SECTION POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTIONS
Precautions for Battery Service
POWER SUPPLY ROUTING CIRCUIT
Schematic4
Wiring Diagram — POWER —
BATTERY POWER SUPPLY — IGNITION SW.
IN ANY POSITION5
ACCESSORY POWER SUPPLY — IGNITION
SW. IN "ACC" OR "ON" 10
IGNITION POWER SUPPLY — IGNITION SW.
IN "ON" AND/OR "START"11
Fuse
Fusible Link
Circuit Breaker 16
IPDM E/R (INTELLIGENT POWER DISTRIBUTION
MODULE ENGINE ROOM) 17
System Description 17
SYSTEMS CONTROLLED BY IPDM E/R 17
CAN COMMUNICATION LINE CONTROL 17
IPDM E/R STATUS CONTROL 18
CAN Communication System Description
CAN Communication Unit
Function of Detecting Ignition Relay Malfunction 18
CONSULT-II Function (IPDM E/R) 19
CONSULT-II BASIC OPERATION 19
SELF-DIAG RESULTS 20
DATA MONITOR21
ACTIVE TEST 22
Auto Active Test
DESCRIPTION23
OPERATION PROCEDURE
INSPECTION IN AUTO ACTIVE TEST MODE 23
Schematic
IPDM E/R Terminal Arrangement
IPDM E/R Power/Ground Circuit Inspection 27
Inspection With CONSULT-II (Self-Diagnosis) 28
Removal and Installation of IPDM E/R 29
REMOVAL
INSTALLATION

GROUND	30	F
Ground Distribution	30	
MAIN HARNESS	30	
ENGINE ROOM HARNESS	32	G
ENGINE CONTROL HARNESS	35	0
BODY HARNESS		
BODY NO. 2 HARNESS	42	Н
TAIL HARNESS		
BACK DOOR HARNESS	45	
HARNESS	46	
Harness Layout		
HOW TO READ HARNESS LAYOUT		
OUTLINE		
MAIN HARNESS		J
ENGINE ROOM HARNESS		
ENGINE CONTROL HARNESS		
BODY HARNESS	57	PG
BODY NO. 2 HARNESS		
TAIL HARNESS		
TAIL NO. 2 HARNESS		1
ROOM LAMP HARNESS		L
DOOR HARNESS		
Wiring Diagram Codes (Cell Codes)		
ELECTRICAL UNITS LOCATION		M
Electrical Units Location		
ENGINE COMPARTMENT		
PASSENGER COMPARTMENT		
LUGGAGE COMPARTMENT		
HARNESS CONNECTOR		
Description	80	
HARNESS CONNECTOR (TAB-LOCKING		
	80	
HARNESS CONNECTOR (SLIDE-LOCKING	~ .	
SMJ (SUPER MULTIPLE JUNCTION)		
Terminal Arrangement	84	

А

В

С

D

Е

STANDARDIZED RELAY	FUSE BLOCK - JUNCTION BOX (J/B)88 Terminal Arrangement88
NORMAL OPEN, NORMAL CLOSED AND	FUSE, FUSIBLE LINK AND RELAY BOX
MIXED TYPE RELAYS86 TYPE OF STANDARDIZED RELAYS	Terminal Arrangement89

PRECAUTIONS

PRECAUTIONS

PFP:00001

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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.

PG

L

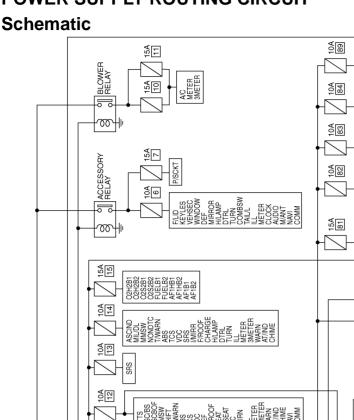
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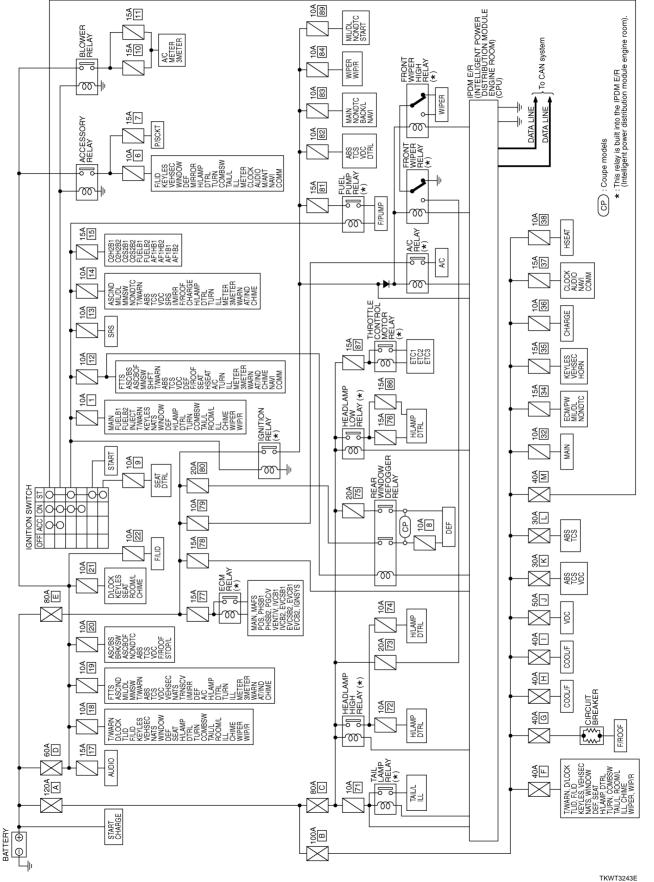
POWER SUPPLY ROUTING CIRCUIT

POWER SUPPLY ROUTING CIRCUIT

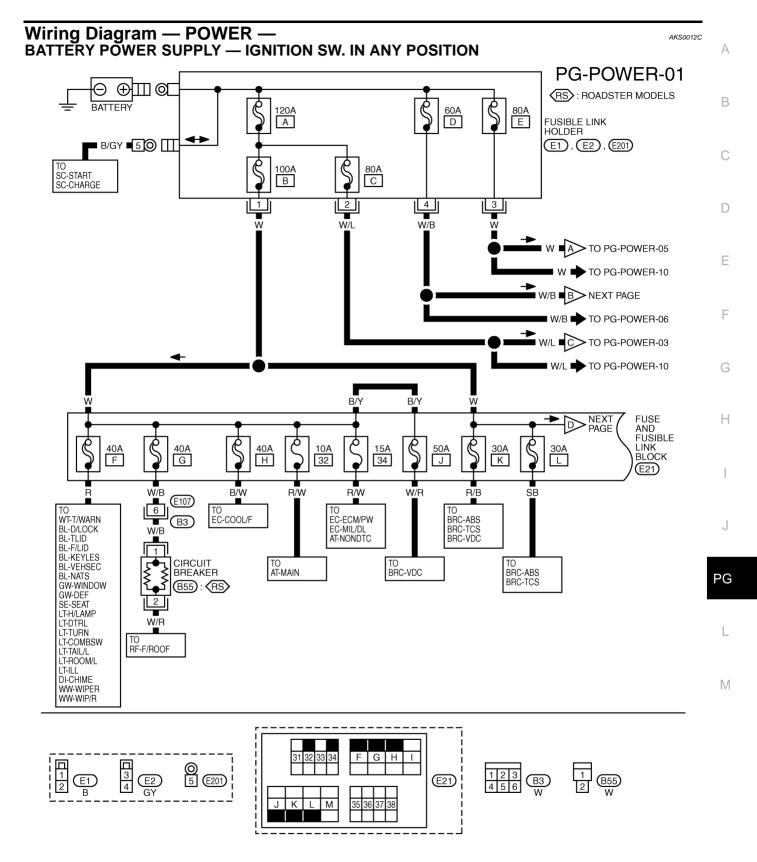
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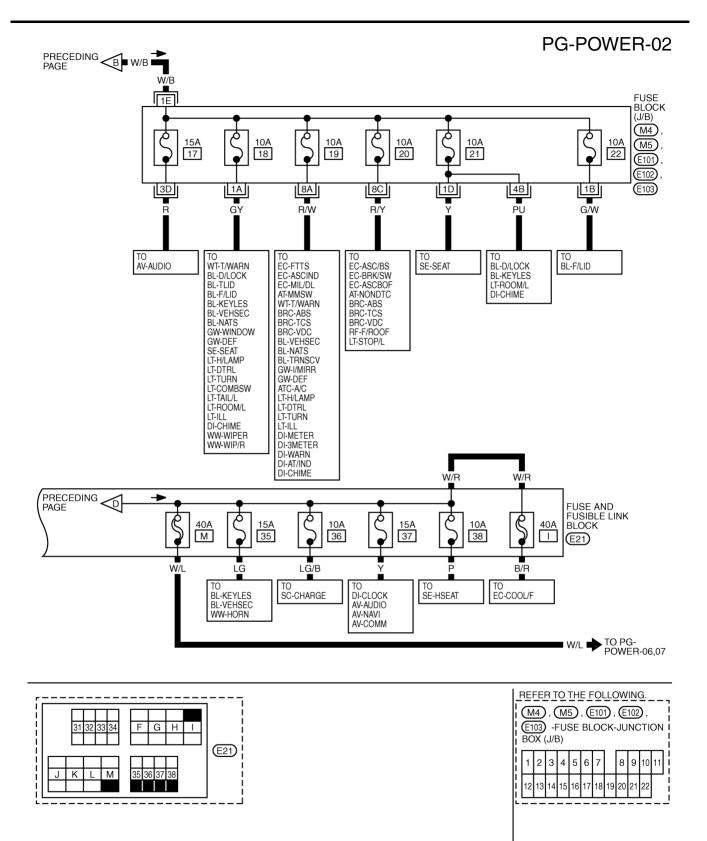




POWER SUPPLY ROUTING CIRCUIT



TKWT2521E

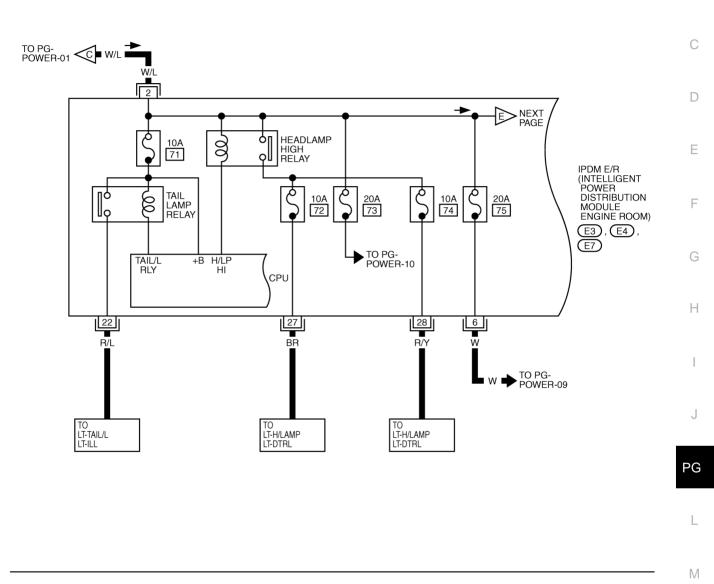


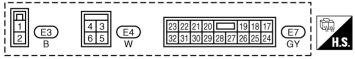
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PG-POWER-03

А

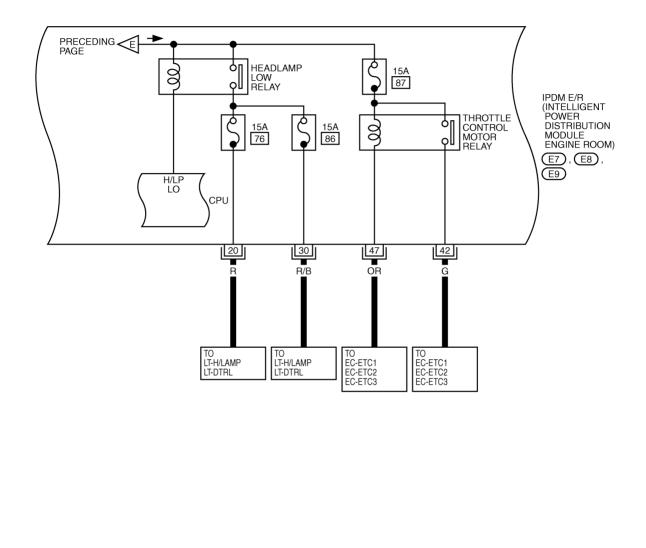
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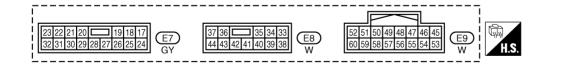




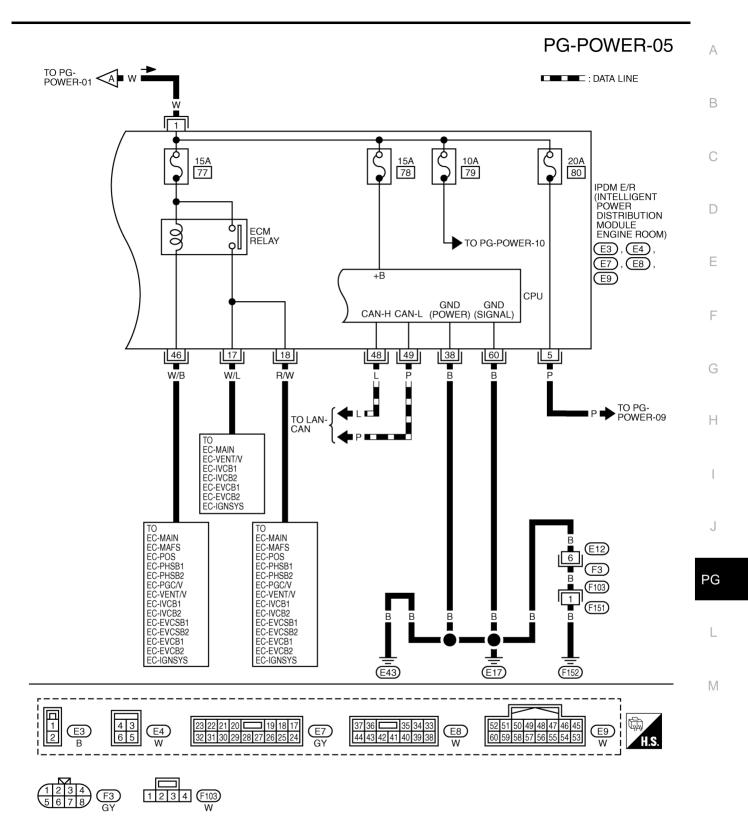
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PG-POWER-04

