

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTION	3	FUSE BLOCK - JUNCTION BOX (J/B)	81	A
PRECAUTIONS	3	Terminal Arrangement	81	B
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	FUSE, FUSIBLE LINK AND RELAY BOX	82	C
PREPARATION	4	Terminal Arrangement	82	D
PREPARATION	4	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	85	E
Special Service Tools	4	IPDM E/R Terminal Arrangement	85	F
Commercial Service Tool	4	BASIC INSPECTION	86	G
SYSTEM DESCRIPTION	5	BATTERY	86	H
COMPONENT PARTS	5	How to Handle Battery	86	I
Circuit Breaker	5	Work Flow	86	J
Battery	5	INSPECTION AND ADJUSTMENT	89	K
Harness Connector	5	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	89	L
Standardized Relay	8	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	89	PG
WIRING DIAGRAM	11	REMOVAL AND INSTALLATION	90	N
POWER SUPPLY ROUTING CIRCUIT	11	BATTERY	90	O
Wiring Diagram - BATTERY POWER SUPPLY -	11	Exploded View	90	P
Wiring Diagram - ACCESSORY POWER SUPPLY -	19	Removal and Installation	90	
Wiring Diagram - IGNITION POWER SUPPLY -	23	BATTERY TRAY	92	
GROUND	35	Removal and Installation	92	
Ground Distribution	35	BATTERY TERMINAL WITH FUSIBLE LINK ...	93	
HARNES	50	Exploded View	93	
Harness Layout	50	Removal and Installation	93	
ELECTRICAL UNITS LOCATION	73	BATTERY CURRENT SENSOR	94	
Electrical Units Location	73	Exploded View	94	
HARNES CONNECTOR	76	Removal and Installation	94	
Description	76	SERVICE DATA AND SPECIFICATIONS (SDS)	95	
STANDARDIZED RELAY	79			
Description	79			

SERVICE DATA AND SPECIFICATIONS

(SDS) 95

Battery 95

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000009175283

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. 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.

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

PREPARATION

< PREPARATION >

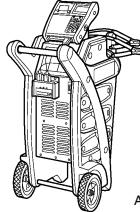
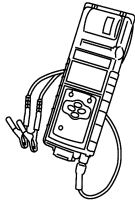
PREPARATION

PREPARATION

Special Service Tools


INFOID:000000009175284

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
<p>— (—) Model GR8-1200 NI Multitasking battery and electrical diagnostic station</p>  <p style="text-align: right;">AWIIA1239ZZ</p>	<p>Tests batteries, starting and charging systems and charges batteries. For operating instructions, refer to diagnostic station instruction manual.</p>
<p>— (—) Model EXP-800 NI Battery and electrical diagnostic analyzer</p>  <p style="text-align: right;">JSMIA0806ZZ</p>	<p>Tests batteries and charging systems. For operating instructions, refer to diagnostic analyzer instruction manual.</p>

Commercial Service Tool

INFOID:000000009175285

Tool name	Description
<p>Power tool</p>  <p style="text-align: right;">PIIB1407E</p>	<p>Loosening nuts, screws and bolts</p>

COMPONENT PARTS

< SYSTEM DESCRIPTION >

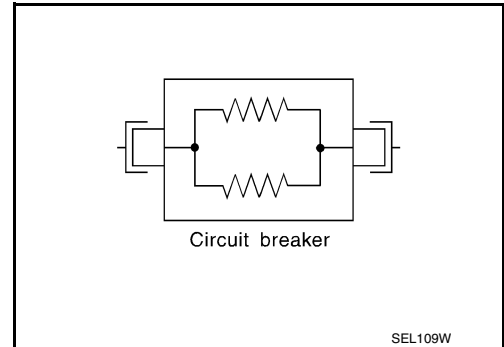
SYSTEM DESCRIPTION

COMPONENT PARTS

Circuit Breaker

INFOID:000000009175286

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.



Battery

INFOID:000000009175287

Type		115D31R
20 hour rate capacity	[V – Ah]	12 – 82
Cold cranking current (For reference value)	[A]	782

Harness Connector

INFOID:000000009175288

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.

CAUTION:

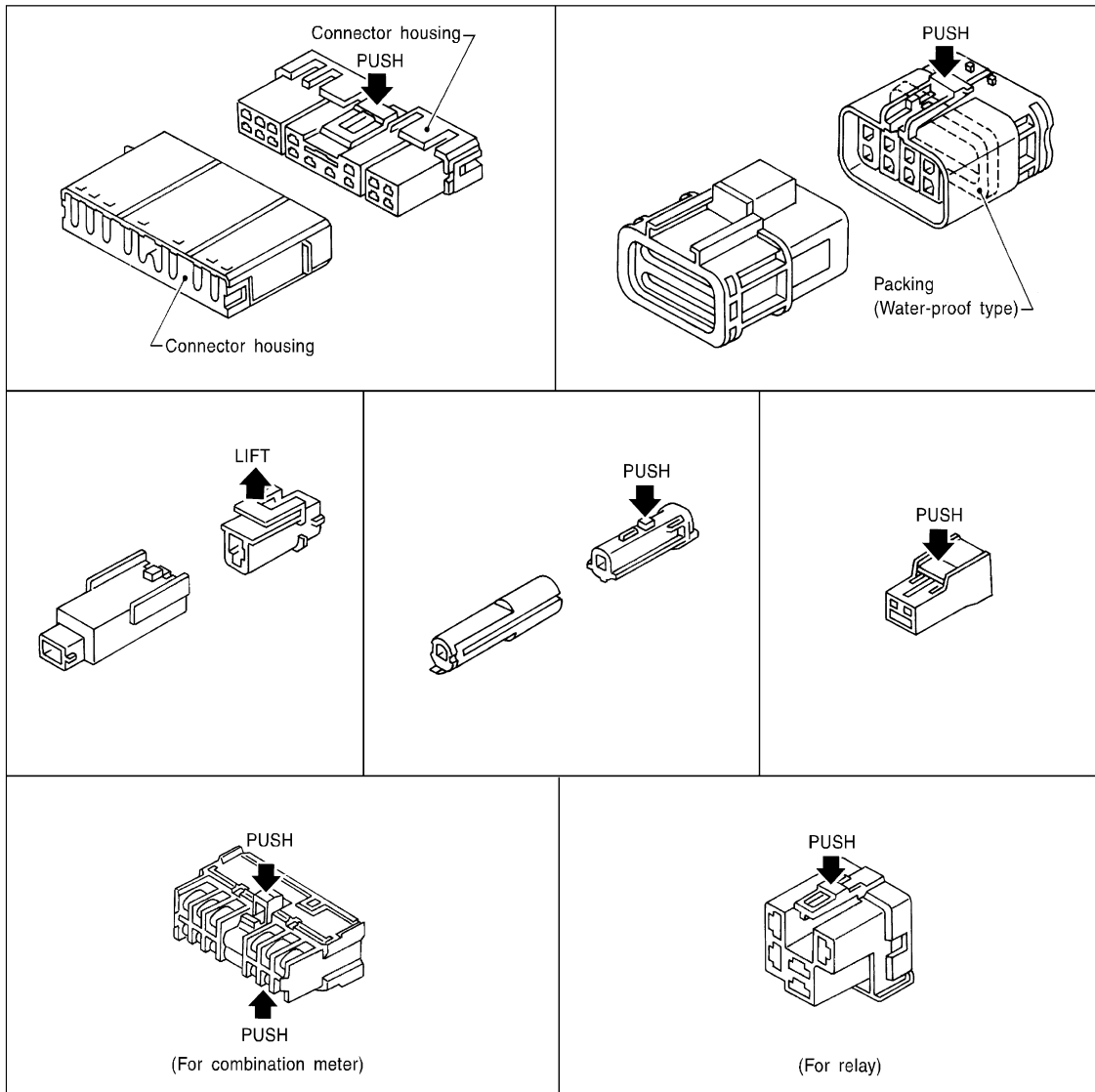
Never pull the harness or wires when disconnecting the connector.

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

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.

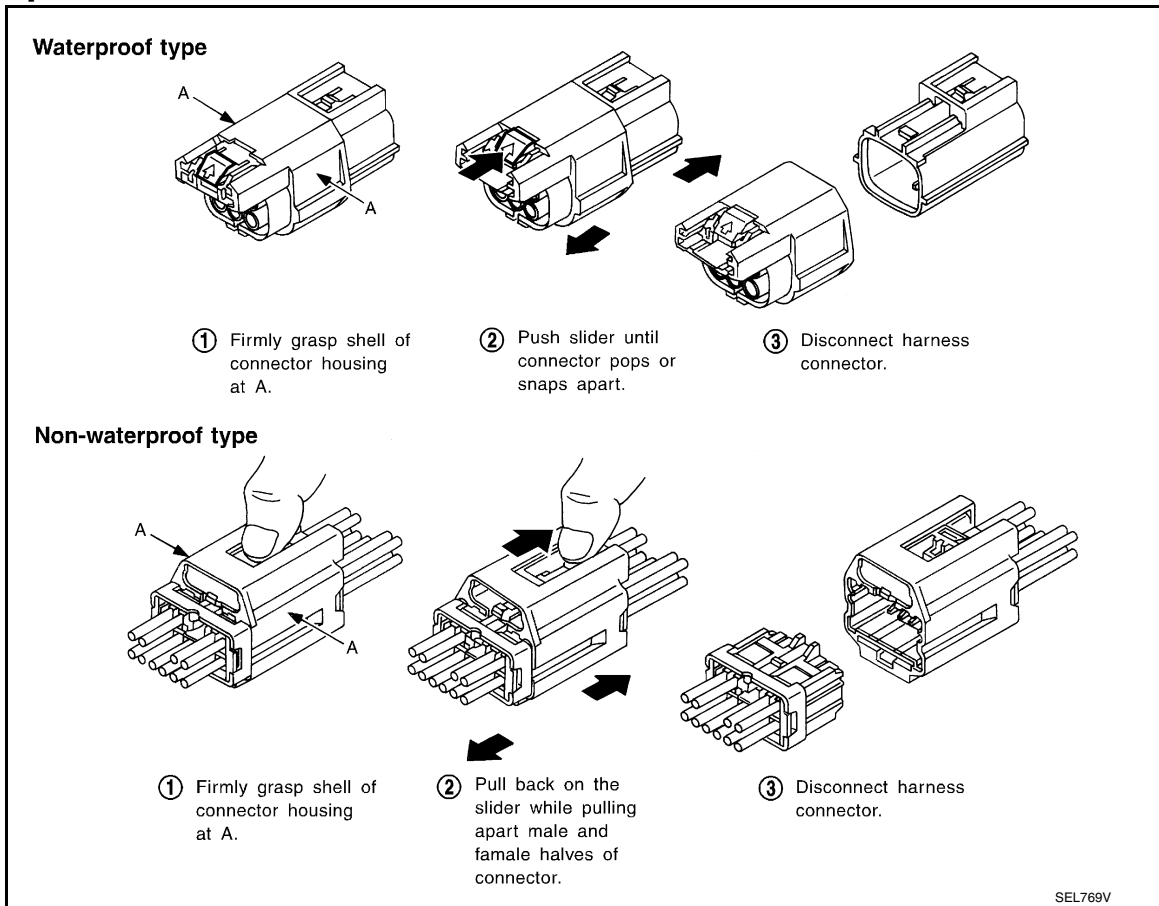
CAUTION:

- **Never 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:

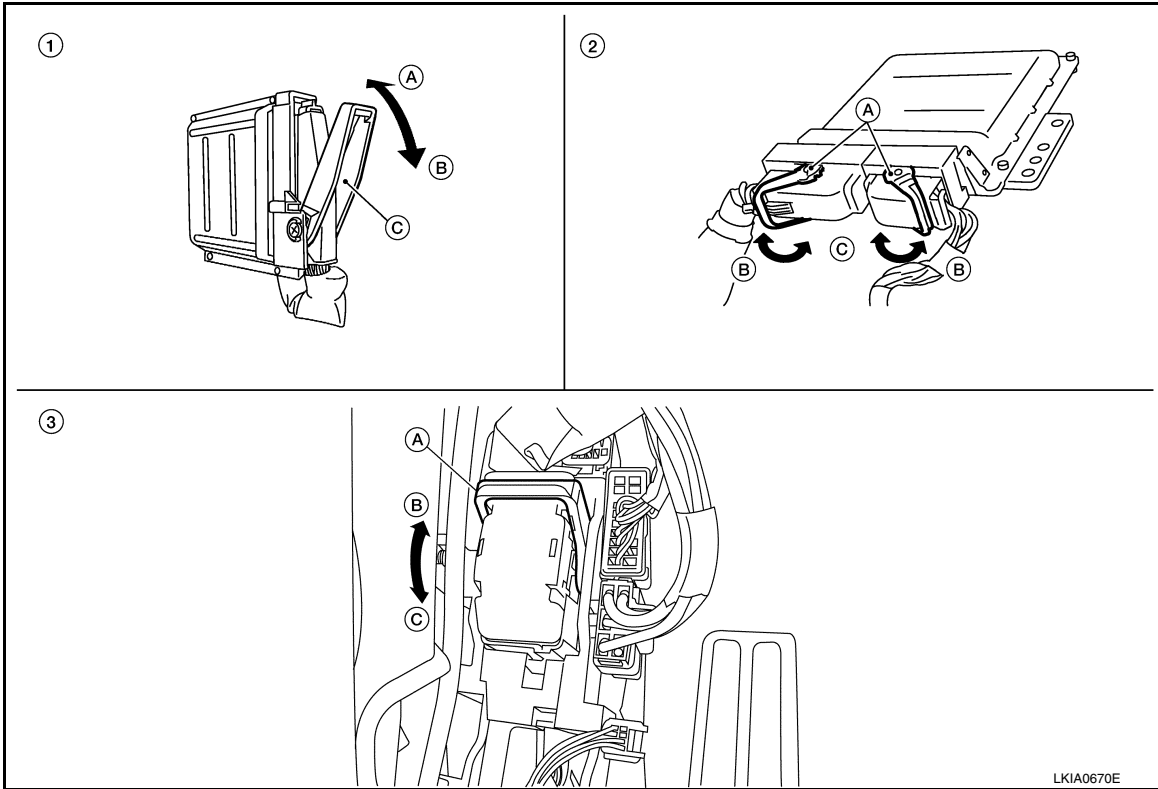
A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

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.



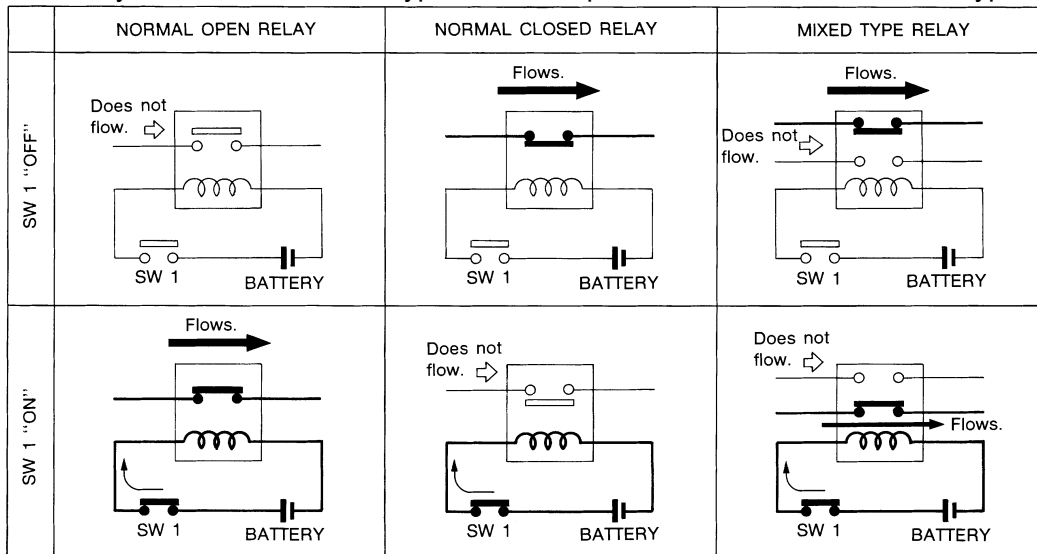
- | | | |
|--|--|---|
| <p>1. Control unit with single lever</p> <p>A. Fasten</p> <p>B. Loosen</p> <p>C. Lever</p> | <p>2. Control unit with dual levers</p> <p>A. Levers</p> <p>B. Fasten</p> <p>C. Loosen</p> | <p>3. SMJ connector</p> <p>A. Lever</p> <p>B. Fasten</p> <p>C. Loosen</p> |
|--|--|---|

Standardized Relay

INFOID:000000009175289

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



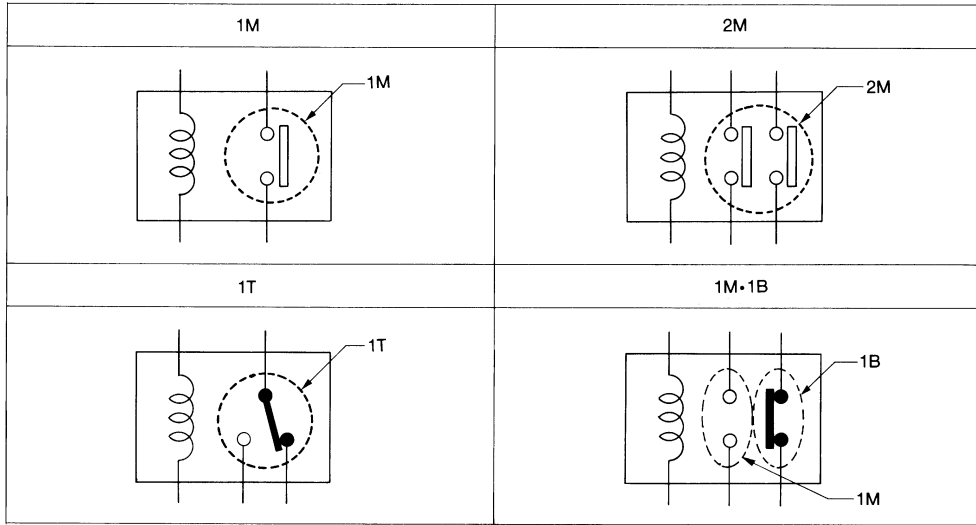
SEL881H

TYPE OF STANDARDIZED RELAYS

COMPONENT PARTS

< SYSTEM DESCRIPTION >

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

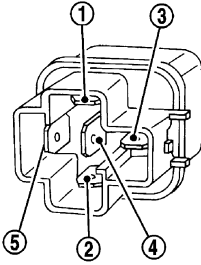
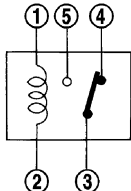
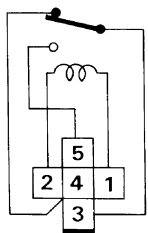
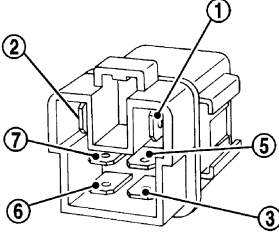
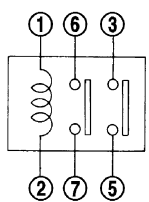
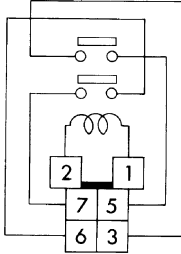
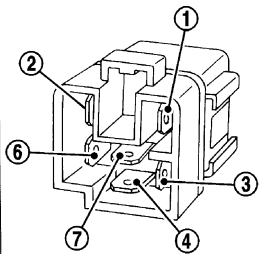
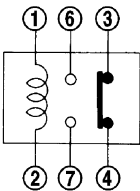
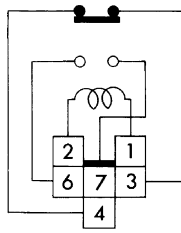
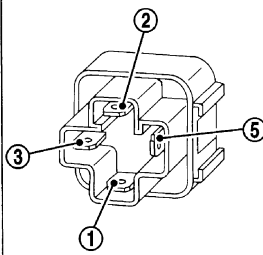
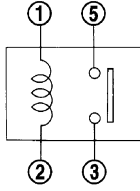
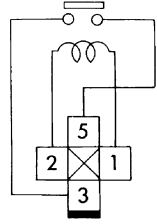
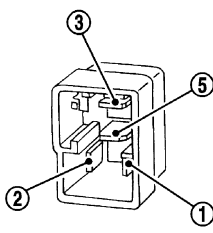
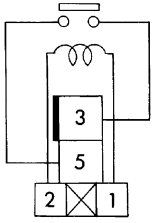


SEL882H

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

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

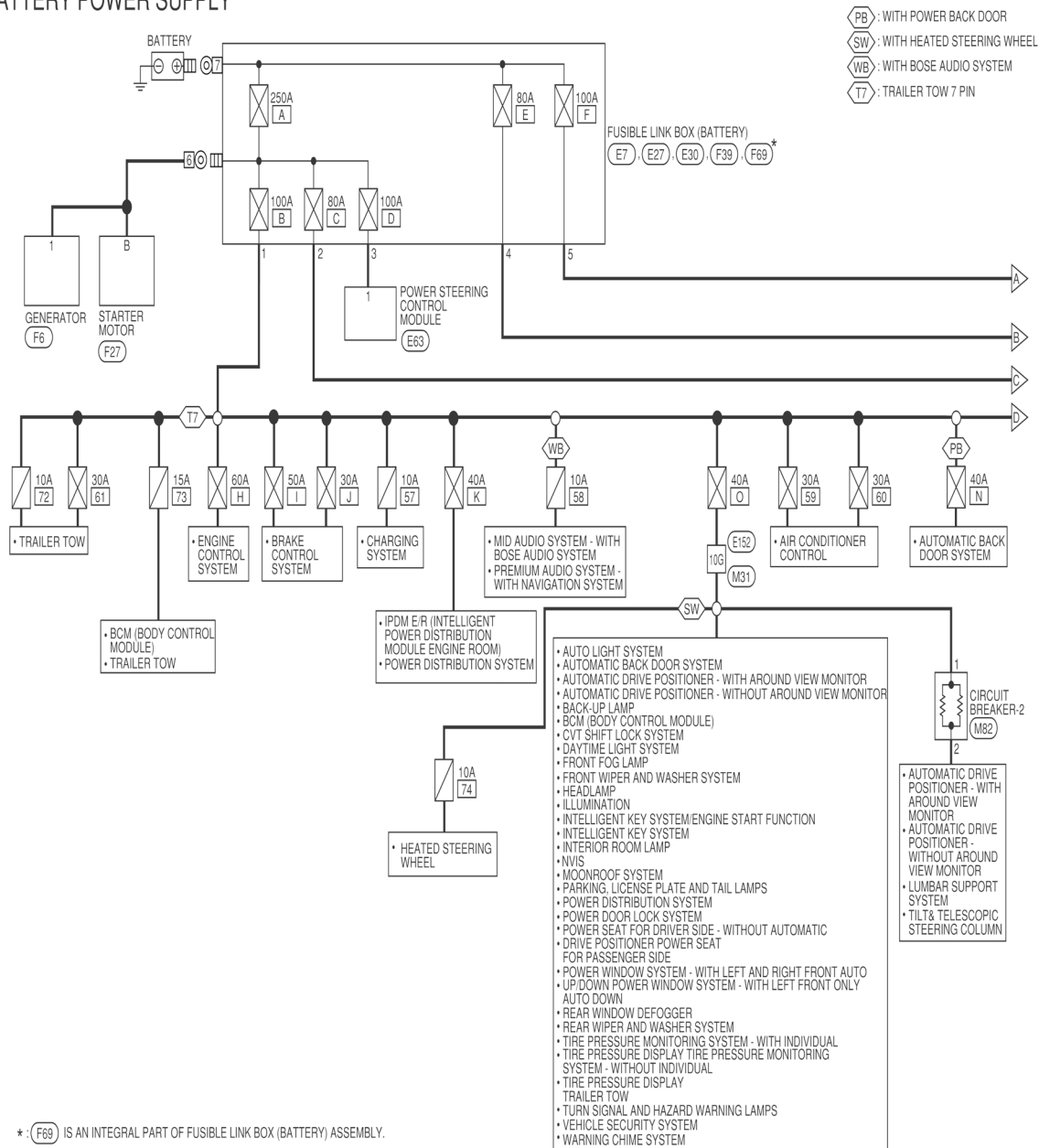
< WIRING DIAGRAM >

WIRING DIAGRAM

POWER SUPPLY ROUTING CIRCUIT

Wiring Diagram - BATTERY POWER SUPPLY - BATTERY POWER SUPPLY

INFOID:000000009175290



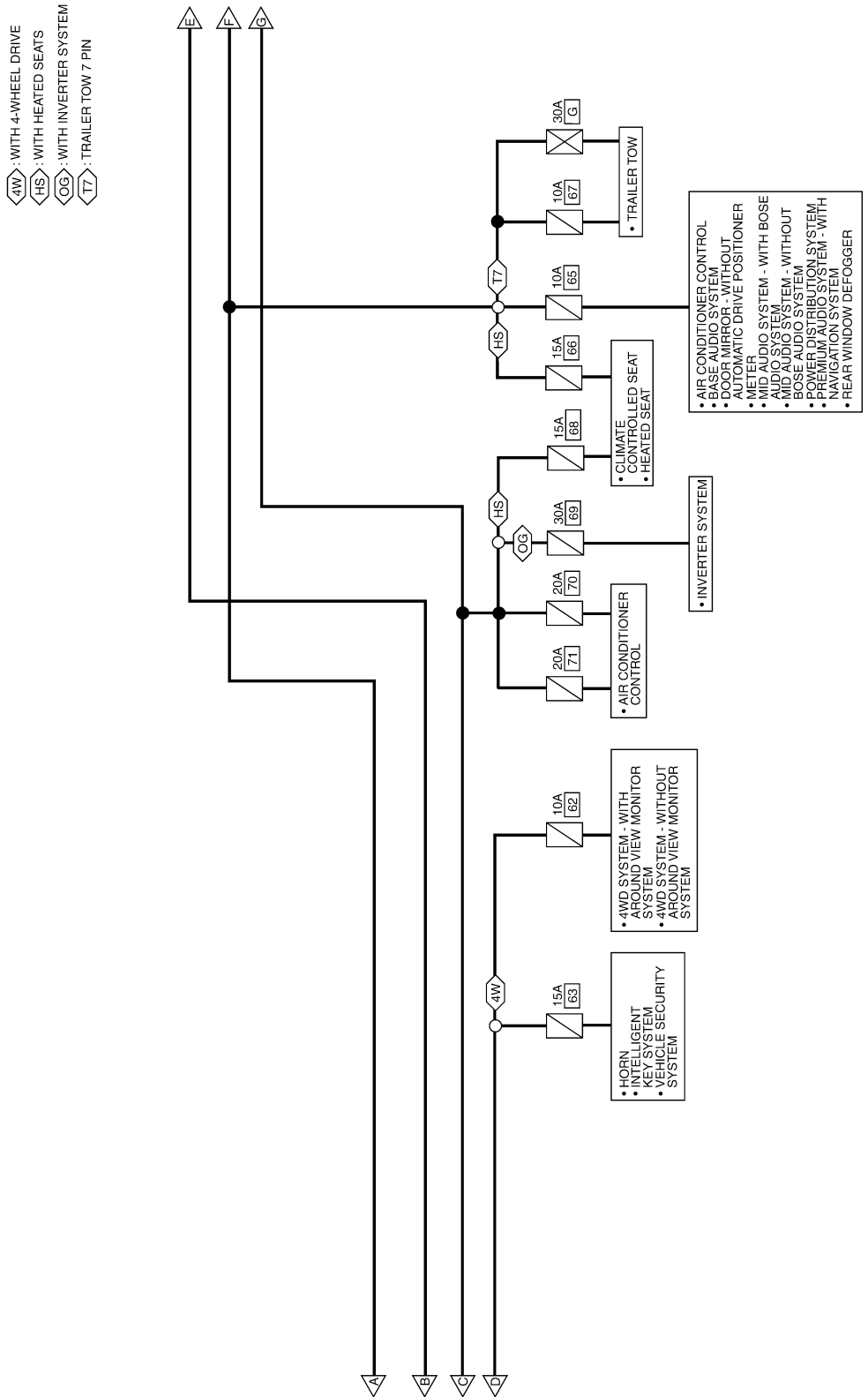
A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

ABMWA2116GB

POWER SUPPLY ROUTING CIRCUIT

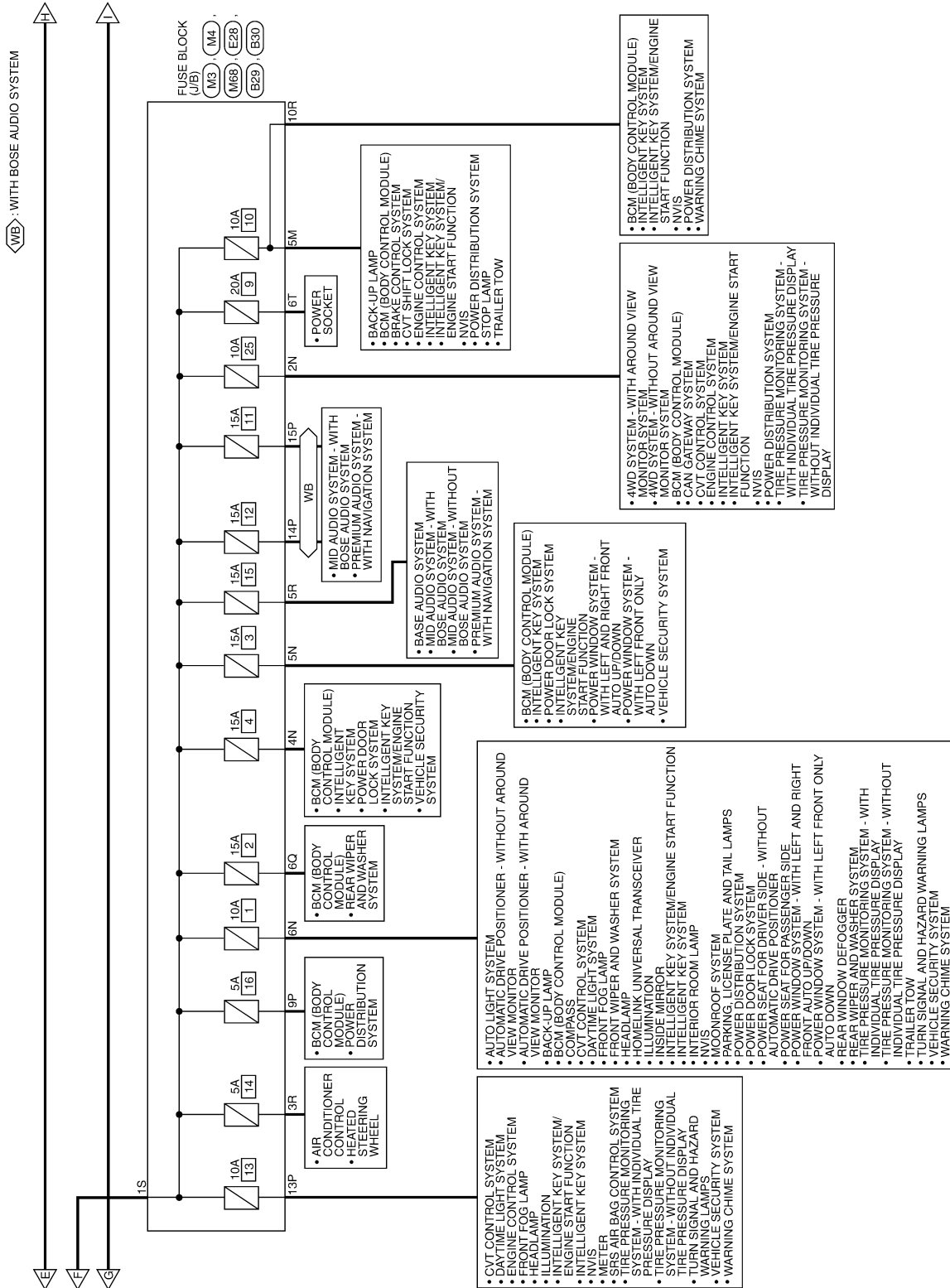
< WIRING DIAGRAM >



ABMWA2117GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



ABMWA2118GB

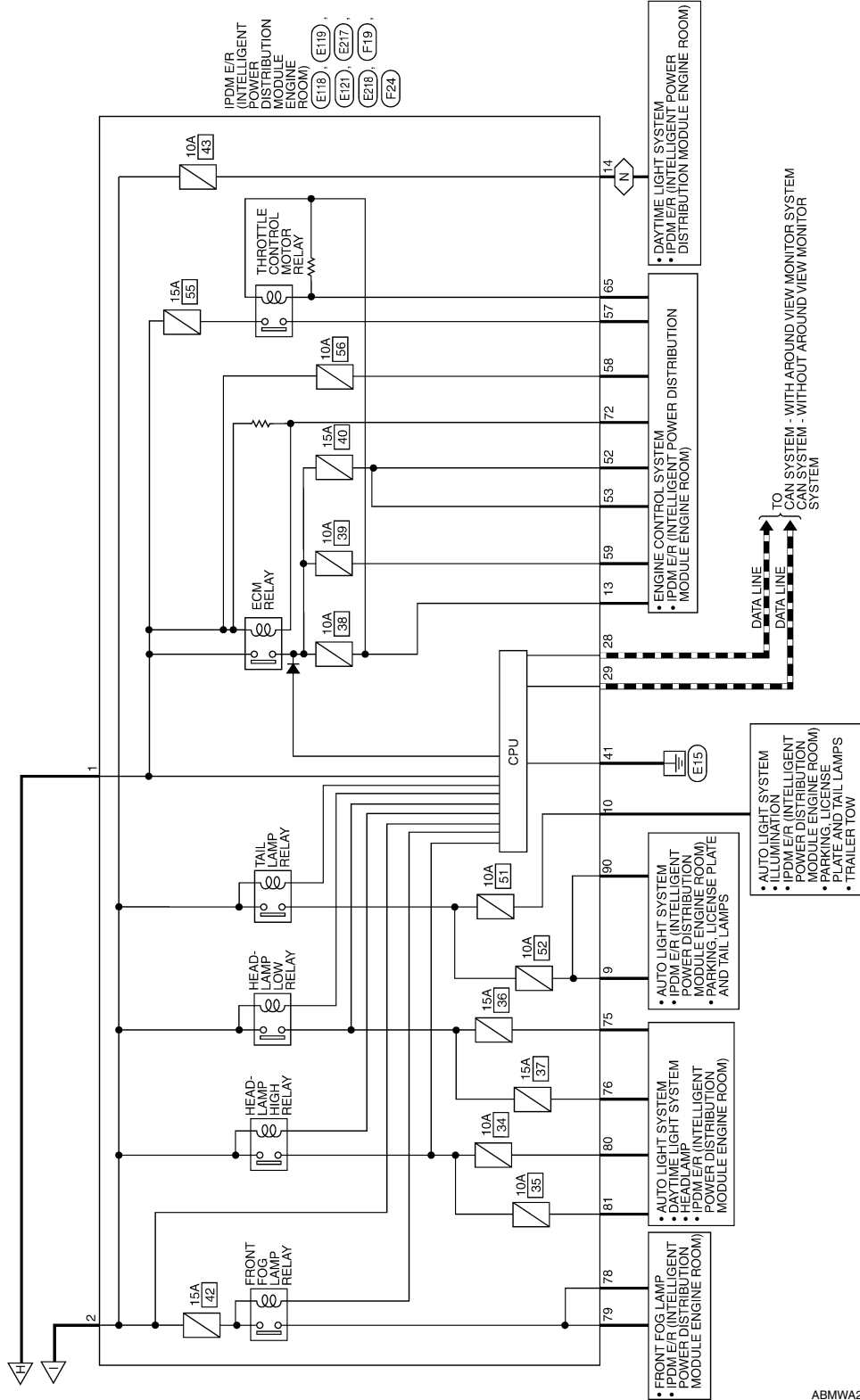
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

