SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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BASIC INSPECTION

BATTERY

How to Handle Battery

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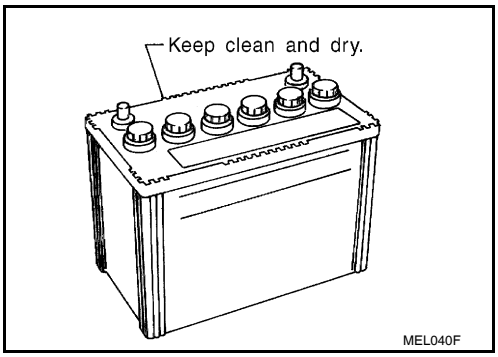
CAUTION:

- **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.**

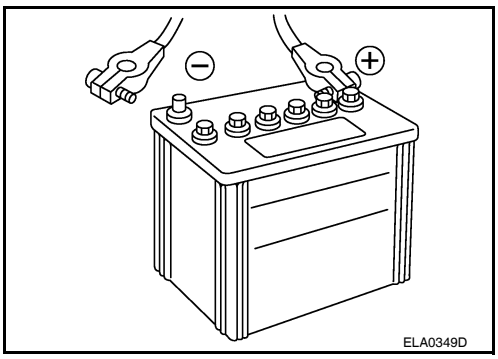
METHODS OF PREVENTING OVER-DISCHARGE

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

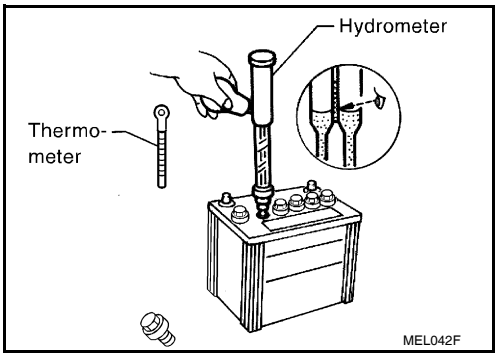
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level.
  This also applies to batteries designated as “low maintenance” and “maintenance-free”.



- 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.

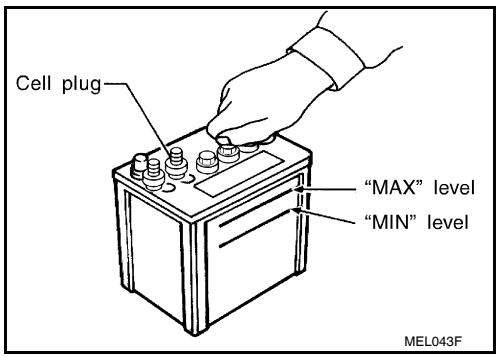


CHECKING ELECTROLYTE LEVEL

WARNING:

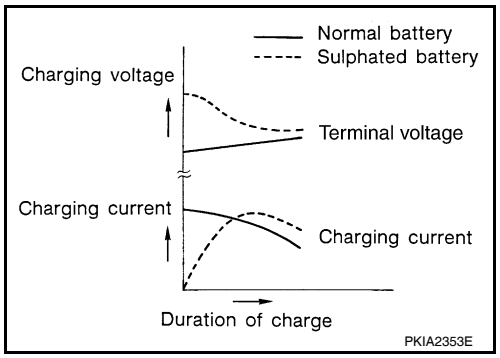
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

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



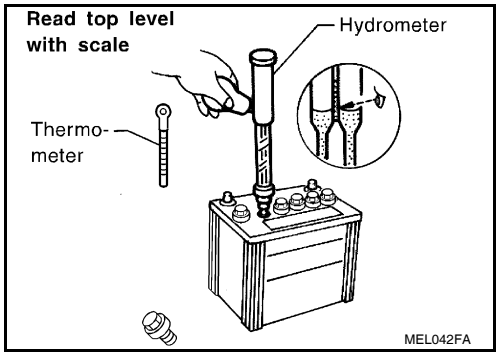
Sulphation

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



SPECIFIC GRAVITY CHECK

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



Hydrometer Temperature Correction

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

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

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

CHARGING THE BATTERY

CAUTION:

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

Charging Rates

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

Do not charge at more than 50 ampere rate.

NOTE:

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

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

Work Flow

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TROUBLE DIAGNOSIS WITH MULTITASKING BATTERY DIAGNOSTIC STATION

Refer to diagnostic station instruction manual.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000005460697

Required Procedure After Battery Disconnection

System	Item	Reference
Engine Control	Idle Air Volume Learning	Refer to EC-19.
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-8.
Glass, Window & Mirrors	Power Window System Initialization	LH & RH Front Window Anti-pinch. Refer to PWC-9. Front & Rear Window Anti-pinch. Refer to PWC-134.
Roof	Sunroof Memory Reset/Initialization	With Single Panel Sunroof. Refer to RF-7. With Dual Panel Sunroof. Refer to RF-88.
Seats	Automatic Drive Positioner System Initialization	Refer to Owner's Manual.
Automatic Temperature Control - With Color Display	Temperature Setting Trimmer	Refer to HAC-7.
	Foot Position Setting Trimmer	Refer to HAC-8.
	Inlet Port Memory Function (FRE)	Refer to HAC-8.
	Inlet Port Memory Function (REC)	Refer to HAC-8.
Automatic Temperature Control - With Monochrome Display	Temperature Setting Trimmer	Refer to HAC-135.
	Foot Position Setting Trimmer	Refer to HAC-136.
	Inlet Port Memory Function (FRE)	Refer to HAC-136.
	Inlet Port Memory Function (REC)	Refer to HAC-137.
Audio-Visual System	Audio (Radio Preset)	Refer to Owner's Manual.
	NAVI	Refer to Owner's Manual.
	Rear View Monitor Guiding Line Adjustment	BOSE W/ Color Display Refer to AV-182. BOSE W/ Color Display W/ NAVI Refer to AV-347. BOSE W/ Color W/ RR CTL Refer to AV-511. BOSE W/ Color W/NAVI W/RR CTL Refer to AV-680.

COMPONENT DIAGNOSIS

POWER SUPPLY ROUTING CIRCUIT

Wiring Diagram —Battery Power Supply —

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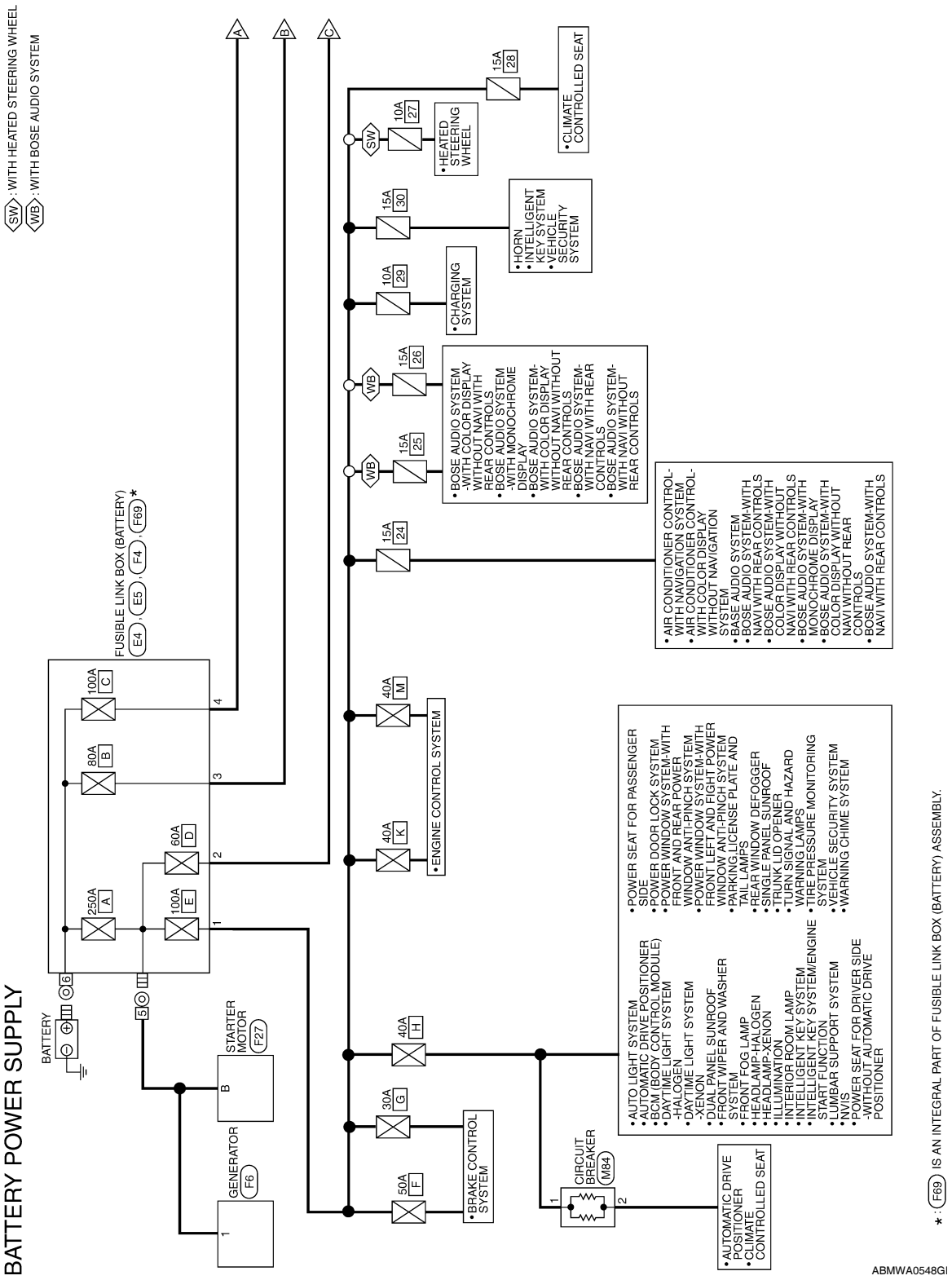
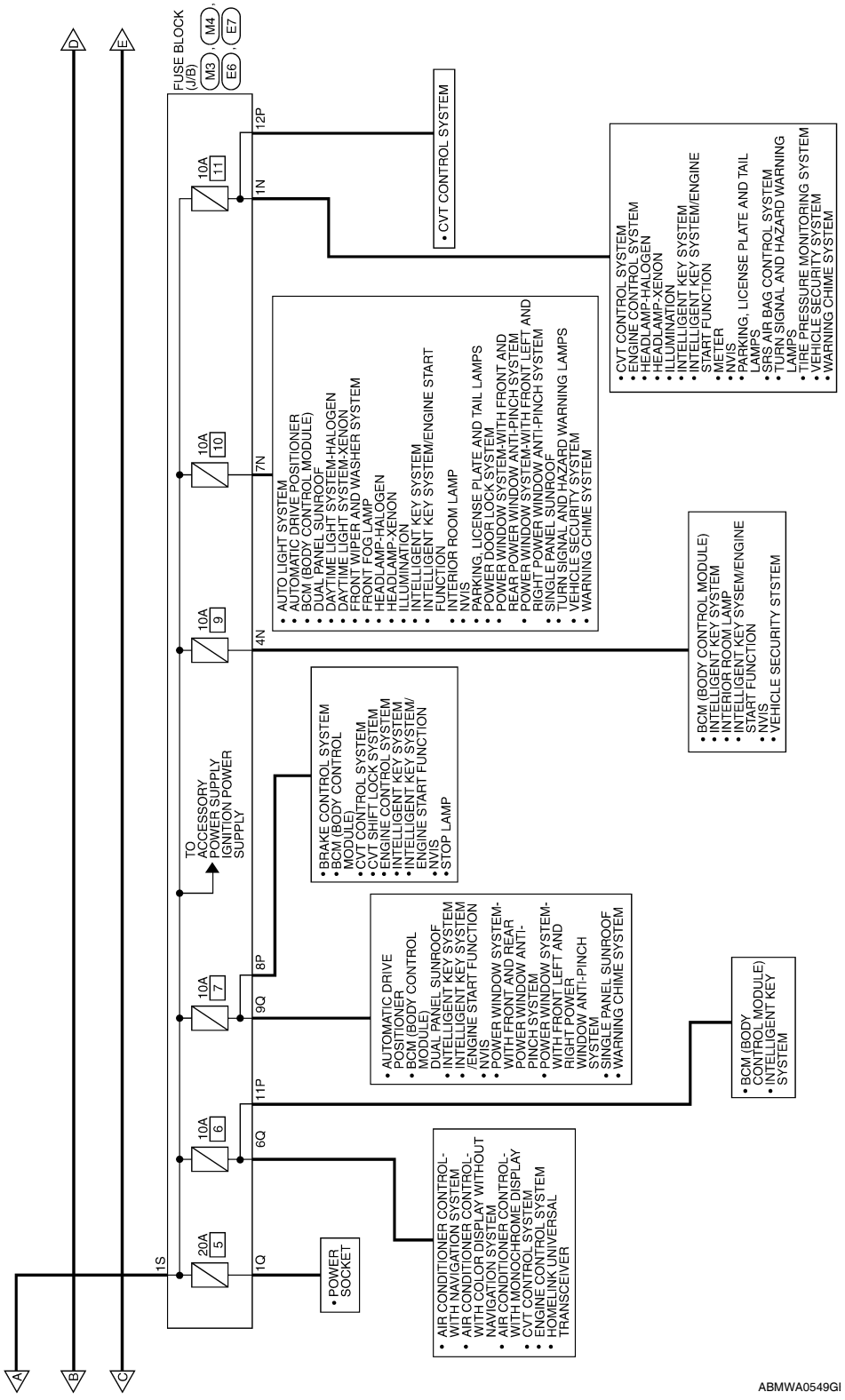
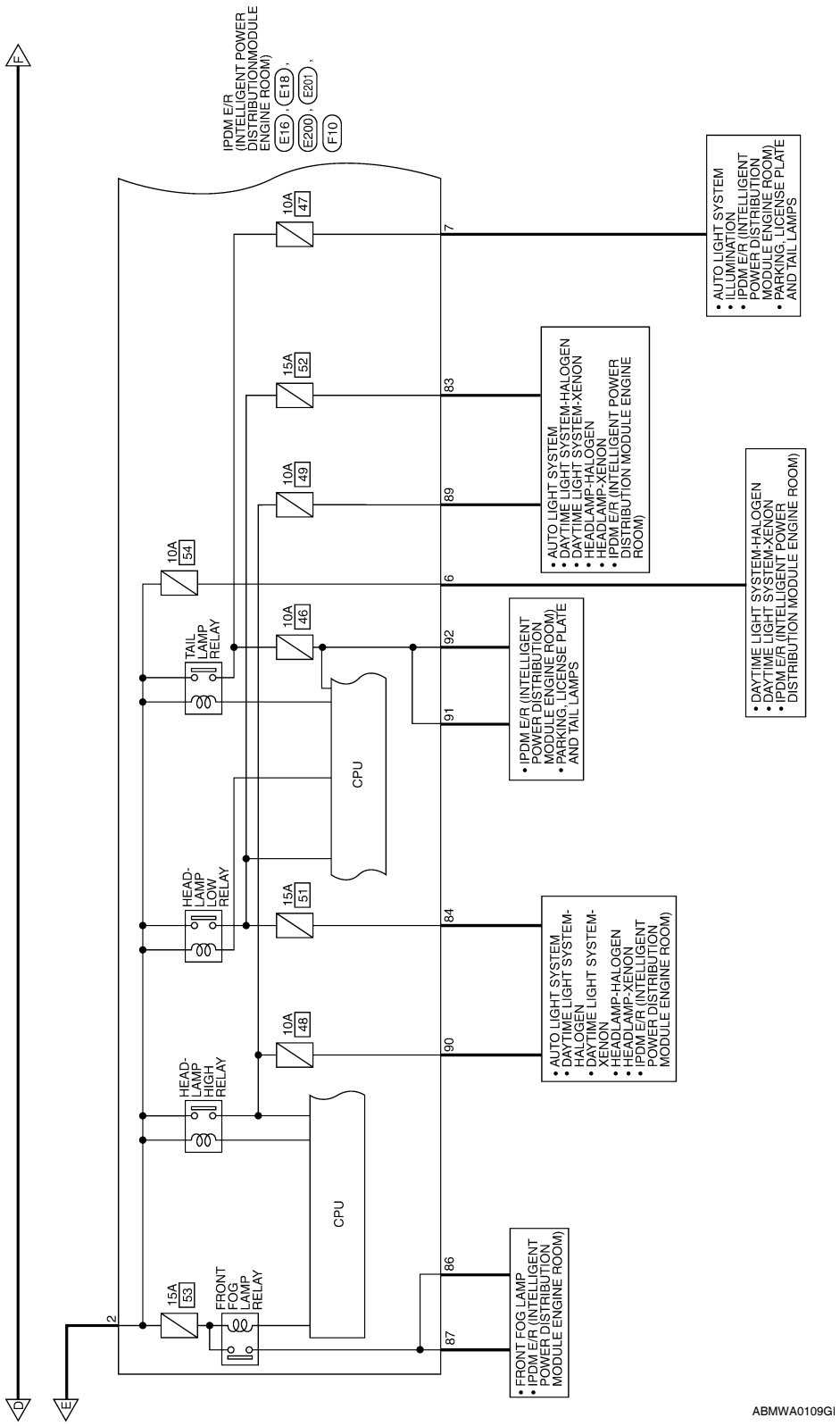
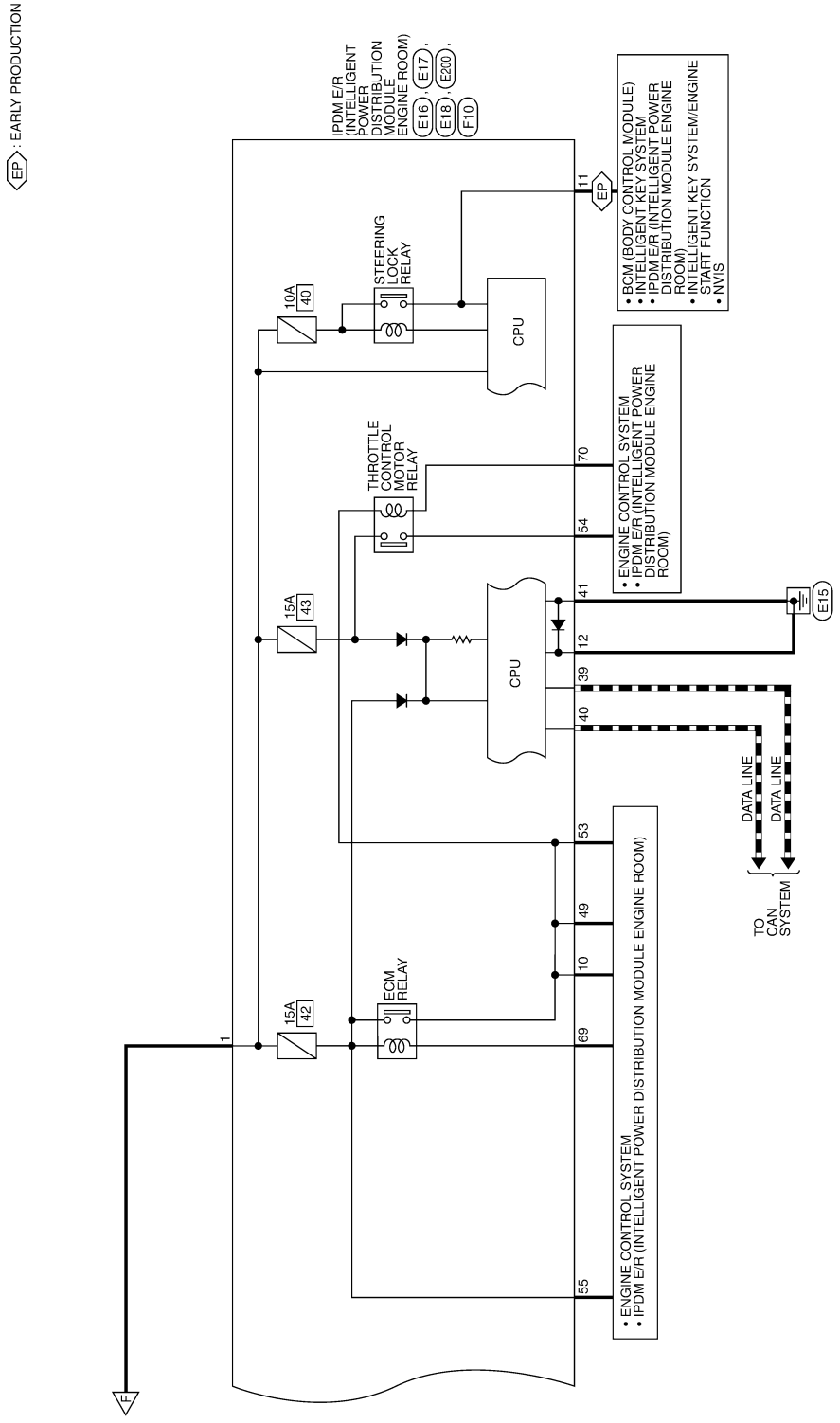



FUSE BLOCK (J/B)
M3, M4, E6, E7
TO ACCESSORY POWER SUPPLY IGNITION POWER SUPPLY
20A 5
10A 6
10A 7
10A 9
10A 10
10A 11
1S
1Q
6Q
9Q
11P
8P
4N
7N
1N
12P
• POWER SOCKET
• AIR CONDITIONER CONTROL- WITH NAVIGATION SYSTEM
• AIR CONDITIONER CONTROL- WITH COLOR DISPLAY WITHOUT NAVIGATION SYSTEM
• AIR CONDITIONER CONTROL- WITH MONOCHROME DISPLAY
• CVT CONTROL SYSTEM
• ENGINE CONTROL SYSTEM
• HOMELINK UNIVERSAL TRANSCEIVER
• AUTOMATIC DRIVE POSITIONER
• BCM (BODY CONTROL MODULE)
• DUAL PANEL SUNROOF
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM /ENGINE START FUNCTION
• NVIS
• POWER WINDOW SYSTEM- WITH FRONT AND REAR POWER WINDOW ANTI-PINCH SYSTEM
• POWER WINDOW SYSTEM- WITH FRONT LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM
• SINGLE PANEL SUNROOF
• WARNING CHIME SYSTEM
• BRAKE CONTROL SYSTEM
• BCM (BODY CONTROL MODULE)
• CVT CONTROL SYSTEM
• CVT SHIFT LOCK SYSTEM
• ENGINE CONTROL SYSTEM
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ ENGINE START FUNCTION
• NVIS
• STOP LAMP
• AUTO LIGHT SYSTEM
• AUTOMATIC DRIVE POSITIONER
• BCM (BODY CONTROL MODULE)
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• FRONT WIPER AND WASHER SYSTEM
• FRONT FOG LAMP
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• INTERIOR ROOM LAMP
• NVIS
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DOOR LOCK SYSTEM
• POWER WINDOW SYSTEM-WITH FRONT AND REAR POWER WINDOW ANTI-PINCH SYSTEM
• POWER WINDOW SYSTEM-WITH FRONT LEFT AND RIGHT POWER WINDOW ANTI-PINCH SYSTEM
• SINGLE PANEL SUNROOF
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME SYSTEM
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• INTERIOR ROOM LAMP
• INTELLIGENT KEY SYSEM/ENGINE START FUNCTION
• NVIS
• VEHICLE SECURITY STSTEM
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• CVT CONTROL SYSTEM
• ENGINE CONTROL SYSTEM
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• METER
• NVIS
• PARKING, LICENSE PLATE AND TAIL LAMPS
• SRS AIR BAG CONTROL SYSTEM
• TURN SIGNAL AND HAZARD WARNING LAMPS
• TIRE PRESSURE MONITORING SYSTEM
• VEHICLE SECURITY SYSTEM
• WARNING CHIME SYSTEM
A
B
C
ABMWA0549GI


IPDM E/R (INTELLIGENT POWER DISTRIBUTIONMODULE ENGINE ROOM)
E16, E18, E201, E200, F10
10A 47
15A 52
10A 49
10A 54
10A 46
15A 51
10A 48
15A 53
TAIL LAMP RELAY
HEAD-LAMP LOW RELAY
HEAD-LAMP HIGH RELAY
FRONT FOG LAMP RELAY
CPU
CPU
2
7
83
89
6
92
91
84
90
86
87
• AUTO LIGHT SYSTEM
• ILLUMINATION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT FOG LAMP
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
F
D
E
ABMWA0109GI



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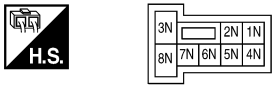
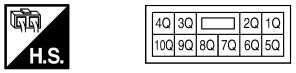
BATTERY POWER SUPPLY CONNECTORS

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.	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.	M84
Connector Name	CIRCUIT BREAKER
Connector Color	WHITE

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

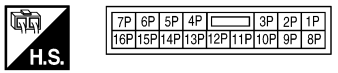
Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN

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

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

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

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

H.S.

