SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

BASIC INSPECTION

BATTERY

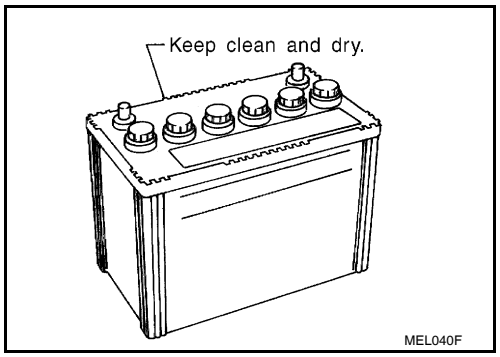
How to Handle Battery

INFOID:0000000004206720

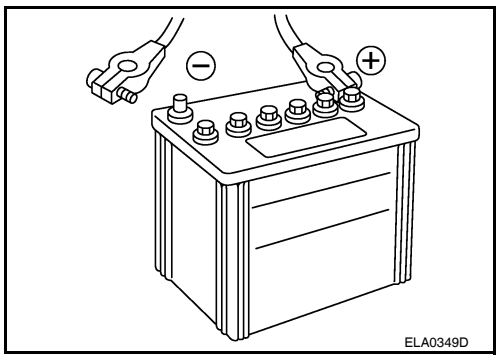
CAUTION:
- **If it becomes necessary to start the engine with a booster battery and jumper cables, use a 12-volt booster battery.**
- **After connecting battery cables, ensure that they are tightly clamped to battery terminals for good contact.**
- **Never add distilled water through the hole used to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

METHODS OF PREVENTING OVER-DISCHARGE

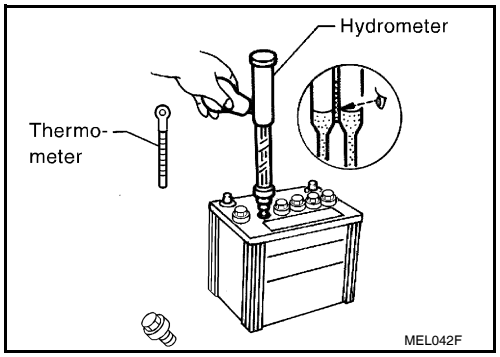
The following precautions must be taken to prevent over-discharging a battery.
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level. This also applies to batteries 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.)



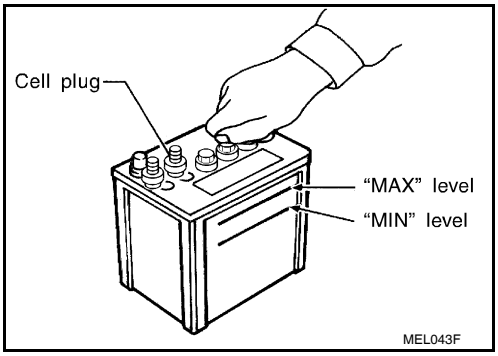
- Check the charge condition of the battery. Periodically check the specific gravity of the electrolyte. Keep a close check on charge condition to prevent over-discharge.



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.

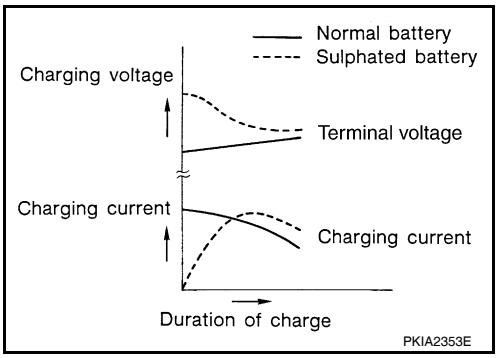


Sulphation

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.

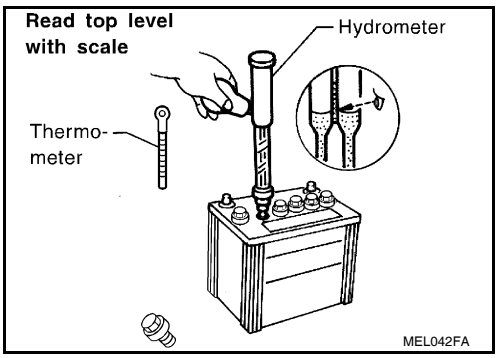
To determine if a battery has been "sulphated", note its voltage and current when charging it. As shown in the figure, less current and higher voltage are observed in the initial stage of charging sulphated batteries.

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

INFOID:0000000004206721

TROUBLE DIAGNOSIS WITH BATTERY SERVICE CENTER

For battery testing, use Battery Service Center (J-48087). For details and operating instructions, refer to Technical Service Bulletin and/or Battery Service Center User Guide.

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000004206722

Required Procedure After Battery Disconnection

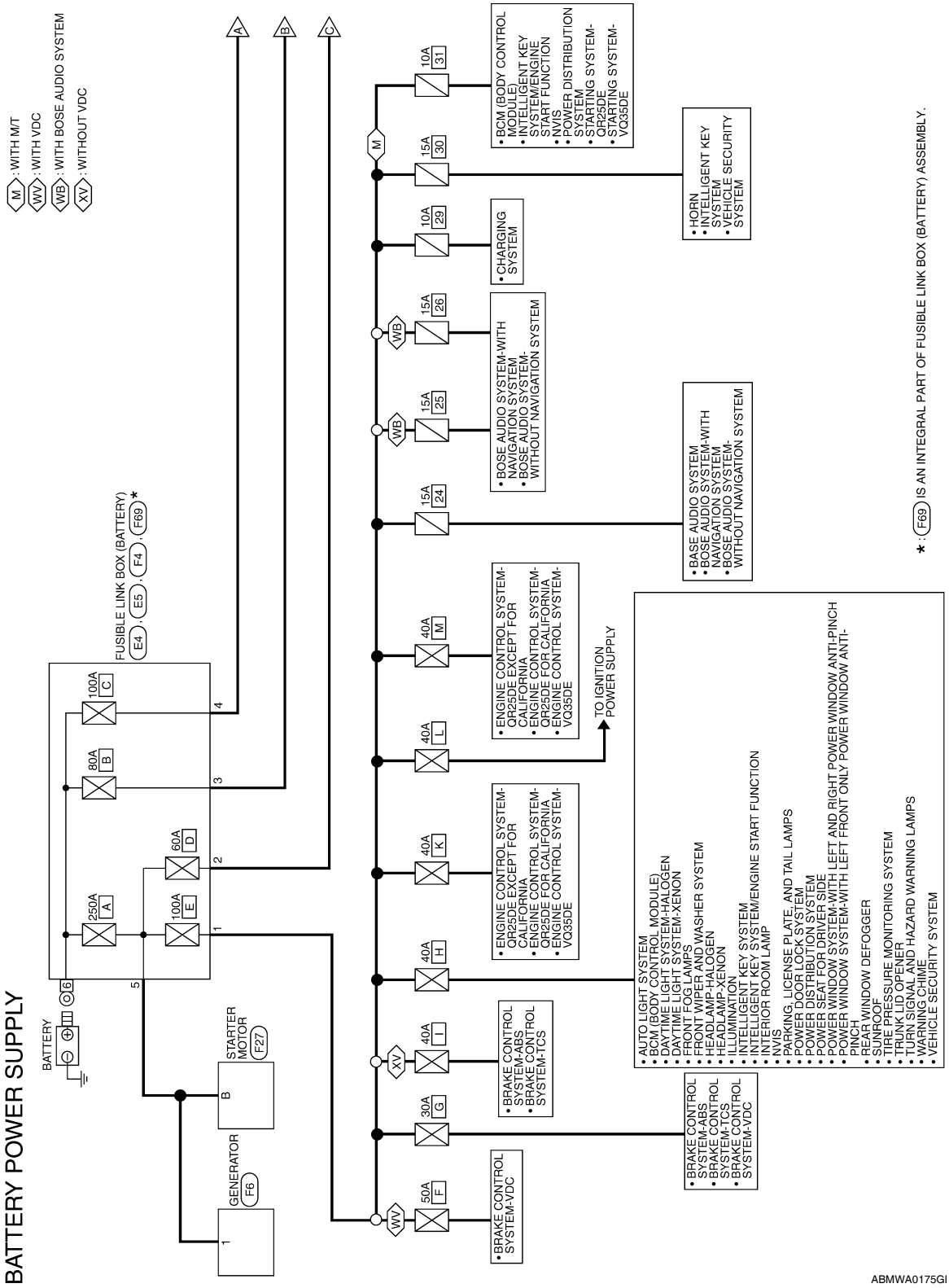
System	Item	Reference
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-143.
Glass, Window & Mirrors	Power Window System Initialization	LH only anti-pinch, refer to PWC-12. LH & RH anti-pinch, refer to PWC-190.
Roof	Sunroof Memory Reset/Initialization	Refer to RF-6.
Automatic Temperature Control	Temperature Setting Trimmer	Refer to HAC-6.
	Foot Position Setting Trimmer	Refer to HAC-6.
	Inlet Port Memory Function	Refer to HAC-6.
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 AV-238.

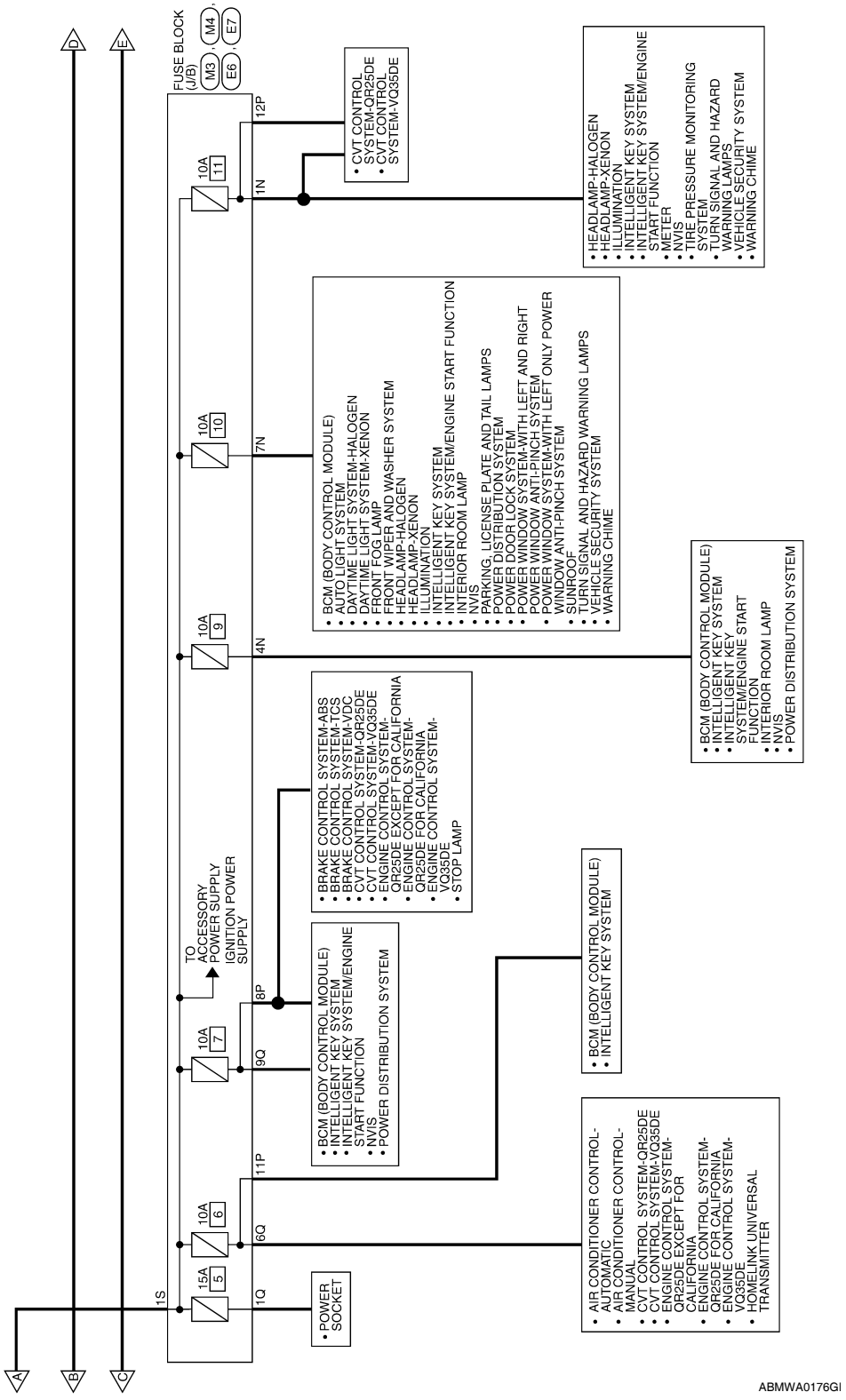
COMPONENT DIAGNOSIS

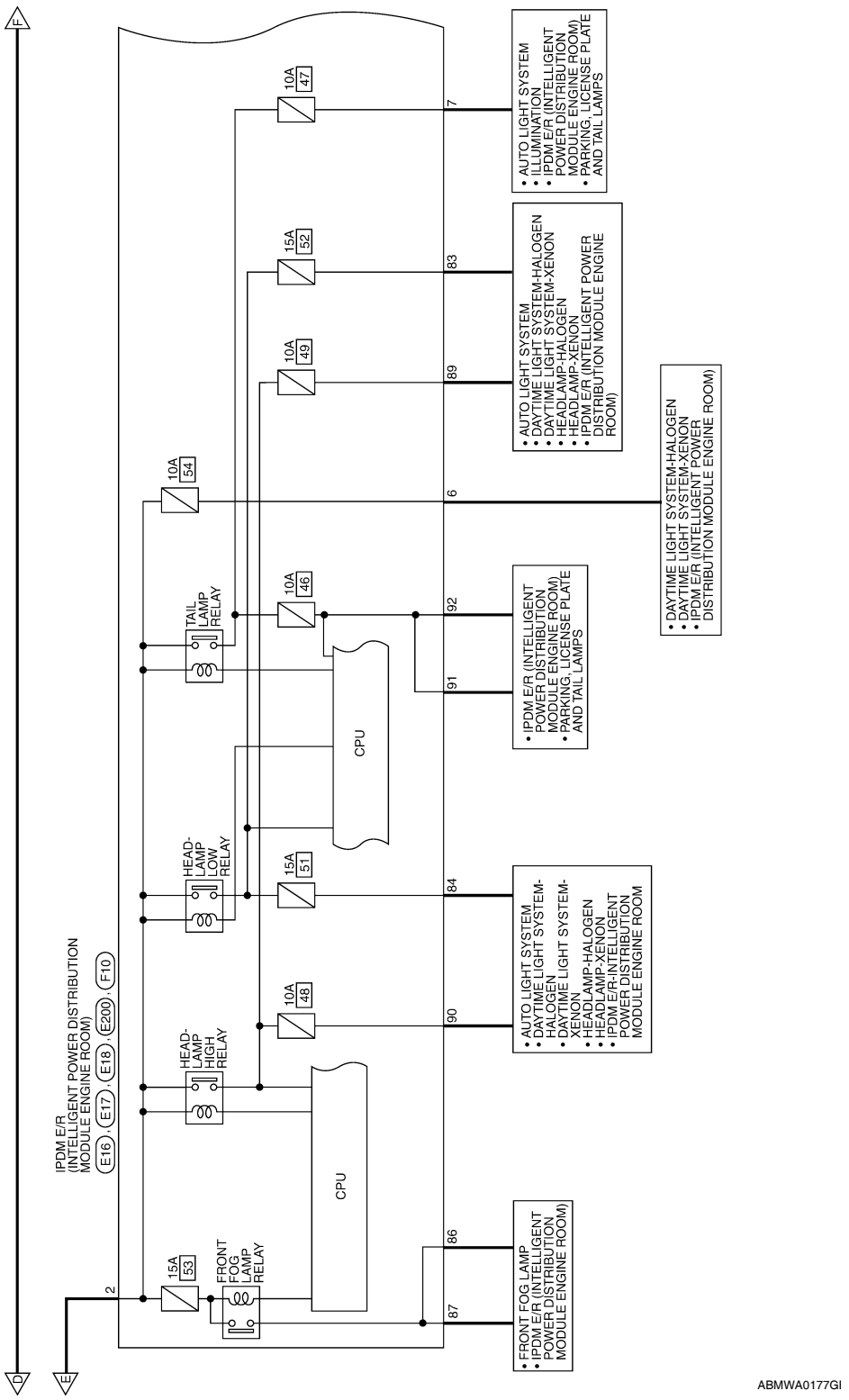
POWER SUPPLY ROUTING CIRCUIT

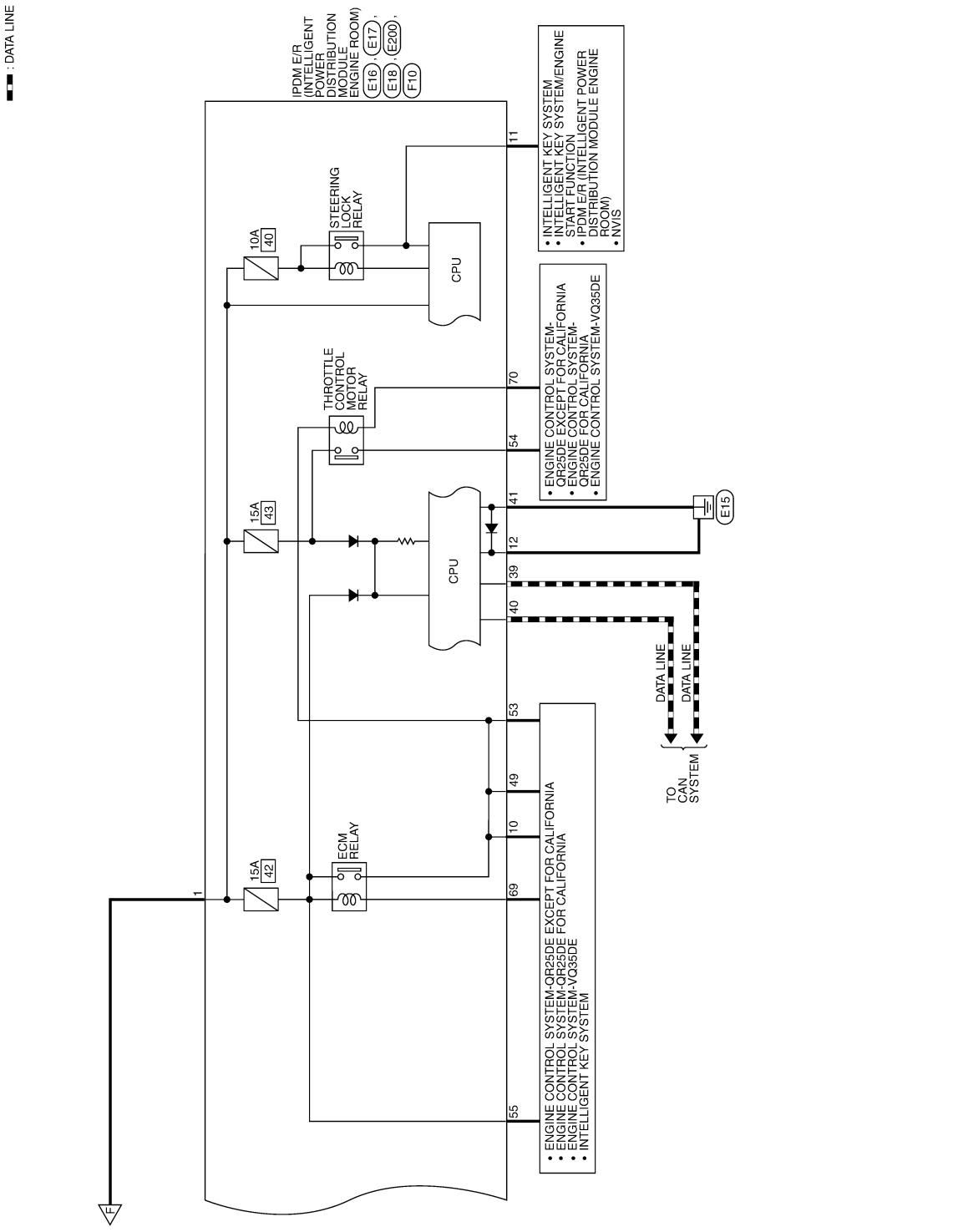
Wiring Diagram —Battery Power Supply —

INFOID:0000000004206723




FUSE BLOCK (J/B)
M3, M4, E6, E7
TO ACCESSORY POWER SUPPLY
IGNITION POWER SUPPLY
15A 5
10A 6
10A 7
10A 9
10A 10
10A 11
1S
1Q
6Q
11P
9Q
8P
4N
7N
1N
12P
• POWER SOCKET
• AIR CONDITIONER CONTROL-AUTOMATIC
• AIR CONDITIONER CONTROL-MANUAL
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• HOMELINK UNIVERSAL TRANSMITTER
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• NVIS
• POWER DISTRIBUTION SYSTEM
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• BRAKE CONTROL SYSTEM-ABS
• BRAKE CONTROL SYSTEM-TCS
• BRAKE CONTROL SYSTEM-VDC
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• STOP LAMP
• BCM (BODY CONTROL MODULE)
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• FRONT FOG LAMP
• FRONT WIPER AND WASHER SYSTEM
• 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 DISTRIBUTION SYSTEM
• POWER DOOR LOCK SYSTEM
• POWER WINDOW SYSTEM-WITH LEFT AND RIGHT ANTI-PINCH SYSTEM
• POWER WINDOW SYSTEM-WITH LEFT ONLY POWER WINDOW ANTI-PINCH SYSTEM
• SUNROOF
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• METER
• NVIS
• TIRE PRESSURE MONITORING SYSTEM
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME
A
B
C
D
E
ABMWA0176GI


F
D
E
IPDM E/R
(INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM)
E16, E17, E18, E200, F10
2
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
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)
ABMWA0177GI



ABMWA0178GI

BATTERY POWER SUPPLY CONNECTORS

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

H.S.

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

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
8P	Y/R	–
11P	Y/B	–
12P	L/R	–

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

H.S.

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

ABMIA0531GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
1	R	F/L_MAIN
2	L	F/L_USM

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

H.S.

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.

Terminal No.	Color of Wire	Signal Name
6	SB	DTRL
7	R/L	TAIL/LLUMI
10	R/B	ECM_VB
11	P/L	ESCL
12	B	GND (POWER)

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

H.S.

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

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

ABMIA0532GB

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

H.S.

5

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

Connector No.	F6
Connector Name	GENERATOR
Connector Color	–

H.S.

1

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

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	69	70	71	72	73	74	75	76	77	78	81	82		
47	48	49	50	51	52	59	60	61	62	63	64	65	66	67	68	79	80		

Terminal No.	Color of Wire	Signal Name
49	R/B	IGN_SOL (WITH VQ35DE)
49	B/R	ENG SOL (WITH QR25DE)
53	R/B	IGN_SOL (WITH QR25DE)
53	B/R	ENG_SOL (WITH VQ35DE)
54	G/W	ETC
55	W/L	ECM_BAT
69	W/B	SSOF
70	O	MOTRLY

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	–

H.S.

B

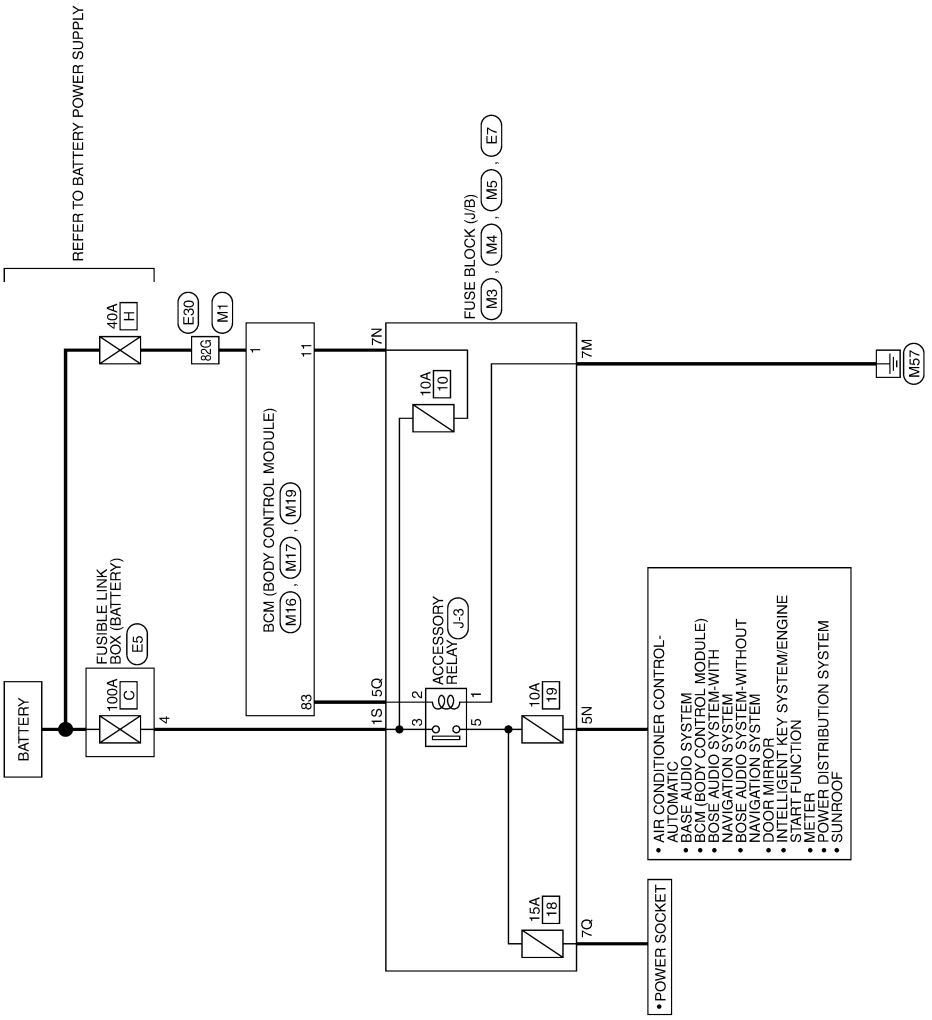
Terminal No.	Color of Wire	Signal Name
B	B/R	–

ABMIA0533GB

Wiring Diagram —Accessory Power Supply —

INFOID:0000000004206724

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
5N	V/Y	–
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
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	BAT_POWER_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

ABMIA0534GB

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.

Terminal No.	Color of Wire	Signal Name
4	W	–

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

H.S.

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

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

T.S.

Terminal No.	Color of Wire	Signal Name
82G	LG	–

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

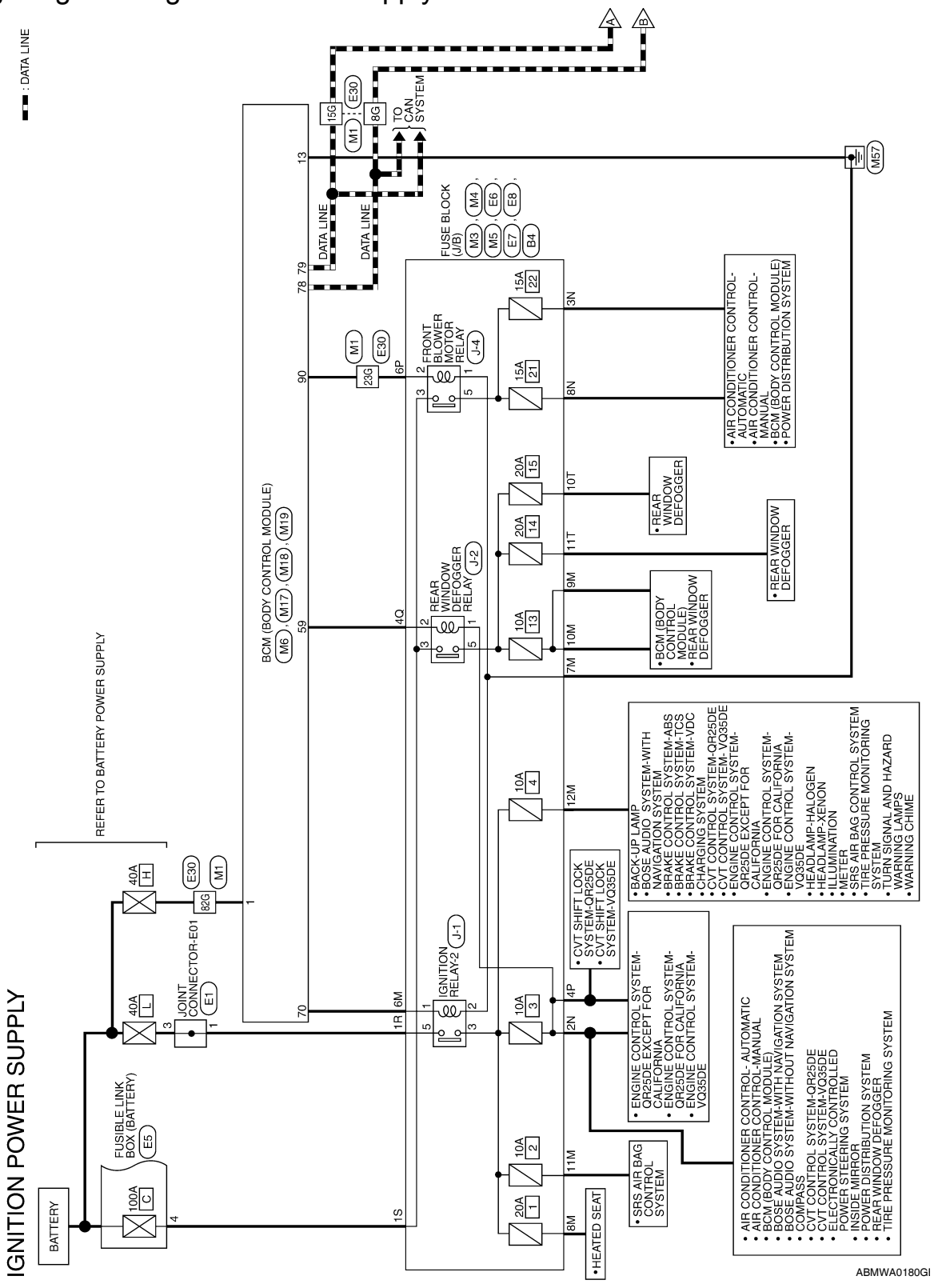
H.S.

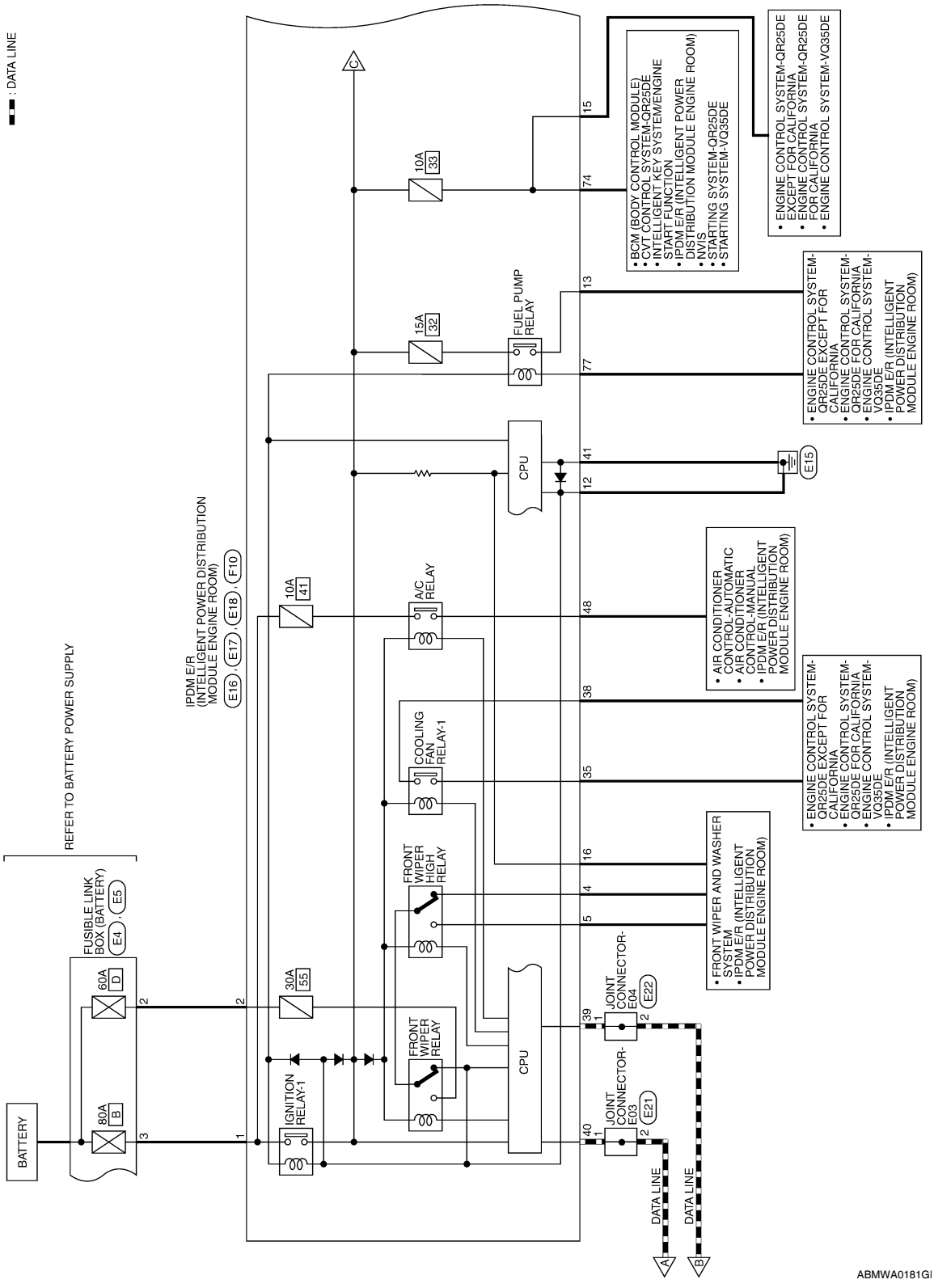
1G	2G	3G	4G	5G	6G	7G	8G	9G
10G	11G	12G	13G	14G	15G	16G	17G	
18G	19G	20G	21G	22G	23G	24G	25G	26G
27G	28G	29G	30G	31G	32G	33G	34G	
35G	36G	37G	38G	39G	40G	41G		
42G	43G	44G	45G	46G	47G	48G	49G	50G
51G	52G	53G	54G	55G	56G	57G	58G	59G
60G	61G	62G	63G	64G	65G	66G	67G	68G
69G	70G	71G	72G	73G	74G	75G	76G	77G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

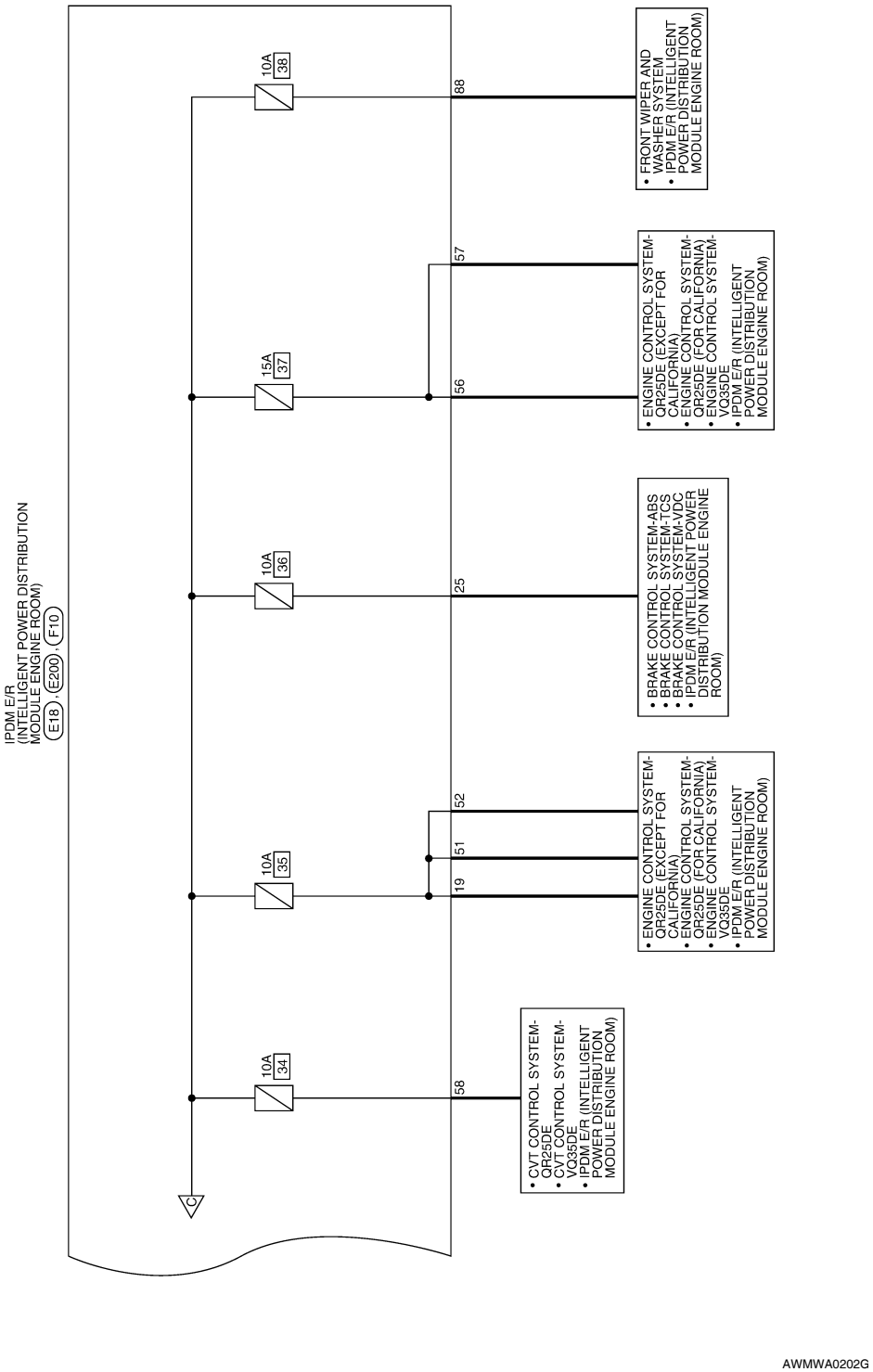
ABMIA0535GB

Wiring Diagram —Ignition Power Supply —

INFOID:0000000004206725




: DATA LINE
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)
10A 41
30A 55
IGNITION RELAY-1
A/C RELAY
COOLING FAN RELAY-1
FRONT WIPER HIGH RELAY
FRONT WIPER RELAY
FUEL PUMP RELAY
10A 33
15A 32
CPU
JOINT CONNECTOR-E03 (E21)
JOINT CONNECTOR-E04 (E22)
DATA LINE
DATA LINE
• BCM (BODY CONTROL MODULE)
• CVT CONTROL SYSTEM-QR25DE
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• NVIS
• STARTING SYSTEM-QR25DE
• STARTING SYSTEM-VQ35DE
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E15
• AIR CONDITIONER CONTROL-AUTOMATIC
• AIR CONDITIONER CONTROL-MANUAL
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
ABMWA0181GI

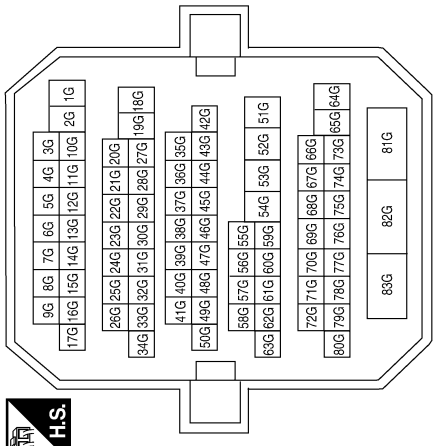

IPDM E/R
(INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM)
E18, E200, F10
10A 38
15A 37
10A 36
10A 35
10A 34
88
57
56
25
52
51
19
58
C
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM-QR25DE (EXCEPT FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-QR25DE (FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• BRAKE CONTROL SYSTEM-ABS
• BRAKE CONTROL SYSTEM-TCS
• BRAKE CONTROL SYSTEM-VDC
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• ENGINE CONTROL SYSTEM-QR25DE (EXCEPT FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-QR25DE (FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

AWMWA0202G

IGNITION POWER SUPPLY CONNECTORS

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

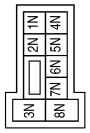
H.S.



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	–

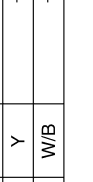
Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

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	L/Y	–
11M	R/L	–
12M	P	–

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

H.S.

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

ABMIA0536GB

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_RLY

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_ELEC_CONT
78	P	CAN-L
79	L	CAN-H
90	Y	IGN2_CONT

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.

1	3	4

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

ABMIA0537GB

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)

ABMIA0538GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
4	L/R	FR_WIPER_LO
5	L/B	FR_WIPER_HI
12	B	GND (POWER)
13	W	FUEL_PUMP
15	G/W	START_IG-E/R
16	L/Y	WIPER_AUTOSTOP
19	L/Y	BCM_IGNSW
25	GR	ABS_ECU
35	L/B	MOTOR_FAN_LO
38	R/W	F/L_MOTOR_FAN

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

H.S.

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

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

H.S.

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

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

H.S.

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

ABMIA0539GB

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	69	70	71	72	73	74	75	76	77	78	81	82
47	48	49	50	51	52	59	60	61	62	63	64	65	66	67	68	79	80

Terminal No.	Color of Wire	Signal Name
48	Y/R	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
74	Y	START_IG-EGI
77	B/R	FPR

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

T.S.

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

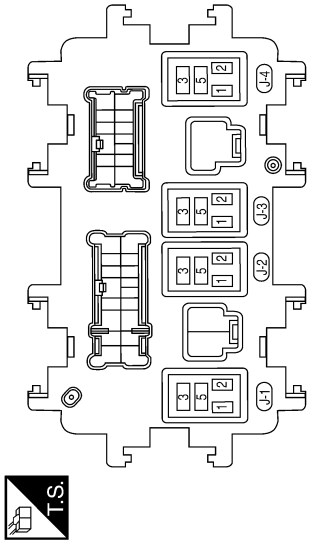
H.S.

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

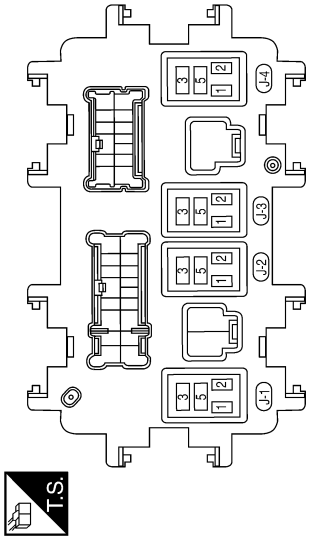
Terminal No.	Color of Wire	Signal Name
10T	R	–
11T	R	–

ABMIA0540GB

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



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

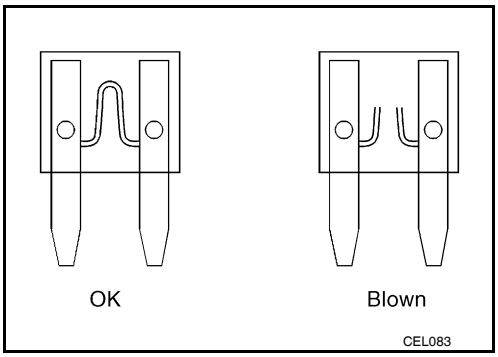


ABMIA0541GB

Fuse

INFOID:0000000004206726

- 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.