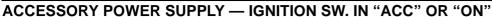


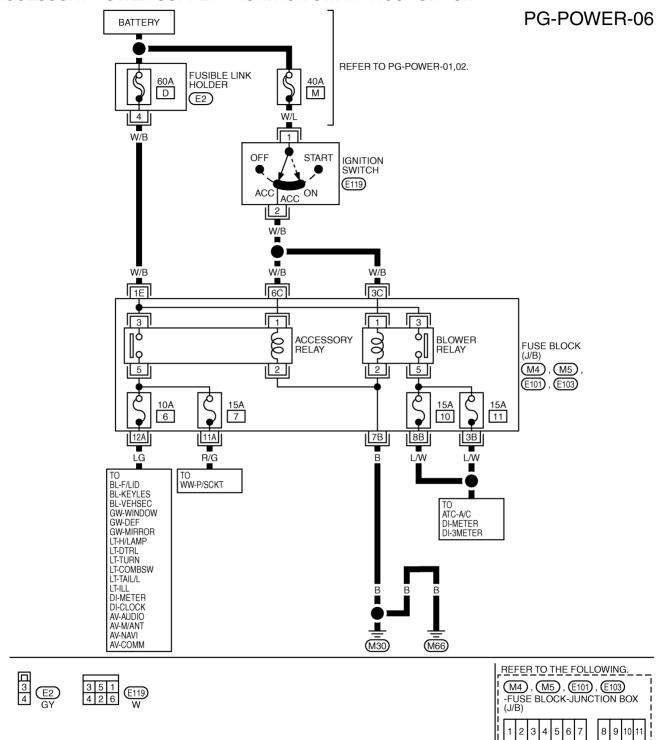


TKWT1643E



POWER SUPPLY ROUTING CIRCUIT





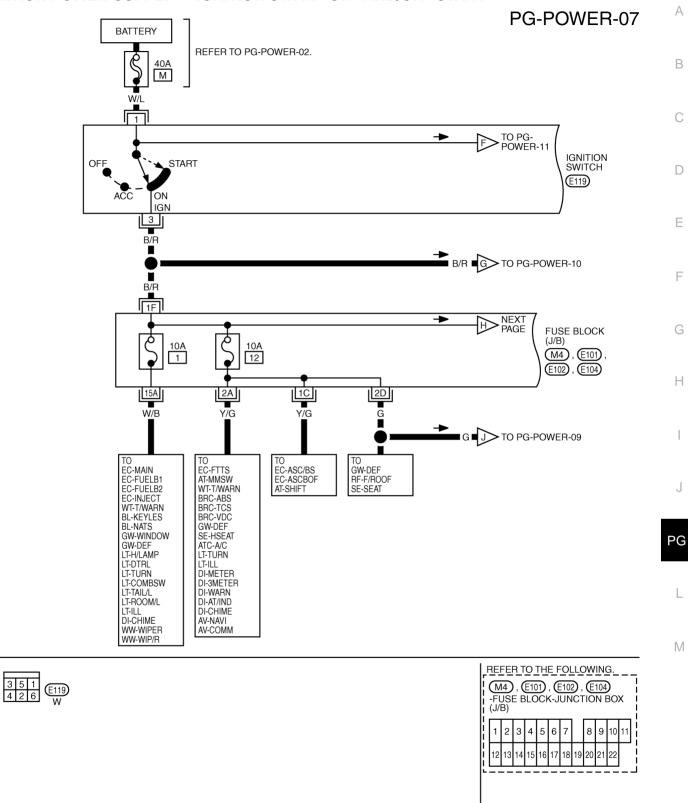
TKWT2349E

22

12 13 14 15 16 17 18 19 20 21

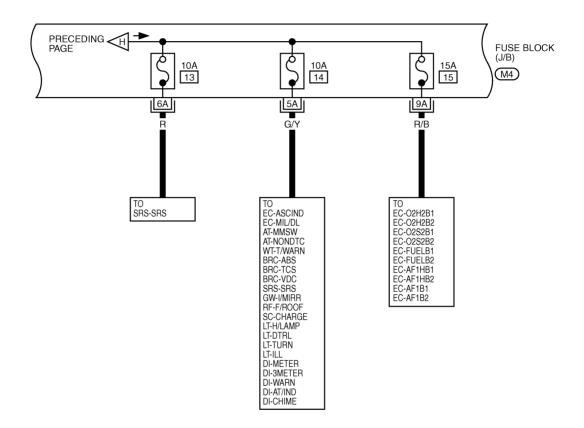
POWER SUPPLY ROUTING CIRCUIT

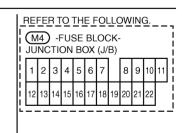
IGNITION POWER SUPPLY — IGNITION SW. IN "ON" AND/OR "START"



TKWT2350E

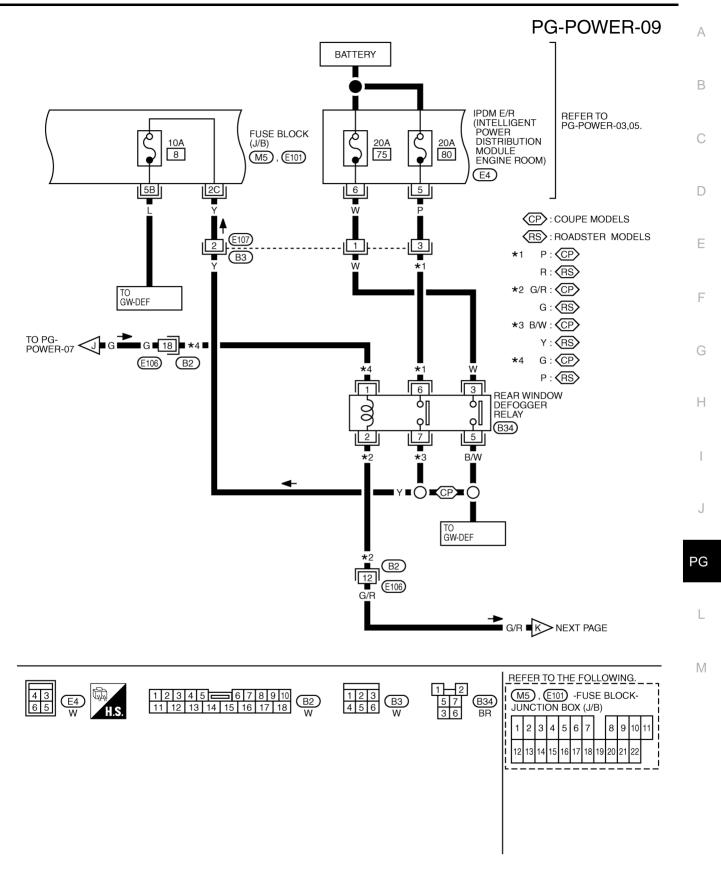
PG-POWER-08





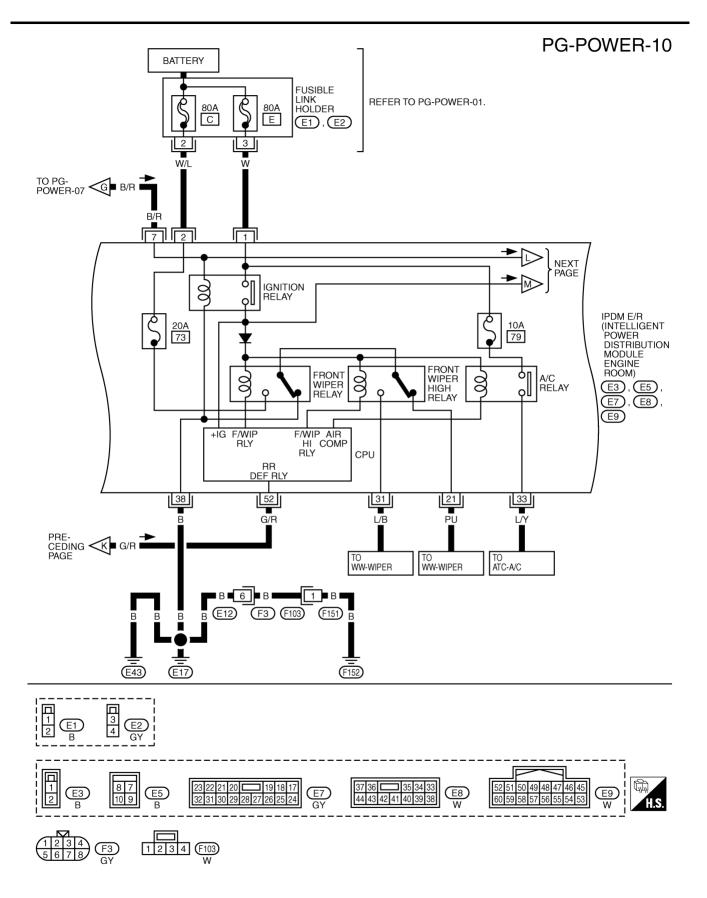
TKWM1379E

POWER SUPPLY ROUTING CIRCUIT

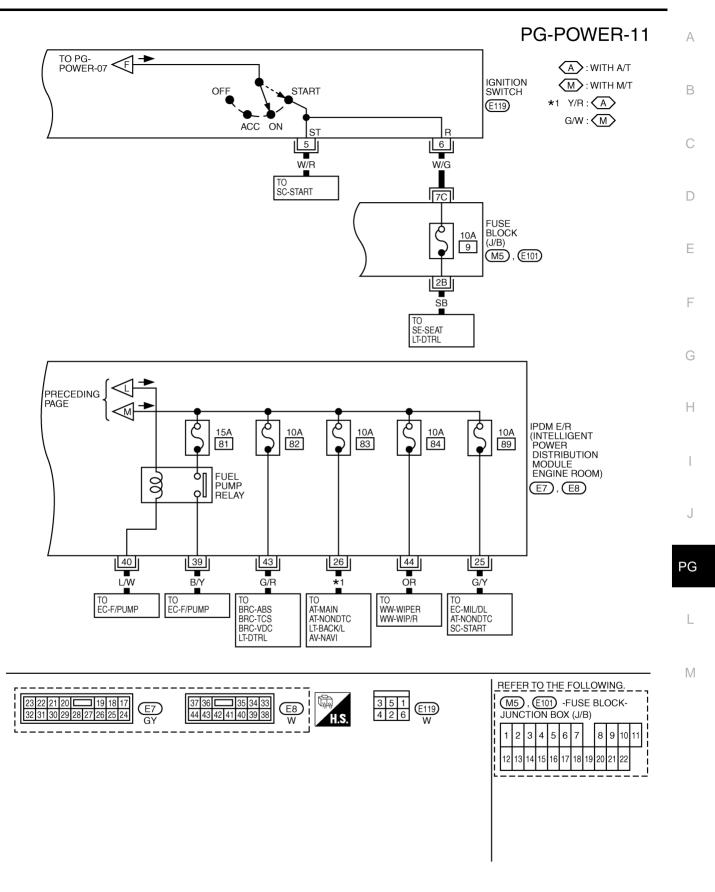


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POWER SUPPLY ROUTING CIRCUIT



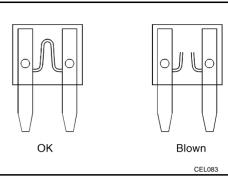
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TKWB0268E

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 prop-• erlv.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.



Fusible Link

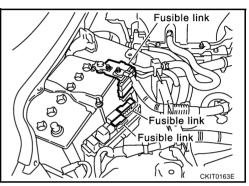
A melted fusible link can be detected either by visual inspection or by feeling with finger tip. If its condition is guestionable, use circuit tester or test lamp.

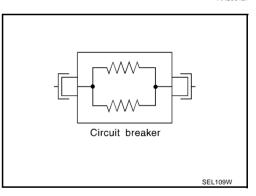
CAUTION:

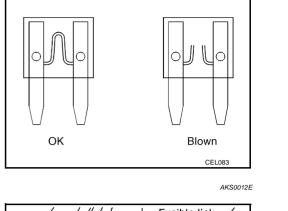
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of malfunction.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other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







AKS0012D

AKS0012F

IP	DM E/R (INTELLIGEN	IT POWER DISTRIBUTION MODULE ENGINE ROOM) PFP:284B7	А
Sy	stem Description	AK500A2H	
•	IPDM E/R (Intelligent Power which were originally placed	Distribution Module Engine Room) integrates the relay box and fuse block in engine room. It controls integrated relay via IPDM E/R control circuit. circuit performs ON-OFF operation of relay, CAN communication control,	В
•	hood switch signal reception		С
-	.UTION: ne of the IPDM E/R-integrate	d relays can be removed	
	STEMS CONTROLLED B	-	D
1.	Lamp control		
	•	ne, it receives signal from BCM and controls the following lamps:	Ε
	 Parking lamps 		
	 Tail lamps 		F
_	License plate lamps		
	•	ne, it receives signals from BCM and controls the front wipers.	G
3.	Rear window defogger relay Using CAN communication relay.	control line, it receives signals from BCM and controls the rear window defogger	Н
4.	A/C compressor control		
		ne, it receives signals from ECM and controls the A/C relay.	
5.	Cooling fan control Using CAN communication li	ne, it receives signals from ECM and controls cooling fan relay.	
CA			
Wit line	th CAN communication, by cor a), it is possible to transmit m	necting each control unit using two communication lines (CAN L line, CAN H aximum amount of information with minimum wiring. Each control unit can	J
	nsmit and receive data, and re Fail-safe control	ads necessary information only.	PG
1.		n with other control units is impossible, IPDM E/R performs fail-safe control.	
		recovers normally, it also returns to normal control.	
	Operation of control parts	by IPDM E/R during fail-safe mode is as follows:	L
	Controlled system	Fail-safe mode	
	odlomp	• With the ignition switch ON, the headlamp (low) is ON.	M
пе	eadlamp	• With the ignition switch OFF, the headlamp (low) is OFF.	
Ta	il and parking lamps	• With the ignition switch ON, the tail and parking lamps is ON.	
		• With the ignition switch OFF, the tail and parking lamps is OFF.	
Co	ooling fan	• With the ignition switch ON, the cooling fan HI operates.	
		With the ignition switch OFF, the cooling fan stops.	
Fr	ont wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it	

Rear window defogger

A/C compressor

was in just before fail-safe control was initiated.

Rear window defogger relay OFF

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 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-21, "CAN Communication Unit" .

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 tail and parking lamps 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.

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.

AKS00A2K

AKS00A2

AKS00A2

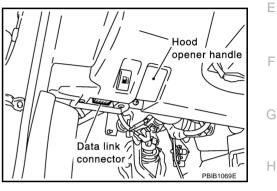
CONSULT-II Function (IP	DM E/R)	AKS00A2L	
CONSULT-II can display each dia	gnostic item using the diagnostic test modes shown following.		A
Inspection Item, Diagnosis Mode	Description		
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of the CAN communication and self-diagnosis.		E
DATA MONITOR	The input/output 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	on.	C

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.

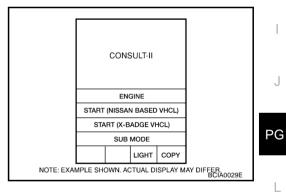
1. With the ignition switch OFF, connect CONSULT-II and CON-SULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



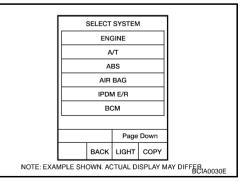
D

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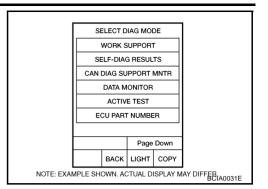
2. Touch "START (NISSAN BASED VHCL)".



 Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 If "IPDM E/R" is not displayed, refer to <u>GI-39, "CONSULT-II Data</u> <u>Link Connector (DLC) Circuit"</u>.



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	Malfunction detecting condition	TIN	ME	Possible causes
	display code	Manufactor detecting condition	CRNT	PAST	
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.	-	-	-	-	-
CAN COMM CIRC	U1000	 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. • 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 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	Display or unit	ALL SIG- NALS	MAIN SIG- NALS	SELEC- TION FROM MENU	Description	G
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	H
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	FR FOG REQ ^{*1}	ON/OFF	×	×	×	_	_
Head lamp washer request	HL WASHER REQ ^{*1}	ON/OFF	×		×	_	J
Front wiper request	FR WIP REQ	STOP/1LOW/ LOW/HI	×	×	×	Signal status input from BCM	PG
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 ^{*2}	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	M
Oil pressure switch	OIL P SW ^{*1}	OPEN/CLOSE	×		×	_	-
Day time light request	DTRL REQ ^{*1}	ON/OFF	×		×	_	-
Hood switch	HOOD SW*1	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.

А

В

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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 ^{NOTE 2}) 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 20ms.		

NOTE:

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

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

	Ito Active Test	А
In a	auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the	
foll	owing systems:	
•	Rear window defogger	В
•	Front wipers	
•	Tail lamps and parking lamps	С
•	Headlamps (Hi, Lo)	C
•	A/C compressor (magnetic clutch)	
•	Cooling fan	D
OP	PERATION PROCEDURE	
1.	Close hood and front door (passenger side), and then lift wiper arms away from windshield (to prevent glass damage by wiper operation). NOTE:	E
	When auto active test is performed with hood opened, sprinkle water on windshield beforehand.	
2.	Turn ignition switch OFF.	F
3.	Turn ignition switch ON, and, within 20 seconds, press drivers front door switch 10 times (close other door). Then turn ignition switch OFF.	1
4.	Turn ignition switch ON within 10 seconds after ignition switch OFF.	G
5.	When auto active test mode is actuated.	
6.	After a series of operations is repeated three times, auto active test is completed.	
	NOTE:	Н
	When auto active test mode has to be cancelled halfway, turn ignition switch OFF.	
	CAUTION:	
	Be sure to inspect <u>BL-39, "Door Switch Check"</u> when the auto active test cannot be performed.	
INS	SPECTION IN AUTO ACTIVE TEST MODE	
Wh	en auto active test mode is actuated, the following eight steps are repeated three times.	
Г		J
	7. Cooling fan (Lo 5 sec.) 1. Rear window defogger (10 sec.)	
	2. Front wiper (Lo 5 sec.)	PG
		L

NOTE: It takes 10 seconds from 3 to 4.

