

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

PRECAUTIONS

PPF:00001

Precautions for Battery Service

AKS003RH

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.

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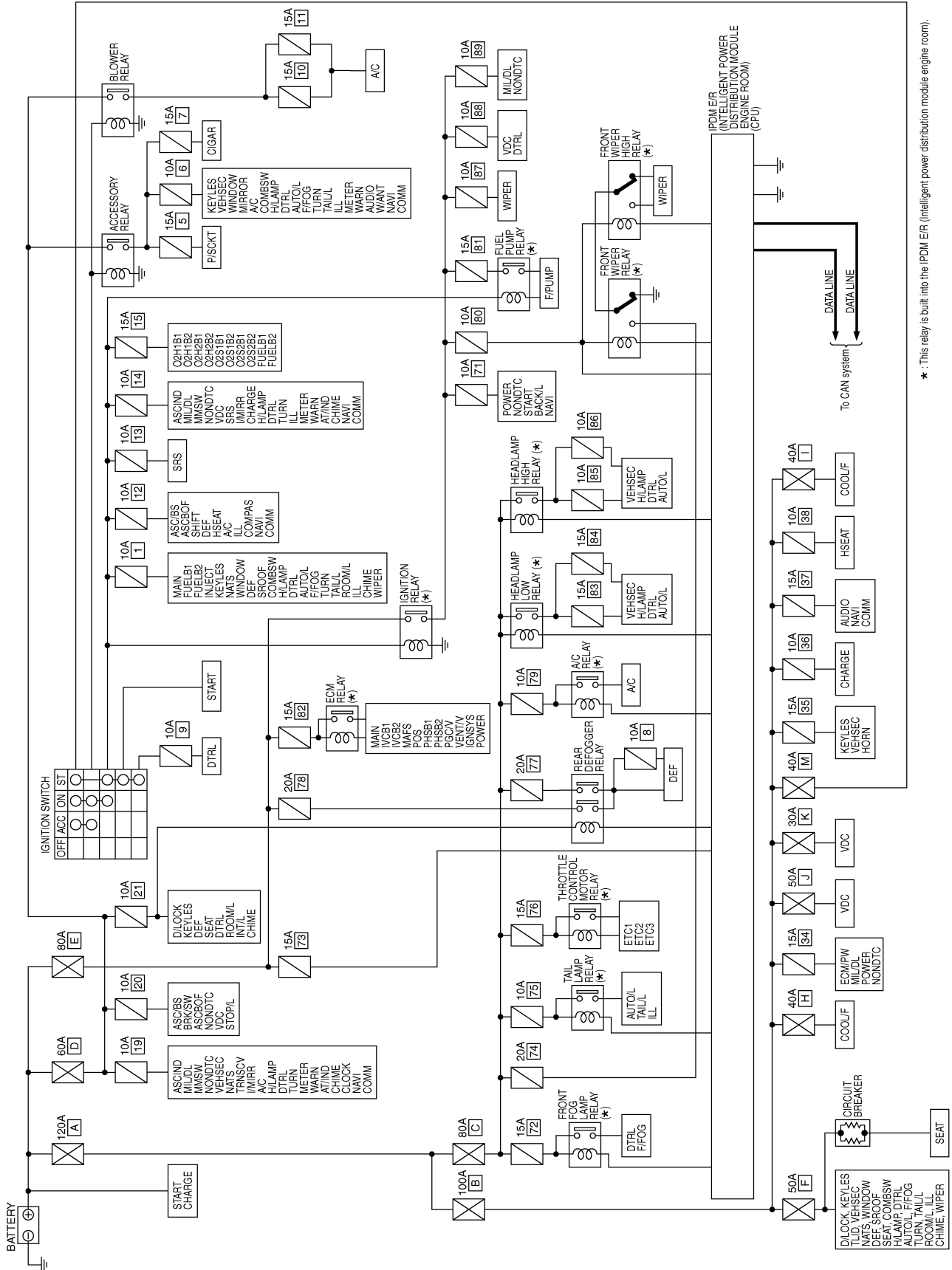
POWER SUPPLY ROUTING CIRCUIT

PFP:24110

POWER SUPPLY ROUTING CIRCUIT

Schematic

AKS003HW



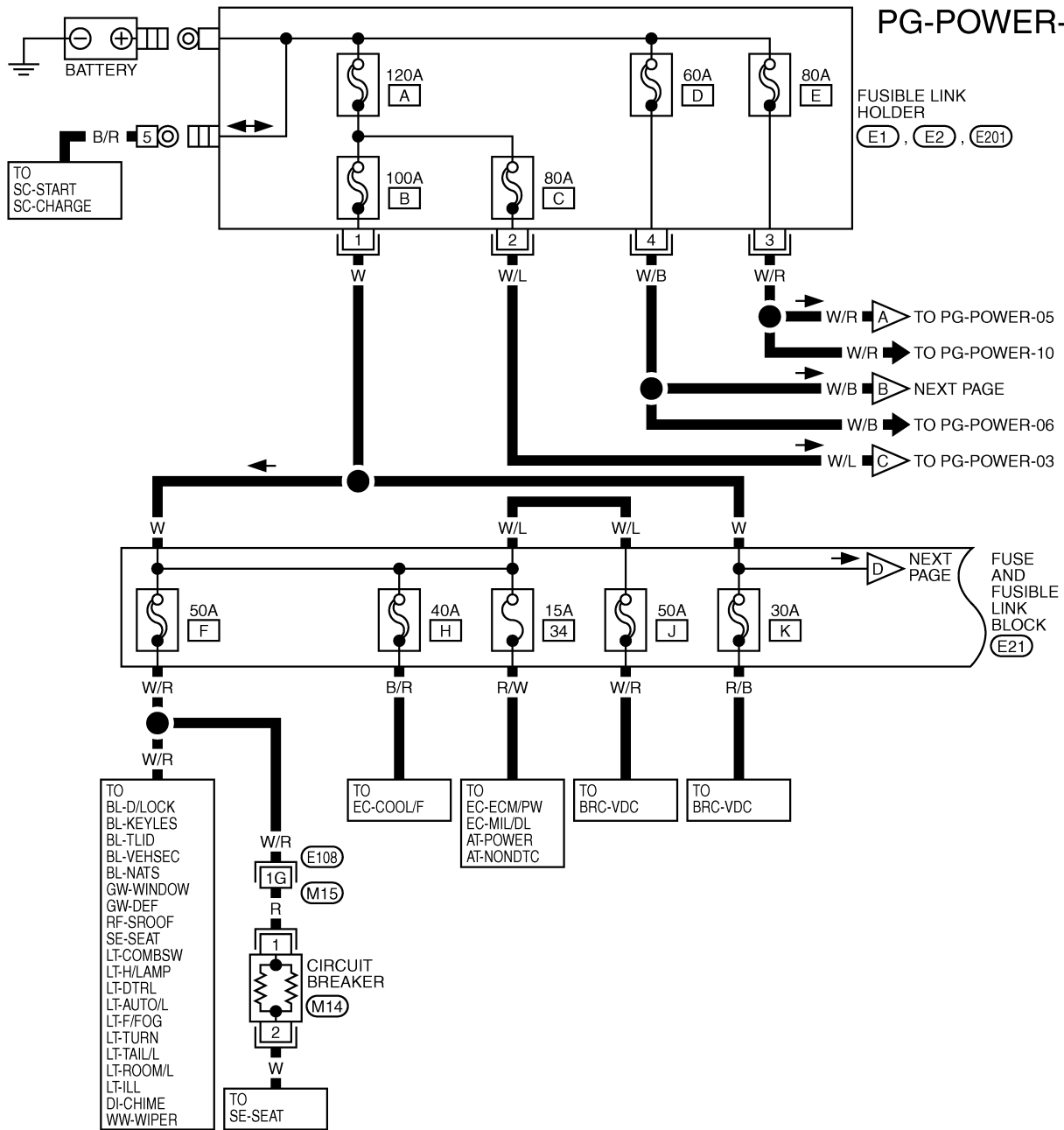
* : This relay is built into the IPDM E/R (Intelligent power distribution module engine room).

TKWT0657E

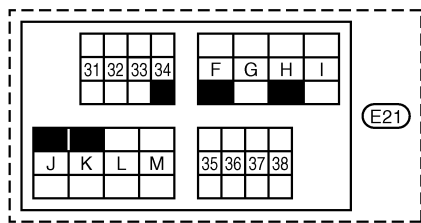
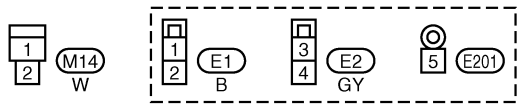
POWER SUPPLY ROUTING CIRCUIT

AKS003HX

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



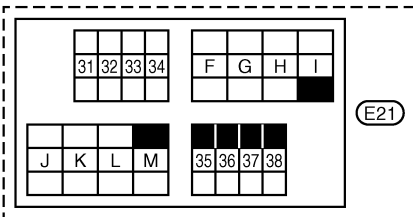
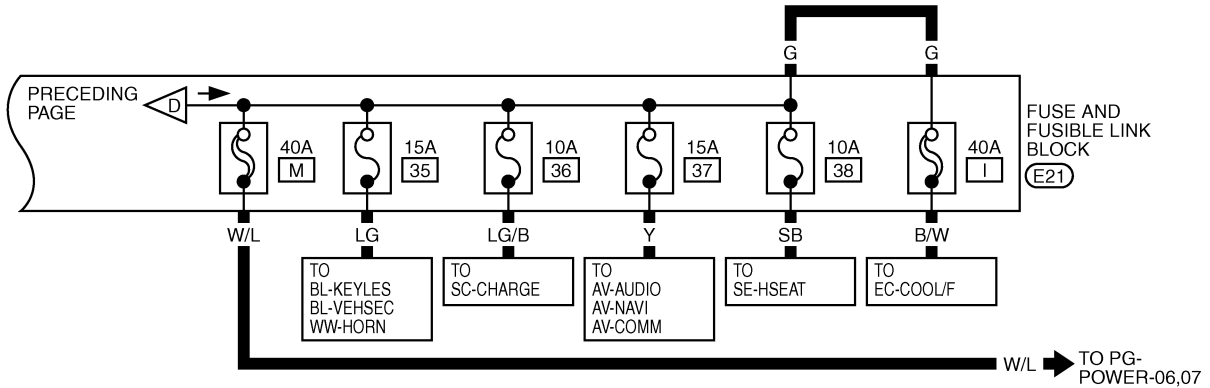
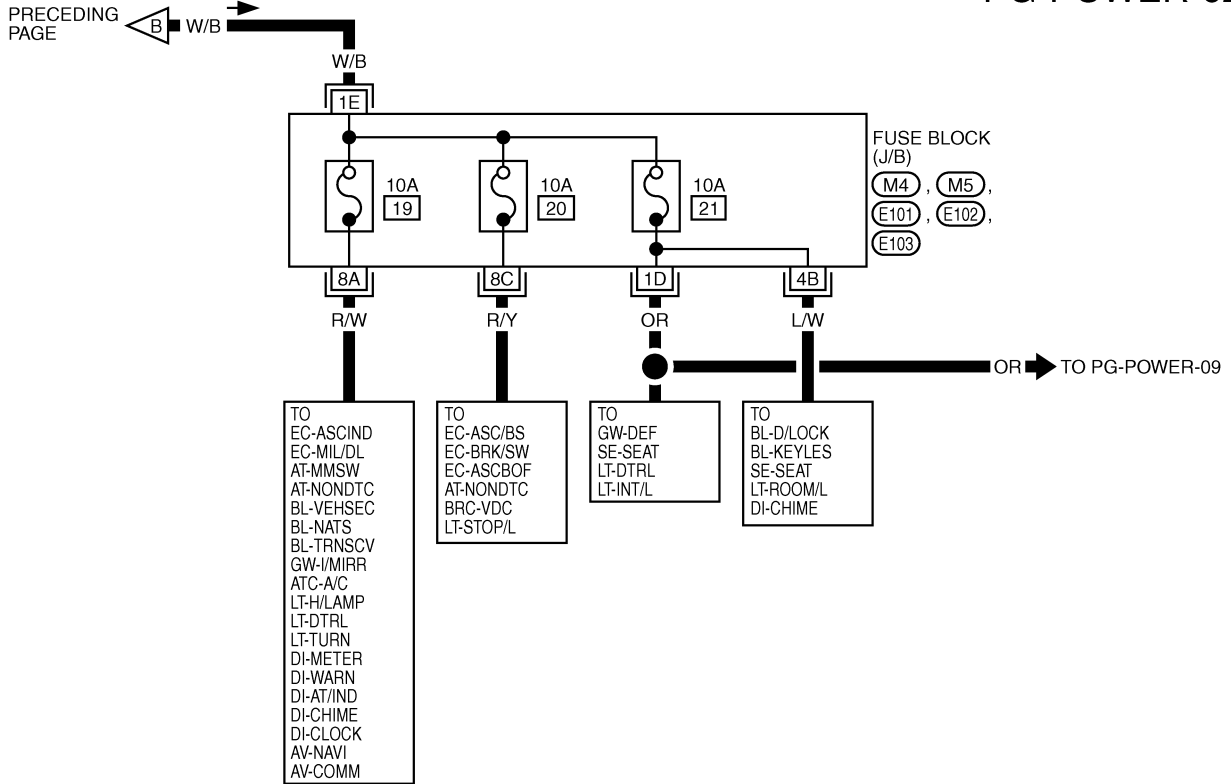
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REFER TO THE FOLLOWING.
(E108) -SUPER MULTIPLE JUNCTION (SMJ)

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02



REFER TO THE FOLLOWING.

(M4), (M5), (E101), (E102)

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

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWT0659E

POWER SUPPLY ROUTING CIRCUIT

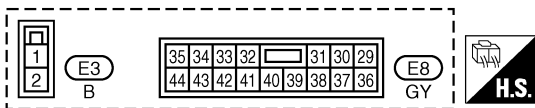
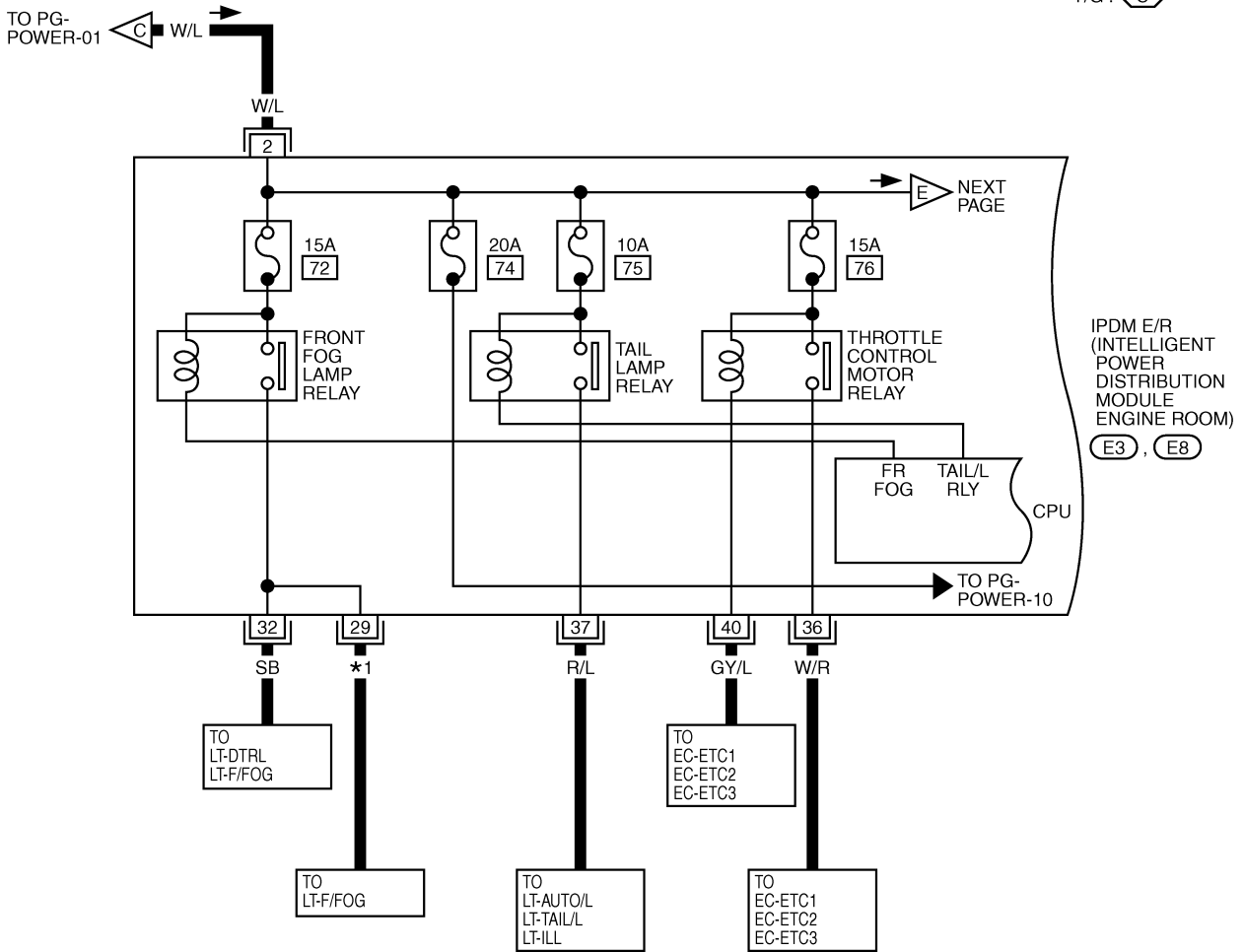
PG-POWER-03

U : FOR U.S.A.

C : FOR CANADA

*1 W/G: U

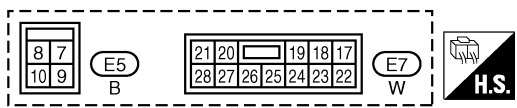
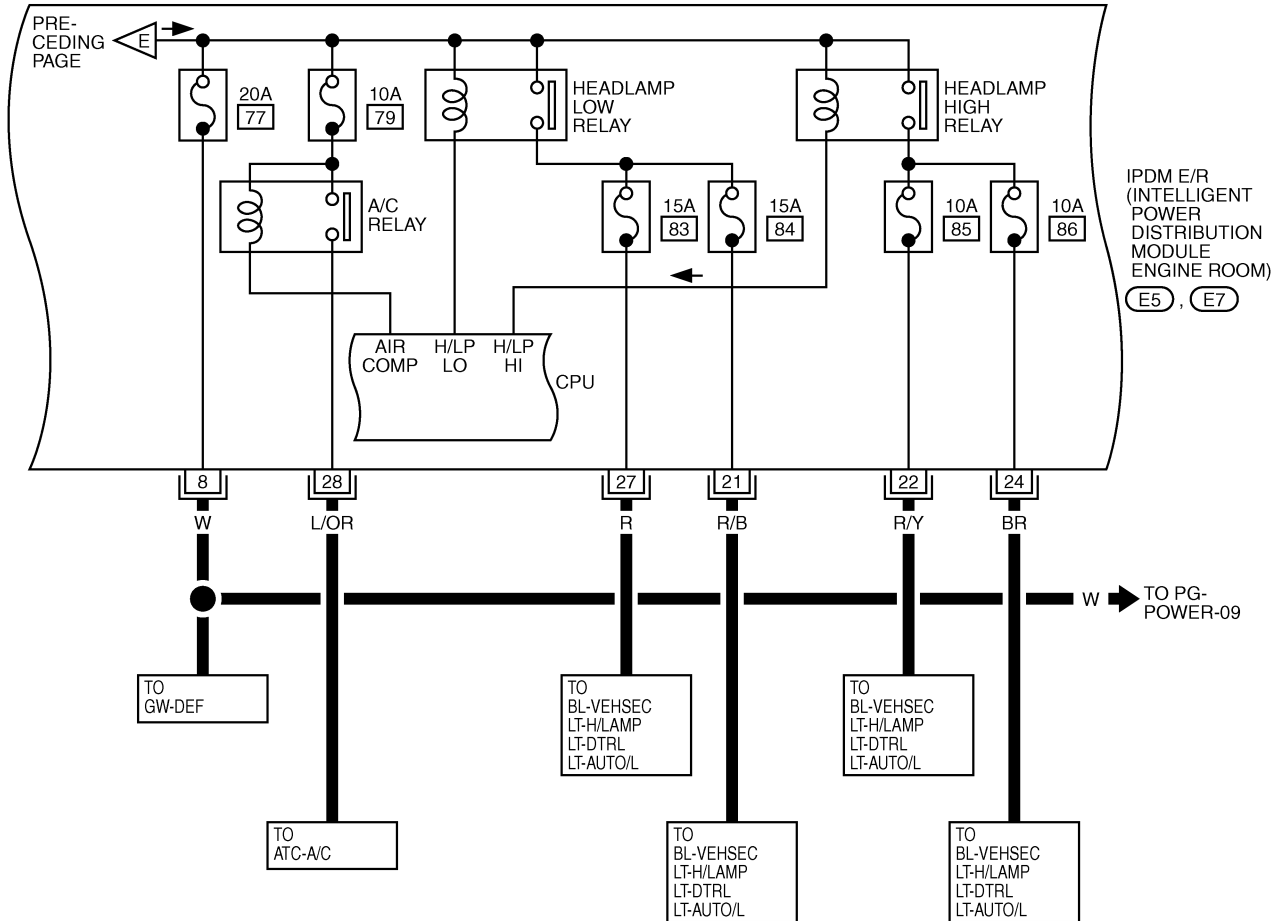
Y/G: C



TKWT0660E

POWER SUPPLY ROUTING CIRCUIT

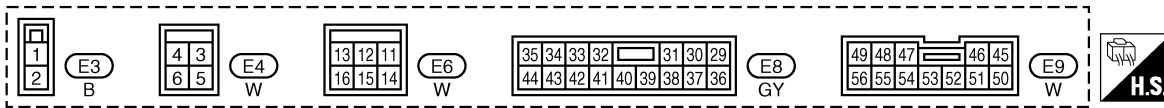
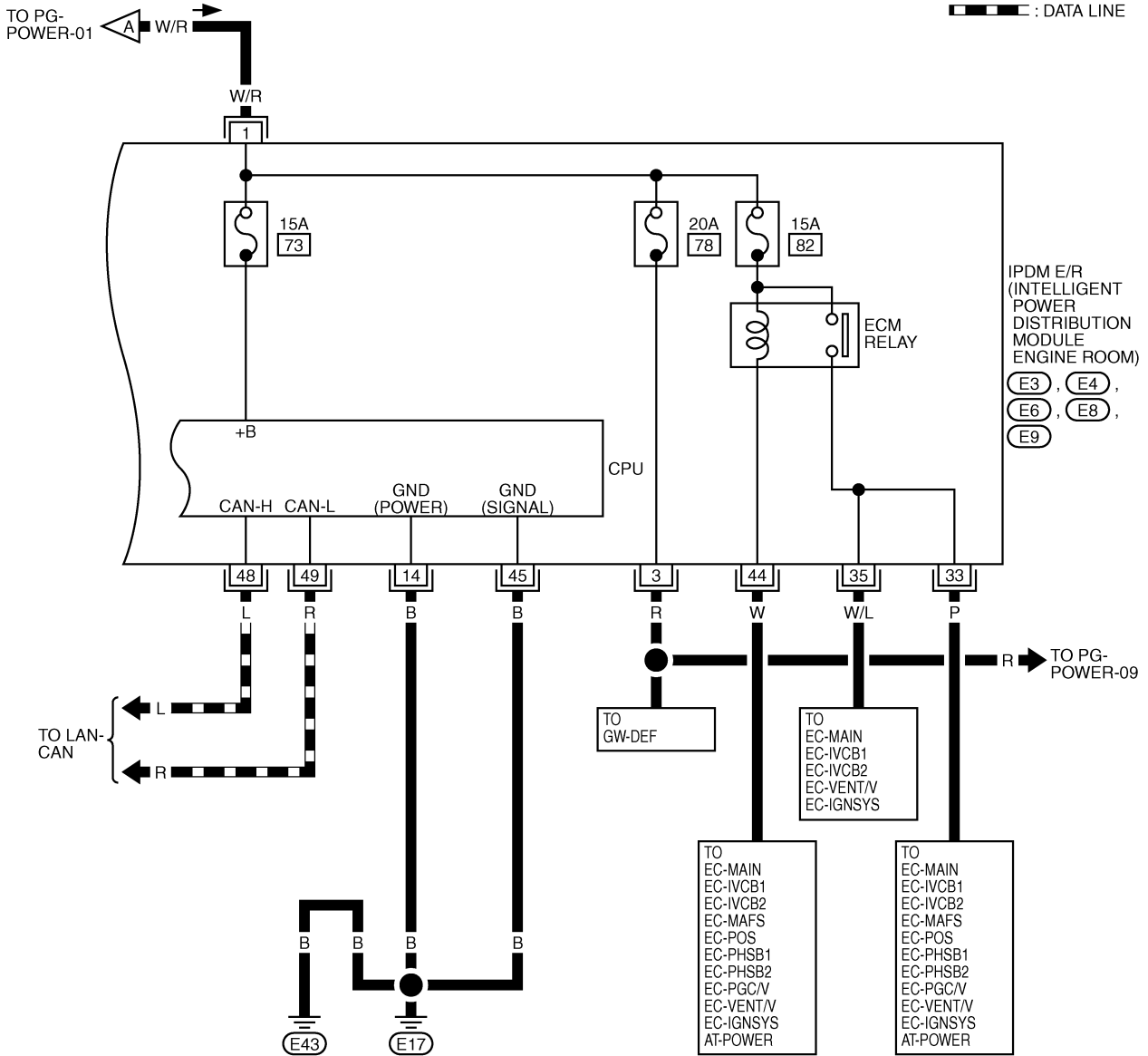
PG-POWER-04



TKWT0661E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05



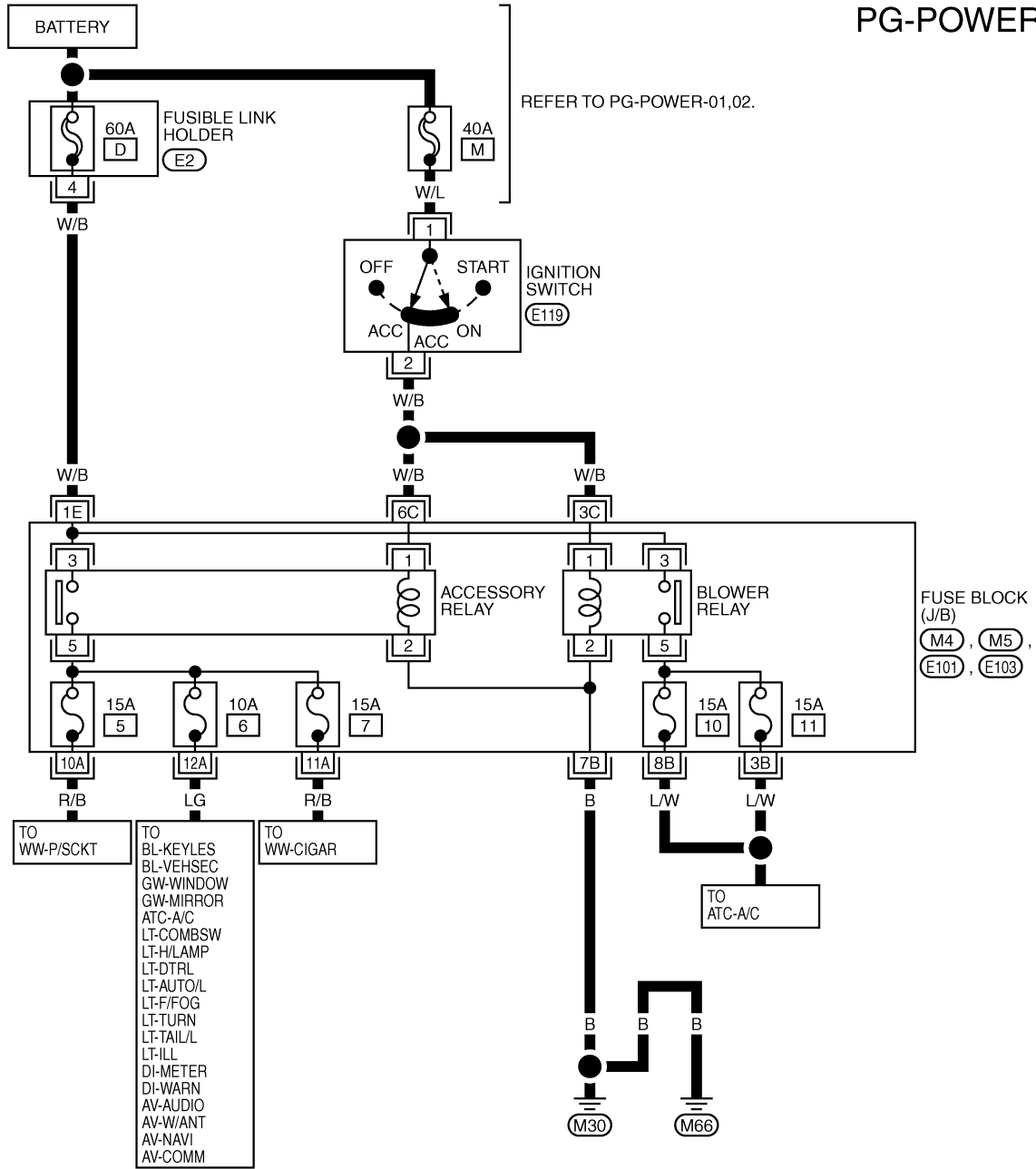
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POWER SUPPLY ROUTING CIRCUIT

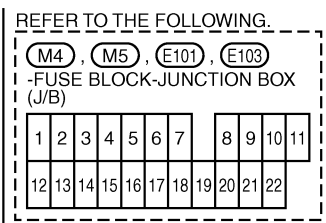
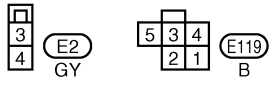
ACCESSORY POWER SUPPLY — IGNITION SW. IN “ACC” OR “ON”

PG-POWER-06



REFER TO PG-POWER-01,02.