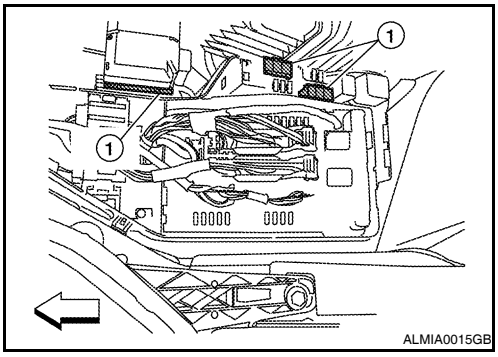


Fusible Link

INFOID:0000000004206727

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:

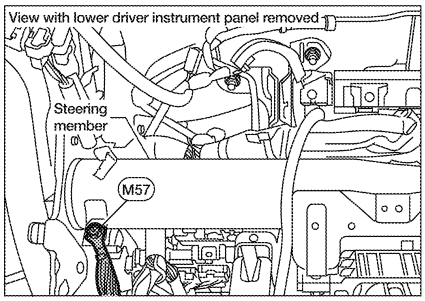
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

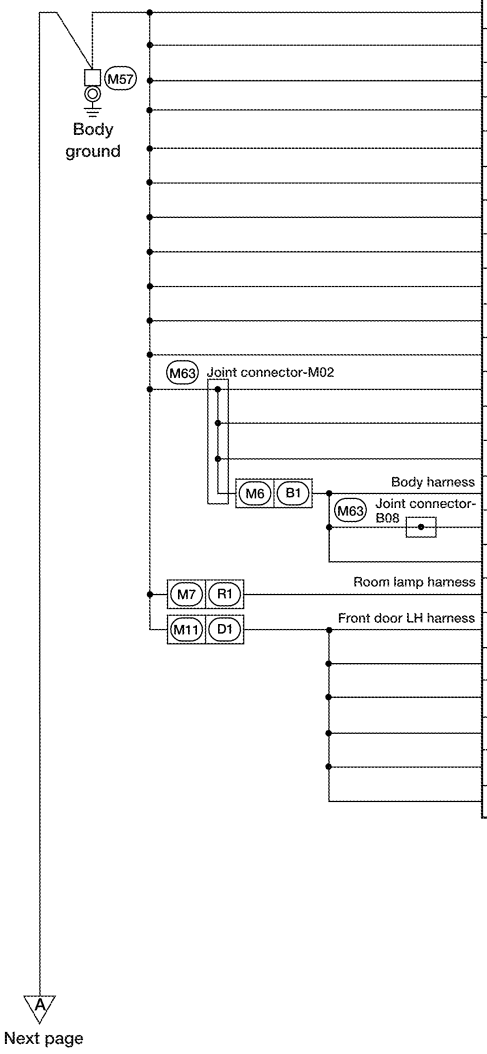
GROUND

Ground Distribution

INFOID:0000000004206728

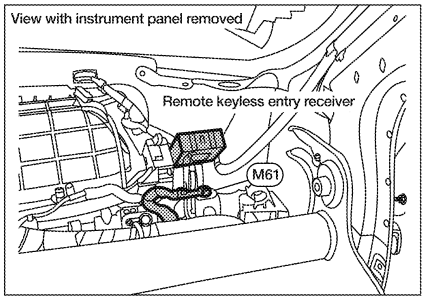
MAIN HARNESS

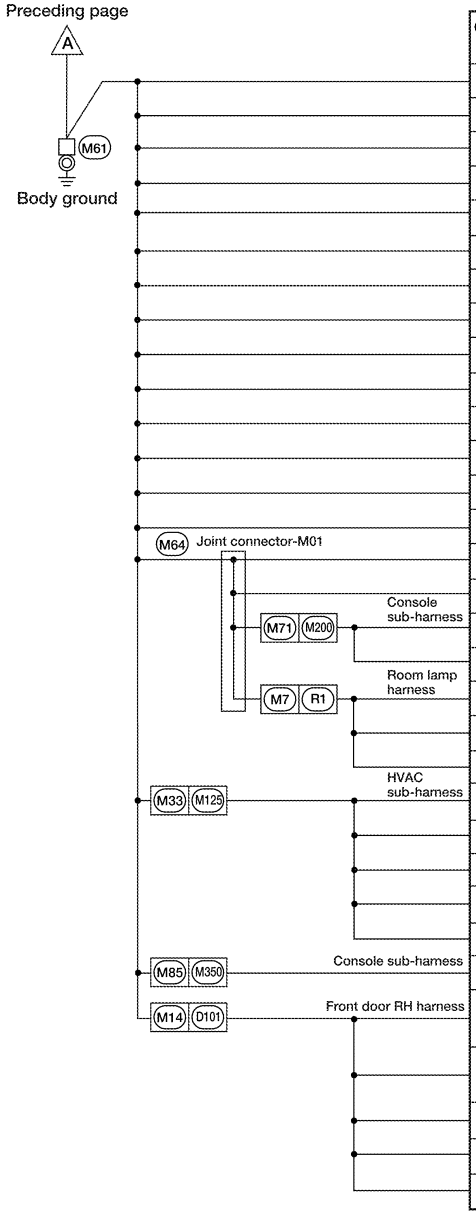




CONNECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal No.7M)
M17	BCM (Body control module) (Terminal No.13)
M22	Data link connector (Terminal No.4)
M22	Data link connector (Terminal No.5)
M24	Combination meter (Terminal No.3)
M24	Combination meter (Terminal No.4)
M24	Combination meter (Terminal No.23)
M28	Combination switch
M31	Blower motor
M40	Key slot
M75	Trunk lid opener cancel switch
M47	AV control unit (Terminal No.19)
M53	Steering angle sensor
M55	Yaw rate/side/decel G sensor
B30	Rear combination lamp LH (Terminal No.5) (with rear view monitor)
B37	High mounted stop lamp (Terminal No.2) (with rear view monitor)
B45	Rear combination lamp RH (Terminal No.5) (with rear view monitor)
R14	Interior room lamp
D4	Door mirror LH (Terminal No.8) (with turn signal in mirror)
D4	Door mirror LH (Terminal No.2) (with mirror defogger)
D5	Door mirror remote control switch
D6	Outside handle LH
D8	Main power window and lock/unlock switch (Terminal No.17)
D10	Door lock assembly LH

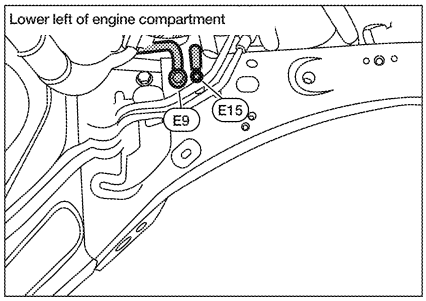
ABMIA0501GB

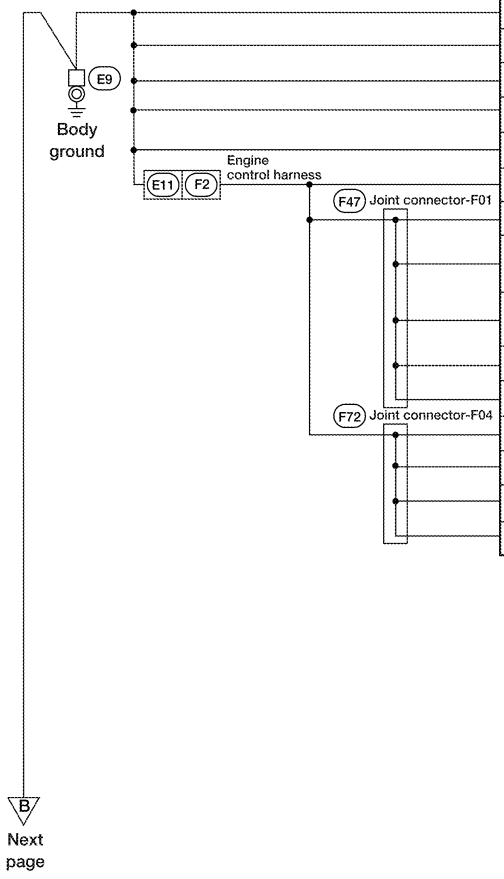




CONNECTOR NUMBER	CONNECT TO
M23	CVT device (Terminal No.4)
M23	CVT device (Terminal No.7)
M32	Electronic steering column lock (Terminal No.5)
M32	Electronic steering column lock (Terminal No.6)
M35	Air bag diagnosis sensor unit (Terminal No.2)
M36	Front passenger air bag off indicator
M37	Front air control (Terminal No.17)
M37	Front air control (Terminal No.37)
M38	Push-button ignition switch
M54	Hazard switch
M59	Power steering control unit (Terminal No.6)
M68	Glove box lamp
M74	Trunk lid opener cancel switch
M76	Front power socket
M72	TCS off switch (Terminal No.2) (with TCS)
M72	VDC off switch (Terminal No.2) (with VDC)
M201	Heated seat switch LH
M202	Heated seat switch RH
R3	Vanity mirror lamp LH
R4	Auto anti-dazzling inside mirror
R9	Vanity mirror lamp RH
M126	Intake door motor
M127	Mode door motor
M128	Air mix door motor LH (with auto A/C)
M129	Air mix door motor RH (with auto A/C)
M130	Air mix door motor (without A/C)
M351	Front console power socket
D105	Power window and door lock/unlock switch RH (Terminal No.3) (with left only power window anti-pinch system)
D105	Power window and door lock/unlock switch RH (Terminal No.11) (with left and right power window anti-pinch system)
D106	Outside handle RH
D107	Door mirror RH (Terminal No.2) (with mirror defogger)
D107	Door mirror RH (Terminal No.8) (with turn signal in mirror)

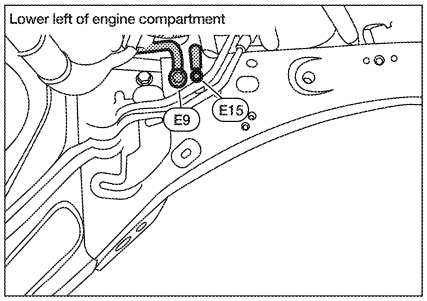
ABMIA0502GB

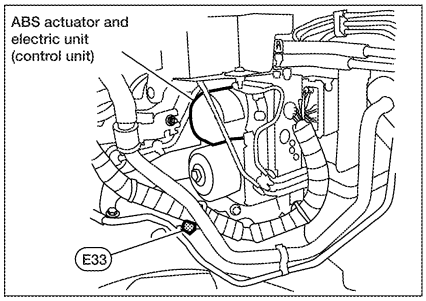


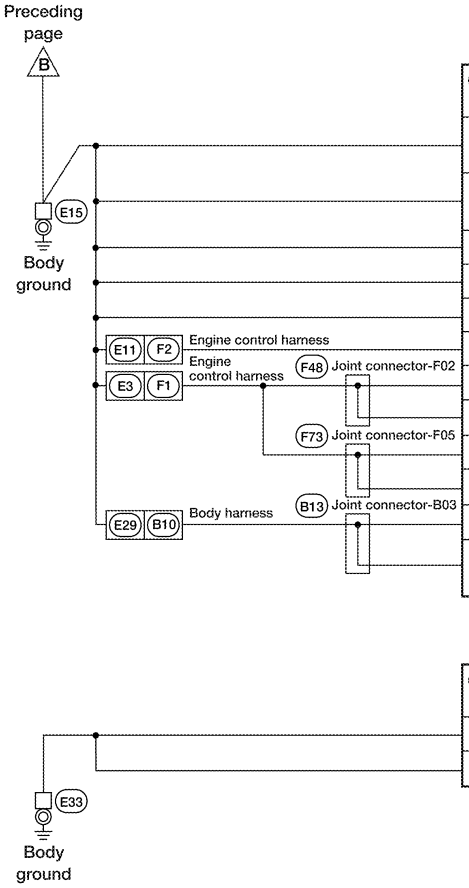


CONNECTOR NUMBER	CONNECT TO
E10	ECM (Terminal No.107)
E10	ECM (Terminal No.108)
E10	ECM (Terminal No.111)
E10	ECM (Terminal No.112)
E42	Cooling fan relay-2
F14	ECM (Terminal No.16)
F14	ECM (Terminal No.12) (with QR25DE)
F43	Tumble control valve actuator shield (sensor) (with QR25DE for California)
F43	Tumble control valve actuator shield (motor) (with QR25DE for California)
F44	Air fuel ratio (A/F) sensor 1 shield (with QR25DE)
F57	Electric throttle control actuator shield (with QR25DE)
F12	Air fuel ratio (A/F) sensor 1 shield (Bank 1) (with VQ35DE)
F14	ECM (Terminal No.12) (with VQ35DE)
F57	Electric throttle control actuator shield (with VQ35DE)
F61	Air fuel ratio (A/F) sensor 1 shield (Bank 2) (with VQ35DE)

ABMIA0503GB





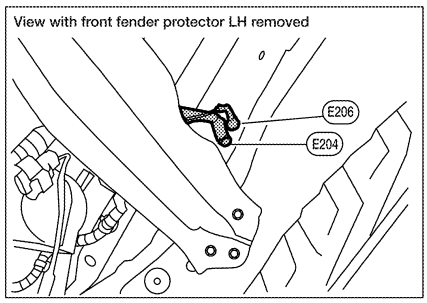


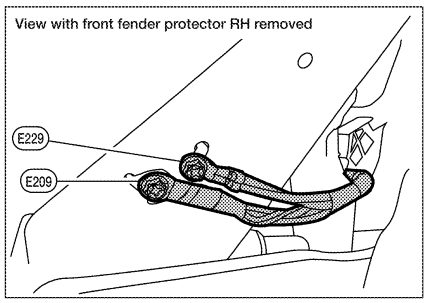
CONNECTOR NUMBER	CONNECT TO
E17	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.41)
E18	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.12)
E24	Brake fluid level switch
E25	Front wiper motor
E43	Cooling fan relay-3
F3	A/C compressor
F16	TCM (Transmission control module) (Terminal No.5) (with QR25DE)
F16	TCM (Transmission control module) (Terminal No.42) (with QR25DE)
F16	TCM (Transmission control module) (Terminal No.5) (with VQ35DE)
F16	TCM (Transmission control module) (Terminal No.42) (with VQ35DE)
B17	Condenser-1 (with rear view monitor)
B42	Fuel level sensor unit and fuel pump (fuel pump) (with rear view monitor)

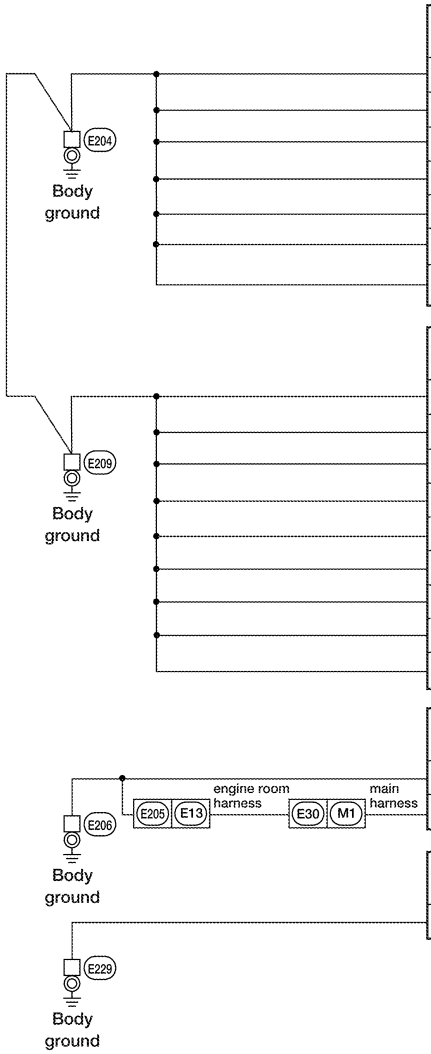
CONNECTOR NUMBER	CONNECT TO
E26	ABS actuator and electric unit (control unit) (Terminal No.1)
E26	ABS actuator and electric unit (control unit) (Terminal No.4)

ABMIA0504GB

FRONT END MODULE HARNESS







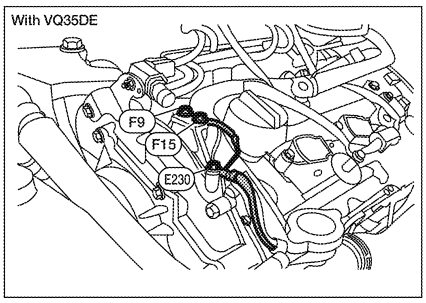
CONNECTOR NUMBER	CONNECT TO
E212	Front combination lamp LH (Terminal No.2) (with Xenon headlamps)
E217	Front combination lamp LH
E221	Cooling fan motor-2 (Terminal No.3)
E221	Cooling fan motor-2 (Terminal No.4)
E223	Front combination lamp RH (Terminal No.2) (with halogen headlamps)
E225	Front combination lamp RH
E227	Front fog lamp RH

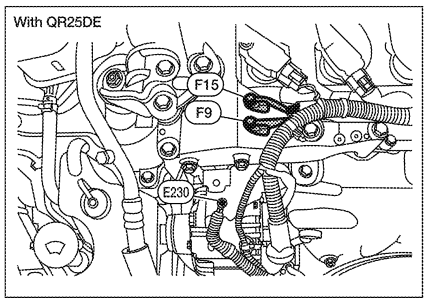
CONNECTOR NUMBER	CONNECT TO
E208	Washer level switch
E212	Front combination lamp LH (Terminal No.2) (with halogen headlamps)
E213	Front combination lamp LH
E214	Front fog lamp LH
E218	Front combination lamp LH
E222	Front combination lamp RH
E223	Front combination lamp RH (Terminal No.2) (with Xenon headlamps)
E224	Front combination lamp RH
E228	Daytime light relay

CONNECTOR NUMBER	CONNECT TO
E210	Crash zone sensor shield
E35	Air bag diagnosis sensor unit (shield wire) (Terminal No.16)

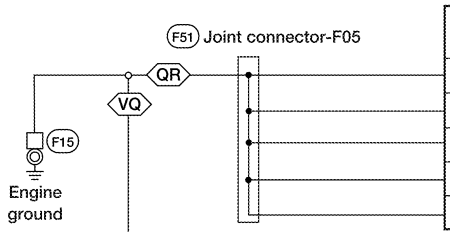
CONNECTOR NUMBER	CONNECT TO
E230	Generator

ABMIA0505GB





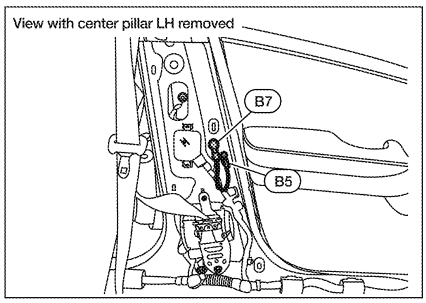
QR : With QR25DE
VQ : With VQ35DE

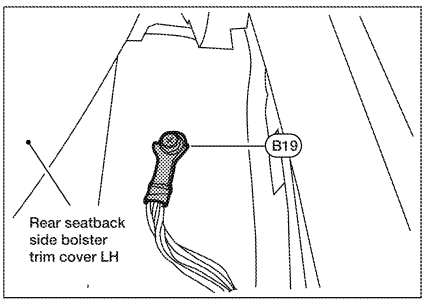


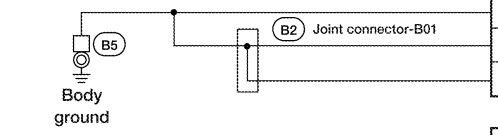
CONNECTOR NUMBER	CONNECT TO
F26	Condenser-2
F34	Ignition coil No. 1 (with power transistor)
F35	Ignition coil No. 2 (with power transistor)
F36	Ignition coil No. 3 (with power transistor)
F37	Ignition coil No. 4 (with power transistor)

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)

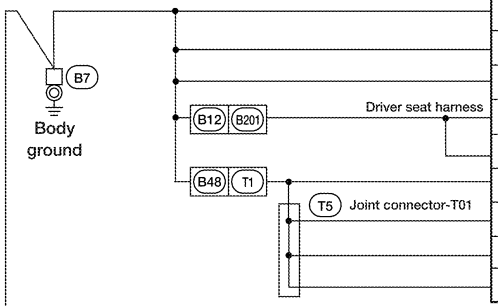
ABMIA0506GB



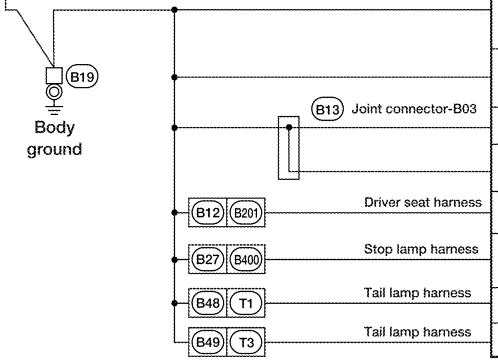




CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag (satellite) sensor shield
B9	Air bag diagnosis sensor unit (shield wire) (Terminal No. 44)
B38	LH side curtain air bag module shield



CONNECTOR NUMBER	CONNECT TO
B31	Rear view camera control unit (Terminal No. 3)
B55	Bluetooth control unit (Terminal No. 4)
B55	Bluetooth control unit (Terminal No. 20)
B203	Power seat switch
B210	Front seat heater LH
T7	Rear view camera
T4	Trunk lamp switch and trunk release solenoid (Terminal No. 2)
T6	License plate lamp LH
T8	License plate lamp RH



CONNECTOR NUMBER	CONNECT TO
B30	Rear combination lamp LH monitor (Terminal No. 5) (without rear view monitor)
B45	Rear combination lamp RH (Terminal No. 5) (without rear view monitor)
B17	Condenser-1
B42	Fuel level sensor unit and fuel pump (fuel pump) (without rear view monitor)
B202	Seat belt buckle switch LH
B401	High mounted stop lamp (Terminal No. 2) (without rear view monitor)
T2	Trunk opener request switch
T4	Trunk lamp switch and trunk release solenoid (Terminal No. 4)

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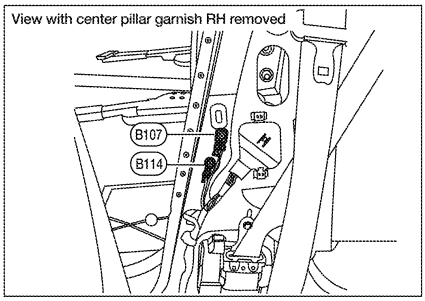
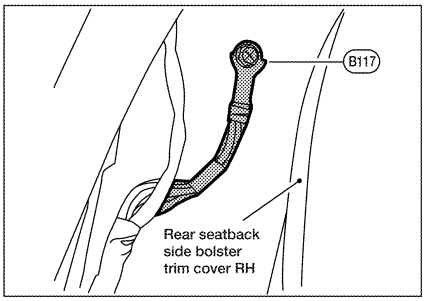
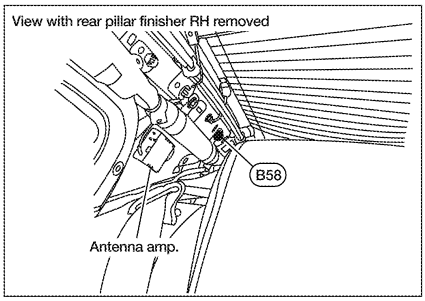
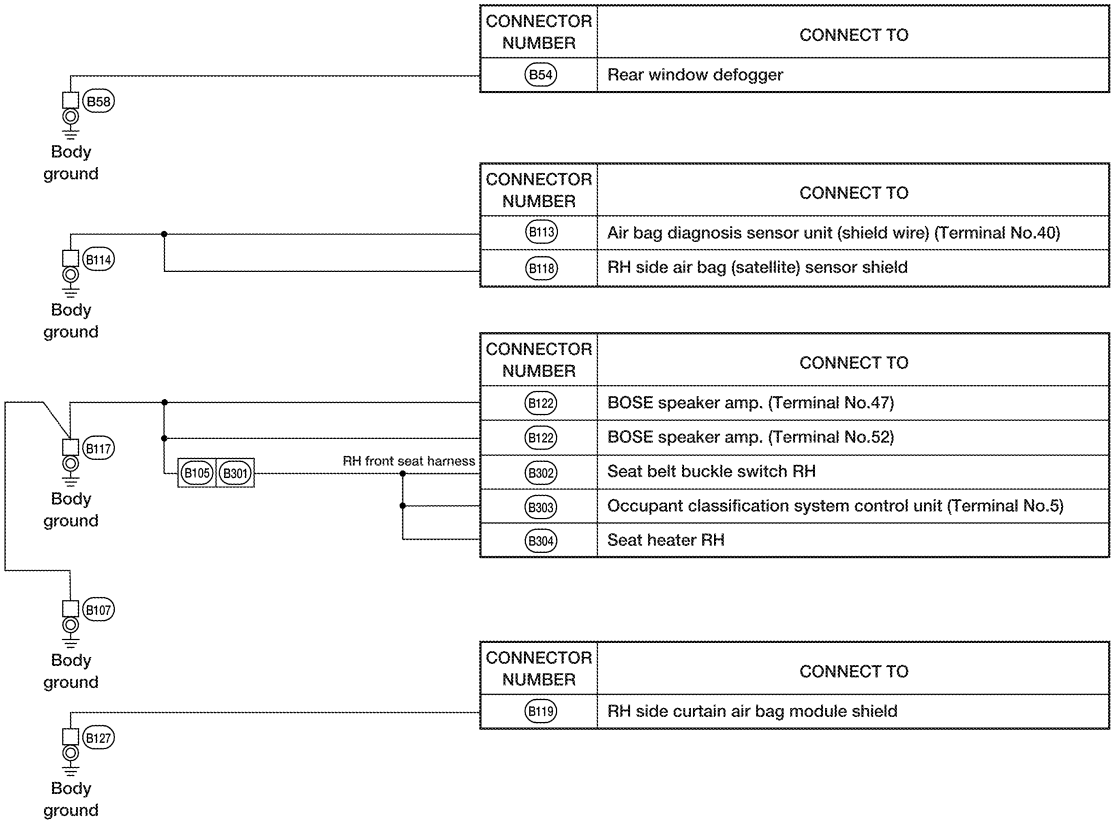








CONNECTOR NUMBER	CONNECT TO
B54	Rear window defogger

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

CONNECTOR NUMBER	CONNECT TO
B122	BOSE speaker amp. (Terminal No.47)
B122	BOSE speaker amp. (Terminal No.52)
B302	Seat belt buckle switch RH
B303	Occupant classification system control unit (Terminal No.5)
B304	Seat heater RH

CONNECTOR NUMBER	CONNECT TO
B119	RH side curtain air bag module shield

ABMIA0508GB

HARNESS

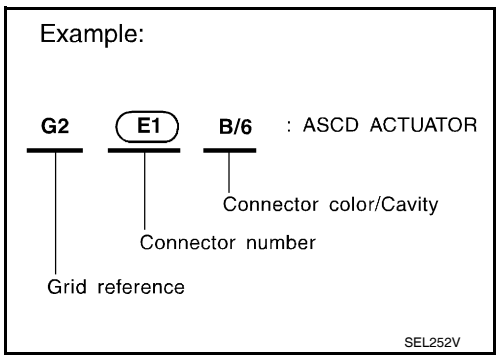
Harness Layout

INFOID:0000000004206729

HOW TO READ HARNESS LAYOUT

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

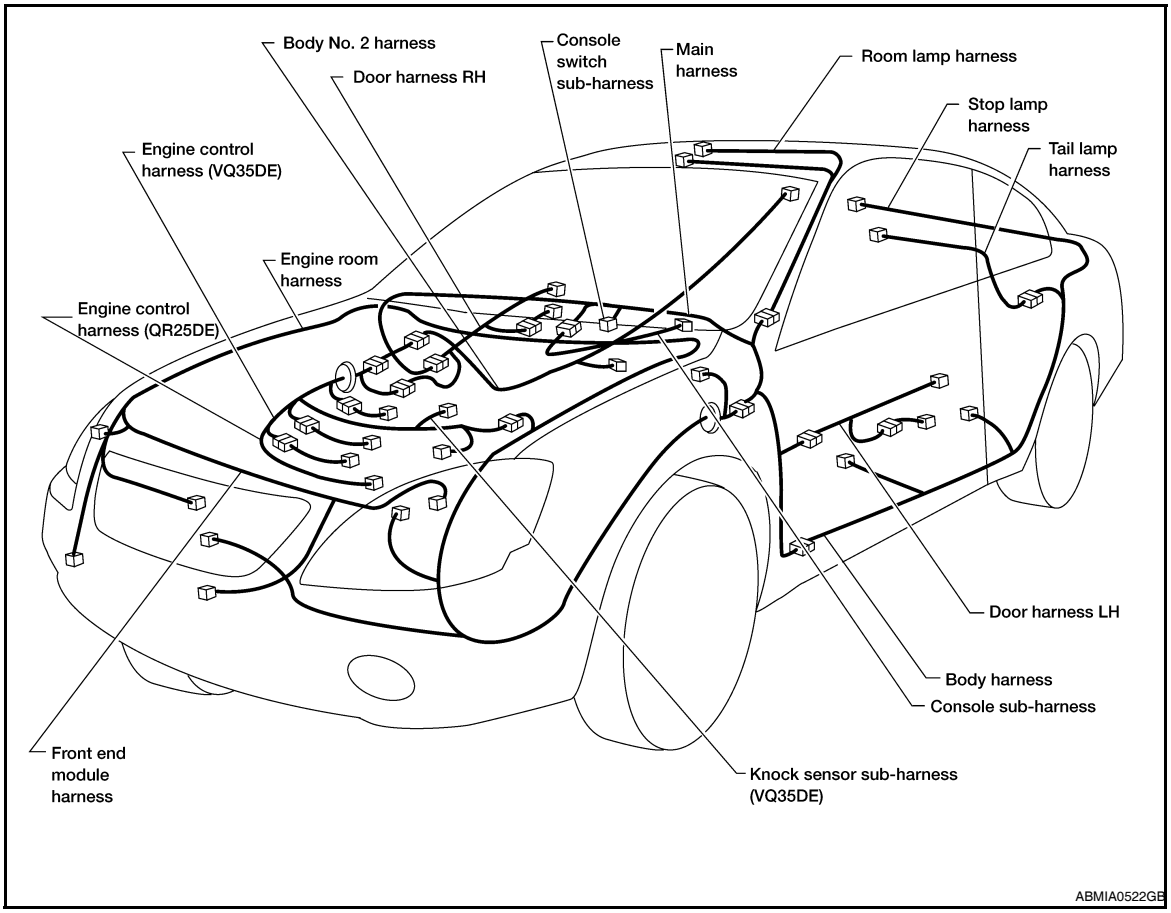
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness
- Engine Control Harness (VQ35DE) and Knock Sensor Sub-harness
- Engine Control Harness (QR25DE)
- Body Harness and Tail Lamp Harness
- Body No. 2 Harness
- Room Lamp Harness



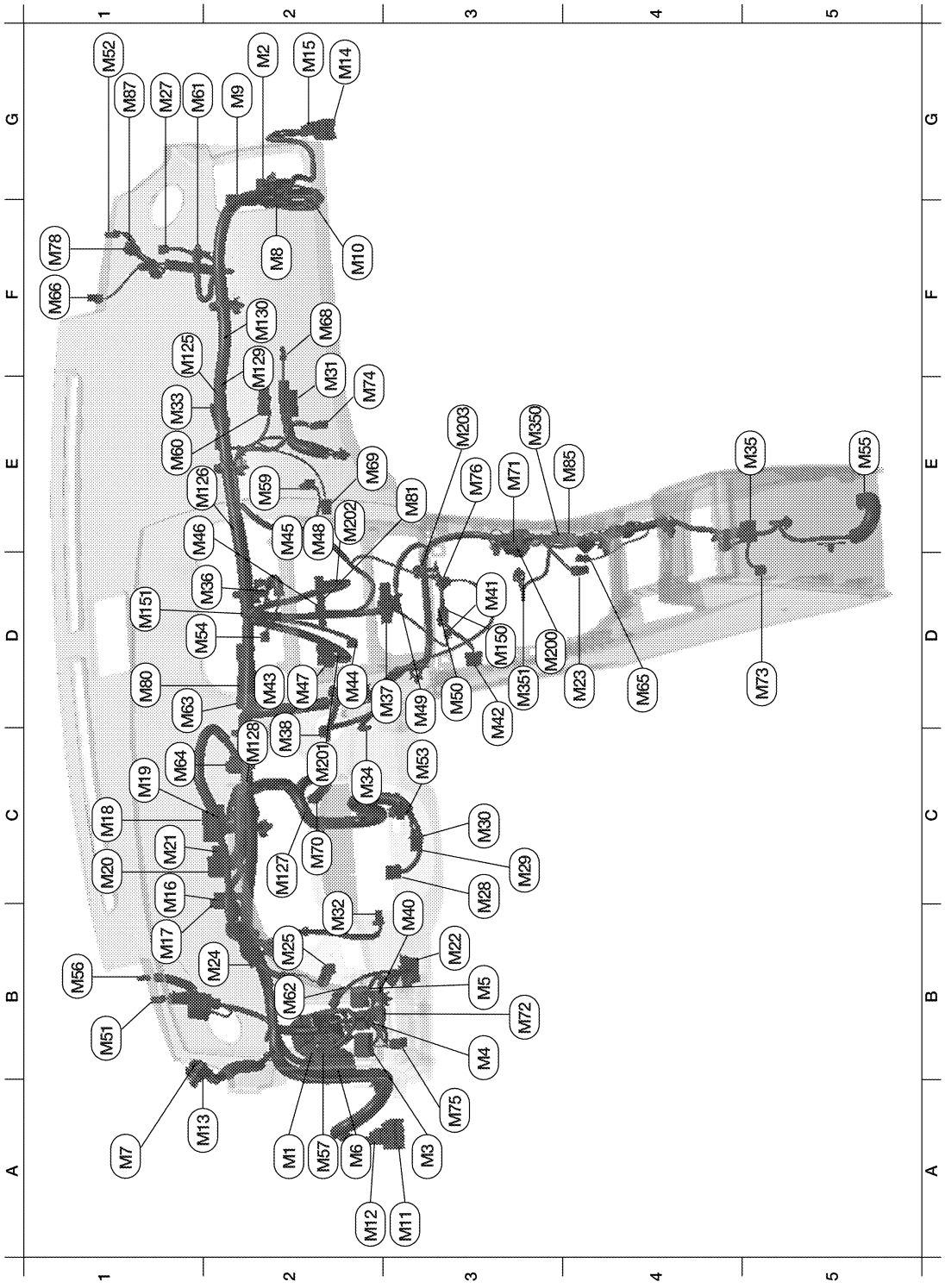
To use the grid reference

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

OUTLINE



MAIN HARNESS

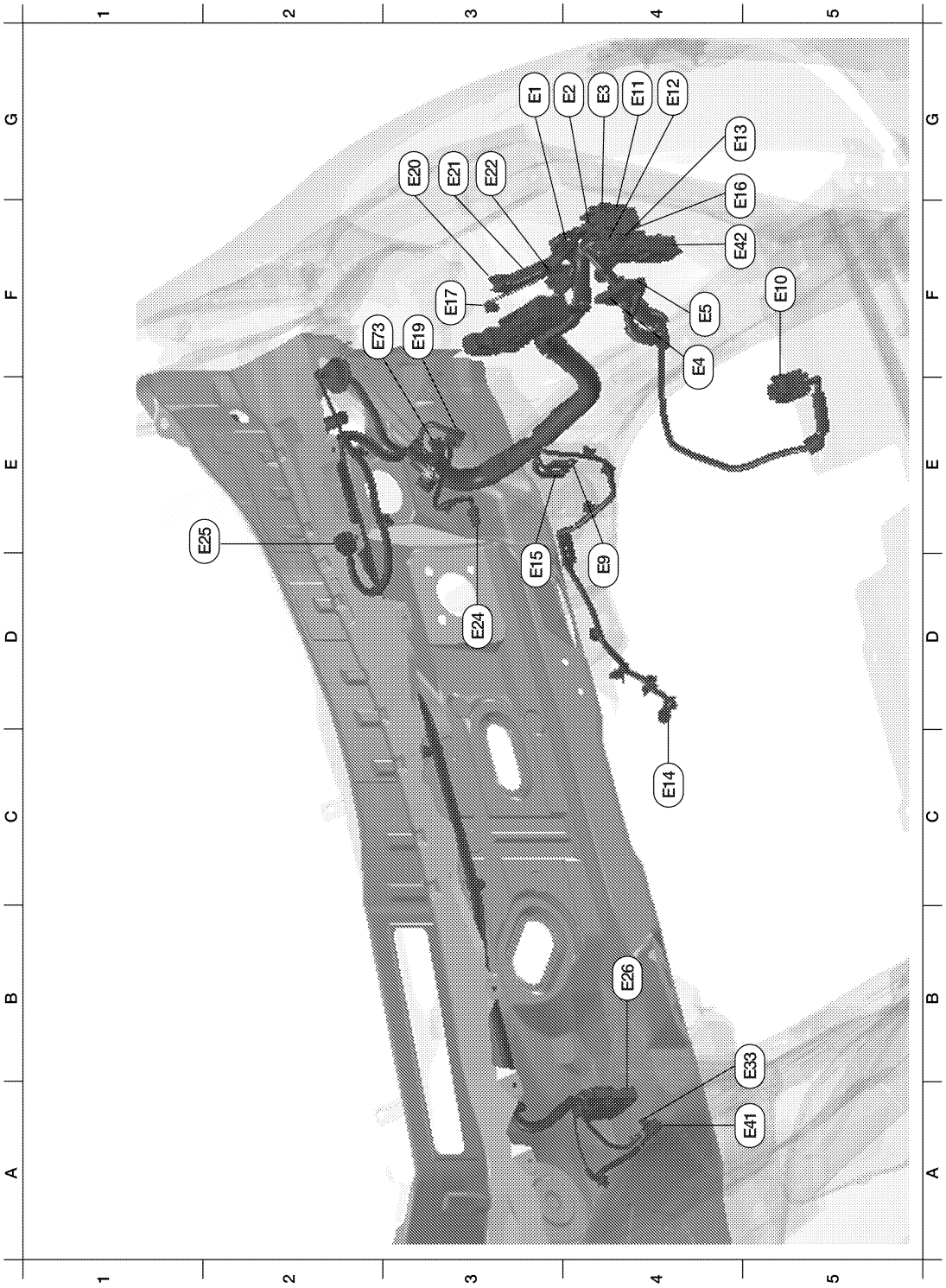


ABMIA0523GB

A2	M1	SMJ	: To E30	B1	M51	BR/2	: Front tweeter LH
G2	M2	W/32	: To B101	G1	M52	BR/2	: Front tweeter RH
A3	M3	W/8	: Fuse block (J/B)	C3	M53	W/8	: Steering angle sensor
A3	M4	W/10	: Fuse block (J/B)	D2	M54	W/4	: Hazard switch

B3	M5	W/12	: Fuse block (J/B)	E5	M55	B/4	: Yaw rate/side/decel G sensor
A2	M6	SMJ	: To B1	D2	M56	B/2	: Sunload sensor
A1	M7	W/16	: To R1	A2	M57	—	: Body ground
F2	M8	W/24	: To B102	E2	M59	W/12	: Power steering control unit
G2	M9	BR/16	: To B103	E1	M60	Y/2	: Front passenger air bag module
F2	M10	BR/12	: To B104	G1	M61	—	: Body ground
A3	M11	W/16	: To D1	B2	M62	W/2	: Tire pressure warning check connector
A2	M12	W/16	: To D2	D1	M63	L/12	: Joint connector-M02
A2	M13	W/4	: To R2	C1	M64	GR/6	: Joint connector-M01
G2	M14	W/10	: To D101	D4	M65	BR/2	: CVT device
G2	M15	W/12	: To D102	F1	M66	W/3	: Optical sensor
B1	M16	B/3	: BCM (body control module)	E2	M67	O/2	: Front passenger air bag module
B1	M17	W/16	: BCM (body control module)	F2	M68	W/2	: Glove box lamp
C1	M18	G/40	: BCM (body control module)	E2	M69	W/4	: Intake sensor
C1	M19	B/40	: BCM (body control module)	C2	M70	W/4	: Tire pressure receiver
C1	M20	W/12	: BCM (body control module)	E3	M71	W/12	: To M200
C1	M21	GR/40	: BCM (body control module)	B3	M72	GR/6	: TCS OFF switch (with TCS)
B3	M22	W/16	: Data link connector	G2	M72	GR/6	: VDC OFF switch (with VDC)
D4	M23	W/10	: CVT device	D5	M73	B/1	: Parking brake switch (with M/T)
B2	M24	W/40	: Combination meter	E2	M74	W/2	: Trunk lid opener cancel switch
B2	M25	B/10	: Meter mode switch	A3	M75	B/2	: Trunk lid opener switch
G1	M27	B/4	: Remote keyless entry receiver	E3	M76	B/3	: Front power socket
C3	M28	W/16	: Combination switch	F1	M78	Y/4	: Front passenger air bag module (service replacement)
C3	M29	Y/6	: Spiral cable	D1	M80	—	: Diode-3
C3	M30	GR/8	: Spiral cable	E3	M81	GR/3	: Audio unit (without NAVI)
E2	M31	W/6	: Blower motor	E3	M81	GR/3	: AV control unit (with NAVI)
B2	M32	W/8	: Electronic steering column lock	F1	M85	W/2	: To M350
E1	M33	W/3	: To M125	G1	M87	GR/3	: To M501
C2	M34	W/2	: In-vehicle sensor	F1	M125	W/3	: To M33
E5	M35	Y/28	: Air bag diagnosis sensor unit	E2	M126	W/3	: Intake door motor
D2	M36	W/3	: Front passenger air bag off indicator	E2	M127	W/3	: Mode door motor
D3	M37	W/40	: Front air control	C2	M128	W/3	: Air mix door motor LH (with auto A/C)
C2	M38	BR/8	: Push-button ignition switch	C2	M129	W/3	: Air mix door motor RH (with auto A/C)
B3	M40	W/12	: Key slot	C2	M130	W/3	: Air mix door motor (with manual A/C)
B3	M41	W/4	: Aux jack	D3	M150	W/2	: To M50
D3	M42	W/16	: CD changer	D1	M151	BR/2	: Center speaker
D2	M43	W/20	: Audio unit	Console switch sub-harness			
D2	M44	W/8	: Audio unit	D3	M200	W/12	: To M71
E2	M45	W/12	: Audio unit	C2	M201	W/6	: Front heated seat switch LH
E2	M46	W/40	: AV control unit	E2	M202	BR/6	: Front heated seat switch RH
D2	M47	W/20	: AV control unit	E3	M203	GR/2	: Front console antenna
D2	M48	GR/12	: AV control unit	Console sub-harness			
D3	M49	GR/2	: Instrument panel antenna	E3	M350	W/2	: To M85
D3	M50	W/2	: To M150	D3	M351	B/3	: Front console power socket

ENGINE ROOM HARNESS

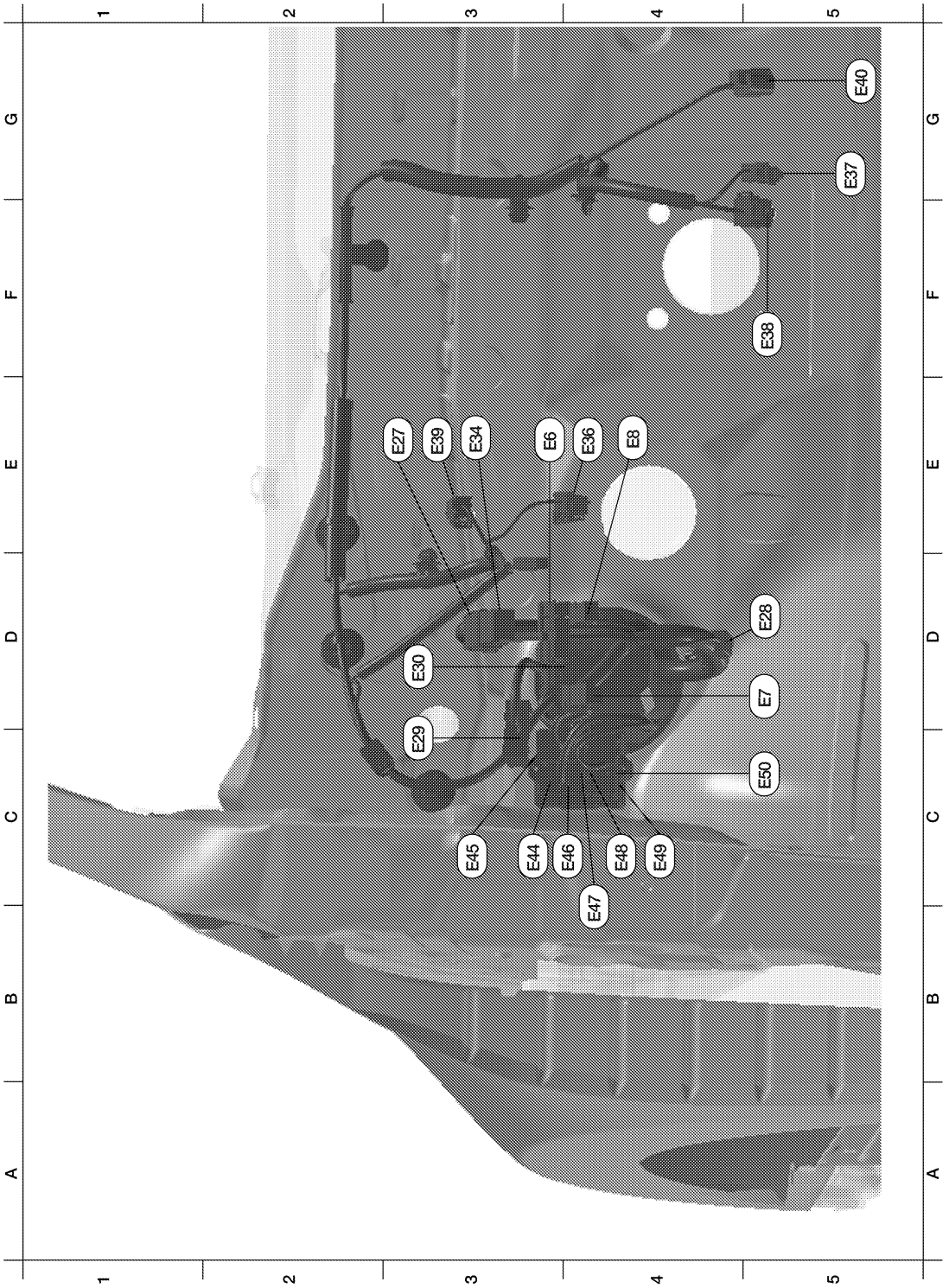


ABMIA0524GB

G4	E1	W/6	: Joint connector-E01	F3	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)
G4	E2	W/8	: To E202	C3	E18	W/36	: IPDM E/R (intelligent power distribution module engine room)
G4	E3	W/16	: To F1	F3	E19	GR/2	: Front wheel sensor LH
F4	E4	BR/2	: Fusible link box (battery)	G3	E20	W/6	: Joint connector-E02

F4	E5	GR/2	: Fusible link box (battery)	G3	E21	W/4	: Joint connector-E03
D4	E9	—	: Body ground	G3	E22	W/4	: Joint connector-E04
F5	E10	B/32	: ECM	D3	E24	GR/2	: Brake fluid level switch
G4	E11	W/10	: To F2	E2	E25	GR/5	: Front wiper motor
G4	E12	W/6	: To E203	B4	E26	B/26	: ABS actuator and electric unit (control unit)
G5	E13	B/3	: To E205	A5	E41	GR/2	: Front wheel sensor RH
C4	E14	B/2	: Power steering solenoid valve	F5	E42	BR/6	: Cooling fan relay-2
D4	E15	—	: Body ground	B2	E43	BR/6	: Cooling fan relay-3
G5	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)	F2	E73	BR/3	: Intelligent key warning buzzer

