

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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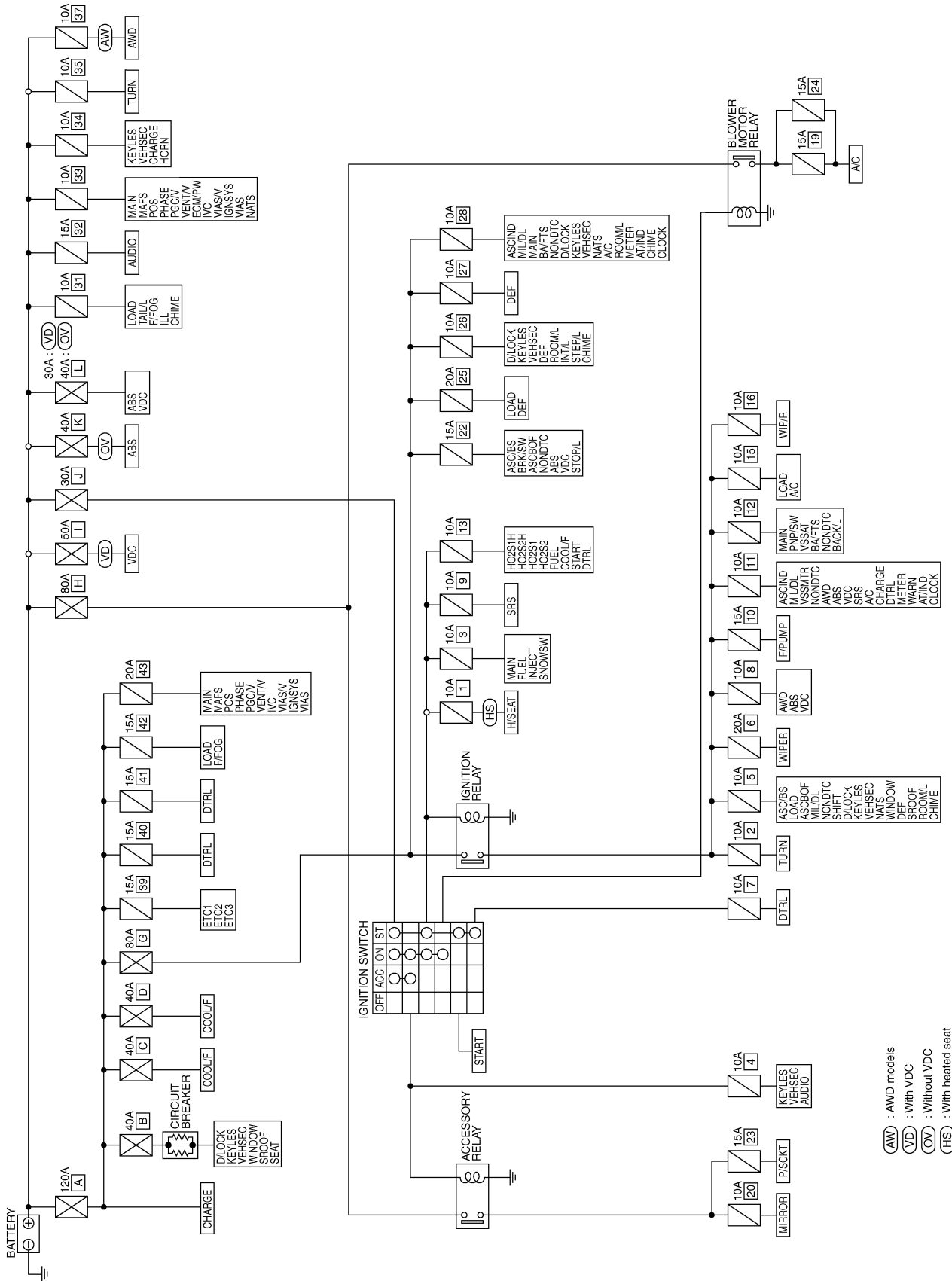
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POWER SUPPLY ROUTING

PFP:00011

Schematic

AKS00BER



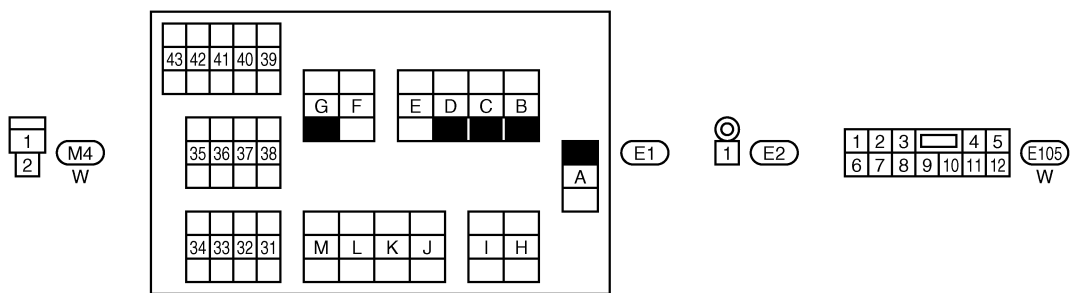
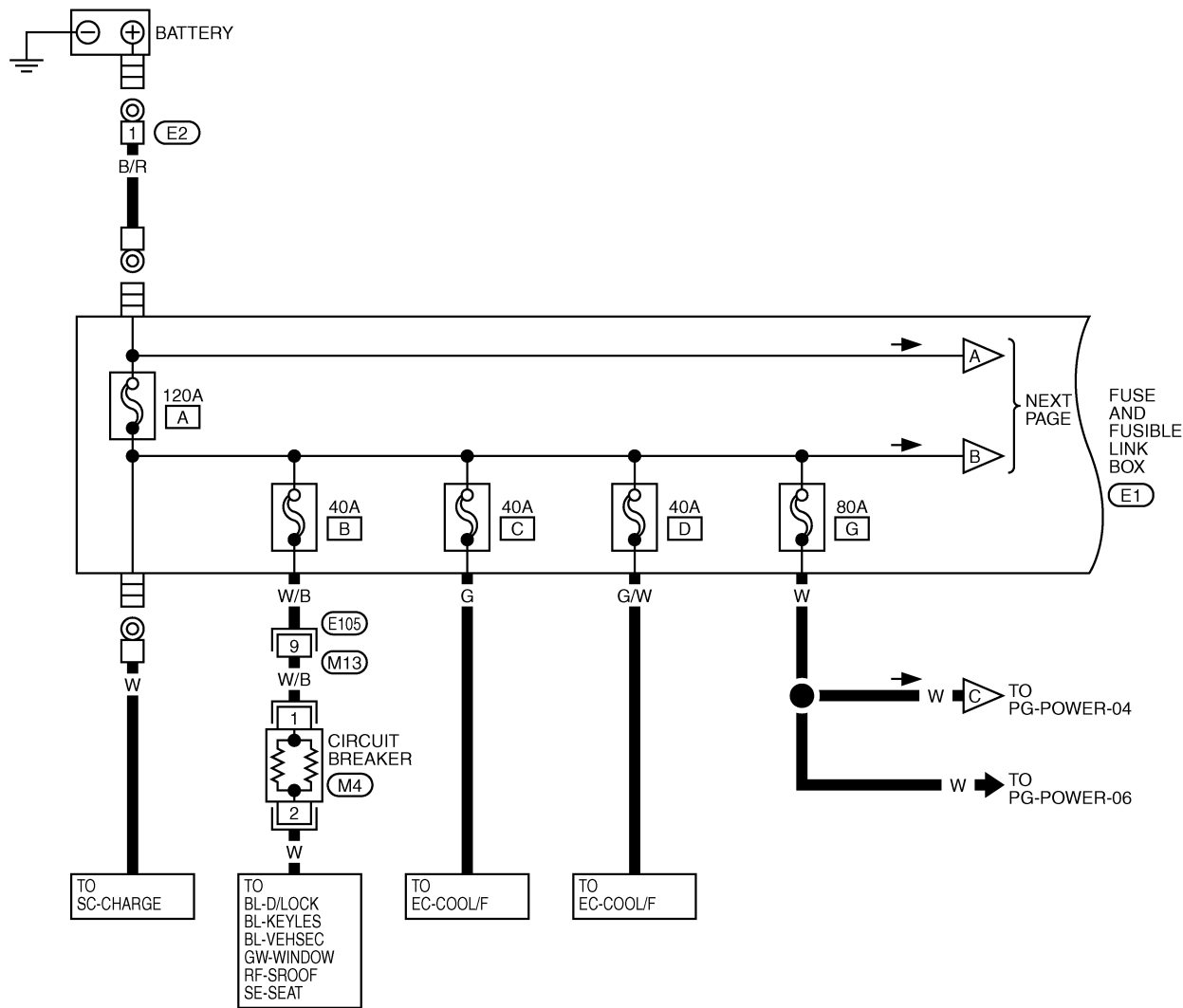
TKWB0202E

POWER SUPPLY ROUTING

Wiring Diagram - POWER -
BATTERY POWER SUPPLY - IGNITION SW. IN ANY POSITION

AKS00BES

PG-POWER-01

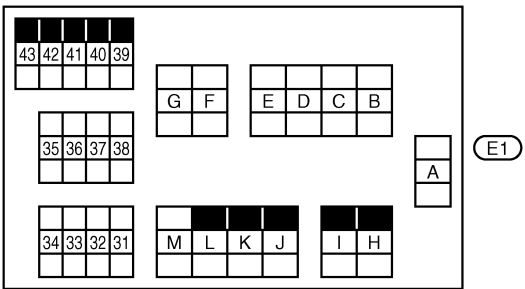
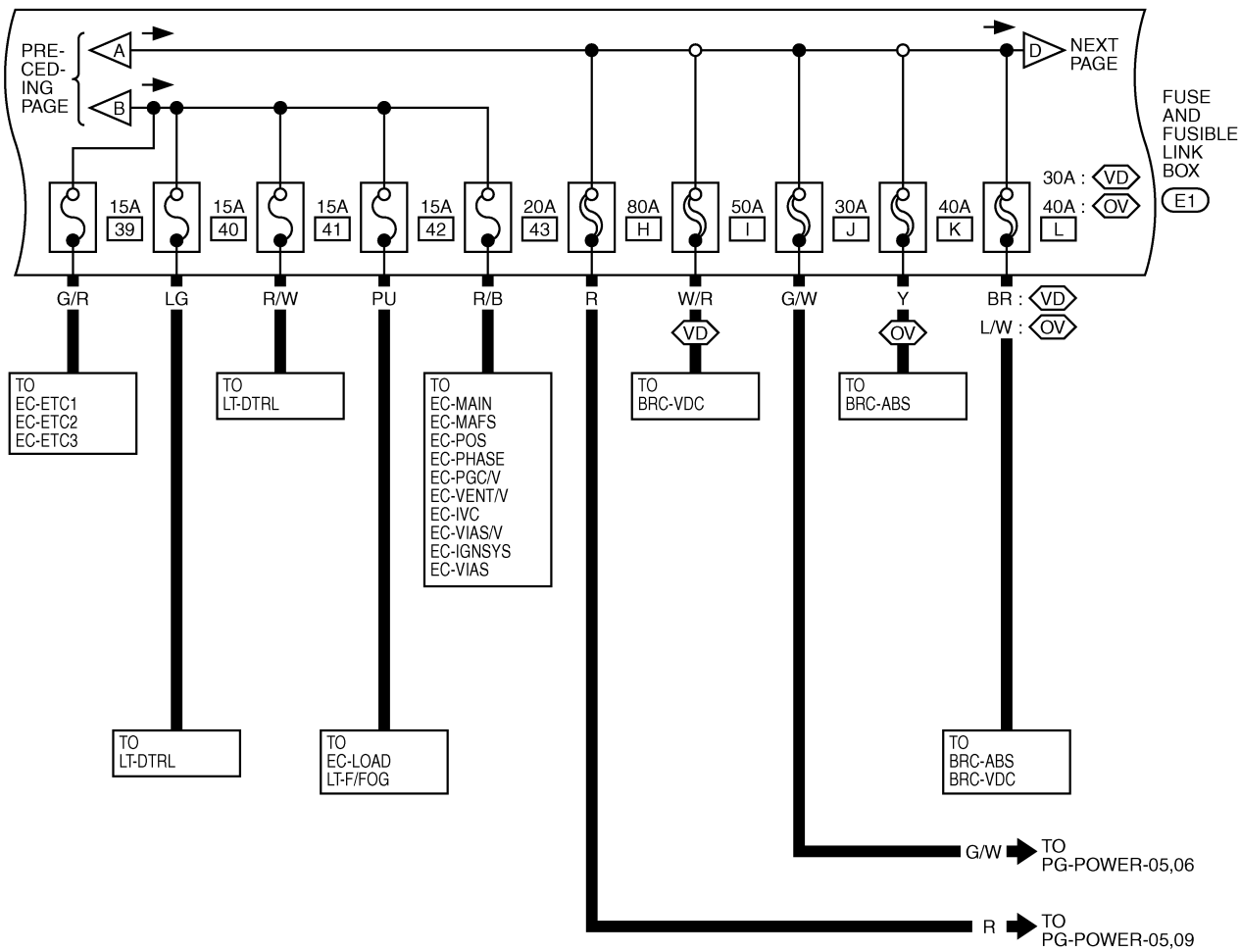


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POWER SUPPLY ROUTING

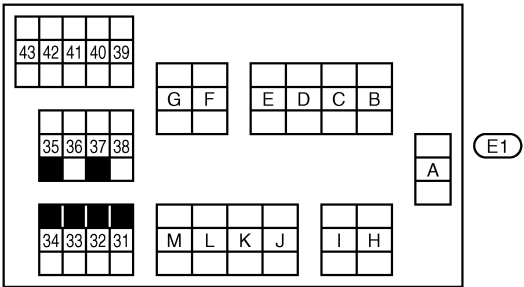
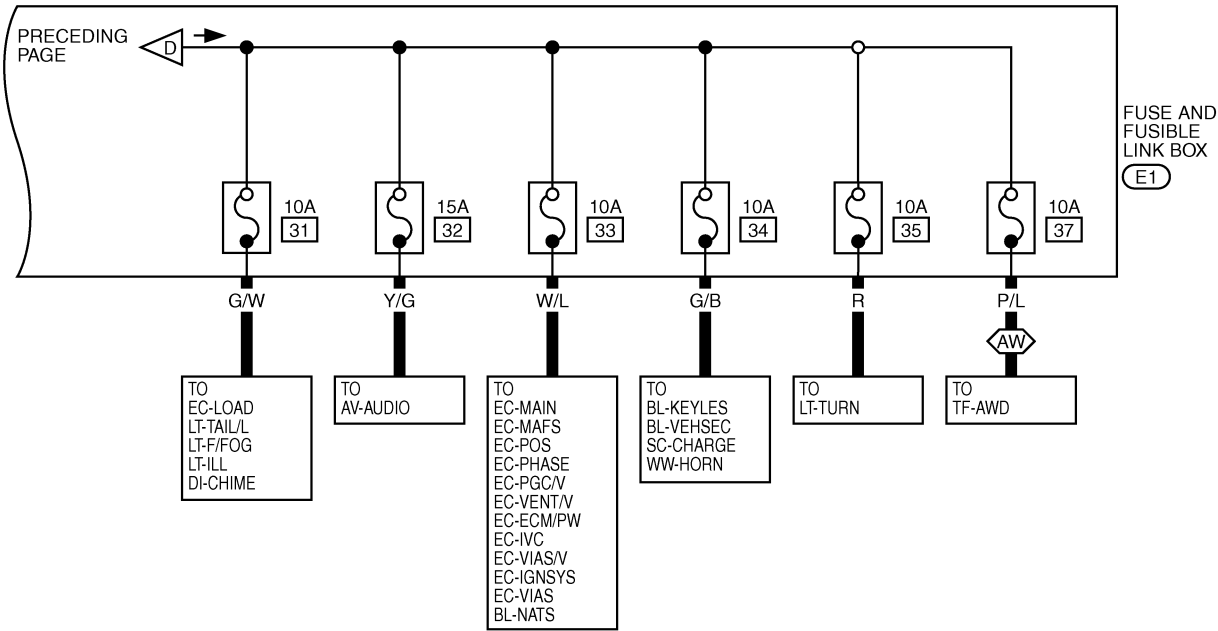
PG-POWER-02

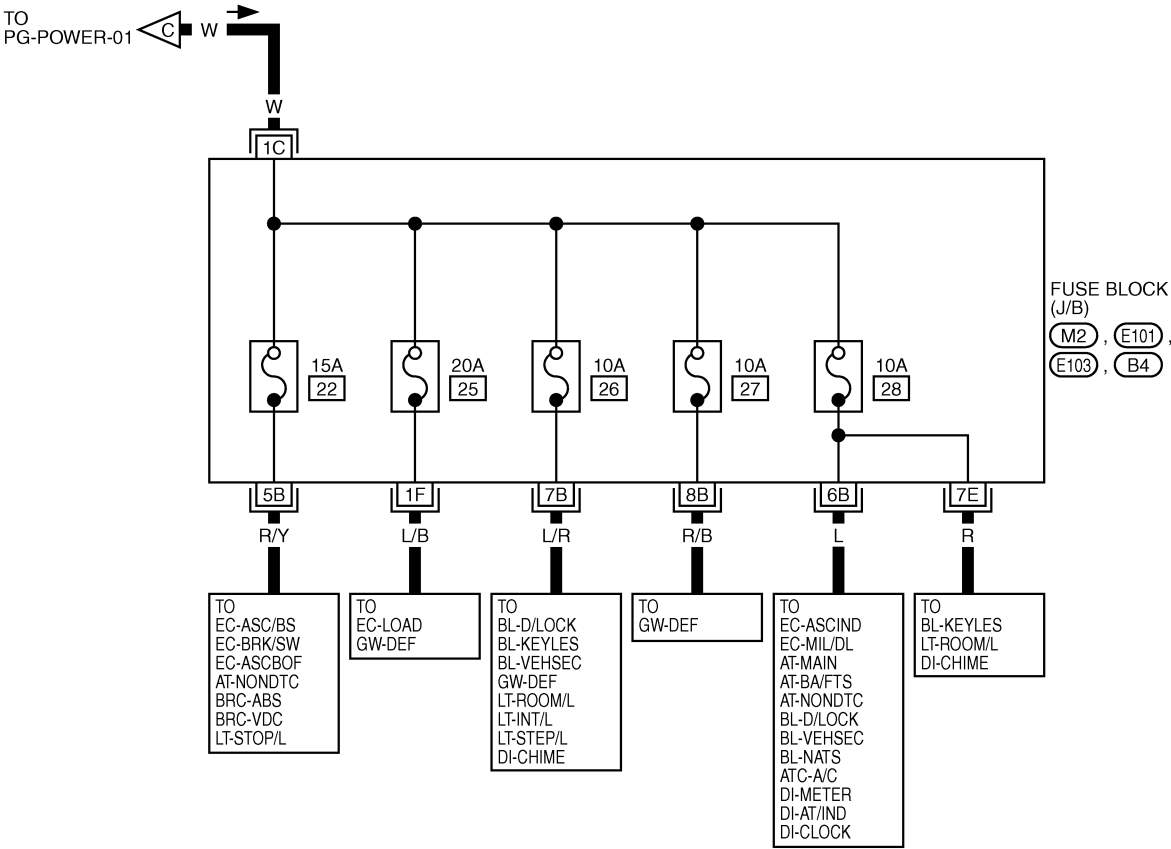
VD : WITH VDC
OV : WITHOUT VDC



TKWB0204E

AWD MODELS





REFER TO THE FOLLOWING.

M2, E101, E103, B4

-FUSE BLOCK-JUNCTION BOX (J/B)

28		20	15	10	5
	24	19	14	9	4
27	23	18	13	8	3
26	22	17	12	7	2
25	21	16	11	6	1

UP



A
B
C
D
E
F
G
H
I
J
G
L
M

PG-POWER-05

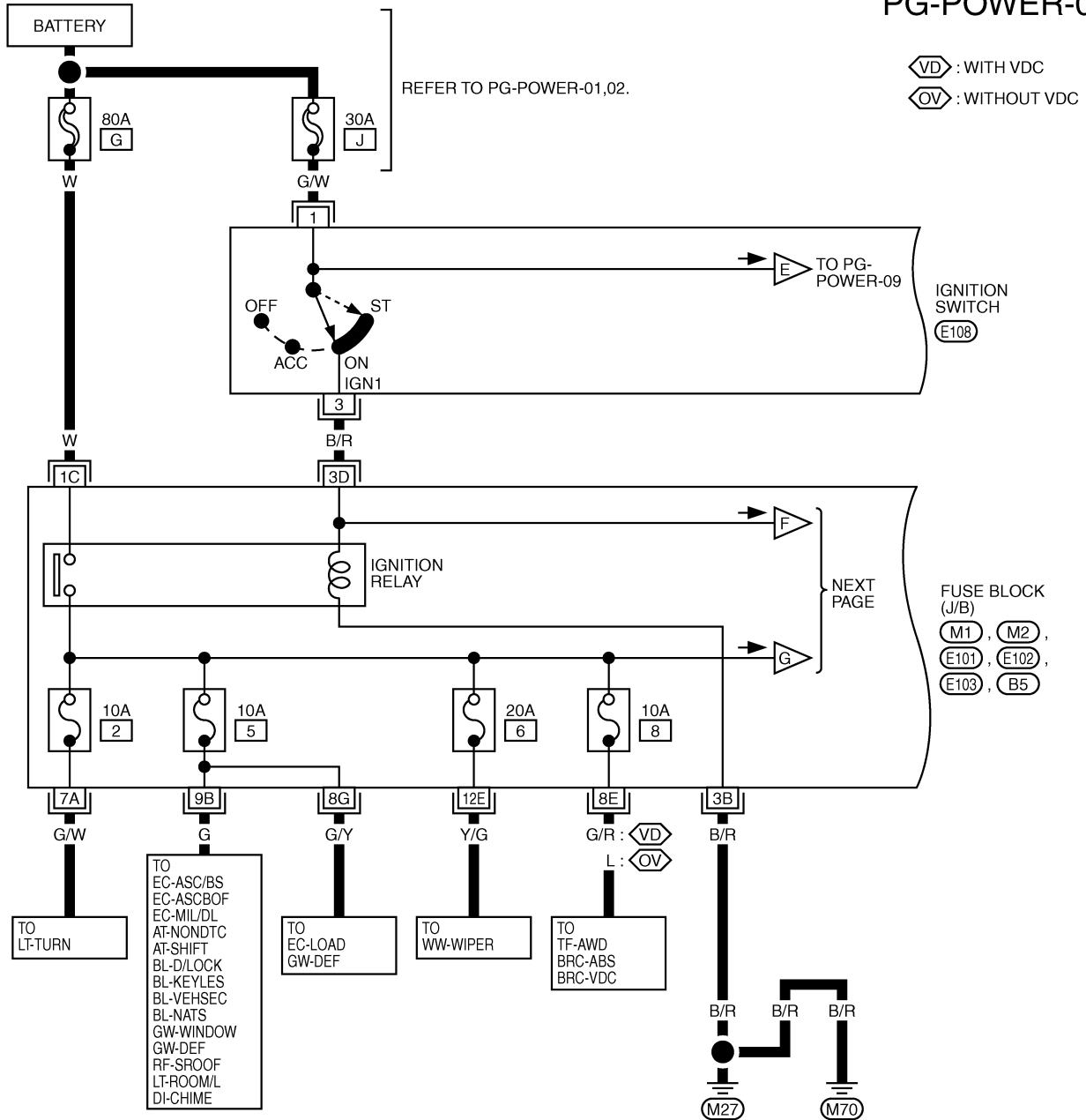


2005 X-Trail

POWER SUPPLY ROUTING

IGNITION POWER SUPPLY - IGNITION SW. IN "ON" AND/OR "START"

PG-POWER-06



3	5	1
4	2	6

E108
W

REFER TO THE FOLLOWING.