FUSE BLOCK (J/B)
 (M4), (M5),
 (E101), (E103)

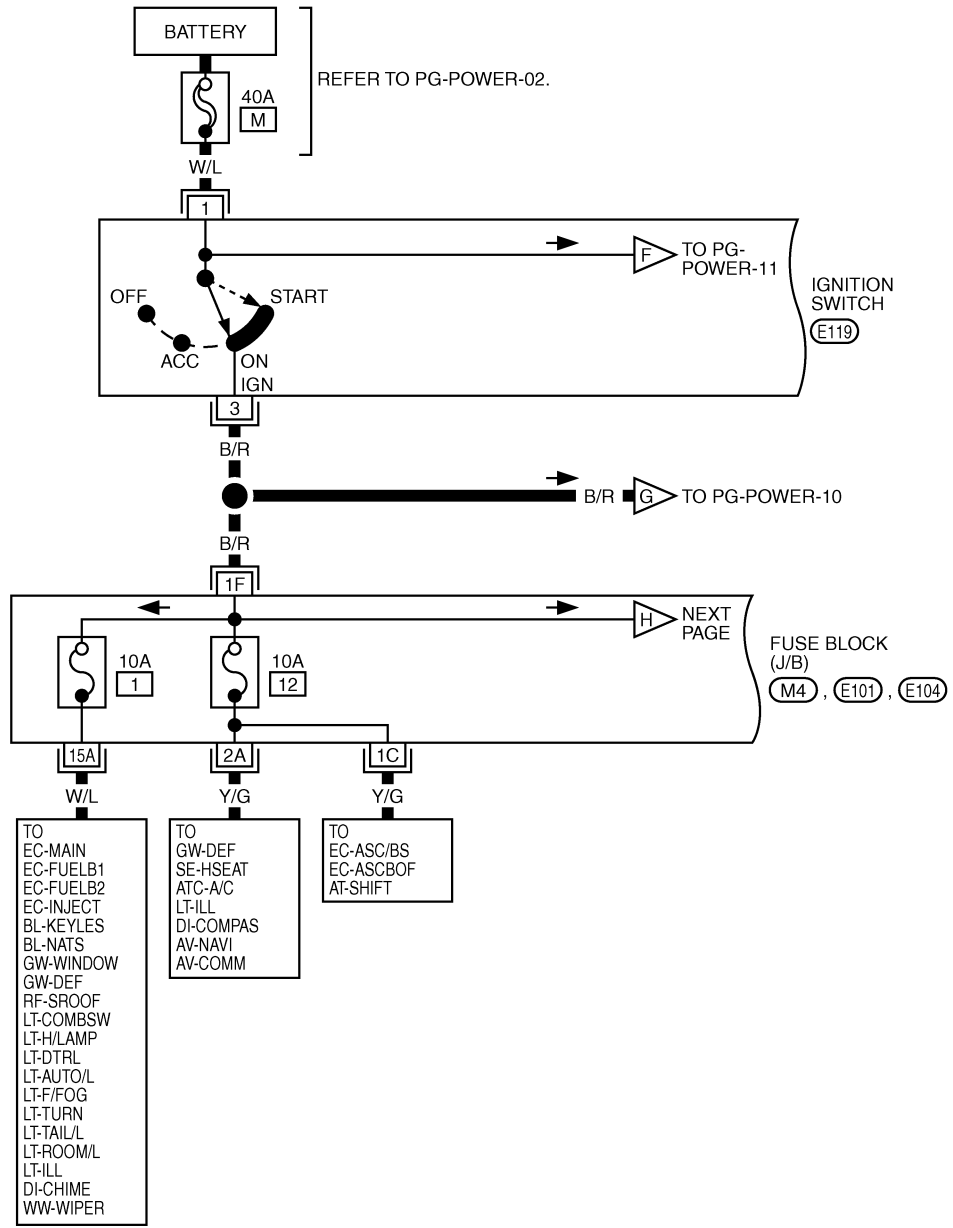


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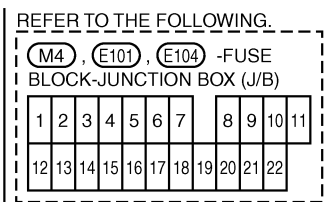
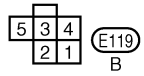
POWER SUPPLY ROUTING CIRCUIT

IGNITION POWER SUPPLY — IGNITION SW. IN “ON” AND/OR “START”

PG-POWER-07



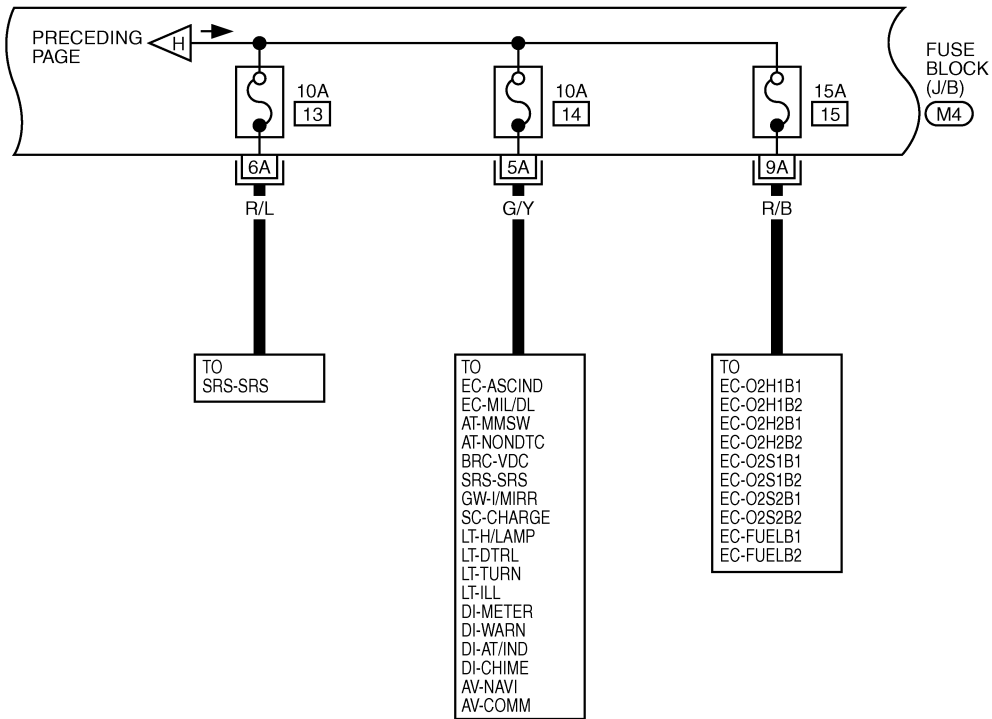
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TKWT0664E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08



REFER TO THE FOLLOWING.

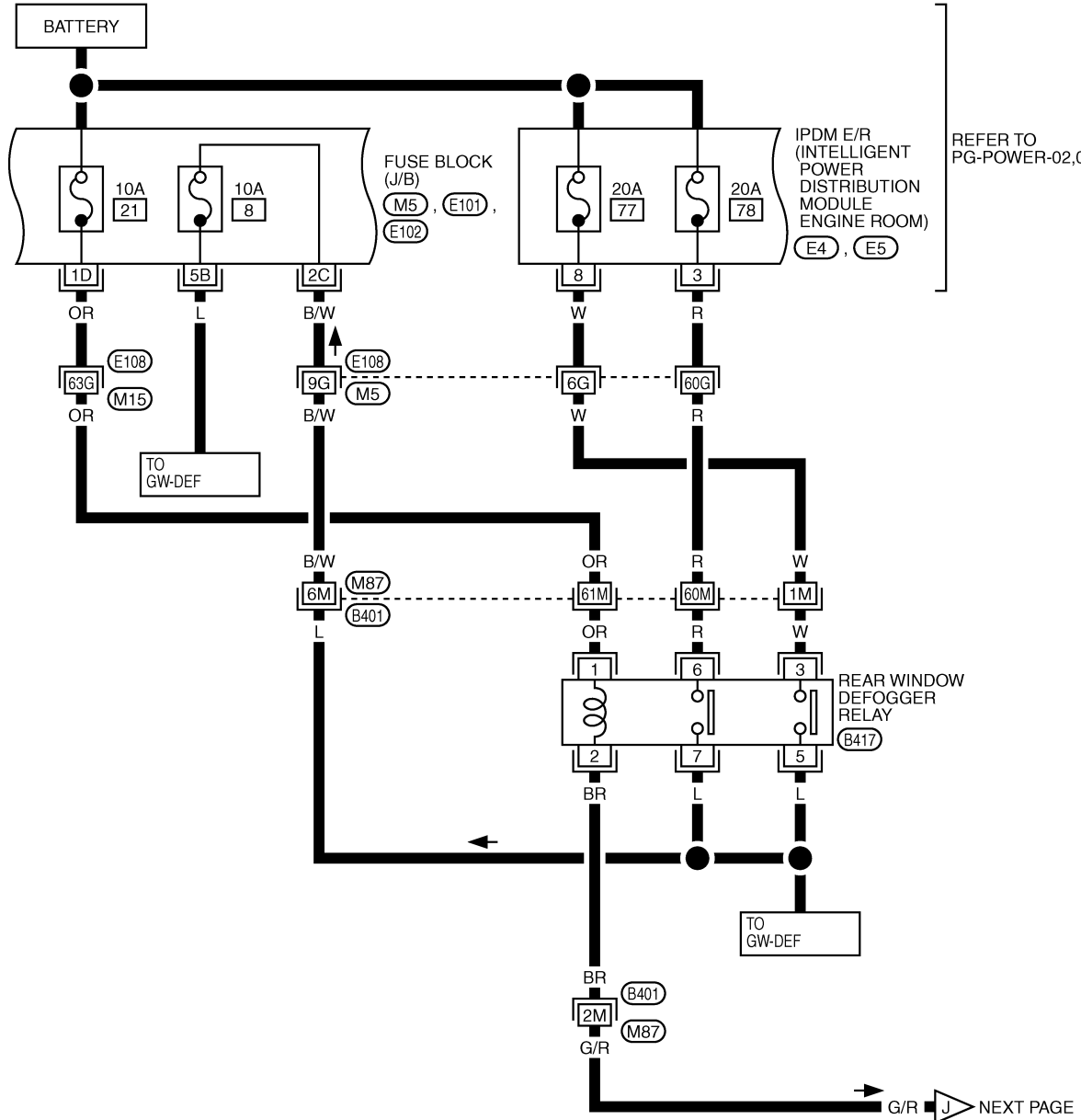
(M4) - FUSE BLOCK-
JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWT0665E

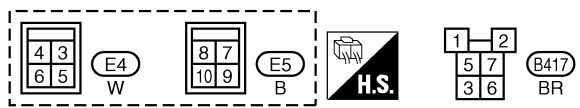
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-09



REFER TO PG-POWER-02,04,05.

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REFER TO THE FOLLOWING.

(E108), (B401) -SUPER MULTIPLE JUNCTION (SMJ)

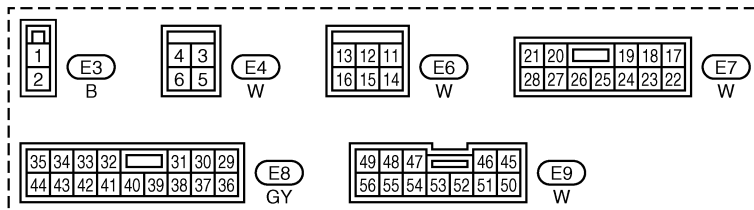
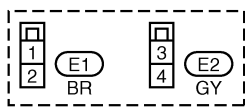
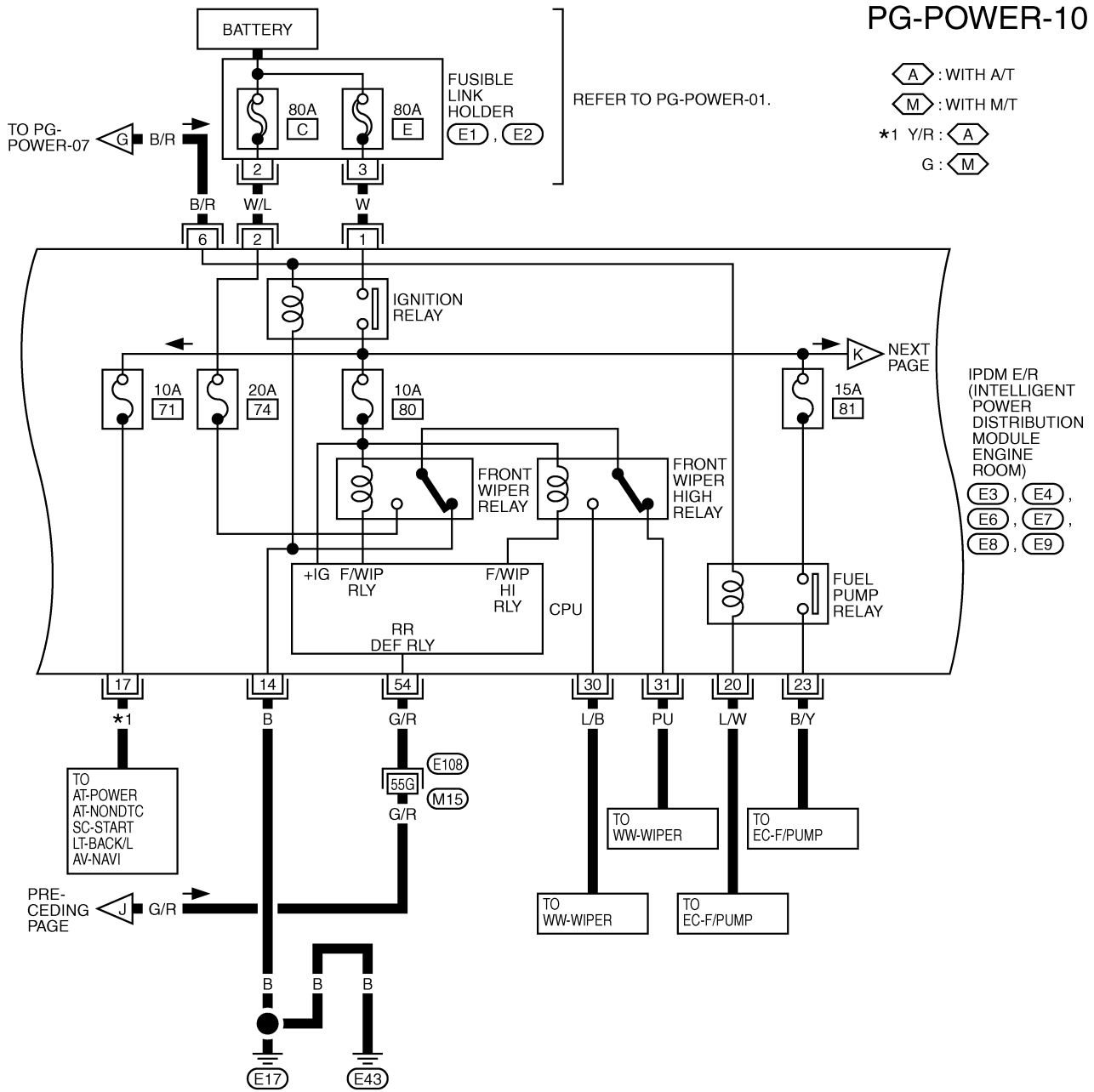
(M5), (E101), (E102) -FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWT0666E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-10



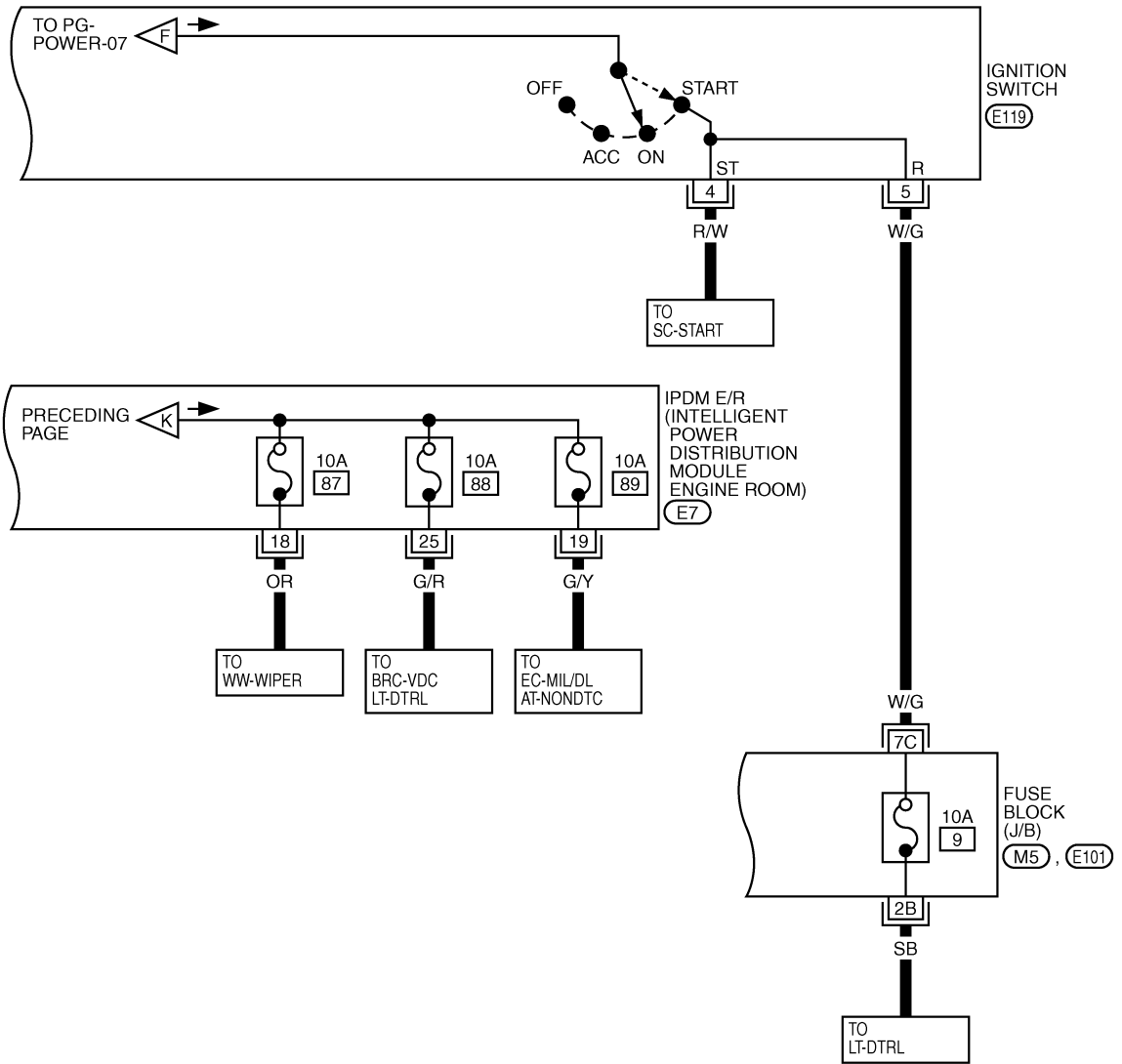
REFER TO THE FOLLOWING.

(E108) -SUPER MULTIPLE JUNCTION (SMJ)

TKWT0667E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-11



21	20	19	18	17
28	27	26	25	24
23	22			



5	3	4
2	1	

E119 B

REFER TO THE FOLLOWING.

(M5), (E101) - FUSE BLOCK-JUNCTION BOX (J/B)

1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

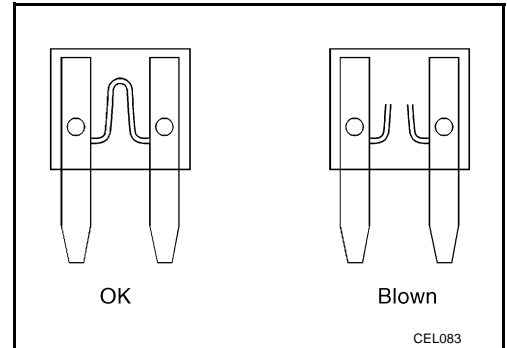
TKWT0668E

POWER SUPPLY ROUTING CIRCUIT

Fuse

AKS003HY

- If fuse is blown, be sure to eliminate cause of incident 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.



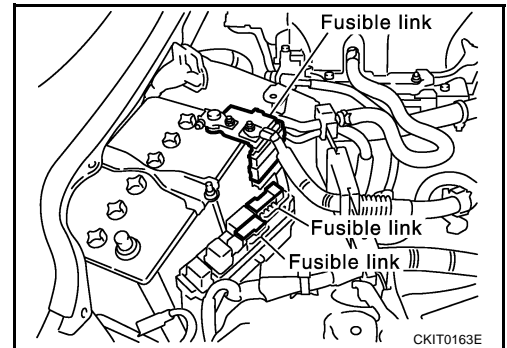
Fusible Link

AKS003HZ

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:

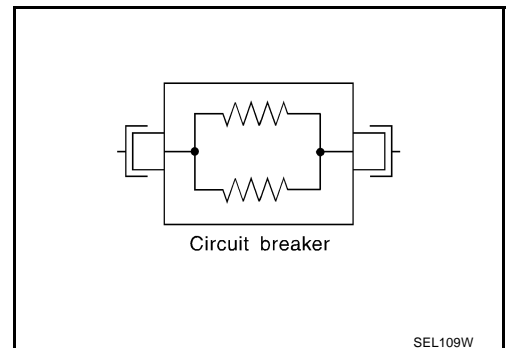
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring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



Circuit Breaker

AKS003J0

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.



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

PFP:284B7

System Description

AKS003/1

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine compartment. It controls integrated relay via IPDM E/R control circuit.
- IPDM E/R-integrated control circuit performs ON-OFF operation of relay, CAN communication control, oil pressure switch signal reception, etc.
- It controls operation of each electrical part via BCM and CAN communication lines.

CAUTION:

None of the IPDM E/R-integrated relays can be removed.

SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control
Using CAN communication line, it receives signal from BCM and controls the following lamps:
 - Head lamps (Hi, Lo)
 - Parking lamps
 - Tail lamps
 - Front fog lamps
2. Wiper control
Using CAN communication line, it receives signals from BCM and controls the front wipers.
3. Rear window defogger relay control
Using CAN communication line, it receives signals from BCM and controls the rear window defogger relay.
4. A/C compressor control
Using CAN communication line, it receives signals from ECM and controls the A/C relay.
5. Cooling fan control
Using CAN communication line, it receives signals from ECM and controls cooling fan relay.
6. Horn control
Using CAN communication line, it receives signals from BCM and controls horn relay.

CAN COMMUNICATION LINE CONTROL

With CAN communication, by connecting each control unit using two communication lines (CAN L-line, CAN H-line), it is possible to transmit maximum amount of information with minimum wiring. Each control unit can transmit and receive data, and reads necessary information only.

1. Fail-safe control
 - When CAN communication with other control units is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.
 - Operation of control parts by IPDM E/R during fail-safe mode is as follows:

Controlled system	Fail-safe mode
Headlamp	<ul style="list-style-type: none"> ● With the ignition switch ON, the headlamp (low) is ON. ● With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	Tail and parking lamps OFF.
Cooling fan	<ul style="list-style-type: none"> ● With the ignition switch ON, the cooling fan HI operates. ● With the ignition switch OFF, the cooling fan stops.
Front wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it was in just before fail-safe control was initiated.
Rear window defogger	Rear window defogger relay OFF
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

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

IPDM E/R STATUS CONTROL

In order to save power, IPDM E/R switches status by itself based on each operating condition.

1. CAN communication status
 - CAN communication is normally performed with other control units.
 - Individual unit control by IPDM E/R is normally performed.
 - When sleep request signal is received from BCM, mode is switched to sleep waiting status.
2. Sleep waiting status
 - Process to stop CAN communication is activated.
 - All systems controlled by IPDM E/R are stopped. When 3 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
 - IPDM E/R operates in low current-consumption mode.
 - CAN communication is stopped.
 - When a change in CAN communication line is detected, mode switches to CAN communication status.
 - When a change hood switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

AKS003I2

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicles are equipped with many electronic control units and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

AKS005PN

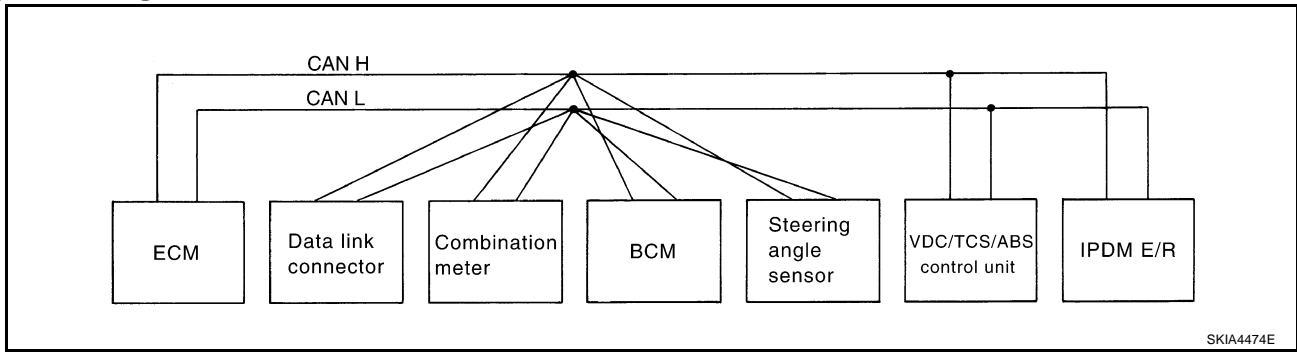
Body type	Coupe	
Axle	2WD	
Engine	VQ35DE	
Transmission	M/T	A/T
Brake control	VDC	
CAN communication unit		
ECM	×	×
TCM		×
Data link connector	×	×
Combination meter	×	×
BCM	×	×
Steering angle sensor	×	×
VDC/TCS/ABS control unit	×	×
IPDM E/R	×	×
CAN communication type	PG-19, "TYPE 1"	PG-20, "TYPE 2"

×: Applicable

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

TYPE 1

System diagram



Input/output signal chart

T: Transmit R: Receive

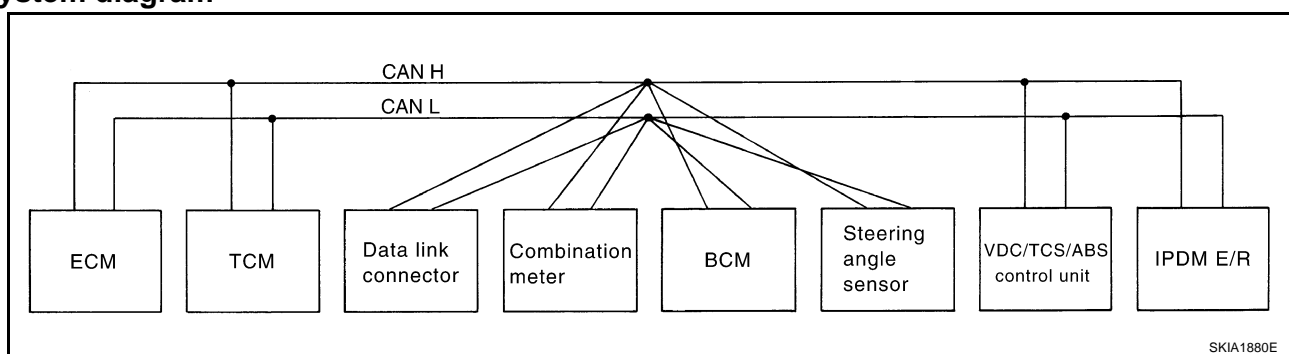
Signals	ECM	Combina- tion meter	BCM	Steering angle sen- sor	VDC/TCS/ ABS con- trol unit	IPDM E/R
Engine speed signal	T	R			R	
Engine coolant temperature signal	T	R				
Accelerator pedal position signal	T				R	
Fuel consumption monitor signal	T	R				
Air conditioner switch signal	R		T			
A/C compressor request signal	T					R
A/C compressor feedback signal	T	R				
Blower fan motor switch signal	R		T			
Cooling fan motor operation signal	T					R
Position lights request signal		R	T			R
Low beam request signal			T			R
Low beam status signal	R		R			T
High beam request signal		R	T			R
High beam status signal	R		R			T
Front fog lights request signal			T			R
Vehicle speed signal	R	R	R		T	
Sleep request 1 signal		R	T			
Sleep request 2 signal			T			R
Wake up request 1 signal		R	T			
Wake up request 2 signal		R	T			
Door switch signal (without navigation system)		R	T			R
Door switch signal (with navigation system)		T	R			
Turn indicator signal		R	T			
Seat belt buckle switch signal		T	R			
Oil pressure switch signal		R				T
Buzzer output signal		R	T			
Trunk switch signal		R	T			
Malfunction indicator lamp signal	T	R				
ASCD SET lamp signal	T	R				
ASCD CRUISE lamp signal	T	R				

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

Signals	ECM	Combina- tion meter	BCM	Steering angle sen- sor	VDC/TCS/ ABS con- trol unit	IPDM E/R
Fuel level sensor signal	R	T				
Front wiper request signal			T			R
Front wiper stop position signal			R			T
Rear window defogger switch signal			T			R
Rear window defogger control signal	R		R			T
Hood switch signal			R			T
Theft warning horn request signal			T			R
Horn chirp signal			T			R
Steering angle sensor signal				T	R	

TYPE 2

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	Combina- tion meter	BCM	Steering angle sensor	VDC/TCS/ ABS con- trol unit	IPDM E/R
Engine speed signal	T	R	R			R	
Engine coolant temperature signal	T	R	R				
Accelerator pedal position signal	T	R				R	
Closed throttle position signal	T	R					
Wide open throttle position signal	T	R					
Battery voltage signal	T	R					
Stop lamp switch		R	T				
Fuel consumption monitor signal	T		R				
A/T self-diagnosis signal	R	T					
A/T CHECK indicator lamp signal		T	R				
A/T position indicator signal		T	R			R	
ABS operation signal		R				T	
A/T shift schedule change demand signal		R				T	
Air conditioner switch signal	R			T			
A/C compressor request signal	T						R
A/C compressor feedback signal	T		R				
Blower fan motor switch signal	R			T			
Cooling fan motor operation signal	T						R

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

Signals	ECM	TCM	Combina- tion meter	BCM	Steering angle sensor	VDC/TCS/ ABS con- trol unit	IPDM E/R	
Position lights request signal			R	T			R	A
Low beam request signal				T			R	B
Low beam status signal	R			R			T	
High beam request signal			R	T			R	C
High beam status signal	R			R			T	
Front fog lights request signal				T			R	
Vehicle speed signal			R			T		D
	R	R	T	R				
Sleep request 1 signal			R	T				E
Sleep request 2 signal				T			R	
Wake up request 1 signal			R	T				
Wake up request 2 signal			R	T				F
Door switch signal (without naviga- tion system)			R	T			R	
Door switch signal (with navigation system)			T	R				G
Turn indicator signal			R	T				
Seat belt buckle switch signal			T	R				H
Oil pressure switch signal			R				T	
Buzzer output signal			R	T				
Trunk switch signal			R	T				I
Malfunction indicator lamp signal	T		R					
ASCD SET lamp signal	T		R					J
ASCD CRUISE lamp signal	T		R					
Fuel level sensor signal	R		T					
Output shaft revolution signal	R	T						PG
Turbine revolution signal	R	T						
Front wiper request signal				T			R	L
Front wiper stop position signal				R			T	
Rear window defogger switch signal				T			R	
Rear window defogger control sig- nal	R			R			T	M
Manual mode signal		R	T					
Not manual mode signal		R	T					
Manual mode shift up signal		R	T					
Manual mode shift down signal		R	T					
Manual mode indicator signal		T	R					
Hood switch signal				R			T	
Theft warning horn request signal				T			R	
Horn chirp signal				T			R	
Steering angle sensor signal					T	R		

Function of Detecting Ignition Relay Malfunction

AKS003/3

- When contact point of integrated ignition relay is stuck and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.

