

SECTION **PG**

**POWER SUPPLY, GROUND & CIRCUIT ELEMENTS**

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# BATTERY

< BASIC INSPECTION >

## BASIC INSPECTION

### BATTERY

#### How to Handle Battery

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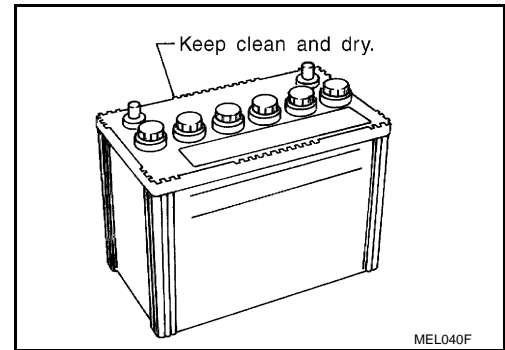
#### CAUTION:

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

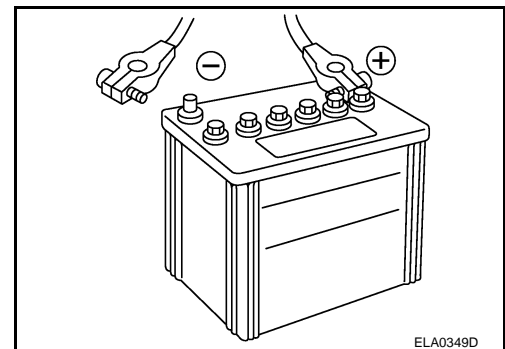
#### METHODS OF PREVENTING OVER-DISCHARGE

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

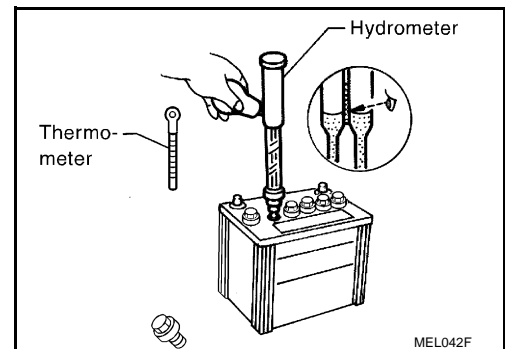
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level. This also applies to batteries designated as "low maintenance" and "maintenance-free".



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



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



#### CHECKING ELECTROLYTE LEVEL

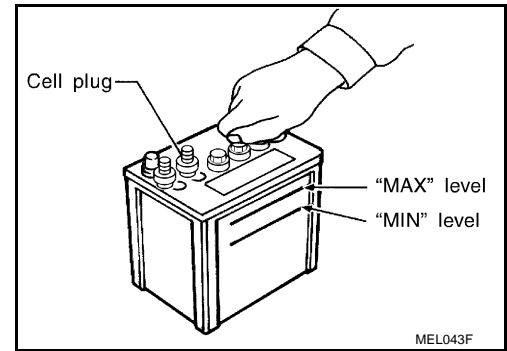
#### WARNING:

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

# BATTERY

## < BASIC INSPECTION >

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

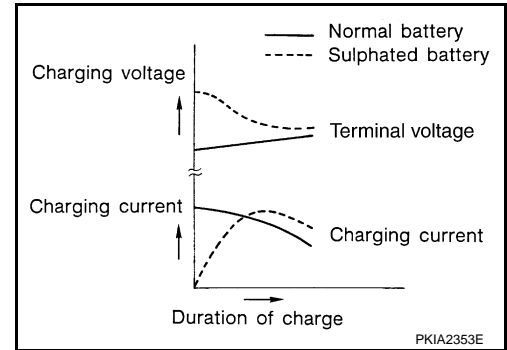


### Sulphation

**A battery will be completely discharged if it is left unattended for a long time and the specific gravity will become less than 1.100. This may result in sulphation on the cell plates.**

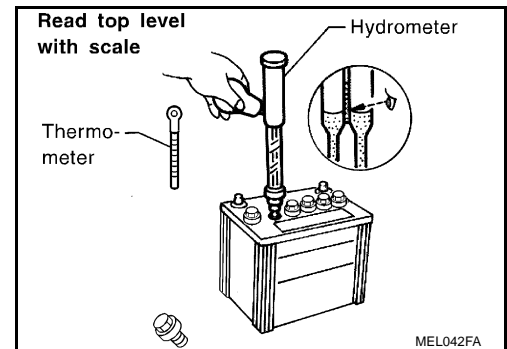
**To determine if a battery has been “sulphated”, note its voltage and current when charging it. As shown in the figure, less current and higher voltage are observed in the initial stage of charging sulphated batteries.**

**A sulphated battery may sometimes be brought back into service by means of a long, slow charge, 12 hours or more, followed by a battery capacity test.**



### SPECIFIC GRAVITY CHECK

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



### Hydrometer Temperature Correction

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

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# BATTERY

## < BASIC INSPECTION >

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

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

## CHARGING THE BATTERY

### CAUTION:

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

### Charging Rates

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

Do not charge at more than 50 ampere rate.

### NOTE:

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

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

## Work Flow

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## TROUBLE DIAGNOSIS WITH MULTITASKING BATTERY DIAGNOSTIC STATION

Refer to diagnostic station instruction manual.

# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

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Required Procedure After Battery Disconnection

System	Item	Reference
Brake Control	Steering Angle Sensor Neutral Position	Refer to <a href="#">BRC-8</a> .
Glass, Window & Mirrors	Power Window System Initialization	LH & RH Front Window Anti-pinch. Refer to <a href="#">PWC-9</a> . Front & Rear Window Anti-pinch. Refer to <a href="#">PWC-119</a> .
Roof	Sunroof Memory Reset/Initialization	Refer to <a href="#">RF-7</a> .
Seats	Automatic Drive Positioner System Initialization	Refer to <a href="#">ADP-8</a> .
Automatic Temperature Control - With Color Display	Temperature Setting Trimmer	Refer to <a href="#">HAC-7</a> .
	Foot Position Setting Trimmer	Refer to <a href="#">HAC-8</a> .
	Inlet Port Memory Function (FRE)	Refer to <a href="#">HAC-8</a> .
	Inlet Port Memory Function (REC)	Refer to <a href="#">HAC-8</a> .
Automatic Temperature Control - With Monochrome Display	Temperature Setting Trimmer	Refer to <a href="#">HAC-132</a> .
	Foot Position Setting Trimmer	Refer to <a href="#">HAC-133</a> .
	Inlet Port Memory Function (FRE)	Refer to <a href="#">HAC-133</a> .
	Inlet Port Memory Function (REC)	Refer to <a href="#">HAC-134</a> .
Audio-Visual System	Audio (Radio Preset)	Refer to Owner's Manual.
	NAVI	Refer to Owner's Manual.
	Rear View Monitor Guiding Line Adjustment	Refer to <a href="#">AV-177</a> .

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# POWER SUPPLY ROUTING CIRCUIT

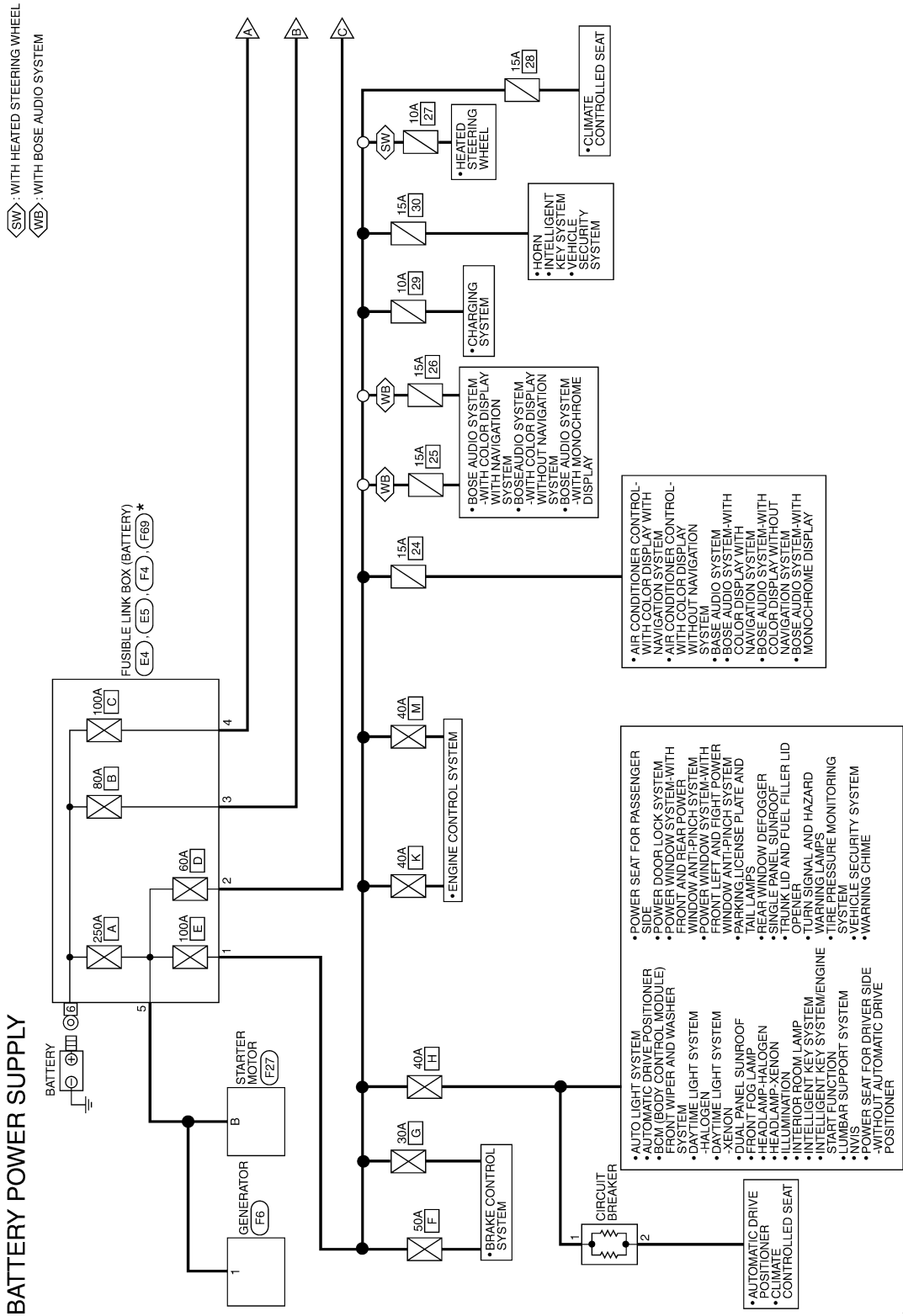
< COMPONENT DIAGNOSIS >

## COMPONENT DIAGNOSIS

### POWER SUPPLY ROUTING CIRCUIT

Wiring Diagram —Battery Power Supply—

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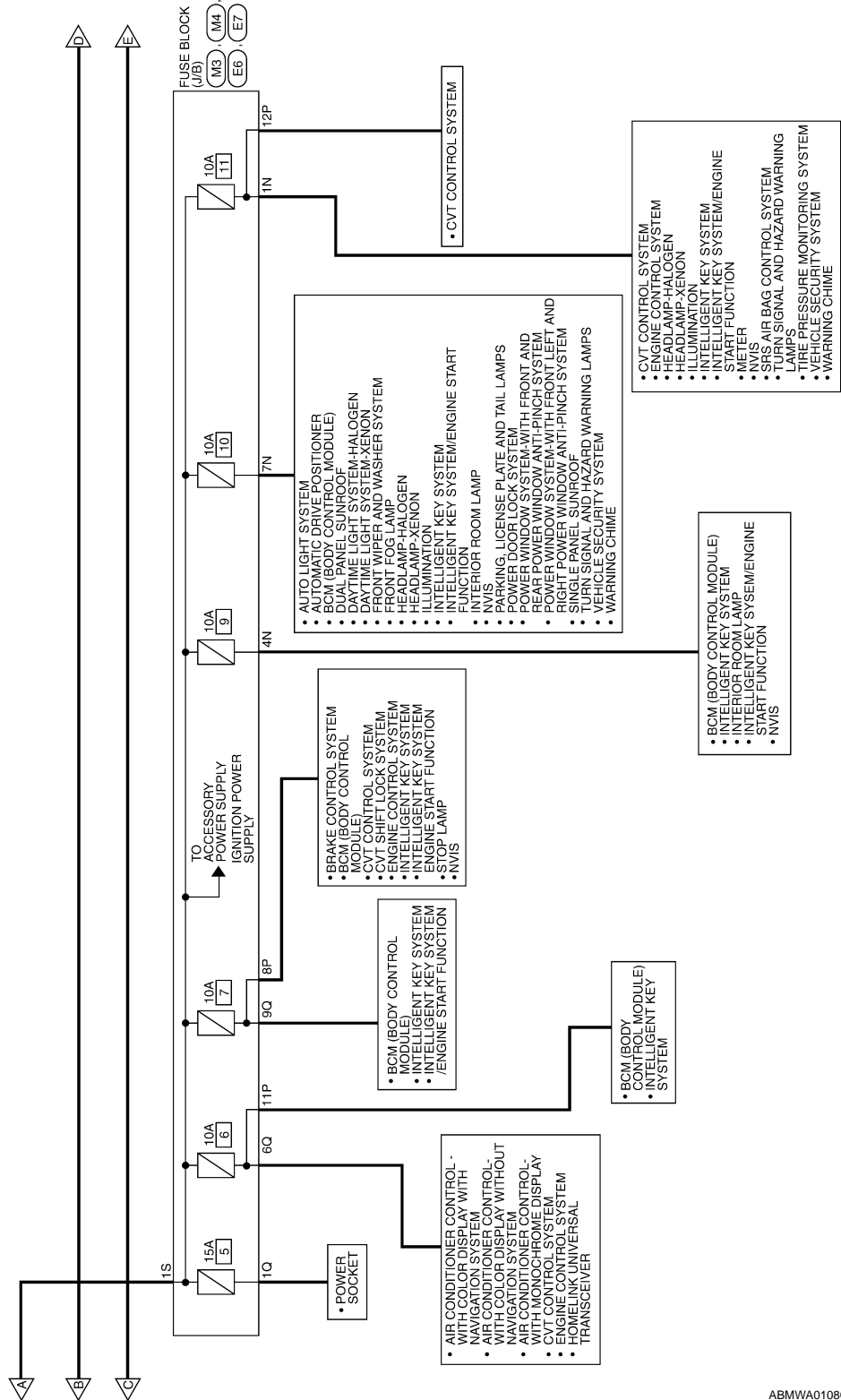


\* (F69) IS AN INTEGRAL PART OF FUSIBLE LINK BOX (BATTERY) ASSEMBLY.

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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

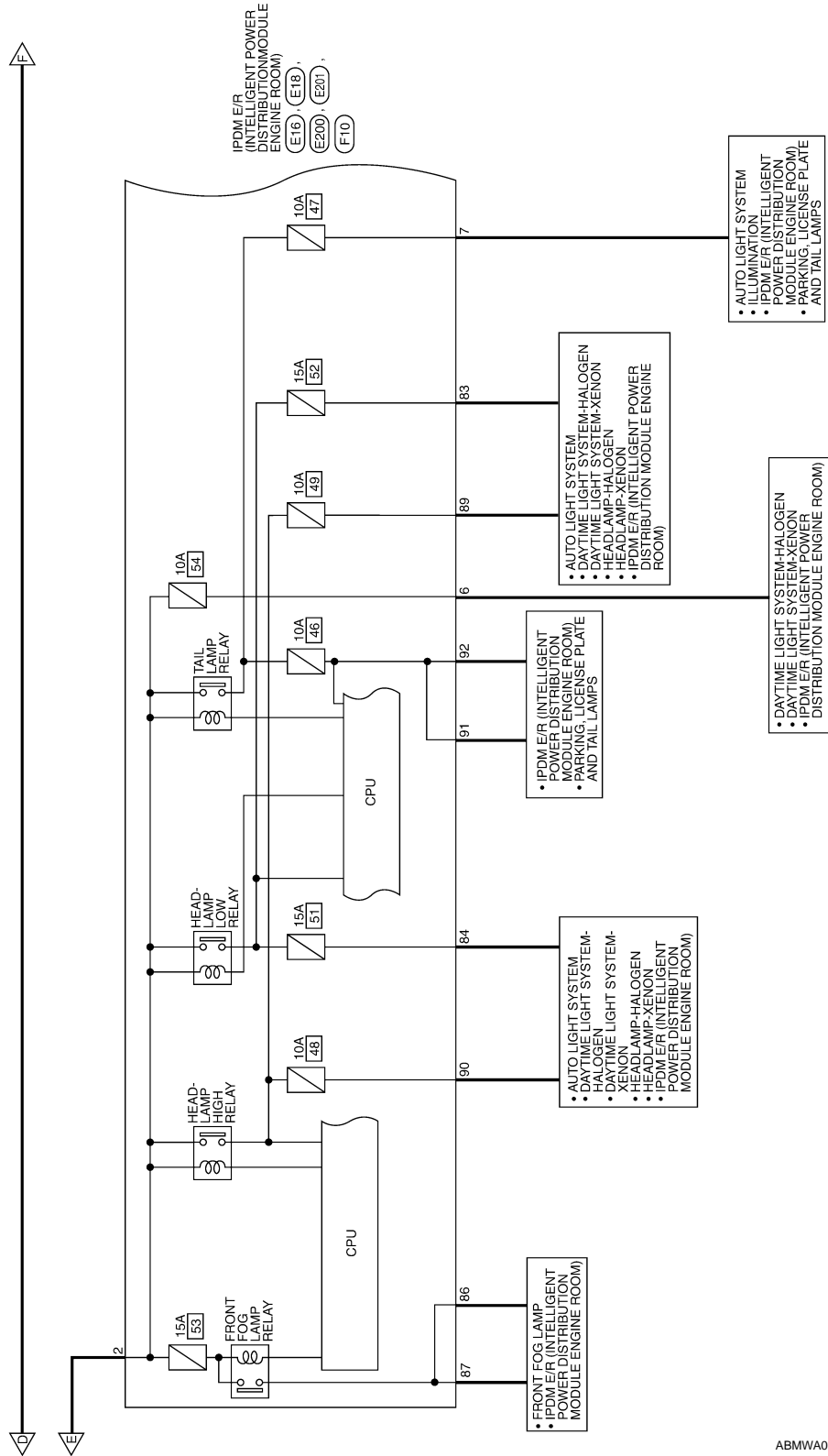


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# POWER SUPPLY ROUTING CIRCUIT

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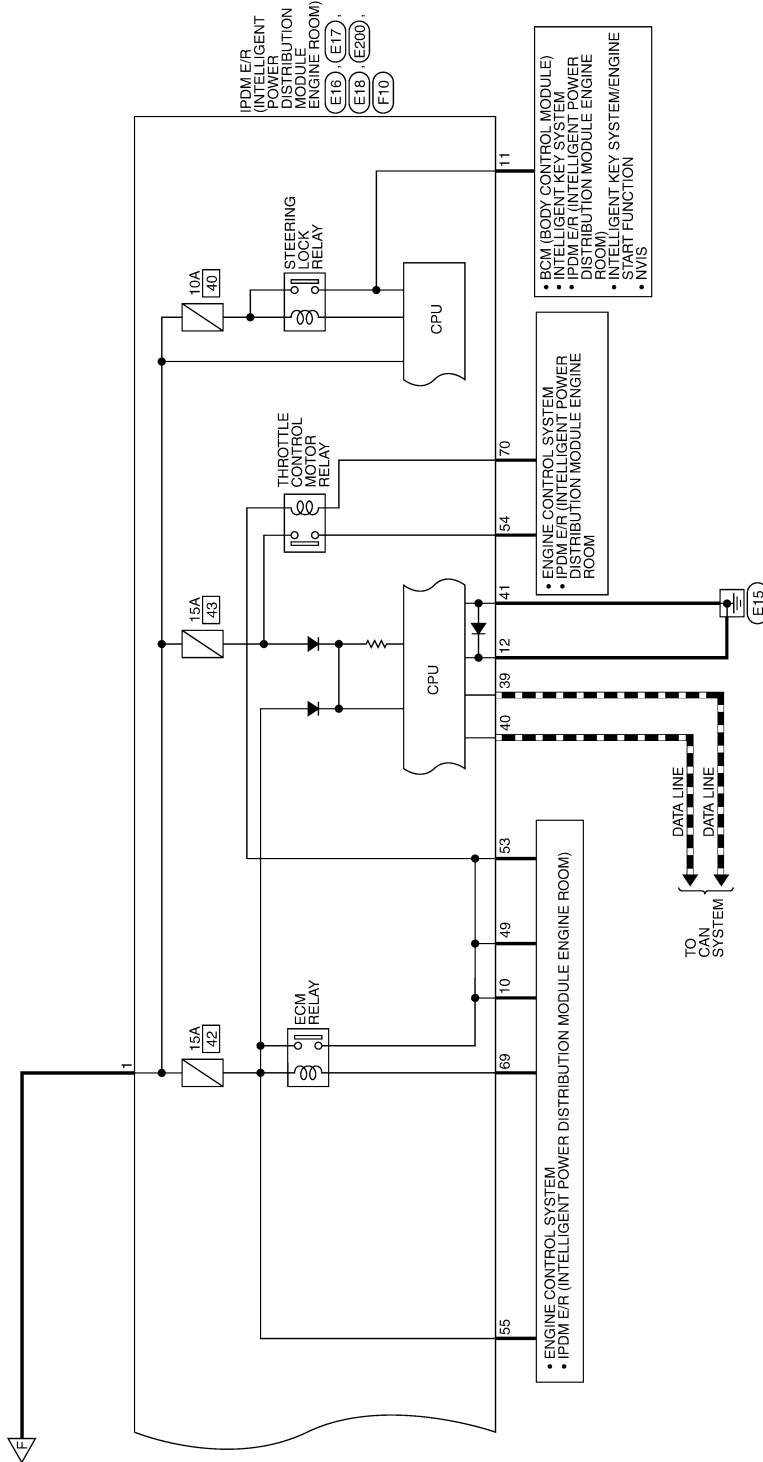
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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

--- : DATA LINE



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# POWER SUPPLY ROUTING CIRCUIT

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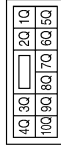
## BATTERY POWER SUPPLY CONNECTORS

Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



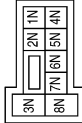
Terminal No.	Color of Wire	Signal Name
1	B/W	-
2	L	-

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



Terminal No.	Color of Wire	Signal Name
1Q	R/W	-
6Q	Y/R	-
9Q	R/W	-

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



Terminal No.	Color of Wire	Signal Name
1N	W/L	-
4N	G/Y	-
7N	Y/R	-

Connector No.	E7
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



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

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8P	R	-
11P	G	-
12P	V	-

Connector No.	E5
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

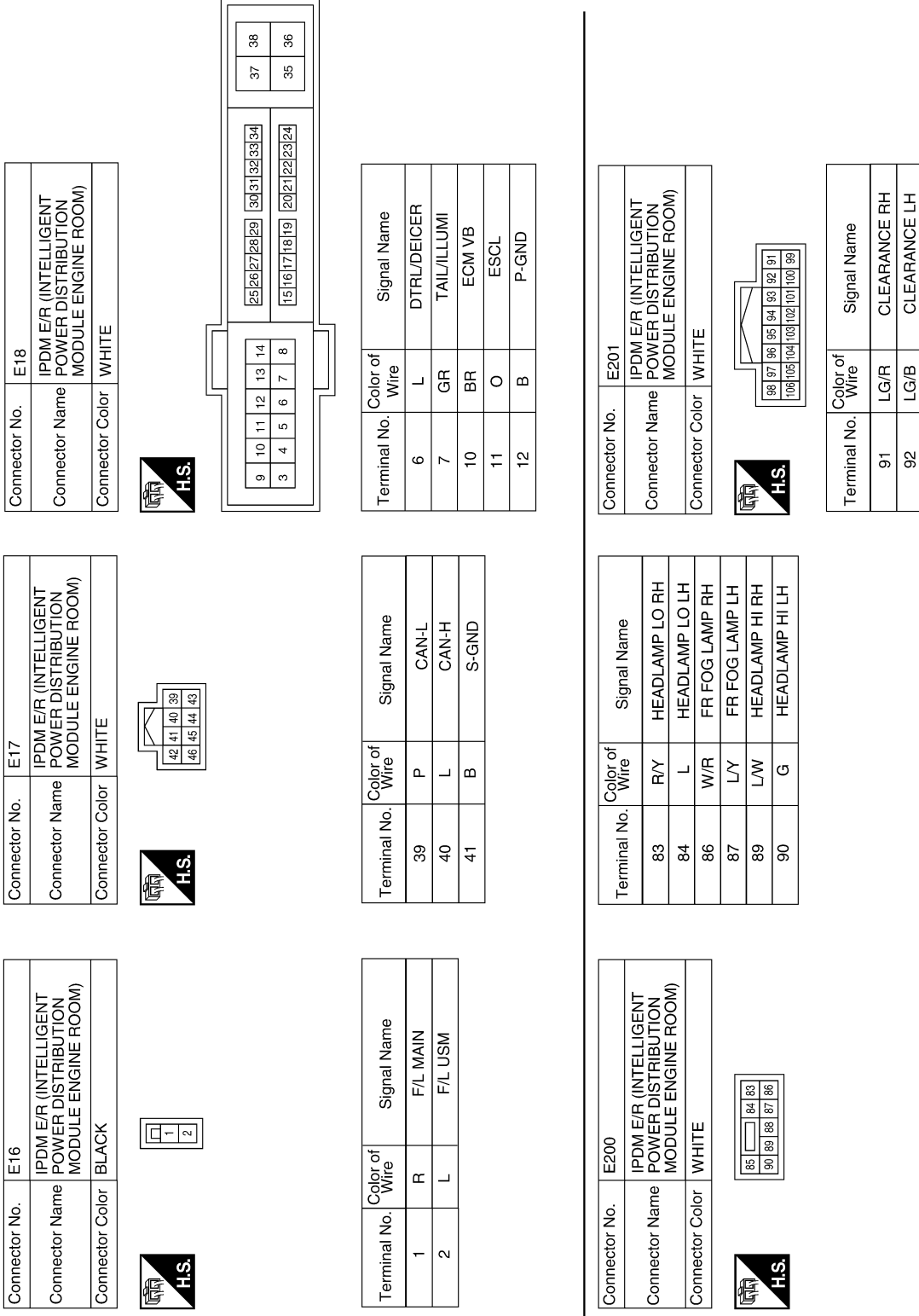


Terminal No.	Color of Wire	Signal Name
3	R	-
4	W	-

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# POWER SUPPLY ROUTING CIRCUIT

