SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTION

PRECAUTIONS

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

INFOID:0000000009131079

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.**
- **Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

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

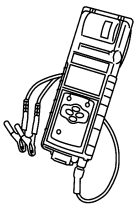
PREPARATION

PREPARATION

Special Service Tools

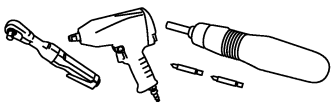
INFOID:0000000009131080

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
— (—) 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:0000000009754969

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

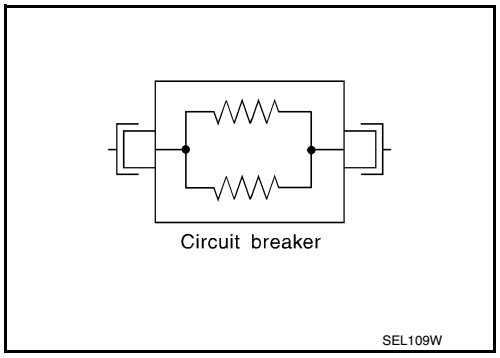
SYSTEM DESCRIPTION

COMPONENT PARTS

Circuit Breaker

INFOID:0000000009131081

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:0000000009131082

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

Harness Connector

INFOID:0000000009131083

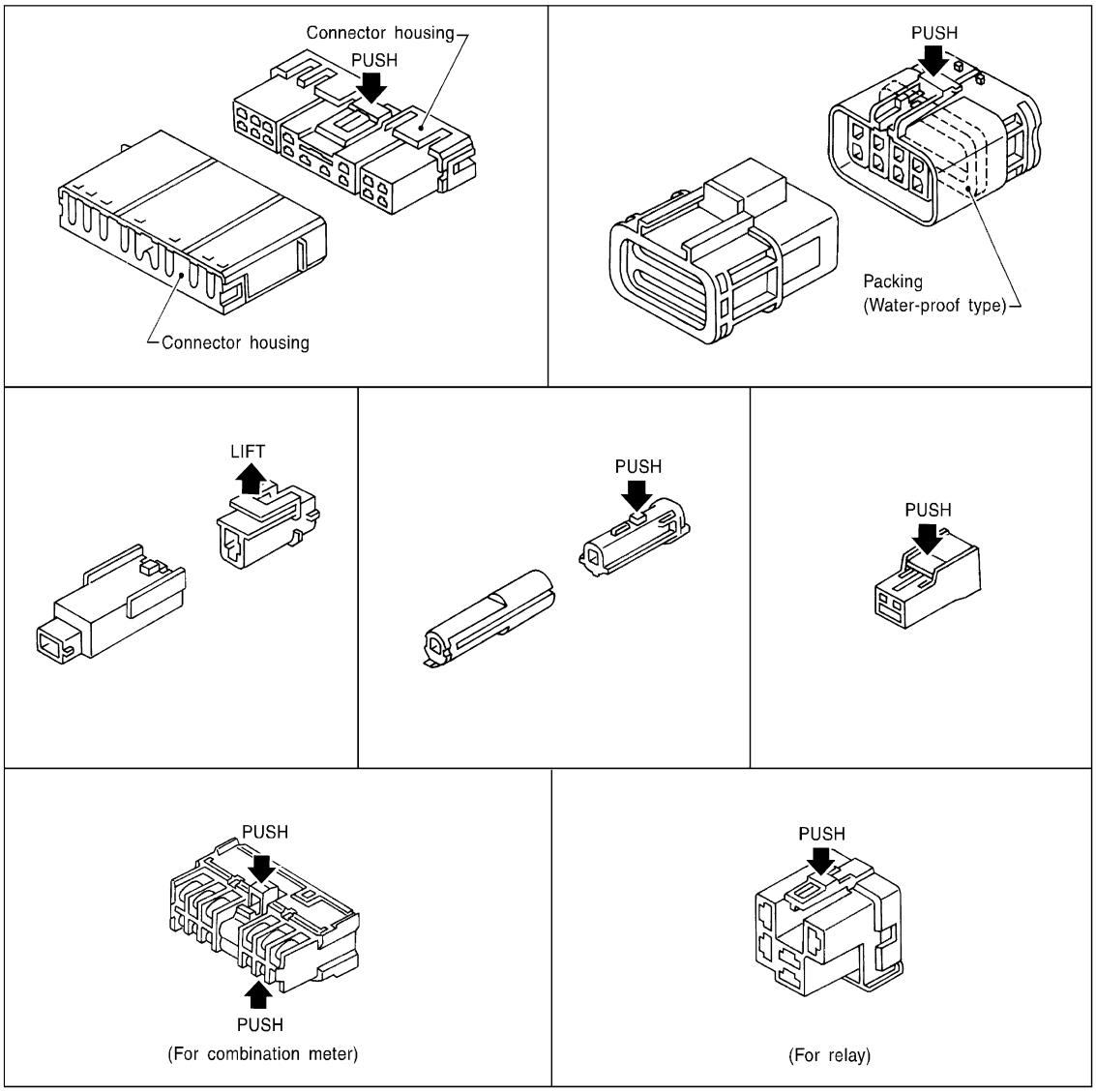
HARNESS CONNECTOR (TAB-LOCKING TYPE)

- 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.

[Example]



SEL769DA

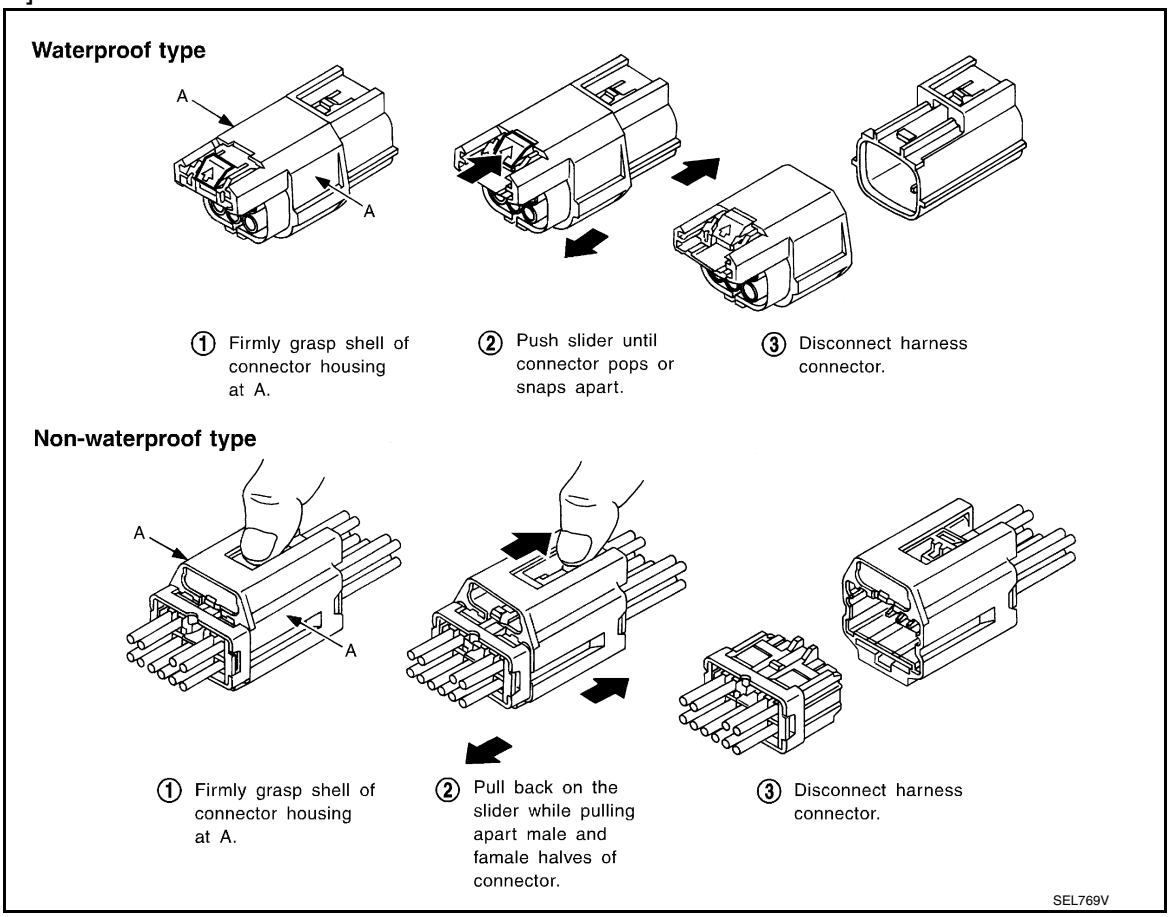
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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.**

[Example]

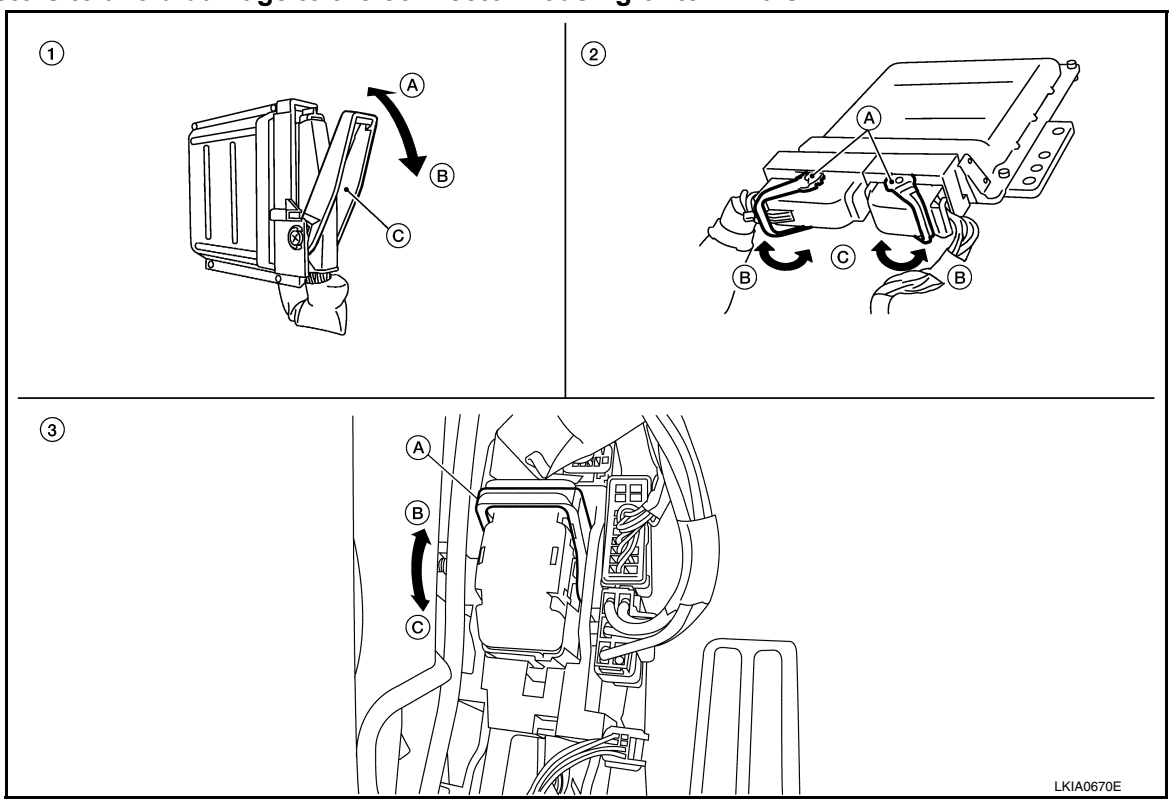


HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

CAUTION:

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



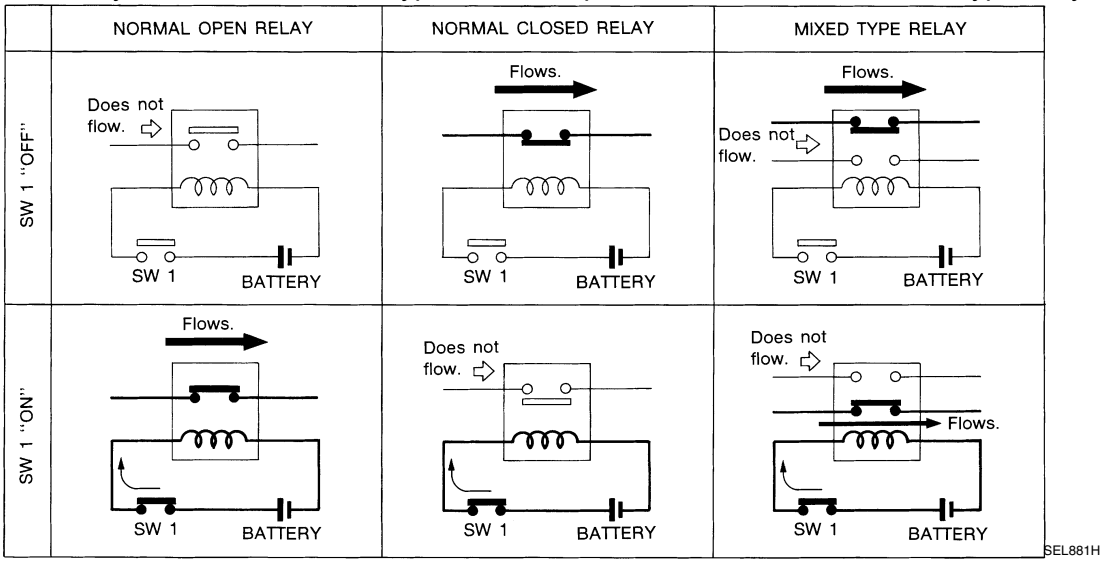
1. Control unit with single lever
   A. Fasten
   B. Loosen
   C. Lever
2. Control unit with dual levers
   A. Levers
   B. Fasten
   C. Loosen
3. SMJ connector
   A. Lever
   B. Fasten
   C. Loosen

Standardized Relay

INFOID:0000000009131084

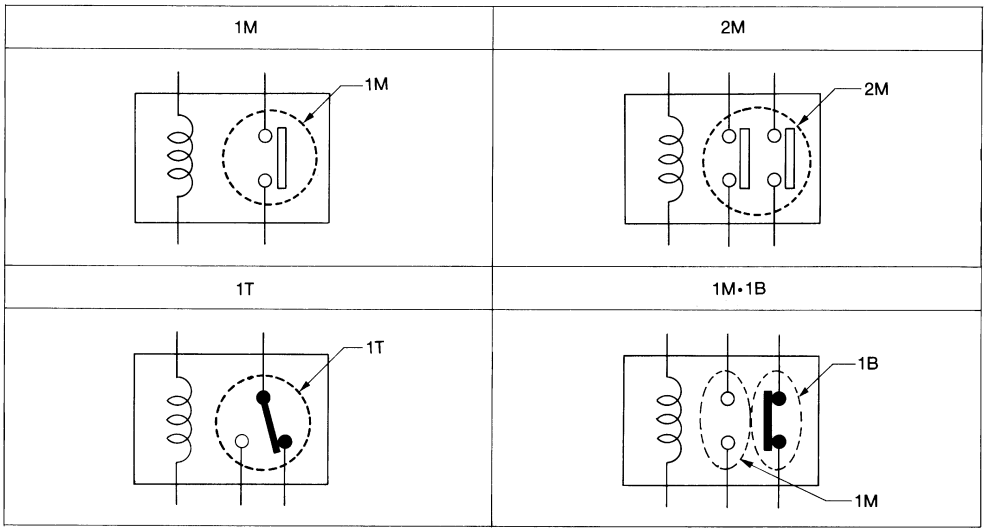
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



TYPE OF STANDARDIZED RELAYS

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



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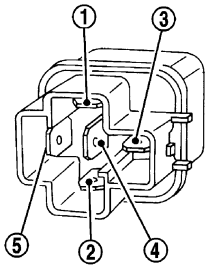
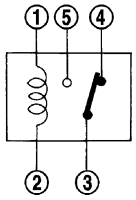
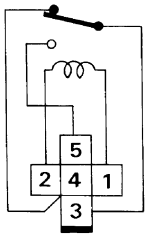
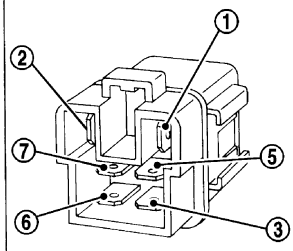
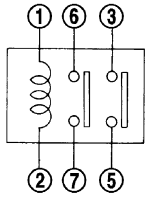
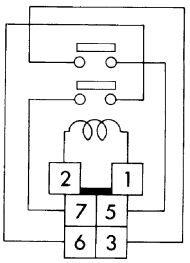
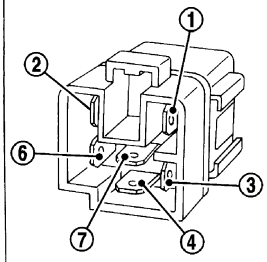
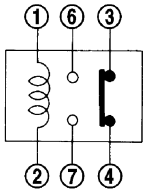
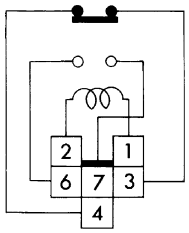
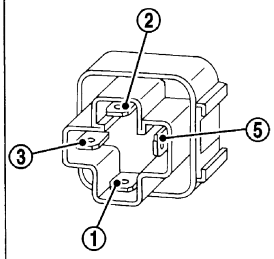
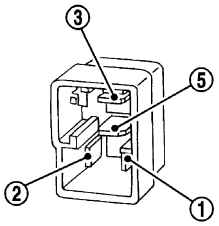
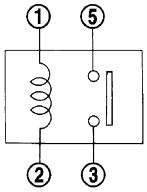
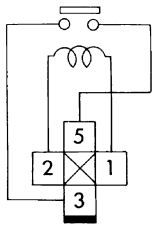
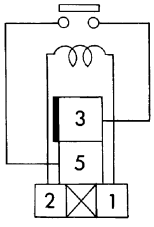
Type	Outer view	Circuit	Connector symbol and connection	Case color
1T				BLACK
2M				BROWN
1M•1B				GRAY
1M	 		 	BLUE

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

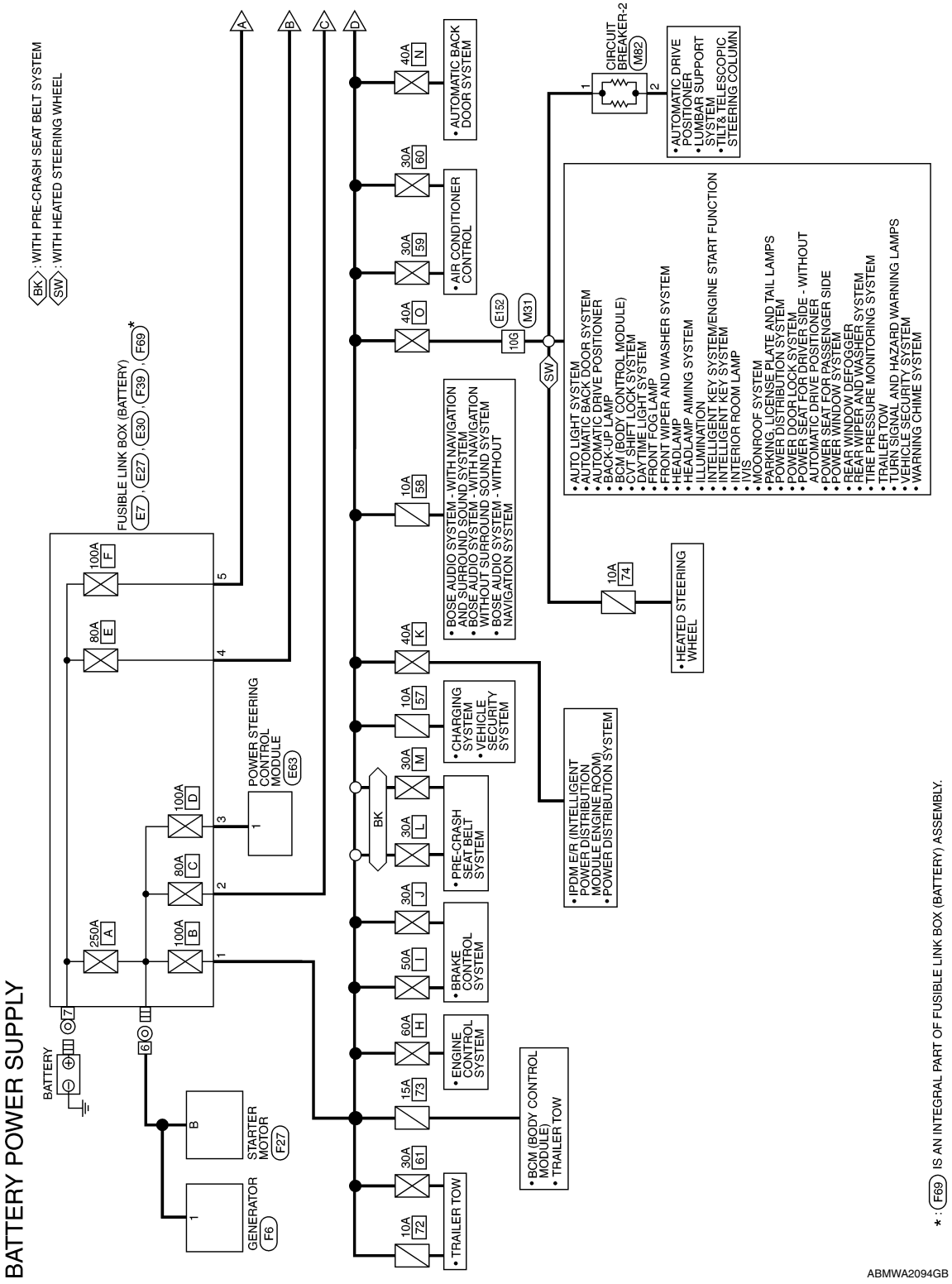
SEL188W

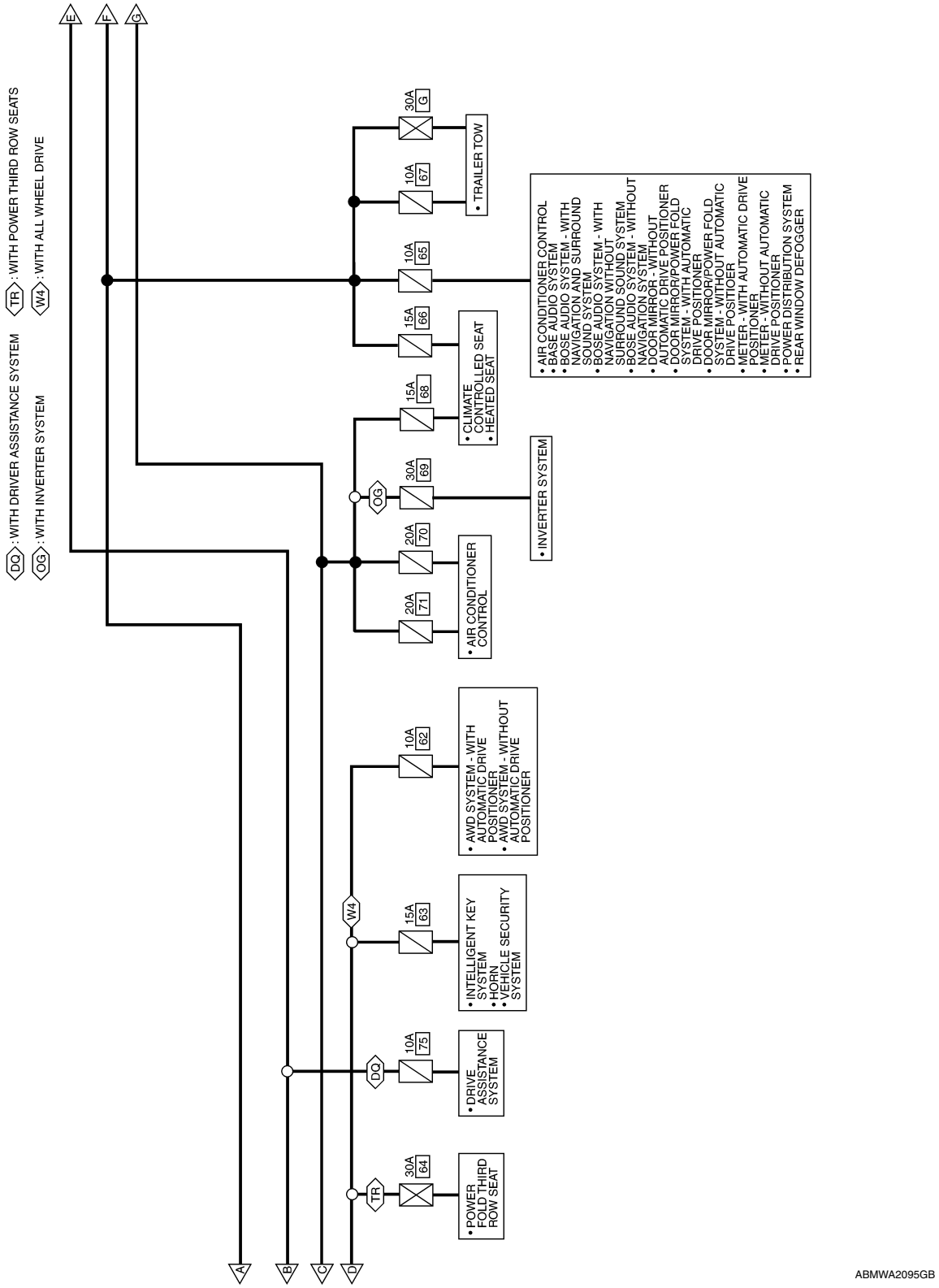
WIRING DIAGRAM

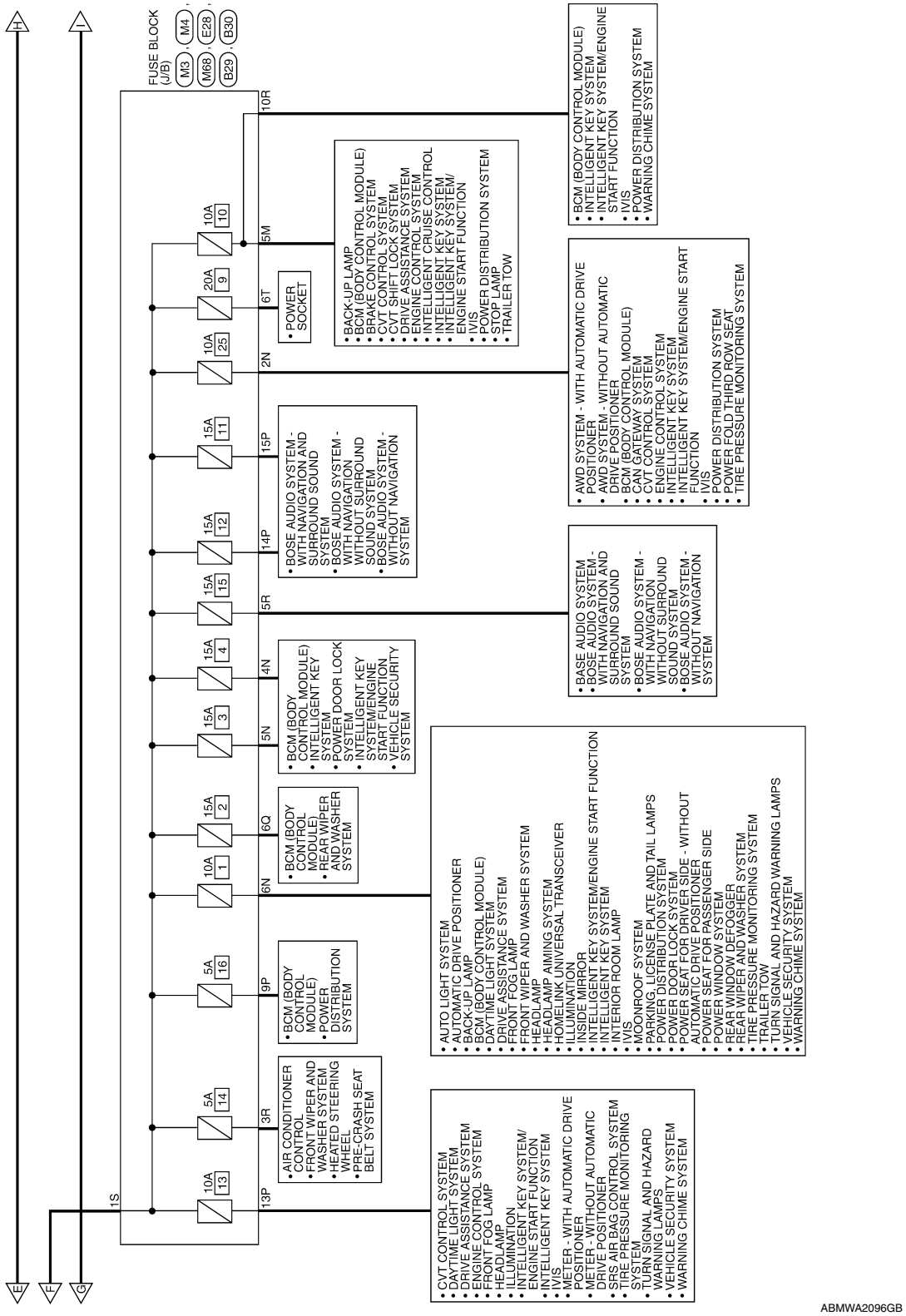
POWER SUPPLY ROUTING CIRCUIT

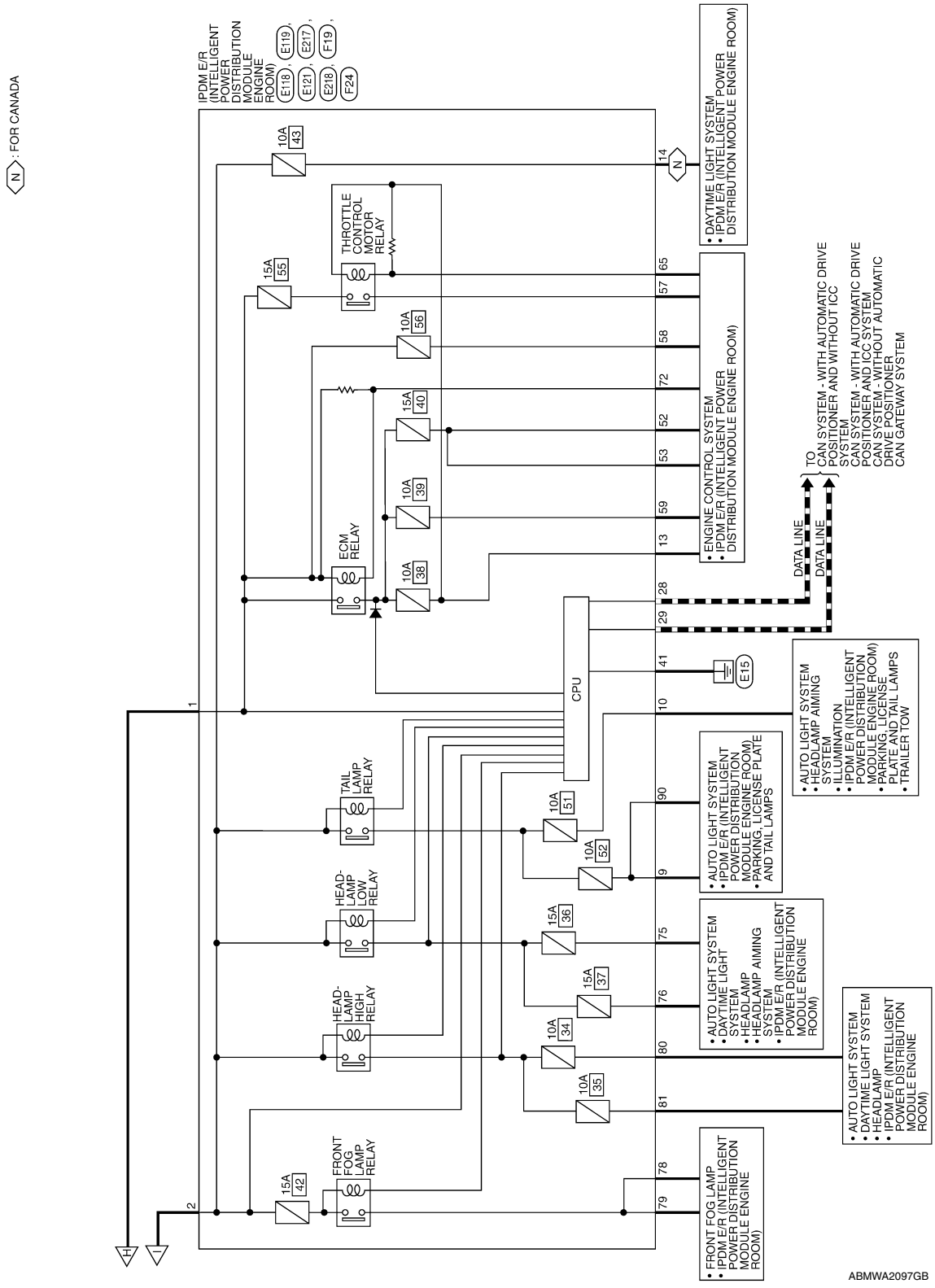
Wiring Diagram - BATTERY POWER SUPPLY -

INFOID:0000000009131085




E
F
G
DQ : WITH DRIVER ASSISTANCE SYSTEM
OG : WITH INVERTER SYSTEM
TR : WITH POWER THIRD ROW SEATS
W4 : WITH ALL WHEEL DRIVE
30A 64
10A 75
20A 71
20A 70
30A 69
15A 68
15A 66
10A 65
10A 67
30A G
15A 63
10A 62
• POWER FOLD THIRD ROW SEAT
• DRIVE ASSISTANCE SYSTEM
• AIR CONDITIONER CONTROL
• INVERTER SYSTEM
• CLIMATE CONTROLLED SEAT
• HEATED SEAT
• AIR CONDITIONER CONTROL
• BASE AUDIO SYSTEM
• BOSE AUDIO SYSTEM - WITH NAVIGATION AND SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITH NAVIGATION WITHOUT SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITHOUT NAVIGATION
• DOOR MIRROR - WITHOUT AUTOMATIC DRIVE POSITIONER
• DOOR MIRROR/POWER FOLD SYSTEM - WITH AUTOMATIC DRIVE POSITIONER
• DOOR MIRROR/POWER FOLD SYSTEM - WITHOUT AUTOMATIC DRIVE POSITIOER
• METER - WITH AUTOMATIC DRIVE POSITIONER
• METER - WITHOUT AUTOMATIC DRIVE POSITIONER
• POWER DISTRIBUTION SYSTEM
• REAR WINDOW DEFOGGER
• TRAILER TOW
• INTELLIGENT KEY SYSTEM
• HORN
• VEHICLE SECURITY SYSTEM
• AWD SYSTEM - WITH AUTOMATIC DRIVE POSITIONER
• AWD SYSTEM - WITHOUT AUTOMATIC DRIVE POSITIONER
A
B
C
D
ABMWA2095GB