PG

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

N : FOR CANADA



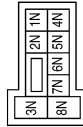
ABMWA2119GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

BATTERY POWER SUPPLY CONNECTORS

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



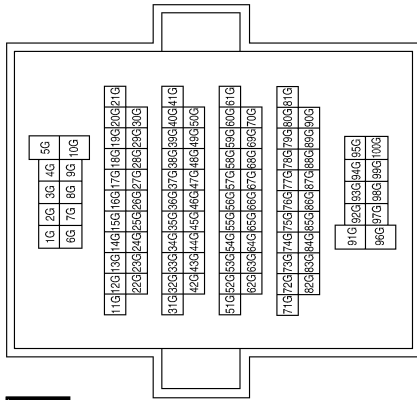
Terminal No.	Color of Wire	Signal Name
2N	BG	-
4N	V	-
5N	Y	-
6N	W	-

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



Terminal No.	Color of Wire	Signal Name
9P	L	-
13P	W	-
14P	Y	-
15P	L	-

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



Terminal No.	Color of Wire	Signal Name
10G	W	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
3R	G	-
5R	Y	-
10R	W	-

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



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

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



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

A B C D E F G H I J K L N O P PG

POWER SUPPLY ROUTING CIRCUIT

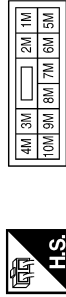
< WIRING DIAGRAM >

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



Terminal No.	5	Color of Wire	W	Signal Name	-
--------------	---	---------------	---	-------------	---

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	5M	Color of Wire	Y	Signal Name	-
--------------	----	---------------	---	-------------	---

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



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

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



19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

Terminal No.	28	Color of Wire	P	Signal Name	CAN-L
29	L				CAN-H
41	B				GND (SIGNAL)

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



1	2
---	---

Terminal No.	1	Color of Wire	R	Signal Name	F/L MAIN
2	L				F/L USM

Connector No.	E63
Connector Name	POWER STEERING CONTROL MODULE
Connector Color	BLACK



Terminal No.	1	Color of Wire	W	Signal Name	+B
--------------	---	---------------	---	-------------	----

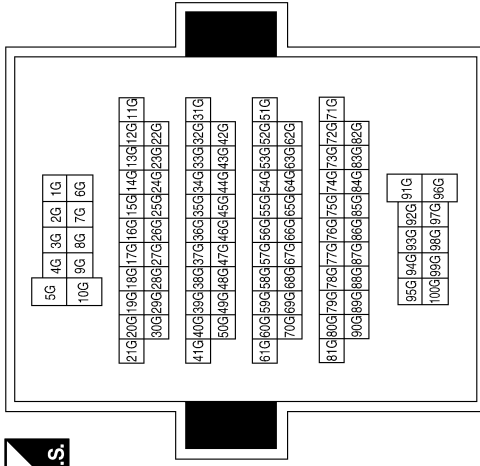
ABMIA4883GB

POWER SUPPLY ROUTING CIRCUIT

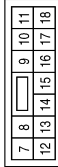
< WIRING DIAGRAM >

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

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



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

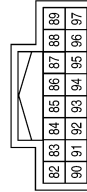


Terminal No.	Color of Wire	Signal Name
9	G	TAIL RH
10	L	TAIL LH
13	LG	ECM VB
14	LG	DTRL

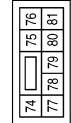
Connector No.	F6
Connector Name	GENERATOR
Connector Color	-



Connector No.	E218
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Connector No.	E217
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



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

Terminal No.	Color of Wire	Signal Name
90	LG	CLEARANCE

Terminal No.	Color of Wire	Signal Name
75	R	HEADLAMP LO RH
76	L	HEADLAMP LO LH
78	W	FR FOG LAMP RH
79	L	FR FOG LAMP LH
80	W	HEADLAMP HI RH
81	G	HEADLAMP HI LH

ABMIA4911GB

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

POWER SUPPLY ROUTING CIRCUIT

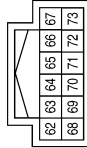
< WIRING DIAGRAM >

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	-



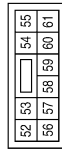
Terminal No.	Color of Wire	Signal Name
B	B/R	-

Connector No.	F24
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



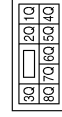
Terminal No.	Color of Wire	Signal Name
65	G	ETC RLY CONT
72	V	SSOFF

Connector No.	F19
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



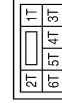
Terminal No.	Color of Wire	Signal Name
52	W	O2SENS #2
53	W	O2SENS #1
57	R	ETC
58	GR	ECM BAT
59	L	ENG SOL

Connector No.	B30
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	6Q	Color of Wire	P	Signal Name	-
--------------	----	---------------	---	-------------	---

Connector No.	B29
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	6T	Color of Wire	L	Signal Name	-
--------------	----	---------------	---	-------------	---

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



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

ABMIA4912GB

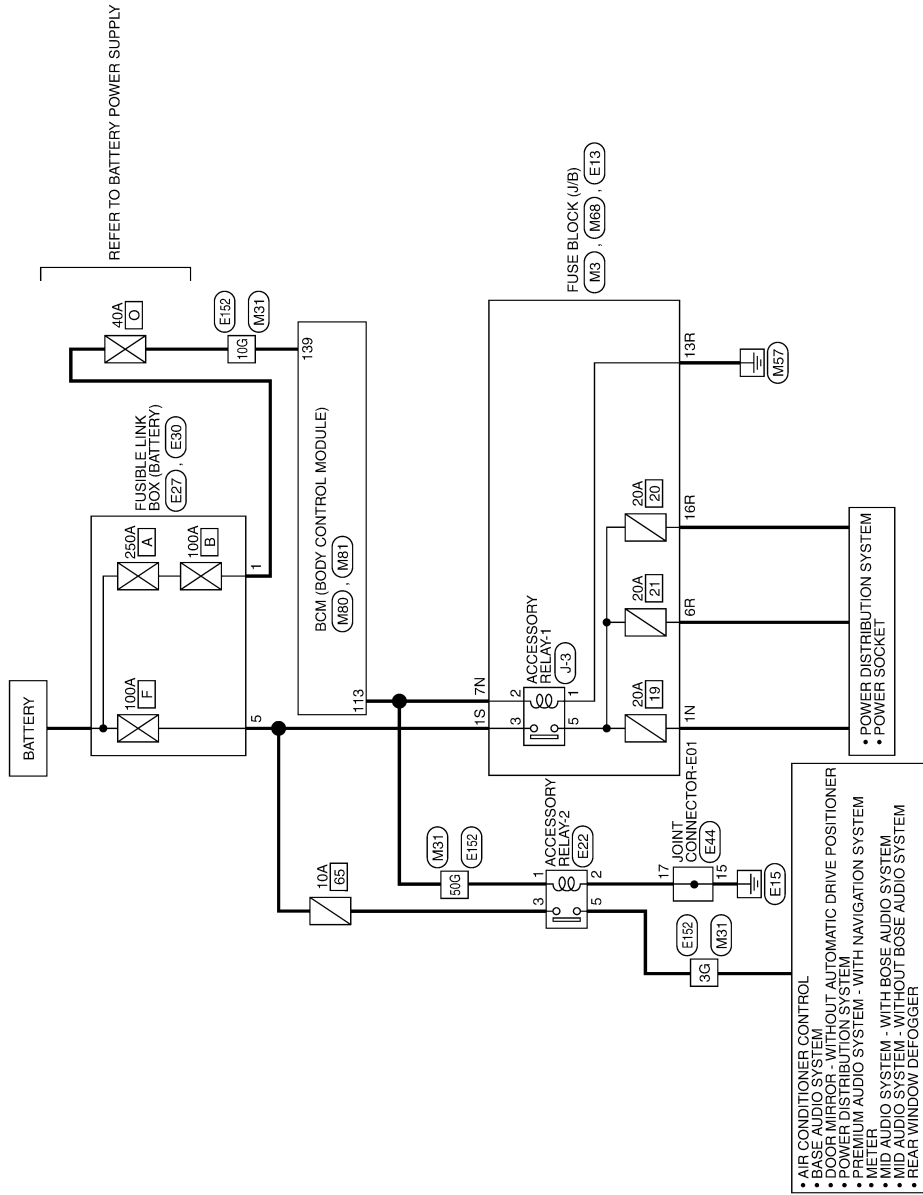
POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Wiring Diagram - ACCESSORY POWER SUPPLY -

INFOID:000000009175291

ACCESSORY POWER SUPPLY



AAMWA0657GB

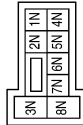
A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

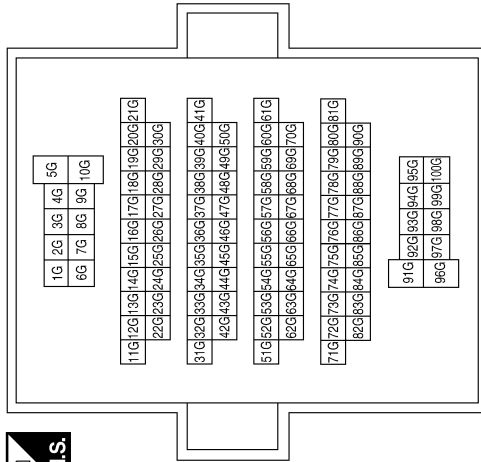
ACCESSORY POWER SUPPLY CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
1N	LG	-
7N	L	-

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



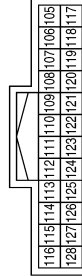
Terminal No.	Color of Wire	Signal Name
3G	P	-
10G	W	-
50G	L	-

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



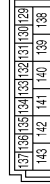
Terminal No.	Color of Wire	Signal Name
6R	Y	-
13R	GR	-
16R	BG	-

Connector No.	M80
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
113	L	ACC RELAY OUT

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
139	W	BAT POWER F/L

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

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



Terminal No.	Color of Wire	Signal Name
1	W	-

Connector No.	E22
Connector Name	ACCESSORY RELAY-2
Connector Color	BLUE



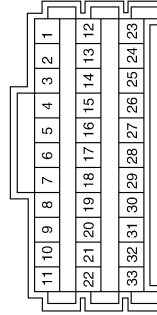
Terminal No.	Color of Wire	Signal Name
1	G	-
2	B	-
3	R	-
5	P	-

Connector No.	E13
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



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

Connector No.	E44
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
15	GR	-
17	B	-

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



Terminal No.	Color of Wire	Signal Name
5	W	-

ABMIA4884GB

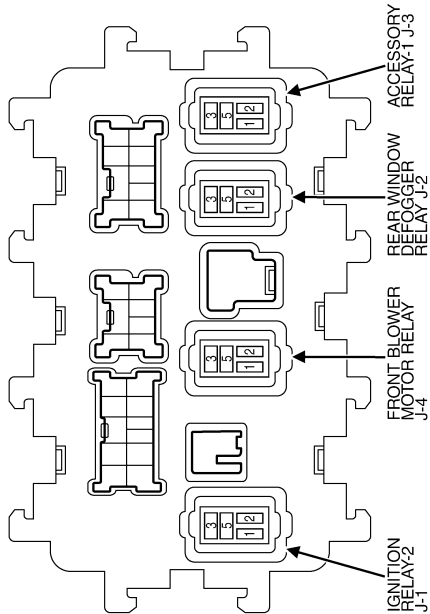
A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

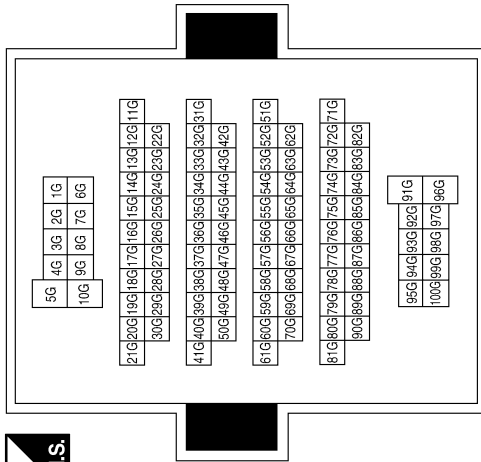
POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	J-3
Connector Name	FUSE BLOCK (J/B) (ACCESSORY RELAY-1)
Connector Color	-



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



Terminal No.	Color of Wire	Signal Name
3G	P	-
10G	P	-
50G	G	-

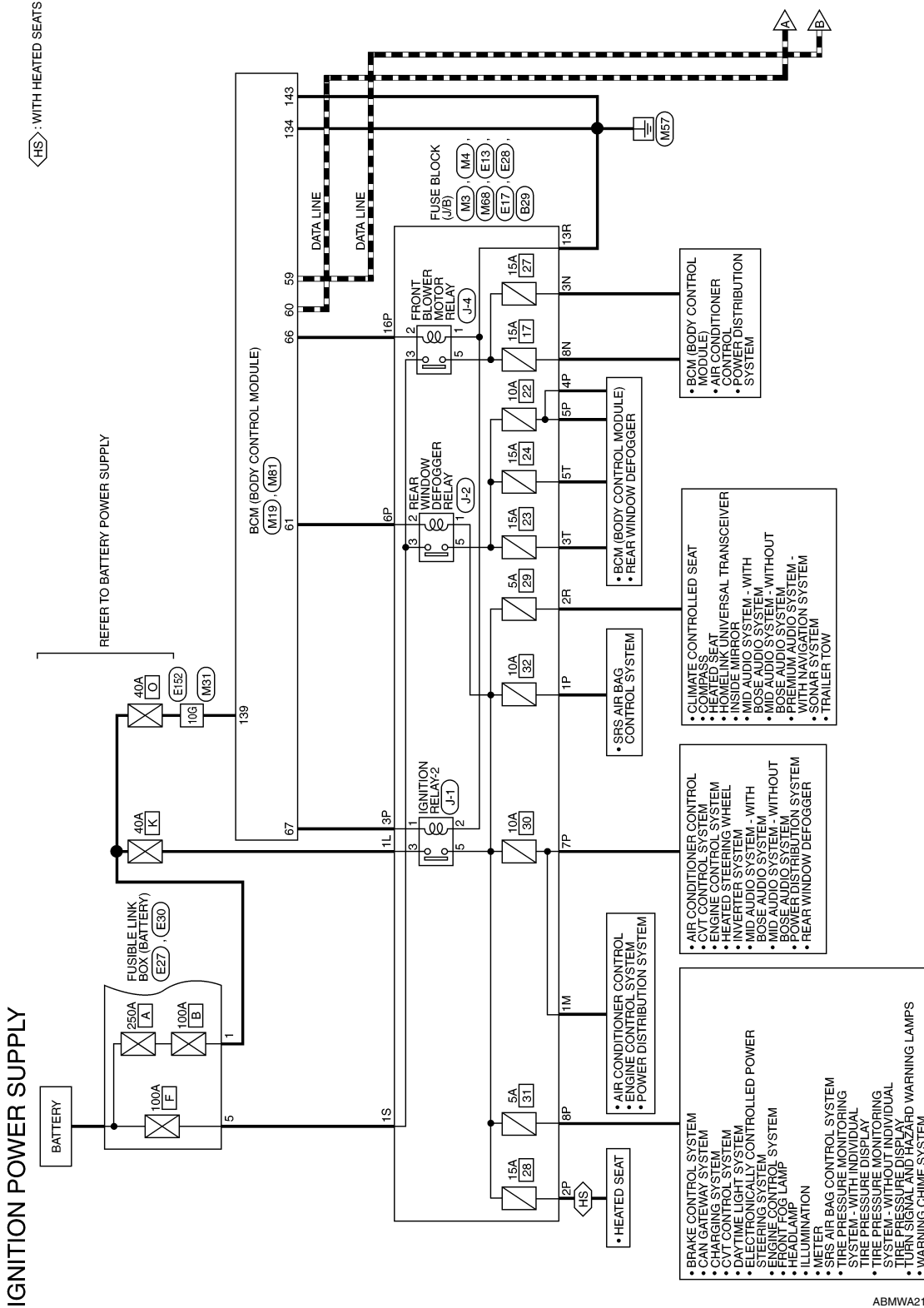
ABMIA4885GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Wiring Diagram - IGNITION POWER SUPPLY -

INFOID:000000009175292



(HS) : WITH HEATED SEATS

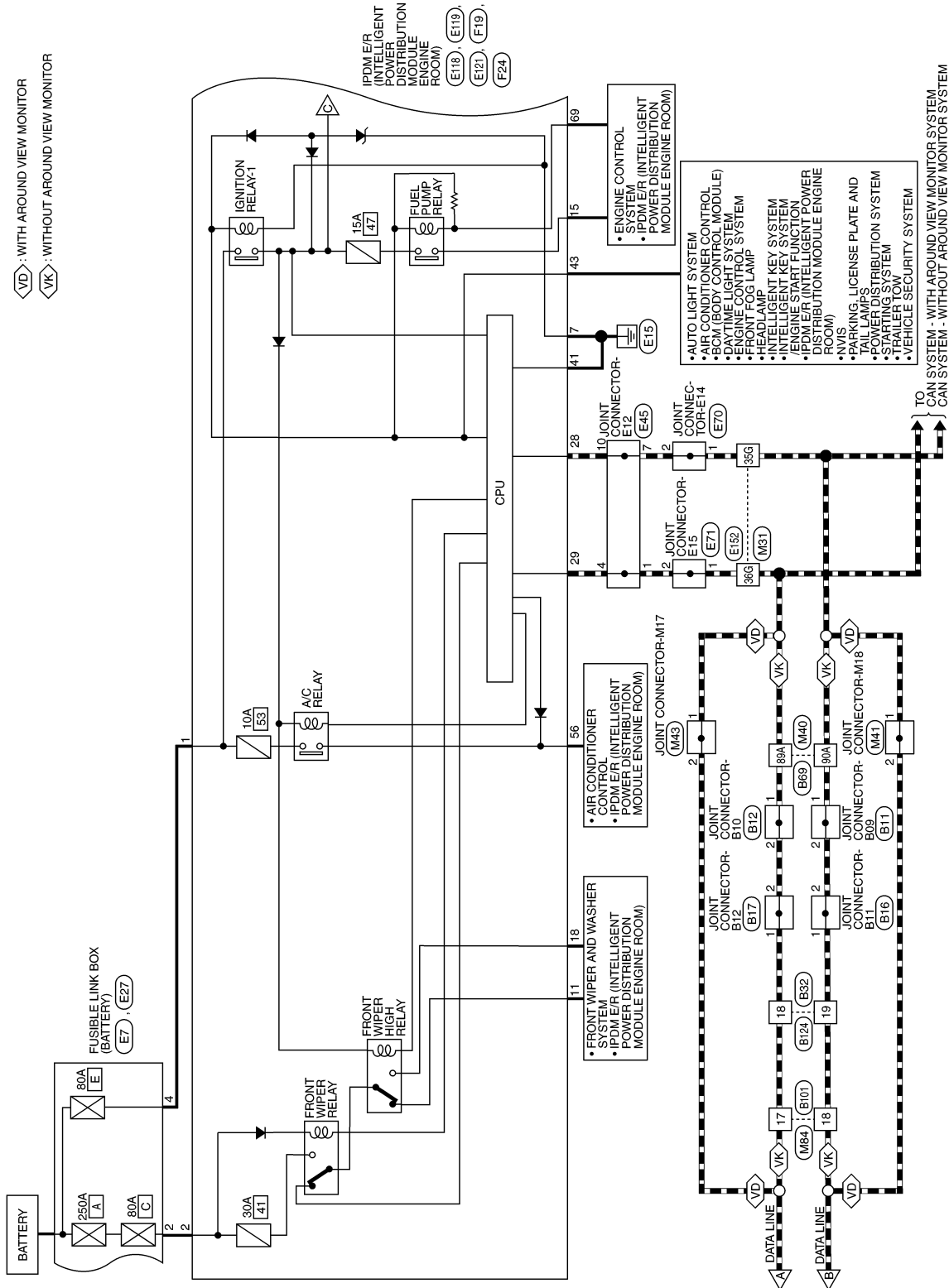
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

PG

ABMWA2121GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

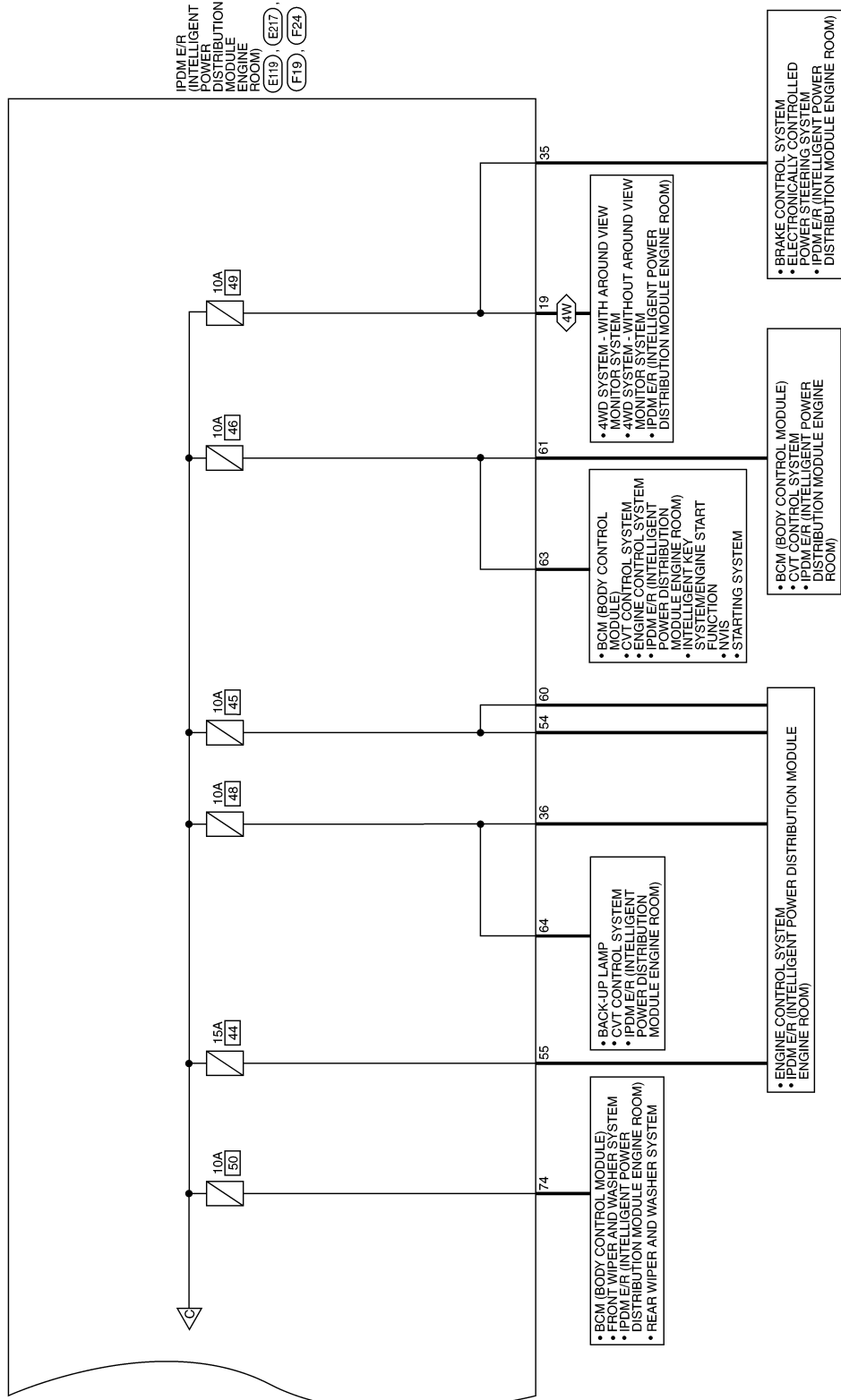


ABMWA2122GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

4W : WITH 4-WHEEL DRIVE



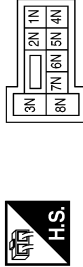
ABMWA2123GB

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

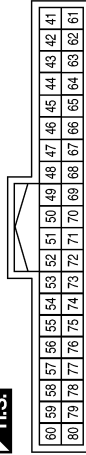
PG

IGNITION 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.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

Terminal No.	Color of Wire	Signal Name
3N	L	-
8N	L	-

Terminal No.	Color of Wire	Signal Name
1P	R	-
2P	LG	-
3P	G	-
4P	LG	-
5P	BR	-
6P	BG	-
7P	LG	-
8P	BG	-
16P	W	-

Terminal No.	Color of Wire	Signal Name
59	P	CAN-L
60	L	CAN-H
61	BG	REAR DEFOGGER RELAY OUT
66	W	BLOWER FAN RELAY OUT
67	G	IGN ELEC RELAY OUT 2

POWER SUPPLY ROUTING CIRCUIT

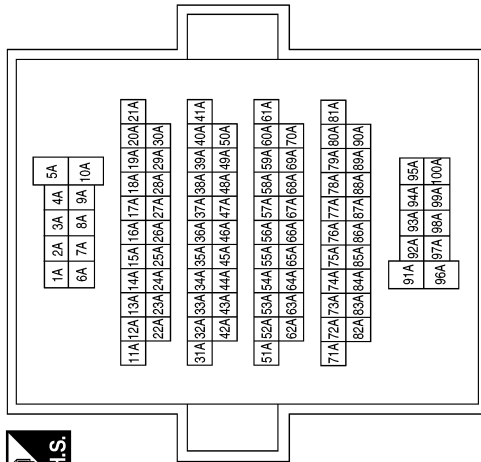
< WIRING DIAGRAM >

Connector No.	M41
Connector Name	JOINT CONNECTOR-M18
Connector Color	WHITE



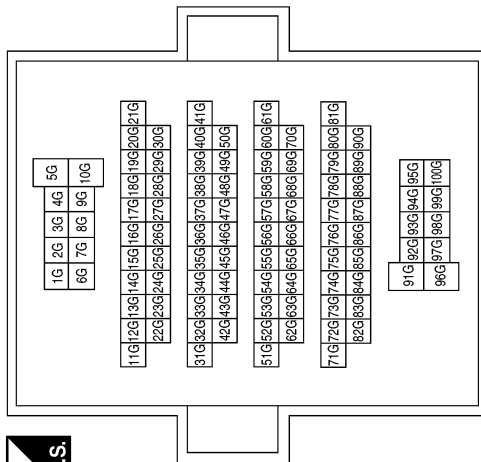
Terminal No.	Color of Wire	Signal Name
1	P	-
2	P	-

Connector No.	M40
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Terminal No.	Color of Wire	Signal Name
89A	L	-
90A	P	-

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



Terminal No.	Color of Wire	Signal Name
10G	W	-
35G	P	-
36G	L	-

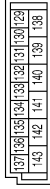
A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

ABMIA4887GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	M81
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
134	B	GND 2
139	W	BAT POWER F/L
143	B	GND 1

Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



Terminal No.	Color of Wire	Signal Name
2R	LG	-
13R	GR	-

Connector No.	M43
Connector Name	JOINT CONNECTOR-M17
Connector Color	WHITE



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

Connector No.	E13
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



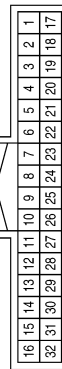
Terminal No.	Color of Wire	Signal Name
1S	W	-

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



Terminal No.	Color of Wire	Signal Name
4	R	-

Connector No.	M84
Connector Name	WIRE TO WIRE
Connector Color	WHITE

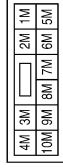


Terminal No.	Color of Wire	Signal Name
17	L	-
18	P	-

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	E28
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



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

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



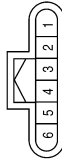
Terminal No.	1	Color of Wire	W	Signal Name	-
2	L	-	-	-	-

Connector No.	E17
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



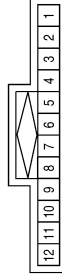
Terminal No.	1L	Color of Wire	G	Signal Name	-
--------------	----	---------------	---	-------------	---

Connector No.	E70
Connector Name	JOINT CONNECTOR-E14
Connector Color	BLACK



Terminal No.	1	Color of Wire	P	Signal Name	-
2	P	-	-	-	-

Connector No.	E45
Connector Name	JOINT CONNECTOR-E12
Connector Color	BLUE



Terminal No.	1	Color of Wire	L	Signal Name	-
4	L	-	-	-	-
7	P	-	-	-	-
10	P	-	-	-	-

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



Terminal No.	5	Color of Wire	W	Signal Name	-
--------------	---	---------------	---	-------------	---

AAMIA1320GB

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

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



19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

Terminal No.	Color of Wire	Signal Name
19	SB	SUB ECU
28	P	CAN-L
29	L	CAN-H
35	BR	ABS ECU
36	W	START IG-E/R
41	B	GND (SIGNAL)
43	L	IGN SIGNAL

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



1	2
---	---

Terminal No.	Color of Wire	Signal Name
1	R	F/L MAIN
2	L	F/L USM

Connector No.	E71
Connector Name	JOINT CONNECTOR-E15
Connector Color	BLACK



6	5	4	3	2	1
---	---	---	---	---	---

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

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



7	8	9	10	11		
12	13	14	15	16	17	18


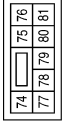
Terminal No.	Color of Wire	Signal Name
7	B	GND (POWER)
11	Y	FR WIPER LO
15	R	FUEL PUMP
18	L	FR WIPER HI

ABMIA4888GB

POWER SUPPLY ROUTING CIRCUIT

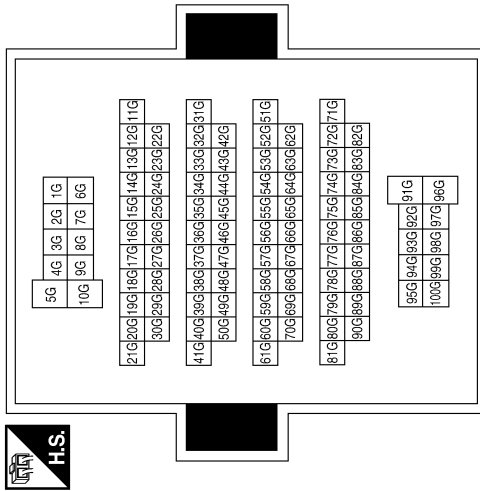
< WIRING DIAGRAM >

Connector No.	E217
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

Terminal No.	74	R	Signal Name	WASH MTR
--------------	----	---	-------------	----------


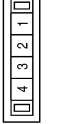
Terminal No.	Color of Wire	Signal Name
10G	P	-
35G	P	-
36G	L	-



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


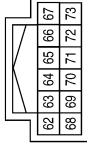


Connector No.	B11
Connector Name	JOINT CONNECTOR-B09
Connector Color	WHITE


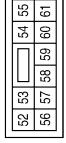
Terminal No.	Color of Wire	Signal Name
1	P	-
2	P	-

Connector No.	F24
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
63	L	INHIBIT SW
64	LG	START I/G EGI
69	W	FPR

Connector No.	F19
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
54	L	INJECTOR #1
55	W	IGN COIL
56	SB	A/C COMP
60	LG	INJECTOR #2
61	Y	AT ECU

AAMIA1322GB

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

PG

POWER SUPPLY ROUTING CIRCUIT

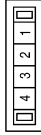
< WIRING DIAGRAM >

Connector No.	B17
Connector Name	JOINT CONNECTOR-B12
Connector Color	WHITE



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

Connector No.	B16
Connector Name	JOINT CONNECTOR-B11
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	P	-
2	P	-

Connector No.	B12
Connector Name	JOINT CONNECTOR-B10
Connector Color	WHITE



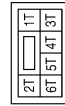
Terminal No.	Color of Wire	Signal Name
1	L	-
2	L	-

Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
18	L	-
19	P	-

Connector No.	B29
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
3T	W	-
5T	G	-

AAMIA1323GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	B101
Connector Name	WIRE TO WIRE
Connector Color	WHITE