## < COMPONENT DIAGNOSIS >



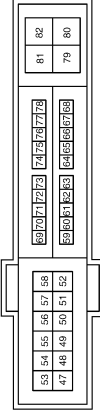
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# POWER SUPPLY ROUTING CIRCUIT

## < COMPONENT DIAGNOSIS >

Connector No.	F10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
49	R/G	IGN COIL
53	R/W	ENG SOL
54	G/W	ETC
55	W/L	ECM BAT
69	W/B	SSOFF
70	O	MOTRLY

Connector No.	F6
Connector Name	GENERATOR
Connector Color	—



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

Connector No.	F4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	—



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

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	—



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

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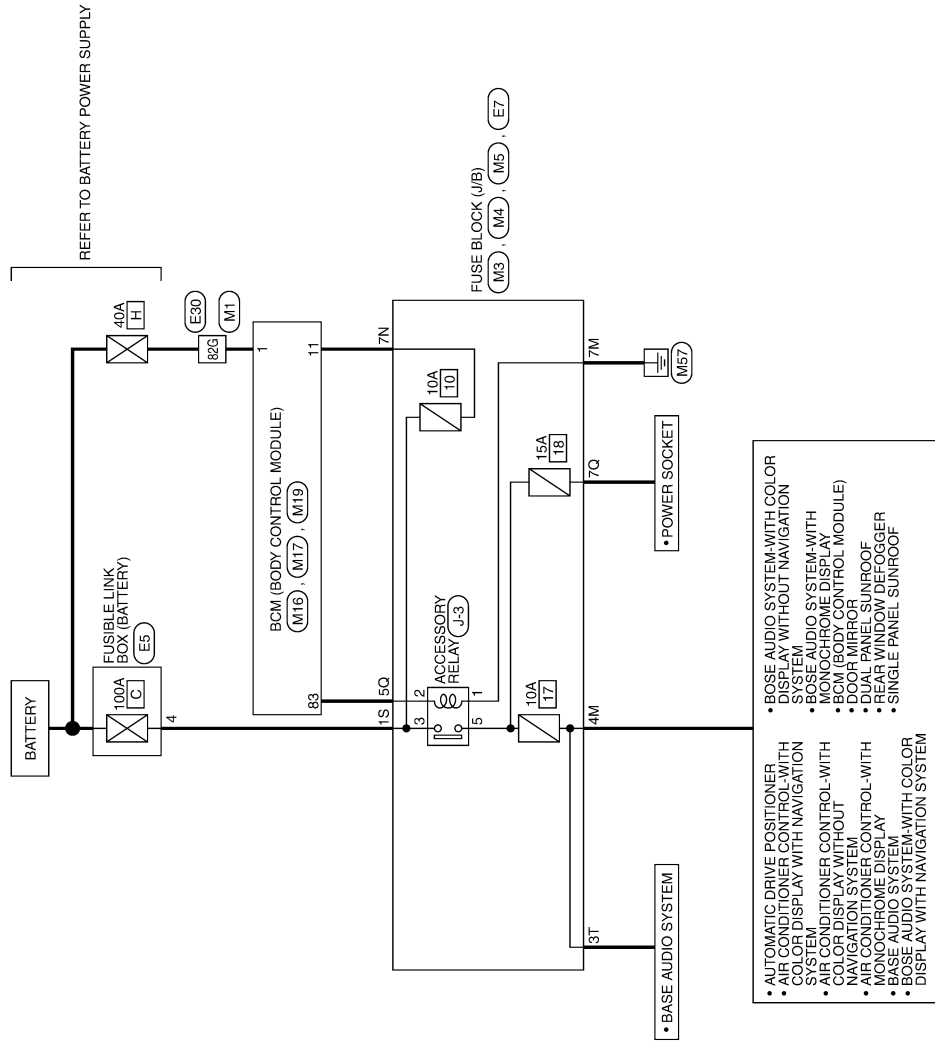
# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

## Wiring Diagram —Accessory Power Supply—

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### ACCESSORY POWER SUPPLY



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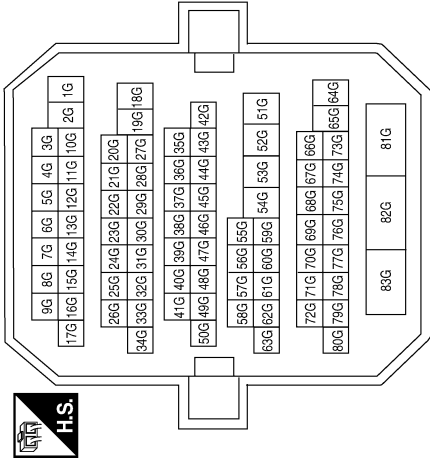
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# POWER SUPPLY ROUTING CIRCUIT

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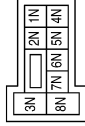
## ACCESSORY POWER SUPPLY CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



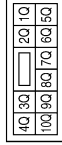
Terminal No.	Color of Wire	Signal Name
82G	W/B	-

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



Terminal No.	Color of Wire	Signal Name
7N	Y/R	-

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



Terminal No.	Color of Wire	Signal Name
5Q	L	-
7Q	R/B	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4M	V/Y	-
7M	B	-

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



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

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	Y/R	BAT BCM FUSE

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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E7
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



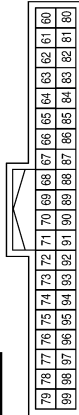
Terminal No.	Color of Wire	Signal Name
1S	W	-

Connector No.	E5
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY



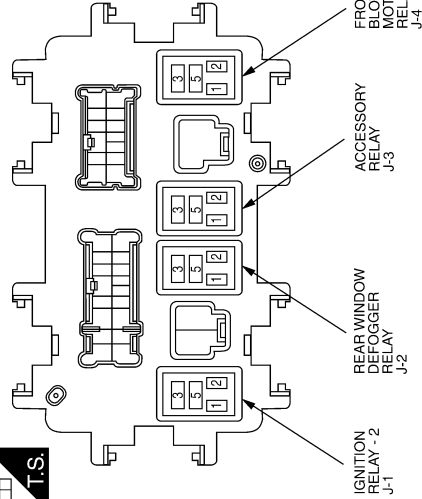
Terminal No.	Color of Wire	Signal Name
4	W	-

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

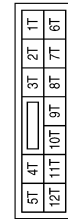


Terminal No.	Color of Wire	Signal Name
83	L	ACC CONT

Connector No.	J-3
Connector Name	ACCESSORY RELAY
Connector Color	-

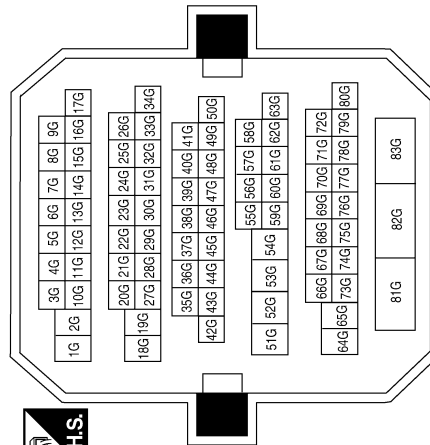


Connector No.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



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

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
82	LG	-

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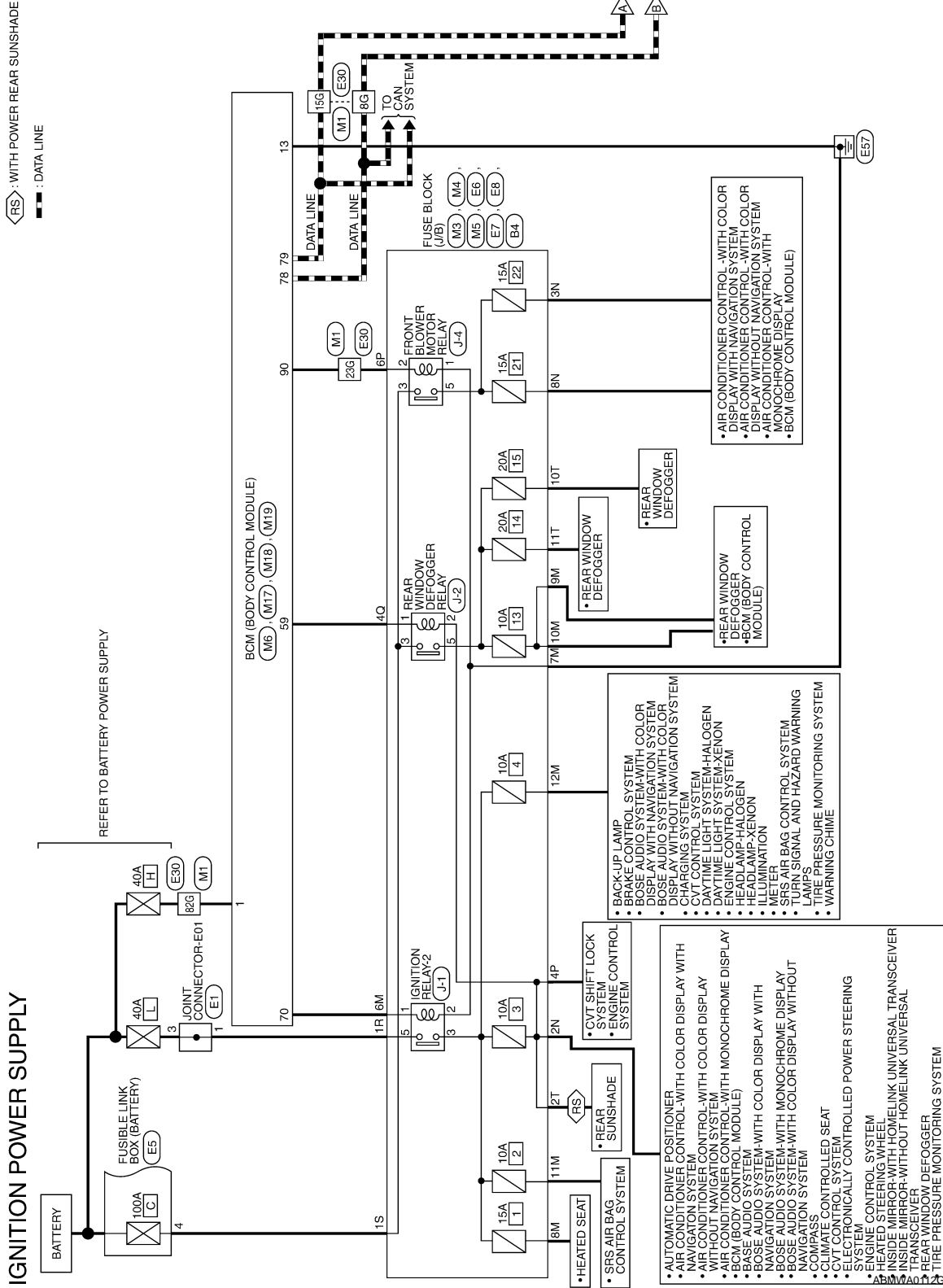
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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

## Wiring Diagram — Ignition Power Supply —

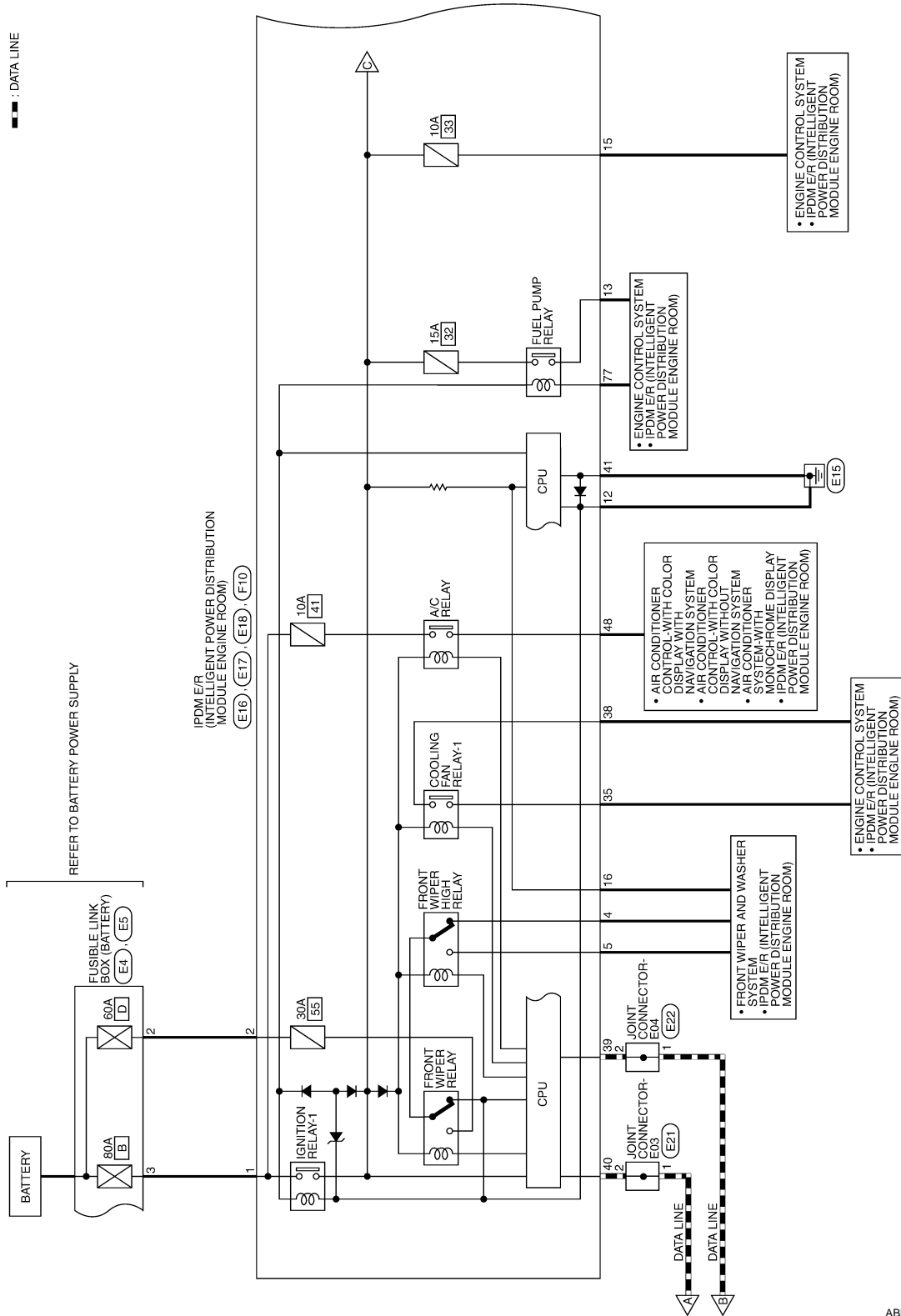
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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >



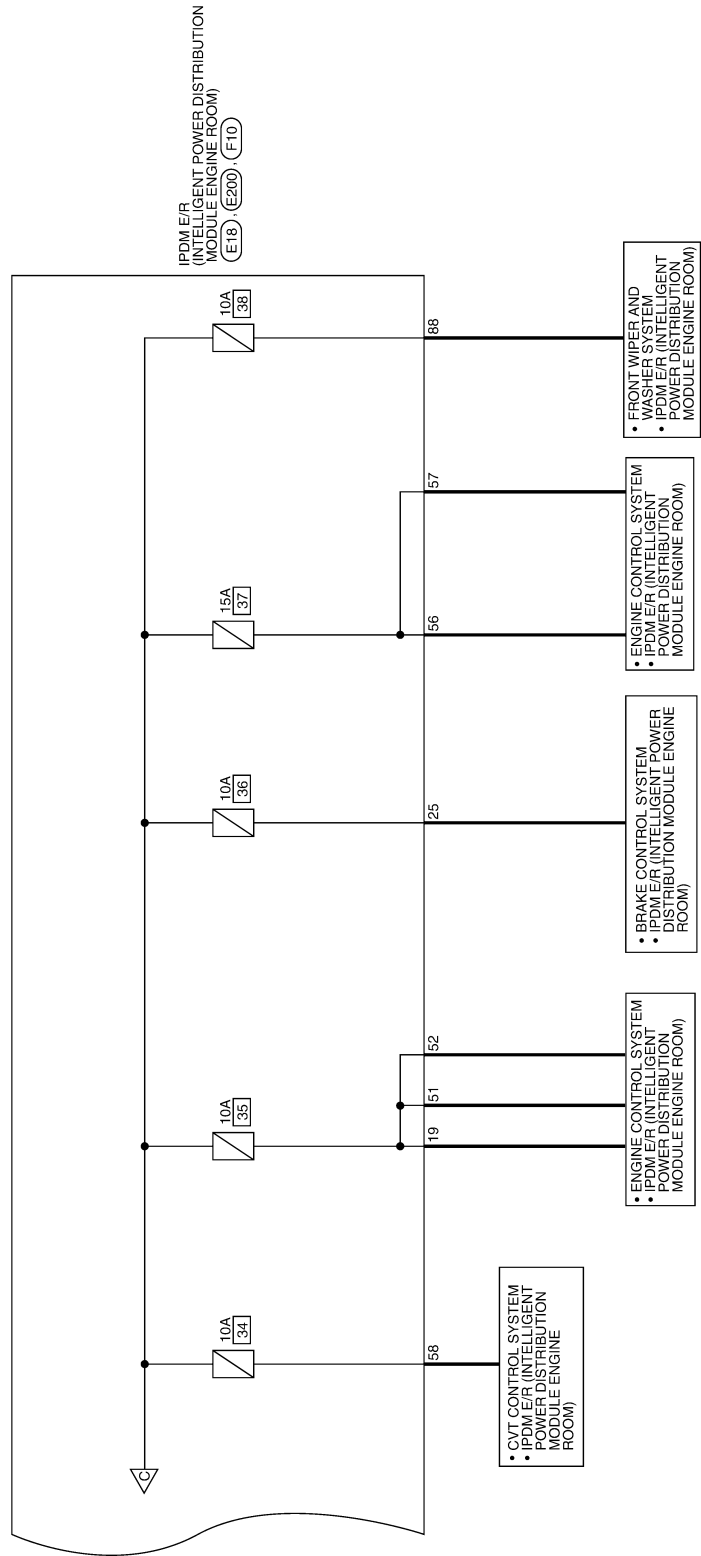
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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >



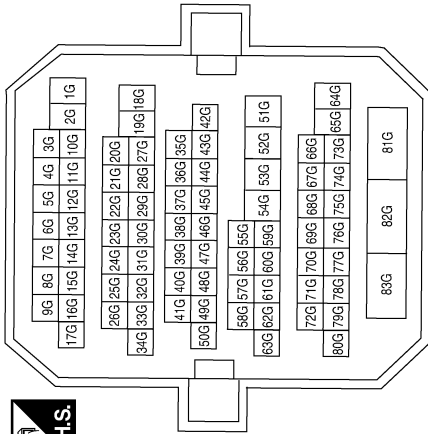
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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

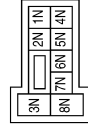
## IGNITION POWER SUPPLY CONNECTORS

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
8G	P	-
15G	L	-
23G	Y	-
82G	W/B	-

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



Terminal No.	Color of Wire	Signal Name
2N	G	-
3N	W/L	-
8N	W/L	-

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



Terminal No.	Color of Wire	Signal Name
4Q	G/R	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
6M	R/B	-
7M	B	-
8M	G/R	-
9M	GR	-
10M	O	-
11M	R/L	-
12M	O	-

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK




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

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# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >


Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



4	5	6	7	8	9	10		
11	12	13	14	15	16	17	18	19


79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN




39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
70	R/B	IGN REL OUTPUT2
78	P	CAN-L
79	L	CAN-H
90	Y	BLOWER FAN RELAY

Terminal No.	Color of Wire	Signal Name
59	G/R	REAR DEFROSTER


Terminal No.	Color of Wire	Signal Name
13	B	GND1

Connector No.	E5
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY




3	4
---	---

Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN



1	2
---	---

Connector No.	E1
Connector Name	JOINT CONNECTOR-E01
Connector Color	WHITE



3	2	1
6	5	4

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

Terminal No.	Color of Wire	Signal Name
2	L	-

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

ABMIA0273GB

# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	E8
Connector Name	FUSE BLOCK (J/B)
Connector Color	BLACK



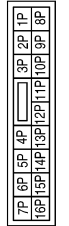
Terminal No.	Color of Wire	Signal Name
1R	G	-

Connector No.	E7
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



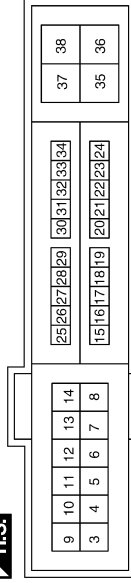
Terminal No.	Color of Wire	Signal Name
1S	W	-

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4P	P	-
6P	Y	-

Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
4	LG	FR WIPER LO
5	Y	FR WIPER HI
12	B	P-GND
13	SB	FUEL PUMP
15	W	START IG-E/R
16	R	WIPER AUTOSTOP
19	Y	BCM IGNSW
25	GR	ABS ECU
35	P	MOTOR FAN LO
38	GR	F/L MOTOR FAN

