

PG

SECTION

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTION	3	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)	60
PRECAUTIONS	3	IPDM E/R Terminal Arrangement	60
Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	3	BASIC INSPECTION	61
Precaution for Power Generation Voltage Variable Control System	3	BATTERY	61
PREPARATION	4	How to Handle Battery	61
PREPARATION	4	Work Flow	61
Special Service Tools	4	INSPECTION AND ADJUSTMENT	64
Commercial Service Tool	4	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL	64
SYSTEM DESCRIPTION	5	ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement	64
ELECTRICAL UNITS LOCATION	5	FUSE INSPECTION	65
Electrical Units Location	5	How To Check	65
COMPONENT PARTS	9	FUSIBLE LINK INSPECTION	69
Circuit Breaker (Built Into BCM)	9	Fusible Link	69
Harness Connector	9	REMOVAL AND INSTALLATION	70
Standardized Relay	12	BATTERY	70
WIRING DIAGRAM	15	Exploded View	70
POWER SUPPLY ROUTING CIRCUIT	15	Removal and Installation (Battery)	70
Wiring Diagram — Battery Power Supply —	15	Removal and Installation (Battery Tray)	71
Wiring Diagram — Accessory Power Supply —	23	BATTERY TERMINAL WITH FUSIBLE LINK ...	72
Wiring Diagram — Ignition Power Supply —	27	Exploded View	72
GROUND	35	Removal and Installation	72
Ground Distribution	35	BATTERY CURRENT SENSOR	73
HARNESS	42	Exploded View	73
Harness Layout	42	Removal and Installation	73
FUSE BLOCK - JUNCTION BOX (J/B)	58	SERVICE DATA AND SPECIFICATIONS (SDS)	74
Terminal Arrangement	58		
FUSE AND FUSIBLE LINK BOX	59		
Terminal Arrangement	59		

SERVICE DATA AND SPECIFICATIONS	
(SDS)	74
Battery	74

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:0000000012433111

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.

Precaution for Power Generation Voltage Variable Control System

INFOID:0000000012433112

CAUTION:

For this model, the battery current sensor that is installed to the battery cable at the negative terminal measures the charging/discharging current of the battery, and performs various controls. If the electrical component or the ground wire is connected directly to the battery terminal, the current other than that being measured with the battery current sensor is charging to or discharging from the battery. This condition causes the malfunction of the control, and then the battery discharge may occur. Do not connect the electrical component or the ground wire directly to the battery terminal.

A

B

C

D

E

F

G

H

I

J

K

L

PG

N

O

P

PREPARATION

< PREPARATION >

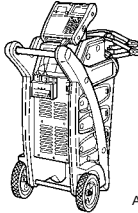
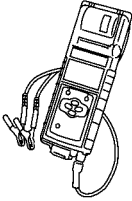
PREPARATION

PREPARATION

Special Service Tools

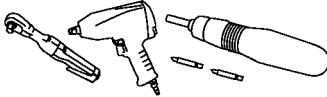
INFOID:0000000012433113

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

Tool number (TechMate No.) Tool name	Description
— (—) Model GR8-1200 NI Multitasking battery and electrical diagnostic station  AWIIA1239ZZ	Tests batteries, starting and charging systems and charges batteries. For operating instructions, refer to diagnostic station instruction manual.
— (—) Model EXP-800 NI Battery and electrical diagnostic analyzer  JSMIA0806ZZ	Tests batteries and charging systems. For operating instructions, refer to diagnostic analyzer instruction manual.

Commercial Service Tool

INFOID:0000000012433114

Tool name	Description
Power tool  PIIB1407E	Loosening nuts, screws and bolts

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >

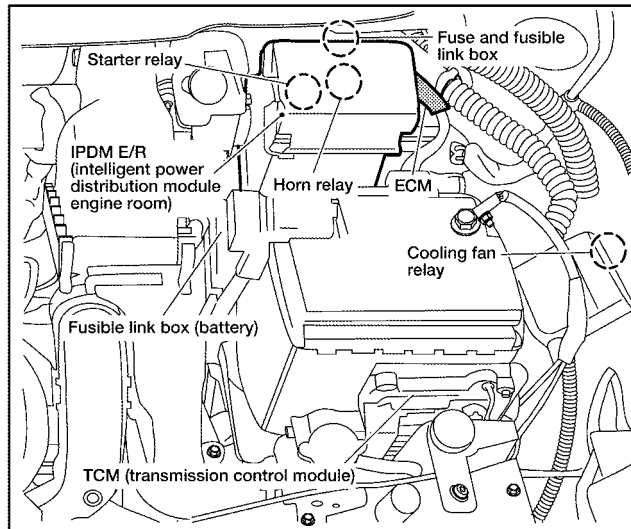
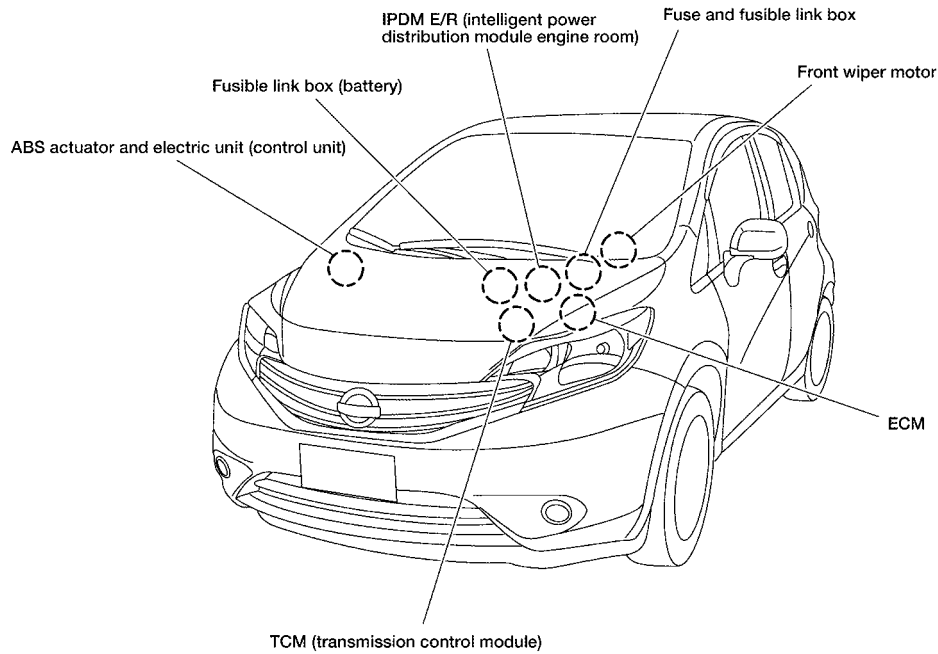
SYSTEM DESCRIPTION

ELECTRICAL UNITS LOCATION

Electrical Units Location

INFOID:0000000012433115

ENGINE COMPARTMENT

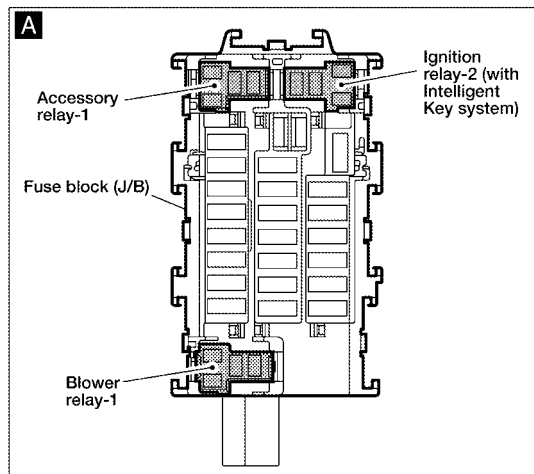
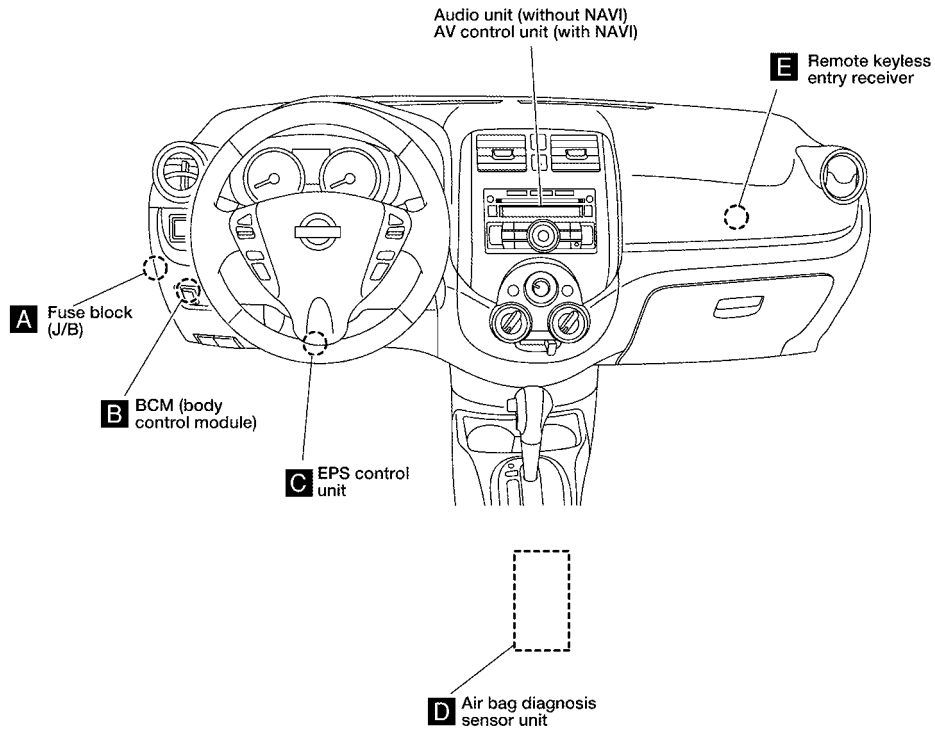


AAMIA2764GB

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >

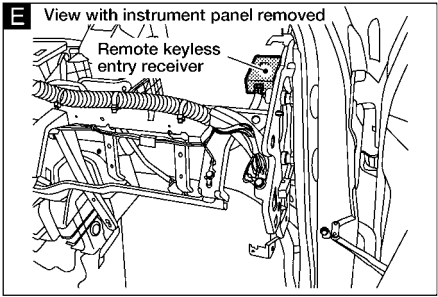
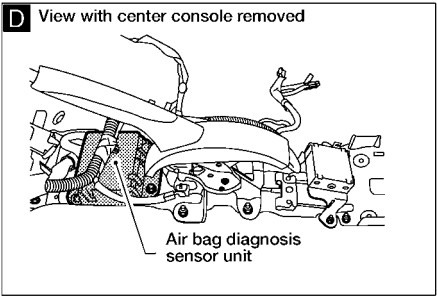
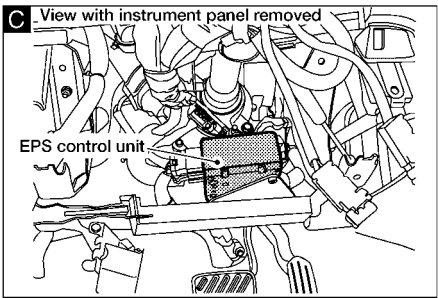
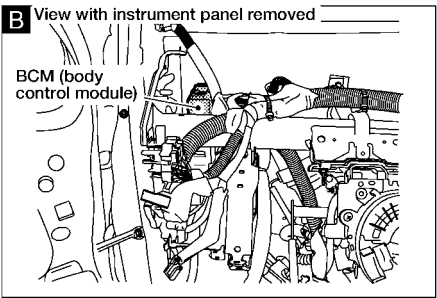
PASSENGER COMPARTMENT



AAMIA2765GB

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >



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

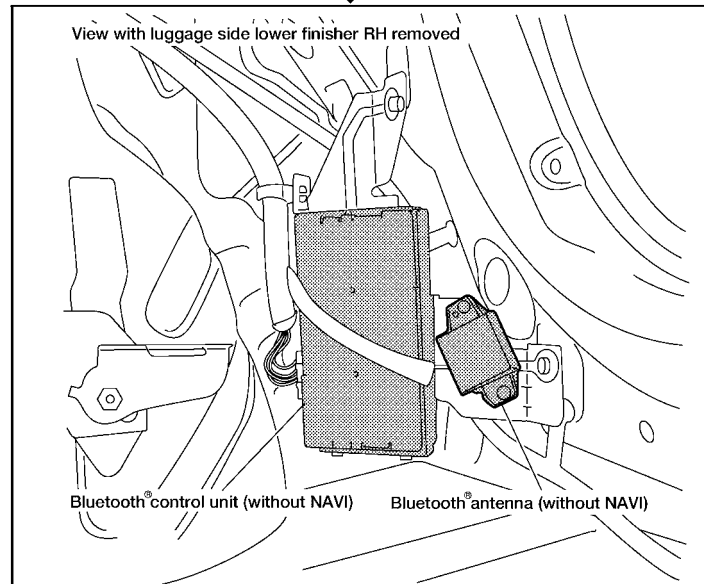
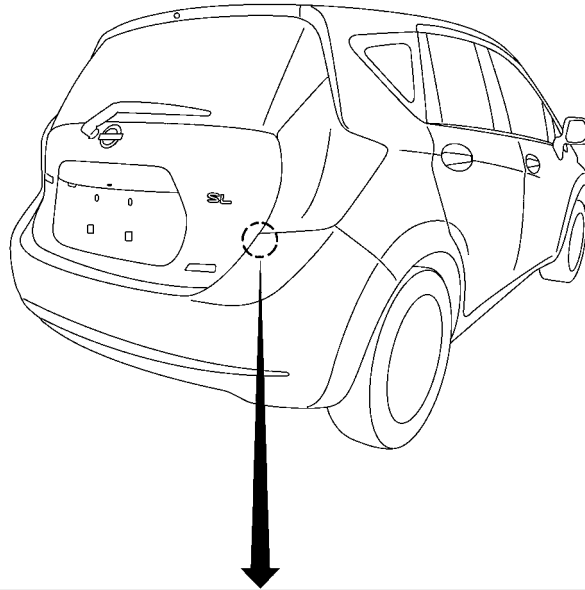
PG

AAMIA1786GB

ELECTRICAL UNITS LOCATION

< SYSTEM DESCRIPTION >

LUGGAGE COMPARTMENT



AAMIA2766GB

COMPONENT PARTS

< SYSTEM DESCRIPTION >

COMPONENT PARTS

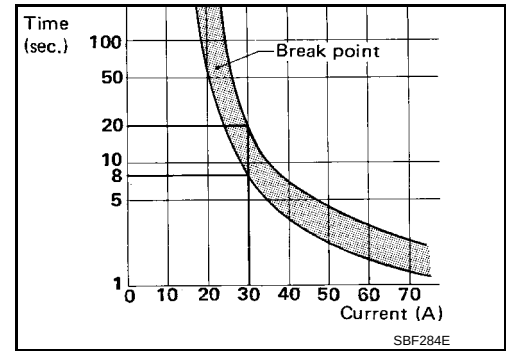
Circuit Breaker (Built Into BCM)

INFOID:0000000012433116

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

This circuit breaker is used for the following systems:

- Power windows



Harness Connector

INFOID:0000000012433117

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.

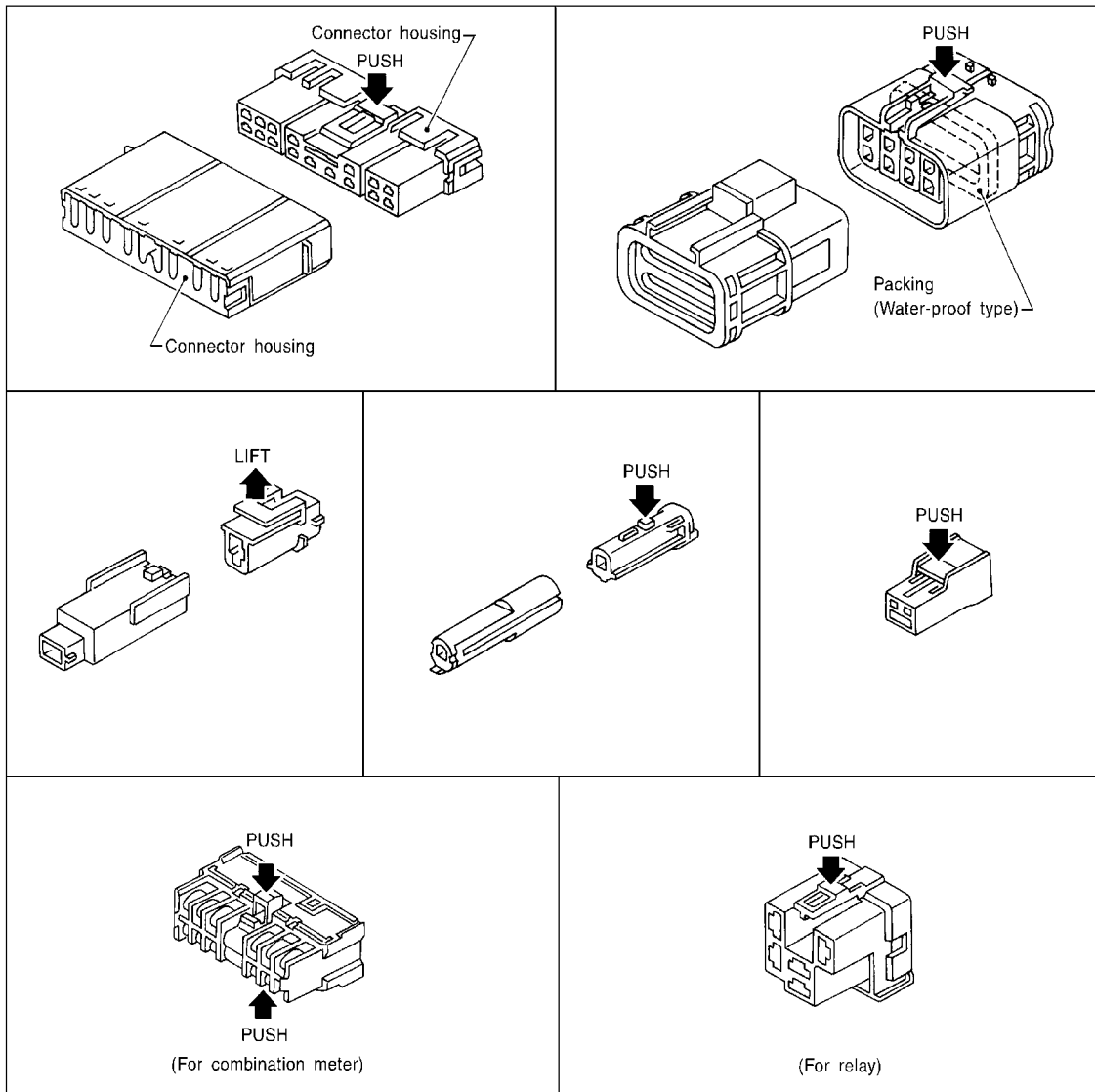
CAUTION:

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

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.
- The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the figure below.

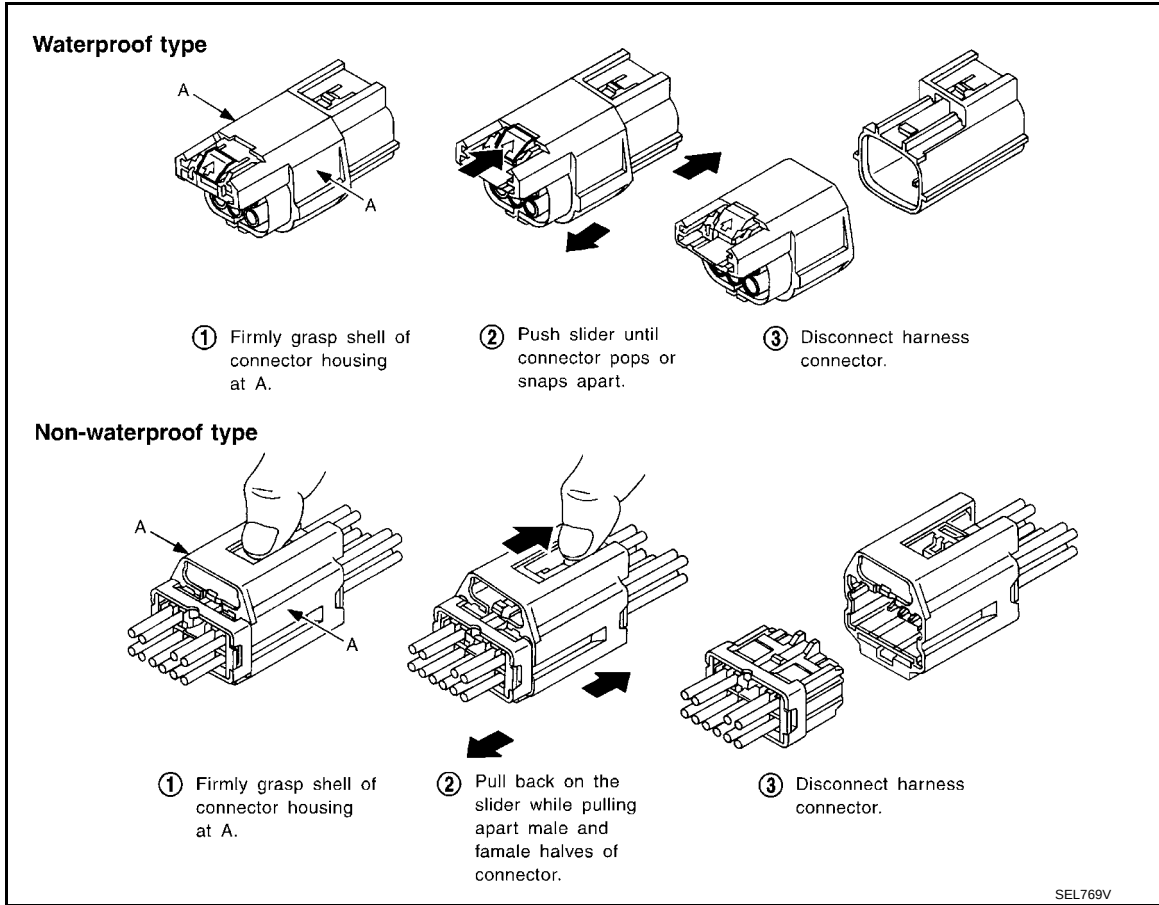
CAUTION:

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

COMPONENT PARTS

< SYSTEM DESCRIPTION >

[Example]



HARNESS CONNECTOR (LEVER LOCKING TYPE)