6. A/C compressor

(ON-OFF five times)

4. Headlamp (Lo 10 sec.)

5. Headlamp (Hi ON-OFF five times)

PKIB6170E

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

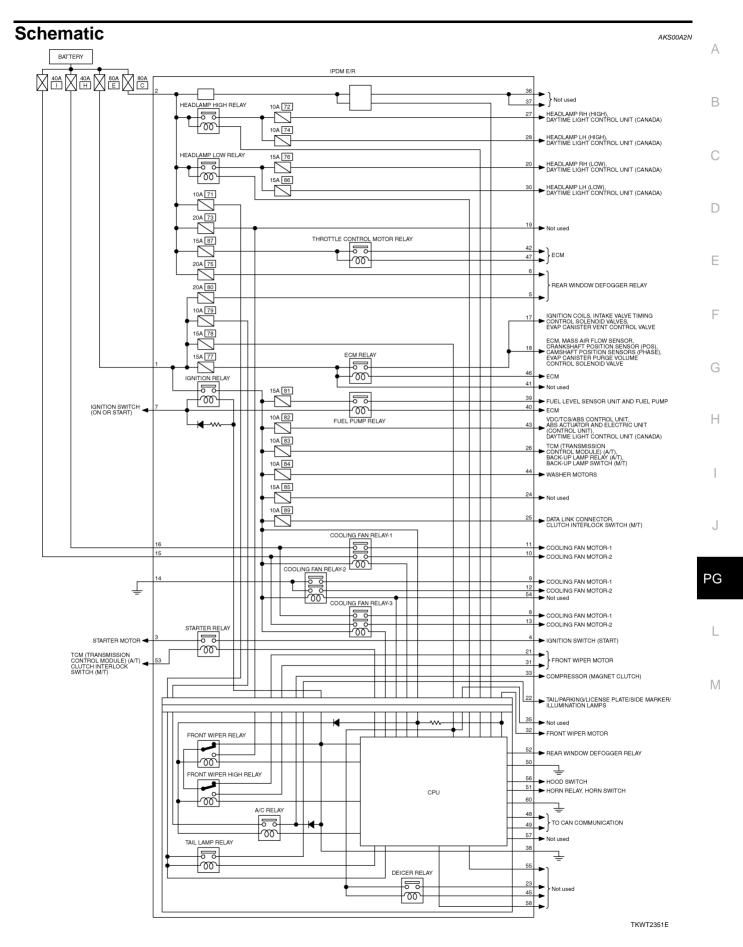
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Concept of Auto Active Test

- 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.

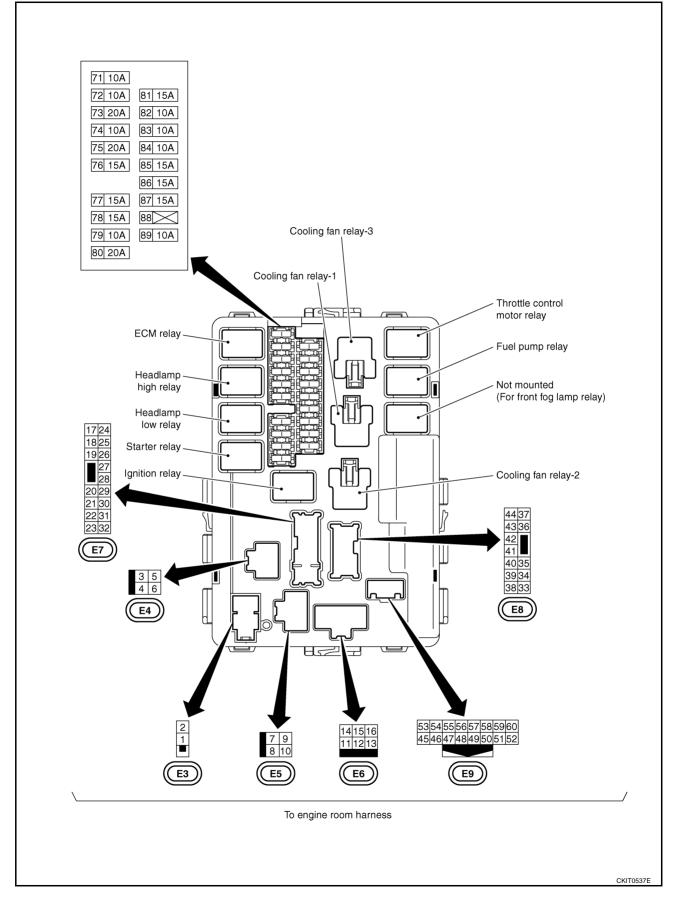
Diagnosis chart in auto active test mode

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



IPDM E/R Terminal Arrangement

AKS00A20



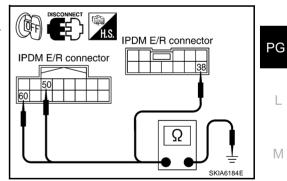
Make sure the following fusible I	inks or IPDM E/R fuses are not blow	vn.	
Terminal No.	Signal name	Fuse and fusible link No.	
		С	
1, 2	Battery power	E	
1, 2	Battery power	71	
		78	
OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY (e of malfunction before installing new fuse	
OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY (e of malfunction before installing new fuse	
OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY (1. Turn ignition switch OFF.	CIRCUIT	e of malfunction before installing new fuse	
 OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect IPDM E/R harned 3. Check voltage between IPD 	CIRCUIT ess connector E3. DM E/R harness connector E3 termi		
 OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect IPDM E/R harned 3. Check voltage between IPD nals 1 (W), 2 (W/L) and group 	CIRCUIT ess connector E3. DM E/R harness connector E3 termi und.		
OK >> GO TO 2. NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY (1. Turn ignition switch OFF. 2. Disconnect IPDM E/R harne 3. Check voltage between IPD	CIRCUIT ess connector E3. DM E/R harness connector E3 termi		
 NG >> If fuse or fusible link or fusible link. 2. CHECK POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect IPDM E/R harned 3. Check voltage between IPD nals 1 (W), 2 (W/L) and grown an	CIRCUIT ess connector E3. DM E/R harness connector E3 termi und.		
OK >> GO TO 2. NG >> If fuse or fusible link. or fusible link.	CIRCUIT ess connector E3. DM E/R harness connector E3 termi und.		

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

38, 50, 60 – 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)

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	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	×	×	Any of or several items below have errors.TRANSMIT DIAGECMBCM/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

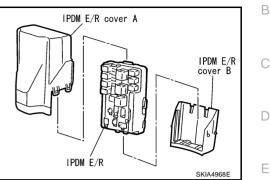
NO DTC IS DETECTED.FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END

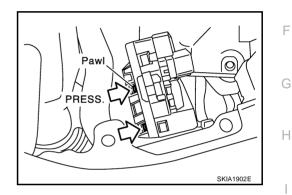
CAN COMM CIRC>>After print-out of the monitor items, refer to <u>LAN-3</u>, "Precautions When Using CON-<u>SULT-II"</u>.

AKS00A2Q

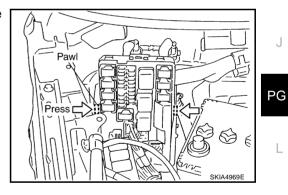
Removal and Installation of IPDM E/R REMOVAL

- Remove battery. Refer to SC-9, "Removal and Installation" in "Starting and Charging System (SC)" sec-1. tion.
- 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.
- Remove harness connector from IPDM E/R. 4.



INSTALLATION

Installation is the reverse order of removal.

А

AKS00A2R

L

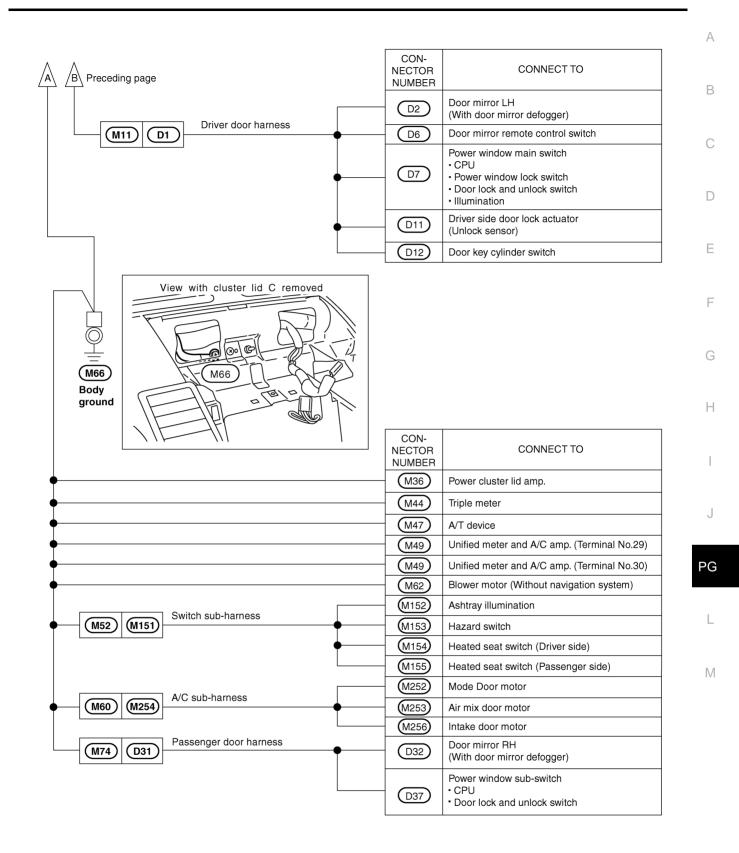
Μ

GROUND Ground Distribution MAIN HARNESS

ብ 6 010 M30 υll Steering shaft (M30) CON-Body NECTOR CONNECT TO ground NUMBER Fuse block (J/B) (Terminal No.7B) M5 · Accessory relay Blower relay Data link connector (M8) (Terminal No.4) TCS off switch (With TCS Without VDC system) (M9) (M9) VDC off switch (With VDC system) (M13) Fuel lid opener switch (M14) Soft top switch Combination meter (Terminal No.10) (M19) M19 Combination meter (Terminal No.11) (M19) Combination meter (Terminal No.12) Combination switch (M29) (M35) Display unit (Terminal No.22) Display unit (Terminal No.24) (M35) (M37) NAVI switch Power socket (M38) (Instrument passenger panel lower) (M55) Air bag diagnosis sensor unit (M91) BCM (Body control module) Body harness Seat belt buckle switch (B11) (M12) (B1) (B31) (B29) (Passenger side) (R3) Vanity mirror lamp LH Room lamp harness Auto anti-dazzling inside mirror R4 (M93) (R2) Vanity mirror lamp RH R5 Room lamp sub-harness R52 Map lamp (Coupe models) M70 (R51) R53 Map lamp (Roadster models) \в/ Next page

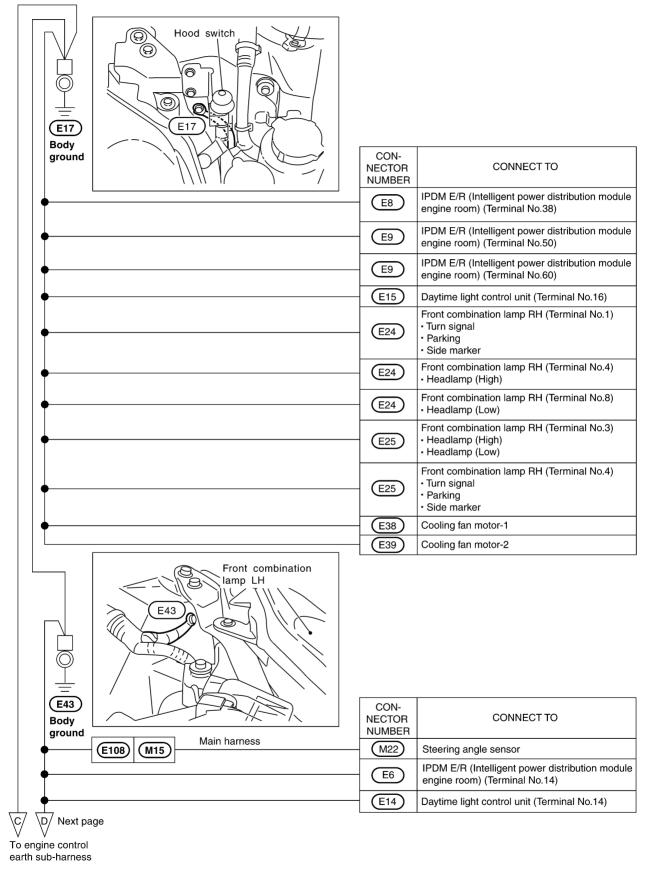
PFP:00011

AKS0012P



CKIT0539E

ENGINE ROOM HARNESS



CKIT0456E

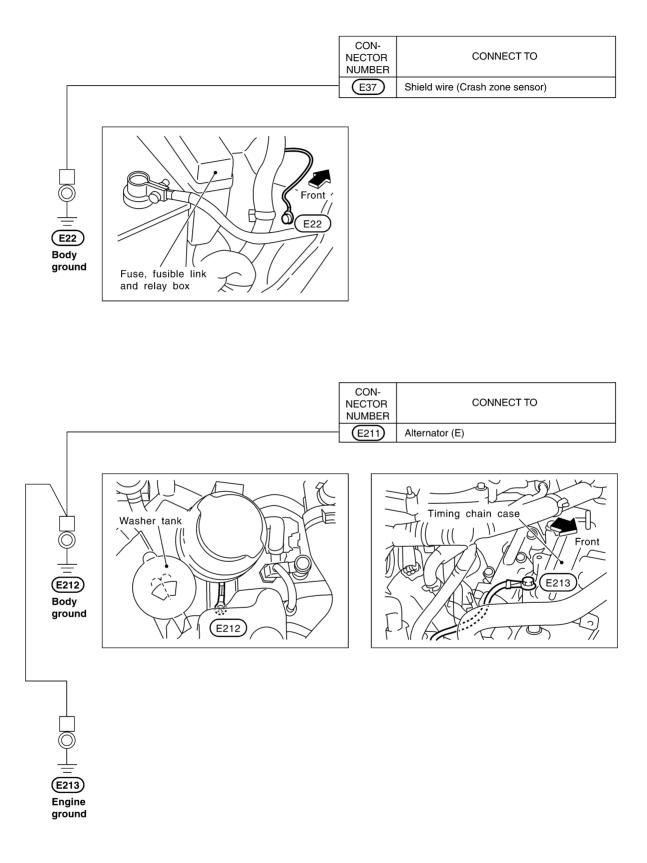
Preceding page			A	
	CON- NECTOR NUMBER	CONNECT TO	E	
•	E23	Hood switch		
•	E30	Washer level sensor	0	
•	E33	Horn (Low)		
•	E36	Horn (High)		
•	E40	Front combination lamp LH (Terminal No. 1) • Turn signal • Parking • Side marker		
	E40	Front combination lamp LH (Terminal No. 4) • Headlamp (High) (For U.S.A.)	E	
•	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.)	F	
•	E41	Front combination lamp LH (Terminal No. 4) • Turn signal • Parking • Side marker	(
•	E44	Brake fluid level switch		
•	E51	ABS actuator and electric unit (Terminal No. 16)	ŀ	
•	E51	ABS actuator and electric unit (Terminal No. 30)		
•		Front wiper motor		
↓	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)		

PG

L

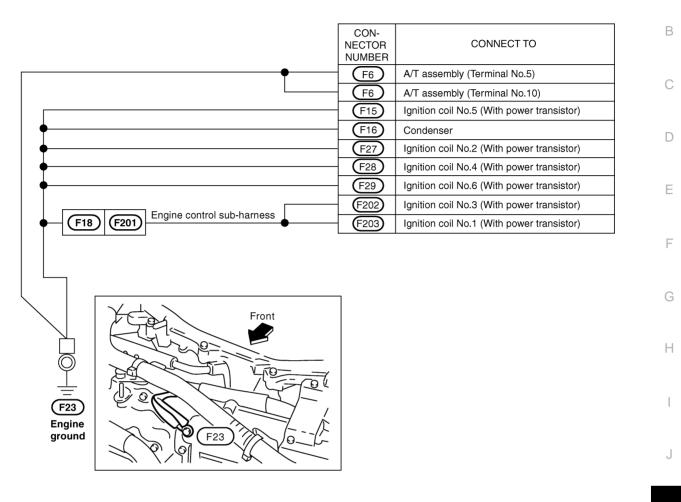
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CKIB0202E



