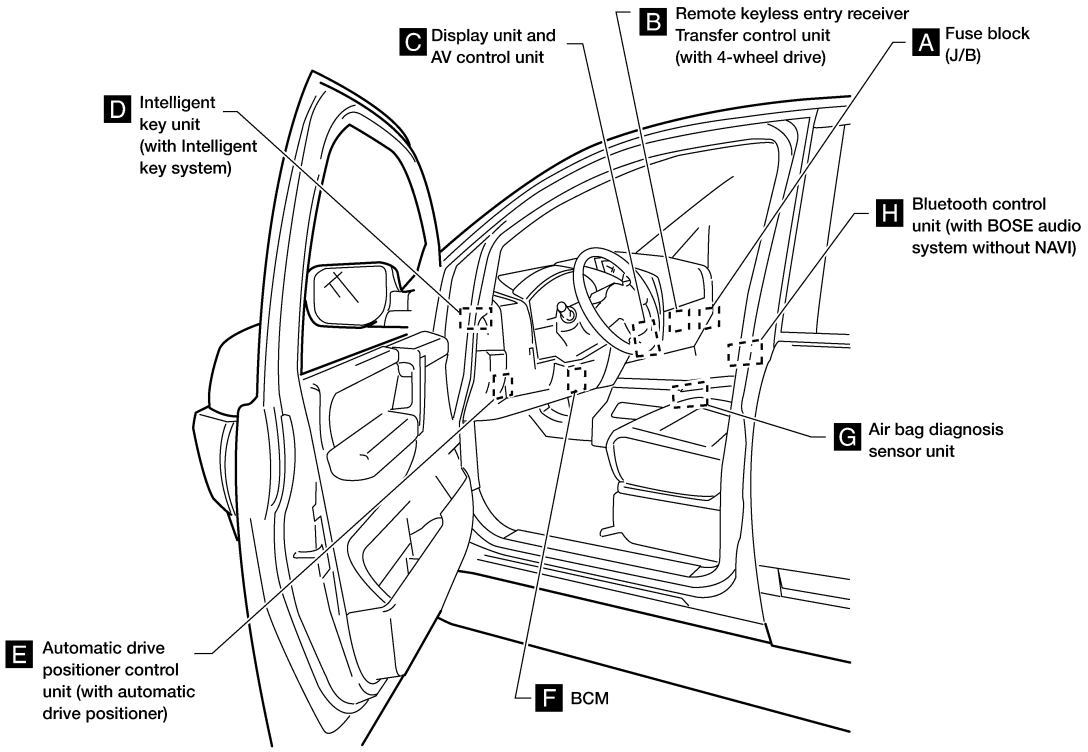
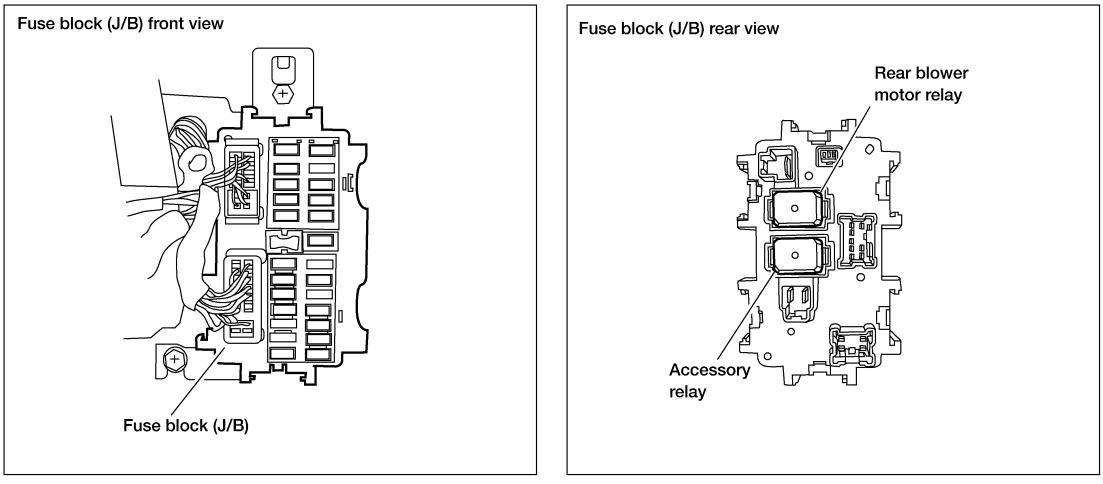


A Instrument panel side RH



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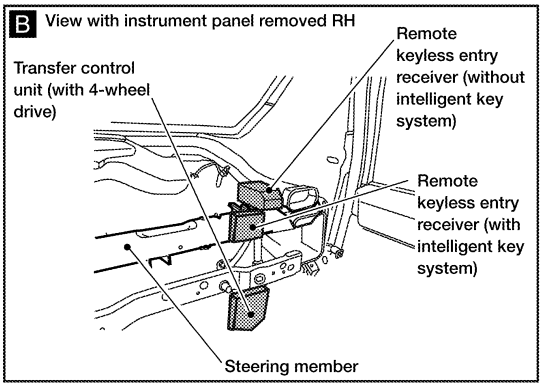
B View with instrument panel removed RH