NOTE:

When the ignition switch is turned ON, the tail lamp is OFF.

Auto Active Test DESCRIPTION

AKS003/4

- In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the following systems:
 - Rear window defogger
 - Front wipers
 - Tail and parking lamps
 - Front fog lamps
 - Headlamps (Hi, Lo)
 - A/C compressor (magnetic clutch)
 - Cooling fan

OPERATION PROCEDURE

1. Close hood front door RH and lift wiper arms away from windshield (to prevent glass damage by wiper operation).

NOTE:

When auto active test is performed with hood opened, sprinkle water on windshield beforehand.

2. Turn ignition switch OFF.
3. Turn ignition switch ON and, within 20 seconds, press front door switch LH 10 times. Then turn ignition switch OFF.
4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
5. When auto active test mode is actuated, horn chirps once.
6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

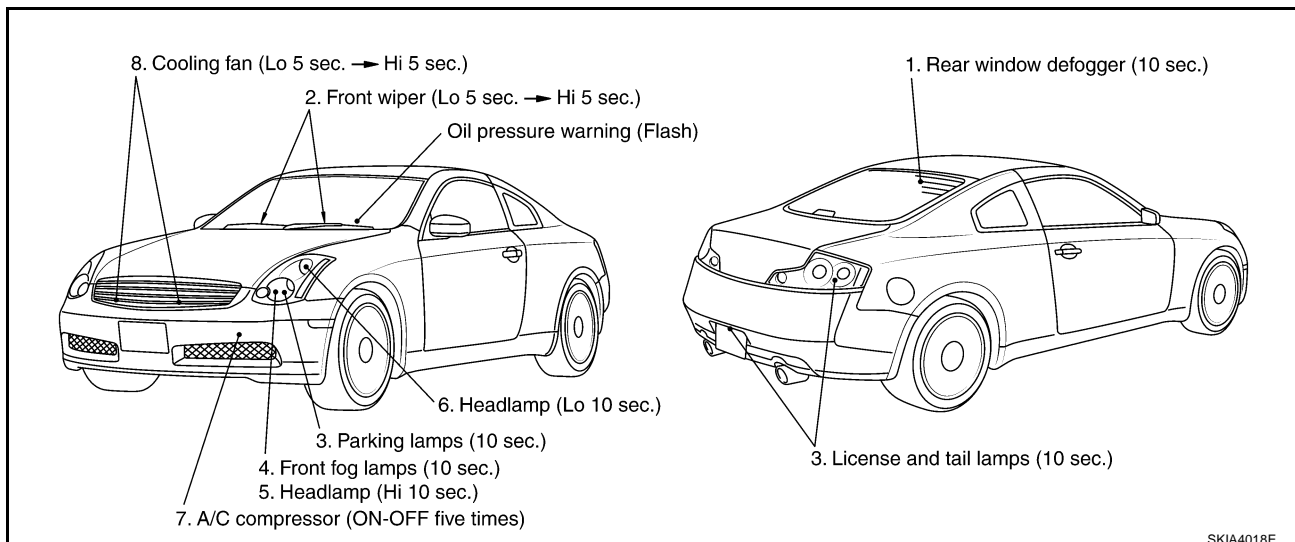
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to inspect [DI-39, "Oil Pressure Warning Lamp Stays Off \(Ignition Switch ON\)"](#) and [BL-37, "Check Door Switch \(With Navigation System\)"](#) or [BL-39, "Check Door Switch \(Without Navigation System\)"](#) when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

- When auto active test mode is actuated, the following eight steps are repeated three times.



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

Concept of Auto Active Test

- IPDM E/R actuates auto active test mode when it receives door switch signal from BCM via CAN communication line. Therefore, when auto active test mode is activated successfully, CAN communication between IPDM E/R and BCM is normal.
- If any of systems controlled by IPDM E/R cannot be operated, possible cause can be easily diagnosed using auto active test.

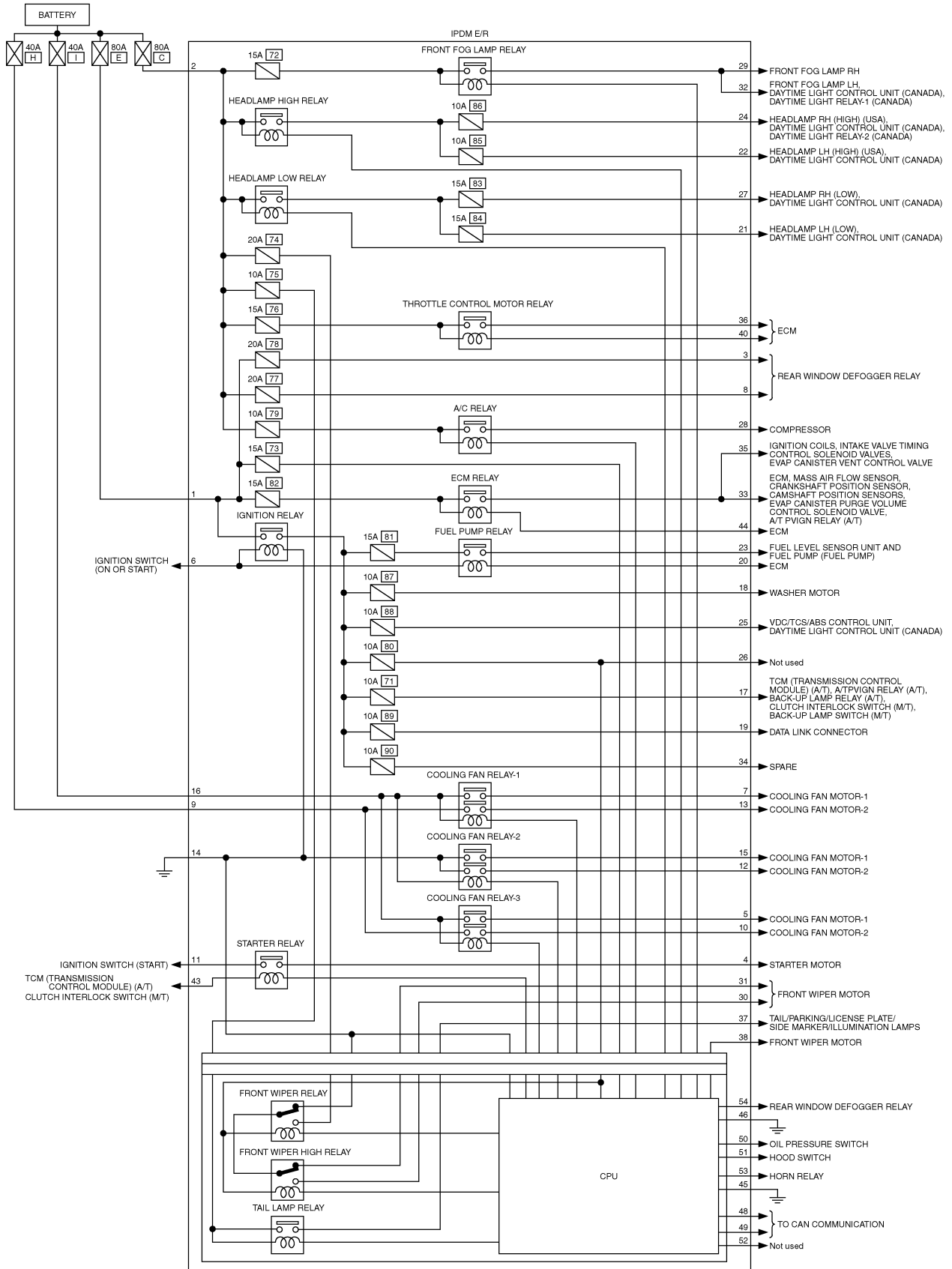
Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Any of front wipers, tail and parking lamps, front fog lamps, and head lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES	● BCM signal input system
		NO	<ul style="list-style-type: none"> ● Lamp/wiper motor malfunction ● Lamp/wiper motor ground circuit malfunction ● Harness/connector malfunction between IPDM E/R and system in question ● IPDM E/R (integrated relay) malfunction
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	<ul style="list-style-type: none"> ● Rear window defogger relay circuit ● Open circuit of rear window defogger ● IPDM E/R malfunction
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES	<ul style="list-style-type: none"> ● BCM signal input circuit ● CAN communication signal between BCM and ECM. ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● Magnetic clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnetic clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES	<ul style="list-style-type: none"> ● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pressure warning lamp blink?	YES	<ul style="list-style-type: none"> ● Harness/connector malfunction between IPDM E/R and oil pressure switch ● Oil pressure switch malfunction
		NO	<ul style="list-style-type: none"> ● CAN communication signal between IPDM E/R and combination meter ● Combination meter

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

Schematic

AKS00315



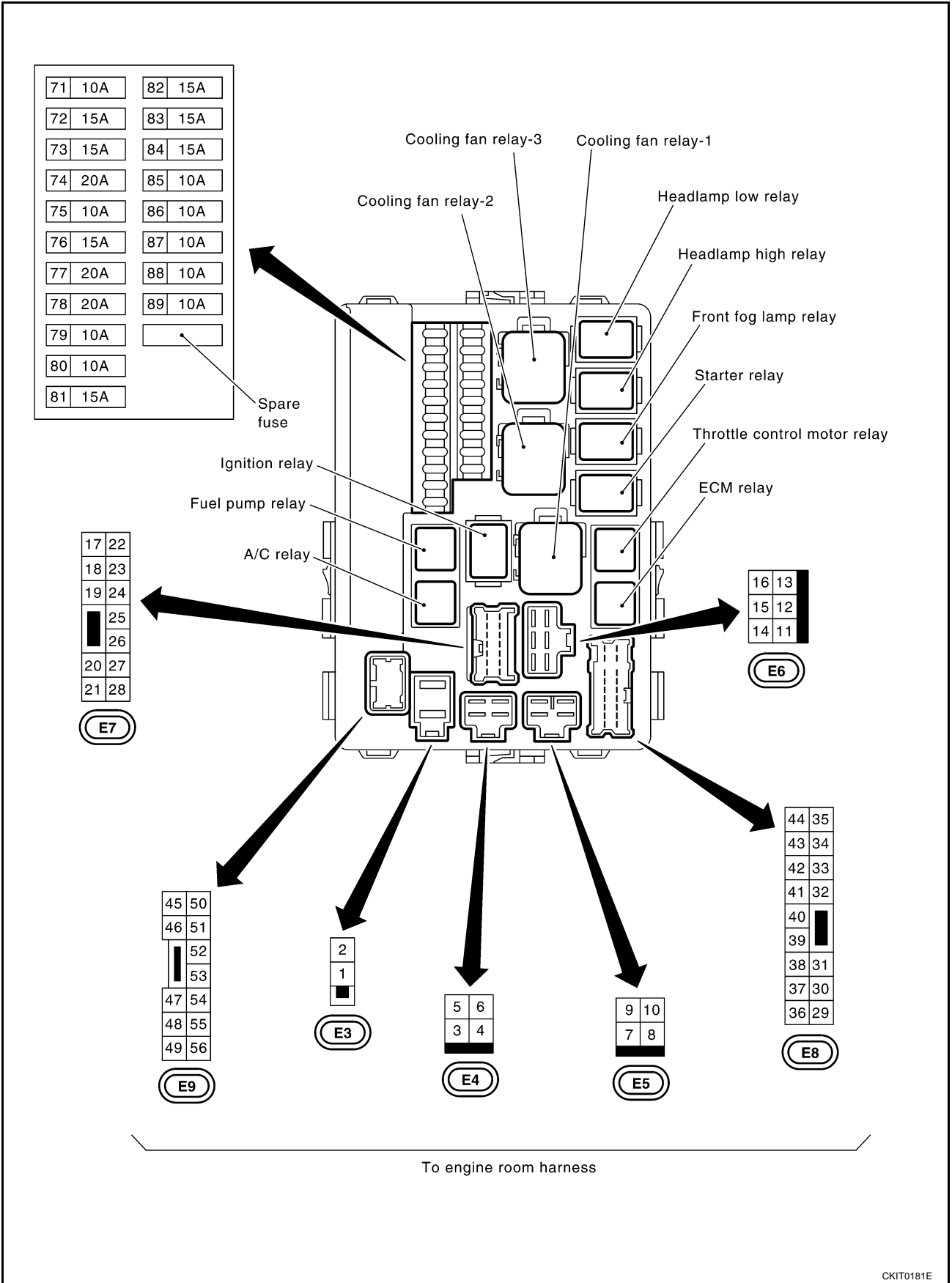
TKWT0669E

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

IPDM E/R Terminal Arrangement

AKS00316

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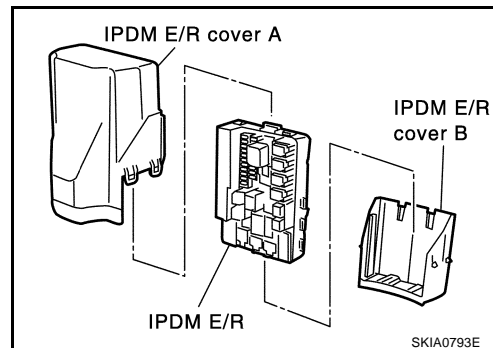
CKIT0181E

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

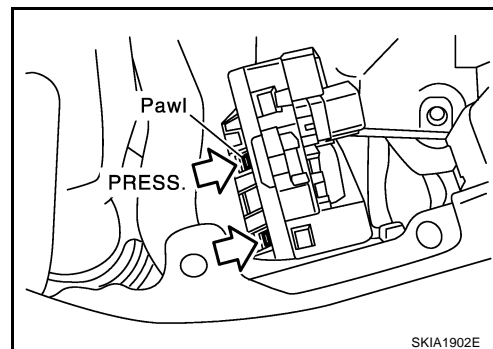
IPDM E/R Terminal Inspection

AKS00317

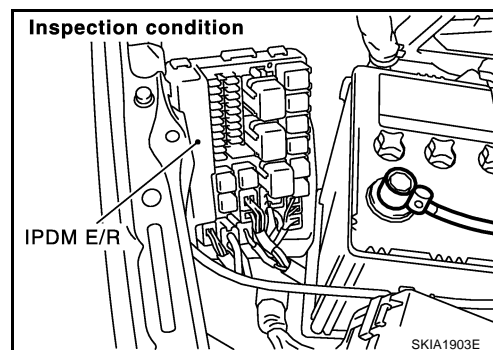
1. Remove hood ledge cover. Refer to [PG-28, "Removal and Installation of IPDM E/R"](#).
2. Remove cowl top cover (left).
3. Pull up to remove IPDM E/R cover A.



4. While pressing pawl on back side of IPDM E/R cover "B" toward vehicle front to unlock, lift up IPDM E/R.



5. Be sure to incline IPDM E/R when placing it. Then perform inspection on each terminal.



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

IPDM E/R Power/Ground Circuit Inspection

AKS003/B

1. FUSE AND FUSIBLE LINK INSPECTION

- Check that the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Signal name	Fuse, fusible link No.
1, 2	Battery power	F/L-C, F/L-E, Fuse No. 73
-	Ignition power	Fuse No. 80

OK or NG?

- OK >> GO TO 2.
- NG >> Replace fuse or fusible link.

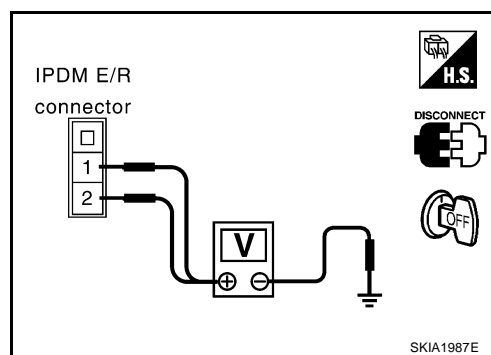
2. POWER CIRCUIT INSPECTION

- Disconnect IPDM E/R harness connector E3.
- Check voltage between IPDM E/R harness connector E3 terminals 1 (W/R), 2 (W/L) and ground.

Battery voltage should exist

OK or NG?

- OK >> GO TO 3.
- NG >> Replace IPDM E/R power circuit harness.



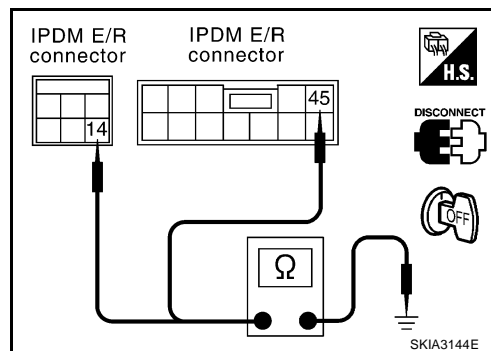
3. GROUND CIRCUIT INSPECTION

- Disconnect IPDM E/R harness connectors E6 and E9.
- Check continuity between IPDM E/R harness connectors E6 terminal 14 (B), E9 terminal 45 (B) and ground.

Continuity should exist

OK or NG?

- OK >> Inspection end.
- NG >> Replace ground circuit harness of IPDM E/R.



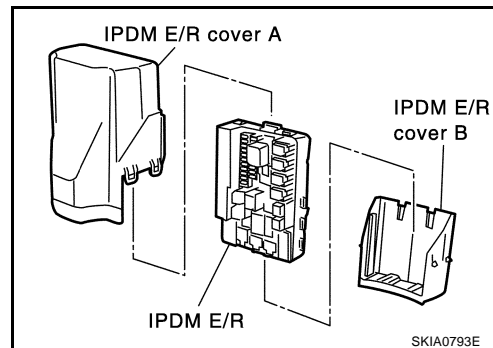
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

AKS00319

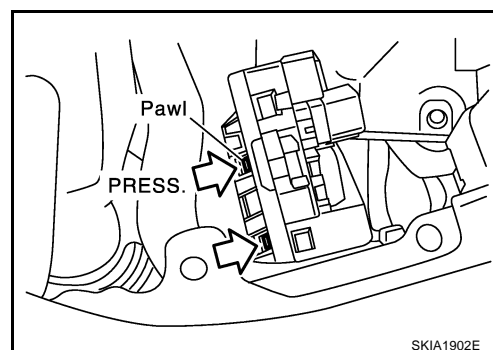
Removal and Installation of IPDM E/R

REMOVAL

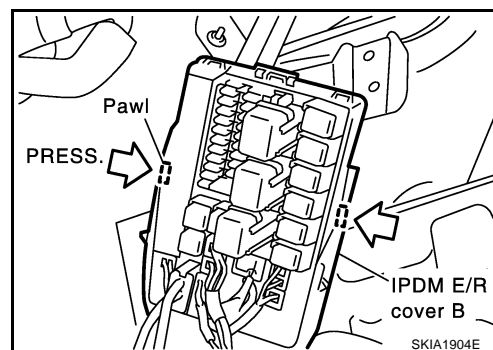
1. Remove battery. Refer to [SC-9, "Removal and Installation"](#) in "Starting and Charging System (SC)" section.
2. Remove IPDM E/R cover A. While pressing pawl on backside of IPDM E/R cover B toward vehicle front to unlock, lift up IPDM E/R.



3. While pressing pawls on right and left side of IPDM E/R, remove IPDM E/R cover B from IPDM E/R.



4. Remove harness connector from IPDM E/R.



INSTALLATION

Install in the reverse order of removal.

GROUND

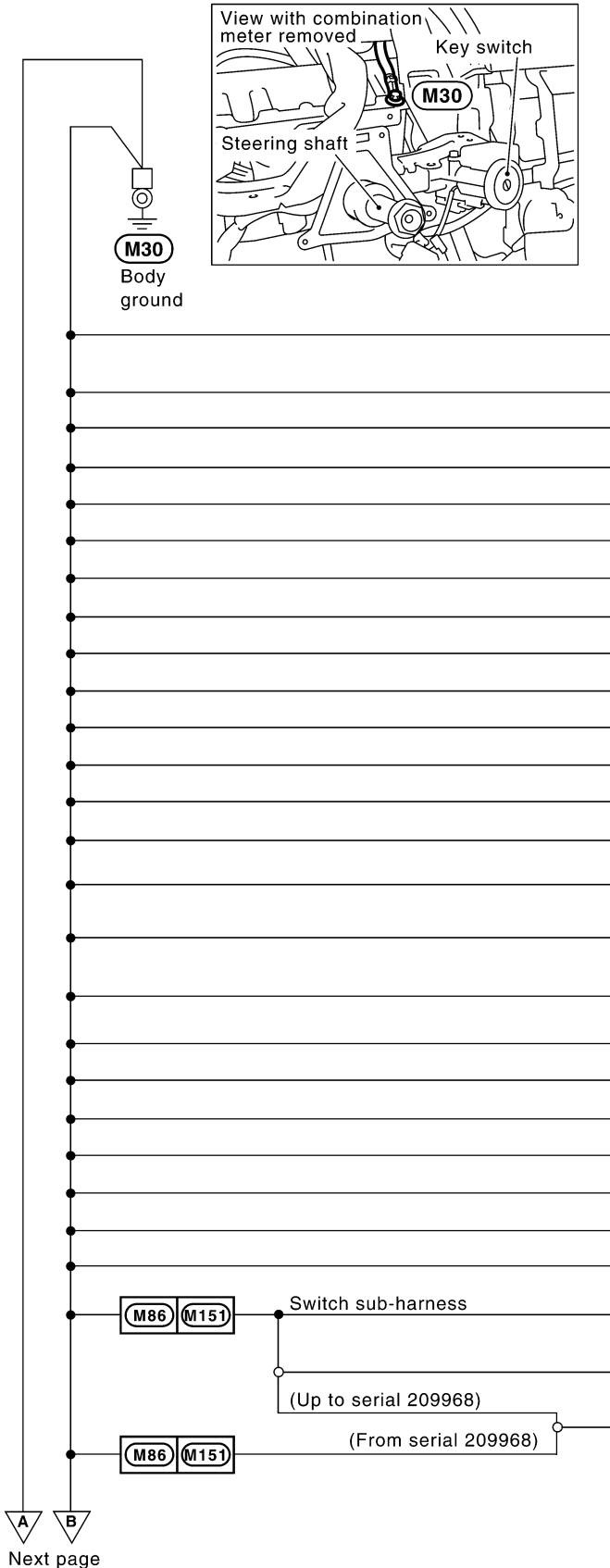
GROUND

PF0:00011

Ground Distribution MAIN HARNESS

AKS0031A

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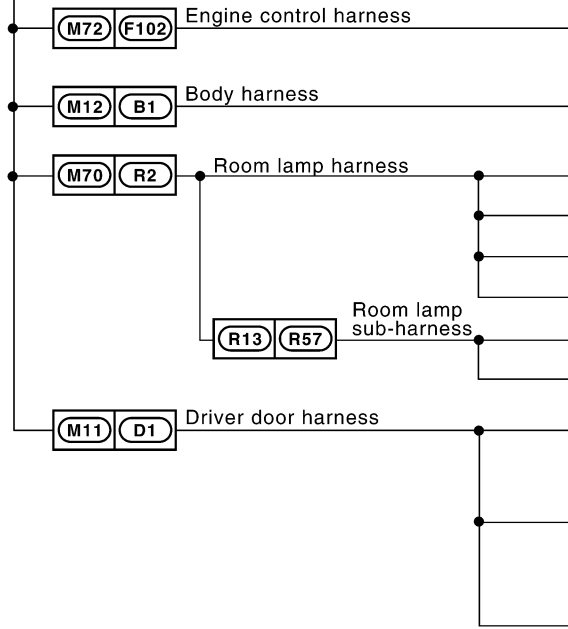
CON-NECTOR NUMBER	CONNECT TO
M5	Fuse block (J/B) (Terminal No.7B) • Accessory relay • Blower relay
M7	Illumination control switch
M8	Data link connector (Terminal No. 4)
M9	VDC off switch
M20	Combination meter (Terminal No. 45)
M20	Combination meter (Terminal No. 46)
M20	Combination meter (Terminal No. 47)
M22	Steering angle sensor
M28	Door mirror remote control switch
M29	Combination switch
M33	Clock
M37	NAVI switch
M38	A/C and audio controller
M44	Cigarette lighter socket
M47	A/T device (Terminal No. 2) • Detention switch
M47	A/T device (Terminal No. 9) • Mode select switch
M49	Ashtray illumination (With A/T and from serial 209969 with M/T)
M50	Hazard switch
M53	Heated seat switch (Passenger side) (With A/T)
M54	Heated seat switch (Driver side) (With A/T)
M55	Air bag diagnosis sensor unit
M81	Compass
M84	Trunk lid opener switch
M85	Heated seat relay
M152	Ashtray illumination (Up to serial 209968 With M/T)
M154	Heated seat switch (Driver side) (With M/T)
M155	Heated seat switch (Passenger side) (With M/T)

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GROUND

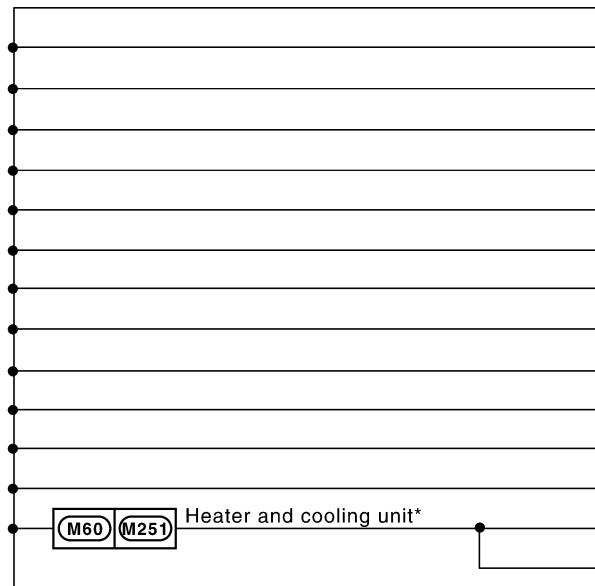
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▲ A ▲ B



CON-NECTOR NUMBER	CONNECT TO
(F105)	A/T PV IGN relay
(B27)	Fuel level sensor unit and fuel pump (Terminal No. 5) • Fuel level sensor (Main) • Fuel tank temperature sensor
(R4)	Vanity mirror lamp (Passenger side)
(R7)	Auto anti-dezzling inside mirror
(R9)	Vanity mirror lamp (Driver side)
(R12)	Sunroof motor assembly
(R52)	Map lamp
(R53)	Sunroof switch
(D2)	Door mirror (Driver side) (With door mirror defogger)
(D7)	Power window main switch • CPU • Power window lock switch • Door lock and unlock switch • Illumination
(D15)	Driver side door lock assembly • Door key cylinder switch

▼ C ▼ D
Next page



CON-NECTOR NUMBER	CONNECT TO
(M8)	Data link connector (Terminal No. 5)
(M17)	Air mix door motor (Driver side)
(M32)	Display and A/C auto amp. (Terminal No. 24)
(M35)	Display unit (Terminal No. 22)
(M35)	Display unit (Terminal No. 24)
(M52)	Power socket (Floor console box) (With A/T)
(M57)	NAVI control unit (Terminal No. 1)
(M57)	NAVI control unit (Terminal No. 4)
(M62)	Blower motor
(M64)	Glove box lamp
(M67)	Intake door motor
(M68)	Upper glove box lamp
(M88)	Power socket (Instrument side panel RH)
(M252)	Mode door motor
(M253)	Air mix door motor (Passenger side)

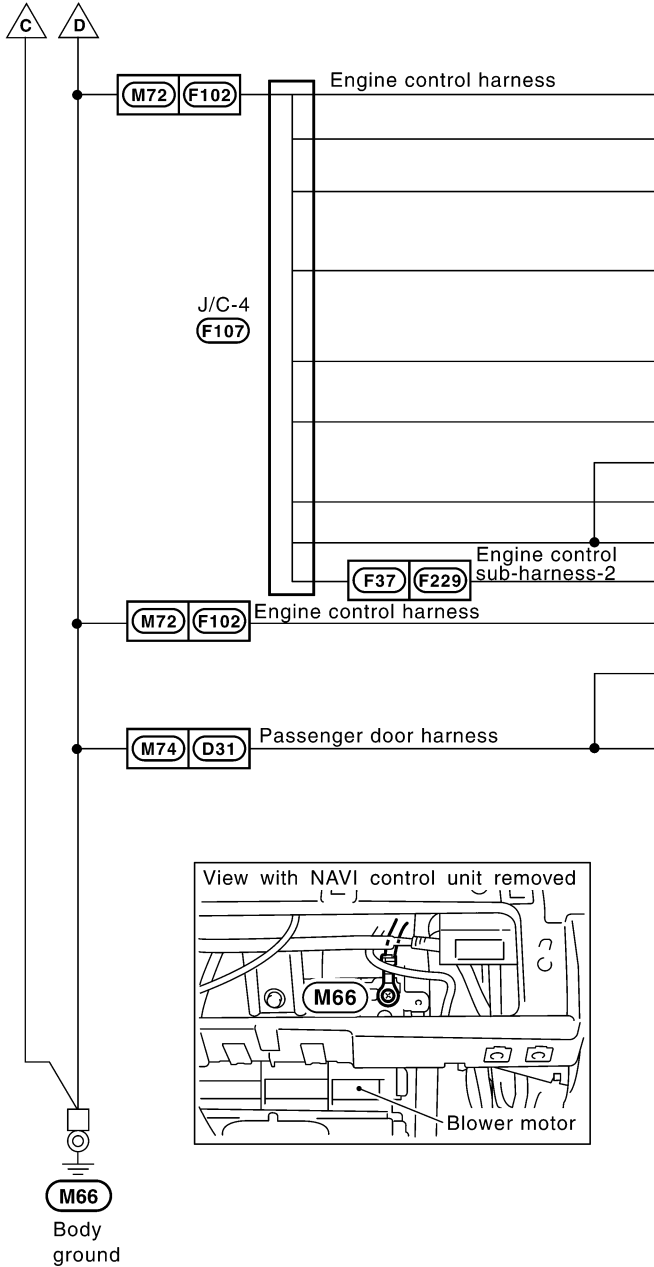
* : This sub-harness is not shown in "HARNES LAYOUT".

