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POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

PRECAUTIONS PFP:00011

Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

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The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

Wiring Diagrams and Trouble Diagnosis

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When you read wiring diagrams, refer to the following:

- GI-14, "How to Read Wiring Diagrams"
- PG-4, "POWER SUPPLY ROUTING CIRCUIT"

When you perform trouble diagnosis, refer to the following:

- GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"
- GI-26, "How to Perform Efficient Diagnosis for an Electrical Incident"

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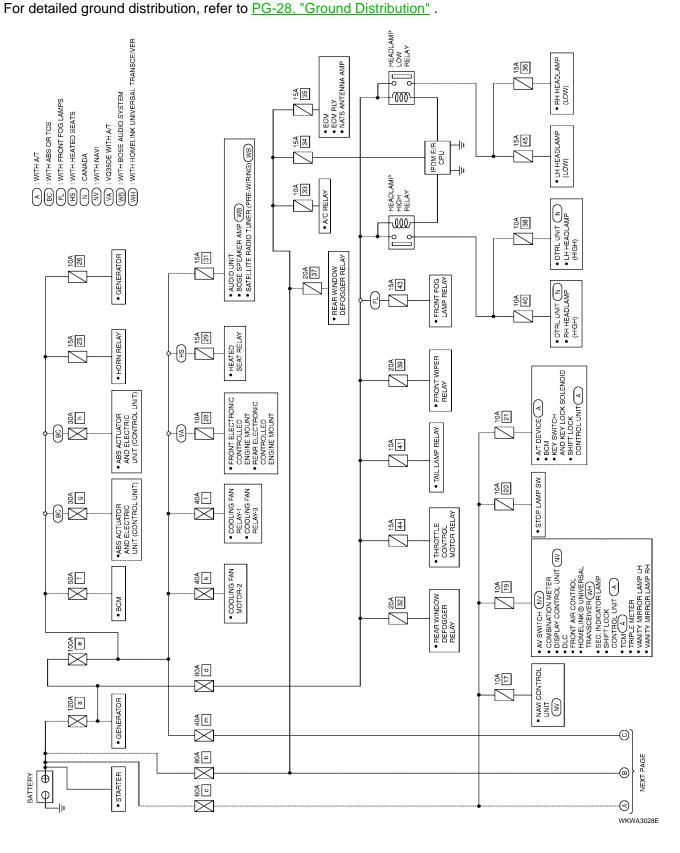
POWER SUPPLY ROUTING CIRCUIT

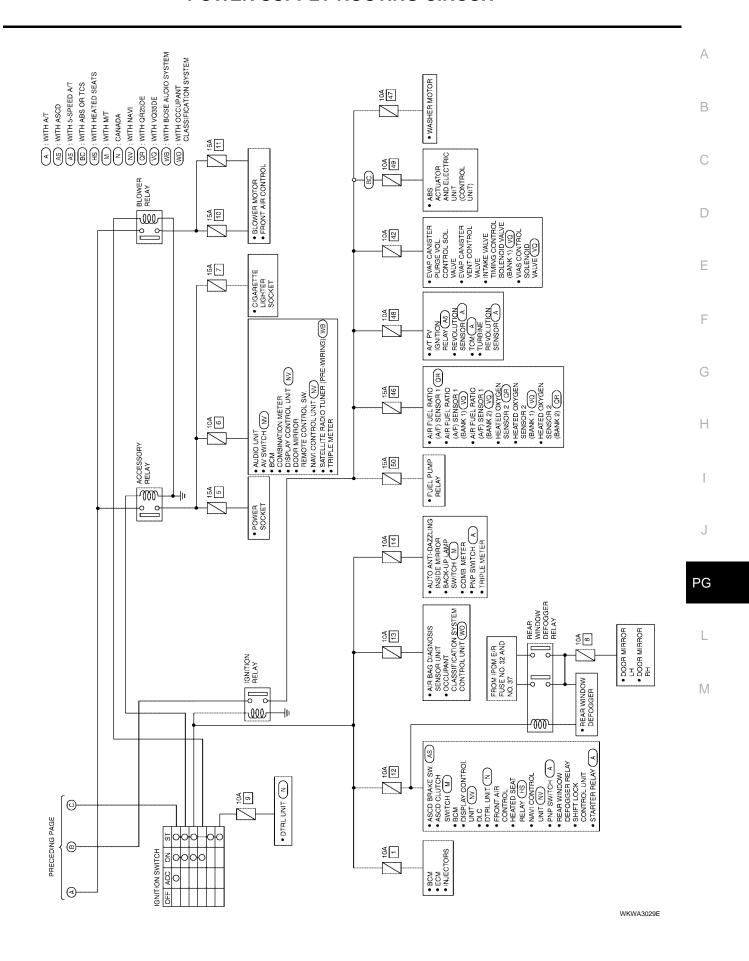
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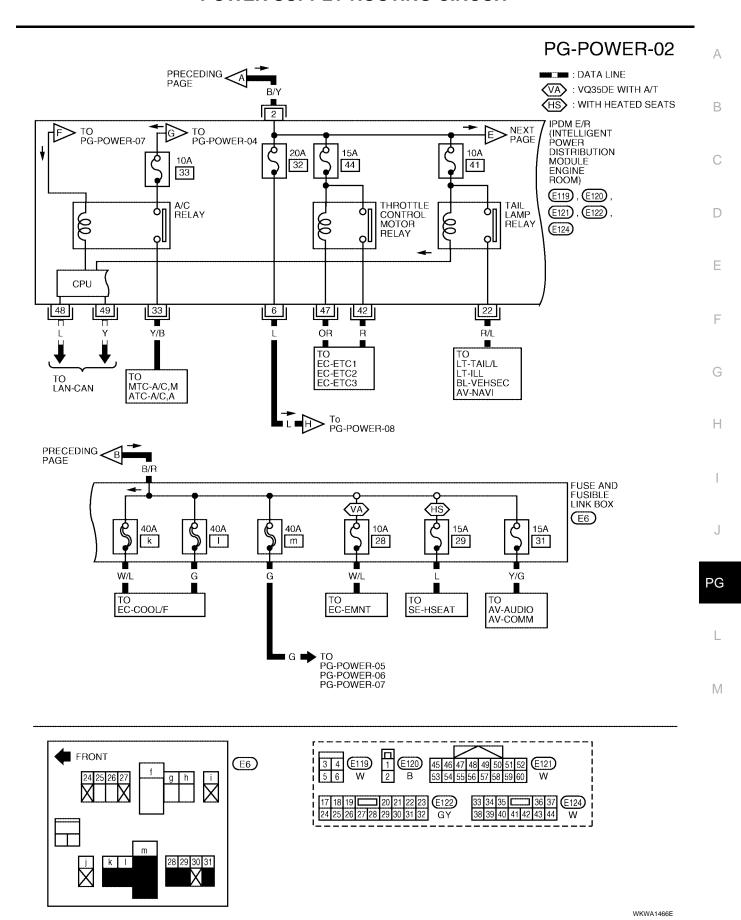
Schematic

For data like discounted distribution, refer to BO 00. || One and Distribution ||

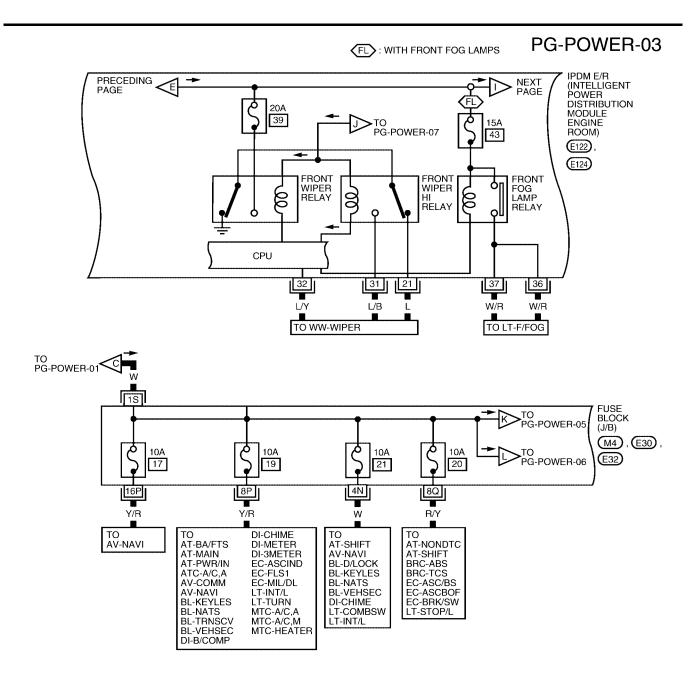


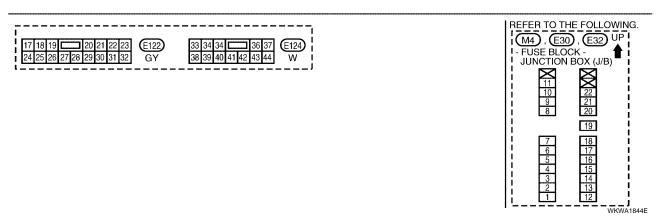


Wiring Diagram — POWER -EKS008UD BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION PG-POWER-01 (BC): WITH ABS OR TCS 0 FUSIBLE LINK BOX (BATTERY) 120A (E9), (E10), а (F39), (F40) 80A 100A 80A 60A d е b С 0 ② 2 B/Y B/R > TO PG-POWER-03 B/R B/R TO PG-POWER-04 TO SC-CHARGE TO SC-START PAGE B/R ■ B/R FUSE AND FUSIBLE LINK BOX (BC) **E**6 30A 10A f 25 26 h g W/B G/B Y/B B/Y TO то ТО ТО AV-NAVI BL-NATS BL-D/LOCK BL-KEYLES BL-TLID **BRC-ABS BL-VEHSEC** SC-CHARGE BRC-TCS WW-HORN BL-VEHSEC DI-CHIME GW-DEF **GW-WINDOW** LT-AUTO/L LT-DTRL LT-F/FOG LT-H/LAMP LT-ILL LT-INT/L LT-TAIL/L LT-TURN LT-COMBSW RF-SROOF SE-SEAT WW-WIPER FRONT **E6** g h WKWA1465E

