SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

COUPE

SEDAN

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:0000000003229309

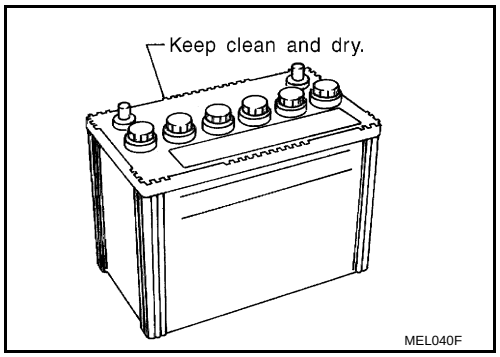
CAUTION:

- **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.**

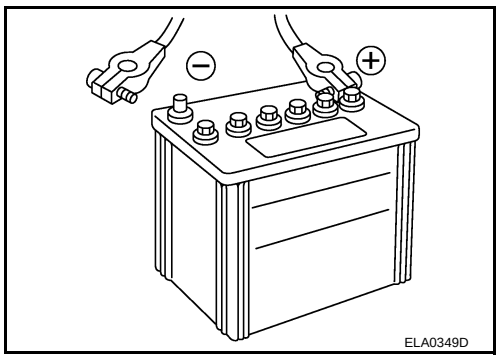
METHODS OF PREVENTING OVER-DISCHARGE

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

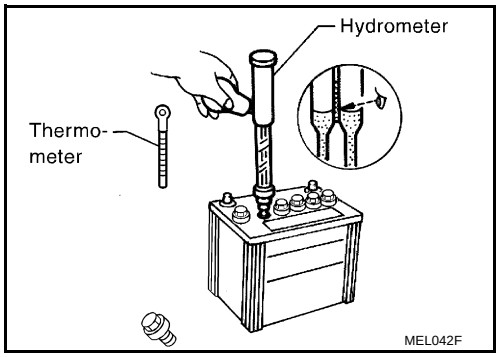
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level.
  This also applies to batteries designated as “low maintenance” and “maintenance-free”.



- 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.

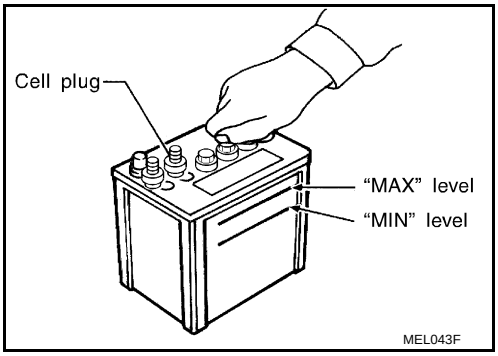


CHECKING ELECTROLYTE LEVEL

WARNING:

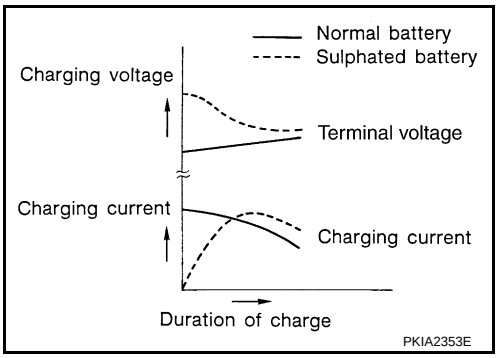
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

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



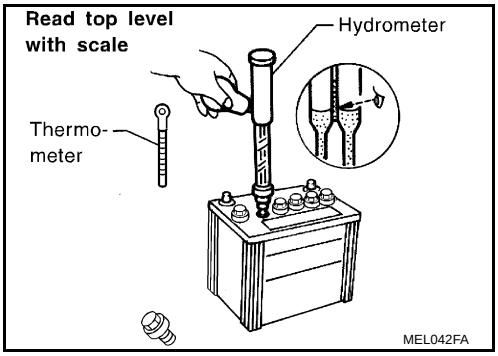
Sulphation

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:0000000003229310

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:0000000003229311

Required Procedure After Battery Disconnection

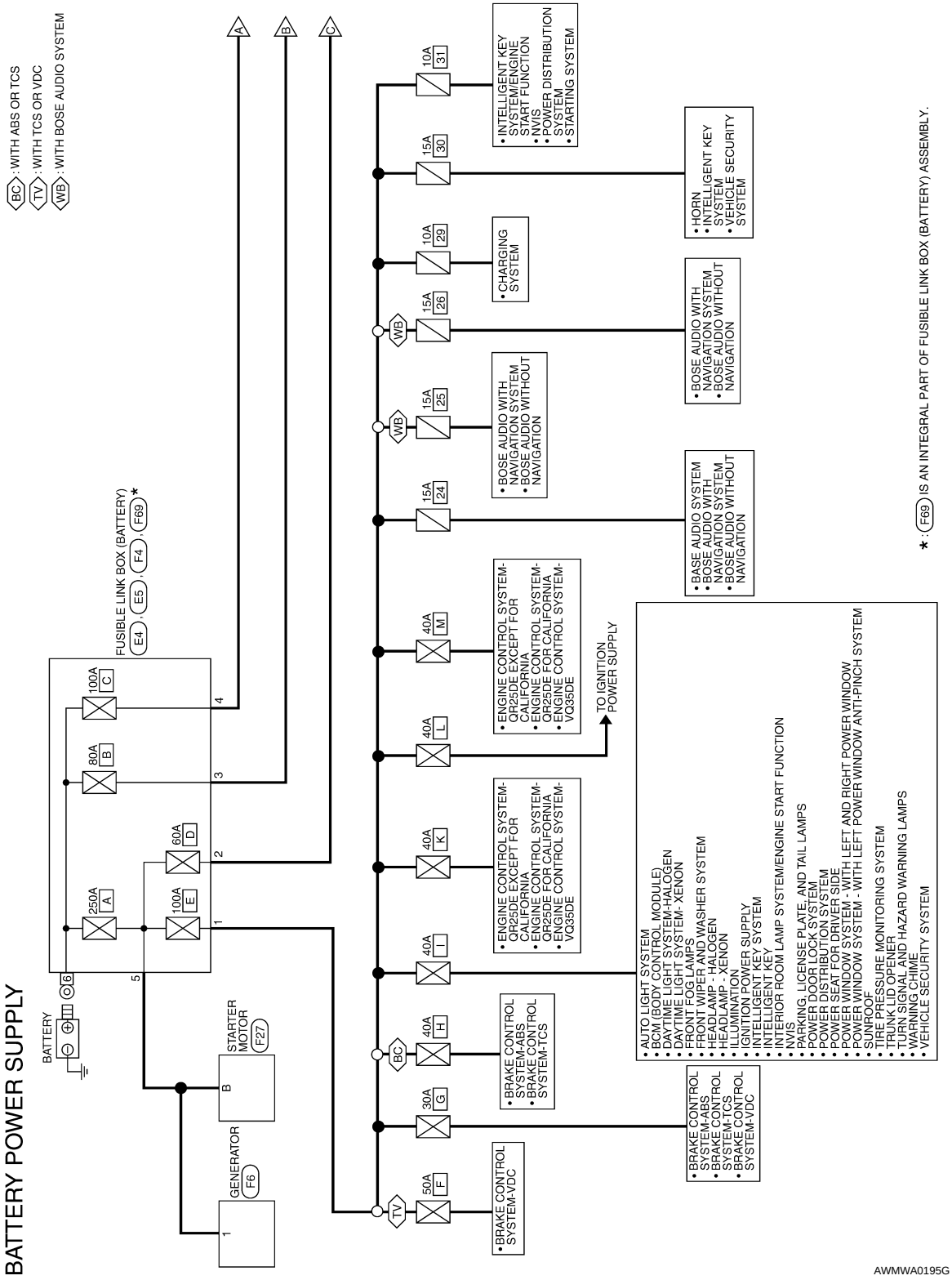
System	Item	Reference
Engine Control	Accelerator Pedal Released Position Learning	QR25DE for California, refer to EC-29. QR25DE except California, refer to EC-548. VQ35DE, refer to EC-1021.
	Throttle Valve Closed Position Learning	QR25DE for California, refer to EC-29. QR25DE except California, refer to EC-548. VQ35DE for California, refer to EC-1021.
	Idle Air Volume Learning	QR25DE for California, refer to EC-30. QR25DE except California, refer to EC-549. VQ35DE for California, refer to EC-1022.
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-142.
Glass, Window & Mirrors	Power Window System Initialization	LH window, refer to PWC-11. RH window, refer to PWC-112.
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-230.

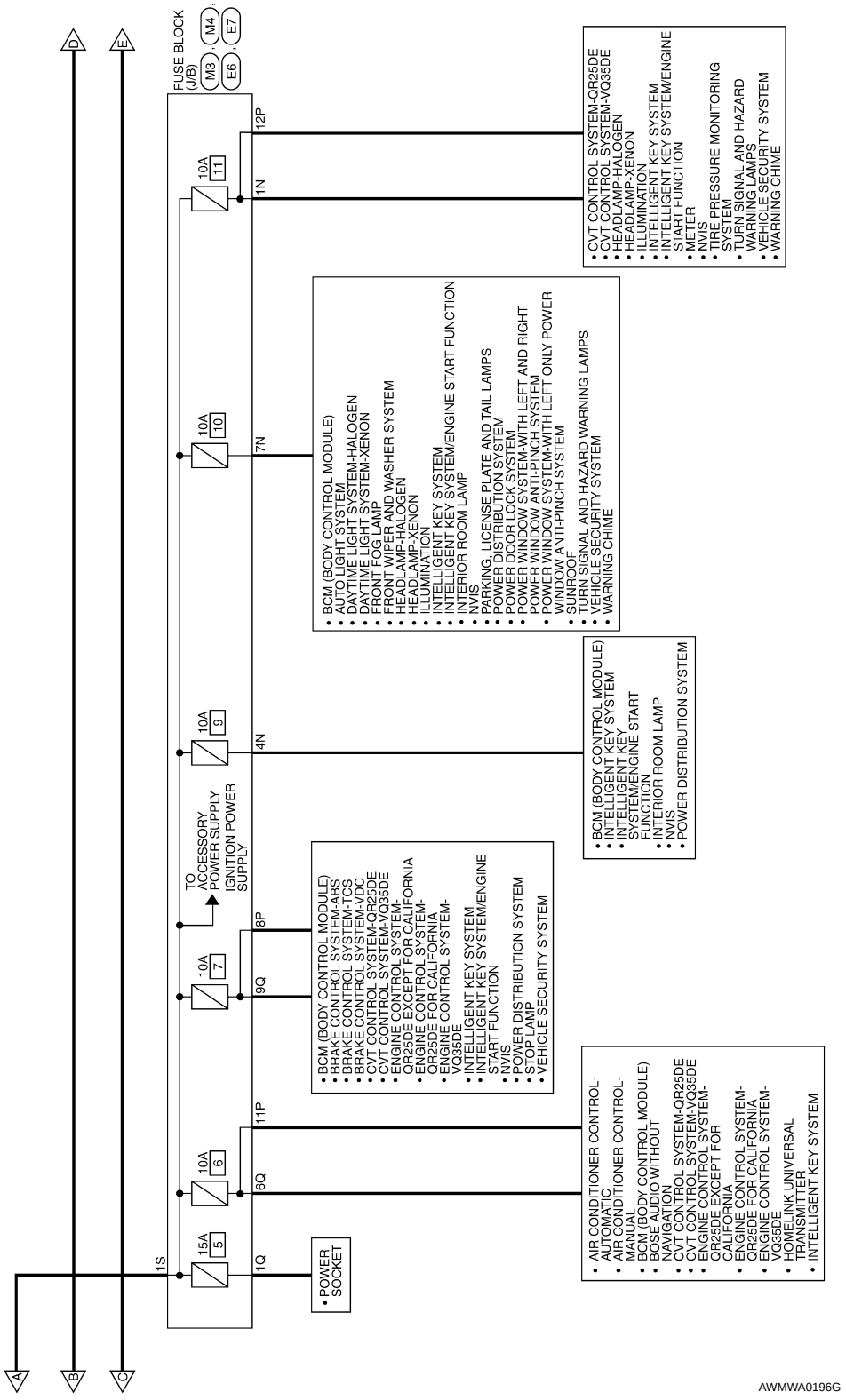
COMPONENT DIAGNOSIS

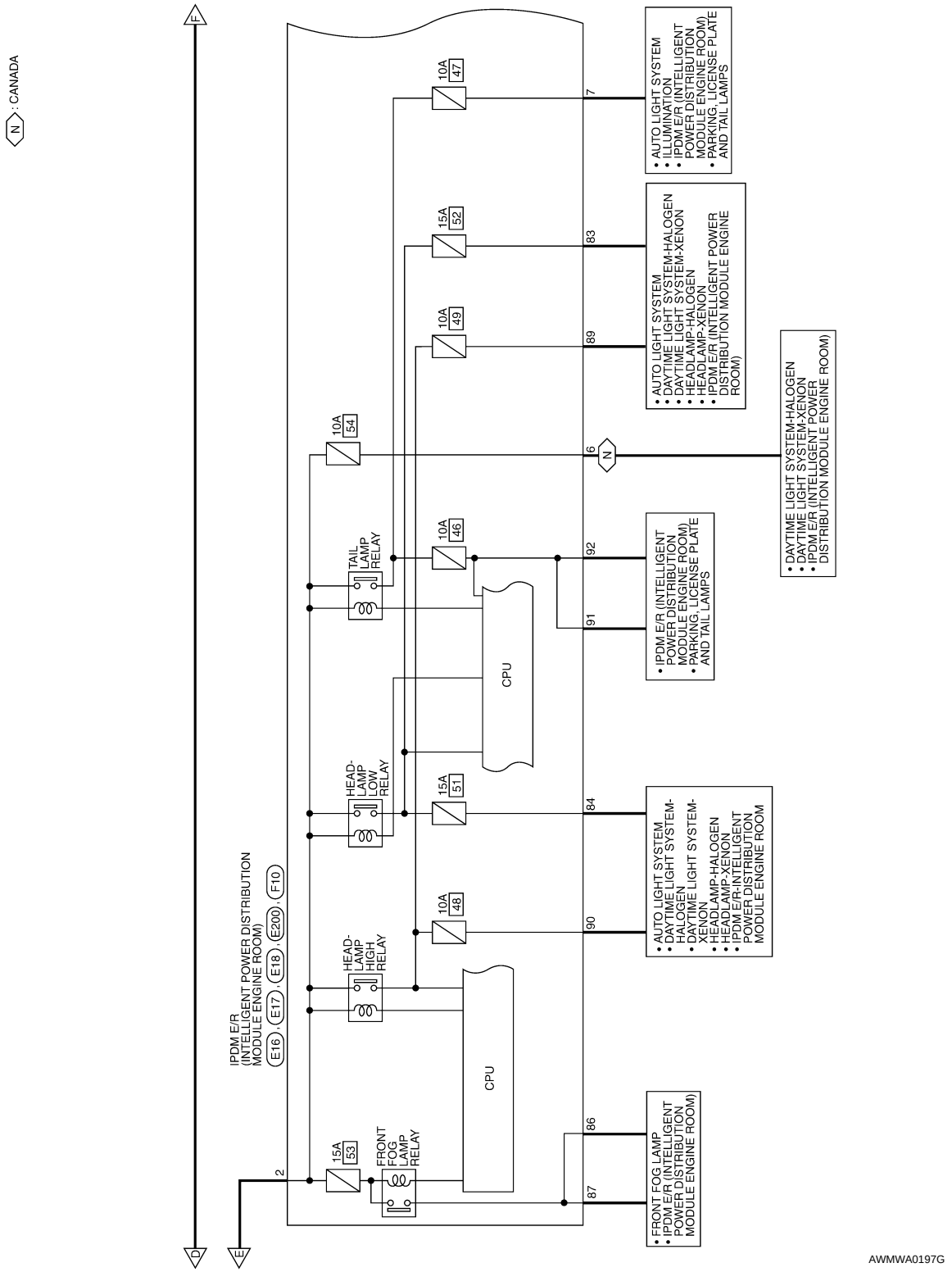
POWER SUPPLY ROUTING CIRCUIT

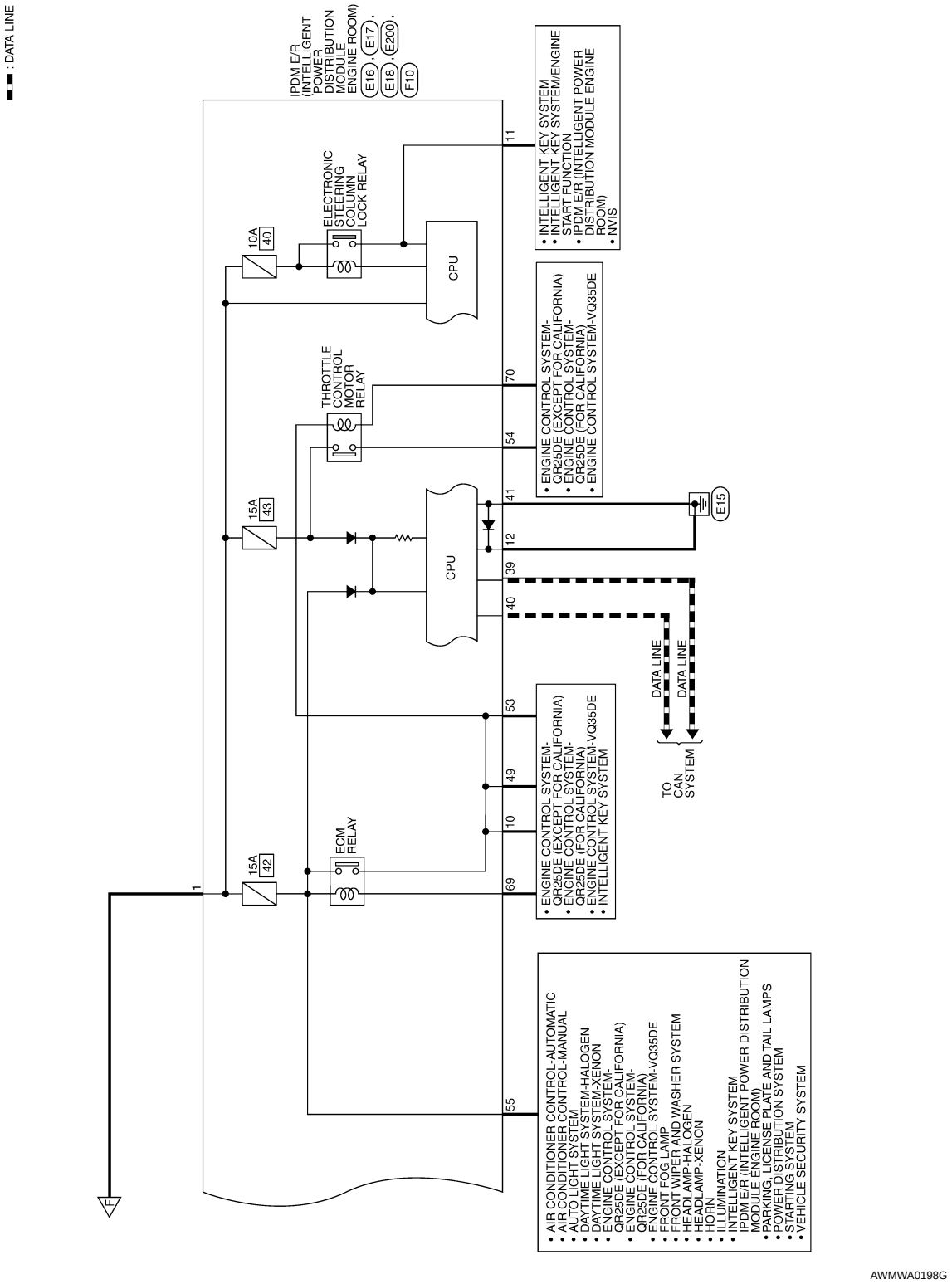
Wiring Diagram —Battery Power Supply —

INFOID:0000000003229312




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
4N
7N
1N
11P
8P
12P
A
B
C
D
E
• POWER SOCKET
• AIR CONDITIONER CONTROL-
• AUTOMATIC AIR CONDITIONER CONTROL-
• MANUAL
• BCM (BODY CONTROL MODULE)
• BOSE AUDIO WITHOUT NAVIGATION
• 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
• INTELLIGENT KEY SYSTEM
• BCM (BODY CONTROL MODULE)
• 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
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• NVIS
• POWER DISTRIBUTION SYSTEM
• STOP LAMP
• VEHICLE SECURITY SYSTEM
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• INTERIOR ROOM LAMP
• NVIS
• POWER DISTRIBUTION SYSTEM
• 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
• POWER WINDOW 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
AWMWA0196G


N : CANADA
F
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)
N
• 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)
AWMWA0197G

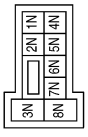

: DATA LINE
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E16, E17, E18, E200, F10
ELECTRONIC STEERING COLUMN LOCK RELAY
THROTTLE CONTROL MOTOR RELAY
ECM RELAY
10A 40
15A 43
15A 42
CPU
CPU
11
70
54
41
12
39
40
53
49
10
69
55
1
E15
F6
DATA LINE
DATA LINE
TO CAN SYSTEM
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• NVIS
• 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
• INTELLIGENT KEY SYSTEM
• AIR CONDITIONER CONTROL-AUTOMATIC
• AIR CONDITIONER CONTROL-MANUAL
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• ENGINE CONTROL SYSTEM-QR25DE (EXCEPT FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-QR25DE (FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-VQ35DE
• FRONT FOG LAMP
• FRONT WIPER AND WASHER SYSTEM
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• HORN
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DISTRIBUTION SYSTEM
• STARTING SYSTEM
• VEHICLE SECURITY SYSTEM

AWMWA0198G

BATTERY POWER SUPPLY CONNECTORS

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

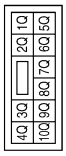
H.S.



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	B/Y	—

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	—

ALMIA0043GB

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	B/Y	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	S-GND

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/ILLUMI
10	R/B	ECM_VB
11	P/L	ESCL
12	B	P-GND

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

ALMIA0044GB

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.

69	70	71	72	73	74	75	76	77	78	81	82
53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	79	80
47	48	49	50	51	52												

Terminal No.	Color of Wire	Signal Name
49	R/B	IGN_SOL (WITH VQ35DE)
53	R/B	IGN_SOL (WITH VQ35DE)
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

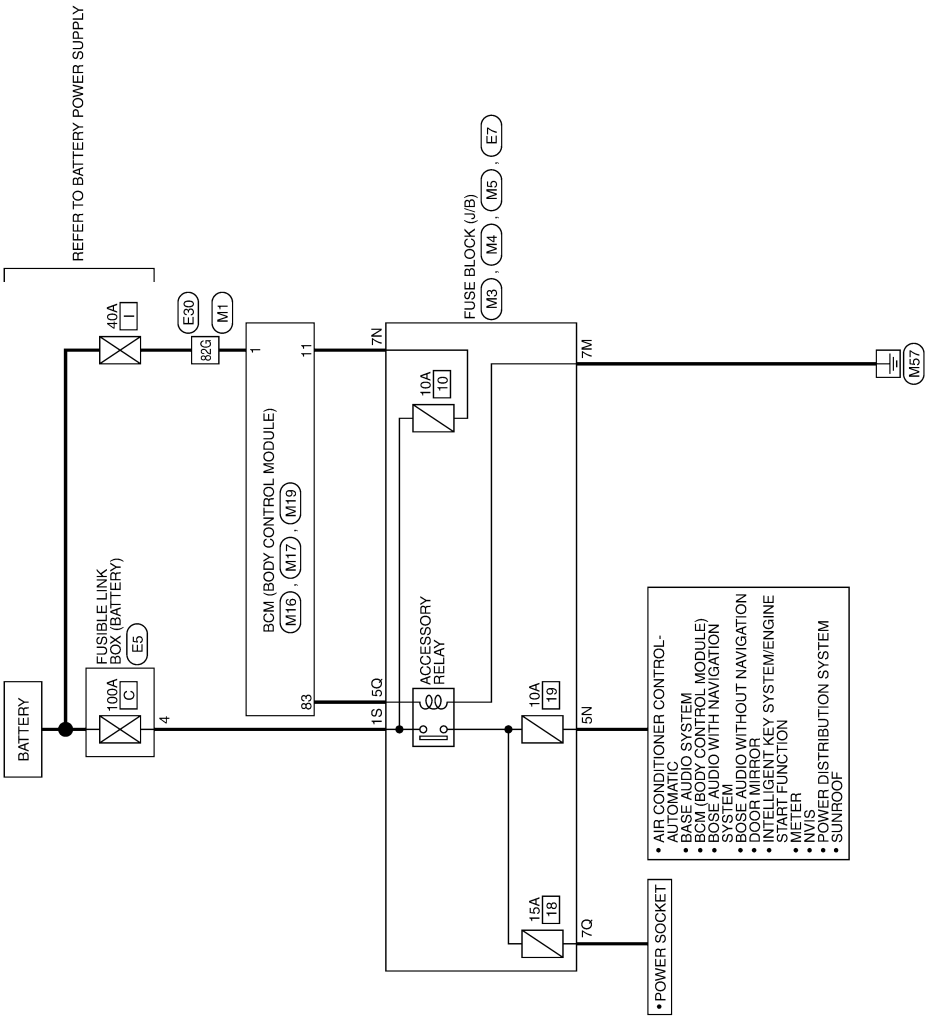
Terminal No.	Color of Wire	Signal Name
B	B/R	BATT

AWMIA0344GB

Wiring Diagram —Accessory Power Supply —

INFOID:0000000003229313

ACCESSORY POWER SUPPLY



AWMWA0199G

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

ALMIA0050GB

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.	E30
Connector Name	WIRE TO WIRE
Connector Color	WHITE

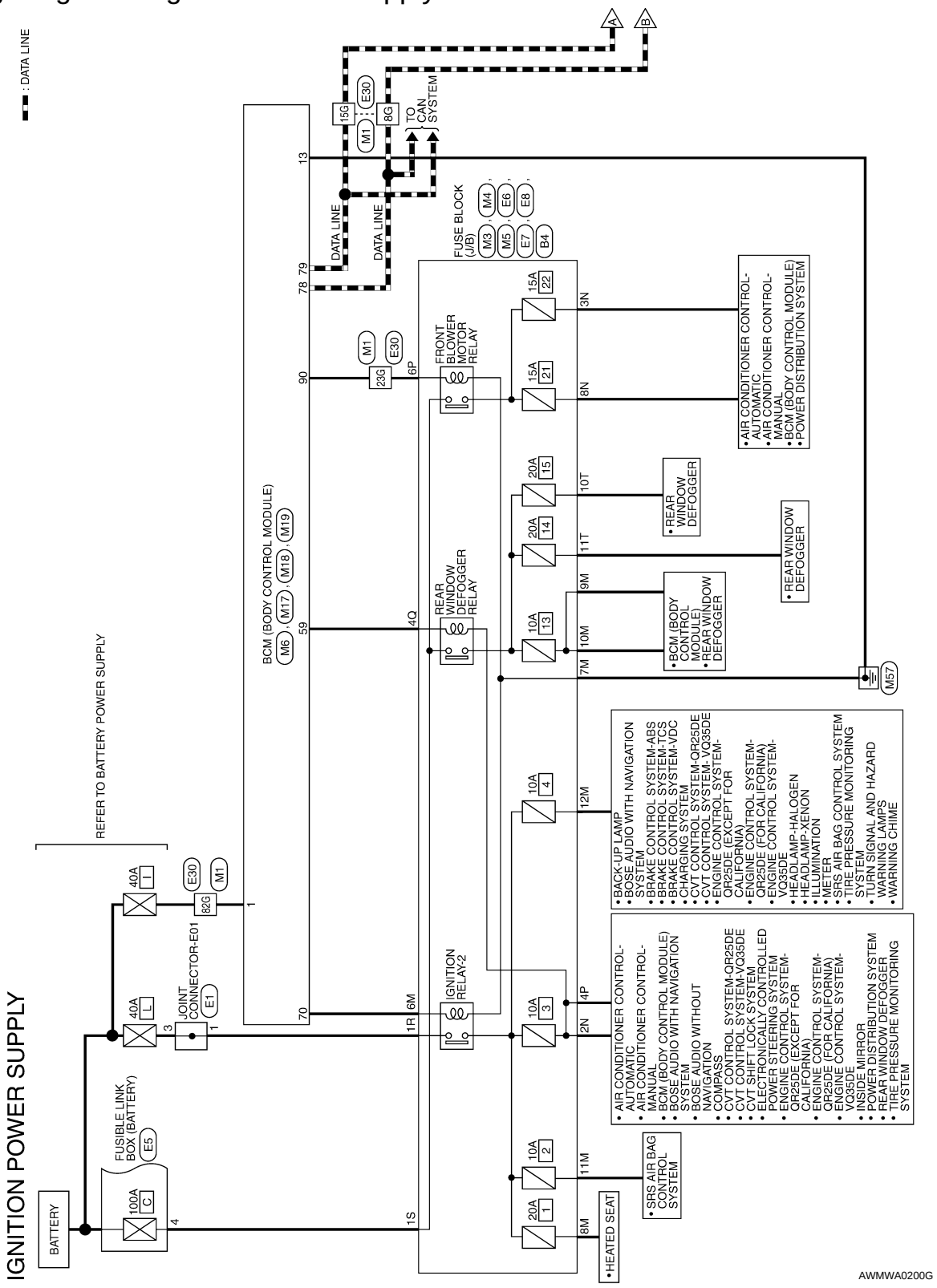
H.S.

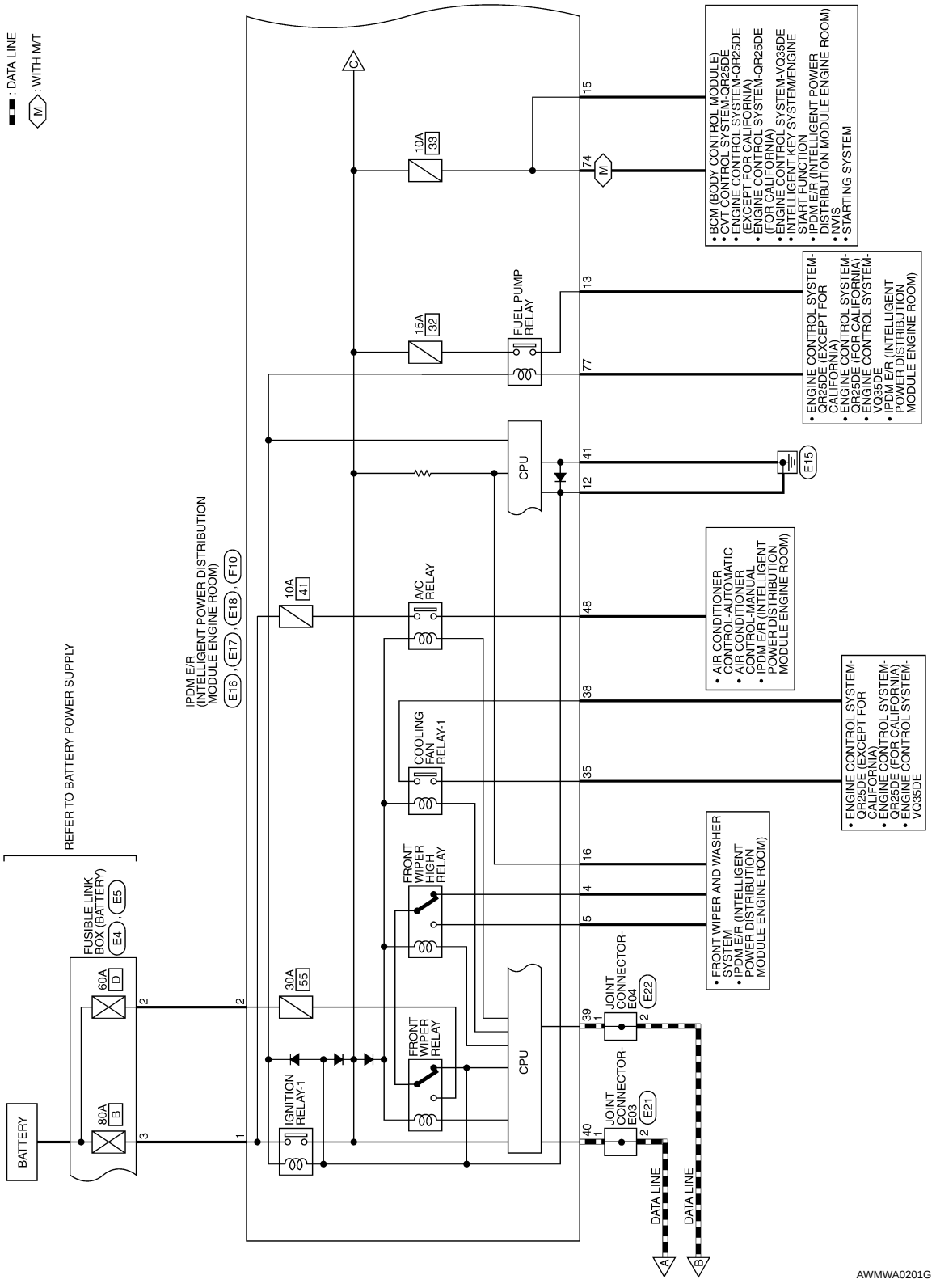
Terminal No.	Color of Wire	Signal Name
82	W/B	–

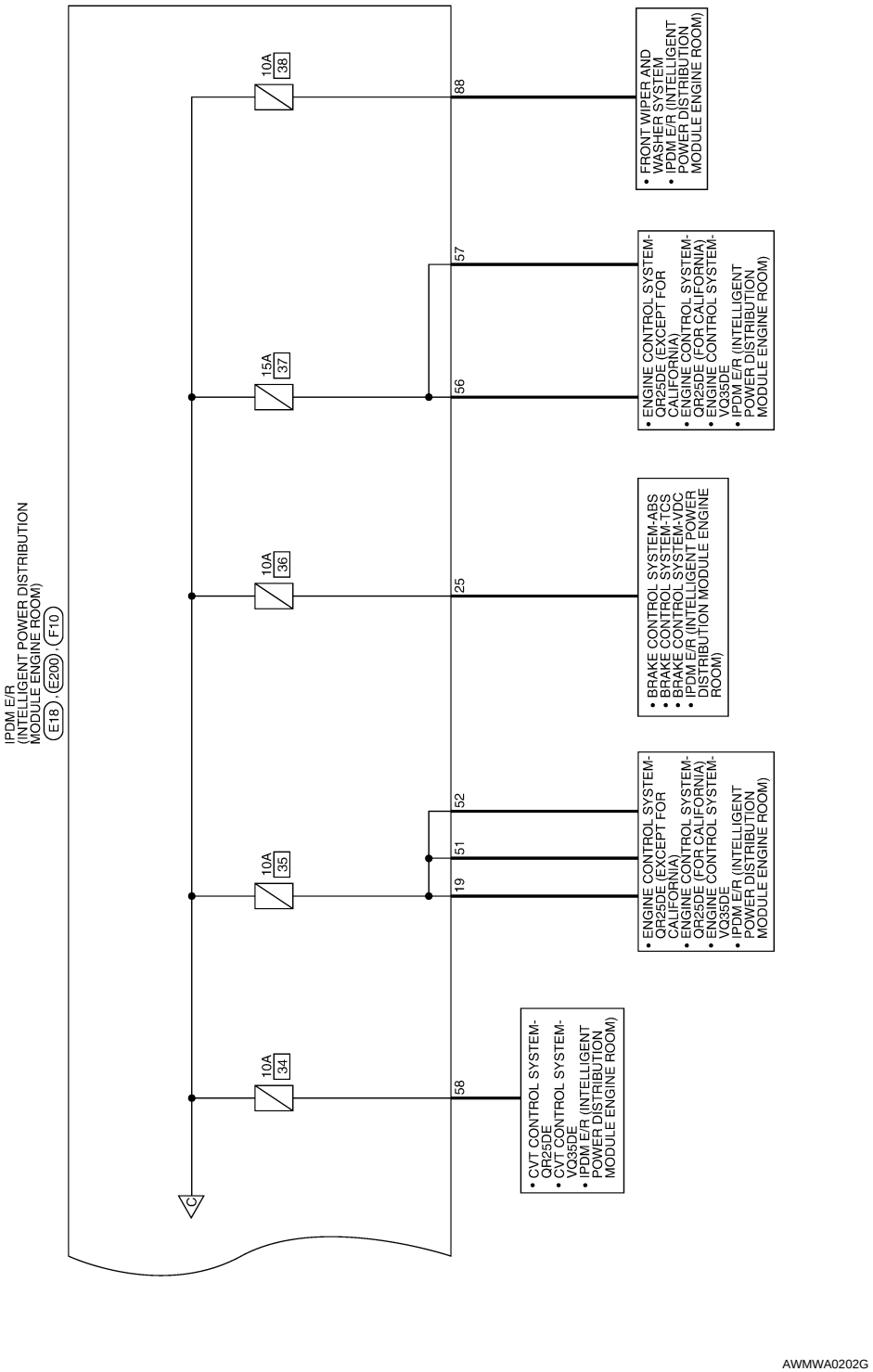
AWMIA0345GB

Wiring Diagram —Ignition Power Supply —

INFOID:0000000003229314



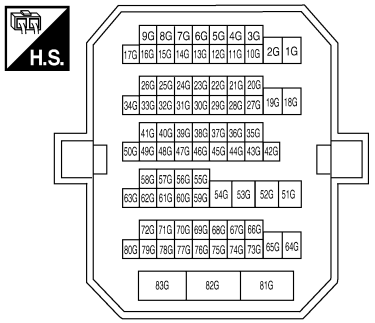

: DATA LINE
M : WITH M/T
REFER TO BATTERY POWER SUPPLY
BATTERY
FUSIBLE LINK BOX (BATTERY) E4, E5
80A B
60A D
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E16, E17, E18, F10
IGNITION RELAY-1
30A 55
10A 41
10A 33
15A 32
FUEL PUMP RELAY
A/C RELAY
COOLING FAN RELAY-1
FRONT WIPER HIGH RELAY
FRONT WIPER RELAY
CPU
JOINT CONNECTOR-E03 E21
JOINT CONNECTOR-E04 E22
DATA LINE
DATA LINE
E15
• BCM (BODY CONTROL MODULE)
• CVT CONTROL SYSTEM-QR25DE
• ENGINE CONTROL SYSTEM-QR25DE (EXCEPT FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-QR25DE (FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-VQ35DE
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• NVIS
• STARTING SYSTEM
• 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)
• ENGINE CONTROL SYSTEM-QR25DE (EXCEPT FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-QR25DE (FOR CALIFORNIA)
• ENGINE CONTROL SYSTEM-VQ35DE
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
AWMWA0201G


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
• 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)
C

AWMWA0202G

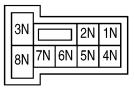
IGNITION POWER SUPPLY CONNECTORS

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



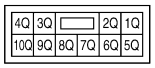
Terminal No.	Color of Wire	Signal Name
8G	P	—
15G	L	—
23G	Y	—
82G	W/B	—

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



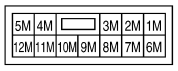
Terminal No.	Color of Wire	Signal Name
2N	G	—
3N	W/L	—
8N	W/L	—

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



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

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



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

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

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

ALMIA0046GB

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	B/Y	—

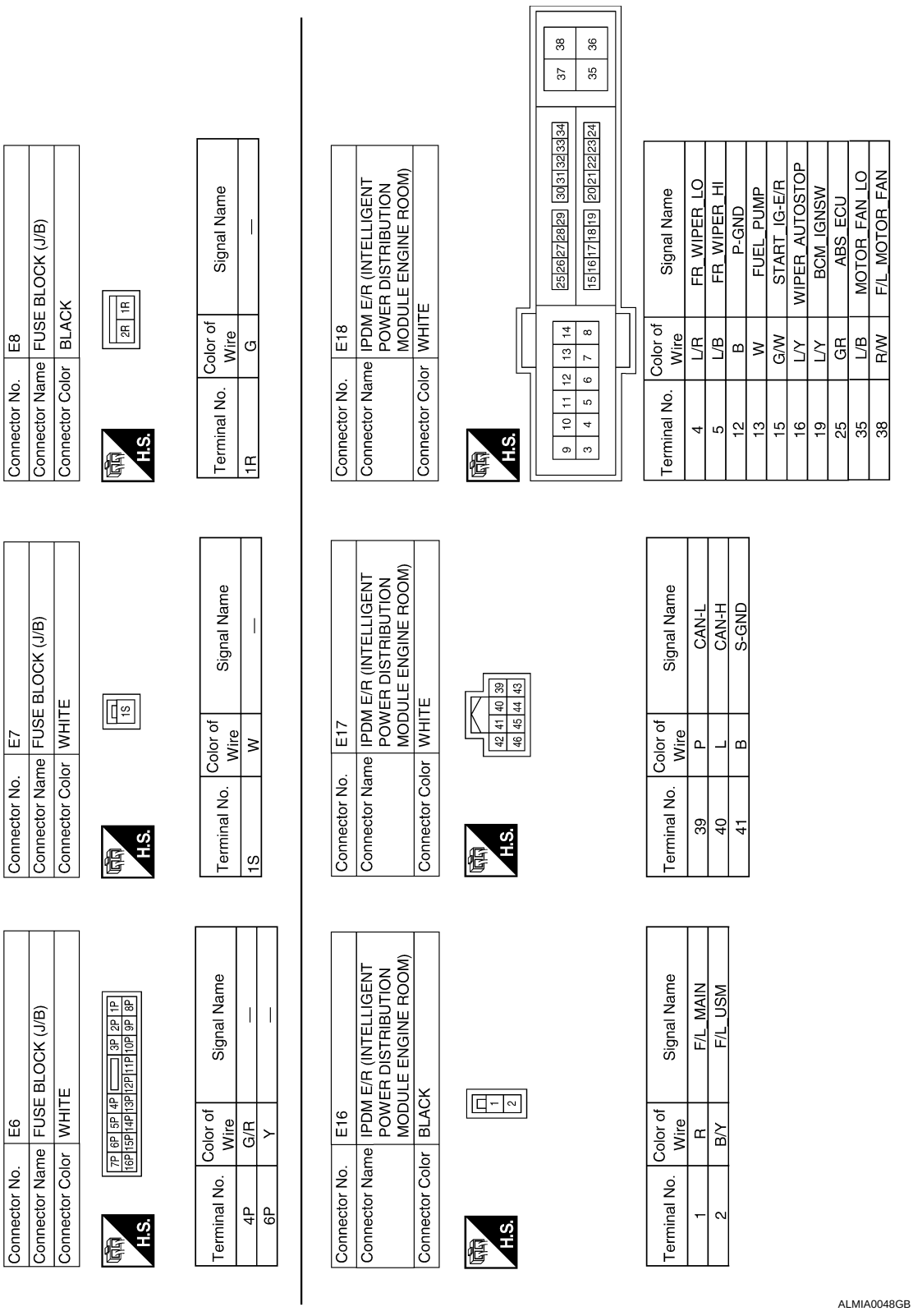
Connector No.	E5
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	GRAY

H.S.

3	4

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

ALMIA0047GB


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 G/R —
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 B/Y 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 S-GND
Connector No. E18
Connector Name IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color WHITE
H.S.
9 10 11 12 13 14
3 4 5 6 7 8
25 26 27 28 29 30 31 32 33 34
15 16 17 18 19 20 21 22 23 24
37 38
35 36
Terminal No. Color of Wire Signal Name
4 L/R FR_WIPER_LO
5 L/B FR_WIPER_HI
12 B P-GND
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
ALMIA0048GB

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.	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	—

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	—	—
82G	W/B	—

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

H.S.

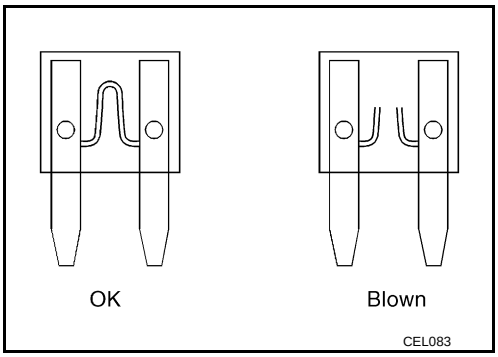
Terminal No.	Color of Wire	Signal Name
48	Y/R	A/C_COMP
51	LG	INJECTOR_#1
52	Y/G	INJECTOR_#2
56	R/Y	O2_SENS_#1
57	O	O2_SENS_#2
58	Y	AT_ECU
74	Y	START_IG-EGI
77	B/R	FPR

ALMIA0049GB

Fuse

INFOID:0000000003229315

- 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.