FUSE BLOCK (J/B)
M3, M4, M68, E28, B29, B30
10A 13
5A 14
5A 16
10A 1
15A 2
15A 3
15A 4
15A 15
15A 12
15A 11
10A 25
20A 9
10A 10
1S
3R
9P
6N
6Q
5N
4N
5R
14P
15P
2N
6T
5M
10R
• AIR CONDITIONER CONTROL
• FRONT WIPER AND WASHER SYSTEM
• HEATED STEERING WHEEL
• PRE-CRASH SEAT BELT SYSTEM
• BCM (BODY CONTROL MODULE)
• POWER DISTRIBUTION SYSTEM
• BCM (BODY CONTROL MODULE)
• REAR WIPER AND WASHER SYSTEM
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• POWER DOOR LOCK SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• VEHICLE SECURITY SYSTEM
• BOSE AUDIO SYSTEM - WITH NAVIGATION AND SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITHOUT NAVIGATION SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITHOUT NAVIGATION SYSTEM
• BASE AUDIO SYSTEM
• BOSE AUDIO SYSTEM - WITH NAVIGATION AND SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITH NAVIGATION WITHOUT SURROUND SOUND SYSTEM
• BOSE AUDIO SYSTEM - WITHOUT NAVIGATION SYSTEM
• AWD SYSTEM - WITH AUTOMATIC DRIVE POSITIONER
• AWD SYSTEM - WITHOUT AUTOMATIC DRIVE POSITIONER
• BCM (BODY CONTROL MODULE)
• CAN GATEWAY SYSTEM
• CVT CONTROL SYSTEM
• ENGINE CONTROL SYSTEM
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• I/VIS
• POWER DISTRIBUTION SYSTEM
• POWER FOLD THIRD ROW SEAT
• TIRE PRESSURE MONITORING SYSTEM
• POWER SOCKET
• BACK-UP LAMP
• BCM (BODY CONTROL MODULE)
• BRAKE CONTROL SYSTEM
• CVT CONTROL SYSTEM
• CVT SHIFT LOCK SYSTEM
• DRIVE ASSISTANCE SYSTEM
• ENGINE CONTROL SYSTEM
• INTELLIGENT CRUISE CONTROL
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• I/VIS
• POWER DISTRIBUTION SYSTEM
• STOP LAMP
• TRAILER TOW
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• I/VIS
• POWER DISTRIBUTION SYSTEM
• WARNING CHIME SYSTEM
• AUTO LIGHT SYSTEM
• AUTOMATIC DRIVE POSITIONER
• BACK-UP LAMP
• BCM (BODY CONTROL MODULE)
• DAYTIME LIGHT SYSTEM
• DRIVE ASSISTANCE SYSTEM
• FRONT FOG LAMP
• FRONT WIPER AND WASHER SYSTEM
• HEADLAMP
• HEADLAMP AIMING SYSTEM
• HOMELINK UNIVERSAL TRANSCEIVER
• ILLUMINATION
• INSIDE MIRROR
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• INTELLIGENT KEY SYSTEM
• INTERIOR ROOM LAMP
• I/VIS
• MOONROOF SYSTEM
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DISTRIBUTION SYSTEM
• POWER DOOR LOCK SYSTEM
• POWER SEAT FOR DRIVER SIDE - WITHOUT AUTOMATIC DRIVE POSITIONER
• POWER SEAT FOR PASSENGER SIDE
• POWER WINDOW SYSTEM
• REAR WIPER AND WASHER SYSTEM
• TIRE PRESSURE MONITORING SYSTEM
• TRAILER TOW
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME SYSTEM
• CVT CONTROL SYSTEM
• DAYTIME LIGHT SYSTEM
• DRIVE ASSISTANCE SYSTEM
• ENGINE CONTROL SYSTEM
• FRONT FOG LAMP
• HEADLAMP
• ILLUMINATION
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• I/VIS
• METER - WITH AUTOMATIC DRIVE POSITIONER
• METER - WITHOUT AUTOMATIC DRIVE POSITIONER
• SRS AIR BAG CONTROL SYSTEM
• TIRE PRESSURE MONITORING SYSTEM
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME SYSTEM
E
F
G
H
L
ABMWA2096GB


: FOR CANADA
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E118, E119, E121, E217, E218, F19, F24
10A 43
15A 55
THROTTLE CONTROL MOTOR RELAY
10A 56
15A 40
10A 39
10A 38
ECM RELAY
CPU
TAIL LAMP RELAY
HEAD-LAMP LOW RELAY
HEAD-LAMP HIGH RELAY
FRONT FOG LAMP RELAY
15A 42
10A 51
10A 52
15A 36
15A 37
10A 34
10A 35
E15
DATA LINE
DATA LINE
TO CAN SYSTEM - WITH AUTOMATIC DRIVE POSITIONER AND WITHOUT ICC SYSTEM
CAN SYSTEM - WITH AUTOMATIC DRIVE POSITIONER AND ICC SYSTEM
CAN SYSTEM - WITHOUT AUTOMATIC DRIVE POSITIONER
CAN GATEWAY SYSTEM
• DAYTIME LIGHT SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AUTO LIGHT SYSTEM
• HEADLAMP AIMING SYSTEM
• ILLUMINATION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• TRAILER TOW
• AUTO LIGHT SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM
• HEADLAMP
• HEADLAMP AIMING SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM
• HEADLAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT FOG LAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
ABMWA2097GB

BATTERY POWER SUPPLY CONNECTORS

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

H.S.

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

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

H.S.

7P	6P	5P	4P		3P	2P	1P
16P	15P	14P	13P	12P	11P	10P	9P	8P

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

H.S.

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

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

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

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

71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
82G	83G	84G	85G	86G	87G	88G	89G	90G		

91G	92G	93G	94G	95G
96G	97G	98G	99G	100G

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

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

H.S.

7R	6R	5R	4R		3R	2R	1R
16R	15R	14R	13R	12R	11R	10R	9R	8R

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

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

H.S.

1
2

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

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

H.S.

4
3

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

ABMIA4821GB

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

H.S.

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

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

H.S.

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

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
5	W	–

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

H.S.

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

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

H.S.

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

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

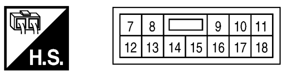
H.S.

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
28	P	CAN-L
29	L	CAN-H
41	B	GND (SIGNAL)

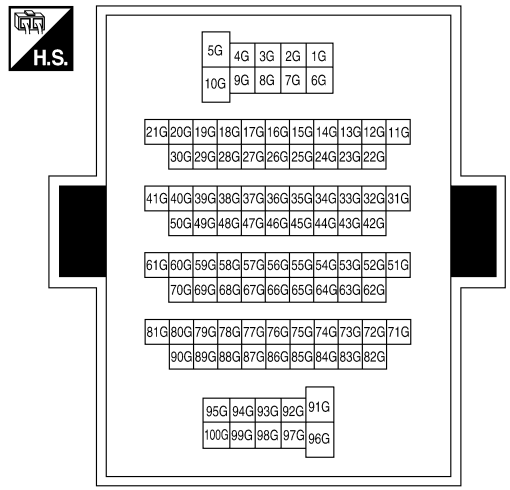
ABMIA4822GB

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



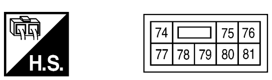
Terminal No.	Color of Wire	Signal Name
9	G	TAIL RH
10	L	TAIL LH
13	LG	ECM VB
14	V	DTRL

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



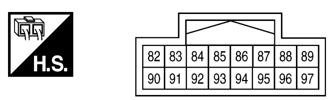
Terminal No.	Color of Wire	Signal Name
10G	P	–

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



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

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



Terminal No.	Color of Wire	Signal Name
90	LG	CLEARANCE

Connector No.	F6
Connector Name	GENERATOR
Connector Color	–

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

ABMIA4823GB

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

H.S.

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.	F24
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
65	G	MOTRLY
72	V	SSOFF

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	–

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

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

ABMIA4824GB

Wiring Diagram - ACCESSORY POWER SUPPLY -

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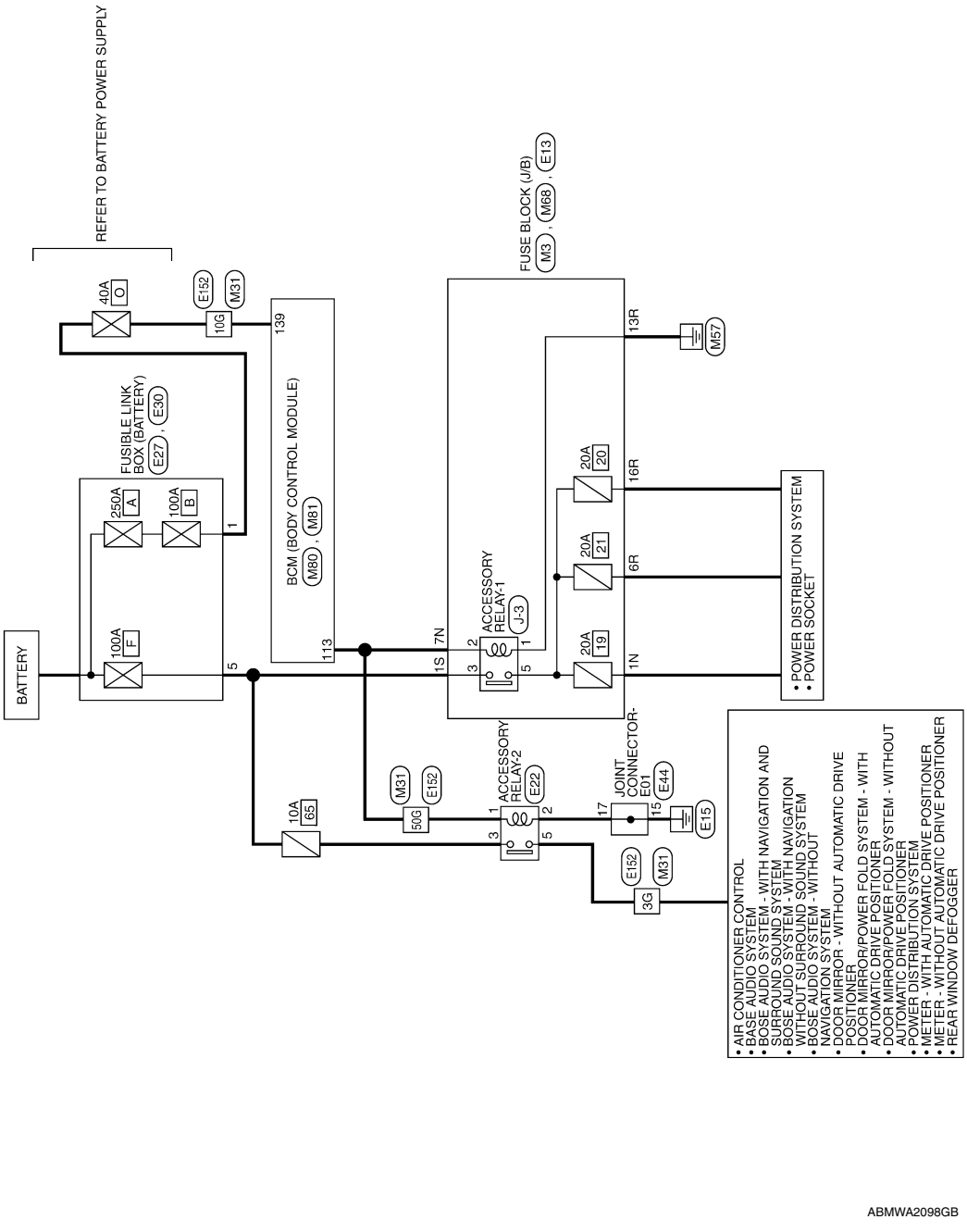
ACCESSORY POWER SUPPLY



ACCESSORY POWER SUPPLY CONNECTORS

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

H.S.

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

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

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

H.S.

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

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

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

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

71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
82G	83G	84G	85G	86G	87G	88G	89G	90G		

91G	92G	93G	94G	95G
96G	97G	98G	99G	100G

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

H.S.

7R	6R	5R	4R		3R	2R	1R
16R	15R	14R	13R	12R	11R	10R	9R	8R

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

H.S.

116	115	114	113	112	111	110	109	108	107	106	105
128	127	126	125	124	123	122	121	120	119	118	117

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

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

H.S.

137	136	135	134	133	132	131	130	129
143	142	141	140	139	138			

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

ABMIA3738GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	W	–

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

H.S.

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

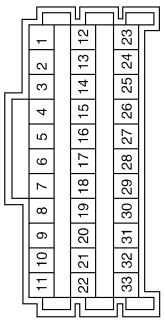
Connector No.	E13
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

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

H.S.



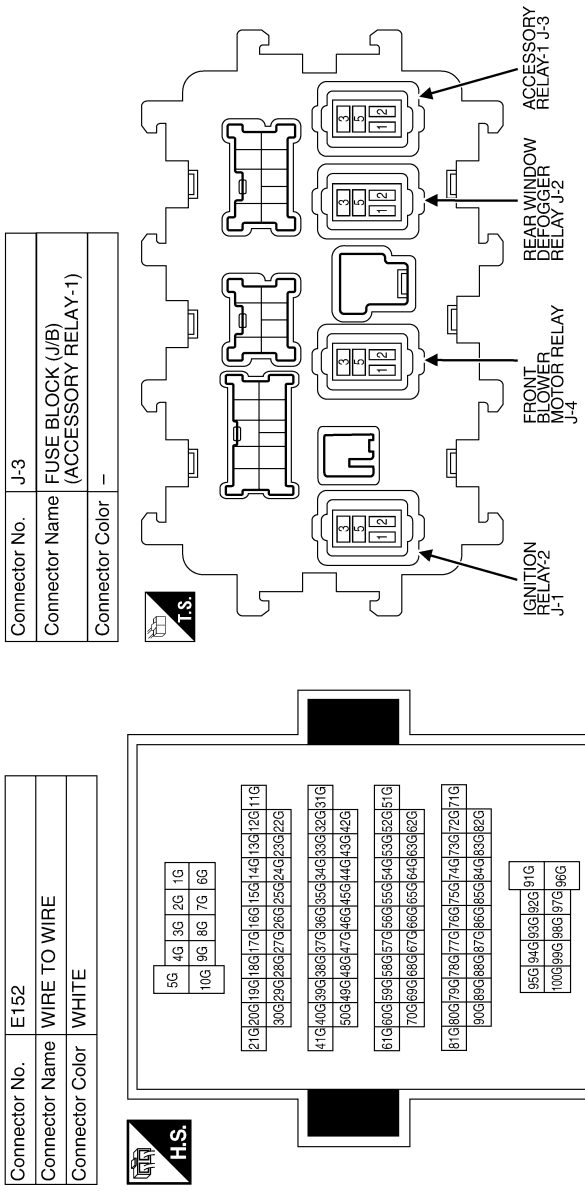
Terminal No.	Color of Wire	Signal Name
15	GR	–
17	B	–

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

H.S.

Terminal No.	Color of Wire	Signal Name
5	W	–

ABMIA4825GB



ABMIA4826GB

Wiring Diagram - IGNITION POWER SUPPLY -

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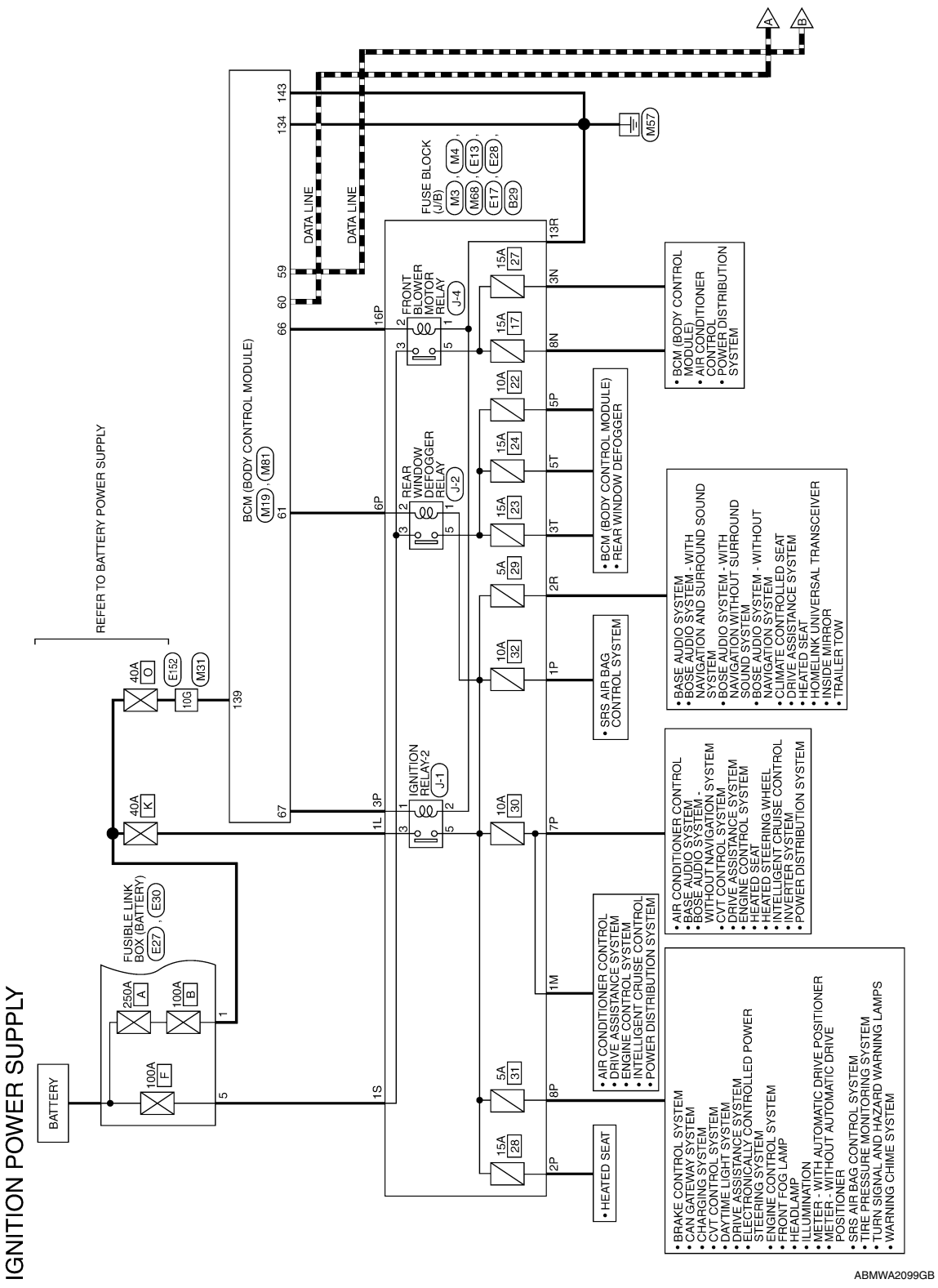
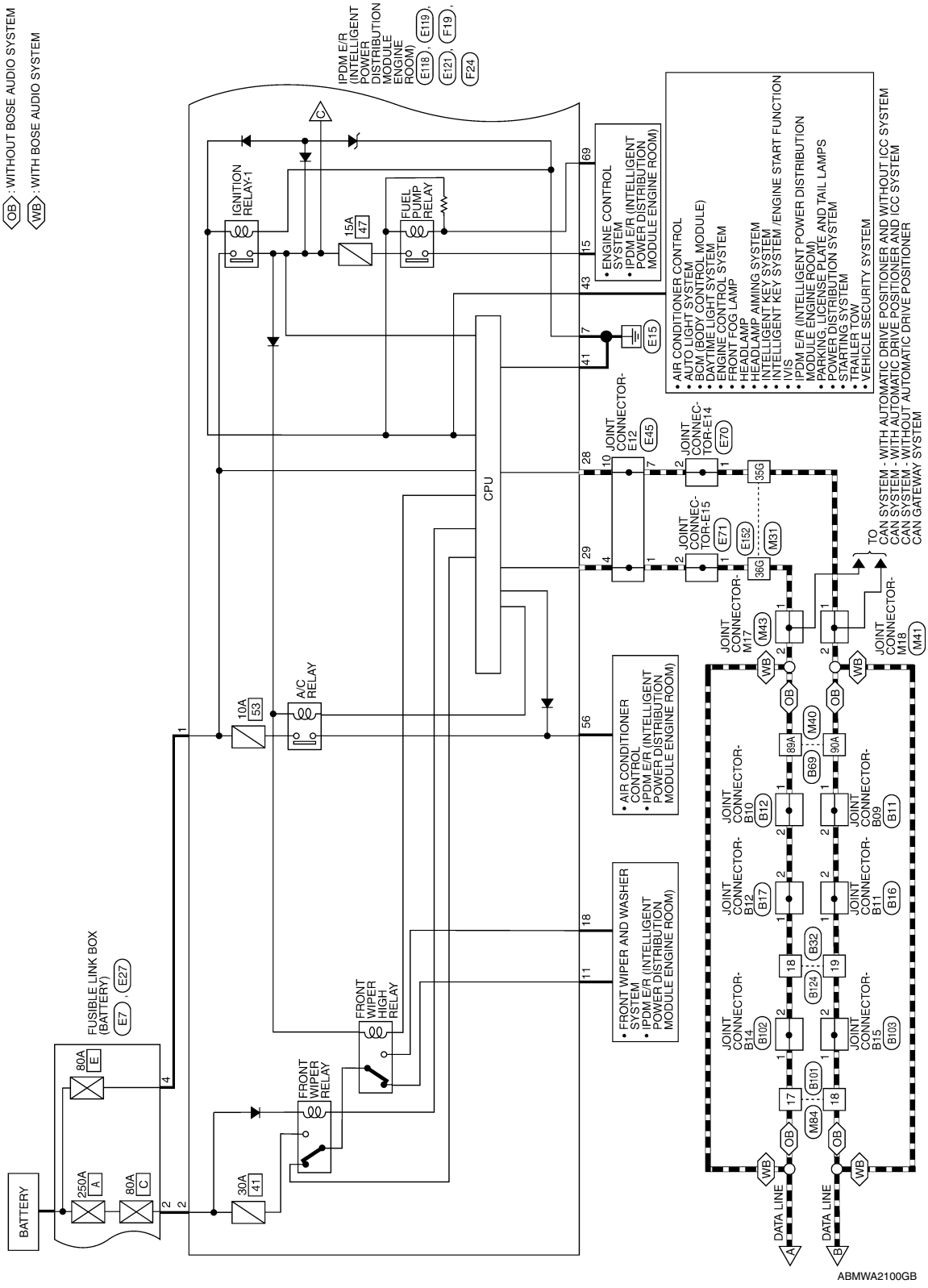
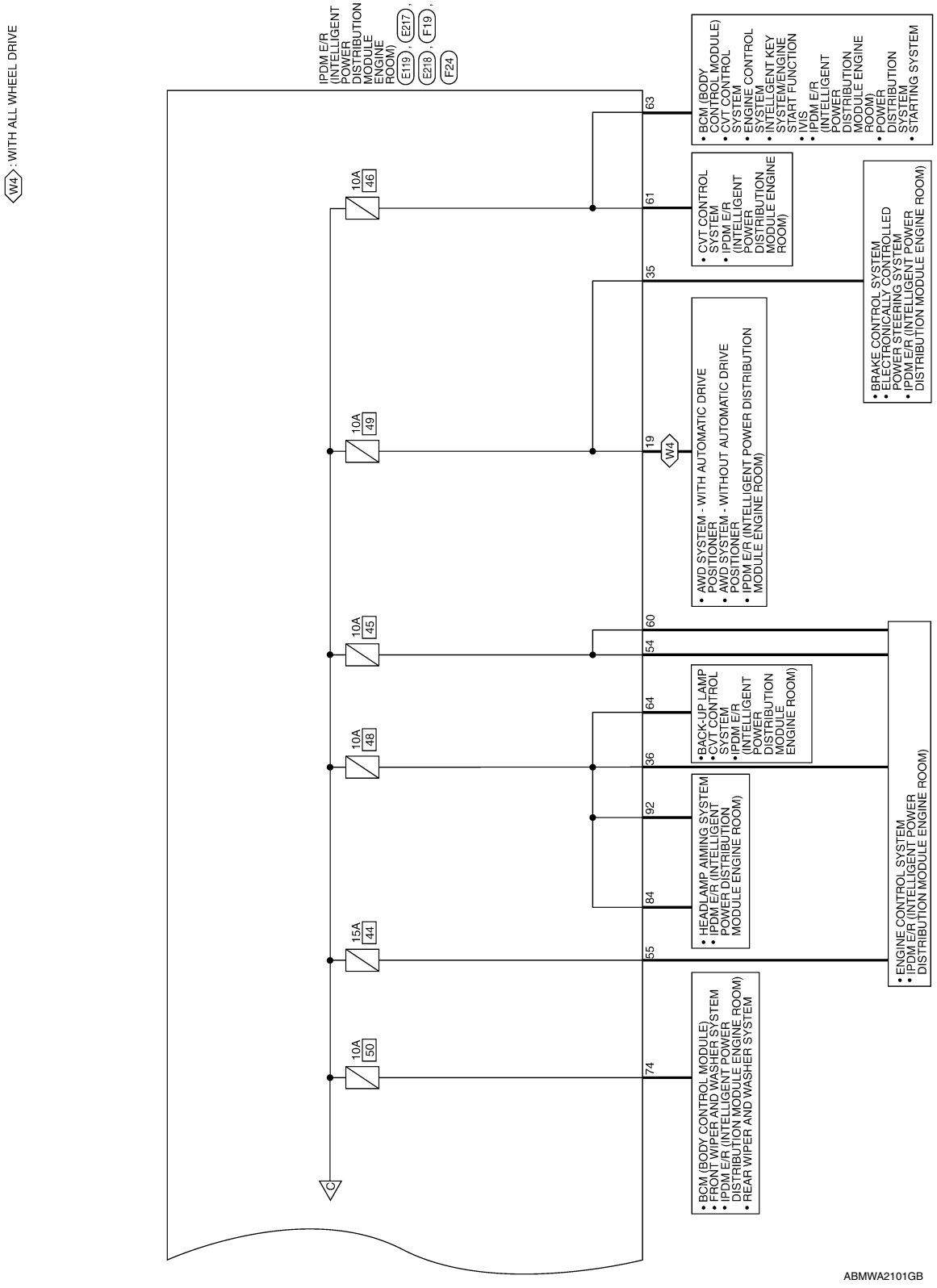



OB : WITHOUT BOSE AUDIO SYSTEM
WB : WITH BOSE AUDIO SYSTEM
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E18, E19, E121, F19, F24
IGNITION RELAY-1
15A 47
FUEL PUMP RELAY
10A 53
A/C RELAY
30A 41
FRONT WIPER RELAY
FRONT WIPER HIGH RELAY
CPU
BATTERY
250A A
80A C
80A E
FUSIBLE LINK BOX (BATTERY) E7, E27
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AIR CONDITIONER CONTROL
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AIR CONDITIONER CONTROL
• AUTO LIGHT SYSTEM
• BCM (BODY CONTROL MODULE)
• DAYTIME LIGHT SYSTEM
• ENGINE CONTROL SYSTEM
• FRONT FOG LAMP
• HEADLAMP
• HEADLAMP AIMING SYSTEM
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM /ENGINE START FUNCTION
• IVIS
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DISTRIBUTION SYSTEM
• STARTING SYSTEM
• TRAILER TOW
• VEHICLE SECURITY SYSTEM
TO CAN SYSTEM : WITH AUTOMATIC DRIVE POSITIONER AND WITHOUT ICC SYSTEM
CAN SYSTEM : WITH AUTOMATIC DRIVE POSITIONER AND ICC SYSTEM
CAN SYSTEM : WITHOUT AUTOMATIC DRIVE POSITIONER
CAN GATEWAY SYSTEM
JOINT CONNECTOR-E12 E45
JOINT CONNECTOR-E14 E70
JOINT CONNECTOR-E15 E71, E152, M31
JOINT CONNECTOR-M17 M43
JOINT CONNECTOR-M18 M41
JOINT CONNECTOR-B10 B12
JOINT CONNECTOR-B12 B17
JOINT CONNECTOR-B14 B102
JOINT CONNECTOR-B09 B11
JOINT CONNECTOR-B11 B16
JOINT CONNECTOR-B15 B103
M40, B69, M84, B101, B124, B32
E15
35G
36G
89A
90A
DATA LINE A
DATA LINE B
ABMWA2100GB


W4 : WITH ALL WHEEL DRIVE
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E119, E217, E218, F19, F24
10A 46
10A 49
10A 45
10A 48
15A 44
10A 50
63
61
35
19
W4
60
54
64
36
92
84
55
74
• BCM (BODY CONTROL MODULE)
• CVT CONTROL SYSTEM
• ENGINE CONTROL SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IVIS
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• POWER DISTRIBUTION SYSTEM
• STARTING SYSTEM
• CVT CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• BRAKE CONTROL SYSTEM
• ELECTRONICALLY CONTROLLED POWER STEERING SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AWD SYSTEM - WITH AUTOMATIC DRIVE POSITIONER
• AWD SYSTEM - WITHOUT AUTOMATIC DRIVE POSITIONER
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• BACK-UP LAMP
• CVT CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• HEADLAMP AIMING SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• BCM (BODY CONTROL MODULE)
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• REAR WIPER AND WASHER SYSTEM
C
ABMWA2101GB

IGNITION POWER SUPPLY CONNECTORS

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

H.S.

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

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

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

H.S.

7P	6P	5P	4P		3P	2P	1P
16P	15P	14P	13P	12P	11P	10P	9P	8P

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

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41
80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61

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

ABMIA3726GB

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

H.S.

4	3	2	1

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

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

H.S.

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

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

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

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

71A	72A	73A	74A	75A	76A	77A	78A	79A	80A	81A
	82A	83A	84A	85A	86A	87A	88A	89A	90A	

91A	92A	93A	94A	95A
96A	97A	98A	99A	100A

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

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

H.S.

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

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

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

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

71G	72G	73G	74G	75G	76G	77G	78G	79G	80G	81G
	82G	83G	84G	85G	86G	87G	88G	89G	90G	

91G	92G	93G	94G	95G
96G	97G	98G	99G	100G

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

ABMIA4827GB

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

H.S.

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

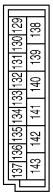
Connector No.	M68
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

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

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

H.S.



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

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
4	R	–

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

H.S.

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

ABMIA3728GB

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

H.S.

1L

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

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

H.S.

1 2

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

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

H.S.

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

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

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

H.S.

5

Terminal No.	Color of Wire	Signal Name
5	W	–

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

H.S.

12 11 10 9 8 7 6 5 4 3 2 1

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

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

H.S.

6 5 4 3 2 1

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

ABMIA3729GB

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

H.S.

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

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

H.S.

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

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

H.S.

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

H.S.

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

ABMIA4828GB

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

H.S.

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

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

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

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

81G	80G	79G	78G	77G	76G	75G	74G	73G	72G	71G
90G	89G	88G	87G	86G	85G	84G	83G	82G		

95G	94G	93G	92G	91G
100G	99G	98G	97G	96G

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

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

H.S.

74	75	76
77	78	79	80	81

Terminal No.	Color of Wire	Signal Name
74	R	WASH MTR

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

H.S.

62	63	64	65	66	67
68	69	70	71	72	73

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

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

H.S.

52	53	54	55
56	57	58	59	60	61

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

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

H.S.