CKIT0170E

ENGINE CONTROL HARNESS



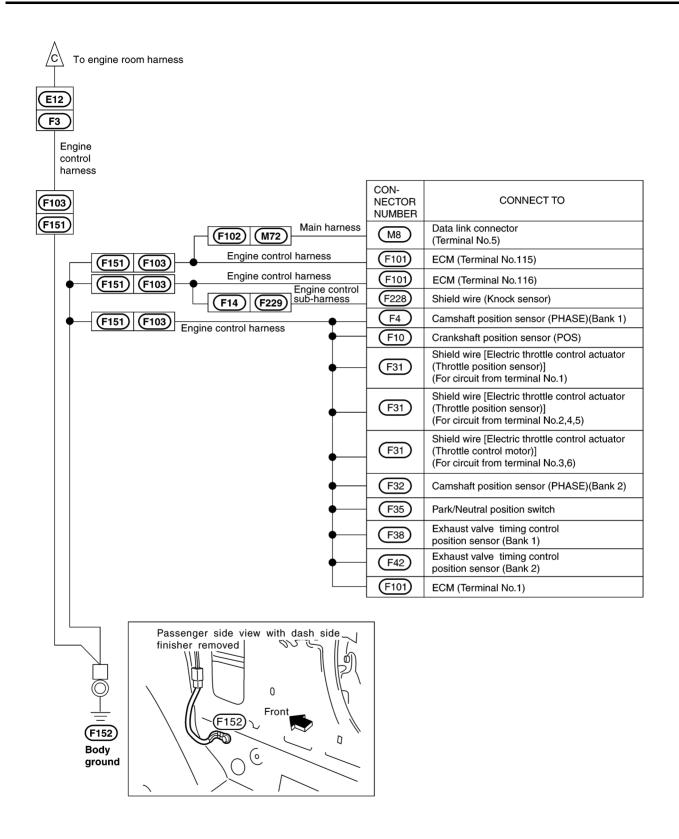
PG

А

L

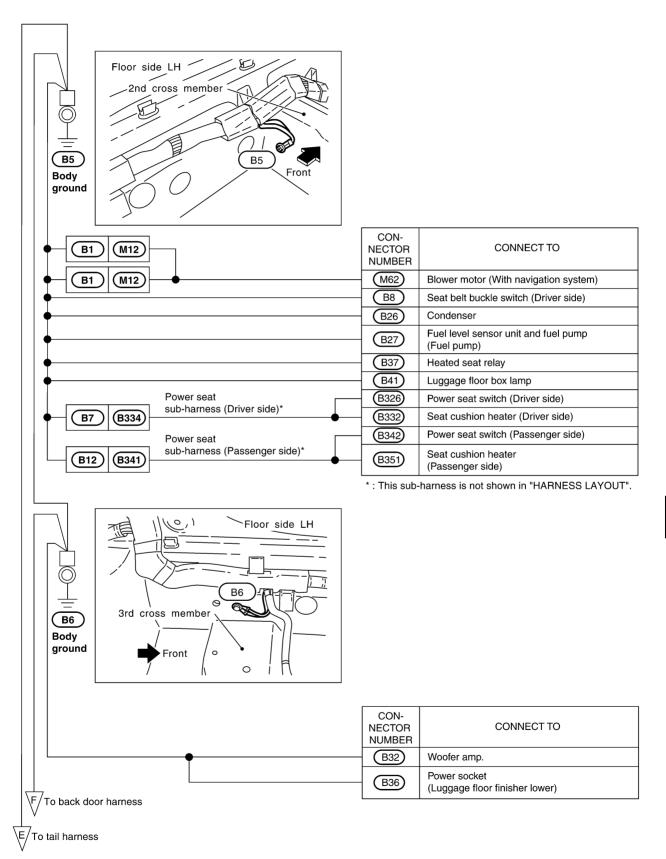
Μ

CKIB0204E



CKIT0646E

BODY HARNESS Coupe Models



А

В

С

D

F

F

G

Н

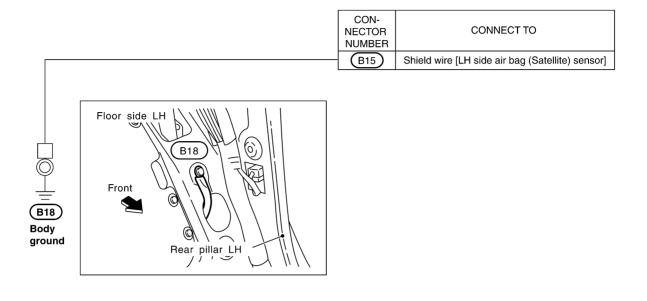
J

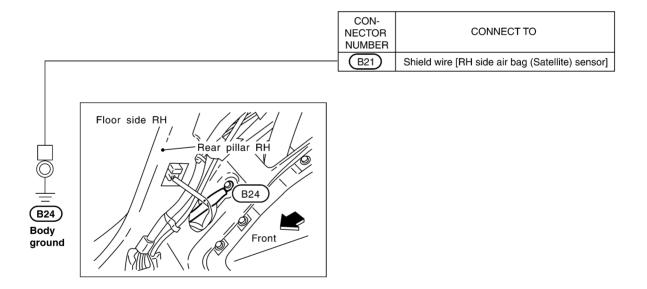
PG

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Μ

GROUND

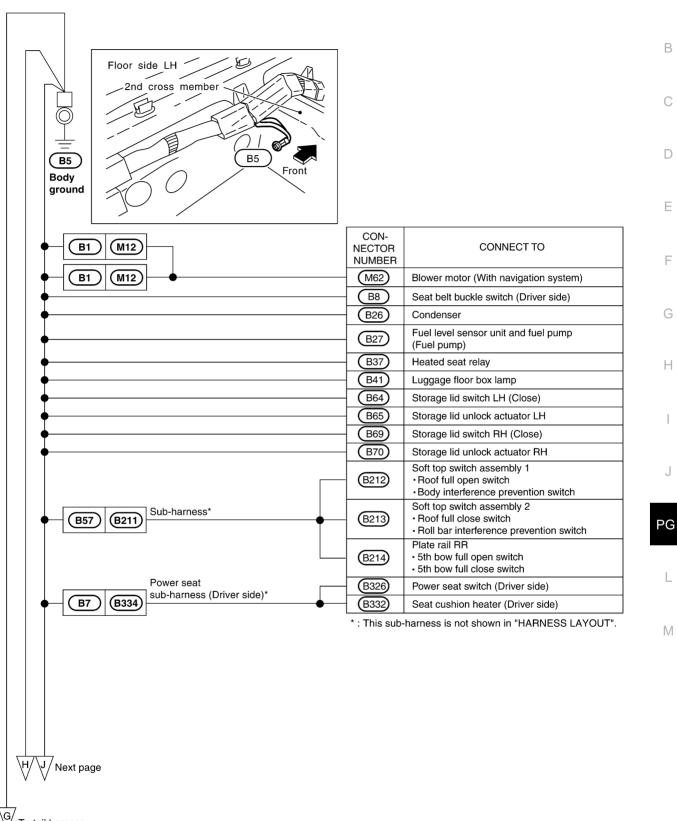




CKIT0174E

GROUND

Roadster Models



To tail harness

CKIT0460E

А

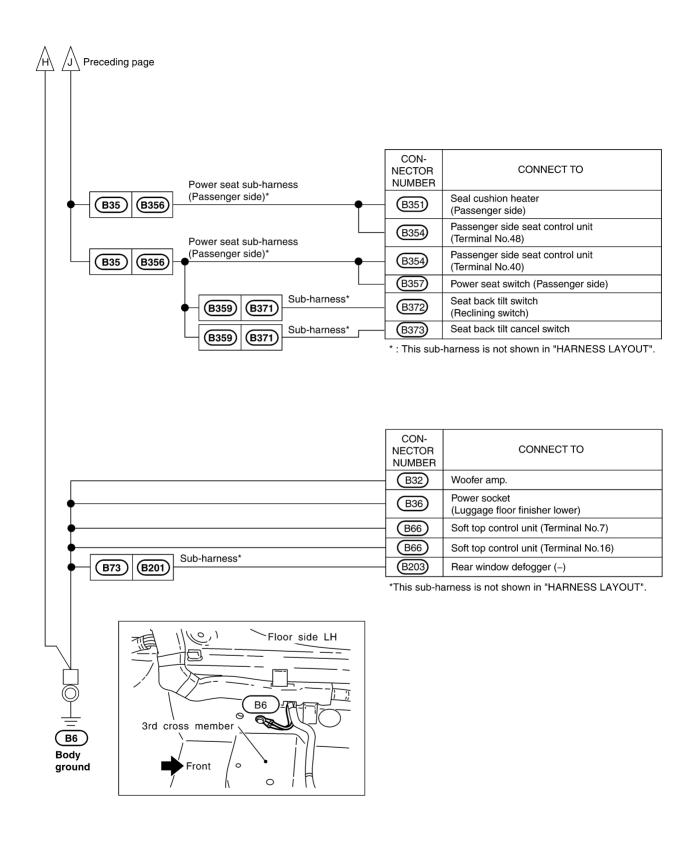
В

F

F

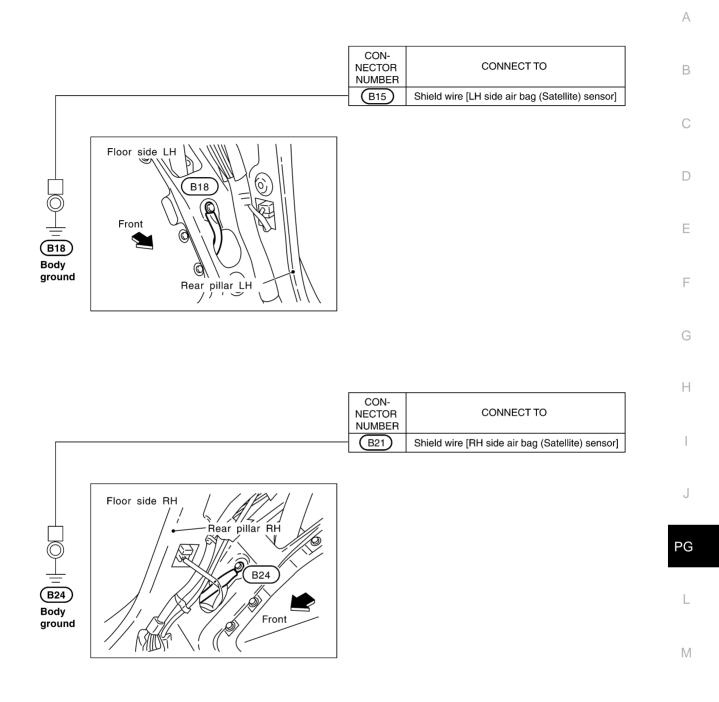
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L



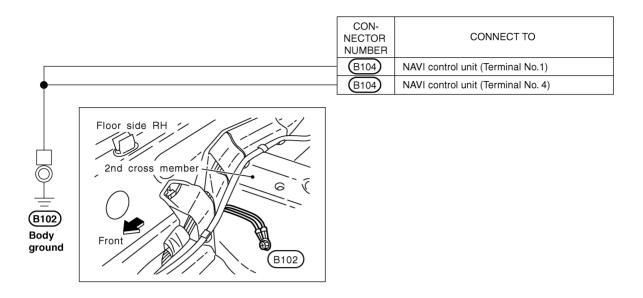
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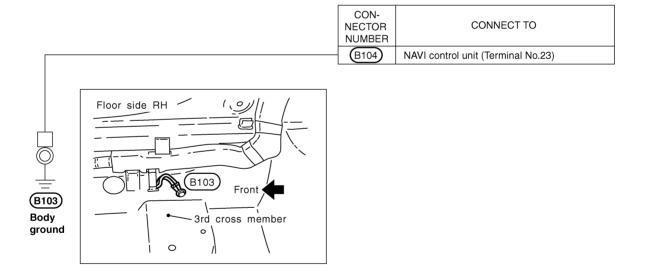
GROUND



CKIT0174E

BODY NO. 2 HARNESS

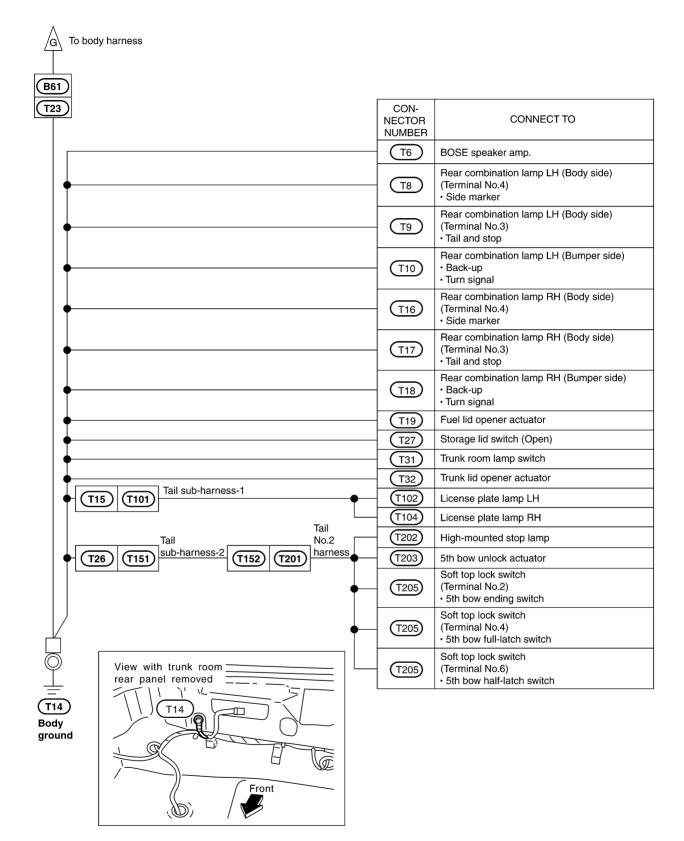




CKIT0540E

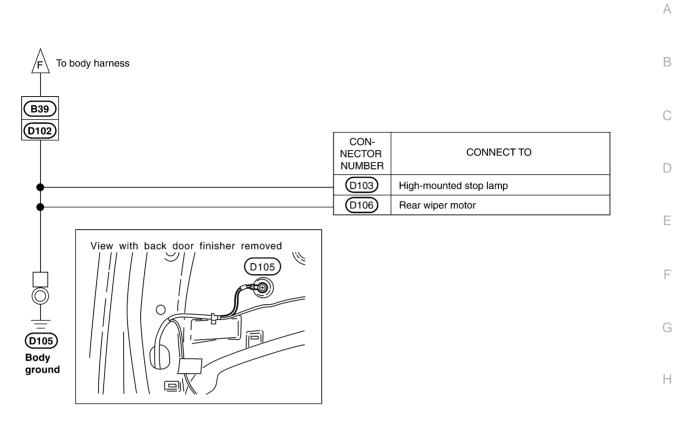
TAIL HARNESS А **Coupe Models** В To body harness /E/ B43 С T1 D CON-F NECTOR CONNECT TO NUMBER (T6) BOSE speaker amp. F Rear combination lamp LH (Body side) T8 (Terminal No.4) · Side marker Rear combination lamp LH (Body side) Т9 G (Terminal No.3) · Tail and stop Rear combination lamp LH (Bumper side) T10 · Back-up Н Turn signal (T11) Back door opener actuator T12 Back door switch Rear combination lamp RH (Body side) (Terminal No.4) (T16) · Side marker Rear combination lamp RH (Body side) J T17 (Terminal No.3) · Tail and stop Rear combination lamp RH (Bumper side) T18 Back-up PG Turn signal Fuel lid opener actuator T19 (T102) License plate lamp LH Tail sub-harness L T15 (T101) (T104 License plate lamp RH Μ View with luggage room rear panel removed V T14 (0)(T14 Body Front ground (D)

