# SECTION FOR SUPPLY, GROUND & CIRCUIT ELEMENTS

# CONTENTS

APPLICATION NOTICE 3
How to Check Vehicle Type 3
PRECAUTIONS 4
Precautions for Battery Service 4
POWER SUPPLY ROUTING CIRCUIT
Schematic/Type 1 5
Wiring Diagram — POWER —/Type 1 6
BATTERY POWER SUPPLY — IGNITION SW.
IN ANY POSITION6
ACCESSORY POWER SUPPLY — IGNITION
SW. IN "ACC" OR "ON"11
IGNITION POWER SUPPLY — IGNITION SW.
IN "ON" AND/OR "START" 12
Schematic/Type 2 17
Wiring Diagram — POWER —/Type 2 18
BATTERY POWER SUPPLY — IGNITION SW.
IN ANY POSITION
ACCESSORY POWER SUPPLY — IGNITION
SW. IN "ACC" OR "ON"
IGNITION POWER SUPPLY — IGNITION SW. IN "ON" AND/OR "START"
Fuse
Circuit Breaker
IPDM E/R (INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM)
System Description
SYSTEMS CONTROLLED BY IPDM E/R
CAN COMMUNICATION LINE CONTROL 30
IPDM E/R STATUS CONTROL
CAN Communication System Description
CAN Communication Unit
Function of Detecting Ignition Relay Malfunction 31
CONSULT-II Function (IPDM E/R)
CONSULT-II BASIC OPERATIÓN
SELF-DIAG RESULTS
DATA MONITOR
ACTIVE TEST 34
Auto Active Test 35
DESCRIPTION

OPERATION PROCEDURE	F
INSPECTION IN AUTO ACTIVE TEST MODE 35	
Schematic/Type 137	
Schematic/Type 2	G
IPDM E/R Terminal Arrangement/Type 1	
IPDM E/R Terminal Arrangement/Type 240	
IPDM E/R Power/Ground Circuit Inspection41	Н
Inspection With CONSULT-II (Self-Diagnosis) 42	
Removal and Installation of IPDM E/R43	
REMOVAL43	
INSTALLATION43	
GROUND 44	
Ground Distribution44	
MAIN HARNESS/TYPE 1 44	J
MAIN HARNESS/TYPE 2 46	
ENGINE ROOM HARNESS/TYPE 1 48	
ENGINE ROOM HARNESS/TYPE 251	PG
ENGINE CONTROL HARNESS/TYPE 1	10
ENGINE CONTROL HARNESS/TYPE 2	
BODY HARNESS/TYPE 158	
BODY HARNESS/TYPE 263	L
BODY NO. 2 HARNESS/TYPE 166	
BODY NO. 2 HARNESS/TYPE 267	
TAIL HARNESS/TYPE 168	M
TAIL HARNESS/TYPE 270	
BACK DOOR HARNESS72	
HARNESS73	
Harness Layout73	
HOW TO READ HARNESS LAYOUT	
OUTLINE74	
MAIN HARNESS/TYPE 175	
MAIN HARNESS/TYPE 277	
ENGINE ROOM HARNESS/TYPE 1	
ENGINE ROOM HARNESS/TYPE 2	
ENGINE CONTROL HARNESS/TYPE 1	
ENGINE CONTROL HARNESS/TYPE 2	
BODY HARNESS/TYPE 1	
BODY HARNESS/TYPE 2	
BODY NO. 2 HARNESS/TYPE 1 103	
BODY NO. 2 HARNESS/TYPE 2 104	

А

В

С

D

Е

TAIL HARNESS/TYPE 110	5
TAIL HARNESS/TYPE 210	8
TAIL NO. 2 HARNESS11	1
ROOM LAMP HARNESS/TYPE 1 11.	2
ROOM LAMP HARNESS/TYPE 2 11	4
DOOR HARNESS 11	
Wiring Diagram Codes (Cell Codes) 11	8
ELECTRICAL UNITS LOCATION12	
Electrical Units Location12	
ENGINE COMPARTMENT12	
PASSENGER COMPARTMENT/TYPE 1 12	2
PASSENGER COMPARTMENT/TYPE 2 12	5
LUGGAGE COMPARTMENT12	
HARNESS CONNECTOR13	0
Description13	0
HARNESS CONNECTOR (TAB-LOCKING	
TYPE)13	0
HARNESS CONNECTOR (SLIDE-LOCKING	

TYPE)	131
HARNESS CONNECTOR (LEVER LOCKING	3
TYPE)	132
ELECTRICAL UNITS	133
Terminal Arrangement/Type 1	133
Terminal Arrangement/Type 2	135
SMJ (SUPER MULTIPLE JUNCTION)	137
Terminal Arrangement	137
STANDARDIZED RELAY	139
Description	139
NORMAL OPEN, NORMAL CLOSED AND	
MIXED TYPE RELAYS	139
TYPE OF STANDARDIZED RELAYS	139
FUSE BLOCK - JUNCTION BOX (J/B)	141
Terminal Arrangement	141
FUSE, FUSIBLE LINK AND RELAY BOX	142
Terminal Arrangement	142

## **APPLICATION NOTICE**

# APPLICATION NOTICE

## How to Check Vehicle Type

Check the vehicle identification number (chassis number).

Identification number (chassis number)	Service information	
For serial		
<ul> <li>JN1AZ34D300001 – JN1AZ34D330000</li> </ul>		
<ul> <li>JN1AZ34E350001 – JN1AZ34E380000</li> </ul>	Туре 1	
<ul> <li>JN1AZ36D400001 – JN1AZ36D430000</li> </ul>		
<ul> <li>JN1AZ36A450001 – JN1AZ36A480000</li> </ul>		
From serial		
• JN1AZ34D330001 -		
• JN1AZ34E380001 -	Type 2	I
• JN1AZ36D430001 -		
• JN1AZ36A480001 -		

PG

L

Μ

J

G

Н

L

PFP:00000

NKS004S9

А

## PRECAUTIONS

**Precautions for Battery Service** 

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.

PFP:00001

NKS0054E

## POWER SUPPLY ROUTING CIRCUIT

#### Schematic/Type 1 NKS000DZ IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) (CPU) 80 10 8 engine room) 15A MIL/DL NONDTC START BLOWER RELAY A/C METER 3METER To CAN system 15A 10A This relay is built into the IPDM E/R (Intelligent power distribution module WIPER WIP/R FRONT WIPER HIGH (\*) 90 -10 ത 83 83 30A : \*1 20A: WIPER DATA LINE MAIN NONDTC BACK/L NAVI DATA LINE 15A 0 P/SCKT ACCESSORY RELAY 00 10A : Coupe models U : For U.S.A. C : For Canada CP : Coupe models ABS TCS EPS EPS FRONT WIPER RELAY 6 10 4 FILID KEYLES VERSEC VERSEC WINDOW MIRROR HILLAMP TOURN TOURN TAIL/L LLL TAIL/L COMM MANIT COMM 5 FUEL PUMP (\*) (\*) \* 15A 81 -lı ത 0 F/PUMP 00 3810A $\infty$ HSEAT 에 AC 에 RELAY (\*) 15A 15 15A 37 Ş 10A AUDIO NAVI COMM ASCIND MILIUL TTORSSCIND MILIUL TTORSS CHARDE CHARDE CHARDE TUTRL TUTRL TUTRL MARN METER MMETER MMETER MMETER MMETER ത 10A THROTTLE CONTROL MOTOR (\*) 10A CHARGE SRS 15A 35 15A 87 5 ٩ 588 282 KEYLES VEHSEC HORN 10A $\overline{\mathcal{O}}$ FTTS ASSCRS ASSCRS ASSCRS ASSCRS AMMSW TWMSRN ABS AMSRN ASSCR AMSRN AMSRN AMSRN COMM 86 86 15A oll LOW PI RELAY (\*) ECM/PW MIL/DL NONDTC ₹Ē-MAIN HELEBI TEVELEBI TRIVECT TRIVECT NATS NATS DTRL DTRL DTRL DTRL TRILL ROOML ILL CHIME WIPER WIPER RELAY (\*) 15A 76 VEHSEC H/LAMP DTRL 33 10 DTRL $\infty$ 5 REAR WINDOW DEFOGGER RELAY START 910A 80Z 80A ത 32 32 SEAT MAIN 75A GNITION SWITCH 10A PG ₽₽ 5 10A 8 ٩ G ШU $\boxtimes$ 22 22 15A ELID -Elg $\bowtie$ 21 21 ABS RELAY (\*) $\infty$ D/LOCK KEYLES ROOM/L CHIME MAIN, MAFS POS, PHSB1 PHSB2, PGC/V VENTV, IVCB1 IVCB2, EVCSB1 EVCSB2, EVCB1 EVCB2, IGNSYS КÃ ВŐA 15A þ 10A $\bowtie$ VDCS Ī ത്പ VEHSEC H/LAMP DTRL 20A ٦<u>5</u> ASC/BS BRK/SW ASCBOF NONDTC SHIFT ABS TCS FIROOF FIROOF STOP/L **\***1 $\overline{\mathbb{X}}$ ß NATS $\overline{\phantom{a}}$ 10A **4**₽ HEADLAMP HIGH RELAY (\*) COOLF $\boxtimes$ 10A 10A 40 ₽ VEHSEC H/LAMP DTRL TWARN TULOCK TLID FFLID FFLID SEAT DTRLES SEAT DTRLES COMBSW COMBSW TAULL ILL COMBSW COMBSW COOLF CIRCUIT BREAKER 00 40A Ъ 15A TAIL LAMP RELAY F/ROOF AUDIO $\bowtie$ $\boxtimes$ A20A S S S S S S 10A TAIL/L **F** T/WARN, D/LOCK TLID, F/LID KEYLES, VEHSEC NATS, WINDOW DEF, SEAT Ń 00 ₽ 40 F DEF, SEAI H/LAMP, DTRL TURN, COMBSW TAIL/L, ROOML ILL, CHIME WIPER, WIP/R START CHARGE $\times$ BATTERY 00∎

TKWT4101E

PFP:24110

А

В

С

D

Е

F

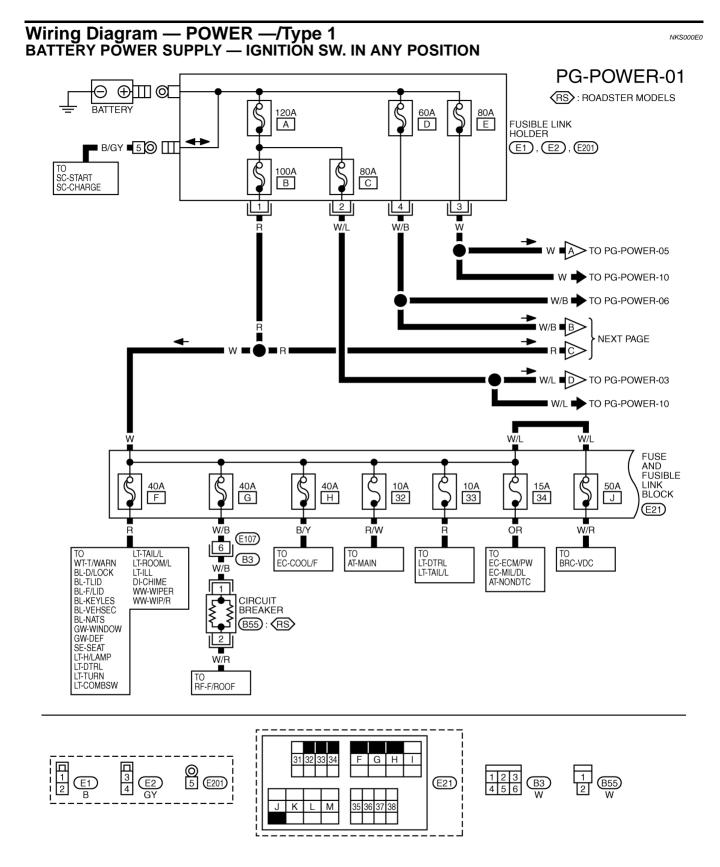
G

Н

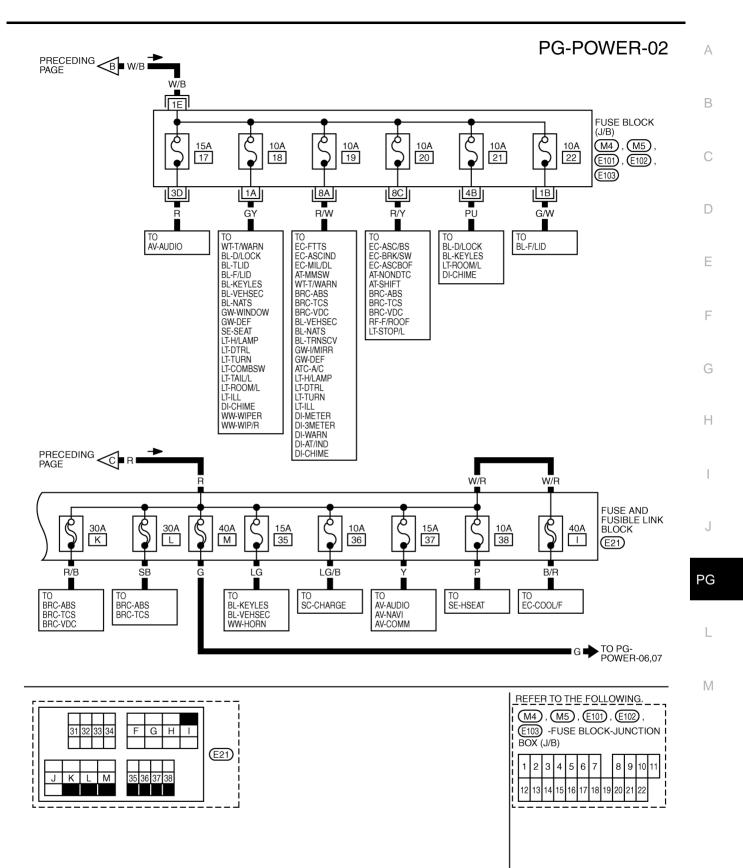
J

L

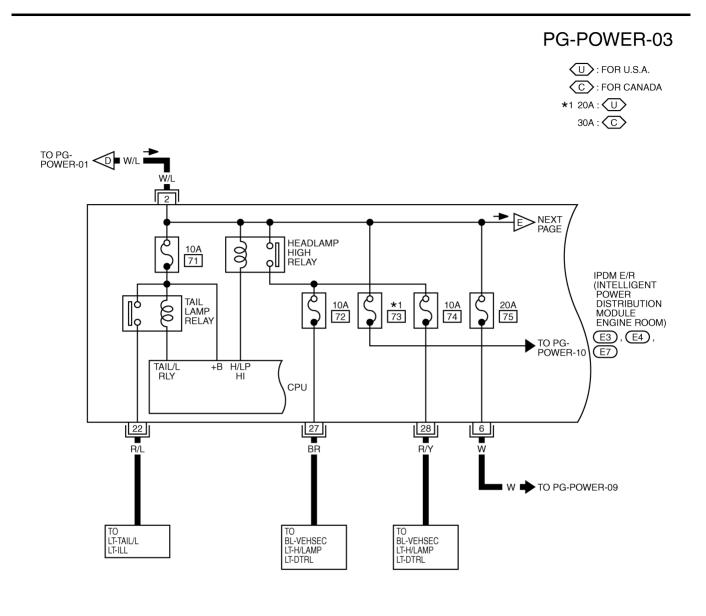
Μ

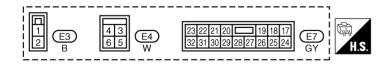


TKWT4102E



TKWT4103E



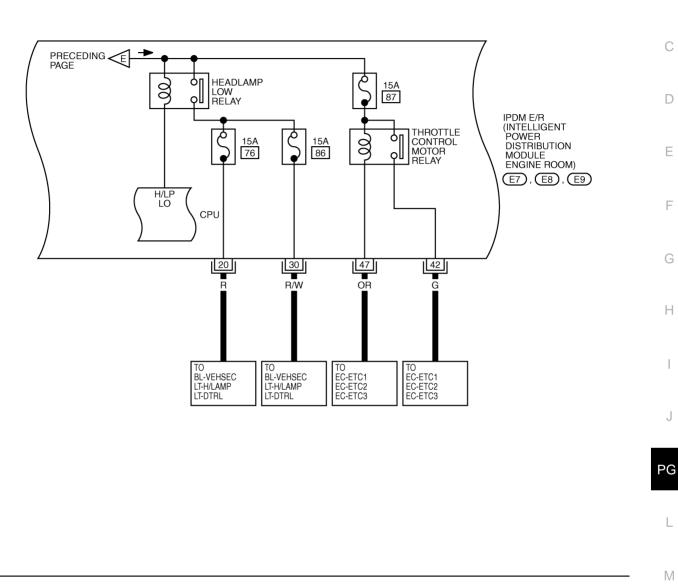


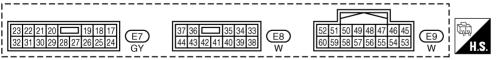
TKWT4104E

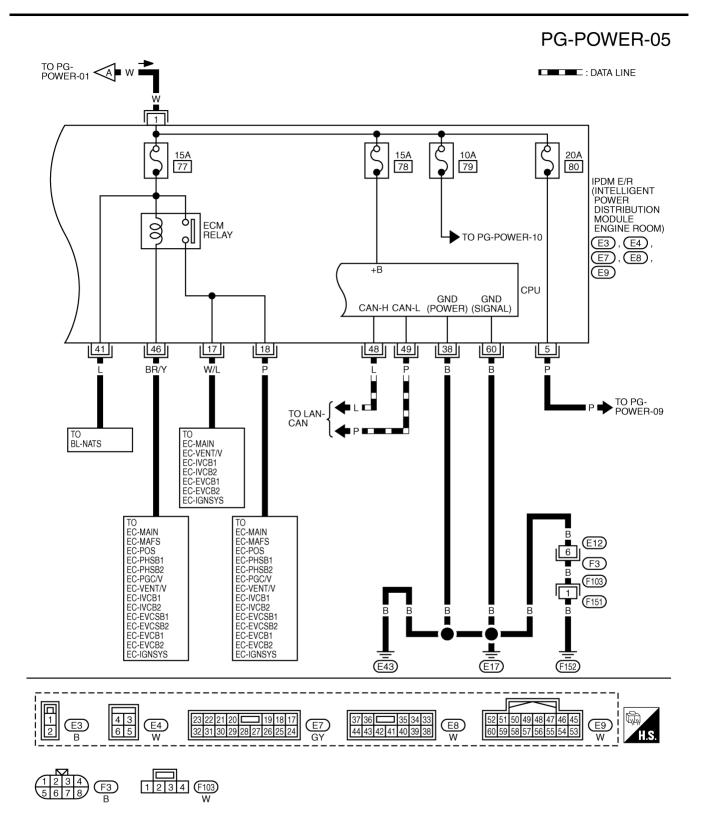
PG-POWER-04

А

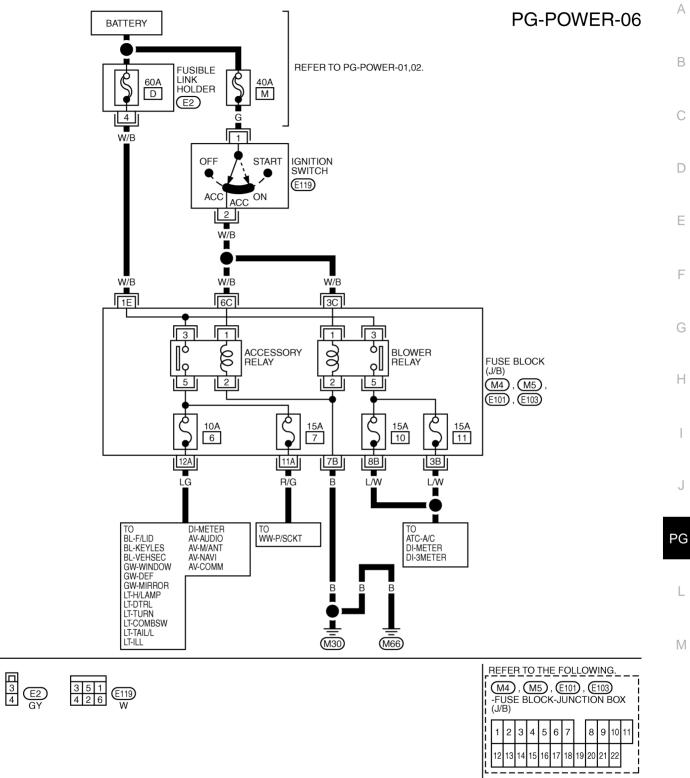
В





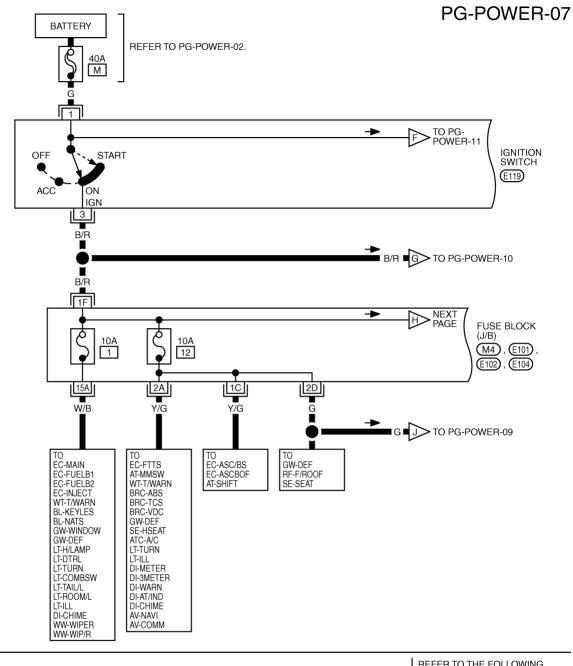


#### ACCESSORY POWER SUPPLY - IGNITION SW. IN "ACC" OR "ON"



TKWT4107E

#### **IGNITION POWER SUPPLY — IGNITION SW. IN "ON" AND/OR "START"**





	REFER TO THE FOLLOWING. (M4), (E10), (E102), (E104) -FUSE BLOCK-JUNCTION BOX (J/B)												
ŀ	1	2	3	4	5	6	7		8	9	10	11	
	12 13 14 15 16 17 18 19 20 21 22												
ľ			-			-			-			-	

TKWT4108E

م

5A G/Y

TO

TO EC-ASCIND EC-MIL/DL AT-MSW AT-NONDTC WT-T/WARN BRC-ABS BRC-ABS BRC-VDC SRS-SRS GW-I/MIRR BE-F/ROOF

GW-I/MIRR RF-F/ROOF SC-CHARGE LT-H/LAMP LT-DTRL LT-TURN LT-IURN LT-ILL DI-METER DI-3METER DI-3METER DI-4MARN

DI-AT/IND

DI-CHIME

10A 14

# **PG-POWER-08**

FUSE BLOCK (J/B)

(M4)

