

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTIONS	3	GROUND	30
Precautions for Battery Service	3	Ground Distribution	30
POWER SUPPLY ROUTING CIRCUIT	4	MAIN HARNESS	30
Schematic	4	ENGINE ROOM HARNESS	32
Wiring Diagram — POWER —	5	ENGINE CONTROL HARNESS	35
BATTERY POWER SUPPLY — IGNITION SW.		BODY HARNESS	37
IN ANY POSITION	5	BODY NO.2 HARNESS	42
ACCESSORY POWER SUPPLY — IGNITION		TAIL HARNESS	43
SW. IN “ACC” OR “ON”	10	BACK DOOR HARNESS	45
IGNITION POWER SUPPLY — IGNITION SW.		HARNESS	46
IN “ON” AND/OR “START”	11	Harness Layout	46
Fuse	16	HOW TO READ HARNESS LAYOUT	46
Fusible Link	16	OUTLINE	47
Circuit Breaker	16	MAIN HARNESS	48
IPDM E/R (INTELLIGENT POWER DISTRIBUTION		ENGINE ROOM HARNESS	50
MODULE ENGINE ROOM)	17	ENGINE CONTROL HARNESS	54
System Description	17	BODY HARNESS	56
SYSTEMS CONTROLLED BY IPDM E/R	17	BODY NO.2 HARNESS	61
CAN COMMUNICATION LINE CONTROL	17	TAIL HARNESS	62
IPDM E/R STATUS CONTROL	18	TAIL NO.2 HARNESS	65
CAN Communication System Description	18	ROOM LAMP HARNESS	66
CAN Communication Unit	18	DOOR HARNESS	68
Function of Detecting Ignition Relay Malfunction ...	18	Wiring Diagram Codes (Cell Codes)	70
CONSULT-II	19	ELECTRICAL UNITS LOCATION	73
CONSULT-II BASIC OPERATION	19	Electrical Units Location	73
SELF-DIAG RESULTS	20	ENGINE COMPARTMENT	73
DATA MONITOR	20	PASSENGER COMPARTMENT	74
ACTIVE TEST	21	LUGGAGE COMPARTMENT	77
Auto Active Test	23	HARNESS CONNECTOR	79
DESCRIPTION	23	Description	79
OPERATION PROCEDURE	23	HARNESS CONNECTOR (TAB-LOCKING	
INSPECTION IN AUTO ACTIVE TEST MODE ...	23	TYPE)	79
Schematic	25	HARNESS CONNECTOR (SLIDE-LOCKING	
IPDM E/R Terminal Arrangement	26	TYPE)	80
IPDM E/R Power/Ground Circuit Inspection	27	ELECTRICAL UNITS	81
Inspection With CONSULT-II (Self-Diagnosis)	28	Terminal Arrangement	81
Removal and Installation of IPDM E/R	29	SMJ (SUPER MULTIPLE JUNCTION)	83
REMOVAL	29	Terminal Arrangement	83
INSTALLATION	29		

STANDARDIZED RELAY	85	FUSE BLOCK - JUNCTION BOX (J/B)	87
Description	85	Terminal Arrangement	87
NORMAL OPEN, NORMAL CLOSED AND		FUSE, FUSIBLE LINK AND RELAY BOX	88
MIXED TYPE RELAYS	85	Terminal Arrangement	88
TYPE OF STANDARDIZED RELAYS	85		

PRECAUTIONS

PRECAUTIONS

PPF:00001

Precautions for Battery Service

AKS003RD

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.

A

B

C

D

E

F

G

H

I

J

PG

L

M

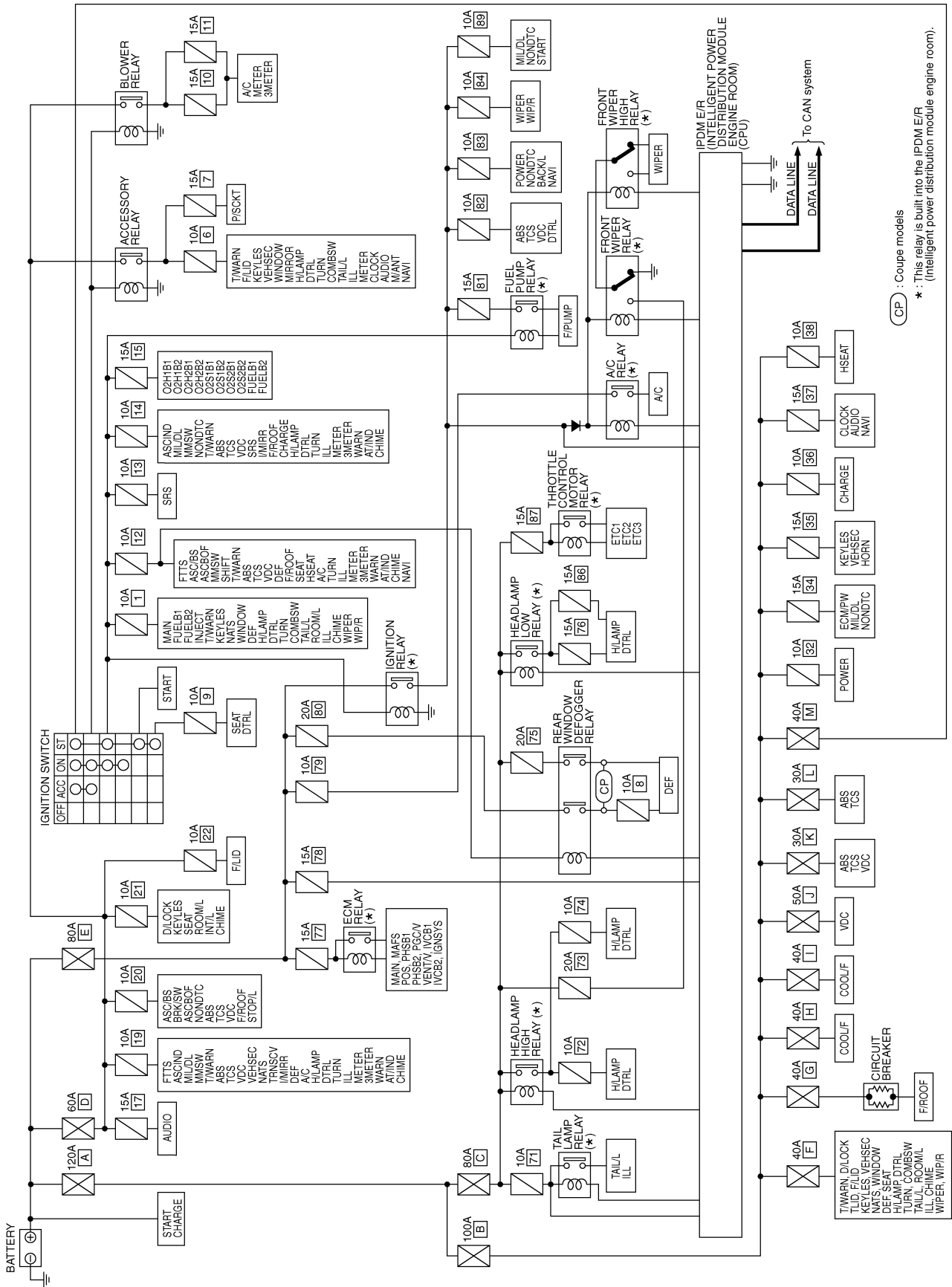
POWER SUPPLY ROUTING CIRCUIT

PFP:24110

AKS0012B

POWER SUPPLY ROUTING CIRCUIT

Schematic

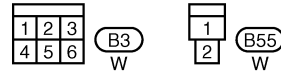
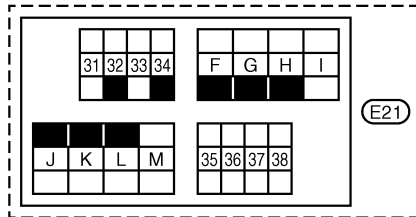
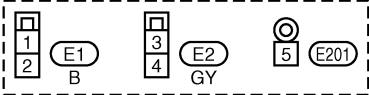
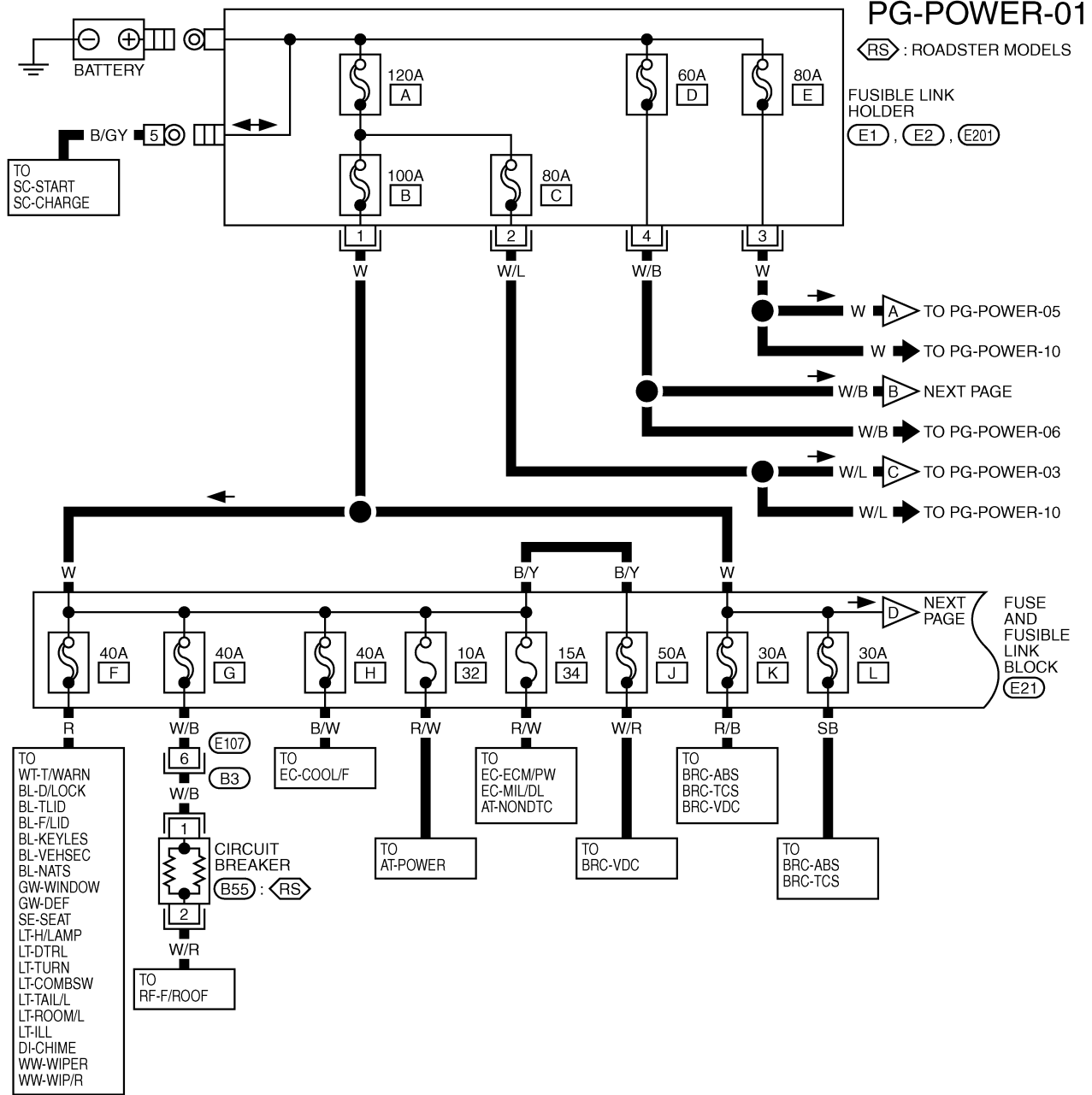


TKWM1325E

POWER SUPPLY ROUTING CIRCUIT

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

AKS0012C

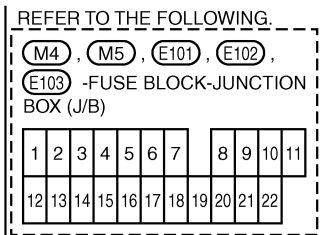
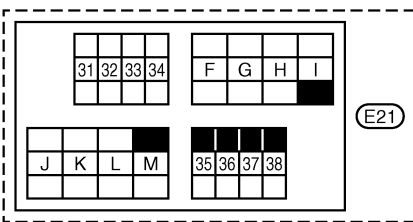
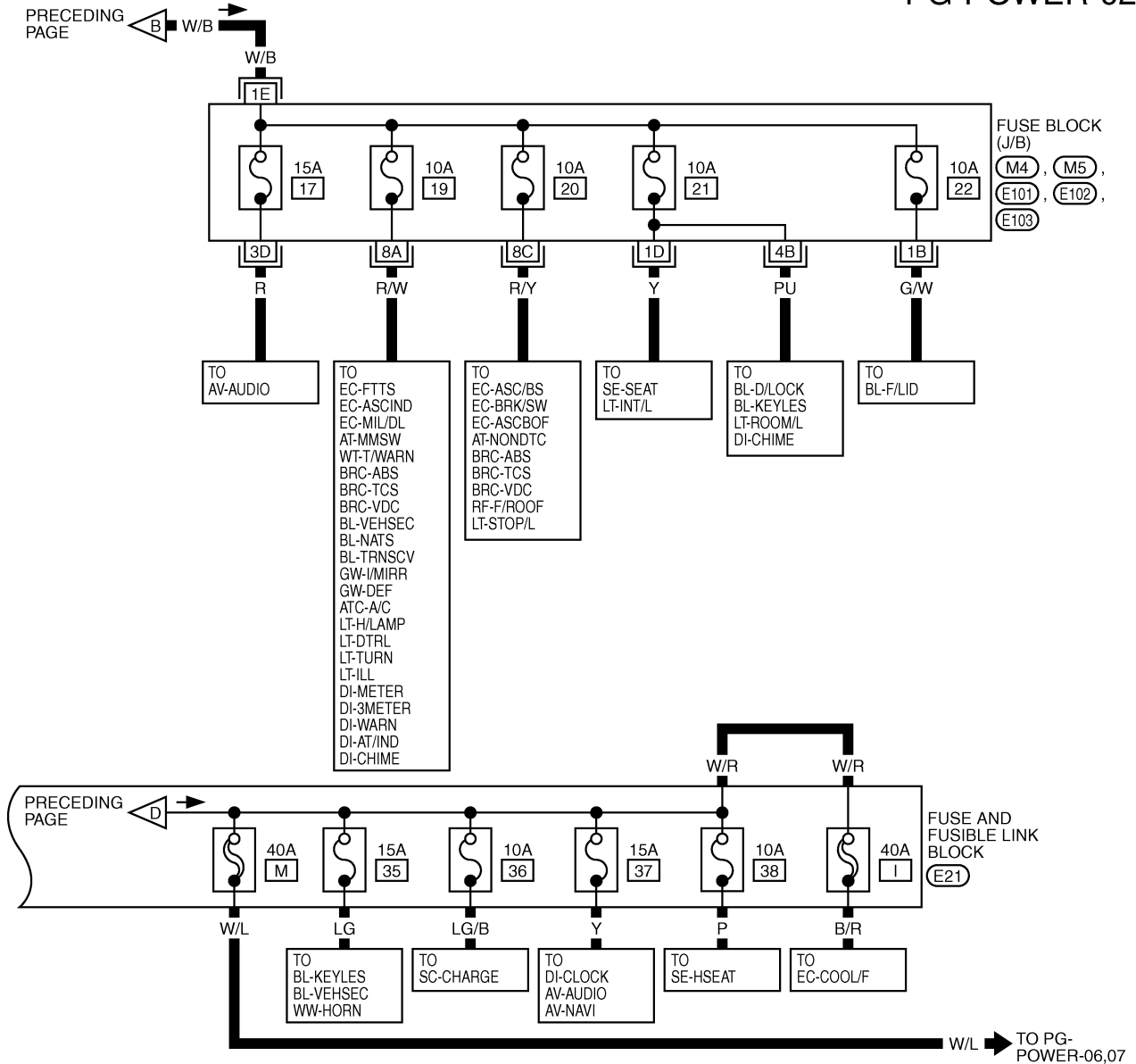


A
B
C
D
E
F
G
H
I
J
K
L
M

PG

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02

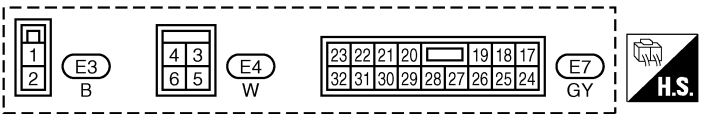
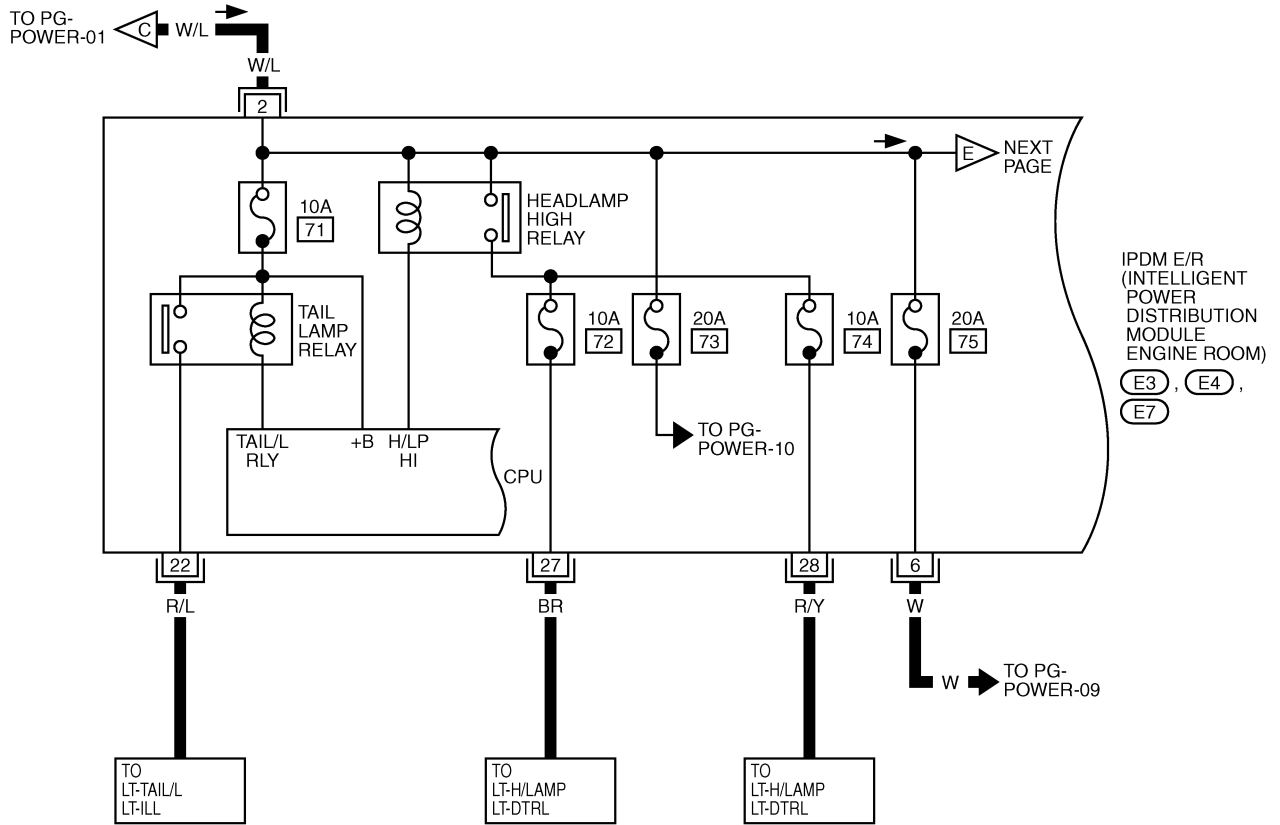


TKWM1327E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03

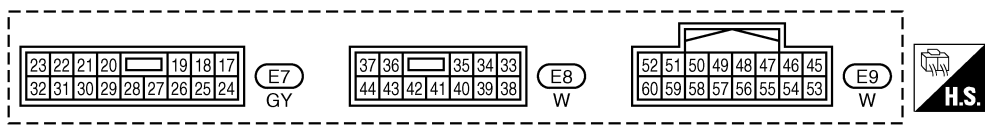
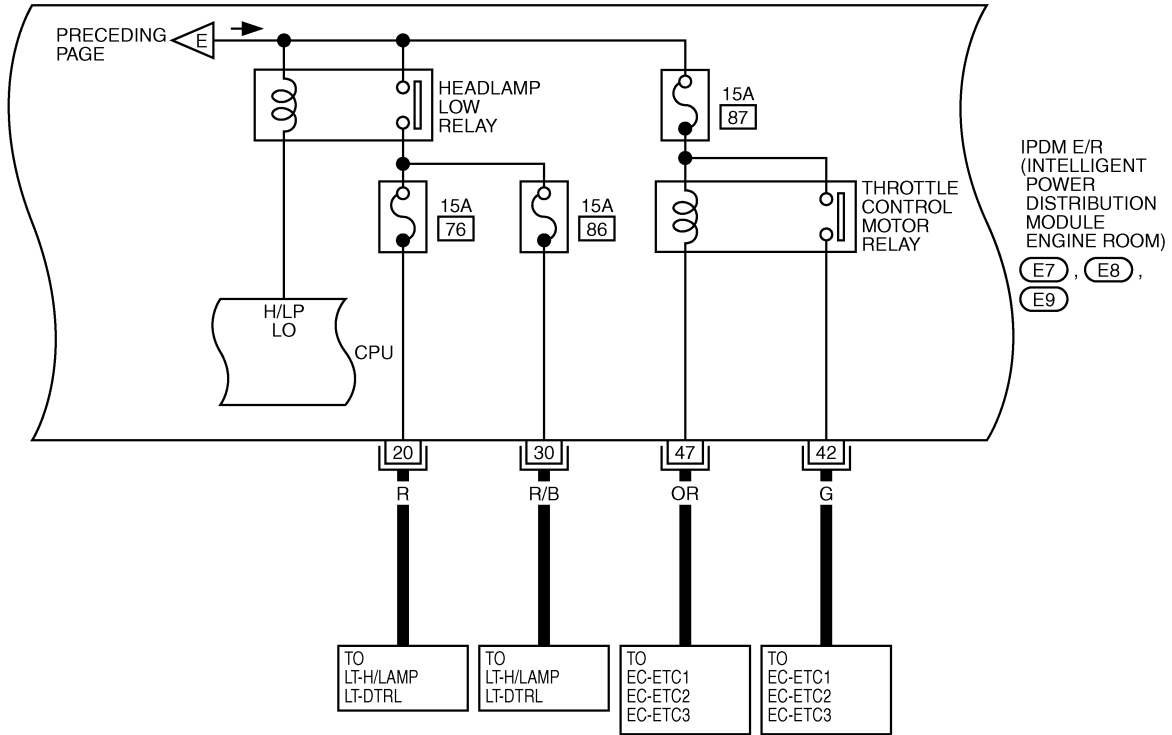
A
B
C
D
E
F
G
H
I
J
PG
L
M



TKWT1642E

POWER SUPPLY ROUTING CIRCUIT

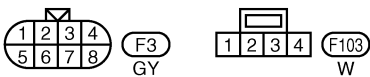
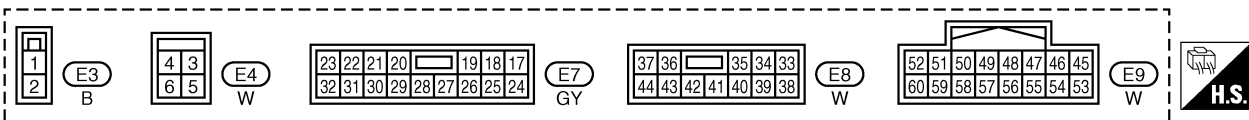
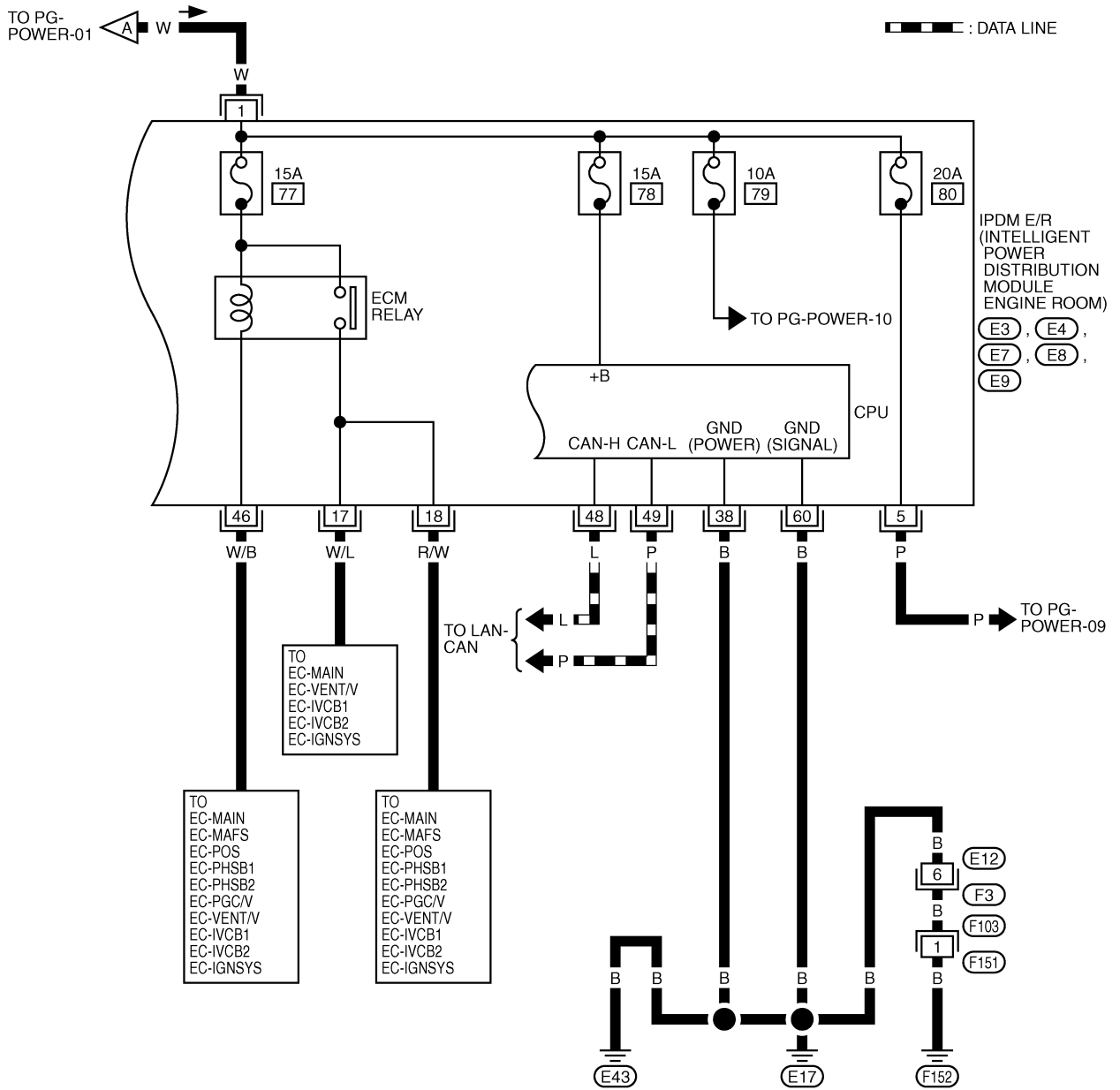
PG-POWER-04



TKWT1643E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05

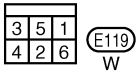
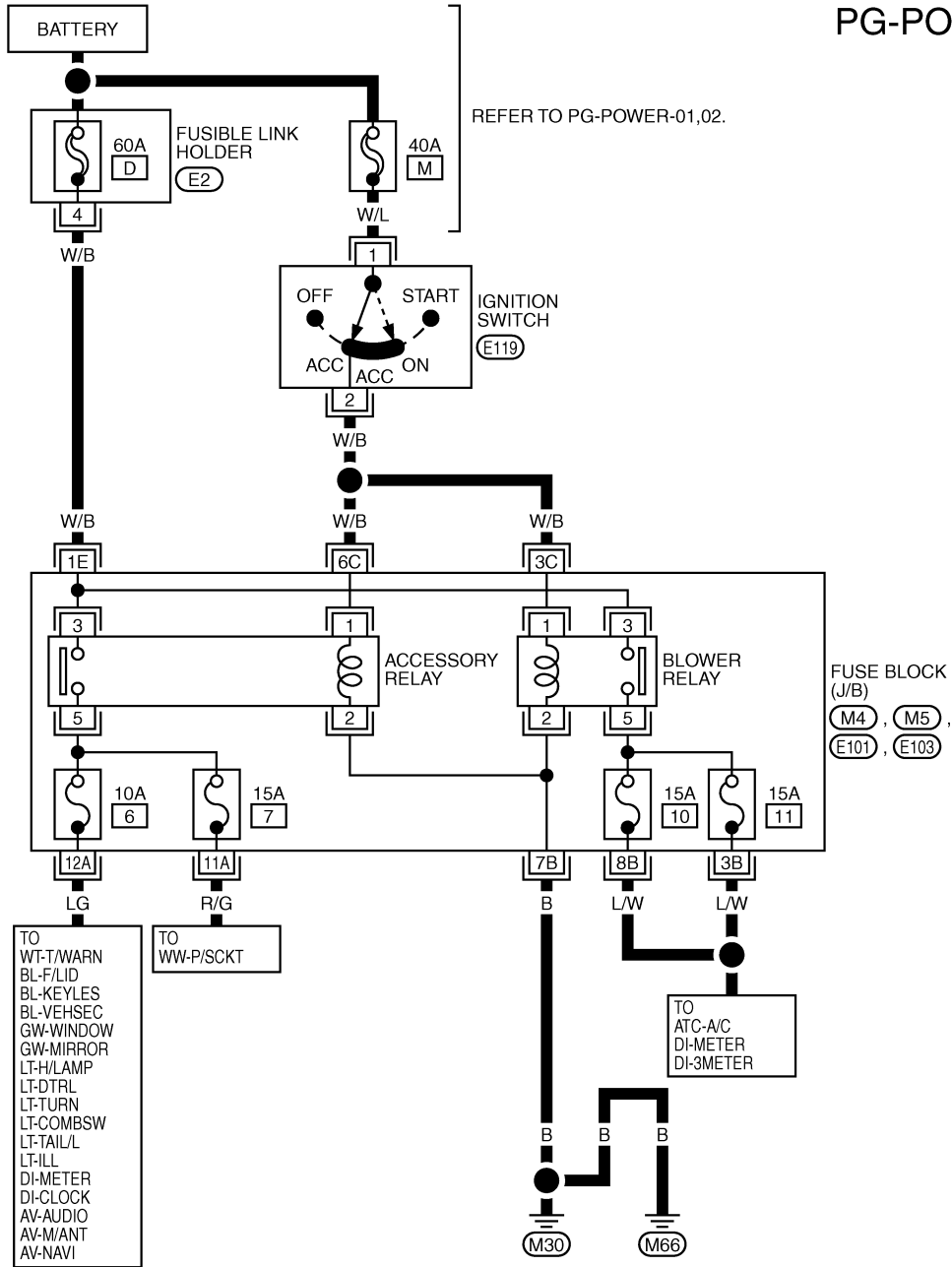


TKWT1644E

POWER SUPPLY ROUTING CIRCUIT

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

PG-POWER-06



REFER TO THE FOLLOWING.

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

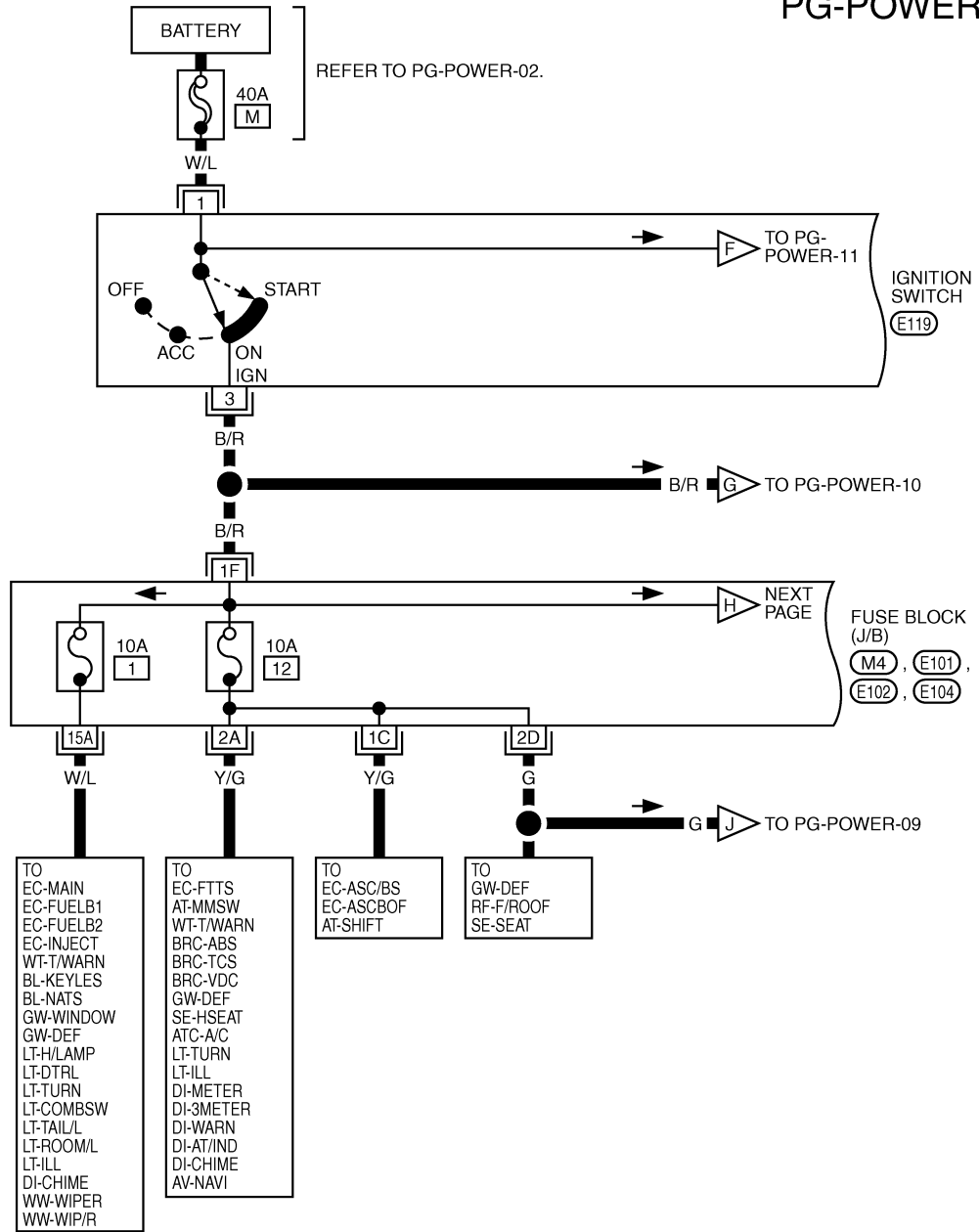
1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16	17	18	19	20	21	22

TKWT1645E

POWER SUPPLY ROUTING CIRCUIT

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

PG-POWER-07



3	5	1
4	2	6

(E119)
W

REFER TO THE FOLLOWING.

