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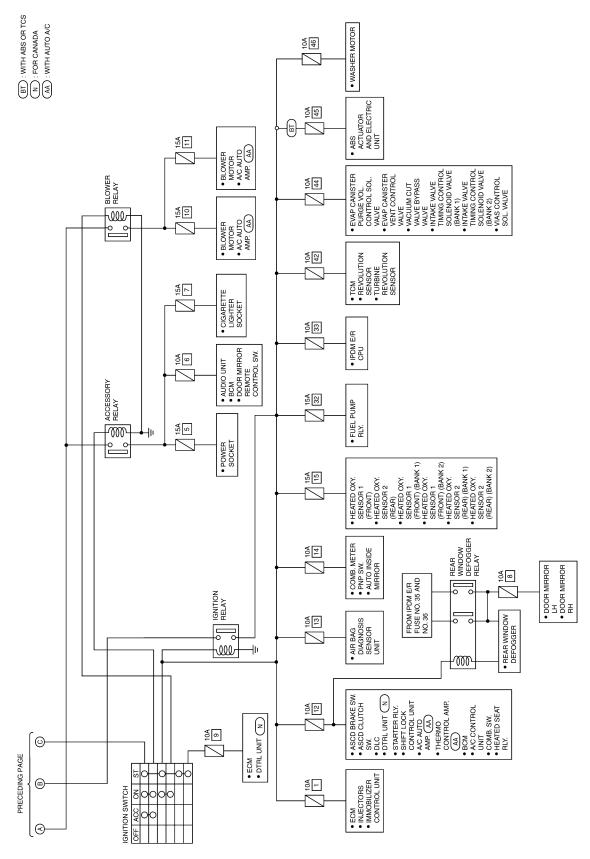
POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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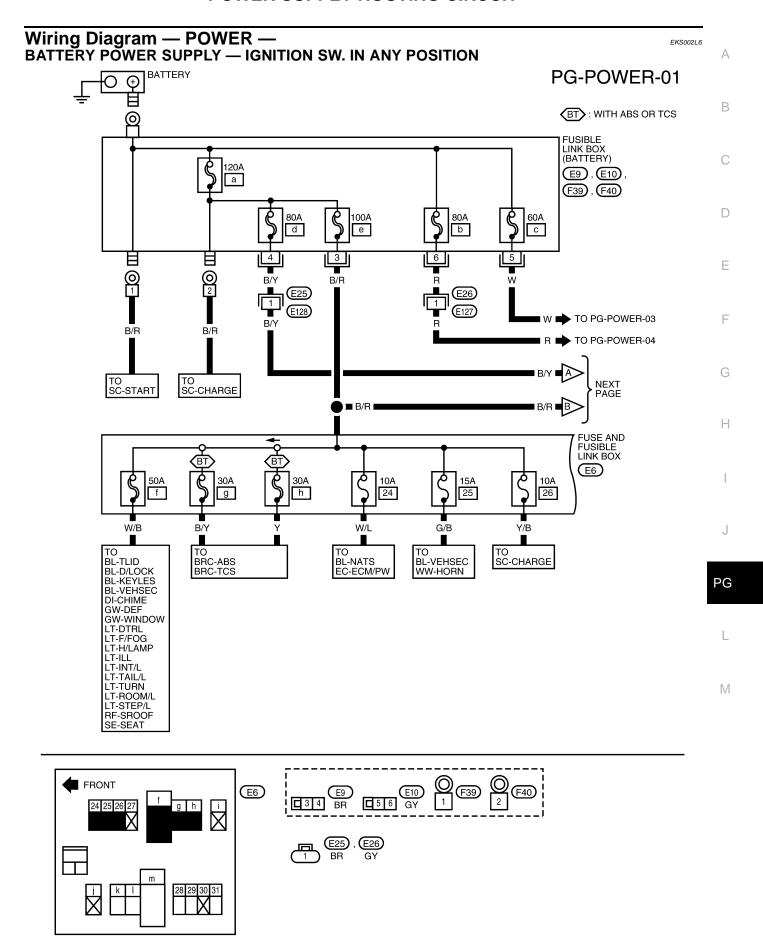
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POWER SUPPLY ROUTING CIRCUIT PFP:24110 Α **Schematic** EKS002L5 For detailed ground distribution, refer to PG-26, "Ground Distribution". В HEADLAMP LOW RELAY WITH FRONT FOG LAMPS WITH HEATED SEATS RH HEADLAMP (LOW) WITH ABS OR TCS VQ35DE WITH A/T 15A C FOR CANADA WITH A/C -ww