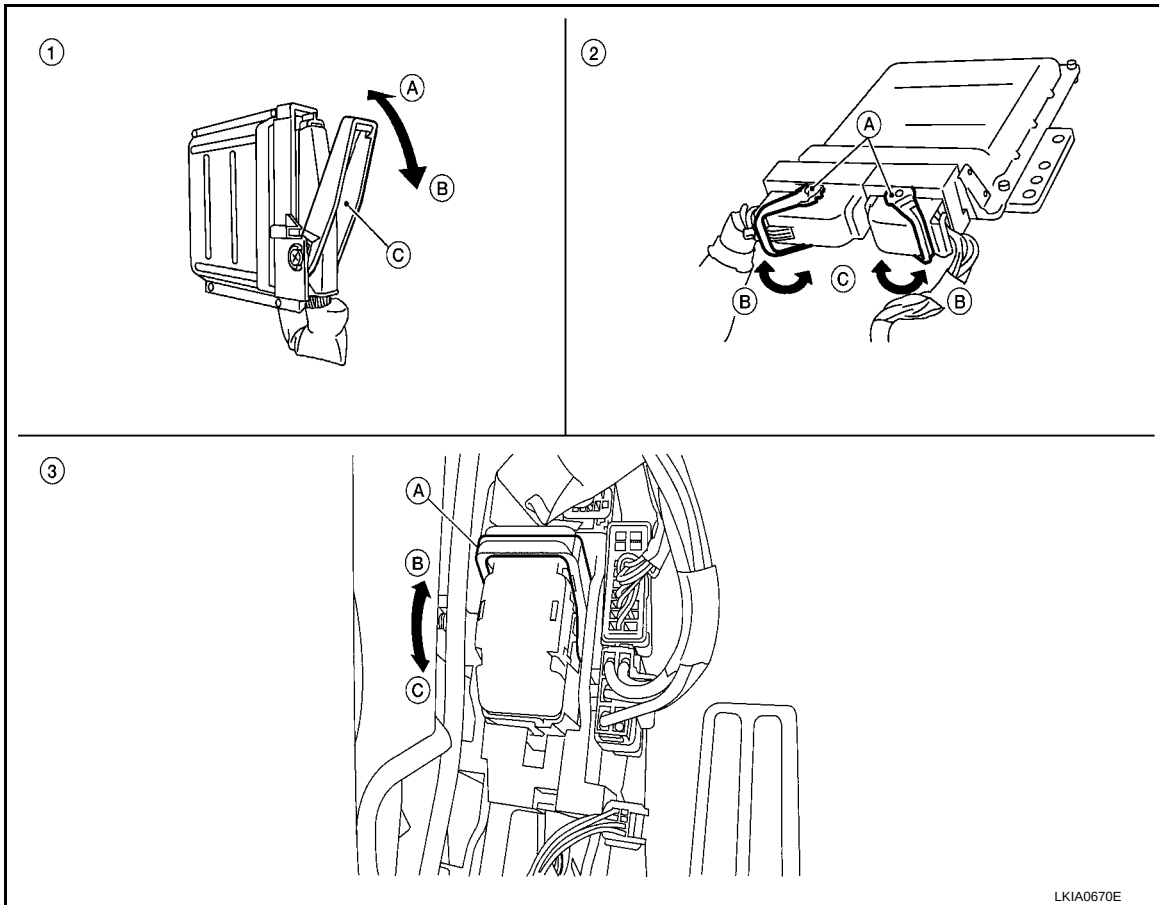
- Lever locking type harness connectors are used on certain control units and control modules such as ECM, ABS actuator and electric unit (control unit), etc.
- Lever locking type harness connectors are also used on super multiple junction (SMJ) connectors.
- Always confirm the lever is fully locked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

CAUTION:

COMPONENT PARTS

< SYSTEM DESCRIPTION >

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



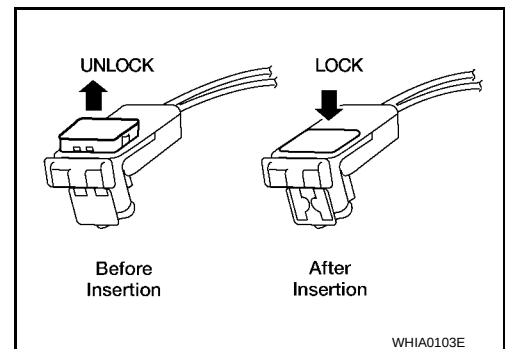
- | | | |
|-----------------------------------|---------------------------------|------------------|
| 1. Control unit with single lever | 2. Control unit with dual lever | 3. SMJ connector |
| A. Fasten | A. Lever | A. Lever |
| B. Loosen | B. Fasten | B. Fasten |
| C. Lever | C. Loosen | C. Loosen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

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS components.
- Always push down to lock black locking tab after installing connector to SRS components. When locked, the black locking tab is level with the connector housing.

CAUTION:

- Do not pull the harness or wires when removing connectors from SRS components.



Standardized Relay

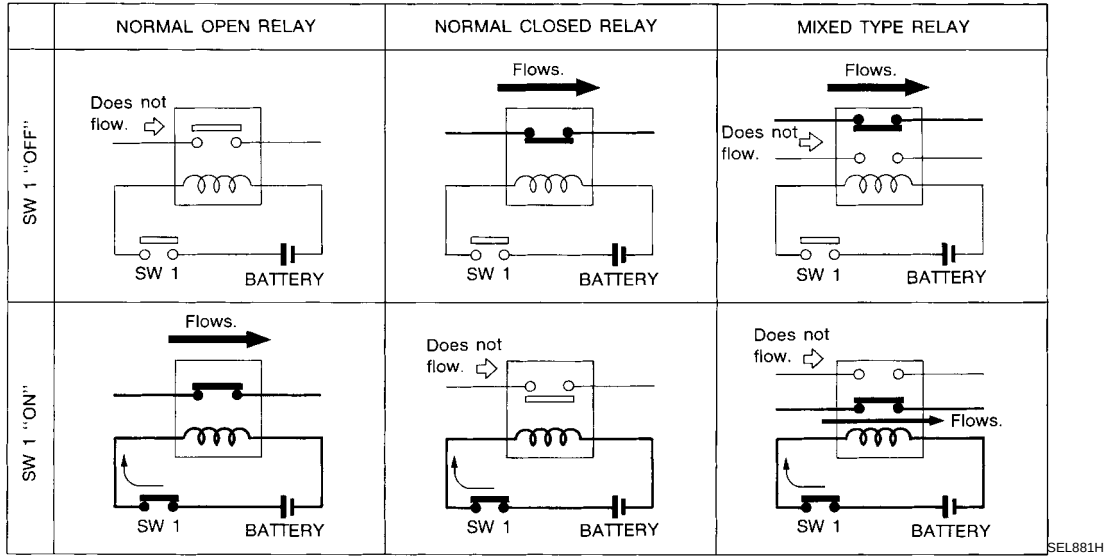
INFOID:000000012433118

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

COMPONENT PARTS

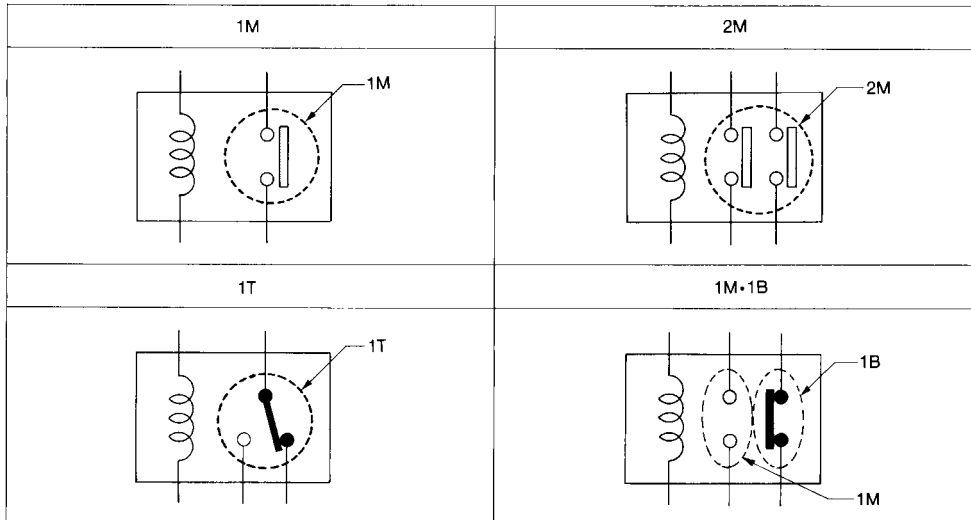
< SYSTEM DESCRIPTION >

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



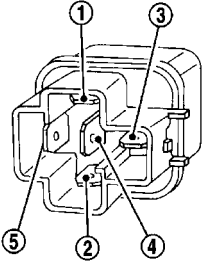
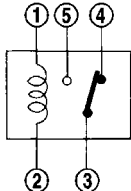
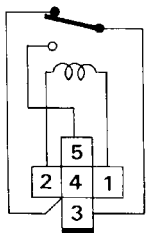
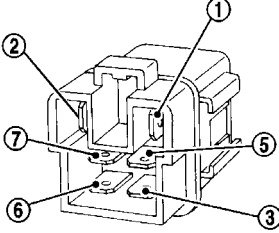
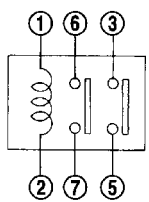
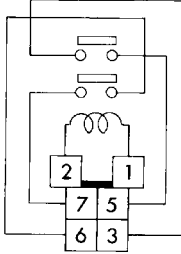
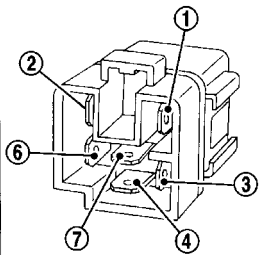
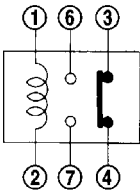
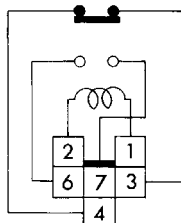
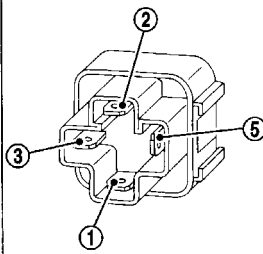
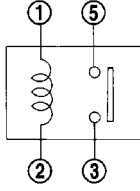
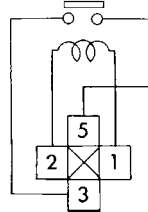
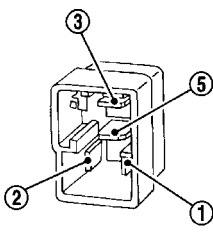
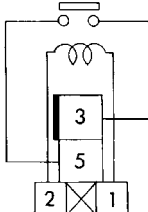
TYPE OF STANDARDIZED RELAYS

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



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

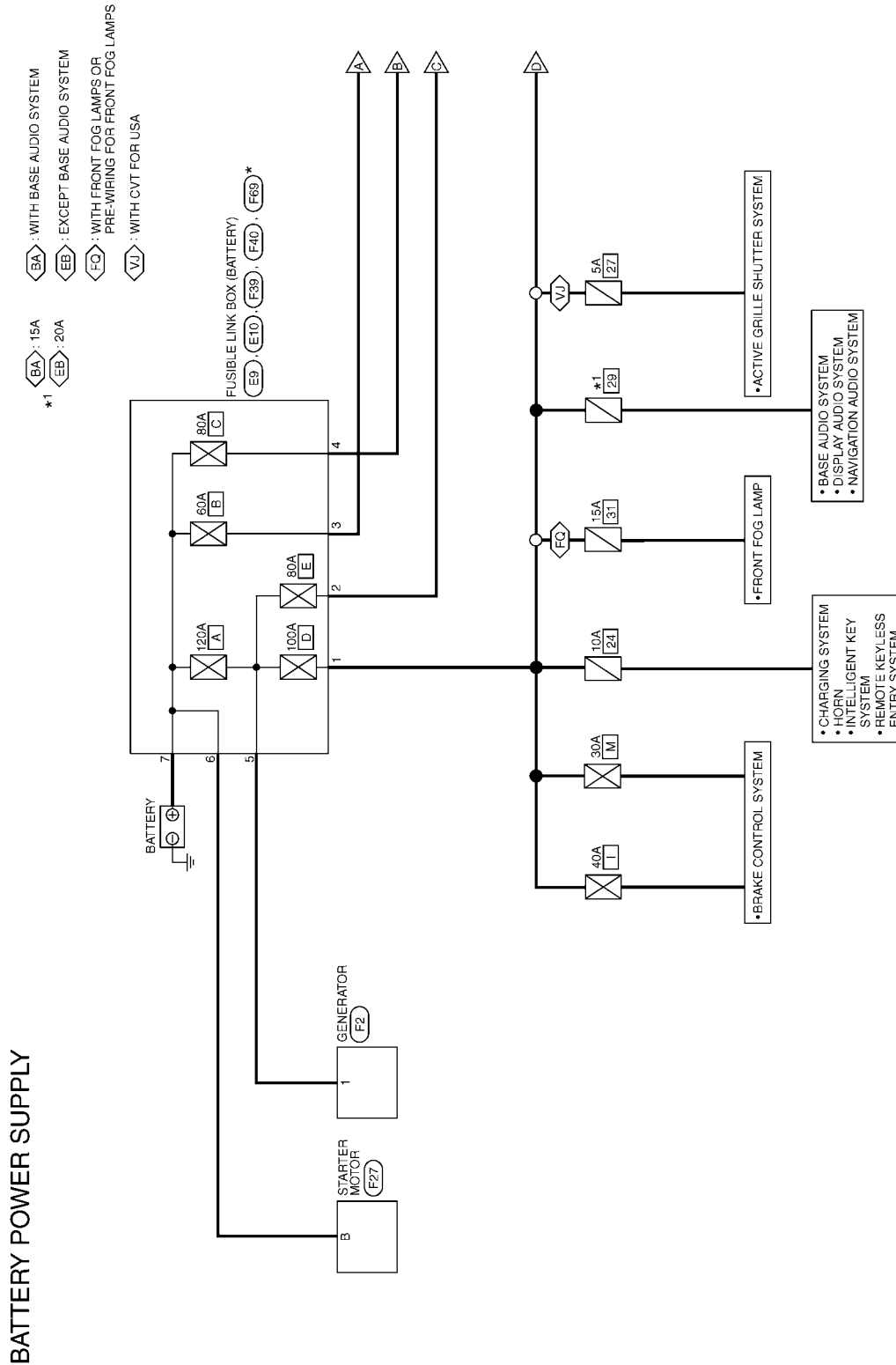
< WIRING DIAGRAM >

WIRING DIAGRAM

POWER SUPPLY ROUTING CIRCUIT

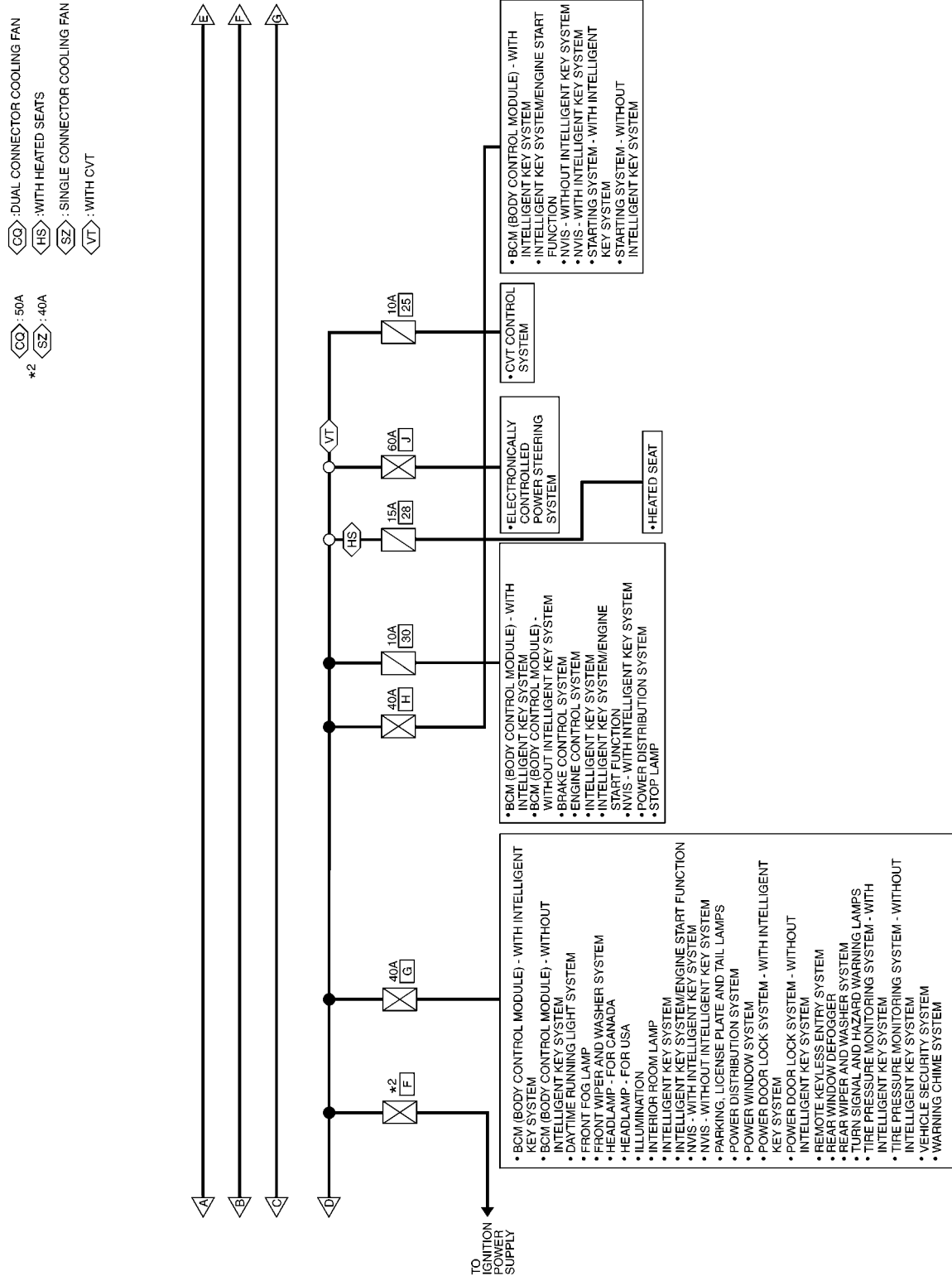
Wiring Diagram —Battery Power Supply —

INFOID:0000000012433119



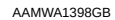
POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



AAMWA1940GB

< WIRING DIAGRAM >

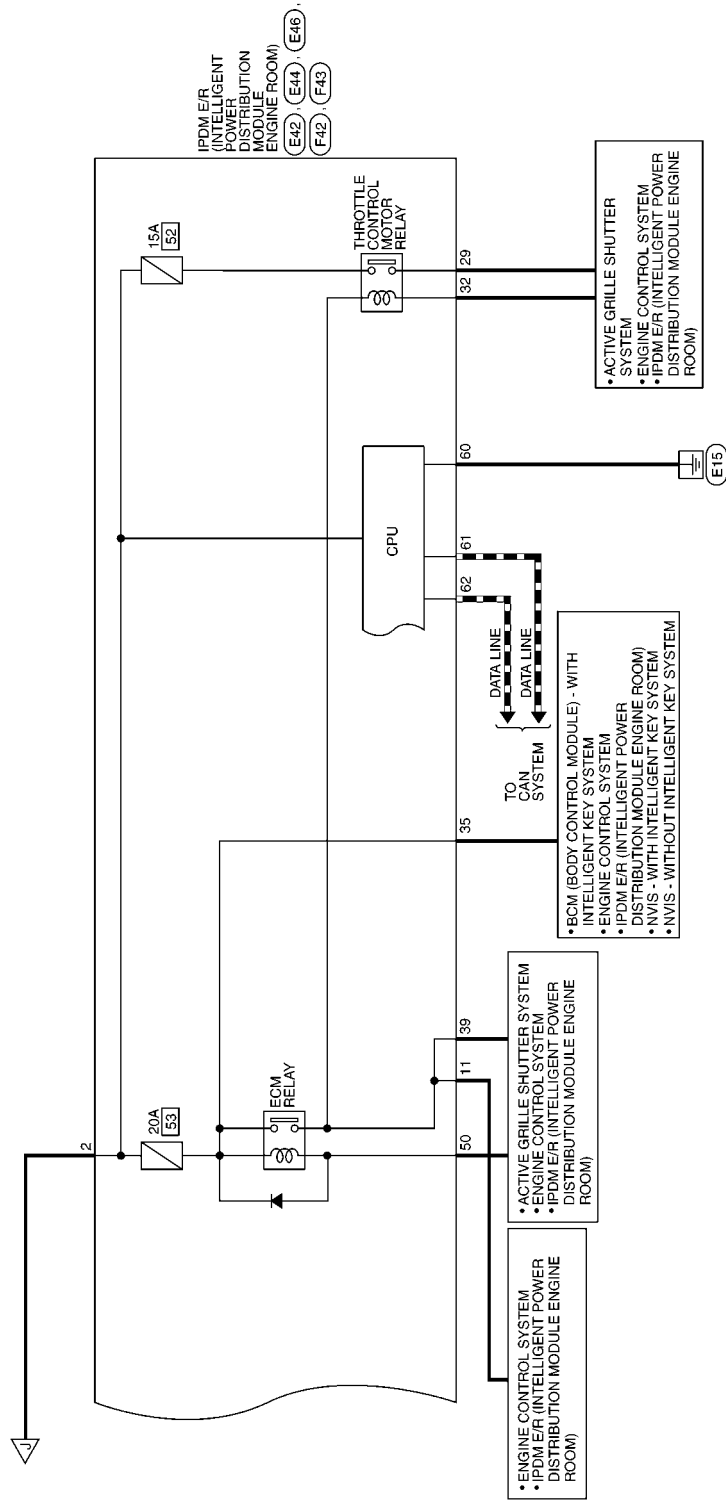


< WIRING DIAGRAM >



POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



AAMWA1400GB

BATTERY POWER SUPPLY CONNECTORS

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



Terminal No.	Color of Wire	Signal Name
1	W	-

Connector No.	M78
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	W	-

Connector No.	E9
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



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

Connector No.	E10
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



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

Connector No.	E11
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	G	-

Connector No.	E42
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	R	F/L USM (+B1)
2	Y	F/L MAIN (+B2)

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
60	B	S GND
61	P	CAN-L
62	L	CAN-H

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



21	20	19	18	17		
28	27	26	25	24	23	22

Terminal No.	Color of Wire	Signal Name
22	P	TAIL/ILLUMI
23	R	CLEARANCE
24	W	DTRL
25	G	HEADLAMP HI LH
27	Y	HEADLAMP HI RH