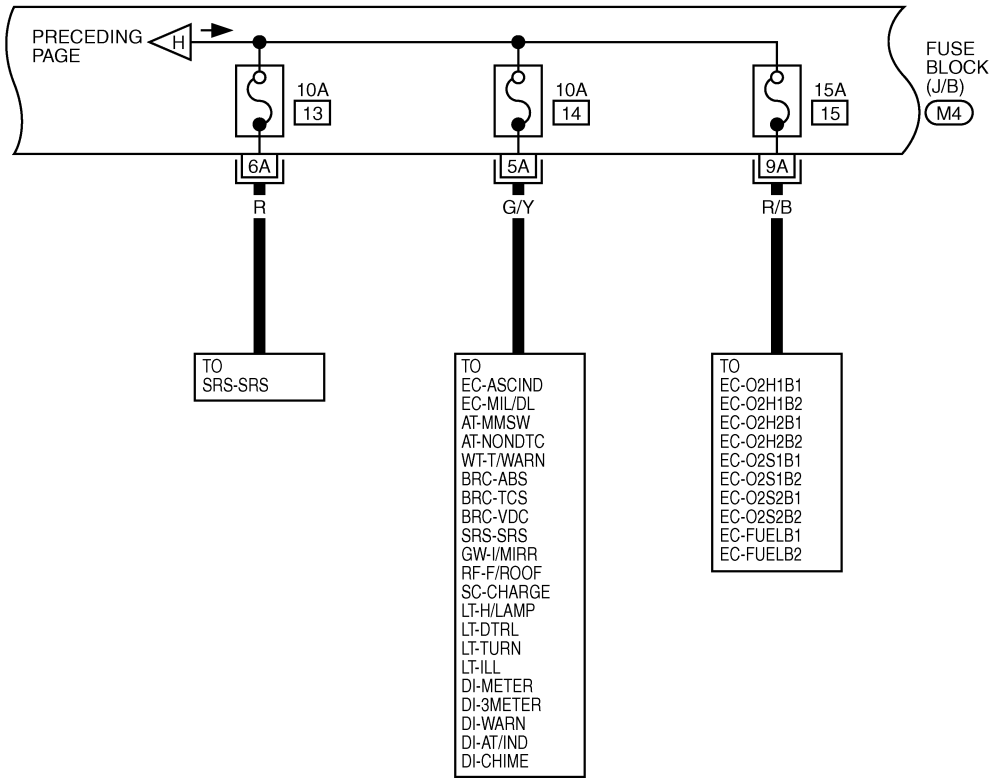
(M4), (E101), (E102), (E104)
- FUSE BLOCK-JUNCTION BOX (J/B)

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

TKWM1328E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08



REFER TO THE FOLLOWING.

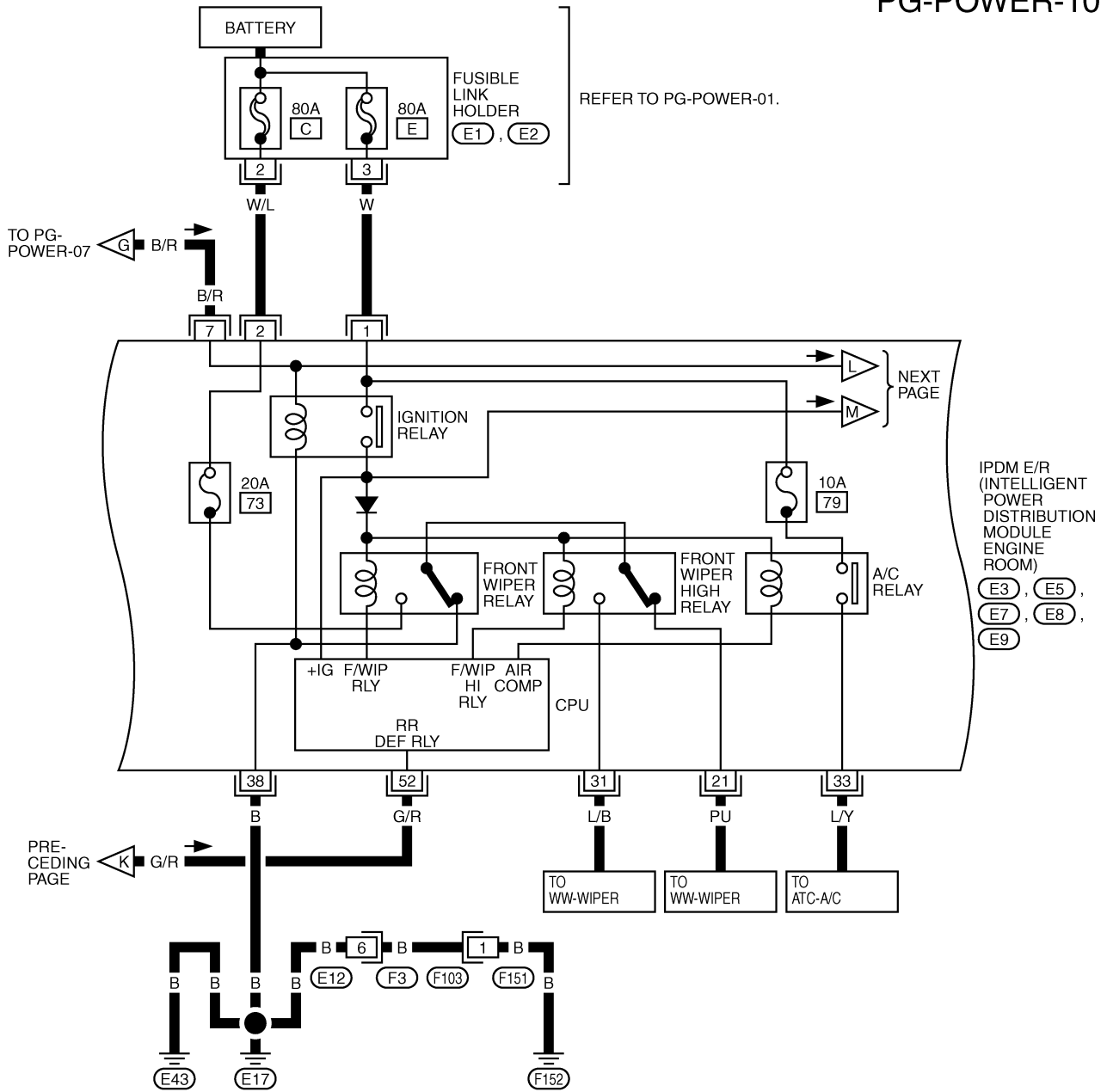
(M4) - FUSE BLOCK-
JUNCTION BOX (J/B)

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

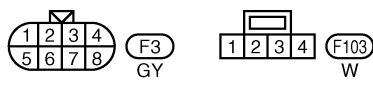
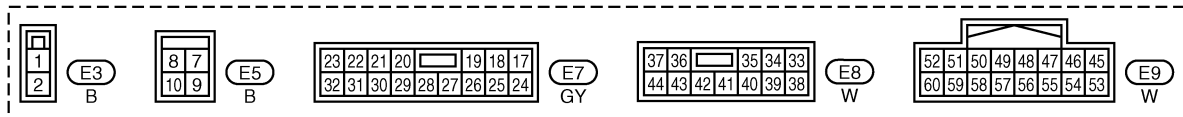
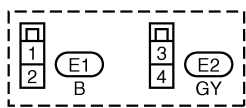
TKWM1329E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-10



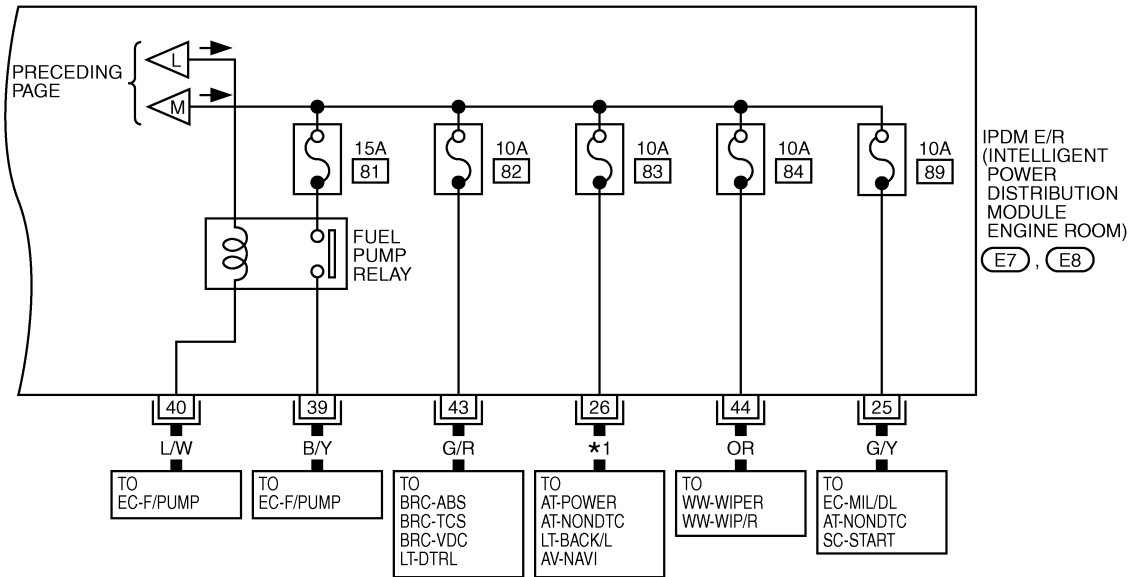
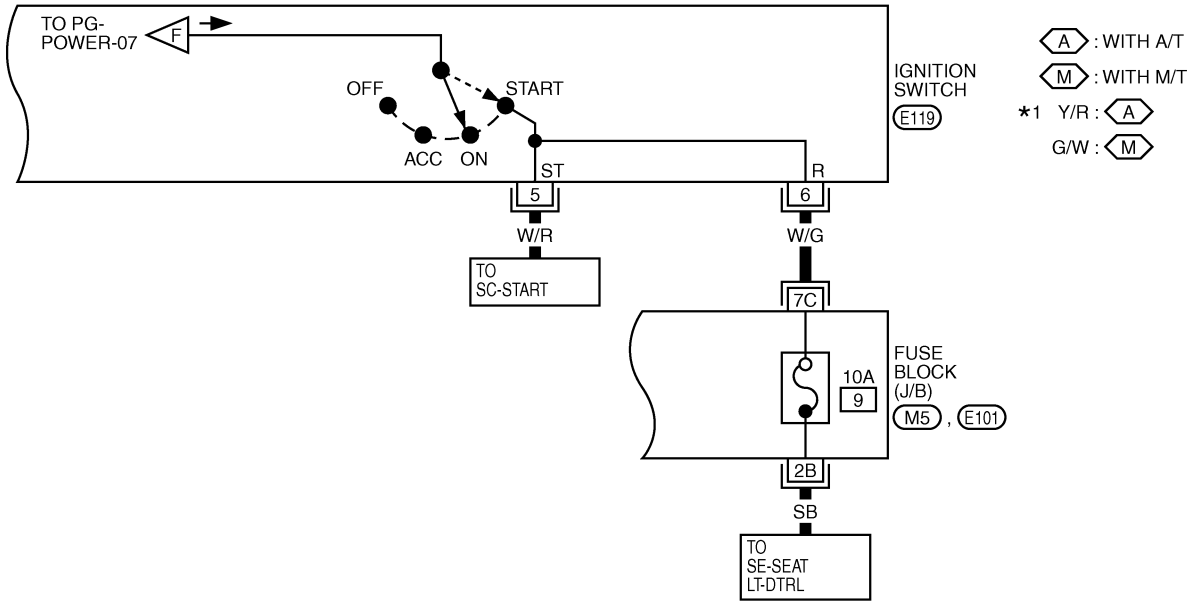
IPDM E/R
(INTELLIGENT
POWER
DISTRIBUTION
MODULE
ENGINE
ROOM)
E3, E5,
E7, E8,
E9



TKWT1649E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-11



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

(E7) GY

37	36	35	34	33		
44	43	42	41	40	39	38

(E8) W



3	5	1
4	2	6

(E119) W

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

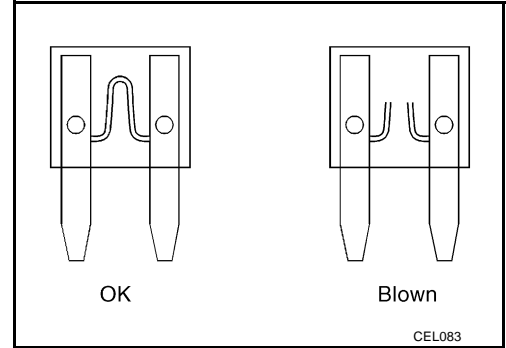
TKWM1330E

POWER SUPPLY ROUTING CIRCUIT

Fuse

AKS0012D

- 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.



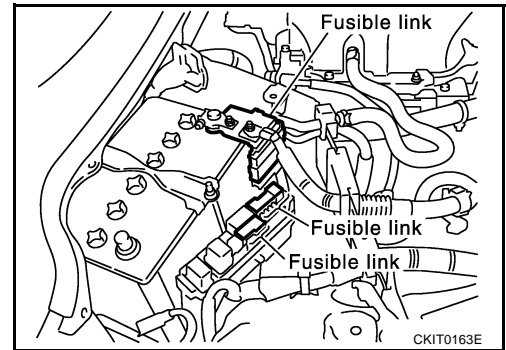
Fusible Link

AKS0012E

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:

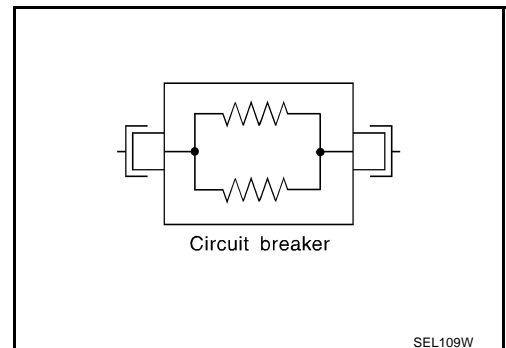
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring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



Circuit Breaker

AKS0012F

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)

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

PFP:284B7

A

System Description

AKS00A2H

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine room. 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, hood switch signal reception, etc.
- It controls operation of each electrical part via ECM, 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:
 - Headlamps (Hi, Lo)
 - Parking lamps
 - Tail lamps
 - License plate lamps
2. Wiper control
Using CAN communication line, it receives signals from BCM and controls the front wipers.
3. Headlamp washer control
Using CAN communication line, it receives signals from BCM and controls the headlamp washer.
4. Rear window defogger relay control
Using CAN communication line, it receives signals from BCM and controls the rear window defogger relay.
5. A/C compressor control
Using CAN communication line, it receives signals from ECM and controls the A/C relay.
6. Cooling fan control
Using CAN communication line, it receives signals from ECM and controls cooling fan 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	<ul style="list-style-type: none">● With the ignition switch ON, the tail and parking lamps is ON.● With the ignition switch OFF, the tail and parking lamps is 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

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 1 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 or ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

AKS00A2I

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

AKS00A2J

Refer to [LAN-5, "CAN Communication Unit"](#) .

Function of Detecting Ignition Relay Malfunction

AKS00A2K

- 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.
- When a state of ignition relay having built-in does not agree with a state of Ignition switch signal input by a CAN communication from BCM, IPDM E/R lets tail lamp relay operate.

Ignition switch signal	Ignition relay status	Tail lamp relay
ON	ON	—
OFF	OFF	—
ON	OFF	—
OFF	ON	ON (10 minutes)

NOTE:

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

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

CONSULT-II

AKS00A2L

CONSULT-II performs the following functions with combination of data receiving, command and transmission using the CAN communication line from the IPDM E/R.

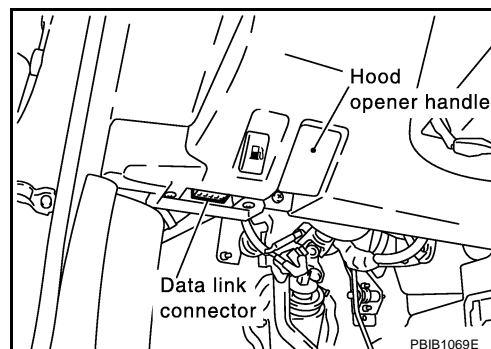
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of the CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive of CAN communication can be read.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.

CONSULT-II BASIC OPERATION

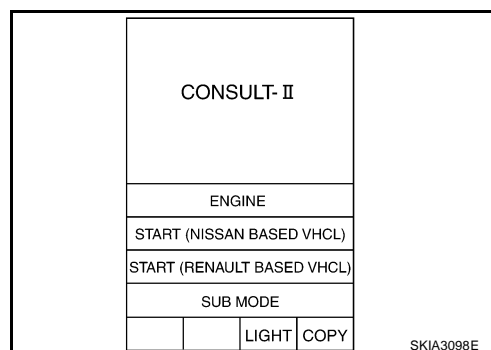
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

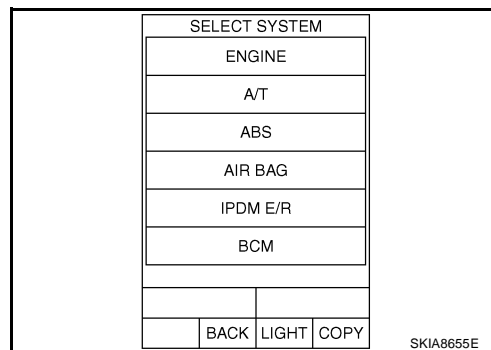
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

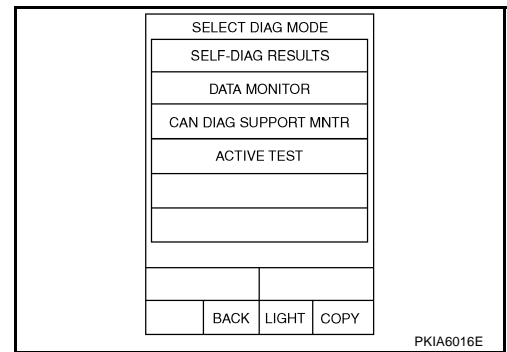


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
If "IPDM E/R" is not displayed, go to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



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

4. Select the desired part to be diagnosed on the “SELECT DIAG MODE” screen.



SELF-DIAG RESULTS

Operation Procedure

1. Touch “SELF-DIAG RESULTS” on “SELECT DIAG MODE” screen.
2. Check display content in self-diagnostic results.

Display Item List

Display Items	CONSULT-II display code	Malfunction detecting condition	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.	-	-	-	-	-
CAN COMM CIRC	U1000	<ul style="list-style-type: none"> ● If CAN communication reception/transmission data has a malfunction, or if any of the control units malfunction, data reception/transmission cannot be confirmed. ● When the data in CAN communication is not received before the specified time 	×	×	Any of or several items below have errors. <ul style="list-style-type: none"> ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The details for display of the period are as follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

DATA MONITOR

Operation Procedure

1. Touch “DATA MONITOR” on “SELECT MONITOR ITEM ” screen.
2. Touch “ALL SIGNALS”, “MAIN SIGNALS” or “SELECTION FROM MENU” on the “DATA MONITOR” screen.

ALL SIGNALS	All items will be monitored.
MAIN SIGNALS	Monitor the predetermined item.
SELECTION FROM MENU	Select any item for monitoring.

3. Touch “START”.
4. Touch the required monitoring item on “SELECTION FROM MENU”. In “ALL SIGNALS”, all items are monitored. In “MAIN SIGNALS”, predetermined items are monitored.
5. Touch “RECORD” while monitoring to record the status of the item being monitored. To stop recording, touch “STOP”.

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

All Items, Main Items, Select Item Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECT FROM MENU	
Motor fan request	MOTOR FAN REQ	1/2/3/4	×	×	×	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	×	×	×	Signal status input from ECM
Tail & clear request	TAIL&CLR REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	×	×	×	Signal status input from BCM
Front fog request ^{NOTE}	FR FOG REQ	ON/OFF	×	×	×	Signal status input from BCM
Head lamp washer request	HL WASHER REQ	ON/OFF	×		×	Signal status input from BCM
Front wiper request	FR WIP REQ	STOP/1LOW/LOW/HI	×	×	×	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	×	×	×	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/Block	×	×	×	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	×		×	Status of input signal ^{NOTE}
Ignition relay status	IGN RLY	ON/OFF	×	×	×	Ignition relay status monitored with IPDM E/R
Rear window defogger request	RR DEF REQ	ON/OFF	×	×	×	Signal status input from BCM
Oil pressure switch ^{NOTE}	OIL P SW	OPEN/CLOSE	×		×	Signal status input in IPDM E/R
Day time light request ^{NOTE}	DTRL REQ	ON/OFF	×		×	Signal status input from BCM
Hood switch	HOOD SW	ON/OFF	×		×	Signal status input in IPDM E/R
Theft warning horn request	THFT HRN REQ	ON/OFF	×		×	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	×		×	Output status of IPDM E/R

NOTE:

- Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is at ACC, the display may not be correct.
- “FR FOG REQ” and “OIL P SW” items are displayed, but they cannot be monitored.
- Only the vehicle which day time light system is mounted with operates.

ACTIVE TEST

Operation Procedure

1. Touch “ACTIVE TEST” on “SELECT DIAG MODE” screen.
2. Touch item to be tested, and check operation.
3. Touch “START”.
4. Touch “STOP” while testing to stop the operation.

Test item	CONSULT-II screen display	Description
Tail lamp output	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be operated.
Rear window defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear window defogger relay can be operated.
Front wiper (HI, LO) output	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON), the front wiper relay (Lo, Hi) can be operated.
Cooling fan output	MOTOR FAN	With a certain operation (1,2,3,4), the cooling fan can be operated.

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

Test item	CONSULT-II screen display	Description
Headlamp washer	HEAD LAMP WASHER	Push "ON" button, headlamp washer relay operates one second.
Lamp (HI, LO,FOG ^{NOTE}) output	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON ^{NOTE}), the lamp relay (Lo, Hi, Fog ^{NOTE}) can be operated.
Horn output	HORN	Push "ON" button, horn relay operates 20ms.

NOTE:

- The cornering lamp items are displayed, but they cannot be tested.
- The fog lamp items are displayed, but they cannot be tested.

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

Auto Active Test DESCRIPTION

- 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
 - Headlamps (Hi, Lo)
 - A/C compressor (magnetic clutch)
 - Cooling fan

OPERATION PROCEDURE

1. Close hood front door (passenger side) 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 (driver side) 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.
6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

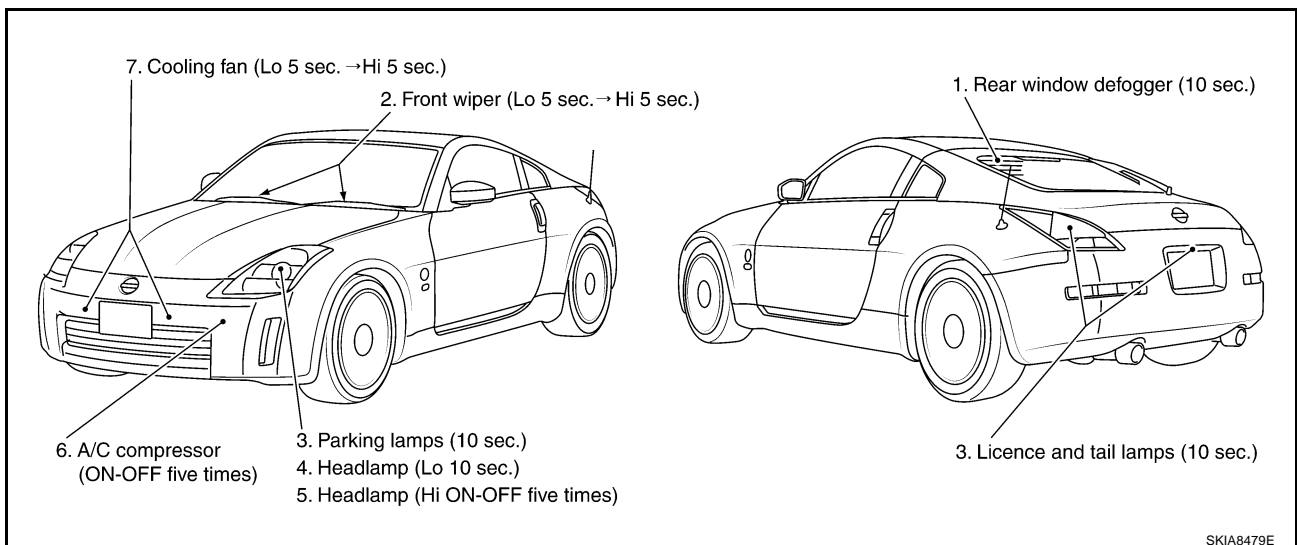
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to inspect **BL-40, "Door Switch Check"** 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.



NOTE:

It will take ten seconds from 3 to 4.

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

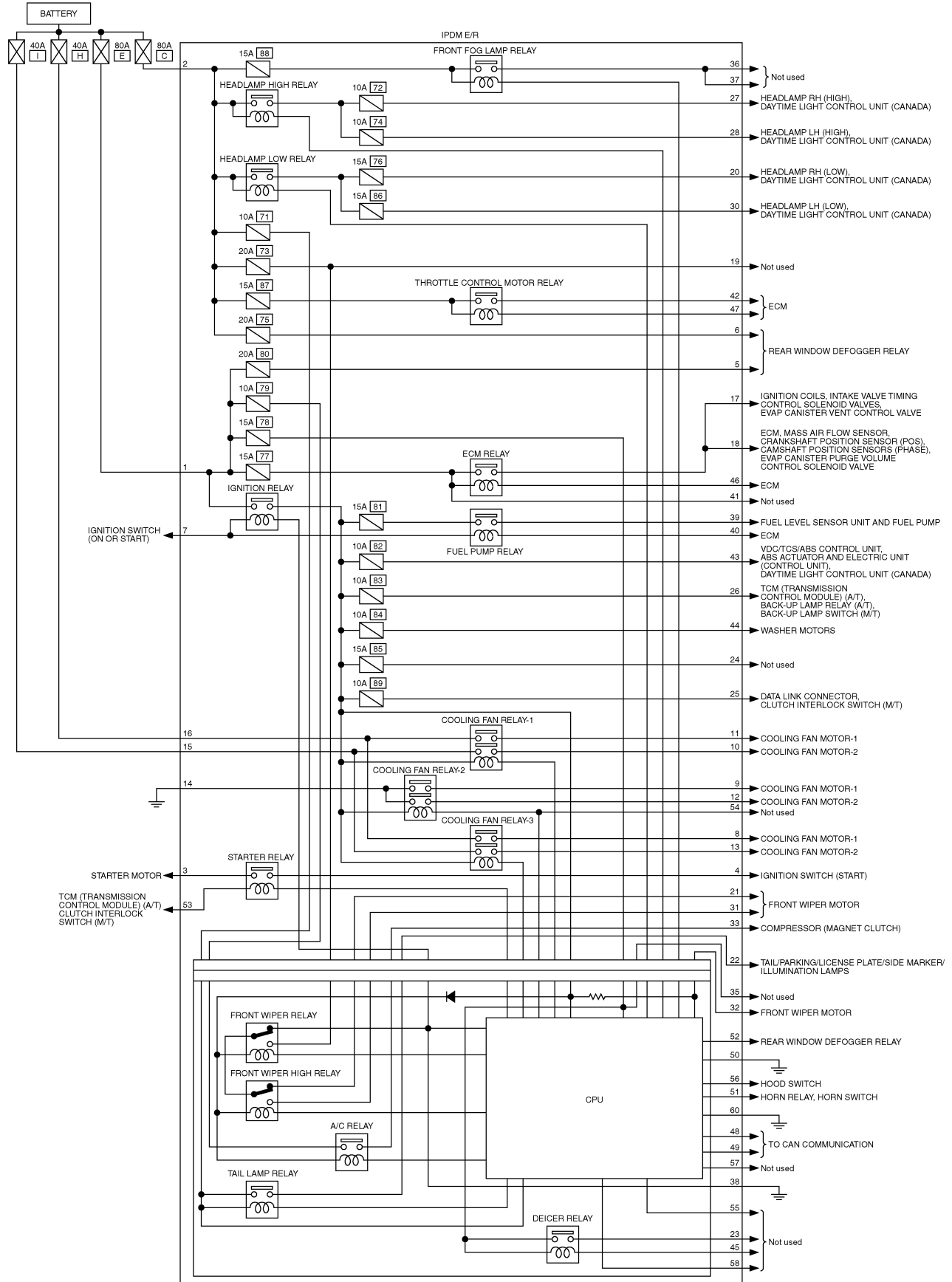
Symptom	Inspection contents	Possible cause	
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	<ul style="list-style-type: none"> ● Rear window defogger relay circuit ● Open circuit of rear window defogger ● IPDM E/R malfunction
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
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

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

Schematic

AKS00A2N

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

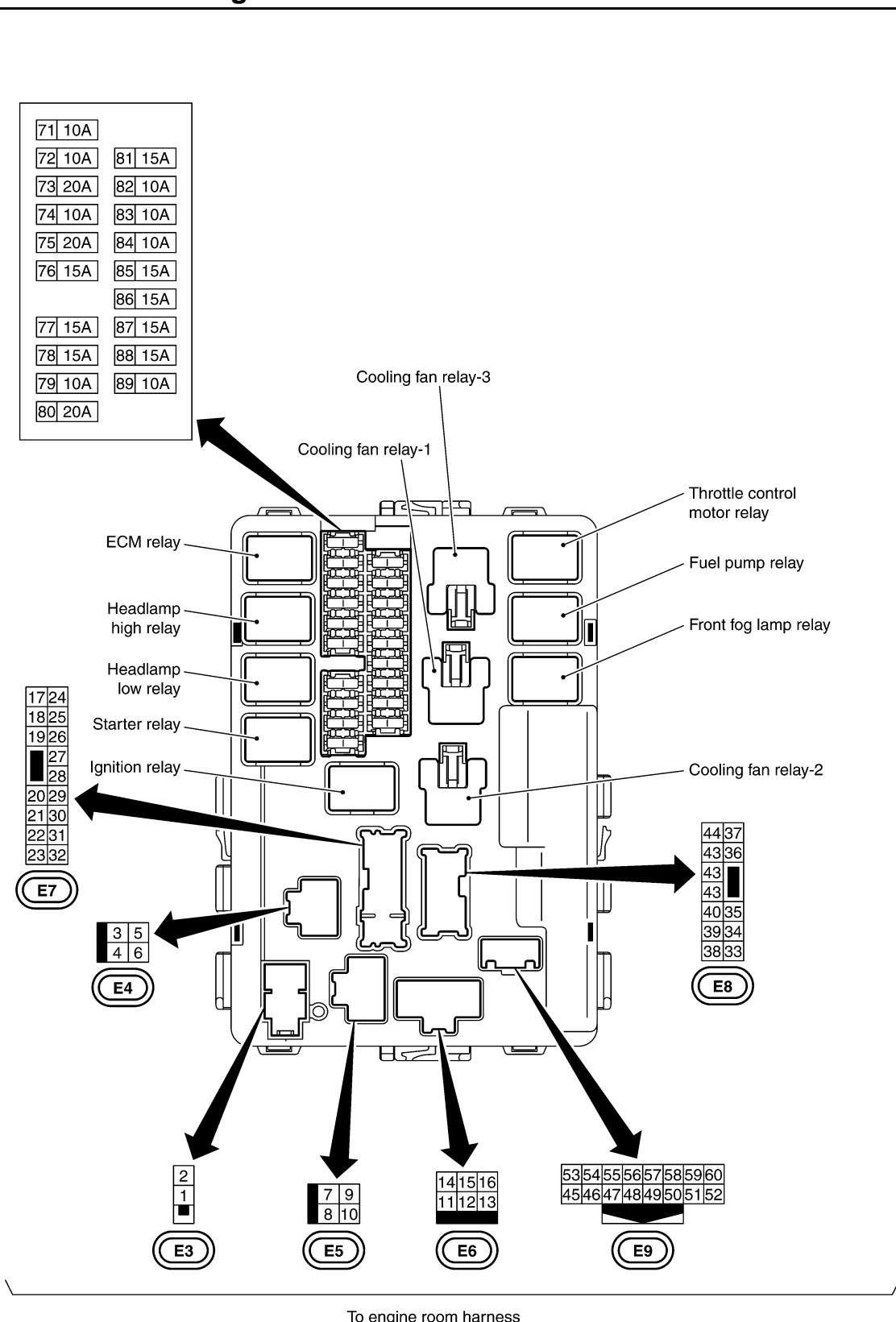


PG

TKWT1651E

IPDM E/R Terminal Arrangement

AKS00A20



CKIT0426E

NOTE:
Front fog lamp relay does not used.

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

IPDM E/R Power/Ground Circuit Inspection

AKS00A2P

1. CHECK FUSE AND FUSIBLE LINK

- Make sure 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. 71,78

OK or NG

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

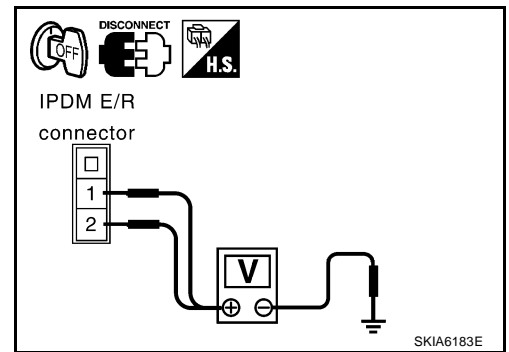
2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R harness connector E3.
3. Check voltage between IPDM E/R harness connector E3 terminals 1 (W), 2 (W/L) and ground.

Battery voltage should exist.

OK or NG

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



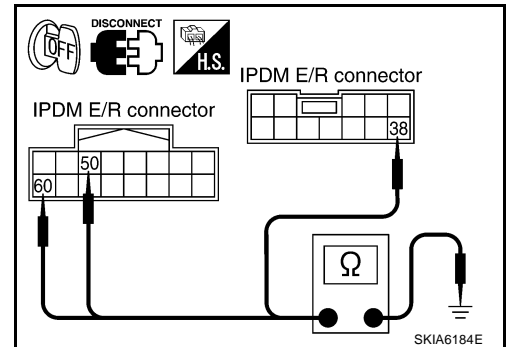
3. CHECK GROUND CIRCUIT

1. Disconnect IPDM E/R harness connectors E8 and E9.
2. Check continuity between IPDM E/R harness connectors E8 terminal 38 (B), E9 terminal 50 (B), 60 (B) and ground.

Continuity should exist.

OK or NG

- OK >> INSPECTION END
 NG >> Replace ground circuit harness of IPDM E/R.



Inspection With CONSULT-II (Self-Diagnosis)

AKS00A2Q

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. CHECK SELF DIAGNOSTIC RESULT

1. Connect CONSULT-II and select "IPDM E/R" on the Diagnosis System Selection screen.
2. Select "SELF-DIAG RESULTS" on the "SELECT DIAG MODE" screen.
3. Check display content in self diagnostic results.