ट

•

9A

R/B

TO EC-02H2B1 EC-02H2B2 EC-02S2B1 EC-02S2B2 EC-FUELB1 EC-FUELB2 EC-AF1HB1 EC-AF1HB1 EC-AF1B2

15A 15



А

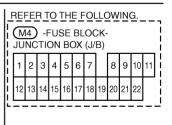




Н

G

Μ



TKWM1379E

┢

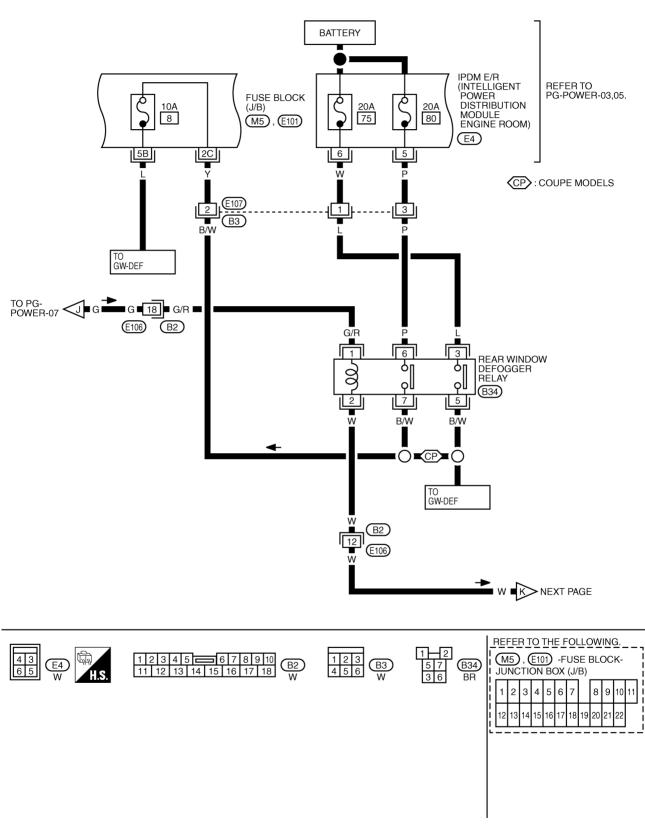
Ò

• 6A

R

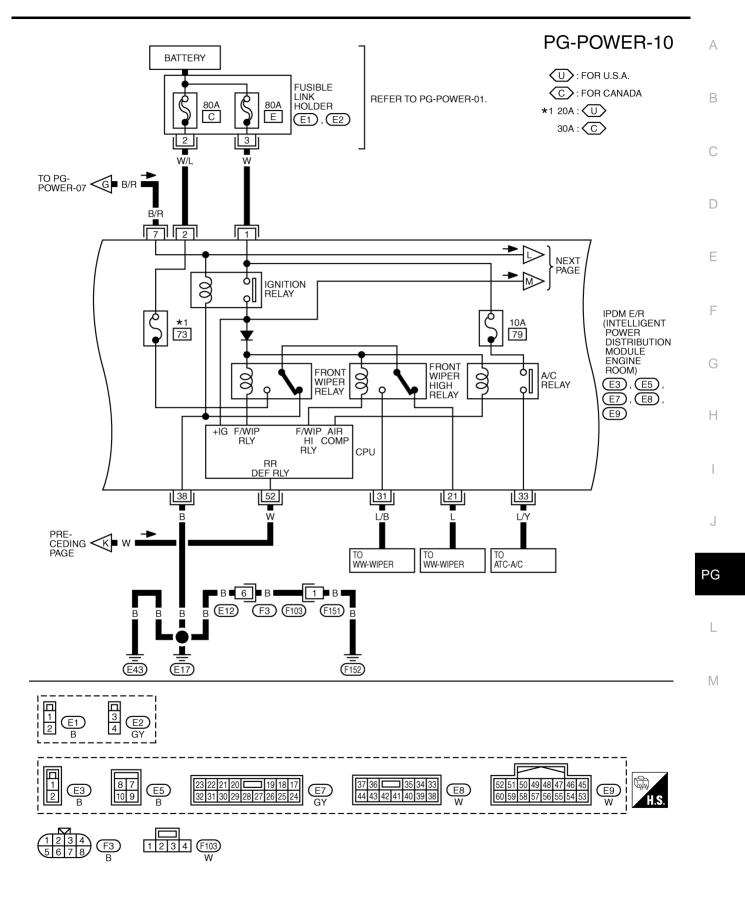
TO SRS-SRS

10A 13

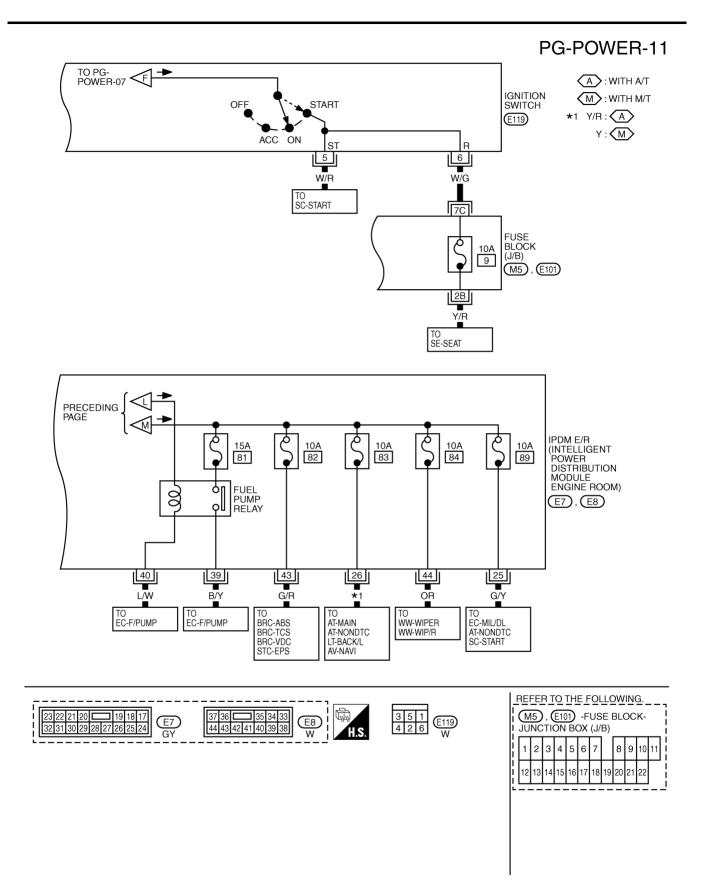


**PG-POWER-09** 

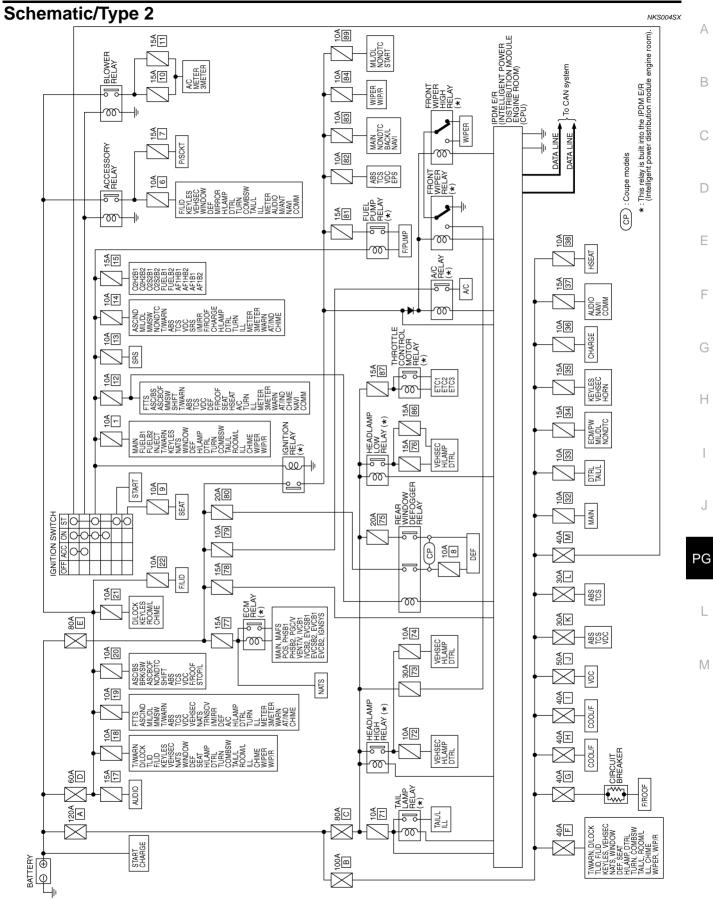
TKWT4109E



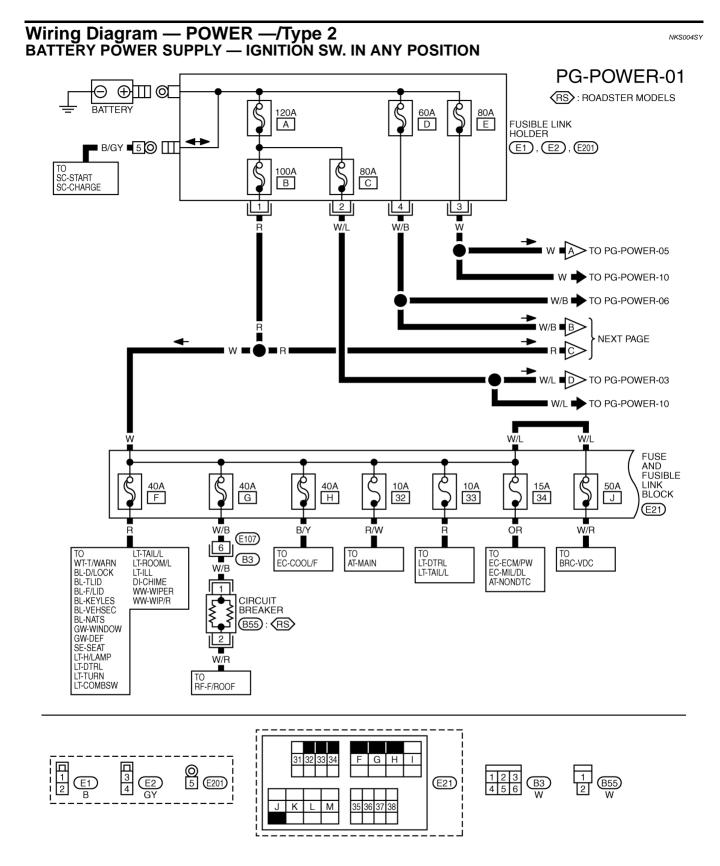
TKWT4110E



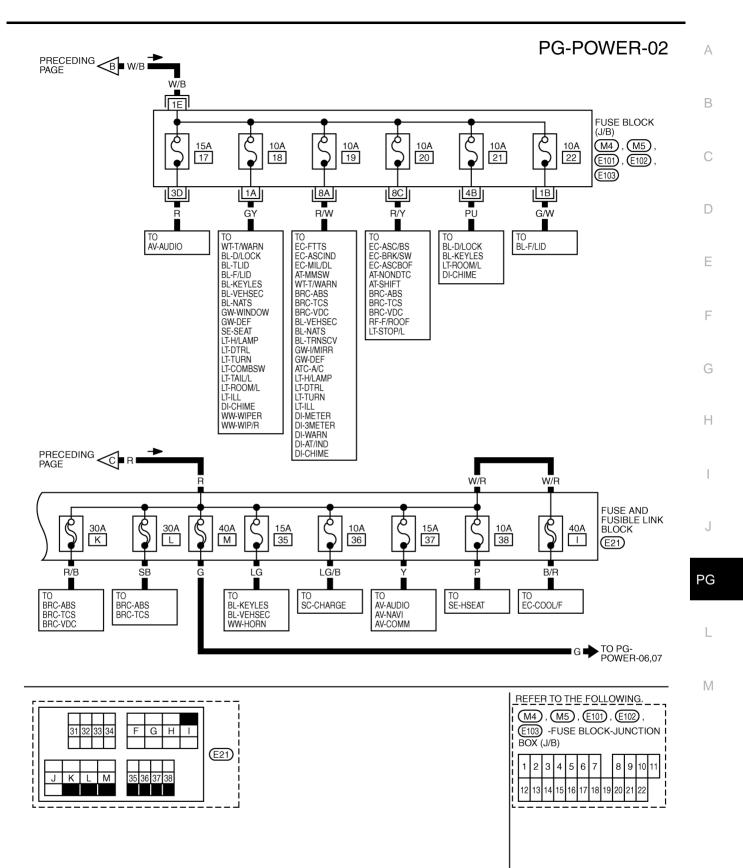
TKWT4111E



TKWT5636E

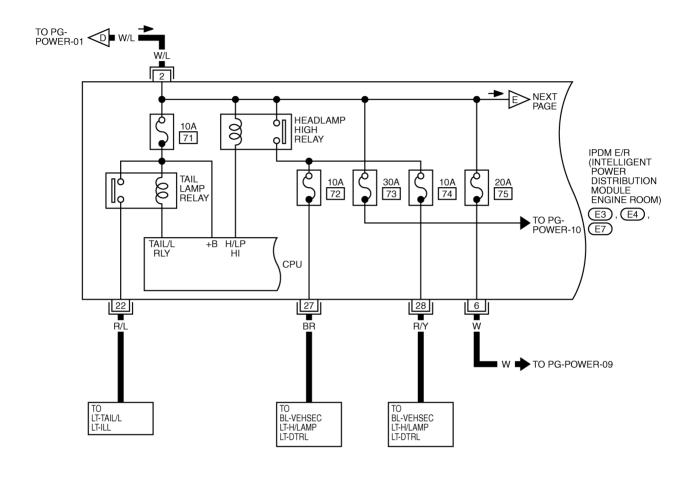


TKWT4102E



TKWT4103E

## PG-POWER-03



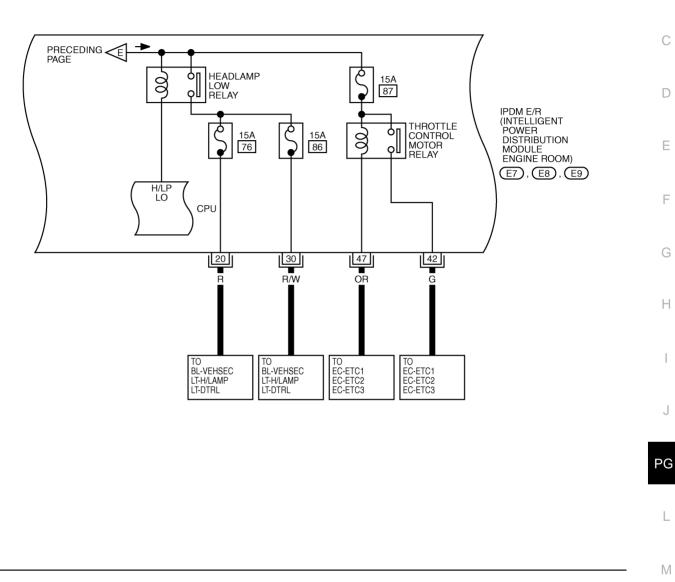


TKWT5637E

PG-POWER-04

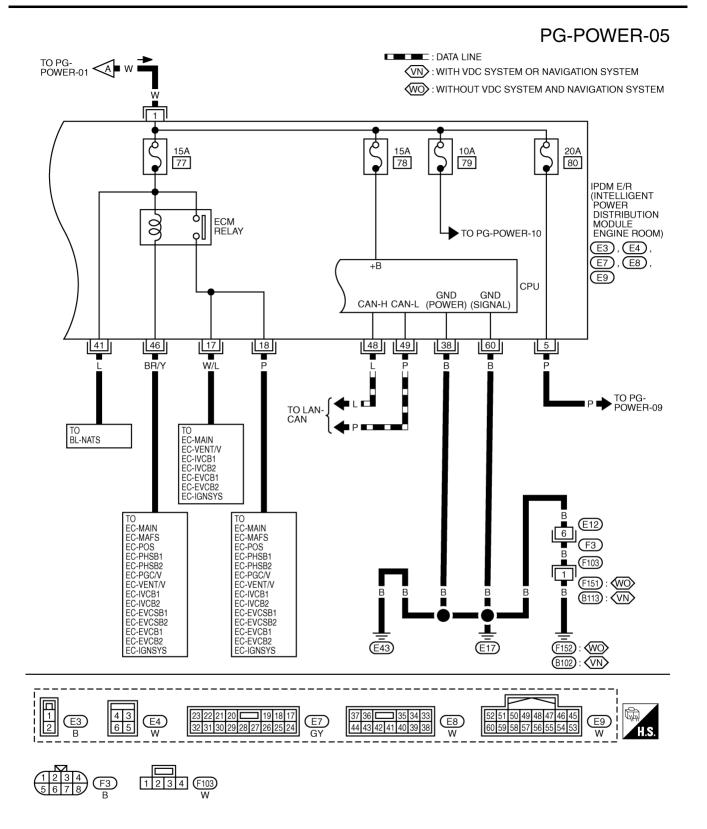
А

В

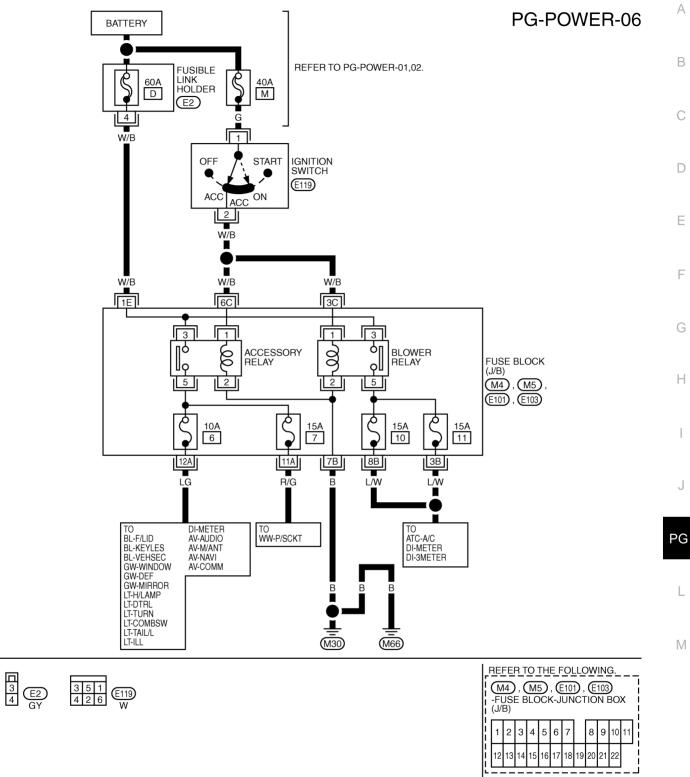




TKWT4105E

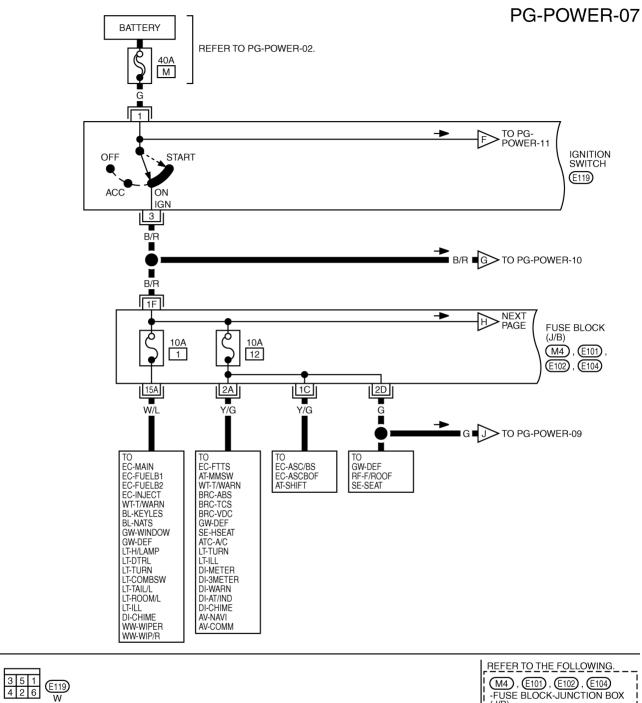


#### ACCESSORY POWER SUPPLY - IGNITION SW. IN "ACC" OR "ON"



TKWT4107E

#### **IGNITION POWER SUPPLY — IGNITION SW. IN "ON" AND/OR "START"**



(M4), (E101), (E102), (E104) -FUSE BLOCK-JUNCTION BOX (J/B)													
i.	1	2	3	4	5	6	7		8	9	10	11	
ľ	12	13	14	15	16	17	18	19	20	21	22		
-			-			-			-			_	_

TKWT5639E

م

5A G/Y

TO

TO EC-ASCIND EC-MIL/DL AT-MSW AT-NONDTC WT-T/WARN BRC-ABS BRC-ABS BRC-VDC SRS-SRS GW-I/MIRR BE-F/ROOF

GW-I/MIRR RF-F/ROOF SC-CHARGE LT-H/LAMP LT-DTRL LT-TURN LT-IURN LT-ILL DI-METER DI-3METER DI-3METER DI-4MARN

DI-AT/IND

DI-CHIME

10A 14

# **PG-POWER-08**

FUSE BLOCK (J/B)

(M4)

ट

•

9A

R/B

TO EC-02H2B1 EC-02H2B2 EC-02S2B1 EC-02S2B2 EC-FUELB1 EC-FUELB2 EC-AF1HB1 EC-AF1HB1 EC-AF1B2

15A 15



А







Н



J

Μ

REFER TO THE FOLLOWING. M4 -FUSE BLOCK-JUNCTION BOX (J/B) 23 4 5 6 7 8 9 10 11 12 13 14 15 20 16 17 18 19 21 22

1

TKWM1379E

#### Revision: 2006 November

┢

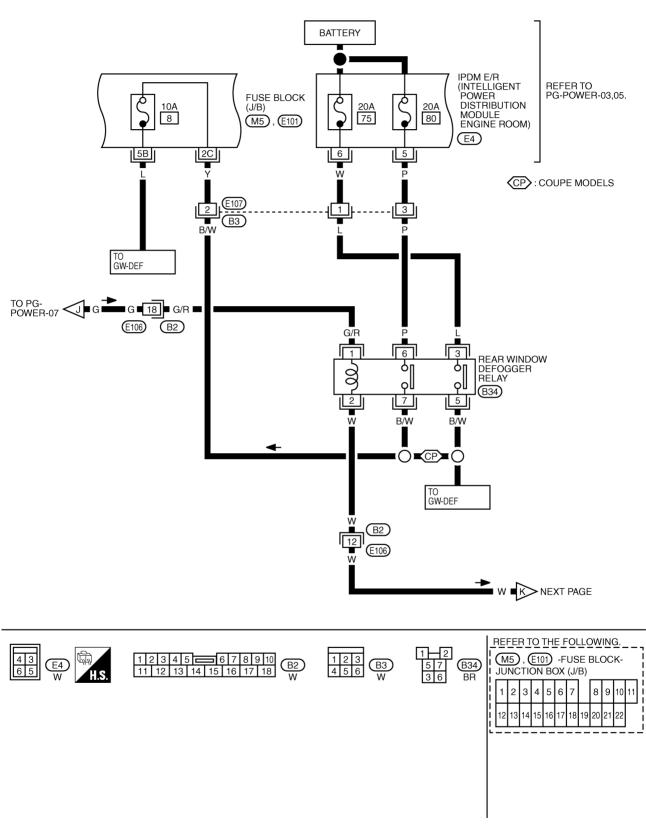
Ò

• 6A

R

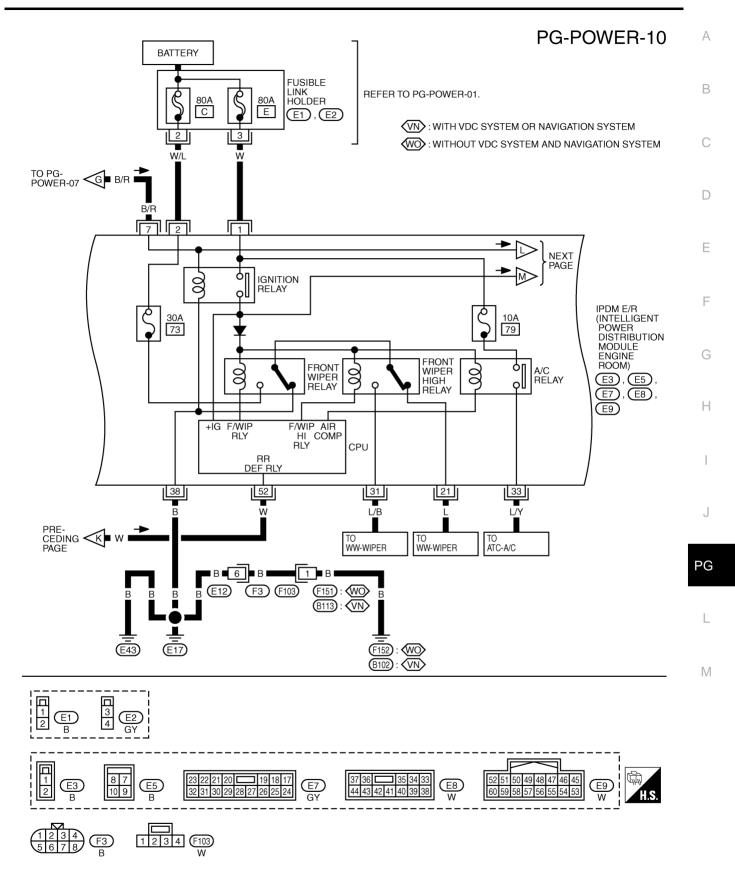
TO SRS-SRS

10A 13

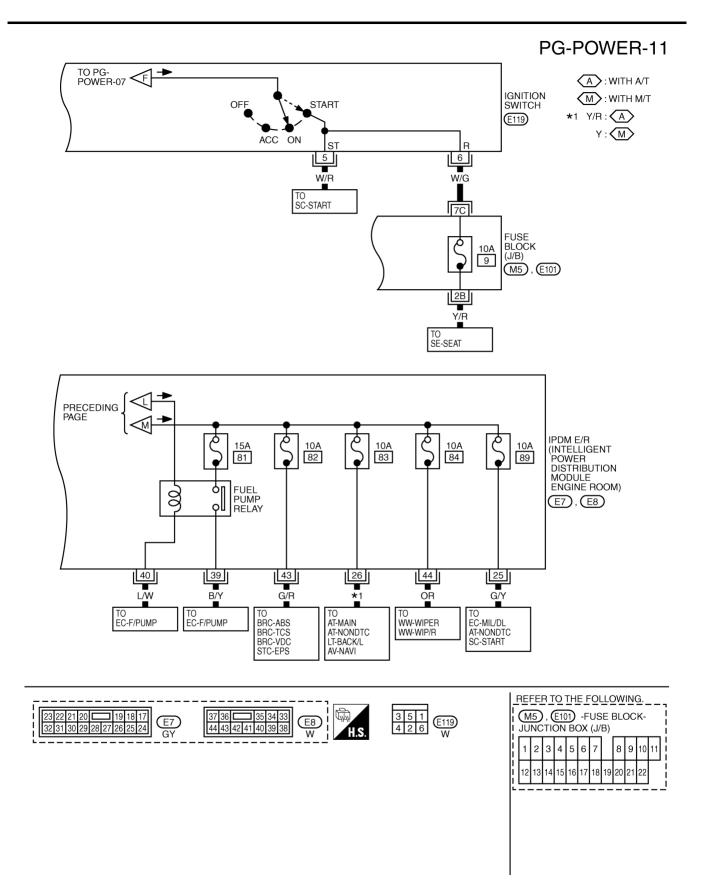


**PG-POWER-09** 

TKWT4109E



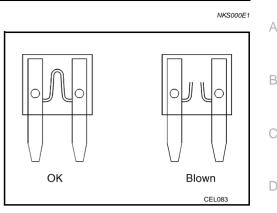
TKWT5640E



TKWT4111E

#### Fuse

- If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.



## **Fusible Link**

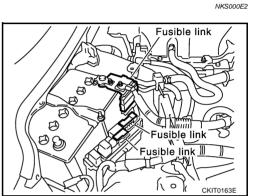
A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is questionable, use circuit tester or test lamp.

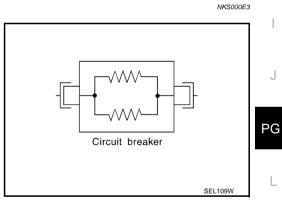
#### **CAUTION:**

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

#### **Circuit Breaker**

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.







F

E

Н

#### **System Description**

NKS000E4

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates relays and fuse blocks which were originally placed in engine room. It controls integrated relays via IPDM E/R control circuit.
- IPDM E/R integrated control unit performs ON-OFF operation of relay, 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

IPDM E/R receives a request signal from each control unit with CAN communication. It controls each system.

Control system	Transmit control unit	Control part		
	BCM	Head lamps (HI, LO)		
Lamp control	DCIVI	Parking lamps, license plate lamps and tail lamps		
Wiper control	BCM	Front wipers		
Rear window defogger control	BCM	Rear window defogger		
A/C compressor control	ECM	A/C compressor (magnet clutch)		
Cooling fan control	ECM	Cooling fan		

#### 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><li>With the ignition switch ON, the headlamp (low) is ON.</li><li>With the ignition switch OFF, the headlamp (low) is OFF.</li></ul>
Parking, license plate and tail lamps	<ul> <li>With the ignition switch ON, the parking, license plate and tail lamps are ON.</li> <li>With the ignition switch OFF, the parking, license plate and tail lamps are OFF.</li> </ul>
Cooling fan	<ul><li>With the ignition switch ON, the cooling fan HI operates.</li><li>With the ignition switch OFF, the cooling fan stops.</li></ul>
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 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 power mode.
  - CAN communication is stopped.
  - When a change in CAN communication line is detected, mode switches to CAN communication status.
  - When a change in hood switch or ignition switch signal is detected, mode switches to CAN communication status.

#### **CAN Communication System Description**

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**

Refer to LAN-48, "CAN System Specification Chart" .

#### **Function of Detecting Ignition Relay Malfunction**

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

	Tail lamp relay and daytime light relay <sup>*1</sup>	Ignition relay status	Ignition switch signal
L	—	ON	ON
		OFF	OFF
М	_	OFF	ON
1 0 1	ON (10 minutes)	ON	OFF

NOTE:

• When the ignition switch is turned ON, tail lamp relay and daytime light relay are OFF.

• \*1: Canada model only

А

F

F

NKS000E5

NKS000E6

NKS000E7

## **CONSULT-II Function (IPDM E/R)**

NKS000E8

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

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 diagnosis 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**

Refer to GI-36, "CONSULT-II Start Procedure" .

#### SELF-DIAG RESULTS

#### **Operation Procedure**

- 1. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
- 2. Check display content in self-diagnosis results.

#### Display Item List

Display Items	CONSULT-II	ULT-II Malfunction detecting condition		ME	Possible causes
Display Romo	display code	Manufolion accounty condition	CRNT	PAST	
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.	-	-	-	-	-
CAN COMM CIRC	U1000	<ul> <li>If CAN communication reception/transmission data has a malfunction, or if any of the control units malfunction, data reception/transmission cannot be confirmed.</li> <li>When the data in CAN communication is not received before the specified time</li> </ul>	×	×	Any of or several items below have errors. • TRANSMIT DIAG • ECM • BCM

#### 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 DIAG MODE" screen.
- 2. Touch "ALL SIGNALS", "MAIN SIGNALS" or "SELECTION FROM MENU" on the "SELECT MONITOR ITEM" screen.

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

3. Touch the required monitoring item on "SELECTION FROM MENU". In "ALL SIGNALS", all items are monitored. In "MAIN SIGNALS", predetermined items are monitored.

4. Touch "START".

5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

#### All Items, Main Items, Selection From Menu

			SELE	CT MONITC	R ITEM		F
Item name	CONSULT-II screen display			SIG-	SELEC- TION FROM MENU	Description	0
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	-
Parking 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	FR FOG REQ <sup>*1</sup>	ON/OFF	×	×	×	_	•
Head lamp washer request	HL WASHER REQ <sup>*1</sup>	ON/OFF	×		×		J
Front wiper request	FR WIP REQ	STOP/1LOW/ LOW/HI	×	×	×	Signal status input from BCM	PC
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 <sup>*2</sup>	ON/OFF	×		×	Status of input signal	L
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	- N
Oil pressure switch	OIL P SW <sup>*1</sup>	OPEN/CLOSE	×		×	_	-
Day time light request	DTRL REQ *3	ON/OFF	×		×	Signal status input from BCM	-
Hood switch	HOOD SW <sup>*1</sup>	ON/OFF	×		×	_	-
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.

- \*1: This items is displayed, but does not function.
- \*2: The vehicle without intelligent key system displays only ON without change.
- \*3: Only the vehicle with daytime light system operates.

А

В

D

F

#### ACTIVE TEST

#### **Operation Procedure**

- 1. Touch "ACTIVE TEST" on "SELECT DIAG MODE" screen.
- 2. Touch item to be tested.
- 3. Touch "START", and confirm its operation.
- 4. Touch "STOP" while testing to stop the operation.

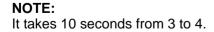
Test item	CONSULT-II screen display	Description
Tail lamp operation	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be oper- ated.
Rear window defogger opera- tion	REAR DEFOGGER	With a certain ON-OFF operation, the rear window defogger relay can be operated.
Front wiper (HI, LO) operation	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON), the front wiper relay (Lo, Hi) can be operated.
Cooling fan operation	MOTOR FAN	With a certain operation (1,2,3,4), the cooling fan can be operated.
Headlamp washer NOTE 1	HEAD LAMP WASHER	_
Lamp (HI, LO, FOG <sup>NOTE 2</sup> ) operation	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON $^{\rm NOTE}$ ), the lamp relay (Lo, Hi, Fog $^{\rm NOTE}$ ) can be operated.
Horn operation	HORN	Push "ON" button, horn relay operates 20 ms.

#### NOTE:

1. Headlamp washer item is displayed, but it cannot be tested.

2. Fog lamp item is displayed, but it cannot be tested.

Auto Active Test	)00E9
In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to t	he
following systems:	-
Rear window defogger	
Front wipers	
<ul> <li>Parking lamp, license plate lamp and tail lamp</li> </ul>	
<ul> <li>Headlamps (Hi, Lo)</li> </ul>	
<ul> <li>A/C compressor (magnetic clutch)</li> </ul>	
Cooling fan	
OPERATION PROCEDURE	
<ol> <li>Close hood and front door (passenger side), and then lift wiper arms away from windshield (to preve glass damage by wiper operation).</li> </ol>	ənt
<b>NOTE:</b> 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 driver's front door switch 10 times (close oth	her
door). 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. Oil pressure warning lamp starts blinking.	
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 <u>BL-38, "Check Door Switch"</u> when the auto active test cannot be performed.	
NSPECTION IN AUTO ACTIVE TEST MODE	
When auto active test mode is actuated, the following eight steps are repeated three times.	
	]
7. Cooling fan (Lo 5 sec.) 1. Rear window defogger (10 sec.)	
2. Front wiper (Lo 5 sec. → Hi 5 sec.)	
A A P A A A A A A A A A A A A A A A A A	



(ON-OFF five times)

4. Headlamp (Lo 10 sec.)

5. Headlamp (Hi ON-OFF five times)

6. A/C compressor

PKIB6170E

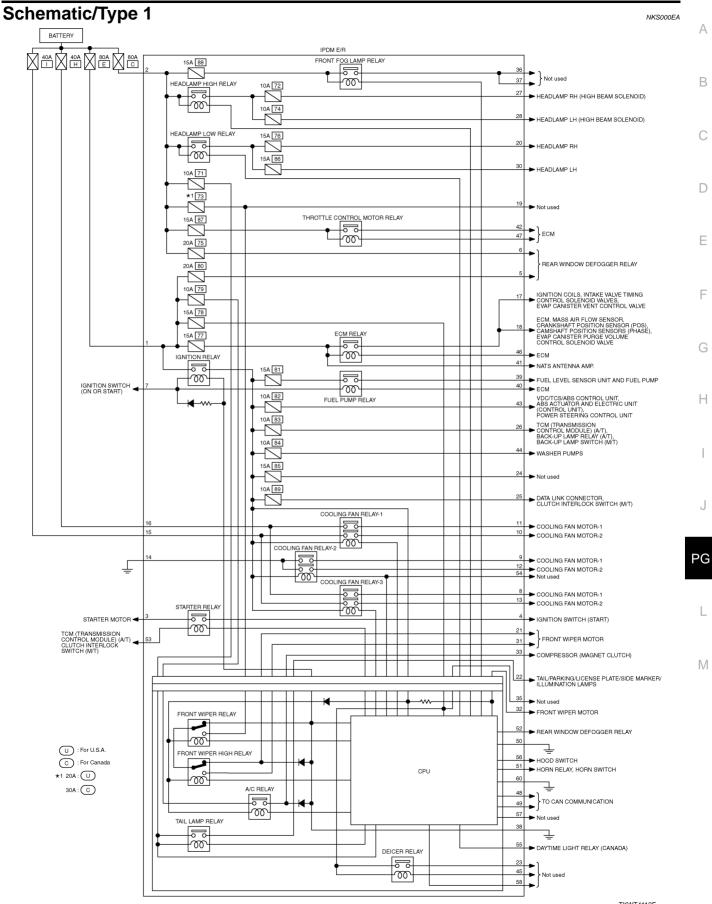
3. Parking lamps · Licence plate lamps · Tail lamps (10 sec.)