Connector No.	E44
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



11		10	9
16	15	14	13
			12

Terminal No.	Color of Wire	Signal Name
11	G	ECM VB
14	L	HEADLAMP LO LH
16	P	HEADLAMP LO RH

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



6

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

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	-



B

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

Connector No.	F2
Connector Name	GENERATOR
Connector Color	-



1

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

ABMIA7853GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	F40
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	—



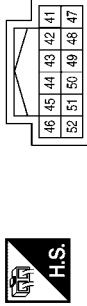
Terminal No.	Color of Wire	Signal Name
5	B/R	—

Connector No.	F42
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
29	L/W	ETC
32	G/W	MOTRLY
35	BR	ECM BAT
39	L	ENG SOL

Connector No.	F43
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
50	P	SSOFF

Connector No.	F69
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	—



Terminal No.	Color of Wire	Signal Name
7	B	—

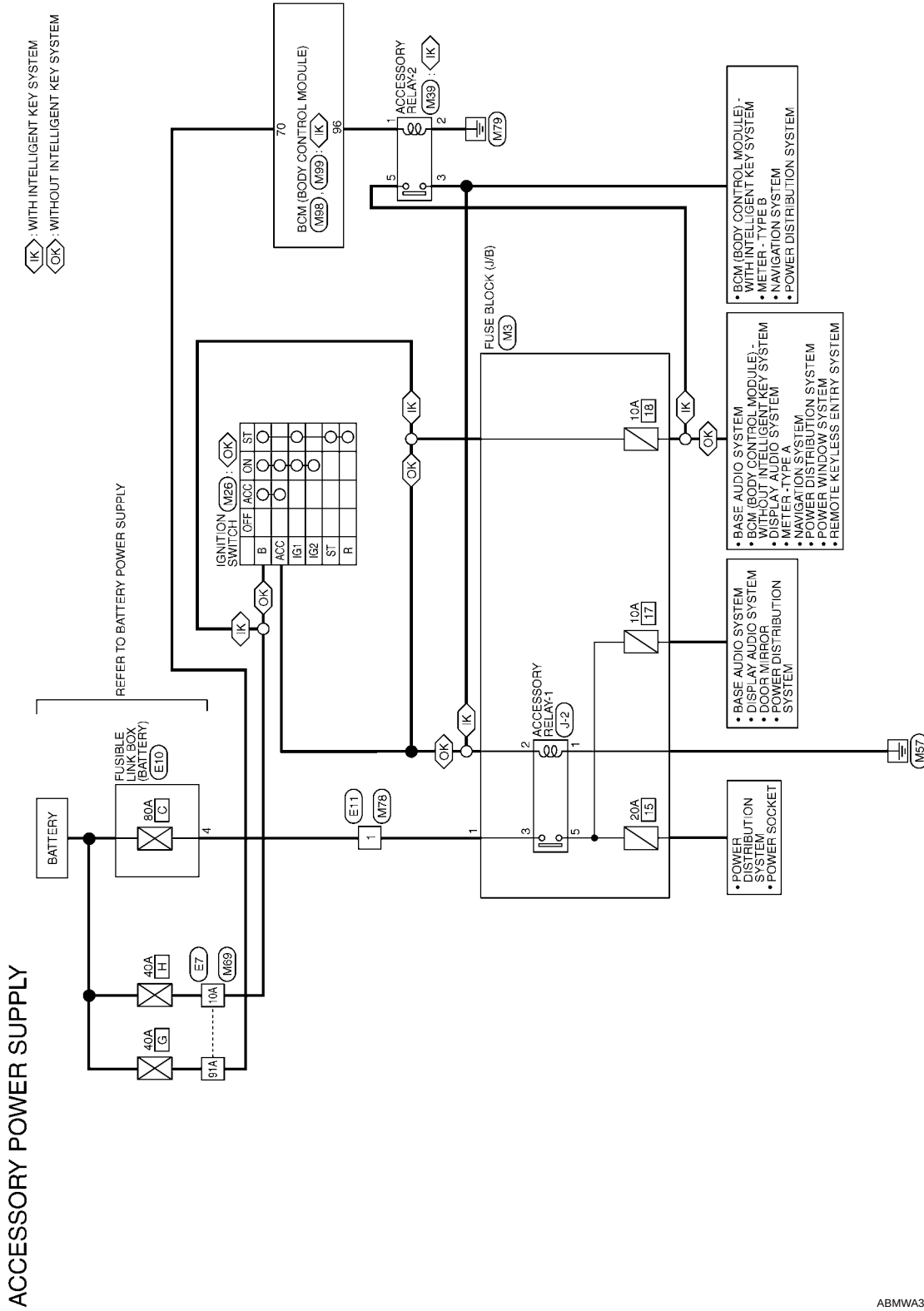
AAMIA2761GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Wiring Diagram —Accessory Power Supply—

INFOID:000000012433120



ABMWA3495GB

ACCESSORY POWER SUPPLY

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



Terminal No.	Color of Wire	Signal Name
1	W	-

Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE



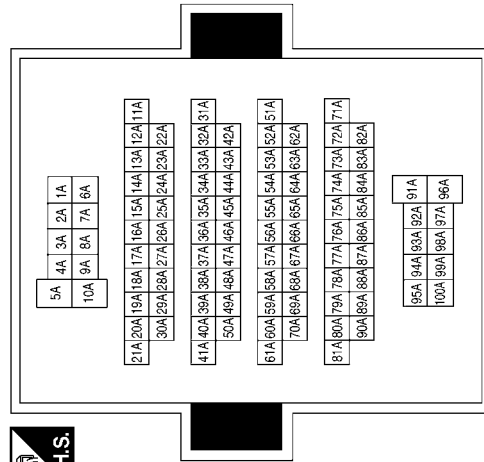
Terminal No.	Color of Wire	Signal Name
B	P	-
ACC	SB	-

Connector No.	M39
Connector Name	ACCESSORY RELAY-2
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
1	SB	-
2	B	-
3	L	-
5	BG	-

Connector No.	M69
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M78
Connector Name	WIRE TO WIRE
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	W	-

ABMIA7851GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	M98
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110



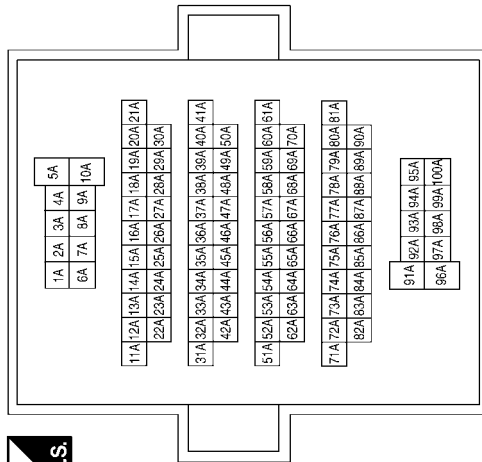
56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Connector No.	M99
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
96	SB	ACC RELAY OUTPUT

Terminal No.	Color of Wire	Signal Name
70	G	BATTERY (F/L)

Connector No.	E7
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	E10
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



4	3
---	---

Terminal No.	Color of Wire	Signal Name
4	G	-

AAMIA1770GB

POWER SUPPLY ROUTING CIRCUIT

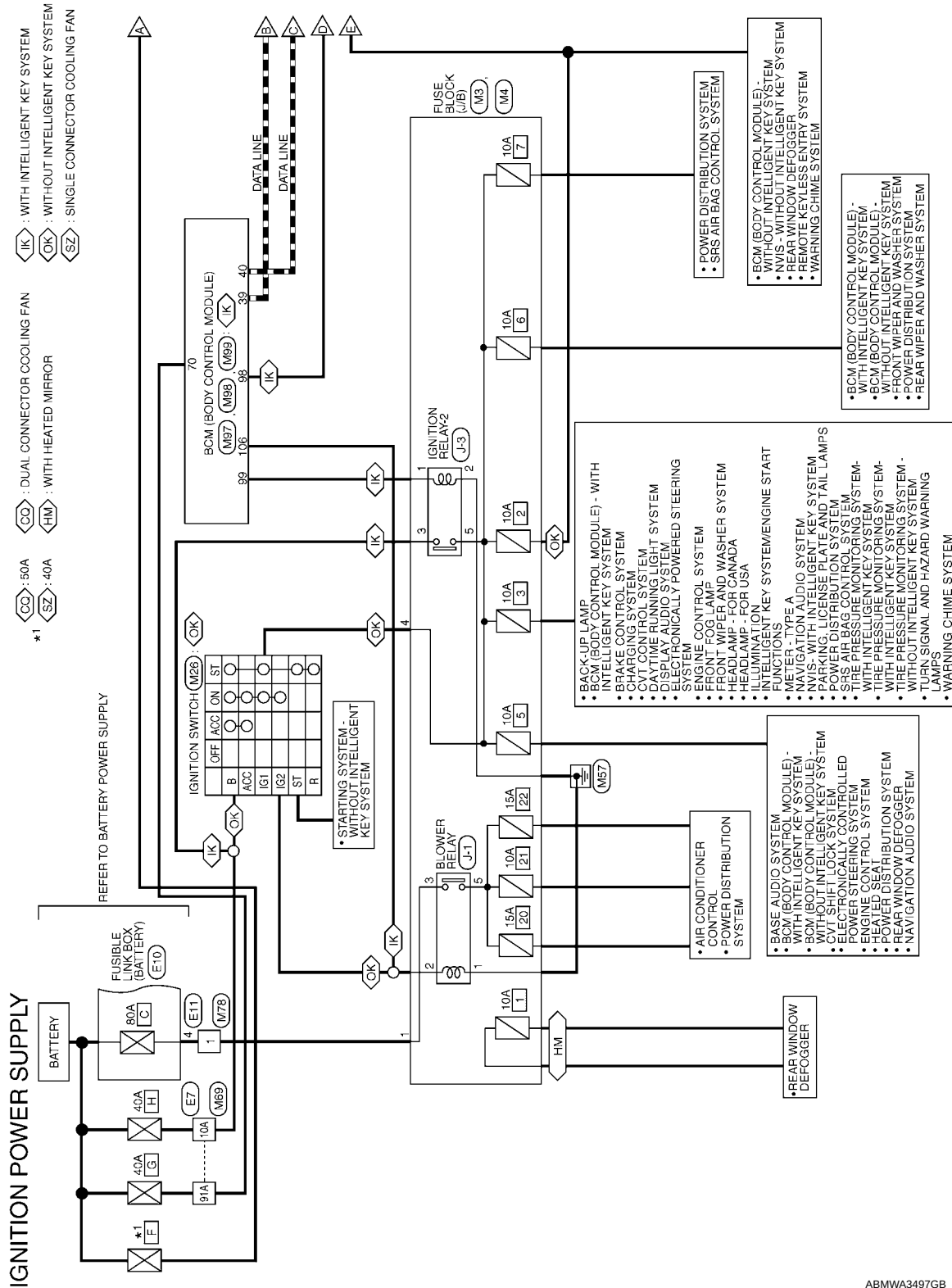
< WIRING DIAGRAM >

Connector No.	E11
Connector Name	WIRE TO WIRE
Connector Color	BLACK



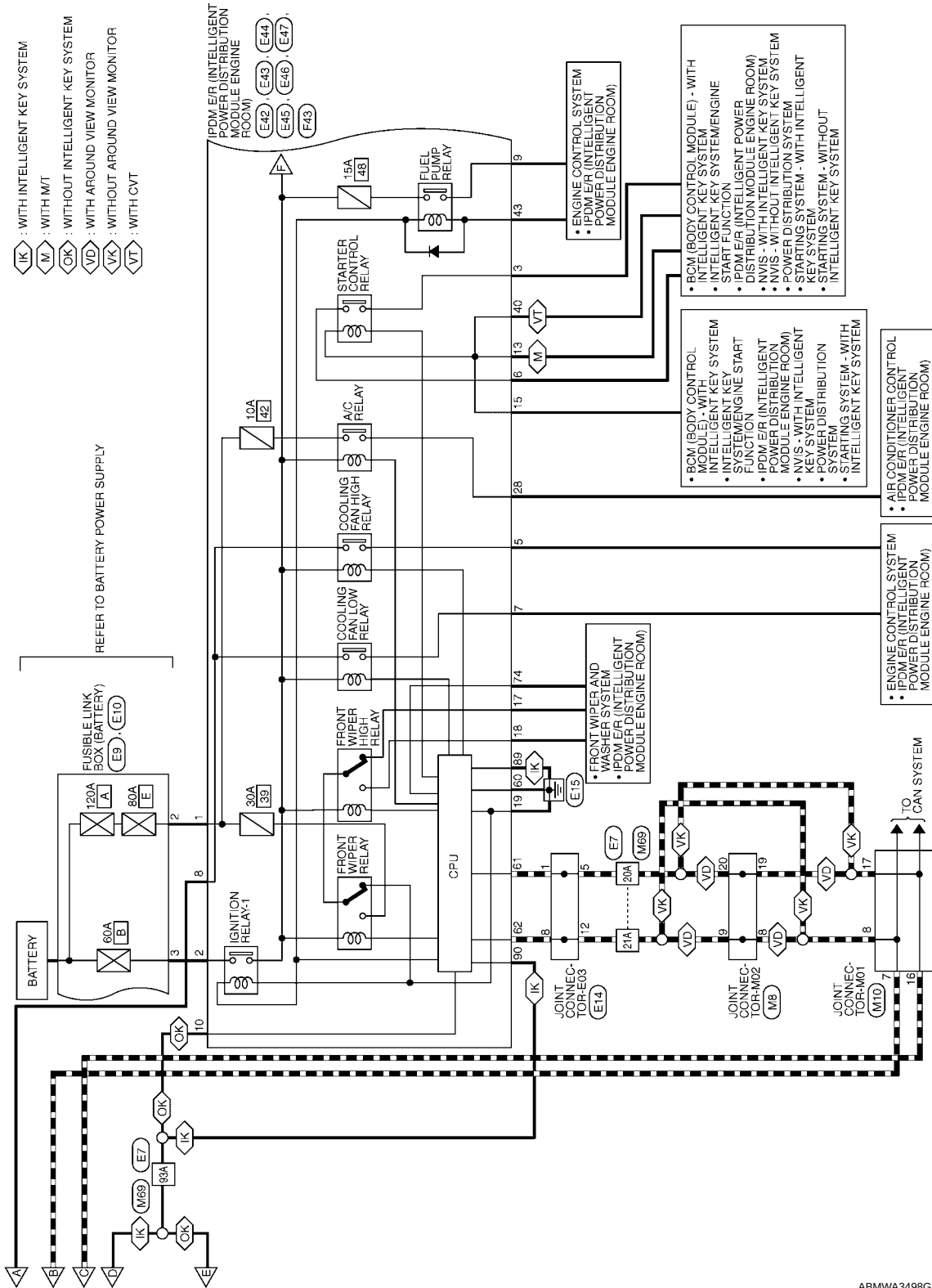
Terminal No.	Color of Wire	Signal Name
1	G	-

ABMIA7852GB

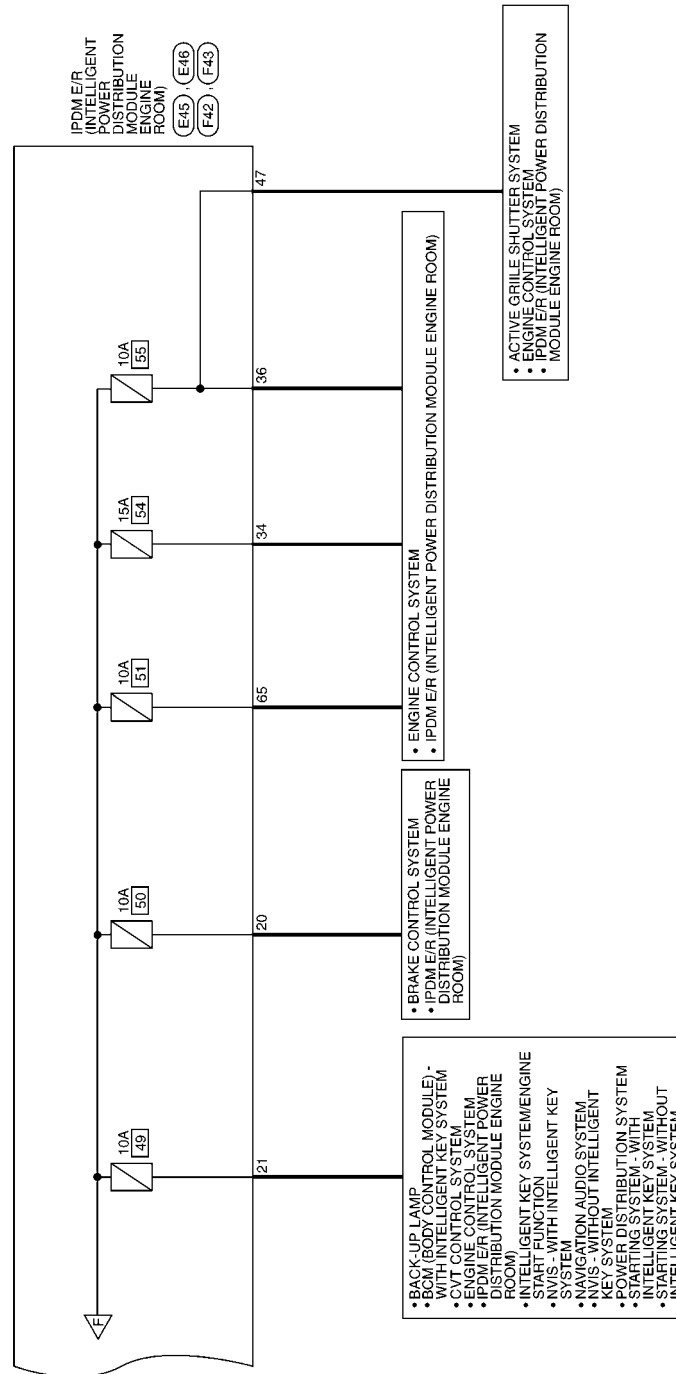


POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



< WIRING DIAGRAM >



AAMWA1404GB

IGNITION POWER SUPPLY CONNECTORS

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



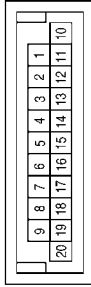
Terminal No.	Color of Wire	Signal Name
1	W	-

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



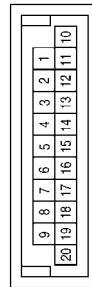
Terminal No.	Color of Wire	Signal Name
4	GR	-

Connector No.	M8
Connector Name	JOINT CONNECTOR-M02
Connector Color	GREEN



Terminal No.	Color of Wire	Signal Name
8	L	-
9	L	-
19	P	-
20	P	-

Connector No.	M10
Connector Name	JOINT CONNECTOR-M01
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
7	L	-
8	L	-
16	P	-
17	P	-