1S

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

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

H.S.

1 2

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

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

H.S.

42 41 40 39
46 45 44 43

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

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

H.S.

9 10 11 12 13 14
3 4 5 6 7 8

25 26 27 28 29 30 31 32 33 34
15 16 17 18 19 20 21 22 23 24

37 38
35 36

Terminal No.	Color of Wire	Signal Name
6	L	DTRL/DEICER
7	GR	TAIL/ILLUMI
10	BR	ECM VB
11	O	ESCL (EARLY PRODUCTION)
12	B	GND (POWER)

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

H.S.

85 84 83
90 89 88 87 86

Terminal No.	Color of Wire	Signal Name
83	R/Y	HEADLAMP LO RH
84	L	HEADLAMP LO LH
86	W/R	FR FOG LAMP RH
87	L/Y	FR FOG LAMP LH
89	L/W	HEADLAMP HI RH
90	G	HEADLAMP HI LH

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Connector No.	E201
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

Terminal No.	Color of Wire	Signal Name
91	LG/R	CLEARANCE RH
92	LG/B	CLEARANCE LH

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

H.S.

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

Connector No.	F6
Connector Name	GENERATOR
Connector Color	—

H.S.

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

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	—

H.S.

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

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

H.S.

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

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Wiring Diagram —Accessory Power Supply —

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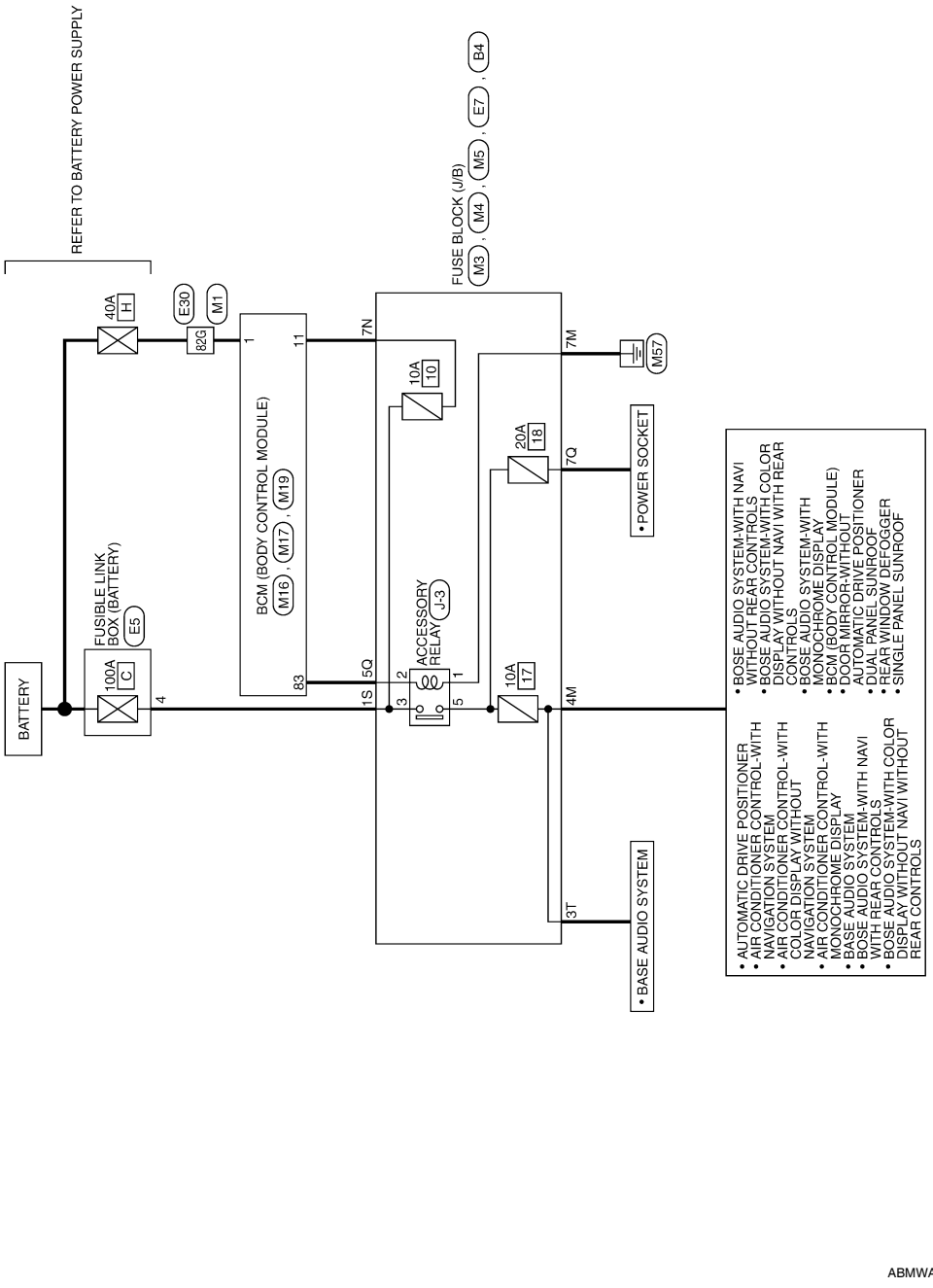
ACCESSORY POWER SUPPLY



ACCESSORY POWER SUPPLY CONNECTORS

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

H.S.

9G	8G	7G	6G	5G	4G	3G	2G	1G
17G	16G	15G	14G	13G	12G	11G	10G	
26G	25G	24G	23G	22G	21G	20G		
34G	33G	32G	31G	30G	29G	28G	27G	19G	18G
41G	40G	39G	38G	37G	36G	35G		
50G	49G	48G	47G	46G	45G	44G	43G	42G	
58G	57G	56G	55G					
63G	62G	61G	60G	59G	54G	53G	52G	51G	
72G	71G	70G	69G	68G	67G	66G		
80G	79G	78G	77G	76G	75G	74G	73G	65G	64G
			83G		82G		81G		

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

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
7N	Y/R	–

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

H.S.

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

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

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

H.S.

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

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

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

H.S.

1	3
2	

Terminal No.	Color of Wire	Signal Name
1	W/B	BATT (F/L)

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

H.S.

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

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

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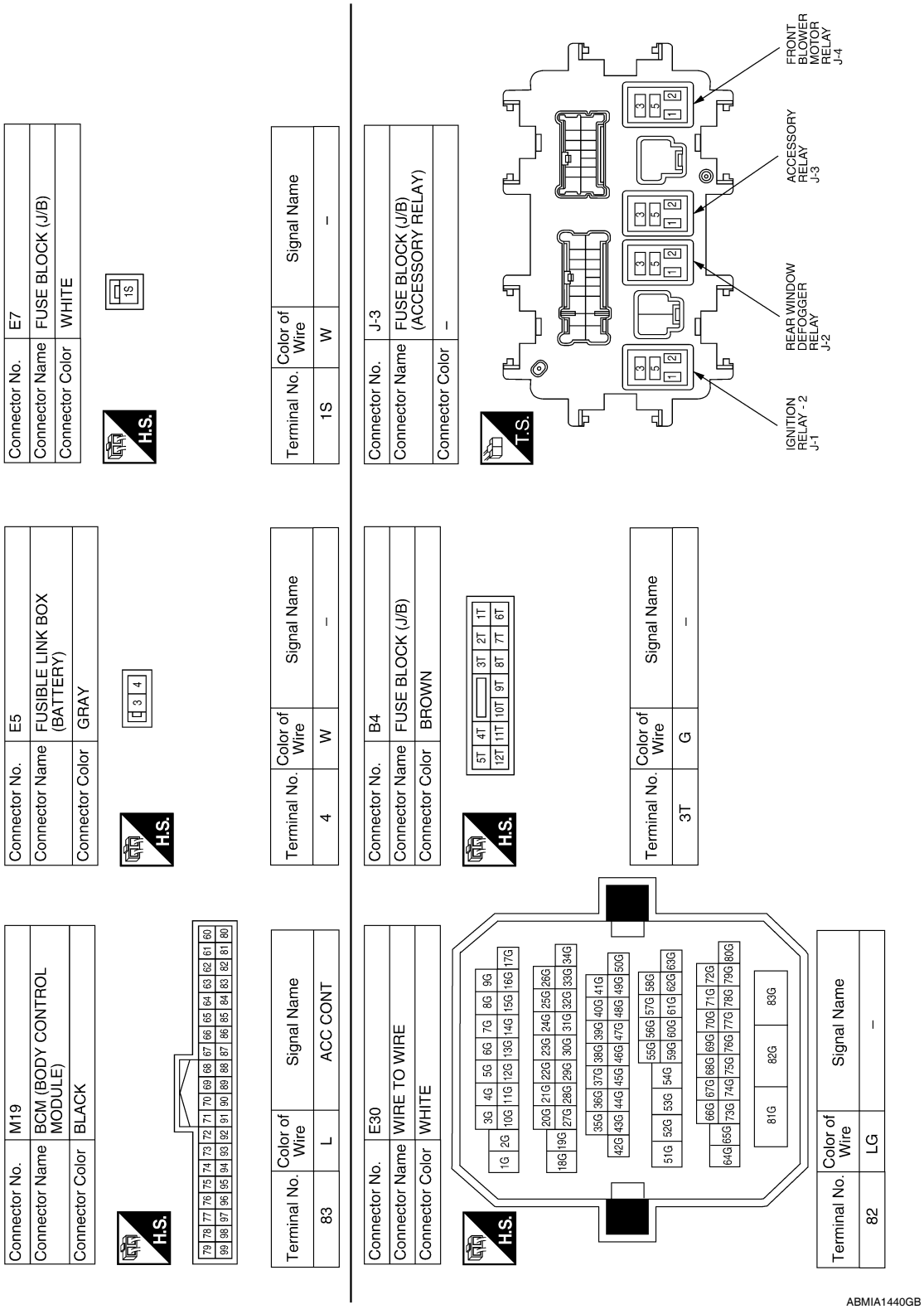
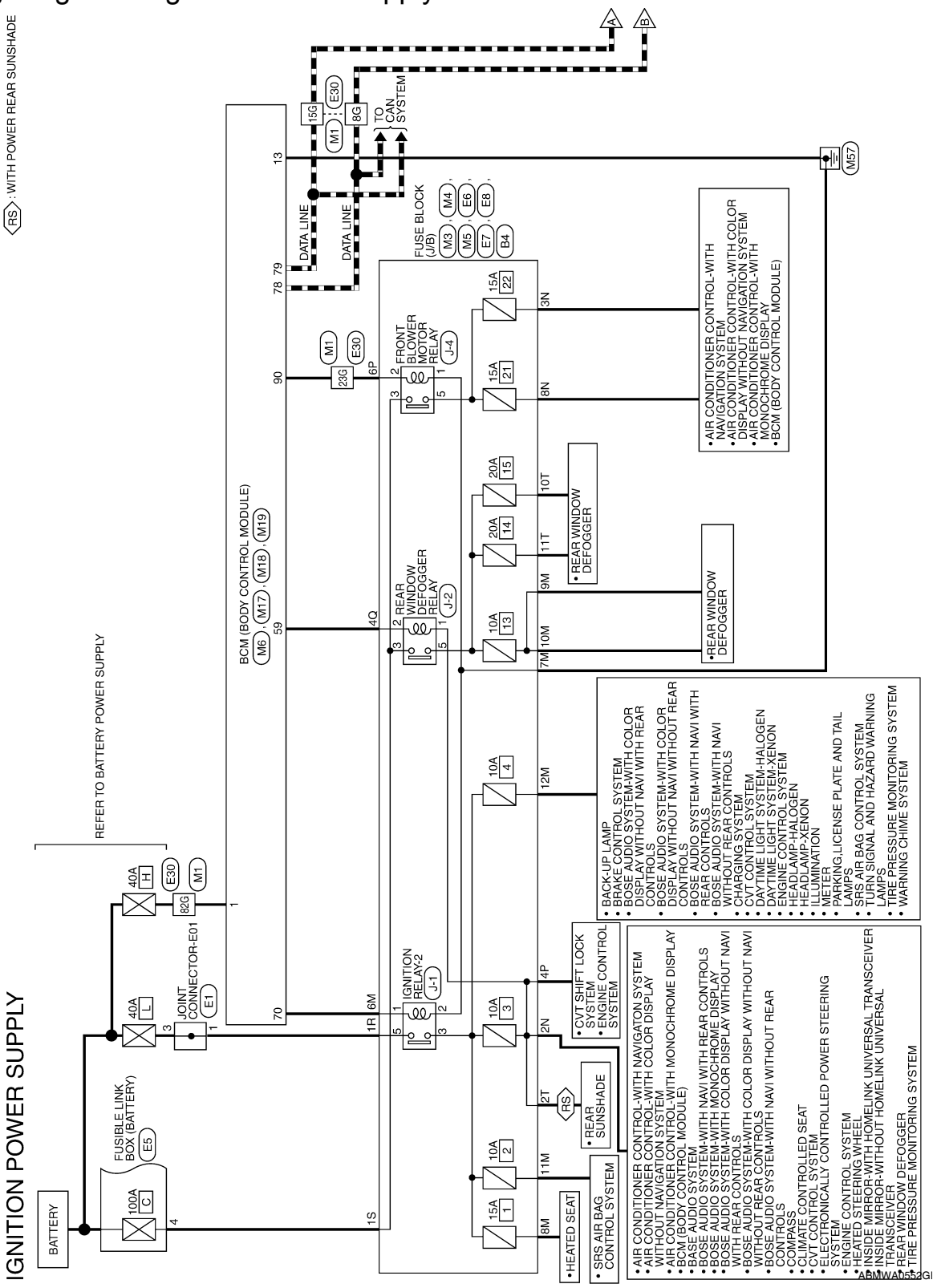
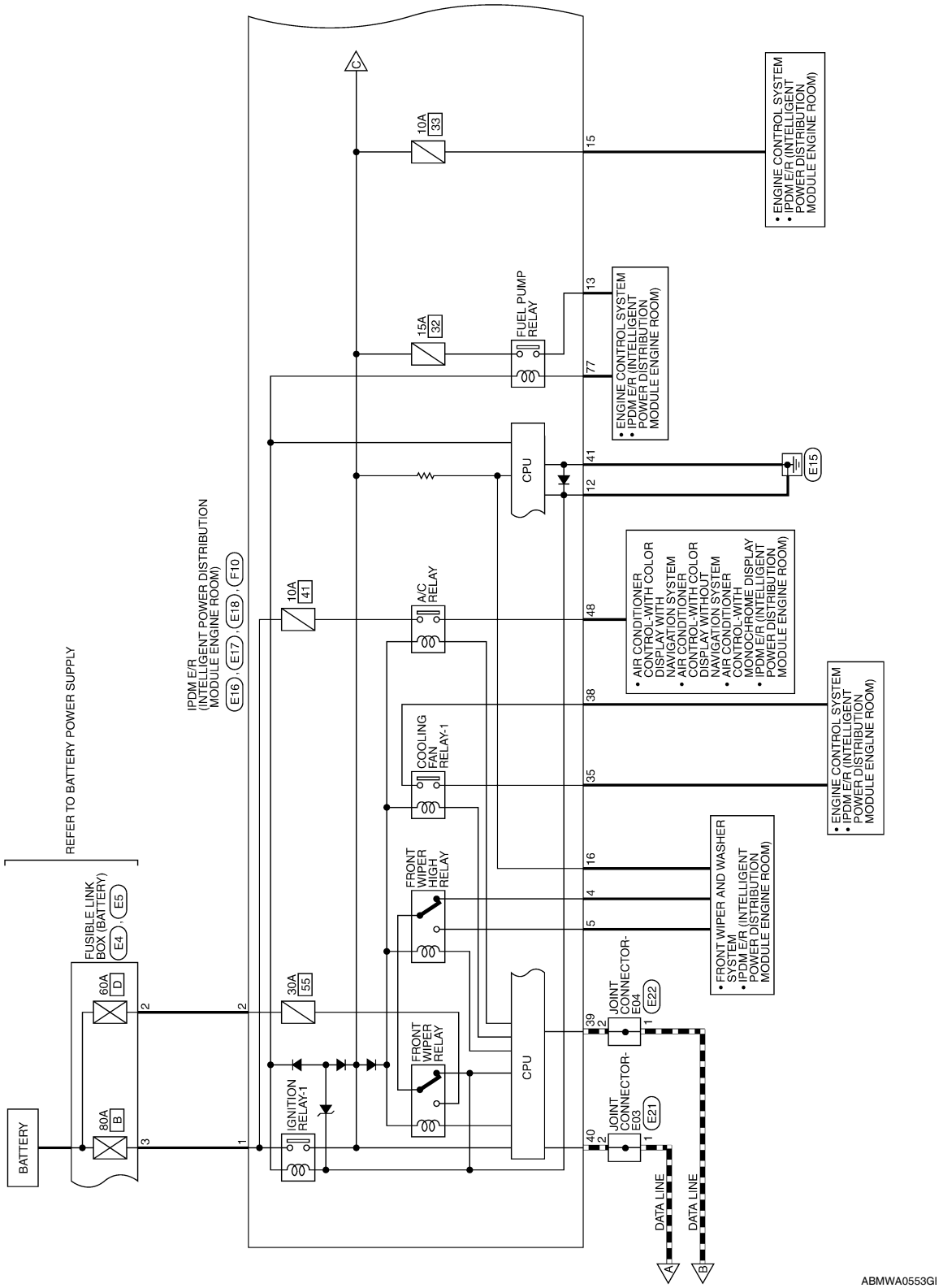
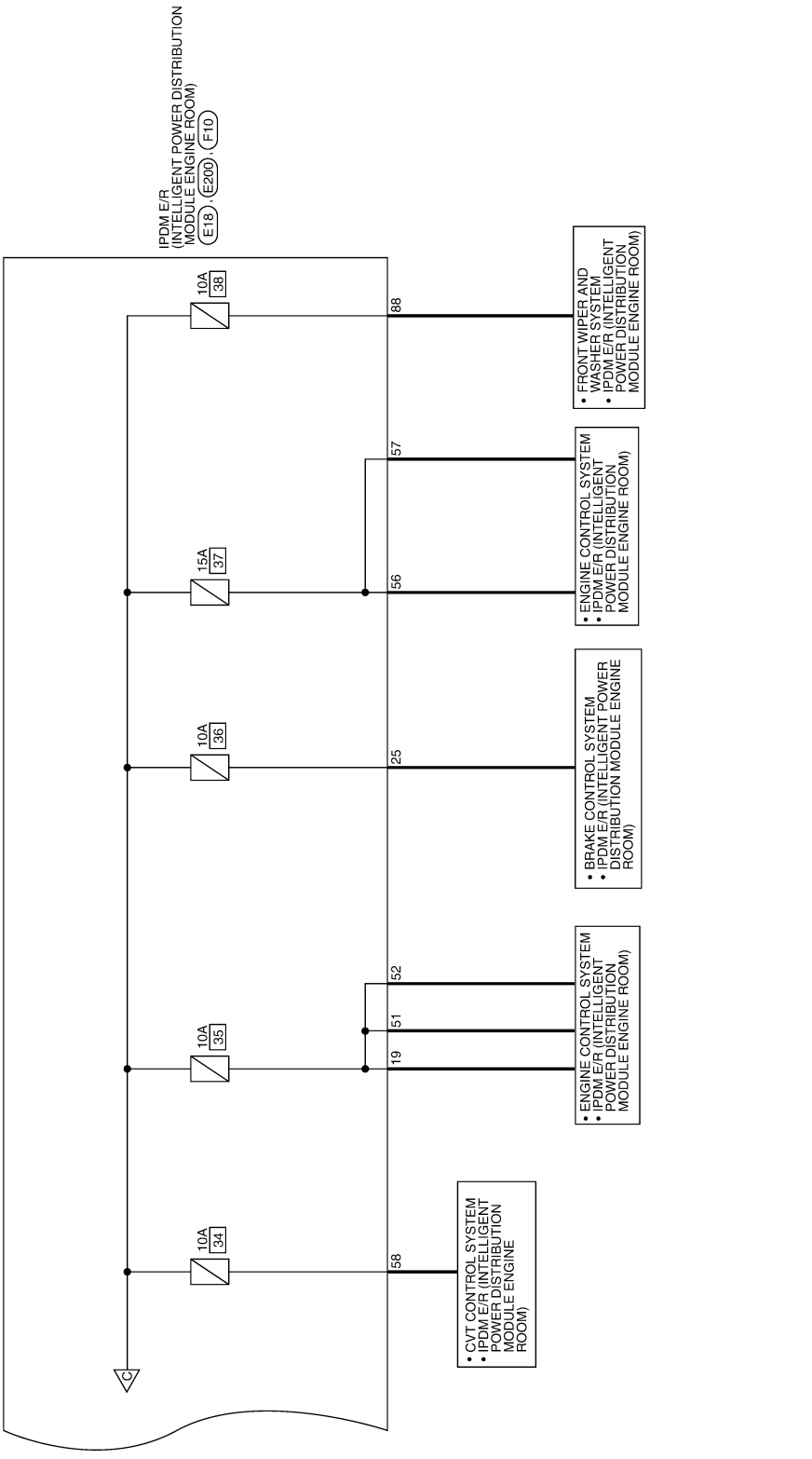

Connector No. M19
Connector Name BCM (BODY CONTROL MODULE)
Connector Color BLACK
H.S.
79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60
99 98 97 96 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81 80
Terminal No. Color of Wire Signal Name
83 L ACC CONT
Connector No. E5
Connector Name FUSIBLE LINK BOX (BATTERY)
Connector Color GRAY
H.S.
1 3 4
Terminal No. Color of Wire Signal Name
4 W –
Connector No. E7
Connector Name FUSE BLOCK (J/B)
Connector Color WHITE
H.S.
1S
Terminal No. Color of Wire Signal Name
1S W –
Connector No. E30
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
Terminal No. Color of Wire Signal Name
82 LG –
Connector No. B4
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
5T 4T 3T 2T 1T
12T 11T 10T 9T 8T 7T 6T
Terminal No. Color of Wire Signal Name
3T G –
Connector No. J-3
Connector Name FUSE BLOCK (J/B) (ACCESSORY RELAY)
Connector Color –
T.S.
IGNITION RELAY - 2 J-1
REAR WINDOW DEFOGGER RELAY J-2
ACCESSORY RELAY J-3
FRONT BLOWER MOTOR RELAY J-4
ABMIA1440GB

Wiring Diagram —Ignition Power Supply —

INFOID:0000000005460700




REFER TO BATTERY POWER SUPPLY
BATTERY
FUSIBLE LINK BOX (BATTERY) (E4), (E5)
80A B
60A D
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (E16), (E17), (E18), (F10)
IGNITION RELAY-1
10A 41
30A 55
A/C RELAY
COOLING FAN RELAY-1
FRONT WIPER HIGH RELAY
FRONT WIPER RELAY
10A 33
15A 32
FUEL PUMP RELAY
CPU
CPU
JOINT CONNECTOR-E03 (E21)
JOINT CONNECTOR-E04 (E22)
DATA LINE
DATA LINE
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AIR CONDITIONER CONTROL-WITH COLOR DISPLAY WITH NAVIGATION SYSTEM
• AIR CONDITIONER CONTROL-WITH COLOR DISPLAY WITHOUT NAVIGATION SYSTEM
• AIR CONDITIONER CONTROL-WITH MONOCHROME DISPLAY
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E15
ABMWA0553GI

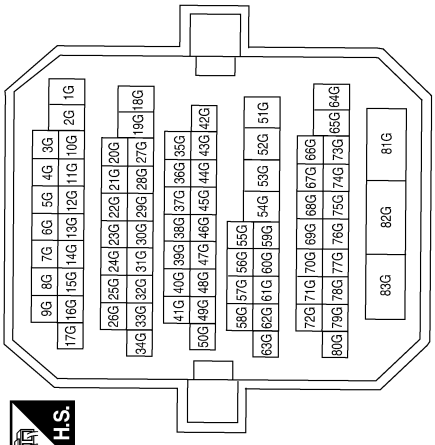


ABMWA0114GI

IGNITION POWER SUPPLY CONNECTORS

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

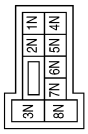
H.S.