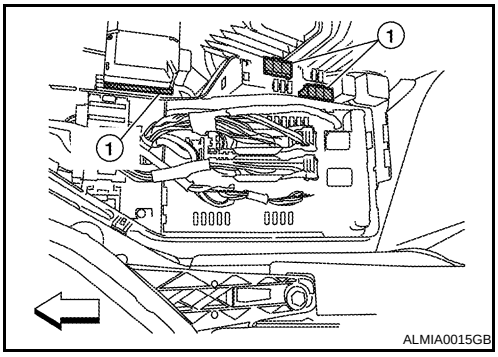


Fusible Link

INFOID:0000000003229316

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:

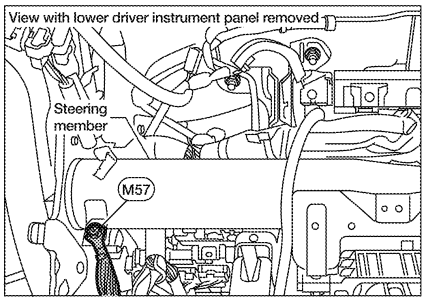
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

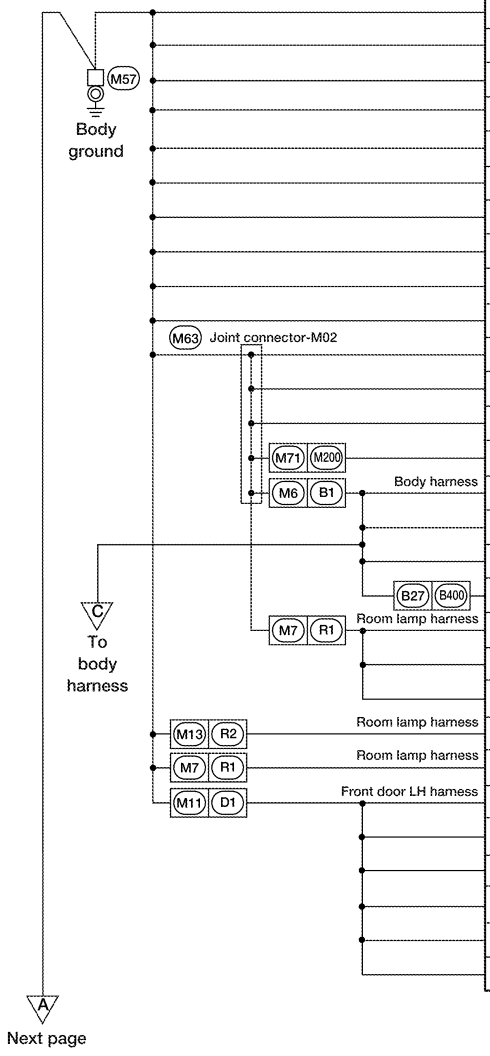
GROUND

Ground Distribution

INFOID:0000000003229317

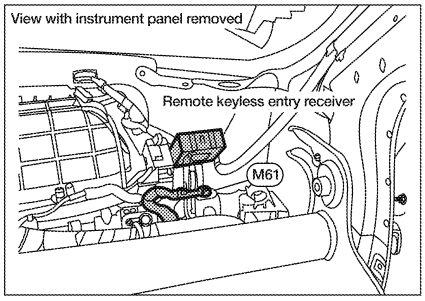
MAIN HARNESS

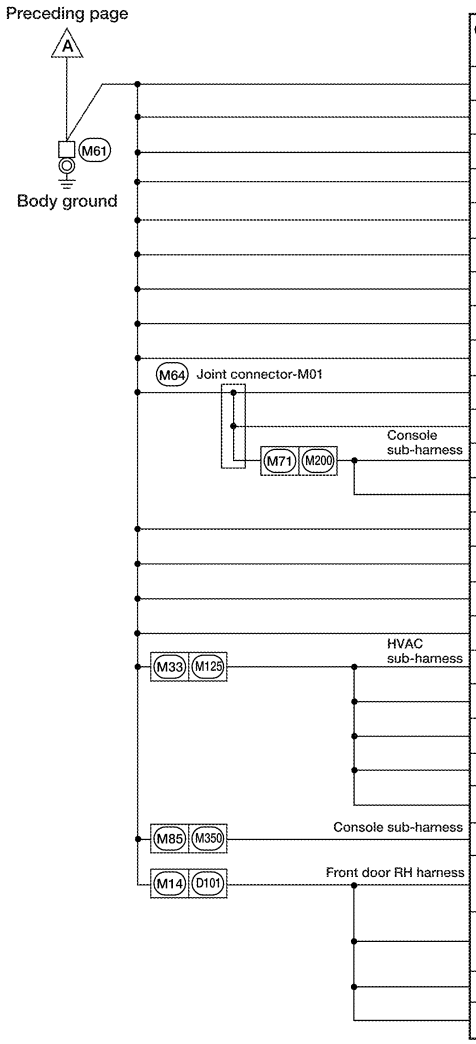




CONNECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal 7M)
M17	BCM (Body control module) (Terminal 13)
M22	Data link connector (Terminal 4)
M22	Data link connector (Terminal 5)
M24	Combination meter (Terminal 3)
M24	Combination meter (Terminal 4)
M24	Combination meter (Terminal 23)
M28	Combination switch
M31	Blower motor
M40	Key slot
M53	Steering angle sensor
M72	TCS OFF switch (With TCS)
M72	VDC OFF switch (With VDC)
M203	Front console antenna (shield wire)
B29	Rear parcel shelf antenna (shield wire)
B30	Rear combination lamp LH (With rear view camera)
B45	Rear combination lamp RH (With rear view camera)
B401	High mounted stop lamp (Without spoiler) (With rear view camera)
R3	Vanity mirror lamp LH
R4	Auto anti-dazzling inside mirror
R9	Vanity mirror lamp RH
R5	Sunroof motor assembly
R12	Personal lamp rear LH
D4	Door mirror LH
D4	Door mirror LH (With mirror defogger)
D5	Door mirror remote control switch
D6	Outside handle LH
D8	Main power window and lock/unlock switch
D10	Door lock assembly LH (Key cylinder switch)

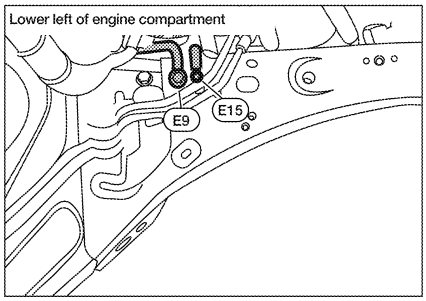
AWMIA0394GB

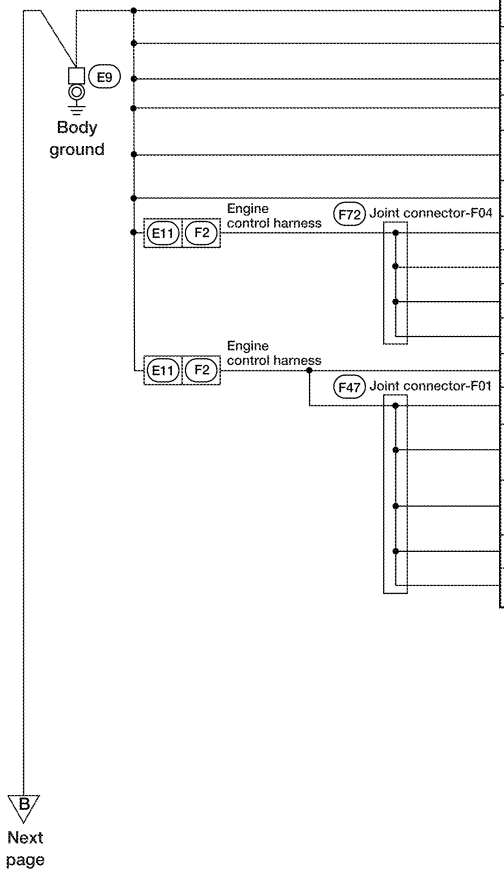




CONNECTOR NUMBER	CONNECT TO
M23	CVT device (Terminal 4)
M23	CVT device (Terminal 7)
M32	Electronic steering column lock (Terminal 5)
M32	Electronic steering column lock (Terminal 6)
M35	Air bag diagnosis sensor unit
M36	Front passenger air bag off indicator
M37	Front air control (Terminal 17)
M37	Front air control (Terminal 37)
M38	Push-button ignition switch
M47	AV control unit (Terminal 19)
M55	Yaw rate/side/decel G sensor
M201	Heated seat switch LH
M202	Heated seat switch RH
M54	Hazard switch
M59	Power steering control unit
M68	Glove box lamp
M76	Front power socket
M126	Intake door motor
M127	Mode door motor
M128	Air mix door motor LH (Automatic air conditioner)
M129	Air mix door motor RH (Automatic air conditioner)
M130	Air mix door motor (Manual air conditioner)
M351	Front console power socket
D105	Power window and door lock/unlock switch RH (With left only power window anti-pinch system)
D105	Power window and door lock/unlock switch RH (With left and right power window anti-pinch system)
D106	Door mirror RH
D106	Door mirror RH (With mirror defogger)

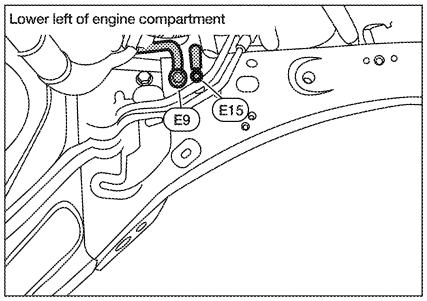
AWMIA0395GB

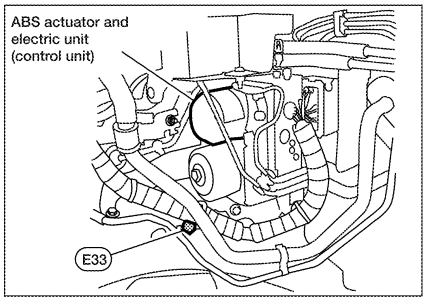


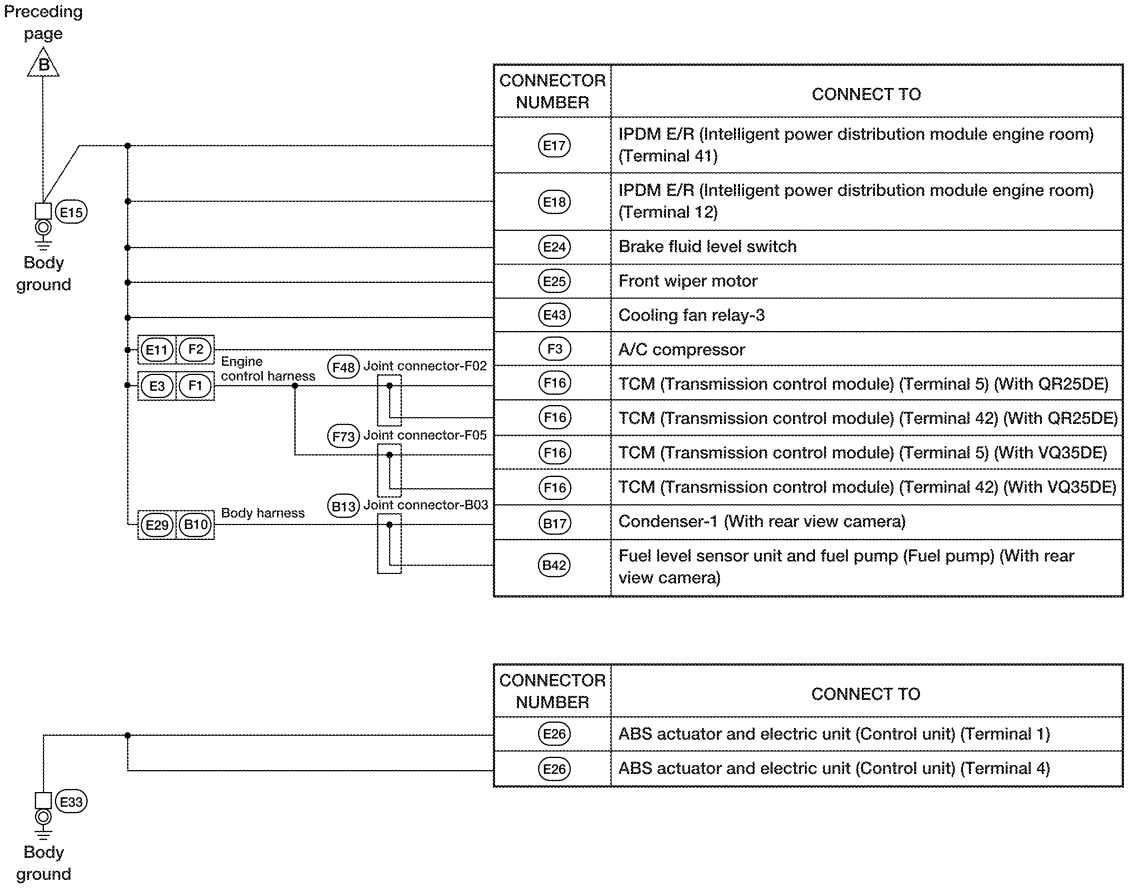


CONNECTOR NUMBER	CONNECT TO
E10	ECM (Terminal 107)
E10	ECM (Terminal 108)
E10	ECM (Terminal 111)
E10	ECM (Terminal 112)
E17	IPDM E/R (Intelligent power distribution module engine room) (Terminal 41)
E42	Cooling fan relay-2
F12	Air fuel ratio (A/F) sensor 1 (Bank 1) (shield wire)
F14	ECM (Terminal 12) (With VQ35DE)
F57	Electric throttle control actuator (shield wire) (With VQ35DE)
F61	Air fuel ratio (A/F) sensor 1 (Bank 2) (shield wire) (With VQ35DE)
F14	ECM (Terminal 16) (With QR25DE)
F14	ECM (Terminal 12) (With QR25DE)
F43	Tumble valve control actuator (Sensor shield wire) (With QR25DE for California)
F43	Tumble valve control actuator (Motor shield wire) (With QR25DE for California)
F44	Air fuel ratio (A/F) sensor 1 (shield wire) (With QR25DE)
F57	Electric throttle control actuator (shield wire) (With QR25DE)

AWMIA0396GB



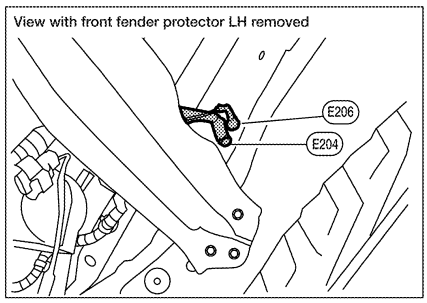


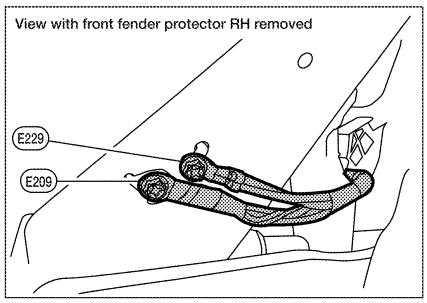


CONNECTOR NUMBER	CONNECT TO
E17	IPDM E/R (Intelligent power distribution module engine room) (Terminal 41)
E18	IPDM E/R (Intelligent power distribution module engine room) (Terminal 12)
E24	Brake fluid level switch
E25	Front wiper motor
E43	Cooling fan relay-3
F3	A/C compressor
F16	TCM (Transmission control module) (Terminal 5) (With QR25DE)
F16	TCM (Transmission control module) (Terminal 42) (With QR25DE)
F16	TCM (Transmission control module) (Terminal 5) (With VQ35DE)
F16	TCM (Transmission control module) (Terminal 42) (With VQ35DE)
B17	Condenser-1 (With rear view camera)
B42	Fuel level sensor unit and fuel pump (Fuel pump) (With rear view camera)

CONNECTOR NUMBER	CONNECT TO
E26	ABS actuator and electric unit (Control unit) (Terminal 1)
E26	ABS actuator and electric unit (Control unit) (Terminal 4)

AWMIA0349GB





CONNECTOR NUMBER	CONNECT TO
E210	Crash zone sensor (shield wire)

E206 Body ground

CONNECTOR NUMBER	CONNECT TO
E212	Front combination lamp LH (Terminal 2) (With Xenon headlamps)
E217	Front combination lamp LH (Terminal 7)
E221	Cooling fan motor-2 (Terminal 3)
E221	Cooling fan motor-2 (Terminal 4)
E223	Front combination lamp RH (Terminal 2) (With halogen headlamps)
E225	Front combination lamp RH (Terminal 9)
E227	Front fog lamp RH

E204 Body ground

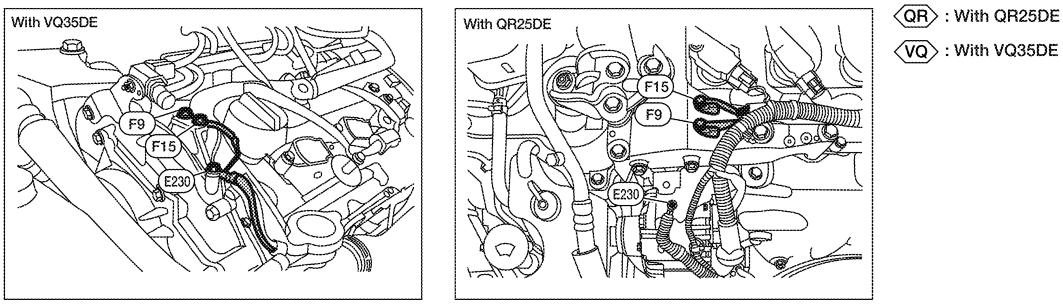
CONNECTOR NUMBER	CONNECT TO
E208	Washer level switch
E212	Front combination lamp LH (Terminal 2) (With halogen headlamps)
E213	Front combination lamp LH (Terminal 4)
E214	Front fog lamp LH
E218	Front combination lamp LH (Terminal 9)
E222	Front combination lamp RH (Terminal 4)
E223	Front combination lamp RH (Terminal 2) (With Xenon headlamps)
E224	Front combination lamp RH (Terminal 7)
E228	Daytime light relay

E209 Body ground

CONNECTOR NUMBER	CONNECT TO
E230	Generator

E229 Body ground

AWMIA0398GB

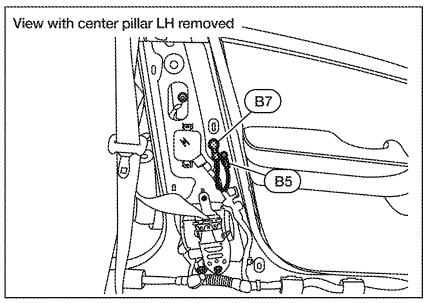


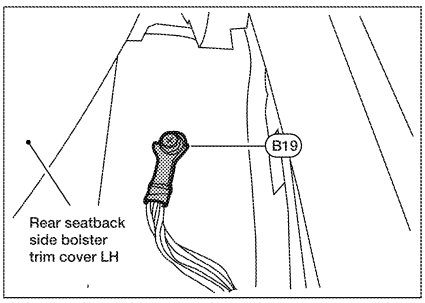
CONNECTOR NUMBER	CONNECT TO
F14	ECM (Terminal 16)

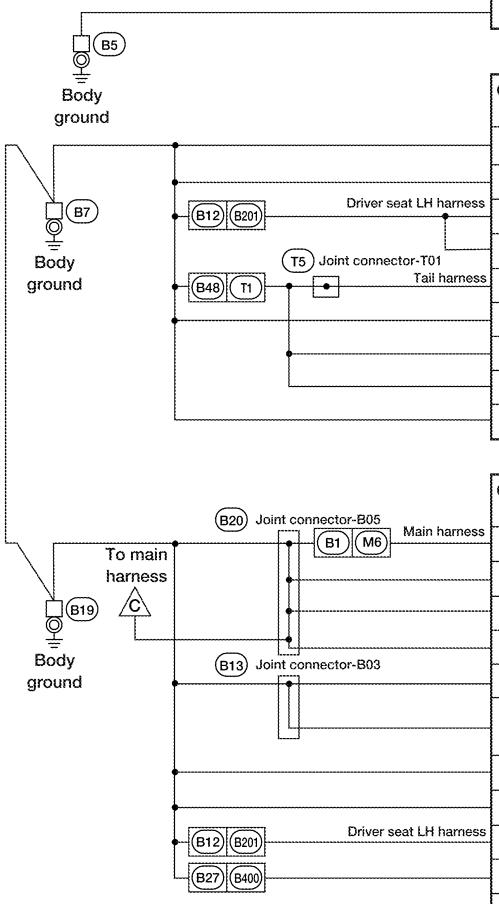
CONNECTOR NUMBER	CONNECT TO
F26	Condenser-2
F34	Ignition coil No. 1 (With power transistor)
F35	Ignition coil No. 2 (With power transistor)
F36	Ignition coil No. 3 (With power transistor)
F37	Ignition coil No. 4 (With power transistor)

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)

ALMIA0040GB





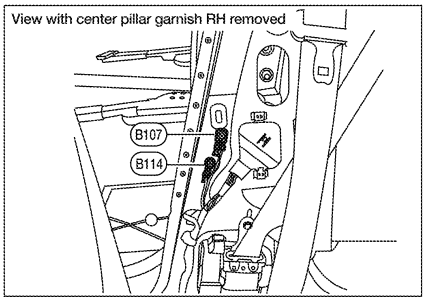


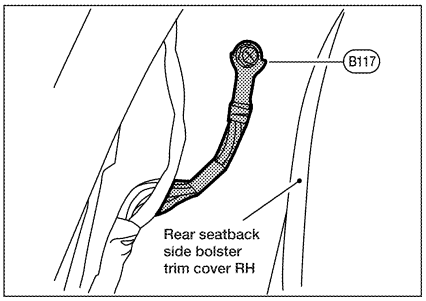
CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag (Satellite) sensor (shield wire)

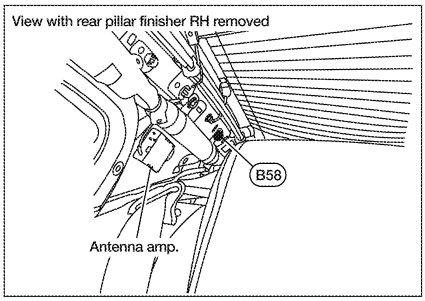
CONNECTOR NUMBER	CONNECT TO
B55	Bluetooth control unit (without NAVI) (Terminal 4)
B55	Bluetooth control unit (without NAVI) (Terminal 20)
B203	Power seat switch
B210	Front seat heater LH
T4	Trunk lamp switch and trunk release solenoid
T6	License plate lamp LH
T7	Rear view camera control unit (Terminal 3)
T7	Rear view camera (Terminal 2)
T8	License plate lamp RH

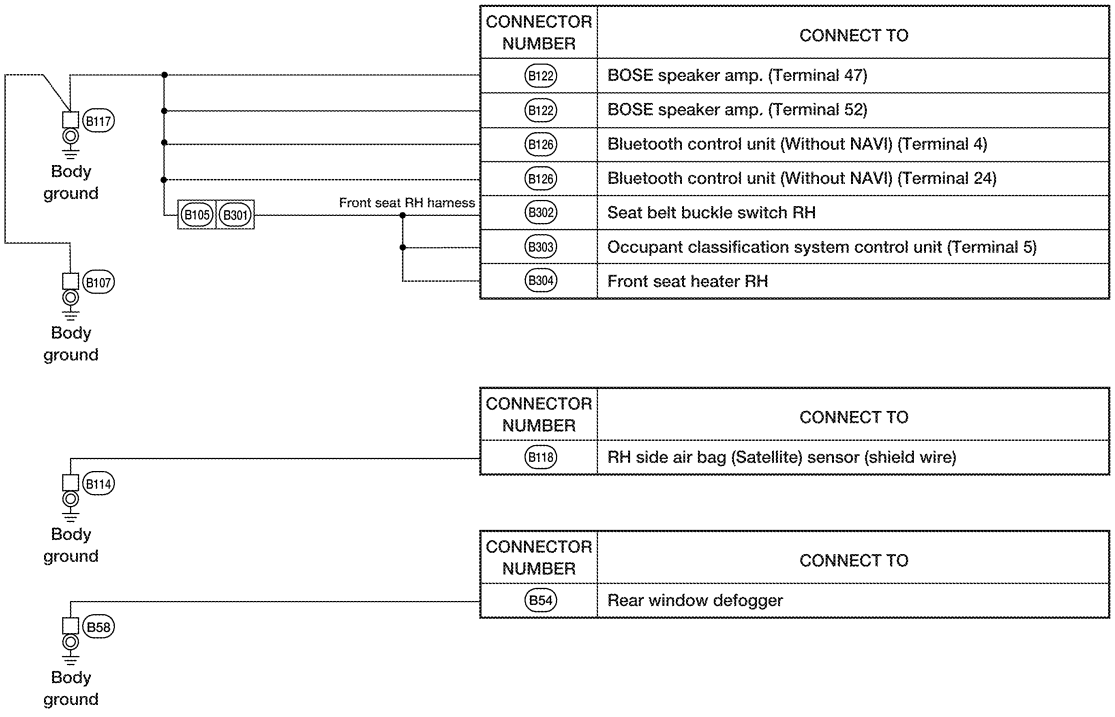
CONNECTOR NUMBER	CONNECT TO
M45	AV control unit (shield wire) (Terminal 35)
B29	Rear parcel shelf antenna (shield wire)
B31	Rear view camera unit (shield wire) (Terminal 11 and 12)
B31	Rear view camera unit (shield wire) (Terminal 11 and 12)
B17	Condenser-1
B42	Fuel level sensor unit and fuel pump (Fuel pump) (Without rear view camera)
B30	Rear combination lamp LH (Without rear view camera)
B45	Rear combination lamp RH (Without rear view camera)
B202	Seat belt buckle switch LH
B401	High mounted stop lamp (Without rear view camera)
T2	Trunk opener request switch
T4	Trunk lamp switch and trunk release solenoid

AWMIA0399GB









CONNECTOR NUMBER	CONNECT TO
B122	BOSE speaker amp. (Terminal 47)
B122	BOSE speaker amp. (Terminal 52)
B126	Bluetooth control unit (Without NAVI) (Terminal 4)
B126	Bluetooth control unit (Without NAVI) (Terminal 24)
B302	Seat belt buckle switch RH
B303	Occupant classification system control unit (Terminal 5)
B304	Front seat heater RH

CONNECTOR NUMBER	CONNECT TO
B118	RH side air bag (Satellite) sensor (shield wire)

CONNECTOR NUMBER	CONNECT TO
B54	Rear window defogger

AWMIA0400GB

HARNESS

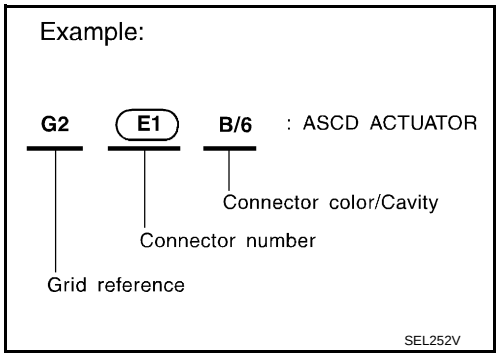
Harness Layout

INFOID:0000000003229318

HOW TO READ HARNESS LAYOUT

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

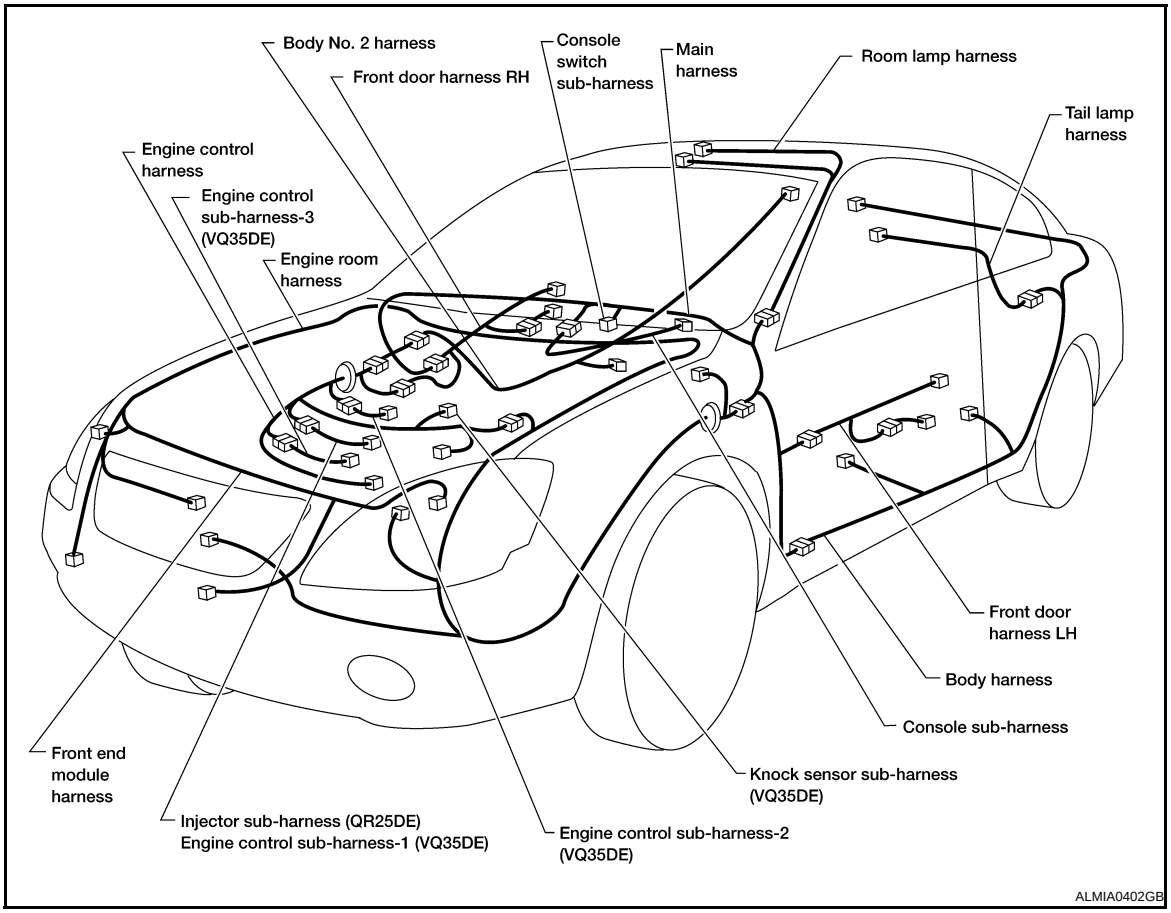
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness
- Engine Control Harness (VQ35DE) and Knock Sensor Sub-harness
- Engine Control Harness (QR25DE)
- Body Harness and Tail Lamp Harness
- Body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



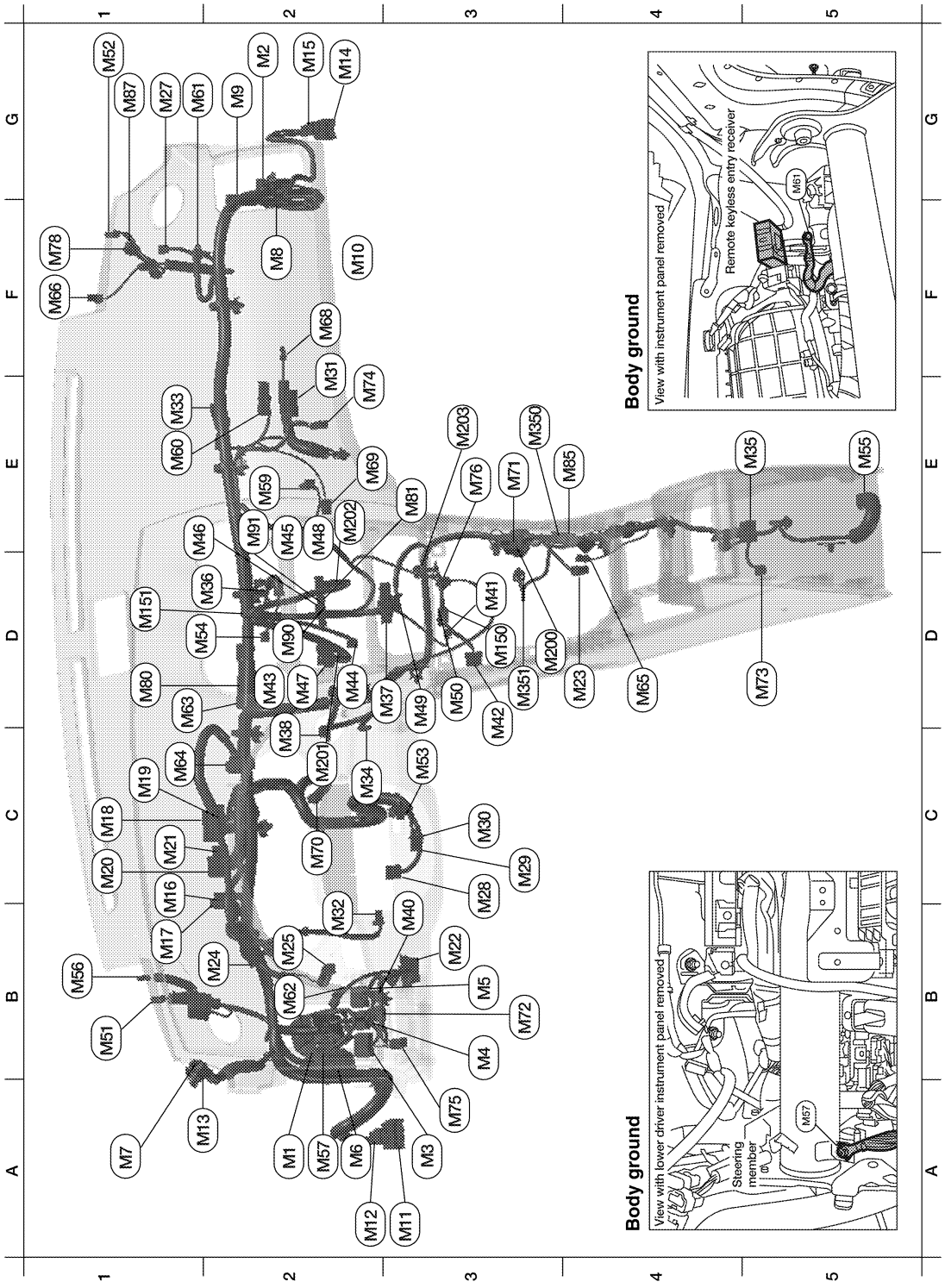
To use the grid reference

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



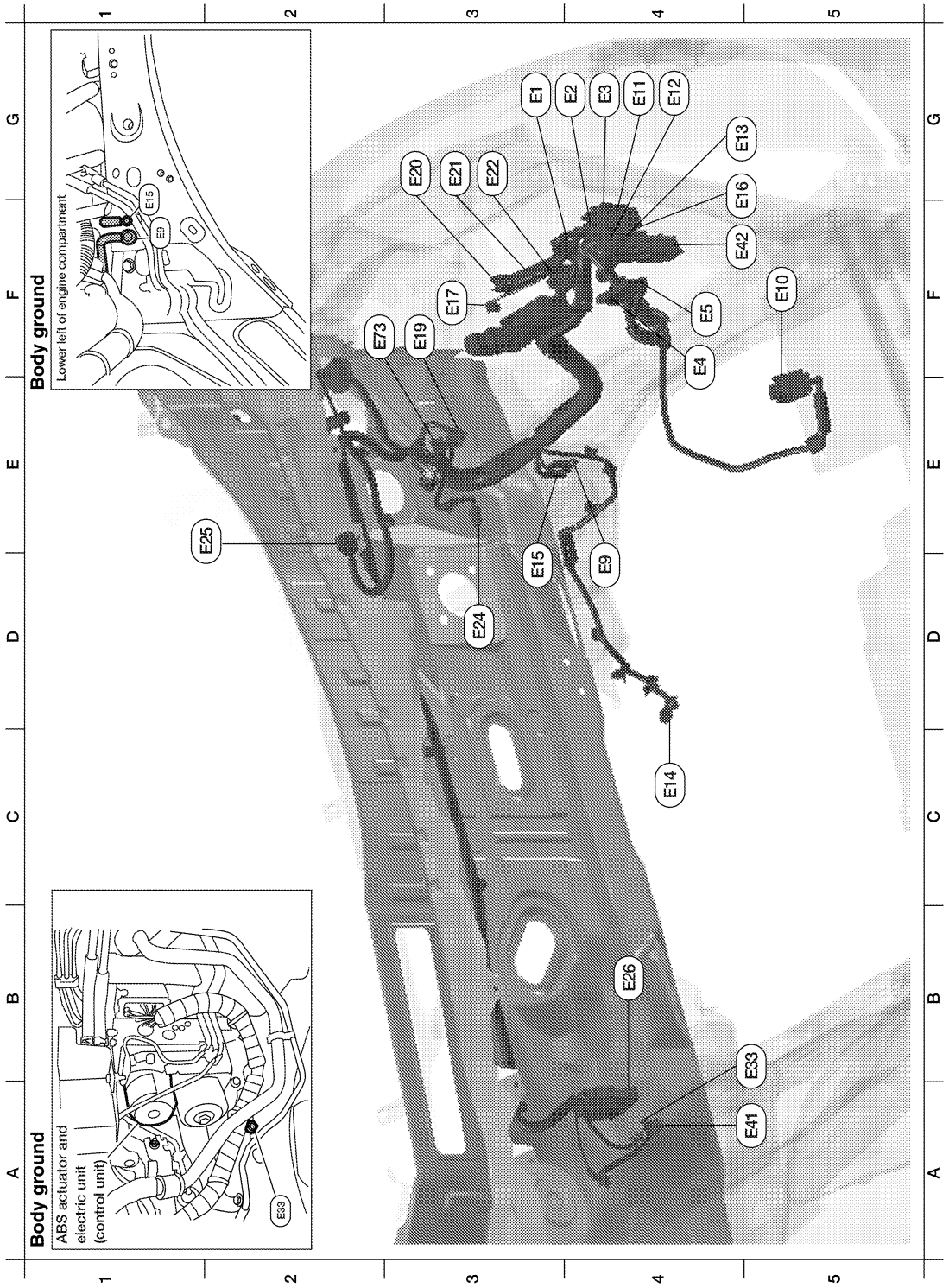
MAIN HARNESS



A2	M1	SMJ	: To E30	D3	M49	GR/2	: Instrument panel antenna
G2	M2	W/32	: To B101	D3	M50	W/2	: To M150
A3	M3	W/8	: Fuse block (J/B)	B1	M51	BR/2	: Front tweeter LH
A3	M4	W/10	: Fuse block (J/B)	G1	M52	BR/2	: Front tweeter RH

B3	M5	W/12	: Fuse block (J/B)	C3	M53	W/8	: Steering angle sensor
A2	M6	SMJ	: To B1	D2	M54	W/4	: Hazard switch
A1	M7	W/16	: To R1	E5	M55	B/4	: Yaw rate/side/decel G sensor
F2	M8	W/24	: To B102	D2	M56	B/2	: Sunload sensor
G2	M9	BR/16	: To B103	A2	M57	—	: Body ground
F2	M10	BR/12	: To B104	E2	M59	W/12	: Power steering control unit
A3	M11	W/16	: To D1	E1	M60	Y/2	: Front passenger air bag module
A2	M12	W/16	: To D2	G1	M61	—	: Body ground
A2	M13	W/4	: To R2	B2	M62	W/2	: Tire pressure warning check connector
G2	M14	W/10	: To D101	D1	M63	L/12	: Joint connector-M02
G2	M15	W/12	: To D102	C1	M64	GR/6	: Joint connector-M01
B1	M16	B/3	: BCM (body control module)	D4	M65	BR/2	: A/T device
B1	M17	W/16	: BCM (body control module)	F1	M66	W/3	: Optical sensor
C1	M18	G/40	: BCM (body control module)	E2	M67	O/2	: Front passenger air bag module
C1	M19	B/40	: BCM (body control module)	F2	M68	W/2	: Glove box lamp
C1	M20	W/12	: BCM (body control module)	E2	M69	W/4	: Intake sensor
C1	M21	GR/40	: BCM (body control module)	C2	M70	W/4	: Tire pressure receiver
B3	M22	W/16	: Data link connector	E3	M71	W/12	: To M200
D4	M23	W/10	: CVT device	B3	M72	GR/6	: TCS OFF switch (with TCS)
B2	M24	W/40	: Combination meter	G2	M72	GR/6	: VDC OFF switch (with VDC)
B2	M25	B/10	: Meter mode switch	D5	M73	B/1	: Parking brake switch
G1	M27	B/4	: Remote keyless entry receiver	E2	M74	W/2	: Trunk lid opener cancel switch
C3	M28	W/16	: Combination switch	A3	M75	B/2	: Trunk lid opener switch
C3	M29	Y/6	: Combination switch (spiral cable)	E3	M76	B/3	: Front power socket
C3	M30	GR/8	: Combination switch (spiral cable)	F1	M78	Y/4	: Front passenger air bag module (service replacement)
E2	M31	W/6	: Blower motor	D1	M80	—	: Diode-3
B2	M32	W/8	: Electronic steering column lock	E3	M81	GR/3	: Audio unit
E1	M33	W/3	: To M125	F1	M85	W/2	: To M350
C2	M34	W/2	: In-vehicle sensor	G1	M87	GR/3	: To M501
E5	M35	Y/28	: Air bag diagnosis sensor unit	D2	M90	GR/2	: AV control unit
D2	M36	W/3	: Front passenger air bag off indicator	D2	M91	V/1	: AV control unit
D3	M37	W/40	: Front air control	D3	M150	W/2	: To M50
C2	M38	BR/8	: Push-button ignition switch	D1	M151	BR/2	: Center speaker
B3	M40	W/12	: Key slot	Console switch sub-harness			
B3	M41	W/4	: Aux jack	D3	M200	W/12	: To M71
D3	M42	W/16	: CD changer	C2	M201	W/6	: Front heated seat switch LH
D2	M43	W/20	: Audio unit	E2	M202	BR/6	: Front heated seat switch RH
D2	M44	W/8	: Audio unit	E3	M203	GR/2	: Front console antenna
E2	M45	W/12	: Audio unit	Console sub-harness			
E2	M46	W/40	: AV control unit	E3	M350	W/2	: To M85
D2	M47	W/20	: AV control unit	D3	M351	B/3	: Front console power socket
D2	M48	GR/12	: AV control unit				

ENGINE ROOM HARNESS

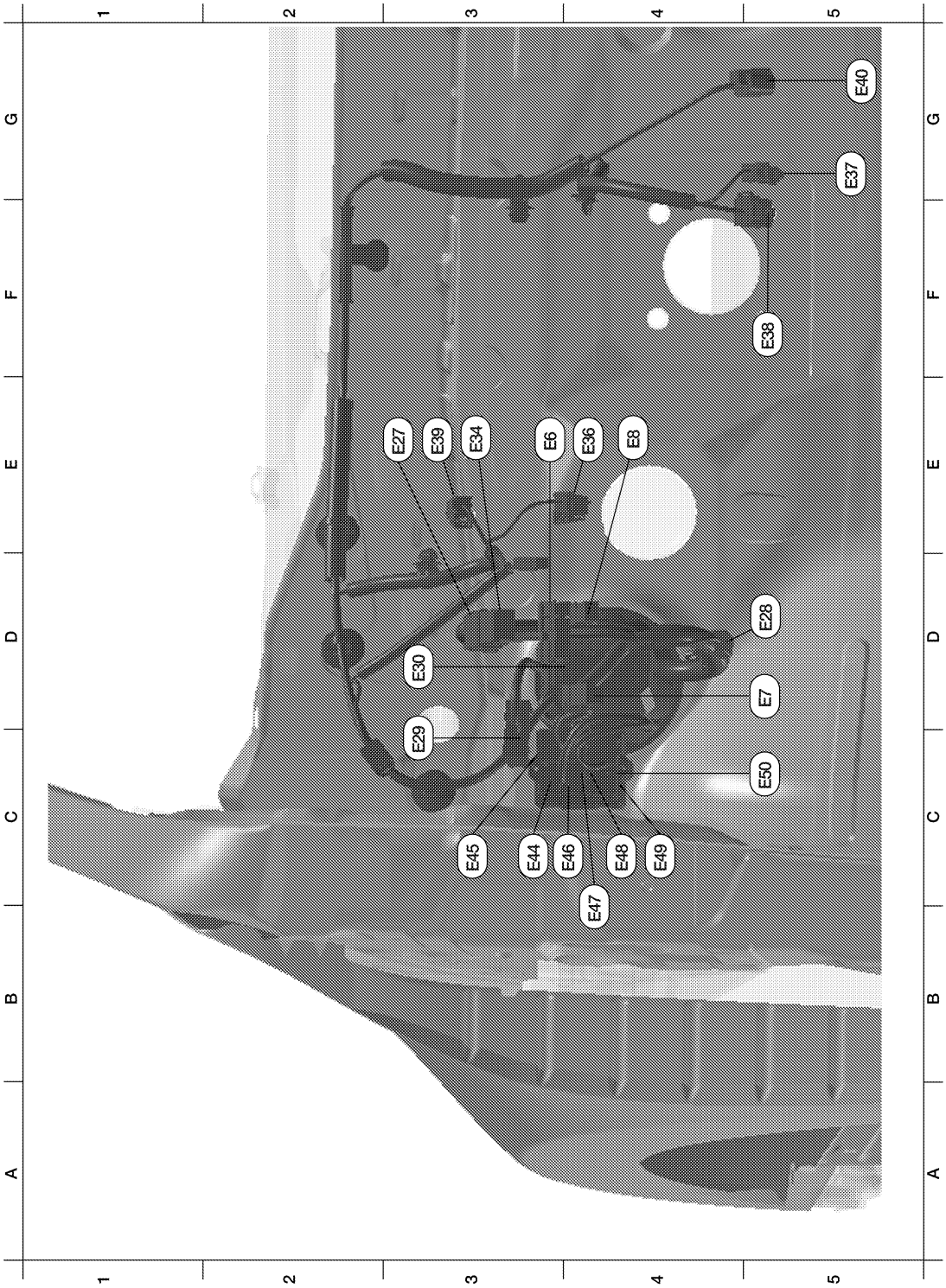


AWMIA0355GB

G4	E1	W/6	: Joint connector-E01			
G4	E2	W/8	: To E202			
G4	E3	W/16	: To F1			
F4	E4	BR/2	: Fusible link box (battery)			
F4	E5	GR/2	: Fusible link box (battery)			