CKIT0246E

GROUND

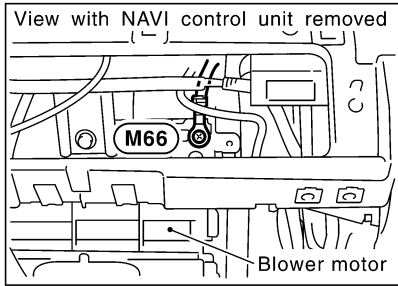
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CON-NECTOR NUMBER	CONNECT TO
(F4)	Camshaft position sensor (PHASE) (BANK1)
(F10)	Crankshaft position sensor (POS)
(F31)	Shield wire [Electric throttle control actuator (Sensor1)] (For circuit from terminal No. 1)
(F31)	Shield wire [Electric throttle control actuator (Sensor1, 2)] (For circuit from terminal No. 2,4,5)
(F31)	Shield wire [Electric throttle control actuator (Throttle control motor)] (For circuit from terminal No. 3,6)
(F32)	Camshaft position sensor (PHASE) (BANK2)
(F35)	Park/neutral position switch (With M/T)
(F108)	ECM (Terminal No. 1)
(F108)	ECM (Terminal No. 116)
(F228)	Shield wire (Knock sensor)
(F108)	ECM (Terminal No. 115)
(D32)	Door mirror (Passenger side) (With door mirror defogger)
(D43)	Power window sub-switch • CPU • Door lock and unlock switch

J/C : Joint connector

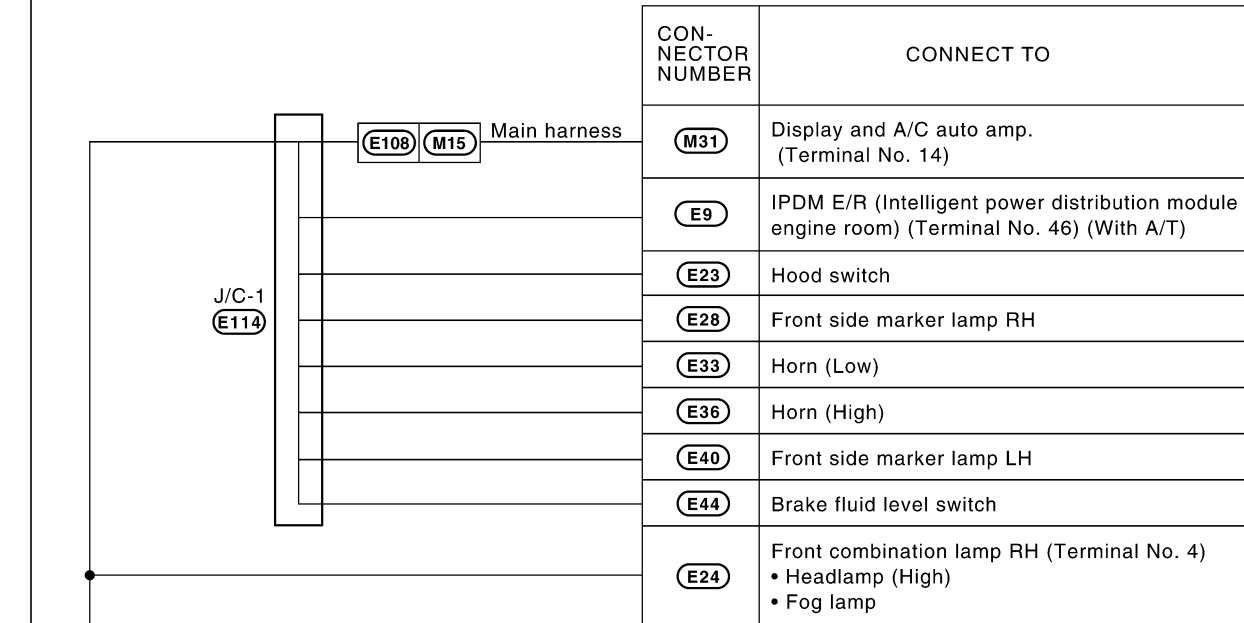
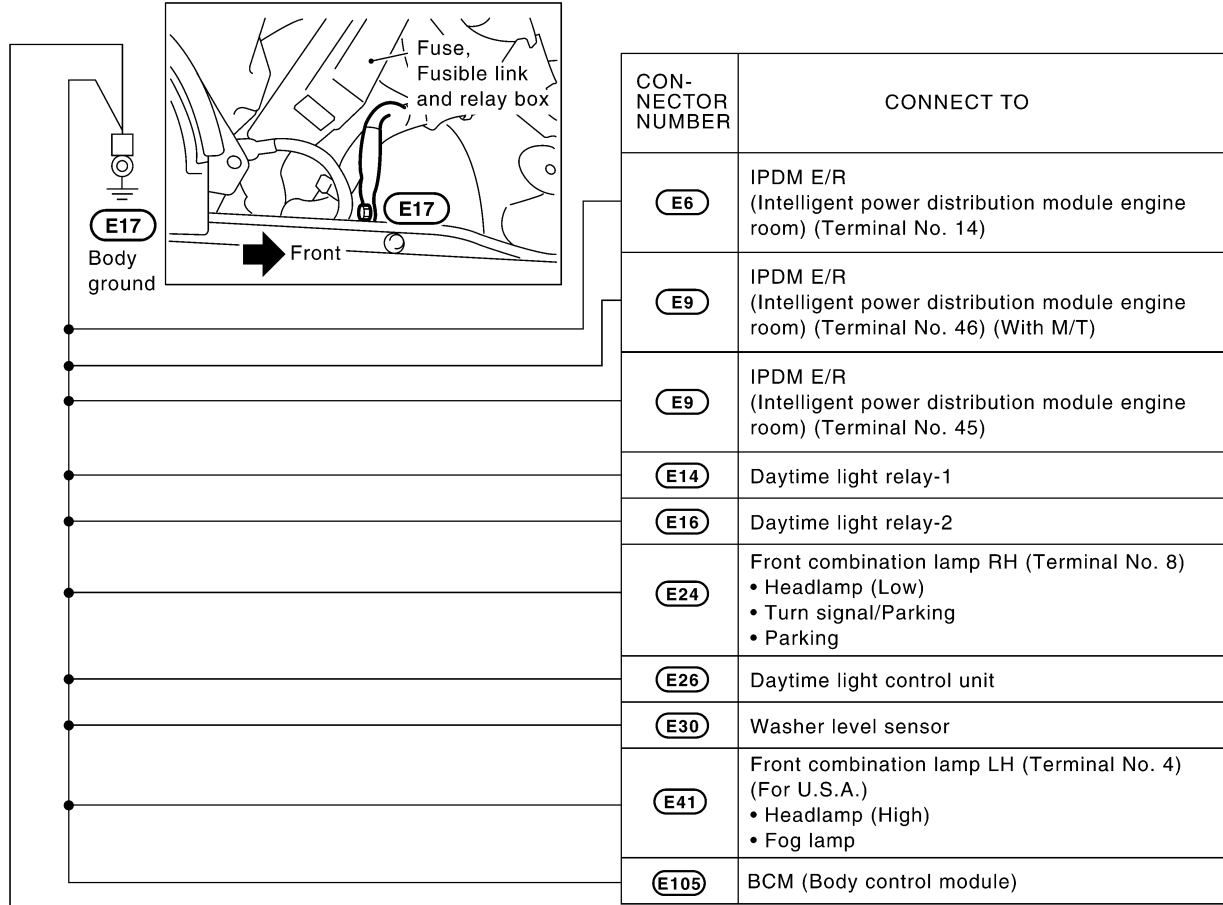


(M66)
Body ground

CKIT0247E

GROUND

ENGINE ROOM HARNESS



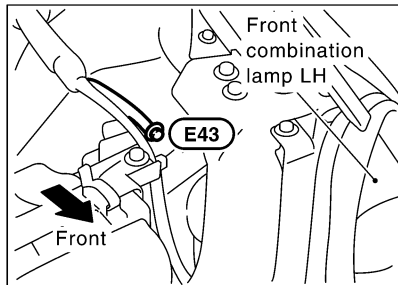
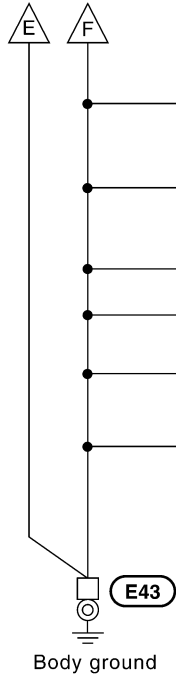
J/C: Joint connector

Next page

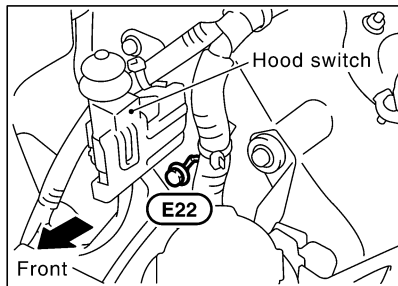
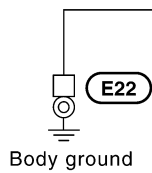
CKIT0248E

GROUND

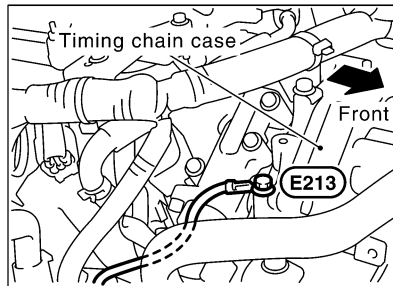
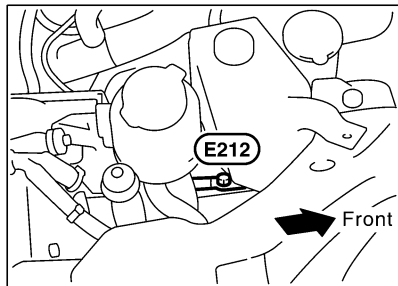
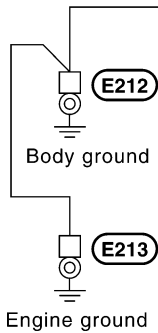
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CON-NECTOR NUMBER	CONNECT TO
E39	Cooling fan motor-1
E41	Front combination lamp LH (Terminal No. 8) • Headlamp (Low) • Turn signal/Parking • Parking
E52	Front wiper motor
E53	Cooling fan motor-2
E118	VDC/TCS/ABS control unit (Terminal No. 28)
E118	VDC/TCS/ABS control unit (Terminal No. 29)



CON-NECTOR NUMBER	CONNECT TO
E37	Shield wire (Crash zone sensor)



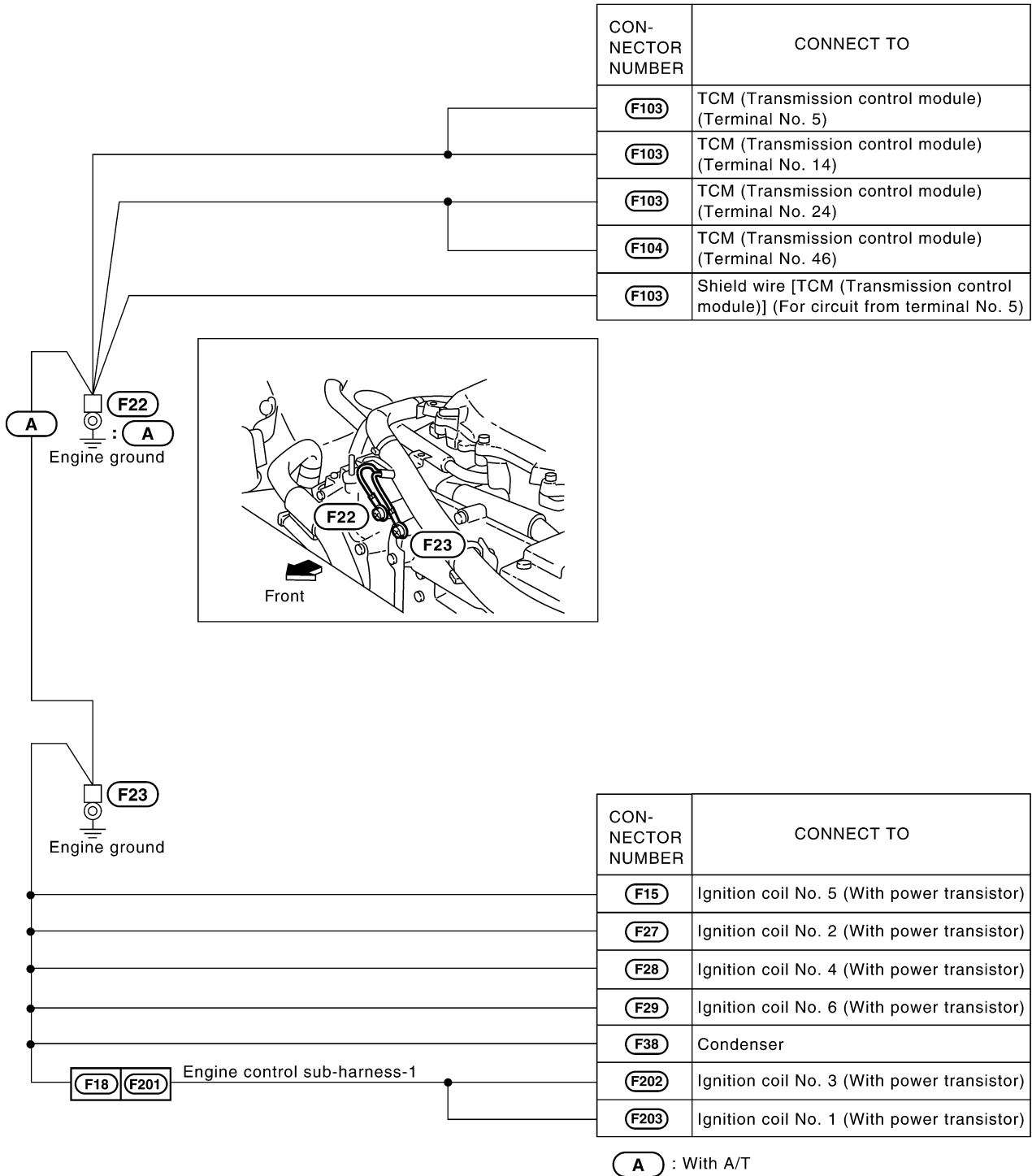
CON-NECTOR NUMBER	CONNECT TO
E211	Alternator (E)

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CKIT0249E

GROUND

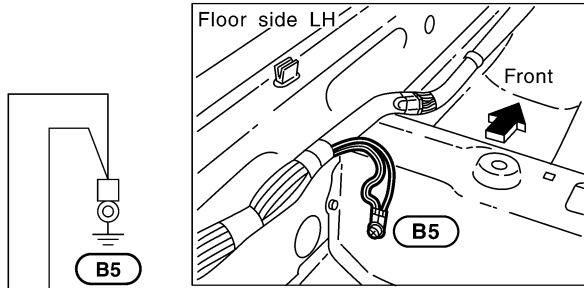
ENGINE CONTROL HARNESS



CKIT0250E

GROUND

BODY HARNESS

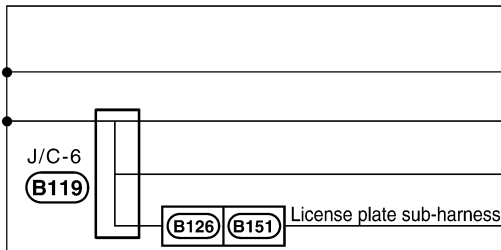


B5
Body ground

B6 B321

Power seat sub-harness (Driver side)*

CON-NECTOR NUMBER	CONNECT TO
B324	Driver side seat control unit
B326	Power seat switch (Driver side)
B332	Front seat cushion heater (Driver side)

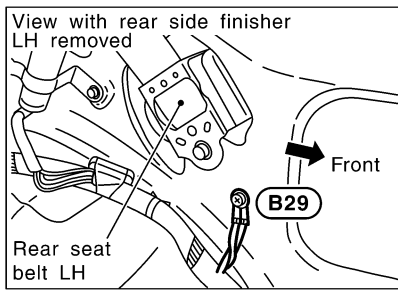


J/C-6
B119

B126 B151

License plate sub-harness

CON-NECTOR NUMBER	CONNECT TO
B27	Fuel level sensor unit and fuel pump (Terminal No. 3) • Fuel pump
B42	Condenser
B8	Seat belt buckle switch (Driver side)
B116	High-mounted stop lamp (On the rear parcel shelf)
B152	License plate lamp LH
B153	License plate lamp RH
B123	BOSE speaker amp.



B29
Body ground

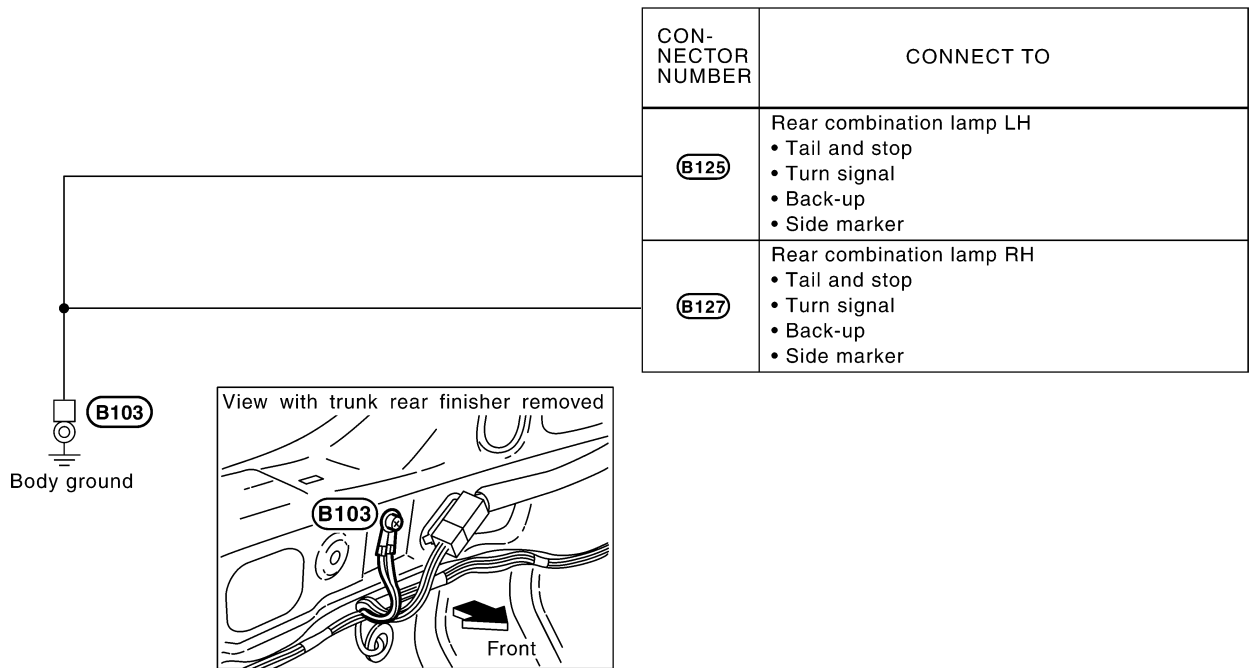
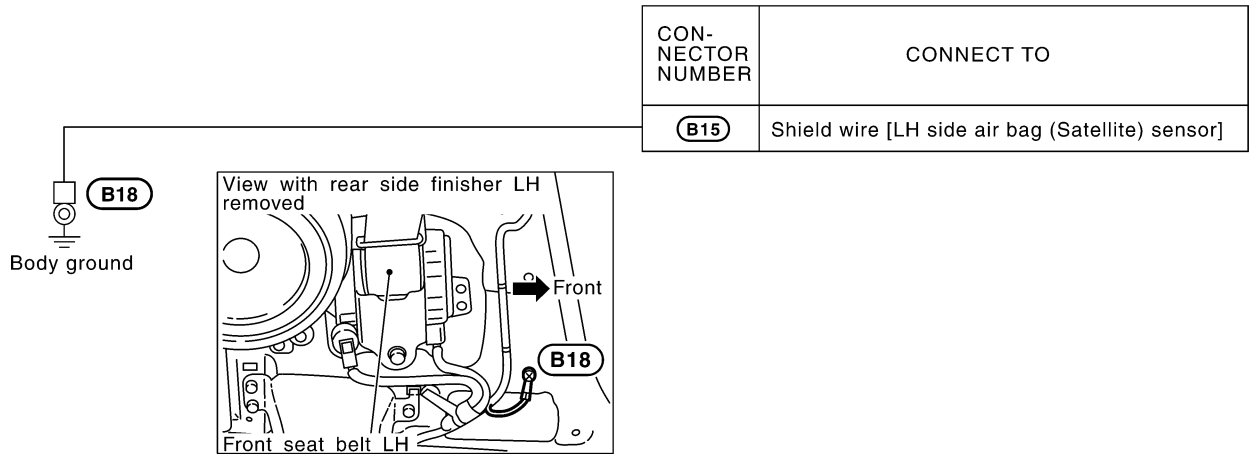
J/C : Joint connector

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

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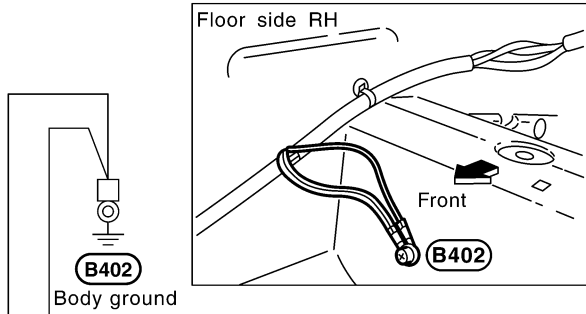
GROUND



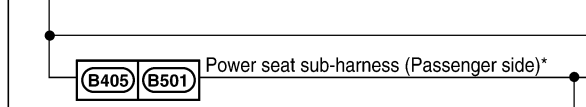
CKIT0252E

GROUND

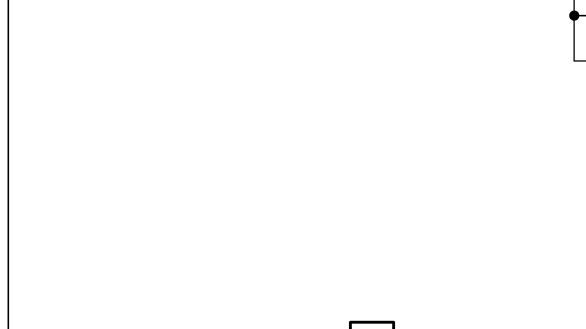
BODY NO.2 HARNESS



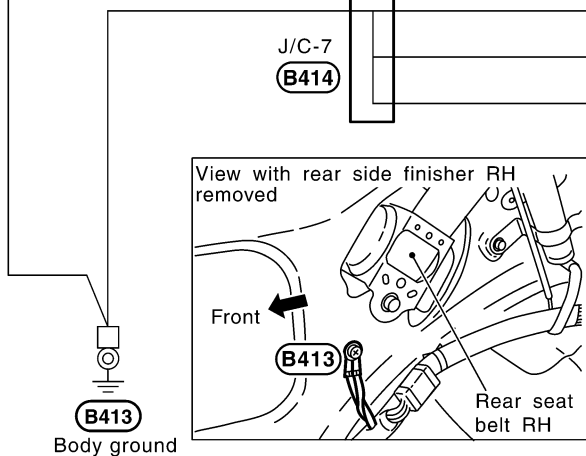
CON-NECTOR NUMBER	CONNECT TO
B406	Seat belt buckle switch (Passenger side)
B502	Passenger side seat control unit
B503	Power seat switch (Passenger side)
B505	Front seat cushion heater (Passenger side)



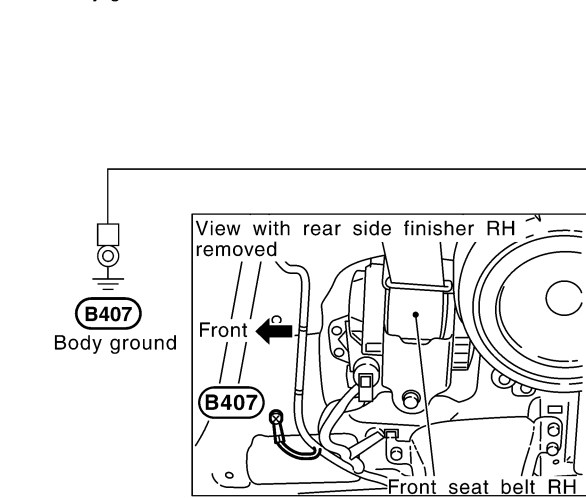
CON-NECTOR NUMBER	CONNECT TO
B419	Trunk lid opener actuator
B420	Trunk Room lamp switch
B421	High-mounted stop lamp (In the rear air spoiler)



J/C : Joint connector



CON-NECTOR NUMBER	CONNECT TO
B409	Shield wire [RH side air bag (Satellite) sensor]

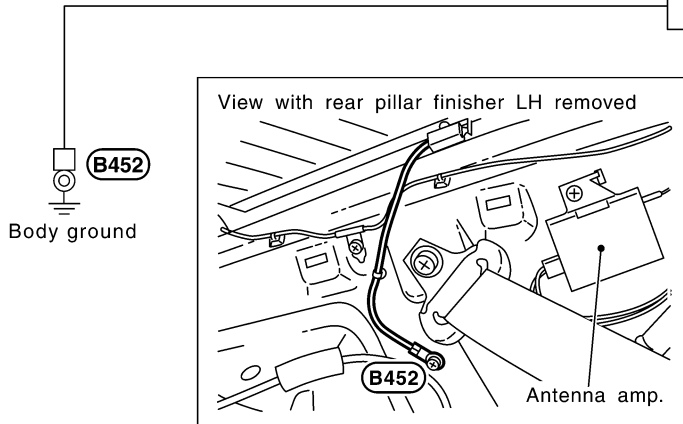


* : This sub-harness is not shown in "HARNES LAYOUT".