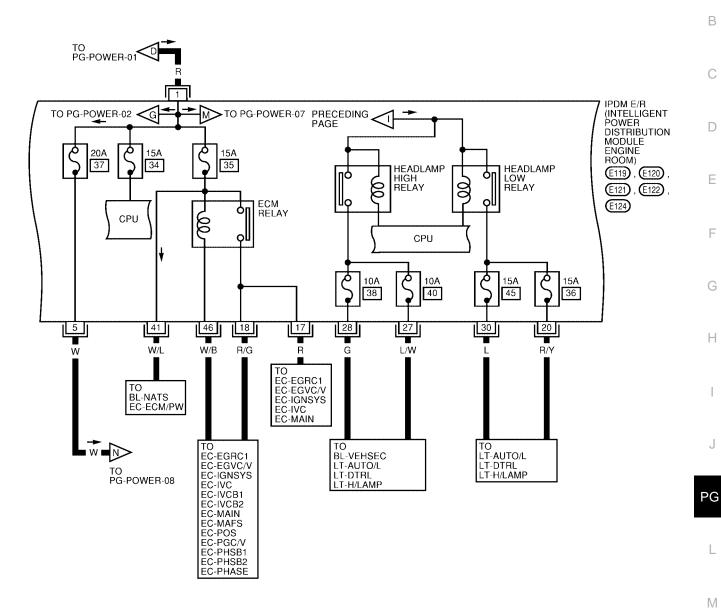


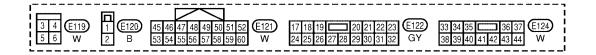
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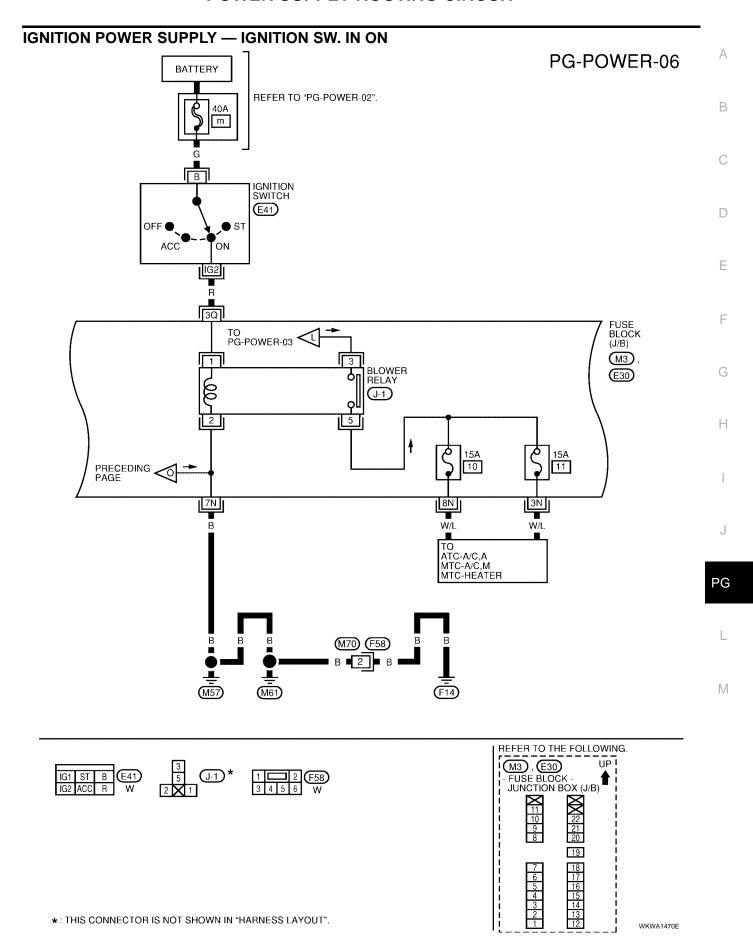
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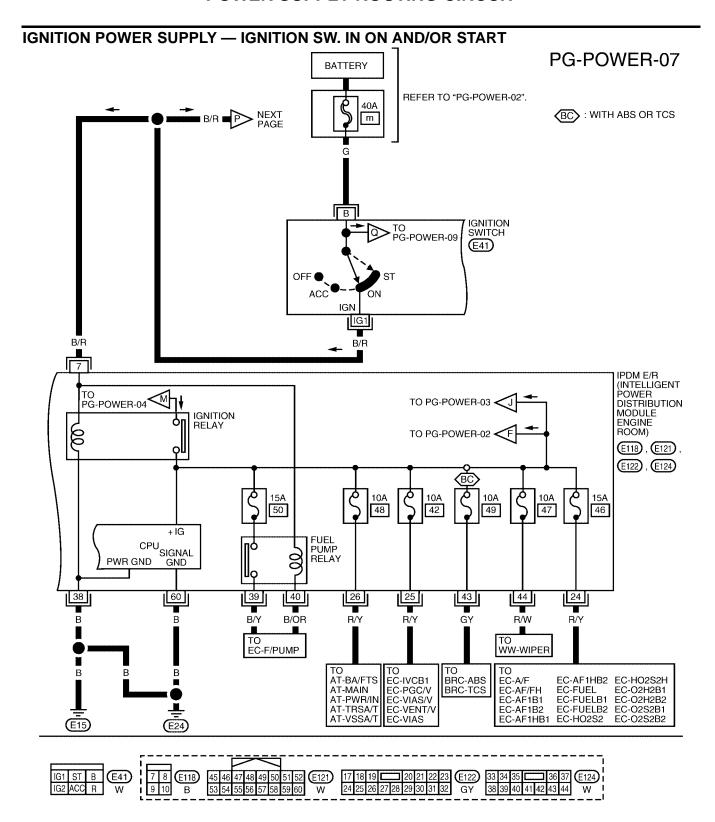
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ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON PG-POWER-05 BATTERY REFER TO "PG-POWER-02". 40A m В IGNITION **SWITCH** (E41) OFF ON ACC W/L 6Q FUSE BLOCK (J/B) TO PG-POWER-03 $\overline{\text{M4}}$ ACCESSORY RELAY (E30) \bigcirc NEXT PAGE 15A 10A 5 6 G/W PU TO TΩ WW-P/SCKT WW-CIGAR TO AV-AUDIO AV-COMM AV-NAVI AV-W/ANT BL-KEYLES BL-VEHSEC DL BL-COMB GW-MIRROR GW-WINDOW LT-AUTO/L LT-COMBSW LT-DTRL LT-F/FOG LT-H/LAMP LT-ILL LT-TAIL/L LT-TURN DI-B/COMP DI-METER DI-3METER







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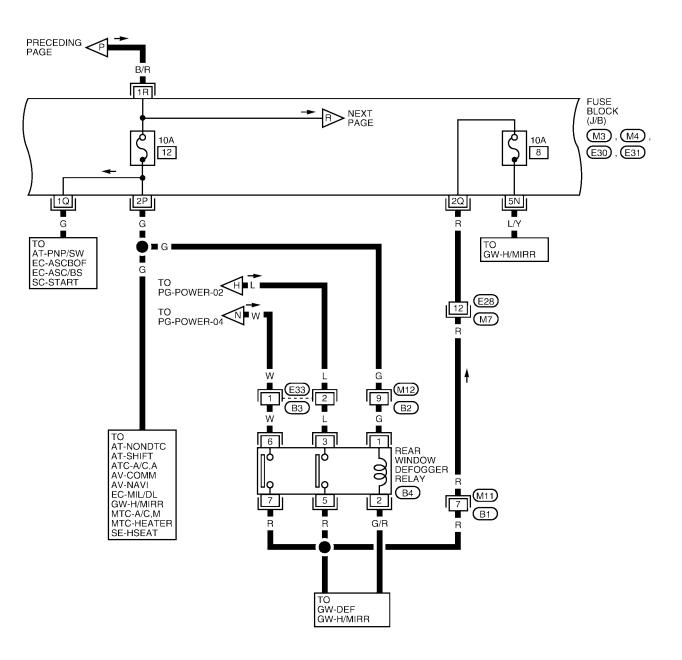
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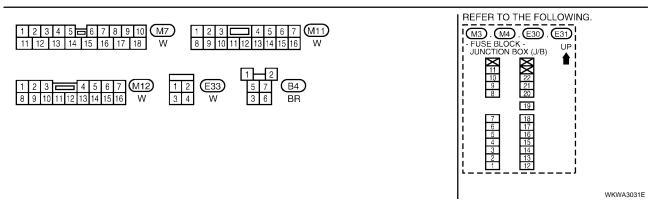
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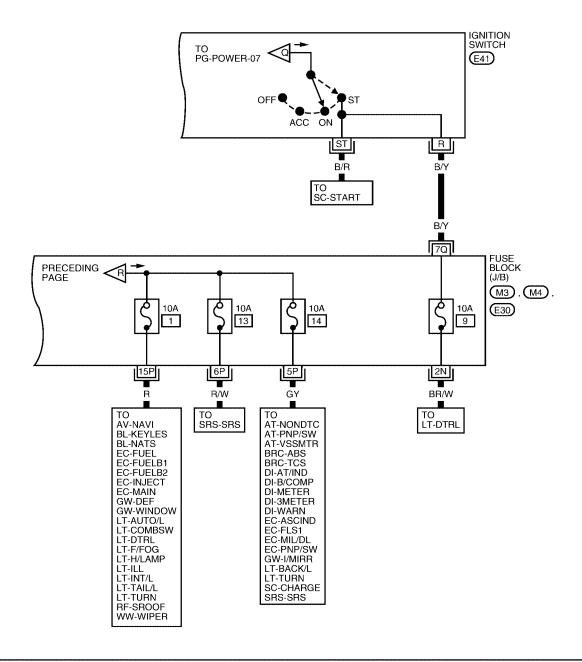
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PG-POWER-09





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

PFP:284B7

System Description

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

CAUTION:

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

SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control

Using CAN communication lines, it receives signals from the BCM and controls the following lamps:

- Headlamps (Hi, Lo)
- Parking lamps
- Tail lamps
- Front fog lamps
- 2. Wiper control

Using CAN communication lines, it receives signals from the BCM and controls the front wipers.

3. Rear window defogger relay control

Using CAN communication lines, it receives signals from the BCM and controls the rear window defogger relay.

A/C compressor control

Using CAN communication lines, it receives signals from the ECM and controls the A/C compressor magnetic clutch).

Cooling fan control

Using CAN communication lines, it receives signals from the ECM and controls the cooling fan relays.

6. Horn control

Using CAN communication lines, it receives signals from the BCM and controls the horn relay.

CAN COMMUNICATION LINE CONTROL

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

- 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	With the ignition switch ON, the headlamp (low) is ON.
Headiamp	With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	With the ignition switch ON, the tail and parking lamps are ON.
	With the ignition switch OFF, the tail and parking lamps are OFF.
Cooling fan	With the ignition switch ON, the cooling fan HI operates.
Cooling lan	With the ignition switch OFF, the cooling fan stops.
Front wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it was in just before fail–safe control was initiated.
Rear window defogger	Rear window defogger relay OFF
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

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IPDM E/R STATUS CONTROL

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

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

CAN Communication System Description

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Refer to LAN-21, "CAN COMMUNICATION".

Function of Detecting Ignition Relay Malfunction

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- When the integrated ignition relay is stuck in a "closed contact" position and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.
- When the state of the integrated ignition relay does not agree with the state of the ignition switch signal received via CAN communication, the IPDM E/R activates the tail lamp relay.

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 lamps are OFF.

CONSULT-II Function (IPDM E/R)

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

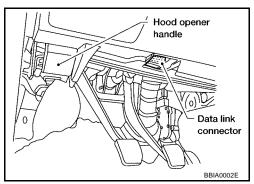
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.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

CONSULT-II BASIC OPERATION

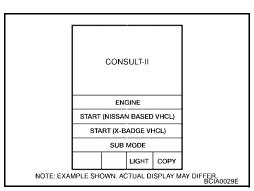
CAUTION:

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

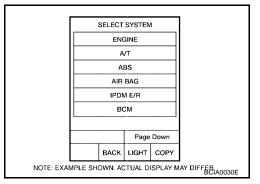
1. With the ignition switch OFF, connect CONSULT-II and CON-SULT-II CONVERTER to the data link connector, then turn ignition switch ON.



Touch "START (NISSAN BASED VHCL)".



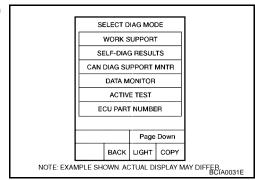
- Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, print "SELECT SYSTEM" screen, then refer to GI-39, "Consult-II Data Link Connector (DLC) Circuit".



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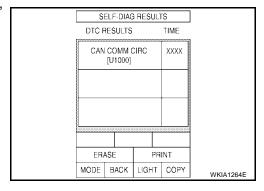
4. Select the desired part to be diagnosed on the "SELECT DIAG MODE" screen.



SELF-DIAGNOSTIC RESULTS

Operation Procedure

- Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
- 2. Self-diagnosis results are displayed.



Display Item List

Disalerritense	CONSULT-II	Maltunction detection		ME	Possible
Display items	display code			PAST	causes
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 fail, data reception/transmission cannot be confirmed. When the data in CAN communication is not received before the specified time. 	х	Х	Any of items listed 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 placed in IPDM E/R memory.

DATA MONITOR

Operation Procedure

- 1. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
- 2. Touch "ALL SIGNALS", "MAIN SIGNALS" or "SELECT FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	All signals will be monitored.
MAIN SIGNALS	Monitors the predetermined item(s).
SELECT FROM MENU	Selects and monitors individual signal(s).

- 3. Touch "START".
- Touch the required monitoring item on "SELECT ITEM MENU".

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

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All Signals, Main Signals, Select From Menu

	CONSULT-II		Monitor item selection			
Item name	screen display	Display or unit	ALL SIGNALS	MAIN SIGNALS	SELECT FROM MENU	Description
Motor fan request	MOTOR FAN REQ	1/2/3/4	Х	Х	х	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	Х	Х	х	Signal status input from ECM
Tail & clear request	TAIL & CLR REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
FR fog request	FR FOG REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
FR wiper request	FR WIP REQ	STOP/1LO/LO/HI	Х	Х	Х	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	Х	Х	Х	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/LS/HS/Block	Х	Х	Х	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	Х		Х	Status of input signal NOTE
Ignition relay status	IGN RLY	ON/OFF	Х	Х	Х	Ignition relay status monitored with IPDM E/R
Rear defogger request	RR DEF REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	Х		х	Signal status input from IPDM E/R
Hood switch	HOOD SW	OFF	Х			Signal status input from IPDM E/R (function is not enabled)
Theft warning horn request	THFT HRN REQ	ON/OFF	Х		Х	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	Х		Х	Output status of IPDM E/R

NOTE:

Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is in ACC position, display may not be correct.