Connector No.	E17
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	S-GND

Connector No.	E16
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	BLACK



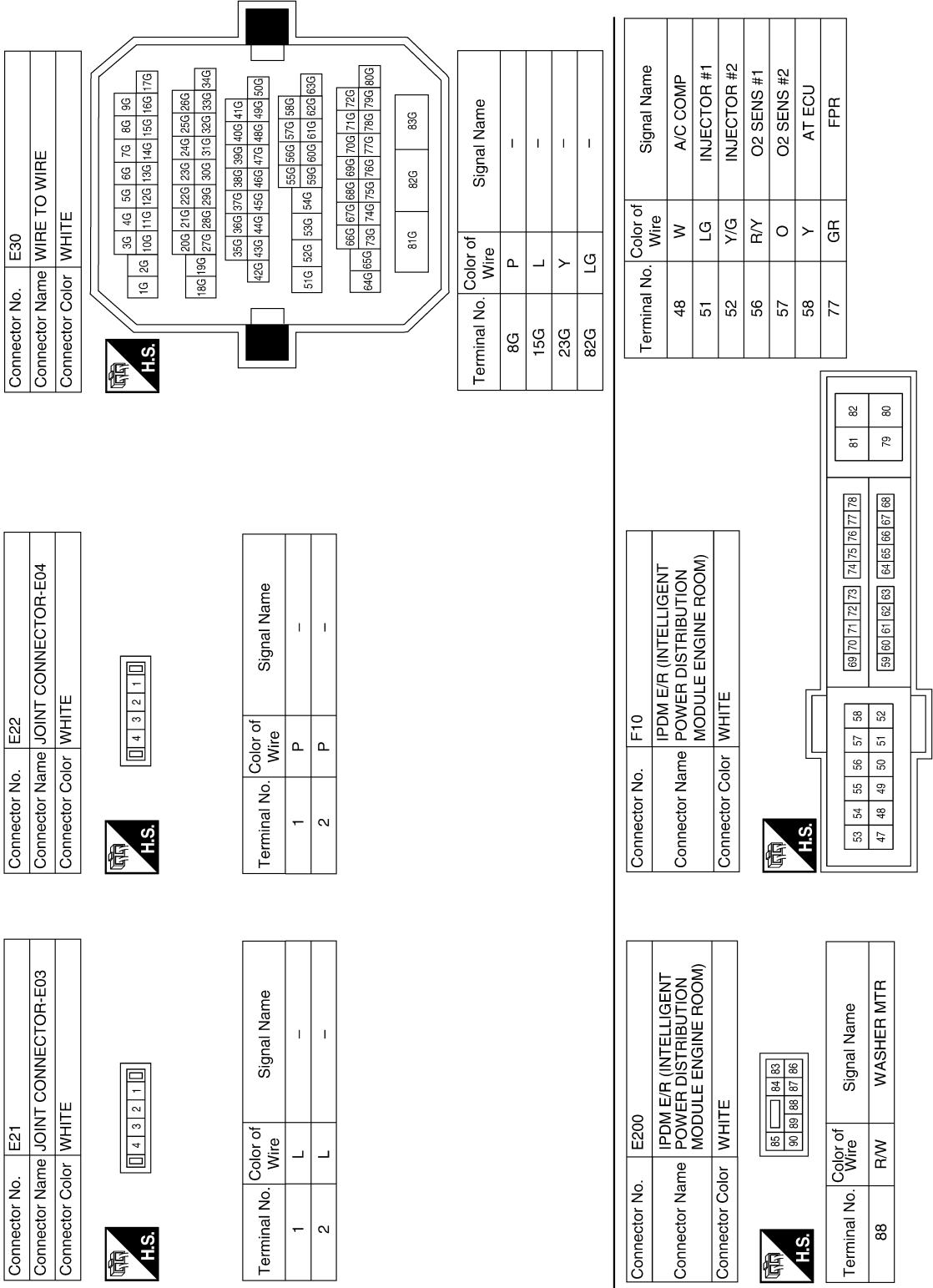
Terminal No.	Color of Wire	Signal Name
1	R	F/L MAIN
2	L	F/L USM

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

# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >



Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE



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

Connector No.	E22
Connector Name	JOINT CONNECTOR-E04
Connector Color	WHITE



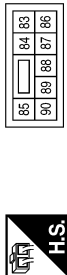
Terminal No.	Color of Wire	Signal Name
1	P	-
2	P	-

Connector No.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE



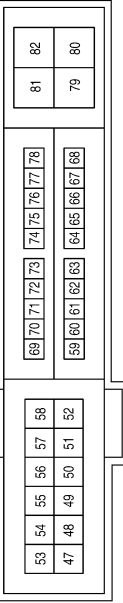
Terminal No.	Color of Wire	Signal Name
8G	P	-
15G	L	-
23G	Y	-
82G	LG	-

Connector No.	E200
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
88	R/W	WASHER MTR

Connector No.	F10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE



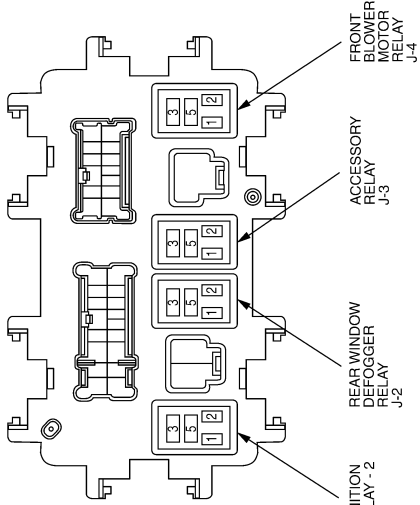
Terminal No.	Color of Wire	Signal Name
48	W	A/C COMP
51	LG	INJECTOR #1
52	Y/G	INJECTOR #2
56	R/Y	O2 SENS #1
57	O	O2 SENS #2
58	Y	AT ECU
77	GR	FPR

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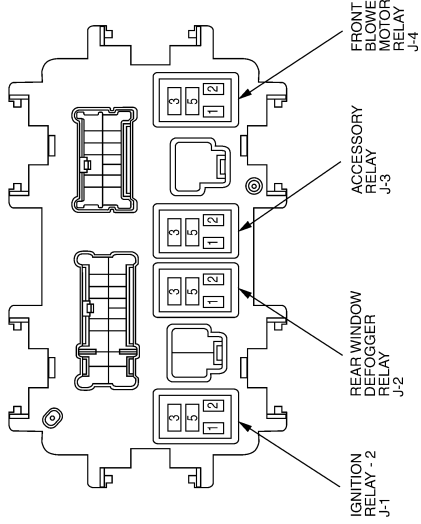
# POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Connector No.	J-2
Connector Name	REAR WINDOW DEFOGGER RELAY
Connector Color	-



Connector No.	J-1
Connector Name	IGNITION RELAY-2
Connector Color	-



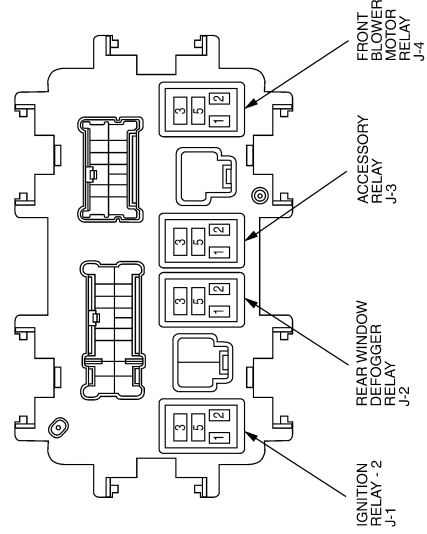
Connector No.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN



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

Terminal No.	Color of Wire	Signal Name
2T	V	-
10T	Y	-
11T	Y	-

Connector No.	J-4
Connector Name	FRONT BLOWER MOTOR RELAY
Connector Color	-



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A  
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E  
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P

PG

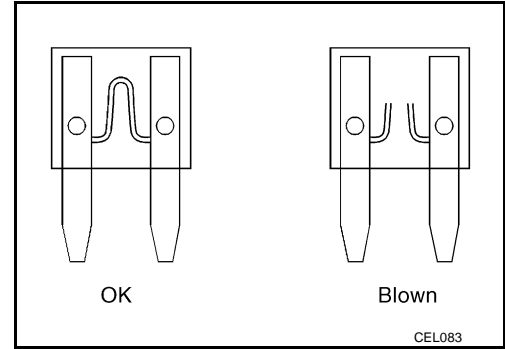
# POWER SUPPLY ROUTING CIRCUIT

## < COMPONENT DIAGNOSIS >

### Fuse

INFOID:000000004212328

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



### Fusible Link

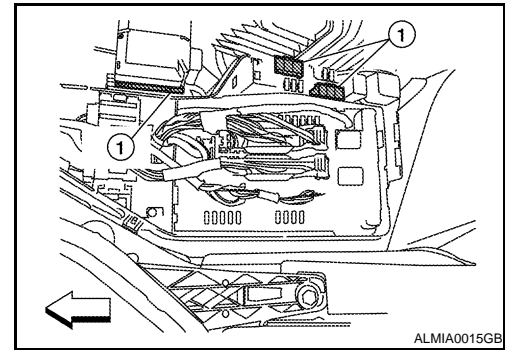
INFOID:000000004212329

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

1 : Fusible link

#### **CAUTION:**

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





# GROUND

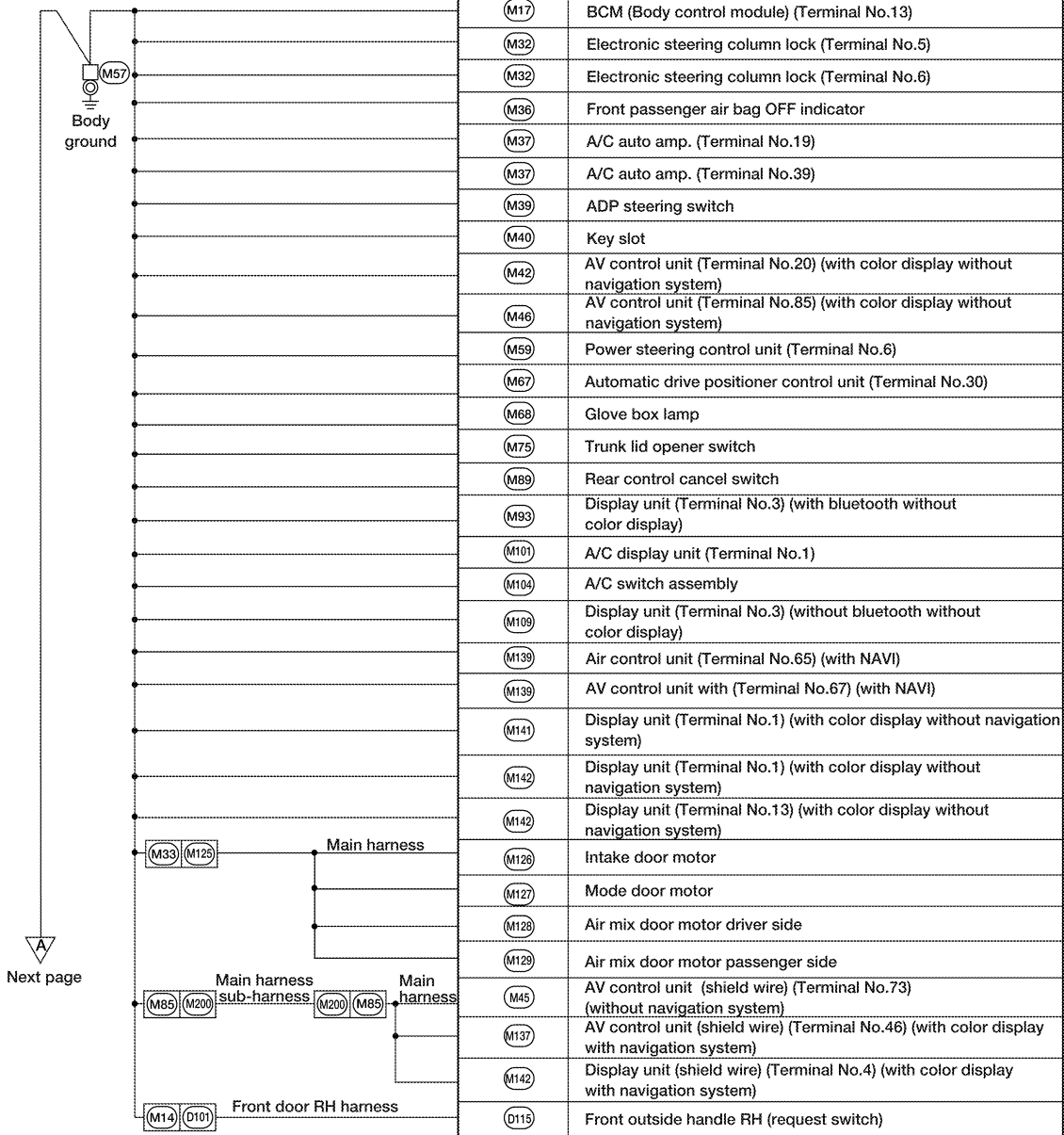
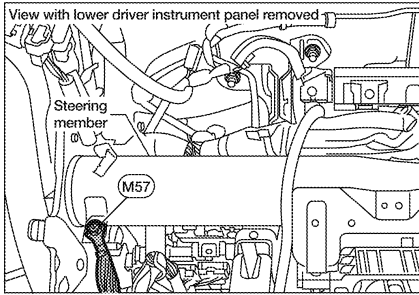
< COMPONENT DIAGNOSIS >

## GROUND

### Ground Distribution

INFOID:000000004212330

### MAIN HARNESS

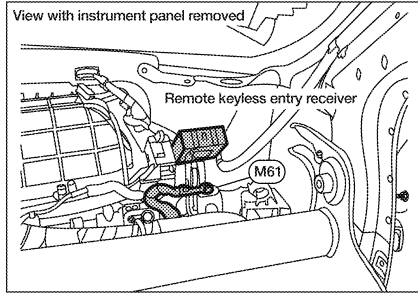


Next page

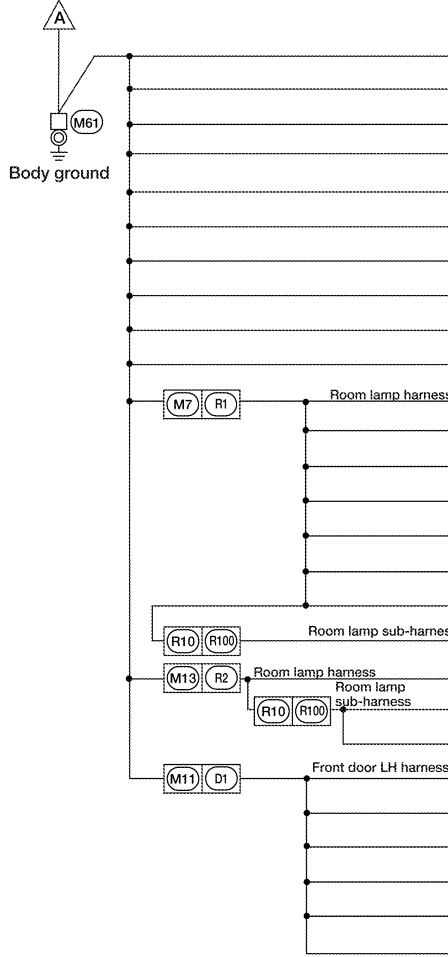
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# GROUND

## < COMPONENT DIAGNOSIS >



Preceding page



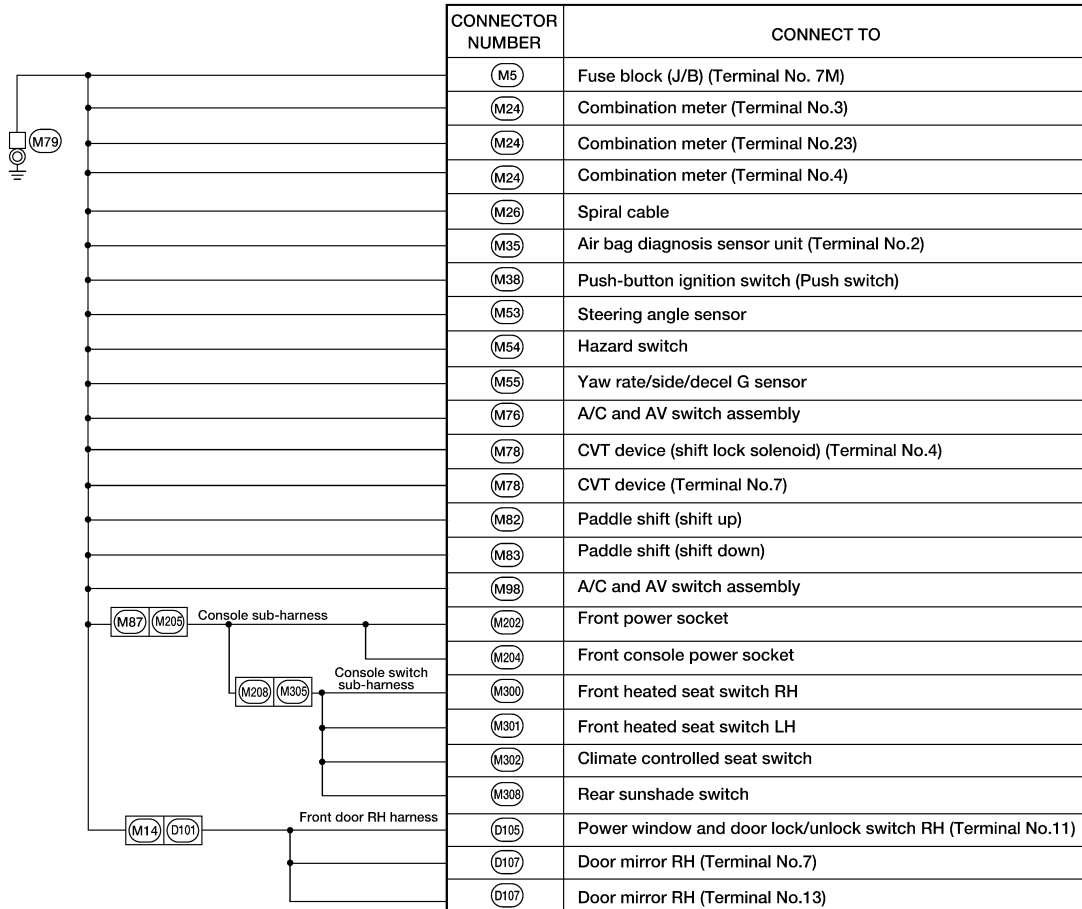
CONNECTOR NUMBER	CONNECT TO
(M22)	Data link connector (Terminal No.4)
(M22)	Data link connector (Terminal No.5)
(M28)	Combination switch (wiper switch)
(M31)	Blower motor
(M58)	Climate controlled seat relay
(M72)	VDC off switch
(M74)	Trunk lid opener cancel switch
(M96)	Heated steering wheel switch
(M102)	Door mirror remote control switch (without automatic drive positioner)
(M108)	Door mirror remote control switch(with automatic drive positioner)
(M7, R1)	Room lamp harness
(R3)	Vanity mirror lamp LH
(R4)	Auto anti-dazzling inside mirror (Terminal No.8) (with homelink universal transceiver)
(R6)	Sunroof switch (Terminal No.2) (with single panel sunroof)
(R9)	Vanity mirror lamp RH
(R12)	Personal lamp rear LH
(R13)	Auto anti-dazzling inside mirror (Terminal No.2) (with homelink universal transceiver)
(R14)	Sunroof switch (Terminal No.1) (with dual panel sunroof)
(R10, R100)	Room lamp sub-harness
(R101)	Sunroof motor assembly (Terminal No.2) (with dual panel sunroof)
(M13, R2)	Room lamp harness
(R5)	Sunroof motor assembly (Terminal No.8) (with single panel sunroof)
(R10, R100)	Room lamp sub-harness
(R101)	Sunroof motor assembly (Terminal No.1) (with dual panel sunroof)
(R102)	Sunshade motor assembly (with dual panel sunroof)
(M11, D1)	Front door LH harness
(D4)	Door mirror LH (Terminal No.7)
(D4)	Door mirror LH (Terminal No.13)
(D8)	Main power window and door lock/unlock switch (Terminal No.17)
(D10)	Front door lock assembly LH
(D13)	Seat memory switch
(D15)	Front outside handle LH (request switch)

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# GROUND

< COMPONENT DIAGNOSIS >

## ENGINE ROOM HARNESS



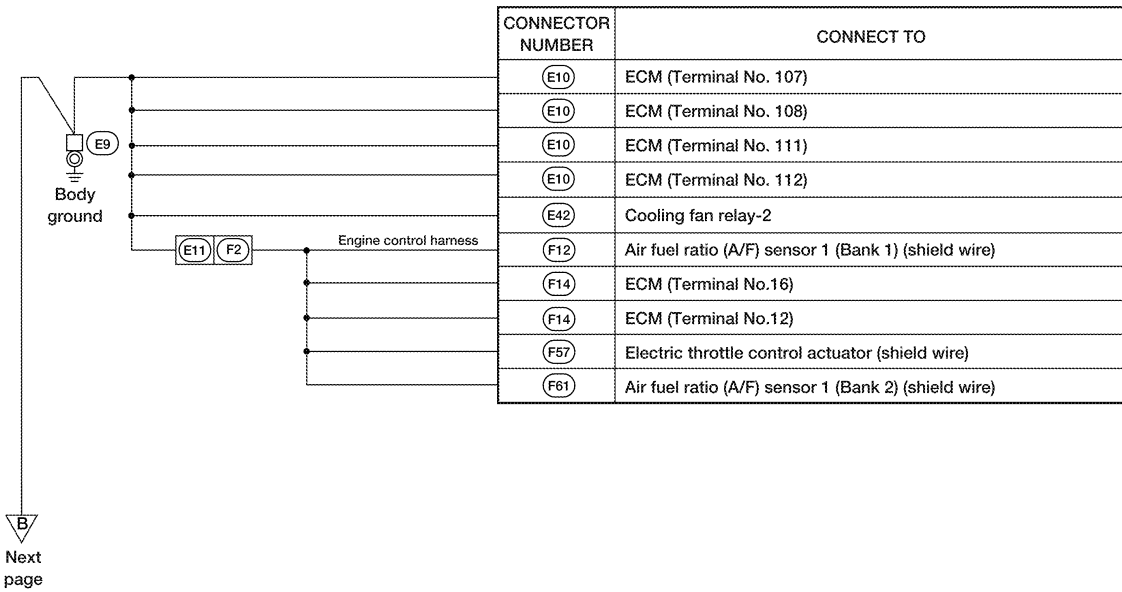
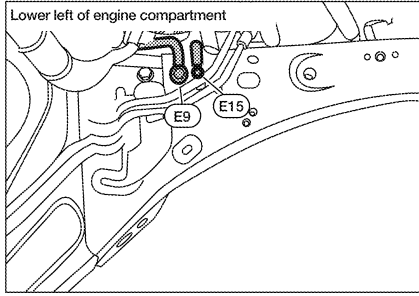
A  
B  
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D  
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G  
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J  
K  
L  
N  
O  
P

PG

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# GROUND

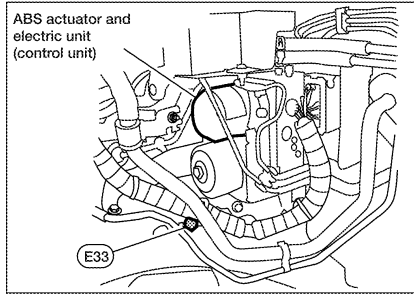
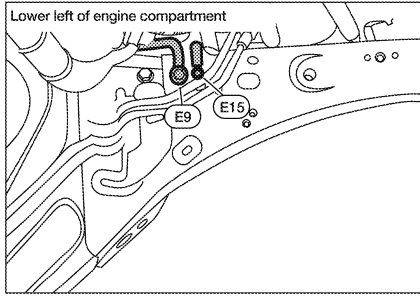
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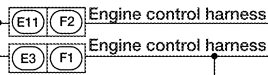
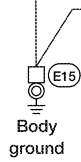
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# GROUND

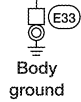
## < COMPONENT DIAGNOSIS > FRONT END MODULE HARNESS



Preceding page



CONNECTOR NUMBER	CONNECT TO
(E17)	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.41)
(E18)	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.12)
(E24)	Brake fluid level switch
(E25)	Front wiper motor
(E27)	Shift lock relay
(E43)	Cooling fan relay-3
(F3)	A/C compressor
(F15)	TCM (Transmission control module) (Terminal No.5)
(F15)	TCM (Transmission control module) (Terminal No.42)