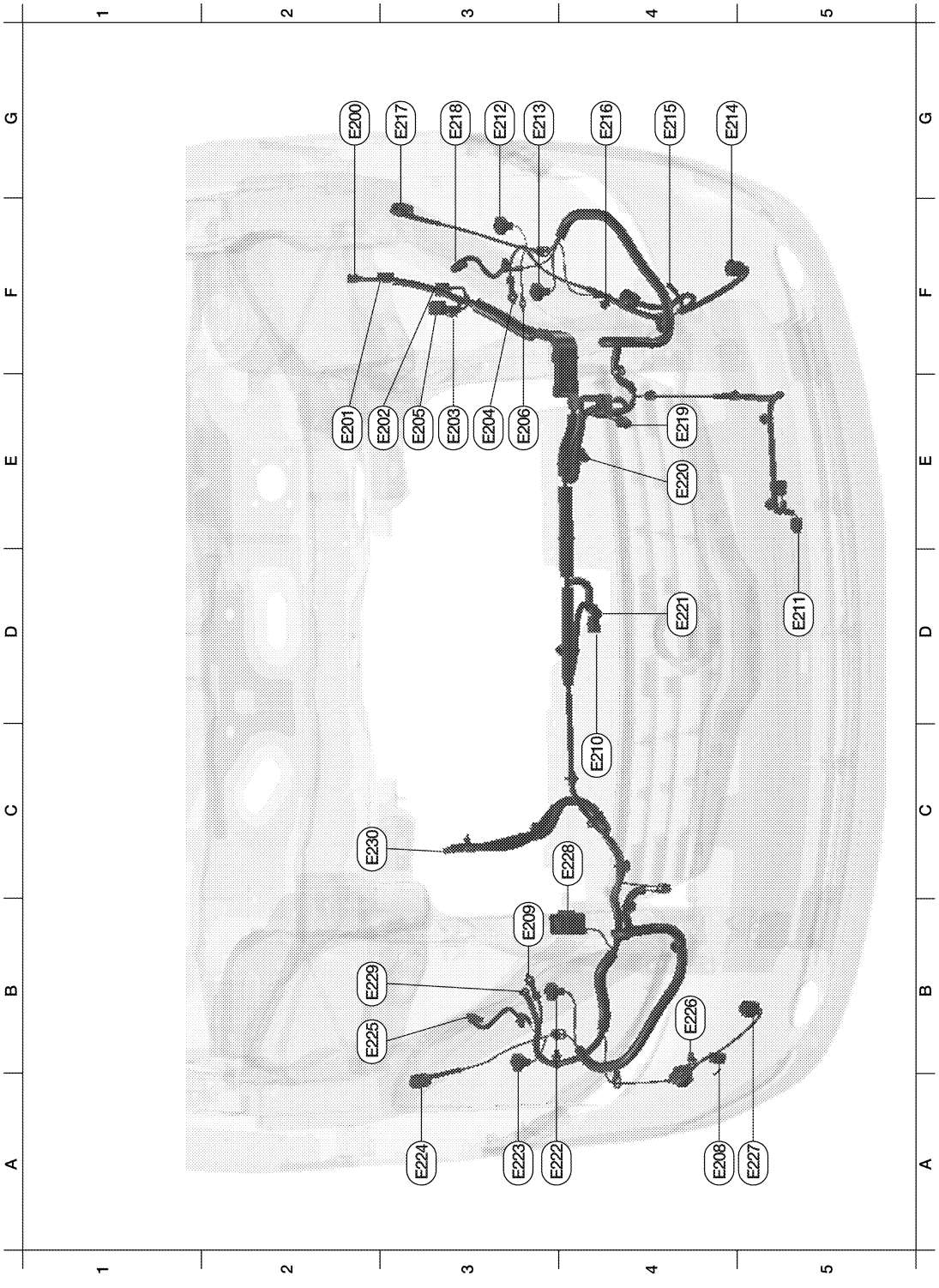
ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



E3	E6	W/16	: Fuse block (J/B)	F5	E38	W/4	: Stop lamp switch (with CVT)
D5	E7	W/1	: Fuse block (J/B)	C5	E38	B/2	: Stop lamp switch (with M/T)
E4	E8	B/2	: Fuse block (J/B)	E3	E39	BR/2	: ASCD clutch switch
E3	E27	W/4	: Joint connector-E06	G5	E40	B/6	: Accelerator pedal position sensor
D5	E28	W/4	: Joint connector-E05	C3	E44	BR/12	: Junction block

C3	E29	W/16	: To B10	C3	E45	W/12	: Junction block
D3	E30	SMJ	: To M1	C4	E46	W/16	: Junction block
E3	E34	L/4	: Back-up lamp relay	B4	E47	W/6	: Junction block
E3	E35	B/1	: Park brake switch	C4	E48	W/4	: Junction block
E4	E36	BR/2	: Clutch interlock switch	C4	E49	BR/4	: Junction block
G5	E37	BR/2	: ASCD brake switch	C5	E50	W/2	: Junction block

FRONT END MODULE HARNESS

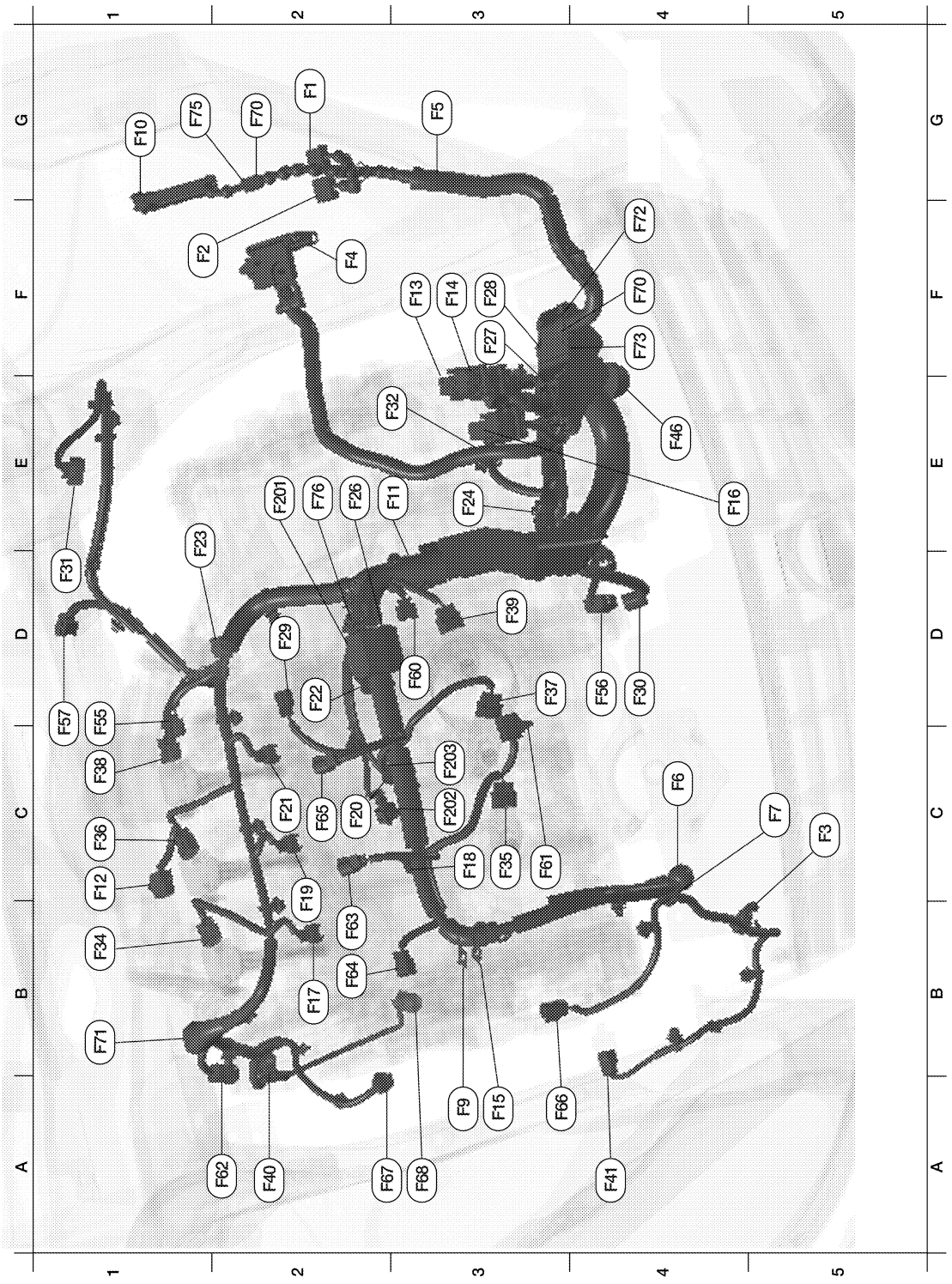


ABMIA0525GB

G3	E200	W/8	: IPDM E/R (intelligent power distribution module engine room)	G4	E216	B/1	: Horn (high)
E2	E201	W/16	: IPDM E/R (intelligent power distribution module engine room)	G3	E217	GR/3	: Front combination lamp LH (turn signal)
E3	E202	W/8	: To E2	G3	E218	B/2	: Front combination lamp LH (parking)
E3	E203	W/6	: To E12	E4	E219	B/3	: Refrigerant pressure sensor

E3	E204	—	: Body ground	E4	E220	GR/4	: Cooling fan motor-1
E3	E205	B/3	: To E13	D4	E221	GR/4	: Cooling fan motor-2
E3	E206	—	: Body ground	A4	E222	B/2	: Front combination lamp RH (high)
A4	E208	W/2	: Washer fluid level switch	A3	E223	GR/2	: Front combination lamp RH (low)(xenon)
B3	E209	—	: Body ground	A3	E223	B/2	: Front combination lamp RH (low) (halogen)
D4	E210	Y/2	: Crash zone sensor	A3	E224	GR/3	: Front combination lamp RH (turn signal)
D5	E211	B/2	: Ambient sensor	B3	E225	B/2	: Front combination lamp RH (parking)
G3	E212	B/2	: Front combination lamp LH (low) (halogen)	B4	E226	B/2	: Front washer motor
G3	E212	GR/2	: Front combination lamp LH (low)(xenon)	A5	E227	B/2	: Front fog lamp RH
G4	E213	B/2	: Front combination lamp LH (high)	C4	E228	B/5	: Daytime light relay
G5	E214	B/2	: Front fog lamp LH	B3	E229	—	: Body ground
G4	E215	B/1	: Horn (low)	C3	E230	—	: Generator

ENGINE CONTROL HARNESS (VQ35DE)

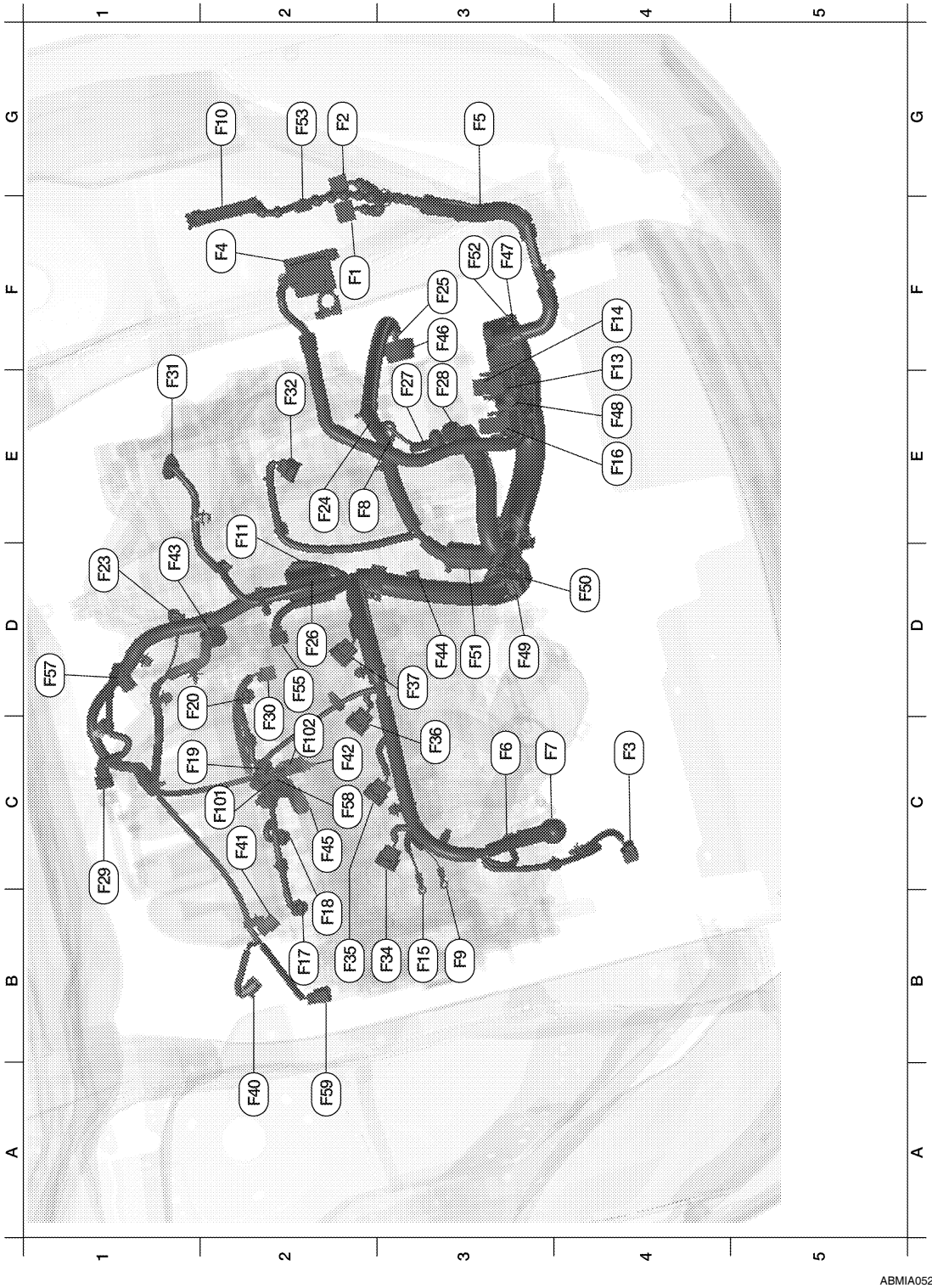


ABMIA0526GB

G2	F1	W/16	: To E3	C3	F35	GR/3	: Ignition coil No. 2 (with power transistor)
F2	F2	W/10	: To E11	C1	F36	GR/3	: Ignition coil No. 3 (with power transistor)
C5	F3	B/2	: A/C Compressor	D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)
F2	F4	—	: Fusible link box (battery)	C1	F38	GR/3	: Ignition coil No. 5 (with power transistor)
G3	F5	B/3	: Battery current sensor	D3	F39	GR/3	: Ignition coil No. 6 (with power transistor)

C4	F6	—	: Generator	A2	F40	B/3	: Power steering pressure sensor
C5	F7	B/3	: Generator	A4	F41	GR/1	: Oil pressure switch
E4	F8	W/3	: Primary speed sensor	E4	F46	B/22	: CVT unit
A3	F9	—	: Engine ground	D1	F55	B/3	: Camshaft position sensor (PHASE)(bank 1)
G1	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
E3	F11	GR/2	: Engine coolant temperature sensor	D1	F57	B/6	: Electric throttle control actuator
C1	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	D3	F60	B/3	: Camshaft position sensor (PHASE)(bank 2)
F3	F13	BR/48	: ECM	C3	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)
F3	F14	GR/32	: ECM	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)
A3	F15	—	: Engine ground	B2	F63	B/2	: VIAS control solenoid valve 1
E4	F16	B/48	: TCM (transmission control module)	B3	F64	B/2	: Electric controlled engine mount control solenoid valve
B2	F17	GR/2	: Fuel injector No. 1	C2	F65	B/2	: VIAS control solenoid valve 2
C3	F18	GR/2	: Fuel injector No. 2	A3	F66	G/2	: Intake valve timing control solenoid valve (bank 2)
C2	F19	GR/2	: Fuel injector No. 3	A2	F67	G/2	: Intake valve timing control solenoid valve (bank 1)
C2	F20	GR/2	: Fuel injector No. 4	A3	F68	GR/2	: Engine oil temperature sensor
C2	F21	GR/2	: Fuel injector No. 5	G2	F70	B/10	: Joint connector-F01
D2	F22	GR/2	: Fuel injector No. 6	B1	F71	GR/6	: Joint connector-F03
E2	F23	B/3	: Secondary speed sensor	F4	F72	B/10	: Joint connector-F04
E3	F24	B/2	: Back-up lamp switch	F4	F73	B/10	: Joint connector-F05
E2	F26	GR/2	: Condenser-2	D3	F74	W/4	: Joint connector-F08
F3	F27	—	: Starter motor	G2	F75	W/4	: Joint connector-F07
F3	F28	GR/1	: Starter motor	E2	F76	L/4	: To F201
D2	F29	L/2	: EVAP canister purge volume control solenoid valve	Knock sensor sub-harness			
D4	F30	B/3	: Crankshaft position sensor (POS)	E2	F201	L/4	: To F76
D1	F31	B/6	: Mass air flow sensor	C3	F202	GR/2	: Knock sensor (bank 1)
E3	F32	B/2	: Park/neutral position (PNP) switch	C3	F203	GR2	: Knock sensor (bank 2)
B1	F34	GR/3	: Ignition coil No. 1 (with power transistor)				

ENGINE CONTROL HARNESS (QR25DE)

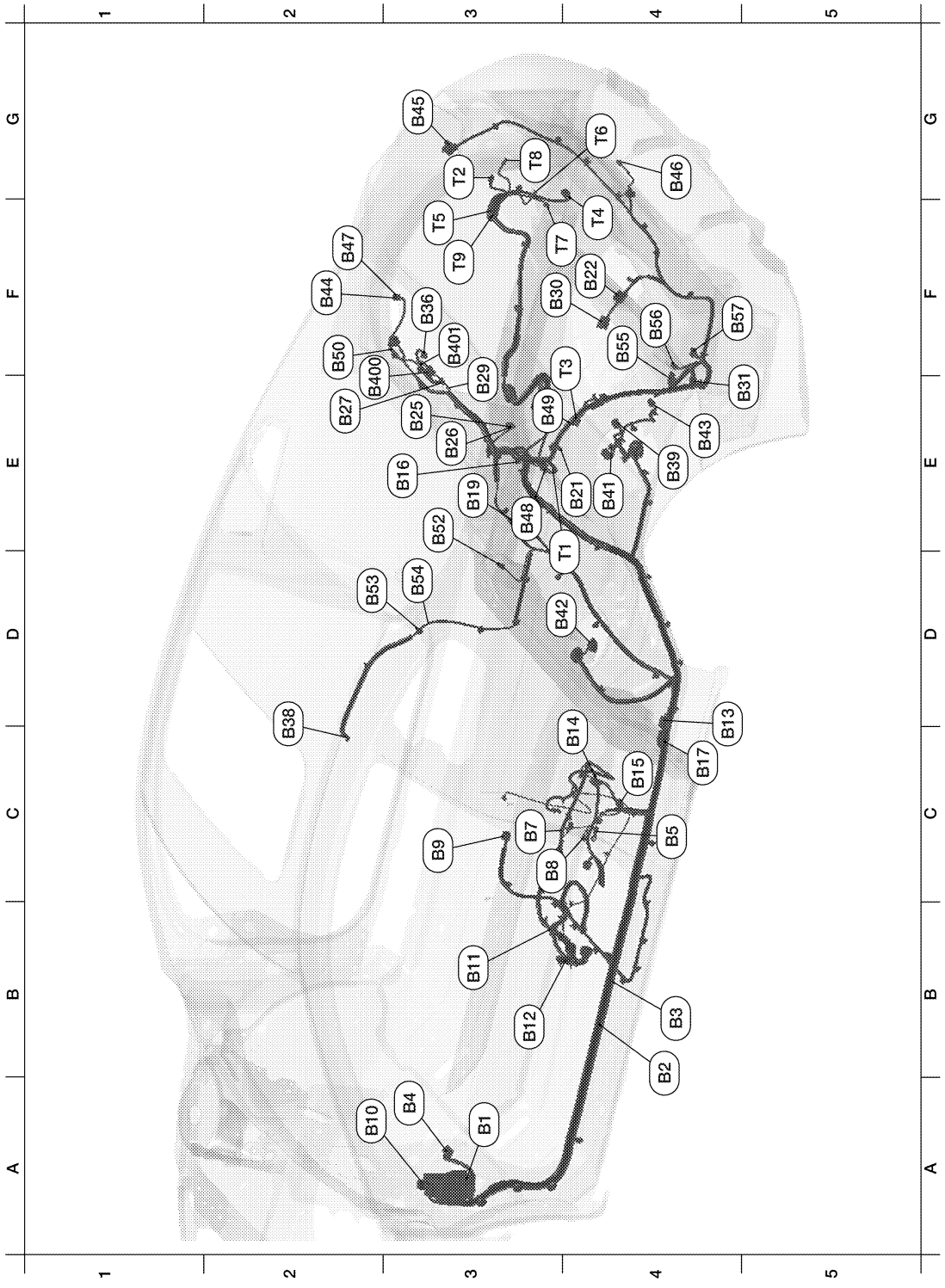


ABMIA0527GB

F2	F1	W/16	: To E3	E1	F31	B/6	: Mass air flow sensor
G2	F2	W/10	: To E11	E2	F32	B/2	: Park/neutral position (PNP) switch (with M/T)
C4	F3	B/12	: A/C Compressor	B3	F34	GR/3	: Ignition coil No. 1 (with power transistor)
F2	F4	—	: Fusible link box (battery)	B2	F35	GR/3	: Ignition coil No. 2 (with power transistor)
G3	F5	B/3	: Battery current sensor	C3	F36	GR/3	: Ignition coil No. 3 (with power transistor)

C3	F6	—	: Generator	D3	F37	GR/3	: Ignition coil No. 4 (with power transistor)
C3	F7	B/3	: Generator	A2	F40	B/3	: Power steering pressure sensor
E2	F8	W/3	: Primary speed sensor	C2	F41	GR/1	: Oil pressure switch
B3	F9	—	: Engine ground	C2	F42	B/4	: Heated oxygen sensor 2
G2	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	D1	F43	GR/5	: Tumble control valve actuator
E2	F11	GR/2	: Engine coolant temperature sensor	D3	F44	GR/4	: Air fuel ratio (A/F) sensor 1
E4	F13	BR/48	: ECM	C2	F45	GR/2	: Knock sensor
F4	F14	GR/32	: ECM	F3	F46	B/22	: CVT unit
B3	F15	—	: Engine ground	F3	F47	B/6	: Joint connector-F01
E4	F16	B/48	: TCM (transmission control module)	E4	F48	B/10	: Joint connector-F02
B2	F17	GR/2	: Fuel injector No. 1	D3	F49	B/10	: Joint connector-F03
B2	F18	GR/2	: Fuel injector No. 2	D4	F50	B/10	: Joint connector-F04
C1	F19	GR/2	: Fuel injector No. 3	D3	F51	B/6	: Joint connector-F05
D1	F20	GR/2	: Fuel injector No. 4	F3	F52	B/10	: Joint connector-F06
D1	F23	B/3	: Secondary speed sensor	G2	F53	B/4	: Joint connector-F07
E3	F24	B/2	: Back-up lamp switch	D2	F55	B/3	: Camshaft position sensor (PHASE)
F3	F25	B/10	: Park/neutral position (PNP) switch (with CVT)	D1	F57	B/6	: Electric throttle control actuator
D2	F26	GR/2	: Condenser-2	C2	F58	B/4	: To F101
E3	F27	—	: Starter motor	A2	F59	G/2	: Intake valve timing control solenoid valve
E3	F28	—	: Starter motor	C1	F101	B/4	: To F58
C1	F29	L/2	: EVAP canister purge volume control solenoid valve	C2	F102	GR/4	: Heated oxygen sensor 3
C2	F30	B/3	: Crankshaft position sensor (POS)				

BODY HARNESS

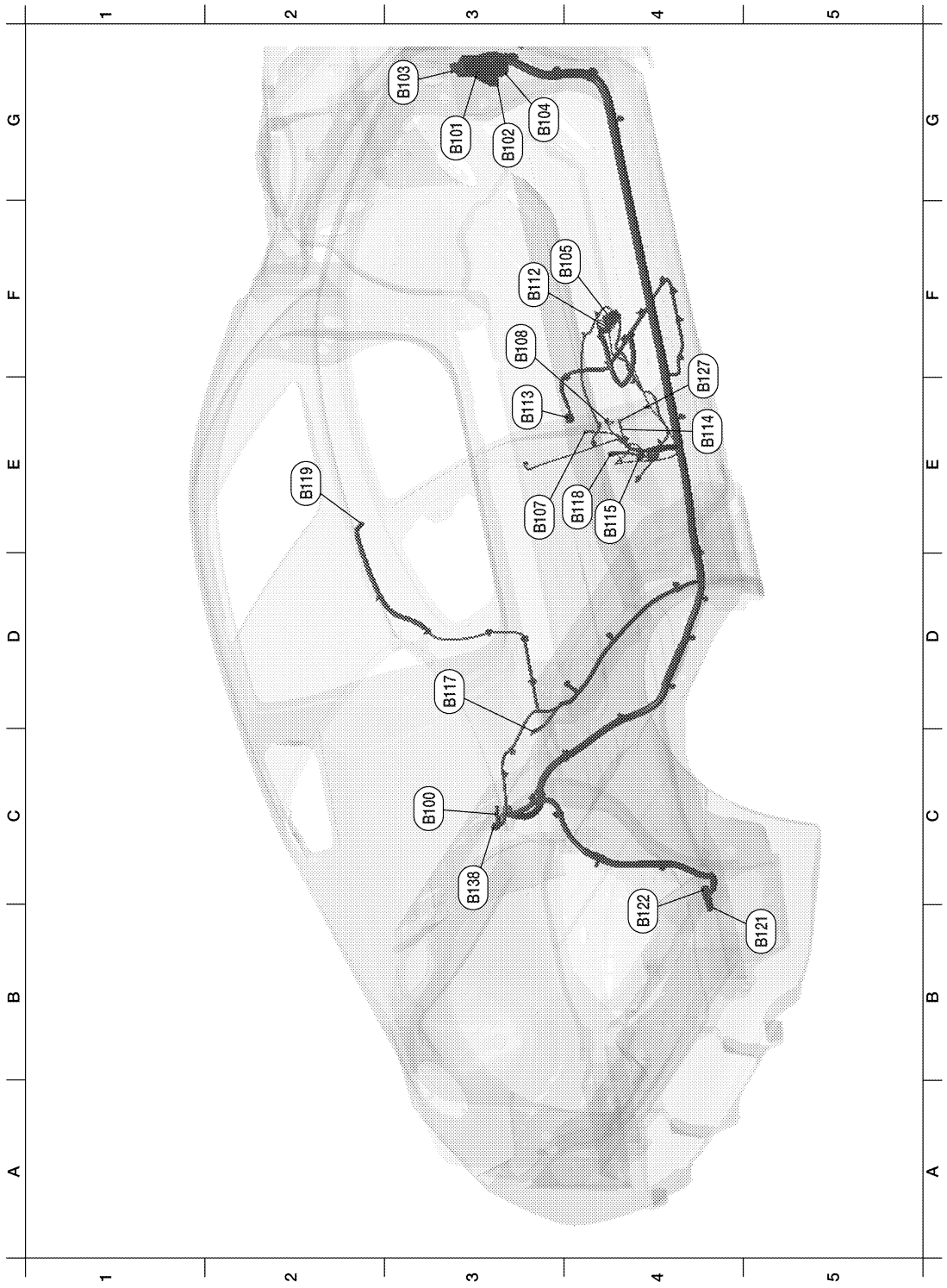


ABMIA0528GB

A3	B1	SMJ	: To M6	E4	B39	B/2	: EVAP canister vent control valve
B4	B2	W/4	: Joint connector-B01	E4	B41	GR/3	: EVAP control system pressure sensor
B4	B3	W/4	: Joint connector-B02	D3	B42	GR/5	: Fuel level sensor unit and fuel pump
A3	B4	BR/12	: Fuse block (J/B)	E4	B43	GR/4	: Rear wheel sensor
C4	B5	—	: Body ground	F2	B44	W/2	: Rear speaker RH

C3	B7	—	: Body ground	G3	B45	W/6	: Rear combination lamp RH
C3	B8	W/3	: Door switch LH	G4	B46	GR/2	: Rear bumper antenna
C3	B9	Y/12	: Air bag diagnosis sensor unit	F2	B47	W/2	: Rear subwoofer RH
A2	B10	W/16	: To E29	E4	B48	W/16	: To T1
B3	B11	Y/2	: Front LH side air bag module	F2	B50	W/6	: To B138
B3	B12	W/8	: To B201	D3	B53	B/1	: Rear window defogger
C4	B13	W/6	: Joint connector-B03	D3	B54	B/1	: Rear window defogger
D4	B14	Y/2	: Front LH seat belt pre-tensioner	F4	B55	W/32	: Bluetooth control unit
C4	B15	Y/2	: LH side air bag (satellite) sensor	F4	B56	W/8	: Bluetooth control unit
E3	B16	BR/2	: Rear tweeter LH	F5	B57	W/16	: Satellite radio tuner or prewiring for satellite radio tuner
C4	B17	W/2	: Condenser-1	F3	B400	W/2	: To B27
E3	B19	—	: Body ground	F3	B401	W/2	: High mounted stop lamp
E3	B21	L/12	: Joint connector-B06	Tail lamp sub-harness			
F4	B22	W/6	: Joint connector-B07	E4	T1	W/16	: To B48
E3	B25	W/2	: Rear subwoofer LH	G3	T2	BR/2	: Trunk opener request switch
E3	B26	W/2	: Rear speaker LH	F4	T4	W/4	: Trunk lamp switch and trunk release solenoid
E2	B27	W/2	: To B400	F3	T5	W/4	: Joint connector-T01
F3	B29	GR/2	: Rear parcel shelf antenna	F4	T6	BR/2	: License plate lamp LH
F4	B30	W/6	: Rear combination lamp LH	F4	T7	W/4	: Rear veiw camera
F5	B31	W/16	: Rear view camera control unit	G4	T8	BR/2	: License plate lamp RH
F3	B36	W/2	: Trunk room lamp	F4	T9	W/4	: Joint connector-T02
D2	B38	Y/2	: LH side front curtain air bag module				

BODY NO. 2 HARNESS

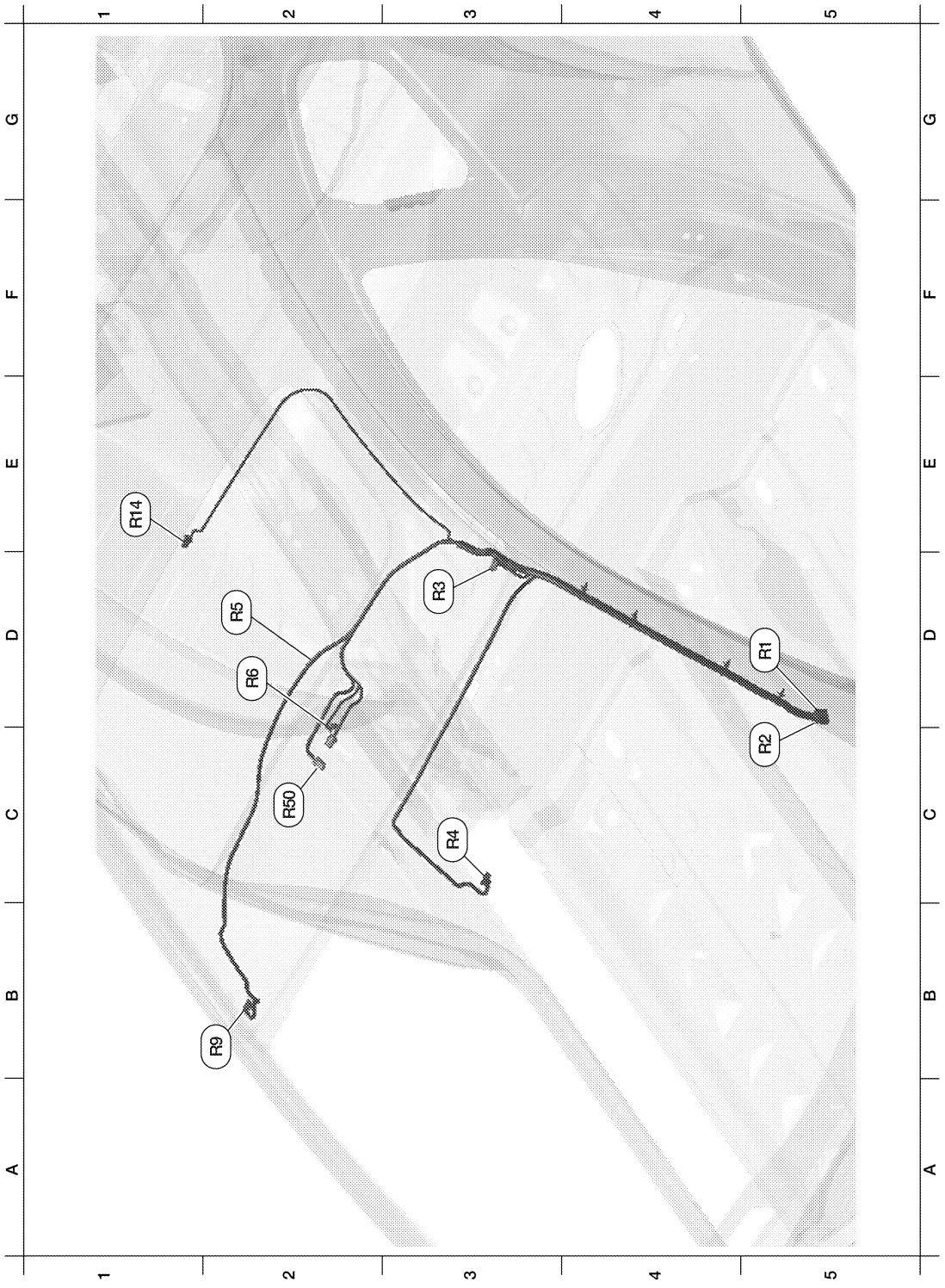


ABMIA0529GB

C3	B100	BR/2	: Rear tweeter RH	E3	B113	Y/12	: Air bag diagnosis sensor unit
G3	B101	W/32	: To M2	E4	B114	—	: Body ground
G3	B102	W/24	: To M8	E4	B115	Y/2	: Front RH seat belt pre-tensioner
G3	B103	BR/16	: To M9	D3	B117	—	: Body ground
G3	B104	BR/12	: To M10	E4	B118	Y/2	: RH side air bag (satellite) sensor

F4	B105	W/8	: To B301	E2	B119	Y/2	: RH side curtain air bag module
E3	B107	—	: Body ground	B5	B121	BR/23	: BOSE speaker amp.
F3	B108	W/3	: Door switch RH	B4	B122	BR/14	: BOSE speaker amp.
F3	B112	Y/2	: Front RH side air bag module	E4	B127	—	: Body ground

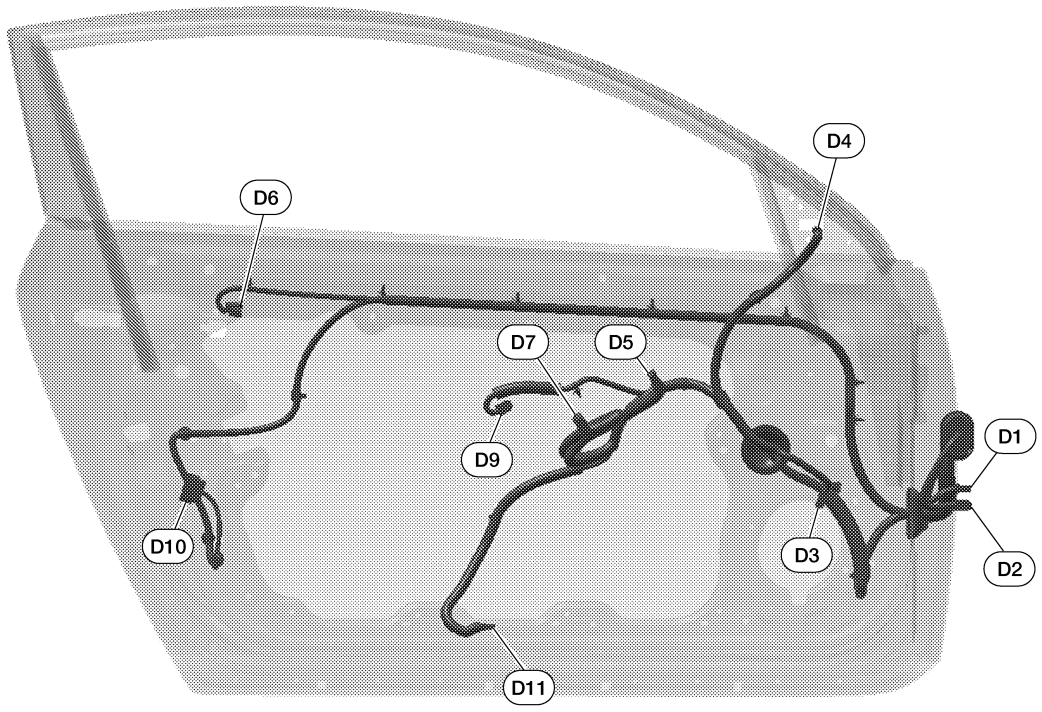
ROOM LAMP HARNESS



ABMIA0530GB

D5	R1	W/16	: To M7	C2	R6	W/3	: Sunroof switch
D5	R2	W/4	: To M13	C2	R7	W/4	: Microphone
D3	R3	W/2	: Vanity mirror lamp LH	B2	R9	W/2	: Vanity mirror lamp RH
C3	R4	B/10	: Auto anti-dazzling inside mirror	D1	R14	W/6	: Interior room lamp
D2	R5	W/10	: Sunroof motor assembly	C2	R50	GR/6	: Front room/map lamp assembly

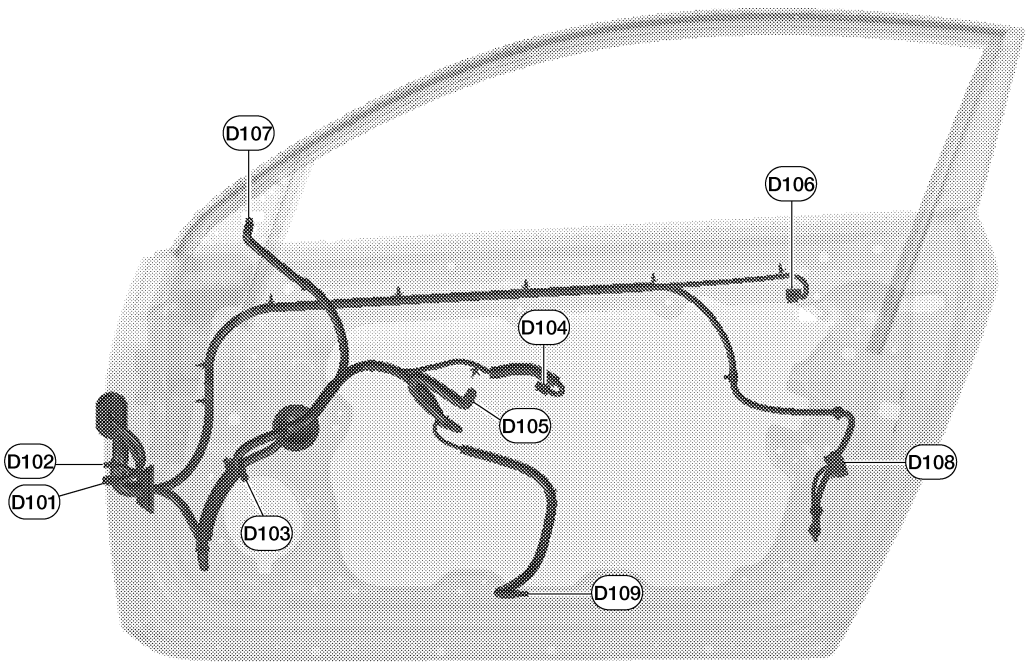
DOOR LH HARNESS



ALMIA0399GB

D1	W/16	: To M11	D6	B/4	: Outside handle LH
D2	W/16	: To M12	D7	W/16	: Main power window and door lock/unlock switch
D3	W/2	: Door speaker LH (with base audio system)	D8	W/3	: Main power window and door lock/unlock switch
D3	BR/2	: Door speaker LH (with BOSE audio system)	D9	W/6	: Front power window motor LH
D4	W/8	: Door mirror LH	D10	GR/6	: Door lock assembly LH
D5	W/16	: Door mirror remote control switch	D11	W/2	: Step lamp LH

DOOR RH HARNESS



ALMIA0400GB

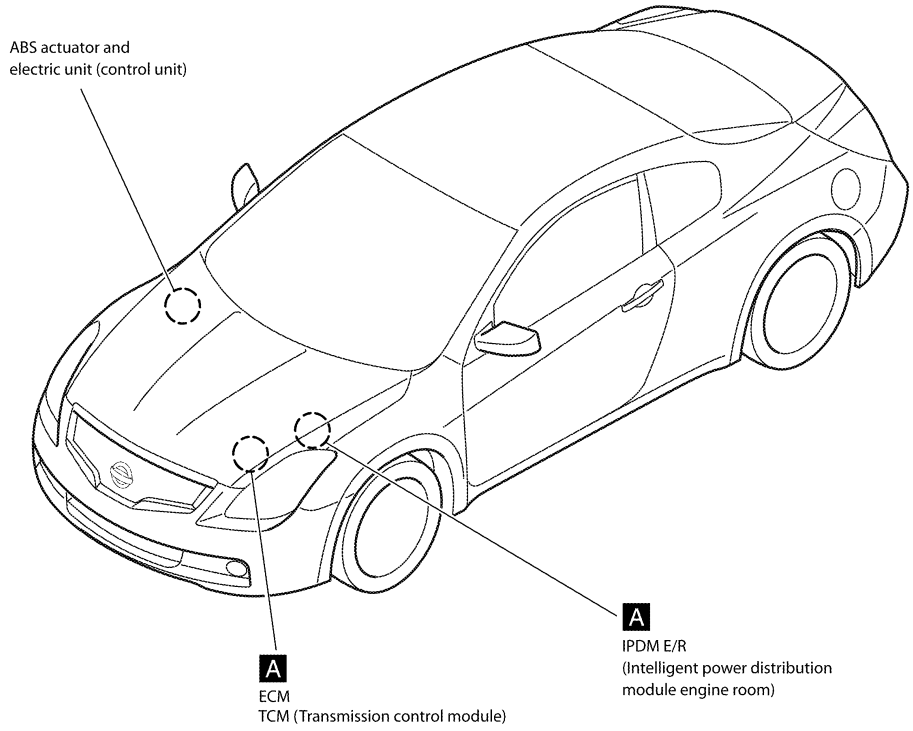
D101	W/10	: To M14	D105	W/16	: Power window and door lock/unlock switch RH (with left and right front power window anti-pinch system)
D102	W/12	: To M15	D106	B/4	: Outside handle RH
D103	W/2	: Door speaker RH (with base audio system)	D107	W/8	: Door mirror RH
D103	BR/2	: Door speaker RH (with BOSE audio system)	D108	GR/6	: Door lock actuator RH
D104	W/6	: Front power window motor RH	D109	W/2	: Step lamp RH
D105	W/12	: Power window and door lock/unlock switch RH (with left front only power window anti-pinch system)			