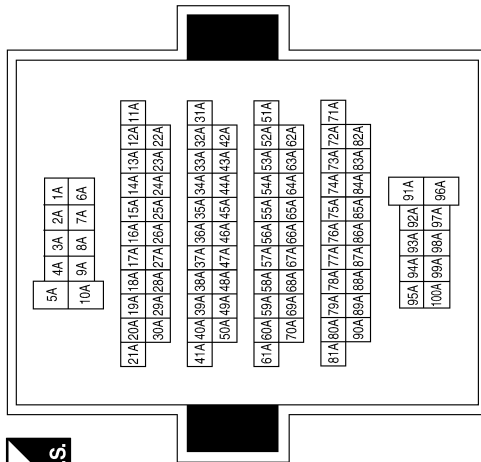


1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
17	L	-
18	P	-

Terminal No.	Color of Wire	Signal Name
89A	L	-
90A	P	-

Connector No.	B69
Connector Name	WIRE TO WIRE
Connector Color	GRAY



Connector No.	B124
Connector Name	WIRE TO WIRE
Connector Color	WHITE



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name
18	L	-
19	P	-

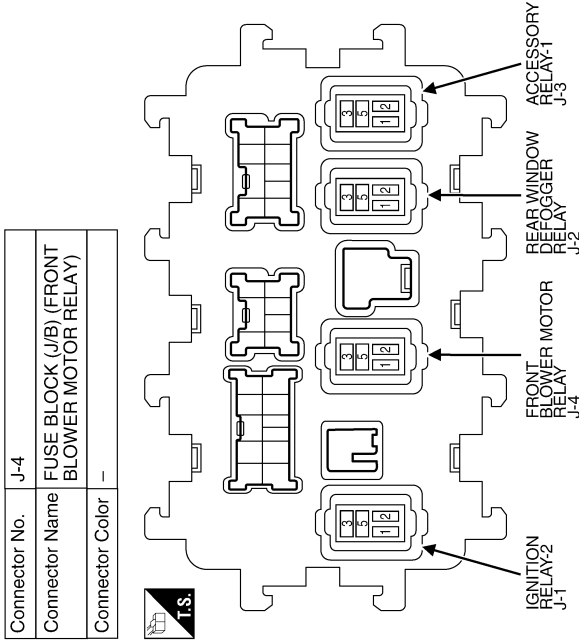
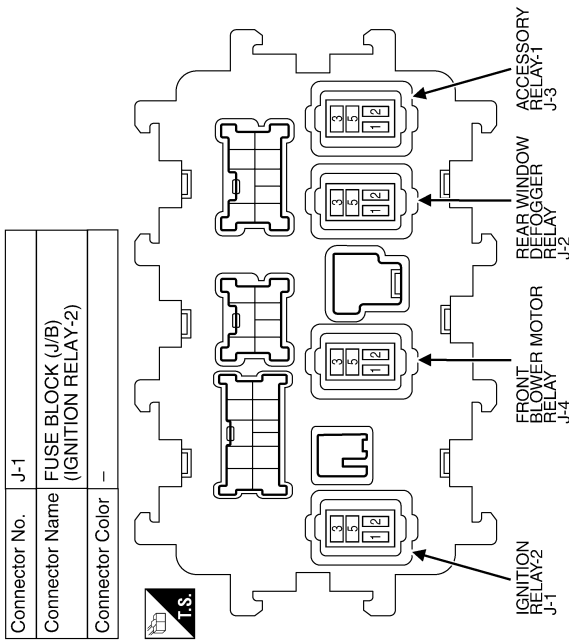
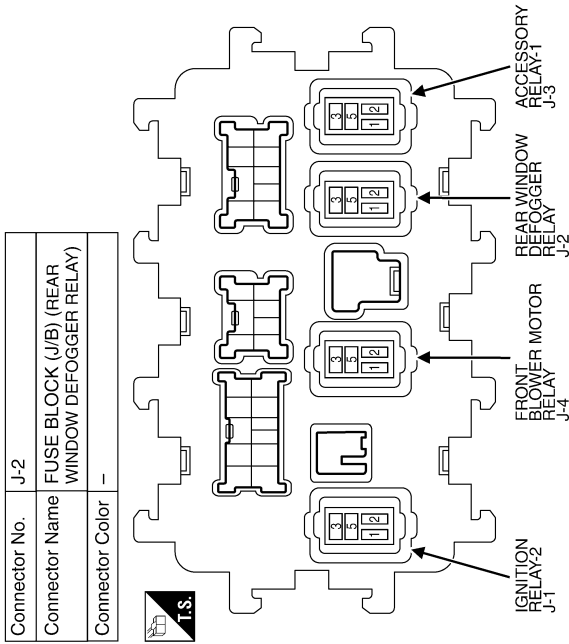
AAMIA1324GB

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



AAMIA1325GB

GROUND

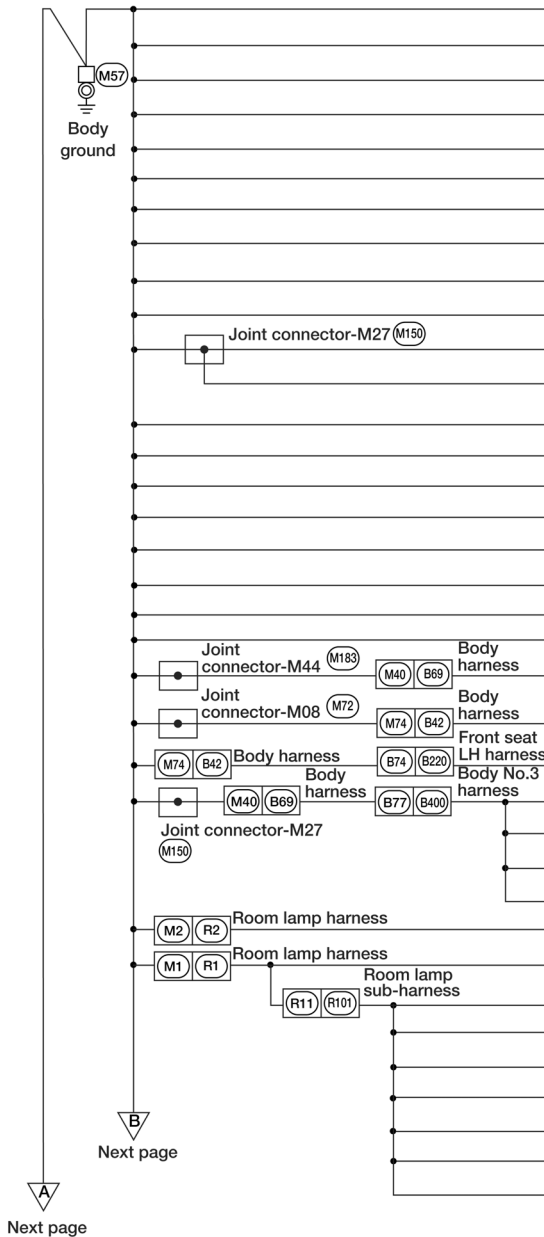
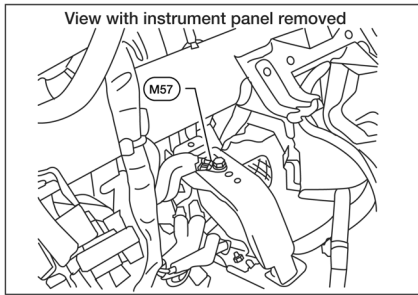
< WIRING DIAGRAM >

GROUND

Ground Distribution

INFOID:00000009175293

MAIN HARNESS



CONNECTOR NUMBER	CONNECT TO
M16	ADP steering switch
M22	Data link connector (Terminal No. 4)
M22	Data link connector (Terminal No. 5)
M24	Combination meter (Terminal No. 1)
M24	Combination meter (Terminal No. 2)
M28	Combination switch
M48	Heated steering wheel switch (Terminal No. 2)
M48	Heated steering wheel switch (Terminal No. 6)
M54	Steering angle sensor
M68	Fuse block (J/B)
M70	Sonar control unit (Terminal No. 15)
M70	Sonar control unit shield
M71	VDC OFF switch
M81	BCM (body control module) (Terminal No. 134)
M81	BCM (body control module) (Terminal No. 143)
M88	A/C 120V outlet main switch
M98	A/C and AV switch assembly
M117	PTC heater (Terminal No. 2)
M185	Automatic back door main switch
M186	Automatic back door switch
B56	Automatic back door control module shield
B82	Inverter unit shield
B205	Climate controlled seat control unit (driver seat) (Terminal No. 30) (with rear entertainment system)
B455	Rear sonar sensor LH outer shield
B456	Rear sonar sensor RH outer shield
B457	Rear sonar sensor LH inner shield
B458	Rear sonar sensor RH inner shield
R4	Moonroof motor assembly
R10	Auto anti-dazzling inside mirror
R102	Vanity lamp RH
R103	Vanity lamp LH
R104	Cargo lamp
R106	Personal lamps 2nd row
R107	Front room/map lamp assembly
R108	Moonroof switch
R110	Sunshade switch

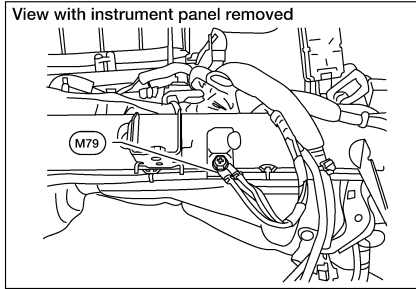
Next page

ABMIA4889GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

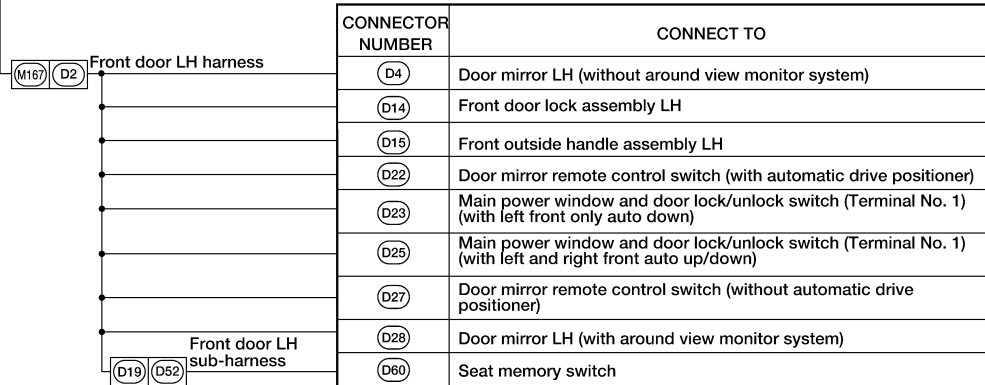
GROUND

< WIRING DIAGRAM >



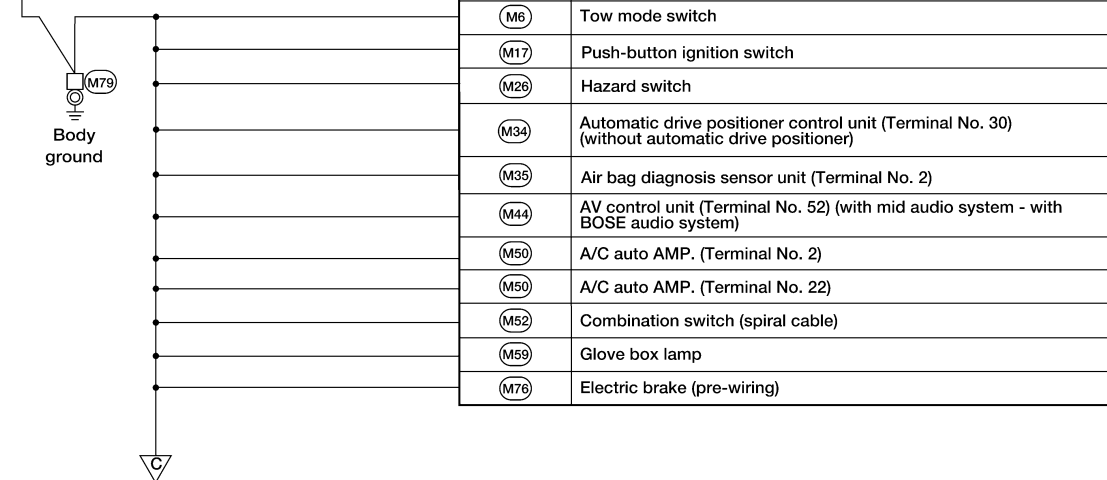
Preceding page

B



Preceding page

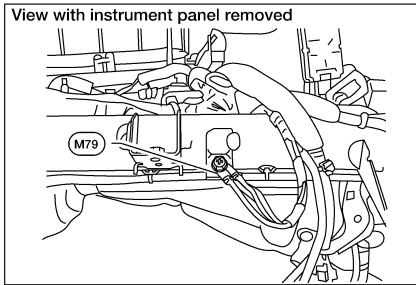
A



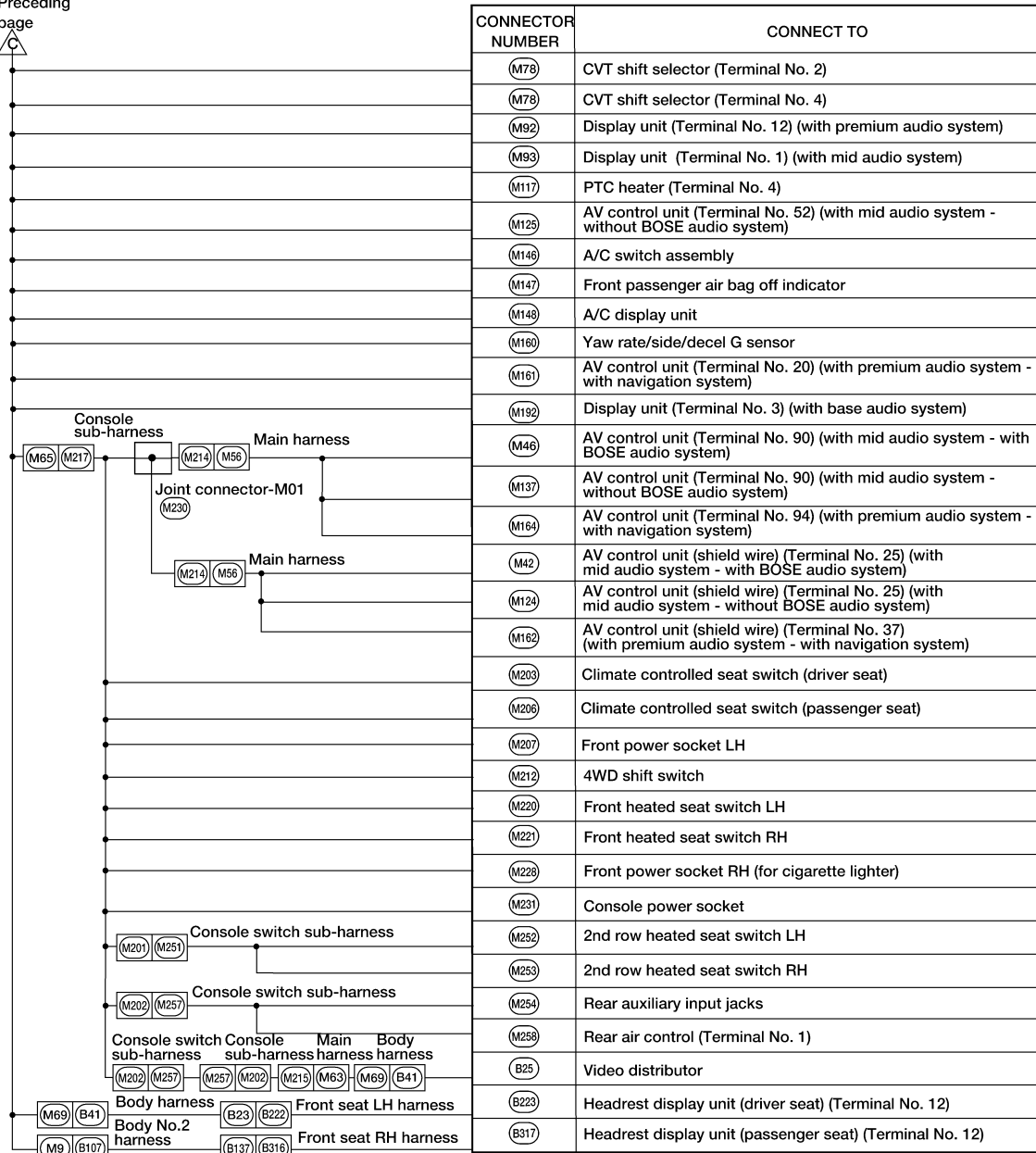
ABMIA4890GB

GROUND

< WIRING DIAGRAM >



Preceding page
C

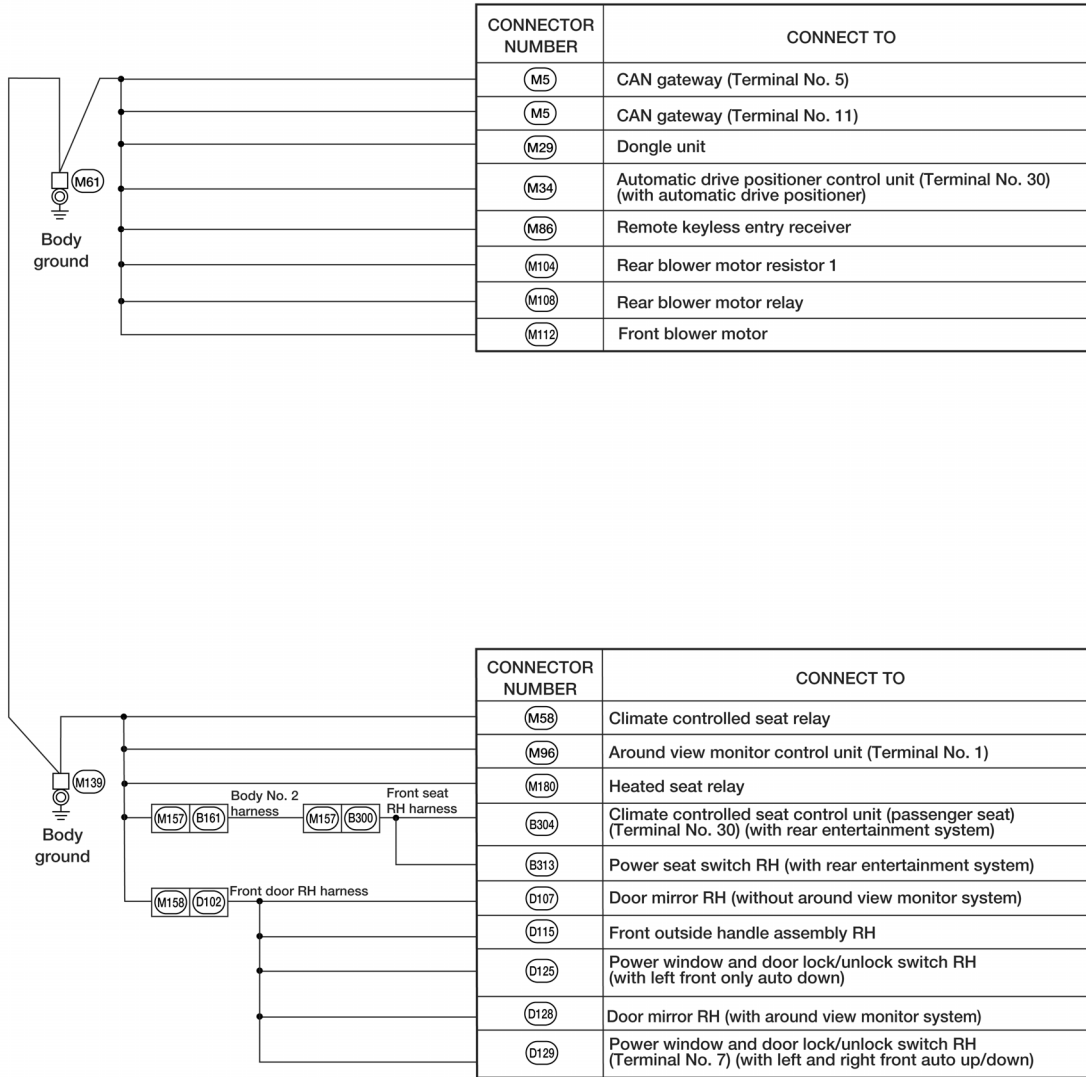
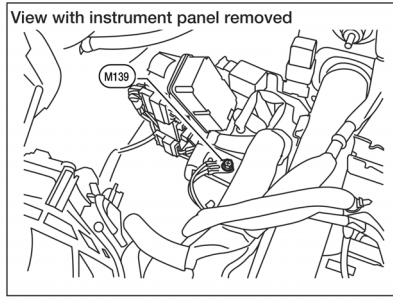
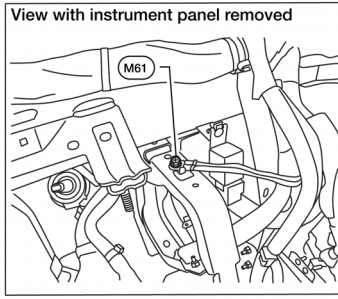


ABMIA4891GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

GROUND

< WIRING DIAGRAM >

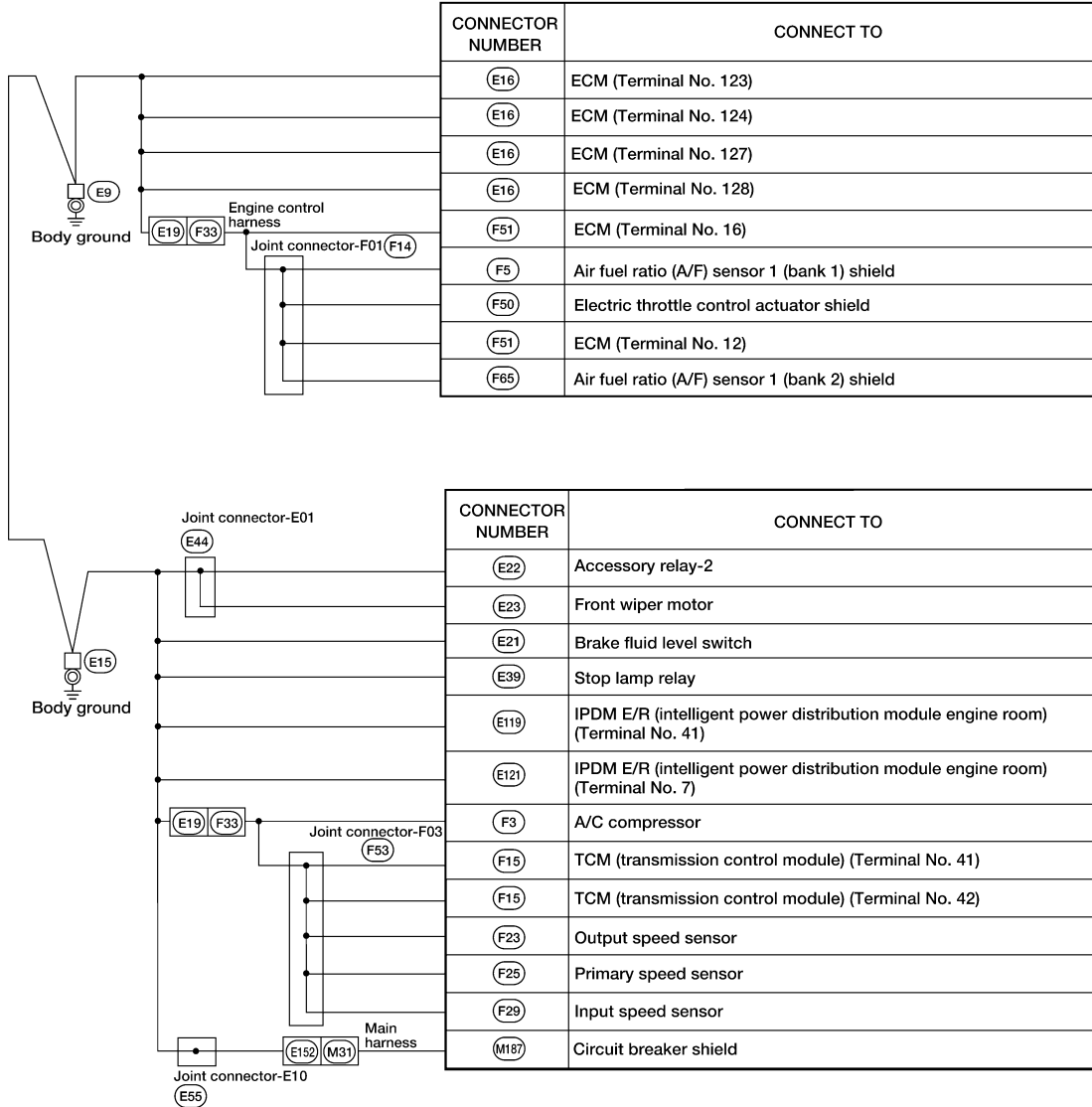
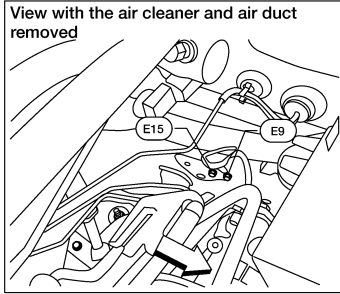


ABMIA4892GB

GROUND

< WIRING DIAGRAM >

ENGINE ROOM HARNESS

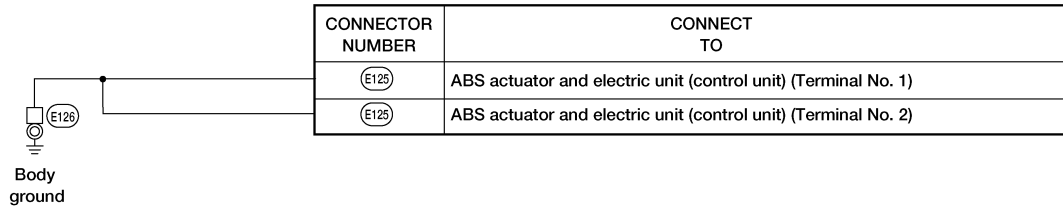
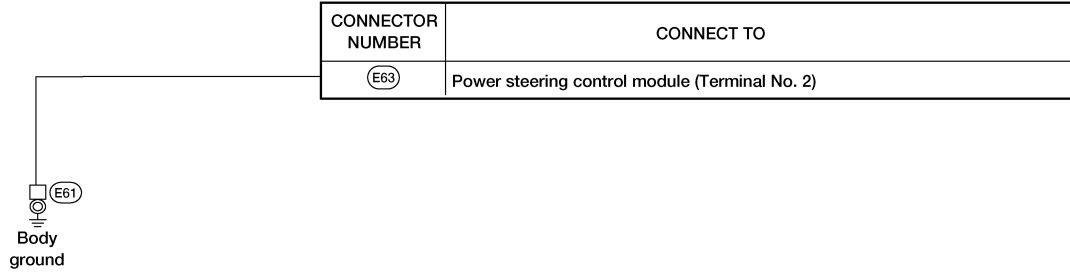
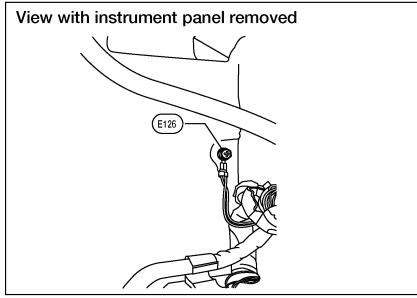
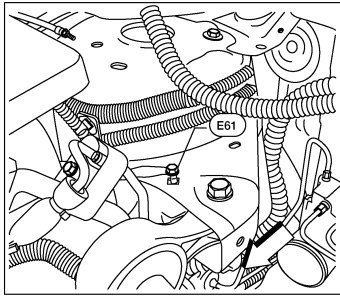


ABMIA4893GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

GROUND

< WIRING DIAGRAM >

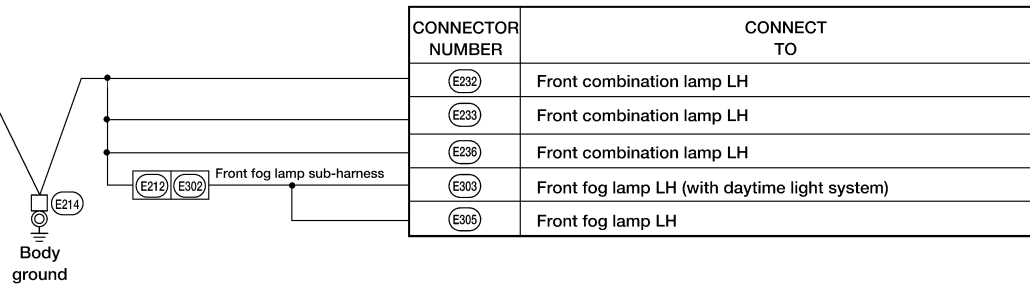
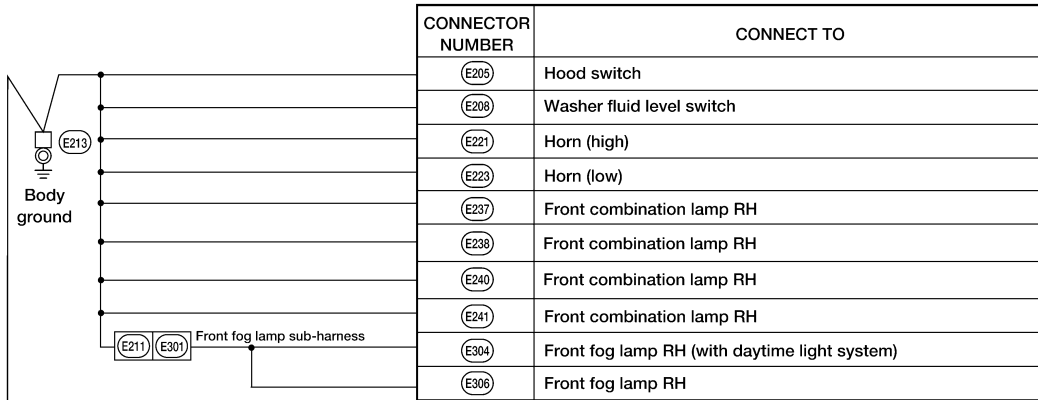
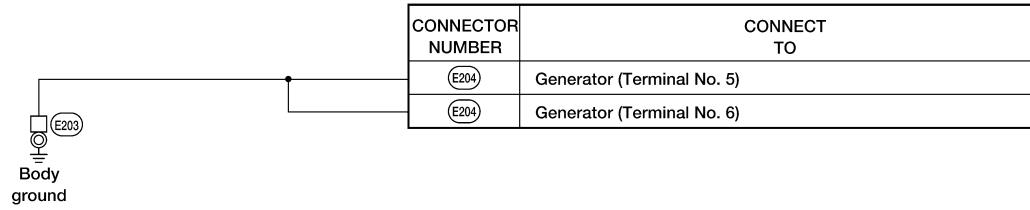
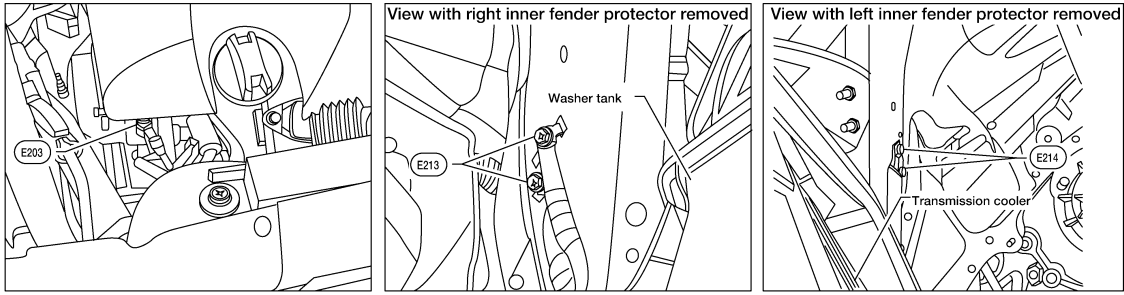


AAMIA1331GB

GROUND

< WIRING DIAGRAM >

FRONT END MODULE HARNESS

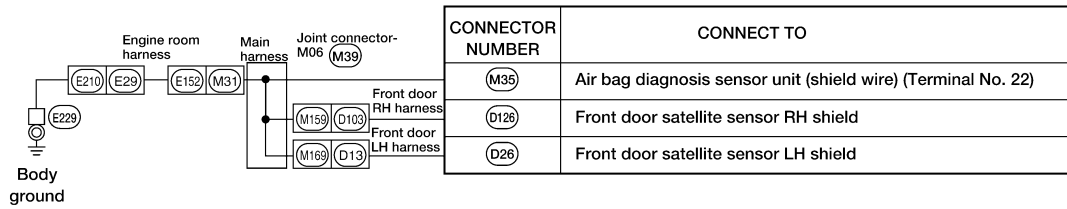
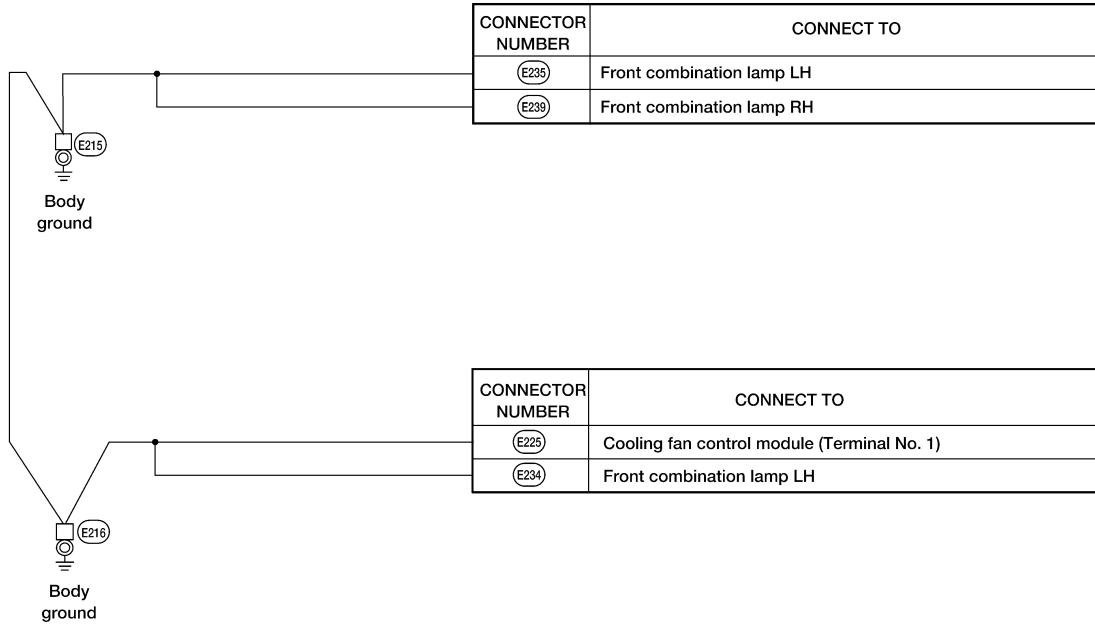
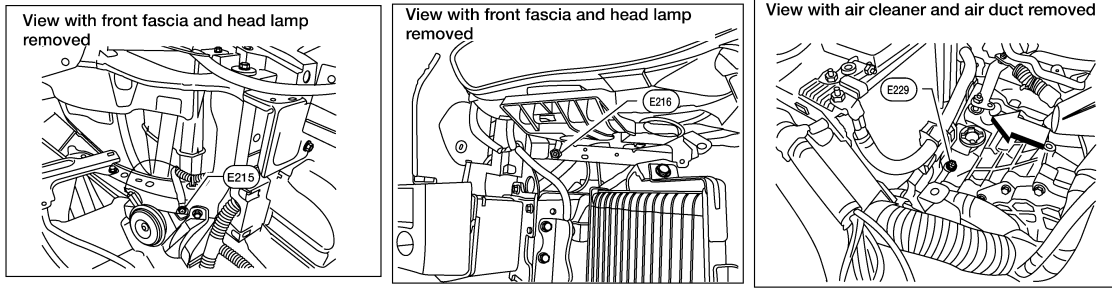