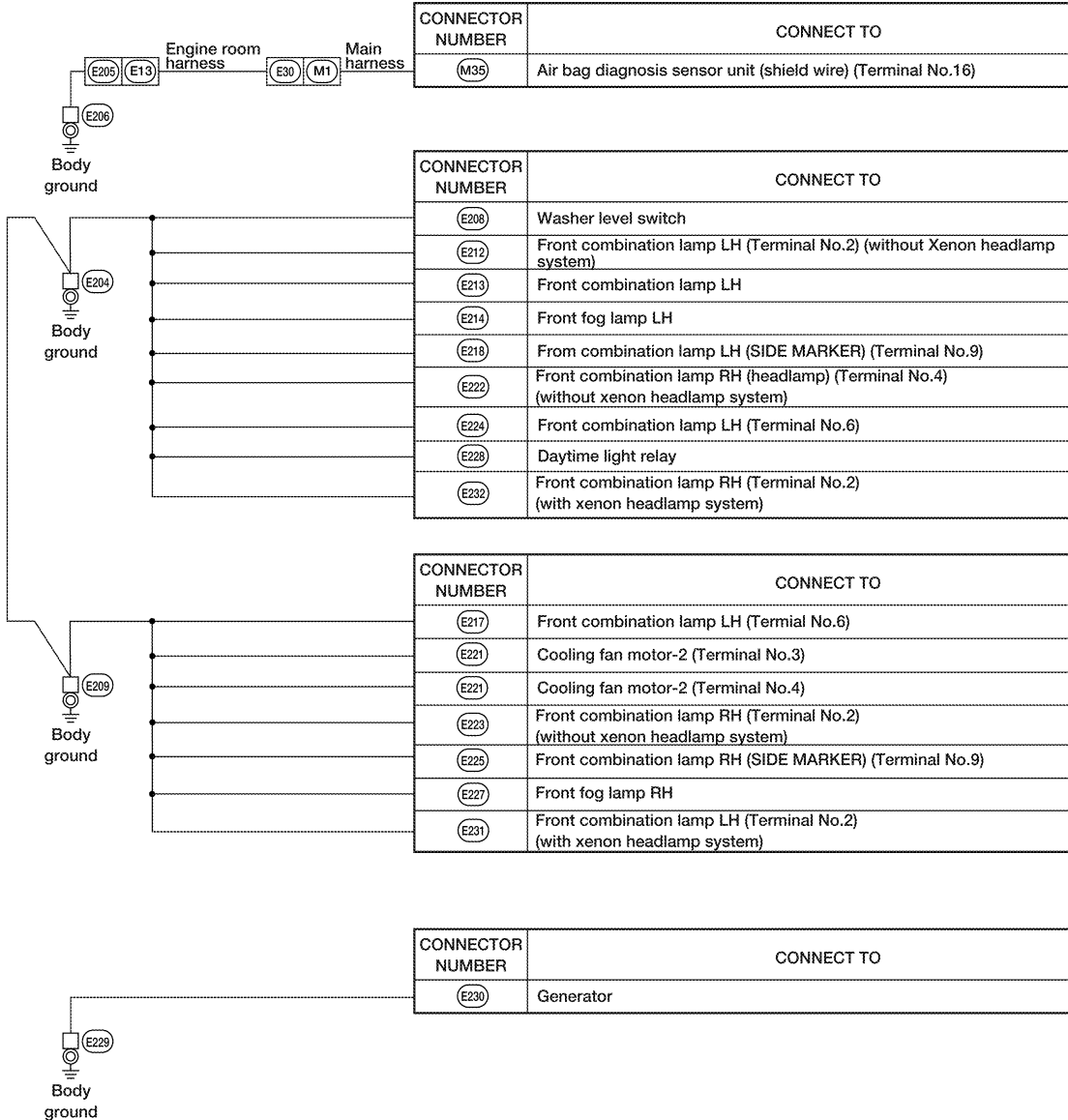
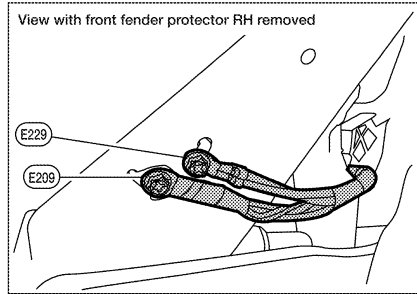
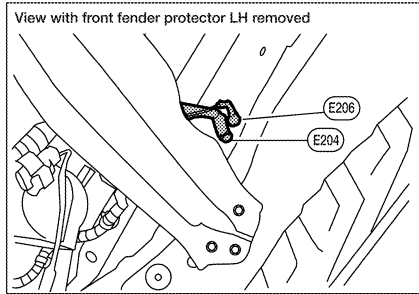
CONNECTOR NUMBER	CONNECT TO
(E26)	ABS actuator and electric unit (Control unit) (Terminal No. 1)
(E26)	ABS actuator and electric unit (Control unit) (Terminal No.4)

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

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# GROUND

## < COMPONENT DIAGNOSIS > ENGINE CONTROL HARNESS

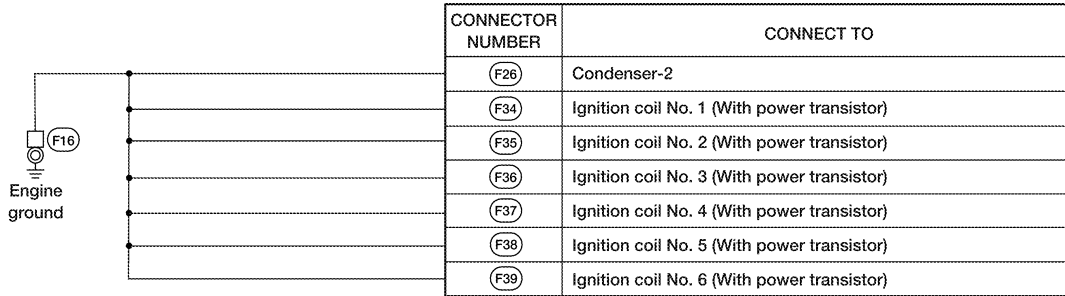
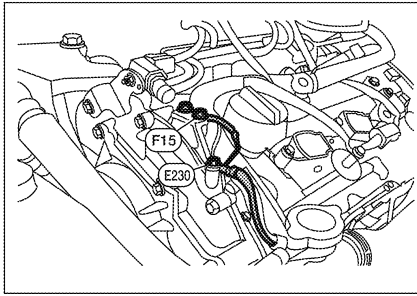


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# GROUND

## < COMPONENT DIAGNOSIS >

### BODY HARNESS



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
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P

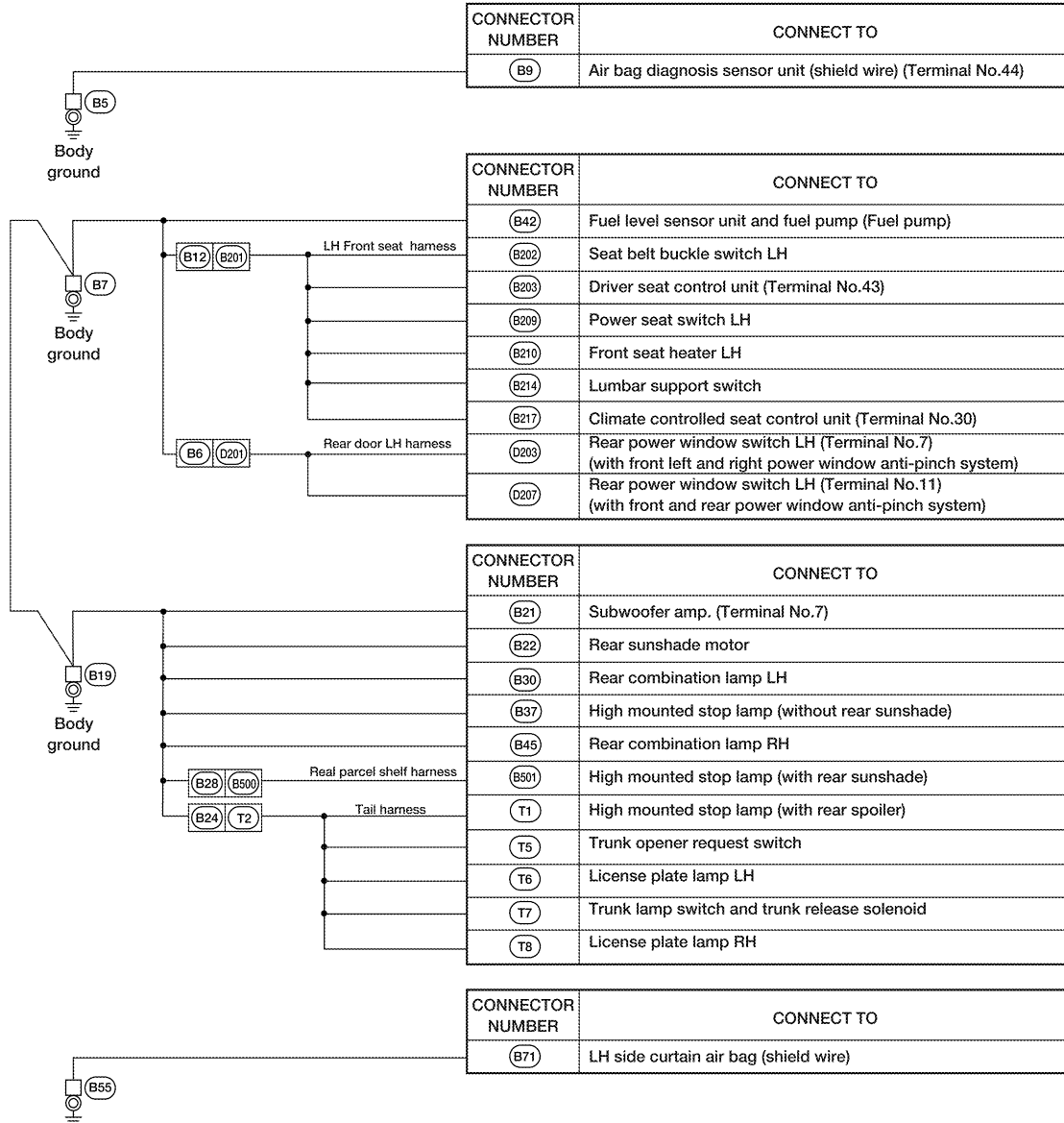
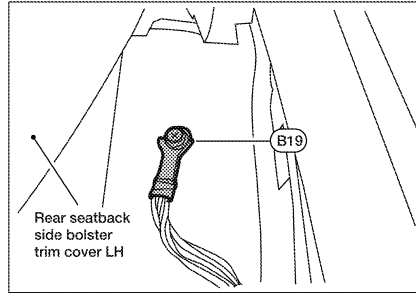
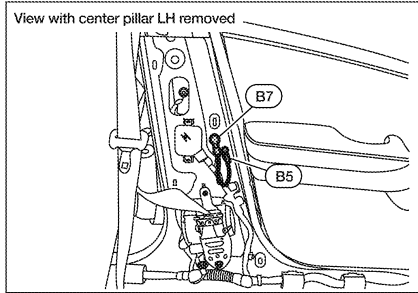
PG

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# GROUND

< COMPONENT DIAGNOSIS >

## BODY NO. 2 HARNESS



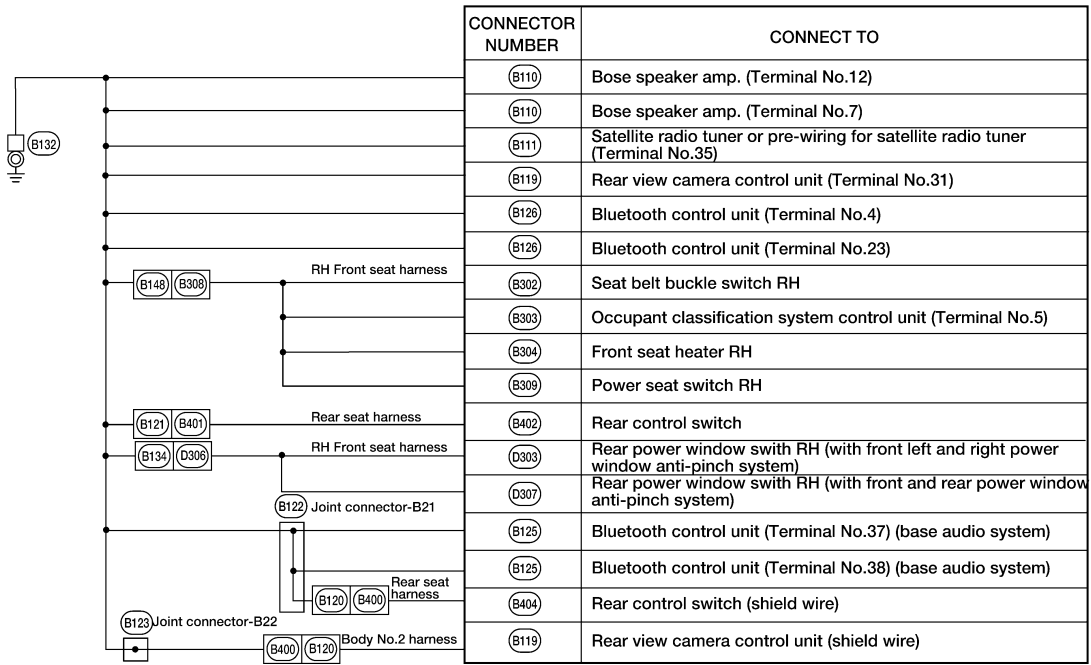
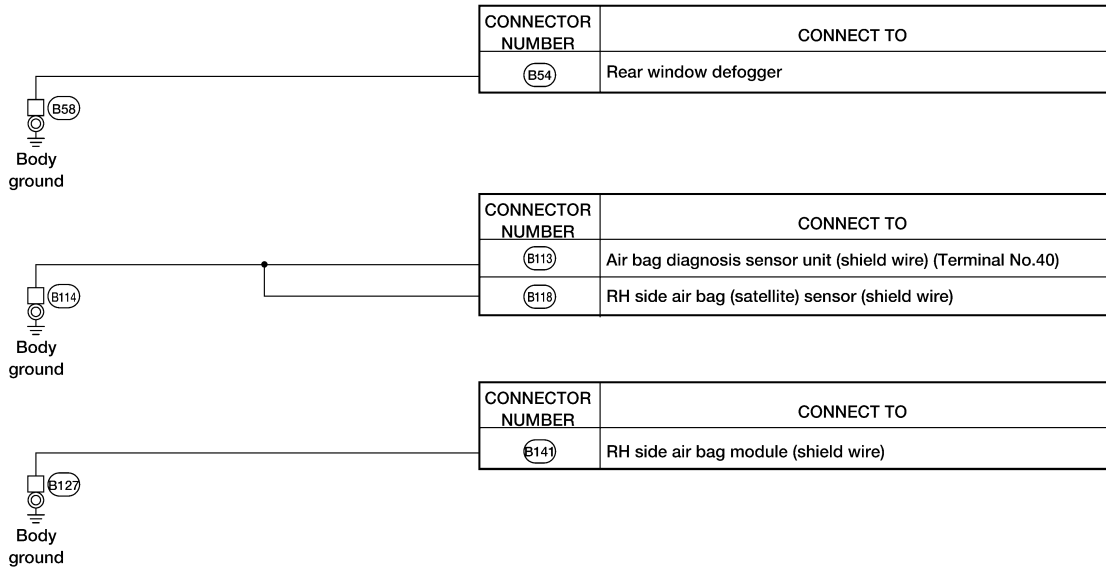
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# GROUND

< COMPONENT DIAGNOSIS >

BODY NO. 2 HARNESS



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# HARNESS

< COMPONENT DIAGNOSIS >

## HARNESS

### Harness Layout

INFOID:000000004212331

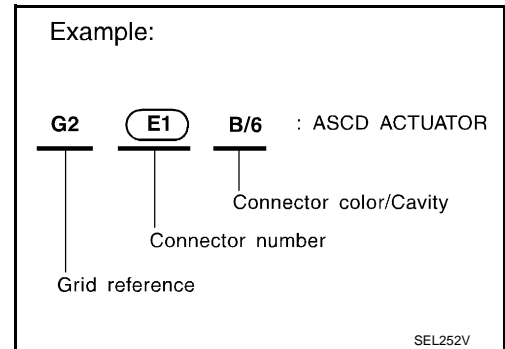
#### HOW TO READ HARNESS LAYOUT

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

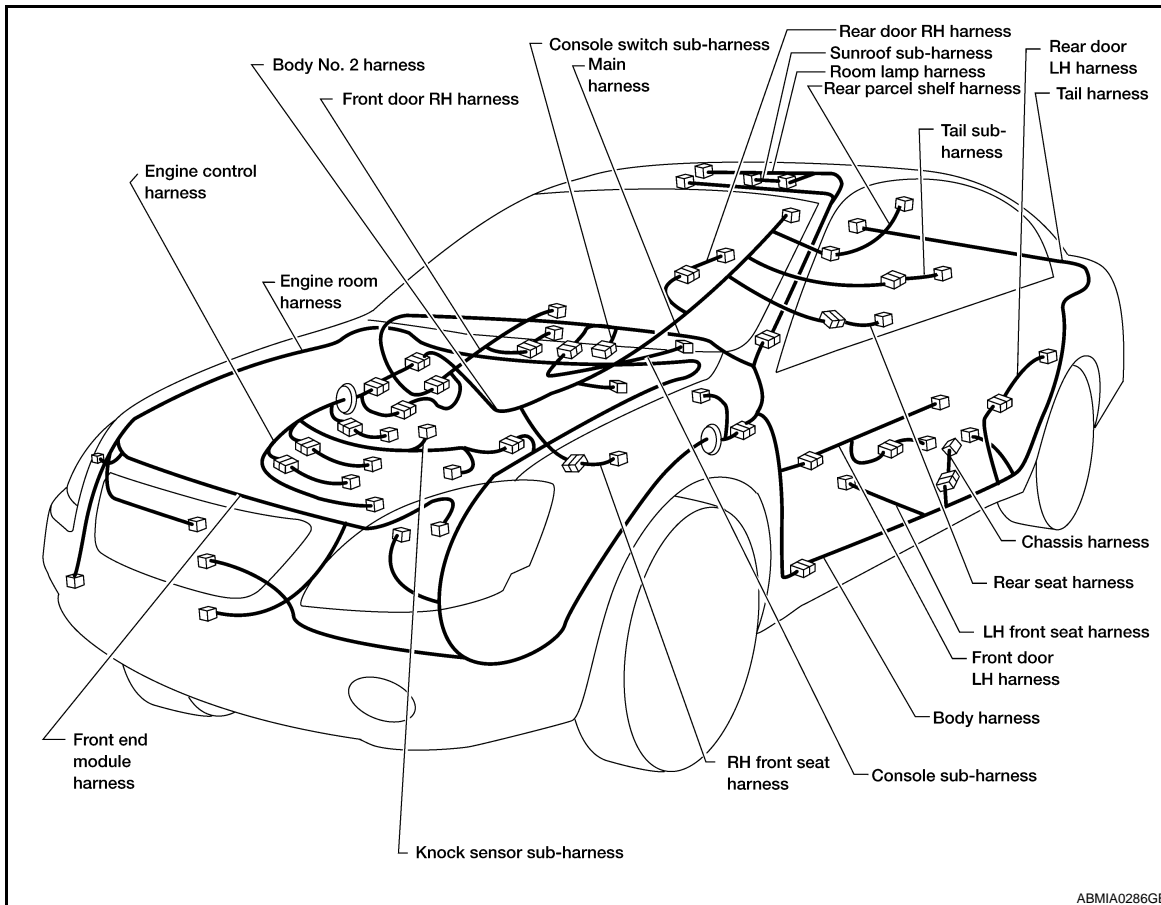
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness and Front End Module Harness
- Engine Room Harness (Passenger Compartment)
- Engine Control Harness and Knock Sensor Sub-harness
- Body Harness, LH Front Seat Harness, Tail Harness and Chassis Harness
- Body No. 2 Harness, RH Front Seat Harness, Rear Seat Harness, Rear Parcel Shelf Harness and Tail Sub-harness
- Room Lamp Harness and Sunroof Sub-harness

#### To use the grid reference

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



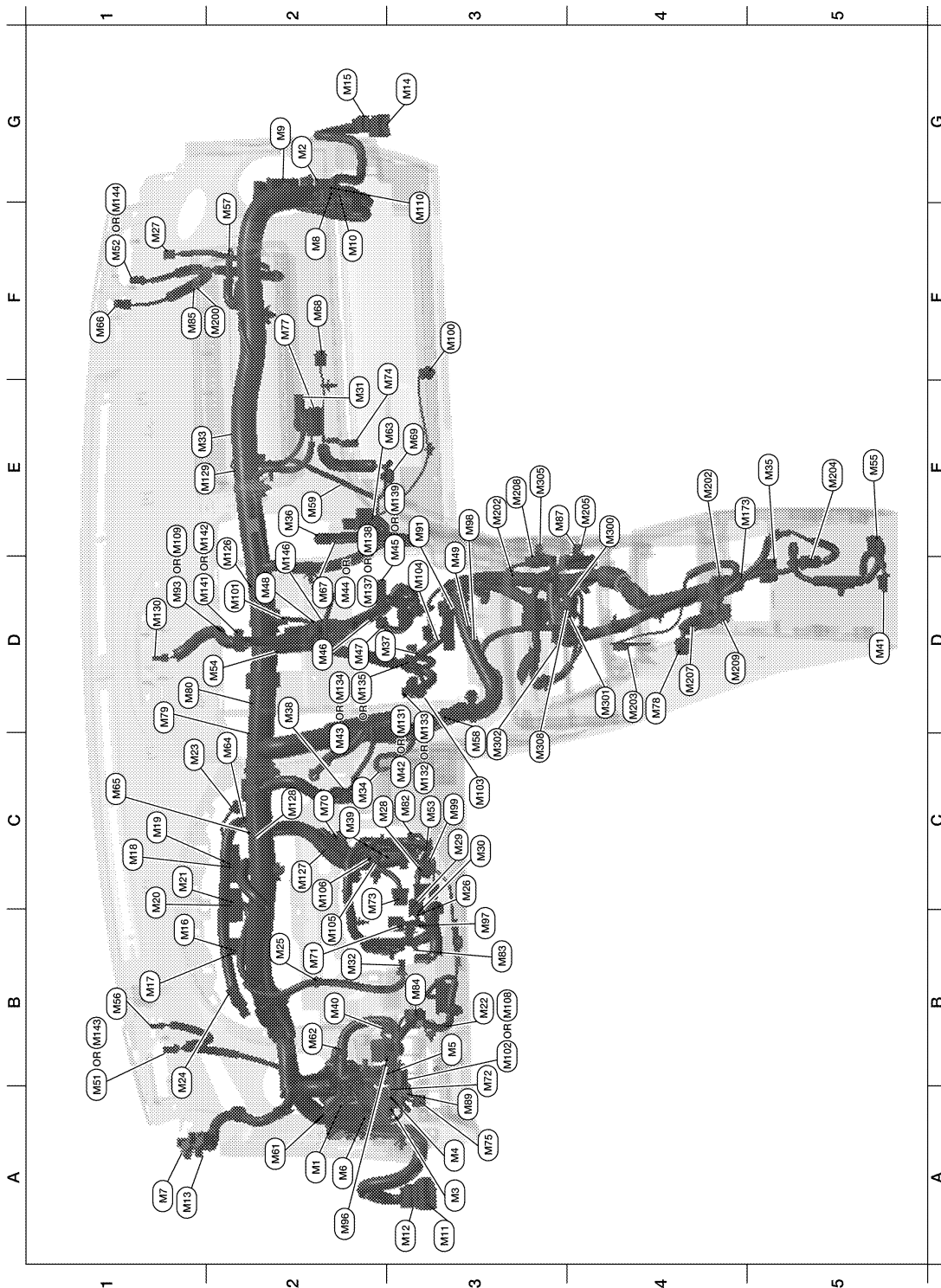
#### OUTLINE



# HARNESS

< COMPONENT DIAGNOSIS >

## MAIN HARNESS



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A2	M1	SMJ	: To E30	B2	M71	W/6	: Tilt motor
G2	M2	W/24	: To B101	B3	M72	GR/6	: VDC OFF switch
A3	M3	W/8	: Fuse block (J/B)	C2	M73	W/6	: Telescopic motor
A3	M4	W/10	: Fuse block (J/B)	E2	M74	W/2	: Trunk lid opener cancel switch

# HARNESS

## < COMPONENT DIAGNOSIS >

B3	M5	W/12	: Fuse block (J/B)	A3	M75	B/2	: Trunk lid opener switch
A2	M6	SMJ	: To B1	F2	M77	Y/4	: Front passenger air bag module
A1	M7	W/16	: To R1	D4	M78	W/10	: CVT device
F2	M8	W/32	: To B102	D1	M79	—	: Body ground
G2	M9	BR/16	: To B103	D1	M80	—	: Diode-3
F2	M10	W/16	: To B104	C3	M82	W/4	: Paddle shifter (shift up)
A3	M11	W/16	: To D1	B2	M83	W/3	: Paddle shifter (shift down)
A3	M12	W/24	: To D2	B3	M84	W/2	: Circuit breaker
A1	M13	W/6	: To R2	F1	M85	W/24	: To M200
G2	M14	W/10	: To D101	E3	M87	BR/16	: To M205
G2	M15	W/16	: To D102	A3	M89	W/8	: Rear control cancel switch
B1	M16	B/3	: BCM (body control module)	D4	M91	W/24	: iPod® adapter
B1	M17	W/16	: BCM (body control module)	D1	M93	W/12	: Display unit ( with monochrome display without bluetooth)
C1	M18	G/40	: BCM (body control module)	A2	M96	W/6	: Heated steering wheel switch
C1	M19	B/40	: BCM (body control module)	B3	M97	L/4	: Heated steering relay
C1	M20	W/12	: BCM (body control module)	E3	M98	W/16	: A/C and AV switch assembly
C1	M21	GR/40	: BCM (body control module)	C3	M99	BR/2	: Foot lamp LH
B3	M22	W/16	: Data link connector	F3	M100	BR/2	: Foot lamp RH
C1	M23	W/12	: Combination meter	D2	M101	B/10	: A/C display
B1	M24	W/40	: Combination meter	B3	M102	W/16	: Door mirror remote control switch (without automatic drive positioner)
B2	M25	W/8	: Meter mode switch	C3	M103	GR/3	: To M501
C3	M26	W/2	: Spiral cable	D4	M104	W/12	: A/C switch assembly
F1	M27	B/4	: Remote keyless entry receiver	B2	M105	Y/2	: Driver air bag module
C3	M28	W/16	: Combination switch	C2	M106	O/2	: Driver air bag module
C3	M29	Y/6	: Spiral cable	B3	M108	BR/16	: Door mirror remote control switch (with automatic drive positioner)
C3	M30	GR/8	: Spiral cable	E1	M109	W/12	: Display unit ( with monochrome display with bluetooth)
E2	M31	W/6	: Blower motor	F3	M110	W/16	: To B136
B2	M32	W/8	: Electronic steering column lock	D2	M126	W/3	: Intake door motor
E1	M33	W/3	: To M125	C2	M127	W/3	: Mode door motor
C2	M34	W/2	: In-vehicle sensor	C2	M128	W/3	: Air mix door motor LH
E5	M35	Y/28	: Air bag diagnosis sensor unit	E1	M129	W/3	: Air mix door motor RH
E2	M36	W/3	: Front passenger air bag off indicator	D1	M130	BR/2	: Center speaker
D3	M37	W/40	: A/C auto amp	D3	M131	W/20	: AV control unit (with NAVI)
D2	M38	BR/8	: Push-button ignition switch	C3	M132	W/20	: Audio unit (bose audio system-with monochrome display)
C2	M39	GR/6	: ADP steering switch	D3	M133	W/20	: Audio unit (base audio system)
B2	M40	W/12	: Key slot	D2	M134	W/12	: AV control unit (with NAVI)
D3	M41	GR/2	: Front console antenna	D2	M135	W/12	: Audio unit (base audio system)
C3	M42	W/20	: AV control unit (without NAVI)	D2	M137	W/32	: AV control unit (with NAVI)
C2	M43	W/12	: AV control unit (without NAVI)	E2	M138	W/12	: Audio unit (bose audio system-with monochrome display)
D2	M44	W/24	: AV control unit (without NAVI)	E3	M139	W/40	: AV control unit (with NAVI)
D3	M45	W/16	: AV control unit (without NAVI)	D2	M141	W/24	: Display unit (with color display without NAVI)