82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97

Terminal No.	Color of Wire	Signal Name
84	SB	H/L LEVELIZER RH
92	L	H/L LEVELIZER LH

ABMIA4502GB

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

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

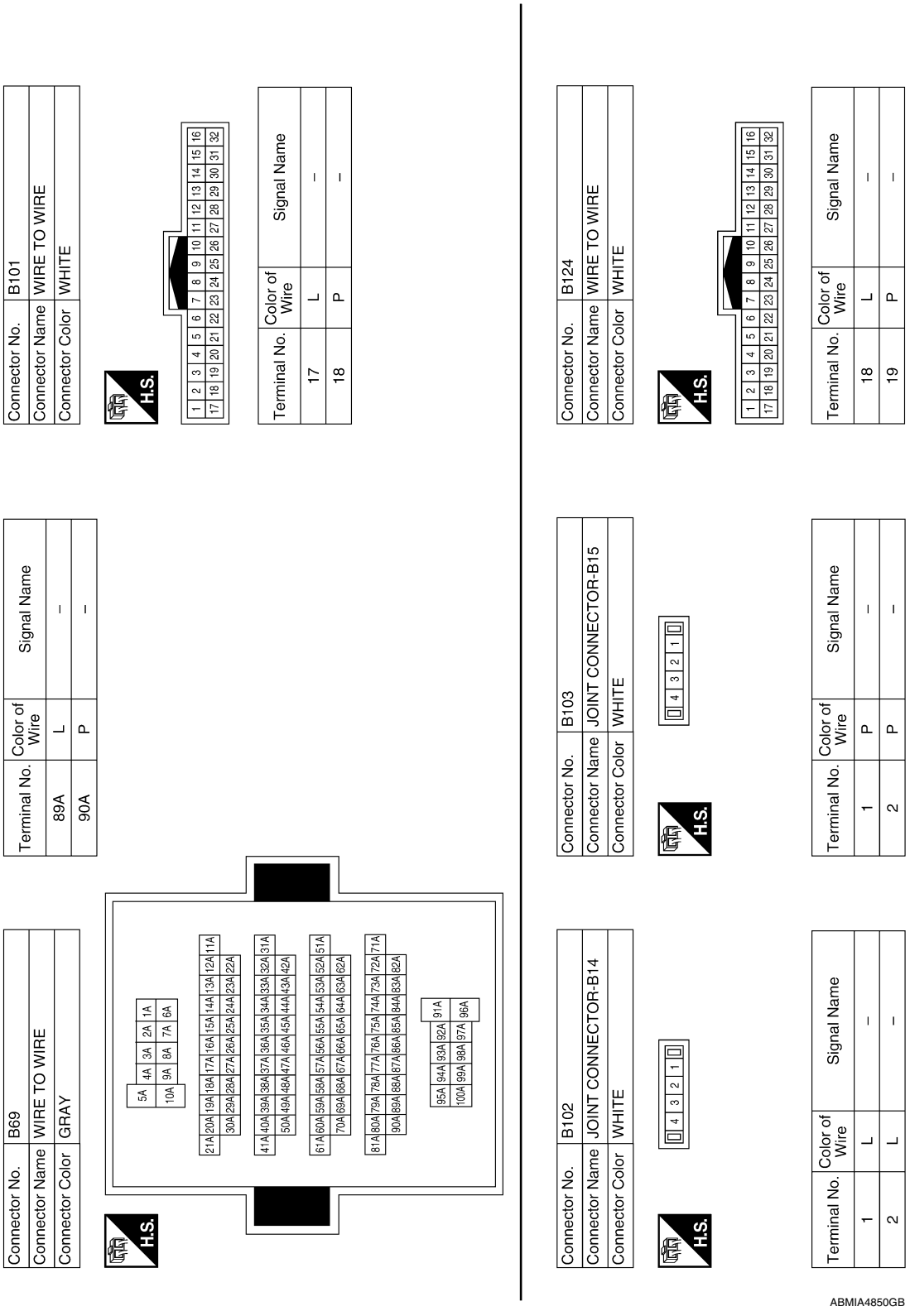
Terminal No.	Color of Wire	Signal Name
3T	W	–
5T	G	–

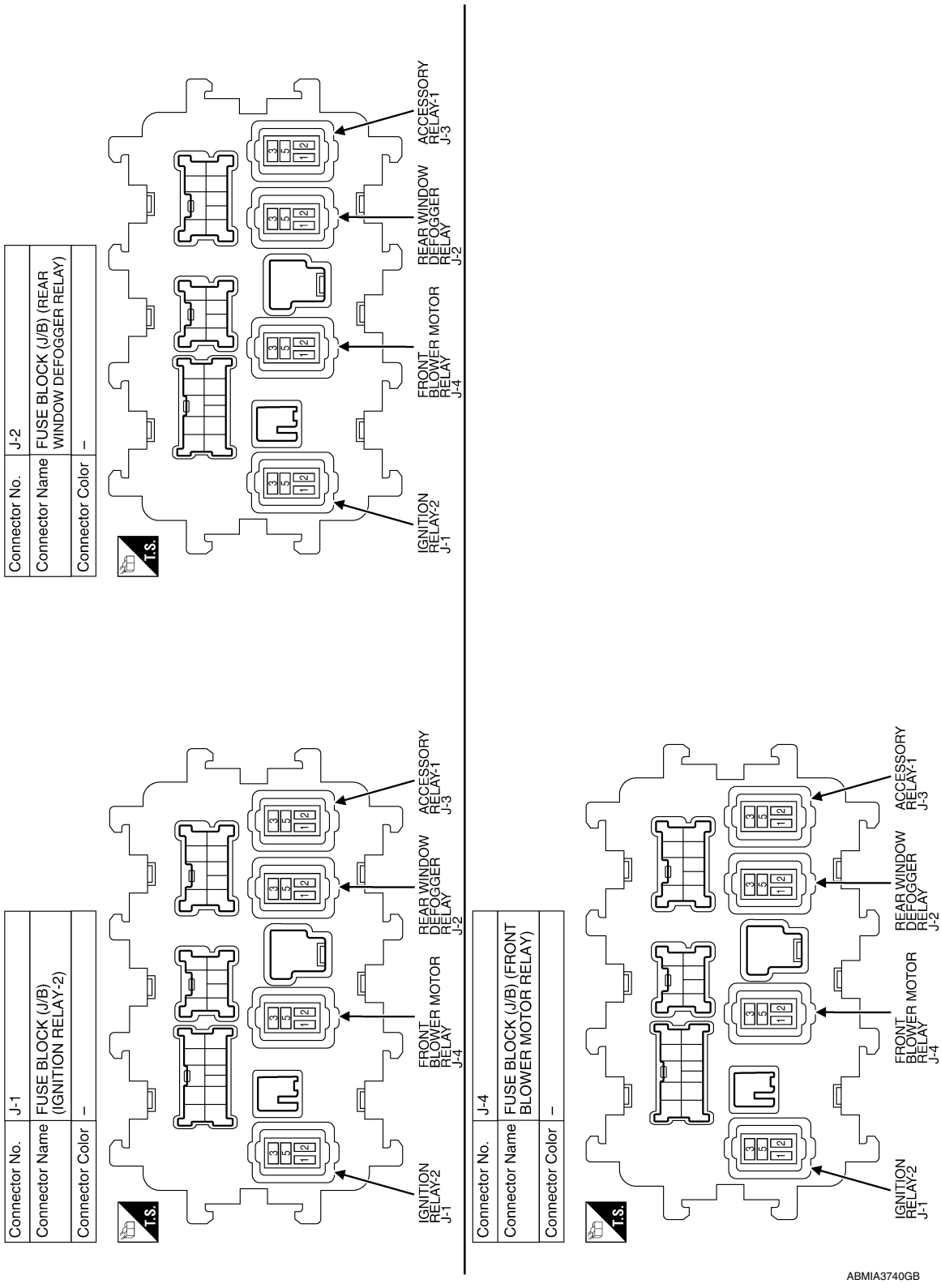
Connector No.	B32
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.

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

ABMIA3732GB


Connector No. B69
Connector Name WIRE TO WIRE
Connector Color GRAY
H.S.
5A 4A 3A 2A 1A
10A 9A 8A 7A 6A
21A 20A 19A 18A 17A 16A 15A 14A 13A 12A 11A
30A 29A 28A 27A 26A 25A 24A 23A 22A
41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A
50A 49A 48A 47A 46A 45A 44A 43A 42A
61A 60A 59A 58A 57A 56A 55A 54A 53A 52A 51A
70A 69A 68A 67A 66A 65A 64A 63A 62A
81A 80A 79A 78A 77A 76A 75A 74A 73A 72A 71A
90A 89A 88A 87A 86A 85A 84A 83A 82A
95A 94A 93A 92A 91A
100A 99A 98A 97A 96A
Terminal No. Color of Wire Signal Name
89A L –
90A P –
Connector No. B101
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
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 –
Connector No. B102
Connector Name JOINT CONNECTOR-B14
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 L –
2 L –
Connector No. B103
Connector Name JOINT CONNECTOR-B15
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. Color of Wire Signal Name
1 P –
2 P –
Connector No. B124
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
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 –
ABMIA4850GB

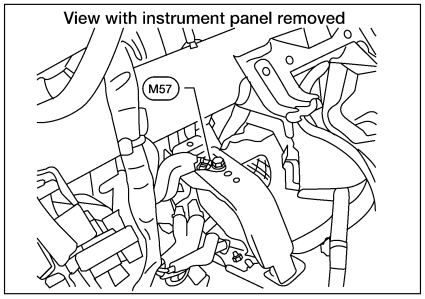

Connector No. J-2
Connector Name FUSE BLOCK (J/B) (REAR WINDOW DEFOGGER RELAY)
Connector Color –
T.S.
IGNITION RELAY-2 J-1
FRONT BLOWER MOTOR RELAY J-4
REAR WINDOW DEFOGGER RELAY J-2
ACCESSORY RELAY-1 J-3
Connector No. J-1
Connector Name FUSE BLOCK (J/B) (IGNITION RELAY-2)
Connector Color –
Connector No. J-4
Connector Name FUSE BLOCK (J/B) (FRONT BLOWER MOTOR RELAY)
Connector Color –
ABMIA3740GB

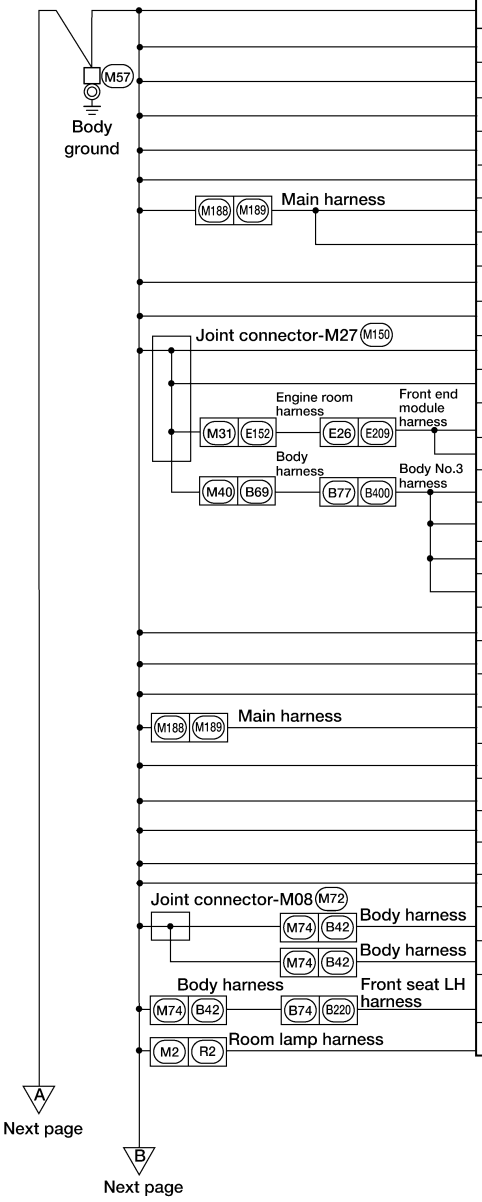
GROUND

Ground Distribution

INFOID:0000000009131088

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
E307	Front sonar sensor LH outer shield
E308	Front sonar sensor RH outer shield
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
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)
M121	Headlamp aiming switch
M185	Automatic back door main switch
M186	Automatic back door switch
B82	Inverter unit shield
B82	Inverter unit (Terminal No. 8)
B205	Climate controlled seat control unit (driver seat) (Terminal No. 30) (with rear entertainment system)
R4	Moonroof motor assembly

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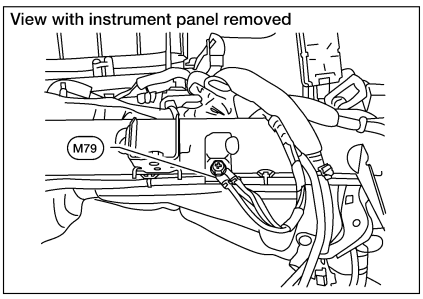

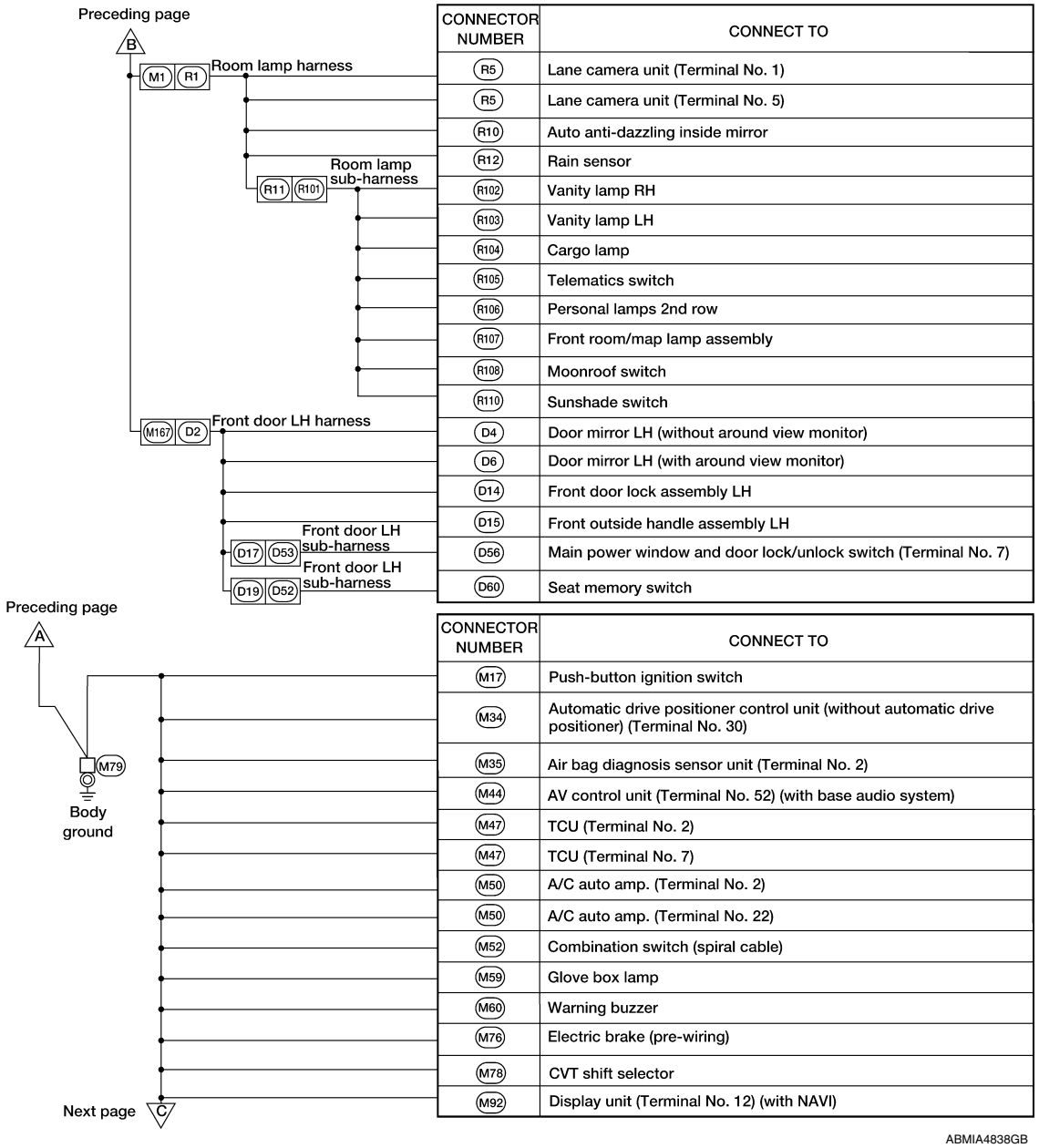

CONNECTOR NUMBER	CONNECT TO
R5	Lane camera unit (Terminal No. 1)
R5	Lane camera unit (Terminal No. 5)
R10	Auto anti-dazzling inside mirror
R12	Rain sensor
R102	Vanity lamp RH
R103	Vanity lamp LH
R104	Cargo lamp
R105	Telematics switch
R106	Personal lamps 2nd row
R107	Front room/map lamp assembly
R108	Moonroof switch
R110	Sunshade switch
D4	Door mirror LH (without around view monitor)
D6	Door mirror LH (with around view monitor)
D14	Front door lock assembly LH
D15	Front outside handle assembly LH
D56	Main power window and door lock/unlock switch (Terminal No. 7)
D60	Seat memory switch

CONNECTOR NUMBER	CONNECT TO
M17	Push-button ignition switch
M34	Automatic drive positioner control unit (without automatic drive positioner) (Terminal No. 30)
M35	Air bag diagnosis sensor unit (Terminal No. 2)
M44	AV control unit (Terminal No. 52) (with base audio system)
M47	TCU (Terminal No. 2)
M47	TCU (Terminal No. 7)
M50	A/C auto amp. (Terminal No. 2)
M50	A/C auto amp. (Terminal No. 22)
M52	Combination switch (spiral cable)
M59	Glove box lamp
M60	Warning buzzer
M76	Electric brake (pre-wiring)
M78	CVT shift selector
M92	Display unit (Terminal No. 12) (with NAVI)

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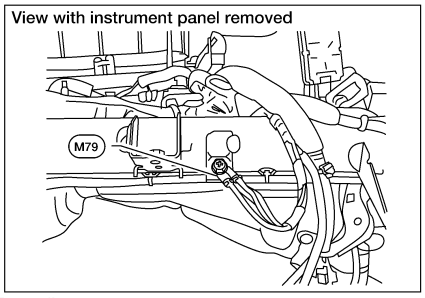

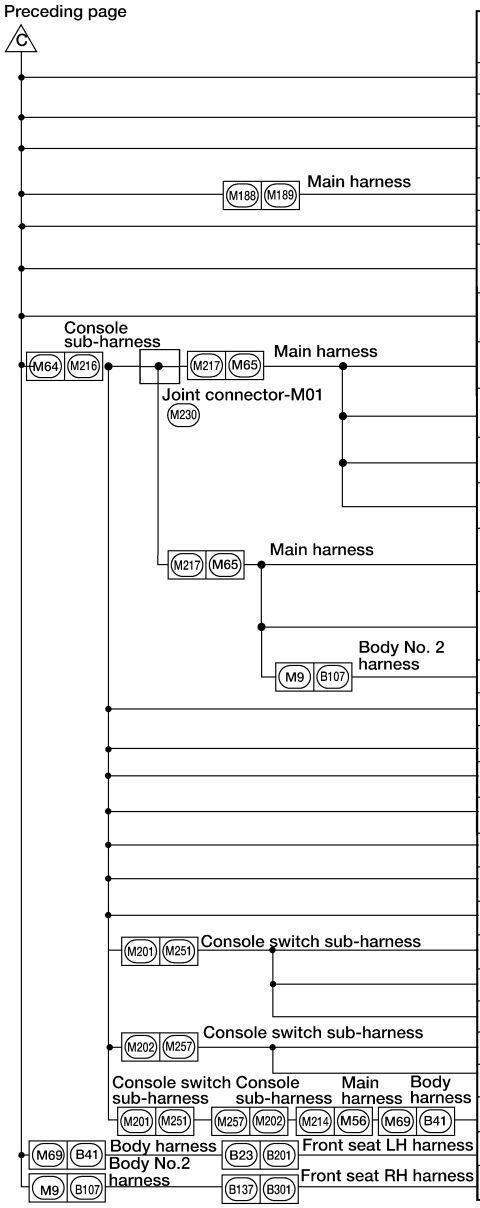

CONNECTOR NUMBER	CONNECT TO
M93	Display unit (Terminal No. 1) (without NAVI)
M117	PTC heater (Terminal No. 4)
M122	AV control unit (Terminal No. 20) (with BOSE audio system - with NAVI without surround sound system)
M126	Twin switch (warning system switch)
M160	Yaw rate/side/decel G sensor
M161	AV control unit (Terminal No. 20) (with BOSE audio system - with NAVI and surround sound system)
M193	AV control unit (Terminal No. 52) (with BOSE audio system without NAVI)
M46	AV control unit (shield wire) (Terminal No. 90) (with base audio system)
M125	AV control unit (shield wire) (Terminal No. 94) (with BOSE audio system - with NAVI without surround sound system)
M164	AV control unit (Terminal No. 94) (with BOSE audio system - with NAVI and surround sound system)
M195	AV control unit (shield wire) (Terminal No. 90) (with BOSE audio system without NAVI)
M123	AV control unit (shield wire) (Terminal No. 37) (with rear entertainment system) (with BOSE audio system with NAVI without surround sound system)
M162	AV control unit (shield wire) (Terminal No. 37) (with rear entertainment system) (with BOSE audio system - with NAVI and surround sound system)
B110	Front seat RH shield (pre-wiring) (without rear entertainment system)
M203	Climate controlled seat switch (driver seat)
M206	Climate controlled seat switch (passenger seat)
M207	Front console power socket
M211	Drive mode select switch
M220	Front heated seat switch LH
M221	Front heated seat switch RH
M228	Front power socket (for cigarette lighter)
M252	2nd row heated seat switch LH
M253	2nd row heated seat switch RH
M268	Rear console power socket
M254	Rear auxiliary input jacks
M258	Rear air control (Terminal No. 1)
B25	Video distributor (shield wire)
B202	Headrest display unit (driver seat) (Terminal No. 12)
B302	Headrest display unit (passenger seat) (Terminal No. 12)

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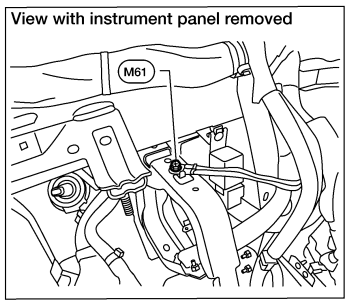

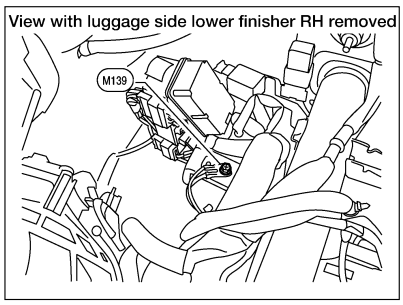

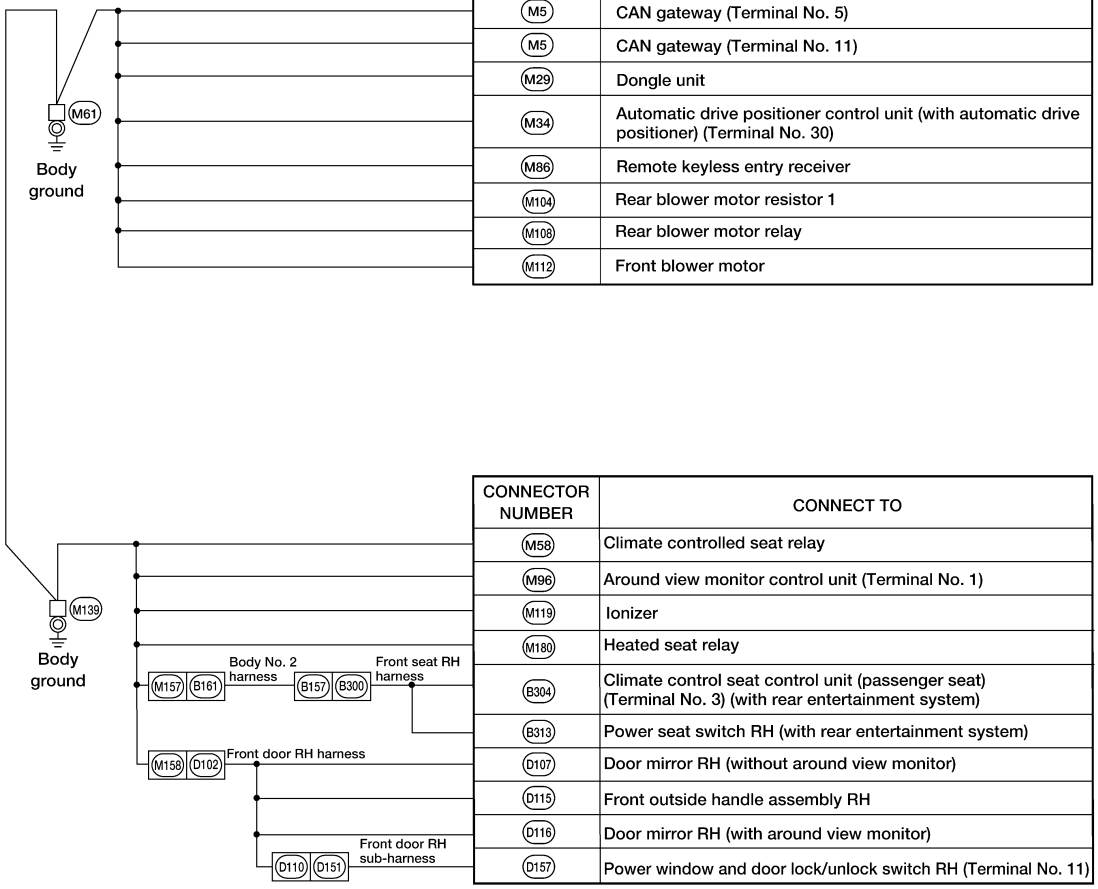

CONNECTOR NUMBER	CONNECT TO
M5	CAN gateway (Terminal No. 5)
M5	CAN gateway (Terminal No. 11)
M29	Dongle unit
M34	Automatic drive positioner control unit (with automatic drive positioner) (Terminal No. 30)
M86	Remote keyless entry receiver
M104	Rear blower motor resistor 1
M108	Rear blower motor relay
M112	Front blower motor

CONNECTOR NUMBER	CONNECT TO
M58	Climate controlled seat relay
M96	Around view monitor control unit (Terminal No. 1)
M119	Ionizer
M180	Heated seat relay
B304	Climate control seat control unit (passenger seat) (Terminal No. 3) (with rear entertainment system)
B313	Power seat switch RH (with rear entertainment system)
D107	Door mirror RH (without around view monitor)
D115	Front outside handle assembly RH
D116	Door mirror RH (with around view monitor)
D157	Power window and door lock/unlock switch RH (Terminal No. 11)

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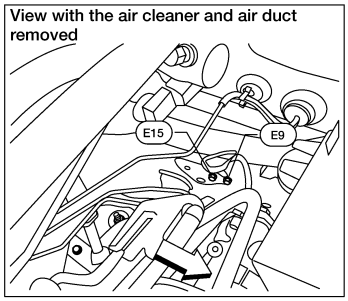
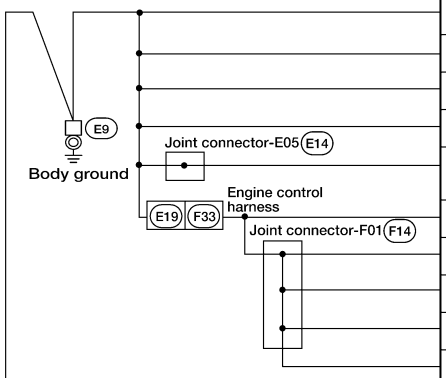
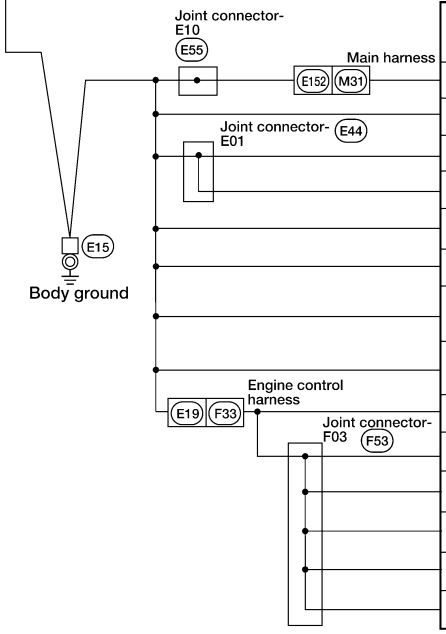




CONNECTOR NUMBER	CONNECT TO
E16	ECM (Terminal No. 123)
E16	ECM (Terminal No. 124)
E16	ECM (Terminal No. 127)
E16	ECM (Terminal No. 128)
E73	Accelerator pedal position sensor shield (with intelligent cruise control)
F51	ECM (Terminal No. 16)
F5	Air fuel ratio (A/F) sensor 1 (bank 2) shield
F50	Electric throttle control actuator shield
F51	ECM (Terminal No. 12)
F65	Air fuel ratio (A/F) sensor 1 (bank 1) shield



CONNECTOR NUMBER	CONNECT TO
M187	Circuit breaker shield
E21	Brake fluid level switch
E22	Accessory relay-2
E23	Front wiper motor
E56	VDC resistor
E74	Accelerator pedal actuator
E119	IPDM E/R (intelligent power distribution module engine room) (Terminal No. 41)
E121	IPDM E/R (intelligent power distribution module engine room) (Terminal No. 7)
F3	A/C compressor
F25	TCM (transmission control module) (Terminal No. 41)
F25	TCM (transmission control module) (Terminal No. 42)
F35	Primary speed sensor
F36	Output speed sensor
F37	Input speed sensor

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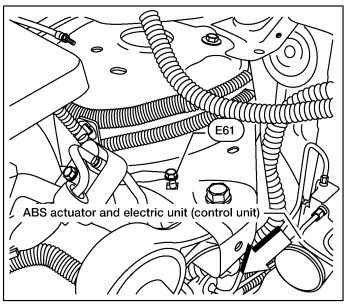
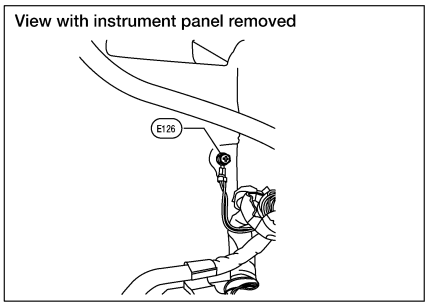
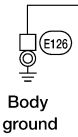




CONNECTOR NUMBER	CONNECT TO
E63	Power steering control module (Terminal No. 2)

CONNECTOR NUMBER	CONNECT TO
E125	ABS actuator and electric unit (control unit) (Terminal No. 1)
E125	ABS actuator and electric unit (control unit) (Terminal No. 2)



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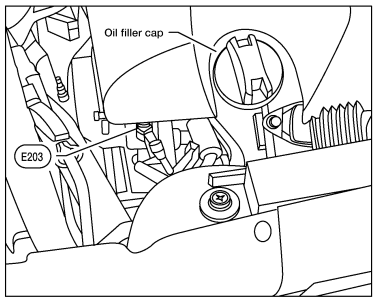

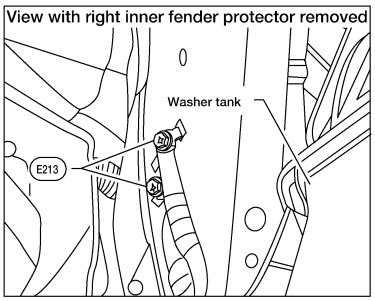

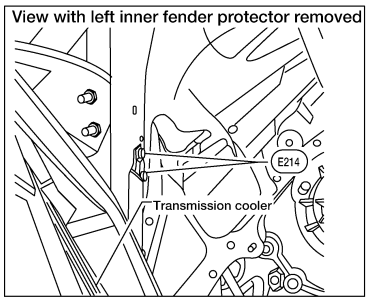

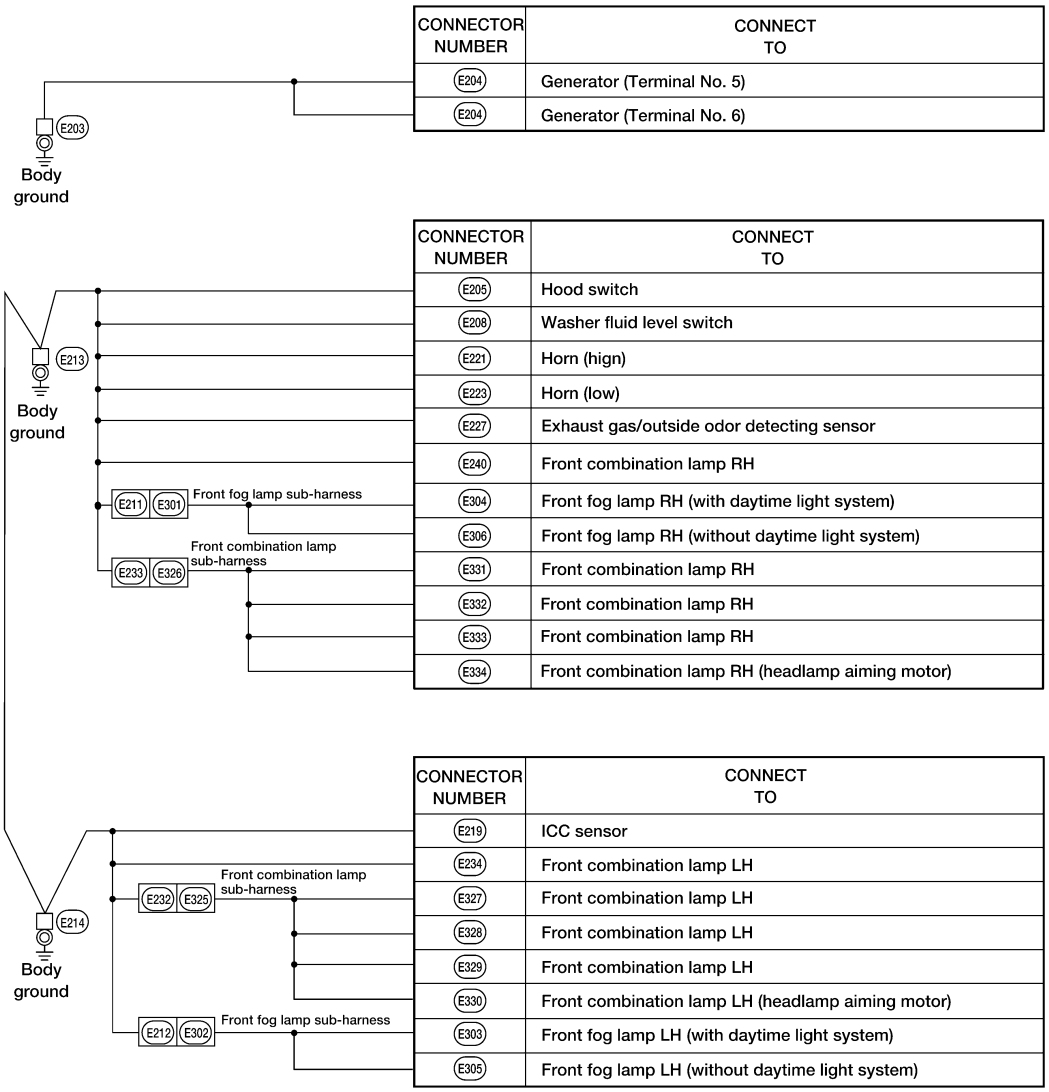

CONNECTOR NUMBER	CONNECT TO
E204	Generator (Terminal No. 5)
E204	Generator (Terminal No. 6)