#### **Concept of Auto Active Test**

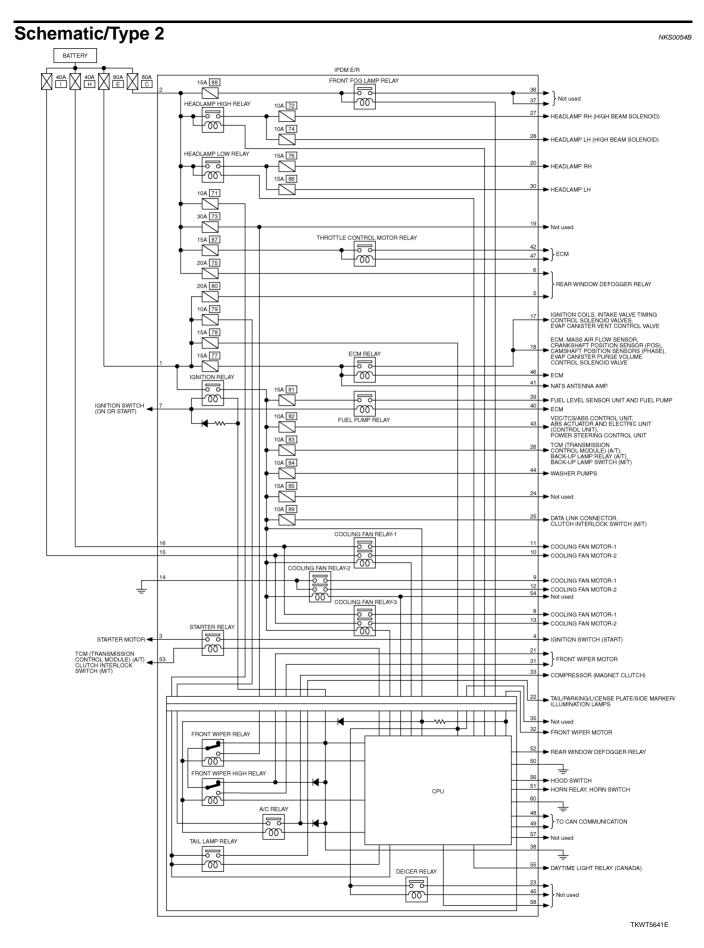
- IPDM E/R actuates auto active test mode when it receives door switch signal from BCM via CAN communication line. Therefore, when auto active test mode is activated successfully, CAN communication between IPDM E/R and BCM is normal.
- If any of systems controlled by IPDM E/R cannot be operated, possible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

Diagnosis chart in auto active test mode

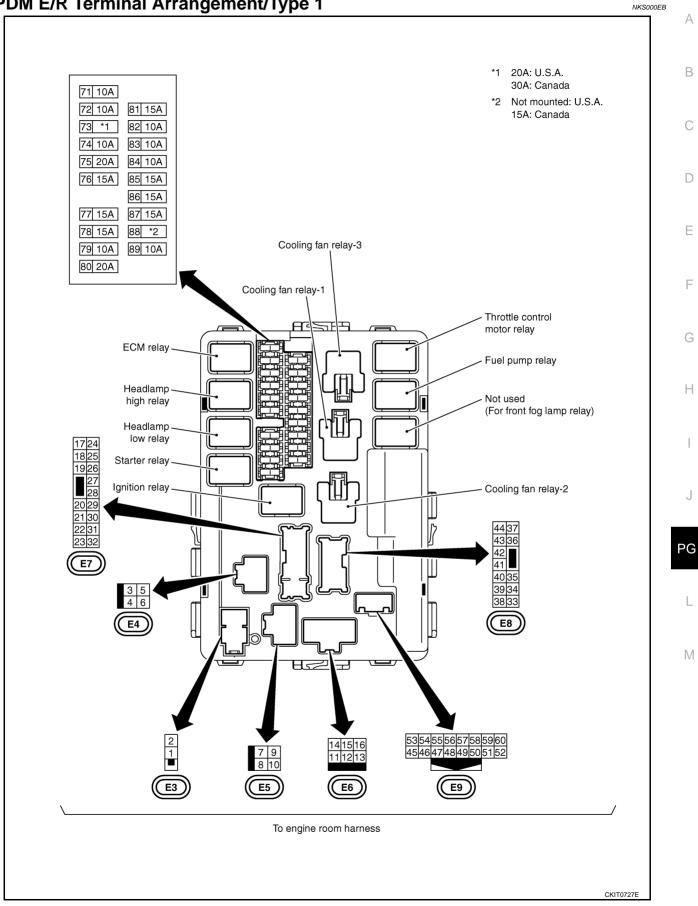
Symptom	Inspection contents		Possible cause		
Rear window defogger test	Perform auto active test. Does rear win- dow defogger oper-	YES	BCM signal input circuit		
			Rear window defogger relay circuit		
		NO	Open circuit of rear window defogger		
	aler		IPDM E/R malfunction		
Any of front wipers, tail and parking lamps, front fog lamps, and head lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES	<ul> <li>BCM signal input system</li> </ul>		
		NO	Lamp/wiper motor malfunction		
			<ul> <li>Lamp/wiper motor ground circuit malfunction</li> </ul>		
			• Harness/connector malfunction between IPDM E/R and system in question		
			<ul> <li>IPDM E/R (integrated relay) malfunction</li> </ul>		
A/C compressor does		YES	BCM signal input circuit		
			<ul> <li>CAN communication signal between BCM and ECM.</li> </ul>		
	Perform auto active test. Does magnetic		<ul> <li>CAN communication signal between ECM and IPDM E/R</li> </ul>		
not operate.	clutch operate?		Magnetic clutch malfunction		
		NO	Harness/connector malfunction between IPDM E/R and magnetic clutch		
			<ul> <li>IPDM E/R (integrated relay) malfunction</li> </ul>		
Cooling fan does not test. I		YES	ECM signal input circuit		
	Perform auto active	TES	<ul> <li>CAN communication signal between ECM and IPDM E/R</li> </ul>		
	test. Does cooling	NO	Cooling fan motor malfunction		
	fan operate?		• Harness/connector malfunction between IPDM E/R and cooling fan motor		
			• IPDM E/R (integrated relay) malfunction		



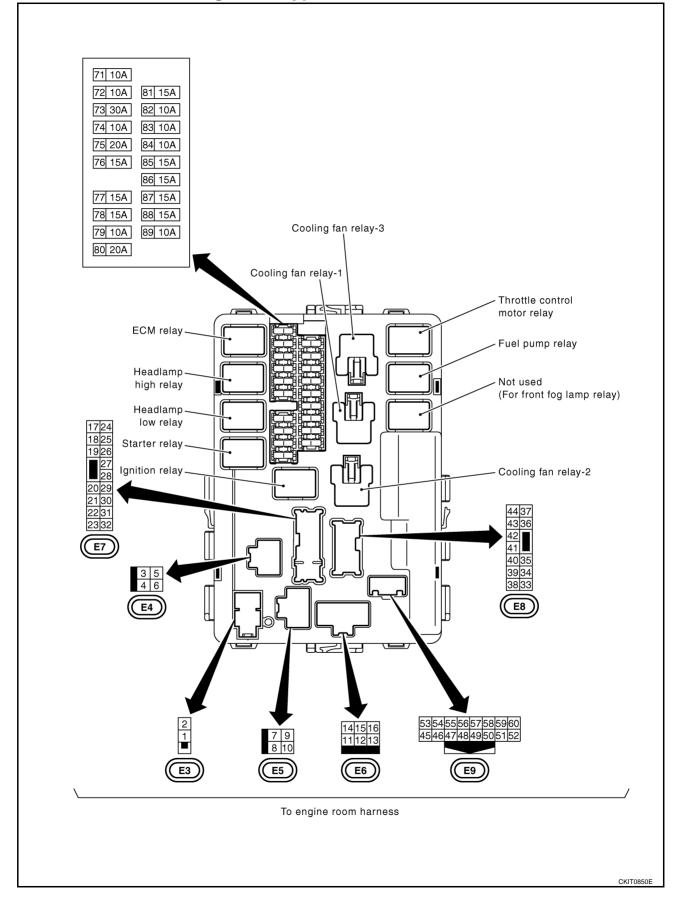
TKWT4112E



### **IPDM E/R Terminal Arrangement/Type 1**



### **IPDM E/R Terminal Arrangement/Type 2**



NKS0054C

IPDM E/R Power/Ground Circuit Inspection 1. CHECK FUSE AND FUSIBLE LINK		NKS000E
Make sure the following fusible link	s or IPDM E/R fuses are not blown	n.
Terminal No.	Signal name	Fuse and fusible link No.
1	5.4	E
2		С
_	Battery power	71
		78

OK or NG

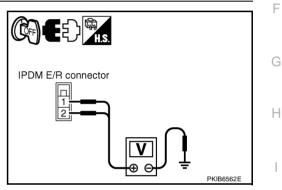
OK >> GO TO 2.

NG >> If fuse or fusible link is blown, be sure to eliminate cause of malfunction before installing new fuse or fusible link.

# 2. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect IPDM E/R harness connector.
- 3. Check voltage between IPDM E/R harness connector and ground.

Te			
(+)	( )		Voltage (Approx.)
IPDM E/R connector	Terminal		
E3	1 2	Ground	Battery voltage



F

J

PG

#### OK or NG

OK >> GO TO 3.

NG >> Repair harness or connector.

## 3. CHECK GROUND CIRCUIT

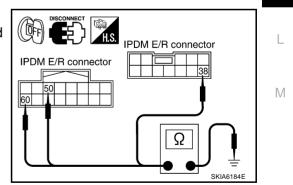
- 1. Disconnect IPDM E/R harness connectors.
- 2. Check continuity between IPDM E/R harness connectors and ground.

IPDM E/R connector	Terminal	Ground	Continuity	
E8	38		Continuity	
E9	50		Yes	
E9	60		res	

#### OK or NG

OK >> INSPECTION END

NG >> Repair harness or connector.



### Inspection With CONSULT-II (Self-Diagnosis)

#### 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 diagnosis results.

CONSULT-II display	CONSULT-II	TIME		Details of diagnosis result	
	display code	CRNT	PAST	Details of diagnosis result	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	_	_	_	No malfunction	
CAN COMM CIRC	U1000	×	×	<ul><li>Any of or several items below have errors.</li><li>TRANSMIT DIAG</li><li>ECM</li><li>BCM</li></ul>	

#### 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.

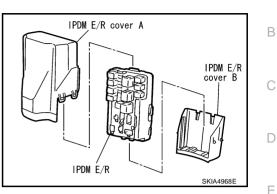
#### Contents displayed

NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END CAN COMM CIRC>>After print-out of the monitor items, refer to <u>LAN-48</u>, "CAN System Specification Chart".

NKS000ED

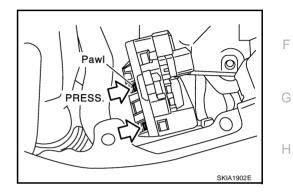
#### Removal and Installation of IPDM E/R REMOVAL

- 1. Remove battery. Refer to <u>SC-9</u>, "Removal and Installation".
- 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.

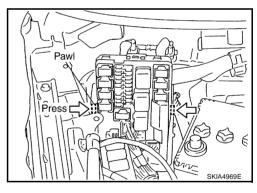


NKS000EE

А



- 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

Installation is the reverse order of removal.

M

J

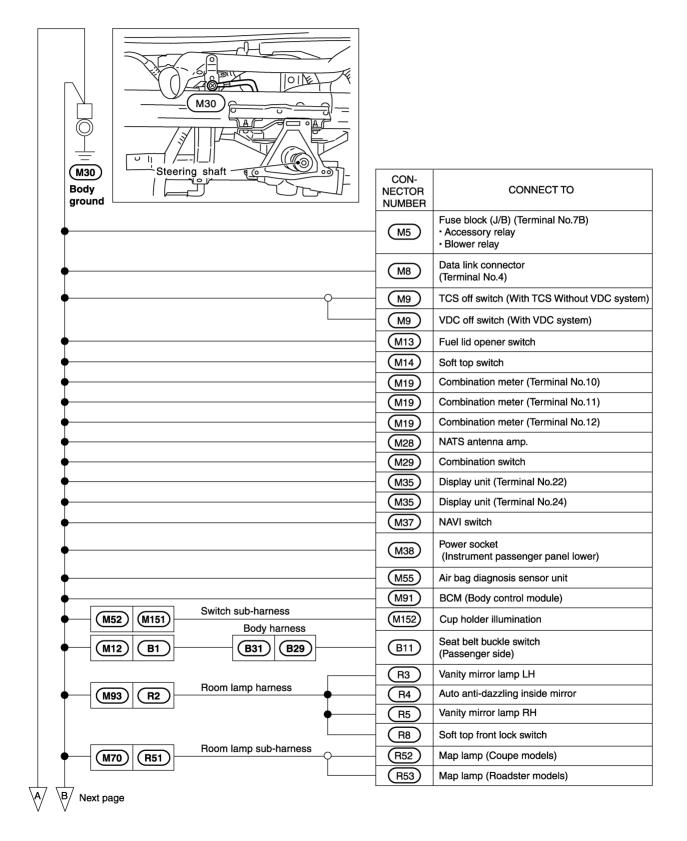
PG

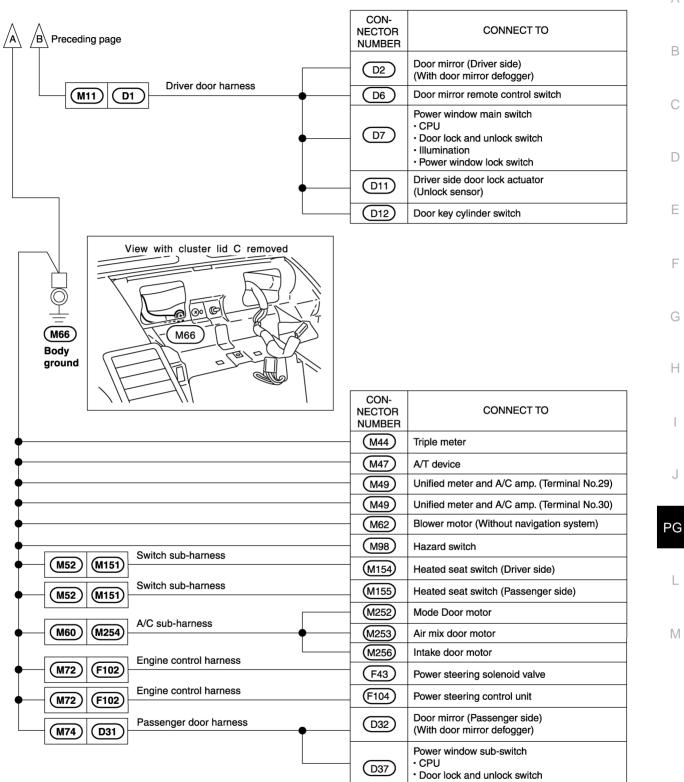
L

## GROUND Ground Distribution MAIN HARNESS/TYPE 1

PFP:00011

NKS000EF





А

В

D

F

F

Н

J

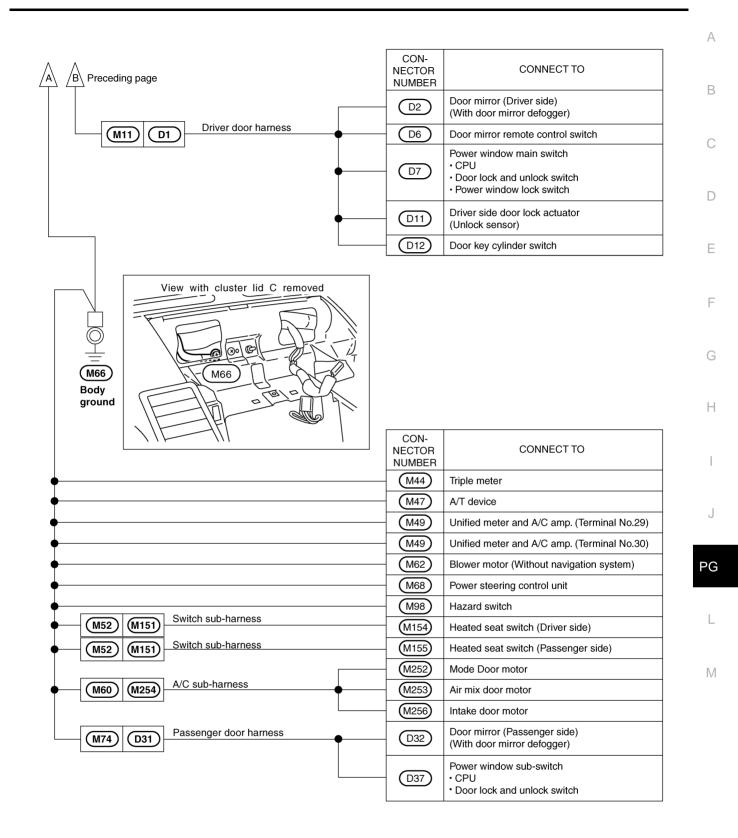
Μ

CKIT0729E

### MAIN HARNESS/TYPE 2

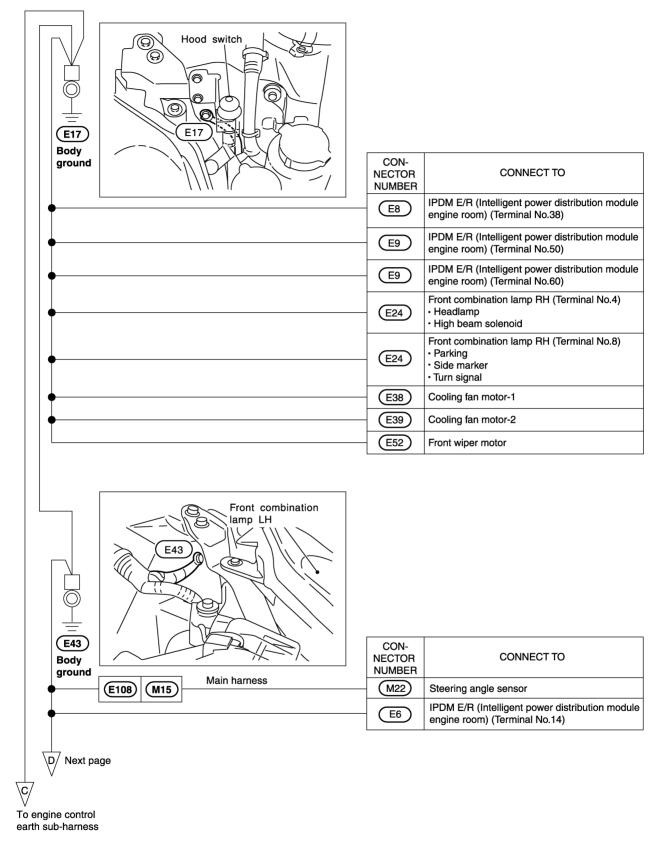
M30 Body ground	CON- NECTOR NUMBER	CONNECT TO
•	M5	Fuse block (J/B) (Terminal No.7B) • Accessory relay • Blower relay
•	<u>M8</u>	Data link connector (Terminal No.4)
ф	M9	TCS off switch (With TCS Without VDC systemeters)
	M9	VDC off switch (With VDC system)
•	M13	Fuel lid opener switch
•	(M14)	Soft top switch
•	M19	Combination meter (Terminal No.10)
•	(M19)	Combination meter (Terminal No.11)
•	(M19)	Combination meter (Terminal No.12)
•	M22	Steering angle sensor
•	M28	NATS antenna amp.
•	(M29)	Combination switch
•	(M35)	Display unit (Terminal No.22)
•	(M35)	Display unit (Terminal No.24)
•	(M37)	NAVI switch
•	M38	Power socket (Instrument passenger panel lower)
•	M55	Air bag diagnosis sensor unit
•	(M91)	BCM (Body control module)
M52 M151 Switch sub-harness	M152	Cup holder illumination
	R3	Vanity mirror lamp LH
R2 Room lamp harness	R4	Auto anti-dazzling inside mirror
↓ <u> </u>	R5	Vanity mirror lamp RH
	R8	Soft top front lock switch
M43 R57 Room lamp sub-harness	R52	Map lamp (Coupe models)
	R53	Map lamp (Roadster models)
Room lamp sub-harness	(R58)	Front passenger air bag off indicator

CKIT0851E



CKIT0852E

#### **ENGINE ROOM HARNESS/TYPE 1**



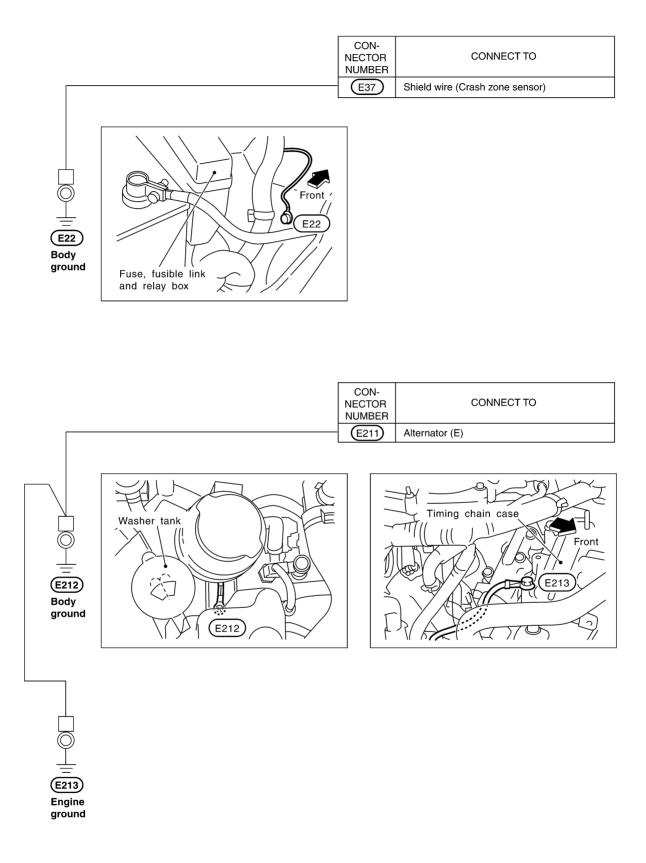
CKIT0730E

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. 4) • Headlamp • High beam solenoid
	E40	Front combination lamp LH (Terminal No. 8) • Parking • Side marker • Turn signal
	E44	Brake fluid level switch
	E51	ABS actuator and electric unit (Terminal No. 16)
	E51	ABS actuator and electric unit (Terminal No. 30)
E126 E127	E118	VDC/TCS/ABS control unit (Terminal No. 28)
E126 E127	E118	VDC/TCS/ABS control unit (Terminal No. 29)
	E128	Diode

PG

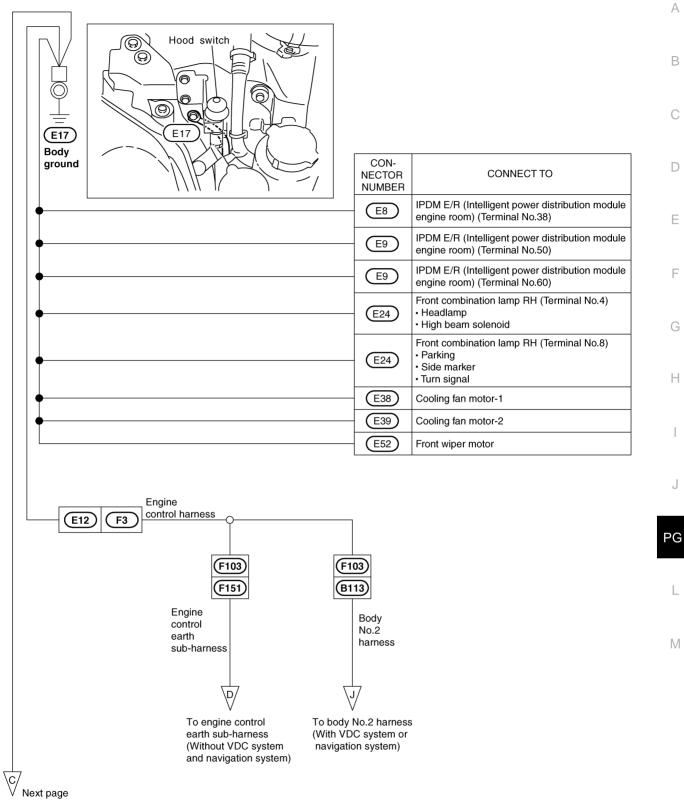
L

Μ



CKIT0170E

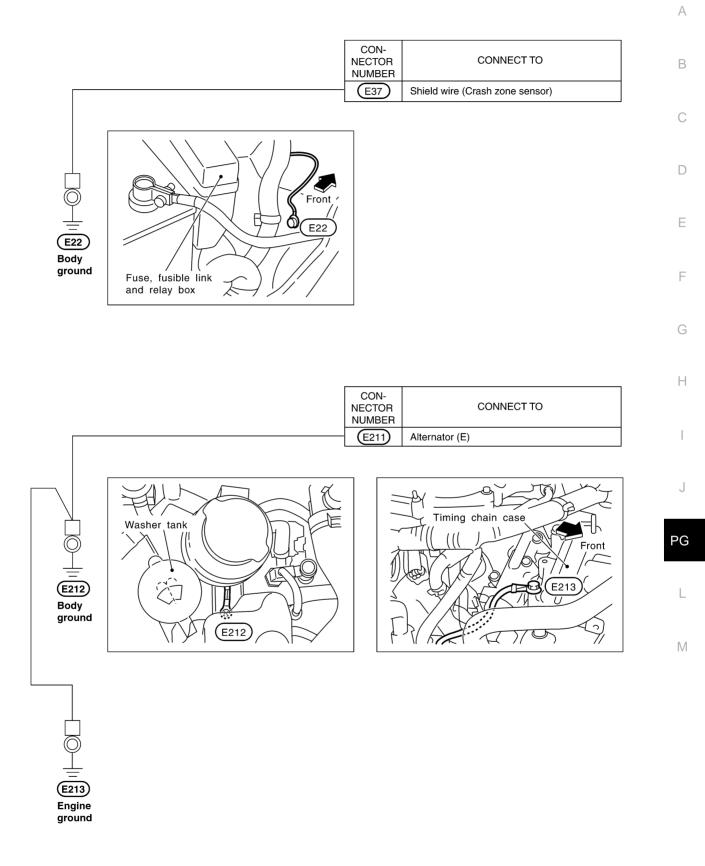
#### **ENGINE ROOM HARNESS/TYPE 2**



CKIT0853E

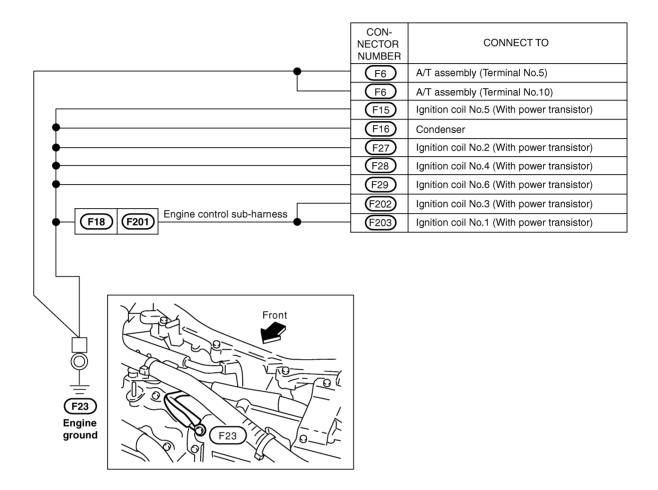
C Preceding page		
E43 Body		
ground	CON- NECTOR NUMBER	CONNECT TO
•	E6	IPDM E/R (Intelligent power distribution module engine room) (Terminal No.14)
•	E23	Hood switch
•	E30	Washer level sensor
•	E33	Horn (Low)
•	E36	Horn (High)
•	E40	Front combination lamp LH (Terminal No. 4) • Headlamp • High beam solenoid
•	E40	Front combination lamp LH (Terminal No. 8) • Parking • Side marker • Turn signal
•	E44	Brake fluid level switch
•	E51	ABS actuator and electric unit (Terminal No. 16)
•	E51	ABS actuator and electric unit (Terminal No. 30)
	E128	Diode