M1, M2, E101, E102, E103, B5 -FUSE BLOCK-JUNCTION BOX (J/B)

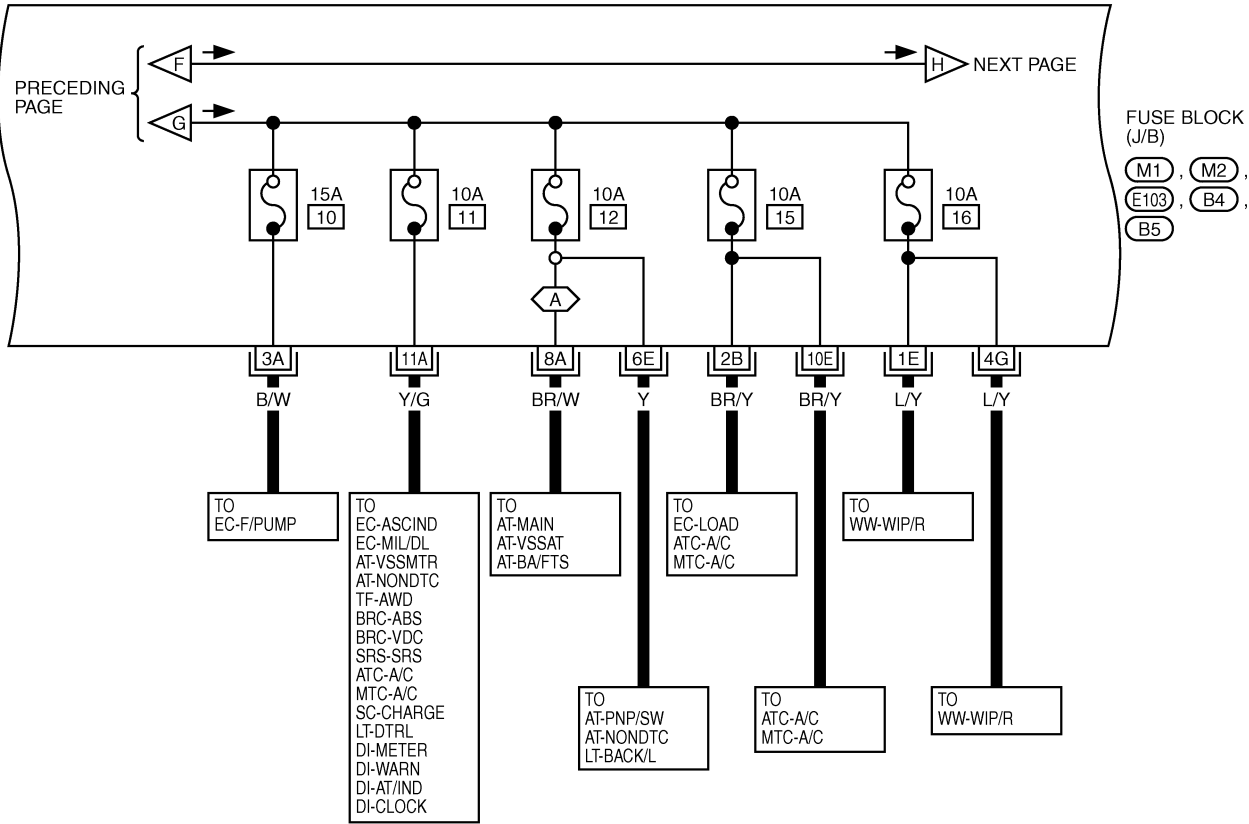
28	20	15	10	5
27	24	19	14	9
26	23	18	13	8
25	22	17	12	7
	21	16	11	6
				1

UP



TKWB0208E

 : WITH A/T



REFER TO THE FOLLOWING.

 ,  ,  ,  ,

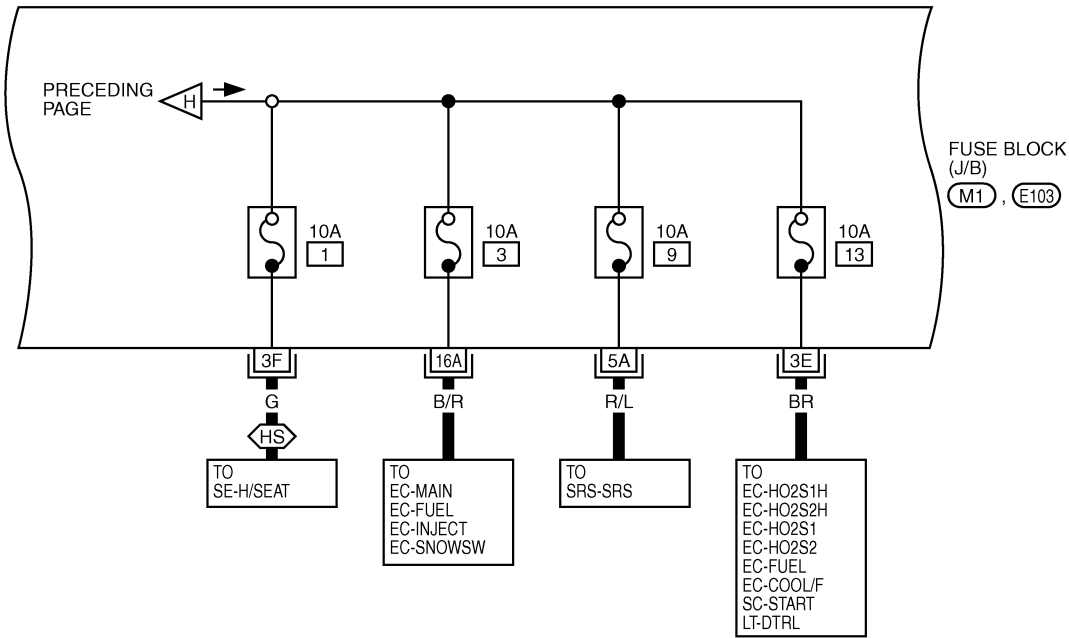
 - FUSE BLOCK-
JUNCTION BOX (J/B)

28		20	15	10	5
	24	19	14	9	4
27	23	18	13	8	3
26	22	17	12	7	2
25	21	16	11	6	1

UP



HS : WITH HEATED SEAT



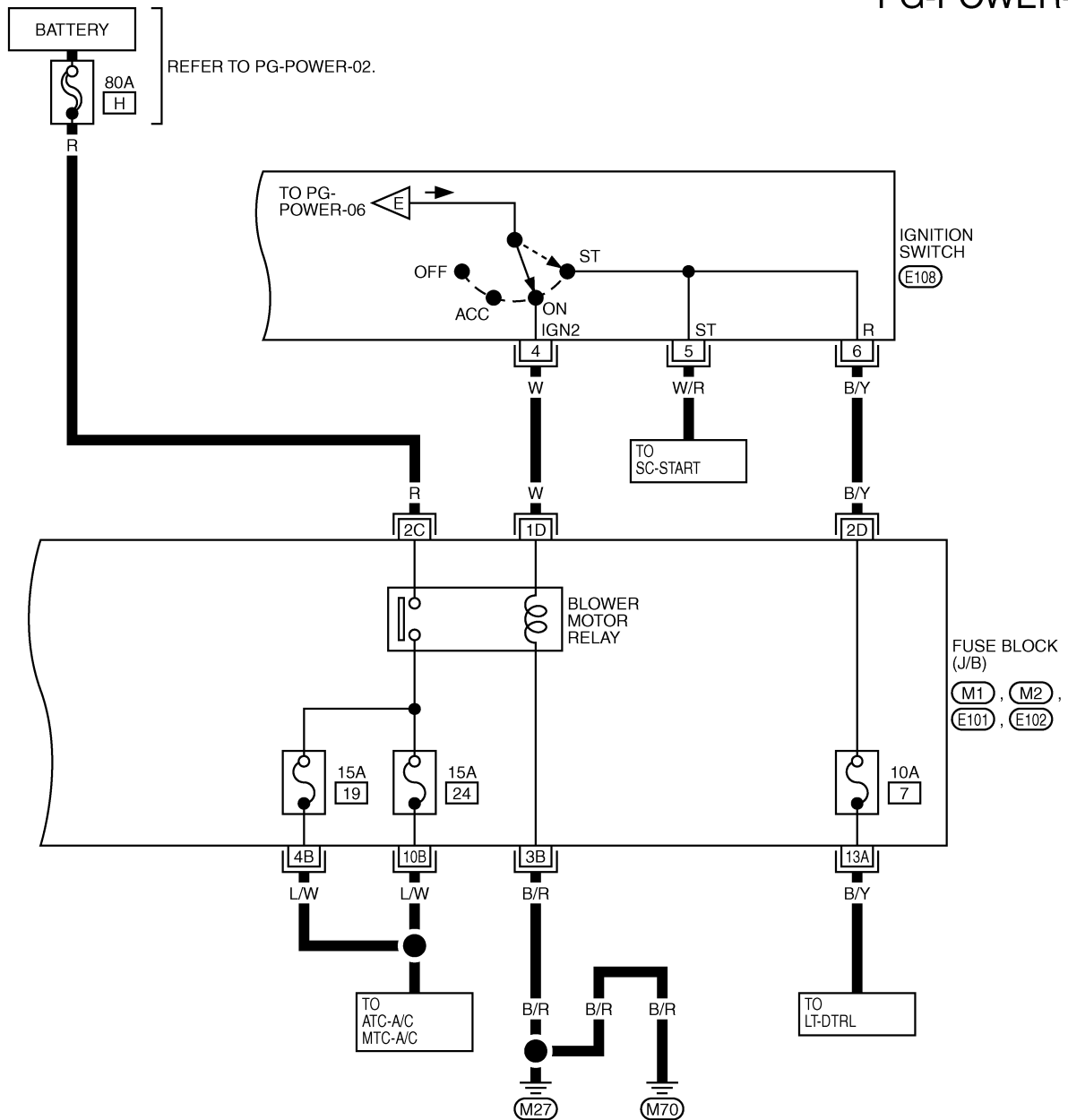
REFER TO THE FOLLOWING.

M1, E103
- FUSE BLOCK-JUNCTION BOX (J/B)

28		20	15	10	5
	24	19	14	9	4
27	23	18	13	8	3
26	22	17	12	7	2
25	21	16	11	6	1

UP
↑

TKWB0210E



3	5	1
4	2	6

E108
W

E108
W

REFER TO THE FOLLOWING.

(M1), (M2), (E101), (E102)

- FUSE BLOCK-JUNCTION BOX (J/B)

28		20	15	10	5
	24	19	14	9	4
27	23	18	13	8	3
26	22	17	12	7	2
25	21	16	11	6	1

UP

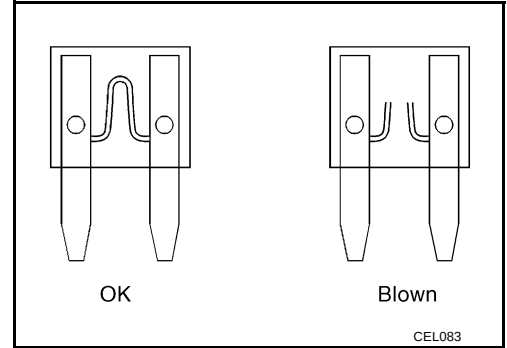


POWER SUPPLY ROUTING

Fuse

AKS00BET

- 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.



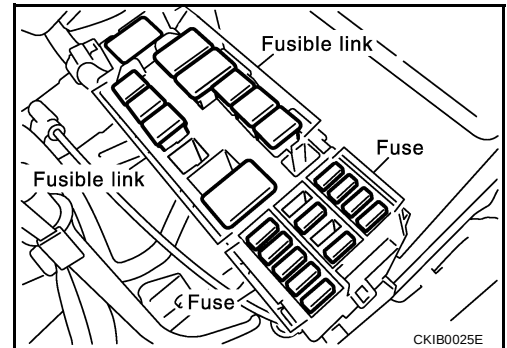
Fusible Link

AKS00BEU

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.

CAUTION:

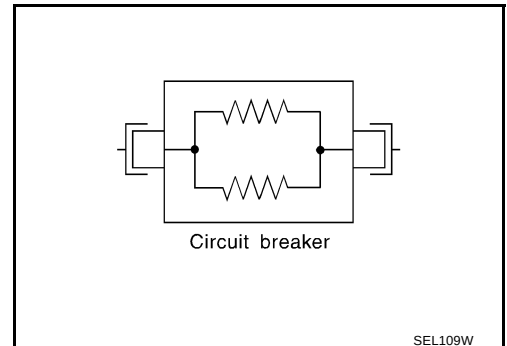
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other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



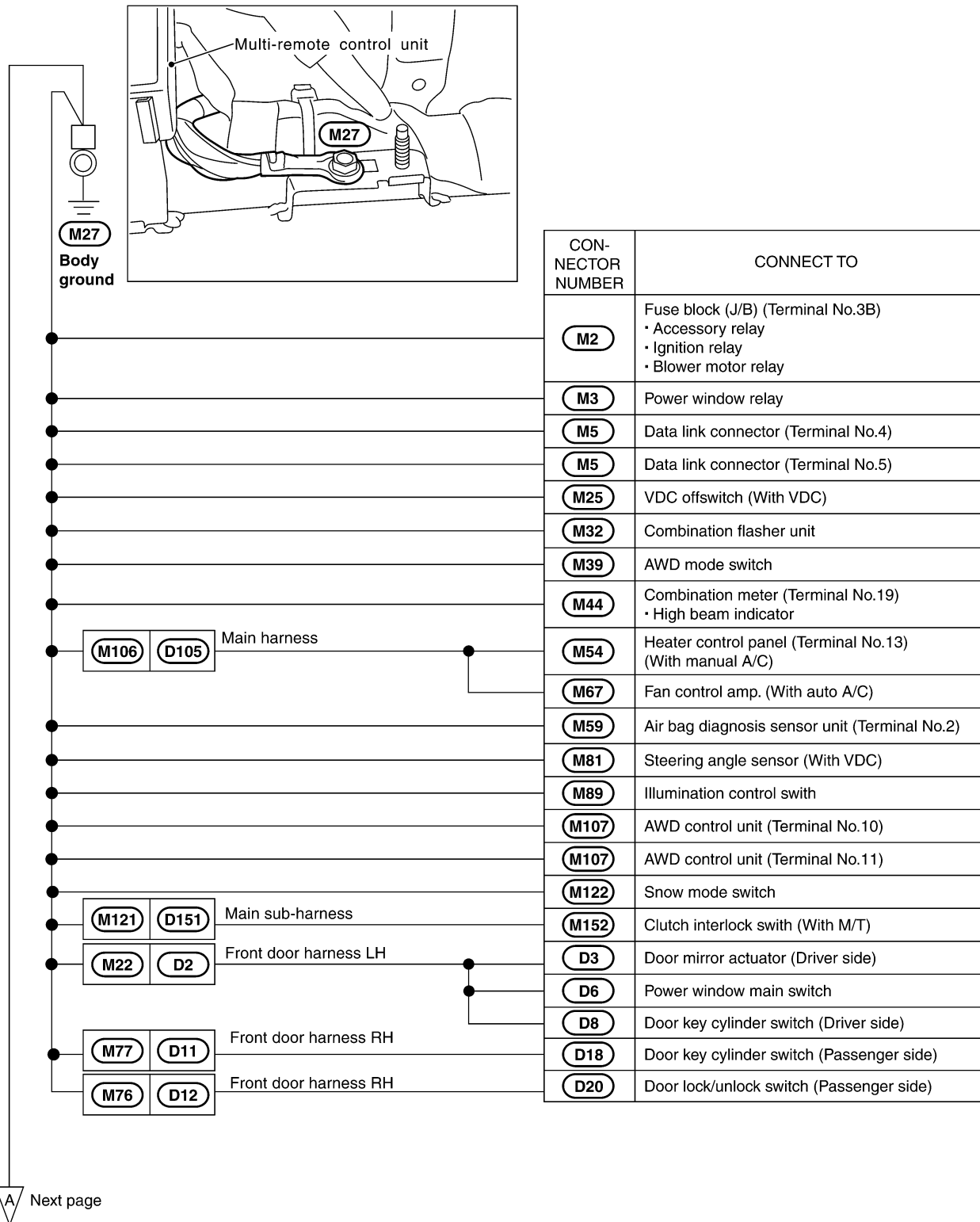
Circuit Breaker

AKS00BEV

The PTC thermistor generates heat in response to current flow. The temperature (and resistance) of the thermistor element varies with current flow. Excessive current flow will cause the element's temperature to rise. When the temperature reaches a specified level, the electrical resistance will rise sharply to control the circuit current. Reduced current flow will cause the element to cool. Resistance falls accordingly and normal circuit current flow is allowed to resume.

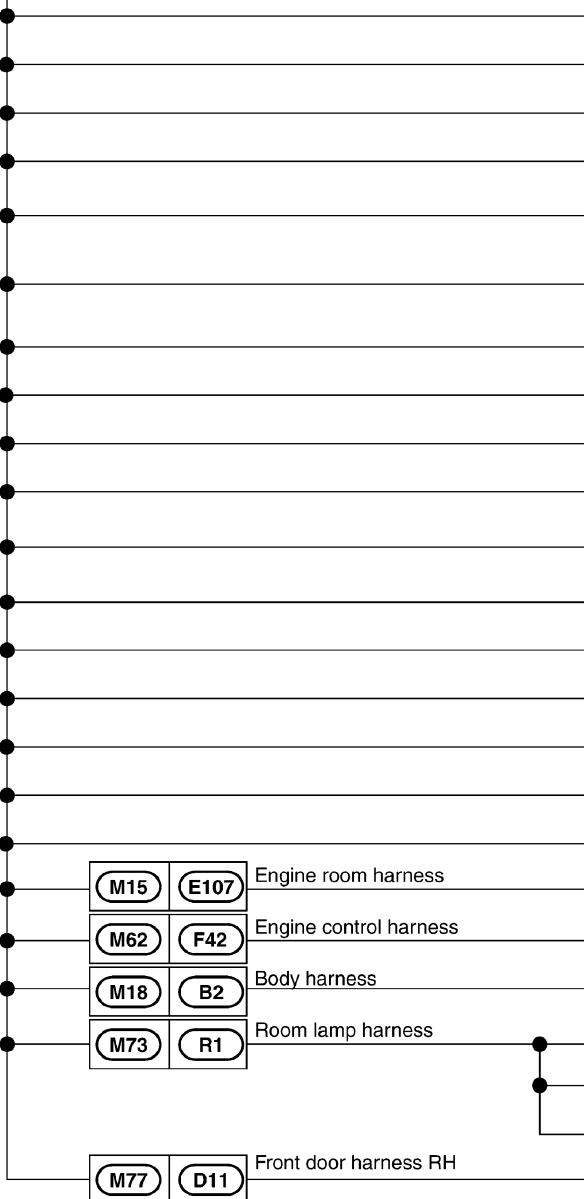
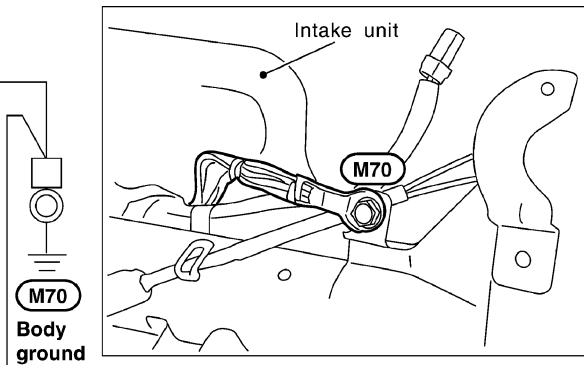


GROUND

Ground Distribution
MAIN HARNESS

GROUND

A Preceding page

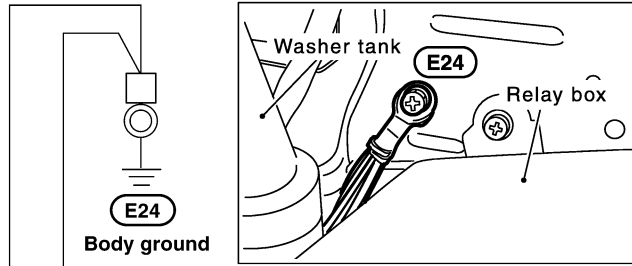


CON- NECTOR NUMBER	CONNECT TO
M26	Door mirror remote control switch
M35	Front power socket
M37	Mode door motor (With auto A/C)
M38	Air mix door motor (With auto A/C)
M44	Combination meter (Terminal No.21) • CPU
M45	Combination meter (Terminal No.64) • Turn signal • Front fog
M47	Intake door motor (With auto A/C)
M50	Rear window defogger switch (Terminal No.2)
M50	Rear window defogger switch (Terminal No.4)
M52	A/C auto amp. (With auto A/C)
M55	Heater control panel (Terminal No.5) (With manual A/C)
M58	A/T device (Terminal No.6)
M58	A/T device (Terminal No.2)
M91	Smart entrance control unit (Terminal No.43)
M92	Smart entrance control unit (Terminal No.64)
M118	ECM (Terminal No.115)
M118	ECM (Terminal No.116)
E109	NATS IMMU
F13	Shield wire (Knock sensor)
B31	Fuel level sensor unit
R2	Map lamp (Without sunroof)
R3	Sunroof switch
R11	Map lamp (With sunroof)
D14	Door mirror actuator (Passenger side)