ABMIA4894GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

GROUND

< WIRING DIAGRAM >

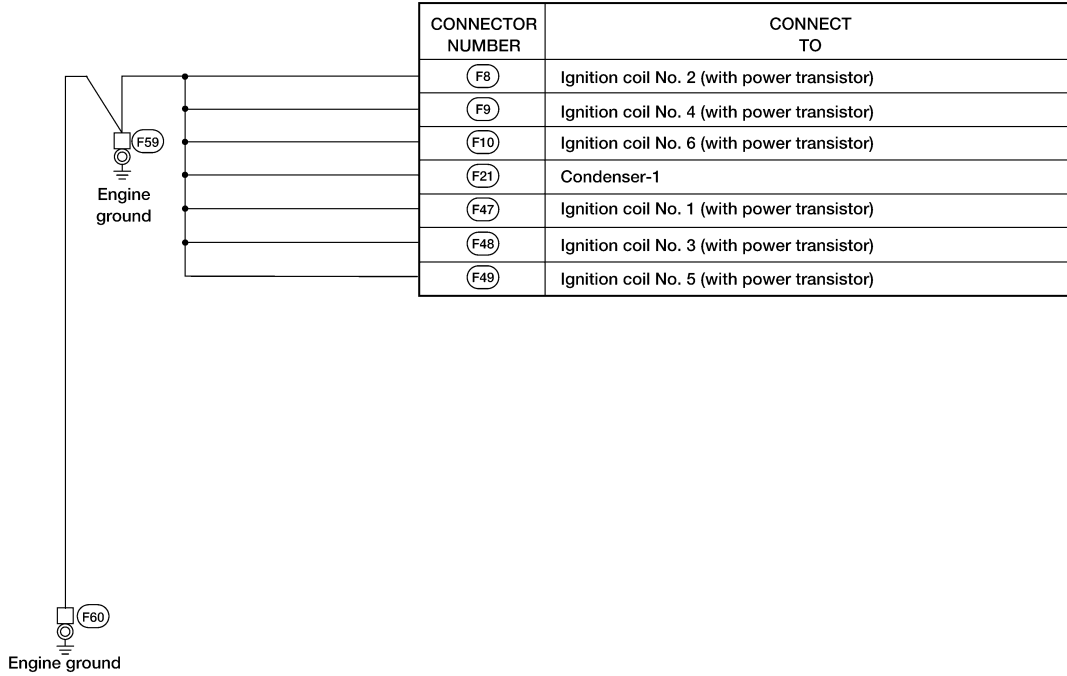
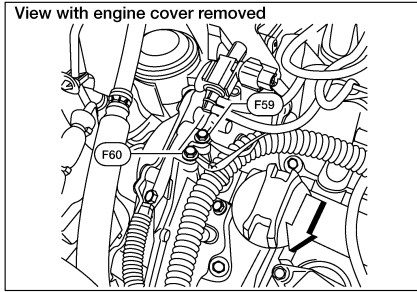


ABMIA4895GB

GROUND

< WIRING DIAGRAM >

ENGINE CONTROL HARNESS



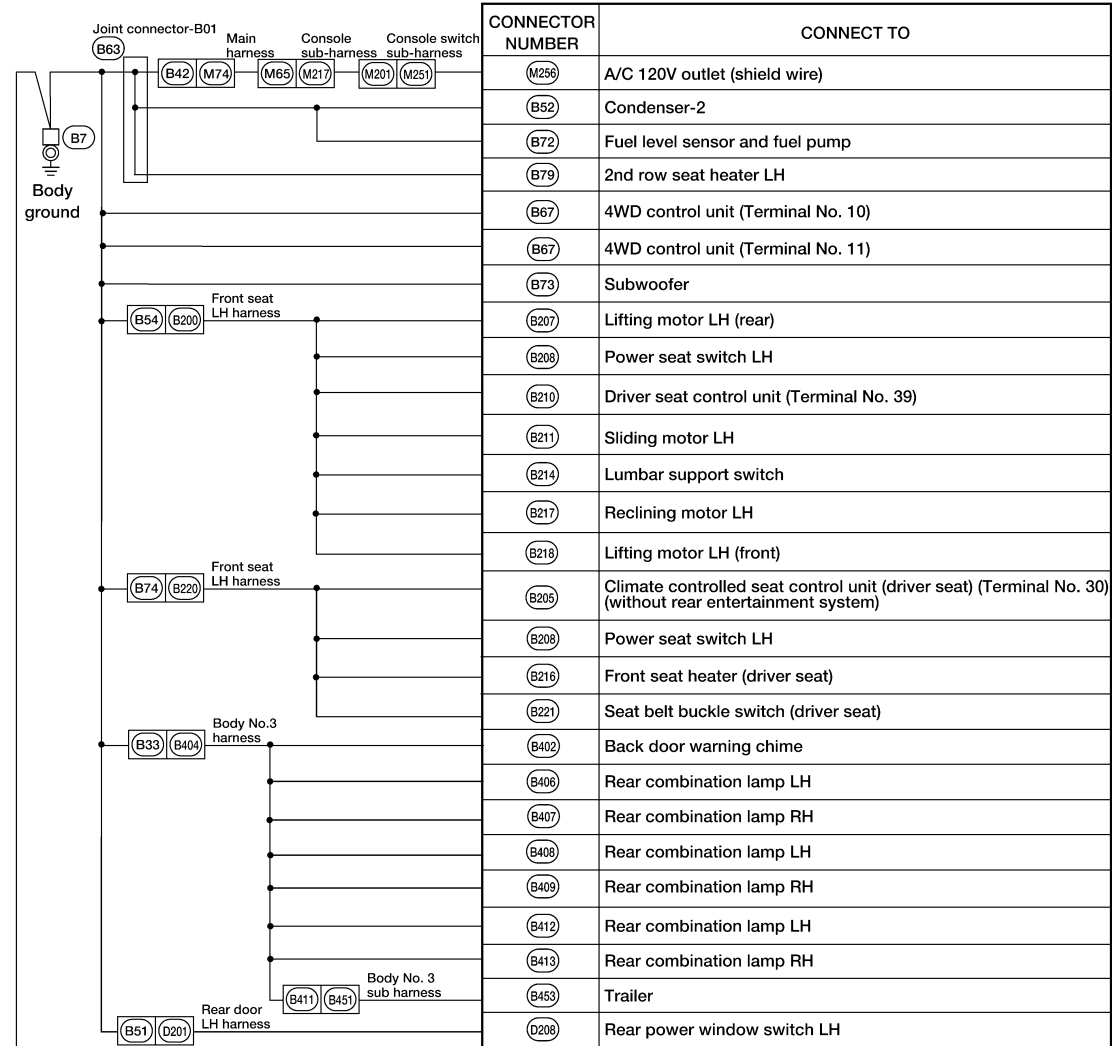
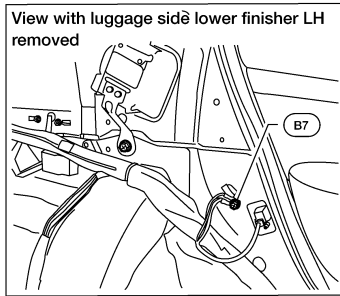
A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

ABMIA4896GB

GROUND

< WIRING DIAGRAM >

BODY HARNESS

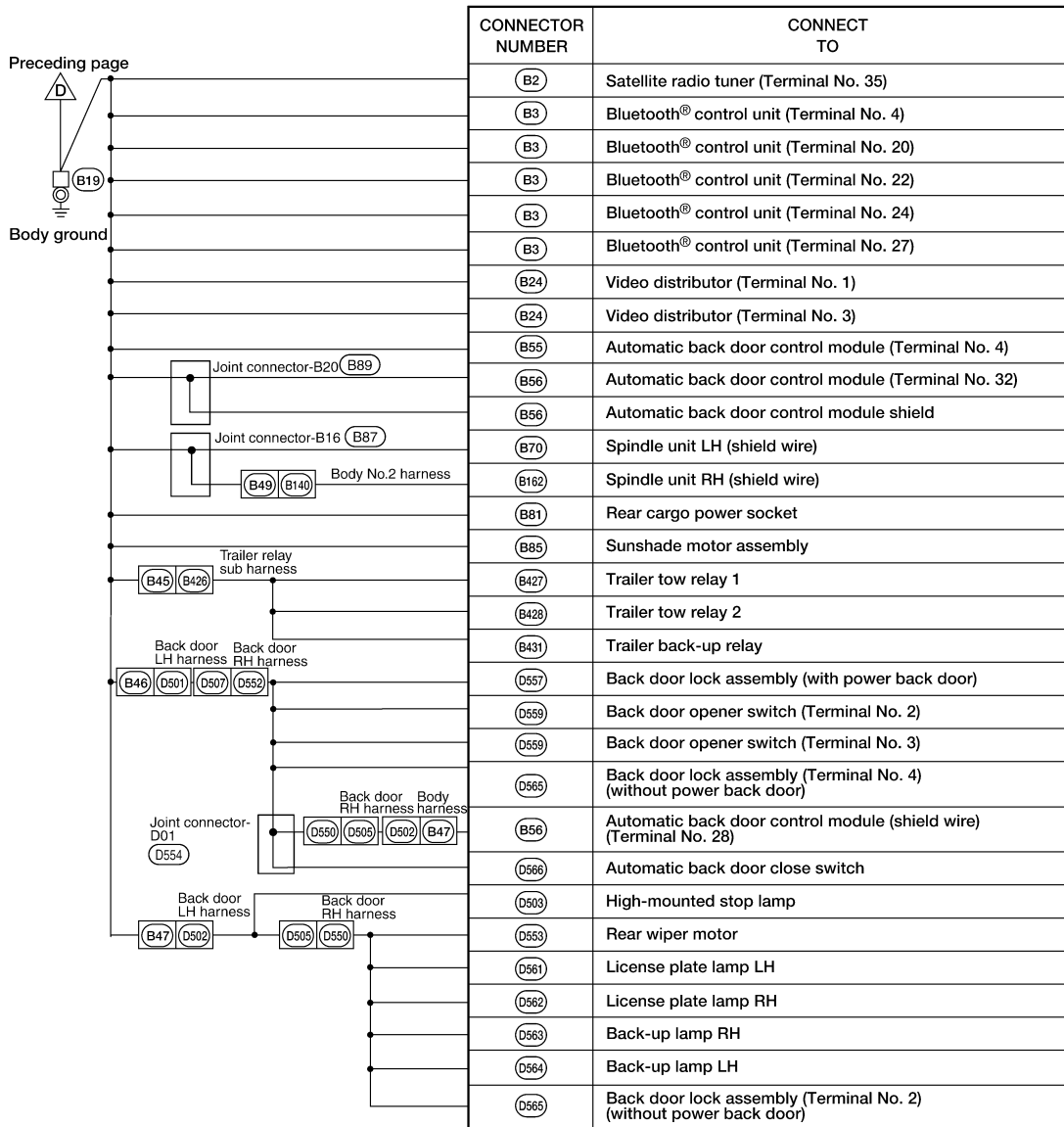
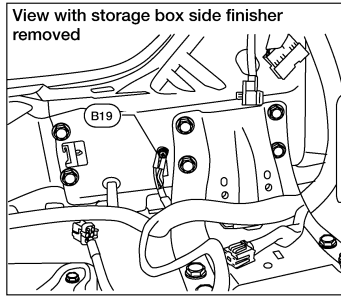


Next page

ABMIA4897GB

GROUND

< WIRING DIAGRAM >

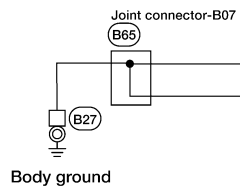
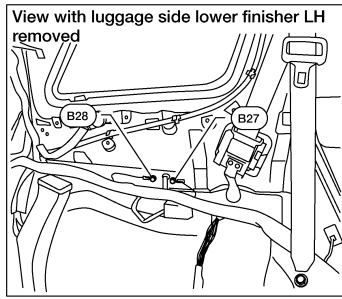


ABMIA4898GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

GROUND

< WIRING DIAGRAM >



CONNECTOR NUMBER	CONNECT TO
B9	Air bag diagnosis sensor unit (shield wire) (Terminal No. 55)
B71	Rear side air bag satellite sensor LH shield



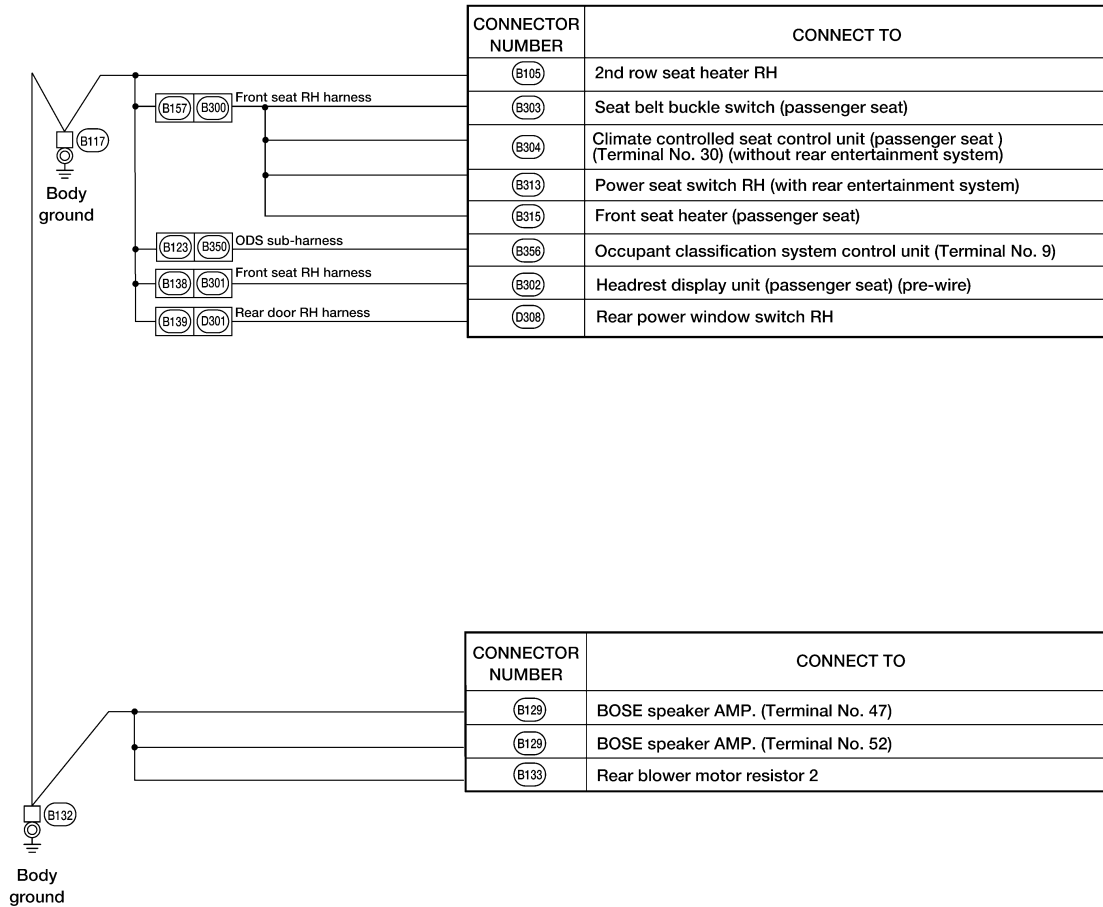
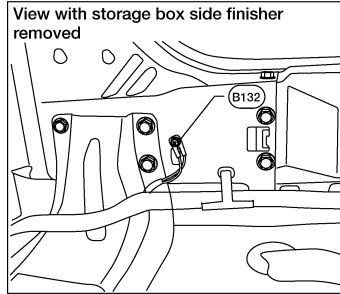
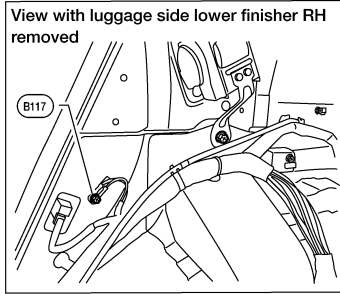
CONNECTOR NUMBER	CONNECT TO
B38	LH side curtain air bag module shield

ABMIA4899GB

GROUND

< WIRING DIAGRAM >

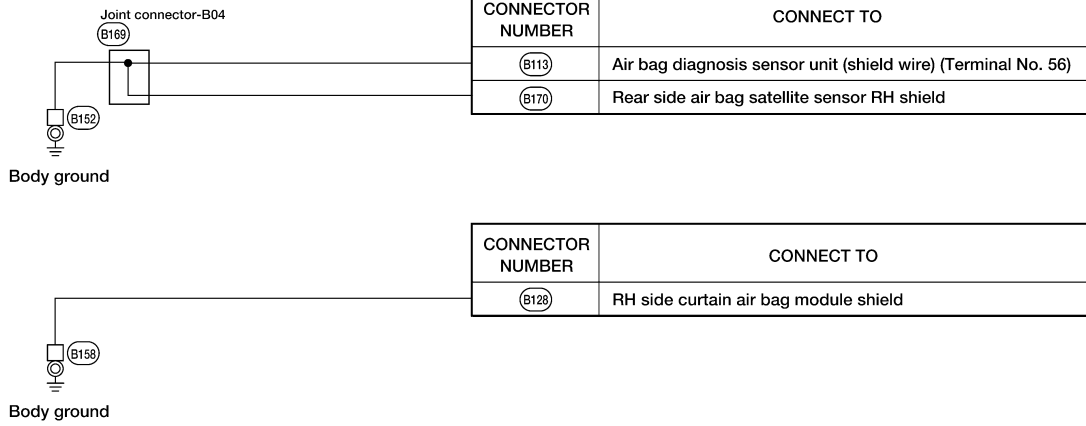
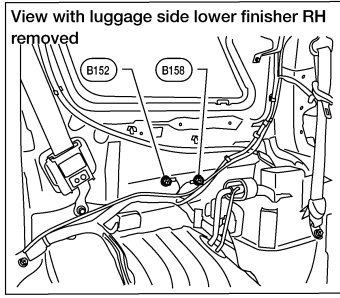
BODY NO. 2 HARNESS



A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

GROUND

< WIRING DIAGRAM >

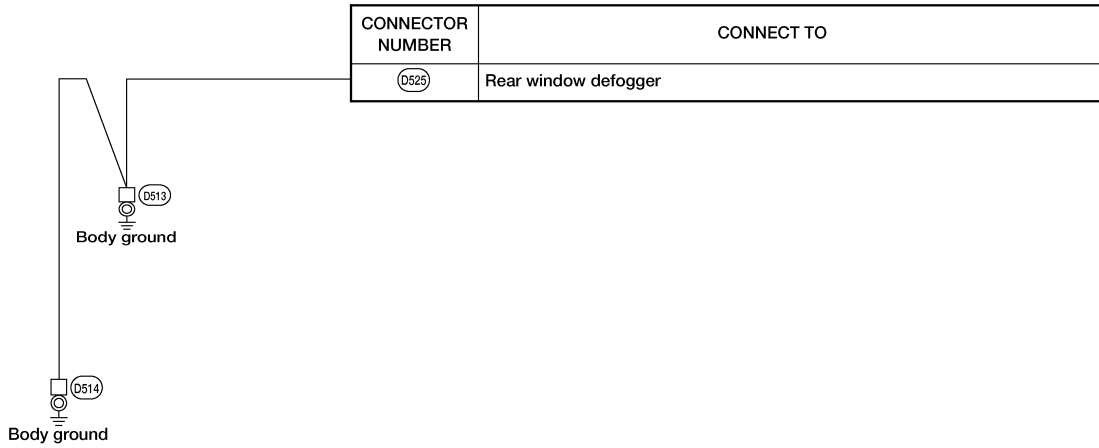
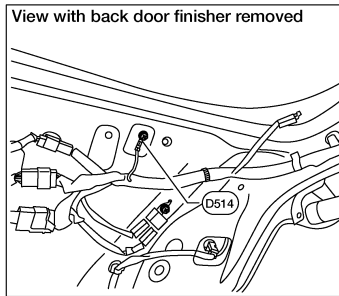
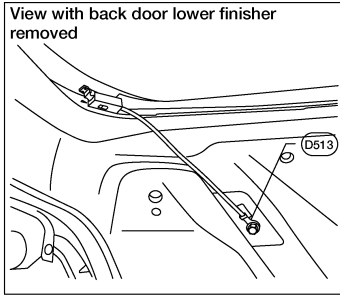


ABMIA4920GB

GROUND

< WIRING DIAGRAM >

BACK DOOR HARNESS



A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

HARNESS

< WIRING DIAGRAM >

HARNESS

Harness Layout

INFOID:000000009175294

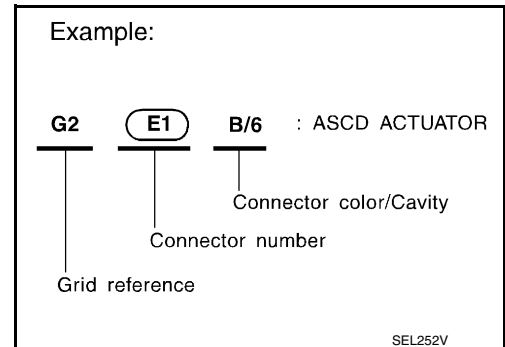
HOW TO READ HARNESS LAYOUT

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

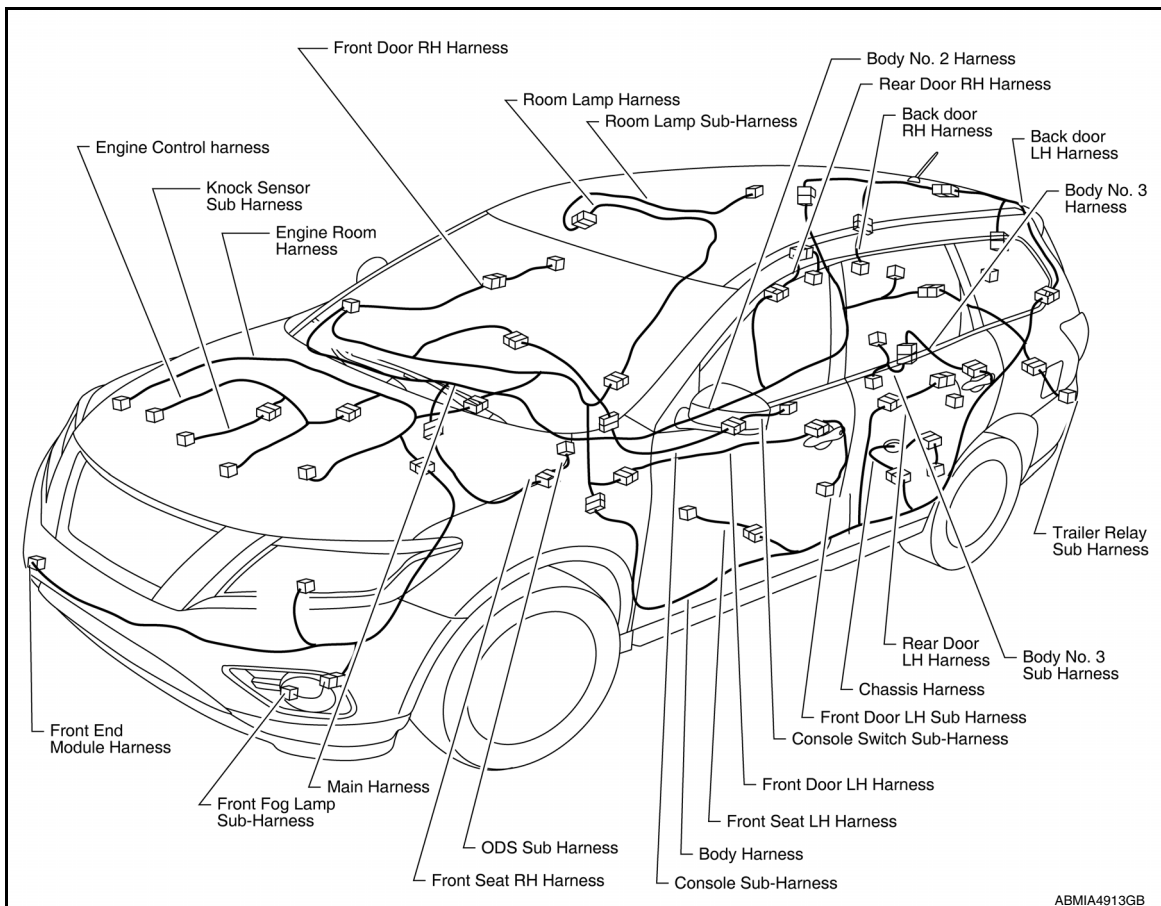
- Main Harness 1, Main Harness 2, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness and Front Fog Lamp Sub-harness
- Engine Control Harness, Knock Sensor Sub-harness
- Body Harness, Front Seat LH Harness, Body No.3 Harness, Body No.3 Sub-harness, Trailer Relay Sub Harness and Chassis Harness
- Body No. 2 Harness and Front Seat RH Harness and ODS sub harness
- Room Lamp Harness and Room Lamp Sub-harness
- Back Door LH Harness and Back Door 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.



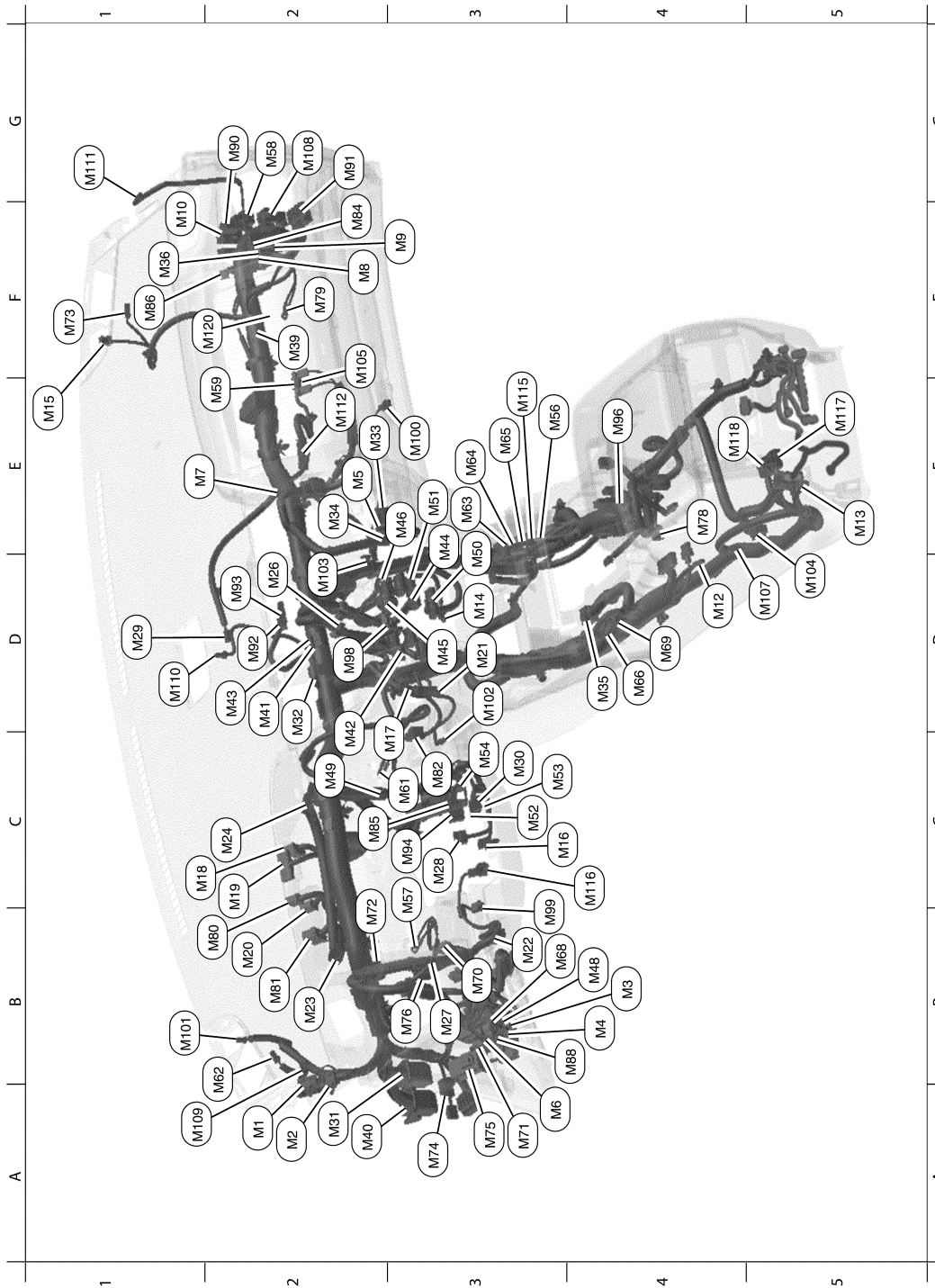
OUTLINE



HARNESS

< WIRING DIAGRAM >

MAIN HARNESS 1



AAMIA0059ZZ

A2	M1	W/24	: To R1	G2	M58	BR/6	: Climate controlled seat relay
A2	M2	W/6	: To R2	E2	M59	B/2	: Glove box lamp
B4	M3	W/8	: Fuse block (J/B)	C3	M61	—	: Body ground
B4	M4	W/16	: Fuse block (J/B)	B2	M62	BR/2	: Instrument panel tweeter LH
E2	M5	W/12	: CAN gateway	E3	M63	W/40	: To M215