CKIT0854E

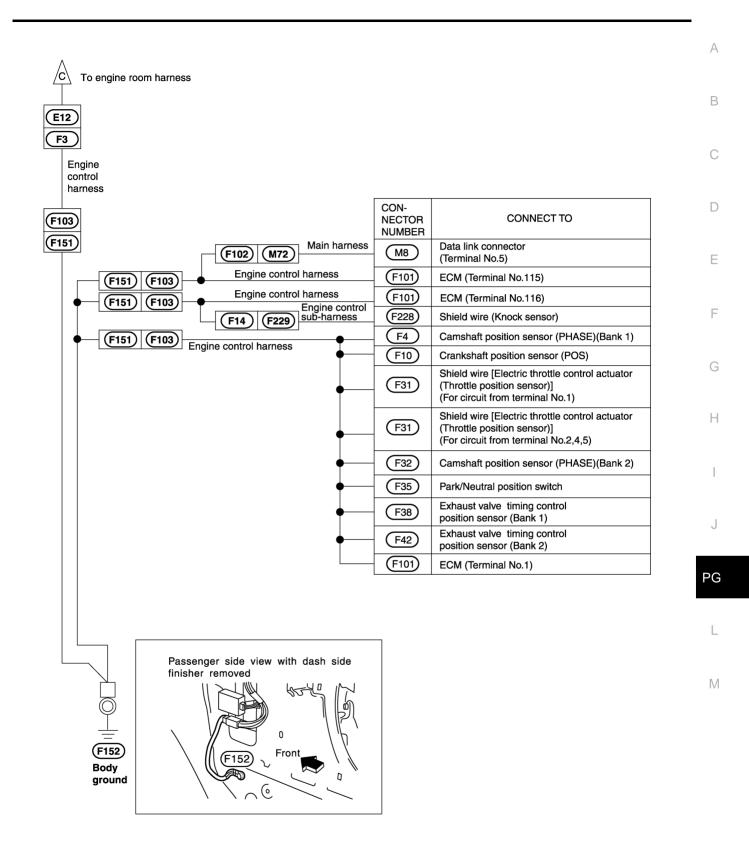


CKIT0170E

#### **ENGINE CONTROL HARNESS/TYPE 1**

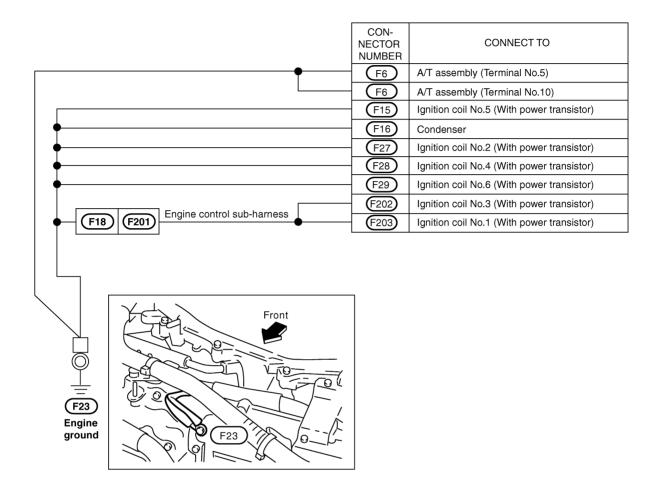


CKIB0204E

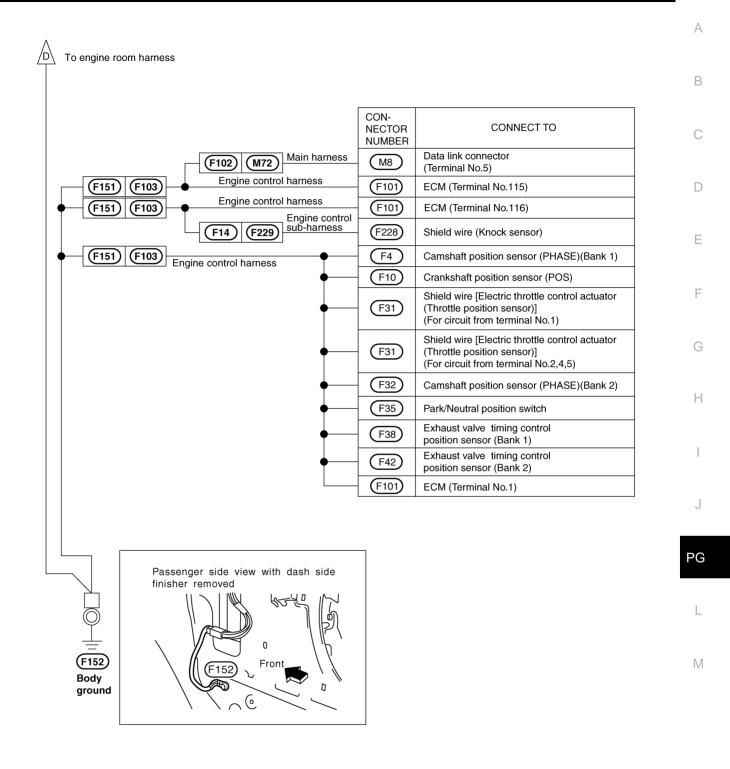


CKIT0732E

#### **ENGINE CONTROL HARNESS/TYPE 2**

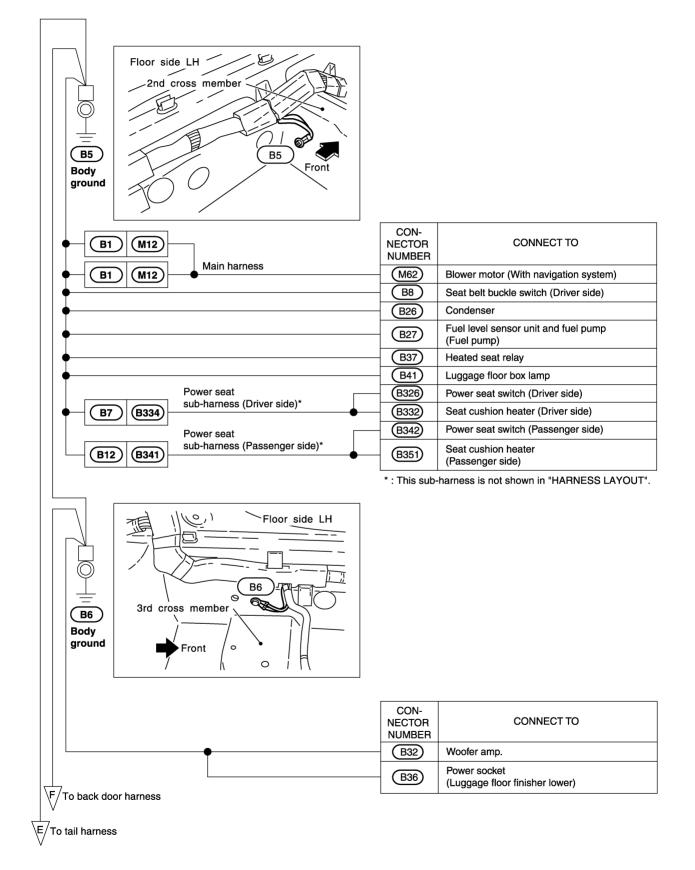


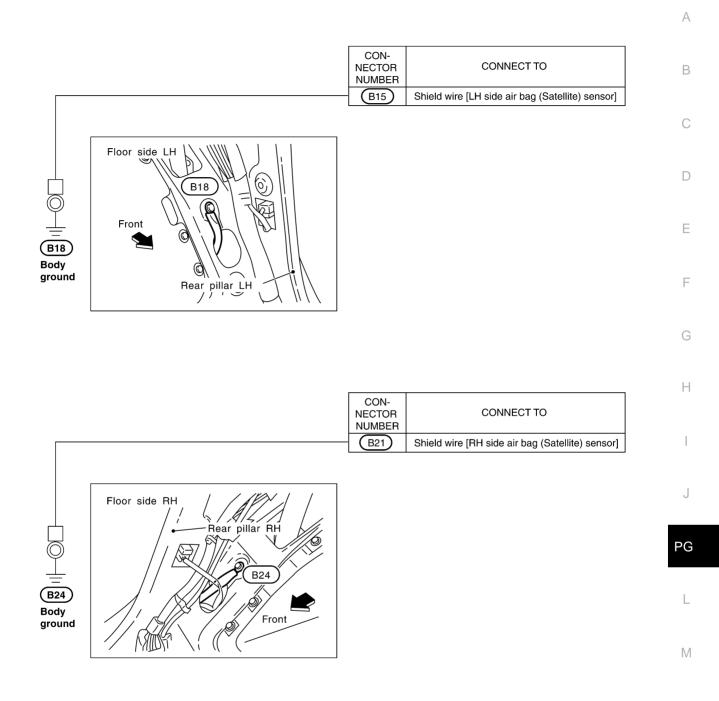
CKIB0204E



CKIT0855E

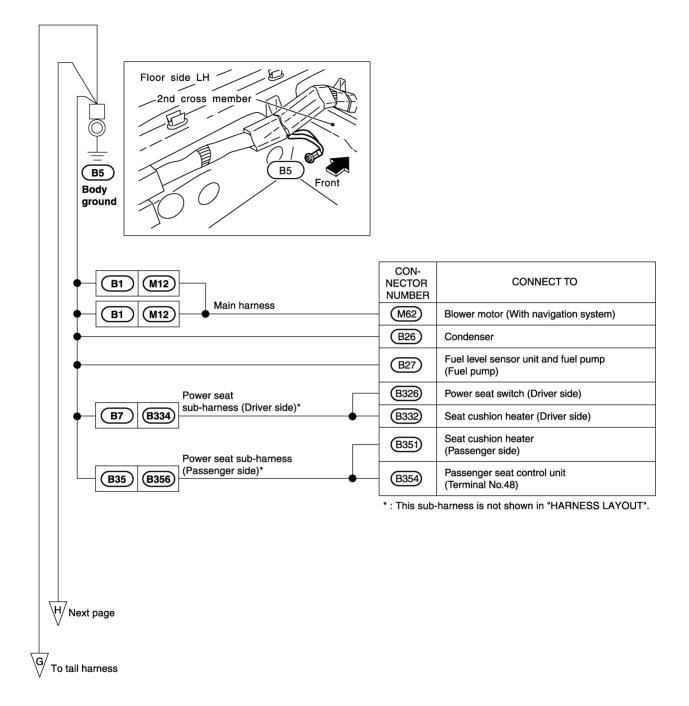
#### BODY HARNESS/TYPE 1 Coupe Models

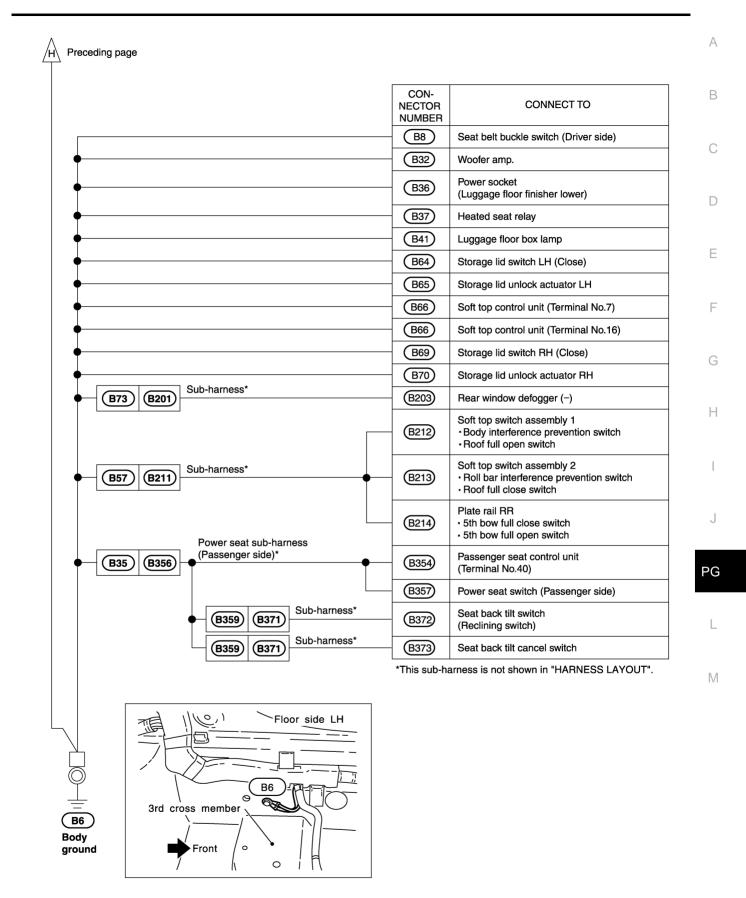




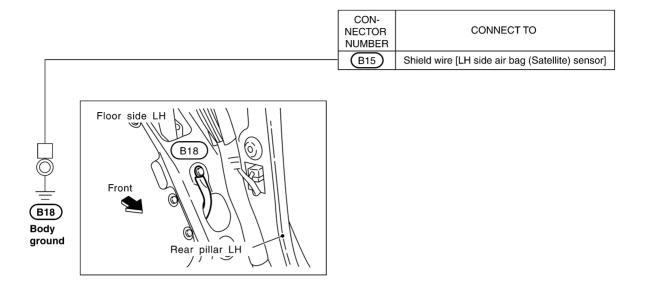
CKIT0174E

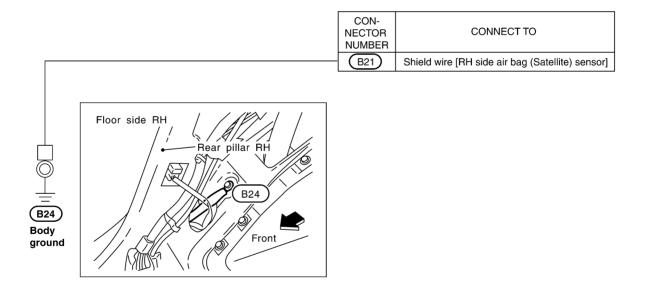
#### **Roadster Models**





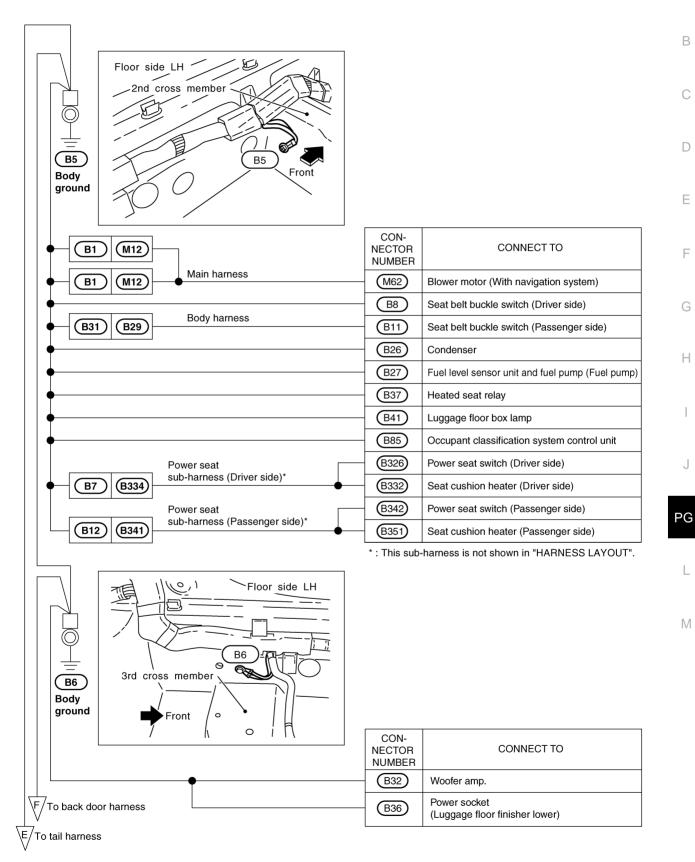
CKIT0735E





CKIT0174E

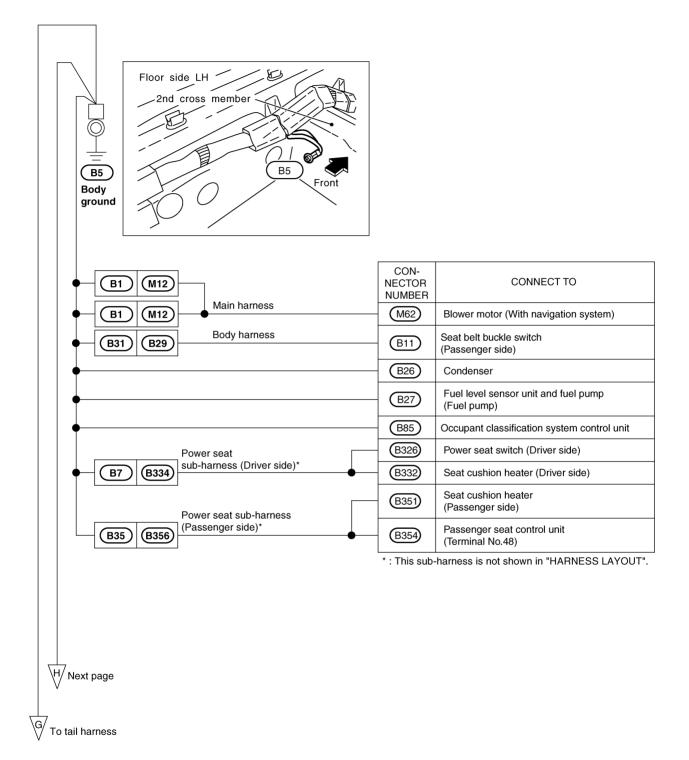
#### BODY HARNESS/TYPE 2 Coupe Models



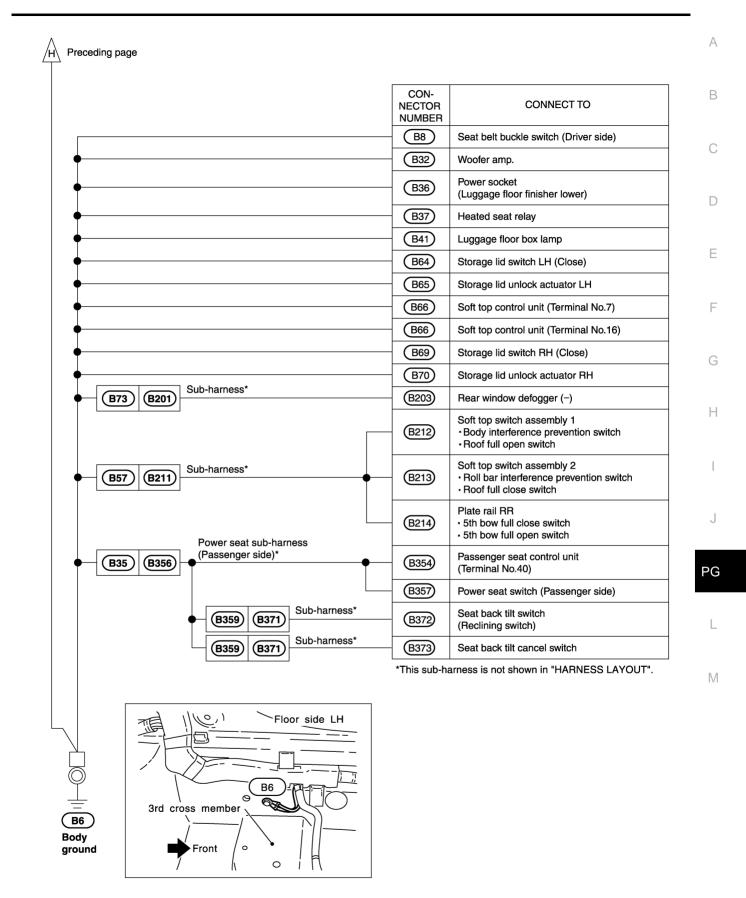
CKIT0856E

А

#### **Roadster Models**

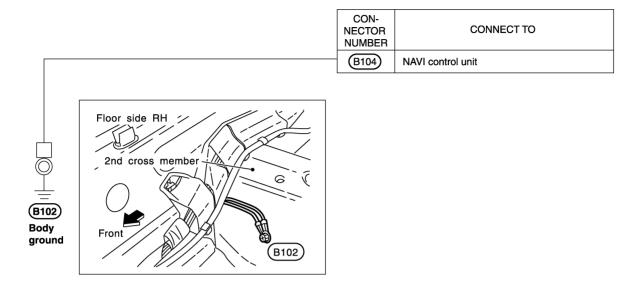


CKIT0857E



CKIT0735E

### **BODY NO. 2 HARNESS/TYPE 1**



CKIT0736E

### BODY NO. 2 HARNESS/TYPE 2

To engine room harness	0.011	
	CON- NECTOR NUMBER	CONNECT TO
F102 M72 Main harness	M8	Data link connector (Terminal No.5)
B113 F103 Engine control harness	F101	ECM (Terminal No.115)
B113 F103      Engine control harness	F101	ECM (Terminal No.116)
Engine control sub-harness	F228	Shield wire (Knock sensor)
B113 F103 Engine control harness	F4	Camshaft position sensor (PHASE)(Bank 1)
•	F10	Crankshaft position sensor (POS)
•	(F31)	Shield wire [Electric throttle control actuator (Throttle position sensor)] (For circuit from terminal No.1)
•	(F31)	Shield wire [Electric throttle control actuator (Throttle position sensor)] (For circuit from terminal No.2,4,5)
•	F32	Camshaft position sensor (PHASE)(Bank 2)
•	(F35)	Park/Neutral position switch
•	F38	Exhaust valve timing control position sensor (Bank 1)
•	(F42)	Exhaust valve timing control position sensor (Bank 2)
	(F101)	ECM (Terminal No.1)
	(B114)	VDC / TCS / ABS control unit (Terminal No.28) (Without navigation system)
	(B114)	VDC / TCS / ABS control unit (Terminal No.29) (Without navigation system)
(With VDC system)	]	(**************************************
Floor side RH 2nd cross member B102 Body ground B102		
	CON- NECTOR NUMBER	CONNECT TO
•	B104	NAVI control unit
	(B114)	VDC / TCS / ABS control unit (Terminal No.28) (With navigation system)
	B114	VDC / TCS / ABS control unit (Terminal No.29) (With navigation system)
B115 Body ground		

CKIT0858E

А

В

С

D

Е

F

G

Н

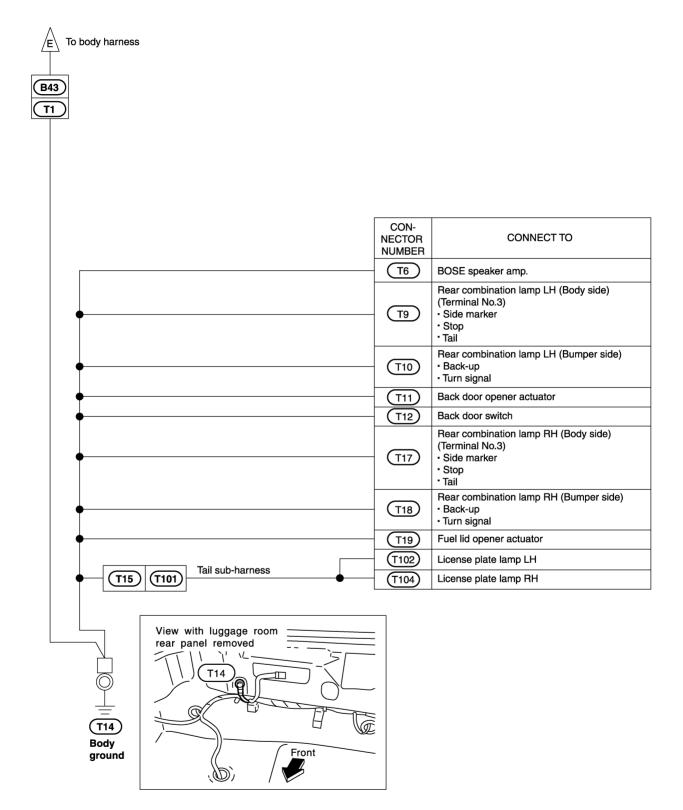
J

PG

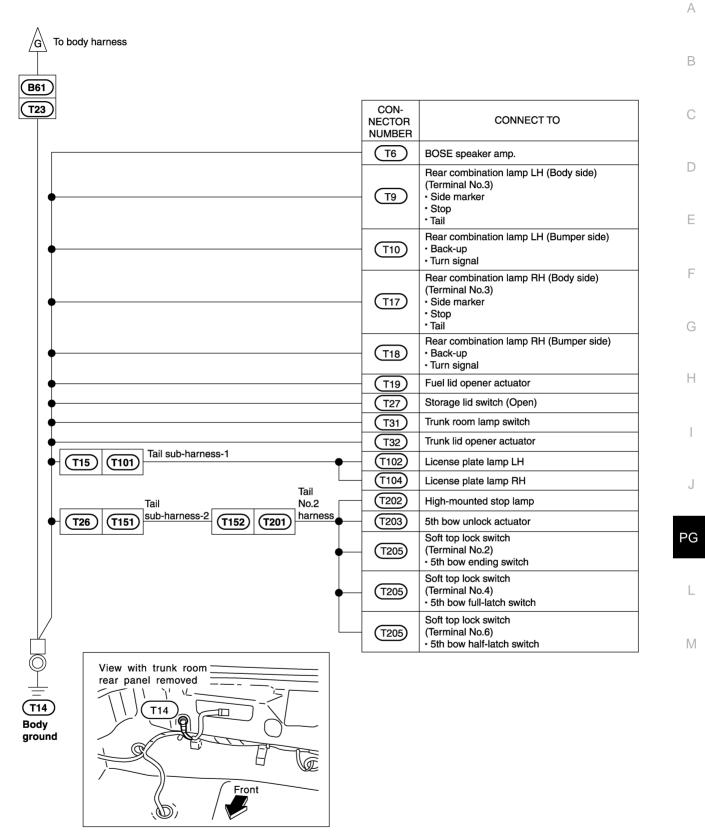
L

Μ

#### TAIL HARNESS/TYPE 1 Coupe Models

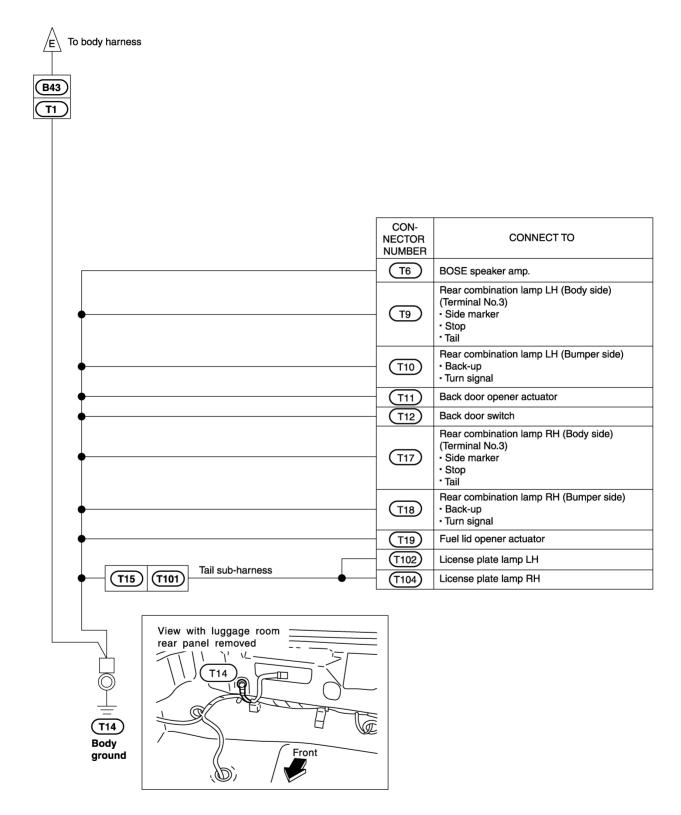


#### **Roadster Models**



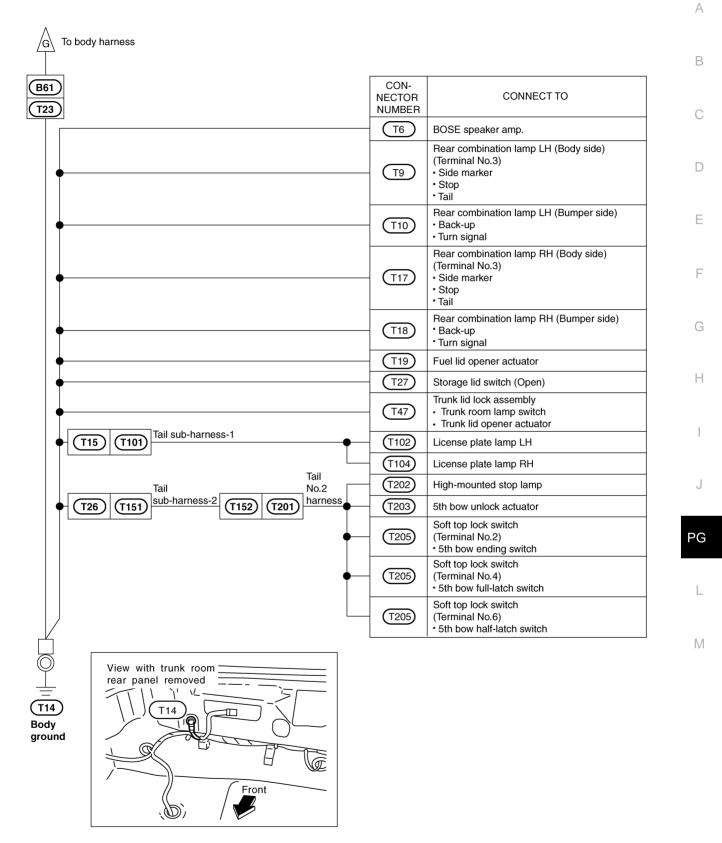
CKIT0738E

#### TAIL HARNESS/TYPE 2 Coupe Models



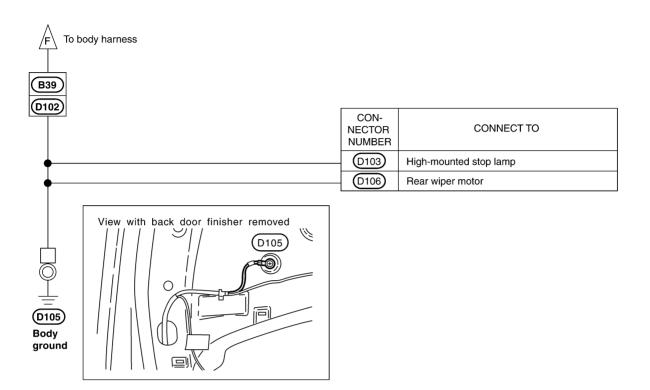
CKIT0737E

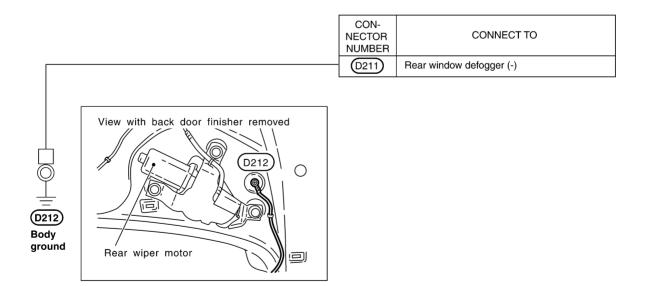
#### **Roadster Models**



CKIT0859E

#### **BACK DOOR HARNESS**





CKIT0464E

### Harness Layout HOW TO READ HARNESS LAYOUT

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

- Main Harness •
- Engine Room Harness (Engine Compartment)
- Engine Control Harness (Engine Compartment) •
- **Body Harness**
- Tail Harness (Roadster models)