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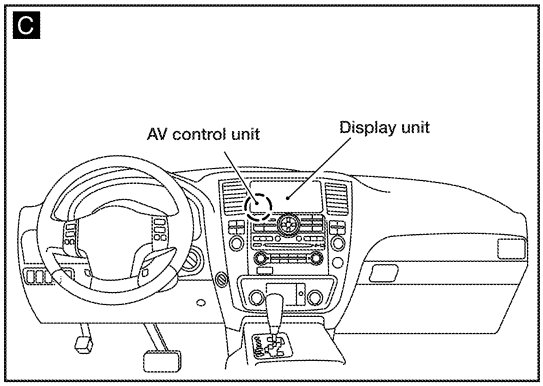
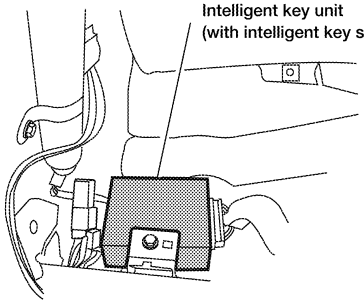
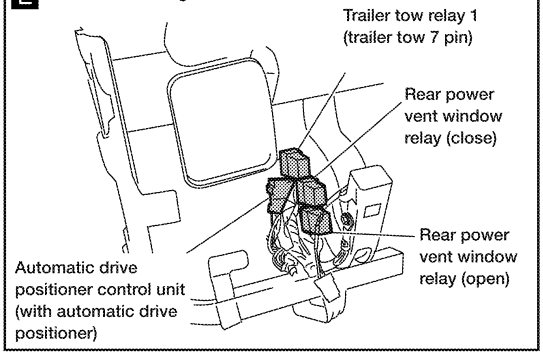


D View with instrument panel removed LH



E View with steering member removed LH



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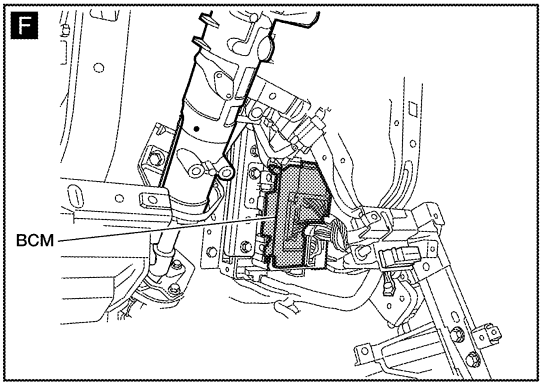
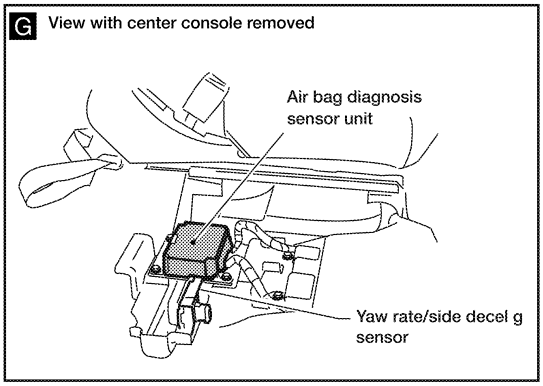
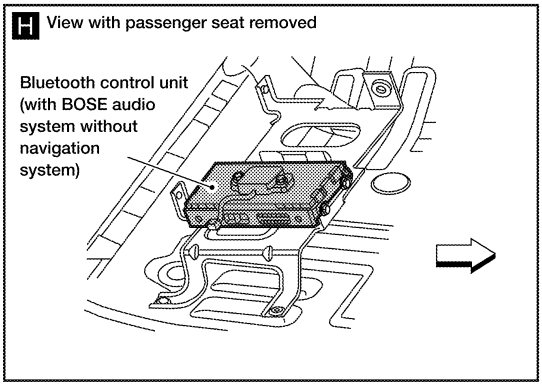


G View with center console removed



H View with passenger seat removed



ABMIA1148GB

HARNESS CONNECTOR

Description

INFOID:0000000004918871

HARNESS CONNECTOR (TAB-LOCKING TYPE)

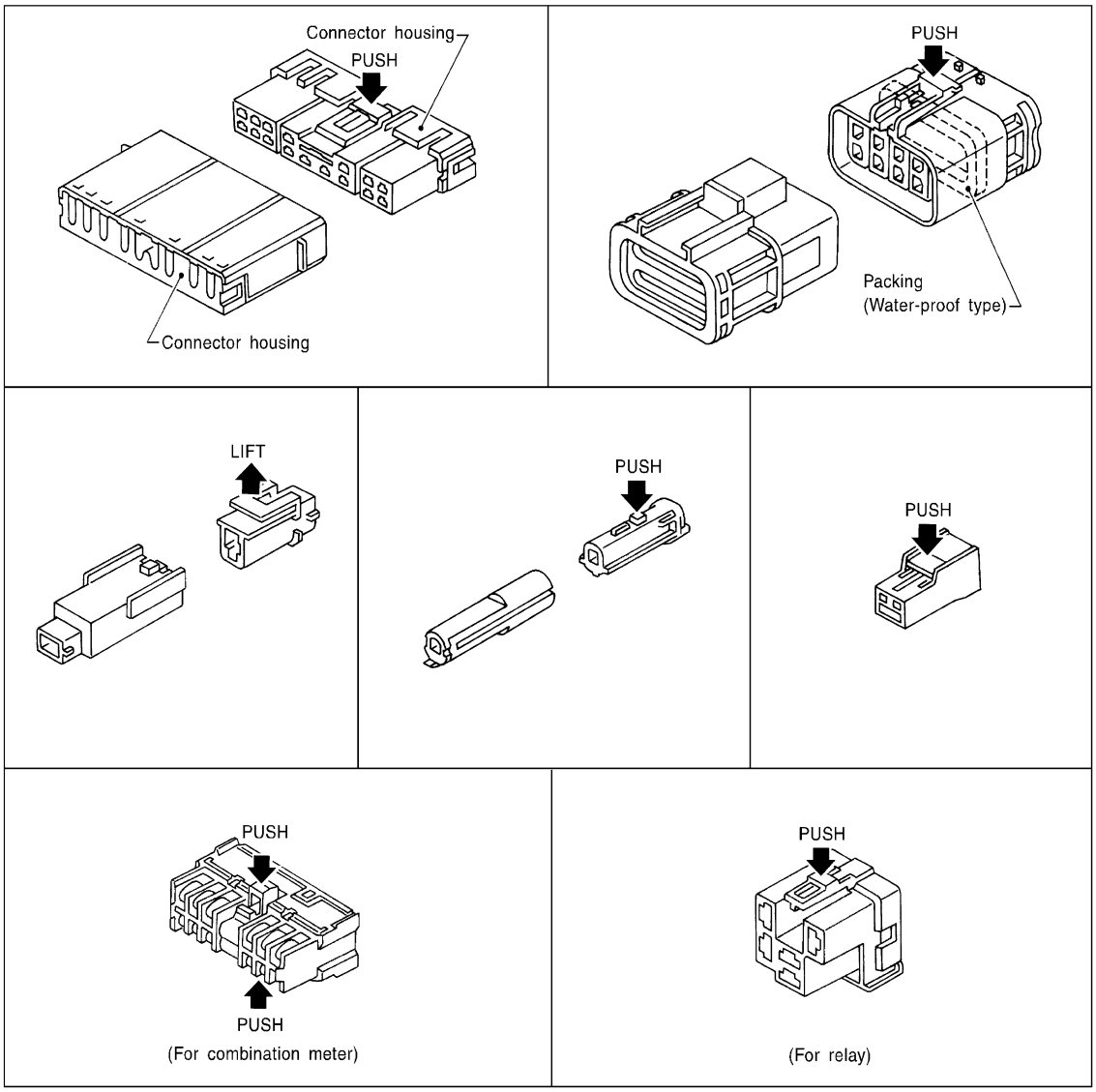
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