# HARNESS

## < COMPONENT DIAGNOSIS >

D2	M46	W/32	: AV control unit (without NAVI)	E1	M142	W/24	: Display unit (with color display with NAVI)
D2	M47	W/12	: AV control unit (without NAVI)	B1	M143	BR/2	: Tweeter LH (base audio system)
D2	M48	GR/3	: AV control unit (without NAVI)	F1	M144	BR/2	: Tweeter LH (base audio system)
D3	M49	GR/2	: Instrument panel antenna	D2	M146	GR3	: AV control unit (with NAVI)
B1	M51	BR/2	: Tweeter LH (Bose audio system)	Console sub-harness			
F1	M52	BR/2	: Tweeter RH (Bose audio system)	F2	M200	W/24	: To M85
C3	M53	W/8	: Steering angle sensor	E4	M202	B/3	: Front power socket
D2	M54	W/4	: Hazard switch	D4	M203	BR/2	: CVT device
E5	M55	B/4	: Yaw rate/side/decel G sensor	E5	M204	B/3	: Front console power socket
B1	M56	B/2	: Sunload sensor	E4	M205	BR/16	: To M87
F2	M57	—	: Body ground	E4	M207	GR/16	: iPod® side
C3	M58	L/4	: Climate controlled seat relay	E3	M208	W/16	: To M305
E2	M59	W/12	: Power steering control unit	E4	M209	W/8	: Aux in jack
A2	M61	—	: Body ground	Console switch sub-harness			
B2	M62	W/2	: Tire pressure warning check connector	E3	M300	BR/6	: Front heated seat switch RH
E3	M63	W/24	: Automatic drive positioner control unit	D3	M301	W/6	: Front heated seat switch LH
C2	M64	W/6	: Joint connector-M01	C3	M302	W/10	: Climate controlled seat switch
C1	M65	W/6	: Joint connector-M02	E3	M305	W/16	: To M208
F1	M66	W/3	: Optical sensor	E5	M308	W/6	: Rear sunshade switch
D2	M67	W/5	: Automatic drive positioner control unit				
F2	M68	BR/2	: Glove box lamp				
E3	M69	W/2	: Intake sensor				
C2	M70	W/4	: Tire pressure receiver				

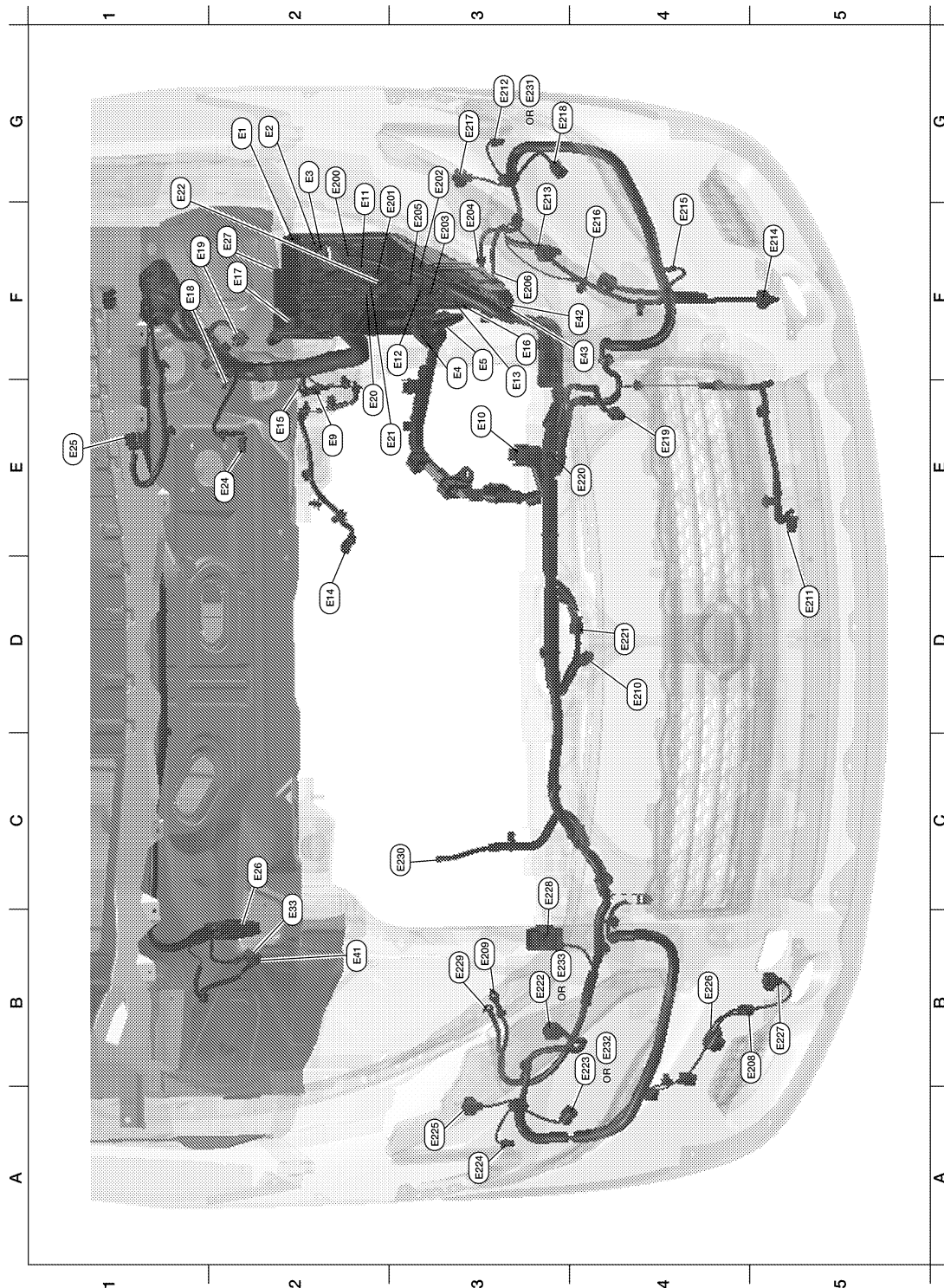
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# HARNESS

< COMPONENT DIAGNOSIS >

## ENGINE ROOM HARNESS



ABMIA0288GB

G2	E1	W/6	: Joint connector-E01	F3	E203	W/6	: To E12
G2	E2	W/8	: To E202	F3	E204	—	: Body ground
G2	E3	W/16	: To F1	F3	E205	B/3	: To E13
F3	E4	BR/2	: Fusible link box (battery)	F3	E206	—	: Body ground
F3	E5	GR/2	: Fusible link box (battery)	B4	E208	W2	: Washer fluid level switch

# HARNESSES

## < COMPONENT DIAGNOSIS >

E2	E9	—	: Body ground	B3	E209	—	: Body ground	A
E3	E10	B/32	: ECM	D4	E210	Y/2	: Crash zone sensor	B
G2	E11	W/10	: To F2	D5	E211	B/2	: Ambient sensor	C
F3	E12	W/6	: To E203	G3	E212	B/2	: Front combination lamp LH (without xenon headlamp system)	D
F3	E13	B/3	: To E205	F3	E213	B/2	: Front combination lamp LH	E
D2	E14	B/2	: Power steering solenoid valve	F5	E214	B/2	: Front fog lamp LH	F
E2	E15	—	: Body ground	F4	E215	B/1	: Horn (low)	G
F3	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)	F4	E216	B/1	: Horn (high)	H
F2	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)	G3	E217	GR/3	: Front combination lamp LH	I
F1	E18	W/36	: IPDM E/R (intelligent power distribution module engine room)	G3	E218	GR/2	: Front combination lamp LH	J
F1	E19	GR/2	: Front wheel sensor LH	E4	E219	B/3	: Refrigerant pressure sensor	K
E2	E20	W/6	: Joint connector-E02	E4	E220	GR/4	: Cooling fan motor-1	L
E2	E21	W/4	: Joint connector-E03	D4	E221	GR/4	: Cooling fan motor-2	
G1	E22	W/4	: Joint connector-E04	B3	E222	B/2	: Front combination lamp RH (without daytime light system)	
E2	E24	GR/2	: Brake fluid level switch	B4	E223	B/2	: Front combination lamp RH (without xenon headlight system)	
E1	E25	GR/5	: Front wiper motor	A3	E224	GR/3	: Front combination lamp RH	
C2	E26	B/26	: ABS actuator and electric unit (control unit)	A3	E225	GR/2	: Front combination lamp RH	
A5	E27	L/4	: Shift lock relay	B4	E226	B/2	: Front washer motor	
B2	E33	—	: Body Ground	B5	E227	B/2	: Front fog lamp RH	
B2	E41	GR/2	: Front wheel sensor RH	C3	E228	B/5	: Daytime light relay	
F4	E42	BR/6	: Cooling fan relay-2	B3	E229	—	: Body ground	
F4	E43	BR/6	: Cooling fan relay-3	C3	E230	—	: Generator	
Front end module harness				G3	E231	GR/2	: Front combination lamp LH (with xenon headlight system)	
G2	E200	W/8	: IPDM E/R (intelligent power distribution module engine room)	B4	E232	GR/2	: Front combination lamp RH (with xenon headlight system)	
G2	E201	W/16	: IPDM E/R (intelligent power distribution module engine room)	B3	E233	B/2	: Front combination lamp RH (with daytime light system)	
G3	E202	W/8	: To E2					

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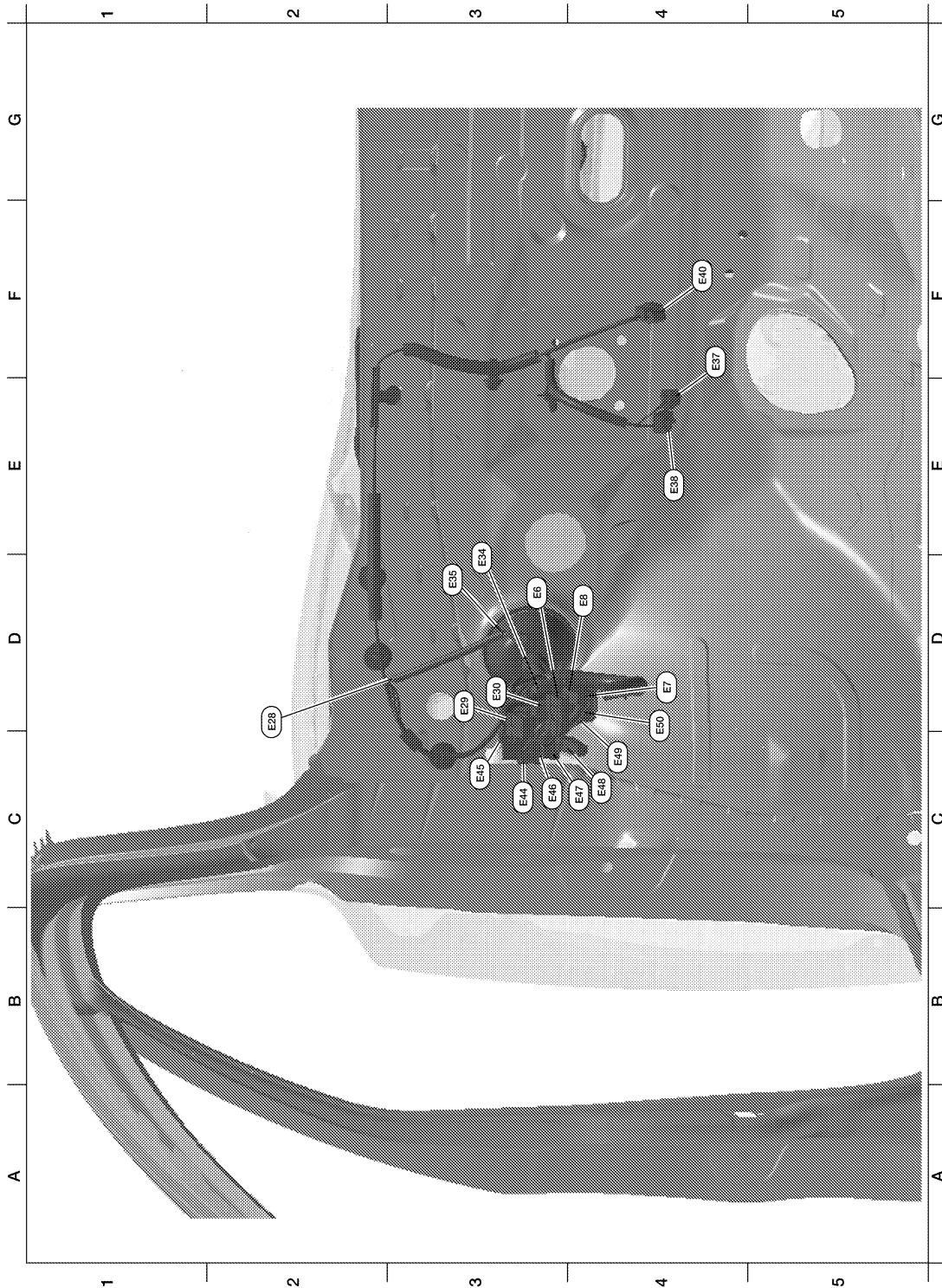
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# HARNESS

< COMPONENT DIAGNOSIS >

## ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



ABMIA0289GB

D3	E6	W/16	: Fuse block (J/B)				
D4	E7	W/1	: Fuse block (J/B)				
D4	E8	B/2	: Fuse block (J/B)				
D2	E28	BR/3	: Intelligent key warning buzzer				
D3	E29	W/16	: To B10				



# HARNESS

## < COMPONENT DIAGNOSIS >

D3	E30	SMJ	: To M1				
D3	E34	L/4	: Back-up lamp relay				
D3	E35	B/1	: Park brake switch				
F4	E37	BR/2	: ASCD brake switch				
E4	E38	W/4	: Stop lamp switch				
F4	E40	B/6	: Accelerator pedal position switch				
C3	E44	BR/12	: Junction block				
C3	E45	W/12	: Junction block				
C3	E46	W/16	: Junction block				
C4	E47	W/6	: Junction block				
C4	E48	W/4	: Junction block				
C4	E49	BR/4	: Junction block				
D4	E50	W/2	: Junction block				

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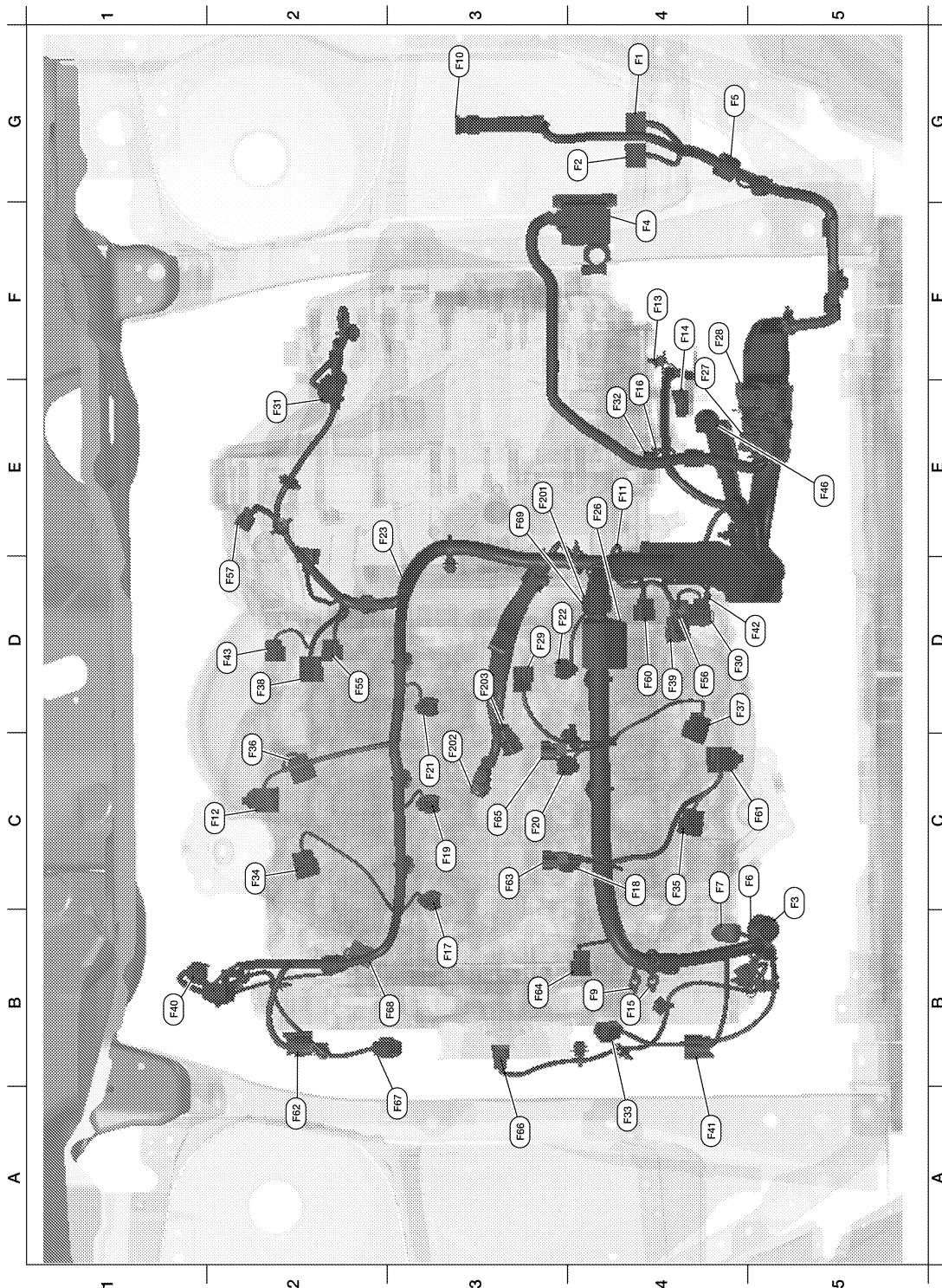
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# HARNESS

< COMPONENT DIAGNOSIS >

## ENGINE CONTROL HARNESS (VQ35DE)



ABMIA0290GB

G4	F1	W/16	: To E3	D2	F43	B/3	: Intake valve timing control position sensor (bank1)
G4	F2	W/10	: To E11	E4	F46	B/22	: CVT unit
C5	F3	B/2	: A/C Compressor	D2	F55	B/3	: Camshaft position sensor (phase) (bank 1)
F4	F4	—	: Fusible link box (battery)	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
G4	F5	B/3	: Battery current sensor	D2	F57	B/6	: Electric throttle control actuator

# HARNESS

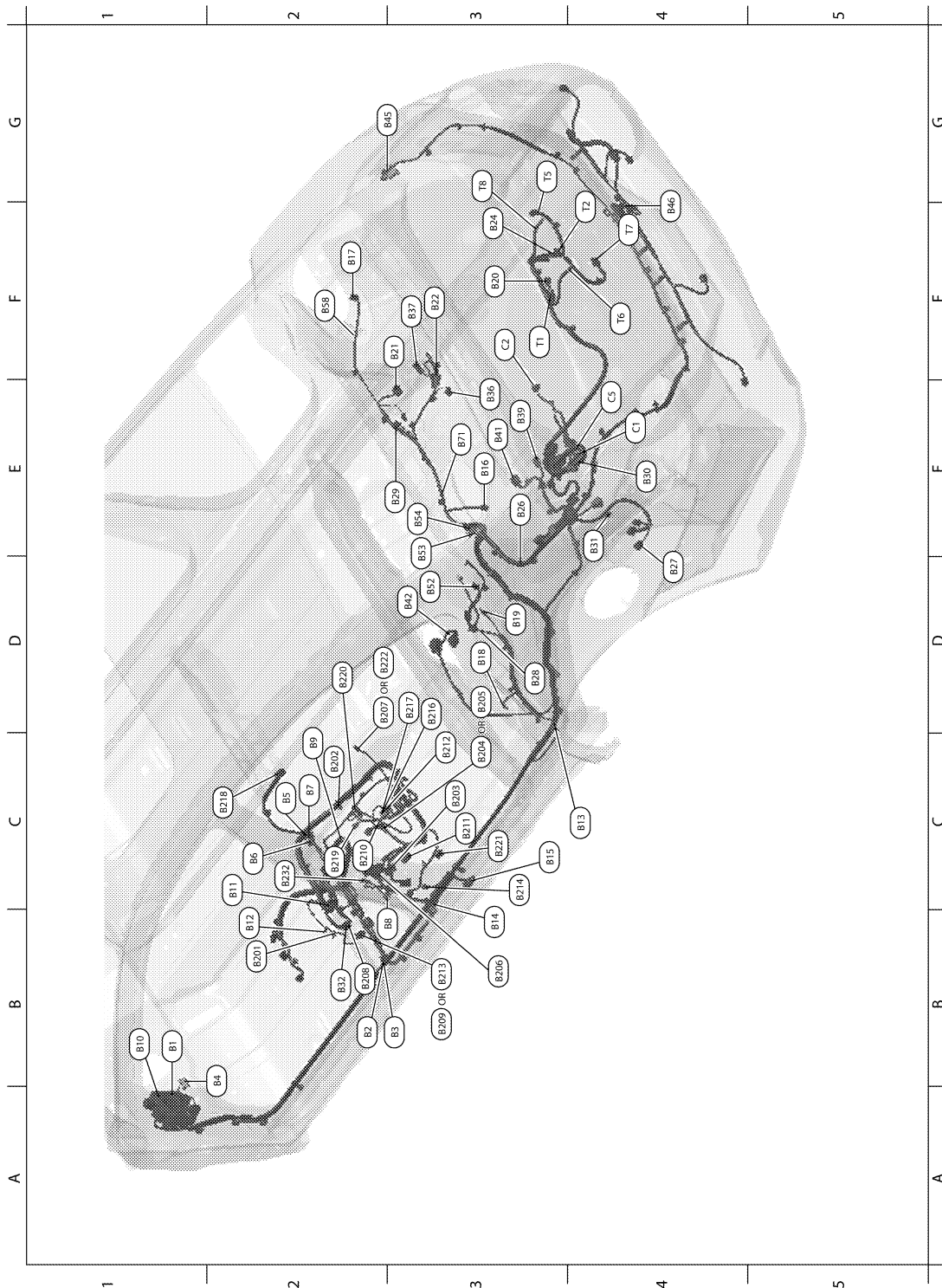
## < COMPONENT DIAGNOSIS >

C4	F6	—	: Generator	D4	F60	B/3	: Camshaft position sensor (phase) (bank 2)	A
C5	F7	B/3	: Generator	C5	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	B
E4	F8	W/3	: Primary speed sensor	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)	B
B4	F9	—	: Engine ground	C3	F63	B/2	: VIAS control solenoid valve (bank 1)	C
G3	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	B3	F64	BR/2	: Electronic controlled engine mount	D
E4	F11	GR/2	: Engine coolant temperature sensor	C3	F65	B/2	: VIAS control solenoid valve (bank 2)	E
C2	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	A3	F66	L/4	: Intake valve timing control solenoid valve (bank 1)	F
F4	F13	BR/48	: ECM	A3	F67	L/4	: Intake valve timing control solenoid valve (bank 1)	G
F4	F14	GR/32	: ECM	B2	F68	GR/2	: Engine oil temperature sensor	H
B4	F15	B/48	: TCM (transmission control module)	E3	F69	L/4	: To F201	I
E4	F16	—	: Engine ground	Knock sensor sub-harness				J
B3	F17	GR/2	: Fuel injector No. 1	E3	F201	L/4	: To F69	K
C4	F18	GR/2	: Fuel injector No. 2	C3	F202	GR/2	: Knock sensor (bank1)	L
C3	F19	GR/2	: Fuel injector No. 3	D3	F203	GR/2	: Knock sensor (bank2)	PG
C3	F20	GR/2	: Fuel injector No. 4					N
C3	F21	GR/2	: Fuel injector No. 5					O
D3	F22	GR/2	: Fuel injector No. 6					P
E2	F23	B/3	: Secondary speed sensor					
E4	F26	W/2	: Condenser-2					
F4	F27	—	: Starter motor					
F4	F28	GR/1	: Starter motor					
D3	F29	L/2	: EVAP canister purge volume control solenoid valve					
D4	F30	B/3	: Crankshaft position sensor (POS)					
E2	F31	B/6	: Mass air flow sensor					
E4	F32	G/2	: Exhaust valve timing control magnet retarder (bank 1)					
A4	F33	G/2	: Exhaust valve timing control magnet retarder (bank 2)					
C2	F34	GR/3	: Ignition coil No. 1 (with power transistor)					
C4	F35	GR/3	: Ignition coil No. 2 (with power transistor)					
C2	F36	GR/3	: Ignition coil No. 3 (with power transistor)					
D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)					
D2	F38	GR/3	: Ignition coil No. 5 (with power transistor)					
D4	F39	GR/3	: Ignition coil No. 6 (with power transistor)					
B1	F40	B/3	: Power steering pressure sensor					
A4	F41	GR/1	: Oil pressure switch					
D5	F42	B/3	: Intake valve timing control position sensor (bank2)					