Connector No.	M26
Connector Name	IGNITION SWITCH
Connector Color	WHITE

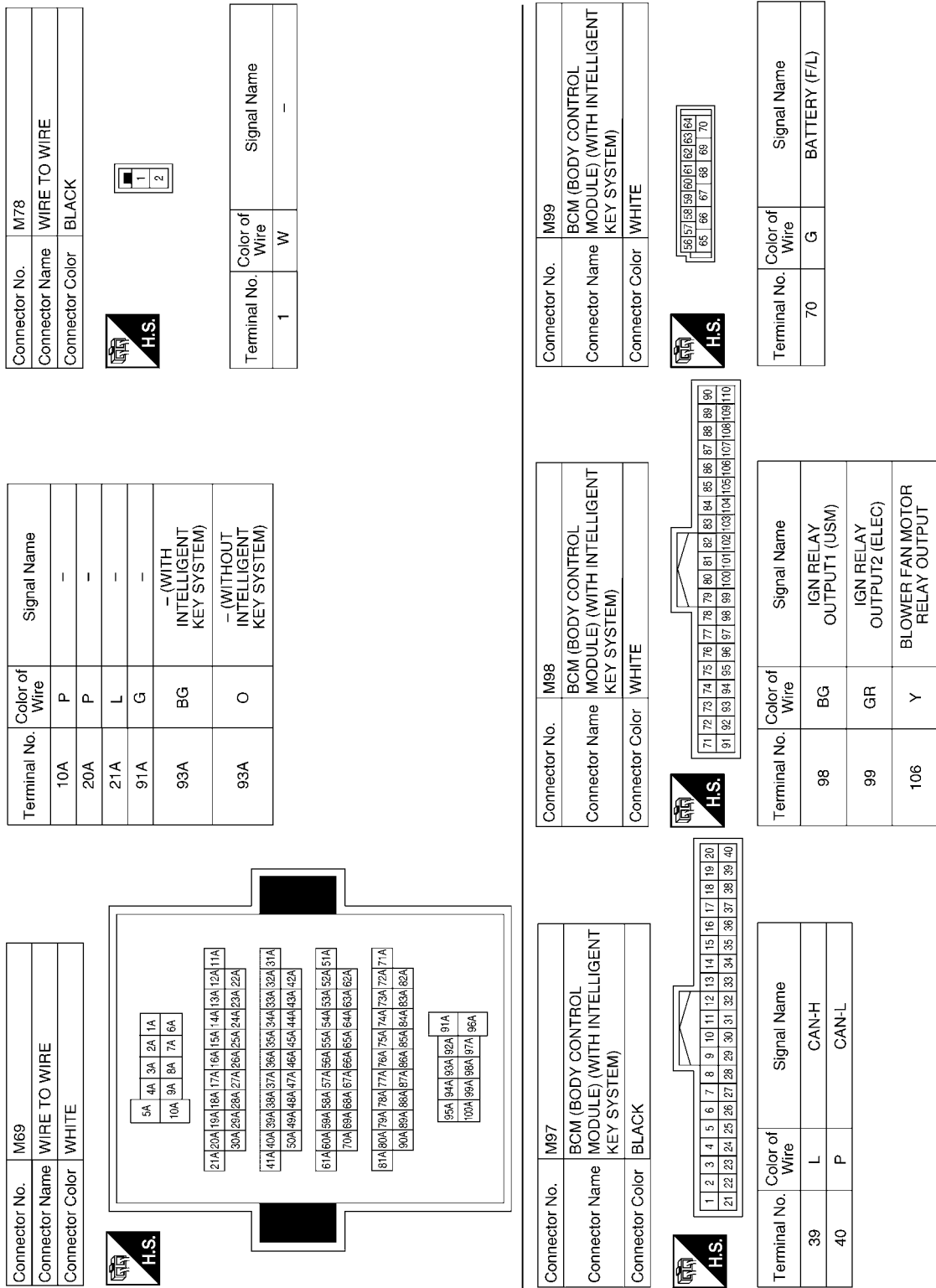


Terminal No.	Color of Wire	Signal Name
B	P	-
ACC	SB	-
IG1	GR	-
IG2	Y	-
ST	W	-

AAMIA1772GB

POWER SUPPLY ROUTING CIRCUIT

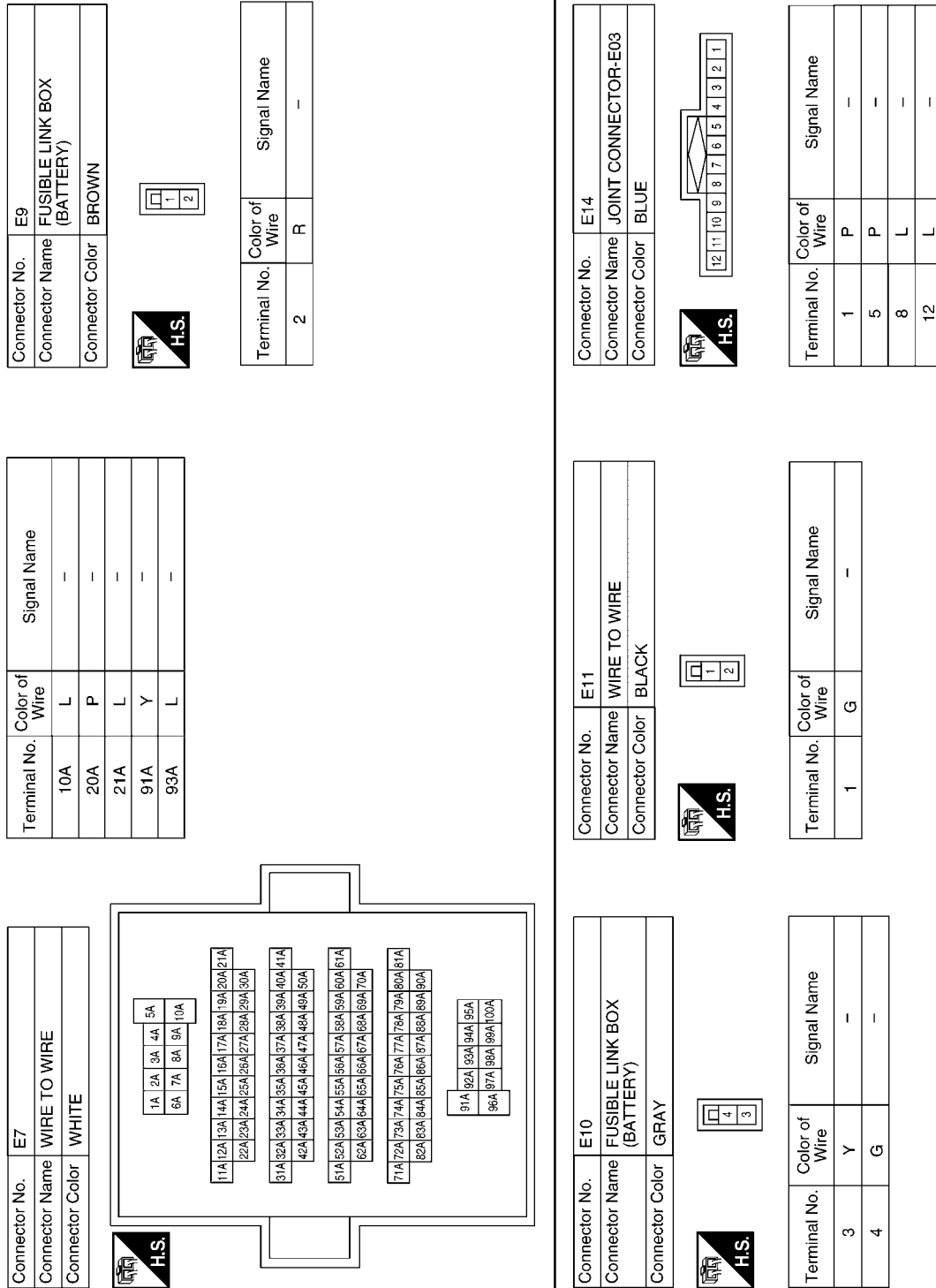
< WIRING DIAGRAM >



ABMIA7854GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >



POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	E44
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



11	10	9
16	15	14
13	12	

Terminal No.	Color of Wire	Signal Name
9	BR	FUEL PUMP
10	L	IGNSW

Connector No.	E43
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



5	4	3
8	7	6

Terminal No.	Color of Wire	Signal Name
5	Y	MOTOR FAN HI
7	P	MOTOR FAN LO
8	G	F/L MOTOR FAN

Connector No.	E42
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 USM (+B1)
2	Y	F/L MAIN (+B2)

Connector No.	E47
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



84	83	82	81	80	79	78	77
92	91	90	89	88	87	86	85

Terminal No.	Color of Wire	Signal Name
89	B	SL CONDITION 2
90	L	IGN SIGNAL

Connector No.	E46
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



64	63	62	61	60	59	58	57	56	55	54	53
76	75	74	73	72	71	70	69	68	67	66	65

Terminal No.	Color of Wire	Signal Name
60	B	S GND
61	P	CAN-L
62	L	CAN-H
65	BR	RELAY IG
74	V	AUTOSTOP

Connector No.	E45
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BROWN



21	20	19	18	17
28	27	26	25	24
23	22			

Terminal No.	Color of Wire	Signal Name
17	LG	FR WIPER LO
18	GR	FR WIPER HI
19	B	P-GND
20	BR	ABS ECU
21	G	AT ECU (WITH M/T)
21	R	AT ECU (WITH CVT)
28	V	AC-COMP

ABMIA7855GB

POWER SUPPLY ROUTING CIRCUIT

< WIRING DIAGRAM >

Connector No.	F43
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



46	45	44	43	42	41
52	51	50	49	48	47

Terminal No.	Color of Wire	Signal Name
43	GR	FPR
47	R/W	ECM IGN SW

Connector No.	F42
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



33	32	31	30	29		
40	39		38	37	36	35

Terminal No.	Color of Wire	Signal Name
34	Y	IGN COIL
36	SB	INJECTOR

ABMIA7856GB

GROUND

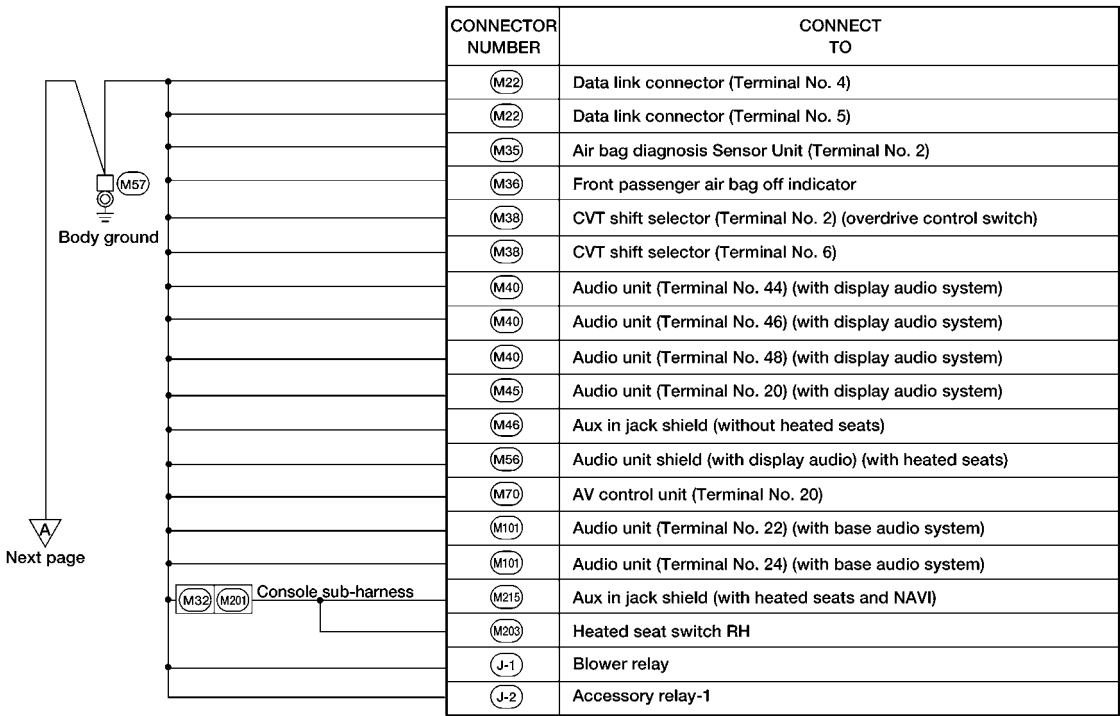
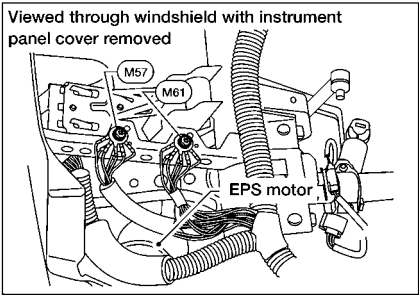
< WIRING DIAGRAM >

GROUND

Ground Distribution

INFOID:0000000012433122

MAIN HARNESS



ABMIA7432GB

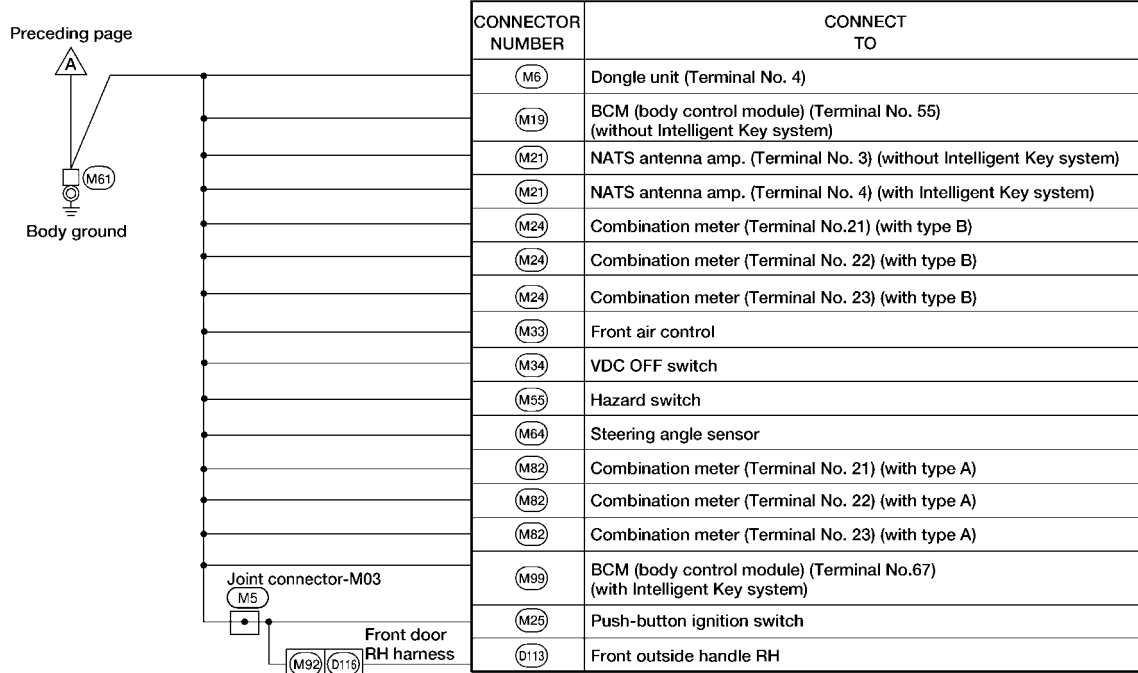
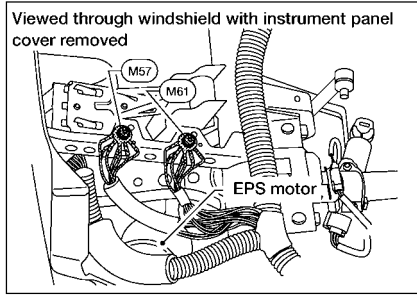
cardiagn.com

PG

N
O
P

GROUND

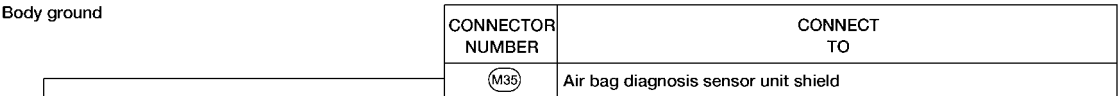
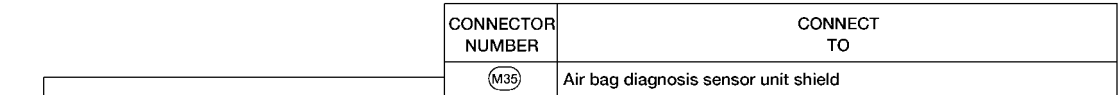
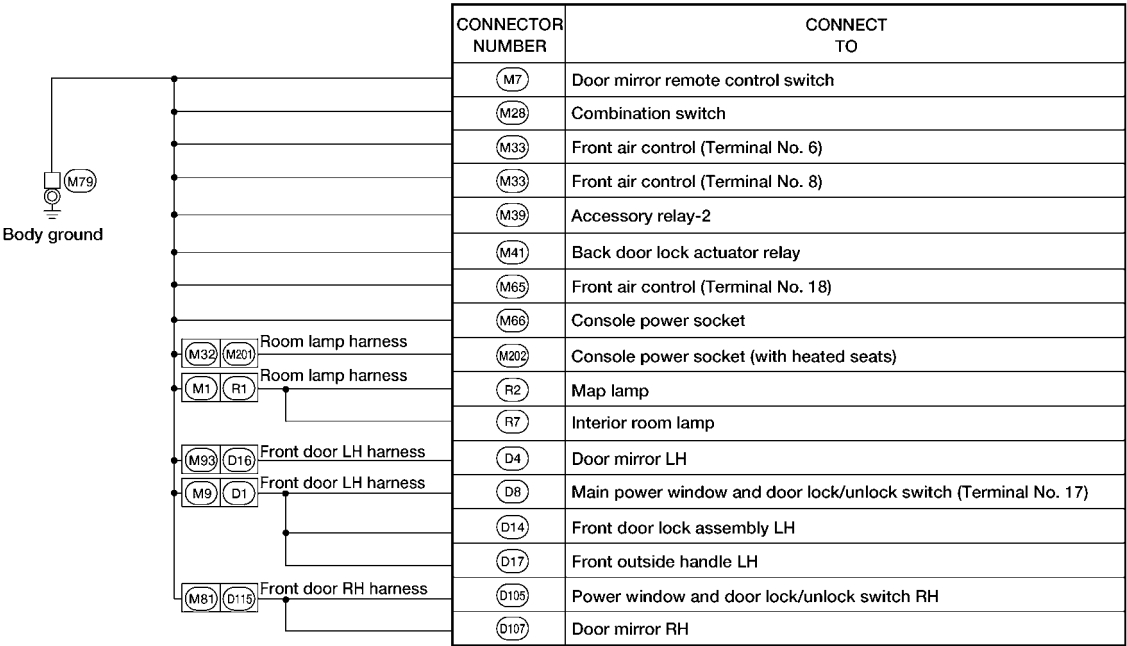
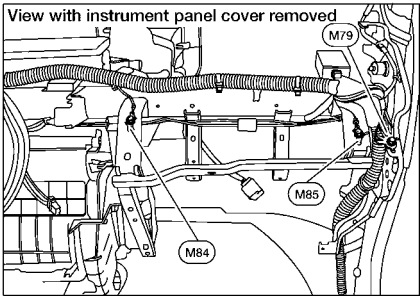
< WIRING DIAGRAM >



AAMIA2772GB

GROUND

< WIRING DIAGRAM >



AAMIA2773GB

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

cardiagn.com

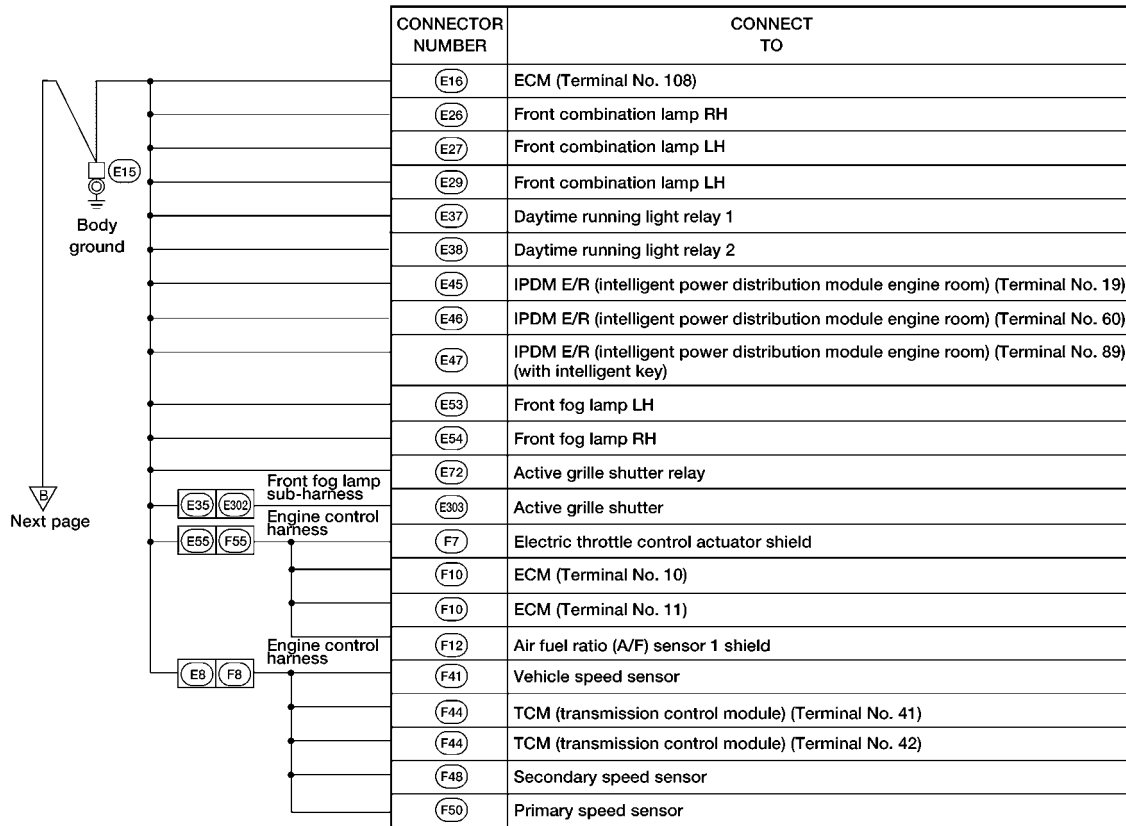
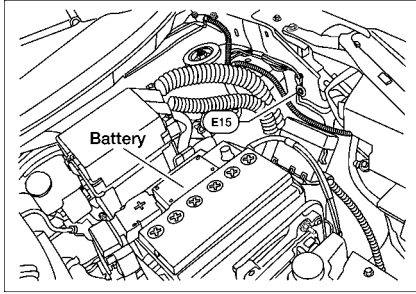
PG

N
O
P

GROUND

< WIRING DIAGRAM >

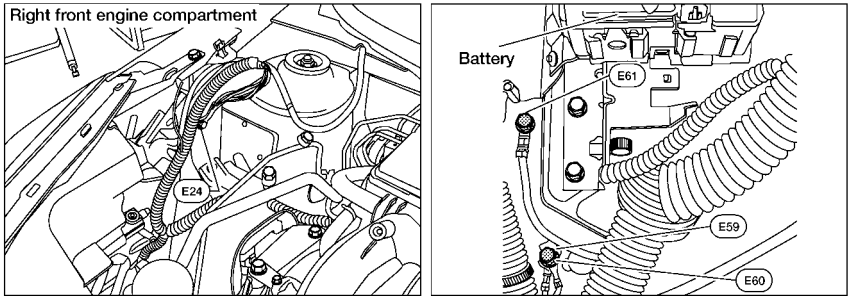
ENGINE ROOM HARNESS



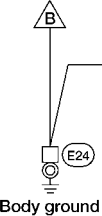
ABMIA7433GB

GROUND

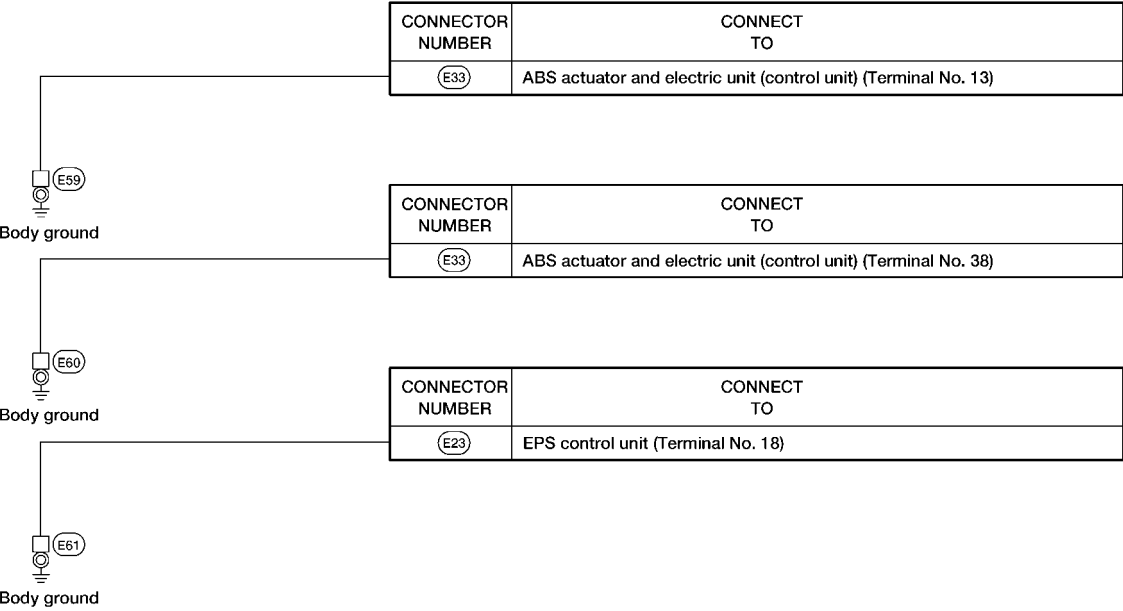
< WIRING DIAGRAM >



Preceding page



CONNECTOR NUMBER	CONNECT TO
E1	Front wiper motor
E5	Cooling fan motor (with CVT)
E20	Horn
E25	Front combination lamp LH
E28	Front combination lamp RH
E30	Front combination lamp RH
E31	Cooling fan motor (with M/T)
E40	Brake fluid level switch
E48	Clutch pedal position switch
E50	Washer fluid level switch
E62	Cooling fan relay
E64	Heated seat relay