ACTIVE TEST

Operation Procedure

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

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

Auto Active Test DESCRIPTION

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

OPERATION PROCEDURE

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

NOTE:

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

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

NOTE:

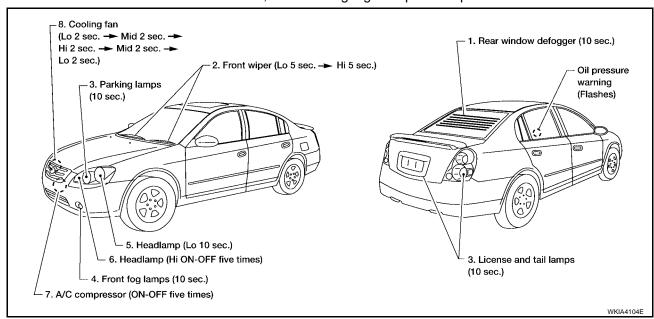
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform BL-30, "Door Switch Check" when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

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



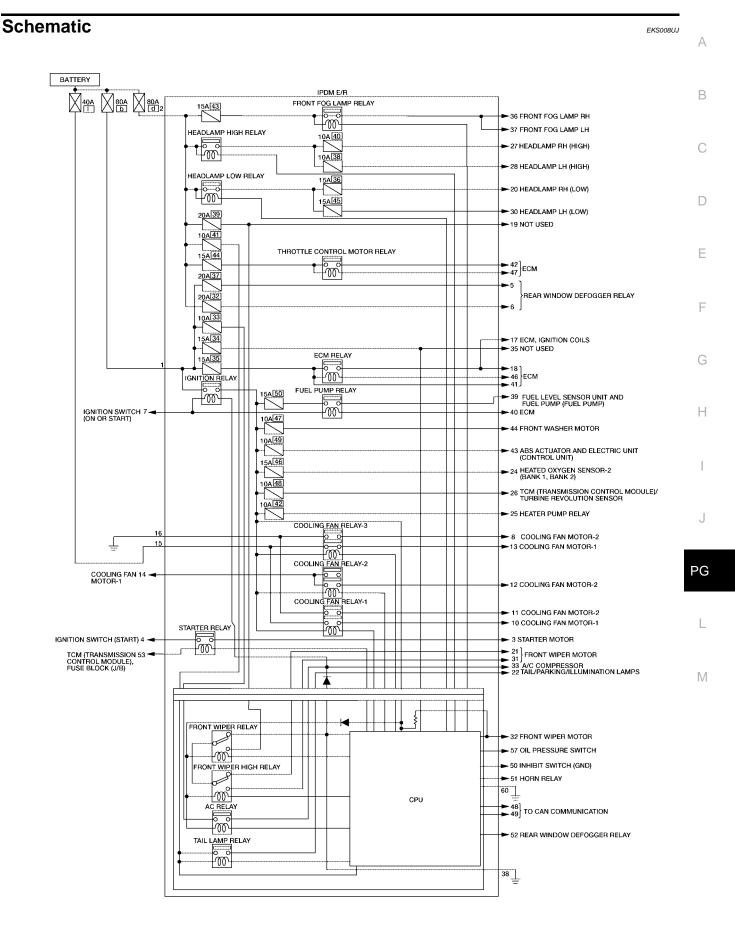
Concept of Auto Active Test

- 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.

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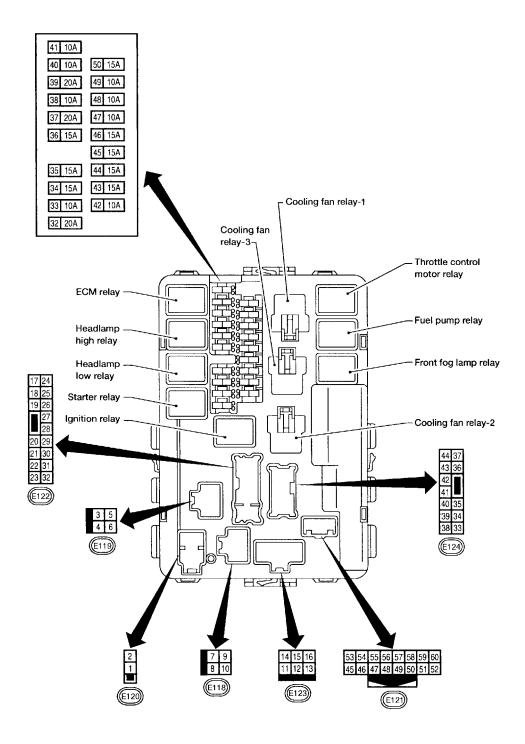
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Symptom	Inspection contents		Possible cause		
	YES		BCM signal input circuit		
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	NO	 Rear window defogger relay Open circuit of rear window defogger IPDM E/R malfunction Harness or connector malfunction between IPDM E/R and rear window defogger 		
		YES	BCM signal input system		
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?	NO	 Lamp/wiper motor malfunction Lamp/wiper motor ground circuit malfunction Harness/connector malfunction between IPDM E/R and system in question IPDM E/R (integrated relay) malfunction 		
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES	 BCM signal input circuit CAN communication signal between BCM and ECM. CAN communication signal between ECM and IPDM E/R 		
		NO	 Magnetic clutch malfunction Harness/connector malfunction between IPDM E/R and magnetic clutch IPDM E/R (integrated relay) malfunction 		
	5 ()	YES	ECM signal input circuit CAN communication signal between ECM and IPDM E/R		
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	NO	 Cooling fan motor malfunction Harness/connector malfunction between IPDM E/R and cooling fan motor IPDM E/R (integrated relay) malfunction 		
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pres- sure warning lamp	YES	 Harness/connector malfunction between IPDM E/R and oil pressure switch Oil pressure switch malfunction IPDM E/R 		
	blink?	NO	CAN communication signal between BCM and Combination Meter Combination meter		



WKWA1575E

IPDM E/R TERMINAL ARRANGEMENT



WKIA1609E

IPDM E/R Power/Ground Circuit Inspection

1. FUSE AND FUSIBLE LINK INSPECTION

Check that the following fusible links are not blown.

Terminal No.	Signal name	Fusible link No.
1, 2	Battery power	a, b, d

OK or NG

OK >> GO TO 2.

NG >> Replace fusible link.

2. POWER CIRCUIT INSPECTION

- 1. Disconnect IPDM E/R harness connector E120.
- Check voltage between IPDM E/R harness connector and ground.

(+)	(-)	Voltage (Approx.)
IPDM E/R connector	Terminal	(-)	
E120	1, 2	Ground	Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Repair or replace IPDM E/R power circuit harness.

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3. GROUND CIRCUIT INSPECTION

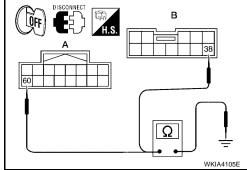
- 1. Disconnect IPDM E/R harness connectors E121 and E124.
- Check continuity between IPDM E/R harness connectors and ground.

А		В	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
IPDM E/R: E121	60	IPDM E/R: E124	38	Yes

OK or NG

OK >> Inspection End.

NG >> Repair or replace ground circuit harness of IPDM E/R.



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Inspection with CONSULT-II (Self-Diagnosis)

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CAUTION

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

1. SELF-DIAGNOSIS RESULT CHECK

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

CONSULT-II Display	CONSULT-II display code	TIME		Details of diagnosis result
CONSOLI-II Display		CRNT	PAST	Details of diagnosis result
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	_	_	_	No malfunction
CAN COMM CIRC	U1000	Х	Х	Any of items listed below have errors: TRANSMIT DIAG ECM BCM/SEC

NOTE:

The Details for Display for the Period are as follows:

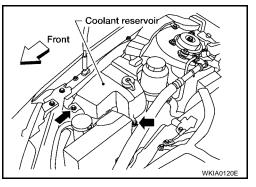
- CRNT: Error currently detected by IPDM E/R.
- PAST: Error detected in the past and stored in IPDM E/R memory.

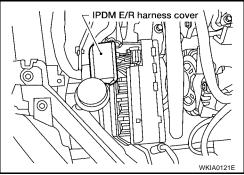
Contents displayed

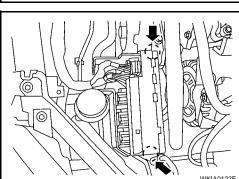
NO DTC DETECTED. FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END. CAN COMM CIRC>>Print out the self-diagnosis result and refer to <u>LAN-21</u>, <u>"CAN COMMUNICATION"</u>.

Removal and Installation of IPDM E/R REMOVAL

- 1. Disconnect the negative battery cable.
- 2. Remove 2 bolts and position coolant reservoir aside.
- 3. Remove IPDM E/R upper cover.
- 4. Remove IPDM E/R harness cover.







- 5. Release 2 clips and pull IPDM E/R up from case.
- Disconnect IPDM E/R connectors and then remove the IPDM E/R.

INSTALLATION

Installation is in the reverse order of removal.

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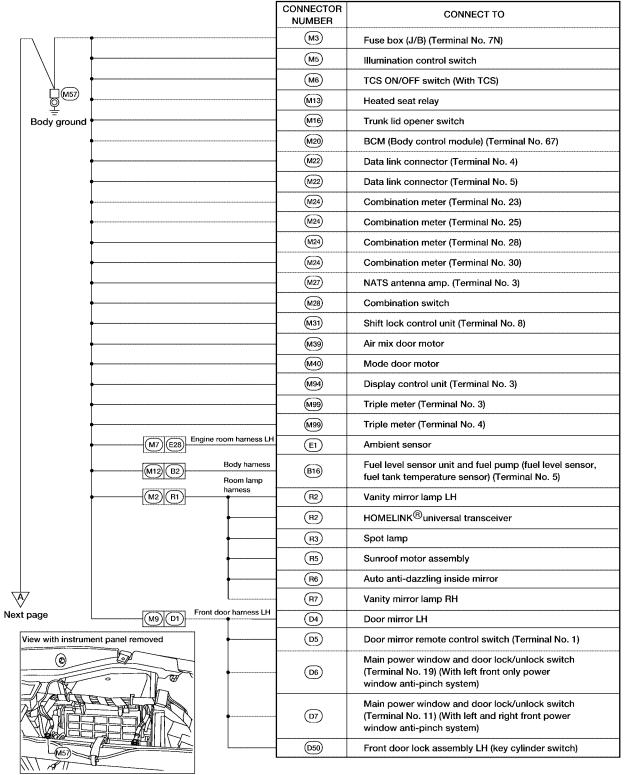
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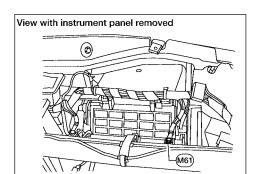
MAIN HARNESS

PFP:24080 **Ground Distribution**

EKS008UN



WKIA4106E



Preceding page

Engine control

Engine control

harness (QR25DE) harness (VQ35DE)

QR : WITH QR25DE (VQ) : WITH VQ35DE

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CONNECT TO NUMBER (M34) A/T device (Terminal No. 2) (3 position switch) (4A/T) (M34) A/T device (Manual mode switch) (Terminal No. 11) (5A/T) (M35) Air bag diagnosis sensor unit (Terminal No. 2) (M61) (M38) Power socket (M43) Audio unit (with NAVI) Body ground (M49) Front air control (Terminal No. 3) (M50) Front air control (Terminal No. 30) (M58) Intake door motor (M59) Glove box lamp (M64) Fan control amp. (M81) Front passenger air bag off indicator (M93) Display unit (Terminal No. 1) (M98) AV switch Console harness (M84) (M201) (M203) Hazard switch (M204) Heated seat switch LH (M205) Heated seat switch RH (M206) Power socket (for cigarette lighter) Front door harness RH M75 (D101) (D104) Door mirror RH

(D105)

(D106)

Power window and door lock/unlock switch RH (Terminal No. 9) (With left front only power window

Power window and door lock/unlock switch RH (Terminal No. 7) (With left and right front power window

anti-pinch system)

anti-pinch system)

CONNECTOR

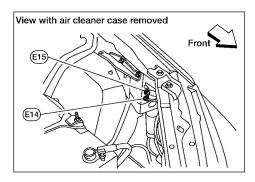
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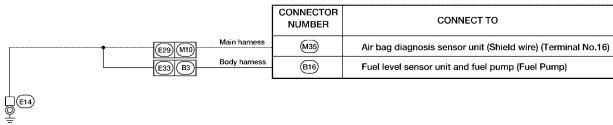
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WKIA3144E

ENGINE ROOM HARNESS

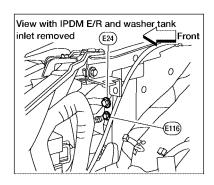




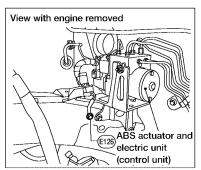
dy ground	CONNECTOR NUMBER	CONNECT TO
	E2	Front fog lamp LH
	E11)	Headlamp LH (High)
	E12)	Front combination lamp LH
E15	E13)	Headlamp LH (Low)
Body ground	E16	Brake fluid level switch
	E23	Front wiper motor
•	E34)	Clutch interlock switch (With M/T)
	E124)	IPDM E/R (Terminal No. 38)