CKIB0027E

GROUND

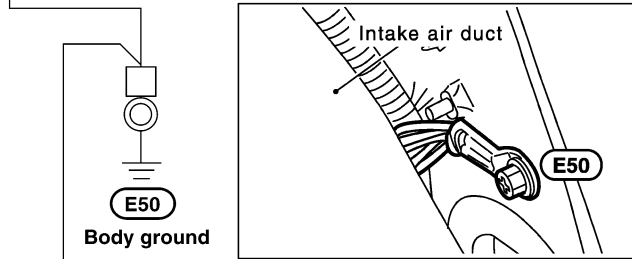
ENGINE ROOM HARNESS



CON- NECTOR NUMBER	CONNECT TO
E7	Front fog lamp relay
E11	Cooling fan relay-3
E13	Daytime light relay LH
E16	Daytime light relay RH
E43	Parking lamp LH
E45	Front fog lamp LH
E83	Front side markerlamp LH



CON- NECTOR NUMBER	CONNECT TO
E19	Brake fluid level switch
E20	Side turn signal lamp RH
E25	Front turn signal lamp RH
E47	Front turn signal lamp LH
E48	Side turn signal lamp LH

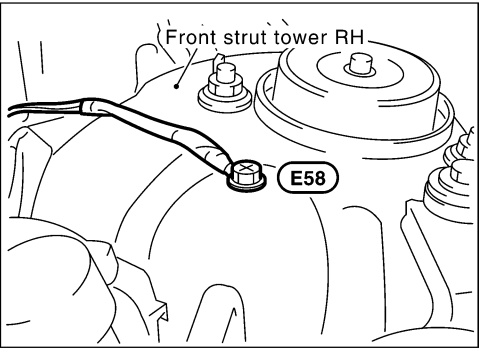
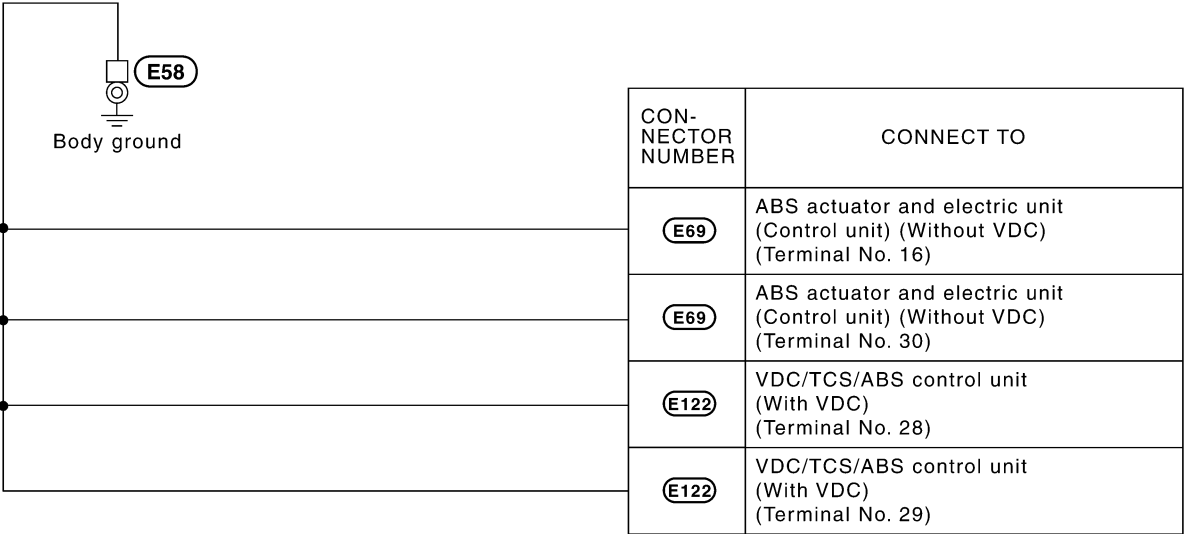
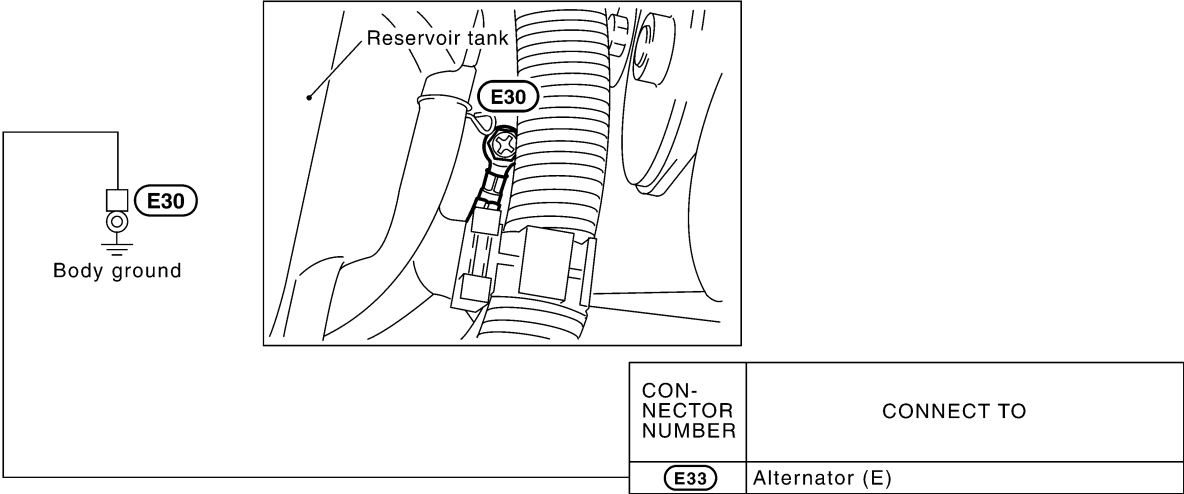


CON- NECTOR NUMBER	CONNECT TO
E18	Front wiper motor
E26	Headlamp RH
E27	Front fog lamp RH
E29	Parking lamp RH
E41	Cooling fan motor-1
E42	Cooling fan motor-2
E54	Hood switch
E81	Washer level sensor
E82	Front side makerlamp RH
E112	Combination switch (Terminal No.17) (Front wiper and washer switch)
E112	Combination switch (Terminal No.24) (Rear wiper and washer switch)
E115	Daytime light control unit



CK1B0028E

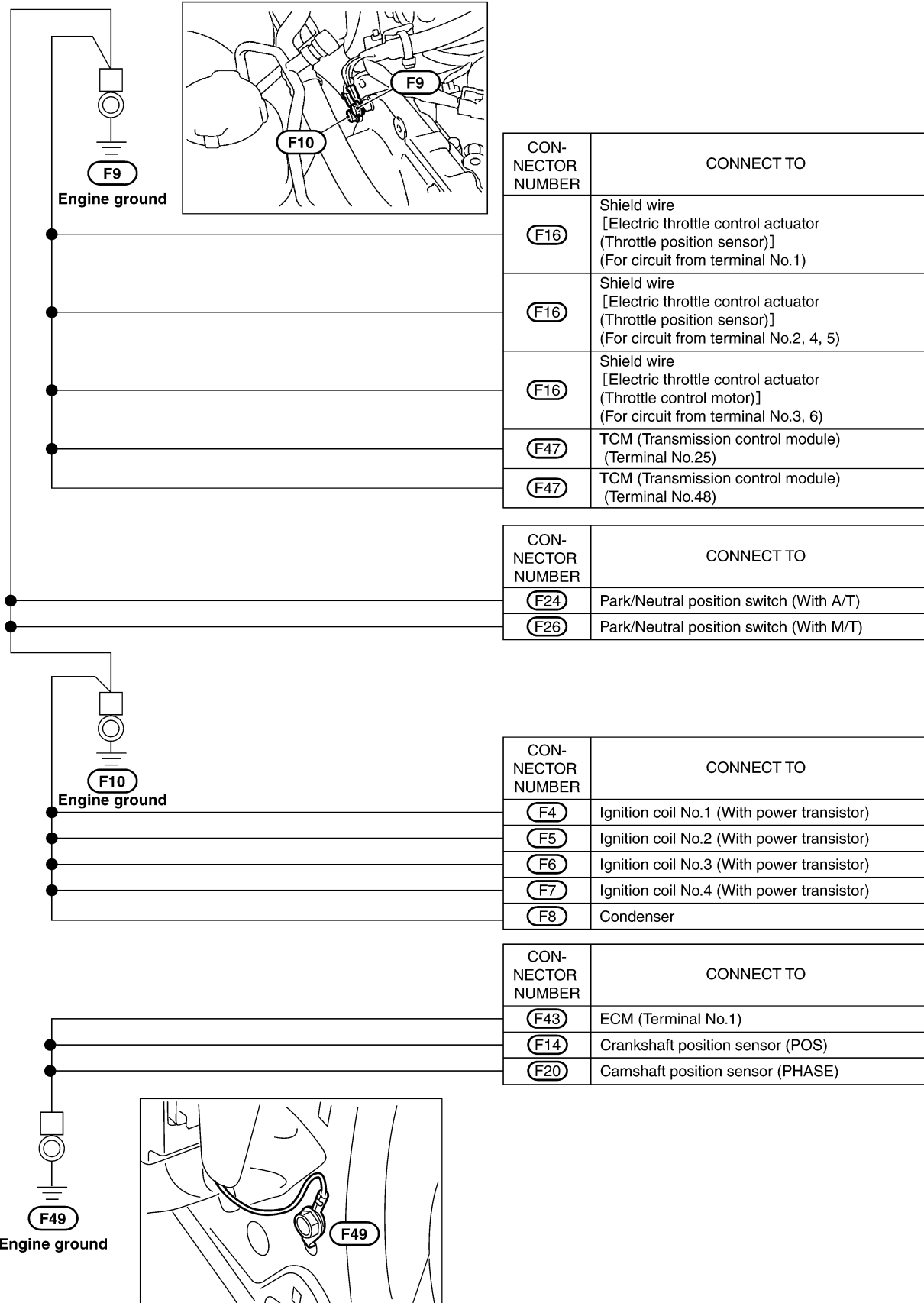
GROUND



CKIB0029E

GROUND

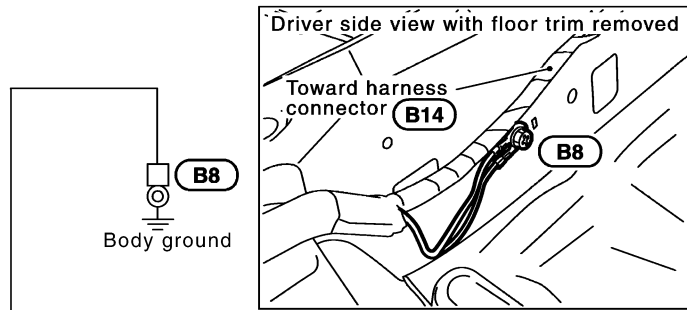
ENGINE CONTROL HARNESS



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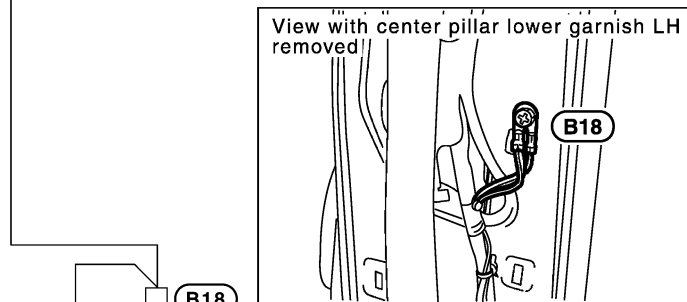
GROUND

BODY HARNESS



CON- NECTOR NUMBER	CONNECT TO
B10	Seat belt buckle switch (Driver side) (Without power seat)
B11	Heated seat LH (Without power seat)
B16	Front door switch (Driver side)
B23	Rear power socket
B31	Fuel pump
B33	Condenser
B302	Seat belt buckle switch (Driver side) (With power seat)
B303	Heated seat LH (With power seat)
B308	Power seat switch (Driver side) (With power seat)

*: This sub-harness is not shown in "HARNESS LAYOUT".

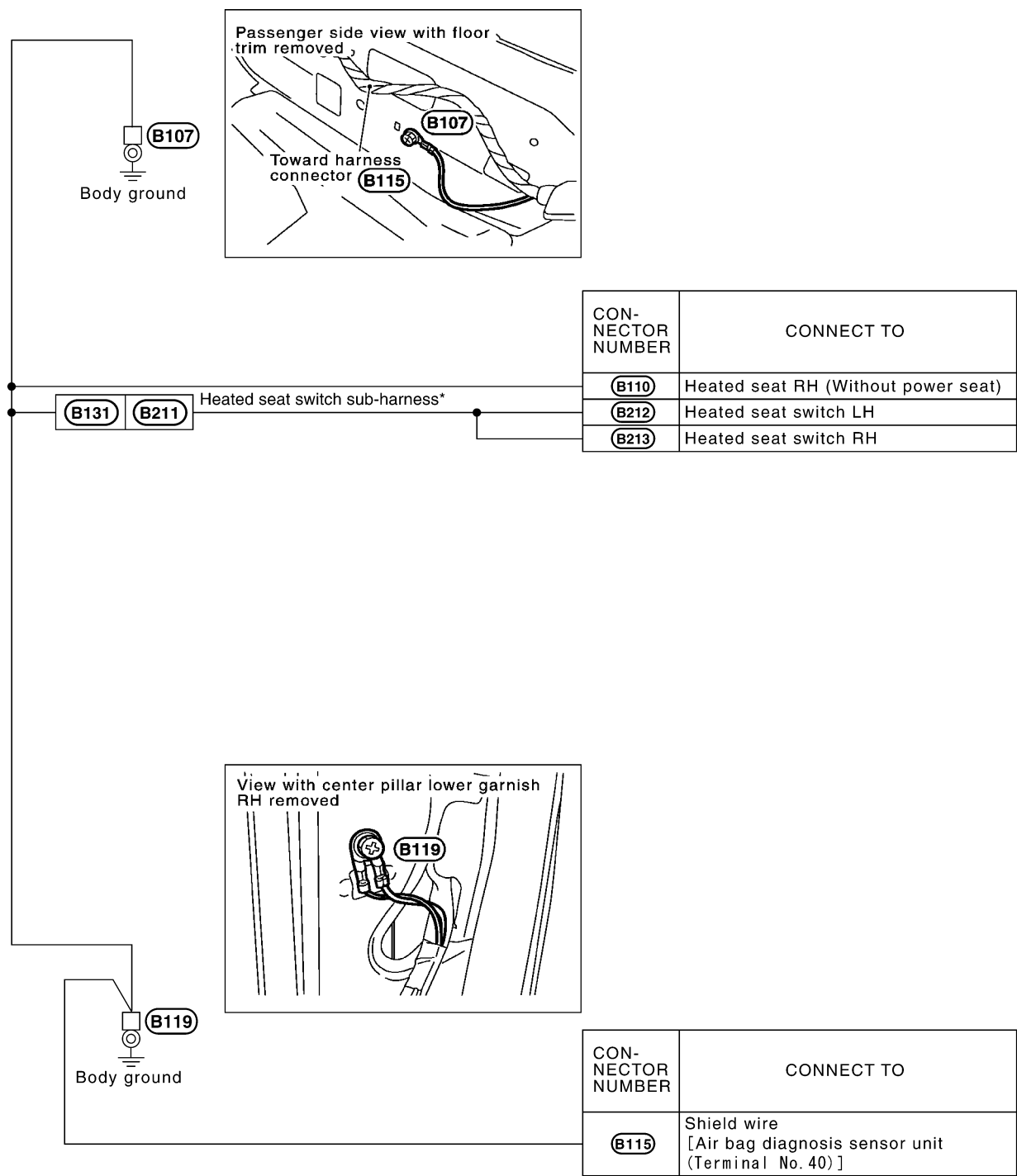


CON- NECTOR NUMBER	CONNECT TO
B14	Shield wire [Air bag]diagnosis sensor unit (Terminal No. 44)]
B24	Rear combination lamp RH • Stop lamp • Tail lamp • Turn signal • Back-up
B28	Rear combination lamp LH • Stop lamp • Tail lamp • Turn signal • Back-up
B42	Rearside markerlamp RH
B43	Rearside markerlamp LH

CKIB0031E

GROUND

BODY NO. 2 HARNESS

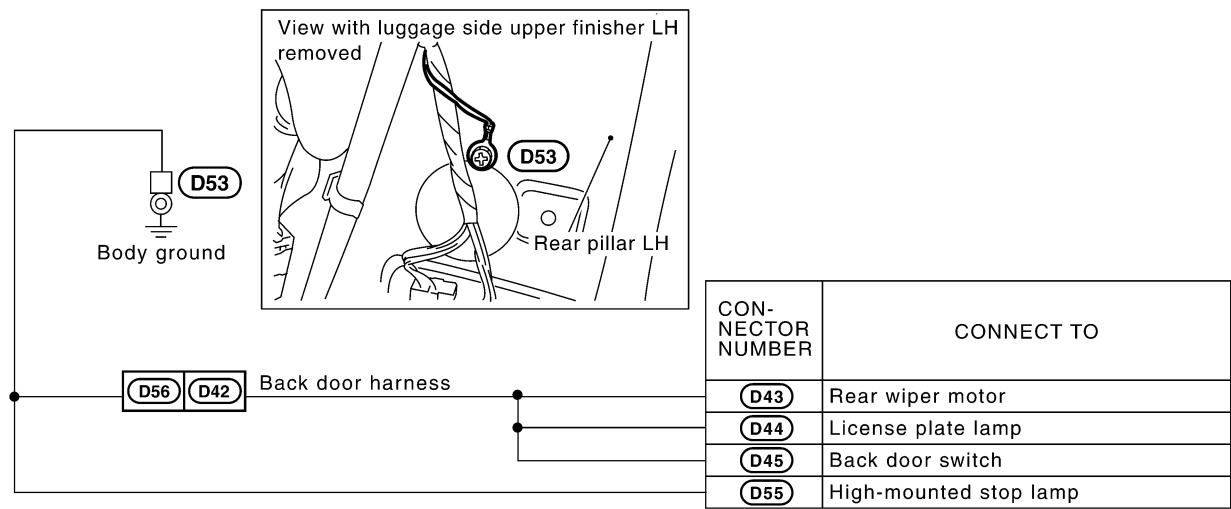


* : This sub-harness is not shown in "HARNESS LAYOUT".

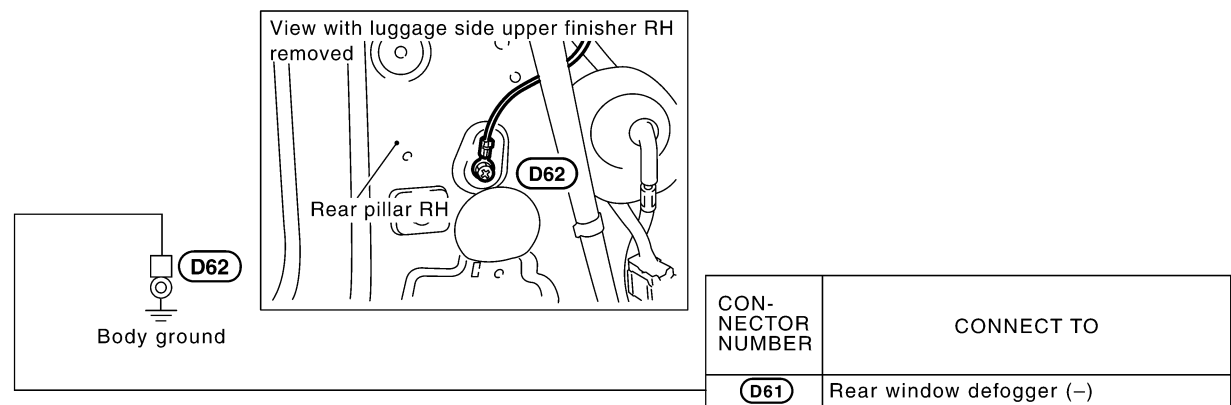
GROUND

BACK DOOR SUB HARNESS/REAR WINDOW DEFOGGER HARNESS

BACK DOOR SUB-HARNESS



REAR WINDOW DEFOGGER HARNESS



HARNESS

PFP:00011

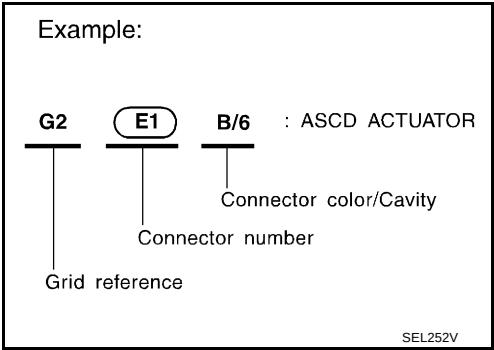
Harness Layout

AKS00BEX

HOW TO READ HARNESS LAYOUTS

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

- Main Harness
- Engine Room Harness (Engine Compartment)



To Use the Grid Reference

1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the figure, 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.