D4	E9	—	: Body ground			
F5	E10	B/32	: ECM			
G4	E11	W/10	: To F2			
G4	E12	W/6	: To E203			
G5	E13	B/3	: To E205			
C4	E14	B/2	: Power steering solenoid valve			
D4	E15	—	: Body ground			
G5	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)			
F3	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)			
C3	E18	W/32	: IPDM E/R (intelligent power distribution module engine room)			
F3	E19	GR/2	: Front wheel sensor LH			
G3	E20	W/6	: Joint connector-E02			
G3	E21	W/4	: Joint connector-E03			
G3	E22	W/4	: Joint connector-E04			
D3	E24	GR/2	: Brake fluid level switch			
E2	E25	GR/5	: Front wiper motor			
B4	E26	B/26	: ABS actuator and electric unit (control unit)			
A5	E41	GR/2	: Front wheel sensor RH			
F5	E42	BR/6	: Cooling fan relay-2			
B2	E43	BR/6	: Cooling fan relay-3			
F2	E73	BR/3	: Intelligent key warning buzzer			

ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)

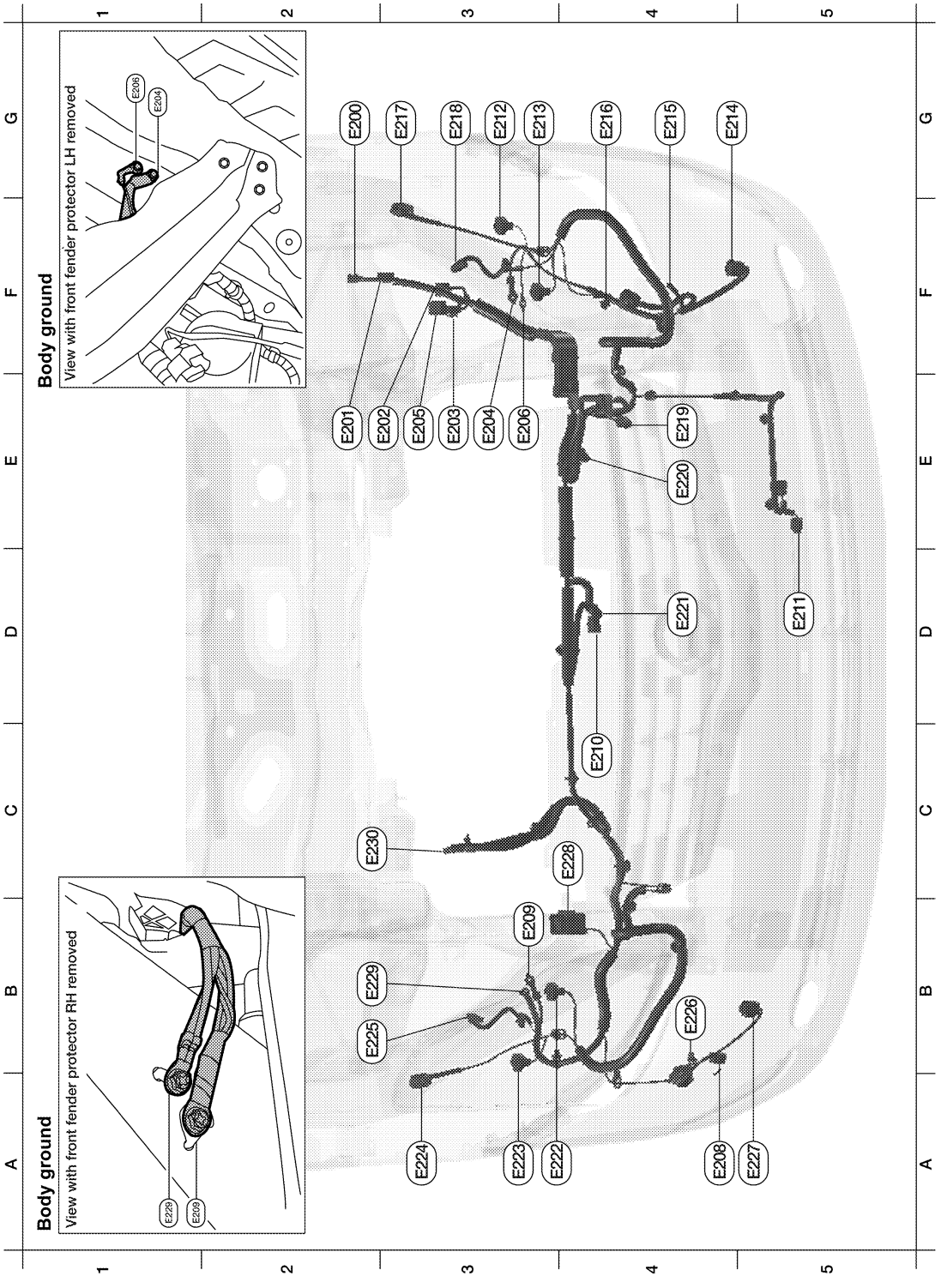


AWMIA0402GB

E3	E6	W/16	: Fuse block (J/B)				
D5	E7	W/1	: Fuse block (J/B)				
E4	E8	B/2	: Fuse block (J/B)				
E3	E27	W/4	: Joint connector-E06				
D5	E28	W/4	: Joint connector-E05				

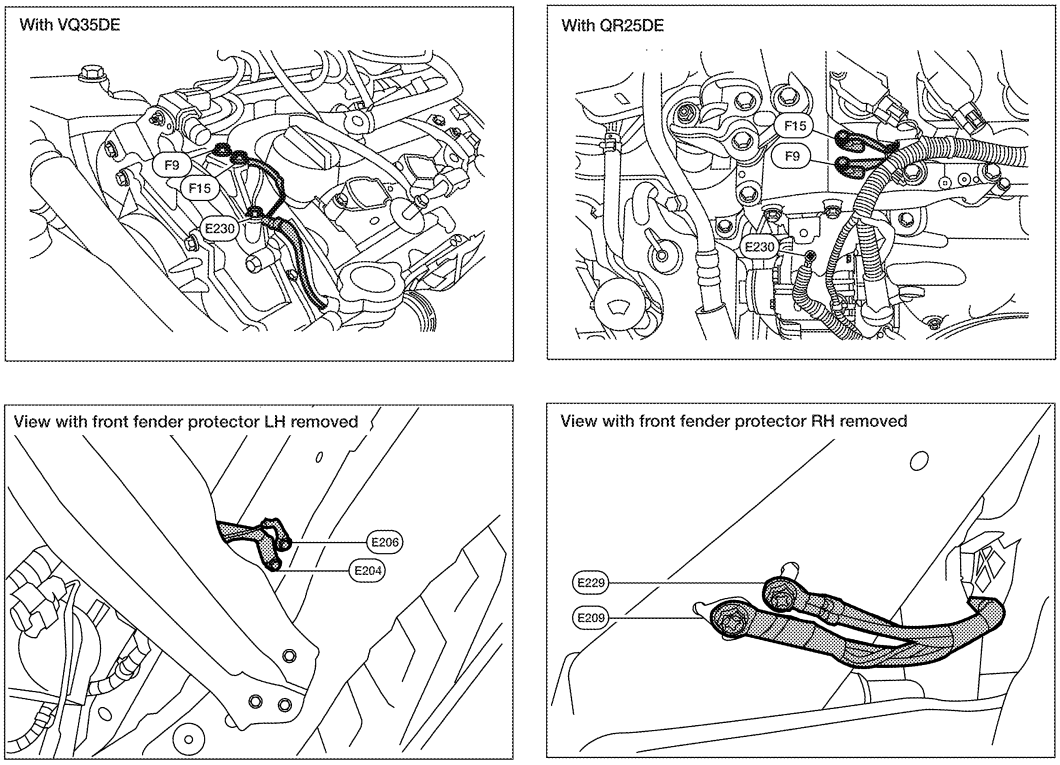
C3	E29	W/16	: To B10				
D3	E30	SMJ	: To M1				
E3	E34	L/4	: Back-up lamp relay				
E3	E35	B/1	: Park brake switch				
E4	E36	BR/2	: Clutch interlock switch				
G5	E37	BR/2	: ASCD brake switch				
F5	E38	W/4	: Stop lamp switch (with CVT)				
C5	E38	B/2	: Stop lamp switch (with M/T)				
E3	E39	BR/2	: ASCD clutch switch				
G5	E40	B/6	: Accelerator pedal position switch				
C3	E44	BR/12	: Junction block				
C3	E45	W/12	: Junction block				
C4	E46	W/16	: Junction block				
B4	E47	W/6	: Junction block				
C4	E48	W/4	: Junction block				
C4	E49	BR/4	: Junction block				
C5	E50	W/2	: Junction block				

FRONT END MODULE HARNESS

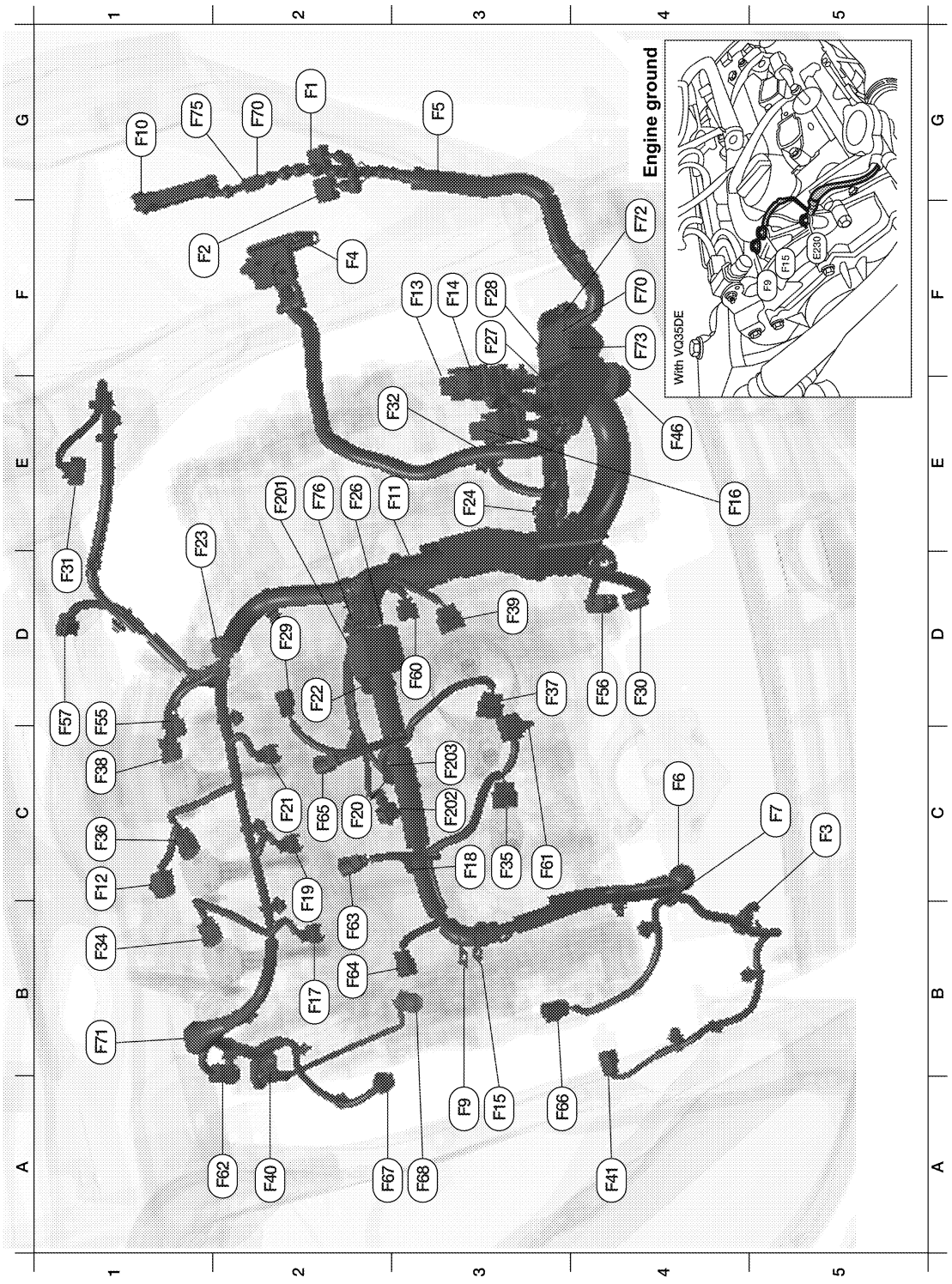


G3	E200	W/8	: IPDM E/R (intelligent power distribution module engine room)					
E2	E201	W/16	: IPDM E/R (intelligent power distribution module engine room)					
E3	E202	W/8	: To E2					
E3	E203	W/6	: To E12					

E3	E204	—	: Body ground				
E3	E205	B/3	: To E13				
E3	E206	—	: Body ground				
A4	E208	W/2	: Washer fluid level switch				
B3	E209	—	: Body ground				
D4	E210	Y/2	: Crash zone sensor				
D5	E211	B/2	: Ambient sensor				
G3	E212	GR/2	: Front combination lamp LH (low)				
G4	E213	B/2	: Front combination lamp LH (high)				
G5	E214	B/2	: Front fog lamp LH				
G4	E215	B/1	: Horn (low)				
G4	E216	B/1	: Horn (high)				
G3	E217	GR/3	: Front turn signal lamp LH				
G3	E218	B/2	: Front parking lamp LH				
E4	E219	B/3	: Refrigerant pressure sensor				
E4	E220	GR/4	: Cooling fan motor-1				
D4	E221	GR/4	: Cooling fan motor-2				
A4	E222	B/2	: Front combination lamp RH (high)				
A3	E223	GR/2	: Front combination lamp RH (low)				
A3	E224	GR/3	: Front turn signal lamp RH				
B3	E225	B/2	: Front parking lamp RH				
B4	E226	B/2	: Front washer motor				
A5	E227	B/2	: Front fog lamp RH				
C4	E228	B/5	: Daytime light relay				
B3	E229	—	: Body ground				
C3	E230	—	: Generator				



ALMIA0031GB

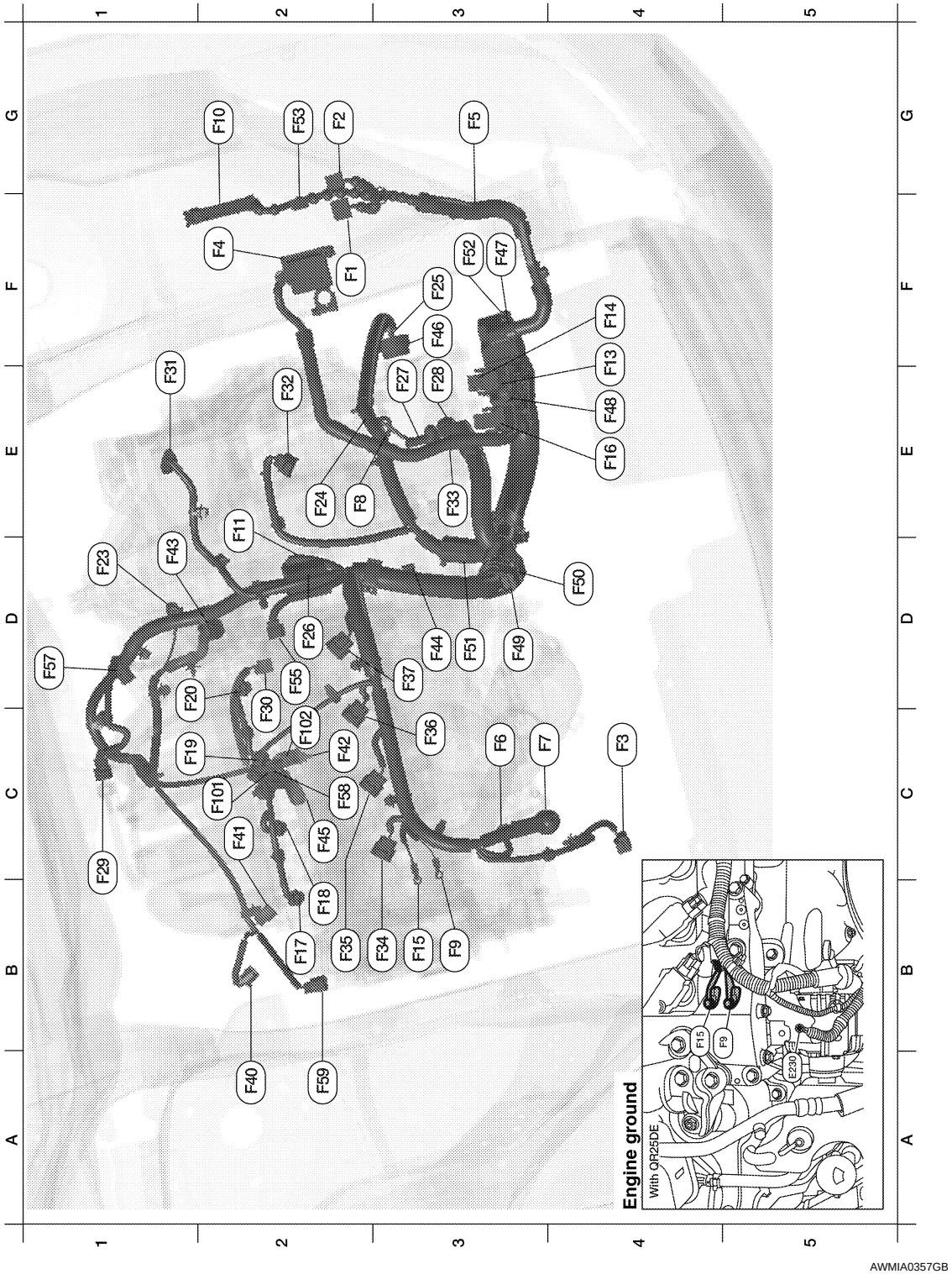


ALMIA0020GB

G2	F1	W/16	: To E3	D1	F55	B/3	: Camshaft position sensor (phase) (bank 1)
F2	F2	W/10	: To E11	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
C5	F3	B/2	: A/C Compressor	D1	F57	B/6	: Electric throttle control actuator
F2	F4	—	: Fusible link box (battery)	D3	F60	B/3	: Camshaft position sensor (phase) (bank 2)
G3	F5	B/3	: Current sensor	C3	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)

C4	F6	—	: Generator	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)
C5	F7	B/3	: Generator	B2	F63	B/2	: VIAS control solenoid valve (bank 1)
E4	F8	W/3	: Primary speed sensor	B3	F64	B/2	: Electric controlled engine mount control solenoid valve
A3	F9	—	: Engine ground	C2	F65	B/2	: VIAS control solenoid valve (bank 1)
G1	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	A3	F66	GR/2	: Intake valve timing control solenoid valve (bank 2)
E3	F11	GR/2	: Engine coolant temperature sensor	A2	F67	G/2	: Intake valve timing control solenoid valve (bank 1)
C1	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	A3	F68	GR/2	: Engine oil temperature sensor
F3	F13	BR/48	: ECM	G2	F70	B/10	: Joint connector-F01
F3	F14	GR/32	: ECM	B1	F71	GR/6	: Joint connector-F03
A3	F15	—	: Engine ground	F4	F72	B/10	: Joint connector-F04
E4	F16	B/48	: TCM (transmission control module)	F4	F73	B/10	: Joint connector-F05
B2	F17	GR/2	: Fuel injector No. 1	D3	F74	W/4	: Joint connector-F08
C3	F18	GR/2	: Fuel injector No. 2	G2	F75	W/4	: Joint connector-F07
C2	F19	GR/2	: Fuel injector No. 3	E2	F76	L/4	: To F201
C2	F20	GR/2	: Fuel injector No. 4	Knock sensor sub-harness			
C2	F21	GR/2	: Fuel injector No. 5	E2	F201	L/4	: To F76
D2	F22	GR/2	: Fuel injector No. 6	C3	F202	L/2	: Knock sensor
E2	F23	B/3	: Secondary speed sensor	C3	F203	L/2	: Knock sensor
E3	F24	B/2	: Reverse lamp switch				
E2	F26	GR/2	: Condenser-2				
F3	F27	/2	: Starter motor				
F3	F28	GR/1	: Starter motor				
D2	F29	L/2	: EVAP canister purge volume control solenoid valve				
D4	F30	B/3	: Crankshaft position sensor (POS)				
D1	F31	B/6	: Mass air flow sensor				
E3	F32	B/2	: Park/neutral position (PNP) switch				
B1	F34	GR/3	: Ignition coil No. 1 (with power transistor)				
C3	F35	GR/3	: Ignition coil No. 2 (with power transistor)				
C1	F36	GR/3	: Ignition coil No. 3 (with power transistor)				
D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)				
C1	F38	GR/3	: Ignition coil No. 5 (with power transistor)				
D3	F39	GR/3	: Ignition coil No. 6 (with power transistor)				
A2	F40	B/3	: Power steering pressure sensor				
A4	F41	GR/1	: Oil pressure switch				
E4	F46	B/22	: CVT unit				

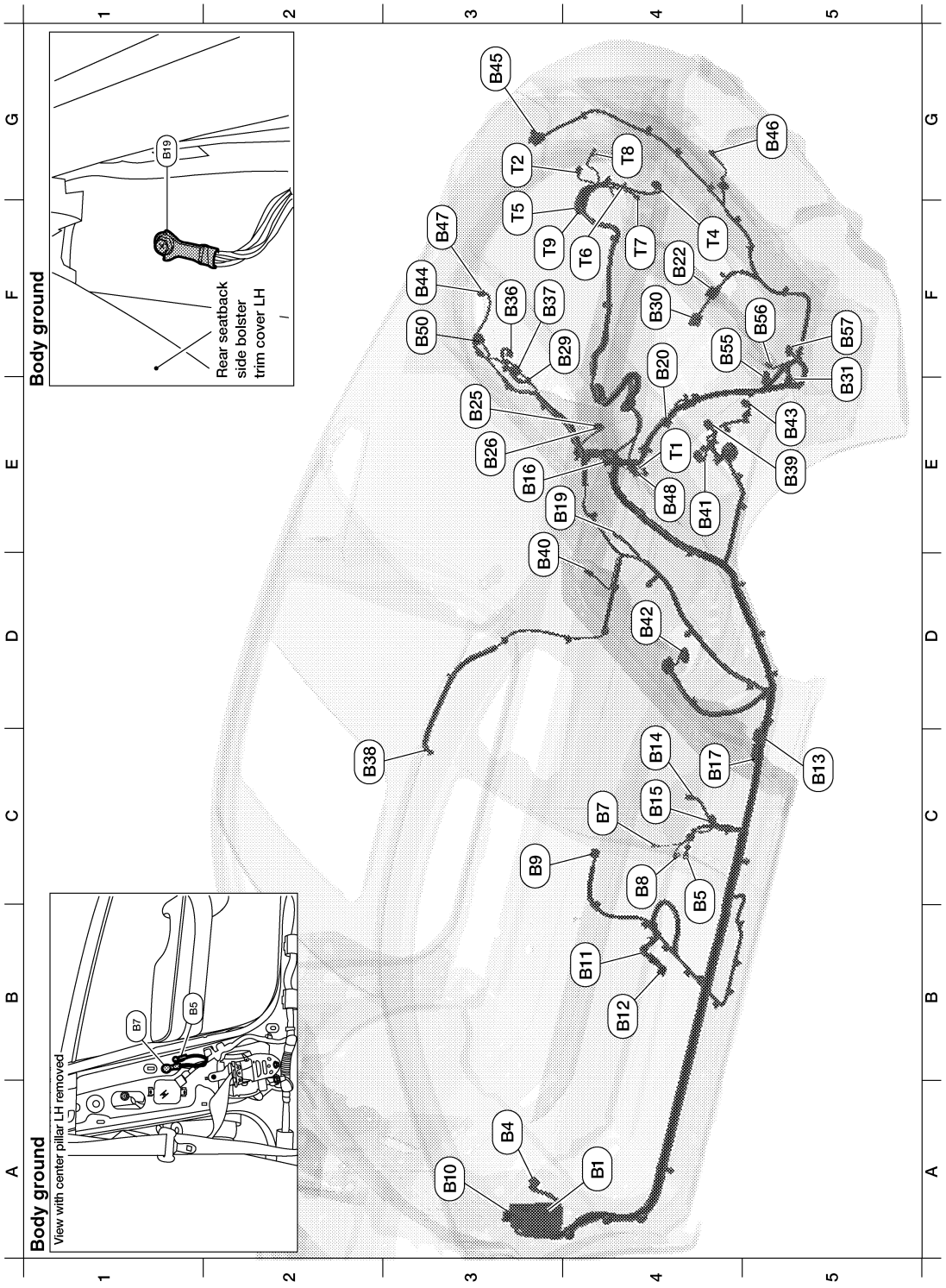
ENGINE CONTROL HARNESS (QR25DE)



AWMIA0357GB

F2	F1	W/16	: To E3	F3	F47	B/6	: Joint connector-F01
G2	F2	W/10	: To E11	E4	F48	B/10	: Joint connector-F02
C4	F3	B/12	: A/C Compressor	D3	F49	B/10	: Joint connector-F03
F2	F4	—	: Fusible link box (battery)	D4	F50	B/10	: Joint connector-F04
G3	F5	B/3	: Current sensor	D3	F51	B/6	: Joint connector-F05

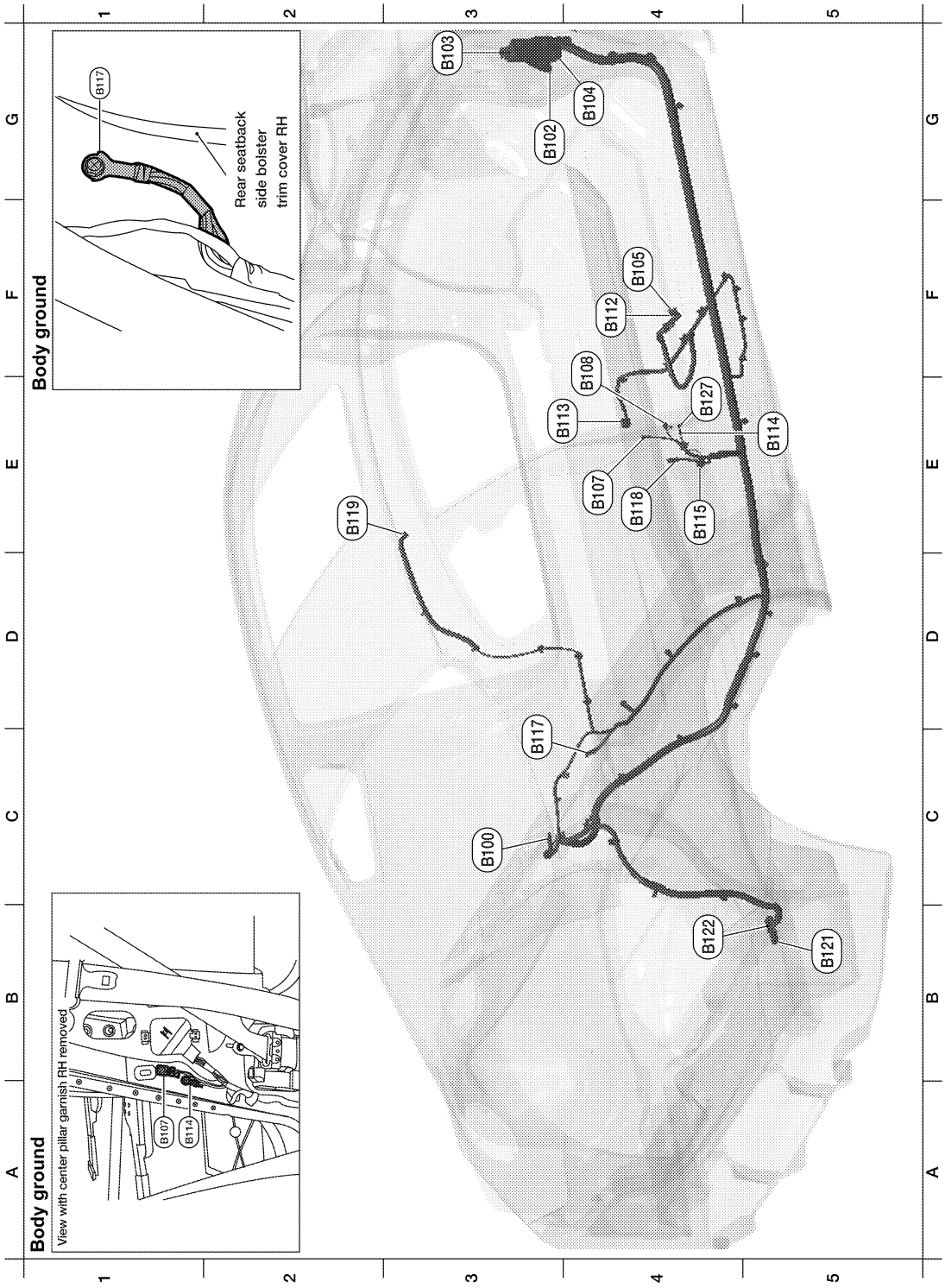
C3	F6	—	: Generator	F3	F52	B/10	: Joint connector-F06
C3	F7	B/3	: Generator	G2	F53	B/4	: Joint connector-F07
E2	F8	W/3	: Primary speed sensor	D2	F55	B/3	: Camshaft position sensor (phase)
B3	F9	—	: Engine ground	D1	F57	B/6	: Electric throttle control actuator
G2	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	C2	F58	B/4	: To F101
E2	F11	GR/2	: Engine coolant temperature sensor	A2	F59	G/2	: Intake valve timing control solenoid valve
E4	F13	BR/48	: ECM	C1	F101	B/4	: To F58
F4	F14	GR/32	: ECM	C2	F102	GR/4	: Heated oxygen sensor 3
B3	F15	—	: Engine ground				
E4	F16	B/48	: TCM (transmission control module)				
B2	F17	GR/2	: Fuel injector No. 1				
B2	F18	GR/2	: Fuel injector No. 2				
C1	F19	GR/2	: Fuel injector No. 3				
D1	F20	GR/2	: Fuel injector No. 4				
D1	F23	B/3	: Secondary speed sensor				
E3	F24	B/2	: Back-up lamp switch				
F3	F25	B/10	: Park/neutral position (PNP) switch (with CVT)				
D2	F26	GR/2	: Condenser-2				
E3	F27	/2	: Starter motor				
E3	F28	GR/1	: Starter motor				
C1	F29	L/2	: EVAP canister purge volume control solenoid valve				
C2	F30	B/3	: Crankshaft position sensor (POS)				
E1	F31	B/6	: Mass air flow sensor				
E2	F32	B/2	: Park/neutral position (PNP) switch (with M/T)				
E3	F33	GR/2	: Vehicle speed sensor				
B3	F34	GR/3	: Ignition coil No. 1 (with power transistor)				
B2	F35	GR/3	: Ignition coil No. 2 (with power transistor)				
C3	F36	GR/3	: Ignition coil No. 3 (with power transistor)				
D3	F37	GR/3	: Ignition coil No. 4 (with power transistor)				
A2	F40	B/3	: Power steering pressure sensor				
C2	F41	GR/1	: Oil pressure switch				
C2	F42	B/4	: Heated oxygen sensor 2				
D1	F43	GR/5	: Tumble control valve actuator				
D3	F44	GR/4	: Air fuel ratio (A/F) sensor 1				
C2	F45	GR/2	: Knock sensor				
F3	F46	B/22	: CVT unit				



ALMIA0397GB

A4	B1	SMJ	: To M6				
A3	B4	BR/12	: Fuse block (J/B)				
C4	B5	—	: LH side air bag (satellite) sensor (sheild wire)				
C4	B7	—	: Body ground				
C4	B8	W/3	: Front door switch LH				

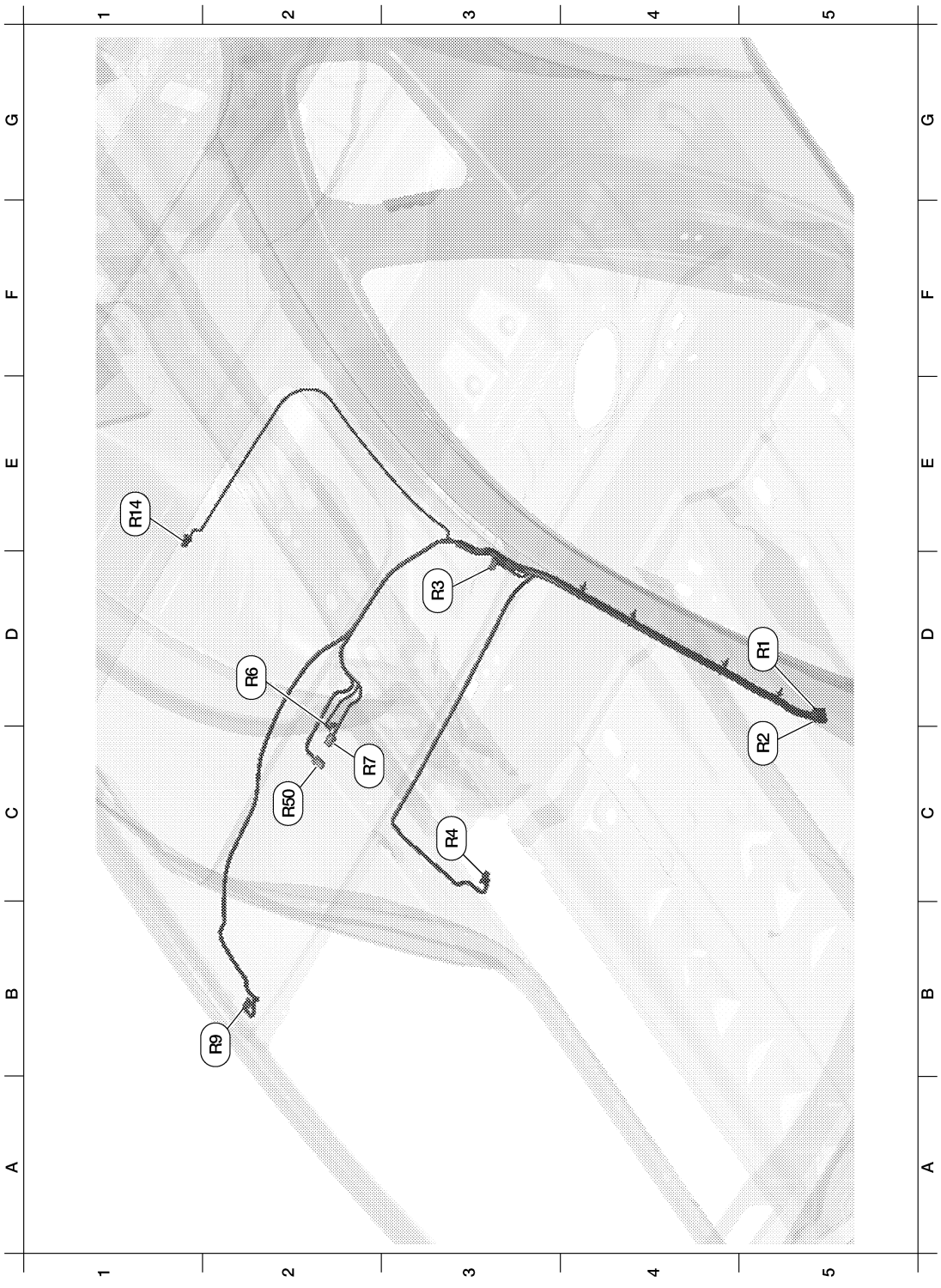
C3	B9	Y/12	: Air bag diagnosis sensor unit				
A3	B10	W/16	: To E29				
B4	B11	Y/2	: Front LH side air bag module				
B4	B12	W/8	: To B201				
C5	B13	W/6	: Joint connector-B03				
C5	B14	Y/2	: Front LH seat belt pre-tensioner				
C4	B15	Y/2	: LH side air bag (satellite) sensor				
E3	B16	BR/2	: Rear tweeter LH				
C4	B17	W/2	: Condenser-1				
E4	B19	—	: Body ground				
F4	B20	GR/6	: Joint connector-B05				
E3	B21	L/12	: Joint connector-B06				
F4	B22	W/6	: Joint connector-B07				
E3	B25	W/2	: Rear subwoofer LH				
E3	B26	W/2	: Rear speaker LH				
F3	B29	GR/2	: Rear panel shelf antenna				
F4	B30	W/6	: Rear combination lamp LH				
F5	B31	W/16	: Rear view camera control unit				
F3	B36	W/2	: Trunk room lamp				
F3	B37	W/2	: High mounted stop lamp				
C2	B38	Y/2	: LH side front curtain air bag module				
E5	B39	B/2	: EVAP canister vent control valve				
E5	B41	GR/3	: EVAP control system pressure sensor				
D4	B42	GR/5	: Fuel level sensor unit and fuel pump				
E5	B43	GR/4	: Rear wheel sensor				
F3	B44	W/2	: Rear speaker RH				
G3	B45	W/6	: Rear combination lamp RH				
G5	B46	GR/2	: Rear bumper antenna				
F3	B47	W/2	: Rear subwoofer RH				
E4	B48	W/16	: To T1				
E4	B50	W/6	: To B138				
F4	B55	W/32	: Bluetooth control unit				
F5	B56	W/8	: Bluetooth control unit				
F5	B57	W/16	: Satellite radio tuner or prewiring for satellite radio tuner				
Tail lamp sub-harness							
E4	T1	W/16	: To B48				
G3	T2	BR/2	: Trunk opener request switch				
F4	T4	W/4	: Trunk lamp switch and trunk release solenoid				
F3	T5	W/4	: Joint connector-T01				
F4	T6	BR/2	: License plate lamp LH				
F4	T7	W/4	: Rear veiw camera				
G4	T8	BR/2	: License plate lamp RH				
F4	T9	W/4	: Joint connector-T02				



ALMIA0396GB

G3	B100	BR/2	: Rear tweeter RH				
G3	B102	W/24	: To M8				
G3	B103	BR/16	: To M9				
G4	B104	BR/12	: To M10				
G3	B105	W/8	: To B301				

E4	B107	—	: Body ground				
E4	B108	W/3	: Front door switch RH				
F4	B112	Y/2	: Front RH side air bag module				
E4	B113	Y/12	: Air bag diagnosis sensor unit				
E4	B114	—	: LH side air bag (satellite) sensor (sheild wire)				
E4	B115	Y/2	: Front RH seat belt pre-tensioner				
C3	B117	—	: Body ground				
E4	B118	Y/2	: RH side air bag (satellite) sensor				
E3	B119	Y/2	: RH side curtain air bag module				
B5	B121	BR/23	: BOSE speaker amp.				
B5	B122	BR/14	: BOSE speaker amp.				
E4	B127	—	: RH side curtain air bag module (ground)				

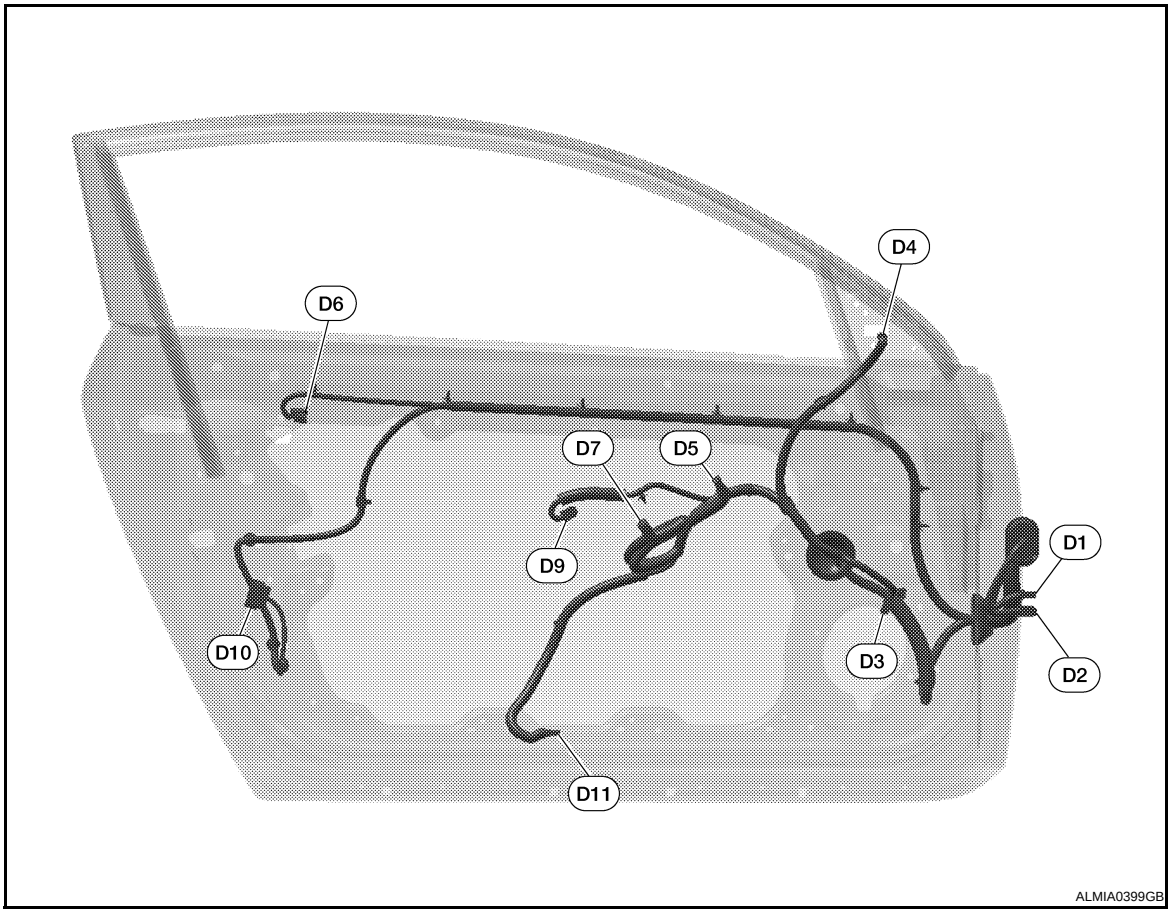


ALMIA0398GB

D5	R1	W/16	: To M17				
D5	R2	W/4	: To M13				
D3	R3	W/2	: Vanity mirror lamp LH				
C3	R4	B/10	: Auto anti-dazzling inside mirror				
C2	R6	W/3	: Sunroof switch				