NKS000EG	;
Example:	В
G2 E1 B/6 : ASCD ACTUATOR	С
Connector color/Cavity Connector number	D
l Grid reference	
SEL252V	F

# To Use the Grid Reference

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

## **CONNECTOR SYMBOL**

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

0	Water p	proof type	Standard type				
Connector type	Male	Female	Male	Female			
<ul> <li>Cavity: Less than 4</li> <li>Relay connector</li> </ul>	<b>O</b>	D	Ø	â			
Cavity: From 5 to 8							
Cavity: More than 9	$\bigcirc$	$\bigcirc$		$\bigcirc$			
Ground terminal etc.		<u> </u>	ø				

PG

Т

Μ

CKIT0108E

J

PFP:00011

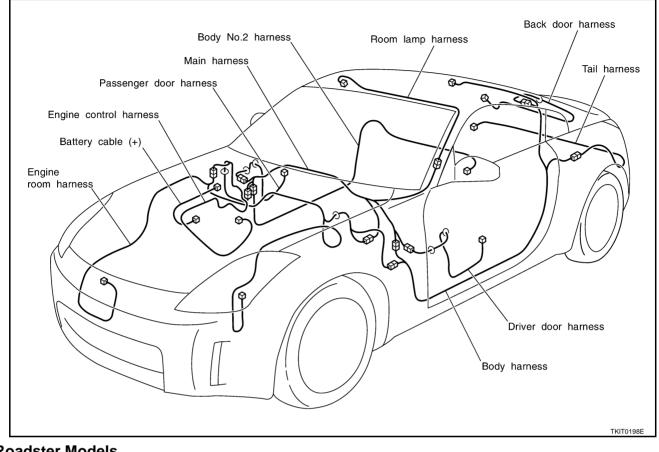
А

F

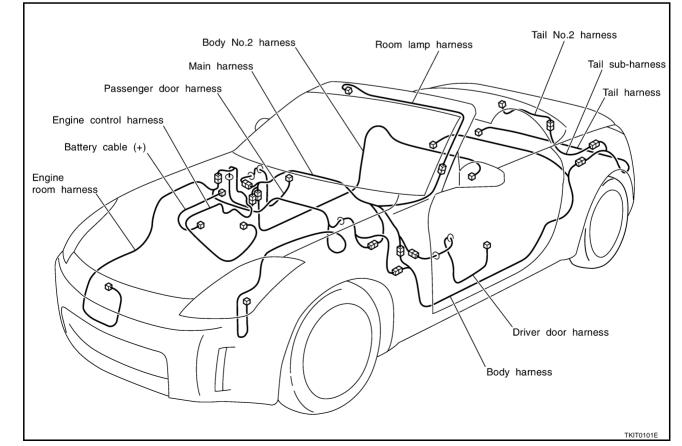
G

Н

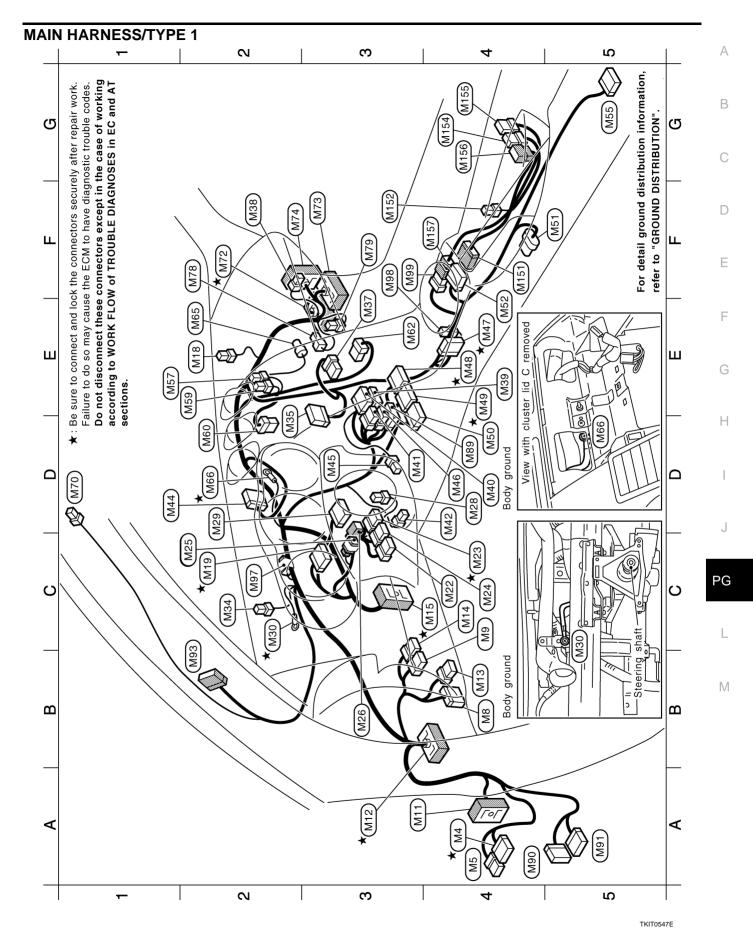
### OUTLINE **Coupe Models**



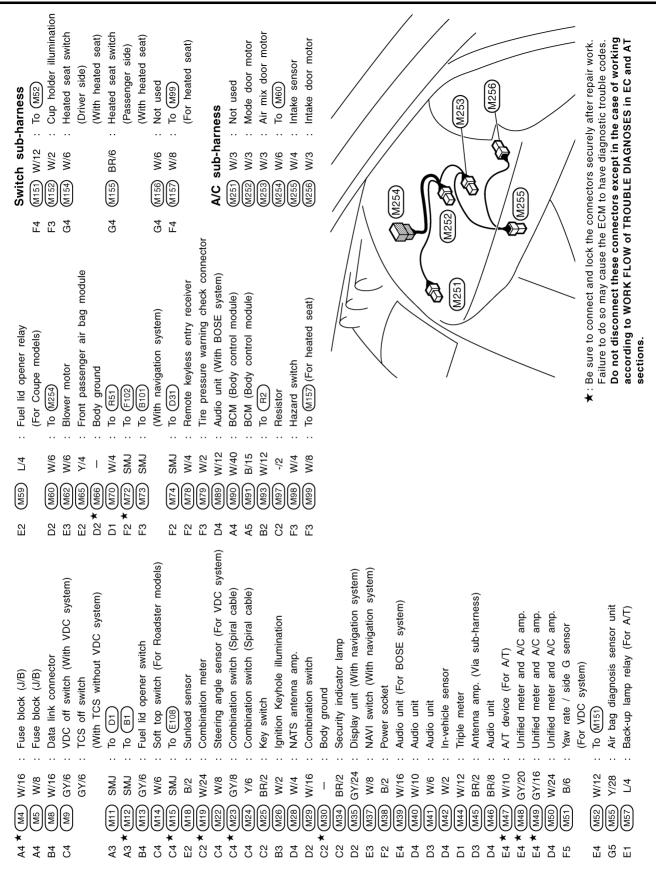
### **Roadster Models**





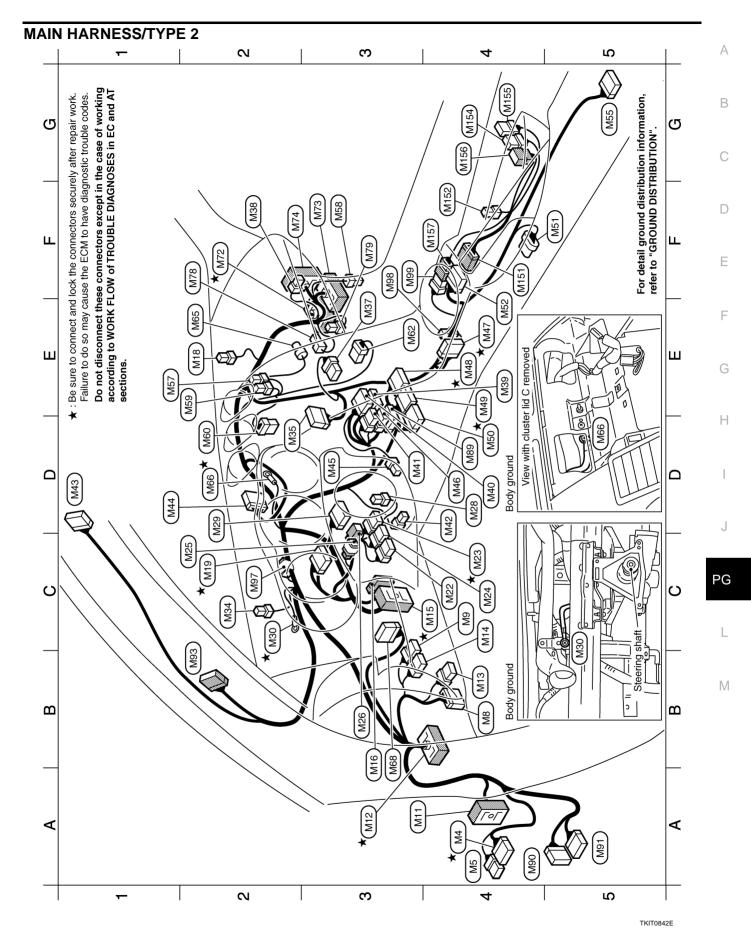


Revision: 2006 November

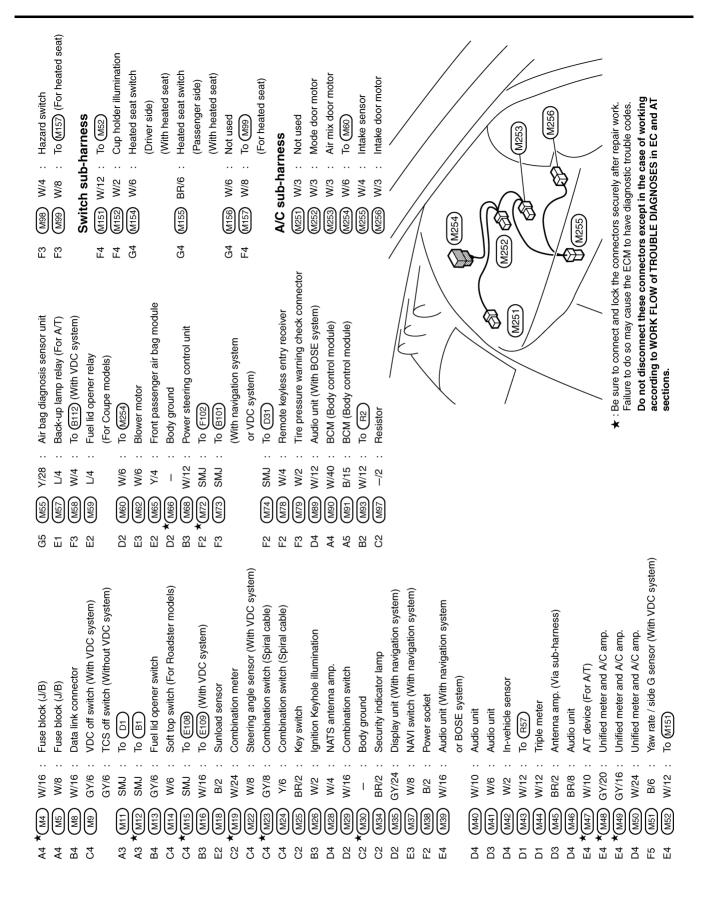


TKIT0548E

# HARNESS



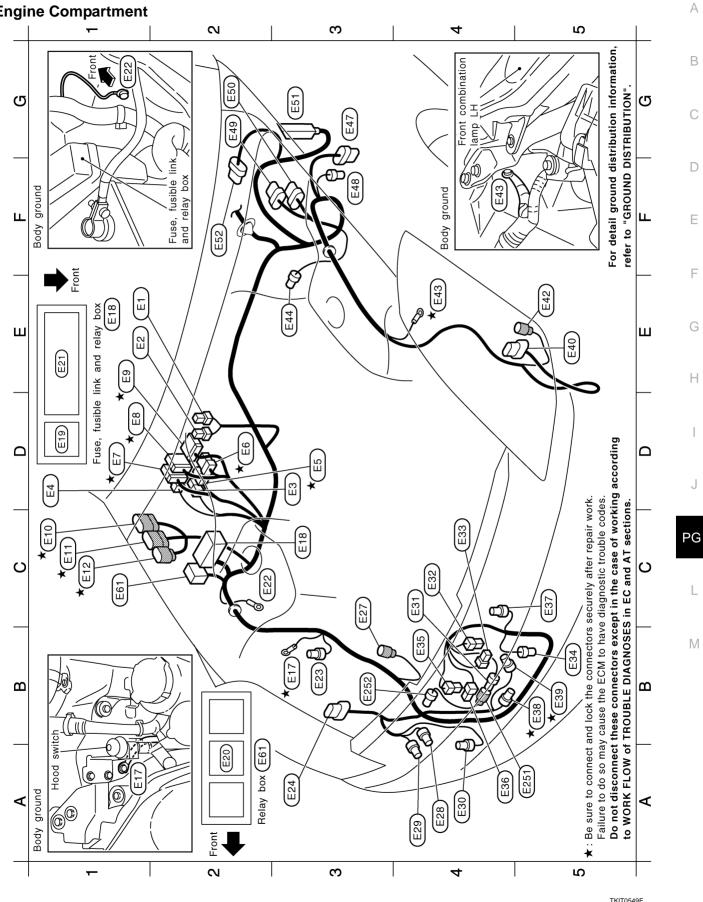
Revision: 2006 November



TKIT0843E

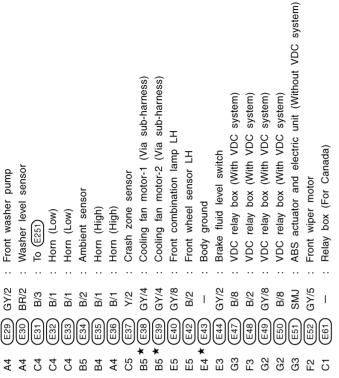
# HARNESS

### ENGINE ROOM HARNESS/TYPE 1 Engine Compartment



Revision: 2006 November

: Front washer	: Washer level	: To (E251)	: Horn (Low)	: Horn (Low)	: Ambient sense	: Horn (High)	: Horn (High)	: Crash zone s	: Cooling fan m	: Cooling fan m	: Front combine	: Front wheel s	: Body ground	: Brake fluid lev	: VDC relay bo	: VDC relay bo	: VDC relay bo	: VDC relay bo	: ABS actuator	: Front wiper m	: Relay box (Fo	
GY/2	BR/2	B/3	B/1	B/1	B/2	B/1	B/1	Υ/2	GY/4	GY/4	GY/8	B/2	I	GY/2	B/8	B/2	GY/8	B/8	CMS	GY/5	I	
E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E42	E43	E44	E47	E48	E49	ESO	E51	E52	E61	
A4	A4	C4	C4	C4	B5	B4	A4	C5	B5 🖈	B5 ¥	E5	E5	E4 ¥	E3	G3	F3	G2	G2	G3	F2	5	
: Fusible link holder	: Fusible link holder	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: IPDM E/R (Intelligent power distribution module engine room)	: To F1	: To F2	: To F3	: Body ground	: Fuse, fusible link and relay box	: Shift lock relay (With A/T)	: Daytime light relay (For Canada)	: Fuse and fusible link block	: Body ground	: Hood switch	: Front combination lamp RH	: Front wheel sensor RH	: Rear washer pump	
B/2	GY/2	B/2	W/4	B/4	0/M	GY/16	W/12	W/16	GY/9	GY/10	B/8	I	I	L/4	L/4	Ι	I	GY/2	GY/8	GY/2	GY/2	
Ē	ES	E3	E4							E I			E18	E19	E20	E21	E22	E23	E24	E27	E28	
Ē	Ē	D3	5	D3 🗙 (	D2 🗡 (	₩ 10	► 10	Е1 <b>*</b> (	CI *	C1 * ()	C1 ★	B3 🖈	ő	D1	A2	Ш	C2	B3	A3	ü	A4	



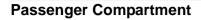
# Sub-harness

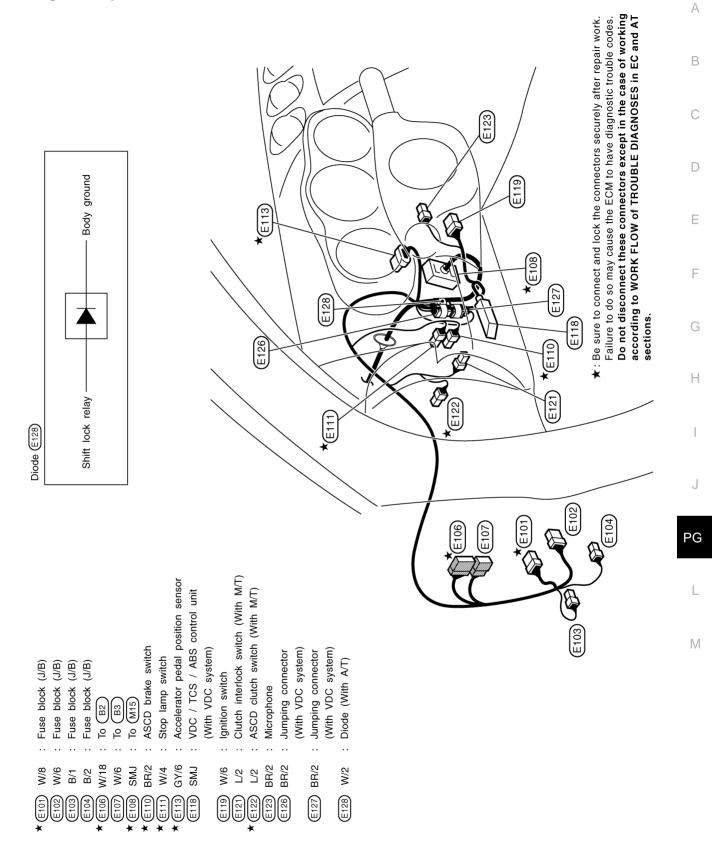
- A5
   E251
   B/3
   : To
   E31

   B3
   E252
   B/3
   : Refrigerant pressure sensor
- ★: 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.

TKIT0550E

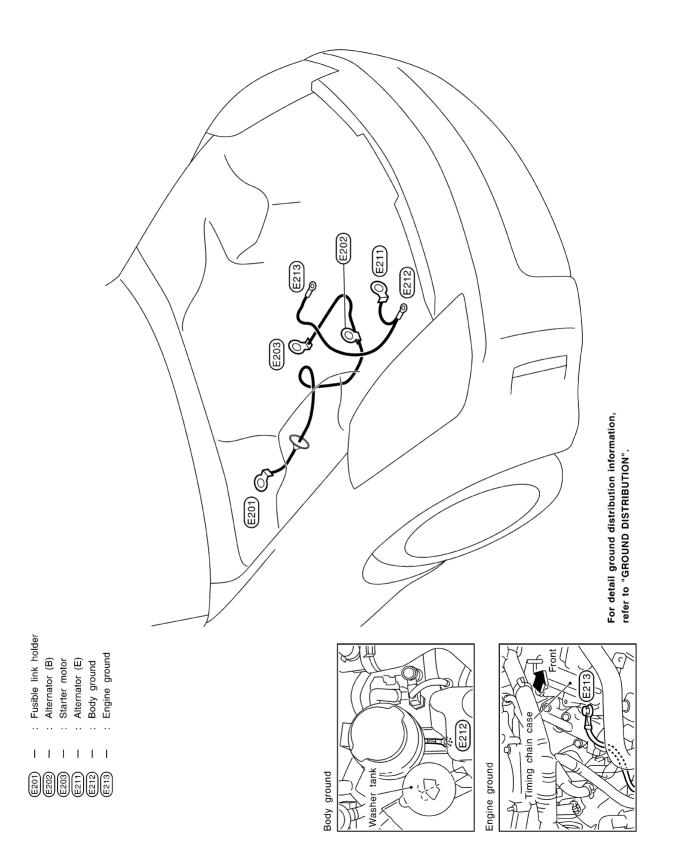






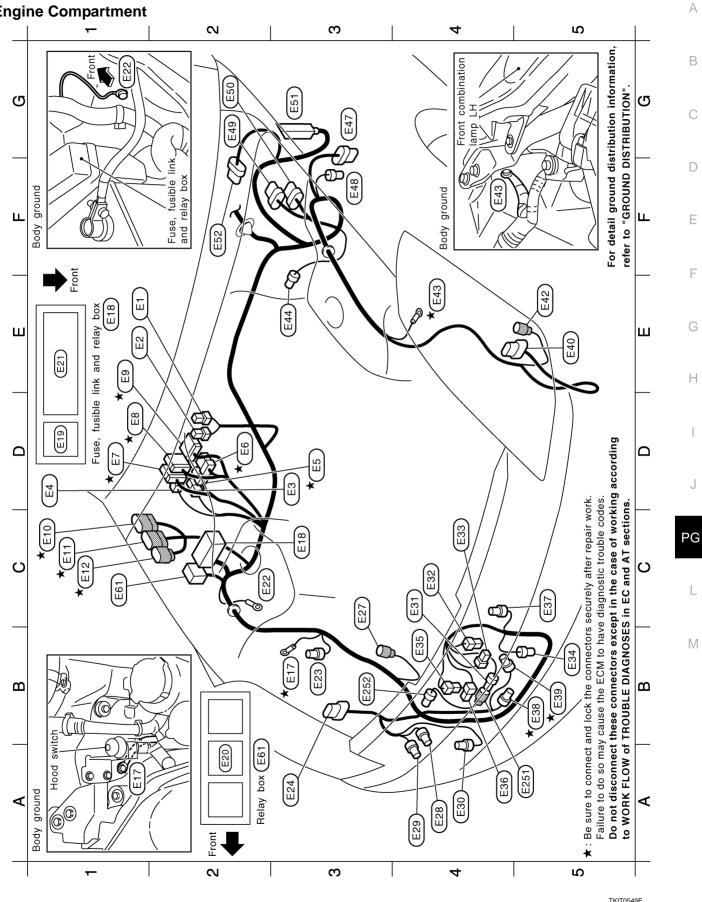
TKIT0551E

**Battery Cable** 



CKIT0202E

### ENGINE ROOM HARNESS/TYPE 2 Engine Compartment



<ul> <li>Front washer pump</li> <li>Washer level sensor</li> <li>To E25)</li> <li>Horn (Low)</li> <li>Horn (Low)</li> <li>Ambient sensor</li> <li>Ambient sensor</li> <li>Ambient sensor</li> <li>Horn (High)</li> <li>Horn (High)</li> <li>Horn (High)</li> <li>Crash zone sensor</li> <li>Cooling fan motor-1 (Via sub-harness)</li> <li>Cooling fan motor-2 (Via sub-harness)</li> <li>Front combination lamp LH</li> <li>Front combination lamp LH</li> <li>Front wheel sensor LH</li> <li>Body ground</li> <li>Brake fluid level switch</li> <li>VDC relay box (With VDC system)</li> <li>VDC actuator (With VDC system)</li> <li>VDC actuator (With VDC system)</li> <li>VDC actuator (With VDC system)</li> <li>Kot wiper motor</li> <li>Front wiper motor</li> </ul>	: To (E31) : Refrigerant pressure sensor
GY/2 BR/2 B/1 B/1 B/1 B/1 B/2 GY/4 GY/8 B/2 B/2 B/2 B/2 B/2 SMJ C/5 SMJ	Sub-harness [251 B/3 [2252 B/3
	Sub-ha A5 (E25) B3 (E252)
<ul> <li>Fusible link holder</li> <li>Fusible link holder</li> <li>Fusible link holder</li> <li>IPDM E/R (Intelligent power distribution module engine room)</li> <li>IPDM E/R (Intelligent power distribution module engine room)</li></ul>	
B/2 B/2 B/2 W/4 B/4 W/16 W/16 W/16 W/16 C/10 B/8 B/8 B/8 C/10 C/12 C/12 G/72 G/72 G/72 G/72 G/72 G/72 G/72 C/72 C/72 C/72 C/72 C/72 C/72 C/72 C	