CONSULT-II display	CONSULT-II display code	TIME		Details of diagnosis result
		CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	-	-	-	No malfunction
CAN COMM CIRC	U1000	×	×	Any of or several items below have errors. <ul style="list-style-type: none"> ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The Details for Display of the Period Are as Follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and memorized with IPDM E/R.

Contents displayed

NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END

CAN COMM CIRC>>After print-out of the monitor items, refer to [LAN-3. "Precautions When Using CONSULT-II"](#) .

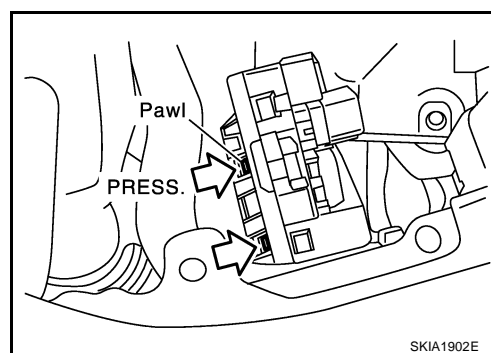
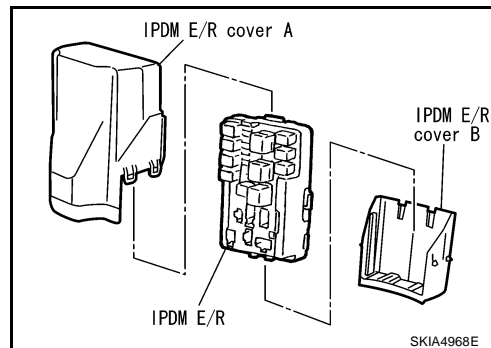
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

Removal and Installation of IPDM E/R

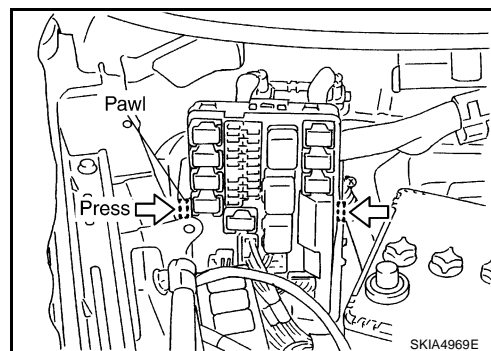
AKS00A2R

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.



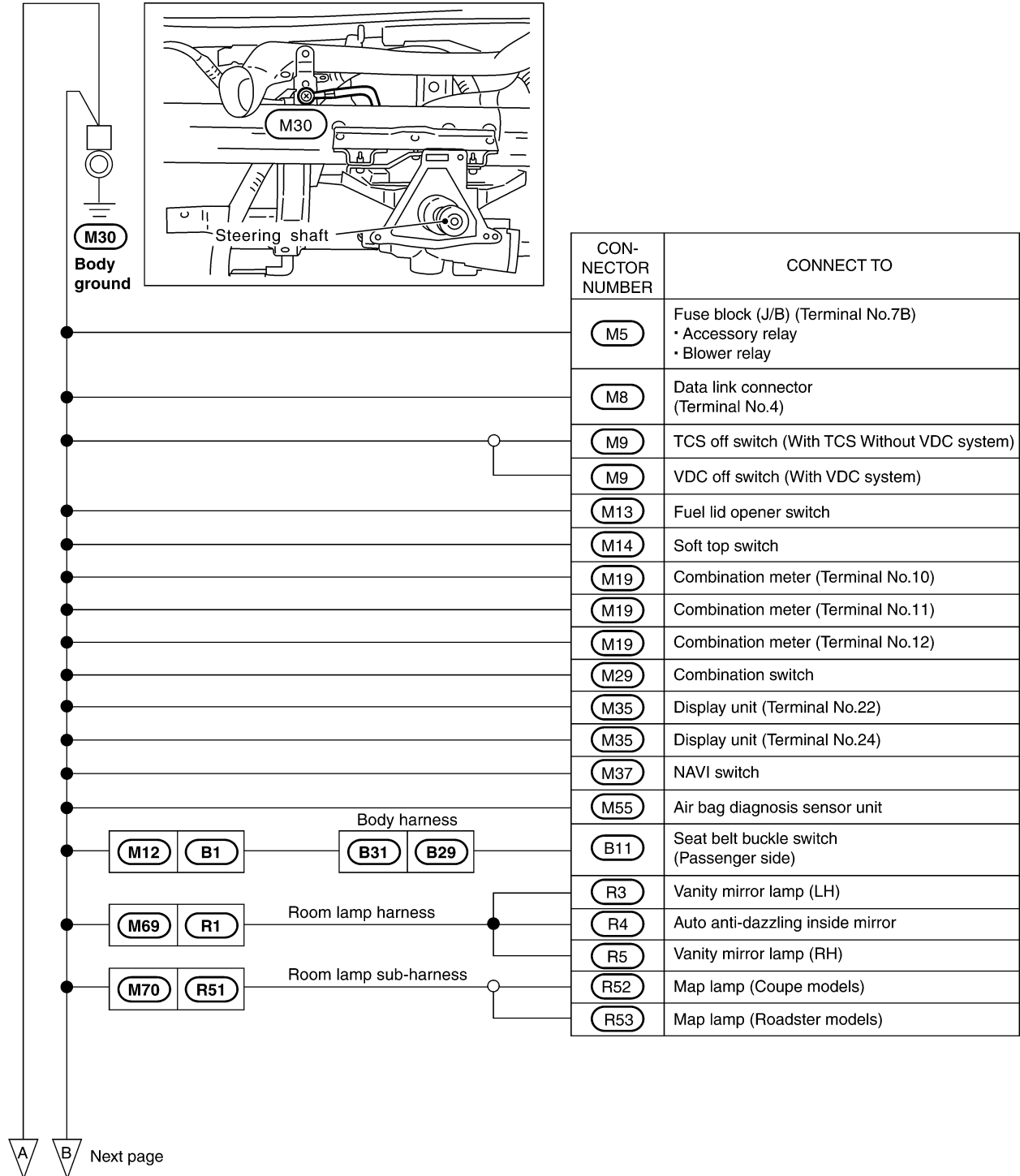
INSTALLATION

- Install in the reverse order of removal.

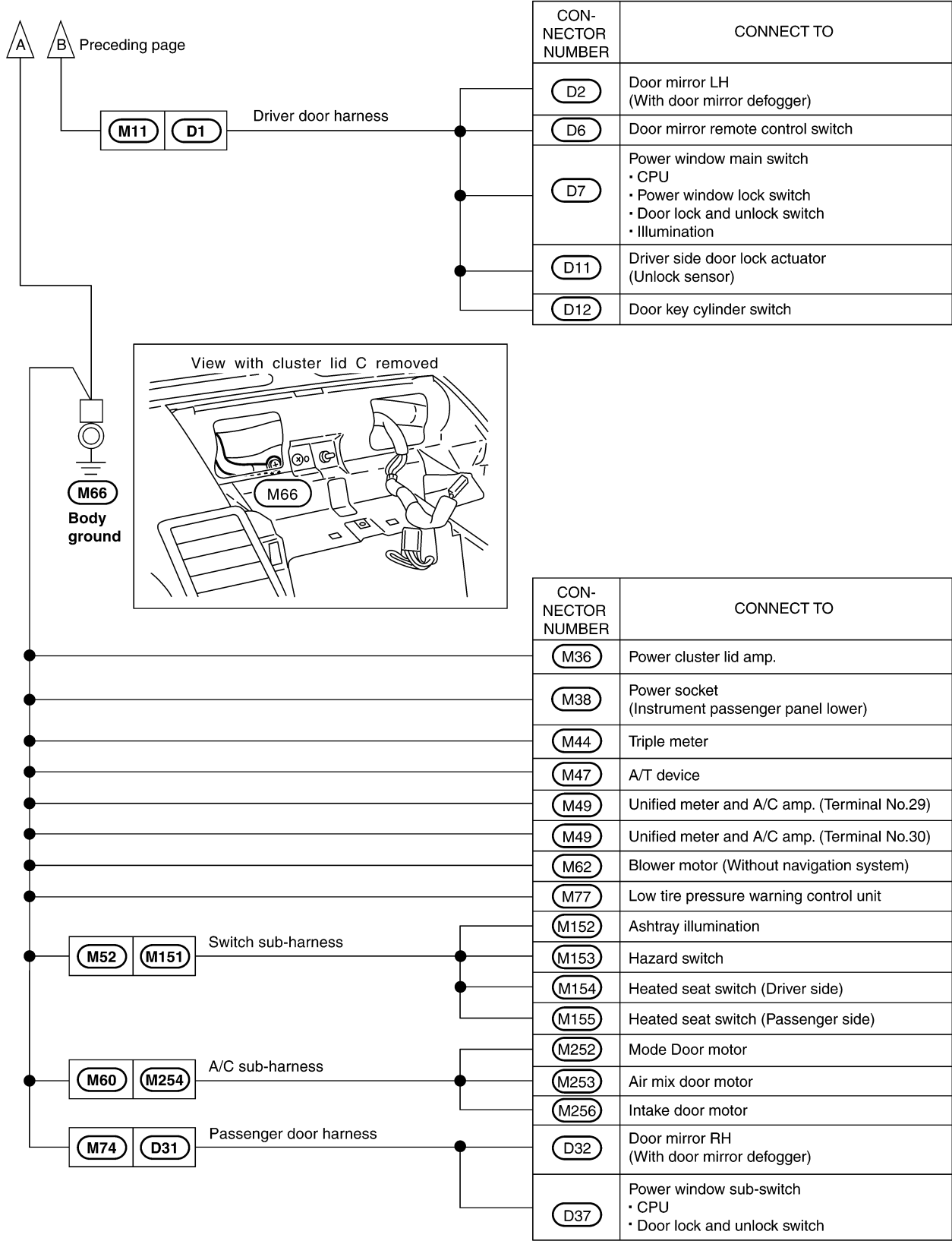
A
B
C
D
E
F
G
H
I
J
PG
L
M

GROUND

Ground Distribution MAIN HARNESS



GROUND

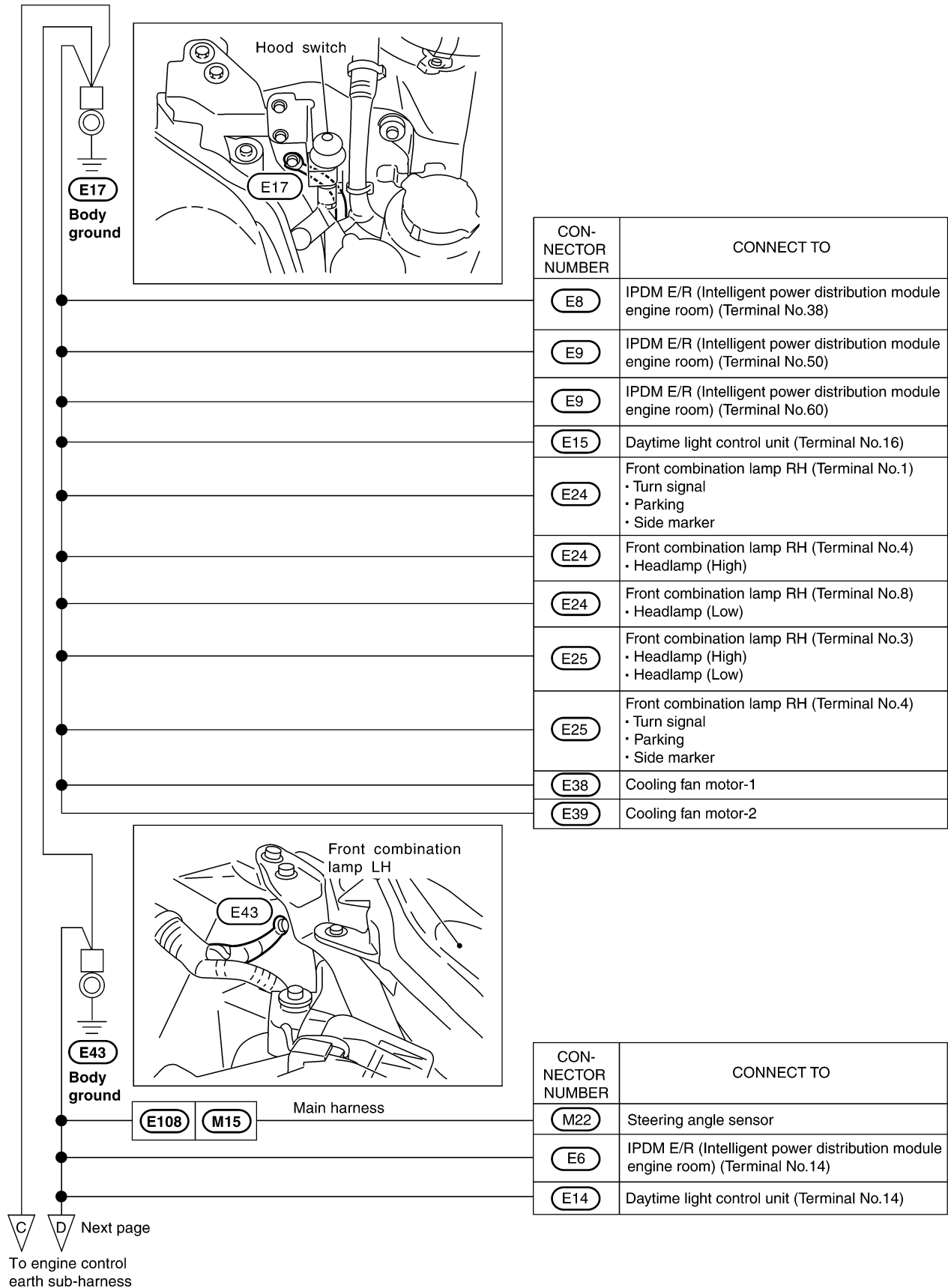


CKIT0455E

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

GROUND

ENGINE ROOM HARNESS



CKIT0456E

GROUND

△ D Preceding page

	CON-NECTOR NUMBER	CONNECT TO
●	E23	Hood switch
●	E30	Washer level sensor
●	E33	Horn (Low)
●	E36	Horn (High)
●	E40	Front combination lamp LH (Terminal No.1) • Turn signal • Parking • Side marker
●	E40	Front combination lamp LH (Terminal No.4) • Headlamp (High) (For U.S.A)
●	E40	Front combination lamp LH (Terminal No.8) • Headlamp (Low)
●	E41	Front combination lamp LH (Terminal No.3) • Headlamp (High) (For U.S.A) • Headlamp (Low) (For U.S.A)
●	E41	Front combination lamp LH (Terminal No.4) • Turn signal • Parking • Side marker
●	E44	Brake fluid lever switch
●	E51	ABS actuator and electric unit (Terminal No.16)
●	E51	ABS actuator and electric unit (Terminal No.30)
●	E52	Front wiper motor
●	E105	BCM (Body control module)
●	E111	Stop lamp switch (With A/T)
●	E118	VDC/TCS/ABS control unit (Terminal No.28)
●	E118	VDC/TCS/ABS control unit (Terminal No.29)

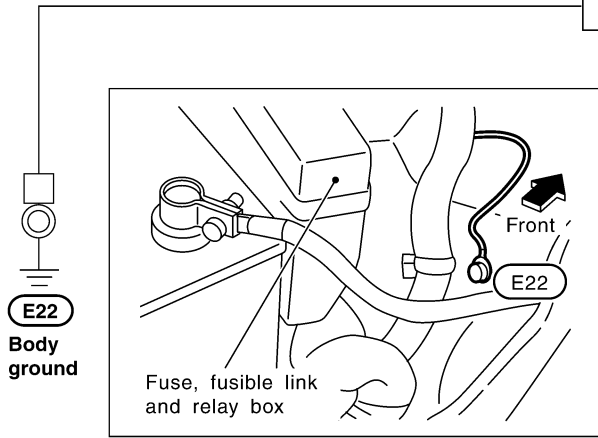
A
B
C
D
E
F
G
H
I
J
L
M

PG

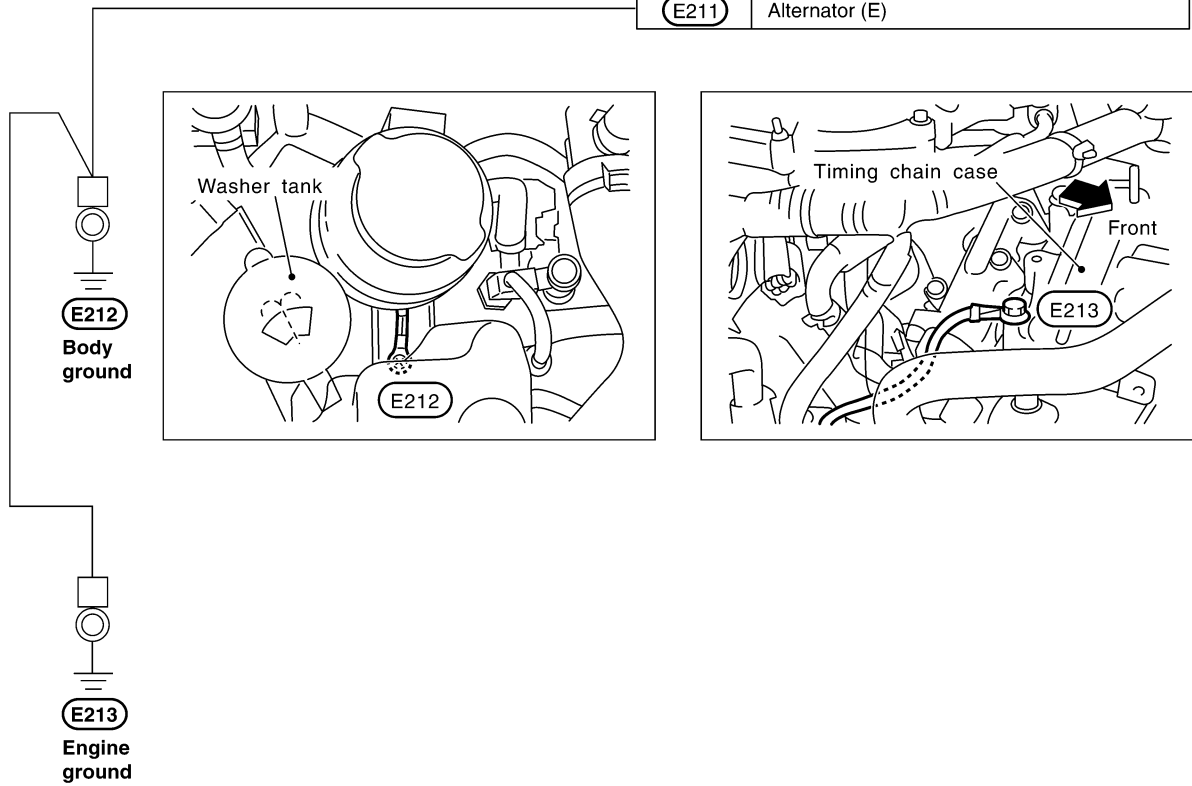
CKIT0457E

GROUND

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



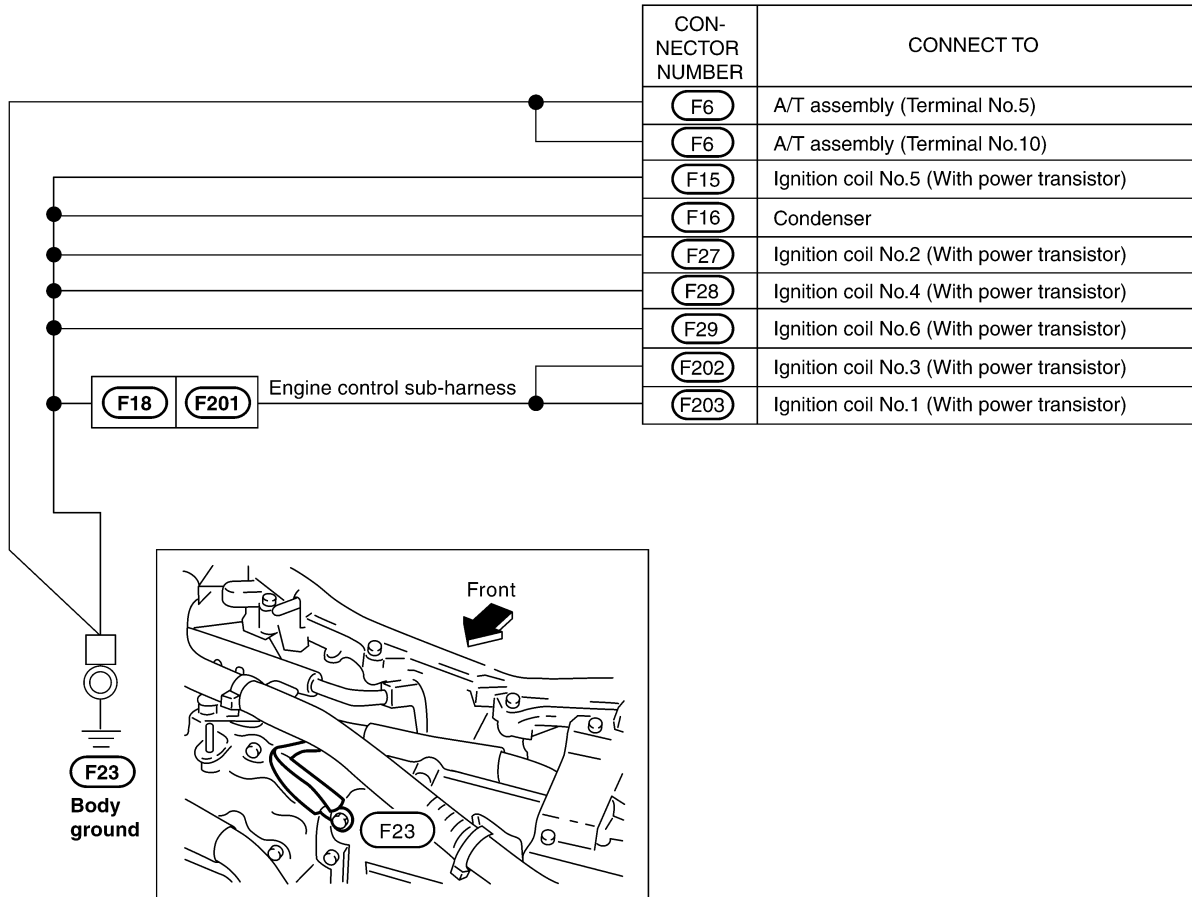
CON-NECTOR NUMBER	CONNECT TO
E211	Alternator (E)



CKIT0170E

GROUND

ENGINE CONTROL HARNESS

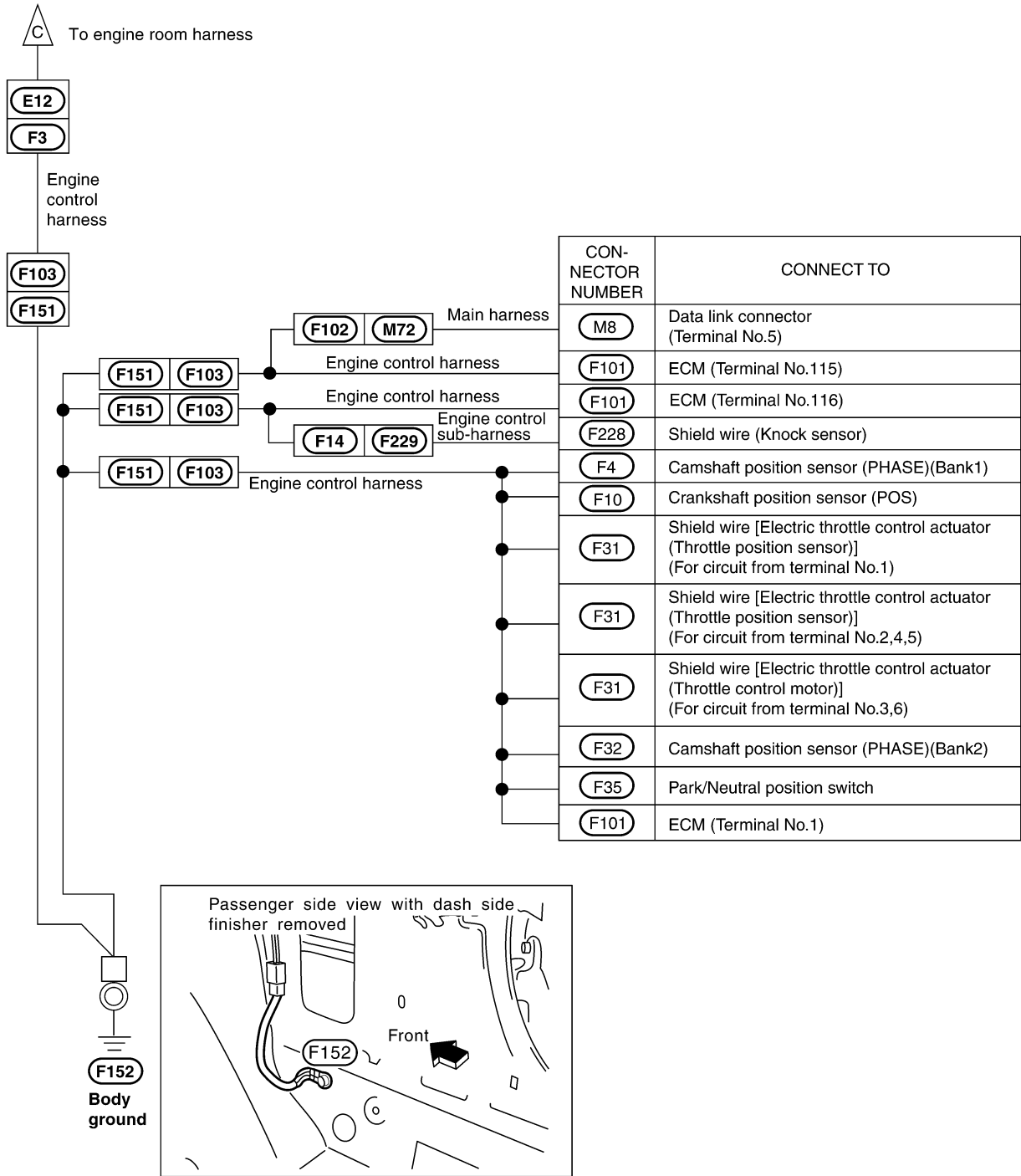


A
B
C
D
E
F
G
H
I
J
PG
L
M

PG

CKIT0171E

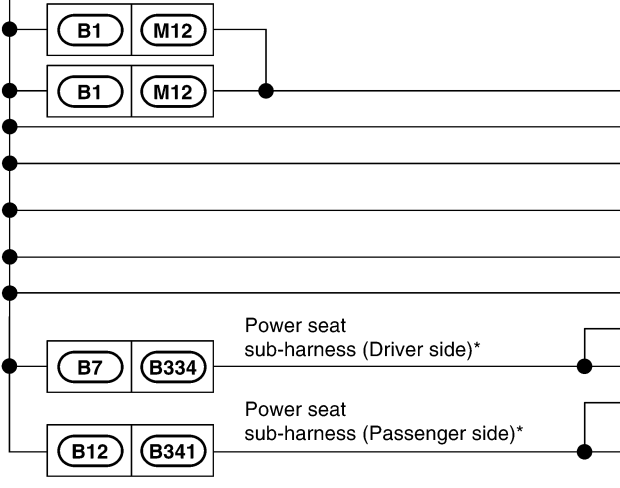
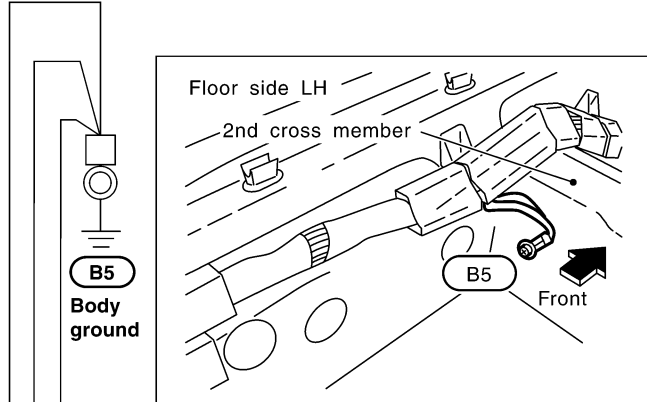
GROUND



CKIT0458E

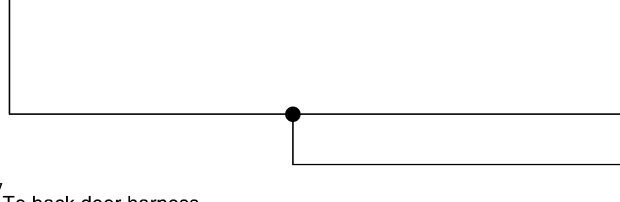
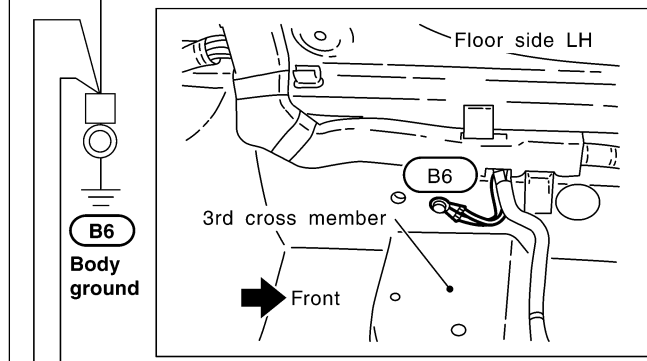
GROUND

BODY HARNESS Coupe Models

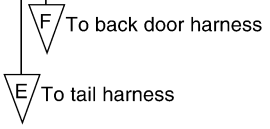


CON-NECTOR NUMBER	CONNECT TO
M62	Blower motor (With navigation system)
B8	Seat belt buckle switch (Driver side)
B26	Condenser
B27	Fuel level sensor unit and fuel pump (Fuel pump)
B37	Heated seat relay
B41	Luggage floor box lamp
B326	Power seat switch (Driver side)
B332	Seat cushion heater (Driver side)
B342	Power seat switch (Passenger side)
B351	Seat cushion heater (Passenger side)

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

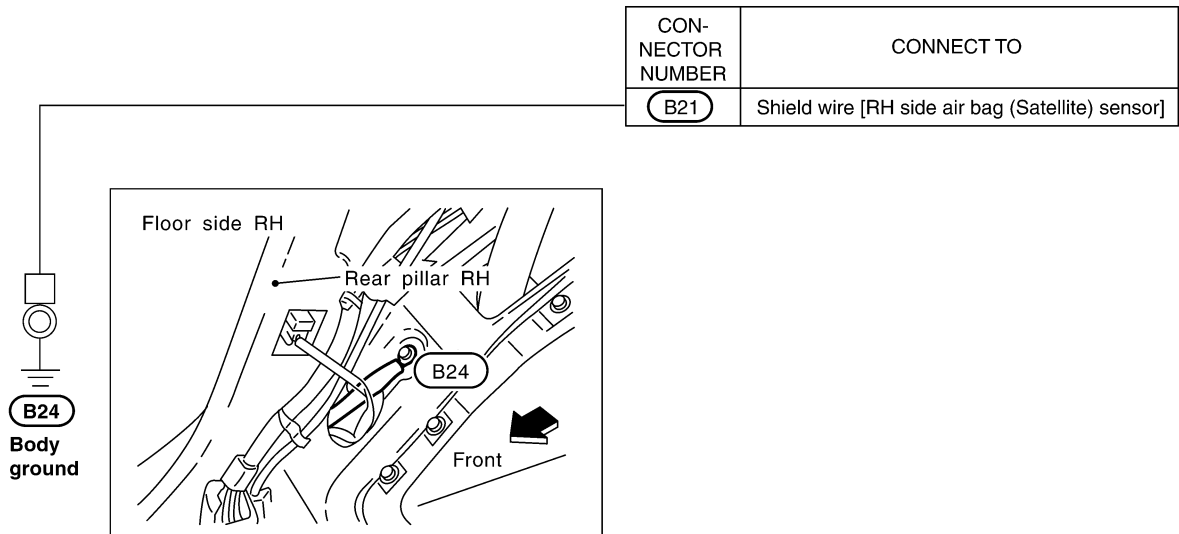
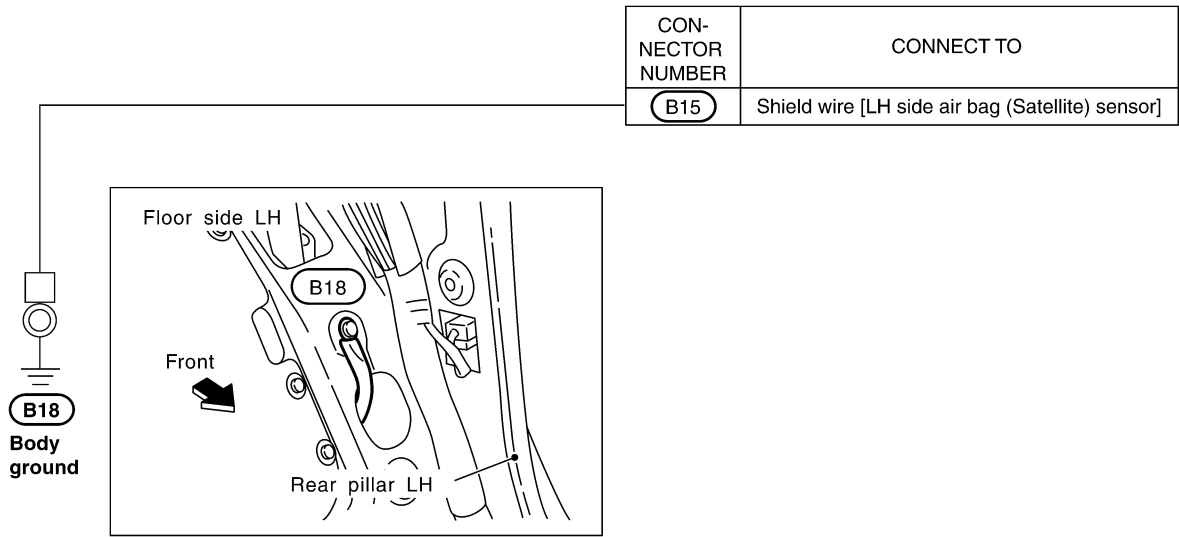


CON-NECTOR NUMBER	CONNECT TO
B32	Woofer amp.
B36	Power socket (Luggage floor finisher lower)