CONNECTOR NUMBER	CONNECT TO
E205	Hood switch
E208	Washer fluid level switch
E221	Horn (hign)
E223	Horn (low)
E227	Exhaust gas/outside odor detecting sensor
E240	Front combination lamp RH
E304	Front fog lamp RH (with daytime light system)
E306	Front fog lamp RH (without daytime light system)
E331	Front combination lamp RH
E332	Front combination lamp RH
E333	Front combination lamp RH
E334	Front combination lamp RH (headlamp aiming motor)

CONNECTOR NUMBER	CONNECT TO
E219	ICC sensor
E234	Front combination lamp LH
E327	Front combination lamp LH
E328	Front combination lamp LH
E329	Front combination lamp LH
E330	Front combination lamp LH (headlamp aiming motor)
E303	Front fog lamp LH (with daytime light system)
E305	Front fog lamp LH (without daytime light system)

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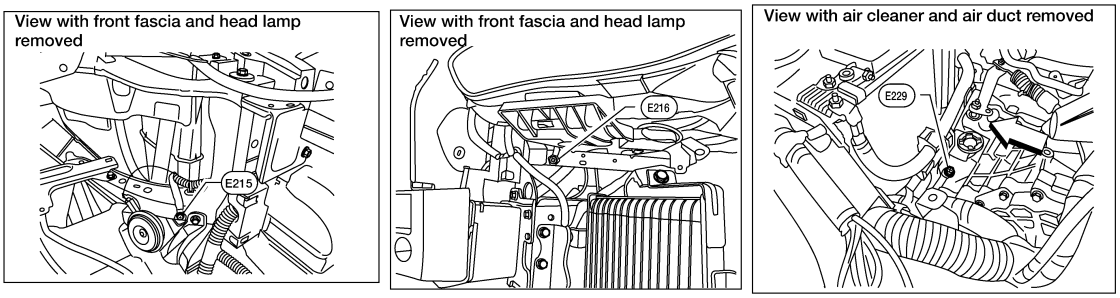
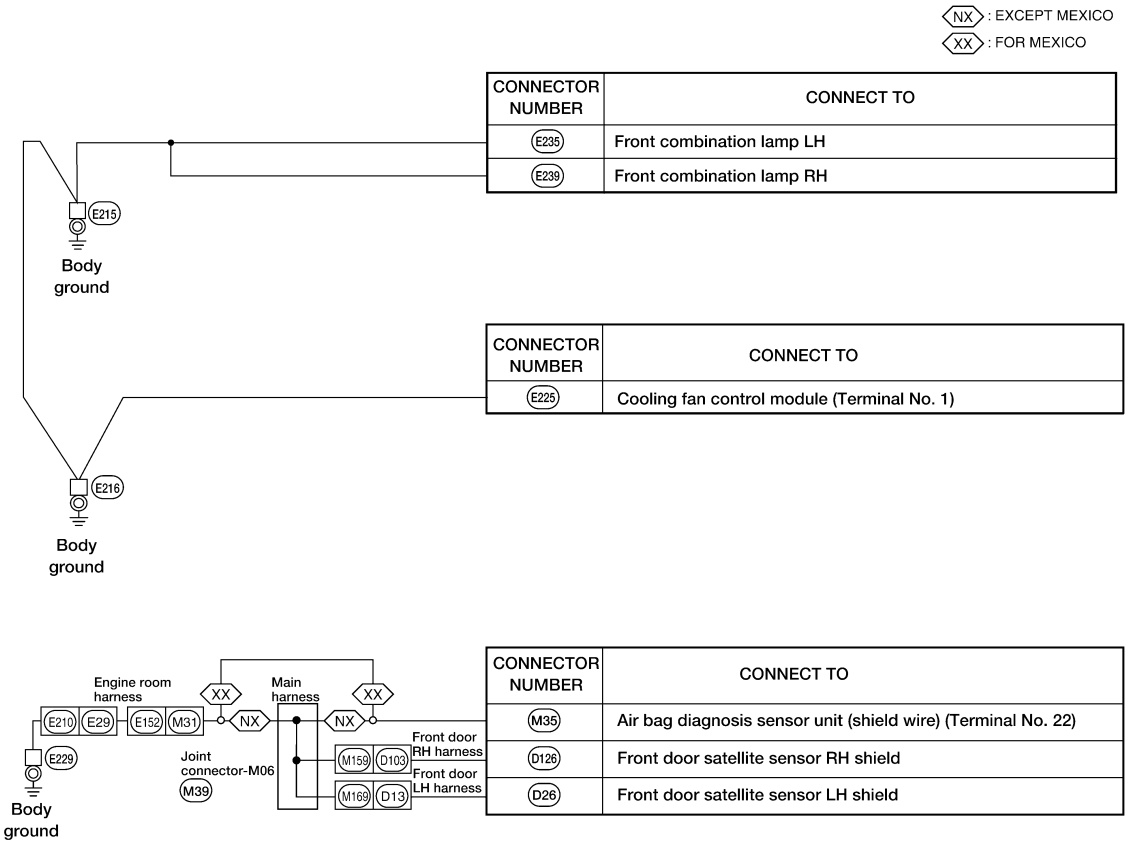


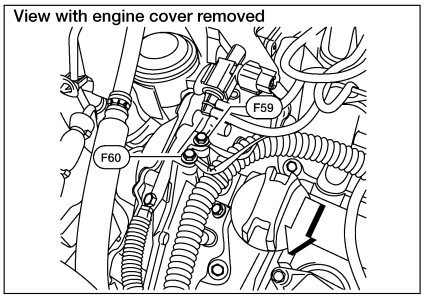


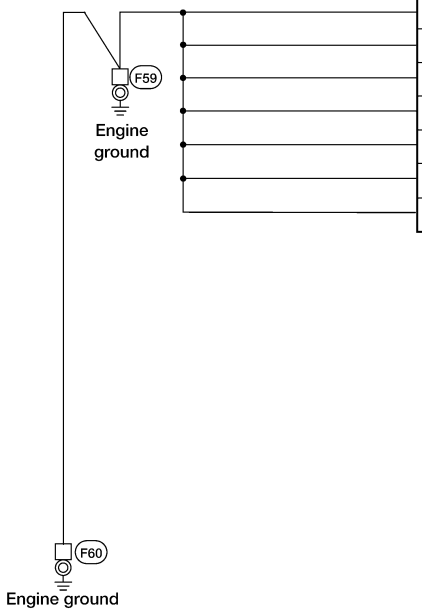
CONNECTOR NUMBER	CONNECT TO
E235	Front combination lamp LH
E239	Front combination lamp RH

CONNECTOR NUMBER	CONNECT TO
E225	Cooling fan control module (Terminal No. 1)

CONNECTOR NUMBER	CONNECT TO
M35	Air bag diagnosis sensor unit (shield wire) (Terminal No. 22)
D126	Front door satellite sensor RH shield
D26	Front door satellite sensor LH shield

ABMIA4843GB





CONNECTOR NUMBER	CONNECT TO
F8	Ignition coil No. 2 (with power transistor)
F9	Ignition coil No. 4 (with power transistor)
F10	Ignition coil No. 6 (with power transistor)
F21	Condenser-1
F47	Ignition coil No. 1 (with power transistor)
F48	Ignition coil No. 3 (with power transistor)
F49	Ignition coil No. 5 (with power transistor)

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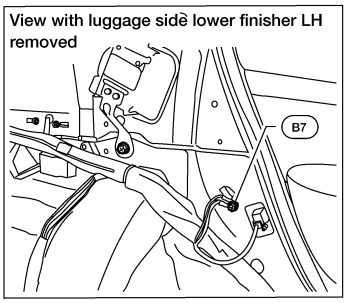
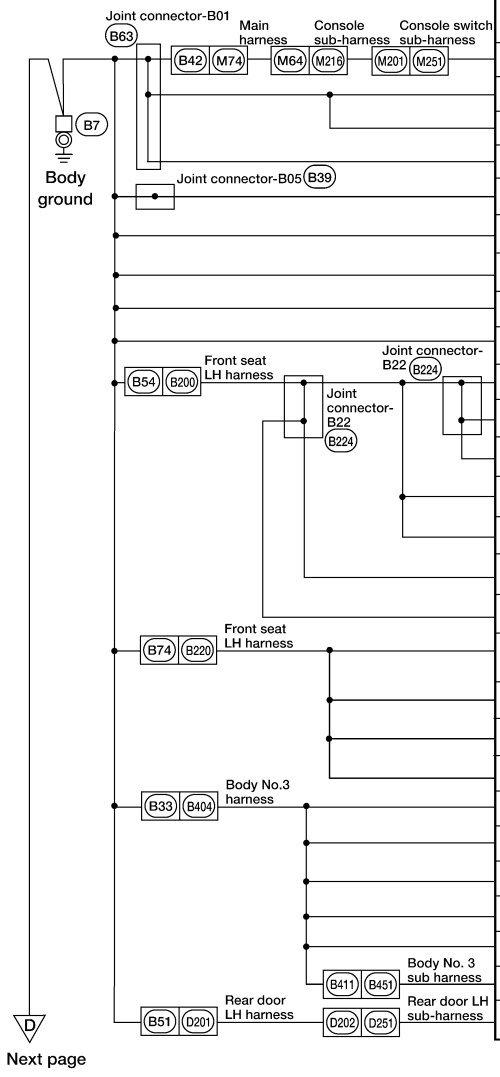
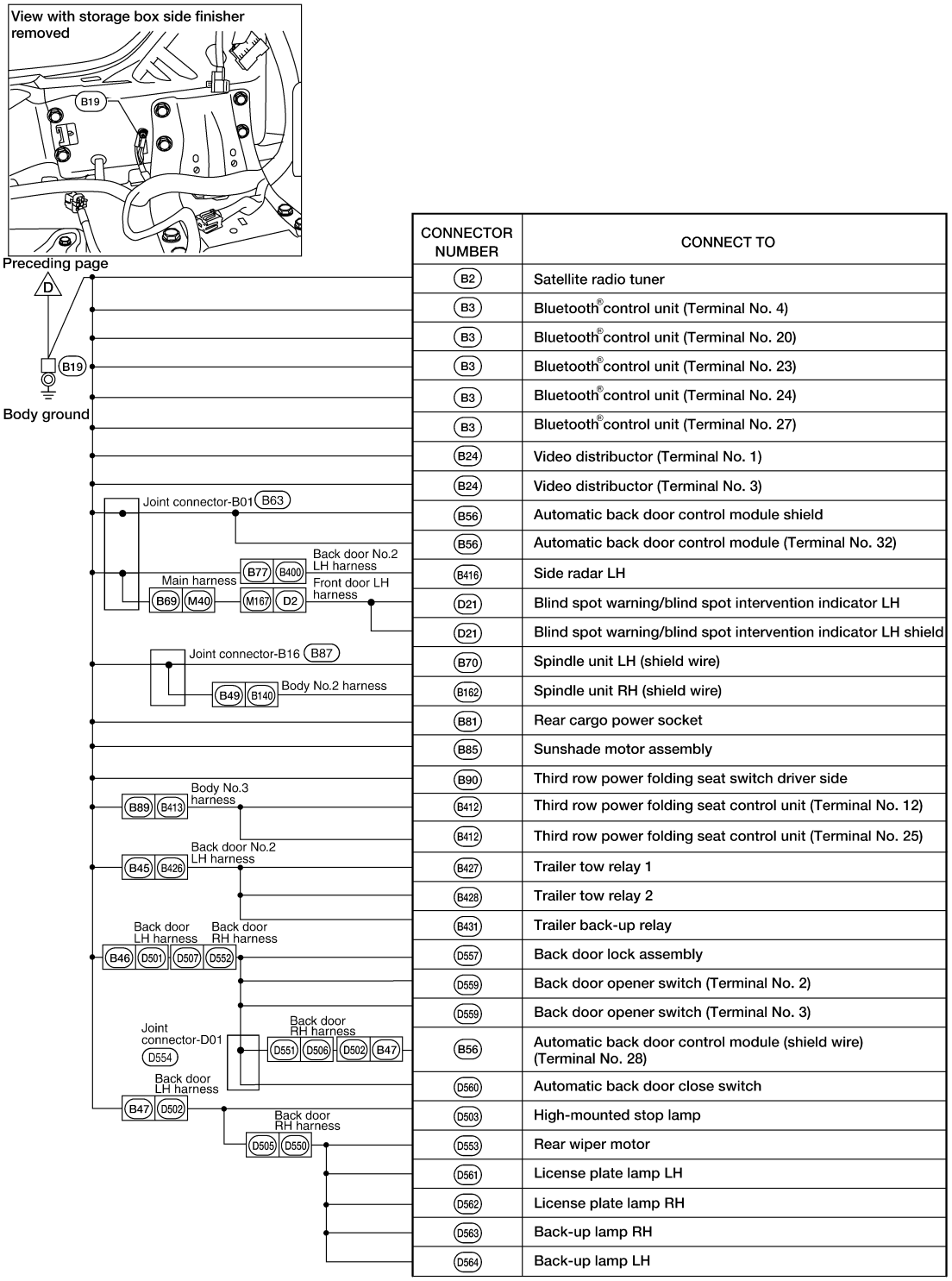




CONNECTOR NUMBER	CONNECT TO
M256	A/C 120V outlet (shield wire)
B52	Condenser-2
B72	Fuel level sensor and fuel pump
B79	2nd row seat heater LH
B58	Pre-crash seat belt control unit (driver side) (Terminal No. 18)
B58	Pre-crash seat belt control unit (driver side) (Terminal No. 20)
B67	AWD control unit (Terminal No. 10)
B67	AWD control unit (Terminal No. 11)
B73	Subwoofer
B207	Lifting motor LH (rear)
B211	Sliding motor LH
B218	Lifting motor LH (front)
B208	Power seat switch LH
B217	Reclining motor LH
B210	Driver seat control unit (Terminal No. 39)
B214	Lumbar support switch
B205	Climate controlled seat control unit (driver seat) (Terminal No. 30) (without rear entertainment system)
B208	Power seat switch LH
B216	Front seat heater (driver seat)
B221	Seat belt buckle switch (driver seat)
B402	Back door warning chime
B406	Rear combination lamp LH
B407	Rear combination lamp RH
B408	Rear combination lamp LH
B409	Rear combination lamp RH
B453	Trailer
D256	Rear power window switch LH (Terminal No. 11)

ABMIA4845GB



CONNECTOR NUMBER	CONNECT TO
B2	Satellite radio tuner
B3	Bluetooth® control unit (Terminal No. 4)
B3	Bluetooth® control unit (Terminal No. 20)
B3	Bluetooth® control unit (Terminal No. 23)
B3	Bluetooth® control unit (Terminal No. 24)
B3	Bluetooth® control unit (Terminal No. 27)
B24	Video distributor (Terminal No. 1)
B24	Video distributor (Terminal No. 3)
B56	Automatic back door control module shield
B56	Automatic back door control module (Terminal No. 32)
B416	Side radar LH
D21	Blind spot warning/blind spot intervention indicator LH
D21	Blind spot warning/blind spot intervention indicator LH shield
B70	Spindle unit LH (shield wire)
B162	Spindle unit RH (shield wire)
B81	Rear cargo power socket
B85	Sunshade motor assembly
B90	Third row power folding seat switch driver side
B412	Third row power folding seat control unit (Terminal No. 12)
B412	Third row power folding seat control unit (Terminal No. 25)
B427	Trailer tow relay 1
B428	Trailer tow relay 2
B431	Trailer back-up relay
D557	Back door lock assembly
D559	Back door opener switch (Terminal No. 2)
D559	Back door opener switch (Terminal No. 3)
B56	Automatic back door control module (shield wire) (Terminal No. 28)
D560	Automatic back door close switch
D503	High-mounted stop lamp
D553	Rear wiper motor
D561	License plate lamp LH
D562	License plate lamp RH
D563	Back-up lamp RH
D564	Back-up lamp LH

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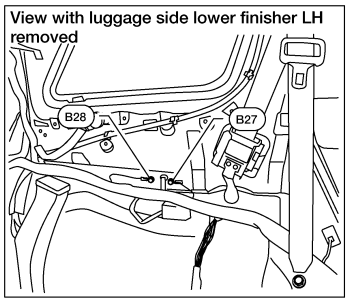

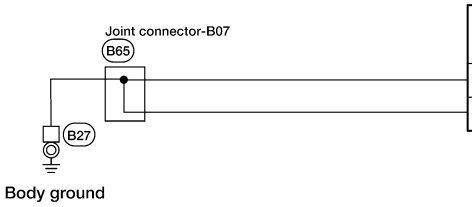

CONNECTOR NUMBER	CONNECT TO
B9	Air bag diagnosis sensor unit (shield wire) (Terminal No. 55)
B71	Rear side air bag satellite sensor LH shield

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

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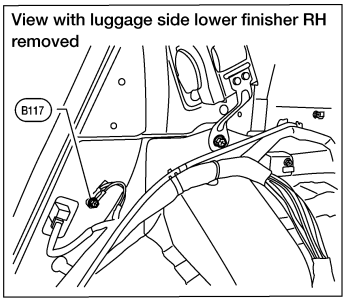
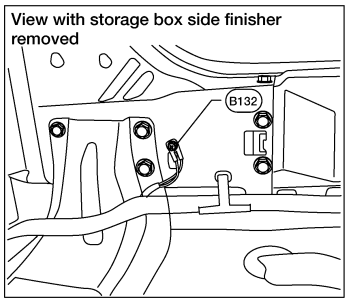
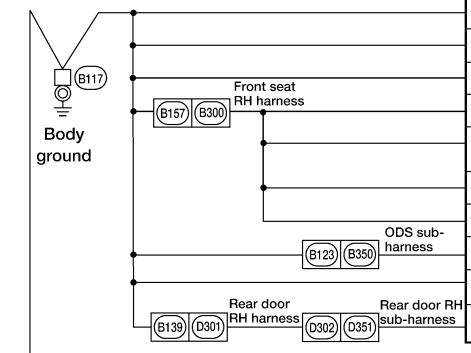
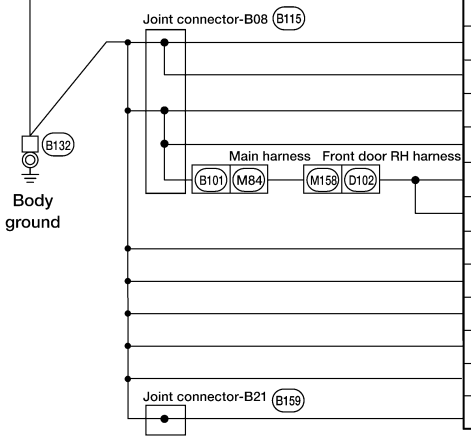






CONNECTOR NUMBER	CONNECT TO
B105	2nd row seat heater RH
B110	Front seat RH (pre-wiring)
B138	Third row power folding seat switch passenger side
B303	Seat belt buckle switch (passenger seat)
B304	Climate controlled seat control unit (passenger seat) (Terminal No. 30) (without rear entertainment system)
B313	Power seat switch RH (without rear entertainment system)
B315	Front seat heater (passenger seat)
B356	Occupant classification system control unit (Terminal No. 9)
B160	Pre-crash seat belt control unit (passenger side) (Terminal No. 20)
D356	Rear power window switch RH (Terminal No. 11)



CONNECTOR NUMBER	CONNECT TO
B104	ADAS control unit shield
B104	ADAS control unit (Terminal No. 6)
B109	Side radar RH (Terminal No. 1)
B109	Side radar RH (Terminal No. 2)
D111	Blind spot warning/blind spot intervention indicator RH
D111	Blind spot warning/blind spot intervention indicator RH shield
B121	BOSE speaker AMP. (Terminal No. 47) (with surround sound)
B121	BOSE speaker AMP. (Terminal No. 52) (with surround sound)
B129	BOSE speaker AMP. (terminal No. 47) (without surround sound)
B129	BOSE speaker AMP. (terminal No. 52) (without surround sound)
B133	Rear blower motor resistor 2
B160	Pre-crash seat belt control unit (passenger side) (Terminal No. 18)

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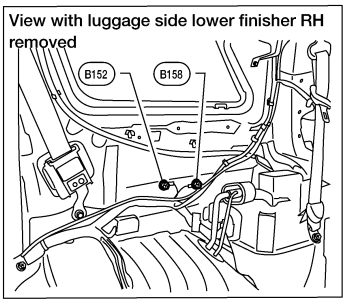
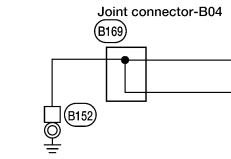
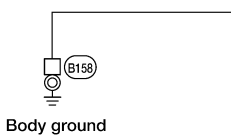




CONNECTOR NUMBER	CONNECT TO
B113	Air bag diagnosis sensor unit (shield wire) (Terminal No. 56)
B170	Rear side air bag satellite sensor RH shield



CONNECT TO	
B128	RH side curtain air bag module shield

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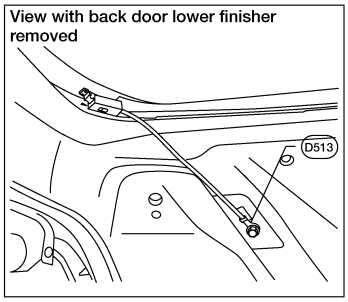
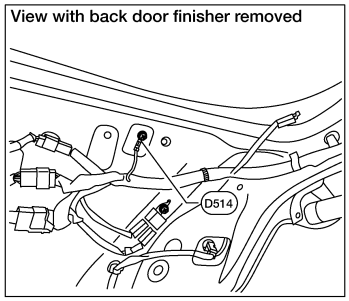
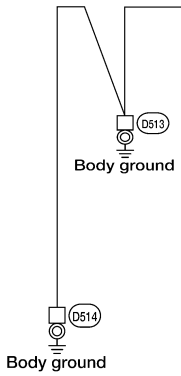




CONNECTOR NUMBER	CONNECT TO
D525	Rear window defogger



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HARNESS

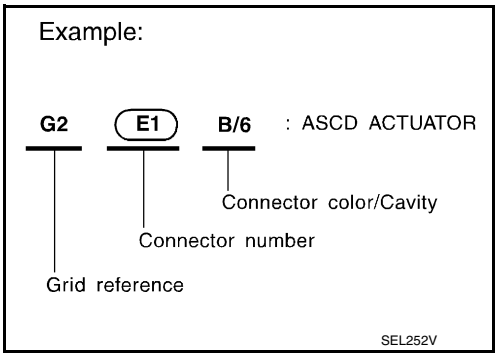
Harness Layout

INFOID:0000000009131089

BOSEHOW TO READ HARNESS LAYOUT

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

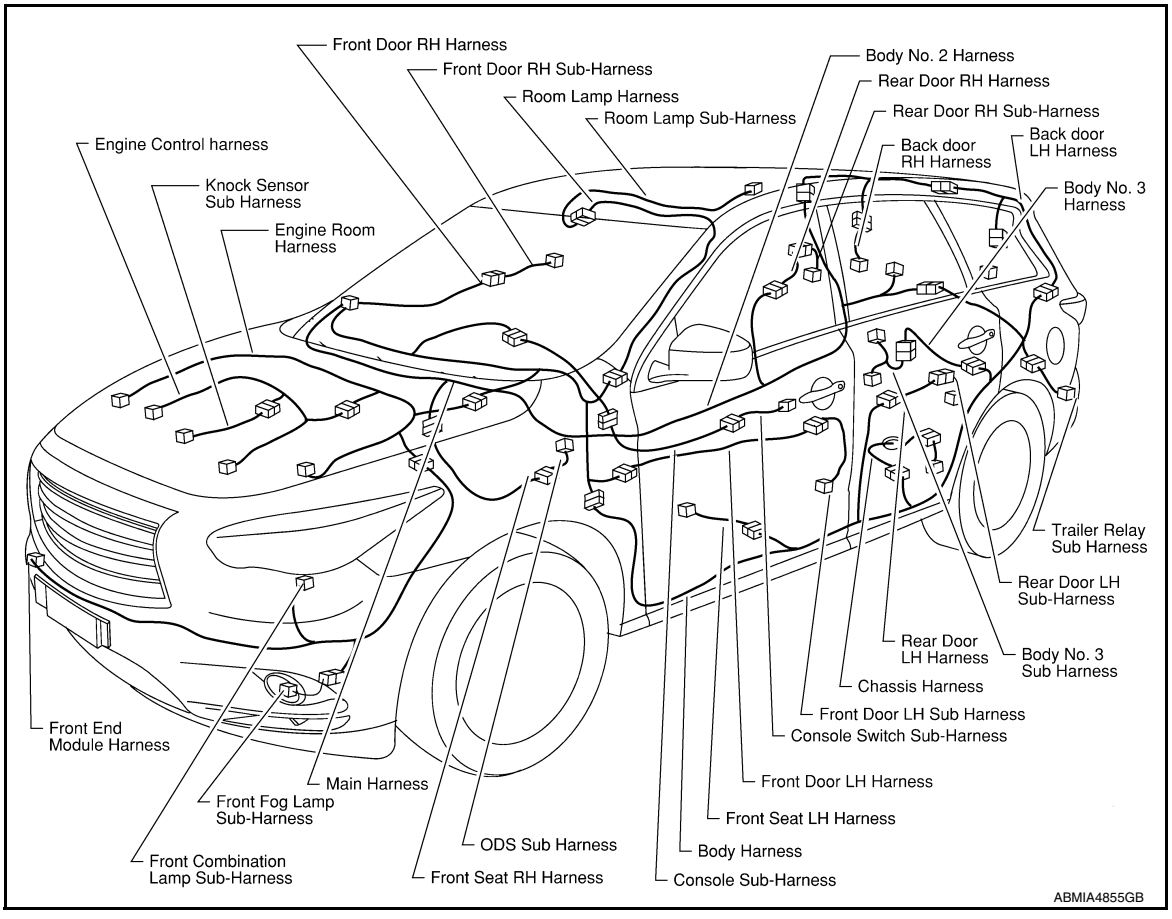
- Main Harness 1, Main Harness 2, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness, Front Fog Lamp Sub-harness and Front Combination Lamp Sub-harness
- Engine Control Harness and Knock Sensor Sub-harness
- 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, 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

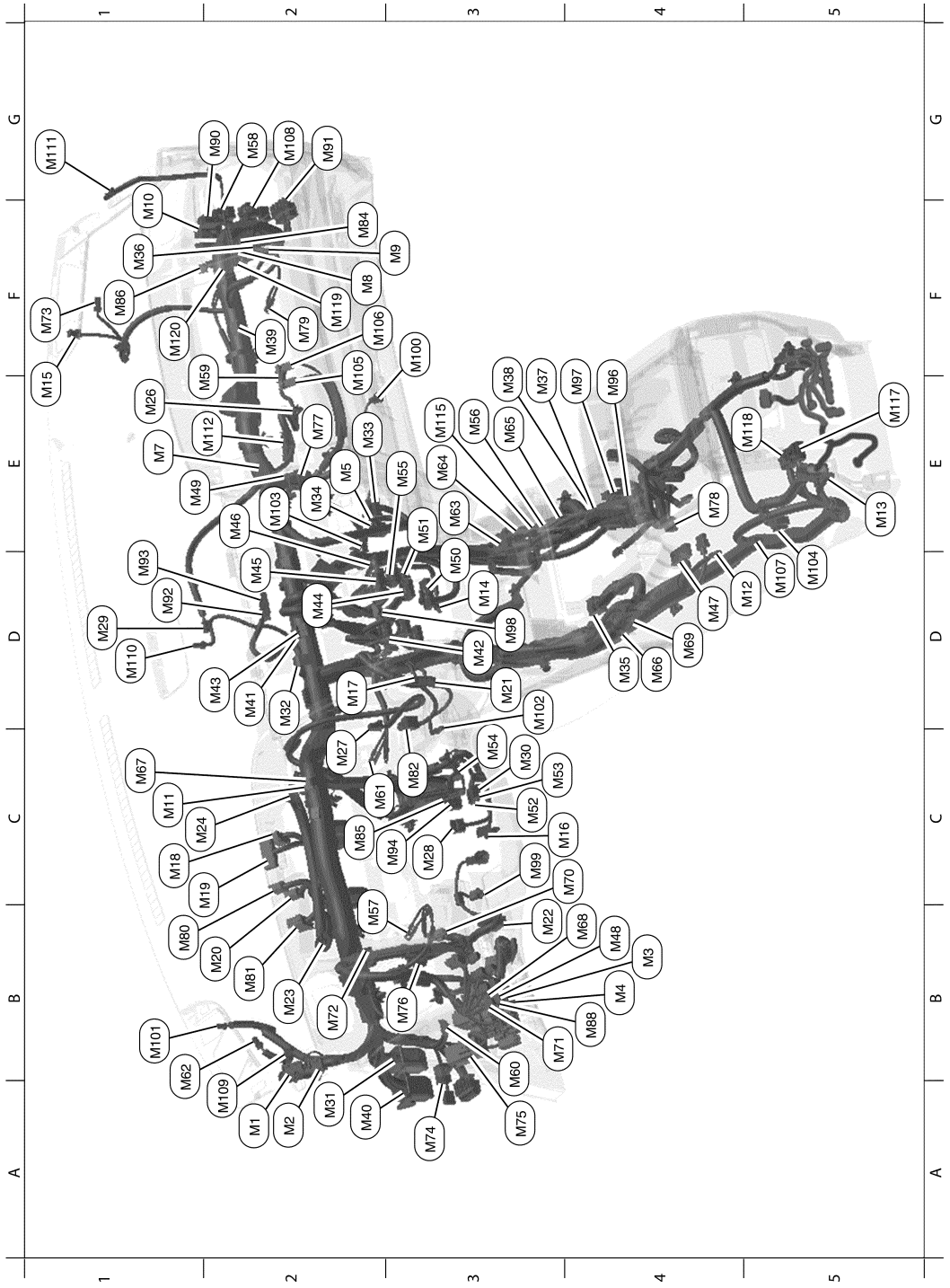


To use the grid reference

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





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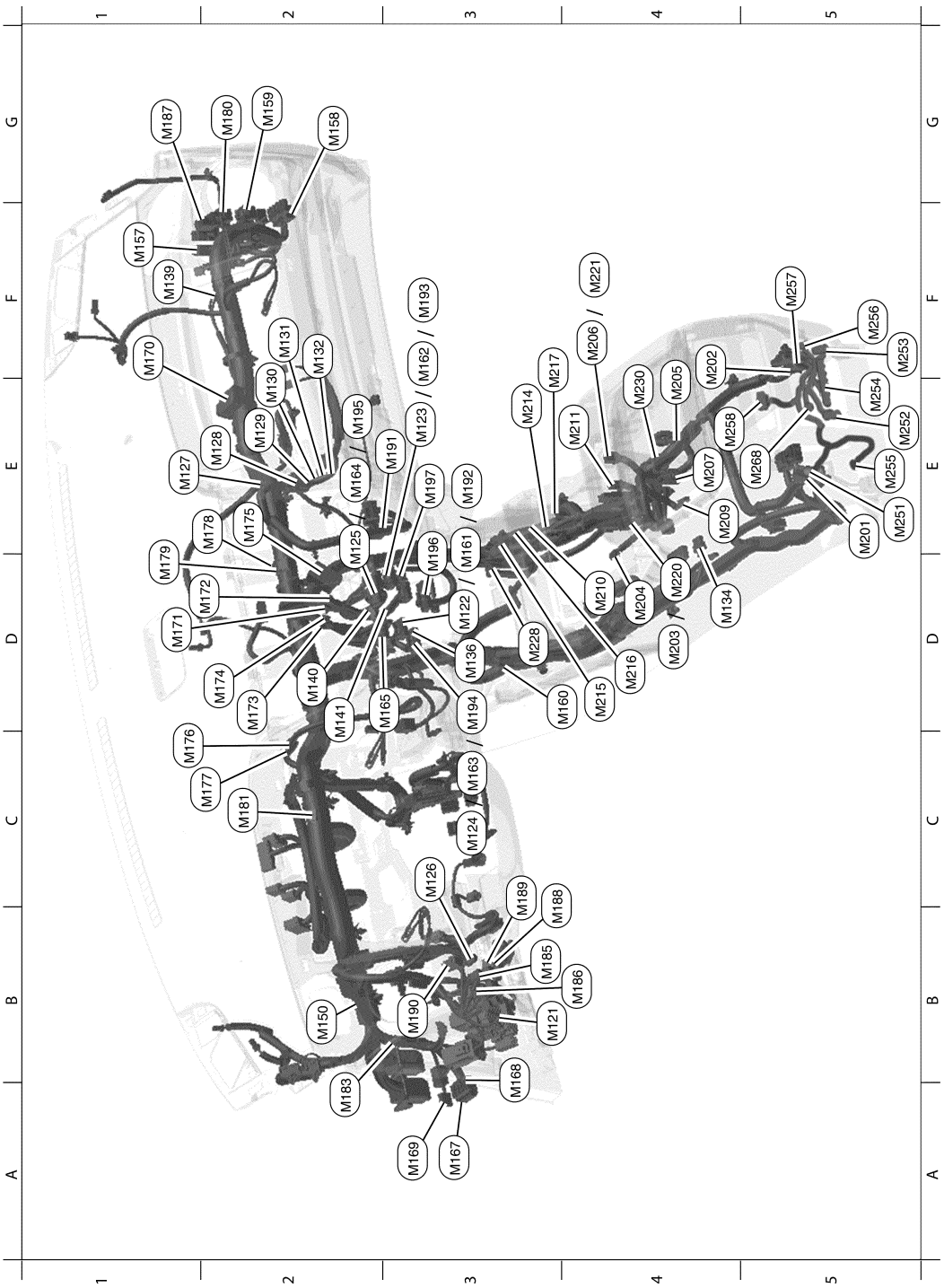
A2	M1	W/24	: To R1	E1	M59	—	: Glove box lamp
A2	M2	W/6	: To R2	B3	M60	BR/4	: Warning buzzer
B4	M3	W/8	: Fuse block (J/B)	C2	M61	—	: Body ground
B4	M4	W/16	: Fuse block (J/B)	B1	M62	BR/2	: Instrument panel tweeter LH
E2	M5	W/12	: CAN gateway	E3	M63	W/24	: To M215