# HARNESS

< COMPONENT DIAGNOSIS >

## BODY HARNESS



ABMIA0292GB

B1	B1	SMJ	: To M6	LH front seat harness		
B2	B2	B/6	: Joint connector-B01	B2	B201	W/8 : To B12
B3	B3	W/4	: Joint connector-B02	C2	B202	W/3 : Seat belt buckle switch LH
B2	B4	BR/12	: Fuse block (J/B)	C3	B203	W/32 : Driver seat control unit
C2	B5	—	: Body ground	C3	B204	W/6 : Front power seat LH

# HARNESS

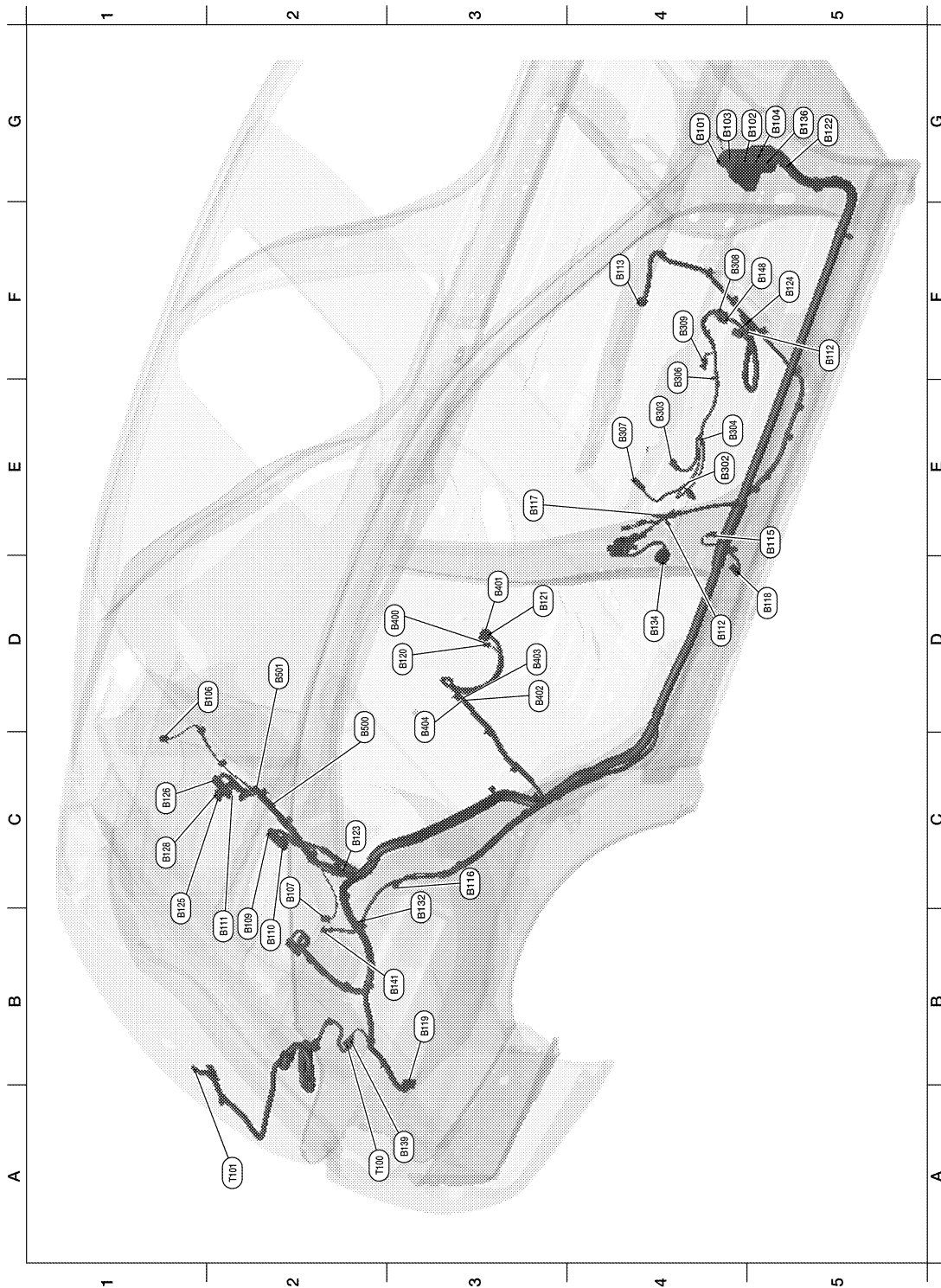
## < COMPONENT DIAGNOSIS >

C2	B6	W/10	: To D201	D3	B205	W/6	: Front power seat LH (with automatic drive positioner)	A
C2	B7	—	: Body ground	B3	B206	W/12	: Front power seat LH (with automatic drive positioner)	B
B2	B8	W/3	: Front door switch LH	D2	B207	B/2	: Reclining motor (without automatic drive positioner)	C
C2	B9	Y/12	: Air bag diagnosis sensor unit	C3	B208	W/16	: To B32	D
B1	B10	W/16	: To E29	B3	B209	W/10	: Power seat switch LH (without automatic drive positioner)	E
C2	B11	Y/2	: Front LH side air bag module	C2	B210	GR/3	: Front seat heater LH	F
B2	B12	W/8	: To B201	C3	B211	W/12	: Driver seat control unit	G
C4	B13	W/4	: Joint connector-B03	C3	B212	B/16	: Climate control seat control unit	H
B3	B14	Y/2	: Front LH seat belt pre-tensioner	B3	B213	W/10	: Power seat switch LH (with automatic drive positioner)	I
C3	B15	Y/2	: LH side air bag (satellite) sensor	C3	B214	W/4	: Lumbar support switch	J
E3	B16	W/2	: Subwoofer LH	D3	B216	B/8	: Climate control seat control unit	K
E5	B17	W/2	: Subwoofer RH	D3	B217	B/6	: Climate control seat control unit	L
D3	B18	W/3	: Rear door switch LH	C2	B218	W/4	: Seat back thermal electric device	
D3	B19	—	: Body ground	C2	B219	W/4	: Seat cushion thermal electric device	
F3	B20	L/20	: Joint connector-B05	D2	B220	W/5	: Climate control seat blower motor	
F2	B21	W/10	: Subwoofer amp.	C3	B221	B/2	: Lumbar support Motor	
F3	B22	W/6	: Rear sunshade unit	D2	B222	W/5	: Reclining motor (with automatic drive positioner)	
F3	B24	W/8	: To T2	Tail harness				I
E3	B26	W/4	: Joint connector - B04	F3	T1	BR/2	: High mounted stop lamp (with rear spoiler)	J
D4	B27	W/4	: Fuel lid door lock actuator	F4	T2	W/8	: To B24	K
D3	B28	W/3	: To B500	G3	T5	BR/2	: Trunk opener request switch	L
E3	B29	GR/2	: Rear parcel shelf antenna	F4	T6	BR/2	: Licence plate lamp LH	
E4	B30	W/6	: Rear combination lamp LH	F4	T7	W/4	: Trunk lamp switch and trunk release solenoid	
E4	B31	GR/4	: To C5	G3	T8	BR/2	: Licence plate lamp RH	
B2	B32	W/16	: To B208	Chassis harness				L
E3	B36	W/2	: Trunk room lamp	E4	C1	BR/2	: Rear wheel sensor LH	
F3	B37	W/2	: High mounted stop lamp (Without rear sunshade)	F3	C2	GR/2	: Rear wheel sensor RH	PG
E3	B39	B/2	: EVAP canister vent control valve	E4	C5	GR/4	: To B31	
E3	B41	GR/3	: EVAP control system pressure sensor					
D3	B42	GR/5	: Fuel level sensor unit and fuel pump					N
G2	B45	W/6	: Rear combination lamp RH					
F4	B46	GR/2	: Rear bumper antenna					O
D3	B52	W/1	: Rear window defogger condenser					
D3	B53	B/1	: Rear window defogger					
E3	B54	B/1	: Rear window defogger					P
F2	B58	—	: Body ground					
E3	B71	Y/2	: LH side curtain air bag module					

# HARNESS

< COMPONENT DIAGNOSIS >

BODY NO. 2 HARNESS



ABMIA0291GB

G4	B101	W/24	: To M2	B3	B132	—	: Body ground
G5	B102	W/32	: To M8	D4	B134	W/10	: To D306
G4	B103	BR/16	: To M9	G5	B136	W/16	: To M110
G5	B104	W/16	: To M10	A3	B139	W/4	: To T100
D1	B106	W/2	: Rear Subwoofer LH	B3	B141	Y/2	: RH side curtain air bag module

# HARNESS

## < COMPONENT DIAGNOSIS >

F4	B107	W/2	: Rear Subwoofer RH	F5	B148	W/8	: To B308	A
D4	B108	W/3	: Front door switch RH	RH front seat harness				B
B2	B109	BR/23	: BOSE speaker amp.	E4	B302	W/3	: Seat belt buckle switch RH	B
B2	B110	BR/14	: BOSE speaker amp.	E4	B303	W/8	: Occupant classification system control unit	B
B2	B111	W/16	: Satellite radio tuner or pre-wiring for satellite radio tuner	E4	B304	W/3	: Front seat heater RH	C
F5	B112	Y/2	: Front RH side air bag module	F4	B306	GR/3	: Sliding motor RH	C
F4	B113	Y/12	: Air bag diagnosis sensor unit	E4	B307	B/2	: Reclining motor RH	D
E5	B115	Y/2	: Front RH seat belt pre-tensioner	F4	B308	W/8	: To B148	D
C3	B116	W/3	: Rear door switch RH	F4	B309	W/10	: Power seat switch RH	D
D3	B117	—	: Body ground	Rear seat harness				E
D5	B118	Y/2	: RH side air bag (satellite) sensor	D3	B400	GR/6	: To B120	E
B3	B119	W/32	: Rear view camera control unit	D3	B401	W/4	: To B121	F
D3	B120	GR/6	: To B400	D3	B402	W/4	: Rear control switch	F
D3	B121	W/4	: To B401	D3	B403	W/2	: Rear control switch	F
G5	B122	W/4	:Joint connector-B21.	D3	B404	GR/2	: Rear control switch	G
C3	B123	W/4	:Joint connector-B22.	Rear parcel shelf harness				G
F5	B124	Y/2	: To B305	D2	B500	W/3	: To B28	H
B1	B125	W/8	: Bluetooth control unit (with Monochrome display)	D2	B501	GR/2	: High mounted stop lamp (with rear sunshade)	H
C1	B126	W/32	: Bluetooth control unit	Tail sub-harness				I
C1	B128	W/8	: Bluetooth control unit (with color display)	A2	T100	W/4	: To B139	I
F5	B112	Y/2	: Front RH side air bag module	A2	T101	W/4	: Rear view camera	J

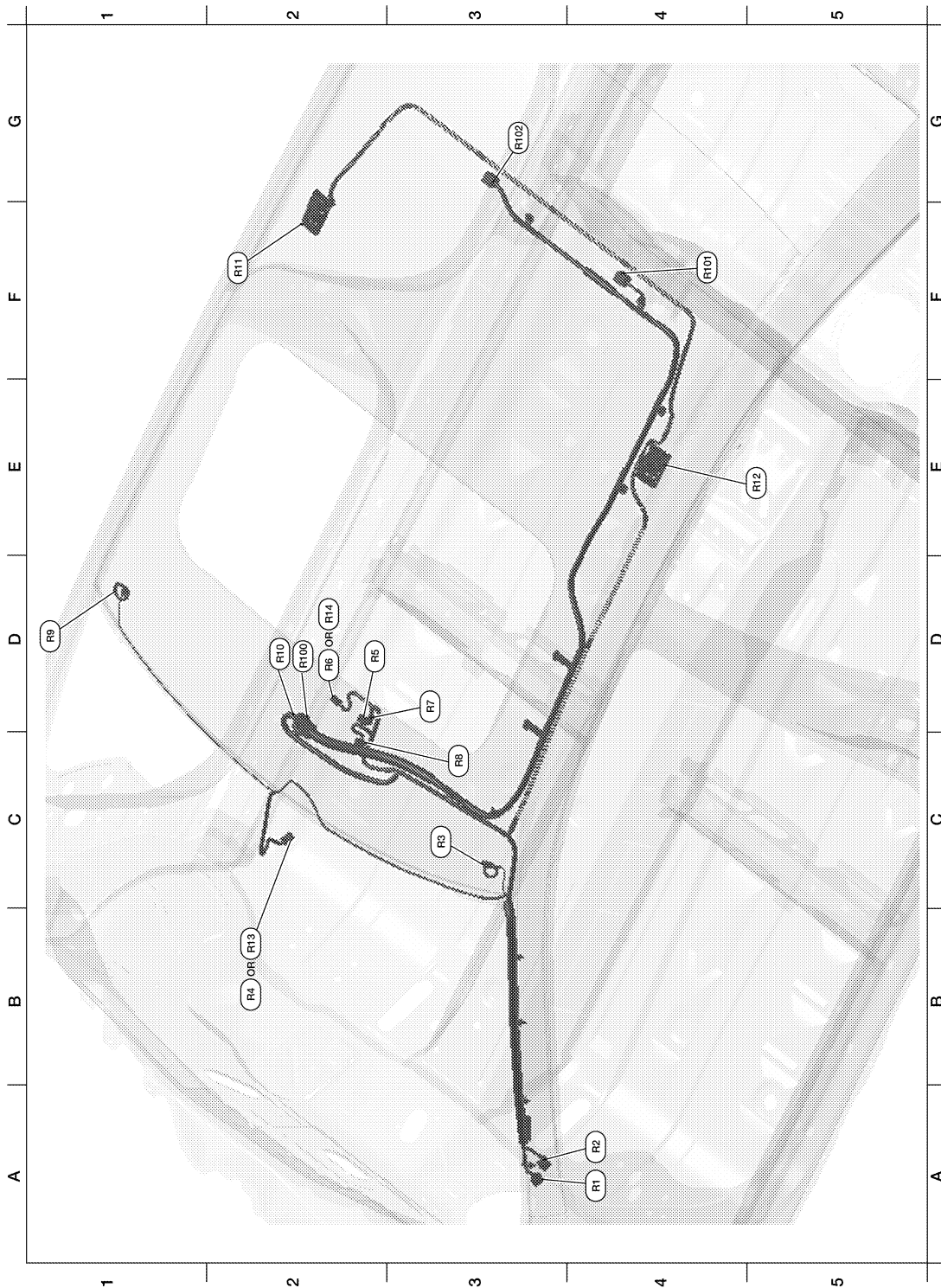
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# HARNESS

< COMPONENT DIAGNOSIS >

## ROOM LAMP HARNESS



ABMIA0293GB

A4	R1	W/16	: To M7	F2	R11	—	: Personal lamp rear RH
A4	R2	W/6	: To M13	E5	R12	—	: Personal lamp rear LH
C3	R3	W/2	: Vanity mirror lamp LH	B2	R13	B/7	: Auto anti-dazzling inside mirror(without homelink universal transceiver)
B2	R4	B/10	: Auto anti-dazzling inside mirror(with homelink universal transceiver)	D2	R14	W/8	: Sunroof switch (with dual panel sunroof)

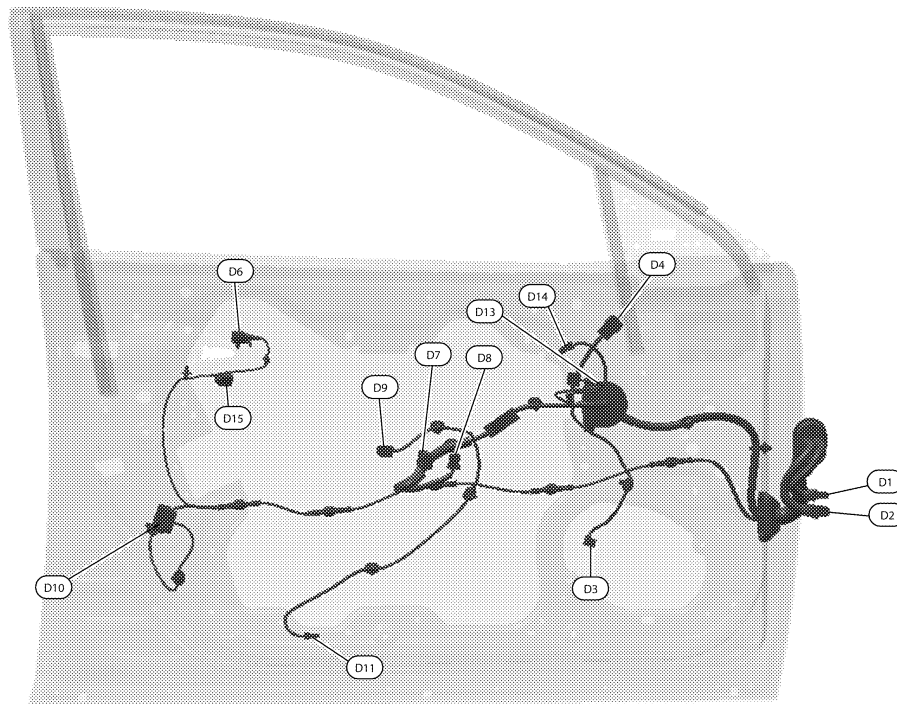


# HARNESS

## < COMPONENT DIAGNOSIS >

D2	R5	W/10	: Sunroof motor assembly(without dual panel sunroof)	Sunroof sub-harness		
D2	R6	W/3	: Sunroof switch (without dual panel sunroof)	D2	R100	W/12 : To R10
D3	R7	W/4	: Microphone	F4	R101	GR/10 : Sunroof motor assembly (with dual panel sunroof)
C3	R8	GR/16	: Front room/map lamp assembly	G3	R102	GR/10 : Sunshade motor assembly
D1	R9	W/2	: Vanity mirror lamp RH			
D2	R10	W/12	: To R100			

## FRONT DOOR LH HARNESS



ABMIA0294GB

D1	W/16	: To M11	D9	W/6	: Front power window motor LH
D2	W/24	: To M12	D10	GR/6	: Front door lock assembly LH
D3	W/2	: Front door speaker LH	D11	W/2	: Front step lamp LH
D4	W/16	: Door mirror LH	D13	W/8	: Seat memory switch
D6	GR/2	: Front outside handle LH (outside key antenna)	D14	GR/2	: Front door inside handle illumination LH
D7	W/16	: Main power window and door lock/unlock switch	D15	B/2	: Front outside handle illumination LH (request switch)
D8	W/3	: Main power window and door lock/unlock switch			

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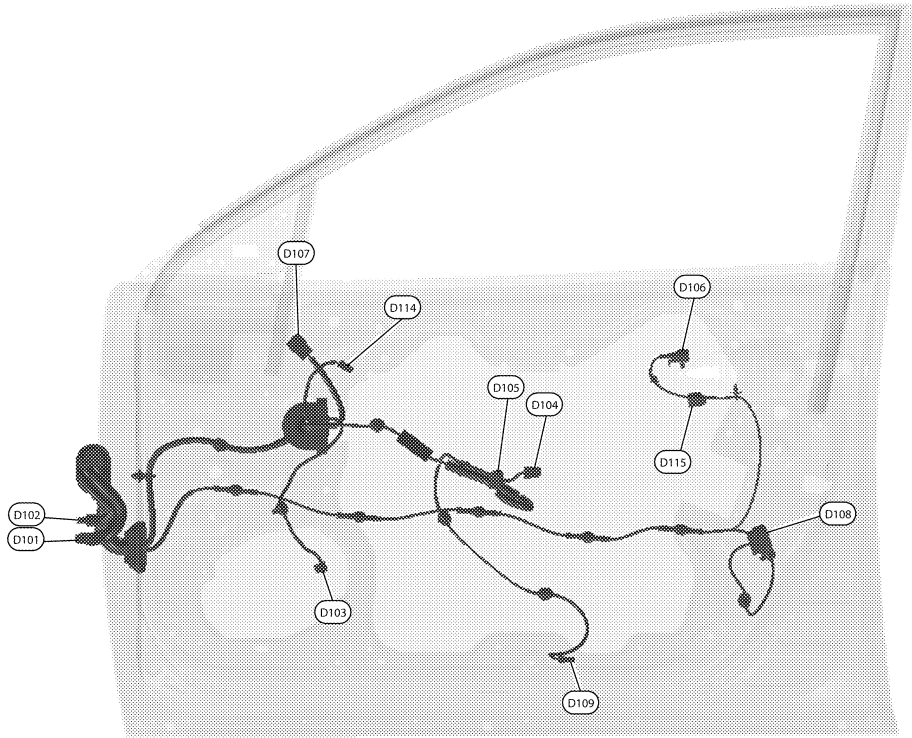
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< COMPONENT DIAGNOSIS >

## FRONT DOOR RH HARNESS



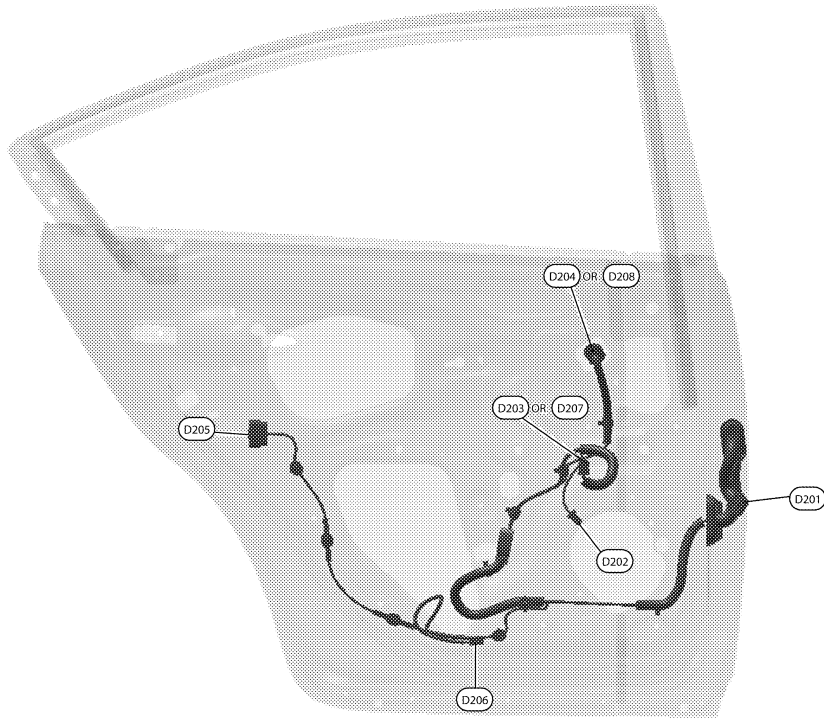
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D101	W/10	: To M14	D107	W/16	: Door mirror RH
D102	W/16	: To M15	D108	GR/6	: Front door lock actuator RH
D103	W/2	: Front door speaker RH	D109	W/2	: Front step lamp RH
D104	W/6	: Front power window motor RH	D114	GR/2	: Front door inside handle illumination RH
D105	W/16	: Power window and door lock/unlock switch RH	D115	B/2	: Front outside handle illumination RH (request switch)
D106	GR/2	: Front outside handle RH (outside key antenna)			