HARNESS

< WIRING DIAGRAM >

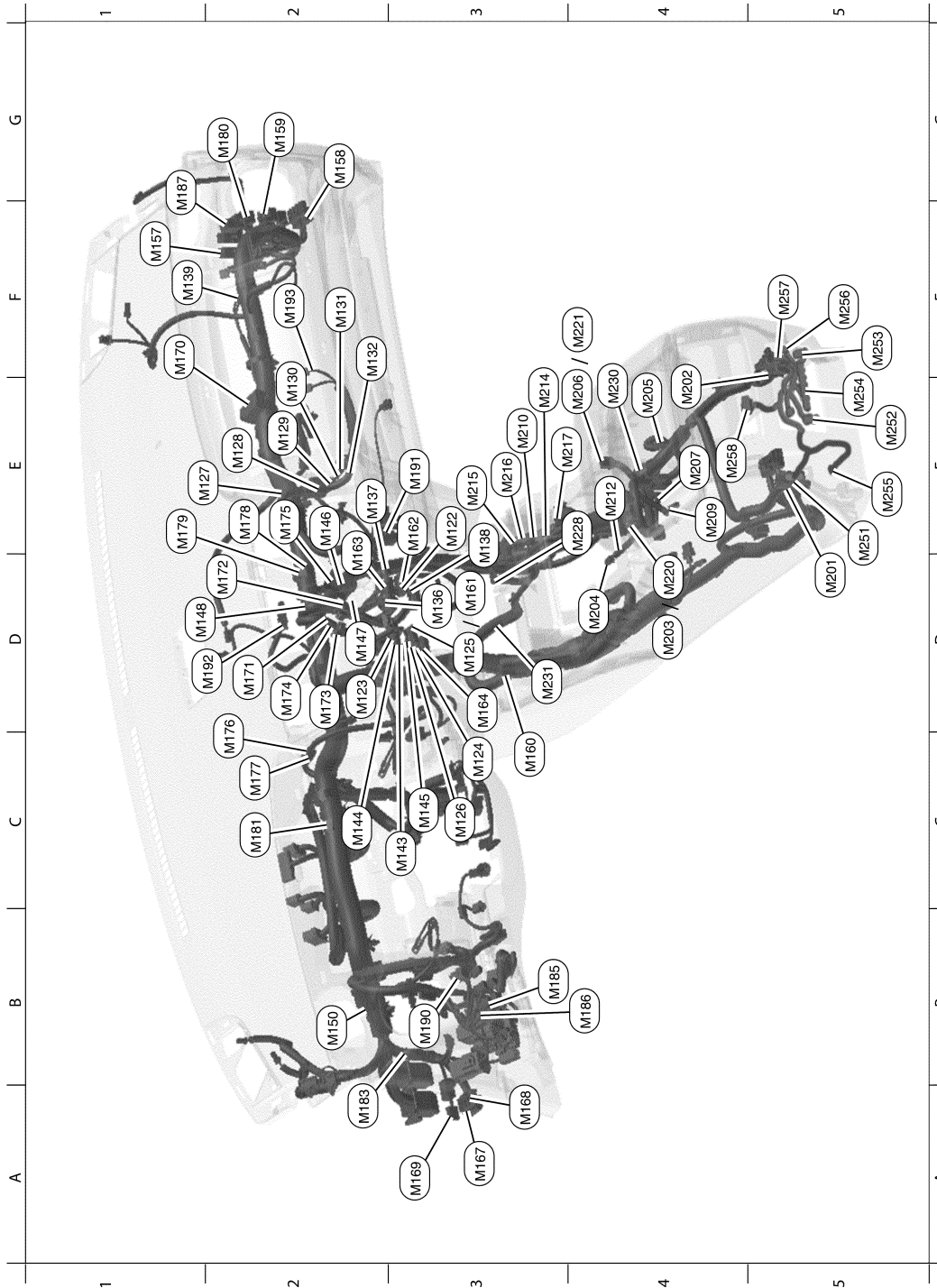
A3	M6	GR/4	: Tow mode switch	E3	M64	W/6	: To M216
E1	M7	W/3	: To M127	E3	M65	W/16	: To M217
F2	M8	GR/1	: To B106	D4	M66	W/24	: To B6
F3	M9	W/24	: To B107	B3	M68	BR/16	: Fuse block (J/B)
F1	M10	BR/16	: To B111	D4	M69	W/32	: To B41
D4	M12	W/3	: Rear shut-off door motor	B3	M70	W/24	: Sonar control unit
E5	M13	W/3	: Mode door motor (Rear)	A3	M71	B/8	: VDC off switch
D3	M14	GR/2	: Inside key antenna (Instrument center)	B2	M72	W/6	: Joint connector-M08
E1	M15	W/3	: Optical sensor	F1	M73	BR/2	: Instrument panel tweeter RH
C3	M16	GR/6	: ADP steering switch	A3	M74	BR/12	: To B42
C3	M17	W/8	: Push-button ignition switch	A3	M75	W/3	: To E36
C1	M18	G/40	: BCM (Body control module)	B3	M76	W/6	: Electric brake (Pre-wiring)
C2	M19	B/40	: BCM (Body control module)	E4	M78	W/12	: CVT shift selector
B2	M20	GR/24	: BCM (Body control module)	F2	M79	—	: Body ground
D3	M21	W/3	: NATS antenna amp.	B2	M80	B/24	: BCM (Body control module)
B3	M22	W/16	: Data link connector	B2	M81	W/15	: BCM (Body control module)
B2	M23	W/12	: Combination meter	C3	M82	W/2	: Circuit breaker-2
C2	M24	W/40	: Combination meter	F2	M84	W/32	: To B101
D2	M26	W/4	: Hazard switch	C2	M85	W/6	: Tilt motor
B3	M27	W/8	: To M55	F1	M86	B/4	: Remote keyless entry receiver
C3	M28	W/16	: Combination switch	B4	M88	B/10	: A/C 120V outlet main switch
D1	M29	W/4	: Dongle unit	G2	M90	L/4	: Heated steering relay
C3	M30	GR/8	: Combination switch (Spiral cable)	G2	M91	W/32	: To D101
A2	M31	SMJ	: To E152	D2	M92	W/24	: Display unit (With premium audio system)
D2	M32	B/2	: Diode-3	D2	M93	W/24	: Display unit (With mid audio system)
E2	M33	W/24	: Automatic drive positioner control unit	C3	M94	BR/6	: Telescopic motor
E2	M34	W/6	: Automatic drive positioner control unit	E4	M96	W/40	: Around view monitor control unit
D4	M35	Y/28	: Air bag diagnosis sensor unit	D2	M98	W/16	: A/C and AV switch assembly
F1	M36	W/40	: To B136	B3	M99	B/2	: Foot lamp LH
F2	M39	W/4	: Joint connector-M06	E3	M100	B/2	: Foot lamp RH
A2	M40	SMJ	: To B69	B1	M101	B/2	: Sunload sensor
D2	M41	W/4	: Joint connector-M18	D3	M102	W/2	: In-vehicle sensor
D2	M42	W/32	: AV control unit (With mid audio system - with BOSE audio system)	D2	M103	W/2	: Intake sensor
D2	M43	W/4	: Joint connector-M17	D5	M104	W/4	: Rear blower motor resistor 1
E3	M44	W/20	: AV control unit (With mid audio system - with BOSE audio system)	F2	M105	Y/4	: Front passenger air bag module
D3	M45	W/24	: AV control unit (With mid audio system - with BOSE audio system)	D5	M107	W/2	: Rear blower motor 1
E3	M46	W/16	: AV control unit (With mid audio system - with BOSE audio system)	G2	M108	BR/6	: Rear blower motor relay
B4	M48	L/8	: Heated steering wheel switch	A1	M109	BR/2	: Front tweeter LH
C2	M49	W/4	: To M83	D1	M110	BR/2	: Center speaker
E3	M50	W/40	: A/C auto amp.	G1	M111	BR/2	: Front tweeter RH
E3	M51	W/12	: AV control unit (With mid audio system - with BOSE audio system)	E2	M112	W/6	: Front blower motor
C3	M52	W/2	: Combination switch (Spiral cable)	E3	M115	GR/7	: To M210

HARNESS

< WIRING DIAGRAM >

C3	M53	Y/6	: Combination switch (Spiral cable)	C4	M116	W/8	: Calibration control
C3	M54	W/8	: Steering angle sensor	E5	M117	W/2	: PTC heater
E3	M56	W/24	: To M214	E4	M118	W/3	: PTC heater
C3	M57	—	: Body ground	F2	M120	W/4	: Joint connector-M21

MAIN HARNESS 2



A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

ABMIA4914ZZ

HARNESS

< WIRING DIAGRAM >

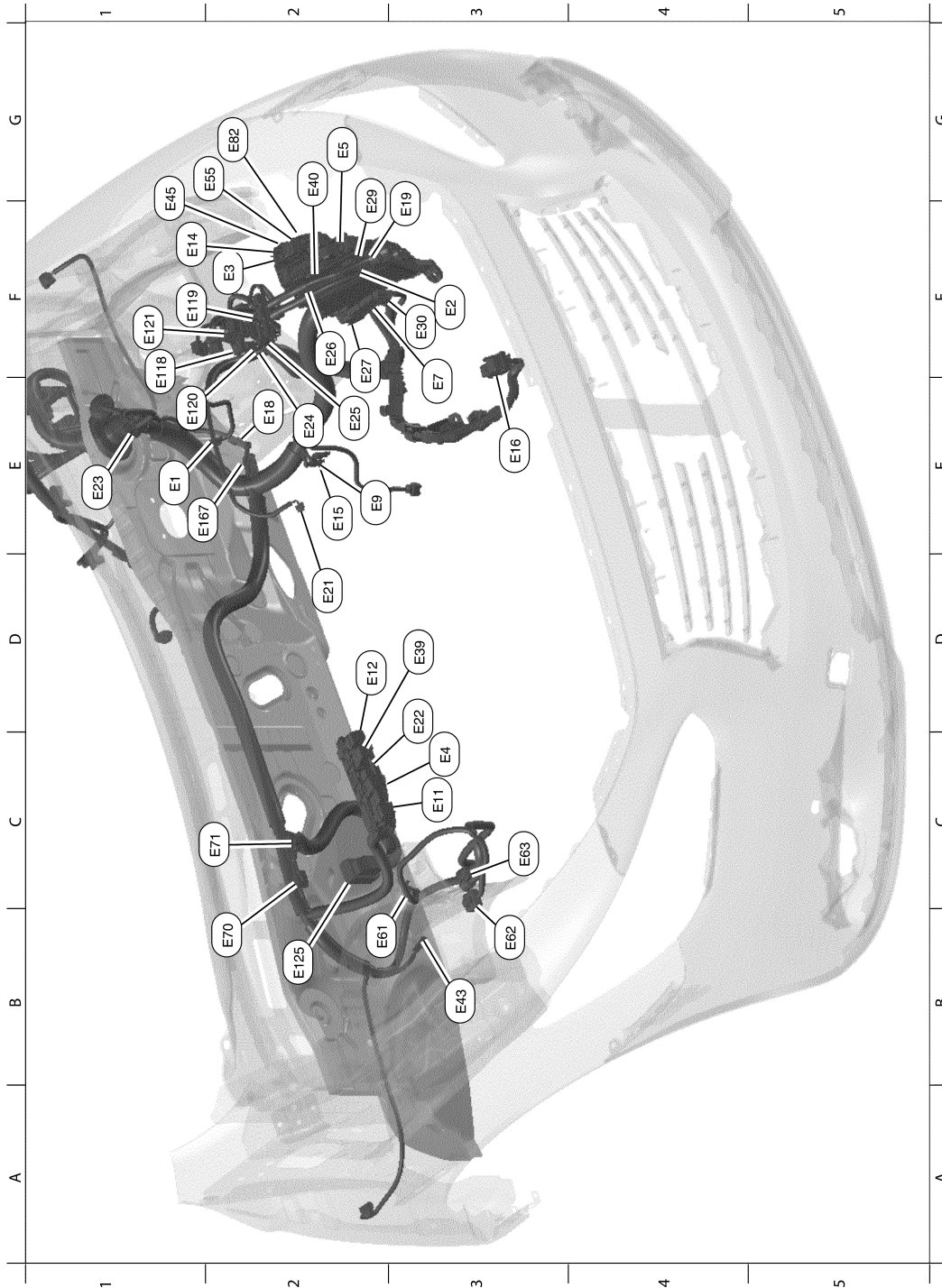
E3	M122	W/12	: Audio unit	E2	M178	W/4	: Joint connector-M58
D2	M123	W/20	: Audio unit	E1	M179	W/4	: Joint connector-M59
C3	M124	W/32	: AV control unit (With mid audio system - without BOSE audio system)	G2	M180	BR/6	: Heated seat relay
D3	M125	W/20	: AV control unit (With mid audio system - without BOSE audio system)	C2	M181	W/4	: Joint connector-M36
C3	M126	L/5	: AV Control unit (With premium audio system - with navigation system)	A2	M183	W/4	: Joint connector-M44
E1	M127	W/3	: To M7	B3	M185	W/10	: Automatic back door main switch
E2	M128	W/3	: Intake door motor	B4	M186	G/8	: Automatic back door switch
E2	M129	W/3	: Mode door motor (Front)	G1	M187	W/2	: Circuit breaker
E2	M130	W/3	: Air mix door motor driver side	B3	M190	W/12	: Accessory pre-wire LH
F2	M131	W/3	: Air mix door motor passenger side	E3	M191	W/12	: Accessory pre-wire RH
F2	M132	W/3	: Air mix door motor (Rear)	D2	M192	W/12	: Display unit (With base audio system)
D3	M136	W/24	: AV control unit (With mid audio system - without BOSE audio system)	F2	M193	Y/2	: Front passenger air bag module
E2	M137	W/16	: AV control unit (With mid audio system - without BOSE audio system)	Console sub harness			
E3	M138	W/12	: AV control unit (With mid audio system - without BOSE audio system)	D5	M201	W/16	: To M251
F1	M139	—	: Body ground	E4	M202	W/40	: To M257
C3	M143	W/12	: AV control unit (With mid audio system - with BOSE audio system)	D4	M203	W/10	: Climate controlled seat switch (Driver seat)
C2	M144	L/5	: AV control unit (With mid audio system - with BOSE audio system)	D4	M204	BR/2	: CVT shift selector indicator lamp
C3	M145	L/5	: AV control unit (With mid audio system - without BOSE audio system)	E4	M205	W/8	: Front auxiliary input jacks
E2	M146	W/12	: A/C switch assembly	E4	M206	BR/8	: Climate controlled seat switch (Passenger seat)
D2	M147	W/3	: Front passenger air bag off indicator	E4	M207	GR/3	: Front power socket LH
D1	M148	B/10	: A/C display unit	E4	M209	G/5	: USB interface
B2	M150	W/33	: Joint connector-M27	E3	M210	GR/7	: To M115
F1	M157	W/16	: To B161	E4	M212	W/8	: 4WD shift switch
G2	M158	W/10	: To D102	E3	M214	W/24	: To M56
G2	M159	Y/4	: To D103	E3	M215	W/40	: To M63
C3	M160	B/6	: Yaw rate/side/decel G sensor	E3	M216	W/6	: To M64
D3	M161	W/20	: AV control unit (With premium audio system - with navigation system)	E3	M217	W/16	: To M65
E3	M162	W/28	: AV control unit (With premium audio system - with navigation system)	D4	M220	W/6	: Front heated seat switch LH
E2	M163	W/32	: AV control unit (With premium audio system - with navigation system)	F4	M221	BR/6	: Front heated seat switch RH
D3	M164	W/40	: AV control unit (With premium audio system - with navigation system)	E4	M228	GR/3	: Front power socket RH (For cigarette lighter)
A3	M167	W/16	: To D2	E4	M230	GR/6	: Joint connector-M01
A3	M168	W/40	: To D3	D3	M231	GR/3	: Console power socket
A3	M169	Y/4	: To D103	Console switch sub harness			
F1	M170	W/33	: Joint connector-M09	E5	M251	W/16	: To M201
D2	M171	W/4	: Joint connector-M10	E5	M252	W/6	: 2nd row heated seat switch LH

HARNESS

< WIRING DIAGRAM >

D2	M172	W/4	: Joint connector-M11	F5	M253	BR/6	: 2nd row heated seat switch RH
D2	M173	W/4	: Joint connector-M12	E5	M254	W/40	: Rear auxiliary input jacks
D2	M174	W/4	: Joint connector-M13	E5	M255	GR/2	: Inside key antenna (Console)
E2	M175	W/33	: Joint connector-M22	F5	M256	W/4	: A/C 120V outlet
C2	M176	W/4	: Joint connector-M56	F5	M257	W/40	: To M202
C2	M177	W/4	: Joint connector-M57	E4	M258	W/12	: Rear air control (Rear)

ENGINE ROOM HARNESS



A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

PG

HARNES

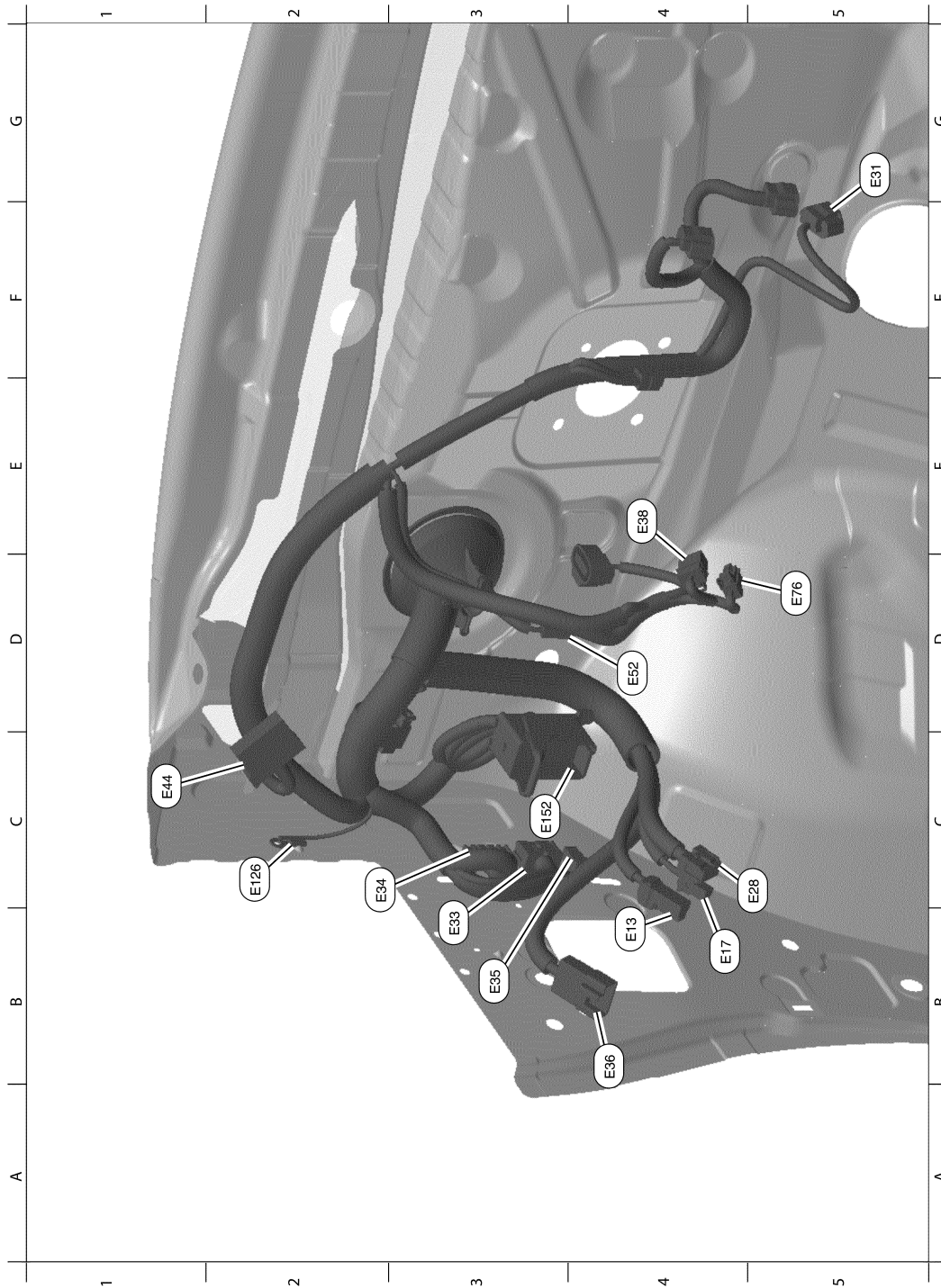
< WIRING DIAGRAM >

E1	E1	BR/3	: Intelligent Key warning buzzer	F2	E27	BR/2	: Fusible link box (Battery)
F3	E2	W/16	: To F32	G2	E29	Y/4	: To E210
F2	E3	B/2	: Anti theft diode	F3	E30	B/1	: Fusible link box (Battery)
C3	E4	BR/6	: Daytime light relay	D3	E39	L/4	: Stop lamp relay
G2	E5	W/16	: To E207	G2	E40	B/2	: To E201
E3	E7	GR/2	: Fusible link box (Battery)	B3	E43	B/2	: Front wheel sensor RH
E2	E9	—	: Engine ground	G1	E45	L/12	: Joint connector-E12
C3	E11	L/5	: PTC relay-1	G2	E55	W/4	: Joint connector-E10
D2	E12	L/5	: PTC relay-2	B2	E61	—	: Body ground
F1	E14	B/12	: Joint connector-E05	B3	E62	B/6	: Power steering control module
E2	E15	—	: Engine ground	C3	E63	B/2	: Power steering control module
E3	E16	GR/32	: ECM	B2	E70	B/6	: Joint connector-E14
E2	E18	B/2	: Front wheel sensor LH	C2	E71	B/6	: Joint connector-E15
F3	E19	W/10	: To F33	G2	E82	BR/4	: Cooling fan relay
D2	E21	GR/2	: Brake fluid level switch	F1	E118	B/2	: IPDM E/R (Intelligent power distribution module engine room)
D3	E22	L/4	: Accessory relay-2	F1	E119	W/32	: IPDM E/R (Intelligent power distribution module engine room)
E1	E23	GR/5	: Front wiper motor	E1	E120	W/4	: IPDM E/R (Intelligent power distribution module engine room)
E2	E24	L/4	: Trailer turn relay LH	F1	E121	W/12	: IPDM E/R (Intelligent power distribution module engine room)
E2	E25	L/4	: Trailer turn relay RH	B2	E125	B/34	: ABS actuator and electric unit (Control unit)
F2	E26	W/24	: To E209	E1	E167	B/3	: Vacuum sensor

HARNESS

< WIRING DIAGRAM >

ENGINE ROOM HARNESS (PASSENGER VIEW)



AAMIA0062ZZ

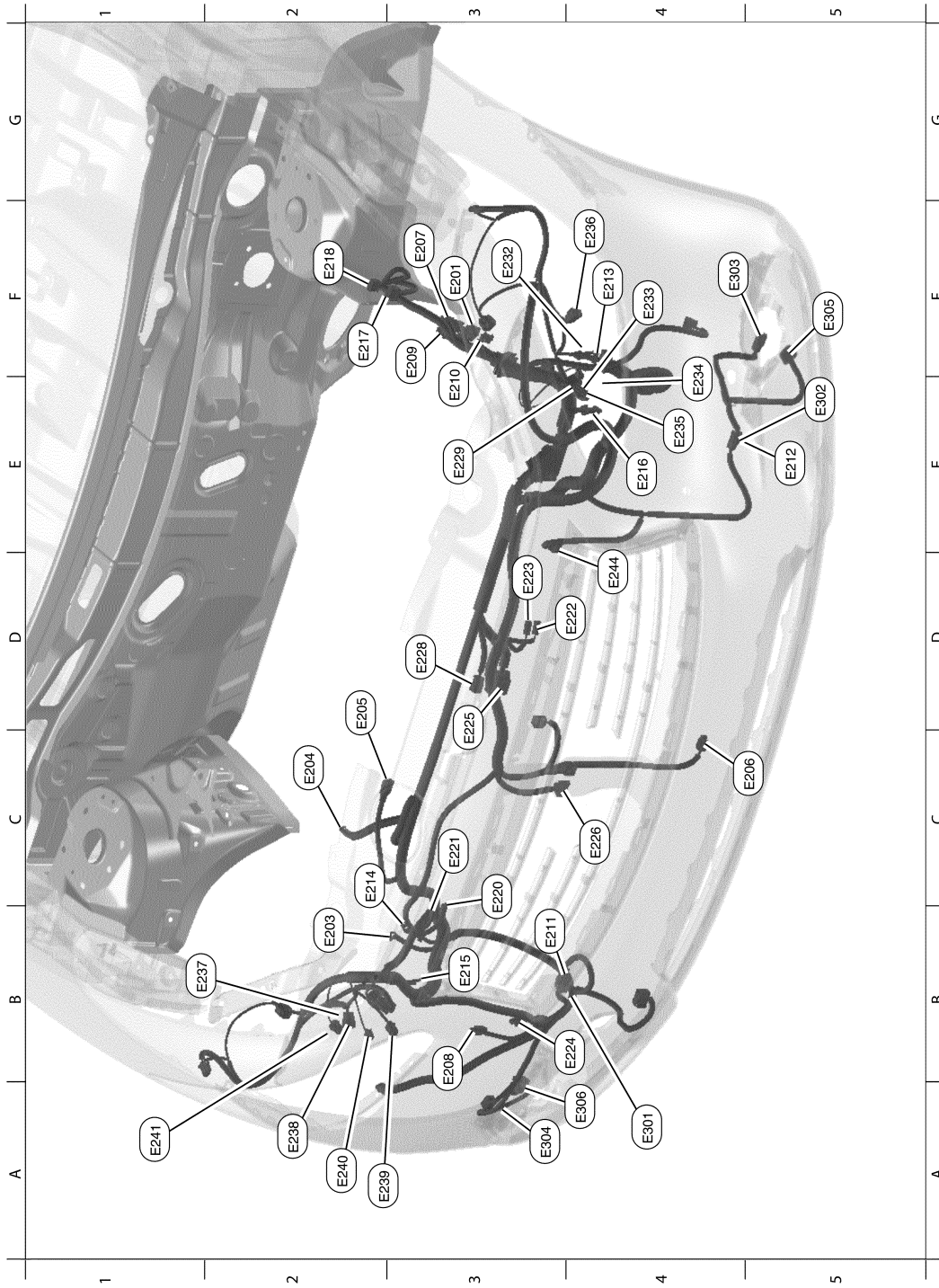
B4	E13	W/1	: Fuse block (J/B)	B4	E36	W/3	: To M75
B4	E17	W/1	: Fuse block (J/B)	E4	E38	W/4	: Stop lamp switch
C5	E28	W/10	: Fuse block (J/B)	C1	E44	W/33	: Joint connector-E01
G5	E31	B/6	: Accelerator pedal position sensor	D4	E52	B/1	: Parking brake switch
B3	E33	W/12	: To B43	D5	E76	BR/2	: Brake pedal position switch

HARNESS

< WIRING DIAGRAM >

C2	E34	W/24	: To B40	C2	E126	—	: Body ground
B3	E35	GR/1	: To B48	C3	E152	SMJ	:To M31

FRONT END MODULE HARNESS



AAMIA0063ZZ

F3	E201	B/2	: To E40	D3	E225	GR/3	: Cooling fan control module
B2	E203	—	: Body ground	C4	E226	B/4	: Front camera
C2	E204	—	: Generator	D3	E228	Y/2	: Crash zone sensor

HARNESSES

< WIRING DIAGRAM >

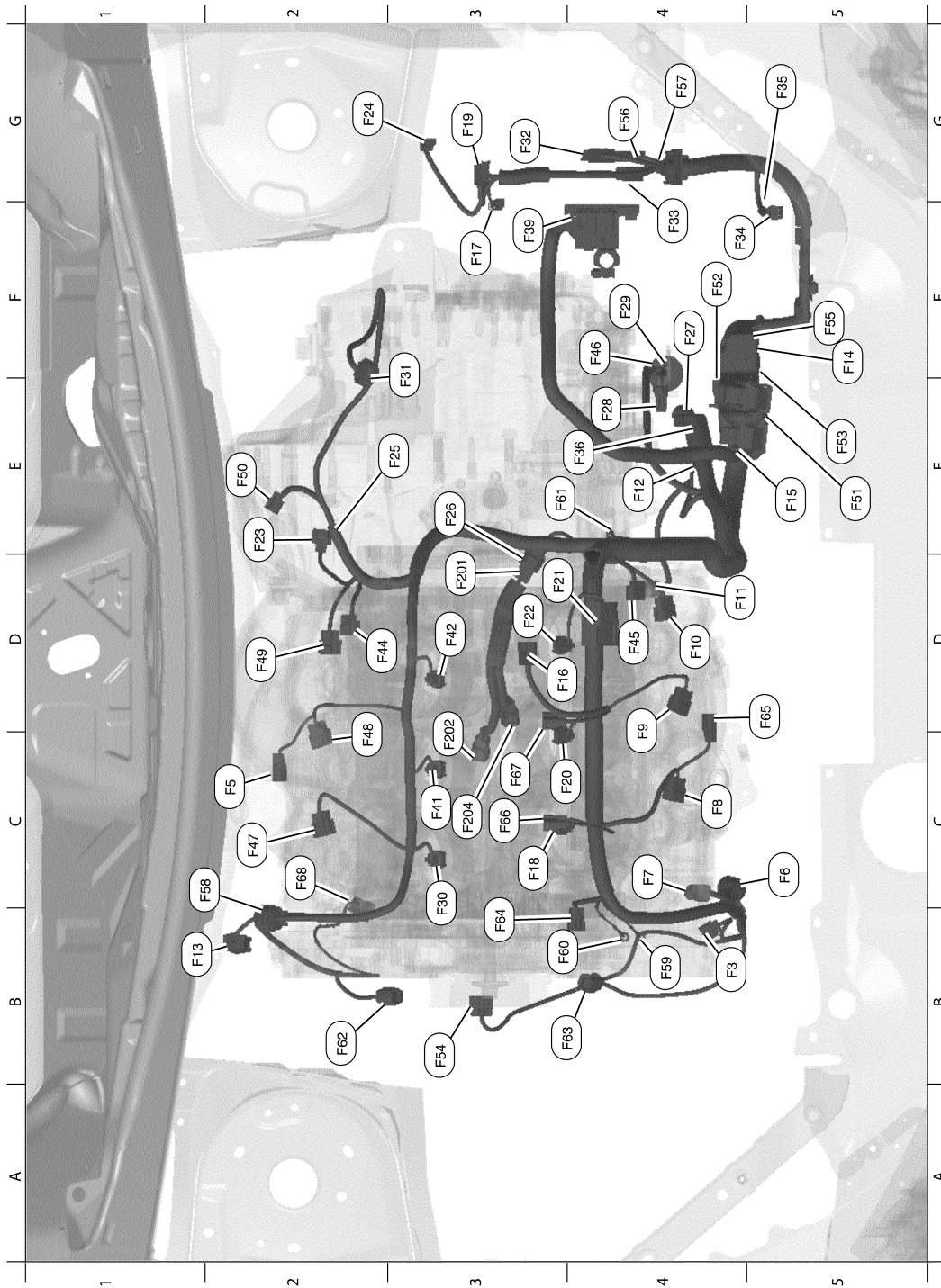
D2	E205	BR/3	: Hood switch	E3	E229	—	: Body ground	A	
C5	E206	B/2	: Ambient sensor	F3	E232	B/2	: Front combination lamp LH	B	
F3	E207	W/16	: To E5	F4	E233	B/2	: Front combination lamp LH	C	
B3	E208	B/2	: Washer fluid level switch	E4	E234	GR/2	: Front combination lamp LH	D	
F3	E209	W/24	: To E26	E4	E235	GR/2	: Front combination lamp LH	E	
E3	E210	Y/4	: To E29	F4	E236	GR/2	: Front combination lamp LH	F	
B3	E211	GR/4	: To E301	B1	E237	B/2	: Front combination lamp RH	G	
E5	E212	GR/4	: To E302	A2	E238	B/2	: Front combination lamp RH	H	
F4	E213	—	: Body ground	A2	E239	GR/2	: Front combination lamp RH	I	
C2	E214	—	: Body ground	A2	E240	GR/2	: Front combination lamp RH	J	
B3	E215	—	: Body ground	A1	E241	GR/2	: Front combination lamp RH	K	
E4	E216	—	: Body ground	D4	E244	B/3	: Refrigerant pressure sensor	L	
F2	E217	W/8	: IPDM E/R (Intelligent power distribution module engine room)	Front fog lamp sub harness					
F2	E218	W/16	: IPDM E/R (Intelligent power distribution module engine room)	A4	E301	GR/4	: To E211		
C3	E220	B/1	: Horn (High)	E5	E302	GR/4	: To E212		
C3	E221	B/1	: Horn (High)	F4	E303	GR/2	: Front fog lamp LH (With daytime light system)		
D4	E222	B/1	: Horn (Low)	A3	E304	GR/2	: Front fog lamp RH (With daytime light system)		
D3	E223	B/1	: Horn (Low)	F5	E305	B/2	: Front fog lamp LH		
B4	E224	B/2	: Front and rear washer motor	A4	E306	B/2	: Front fog lamp RH		

PG

HARNESS

< WIRING DIAGRAM >

ENGINE CONTROL HARNESS



AAMIA0064ZZ

B4	F3	B/2	: A/C compressor	F3	F39	—	: Fusible link box (Battery)
C2	F5	BR/4	: Air fuel ratio (A/F) sensor 1 (Bank 1)	C3	F41	GR/2	: Fuel injector No. 3
C5	F6	—	: Generator	D3	F42	GR/2	: Fuel injector No. 5
C4	F7	B/3	: Generator	D2	F44	B/3	: Camshaft position sensor (PHASE) (Bank1)