E1	M7	W/3	: To M127	E3	M64	W/16	: To M216
F2	M8	W/1	: To B106	E3	M65	W/32	: To M217
F3	M9	W/16	: To B107	D4	M66	W/24	: To B6
F1	M10	BR/16	: To B111	C1	M67	W/4	: Joint connector-M04
C1	M11	W/4	: Joint connector-M03	B4	M68	BR/16	: Fuse block (J/B)
D5	M12	W/3	: Rear shut-off door motor	D4	M69	W/32	: To B41
E5	M13	W/3	: Mode door motor (Rear)	C4	M70	W/24	: Sonar control unit
D3	M14	GR/2	: Inside key antenna (Instrument center)	B3	M71	G/8	: VDC off switch
E1	M15	W/3	: Optical sensor	B2	M72	W/6	: Joint connector-M08
C4	M16	GR/6	: ADP steering switch	F1	M73	BR/2	: Instrument panel tweeter RH
D2	M17	W/8	: Push-button ignition switch	A3	M74	BR/12	: To B42
C1	M18	G/40	: BCM (Body control module)	A3	M75	W/3	: To E36
C2	M19	B/40	: BCM (Body control module)	B3	M76	W/6	: Electric brake (Pre-wiring)
B2	M20	GR/24	: BCM (Body control module)	E2	M77	Y/4	: Front passenger air bag module (Service replacement)
D3	M21	W/3	: NATS antenna amp.	E4	M78	W/12	: CVT shift selector
B3	M22	W/16	: Data link connector	F2	M79	—	: Body ground
B2	M23	W/12	: Combination meter	B1	M80	B/24	: BCM (Body control module)
C1	M24	W/40	: Combination meter	B2	M81	W/15	: BCM (Body control module)
E1	M26	Y/2	: Front passenger air bag module	C3	M82	W/2	: Circuit breaker-2
C2	M27	W/12	: Meter control switch	F2	M84	W/32	: To B101
C3	M28	W/14	: Combination switch	C2	M85	W/6	: Tilt motor
D1	M29	W/4	: Dongle unit	F1	M86	B/4	: Remote keyless entry receiver
C3	M30	GR/8	: Combination switch (Spiral cable)	B4	M88	B/10	: A/C 120v outlet main switch
A2	M31	W/100	: To E152	G2	M90	L/4	: Heated steering relay
D2	M32	B/2	: Diode-3	G2	M91	W/32	: To D101
E2	M33	W/24	: Automatic drive positioner control unit	D1	M92	W/24	: Display unit (With NAVI)
E2	M34	W/6	: Automatic drive positioner control unit	D1	M93	W/24	: Display unit (Without NAVI)
D4	M35	Y/28	: Air bag diagnosis sensor unit	C3	M94	BR/6	: Telescopic motor
F1	M36	W/40	: To B136	E4	M96	W/40	: Around view monitor control unit
E3	M37	W/4	: Joint connector-M28	E4	M97	W/32	: Around view monitor control unit
E3	M38	W/4	: Joint connector-M29	D3	M98	W/16	: A/C and AV switch assembly
F2	M39	W/4	: Joint connector-M06	C3	M99	—	: Foot lamp LH
A2	M40	W/57	: To B69	F3	M100	—	: Foot lamp RH
D2	M41	W/4	: Joint connector-M18	B1	M101	B/2	: Sunload sensor
D3	M42	W/32	: AV control unit (With base audio system)	D3	M102	W/2	: In-vehicle sensor
D2	M43	W/4	: Joint connector-M17	E2	M103	W/2	: Intake sensor
D2	M44	W/20	: AV control unit (With base audio system)	D5	M104	W/4	: Rear blower motor resistor 1
D2	M45	W/24	: AV control unit (With base audio system)	F2	M105	Y/2	: Front passenger air bag module
E2	M46	W/16	: AV control unit (With base audio system)	F2	M106	O/2	: Front passenger air bag module
D4	M47	W/40	: TCU	D5	M107	W/2	: Rear blower motor 1
B4	M48	L/8	: Heated steering wheel switch	G2	M108	BR/6	: Rear blower motor relay
E1	M49	B/12	: Joint connector-M15	A2	M109	BR/2	: Front tweeter LH
D3	M50	W/40	: A/C auto amp.	D1	M110	BR/2	: Center speaker
E3	M51	W/12	: AV control unit (With base audio system)	G1	M111	BR/2	: Front tweeter RH
C3	M52	W/2	: Combination switch (Spiral cable)	E2	M112	W/6	: Front blower motor

C3	M53	Y/6	: Combination switch (Spiral cable)	E3	M115	GR/7	: To M210
C3	M54	W/8	: Steering angle sensor	E5	M117	W/2	: PTC heater
E3	M55	L/5	: AV control unit	E5	M118	W/3	: PTC heater
E3	M56	W/10	: To M214	F2	M119	W/4	: Ionizer
B2	M57	—	: Body ground	F1	M120	W/4	: Joint connector-M21
G2	M58	BR/	: Climate controlled seat relay				

MAIN HARNESS 2



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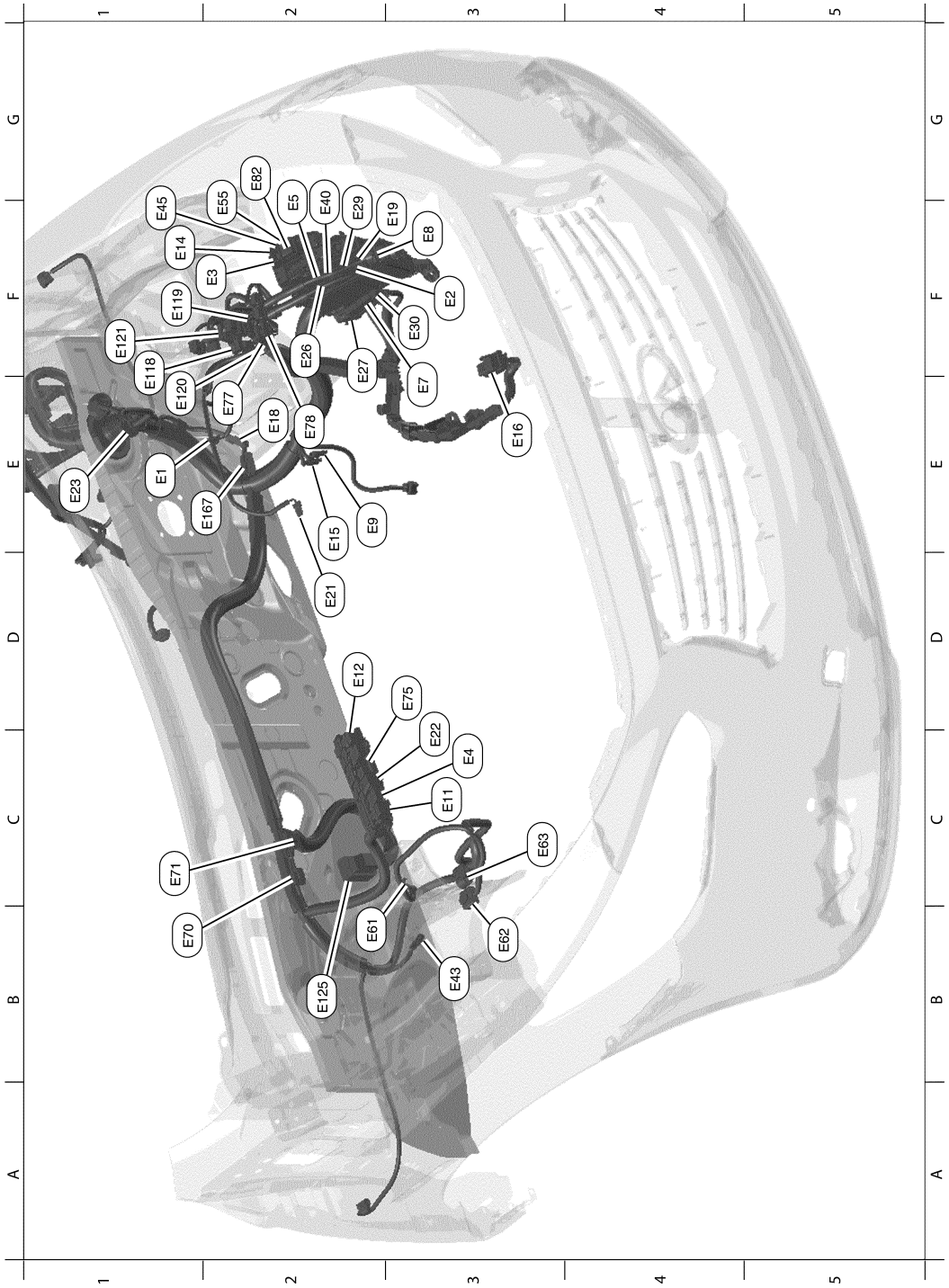
B3	M121	W/4	: Headlamp aiming switch	B3	M185	W/10	: Automatic back door main switch
D3	M122	W/20	: AV control unit (With BOSE audio system - With NAVI and without surround sound system)	B4	M186	B/8	: Automatic back door switch
E3	M123	W/28	: AV control unit (With BOSE audio system - with NAVI and without surround sound system)	G1	M187	W/2	: Circuit breaker
C3	M124	W/32	: AV control unit (With BOSE audio system - With NAVI and without surround sound system)	C3	M188	W/24	: To M189
E2	M125	W/40	: AV control unit (With BOSE audio system - With NAVI and without surround sound system)	C3	M189	W/24	: To M188
C3	M126	B/8	: Twin switch (Warning systems switch)	B3	M190	W/12	: Accessory prewire LH
E1	M127	W/3	: To M7	E3	M191	W/12	: Accessory prewire RH
E2	M128	W/3	: Intake door motor	E3	M192	W/32	: AV control unit (With BOSE audio system without navi)
E2	M129	W/3	: Mode door motor (Front)	F3	M193	W/20	: AV control unit (With BOSE audio system without navi)
E2	M130	W/3	: Air mix door motor driver side	D3	M194	W/24	: AV control unit (With BOSE audio system without navi)
F2	M131	W/3	: Air mix door motor passenger side	E2	M195	W/16	: AV control unit (With BOSE audio system without navi)
F2	M132	W/3	: Air mix door motor (Rear)	E3	M196	W/12	: AV control unit (With BOSE audio system without navi)
D4	M134	GR/17	: TCU	E3	M197	W/12	: AV control unit (With BOSE audio system without navi)
D3	M136	GR/17	: AV control unit	Console sub harness			
F1	M139	—	: Body ground	E5	M201	W/16	: To M251
D2	M140	B/4	: AV control unit	F4	M202	W/40	: To M257
D2	M141	BR/4	: Display unit	D4	M203	W/10	: Climate controlled seat switch (Driver seat)
B2	M150	W/33	: Joint connector-M27	D4	M204	W/4	: CVT shift selector
F1	M157	W/16	: To B161	E4	M205	W/8	: Front auxillary input jacks
G2	M158	W/10	: To D102	F4	M206	BR/8	: Climate controlled seat switch (Passenger seat)
G2	M159	Y/4	: To D103	E4	M207	GR/3	: Front console power socket
D4	M160	B/6	: Yaw rate/side/decel G sensor	E4	M209	G/5	: USB interface
E3	M161	W/20	: AV control unit (With BOSE audio system - with NAVI and surround sound system)	D4	M210	GR/7	: To M115
F3	M162	W/28	: AV control unit (With BOSE audio system - with NAVI and surround sound system)	E4	M211	B/10	: Drive mode select switch
C3	M163	W/32	: AV control unit (With BOSE audio system - with NAVI and surround sound system)	E3	M214	W/16	: To M56
E2	M164	W/40	: AV control unit (With BOSE audio system - with NAVI and surround sound system)	D4	M215	W/24	: To M63
D3	M165	W/16	: AV control unit (With BOSE audio system - with surround sound system)	D4	M216	W/16	: To M64
A3	M167	W/10	: To D2	F3	M217	W/32	: To M65
B3	M168	W/40	: To D3	D4	M220	W/10	: Front heated seat switch LH
A3	M169	Y/4	: To D13	F4	M221	BR/8	: Front heated seat switch RH

F1	M170	W/33	: Joint connector-M09	D3	M228	GR/3	: Front console power socket (For cigarette lighter)
D1	M171	W/4	: Joint connector-M10	E4	M230	GR/6	: Joint connector-M01
D2	M172	W/4	: Joint connector-M11	Console switch sub harness			
D2	M173	W/4	: Joint connector-M12	E5	M251	W/16	: To M201
D2	M174	W/4	: Joint connector-M13	E5	M252	W/6	: 2nd row heated seat switch LH
E2	M175	W/33	: Joint connector-M22	F5	M253	BR/6	: 2nd row heated seat switch RH
C1	M176	W/4	: Joint connector-M56	E5	M254	W/40	: Rear auxiliary input jacks
C2	M177	W/4	: Joint connector-M57	E5	M255	GR/2	: Inside key antenna (Console)
E2	M178	W/4	: Joint connector-M58	F5	M256	W/4	: A/C 120V outlet
D1	M179	W/4	: Joint connector-M59	F5	M257	W/24	: To M202
G2	M180	BR/7	: Heated seat relay	E4	M258	W/12	: Rear air control
C2	M181	W/4	: Joint connector-M36	E5	M268	GR/3	: Rear console power socket
A2	M183	W/4	: Joint connector-M44				



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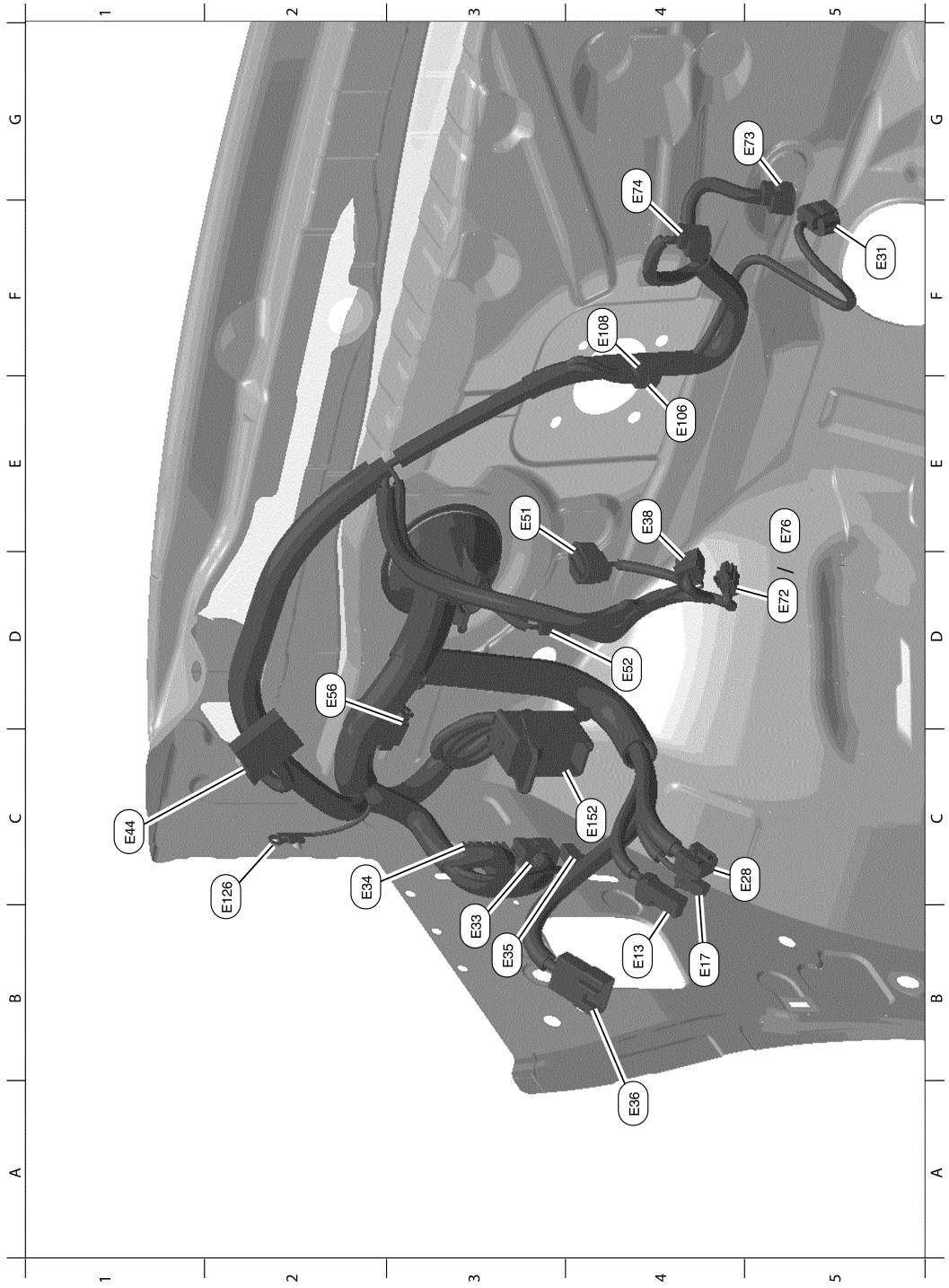
E1	E1	BR/3	: Intelligent Key warning buzzer	F3	E30	B/1	: Fusible link box (Battery)
F3	E2	W/16	: To F32	G2	E40	B/2	: To E201
F2	E3	B/2	: Anti theft diode	B3	E43	B/2	: Front wheel sensor RH
C3	E4	BR/6	: Daytime light relay	F1	E45	L/12	: Joint connector-E12
G2	E5	W/16	: To E207	G2	E55	W/4	: Joint connector-E10

E3	E7	GR/2	: Fusible link box (Battery)	B2	E61	—	: Body ground
F3	E8	W/3	: Anti theft horn relay	B3	E62	B/6	: Power steering control module
E2	E9	—	: Ground	C3	E63	B/2	: Power steering control module
C3	E11	L/5	: PTC relay-1	B1	E70	B/6	: Joint connector-E14
D2	E12	L/5	: PTC relay-2	C1	E71	B/6	: Joint connector-E15
F1	E14	B/12	: Joint connector-E05	D3	E75	L/4	: ICC brake hold relay
E2	E15	—	: Engine ground	E2	E77	L/4	: Trailer turn relay LH
E3	E16	GR/32	: ECM	E2	E78	L/4	: Trailer turn relay RH
E2	E18	B/2	: Front wheel sensor LH	G2	E82	BR/4	: Cooling fan relay
F3	E19	W/10	: To F33	F1	E118	B/2	: IPDM E/R (Intelligent power distribution module engine room)
D2	E21	GR/2	: Brake fluid level switch	F1	E119	W/32	: IPDM E/R (Intelligent power distribution module engine room)
C3	E22	L/4	: Accessory relay-2	E1	E120	W/4	: IPDM E/R (Intelligent power distribution module engine room)
E1	E23	GR/5	: Front wiper motor	F1	E121	W/12	: IPDM E/R (Intelligent power distribution module engine room)
F2	E26	W/24	: To E209	B2	E125	B/34	: ABS actuator and electric unit (Control unit)
F2	E27	BR/2	: Fusible link box (Battery)	E2	E167	B/3	: Vacuum sensor
F2	E29	Y/4	: To E210				

ENGINE ROOM HARNESS (PASSENGER VIEW)



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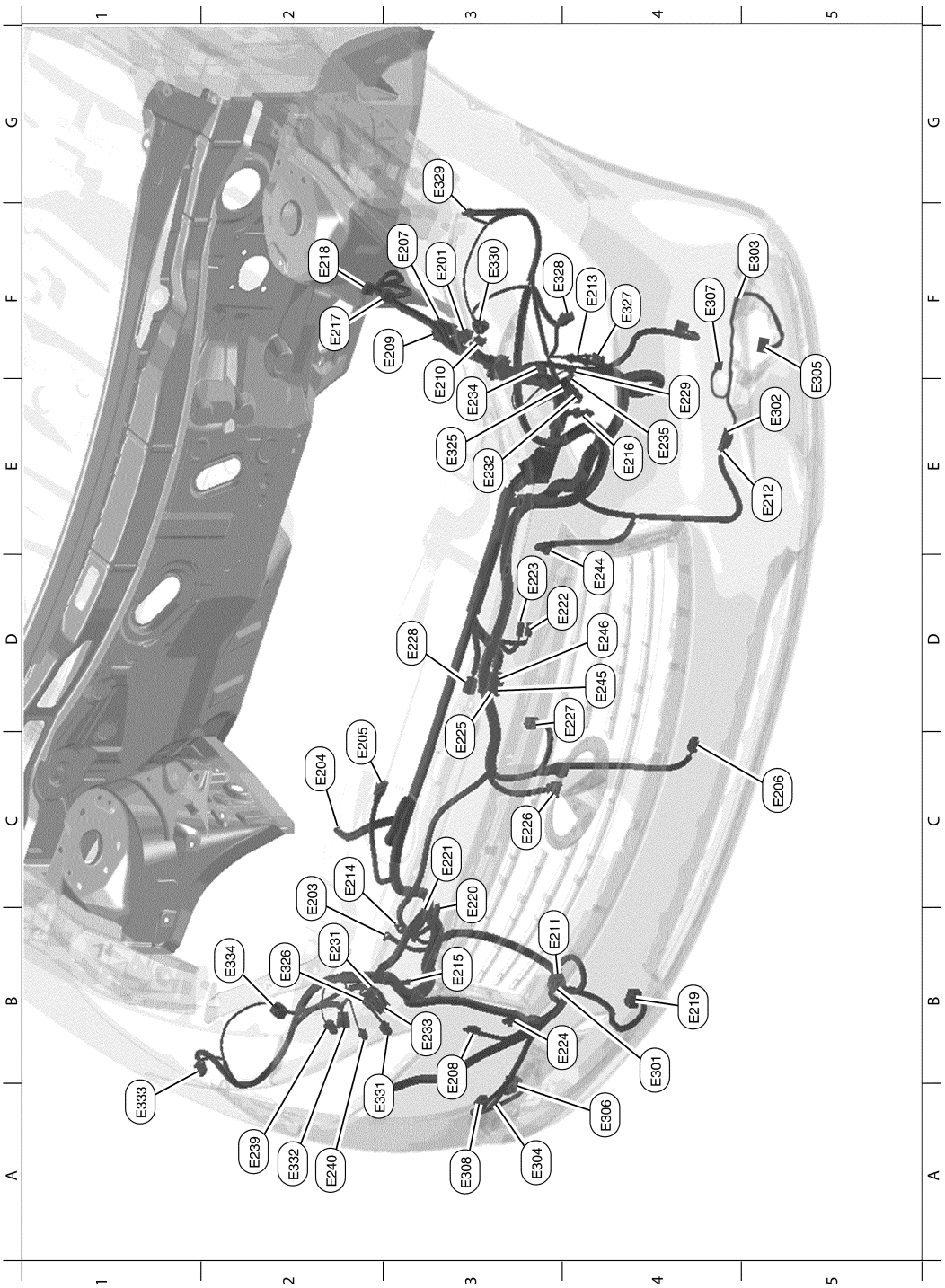
B4	E13	W/1	: Fuse block (J/B)	D4	E52	B/1	: Parking brake switch
B4	E17	W/1	: Fuse block (J/B)	D2	E56	BR/2	: VDC resistor
C5	E28	W/10	: Fuse block (J/B)	D5	E72	BR/2	: ICC brake switch
F5	E31	B/6	: Accelerator pedal position sensor (Without intelligent cruise control)	G5	E73	B/6	: Accelerator pedal position sensor (With intelligent cruise control)
B3	E33	W/12	: To B43	G4	E74	GR/6	: Accelerator pedal actuator

C2	E34	W/24	: To B40	E5	E76	BR/2	: Brake pedal position switch
B3	E35	GR/1	: To B48	E4	E106	W/4	: Joint connector-E06
A4	E36	W/3	: To M75	F4	E108	W/4	: Joint connector-E07
E4	E38	W/4	: Stop lamp switch	C2	E126	—	: Body ground
C1	E44	W/33	: Joint connector-E01	C4	E152	SMJ	: To M31
E3	E51	B/4	: Brake pedal stroke sensor				

FRONT END MODULE HARNESS



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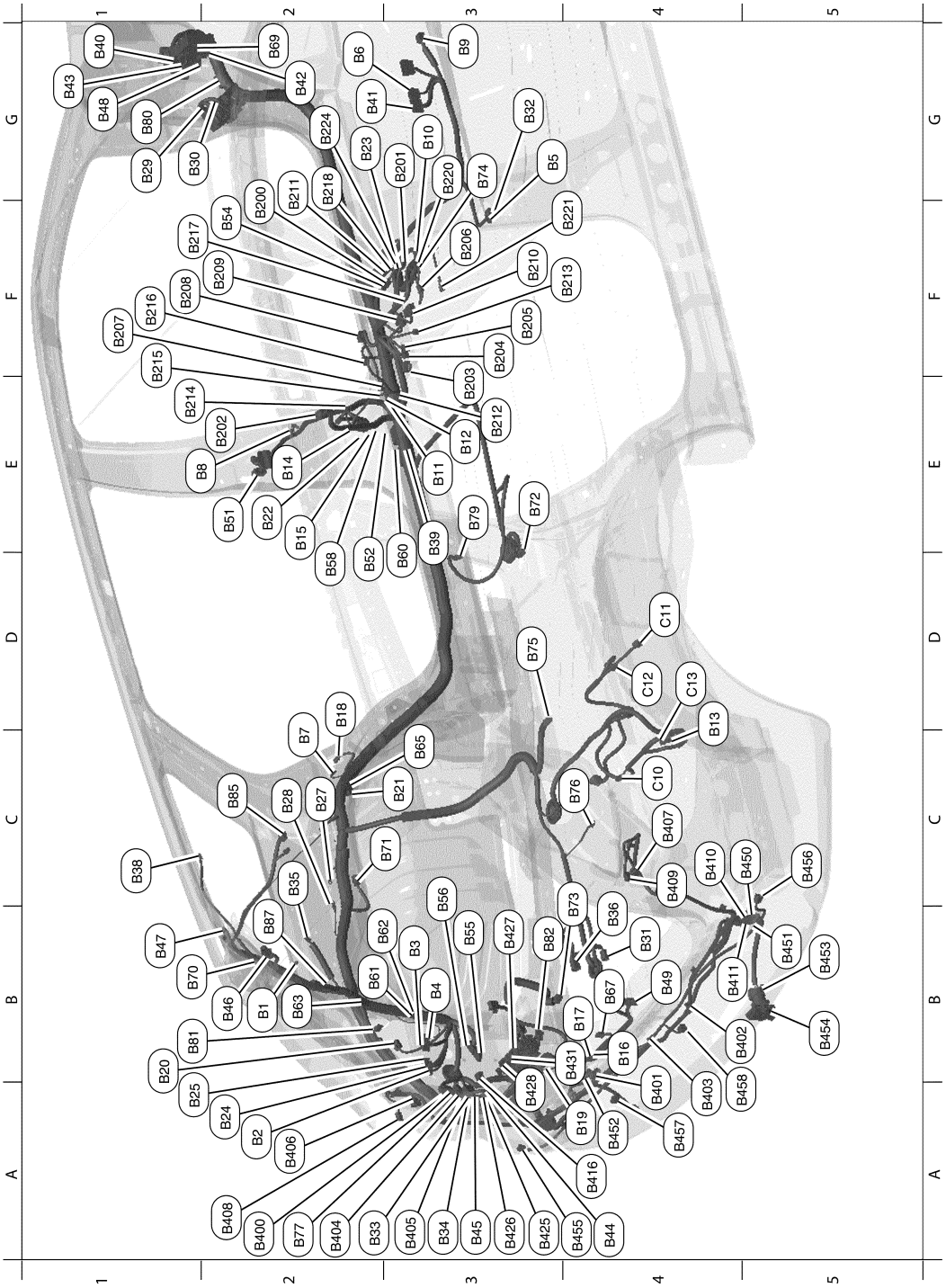
F3	E201	B/2	: To E40	E3	E232	B/8	: To E325
C2	E203	—	: Body ground	B3	E233	GR/8	: To E326
C2	E204	—	: Generator	E3	E234	GR/2	: Front combination lamp LH
C2	E205	BR/3	: Hood switch	E4	E235	GR/2	: Front combination lamp LH
C5	E206	B/2	: Ambient sensor	A2	E239	GR/2	: Front combination lamp RH
F3	E207	W/16	: To E5	A2	E240	GR/2	: Front combination lamp RH
B3	E208	B/2	: Washer fluid level switch	D4	E244	B/3	: Refrigerant pressure sensor
F3	E209	W/24	: To E26	D4	E245	BR/2	: Cooling fan control module (cooling fan motor-1)
E3	E210	Y/4	: To E29	D4	E246	GR/2	: Cooling fan control module (cooling fan motor-2)
B3	E211	GR/8	: To E301	Front fog lamp sub harness			
E5	E212	GR/8	: To E302	B4	E301	GR/8	: To E211
F4	E213	—	: Body ground	E5	E302	GR/8	: To E212
C2	E214	—	: Body ground	F5	E303	GR/2	: Front fog lamp LH
B3	E215	—	: Body ground	A3	E304	GR/2	: Front fog lamp RH
E4	E216	—	: Body ground	F5	E305	B/2	: Front fog lamp LH
F2	E217	W/8	: IPDM E/R (intelligent power distribution module engine room)	A4	E306	B/2	: Front fog lamp RH
F2	E218	W/16	: IPDM E/R (intelligent power distribution module engine room)	F4	E307	B/3	: Front sonar sensor LH outer
B4	E219	B/8	: ICC sensor	A3	E308	B/3	: Front sonar sensor RH outer
C3	E220	B/1	: Horn (high)	Front combination lamp sub harness			
C3	E221	B/1	: Horn (high)	E3	E325	B/8	: To E232
D4	E222	B/1	: Horn (low)	B2	E326	GR/8	: To E233
D3	E223	B/1	: Horn (low)	F4	E327	B/2	: Front combination lamp LH
B4	E224	B/2	: Front and rear washer motor	F3	E328	GR/2	: Front combination lamp LH
C3	E225	GR/3	: Cooling fan control module	G3	E329	GR/2	: Front combination lamp LH
C3	E226	B/6	: Front camera	F3	E330	GR/3	: Front combination lamp LH (headlamp aiming motor)
D4	E227	B/3	: Exhaust gas/outside odor detecting sensor	A2	E331	B/2	: Front combination lamp RH
D3	E228	Y/2	: Crash zone sensor	A2	E332	GR/2	: Front combination lamp RH
E4	E229	—	: Body ground	A1	E333	GR/2	: Front combination lamp RH
B2	E231	B/1	: Anti theft horn	B2	E334	GR/3	: Front combination lamp RH (headlamp aiming motor)

ABMIA4832ZZ

B5	F3	B/2	: A/C compressor	F3	F39	—	: Fusible link box (Battery)
C5	F5	GR/4	: Air fuel ratio (A/F) sensor 1 (Bank 2)	C3	F41	GR/2	: Fuel injector No. 3
C5	F6	—	: Generator	D3	F42	GR/2	: Fuel injector No. 5
C4	F7	B/3	: Generator	F4	F43	GR/22	: CVT unit
C4	F8	GR/3	: Ignition coil No. 2 (With power transistor)	D2	F44	B/3	: Camshaft position sensor (PHASE) (Bank 1)

C4	F9	GR/3	: Ignition coil No. 4 (With power transistor)	D4	F45	B/3	: Camshaft position sensor (PHASE) (Bank 2)
D4	F10	GR/3	: Ignition coil No. 6 (With power transistor)	C2	F47	GR/3	: Ignition coil No. 1 (With power transistor)
D4	F11	B/3	: Crankshaft position sensor (POS)	C2	F48	GR/3	: Ignition coil No. 3 (With power transistor)
E4	F12	B/4	: Heated oxygen sensor 2 (Bank 2)	D2	F49	GR/3	: Ignition coil No. 5 (With power transistor)
B2	F13	B/4	: Heated oxygen sensor 2 (Bank 1)	E2	F50	B/6	: Electric throttle control actuator
E5	F14	B/10	: Joint connector-F01	E5	F51	B/48	: ECM
D4	F16	GR/2	: Evap canister purge volume control solenoid valve	F4	F52	BR/48	: ECM
F3	F17	B/1	: IPDM E/R (Intelligent power distribution module engine room)	E5	F53	B/10	: Joint connector-F03
C3	F18	GR/2	: Fuel injector No. 2	B3	F54	B/3	: Engine oil pressure sensor
G3	F19	W/10	: IPDM E/R (Intelligent power distribution module engine room)	F5	F55	B/10	: Joint connector-F04
C3	F20	GR/2	: Fuel injector No. 4	G4	F56	W/4	: Joint connector-F07
D3	F21	W/2	: Condenser-1	G4	F57	W/4	: Joint connector-F08
D3	F22	GR/2	: Fuel injector No. 6	C2	F58	GR/6	: Joint connector-F09
G2	F24	W/12	: IPDM E/R (Intelligent power distribution module engine room)	B4	F59	—	: Ground
E5	F25	B/48	: TCM (Transmission control module)	B3	F60	—	: Ground
D3	F26	B/4	: To F201	E3	F61	GR/2	: Engine coolant temperature sensor
F4	F27	—	: Starter motor	B2	F62	GR/2	: Intake valve timing control solenoid valve (Bank 1)
E4	F28	GR/1	: Starter motor	B3	F63	GR/2	: Intake valve timing control solenoid valve (Bank 2)
E5	F29	B/10	: Transmission range switch	B3	F64	BR/2	: Electronic controlled engine mount control solenoid valve
B3	F30	GR/2	: Fuel injector No. 1	D2	F65	BR/4	: Air fuel ratio (A/F) sensor 1 (Bank 1)
E3	F31	B/5	: Mass air flow sensor	C3	F66	B/2	: VIAS control solenoid valve 1
G3	F32	W/16	: To E2	C3	F67	B/2	: VIAS control solenoid valve 2
F4	F33	W/10	: To E19	C2	F68	GR/2	: Engine oil temperature sensor
F5	F34	GR/4	: Battery current sensor	Knock sensor sub harness			
F4	F35	B/3	: Primary speed sensor	D3	F201	L/4	: To F26
F4	F36	B/3	: Output speen sensor	D3	F202	GR/2	: Knock sensor (Bank 1)
E5	F37	B/3	: Input speed sensor	C3	F204	GR/2	: Knock sensor (Bank 2)
F5	F38	B/10	: Joint connector-f02				