Roadster Models



CKIT0471E

BACK DOOR HARNESS



CON-NECTOR CONNECT TO NUMBER (D211) Rear window defogger (-) View with back door finisher removed D212 // 0 C (D212) Body ground Rear wiper motor 回

L

Μ

I

J

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

Example:		
	SCD ACTUATOR	
Connector number		
Grid reference		
	SEI 252V	

To Use the Grid Reference

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

CONNECTOR SYMBOL

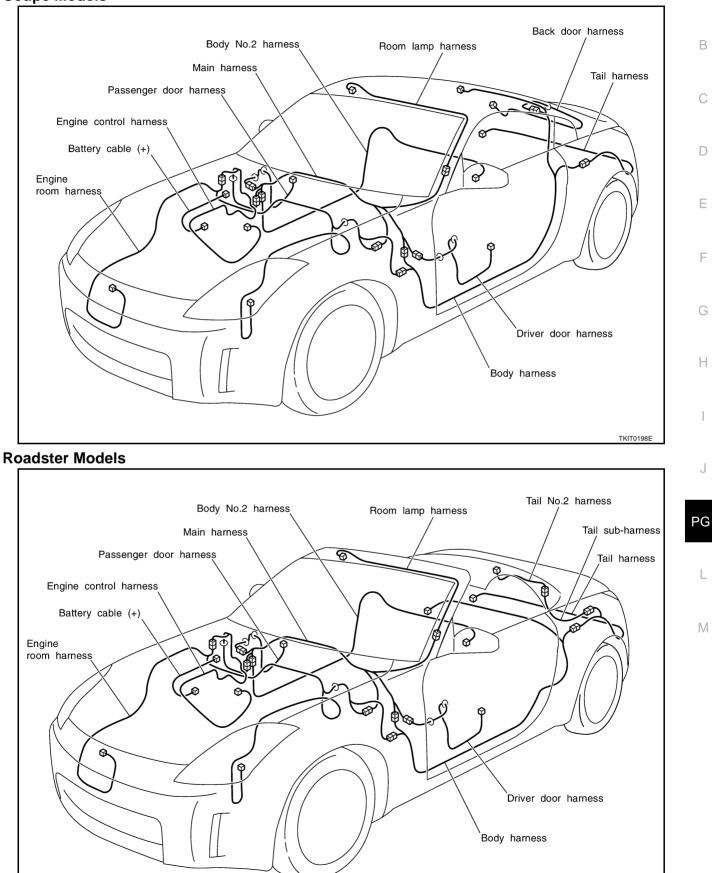
Main symbols of connector (in Harness Layout) are indicated in the below.

Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
Cavity: Less than 4 Relay connector	Ø	5	O	
Cavity: From 5 to 8				
Cavity: More than 9	\bigcirc	\bigcirc		\diamond
Ground terminal etc.	_			T T

CKIT0108E

PFP:00011

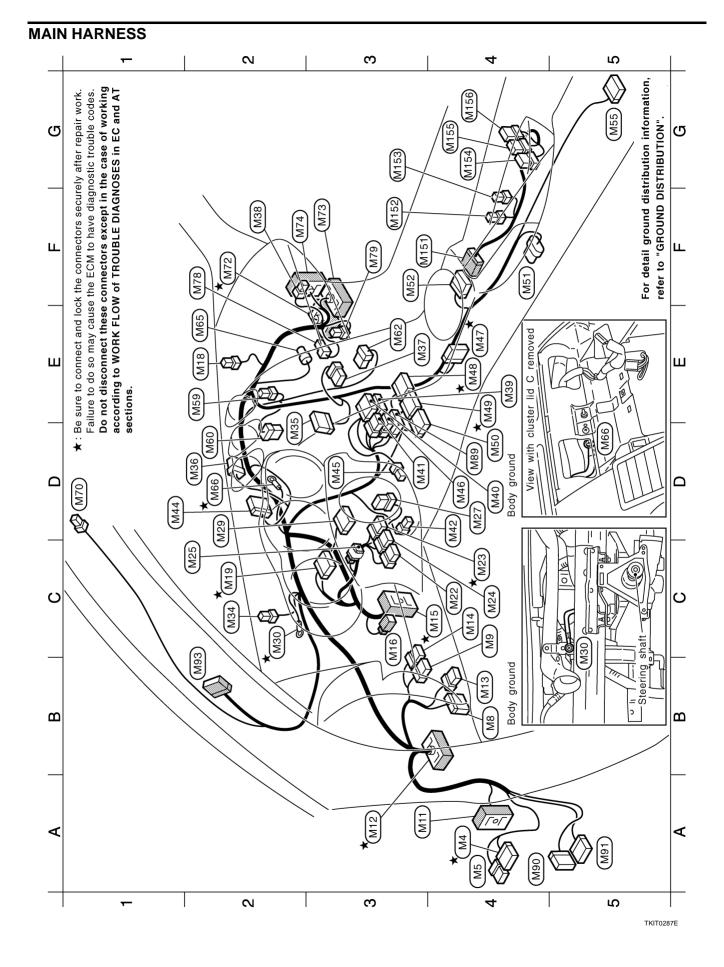


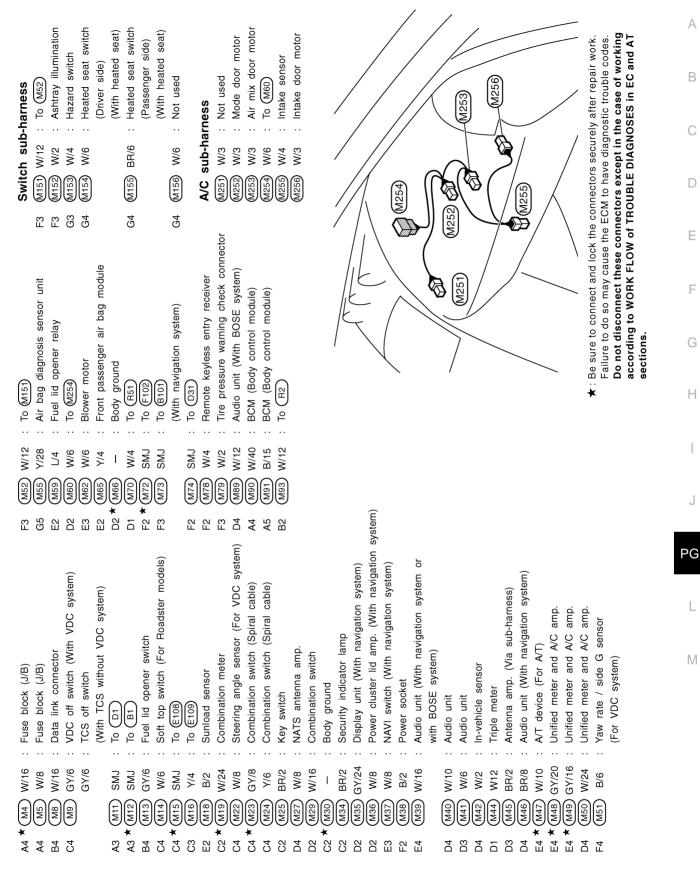


PG-47

TKIT0101E

А





TKIT0288E

HARNESS

А

В

С

D

Е

F

Н

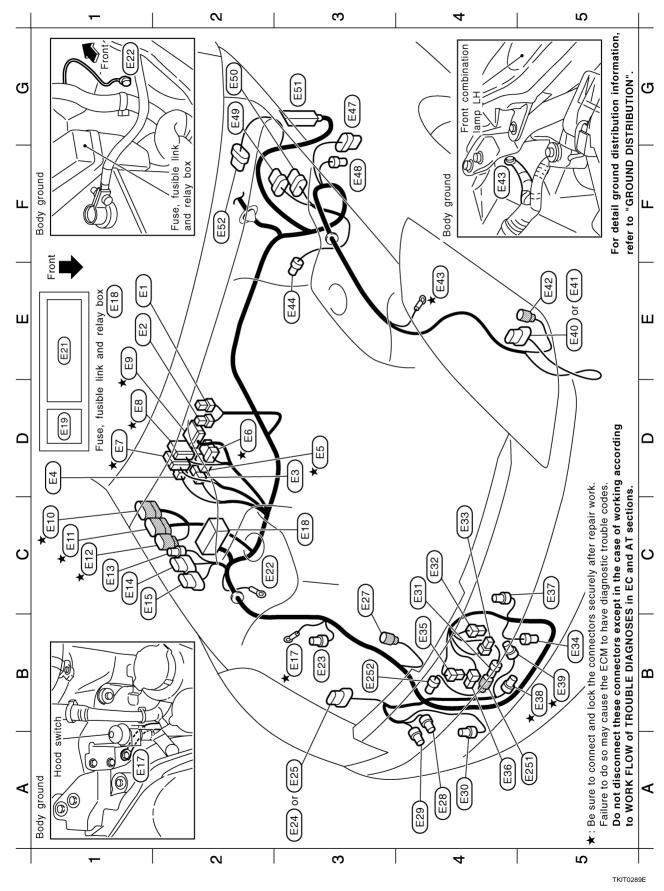
I

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L

Μ

ENGINE ROOM HARNESS Engine Compartment



Revision: 2004 December

PG-51

2005 350Z

TKIT0290E

PG

L

Μ

А

В

С

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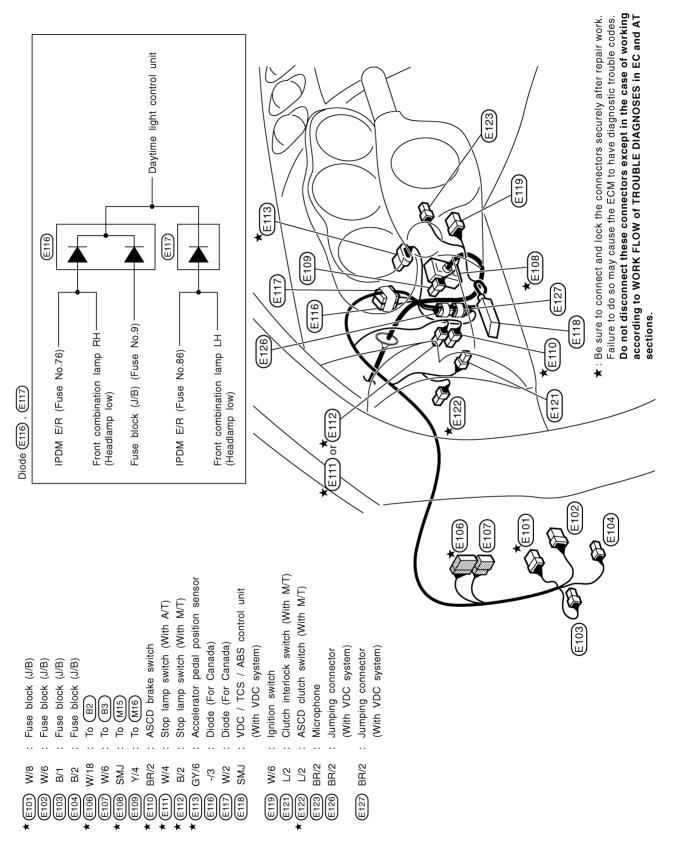
G

Н

I

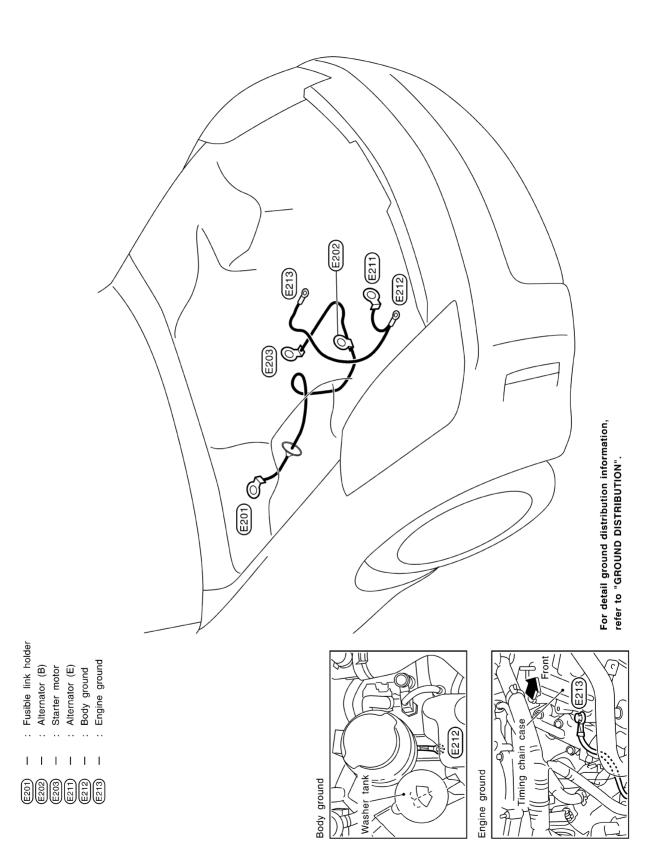
J

Passenger Compartment



TKIT0291E

Battery Cable



CKIT0202E

А

В

С

D

Е

F

G

Н

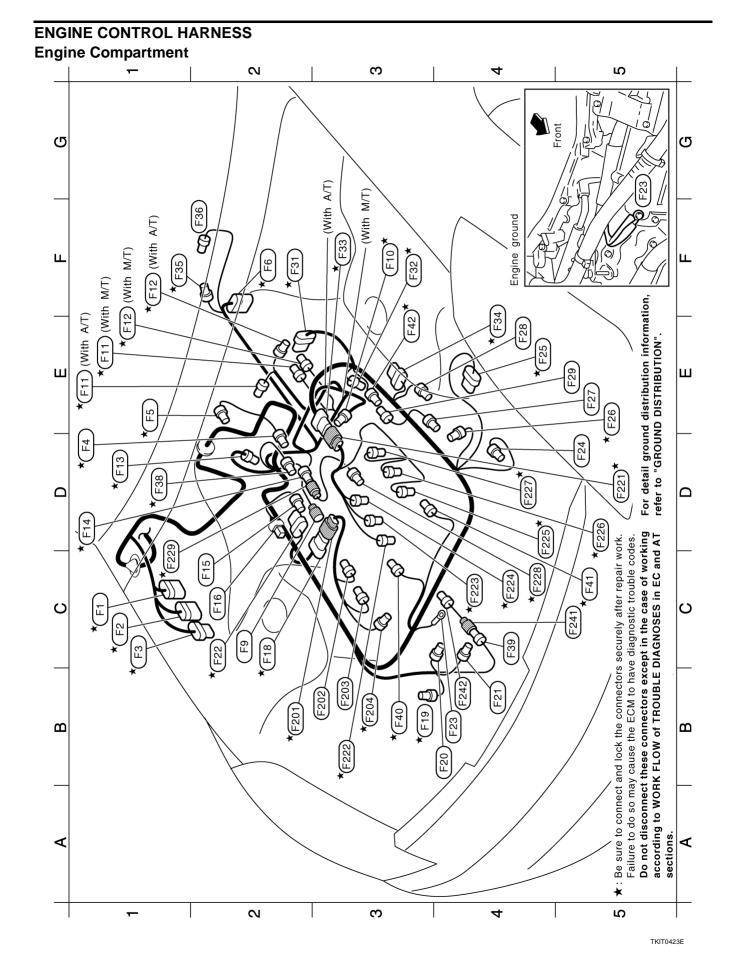
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J

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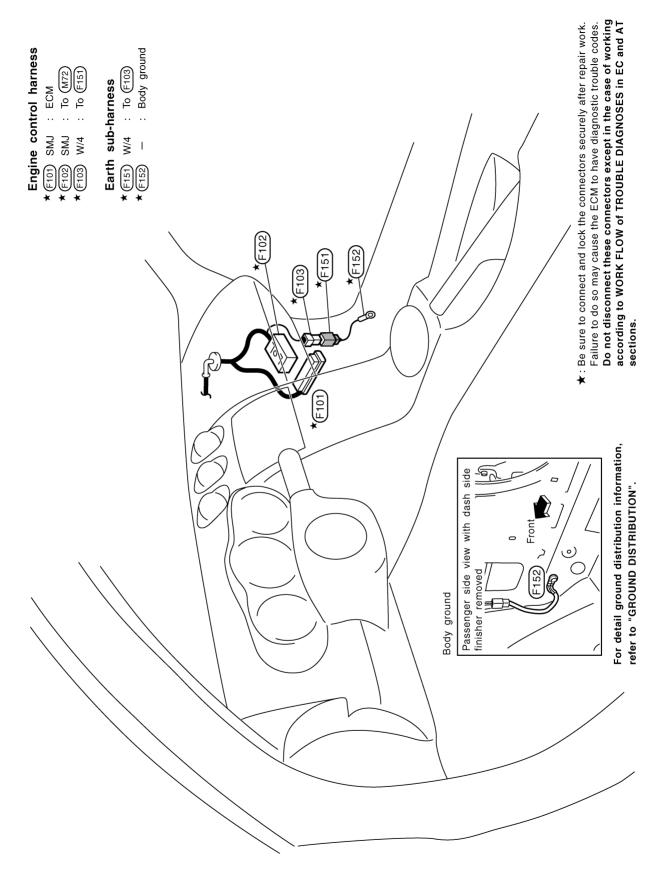
TKIT0424E