CONNECTOR SYMBOL

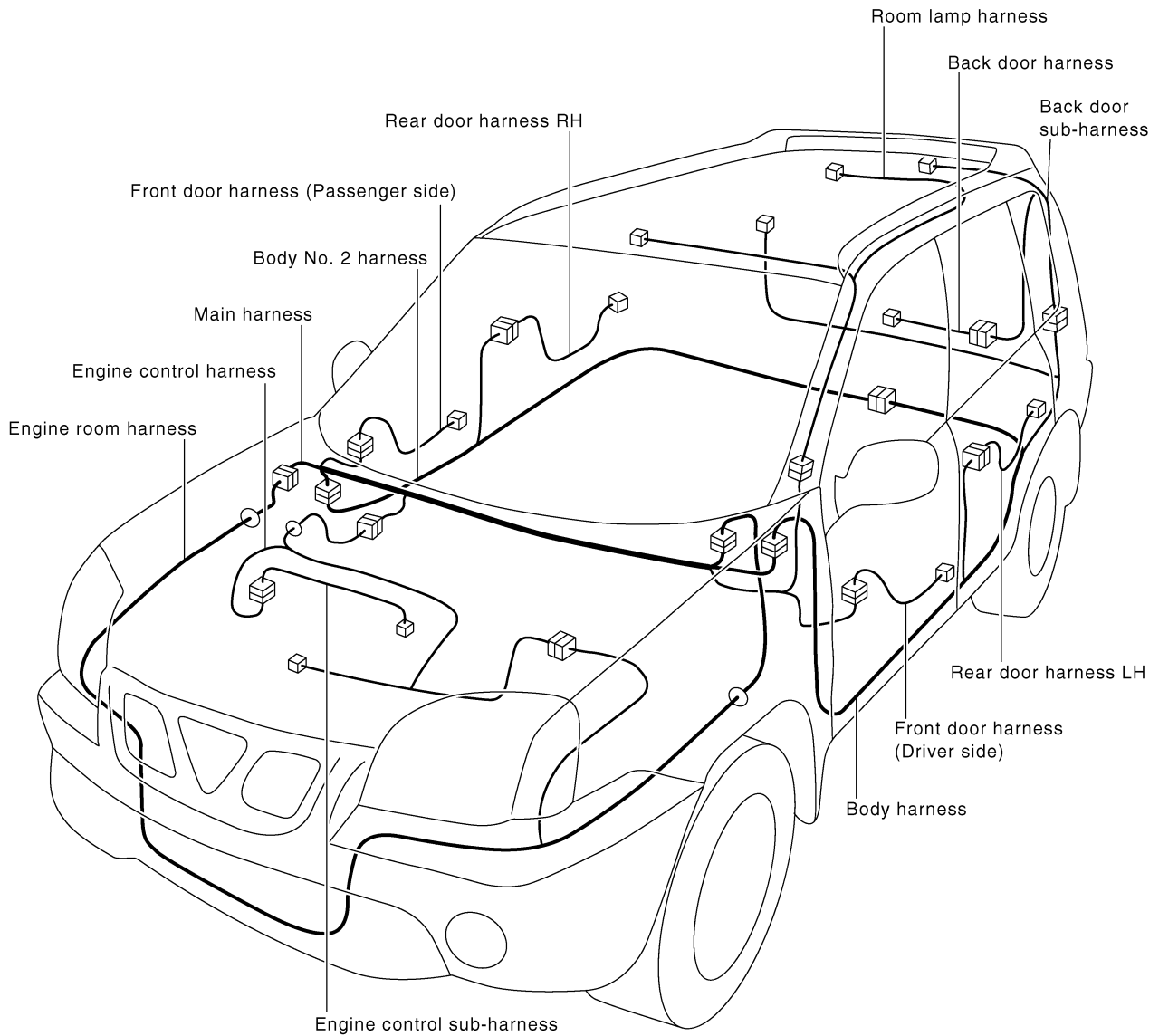
Main symbols of connector (in Harness Layout) are indicated in the below.

Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
• Cavity: Less than 4 • Relay connector				
• Cavity: From 5 to 8				
• Cavity: More than 9	—	—		
• Ground terminal etc.	—			

SKJA0404E

HARNESS

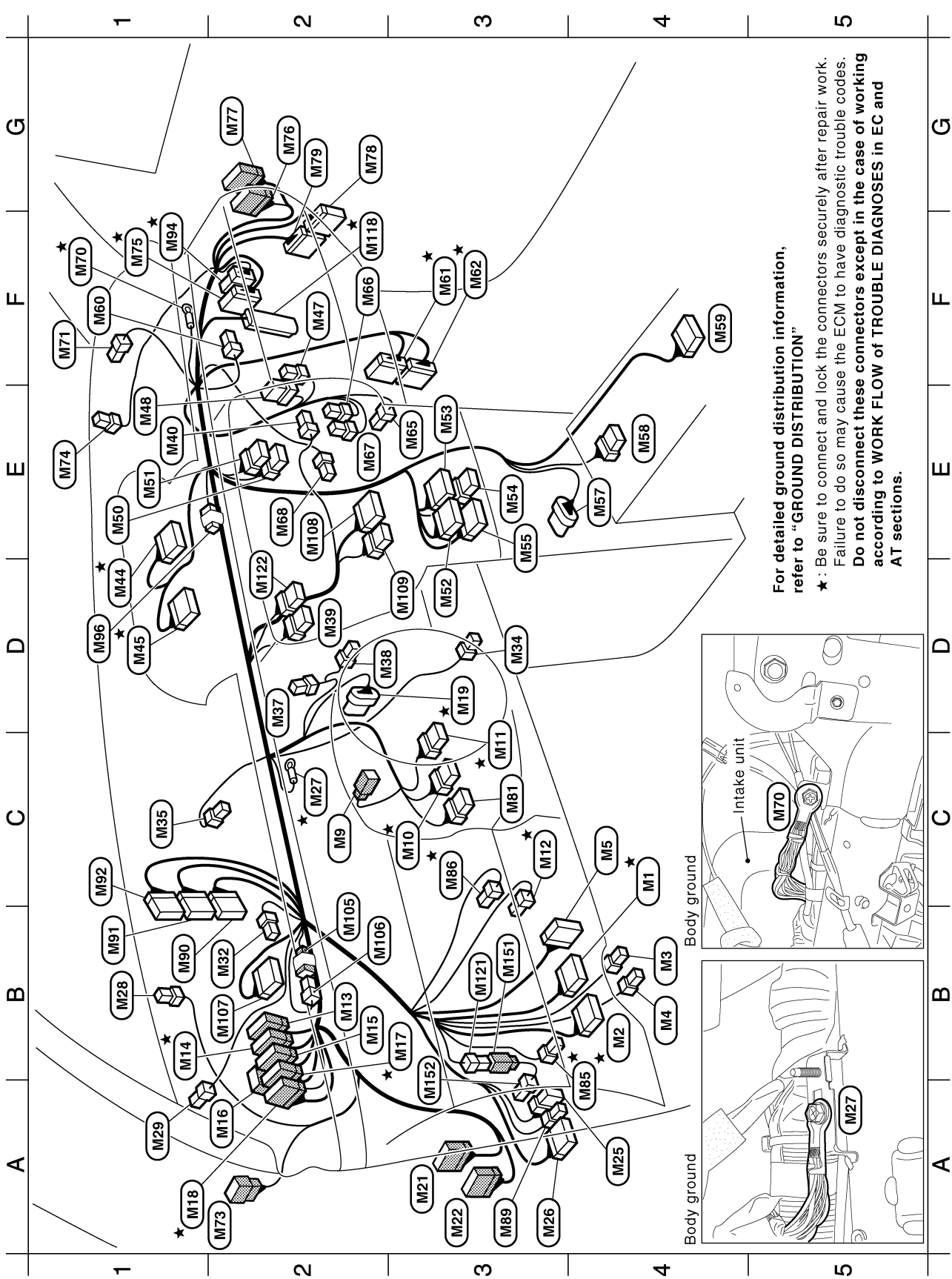
OUTLINE



TKIA0131E

HARNESS

MAIN HARNESS

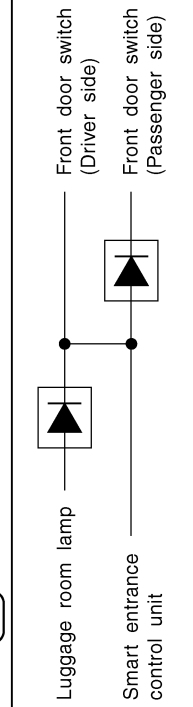


TKIB0041E

C4	★	(M1)	W/16	: Fuse block (J/B)	C1	(M33)	B/2	: Front power socket	A2	(M73)	W/8	: To (R1)
B4	★	(M2)	W/10	: Fuse block (J/B)	D2	(M37)	W/3	: Mode door motor (With auto A/C)	E1	(M74)	B/2	: Sunload sensor (With auto A/C)
B4		(M3)	L/4	: Power window relay	D2	(M38)	W/3	: Air mix door motor (With auto A/C)	F1	★ (M75)	BR/20	: To (E116) (AWD models)
B4		(M4)	W/2	: Circuit breaker (PTC)	D2	(M39)	GY/8	: AWD mode switch (AWD models)	G2	(M76)	BR/12	: To (D12)
C4		(M5)	W/16	: Data link connector	E1	(M40)	W/2	: Roof antenna (Via sub-harness)	G2	(M77)	W/12	: To (D11)
C2		(M9)	BR/2	: Key switch	D1	★ (M44)	W/40	: Combination meter	G2	(M78)	W/12	: To (B105)
C3	★	(M10)	Y/6	: Combination switch	D1	★ (M45)	W/24	: Combination meter	G2	(M79)	W/10	: To (B106)
				(Spiral cable)	F2	(M47)	W/3	: Intake door motor (With auto A/C)	C3	(M81)	W/8	: Steering angle sensor (With VDC)
C3	★	(M11)	GY/8	: Combination switch	E1	(M48)	B/6	: Intake door motor (With manual A/C)	A4	★ (M85)	L/2	: ASCD clutch switch (With M/T)
				(Spiral cable)	E1	(M50)	W/6	: Rear window defogger switch (With manual A/C)	C3	★ (M86)	BR/2	: ASCD brake switch
C3	★	(M12)	W/4	: Stop lamp switch (With A/T)	E1			: Rear window defogger switch (With manual A/C)	A3	(M89)	W/3	: Illumination control switch
			B/2	: Stop lamp switch (With M/T)	E1	(M51)	W/8	: Hazard switch	B1	(M90)	W/24	: Smart entrance control unit
B2		(M13)	W/12	: To (E105)	E1	(M52)	GY/20	: A/C auto amp. (With auto A/C)	B1	(M91)	GY/24	: Smart entrance control unit
B1	★	(M14)	BR/16	: To (E106)	D3	(M53)	GY/16	: A/C auto amp. (With auto A/C)	C1	(M92)	GY/16	: Smart entrance control unit
B2		(M15)	W/16	: To (E107)	E3	(M54)	W/6	: Fan switch (With manual A/C)	F1	★ (M94)	W/8	: To (E125) (2WD models)
A2		(M16)	W/6	: To (B3)	E3	(M55)	W/12	: Heater control panel (With manual A/C)	D1	(M96)	L/4	: Diode
B3	★	(M17)	W/10	: To (B1)	E3				B2	(M105)	B/2	: To (M106)
A1	★	(M18)	BR/20	: To (B2)					B2	(M106)	B/2	: To (M105)
D3	★	(M19)	GY/6	: Accelerator pedal position sensor	E4	(M57)	W/5	: G sensor (AWD models)	B2	(M107)	W/16	: AWD control unit (AWD models)
					E4	(M58)	W/6	: A/T device (With A/T)	E2	(M108)	W/10	: Audio unit
A3		(M21)	W/16	: To (D1)	F4	(M59)	Y/20	: Air bag diagnosis sensor unit	D3	★ (M109)	W/6	: Audio unit
A3		(M22)	BR/12	: To (D2)	F1	(M60)	Y/2	: Front passenger air bag module	F2	★ (M118)	SMJ	: ECM
A4		(M25)	GY/6	: VDC off switch (With VDC)	F3	★ (M61)	BR/24	: To (F41)	B3	(M121)	W/2	: To (M151) (With M/T)
A3		(M26)	W/10	: Door mirror remote control switch	F3	★ (M62)	W/16	: To (F42)	D2	(M122)	BR/6	: Snow mode switch (2WD models)
					E3	(M65)	W/2	: Blower motor				
C2	★	(M27)	—	: Body ground	F2	(M66)	BR/4	: Fan resistor (With manual A/C)				
B1		(M28)	BR/2	: Security indicator lamp	E2	(M67)	W/4	: Fan control amp. (With auto A/C)	B3	(M151)	W/2	: To (M121) (With M/T)
A1		(M29)	BR/2	: Tweeter LH	E2	(M68)	W/4	: Intake sensor (With auto A/C)	B3	(M152)	L/2	: Clutch inter lock switch (With M/T)
B2		(M32)	B/3	: Combination flasher unit	F1	★ (M70)	—	: Body ground				
D3		(M34)	W/2	: In-vehicle sensor (With auto A/C)	F1	(M71)	BR/2	: Tweeter RH				

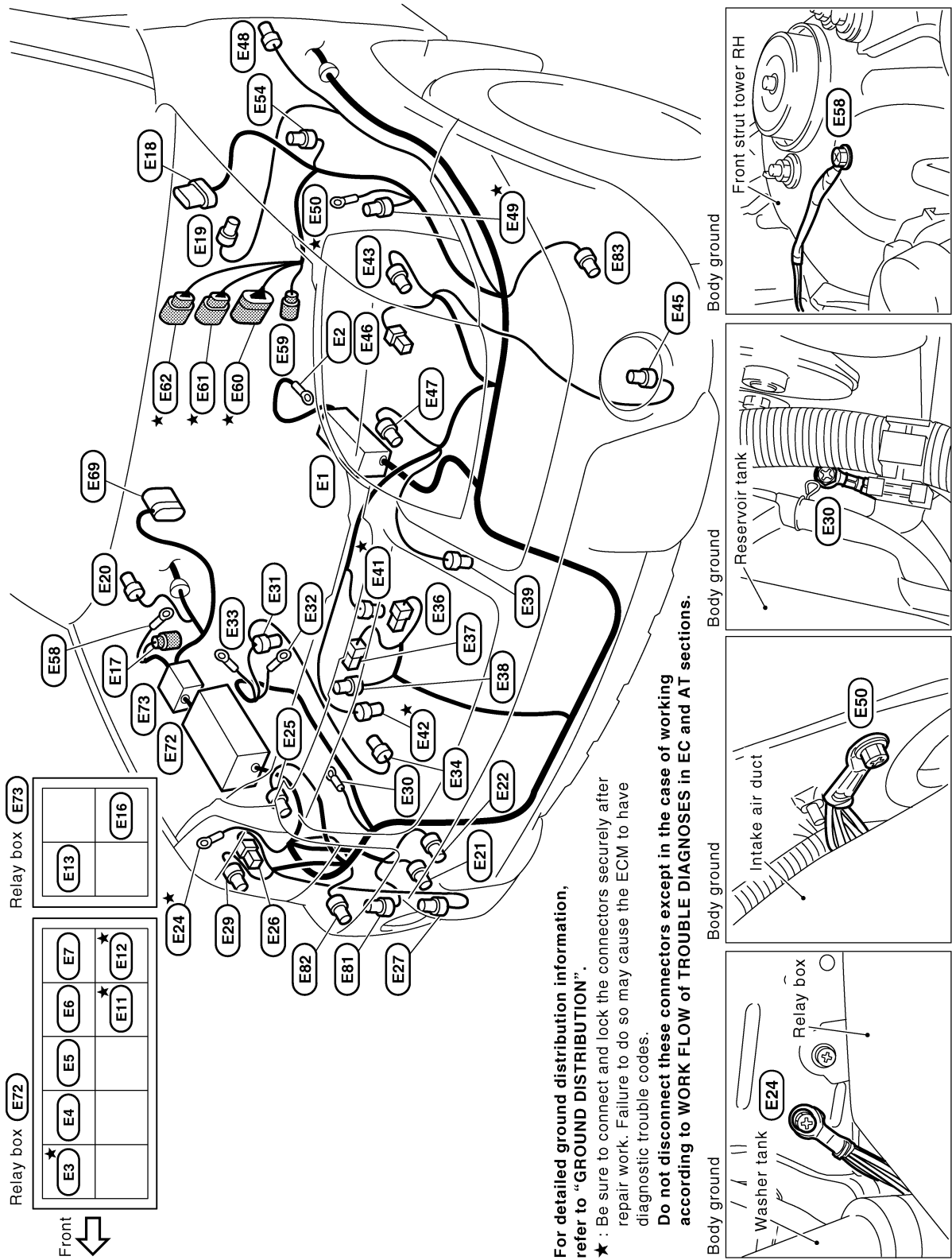
Main sub-harness

Diode (M96)



★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

ENGINE ROOM HARNESS
Engine Compartment for 2WD Models



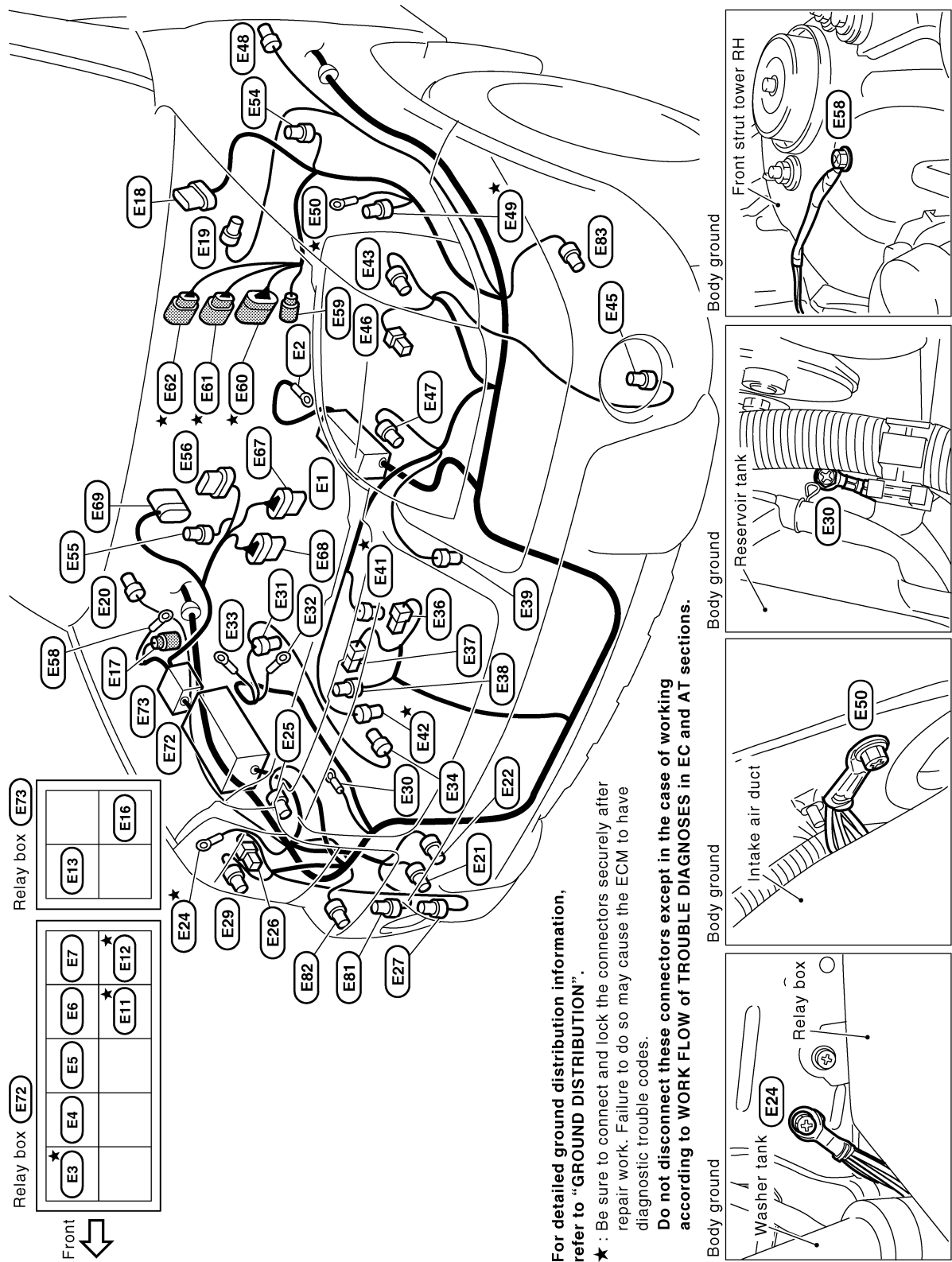
TKIB0045E

E2	(E1)	—	: Fuse and Fusible link box
F2	(E2)	—	: Battery (+)
A1	(E3)	BR/6	: Cooling fan relay-1
A1	(E4)	W/3	: Horn relay
B1	(E5)	L/4	: Air conditioner relay
B1	(E6)	L/4	: Park/Neutral position relay
B1	(E7)	L/4	: Front fog lamp relay
B1	(E11)	BR/6	: Cooling fan relay-3
B1	(E12)	L/4	: Throttle control motor relay
C1	(E13)	L/4	: Daytime light relay LH
C1	(E16)	L/4	: Daytime light relay RH
D1	(E17)	GY/2	: Front wheel sensor RH
G1	(E18)	GY/5	: Front wiper motor
F2	(E19)	GY/2	: Brake fluid level switch
D1	(E20)	BR/2	: Side turn signal lamp RH
C3	(E21)	GY/2	: Front washer motor
C3	(E22)	BR/2	: Rear washer motor
B1	(E24)	—	: Body ground
C2	(E25)	GY/2	: Front turn signal lamp RH
B2	(E26)	B/3	: Headlamp RH
B3	(E27)	—/2	: Front fog lamp RH
B2	(E29)	GY/3	: Parking lamp RH
C3	(E30)	—	: Body ground
D2	(E31)	GY/2	: Alternator
D2	(E32)	—	: Alternator
D2	(E33)	—	: Alternator
C3	(E34)	B/1	: Compressor
D3	(E36)	B/1	: Horn high
D3	(E37)	B/1	: Horn low
D3	(E38)	B/2	: Ambient sensor
D3	(E39)	B/3	: Refrigerant pressure sensor
D2	(E41)	GY/2	: Cooling fan motor-1
C3	(E42)	GY/4	: Cooling fan motor-2
F2	(E43)	GY/3	: Parking lamp LH
F4	(E45)	—/2	: Front fog lamp LH
F2	(E46)	B/3	: Headlamp LH
E3	(E47)	GY/2	: Front turn signal lamp LH
G2	(E48)	BR/2	: Side turn signal lamp LH

F3	★	(E49)	GY/2	: Dropping resistor
F2	★	(E50)	—	: Body ground
G2		(E54)	GY/2	: Hood switch
D1		(E58)	—	: Body ground
F2		(E59)	L/2	: Front wheel sensor LH
E2	★	(E60)	GY/9	: To (F36)
E2	★	(E61)	DGY/8	: To (F38)
E1	★	(E62)	GY/8	: To (F37)
E1		(E69)	SMJ	: ABS actuator and electric unit
A1, C1		(E72)	—	: Relay box
C1, D1		(E73)	—	: Relay box
B2		(E81)	BR/2	: Washer level sensor
B2		(E82)	GY/2	: Front side marker lamp RH
F4		(E83)	GY/2	: Front side marker lamp LH