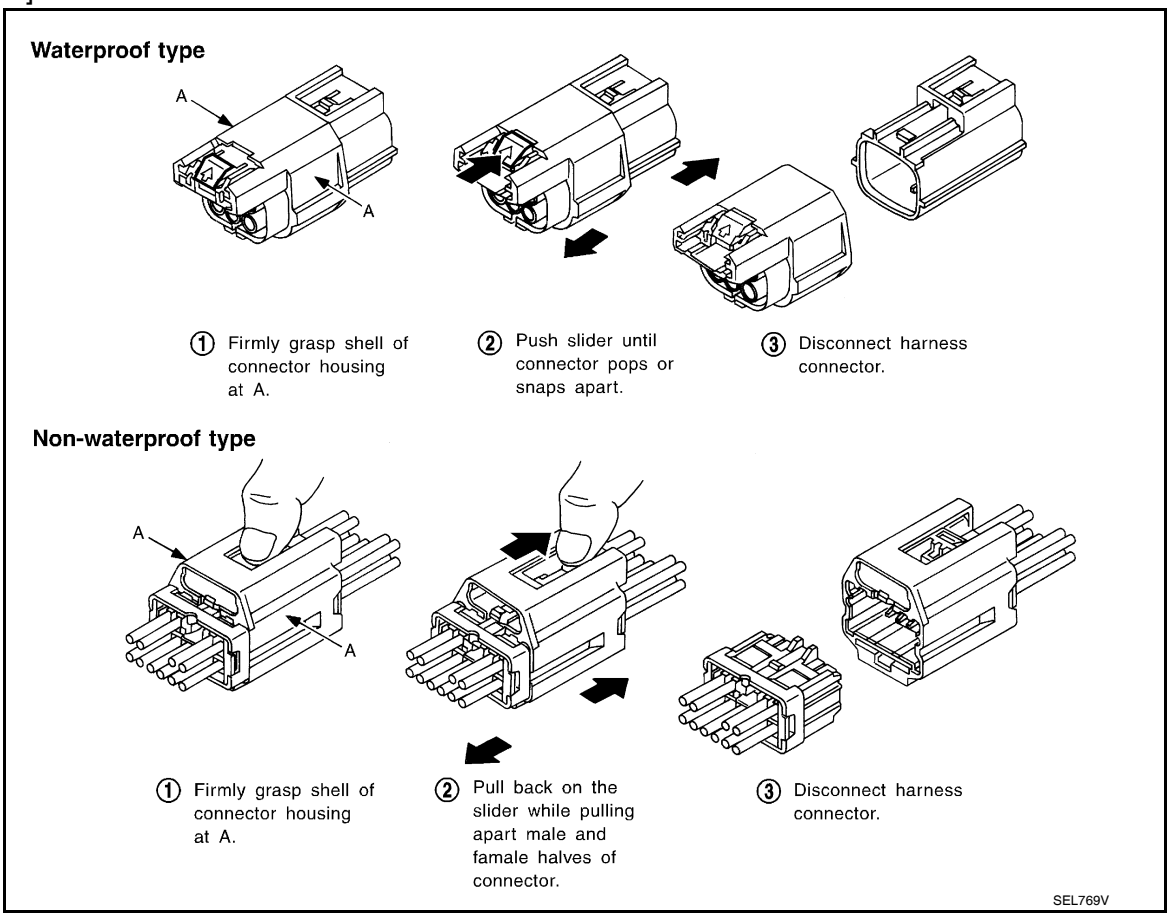
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]