HARNESSES

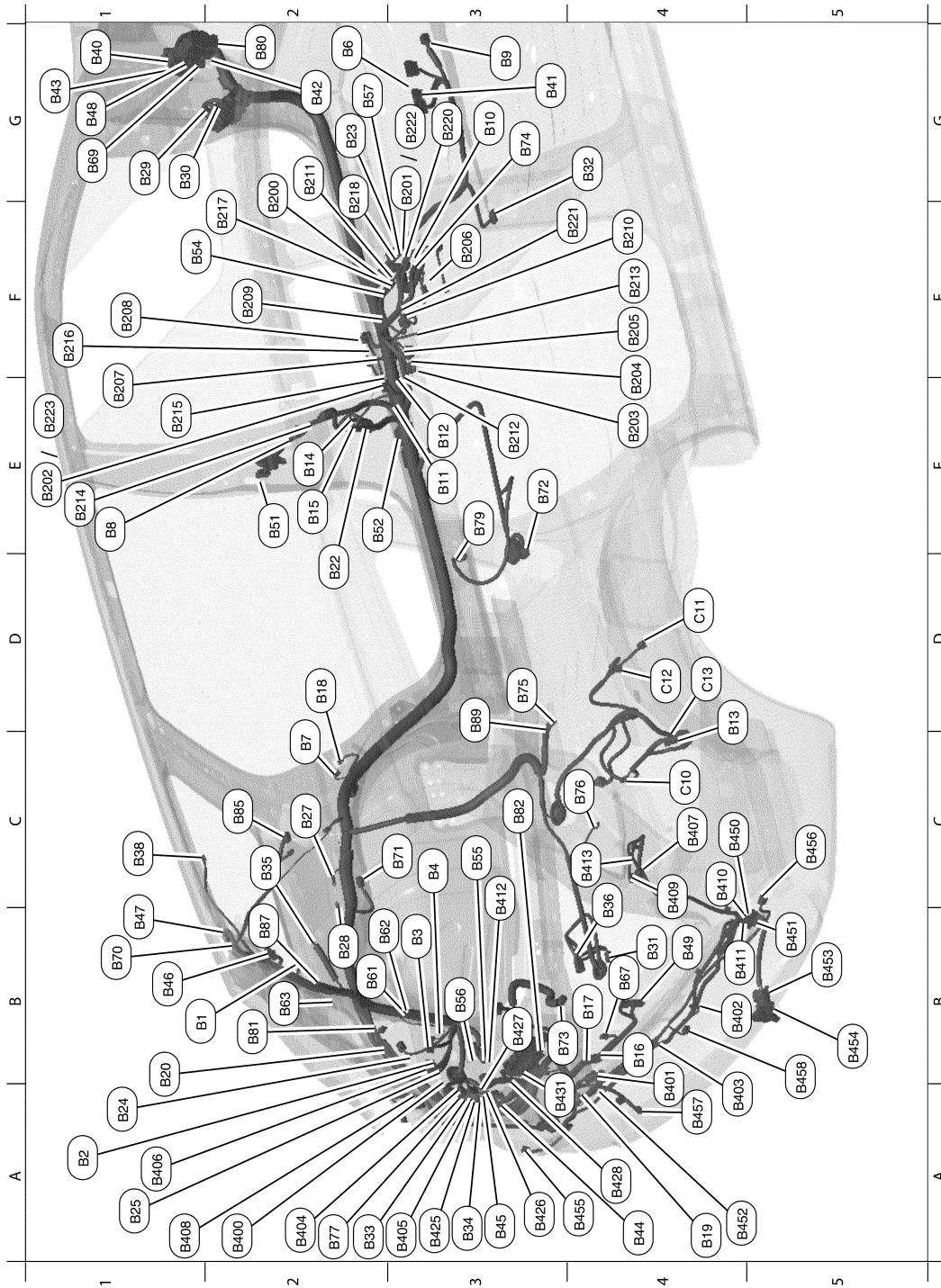
< WIRING DIAGRAM >

C4	F8	GR/3	: Ignition coil No. 2 (With power transistor)	D4	F45	B/3	: Camshaft position sensor (PHASE) (Bank2)	A
D4	F9	GR/3	: Ignition coil No. 4 (With power transistor)	F4	F46	GR/22	: CVT unit	B
D4	F10	GR/3	: Ignition coil No. 6 (With power transistor)	C2	F47	GR/3	: Ignition coil No. 1 (With power transistor)	C
D4	F11	B/3	: Crankshaft position sensor (POS)	C2	F48	GR/3	: Ignition coil No. 3 (With power transistor)	D
E4	F12	B/4	: Heated oxygen sensor 2 (Bank 2)	D2	F49	GR/3	: Ignition coil No. 5 (With power transistor)	E
B1	F13	B/4	: Heated oxygen sensor 2 (Bank 1)	E2	F50	B/6	: Electric throttle control actuator	F
F5	F14	B/10	: Joint connector-F01	E5	F51	B/48	: ECM	G
E5	F15	B/48	: TCM (Transmission control module)	F4	F52	BR/48	: ECM	H
D3	F16	GR/2	: EVAP canister purge volume control solenoid valve	E5	F53	B/10	: Joint connector-F03	I
F3	F17	B/1	: IPDM E/R (Intelligent power distribution module engine room)	B3	F54	B/3	: Engine oil pressure sensor	J
C3	F18	GR/2	: Fuel injector No. 2	F5	F55	B/10	: Joint connector-F04	K
G3	F19	W/10	: IPDM E/R (Intelligent power distribution module engine room)	G4	F56	W/4	: Joint connector-F07	L
C4	F20	GR/2	: Fuel injector No. 4	G4	F57	W/4	: Joint connector-F08	PG
D3	F21	GR/2	: Condenser-1	C1	F58	GR/6	: Joint connector-F09	N
D3	F22	GR/2	: Fuel injector No. 6	B4	F59	—	: Engine ground	O
E2	F23	B/3	: Output speed sensor	B3	F60	—	: Engine ground	P
G2	F24	W/12	: IPDM E/R (Intelligent power distribution module engine room)	E3	F61	GR/2	: Engine coolant temperature sensor	
E3	F25	B/3	: Primary speed sensor	B2	F62	GR/2	: Intake valve timing control solenoid valve (Bank 1)	
E3	F26	L/4	: To F201	B4	F63	GR/2	: Intake valve timing control solenoid valve (Bank 2)	
F4	F27	—	: Starter motor	B3	F64	BR/2	: Electronic controlled engine mount control solenoid valve	
E4	F28	GR/1	: Starter motor	D5	F65	BR/4	: Air fuel ratio (A/F) sensor 1 (Bank 2)	
F4	F29	B/3	: Input speed sensor	C3	F66	B/2	: VIAS control solenoid valve 1	
C3	F30	GR/2	: Fuel injector No. 1	C3	F67	B/2	: VIAS control solenoid valve 2	
F3	F31	B/5	: Mass air flow sensor	C2	F68	GR/2	: Engine oil temperature sensor	
G3	F32	W/16	: To E2	Knock sensor sub harness				
F4	F33	W/10	: To E19	D3	F201	L/4	: To F26	
F4	F34	GR/4	: Battery current sensor	D3	F202	GR/2	: Knock sensor (Bank 1)	
G5	F35	B/10	: Joint connector-F02	C3	F204	GR/2	: Knock sensor (Bank 2)	
E4	F36	B/10	: Transmission range switch					

HARNESS

< WIRING DIAGRAM >

BODY HARNESS



ABMIA4916ZZ

B1	B1	BR/2	: Rear side speaker LH	B2	B81	GR/3	: Rear cargo power socket
A1	B2	W/16	: Satellite radio tuner	C3	B82	B/8	: Inverter unit
B3	B3	W/32	: Bluetooth® control unit	C2	B85	W/10	: Sunshade motor assembly
C3	B4	W/8	: Bluetooth® control unit	B2	B87	W/4	: Joint connector-B16
G2	B6	W/24	: To M66	D3	B89	W/4	: Joint connector-B20

HARNESSES

< WIRING DIAGRAM >

C2	B7	—	: Body ground	Chassis harness				A
E1	B8	W/4	: Front door switch LH	C4	C10	B/2	: Rear wheel sensor LH	
G3	B9	Y/22	: Air bag diagnosis sensor unit	D4	C11	GR/2	: Rear wheel sensor RH	
G3	B10	Y/2	: Front LH side air bag module	D4	C12	GR/2	: 4WD solenoid	B
E3	B11	W/4	: Joint connector-B09	D4	C13	B/14	: To B13	
E3	B12	W/4	: Joint connector-B10	Front seat LH harness				
D4	B13	B/14	: To C13	G2	B200	BR/12	: To B54	C
E2	B14	Y/2	: Front LH seat belt pre-tensioner	G3	B201	W/16	: To B57	
E2	B15	Y/2	: Front side air bag satellite sensor LH	E1	B202	W/24	: Headrest display unit (Driver seat) (Pre-wire)	D
B4	B16	W/4	: Joint connector-B11	E4	B203	B/16	: Climate controlled seat control unit (Driver seat)	E
B4	B17	W/4	: Joint connector-B12	F4	B204	B/8	: Climate controlled seat control unit (Driver seat)	
D2	B18	W/4	: Rear door switch LH	F4	B205	B/6	: Climate controlled seat control unit (Driver seat)	F
A4	B19	—	: Body ground	F3	B206	W/4	: Seat cushion thermal electric device (Driver seat)	
B1	B20	W/4	: Fuel lid door lock actuator	E1	B207	W/6	: Lifting motor LH (Rear)	G
D2	B22	O/2	: Front LH seat belt pre-tensioner	F1	B208	W/10	: Power seat switch LH	
G2	B23	W/24	: To B222	F2	B209	W/32	: Driver seat control unit	H
A1	B24	W/32	: Video distributor	F4	B210	W/12	: Driver seat control unit	
A1	B25	W/24	: Video distributor	G2	B211	GR/5	: Sliding motor LH	I
C2	B27	—	: Body ground	E3	B212	W/4	: Seat back thermal electric device (Driver seat)	
B2	B28	—	: Body ground	F4	B213	W/5	: Climate controlled seat blower motor (Driver seat)	J
G1	B29	W/6	: Fuse block (J/B)	E1	B214	BR/4	: Lumbar support switch	
G1	B30	W/8	: Fuse block (J/B)	E1	B215	B/2	: Lumbar support motor	K
B4	B31	B/2	: EVAP canister vent control valve	F1	B216	W/3	: Front seat heater (Driver seat)	
G4	B32	W/32	: To B124	F2	B217	W/6	: Reclining motor LH	L
A2	B33	B/2	: To B404	G2	B218	W/6	: Lifting motor LH (Front)	
A3	B34	W/8	: To B405	G3	B220	W/12	: To B74	
C2	B35	W/4	: Sonar buzzer	F4	B221	W/4	: Seat belt buckle switch (Driver seat)	PG
C4	B36	GR/3	: EVAP control system pressure sensor	G3	B222	W/24	: To B23	
C1	B38	Y/2	: LH side curtain air bag module	E1	B223	W/24	: Headrest display unit (Driver seat)	
G1	B40	W/24	: To E34	Body no. 3 harness				N
G3	B41	W/32	: To M69	A2	B400	W/32	: To B77	
G2	B42	BR/12	: To M74	A4	B401	B/12	: To B452	
G1	B43	W/12	: To E33	B4	B402	BR/2	: Back door warning chime	O
A4	B44	B/2	: To B425	A4	B403	GR/2	: Outside key antenna (Rear bumper)	
A3	B45	W/16	: To B426	A2	B404	B/2	: To B33	P
B1	B46	W/24	: To D501	A3	B405	W/8	: To B34	
B1	B47	GR/8	: To D502	A1	B406	GR/3	: Rear combination lamp LH	
G1	B48	GR/1	: To E35	C4	B407	GR/3	: Rear combination lamp RH	
B4	B49	W/16	: To B140	A1	B408	GR/2	: Rear combination lamp LH	
E2	B51	W/12	: To D201	C4	B409	GR/2	: Rear combination lamp RH	
E2	B52	W/2	: Condenser-2	C4	B410	GR/6	: To B450	

HARNESS

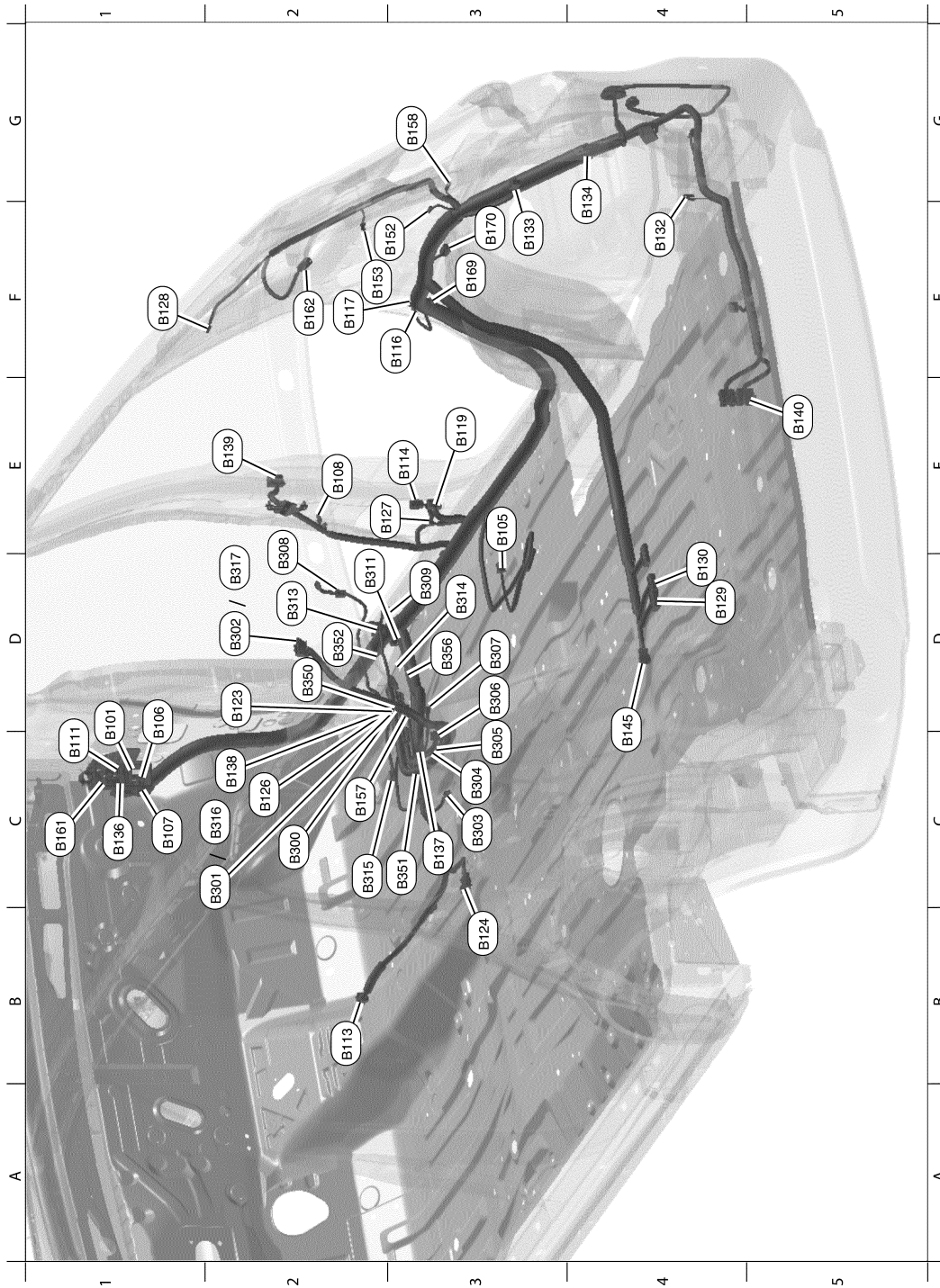
< WIRING DIAGRAM >

F1	B54	BR/12	: To B200	B4	B411	B/2	: To B451
C3	B55	B/24	: Automatic back door control module	C3	B412	W/2	: Rear combination lamp LH
B3	B56	GR/14	: Automatic back door control module	C4	B413	W/2	: Rear combination lamp RH
G2	B57	W/16	: To B201	A3	B425	B/2	: To B44
B2	B61	W/4	: Joint connector-B18	Trailer relay sub harness			
B2	B62	W/4	: Joint connector-B19	A3	B426	W/16	: To B45
B2	B63	W/33	: Joint connector-B01	B3	B427	L/4	: Trailer tow relay 1
B4	B67	W/16	: 4WD control unit	A4	B428	BR/6	: Trailer tow relay 2
G1	B69	SMJ	: To M40	A3	B431	L/4	: Trailer back-up relay
B1	B70	B/10	: Spindle unit LH	Body no. 3 sub harness			
C3	B71	Y/2	: Rear side air bag satellite sensor LH	C4	B450	GR/6	: To B410
E3	B72	GR/6	: Fuel level sensor and fuel pump	B5	B451	B/2	: To B411
B3	B73	GR/6	: Subwoofer	A4	B452	B/12	: To B401
G3	B74	W/12	: To B220	B5	B453	B/7	: Trailer
D3	B75	W/16	: To B145	B5	B454	B/7	: Trailer receptacle
C4	B76	GR/2	: Inside key antenna (Luggage room)	A4	B455	B/3	: Rear sonar sensor LH outer
A2	B77	W/32	: To B400	C5	B456	B/3	: Rear sonar sensor RH outer
E3	B79	W/6	: 2nd row seat heater LH	A4	B457	B/3	: Rear sonar sensor LH inner
G2	B80	W/4	: Joint connector-B15	B5	B458	B/3	: Rear sonar sensor RH inner

HARNESS

< WIRING DIAGRAM >

BODY NO. 2 HARNESS



ABMIA4917ZZ

D1	B101	W/32	: To M84	C2	B157	W/12	: To B300
E3	B105	W/6	: 2nd row seat heater RH	G3	B158	—	: Body ground
D1	B106	GR/1	: To M8	C1	B161	W/16	: To M157
C1	B107	W/24	: To M9	F2	B162	B/10	: Spindle unit RH
E2	B108	W/4	: Front door switch RH	F3	B169	W/4	: Joint connector-B04

HARNESS

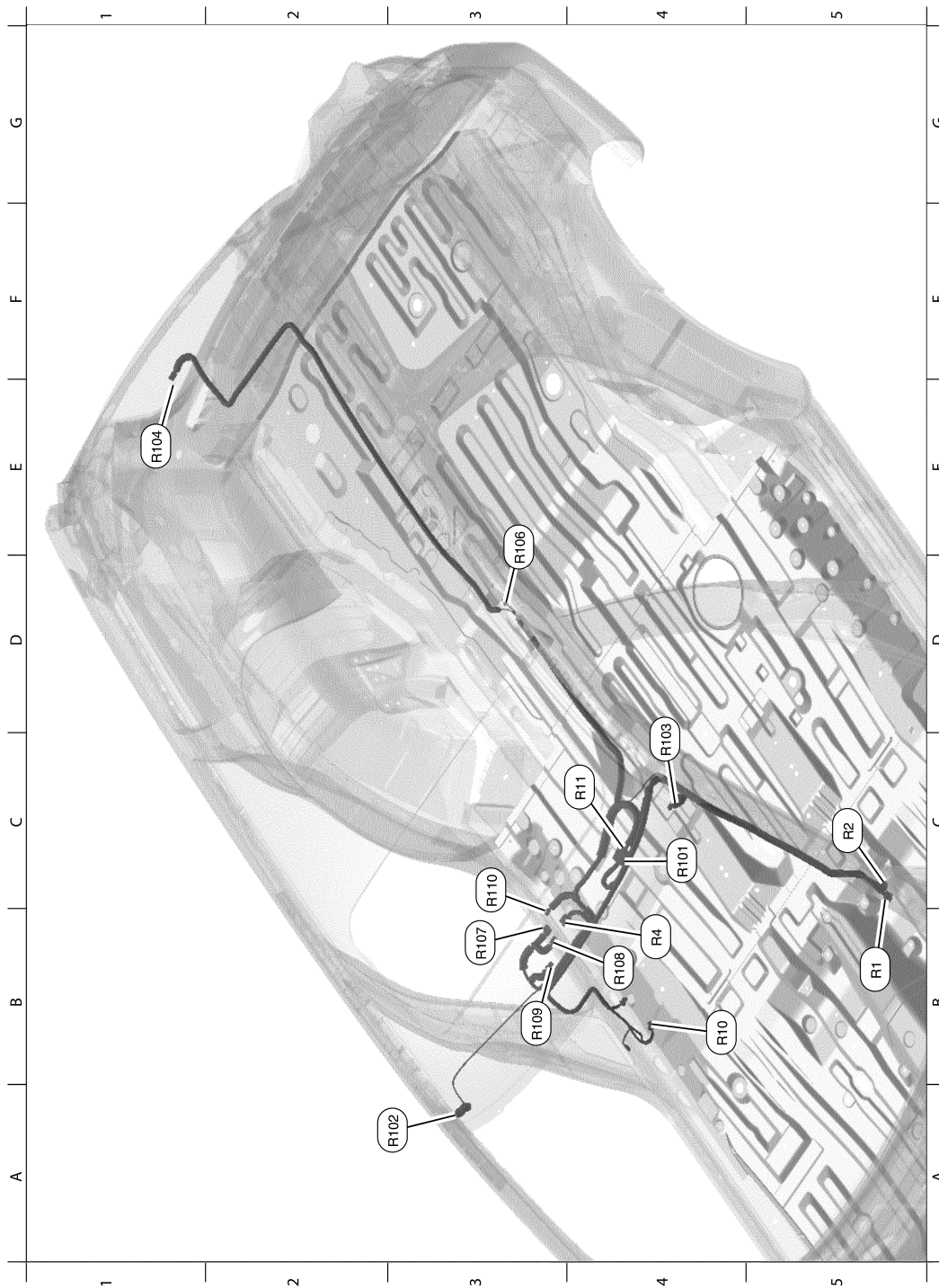
< WIRING DIAGRAM >

C1	B111	BR/16	: To M10	F3	B170	Y/2	: Rear side air bag satellite sensor RH
B2	B113	Y/22	: Air bag diagnosis sensor unit	Front seat RH harness			
E3	B114	Y/2	: Front side air bag satellite sensor RH	C2	B300	W/12	: To B157
F3	B116	W/4	: Rear door switch RH	C2	B301	W/24	: To B138
F2	B117	—	: Body ground	D2	B302	W/24	: Headrest display unit (Passenger seat) (Pre-wire)
E3	B119	O/2	: Front RH seat belt pre-tensioner	C3	B303	W/4	: Seat belt buckle switch (Passenger seat)
D2	B123	W/4	: To B350	C3	B304	B/6	: Climate controlled seat control unit (Passenger seat)
B3	B124	W/32	: To B32	C3	B305	B/8	: Climate controlled seat control unit (Passenger seat)
C2	B126	Y/2	: Front RH side air bag module	D3	B306	B/16	: Climate controlled seat control unit (Passenger seat)
E2	B127	Y/2	: Front RH seat belt pre-tensioner	D3	B307	W/5	: Climate controlled seat blower motor (Passenger seat)
F1	B128	Y/2	: RH side curtain air bag module	E2	B308	W/4	: Seat cushion thermal electric device (Passenger seat)
D4	B129	BR/14	: BOSE speaker amp.	D3	B309	W/4	: Seat back thermal electric device (Passenger seat)
D4	B130	BR/23	: BOSE speaker amp.	D2	B311	W/6	: Reclining motor RH
F4	B132	—	: Body ground	D2	B313	W/10	: Power seat switch RH
F3	B133	W/4	: Rear blower motor resistor 2	D3	B314	W/5	: Sliding motor RH
G4	B134	W/2	: Rear blower motor 2	C2	B315	W/3	: Front seat heater (Passenger seat)
C1	B136	W/40	: To M36	C2	B316	W/24	: To B137
C3	B137	W/24	: To B316	D2	B317	W/24	: Headrest display unit (Passenger seat)
C2	B138	W/24	: To B301	ODS sub harness			
E2	B139	W/12	: To D301	D2	B350	W/4	: To B123
E5	B140	W/16	: To B49	C3	B351	P/3	: Occupant classification system sensor FL
D4	B145	W/16	: To B75	D2	B352	P/3	: Occupant classification system sensor FR
F3	B152	—	: Body ground	D3	B356	B/20	: Occupant classification system control unit
F2	B153	BR/2	: Rear side speaker RH				

HARNESS

< WIRING DIAGRAM >

ROOM LAMP HARNESS



AAMIA0067ZZ

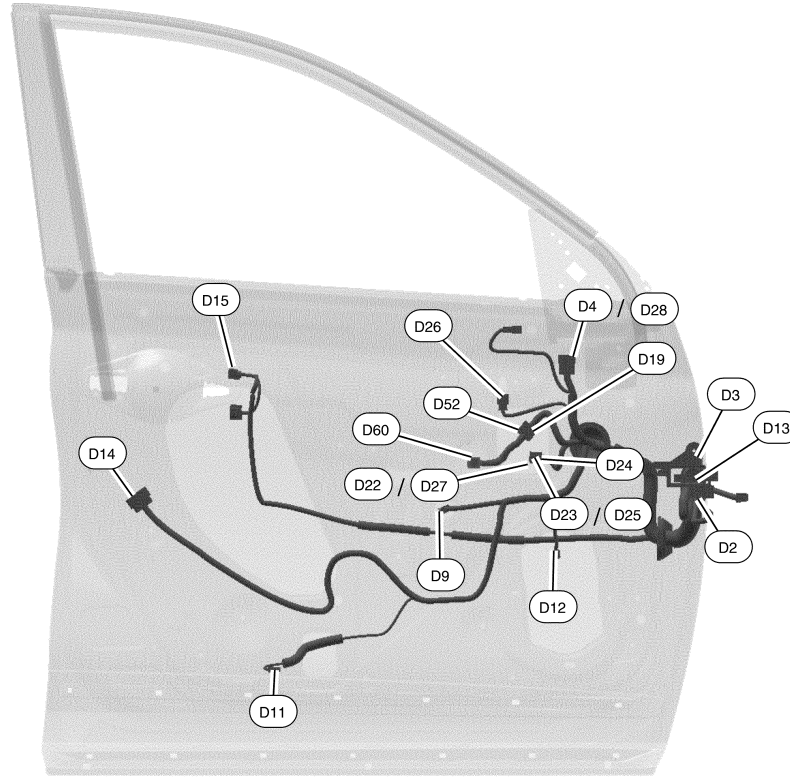
B5	R1	W/24	: To M1	C4	R103	W/2	: Vanity lamp LH
C5	R2	W/6	: To M2	E1	R104	W/3	: Cargo lamp
B4	R4	GR/10	: Moonroof motor assembly	E3	R106	W/4	: Personal lamps 2nd row
B4	R10	B/10	: Auto anti-dazzling inside mirror	B3	R107	W/8	: Front room/map lamp assembly
C4	R11	W/24	: To R101	B4	R108	W/12	: Moonroof switch

HARNESS

< WIRING DIAGRAM >

Room lamp sub harness				B3	R109	W/6	: Microphone
C4	R101	W/24	: To R11	C3	R110	W/4	: Sunshade switch
A3	R102	W/2	: Vanity lamp RH				

FRONT DOOR LH HARNESS



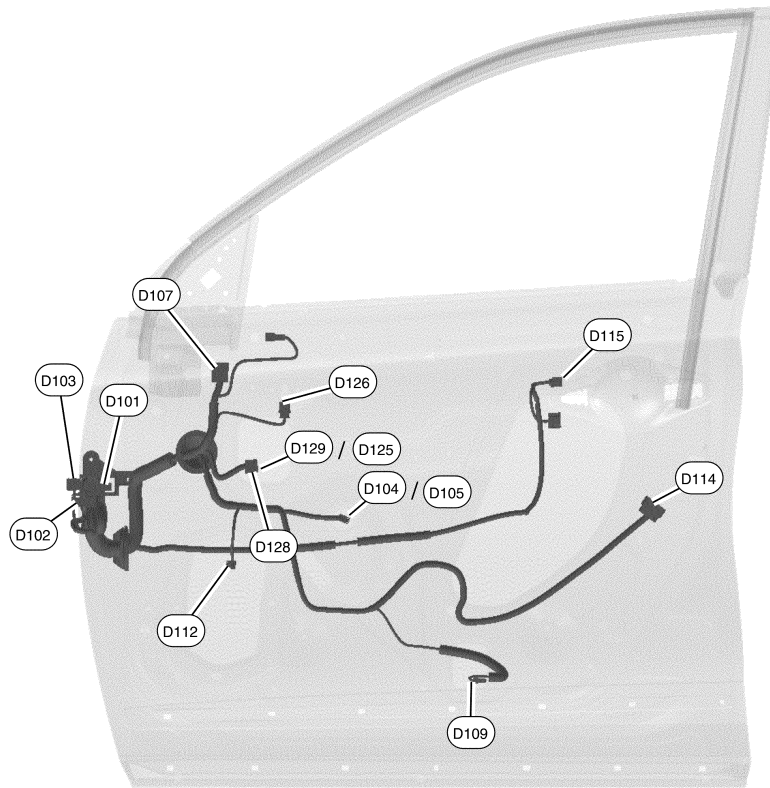
ABMIA4918ZZ

D2	W/16	: To M167	D22	GR/16	: Door mirror remote control switch (With automatic drive positioner)
D3	W/40	: To M168	D23	W/16	: Main power window and door lock/unlock switch (With left front only auto down)
D4	W/12	: Door mirror LH (Without around view monitor system)	D24	W/3	: Main power window and door lock/unlock switch
D9	W/6	: Front power window motor LH	D25	W/16	: Main power window and door lock/unlock switch (With left and right front auto up/down)
D11	W/2	: Front step lamp LH	D26	Y/2	: Front door satellite sensor LH
D12	W/2	: Front door speaker LH	D27	B/16	: Door mirror remote control switch (Without automatic drive positioner)
D13	Y/4	:To M169	D28	W/24	: Door mirror LH (With around view monitor system)
D14	GR/6	: Front door lock assembly LH	Front door LH sub harness		
D15	B/4	: Front outside handle assembly LH	D52	W/16	: To D19
D19	W/16	: To D52	D60	W/16	: Seat memory switch

HARNESS

< WIRING DIAGRAM >

FRONT DOOR RH HARNESS



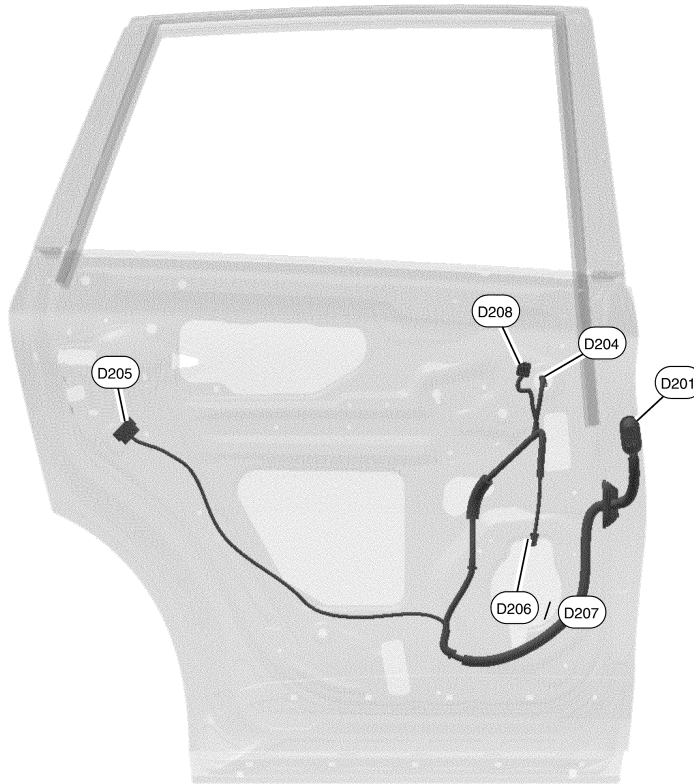
AAMIA0069ZZ

D101	W/32	: To M91	D112	W/2	: Front door speaker RH
D102	W/10	: To M158	D114	GR/6	: Front door lock actuator RH
D103	Y/4	: To M159	D115	B/4	: Front outside handle assembly RH
D104	W/6	: Front power window motor RH (With left front only auto down)	D125	W/12	: Power window and door lock/unlock switch RH (With left front only auto down)
D105	W/6	: Front power window motor RH (With left and right front auto up/down)	D126	Y/2	: Front door satellite sensor RH
D107	W/12	: Door mirror RH (Without around view monitor system)	D128	W/24	: Door mirror RH (With around view monitor system)
D109	W/2	: Front step lamp RH	D129	W/12	: Power window and door lock/unlock switch RH (With left and right auto up/down)

HARNESS

< WIRING DIAGRAM >

REAR DOOR LH HARNESS



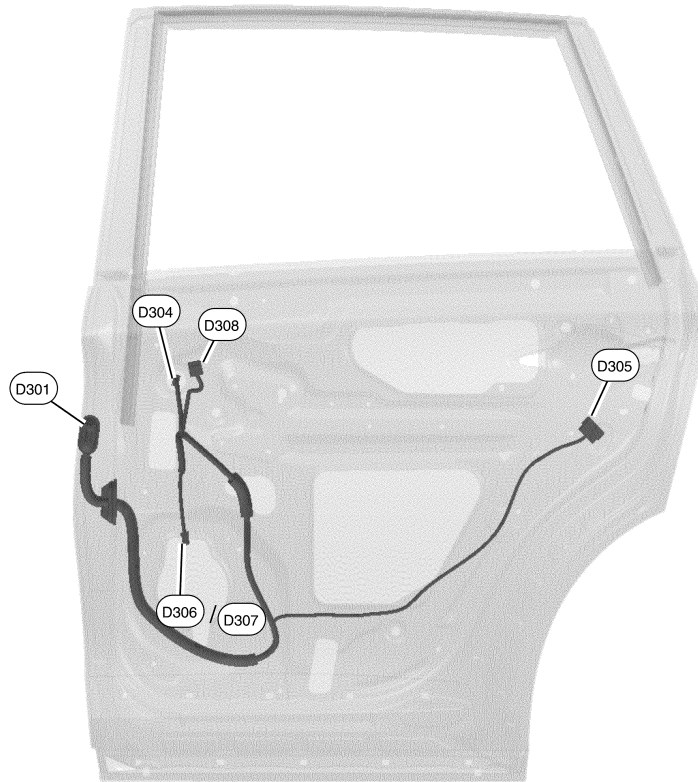
AAMIA0070ZZ

D201	W/12	: To B51	D206	W/2	: Rear door speaker LH
D204	W/6	: Rear power window motor LH	D207	BR/2	: Rear door speaker LH
D205	GR/6	: Rear door lock actuator LH	D208	W/8	: Rear power window switch LH

HARNESS

< WIRING DIAGRAM >

REAR DOOR RH HARNESS



AAMIA0071ZZ

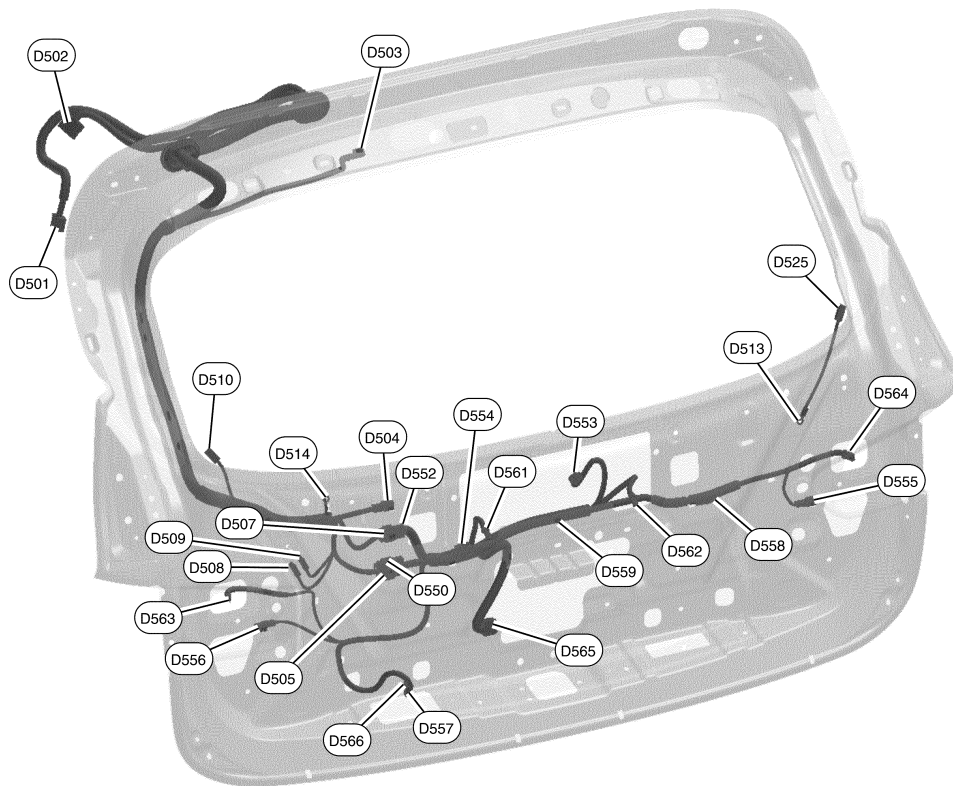
D301	W/12	: To B139	D306	W/2	: Rear door speaker RH
D304	W/6	: Rear power window motor RH	D307	BR/2	: Rear door speaker RH
D305	GR/6	: Rear door lock actuator RH	D308	W/8	: Rear power window switch RH