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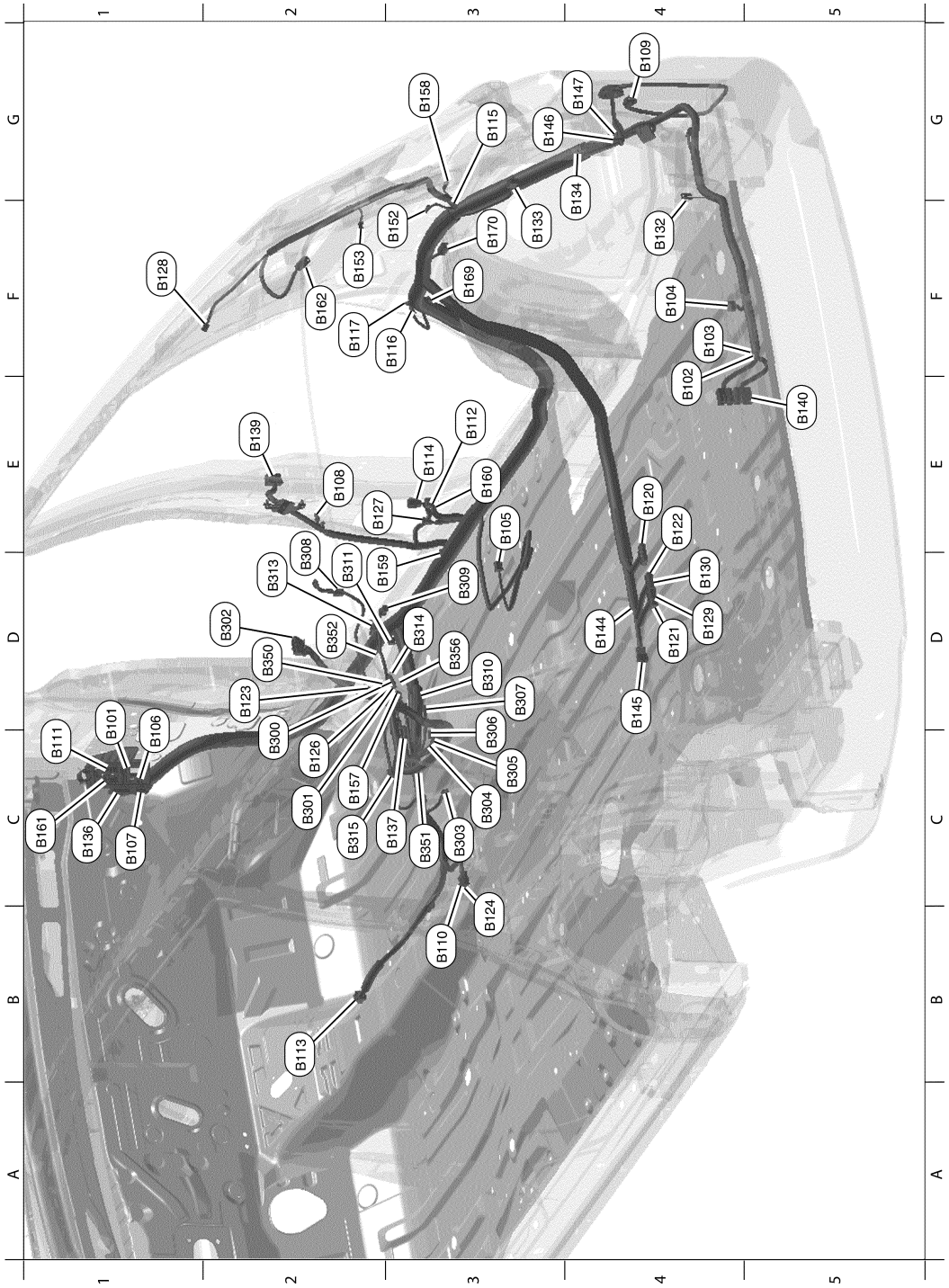
B2	B1	BR/2	: Rear side speaker LH	C4	B76	GR/2	: Inside key antenna (Luggage room)
A2	B2	W/16	: Satellite radio tuner	A2	B77	W/32	: To B400
B3	B3	W/32	: Bluetooth® control unit	E3	B79	W/3	: 2nd row seat heater LH
B3	B4	W/8	: Bluetooth® control unit	G1	B80	W/4	: Joint connector-B17
G3	B5	W/16	: Front seat LH (Pre-wiring)	B1	B81	GR/3	: Rear cargo power socket

G2	B6	W/24	: To M66	B3	B82	B/8	: Inverter unit
C2	B7	—	: Body ground	C2	B85	W/10	: Sunshade motor assembly
E1	B8	W/4	: Front door switch LH	B2	B87	W/4	: Joint connector-B16
G3	B9	Y/15	: Air bag diagnosis sensor unit	Front seat LH harness			
G3	B10	Y/2	: Front LH side air bag module	G2	B200	BR/12	: To B54
E3	B11	W/4	: Joint connector-B09	G3	B201	W/24	: To B23
E3	B12	W/4	: Joint connector-B10	E2	B202	W/32	: Headrest display unit (Driver seat)
D4	B13	B/14	: To C13	E3	B203	B/16	: Climate controlled seat control unit (Driver seat)
E2	B14	Y/2	: Front LH seat belt pre-tensioner	F3	B204	B/8	: Climate controlled seat control unit (Driver seat)
E2	B15	Y/2	: Front side air bag satellite sensor LH	F3	B205	B/6	: Climate controlled seat control unit (Driver seat)
B4	B16	W/4	: Joint connector-B11	F3	B206	W/4	: Seat cushion thermal electric device (Driver seat)
B4	B17	W/4	: Joint connector-B12	F1	B207	W/6	: Lifting motor LH (Rear)
D2	B18	W/4	: Rear door swtich LH	F1	B208	W/10	: Power seat switch LH
A4	B19	—	: Body ground	F2	B209	W/32	: Driver seat control unit
B1	B20	W/4	: Fuel lid door lock actuator	F3	B210	W/12	: Driver seat control unit
C3	B21	W/4	: Joint connector-B20	G2	B211	GR/5	: Sliding motor LH
E2	B22	O/2	: Front LH seat belt pre-tensioner	E3	B212	W/4	: Seat back thermal electric device (Driver seat)
G2	B23	W/24	: To B201	F4	B213	W/5	: Climate controlled seat blower motor (Driver seat)
A2	B24	W/32	: Video distributor	E1	B214	BR/4	: Lumbar support switch
A1	B25	W/24	: Video distributor	F1	B215	B/2	: Lumbar support motor
C2	B27	—	: Body ground	F1	B216	W/3	: Front seat heater (Driver seat)
C2	B28	—	: Body ground	F1	B217	W/6	: Reclining motor LH
G1	B29	W/6	: Fuse block (J/B)	G2	B218	W/6	: Lifting motor LH (Front)
G1	B30	W/8	: Fuse block (J/B)	G3	B220	W/12	: To B74
B4	B31	B/2	: Evap canister vent control valve	F4	B221	W/4	: Seat belt buckle switch (Driver seat)
G3	B32	W/32	: To B124	G2	B224	P/20	: Joint connector-B22
A2	B33	B/2	: To B404	Body no.3 harness			
A3	B34	W/8	: To B405	A2	B400	W/32	: To B77
C2	B35	W/4	: Sonar buzzer	A4	B401	B/12	: To B452
B4	B36	GR/3	: Evap control system pressure sensor	B4	B402	BR/2	: Back door warning chime
C1	B38	Y/2	: LH side curtain air bag module	A4	B403	GR/2	: Outside key antenna (Rear bumper)
E3	B39	W/4	: Joint connector-B05	A2	B404	B/2	: To B33
G1	B40	W/24	: To E34	A3	B405	W/8	: To B34
G2	B41	W/32	: To M69	A2	B406	GR/3	: Rear combination lamp LH
G2	B42	BR/12	: To M74	C4	B407	GR/3	: Rear combination lamp RH
G1	B43	W/12	: To E33	A2	B408	GR/2	: Rear combination lamp LH
A4	B44	B/2	: To B425	C4	B409	GR/2	: Rear combination lamp RH
A3	B45	W/16	: To B426	C4	B410	GR/6	: To B450
B2	B46	W/24	: To D501	B4	B411	B/2	: To B451
B1	B47	W/8	: To D502	A4	B416	B/6	: Side radar LH
G1	B48	W/1	: To E35	Trailer relay sub harness			

B4	B49	W/16	: To B140	A3	B425	B/2	: To B44
E2	B51	W/12	: To D201	A3	B426	W/16	: To B45
D2	B52	W/2	: Condenser-2	B3	B427	L/4	: Trailer tow relay 1
F2	B54	BR/12	: To B200	A3	B428	BR/6	: Trailer tow relay 2
B3	B55	B/24	: Automatic back door control module	B4	B431	L/4	: Trailer back-up relay
C3	B56	GR/14	: Automatic back door control module	Body no.3 sub harness			
D2	B58	W/20	: Pre-crash seat belt control unit (Driver side)	C5	B450	GR/6	: To B410
D3	B60	W/4	: Joint connector-B06	B5	B451	B/2	: To B411
B2	B61	W/4	: Joint connector-B18	A4	B452	B/12	: To B401
B2	B62	W/4	: Joint connector-B19	B5	B453	B/7	: Trailer
B2	B63	W/33	: Joint connector-B01	B5	B454	B/7	: Trailer receptacle
C3	B65	W/4	: Joint connector-B07	A4	B455	B/3	: Rear sonar sensor LH outer
B4	B67	W/16	: Awd control unit	C5	B456	B/3	: Rear sonar sensor RH outer
G2	B69	W/99	: To M40	A4	B457	B/3	: Rear sonar sensor LH inner
B1	B70	B/10	: Spindle unit LH	A5	B458	B/3	: Rear sonar sensor RH inner
C3	B71	Y/2	: Rear side air bag satellite sensor LH	Chassis harness			
E3	B72	GR/6	: Fuel level sensor and fuel pump	C4	C10	B/2	: Rear wheel sensor LH
C4	B73	GR/6	: Subwoofer	D4	C11	GR/2	: Rear wheel sensor RH
G3	B74	W/12	: To B220	D4	C12	GR/2	: AWD solenoid
D3	B75	W/16	: To B145	D4	C13	B/14	: To B13



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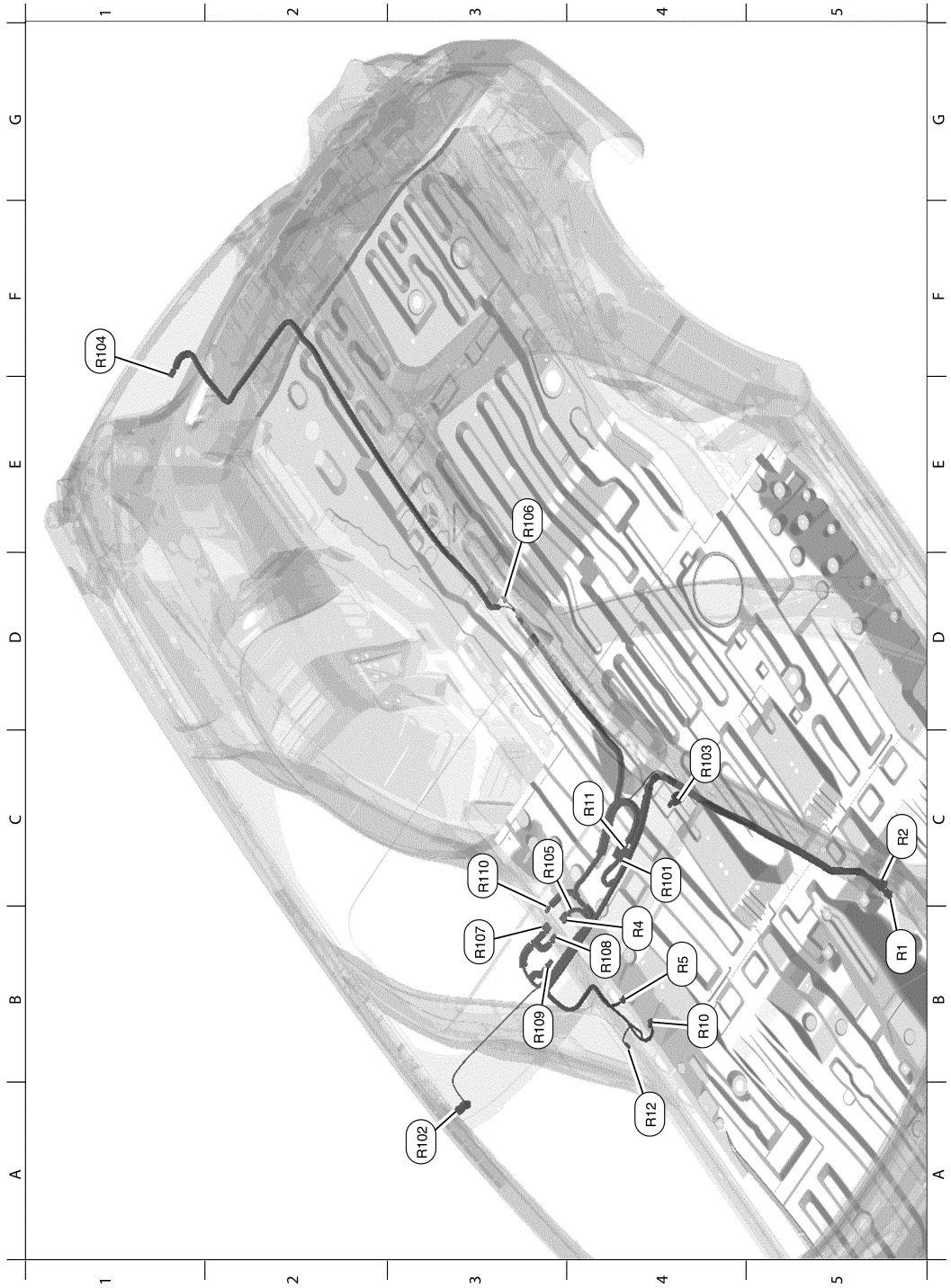
D1	B101	W/32	: To M84	D4	B145	W/16	: To B75
E4	B102	W/4	: Joint connector-B14	G3	B146	W/4	: Joint connector-B12
F4	B103	W/4	: Joint connector-B15	G4	B147	W/4	: Joint connector-B13
F4	B104	W/16	: ADAS control unit	F3	B152	—	: Body ground
E3	B105	W/6	: 2nd row seat heater RH	F2	B153	BR/2	: Rear side speaker RH

D1	B106	GR/1	: To M8	C2	B157	W/12	: To B300
C1	B107	W/24	: To M9	G3	B158	—	: Body ground
E2	B108	W/4	: Front door switch RH	D2	B159	W/4	: Joint connector-B21
G4	B109	B/6	: Side radar RH	E3	B160	W/20	: Pre-crash seat belt control unit (Passenger side)
B3	B110	W/24	: Front seat RH (Pre-wiring)	C1	B161	W/16	: To M157
C1	B111	BR/16	: To M10	F2	B162	B/10	: Spindle unit RH
E3	B112	O/2	: Front RH seat belt pre-tensioner	F3	B169	W/4	: Joint connector-B04
B2	B113	Y/14	: Air bag diagnosis sensor unit	F3	B170	Y/2	: Rear side air bag satellite sensor RH
E3	B114	Y/2	: Front side air bag satellite sensor RH	Front seat RH harness			
G3	B115	W/33	: Joint connector-B08	C2	B300	W/12	: To B157
F3	B116	W/4	: Rear door switch RH	C2	B301	W/24	: To B137
F2	B117	—	: Body ground	D2	B302	—	: Headrest display unit (Passenger seat)
E4	B120	W/40	: BOSE speaker amp. (With surround sound system)	C3	B303	W/4	: Seat belt buckle switch (Passenger seat)
D4	B121	BR/14	: BOSE speaker amp. (With surround sound system)	C3	B304	B/6	: Climate controlled seat control unit (Passenger seat)
E4	B122	BR/23	: BOSE speaker amp. (With surround sound system)	C3	B305	B/8	: Climate controlled seat control unit (Passenger seat)
D2	B123	W/4	: To B350	D3	B306	B/16	: Climate controlled seat control unit (Passenger seat)
B3	B124	W/32	: To B32	D3	B307	W/5	: Climate controlled seat blower moter (Passenger seat)
C2	B126	Y/2	: Front RH side air bag module	E2	B308	W/4	: Seat cushion thermal electric device (Passenger seat)
E2	B127	Y/2	: Front RH seat belt pre-tensioner	D3	B309	W/4	: Seat back thermal electric device (Passenger seat)
F1	B128	Y/2	: RH side curtain air bag module	D3	B310	W/6	: Lifting motor RH (Rear)
D4	B129	BR/14	: BOSE speaker amp. (Without surround sound system)	D2	B311	W/6	: Reclining motor RH
D4	B130	BR/23	: BOSE speaker amp. (Without surround sound system)	D2	B313	W/10	: Power seat switch RH
F4	B132	—	: Body ground	D3	B314	W/5	: Sliding motor RH
F3	B133	W/4	: Rear blower motor resistor 2	C2	B315	W/3	: Front seat heater (Passenger seat)
G4	B134	W/2	: Rear blower motor 2	ODS sub harness			
C1	B136	W/40	: To M36	D2	B350	W/4	: To B123
C3	B137	W/24	: To B301	C3	B351	B/3	: Occupant classification system sensor (FL)
E2	B139	W/12	: To D301	D2	B352	P/3	: Occupant classification system sensor (FR)
E5	B140	W/16	: To B49	D3	B356	P/20	: Occupant classification system control unit
D4	B144	W/4	: Joint connector-B11				



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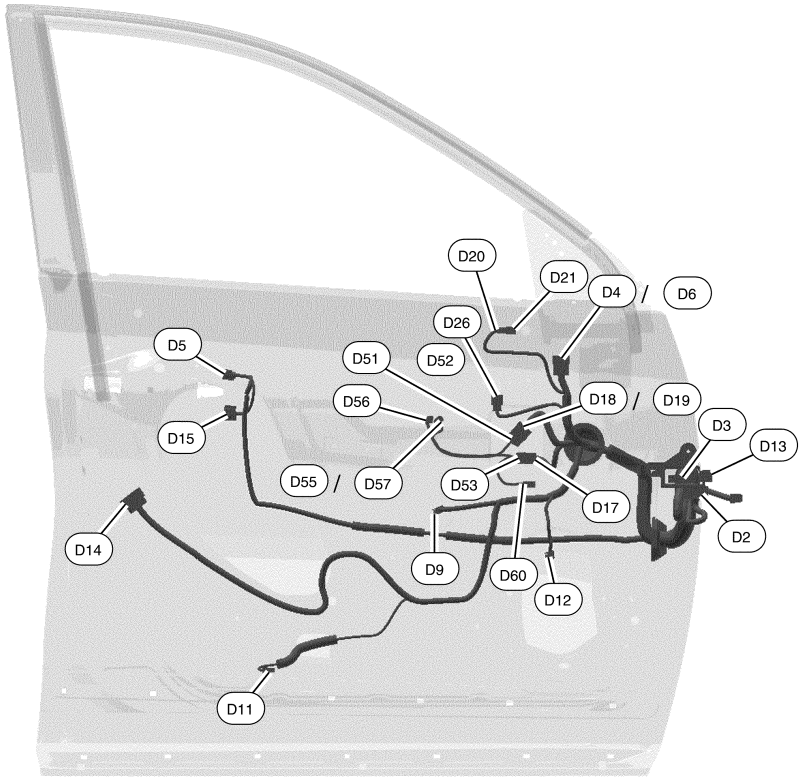
B5	R1	W/24	: To M1	A3	R102	W/2	: Vanity lamp RH
C5	R2	W/6	: To M2	C4	R103	W/2	: Vanity lamp LH
B4	R4	GR/10	: Moonroof motor assembly	F1	R104	W/3	: Cargo lamp
B4	R5	W/8	: Lane camera unit	C3	R105	W/8	: Telematics switch
B4	R10	B/10	: Auto anti-dazzling inside mirror	E3	R106	W/4	: Personal lamps 2nd row

C4	R11	W/24	: To R101	B3	R107	GR/8	: Front room/map lamp assembly
A4	R12	B/3	: Rain sensor	B4	R108	W/8	: Moonroof switch
Room lamp sub harness				B3	R109	W/4	: Microphone
C4	R101	W/24	: To R11	C3	R110	W/4	: Sunshade switch

FRONT DOOR LH HARNESS



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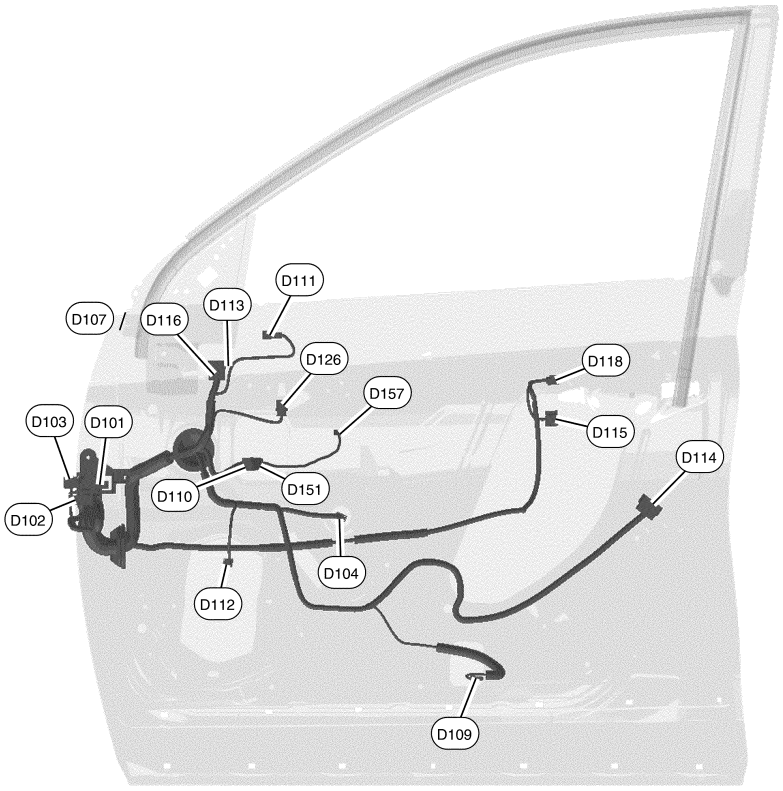
D2	W/16	: To M167	D19	W/24	: To D52
D3	W/40	: To M168	D20	W/24	: Door mirror LH (Side camera)
D4	W/12	: Door mirror LH (Without around view monitor)	D21	W/4	: Blind spot warning/blind spot intervention indicator LH
D5	GR/2	: Outside key antenna (Driver side)	D26	Y/2	: Front door satellite sensor LH
D6	W/24	: Door mirror LH (With around view monitor)	Front door LH sub harness		
D9	W/6	: Front power window motor LH	D51	W/16	: To D18
D11	W/2	: Front step lamp LH	D52	W/24	: To D19
D12	W/2	: Front door speaker LH	D53	W/8	: To D17
D13	Y/4	: To M169	D55	W/12	: Main power window and door lock/unlock switch (Power mirror remote control switch) (Without automatic drive positioner)
D14	GR/6	: Front door lock assembly LH	D56	W/16	: Main power window and door lock/unlock switch
D15	W/6	: Front outside handle assembly LH	D57	W/12	: Main power window and door lock/unlock switch (Power mirror remote control switch) (With automatic drive positioner)
D17	W/8	: To D53	D60	W/16	: Seat memory switch
D18	W/16	: To D51			



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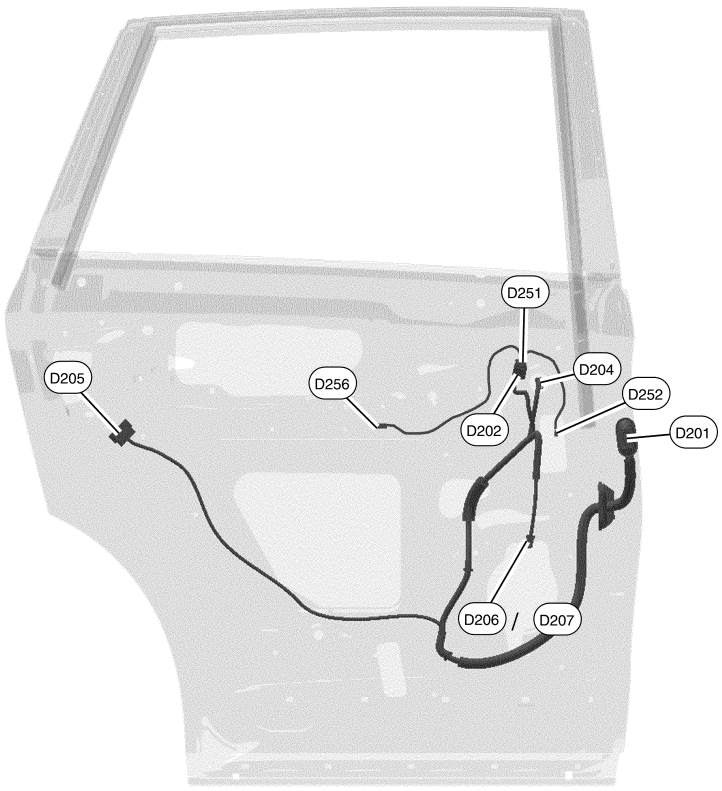
D101	W/32	: To M91	D113	W/24	: Door mirror RH (Side camera)
D102	W/10	: To M158	D114	GR/6	: Front door lock actuator RH
D103	Y/4	: To M159	D115	W/6	: Front outside handle assembly RH
D104	W/6	: Front power window motor RH	D116	W/24	: Door mirror RH (With around view monitor)
D107	W/12	: Door mirror RH (Without around view monitor)	D118	GR/2	: Outside key antenna (Passenger side)
D109	W/2	: Front step lamp RH	D126	Y/2	: Front door satellite sensor RH
D110	W/10	: To D151	Front door RH sub harness		
D111	W/4	: Blind spot warning/blind spot intervention indicator RH	D151	W/10	: To D110
D112	W/2	: Front door speaker RH	D157	W/16	: Power window and door lock/unlock switch RH



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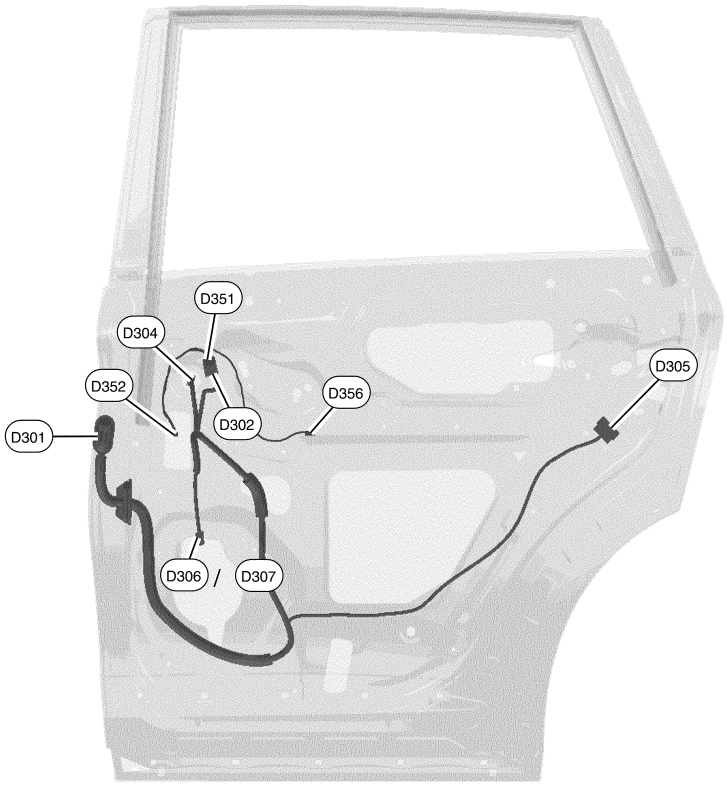
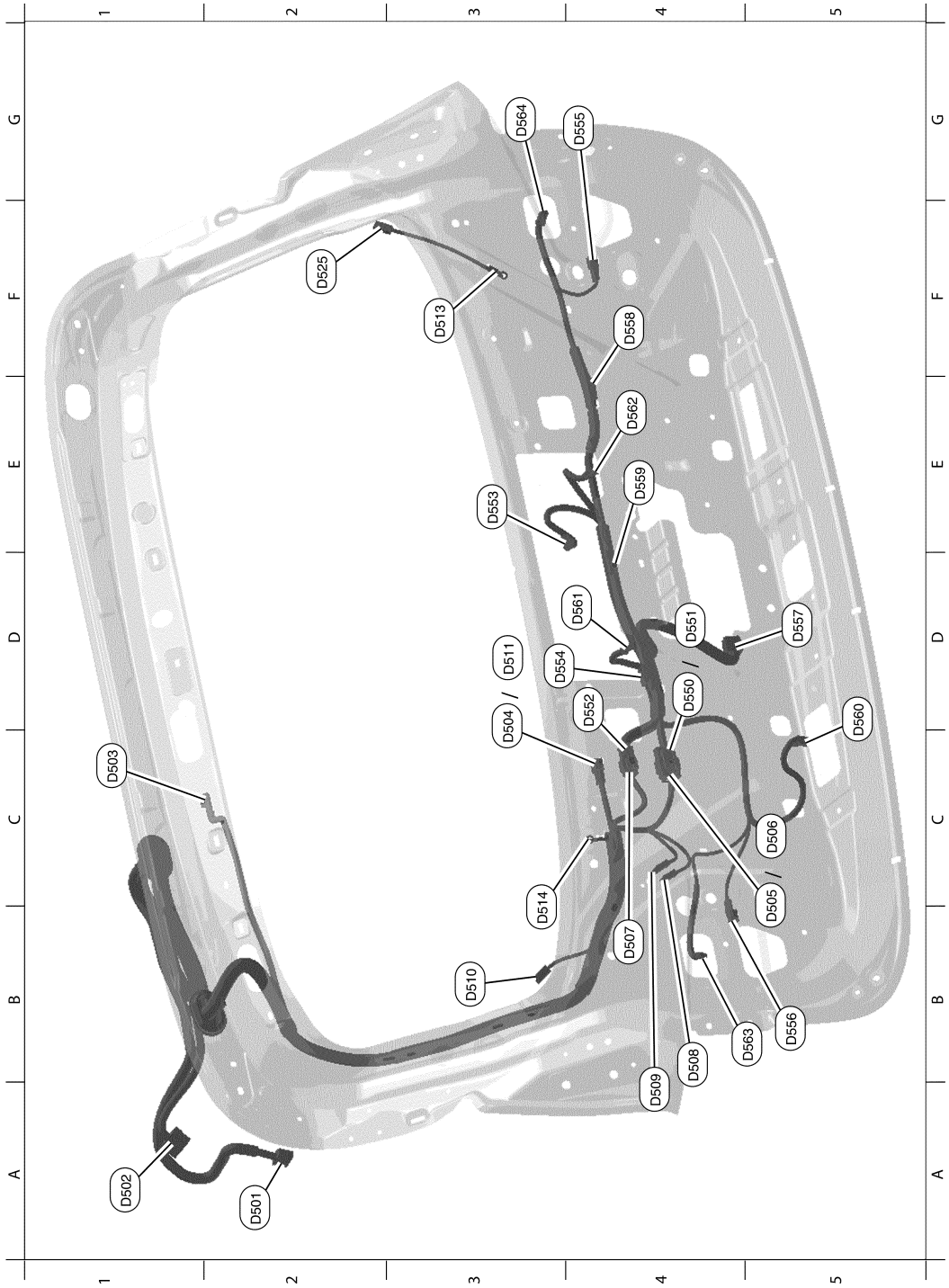
D201	W/12	: To B51	D207	BR/2	: Rear door speaker LH (With BOSE audio system)
D202	W/12	: To D251	Rear door LH sub harness		
D204	W/6	: Rear power window motor LH	D251	W/12	: To D202
D205	GR/6	: Rear door lock actuator LH	D252	BR/2	: Rear door tweeter LH
D206	W/2	: Rear door speaker LH (With base audio system)	D256	W/16	: Rear power window switch LH

REAR DOOR RH HARNESS



AAMIA0134ZZ

D301	W/12	: To B139	D307	BR/2	: Rear door speaker RH (With BOSE audio system)
D302	W/12	: To D351	Rear door RH sub harness		
D304	W/6	: Rear power window motor RH	D351	W/12	: To D302
D305	GR/6	: Rear door lock actuator RH	D352	BR/2	: Rear door tweeter RH
D306	W/2	: Rear door speaker RH (With base audio system)	D356	W/16	: Rear power window switch RH



AAMIA0135ZZ

A2	D501	W/24	: To B46	D4	D550	W/6	: To D505
A1	D502	GR/8	: To B47	D4	D551	W/6	: To D506
C1	D503	BR/2	: High-mounted stop lamp	D4	D552	W/16	: To D507
D3	D504	W/4	: Rear view camera (Without NAVI)	E3	D553	W/3	: Rear wiper motor
C5	D505	W/6	: To D550	D3	D554	W/4	: Joint connector-D01

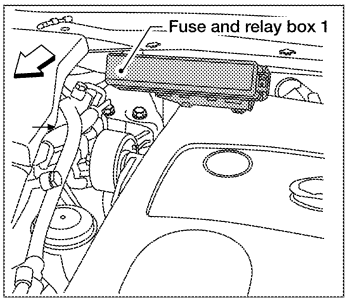
C5	D506	W/6	: To D551	G4	D555	GR/2	: Touch sensor RH
B4	D507	W/16	: To D552	B5	D556	W/2	: Touch sensor LH
B4	D508	B/1	: Rear window defogger condenser	D5	D557	W/8	: Back door lock assembly
A4	D509	B/1	: Rear window defogger condenser	F4	D558	B/2	: Diode-2
B3	D510	B/1	: Rear window defogger	E4	D559	W/4	: Back door opener switch
D3	D511	W/8	: Rear view camera (With NAVI)	D5	D560	B/8	: Automatic back door close switch
F3	D513	—	: Body ground	D4	D561	BR/2	: License plate lamp LH
C3	D514	—	: Body ground	E4	D562	BR/2	: License plate lamp RH
F2	D525	B/1	: Rear window defogger	B5	D563	W/2	: Back-up lamp RH
Back door RH harness				G3	D564	W/2	: Back-up lamp LH