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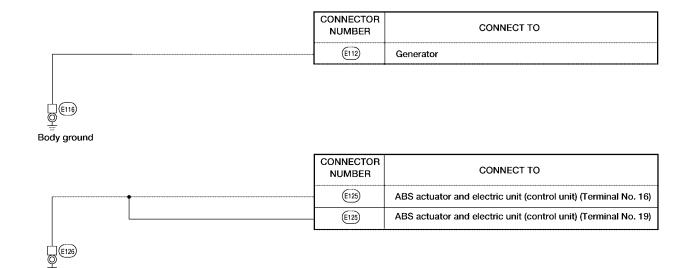
WKIA2754E



Body ground



Preceding	CONNECTOR NUMBER	CONNECT TO
page	(E101)	Front fog lamp RH
	E103	Daytime light control unit (Canada only) (Terminal No. 14)
	E104)	Daytime light control unit (Canada only) (Terminal No. 13)
©E24) •	E104)	Daytime light control unit (Canada only) (Terminal No. 16)
Body ground	E106)	Washer fluid level sensor
•	E107	Headlamp RH (Low)
<u> </u>	E109	Front combination lamp RH
	E110	Headlamp RH (High)
	E113)	Cooling fan motor 1 (Terminal No. 3)
	E113)	Cooling fan motor 1 (Terminal No. 4)
<u> </u>	E121)	IPDM E/R (Terminal No. 60)
	(E123)	IPDM E/R (Cooling fan relay-1, cooling fan relay-3) (Terminal No. 16)



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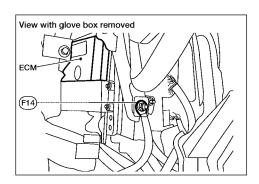
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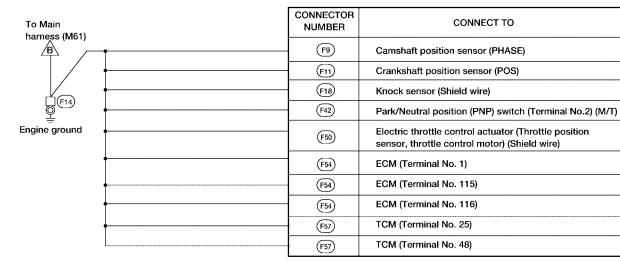
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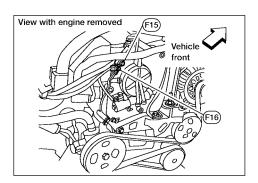
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ENGINE CONTROL HARNESS (QR25DE)







F16

Engine ground

F15

Engine ground

CONNECTOR
NUMBER

F5 Ignition coil No. 1 (With power transistor)

F6 Ignition coil No. 2 (With power transistor)

F7 Ignition coil No. 4 (With power transistor)

F8 Ignition coil No. 3 (With power transistor)

C1 Condenser-2

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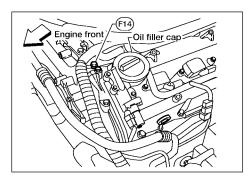
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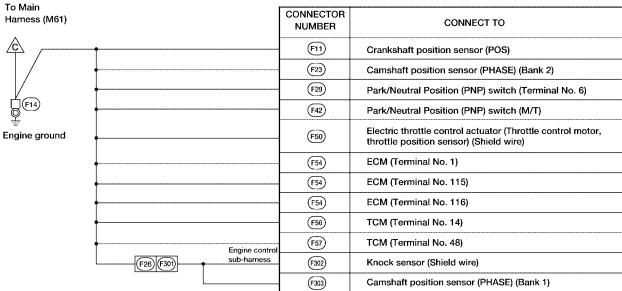
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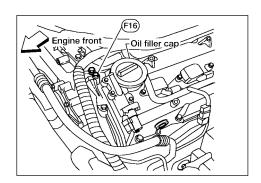
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WKIA2757E

ENGINE CONTROL HARNESS (VQ35DE)







		CONNECTOR NUMBER	CONNECT TO
	<u>†</u>	F6	Ignition coil No. 2 (With power transistor)
Engine ground	Engine control sub-harness	F7	Ignition coil No. 4 (With power transistor)
		F8	Ignition coil No. 6 (With power transistor)
		F21)	Condenser-2
		(F202)	Ignition coil No. 1 (With power transistor)
		F203	Ignition coil No. 3 (With power transistor)
		F204)	Ignition coil No. 5 (With power transistor)

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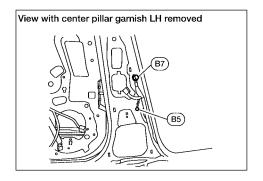
WKIA2759E

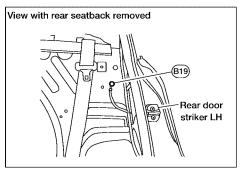
BODY HARNESS

](B5)

□ (B19)

Body ground





CONNECTOR NUMBER	CONNECT TO		
 B9	Air bag diagnosis sensor unit (Shield wire) (Terminal No. 44) (With side air bags)		

Body ground CONNECTOR CONNECT TO NUMBER (B11) Power seat High mounted stop lamp (Without rear air spoiler and (B24) without BOSE audio) (B30) High mounted stop lamp (With rear air spoiler)](B7) (B31) License lamp LH Body ground (B32) Trunk lamp switch and trunk release solenoid (B33) License lamp RH (B34) Trunk key cylinder switch (Unlock switch) Rear combination lamp LH (Turn signal, tail, back-up and (B35) stop lamp) (Terminal No. 5) Rear combination lamp RH (Turn signal, tail, back-up and (B36) stop lamp) (Terminal No. 5) (B40) NAVI control unit (Terminal No. 1) (With NAVI) (B40) NAVI control unit (Terminal No. 4) (With NAVI) (B41) NAVI control unit (Terminal No. 30) (With NAVI) Rear door harness LH B6 (D201) (D203) Rear power window switch LH Seat (B42) (P1) (P2) Seat belt buckle switch LH (P7) Heated seat LH

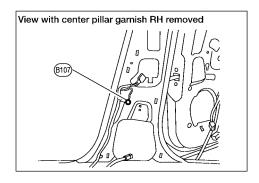
CONNECT TO

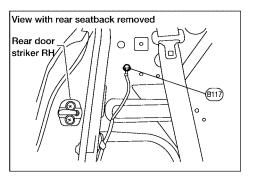
B17 Condenser-1 (Fuel pump)

WKIA3145E

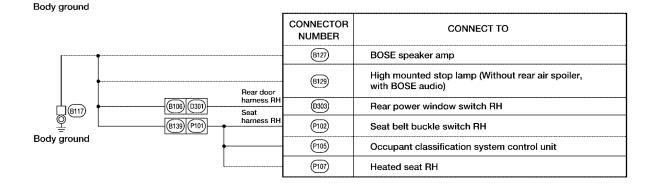
GROUND CIRCUIT

BODY NO. 2 HARNESS





CONNECTOR NUMBER	CONNECT TO
(B113)	Air bag diagnosis sensor unit (Shield wire) (Terminal No. 40) (With side air bags)



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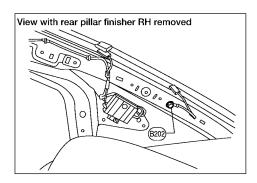
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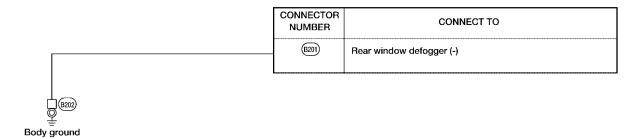
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WKIA3146E

GROUND CIRCUIT





WKIA2762E

HARNESS PFP:24010

Harness Layout HOW TO READ HARNESS LAYOUT

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

- Main Harness and Console Sub-harness
- Engine Room Harness LH (Engine Compartment)
- Engine Room Harness RH (Engine Compartment)
- Engine Control Harness and Engine Control Sub-Harness (QR25DE)
- Engine Control Harness, Engine Control Sub-harness-1, Engine Control Sub-Harness-2, and Enigne Control Sub-harness-3 (VQ35DE)
- Body Harness
- Body No. 2 Harness

To use the grid reference

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

CONNECTOR SYMBOL

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

Connector type	Water proof type		Standard type	
Connector type	Male	Female	Male	Female
Cavity: 4 or Less		<u> </u>		Q
Relay connector	♥	ملا		
Cavity: From 5 to 8			\$	
Cavity: 9 or More	\Diamond	\Diamond		\Diamond
Ground terminal etc.			2	

Example:

G2
E1
B/6: ASCD ACTUATOR

Connector color/Cavity

Connector number

Grid reference

Н

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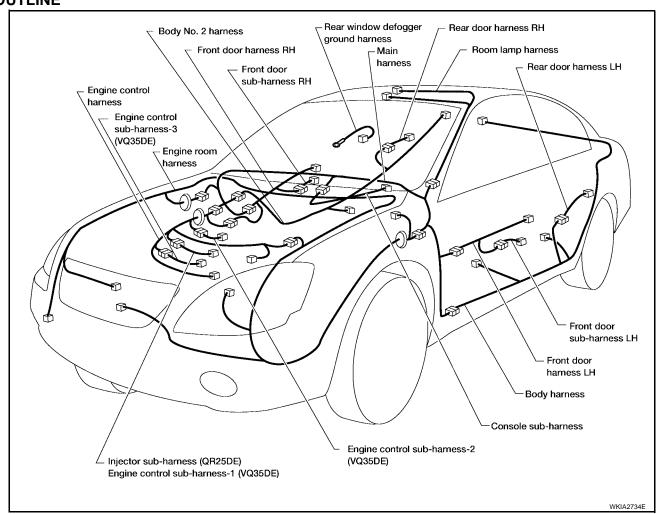
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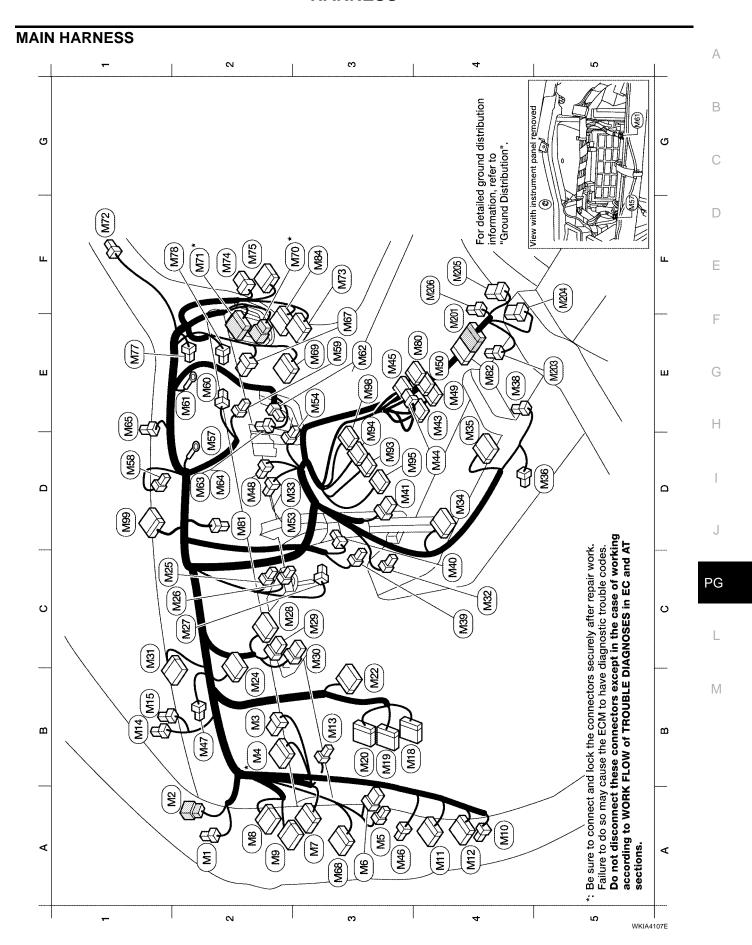
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OUTLINE