★: Be sure to connect and lock the connectors securely after repair work.
 Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

Engine Compartment for AWD Models



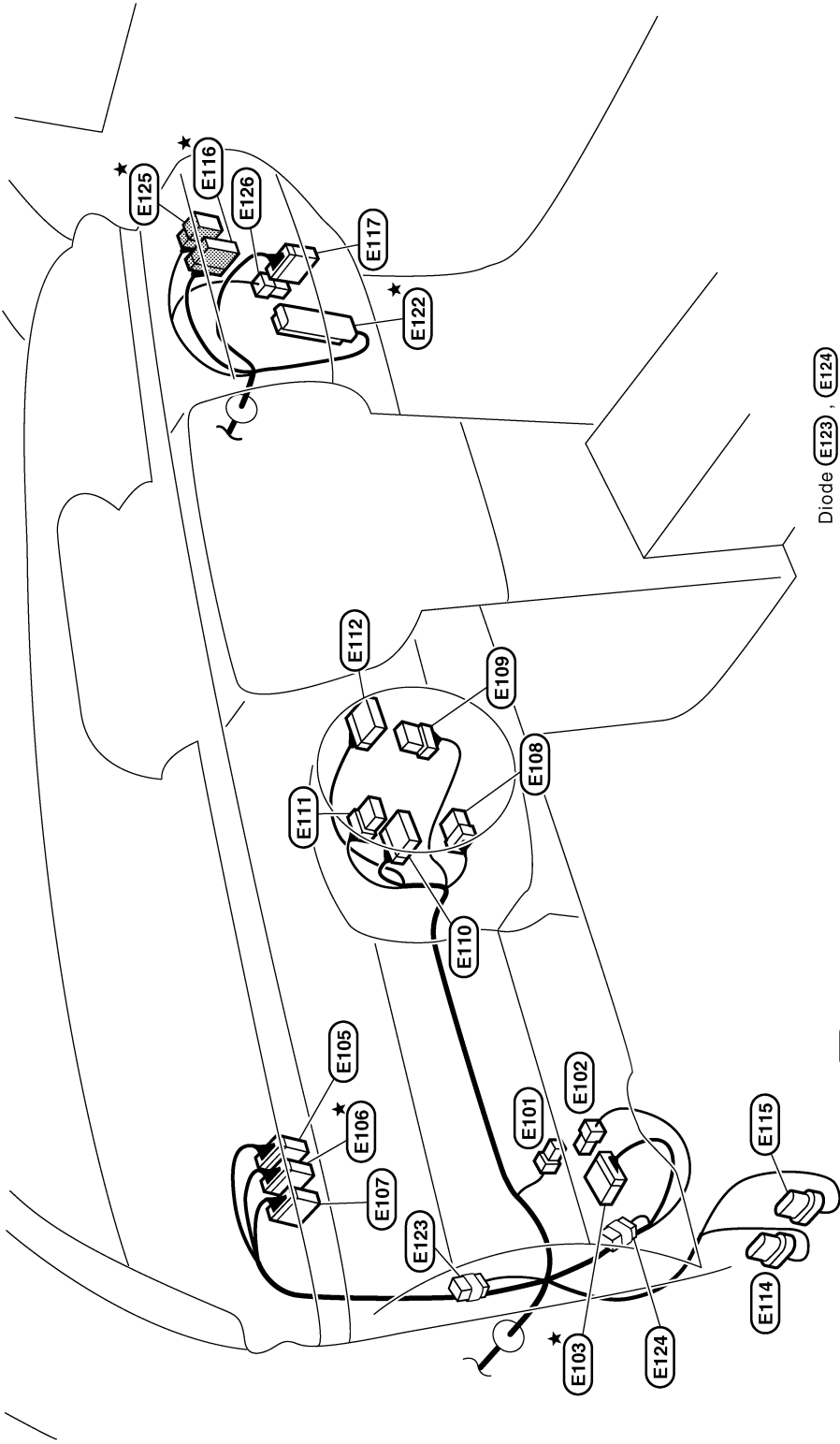
A
B
C
D
E
F
G
H
I
J
PG
L
M

E2	(E1)	-	Fuse and Fusible link box
F2	(E2)	-	Battery (+)
A1	★ (E3)	BR/6	Cooling fan relay-1
A1	(E4)	W/3	Horn relay
B1	(E5)	L/4	Air conditioner relay
B1	(E6)	L/4	Park/Neutral position relay
B1	(E7)	L/4	Front fog lamp relay
B1	★ (E11)	BR/6	Cooling fan relay-3
B1	★ (E12)	L/4	Throttle control motor relay
C1	(E13)	L/4	Daytime light relay LH
C1	(E16)	L/4	Daytime light relay RH
D1	(E17)	GY/2	Front wheel sensor RH
F1	(E18)	GY/5	Front wiper motor
F2	(E19)	GY/2	Brake fluid level switch
D1	(E20)	BR/2	Side turn signal lamp RH
C3	(E21)	GY/2	Front washer motor
C3	(E22)	BR/2	Rear washer motor
B1	★ (E24)	-	Body ground
C2	(E25)	GY/2	Front turn signal lamp RH
B2	(E26)	B/3	Headlamp RH
B3	(E27)	-/2	Front fog lamp RH
B2	(E29)	GY/3	Parking lamp RH
C3	(E30)	-	Body ground
D2	(E31)	GY/2	Alternator
D2	(E32)	-	Alternator
D2	(E33)	-	Alternator
C3	(E34)	B/1	Compressor
D3	(E36)	B/1	Horn high
D3	(E37)	B/1	Horn low
D3	(E38)	B/2	Ambient sensor
D3	(E39)	B/3	Refrigerant pressure sensor
D2	★ (E41)	GY/2	Cooling fan motor-1
C3	★ (E42)	GY/4	Cooling fan motor-2
F2	(E43)	GY/3	Parking lamp LH
F4	(E45)	-/2	Front fog lamp LH
F2	(E46)	B/3	Headlamp LH
E3	(E47)	GY/2	Front turn signal lamp LH

G2	(E48)	BR/2	Side turn signal lamp LH
F3	★ (E49)	GY/2	Dropping resistor (With A/T)
F2	★ (E50)	-	Body ground
G2	(E54)	GY/2	Hood switch
D1	(E55)	B/2	VDC relay box (With VDC)
E1	(E56)	B/8	VDC relay box (With VDC)
D1	(E58)	-	Body ground
F2	(E59)	L/2	Front wheel sensor LH
E2	★ (E60)	GY/9	To (F36)
E2	★ (E61)	DGY/8	To (F38)
E1	★ (E62)	GY/8	To (F37) (With A/T)
E2	(E67)	DGY/8	VDC actuator (With VDC)
D2	(E68)	SB/8	VDC actuator (With VDC)
E1	(E69)	SMJ	ABS actuator and electric unit (Without VDC)
A1, C1	(E72)	-	Relay box
C1, D1	(E73)	-	Relay box
B2	(E81)	BR/2	Washer level sensor
B2	(E82)	GY/2	Front side marker lamp RH
F4	(E83)	GY/2	Front side marker lamp LH

★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

Passenger Compartment



- | | | | |
|------|-------|---|--|
| E101 | B/2 | : | Fuse block (J/B) |
| E102 | W/4 | : | Fuse block (J/B) |
| E103 | W/12 | : | Fuse block (J/B) |
| E105 | W/12 | : | To (M13) |
| E106 | BR/16 | : | To (M14) |
| E107 | W/16 | : | To (M15) |
| E108 | W/6 | : | Ignition switch |
| E109 | W/8 | : | NATS IMMU |
| E110 | BR/12 | : | Combination switch (Lighting switch) |
| E111 | W/8 | : | Combination switch (Fog lamp switch) |
| E112 | GY/12 | : | Combination switch (Wiper and washer switch) |
| E114 | | | |
| E115 | | | |
| E116 | BR/20 | : | To (M75) (AWD models) |
| E117 | W/10 | : | To (B101) (AWD models) |
| E122 | SMJ | : | VDC/TCS/ABS control unit (With VDC) |
| E123 | W/2 | : | Diode |
| E124 | W/2 | : | Diode |
| E125 | W/8 | : | To (M94) (2WD models) |
| E126 | W/4 | : | To (B133) (2WD models) |
| E123 | GY/6 | : | Daytime light control unit |
| E124 | GY/8 | : | Daytime light control unit |
| E125 | | | |
| E126 | | | |
- Diode (E123), (E124)
- | | |
|--------------------------------------|-----|
| Headlamp LH | ECM |
| Combination switch (Lighting switch) | |
| Combination switch (Lighting switch) | |
| Headlamp LH | |

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

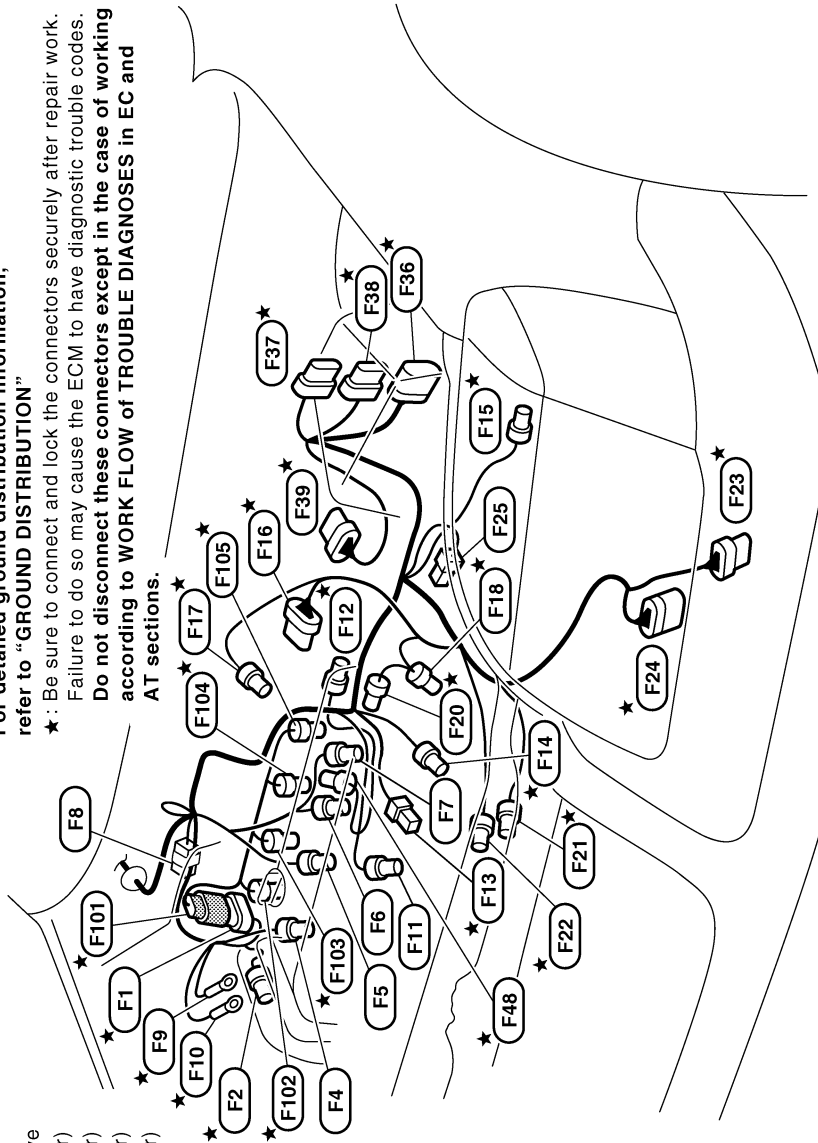
A B C D E F G H I J L M PG

ENGINE CONTROL HARNESS

A/T Models

For detailed ground distribution information, refer to "GROUND DISTRIBUTION"

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.



★ F1 : To (F101)
★ F2 : Intake valve timing control solenoid valve
★ F4 : Ignition coil No. 1 (With power transistor)
★ F5 : Ignition coil No. 2 (With power transistor)
★ F6 : Ignition coil No. 3 (With power transistor)
★ F7 : Ignition coil No. 4 (With power transistor)
★ F8 : Condenser
★ F9 : Engine ground
★ F10 : Engine ground
★ F11 : Oil pressure switch
★ F12 : Power steering pressure sensor
★ F13 : Knock sensor
★ F14 : Crankshaft position sensor (POS)
★ F15 : Revolution sensor
★ F16 : Electronic throttle control actuator
★ F17 : EVAP canister purge volume control solenoid valve

★ F18 : Engine coolant temperature sensor
★ F20 : Camshaft position sensor (PHASE)
★ F21 : Heated oxygen sensor 1
★ F22 : Heated oxygen sensor 2
★ F23 : A/T solenoid valve
★ F24 : Park/Neutral position switch
★ F25 : Starter motor
★ F36 : To (E60)
★ F37 : To (E62)
★ F38 : To (E61)
★ F39 : Mass air flow sensor
★ F41 : To (M61)
★ F42 : To (M62)
★ F43 : ECM
★ F44 : ECM relay
★ F46 : TCM (Transmission control module)
★ F47 : TCM (Transmission control module)
★ F48 : VIAS control solenoid valve
★ F49 : Body ground

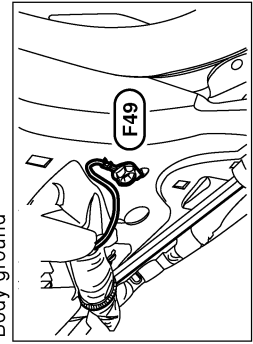
★ GY/6 : To (F101)
★ G/2 : Intake valve timing control solenoid valve
★ GY/3 : Ignition coil No. 1 (With power transistor)
★ GY/3 : Ignition coil No. 2 (With power transistor)
★ GY/3 : Ignition coil No. 3 (With power transistor)
★ GY/3 : Ignition coil No. 4 (With power transistor)
★ GY/2 : Condenser
★ - : Engine ground
★ - : Engine ground
★ GY/1 : Oil pressure switch
★ B/3 : Power steering pressure sensor
★ B/2 : Knock sensor
★ B/3 : Crankshaft position sensor (POS)
★ B/3 : Revolution sensor
★ G/6 : Electronic throttle control actuator
★ L/2 : EVAP canister purge volume control solenoid valve

★ GY/2 : Engine coolant temperature sensor
★ B/3 : Camshaft position sensor (PHASE)
★ G/4 : Heated oxygen sensor 1
★ L/4 : Heated oxygen sensor 2
★ B/8 : A/T solenoid valve
★ B/10 : Park/Neutral position switch
★ B/1 : Starter motor
★ GY/9 : To (E60)
★ GY/8 : To (E62)
★ DGY/8 : To (E61)
★ B/6 : Mass air flow sensor
★ BR/24 : To (M61)
★ W/16 : To (M62)
★ SMJ : ECM
★ BR/6 : ECM relay
★ W/24 : TCM (Transmission control module)
★ GY/24 : TCM (Transmission control module)
★ BR/2 : VIAS control solenoid valve
★ - : Body ground

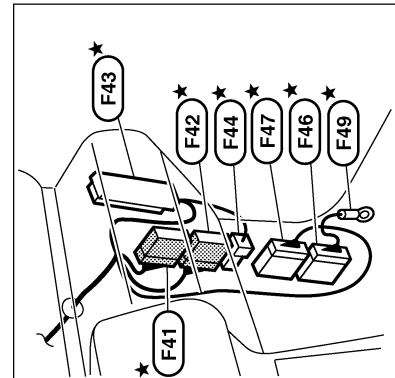
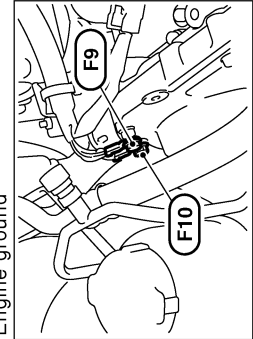
Engine control sub-harness

★ F101 : To (F1)
★ F102 : Injector No. 1
★ F103 : Injector No. 2
★ F104 : Injector No. 3
★ F105 : Injector No. 4

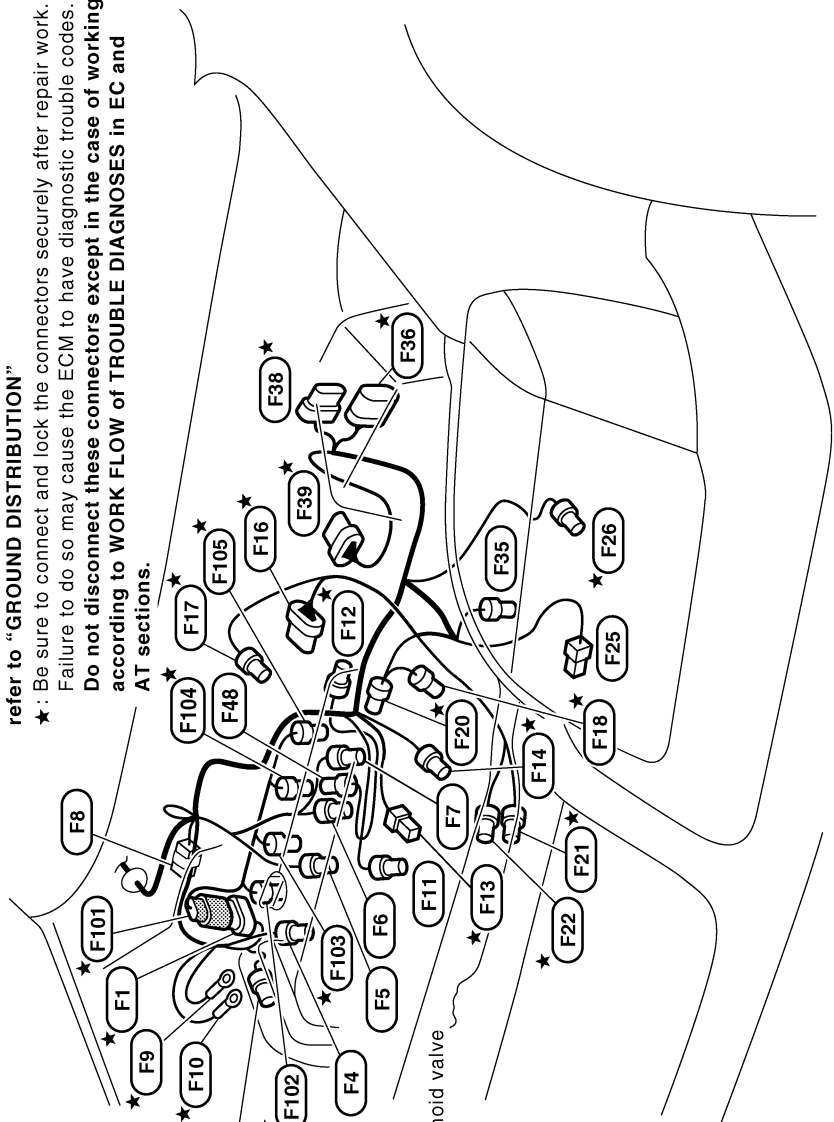
Body ground



Engine ground



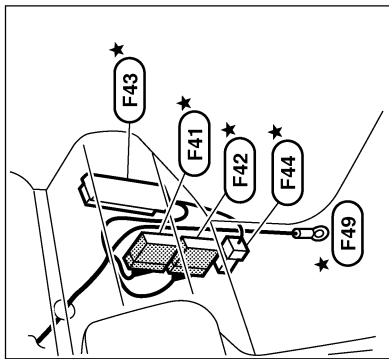
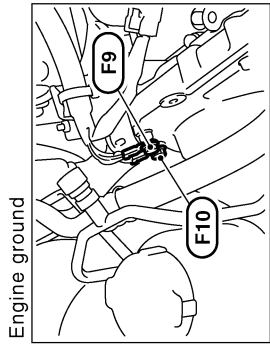
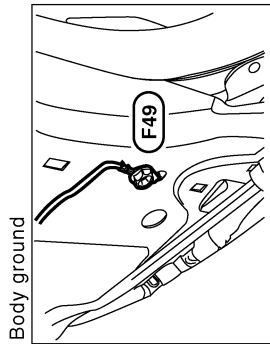
M/T Models



- ★ **F1** : To **(F101)**
★ **F2** : DG/Y/6 : Intake valve timing control solenoid valve
★ **F3** : G/2 : Ignition coil No. 1 (With power transistor)
★ **F4** : GY/3 : Ignition coil No. 2 (With power transistor)
★ **F5** : GY/3 : Ignition coil No. 3 (With power transistor)
★ **F6** : GY/3 : Ignition coil No. 4 (With power transistor)
★ **F7** : GY/2 : Ignition coil No. 4 (With power transistor)
★ **F8** : GY/2 : Condenser
★ **F9** : - : Engine ground
★ **F10** : - : Engine ground
★ **F11** : GY/1 : Oil pressure switch
★ **F12** : B/3 : Power steering pressure sensor
★ **F13** : B/2 : Knock sensor
★ **F14** : B/3 : Crankshaft position sensor (POS)
★ **F16** : G/6 : Electronic throttle control actuator
★ **F17** : L/2 : EVAP canister purge volume control solenoid valve
★ **F18** : GY/2 : Engine coolant temperature sensor
★ **F20** : B/3 : Camshaft position sensor (PHASE)
★ **F21** : G/4 : Heated oxygen sensor 1
★ **F22** : L/4 : Heated oxygen sensor 2
★ **F25** : B/1 : Starter motor
★ **F26** : B/2 : Park/Neutral position switch
★ **F35** : B/2 : Back-up lamp switch
★ **F36** : GY/9 : To **(E60)**
★ **F38** : DG/Y/8 : To **(E61)**
★ **F39** : B/6 : Mass air flow sensor
★ **F41** : BR/24 : To **(M61)**
★ **F42** : W/16 : To **(M62)**
★ **F43** : SMJ : ECM
★ **F44** : BR/6 : ECM relay
★ **F48** : BR/2 : VIAS control solenoid valve
★ **F49** : - : Body ground