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

H.S.



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

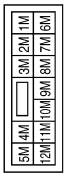
Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

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

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

H.S.



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

H.S.

Terminal No.	Color of Wire	Signal Name
1	W/B	BATT (F/L)

ABMIA0861GB

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

H.S.

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

Terminal No.	Color of Wire	Signal Name
13	B	GND1

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

H.S.

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
59	G/R	REAR DEFOGGER

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

H.S.

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

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

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

H.S.

3	2	1
6	5	4

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

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

H.S.

1
2

Terminal No.	Color of Wire	Signal Name
2	L	–

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

H.S.

3	4

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

ABMIA0862GB

Connector No.	E6
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
4P	P	–
6P	Y	–

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

H.S.

1S

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

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

H.S.

2R 1R

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

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

H.S.

1
2

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

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

H.S.

42 41 40 39
46 45 44 43

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

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

H.S.

9 10 11 12 13 14
3 4 5 6 7 8

25 26 27 28 29 30 31 32 33 34
15 16 17 18 19 20 21 22 23 24

37 38
35 36

Terminal No.	Color of Wire	Signal Name
4	LG	FR WIPER LO
5	Y	FR WIPER HI
12	B	GND (POWER)
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

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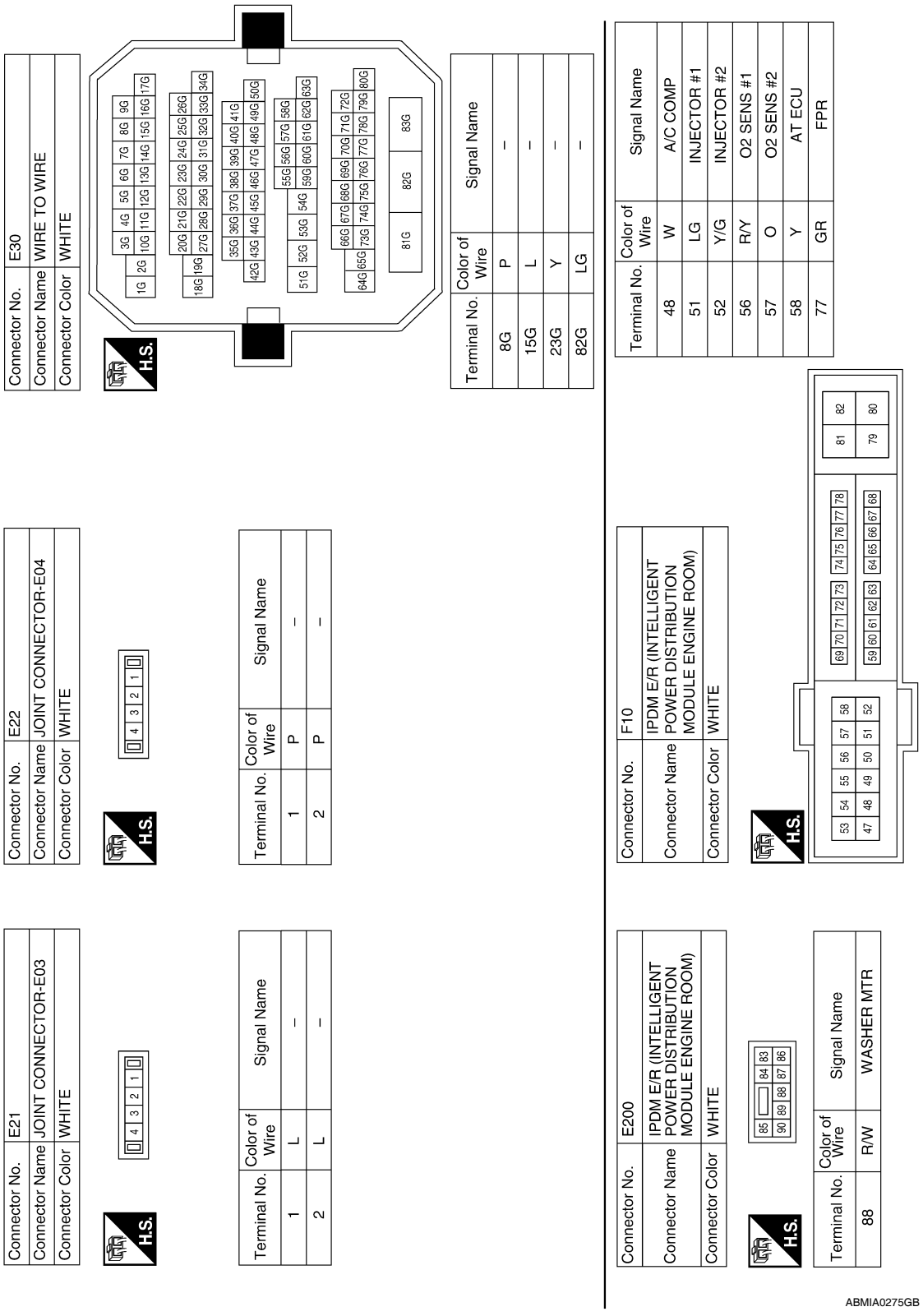
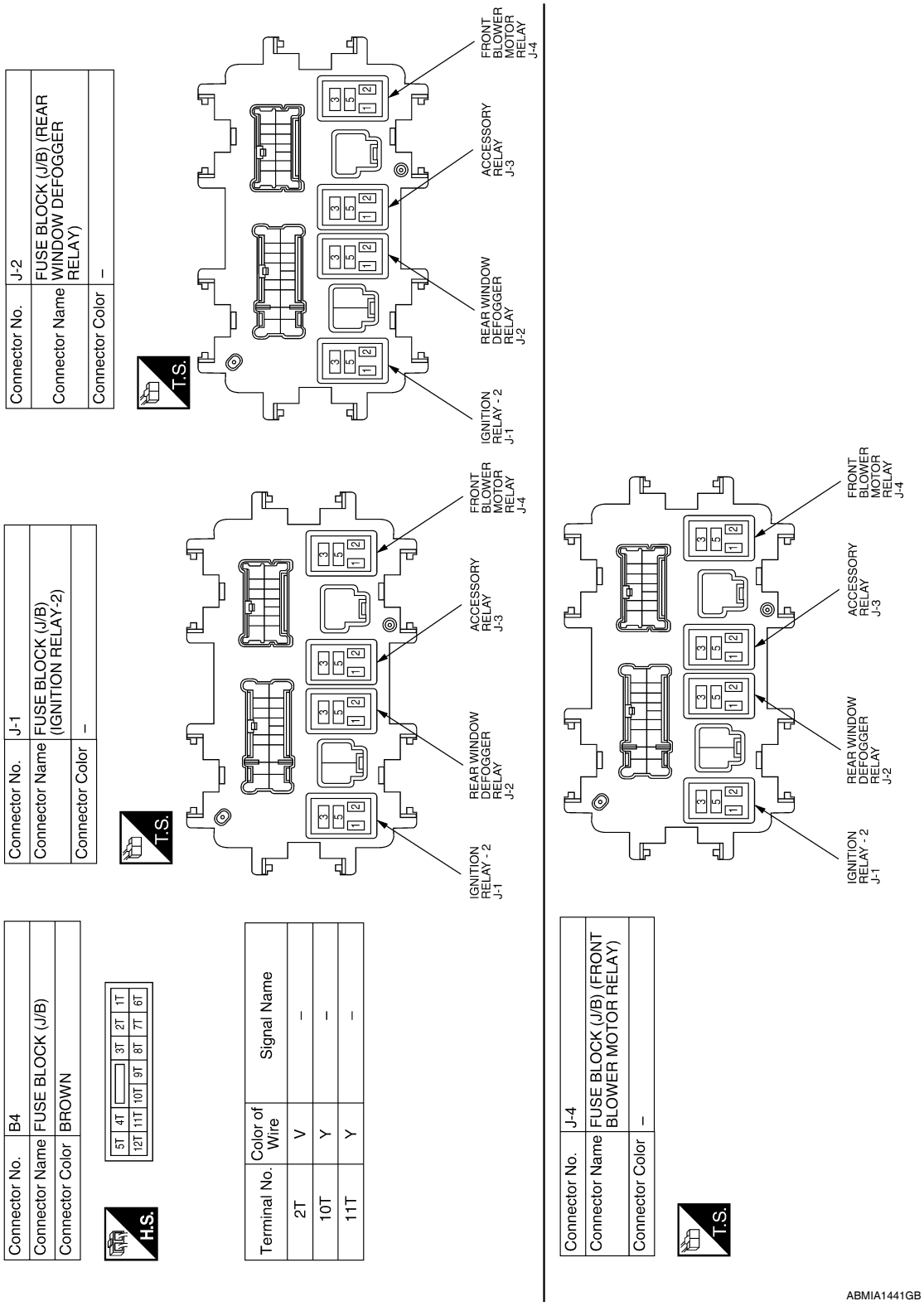
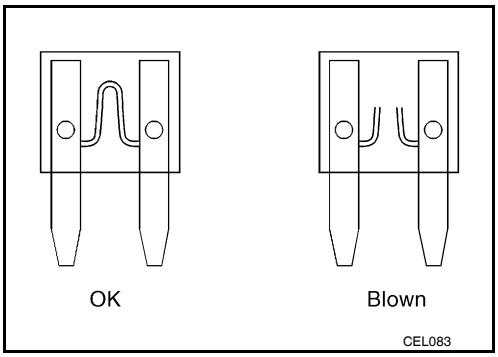

Connector No. E30
Connector Name WIRE TO WIRE
Connector Color WHITE
H.S.
1G 2G 3G 4G 5G 6G 7G 8G 9G
10G 11G 12G 13G 14G 15G 16G 17G
18G 19G 20G 21G 22G 23G 24G 25G 26G
27G 28G 29G 30G 31G 32G 33G 34G
35G 36G 37G 38G 39G 40G 41G
42G 43G 44G 45G 46G 47G 48G 49G 50G
51G 52G 53G 54G 55G 56G 57G 58G 59G 60G 61G 62G 63G
64G 65G 66G 67G 68G 69G 70G 71G 72G 73G 74G 75G 76G 77G 78G 79G 80G
81G 82G 83G
Terminal No. | Color of Wire | Signal Name
8G | P | –
15G | L | –
23G | Y | –
82G | LG | –
Connector No. E22
Connector Name JOINT CONNECTOR-E04
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. | Color of Wire | Signal Name
1 | P | –
2 | P | –
Connector No. E21
Connector Name JOINT CONNECTOR-E03
Connector Color WHITE
H.S.
4 3 2 1
Terminal No. | Color of Wire | Signal Name
1 | L | –
2 | L | –
Connector No. E200
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
85 84 83
90 89 88 87 86
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
H.S.
53 54 55 56 57 58
47 48 49 50 51 52
69 70 71 72 73 74 75 76 77 78
59 60 61 62 63 64 65 66 67 68
81 82
79 80
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
ABMIA0275GB


Connector No. J-2
Connector Name FUSE BLOCK (J/B) (REAR WINDOW DEFOGGER RELAY)
Connector Color –
T.S.
FRONT BLOWER MOTOR RELAY J-4
ACCESSORY RELAY J-3
REAR WINDOW DEFOGGER RELAY J-2
IGNITION RELAY - 2 J-1
Connector No. J-1
Connector Name FUSE BLOCK (J/B) (IGNITION RELAY-2)
Connector Color –
T.S.
FRONT BLOWER MOTOR RELAY J-4
ACCESSORY RELAY J-3
REAR WINDOW DEFOGGER RELAY J-2
IGNITION RELAY - 2 J-1
Connector No. B4
Connector Name FUSE BLOCK (J/B)
Connector Color BROWN
H.S.
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 FUSE BLOCK (J/B) (FRONT BLOWER MOTOR RELAY)
Connector Color –
T.S.
FRONT BLOWER MOTOR RELAY J-4
ACCESSORY RELAY J-3
REAR WINDOW DEFOGGER RELAY J-2
IGNITION RELAY - 2 J-1
ABMIA1441GB

Fuse

INFOID:0000000005460701

- 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.

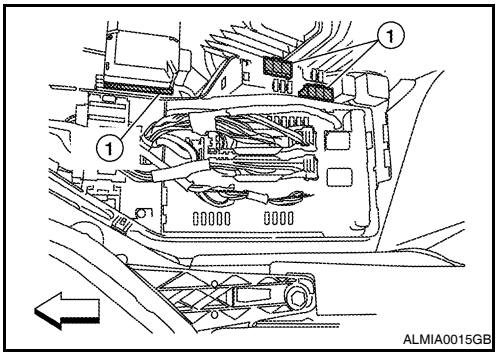


Fusible Link

INFOID:0000000005460702

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

1 : Fusible link



CAUTION:

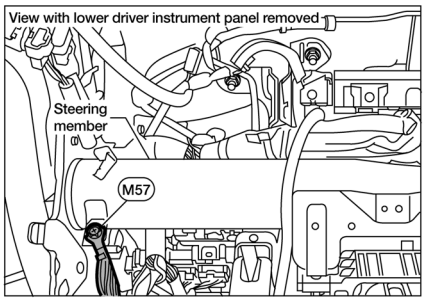
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

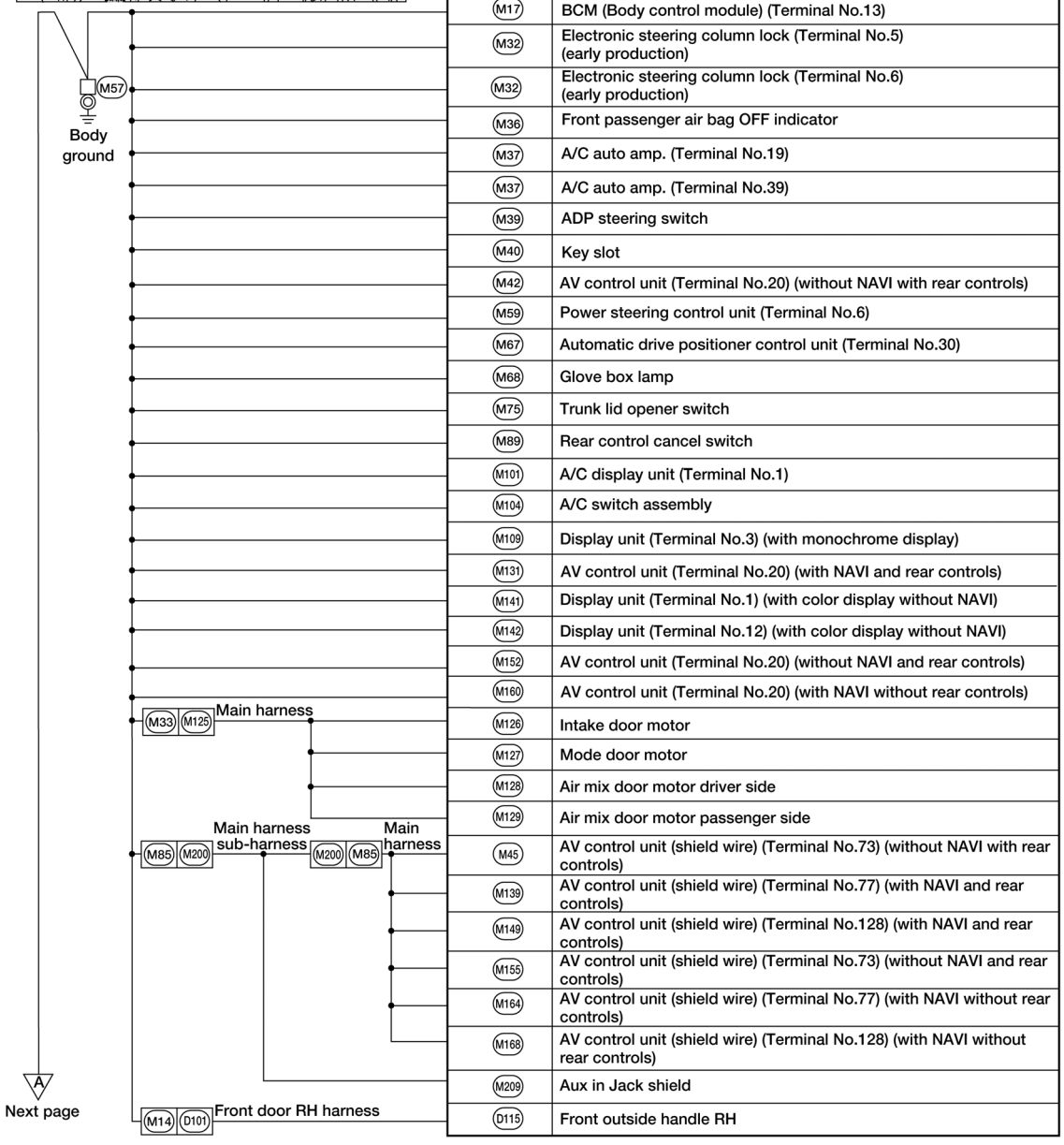
GROUND

Ground Distribution

INFOID:0000000005460703

MAIN HARNESS





CONNECTOR NUMBER	CONNECT TO
M17	BCM (Body control module) (Terminal No.13)
M32	Electronic steering column lock (Terminal No.5) (early production)
M32	Electronic steering column lock (Terminal No.6) (early production)
M36	Front passenger air bag OFF indicator
M37	A/C auto amp. (Terminal No.19)
M37	A/C auto amp. (Terminal No.39)
M39	ADP steering switch
M40	Key slot
M42	AV control unit (Terminal No.20) (without NAVI with rear controls)
M59	Power steering control unit (Terminal No.6)
M67	Automatic drive positioner control unit (Terminal No.30)
M68	Glove box lamp
M75	Trunk lid opener switch
M89	Rear control cancel switch
M101	A/C display unit (Terminal No.1)
M104	A/C switch assembly
M109	Display unit (Terminal No.3) (with monochrome display)
M131	AV control unit (Terminal No.20) (with NAVI and rear controls)
M141	Display unit (Terminal No.1) (with color display without NAVI)
M142	Display unit (Terminal No.12) (with color display without NAVI)
M152	AV control unit (Terminal No.20) (without NAVI and rear controls)
M160	AV control unit (Terminal No.20) (with NAVI without rear controls)
M126	Intake door motor
M127	Mode door motor
M128	Air mix door motor driver side
M129	Air mix door motor passenger side
M45	AV control unit (shield wire) (Terminal No.73) (without NAVI with rear controls)
M139	AV control unit (shield wire) (Terminal No.77) (with NAVI and rear controls)
M149	AV control unit (shield wire) (Terminal No.128) (with NAVI and rear controls)
M155	AV control unit (shield wire) (Terminal No.73) (without NAVI and rear controls)
M164	AV control unit (shield wire) (Terminal No.77) (with NAVI without rear controls)
M168	AV control unit (shield wire) (Terminal No.128) (with NAVI without rear controls)
M209	Aux in Jack shield
D115	Front outside handle RH

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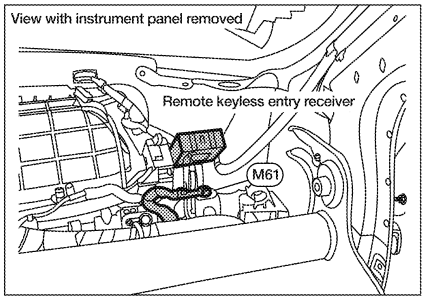

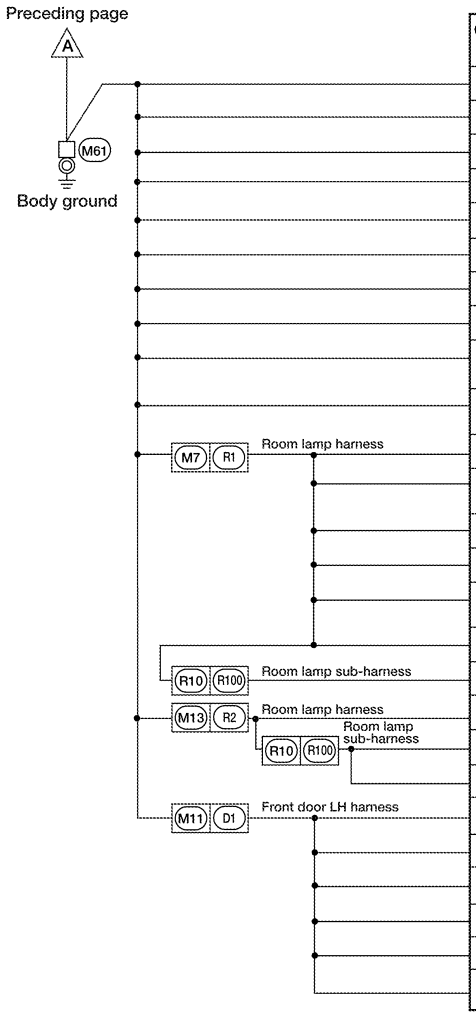

CONNECTOR NUMBER	CONNECT TO
M22	Data link connector (Terminal No.4)
M22	Data link connector (Terminal No.5)
M28	Combination switch (wiper switch)
M31	Blower motor
M58	Climate controlled seat relay
M72	VDC off switch
M74	Trunk lid opener cancel switch
M96	Heated steering wheel switch
M102	Door mirror remote control switch (without automatic drive positioner)
M108	Door mirror remote control switch (with automatic drive positioner)
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 sunrool)
R9	Vanity mirror lamp RH
R13	Auto anti-dazzling inside mirror (Terminal No.2) (with homelink universal transceiver)
R14	Sunroof switch (Terminal No.1) (with dual panel sunroof)
R101	Sunroof motor assembly (Terminal No.2) (with dual panel sunroof)
R5	Sunroof motor assembly (Terminal No.8) (with single panel sunroof)
R101	Sunroof motor assembly (Terminal No.1) (with dual panel sunroof)
R102	Sunshade motor assembly (with dual panel sunroof)
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