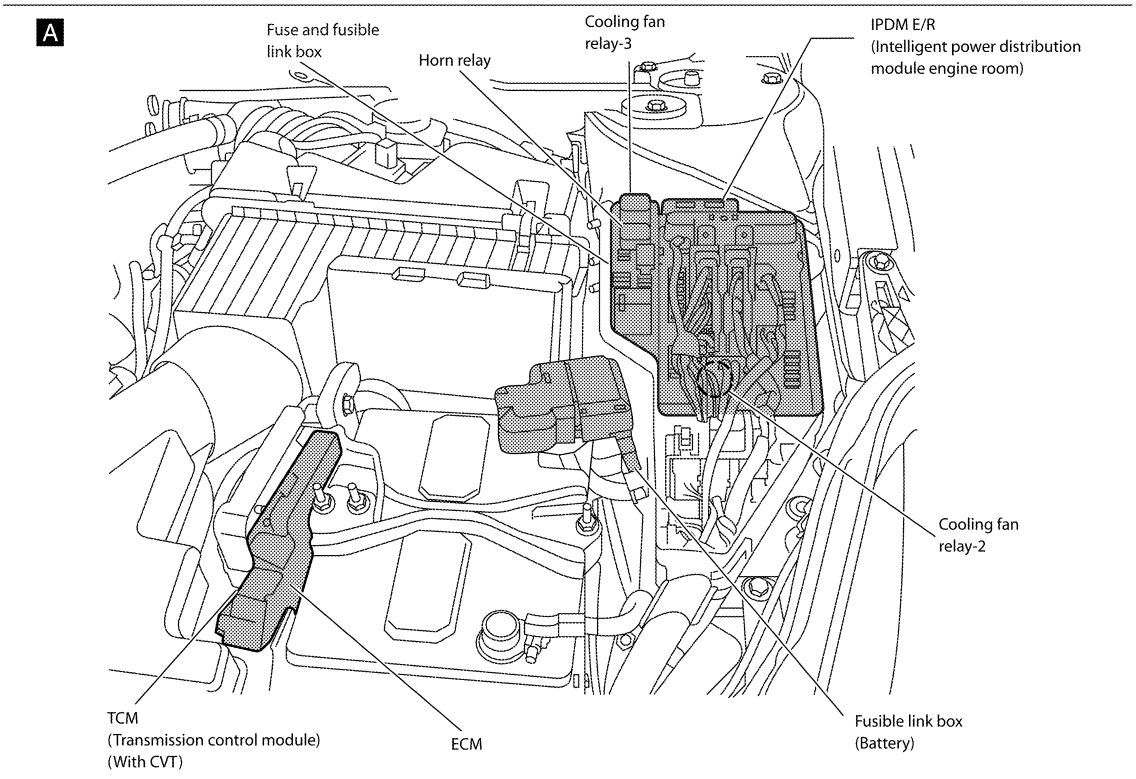
ELECTRICAL UNITS LOCATION

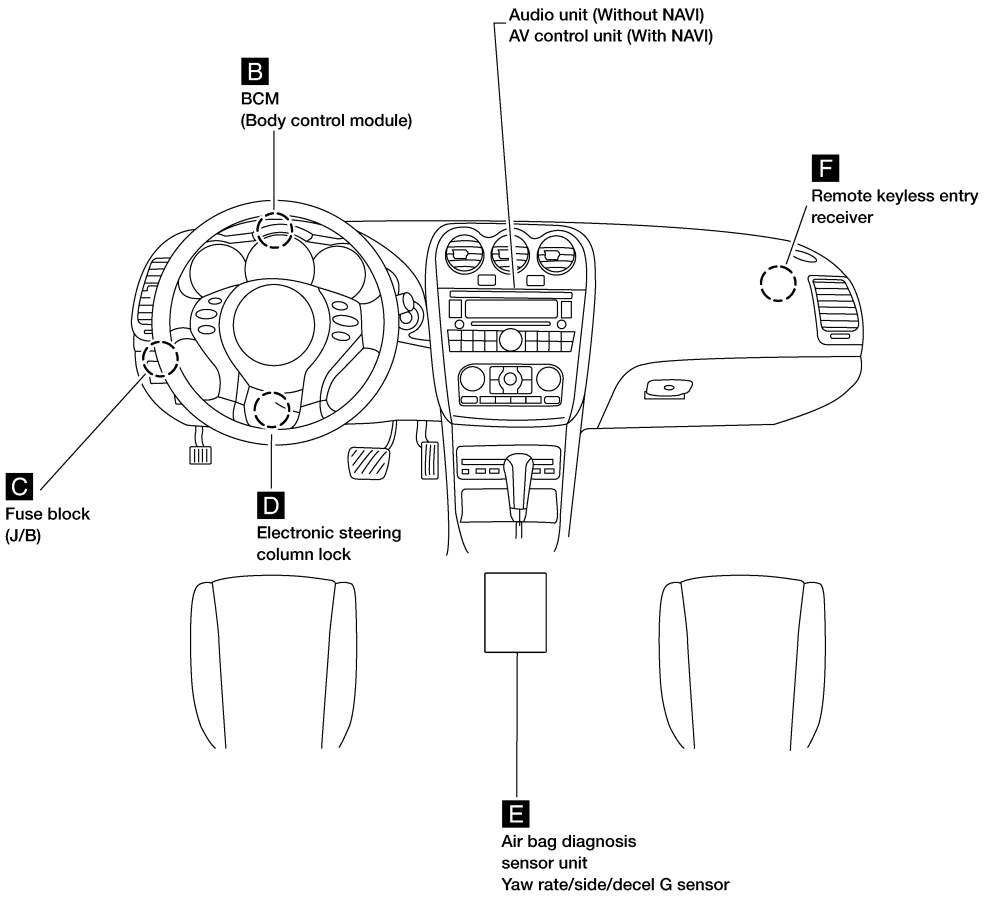
Electrical Units Location

INFOID:0000000004206730

ENGINE COMPARTMENT

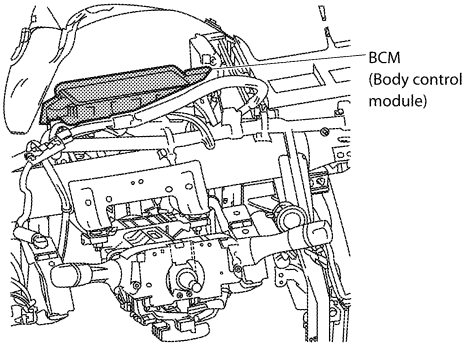




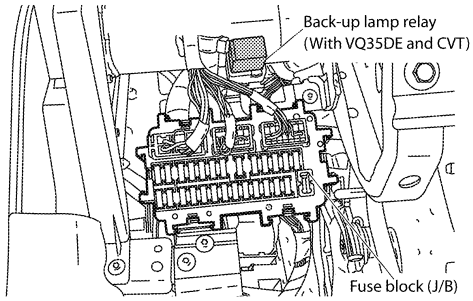


ABMIA0516GB

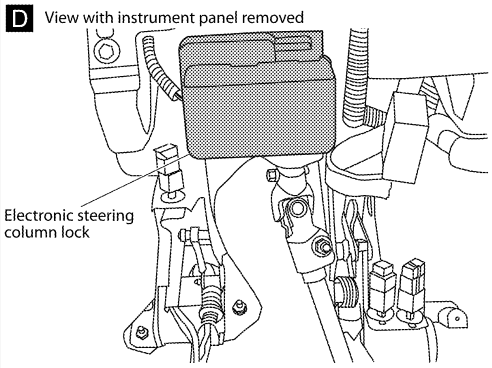
B View with instrument panel removed



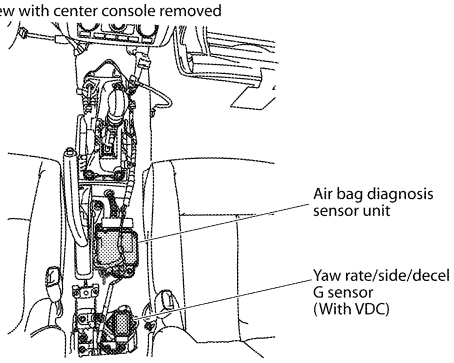
C View with lower driver instrument panel removed



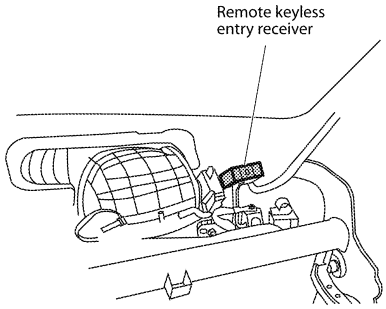
D View with instrument panel removed



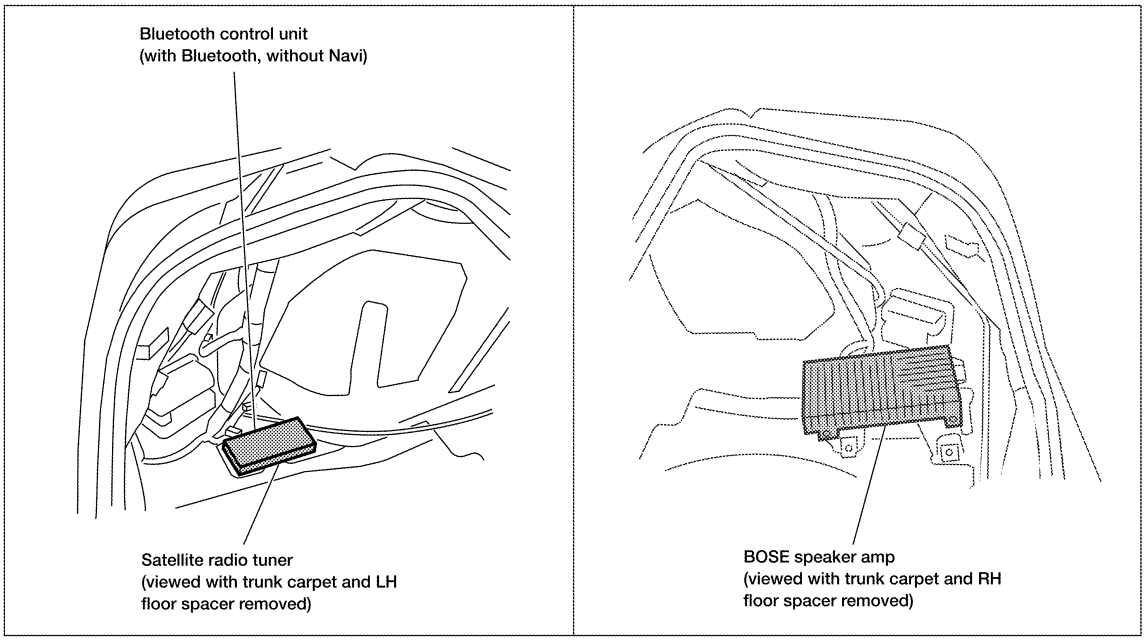
E View with center console removed

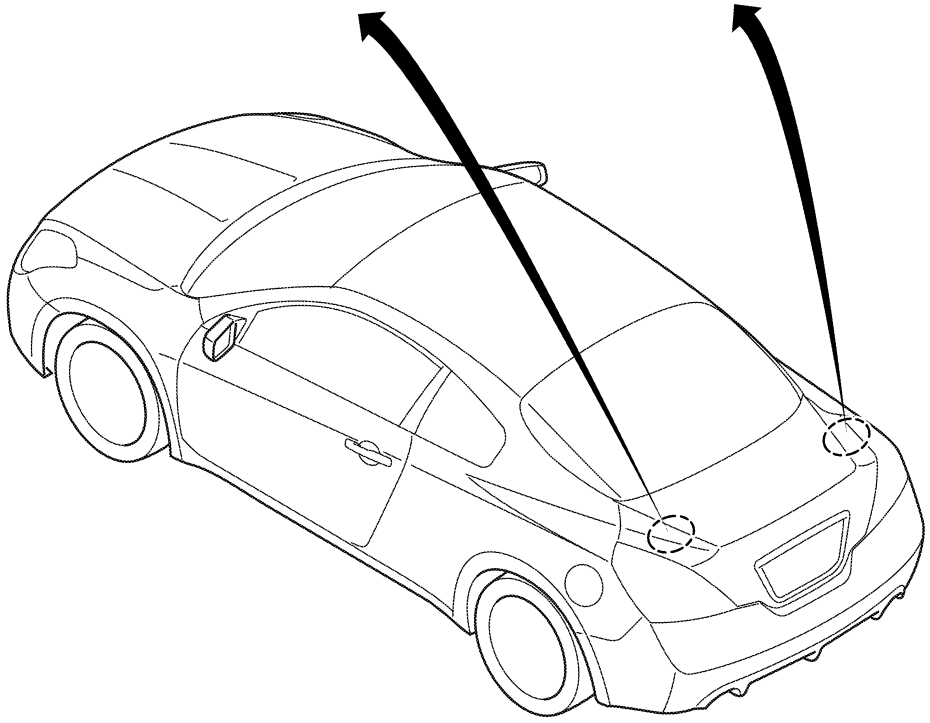


F View with instrument panel removed



ABMIA0517GB





ABMIA0518GB

HARNESS CONNECTOR

Description

INFOID:0000000004494679

HARNESS CONNECTOR (TAB-LOCKING TYPE)

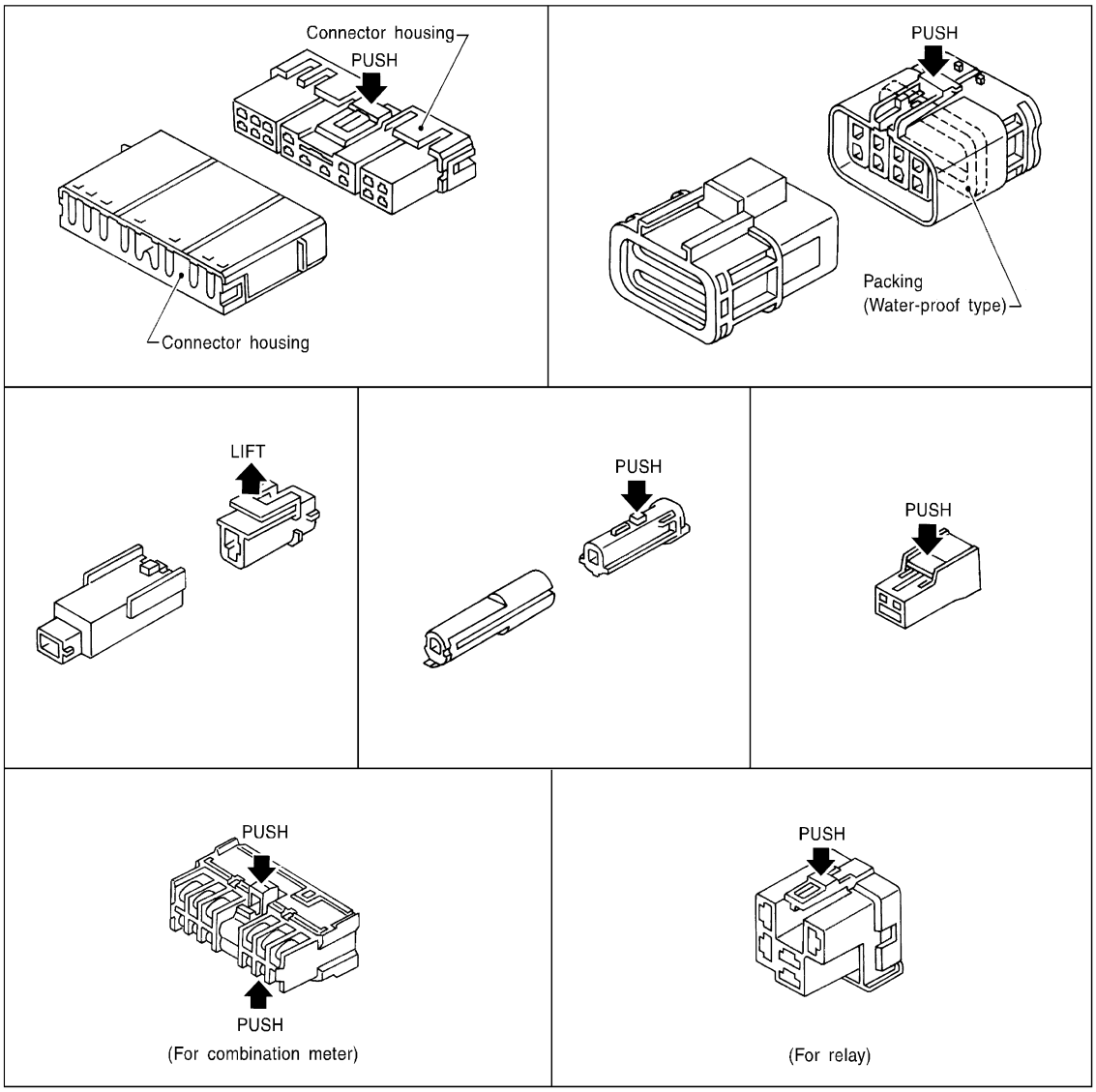
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

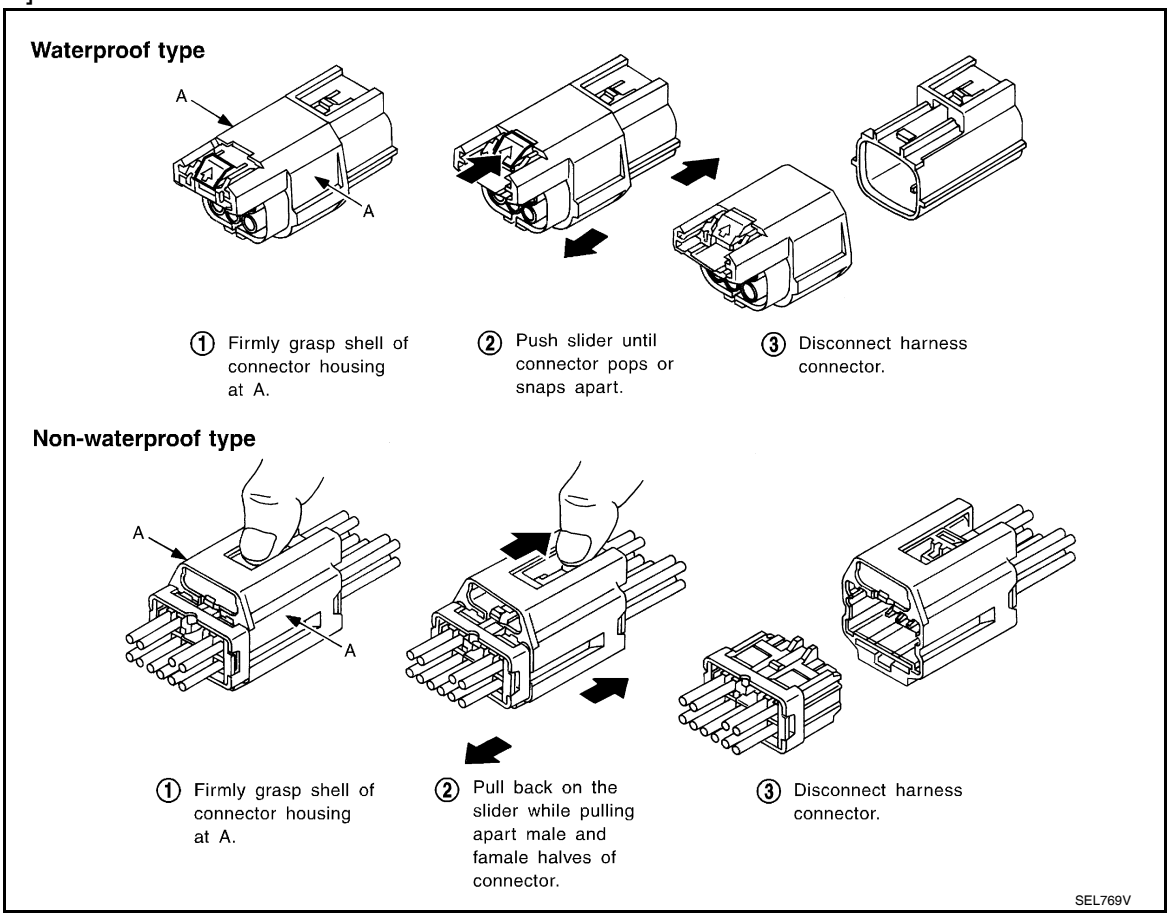
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]

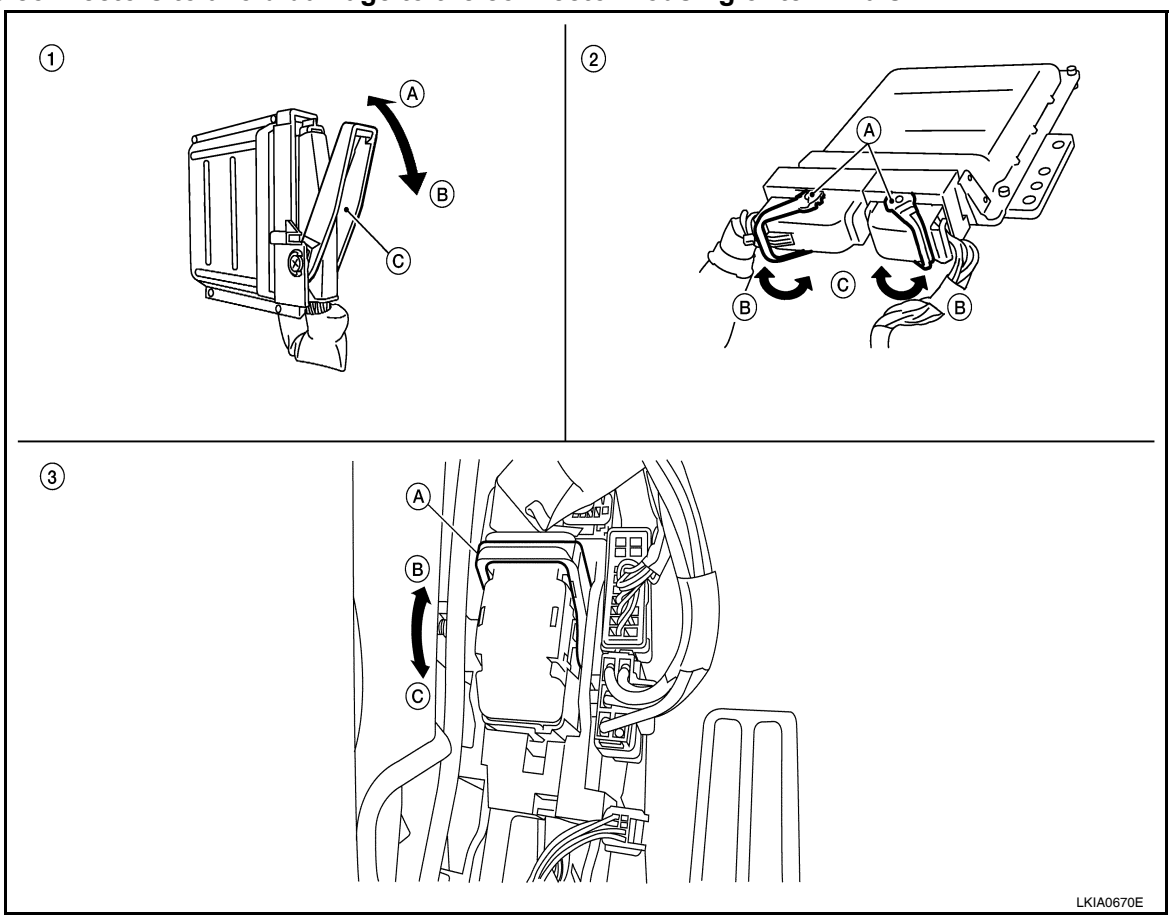


HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

CAUTION:

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



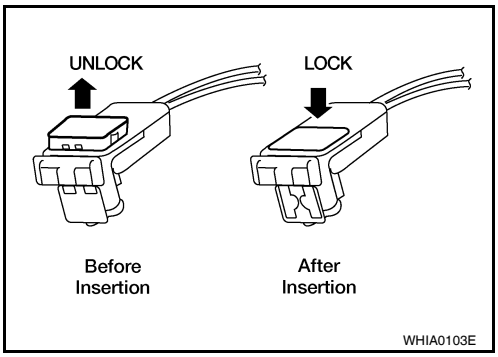
1. Control unit with single lever
   A. Fasten
   B.Loosen
   C.Lever
2. Control unit with dual lever
   A. Fasten
   B.Loosen
   C.Lever
3. SMJ connector
   A. Fasten
   B.Loosen
   C.Lever

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS components.
- Always push down to lock black locking tab afte4r installing connector to SRS components.n When locked, the black locking tab is level with the connector housing.

CAUTION:

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



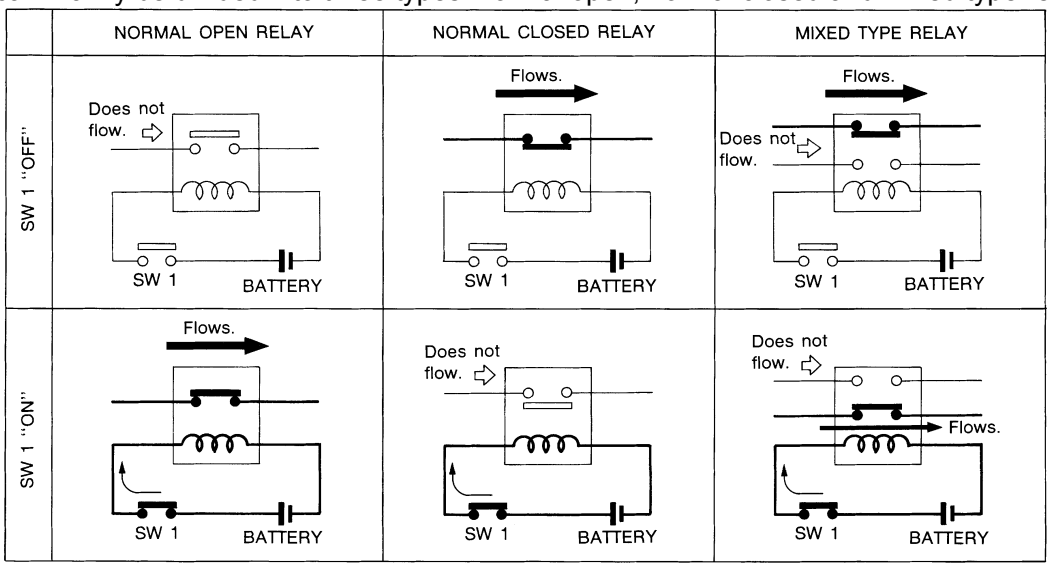
STANDARDIZED RELAY

Description

INFOID:0000000004206732

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

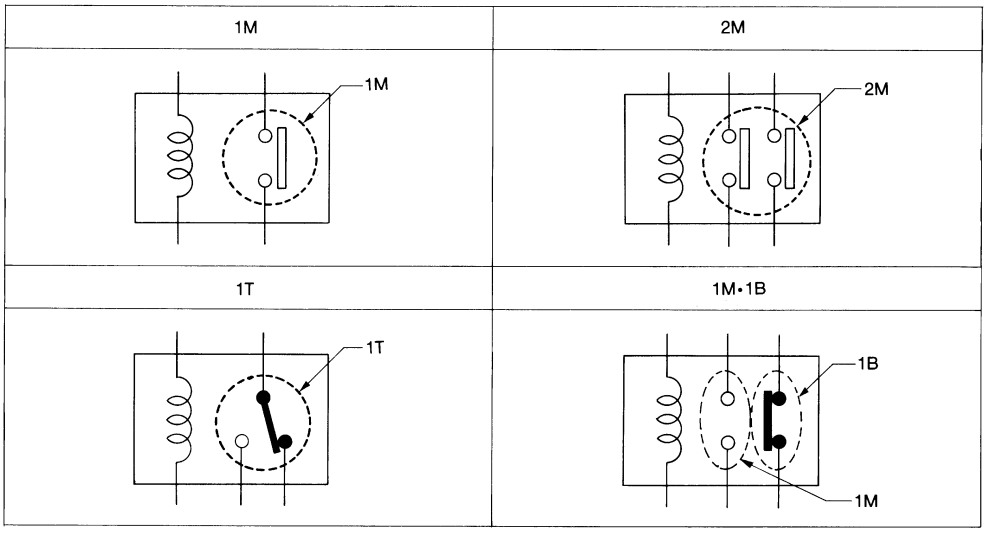
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



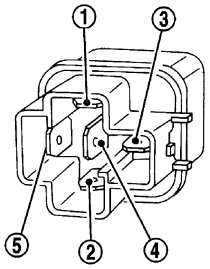
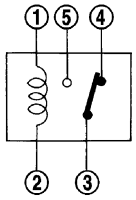
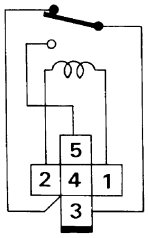
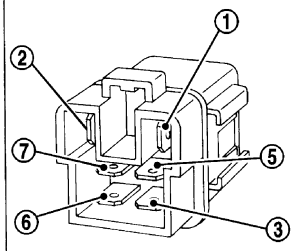
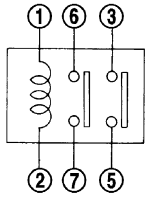
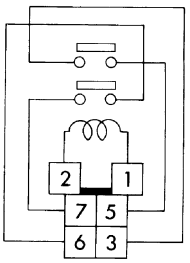
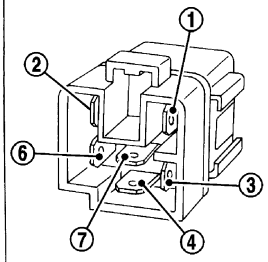
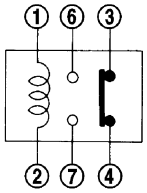
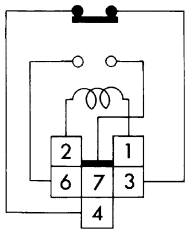
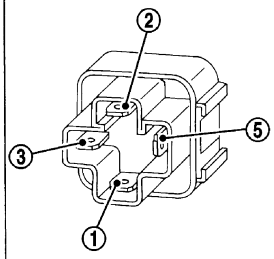
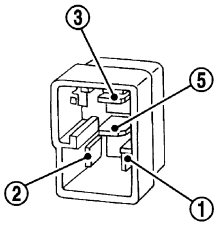
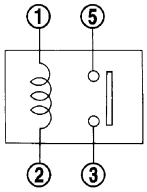
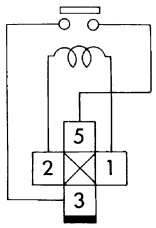
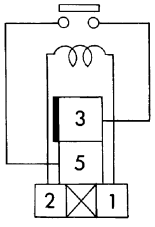
SEL881H

TYPE OF STANDARDIZED RELAYS

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



SEL882H

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

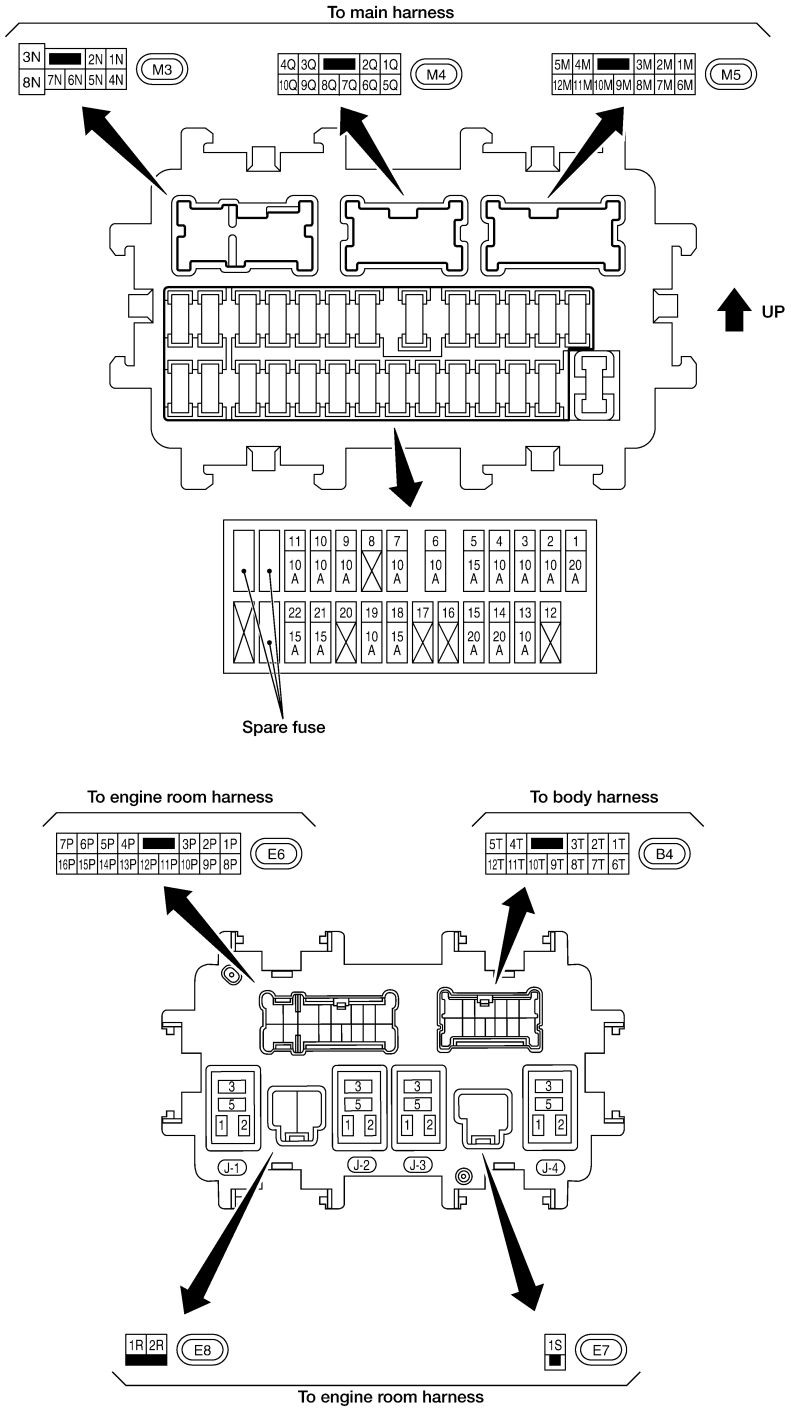
The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000004206733



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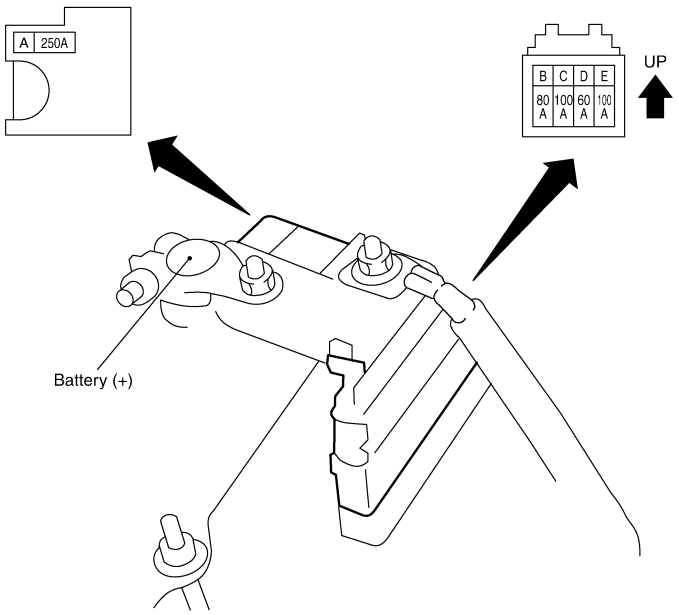
FUSE, FUSIBLE LINK AND RELAY BOX

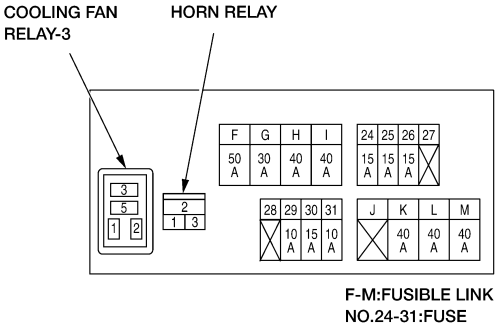
Terminal Arrangement

INFOID:0000000004206734

FUSIBLE LINK BOX (BATTERY)



FUSE AND FUSIBLE LINK BOX



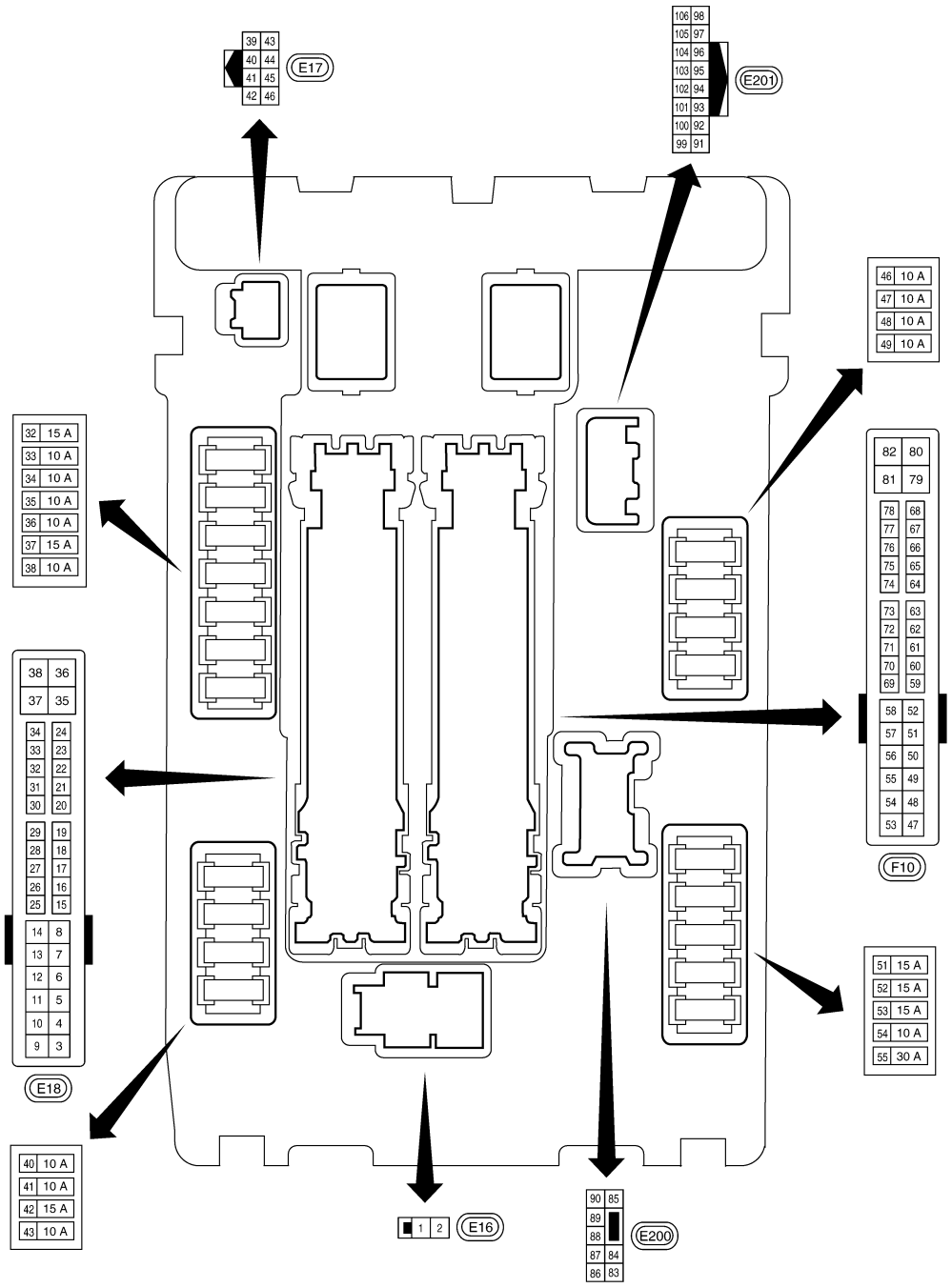
F-M:FUSIBLE LINK
NO.24-31:FUSE

ABMIA0520GB

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

Fuse, Connector and Terminal Arrangement

INFOID:0000000004494674



ABMIA0308GB

PRECAUTION

PRECAUTIONS

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

INFOID:0000000004206735

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.**

Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000004499303

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.

Battery Service

INFOID:0000000004206736

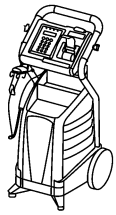
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

PREPARATION

PREPARATION

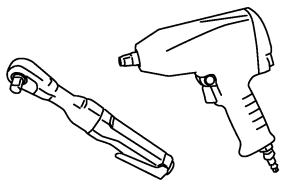
Special Service Tool

INFOID:0000000004206737

Tool number (Kent Moore No.) Tool name	Description
(J-48087) Battery Service Center  WKIA5280E	Tests Battery. For operating instructions, refer to Technical Service Bulletin and Battery Service Center User Guide.

Commercial Service Tool

INFOID:0000000004206738

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

ON-VEHICLE REPAIR

BATTERY

Removal and Installation

INFOID:0000000004206739

REMOVAL

1. Remove air duct (front). Refer to EM-25, "Removal and Installation" QR25DE models, EM-129, "Removal and Installation" VQ35DE models.
2. Loosen battery terminal nuts, and disconnect both battery terminals.
   CAUTION:
   When disconnecting, disconnect the negative terminal first.
3. Remove battery frame nuts and battery frame.
4. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

When connecting, connect the positive terminal first.

Battery frame nut	**: 3.92 N·m (0.4 kg-m, 35 in-lb)**
Battery terminal nut	**: 5.4 N·m (0.55 kg-m, 48 in-lb)**

Reset electronic systems as necessary. Refer to PG-6, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

SERVICE DATA AND SPECIFICATIONS (SDS)

BATTERY

Battery

INFOID:0000000004206740

Type	GR.35 (BCI)
Capacity (5HR) minimum V-AH	52
Cold cranking current A @ -18°C (0°F)	525

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:0000000004206741

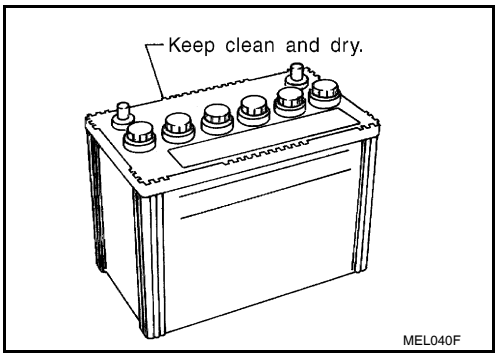
CAUTION:

- **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.**

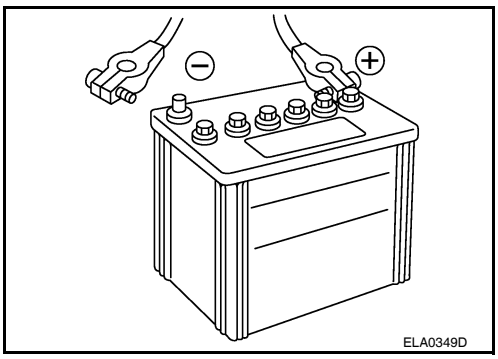
METHODS OF PREVENTING OVER-DISCHARGE

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

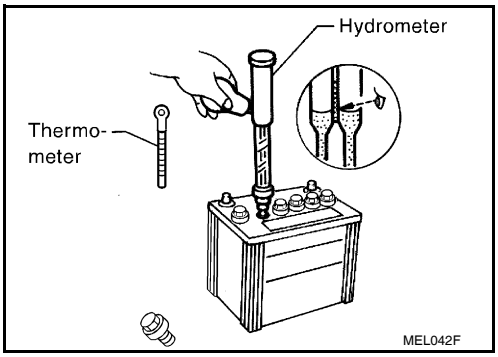
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level.
  This also applies to batteries designated as “low maintenance” and “maintenance-free”.



- 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.

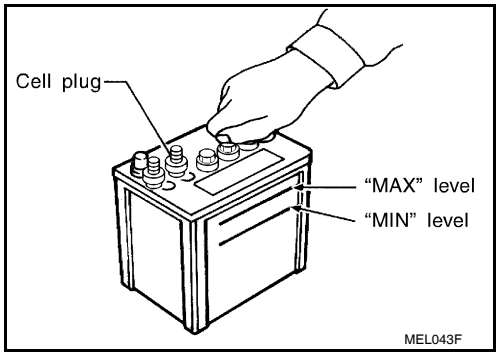


CHECKING ELECTROLYTE LEVEL

WARNING:

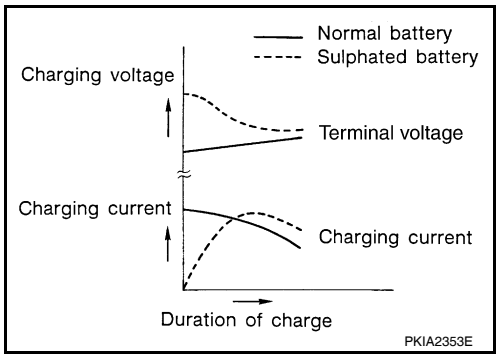
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

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



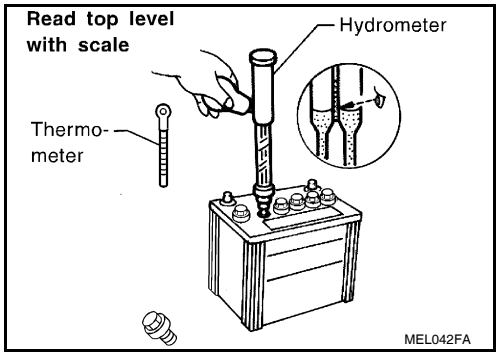
Sulphation

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

INFOID:0000000004206742

TROUBLE DIAGNOSIS WITH BATTERY SERVICE CENTER

For battery testing, use Battery Service Center (J-48087). For details and operating instructions, refer to Technical Service Bulletin and/or Battery Service Center User Guide.

INSPECTION AND ADJUSTMENT
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL
ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

INFOID:0000000004206743

Required Procedure After Battery Disconnection

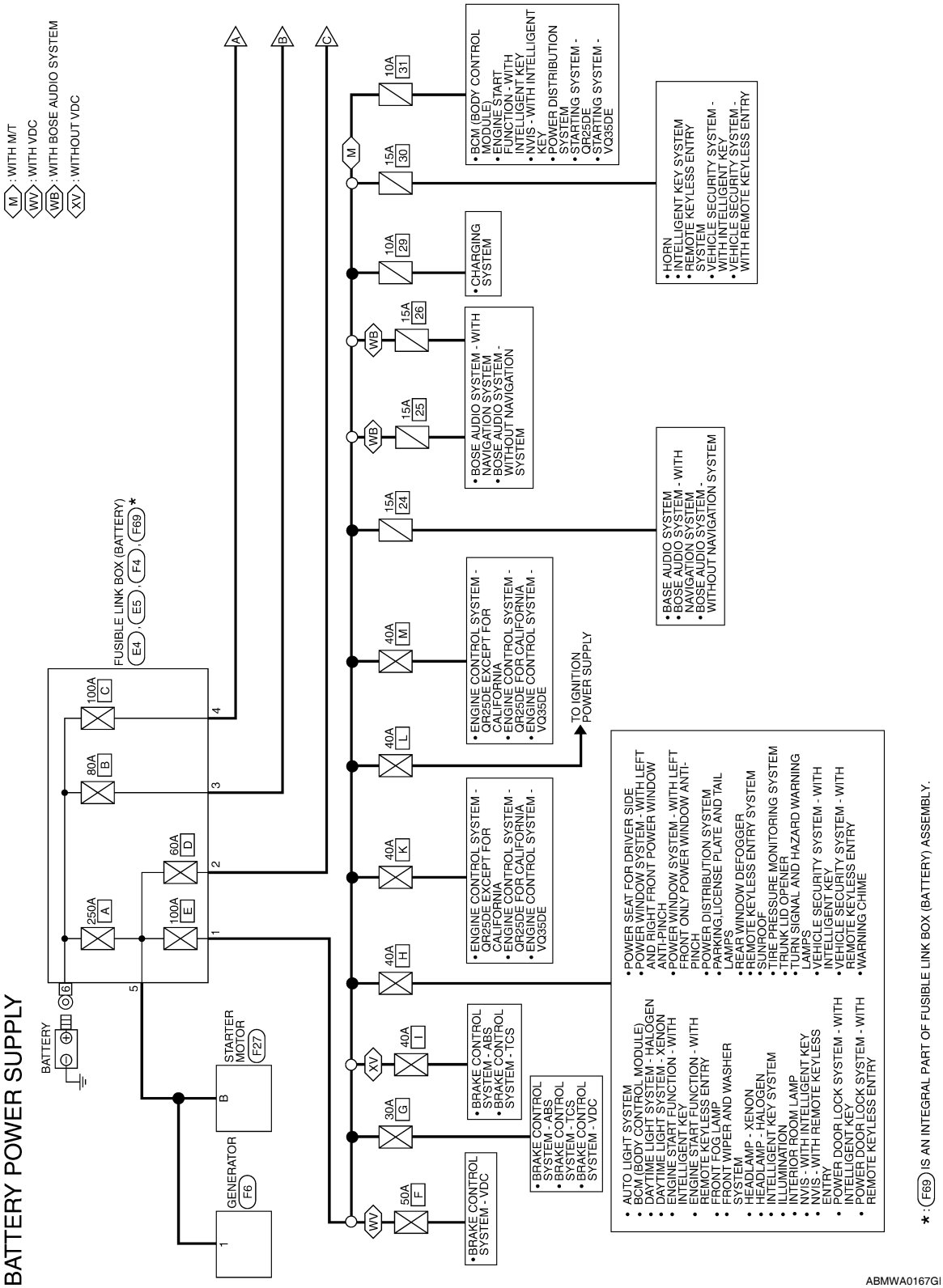
System	Item	Reference
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-143.
Glass, Window & Mirrors	Power Window System Initialization	LH only anti-pinch, refer to PWC-95. LH & RH front anti-pinch, refer to PWC-295.
Roof	Sunroof Memory Reset/Initialization	Refer to RF-6.
Automatic Temperature Control	Temperature Setting Trimmer	Refer to HAC-6.
	Foot Position Setting Trimmer	Refer to HAC-6.
	Inlet Port Memory Function	Refer to HAC-6.
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 AV-238.