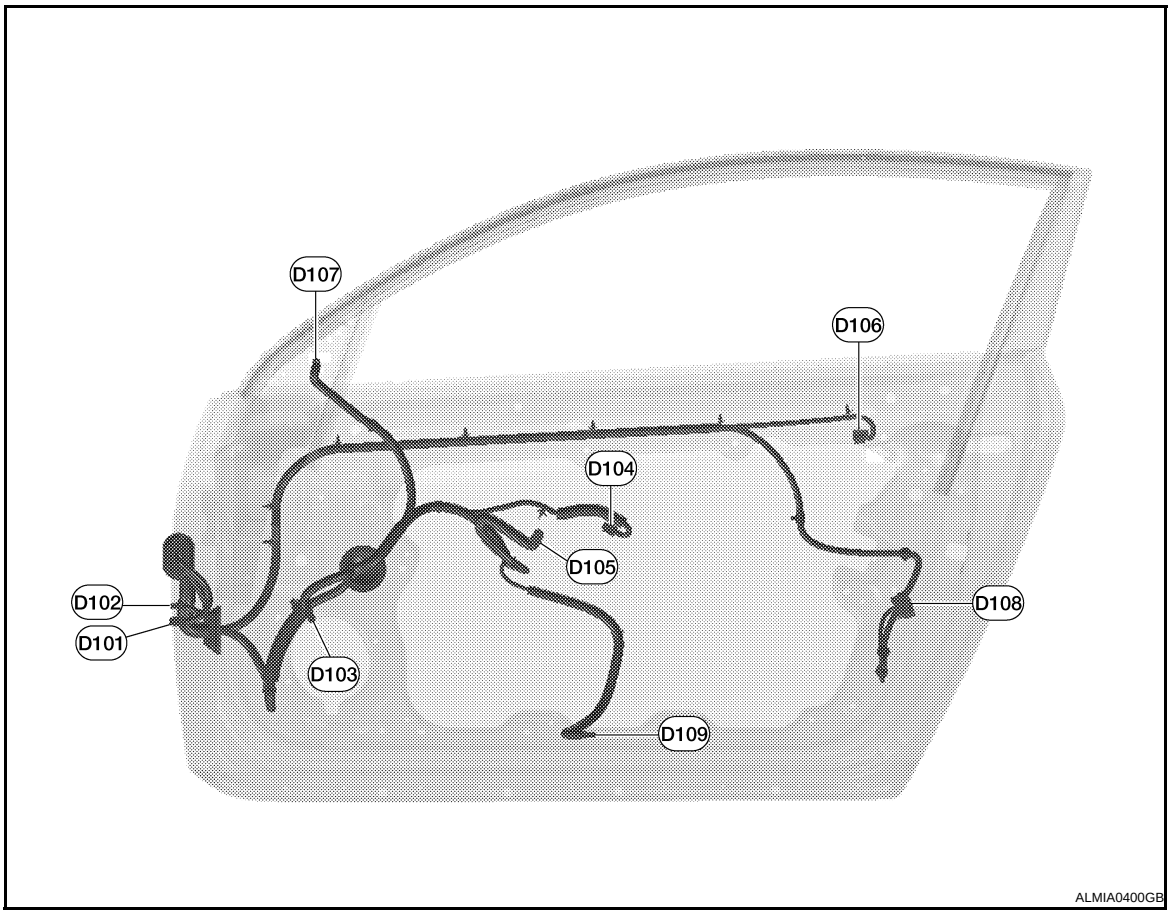
C2	R7	W/4	: Microphone				
B2	R9	W/2	: Vanity mirror lamp RH				
D1	R14	W/6	: Interior room lamp				
C2	R50	GR/6	: Front room/map lamp assembly				

FRONT DOOR LH HARNESS



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	D8	W/3	: Main power window and door lock/unlock switch
D3	W/2	: Front door speaker LH	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



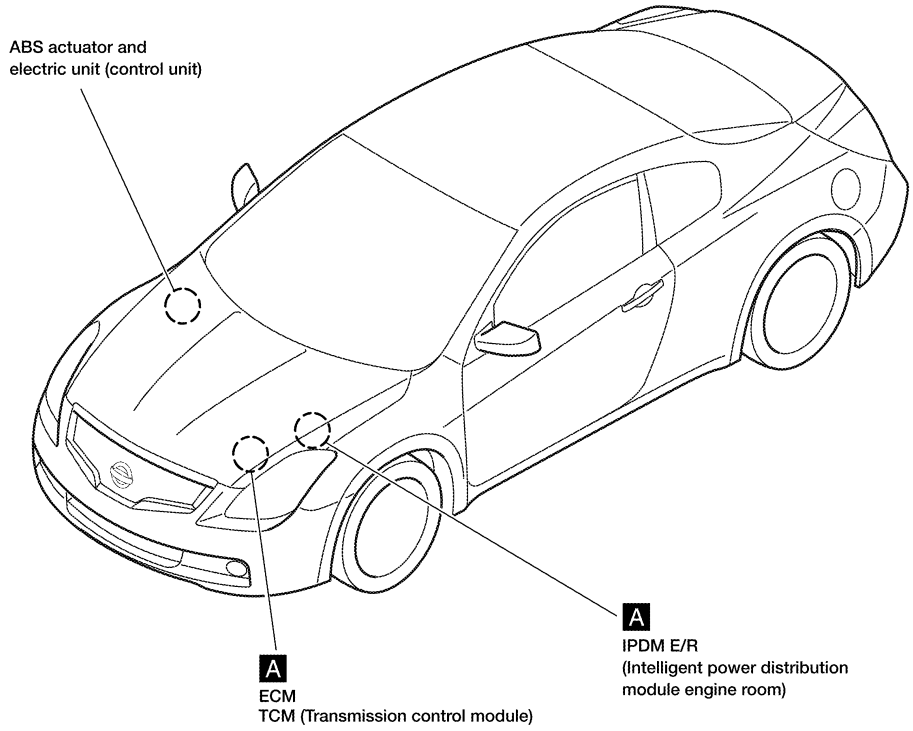
D101	W/10	: To M14	D105	W/16	: Power window and door lock/unlock switch RH
D102	W/12	: To M15	D106	B/4	: Front outside handle RH
D103	W/2	: Front door speaker RH	D107	W/8	: Door mirror RH
D103	BR/2	: Front door speaker RH	D108	GR/6	: Front door lock actuator RH
D104	W/6	: Front power window motor RH	D109	W/2	: Step lamp RH
D105	W/12	: Power window and door lock/unlock switch RH			

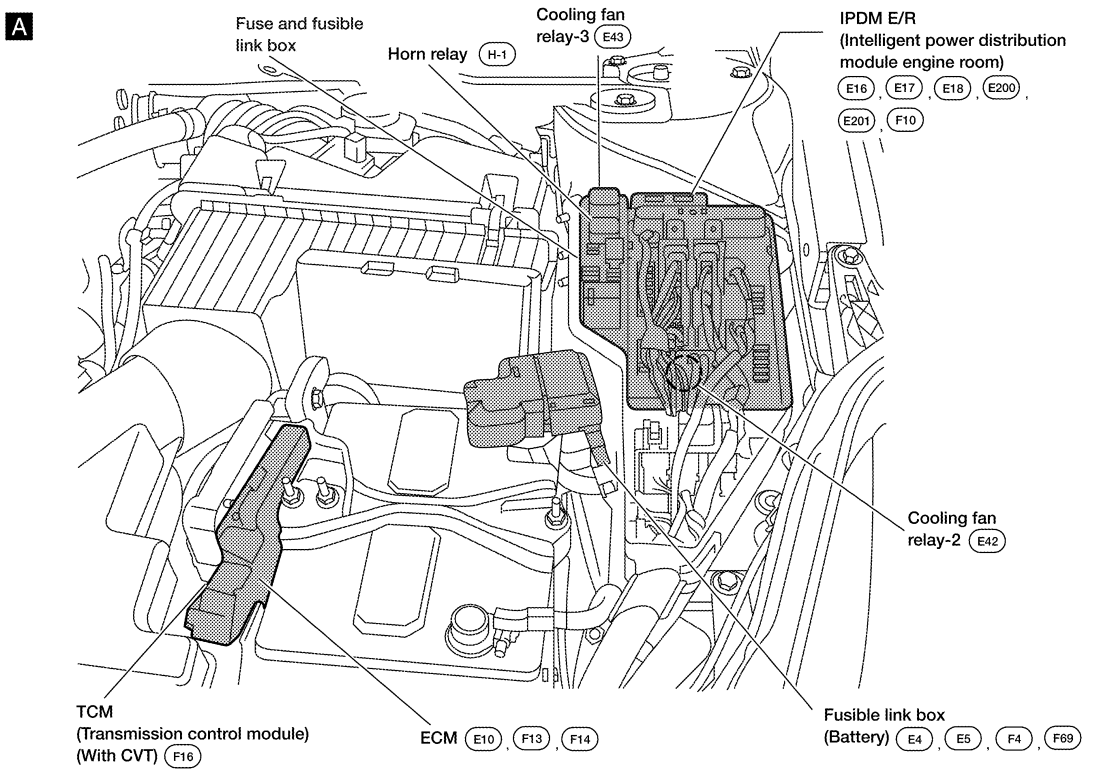
ELECTRICAL UNITS LOCATION

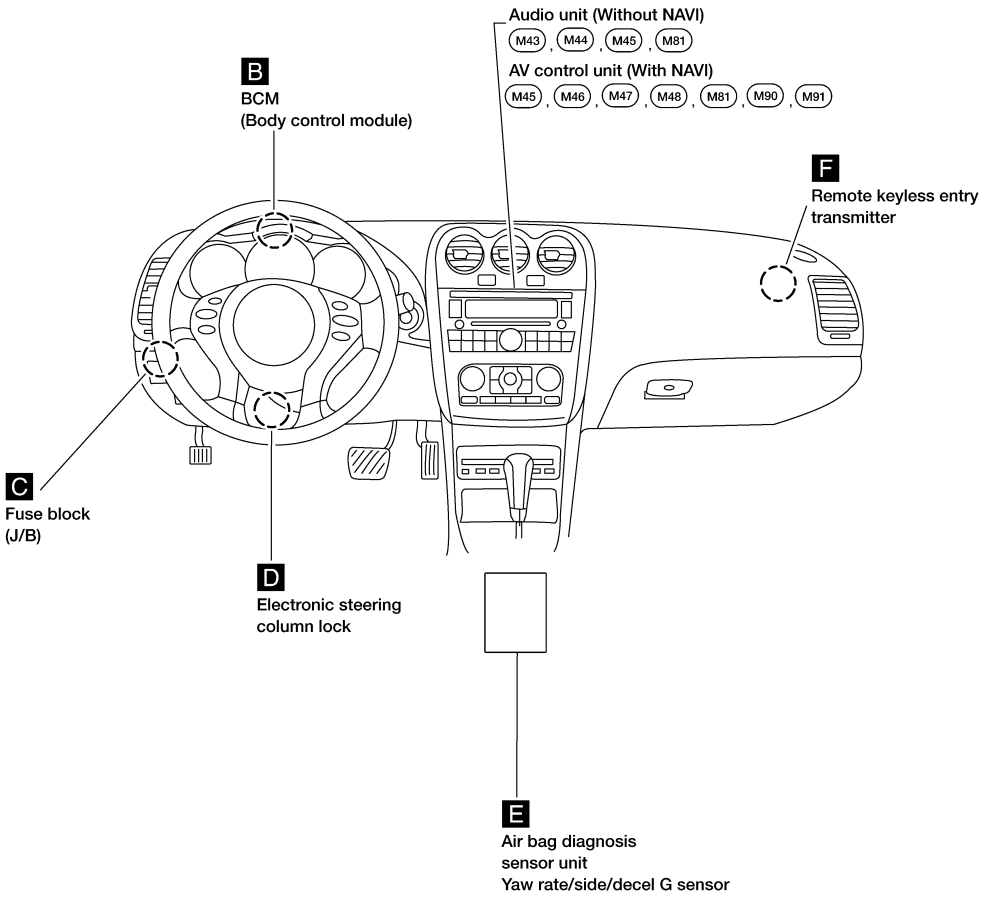
Electrical Units Location

INFOID:0000000003229319

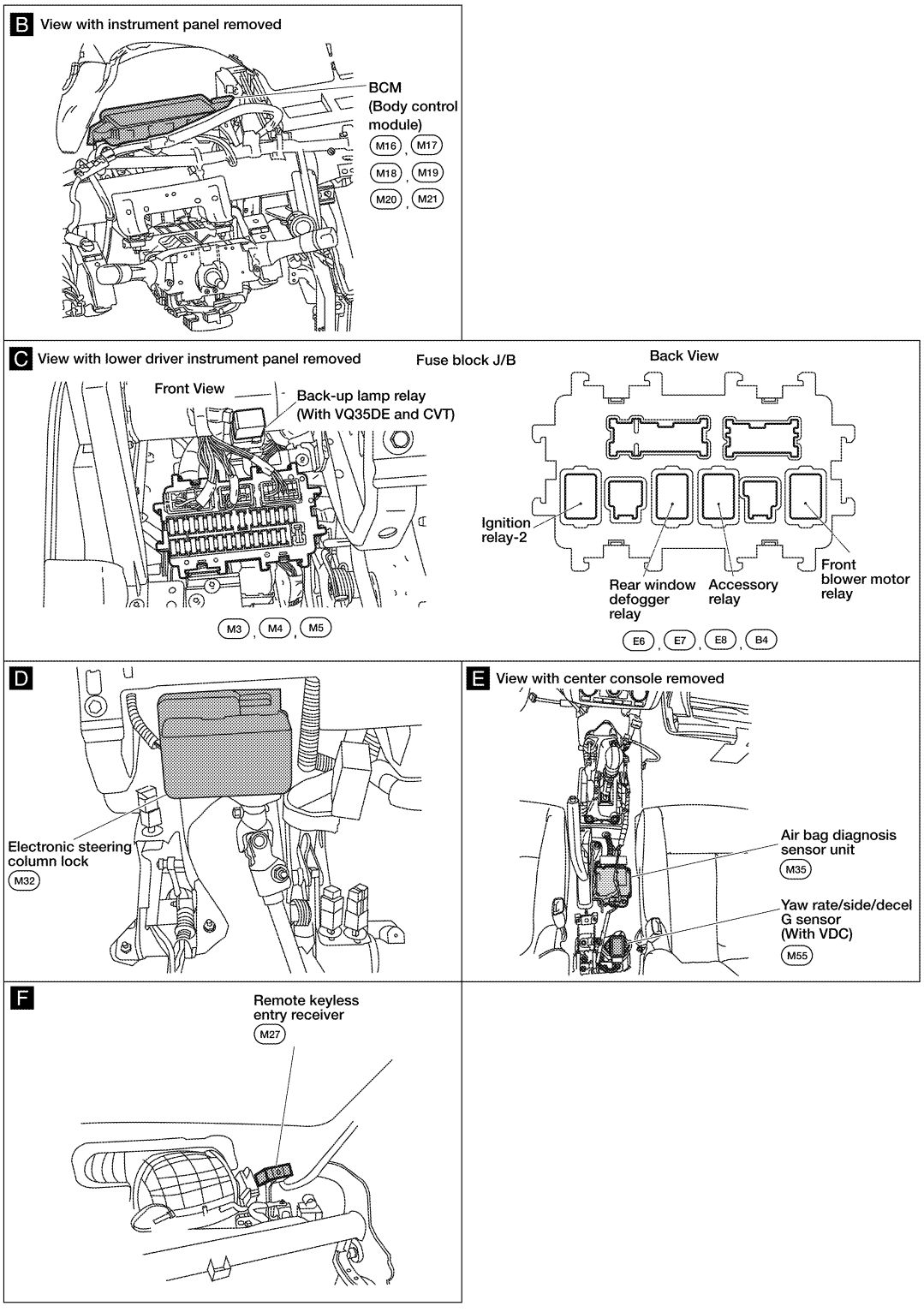
ENGINE COMPARTMENT



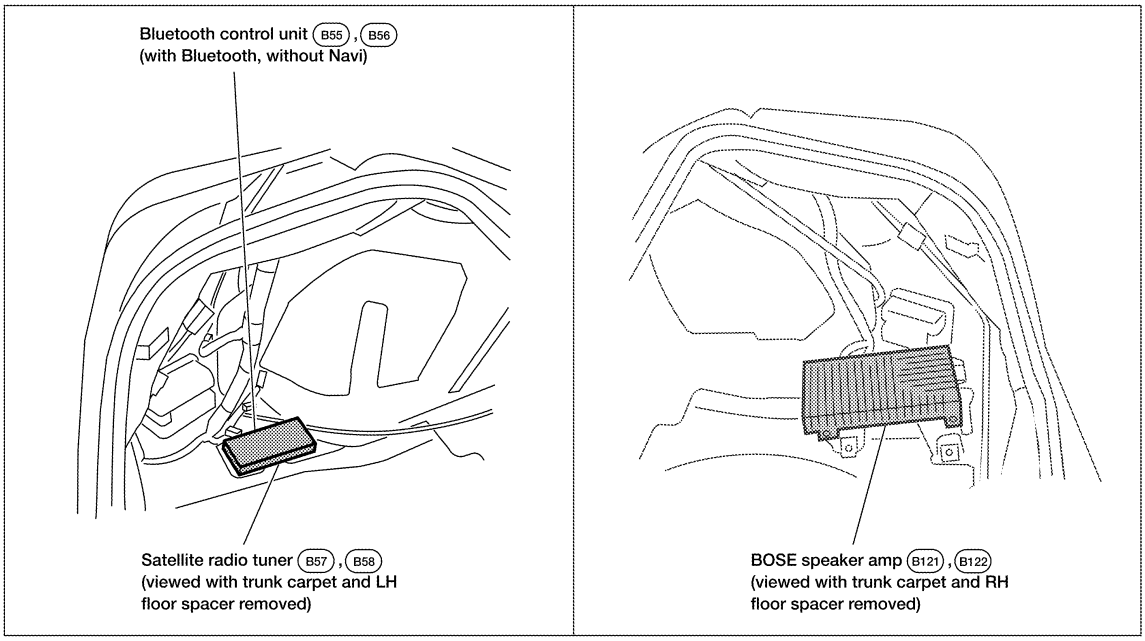


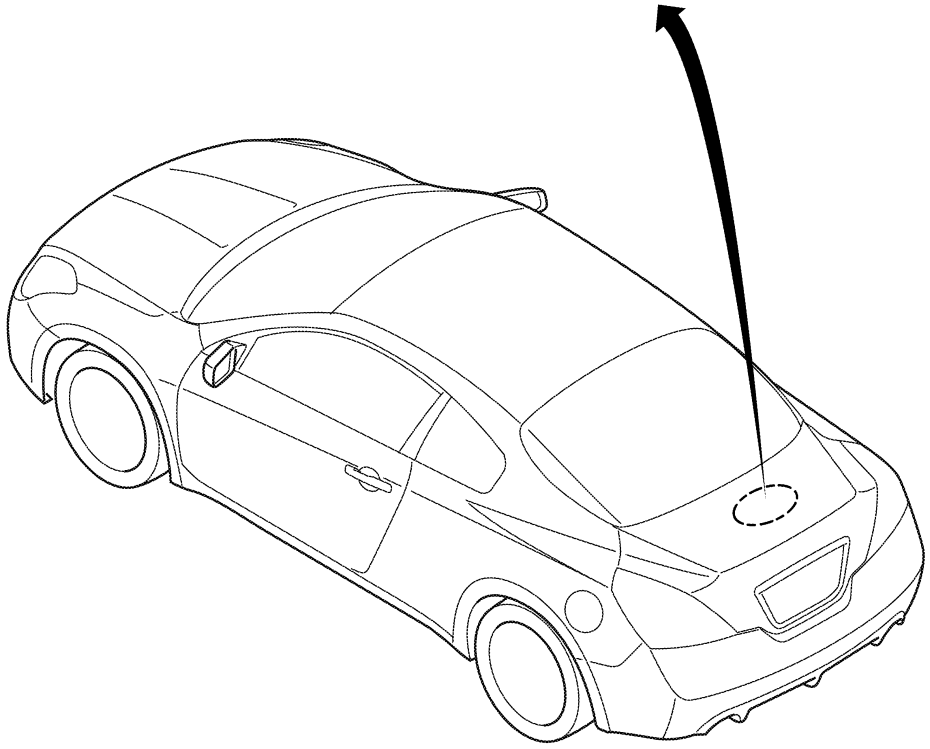


AWMIA0362GB



ALMIA0012GB





ALMIA0404GB

HARNESS CONNECTOR

Description

INFOID:0000000003229320

HARNESS CONNECTOR (TAB-LOCKING TYPE)

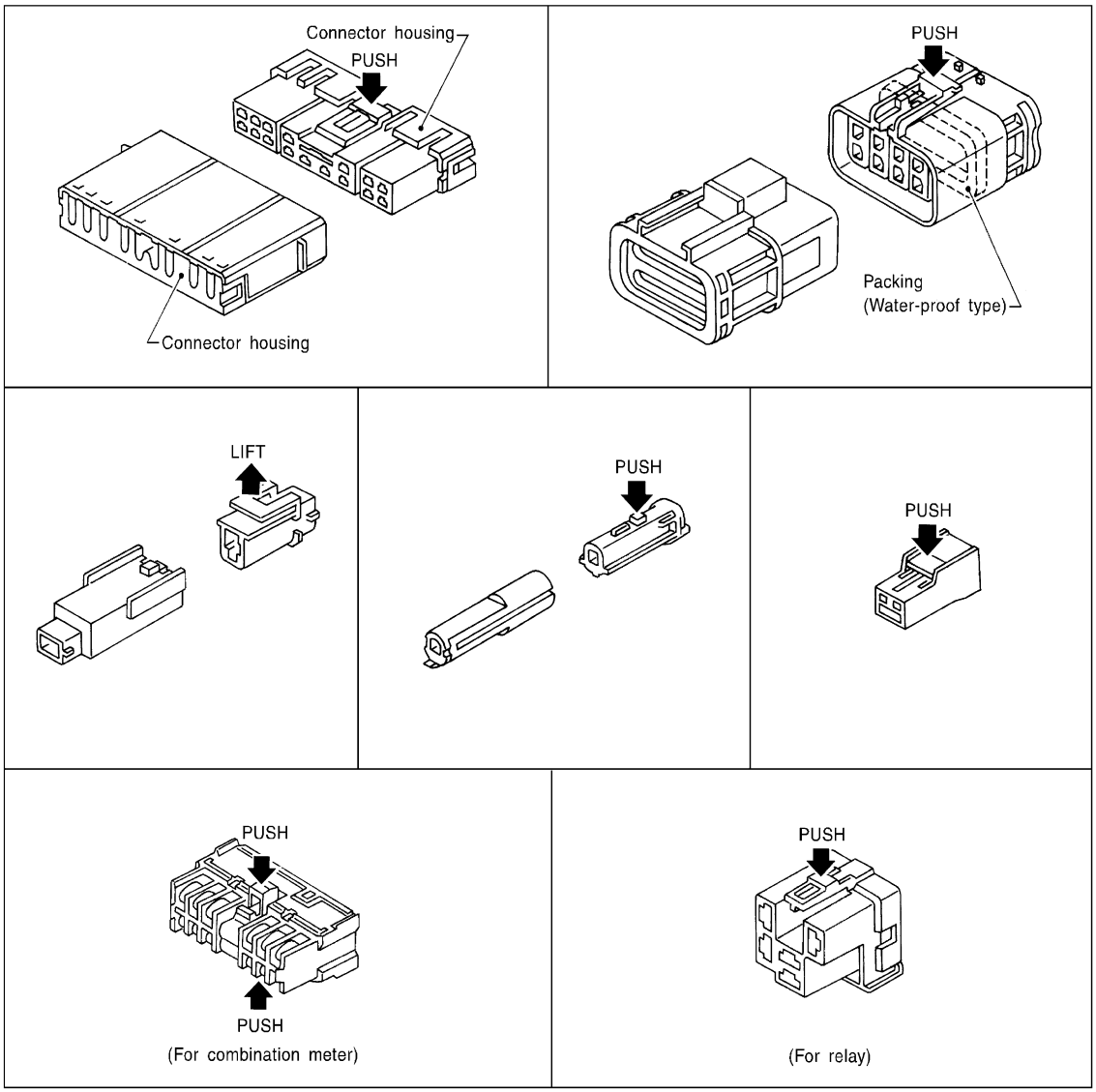
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

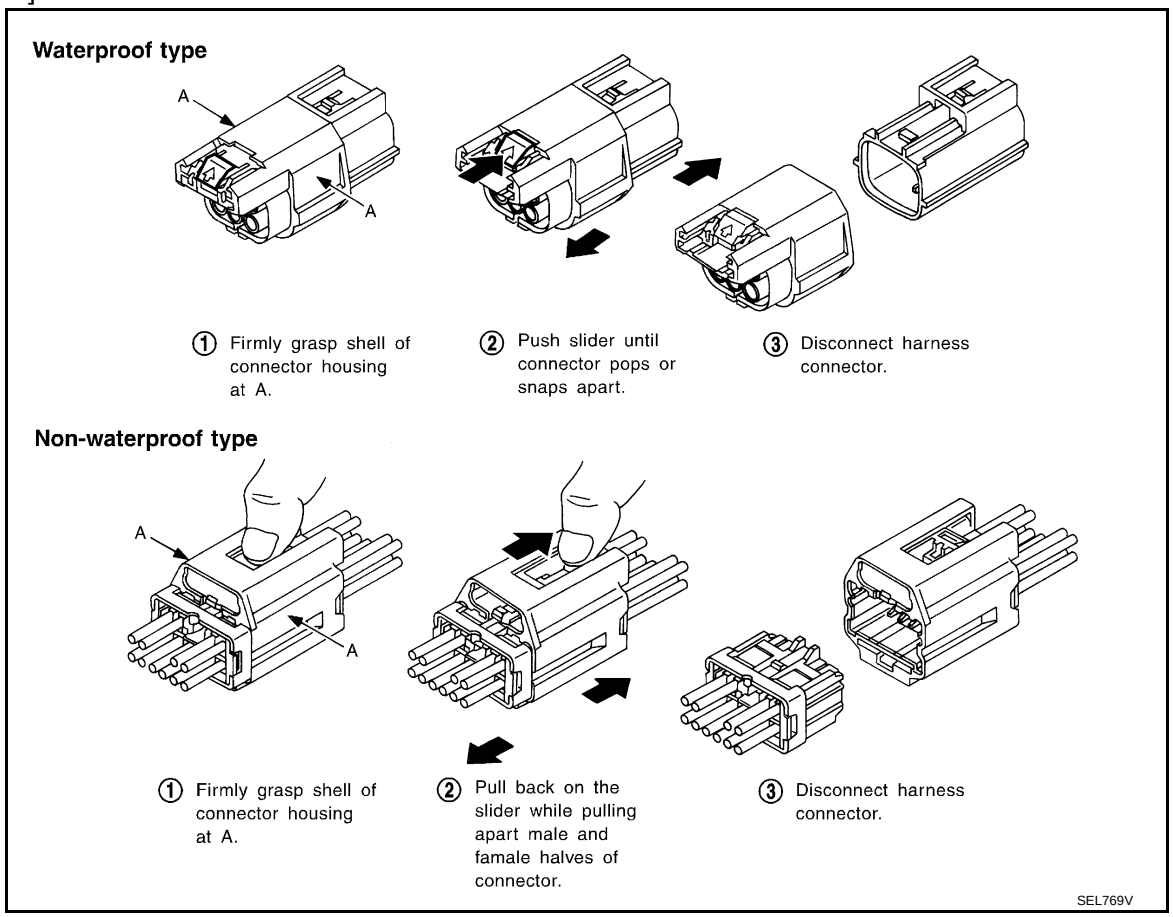
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]



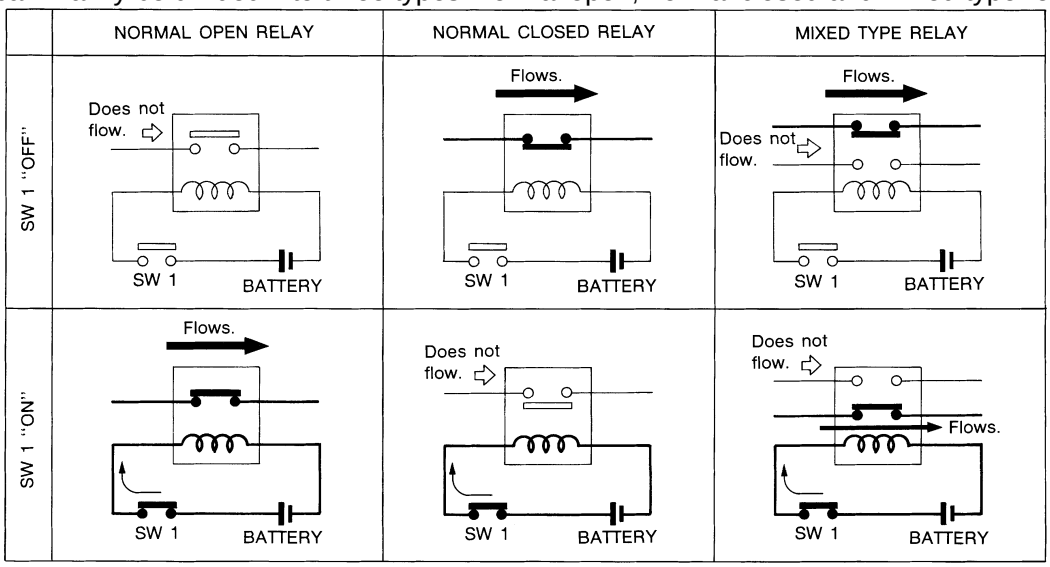
STANDARDIZED RELAY

Description

INFOID:0000000003229321

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

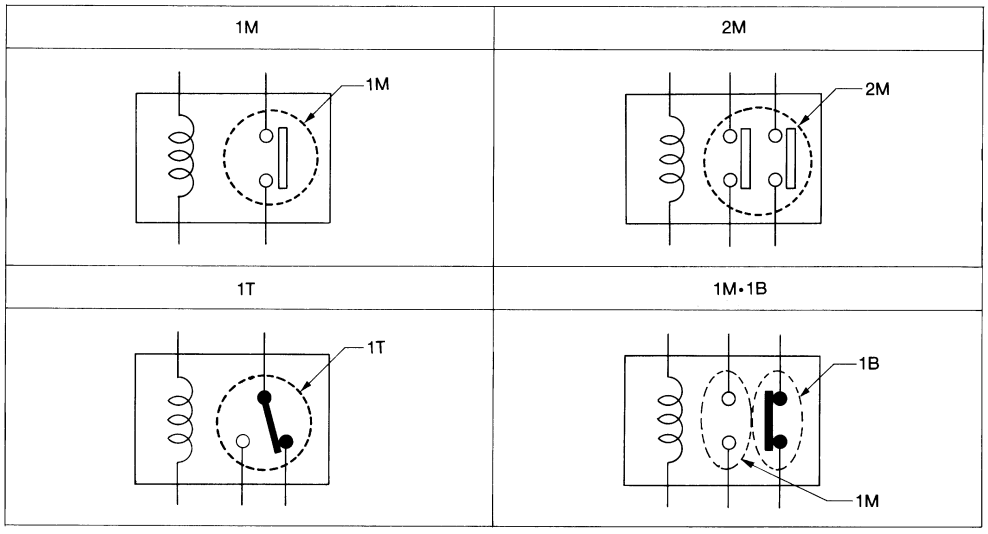
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



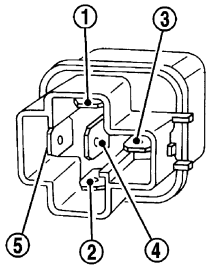
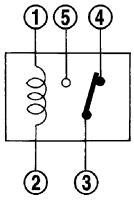
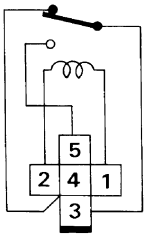
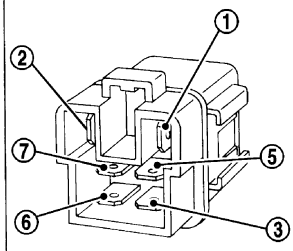
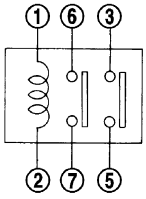
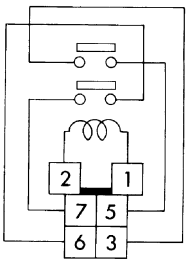
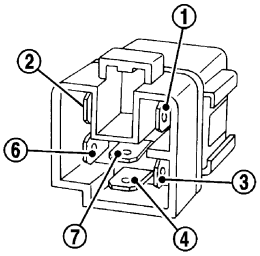
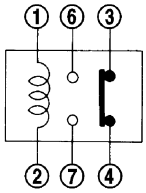
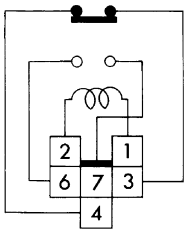
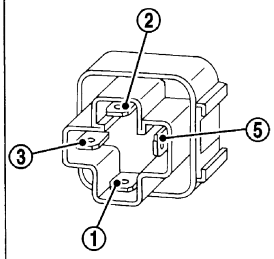
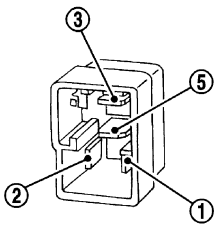
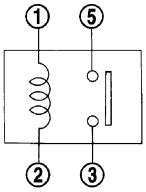
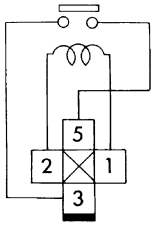
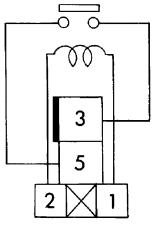
SEL881H

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

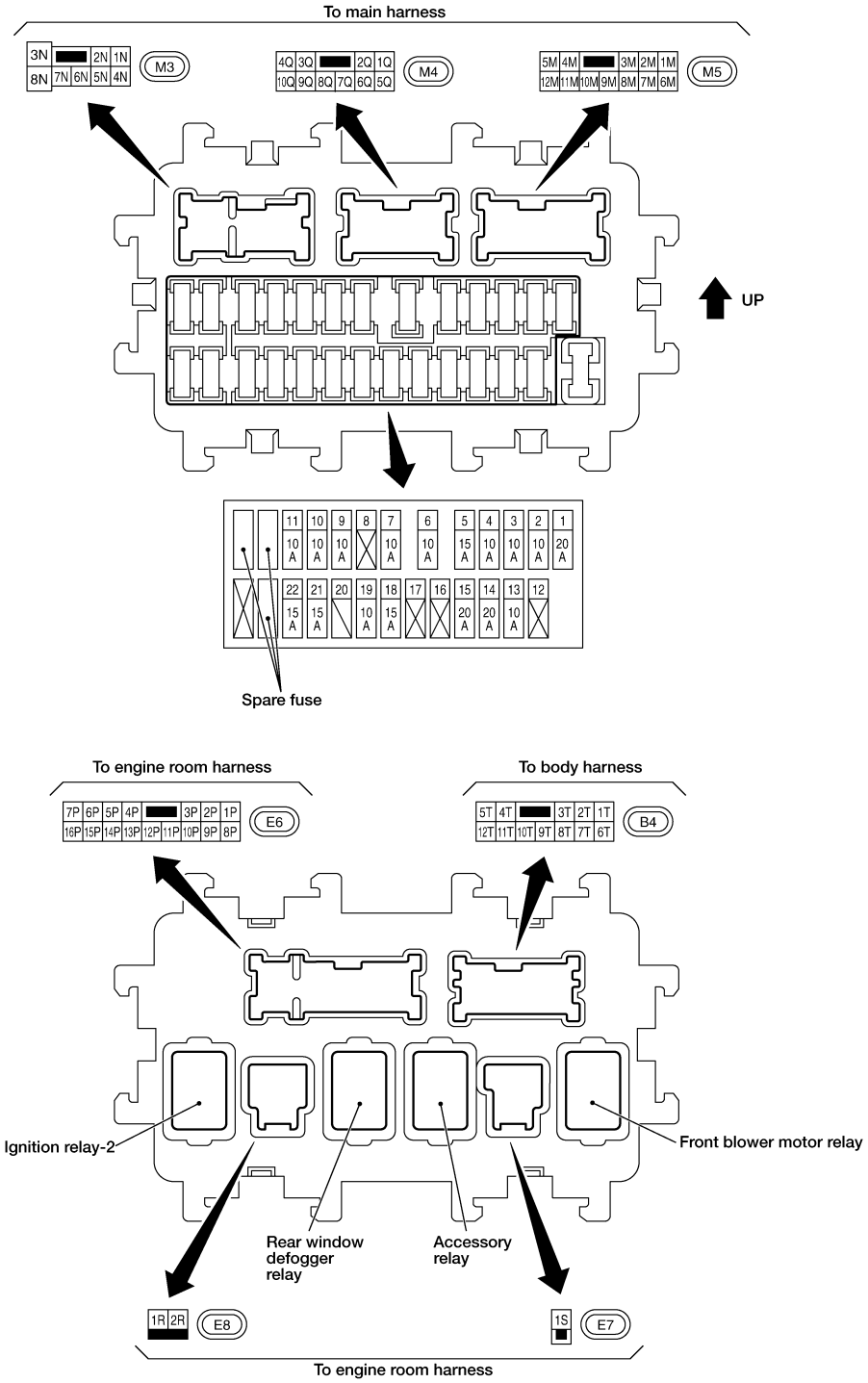
The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000003229322



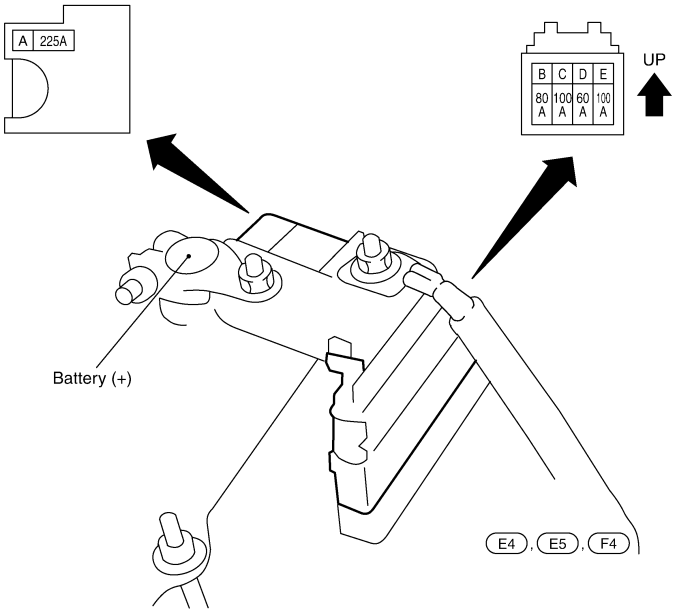
AWMIA0364GB

FUSE, FUSIBLE LINK AND RELAY BOX

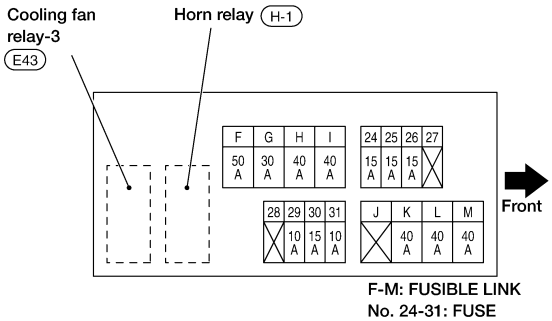
Terminal Arrangement

INFOID:0000000003229323

Fuse and fusible link box (Battery)



Fuse and fusible link box



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

AWMIA0365GB

PRECAUTION

PRECAUTIONS

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

INFOID:0000000003229324

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.**

Battery Service

INFOID:0000000003229325

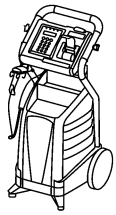
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference.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

PREPARATION

PREPARATION

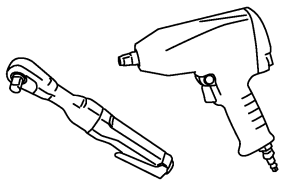
Special Service Tool

INFOID:0000000003229326

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:0000000003229327

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

ON-VEHICLE REPAIR

BATTERY

Removal and Installation

INFOID:0000000003229328

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 cables from battery terminals.
   CAUTION:
   When disconnecting, disconnect the battery cable from 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 battery cable to 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:0000000003229329

Type	GR.24	GR.35 (BCII)
Capacity (5HR) minimum V-AH	55	52
Cold cranking current A (For reference value)	550	525

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:0000000001345774

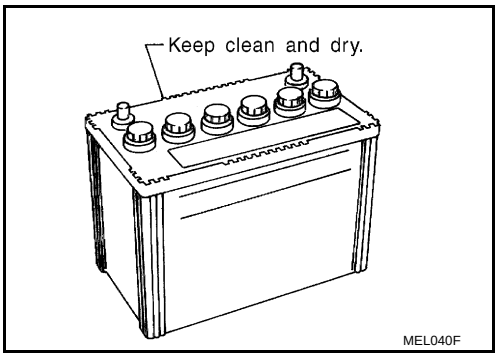
CAUTION:

- **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.**

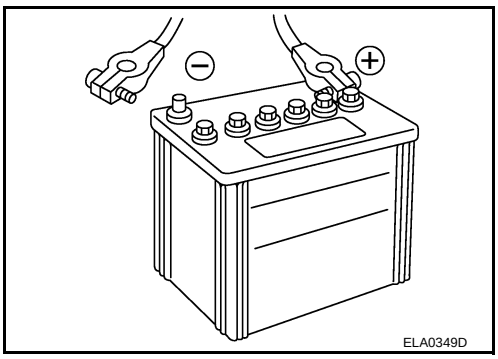
METHODS OF PREVENTING OVER-DISCHARGE

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

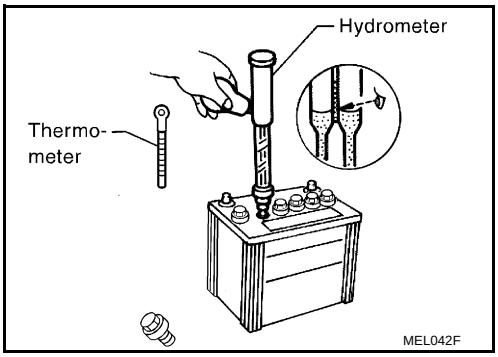
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level.
  This also applies to batteries designated as “low maintenance” and “maintenance-free”.



- 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.