ECM RLY. D 15A 40 • LH HEADLAMP (LOW) IPDM E/R CPU 15A 49 GENERATOR 10A 26 HEADLAMP HIGH RELAY Е REAR WINDOW DEFOGGER RLY. 35 ZOA • LH HEADLAMP (HIGH) • DTRL UNIT 10A W F 15A 25 15A HORN RLY. AUDIO UNIT • FRONT FOG LAMP RLY. 15A • RH HEADLAMP (HIGH) • DTRL UNIT 10A • ECM • IMMOBILIZER CONTROL UNIT 10A 15A 29 Н HEATED SEAT RLY. • FRONT WIPER RLY. • WIPER MOTOR 39 gg FRONT ELECTRONIC CONTHOLLED ENGINE MOUNT REAR ELECTRONIC CONTROLLED ENGINE MOUNT ABS ACTUATOR AND ELECTRIC UNIT 93A 10A STOP LAMP SW. 10A TAIL LAMP RLY. ₩ 38 ABS ACTUATOR AND ELECTRIC UNIT • COOLING FAN RLY.-1 • COOLING FAN RLY.-3 30A Ş□ PG • TCM • HOMELINK® • HOMELINK® • UNIVERSAL TRANSCEIVER • SEC. INDICATOR LAMP • KEY SW. AND KEY LOCK • COMBINATION METER • BCM • TRUNK ROOM LAMP • TRUNK THROTTLE CONTROL MOTOR RLY. 15A 37 10A L • COOLING FAN RLY-1 • COOLING FAN RLY-2 • COOLING FAN RLY-3 20A → \$₹ REAR WINDOW DEFOGGER RLY. • BCM 8 8 8 M e 100 908 P 34 A • A/C RLY. 120A a GENERATOR \boxtimes ₽ Ф Е \boxtimes <u>(O</u> 90A NEXT PAGE STARTER \boxtimes <u>@</u> BATTERY • c 80 φ **⊘** \square WKWA0093E

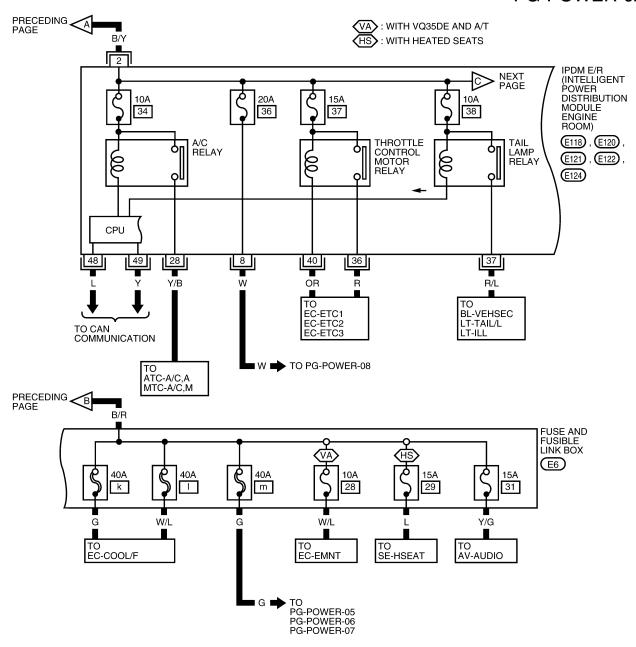


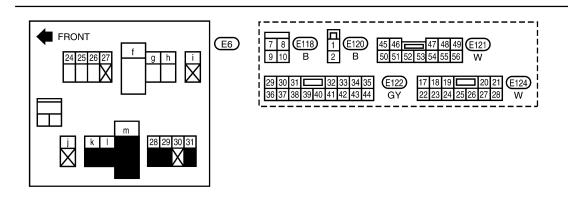