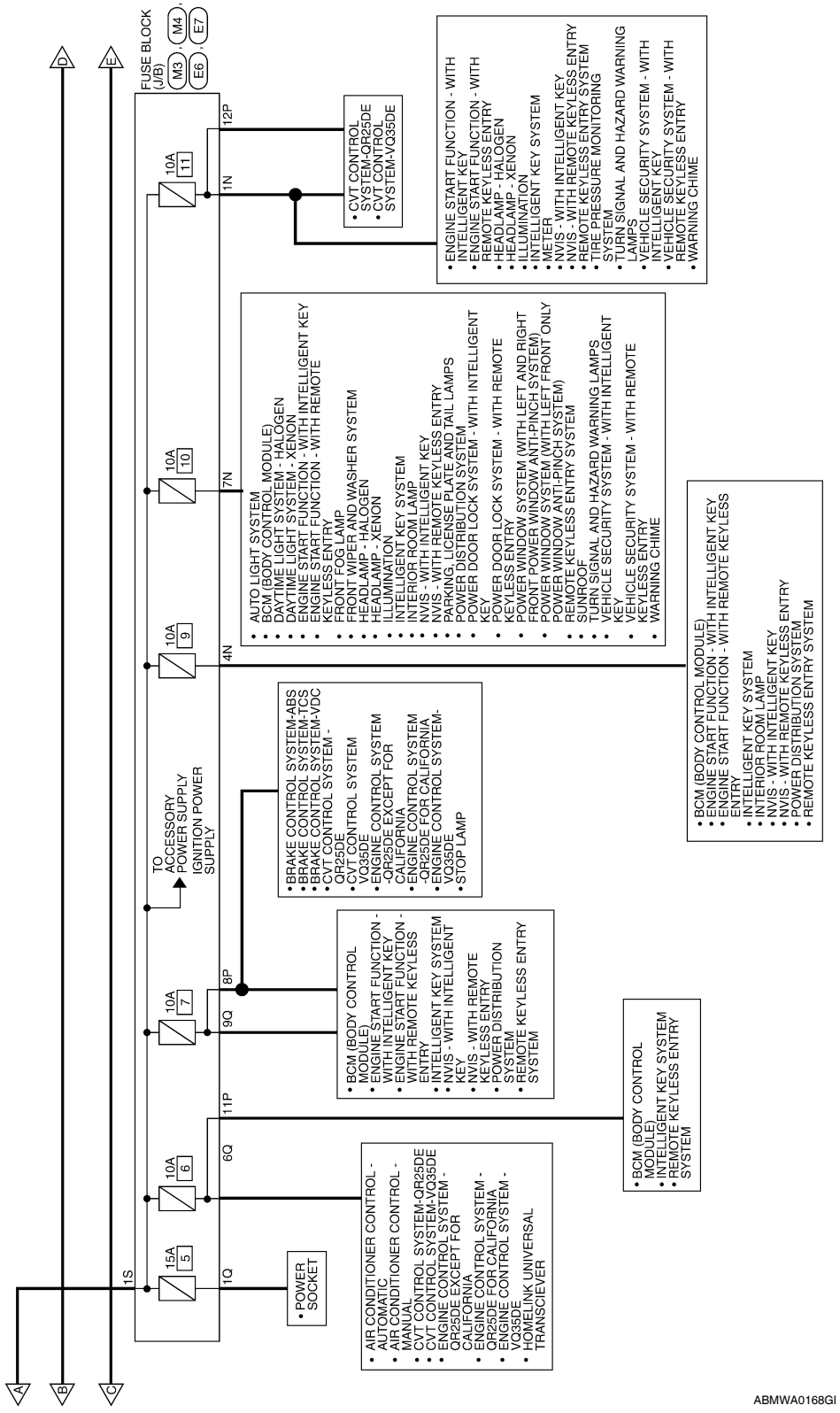
COMPONENT DIAGNOSIS

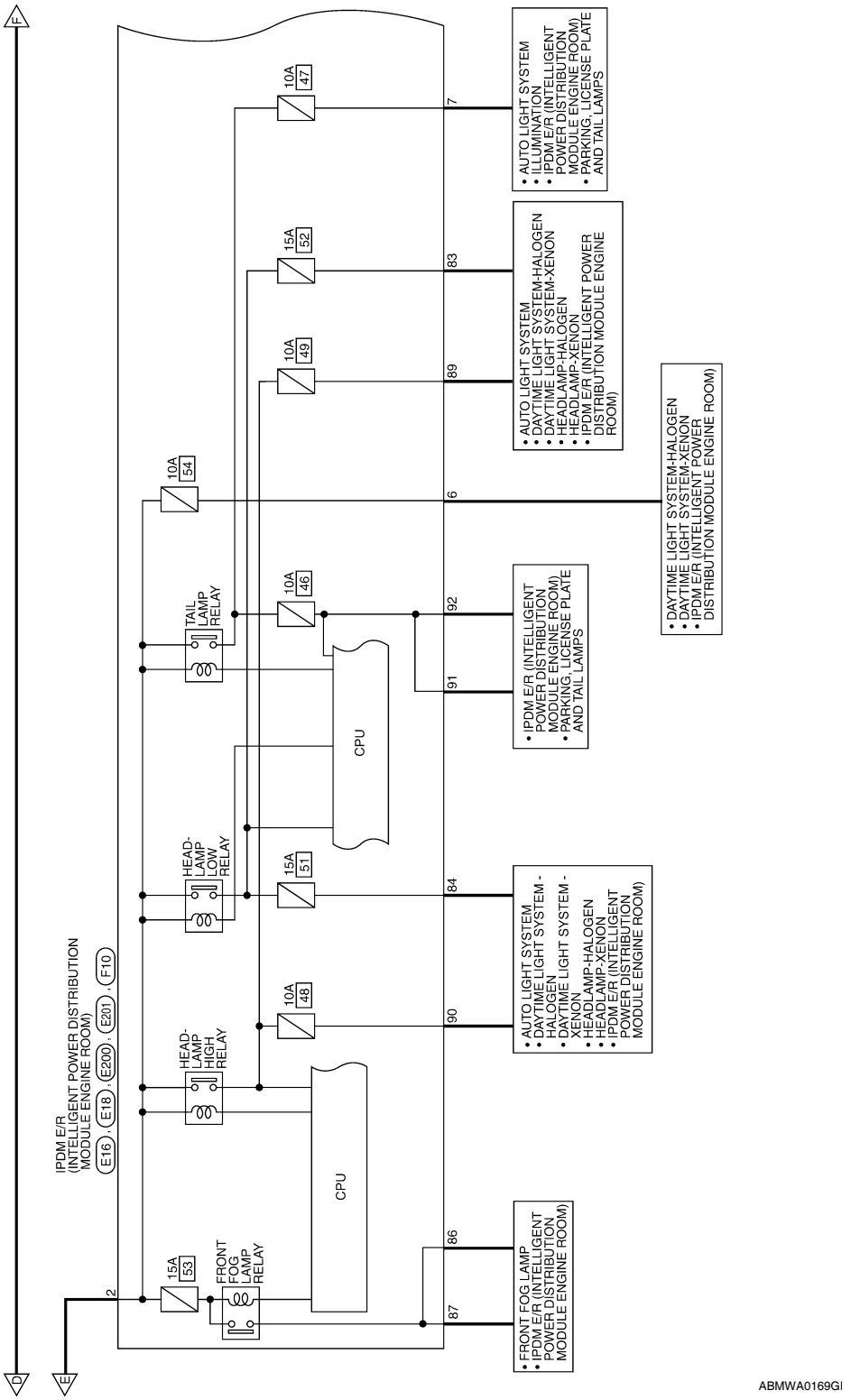
POWER SUPPLY ROUTING CIRCUIT

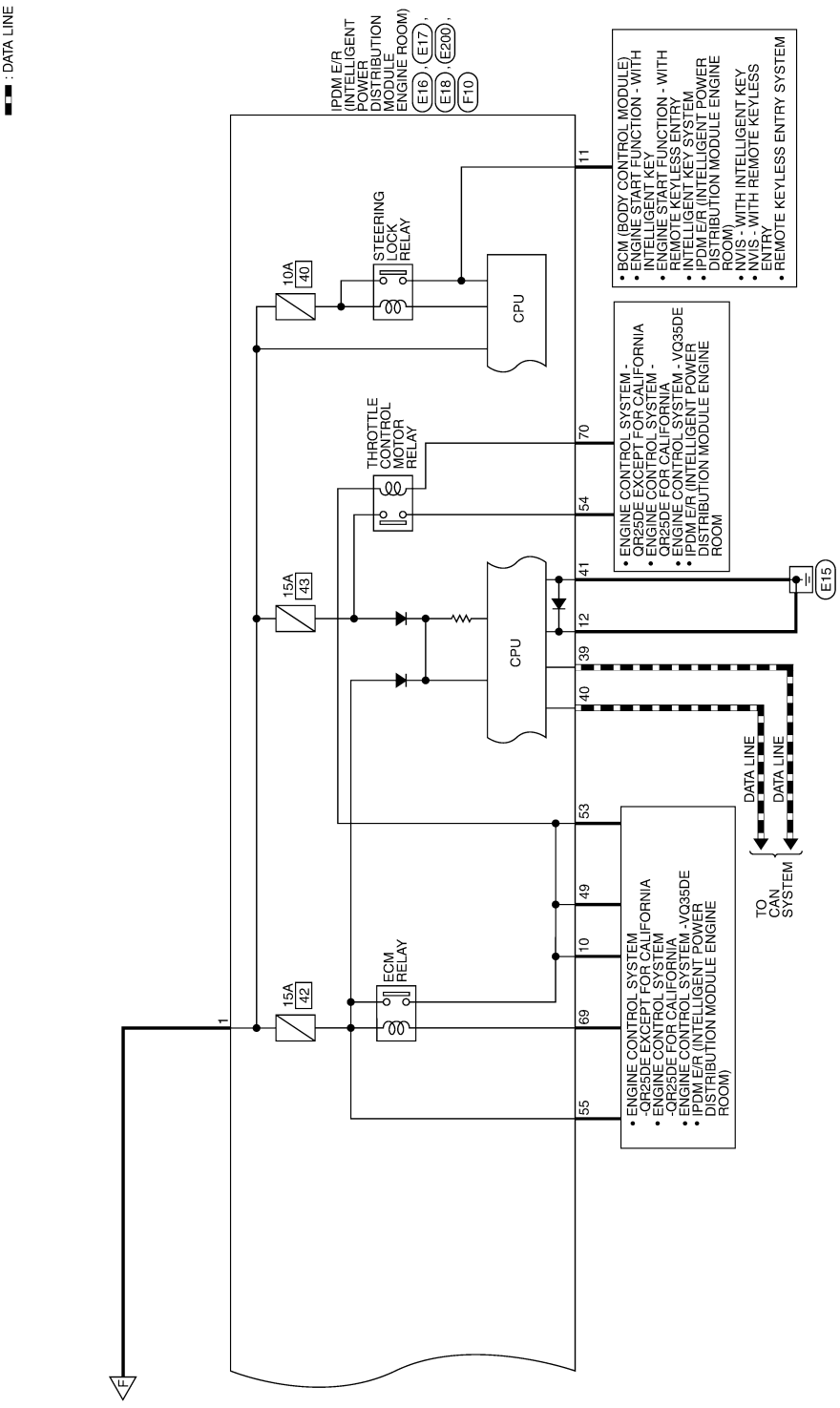
Wiring Diagram —Battery Power Supply —

INFOID:0000000004206744




FUSE BLOCK (J/B)
M3
M4
E6
E7
TO ACCESSORY POWER SUPPLY IGNITION POWER SUPPLY
15A 5
10A 6
10A 7
10A 9
10A 10
10A 11
1S
1Q
6Q
9Q
8P
11P
7N
4N
1N
12P
• POWER SOCKET
• AIR CONDITIONER CONTROL - AUTOMATIC
• AIR CONDITIONER CONTROL - MANUAL
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• ENGINE CONTROL SYSTEM - QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM - QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM - VQ35DE
• HOMELINK UNIVERSAL TRANSCEIVER
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• REMOTE KEYLESS ENTRY SYSTEM
• BCM (BODY CONTROL MODULE)
• ENGINE START FUNCTION - WITH INTELLIGENT KEY
• ENGINE START FUNCTION - WITH REMOTE KEYLESS ENTRY
• INTELLIGENT KEY SYSTEM
• NVIS - WITH INTELLIGENT KEY
• NVIS - WITH REMOTE KEYLESS ENTRY
• POWER DISTRIBUTION SYSTEM
• REMOTE KEYLESS ENTRY SYSTEM
• BRAKE CONTROL SYSTEM-ABS
• BRAKE CONTROL SYSTEM-TCS
• BRAKE CONTROL SYSTEM-VDC
• CVT CONTROL SYSTEM - QR25DE
• CVT CONTROL SYSTEM - VQ35DE
• ENGINE CONTROL SYSTEM - QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM - QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM - VQ35DE
• STOP LAMP
• AUTO LIGHT SYSTEM
• BCM (BODY CONTROL MODULE)
• DAYTIME LIGHT SYSTEM - HALOGEN
• DAYTIME LIGHT SYSTEM - XENON
• ENGINE START FUNCTION - WITH INTELLIGENT KEY
• KEYLESS ENTRY
• FRONT FOG LAMP
• FRONT WIPER AND WASHER SYSTEM
• HEADLAMP - HALOGEN
• HEADLAMP - XENON
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• INTERIOR ROOM LAMP
• NVIS - WITH INTELLIGENT KEY
• NVIS - WITH REMOTE KEYLESS ENTRY
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DISTRIBUTION SYSTEM
• POWER DOOR LOCK SYSTEM - WITH INTELLIGENT KEY
• POWER DOOR LOCK SYSTEM - WITH REMOTE KEYLESS ENTRY
• POWER WINDOW SYSTEM (WITH LEFT AND RIGHT FRONT POWER WINDOW ANTI-PINCH SYSTEM)
• POWER WINDOW SYSTEM (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
• REMOTE KEYLESS ENTRY SYSTEM
• SUNROOF
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM - WITH INTELLIGENT KEY
• VEHICLE SECURITY SYSTEM - WITH REMOTE KEYLESS ENTRY
• WARNING CHIME
• CVT CONTROL SYSTEM-QR25DE
• CVT CONTROL SYSTEM-VQ35DE
• ENGINE START FUNCTION - WITH INTELLIGENT KEY
• ENGINE START FUNCTION - WITH REMOTE KEYLESS ENTRY
• HEADLAMP - HALOGEN
• HEADLAMP - XENON
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• METER
• NVIS - WITH INTELLIGENT KEY
• NVIS - WITH REMOTE KEYLESS ENTRY
• REMOTE KEYLESS ENTRY SYSTEM
• TIRE PRESSURE MONITORING SYSTEM
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM - WITH INTELLIGENT KEY
• VEHICLE SECURITY SYSTEM - WITH REMOTE KEYLESS ENTRY
• WARNING CHIME
A
B
C
D
E
ABMWA0168GI


F
D
E
IPDM E/R
(INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM)
E16, E18, E200, E201, F10
2
15A 53
FRONT FOG LAMP RELAY
HEAD-LAMP HIGH RELAY
HEAD-LAMP LOW RELAY
TAIL LAMP RELAY
CPU
CPU
10A 54
10A 47
15A 52
10A 49
10A 46
15A 51
10A 48
6
7
83
89
92
91
84
90
86
87
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• 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)
• 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)
ABMWA0169GI



ABMWA0170GI

BATTERY POWER SUPPLY CONNECTORS

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

H.S.

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

H.S.

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

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

H.S.

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

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

H.S.

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

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

H.S.

Terminal No.	Color of Wire	Signal Name
8P	Y/R	–
11P	Y/B	–
12P	L/R	–

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

H.S.

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

ABMIA0482GB

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	37	38
15	16	17	18	19	20	21	22	23	24	35	36

Terminal No.	Color of Wire	Signal Name
6	SB	DTRL
7	R/L	TAIL/ILLUMI
10	R/B	ECM VB
11	P/L	ESCL
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

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

H.S.

98	97	96	95	94	93	92	91
106	105	104	103	102	101	100	99

Terminal No.	Color of Wire	Signal Name
91	LG/R	CLEARANCE_RH
92	LG/B	CLEARANCE_LH

ABMIA0483GB

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

H.S.

5

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

Connector No.	F6
Connector Name	GENERATOR
Connector Color	—

H.S.

1

Terminal No.	Color of Wire	Signal Name
1	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/B	IGN_SOL (WITH VQ35DE)
49	B/R	ENG SOL (WITH QR25DE)
53	R/B	IGN_SOL (WITH QR25DE)
53	B/R	ENG_SOL (WITH VQ35DE)
54	G/W	ETC
55	W/L	ECM_BAT
69	W/B	SSOF
70	O	MOTRLY

Connector No.	F27
Connector Name	STARTER MOTOR
Connector Color	—

H.S.

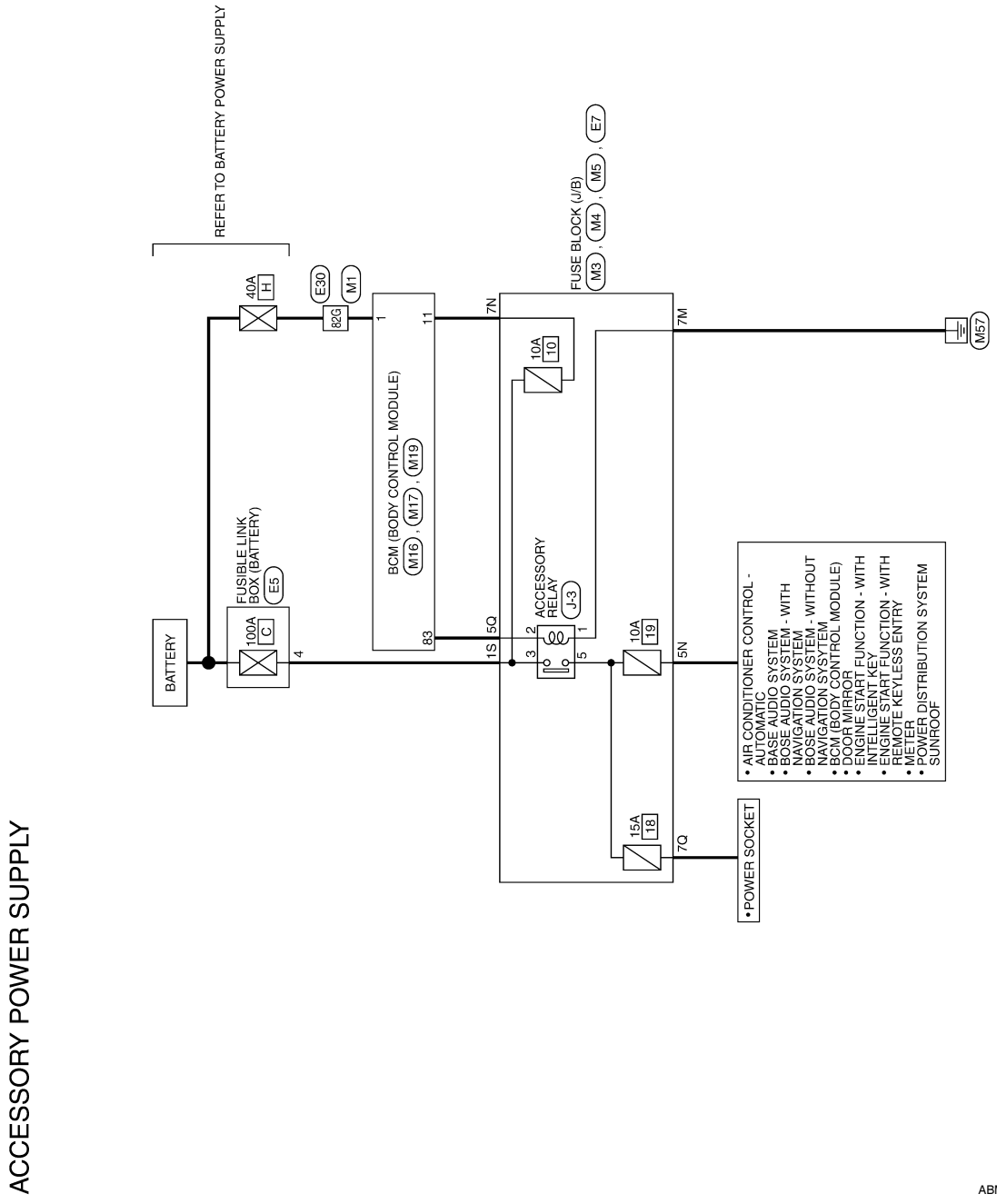
B

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

ABMIA0484GB

Wiring Diagram —Accessory Power Supply —

INFOID:0000000004206745



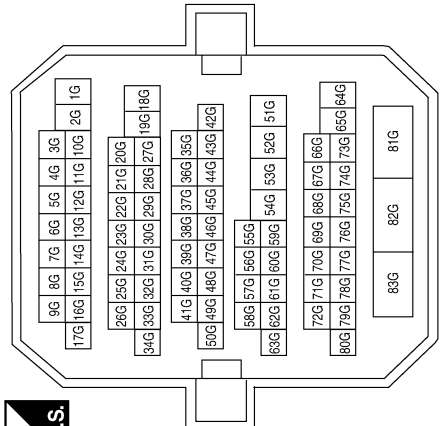
ACCESSORY POWER SUPPLY

ABMWA0171GI

ACCESSORY POWER SUPPLY CONNECTORS

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

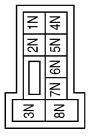
H.S.



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

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

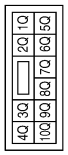
H.S.



Terminal No.	Color of Wire	Signal Name
5N	V/Y	–
7N	Y/R	–

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

H.S.



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.

Terminal No.	Color of Wire	Signal Name
7M	B	–

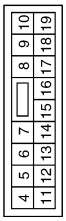
Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

H.S.

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

H.S.



Terminal No.	Color of Wire	Signal Name
11	Y/R	BAT_BCM_FUSE

ABMIA0485GB

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.

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

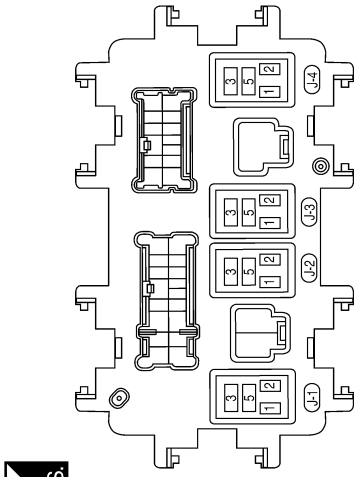
H.S.

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	–

ABMIA0486GB

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



ABMIA0487GB

Wiring Diagram —Ignition Power Supply —

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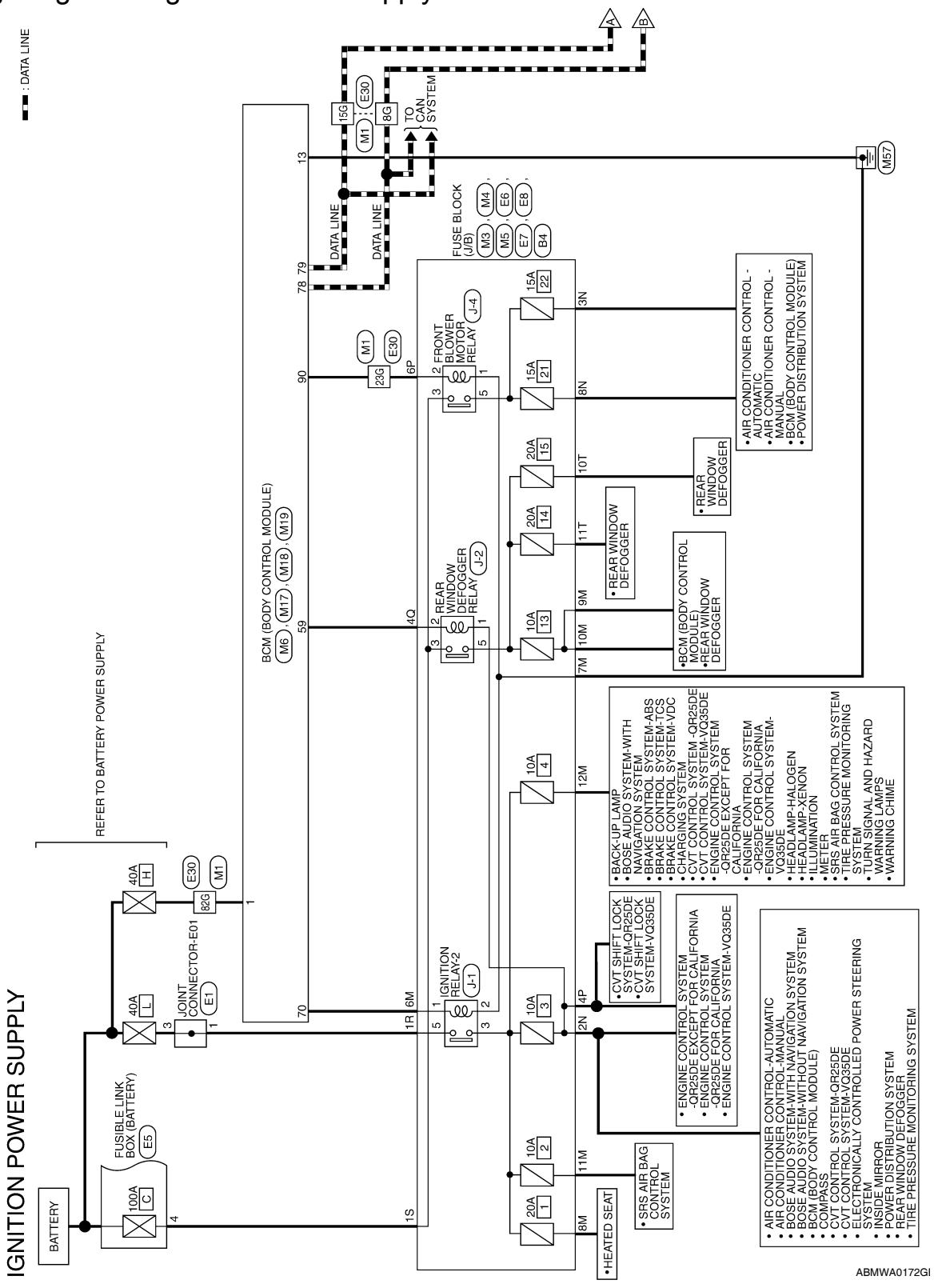
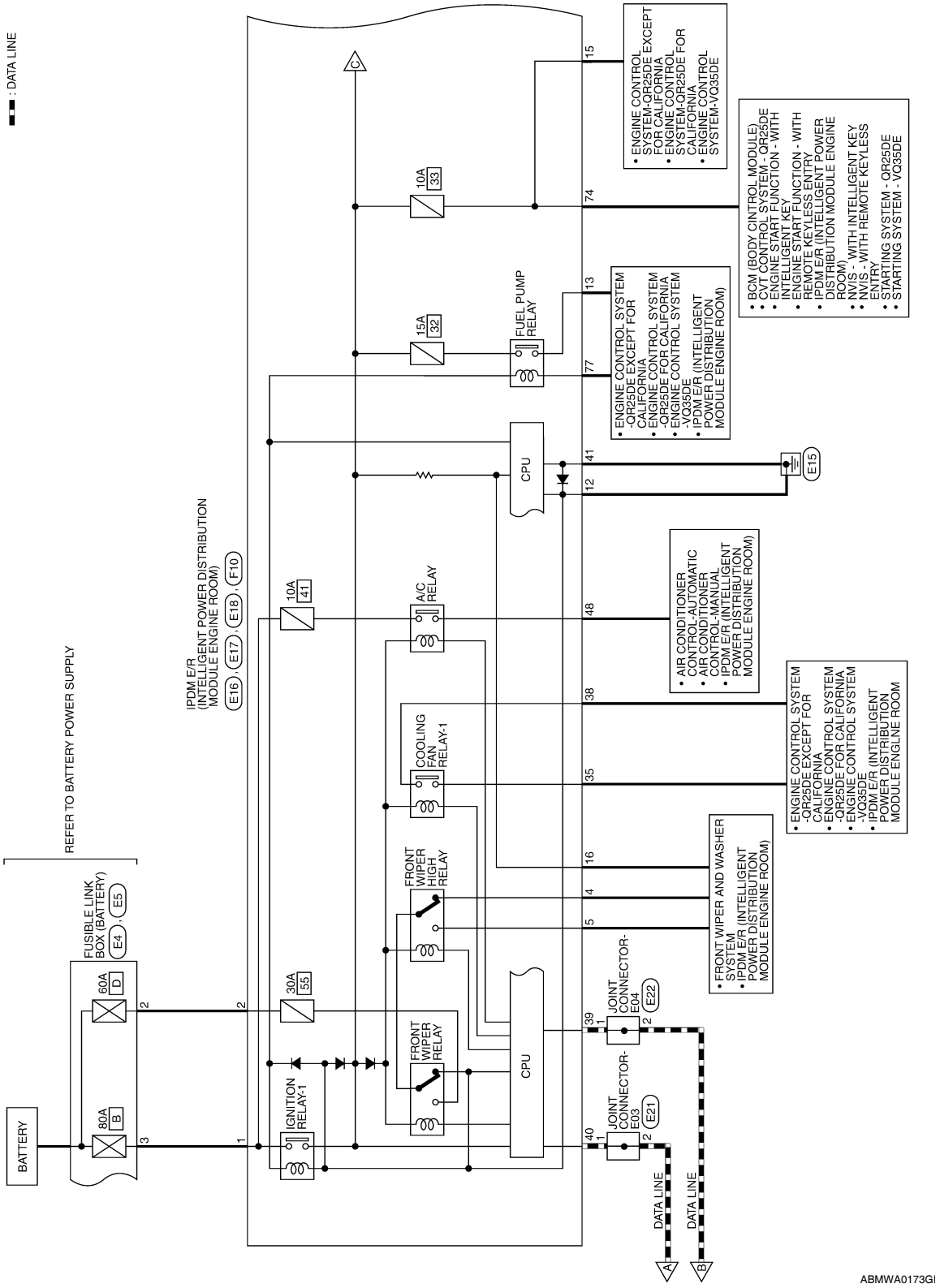
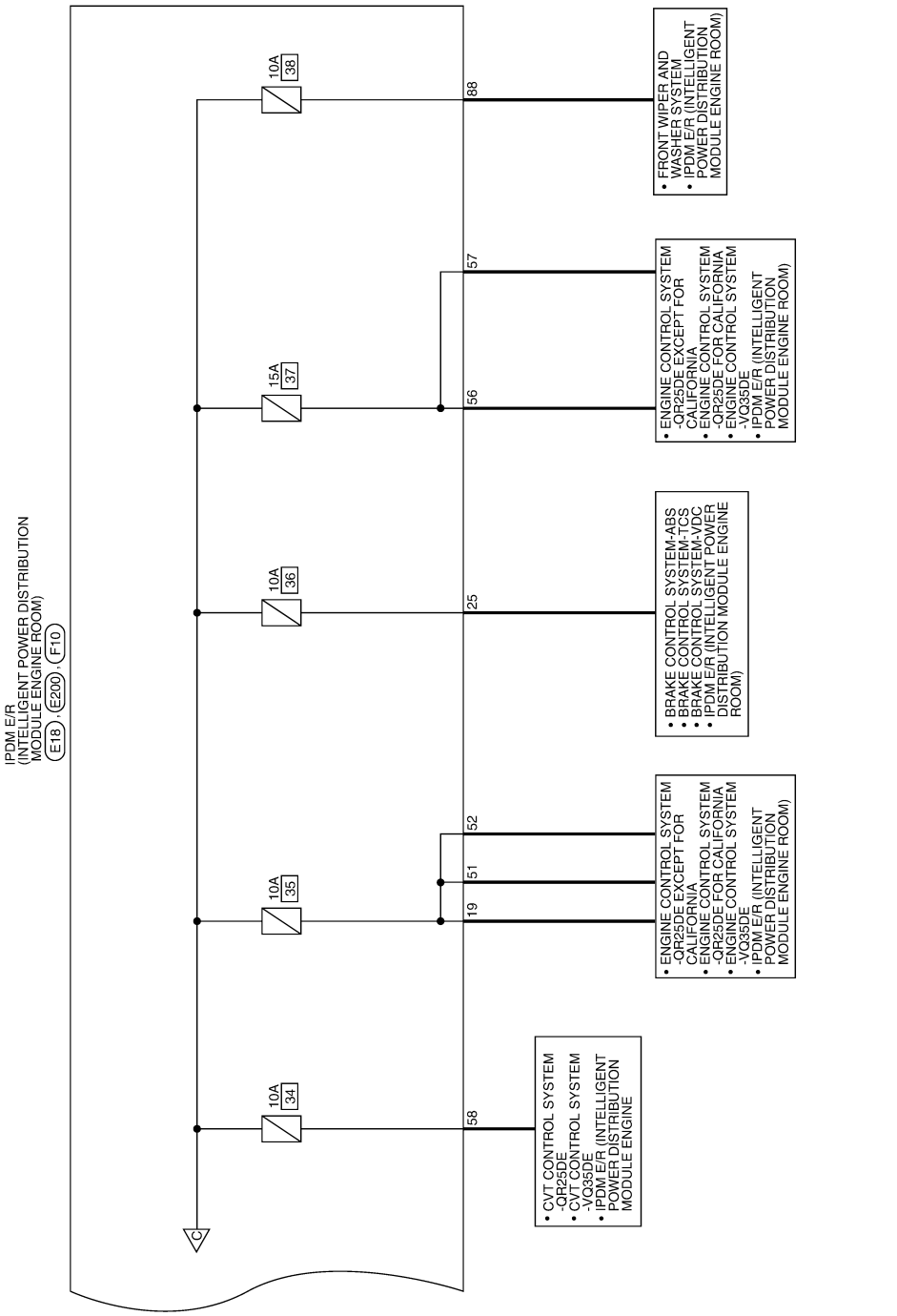



: DATA LINE
REFER TO BATTERY POWER SUPPLY
BATTERY
FUSIBLE LINK BOX (BATTERY)
E4, E5
80A B
60A D
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E16, E17, E18, F10
IGNITION RELAY-1
30A 55
10A 41
10A 33
15A 32
A/C RELAY
COOLING FAN RELAY-1
FRONT WIPER HIGH RELAY
FRONT WIPER RELAY
FUEL PUMP RELAY
CPU
JOINT CONNECTOR-E03
JOINT CONNECTOR-E04
E21
E22
E15
DATA LINE
DATA LINE
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• BCM (BODY CINTROL MODULE)
• CVT CONTROL SYSTEM - QR25DE
• ENGINE START FUNCTION - WITH INTELLIGENT KEY
• ENGINE START FUNCTION - WITH REMOTE KEYLESS ENTRY
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• NVIS - WITH INTELLIGENT KEY
• NVIS - WITH REMOTE KEYLESS ENTRY
• STARTING SYSTEM - QR25DE
• STARTING SYSTEM - VQ35DE
• ENGINE CONTROL SYSTEM -QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM -QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM -VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• AIR CONDITIONER CONTROL-AUTOMATIC
• AIR CONDITIONER CONTROL-MANUAL
• 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 -QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM -QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM -VQ35DE
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
ABMWA0173GI

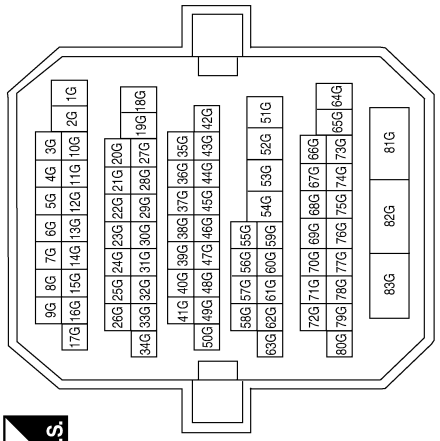


ABMWA0174GI

IGNITION POWER SUPPLY CONNECTORS

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

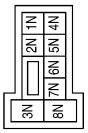
H.S.



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	–

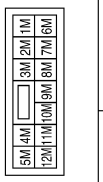
Connector No.	M4
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

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	L/Y	–
11M	R/L	–
12M	P	–

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

H.S.

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

ABMIA0488GB

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	–

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_RLY

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_ELEC_CONT
78	P	CAN-L
79	L	CAN-H
90	Y	IGN2_CONT

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	–

ABMIA0489GB

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)

ABMIA0490GB

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

H.S.

Terminal No.	Color of Wire	Signal Name
4	L/R	FR_WIPER_LO
5	L/B	FR_WIPER_HI
12	B	GND (POWER)
13	W	FUEL_PUMP
15	G/W	START_IG-E/R
16	L/Y	WIPER_AUTOSTOP
19	L/Y	BCM_IGNSW
25	GR	ABS_ECU
35	L/B	MOTOR_FAN_LO
38	R/W	F/L_MOTOR_FAN

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

H.S.

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

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

H.S.

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

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

H.S.

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

ABMIA0491GB

Terminal No.	Color of Wire	Signal Name
48	Y/R	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
74	Y	START_IG-EGI
77	B/R	FPR

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

H.S.

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

H.S.

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

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

T.S.

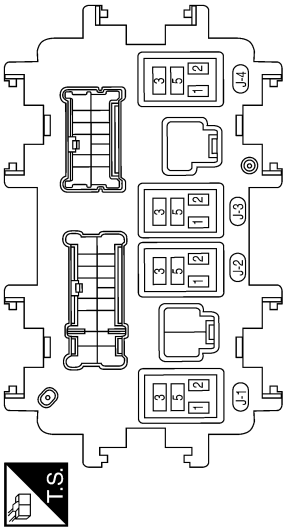
Connector No.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.

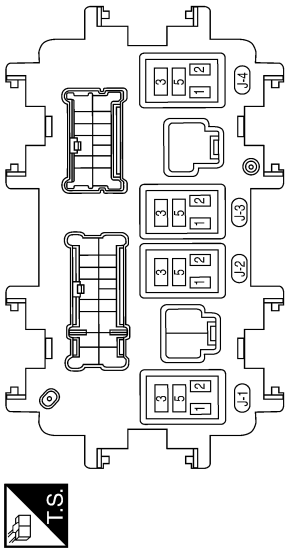
Terminal No.	Color of Wire	Signal Name
10T	R	–
11T	R	–

ABMIA0492GB

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



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

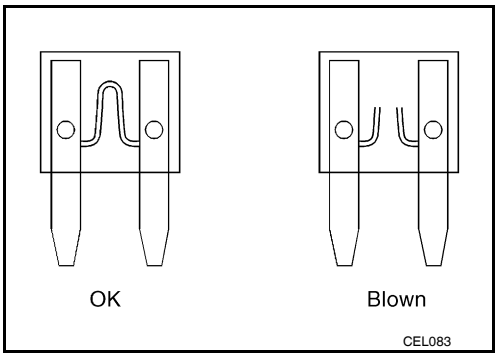


ABMIA0521GB

Fuse

INFOID:0000000004206747

- 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.