I

J

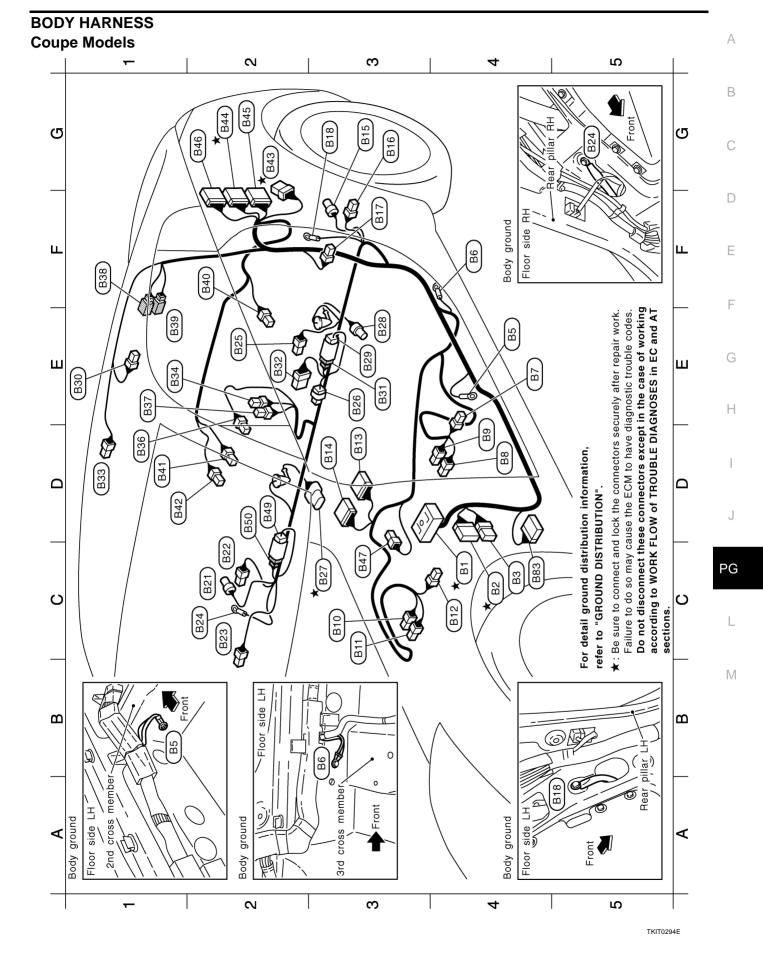
2005 350Z

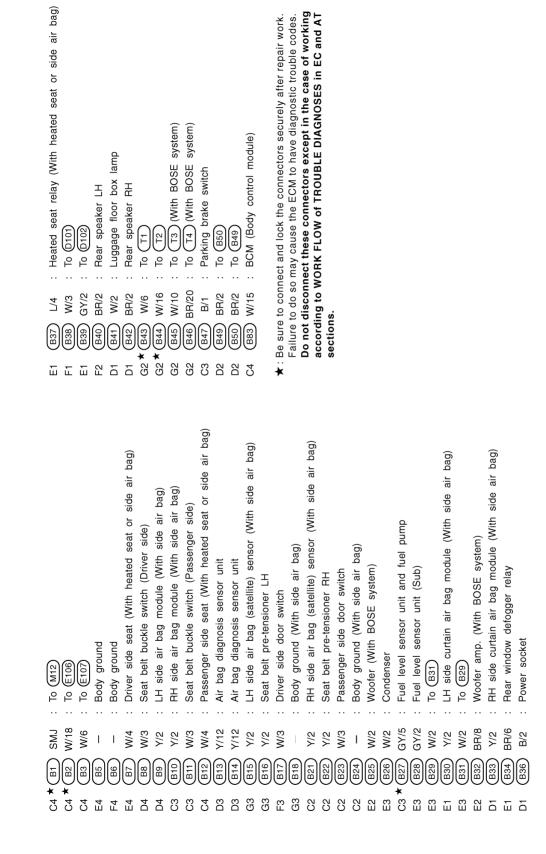
Passenger Compartment



TKIT0425E

HARNESS



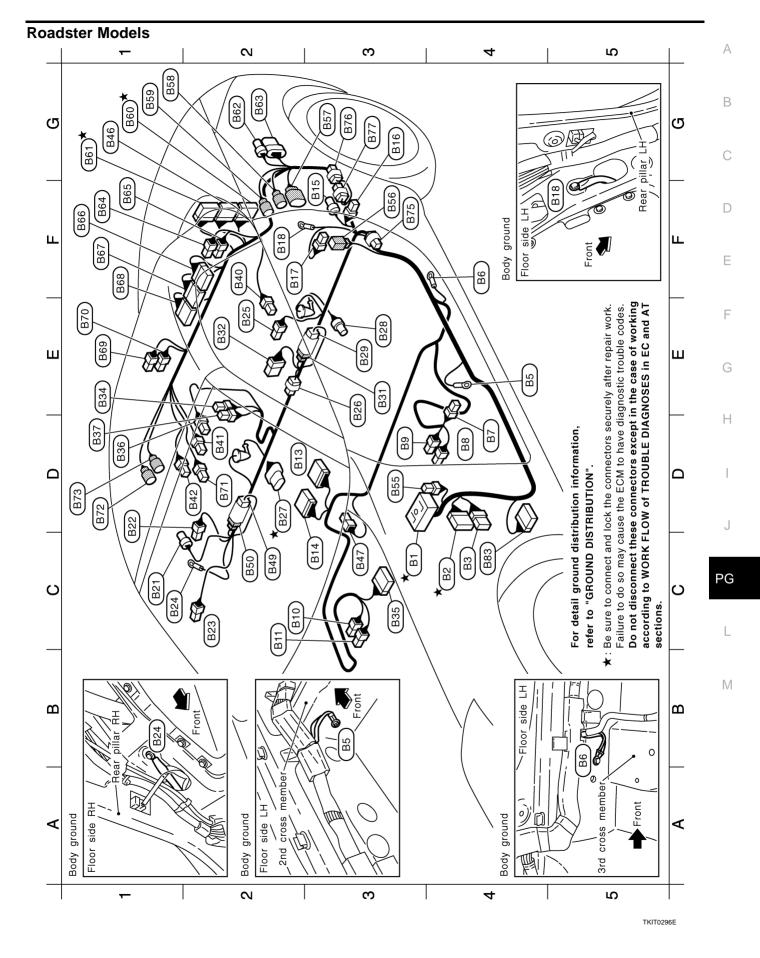


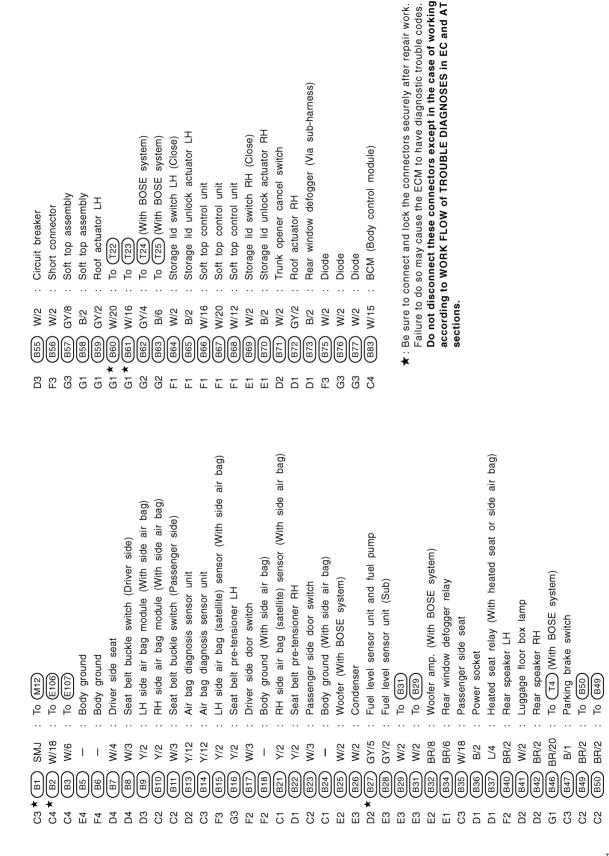
Revision: 2004 December

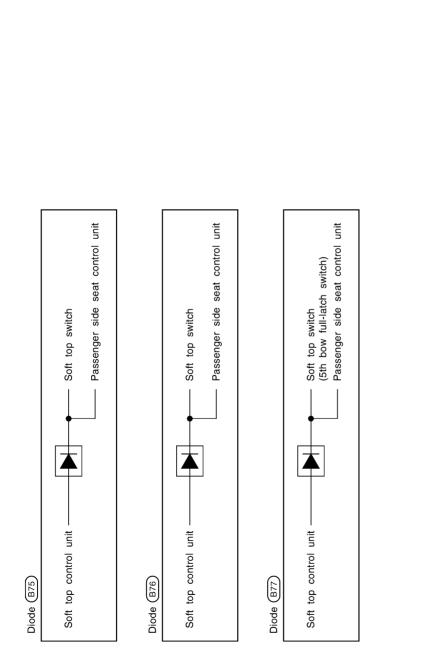
PG-58

2005 350Z

TKIT0295E







TKIT0117E

А

В

С

D

Е

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G

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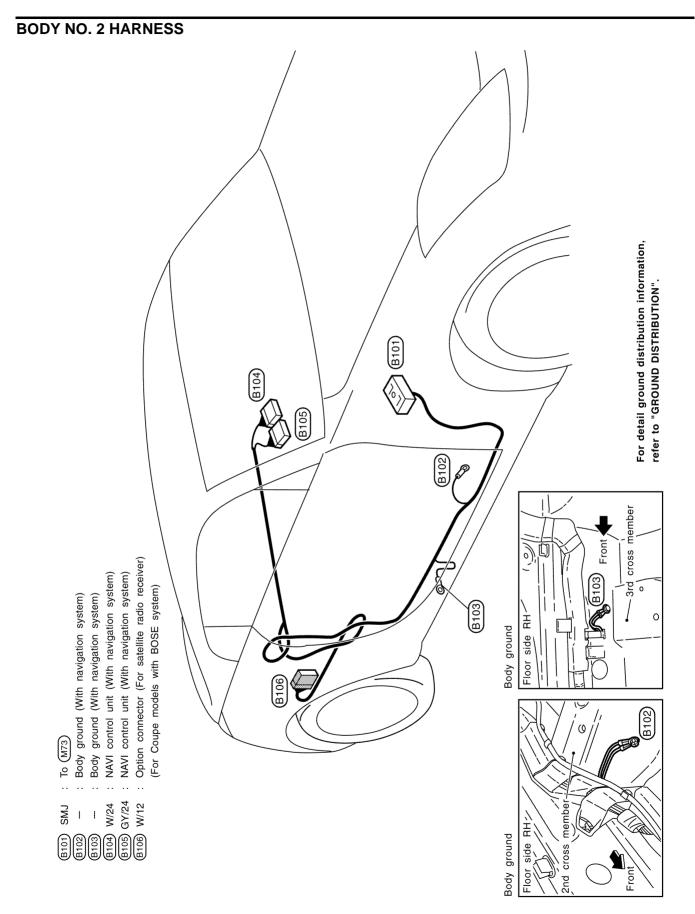
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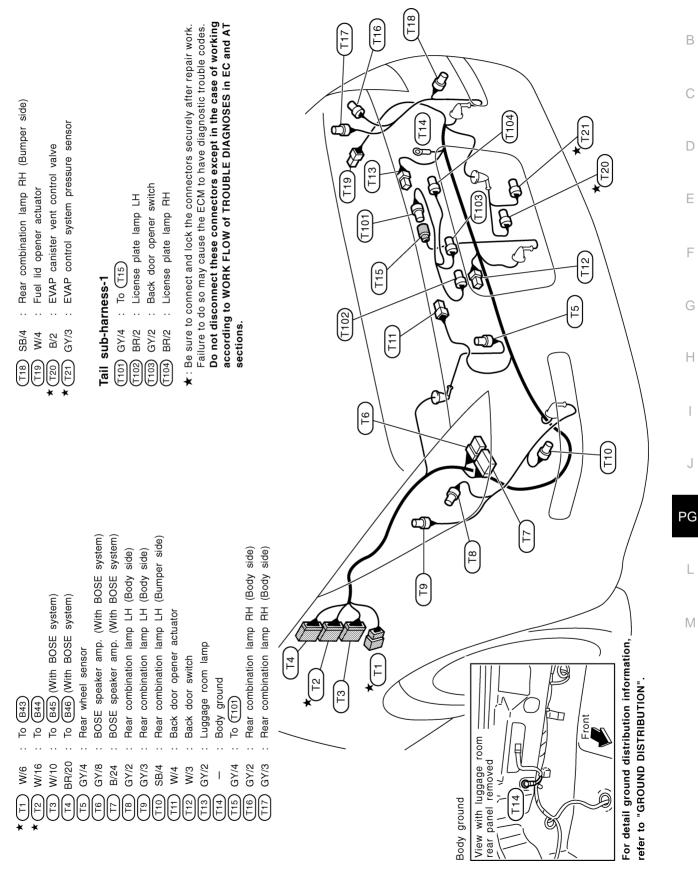
L

M



TKIT0226E

TAIL HARNESS Coupe Models



TKIT0298E

А

В

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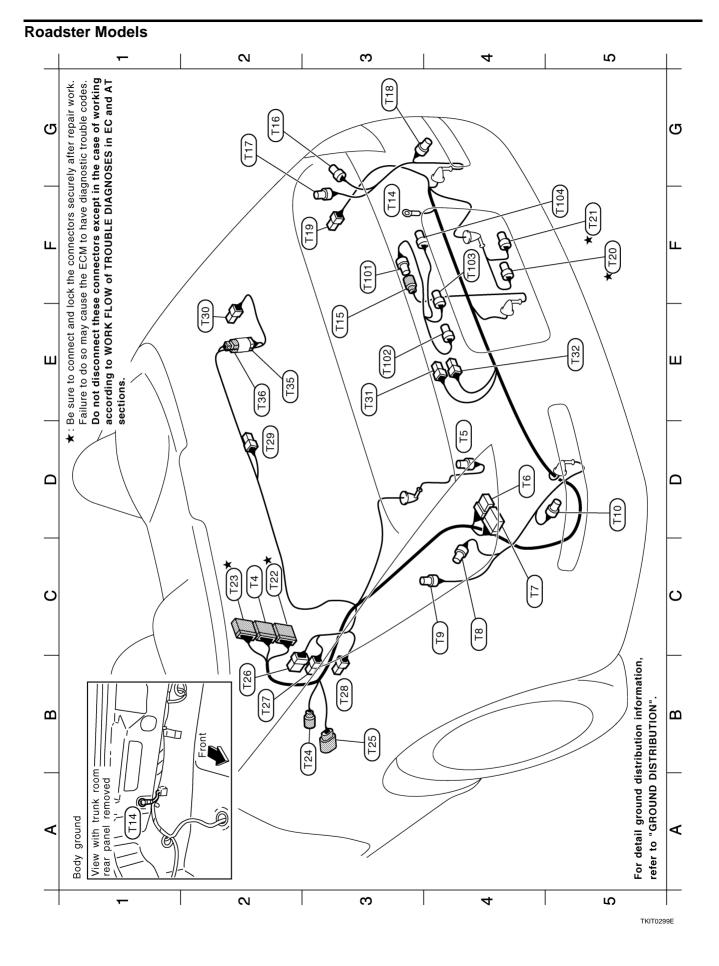
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Н