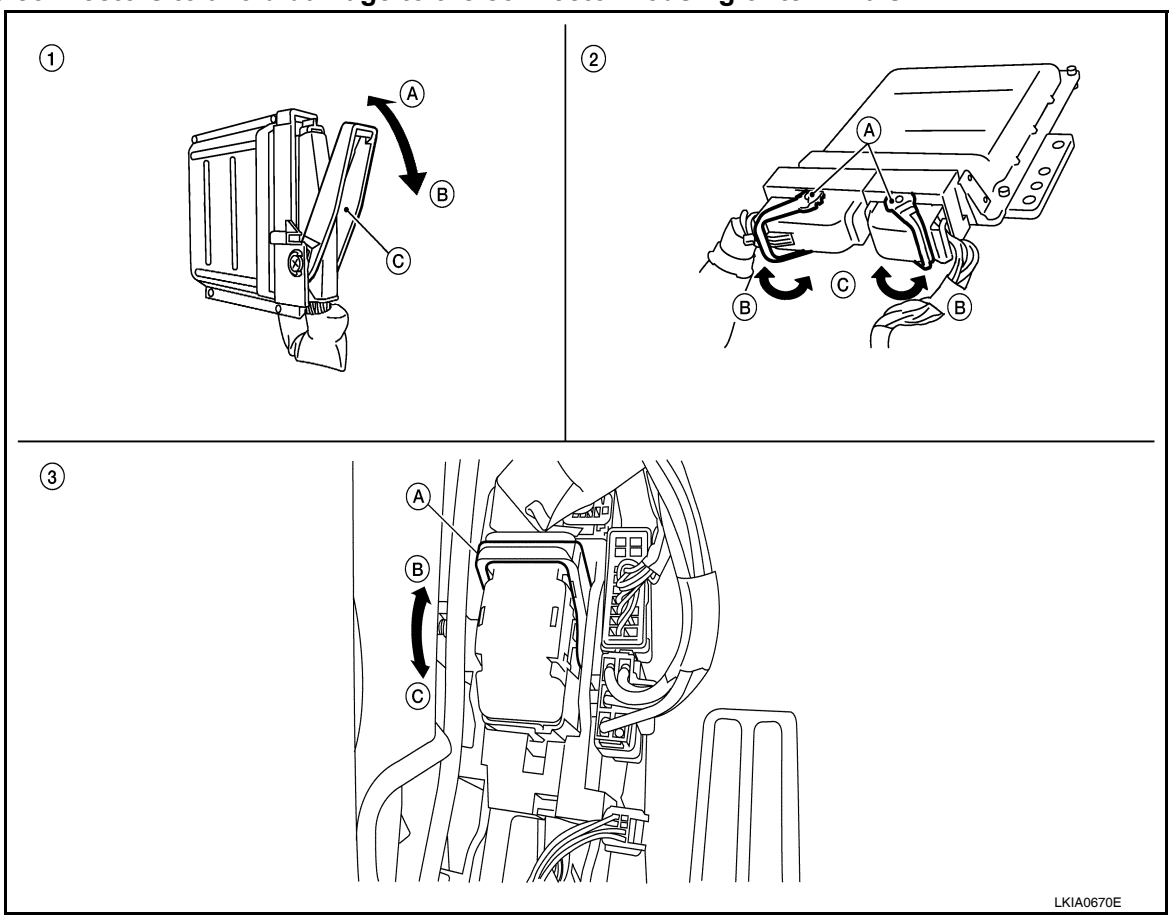


HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

CAUTION:

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



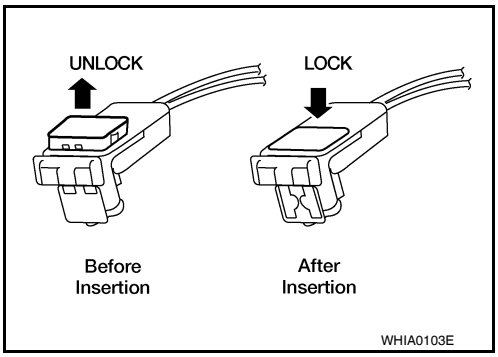
1. Control unit with single lever
   A. Fasten
   B.Loosen
   C.Lever
2. Control unit with dual lever
   A. Fasten
   B.Loosen
   C.Lever
3. SMJ connector
   A. Fasten
   B.Loosen
   C.Lever