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GROUND

CON-NECTOR NUMBER	CONNECT TO
B451	Rear window defogger (-)



CKIT0254E

HARNESS

HARNESS

PF0:00011

Harness Layout

AKS0031B

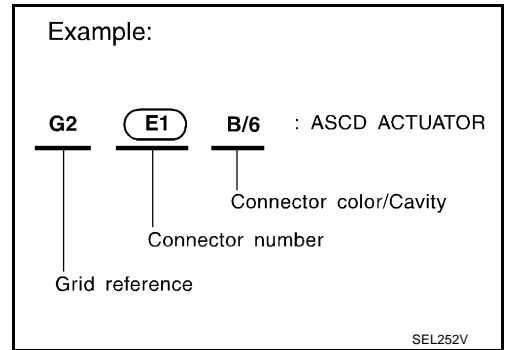
HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness (Engine Compartment)
- Engine Control Harness
- Body Harness (Passenger Compartment)
- Body No.2 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.



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
<ul style="list-style-type: none"> • Cavity: Less than 4 • Relay connector 				
<ul style="list-style-type: none"> • Cavity: From 5 to 8 				
<ul style="list-style-type: none"> • Cavity: More than 9 				
<ul style="list-style-type: none"> • Ground terminal etc. 	—			

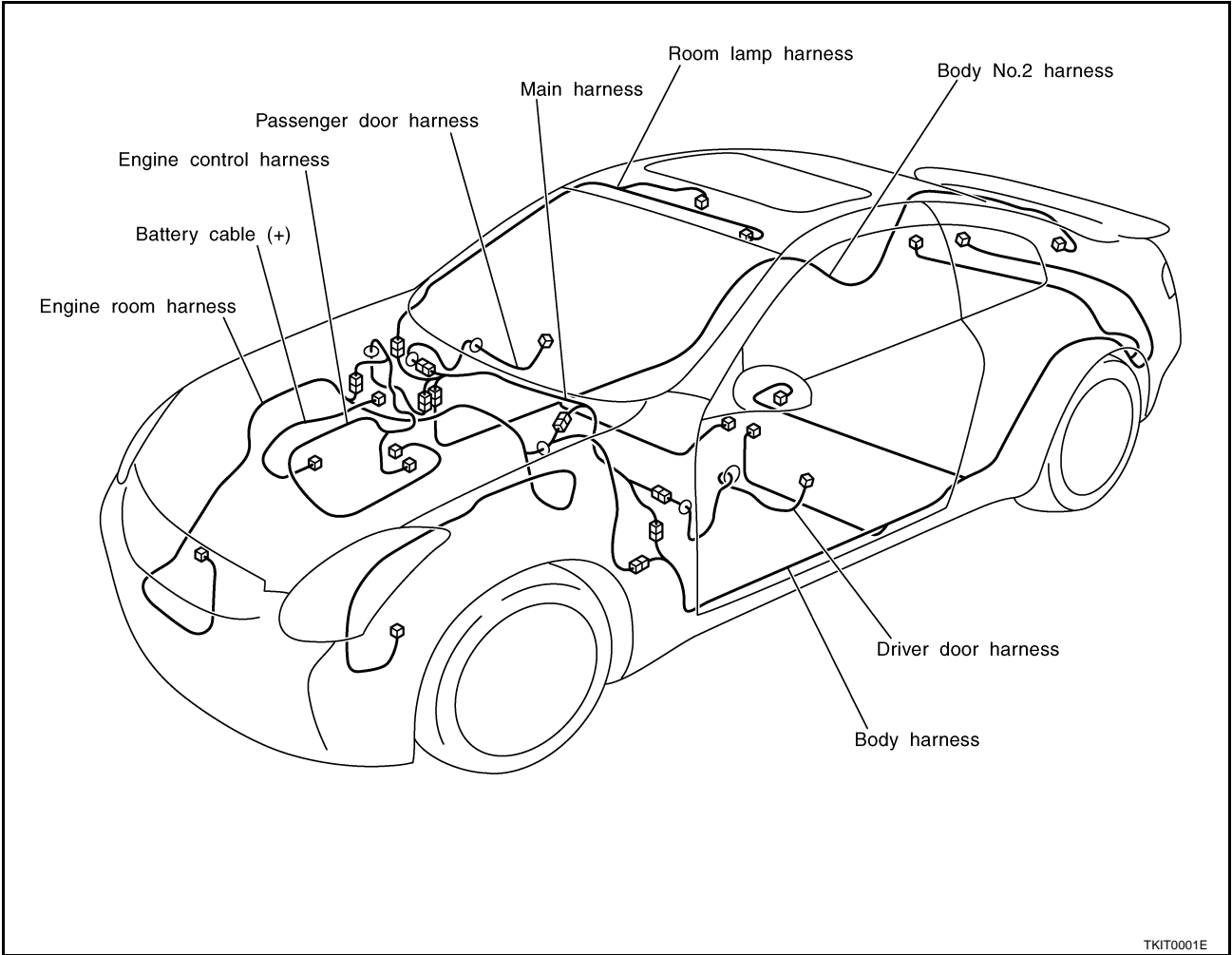
CKIT0108E

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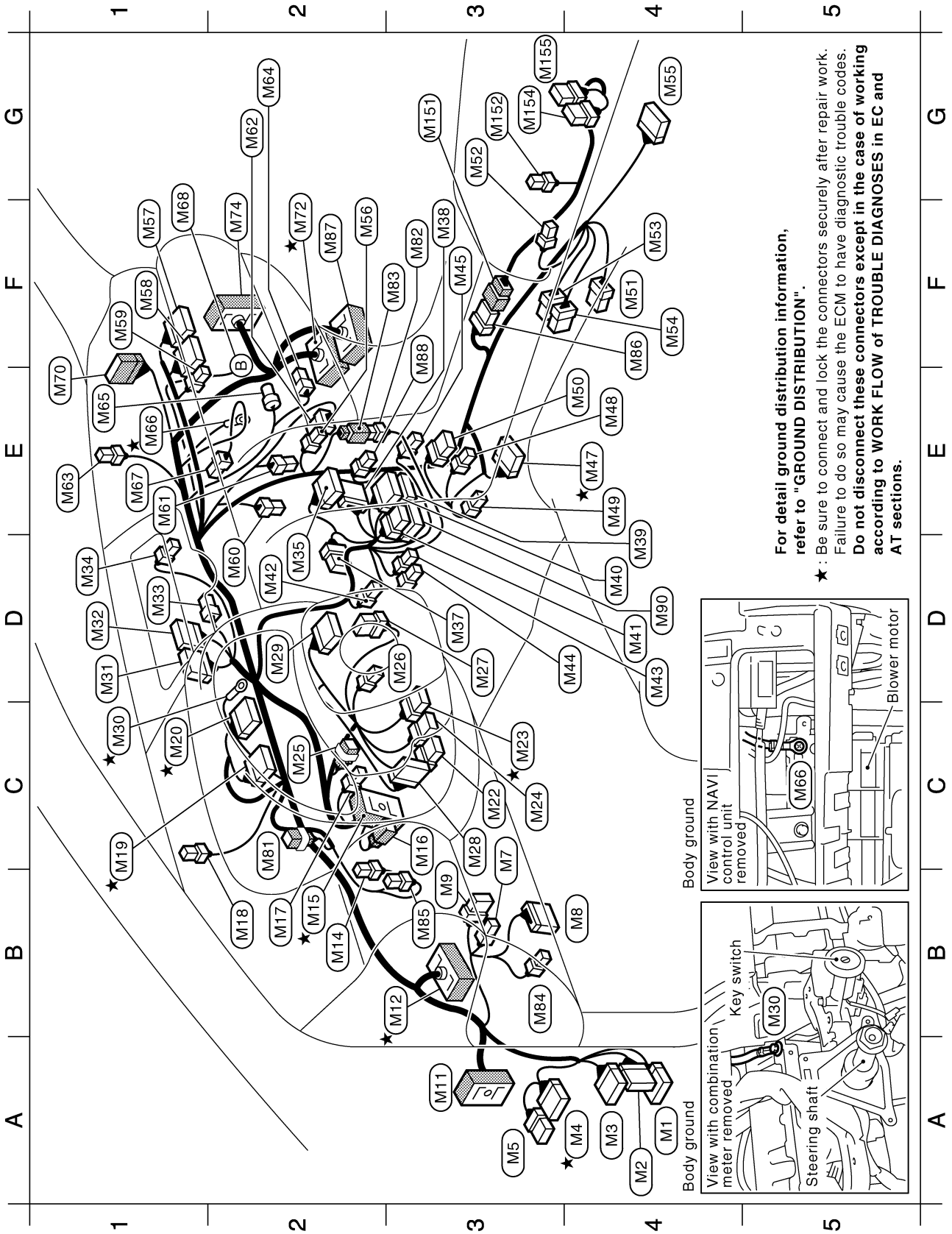
HARNESS

OUTLINE



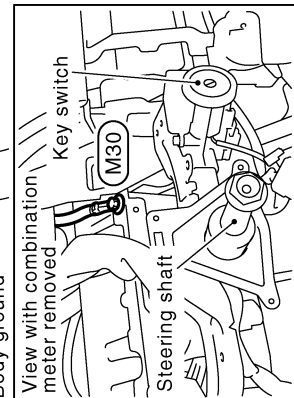
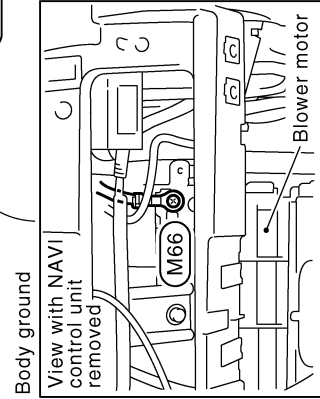
HARNESS

MAIN HARNESS



For detail 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.



A B C D E F G
1 2 3 4 5

PG

TKIM0105E

HARNESS

A4	(M1)	W/16	: BCM (Body control module)	D3	(M37)	W/8	: NAVI switch (With navigation system)	D2	(M60)	W/3	: Heater and cooling unit (Via sub-harness)
A4	(M2)	W/16	: BCM (Body control module)	F3	(M38)	W/12	: A/C and audio controller	E1	(M61)	W/4	: Intake sensor
A4	(M3)	BR/24	: BCM (Body control module)	D4	(M39)	W/16	: Audio unit	G2	(M62)	W/6	: Blower motor
A4★	(M4)	W/16	: Fuse block (J/B)	D4	(M40)	W/10	: Audio unit	E1	(M63)	W/3	: Optical sensor
A3	(M5)	W/8	: Fuse block (J/B)	D4	(M41)	W/6	: Audio unit	G2	(M64)	W/2	: Glove box lamp
C3	(M7)	W/3	: Illumination control switch	D2	(M42)	W/2	: In-vehicle sensor	E1	(M65)	Y/4	: Front passenger air bag module
B4	(M8)	W/16	: Data link connector	D4	(M43)	W/2	: Cigarette lighter illumination	E1★	(M66)	—	: Body ground
B3	(M9)	GY/6	: VDC off switch	D4	(M44)	B/2	: Cigarette lighter socket	E1	(M67)	W/3	: Intake door motor
A3	(M11)	SMJ	: To (D1)	D4	(M45)	BR/2	: Antenna amp. (Via sub-harness)	F1	(M68)	Bulb	: Upper glove box lamp (Without navigation system)
B3★	(M12)	SMJ	: To (B1)	F3	(M47)	W/10	: A/T device (With A/T)	E1	(M70)	W/18	: To (R2)
B2	(M14)	W/2	: Circuit breaker	E4★	(M48)	BR/2	: A/T illumination (With A/T)	F2★	(M72)	SMJ	: To (F102)
B2★	(M15)	SMJ	: To (E108)	E4	(M49)	W/2	: Ashtray illumination	F2	(M74)	SMJ	: To (D31)
C3	(M16)	Y/4	: To (E109)	E4	(M49)	W/2	: (With A/T and from serial 209969 with M/T)	C2	(M81)	W/4	: Compass
B2	(M17)	W/3	: Air mix door motor (Driver side)	E4	(M50)	W/8	: Hazard switch	F3	(M82)	W/4	: To (M83) (With navigation system)
B2	(M18)	B/2	: Sunload sensor	F4	(M51)	B/6	: Yaw rate/side G sensor	F3	(M83)	W/4	: To (M82) (With navigation system)
C1★	(M19)	BR/24	: Combination meter	G3	(M52)	B/2	: Power socket	B3	(M84)	B/2	: Trunk lid opener switch
C1★	(M20)	W/24	: Combination meter	F4	(M53)	BR/6	: (Floor console box) (With A/T)	B3	(M85)	L/4	: Heated seat relay (With heated seat)
C3	(M22)	W/8	: Steering angle sensor	F4	(M54)	W/6	: Heated seat switch (Passenger side)	F4	(M86)	★1	: To (M151) (With M/T)
C3★	(M23)	GY/8	: Combination switch (Spiral cable)	F4	(M55)	Y/28	: Heated seat switch (Driver side)	F2	(M87)	SMJ	: To (E401)
C3	(M24)	Y/6	: Combination switch (Spiral cable)	F4	(M56)	W/2	: (With A/T and heated seat)	F3	(M88)	B/2	: Power socket (Instrument side panel RH)
C2	(M25)	BR/2	: Key switch	G4	(M57)	W/24	: NAVI control unit (With A/T and heated seat)	D4	(M90)	W/12	: Audio unit
D3	(M26)	W/2	: Ignition key hole illumination	F2	(M58)	GY/24	: Air bag diagnosis sensor unit	G3	(M151)	★1	: To (M86)
D3	(M27)	W/8	: NATS antenna amp.	F1	(M59)	GY/2	: Trunk lid opener cancel switch	G3	(M152)	W/2	: Ashtray illumination (Up to serial 209968)
C3	(M28)	W/10	: Door mirror remote control switch	F1	(M58)	GY/24	: NAVI control unit (With navigation system)	G3	(M154)	W/6	: Heated seat switch (Driver side)
D2	(M29)	W/16	: Door mirror remote control switch	F1	(M59)	GY/2	: NAVI control unit (With navigation system)	G3	(M155)	BR/6	: Heated seat switch (Passenger side)
C1★	(M30)	—	: Combination switch								
D1	(M31)	GY/20	: Body ground								
D1	(M32)	GY/16	: Display and A/C auto amp.								
D1	(M33)	W/4	: Display and A/C auto amp.								
D1	(M34)	W/2	: Clock								
D1	(M34)	W/2	: Security indicator lamp								
D2	(M35)	W/24	: Display unit (With navigation system)								

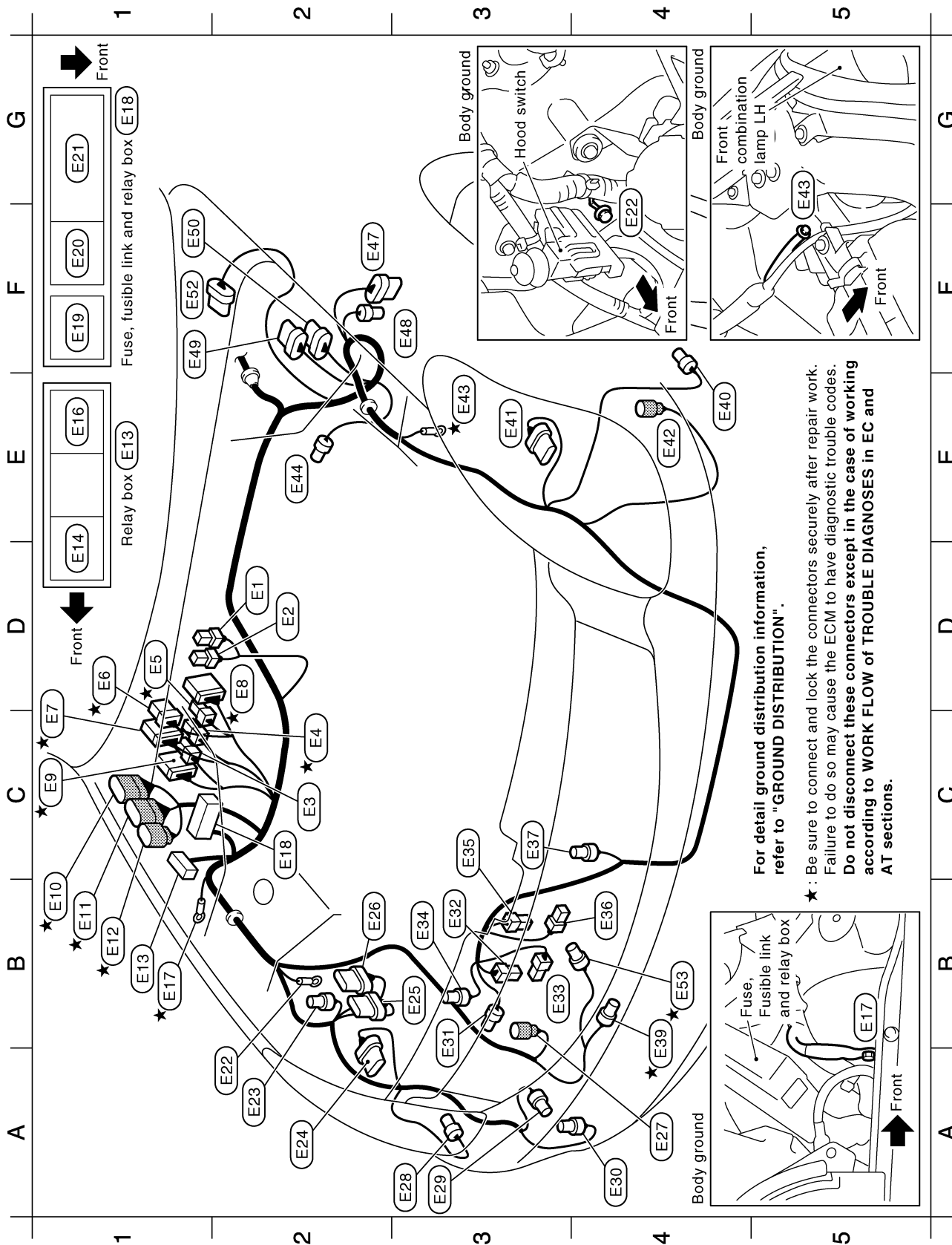
Switch sub-harness (With M/T)

★1 W/8 : Up to serial 209968
W/12 : From serial 209969

★ : 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.

HARNESS

ENGINE ROOM HARNESS Engine Compartment



TKIT0004E

HARNESS

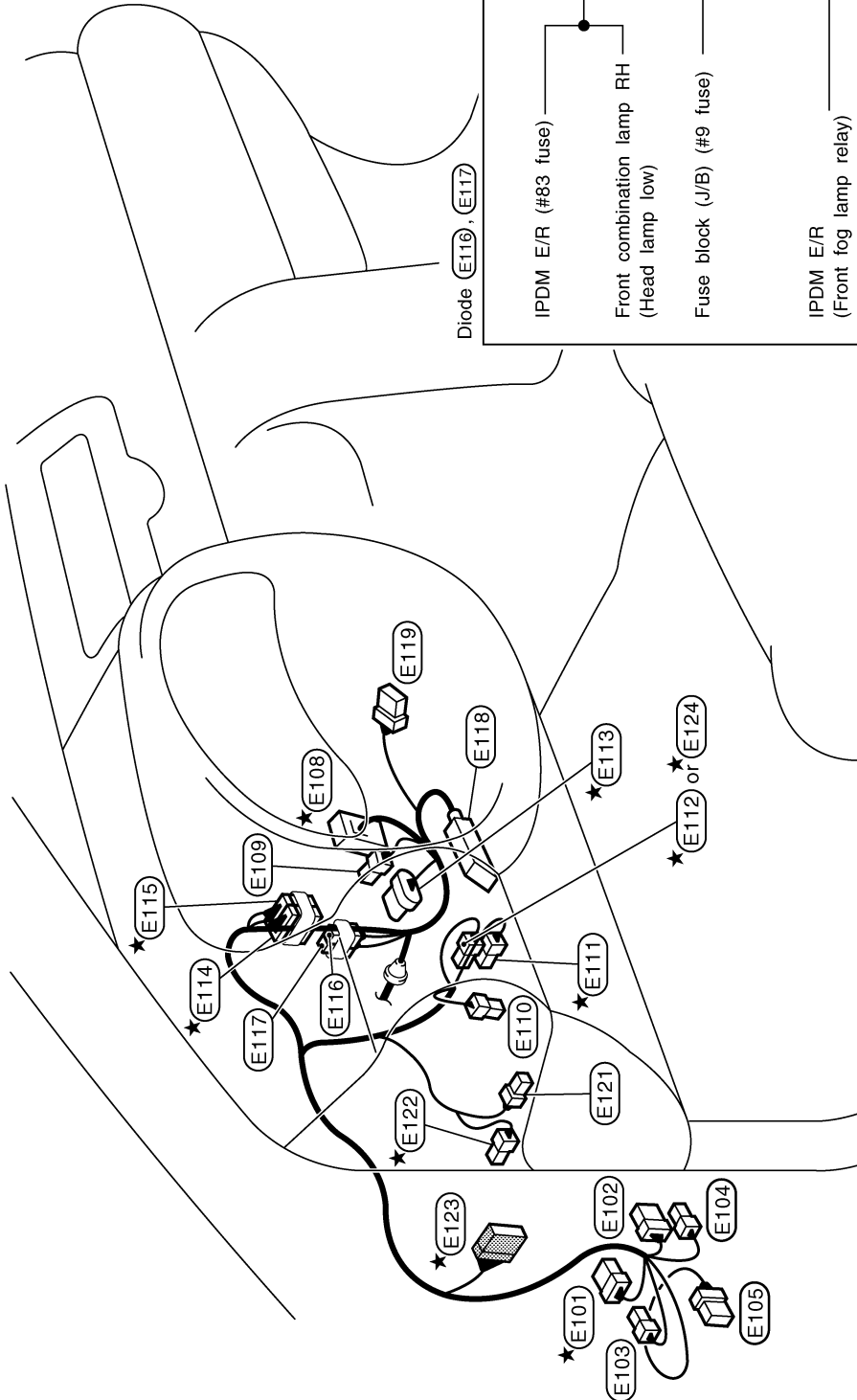
D2	(E1)	B/2	: Fusible link holder	E4	(E42)	B/2	: Front wheel sensor LH
D2	(E2)	GY/2	: Fusible link holder	E3	(E43)	—	: Body ground
C2	(E3)	B/2	: IPDM E/R (Intelligent power distribution module engine room)	E2	(E44)	GY/2	: Brake fluid level switch
C2	(E4)	W/4	: IPDM E/R (Intelligent power distribution module engine room)	F2	(E47)	B/8	: VDC relay box
D1	(E5)	B/4	: IPDM E/R (Intelligent power distribution module engine room)	F3	(E48)	B/2	: VDC relay box
D1	(E6)	W/6	: IPDM E/R (Intelligent power distribution module engine room)	F1	(E49)	GY/8	: VDC actuator
D1	(E7)	W/12	: IPDM E/R (Intelligent power distribution module engine room)	F1	(E50)	B/8	: VDC actuator
D2	(E8)	GY/16	: IPDM E/R (Intelligent power distribution module engine room)	F1	(E52)	GY/5	: Front wiper motor
D1	(E9)	W/12	: IPDM E/R (Intelligent power distribution module engine room)	B4	(E53)	GY/4	: Cooling fan motor-2
B1	(E10)	GY/9	: To (F1)				
B1	(E11)	GY/10	: To (F2)				
B1	(E12)	B/8	: To (F3)				
B1	(E13)	—	: Relay box (For Canada)				
D1	(E14)	L/4	: Daytime light relay-1 (For Canada)				
E1	(E16)	L/4	: Daytime light relay-2 (For Canada)				
B1	(E17)	—	: Body ground				
C2	(E18)	—	: Fuse, fusible link and relay box				
F1	(E19)	L/4	: Back-up lamp relay (With A/T)				
F1	(E20)	W/3	: Horn relay				
G1	(E21)	—	: Fuse and fusible link block				
A2	(E22)	—	: Body ground				
A2	(E23)	GY/2	: Hood switch				
A2	(E24)	B/8	: Front combination lamp RH				
B3	(E25)	GY/6	: Daytime light control unit (For Canada)				
B2	(E26)	GY/8	: Daytime light control unit (For Canada)				
A4	(E27)	GY/2	: Front wheel sensor RH				
A3	(E28)	GY/2	: Front side marker lamp RH				
A3	(E29)	GY/2	: Front washer motor				
A4	(E30)	BR/2	: Washer level sensor				
B3	(E31)	B/3	: Refrigerant pressure sensor				
B3	(E32)	B/1	: Horn (Low)				
B3	(E33)	B/1	: Horn (Low)				
B3	(E34)	B/2	: Ambient sensor				
C3	(E35)	B/1	: Horn (High)				
B4	(E36)	B/1	: Horn (High)				
C3	(E37)	Y/2	: Crash zone sensor				
B4	(E39)	GY/4	: Cooling fan motor-1				
E4	(E40)	GY/2	: Front side marker lamp LH				
E3	(E41)	B/8	: Front combination 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.

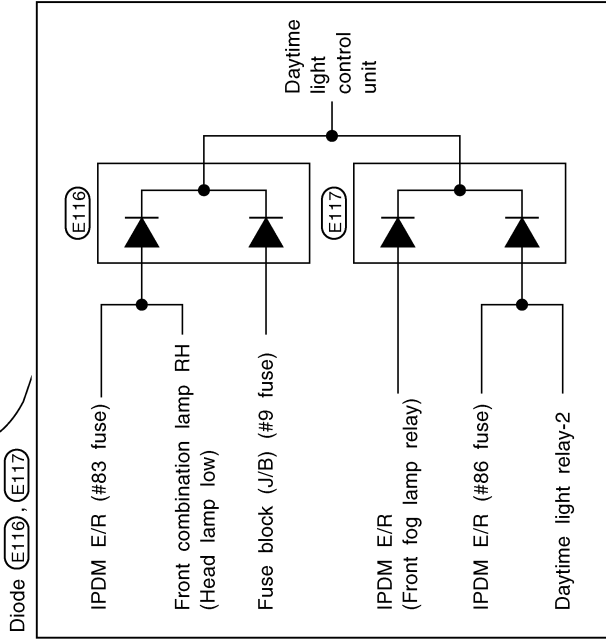
TKIT0005E

HARNESS

Passenger Compartment



- ★ (E101) W/8 : Fuse block (J/B)
- (E102) W/6 : Fuse block (J/B)
- (E103) B/1 : Fuse block (J/B)
- (E104) B/2 : Fuse block (J/B)
- (E105) W/8 : BCM (Body control module)
- ★ (E108) SMJ : To (M15)
- (E109) Y/4 : To (M16)
- (E110) W/1 : Parking brake switch (With A/T)
- (E111) BR/2 : ASCD brake switch
- ★ (E112) B/2 : Stop lamp switch (With M/T)
- ★ (E113) GY/6 : Accelerator pedal position sensor
- ★ (E114) BR/20 : Joint connector-1
- ★ (E115) OR/20 : Joint connector-2
- (E116) -/3 : Diode (For Canada)
- (E117) -/3 : Diode (For Canada)
- (E118) SMJ : VDC/TCS/ABS control unit
- (E119) B/5 : Ignition switch
- (E121) L/2 : Clutch interlock switch (With M/T)
- (E122) L/2 : ASCD clutch switch (With M/T)
- ★ (E123) W/12 : To (B41)
- ★ (E124) W/4 : Stop lamp switch (With A/T)



★ : 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.**

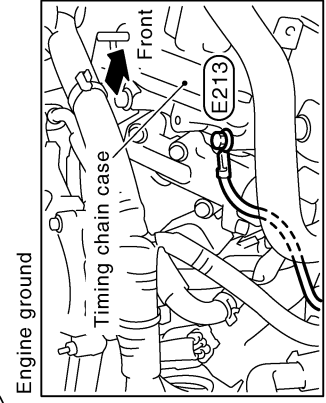
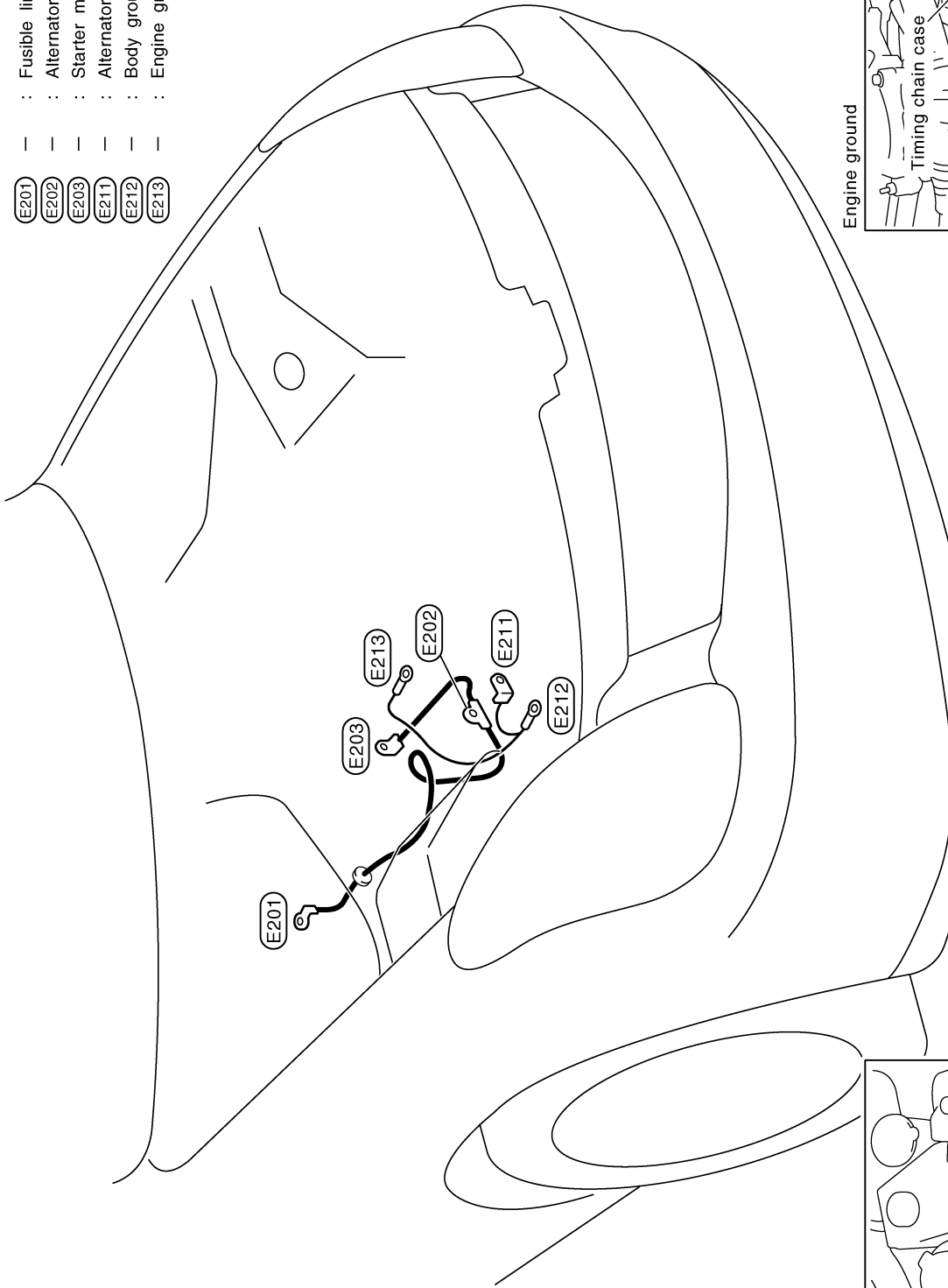
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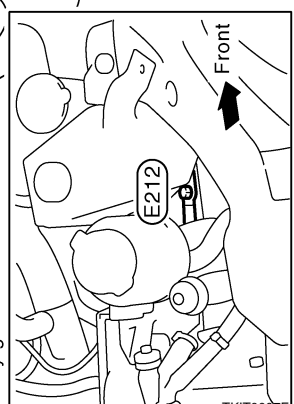
Battery Cable