J

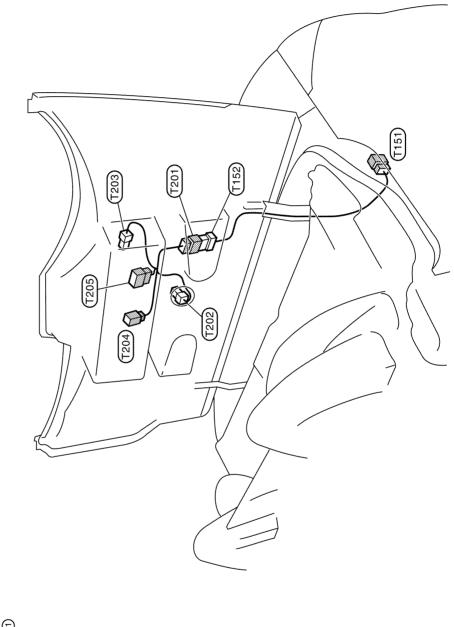
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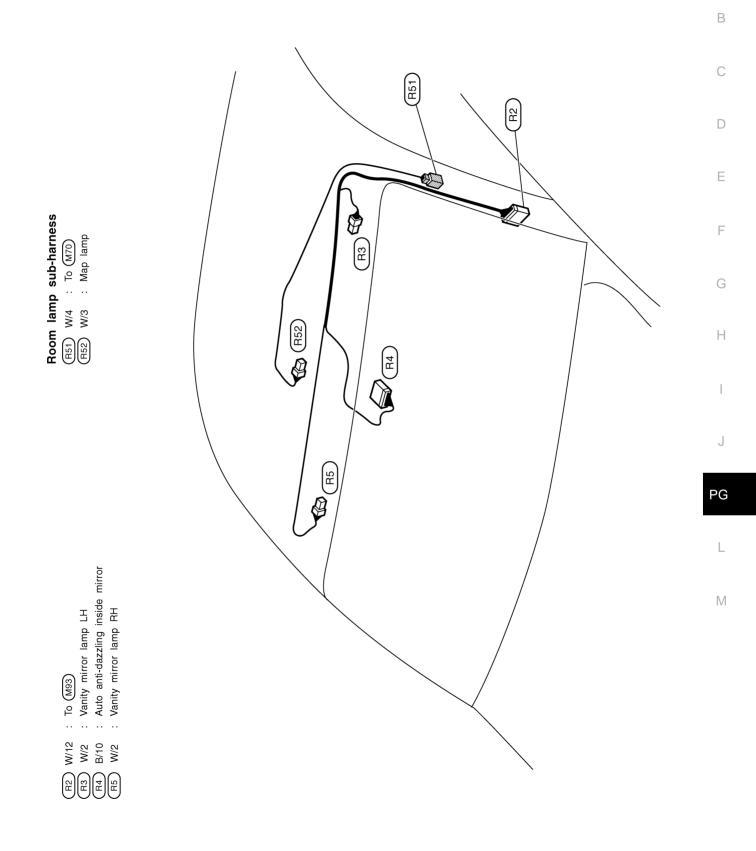
TAIL NO. 2 HARNESS Roadster Models



Tail No.2harnessT201W/8: To (T152)T202BR/2: High-mounted stop lampT203W/4: 5th bow unlock actuatorT204B/2: 5th bow unlock actuatorT205W/6: Soft top lock switchTail sub-harness-2T15T15W/8: To (T26)

TKIT0113E

ROOM LAMP HARNESS Coupe Models

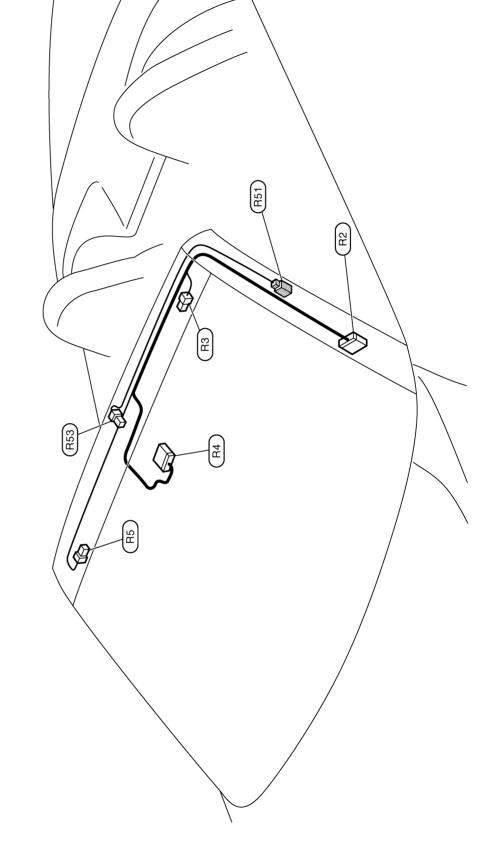


TKIT0301E

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TKIT0302E

: Auto anti-dazzling inside mirror : Vanity mirror lamp RH

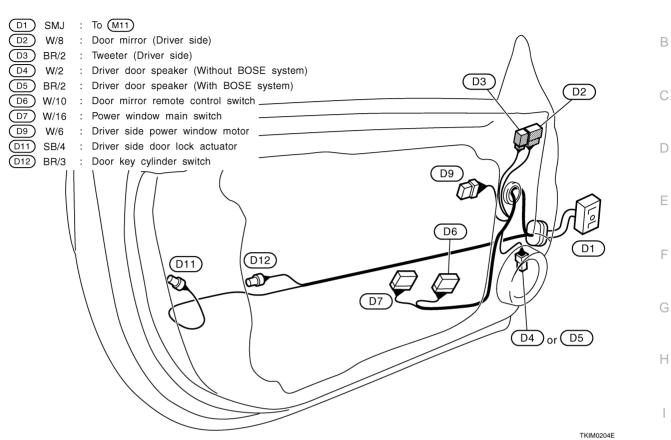
: Vanity mirror lamp LH

W/12 W/2 B/10 W/2

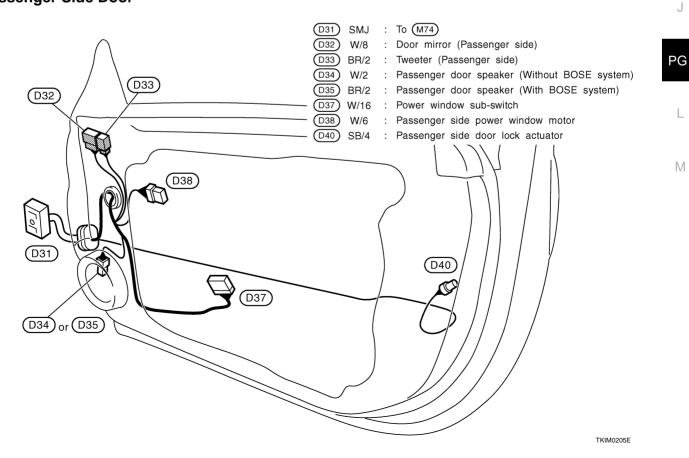
R R R R

: To (M93)

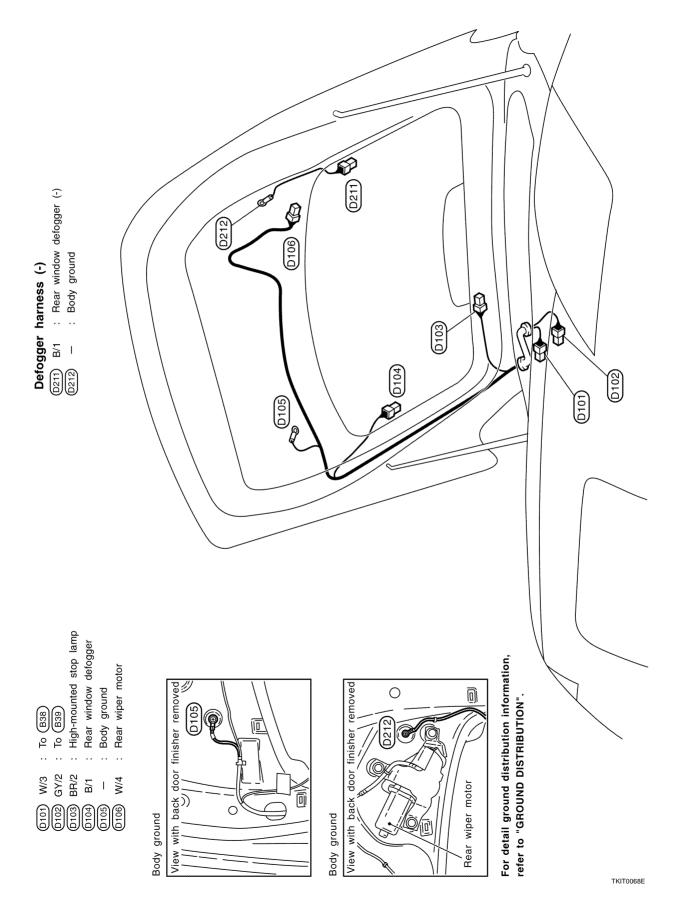
DOOR HARNESS Driver Side Door



Passenger Side Door



А



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	B
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	E
APPS1	EC	Accelerator Pedal Position Sensor	
APPS2	EC	Accelerator Pedal Position Sensor	
APPS3	EC	Accelerator Pedal Position Sensor	F
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch	
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch	G
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch	
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator	
AT/IND	DI	A/T Indicator Lamp	F
AUDIO	AV	Audio	
BACK/L	LT	Back-Up Lamp	
BRK/SW	EC	Brake Switch	
CAN	AT	CAN Communication Line	
CAN	EC	CAN Communication Line	J
CAN	LAN	CAN System	
CHARGE	SC	Charging System	
CHIME	DI	Warning Chime	PC
CLOCK	DI	Clock	
COMBSW	LT	Combination Switch	L
COMM	AV	Audio Visual Communication Line	
COOL/F	EC	Cooling Fan Control	
DEF	GW	Rear Window Defogger	N
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	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	

AKS00A3P

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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 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
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

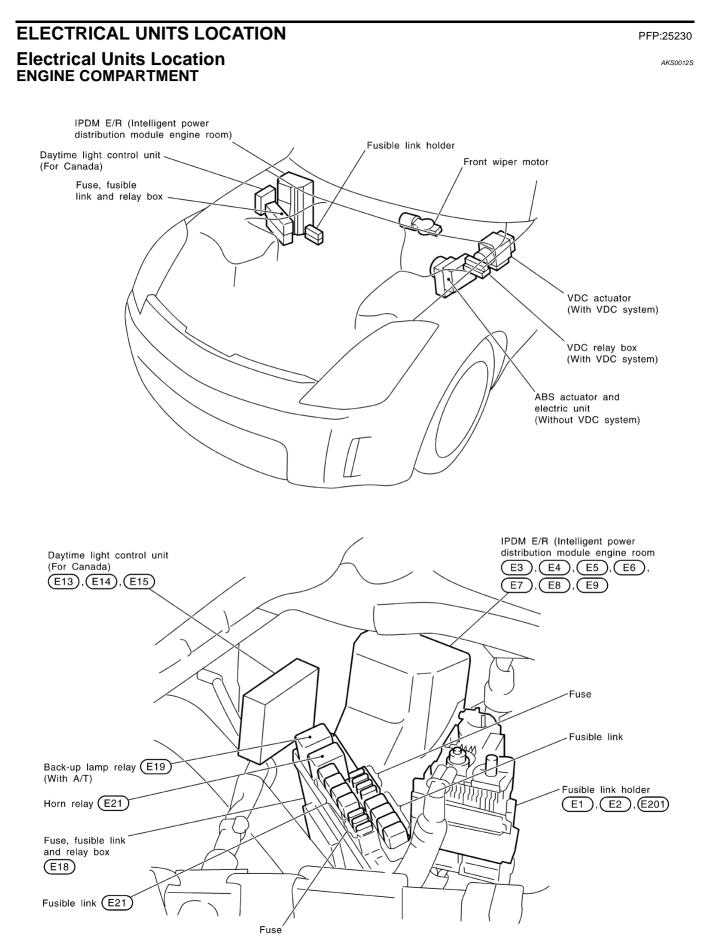
HARNESS

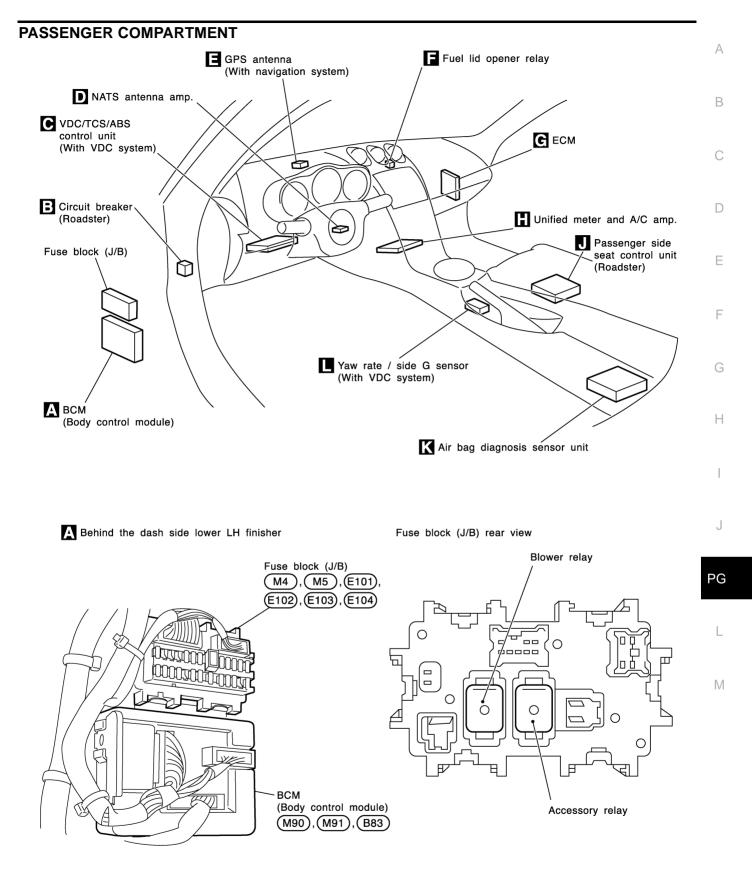
Code	Section	Wiring Diagram Name	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SRS	SRS	Supplemental Restraint System	
START	SC	Starting System	
STOP/L	LT	Stop Lamp	
STSIG	AT	Start Signal Circuit	
TAIL/L	LT	Parking, License and Tail Lamps	
TCS	BRC	Traction Control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

PG

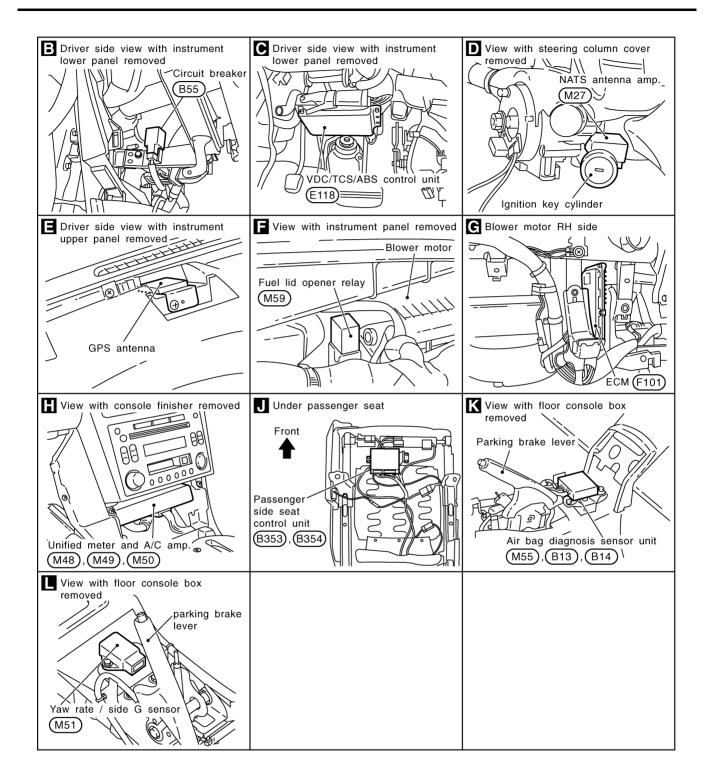
L

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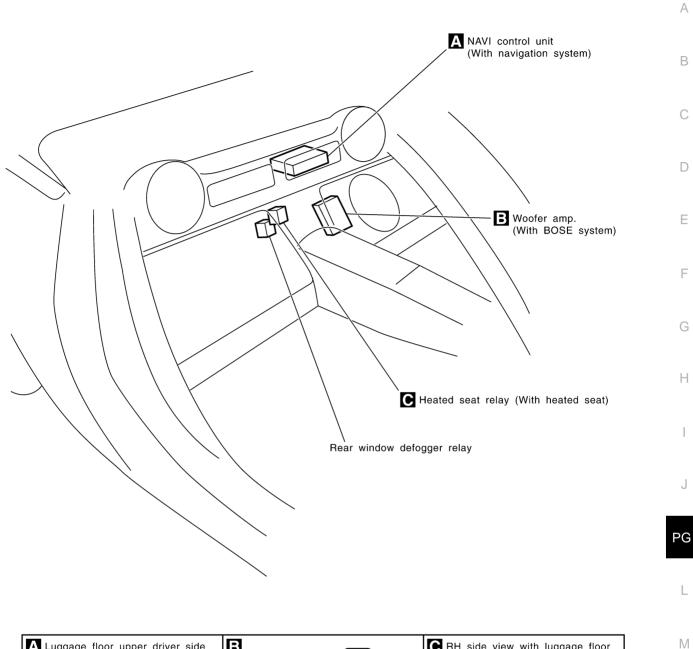