# HARNESS

< COMPONENT DIAGNOSIS >

## REAR DOOR LH HARNESS



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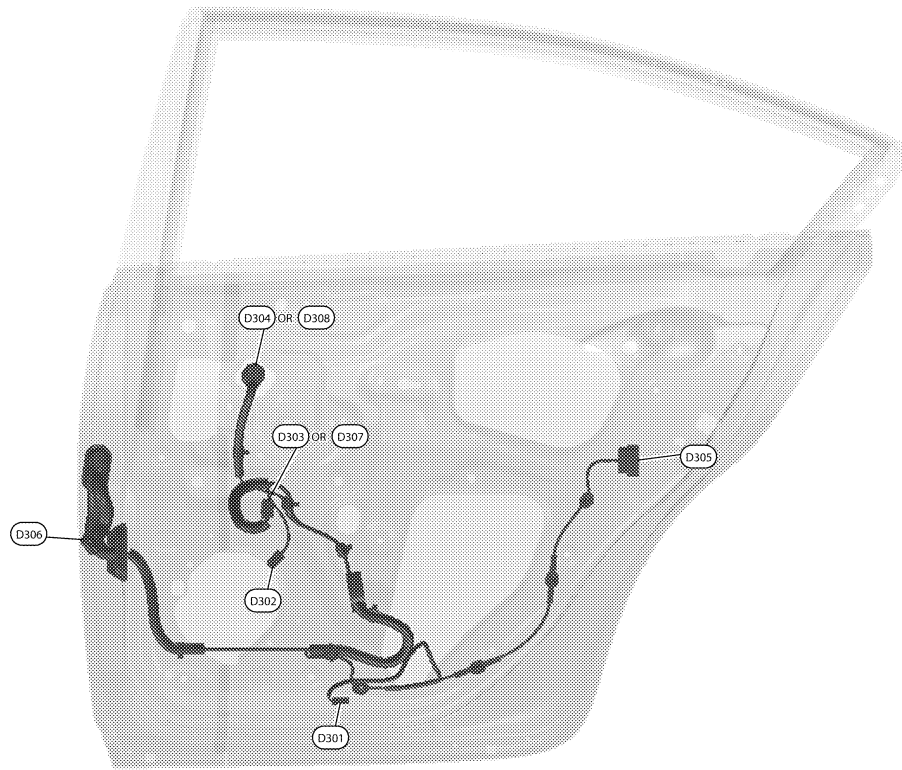
D201	W/10	: To B6	D205	GR/6	: Rear door lock actuator LH
D202	BR/2	: Rear door speaker LH	D206	W/2	: Rear step lamp LH
D203	W/8	: Rear power window switch LH (with front left and right power window anti-pinch system)	D207	W/16	: Rear power window switch LH (with front and rear power window anti-pinch system)
D204	G/6	: Rear power window switch LH (with front left and right power window anti-pinch system)	D208	G/6	: Rear power window motor LH (with front and rear power window anti-pinch system)

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# HARNESS

< COMPONENT DIAGNOSIS >

## REAR DOOR RH HARNESS



ABMIA0297GB

D301	W/2	: Rear step lamp RH	D305	GR/6	: Rear door lock actuator RH
D302	BR/2	: Rear door speaker RH	D306	W/10	: To B134
D303	W/8	: Rear power window switch RH (with front left and right power window anti-pinch system)	D307	W/6	: Rear power window switch RH (with front and rear power window anti-pinch system)
D304	GR/6	: Rear power window switch RH (with front left and right power window anti-pinch system)	D307	W/6	: Rear power window motor RH (with front and rear power window anti-pinch system)

# ELECTRICAL UNITS LOCATION

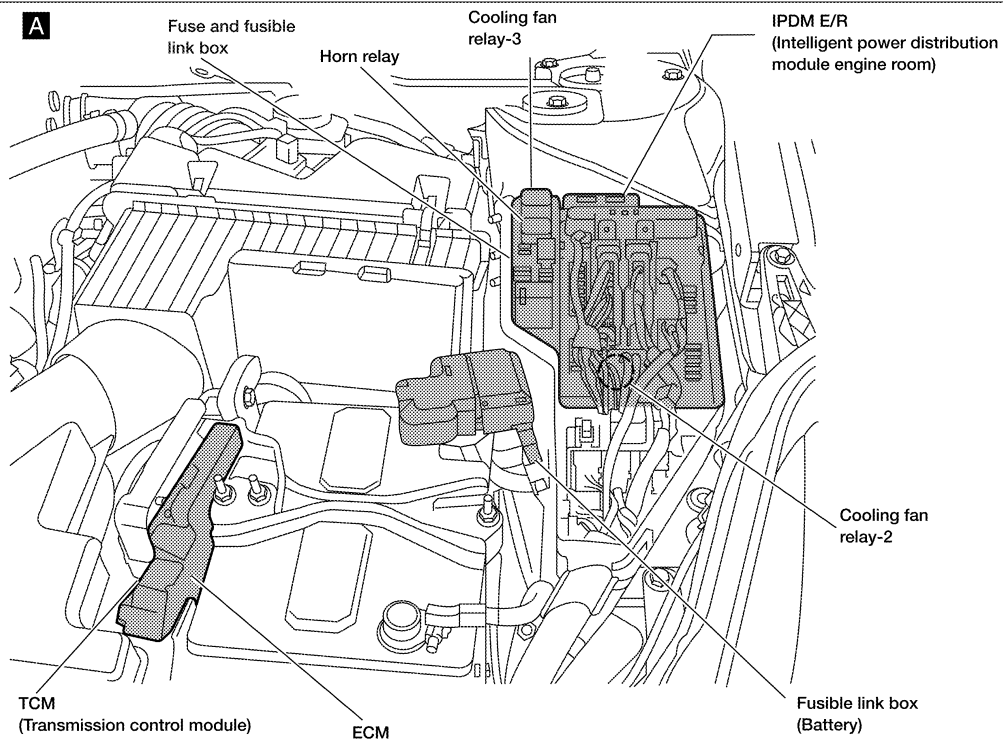
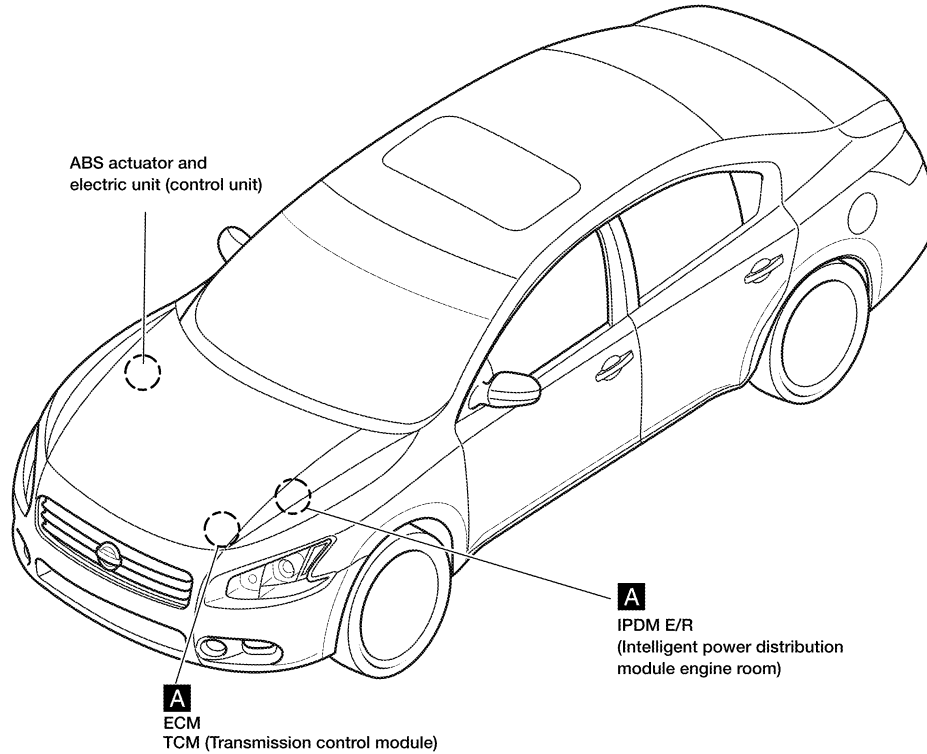
< COMPONENT DIAGNOSIS >

## ELECTRICAL UNITS LOCATION

### Electrical Units Location

INFOID:000000004212332

### ENGINE COMPARTMENT

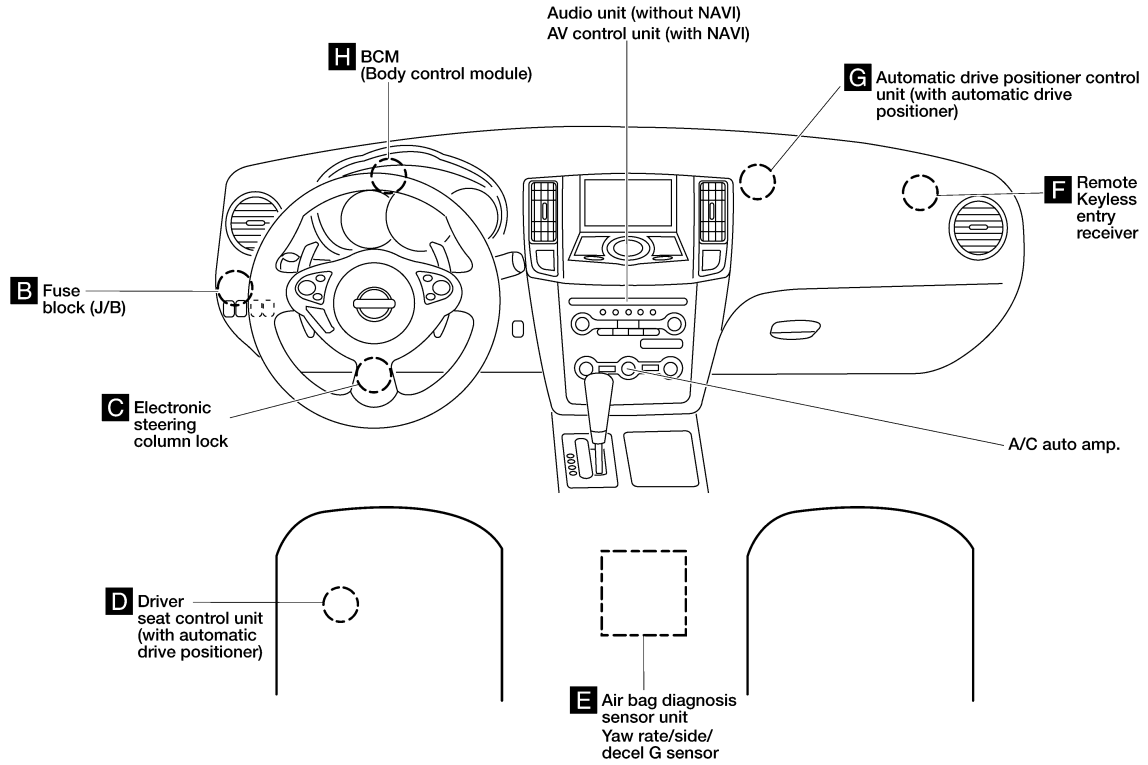


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# ELECTRICAL UNITS LOCATION

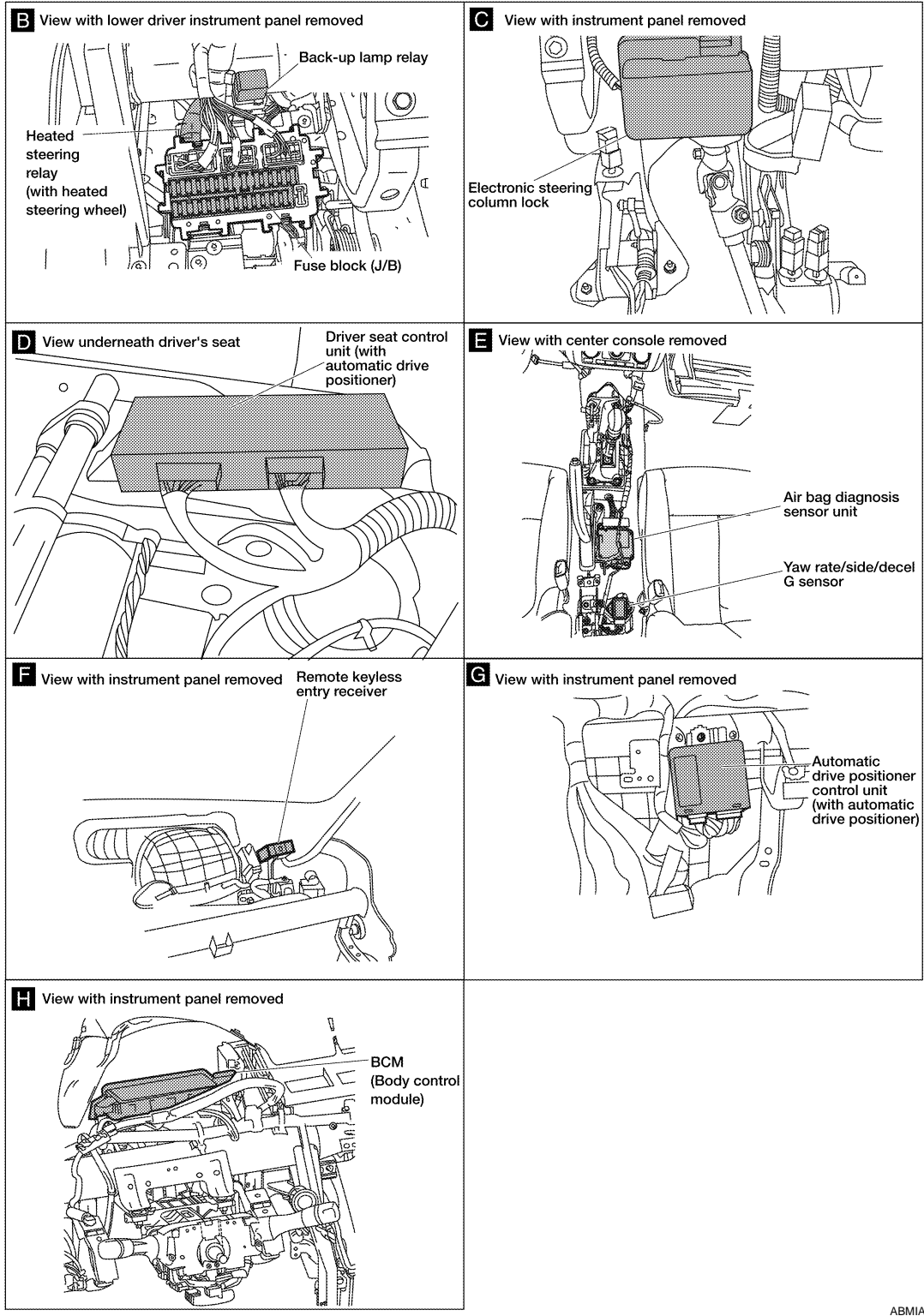
## < COMPONENT DIAGNOSIS > PASSENGER COMPARTMENT



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# ELECTRICAL UNITS LOCATION

< COMPONENT DIAGNOSIS >



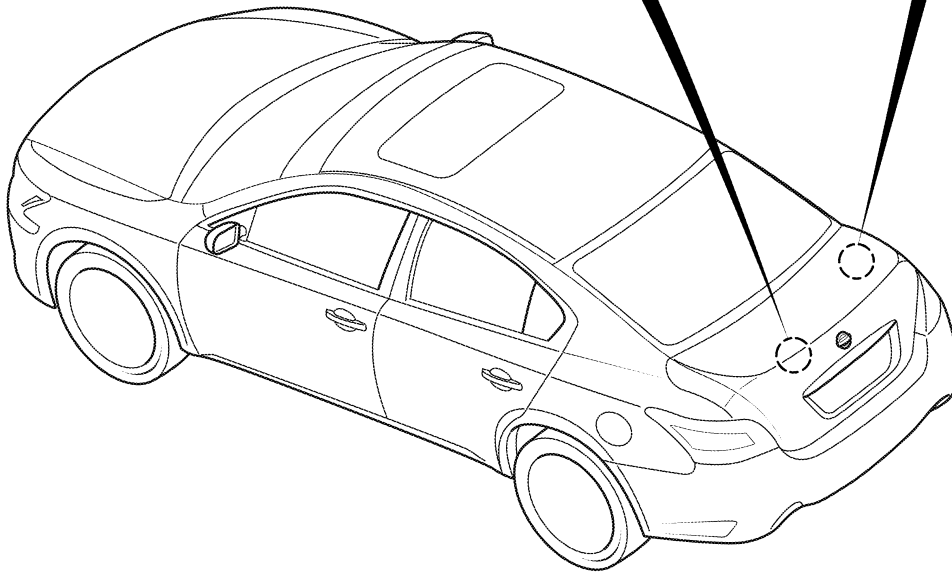
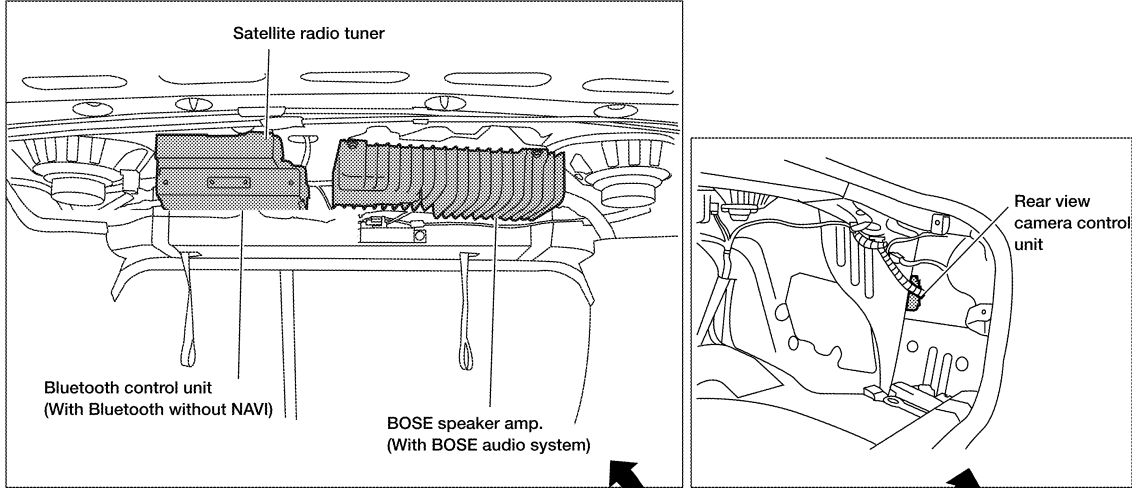
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# ELECTRICAL UNITS LOCATION

< COMPONENT DIAGNOSIS >

LUGGAGE COMPARTMENT



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# HARNESS CONNECTOR

< COMPONENT DIAGNOSIS >

## HARNESS CONNECTOR

### Description

INFOID:000000004212333

#### HARNESS CONNECTOR (TAB-LOCKING TYPE)

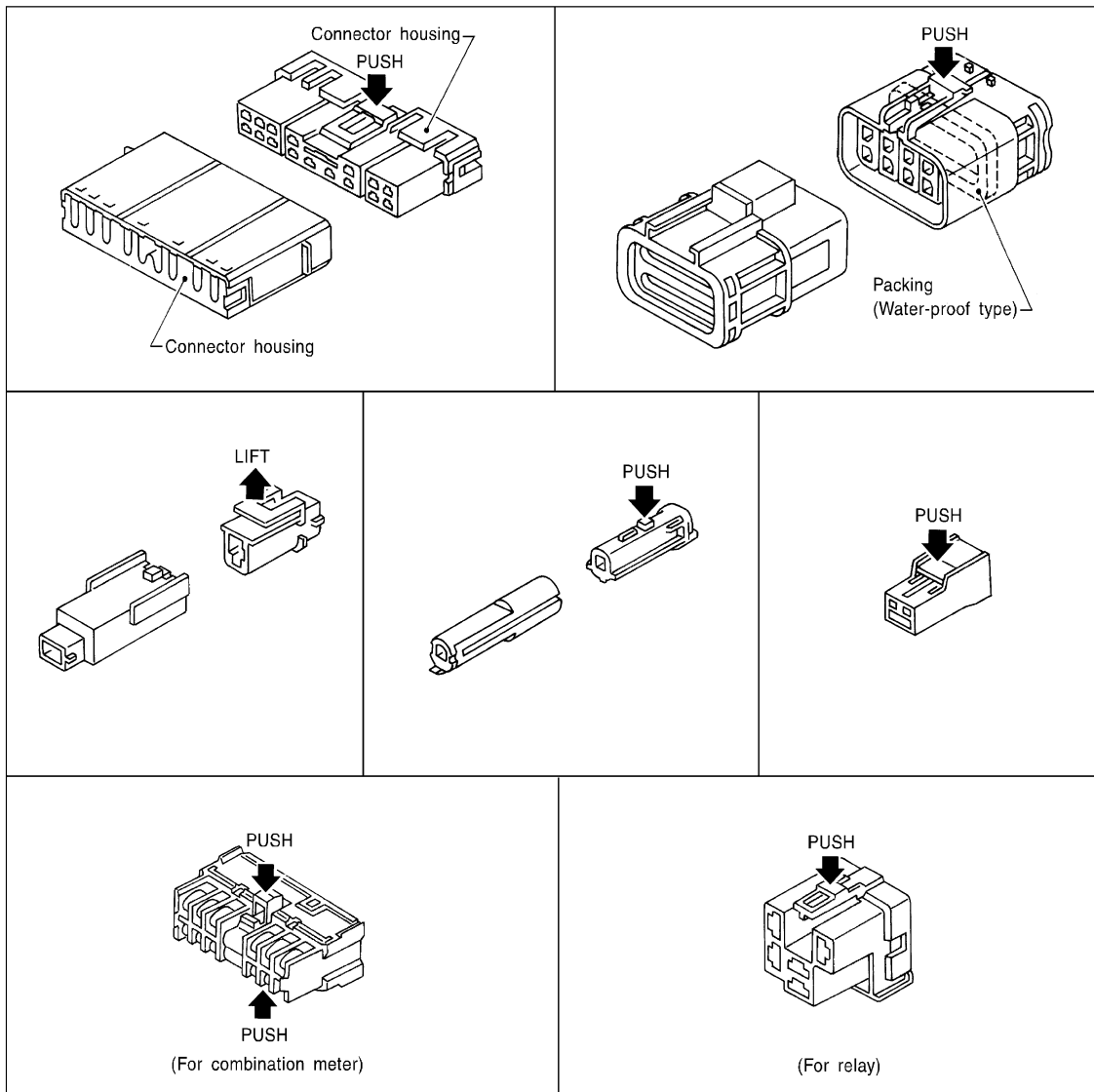
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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.