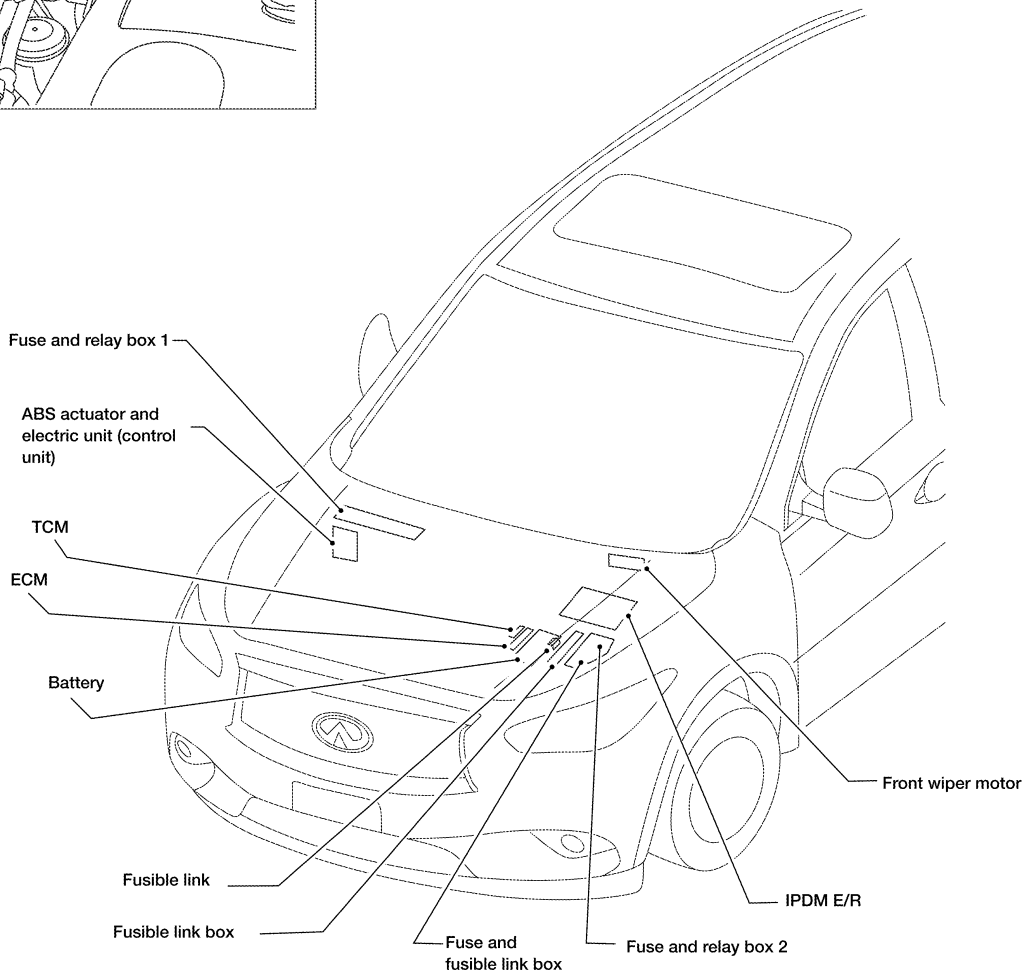
ELECTRICAL UNITS LOCATION

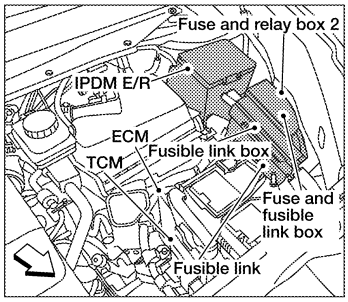
Electrical Units Location

INFOID:0000000009131090

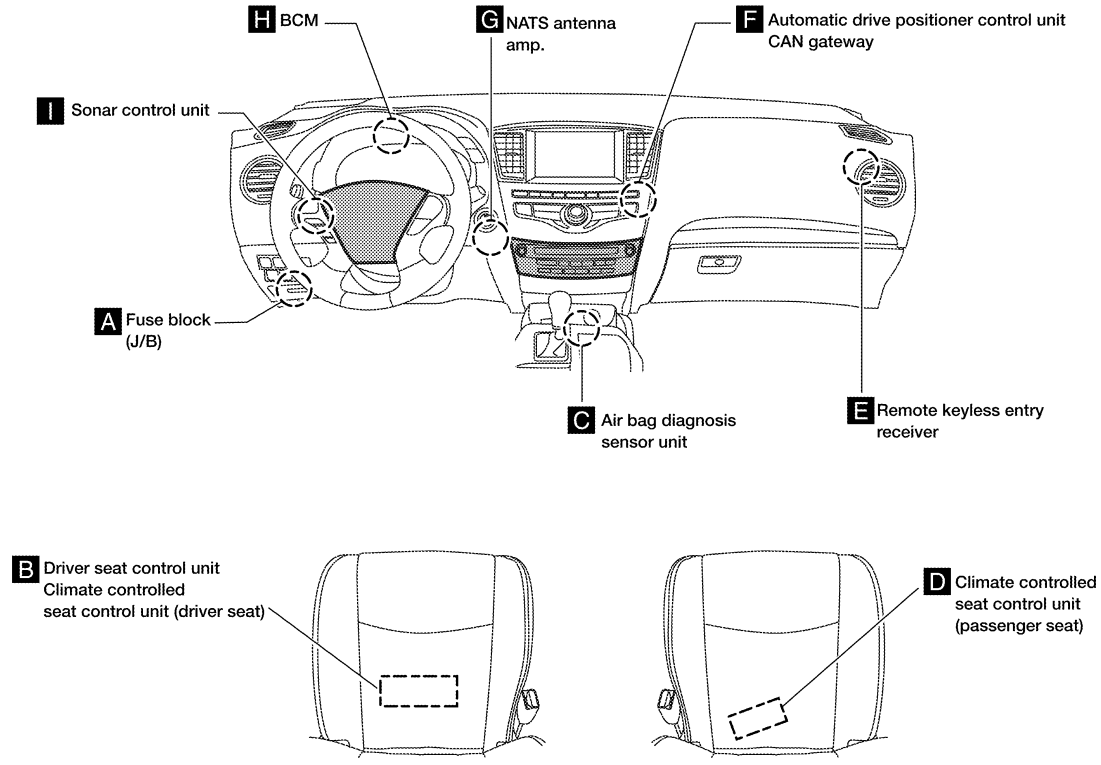
ENGINE COMPARTMENT

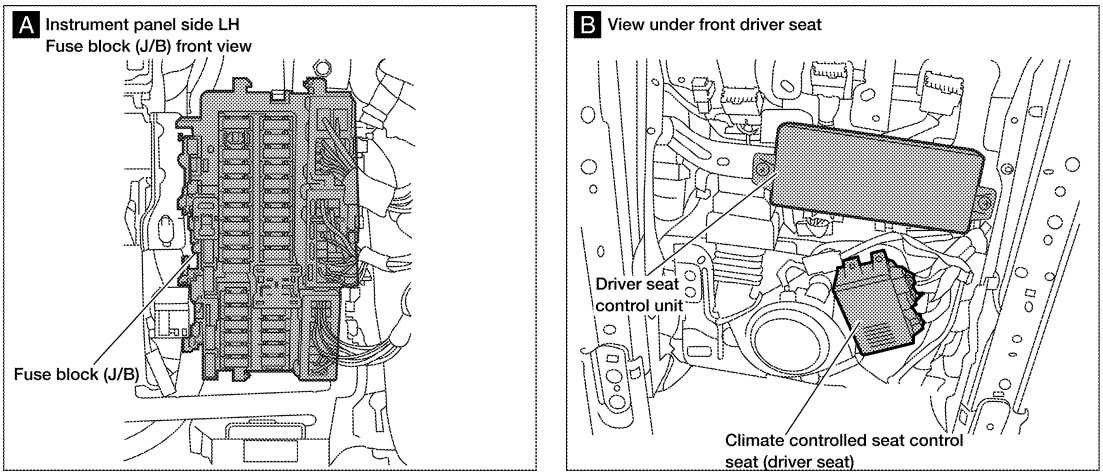






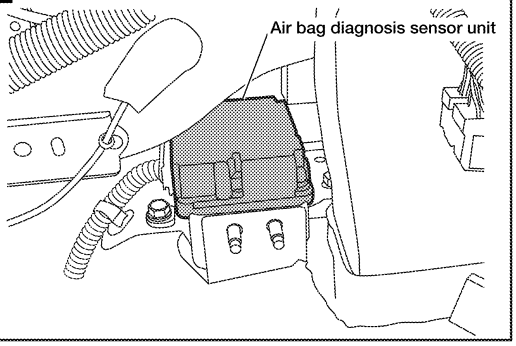
ABMIA4814GB



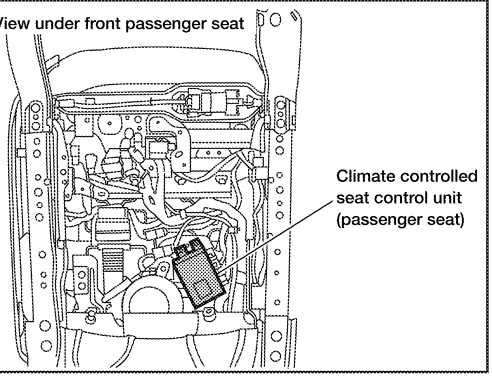


AAMIA1069GB

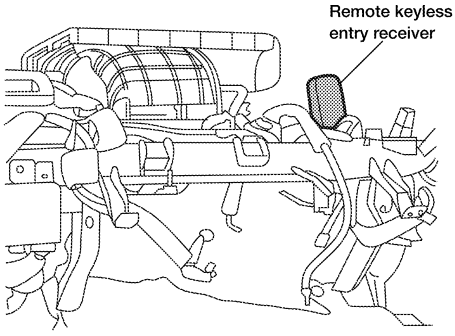
C View behind center console



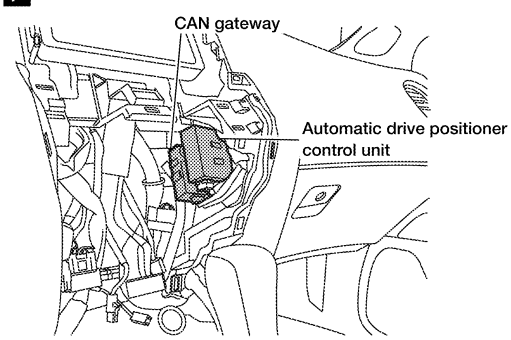
D View under front passenger seat



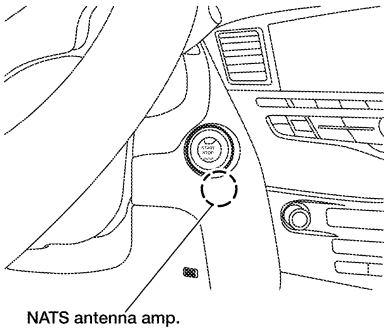
E View with instrument panel removed



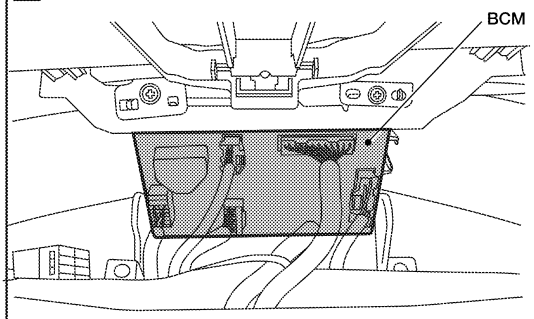
F View with center console removed



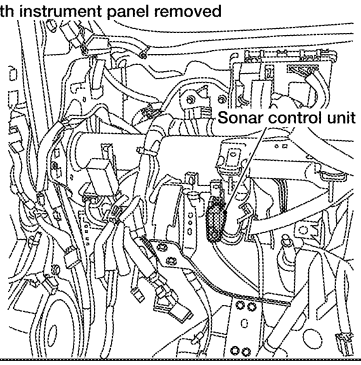
G



H View with instrument panel removed



I View with instrument panel removed



AAMIA1070GB

HARNESS CONNECTOR

Description

INFOID:0000000009131091

HARNESS CONNECTOR (TAB-LOCKING TYPE)

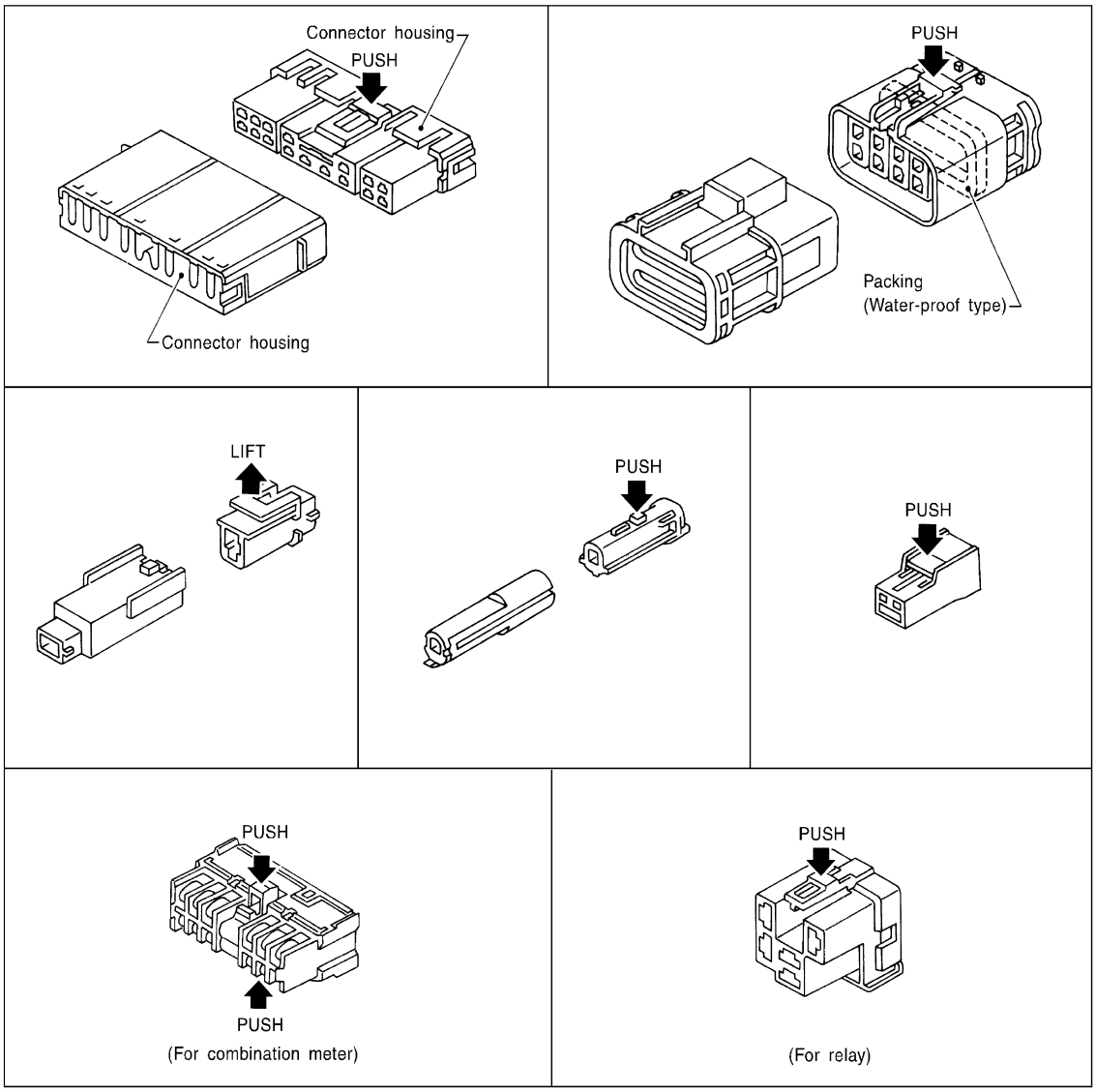
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

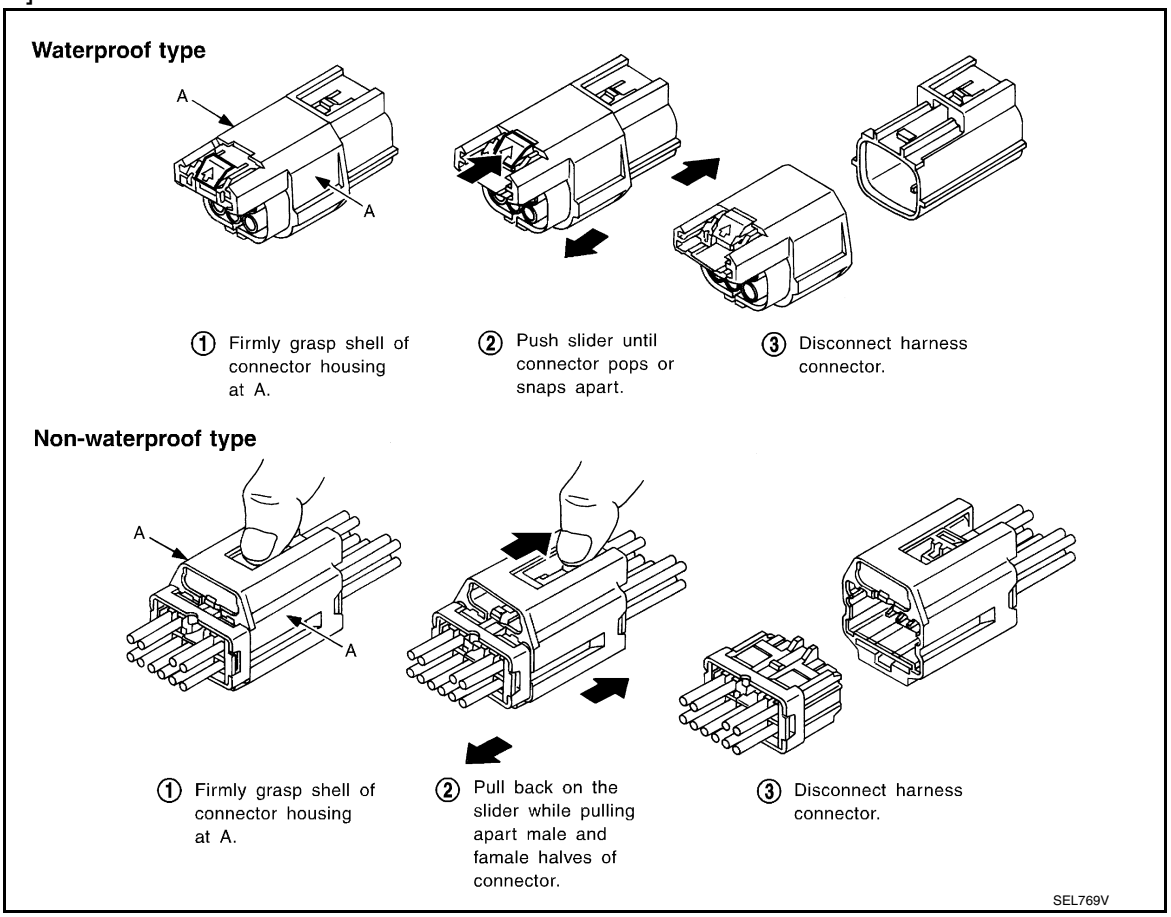
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]

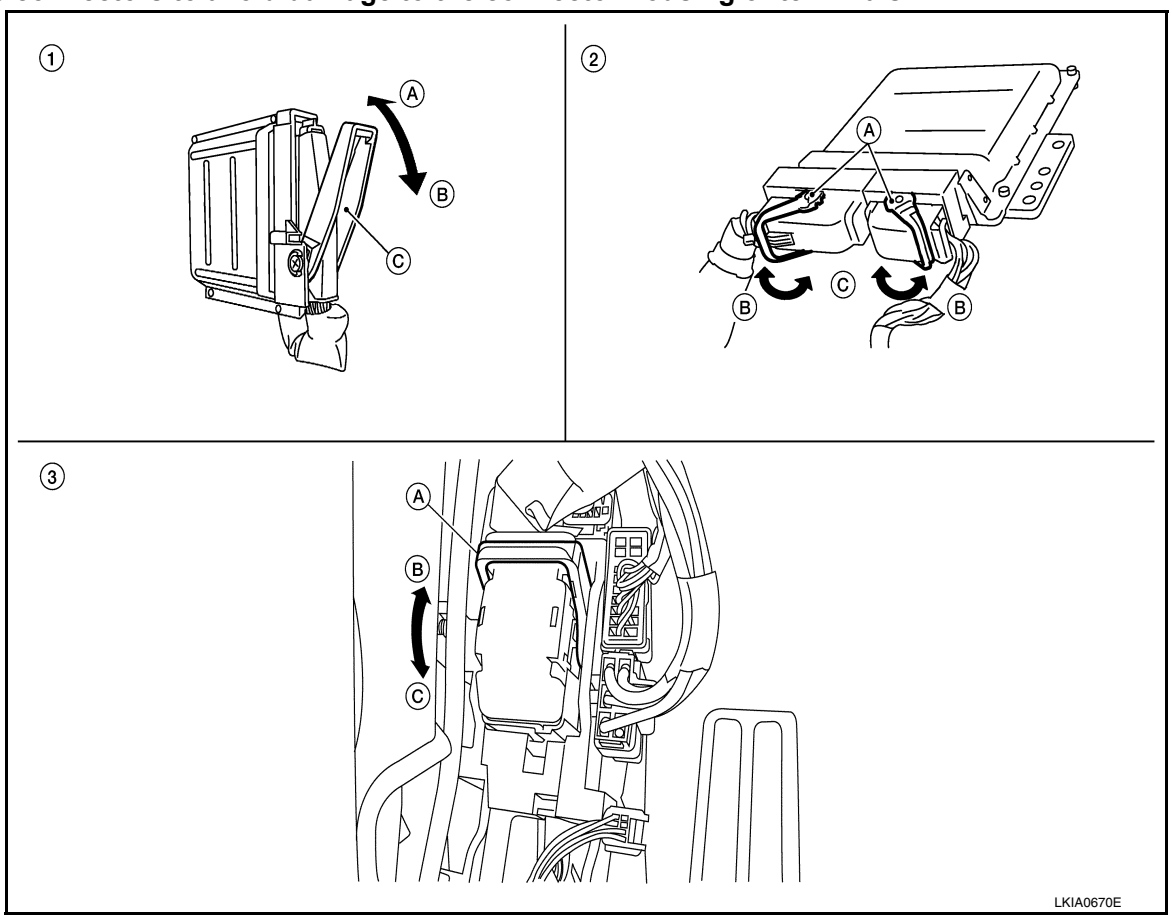


HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

CAUTION:

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



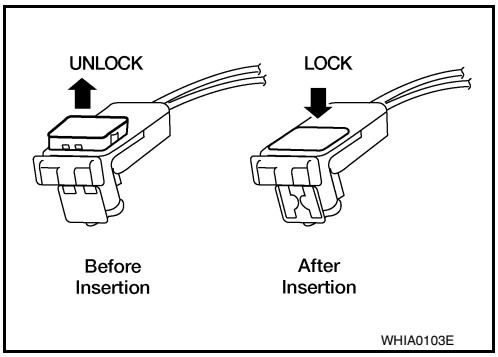
1. Control unit with single lever
   A. Fasten
   B. Loosen
   C. Lever
2. Control unit with dual lever
   A. Lever
   B. Fasten
   C. Loosen
3. SMJ connector
   A. Lever
   B. Fasten
   C. Loosen

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.**



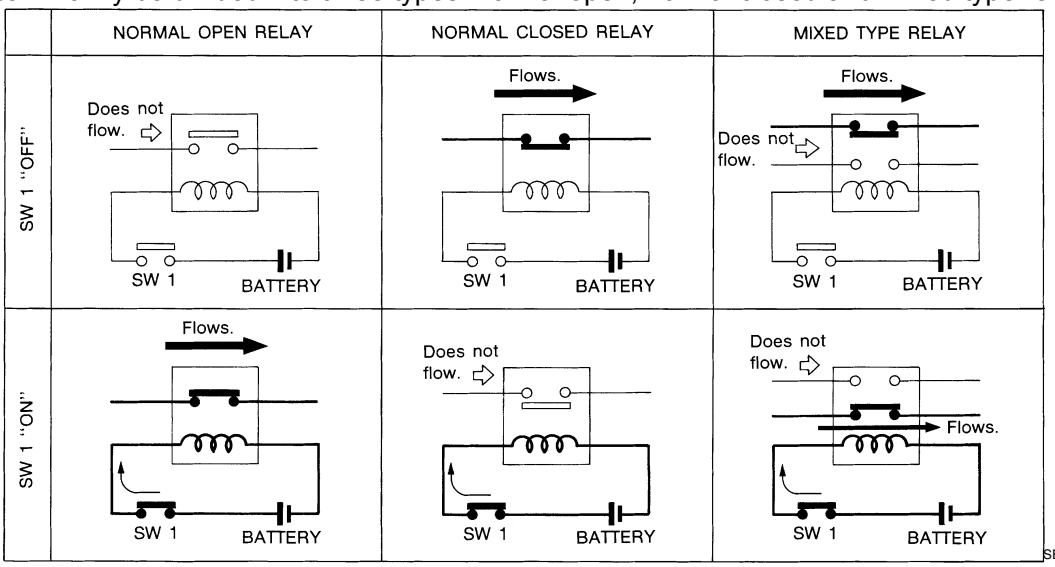
STANDARDIZED RELAY

Description

INFOID:0000000009131092

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

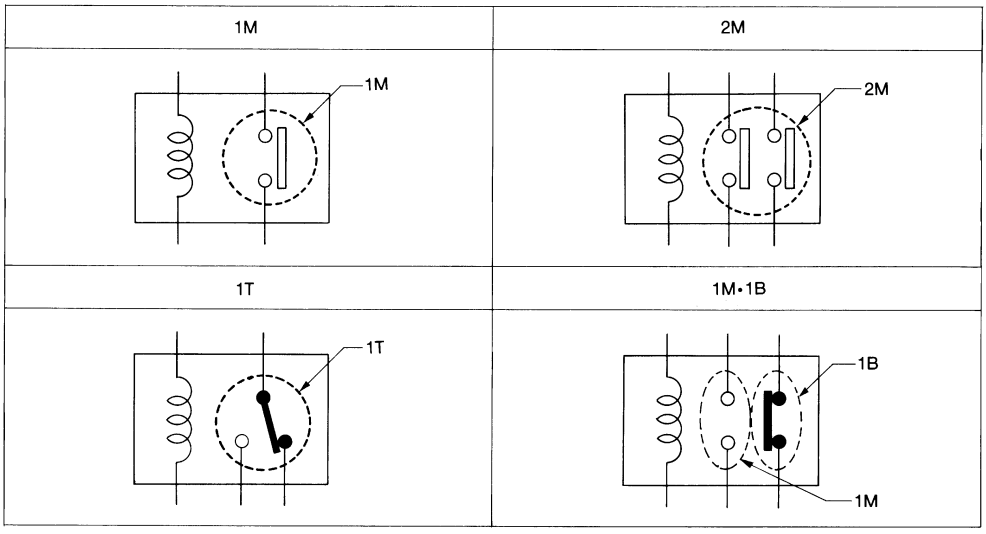
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



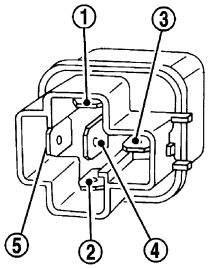
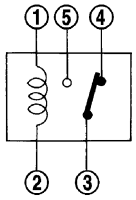
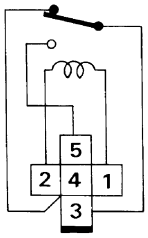
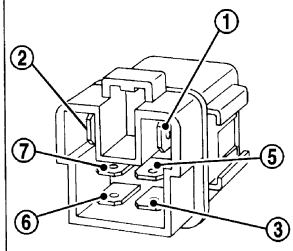
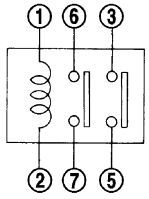
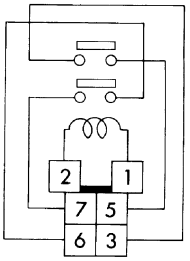
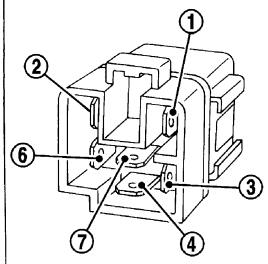
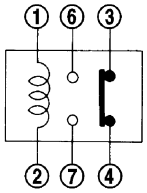
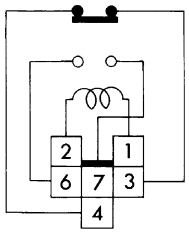
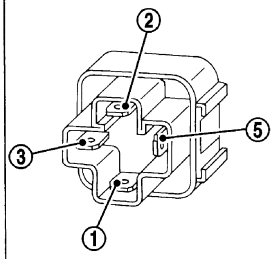
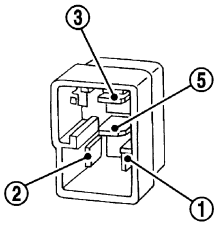
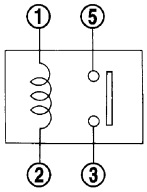
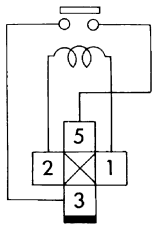
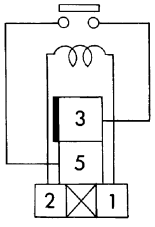
SEL881H

TYPE OF STANDARDIZED RELAYS

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



SEL882H

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

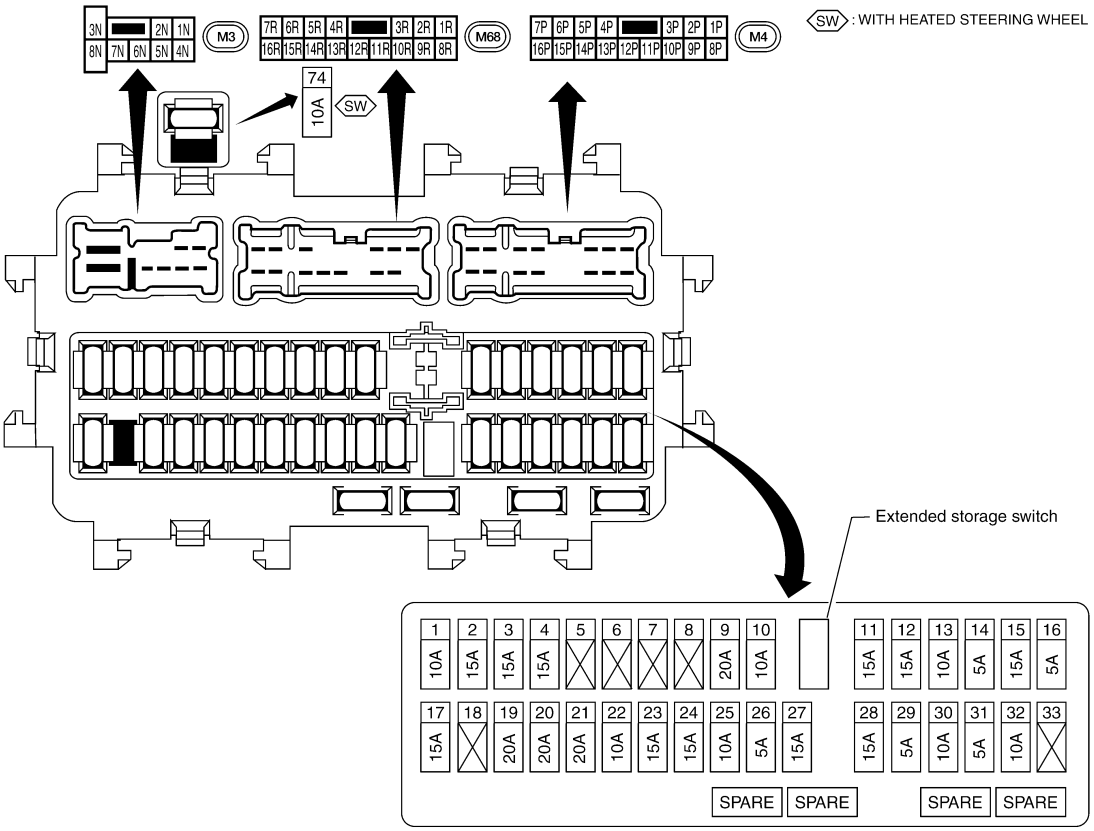
The arrangement of terminal numbers on the actual relays may differ from those shown above.