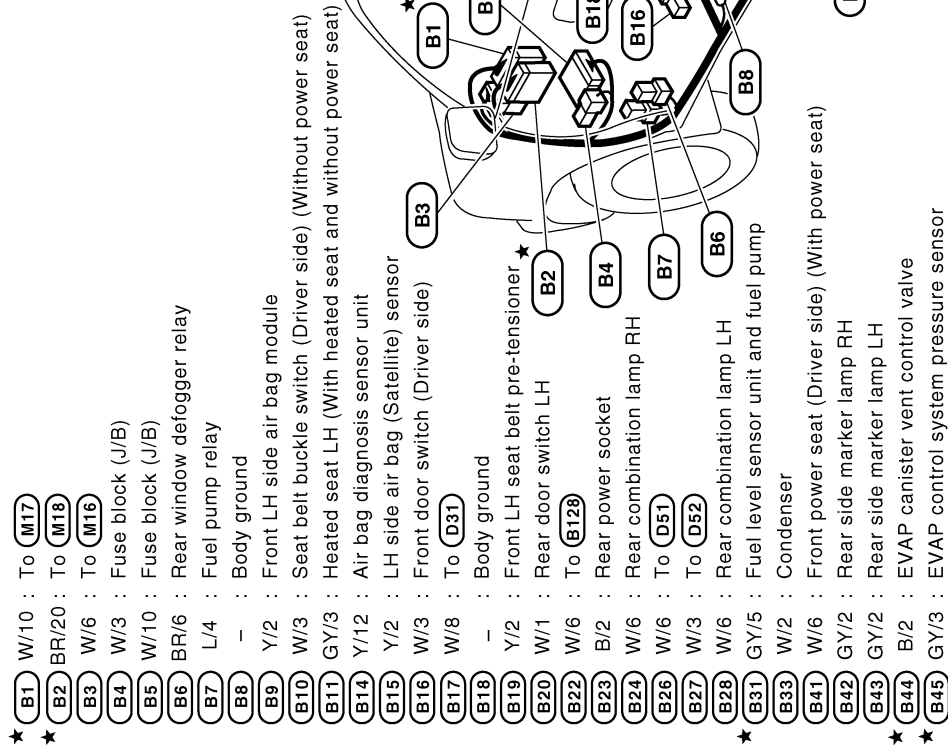
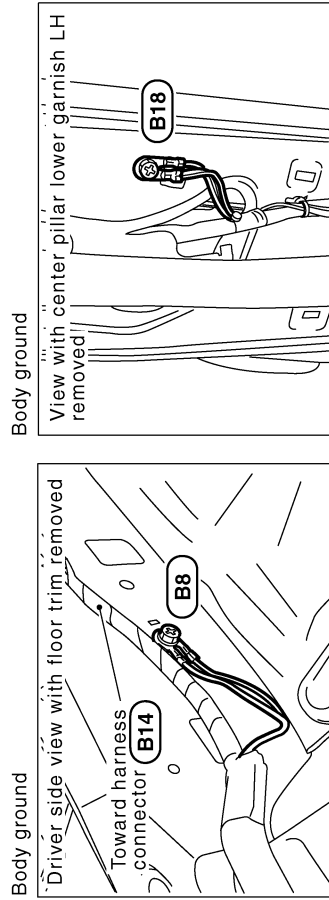
Engine control sub-harness

- ★ **F101** : B/6 : To **(F1)**
★ **F102** : GY/2 : Injector No. 1
★ **F103** : GY/2 : Injector No. 2
★ **F104** : GY/2 : Injector No. 3
★ **F105** : GY/2 : Injector No. 4



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BODY HARNESS



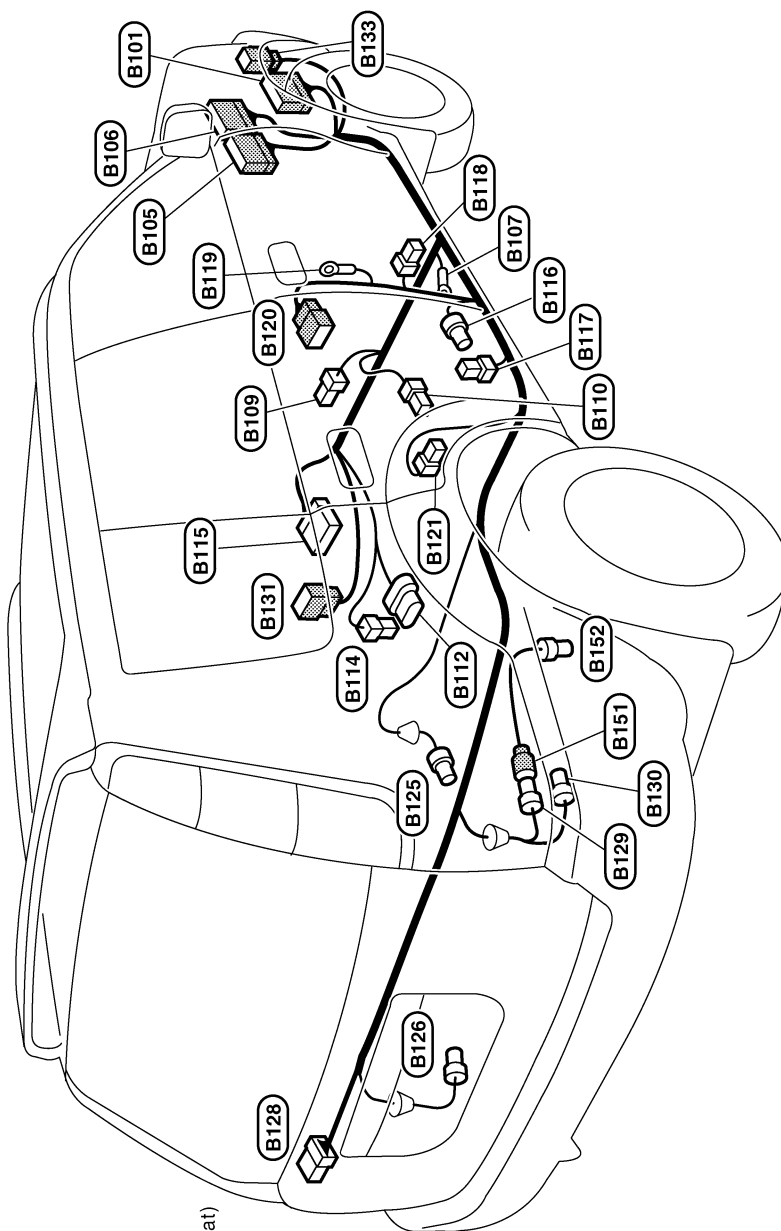
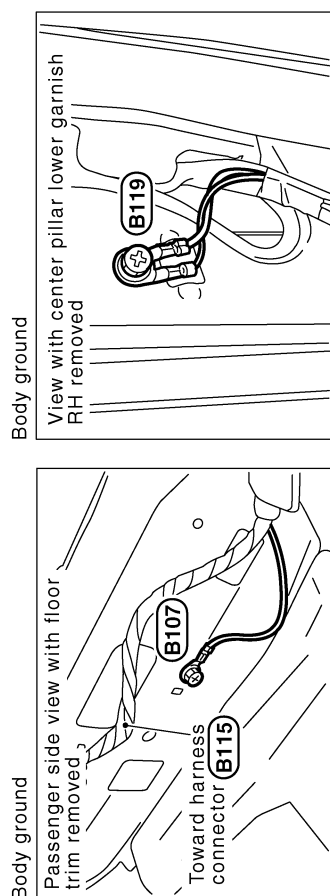
For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.

Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

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BODY NO. 2 HARNESS



- (B101) W/10 : To (E117) (AWD models)
- (B105) W/12 : To (M78)
- (B106) W/10 : To (M79)
- (B107) - : Body ground
- (B109) Y/2 : Front RH side air bag module
- (B110) GY/3 : Heated seat RH (With heated seat)
- (B112) B/6 : Yaw rate/side G sensor (With VDC)
- (B114) B/1 : Parking brake switch
- (B115) Y/12 : Air bag diagnosis sensor unit
- (B116) Y/2 : RH side air bag (Satellite) sensor
- (B117) Y/2 : Front RH seat belt pre-tensioner
- (B118) W/3 : Front door switch (Passenger side)
- (B119) - : Body ground
- (B120) W/8 : To (D21)
- (B121) W/1 : Rear door switch RH
- (B125) GY/4 : Sub fuel level sensor unit
- (B126) L/2 : Rear wheel sensor LH
- (B128) W/6 : To (B22)
- (B129) B/2 : To (B151) (AWD models)
- (B130) GY/2 : Rear wheel sensor RH
- (B131) W/8 : Heated seat switch (With heated seat)
- (B133) W/4 : To (E126) (2WD models)

Transmission sub-harness

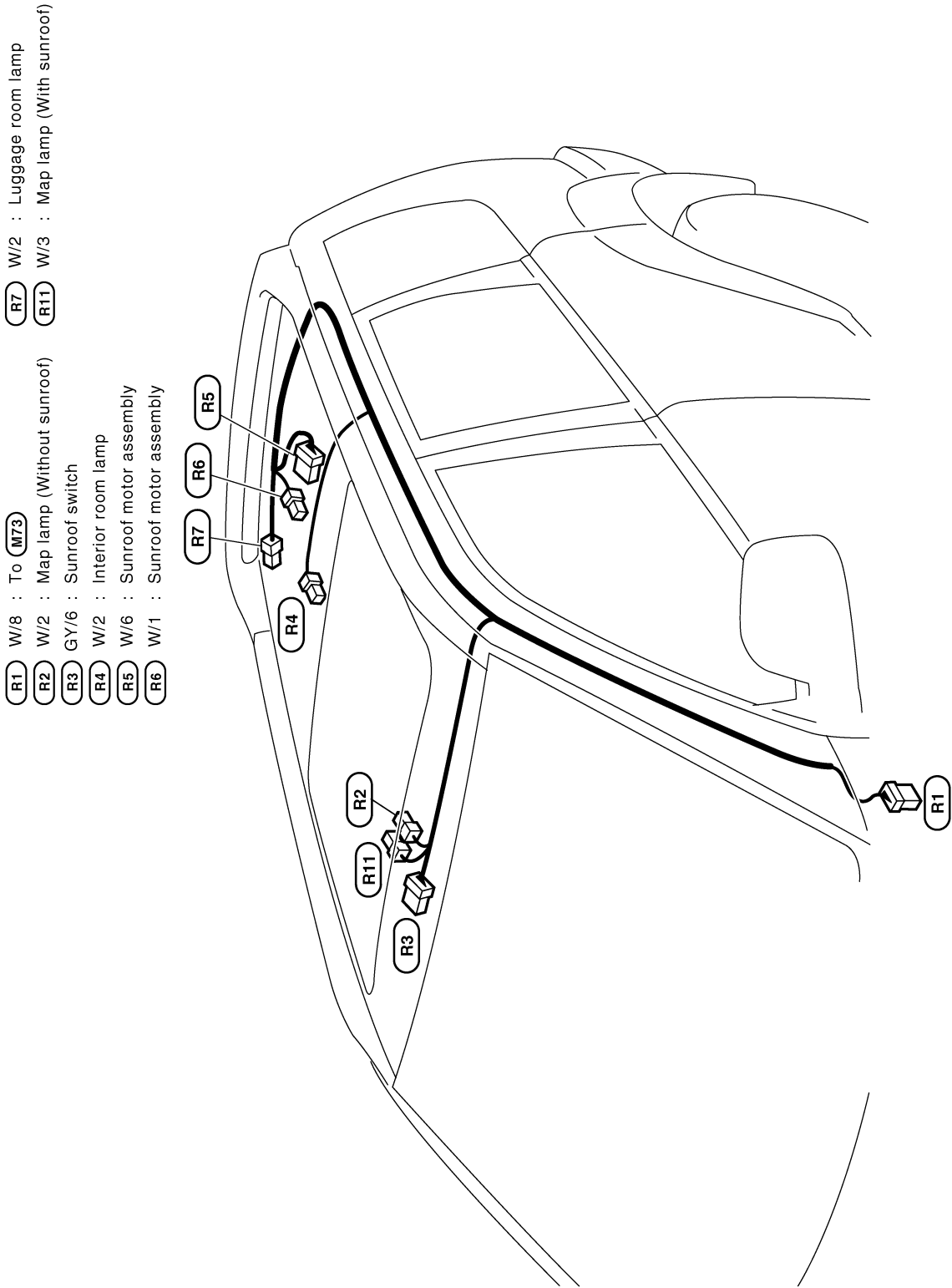
- (B151) B/2 : To (B129) (AWD models)
- (B152) GY/2 : AWD solenoid (AWD models)

For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

TKIB0051E

HARNESS

ROOM LAMP HARNESS



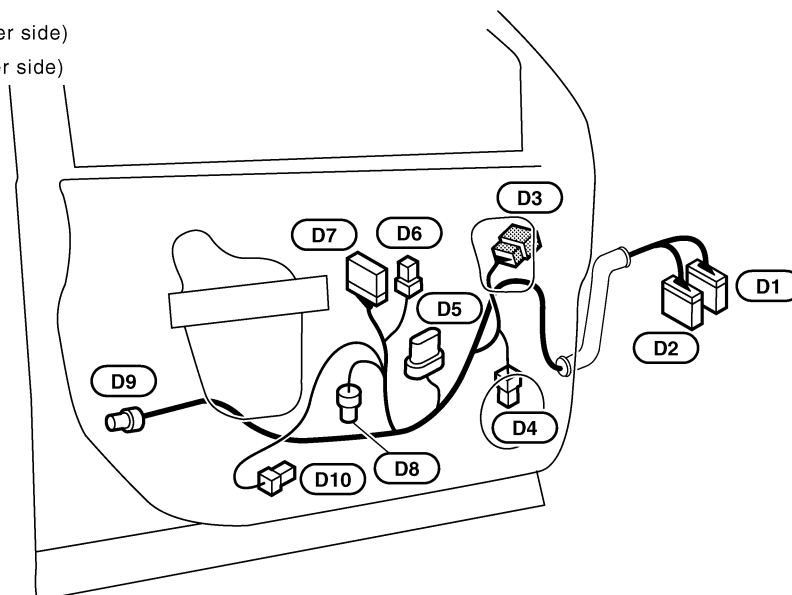
TKIB0052E

HARNESS

FRONT DOOR HARNESS

LH Side

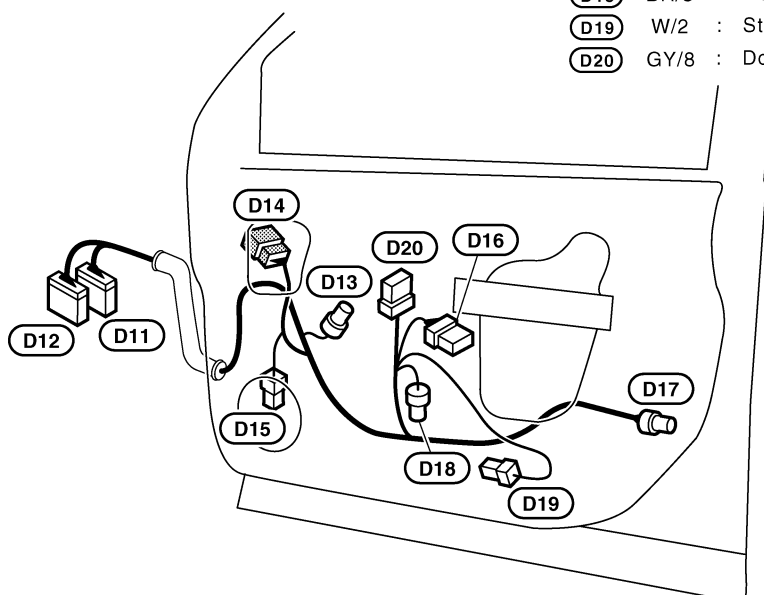
- (D1) W/16 : To (M21)
- (D2) BR/12 : To (M22)
- (D3) W/8 : Door mirror actuator (Driver side)
- (D4) W/2 : Front door speaker LH
- (D5) GY/6 : Front power window motor (Driver side)
- (D6) W/3 : Power window main switch
- (D7) W/16 : Power window main switch
- (D8) BR/3 : Door key cylinder switch (Driver side)
- (D9) GY/4 : Front door lock actuator (Driver side)
- (D10) W/2 : Step lamp (Driver side)



TKIB0031E

RH Side

- (D11) W/12 : To (M77)
- (D12) BR/12 : To (M76)
- (D13) BR/2 : Front power window motor (Passenger side)
- (D14) W/8 : Door mirror actuator (Passenger side)
- (D15) W/2 : Front door speaker RH
- (D16) W/8 : Front power window switch (Passenger side)
- (D17) GY/4 : Front door lock actuator (Passenger side)
- (D18) BR/3 : Door key cylinder switch (Passenger side)
- (D19) W/2 : Step lamp (Passenger side)
- (D20) GY/8 : Door lock/unlock switch (Passenger side)



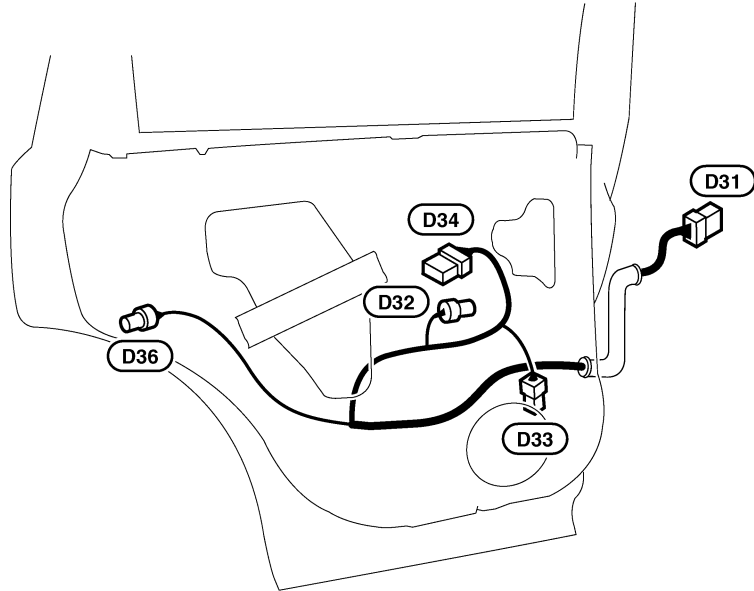
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HARNESS

REAR DOOR HARNESS

LH Side

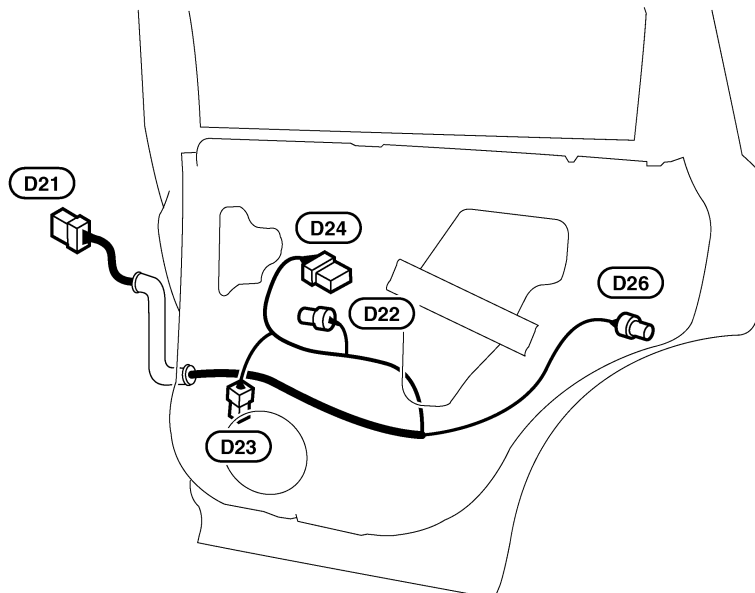
- (D31) W/8 : To (B17)
- (D32) BR/2 : Rear power window motor LH
- (D33) W/2 : Rear door speaker LH
- (D34) W/8 : Rear power window switch LH
- (D36) GY/4 : Rear door lock actuator LH



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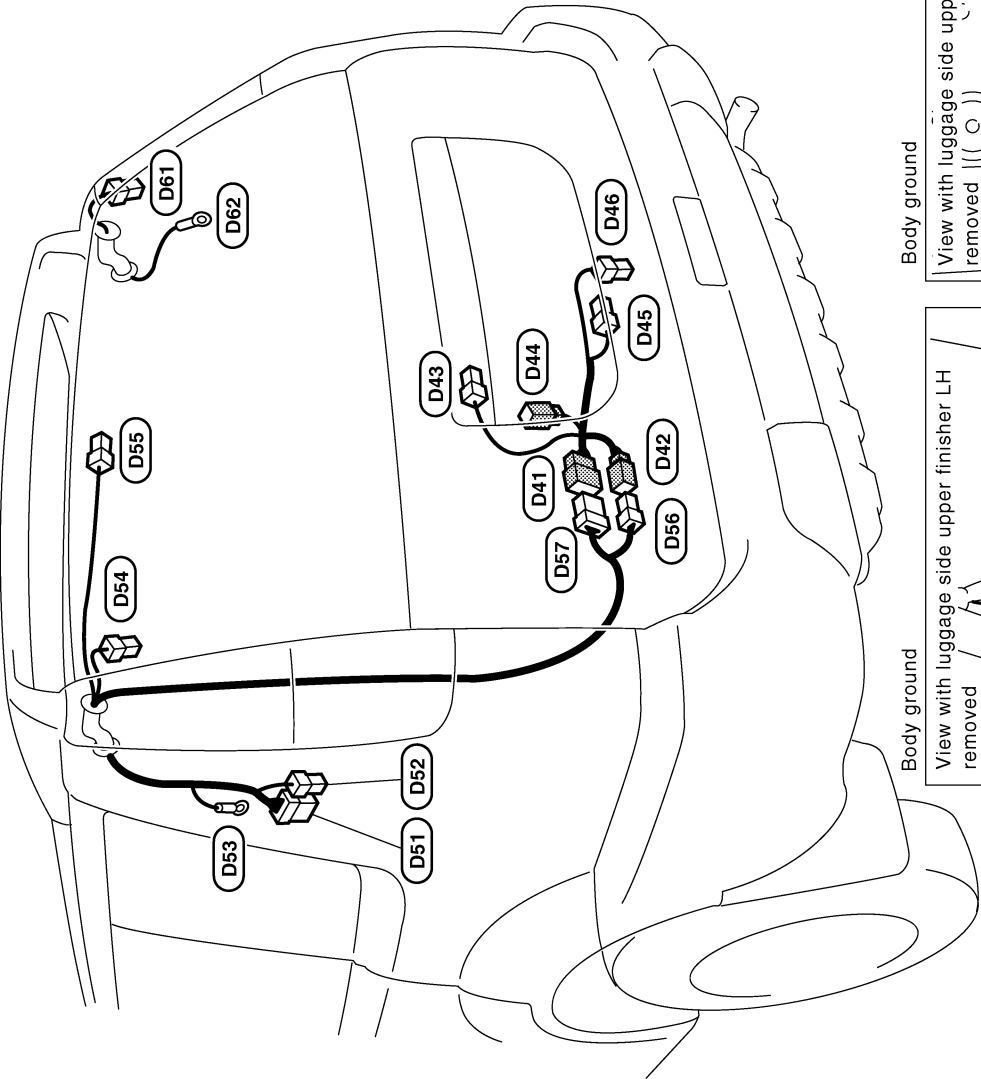
RH Side

- (D21) W/8 : To (B120)
- (D22) BR/2 : Rear power window motor RH
- (D23) W/2 : Rear door speaker RH
- (D24) W/8 : Rear power window switch RH
- (D26) GY/4 : Rear door lock actuator RH



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BACK DOOR HARNESS

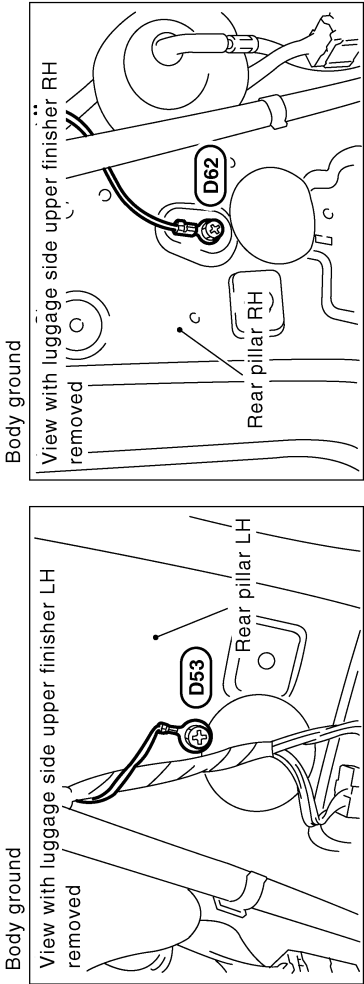


- Back door haarness**

 - D41 : To D57
 - D42 : To D56
 - D43 : Rear wiper motor
 - D44 : License plate lamp
 - D45 : Back door switch
 - D46 : Back door lock actuator
- Back door sub-harness**

 - D51 : To B26
 - D52 : To B27
 - D53 : Body ground
 - D54 : Rear window defogger (+)
 - D55 : High-mounted stop lamp
 - D56 : To D42
 - D57 : To D41
- Rear window defogger harness**

 - D61 : Rear window defogger (-)
 - D62 : Body ground



For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

TKIB0056E

HARNESS

Wiring Diagram Codes (Cell Codes)

AKS00BEY

Use the chart below to find out what each wiring diagram code stands for.