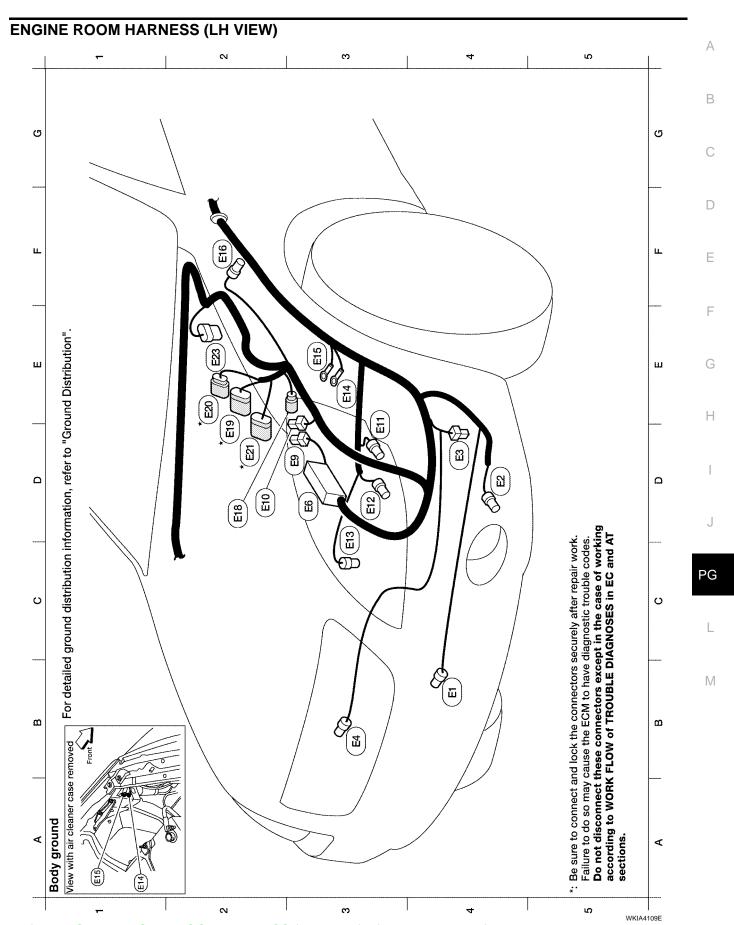




A2 (M1) BR/2 A2 (M2) W/6	:Tweeter LH :To(印)(without vanity mirror lamps)				: In-vehicle sensor (with auto A/C) : Intake sensor (with auto A/C)	20 E 2	(M64) W/4 (M65) B/2	: Fan control amp. (with auto A/C) : Sunload sensor (with auto A/C)
M2	: To(RI)(with vanity mirror lamps)	2 T	M34) (M34)	W/16 Y/28	: Ar I device : Air bag diagnosis sensor unit	A E	M68 BR/16	: 10 (B33)
	: Fuse block (J/B)	D2	- (%)	B/1	: Parking brake switch	E	M69 W/16	: To (8104)
* (<u>M</u> 4	: Fuse block (J/B)	E4	M38	B/2	: Power socket	F3	9/M @JW *	: To (F58)
(Mg)	: Illumination control switch	9 2	(EW)	W/3	: Air mix door motor (with auto A/C)	F2	*(M71) W/24	: To (F59)
(M6	: TCS ON/OFF switch (with TCS)	Q	M40	W/3	: Mode door motor	Ε	(M72) BR/2	: Tweeter RH
<u>R</u>	: To (E28) -)		M41	9/M	Fan switch (with manual A/C or	F3	M73 W/12	: To (813)
A2 (M8) W/16					neater only)	F 2	M74 W/8	: To ஹ
A2 (M9) W/12	: To (Pt)	_	M43	_	: Audio unit	F2	M75 W/10	: To (pret)
A4 M10 Y/4	: To (E29)	7	M44	9/M	: Audio unit	Ш	(M77) Y/2	: Front passenger air bag module
A4 (M11) W/16	: To (B1)	<u> </u>	M45	W/16	: Audio unit	Ξ	M78 OR/2	: Front passender air bad module
A4 (M12) W/16	: To ^{B2}	A3	M46	B/2	: To (E7)	E 4	(M80) W/12	. Audio unit
B3 (M13) L/4	: Heated seat relay	B2	M47	W/4	: Remote keyless entry receiver	20		: Front passenger air bag off
B1 (M14) BR/2	: Security indicator lamp	D2	M48	W/2	: Antenna amplifier	1		indicator
B1 (M15) W/3	: Auto light sensor (w/auto light system)	E4	(M49)	GY/20	: Front air control	E4	(M82) W/10	: To (M201)
ВЗ (м18) W/40	: BCM (Body control module)	E4	(M50)	GY/16	: Front air control	£	(M84) W/12	: To (B133)
B3 M19 W/15	: BCM (Body control module)	D2	M53	W/2	: Intake sensor (with manual A/C)	<u>D3</u>	M93 W/24	: Display unit
B3 (M20) B/15	: BCM (Body control module)	E3	M54	W/2	: Trunk lid opener cancel switch	E	M94 W/24	: Display control unit (with NAVI)
B3 (M22) W/16	: Data link connector	D2	M57		: Body ground	D3	(M95) W/32	: Display control unit (with NAVI)
B2 (M24) W/40	: Combination meter	5	M58	W/3	: Intake door motor	8	91/W @W	: AV switch
C2 (M25) W/2	: Ignition key illumination	E3	- (65M)	BR/2	: Glove box lamp	10	(M99) W/12	: Triple meter
C2 M26 W/4	: Key switch and key lock solenoid	E2	, (Me0)	Y/4	: Front passenger air bag service	Con	Console sub-harness	rness
C2 (M27) W/4 C2 (M28) W/16 C3 (M29) Y/6	NATS antenna amp Combination switch Combination switch		(Met)	- W/2	replacement connector : Body ground : Blower motor	E5 E5	(M20) W/12 (M203) W/4 (M204) W/6	: To (мв.) : Hazard switch : Heated seat switch LH
C3 (M30) GY/8 C1 (M31) GY/10	: Combination switch : Shift lock control unit (with A/T)	02		BR/2	: 7০ (নান্ত্র)	F4 4	M205 BR/6 M206 B/2	: Heated seat switch RH : Power socket (for cigarette lighter)

*: 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.

WKIA4108E



Refer to <u>PG-46</u>, "<u>ENGINE ROOM HARNESS (RH VIEW)</u>" for continuation of engine room harness.

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 *: Be sure to connect and lock the connectors securely after repair work. sections.

: Horn relay (inside fuse and fusible link box) : Headlamp LH (low) (conventional type) : Headlamp LH (low) (xenon type) : Front combination lamp LH : Fuse and fusible link box : Fusible link box (battery) : Fusible link box (battery) Brake fluid level switch : Front wheel sensor LH : Headlamp LH (high) **Body ground** : Body ground To (F33) : To (F32) To (F34) BR/2 GY/2 BR/2 BR/2 GY/9 GY/2 B/12 W/3 B/8 B/2 B/3 B/2 (± (E) E12 (E19) (E20) ĘZJ (1) EF33 EF33 (8) D2 D2 D3 D3 D3 D3 D4 D4 D4 D3 D3

Crash zone sensor

۲/2 B/1

: Front fog lamp LH : Ambient sensor

: Horn (low)

(E)

WKIA2738E

: Wiper motor

GY/6

PASSENGER COMPARTMENT

: Fuse block J/B : Fuse block J/B

: To 🙉

: Fuse block J/B

: To M10 : To (M7)

(E28) W/18

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Daytime light control unit

Fuse block (J/B) fuse No. 9

: ASCD clutch switch (with M/T and ASCD) : Clutch interlock switch (with M/T)

: Diode-1 (with DTRL)

: ASCD brake switch : Stop lamp switch BR/2 (E3) W/8 B/2 B/1 (E3) B/2 (E3) B/1 (E3) W/4 (E3) C/2 (E3) C/2 (E3) B/2 (E3)

: Accelerator pedal position sensor

: Ignition switch *E40 B/6 E41 W/6 E102 GY/4

: Daytime light control unit (for Canada) : Daytime light control unit (for Canada) : Daytime light control unit (for Canada) diagnostic trouble codes.

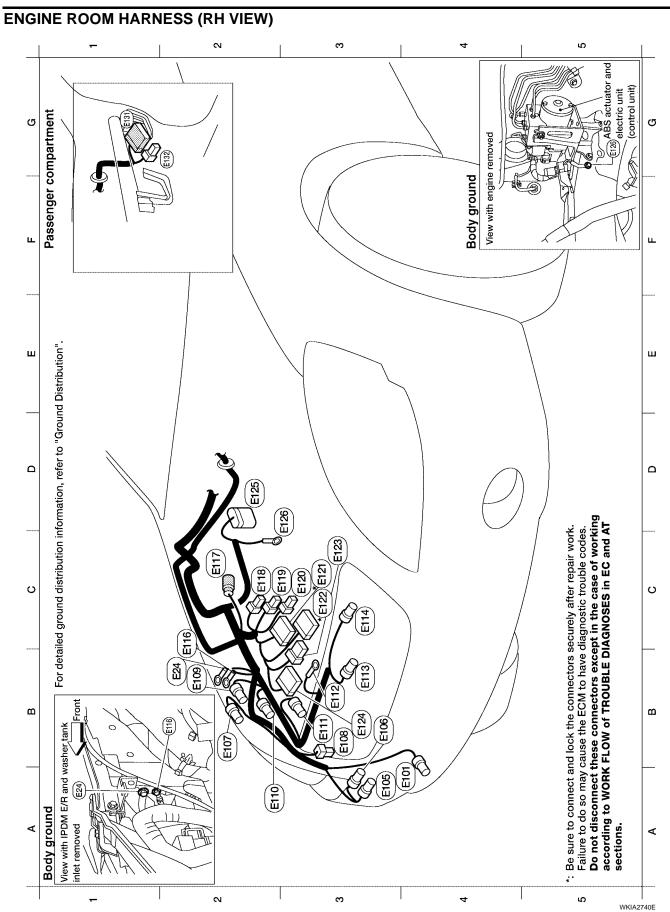
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

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

E40 7 88 **三**名 E103) E37 (E102) E33 盟 (程 (程 E36 <u>명</u> (EZ) E33 IPDM E/R fuse No.51 E36 Diode-1

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WKIA4110E



Refer to PG-43, "ENGINE ROOM HARNESS (LH VIEW)" for continuation of engine room harness.

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

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W/4

B/2

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B/4

8 8 8 8

: IPDM E/R (Intelligent Power Distribution Module Engine Room)

Front wheel sensor RH

GY//2

Cooling fan motor-2

GY/4

E114 (E116)

Body ground

Generator (ground) Cooling fan motor-1

GY/4

(FF)

C2 B3 B3

E112

Headlamp RH (low) (conventional type)

Washer fluid level sensor

BR/2

Front washer motor

GY/2

E105 E107

Front fog lamp RH

Body ground

: Headlamp RH (low) (xenon type)

BR/2

(E113) (E113) (E113) (E113) (E113)

A3 B2 B3 B3 B3

Refrigerant pressure sensor

Front combination lamp RH

Horn (high)

B/3

Headlamp RH (high)

B/2 B/3 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)

W/16 GY/16

W/12

E123 E123

E123

B/31

: ABS actuator and electric unit (with ABS or TCS)

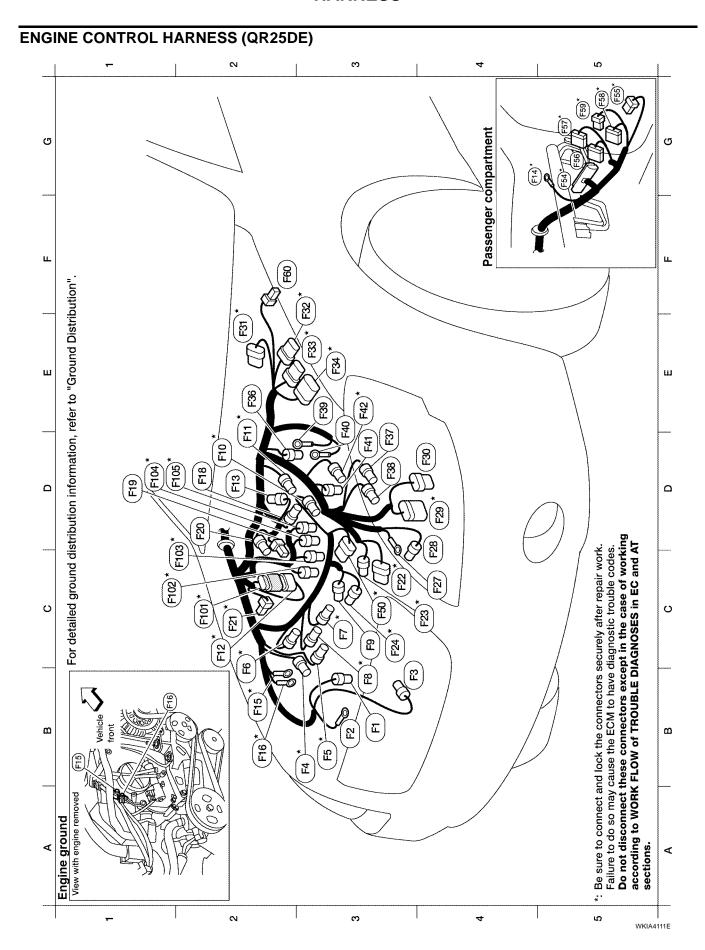
: To (Mer) (With ABS or TCS) : To (Brit) (With ABS or TCS)