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

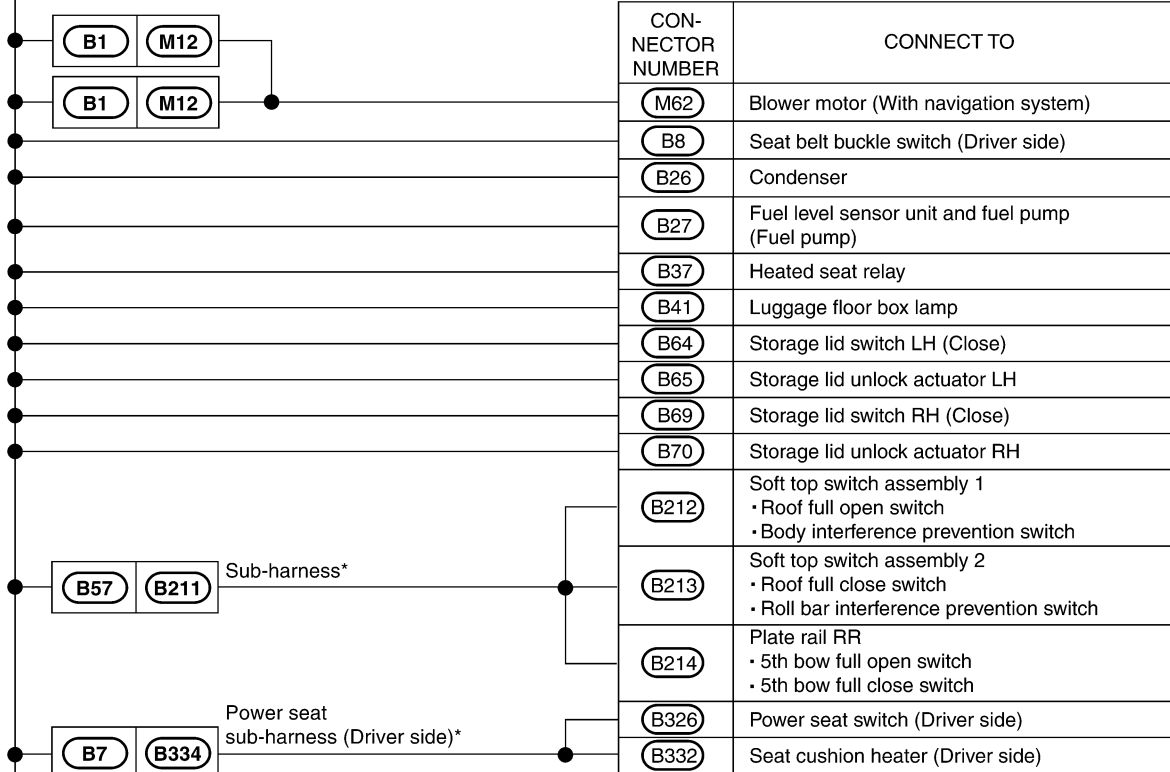
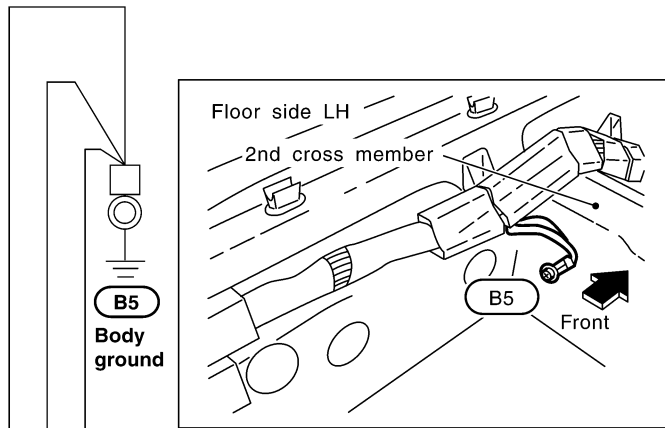
GROUND



CKIT0174E

GROUND

Roadster Models



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

H J Next page

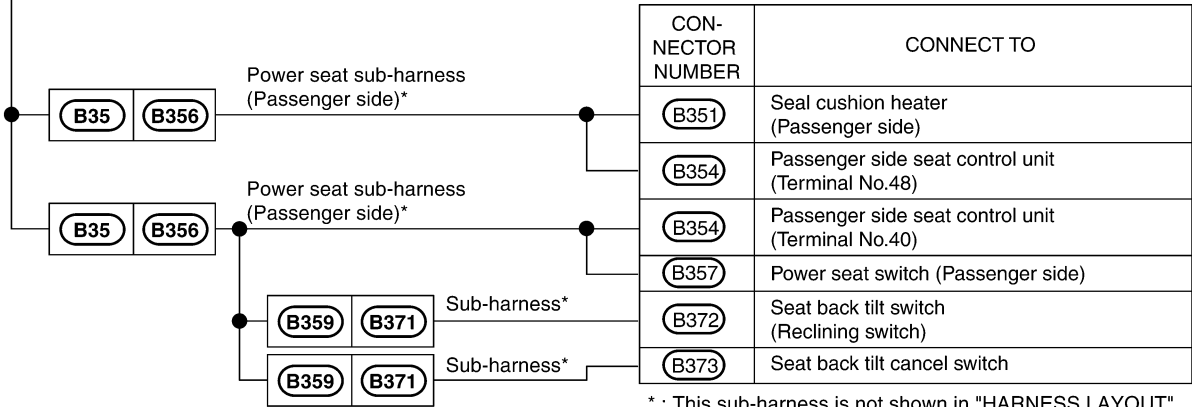
G To tail harness

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

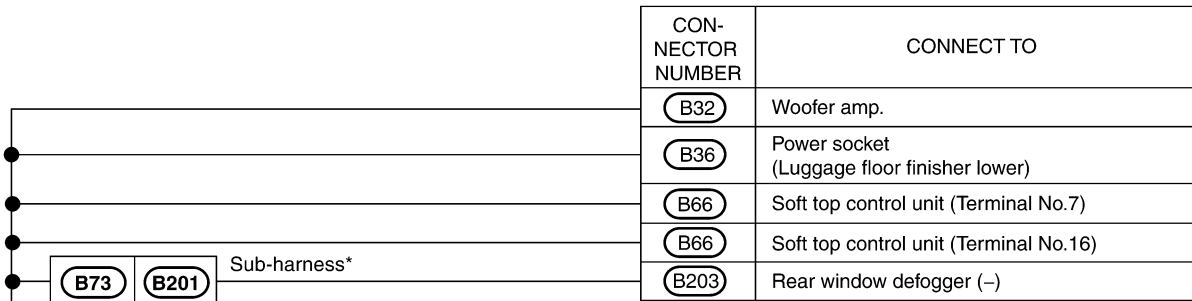
CKIT0460E

GROUND

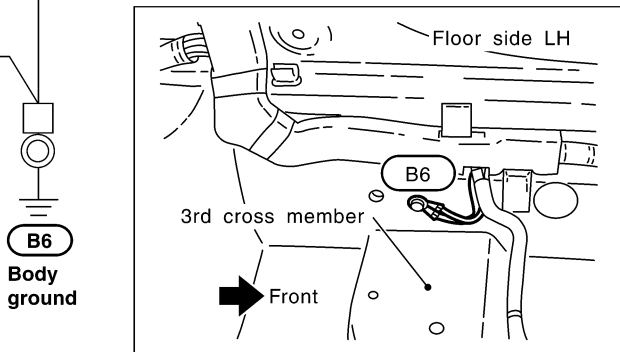
H
J
 Preceding page



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



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

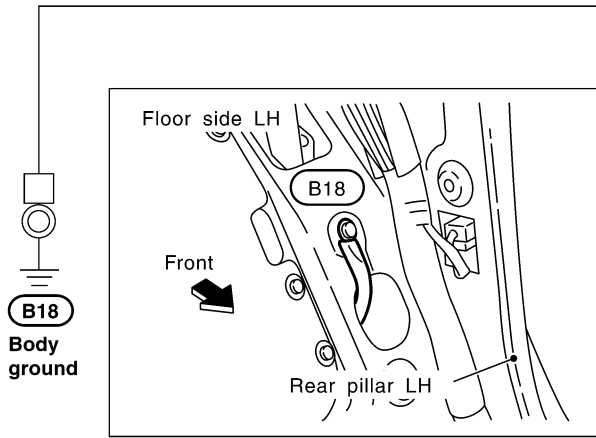


CKIT0470E

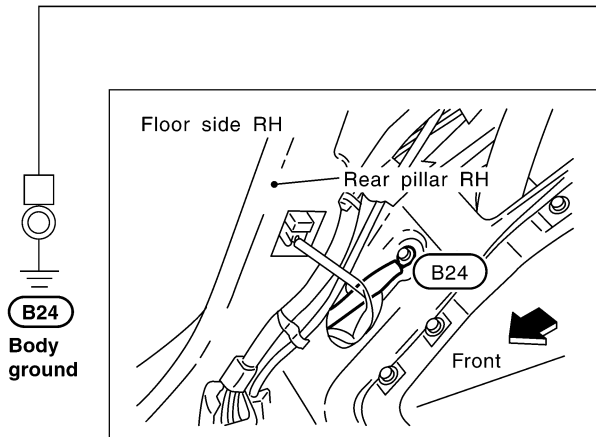
GROUND

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

CON-NECTOR NUMBER	CONNECT TO
B15	Shield wire [LH side air bag (Satellite) sensor]



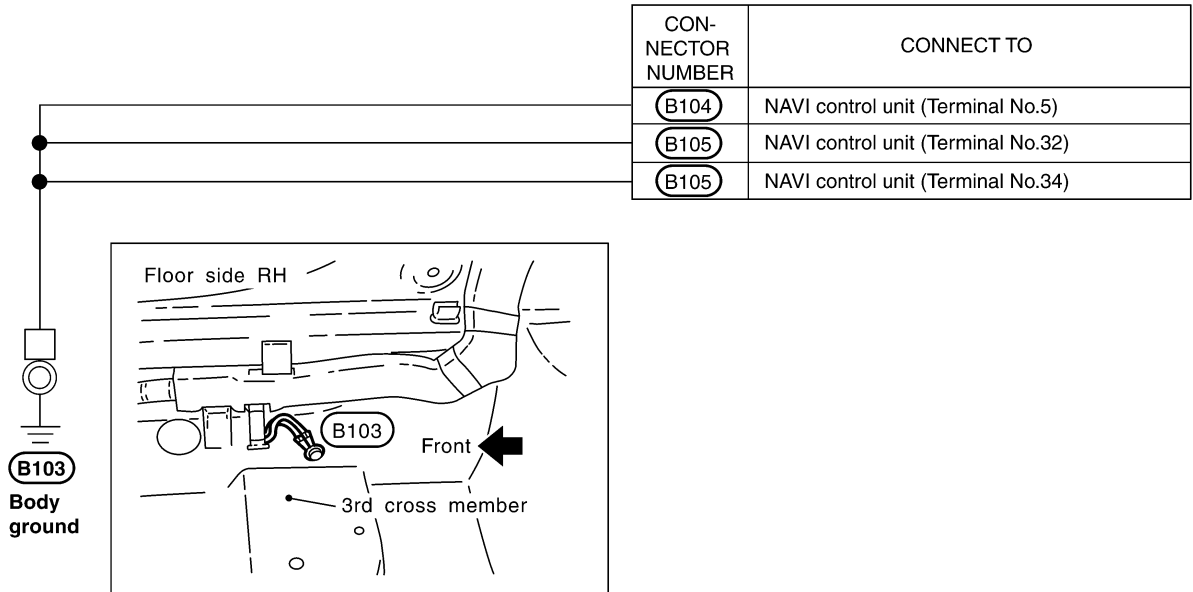
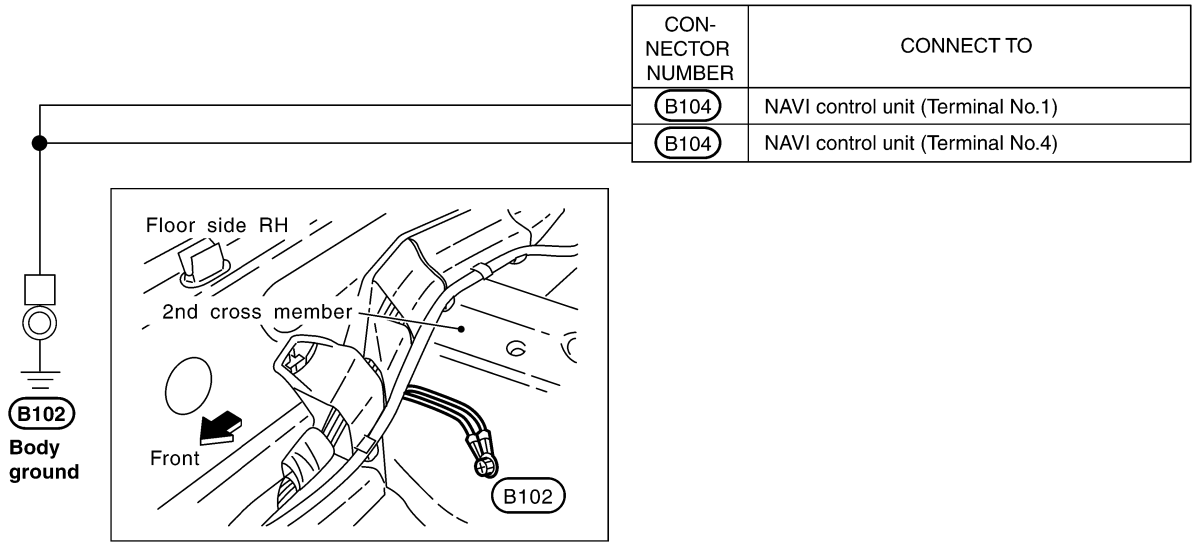
CON-NECTOR NUMBER	CONNECT TO
B21	Shield wire [RH side air bag (Satellite) sensor]



CKIT0174E

GROUND

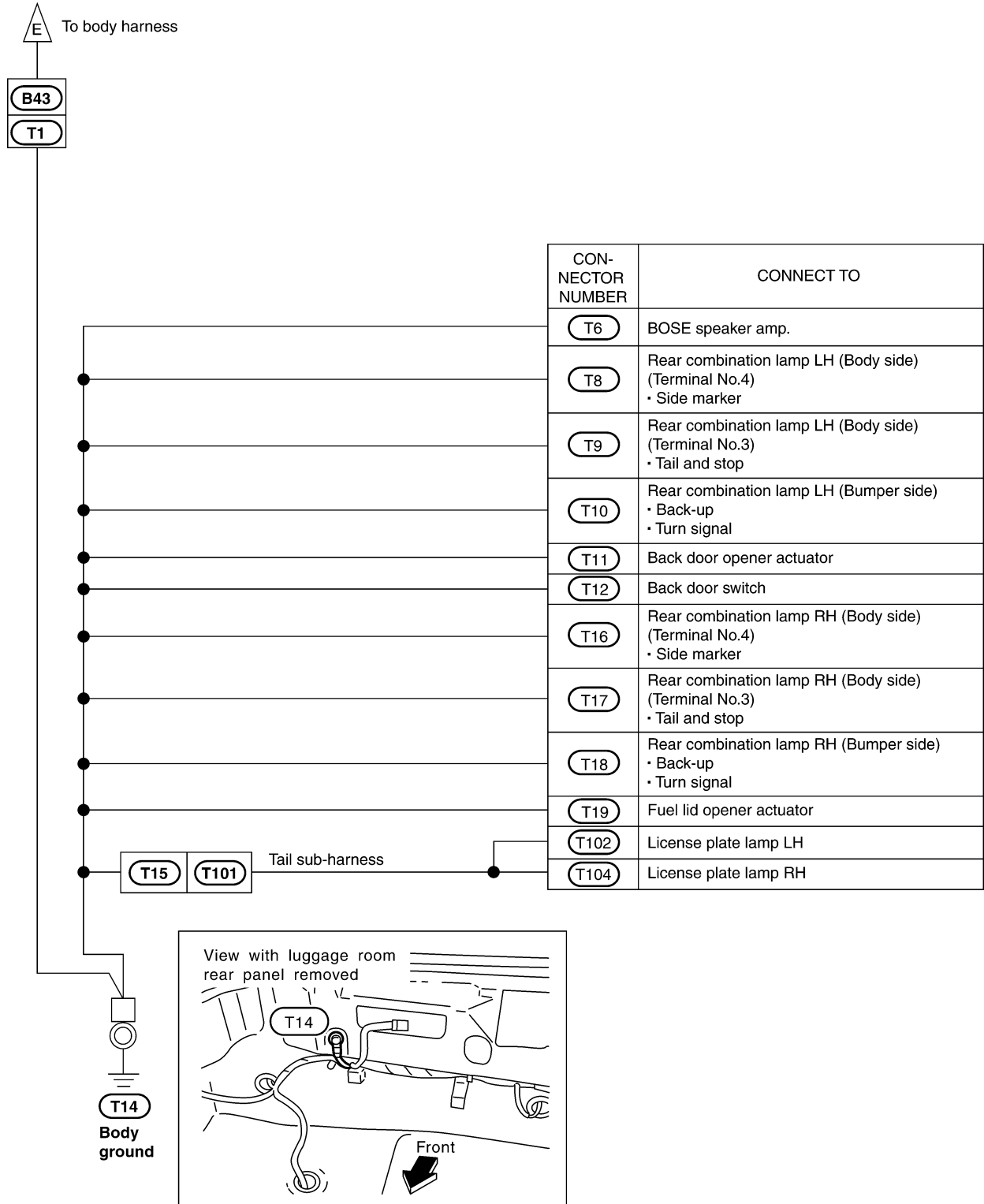
BODY NO.2 HARNESS



CKIT0360E

GROUND

TAIL HARNESS Coupe Models

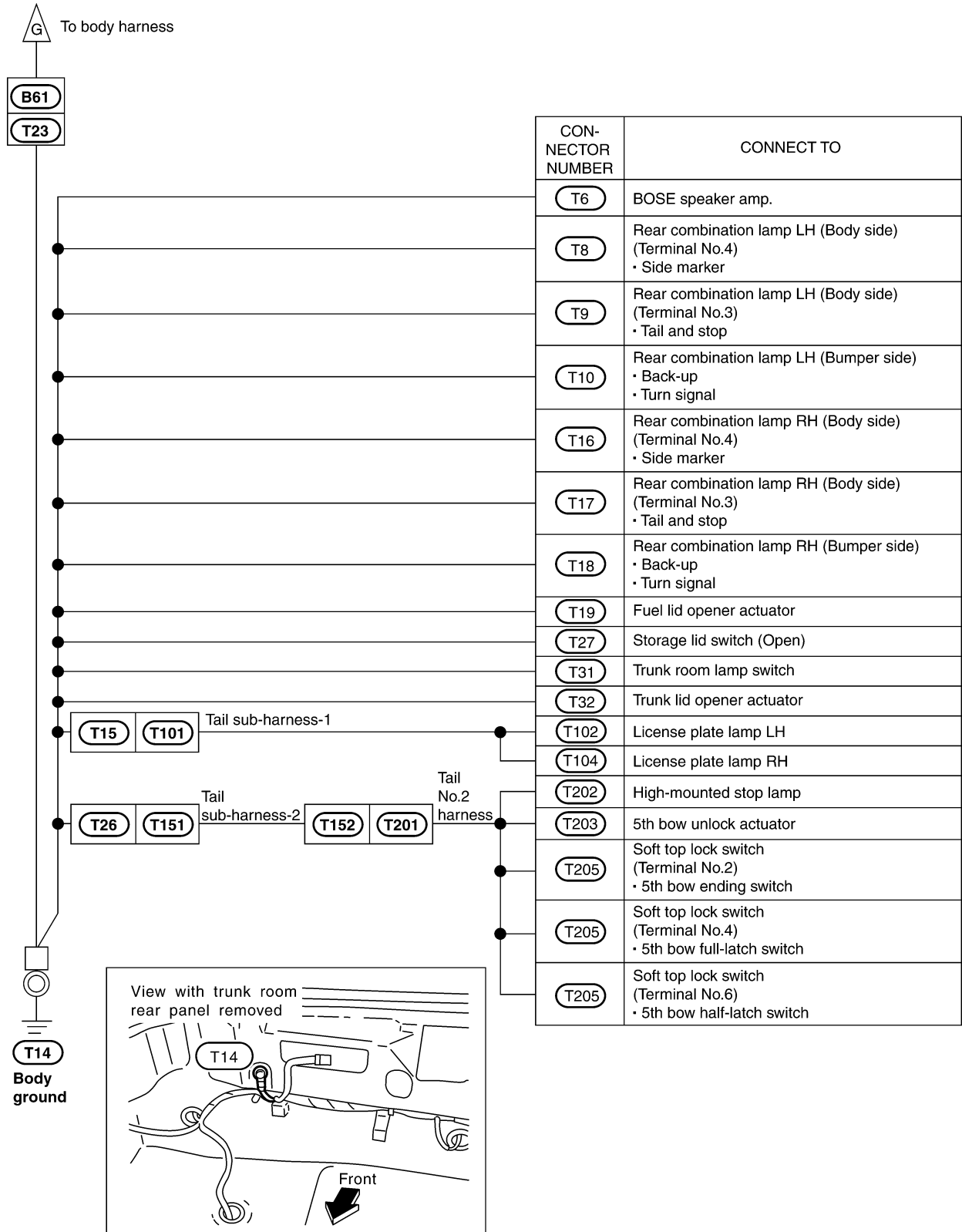


A
B
C
D
E
F
G
H
I
J
PG
L
M

CKIT0462E

GROUND

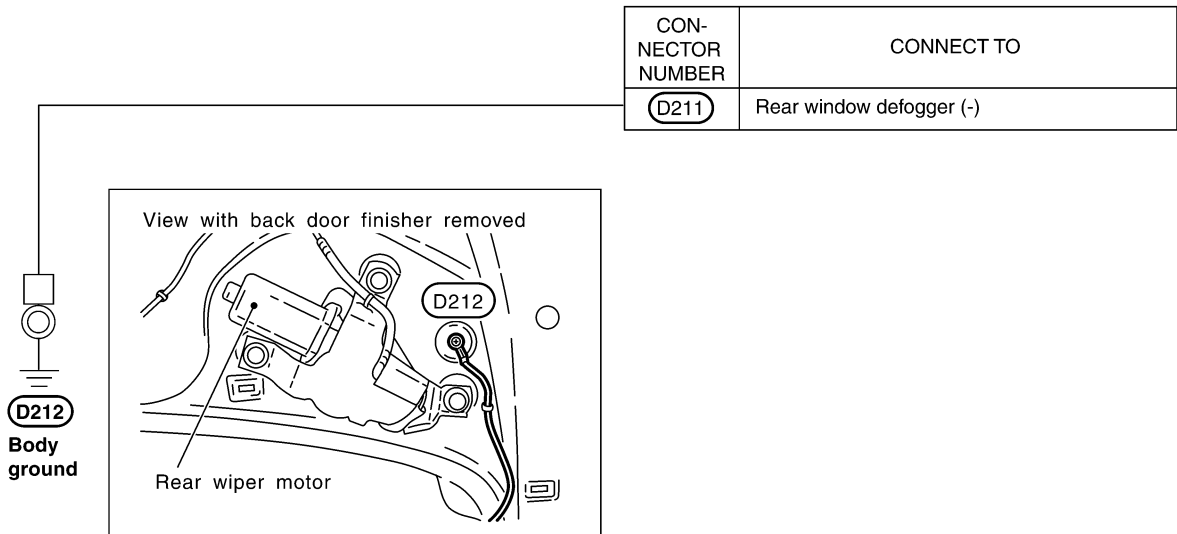
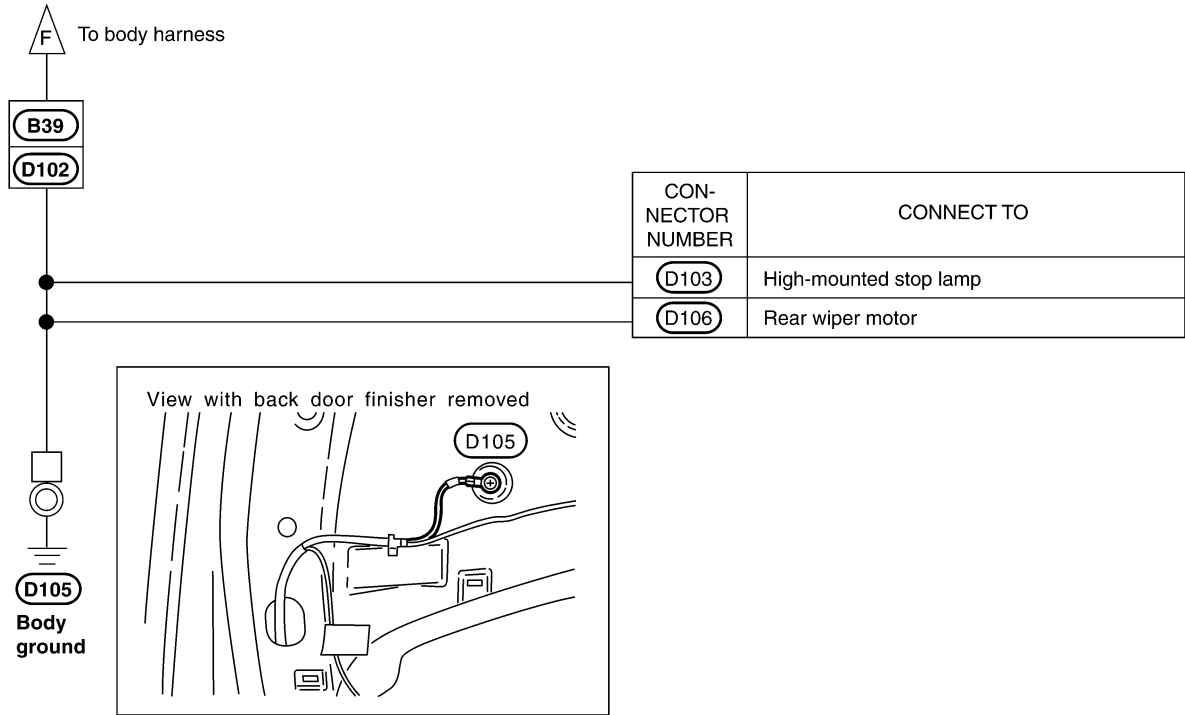
Roadster Models



CKIT0471E

GROUND

BACK DOOR HARNESS



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

CKIT0464E

HARNESS

HARNESS

PPF:00011

Harness Layout

AKS0012Q

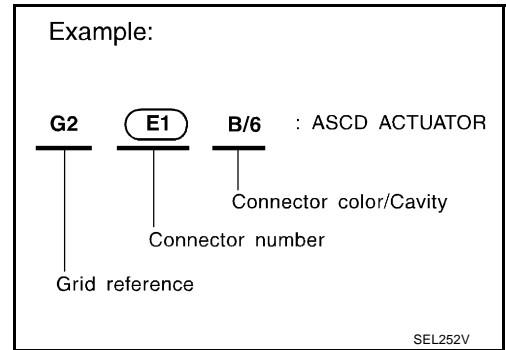
HOW TO READ HARNESS LAYOUT

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
- Tail 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.

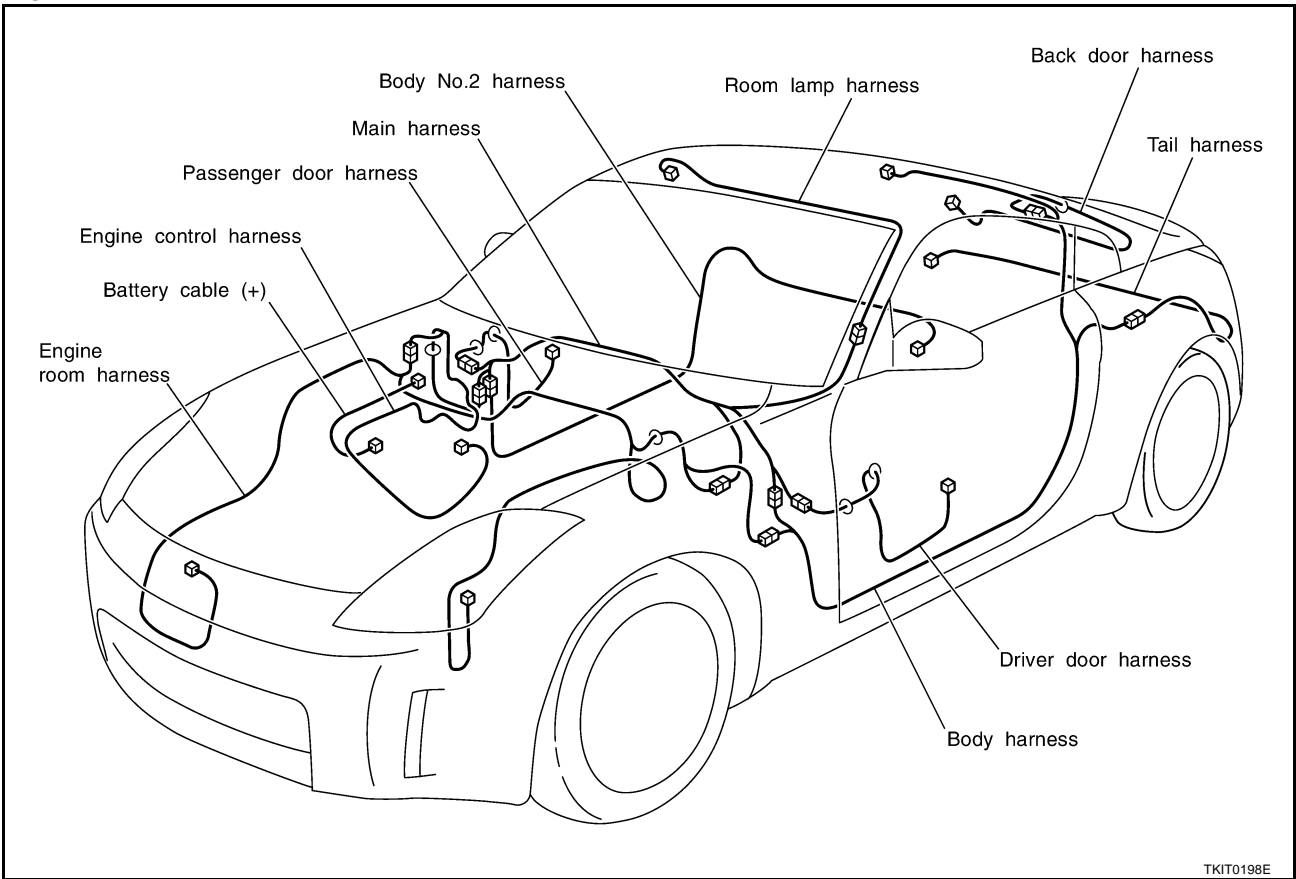
Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
<ul style="list-style-type: none"> • Cavity: Less than 4 • Relay connector 				
<ul style="list-style-type: none"> • Cavity: From 5 to 8 				
<ul style="list-style-type: none"> • Cavity: More than 9 				
<ul style="list-style-type: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