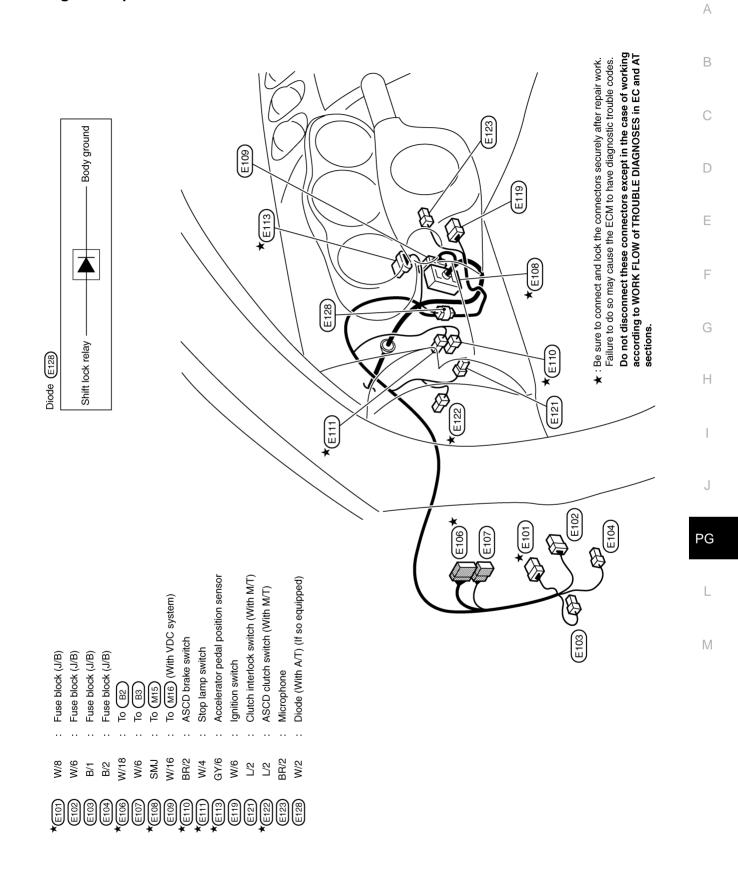


TKIT0844E

# HARNESS

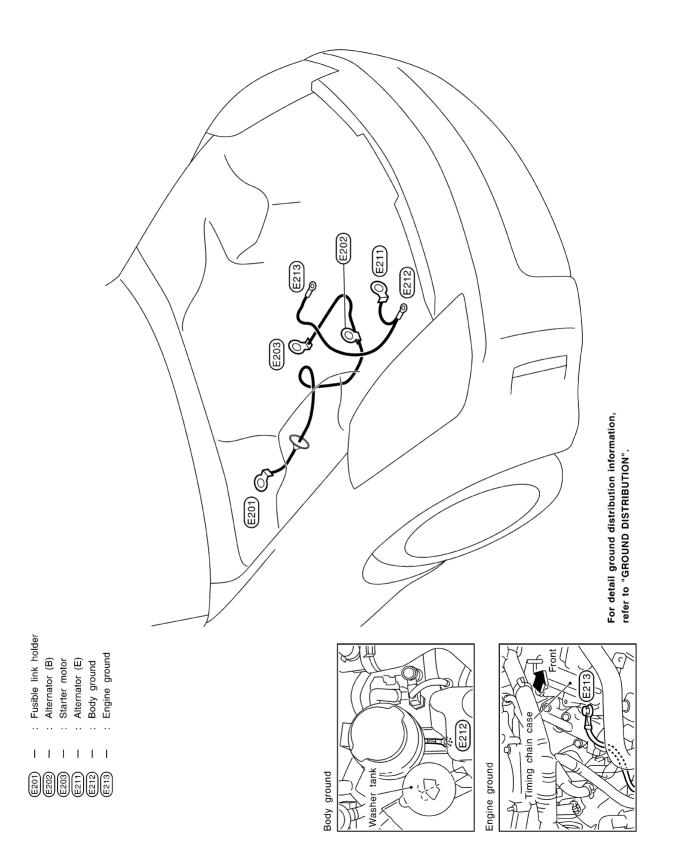
**PG-84** 

### **Passenger Compartment**



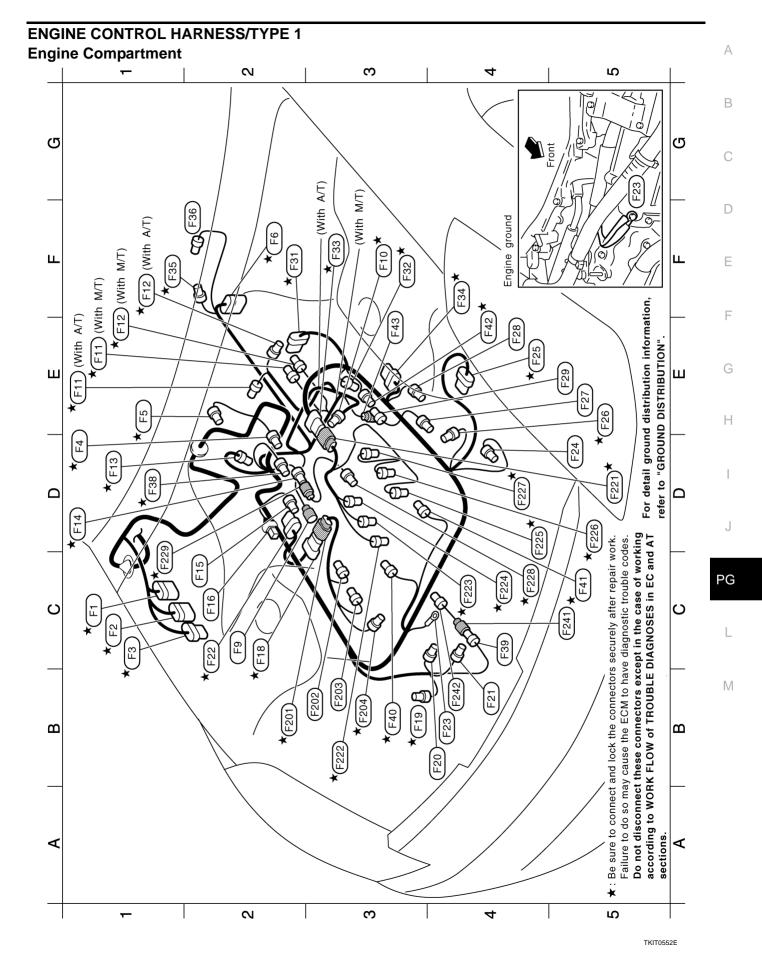
TKIT0906E

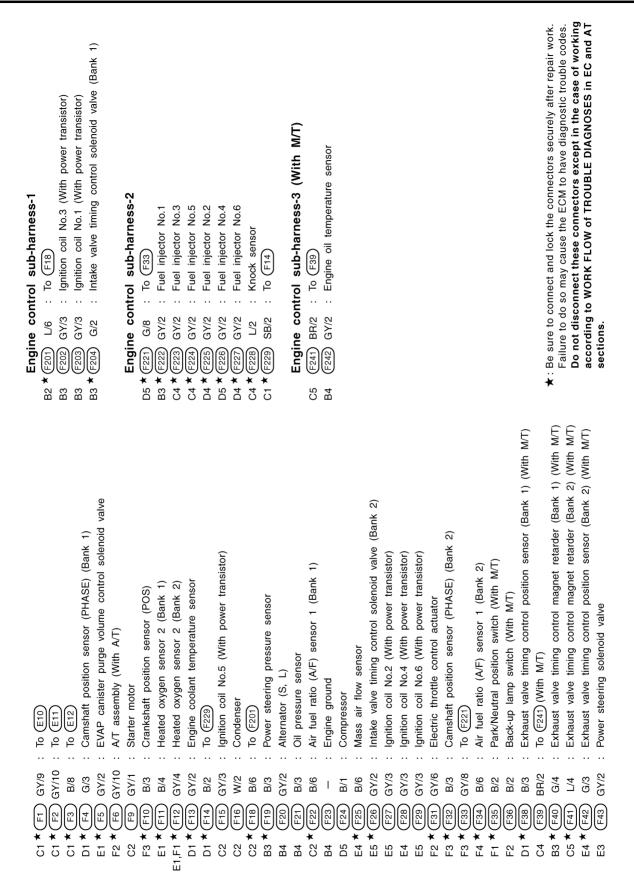
**Battery Cable** 

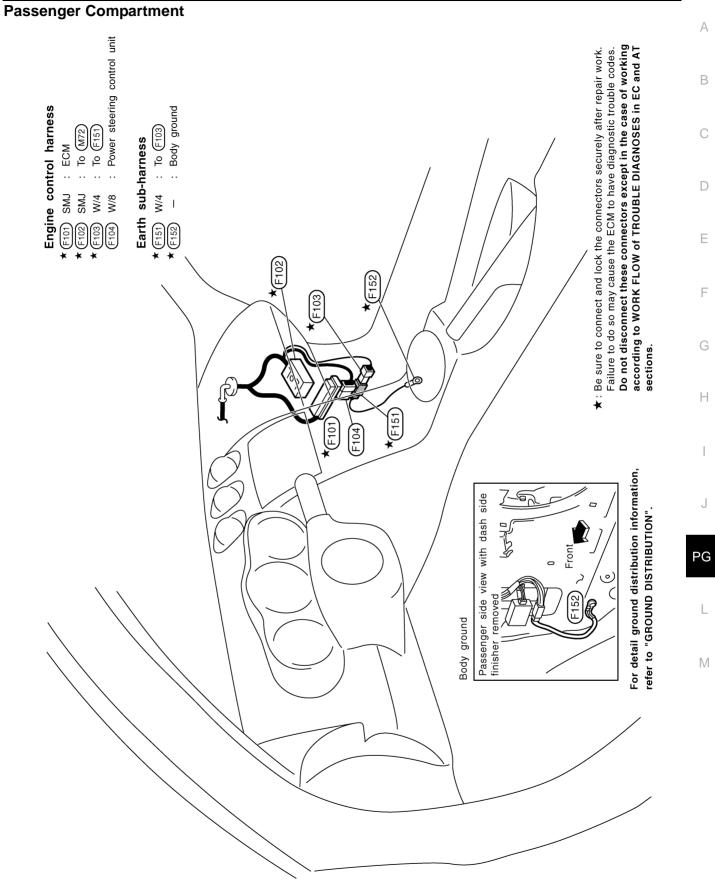


CKIT0202E

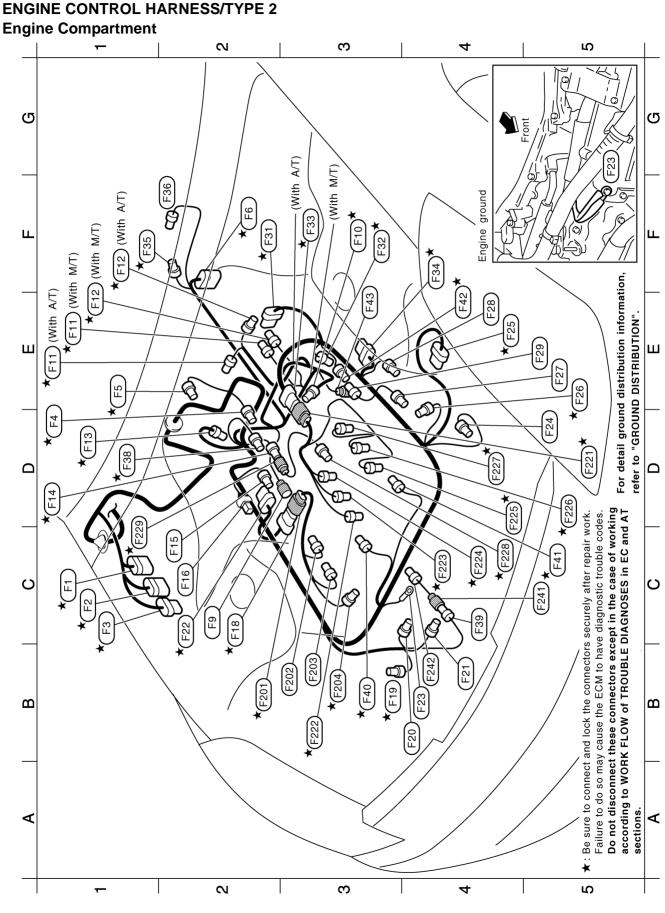
HARNESS







TKIT0554E



TKIT0552E



TKIT0553E

А

В

D

Е

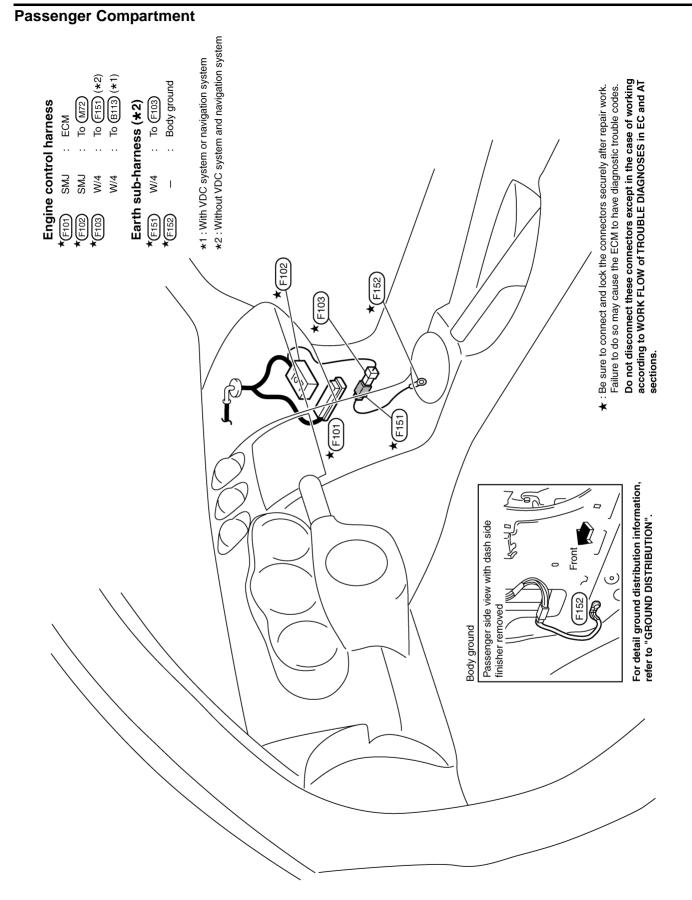
F

Н

I

J

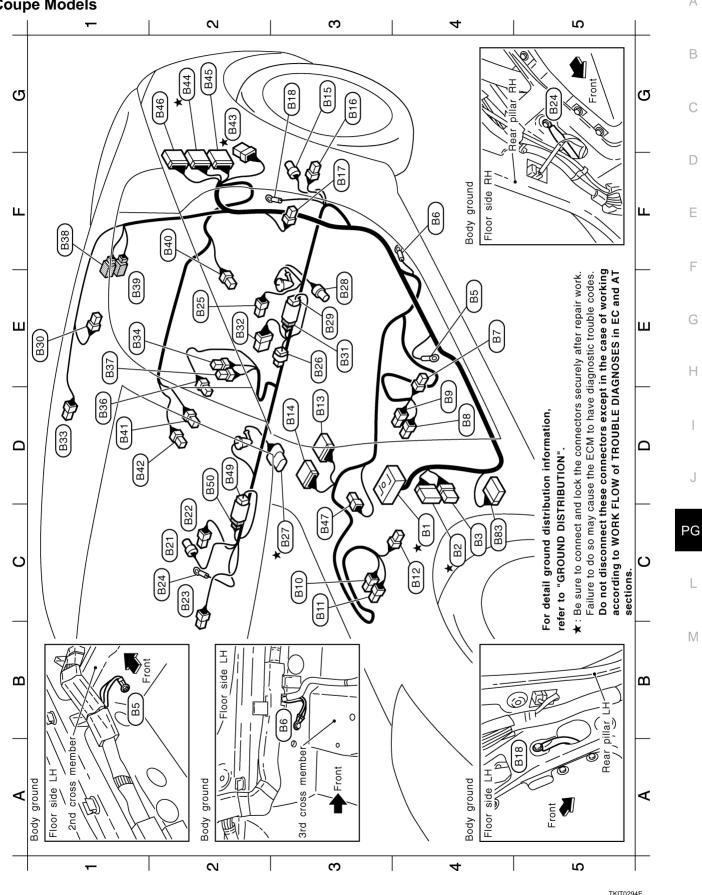
L



TKIT0846E

**HARNESS** 

### **BODY HARNESS/TYPE 1 Coupe Models**



А

В

С

D

Е

F

G

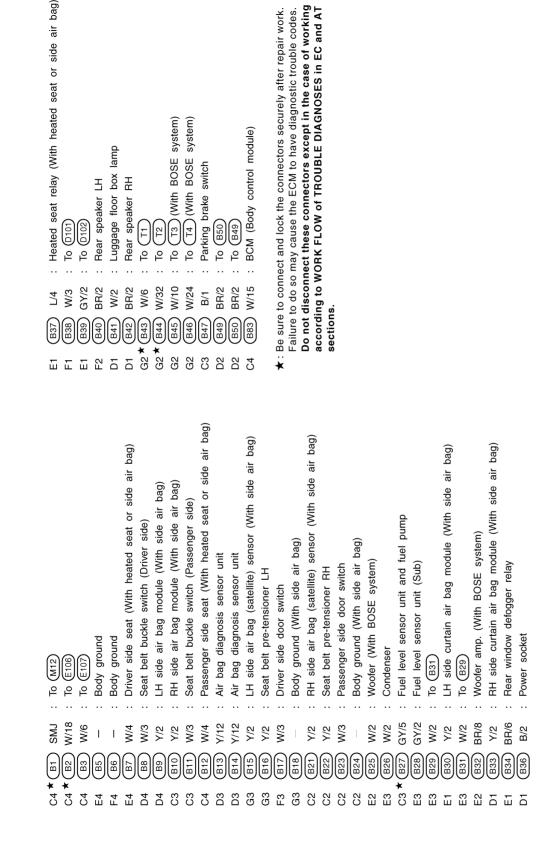
Н

I

J

L

Μ

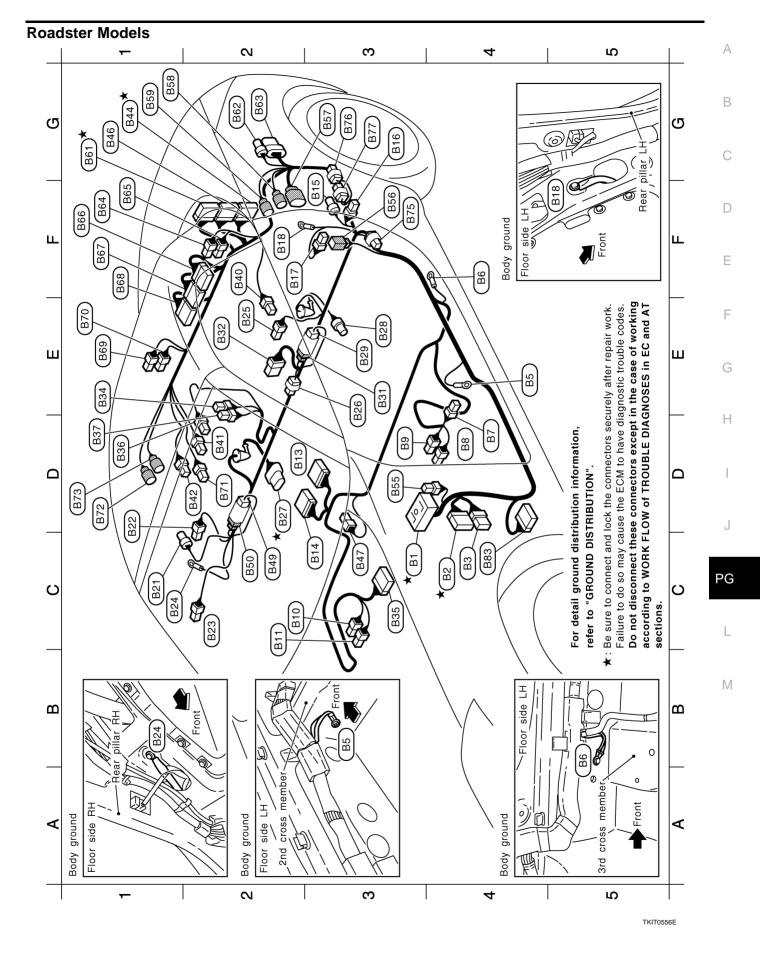


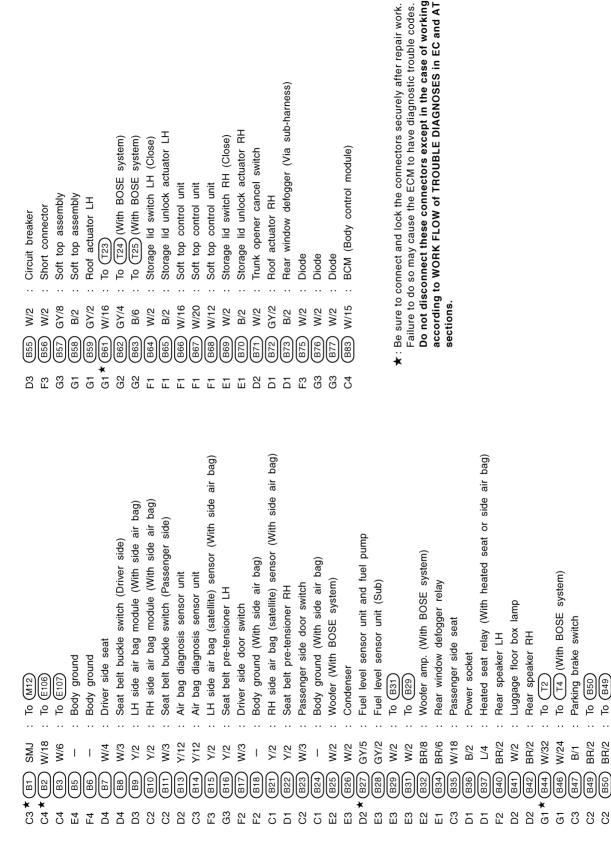
Revision: 2006 November

PG-94

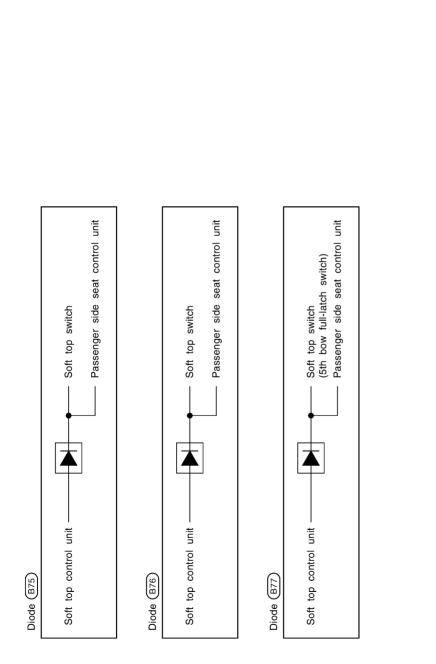
2006 350Z

TKIT0555E





TKIT0557E



TKIT0117E

А

В

С

D

Е

F

G

Н

I

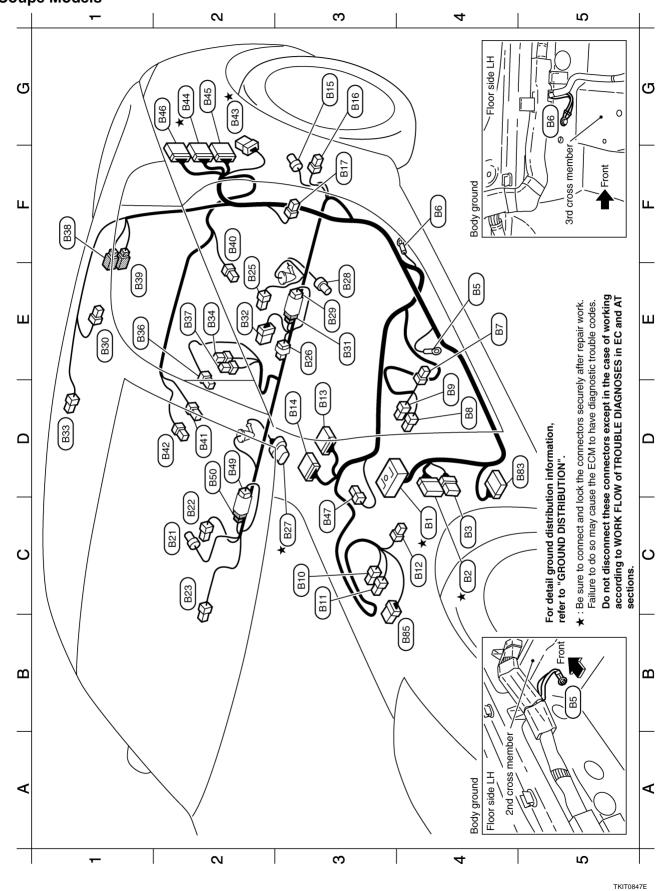
J

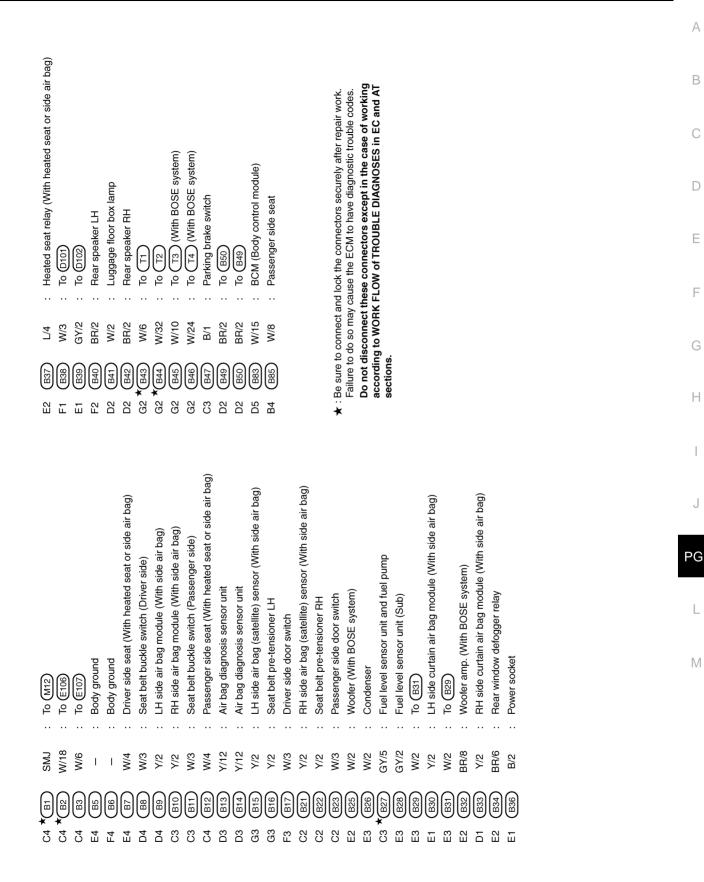
PG

L

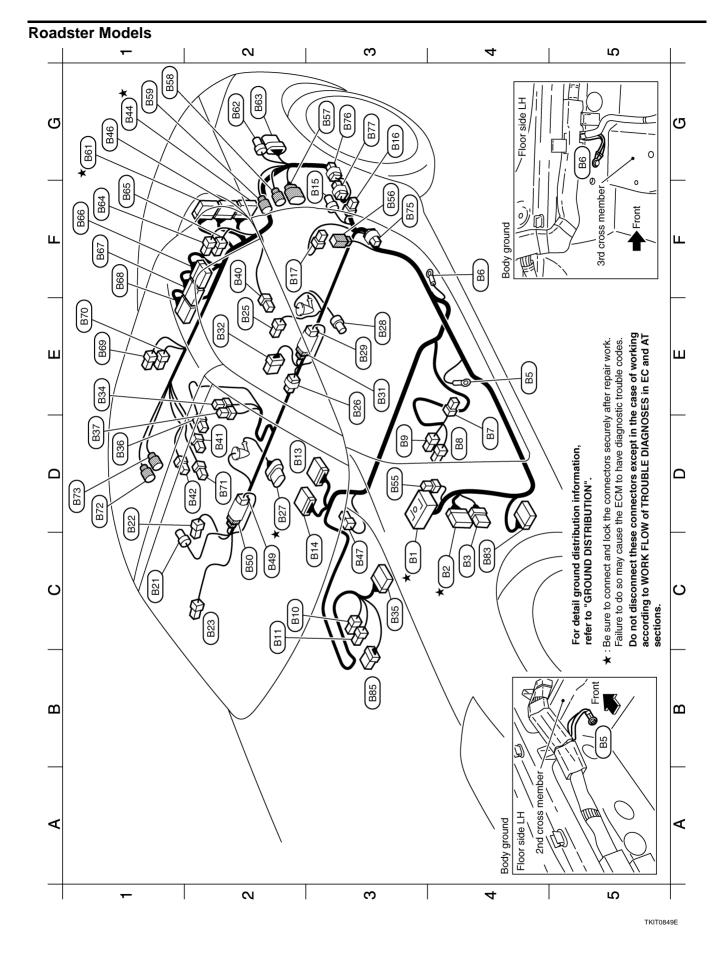
M

### BODY HARNESS/TYPE 2 Coupe Models





TKIT0848E



D3       (55)       W/2       : Circuit breaker         F3       (55)       W/2       : Short connector         G3       (57)       (7Y)       : Soft top assembly         G1       (55)       (57)       : Soft top assembly         G1       (55)       (57)       : Roof actuator LH         G1       (55)       (57)       : To       (72)         G2       (55)       (57)       : To       (72)         G3       (67)       : To       (72)       (With BOSE system)         G4       : To       (72)       : Sott op control unit         F1       : 666       W/16       : Sott op control unit         F2       : Sott op control unit       : Sott op control unit         G7       : W/12       : Sott op control unit       : Sott op control unit         G7       : W/2       : Sott op control unit<
W/2 GY/8 B/2 GY/4 B/6 W/16 W/26 W/26 W/2 B/2 W/2 B/2 W/2 W/2 B/2 W/2 W/2 B/2 W/2 W/2 0 W/2 C/2 W/2 C/2 C/2 C/2 C/2 C/2 C/2 C/2 C/2 C/2 C
≅85000000000000000000000000000000000000
To (112)         To (103)         To (103)         To (103)         To (103)         Body ground         Driver side seat         Seat belt buckle switch (Driver side)         TH side air bag diagnosis sensor unit         Diver side door switch         Woofer (With BOSE system)         Voofer amp. (With BOSE system)         Condenser         Terel level sensor unit (Sub)         Tere
SMJ W/18 W/18 W/18 W/12 W/12 W/12 W/12 BR/6 BR/6 BR/6 BR/2 W/24 BR/2 BR/2 BR/2 BR/2 BR/2 BR/2 BR/2 BR/2
2       2       3       4       5       2       3       3       3       3       3       3       3       3       3       4