4/W

E132

Body ground

ET 26



: TCM (transmission control module) (with A/T) : TCM (transmission control module) (with A/T) Park/neutral position (PNP) switch (with M/T) Turbine revolution sensor (with A/T) Back-up lamp switch (with M/T) : Electric throttle control actuator : Revolution sensor (with A/T) : Fusible link box (battery) : Vehicle speed sensor : Battery (positive) : Dropping resistor : Injector No. 3 : Injector No. 4 : Injector No. 1 : Injector No. : To (E19) : **To** M70 : To (M71) Engine control sub-harness (SI) To (E21) : To (B105) : ECM <u>و</u> <u>ှ</u> **GY/24** GY/2 W/24 W/24 **GY/2** GY/9 GY/2 BR/8 GY/2 GY/2 GY/2 B/12 SMJ 9// B/2 9/9 B/3 B/6 (F59) **★** F33 F42 F54 F55 F56 * (F58) (E) * F105 F32 F34 (2) (E) (E) (E) (F) * (F57) * (F101) (F) (F50 * (F102) (F) * Figh ဗ G5 G5 G5 G5 35 <u>g</u>2 $^{\circ}$ \ddot{c} 5 贸 \aleph **E**3 23 ឧ 23 72 \mathbb{B} 2 23 E3 EVAP canister purge volume control solenoid valve : Park/neutral position (PNP) switch (with A/T) : Intake valve timing control solenoid valve Ignition coil No. 4 (with power transistor) Ignition coil No. 3 (with power transistor) Ignition coil No. 1 (with power transistor) Ignition coil No. 2 (with power transistor) Engine coolant temperature sensor Camshaft position sensor (PHASE) : Terminal cord assembly (with A/T) Power steering pressure sensor : Heated oxygen sensor 2 (Rear) : VIAS control solenoid valve Crankshaft position sensor : Air fuel ratio (A/F) sensor Oil pressure switch : A/C compressor : Engine ground **Engine ground** : Engine ground Knock sensor : Condenser-2 Starter motor Starter motor Generator **To** (F101)

: Mass air flow sensor

B/6

(F3

E2

: Generator

GY/3 GY/3 GY/3 GY/3

(E (F) (F

B3 83 B3 5

WKIA4112E

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GY/1

5

B/2

(E) (eF

20

F16

B2

W/2

F21 (F22) F23 F24 (F27)

 5

9/5 **G/4**

 \aleph 2

B/3

5

GY/2

B/10

(EZ F30

GY/1

2 2

BR/2

(F) (F) (F)

D2 94 **B**2

B/6

(F12)

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E

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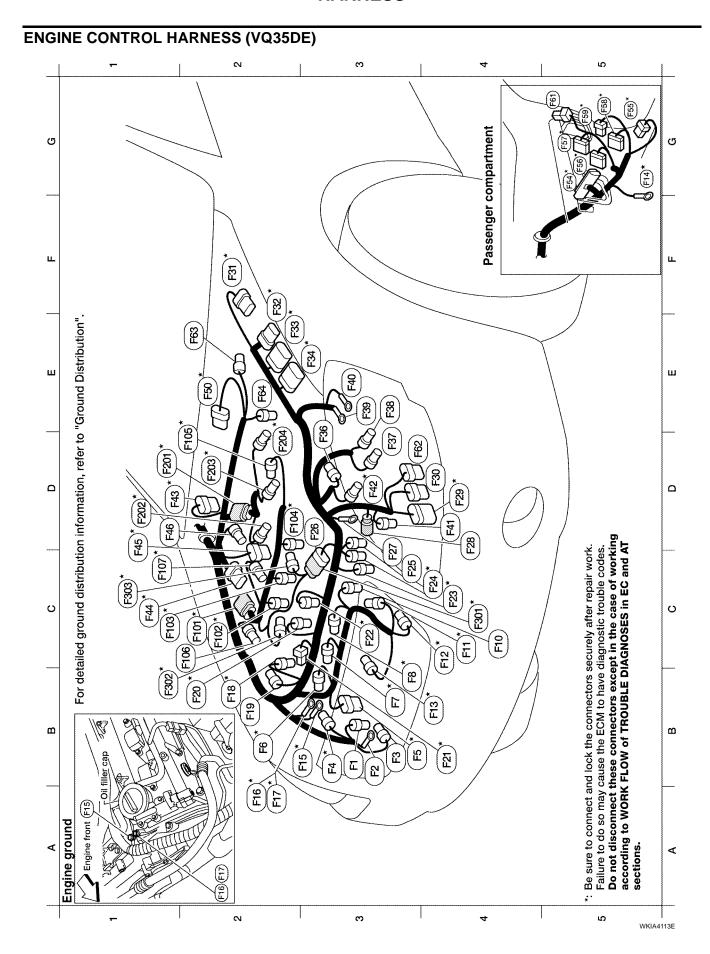
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Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT Failure to do so may cause the ECM to have diagnostic trouble codes. Be sure to connect and lock the connectors securely after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

sections.



E2 (FEB) GY/6 : EGR volume control valve E2 (FEB) GY/2 : EGR Temperature sensor Engine control sub-harness-1 C2 *(FID) G/8 : To (F4A) C2 *(FID) G/8 : To (F4A) C2 *(FID) G/8 : To (F4A) C3 *(FID) GY/2 : Injector No. 3 D2 *(FID) GY/2 : Injector No. 3 D2 *(FID) GY/2 : Injector No. 5 D2 *(FID) GY/2 : Injector No. 5 D3 *(FID) GY/2 : Injector No. 5 D4 *(FID) GY/2 : Injector No. 5 D5 *(FID) GY/2 : Injector No. 5 D6 *(FID) GY/2 : Injector No. 5 D7 *(FID) GY/2 : Injector No. 5 D8 *(FID) GY/2 : Injector No. 5 D9 *(FID) GY/2 : Injector No. 5 D9 *(FID) GY/2 : Injector No. 7 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 7 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 5 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 5 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 5 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 5 (with power transistor) D9 *(FID) GY/3 : Ignition coil No. 5 (with power transistor) C1 *(FID) GY/3 : To (FID) C2 *(FID) GY/3 : To (FID) C3 *(FID) GY/3 : To (FID) C4 *(FID) GY/3 : To (FID) C5 *(FID) GY/3 : To (FID) C6 *(FID) GY/3 : To (FID) C7 *(FID) GY/3 : To (FID) C8 *(FID) GY/3 : To (FID) C9 *(FID) GY/4 : To (F	** 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.
E2 (FG) GY/6 E2 (FG) GY/6 Engine control C2 *(FG) G/2 C1 *(FG) GY/2 C1 *(FG) GY/2 C2 *(FG) GY/2 C2 *(FG) GY/2 C2 *(FG) GY/2 C2 *(FG) GY/2 C3 *(FG) GY/2 C4 *(FG) GY/3 C5 *(FG) GY/3 C6 *(FG) GY/3 C7 *	Be sure to connec after repair work. to have diagnostii Do not disconne case of working TROUBLE DIAGN
# # # # # # # # # # # # # # # # # # #	*. ፙ <i>፟</i> ቜ ፘ፬ Ω፟ ፫
10 (E301) Starter motor Starter motor Park/neutral position (PNP) switch (with A/T) Terminal cord assembly (with A/T) Mass air flow sensor To (E20) To (E2) Turbine revolution sensor (with M/T) Revolution sensor (with A/T) Battery (positive) Fusible link box (battery) Back-up lamp switch (with M/T) Park/neutral position (PNP) switch (with M/T) Park/neutral position (PNP) switch (with M/T) To (E201) Park/neutral position (PNP) switch (with M/T) To (E201)	(with A/T) To (MZ) To (MZ) A/T PV IGN relay Terminal cord assembly (with A/T)
(Fig. G.Y/10 (Fig.	*(FS) W/6 *(FS) W/24 (FG) L/4 (FG) GY/8
C3 C	G5 G5 G5 D3
Generator Generator A/C compressor Intake valve timing control solenoid valve (Bank 2) Air fuel ratio (A/F) sensor (Bank 2) Ignition coil No. 2 (with power transistor) Ignition coil No. 4 (with power transistor) Ignition coil No. 6 (with power transistor) Front electronic controlled engine mount Crankshaft position sensor Heated oxygen sensor 2 (Rear) (Bank 2) (with M/T) Heated oxygen sensor 2 (Rear) (Bank 2) (with A/T) Heated oxygen sensor 2 (Rear) (Bank 1) Engine ground Engine ground Engine ground Engine ground Injector No. 2 VIAS control solenoid valve Injector No. 4 Condenser 2	: Camshaft position sensor (PHASE) (Bank 2) : Engine coolant temperature sensor : Rear electronic controlled engine mount
	C4*F23 B/3 C4*F24 GY/2 D3 F25 BR/3

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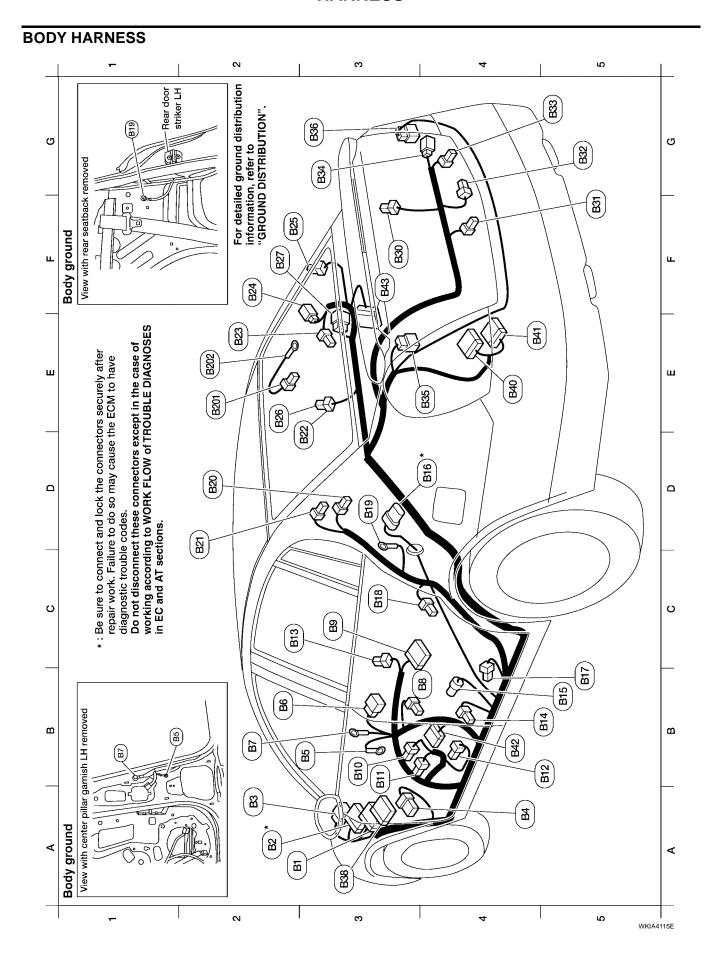
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: Rear window defogger condenser : LH side curtain air bag module 7/2 (BZ0) (B21) 8

Rear speaker LH (without Bose audio system) BR/2 (B23) (B22) 8

: Trunk room lamp (without Bose audio system) W/2

: High mounted stop lamp (without rear spoiler and without Bose audio system)

W/2

(B24

舀

: Rear window defogger relay

BR/6

A4

: To (M12) . To Miti

* (B2)

W/16 W/16

(B)

: To (E33)

9//

(E) (g) (BS

Body ground

To (pzor)

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(8)

B2 B2 **B**4 ဗ 83 B3

: Rear speaker RH (without Bose audio system) BR/2

(BZ5)

囧 Ξ 33 F5 ß

: Subwoofer LH (with Bose audio system) : To (B131) (with Bose audio system) 8/% B26 (B27)

: High mounted stop lamp (with rear spoiler)

BR/2 (B30

: License lamp LH

BR/2

B33

: Front LH side air bag module : Air bag diagnosis sensor unit

: Front door switch LH

W/3

Y/12

(m) (E)

Body ground

(a) (m) Seat belt buckle switch LH

Power seat

W/2

Y/2

W/3 W/3

B12 B13

B5

: Heated seat switch

: Trunk lamp switch and trunk release solenoid **4/W** B32

: License lamp RH BR/2 (E) 35

: Trunk key cylinder switch **W/2** B34 83

: Rear combination lamp LH 9/∕ B35 <u>E</u>4

: Rear combination lamp RH 9/M 836 ဌ

: Fuel level sensor unit and fuel pump

GY//5

D4 x (B16)

: Rear door switch LH

≶

B18 (FB)

: Condenser-1

W/2

(B17)

B2

: Body ground

: Front LH seat belt pre-tensioner : LH side airbag (satellite) sensor

Y/2

(B14) (B15)

82

80

Y/2

: NAVI control unit (with NAVI) : To (M68) **BR/16** W/24 (83) B40 A3 **E**4

: NAVI control unit (with NAVI) GY/24 (B41) **E**4

. To W/8 B42 84

: NAVI control unit (GPS antenna) (with NAVI) GY/2 (B43)

: Rear window defogger B/1 (BZ04)

: Body ground B202

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

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

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BODY NO. 2 HARNESS N က 2 B132) B133) B103 回 O G (B105) (B101) View with rear seatback (B137) B108 (B139) **Body ground** B107 B104 Rear door B115 ш (B112) (B114) B106 *: 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. B113 B116 ш ш (B117) B118 Ω Ω B126 B122 O O B130 (B129) (B127) B128 ω Ω For detailed ground distribution (B131) (B123) garnish RH information, refer to "GROUND DISTRIBUTION". B138) (B119) View with center pillar B121) **Body ground** ⋖ က 2 WKIA3149E

: EVAP control system pressure sensor : RH side curtain air bag module GY/3 ۲/2 (B118) (B113) A22

: EVAP canister vent control valve **B**/2 B121 ¥

Rear wheel sensor RH GY/2 B122

> S B5 ဗ

: Rear wheel sensor LH BR/2 B123

Subwoofer RH (with Bose audio system) W/2

B126

: Bose Speaker Amp. GY/8 B127

B4

B2 B2

: Front RH side air bag module : Air bag diagnosis sensor unit

Y/12

B113

E3

Y/2 ۲//2

(B114) B115

5 75

: Heated seat switch RH

W/3

B108

(B)

Y/2

B112

: Body ground

8/%

(B106)

F4 F2 Ξ F2

(M69 : To (F55) : **To** (5301)

<u>မ</u> ..