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

HARNESS

< WIRING DIAGRAM >

BACK DOOR



AAMIA0072ZZ

D501	W/24	: To B46	D552	W/16	: To D507
D502	GR/8	: To B47	D553	W/3	: Rear wiper motor
D503	BR/2	: High-mounted stop lamp	D554	W/4	: Joint connector-D01
D504	W/4	: Rear view camera	D555	GR/2	: Touch sensor RH
D505	W/6	: To D550	D556	W/2	: Touch sensor LH
D507	W/16	: To D552	D557	W/8	: Back door lock assembly (With power back door)
D508	B/1	: Rear window defogger condenser	D558	B/2	: Diode-2
D509	B/1	: Rear window defogger condenser	D559	W/4	: Back door opener switch
D510	B/1	: Rear window defogger	D561	BR/2	: License plate lamp LH
D513	—	: Body ground	D562	BR/2	: License plate lamp RH
D514	—	: Body ground	D563	W/2	: Back-up lamp RH
D525	B/1	: Rear window defogger	D564	W/2	: Back-up lamp LH
Back door RH harness			D565	W/4	: Back door lock assembly (Without power back door)
D550	W/6	: To D505	D566	G/8	: Automatic back door close switch

ELECTRICAL UNITS LOCATION

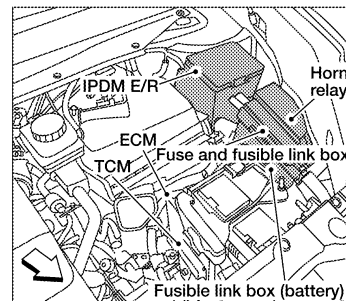
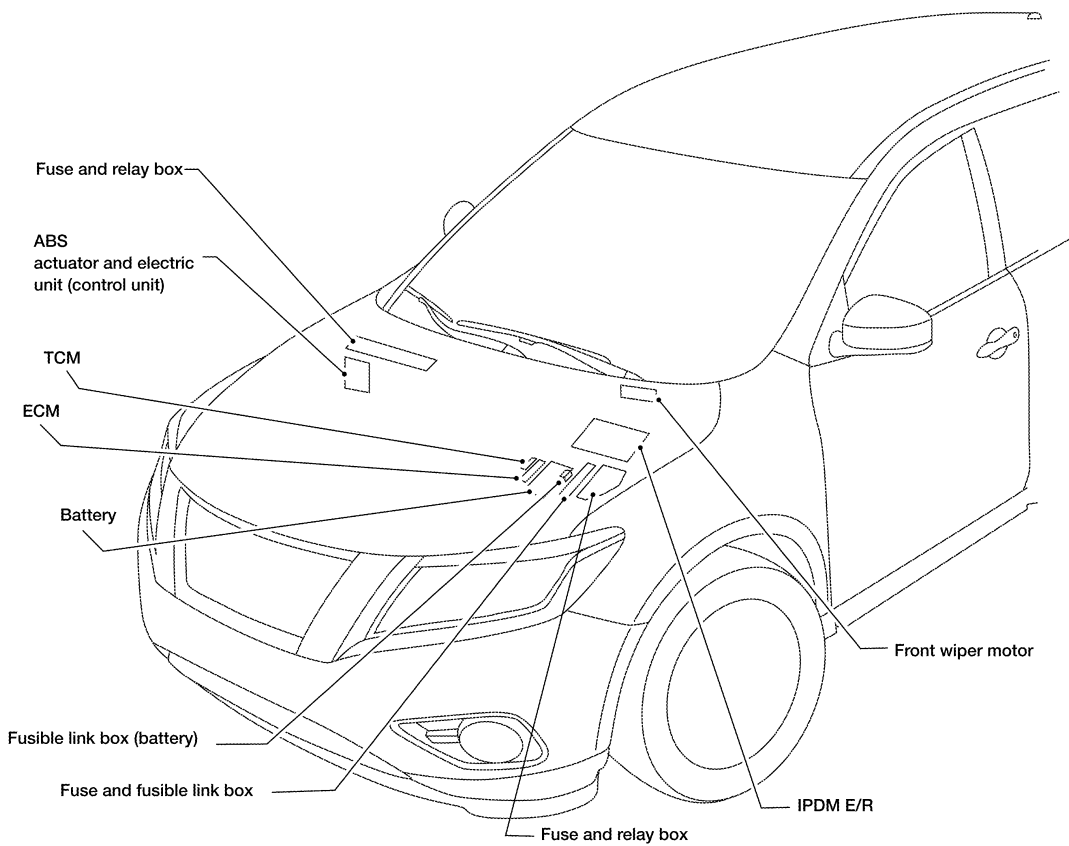
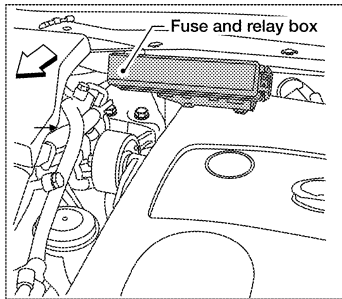
< WIRING DIAGRAM >

ELECTRICAL UNITS LOCATION

Electrical Units Location

INFOID:000000009175295

ENGINE COMPARTMENT



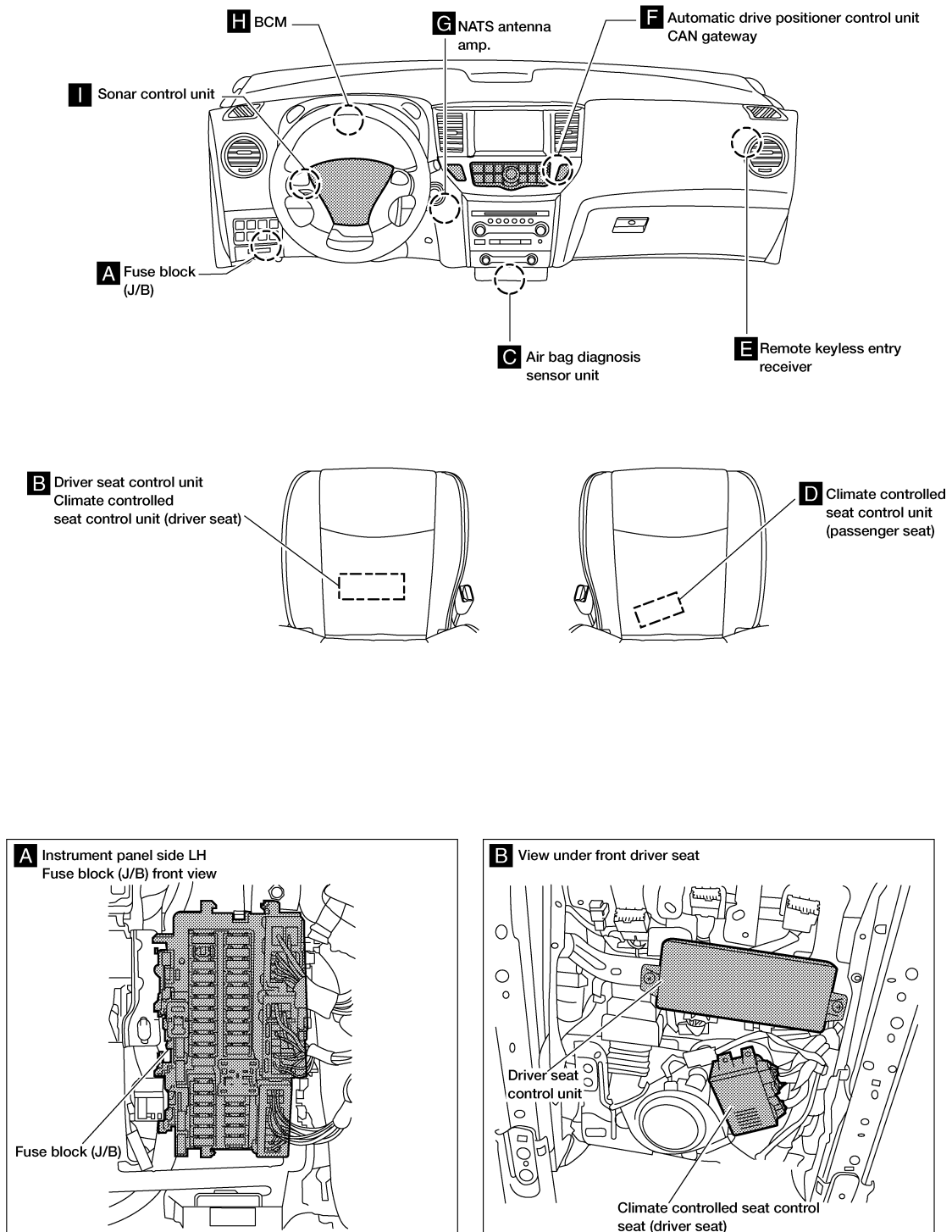
AAMIA1361GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

ELECTRICAL UNITS LOCATION

< WIRING DIAGRAM >

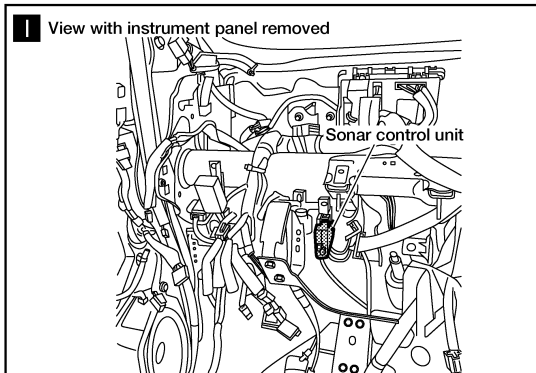
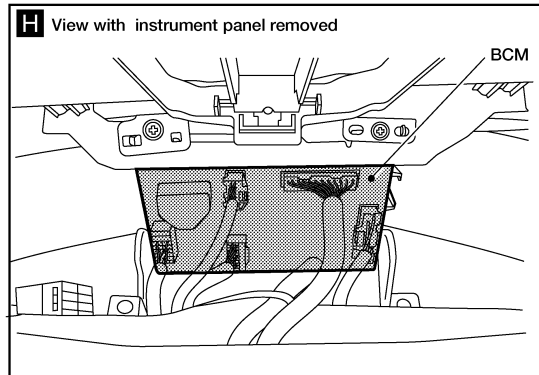
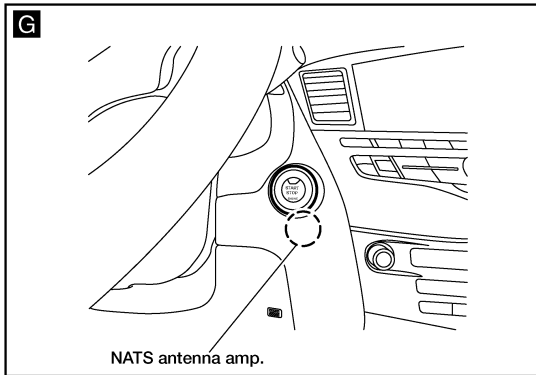
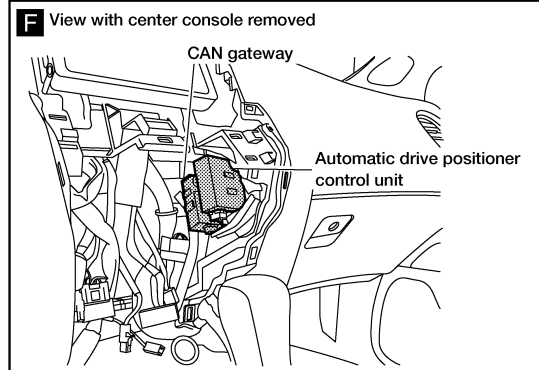
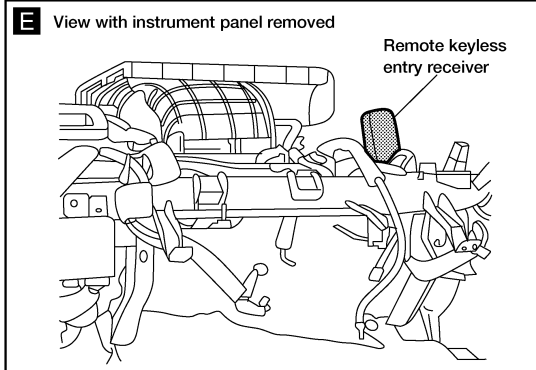
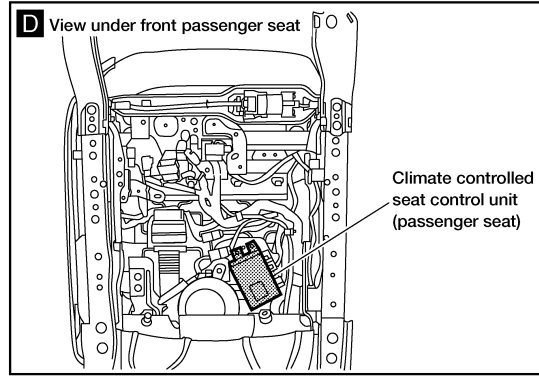
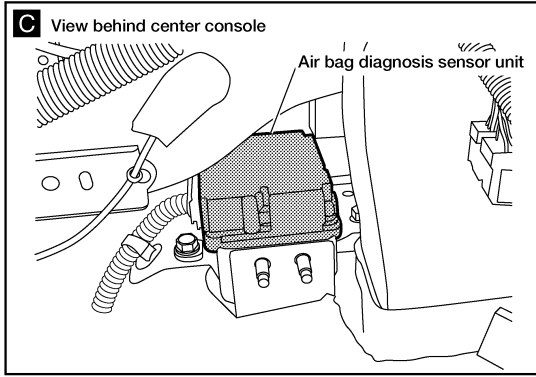
PASSENGER COMPARTMENT



AAMIA1362GB

ELECTRICAL UNITS LOCATION

< WIRING DIAGRAM >



A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

AAMIA1363GB

HARNESS CONNECTOR

< WIRING DIAGRAM >

HARNESS CONNECTOR

Description

INFOID:000000009175296

HARNESS CONNECTOR (TAB-LOCKING TYPE)

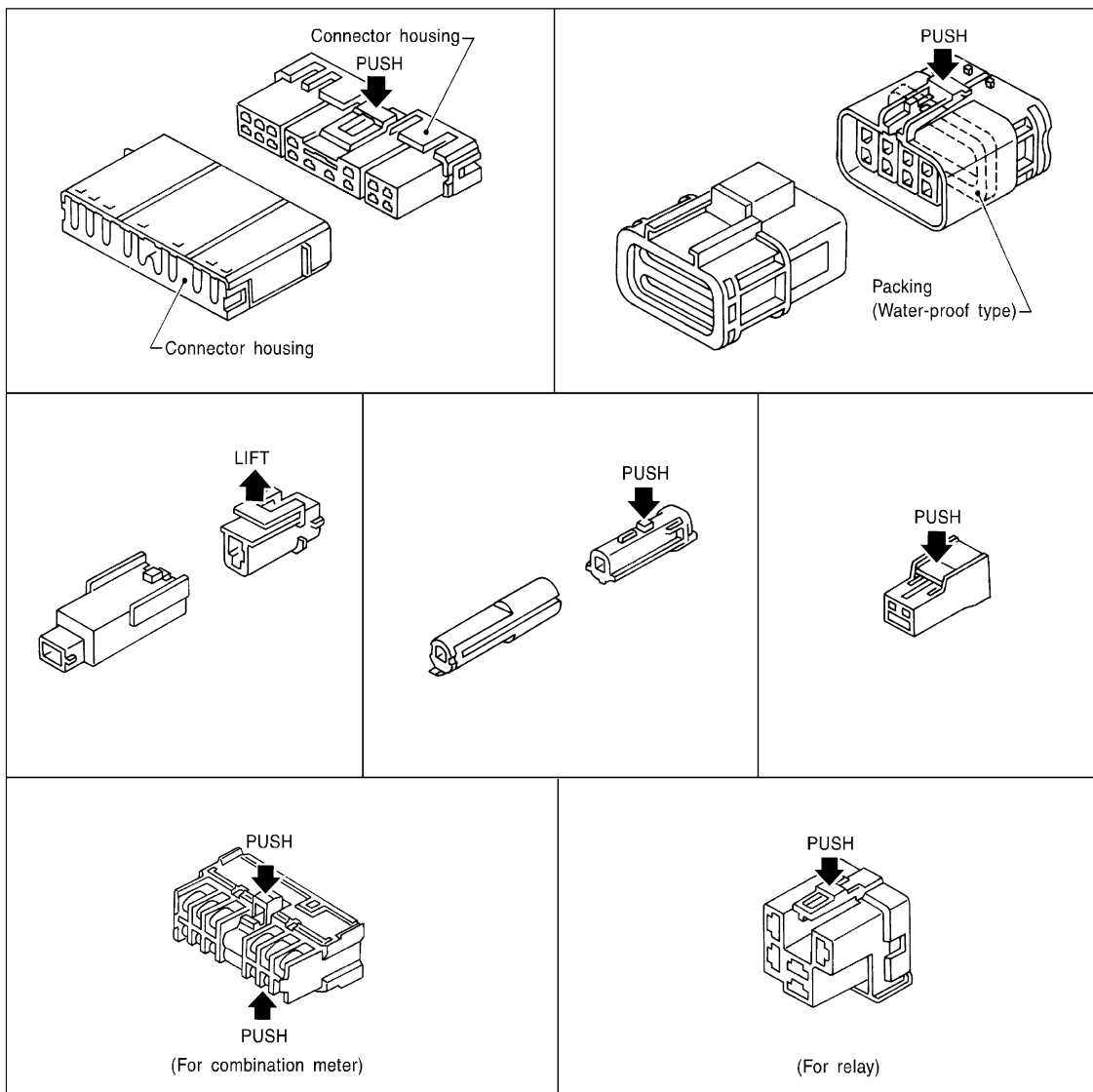
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

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

HARNESS CONNECTOR

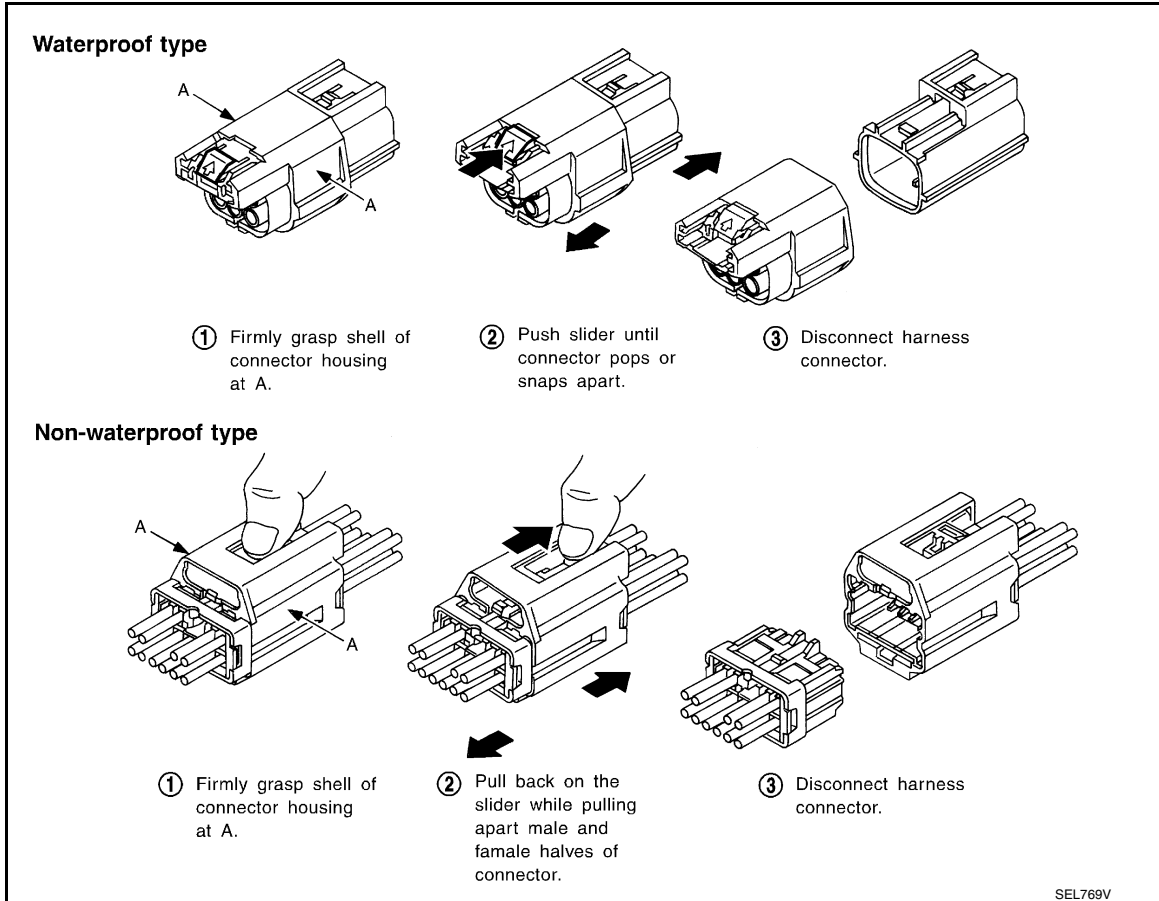
< WIRING DIAGRAM >

- 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.

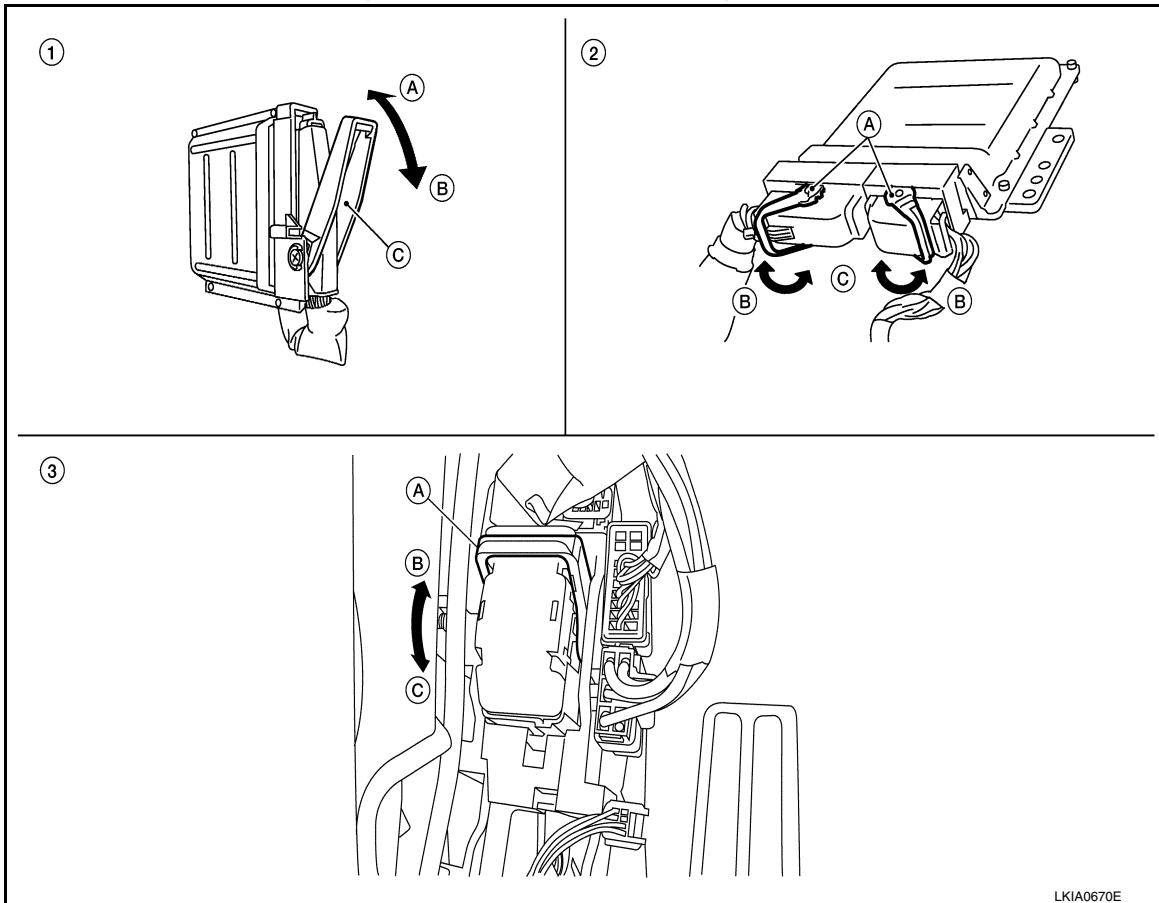
CAUTION:

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

HARNESS CONNECTOR

< WIRING DIAGRAM >

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



LKIA0670E

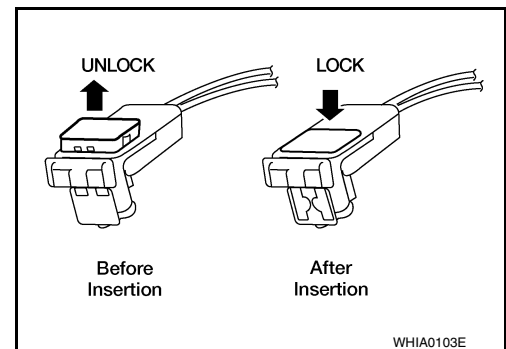
- | | | |
|-----------------------------------|---------------------------------|------------------|
| 1. Control unit with single lever | 2. Control unit with dual lever | 3. SMJ connector |
| A. Fasten | A. Lever | A. Lever |
| B. Loosen | B. Fasten | B. Fasten |
| C. Lever | C. Loosen | C. Loosen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

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.



WHIA0103E

STANDARDIZED RELAY

< WIRING DIAGRAM >

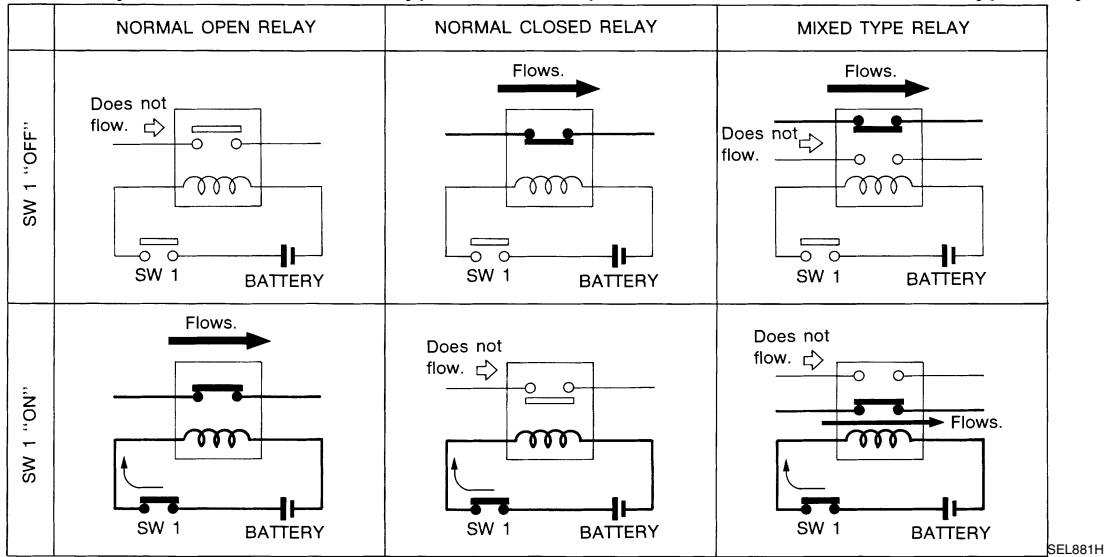
STANDARDIZED RELAY

Description

INFOID:000000009175297

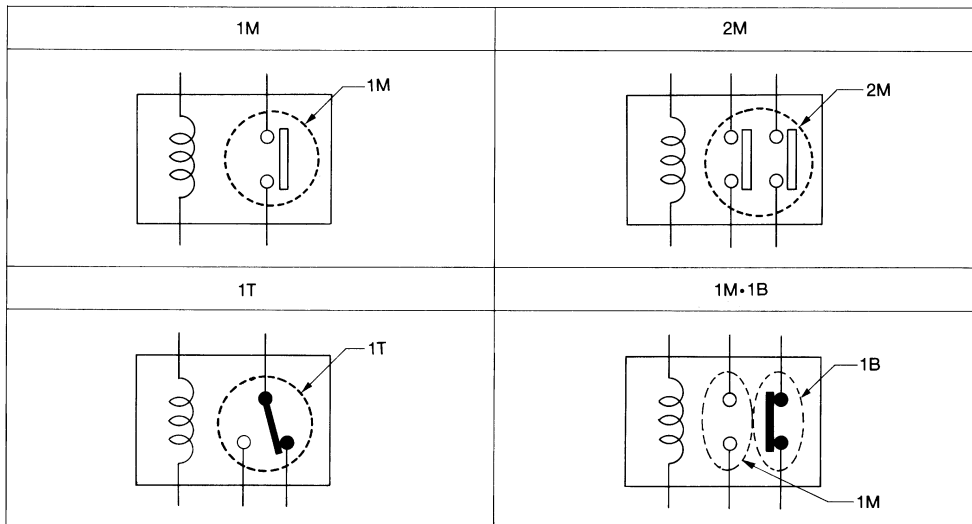
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



TYPE OF STANDARDIZED RELAYS

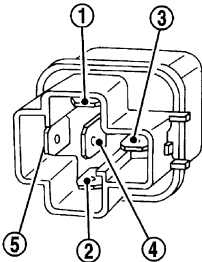
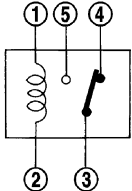
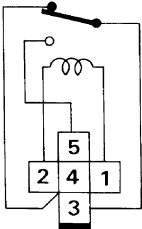
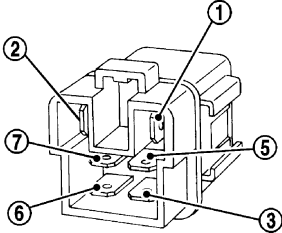
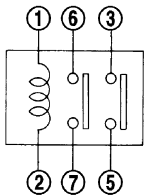
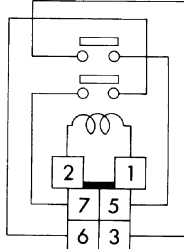
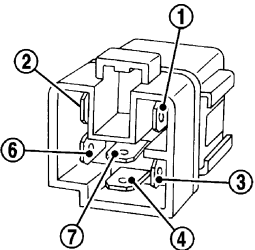
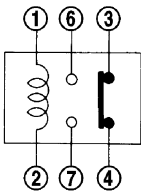
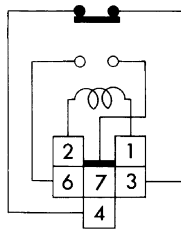
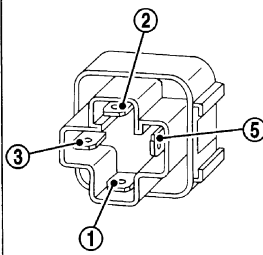
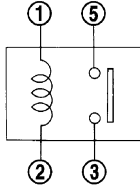
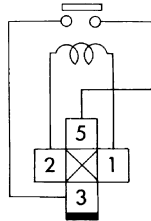
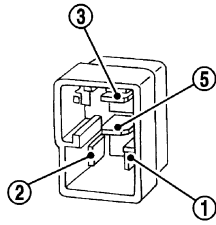
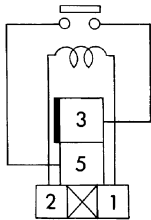
- 1M 1 Make
- 1T 1 Transfer
- 2M 2 Make
- 1M-1B 1 Make 1 Break