TKIT0850E

А

В

С

D

Е

F

G

Н

I

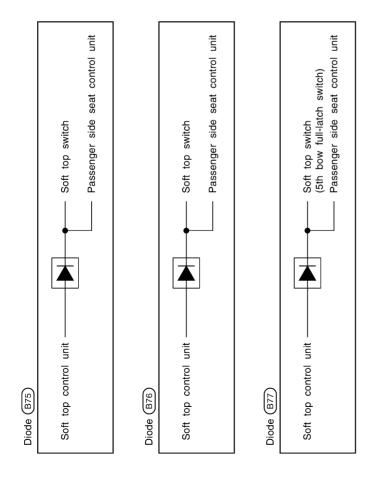
J

PG

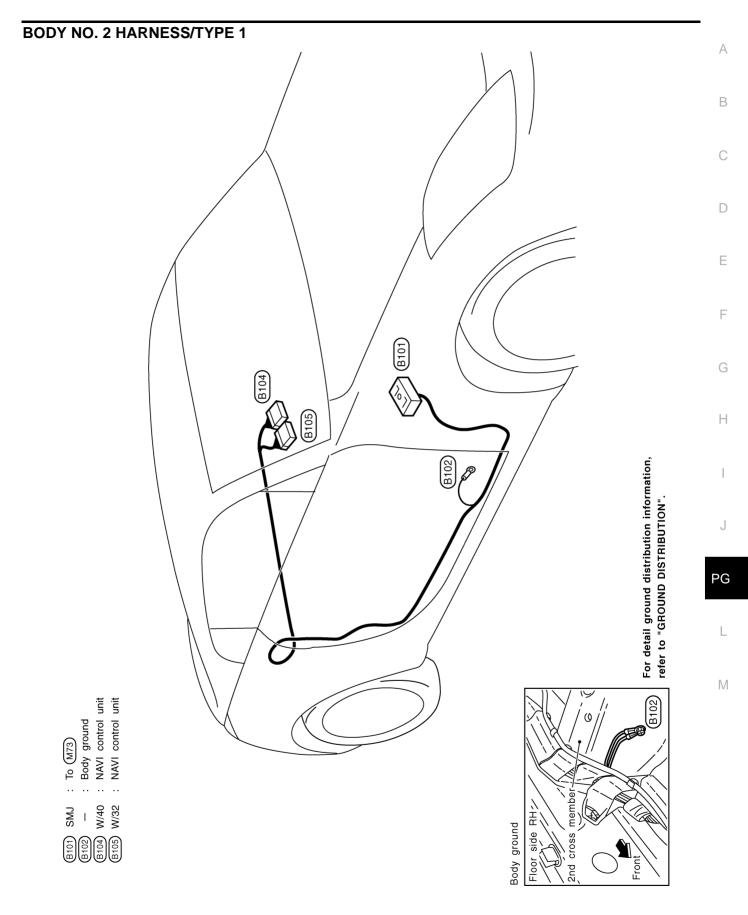
L

Μ

PG-101

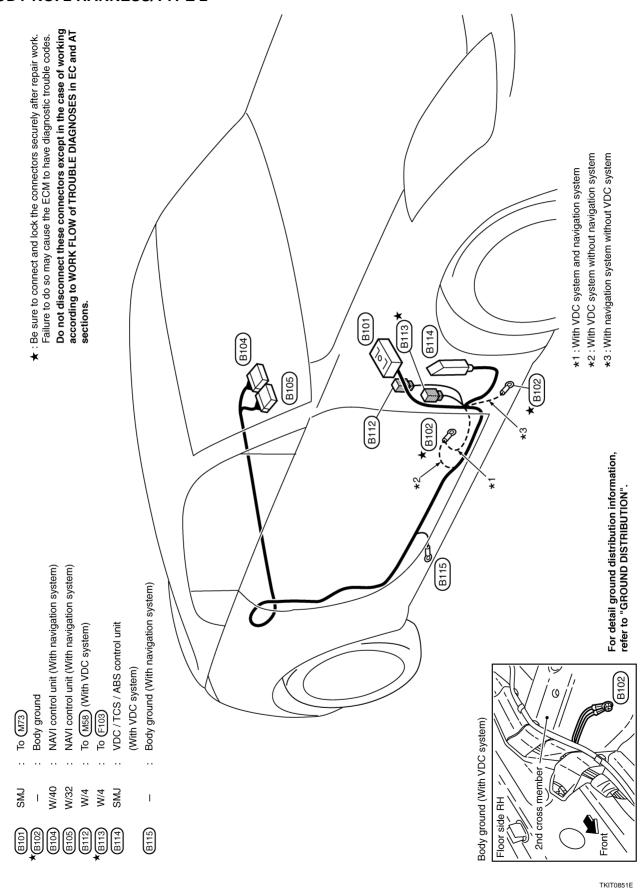


TKIT0117E

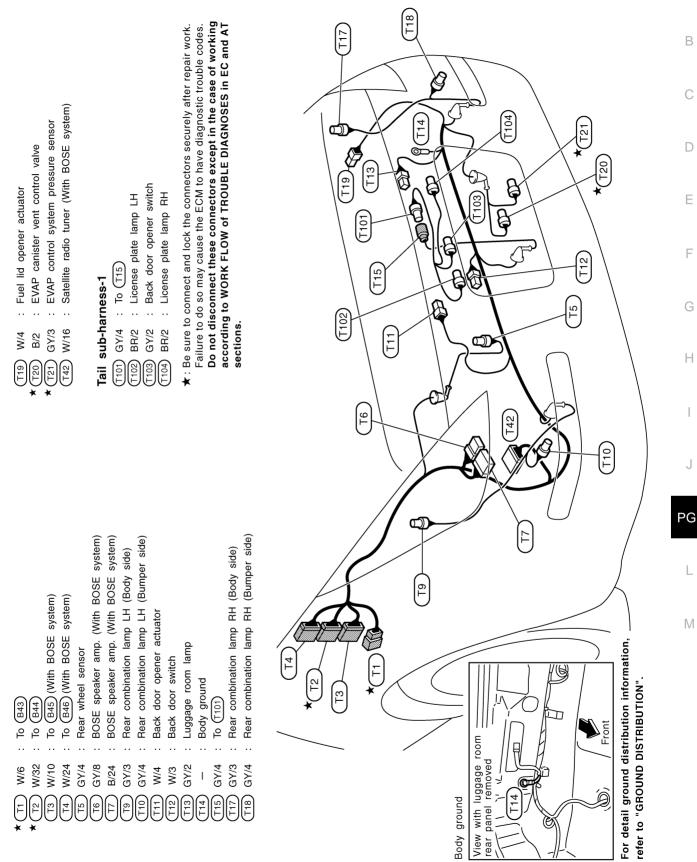


TKIT0558E





### **TAIL HARNESS/TYPE 1 Coupe Models**



TKIT0559E

А

В

С

D

Е

F

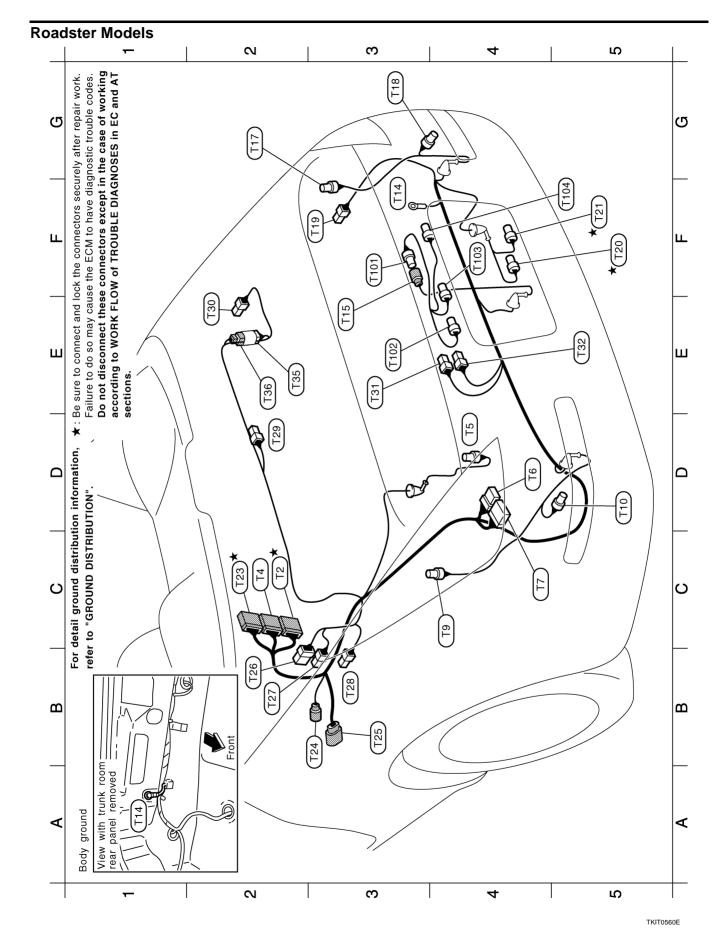
G

Н

J

L

Μ

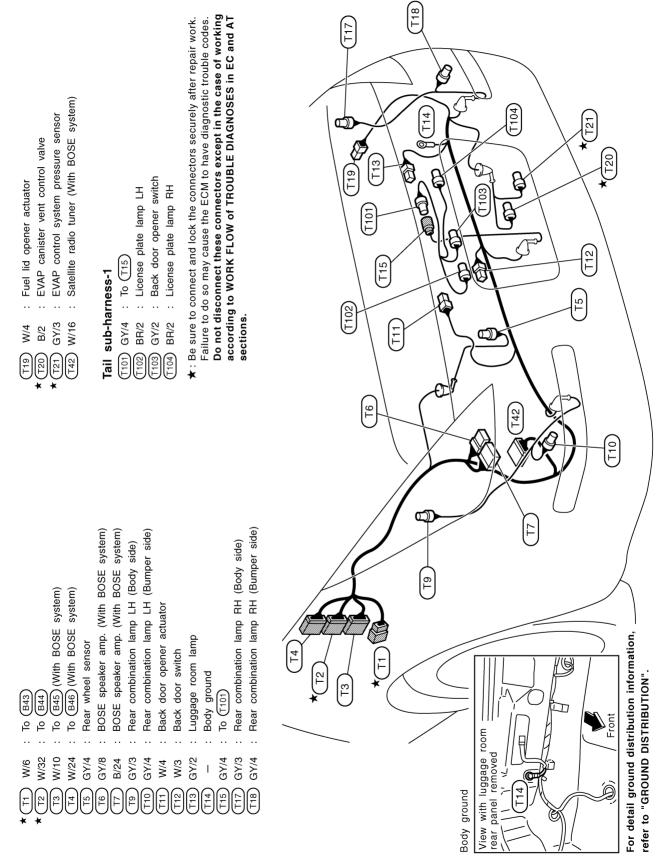


Revision: 2006 November



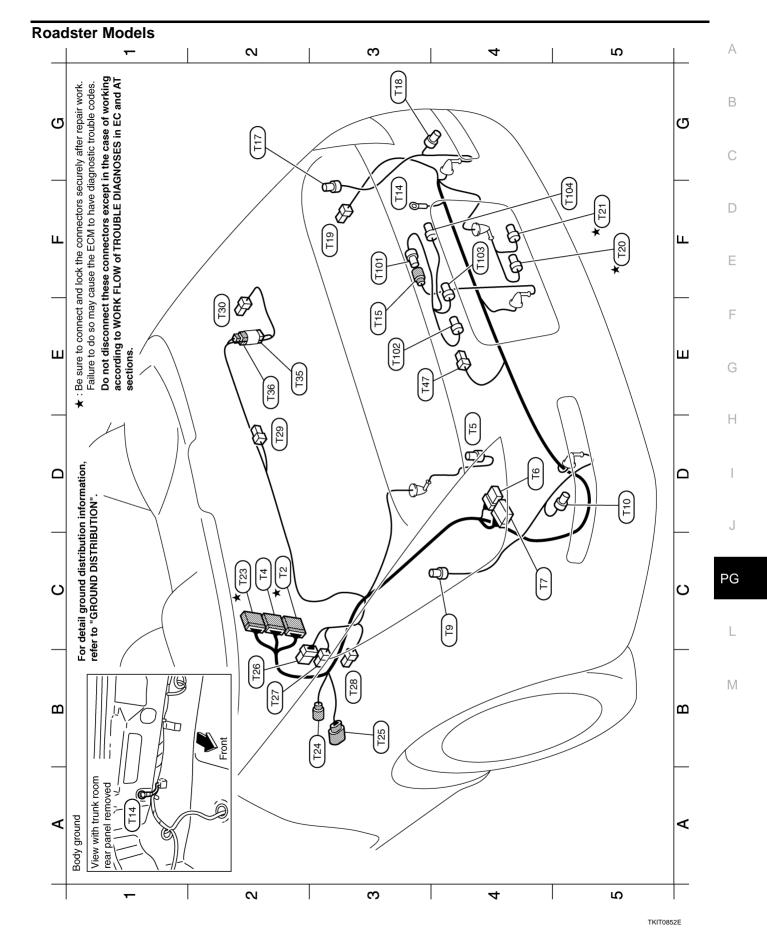
TKIT0561E

### TAIL HARNESS/TYPE 2 Coupe Models



TKIT0559E

## HARNESS

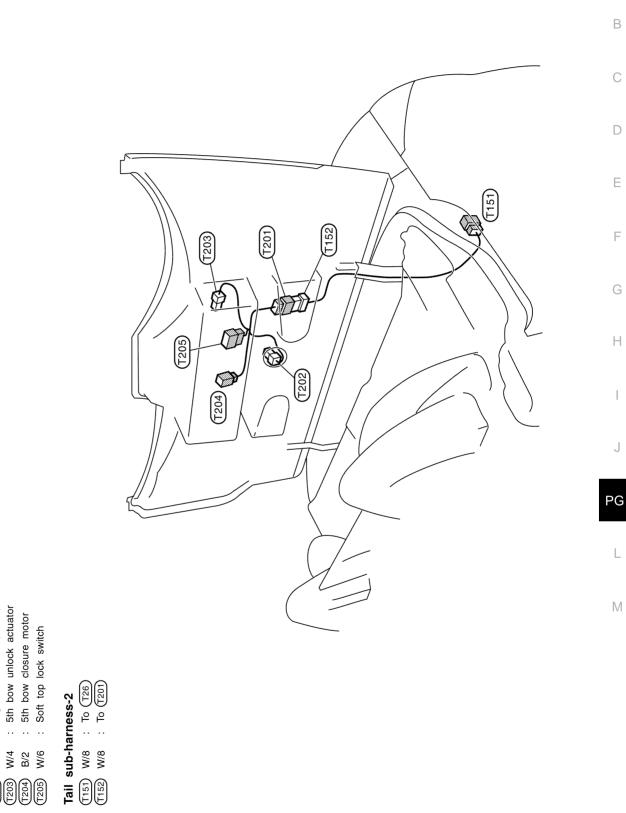


Revision: 2006 November





**TAIL NO. 2 HARNESS Roadster Models** 



TKIT0113E

А

: High-mounted stop lamp

W/8 BR/2 W/4

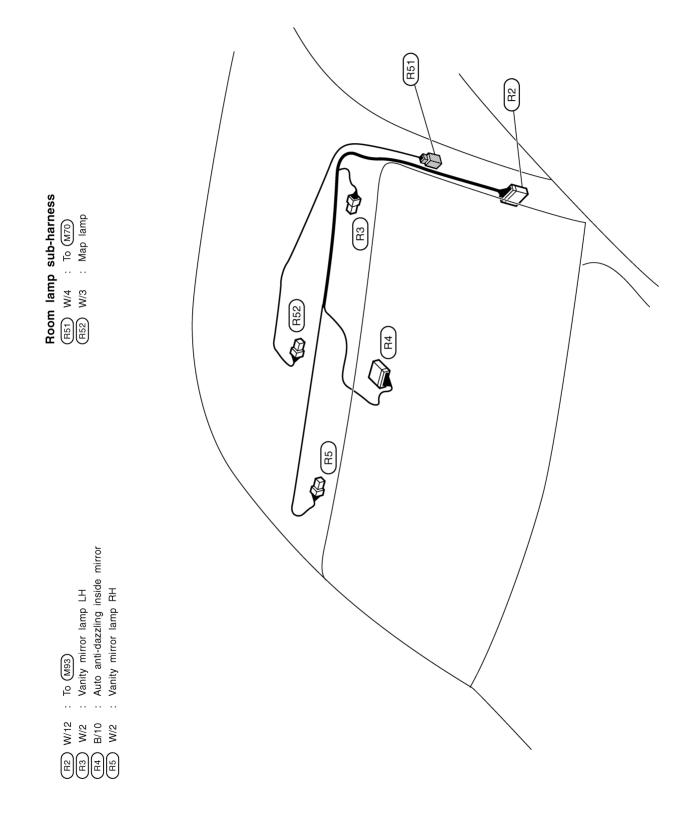
[203] [203] [203]

..

: To (T152)

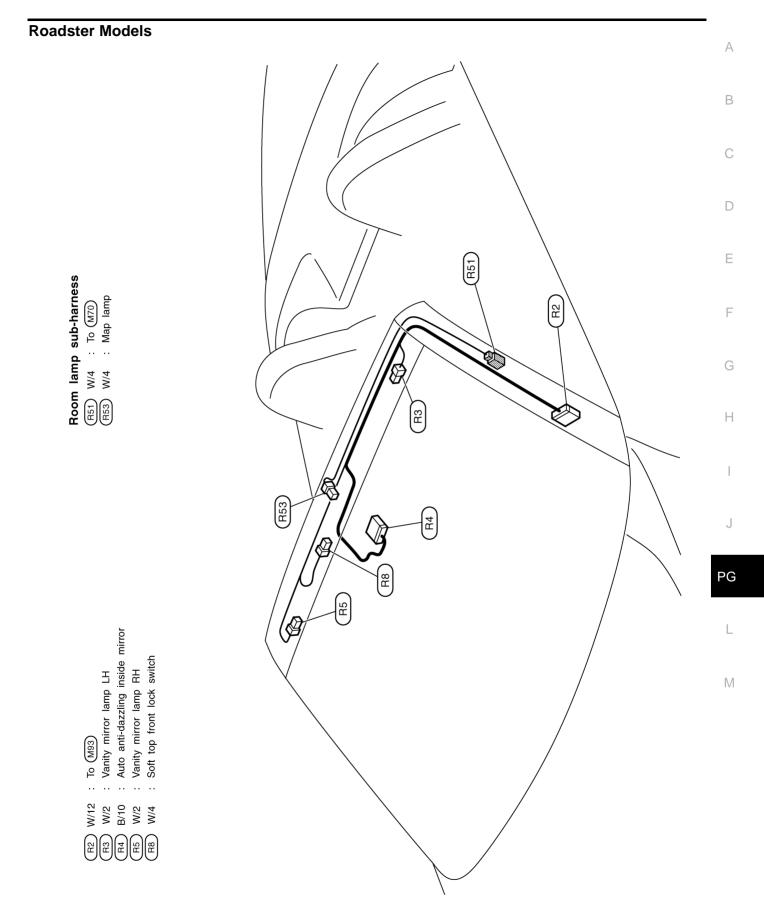
Tail No.2 harness

## ROOM LAMP HARNESS/TYPE 1 Coupe Models



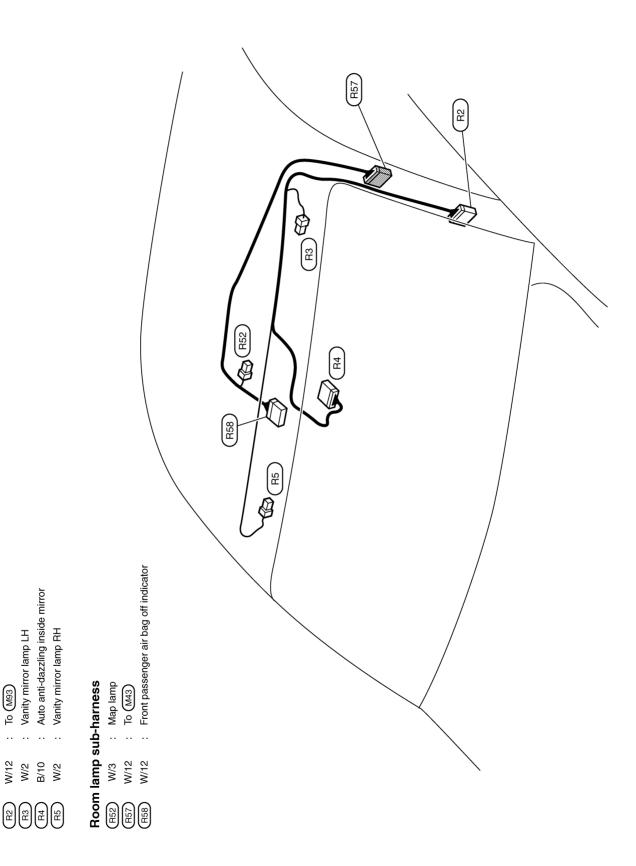
TKIT0301E

## HARNESS



TKIT0562E

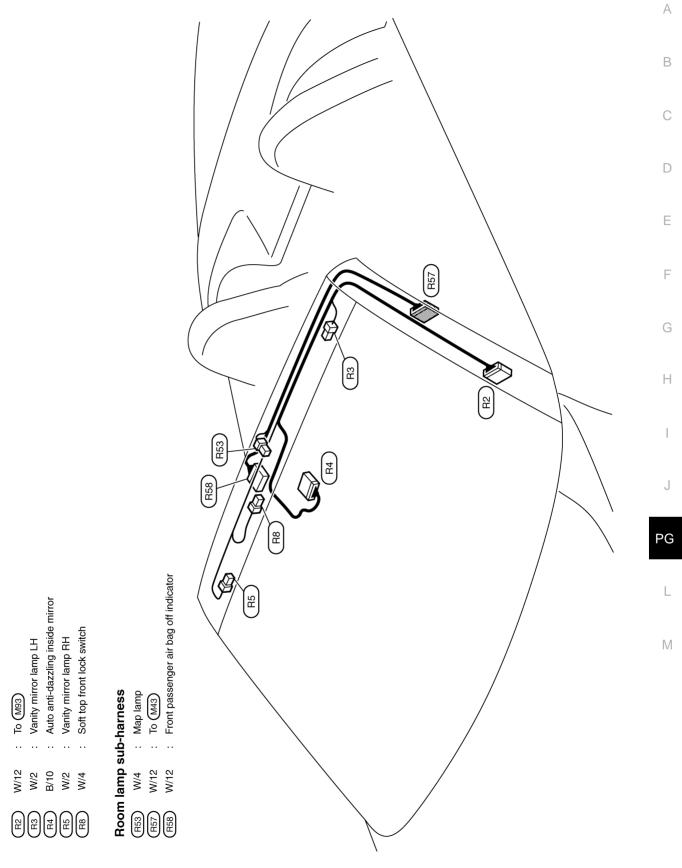
ROOM LAMP HARNESS/TYPE 2 Coupe Models



TKIT0854E

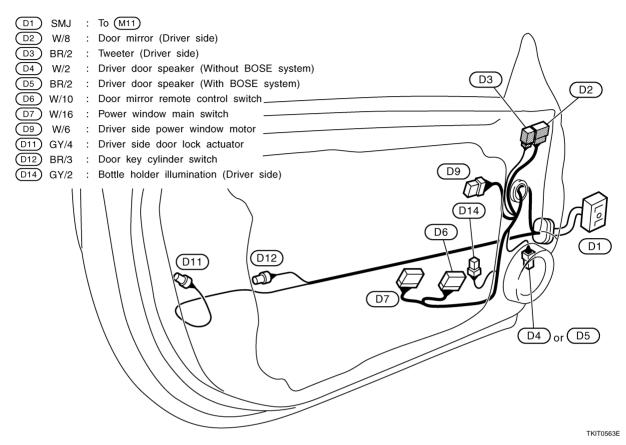
## HARNESS

**Roadster Models** 

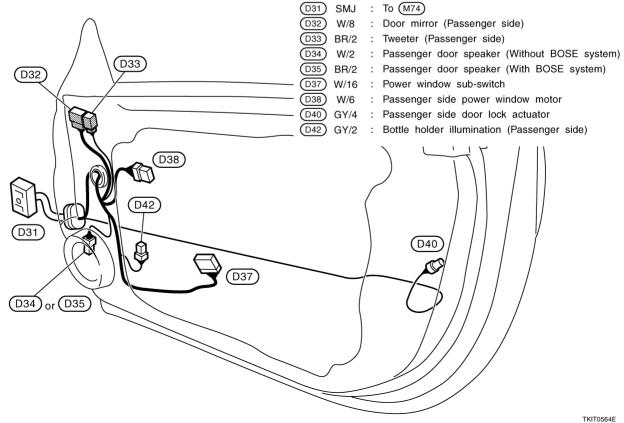


TKIT0855E

#### **DOOR HARNESS Driver Side Door**

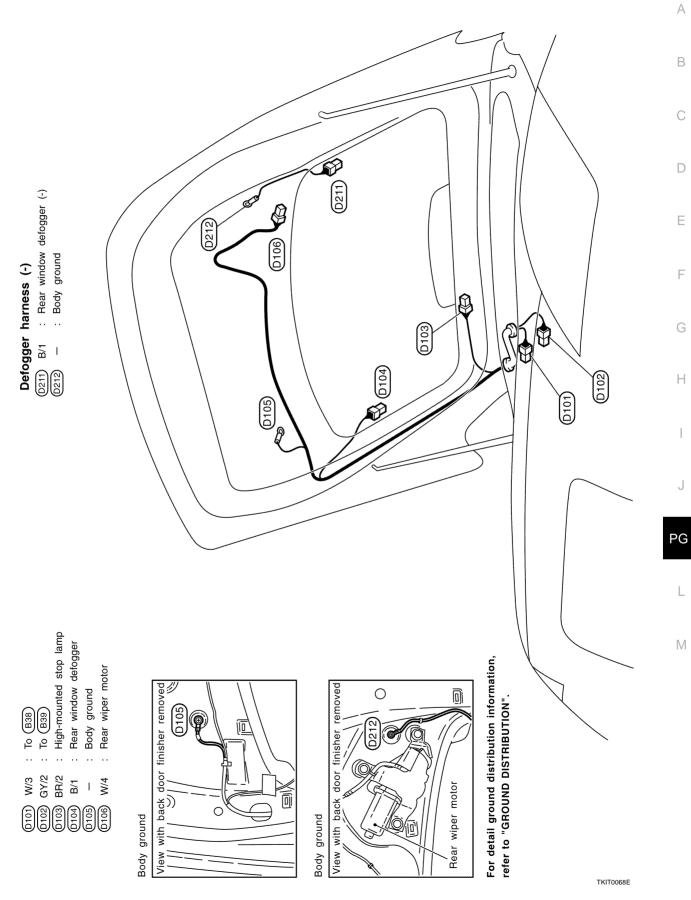


#### **Passenger Side Door**



# HARNESS





# Wiring Diagram Codes (Cell Codes)

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	
AF1B1	EC	Air Fuel Ratio Sensor 1 Bank 1	
AF1B2	EC	Air Fuel Ratio Sensor 1 Bank 2	
AF1HB1	EC	Air Fuel Ratio Sensor 1 Heater Bank 1	
AF1HB2	EC	Air Fuel Ratio Sensor 1 Heater Bank 2	
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	
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	
COMBSW	LT	Combination Switch	
СОММ	AV	Audio Visual Communication Line	
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	
EPS	STC	Electric Controlled Power Steering System	
ETC1	EC	Electric Throttle Control Function	
ETC2	EC	Electric Throttle Control Motor Relay	
ETC3	EC	Electric Throttle Control Motor	
EVCB1	EC	Exhaust Valve Timing Control Magnet Retarder (Bank 1)	
EVCB2	EC	Exhaust Valve Timing Control Magnet Retarder (Bank 2)	
EVCSB1	EC	Exhaust Valve Timing Control Position Sensor (Bank 1)	
EVCSB2	EC	Exhaust Valve Timing Control Position Sensor (Bank 2)	
F/LID	BL	Fuel Lid Opener	
F/PUMP	EC	Fuel Pump	

Revision: 2006 November

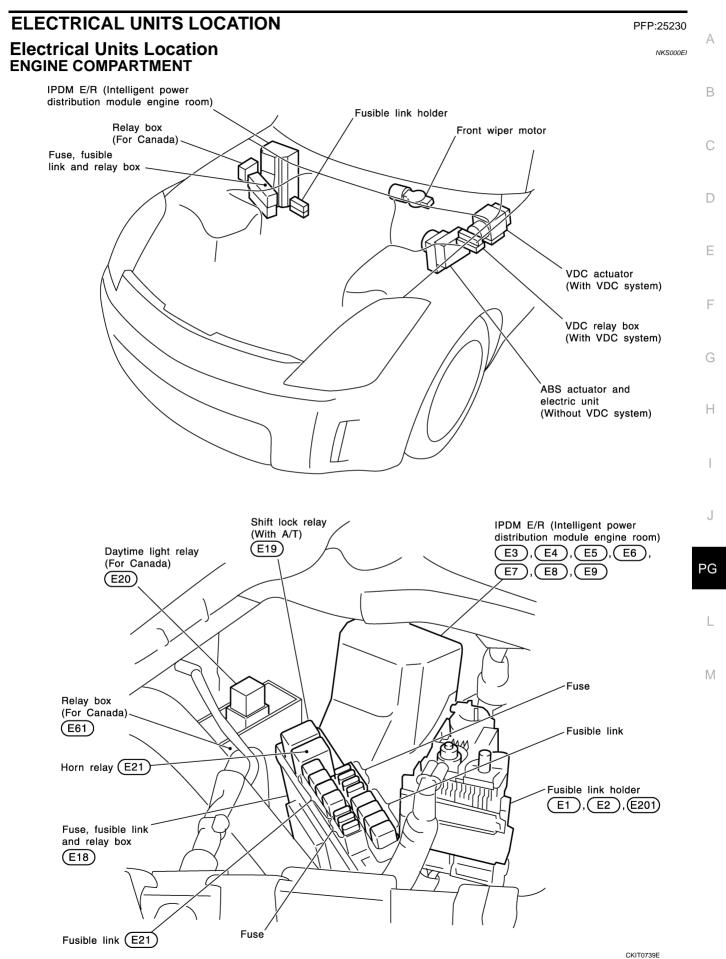
NKS000EH

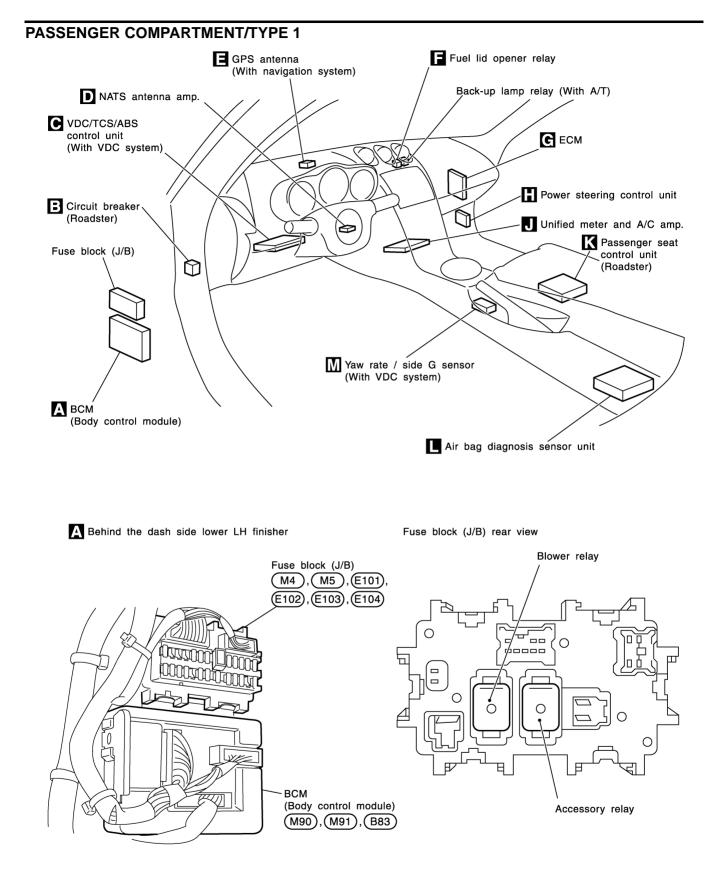
# HARNESS

Code	Section	Wiring Diagram Name		
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		
IGNSYS	EC	Ignition System		
ILL	LT	Illumination		
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)		
INJECT	EC	Injector		
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	AT	Main Power Supply and Ground Circuit		
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 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		
O2H2B1	EC	Heated Oxygen Sensor 2 Heater Bank 1		
O2H2B2	EC	Heated Oxygen Sensor 2 Heater Bank 2		
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1		
O2S2B2	EC	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	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		