CKIT0108E

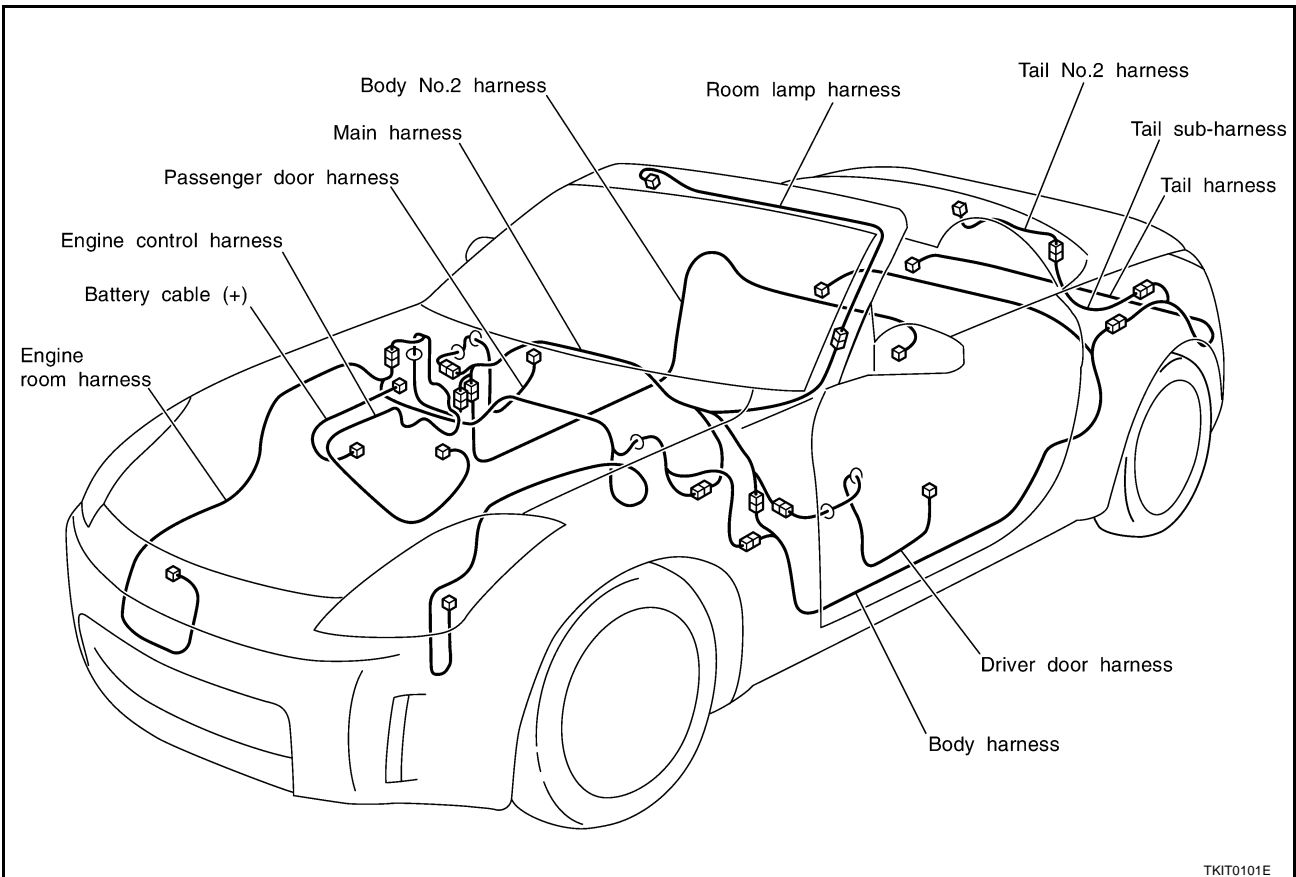
HARNESSES

OUTLINE

Coupe Models



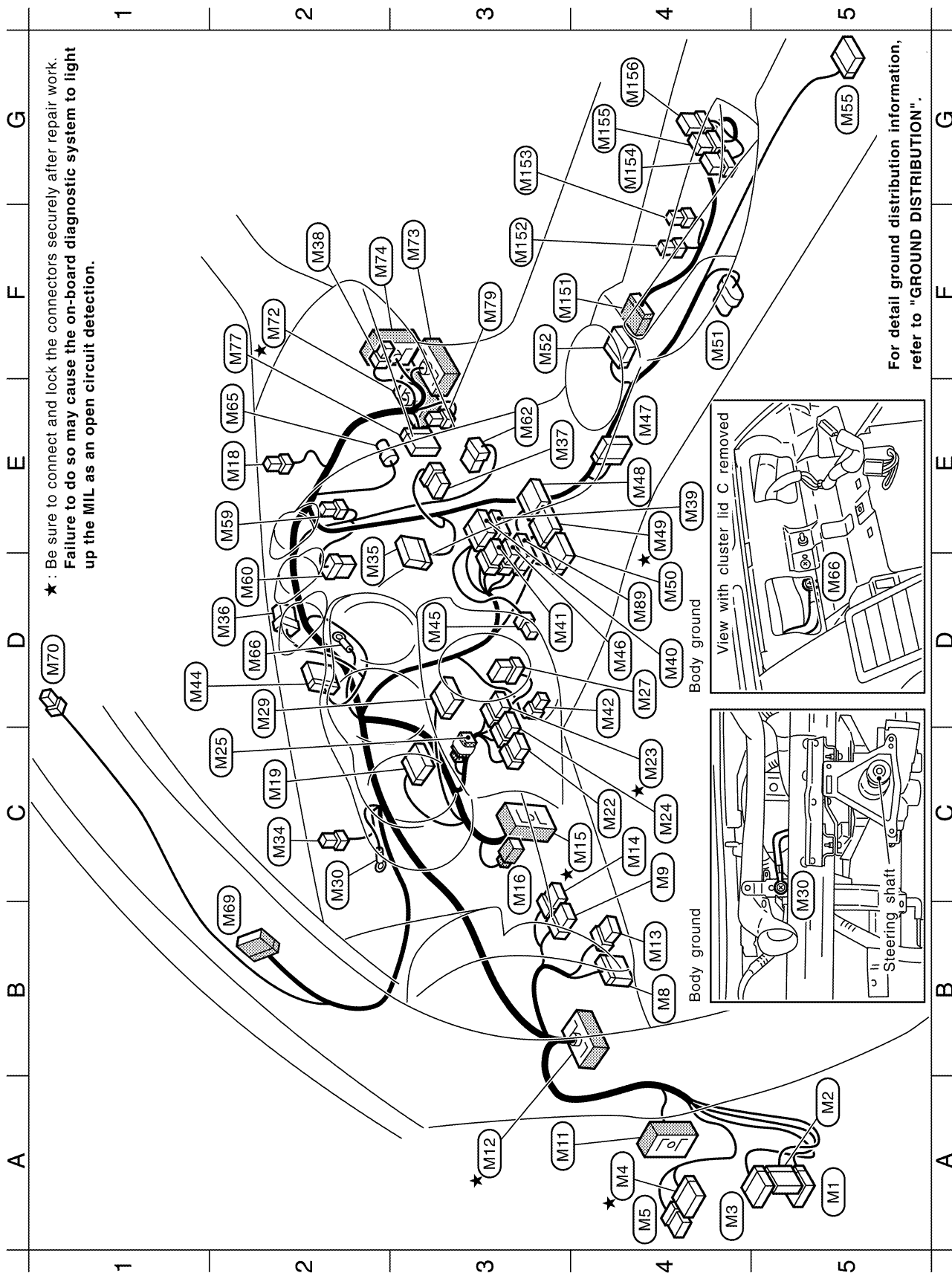
Roadster Models



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

HARNESS

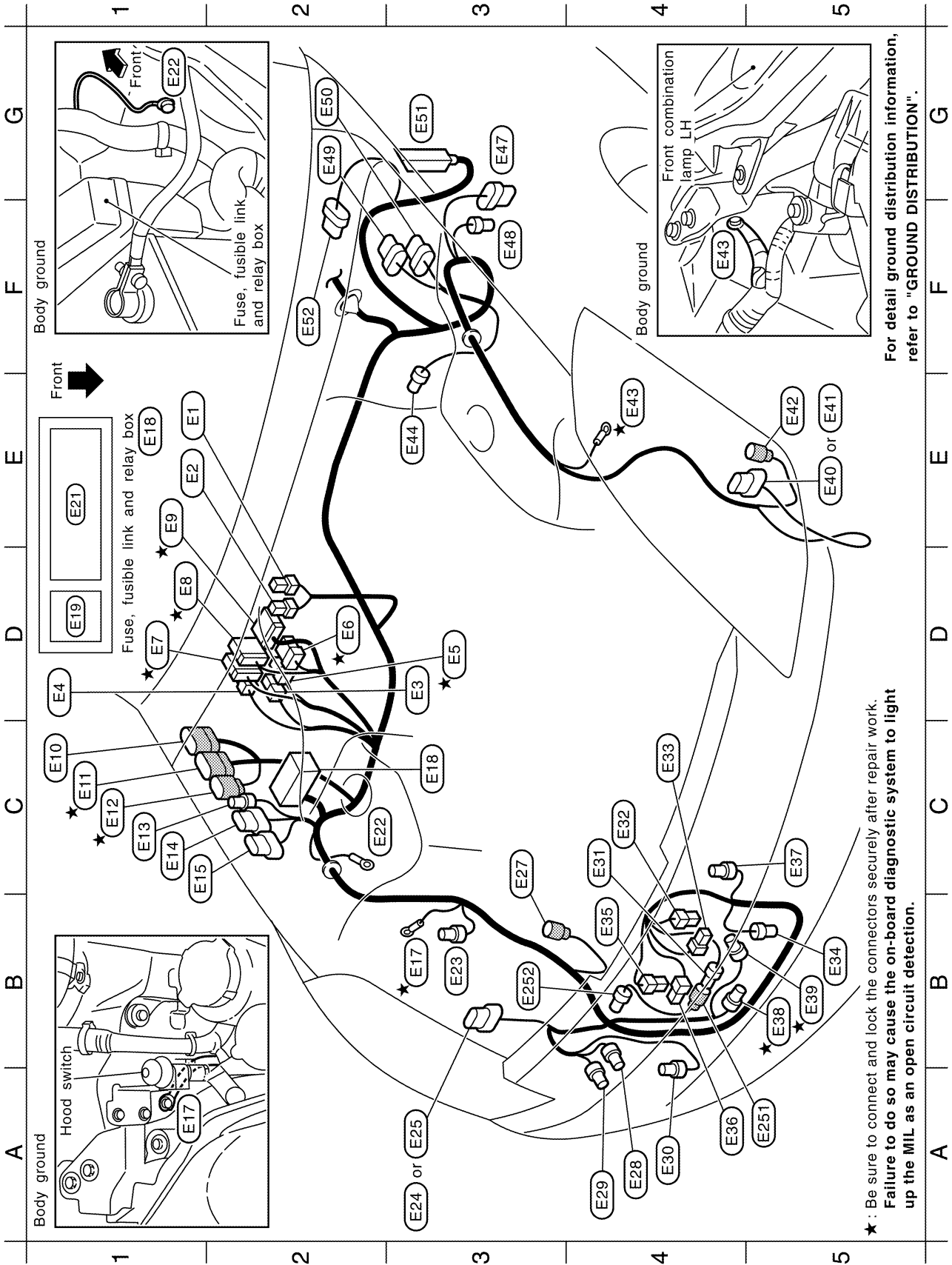
MAIN HARNESS



TKIT0199E

HARNESS

ENGINE ROOM HARNESS Engine Compartment

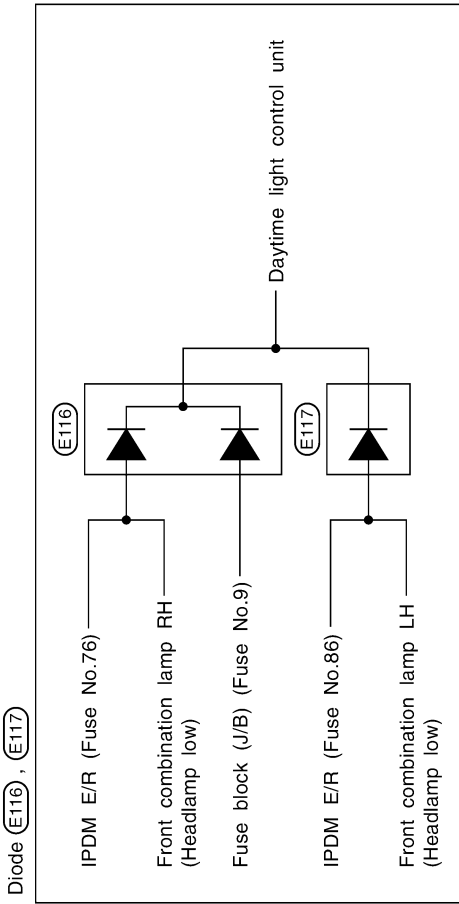


For detail ground distribution information, refer to "GROUND DISTRIBUTION".

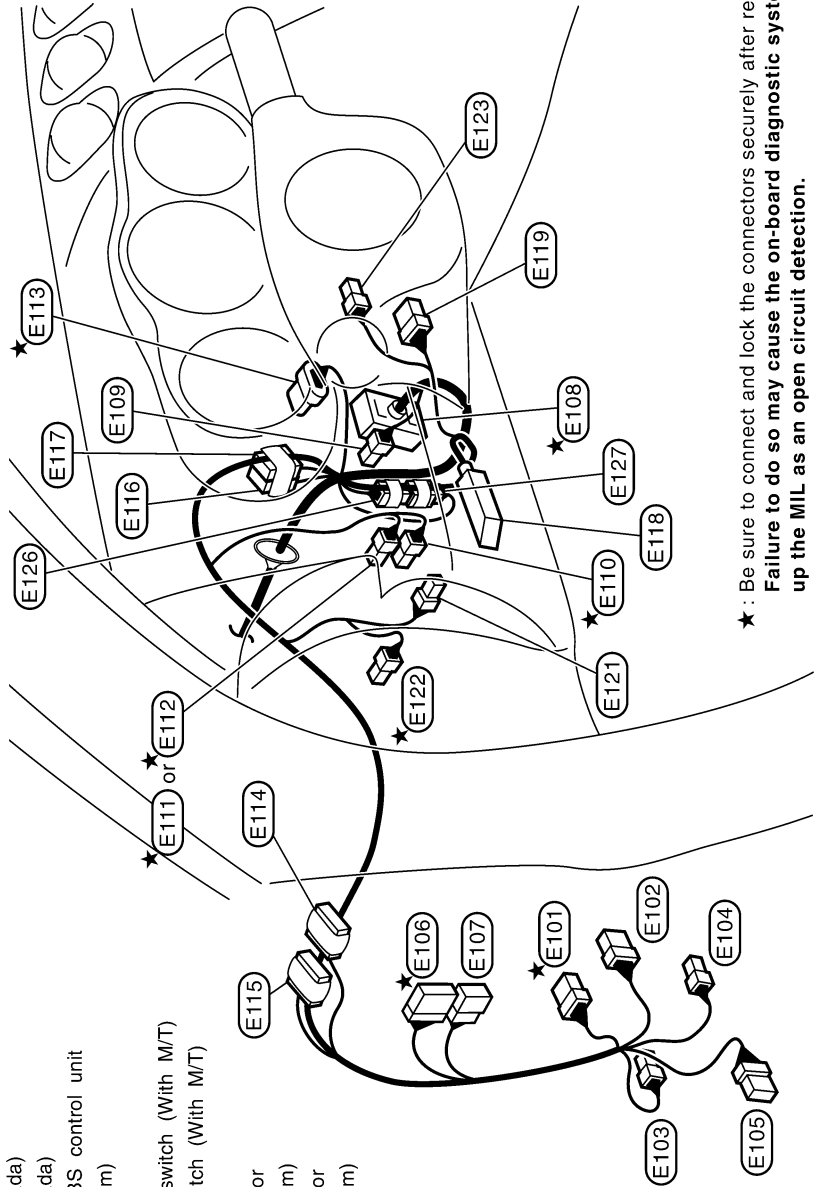
★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

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)
- ★ (E106) W/18 : To (B2)
- (E107) W/6 : To (B3)
- ★ (E108) SMJ : To (M15)
- (E109) Y/4 : To (M16)
- ★ (E110) BR/2 : ASCD brake switch
- ★ (E111) W/4 : Stop lamp switch (With A/T)
- ★ (E112) B/2 : Stop lamp switch (With M/T)
- ★ (E113) GY/6 : Accelerator pedal position sensor
- (E114) BR/20 : Joint connector-1
- (E115) G/20 : Joint connector-2
- (E116) -/3 : Diode (For Canada)
- (E117) W/2 : Diode (For Canada)
- (E118) SMJ : VDC / TCS / ABS control unit (With VDC system)
- (E119) W/6 : Ignition switch
- (E121) L/2 : Clutch interlock switch (With M/T)
- ★ (E122) L/2 : ASCD clutch switch (With M/T)
- (E123) BR/2 : Microphone
- (E126) BR/2 : Jumping connector (With VDC system)
- (E127) BR/2 : Jumping connector (With VDC system)



★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

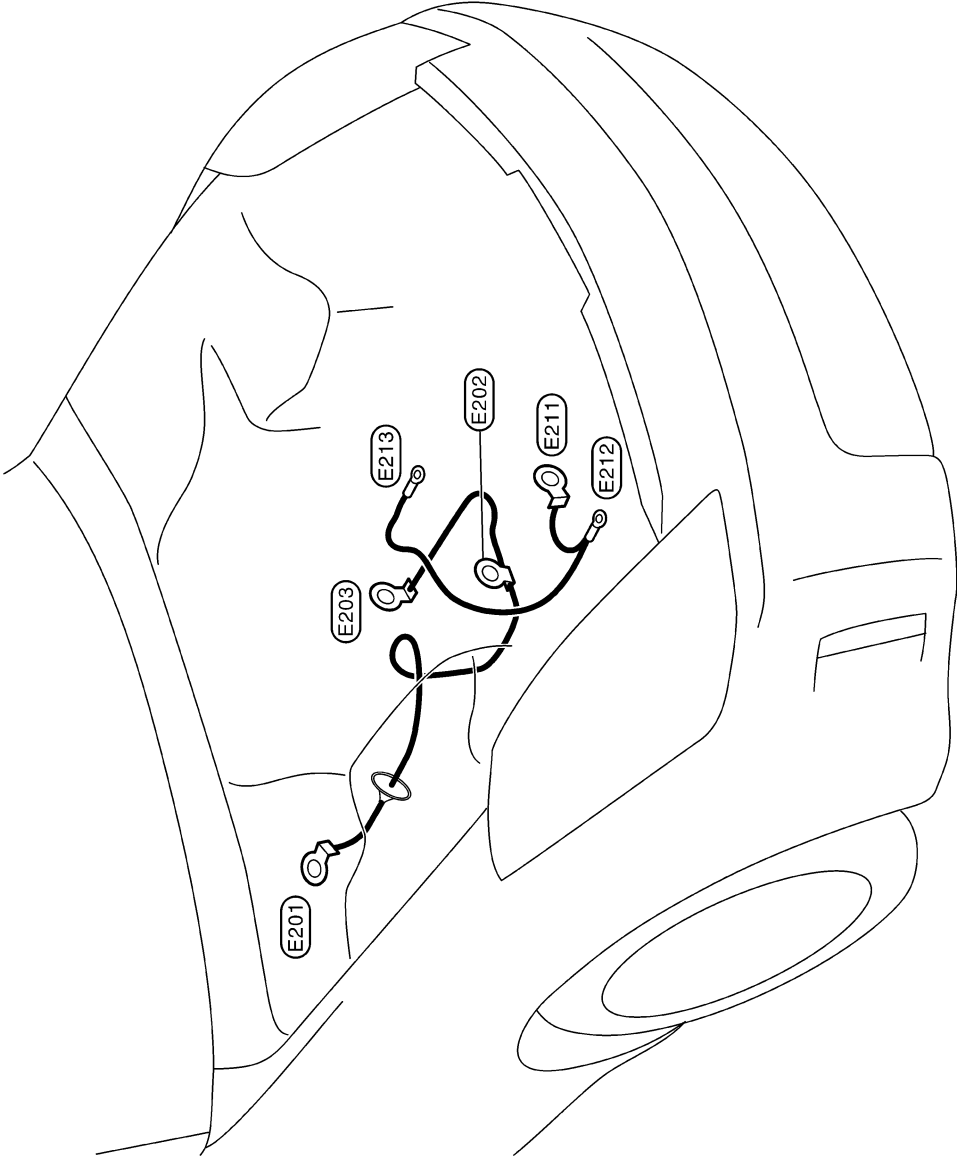
TKIT0203E

HARNESS

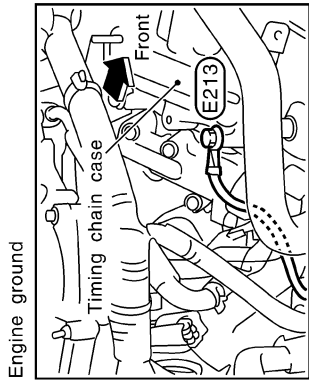
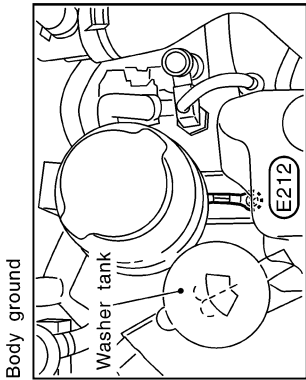
Battery Cable

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

- (E201) : Fusible link holder
- (E202) : Alternator (B)
- (E203) : Starter motor
- (E211) : Alternator (E)
- (E212) : Body ground
- (E213) : Engine ground



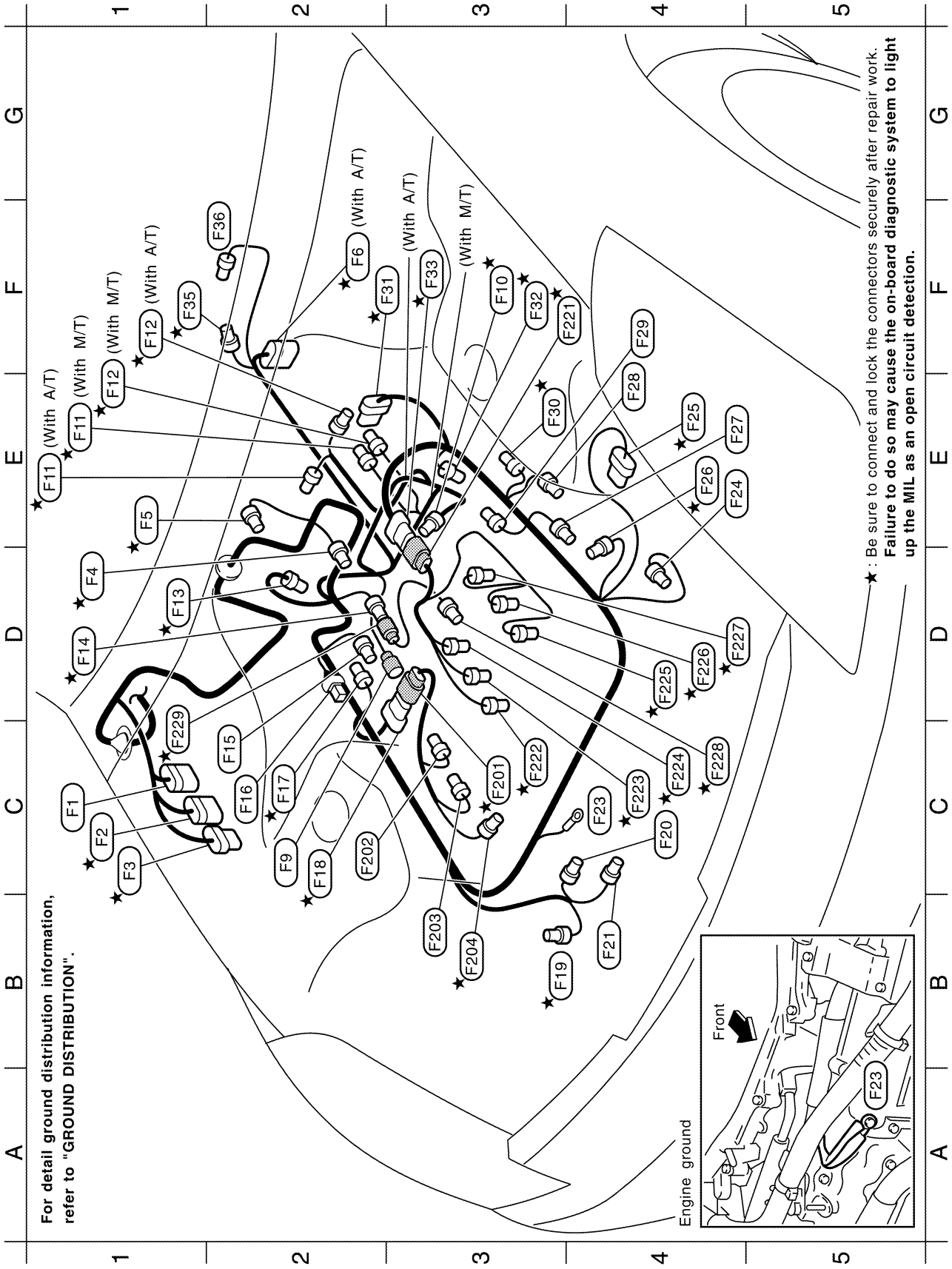
For detail ground distribution information, refer to "GROUND DISTRIBUTION".



CKIT0202E

HARNESS

ENGINE CONTROL HARNESS



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

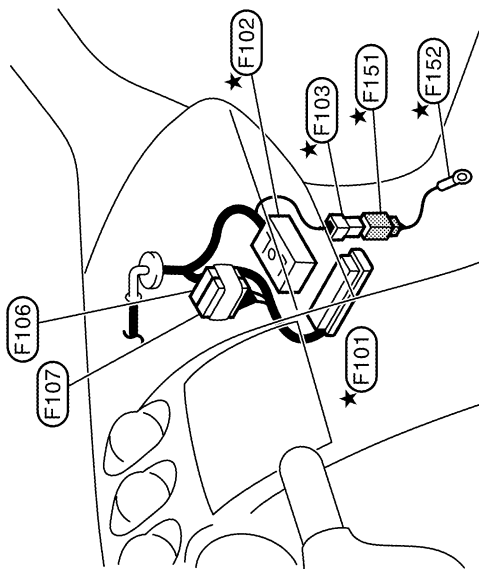
★ : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

TKIT0177E

C1	(F1)	GY/9	:	To (E10)
C1	★ (F2)	GY/10	:	To (E11)
C1	★ (F3)	GY/8	:	To (E12)
D1	★ (F4)	GY/3	:	Camshaft position sensor (PHASE) (Bank1)
E1	★ (F5)	GY/2	:	EVAP canister purge volume control solenoid valve
F2	★ (F6)	GY/10	:	A/T assembly (With A/T)
C2	(F9)	GY/1	:	Starter motor
F3	★ (F10)	B/3	:	Crankshaft position sensor (POS)
E1	★ (F11)	B/4	:	Heated oxygen sensor 2 (Bank1)
E1,F1	★ (F12)	GY/4	:	Heated oxygen sensor 2 (Bank2)
D1	★ (F13)	GY/2	:	Engine coolant temperature sensor
D1	★ (F14)	B/2	:	To (F229)
C2	(F15)	GY/3	:	Ignition coil No.5 (With power transistor)
C2	(F16)	W/2	:	Condenser
C2	★ (F17)	GY/4	:	Heated oxygen sensor 1 (Bank1)
C2	★ (F18)	B/6	:	To (F201)
B3	★ (F19)	B/3	:	Power steering pressure sensor
C4	(F20)	GY/2	:	Alternator (S, L)
B4	(F21)	B/3	:	Oil pressure sensor
C4	(F23)	-	:	Engine ground
E4	(F24)	B/1	:	Compressor
E4	★ (F25)	B/6	:	Mass air flow sensor
E4	★ (F26)	GY/2	:	Intake valve timing control solenoid valve (Bank2)
E4	(F27)	GY/3	:	Ignition coil No.2 (With power transistor)
E4	(F28)	GY/3	:	Ignition coil No.4 (With power transistor)
E4	(F29)	GY/3	:	Ignition coil No.6 (With power transistor)
E3	★ (F30)	GY/4	:	Heated oxygen sensor 1 (Bank2)
F2	★ (F31)	GY/6	:	Electric throttle control actuator
F3	★ (F32)	B/3	:	Camshaft position sensor (PHASE) (Bank2)
F3	★ (F33)	GY/8	:	To (F221)
F1	★ (F35)	B/2	:	Park/Neutral position switch (With M/T)
F2	(F36)	B/2	:	Back-up lamp switch (With M/T)
Engine control sub-harness-1				
C3	★ (F201)	L/6	:	To (F18)
C2	(F202)	GY/3	:	Ignition coil No.3 (With power transistor)
B3	(F203)	GY/3	:	Ignition coil No.1 (With power transistor)
B3	★ (F204)	G/2	:	Intake valve timing control solenoid valve (Bank1)
Engine control sub-harness-2				
F3	★ (F221)	G/8	:	To (F33)
C3	★ (F222)	GY/2	:	Injector No.1
C4	★ (F223)	GY/2	:	Injector No.3

C4	★ (F224)	GY/2	:	Injector No.5
D4	★ (F225)	GY/2	:	Injector No.2
D4	★ (F226)	GY/2	:	Injector No.4
D4	★ (F227)	GY/2	:	Injector No.6
C4	★ (F228)	L/2	:	Knock sensor
C1	★ (F229)	SB/2	:	To (F14)

PASSENGER COMPARTMENT

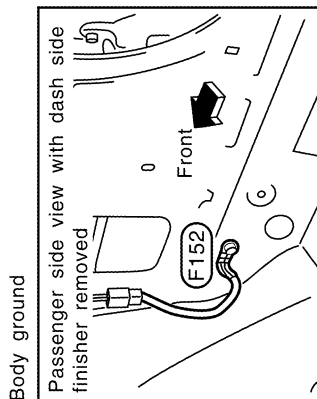


Engine control harness

★ (F101)	SMJ	:	ECM
★ (F102)	SMJ	:	To (M72)
★ (F103)	W/4	:	To (F151)
(F106)	L/20	:	Joint connector-3
(F107)	P/20	:	Joint connector-4

Earth sub-harness

★ (F151)	W/4	:	To (F103)
★ (F152)	-	:	Body ground

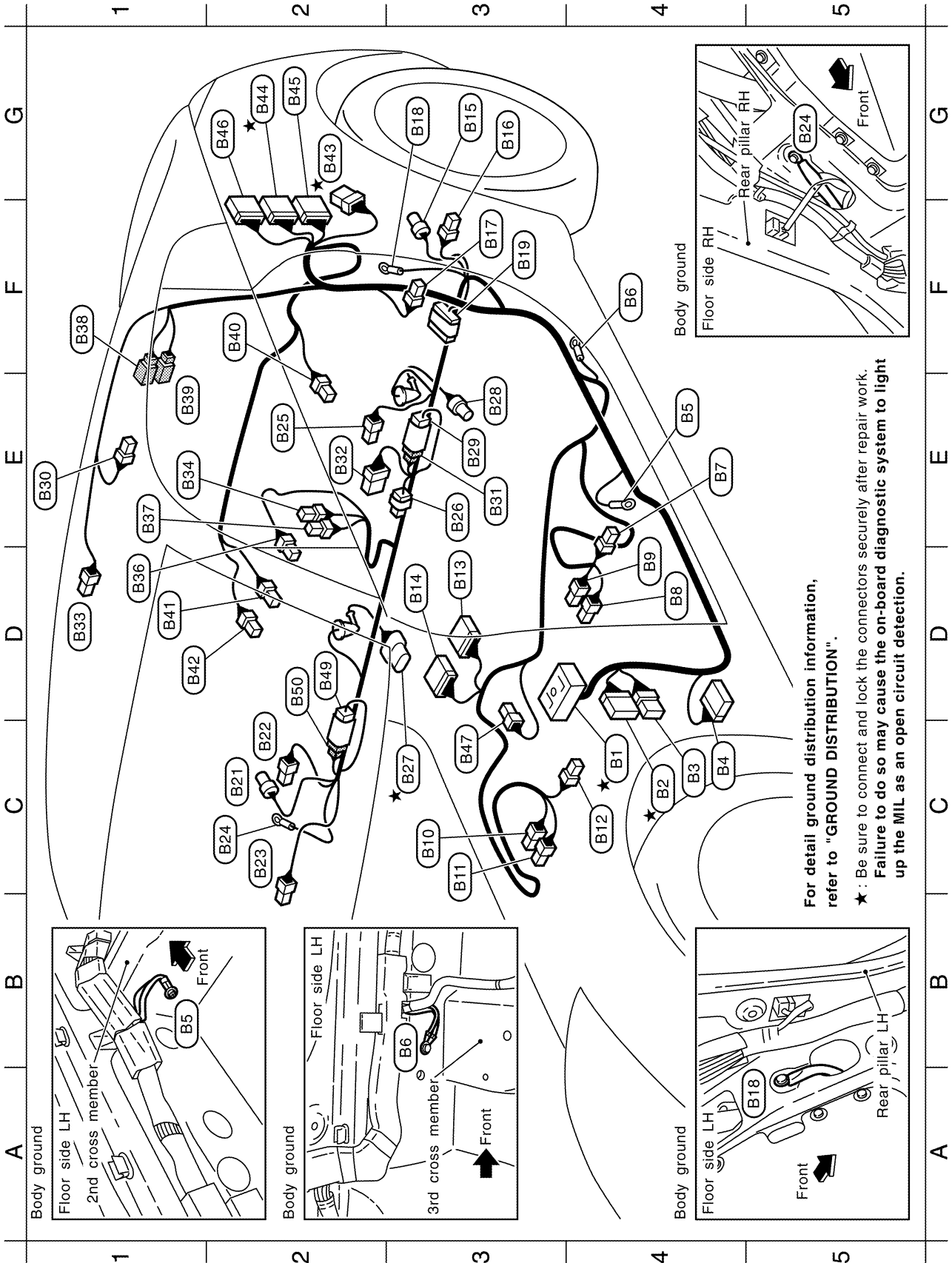


For detail ground distribution information, refer to "GROUND DISTRIBUTION".

★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

HARNESS

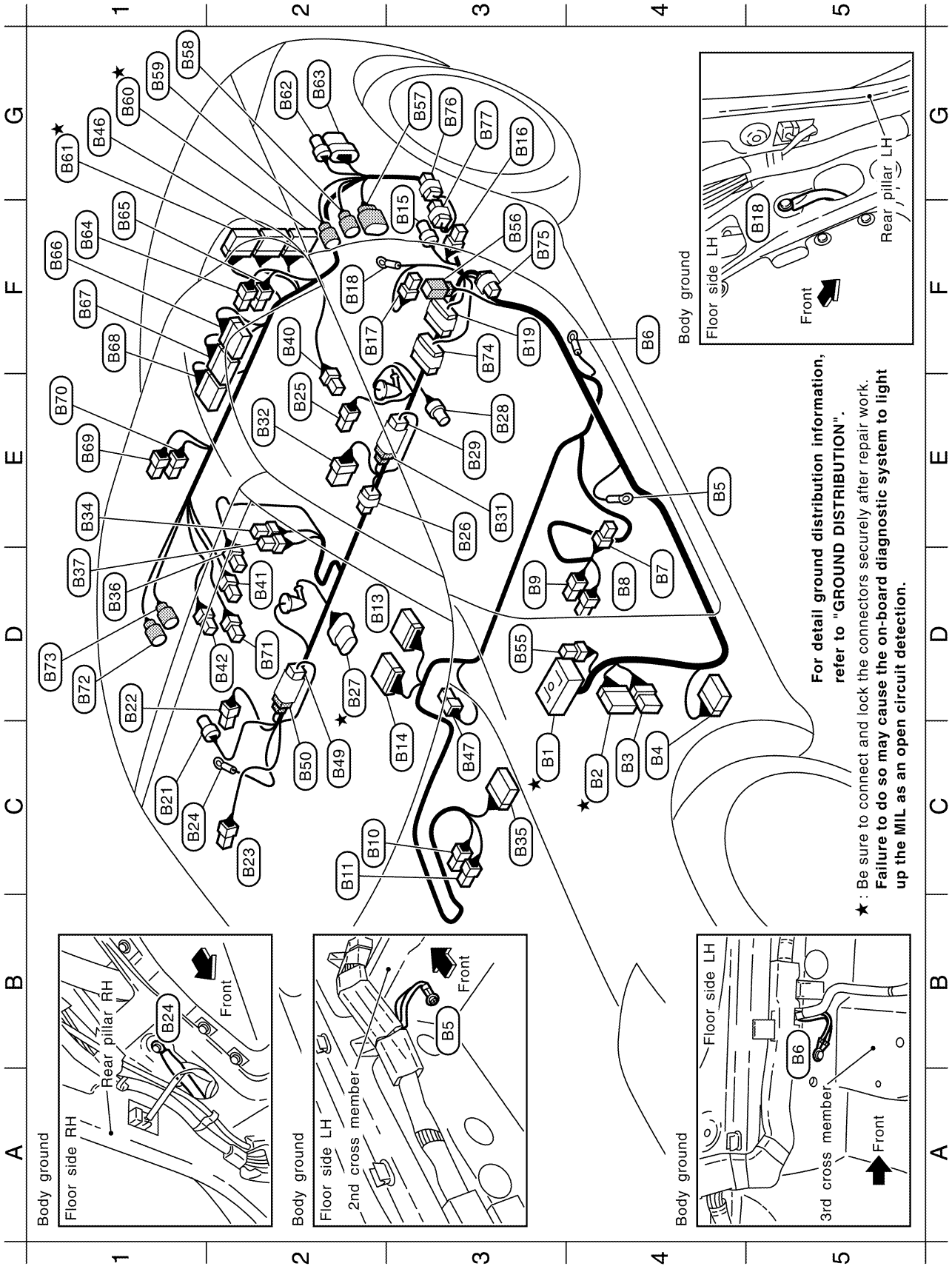
BODY HARNESS Coupe Models



TKIT0204E

HARNESS

Roadster Models



TKIT0108E

HARNESSES

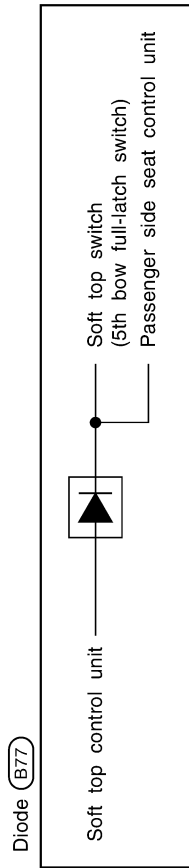
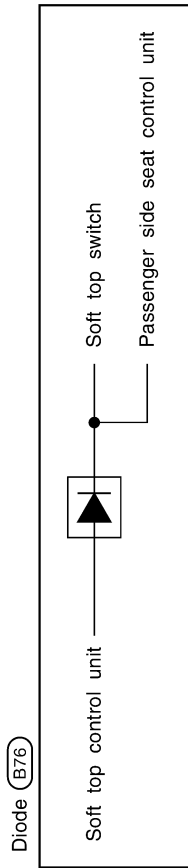
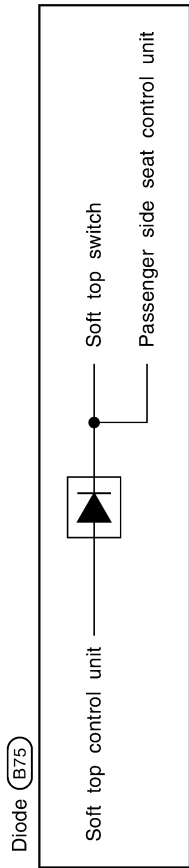
C3 ★	(B1)	SMJ	:	To	(M12)
C4 ★	(B2)	W/18	:	To	(E106)
C4	(B3)	W/6	:	To	(E107)
C4	(B4)	W/12	:	BCM (Body control module)	
E4	(B5)	—	:	Body ground	
F4	(B6)	—	:	Body ground	
D4	(B7)	W/4	:	Driver side seat	
D4	(B8)	W/3	:	Seat belt buckle switch (Driver side)	
D3	(B9)	Y/2	:	LH side air bag module (With side air bag)	
C2	(B10)	Y/2	:	RH side air bag module (With side air bag)	
C2	(B11)	W/3	:	Seat belt buckle switch (Passenger side)	
D2	(B13)	Y/12	:	Air bag diagnosis sensor unit	
C3	(B14)	Y/12	:	Air bag diagnosis sensor unit	
F3	(B15)	Y/2	:	LH side air bag (satellite) sensor (With side air bag)	
G3	(B16)	Y/2	:	Seat belt pre-tensioner LH	
F2	(B17)	W/3	:	Driver side door switch	
F2	(B18)	—	:	Body ground (With side air bag)	
F3	(B19)	OR/20	:	Joint connector-5	
C1	(B21)	Y/2	:	RH side air bag (satellite) sensor (With side air bag)	
D1	(B22)	Y/2	:	Seat belt pre-tensioner RH	
C2	(B23)	W/3	:	Passenger side door switch	
C1	(B24)	—	:	Body ground (With side air bag)	
E2	(B25)	W/2	:	Woofer (With BOSE system)	
E3	(B26)	W/2	:	Condenser	
D2 ★	(B27)	GY/5	:	Fuel level sensor unit and fuel pump	
E3	(B28)	GY/2	:	Fuel level sensor unit (Sub)	
E3	(B29)	W/2	:	To (B31)	
E3	(B31)	W/2	:	To (B29)	
E2	(B32)	BR/8	:	Woofer amp. (With BOSE system)	
E1	(B34)	BR/6	:	Rear window defogger relay	
C3	(B35)	W/18	:	Passenger side seat	
D1	(B36)	B/2	:	Power socket	
D1	(B37)	L/4	:	Heated seat relay (With heated seat or side air bag)	
F2	(B40)	BR/2	:	Rear speaker LH	
D2	(B41)	W/2	:	Luggage floor box lamp	
D2	(B42)	BR/2	:	Rear speaker RH	
G1	(B46)	BR/20	:	To (T4) (With BOSE system)	
C3	(B47)	B/1	:	Parking brake switch	
C2	(B49)	BR/2	:	To (B50)	
C2	(B50)	BR/2	:	To (B49)	