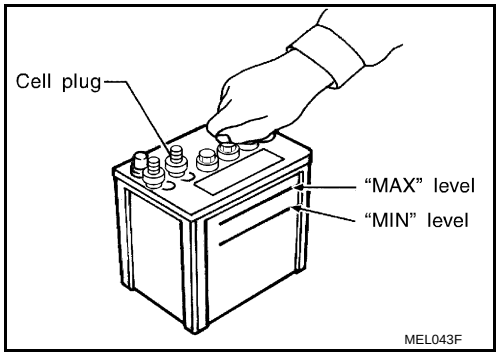


CHECKING ELECTROLYTE LEVEL

WARNING:

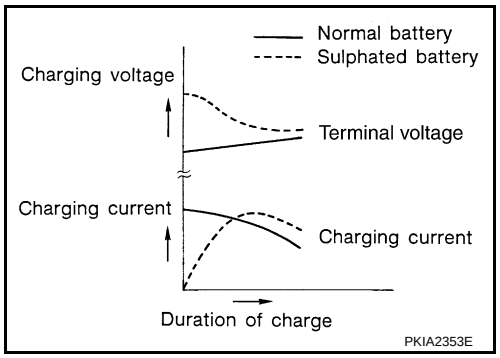
Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

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



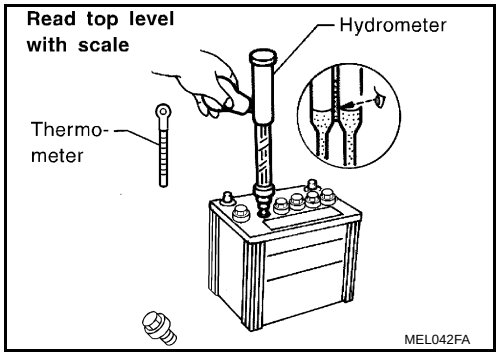
Sulphation

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:0000000001345775

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:0000000003183226

Required Procedure After Battery Disconnection

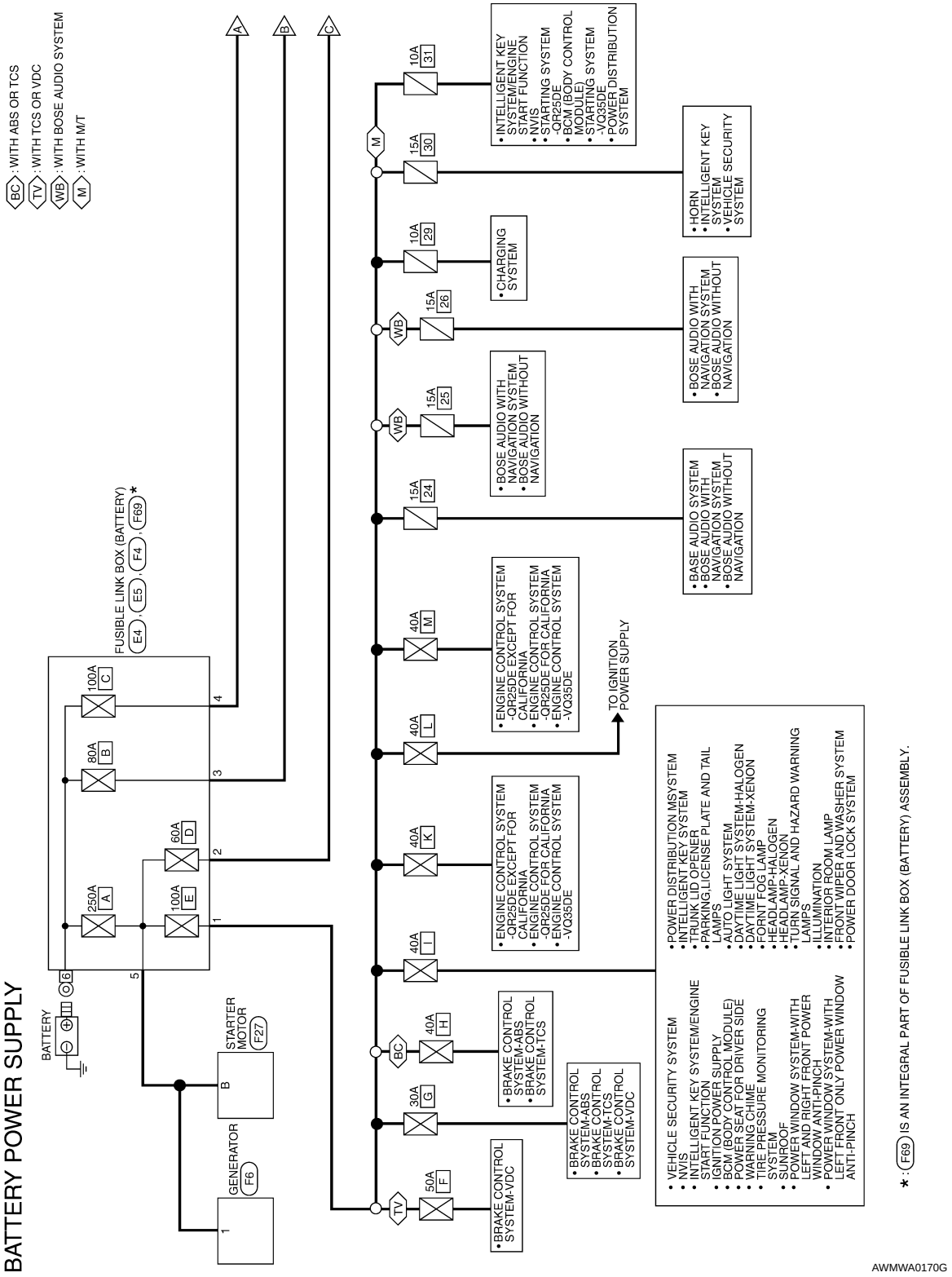
System	Item	Reference
Engine Control	Accelerator Pedal Released Position Learning	QR25DE for California, refer to EC-29. QR25DE except California, refer to EC-548. VQ35DE, refer to EC-1021.
	Throttle Valve Closed Position Learning	QR25DE for California, refer to EC-29. QR25DE except California, refer to EC-548. VQ35DE for California, refer to EC-1021.
	Idle Air Volume Learning	QR25DE for California, refer to EC-30. QR25DE except California, refer to EC-549. VQ35DE for California, refer to EC-1022.
Brake Control	Steering Angle Sensor Neutral Position	Refer to BRC-142.
Glass, Window & Mirrors	Power Window System Initialization	LH window, refer to PWC-11. RH window, refer to PWC-112.
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-230.

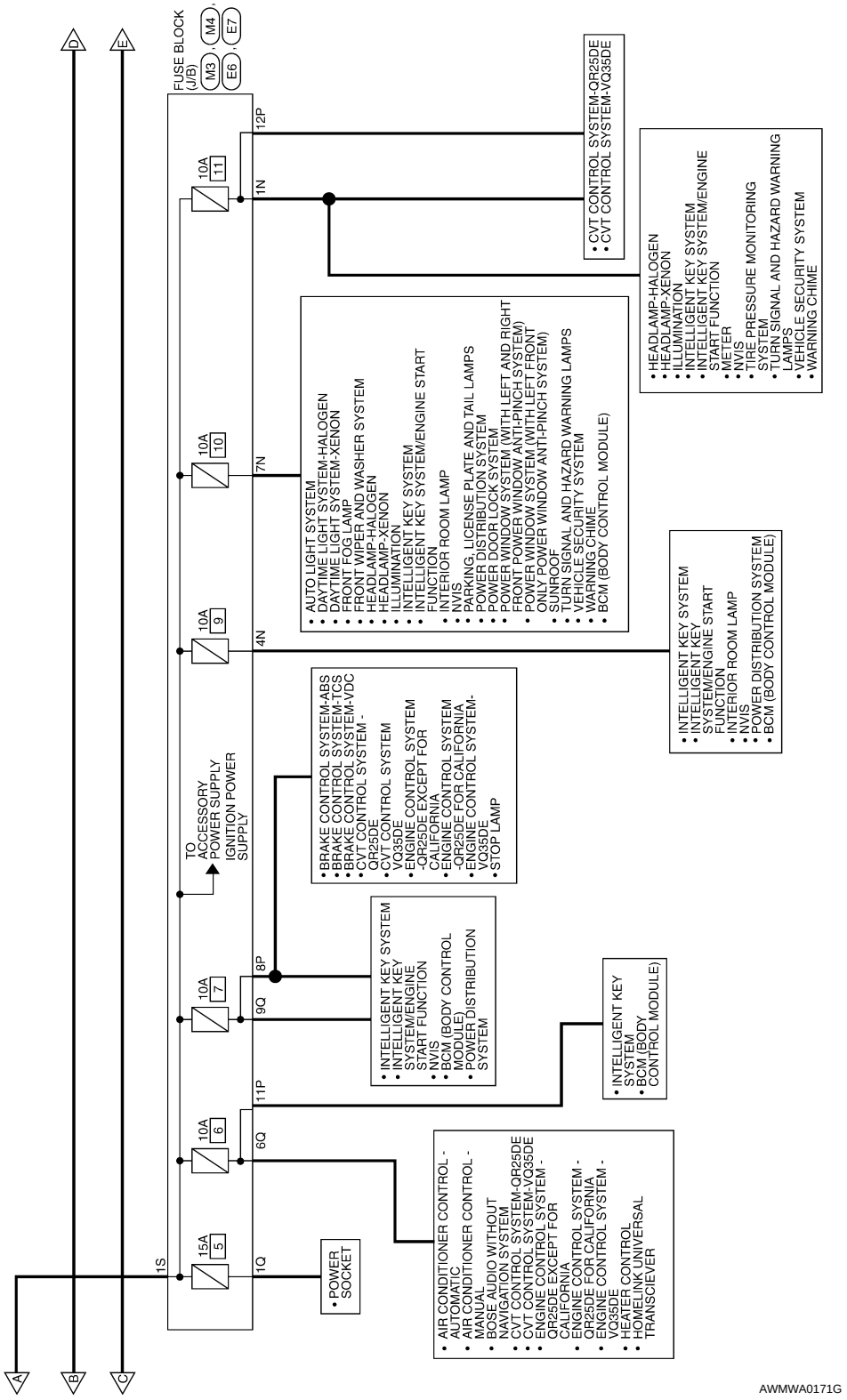
COMPONENT DIAGNOSIS

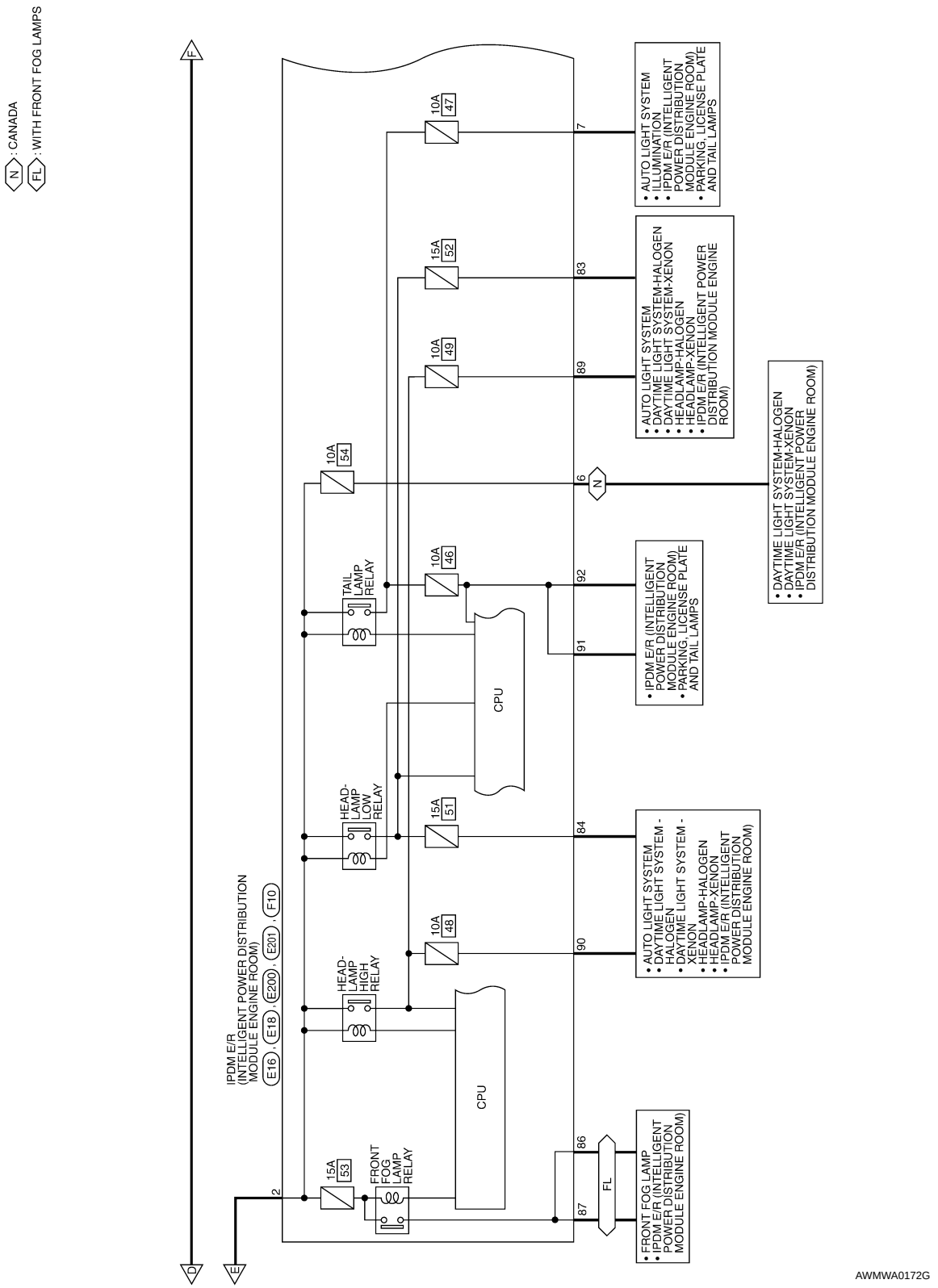
POWER SUPPLY ROUTING CIRCUIT

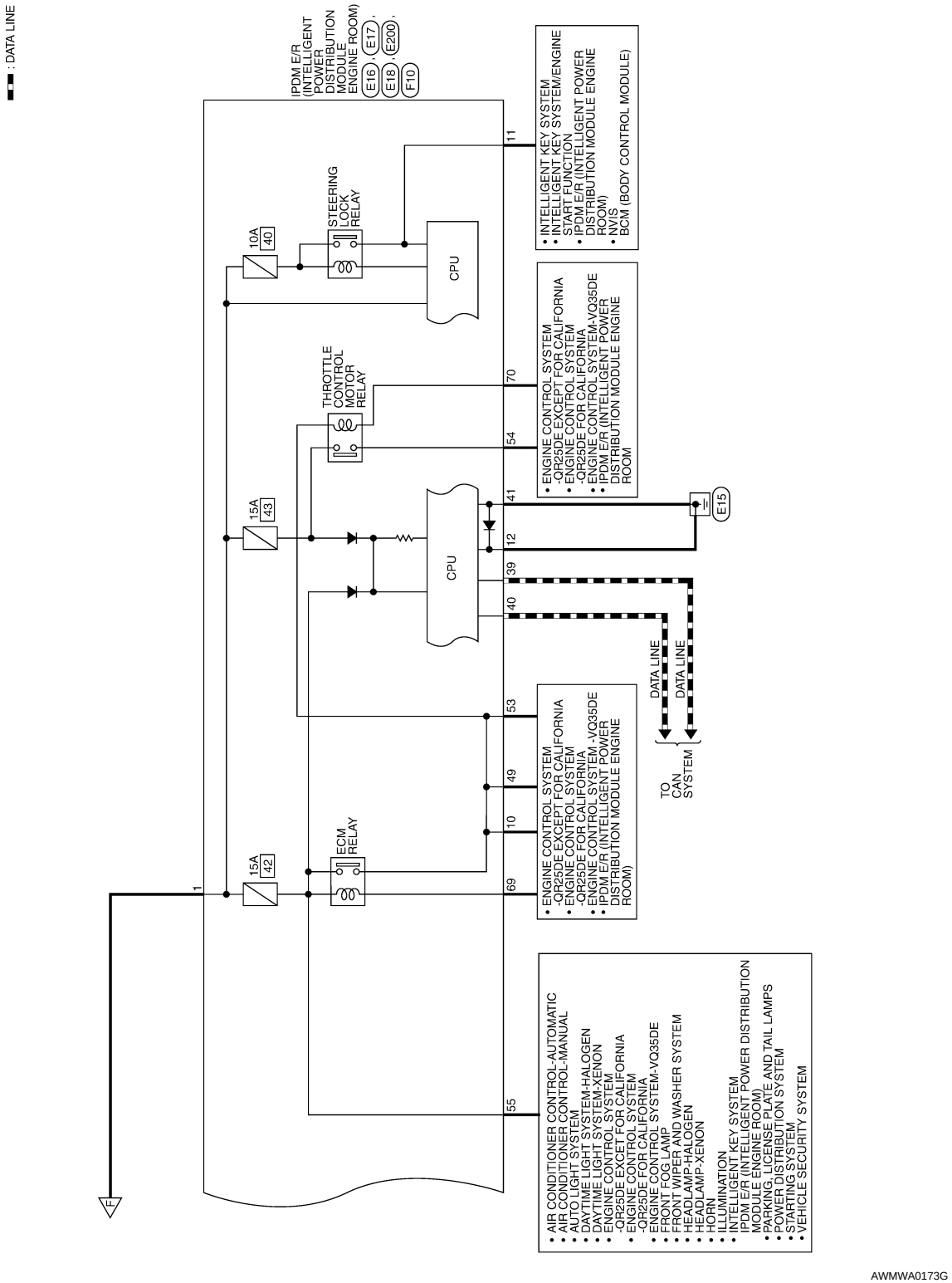
Wiring Diagram —Battery Power Supply —

INFOID:0000000001345776




FUSE BLOCK (J/B)
M3, M4, E6, E7
10A 11
10A 10
10A 9
10A 7
10A 6
15A 5
12P
1N
7N
4N
8P
9Q
11P
6Q
1Q
1S
TO ACCESSORY POWER SUPPLY
IGNITION POWER SUPPLY
• 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
• 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 FRONT POWER WINDOW ANTI-PINCH SYSTEM)
• POWER WINDOW SYSTEM (WITH LEFT FRONT ONLY POWER WINDOW ANTI-PINCH SYSTEM)
• SUNROOF
• TURN SIGNAL AND HAZARD WARNING LAMPS
• VEHICLE SECURITY SYSTEM
• WARNING CHIME
• BCM (BODY CONTROL MODULE)
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• INTERIOR ROOM LAMP
• NVIS
• POWER DISTRIBUTION SYSTEM
• BCM (BODY CONTROL MODULE)
• 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
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• NVIS
• BCM (BODY CONTROL MODULE)
• POWER DISTRIBUTION SYSTEM
• INTELLIGENT KEY SYSTEM
• BCM (BODY CONTROL MODULE)
• AIR CONDITIONER CONTROL - AUTOMATIC
• AIR CONDITIONER CONTROL - MANUAL
• BOSE AUDIO WITHOUT NAVIGATION SYSTEM
• 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
• HEATER CONTROL
• HOMELINK UNIVERSAL TRANSCIEVER
• POWER SOCKET
A
B
C
D
E
AWMWA0171G

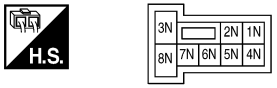

N : CANADA
FL : WITH FRONT FOG LAMPS
F
D
E
IPDM E/R
(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E16, E18, E200, E201, F10
2
15A 53
FRONT FOG LAMP RELAY
HEAD-LAMP HIGH RELAY
HEAD-LAMP LOW RELAY
TAIL LAMP RELAY
CPU
CPU
10A 54
10A 47
15A 52
10A 49
10A 46
15A 51
10A 48
6
7
83
89
92
91
84
90
86
87
N
FL
• 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)
AWMWA0172G


: DATA LINE
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E16, E17, E18, E200, F10
STEERING LOCK RELAY
THROTTLE CONTROL MOTOR RELAY
ECM RELAY
10A 40
15A 43
15A 42
CPU
CPU
11
70
54
41
12
39
40
53
49
10
69
55
1
E15
F6
• INTELLIGENT KEY SYSTEM
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• NVIS
BCM (BODY CONTROL MODULE)
• 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
DATA LINE
DATA LINE
TO CAN SYSTEM
• 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
• AUTO LIGHT SYSTEM
• DAYTIME LIGHT SYSTEM-HALOGEN
• DAYTIME LIGHT SYSTEM-XENON
• ENGINE CONTROL SYSTEM -QR25DE EXCET FOR CALIFORNIA
• ENGINE CONTROL SYSTEM -QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• FRONT FOG LAMP
• FRONT WIPER AND WASHER SYSTEM
• HEADLAMP-HALOGEN
• HEADLAMP-XENON
• HORN
• ILLUMINATION
• INTELLIGENT KEY SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• PARKING, LICENSE PLATE AND TAIL LAMPS
• POWER DISTRIBUTION SYSTEM
• STARTING SYSTEM
• VEHICLE SECURITY SYSTEM

AWMWA0173G

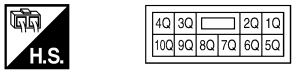
BATTERY POWER SUPPLY CONNECTORS

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



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

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



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

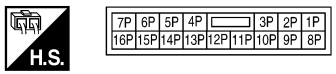
Connector No.	E4
Connector Name	FUSIBLE LINK BOX (BATTERY)
Connector Color	BROWN

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

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

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

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



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

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

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

ALMIA0043GB

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	B/Y	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	S-GND

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

H.S.

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

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

37	38
35	36

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

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

ALMIA0044GB

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)
53	R/B	IGN_SOL (WITH VQ35DE)
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

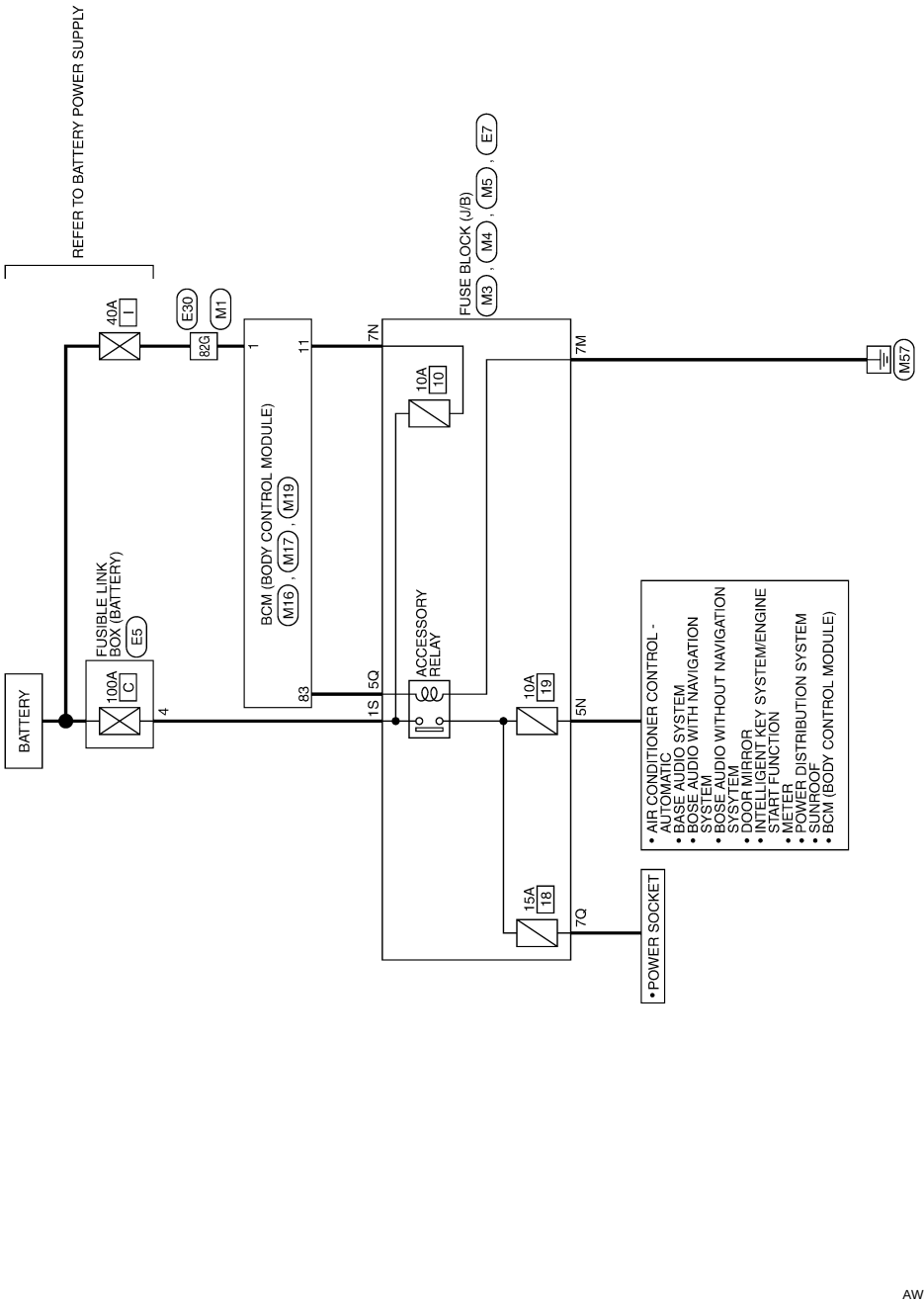
Terminal No.	Color of Wire	Signal Name
B	B/R	BATT

AWMIA0344GB

Wiring Diagram —Accessory Power Supply —

INFOID:0000000001345777

ACCESSORY POWER SUPPLY

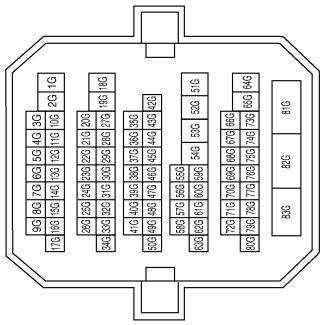


AWMWA0174G

ACCESSORY POWER SUPPLY CONNECTORS

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

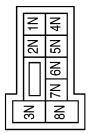
H.S.



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

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

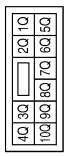
H.S.



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

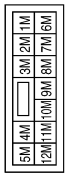
H.S.



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	—

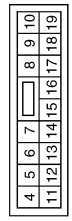
Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

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

ALMIA0050GB

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.

4	3

Terminal No.	Color of Wire	Signal Name
4	W	–

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

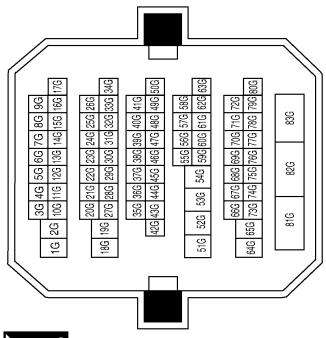
H.S.

1S

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

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

H.S.

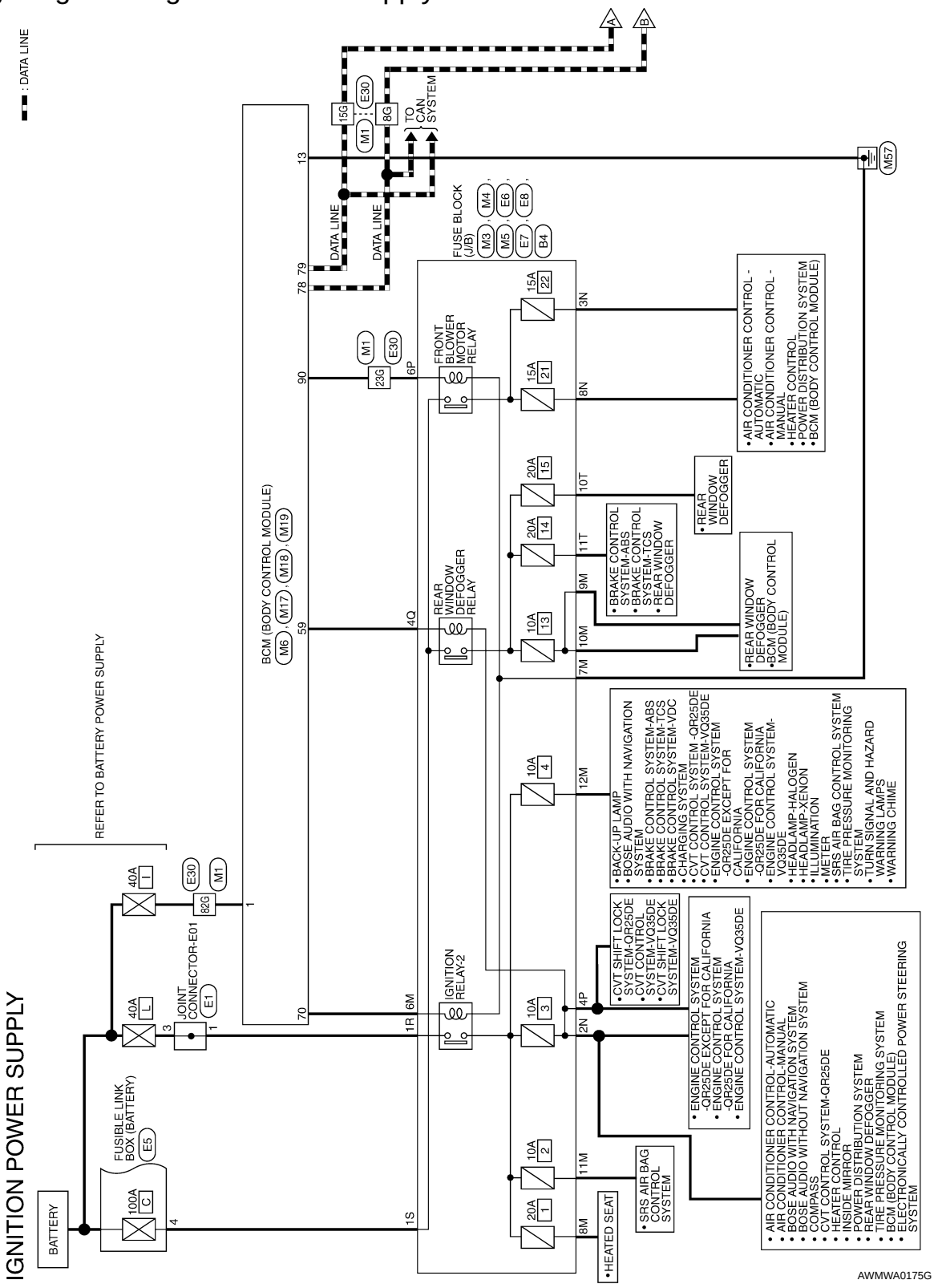


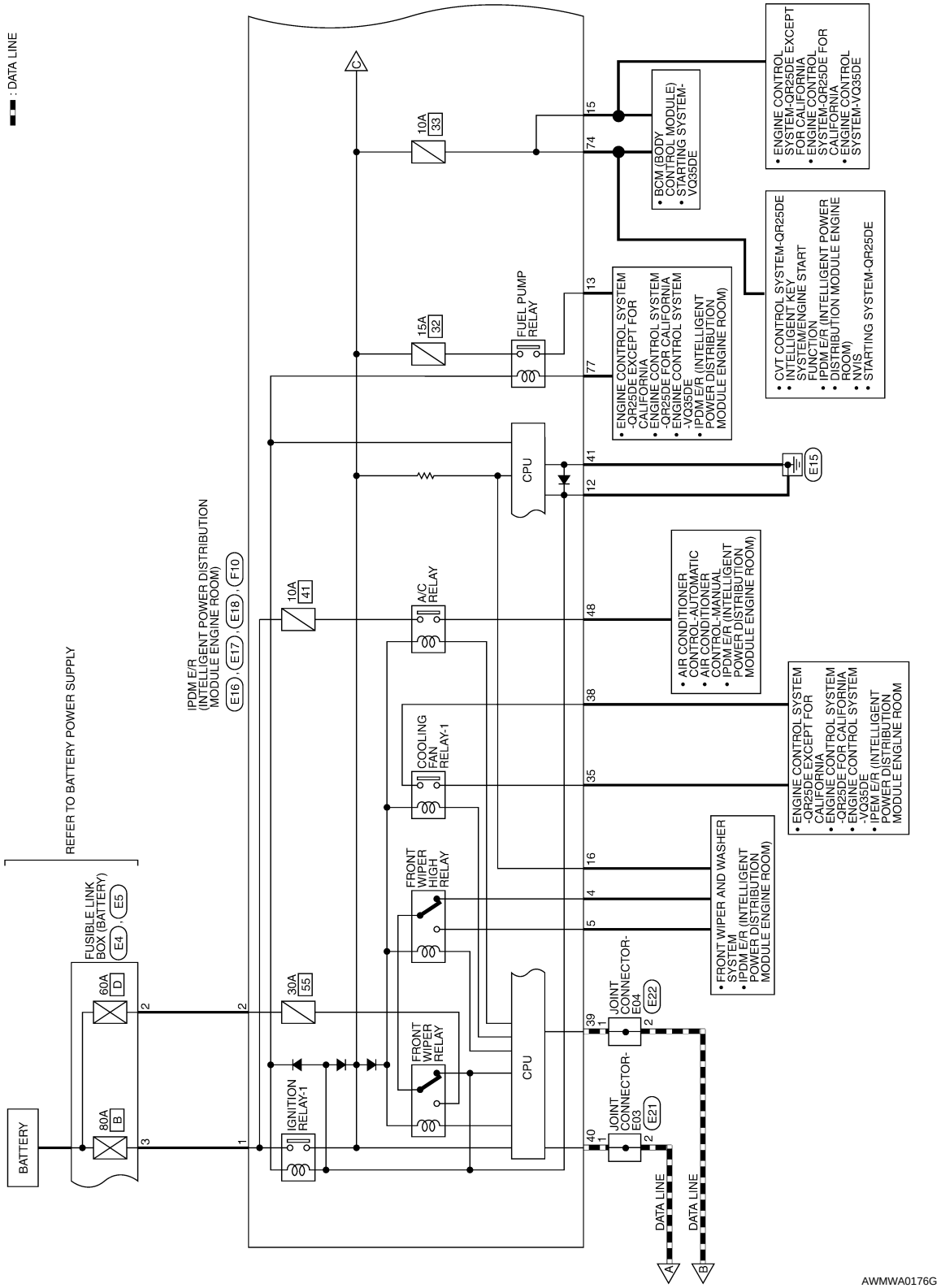
Terminal No.	Color of Wire	Signal Name
82	W/B	–

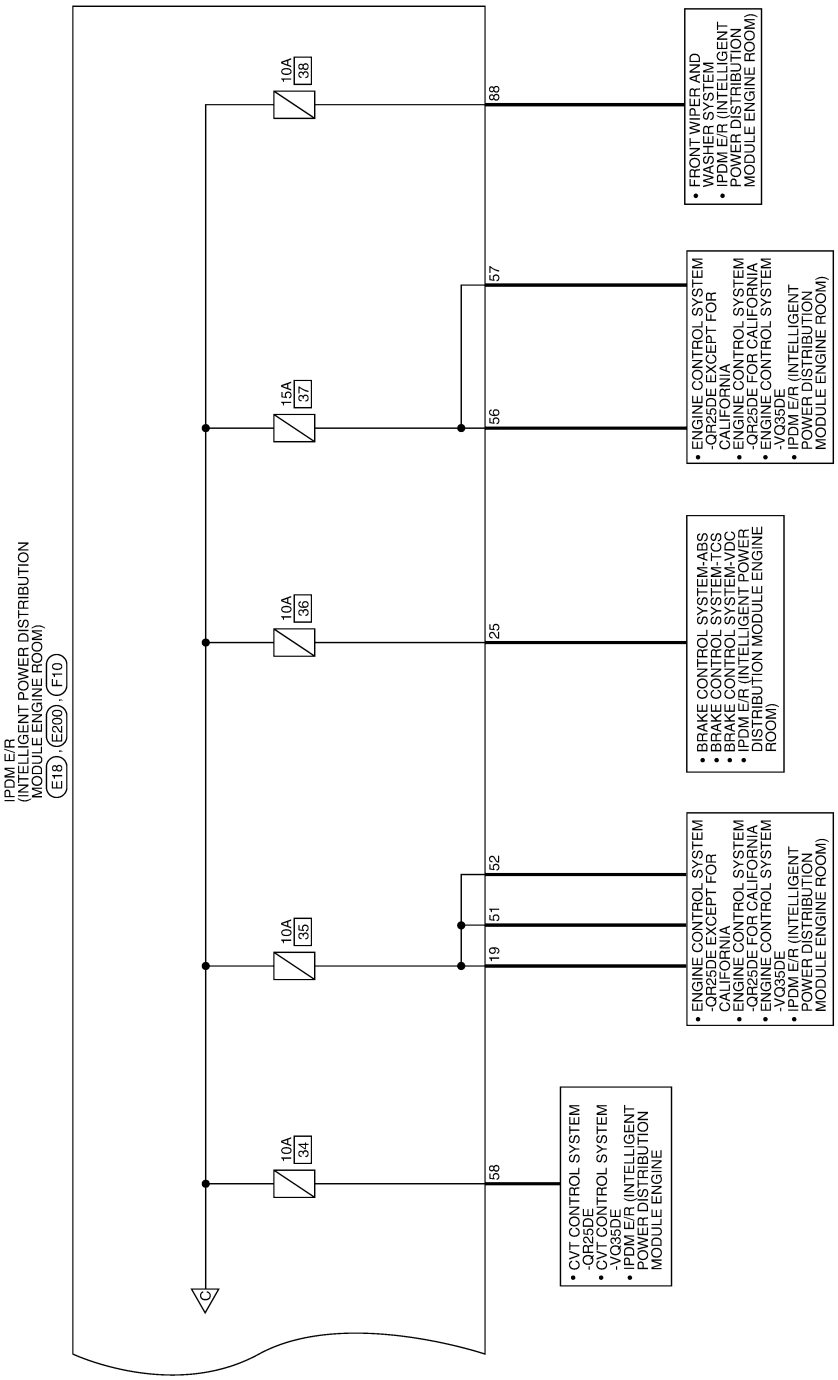
AWMIA0345GB

Wiring Diagram —Ignition Power Supply —

INFOID:0000000001345778




: 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
CPU
JOINT CONNECTOR-E03 (E21)
JOINT CONNECTOR-E04 (E22)
DATA LINE
DATA LINE
• BCM (BODY CONTROL MODULE)
• 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)
• ENGINE CONTROL SYSTEM-QR25DE EXCEPT FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-QR25DE FOR CALIFORNIA
• ENGINE CONTROL SYSTEM-VQ35DE
• CVT CONTROL SYSTEM-QR25DE
• INTELLIGENT KEY SYSTEM/ENGINE START FUNCTION
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
• RCDM)
• NVIS
• STARTING SYSTEM-QR25DE
• 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
• IPEM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGLNE ROOM
• FRONT WIPER AND WASHER SYSTEM
• IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E15
AWMWA0176G


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

AWMWA0177G

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

ALMIA0046GB

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	B/Y	—

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	—

ALMIA0047GB

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	G/R	—
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	B/Y	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	S-GND

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

H.S.

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

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

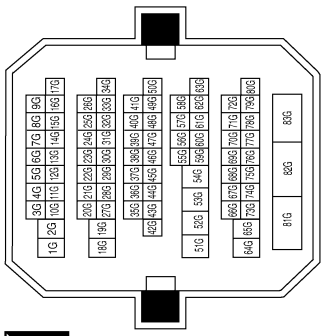
37 38
35 36

Terminal No.	Color of Wire	Signal Name
4	L/R	FR_WIPER_LO
5	L/B	FR_WIPER_HI
12	B	P-GND
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

ALMIA0048GB

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

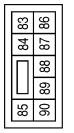
H.S.



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

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

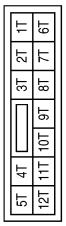
Connector No.	F10
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

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.	B4
Connector Name	FUSE BLOCK (J/B)
Connector Color	BROWN

H.S.



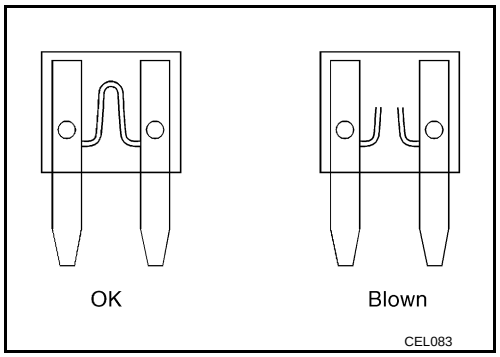
Terminal No.	Color of Wire	Signal Name
10T	R	—
11T	R	—

ALMIA0049GB

Fuse

INFOID:0000000001345779

- 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.

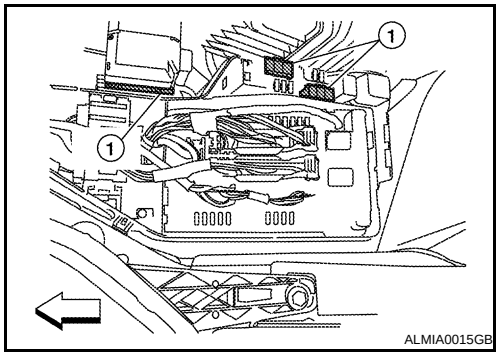


Fusible Link

INFOID:0000000001345780

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:

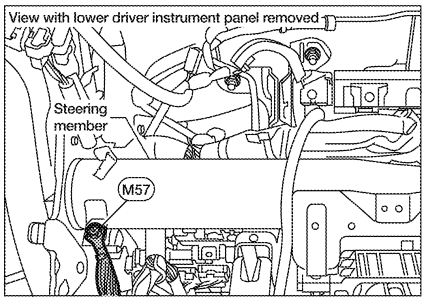
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.**
- **Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any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

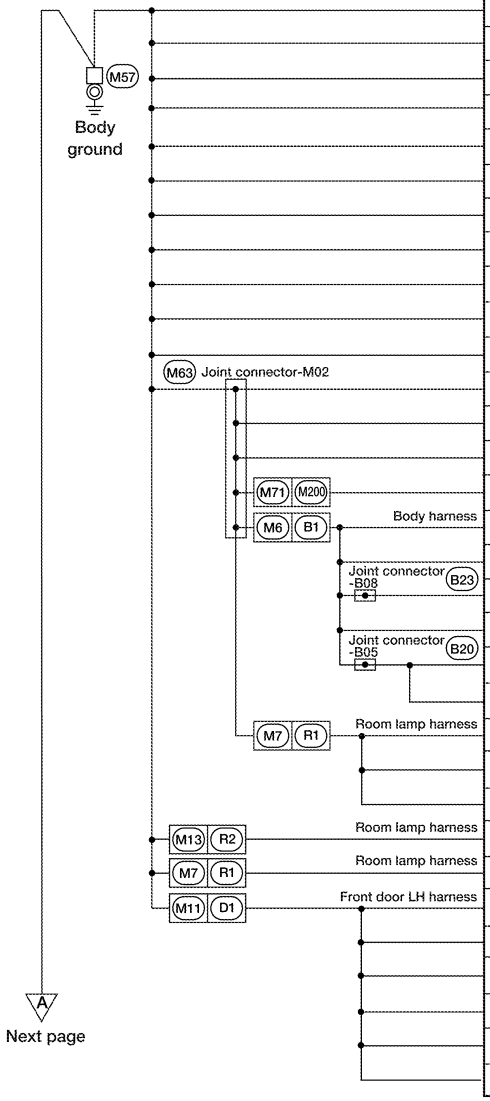
GROUND

Ground Distribution

INFOID:0000000001345781

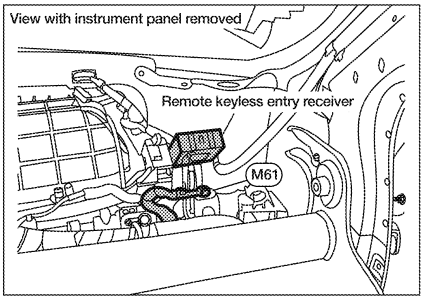
MAIN HARNESS

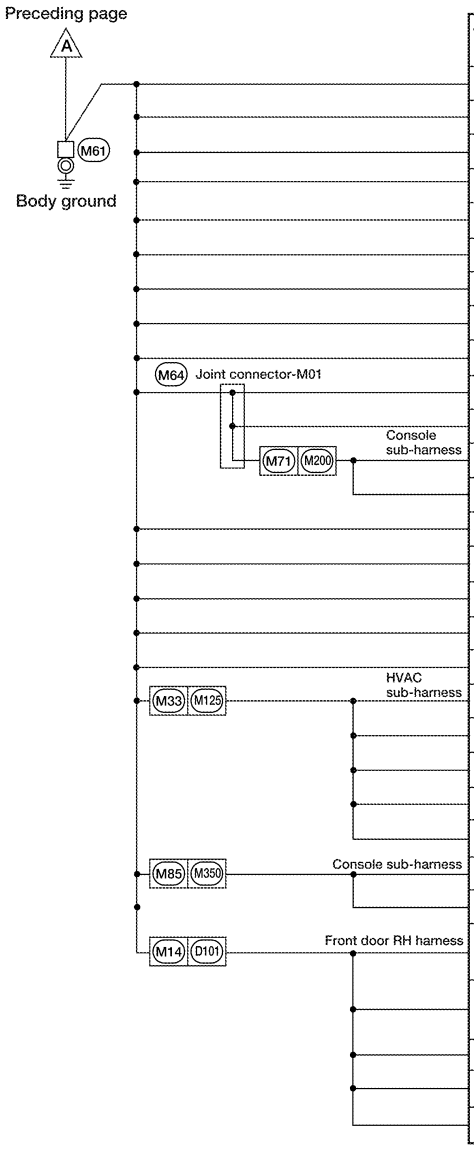




CONNECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal 7M)
M17	BCM (Body control module) (Terminal 13)
M22	Data link connector (Terminal 4)
M22	Data link connector (Terminal 5)
M24	Combination meter (Terminal 3)
M24	Combination meter (Terminal 4)
M24	Combination meter (Terminal 23)
M28	Combination switch
M31	Blower motor
M40	Key slot
M75	Trunk LID opener switch
M53	Steering angle sensor
M72	TCS OFF switch (With TCS)
M72	VDC OFF switch (With VDC)
M203	Front console antenna (shield wire)
B29	Rear parcel shelf antenna (shield wire)
B30	Rear combination lamp LH (With rear view camera)
B37	High mounted stop lamp (With rear view camera)
B45	Rear combination lamp RH (With rear view camera)
B31	Rear view camera control unit (Shield wire) (Terminal 11 and 12)
B35	Rear view camera control (Shield wire) (Terminal 3 and 4)
R3	Vanity mirror lamp LH
R4	Auto anti-dazzling inside mirror
R9	Vanity mirror lamp RH
R5	Sunroof motor assembly
R50	Front room/map lamp assembly
D4	Door mirror LH (Door mirror deforgger)
D4	Door mirror LH (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
D10	Front door lock assembly LH