Refer to the wiring diagram code in the alphabetical index to find the location (page number) of each wiring diagram.

Code	Section	Wiring Diagram Name
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
A/C	ATC	Auto Air Conditioner
A/C	MTC	Manual Air Conditioner
ABS	BRC	Anti-Lock Brake System
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch
ASCB OF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	DI	Automatic Speed Control Device (ASCD) Indicator
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AWD	TF	AWD System
BA/FTS	AT	A/T Fluid Temperature Sensor and TCM Power Supply
BACK/L	LT	Back-Up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CLOCK	DI	Clock
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ENGSS	AT	Engine Speed Signal
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Electric Throttle Control Motor Relay
ETC3	EC	Electric Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FTS	AT	A/T Fluid Temperature Sensor Circuit
FTTS	EC	Fuel Tank Temperature Sensor
FUEL	EC	Fuel Injection System Function

HARNESS

Code	Section	Wiring Diagram Name	
HO2S1	EC	Heated Oxygen Sensor 1	A
HO2S1H	EC	Heated Oxygen Sensor 1 Heater	
HO2S2	EC	Heated Oxygen Sensor 2	B
HO2S2H	EC	Heated Oxygen Sensor 2 Heater	
HORN	WW	Horn	
HSEAT	SE	Heated Seat	C
IATS	EC	Intake Air Temperature Sensor	
IGNSYS	EC	Ignition System	D
ILL	LT	Illumination	
INJECT	EC	Injector	
INT/L	LT	Map Lamp	E
IVC	EC	Intake Valve Timing Control Solenoid Valve	
KEYLES	BL	Remote Keyless Entry System	F
KS	EC	Knock Sensor	
LOAD	EC	Electrical Load Signal	
LPSV	AT	Line Pressure Solenoid Valve	G
MAFS	EC	Mass Air Flow Sensor	
MAIN	AT	Main Power Supply and Ground Circuit	H
MAIN	EC	Main Power Supply and Ground Circuit	
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges	
MIL/DL	EC	MIL & Data Link Connector	I
MIRROR	GW	Door Mirror	
NATS	BL	Nissan Anti-Theft System	J
NONDTC	AT	Non-Detective Items	
OVRCSV	AT	Overrun Clutch Solenoid Valve	
P/SCKT	WW	Power Socket	PG
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve	
PHASE	EC	Camshaft Position Sensor (PHASE)	
PNP/SW	AT	Park/Neutral Position Switch	L
PNP/SW	EC	Park/Neutral Position Switch	
POS	EC	Crankshaft Position Sensor (CKPS) (POS)	M
POWER	PG	Power Supply Routing	
PRE/SE	EC	EVAP Control System Pressure Sensor	
PS/SEN	EC	Power Steering Pressure Sensor	
ROOM/L	LT	Interior Room Lamp	
RP/SEN	EC	Refrigerant Pressure Sensor	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SNOWSW	EC	Snow Mode Switch	
SROOF	RF	Sunroof	
SRS	SRS	Supplemental Restraint System	
SSV/A	AT	Shift Solenoid Valve A	
SSV/B	AT	Shift Solenoid Valve B	

HARNESS

Code	Section	Wiring Diagram Name
START	SC	Starting System
STEP/L	LT	Step Lamp
STOP/L	LT	Stop Lamp
TAIL/L	LT	Parking, License and Tail Lamps
TCCSIG	AT	A/T Tcc S/V Function (Lock-Up)
TCV	AT	Torque Converter Clutch Solenoid Valve
TPS	AT	Throttle Position Sensor
TPS1	EC	Throttle Position Sensor (Sensor 1)
TPS2	EC	Throttle Position Sensor (Sensor 2)
TPS3	EC	Throttle Position Sensor
TURN	LT	Turn Signal and Hazard Warning Lamp
VDC	BRC	Vehicle Dynamics Control System
VEHSEC	BL	Vehicle Security System
VENT/V	EC	EVAP Canister Vent Control Valve
VIAS	EC	Variable Induction Air Control System
VIAS/V	EC	VIAS Control Solenoid Valve
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
VSSMTR	AT	Vehicle Speed Sensor MTR
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIP/R	WW	Rear Wiper and Washer
WIPER	WW	Front Wiper and Washer

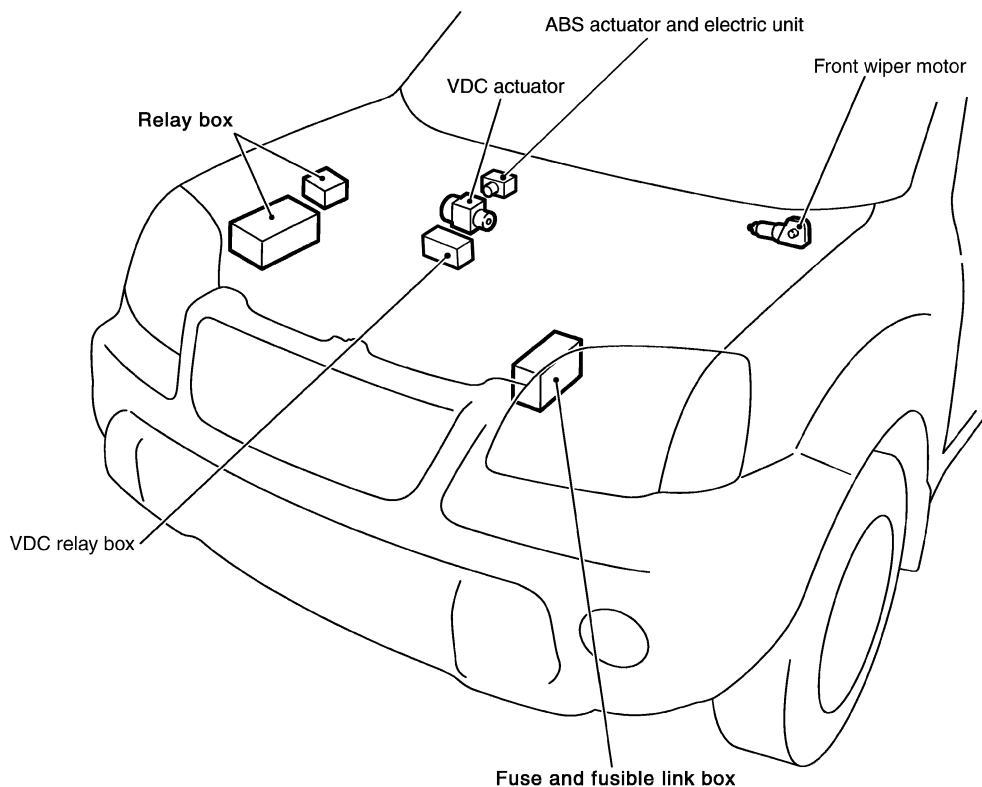
ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

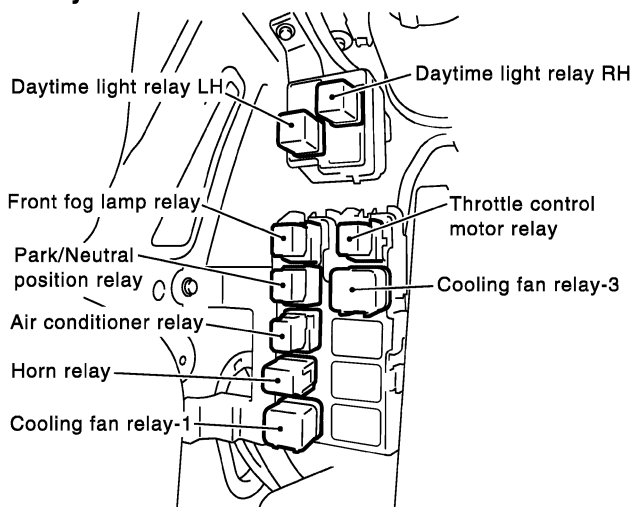
PFP:25230

Electrical Units Location ENGINE COMPARTMENT

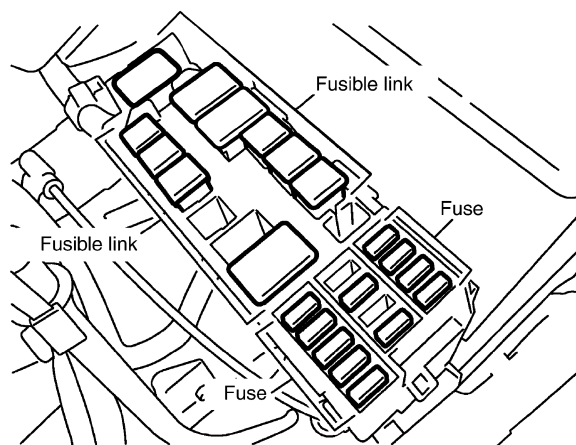
AKS00BEZ



Relay box



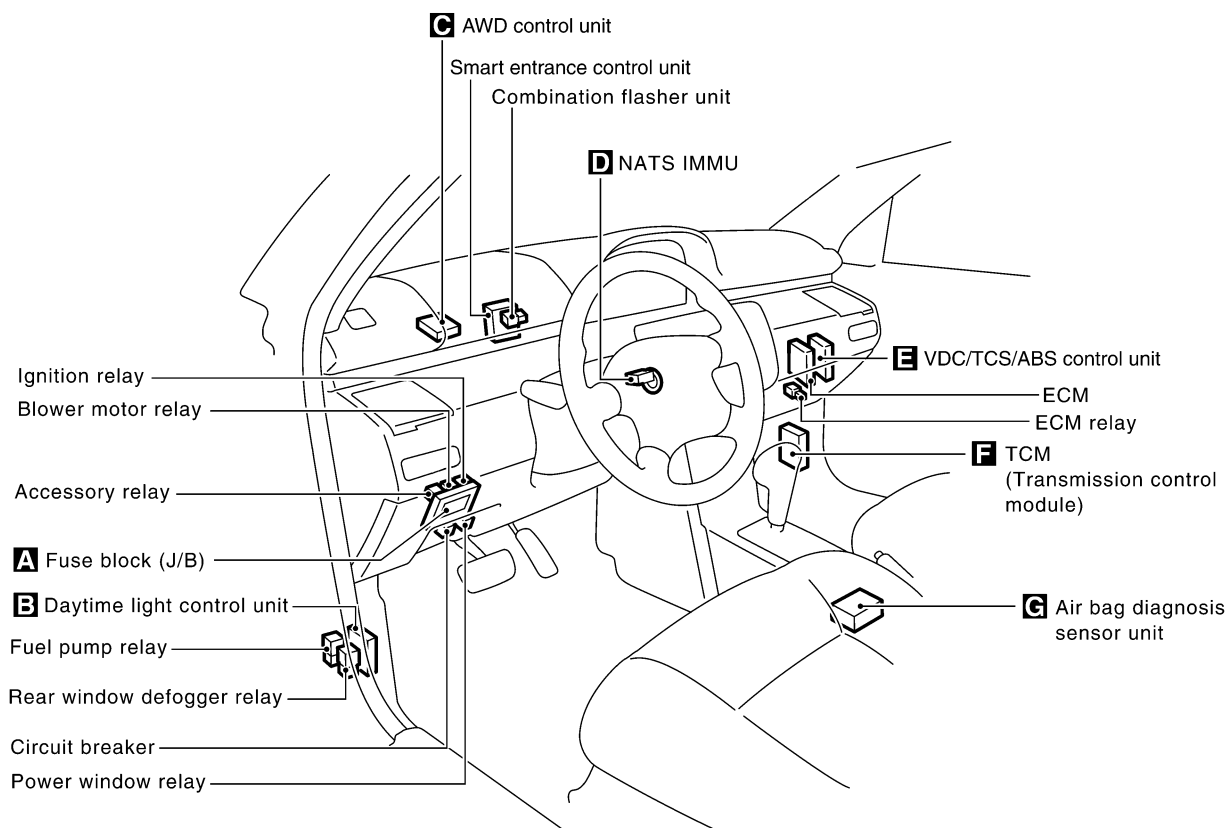
Fuse and fusible link box



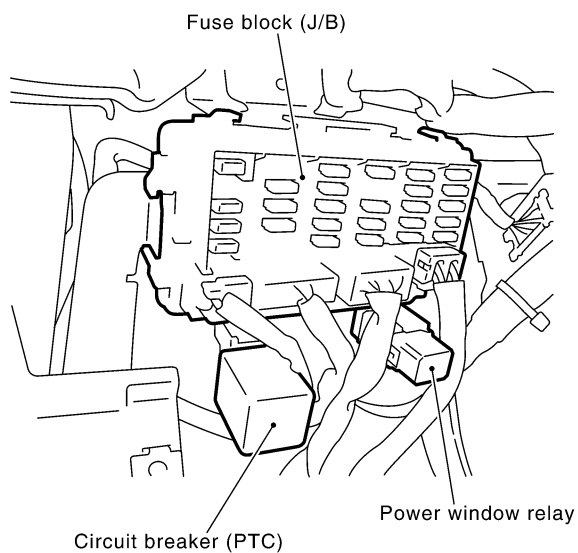
CKIB0033E

ELECTRICAL UNITS LOCATION

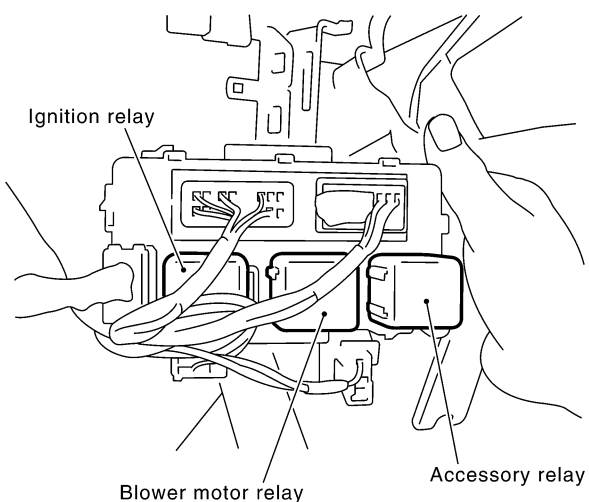
PASSENGER COMPARTMENT



A Instrument panel LH



Back of the fuse block (J/B)

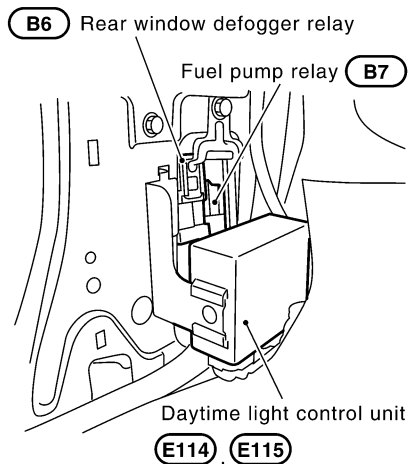


CKIB0034E

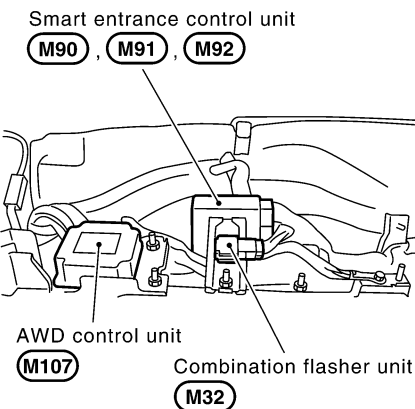
ELECTRICAL UNITS LOCATION

A
B
C
D
E
F
G
H
I
J
PG
L
M

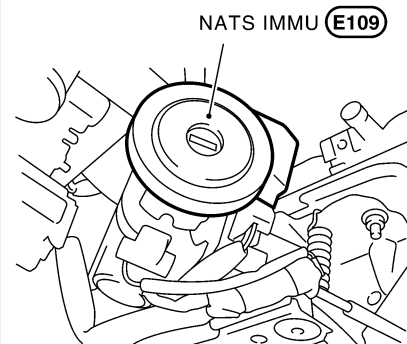
B Driver side view with dash side lower finisher removed



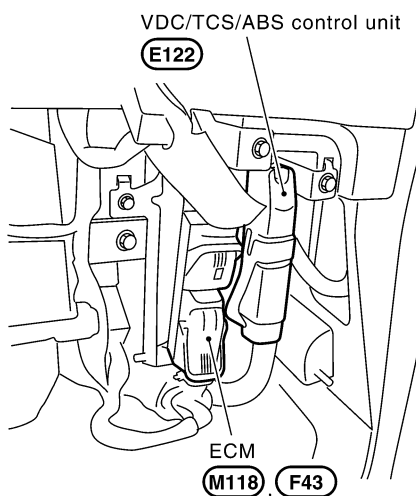
C Driver side view with upper instrument panel removed



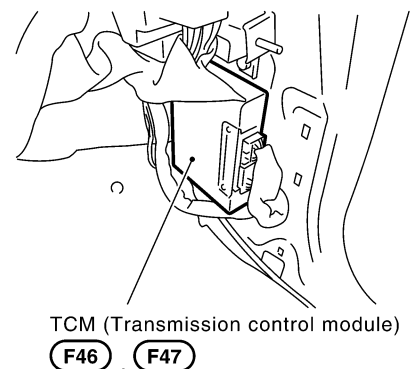
D



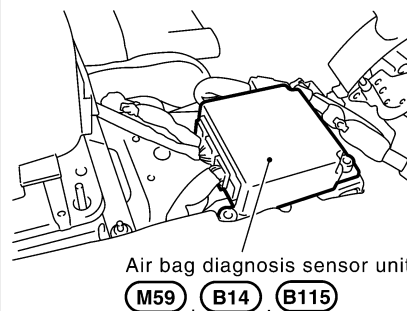
E Behind lower instrument panel on passenger side



F Passenger side view with dash side lower finisher removed



G Behind the console box assembly



CKIB0035E

HARNESS CONNECTOR

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

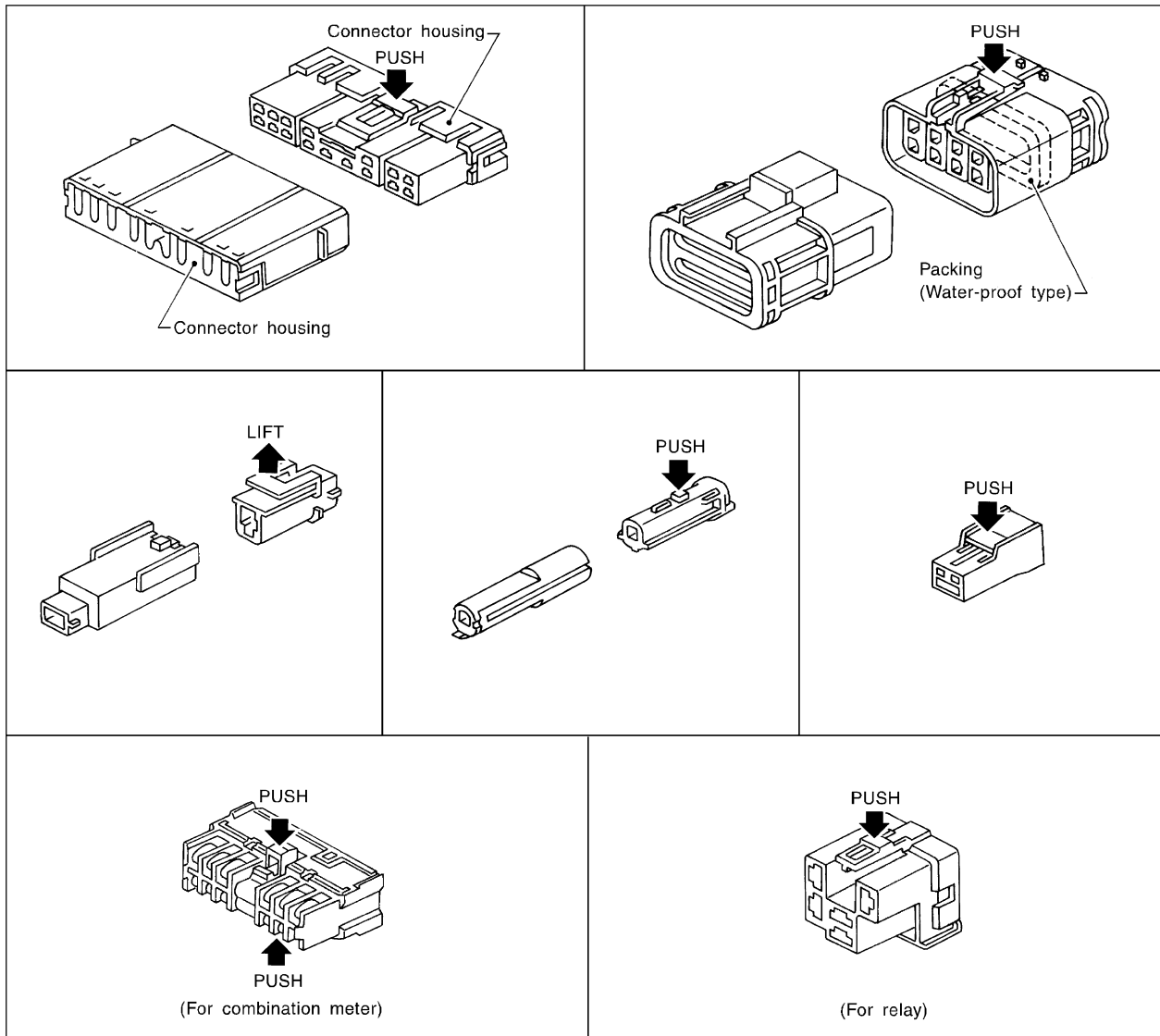
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the figure below.