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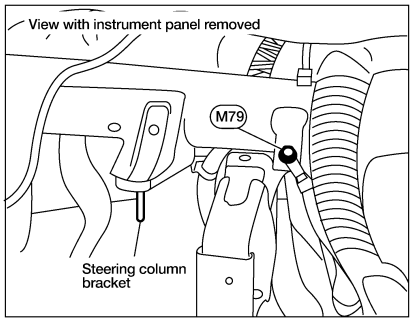
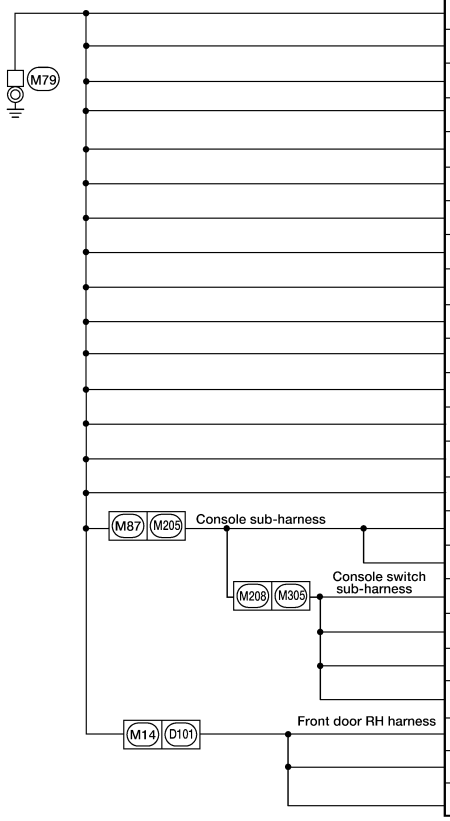
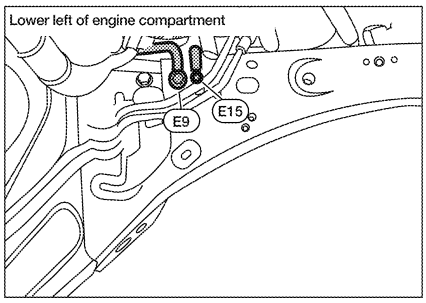
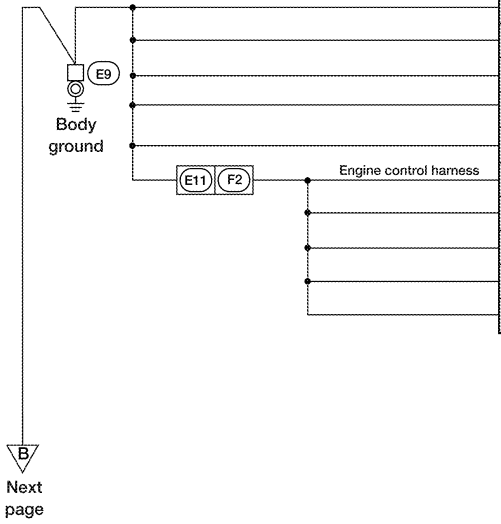




CONNECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal No. 7M)
M24	Combination meter (Terminal No.3)
M24	Combination meter (Terminal No.23)
M24	Combination meter (Terminal No.4)
M26	Spiral cable
M35	Air bag diagnosis sensor unit (Terminal No.2)
M38	Push-button ignition switch
M53	Steering angle sensor
M54	Hazard switch
M55	Yaw rate/side/decel G sensor
M78	CVT shift selector (Terminal No.4)
M78	CVT shift selector (Terminal No.7)
M82	Paddle shift (shift up)
M83	Paddle shift (shift down)
M98	A/C and AV switch assembly
M202	Front power socket
M204	Front console power socket
M300	Front heated seat switch RH
M301	Front heated seat switch LH
M302	Climate controlled seat switch
M308	Rear sunshade switch
D105	Power window and door lock/unlock switch RH (Terminal No.11)
D107	Door mirror RH (Terminal No.7)
D107	Door mirror RH (Terminal No.13)

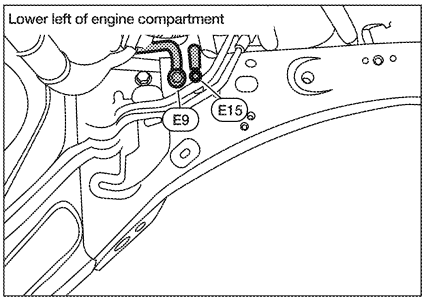
ABMIA1444GB

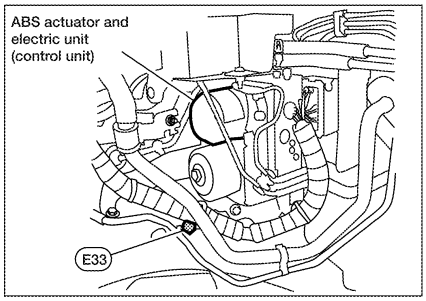


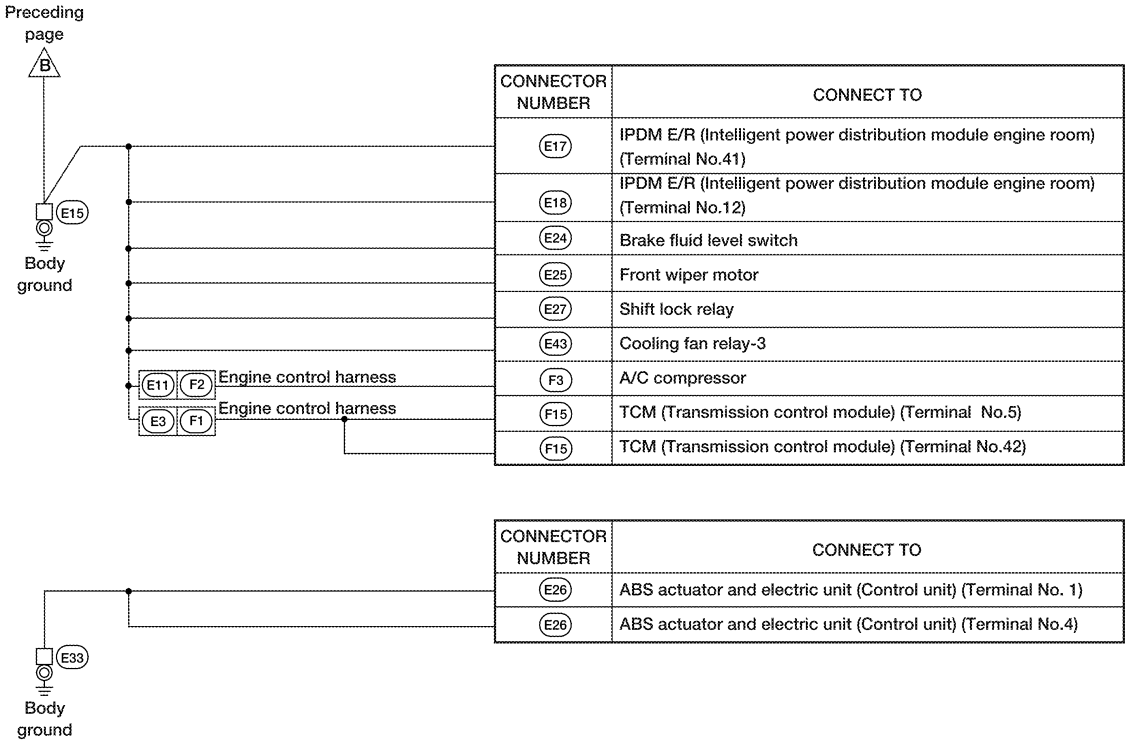


CONNECTOR NUMBER	CONNECT TO
E10	ECM (Terminal No. 107)
E10	ECM (Terminal No. 108)
E10	ECM (Terminal No. 111)
E10	ECM (Terminal No. 112)
E42	Cooling fan relay-2
F12	Air fuel ratio (A/F) sensor 1 (Bank 1) (shield wire)
F14	ECM (Terminal No.16)
F14	ECM (Terminal No.12)
F57	Electric throttle control actuator (shield wire)
F61	Air fuel ratio (A/F) sensor 1 (Bank 2) (shield wire)

ABMIA0280GB







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)

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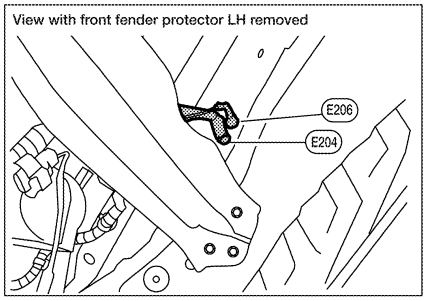

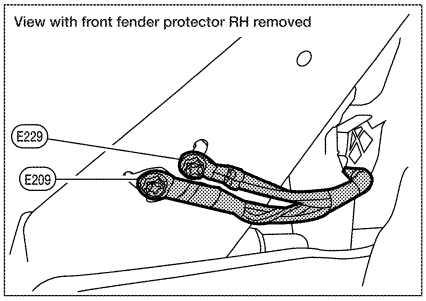

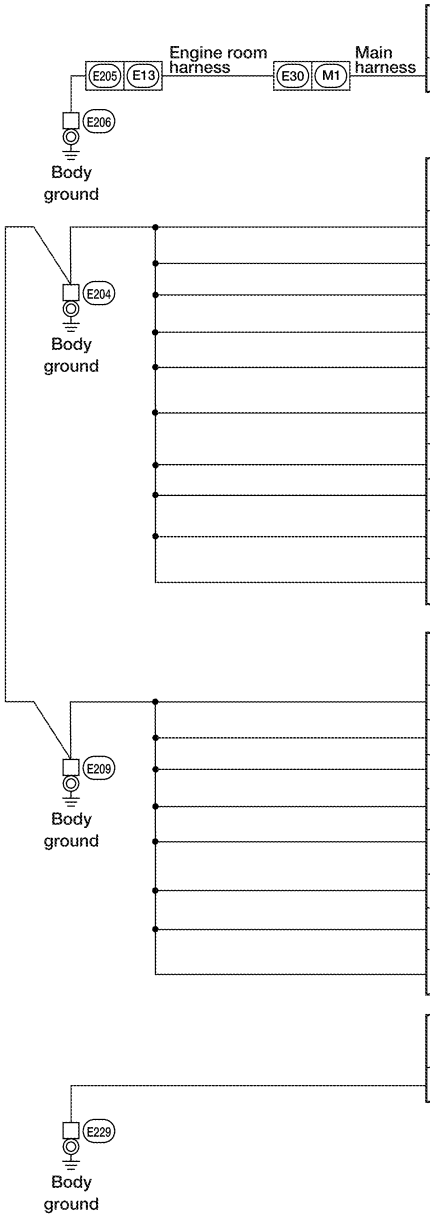

CONNECTOR NUMBER	CONNECT TO
M35	Air bag diagnosis sensor unit (shield wire) (Terminal No.16)

CONNECTOR NUMBER	CONNECT TO
E208	Washer level switch
E212	Front combination lamp LH (Terminal No.2) (without Xenon headlamp system)
E213	Front combination lamp LH
E214	Front fog lamp LH
E218	Front combination lamp LH (Terminal No.9) (without xenon headlamp system)
E222	Front combination lamp RH (headlamp) (Terminal No.4) (without xenon headlamp system)
E224	Front combination lamp LH (Terminal No.6)
E228	Daytime light relay
E232	Front combination lamp RH (Terminal No.2) (with xenon headlamp system)
E234	Front combination lamp LH (Terminal No.9) (with xenon headlamp system)

CONNECTOR NUMBER	CONNECT TO
E217	Front combination lamp LH (Termial No.6)
E221	Cooling fan motor-2 (Terminal No.3)
E221	Cooling fan motor-2 (Terminal No.4)
E223	Front combination lamp RH (Terminal No.2) (without xenon headlamp system)
E225	Front combination lamp RH (Terminal No.9) (without xenon headlamp system)
E227	Front fog lamp RH
E231	Front combination lamp LH (Terminal No.2) (with xenon headlamp system)
E235	Front combination lamp RH (Terminal No.9) (with xenon headlamp system)

CONNECTOR NUMBER	CONNECT TO
E230	Generator

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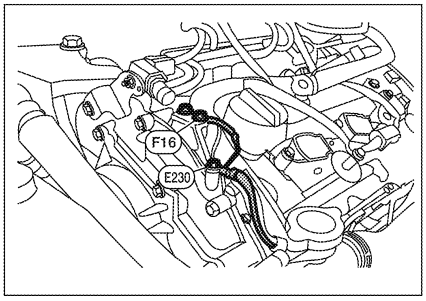

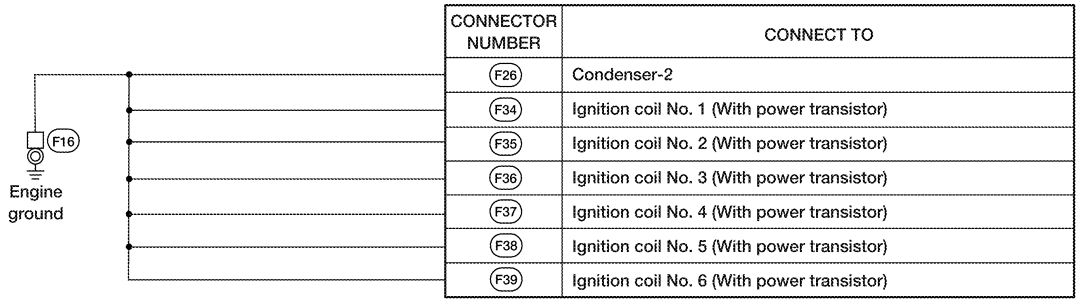

CONNECTOR NUMBER	CONNECT TO
F26	Condenser-2
F34	Ignition coil No. 1 (With power transistor)
F35	Ignition coil No. 2 (With power transistor)
F36	Ignition coil No. 3 (With power transistor)
F37	Ignition coil No. 4 (With power transistor)
F38	Ignition coil No. 5 (With power transistor)
F39	Ignition coil No. 6 (With power transistor)

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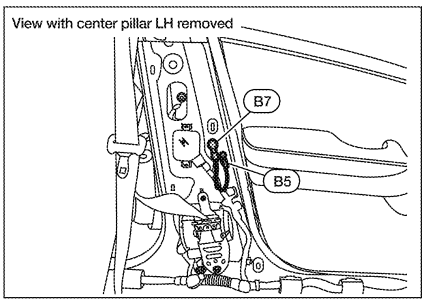

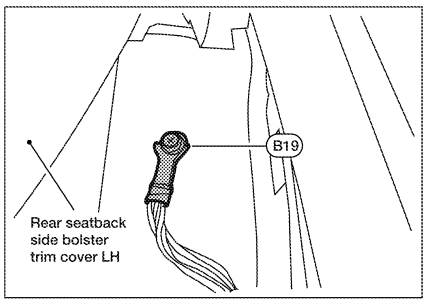

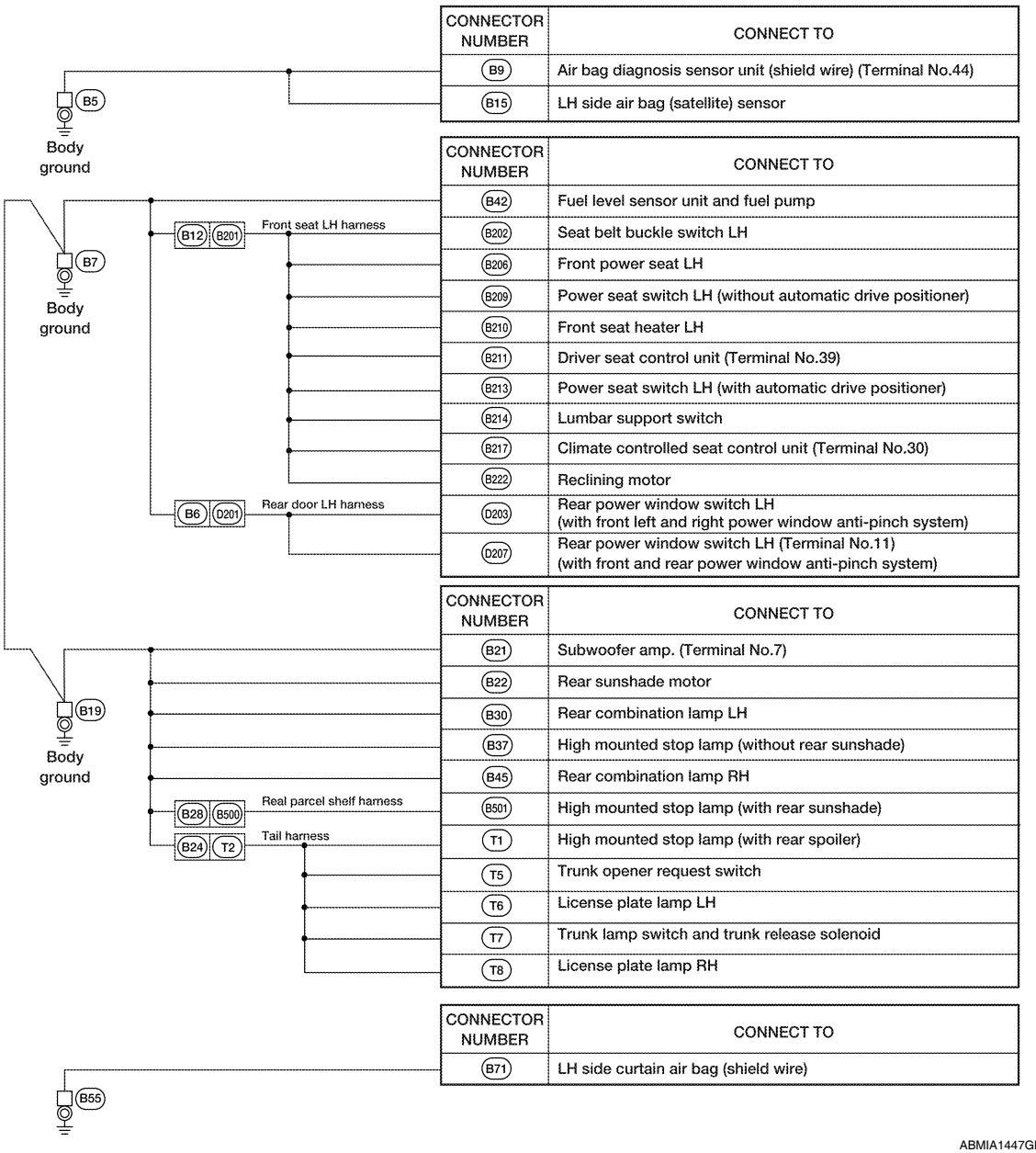

CONNECTOR NUMBER	CONNECT TO
B9	Air bag diagnosis sensor unit (shield wire) (Terminal No.44)
B15	LH side air bag (satellite) sensor

CONNECTOR NUMBER	CONNECT TO
B42	Fuel level sensor unit and fuel pump
B202	Seat belt buckle switch LH
B206	Front power seat LH
B209	Power seat switch LH (without automatic drive positioner)
B210	Front seat heater LH
B211	Driver seat control unit (Terminal No.39)
B213	Power seat switch LH (with automatic drive positioner)
B214	Lumbar support switch
B217	Climate controlled seat control unit (Terminal No.30)
B222	Reclining motor
D203	Rear power window switch LH (with front left and right power window anti-pinch system)
D207	Rear power window switch LH (Terminal No.11) (with front and rear power window anti-pinch system)

CONNECTOR NUMBER	CONNECT TO
B21	Subwoofer amp. (Terminal No.7)
B22	Rear sunshade motor
B30	Rear combination lamp LH
B37	High mounted stop lamp (without rear sunshade)
B45	Rear combination lamp RH
B501	High mounted stop lamp (with rear sunshade)
T1	High mounted stop lamp (with rear spoiler)
T5	Trunk opener request switch
T6	License plate lamp LH
T7	Trunk lamp switch and trunk release solenoid
T8	License plate lamp RH

CONNECTOR NUMBER	CONNECT TO
B71	LH side curtain air bag (shield wire)

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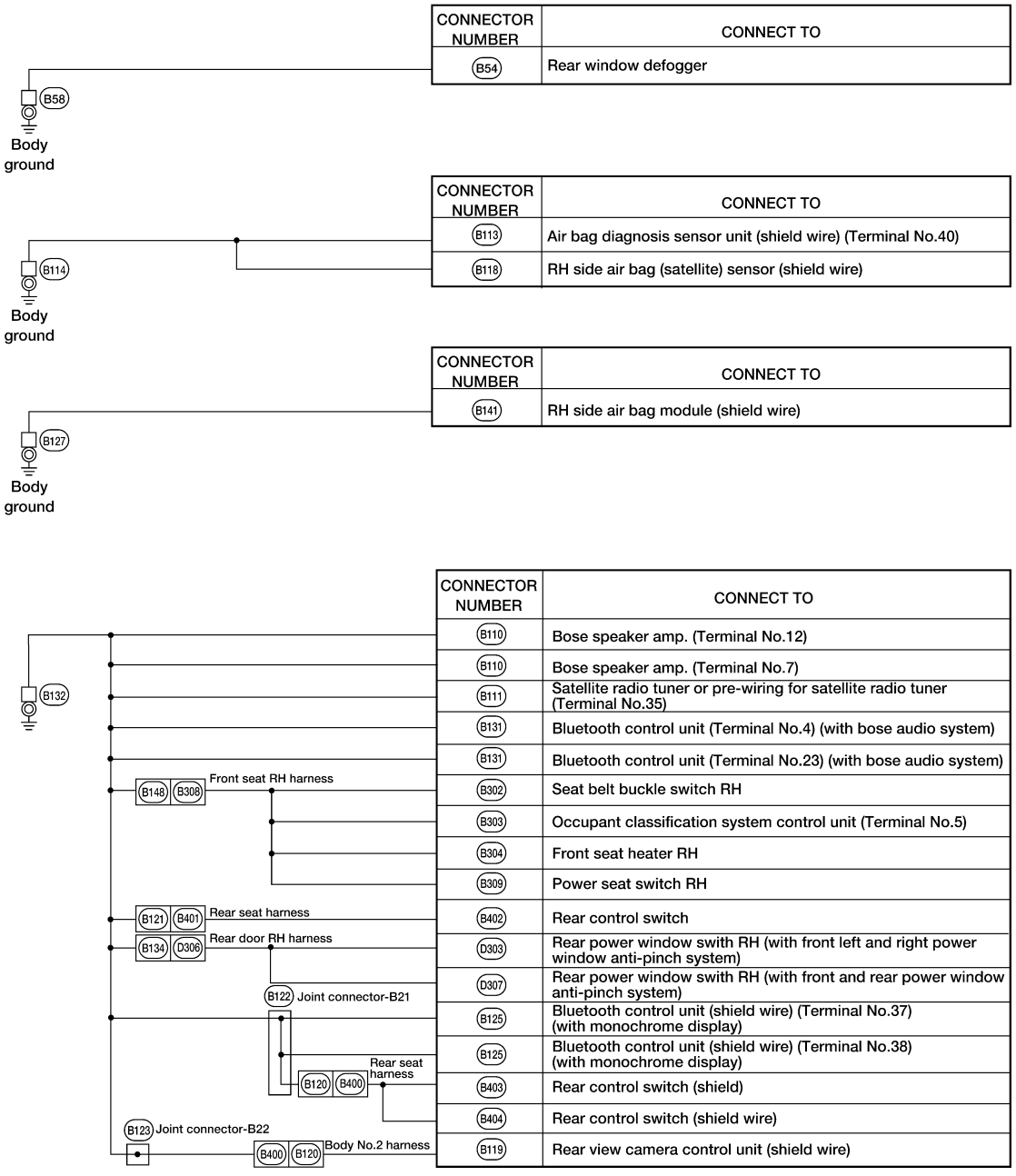

CONNECTOR NUMBER	CONNECT TO
B54	Rear window defogger

CONNECTOR NUMBER	CONNECT TO
B113	Air bag diagnosis sensor unit (shield wire) (Terminal No.40)
B118	RH side air bag (satellite) sensor (shield wire)

CONNECTOR NUMBER	CONNECT TO
B141	RH side air bag module (shield wire)

CONNECTOR NUMBER	CONNECT TO
B110	Bose speaker amp. (Terminal No.12)
B110	Bose speaker amp. (Terminal No.7)
B111	Satellite radio tuner or pre-wiring for satellite radio tuner (Terminal No.35)
B131	Bluetooth control unit (Terminal No.4) (with bose audio system)
B131	Bluetooth control unit (Terminal No.23) (with bose audio system)
B302	Seat belt buckle switch RH
B303	Occupant classification system control unit (Terminal No.5)
B304	Front seat heater RH
B309	Power seat switch RH
B402	Rear control switch
D303	Rear power window swith RH (with front left and right power window anti-pinch system)
D307	Rear power window swith RH (with front and rear power window anti-pinch system)
B125	Bluetooth control unit (shield wire) (Terminal No.37) (with monochrome display)
B125	Bluetooth control unit (shield wire) (Terminal No.38) (with monochrome display)
B403	Rear control switch (shield)
B404	Rear control switch (shield wire)
B119	Rear view camera control unit (shield wire)