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.**



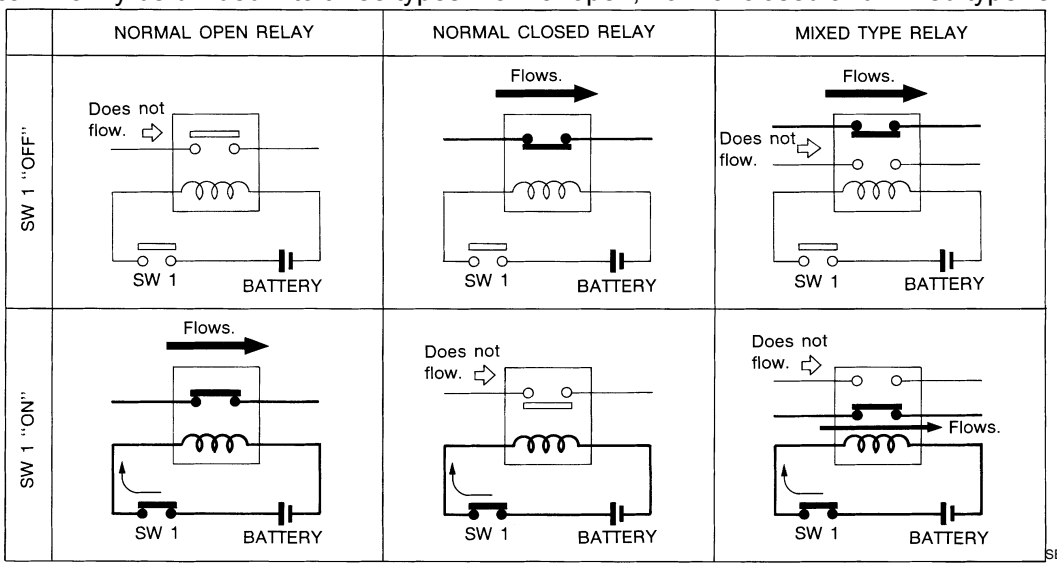
STANDARDIZED RELAY

Description

INFOID:0000000004918872

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

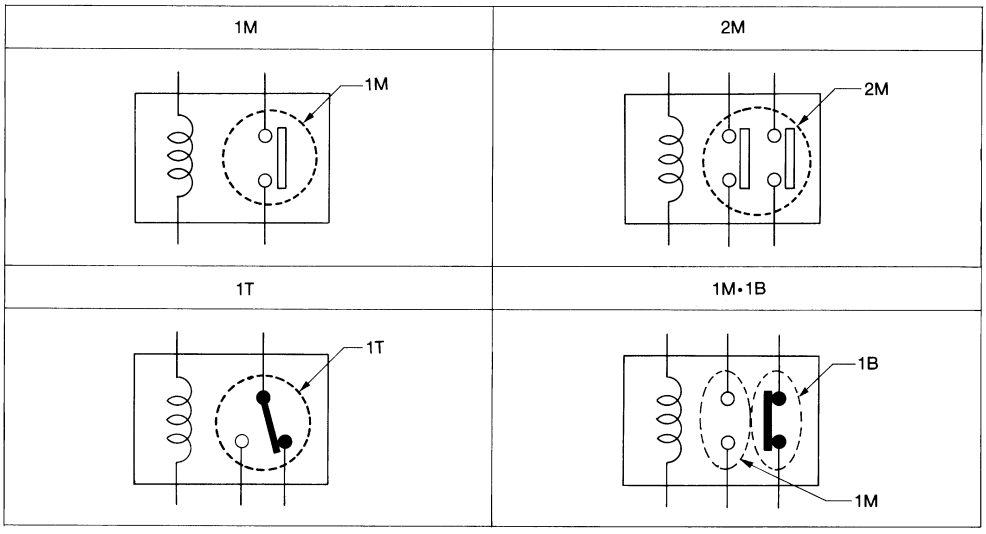
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



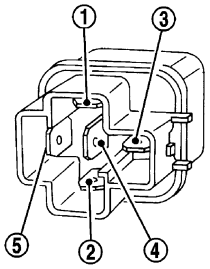
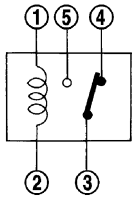
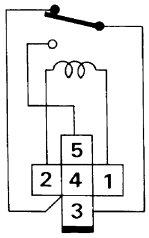
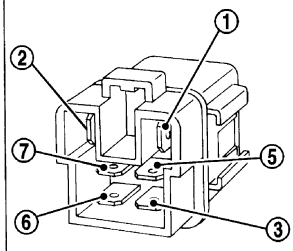
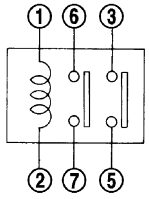
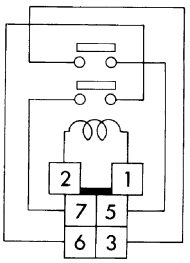
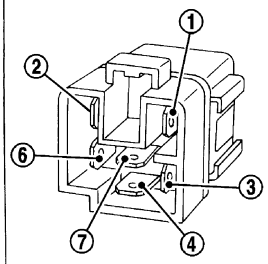
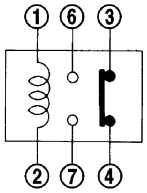
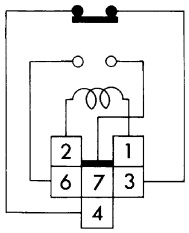
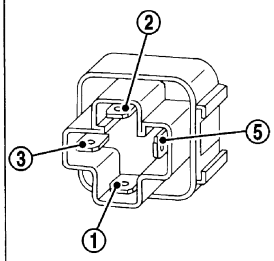
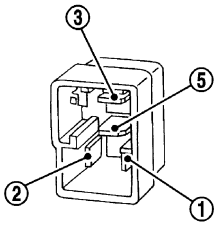
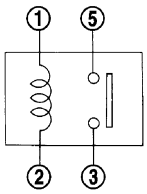
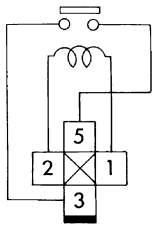
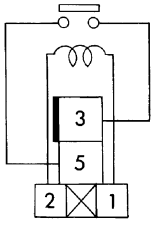
SEL881H

TYPE OF STANDARDIZED RELAYS

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



SEL882H

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

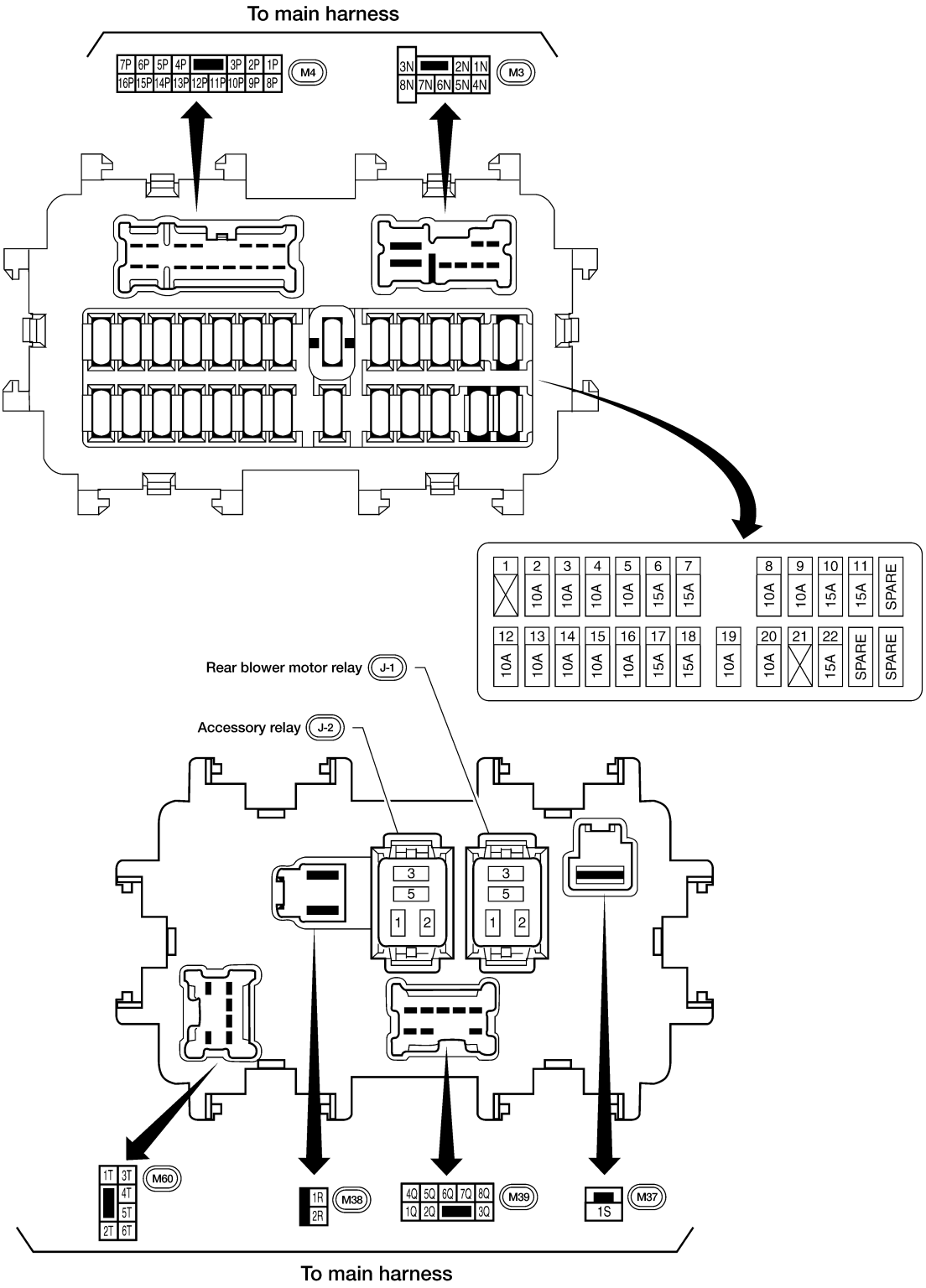
The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000004918873