AAMIA2777GB

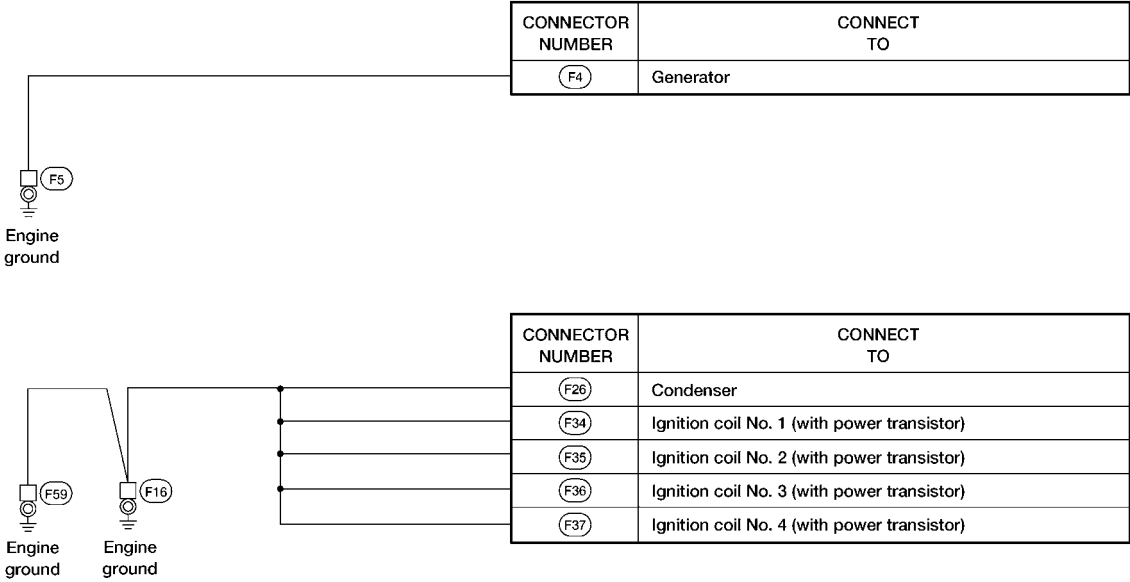
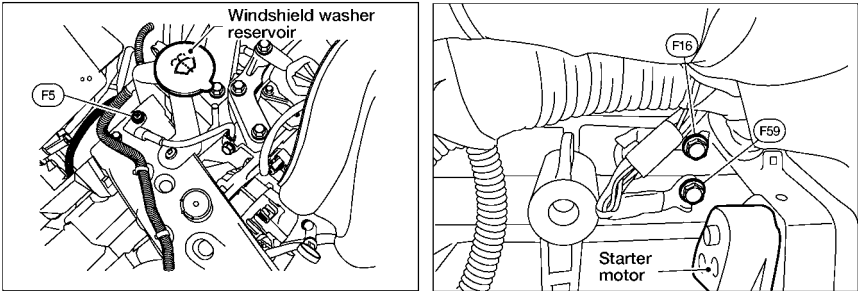
A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

cardiagn.com

PG

GROUND

< WIRING DIAGRAM >
ENGINE CONTROL HARNESS

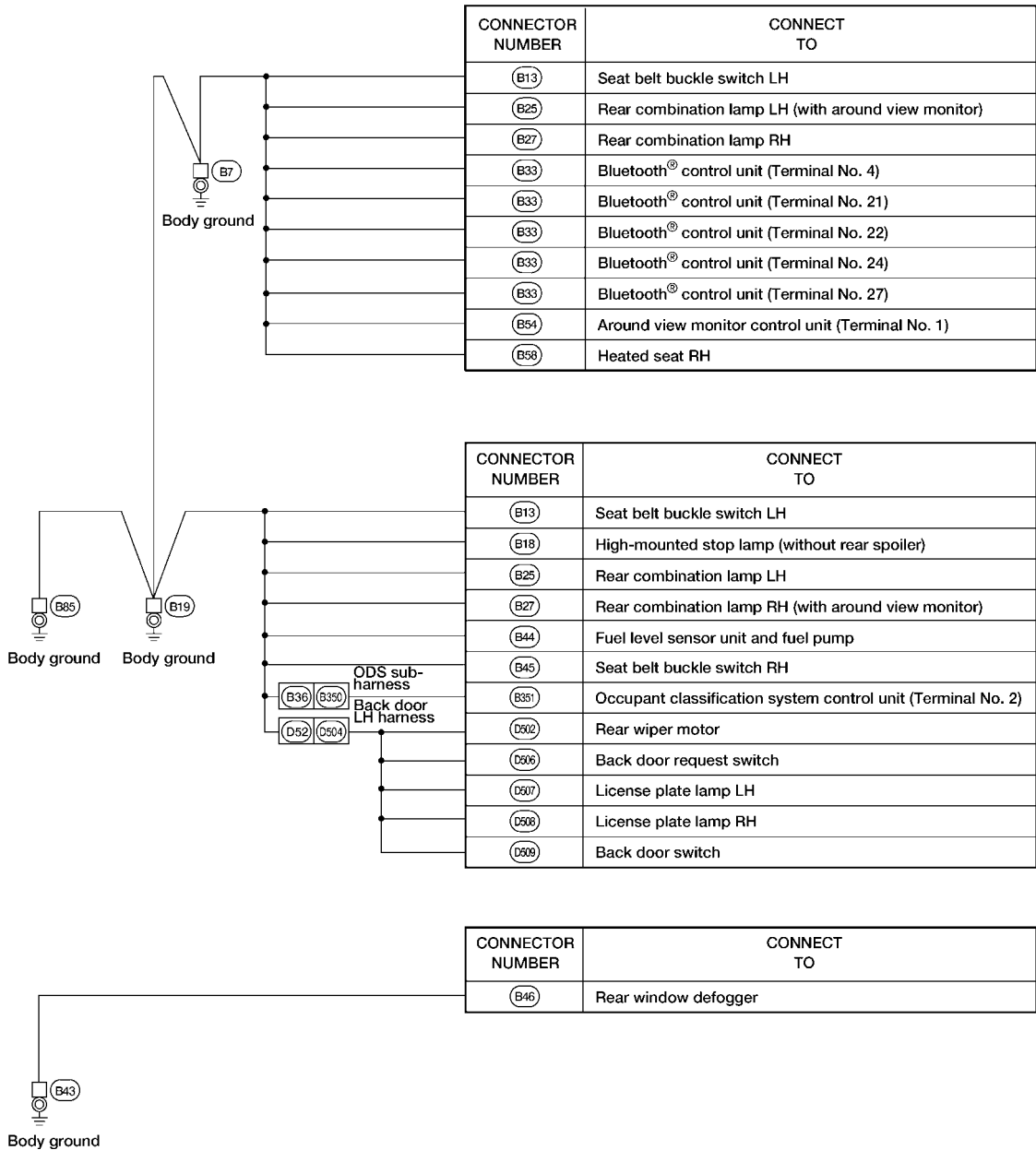
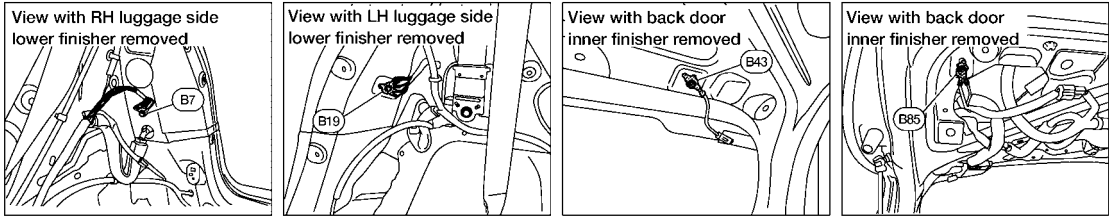


AAMIA1782GB

cardiagn.com

GROUND

< WIRING DIAGRAM >
BODY HARNESS



ABMIA7850GB

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

PG

HARNESS

< WIRING DIAGRAM >

HARNESS

Harness Layout

INFOID:000000012433123

HOW TO READ HARNESS LAYOUT

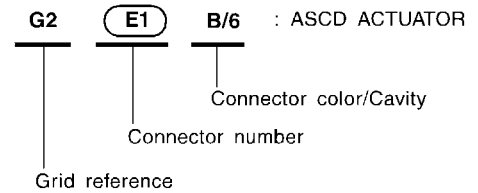
The following Harness Layouts use a map style grid to help locate connectors on the drawings:

- Main Harness and Console Sub Harness
- Engine Room Harness and Front Fog lamp Sub Harness
- Engine Room Harness (Passenger Compartment)
- Engine Control Harness
- Body Harness
- Room Lamp Harness

To use the grid reference

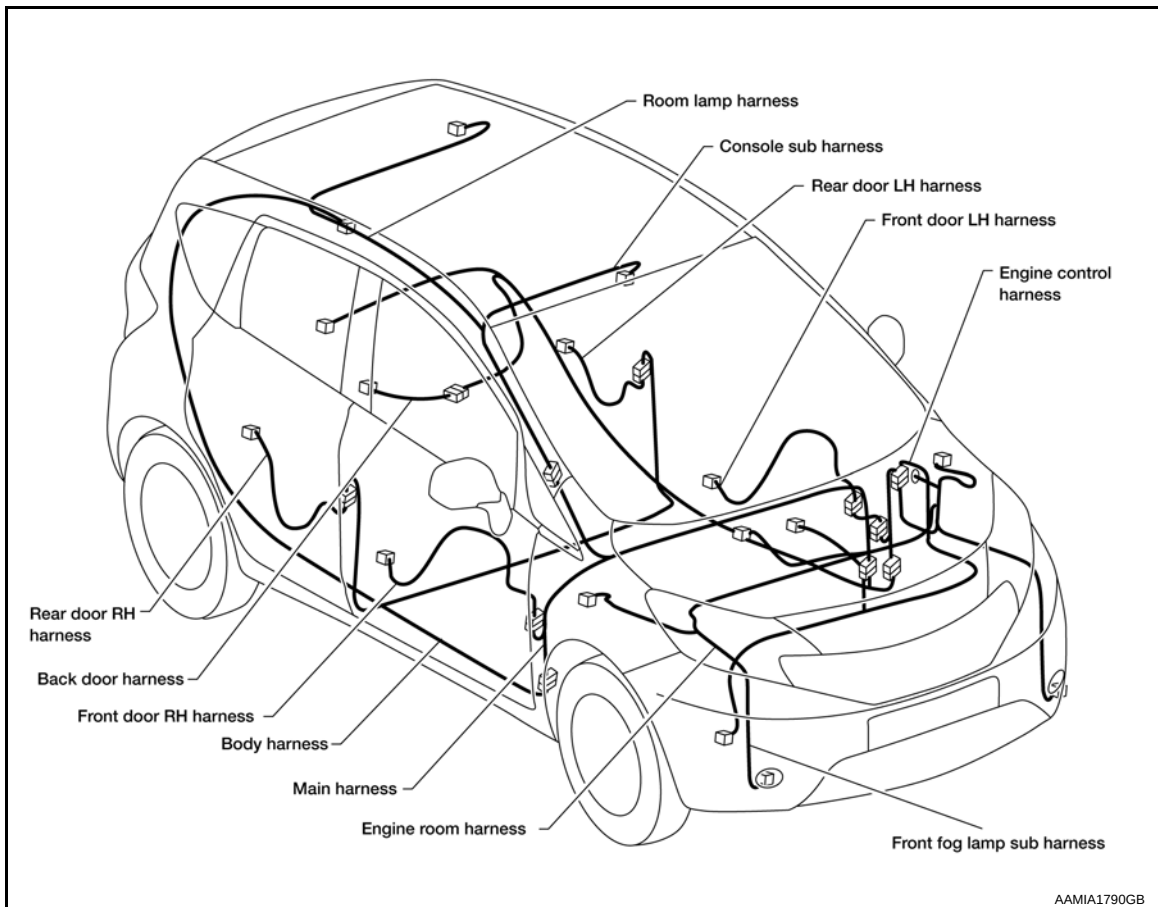
1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the drawing, find the crossing of the grid reference letter column and number row.
4. Find the connector number in the crossing zone.
5. Follow the line (if used) to the connector.

Example:



SEL252V

OUTLINE

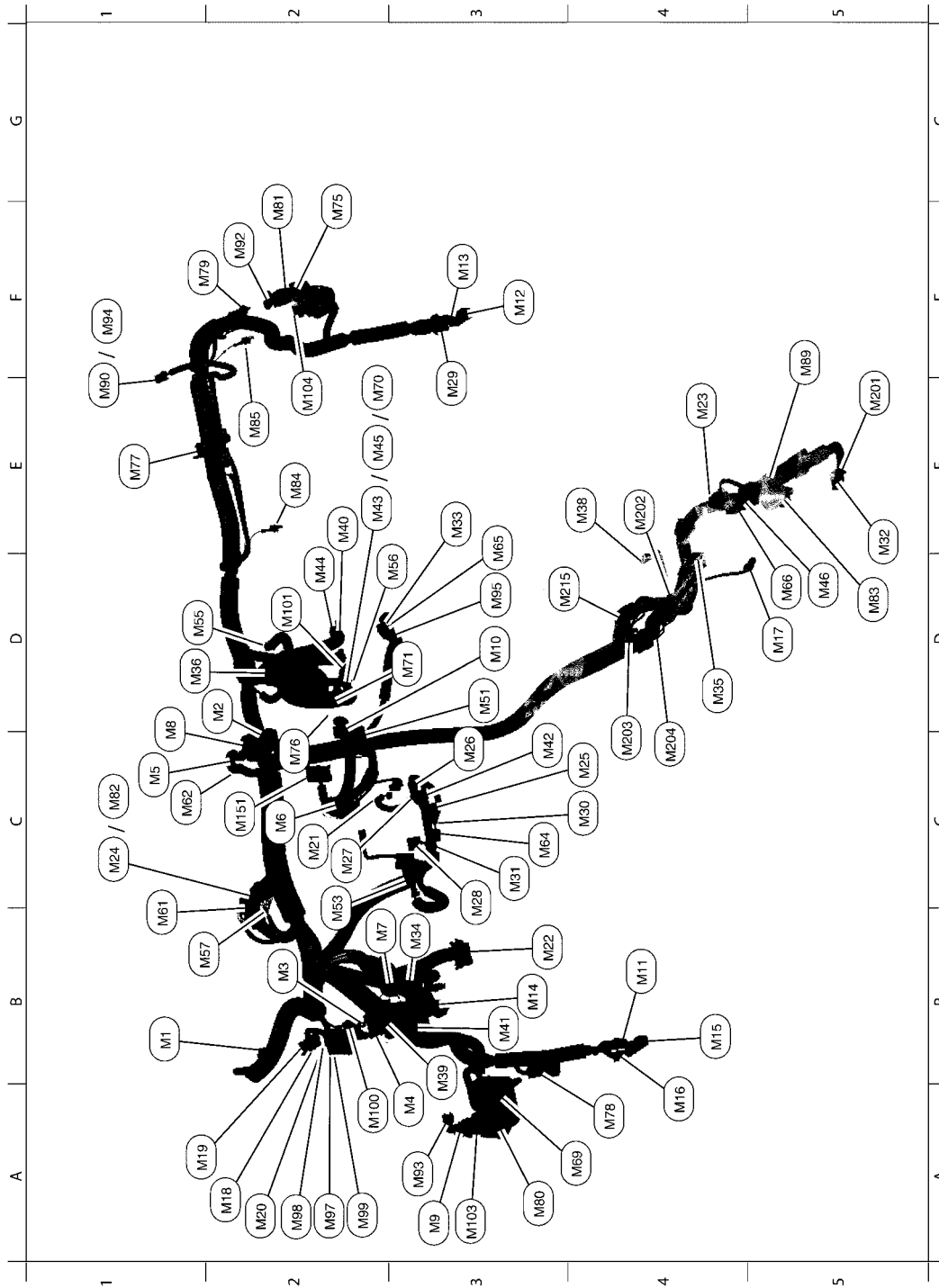


AAMIA1790GB

HARNESS

< WIRING DIAGRAM >

MAIN HARNESS



AAMIA0551ZZ

B1	M1	W/8	: To R1	D3	M51	L/20	: Joint connector-M04
D2	M2	—	: Diode	C2	M53	B/8	: EPS control unit
B2	M3	W/1	: Fuse block (J/B)	D1	M55	W/4	: Hazard switch
A3	M4	W/1	: Fuse block (J/B)	D2	M56	W/8	: Audio unit (With display audio system)
C1	M5	W/20	: Joint connector-M03	B1	M57	—	: Body ground

HARNESS

< WIRING DIAGRAM >

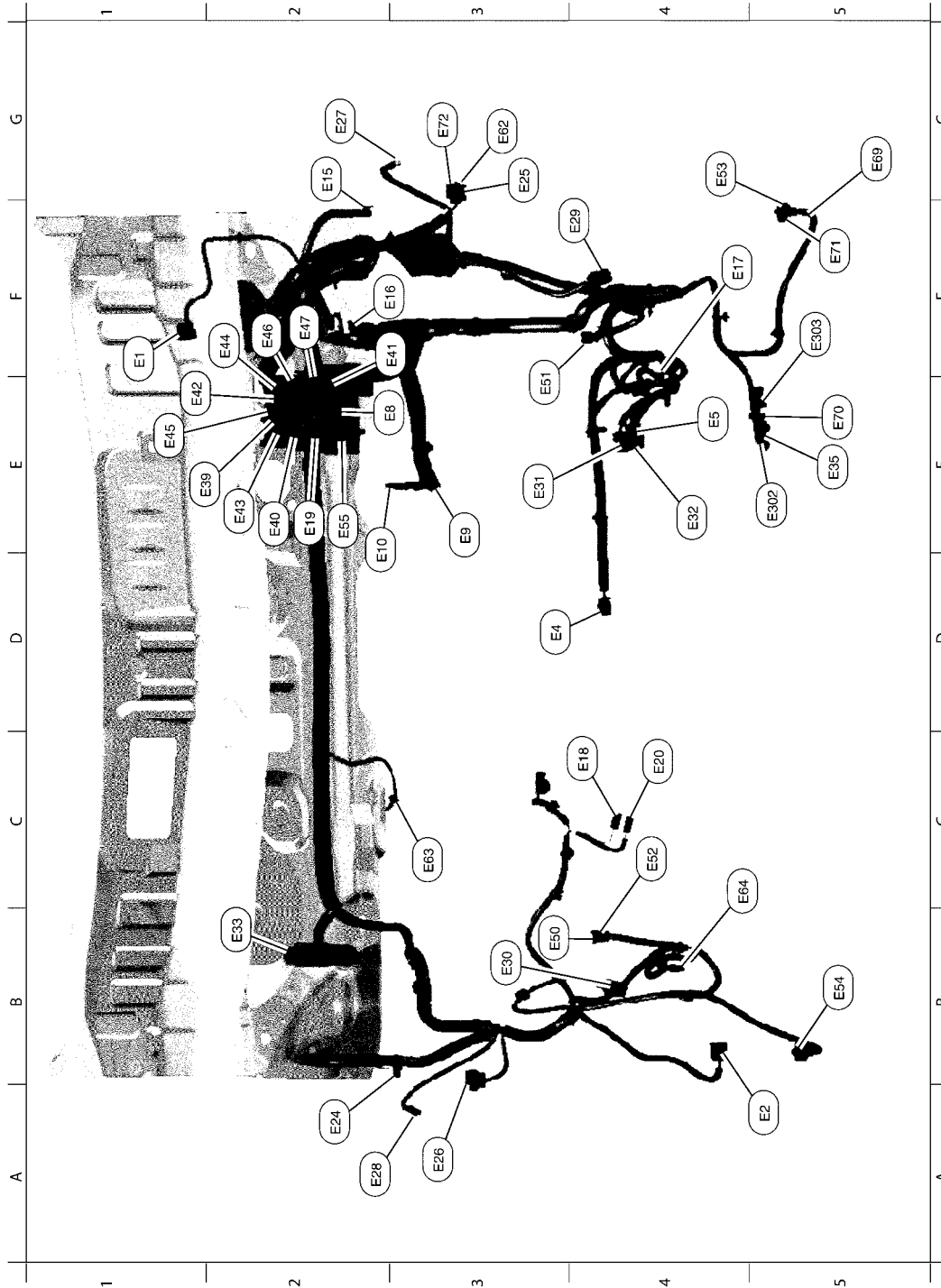
C2	M6	W/4	: Dongle unit	B1	M61	—	: Body ground
B2	M7	W/16	: Door mirror remote control switch	C1	M62	W/2	: Front blower motor
D1	M8	G/20	: Joint connector—M02	C3	M64	W/8	: Steering angle sensor
A3	M9	W/12	: To D1	E3	M65	W/4	: Front air control
D3	M10	L/20	: Joint connector—M01	D5	M66	B/3	: Console power socket
B4	M11	W/2	: To B28	A4	M69	SMJ	: To E7
F3	M12	W/16	: To B29	E2	M70	W/20	: AV control unit
F3	M13	W/24	: To B30	D3	M71	W/24	: AV control unit
B3	M14	BR/6	: Rear window defogger relay	F2	M75	Y/4	: To D101
B4	M15	W/16	: To B23	D2	M76	GR/5	: AV control unit
A4	M16	W/24	: To B24	E1	M77	Y/4	: Front passenger air bag module
D5	M17	B/1	: Parking brake switch	A4	M78	B/2	: To E11
A2	M18	W/40	: BCM (Body control module) (Without Intelligent Key system)	F1	M79	—	: Body ground
A1	M19	W/15	: BCM (Body control module) (Without Intelligent Key system)	A3	M80	Y/4	: To D3
A2	M20	B/15	: BCM (Body control module) (Without Intelligent Key system)	F2	M81	W/12	: To D115
C2	M21	W/4	: NATS antenna amp.	C1	M82	W/40	: Combination meter (With type A)
B3	M22	W/16	: Data link connector	D5	M83	B/3	: G sensor
E4	M23	W/4	: Remote keyless entry receiver (Without Intelligent Key system)	E2	M84	—	: Body ground
C1	M24	W/40	: Combination meter (With type B)	E2	M85	—	: Body ground
C4	M25	W/8	: Push—button ignition switch	F5	M89	L/2	: Inside key antenna (Console)
C3	M26	W/6	: Ignition switch	E1	M90	B/4	: Remote keyless entry receiver (With Intelligent Key system without tire pressure monitoring system)
C2	M27	BR/2	: Key switch	F2	M92	W/12	: To D116
C3	M28	W/16	: Combination switch	A3	M93	W/24	: To D16
E3	M29	W/24	: To B1	F1	M94	W/4	: Remote keyless entry receiver (With Intelligent Key system with tire pressure monitoring system)
C4	M30	GR/8	: Combination switch (Spiral cable)	D3	M95	L/2	: Inside key antenna (Instrument center)
C3	M31	Y/6	: Combination switch (Spiral cable)	A2	M97	B/40	: BCM (Body control module) (With Intelligent Key system)
E5	M32	W/16	: To M201	A2	M98	W/40	: BCM (Body control module) (With Intelligent Key system)
E3	M33	B/15	: Front air control	A2	M99	W/15	: BCM (Body control module) (With Intelligent Key system)
B3	M34	GR/6	: VDC off switch	A2	M100	B/15	: BCM (Body control module) (With Intelligent Key system)
D4	M35	Y/28	: Air bag diagnosis sensor unit	D2	M101	W/16	: Audio unit (With base audio system)
D1	M36	BR/2	: Front passenger air bag off indicator	A3	M103	W/12	: Accessory prewire LH
E4	M38	W/8	: CVT shift selector	E2	M104	W/12	: Accessory prewire RH
B3	M39	L/4	: Accessory relay—2	C2	M151	BR/4	: Front blower motor resistor
E2	M40	W/32	: Audio unit (With display audio system)	Console sub harness			
B3	M41	B/5	: Back door lock actuator relay	E5	M201	W/16	: To M32
C3	M42	BR/4	: Thermo control amp.	E4	M202	B/3	: Console power socket
E2	M43	W/20	: Audio unit (With base audio system)	C4	M203	BR/6	: Heated seat switch RH