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HARNESS

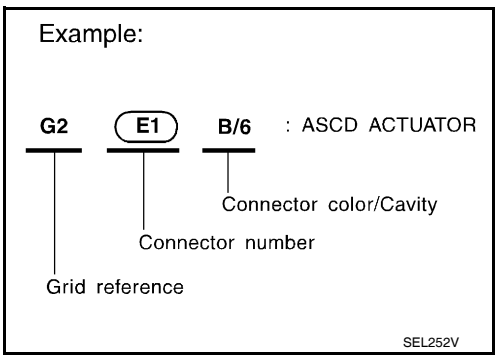
Harness Layout

INFOID:0000000005460704

HOW TO READ HARNESS LAYOUT

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

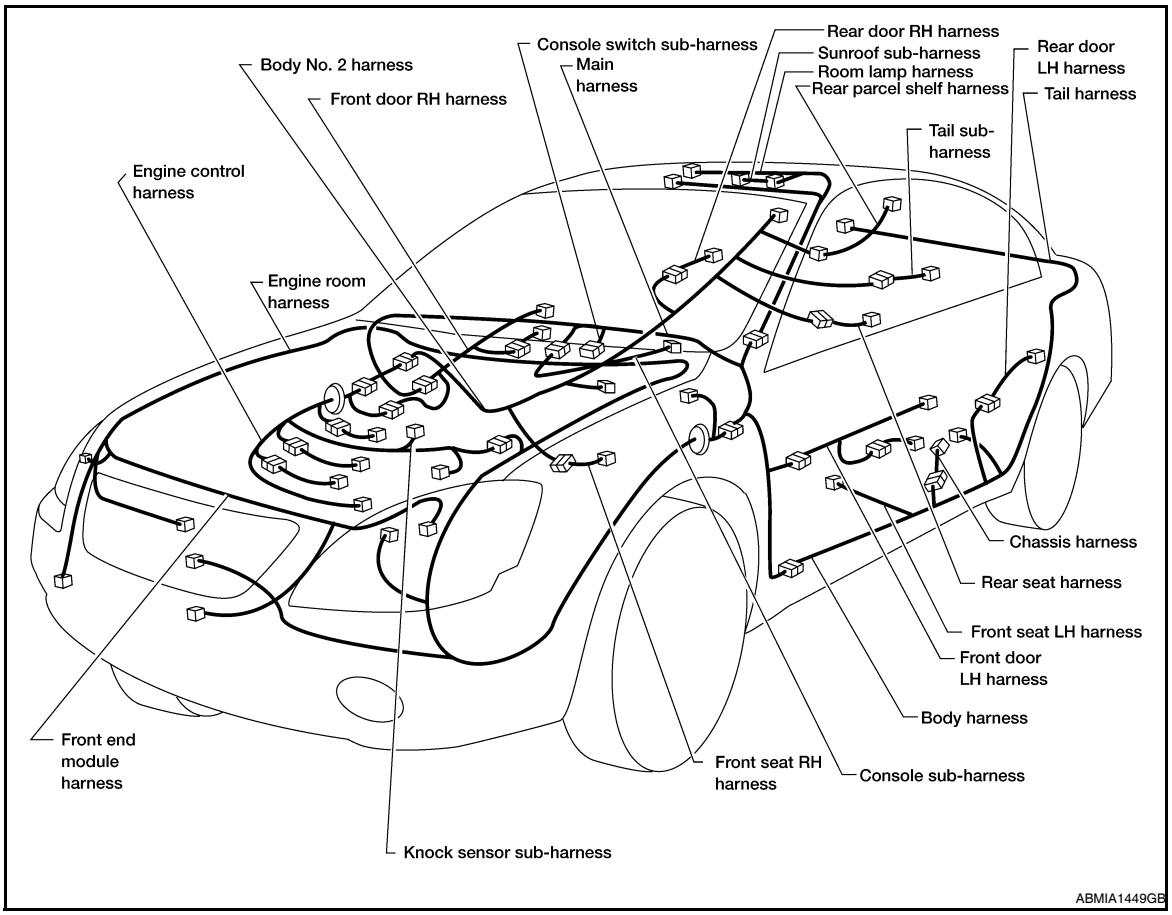
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness and Front End Module Harness
- Engine Room Harness (Passenger Compartment)
- Engine Control Harness and Knock Sensor Sub-harness
- Body Harness, Front Seat LH Harness, Tail Harness and Chassis Harness
- Body No.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

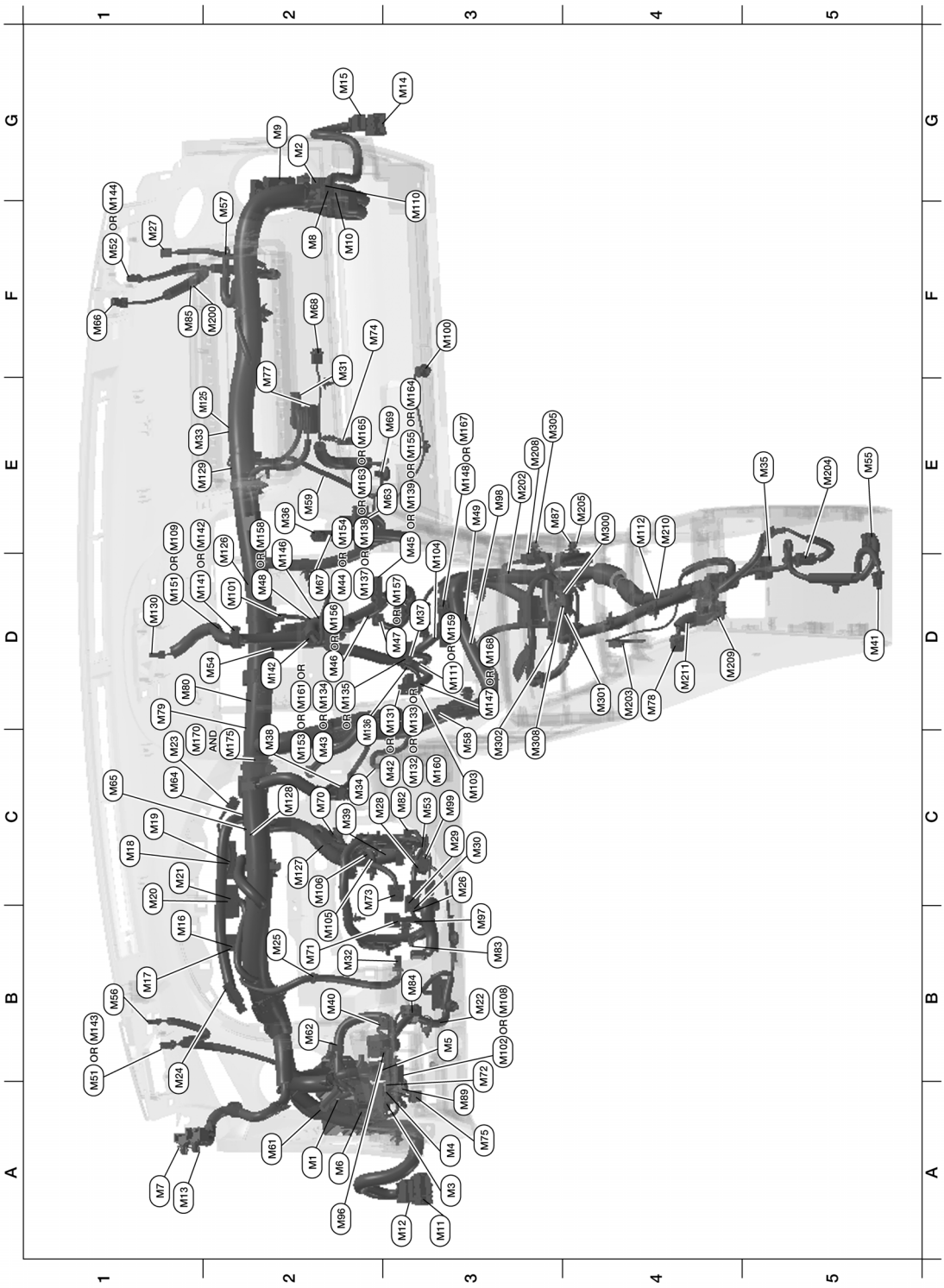


To use the grid reference

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





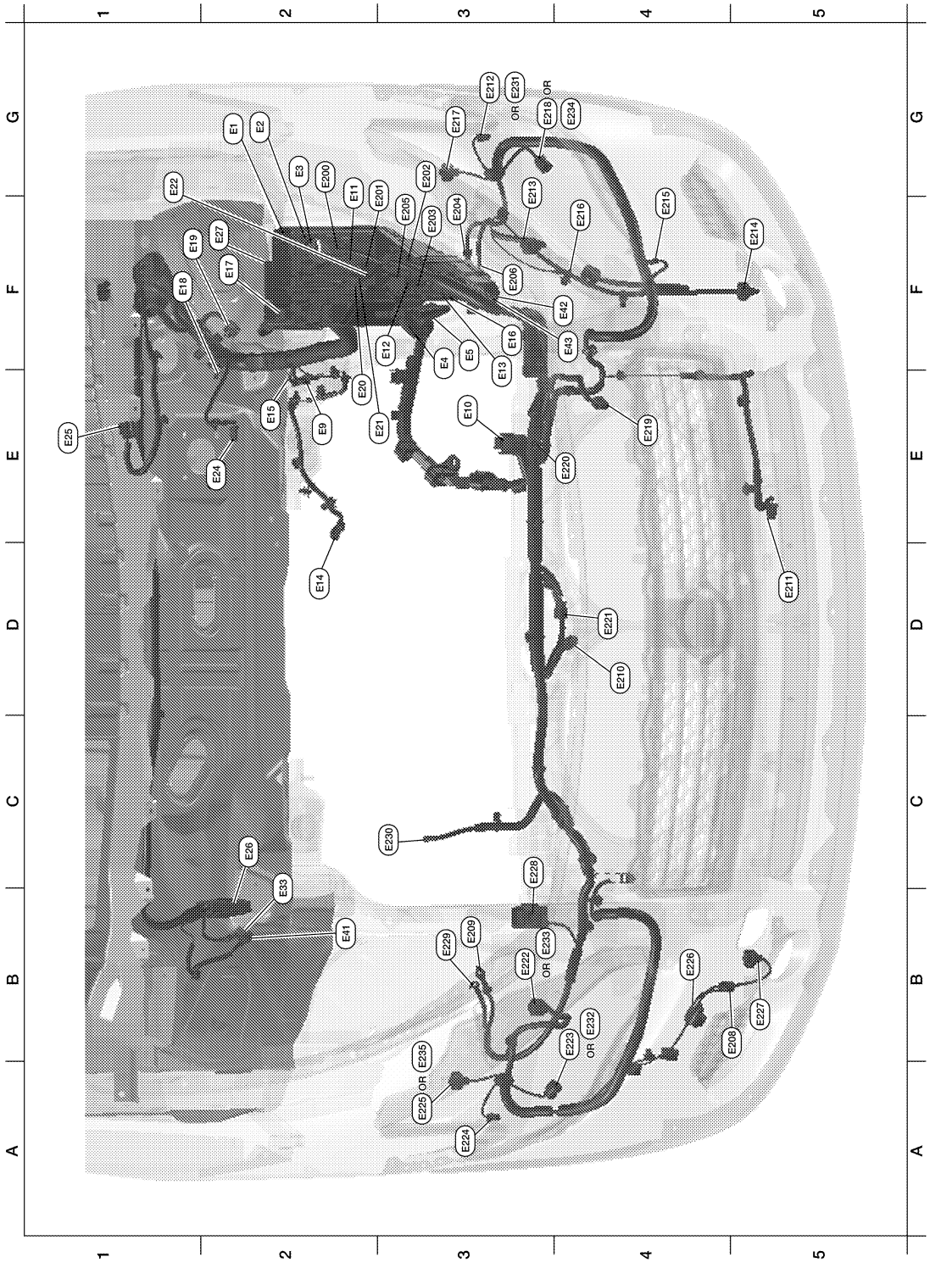
A2	M1	SMJ	: To E30	F1	M85	W/24	: To M200
G2	M2	W/24	: To B101	E3	M87	BR/16	: To M205
A3	M3	W/8	: Fuse block (J/B)	A3	M89	W/8	: Rear control cancel switch
A3	M4	W/10	: Fuse block (J/B)	A2	M96	W/6	: Heated steering wheel switch

B3	M5	W/12	: Fuse block (J/B)	B3	M97	L/4	: Heated steering relay
A2	M6	SMJ	: To B1	E3	M98	W/16	: A/C and AV switch assembly
A1	M7	W/16	: To R1	C3	M99	BR/2	: Foot lamp LH
F2	M8	W/32	: To B102	F3	M100	BR/2	: Foot lamp RH
G2	M9	BR/16	: To B103	D2	M101	B/10	: A/C display unit
F2	M10	W/16	: To B104	B3	M102	W/16	: Door mirror remote control switch (without automatic drive positioner)
A3	M11	W/16	: To D1	C3	M103	GR/3	: To M501
A3	M12	W/24	: To D2	D3	M104	W/12	: A/C switch assembly
A1	M13	W/6	: To R2	B2	M105	Y/2	: Driver air bag module
G2	M14	W/10	: To D101	C2	M106	O/2	: Driver air bag module
G2	M15	W/16	: To D102	B3	M108	BR/16	: Door mirror remote control switch (with automatic drive positioner)
B1	M16	B/3	: BCM (body control module)	E1	M109	W/12	: Display unit (with monochrome display)
B1	M17	W/16	: BCM (body control module)	F3	M110	W/16	: To B136
C1	M18	G/40	: BCM (body control module)	D3	M111	G/4	: AV control unit (without NAVI and rear controls)
C1	M19	B/40	: BCM (body control module)	E4	M112	GR/6	: To M210
C1	M20	W/12	: BCM (body control module)	E1	M125	W/3	: To M33
C1	M21	GR/40	: BCM (body control module)	D2	M126	W/3	: Intake door motor
B3	M22	W/16	: Data link connector	C2	M127	W/3	: Mode door motor
C1	M23	W/12	: Combination meter	C2	M128	W/3	: Air mix door motor driver side
B1	M24	W/40	: Combination meter	E1	M129	W/3	: Air mix door motor passenger side
B2	M25	W/8	: Meter mode switch	D1	M130	BR/2	: Center speaker
C3	M26	W/2	: Spiral cable	D3	M131	W/20	: AV control unit (with NAVI and rear controls)
F1	M27	B/4	: Remote keyless entry receiver	C3	M132	W/20	: Audio unit (with BOSE audio system)
C3	M28	W/16	: Combination switch	D3	M133	W/20	: Audio unit (with base audio system)
C3	M29	Y/6	: Spiral cable	D2	M134	G/4	: AV control unit (with NAVI and rear controls)
C3	M30	GR/8	: Spiral cable	D2	M135	W/12	: Audio unit (with BOSE audio system)
E2	M31	W/6	: Blower motor	D2	M137	W/32	: AV control unit (with NAVI and rear controls)
B2	M32	W/8	: Electronic steering column lock (early production)	E2	M138	W/12	: Audio unit (with BOSE audio system)
E1	M33	W/3	: To M125	E3	M139	W/40	: AV control unit (with NAVI and rear controls)
C2	M34	W/2	: In-vehicle sensor	D2	M141	W/24	: Display unit (with color display without NAVI)
E5	M35	Y/28	: Air bag diagnosis sensor unit	E1	M142	W/24	: Display unit (with color display and NAVI)
E2	M36	W/3	: Front passenger air bag off indicator	B1	M143	BR/2	: Tweeter LH (with base audio system)
D3	M37	W/40	: A/C auto amp.	F1	M144	BR/2	: Tweeter RH (with base audio system)
D2	M38	BR/8	: Push-button ignition switch	D2	M146	GR/3	: AV control unit (with NAVI and rear controls)
C2	M39	GR/6	: ADP steering switch	D3	M147	W/12	: Audio unit (with base audio system)
B2	M40	W/12	: Key slot	D3	M148	G/4	: AV control unit (with NAVI and rear controls)
D5	M41	GR/2	: Front console antenna	E3	M149	W/28	: AV control unit (with NAVI and rear controls)

C3	M42	W/20	: AV control unit (without NAVI with rear controls)	D1	M151	G/4	: Display unit (with color display and NAVI)
C2	M43	W/12	: AV control unit (without NAVI with rear controls)	C3	M152	W/20	: AV control unit (without NAVI and rear controls)
D2	M44	W/24	: AV control unit (without NAVI with rear controls)	D2	M153	W/12	: AV control unit (without NAVI and rear controls)
D3	M45	W/16	: AV control unit (without NAVI with rear controls)	E2	M154	W/24	: AV control unit (without NAVI and rear controls)
D2	M46	W/32	: AV control unit (without NAVI with rear controls)	E3	M155	W/16	: AV control unit (without NAVI and rear controls)
D2	M47	W/12	: AV control unit (without NAVI with rear controls)	D2	M156	W/32	: AV control unit (without NAVI and rear controls)
D2	M48	GR/3	: AV control unit (without NAVI with rear controls)	D3	M157	W/12	: AV control unit (without NAVI and rear controls)
B1	M51	BR/2	: Tweeter LH (with BOSE audio system)	D2	M158	GR/3	: AV control unit (without NAVI and rear controls)
F1	M52	BR/2	: Tweeter RH (with BOSE audio system)	D3	M159	G/4	: AV control unit (without NAVI and rear controls)
C3	M53	W/8	: Steering angle sensor	D2	M160	W/20	: AV control unit (with NAVI without rear controls)
D2	M54	W/4	: Hazard switch	D2	M161	G/4	: AV control unit (with NAVI without rear controls)
E5	M55	B/4	: Yaw rate/side/decel G sensor	E3	M163	W/32	: AV control unit (with NAVI without rear controls)
B1	M56	B/2	: Sunload sensor	E3	M164	W/40	: AV control unit (with NAVI without rear controls)
F2	M57	—	: Body ground	E2	M165	GR/2	: AV control unit (with NAVI without rear controls)
C3	M58	L/4	: Climate controlled seat relay	E2	M166	GR/3	: AV control unit (with NAVI without rear controls)
E2	M59	W/12	: Power steering control unit	E3	M167	G/4	: AV control unit (with NAVI without rear controls)
A2	M61	—	: Body ground	E3	M168	W/28	: AV control unit (with NAVI without rear controls)
B2	M62	W/2	: Tire pressure warning check connector	C2	M170	W/4	: ESCL Jumper -1
E3	M63	W/24	: Automatic drive positioner control unit	C2	M175	W/4	: ESCL Jumper -2
C1	M64	W/4	: Joint connector-M01	Console sub-harness			
F1	M66	W/3	: Optical sensor	F2	M200	W/24	: To M85
D2	M67	W/6	: Automatic drive positioner control unit	E4	M202	B/3	: Front power socket
F2	M68	BR/2	: Glove box lamp	D4	M203	BR/2	: CVT shift selector
E3	M69	W/2	: Intake sensor	E5	M204	B/3	: Front console power socket
C2	M70	W/4	: Tire pressure receiver	E4	M205	BR/16	: To M87
B2	M71	W/6	: Tilt motor	E3	M208	W/16	: To M305
B3	M72	GR/6	: VDC OFF switch	D4	M209	W/8	: Aux in jack
C2	M73	W/6	: Telescopic motor	E4	M210	GR/6	: To M112
E2	M74	W/2	: Trunk lid opener cancel switch	D4	M211	G/4	: USB interface
A3	M75	B/2	: Trunk lid opener switch	Console switch sub-harness			
F2	M77	Y/4	: Front passenger air bag module	E3	M300	BR/6	: Front heated seat switch RH
D4	M78	W/10	: CVT shift selector	D3	M301	W/6	: Front heated seat switch LH
D1	M79	—	: Body ground	C3	M302	W/10	: Climate controlled seat switch
D1	M80	—	: Diode-3	E3	M305	W/16	: To M208

C3	M82	W/4	: Paddle shifter (shift up)	C3	M308	W/6	: Rear sunshade switch
B2	M83	W/3	: Paddle shifter (shift down)				
B3	M84	W/2	: Circuit breaker				

ENGINE ROOM HARNESS



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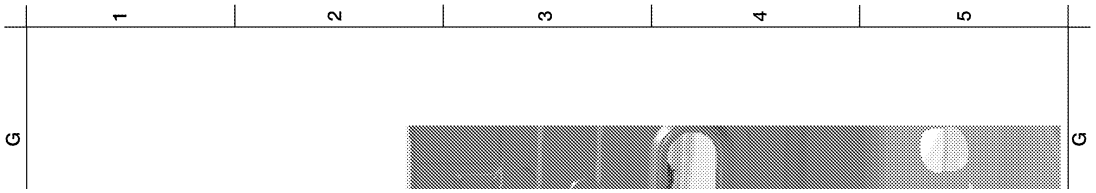
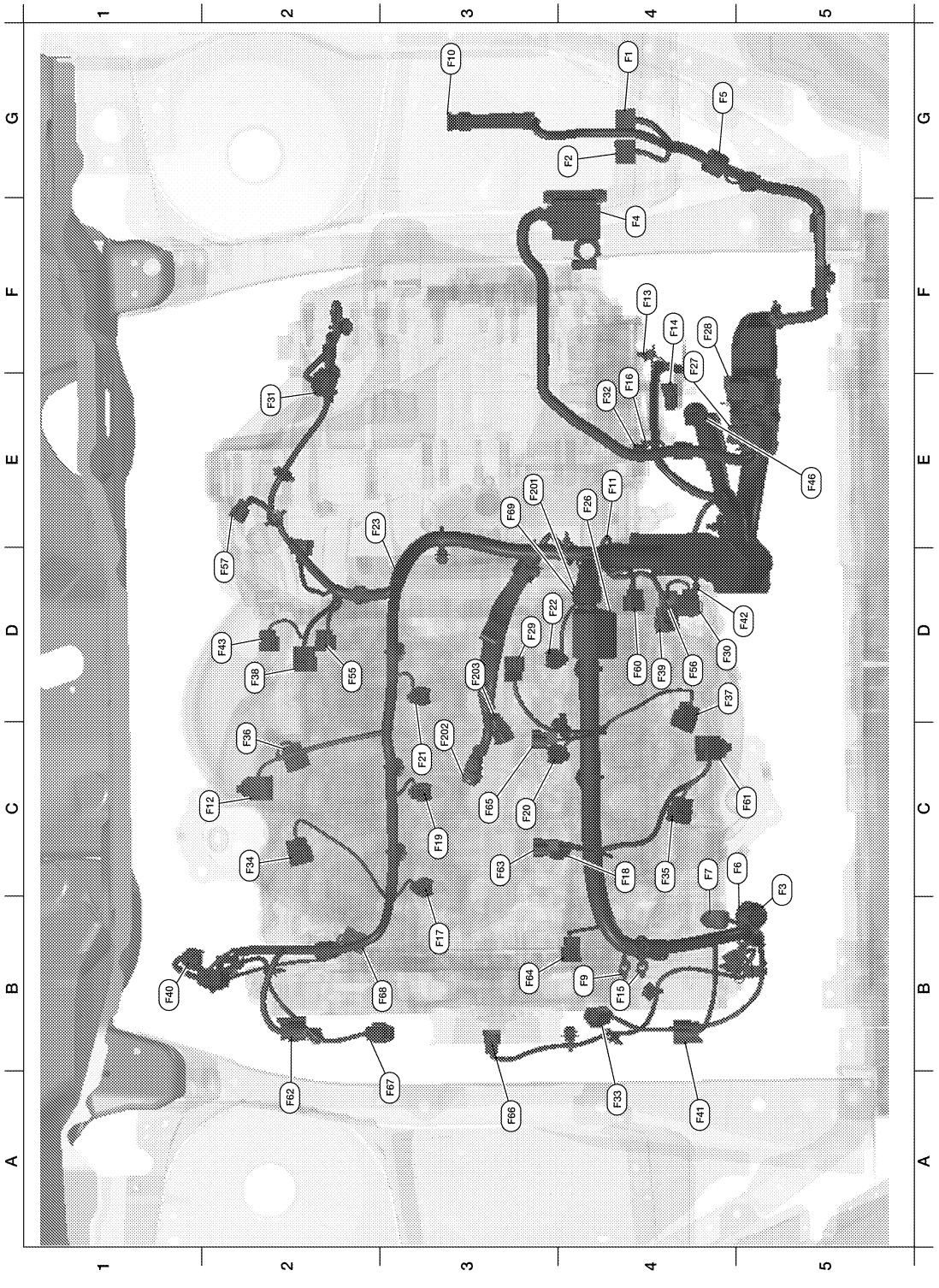
G2	E1	W/6	: Joint connector-E01	F3	E204	—	: Body ground
G2	E2	W/8	: To E202	F3	E205	B/3	: To E13