AWMIA0346GB

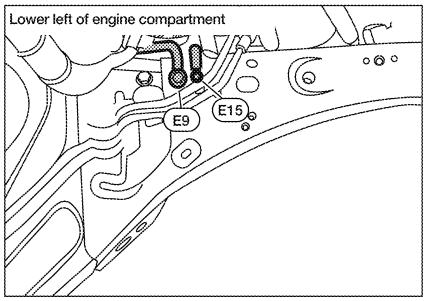


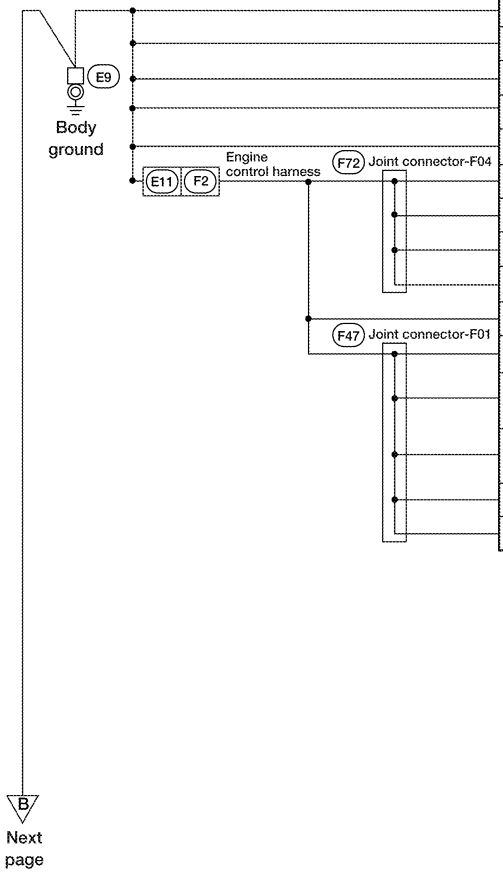


CONNECTOR NUMBER	CONNECT TO
M23	CVT device (Terminal 4)
M23	CVT device (Terminal 7)
M32	Electronic steering column lock (Terminal 5)
M32	Electronic steering column lock (Terminal 6)
M35	Air bag diagnosis sensor unit
M36	Front passenger air bag off indicator
M37	Front air control (Terminal 17)
M37	Front air control (Terminal 37)
M38	Push-button ignition switch
M47	AV control unit (Terminal 19)
M55	Yaw rate/side/decel G sensor
M201	Front heated seat switch LH
M202	Front heated seat switch RH
M54	Hazard switch
M59	Power steering control unit (Terminal6)
M68	Glove box lamp
M74	Trunk lid opener cancel switch (With trunk lid opener switch)
M76	Front power socket
M126	Intake door motor
M127	Mode door motor
M128	Air mix door motor LH (Automatic air conditioner)
M129	Air mix door motor RH (Automatic air conditioner)
M130	Air mix door motor (Manual air conditioner)
M203	Front console antenna (Shield wire)
M351	Front console power socket
D105	Power window and door lock/unlock switch RH-With left front only power window anti-pinch
D105	Power window and door lock/unlock switch RH-With left and right front power window anti-pinch
D106	Front outside handle RH
D107	Door mirror RH (Door mirror defogger)
D107	Door mirror RH (With turn signal in mirror)

AWMIA0347GB

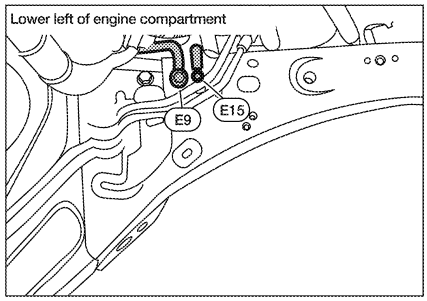
ENGINE ROOM HARNESS

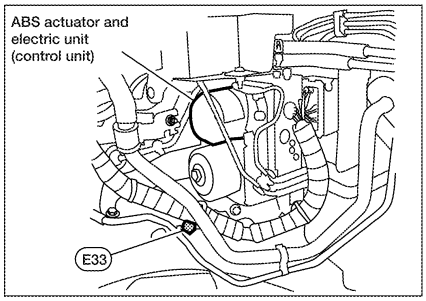


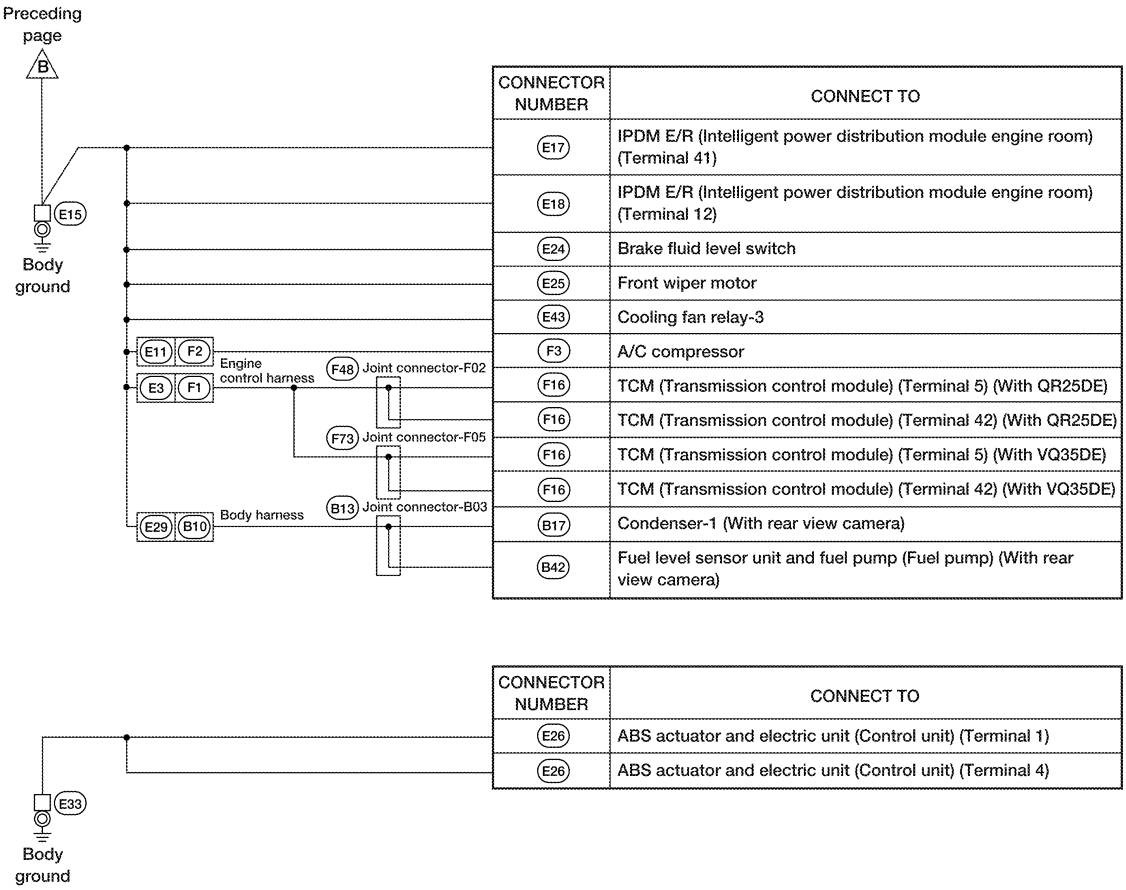


CONNECTOR NUMBER	CONNECT TO
E10	ECM (Terminal 107)
E10	ECM (Terminal 108)
E10	ECM (Terminal 111)
E10	ECM (Terminal 112)
E42	Cooling fan relay-2
F12	Air fuel ratio (A/F) sensor 1 (Bank 1) (shield wire)
F14	ECM (Terminal 12) (With VQ35DE)
F57	Electric throttle control actuator (shield wire) (With VQ35DE)
F61	Air fuel ratio (A/F) sensor 1 (Bank 2) (shield wire) (With VQ35DE)
F14	ECM (Terminal 16) (With QR25DE)
F14	ECM (Terminal 12) (With QR25DE)
F43	Tumble valve control actuator (Sensor shield wire) (With QR25DE for California)
F43	Tumble valve control actuator (Motor shield wire) (With QR25DE for California)
F44	Air fuel ratio (A/F) sensor 1 (shield wire) (With QR25DE)
F57	Electric throttle control actuator (shield wire) (With QR25DE)

AWMIA0348GB





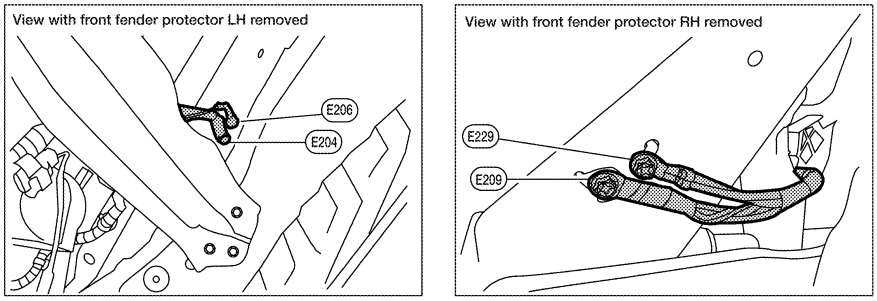


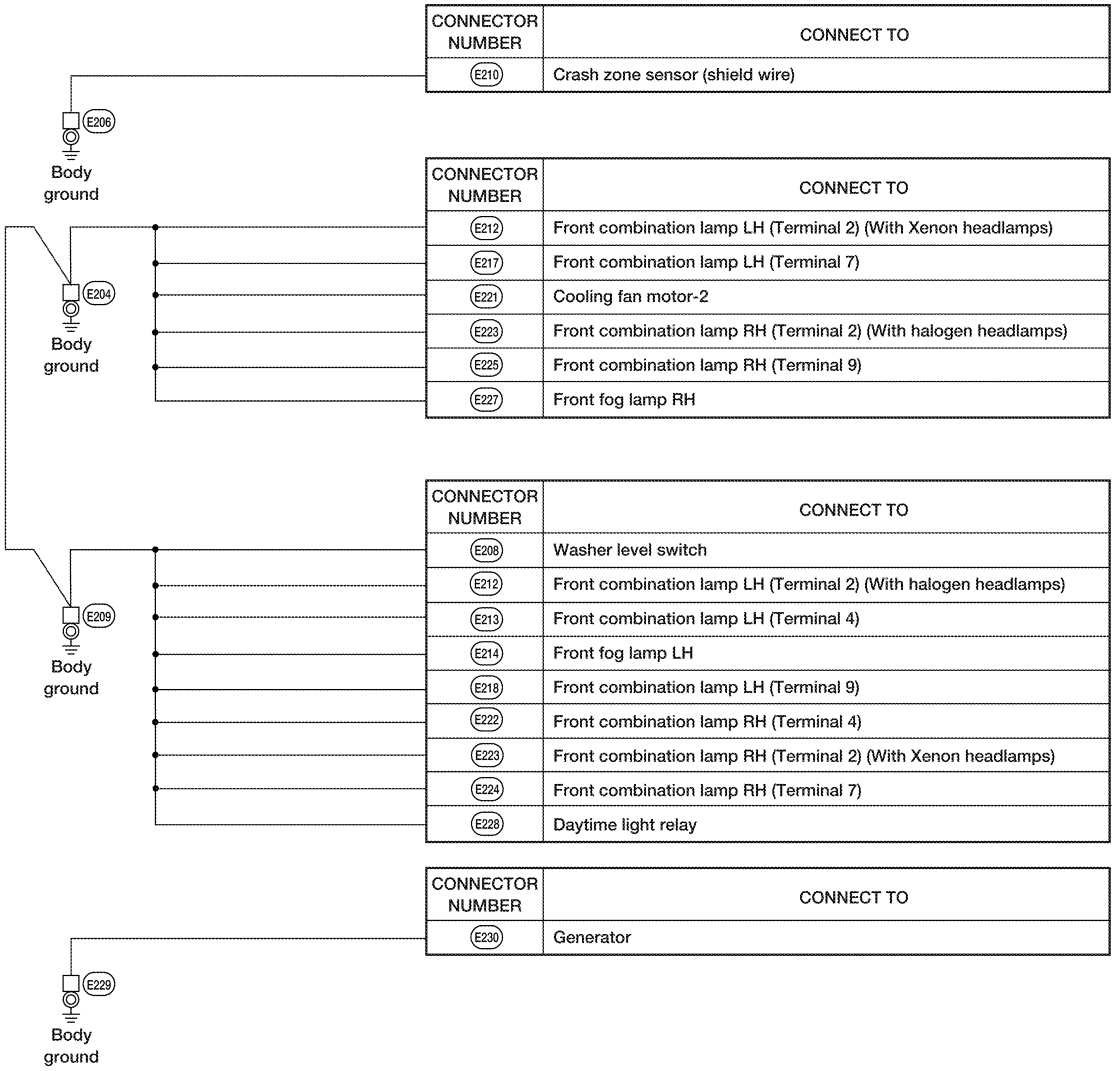
CONNECTOR NUMBER	CONNECT TO
E17	IPDM E/R (Intelligent power distribution module engine room) (Terminal 41)
E18	IPDM E/R (Intelligent power distribution module engine room) (Terminal 12)
E24	Brake fluid level switch
E25	Front wiper motor
E43	Cooling fan relay-3
F3	A/C compressor
F16	TCM (Transmission control module) (Terminal 5) (With QR25DE)
F16	TCM (Transmission control module) (Terminal 42) (With QR25DE)
F16	TCM (Transmission control module) (Terminal 5) (With VQ35DE)
F16	TCM (Transmission control module) (Terminal 42) (With VQ35DE)
B17	Condenser-1 (With rear view camera)
B42	Fuel level sensor unit and fuel pump (Fuel pump) (With rear view camera)

CONNECTOR NUMBER	CONNECT TO
E26	ABS actuator and electric unit (Control unit) (Terminal 1)
E26	ABS actuator and electric unit (Control unit) (Terminal 4)

AWMIA0349GB

FRONT END MODULE HARNESS





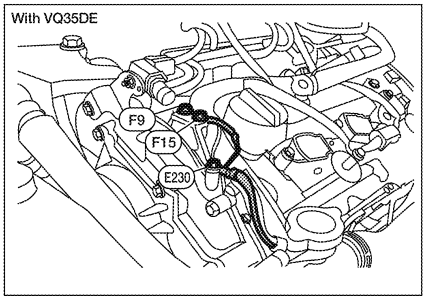
CONNECTOR NUMBER	CONNECT TO
E210	Crash zone sensor (shield wire)

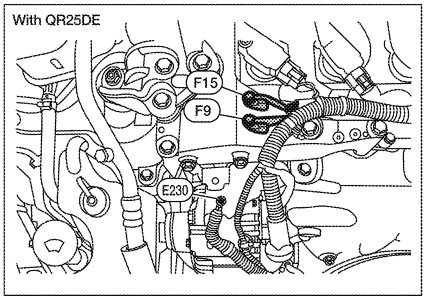
CONNECTOR NUMBER	CONNECT TO
E212	Front combination lamp LH (Terminal 2) (With Xenon headlamps)
E217	Front combination lamp LH (Terminal 7)
E221	Cooling fan motor-2
E223	Front combination lamp RH (Terminal 2) (With halogen headlamps)
E225	Front combination lamp RH (Terminal 9)
E227	Front fog lamp RH

CONNECTOR NUMBER	CONNECT TO
E208	Washer level switch
E212	Front combination lamp LH (Terminal 2) (With halogen headlamps)
E213	Front combination lamp LH (Terminal 4)
E214	Front fog lamp LH
E218	Front combination lamp LH (Terminal 9)
E222	Front combination lamp RH (Terminal 4)
E223	Front combination lamp RH (Terminal 2) (With Xenon headlamps)
E224	Front combination lamp RH (Terminal 7)
E228	Daytime light relay

CONNECTOR NUMBER	CONNECT TO
E230	Generator

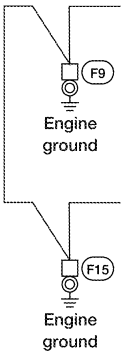
AWMIA0350GB





QR : With QR25DE
VQ : With VQ35DE

CONNECTOR NUMBER	CONNECT TO
F14	ECM (Terminal 16)



Joint connector-F05 F51

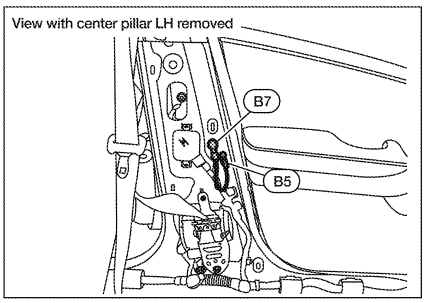
QR

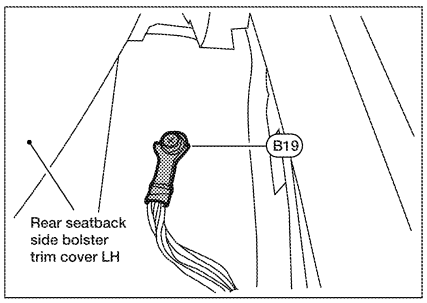
VQ

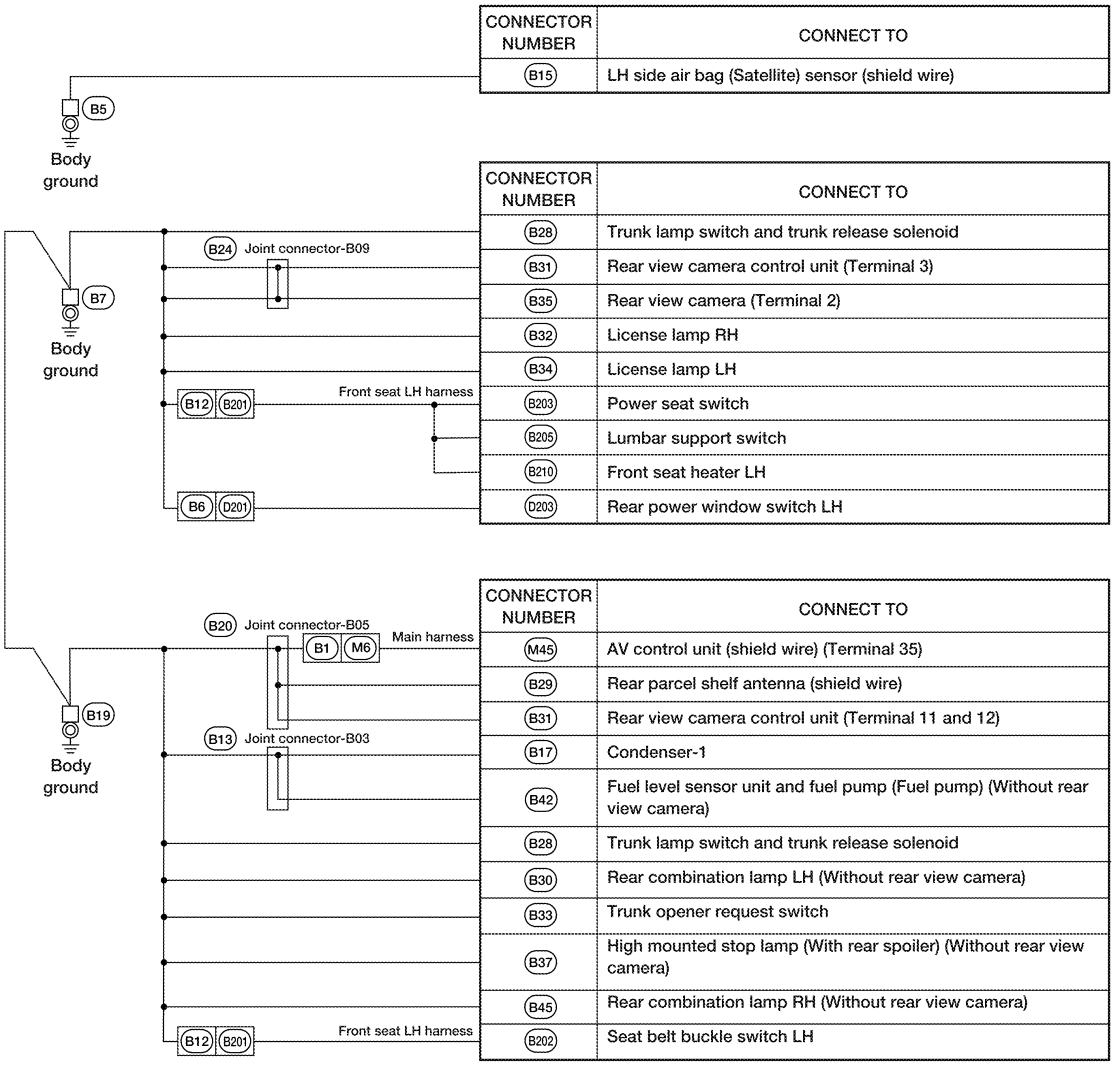
CONNECTOR NUMBER	CONNECT TO
F26	Condenser-2
F34	Ignition coil No. 1 (With power transistor)
F35	Ignition coil No. 2 (With power transistor)
F36	Ignition coil No. 3 (With power transistor)
F37	Ignition coil No. 4 (With power transistor)

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)

ALMIA0040GB





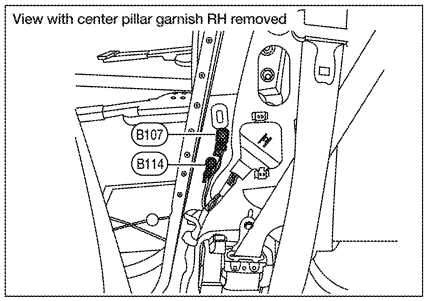


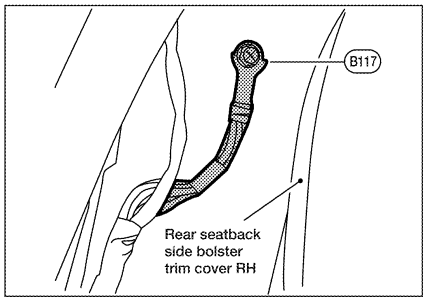
CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag (Satellite) sensor (shield wire)

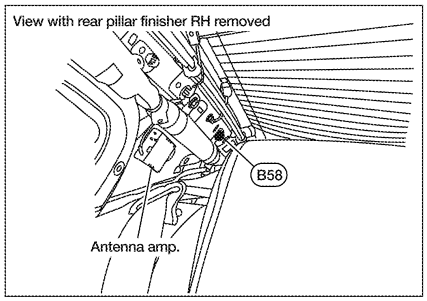
CONNECTOR NUMBER	CONNECT TO
B28	Trunk lamp switch and trunk release solenoid
B31	Rear view camera control unit (Terminal 3)
B35	Rear view camera (Terminal 2)
B32	License lamp RH
B34	License lamp LH
B203	Power seat switch
B205	Lumbar support switch
B210	Front seat heater LH
D203	Rear power window switch LH

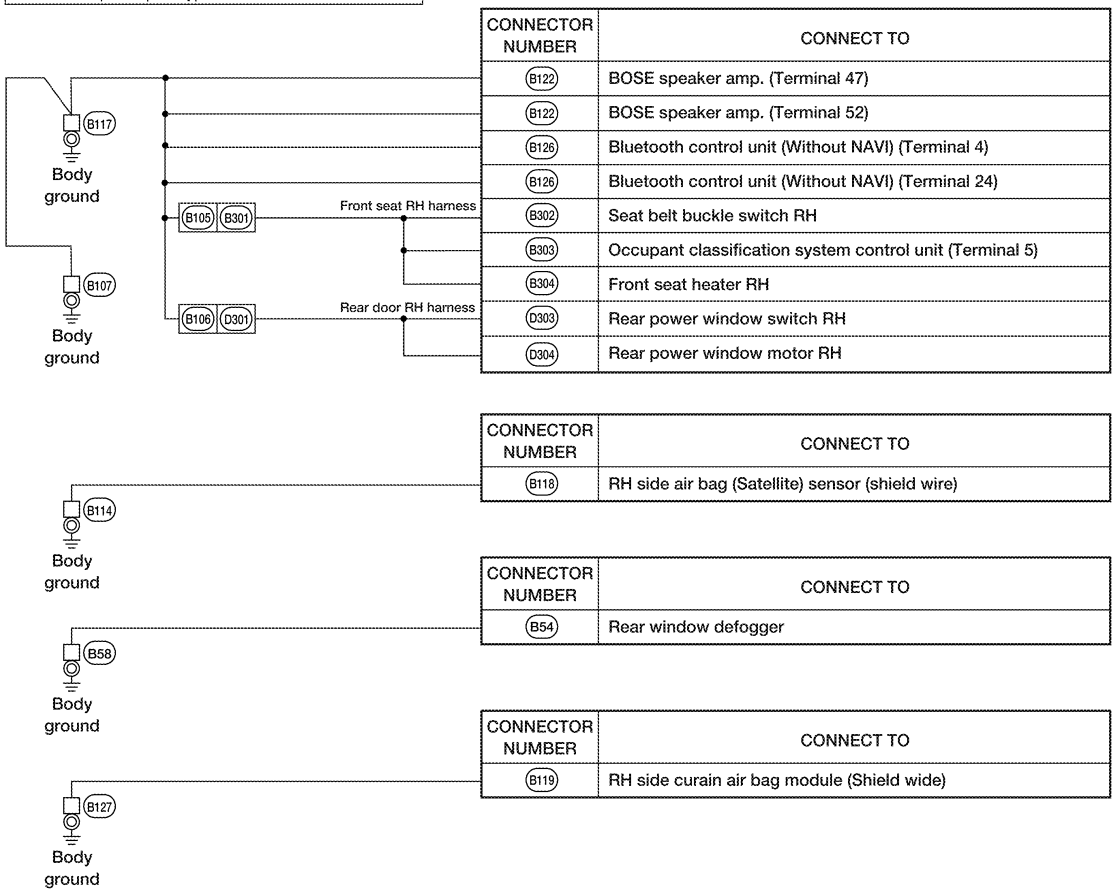
CONNECTOR NUMBER	CONNECT TO
M45	AV control unit (shield wire) (Terminal 35)
B29	Rear parcel shelf antenna (shield wire)
B31	Rear view camera control unit (Terminal 11 and 12)
B17	Condenser-1
B42	Fuel level sensor unit and fuel pump (Fuel pump) (Without rear view camera)
B28	Trunk lamp switch and trunk release solenoid
B30	Rear combination lamp LH (Without rear view camera)
B33	Trunk opener request switch
B37	High mounted stop lamp (With rear spoiler) (Without rear view camera)
B45	Rear combination lamp RH (Without rear view camera)
B202	Seat belt buckle switch LH

AWMIA0351GB









CONNECTOR NUMBER	CONNECT TO
B122	BOSE speaker amp. (Terminal 47)
B122	BOSE speaker amp. (Terminal 52)
B126	Bluetooth control unit (Without NAVI) (Terminal 4)
B126	Bluetooth control unit (Without NAVI) (Terminal 24)
B302	Seat belt buckle switch RH
B303	Occupant classification system control unit (Terminal 5)
B304	Front seat heater RH
D303	Rear power window switch RH
D304	Rear power window motor RH

CONNECTOR NUMBER	CONNECT TO
B118	RH side air bag (Satellite) sensor (shield wire)

CONNECTOR NUMBER	CONNECT TO
B54	Rear window defogger

CONNECTOR NUMBER	CONNECT TO
B119	RH side curain air bag module (Shield wide)

AWMIA0352GB

HARNESS

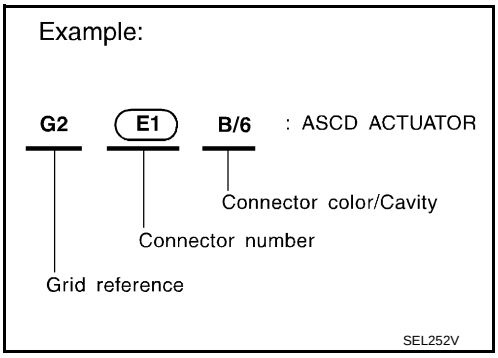
Harness Layout

INFOID:0000000001345782

HOW TO READ HARNESS LAYOUT

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

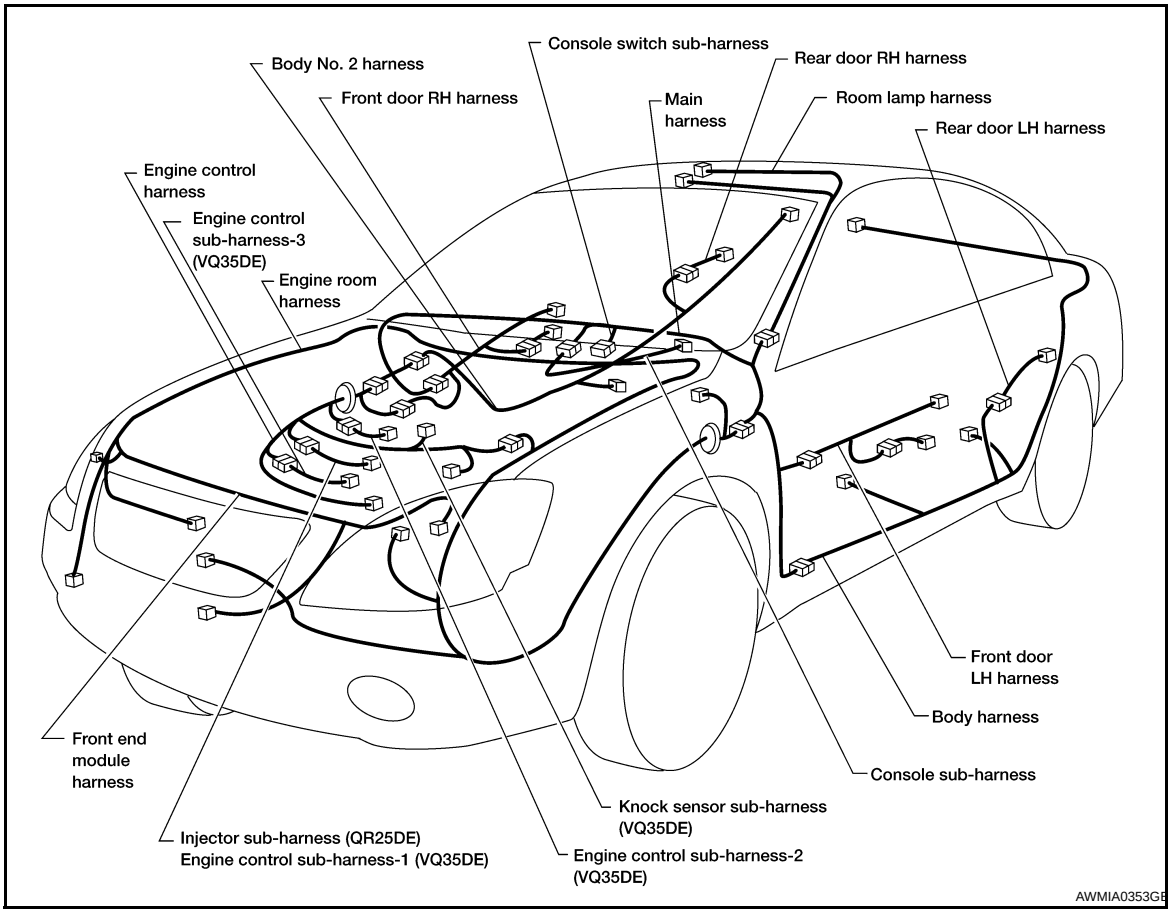
- Main Harness, Console Sub-harness and Console Switch Sub-harness
- Engine Room Harness
- Engine Room Harness (Passenger Compartment)
- Front End Module Harness
- Engine Control Harness (VQ35DE) and Knock Sensor Sub-harness
- Engine Control Harness (QR25DE)
- Body Harness
- Body No. 2 Harness
- Room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

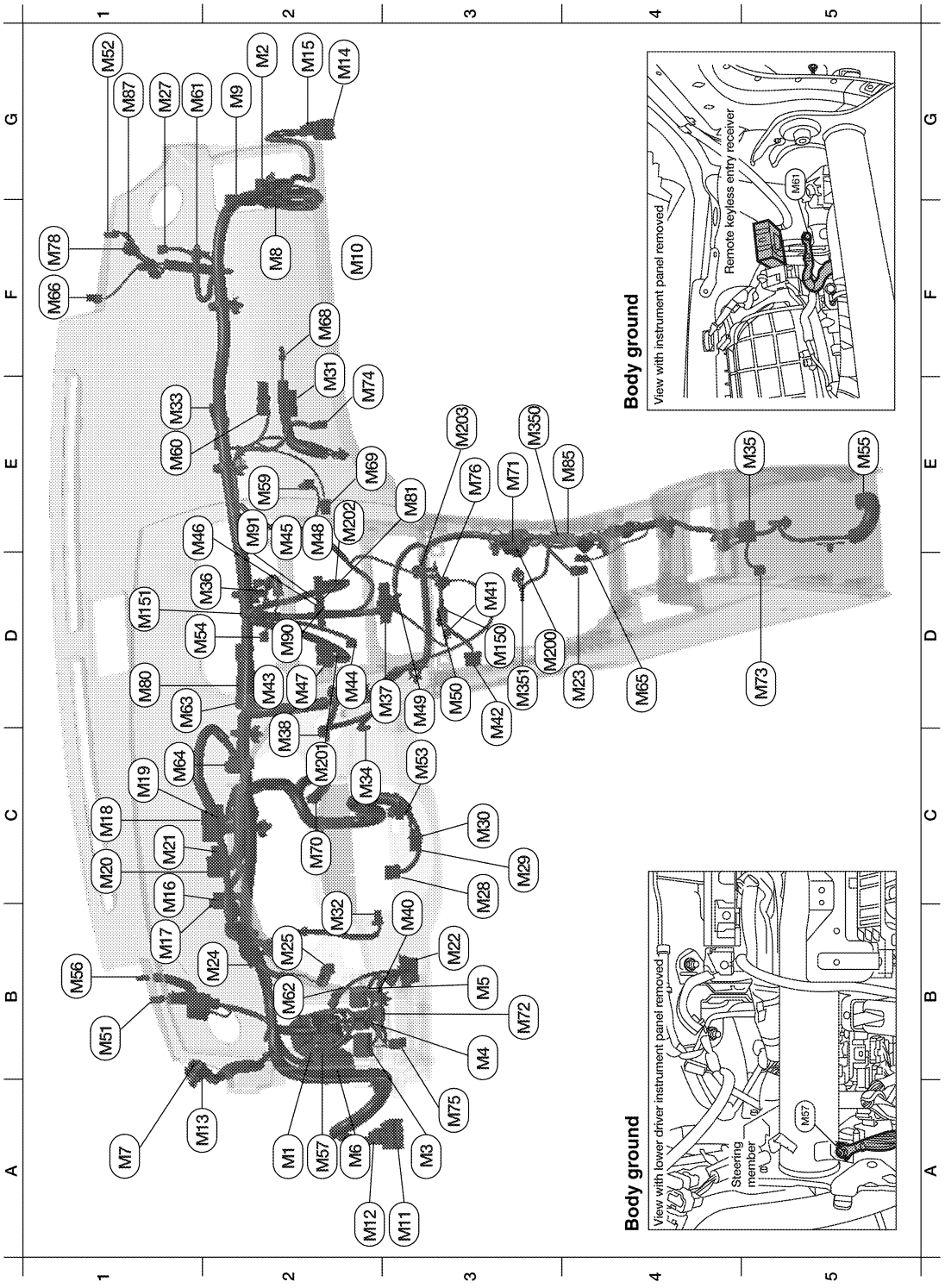


To use the grid reference

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.

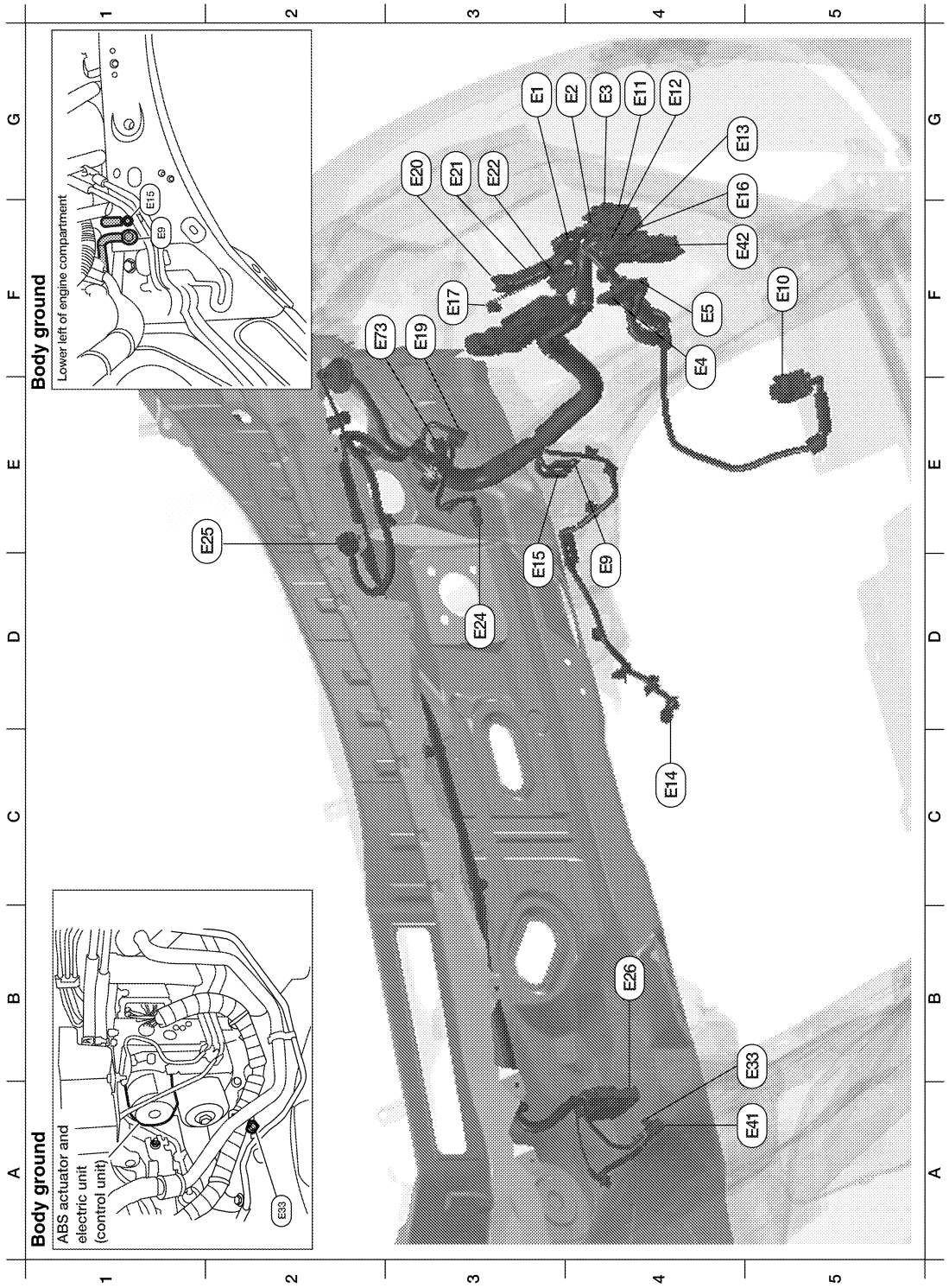
OUTLINE





A2	M1	SMJ	: To E30	D3	M49	GR/2	: Instrument panel antenna
G2	M2	W/32	: To B101	D3	M50	W/2	: To M150
A3	M3	W/8	: Fuse block (J/B)	B1	M51	BR/2	: Tweeter LH
A3	M4	W/10	: Fuse block (J/B)	G1	M52	BR/2	: Tweeter RH

B3	M5	W/12	: Fuse block (J/B)	C3	M53	W/8	: Steering angle sensor
A2	M6	SMJ	: To B1	D2	M54	W/4	: Hazard switch
A1	M7	W/16	: To R1	E5	M55	B/4	: Yaw rate/side/decel G sensor
F2	M8	W/24	: To B102	D2	M56	B/2	: Sunload sensor
G2	M9	BR/16	: To B103	A2	M57	—	: Body ground
F2	M10	BR/12	: To B104	E2	M59	W/12	: Power steering control unit
A3	M11	W/16	: To D1	E1	M60	Y/2	: Front passenger air bag module
A2	M12	W/16	: To D2	G1	M61	—	: Body ground
A2	M13	W/4	: To R2	B2	M62	W/2	: Tire pressure warning check connector
G2	M14	W/10	: To D101	D1	M63	L/12	: Joint connector-M02
G2	M15	W/12	: To D102	C1	M64	GR/6	: Joint connector-M01
B1	M16	B/3	: BCM (body control module)	D4	M65	BR/2	: A/T device
B1	M17	W/16	: BCM (body control module)	F1	M66	W/3	: Optical sensor
C1	M18	G/40	: BCM (body control module)	E2	M67	O/2	: Front passenger air bag module
C1	M19	B/40	: BCM (body control module)	F2	M68	W/2	: Glove box lamp
C1	M20	W/12	: BCM (body control module)	E2	M69	W/4	: Intake sensor
C1	M21	GR/40	: BCM (body control module)	C2	M70	W/4	: Tire pressure receiver
B3	M22	W/16	: Data link connector	E3	M71	W/12	: To M200
D4	M23	W/10	: CVT device	B3	M72	GR/6	: TCS OFF switch (with TCS)
B2	M24	W/40	: Combination meter	G2	M72	GR/6	: VDC OFF switch (with VDC)
B2	M25	B/10	: Meter mode switch	D5	M73	B/1	: Parking brake switch (with M/T)
G1	M27	B/4	: Remote keyless entry receiver	E2	M74	W/2	: Trunk lid opener cancel switch
C3	M28	W/16	: Combination switch	A3	M75	B/2	: Trunk lid opener switch
C3	M29	Y/6	: Combination switch (spiral cable)	E3	M76	B/3	: Front power socket
C3	M30	GR/8	: Combination switch (spiral cable)	F1	M78	Y/4	: Front passenger air bag module (service replacement)
E2	M31	W/6	: Blower motor	D1	M80	—	: Diode-3
B2	M32	W/8	: Electronic steering column lock	E3	M81	GR/3	: Audio unit
E1	M33	W/3	: To M125	F1	M85	W/2	: To M350
C2	M34	W/2	: In-vehicle sensor	G1	M87	GR/3	: To M501
E5	M35	Y/28	: Air bag diagnosis sensor unit	D2	M90	GR/2	: AV control unit
D2	M36	W/3	: Front passenger air bag off indicator	D2	M91	V/1	: AV control unit
D3	M37	W/40	: Front air control	D3	M150	W/2	: To M50
C2	M38	BR/8	: Push-button ignition switch	D1	M151	BR/2	: Center speaker
B3	M40	W/12	: Key slot	Console switch sub-harness			
B3	M41	W/4	: Aux jack	D3	M200	W/12	: To M71
D3	M42	W/16	: CD changer	C2	M201	W/6	: Front heated seat switch LH
D2	M43	W/20	: Audio unit	E2	M202	BR/6	: Front heated seat switch RH
D2	M44	W/8	: Audio unit	E3	M203	GR/2	: Front console antenna
E2	M45	W/12	: Audio unit	Console sub-harness			
E2	M46	W/40	: AV control unit	E3	M350	W/2	: To M85
D2	M47	W/20	: AV control unit	D3	M351	B/3	: Front console power socket
D2	M48	GR/12	: AV control unit				