- : Fusible link holder
- : Alternator (B)
- : Starter motor
- : Alternator (E)
- : Body ground
- : Engine ground

- (E201)
- (E202)
- (E203)
- (E211)
- (E212)
- (E213)



Engine ground

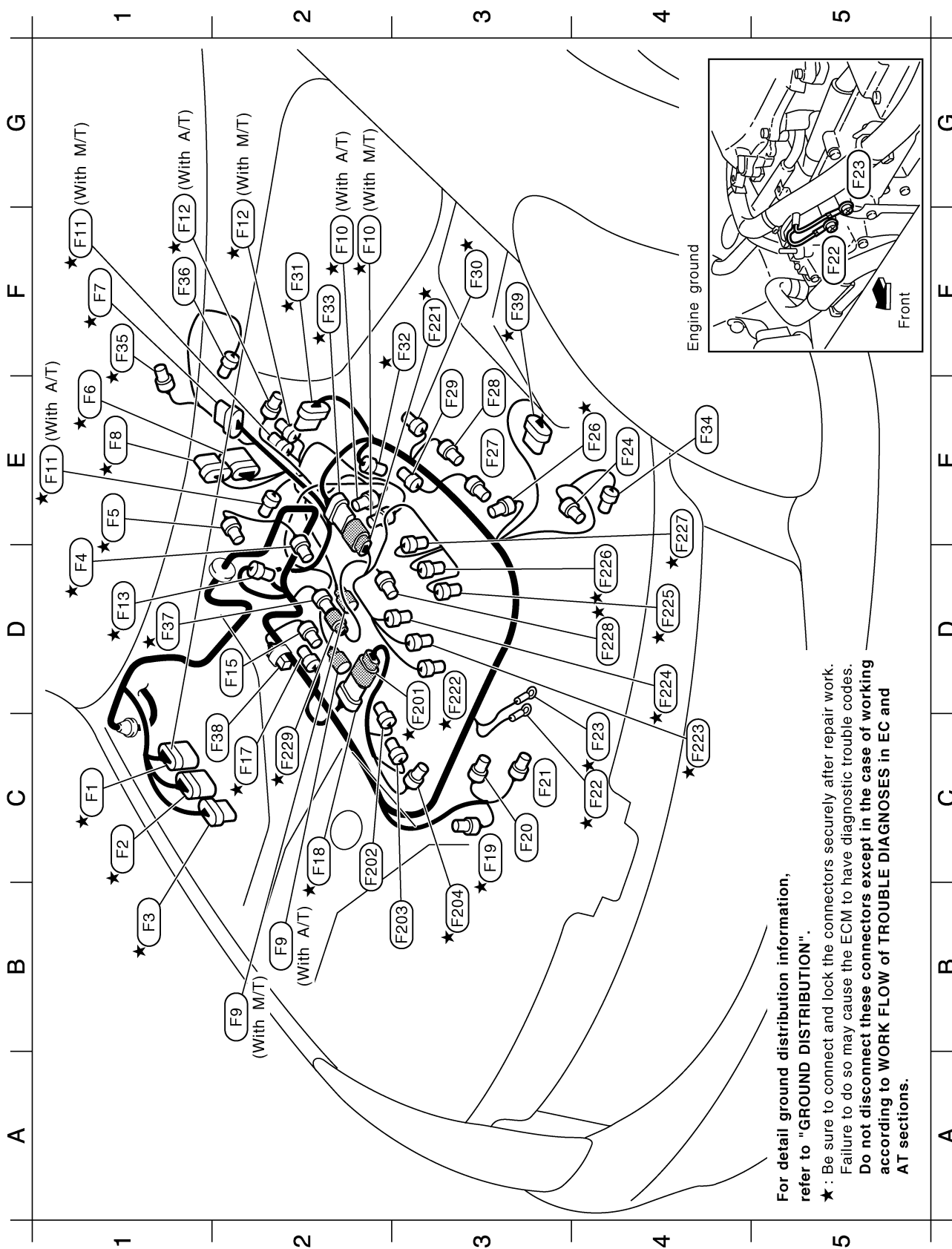


Body ground

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

HARNESS

ENGINE CONTROL HARNESS



TKIT0008E

Passenger compartment

- F1 ★ (F35) B/2 : Park/Neutral position switch (With M/T)
- F1 (F36) B/2 : Back-up lamp switch (With M/T)
- D1 ★ (F37) B/2 : To (F229)
- C2 (F38) W/2 : Condenser
- F3 ★ (F39) B/6 : Mass air flow sensor

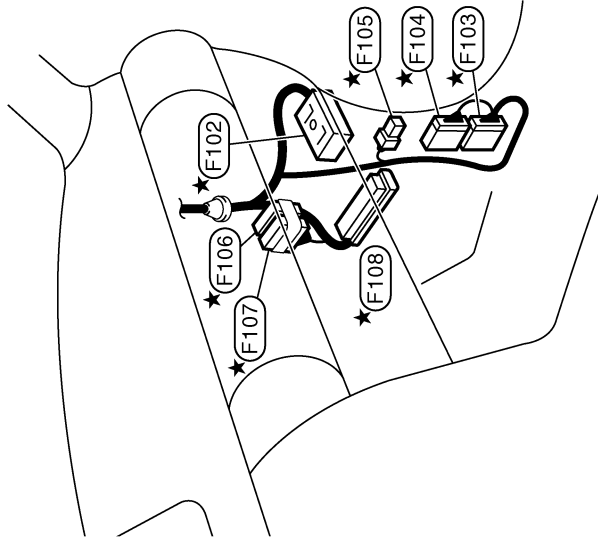
Engine control sub-harness-1

- D3 ★ (E201) L/6 : To (F18)
- C2 (E202) GY/3 : Ignition coil No. 3 (With power transistor)
- B3 (E203) GY/3 : Ignition coil No. 1 (With power transistor)
- B3 ★ (F204) G/2 : Intake valve timing control solenoid valve (Bank 1)

Engine control sub-harness-2

- F3 ★ (F221) G/8 : To (F33)
- D3 ★ (F222) GY/2 : Injector No. 1
- C4 ★ (F223) GY/2 : Injector No. 3
- D4 ★ (F224) GY/2 : Injector No. 5
- D4 ★ (F225) GY/2 : Injector No. 2
- D4 ★ (F226) GY/2 : Injector No. 4
- E4 ★ (F227) GY/2 : Injector No. 6
- D4 ★ (F228) L/2 : Knock sensor
- C2 ★ (F229) SB/2 : To (F37)

- C1 ★ (F1) GY/9 : To (E10)
- C1 ★ (F2) GY/10 : To (E11)
- B1 ★ (F3) B/8 : To (E12)
- D1 ★ (F4) G/3 : Camshaft position sensor (PHASE) (Bank 1)
- E1 ★ (F5) GY/2 : EVAP canister purge volume control solenoid valve
- E1 ★ (F6) GY/10 : A/T assembly (With A/T)
- F1 ★ (F7) GY/8 : A/T assembly (With A/T)
- E1 ★ (F8) B/8 : A/T assembly (With A/T)
- B2 (F9) GY/1 : Starter motor
- F2 ★ (F10) B/3 : Crankshaft position sensor (POS)
- E1,F1 ★ (F11) B/4 : Heated oxygen sensor 2 (Bank 1)
- F1,F2 ★ (F12) GY/4 : Heated oxygen sensor 2 (Bank 2)
- D1 ★ (F13) GY/2 : Engine coolant temperature sensor
- D2 (F15) GY/3 : Ignition coil No. 5 (With power transistor)
- C2 ★ (F17) GY/4 : Heated oxygen sensor 1 (Bank 1)
- C2 ★ (F18) B/6 : To (F201)
- C3 ★ (F19) B/3 : Power steering pressure sensor
- C3 (F20) GY/2 : Alternator (S, L)
- C3 (F21) GY/1 : Oil pressure switch
- C4 ★ (F22) - : Engine ground (With A/T)
- C4 ★ (F23) - : Engine ground
- E4 (F24) B/1 : Compressor
- E4 ★ (F26) GY/2 : Intake valve timing control solenoid valve (Bank 2)
- E3 (F27) GY/3 : Ignition coil No. 2 (With power transistor)
- E3 (F28) GY/3 : Ignition coil No. 4 (With power transistor)
- E3 (F29) GY/3 : Ignition coil No. 6 (With power transistor)
- F3 ★ (F30) GY/4 : Heated oxygen sensor 1 (Bank 2)
- F2 ★ (F31) GY/6 : Electric throttle control actuator
- F3 ★ (F32) B/3 : Camshaft position sensor (PHASE) (Bank 2)
- F2 ★ (F33) GY/8 : To (F221)
- E4 (F34) B/2 : Compressor



- ★ (F102) SMJ : To (M72)
- ★ (F103) W/24 : TCM (Transmission control module) (With A/T)
- ★ (F104) GY/24 : TCM (Transmission control module) (With A/T)
- ★ (F105) L/4 : A/T PV IGN relay (With A/T)
- ★ (F106) L/20 : Joint connector-3
- ★ (F107) P/20 : Joint connector-4
- ★ (F108) SMJ : ECM

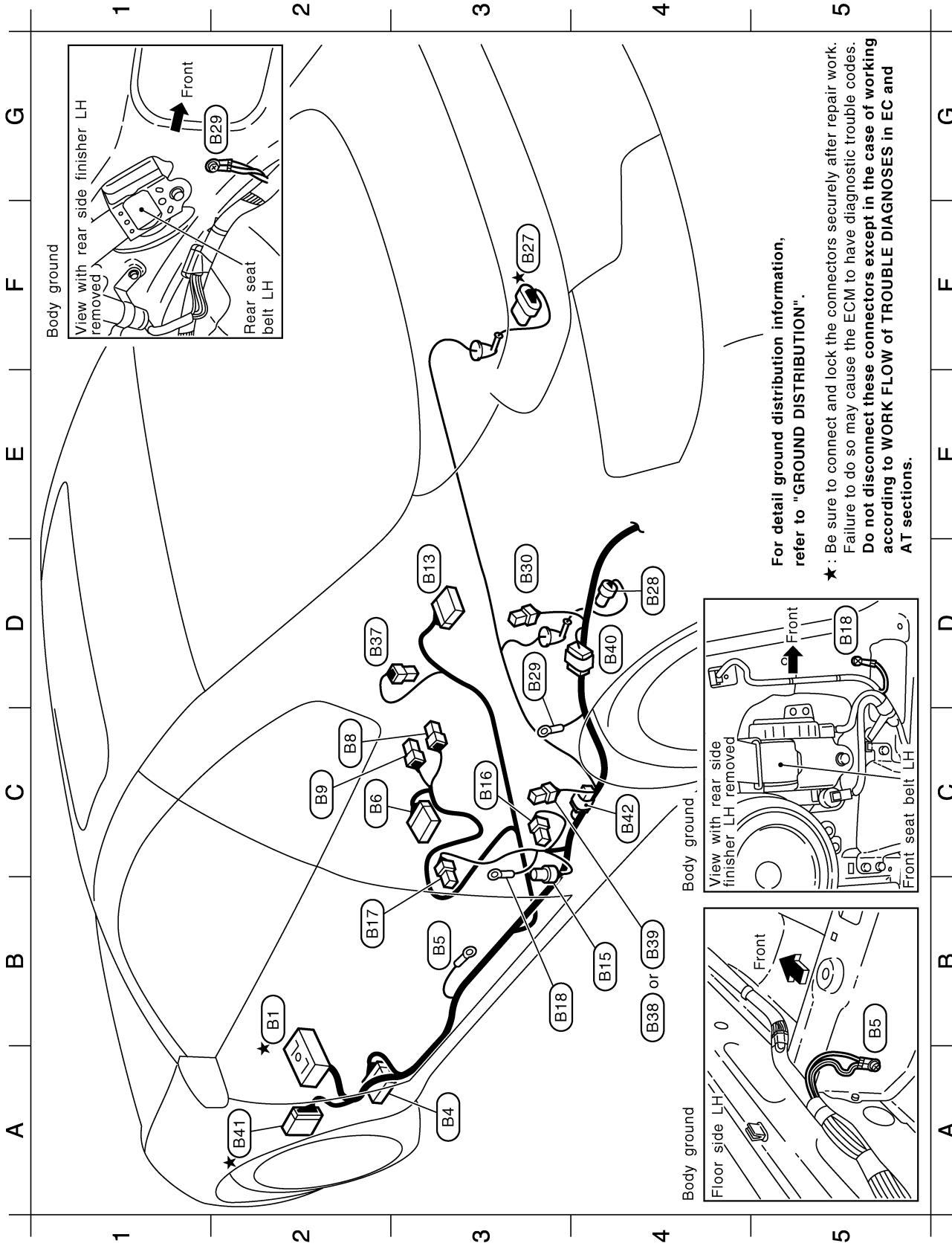
★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

TK10009E

HARNESS

BODY HARNESS

Passenger Compartment



A B C D E F G

1 2 3 4 5

A B C D E F G

For detail 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.

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

★ B2	(B1)	SMJ	:	To (M12)
A3	(B4)	W/12	:	BCM (Body control module)
B3	(B5)	—	:	Body ground
C2	(B6)	W/12	:	Front power seat (Driver side)
C2	(B8)	W/3	:	Seat belt buckle switch (Driver side)
C2	(B9)	Y/2	:	Front LH side air bag module
D3	(B13)	Y/12	:	Air bag diagnosis sensor unit
B4	(B15)	Y/2	:	LH side air bag (satellite) sensor
C3	(B16)	Y/2	:	Front LH seat belt pre-tensioner
B2	(B17)	W/3	:	Driver side door switch
B3	(B18)	—	:	Body ground
F3	★ (B27)	GY/5	:	Fuel level sensor unit and fuel pump
D4	(B28)	GY/2	:	Fuel level sensor unit (Sub)
D3	(B29)	—	:	Body ground
D3	(B30)	Y/2	:	LH side curtain air bag module
D2	(B37)	B/1	:	Parking brake switch (With M/T)
B4	(B38)	W/2	:	Rear speaker LH (Without BOSE system)
B4	(B39)	BR/2	:	Rear speaker LH (With BOSE system)
D4	(B40)	OR/20	:	Joint connector-5
A2	★ (B41)	W/12	:	To (E123)
C4	(B42)	W/2	:	Condenser

★ : Be sure to connect and lock the connectors securely after repair work.
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Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

Trunk Room

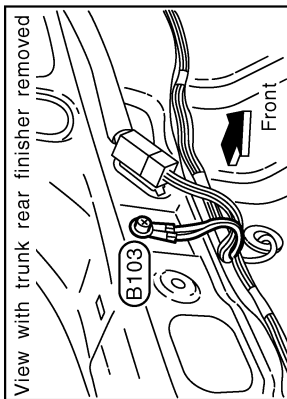
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- (B103) — : Body ground
- (B113) SB/4 : Rear wheel sensor
- (B116) BR/2 : High-mounted stop lamp (On the rear parcel shelf)
- (B117) W/2 : Trunk room lamp
- (B119) BR/20 : Joint connector-6
- (B120) W/2 : Woofer LH (With BOSE system)
- (B121) W/2 : Woofer RH (With BOSE system)
- (B122) B/24 : BOSE speaker amp. (With BOSE system)
- (B123) GY/8 : BOSE speaker amp. (With BOSE system)
- (B124) W/16 : Option connector (For satellite radio receiver)
- (B125) W/6 : Rear combination lamp LH
- (B126) GY/2 : To (B151)
- (B127) W/6 : Rear combination lamp RH
- (B128) GY/3 : EVAP control system pressure sensor
- ★ (B129) B/2 : EVAP canister vent control valve

License plate sub-harness

- (B151) GY/2 : To (B126)
- (B152) BR/2 : License plate lamp LH
- (B153) BR/2 : License plate lamp RH

Body ground



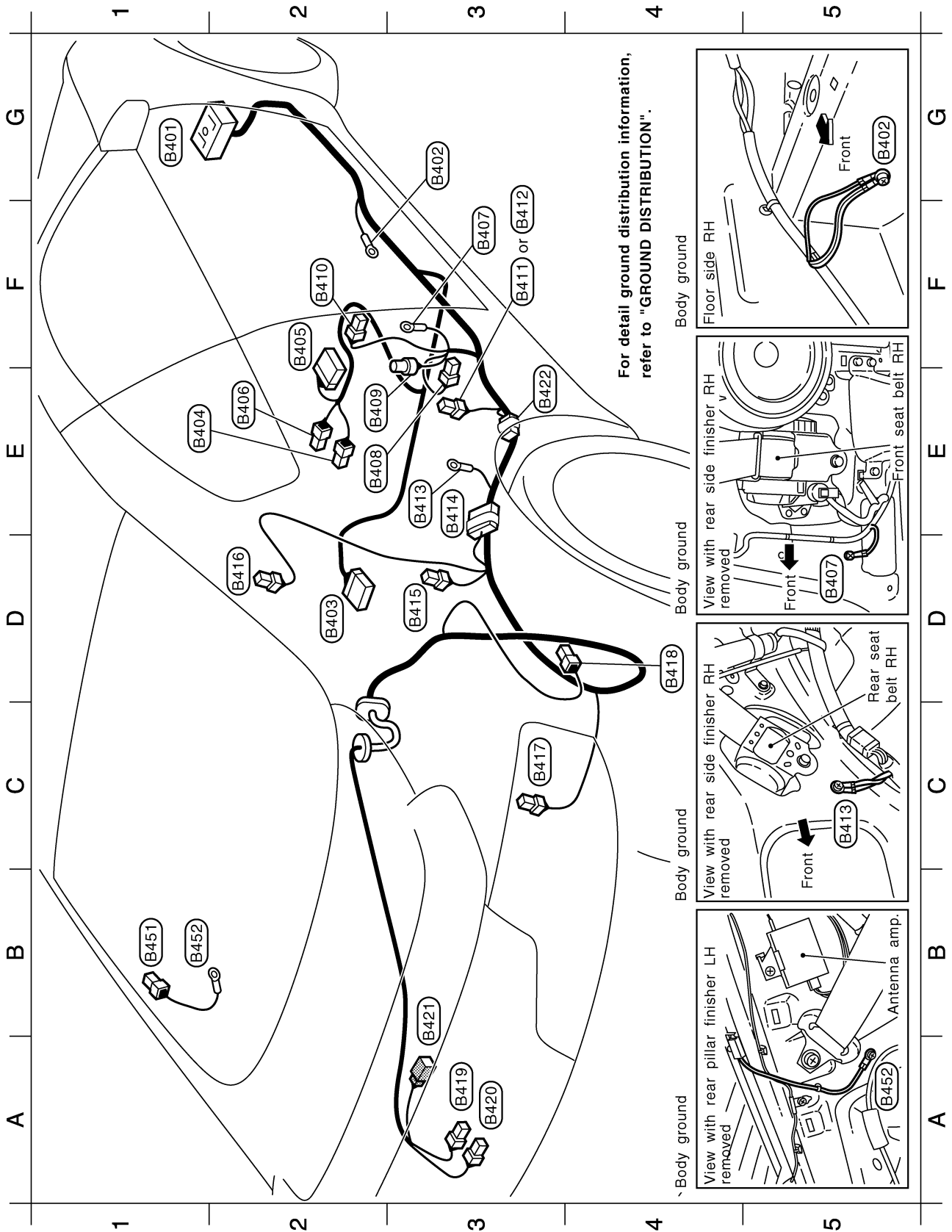
For detail ground distribution information, refer to "GROUND DISTRIBUTION".

★ : 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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HARNESSES

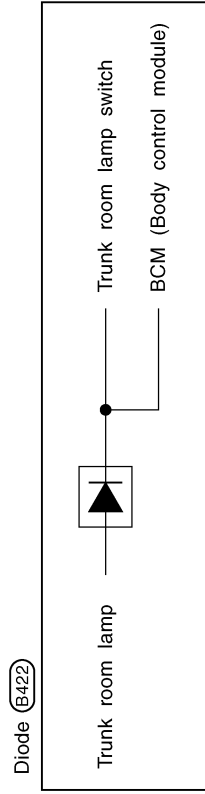
BODY NO.2 HARNESSES



TKIT0013E

Body sub-harness
 B1 (B451) B/1 : Rear window defogger (-)
 B1 (B452) - : Body ground

G1	(B401)	SMJ	:	To (M87)
G3	(B402)	-	:	Body ground
D2	(B403)	Y/12	:	Air bag diagnosis sensor unit
E1	(B404)	Y/2	:	Front RH side air bag module
F2	(B405)	W/12	:	Front power seat (Passenger side)
E2	(B406)	W/3	:	Seat belt buckle switch (Passenger side)
F3	(B407)	-	:	Body ground
E2	(B408)	Y/2	:	Front RH seat belt pre-tensioner
E2	(B409)	Y/2	:	RH side air bag (satellite) sensor
F2	(B410)	W/3	:	Passenger side door switch
F3	(B411)	W/2	:	Rear speaker RH (Without BOSE system)
F3	(B412)	BR/2	:	Rear speaker RH (With BOSE system)
E3	(B413)	-	:	Body ground
E3	(B414)	BR/20	:	Joint connector-7
D3	(B415)	Y/2	:	RH side curtain air bag module
D2	(B416)	W/1	:	Condenser
C3	(B417)	BR/6	:	Rear window defogger relay
D4	(B418)	W/4	:	Fuel lid lock actuator
A3	(B419)	B/2	:	Trunk lid opener actuator
A3	(B420)	W/2	:	Trunk room lamp switch
B3	(B421)	BR/2	:	High-mounted stop lamp (In the rear spoiler)
E3	(B422)	W/2	:	Diode



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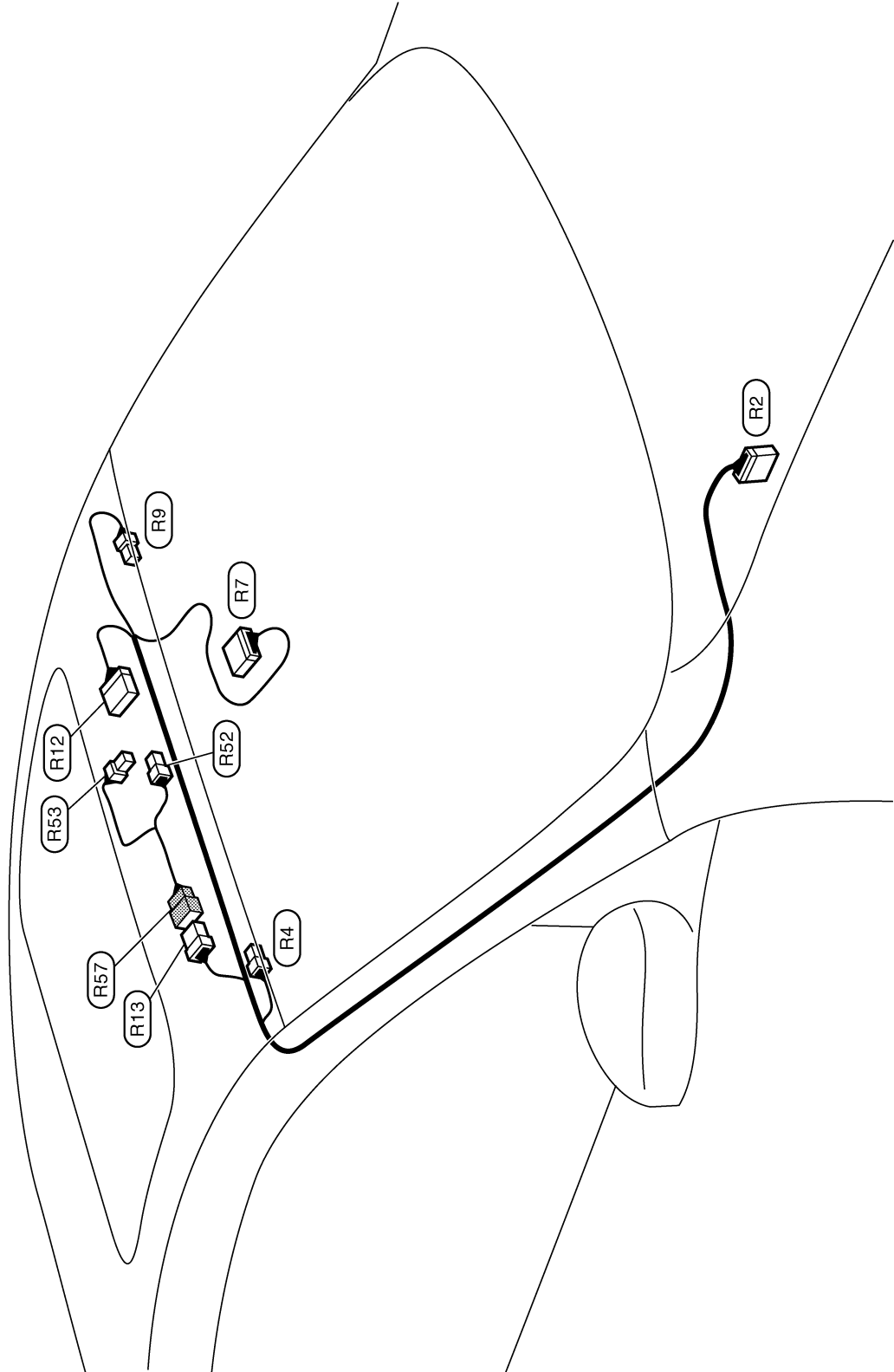
HARNESS

ROOM LAMP HARNESS

Room lamp sub-harness

- (R52) W/3 : Map lamp
- (R53) W/3 : Sunroof switch (With sunroof)
- (R57) W/6 : To (R13)

- (R2) W/18 : To (M70)
- (R4) W/2 : Vanity mirror lamp (Passenger side)
- (R7) B/10 : Auto anti-dazzling inside mirror
- (R9) W/2 : Vanity mirror lamp (Driver side)
- (R12) GY/10 : Sunroof motor assembly (With sunroof)
- (R13) W/6 : To (R57)