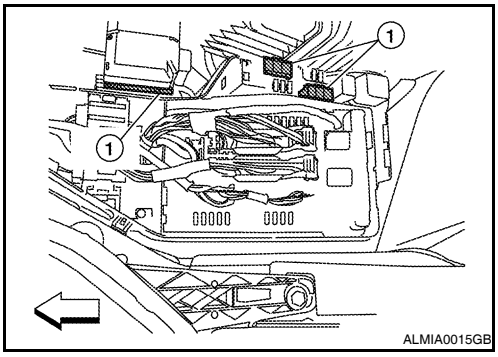


Fusible Link

INFOID:0000000004206748

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:

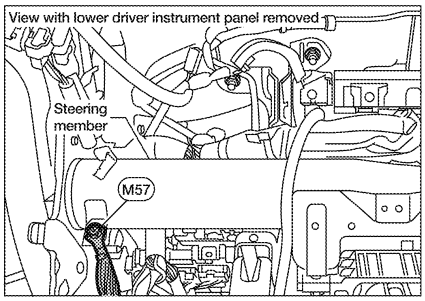
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

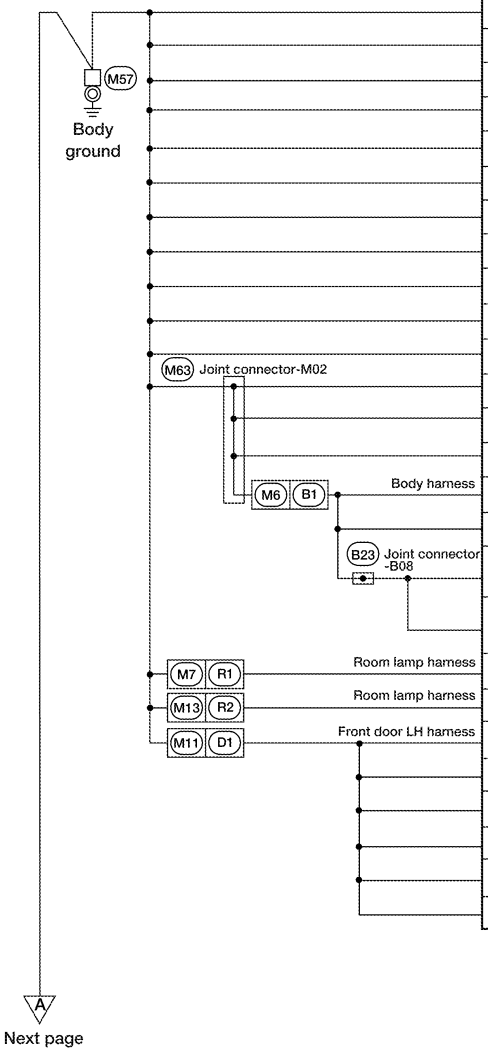
GROUND

Ground Distribution

INFOID:0000000004206749

MAIN HARNESS





CONNECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal No. 7M)
M17	BCM (Body control module) (Terminal No. 13)
M22	Data link connector (Terminal No. 4)
M22	Data link connector (Terminal No. 5)
M24	Combination meter (Terminal No. 3)
M24	Combination meter (Terminal No. 4)
M24	Combination meter (Terminal No. 23)
M28	Combination switch
M31	Blower motor
M40	Key slot
M75	Trunk lid opener switch
M47	AV control unit (Terminal No. 19)
M53	Steering angle sensor
M55	Yaw rate/side/decel G sensor
B30	Rear combination lamp LH (with rear view monitor)
B45	Rear combination lamp RH (with rear view monitor)
B37	High mounted stop lamp (Terminal No. 2) (with rear view monitor) (with rear spoiler)
B37	High mounted stop lamp (Terminal No. 2) (with rear view monitor) (without rear spoiler)
R50	Front room/map lamp assembly
R5	Sunroof motor assembly
D4	Door mirror LH (Terminal No. 2) (with mirror defogger)
D4	Door mirror LH (Terminal No. 8) (with turn signal in mirror)
D5	Door mirror remote control switch
D6	Front outside handle LH
D8	Main power window and door lock/unlock switch (Terminal No. 17)
D10	Front door lock assembly LH

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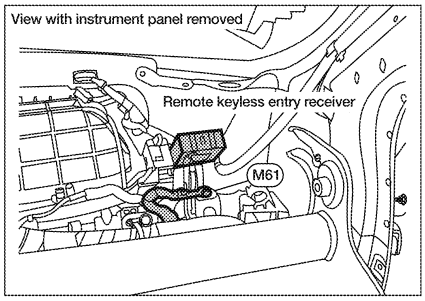

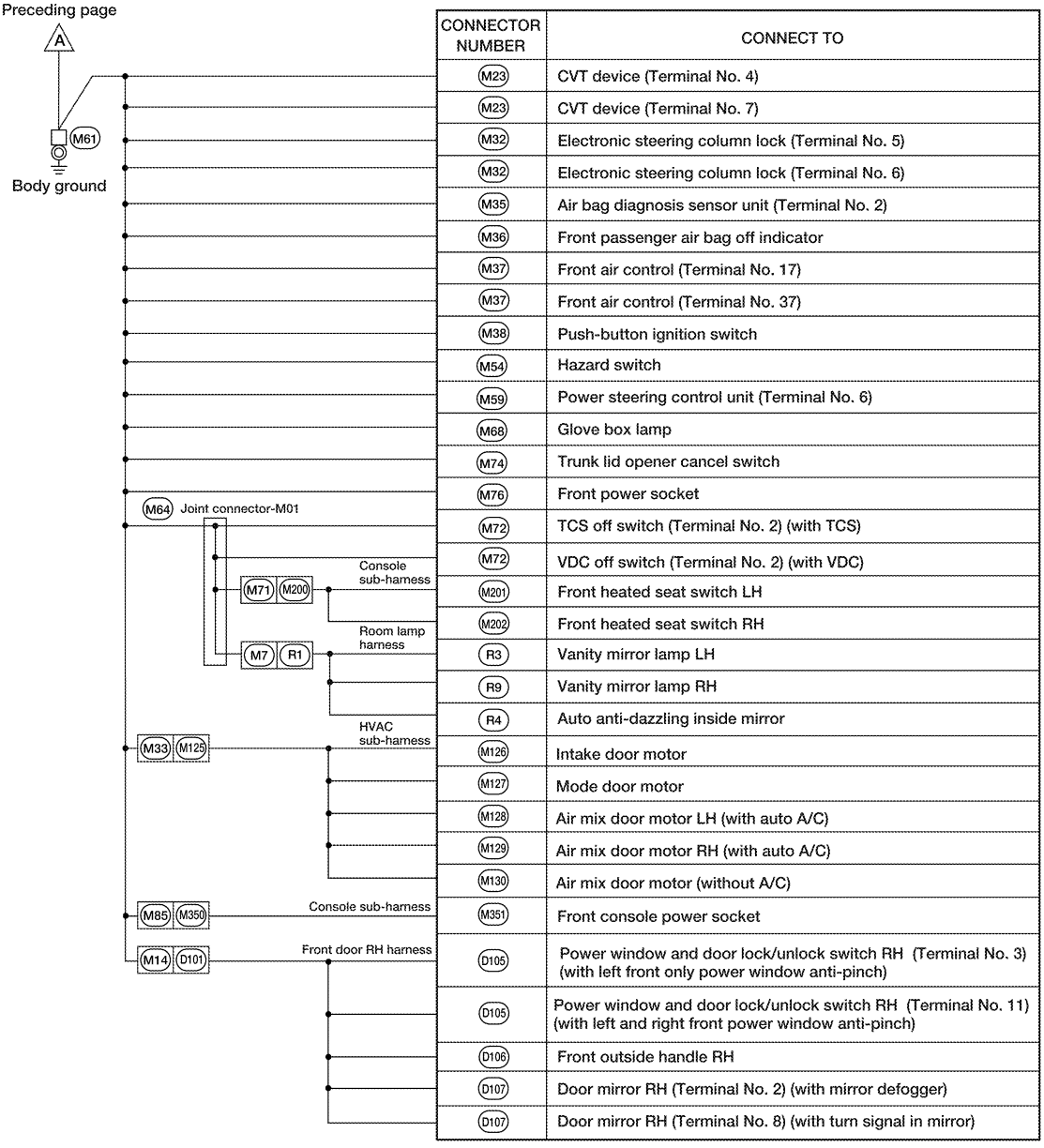

CONNECTOR NUMBER	CONNECT TO
M23	CVT device (Terminal No. 4)
M23	CVT device (Terminal No. 7)
M32	Electronic steering column lock (Terminal No. 5)
M32	Electronic steering column lock (Terminal No. 6)
M35	Air bag diagnosis sensor unit (Terminal No. 2)
M36	Front passenger air bag off indicator
M37	Front air control (Terminal No. 17)
M37	Front air control (Terminal No. 37)
M38	Push-button ignition switch
M54	Hazard switch
M59	Power steering control unit (Terminal No. 6)
M68	Glove box lamp
M74	Trunk lid opener cancel switch
M76	Front power socket
M72	TCS off switch (Terminal No. 2) (with TCS)
M72	VDC off switch (Terminal No. 2) (with VDC)
M201	Front heated seat switch LH
M202	Front heated seat switch RH
R3	Vanity mirror lamp LH
R9	Vanity mirror lamp RH
R4	Auto anti-dazzling inside mirror
M126	Intake door motor
M127	Mode door motor
M128	Air mix door motor LH (with auto A/C)
M129	Air mix door motor RH (with auto A/C)
M130	Air mix door motor (without A/C)
M351	Front console power socket
D105	Power window and door lock/unlock switch RH (Terminal No. 3) (with left front only power window anti-pinch)
D105	Power window and door lock/unlock switch RH (Terminal No. 11) (with left and right front power window anti-pinch)
D106	Front outside handle RH
D107	Door mirror RH (Terminal No. 2) (with mirror defogger)
D107	Door mirror RH (Terminal No. 8) (with turn signal in mirror)

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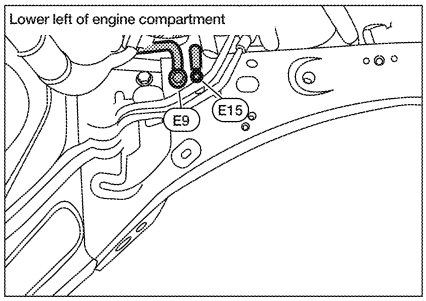

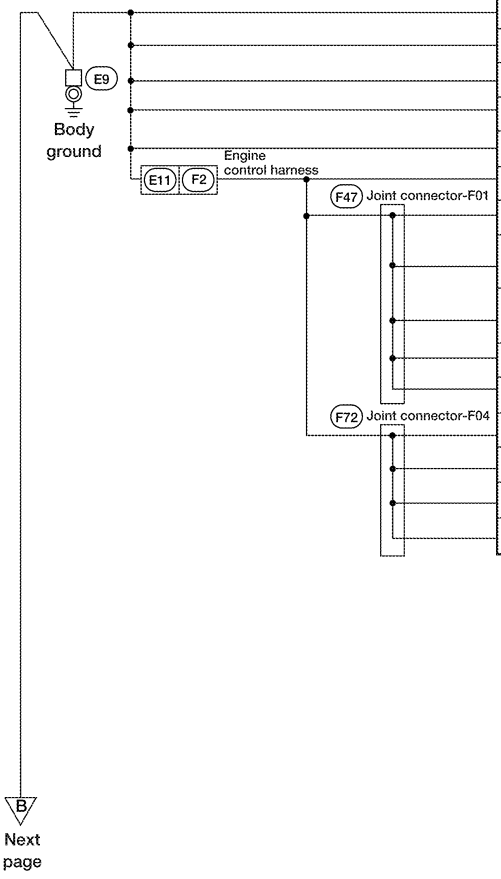

CONNECTOR NUMBER	CONNECT TO
E10	ECM (Terminal No. 107)
E10	ECM (Terminal No. 108)
E10	ECM (Terminal No. 111)
E10	ECM (Terminal No. 112)
E42	Cooling fan relay-2
F14	ECM (Terminal No. 16)
F14	ECM (Terminal No. 12) (with QR25DE)
F43	Tumble control valve actuator shield (sensor) (with QR25DE for California)
F43	Tumble control valve actuator shield (motor) (with QR25DE for California)
F44	Air fuel ratio (A/F) sensor 1 shield (with QR25DE)
F57	Electric throttle control actuator shield (with QR25DE)
F12	Air fuel ratio (A/F) sensor 1 shield (Bank 1) (with VQ35DE)
F14	ECM (Terminal No. 12) (with VQ35DE)
F57	Electric throttle control actuator shield (with VQ35DE)
F61	Air fuel ratio (A/F) sensor 1 shield (Bank 2) (with VQ35DE)

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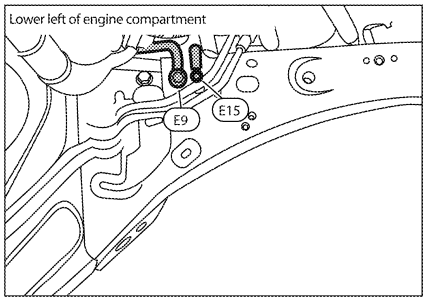
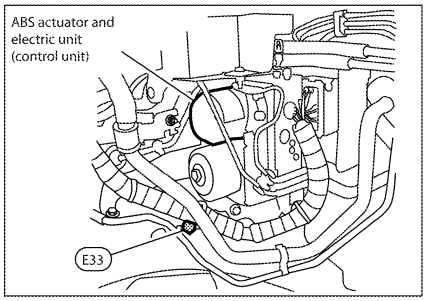
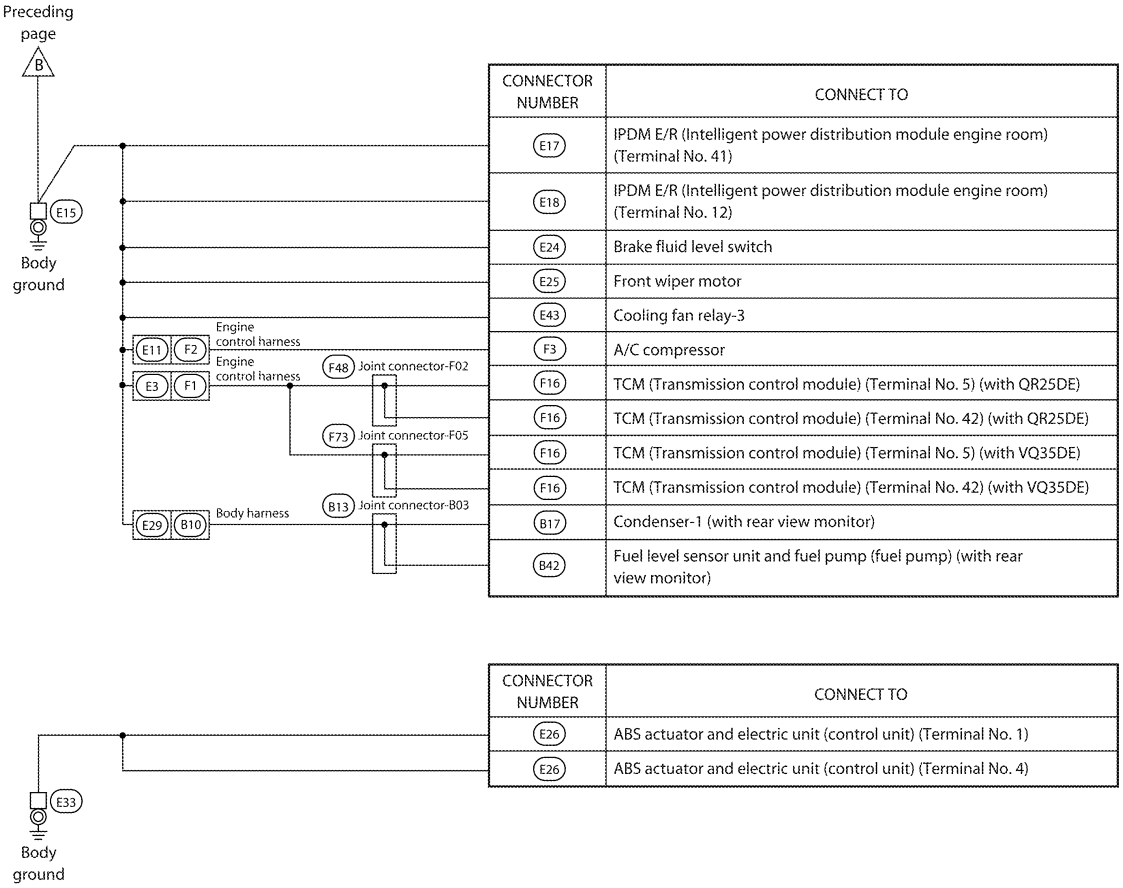




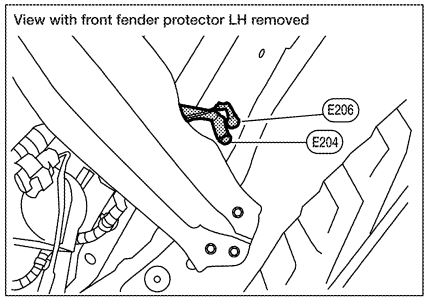


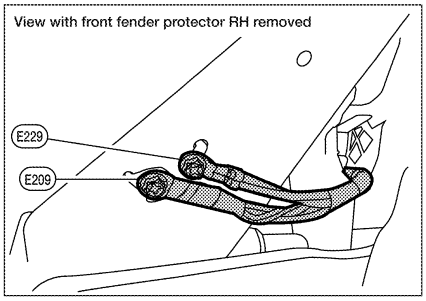
CONNECTOR NUMBER	CONNECT TO
E17	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 41)
E18	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 12)
E24	Brake fluid level switch
E25	Front wiper motor
E43	Cooling fan relay-3
F3	A/C compressor
F16	TCM (Transmission control module) (Terminal No. 5) (with QR25DE)
F16	TCM (Transmission control module) (Terminal No. 42) (with QR25DE)
F16	TCM (Transmission control module) (Terminal No. 5) (with VQ35DE)
F16	TCM (Transmission control module) (Terminal No. 42) (with VQ35DE)
B17	Condenser-1 (with rear view monitor)
B42	Fuel level sensor unit and fuel pump (fuel pump) (with rear view monitor)

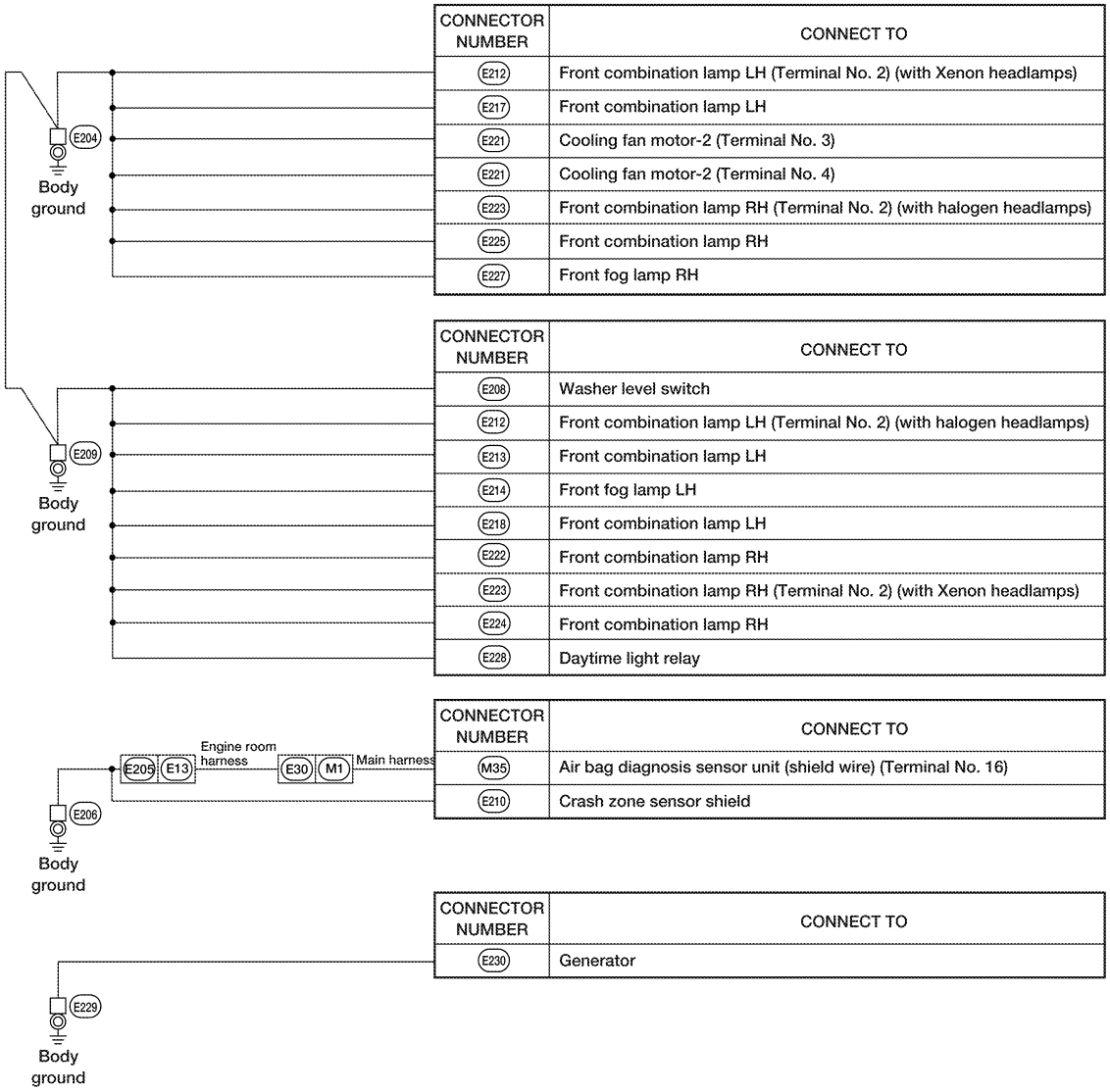
CONNECTOR NUMBER	CONNECT TO
E26	ABS actuator and electric unit (control unit) (Terminal No. 1)
E26	ABS actuator and electric unit (control unit) (Terminal No. 4)

ABMIA0496GB

FRONT END MODULE HARNESS







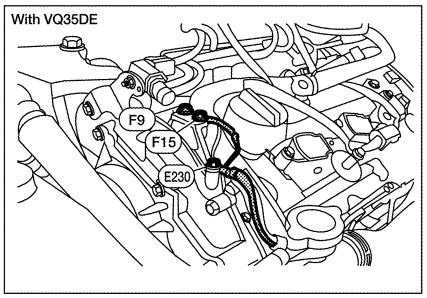
CONNECTOR NUMBER	CONNECT TO
E212	Front combination lamp LH (Terminal No. 2) (with Xenon headlamps)
E217	Front combination lamp LH
E221	Cooling fan motor-2 (Terminal No. 3)
E221	Cooling fan motor-2 (Terminal No. 4)
E223	Front combination lamp RH (Terminal No. 2) (with halogen headlamps)
E225	Front combination lamp RH
E227	Front fog lamp RH

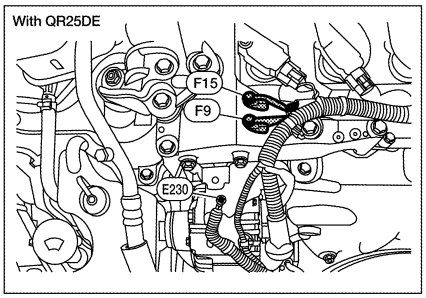
CONNECTOR NUMBER	CONNECT TO
E208	Washer level switch
E212	Front combination lamp LH (Terminal No. 2) (with halogen headlamps)
E213	Front combination lamp LH
E214	Front fog lamp LH
E218	Front combination lamp LH
E222	Front combination lamp RH
E223	Front combination lamp RH (Terminal No. 2) (with Xenon headlamps)
E224	Front combination lamp RH
E228	Daytime light relay

CONNECTOR NUMBER	CONNECT TO
M35	Air bag diagnosis sensor unit (shield wire) (Terminal No. 16)
E210	Crash zone sensor shield

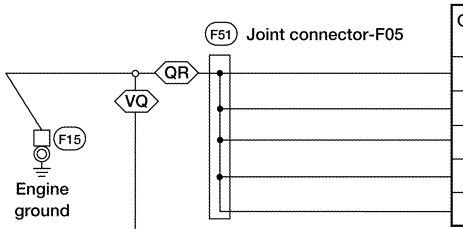
CONNECTOR NUMBER	CONNECT TO
E230	Generator

ABMIA0497GB





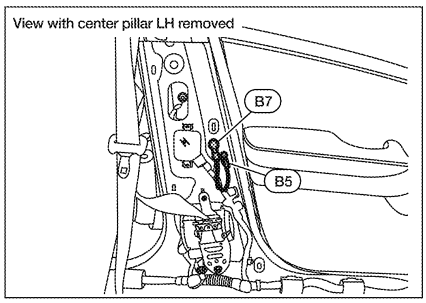
QR : With QR25DE
VQ : With VQ35DE

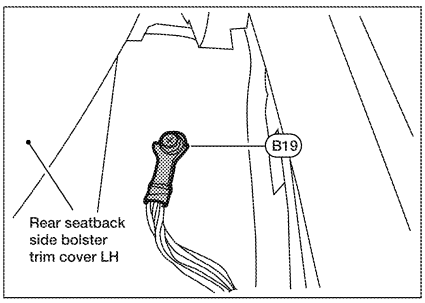


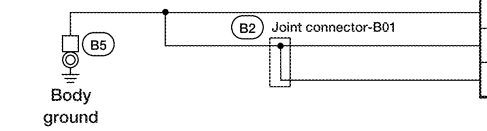
CONNECTOR NUMBER	CONNECT TO
F26	Condenser-2
F34	Ignition coil No. 1 (with power transistor)
F35	Ignition coil No. 2 (with power transistor)
F36	Ignition coil No. 3 (with power transistor)
F37	Ignition coil No. 4 (with power transistor)

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)

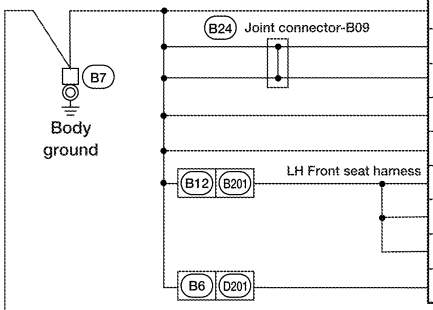
ABMIA0498GB



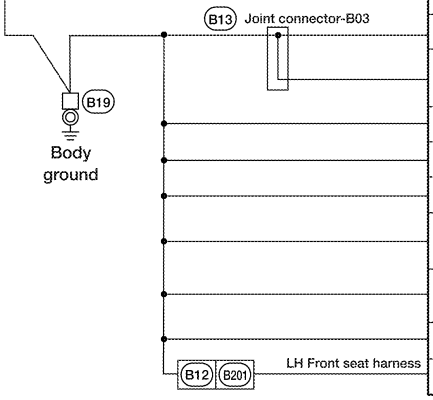




CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag (satellite) sensor shield
B9	Air bag diagnosis sensor unit (shield wire) (Terminal No. 44)
B38	LH side curtain air bag module shield



CONNECTOR NUMBER	CONNECT TO
B28	Trunk lamp switch and trunk release solenoid (Terminal No. 2)
B31	Rear view camera control unit (Terminal No. 3)
B35	Rear view camera
B32	License plate lamp RH
B34	License plate lamp LH
B203	Power seat switch
B205	Lumbar support switch
B210	Front seat heater LH
D203	Rear power window switch LH



CONNECTOR NUMBER	CONNECT TO
B17	Condenser-1
B42	Fuel level sensor unit and fuel pump (fuel pump) (without rear view camera)
B28	Trunk lamp switch and trunk release solenoid (Terminal No. 4)
B30	Rear combination lamp LH (Terminal No. 4) (without rear view monitor)
B33	Trunk opener request switch
B37	High mounted stop lamp (Terminal No. 2)(with rear spoiler) (without rear view monitor)
B37	High mounted stop lamp (Terminal No. 2) (without rear spoiler) (without rear view monitor)
B45	Rear combination lamp RH (Terminal No. 5) (without rear view monitor)
B202	Seat belt buckle switch LH

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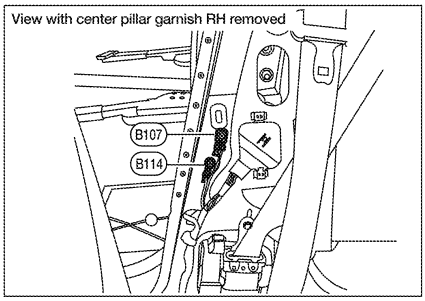
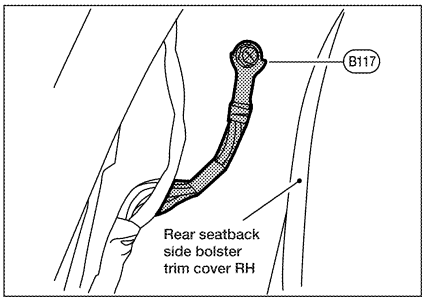
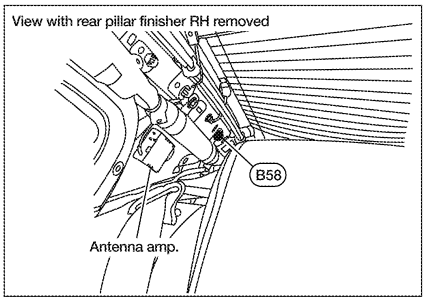
BODY NO. 2 HARNESS





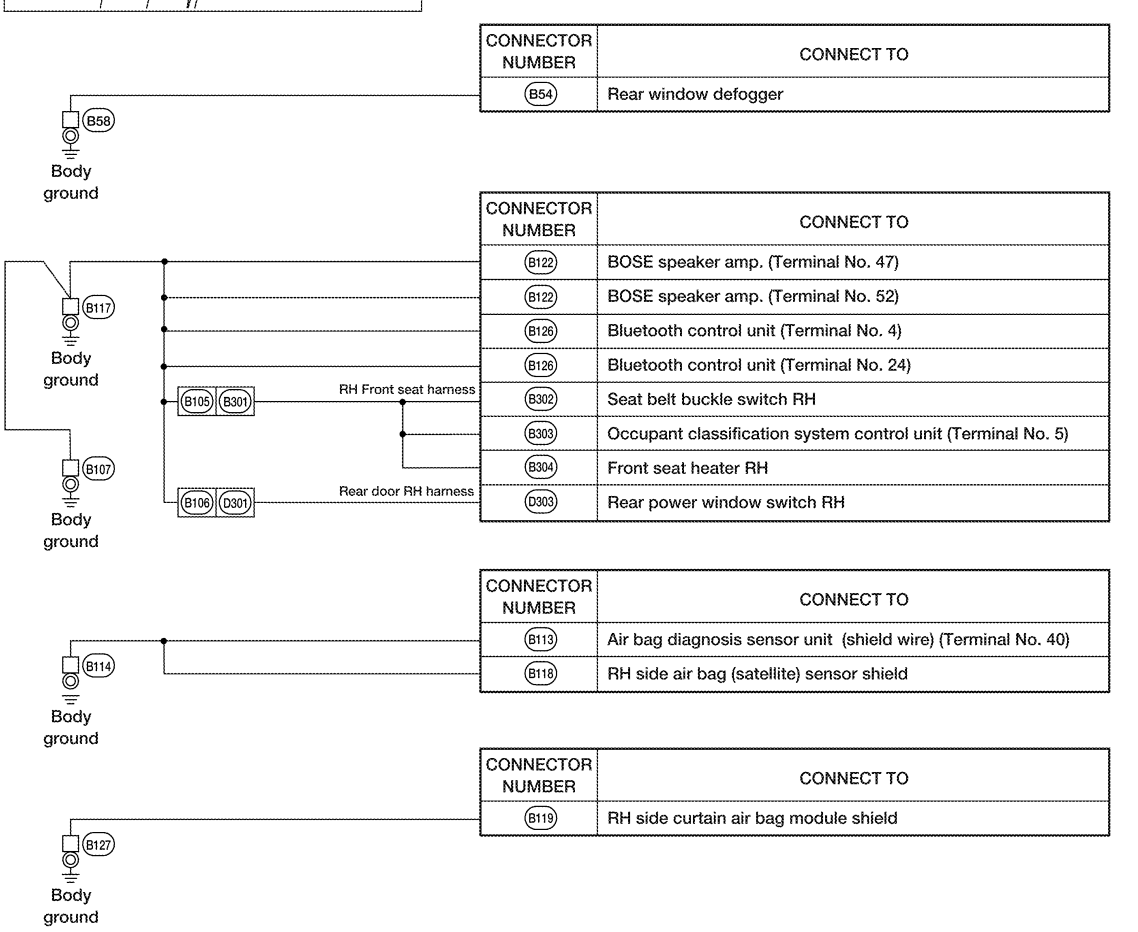


CONNECTOR NUMBER	CONNECT TO
B54	Rear window defogger

CONNECTOR NUMBER	CONNECT TO
B122	BOSE speaker amp. (Terminal No. 47)
B122	BOSE speaker amp. (Terminal No. 52)
B126	Bluetooth control unit (Terminal No. 4)
B126	Bluetooth control unit (Terminal No. 24)
B302	Seat belt buckle switch RH
B303	Occupant classification system control unit (Terminal No. 5)
B304	Front seat heater RH
D303	Rear power window switch RH

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

CONNECTOR NUMBER	CONNECT TO
B119	RH side curtain air bag module shield



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HARNESS

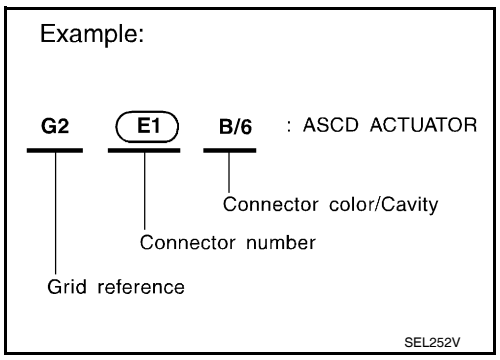
Harness Layout

INFOID:0000000004206750

HOW TO READ HARNESS LAYOUT

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

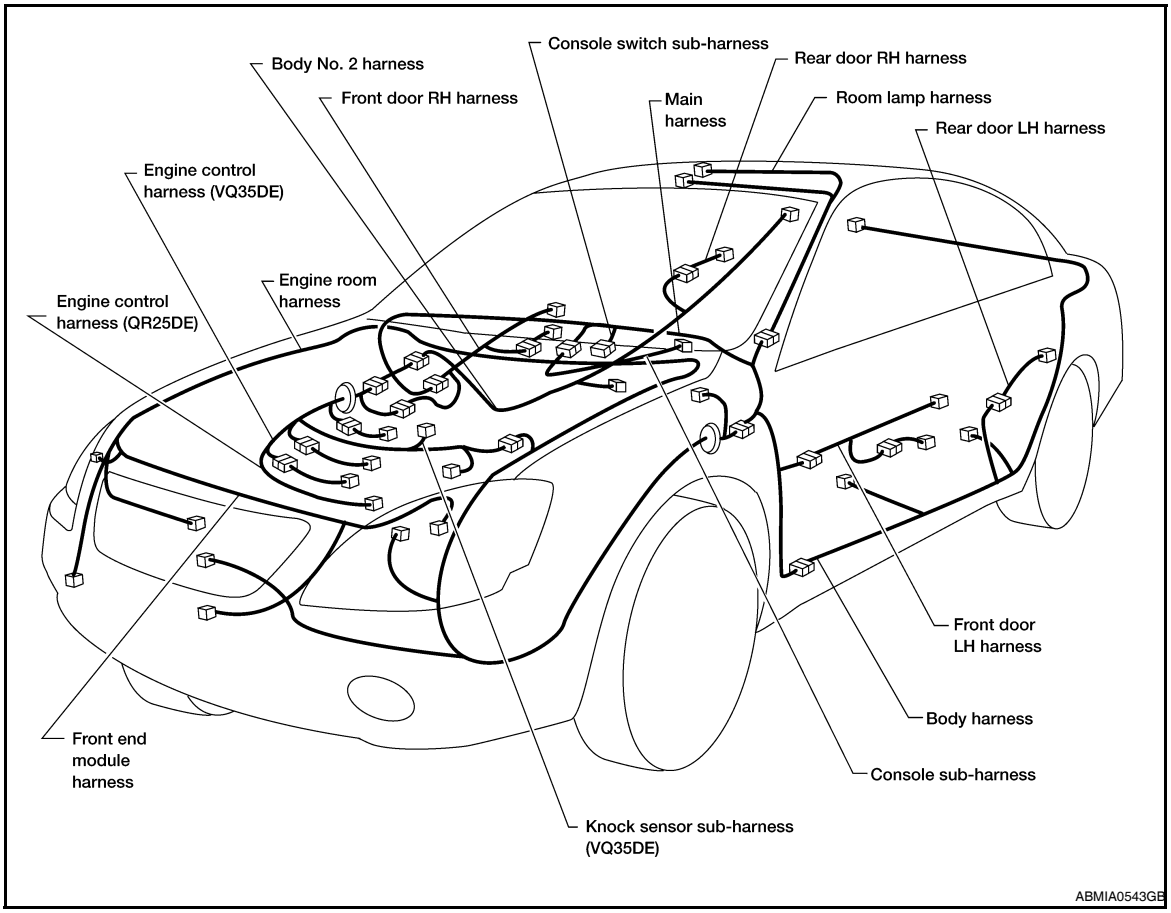
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness
- Engine Control Harness (VQ35DE) and Knock Sensor Sub-harness
- Engine Control Harness (QR25DE)
- Body Harness
- Body No. 2 Harness
- Room Lamp Harness



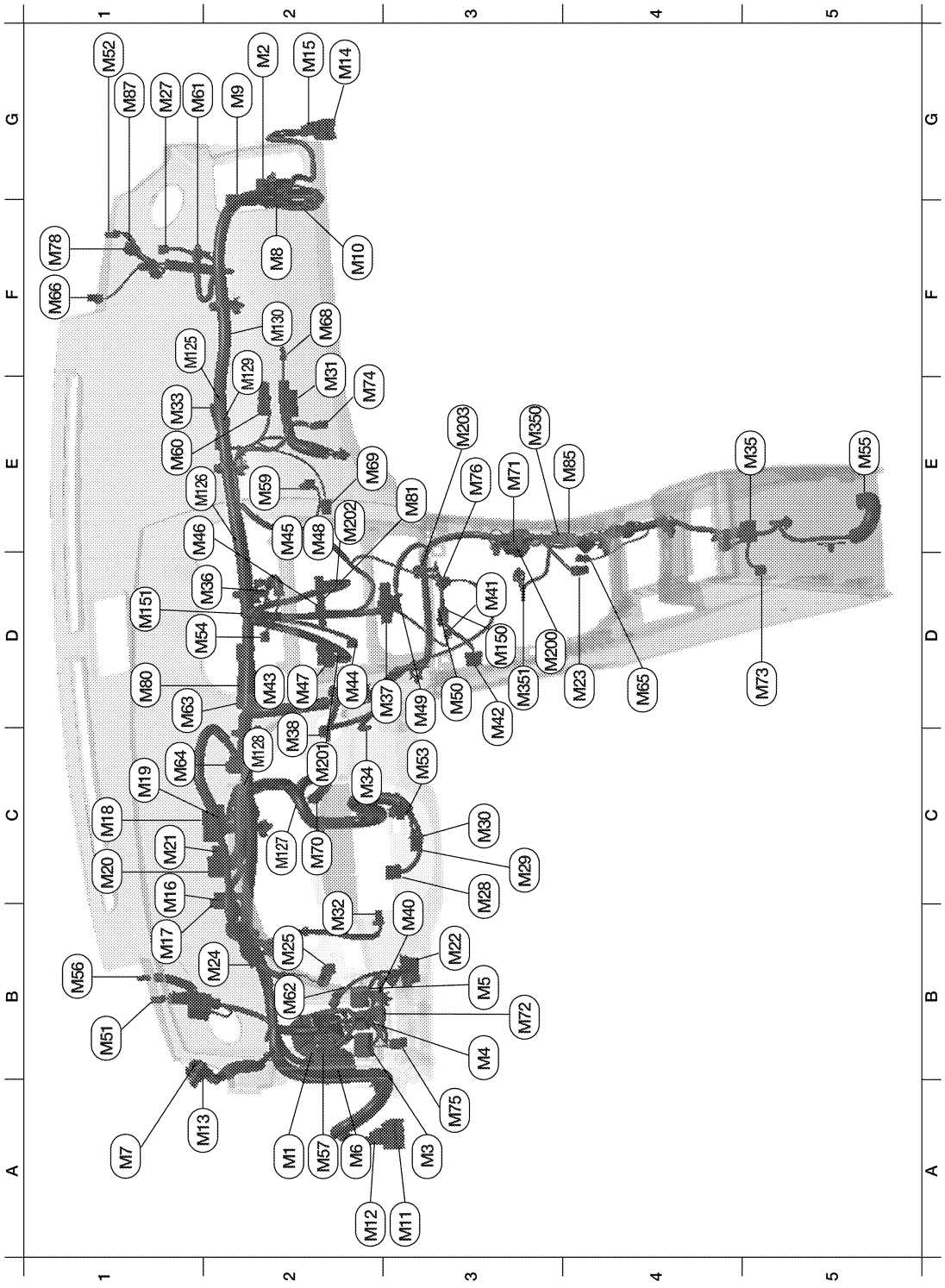
To use the grid reference

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

OUTLINE



MAIN HARNESS

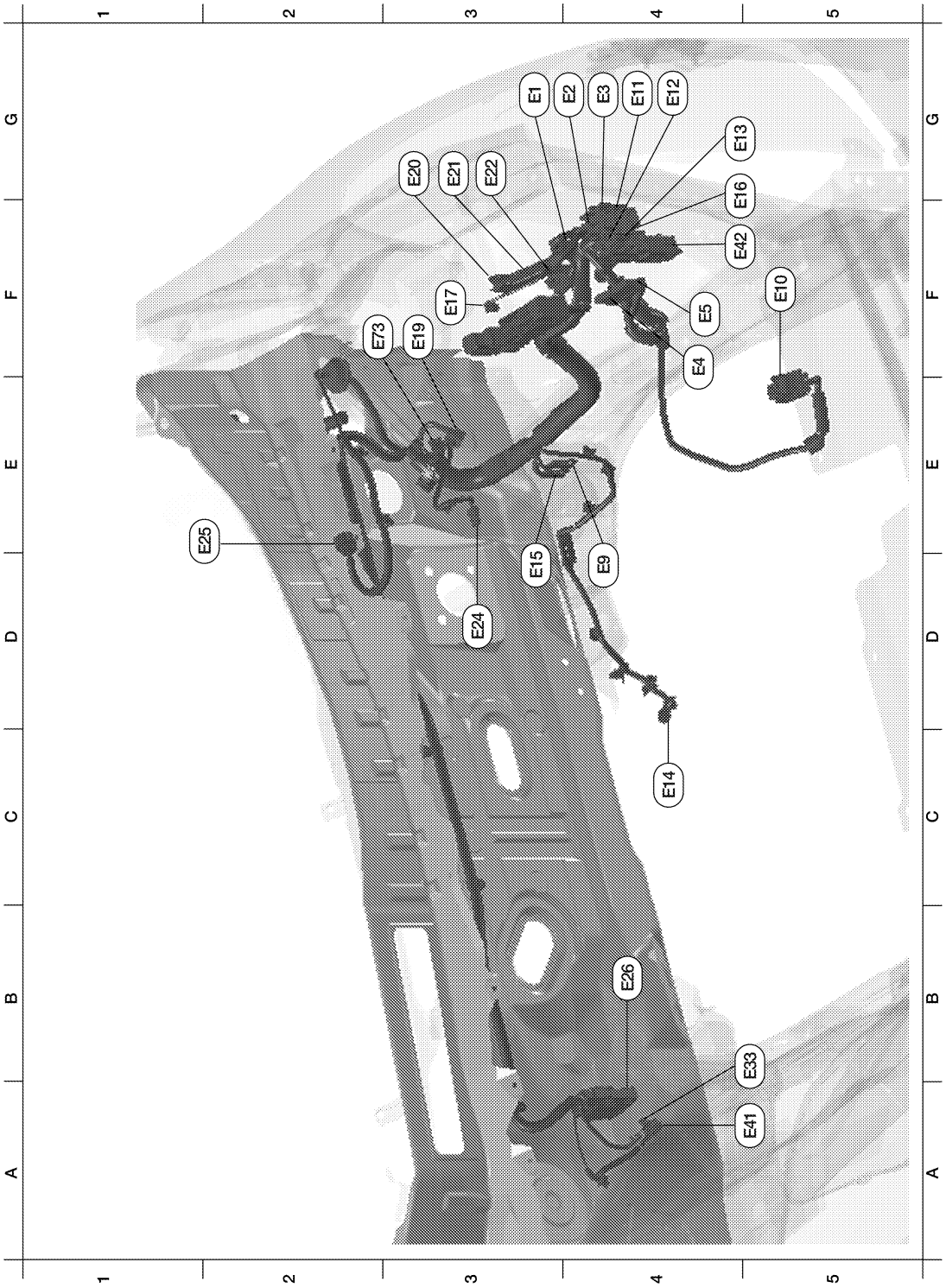


ABMIA0544GB

A2	M1	SMJ	: To E30	B1	M51	BR/2	: Tweeter LH
G2	M2	W/32	: To B101	G1	M52	BR/2	: Tweeter RH
A3	M3	W/8	: Fuse block (J/B)	C3	M53	W/8	: Steering angle sensor
A3	M4	W/10	: Fuse block (J/B)	D2	M54	W/4	: Hazard switch

B3	M5	W/12	: Fuse block (J/B)	E5	M55	B/4	: Yaw rate/side/decel G sensor
A2	M6	SMJ	: To B1	D2	M56	B/2	: Sunload sensor
A1	M7	W/16	: To R1	A2	M57	—	: Body ground
F2	M8	W/24	: To B102	E2	M59	W/12	: Power steering control unit
G2	M9	BR/16	: To B103	E1	M60	Y/2	: Front passenger air bag module
F2	M10	BR/12	: To B104	G1	M61	—	: Body ground
A3	M11	W/16	: To D1	B2	M62	W/2	: Tire pressure warning check connector
A2	M12	W/16	: To D2	D1	M63	L/12	: Joint connector-M02
A2	M13	W/4	: To R2	C1	M64	GR/6	: Joint connector-M01
G2	M14	W/10	: To D101	D4	M65	BR/2	: CVT device
G2	M15	W/12	: To D102	F1	M66	W/3	: Optical sensor
B1	M16	B/3	: BCM (body control module)	E2	M67	O/2	: Front passenger air bag module
B1	M17	W/16	: BCM (body control module)	F2	M68	W/2	: Glove box lamp
C1	M18	G/40	: BCM (body control module)	E2	M69	W/4	: Intake sensor
C1	M19	B/40	: BCM (body control module)	C2	M70	W/4	: Tire pressure receiver
C1	M20	W/12	: BCM (body control module)	E3	M71	W/12	: To M200
C1	M21	GR/40	: BCM (body control module)	B3	M72	GR/6	: TCS OFF switch (with TCS)
B3	M22	W/16	: Data link connector	G2	M72	GR/6	: VDC OFF switch (with VDC)
D4	M23	W/10	: CVT device	D5	M73	B/1	: Parking brake switch (with M/T)
B2	M24	W/40	: Combination meter	E2	M74	W/2	: Trunk lid opener cancel switch
B2	M25	B/10	: Meter mode switch	A3	M75	B/2	: Trunk lid opener switch
G1	M27	B/4	: Remote keyless entry receiver	E3	M76	B/3	: Front power socket
C3	M28	W/16	: Combination switch	F1	M78	Y/4	: Front passenger air bag module (service replacement)
C3	M29	Y/6	: Spiral cable	D1	M80	—	: Diode-3
C3	M30	GR/8	: Spiral cable	E3	M81	GR/3	: Audio unit (without NAVI)
E2	M31	W/6	: Blower motor	E3	M81	GR/3	: AV control unit (with NAVI)
B2	M32	W/8	: Electronic steering column lock	F1	M85	W/2	: To M350
E1	M33	W/3	: To M125	G1	M87	GR/3	: To M501
C2	M34	W/2	: In-vehicle sensor	F1	M125	W/3	: To M33
E5	M35	Y/28	: Air bag diagnosis sensor unit	E1	M126	W/3	: Intake door motor
D2	M36	W/3	: Front passenger air bag off indicator	C2	M127	W/3	: Mode door motor
D3	M37	W/40	: Front air control	C2	M128	W/3	: Air mix door motor LH (with auto AC)
C2	M38	BR/8	: Push-button ignition switch	F2	M129	W/3	: Air mix door motor RH (with auto AC)
B3	M40	W/12		F2	M130	W/3	: Air mix door motor (with manual AC)
B3	M41	W/4	: Aux jack	D3	M150	W/2	: To M50
D3	M42	W/16	: CD changer	D1	M151	BR/2	: Center speaker
D2	M43	W/20	: Audio unit	Console switch sub-harness			
D2	M44	W/8	: Audio unit	D3	M200	W/12	: To M71
E2	M45	W/12	: Audio unit	C2	M201	W/6	: Front heated seat switch LH
E2	M46	W/40	: AV control unit	E2	M202	BR/6	: Front heated seat switch RH
D2	M47	W/20	: AV control unit	E3	M203	GR/2	: Front console antenna
D2	M48	GR/12	: AV control unit	Console sub-harness			
D3	M49	GR/2	: Instrument panel antenna	E3	M350	W/2	: To M85
D3	M50	W/2	: To M150	D3	M351	B/3	: Front console power socket

ENGINE ROOM HARNESS

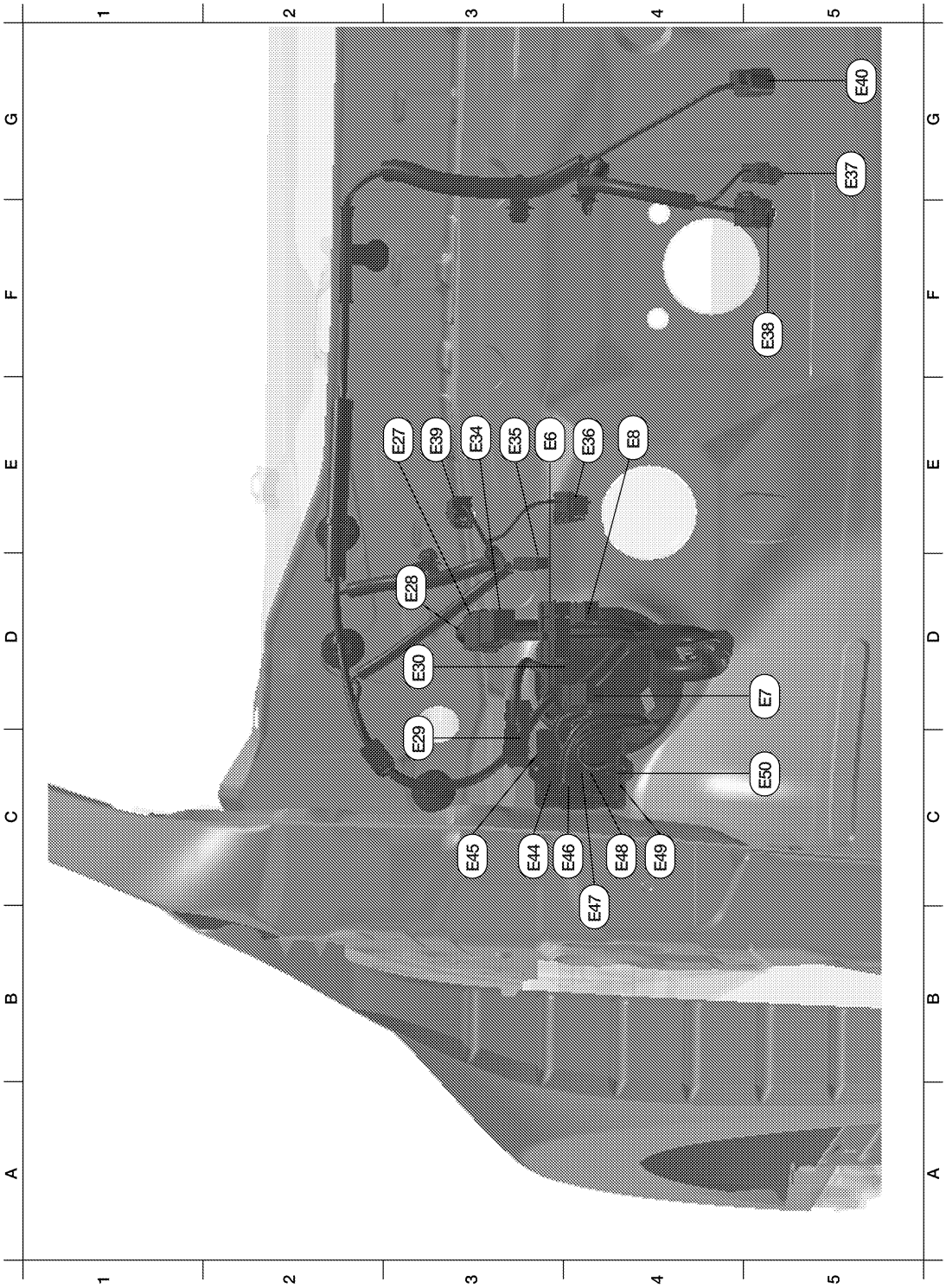


ABMIA0545GB

G4	E1	W/6	: Joint connector-E01	F3	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)
G4	E2	W/8	: To E202	C3	E18	W/36	: IPDM E/R (intelligent power distribution module engine room)
G4	E3	W/16	: To F1	F3	E19	GR/2	: Front wheel sensor LH
F4	E4	BR/2	: Fusible link box (battery)	G3	E20	W/6	: Joint connector-E02