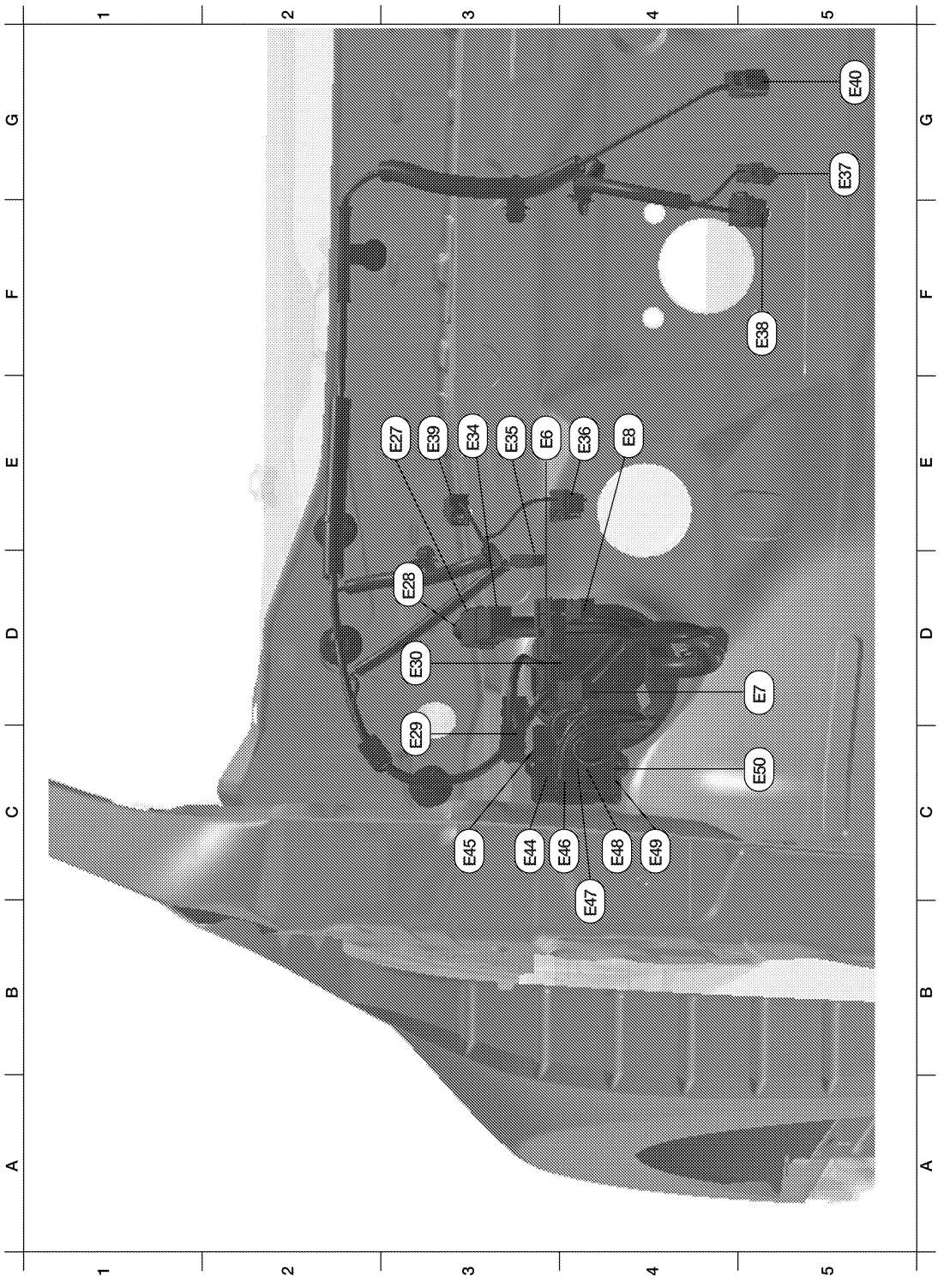


AWMIA0355GB

G4	E1	W/6	: Joint connector-E01			
G4	E2	W/8	: To E202			
G4	E3	W/16	: To F1			
F4	E4	BR/2	: Fusible link box (battery)			
F4	E5	GR/2	: Fusible link box (battery)			

D4	E9	—	: Body ground			
F5	E10	B/32	: ECM			
G4	E11	W/10	: To F2			
G4	E12	W/6	: To E203			
G5	E13	B/3	: To E205			
C4	E14	B/2	: Power steering solenoid valve			
D4	E15	—	: Body ground			
G5	E16	B/2	: IPDM E/R (intelligent power distribution module engine room)			
F3	E17	W/8	: IPDM E/R (intelligent power distribution module engine room)			
C3	E18	W/32	: IPDM E/R (intelligent power distribution module engine room)			
F3	E19	GR/2	: Front wheel sensor LH			
G3	E20	W/6	: Joint connector-E02			
G3	E21	W/4	: Joint connector-E03			
G3	E22	W/4	: Joint connector-E04			
D3	E24	GR/2	: Brake fluid level switch			
E2	E25	GR/5	: Front wiper motor			
B4	E26	B/26	: ABS actuator and electric unit (control unit)			
A5	E41	GR/2	: Front wheel sensor RH			
F5	E42	BR/6	: Cooling fan relay-2			
B2	E43	BR/6	: Cooling fan relay-3			
F2	E73	BR/3	: Intelligent key warning buzzer			

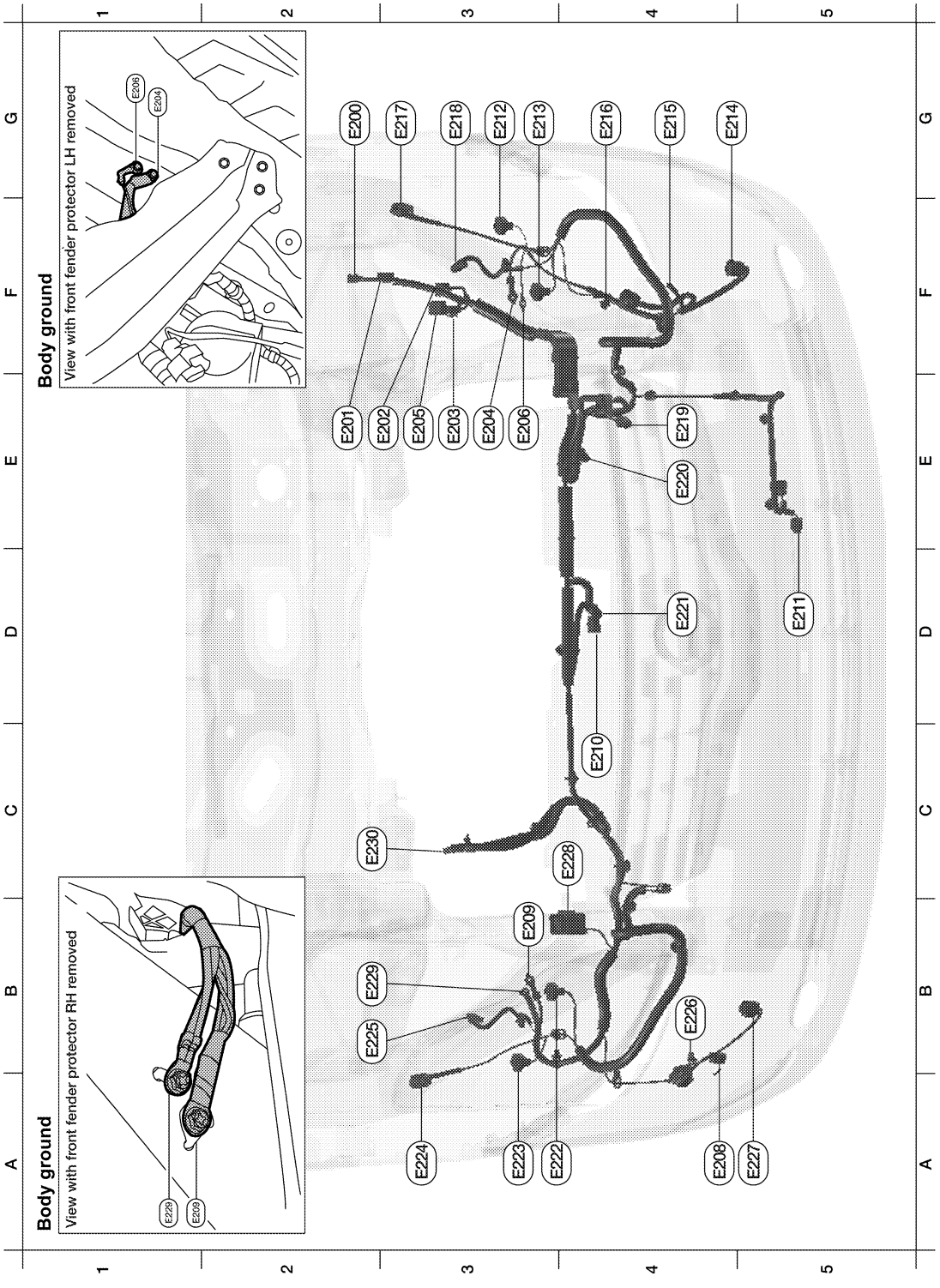
ENGINE ROOM HARNESS (PASSENGER COMPARTMENT)



E3	E6	W/16	: Fuse block (J/B)				
D5	E7	W/1	: Fuse block (J/B)				
E4	E8	B/2	: Fuse block (J/B)				
E3	E27	W/4	: Joint connector-E06				
D3	E28	W/4	: Joint connector-E05				

C3	E29	W/16	: To B10				
D3	E30	SMJ	: To M1				
E3	E34	L/4	: Back-up lamp relay				
E3	E35	B/1	: Park brake switch				
E4	E36	BR/2	: Clutch interlock switch				
G5	E37	BR/2	: ASCD brake switch				
F5	E38	W/4	: Stop lamp switch (with CVT)				
C5	E38	B/2	: Stop lamp switch (with M/T)				
E3	E39	BR/2	: ASCD clutch switch				
G5	E40	B/6	: Accelerator pedal position switch				
C3	E44	BR/12	: Junction block				
C3	E45	W/12	: Junction block				
C4	E46	W/16	: Junction block				
B4	E47	W/6	: Junction block				
C4	E48	W/4	: Junction block				
C4	E49	BR/4	: Junction block				
C5	E50	W/2	: Junction block				

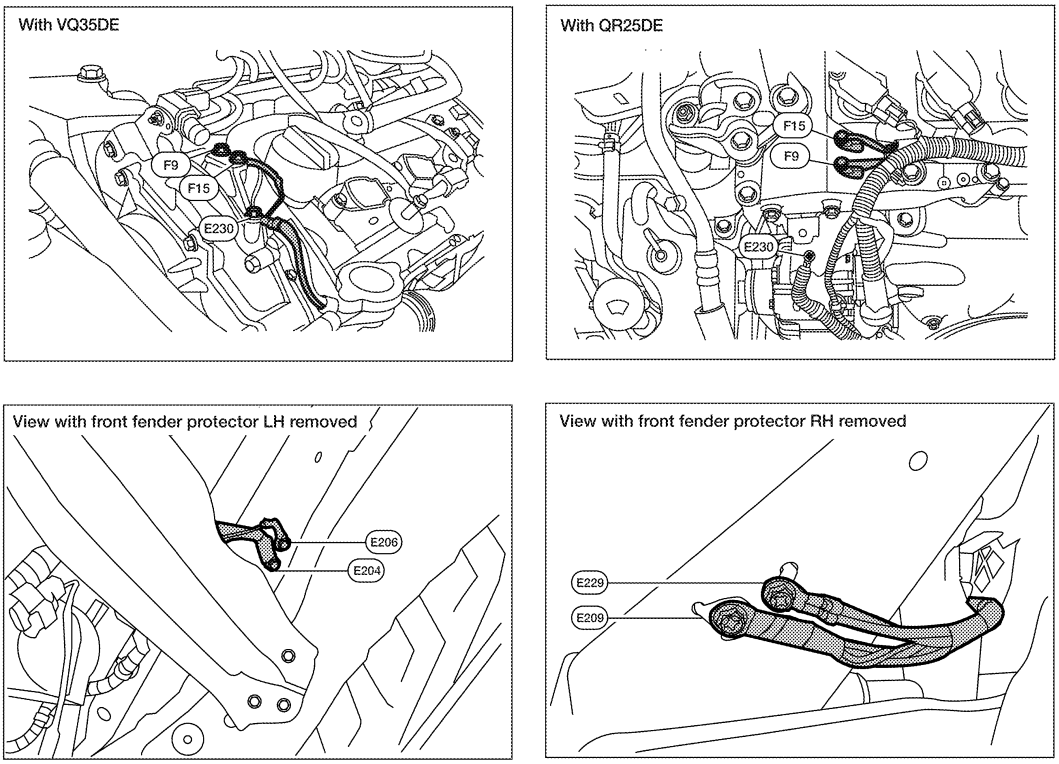
FRONT END MODULE HARNESS



ALMIA0022GB

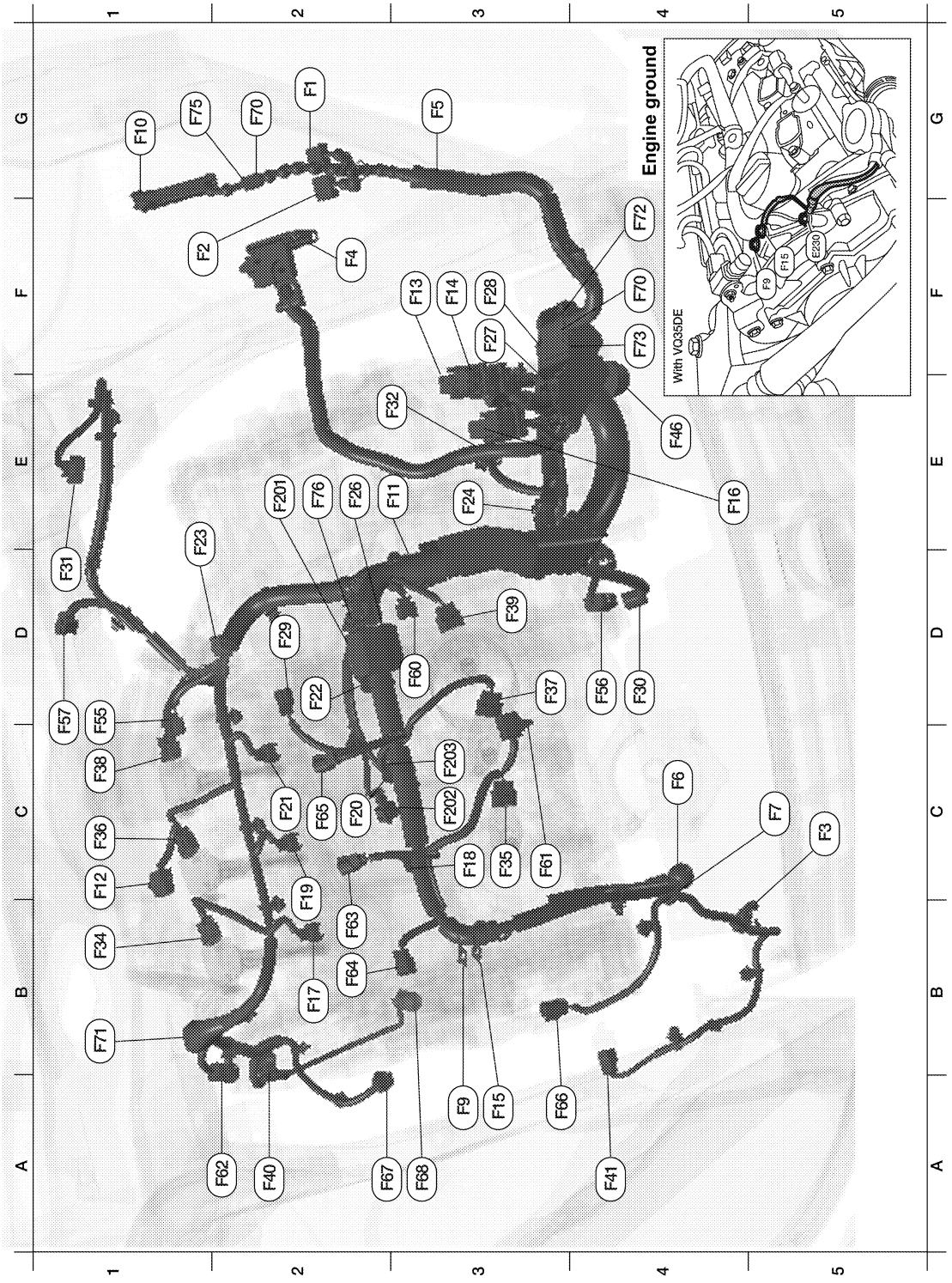
G3	E200	W/8	: IPDM E/R (intelligent power distribution module engine room)					
E2	E201	W/16	: IPDM E/R (intelligent power distribution module engine room)					
E3	E202	W/8	: To E2					
E3	E203	W/6	: To E12					

E3	E204	—	: Body ground				
E3	E205	B/3	: To E13				
E3	E206	—	: Body ground				
A4	E208	W/2	: Washer fluid level switch				
B3	E209	—	: Body ground				
D4	E210	Y/2	: Crash zone sensor				
D5	E211	B/2	: Ambient sensor				
B2	E212	B/2	: Front combination lamp LH (low) (halogen)				
G3	E212	GR/2	: Front combination lamp LH (low) (xenon)				
G4	E213	B/2	: Front combination lamp LH (high)				
G5	E214	B/2	: Front fog lamp LH				
G4	E215	B/1	: Horn (low)				
G4	E216	B/1	: Horn (high)				
G3	E217	GR/3	: Front turn signal lamp LH				
G3	E218	B/2	: Front parking lamp LH				
E4	E219	B/3	: Refrigerant pressure sensor				
E4	E220	GR/4	: Cooling fan motor-1				
D4	E221	GR/4	: Cooling fan motor-2				
A4	E222	B/2	: Front combination lamp RH (high)				
A3	E223	B/2	: Front combination lamp RH (low) (halogen)				
A3	E223	GR/2	: Front combination lamp RH (low) (xenon)				
A3	E224	GR/3	: Front turn signal lamp RH				
B3	E225	B/2	: Front parking lamp RH				
B4	E226	B/2	: Front washer motor				
A5	E227	B/2	: Front fog lamp RH				
C4	E228	B/5	: Daytime light relay				
B3	E229	—	: Body ground				
C3	E230	—	: Generator				



ALMIA0031GB

ENGINE CONTROL HARNESS (VQ35DE)

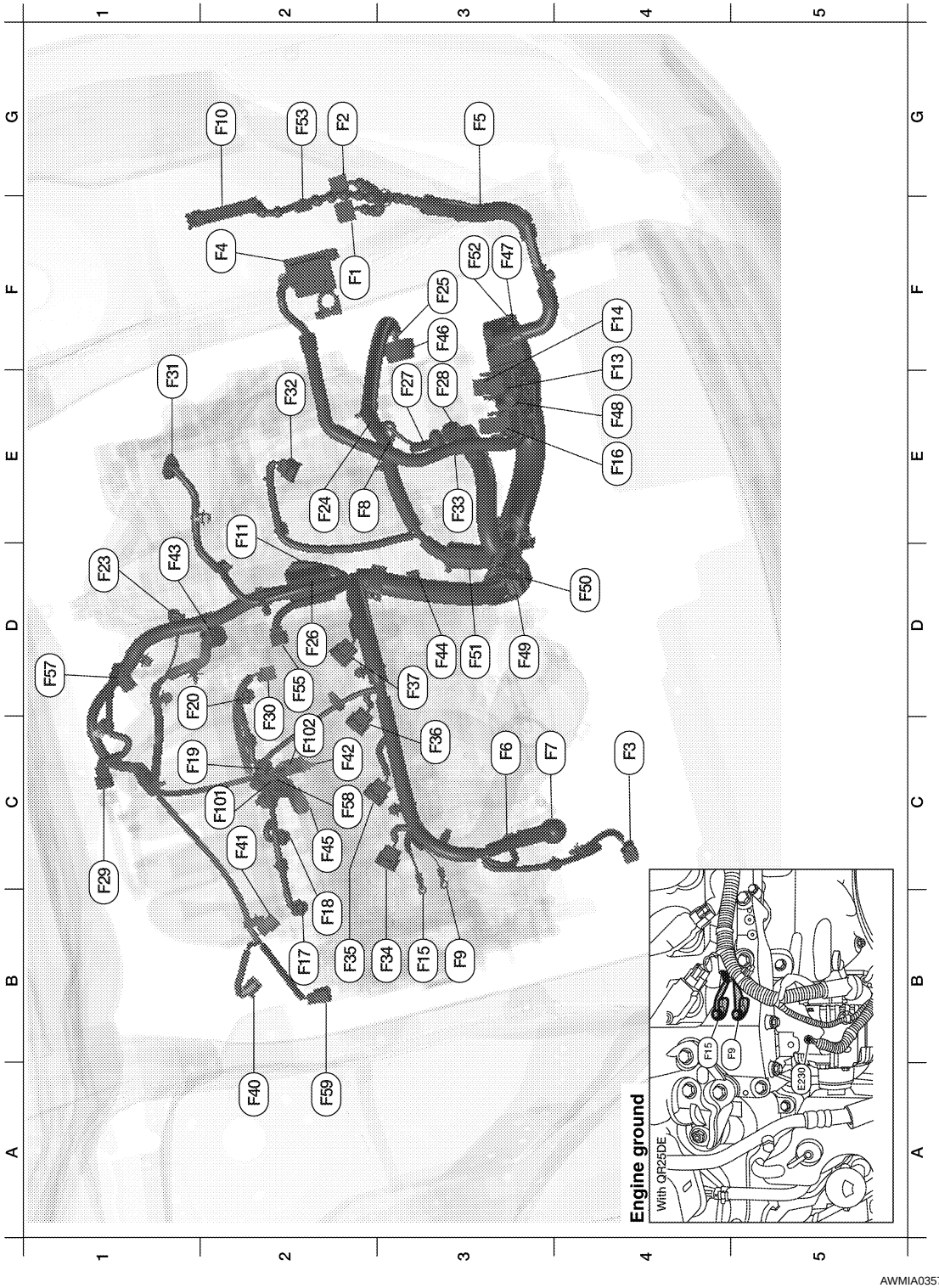


ALMIA0020GB

G2	F1	W/16	: To E3	D1	F55	B/3	: Camshaft position sensor (phase) (bank 1)
F2	F2	W/10	: To E11	D4	F56	B/4	: Heated oxygen sensor 2 (bank 2)
C5	F3	B/2	: A/C Compressor	D1	F57	B/6	: Electric throttle control actuator
F2	F4	—	: Fusible link box (battery)	D3	F60	B/3	: Camshaft position sensor (phase) (bank 2)
G3	F5	B/3	: Current sensor	C3	F61	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)

C4	F6	—	: Generator	A2	F62	B/4	: Heated oxygen sensor 2 (bank 1)
C5	F7	B/3	: Generator	B2	F63	B/2	: VIAS control solenoid valve (bank 1)
E4	F8	W/3	: Primary speed sensor	B3	F64	B/2	: Electric controlled engine mount control solenoid valve
A3	F9	—	: Engine ground	C2	F65	B/2	: VIAS control solenoid valve (bank 1)
G1	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	A3	F66	GR/2	: Intake valve timing control solenoid valve (bank 2)
E3	F11	GR/2	: Engine coolant temperature sensor	A2	F67	G/2	: Intake valve timing control solenoid valve (bank 1)
C1	F12	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	A3	F68	GR/2	: Engine oil temperature sensor
F3	F13	BR/48	: ECM	G2	F70	B/10	: Joint connector-F01
F3	F14	GR/32	: ECM	B1	F71	GR/6	: Joint connector-F03
A3	F15	—	: Engine ground	F4	F72	B/10	: Joint connector-F04
E4	F16	B/48	: TCM (transmission control module)	F4	F73	B/10	: Joint connector-F05
B2	F17	GR/2	: Fuel injector No. 1	D3	F74	W/4	: Joint connector-F08
C3	F18	GR/2	: Fuel injector No. 2	G2	F75	W/4	: Joint connector-F07
C2	F19	GR/2	: Fuel injector No. 3	E2	F76	L/4	: To F201
C2	F20	GR/2	: Fuel injector No. 4	Knock sensor sub-harness			
C2	F21	GR/2	: Fuel injector No. 5	E2	F201	L/4	: To F76
D2	F22	GR/2	: Fuel injector No. 6	C3	F202	L/2	: Knock sensor
E2	F23	B/3	: Secondary speed sensor	C3	F203	L/2	: Knock sensor
E3	F24	B/2	: Reverse lamp switch				
E2	F26	GR/2	: Condenser-2				
F3	F27	/2	: Starter motor				
F3	F28	GR/1	: Starter motor				
D2	F29	L/2	: EVAP canister purge volume control solenoid valve				
D4	F30	B/3	: Crankshaft position sensor (POS)				
D1	F31	B/6	: Mass air flow sensor				
E3	F32	B/2	: Park/neutral position (PNP) switch				
B1	F34	GR/3	: Ignition coil No. 1 (with power transistor)				
C3	F35	GR/3	: Ignition coil No. 2 (with power transistor)				
C1	F36	GR/3	: Ignition coil No. 3 (with power transistor)				
D4	F37	GR/3	: Ignition coil No. 4 (with power transistor)				
C1	F38	GR/3	: Ignition coil No. 5 (with power transistor)				
D3	F39	GR/3	: Ignition coil No. 6 (with power transistor)				
A2	F40	B/3	: Power steering pressure sensor				
A4	F41	GR/1	: Oil pressure switch				
E4	F46	B/22	: CVT unit				

ENGINE CONTROL HARNESS (QR25DE)

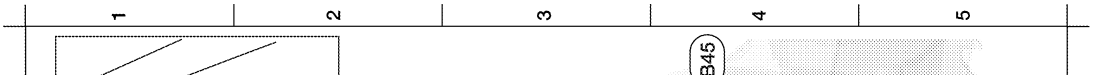


AWMIA0357GB

F2	F1	W/16	: To E3	F3	F47	B/6	: Joint connector-F01
G2	F2	W/10	: To E11	E4	F48	B/10	: Joint connector-F02
C4	F3	B/12	: A/C Compressor	D3	F49	B/10	: Joint connector-F03
F2	F4	—	: Fusible link box (battery)	D4	F50	B/10	: Joint connector-F04
G3	F5	B/3	: Current sensor	D3	F51	B/6	: Joint connector-F05

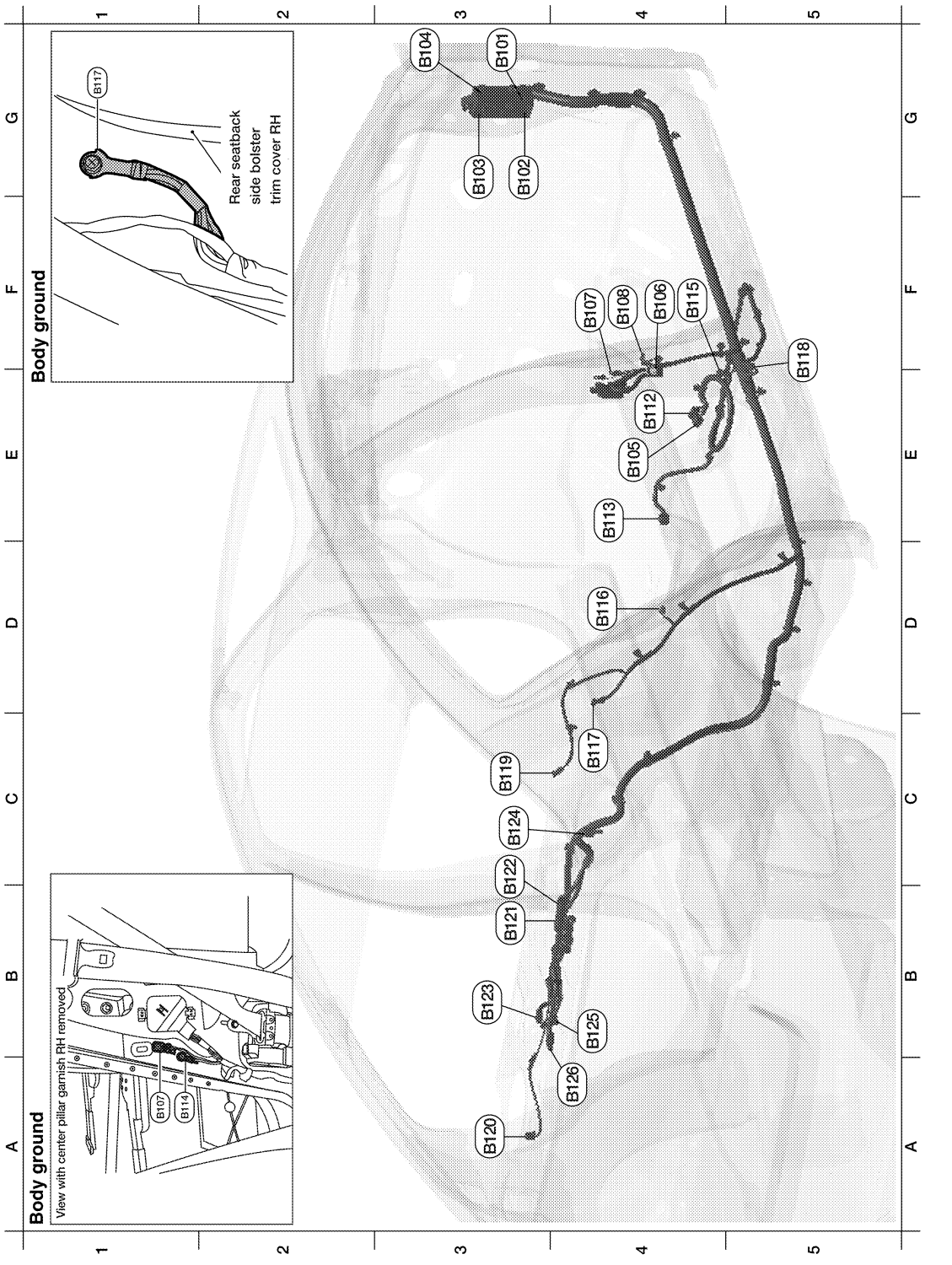
C3	F6	—	: Generator	F3	F52	B/10	: Joint connector-F06
C3	F7	B/3	: Generator	G2	F53	B/4	: Joint connector-F07
E2	F8	W/3	: Primary speed sensor	D2	F55	B/3	: Camshaft position sensor (phase)
B3	F9	—	: Engine ground	D1	F57	B/6	: Electric throttle control actuator
G2	F10	W/36	: IPDM E/R (intelligent power distribution module engine room)	C2	F58	B/4	: To F101
E2	F11	GR/2	: Engine coolant temperature sensor	A2	F59	G/2	: Intake valve timing control solenoid valve
E4	F13	BR/48	: ECM	C1	F101	B/4	: To F58
F4	F14	GR/32	: ECM	C2	F102	GR/4	: Heated oxygen sensor 3
B3	F15	—	: Engine ground				
E4	F16	B/48	: TCM (transmission control module)				
B2	F17	GR/2	: Fuel injector No. 1				
B2	F18	GR/2	: Fuel injector No. 2				
C1	F19	GR/2	: Fuel injector No. 3				
D1	F20	GR/2	: Fuel injector No. 4				
D1	F23	B/3	: Secondary speed sensor				
E3	F24	B/2	: Back-up lamp switch				
F3	F25	B/10	: Park/neutral position (PNP) switch (with CVT)				
D2	F26	GR/2	: Condenser-2				
E3	F27	/2	: Starter motor				
E3	F28	GR/1	: Starter motor				
C1	F29	L/2	: EVAP canister purge volume control solenoid valve				
C2	F30	B/3	: Crankshaft position sensor (POS)				
E1	F31	B/6	: Mass air flow sensor				
E2	F32	B/2	: Park/neutral position (PNP) switch (with M/T)				
E3	F33	GR/2	: Vehicle speed sensor				
B3	F34	GR/3	: Ignition coil No. 1 (with power transistor)				
B2	F35	GR/3	: Ignition coil No. 2 (with power transistor)				
C3	F36	GR/3	: Ignition coil No. 3 (with power transistor)				
D3	F37	GR/3	: Ignition coil No. 4 (with power transistor)				
A2	F40	B/3	: Power steering pressure sensor				
C2	F41	GR/1	: Oil pressure switch				
C2	F42	B/4	: Heated oxygen sensor 2				
D1	F43	GR/5	: Tumble control valve actuator				
D3	F44	GR/4	: Air fuel ratio (A/F) sensor 1				
C2	F45	GR/2	: Knock sensor				
F3	F46	B/22	: CVT unit				

BODY HARNESS



A3	B1	SMJ	: To M6				
A5	B2	W/4	: Joint connector-B01				
B5	B3	W/4	: Joint connector-B02				
A3	B4	BR/12	: Fuse block (J/B)				
B4	B6	W/8	: To D201				
B4	B7	—	: Body ground				
B4	B8	W/3	: Front door switch LH				
C4	B9	Y/12	: Air bag diagnosis sensor unit				
A3	B10	W/16	: To E29				
B3	B11	Y/2	: Front LH side air bag module				
B4	B12	W/8	: To B201				
C5	B13	W/6	: Joint connector-B03				
B5	B14	Y/2	: Front LH seat belt pre-tensioner				
C4	B15	Y/2	: LH side air bag (satellite) sensor				
C5	B17	W/2	: Condenser-1				
D4	B18	W/3	: Rear door switch LH				
D4	B19	—	: Body ground				
F4	B20	GR/6	: Joint connector-B05				
E4	B21	L/12	: Joint connector-B06				
E5	B22	GR/6	: Joint connector-B07				
E4	B23	W/4	: Joint connector-B08				
D4	B24	GR/4	: Joint connector-B09				
E4	B26	W/2	: Rear speaker LH				
F5	B28	W/4	: Trunk lamp switch and trunk release solenoid				
E3	B29	GR/2	: Rear panel shelf antenna				
E4	B30	W/6	: Rear combination lamp LH				
D5	B31	W/16	: Rear view camera control unit				
F4	B32	BR/2	: License plate lamp LH				
G4	B33	BR/2	: Trunk opener request switch				
G4	B34	BR/2	: License plate lamp RH				
F4	B35	W/4	: Rear view camera control unit				
E3	B36	W/2	: Trunk room lamp				
F3	B37	W/2	: High mounted stop lamp				
E3	B38	Y/2	: LH side front curtain air bag module				
E5	B39	B/2	: EVAP canister vent control valve				
E5	B41	GR/3	: EVAP control system pressure sensor				
D5	B42	GR/5	: Fuel level sensor unit and fuel pump				
E5	B43	GR/4	: Rear wheel sensor				
F3	B44	W/2	: Rear speaker RH				
G4	B45	W/6	: Rear combination lamp RH				
G5	B46	GR/2	: Rear bumper antenna				
E4	B52	W/1	: Condenser				
D3	B53	B/1	: Rear defogger				
E3	B54	B/1	: Rear defogger				

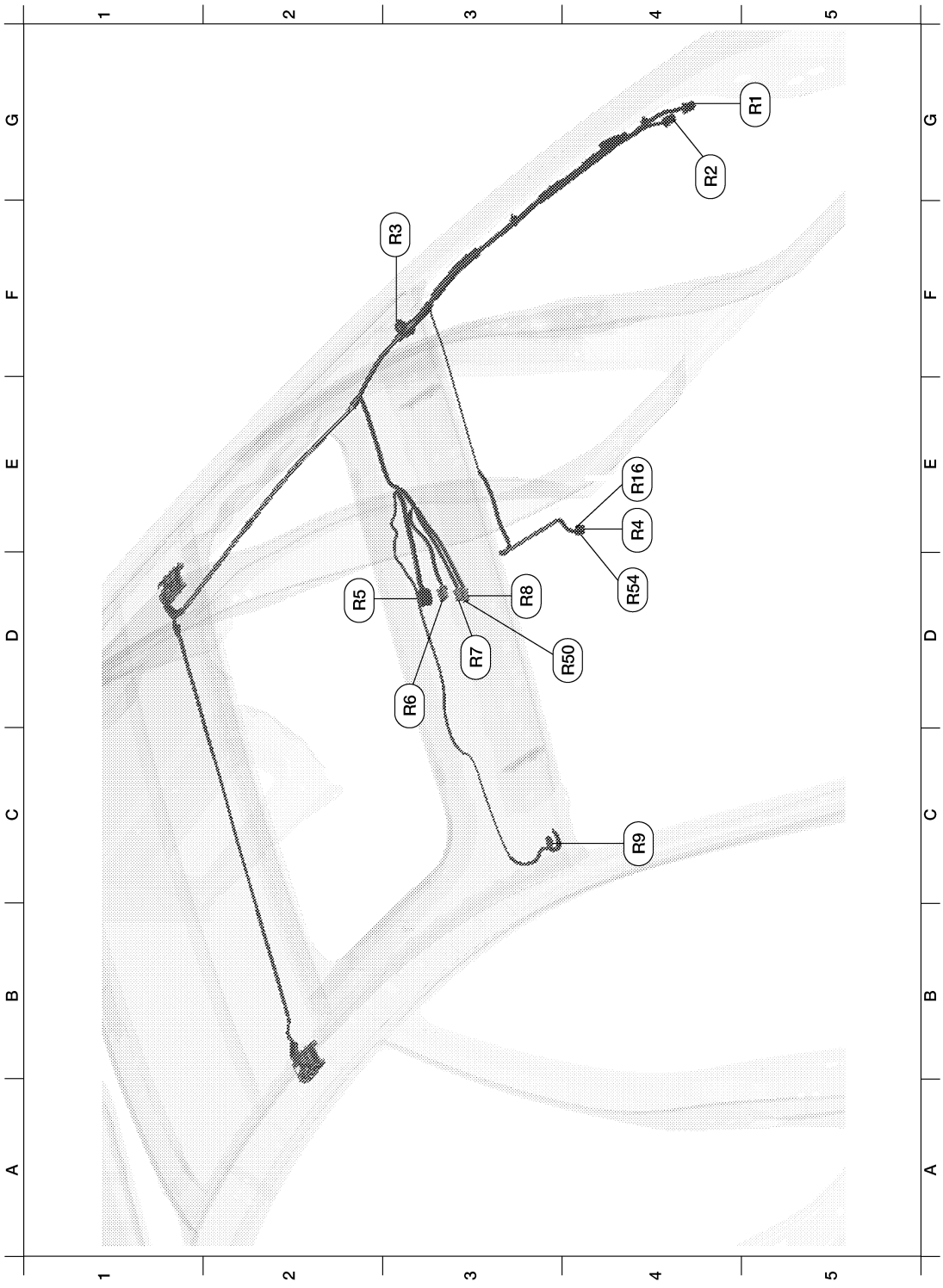
BODY NO. 2 HARNESS



G3	B101	W/32	: To M2				
G3	B102	W/24	: To M8				
G3	B103	BR/16	: To M9				
G3	B104	BR/12	: To M10				
E4	B105	W/8	: To B301				

F4	B106	W/8	: To D301				
F4	B107	—	: Body ground				
F4	B108	W/3	: Front door switch RH				
E4	B112	Y/2	: Front RH side air bag module				
D4	B113	Y/12	: Air bag diagnosis sensor unit				
F4	B115	Y/2	: Front RH seat belt pre-tensioner				
D4	B116	W/3	: Rear door switch RH				
C4	B117	—	: Body ground				
E4	B118	Y/2	: RH side air bag (satellite) sensor				
C3	B119	Y/2	: RH side curtain air bag module				
A3	B120	W/2	: Rear speaker subwoofer LH				
A3	B121	BR/23	: BOSE speaker amp.				
B3	B122	BR/14	: BOSE speaker amp.				
B3	B123	W/16	: Satellite radio tuner or pre-wiring for satellite radio tuner				
C3	B124	W/2	: Rear subwoofer RH				
B4	B125	W/8	: Bluetooth control unit				
A4	B126	W/32	: Bluetooth control unit				
B3	B127	—	: RH side curtain air bag module (ground)				

ROOM LAMP HARNESS

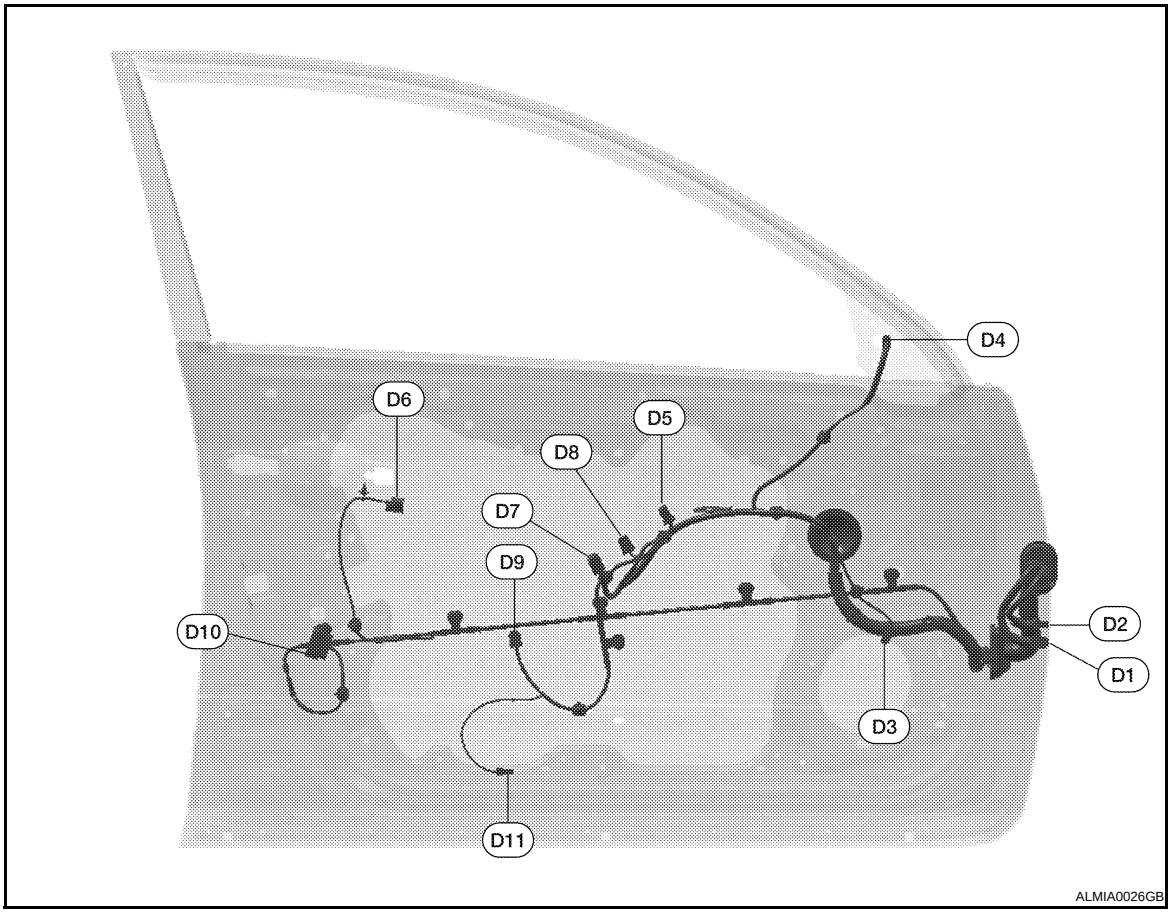


AWMIA0360GB

G5	R1	W/16	: To M17				
G4	R2	W/4	: To M13				
F3	R3	W/2	: Vanity mirror lamp LH				
E4	R4	B/10	: Auto anti-dazzling inside mirror				
D2	R5	W/10	: Sunroof motor assembly				

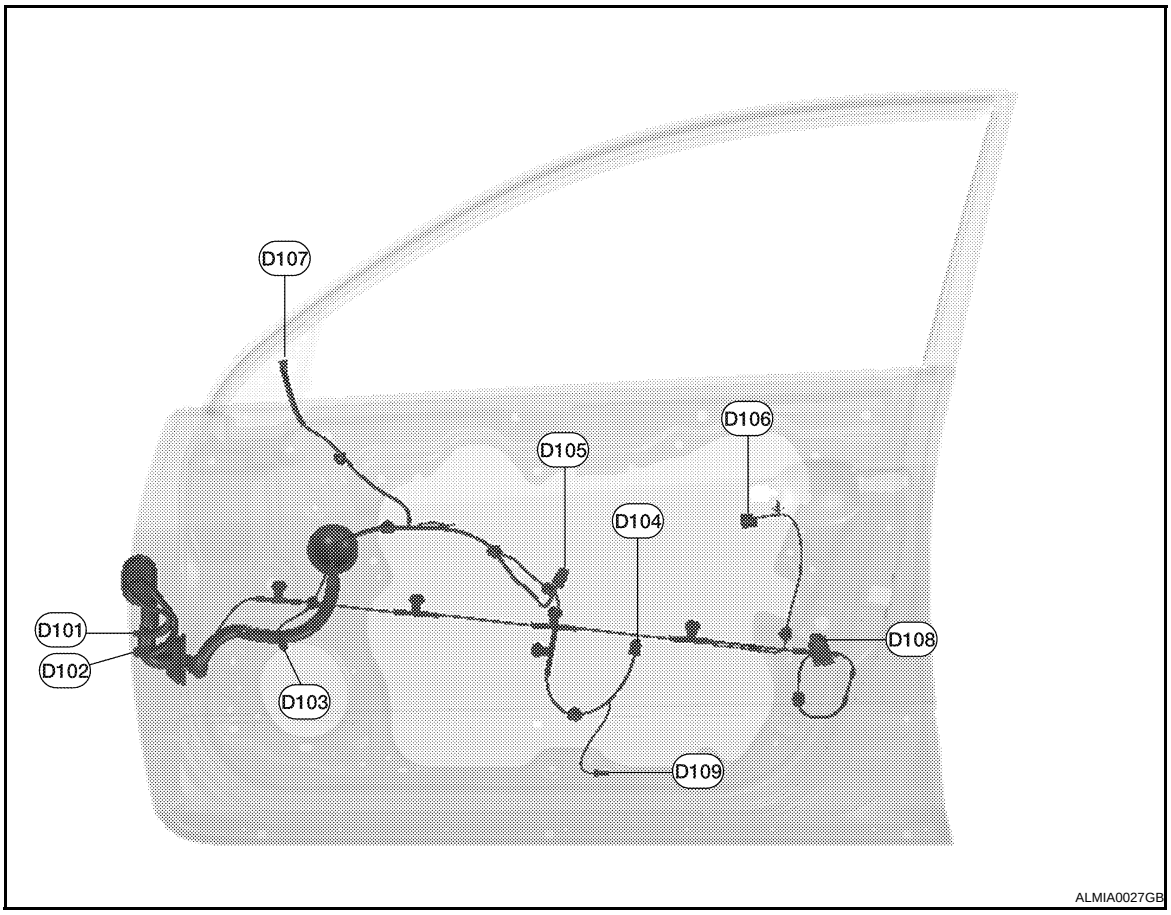
D3	R6	W/3	: Sunroof switch				
D3	R7	W/4	: Microphone				
D3	R8	W/4	: Bluetooth on indicator				
C4	R9	W/2	: Vanity mirror lamp RH				
E4	R16	—	: Console lamp				
D4	R50	GR/16	: Front room lamp assembly				
D4	R54	—	: Console lamp				