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]



HARNESS CONNECTOR

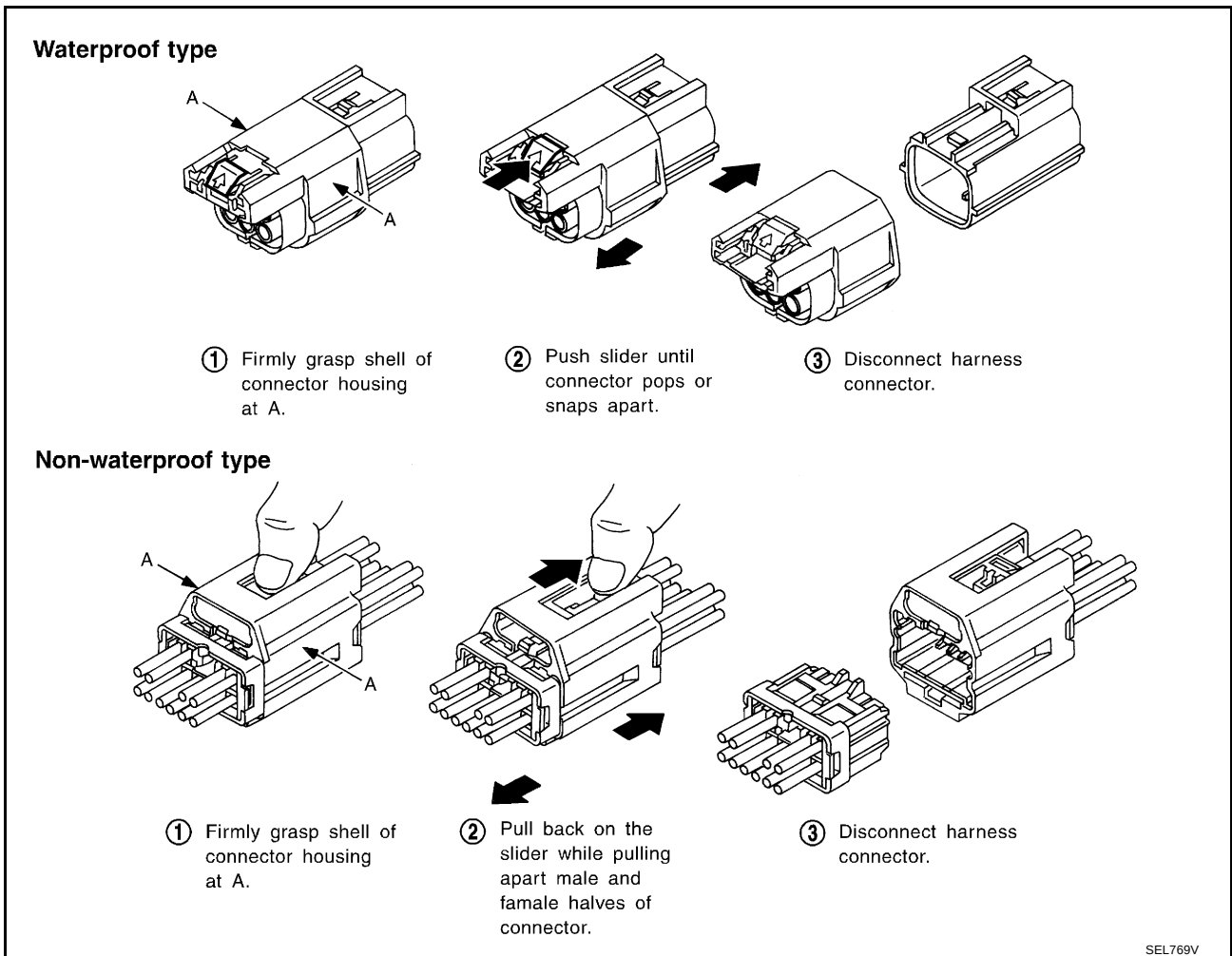
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



A
B
C
D
E
F
G
H
I
J
PG
L
M

ELECTRICAL UNITS

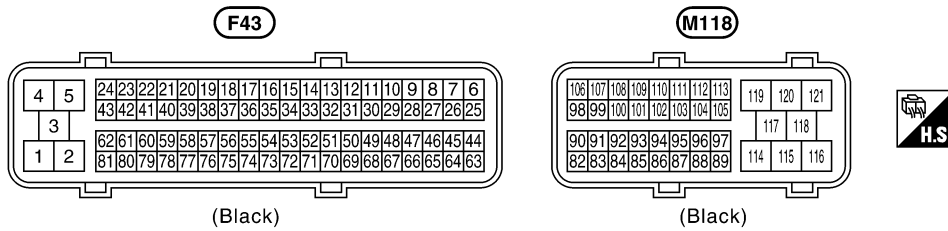
ELECTRICAL UNITS

Terminal Arrangement

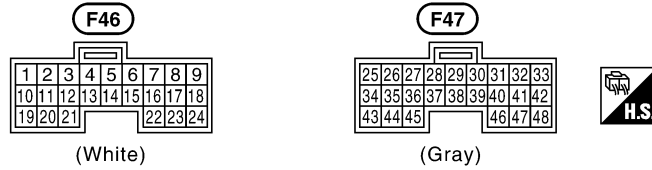
PFP:00011

AKS00BF1

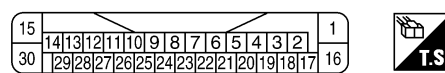
ECM



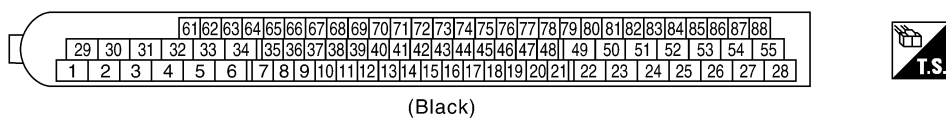
TCM (TRANSMISSION CONTROL MODULE)



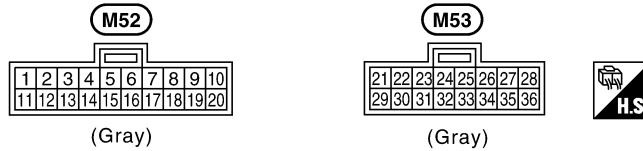
ABS ACTUATOR AND ELECTRIC UNIT



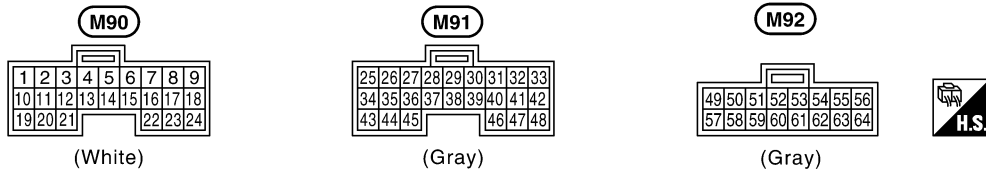
VDC/TCS/ABS CONTROL UNIT



A/C AUTO AMP.



SMART ENTRANCE CONTROL UNIT



CKIB0036E

STANDARDIZED RELAY

STANDARDIZED RELAY

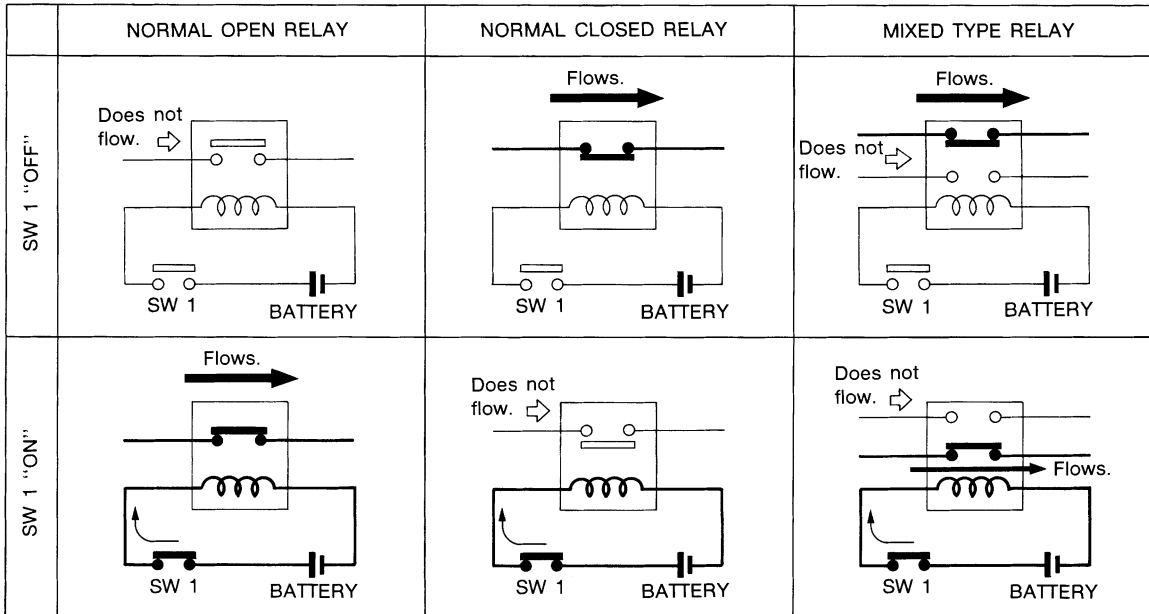
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Description

AKS00BF2

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

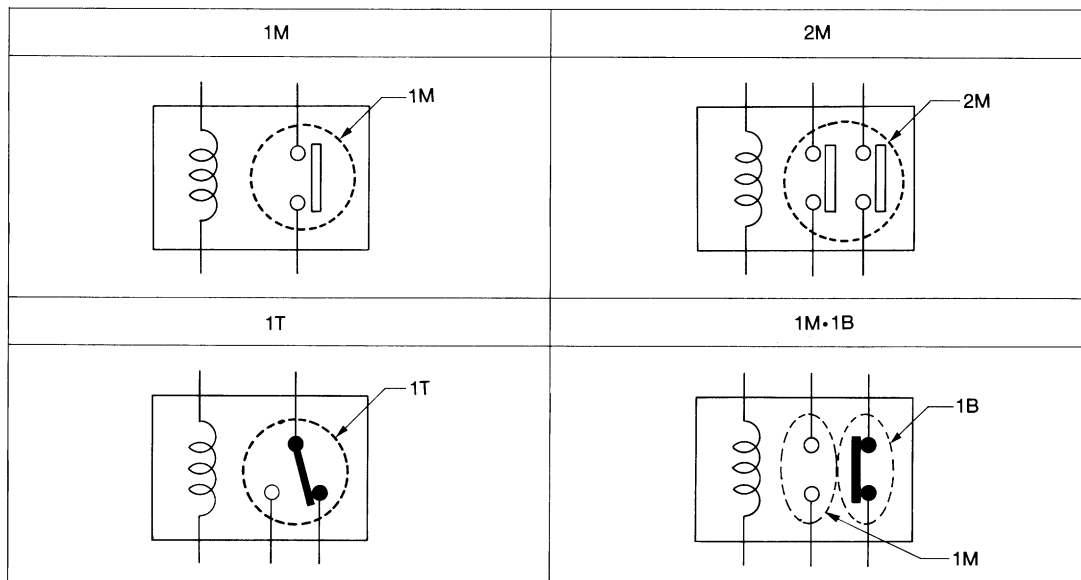
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

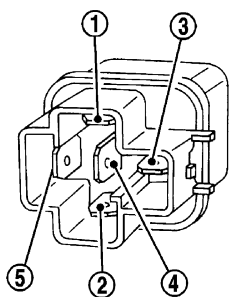
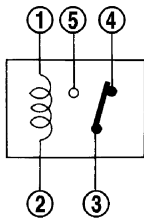
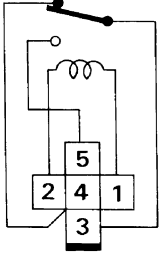
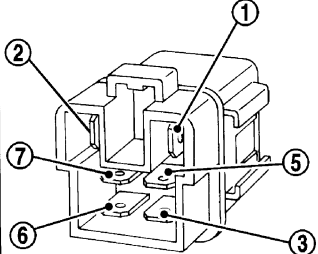
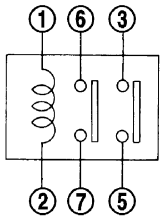
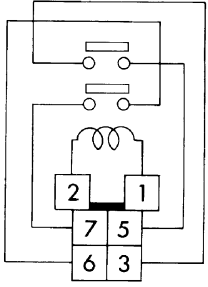
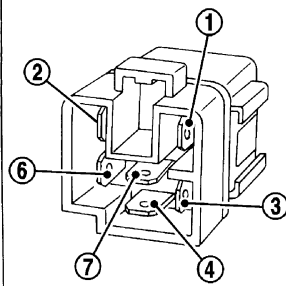
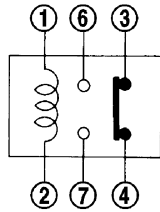
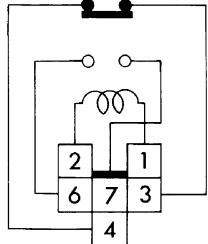
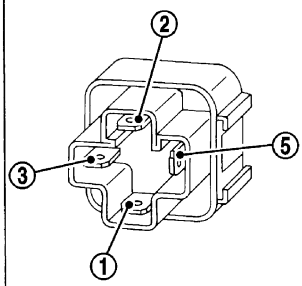
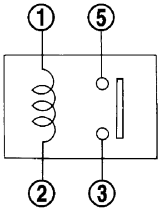
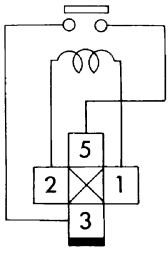
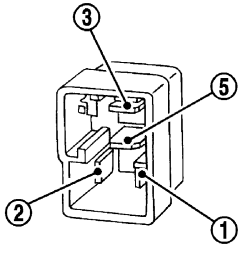
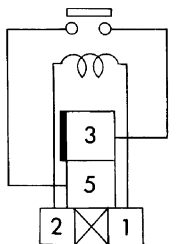
TYPE OF STANDARDIZED RELAYS

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



SEL882H

STANDARDIZED RELAY

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

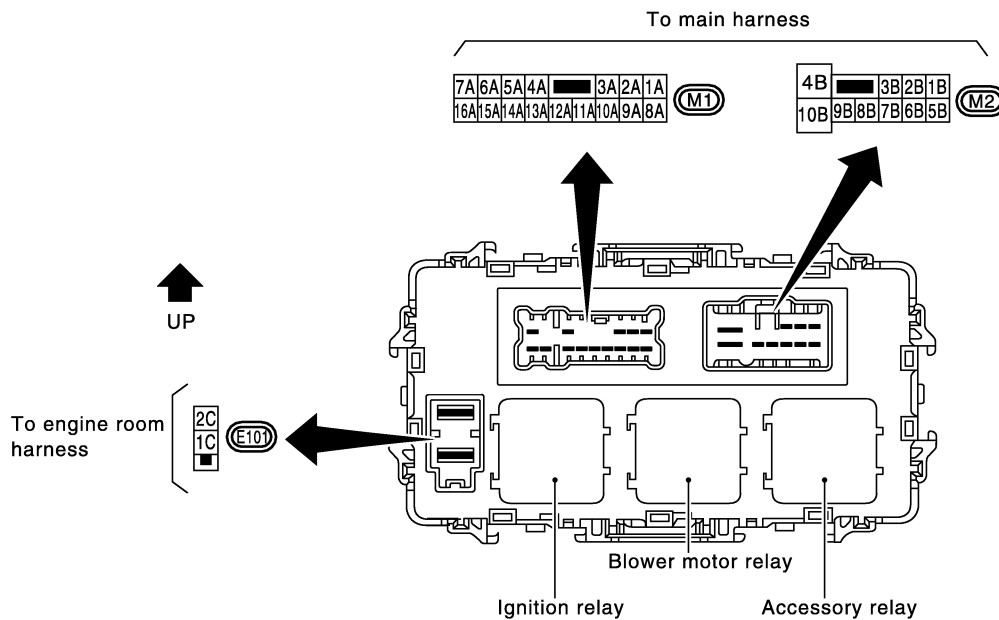
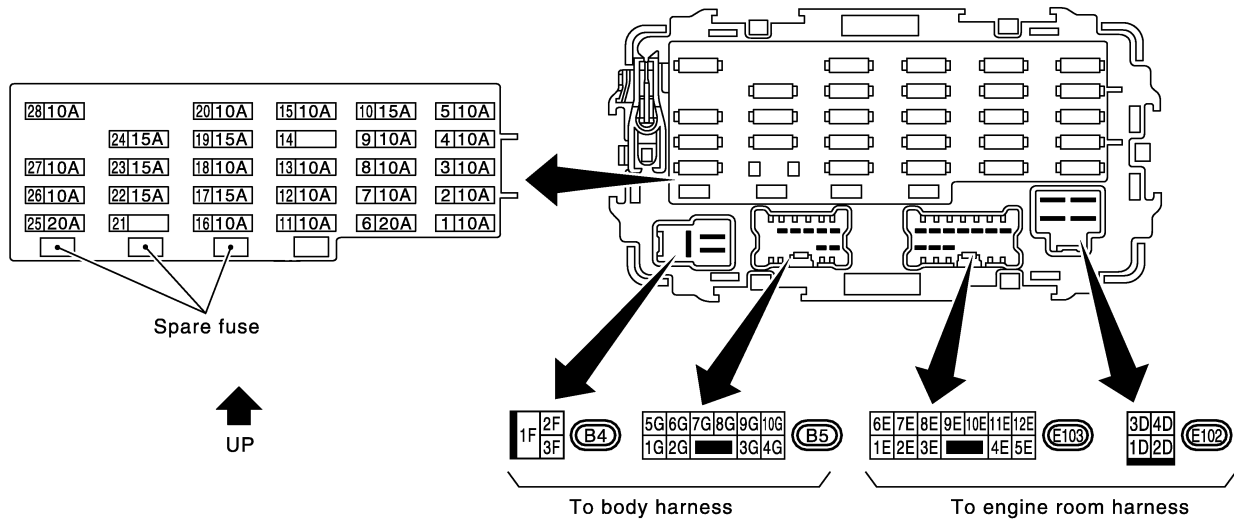
FUSE BLOCK - JUNCTION BOX (J/B)

FUSE BLOCK - JUNCTION BOX (J/B)

PDF:24350

Terminal Arrangement

AKS00BF3



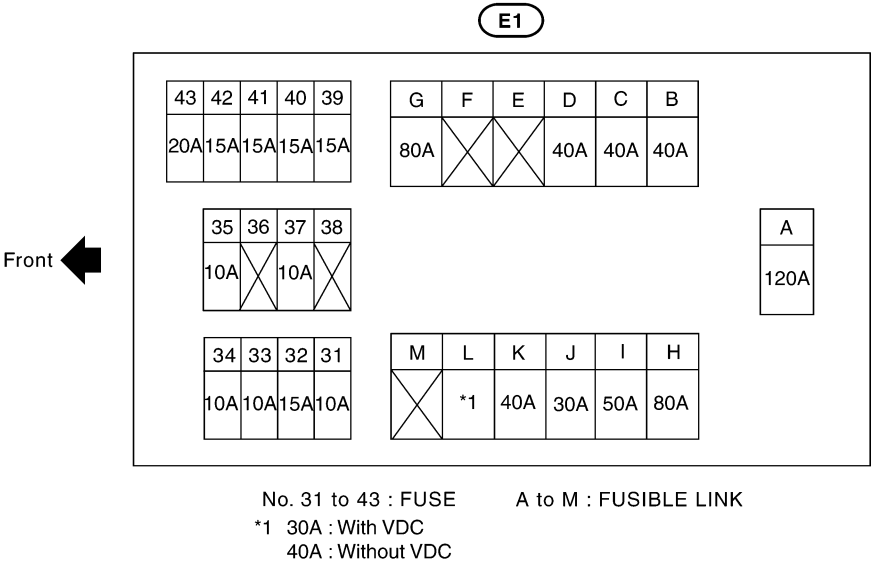
CK1B0038E

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX
Terminal Arrangement

PFP:24381

AKS00BF4



CKIB0037E