(B104)

44

* (B105)

, G5

M73

W/12 W/16 BR/8

(B103)

g

<u>م</u> 은 ..

(B101)

Bose Speaker Amp. B/24 B128

: High mounted stop lamp (without rear spoiler and with Bose W/2 (B123)

audio system)

: Trunk room lamp (with Bose audio system) W/2 B130

 6 **B**2

: Front RH seat belt pre-tensioner : RH side air bag (satellite) sensor

: Rear door switch RH

M

: Body ground

(B117)

: To (B27) (with Bose audio system) 8/% (H23)

: To M63 BR/2 B132 G4

To (M82) W/10 (B133) 63

: Belt tension sensor B/3 B137 F4

: Satellite radio tuner (Pre-wiring) . **To** (P101) W/16 9/M B138 (B138) B3

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

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

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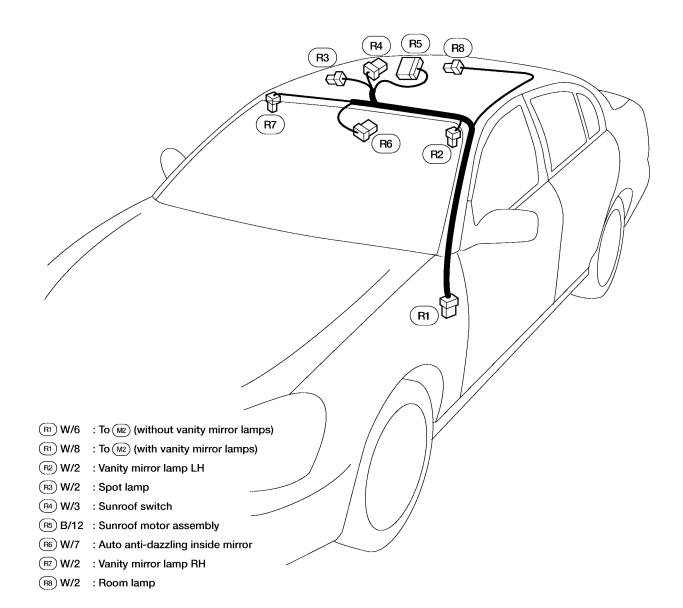
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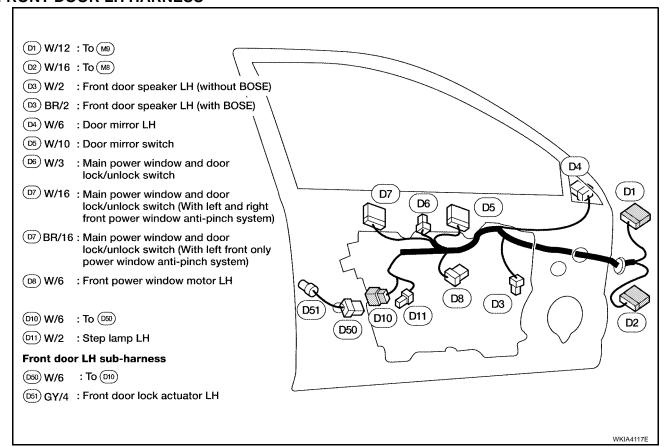
WKIA4116E

ROOM LAMP HARNESS

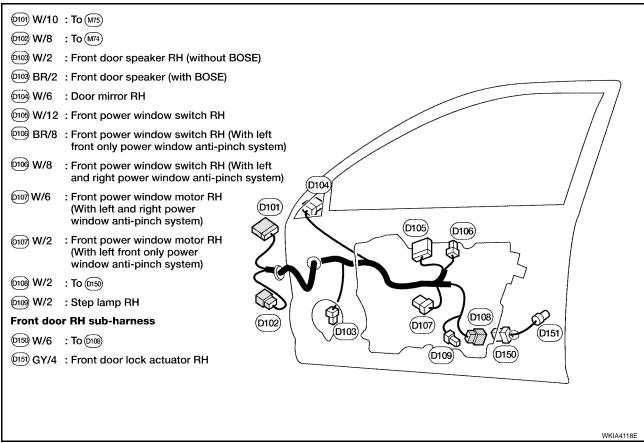


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FRONT DOOR LH HARNESS



FRONT DOOR RH HARNESS



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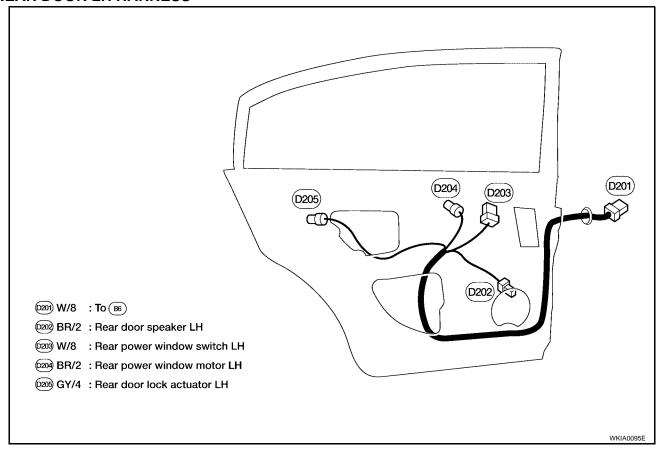
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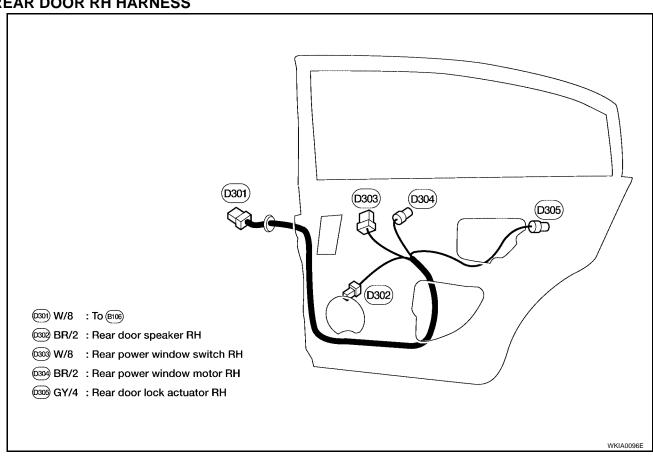
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REAR DOOR LH HARNESS



REAR DOOR RH HARNESS



Wiring Diagram Codes (Cell Codes)

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

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

Code	Section	Wiring Diagram Name
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3METER	DI	Triple Meter
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
5THSIG	AT	A/T 5th Signal
A/C,A	ATC	Auto Air Conditioner
A/C,M	MTC	Manual Air Conditioner
A/F	EC	Air Fuel Ratio Sensor
AF/FH	EC	Air Fuel Ratio Sensor
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
ABS	BRC	Anti-Lock Brake System
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASCBOF	EC	ASCD Brake Switch
ASC/BS	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
ASC/SW	EC	ASCD Steering Switch
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUTO/L	LT	Auto Light System
B/COMP	DI	Board Computer
BA/FTS	AT	A/T Fluid Temperature Sensor and TCM Power Supply
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ENGSS	AT	Engine Speed Signal
EGRC1	EC	EGR Function
EGR/TS	EC	EGR Temperature Sensor
EGVC/V	EC	EGR Volume Control Valve

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EMNT	l EC	Engine Mount
ETC1	EC	Electric Throttle Control Function
	_	
ETC2	EC	Throttle Control Motor Relay Throttle Control Motor
ETC3	EC	
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FLS1	EC	Fuel Level Sensor Function (SLOSH)
FTS	AT	A/T Fluid Temperature Sensor
FTSP	AT	A/T Fluid Temperature Sensor Failure
FTTS	EC	Fuel Tank Temperature Sensor
FUEL	EC	Fuel Injection System Function
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
H/MIRR	GW	Door Mirror with Heated Mirror
HEATER	MTC	Heater System
HO2S2	EC	Heated Oxygen Sensor 2 (Rear)
HO2S2H	EC	Heated Oxygen Sensor 2 (Rear) Heater
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/MIRR	GW	Inside Mirror (Auto-Anti Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
INT/L	LT	Spot, Vanity Mirror and Trunk Room Lamps
IVC	EC	Intake Valve Timing Control Solenoid Valve
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
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., Oil and Fuel Gauges
MIL/DL	EC	Malfunction Indicator Lamp
MIRROR	GW	Door Mirror
MMSW	AT	Manual Mode Switch
NATS	BL	Nissan Anti-Theft System
NAVI	AV	Navigation System
NONDTC	AT	Non-detective Items
O2H2B1	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 (Rear) Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 (Rear) Bank 2
OVRCSV	AT	Over Run Clutch Solenoid Valve
PC/A	AT	Line Pressure Solenoid Valve
PC/B	AT	Shift Pressure Solenoid Valve
PC/C	AT	Pressure Control Solenoid Valve Failure
PC/CS	AT	Line Pressure Solenoid Valve
P/SCKT	WW	Power Socket
. / 5 5 1 1 1	4444	. 551 666/101

PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHASE	EC	Camshaft Position Sensor (PHASE)
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
PS/SEN	EC	Power Steering Oil Pressure Sensor
PWR/IN	AT	TCM Ignition Power
RP/SEN	EC	Refrigerant Pressure Sensor
SEAT	SE	Power Seat
SEN/PW	EC	Sensor Power Supply
SFTFNC	AT	Unusual Shifting
SHIFT	AT	A/T Shift Lock System
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
SSV/A	AT	Shift Solenoid Valve A
SSV/B	AT	Shift Solenoid Valve B
SSV/C	AT	Shift Solenoid Valve C
SSV/CS	AT	Shift Solenoid Valve Failure
SSV/D	AT	Shift Solenoid Valve D
SSV/E	AT	Shift Solenoid Valve E
START	SC	Starting System
STOP/L	LT	Stop Lamp
TLID	BL	Trunk Lid Opener
TAIL/L	LT	Parking, License and Tail Lamps
TCCSIG	AT	A/T TCC Signal (Lock Up)
TCS	BRC	Traction Control System
TCV	AT	Torque Converter Clutch Solenoid Valve
TPS	AT	Throttle Position Sensor
TPS1	EC	Throttle Position Sensor
TPS2	EC	Throttle Position Sensor
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	HOMELINK® Universal Transceiver
TRSA/T	AT	Turbine Revolution Sensor
TRSC	AT	Turbine Revolution Sensor
TURN	LT	Turn Signal and Hazard Warning Lamps
VEHSEC	BL	Vehicle Security System
VENT/V	EC	EVAP Canister Vent Control Valve
VIAS	EC	Variable Air Induction Control System
VIAS/V	EC	Variable Air Induction Control System Valve
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
VSSATC	AT	Revolution Sensor
VSSMTR	AT	Vehicle Speed Sensor Meter
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