FRONT DOOR LH HARNESS



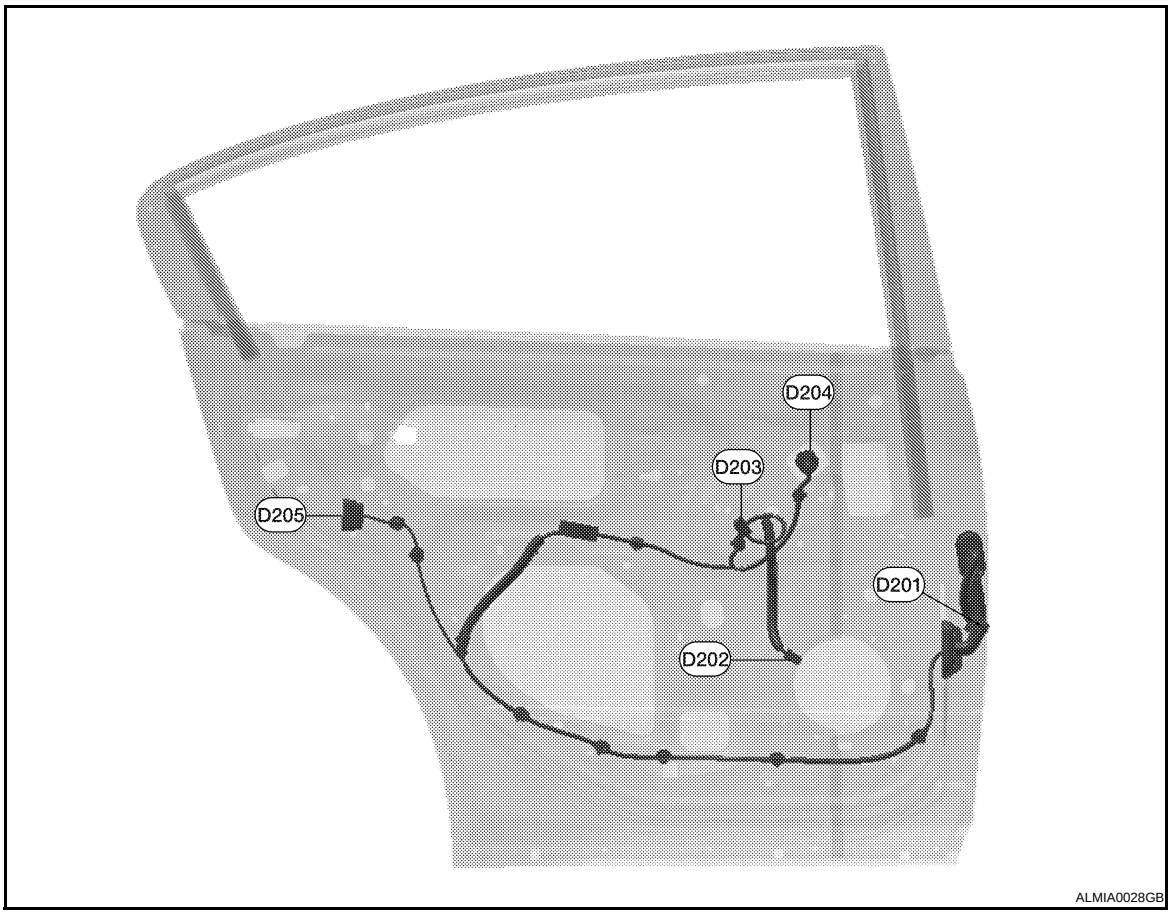
D1	W/16	: To M11	D6	B/4	: Front outside handle LH
D2	W/16	: To M12	D7	W/16	: Main power window and door lock/unlock switch
D3	W/2	: Front door speaker LH	D8	W/3	: Main power window and door lock/unlock switch
D3	W/2	: Front door speaker LH	D9	W/6	: Front power window motor LH
D4	W/8	: Door mirror LH	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



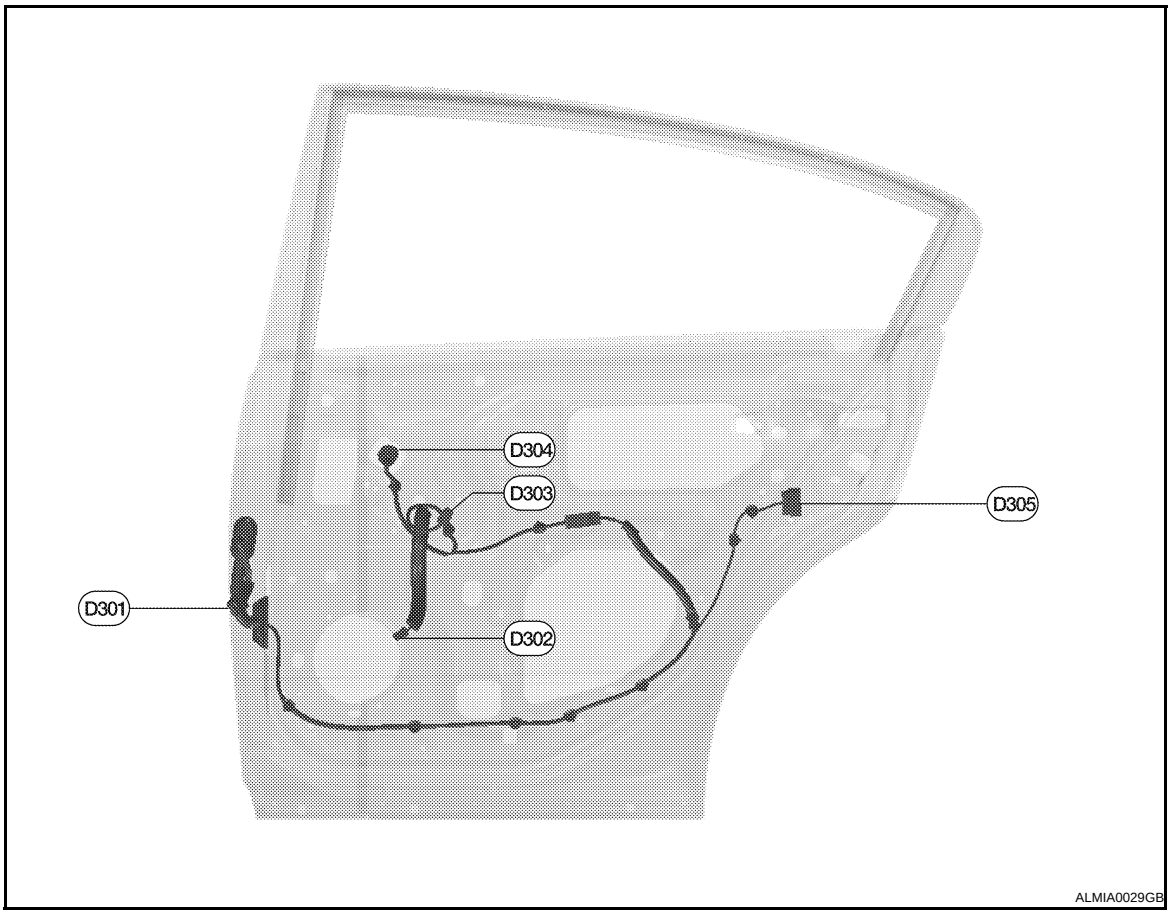
D101	W/10	: To M14	D105	W/16	: Power window and door lock/unlock switch RH
D102	W/16	: To M15	D106	B/4	: Front outside handle RH
D103	W/2	: Front door speaker RH	D107	W/8	: Door mirror RH
D103	BR/2	: Front door speaker RH	D108	GR/6	: Front door lock actuator RH
D104	W/6	: Front power window motor RH	D109	W/2	: Step lamp RH
D105	W/12	: Power window and door lock/unlock switch RH			

REAR DOOR LH HARNESS



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



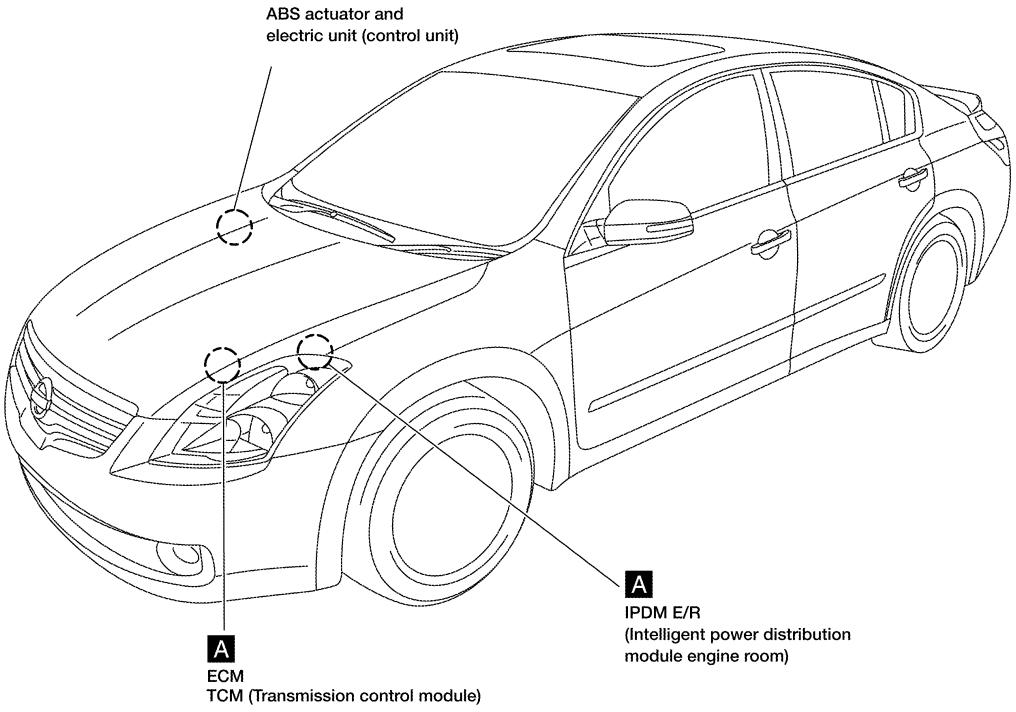
D301	W/8	: To B106			
D302	BR/2	: Rear door speaker RH			
D303	W/8	: Rear power window switch RH			
D304	GR/6	: Rear power window motor RH			
D305	GR/6	: Rear door lock actuator RH			

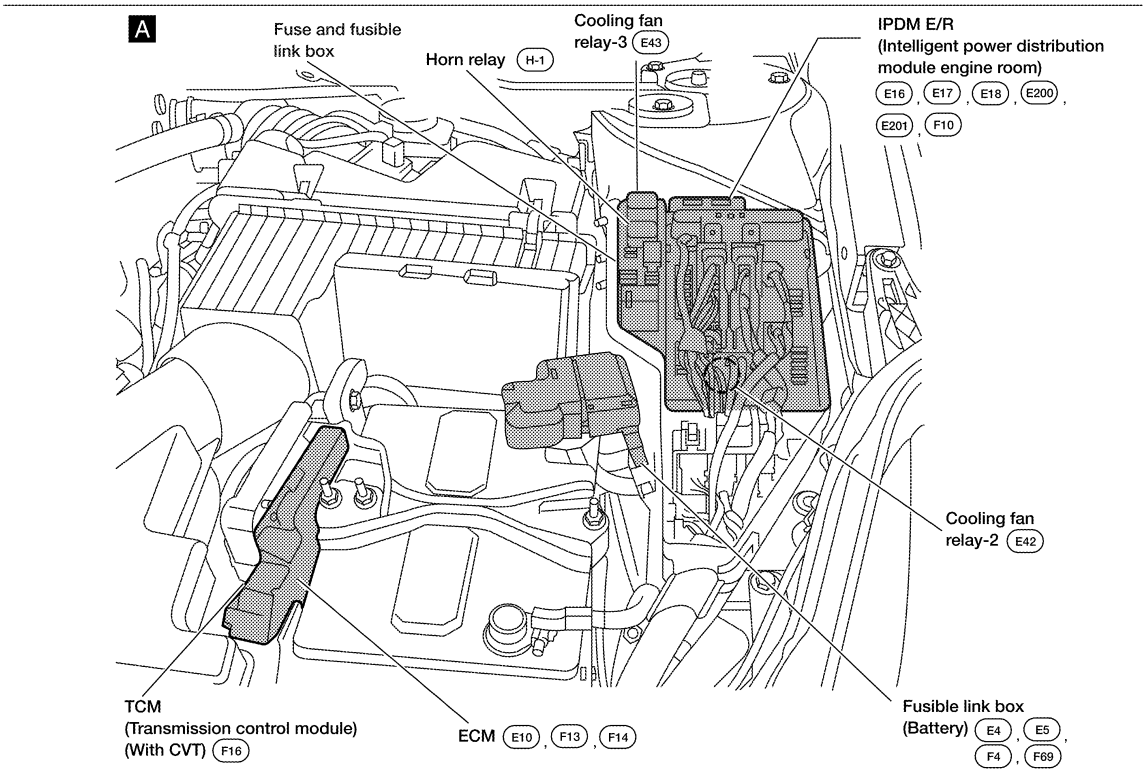
ELECTRICAL UNITS LOCATION

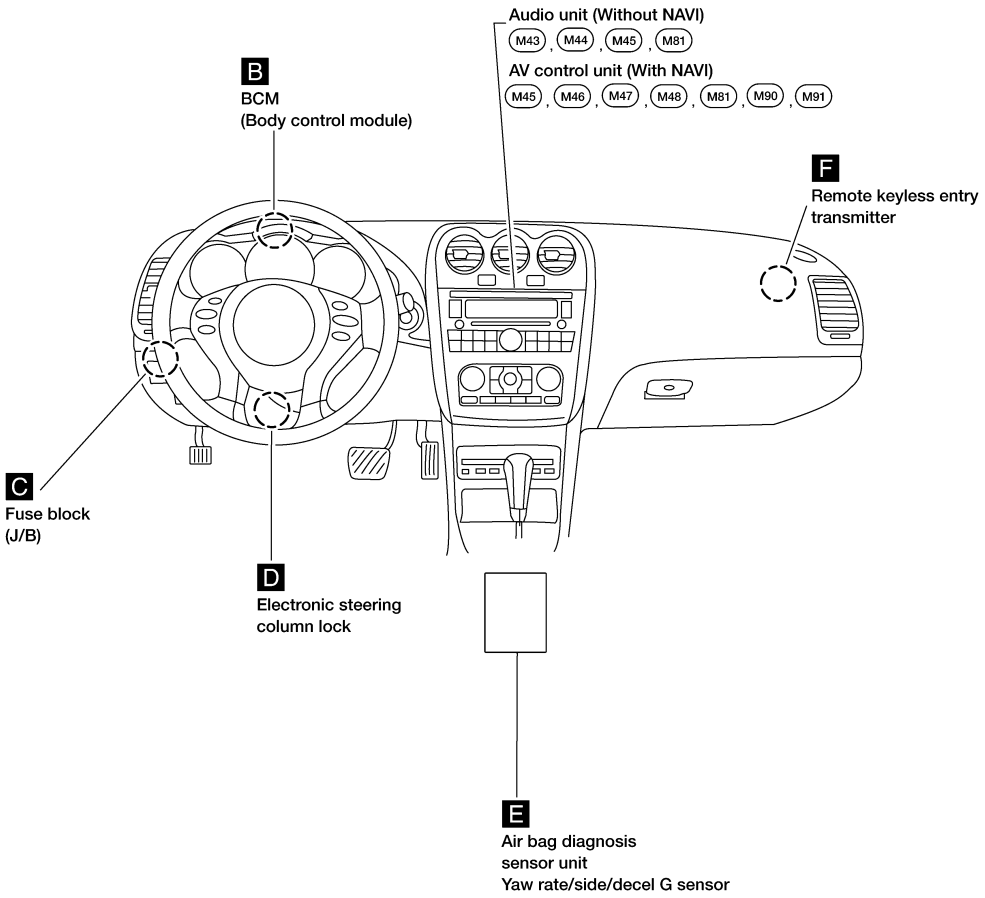
Electrical Units Location

INFOID:0000000001345783

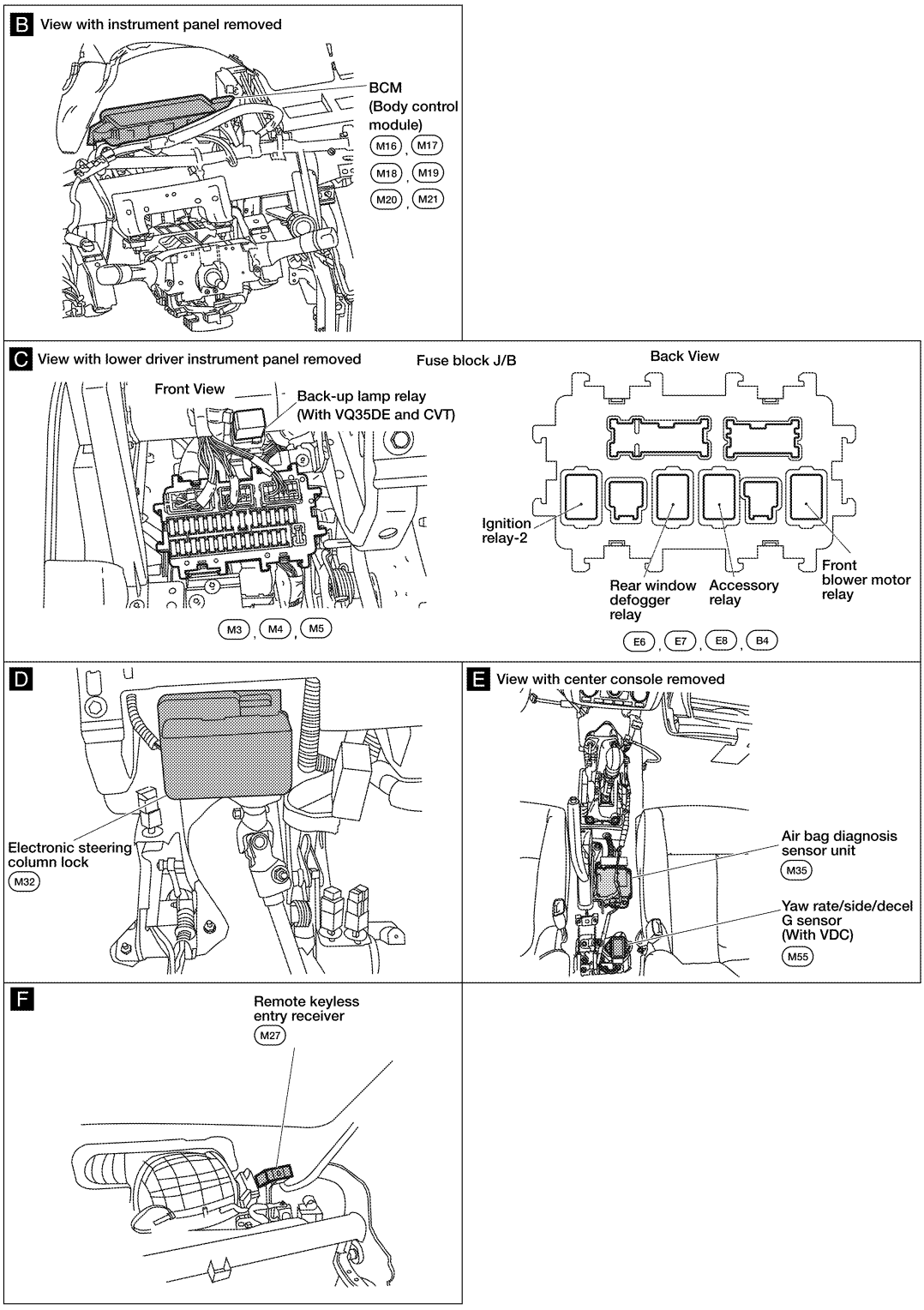
ENGINE COMPARTMENT



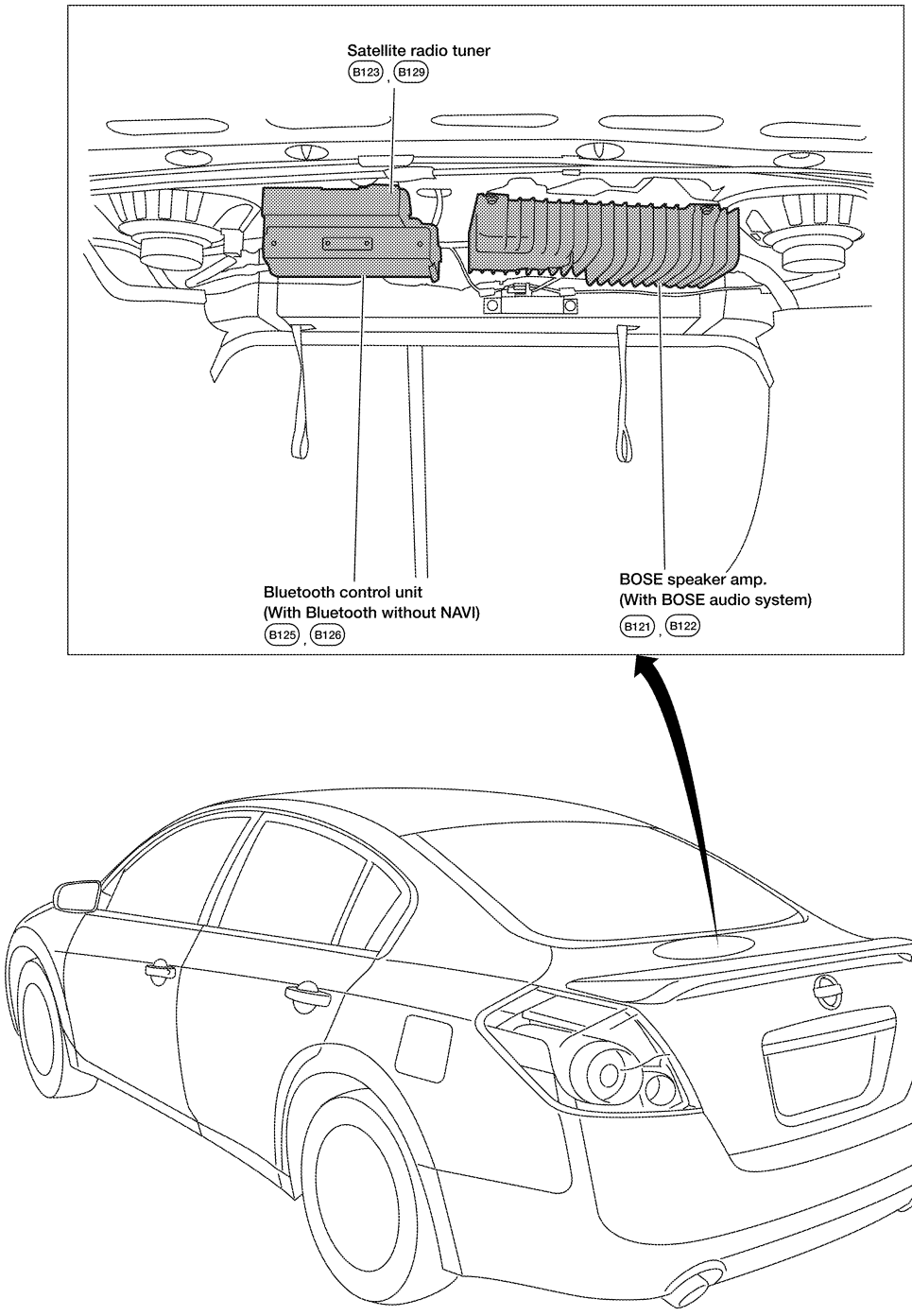




AWMIA0362GB



ALMIA0012GB



AWMIA0363GB

HARNESS CONNECTOR

Description

INFOID:0000000001345784

HARNESS CONNECTOR (TAB-LOCKING TYPE)

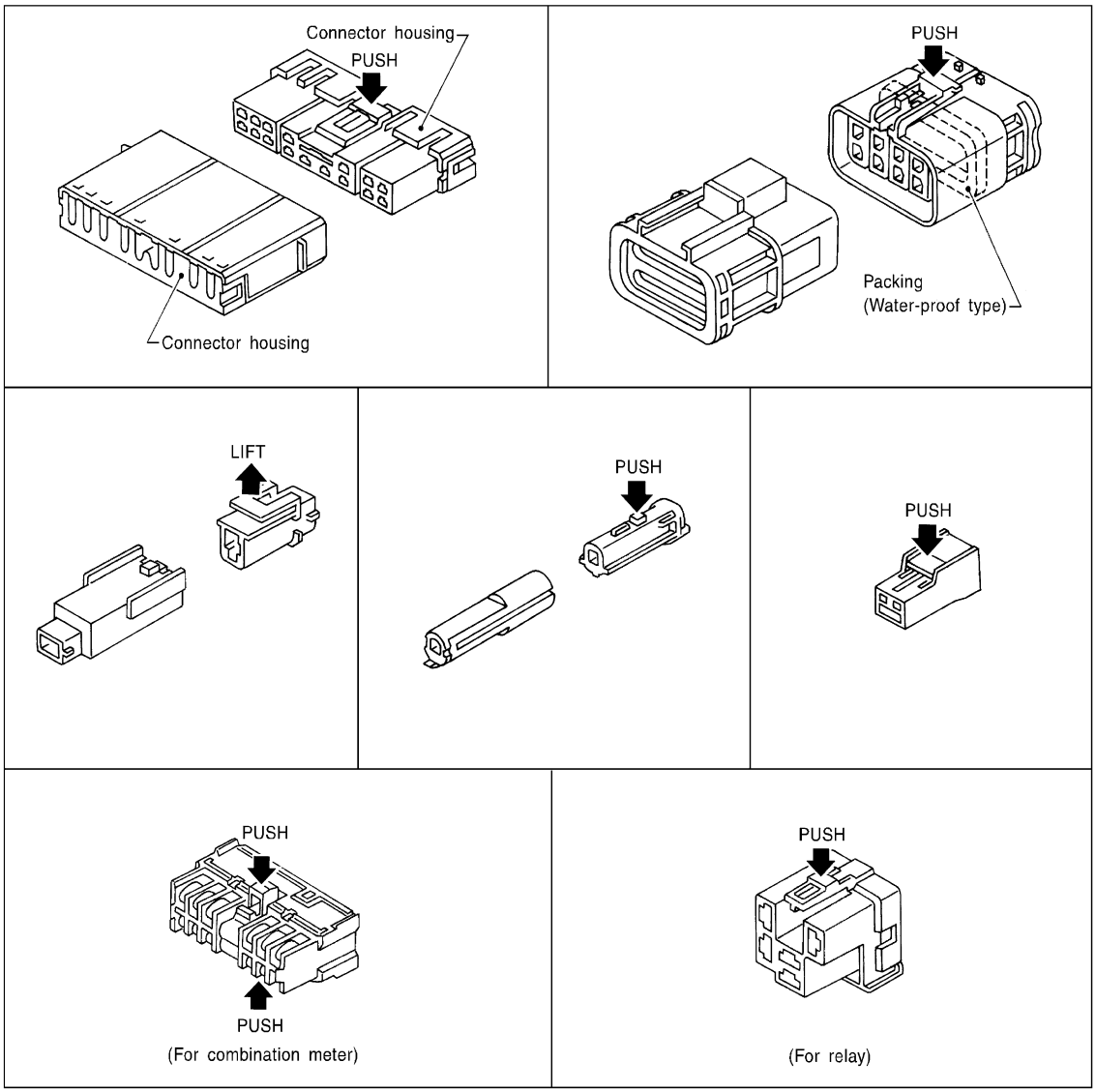
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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

CAUTION:

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

[Example]



SEL769DA

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

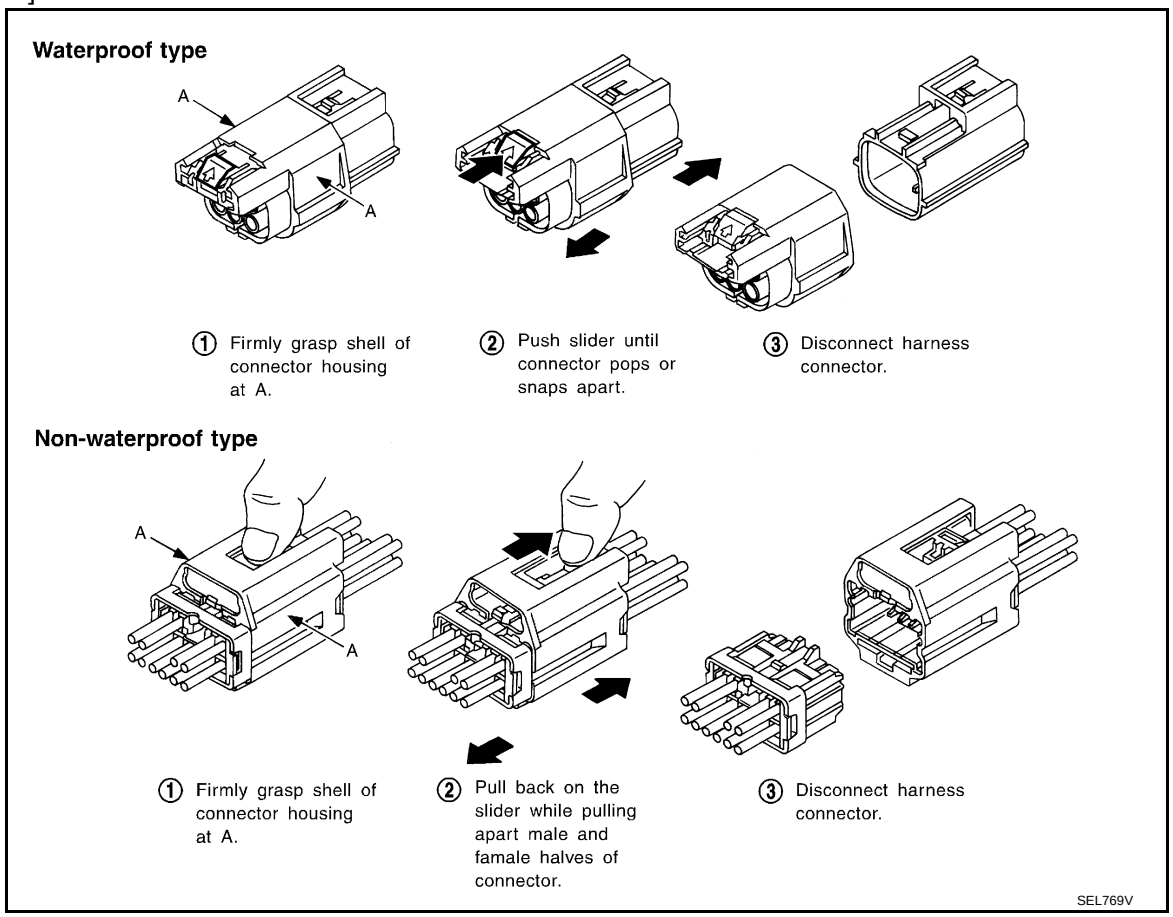
- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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

CAUTION:

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

[Example]



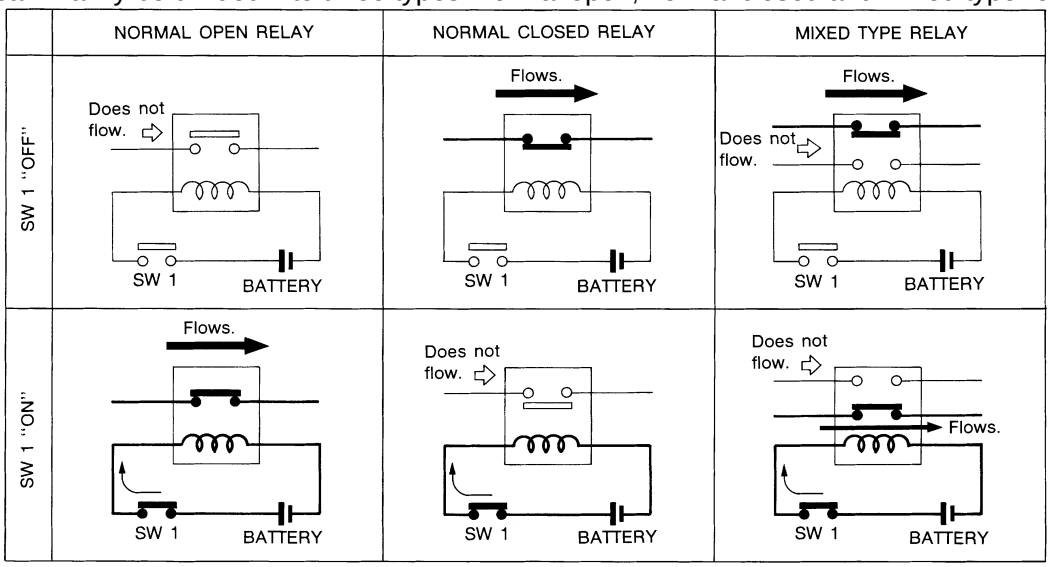
STANDARDIZED RELAY

Description

INFOID:0000000001345785

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

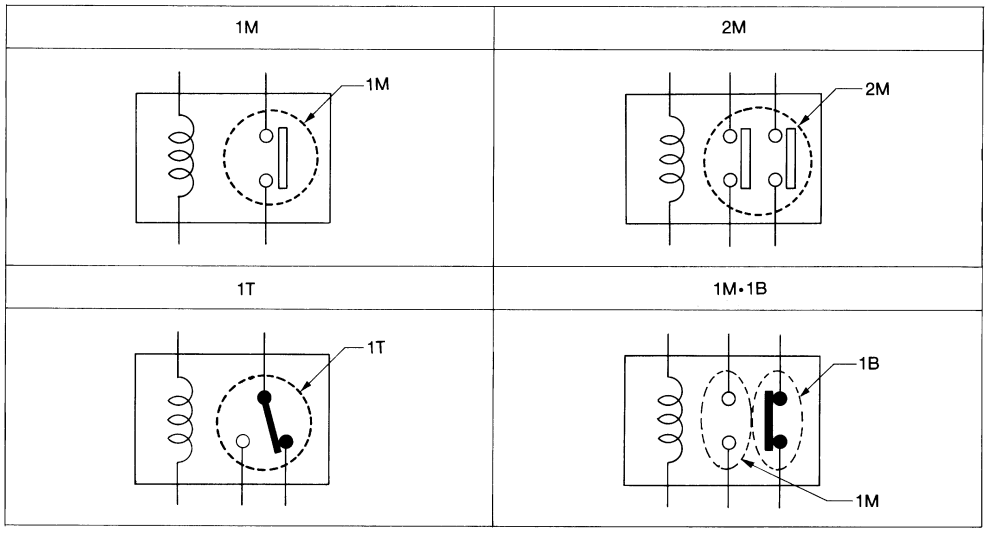
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



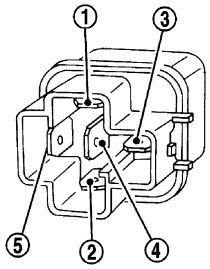
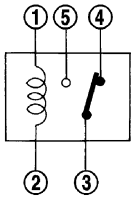
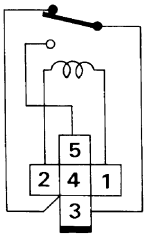
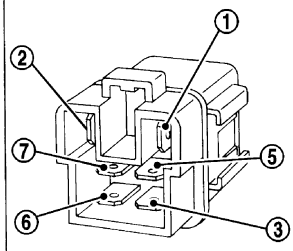
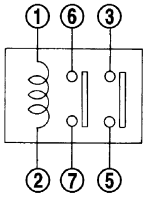
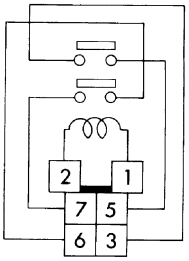
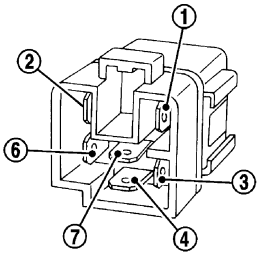
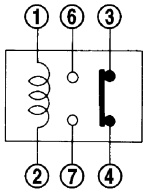
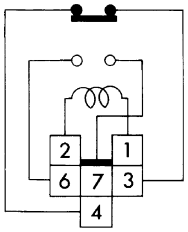
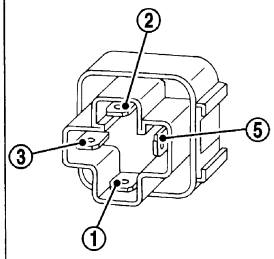
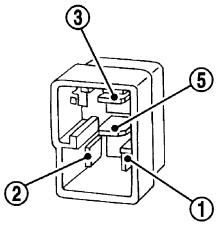
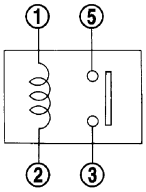
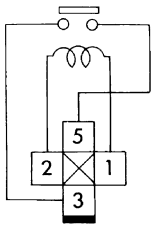
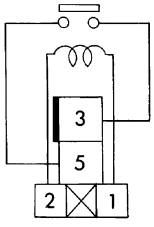
SEL881H

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

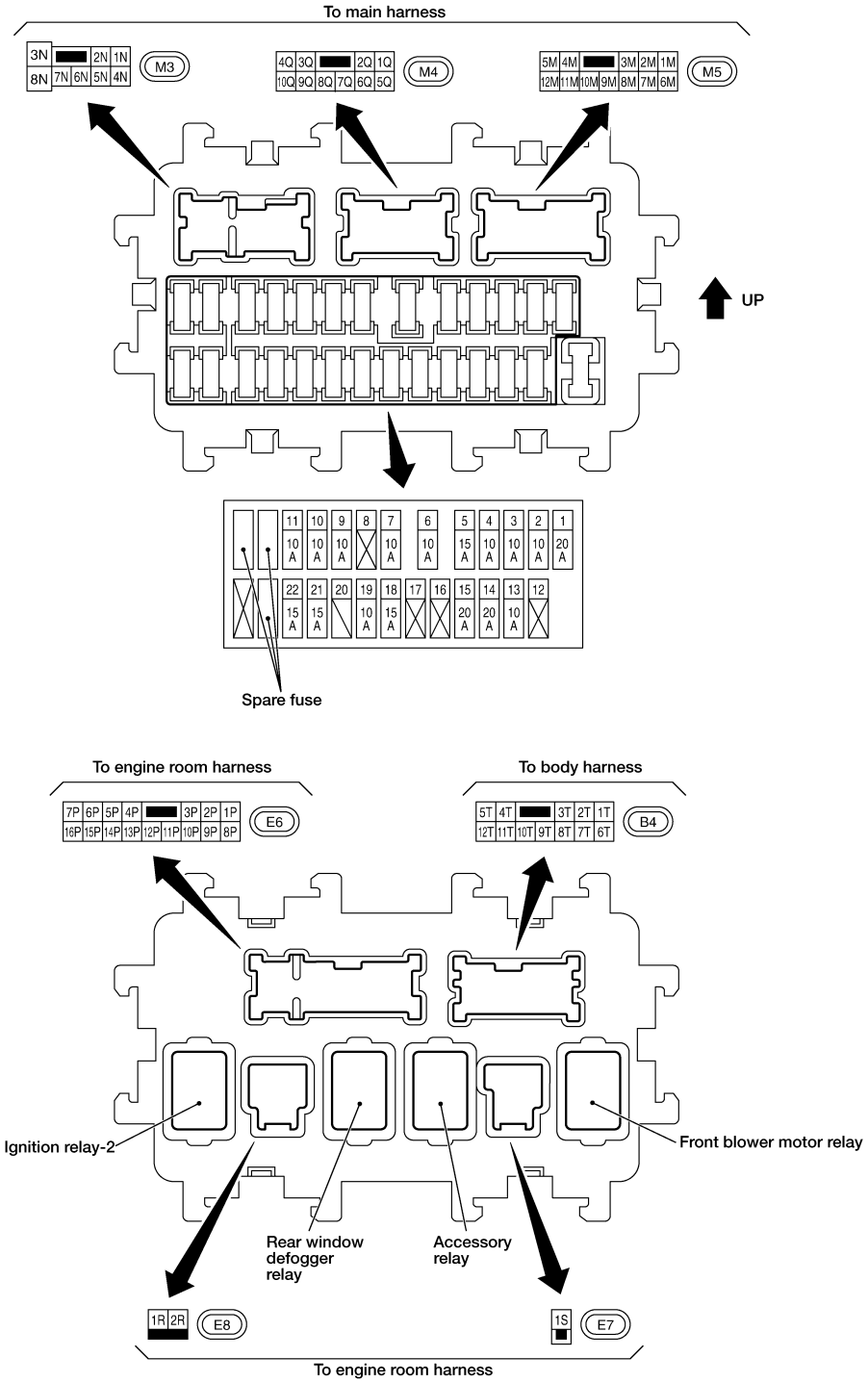
The arrangement of terminal numbers on the actual relays may differ from those shown above.

SEL188W

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:0000000001345786



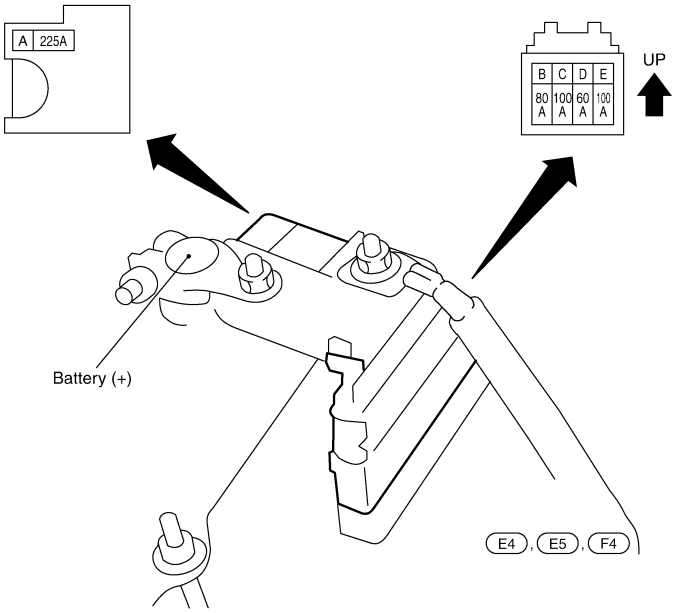
AWMIA0364GB

FUSE, FUSIBLE LINK AND RELAY BOX

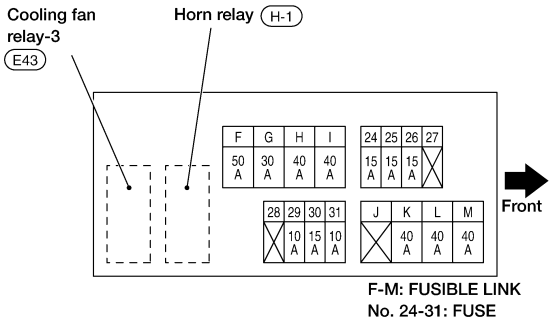
Terminal Arrangement

INFOID:0000000001345787

Fuse and fusible link box (Battery)



Fuse and fusible link box



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

AWMIA0365GB

PRECAUTION

PRECAUTIONS

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

INFOID:0000000001345788

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.**

Battery Service

INFOID:0000000001345789

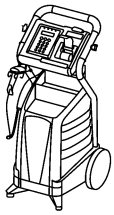
Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference.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

PREPARATION

PREPARATION

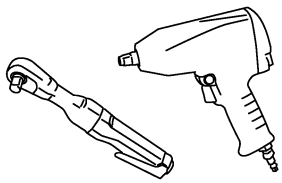
Special Service Tool

INFOID:0000000001345790

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:0000000001345791

Tool name	Description
Power tool  PBIC0190E	Loosening bolts and nuts

ON-VEHICLE REPAIR

BATTERY

Removal and Installation

INFOID:0000000001345792

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 cables from battery terminals.
   CAUTION:
   When disconnecting, disconnect the battery cable from 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 battery cable to 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-71, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement".

SERVICE DATA AND SPECIFICATIONS (SDS)

BATTERY

Battery

INFOID:0000000001345793

Type	GR.24	GR.35 (BCII)
Capacity (5HR) minimum V-AH	55	52
Cold cranking current A (For reference value)	550	525