D3	(B55)	W/2	:	Circuit breaker
F3	(B56)	W/2	:	Short connector
G3	(B57)	GY/8	:	Soft top assembly
G1	(B58)	B/2	:	Soft top assembly
G1	(B59)	GY/2	:	Roof actuator LH
G1 ★	(B60)	W/20	:	To (T22)
G1 ★	(B61)	W/16	:	To (T23)
G2	(B62)	GY/4	:	To (T24) (With BOSE system)
G2	(B63)	B/6	:	To (T25) (With BOSE system)
F1	(B64)	W/2	:	Storage lid switch LH (Close)
F1	(B65)	B/2	:	Storage lid unlock actuator LH
F1	(B66)	W/16	:	Soft top control unit
F1	(B67)	W/20	:	Soft top control unit
F1	(B68)	W/12	:	Soft top control unit
E1	(B69)	W/2	:	Storage lid switch RH (Close)
E1	(B70)	B/2	:	Storage lid unlock actuator RH
D2	(B71)	W/2	:	Trunk opener cancel switch
D1	(B72)	GY/2	:	Roof actuator RH
D1	(B73)	B/2	:	Rear window defogger (Via sub-harness)
F3	(B74)	P/20	:	Joint connector-14
F3	(B75)	W/2	:	Diode
G3	(B76)	W/2	:	Diode
G3	(B77)	W/2	:	Diode

★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

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

HARNESS

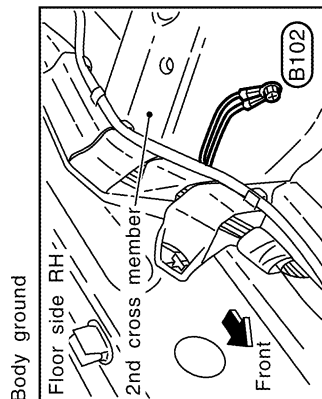
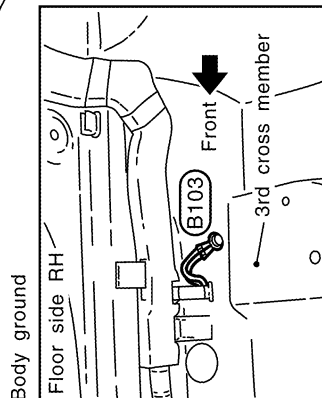
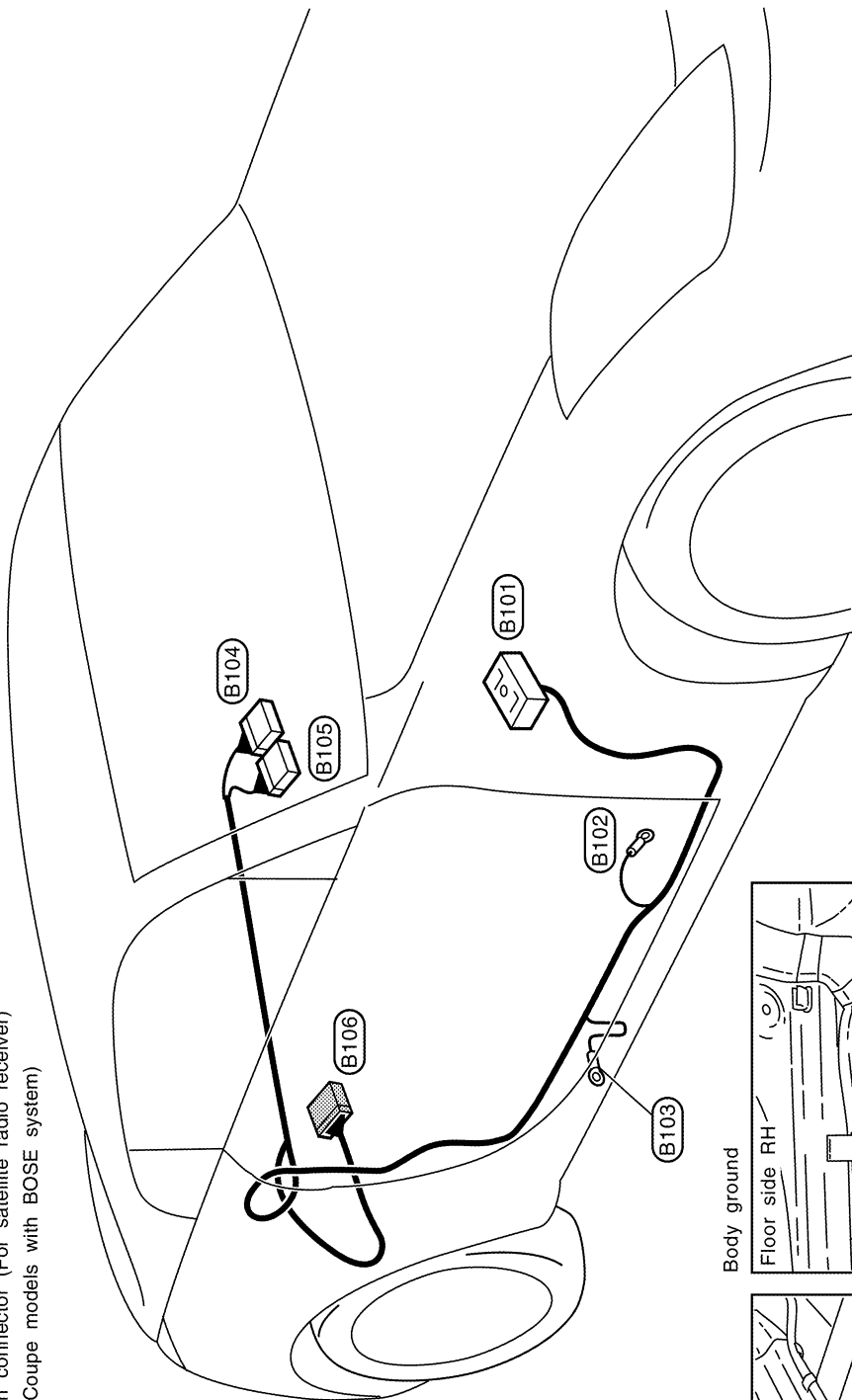


TKIT0117E

HARNESS

BODY NO.2 HARNESS

- (B101) SMJ : To (M73)
- (B102) — : Body ground (With navigation system)
- (B103) — : Body ground (With navigation system)
- (B104) W/24 : NAVI control unit (With navigation system)
- (B105) GY/24 : NAVI control unit (With navigation system)
- (B106) W/12 : Option connector (For satellite radio receiver)
(For Coupe models with BOSE system)



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

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

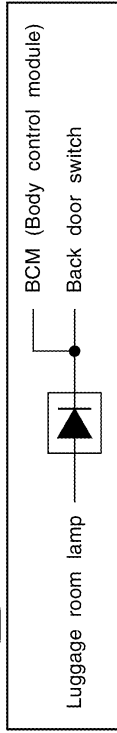
TKIT0207E

TAIL HARNESS Coupe Models

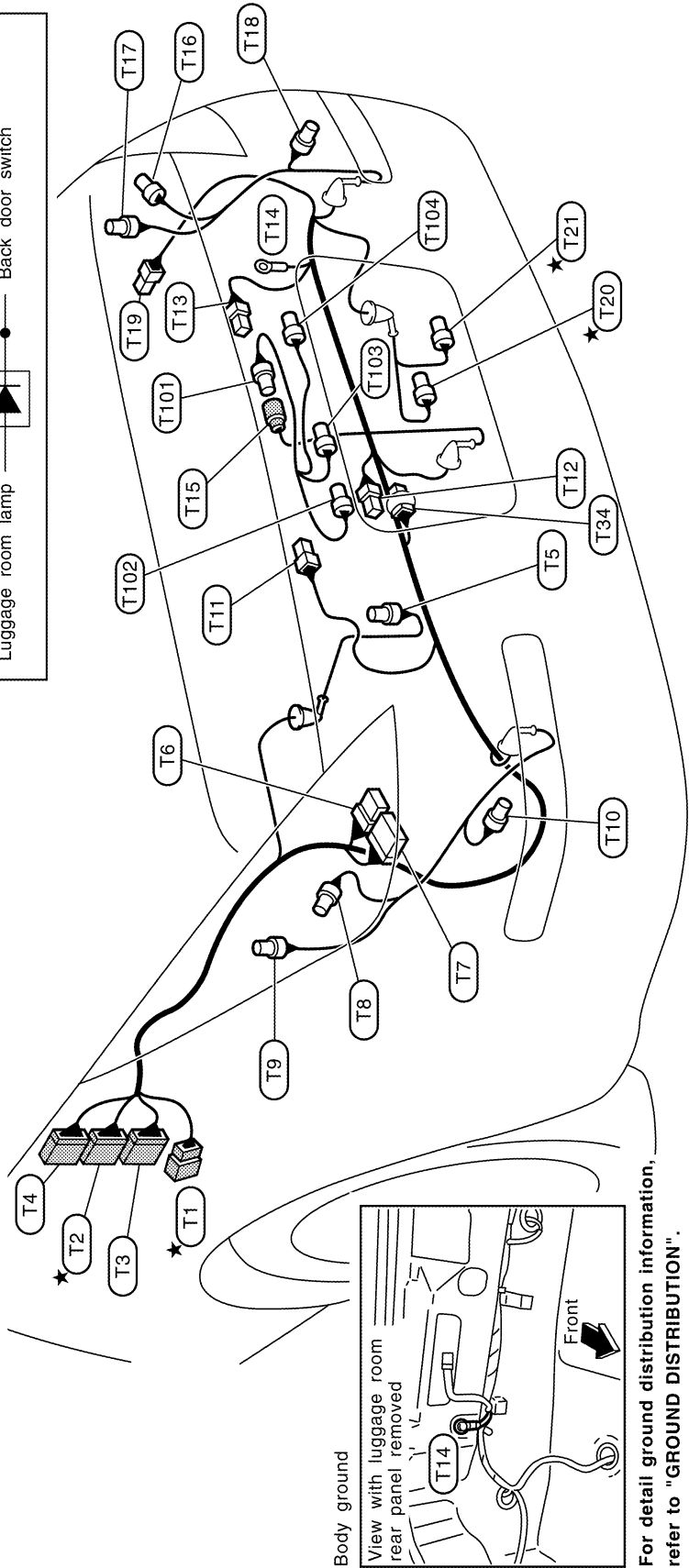
- (T18) SB/4 : Rear combination lamp RH (Bumper side)
 - (T19) W/4 : Fuel lid opener actuator
 - ★ (T20) B/2 : EVAP canister vent control valve
 - ★ (T21) GY/3 : EVAP control system pressure sensor
 - (T34) W/2 : Diode
- Tail sub-harness-1**
- (T101) GY/4 : To (T15)
 - (T102) BR/2 : License plate lamp LH
 - (T103) GY/2 : Back door opener switch
 - (T104) BR/2 : License plate lamp RH

★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

Diode (T34)



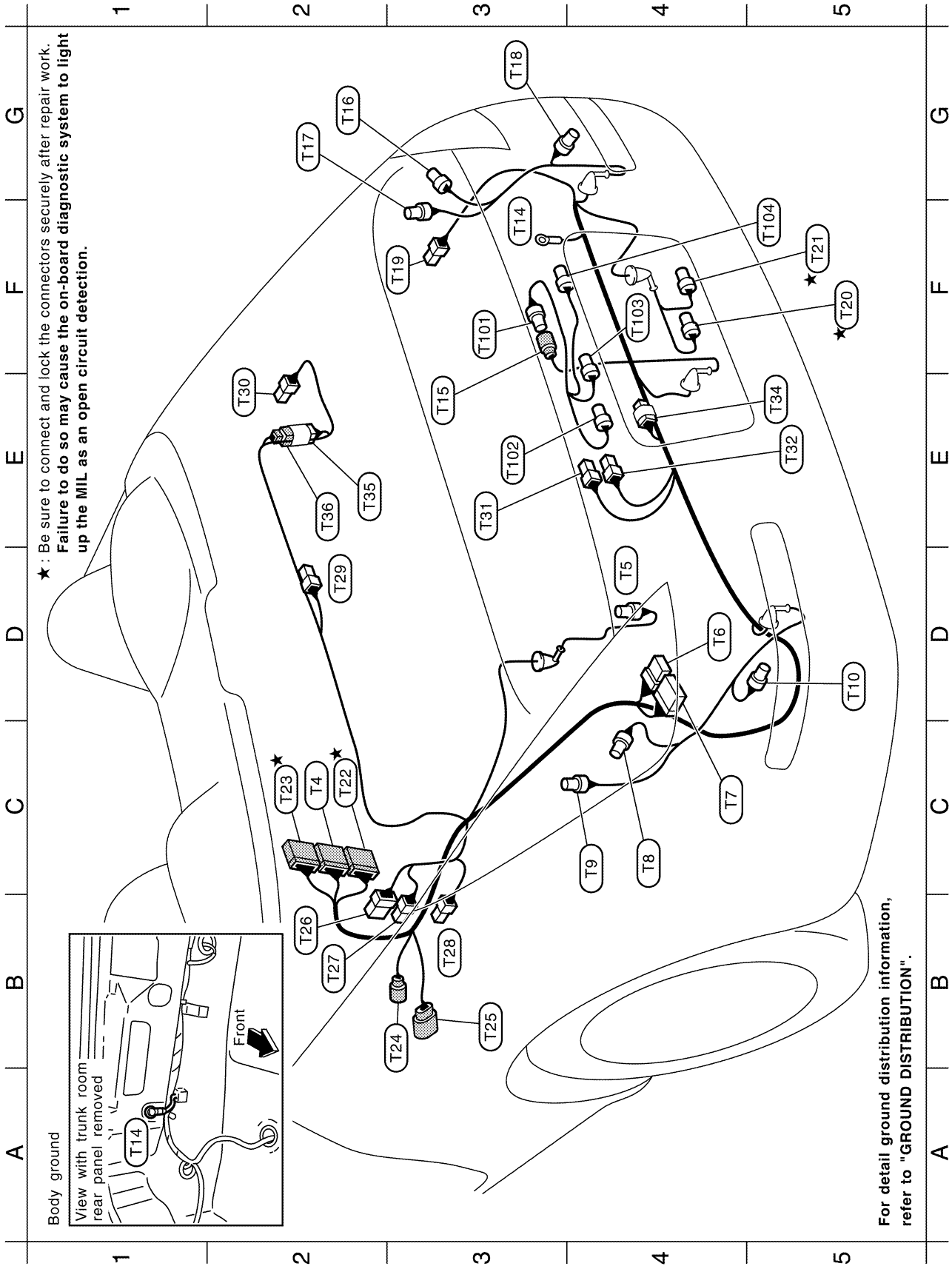
- ★ (T1) W/6 : To (B43)
- ★ (T2) W/16 : To (B44)
- (T3) W/10 : To (B45) (With BOSE system)
- (T4) BR/20 : To (B46) (With BOSE system)
- (T5) GY/4 : Rear wheel sensor
- (T6) GY/8 : BOSE speaker amp. (With BOSE system)
- (T7) B/24 : BOSE speaker amp. (With BOSE system)
- (T8) GY/2 : Rear combination lamp LH (Body side)
- (T9) GY/3 : Rear combination lamp LH (Body side)
- (T10) SB/4 : Rear combination lamp LH (Bumper side)
- (T11) W/4 : Back door opener actuator
- (T12) W/3 : Back door switch
- (T13) GY/2 : Luggage room lamp
- (T14) — : Body ground
- (T15) GY/4 : To (T101)
- (T16) GY/2 : Rear combination lamp RH (Body side)
- (T17) GY/3 : Rear combination lamp RH (Body side)



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

HARNESS

Roadster Models



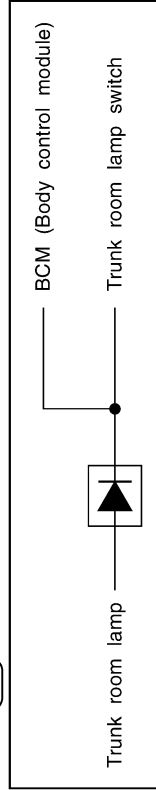
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
PG

TKIT0111E

Tail sub-harness-1

- F3 (T101) GY/4 : To (T15)
- E3 (T102) BR/2 : License plate lamp LH
- F4 (T103) GY/2 : Trunk lid opener switch
- F5 (T104) BR/2 : License plate lamp RH

Diode (T34)



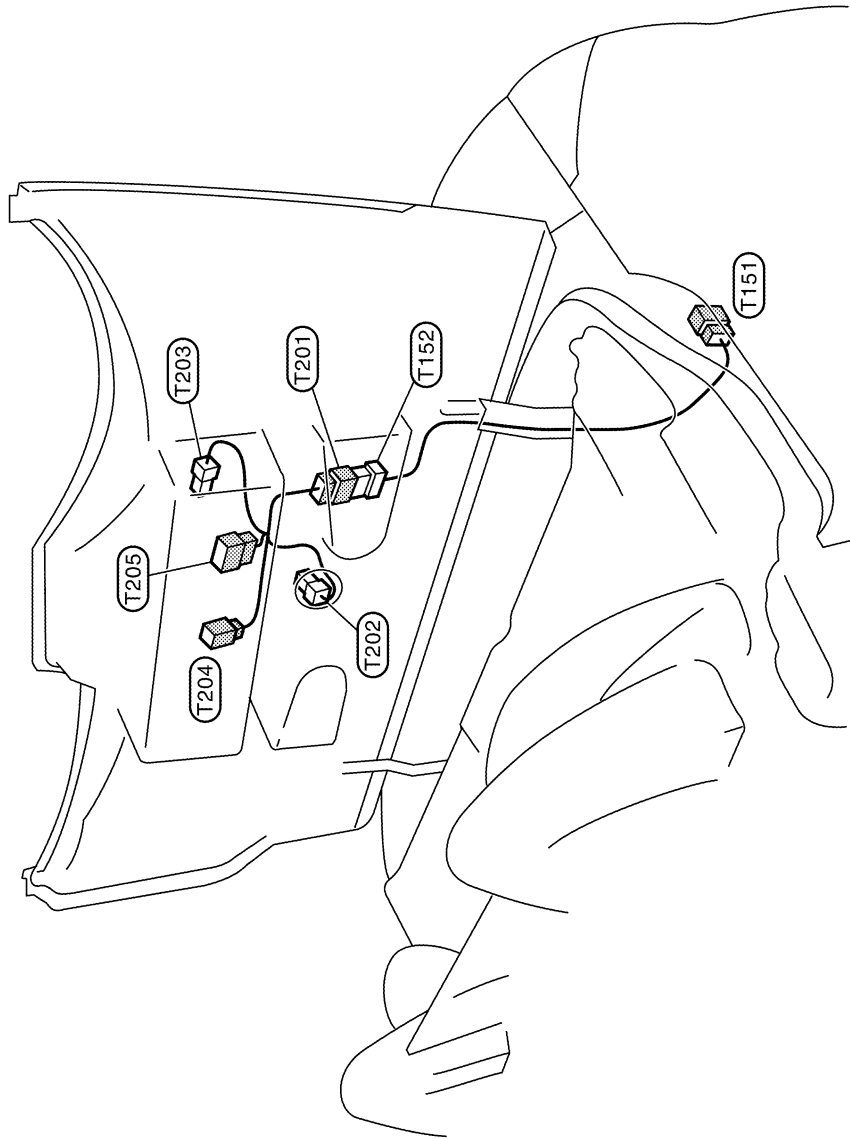
★ : Be sure to connect and lock the connectors securely after repair work.
Failure to do so may cause the on-board diagnostic system to light up the MIL as an open circuit detection.

- C2 (T4) BR/20 : To (B46) (With BOSE system)
- D4 (T5) SB/4 : Rear wheel sensor
- D4 (T6) GY/8 : BOSE speaker amp. (With BOSE system)
- C4 (T7) B/24 : BOSE speaker amp. (With BOSE system)
- C4 (T8) GY/2 : Rear combination lamp LH (Body side)
- C4 (T9) GY/3 : Rear combination lamp LH (Body side)
- D5 (T10) SB/4 : Rear combination lamp LH (Bumper side)
- F3 (T14) — : Body ground
- E3 (T15) GY/4 : To (T101)
- G2 (T16) GY/2 : Rear combination lamp RH (Body side)
- G2 (T17) GY/3 : Rear combination lamp RH (Body side)
- G3 (T18) SB/4 : Rear combination lamp RH (Bumper side)
- F3 (T19) W/4 : Fuel lid opener actuator
- F5 (T20) B/2 : EVAP canister vent control valve
- F5 (T21) GY/3 : EVAP control system pressure sensor
- C2 (T22) W/20 : To (B60)
- C2 (T23) W/16 : To (B61)
- B3 (T24) GY/4 : To (B62) (With BOSE system)
- B3 (T25) B/6 : To (B63) (With BOSE system)
- B2 (T26) W/8 : To (T151)
- B2 (T27) B/2 : Storage lid switch (Open)
- B3 (T28) W/2 : Storage lid actuator LH
- D2 (T29) W/2 : Trunk room lamp
- E2 (T30) W/2 : Storage lid actuator RH
- E3 (T31) W/2 : Trunk room lamp switch
- E5 (T32) B/2 : Trunk lid opener actuator
- E5 (T34) W/2 : Diode
- E2 (T35) W/2 : To (T36)
- E2 (T36) W/2 : To (T35)

HARNESS

TAIL NO.2 HARNESS Roadster Models

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



Tail No.2 harness

- (T201) W/8 : To (T152)
- (T202) BR/2 : High-mounted stop lamp
- (T203) W/4 : 5th bow unlock actuator
- (T204) B/2 : 5th bow closure motor
- (T205) W/6 : Soft top lock switch

Tail sub-harness-2

- (T151) W/8 : To (T26)
- (T152) W/8 : To (T201)

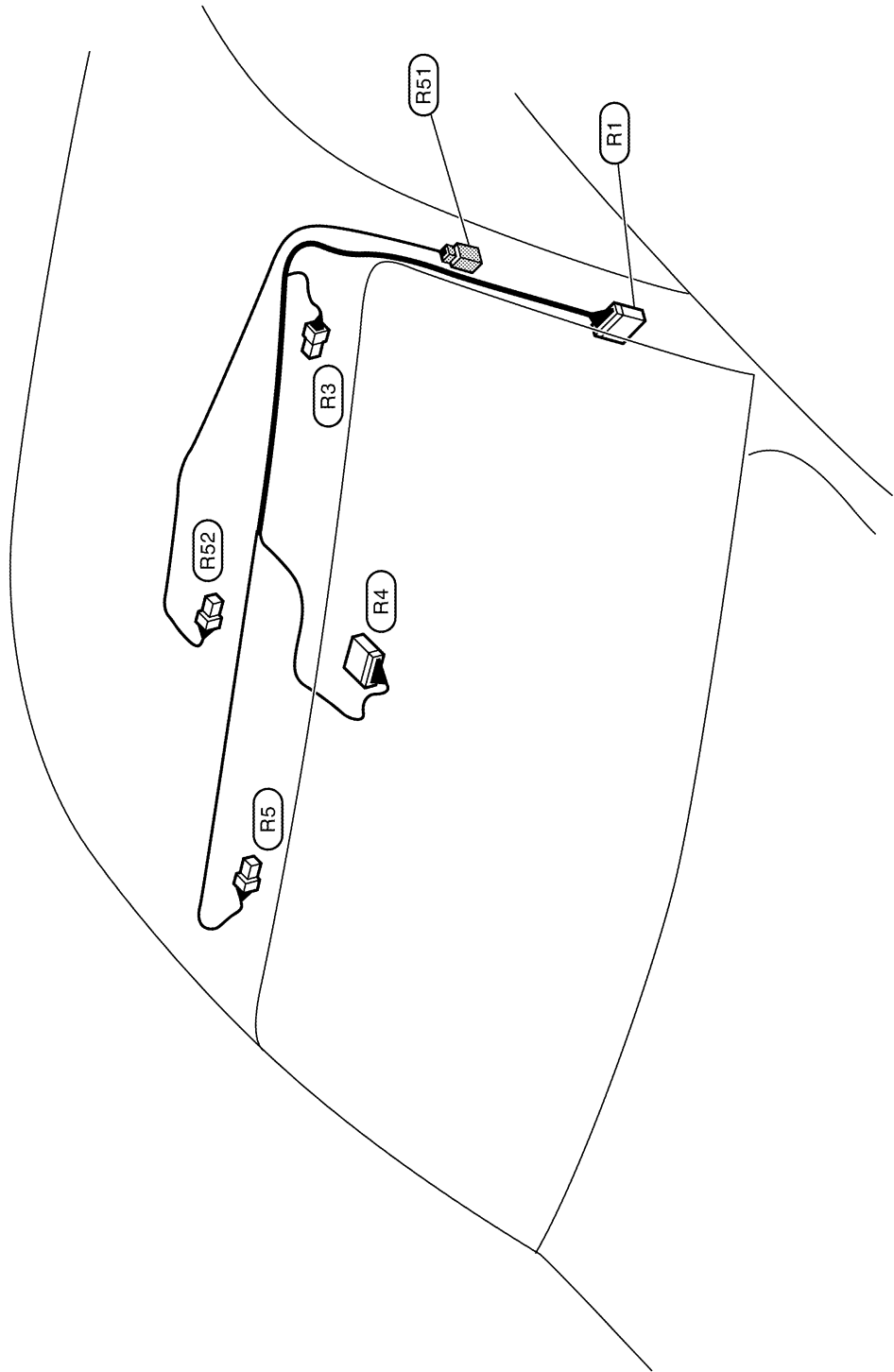
HARNESS

ROOM LAMP HARNESS Coupe Models

Room lamp sub-harness

(R51) W/4 : To (M70)
(R52) W/3 : Map lamp

(R1) W/10 : To (M69)
(R3) W/2 : Vanity mirror lamp LH
(R4) B/10 : Auto anti-dazzling inside mirror
(R5) W/2 : Vanity mirror lamp RH



TKIT0209E

HARNESS

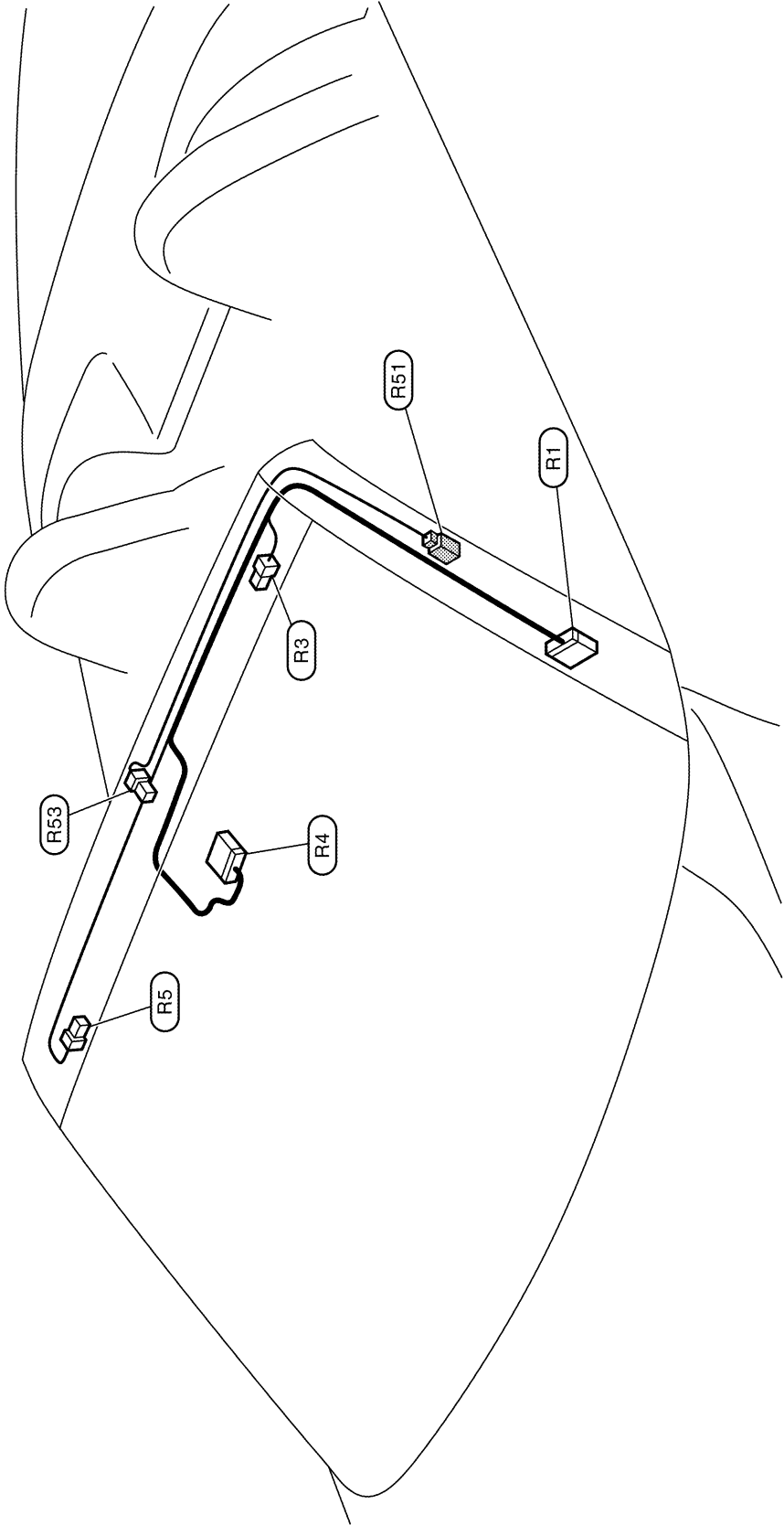
Roadster Models

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

Room lamp sub-harness

- (R51) W/4 : To (M70)
- (R63) W/4 : Map lamp

- (R1) W/10 : To (M69)
- (R3) W/2 : Vanity mirror lamp LH
- (R4) B/10 : Auto anti-dazzling inside mirror
- (R5) W/2 : Vanity mirror lamp RH