ABMIA1149GB

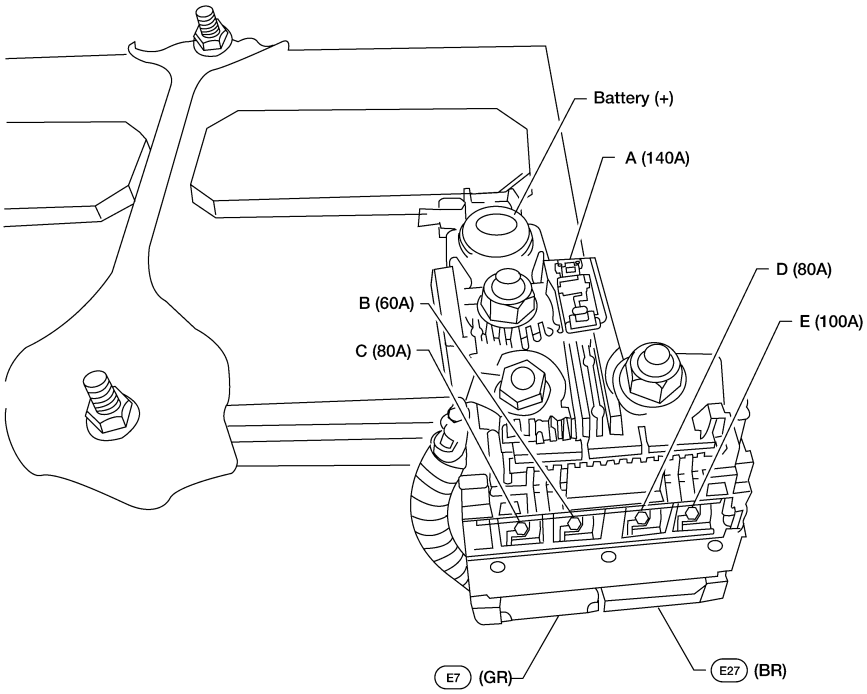
FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement

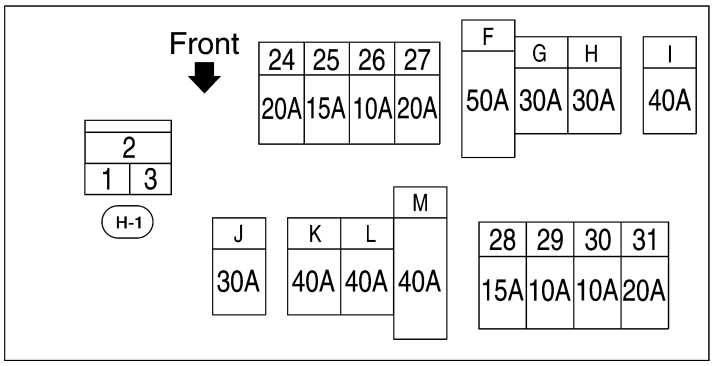
INFOID:0000000004918874

FUSE AND FUSIBLE LINK BOX

FUSIBLE LINK BOX (BATTERY)