HARNESS

< WIRING DIAGRAM >

D2	M44	B/6	: Audio unit (With display audio system)	C4	M204	W/6	: Heated seat switch LH
E2	M45	W/20	: Audio unit (With display audio system)	D3	M215	W/4	: AUX in jack (With heated seats and NAVI
D5	M46	W/4	: Aux in jack (Without heated seats)				

ENGINE ROOM HARNESS



AAMIA0382ZZ

F1	E1	GR/5	: Front wiper motor	E2	E40	B/2	: Brake fluid level switch
A5	E2	GR/2	: Front and rear washer motor	F2	E41	L/5	: Starter relay

HARNESS

< WIRING DIAGRAM >

D3	E4	Y/2	: Crash zone sensor	E1	E42	B/2	: IPDM E/R (Intelligent power distribution module engine room)
E4	E5	B/2	: Cooling fan motor (With CVT)	E2	E43	B/6	: IPDM E/R (Intelligent power distribution module engine room)
E2	E8	W/24	: To F8	F2	E44	BR/8	: IPDM E/R (Intelligent power distribution module engine room)
E3	E9	BR/2	: Fusible link box (Battery)	E1	E45	BR/12	: IPDM E/R (Intelligent power distribution module engine room)
E2	E10	GR/2	: Fusible link box (Battery)	F2	E46	W/24	: IPDM E/R (Intelligent power distribution module engine room)
G2	E15	—	: Body ground	F2	E47	W/16	: IPDM E/R (Intelligent power distribution module engine room)
F2	E16	B/32	: ECM	B3	E50	BR/2	: Washer fluid level switch
F4	E17	B/3	: Refrigerant pressure sensor	E3	E51	B/2	: Front wheel sensor LH
C4	E18	BR/1	: Horn	C4	E52	B/2	: Front wheel sensor RH
E2	E19	W/6	: To F33	G4	E53	B/2	: Front fog lamp LH
C4	E20	B/1	: Horn	B5	E54	B/2	: Front fog lamp RH
A2	E24	—	: Body ground	E2	E55	GR/12	: To F55
G3	E25	B/3	: Front combination lamp LH	G3	E62	L/4	: Cooling fan relay
A3	E26	B/3	: Front combination lamp RH	C3	E63	GR/4	: Heated oxygen sensor 2
G2	E27	B/2	: Front combination lamp LH	C4	E64	L/4	: Heated seat relay
A2	E28	B/2	: Front combination lamp RH	G5	E69	B/2	: Ambient sensor
F4	E29	GR/3	: Front combination lamp LH	E5	E70	BR/3	: Intelligent Key warning buzzer
B3	E30	GR/3	: Front combination lamp RH	F5	E71	B/4	: Front camera
E3	E31	GR/4	: Cooling fan motor (With CVT)	G3	E72	L/4	: Active grille shutter relay
E4	E32	W/2	: Cooling fan motor (With CVT)	Front fog lamp sub harness			
B2	E33	B/38	: ABS actuator and electric unit (Control unit)	E5	E302	B/4	: To E35
E5	E35	B/4	: To E302	F5	E303	B/4	: Active grille shutter
E1	E39	W/3	: Horn relay	F5	E303	B/4	: Active grille shutter

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



PG

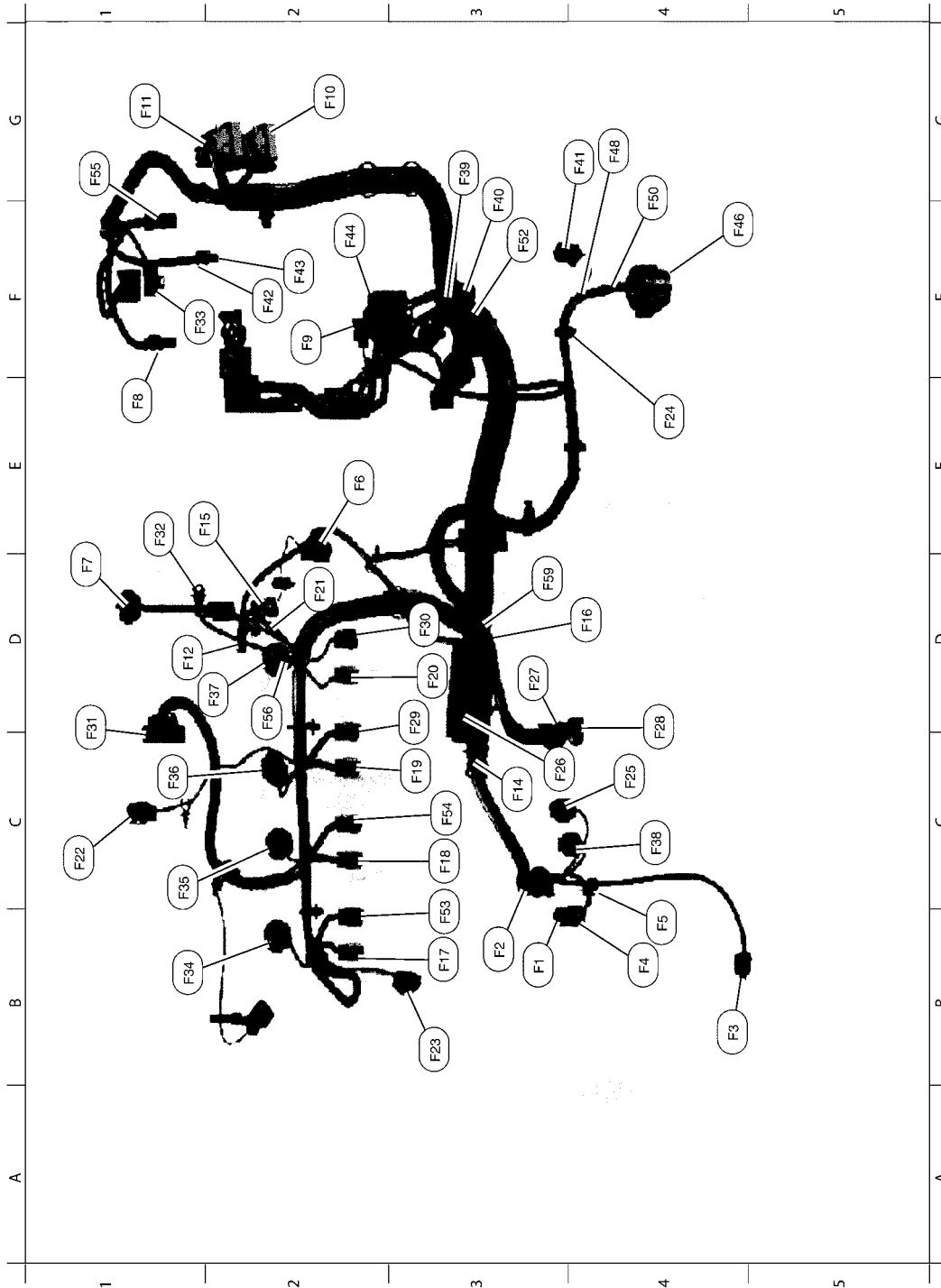
N
O
P

HARNESS

< WIRING DIAGRAM >

A4	E21	GR/16	: To B12	B2	E58	L/4	: Front fog lamp relay
B2	E22	W/22	: Joint connector-E02	A3	E59	—	: Body ground
C3	E23	B/2	: EPS control unit	A2	E60	—	: Body ground
C3	E34	BR/2	: Clutch interlock switch	B3	E61	—	: Body ground

ENGINE CONTROL HARNESS



AAMIA0188ZZ

HARNESS

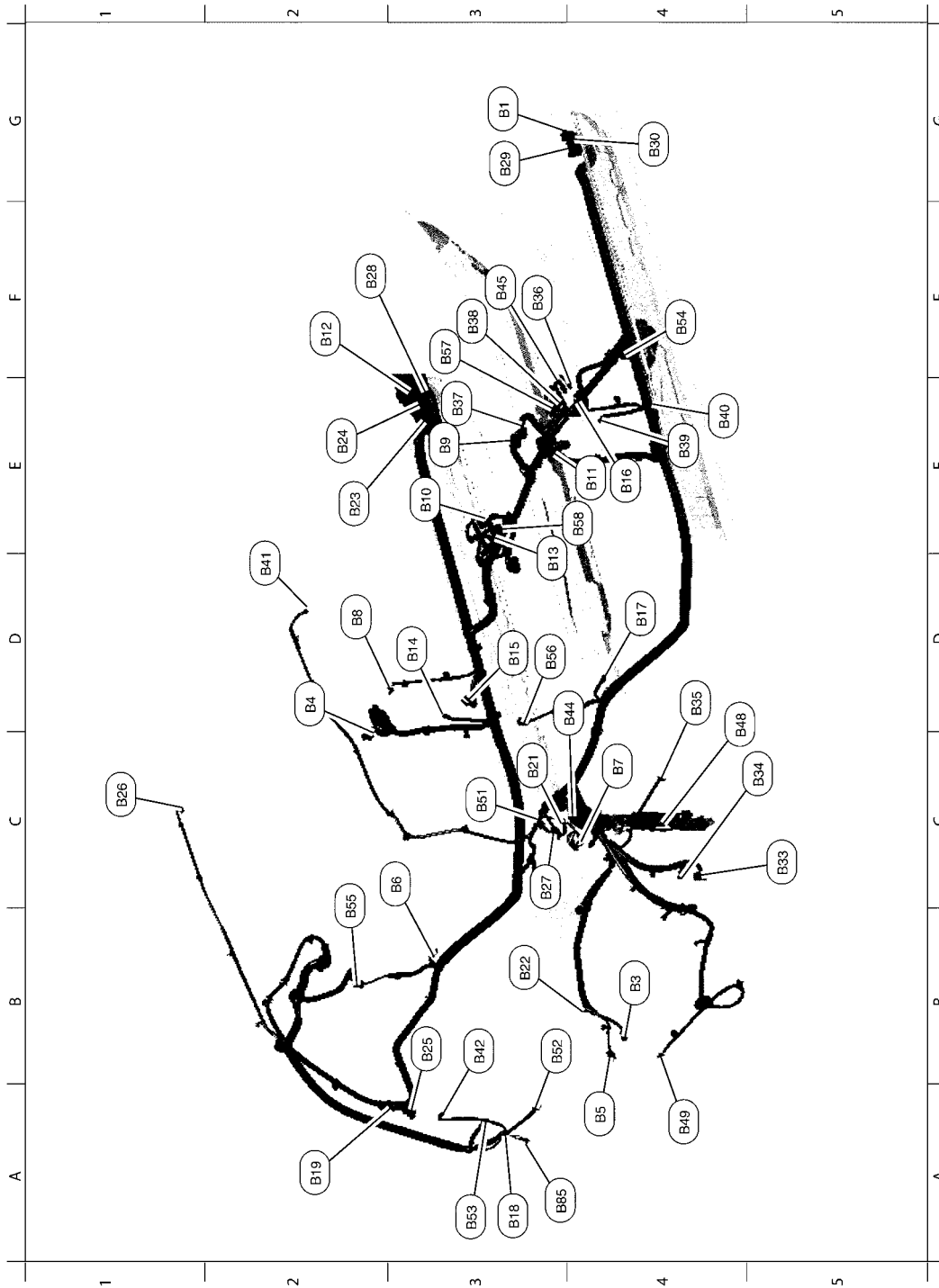
< WIRING DIAGRAM >

B3	F1	B/3	: Generator	D4	F28	—	: Starter motor
B3	F2	—	: Generator	D3	F29	B/2	: Fuel injector no. 3 (Rear)
B4	F3	B/1	: A/C compressor	D3	F30	B/2	: Fuel injector no. 4 (Rear)
B4	F4	—	: Generator	D1	F31	B/6	: Mass air flow sensor
B4	F5	—	: Engine ground	E1	F32	GR/2	: Exhaust valve timing control solenoid valve
E2	F6	GR/2	: Engine coolant temperature sensor	F1	F33	W/6	: To E19
D1	F7	B/6	: Electric throttle control actuator	B1	F34	GR/3	: Ignition coil no.1 (With power transistor)
E1	F8	W/24	: To E8	C1	F35	GR/3	: Ignition coil no.2 (With power transistor)
F2	F9	GR/4	: Battery current sensor	C1	F36	GR/3	: Ignition coil no.3 (With power transistor)
G2	F10	GR/32	: ECM	D2	F37	GR/3	: Ignition coil no.4 (With power transistor)
G1	F11	BR/48	: ECM	C4	F38	B/3	: Engine oil pressure sensor
D1	F12	BR/4	: Air fuel ratio (A/F) sensor 1	G3	F39	—	: Fusible link box (Battery)
C3	F14	GR/2	: Knock sensor	G3	F40	—	: Fusible link box (Battery)
E1	F15	B/3	: Crankshaft position sensor (POS)	G4	F41	B/3	: Output speed sensor
D4	F16	—	: Engine ground	F2	F42	W/12	: IPDM E/R (Intelligent power distribution module engine room)
B3	F17	B/2	: Fuel injector no. 1 (Front)	F2	F43	W/12	: IPDM E/R (Intelligent power distribution module engine room)
C3	F18	B/2	: Fuel injector no. 2 (Front)	F2	F44	B/48	: TCM (Transmission control module)
C3	F19	B/2	: Fuel injector no. 3 (Front)	F4	F46	GR/22	: CVT unit
D3	F20	B/2	: Fuel injector no. 4 (Front)	G4	F48	B/3	: Secondary speed sensor
D2	F21	B/3	: Camshaft position sensor	G4	F50	B/3	: Primary speed sensor
C1	F22	GR/2	: Evap canister purge volume control solenoid valve	F3	F52	B/10	: Transmission range switch
B3	F23	GR/2	: Intake valve timing control solenoid valve	B3	F53	B/2	: Fuel injector no. 1 (Rear)
E4	F24	G/3	: Park/neutral position (PNP) switch	C3	F54	B/2	: Fuel injector no. 2 (Rear)
C4	F25	GR/2	: Engine oil temperature sensor	G1	F55	GR/12	: To E55
C3	F26	W/2	: Condenser	D2	F56	B/3	: Exhaust valve timing control position sensor
D3	F27	—	: Starter motor	D3	F59	—	: Engine ground

HARNESS

< WIRING DIAGRAM >

BODY HARNESS



AAMIA0383ZZ

G2	B1	W/24	: To M29	G2	B29	W/16	: To M12
B4	B3	GR/3	: Evap control system pressure sensor	G3	B30	W/24	: To M13
F4	B4	W/10	: To D201	D5	B33	W/32	: Bluetooth® control unit
B4	B5	B/2	: Evap canister vent control valve	C5	B34	W/8	: Bluetooth® control unit
C2	B6	W/4	: Rear door switch LH	C4	B35	B/2	: Rear wheel sensor RH

HARNESS

< WIRING DIAGRAM >

D4	B7	—	: Body ground	F3	B36	W/4	: To B350
D2	B8	W/4	: Front door switch LH	F2	B37	Y/22	: Air bag diagnosis sensor unit
E2	B9	Y/22	: Air bag diagnosis sensor unit	F2	B38	Y/2	: Front RH side air bag module
D2	B10	Y/2	: Front LH side air bag module	F4	B39	Y/2	: Front RH seat belt pre-tensioner
E3	B11	W/10	: To D301	G3	B40	Y/2	: Side air bag satellite sensor RH
E1	B12	GR/16	: To E21	D4	B41	Y/2	: RH side curtain air bag module
E3	B13	W/3	: Seat belt buckle switch LH	B3	B42	B/1	: Condenser
D2	B14	Y/2	: Front LH seat belt pre-tensioner	D3	B44	GR/5	: Fuel level sensor unit and fuel pump
C2	B15	Y/2	: Side air bag satellite sensor LH	F2	B45	W/3	: Seat belt buckle switch RH
E3	B16	W/4	: Front door switch RH	C4	B48	L/2	: Inside key antenna (Trunk room)
E4	B17	W/4	: Rear door switch RH	B5	B49	L/2	: Outside key antenna (Rear bumper)
B3	B18	B/2	: High-mounted stop lamp	C3	B51	B/1	: Rear window defogger
A2	B19	—	: Body ground	B3	B52	W/4	: To D504
D4	B21	W/4	: Cargo lamp	A4	B53	W/8	: To D503
C3	B22	GR/2	: Rear wheel sensor LH	G2	B54	W/40	: Around view monitor control unit
F2	B23	W/16	: To M15	C2	B55	Y/2	: Rear side air bag satellite sensor LH
F1	B24	W/24	: To M16	D3	B56	Y/2	: Rear side air bag satellite sensor RH
A3	B25	W/6	: Rear combination lamp LH	F2	B57	GR/3	: Seat heater RH
C1	B26	Y/2	: LH side curtain air bag module	E3	B58	GR/3	: Seat heater LH
C4	B27	W/6	: Rear combination lamp RH	A4	B85	—	: Body ground
E1	B28	W/2	: To M11				

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

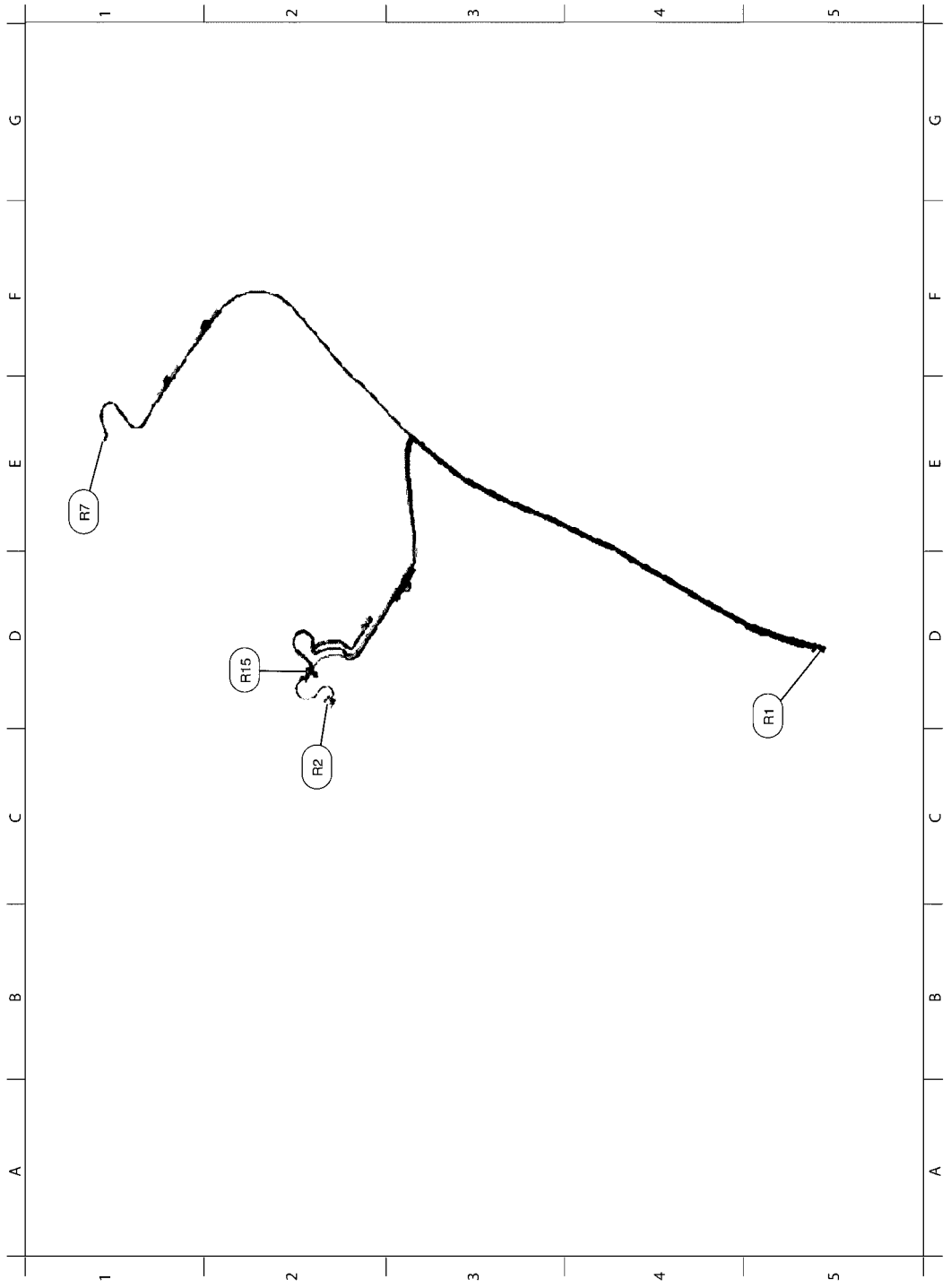
PG

N
O
P

HARNESS

< WIRING DIAGRAM >

ROOM LAMP HARNESS



AAMIA0190ZZ

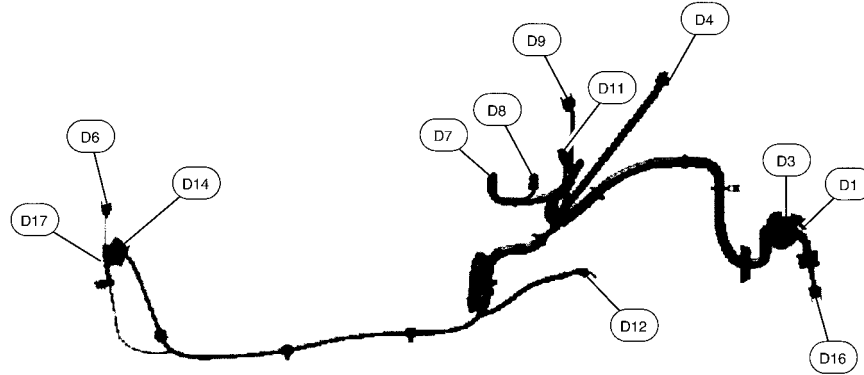
D5	R1	W/8	: To M1	E1	R7	W/3	: Interior room lamp
C2	R2	W/6	: Map lamp	D2	R15	W/4	: Microphone

cardiagn.com

HARNESS

< WIRING DIAGRAM >

FRONT DOOR LH HARNESS



AAMIA0191ZZ

D1	W/12	: To M9	D9	B/2	: Front power window motor LH
D3	Y/4	: To M80	D11	Y/2	: Front door satellite sensor LH
D4	W/12	: Door mirror LH	D12	W/2	: Front door speaker LH
D6	GR/2	: Front outside handle LH (Outside key antenna)	D14	GR/6	: Front door lock actuator LH
D7	W/16	: Main power window and door lock/unlock switch	D16	W/24	: To M93
D8	W/3	: Main power window and door lock/unlock switch	D17	GR/2	: Front outside handle LH (Request switch)