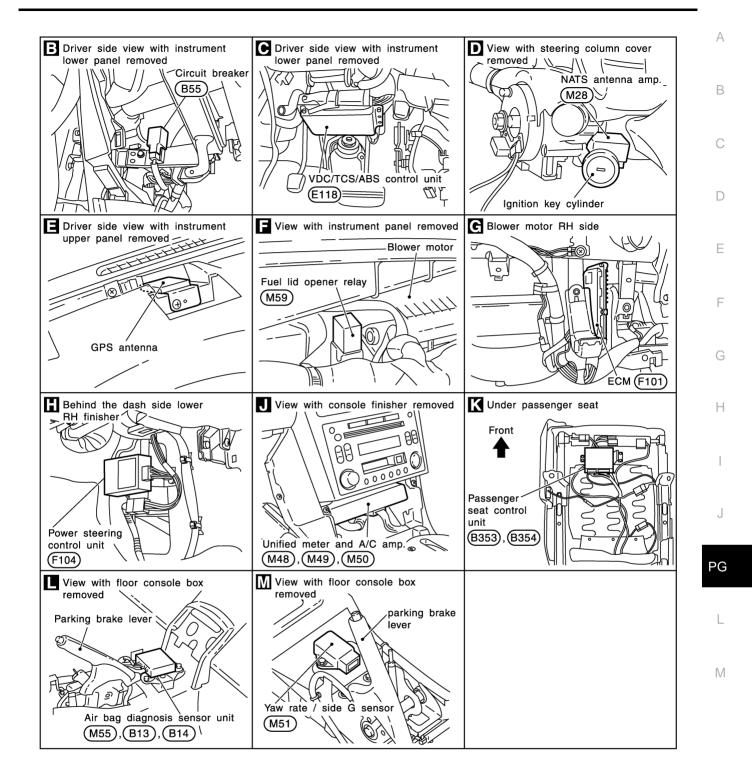
# HARNESS

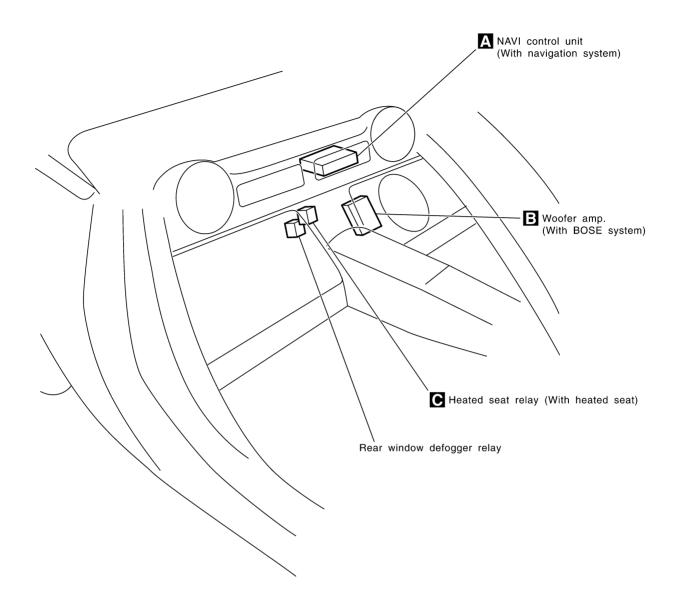
Code	Section	Wiring Diagram Name	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SRS	SRS	Supplemental Restraint System	
START	SC	Starting System	
STOP/L	LT	Stop Lamp	
STSIG	AT	Start Signal Circuit	
TAIL/L	LT	Parking, License and Tail Lamps	
TCS	BRC	Traction Control 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	
TRNSCV	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	

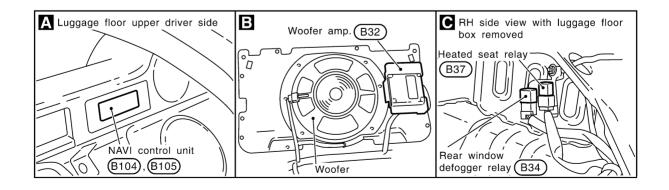




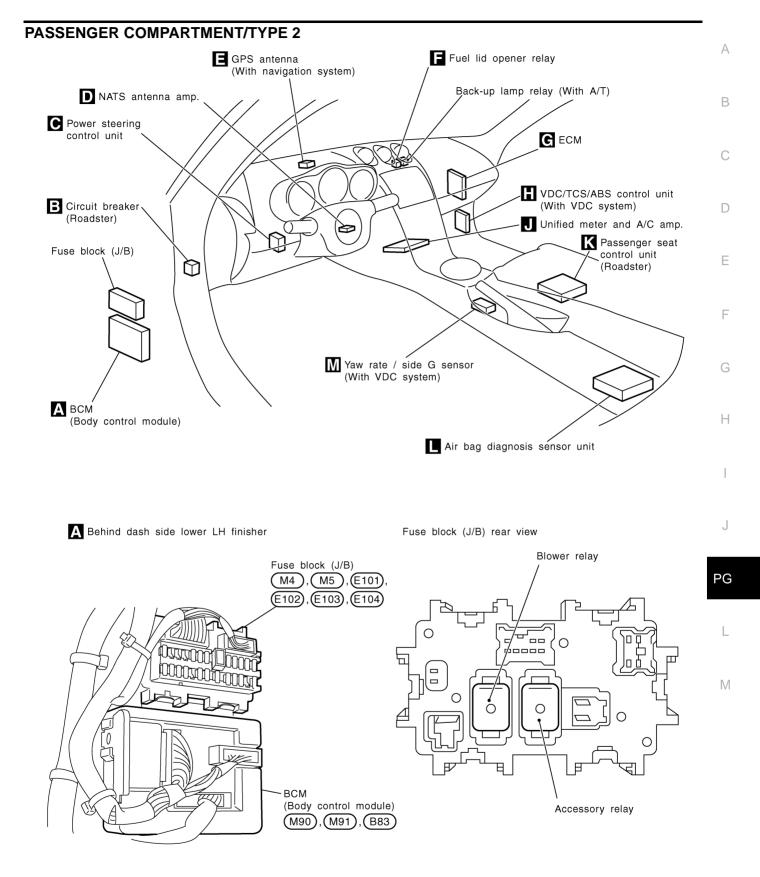
CKIT0740E



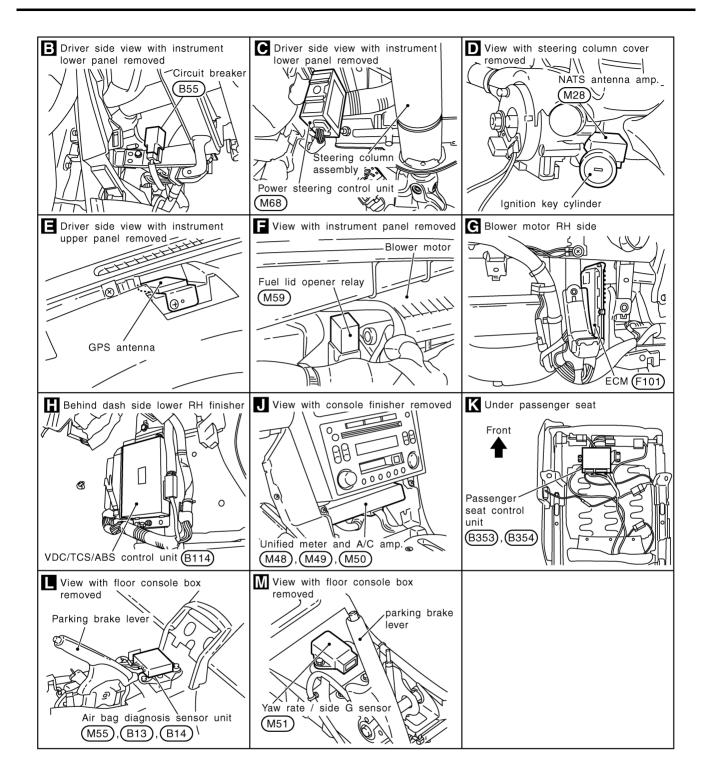




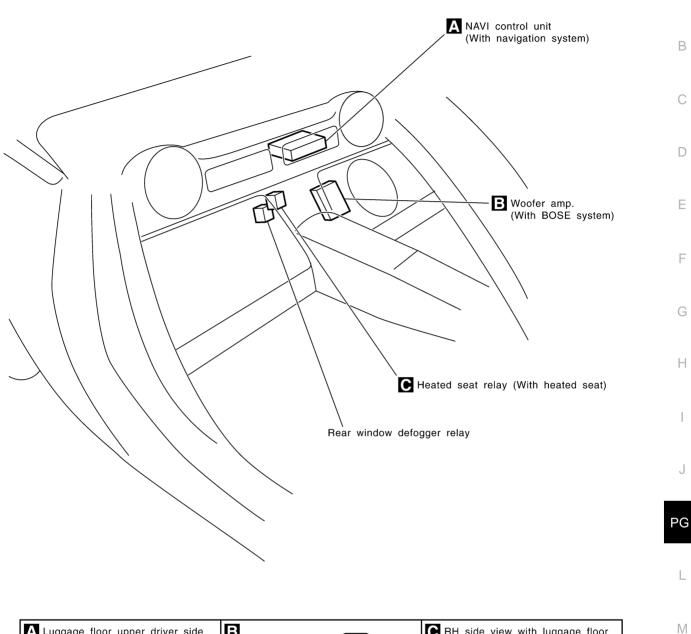
CKIT0349E

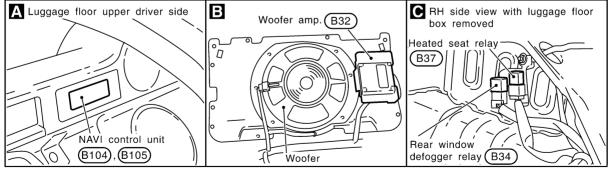


CKIT0860E



CKIT0861E

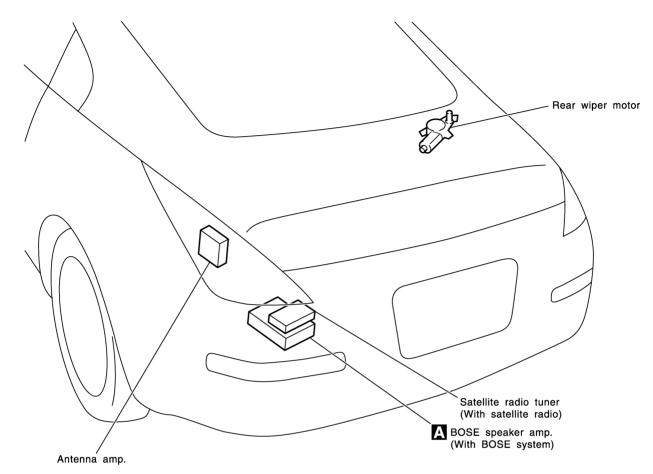


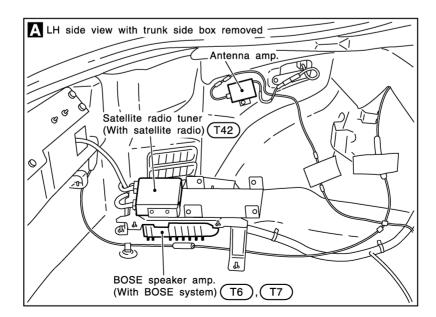


CKIT0349E

А

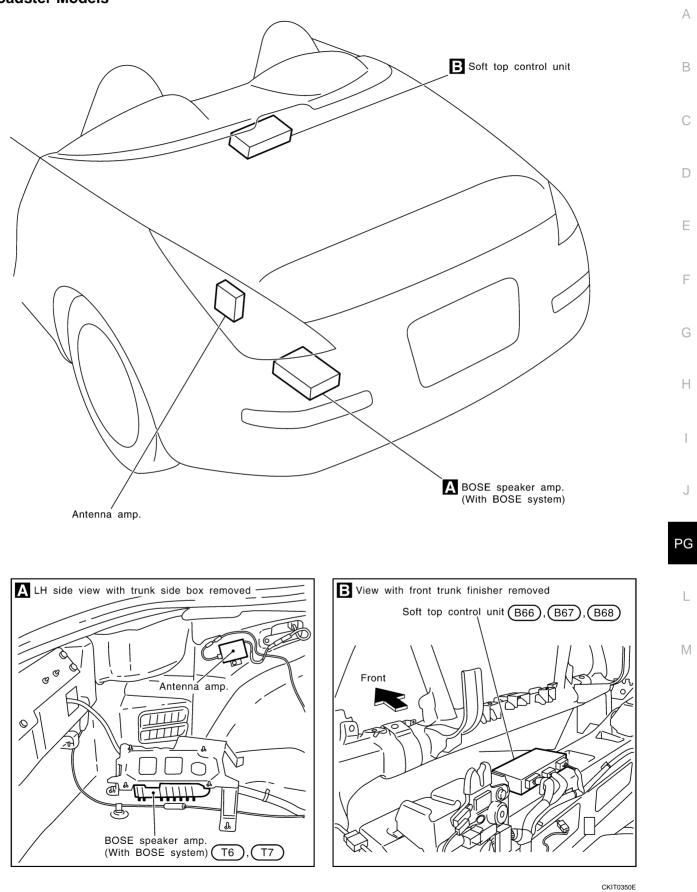
## LUGGAGE COMPARTMENT Coupe Models





CKIT0742E

#### **Roadster Models**



## HARNESS CONNECTOR

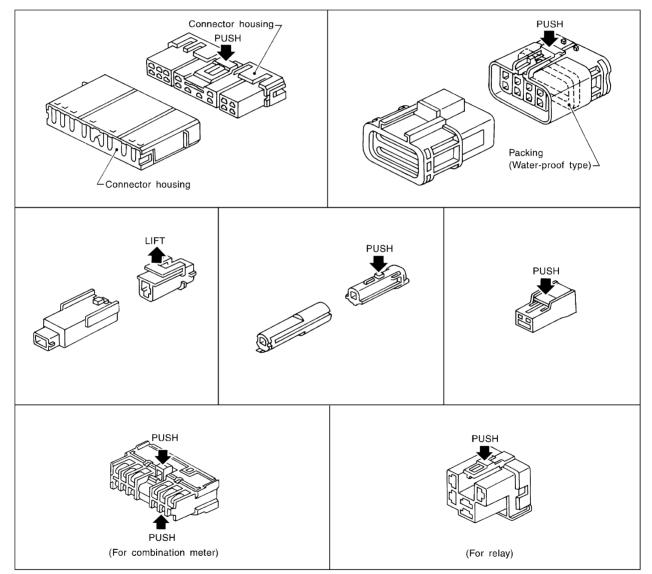
## **Description** HARNESS CONNECTOR (TAB-LOCKING TYPE)

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

# Refer to the next page for description of the slide-locking type connector. **CAUTION:**

#### Never pull the harness or wires when disconnecting the connector.

[Example]



PFP:00011

# HARNESS CONNECTOR

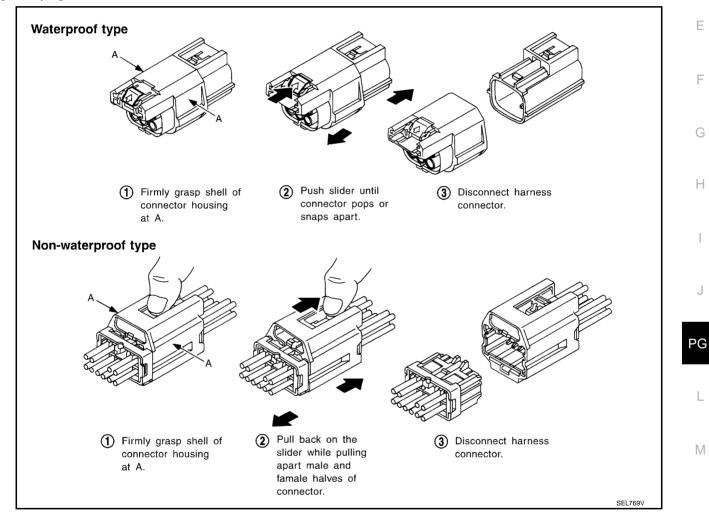
### HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.
- The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the figure below.

#### **CAUTION:**

- Never pull the harness or wires when disconnecting the connector.
- Be careful not to damage the connector support bracket when disconnecting the connector.

[Example]



В

С

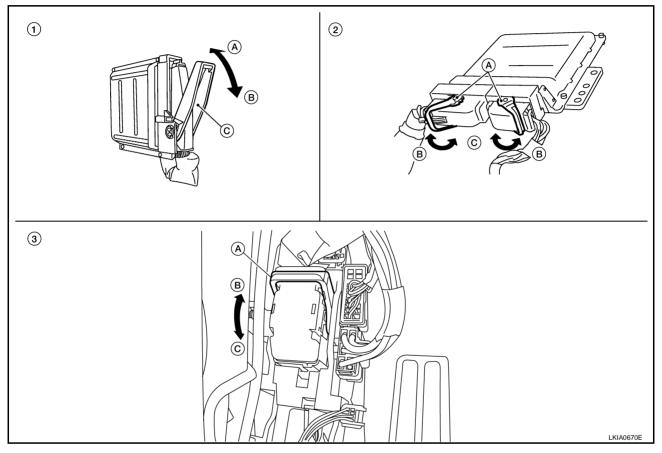
D

## HARNESS CONNECTOR (LEVER LOCKING TYPE)

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

#### **CAUTION:**

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

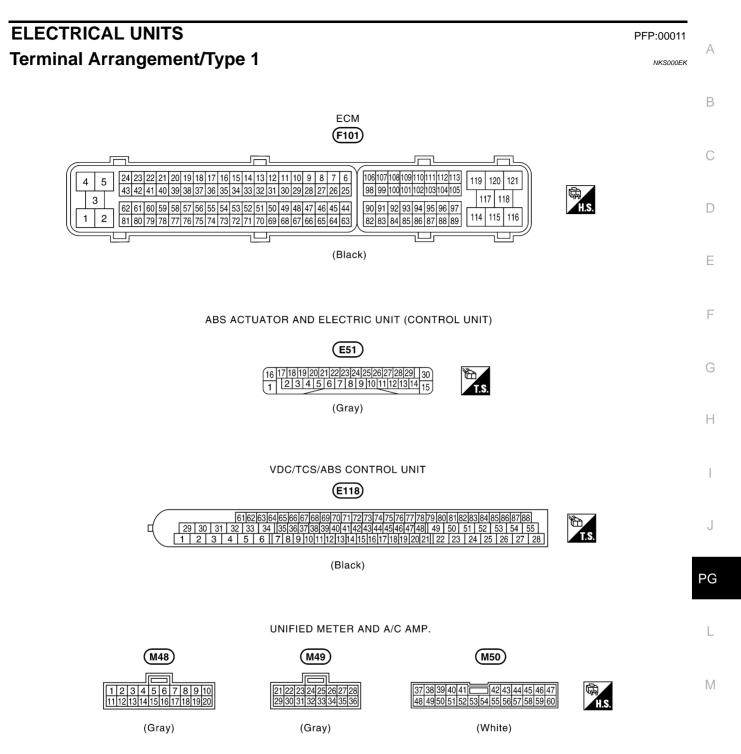


- 1. Control unit with single lever
  - A. Fasten
  - B. Loosen
  - C. Lever

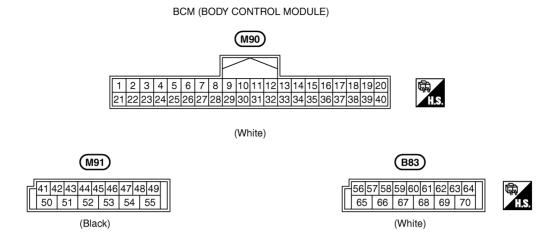
- 2. Control unit with dual levers
  - A. Levers
  - B. Fasten
  - C. Loosen

- 3. SMJ connector
  - A. Lever
  - B. Fasten
  - C. Loosen

# **ELECTRICAL UNITS**

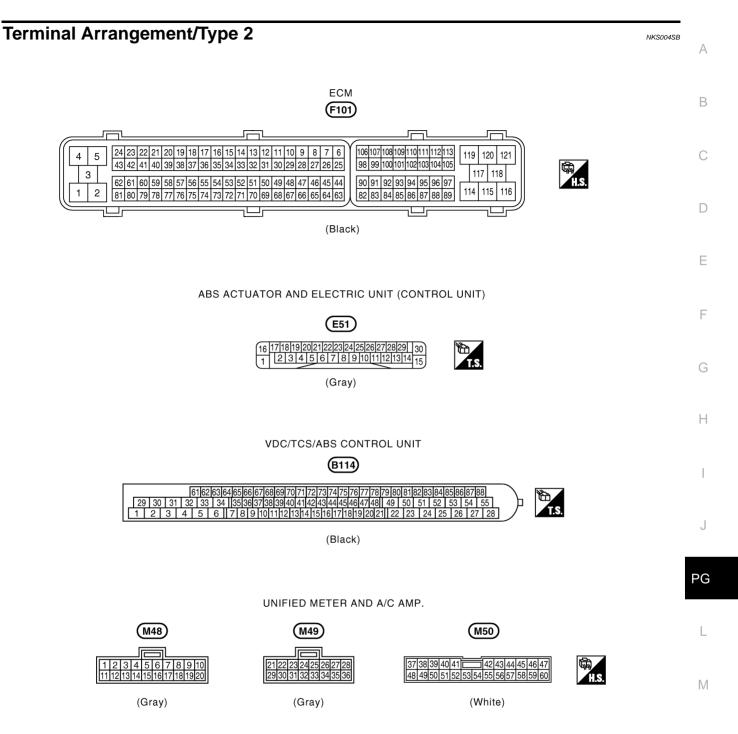


CKIT0294E

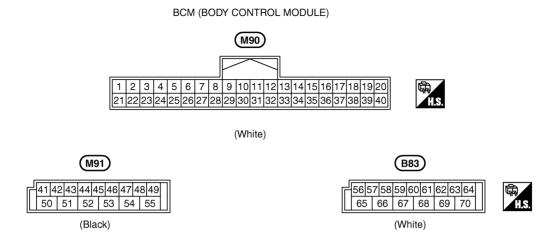


CKIT0647E

# **ELECTRICAL UNITS**

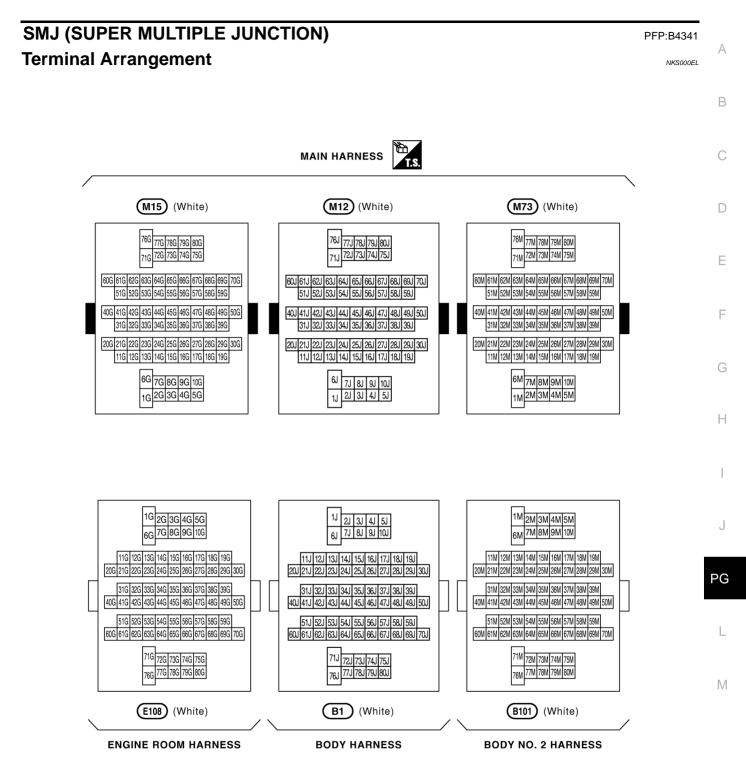


CKIT0862E

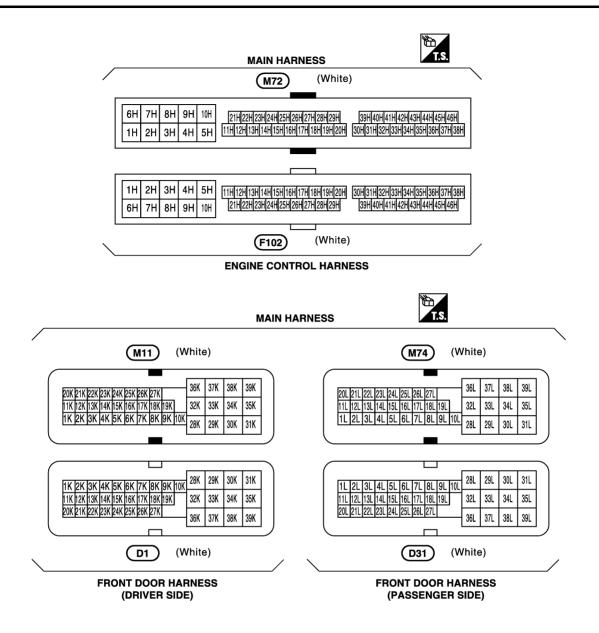


CKIT0647E

# SMJ (SUPER MULTIPLE JUNCTION)



CKIT0743E



CKIT0158E

# STANDARDIZED RELAY

PFP:00011



А

J

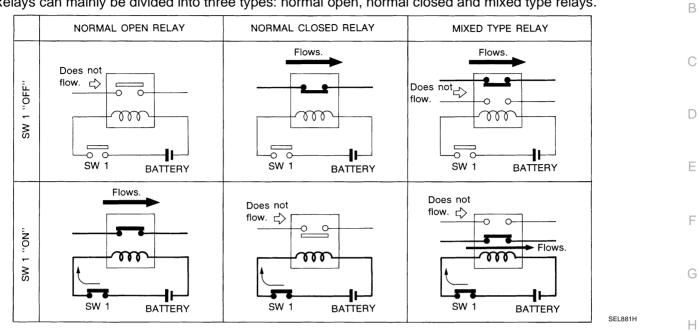
PG

L

Μ

#### Description NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

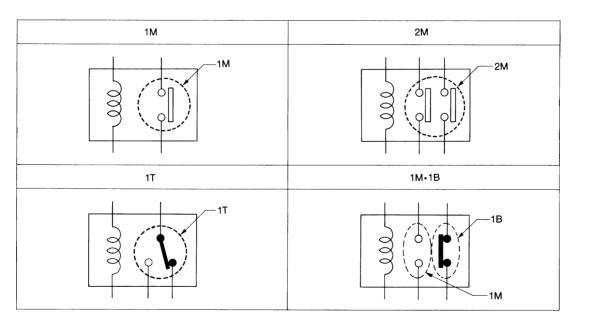
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



#### **TYPE OF STANDARDIZED RELAYS**

1M ..... 1 Make

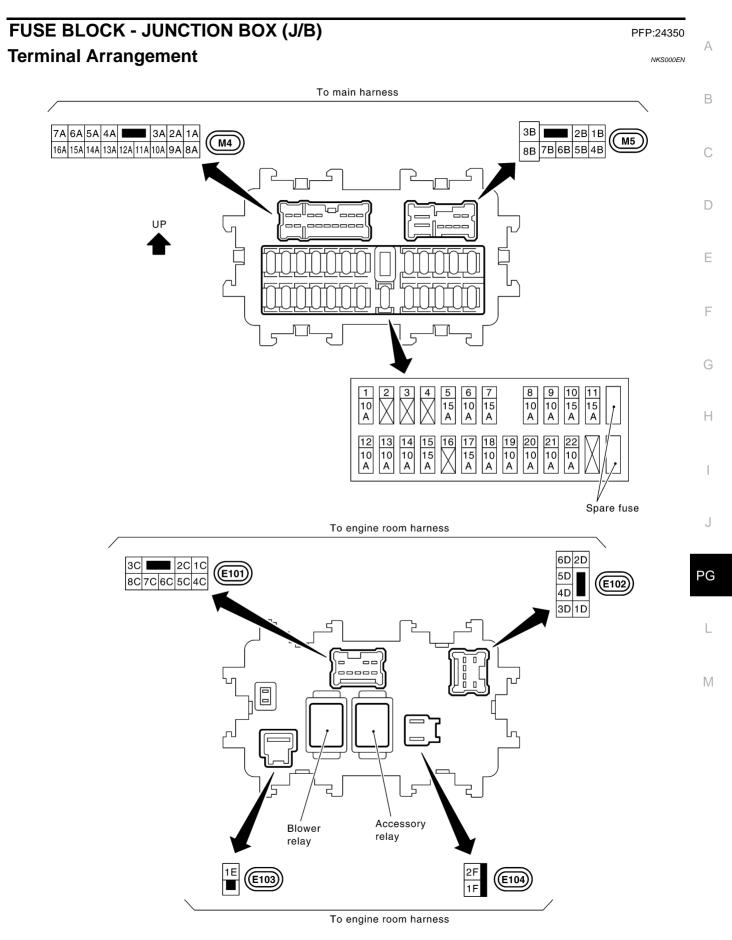
- 1T ..... 1 Transfer
- 2M ..... 2 Make 1M-1B ..... 1 Make 1 Break



# STANDARDIZED RELAY

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

SEL188W



# FUSE, FUSIBLE LINK AND RELAY BOX Terminal Arrangement

A 120A EDCB UP 80 60 80 100 A A A A  $\mathfrak{G}$ Battery (+) [] Fusible link holder (E1), (E2), (E201) Horn relay Shift lock relay Fuse and fusible link block GHI 31 32 33 34 F (E21) 40 40 40 A A A 101015 40 A A A A Fuse, fusible link and relay box (E18) J ĸ Μ 35 36 37 38 30 A 30 A 40 A 15 10 15 10 A A A A 50 A F - M: FUSIBLE LINK No. 31 - 38: FUSE Front Daytime light relay (For Canada) Relay box (For Canada) Front (E61)

CKIT0744E

PFP:24382

NKS000EO