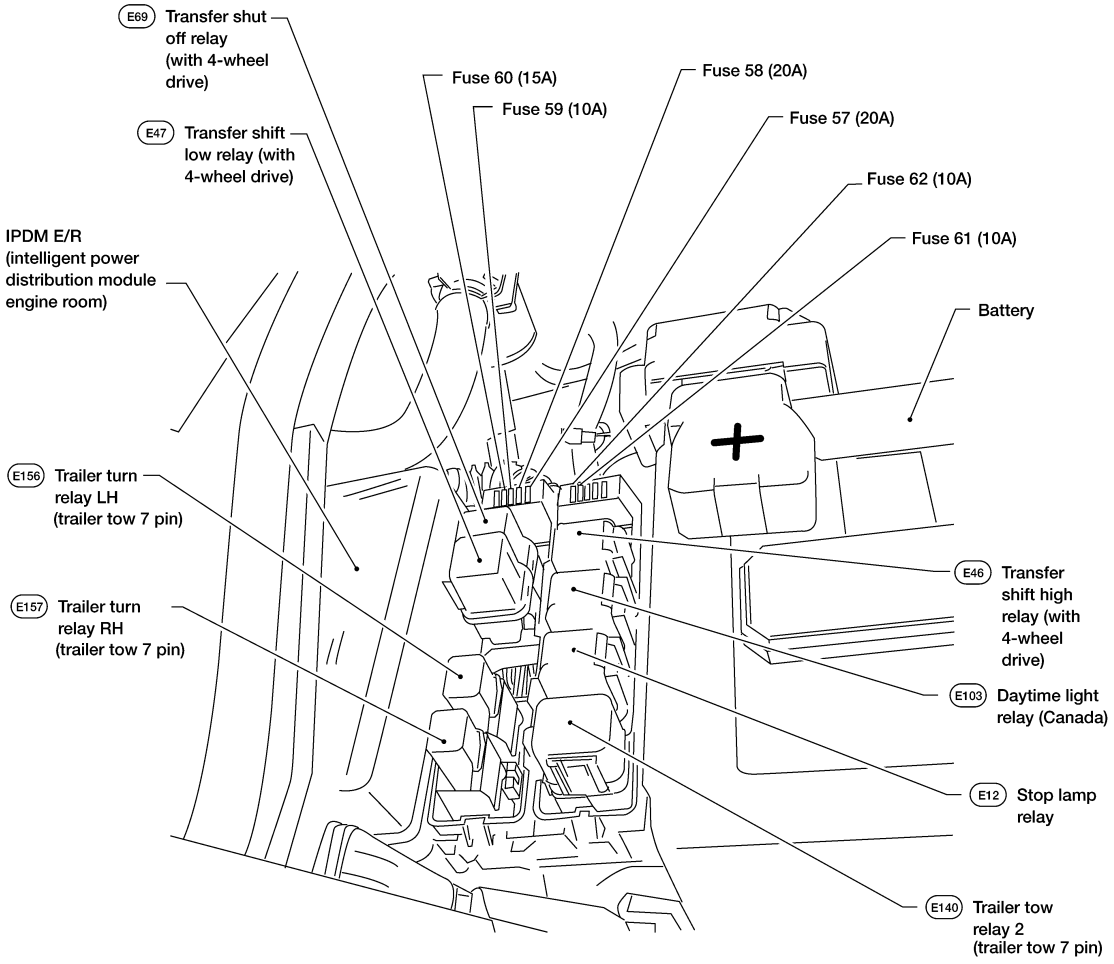


FUSE AND FUSIBLE LINK BOX



24 - 31 : FUSE F - M : FUSIBLE LINK

ABMIA1166GB

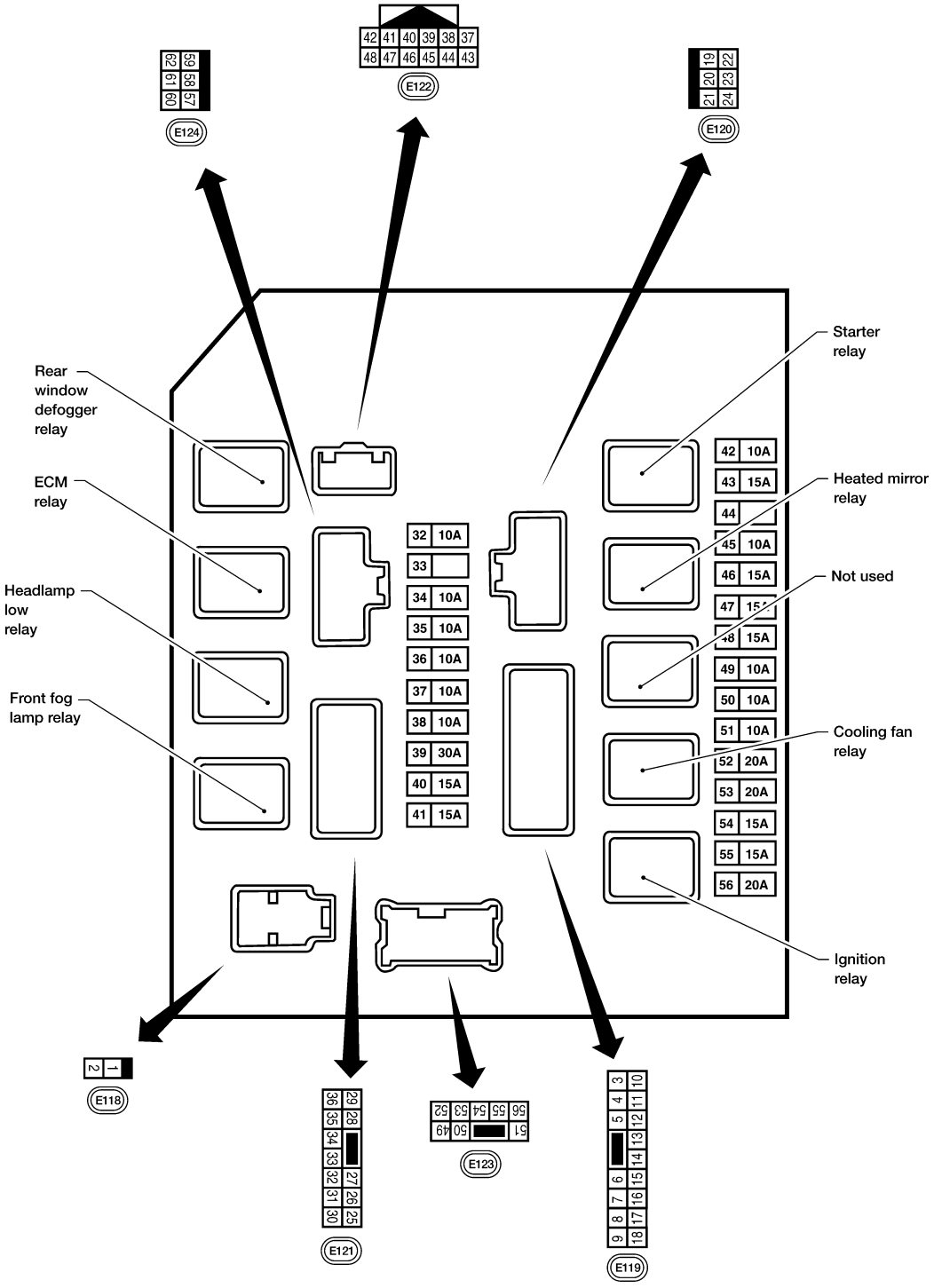


ABMIA1150GB

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

IPDM E/R Terminal Arrangement - Type A

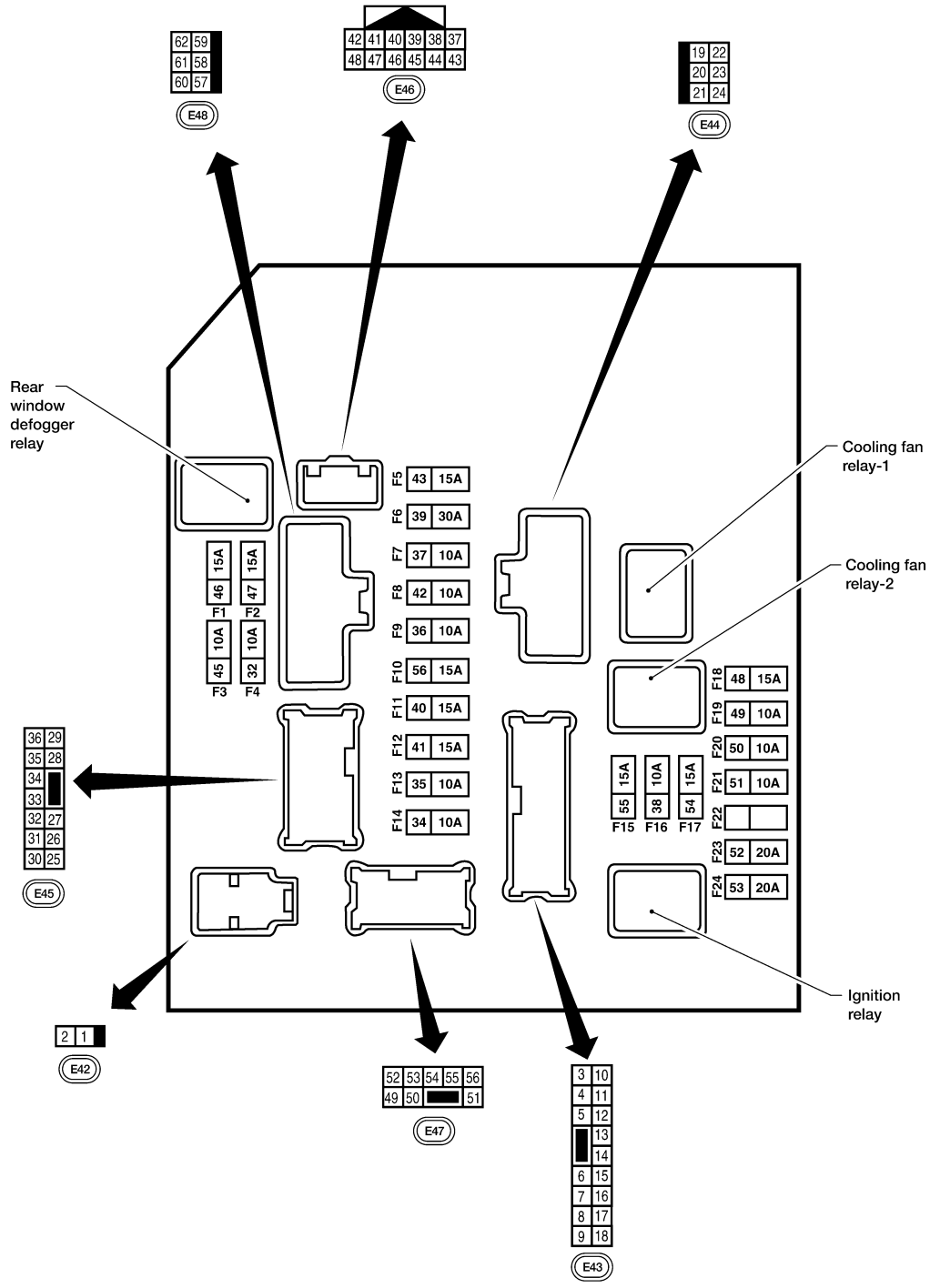
INFOID:0000000005369254



WKIA5852E

IPDM E/R Terminal Arrangement - Type B

INFOID:0000000005369255



AAMIA0364GB

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.

ON-VEHICLE REPAIR

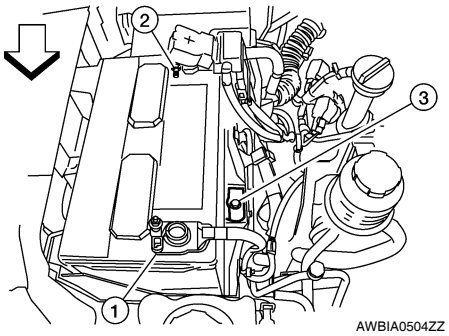
BATTERY

Removal and Installation

INFOID:0000000004918875

REMOVAL

1. Disconnect the negative battery terminal (1) and positive battery terminal (2).
   CAUTION:
   Remove negative battery terminal first.



   ⇦ **: Front**

2. Remove the battery cover.
3. Remove the battery clamp bolt (3) and battery clamp.
4. Remove the battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
When installing, install the positive battery terminal first.

Battery clamp bolt	**: 14.7 N·m (1.5 kg-m, 11 ft-lb)**
Battery terminal nut	**: 3.5 N·m (0.36 kg-m, 31 in-lb)**

Reset electronic systems as necessary. Refer to PG-8, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Battery

INFOID:0000000004918876

	Standard battery	Heavy duty battery (LE models and FFV equipped vehicles)
Type	Gr. 24	Gr. 27F
Capacity (20 HR) minimum V-AH	72	80
Cold cranking current A (For reference value)	650	710