F4	E5	GR/2	: Fusible link box (battery)	G3	E22	W/4	: Joint connector-E04
D4	E9	—	: Body ground	D3	E24	GR/2	: Brake fluid level switch
F5	E10	B/32	: ECM	E2	E25	GR/5	: Front wiper motor
G4	E11	W/10	: To F2	B4	E26	B/26	: ABS actuator and electric unit (control unit)
G4	E12	W/6	: To E203	A5	E41	GR/2	: Front wheel sensor RH
G5	E13	B/3	: To E205	F5	E42	BR/6	: Cooling fan relay-2
C4	E14	B/2	: Power steering solenoid valve	B2	E43	BR/6	: Cooling fan relay-3
D4	E15	—	: Body ground	F2	E73	BR/3	: Intelligent key warning buzzer
G5	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)	F2	E73	BR/3	: Outside warning buzzer
G3	E21	W/4	: Joint connector-E03				

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



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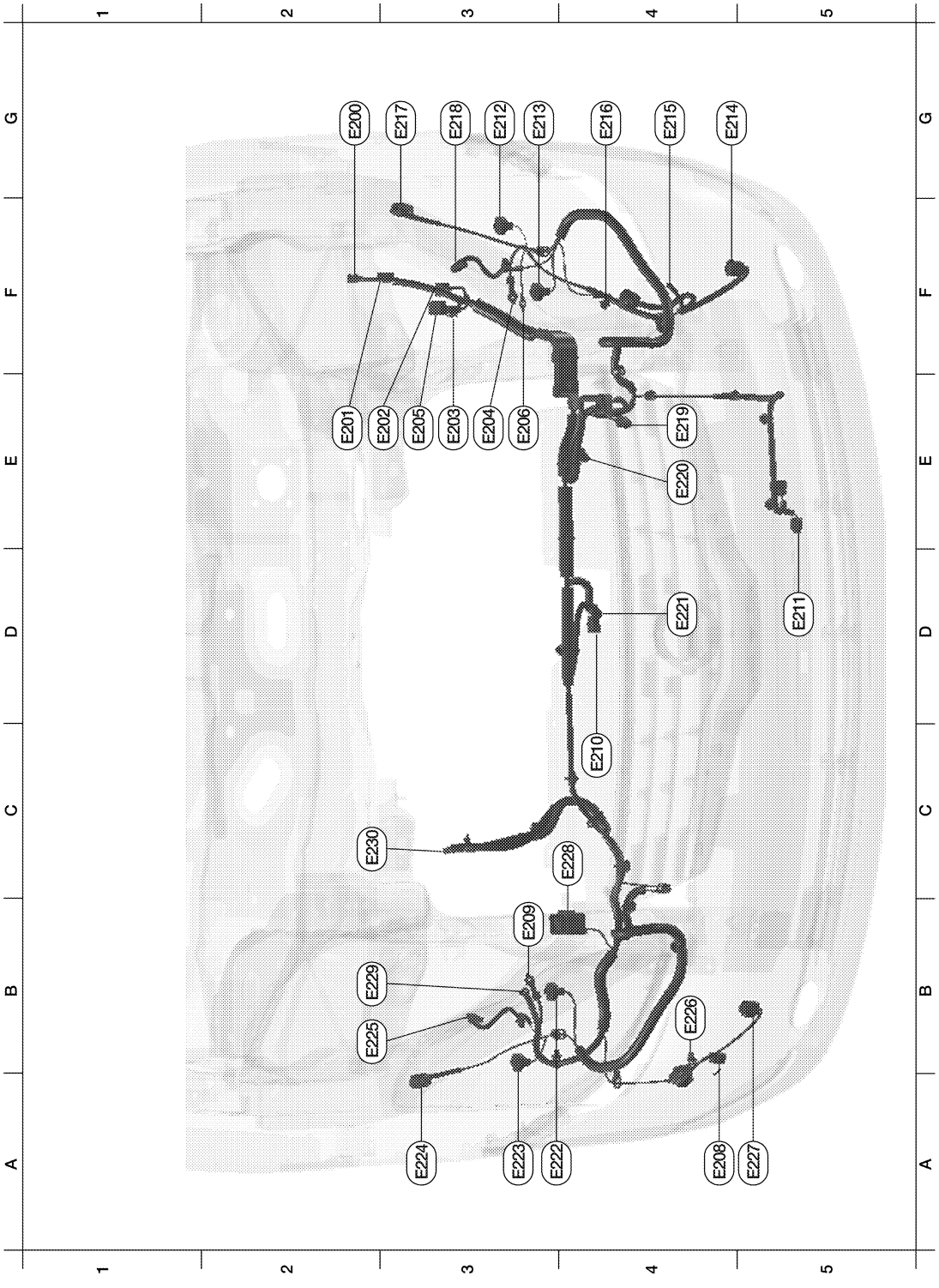
E3	E6	W/16	: Fuse block (J/B)	F5	E38	W/4	: Stop lamp switch (with CVT)
D5	E7	W/1	: Fuse block (J/B)	C5	E38	B/2	: Stop lamp switch (with M/T)
E4	E8	B/2	: Fuse block (J/B)	E3	E39	BR/2	: ASCD clutch switch
E3	E27	W/4	: Joint connector-E06	G5	E40	B/6	: Accelerator pedal position sensor
D3	E28	W/4	: Joint connector-E05	C3	E44	BR/12	: Junction block

C3	E29	W/16	: To B10	C3	E45	W/12	: Junction block
D3	E30	SMJ	: To M1	C4	E46	W/16	: Junction block
E3	E34	L/4	: Back-up lamp relay	B4	E47	W/6	: Junction block
E3	E35	B/1	: Park brake switch	C4	E48	W/4	: Junction block
E4	E36	BR/2	: Clutch interlock switch	C4	E49	BR/4	: Junction block
G5	E37	BR/2	: ASCD brake switch	C5	E50	W/2	: Junction block

FRONT END MODULE HARNESS

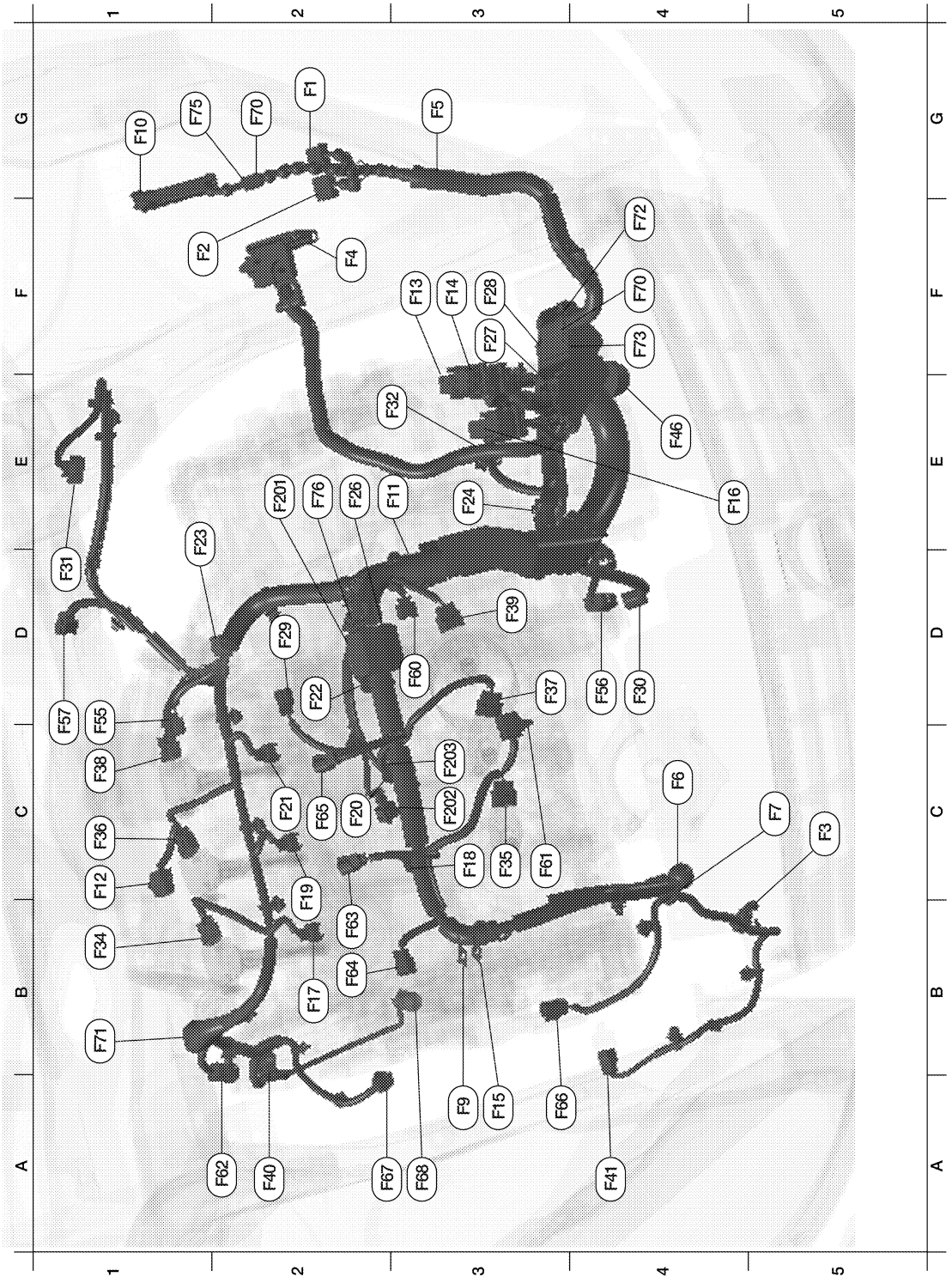


ABMIA0547GB

G3	E200	W/8	: IPDM E/R (intelligent power distribtion module engine room)	G4	E216	B/1	: Horn (high)
E2	E201	W/16	: IPDM E/R (intelligent power distrbution module engine room)	G3	E217	GR/3	: Front combination lamp LH (turn signal)
E3	E202	W/8	: To E2	G3	E218	B/2	: Front combination lamp LH (parking)
E3	E203	W/6	: To E12	E4	E219	B/3	: Refrigerant pressure sensor

E3	E204	—	: Body ground	E4	E220	GR/4	: Cooling fan motor-1
E3	E205	B/3	: To E13	D4	E221	GR/4	: Cooling fan motor-2
E3	E206	—	: Body ground	A4	E222	B/2	: Front combination lamp RH (high)
A4	E208	W/2	: Washer fluid level switch	A3	E223	B/2	: Front combination lamp RH (low)(halogen)
B3	E209	—	: Body ground	A3	E223	GR/2	: Front combination lamp RH (low)(xenon)
D4	E210	Y/2	: Crash zone sensor	A3	E224	GR/3	: Front combination lamp RH (turn signal)
D5	E211	B/2	: Ambient sensor	B3	E225	B/2	: Front combination lamp RH (parking)
B2	E212	B/2	: Front combination lamp LH (low) (halogen)	B4	E226	B/2	: Front washer motor
G3	E212	GR/2	: Front combination lamp LH (low) (Xenon)	A5	E227	B/2	: Front fog lamp RH
G4	E213	B/2	: Front combination lamp LH (high)	C4	E228	B/5	: Daytime light relay
G5	E214	B/2	: Front fog lamp LH	B3	E229	—	: Body ground
G4	E215	B/1	: Horn (low)	C3	E230	—	: Generator

ENGINE CONTROL HARNESS (VQ35DE)

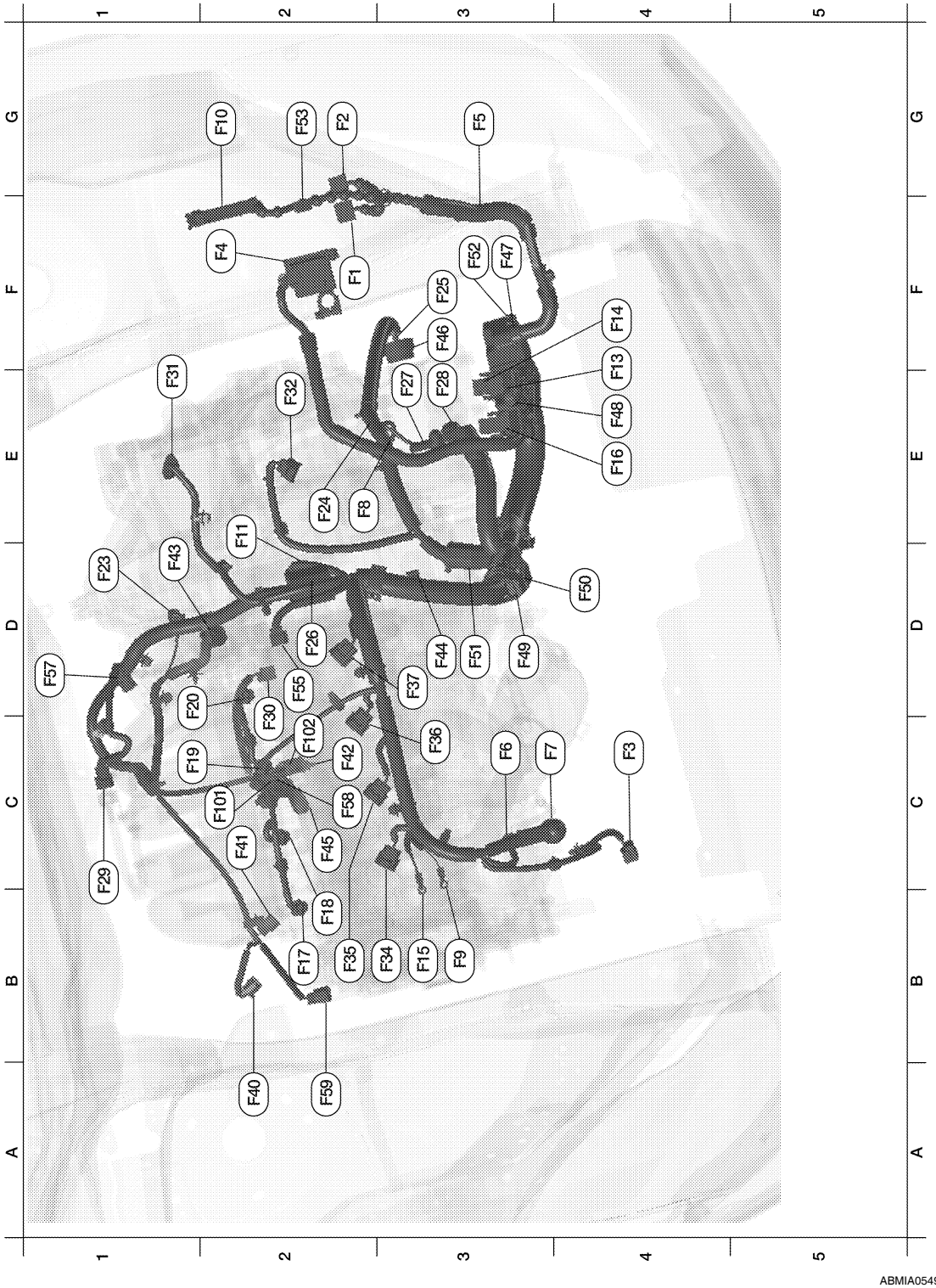


ABMIA0548GB

G2	F1	W/16	: To E3	C3	F35	GR/3	: Ignition coil No. 2 (with power transistor)
F2	F2	W/10	: To E11	C1	F36	GR/3	: Ignition coil No. 3 (with power transistor)
C5	F3	B/2	: A/C Compressor	D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)
F2	F4	—	: Fusible link box (battery)	C1	F38	GR/3	: Ignition coil No. 5 (with power transistor)
G3	F5	B/3	: Battery current sensor	D3	F39	GR/3	: Ignition coil No. 6 (with power transistor)

C4	F6	—	: Generator	A2	F40	B/3	: Power steering pressure sensor
C5	F7	B/3	: Generator	A4	F41	GR/1	: Oil pressure switch
E4	F8	W/3	: Primary speed sensor	E4	F46	B/22	: CVT unit
A3	F9	—	: Engine ground	D1	F55	B/3	: Camshaft position sensor (PHASE)(bank1)
G1	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
E3	F11	GR/2	: Engine coolant temperature sensor	D1	F57	B/6	: Electric throttle control actuator
C1	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	D3	F60	B/3	: Camshaft position sensor (PHASE)(bank2)
F3	F13	BR/48	: ECM	C3	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)
F3	F14	GR/32	: ECM	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)
A3	F15	—	: Engine ground	B2	F63	B/2	: VIAS control solenoid valve 1
E4	F16	B/48	: TCM (transmission control module)	B3	F64	B/2	: Electric controlled engine mount control solenoid valve
B2	F17	GR/2	: Fuel injector No. 1	C2	F65	B/2	: VIAS control solenoid valve 2
C3	F18	GR/2	: Fuel injector No. 2	A3	F66	G/2	: Intake valve timing control solenoid valve (bank 2)
C2	F19	GR/2	: Fuel injector No. 3	A2	F67	G/2	: Intake valve timing control solenoid valve (bank 1)
C2	F20	GR/2	: Fuel injector No. 4	A3	F68	GR/2	: Engine oil temperature sensor
C2	F21	GR/2	: Fuel injector No. 5	G2	F70	B/10	: Joint connector-F01
D2	F22	GR/2	: Fuel injector No. 6	B1	F71	GR/6	: Joint connector-F03
E2	F23	B/3	: Secondary speed sensor	F4	F72	B/10	: Joint connector-F04
E3	F24	B/2	: Back-up lamp switch	F4	F73	B/10	: Joint connector-F05
E2	F26	GR/2	: Condenser-2	D3	F74	W/4	: Joint connector-F08
F3	F27	—	: Starter motor	G2	F75	W/4	: Joint connector-F07
F3	F28	GR/1	: Starter motor	E2	F76	L/4	: To F201
D2	F29	L/2	: EVAP canister purge volume control solenoid valve	Knock sensor sub-harness			
D4	F30	B/3	: Crankshaft position sensor (POS)	E2	F201	L/4	: To F76
D1	F31	B/6	: Mass air flow sensor	C3	F202	GR/2	: Knock sensor (bank 1)
E3	F32	B/2	: Park/neutral position (PNP) switch	C3	F203	GR/2	: Knock sensor (bank 2)
B1	F34	GR/3	: Ignition coil No. 1 (with power transistor)				

ENGINE CONTROL HARNESS (QR25DE)

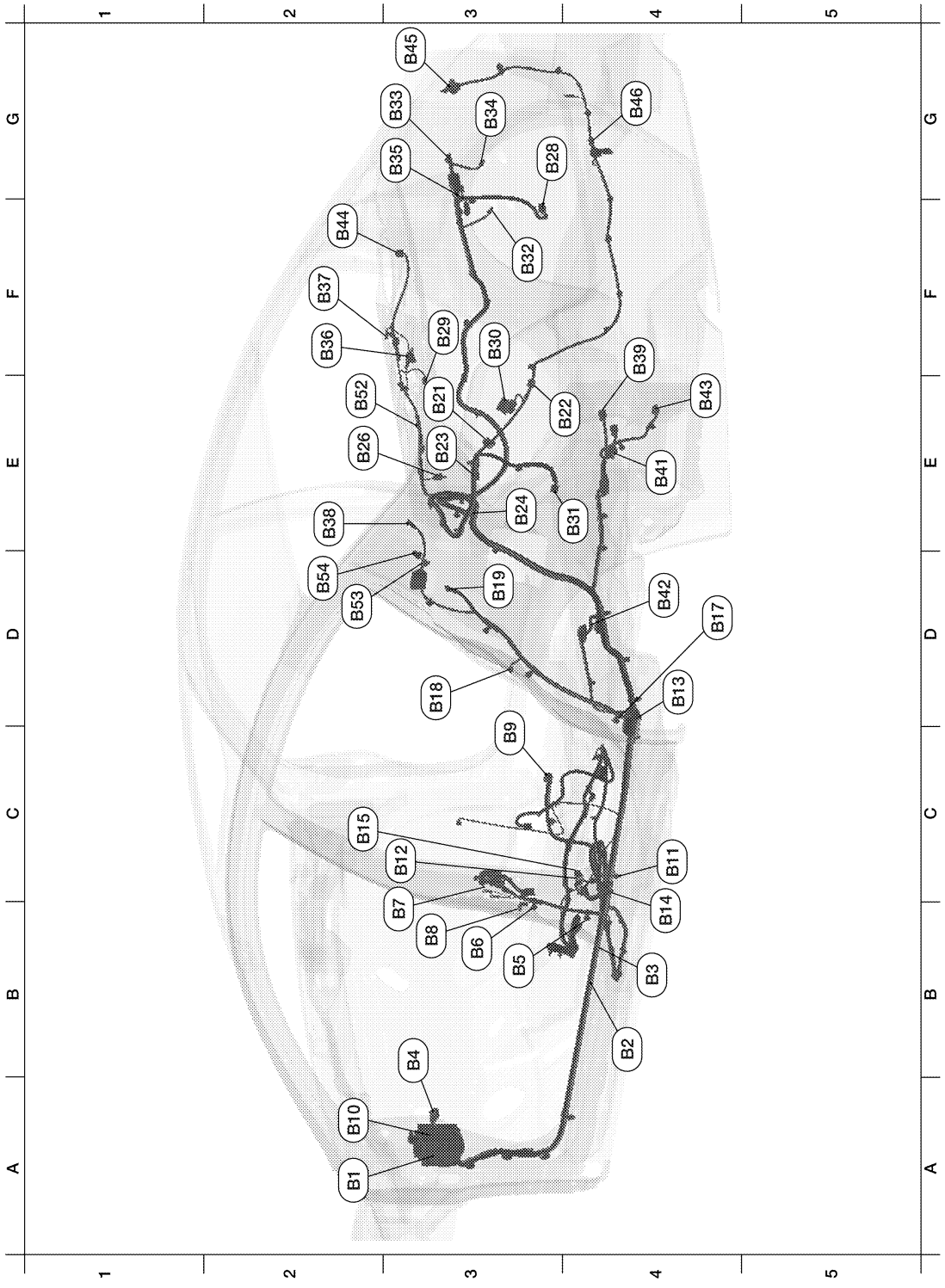


ABMIA0549GB

F2	F1	W/16	: To E3	E1	F31	B/6	: Mass air flow sensor
G2	F2	W/10	: To E11	E2	F32	B/2	: Park/neutral position (PNP) switch (with M/T)
C4	F3	B/12	: A/C Compressor	B3	F34	GR/3	: Ignition coil No. 1 (with power transistor)
F2	F4	—	: Fusible link box (battery)	B2	F35	GR/3	: Ignition coil No. 2 (with power transistor)
G3	F5	B/3	: Battery current sensor	C3	F36	GR/3	: Ignition coil No. 3 (with power transistor)

C3	F6	—	: Generator	D3	F37	GR/3	: Ignition coil No. 4 (with power transistor)
C3	F7	B/3	: Generator	A2	F40	B/3	: Power steering pressure sensor
E2	F8	W/3	: Primary speed sensor	C2	F41	GR/1	: Oil pressure switch
B3	F9	—	: Engine ground	C2	F42	B/4	: Heated oxygen sensor 2
G2	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	D1	F43	GR/5	: Tumble control valve actuator
E2	F11	GR/2	: Engine coolant temperature sensor	D3	F44	GR/4	: Air fuel ratio (A/F) sensor 1
E4	F13	BR/48	: ECM	C2	F45	GR/2	: Knock sensor
F4	F14	GR/32	: ECM	F3	F46	B/22	: CVT unit
B3	F15	—	: Engine ground	F3	F47	B/6	: Joint connector-F01
E4	F16	B/48	: TCM (transmission control module)	E4	F48	B/10	: Joint connector-F02
B2	F17	GR/2	: Fuel injector No. 1	D3	F49	B/10	: Joint connector-F03
B2	F18	GR/2	: Fuel injector No. 2	D4	F50	B/10	: Joint connector-F04
C1	F19	GR/2	: Fuel injector No. 3	D3	F51	B/6	: Joint connector-F05
D1	F20	GR/2	: Fuel injector No. 4	F3	F52	B/10	: Joint connector-F06
D1	F23	B/3	: Secondary speed sensor	G2	F53	B/4	: Joint connector-F07
E3	F24	B/2	: Back-up lamp switch	D2	F55	B/3	: Camshaft position sensor (PHASE)
F3	F25	B/10	: Park/neutral position (PNP) switch (with CVT)	D1	F57	B/6	: Electric throttle control actuator
D2	F26	GR/2	: Condenser-2	C2	F58	B/4	: To F101
E3	F27	—	: Starter motor	A2	F59	G/2	: Intake valve timing control solenoid valve
E3	F28	—	: Starter motor	C1	F101	B/4	: To F58
C1	F29	L/2	: EVAP canister purge volume control solenoid valve	C2	F102	GR/4	: Heated oxygen sensor 3
C2	F30	B/3	: Crankshaft position sensor (POS)				

BODY HARNESS

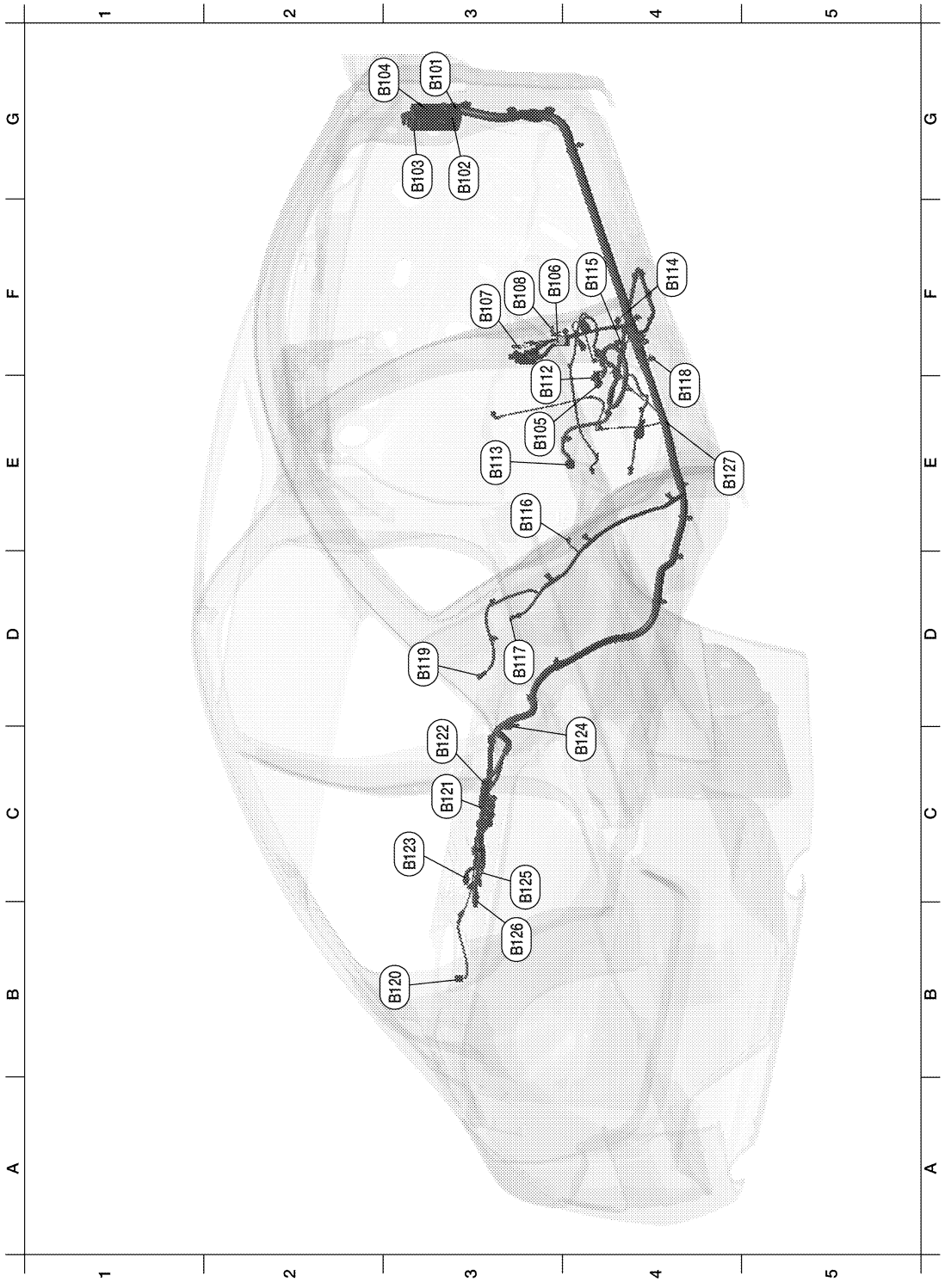


ABMIA0550GB

A2	B1	SMJ	: To M6	G5	B28	W/4	: Trunk lamp switch and trunk release solenoid
B4	B2	W/4	: Joint connector-B01	F3	B29	GR/2	: Rear parcel shelf antenna
B4	B3	W/4	: Joint connector-B02	F3	B30	W/6	: Rear combination lamp LH
B3	B4	BR/12	: Fuse block (J/B)	E4	B31	W/16	: Rear view camera control unit
B3	B5	—	: Body ground	F3	B32	BR/2	: License plate lamp LH

B3	B6	W/8	: To D201	G3	B33	BR/2	: Trunk opener request switch
B3	B7	—	: Body ground	G3	B34	BR/2	: License plate lamp RH
B3	B8	W/3	: Front door switch LH	G3	B35	W/4	: Rear view camera control unit
C3	B9	Y/12	: Air bag diagnosis sensor unit	F2	B36	W/2	: Trunk room lamp
A2	B10	W/16	: To E29	F2	B37	BR/2	: High mounted stop lamp (with rear spoiler)
C4	B11	Y/2	: Front LH side air bag module	F2	B37	W/2	: High mounted stop lamp (without rear spoiler)
C3	B12	W/8	: To B201	E2	B38	Y/2	: LH side front curtain air bag module
D4	B13	W/6	: Joint connector-B03	F4	B39	B/2	: EVAP canister vent control valve
B4	B14	Y/2	: Front LH seat belt pre-tensioner	E4	B41	GR/3	: EVAP control system pressure sensor
C2	B15	Y/2	: LH side air bag (satellite) sensor	D4	B42	GR/5	: Fuel level sensor unit and fuel pump
D4	B17	W/2	: Condenser-1	E4	B43	GR/4	: Rear wheel sensor
D3	B18	W/3	: Rear door switch LH	F2	B44	W/2	: Rear speaker RH
D3	B19	—	: Body ground	G3	B45	W/6	: Rear combination lamp RH
E3	B21	L/12	: Joint connector-B06	G4	B46	GR/2	: Rear bumper antenna
E4	B22	GR/6	: Joint connector-B07	E2	B52	W/1	: Condenser
E3	B23	W/4	: Joint connector-B08	D2	B53	B/1	: Rear window defogger
E3	B24	W/4	: Joint connector-B09	D2	B54	B/1	: Rear window defogger
E2	B26	W/2	: Rear speaker LH	F3	B58	—	: Body ground

BODY NO. 2 HARNESS

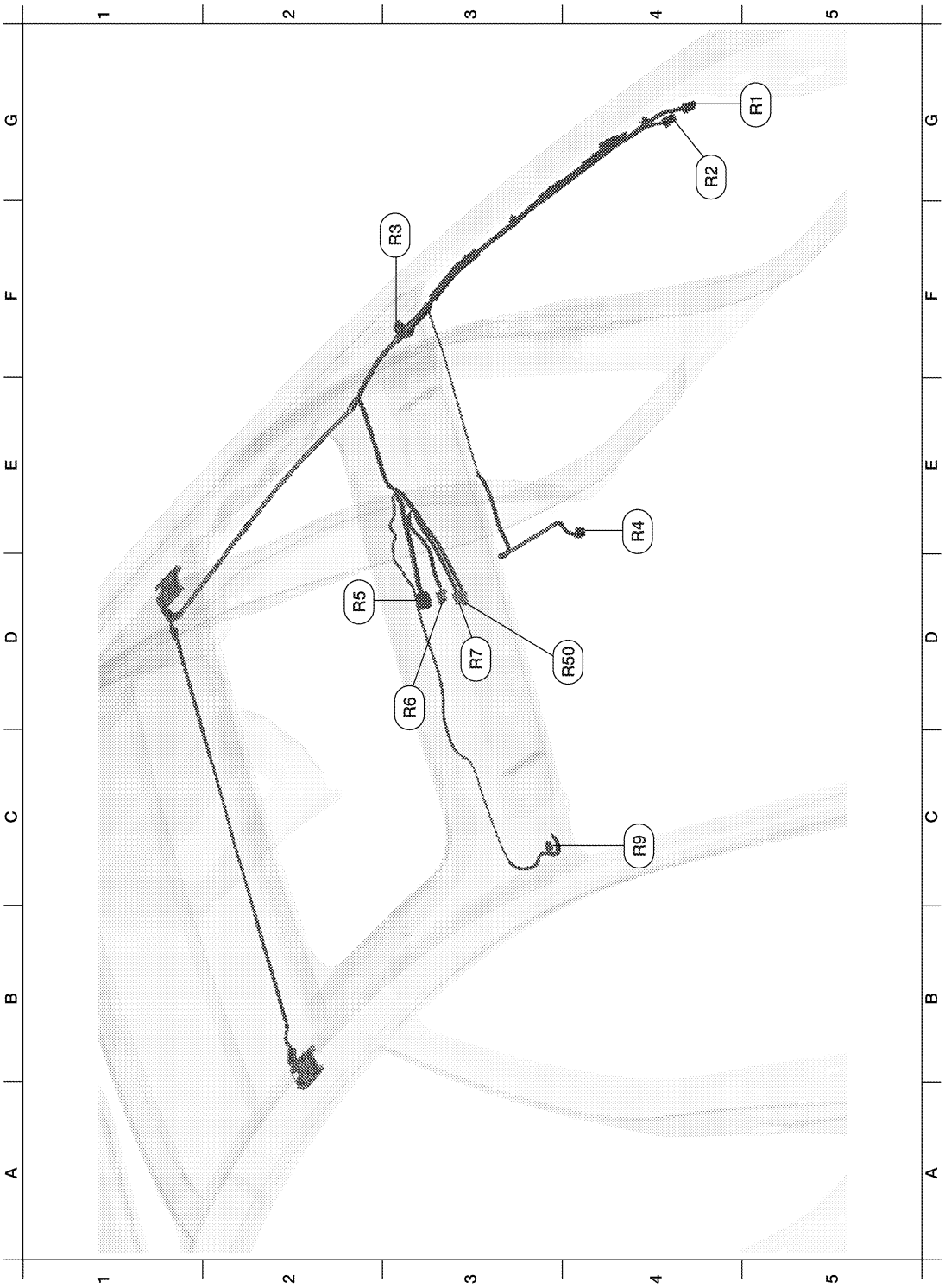


ABMIA0551GB

G3	B101	W/32	: To M2	E3	B116	W/3	: Rear door switch RH
G3	B102	W/24	: To M8	D3	B117	—	: Body ground
G3	B103	BR/16	: To M9	E4	B118	Y/2	: RH side air bag (satellite) sensor
G3	B104	BR/12	: To M10	D3	B119	Y/2	: RH side curtain air bag module
E3	B105	W/8	: To B301	B3	B120	W/2	: Rear speaker subwoofer LH

F3	B106	W/8	: To D301	C3	B121	BR/23	: BOSE speaker amp.
F3	B107	—	: Body ground	C3	B122	BR/14	: BOSE speaker amp.
F3	B108	W/3	: Front door switch RH	C3	B123	W/16	: Satellite radio tuner or pre-wiring for satellite radio tuner
E3	B112	Y/2	: Front RH side air bag module	C4	B124	W/2	: Rear subwoofer RH
E3	B113	Y/12	: Air bag diagnosis sensor unit	C3	B125	W/8	: Bluetooth control unit
E4	B114	—	: Body ground	B3	B126	W/32	: Bluetooth control unit
F4	B115	Y/2	: Front RH seat belt pre-tensioner	E4	B127	—	: Body ground

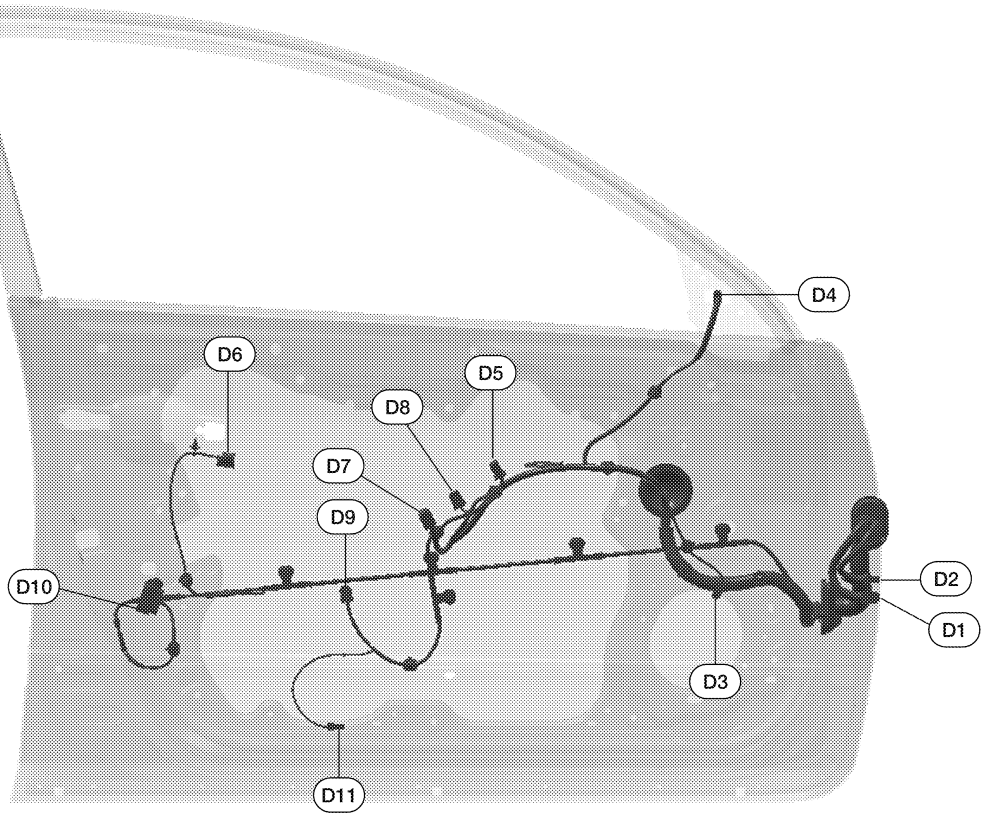
ROOM LAMP HARNESS



ABMIA0552GB

G5	R1	W/16	: To M77	D3	R6	W/3	: Sunroof switch
G4	R2	W/4	: To M13	D3	R7	W/4	: Microphone
F3	R3	W/2	: Vanity mirror lamp LH	C4	R9	W/2	: Vanity mirror lamp RH
E4	R4	B/10	: Auto anti-dazzling inside mirror	D4	R50	GR/6	: Front room/map lamp assembly
D2	R5	W/10	: Sunroof motor assembly				

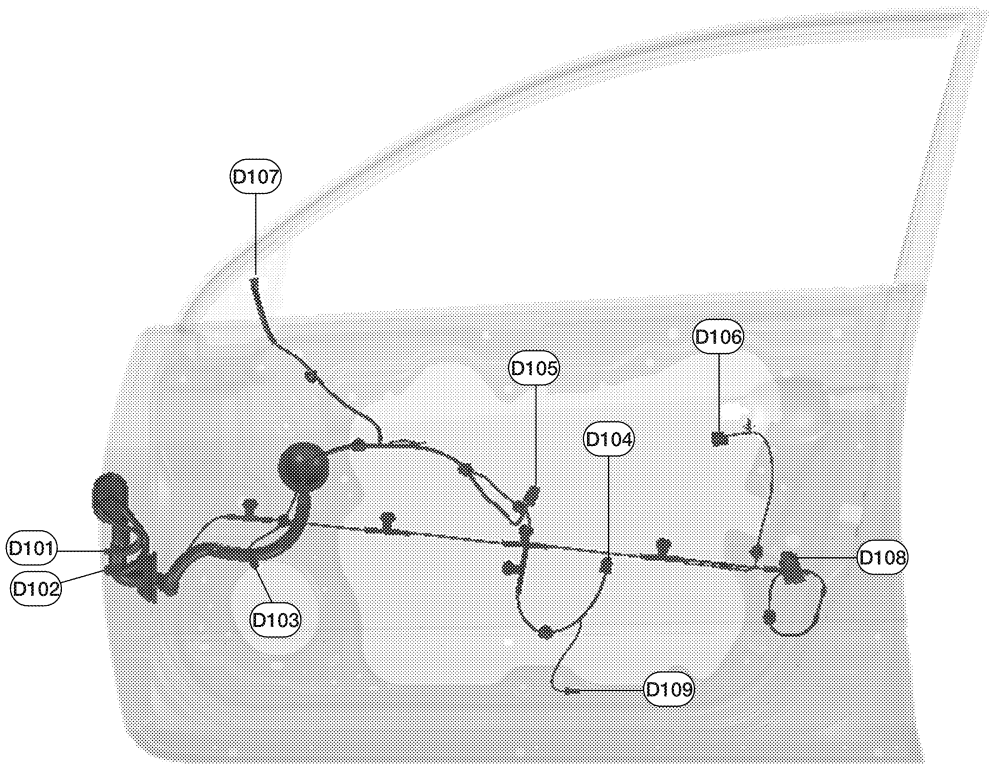
FRONT DOOR LH HARNESS



ALMIA0026GB

D1	W/16	: To M11	D6	B/4	: Front outside handle LH
D2	W/16	: To M12	D7	W/16	: Main power window and door lock/unlock switch
D3	W/2	: Front door speaker LH (with base audio system)	D8	W/3	: Main power window and door lock/unlock switch
D3	BR/2	: Front door speaker LH (with BOSE audio system)	D9	W/6	: Front power window motor LH
D4	W/8	: Door mirror LH	D10	GR/6	: Front door lock assembly LH
D5	W/16	: Door mirror remote control switch	D11	W/2	: Step lamp LH

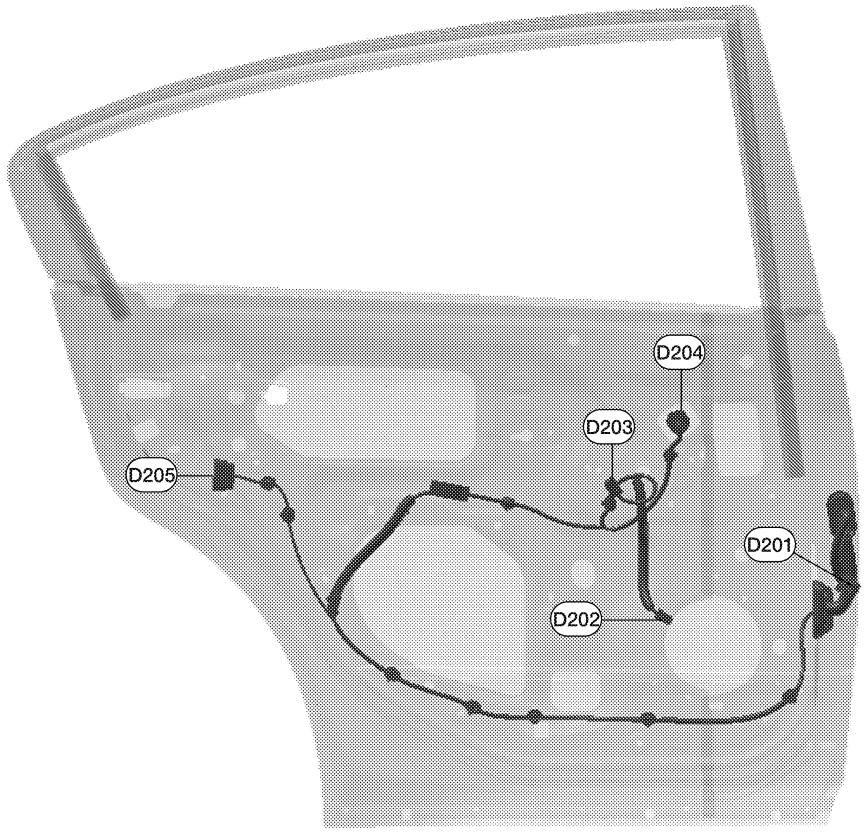
FRONT DOOR RH HARNESS



ALMIA0027GB

D101	W/10	: To M14	D105	W/16	: Power window and door lock/unlock switch RH (with left and right front power window anti-pinch system)
D102	W/12	: To M15	D106	B/4	: Front outside handle RH
D103	W/2	: Front door speaker RH (with base audio system)	D107	W/8	: Door mirror RH
D103	BR/2	: Front door speaker RH (with BOSE audio system)	D108	GR/6	: Front door lock actuator RH
D104	W/6	: Front power window motor RH	D109	W/2	: Step lamp RH
D105	W/12	: Power window and door lock/unlock switch RH (with left front only power window anti-pinch system)			