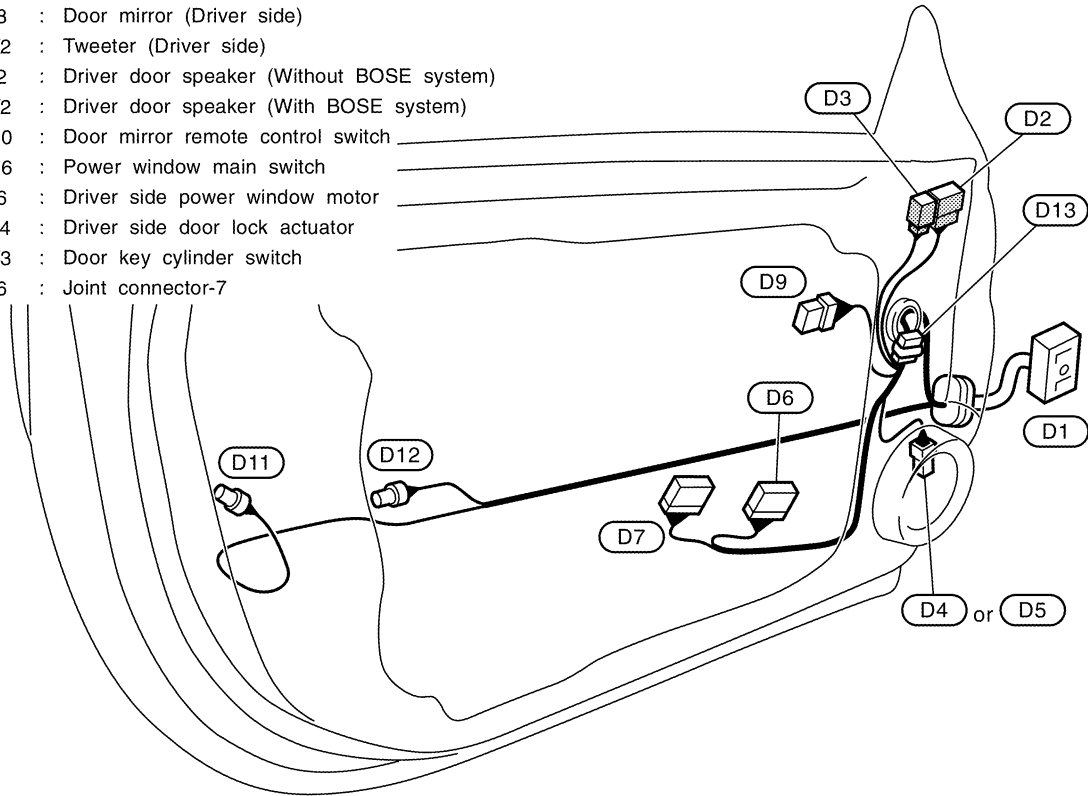
TKIT0210E

HARNESS

DOOR HARNESS

Driver Side Door

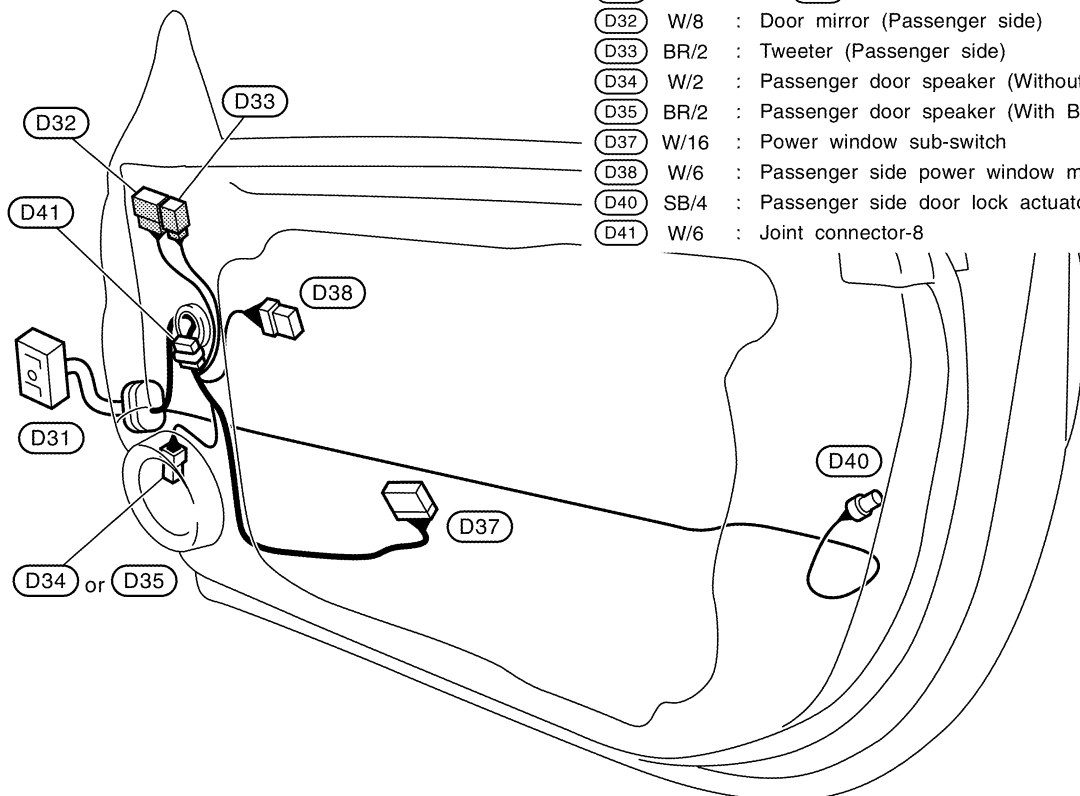
- (D1) SMJ : To (M11)
- (D2) W/8 : Door mirror (Driver side)
- (D3) BR/2 : Tweeter (Driver side)
- (D4) W/2 : Driver door speaker (Without BOSE system)
- (D5) BR/2 : Driver door speaker (With BOSE system)
- (D6) W/10 : Door mirror remote control switch
- (D7) W/16 : Power window main switch
- (D9) W/6 : Driver side power window motor
- (D11) SB/4 : Driver side door lock actuator
- (D12) BR/3 : Door key cylinder switch
- (D13) W/6 : Joint connector-7



TKIT0115E

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)
- (D35) BR/2 : Passenger door speaker (With BOSE system)
- (D37) W/16 : Power window sub-switch
- (D38) W/6 : Passenger side power window motor
- (D40) SB/4 : Passenger side door lock actuator
- (D41) W/6 : Joint connector-8



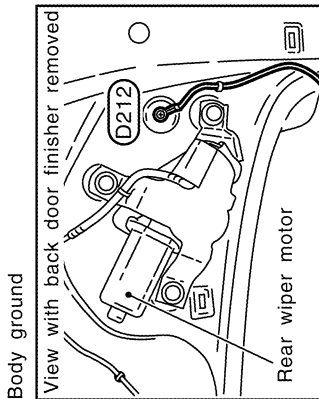
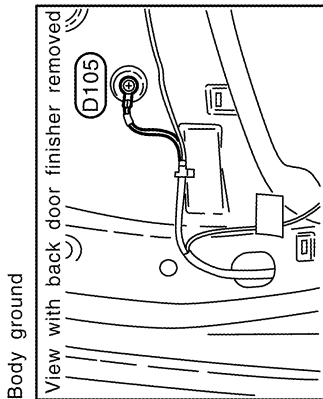
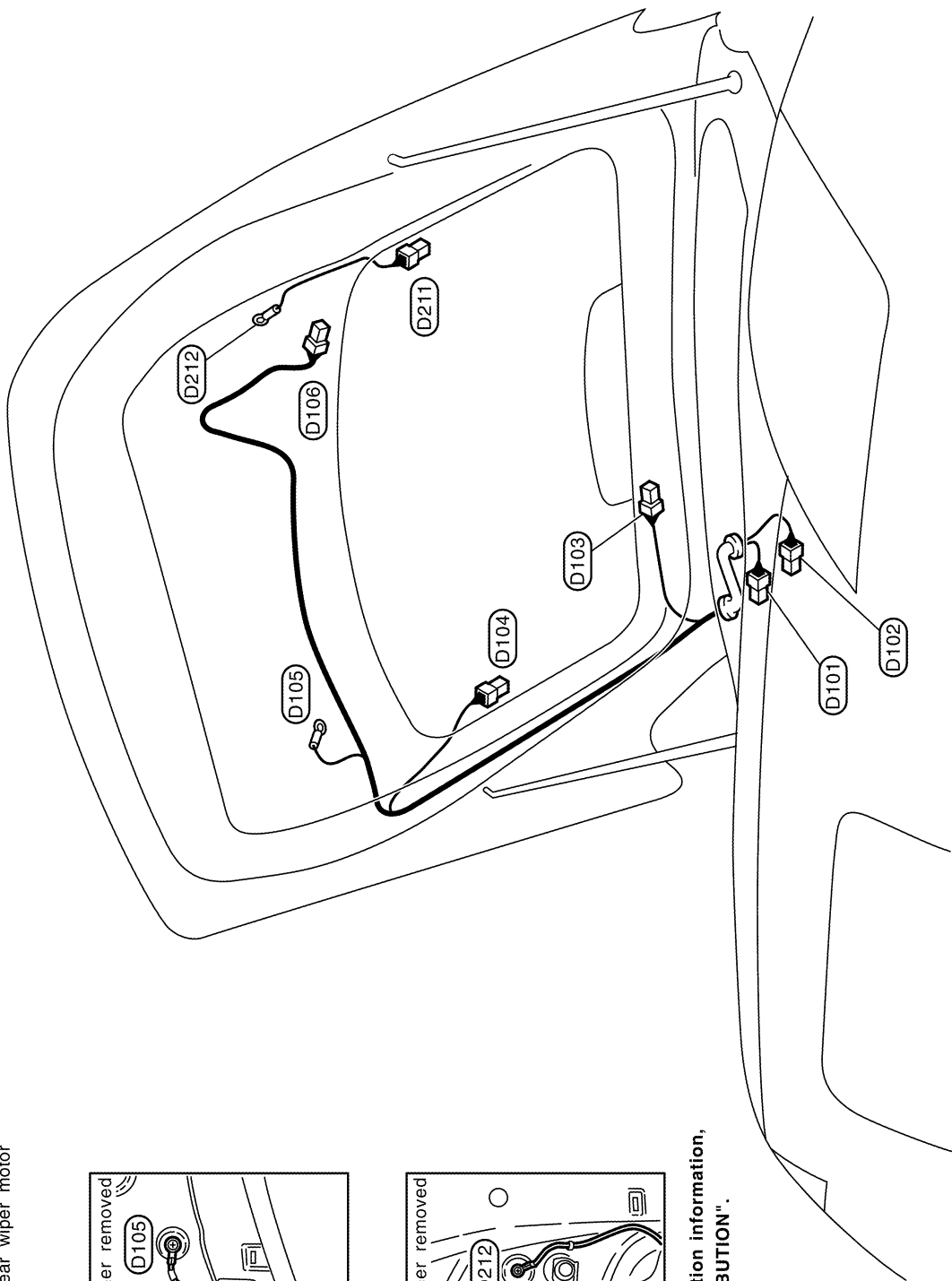
TKIT0116E

HARNESS

Back Door

Defogger harness (-)
 (D211) B/1 : Rear window defogger (-)
 (D212) -- : Body ground

(D101) W/3 : To (B38)
 (D102) GY/2 : To (B39)
 (D103) BR/2 : High-mounted stop lamp
 (D104) B/1 : Rear window defogger
 (D105) -- : Body ground
 (D106) W/4 : Rear wiper motor



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

TKIT0068E

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

HARNESS

Wiring Diagram Codes (Cell Codes)

AKS00A3P

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
3METER	DI	Triple Meter
ABS	BRC	Anti-lock Brake System
A/C	ATC	Air Conditioner
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
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
COMBSW	LT	Combination Switch
COOL/F	EC	Cooling Fan Control
DEF	GW	Rear Window Defogger
D/LOCK	BL	Power Door Lock
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply For Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electrical Throttle Function
ETC2	EC	Electrical Throttle Control Motor Relay
ETC3	EC	Electrical Throttle Control Motor
F/LID	BL	Fuel Lid Opener
F/PUMP	EC	Fuel Pump
F/ROOF	RF	Soft Top
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
HORN	WW	Horn
HSEAT	SE	Heated Seat
IATS	EC	Intake Air Temperature Sensor

HARNESS

Code	Section	Wiring Diagram Name
IGNSYS	EC	Ignition System
ILL	LT	Illumination
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
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
MAFS	EC	Mass Air Flow Sensor
MAIN	EC	Main Power Supply and Ground Circuit
M/ANT	AV	Manual Antenna
METER	DI	Speedometer, Tachometer, Temp., and Fuel Gauges
MIL/DL	EC	Mil&Data Link Connectors
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	Rear Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Rear 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	Rear Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Rear Heated Oxygen Sensor 2 Bank 2
PGC/V	EC	Evap Canister Purge Volume Control Solenoid Valve
PHSB1	EC	Camshaft Position Sensor (Phase) (Bank 1)
PHSB2	EC	Camshaft Position Sensor (Phase) (Bank 2)
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
P/SCKT	WW	Power Socket
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
SRS	SRS	Supplemental Restraint System

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

HARNESS

Code	Section	Wiring Diagram Name
START	SC	Starting System
STOP/L	LT	Stop Lamp
STSIG	AT	Start Signal Circuit
TAIL/L	LT	Parking, License and Tail Lamps
TCS	BRC	Traction Control System
TLID	BL	Trunk Lid Opener
TPS1	EC	Throttle Position Sensor (Sensor 1)
TPS2	EC	Throttle Position Sensor (Sensor 2)
TPS3	EC	Throttle Position Sensor
TRANSCV	BL	Homelink Universal Transceiver
TURN	LT	Turn Signal and Hazard Warning Lamp
T/WARN	WT	Low Tire Pressure Warning System
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)
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer
WIP/R	WW	Rear Wiper and Washer

ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

PPF:25230

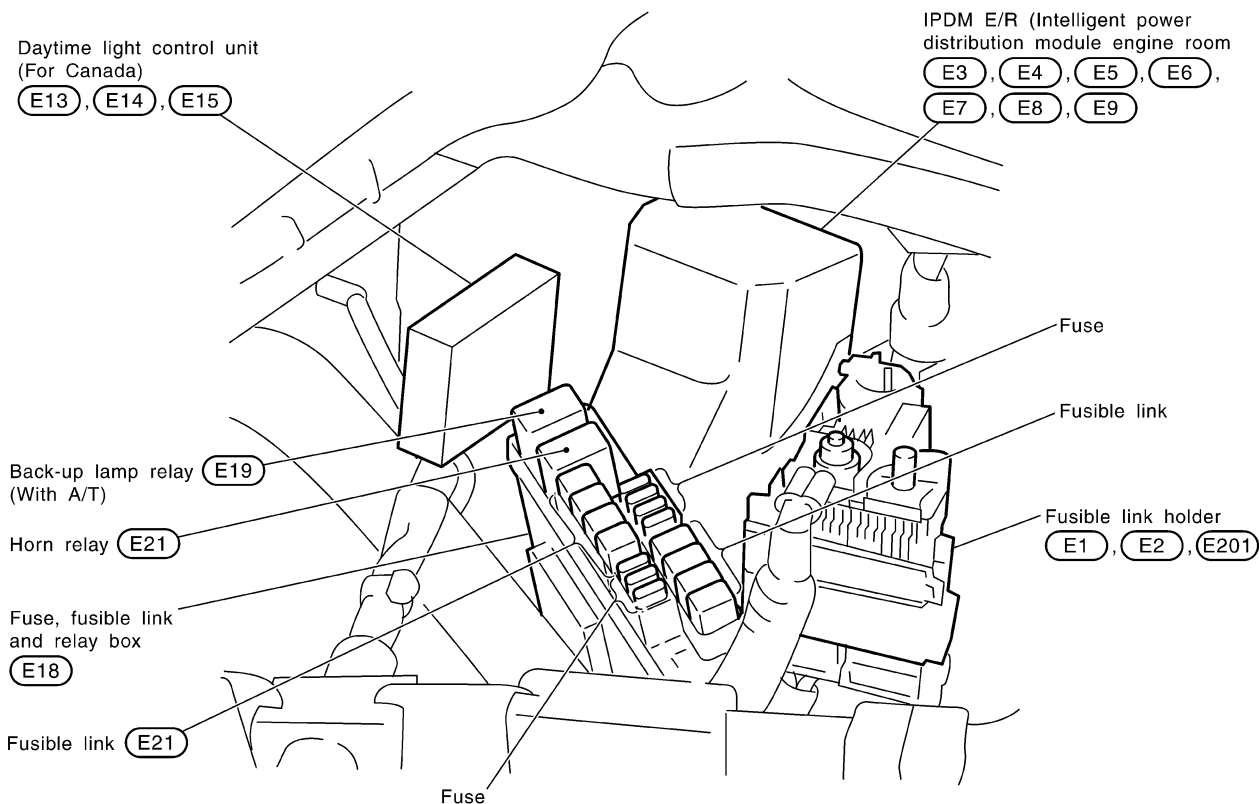
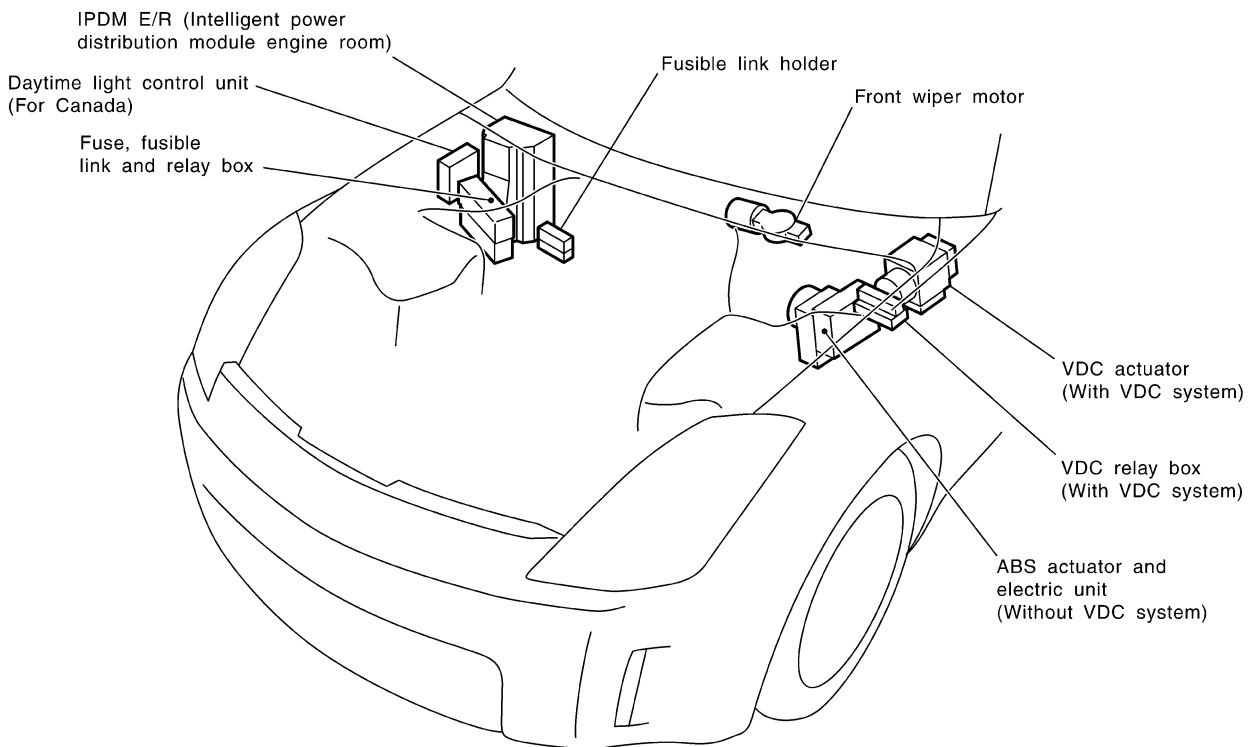
Electrical Units Location ENGINE COMPARTMENT

AKS0012S

A
B
C
D
E
F
G
H
I
J

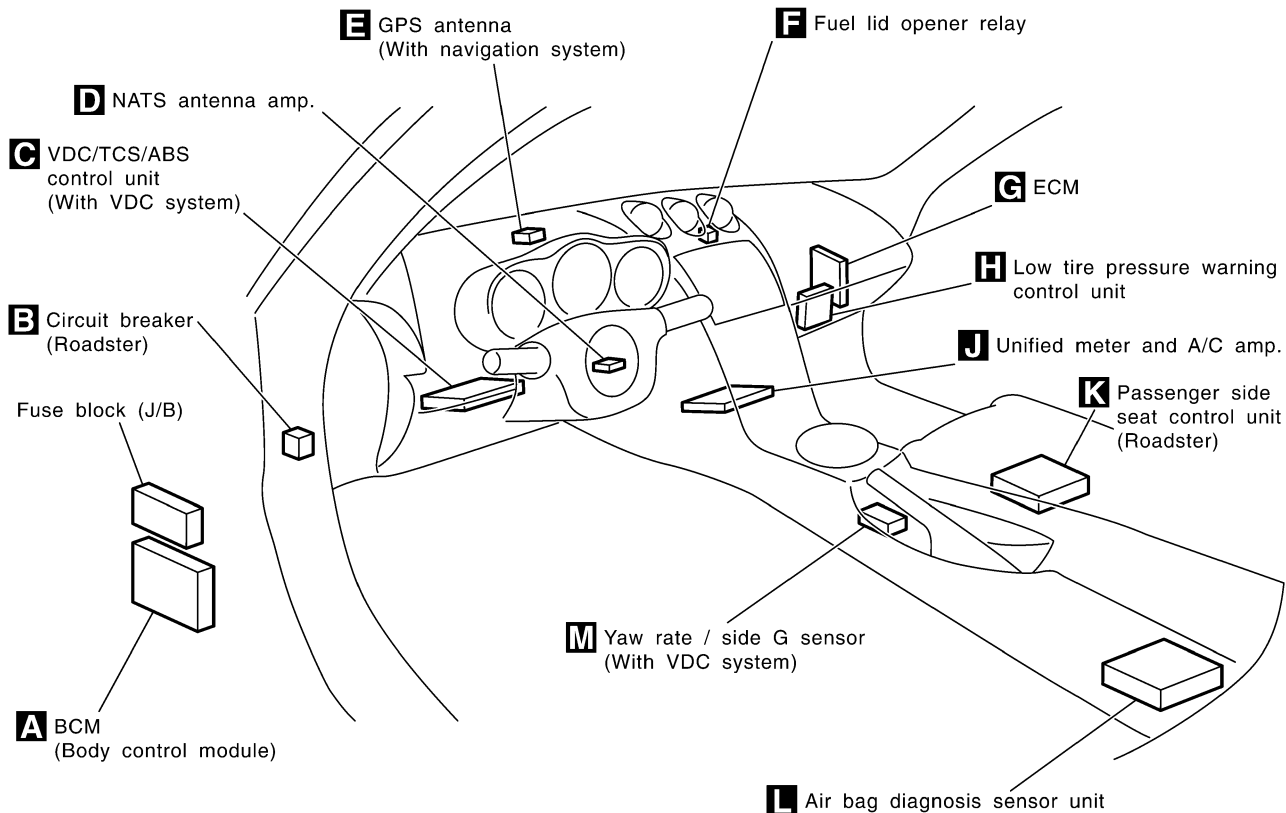
PG

L
M

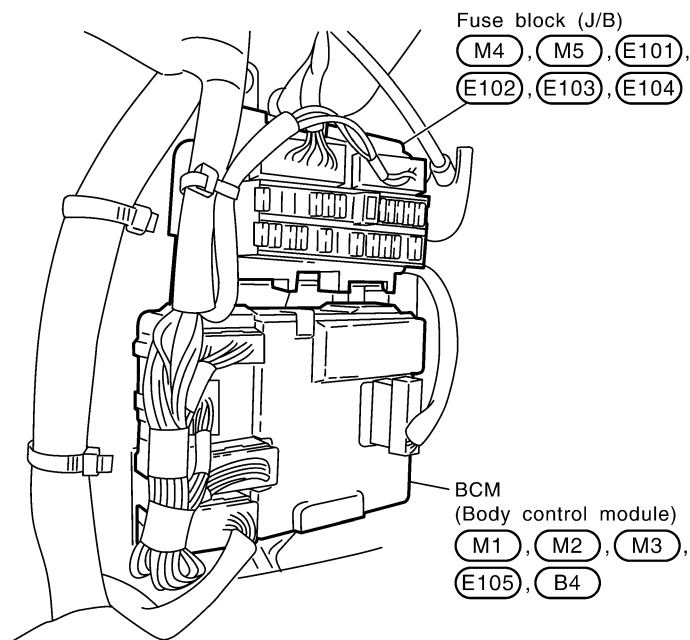


ELECTRICAL UNITS LOCATION

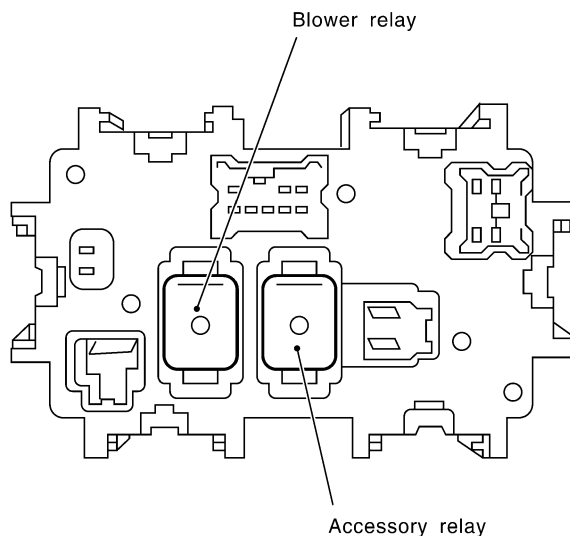
PASSENGER COMPARTMENT



A Behind the dash side lower LH finisher



Fuse block (J/B) rear view



CKIT0435E

ELECTRICAL UNITS LOCATION

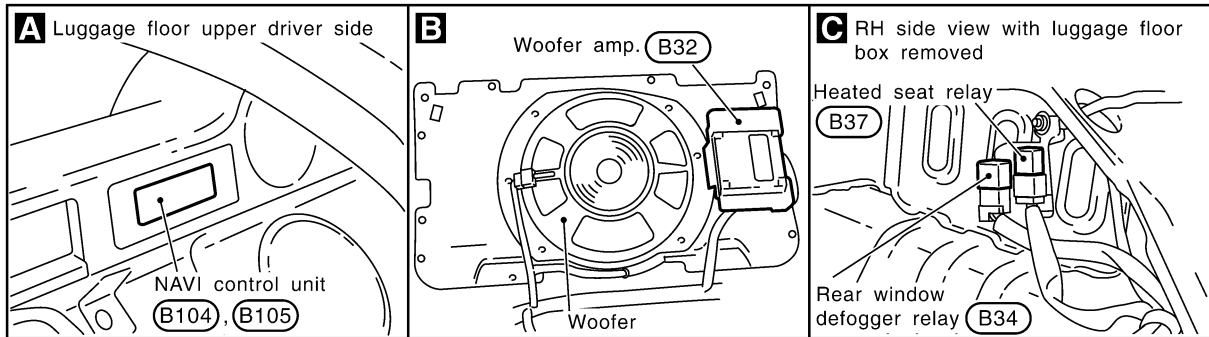
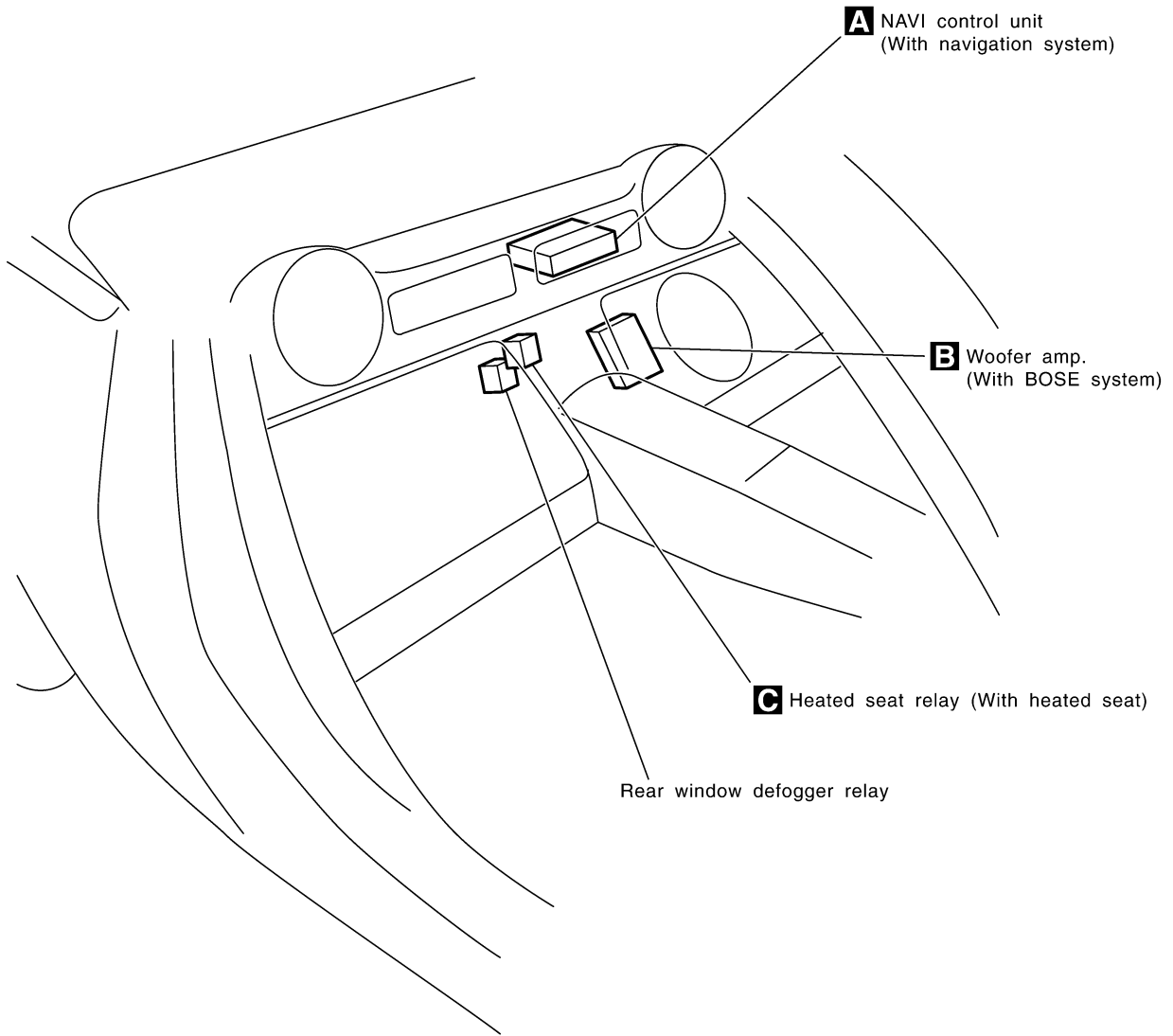
<p>B Driver side view with instrument lower panel removed</p> <p>Circuit breaker B55</p>	<p>C Driver side view with instrument lower panel removed</p> <p>VDC/TCS/ABS control unit E118</p>	<p>D View with steering column cover removed</p> <p>NATS antenna amp. M27 Ignition key cylinder</p>
<p>E Driver side view with instrument upper panel removed</p> <p>GPS antenna</p>	<p>F View with instrument panel removed</p> <p>Blower motor Fuel lid opener relay M59</p>	<p>G Blower motor RH side</p> <p>ECM (F101)</p>
<p>H</p> <p>Low tire pressure warning control unit (M77) Blower motor</p>	<p>J View with console finisher removed</p> <p>Unified meter and A/C amp. M48, M49, M50</p>	<p>K Under passenger seat</p> <p>Front Passenger side seat control unit (B353, B354)</p>
<p>L View with floor console box removed</p> <p>Parking brake lever Air bag diagnosis sensor unit (M55, B13, B14)</p>	<p>M View with floor console box removed</p> <p>parking brake lever Yaw rate / side G sensor (M51)</p>	

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

PG

CKIT0436E

ELECTRICAL UNITS LOCATION

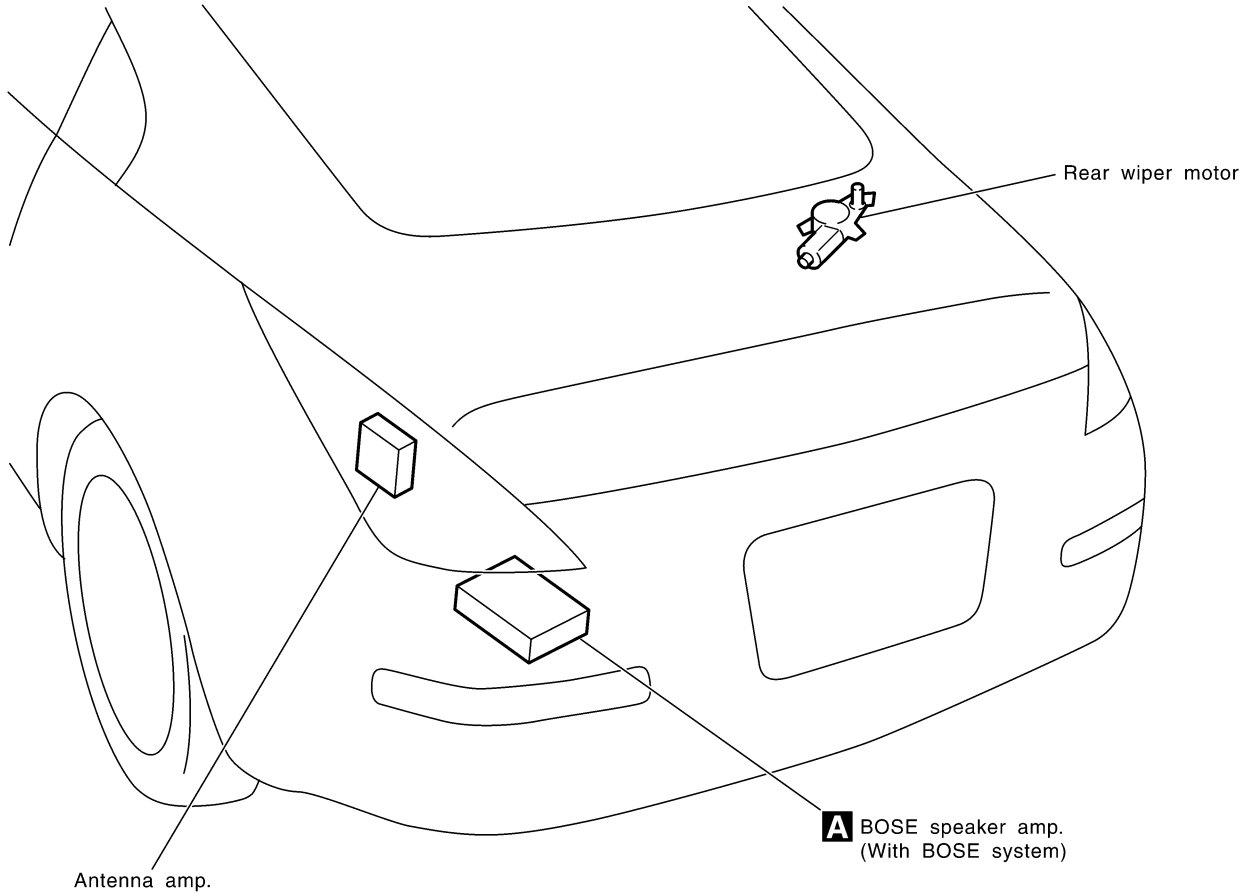


CKIT0349E

ELECTRICAL UNITS LOCATION

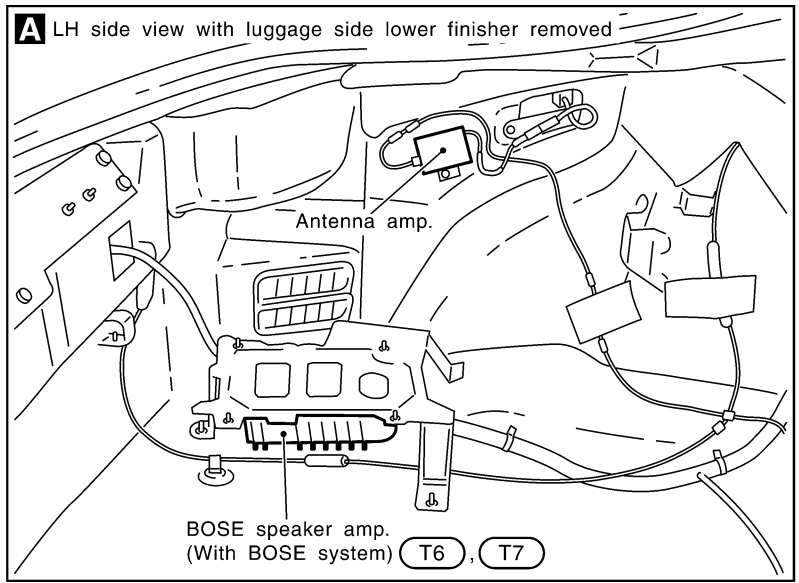
LUGGAGE COMPARTMENT

Coupe Models



A
B
C
D
E
F
G
H
I
J

PG

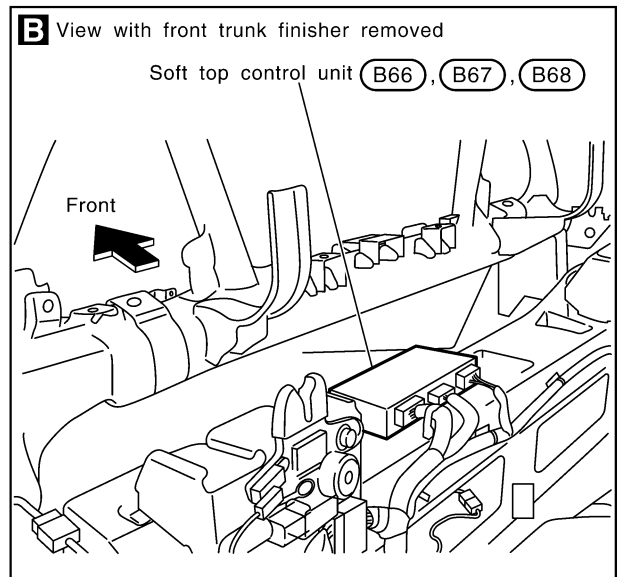
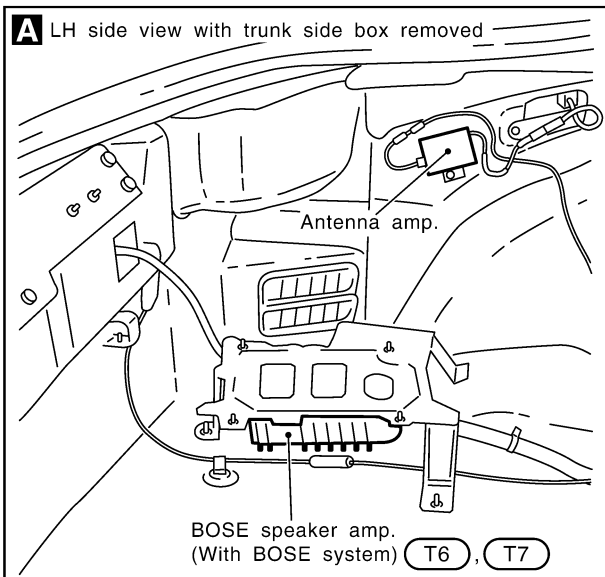
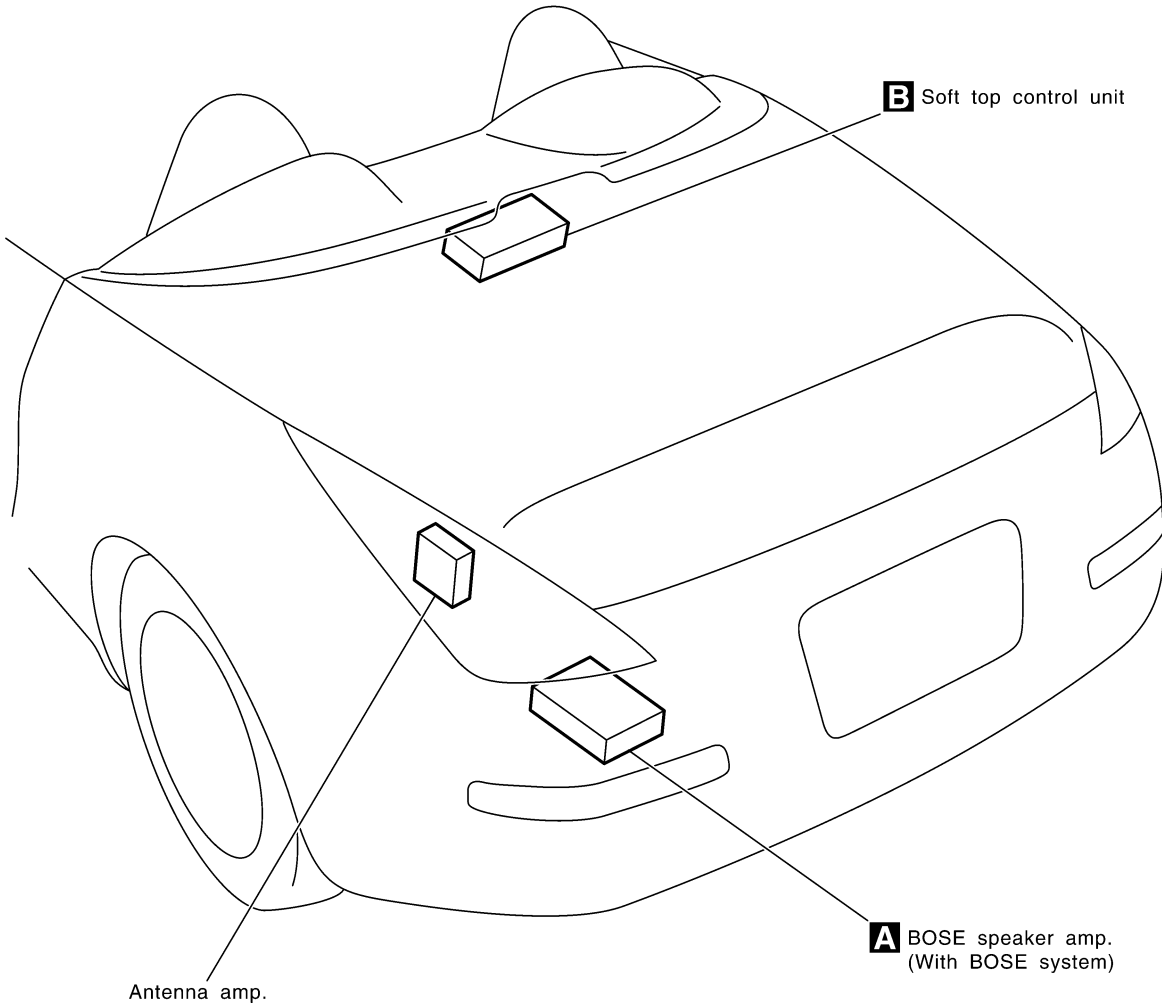