G2	E3	W/16	: To F1	F3	E206	—	: Body ground
F3	E4	BR/2	: Fusible link box (battery)	B4	E208	W2	: Washer level switch
F3	E5	GR/2	: Fusible link box (battery)	B3	E209	—	: Body ground
E2	E9	—	: Body ground	D4	E210	Y/2	: Crash zone sensor
E3	E10	B/32	: ECM	D5	E211	B/2	: Ambient sensor
G2	E11	W/10	: To F2	G3	E212	B/2	: Front combination lamp LH (without xenon headlamp system)
F3	E12	W/6	: To E203	F3	E213	B/2	: Front combination lamp LH
F3	E13	B/3	: To E205	F5	E214	B/2	: Front fog lamp LH
D2	E14	B/2	: Power steering solenoid valve	F4	E215	B/1	: Horn (low)
E2	E15	—	: Body ground	F4	E216	B/1	: Horn (high)
F3	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)	G3	E217	GR/3	: Front combination lamp LH
F2	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)	G3	E218	GR/2	: Front combination lamp LH (without xenon headlamp system)
F1	E18	W/36	: IPDM E/R (intelligent power distribution module engine room)	E4	E219	B/3	: Refrigerant pressure sensor
F1	E19	GR/2	: Front wheel sensor LH	E4	E220	GR/4	: Cooling fan motor-1
E2	E20	W/6	: Joint connector-E02	D4	E221	GR/4	: Cooling fan motor-2
E2	E21	W/4	: Joint connector-E03	B3	E222	B/2	: Front combination lamp RH (without day time light system)
G1	E22	W/4	: Joint connector-E04	B4	E223	B/2	: Front combination lamp RH (without xenon headlamp system)
E2	E24	GR/2	: Brake fluid level switch	A3	E224	GR/3	: Front combination lamp RH
E1	E25	GR/5	: Front wiper motor	A3	E225	GR/2	: Front combination lamp RH (without xenon headlamp system)
C2	E26	B/26	: ABS actuator and electric unit (control unit)	B4	E226	B/2	: Front washer motor
F2	E27	L/4	: Shift lock relay	B5	E227	B/2	: Front fog lamp RH
B2	E33	—	: Body Ground	C3	E228	B/5	: Daytime light relay
B2	E41	GR/2	: Front wheel sensor RH	B3	E229	—	: Body ground
F4	E42	BR/6	: Cooling fan relay-2	C3	E230	—	: Generator
F4	E43	BR/6	: Cooling fan relay-3	G3	E231	GR/2	: Front combination lamp LH (with xenon headlamp system)
Front end module harness				B4	E232	GR/2	: Front combination lamp RH (with xenon headlamp system)
G2	E200	W/8	: IPDM E/R (intelligent power distribution module engine room)	B3	E233	B/2	: Front combination lamp RH (with daytime light system)
G2	E201	W/16	: IPDM E/R (intelligent power distribution module engine room)	G3	E234	GR/2	: Front combination lamp LH (with xenon headlamp system)
G3	E202	W/8	: To E2	B3	E235	GR/2	: Front combination lamp RH (with xenon headlamp system)
F3	E203	W/6	: To E12				

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



D3	E6	W/16	: Fuse block (J/B)	E4	E38	W/4	: Stop lamp switch
D4	E7	W/1	: Fuse block (J/B)	F4	E40	B/6	: Accelerator pedal position sensor
D4	E8	B/2	: Fuse block (J/B)	C3	E44	BR/12	: Junction block
D2	E28	BR/3	: Intelligent key warning buzzer	C3	E45	W/12	: Junction block
D3	E29	W/16	: To B10	C3	E46	W/16	: Junction block
D3	E30	SMJ	: To M1	C4	E47	W/6	: Junction block
D3	E34	L/4	: Back-up lamp relay	C4	E48	W/4	: Junction block
D3	E35	B/1	: Parking brake switch	C4	E49	BR/4	: Junction block
F4	E37	BR/2	: ASCD brake switch	D4	E50	W/2	: Junction block



ABMIA0290GB

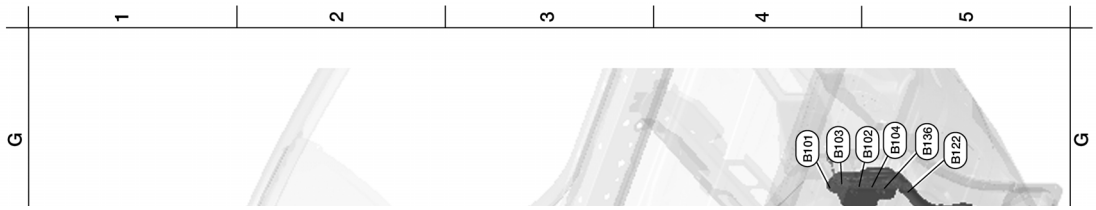
G4	F1	W/16	: To E3	A4	F33	L/4	: Exhaust valve timing control magnet retarder (bank 2)
G4	F2	W/10	: To E11	C2	F34	GR/3	: Ignition coil No. 1 (with power transistor)
C5	F3	B/2	: A/C Compressor	C4	F35	GR/3	: Ignition coil No. 2 (with power transistor)
F4	F4	—	: Fusible link box (battery)	C2	F36	GR/3	: Ignition coil No. 3 (with power transistor)
G4	F5	B/3	: Battery current sensor	D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)

C4	F6	—	: Generator	D2	F38	GR/3	: Ignition coil No. 5 (with power transistor)
C5	F7	B/3	: Generator	D4	F39	GR/3	: Ignition coil No. 6 (with power transistor)
B4	F9	—	: Engine ground	B1	F40	B/3	: Power steering pressure sensor
G3	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	A4	F41	GR/1	: Oil pressure switch
E4	F11	GR/2	: Engine coolant temperature sensor	D5	F42	B/3	: Exhaust valve timing control position sensor (bank 2)
C2	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	D2	F43	B/3	: Exhaust valve timing control position sensor (bank 1)
F4	F13	BR/48	: ECM	E5	F46	B/22	: CVT unit
F4	F14	GR/32	: ECM	D2	F55	B/3	: Camshaft position sensor (PHASE) (bank 1)
B4	F15	B/48	: TCM (transmission control module)	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
E4	F16	—	: Engine ground	D2	F57	B/6	: Electric throttle control actuator
B3	F17	GR/2	: Fuel injector No. 1	D4	F60	B/3	: Camshaft position sensor (PHASE) (bank 2)
C4	F18	GR/2	: Fuel injector No. 2	C5	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)
C3	F19	GR/2	: Fuel injector No. 3	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)
C3	F20	GR/2	: Fuel injector No. 4	C3	F63	B/2	: VIAS control solenoid valve (bank 1)
C3	F21	GR/2	: Fuel injector No. 5	B3	F64	BR/2	: Electronic controlled engine mount controlled solenoid valve
D3	F22	GR/2	: Fuel injector No. 6	C3	F65	B/2	: VIAS control solenoid valve (bank 2)
E2	F23	B/3	: Secondary speed sensor	A3	F66	G/2	: Intake valve timing control solenoid valve (bank 1)
E4	F26	W/2	: Condenser-2	A3	F67	G/2	: Intake valve timing control solenoid valve (bank 1)
F4	F27	—	: Starter motor	B2	F68	GR/2	: Engine oil temperature sensor
F4	F28	GR/1	: Starter motor	E3	F69	L/4	: To F201
D3	F29	L/2	: EVAP canister purge volume control solenoid valve	Knock sensor sub-harness			
D4	F30	B/3	: Crankshaft position sensor (POS)	E3	F201	L/4	: To F69
E2	F31	B/6	: Mass air flow sensor	C3	F202	GR/2	: Knock sensor (bank 1)
E4	F32	L/4	: Exhaust valve timing control magnet retarder (bank 1)	D3	F203	GR/2	: Knock sensor (bank 2)

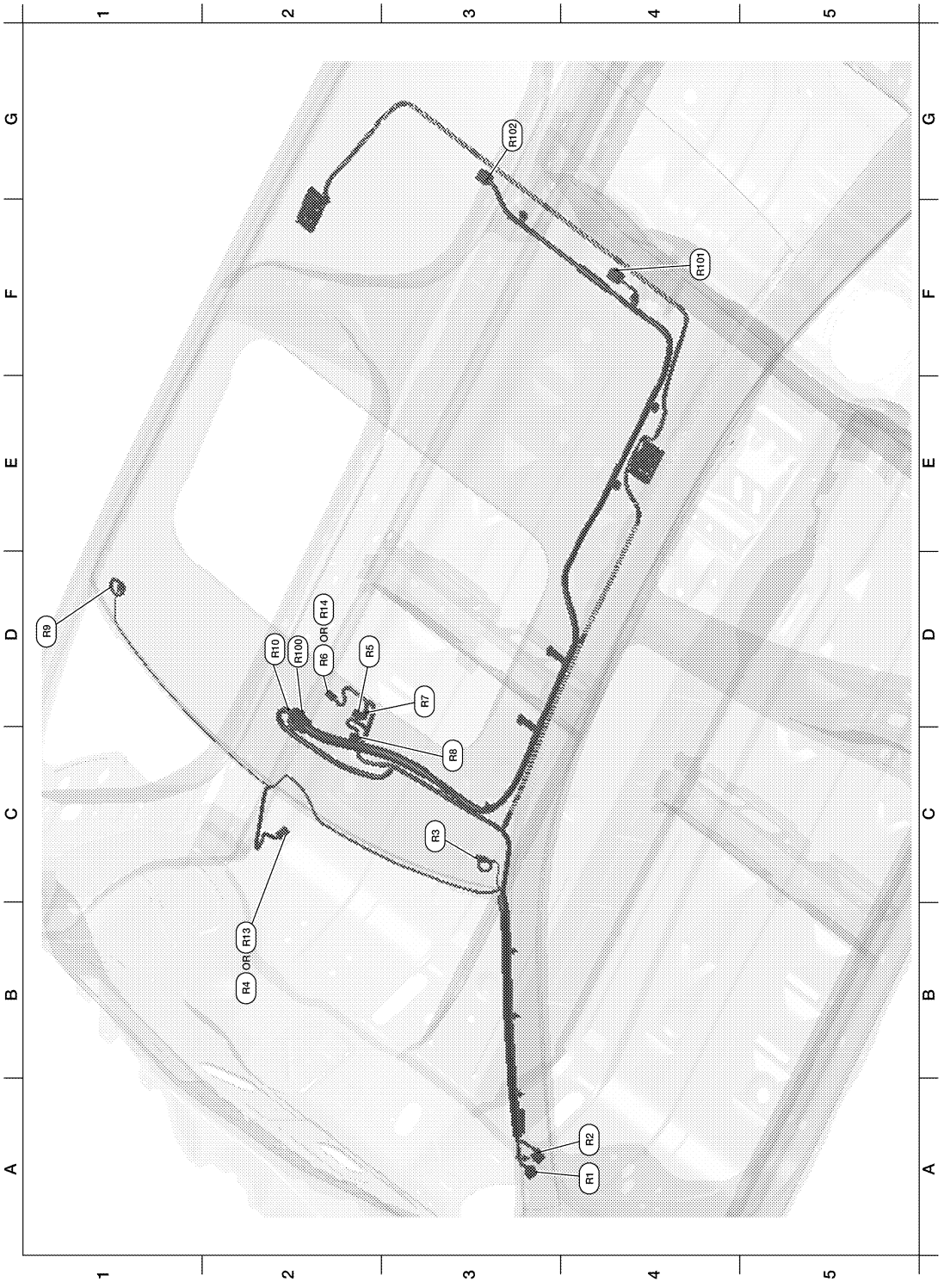
B1	B1	SMJ	: To M6	D3	B53	B/1	: Rear window defogger
B2	B2	B/6	: Joint connector-B01	E3	B54	B/1	: Rear window defogger
B3	B3	W/4	: Joint connector-B02	F2	B58	—	: Body ground
B2	B4	BR/12	: Fuse block (J/B)	E3	B71	Y/2	: LH side rear curtain air bag module
C2	B5	—	: Body ground	Front seat LH harness			

C2	B6	W/10	: To D201	B2	B201	W/8	: To B12
C2	B7	—	: Body ground	C2	B202	W/3	: Seat belt buckle switch LH
B2	B8	W/3	: Front door switch LH	C3	B203	W/32	: Driver seat control unit
C2	B9	Y/12	: Air bag diagnosis sensor unit	C3	B204	W/6	: Front power seat LH (without automatic drive positioner
B1	B10	W/16	: To E29	D3	B205	W/6	: Front power seat LH (with automatic drive positioner)
C2	B11	Y/2	: Front LH side air bag module	B3	B206	W/12	: Front power seat LH (with automatic drive positioner)
B2	B12	W/8	: To B201	D2	B207	B/2	: Reclining motor (without automatic drive positioner)
C4	B13	W/4	: Joint connector-B03	C3	B208	W/16	: To B32
B3	B14	Y/2	: Front LH seat belt pre-tensioner	B3	B209	W/10	: Power seat switch LH (without automatic drive positioner)
C3	B15	Y/2	: LH side air bag (satellite) sensor	C2	B210	W/3	: Front seat heater LH
E3	B16	W/2	: Subwoofer LH	C3	B211	W/12	: Driver seat control unit
E5	B17	W/2	: Subwoofer RH	C3	B212	B/16	: Climate controlled seat control unit
D3	B18	W/3	: Rear door switch LH	B3	B213	W/10	: Power seat switch LH (with automatic drive positioner)
D3	B19	—	: Body ground	C3	B214	W/4	: Lumbar support switch
F3	B20	L/20	: Joint connector-B05	D3	B216	B/8	: Climate controlled seat control unit
F2	B21	W/10	: Subwoofer amp.	D3	B217	B/6	: Climate controlled seat control unit
F3	B22	W/6	: Rear sunshade unit	C2	B218	W/4	: Seat back thermal electric device
F3	B24	W/8	: To T2	C2	B219	W/4	: Seat cushion thermal electric device
E3	B26	W/4	: Joint connector - B04	D2	B220	W/5	: Climate controlled seat blower motor
D4	B27	W/4	: Fuel lid door lock actuator	C3	B221	B/2	: Lumbar support Motor
D3	B28	W/3	: To B500	D2	B222	B/5	: Reclining motor LH (with automatic drive positioner)
E3	B29	GR/2	: Rear parcel shelf antenna	Tail harness			
E4	B30	W/6	: Rear combination lamp LH	F3	T1	BR/2	: High mounted stop lamp (with rear spoiler)
E4	B31	GR/4	: To C5	F4	T2	W/8	: To B24
B2	B32	W/16	: To B208	G3	T5	BR/2	: Trunk opener request switch
E3	B36	W/2	: Trunk room lamp	F4	T6	BR/2	: Licence plate lamp LH
F3	B37	W/2	: High mounted stop lamp (without rear sunshade)	F4	T7	W/4	: Trunk lamp switch and trunk release solenoid
E3	B39	B/2	: EVAP canister vent control valve	G3	T8	BR/2	: Licence plate lamp RH
E3	B41	GR/3	: EVAP control system pressure sensor	Chassis harness			
D3	B42	GR/5	: Fuel level sensor unit and fuel pump	E4	C1	B/2	: Rear wheel sensor LH
G2	B45	W/6	: Rear combination lamp RH	F3	C2	GR/2	: Rear wheel sensor RH
F4	B46	GR/2	: Rear bumper antenna	E4	C5	GR/4	: To B31
D3	B52	W/1	: Rear window defogger condenser				

BODY NO. 2 HARNESS



G4	B101	W/24	: To M2	B1	B131	W/32	: Bluetooth control unit (with BOSE audio system)
G5	B102	W/32	: To M8	B3	B132	—	: Body ground
G4	B103	BR/16	: To M9	D4	B134	W/10	: To D306
G5	B104	W/16	: To M10	G5	B136	W/16	: To M110
D1	B106	W/2	: Rear subwoofer LH	A3	B139	W/4	: To T100
F4	B107	W/2	: Rear subwoofer RH	B3	B141	Y/2	: RH side curtain air bag module
D4	B108	W/3	: Front door switch RH	F5	B148	W/8	: To B308
B2	B109	BR/23	: BOSE speaker amp.	Front seat RH harness			
B2	B110	BR/14	: BOSE speaker amp.	E4	B302	W/3	: Seat belt buckle switch RH
B2	B111	W/16	: Satellite radio tuner or pre-wiring for satellite radio tuner	E4	B303	W/8	: Occupant classification system control unit
F5	B112	Y/2	: Front RH side air bag module	E4	B304	W/3	: Front seat heater RH
F4	B113	Y/12	: Air bag diagnosis sensor unit	F4	B306	GR/3	: Sliding motor RH
E5	B115	Y/2	: Front RH seat belt pre-tensioner	E4	B307	B/2	: Reclining motor RH
C3	B116	W/3	: Rear door switch RH	F4	B308	W/8	: To B148
D3	B117	—	: Body ground	F4	B309	W/10	: Power seat switch RH
D5	B118	Y/2	: RH side air bag (satellite) sensor	Rear seat harness			
B2	B119	BR/23	: BOSE speaker amp. (with monochrome display)	D3	B400	GR/6	: To B120
D3	B120	GR/6	: To B400	D3	B401	W/4	: To B121
D3	B121	W/4	: To B401	D3	B402	W/4	: Rear control switch
G5	B122	W/4	: Joint connector-B21	D3	B403	W/2	: Rear control switch
C3	B123	W/4	: Joint connector-B22	D3	B404	GR/2	: Rear control switch
F5	B124	Y/2	: To B305	Rear parcel shelf harness			
B1	B125	W/8	: Bluetooth control unit (with mono chrome display)	D2	B500	W/3	: To B28
C1	B126	W/32	: Bluetooth control unit (with base audio system)	D2	B501	GR/2	: High mounted stop lamp (with rear sunshade)
C1	B128	W/8	: Bluetooth control unit (with color display without rear controls)	Tail sub-harness			
C1	B129	W/8	: Bluetooth control unit (with color display with rear controls)	A2	T100	W/4	: To B139
C1	B130	B/2	: Bluetooth control unit	A2	T101	W/4	: Rear view camera



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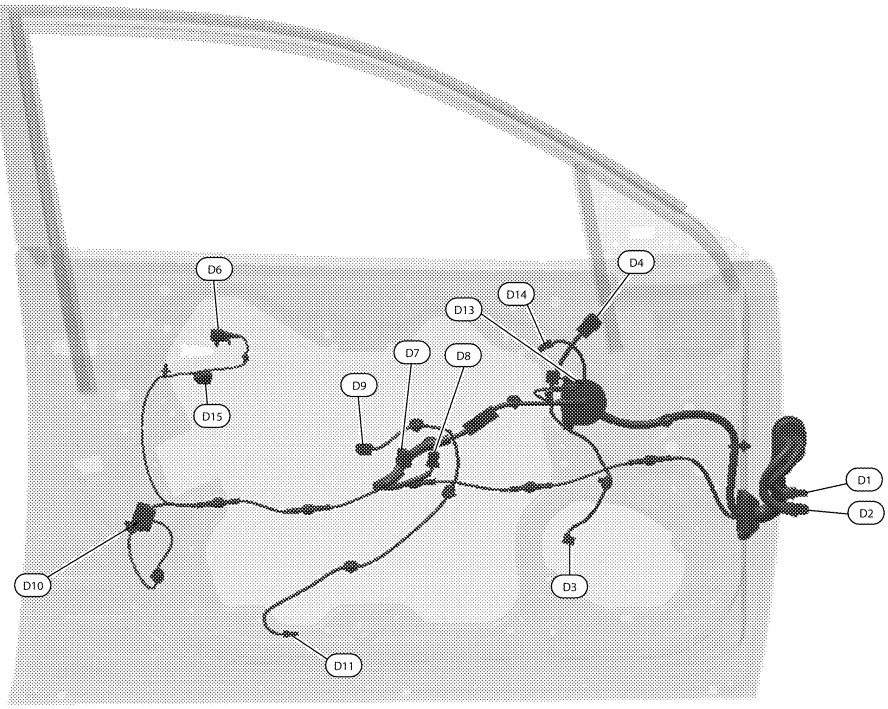
A4	R1	W/16	: To M7	D1	R9	W/2	: Vanity mirror lamp RH
A4	R2	W/6	: To M13	D2	R10	W/12	: To R100
C3	R3	W/2	: Vanity mirror lamp LH	B2	R13	B/7	: Auto anti-dazzling inside mirror (without homelink universal transceiver)
B2	R4	B/10	: Auto anti-dazzling inside mirror (with homelink universal transceiver)	D2	R14	W/8	: Sunroof switch (with dual panel sunroof)

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	: Sunroof motor assembly (with dual panel sunroof)

FRONT DOOR LH HARNESS



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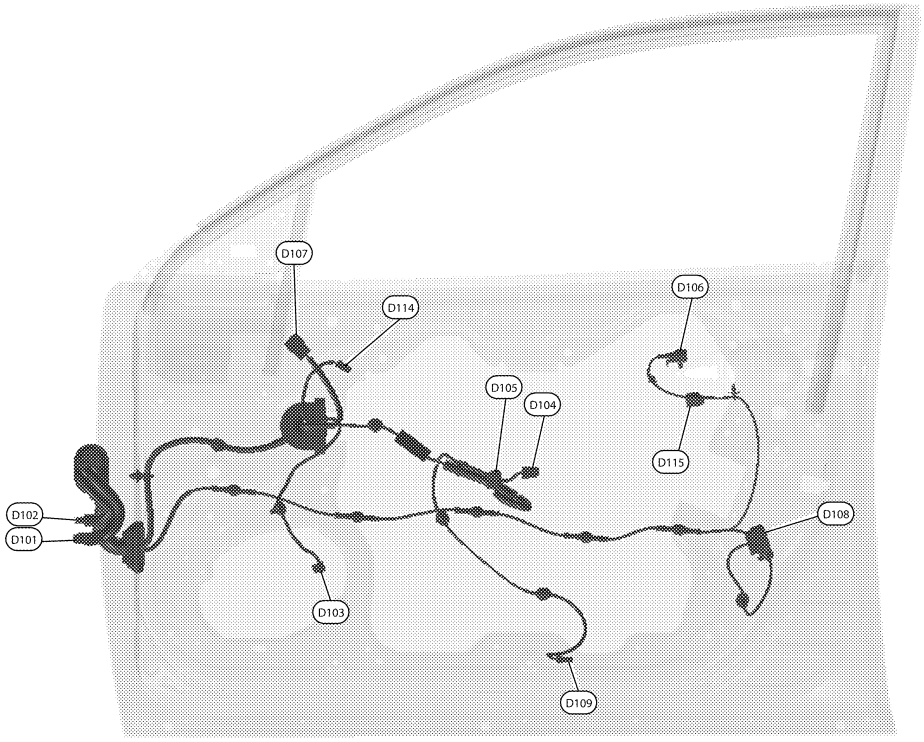
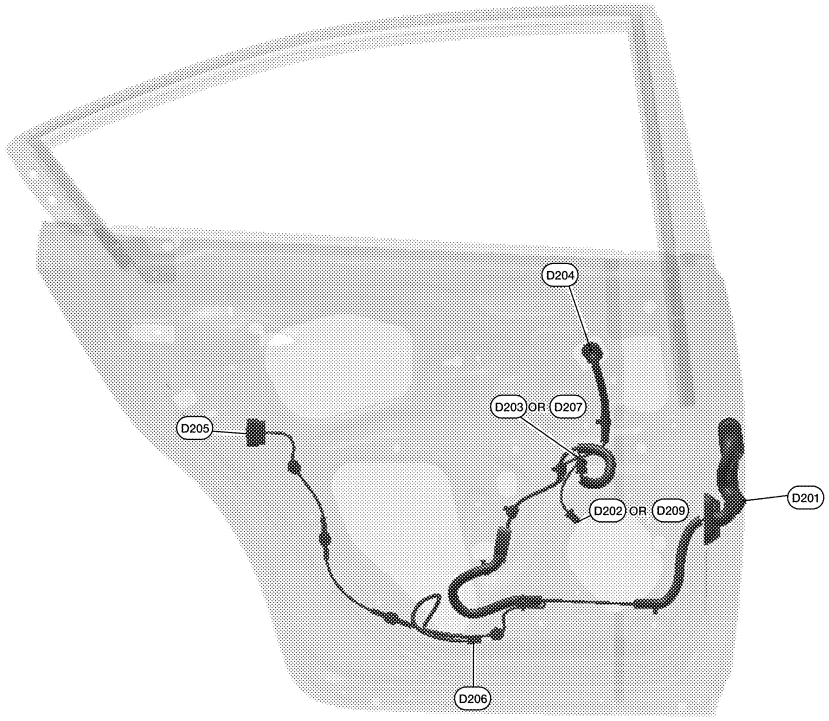
D1	W/16	: To M11	D9	W/6	: Front power window motor LH
D2	W/24	: To M12	D10	GR/6	: Front door lock assembly LH
D3	W/2	: Front door speaker LH	D11	W/2	: Front step lamp LH
D4	W/16	: Door mirror LH	D13	W/8	: Seat memory switch
D6	GR/2	: Front outside handle LH	D14	GR/2	: Front door inside handle illumination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