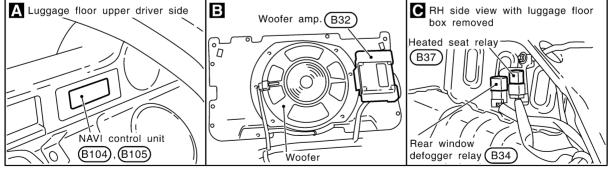


CKIT0541E



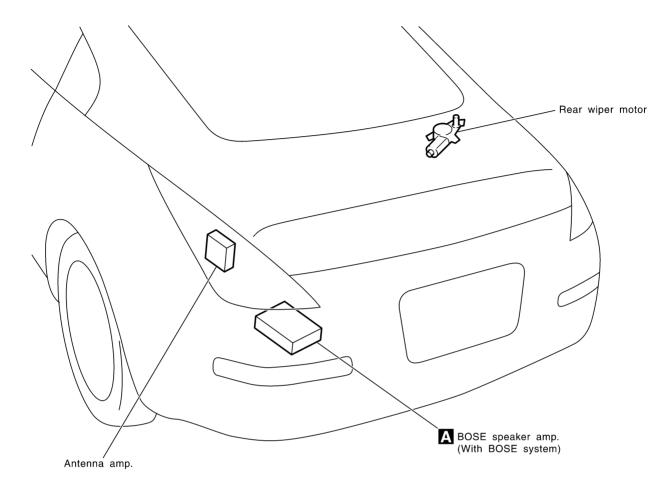
CKIT0542E

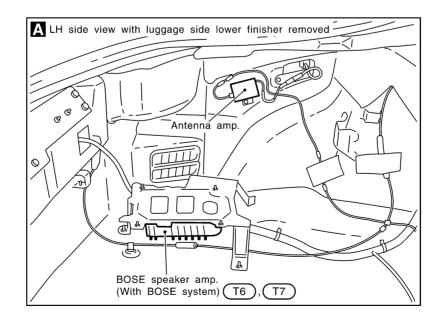




CKIT0349E

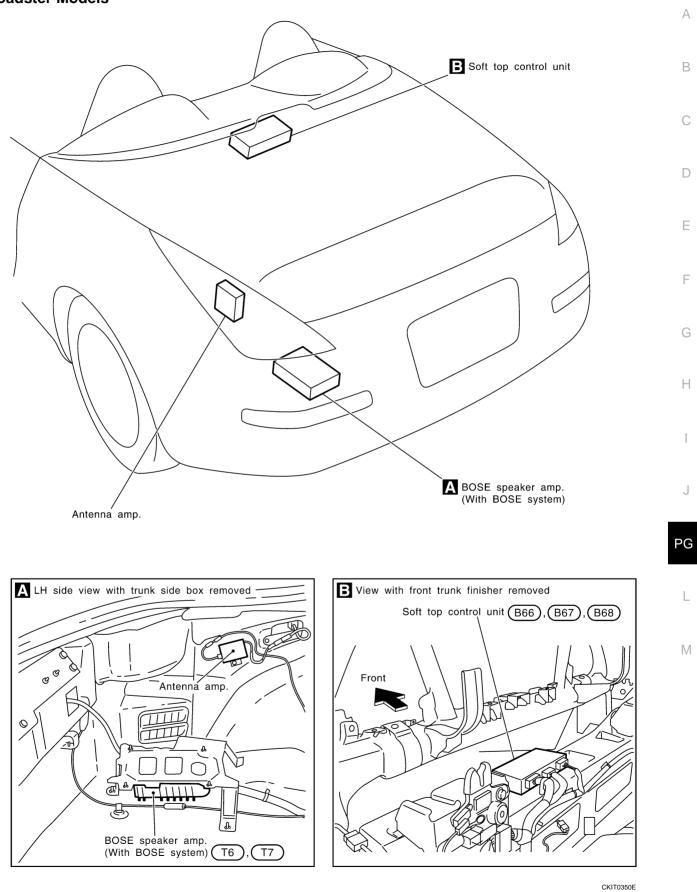
LUGGAGE COMPARTMENT Coupe Models





CKIT0216E

Roadster Models



HARNESS CONNECTOR

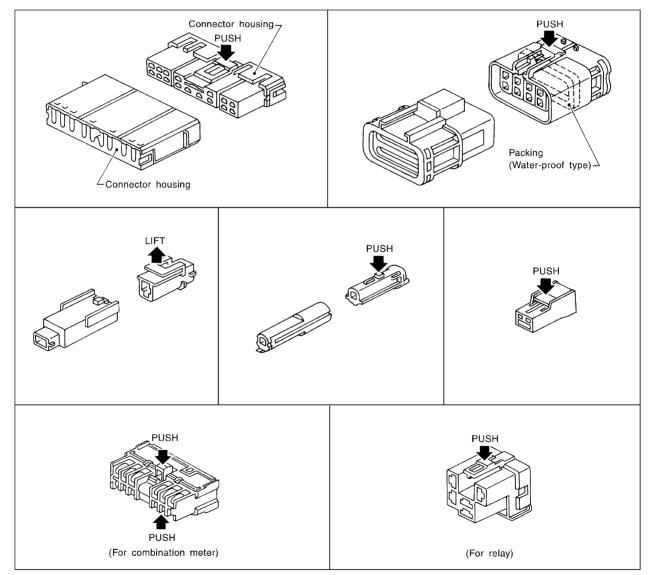
Description HARNESS CONNECTOR (TAB-LOCKING TYPE)

- 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:

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

[Example]



PFP:00011

AKS0012T

HARNESS CONNECTOR

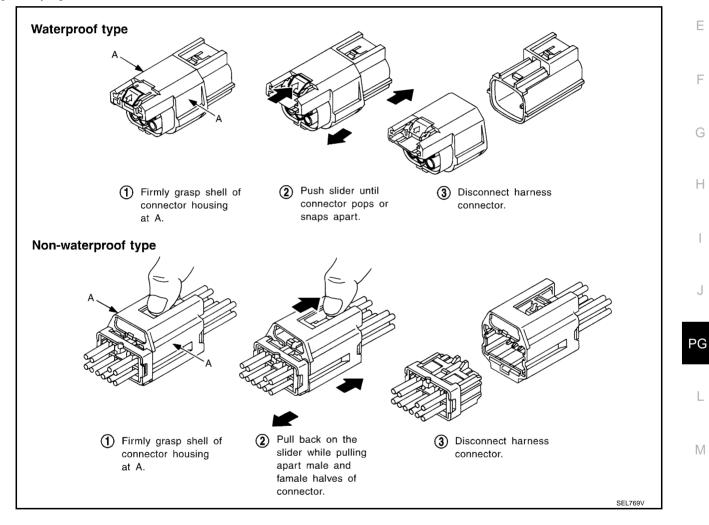
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

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

CAUTION:

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

[Example]

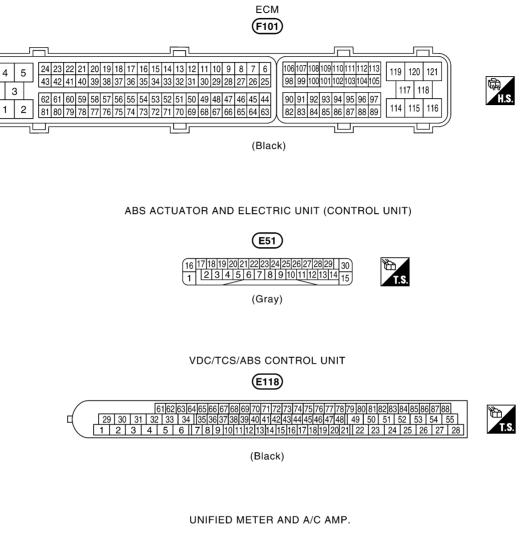


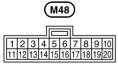
В

С

D

ELECTRICAL UNITS Terminal Arrangement





(Gray)



(Gray)



(White)

Г H.S.

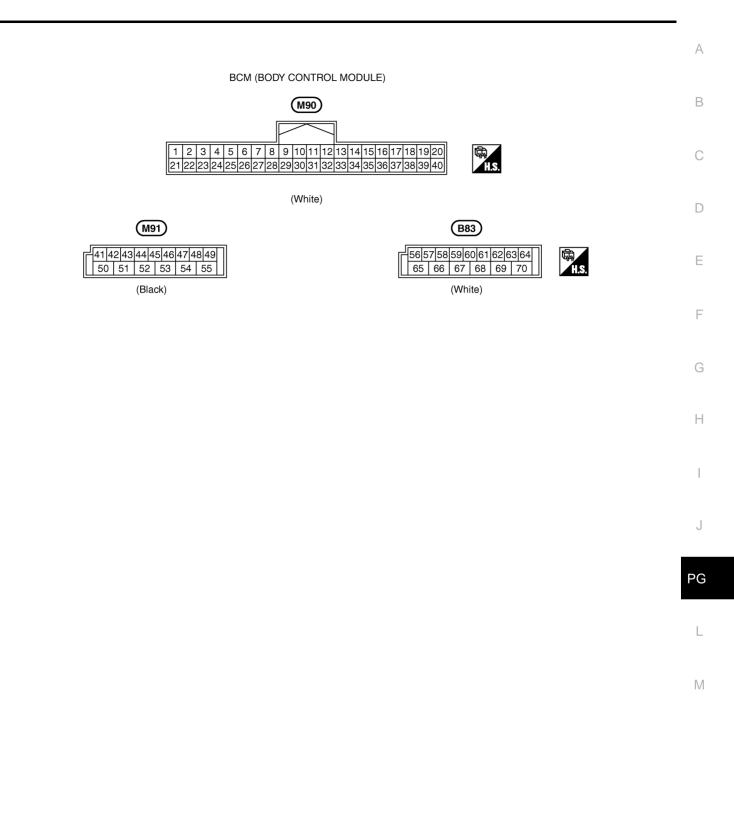
CKIT0294E

Revision: 2004 December

PFP:00011

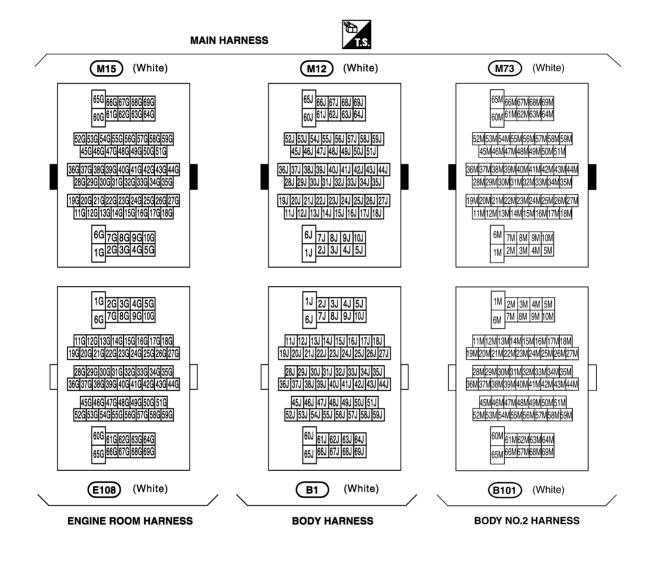
AKS0012V

ELECTRICAL UNITS



CKIT0647E

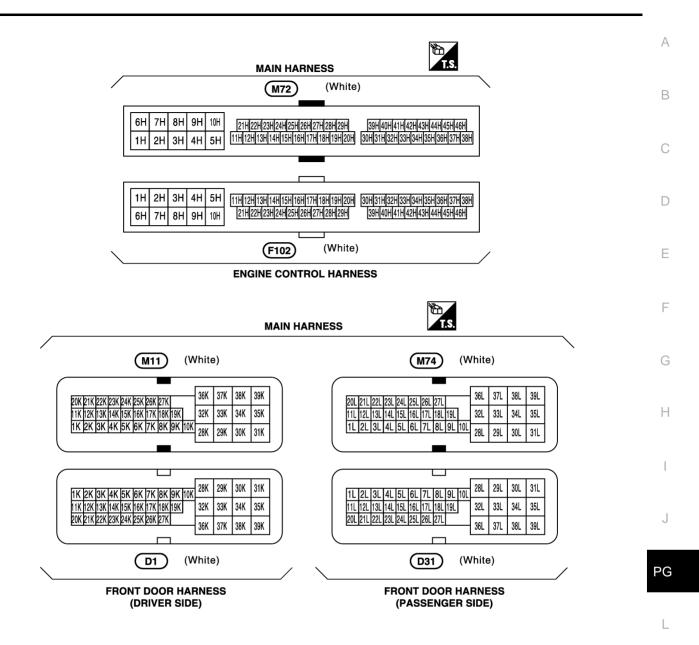
SMJ (SUPER MULTIPLE JUNCTION) Terminal Arrangement



Revision: 2004 December

PFP:B4341

AKS0012W



Μ

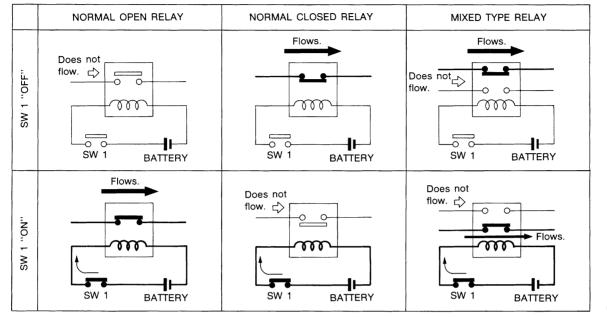
STANDARDIZED RELAY

PFP:00011

AKS0012X

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

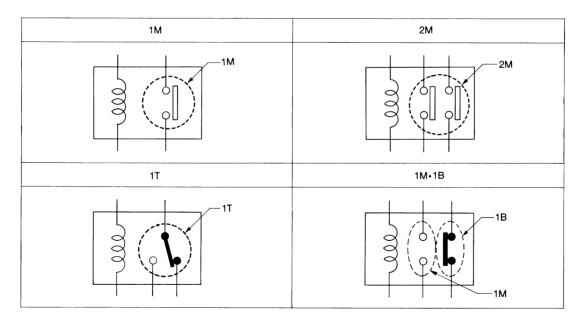
TYPE OF STANDARDIZED RELAYS

1M 1 Make

1T 1 Transfer

2M 2 Make

fer 1M-1B 1 Make 1 Break



SEL882H

STANDARDIZED RELAY

Туре	Outer view	Circuit	Connector symbol and connection	Case color	
1T				BLACK	
2M				BROWN	
1M•1B				GRAY	
1M	a contraction of terminal numbers on the			BLUE	

SEL188W

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FUSE BLOCK - JUNCTION BOX (J/B) Terminal Arrangement

PFP:24350

AKS0012Y