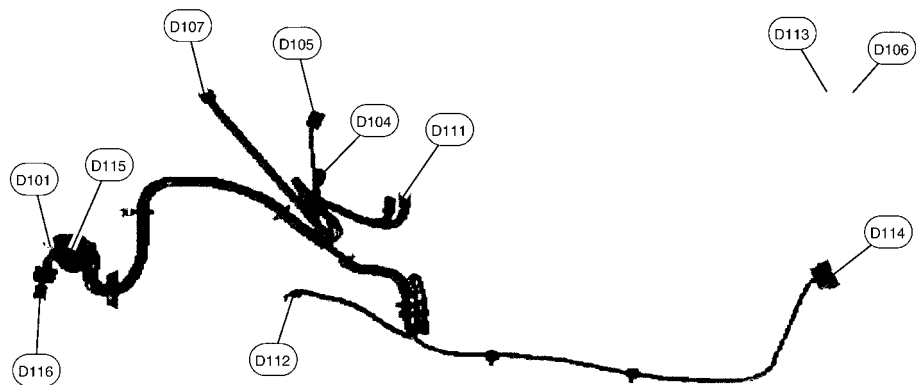
A
B
C
D
E
F
G
H
I
J
K
L
N
O
P

cardiagn.com

PG

HARNESS

< WIRING DIAGRAM > FRONT DOOR RH HARNESS

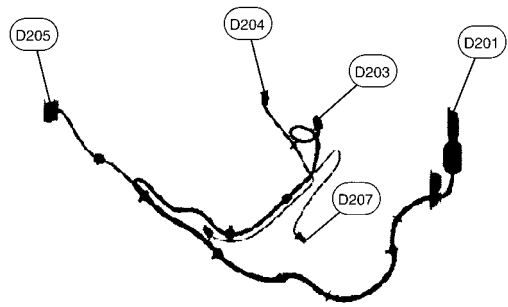


AAMIA0192ZZ

D101	Y/4	: To M75	D112	W/2	: Front door speaker RH
D104	B/2	: Front power window motor RH	D113	GR/2	: Front outside handle RH (Request switch)
D105	W/12	: Power window and door lock/unlock switch RH	D114	GR/6	: Front door lock actuator RH
D106	GR/2	: Front outside handle RH (Outside key antenna)	D115	W/12	: To M81
D107	W/12	: Door mirror RH	D116	W/12	: To M92
D111	Y/2	: Front door satellite sensor RH			

HARNESS

< WIRING DIAGRAM >
REAR DOOR LH HARNESS



AAMIA0193ZZ

D201	W/10	: To B4	D205	GR/6	: Rear door lock actuator LH
D203	W/8	: Rear power window switch LH	D207	W/2	: Rear door speaker LH
D204	B/2	: Rear power window motor LH			

PG

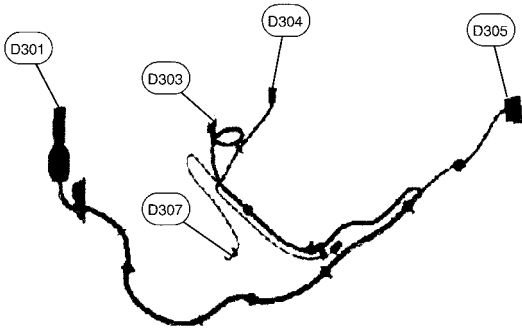
N

O

P

HARNESS

< WIRING DIAGRAM >
REAR DOOR RH HARNESS



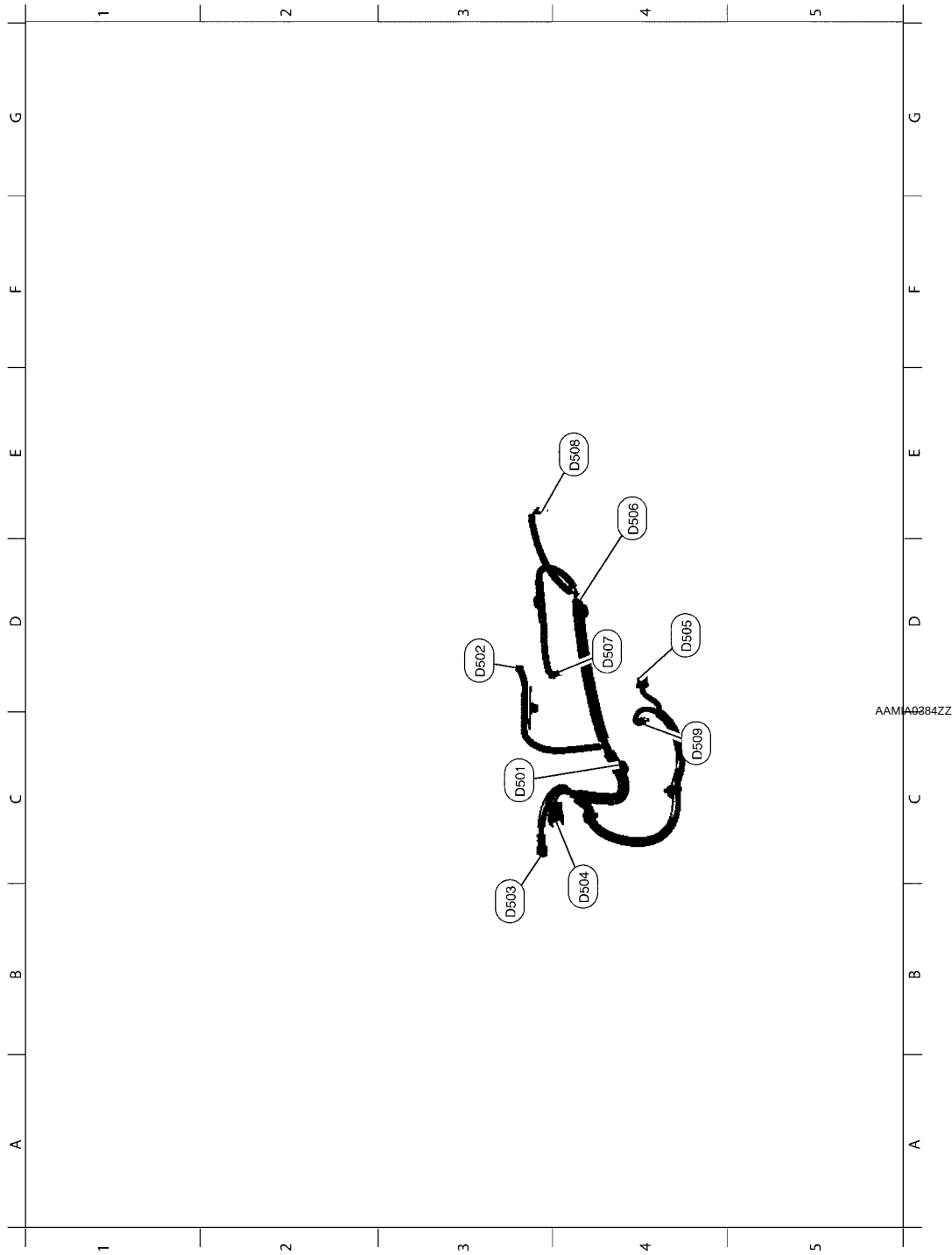
AAMIA0194ZZ

D301	W/10	: To B11	D305	GR/6	: Rear door lock actuator RH
D303	W/8	: Rear power window switch RH	D307	W/2	: Rear door speaker RH
D304	B/2	: Rear power window motor RH			

cardiagn.com

HARNESS

< WIRING DIAGRAM >
BACK DOOR HARNESS



D3	D501	B/6	: Rear view camera	C3	D506	BR/2	: Back door request switch
D3	D502	W/4	: Rear wiper motor	D3	D507	BR/2	: License plate lamp LH
E3	D503	W/8	: To B53	C4	D508	BR/2	: License plate lamp RH
E4	D504	W/4	: To B52	E5	D509	W/3	: Back door switch
D4	D505	W/2	: Back door lock actuator				

PG

cardiagn.com

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

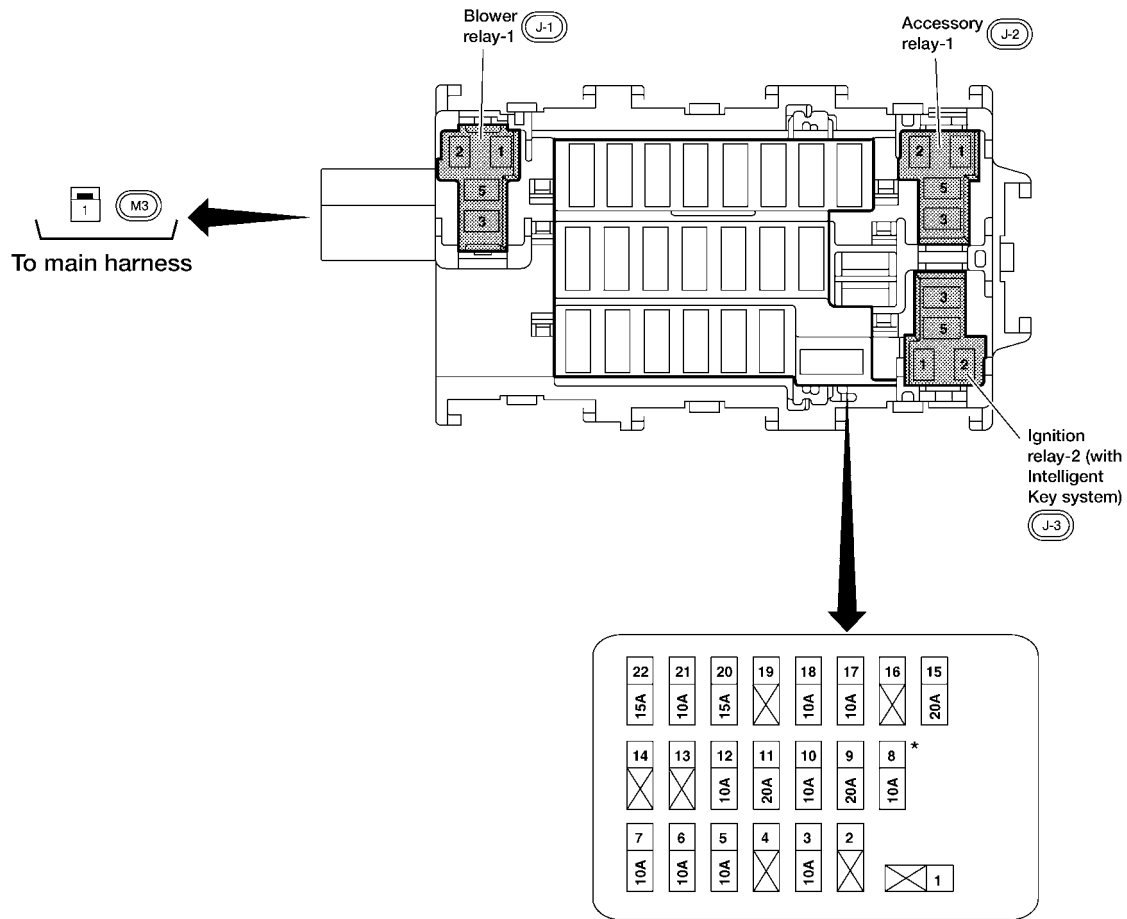
FUSE BLOCK - JUNCTION BOX (J/B)

< WIRING DIAGRAM >

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:000000012433124



* Fuse 8 = Extended storage switch

AAMIA2767GB

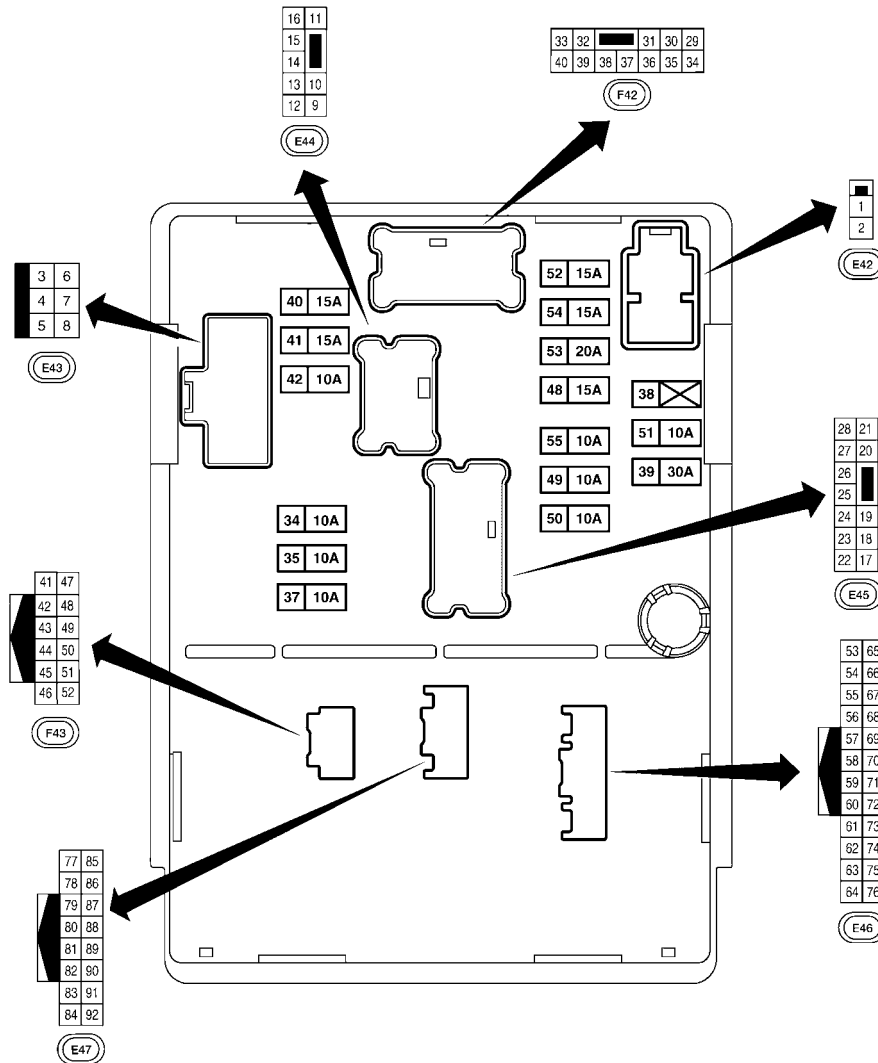
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< WIRING DIAGRAM >

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

IPDM E/R Terminal Arrangement

INFOID:000000012433126



AAMIA0161ZZ

BATTERY

< BASIC INSPECTION >

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:0000000012433127

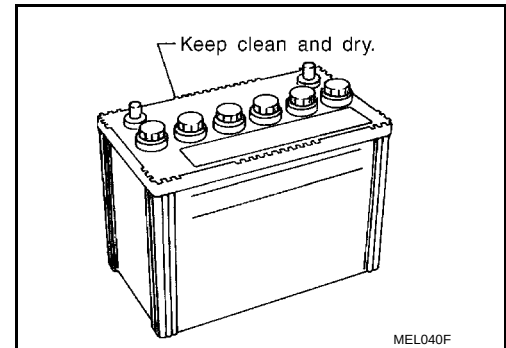
CAUTION:

- 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.

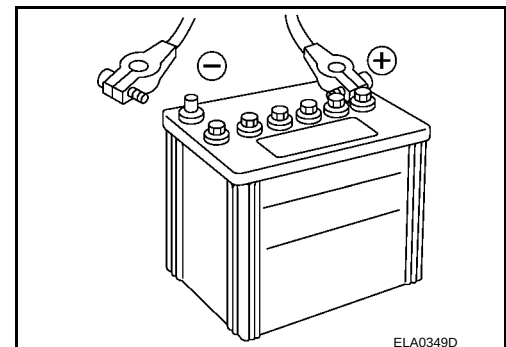
METHODS OF PREVENTING OVER-DISCHARGE

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:0000000012433128

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

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

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

NOTE:

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

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

Checking Electrolyte Level

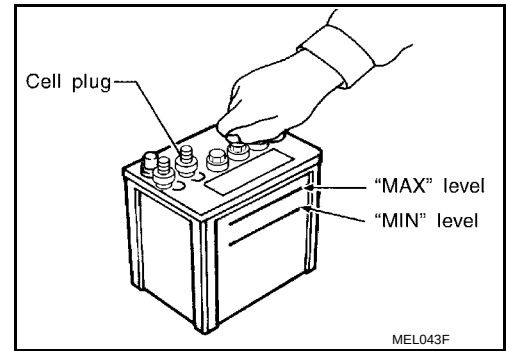
WARNING:

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

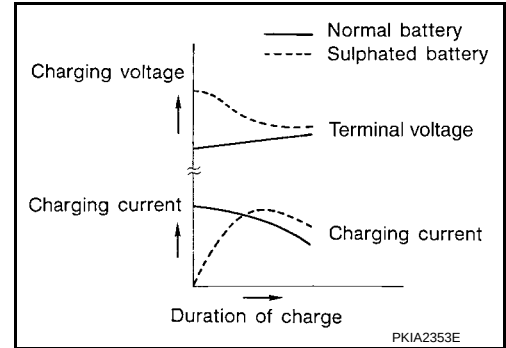
< BASIC INSPECTION >

- 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.



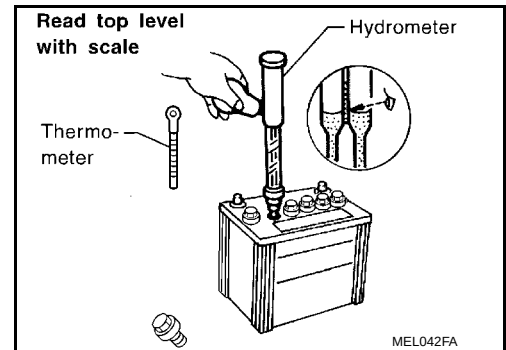
Specific Gravity Check

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:0000000012433129

Required Procedure After Battery Disconnection

System	Item	Reference
Engine Control System	Idle Air Volume Learning	EC-130
Audio, Visual & Navigation System	Audio (Radio Preset)	Refer to Owner's Manual.
	Navigation System	Refer to Owner's Manual.

FUSE INSPECTION

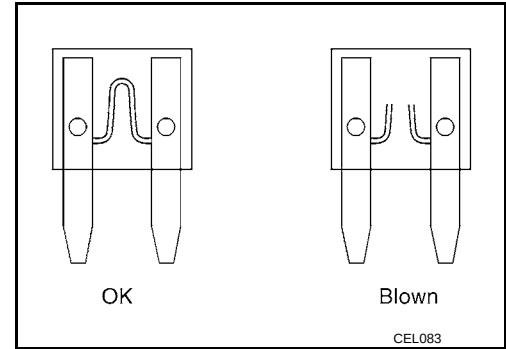
< BASIC INSPECTION >

FUSE INSPECTION

How To Check

INFOID:000000012433130

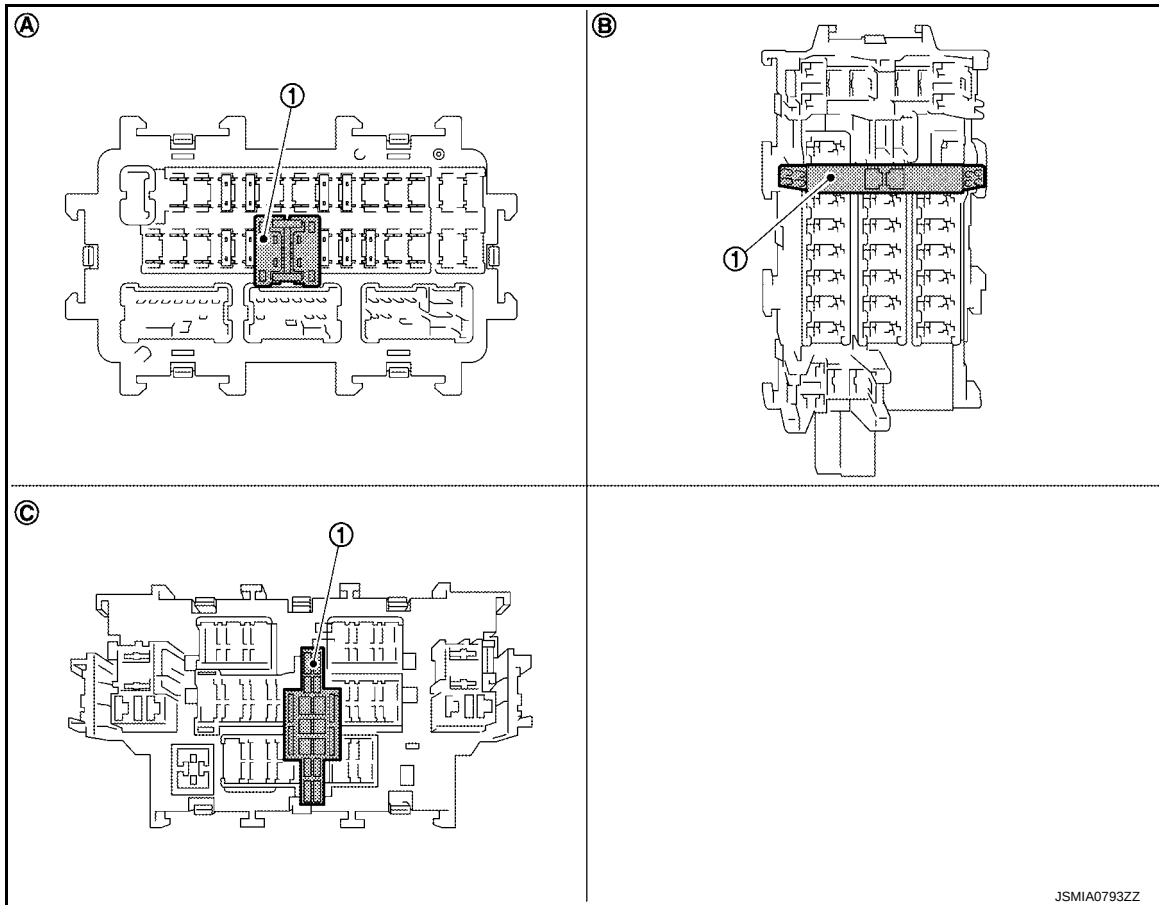
- If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is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



EXTENDED STORAGE SWITCH (IF EQUIPPED)

NOTE:

- When extended storage switch is pulled out, a message may be shown in the meter or display. To turn message/display off, push extended storage switch in.
- The following information is related to extended storage switch (shipping mode). For information related to BCM transit mode, refer to [BCS-15, "TRANSIT MODE CONTROL SYSTEM : System Description"](#). The following switch may be mounted on the fuse block (Junction Box) for transportation and storage.