ABMIA0295GB

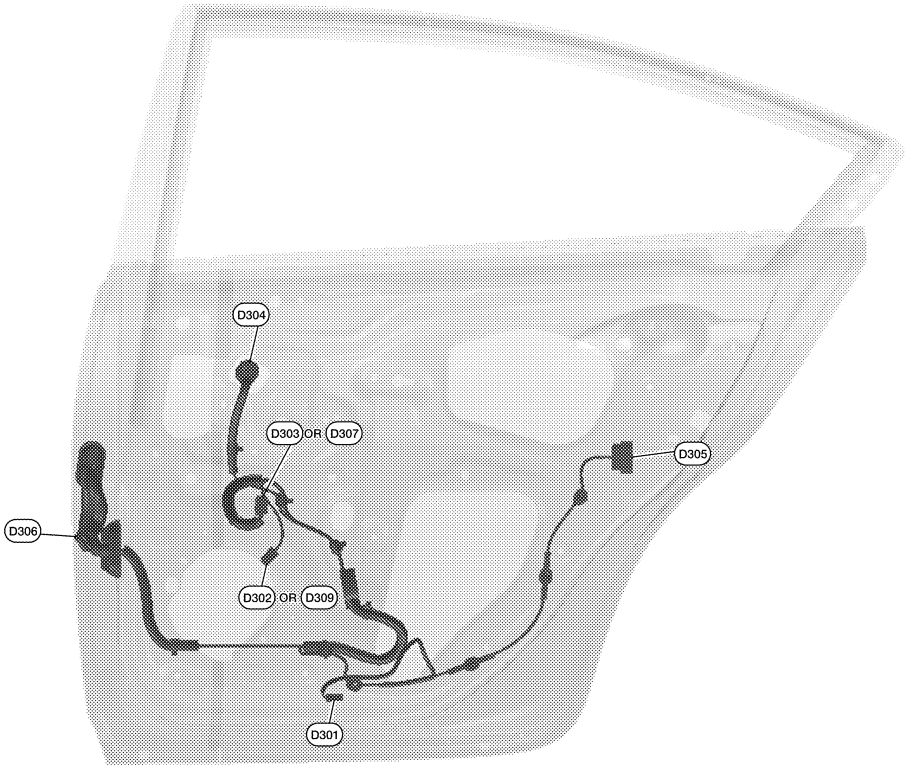
D101	W/10	: To M14	D107	W/16	: Door mirror RH
D102	W/16	: To M15	D108	GR/6	: Front door lock actuator RH
D103	W/2	: Front door speaker RH	D109	W/2	: Front step lamp RH
D104	W/6	: Front power window motor RH	D114	GR/2	: Front door inside handle illumination RH
D105	W/16	: Power window and door lock/unlock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



ABMIA1454GB

D201	W/10	: To B6	D205	GR/6	: Rear door lock actuator LH
D202	BR/2	: Rear door speaker LH (with BOSE audio system)	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	D209	W/2	: Rear door speaker LH (with base audio system)

REAR DOOR RH HARNESS



ABMIA0898GB

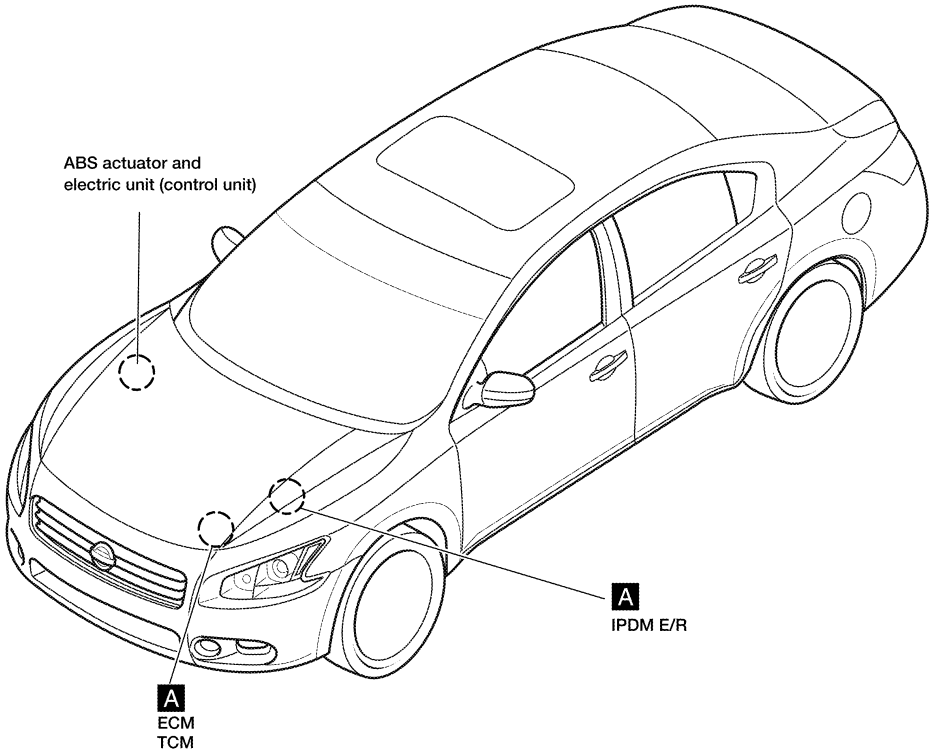
D301	W/2	: Rear step lamp RH	D305	GR/6	: Rear door lock actuator RH
D302	BR/2	: Rear door speaker RH (with BOSE audio system)	D306	W/10	: To B134
D303	W/8	: Rear power window switch RH (with front left and right power window anti-pinch system	D307	W/6	: Rear power window switch RH (with front and rear power window anti-pinch system
D304	G/6	: Rear power window switch RH	D309	W/2	: Rear door speaker RH (with base audio system)

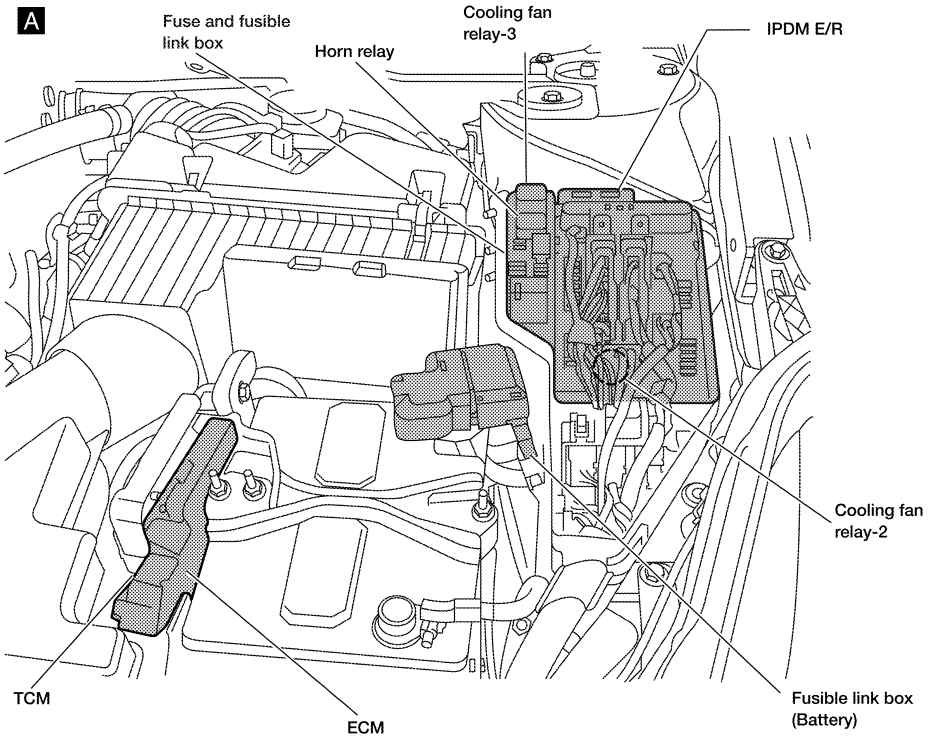
ELECTRICAL UNITS LOCATION

Electrical Units Location

INFOID:0000000005460705

ENGINE COMPARTMENT





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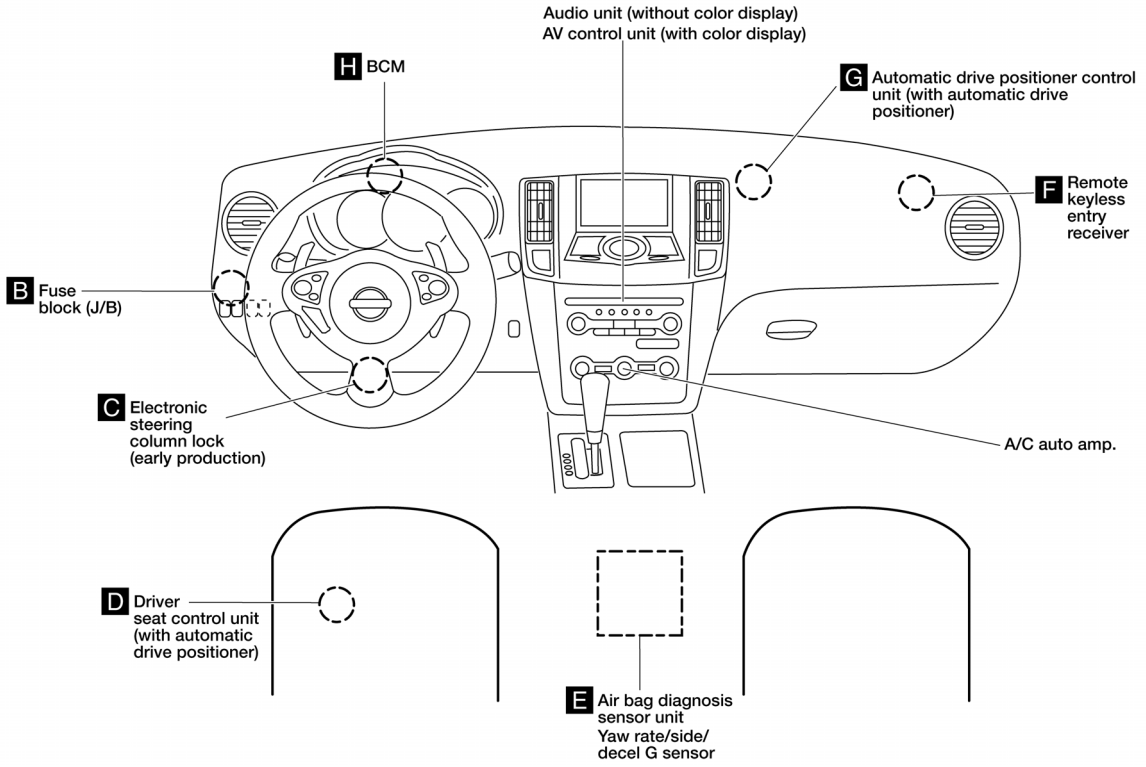
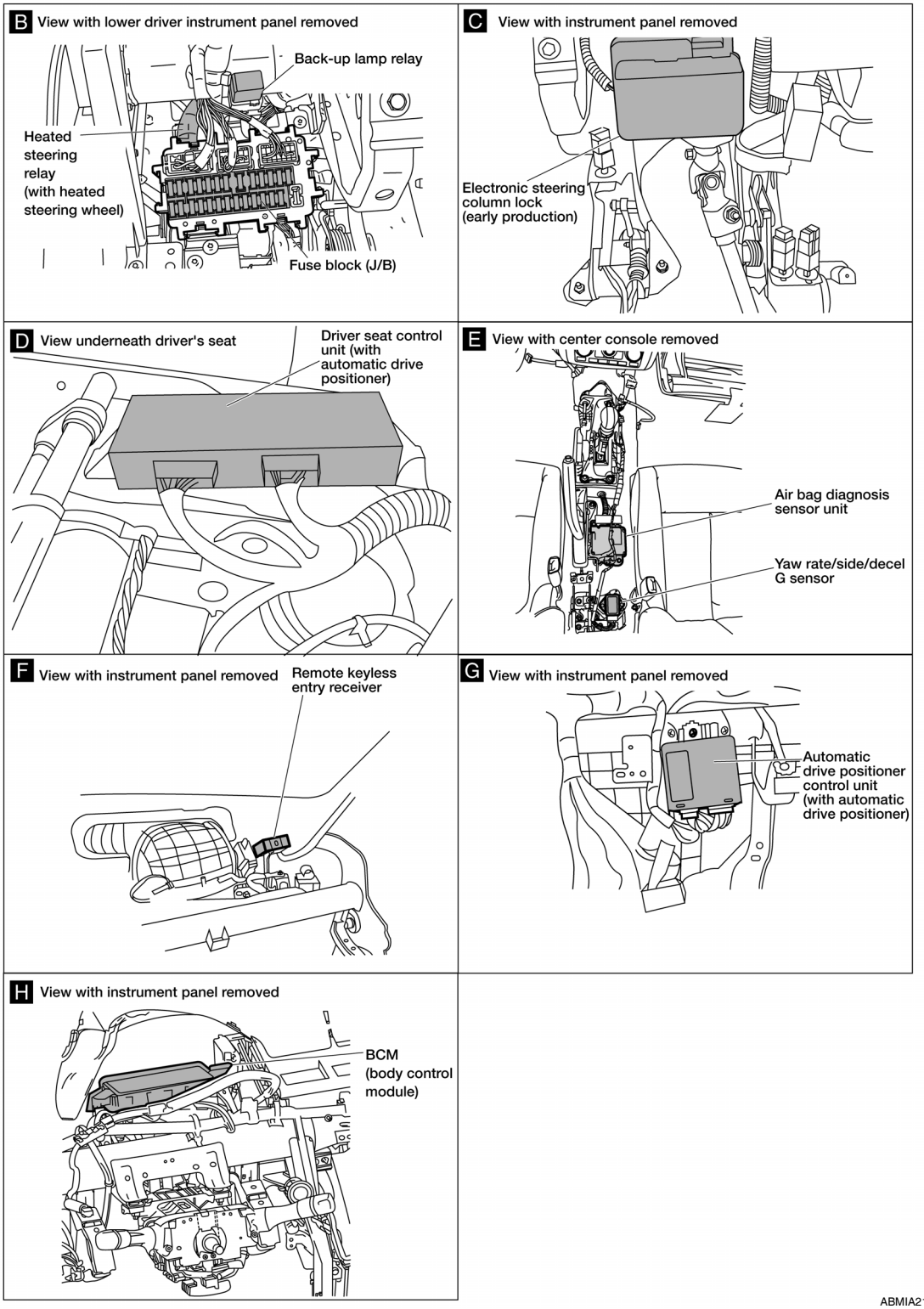
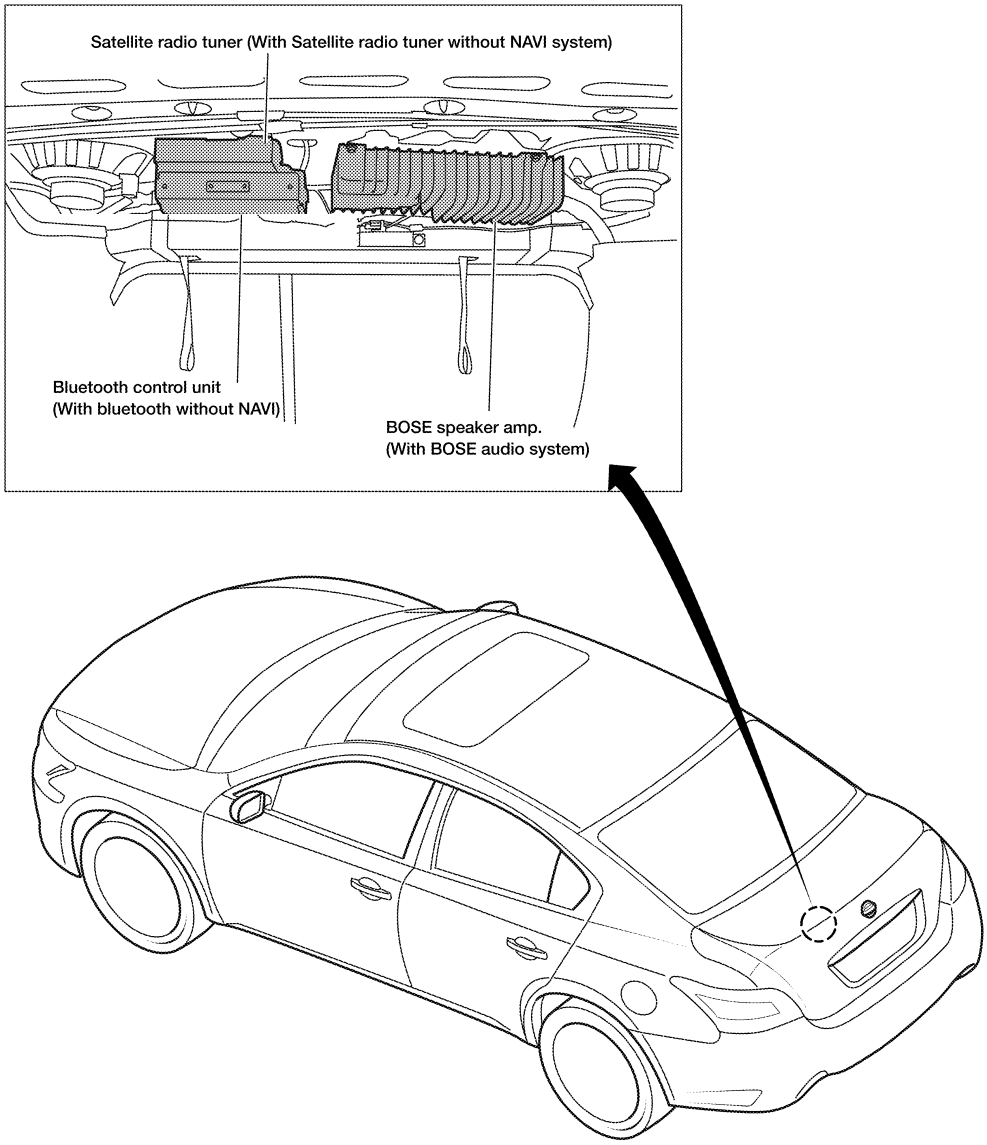


ABMIA2112GB



ABMIA2113GB



ABMIA1458GB

HARNESS CONNECTOR

Description

INFOID:0000000005460706

HARNESS CONNECTOR (TAB-LOCKING TYPE)

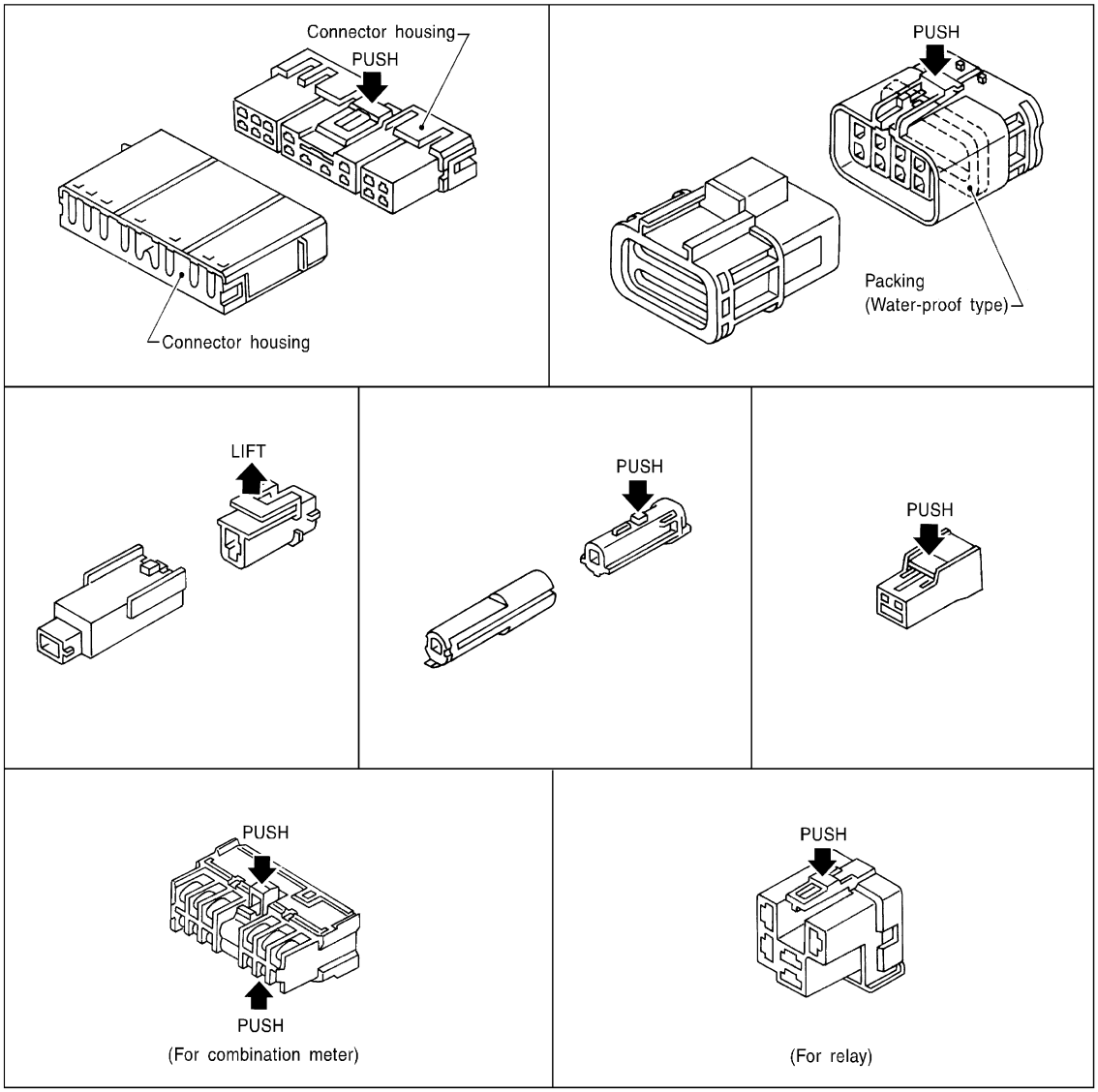
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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)