A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

STANDARDIZED RELAY

< WIRING DIAGRAM >

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

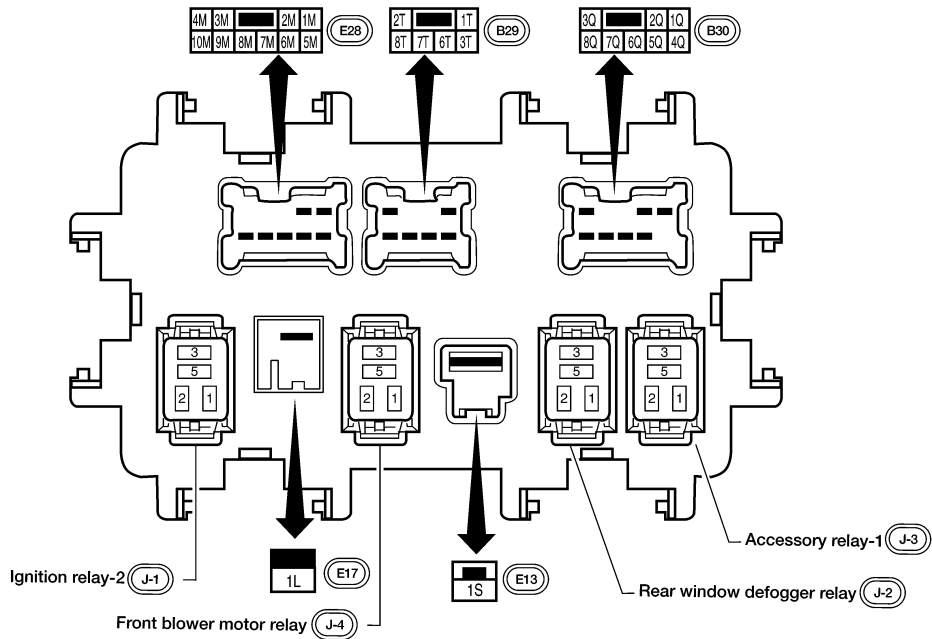
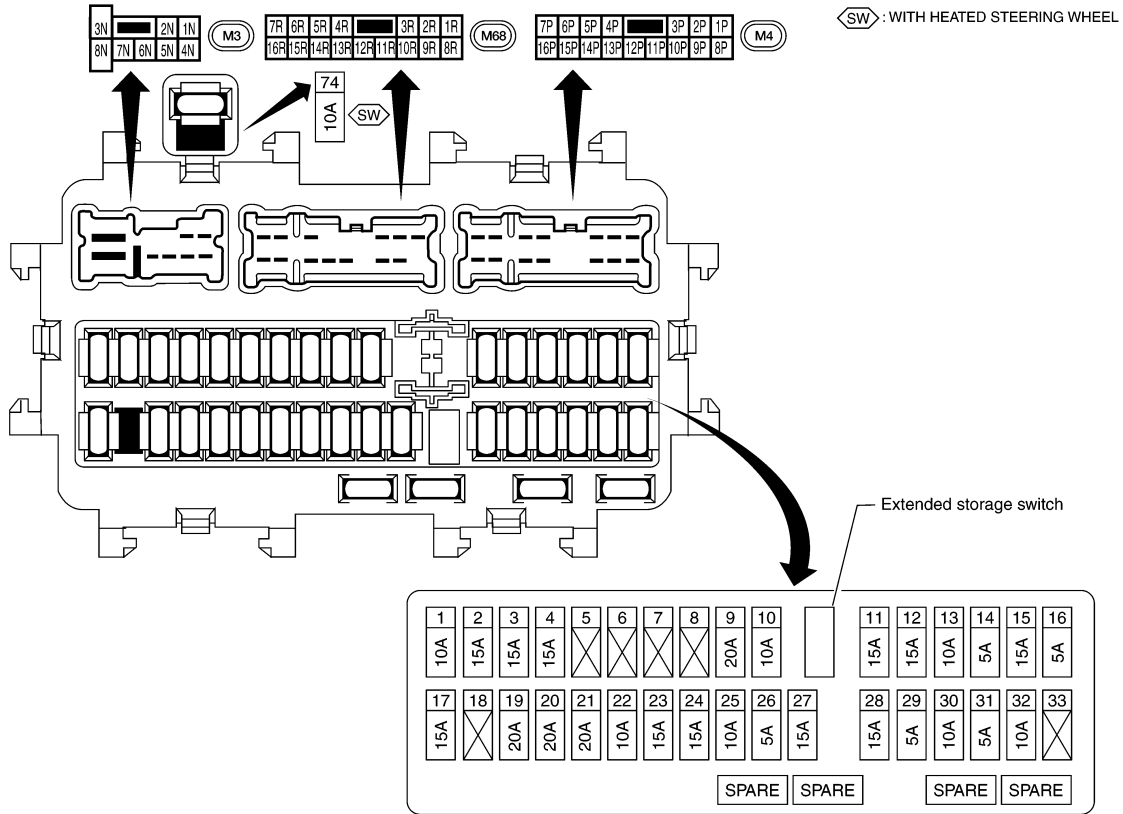
FUSE BLOCK - JUNCTION BOX (J/B)

< WIRING DIAGRAM >

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:000000009175298



ABMIA4878GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

FUSE, FUSIBLE LINK AND RELAY BOX

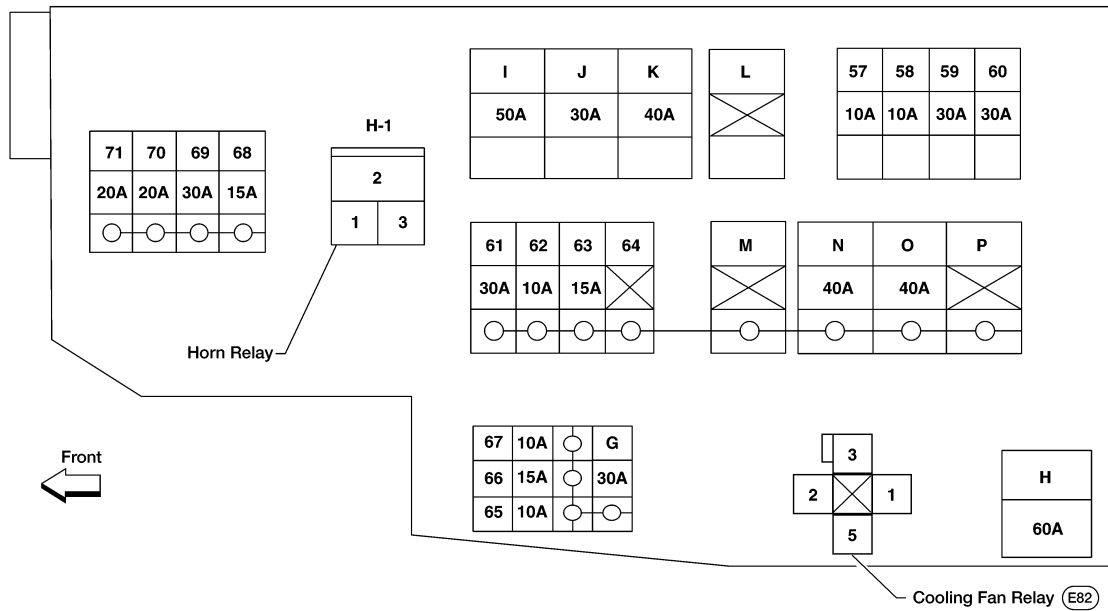
< WIRING DIAGRAM >

FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement

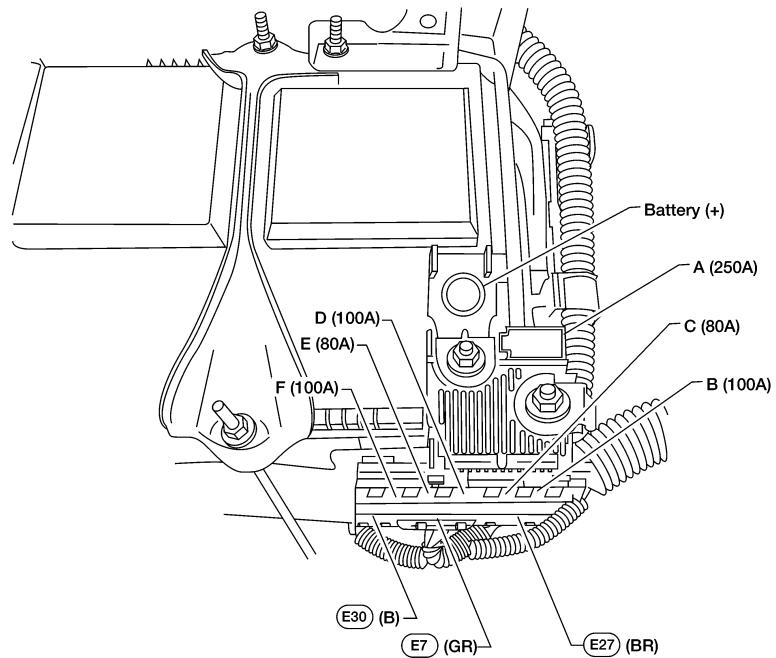
INFOID:000000009175299

FUSE AND FUSIBLE LINK BOX



NO. 61 - 71 : FUSE G - P : FUSIBLE LINK

FUSIBLE LINK BOX (BATTERY)

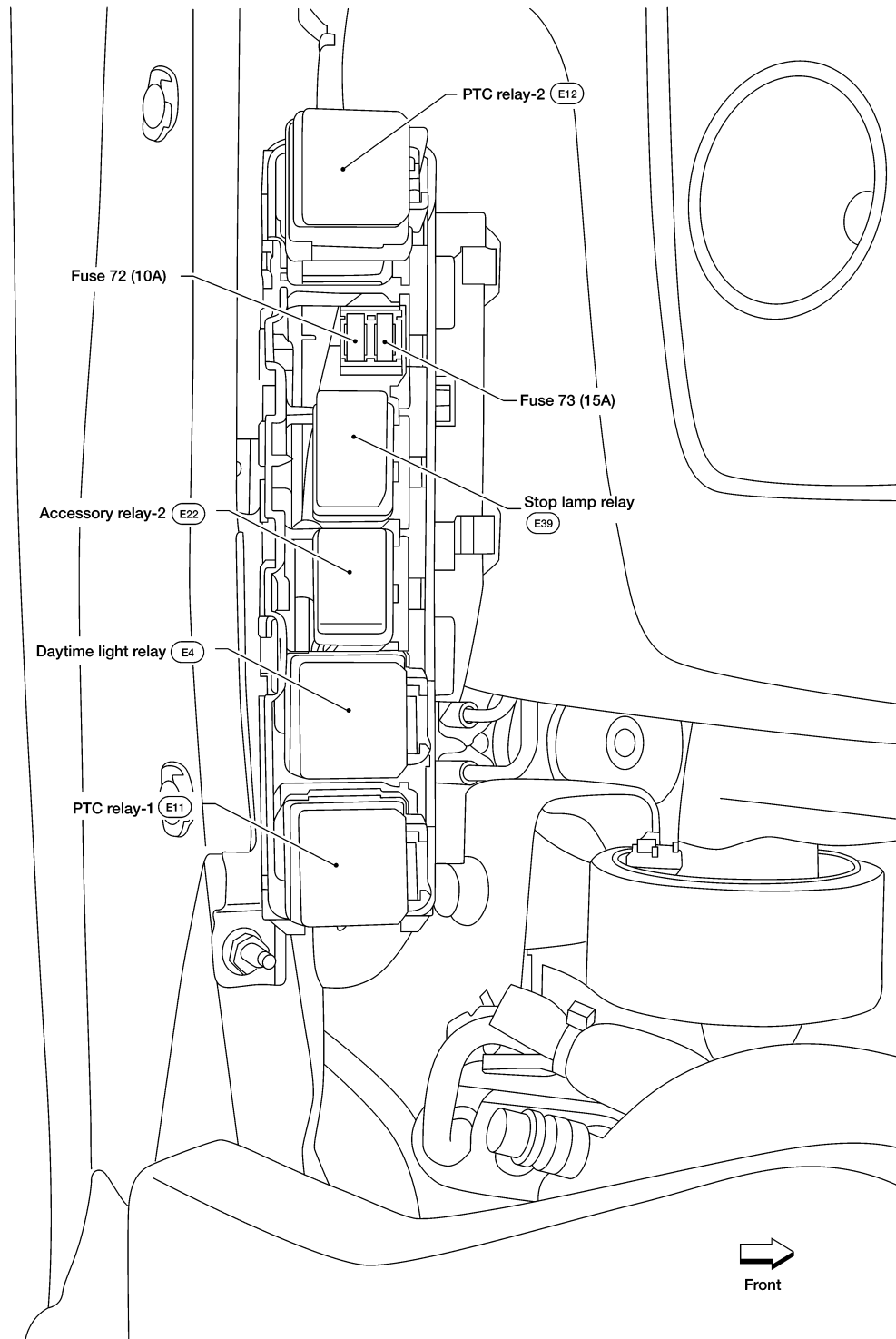


ABMIA4879GB

FUSE, FUSIBLE LINK AND RELAY BOX

< WIRING DIAGRAM >

FUSE AND RELAY BOX

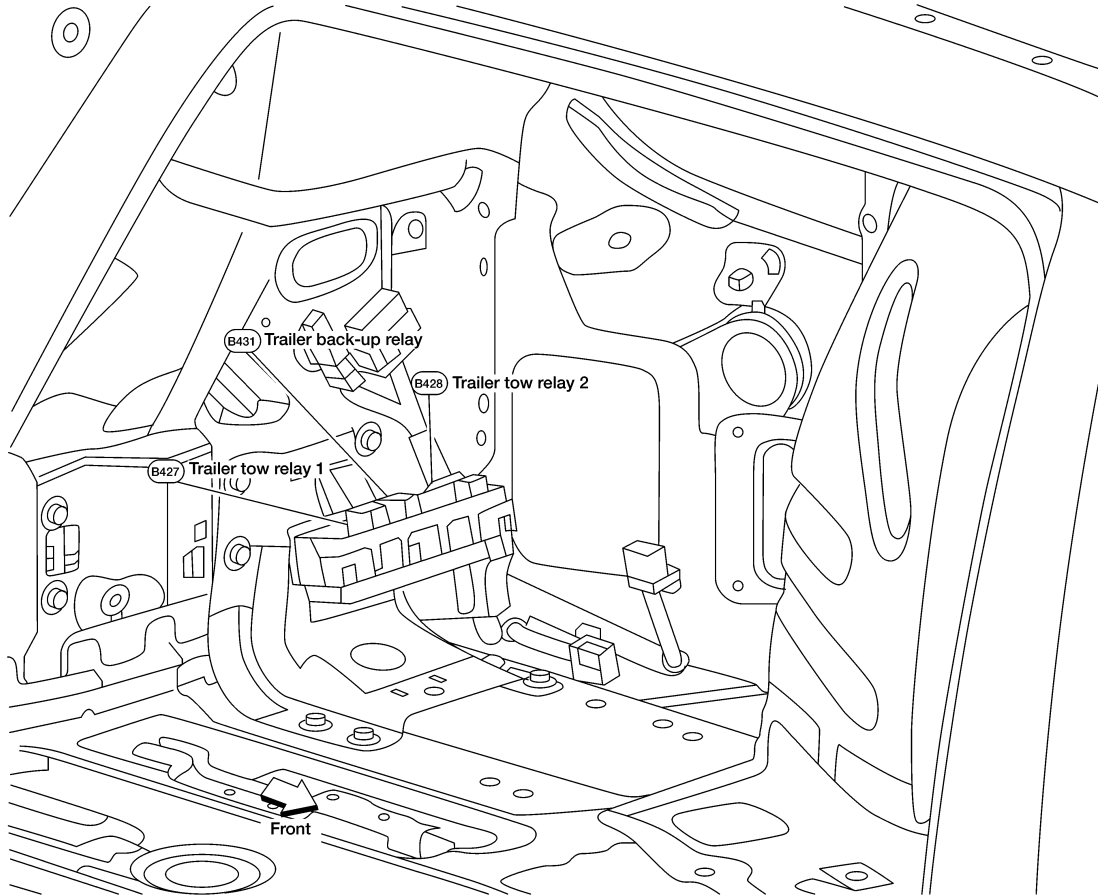


ABMIA4880GB

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

FUSE, FUSIBLE LINK AND RELAY BOX

< WIRING DIAGRAM >



ABMIA4881GB

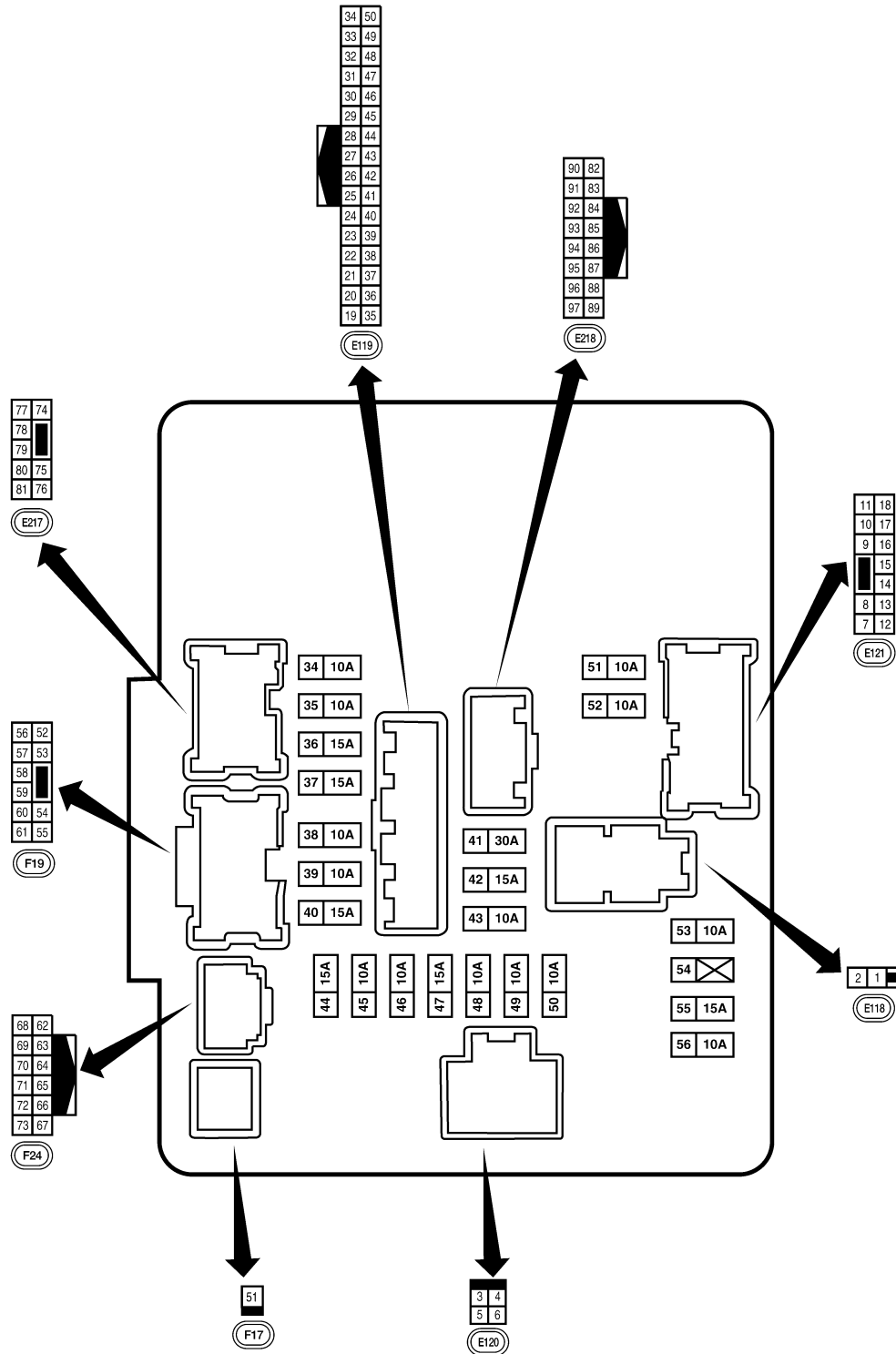
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< WIRING DIAGRAM >

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

IPDM E/R Terminal Arrangement

INFOID:000000009175300



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.

AAMIA0058ZZ

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

BATTERY

< BASIC INSPECTION >

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:000000009175301

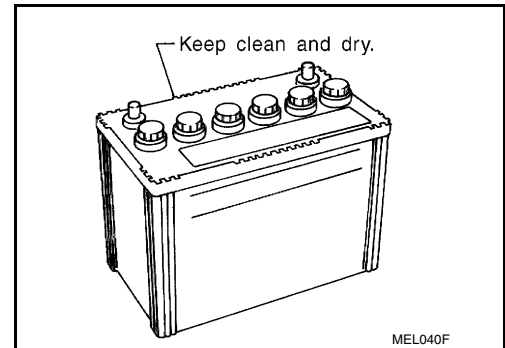
CAUTION:

- 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.

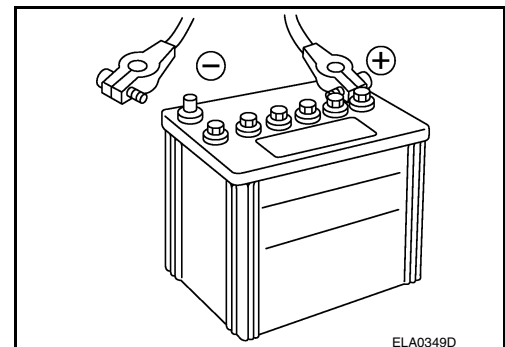
METHODS OF PREVENTING OVER-DISCHARGE

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.)



Work Flow

INFOID:000000009175302

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

Check Electrolyte Level

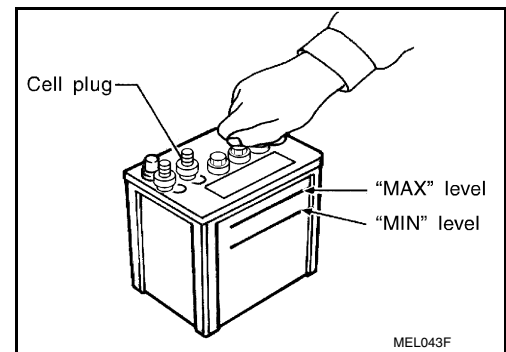
WARNING:

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. Failure to do this may cause personal injury or damage to clothing or the painted surfaces.

BATTERY

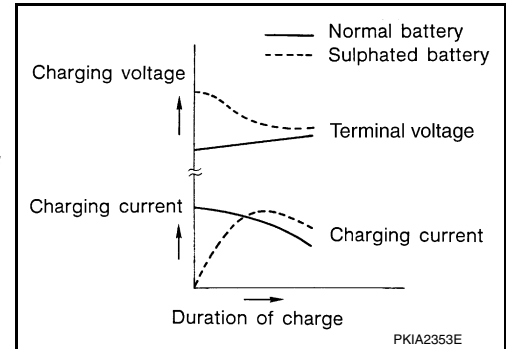
< BASIC INSPECTION >

- 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.**



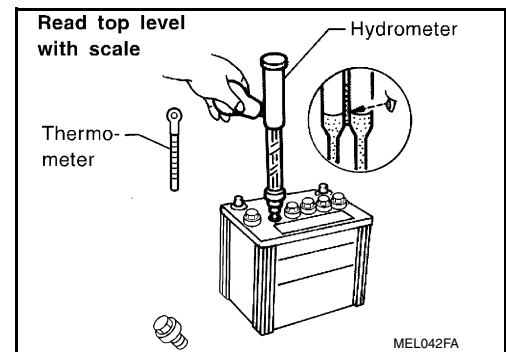
Specific Gravity Check

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

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:

- 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 (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:000000009175303

Required Procedure After Battery Disconnection

System	Item	Reference
Engine Control System	Idle Air Volume Learning	EC-143
Brake Control System	Steering Angle Sensor Neutral Position	BRC-55
Door & Lock	Calibration Of Automatic Back Door Position Information	DLK-114
Power Window Control System	Power Window System Initialization	PWC-93
Roof	Moonroof Memory Reset/Initialization Sunshade Memory Reset/Initialization	RF-25
Automatic Drive Positioner	Automatic Drive Positioner System Initialization	Refer to Owner's Manual.
Heater & Air Conditioning Control System	Temperature Setting Trimmer (front)	HAC-78
	Temperature Setting Trimmer (rear)	HAC-79
	Foot Position Setting Trimmer	HAC-78
	Inlet Port Memory Function (FRE)	HAC-79
Audio, Visual & Navigation System	Inlet Port Memory Function (REC)	HAC-79
	Audio (Radio Preset)	Refer to Owner's Manual.
	Navigation System	Refer to Owner's Manual.

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

BATTERY

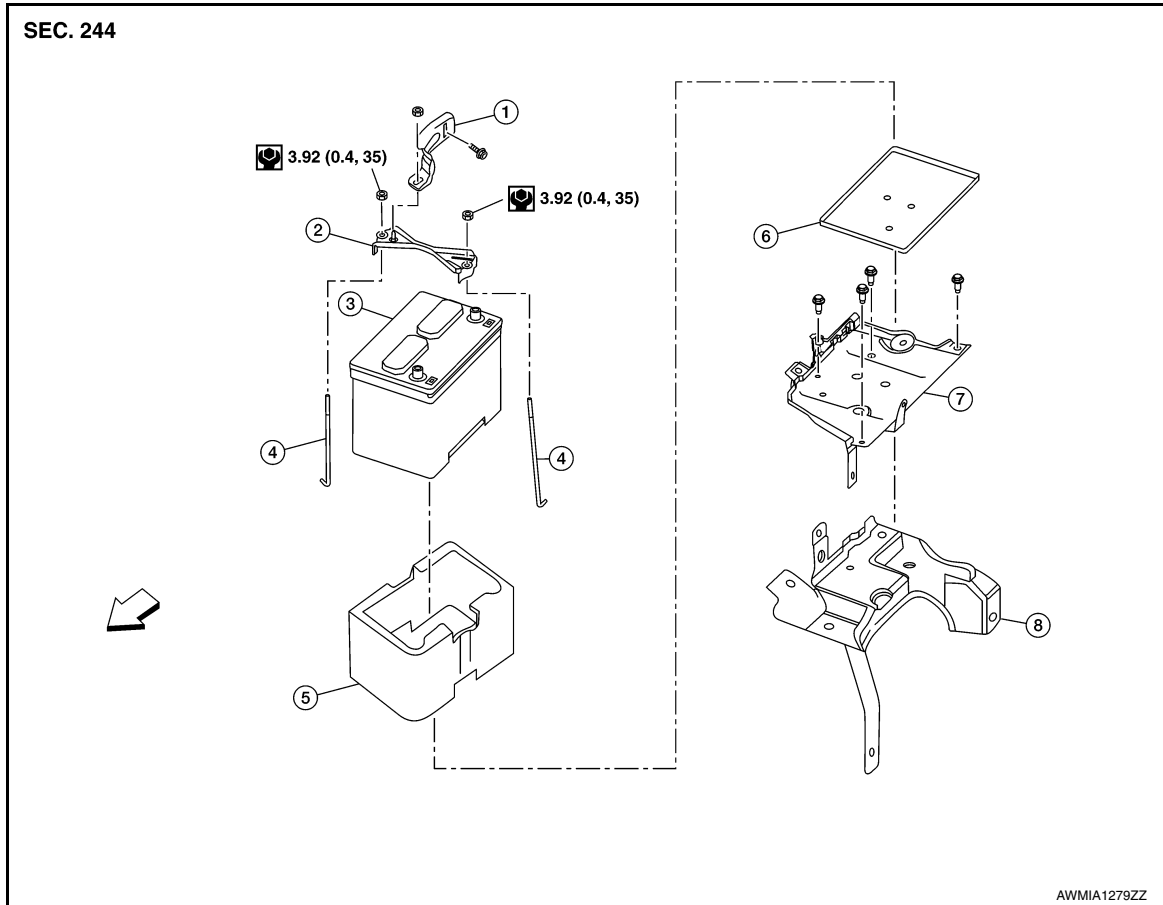
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BATTERY

Exploded View

INFOID:000000009175304



- | | | |
|----------------------|-------------------------|-----------------------|
| 1. Upper ECM bracket | 2. Battery frame | 3. Battery |
| 4. Battery rods | 5. Battery cover | 6. Battery tray liner |
| 7. Battery tray | 8. Battery tray support | ⇐ Front |

Removal and Installation

INFOID:000000009175305

REMOVAL

1. Remove cover of battery positive terminal.
2. Loosen battery terminal nuts and disconnect both battery negative and positive terminals.
CAUTION:
When disconnecting, disconnect the battery negative terminal first.
3. Remove upper ECM bracket bolts and upper ECM bracket.
4. Remove battery frame nuts and battery frame and battery rods.
5. Remove battery cover.
6. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the battery if it has been dropped or sustained an impact.

To install the battery, carefully read the following instructions:

BATTERY

< REMOVAL AND INSTALLATION >

- 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"](#).

A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

PG

BATTERY TRAY

< REMOVAL AND INSTALLATION >

BATTERY TRAY

Removal and Installation

INFOID:000000009175306

REMOVAL

1. Remove battery and battery tray liner. Refer to [PG-90, "Removal and Installation"](#).
2. Remove air cleaner assembly. Refer to [EM-24, "Removal and Installation"](#).
3. Disconnect harness connector and then remove ECM.
4. Disconnect the harness connector from the transmission control module (TCM). Refer to [TM-195, "Removal and Installation"](#).
5. Remove the ECM bracket.
6. Remove the battery tray bolts and battery tray.
7. Remove the battery tray support bolts and battery tray support.

INSTALLATION

Installation is in the reverse order of removal.

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

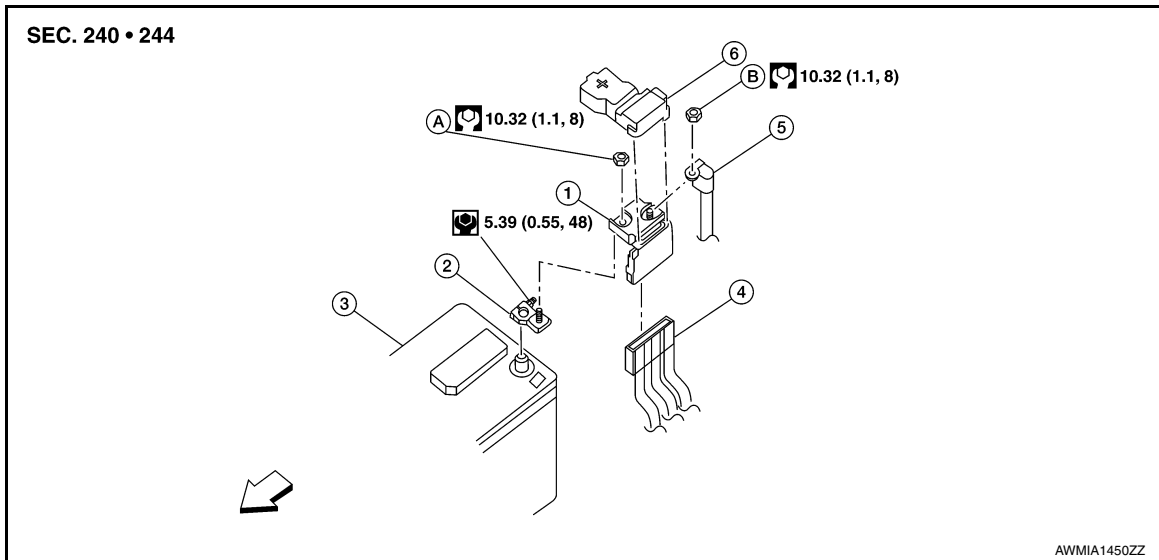
BATTERY TERMINAL WITH FUSIBLE LINK

< REMOVAL AND INSTALLATION >

BATTERY TERMINAL WITH FUSIBLE LINK

Exploded View

INFOID:000000009729268



- | | | |
|-----------------------------------|-----------------------|------------|
| 1. Fusible link box (battery) | 2. Terminal | 3. Battery |
| 4. Harness connectors | 5. Positive cable | 6. Cover |
| A. Fusible link box (battery) nut | B. Positive cable nut | ← Front |

Removal and Installation

INFOID:000000009729269

REMOVAL

1. Disconnect both battery negative and positive terminals. Refer to [PG-90. "Exploded View"](#).
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.

PG

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 Requirement"](#).

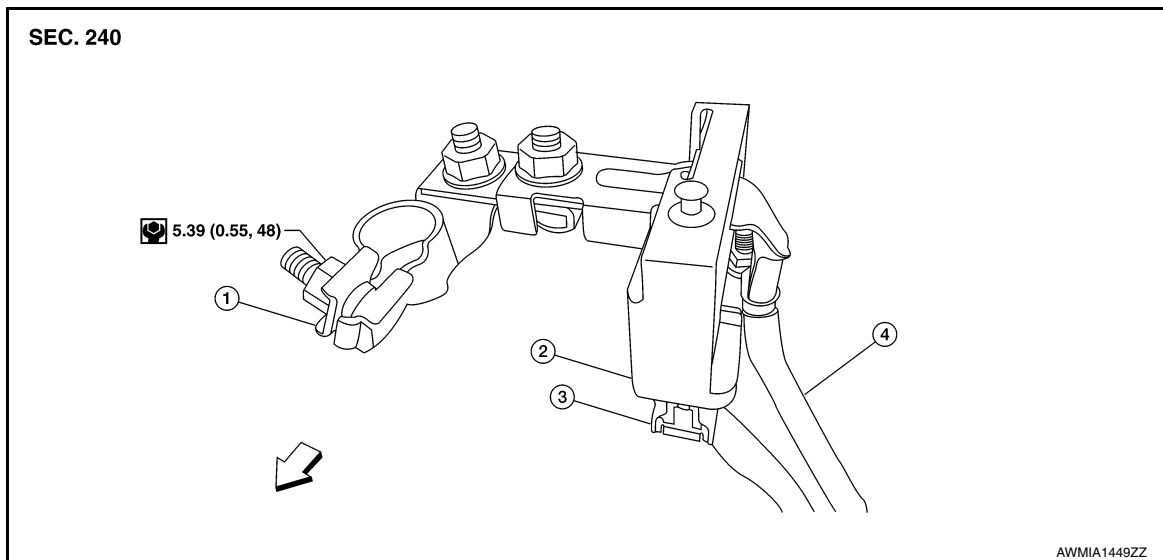
BATTERY CURRENT SENSOR

< REMOVAL AND INSTALLATION >

BATTERY CURRENT SENSOR

Exploded View

INFOID:000000009729270



- | | | |
|-------------------|-------------------|----------------------|
| 1. Terminal | 2. Current sensor | 3. Harness connector |
| 4. Negative cable | ⇐ Front | |

Removal and Installation

INFOID:000000009729271

REMOVAL

1. Disconnect negative terminal from the battery. Refer to [PG-90, "Exploded View"](#).
2. Disconnect harness connector from current sensor.
3. Remove nut and separate current sensor from the negative terminal.
4. Remove nut and separate negative cable from the current sensor and remove the current sensor.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the battery current sensor 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"](#).

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Battery

INFOID:000000009175307

Type		GR35
20 hour rate capacity	[V-Ah]	12-60
Cold cranking current (For reference value)	[A]	550

A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P