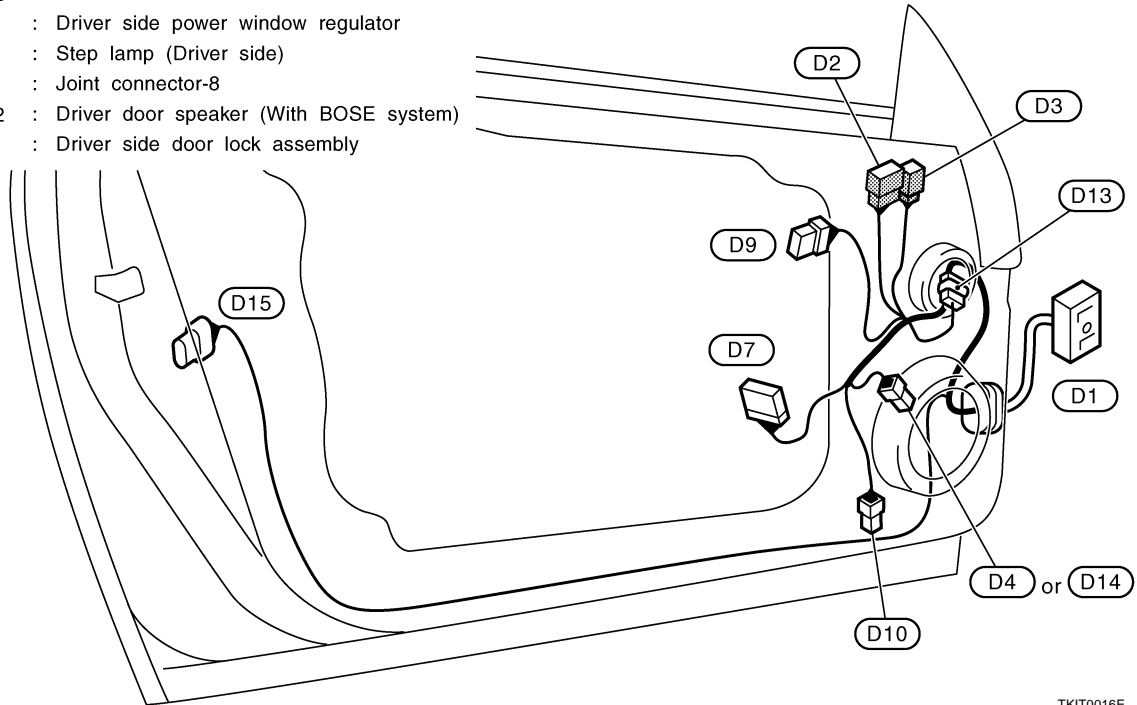
TKIT0015E

HARNESS

DOOR HARNESS

Driver Side Door

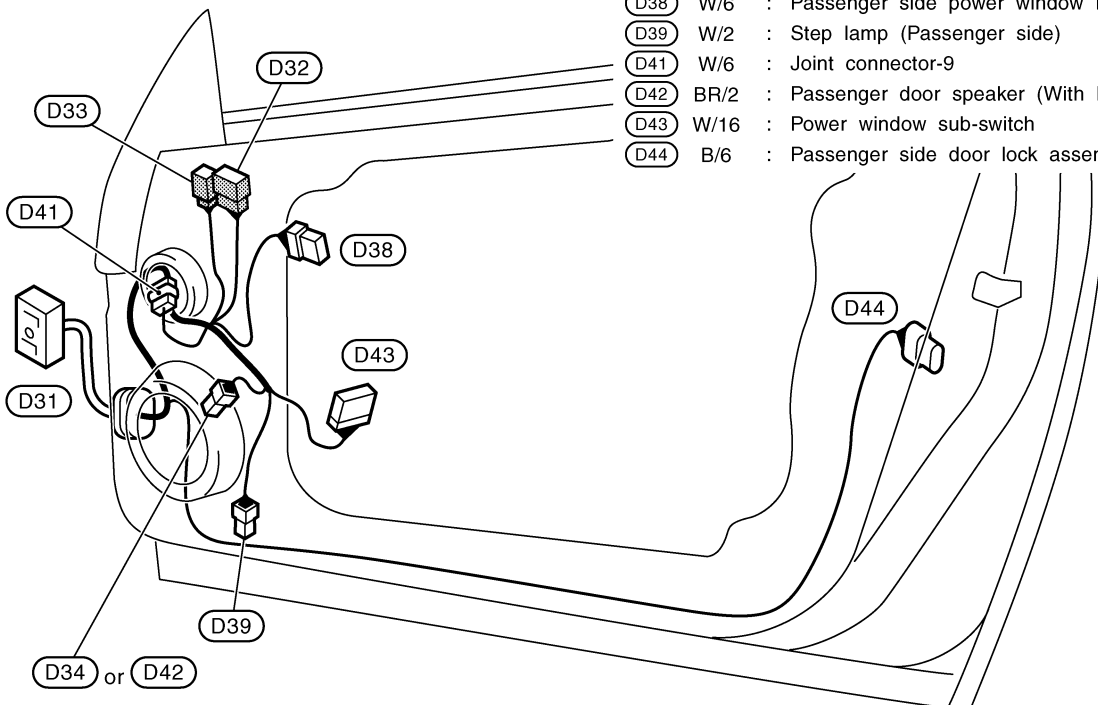
- (D1) SMJ : To (M11)
- (D2) W/8 : Door mirror (Driver side)
- (D3) BR/2 : Tweeter (Driver side)
- (D4) W/2 : Driver door speaker (Without BOSE system)
- (D7) W/16 : Power window main switch
- (D9) W/6 : Driver side power window regulator
- (D10) W/2 : Step lamp (Driver side)
- (D13) W/6 : Joint connector-8
- (D14) BR/2 : Driver door speaker (With BOSE system)
- (D15) B/6 : Driver side door lock assembly



TKIT0016E

Passenger Side Door

- (D31) SMJ : To (M74)
- (D32) W/8 : Door mirror (Passenger side)
- (D33) BR/2 : Tweeter (Passenger side)
- (D34) W/2 : Passenger door speaker (Without BOSE system)
- (D38) W/6 : Passenger side power window regulator
- (D39) W/2 : Step lamp (Passenger side)
- (D41) W/6 : Joint connector-9
- (D42) BR/2 : Passenger door speaker (With BOSE system)
- (D43) W/16 : Power window sub-switch
- (D44) B/6 : Passenger side door lock assembly



TKIT0017E

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HARNESS

Wiring Diagram Codes (Cell Codes)

AKS0031C

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
A/C	ATC	Air Conditioner
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
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUTO/L	LT	Automatic Light System
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
CIGAR	WW	Cigarette Lighter
CLOCK	DI	Clock
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication Line
COMPAS	DI	Compass and Thermometer
COOL/F	EC	Cooling Fan Control
D/C	AT	Direct Clutch Solenoid Valve
D/CF	AT	Direct Clutch Solenoid Valve Function
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
E/BRE	AT	A/T 1st Engine Braking
ECM/PW	EC	ECM Power Supply For Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electrical Throttle Control Function
ETC2	EC	Electrical Throttle Control Motor Relay
ETC3	EC	Electrical Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FPSW1	AT	ATF Pressure Switch 1
FPSW3	AT	ATF Pressure Switch 3
FPSW5	AT	ATF Pressure Switch 5
FPSW6	AT	ATF Pressure Switch 6

HARNESSES

Code	Section	Wiring Diagram Name
FR/B	AT	Front Brake Solenoid Valve
FR/BF	AT	Front Brake Solenoid Valve Function
FTS	AT	A/T Fluid Temperature Sensor Circuit
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
HLR/C	AT	High And Low Reverse Clutch Solenoid Valve
HLR/CF	AT	High And Low Reverse Clutch Solenoid Valve Function
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/C	AT	Input Clutch Solenoid Valve
I/CF	AT	Input Clutch Solenoid Valve Function
I/LOCK	AT	A/T Interlock
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
INT/L	LT	Trunk Room Lamp
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
LC/B	AT	Low Coast Brake Solenoid Valve
LC/BF	AT	Low Coast Brake Solenoid Valve Function
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	EC	Main Power Supply And Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., And Fuel Gauges
MIL/DL	EC	MIL & Data Link Connector
MIRROR	GW	Power Door Mirror
MMSW	AT	Manual Mode Switch
NATS	BL	Nissan Anti - Theft System
NAVI	AV	Navigation System
NONDTC	AT	Non-Detective Items
O2H1B1	EC	Heated Oxygen Sensor 1 Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 Heater Bank 2
O2H2B1	EC	Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Heated Oxygen Sensor 2 Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2

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HARNESS

Code	Section	Wiring Diagram Name
P/SCKT	WW	Power Socket
PGC/V	EC	Evap Canister Purge Volume Control Solenoid Valve
PHSB1	EC	Camshaft Position Sensor (Phase) (Bank1)
PHSB2	EC	Camshaft Position Sensor (Phase) (Bank2)
PNP/SW	AT	Park / Neutral Position Switch
PNP/SW	EC	Park / Neutral Position Switch
POS	EC	Crankshaft Position Sensor (Ckps) (Pos)
POWER	AT	Transmission Control Module Power Supply
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
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
START	SC	Starting System
STOP/L	LT	Stop Lamp
STSIG	AT	Start Signal Circuit
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
TLID	BL	Trunk Lid Opener
TPS1	EC	Throttle Position Sensor (Sensor 1)
TPS2	EC	Throttle Position Sensor (Sensor 2)
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	Homelink Universal Transceiver
TRSA/T	AT	Turbine Revolution 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
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

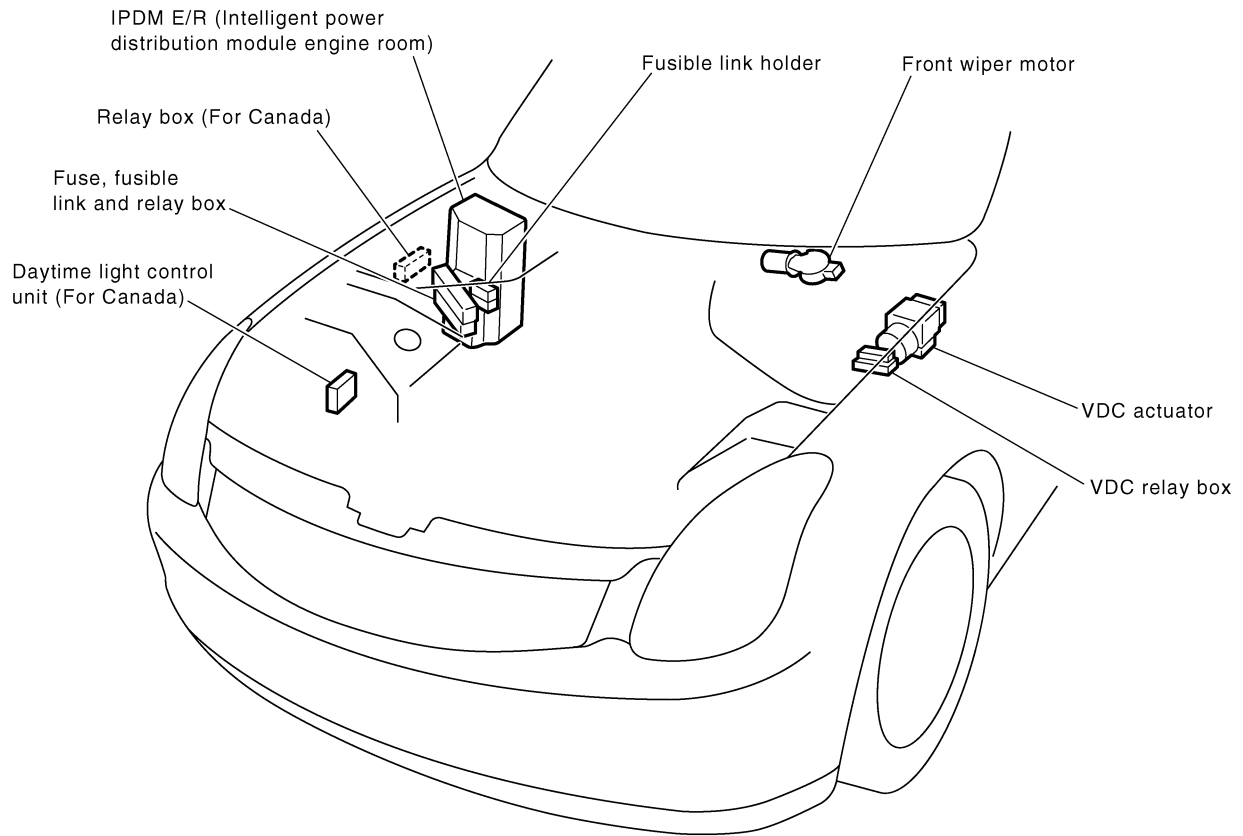
ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

PPF:25230

Electrical Units Location ENGINE COMPARTMENT

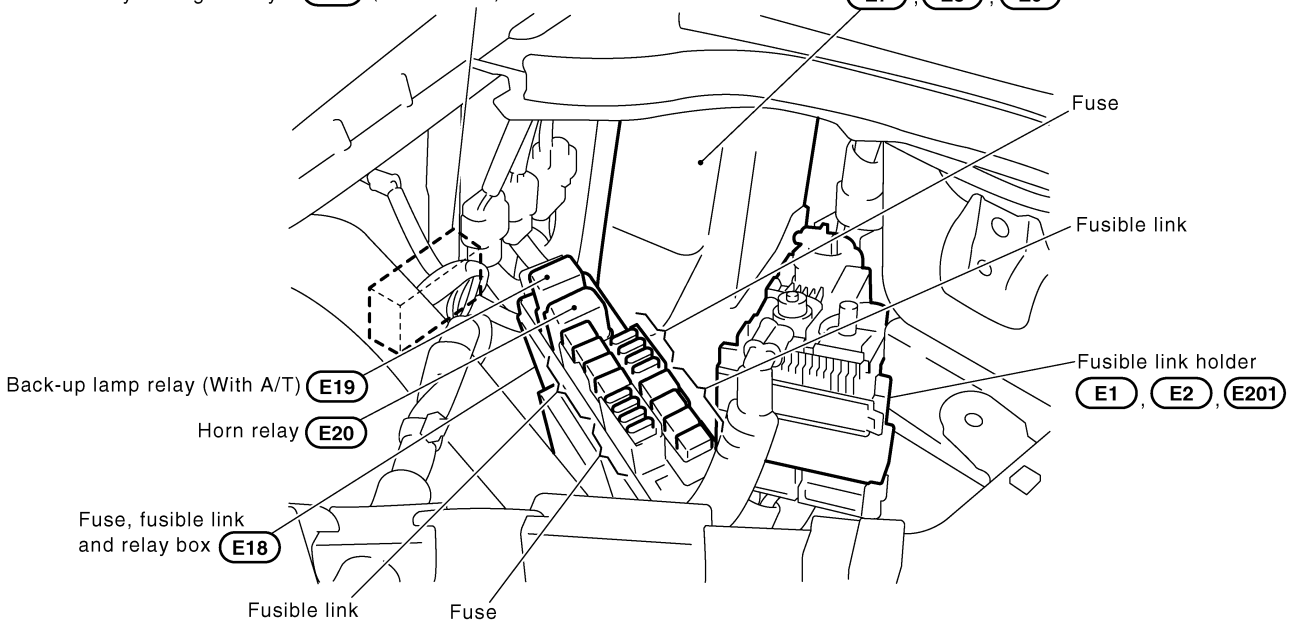
AKS003ID



- Relay box **(E13)** (For Canada)
- Built-in daytime light relay-1 **(E14)** (For Canada)
- Built-in daytime light relay-2 **(E16)** (For Canada)

IPDM E/R (Intelligent power distribution module engine room)

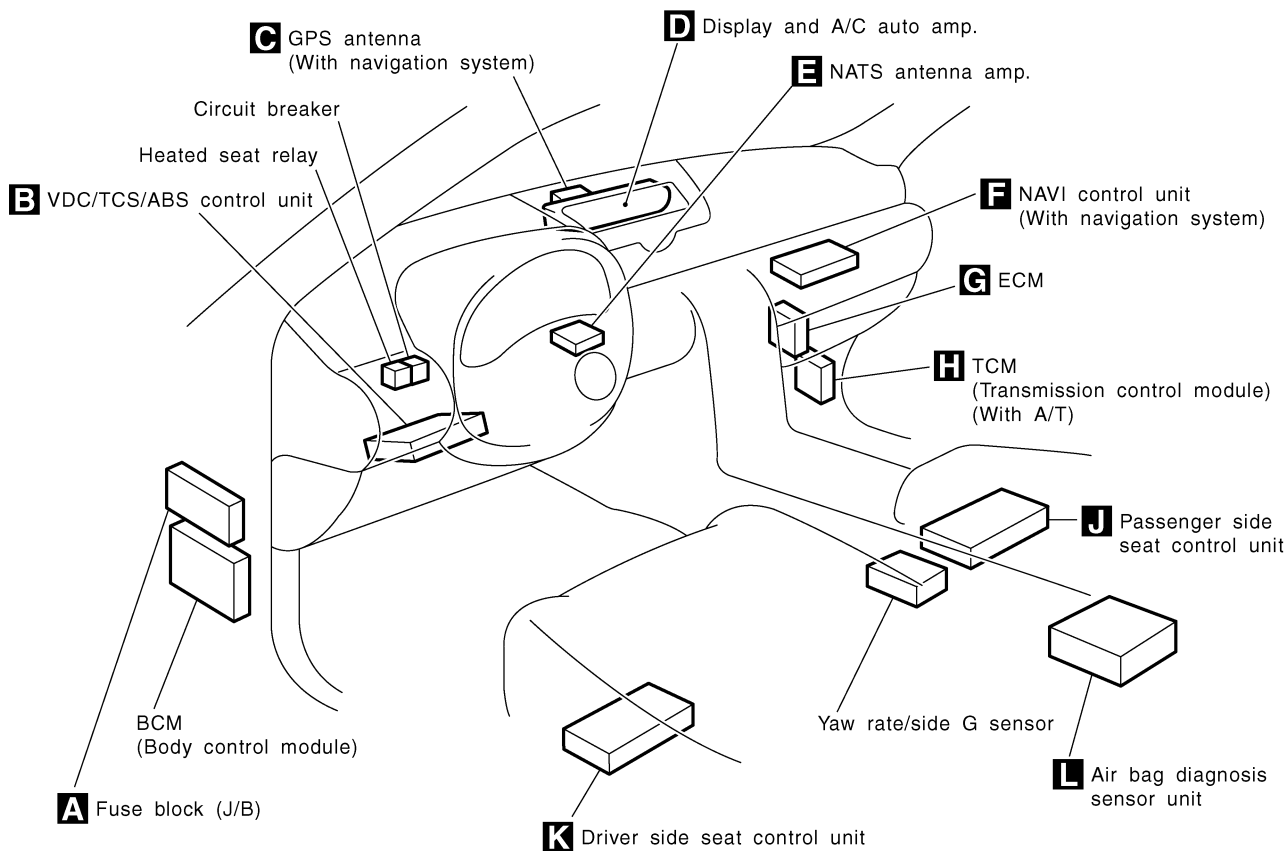
- (E3)**, **(E4)**, **(E5)**, **(E6)**,
- (E7)**, **(E8)**, **(E9)**



CKIT0237E

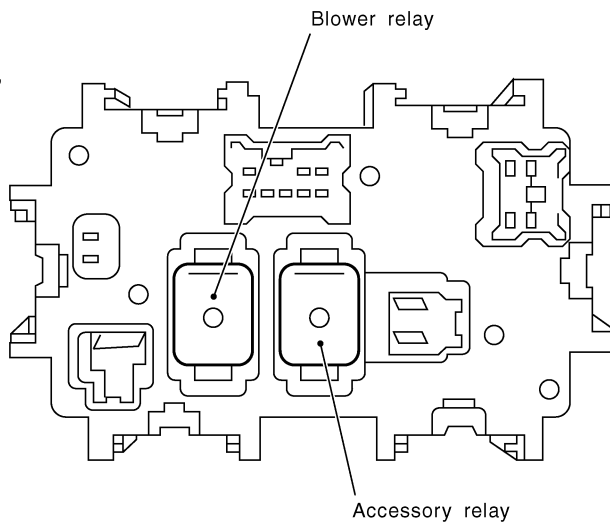
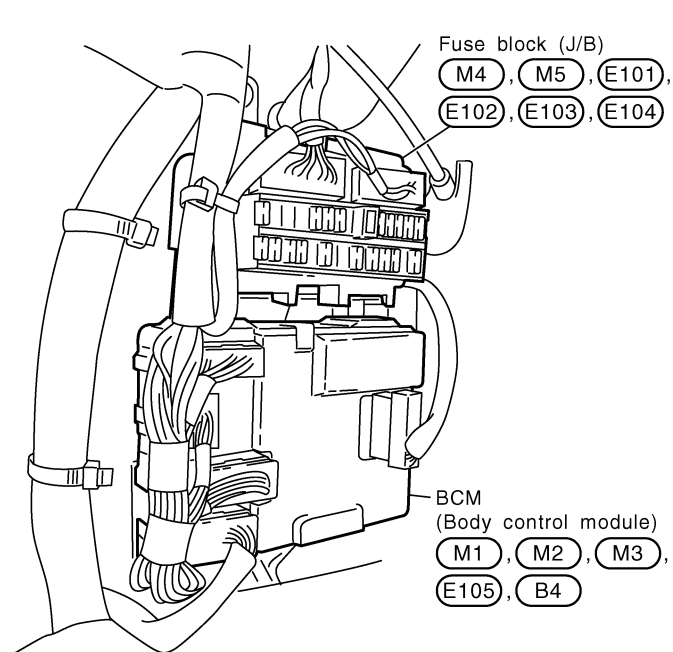
ELECTRICAL UNITS LOCATION

PASSENGER COMPARTMENT



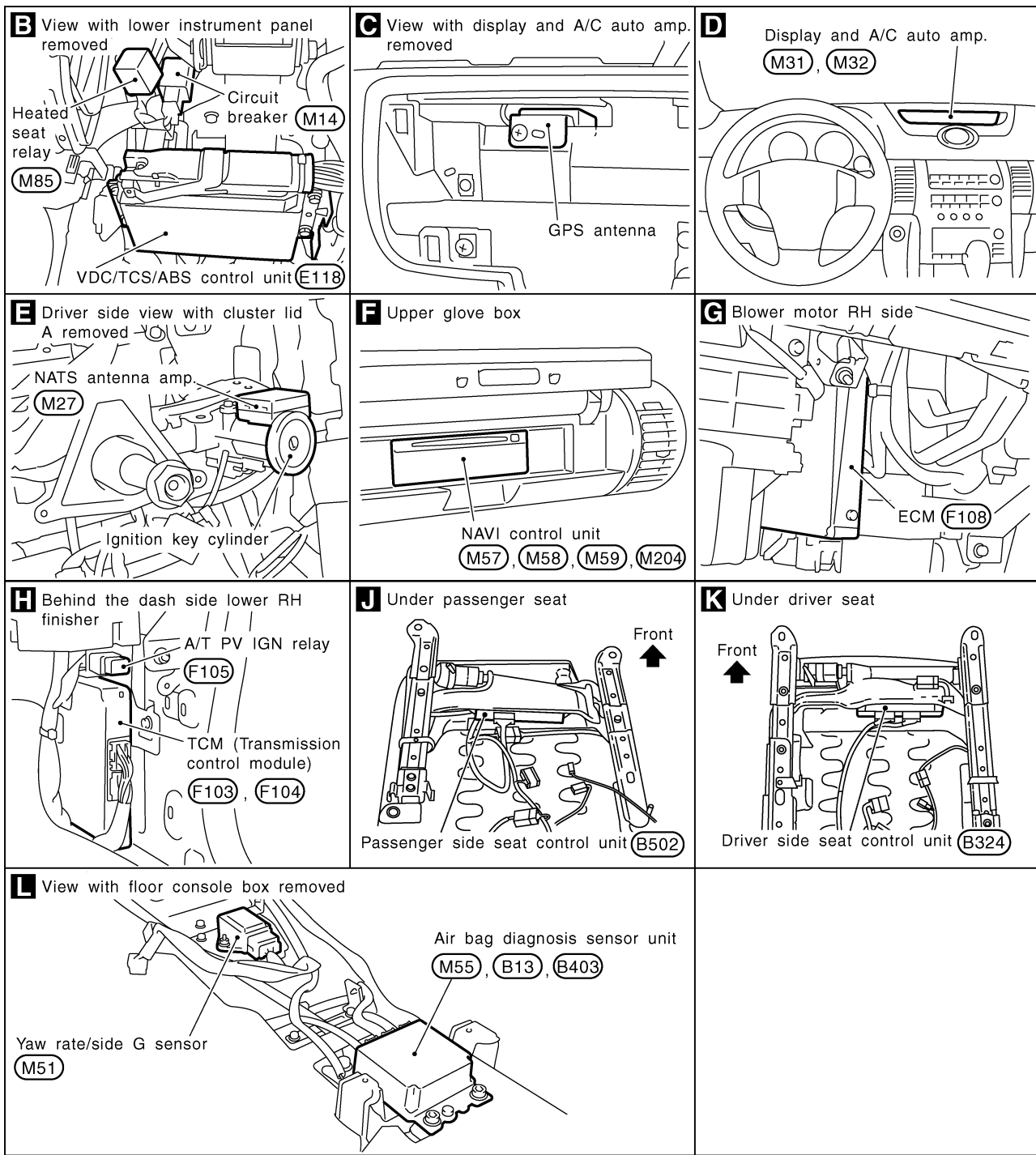
A Behind the dash side lower LH finisher

Fuse block (J/B) rear view



CKIT0238E

ELECTRICAL UNITS LOCATION



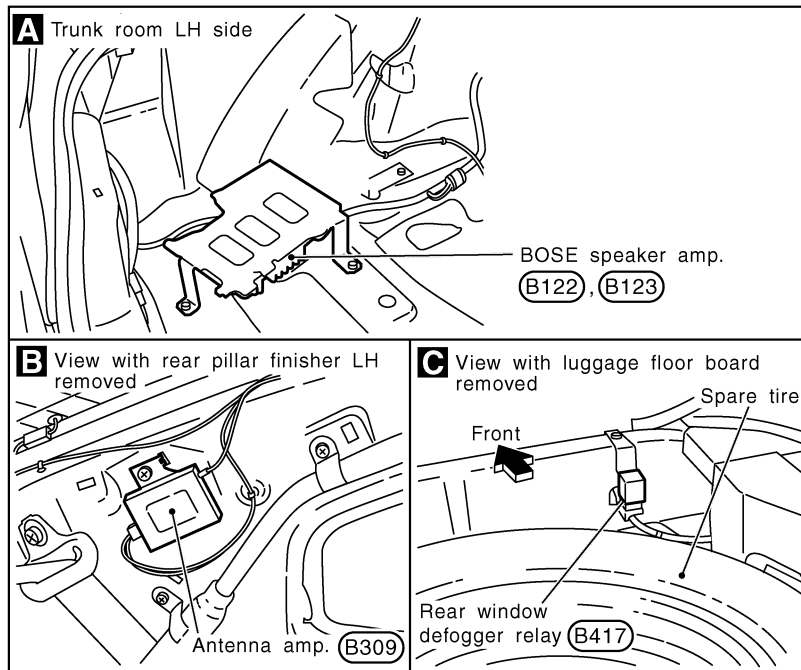
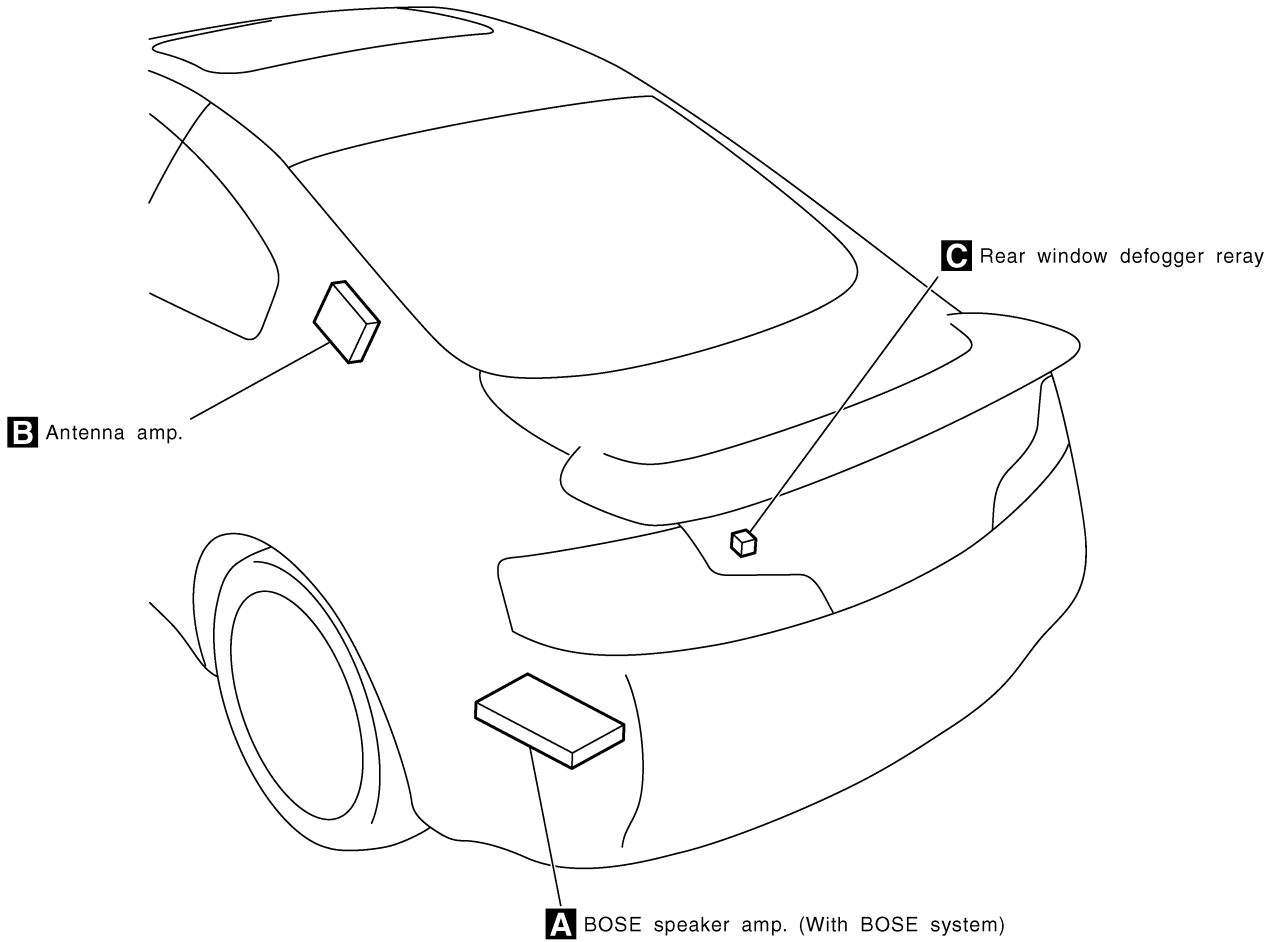
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CKIT0239E