① Extended storage switch

Ⓐ Type A

Ⓑ Type B

Ⓒ Type C

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

How/When to turn Extended Storage Switch ON/OFF

CAUTION:

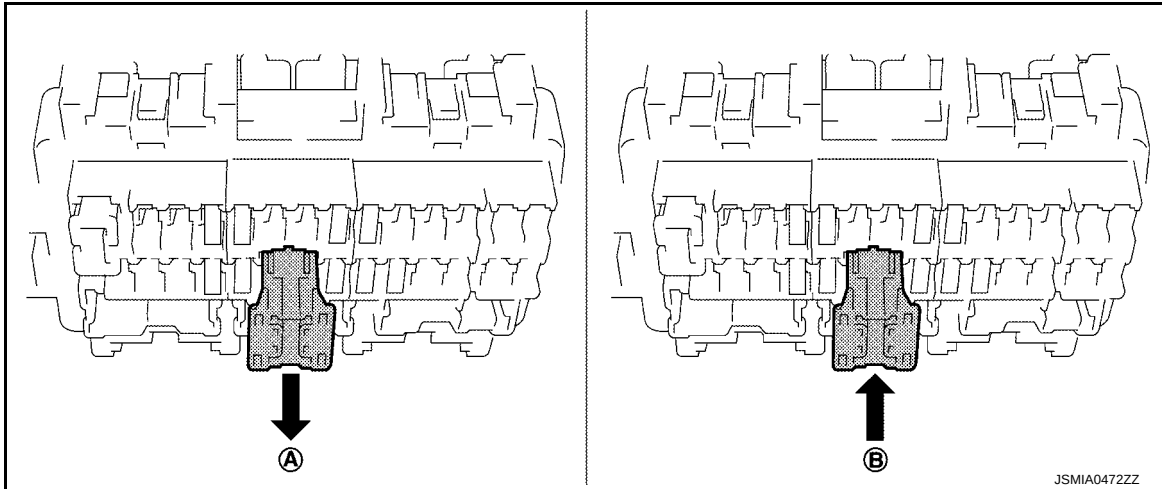
A
B
C
D
E
F
G
H
I
J
K
L
PG
N
O
P

cardiagn.com

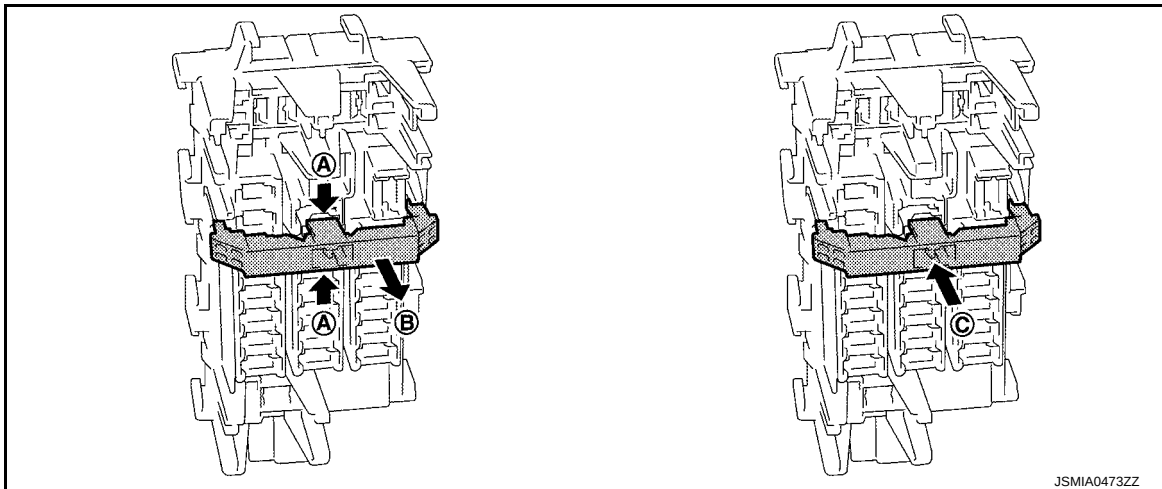
FUSE INSPECTION

< BASIC INSPECTION >

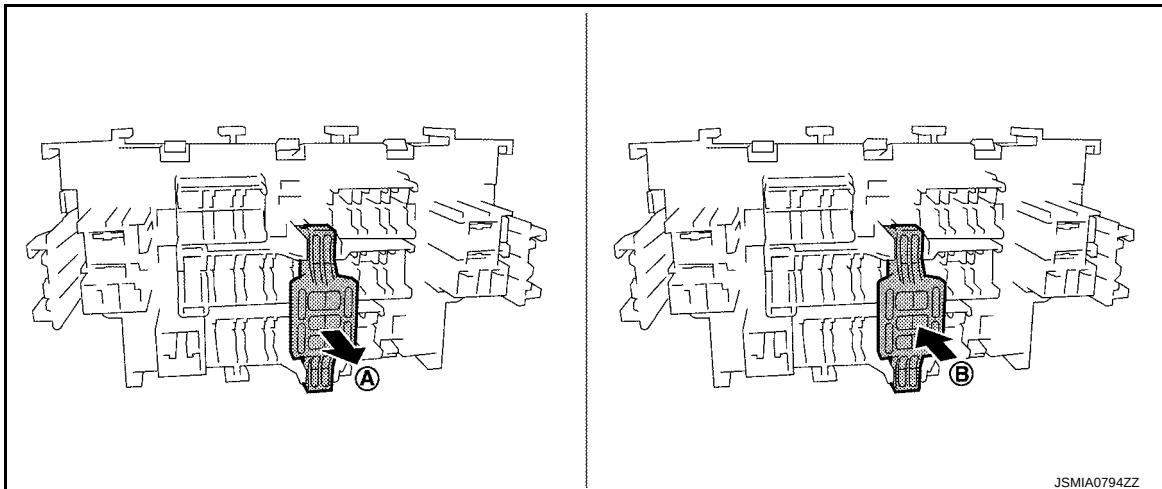
- Turn the ignition switch OFF when operating the extended storage switch.
- Under normal conditions, keep the extended storage switch in ON state. Never operate the extended storage switch except when necessary.
- Type A



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



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



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

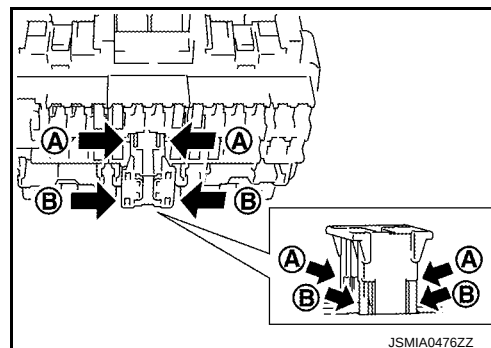
FUSE INSPECTION

< BASIC INSPECTION >

How To Remove Extended Storage Switch

Type A

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



CAUTION:

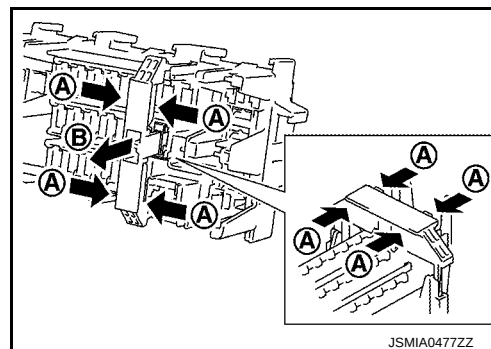
For bus bar type extended storage switch, never replace bus bar with a fuse, or fuse may continually open.

NOTE:

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

Type B

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



CAUTION:

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

NOTE:

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

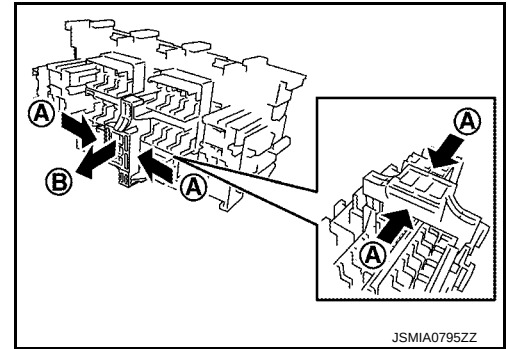
Type C

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

FUSE INSPECTION

< BASIC INSPECTION >

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



CAUTION:

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

NOTE:

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

FUSIBLE LINK INSPECTION

< BASIC INSPECTION >

FUSIBLE LINK INSPECTION

Fusible Link

INFOID:0000000012433131

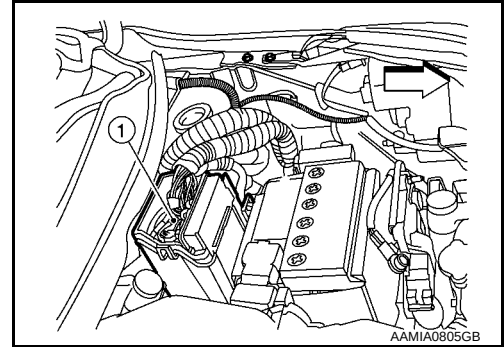
A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is questionable, use circuit tester or test lamp.

1 : Fusible link

⇐: Vehicle front

CAUTION:

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



BATTERY

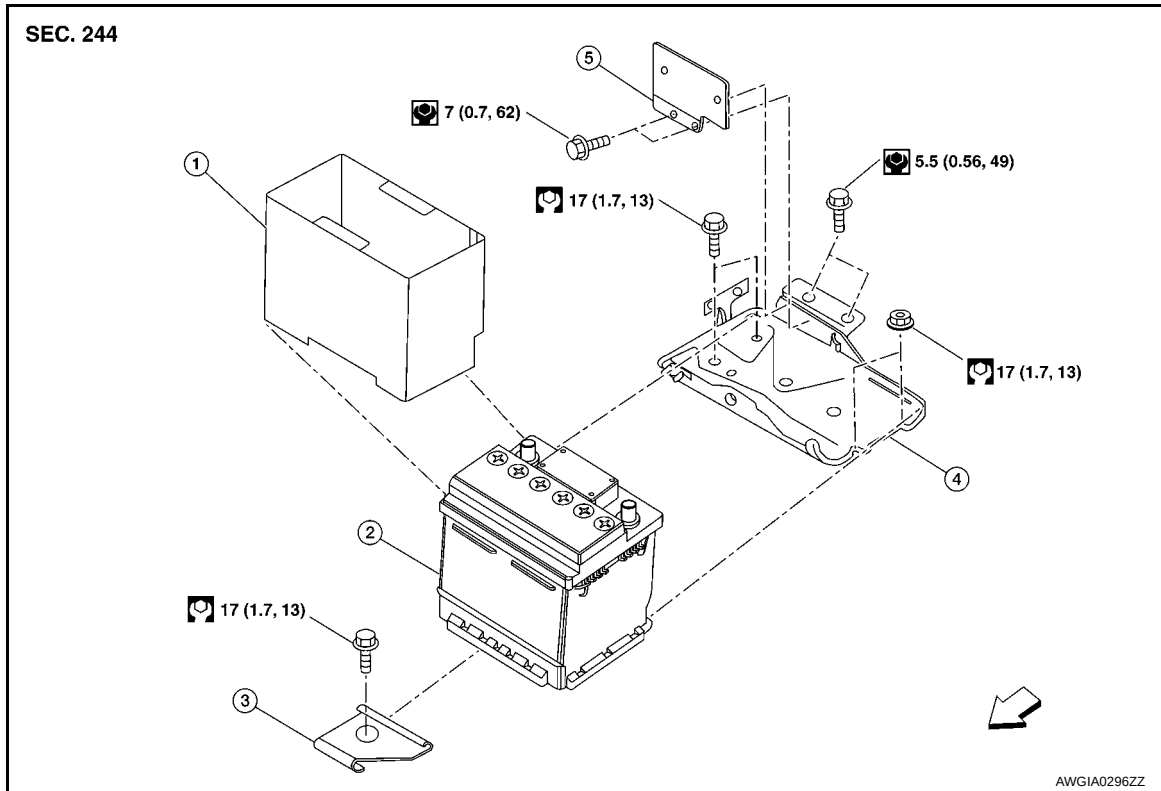
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BATTERY

Exploded View

INFOID:0000000012433132



- | | | |
|------------------|-------------------------|--------------------------|
| 1. Battery cover | 2. Battery | 3. Battery wedge bracket |
| 4. Battery tray | 5. Battery tray bracket | ← Front |

Removal and Installation (Battery)

INFOID:0000000012433133

CAUTION:

To prevent damage to the parts, disconnect the battery cable from the negative terminal first.

REMOVAL

1. Remove the air duct inlet. Refer to [EM-26, "Exploded View"](#).
2. Disconnect the battery cable from the negative terminal and set aside.
3. Disconnect the battery cable from the positive terminal and set aside.
4. Remove the battery wedge bracket.
5. Remove the battery cover and the 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:

- 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-64, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

BATTERY

< REMOVAL AND INSTALLATION >

Removal and Installation (Battery Tray)

INFOID:000000012433134

CAUTION:

To prevent damage to the parts, disconnect the battery cable from the negative terminal first.

REMOVAL

1. Remove the battery. Refer to [PG-70, "Removal and Installation \(Battery\)"](#).
2. Remove the battery tray bracket. Refer to [PG-70, "Exploded View"](#).
3. Remove the IPDM E/R. Refer to [PCS-30, "Removal and Installation"](#).
4. Disconnect the harness from the TCM and remove the TCM bracket. Refer to [TM-239, "Removal and Installation"](#) (FOR CVT MODEL).
5. Disconnect the harness from the battery tray.
6. Remove the nuts and bolts and remove the battery tray. Refer to [PG-70, "Exploded View"](#).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace electrical components as necessary, if any have 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-64, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

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

PG

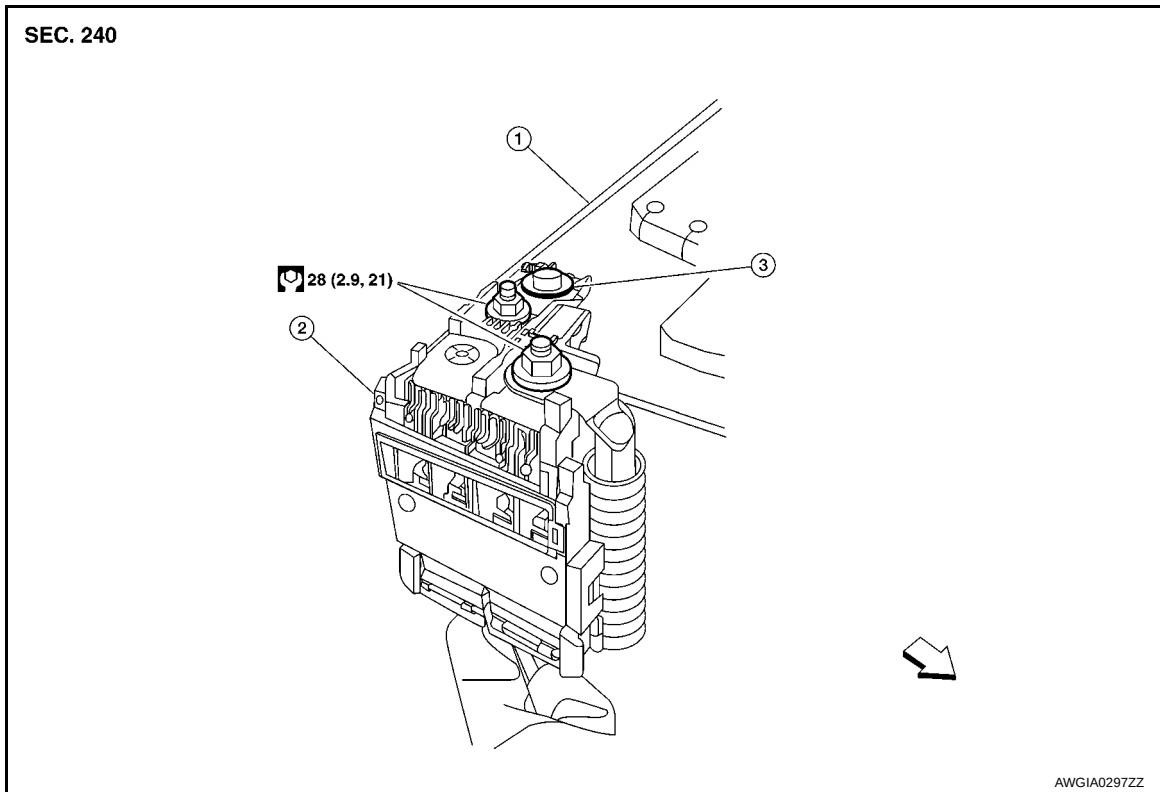
BATTERY TERMINAL WITH FUSIBLE LINK

< REMOVAL AND INSTALLATION >

BATTERY TERMINAL WITH FUSIBLE LINK

Exploded View

INFOID:000000012433135



1. Battery

2. Fusible link box (battery)

3. Terminal connector

⇐ Front

Removal and Installation

INFOID:000000012433136

CAUTION:

To prevent damage to the parts, disconnect the battery cable from the negative terminal first.

REMOVAL

1. Disconnect the battery cable from the negative terminal and set aside. Refer to [PG-70, "Exploded View"](#).
2. Disconnect the battery cable with the fusible link box (battery) from positive terminal.
3. Open cover of the fusible link box (battery).
4. Remove harness nut from the fusible link box (battery) and separate the fusible link box (battery) from terminal connector.
5. Disconnect harness connectors and remove the fusible link box (battery).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

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

To install the battery, carefully read the following instructions:

- To prevent damage to the parts, connect the battery cable to the positive terminal first.
- After connecting battery cables, to securely supply battery voltage, ensure that they are tightly clamped to battery terminals for good contact.
- To securely supply battery voltage, check battery terminal for poor connection caused by corrosion.

Reset electronic systems as necessary. Refer to [PG-64, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

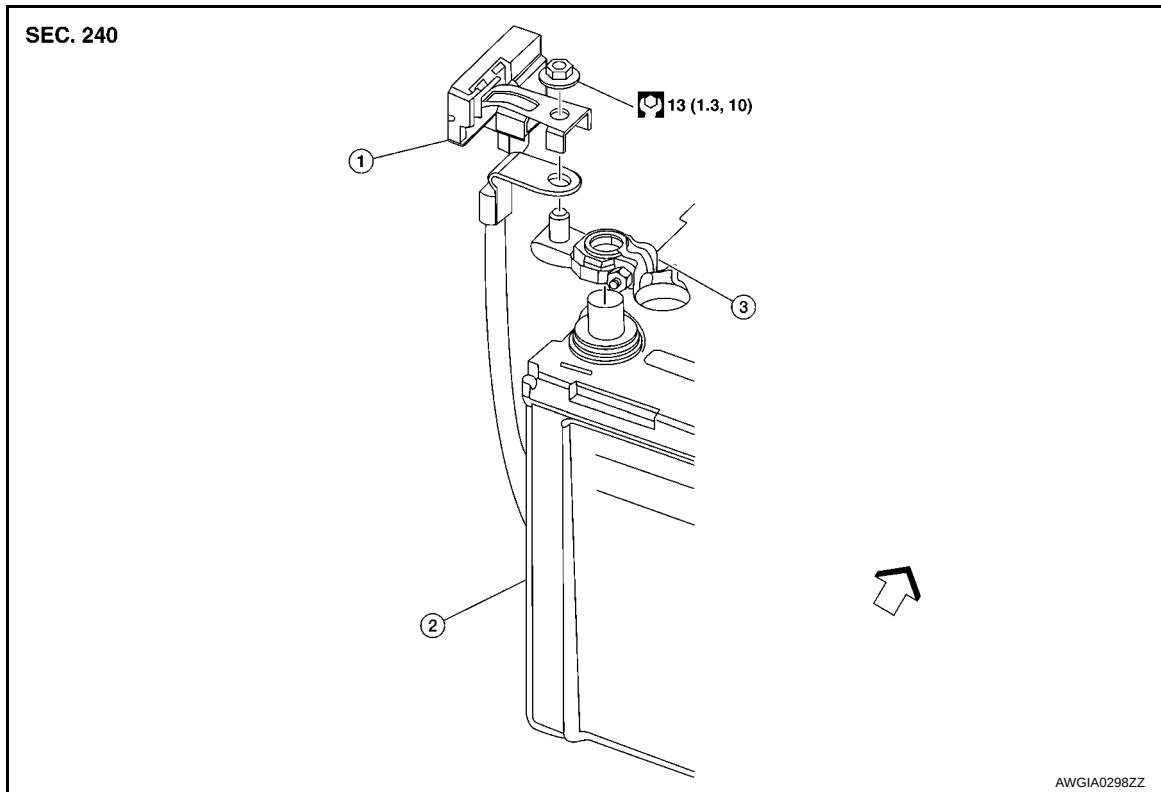
BATTERY CURRENT SENSOR

< REMOVAL AND INSTALLATION >

BATTERY CURRENT SENSOR

Exploded View

INFOID:0000000012433137



1. Current sensor

2. Battery

3. Terminal connector

⇐ Front

Removal and Installation

INFOID:0000000012433138

CAUTION:

To prevent damage to the parts, disconnect the battery cable from the negative terminal first.

REMOVAL

1. Disconnect the battery cable from the negative terminal. Refer to [PG-70. "Exploded View"](#).
2. Remove current sensor nut and separate the current sensor from terminal connector.
3. Disconnect harness connector and remove the current sensor.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the 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-64. "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:0000000012433139

Type		T4
5 hour rate minimum	[V – Ah]	12 – 36
Cold cranking current A (For reference value)	A	470

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