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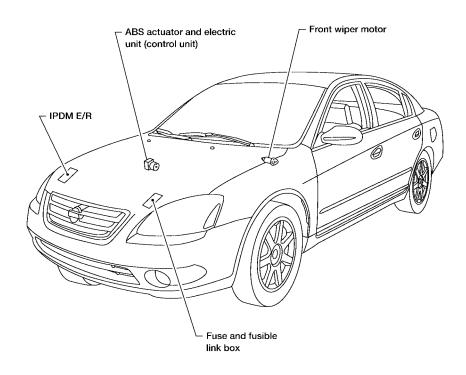
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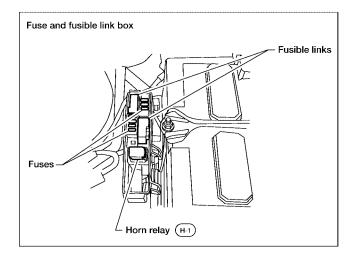
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Electrical Units Location ENGINE COMPARTMENT

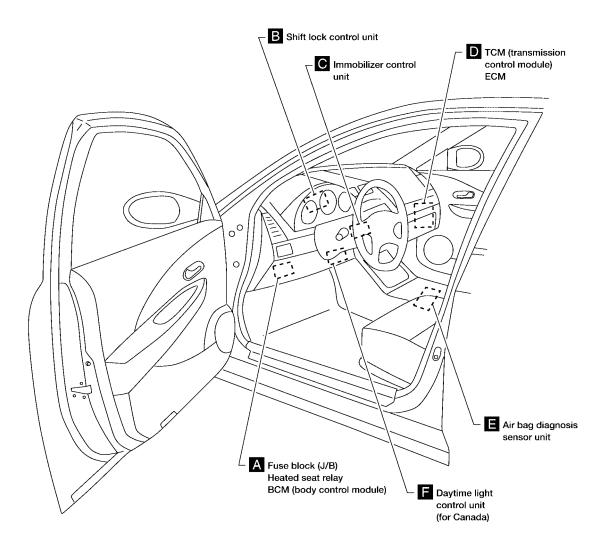
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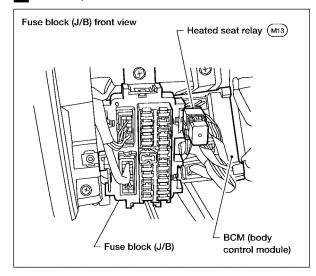


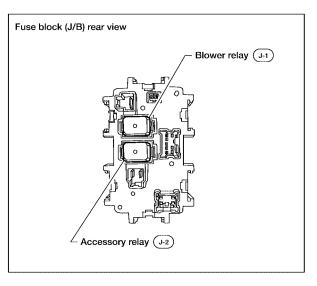
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PASSENGER COMPARTMENT



A Instrument panel lower LH





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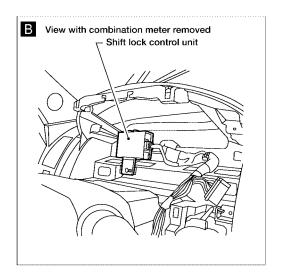
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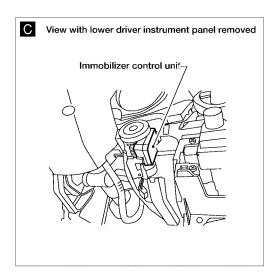
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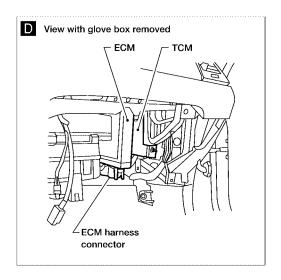
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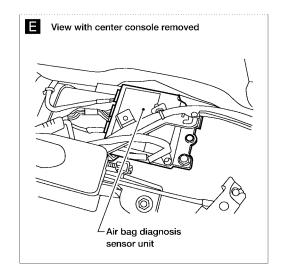
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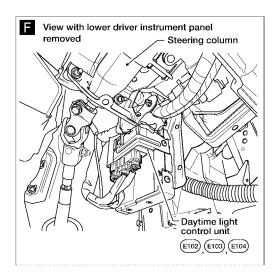
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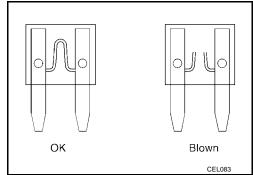


WKIA2765E

Fuse

 If fuse is blown, be sure to eliminate cause of incident before installing new fuse.

- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.

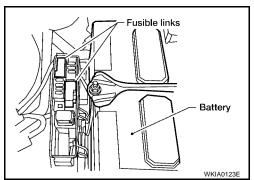


Fusible Link

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

CAUTION:

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



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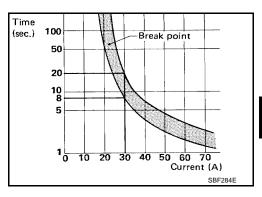
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Circuit Breaker (Built Into BCM)

For example, when current is 30A, the circuit is broken within 8 to 20 seconds.

A circuit breaker is used for the following systems:

- Power seat
- Power windows
- Power door locks
- Remote keyless entry system



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HARNESS CONNECTOR

HARNESS CONNECTOR

PFP:B4341

DescriptionHARNESS CONNECTOR (TAB-LOCKING TYPE)

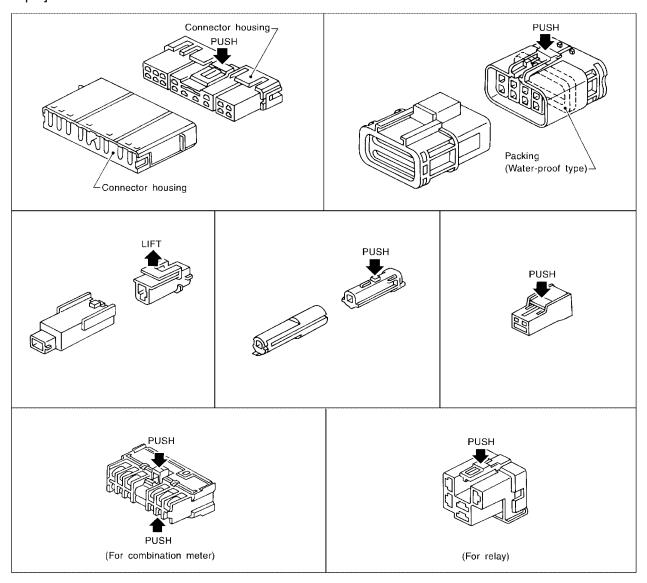
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- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

Refer to the next page for description of the slide-locking type connector.

CAUTION:

Do not pull the harness or wires when disconnecting the connector. [Example]



SEL769DA

HARNESS CONNECTOR

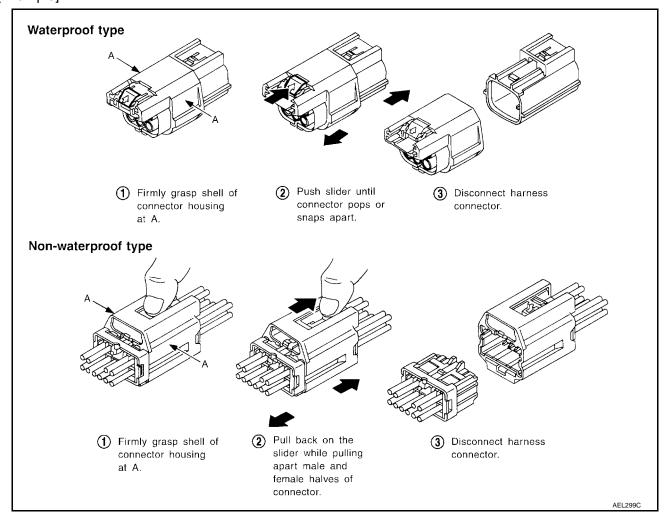
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

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

CAUTION:

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

[Example]



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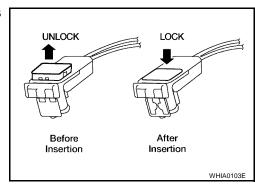
HARNESS CONNECTOR

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS component.
- Always push down to lock black locking tab after installing connector to SRS component. When locked, the black locking tab is level with the connector housing.

CAUTION:

 Do not pull the harness or wires when removing connectors from SRS components.



ELECTRICAL UNITS

ELECTRICAL UNITS PFP:23710 Α **Terminal Arrangement** EKS008UV A4: WITH 4-SPEED A/T В (A5): WITH 5-SPEED A/T **BCM (BODY CONTROL MODULE)** 8 (M18) D 52 67 Е ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) 6 5 26 25 24 23 22 21 20 E125 16 31 30 29 28 27 Н **ECM** 3 PG (F54) M TCM (TRANSMISSION CONTROL MODULE)

WKIA3348E

STANDARDIZED RELAY

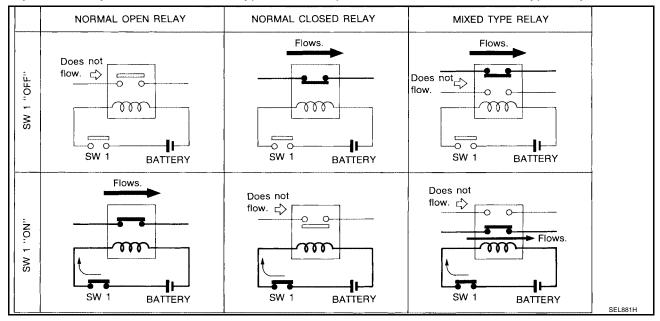
STANDARDIZED RELAY

PFP:25230

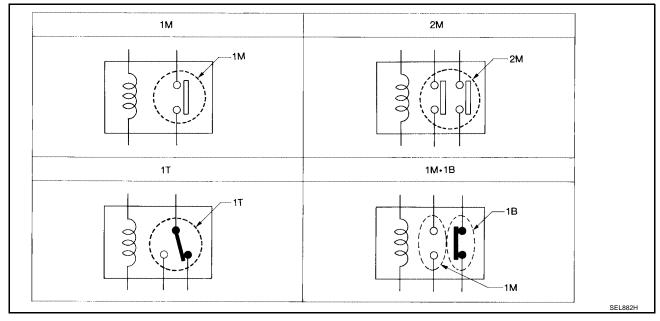
DescriptionNORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

EKS008UW

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



TYPE OF STANDARDIZED RELAYS



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

STANDARDIZED RELAY

Туре	Outer view	Circuit	Connector Symbol and connection	Case color
1 T	5 2 4	1 5 4 0 / 2 3	5 2 4 1	BLACK
2М		1 6 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 1 7 5 6 3	BROWN
1M ·1B	6 3	1 6 3	2 1 6 7 3 4	GRAY
114		2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3 1	BLACK
1M	3 5	(1) (5)(2) (3)	3 5 2 1	BLUE

2005 Altima

Α

В

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PG

M

Revision: March 2005

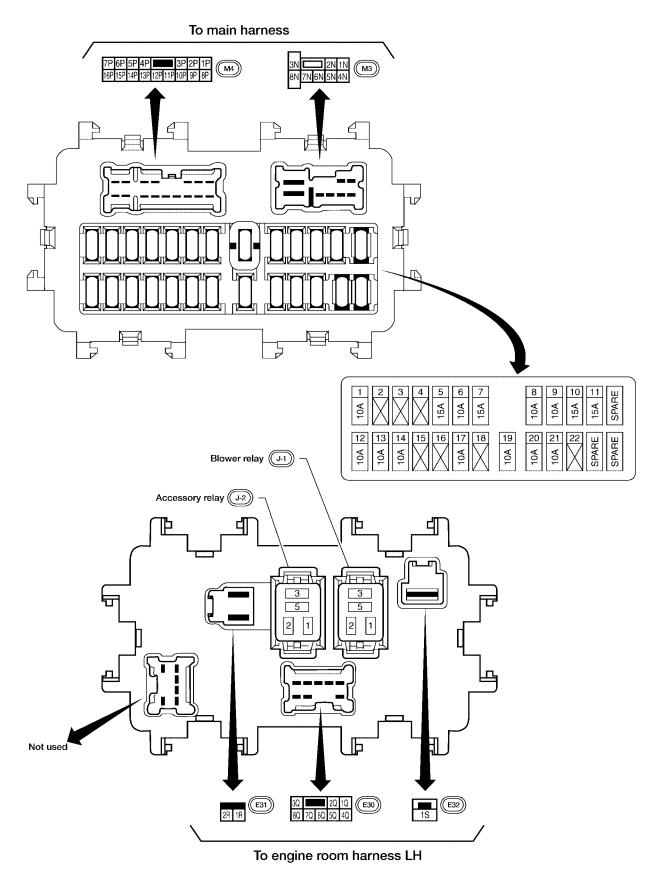
FUSE BLOCK-JUNCTION BOX(J/B)

FUSE BLOCK-JUNCTION BOX(J/B)

PFP:24350

Terminal Arrangement

EKS008UX



WKIA4121E

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX

PFP:24381

Terminal Arrangement

EKS008UY

С

D

Е

Α

В

E6

F

G

Н

Н

PG

L

M

24 - 31: FUSE

f - m: FUSIBLE LINK

WKIA4122E

FUSE AND FUSIBLE LINK BOX