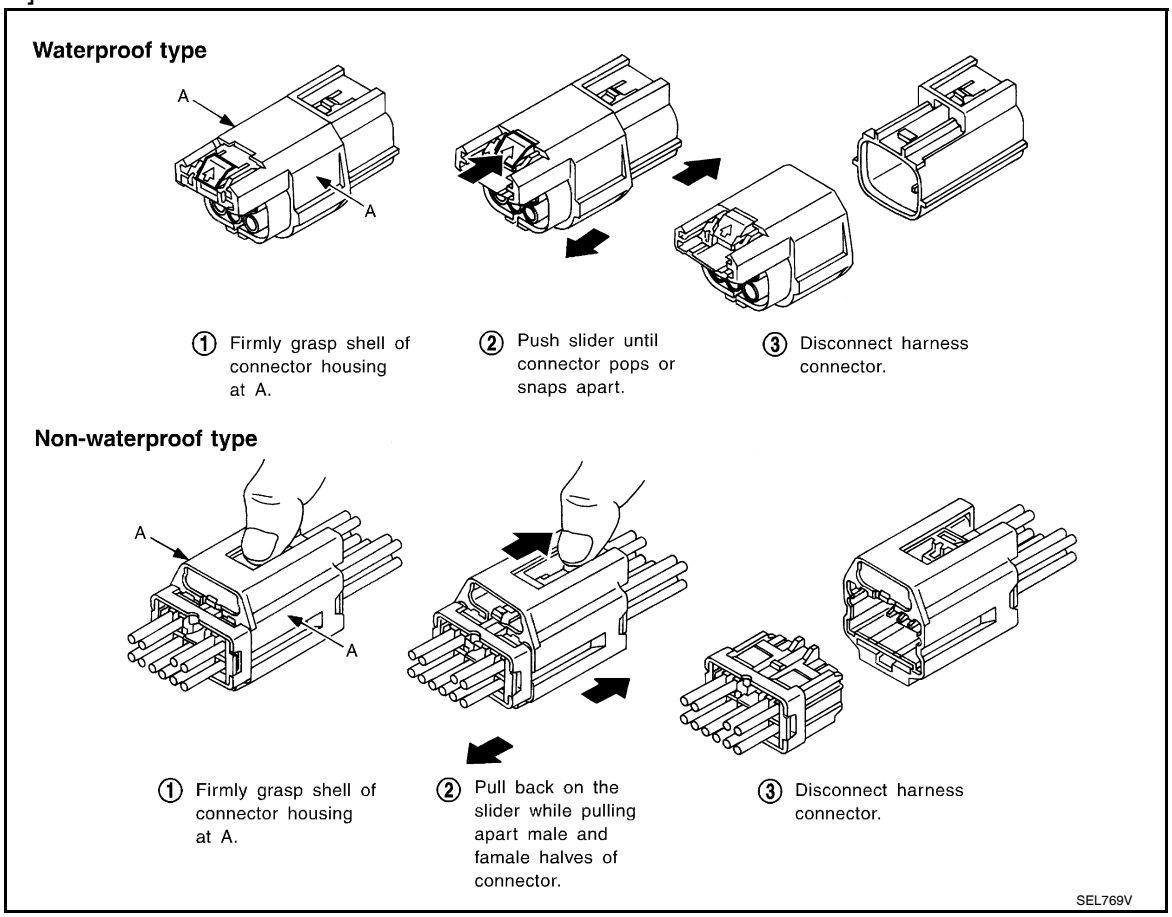
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

- 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]



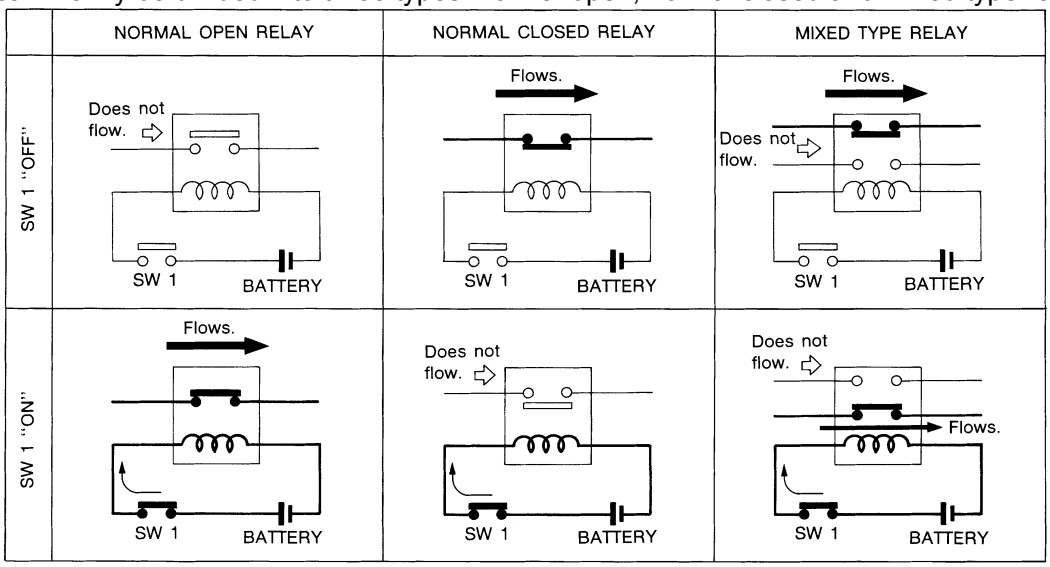
STANDARDIZED RELAY

Description

INFOID:0000000005460707

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

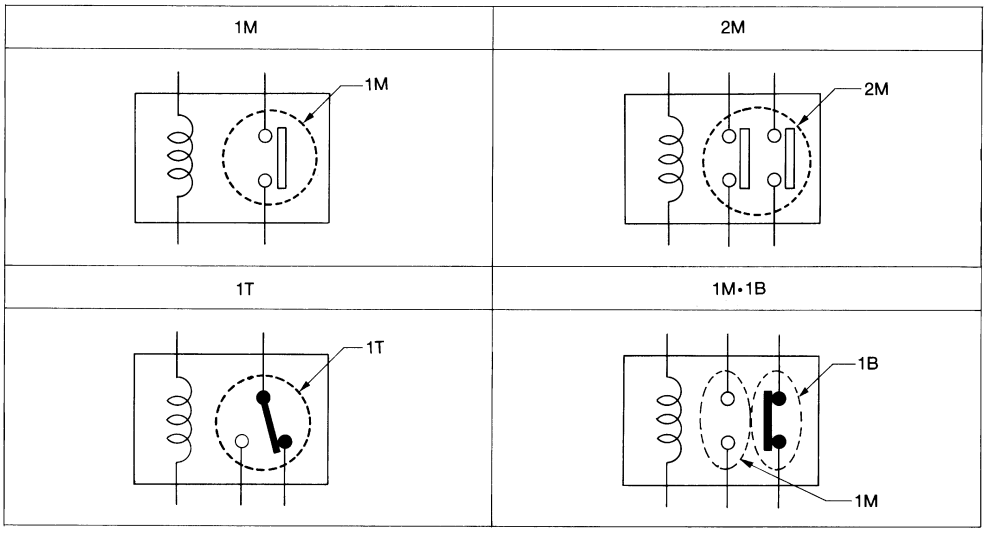
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



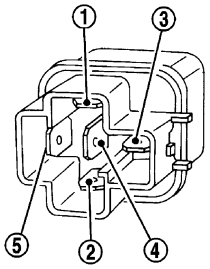
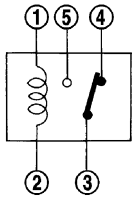
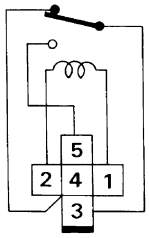
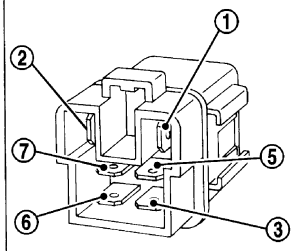
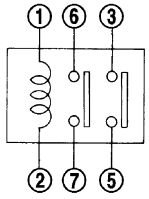
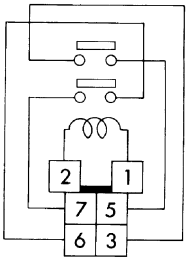
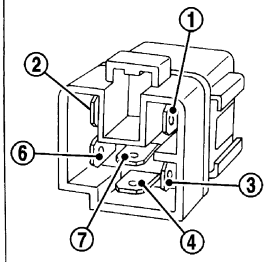
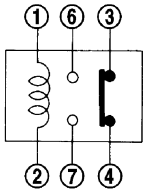
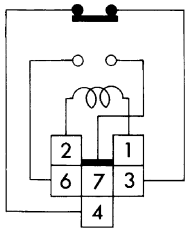
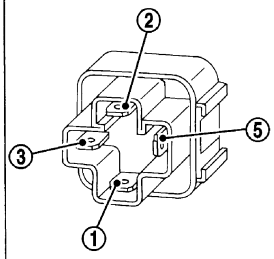
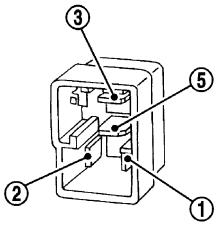
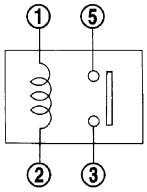
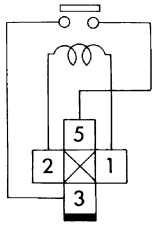
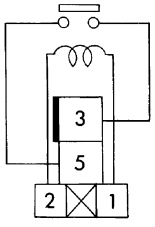
SEL881H

TYPE OF STANDARDIZED RELAYS

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



SEL882H

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

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

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

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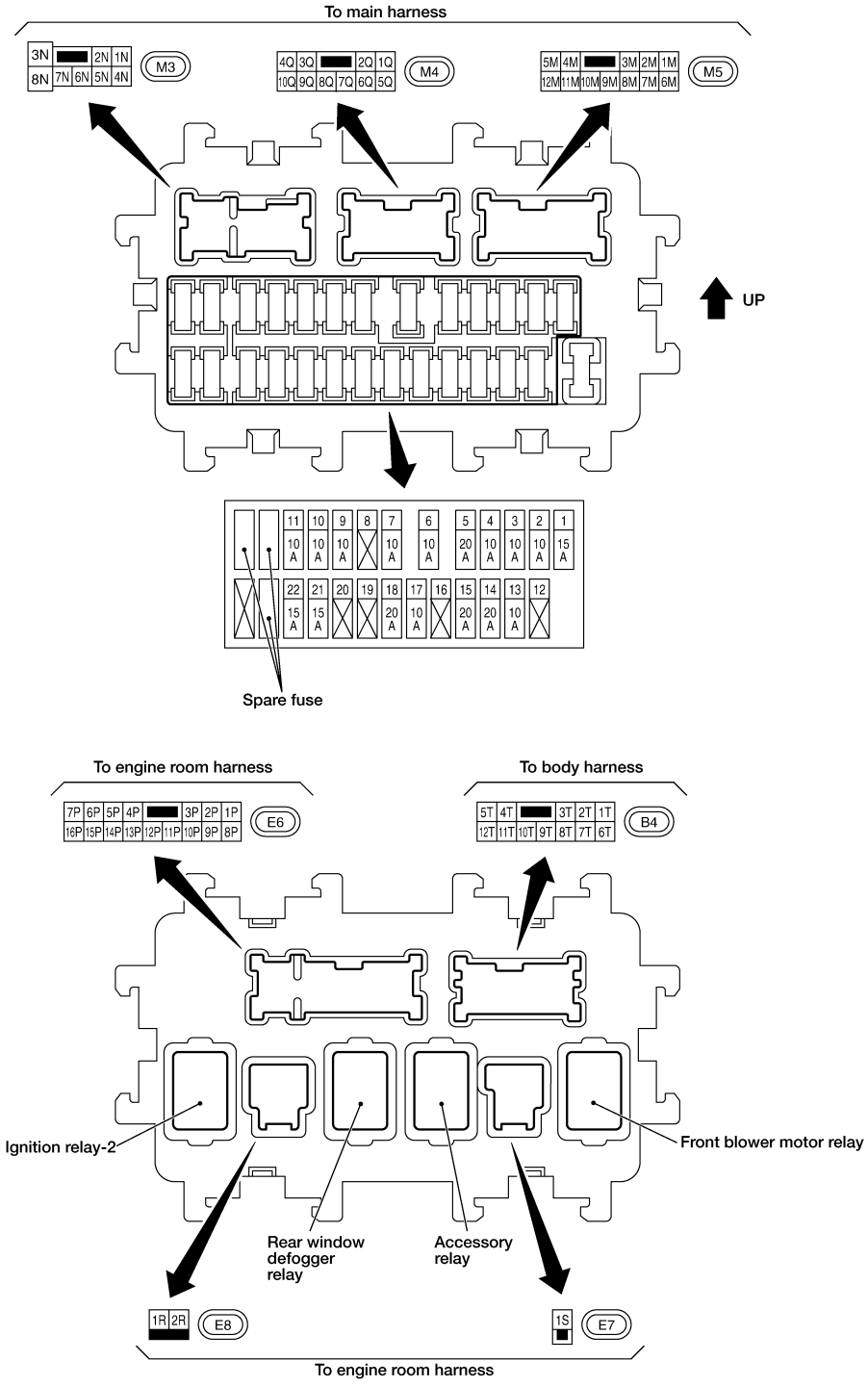

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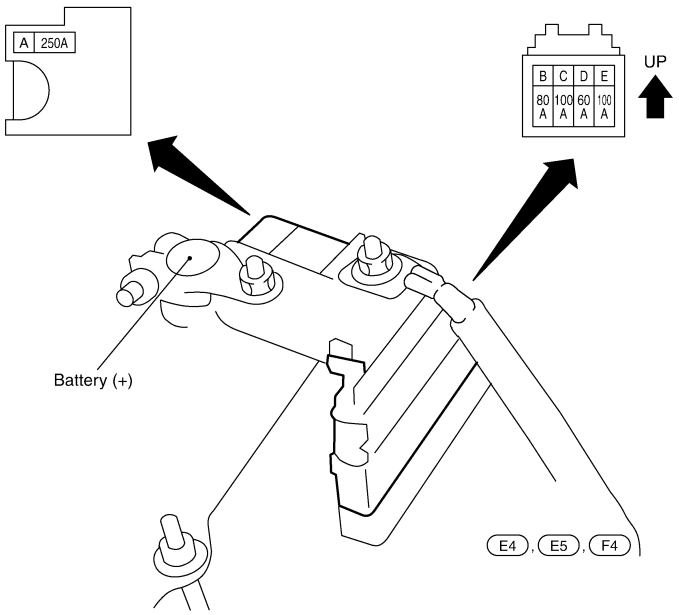
FUSE, FUSIBLE LINK AND RELAY BOX

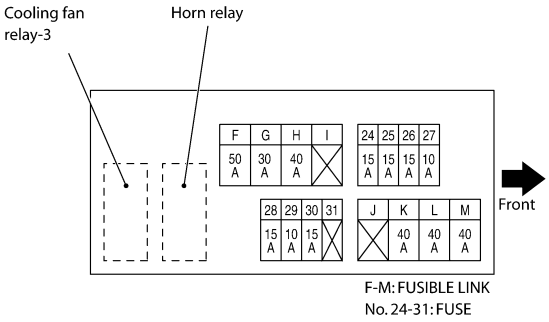
Terminal Arrangement

INFOID:0000000005460709

Fusible link box (Battery)



Fuse and fusible link box



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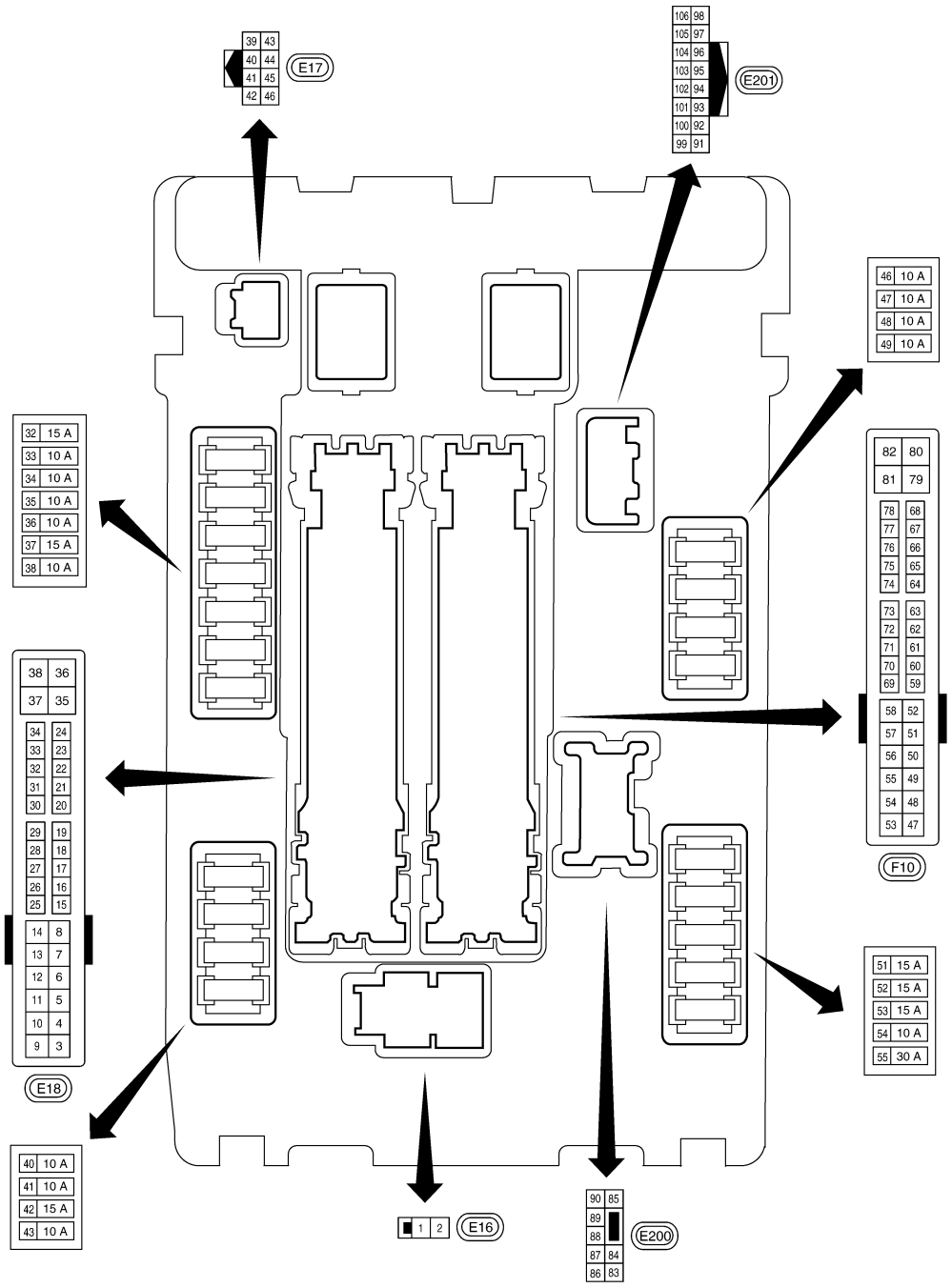
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Fuse, Connector and Terminal Arrangement

INFOID:0000000005460710



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PRECAUTION

PRECAUTIONS

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

INFOID:0000000005460711

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

WARNING:

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

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

WARNING:

- **When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precautions Necessary for Steering Wheel Rotation after Battery Disconnect (Early Production, With Electronic Steering Column Lock)

INFOID:0000000005885974

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

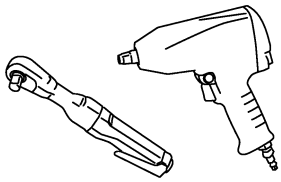
Special Service Tool

INFOID:0000000005460713

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

Commercial Service Tool

INFOID:0000000005460714

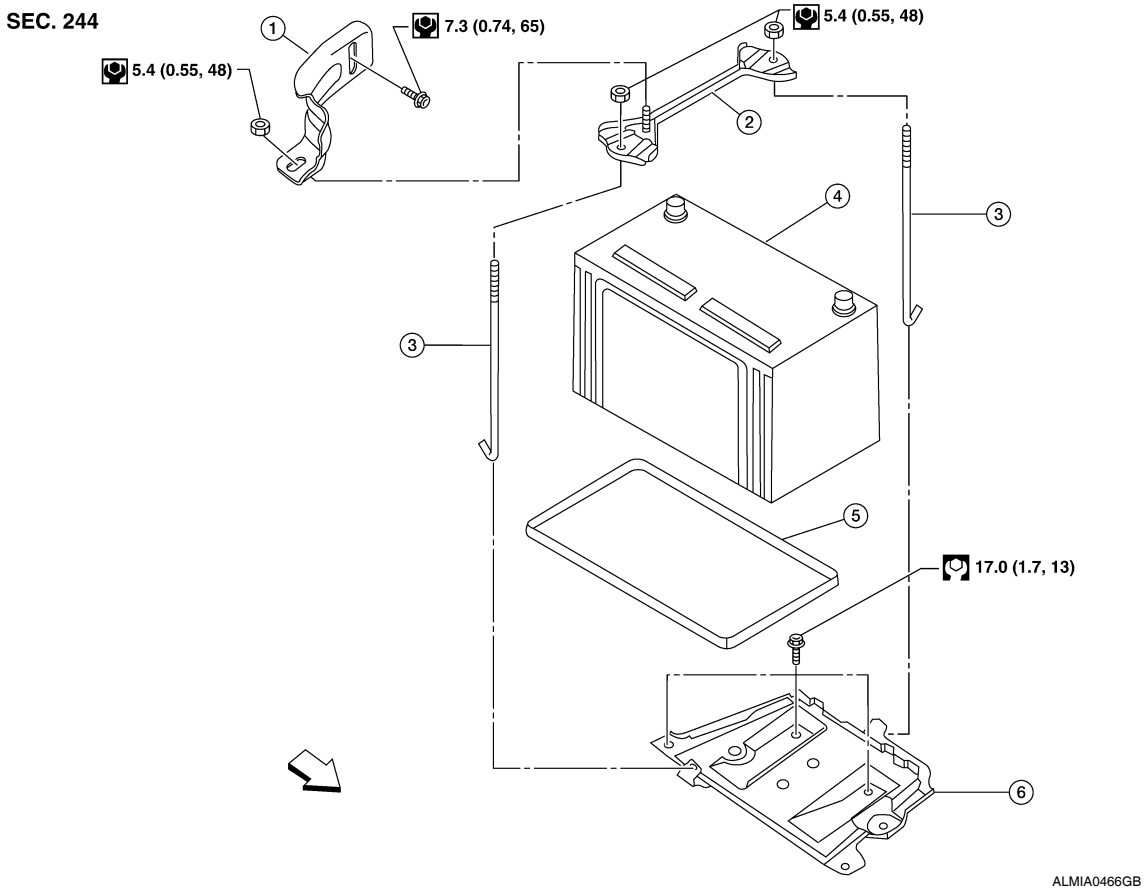
Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

ON-VEHICLE REPAIR

BATTERY

Exploded View

INFOID:0000000005460715



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:0000000005460716

REMOVAL

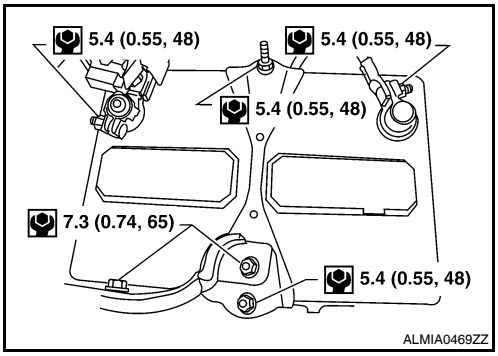
1. Loosen battery cable assembly nuts, and disconnect both battery terminals.
   CAUTION:
   When disconnecting, disconnect the negative terminal first.
2. Remove upper ECM bracket nut and bolt and ECM upper bracket.
3. Remove battery frame nuts and battery frame.
4. Remove battery.

INSTALLATION

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:0000000005460717

REMOVAL

1. Remove battery and battery tray liner. Refer to PG-65, "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-163, "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".

SERVICE DATA AND SPECIFICATIONS (SDS)

BATTERY

Battery

INFOID:0000000005460718

Type*	GR35
Capacity (20HR) minimum V-AH	12-63
Cold cranking current A (For reference value)	550

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