L
M

CKIT0216E

ELECTRICAL UNITS LOCATION

Roadster Models



CKIT0350E

HARNESS CONNECTOR

HARNESS CONNECTOR

PFP:00011

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

AKS0012T

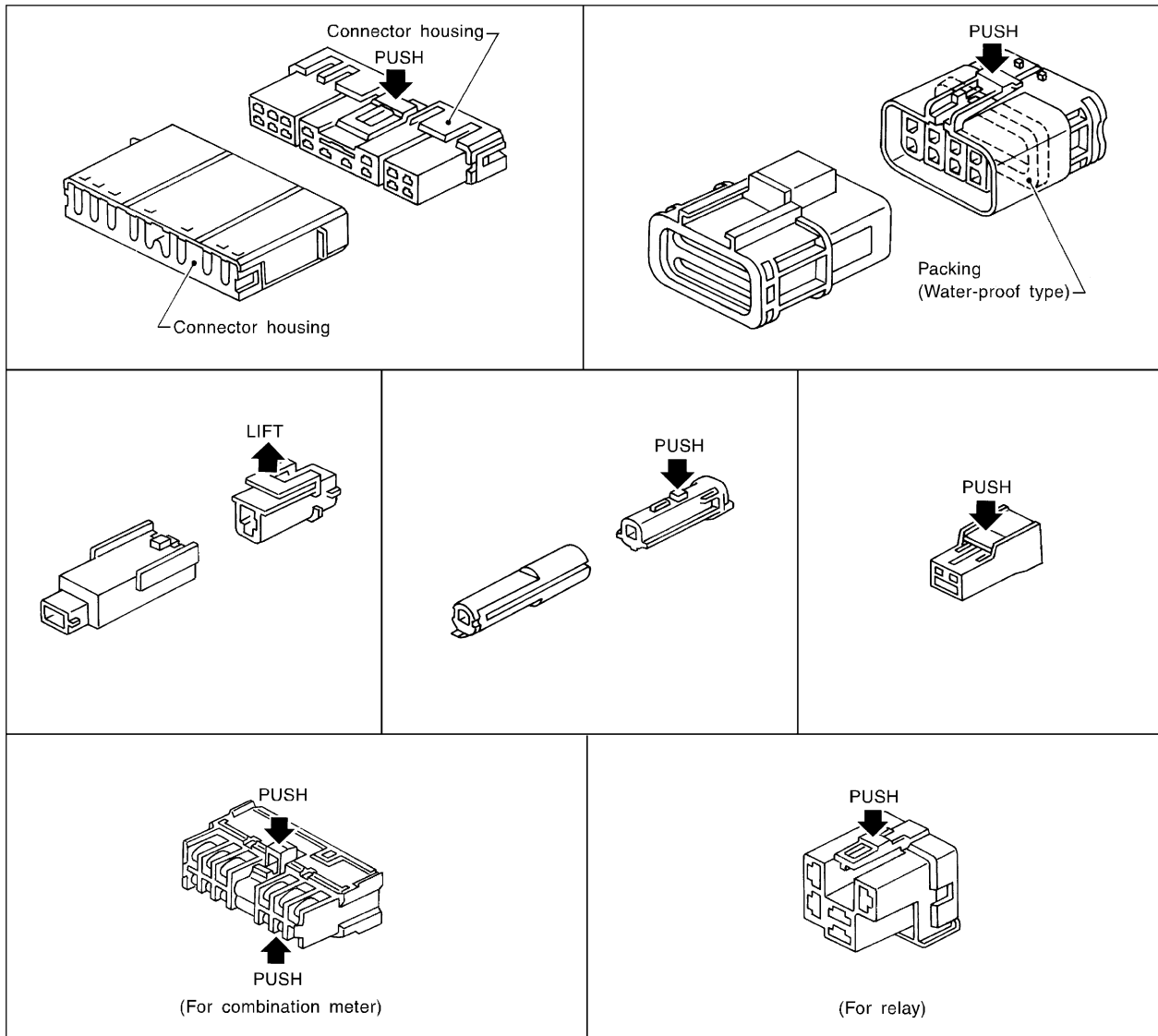
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



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

PG

SEL769DA

HARNESS CONNECTOR

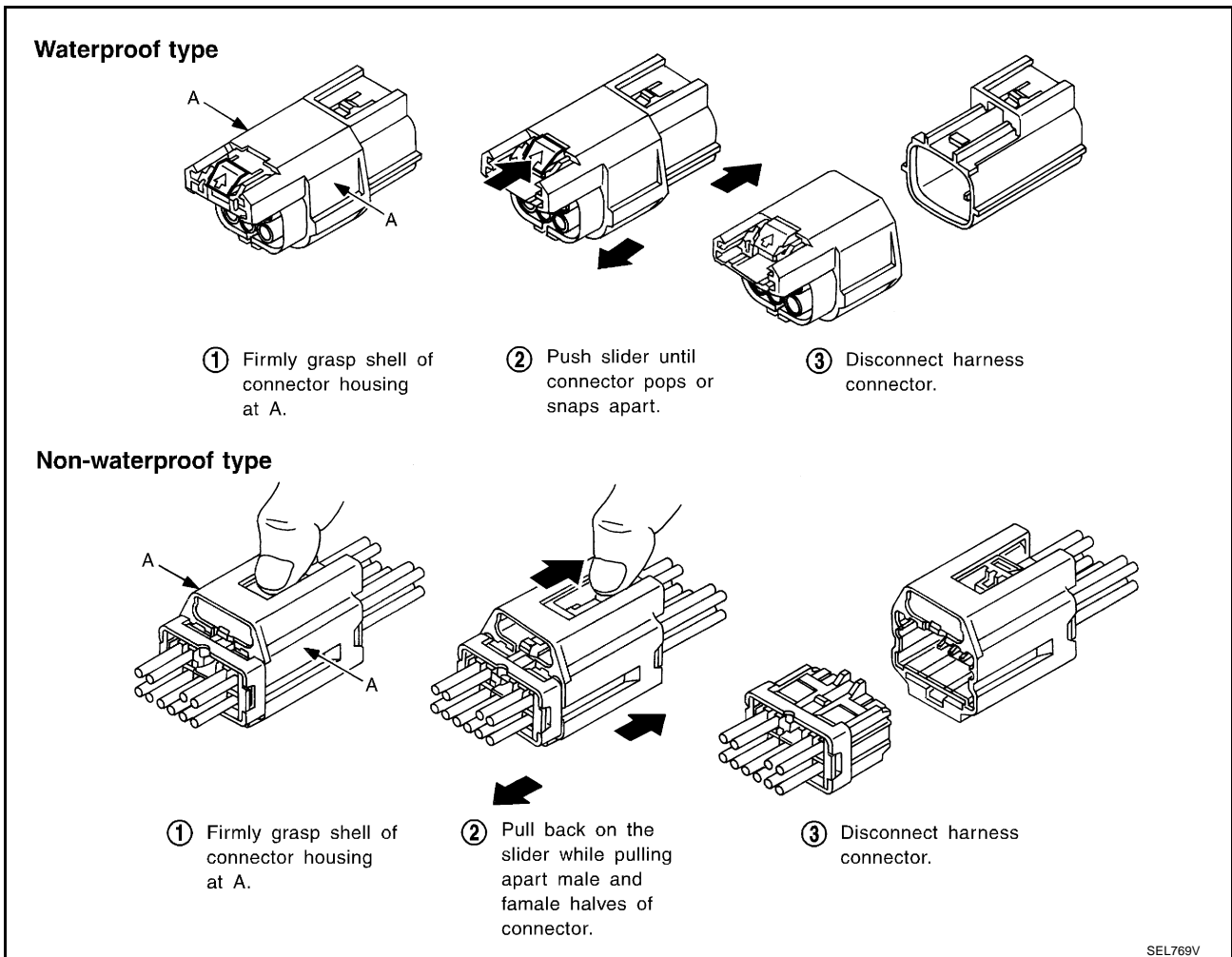
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



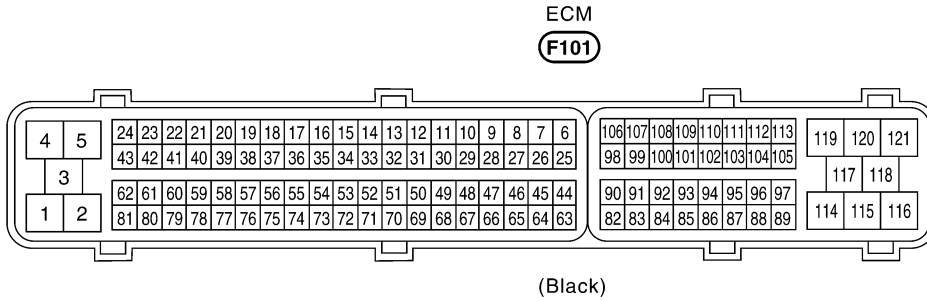
ELECTRICAL UNITS

ELECTRICAL UNITS

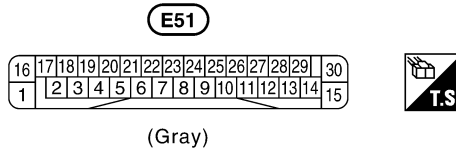
Terminal Arrangement

PFP:00011

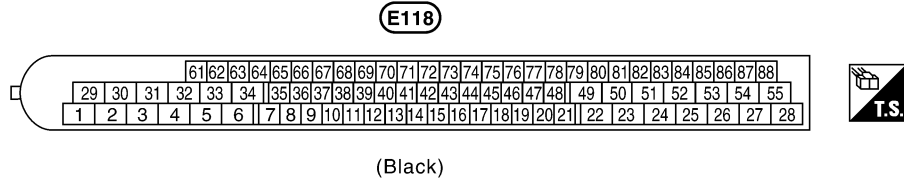
AKS0012V



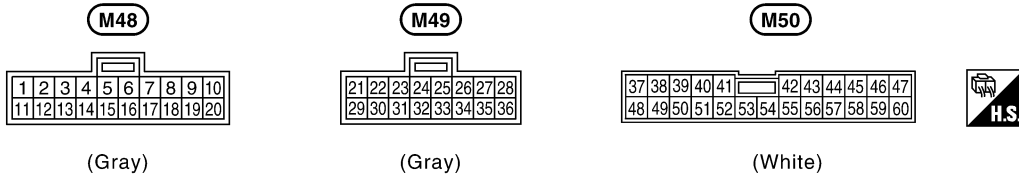
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



VDC/TCS/ABS CONTROL UNIT



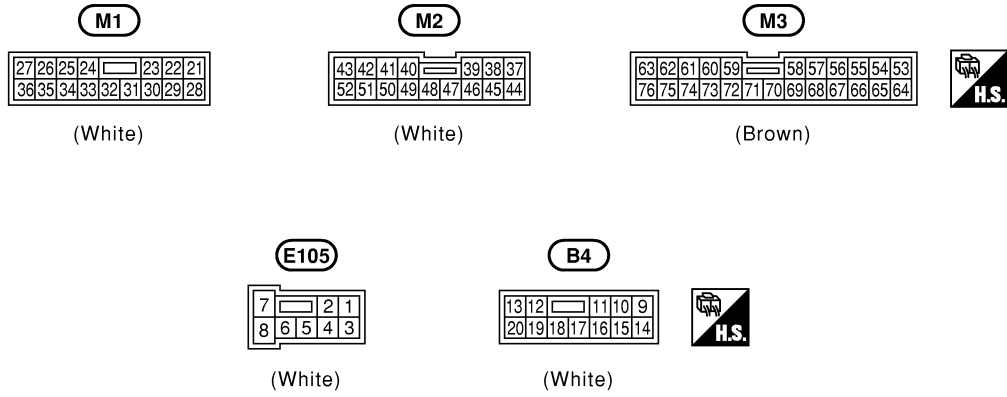
UNIFIED METER AND A/C AMP.



CKIT0294E

ELECTRICAL UNITS

BCM (BODY CONTROL MODULE)



CKIT0156E

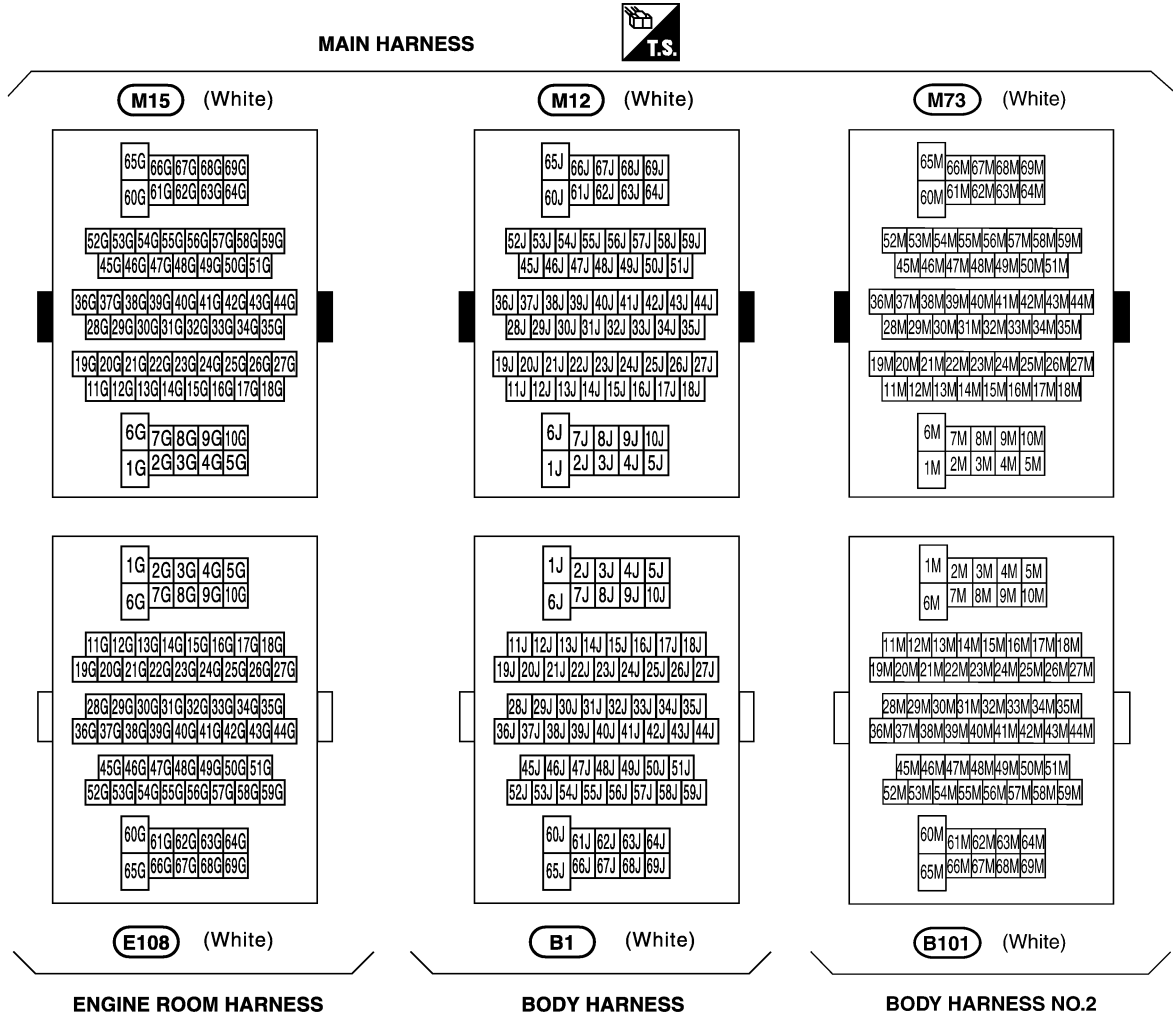
SMJ (SUPER MULTIPLE JUNCTION)

SMJ (SUPER MULTIPLE JUNCTION)

PFP:B4341

Terminal Arrangement

AKS0012W



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

CKIT0184E

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)

CKIT0158E

STANDARDIZED RELAY

PFP:00011

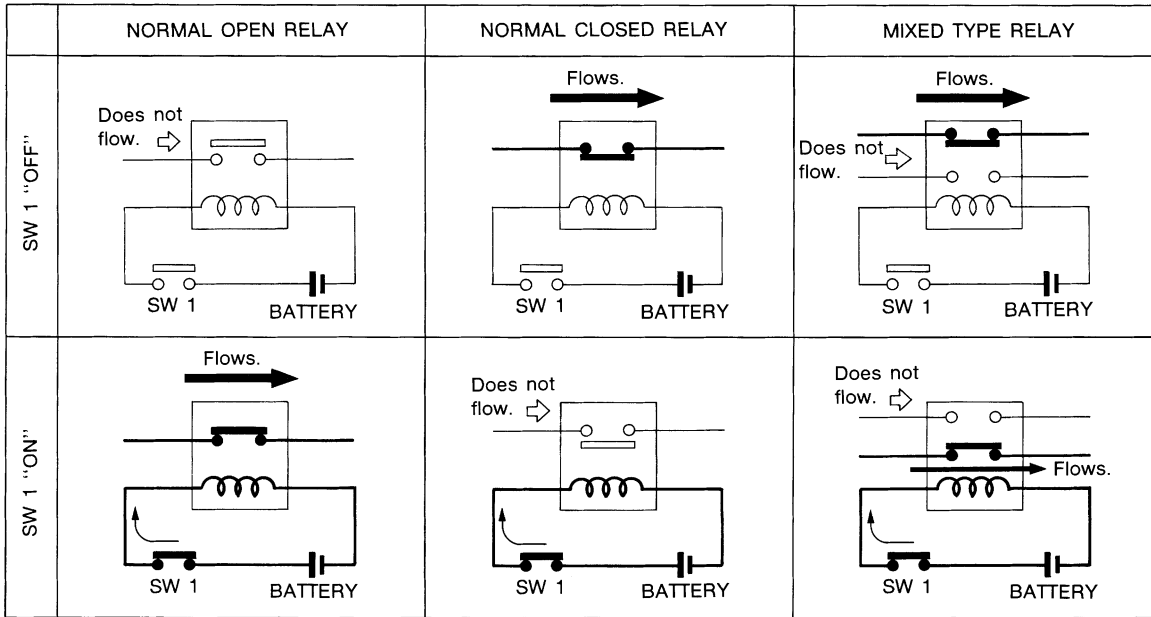
AKS0012X

STANDARDIZED RELAY

Description

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

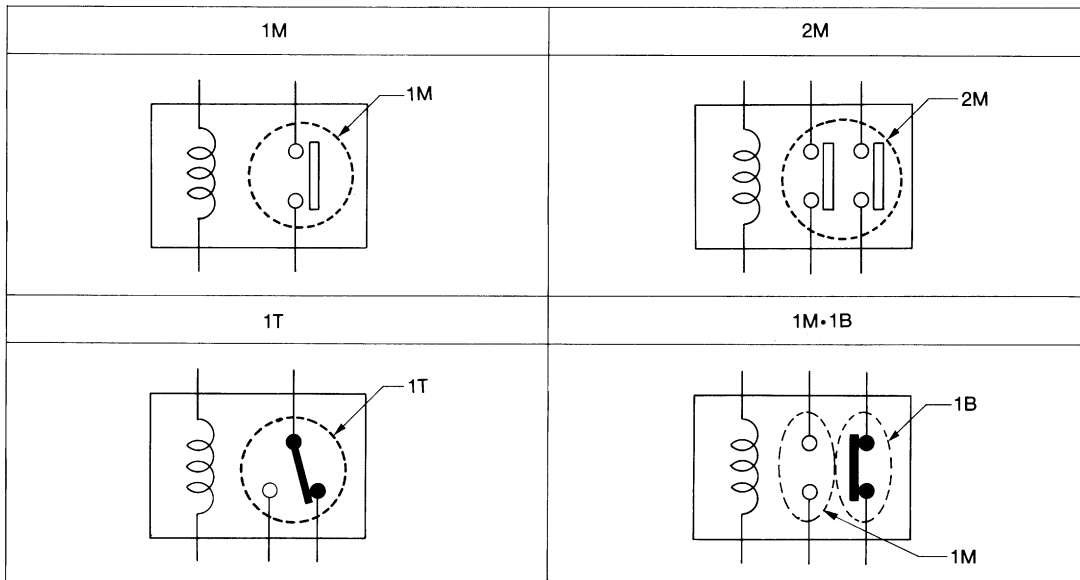
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

TYPE OF STANDARDIZED RELAYS

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

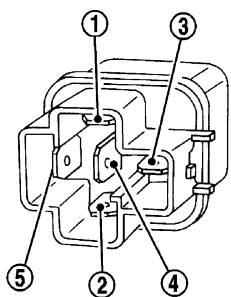
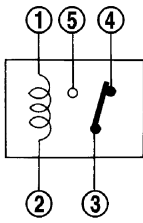
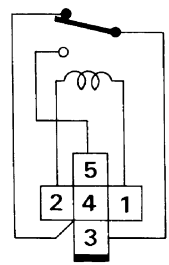
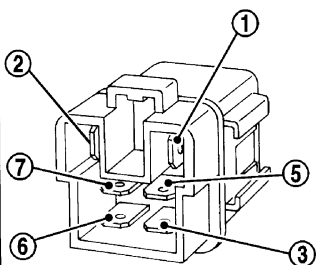
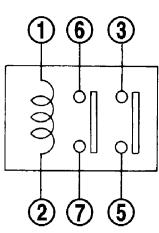
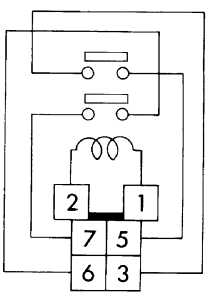
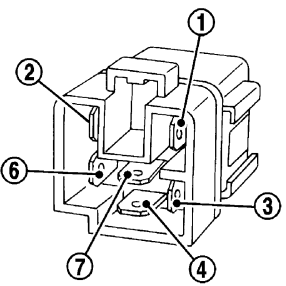
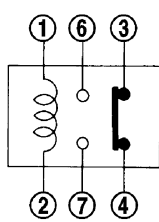
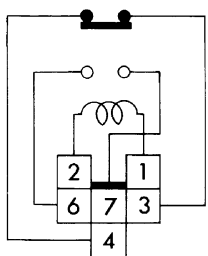
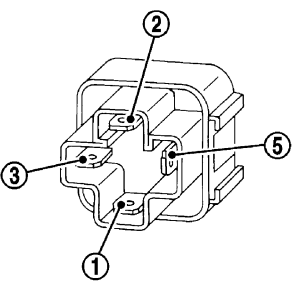
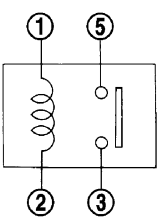
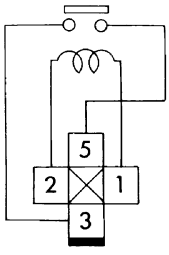
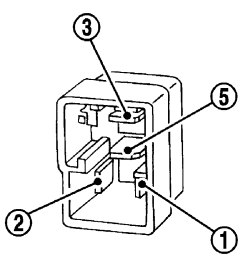
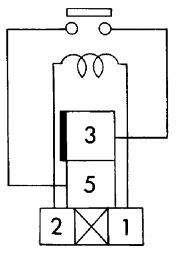


SEL882H

A
B
C
D
E
F
G
H
I
J

PG

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

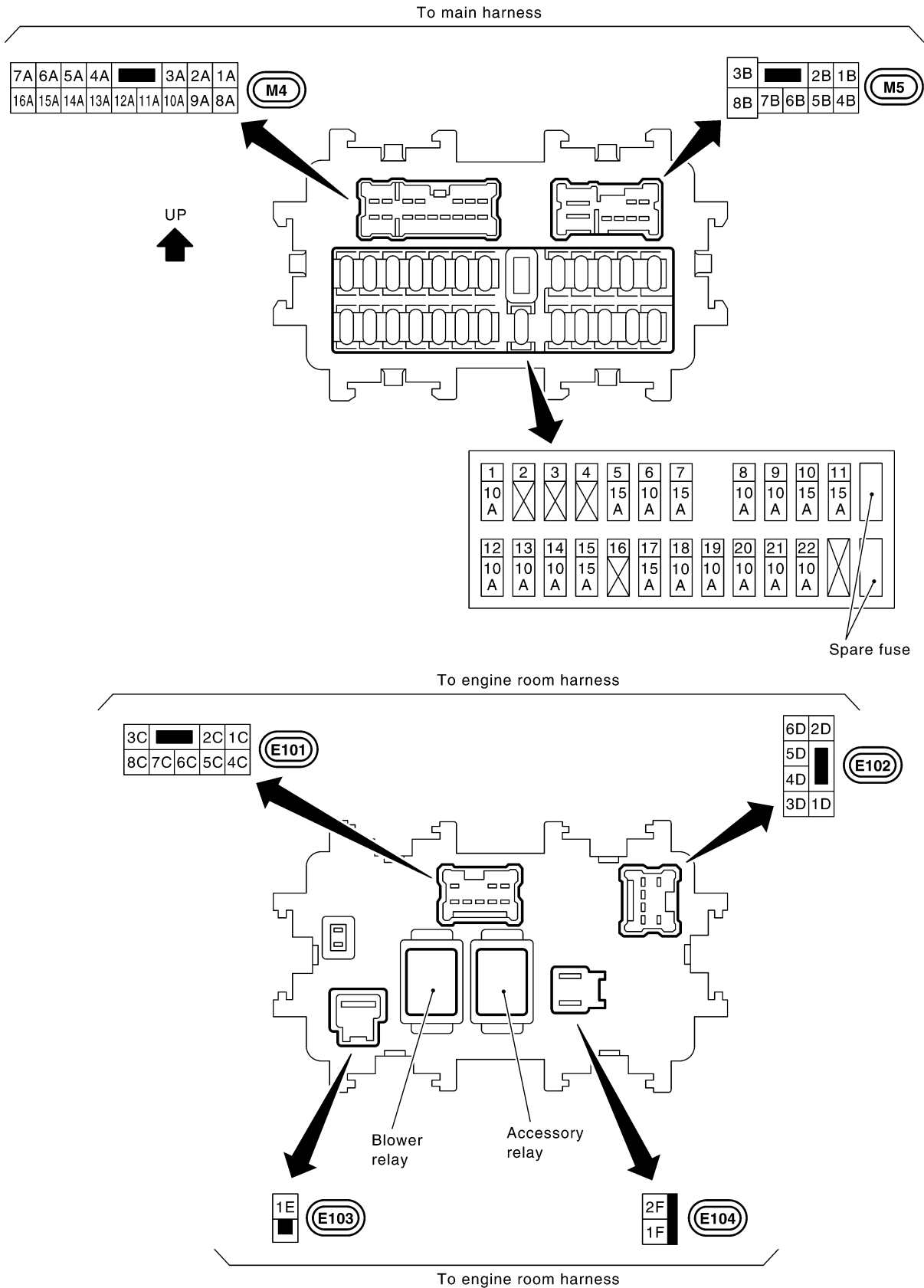
FUSE BLOCK - JUNCTION BOX (J/B)

FUSE BLOCK - JUNCTION BOX (J/B)

PPF:24350

Terminal Arrangement

AKS0012Y



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

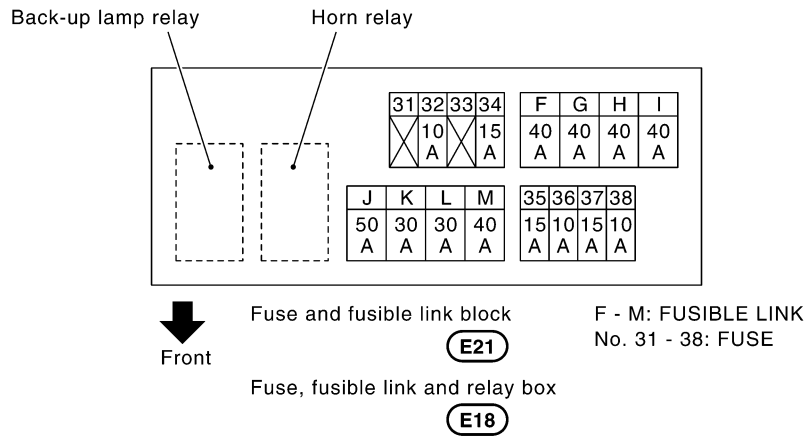
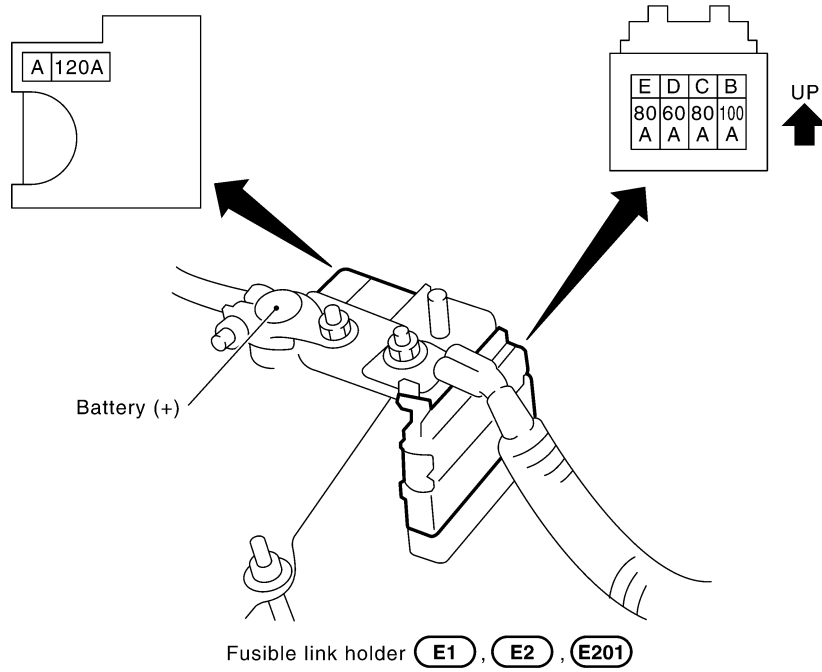
FUSE, FUSIBLE LINK AND RELAY BOX

PFP:24382

FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement

AKS0012Z



CKIT0186E