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# HARNESS CONNECTOR

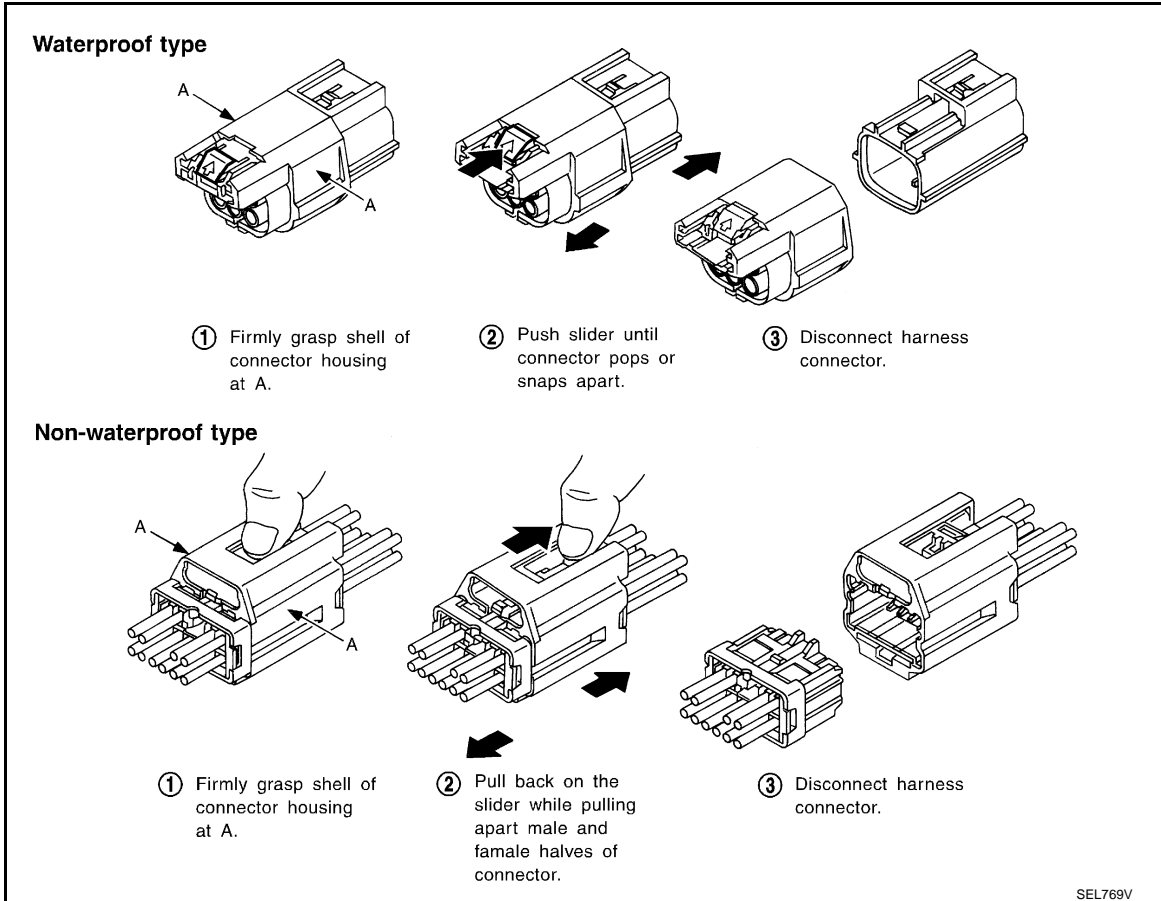
## < COMPONENT DIAGNOSIS >

- 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]



# STANDARDIZED RELAY

< COMPONENT DIAGNOSIS >

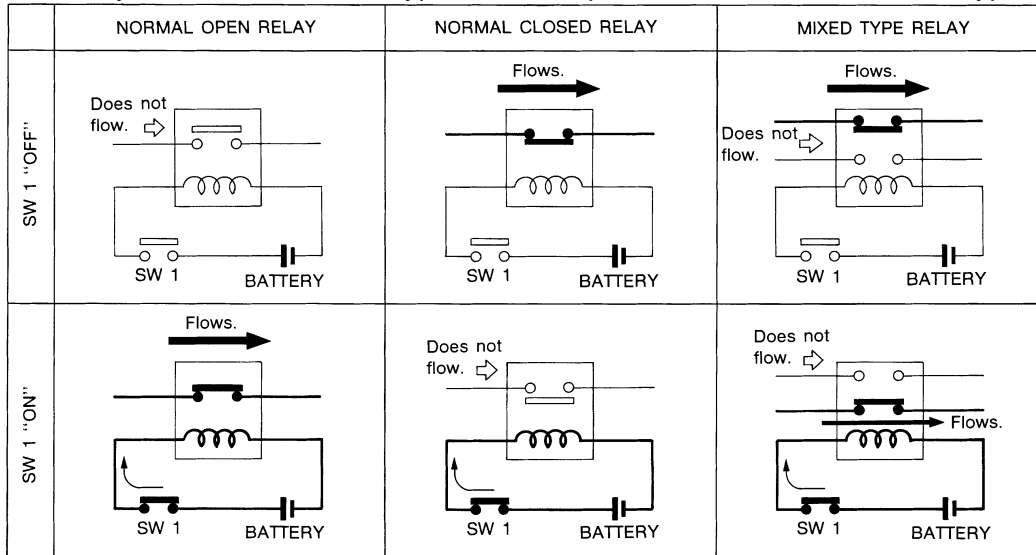
## STANDARDIZED RELAY

### Description

INFOID:000000004212334

### NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

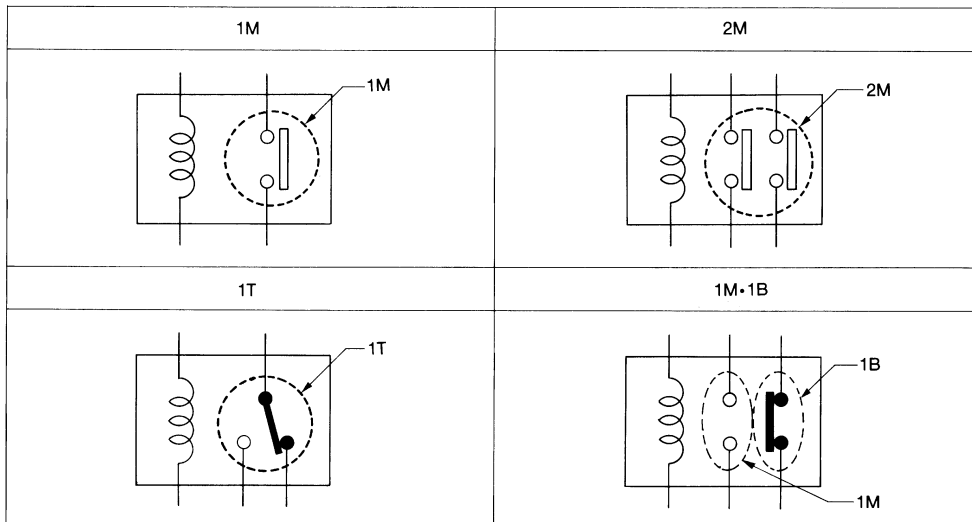
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



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### TYPE OF STANDARDIZED RELAYS

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

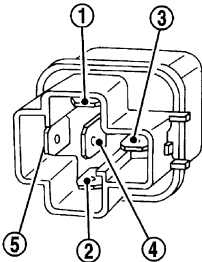
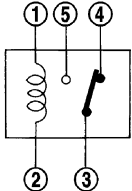
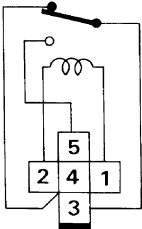
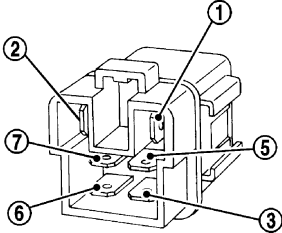
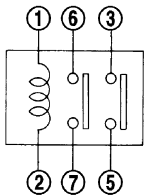
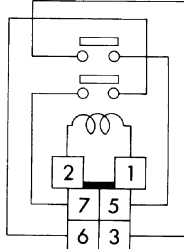
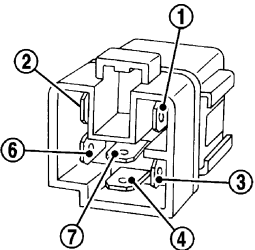
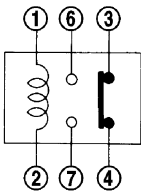
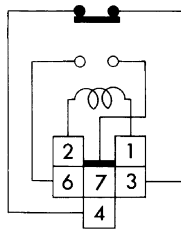
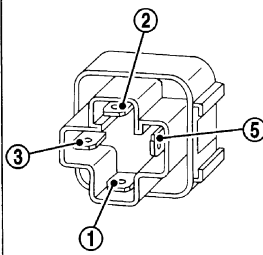
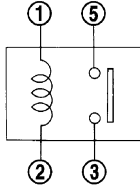
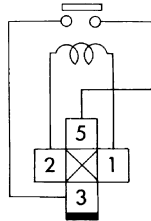
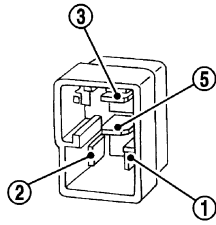
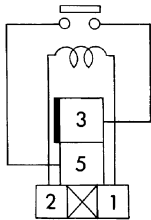


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# STANDARDIZED RELAY

## < COMPONENT DIAGNOSIS >

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

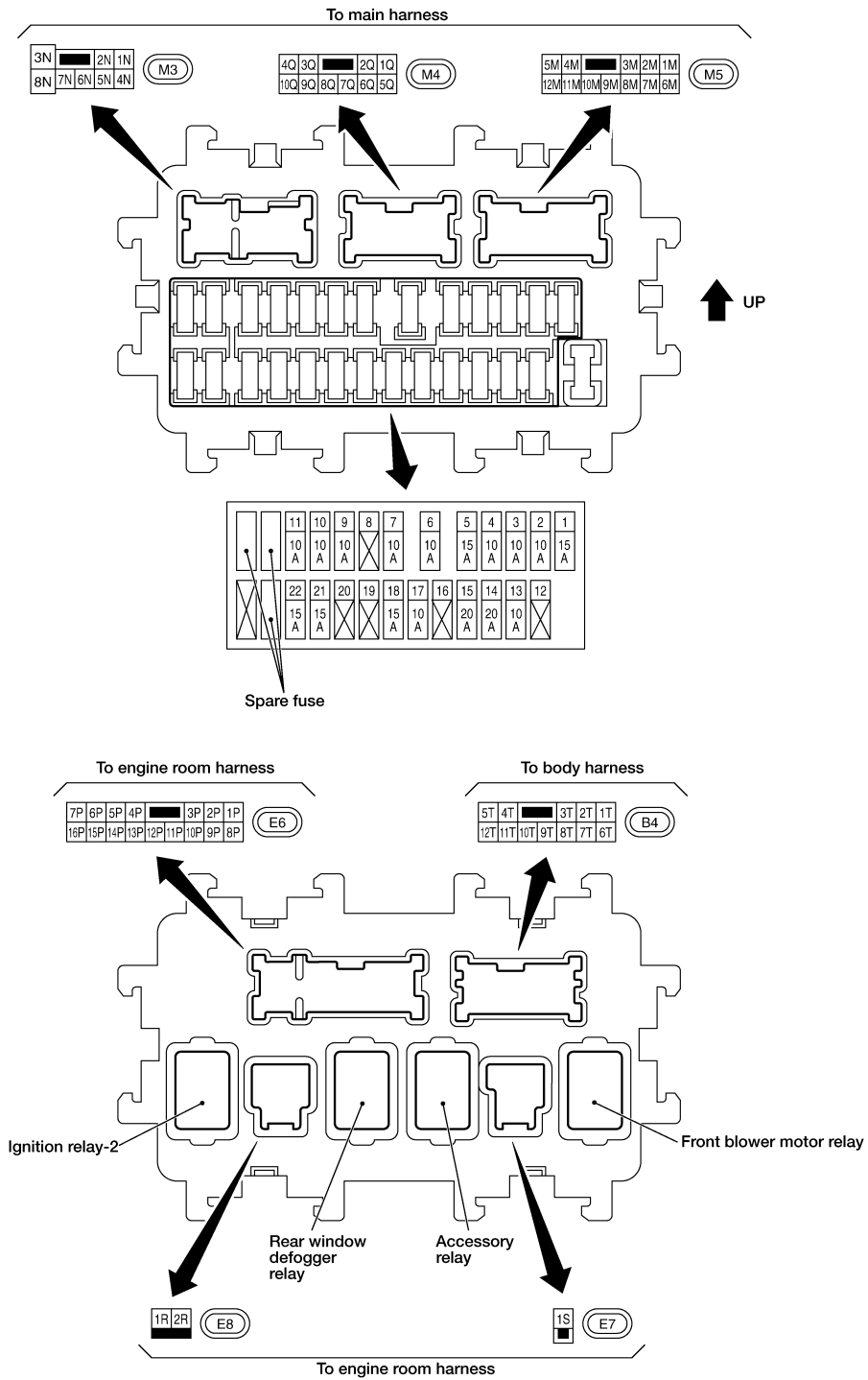
# FUSE BLOCK - JUNCTION BOX (J/B)

< COMPONENT DIAGNOSIS >

## FUSE BLOCK - JUNCTION BOX (J/B)

### Terminal Arrangement

INFOID:000000004212335



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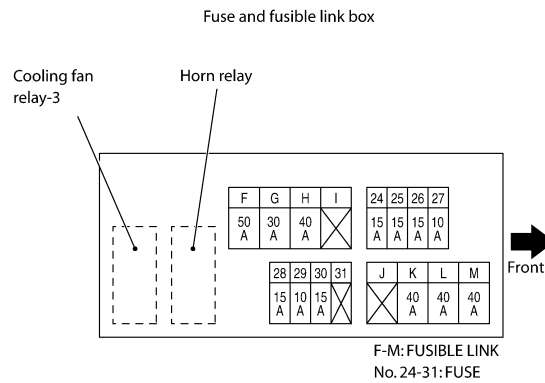
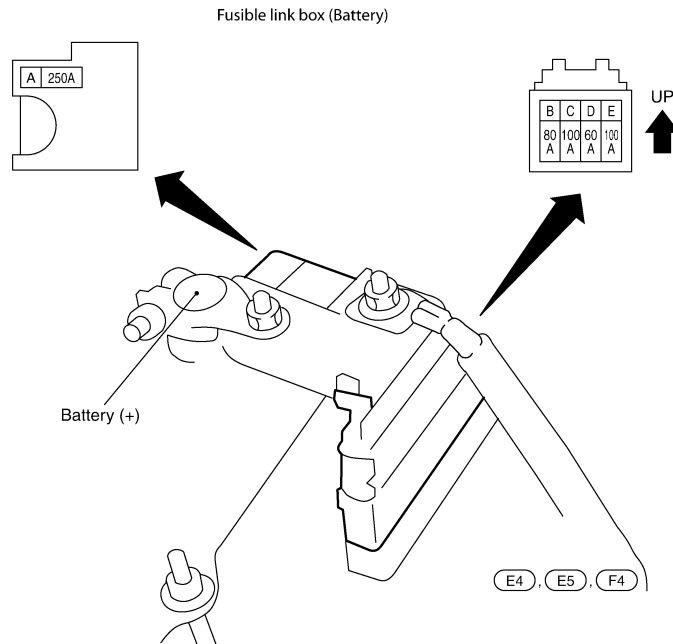
# FUSE, FUSIBLE LINK AND RELAY BOX

< COMPONENT DIAGNOSIS >

## FUSE, FUSIBLE LINK AND RELAY BOX

### Terminal Arrangement

INFOID:000000004212336



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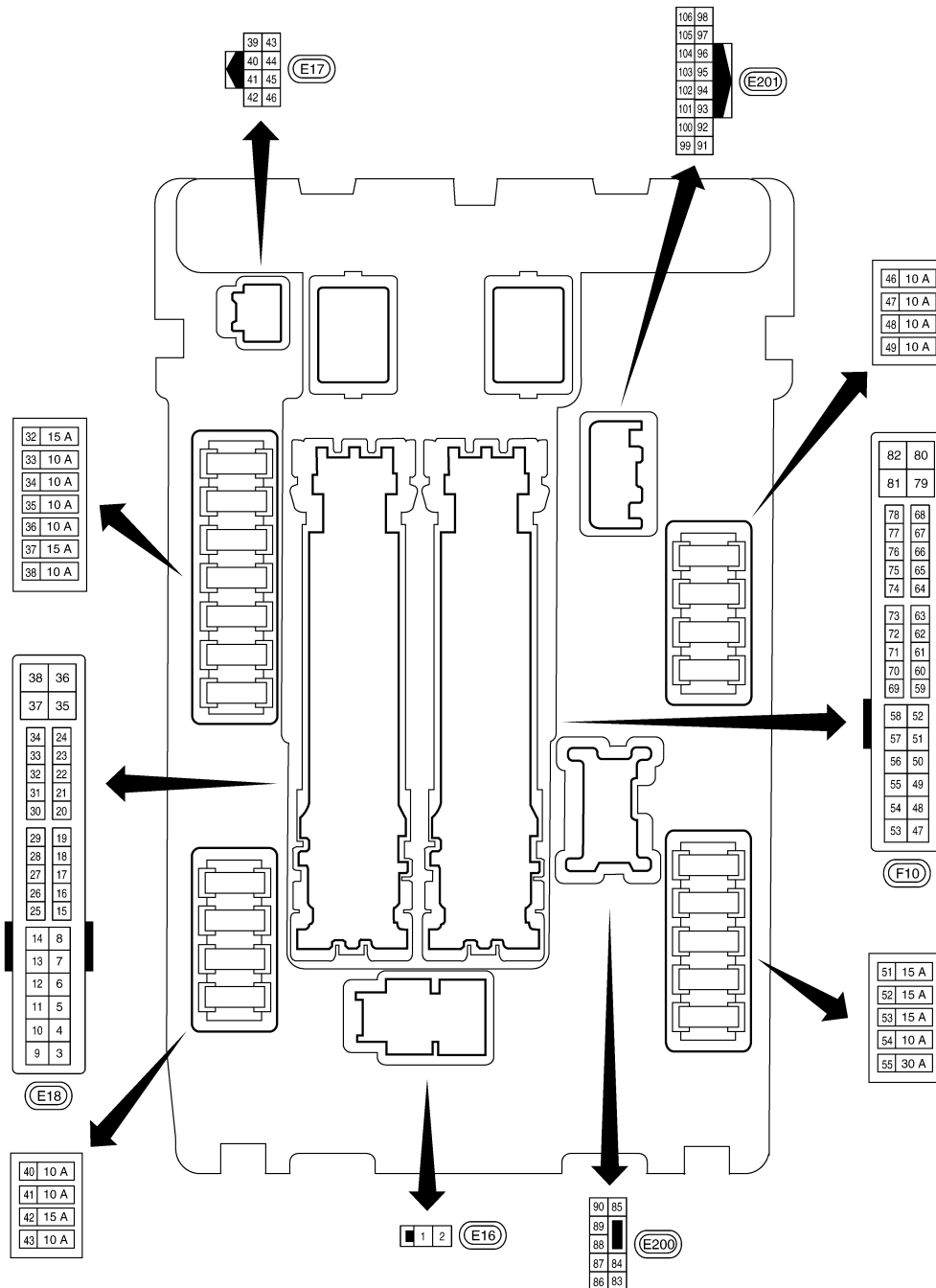
# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< COMPONENT DIAGNOSIS >

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

### Fuse, Connector and Terminal Arrangement

INFOID:000000004336255



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# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

#### Supplemental Restraint System SRS "AIR BAG" and "SEAT BELT PRE-TENSIONER" Service

INFOID:000000004212337

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

#### **WARNING:**

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

#### Precautions Necessary for Steering Wheel Rotation after Battery Disconnect

INFOID:000000004394030

#### **NOTE:**

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work. If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

This vehicle is equipped with a push-button ignition switch and a steering lock unit.

If the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the procedure below before starting the repair operation.

#### OPERATION PROCEDURE

1. Connect both battery cables.

#### **NOTE:**

Supply power using jumper cables if battery is discharged.

2. Carry the Intelligent Key or insert it to the key slot and turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
4. Perform the necessary repair operation.
5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
6. Perform self-diagnosis check of all control units using CONSULT-III.



# PREPARATION


< PREPARATION >

## PREPARATION

### PREPARATION

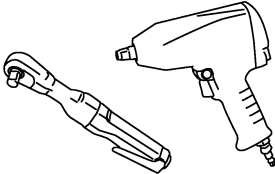
#### Special Service Tool

INFOID:000000004687996

Tool number (Kent-Moore No.) Tool name	Description
<p>— (—) Model GR-8 Multitasking Battery Diagnostic Station</p>  <p style="text-align: right;">AWIIA1239ZZ</p>	<p>Tests batteries, starting and charging systems. For operating instructions, refer to diagnostic station instruction manual.</p>

#### Commercial Service Tool

INFOID:000000004212340

Tool name	Description
<p>Power tool</p>  <p style="text-align: right;">PBIC0190E</p>	<p>Loosening bolts and nuts</p>

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# BATTERY

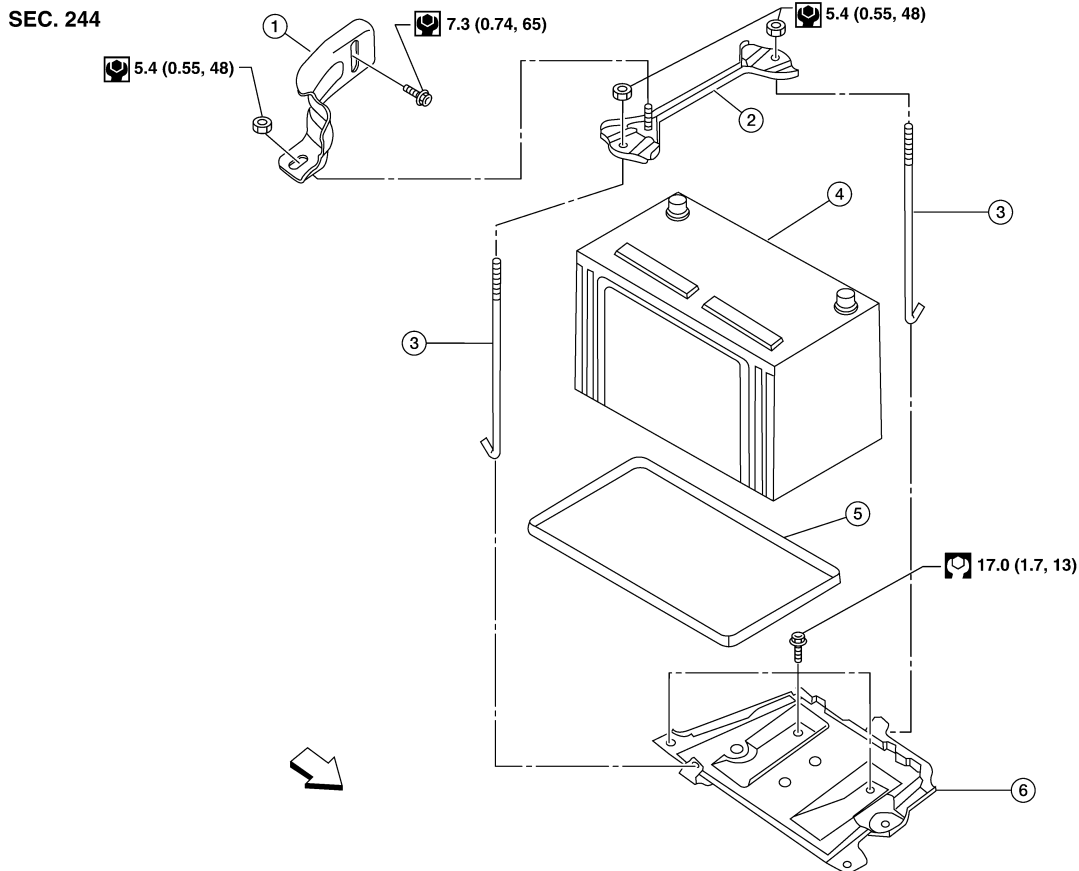
< ON-VEHICLE REPAIR >

## ON-VEHICLE REPAIR

### BATTERY

#### Exploded View

INFOID:000000004212343



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

#### Removal and Installation (Battery)

INFOID:000000004212341

##### REMOVAL

1. Remove air duct (front). Refer to [EM-23. "Removal and Installation"](#).
2. Loosen battery cable assembly nuts, and disconnect both battery terminals.  
**CAUTION:**  
**When disconnecting, disconnect the negative terminal first.**
3. Remove upper ECM bracket nut and bolt and ECM upper bracket.
4. Remove battery frame nuts and battery frame.
5. Remove battery.

##### INSTALLATION

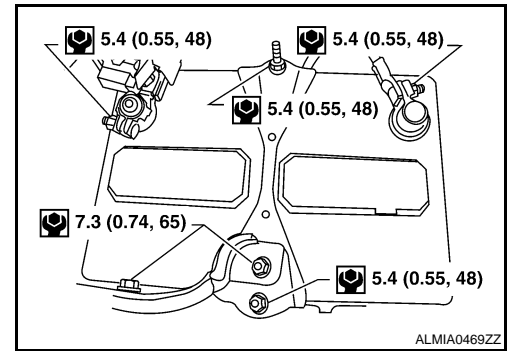
# BATTERY

## < ON-VEHICLE REPAIR >

Installation is in the reverse order of removal.

**Battery cable assembly nut** : 5.4 N·m (0.55 kg-m, 48 in-lb)

**CAUTION:**  
When connecting, connect the positive terminal first.



Reset electronic systems as necessary. Refer to [PG-5. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

## Removal and Installation (Battery Tray)

INFOID:000000004212896

### REMOVAL

1. Remove battery and battery tray liner. Refer to [PG-66. "Removal and Installation \(Battery\)"](#).
2. Remove air cleaner assembly. Refer to [EM-23. "Removal and Installation"](#).
3. Remove ECM.
4. Disconnect transmission control module (TCM). Refer to [TM-166. "Removal and Installation"](#).
5. Remove the ECM bracket.
6. Remove current sensor from battery tray.
7. Remove the battery tray bolts and battery tray.

### INSTALLATION

Installation is in the reverse order of removal.

Reset electronic systems as necessary. Refer to [PG-5. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement"](#).

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# BATTERY

< SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

### BATTERY

Battery

INFOID:000000004212342

Type	GR.24F
Capacity (5HR) minimum V-AH	56
Cold cranking current A (For reference value)	550