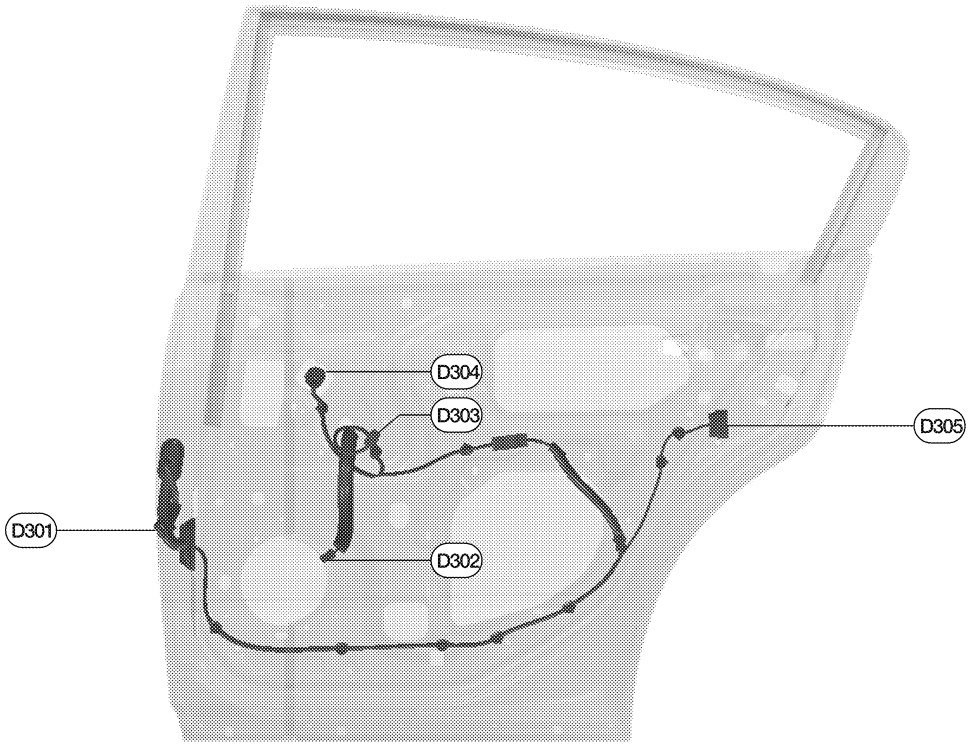
REAR DOOR LH HARNESS



ALMIA0028GB

D201	W/8	: To B6			
D202	BR/2	: Rear door speaker LH			
D203	W/8	: Rear power window switch LH			
D204	GR/6	: Rear power window motor LH			
D205	GR/6	: Rear door lock actuator LH			

REAR DOOR RH HARNESS



ALMIA0029GB

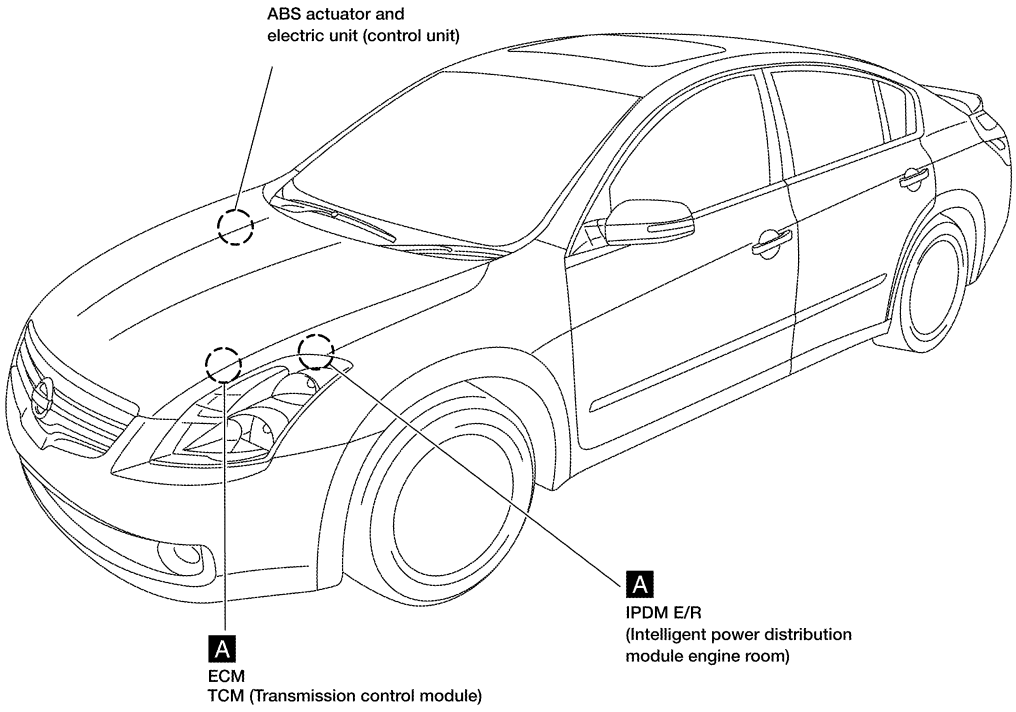
D301	W/8	: To B106			
D302	BR/2	: Rear door speaker RH			
D303	W/8	: Rear power window switch RH			
D304	GR/6	: Rear power window motor RH			
D305	GR/6	: Rear door lock actuator RH			

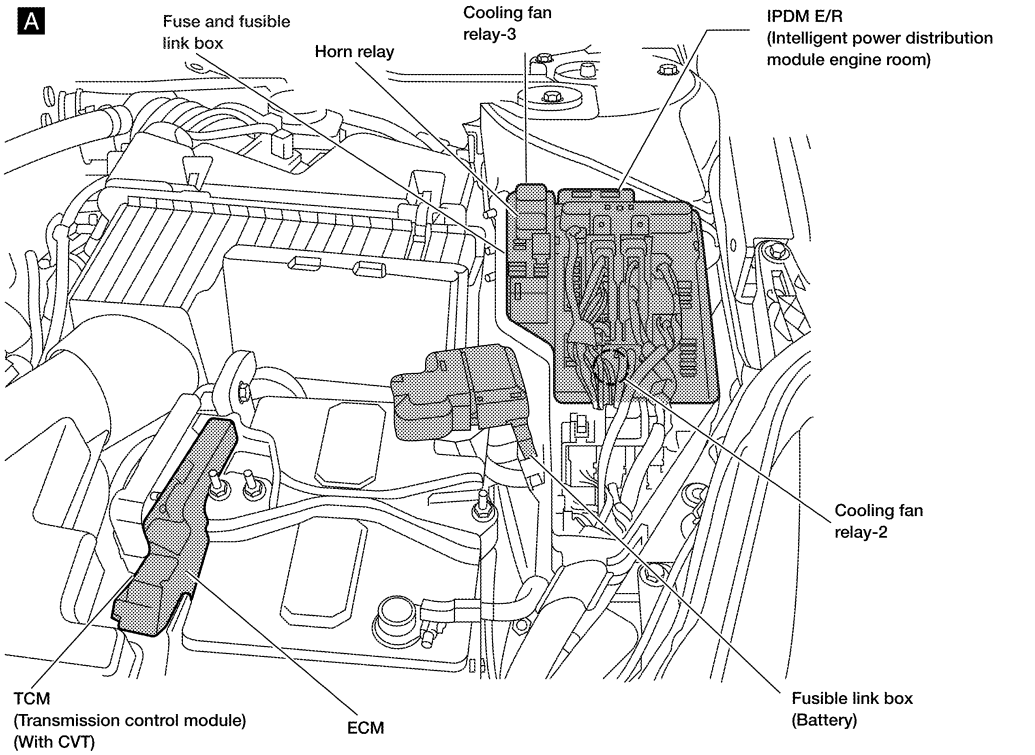
ELECTRICAL UNITS LOCATION

Electrical Units Location

INFOID:0000000004206751

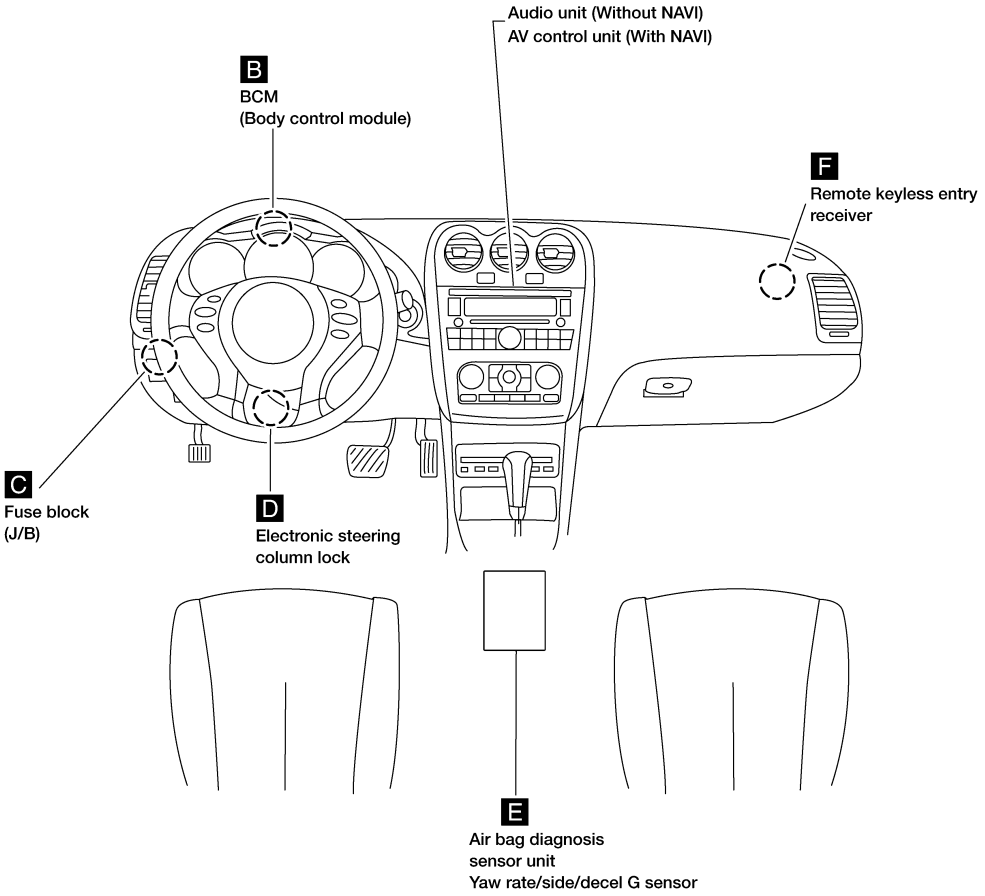
ENGINE COMPARTMENT





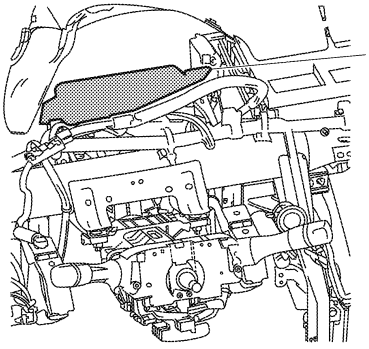
ABMIA0509GB

PASSENGER COMPARTMENT

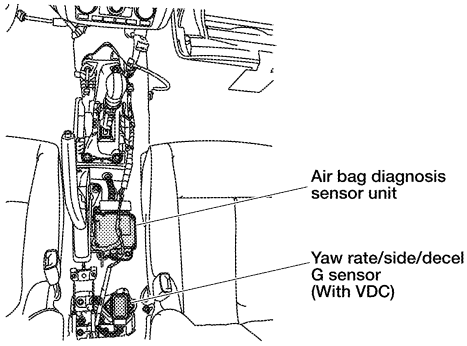


ABMIA0510GB

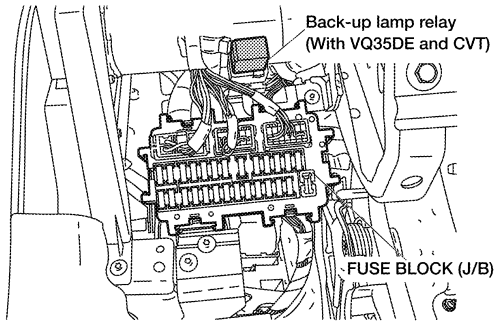
B View with instrument panel removed



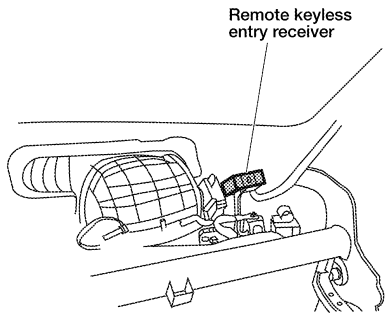
E View with center console removed



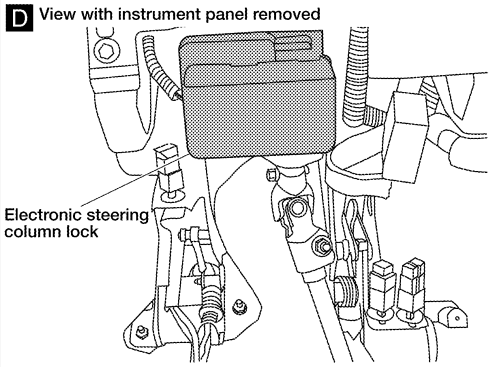
C View with lower driver instrument panel removed



F View with instrument panel removed

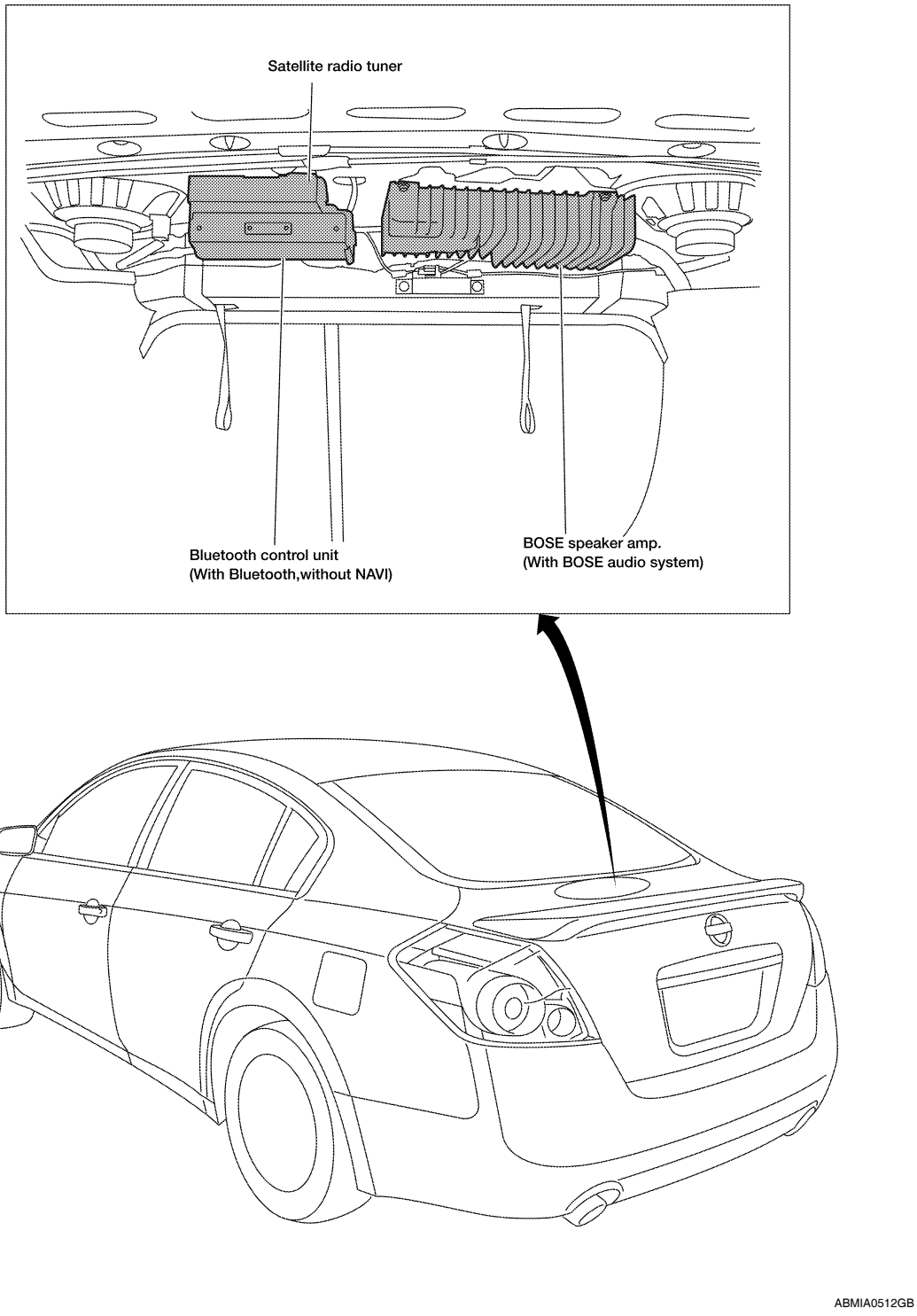


D View with instrument panel removed



ABMIA0511GB

LUGGAGE COMPARTMENT



ABMIA0512GB

HARNESS CONNECTOR

Description

INFOID:0000000004494680

HARNESS CONNECTOR (TAB-LOCKING TYPE)

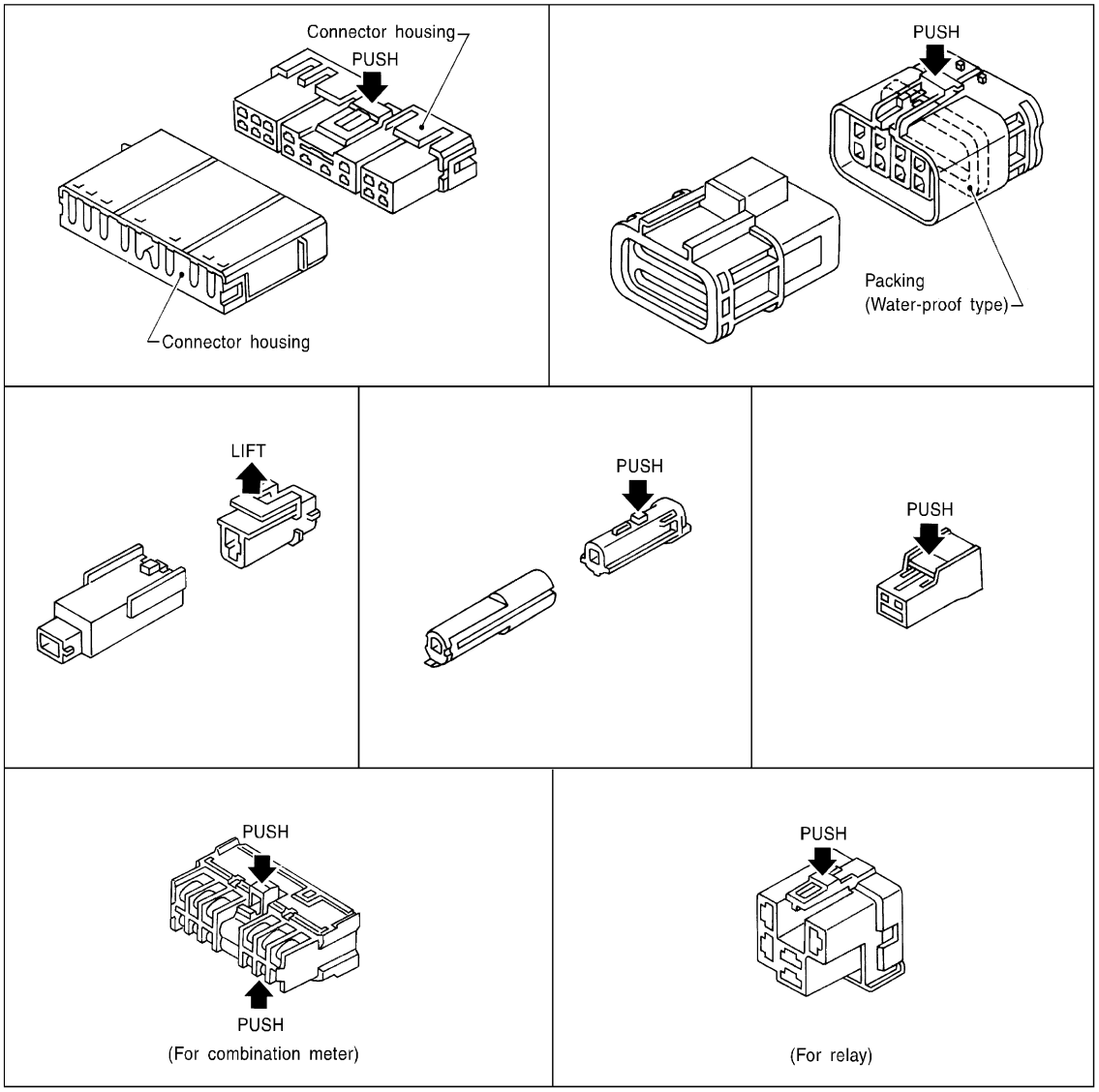
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

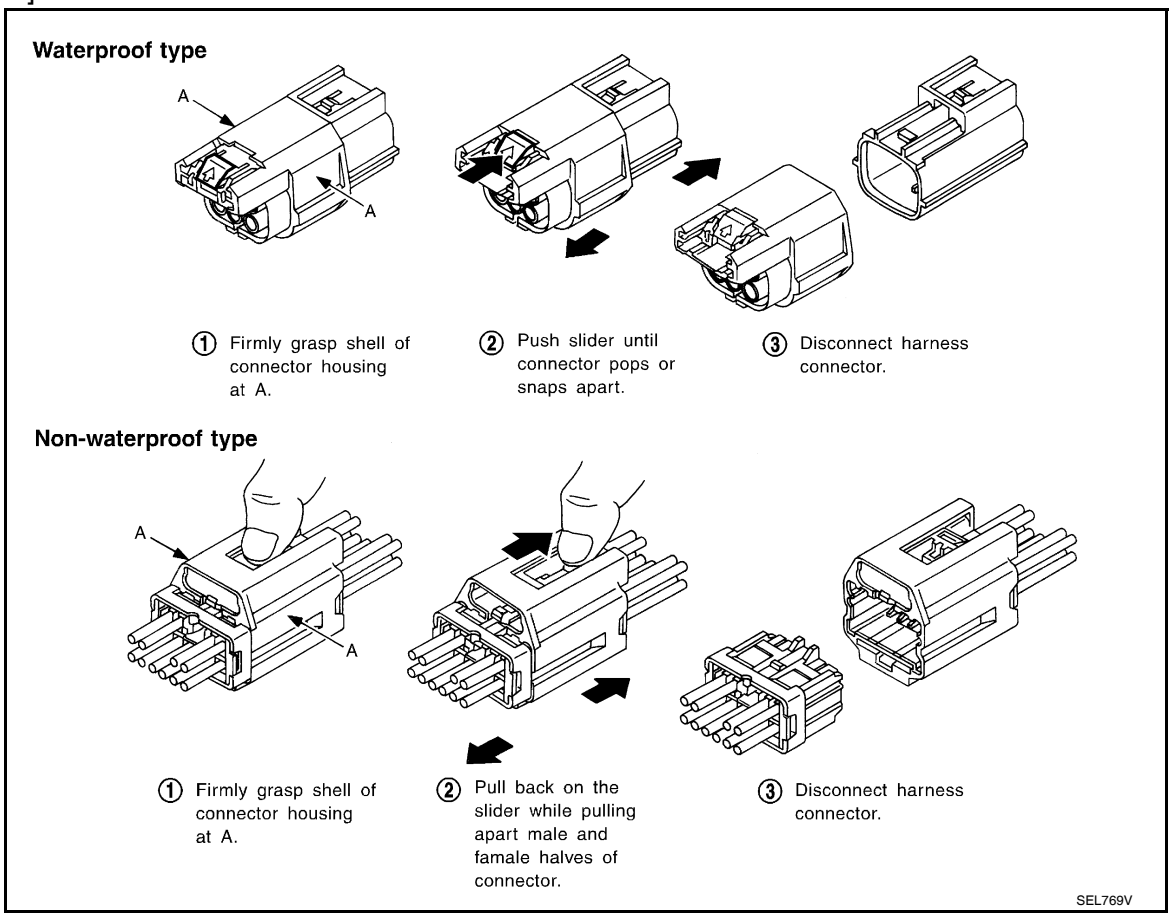
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]

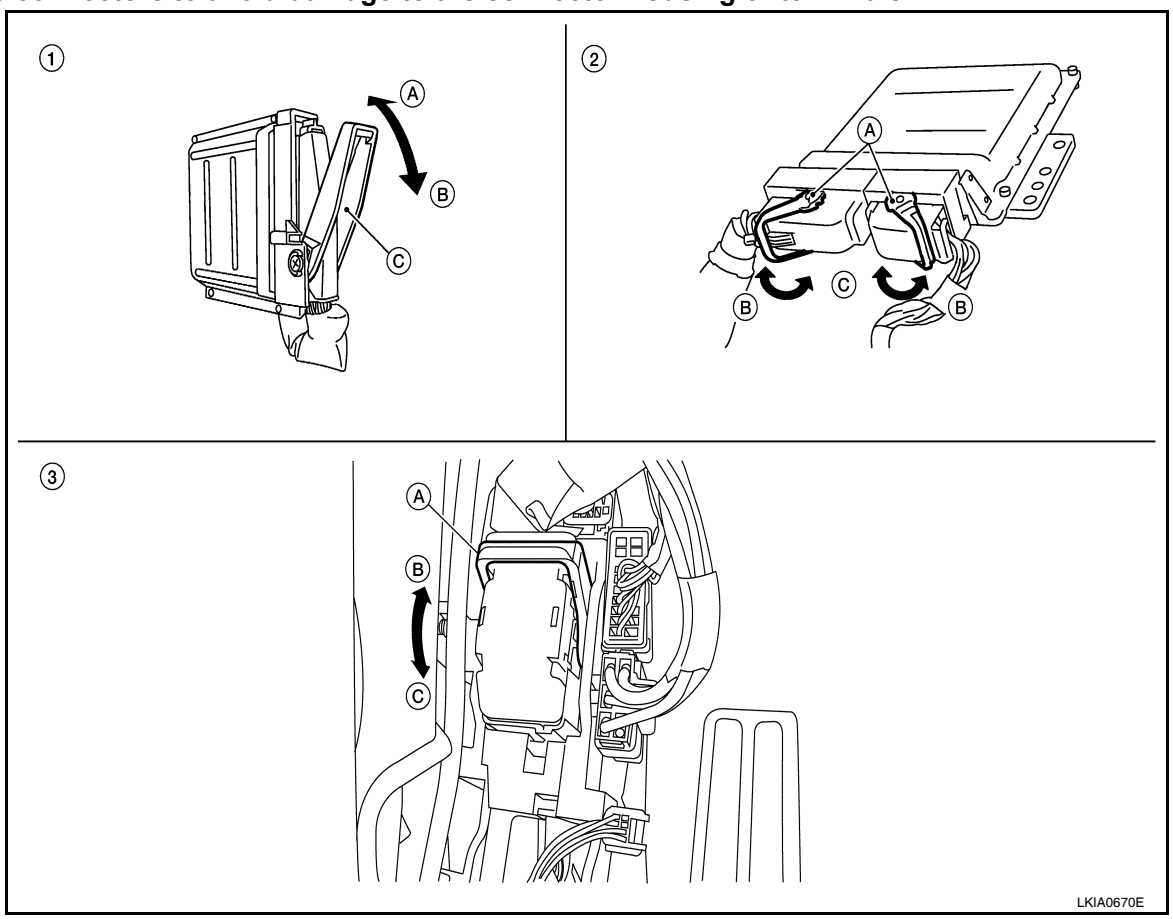


HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

CAUTION:

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



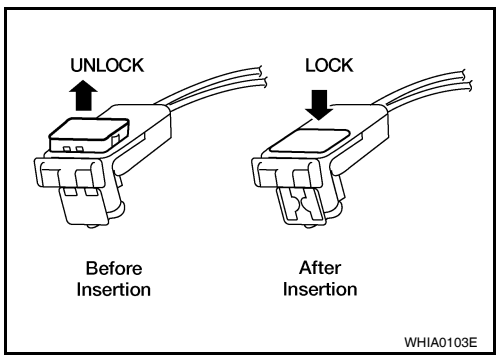
1. Control unit with single lever
   A. Fasten
   B.Loosen
   C.Lever
2. Control unit with dual lever
   A. Fasten
   B.Loosen
   C.Lever
3. SMJ connector
   A. Fasten
   B.Loosen
   C.Lever

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS components.
- Always push down to lock black locking tab afte4r installing connector to SRS components.n When locked, the black locking tab is level with the connector housing.

CAUTION:

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



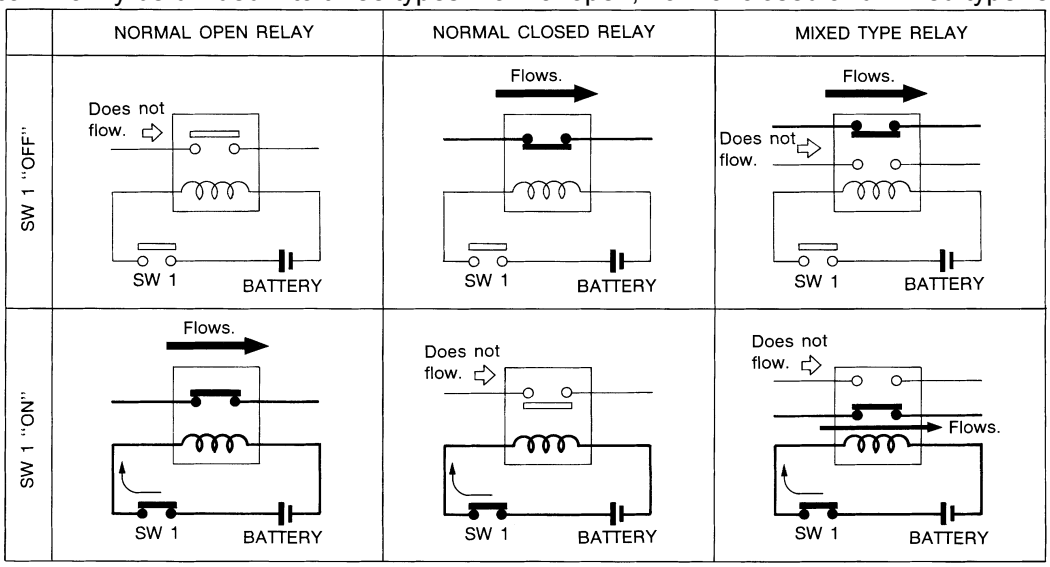
STANDARDIZED RELAY

Description

INFOID:0000000004206753

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

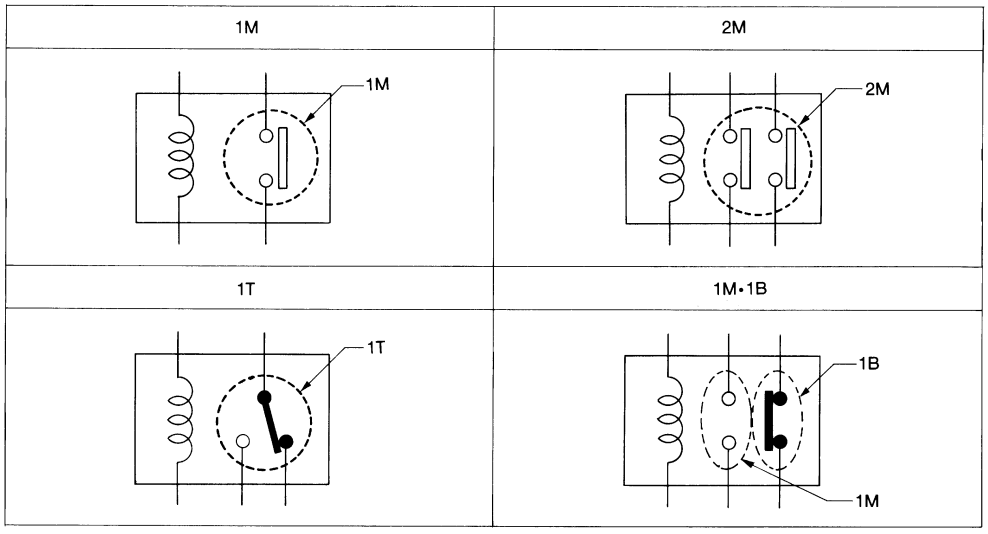
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



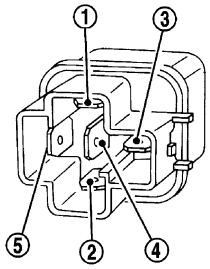
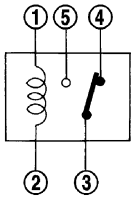
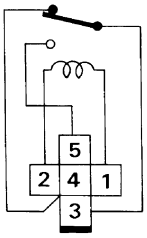
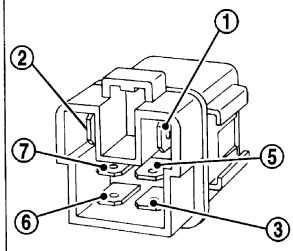
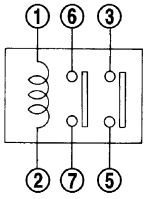
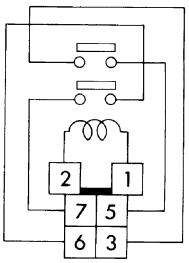
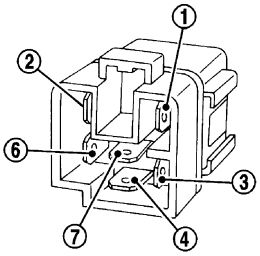
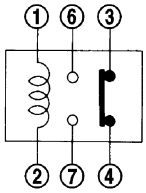
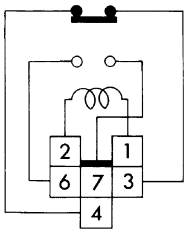
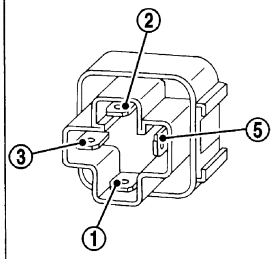
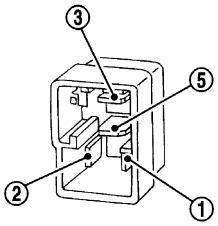
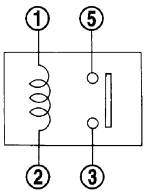
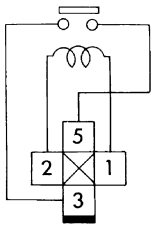
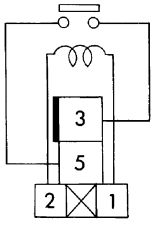
SEL881H

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

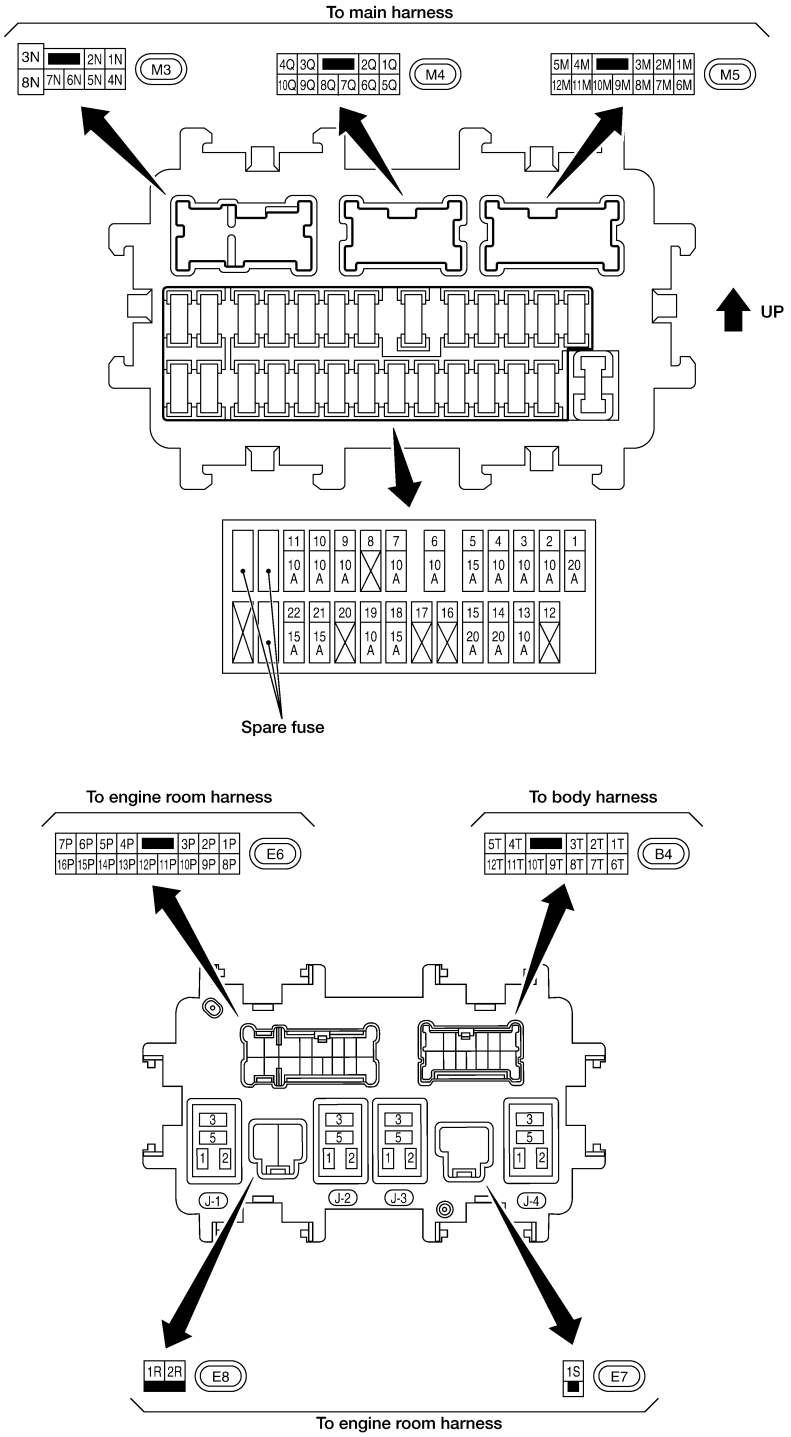
The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000004206754



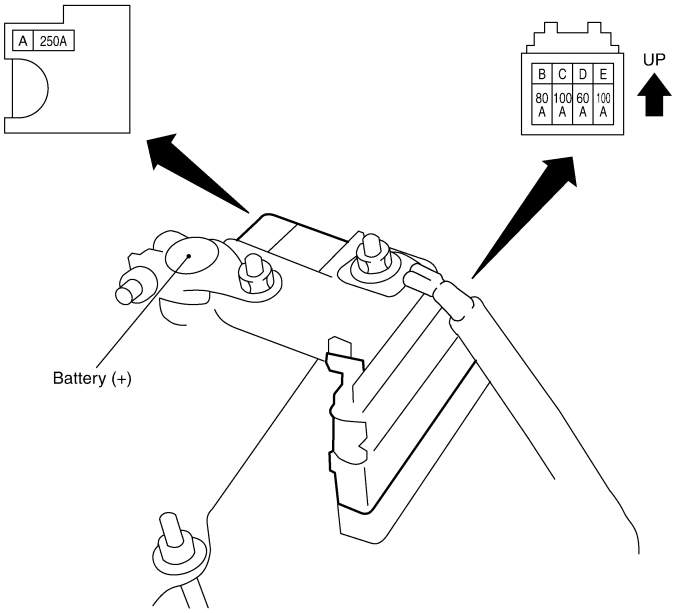
ABMIA0513GB

FUSE, FUSIBLE LINK AND RELAY BOX

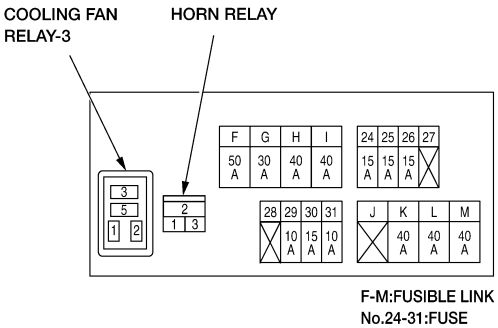
Terminal Arrangement

INFOID:0000000004206755

FUSIBLE LINK BOX (BATTERY)



FUSE AND FUSIBLE LINK BOX

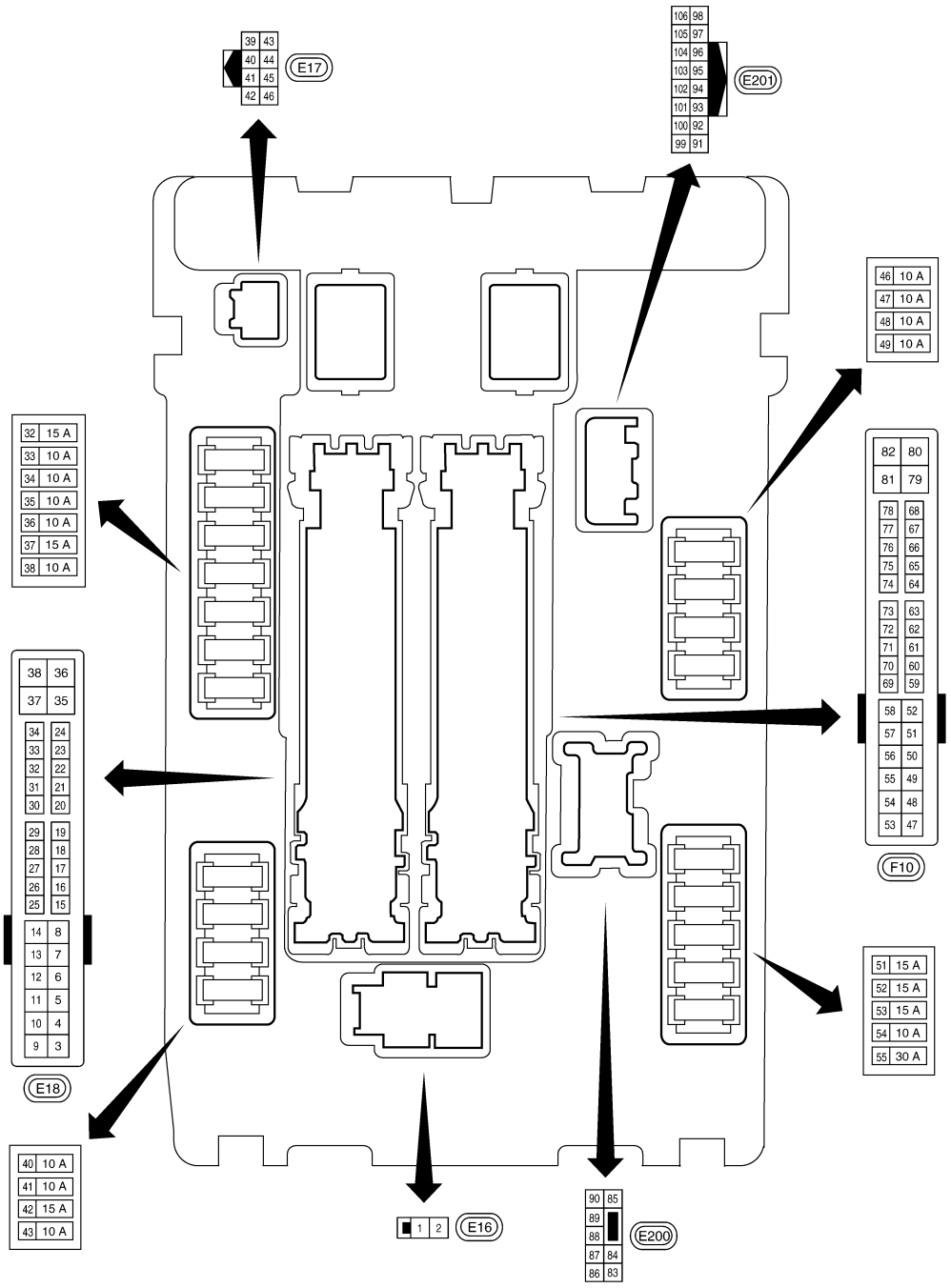


ABMIA0514GB

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

Fuse, Connector and Terminal Arrangement

INFOID:0000000004494677



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PRECAUTION

PRECAUTIONS

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

INFOID:0000000004206756

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.**

Necessary for Steering Wheel Rotation After Battery Disconnect

INFOID:0000000004499306

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.

Battery Service

INFOID:0000000004206757

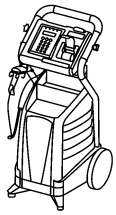
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

PREPARATION

PREPARATION

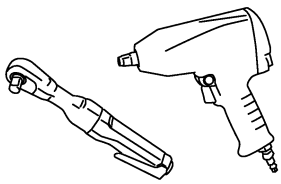
Special Service Tool

INFOID:0000000004206758

Tool number (Kent Moore No.) Tool name	Description
(J-48087) Battery Service Center  WKIA5280E	Tests Battery. For operating instructions, refer to Technical Service Bulletin and Battery Service Center User Guide.

Commercial Service Tool

INFOID:0000000004206759

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

ON-VEHICLE REPAIR

BATTERY

Removal and Installation

INFOID:0000000004206760

REMOVAL

1. Remove air duct (front). Refer to EM-25, "Removal and Installation" QR25DE models, EM-129, "Removal and Installation" VQ35DE models.
2. Loosen battery terminal nuts, and disconnect both battery terminals.
   CAUTION:
   When disconnecting, disconnect the negative terminal first.
3. Remove battery frame nuts and battery frame.
4. Remove battery.

INSTALLATION

Installation is in the reverse order of removal.

CAUTION:
When connecting, connect the positive terminal first.

Battery frame nut	**: 3.92 N·m (0.4 kg-m, 35 in-lb)**
Battery terminal nut	**: 5.4 N·m (0.55 kg-m, 48 in-lb)**

Reset electronic systems as necessary. Refer to PG-73, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

SERVICE DATA AND SPECIFICATIONS (SDS)

BATTERY

Battery

INFOID:0000000004206761

Type	GR.35 (BCI)
Capacity (5HR) minimum V-AH	52
Cold cranking current A @ -18°C (0°F)	525