ELECTRICAL UNITS LOCATION

LUGGAGE COMPARTMENT



CKIT0240E

HARNESS CONNECTOR

HARNESS CONNECTOR

PFP:00011

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

AKS0031E

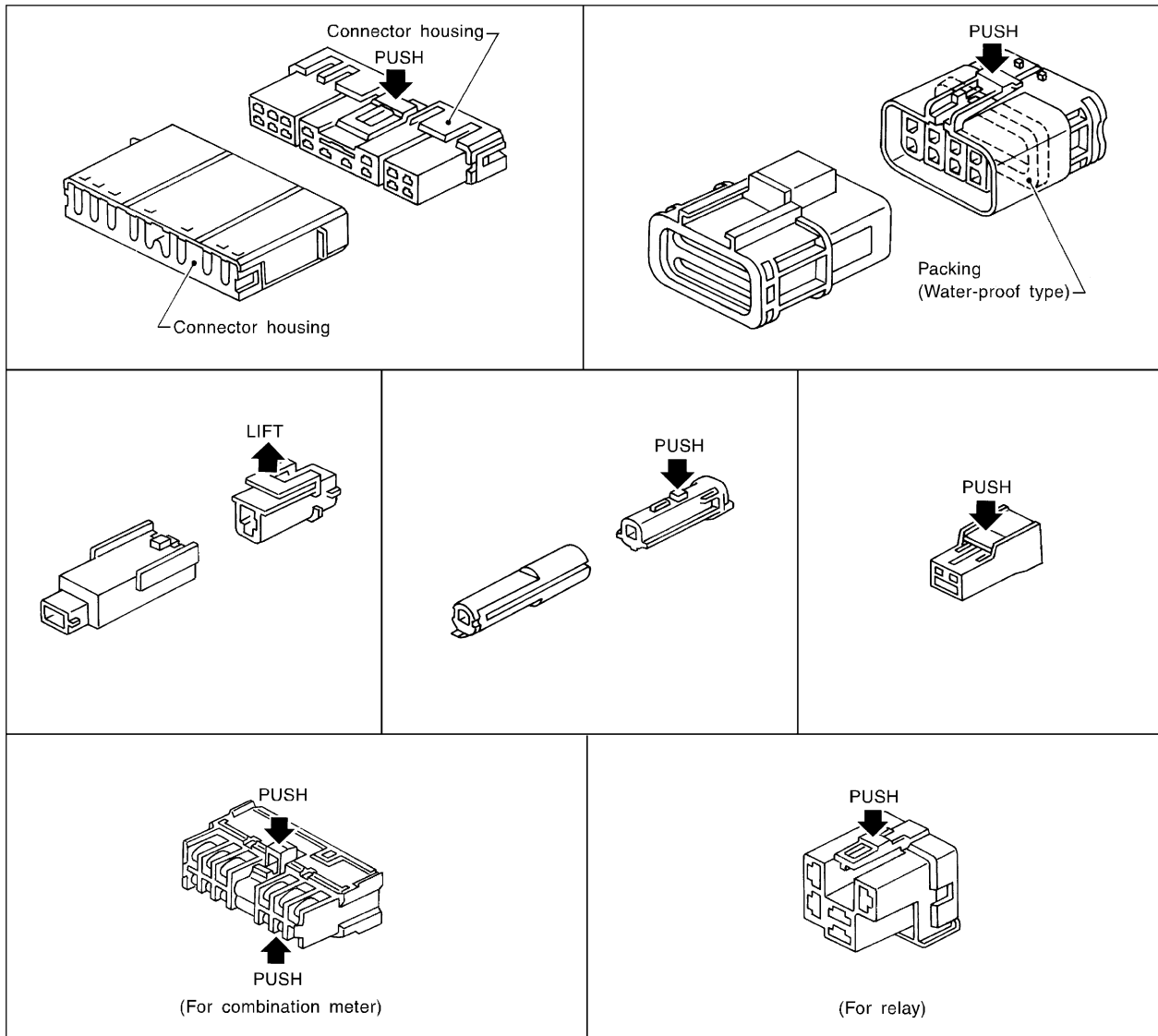
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



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SEL769DA

HARNESS CONNECTOR

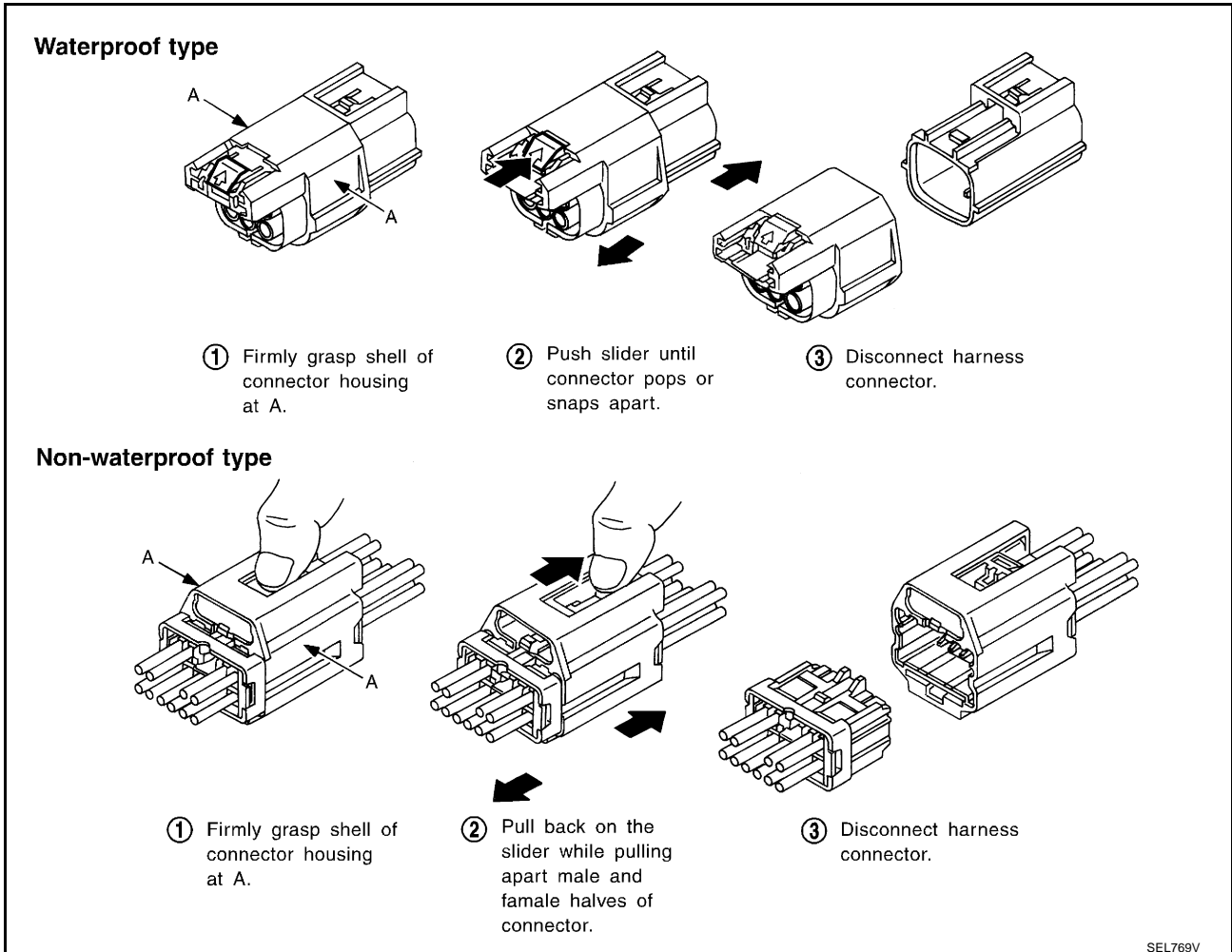
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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 illustration 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]



JOINT CONNECTOR (J/C)

PFP:B4341

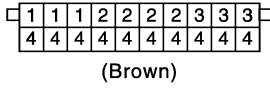
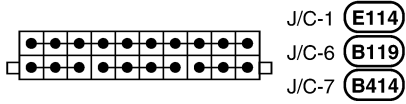
A

JOINT CONNECTOR (J/C)

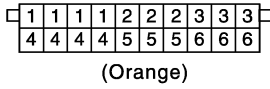
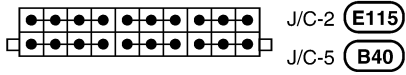
Terminal Arrangement

AKS0031F

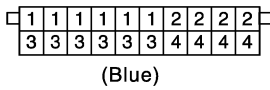
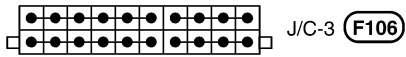
B



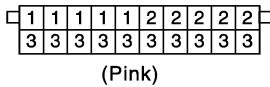
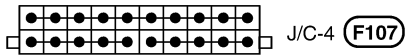
C



D



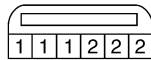
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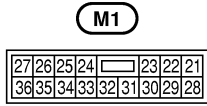
L

M

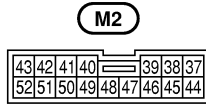
CKIT0258E

ELECTRICAL UNITS

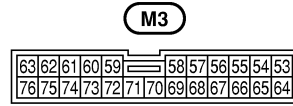
BCM (BODY CONTROL MODULE)



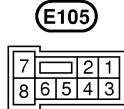
(White)



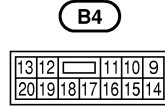
(White)



(Brown)



(White)



(White)



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CKIT0156E

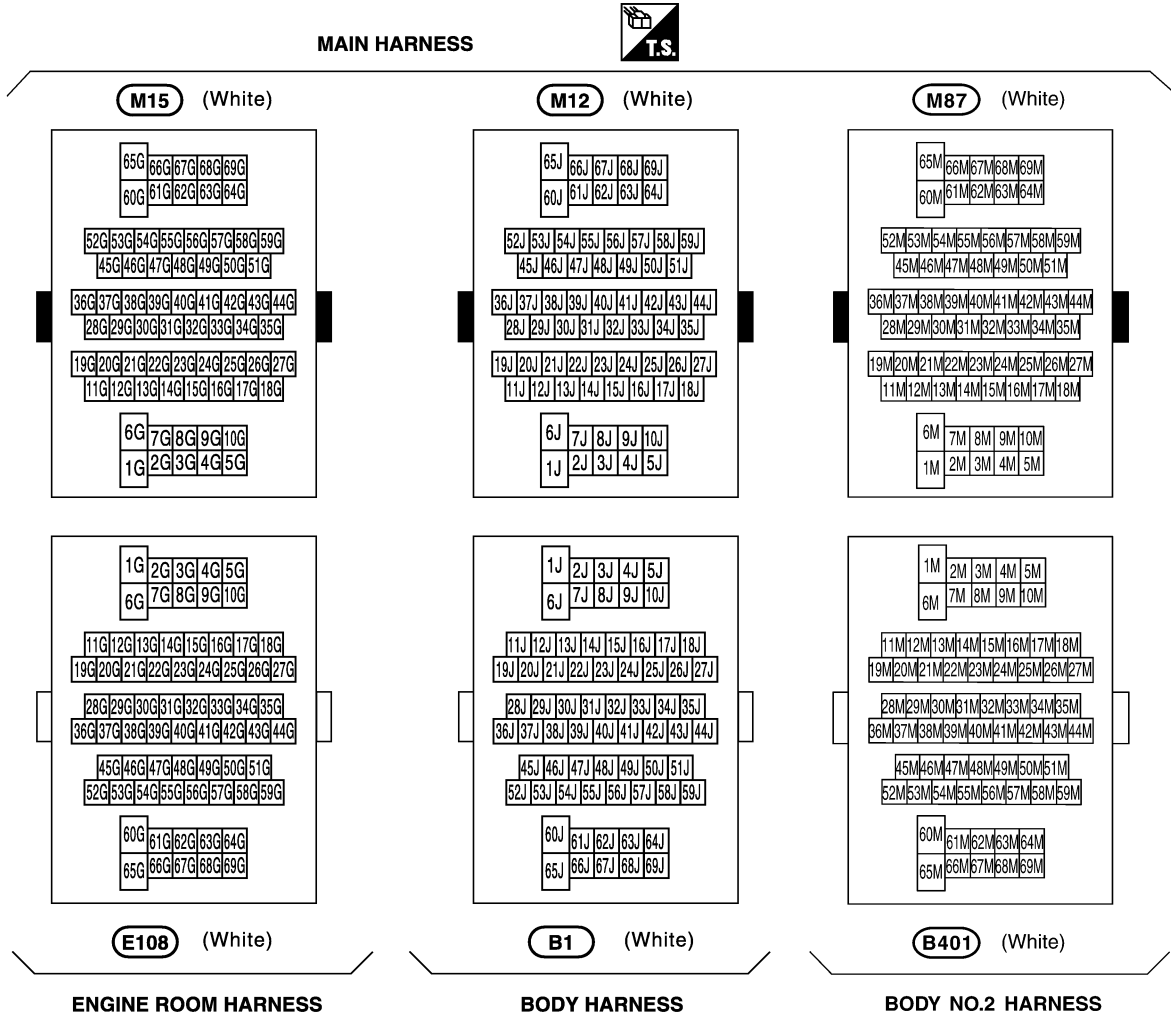
SMJ (SUPER MULTIPLE JUNCTION)

SMJ (SUPER MULTIPLE JUNCTION)

PFP:B4341

Terminal Arrangement

AKS003IH



CKIT0260E

SMJ (SUPER MULTIPLE JUNCTION)



MAIN HARNESS

M72 (White)

6H	7H	8H	9H	10H	21H	22H	23H	24H	25H	26H	27H	28H	29H	39H	40H	41H	42H	43H	44H	45H	46H		
1H	2H	3H	4H	5H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	30H	31H	32H	33H	34H	35H	36H	37H	38H

1H	2H	3H	4H	5H	11H	12H	13H	14H	15H	16H	17H	18H	19H	20H	30H	31H	32H	33H	34H	35H	36H	37H	38H
6H	7H	8H	9H	10H	21H	22H	23H	24H	25H	26H	27H	28H	29H	39H	40H	41H	42H	43H	44H	45H	46H		

F102 (White)

ENGINE CONTROL HARNESS



MAIN HARNESS

M11 (White)

20K	21K	22K	23K	24K	25K	26K	27K	36K	37K	38K	39K		
11K	12K	13K	14K	15K	16K	17K	18K	19K	32K	33K	34K	35K	
1K	2K	3K	4K	5K	6K	7K	8K	9K	10K	28K	29K	30K	31K

M74 (White)

20L	21L	22L	23L	24L	25L	26L	27L	36L	37L	38L	39L		
11L	12L	13L	14L	15L	16L	17L	18L	19L	32L	33L	34L	35L	
1L	2L	3L	4L	5L	6L	7L	8L	9L	10L	28L	29L	30L	31L

1K	2K	3K	4K	5K	6K	7K	8K	9K	10K	28K	29K	30K	31K
11K	12K	13K	14K	15K	16K	17K	18K	19K	32K	33K	34K	35K	
20K	21K	22K	23K	24K	25K	26K	27K	36K	37K	38K	39K		

1L	2L	3L	4L	5L	6L	7L	8L	9L	10L	28L	29L	30L	31L
11L	12L	13L	14L	15L	16L	17L	18L	19L	32L	33L	34L	35L	
20L	21L	22L	23L	24L	25L	26L	27L	36L	37L	38L	39L		

D1 (White)

FRONT DOOR HARNESS (DRIVER SIDE)

D31 (White)

FRONT DOOR HARNESS (PASSENGER SIDE)

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STANDARDIZED RELAY

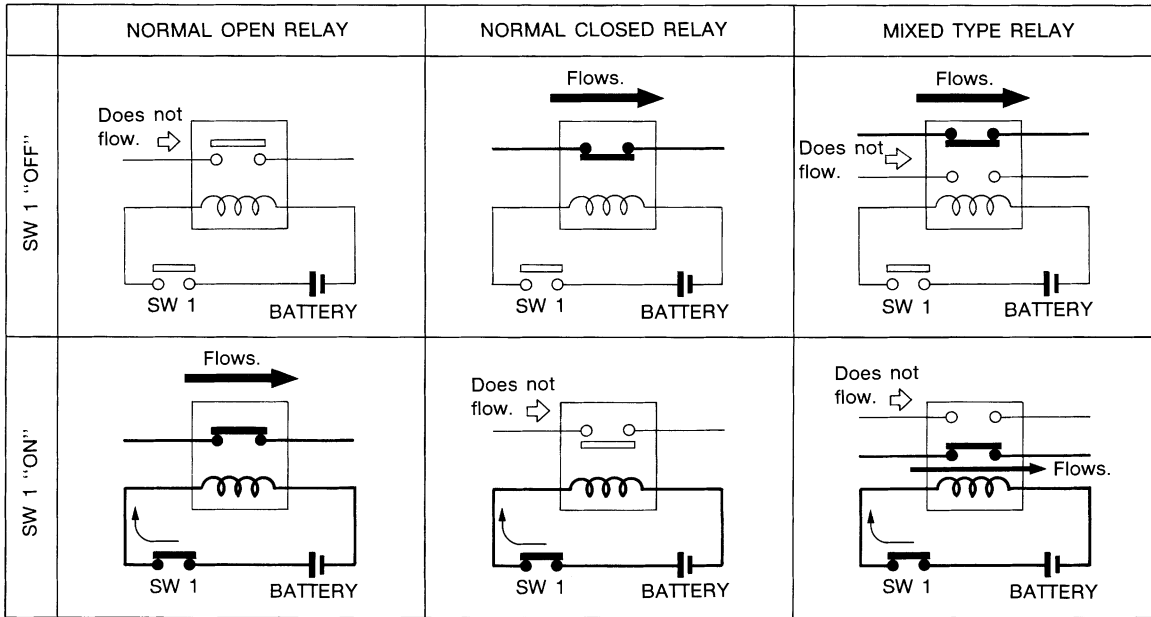
PFP:00011

AKS003II

STANDARDIZED RELAY

Description NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

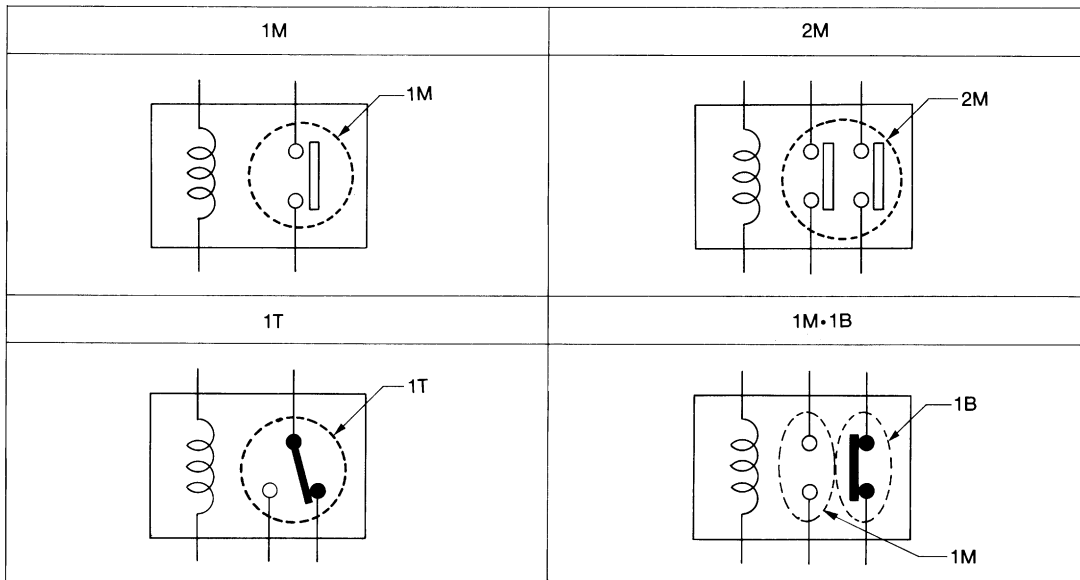
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

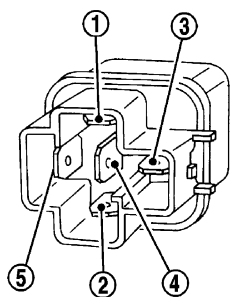
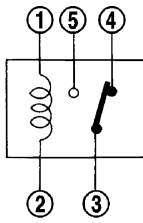
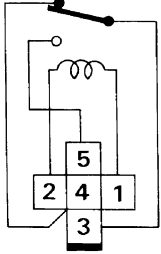
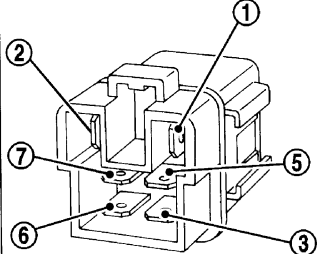
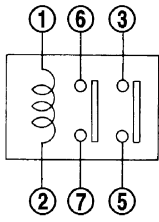
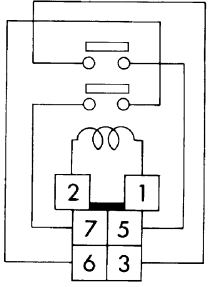
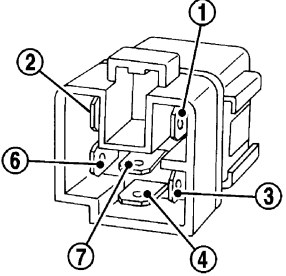
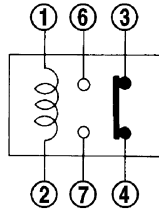
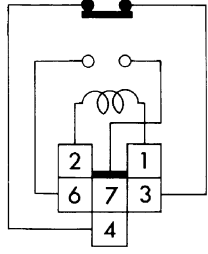
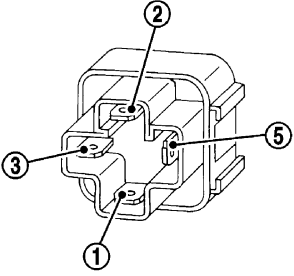
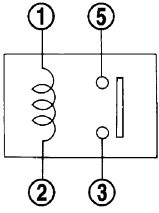
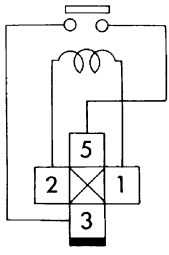
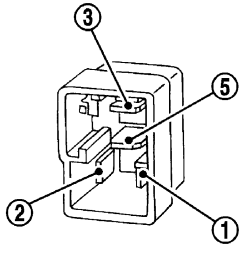
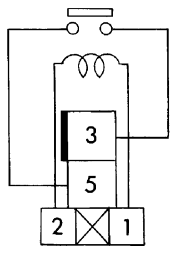
TYPE OF STANDARDIZED RELAYS

- 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

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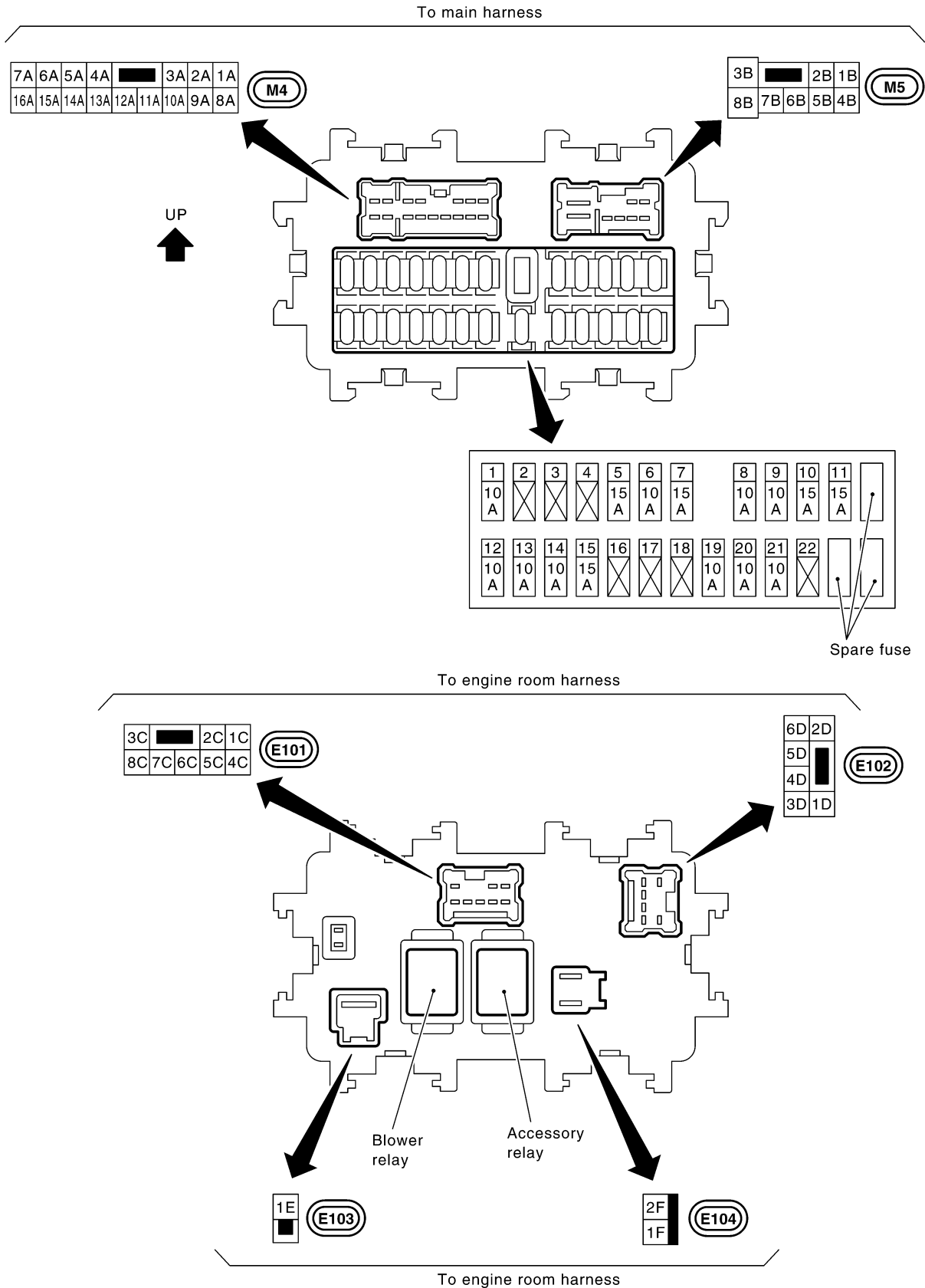
FUSE BLOCK - JUNCTION BOX (J/B)

PFP:24350

AKS003U

FUSE BLOCK - JUNCTION BOX (J/B)

Terminal Arrangement



CKIT0261E

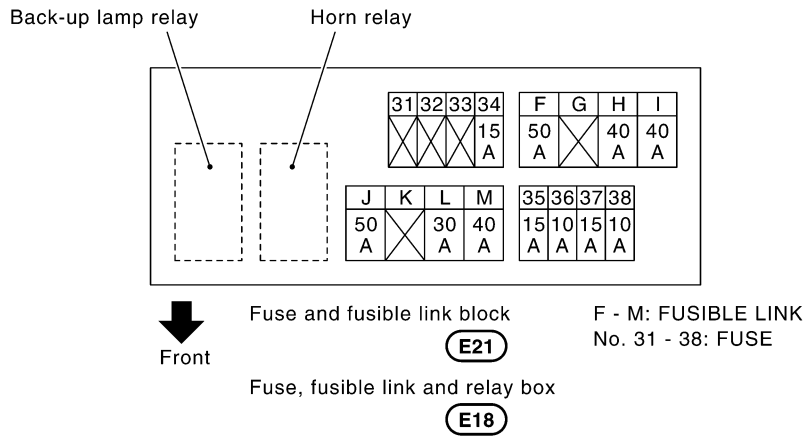
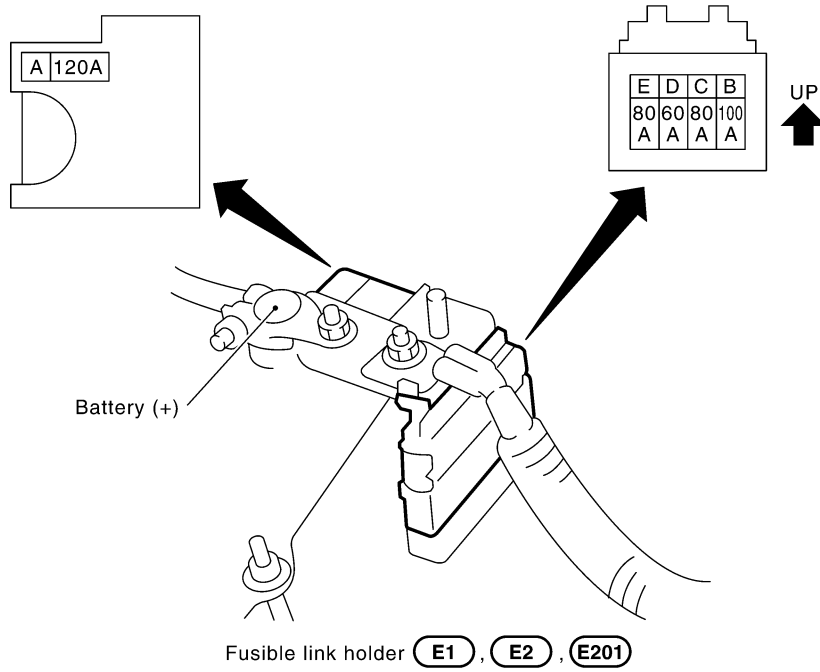
FUSE, FUSIBLE LINK AND RELAY BOX

FUSE, FUSIBLE LINK AND RELAY BOX

PPF:24382

Terminal Arrangement

AKS003JK



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PG
L
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FUSE, FUSIBLE LINK AND RELAY BOX