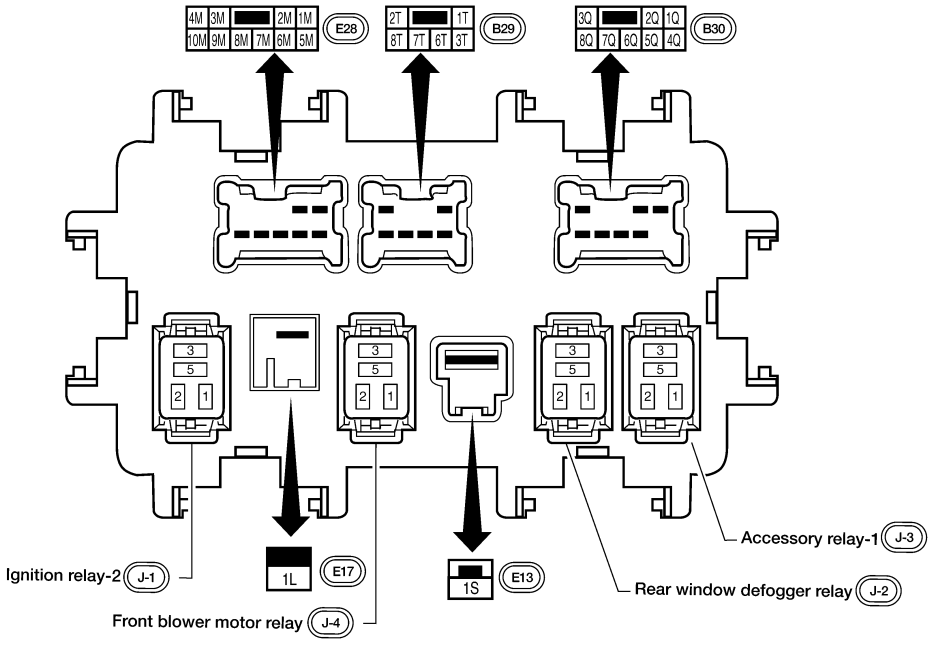
SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000009131093





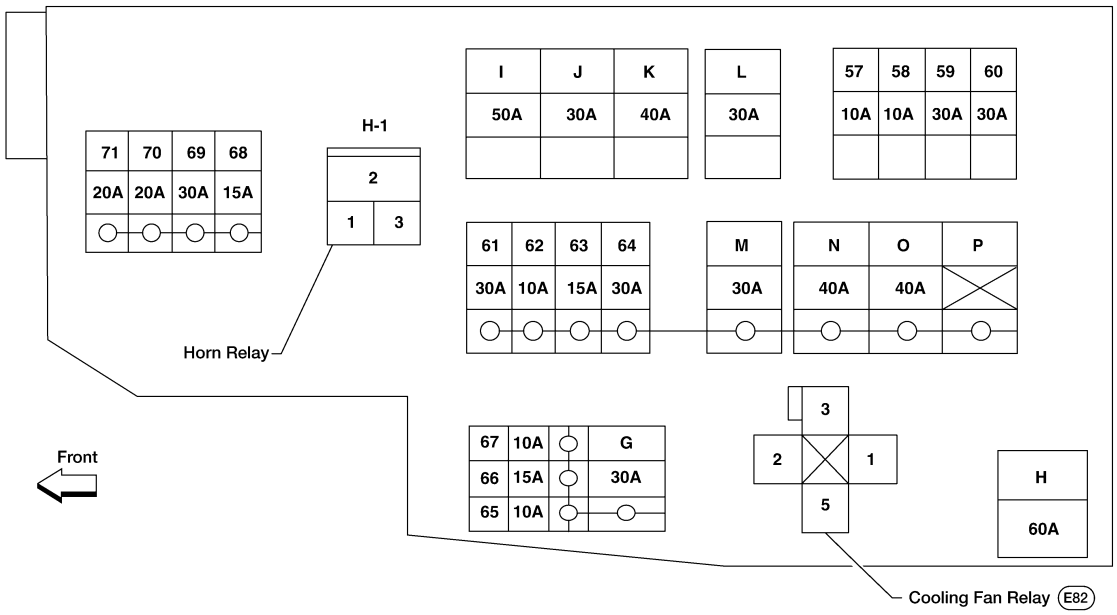
ABMIA4815GB

FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement

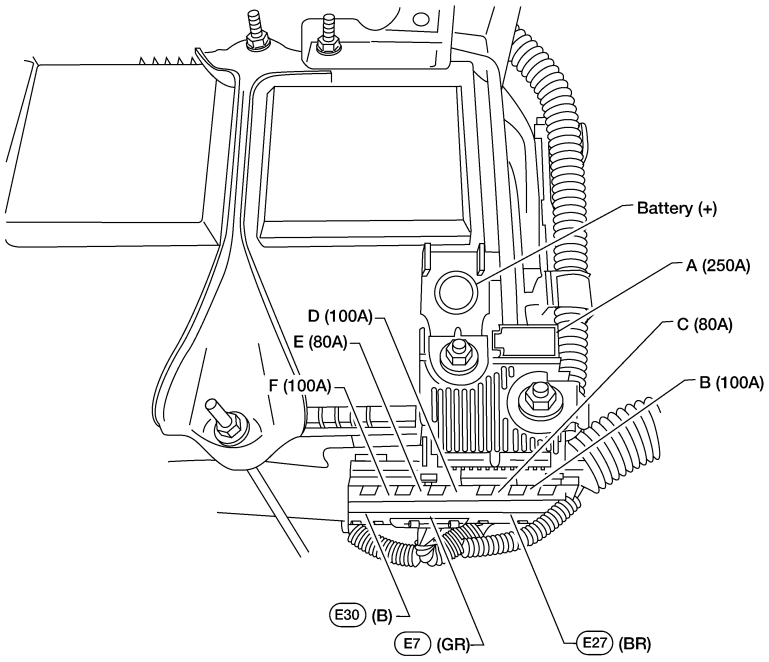
INFOID:0000000009131094

FUSE AND FUSIBLE LINK BOX



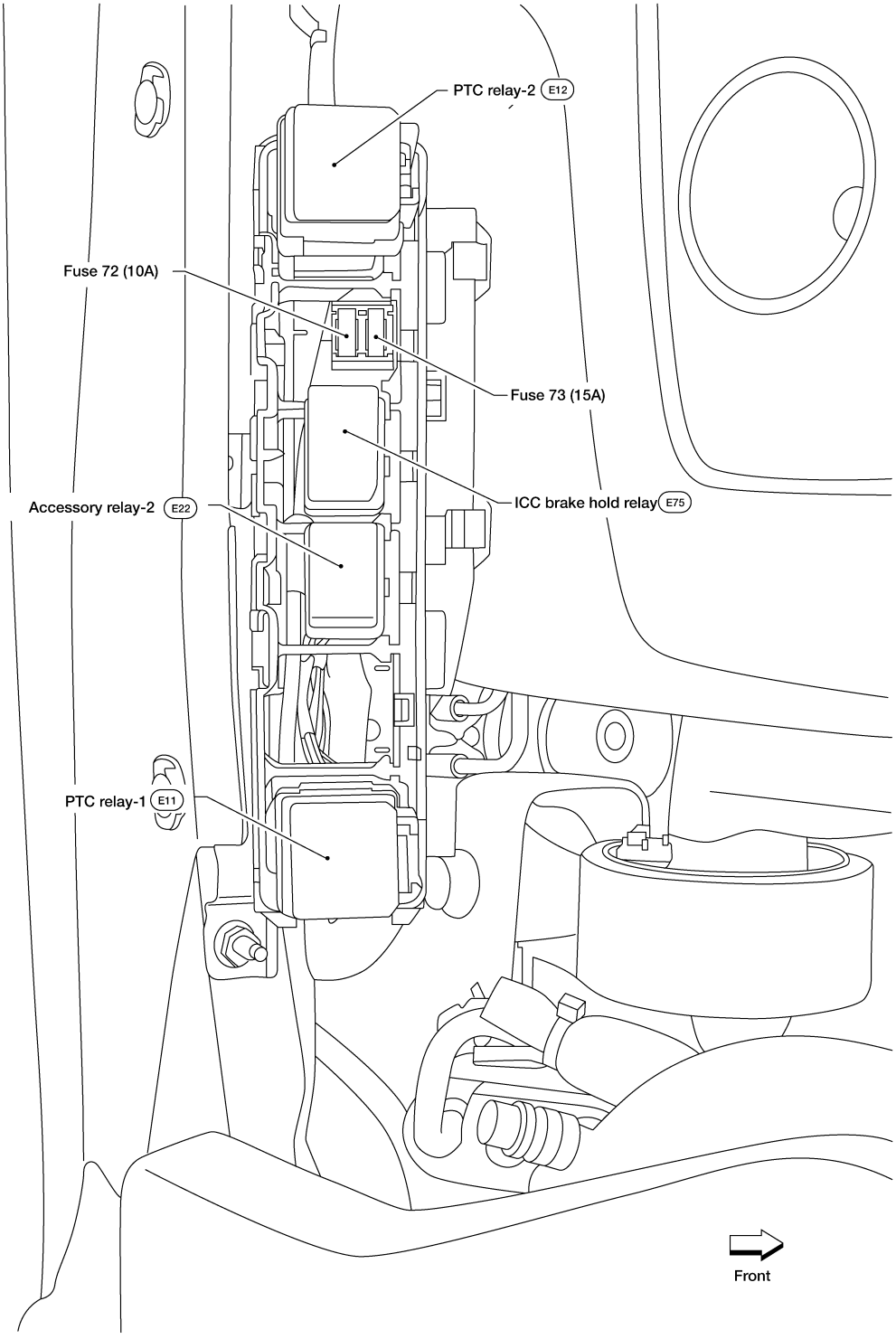
NO. 61 - 71 : FUSE G - P : FUSIBLE LINK

FUSIBLE LINK BOX (BATTERY)

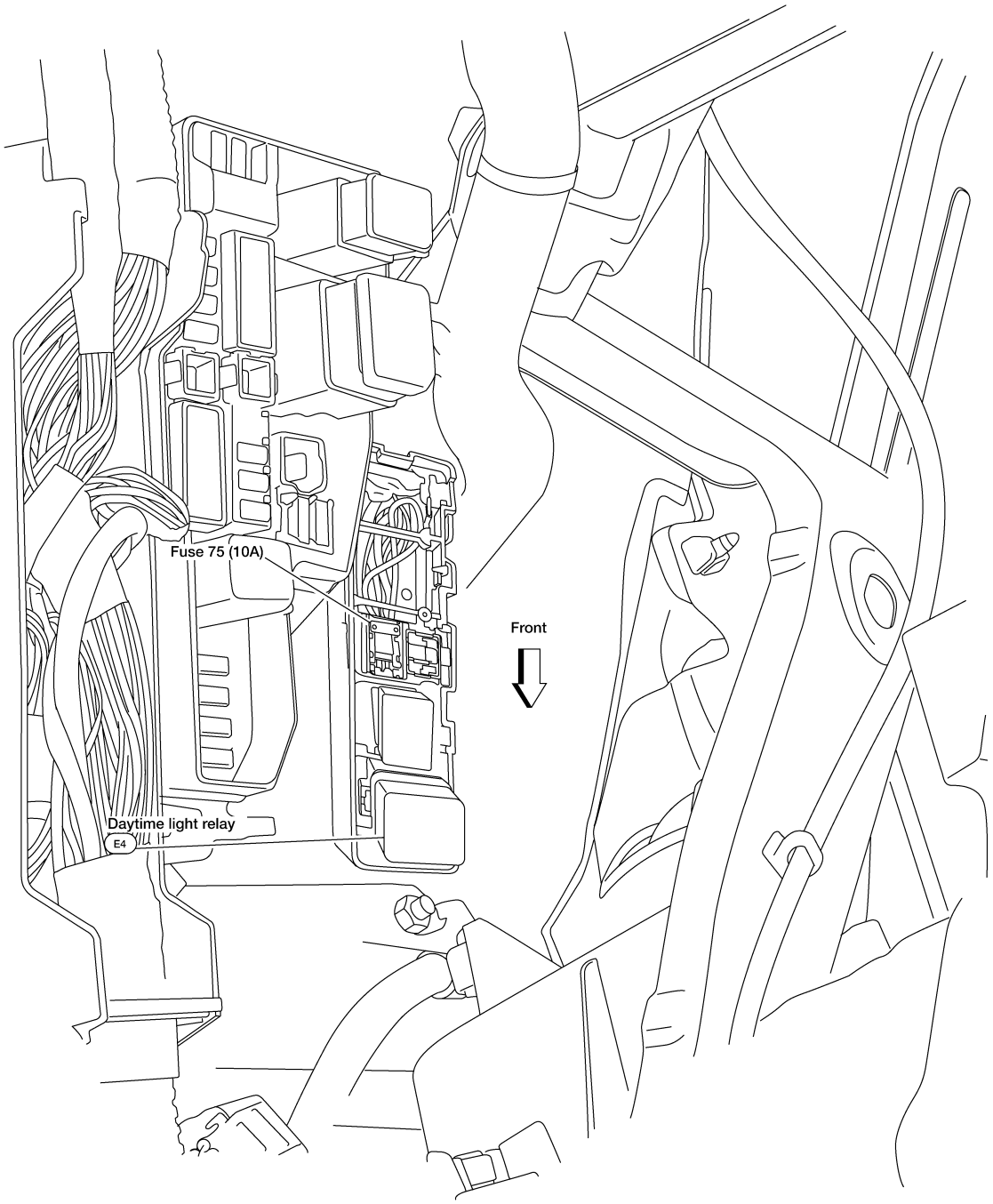


ABMIA4816GB

FUSE AND RELAY BOX 1

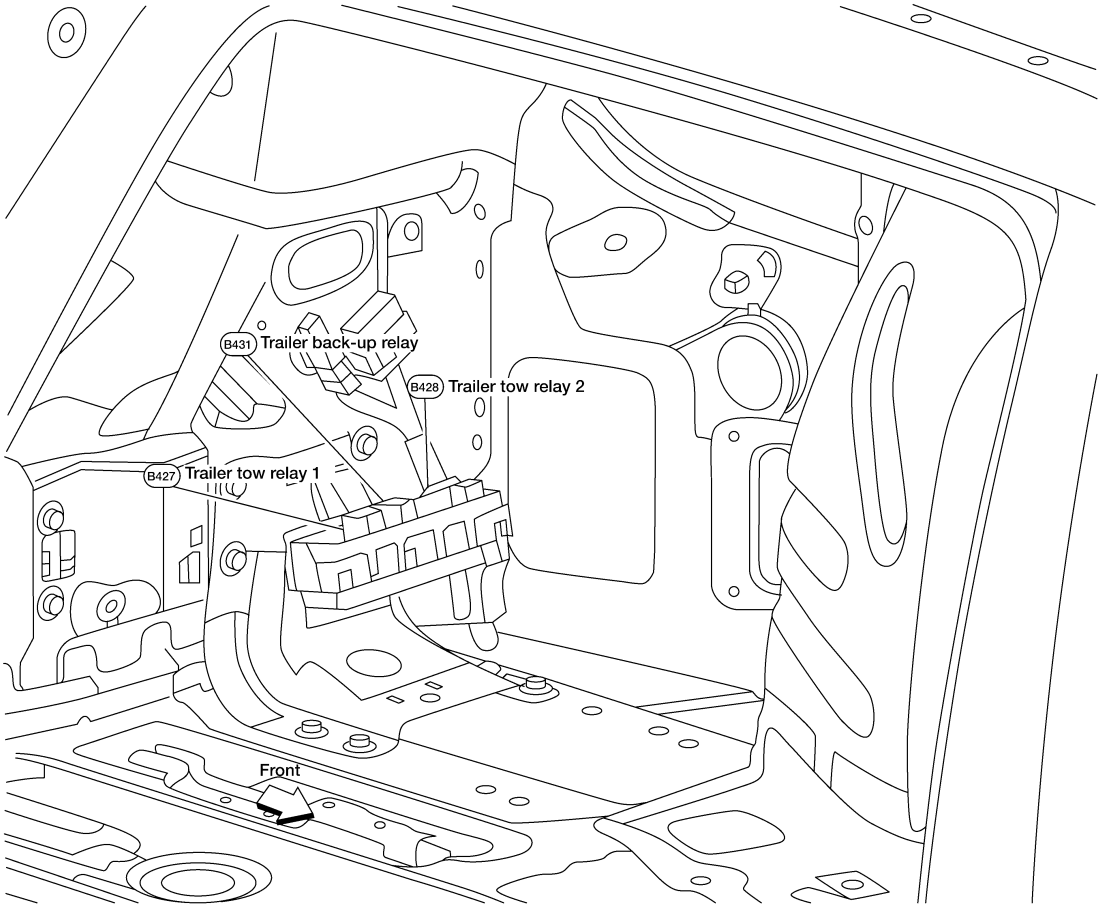


ABMIA4817GB



ABMIA4818GB

View with luggage side lower finisher LH removed

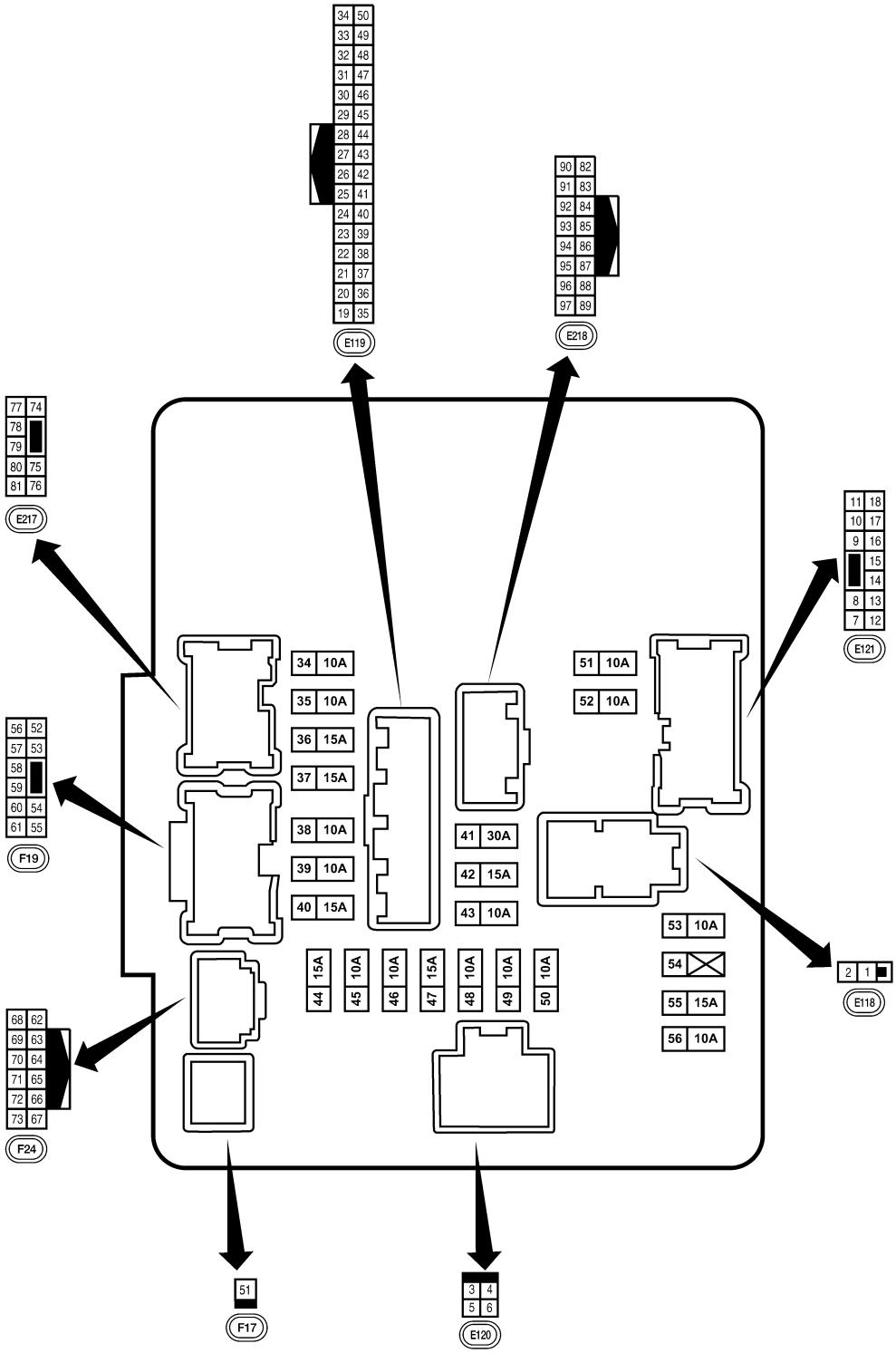


ABMIA4819GB

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

IPDM E/R Terminal Arrangement

INFOID:0000000009131095



ABMIA4820ZZ

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.

BASIC INSPECTION

BATTERY

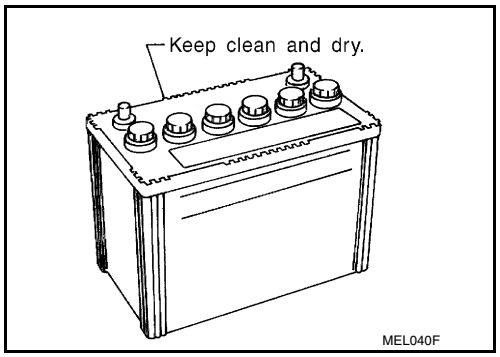
How to Handle Battery

INFOID:0000000009131096

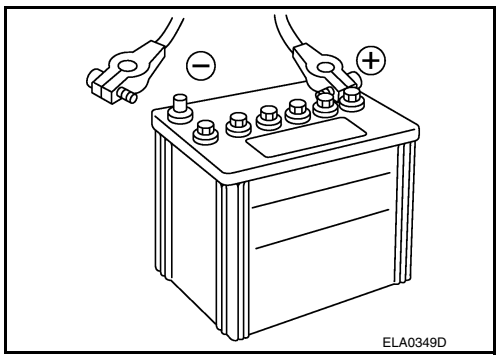
CAUTION:
- **If it becomes necessary to start the engine with a booster battery and jumper cables, use a 12-volt booster battery.**
- **After connecting battery cables, ensure that they are tightly clamped to battery terminals for good contact.**
- **Never add distilled water through the hole used to 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:0000000009131097

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

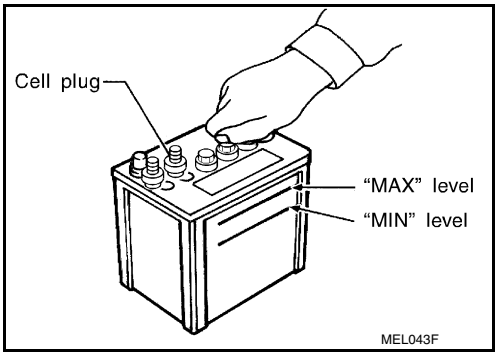
NOTE:
Refer to the applicable Instruction Manual for proper battery diagnosis procedures.

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

Checking Electrolyte Level

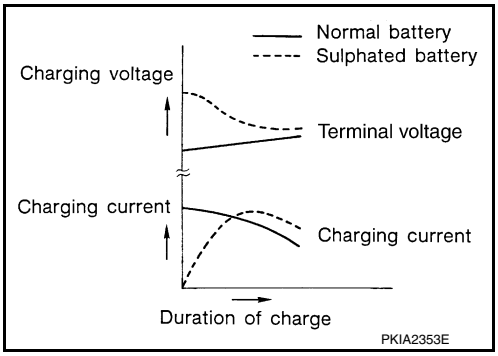
WARNING:
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical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

- 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.**



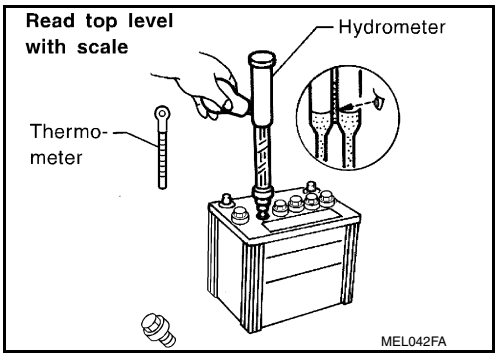
Specific Gravity Check

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 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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000009131098

Required Procedure After Battery Disconnection

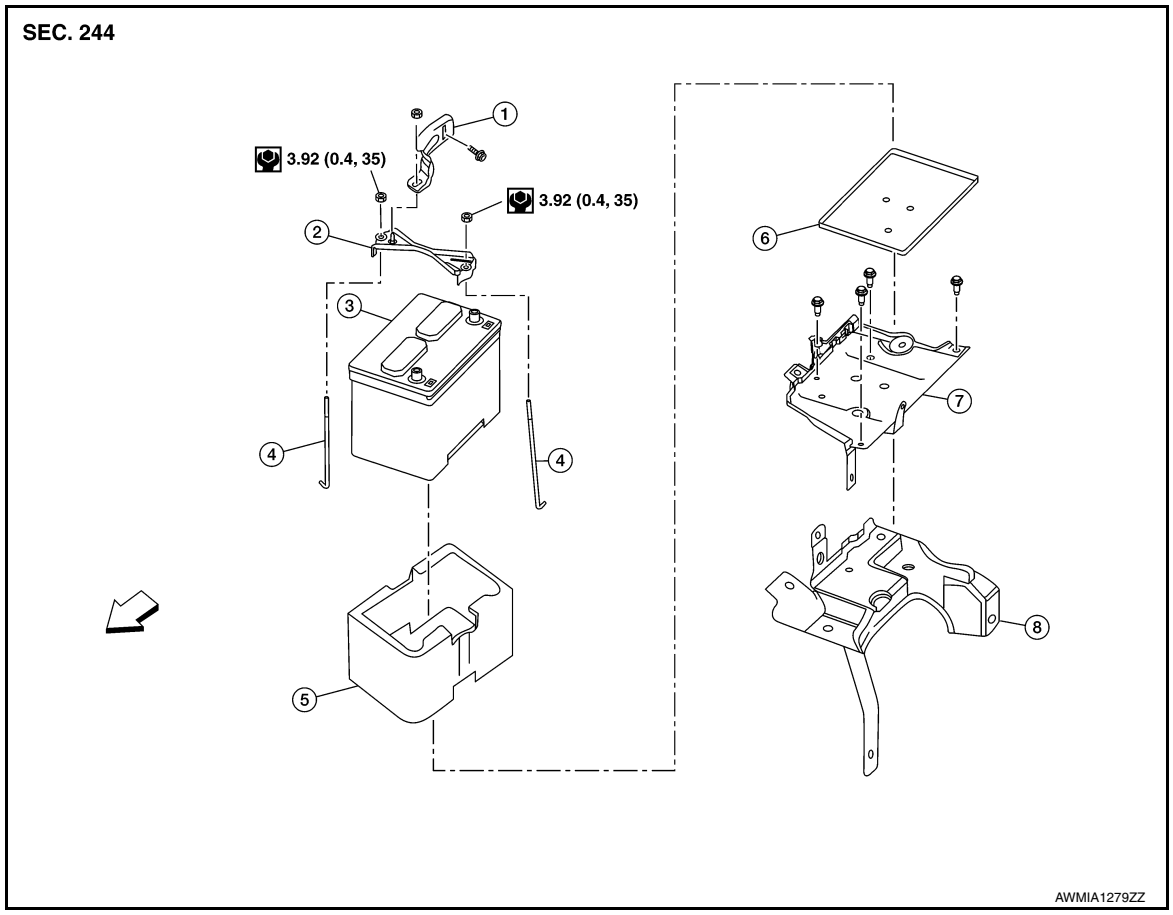
System	Item	Reference
Engine Control System	Idle Air Volume Learning	EC-153
Brake Control System	Steering Angle Sensor Neutral Position	BRC-60
Power Window Control System	Power Window System Initialization	PWC-35
Roof	Moonroof Memory Reset/Initialization Sunshade Memory Reset/Initialization	RF-24
Automatic Drive Positioner	Automatic Drive Positioner System Initialization	Refer to Owner's Manual.
Heater & Air Conditioning Control System	Temperature Setting Trimmer (front)	HAC-83
	Temperature Setting Trimmer (rear)	HAC-84
	Foot Position Setting Trimmer	HAC-83
	Inlet Port Memory Function (FRE)	HAC-84
	Inlet Port Memory Function (REC)	HAC-84
	Exhaust Gas/Outside Odor Detecting Sensor Sensitivity Adjustment Function	HAC-85
	Auto Intake Switch Interlocking Movement Change Function	HAC-85
Audio, Visual & Navigation System	Audio (Radio Preset)	Refer to Owner's Manual.
	Navigation System	Refer to Owner's Manual.

REMOVAL AND INSTALLATION

BATTERY

Exploded View

INFOID:0000000009131099



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:0000000009131100

REMOVAL

1. Remove cover of battery positive terminal.
2. Loosen battery terminal nuts and disconnect both negative and positive terminals from the battery.
   CAUTION:
   To prevent damage to the parts, disconnect the battery negative terminal first.
3. Remove battery frame nuts, battery frame and battery rods.
4. Remove battery cover.
5. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the 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-92, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

BATTERY TRAY

Removal and Installation

INFOID:0000000009131101

REMOVAL

1. Remove battery and battery tray liner. Refer to PG-93, "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-193, "Exploded View".
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.

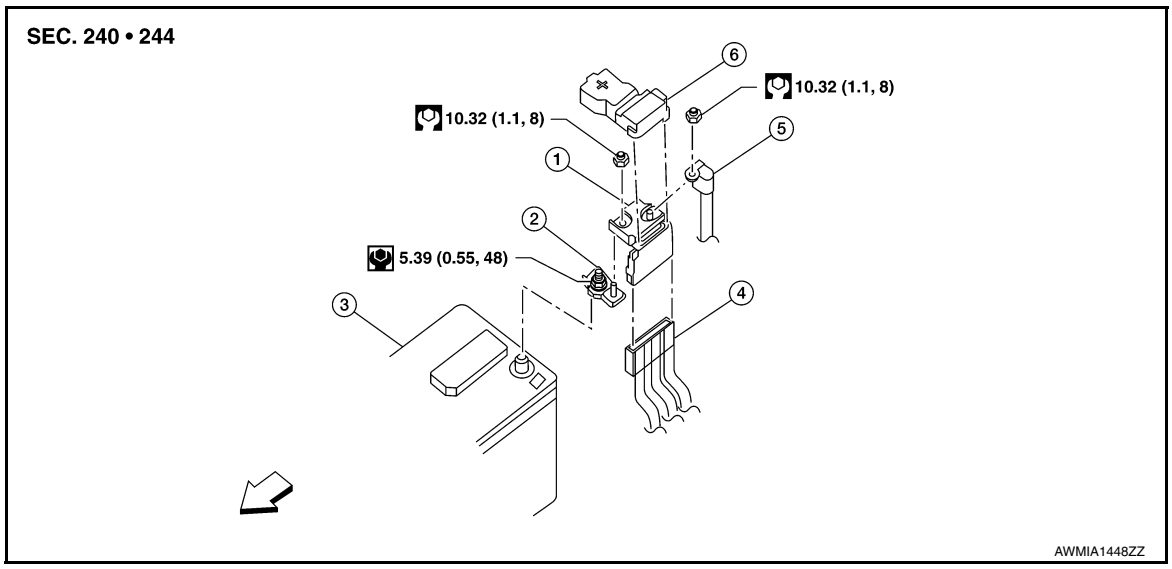
INSTALLATION

Installation is in the reverse order of removal.
Reset electronic systems as necessary. Refer to PG-92, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

BATTERY TERMINAL WITH FUSIBLE LINK

Exploded View

INFOID:0000000009729275



1. Fusible link box (battery)
2. Positive 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:0000000009729276

REMOVAL

1. Loosen battery terminal nuts and disconnect both negative and positive terminals from the battery.
   CAUTION:
   To prevent damage to the parts, disconnect the battery negative terminal first.
2. Disconnect positive cable from fusible link box (battery).
3. Disconnect harness connectors and separate positive terminal from fusible link box (battery).

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Replace the fusible link box battery if it has been dropped or sustained and impact.
To install the battery, carefully read the following instructions:

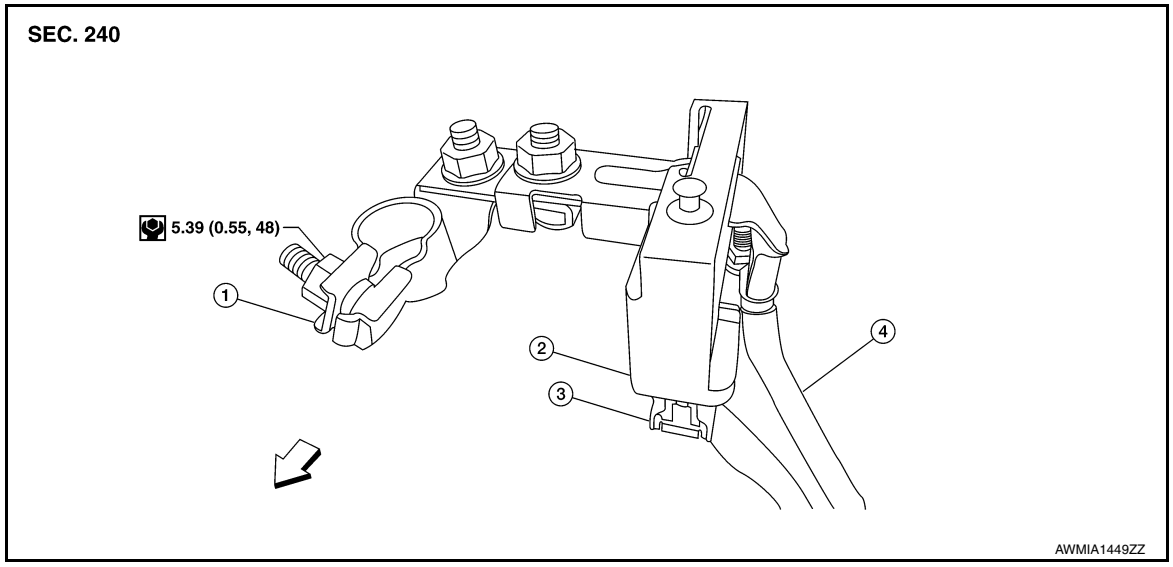
- **To prevent damage to the parts, connect the battery cable to the positive terminal first.**
- **After connecting battery cables, to securely supply battery voltage, ensure that they are tightly clamped to battery terminals for good contact.**
- **To securely supply battery voltage, check battery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

Reset electronic systems as necessary. Refer to PG-92, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

BATTERY CURRENT SENSOR

Exploded View

INFOID:0000000009729277



1. Negative terminal
2. Current sensor
3. Harness connector
4. Negative cable
⇦ Front

Removal and Installation

INFOID:0000000009729278

REMOVAL

1. Disconnect negative terminal from the battery.
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-92, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Battery

INFOID:0000000009131102

Type*	GR35
Capacity (20HR) minimum V-AH	12 - 60
Cold cranking current A @ -18°C (0°F)	550

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