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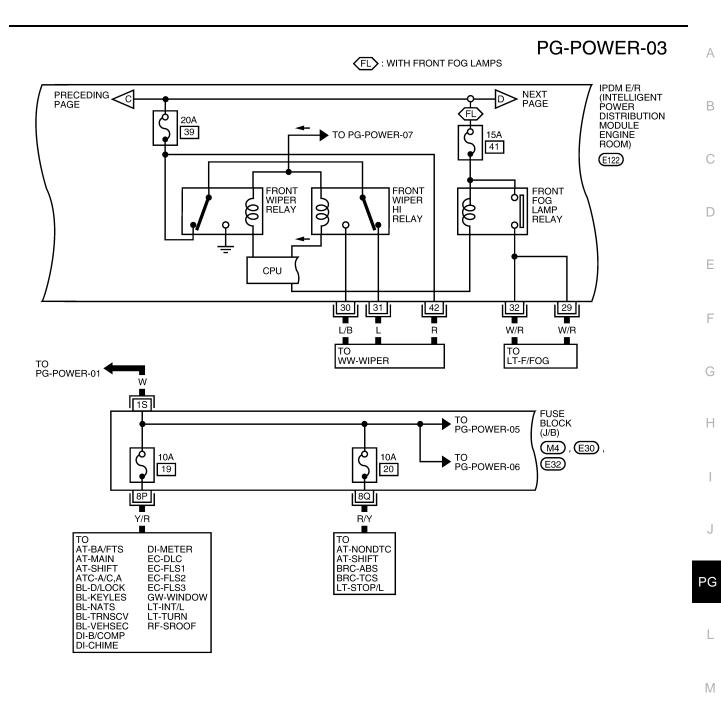
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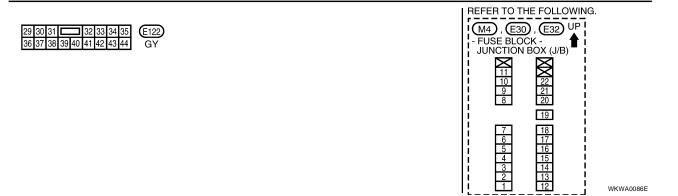
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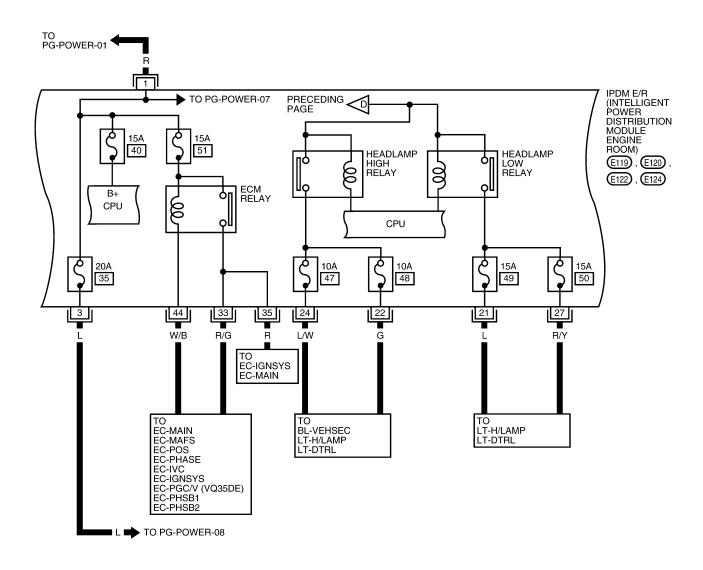


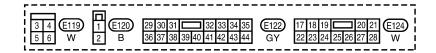
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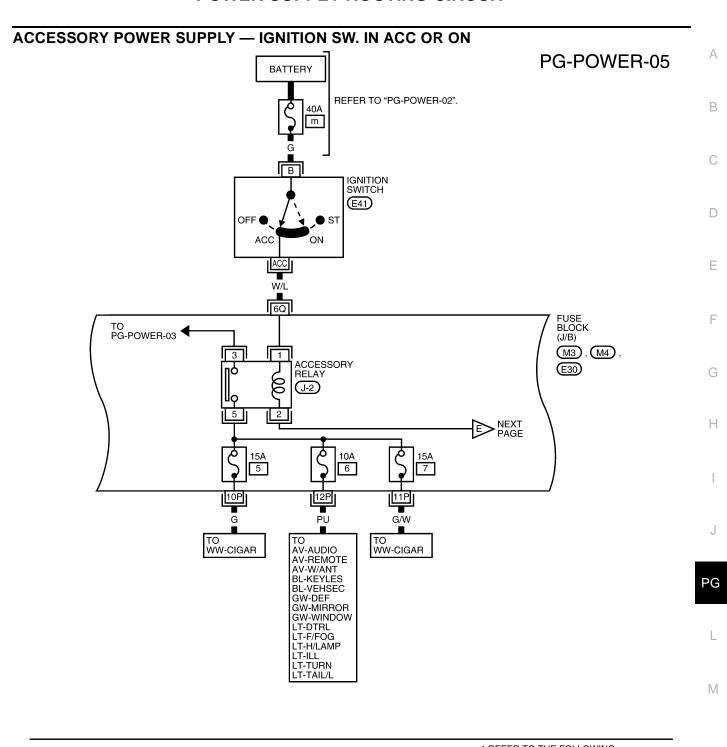


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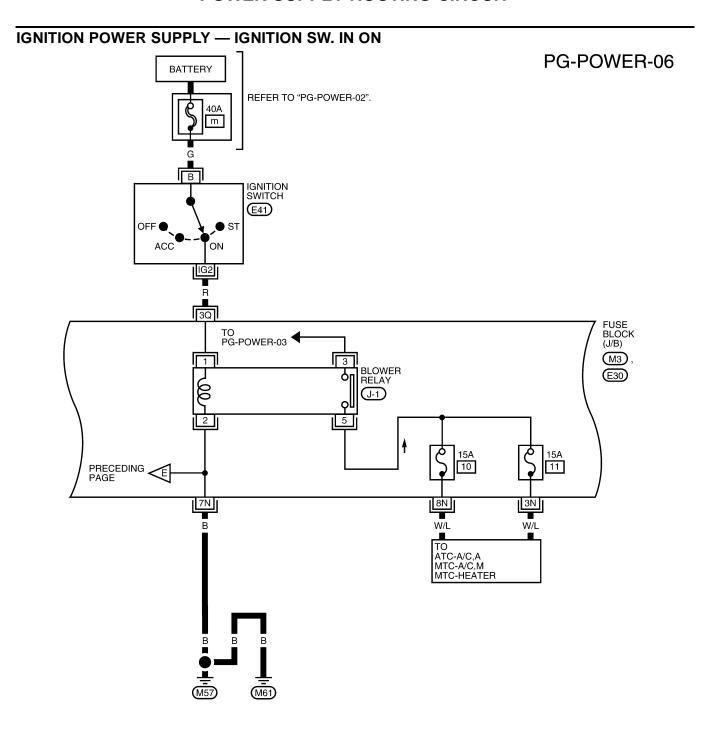


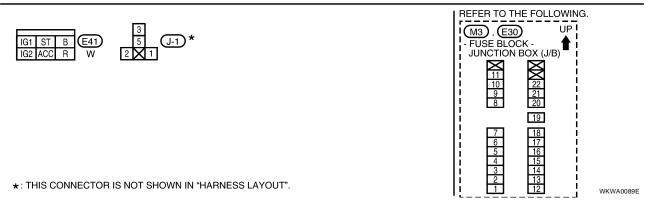


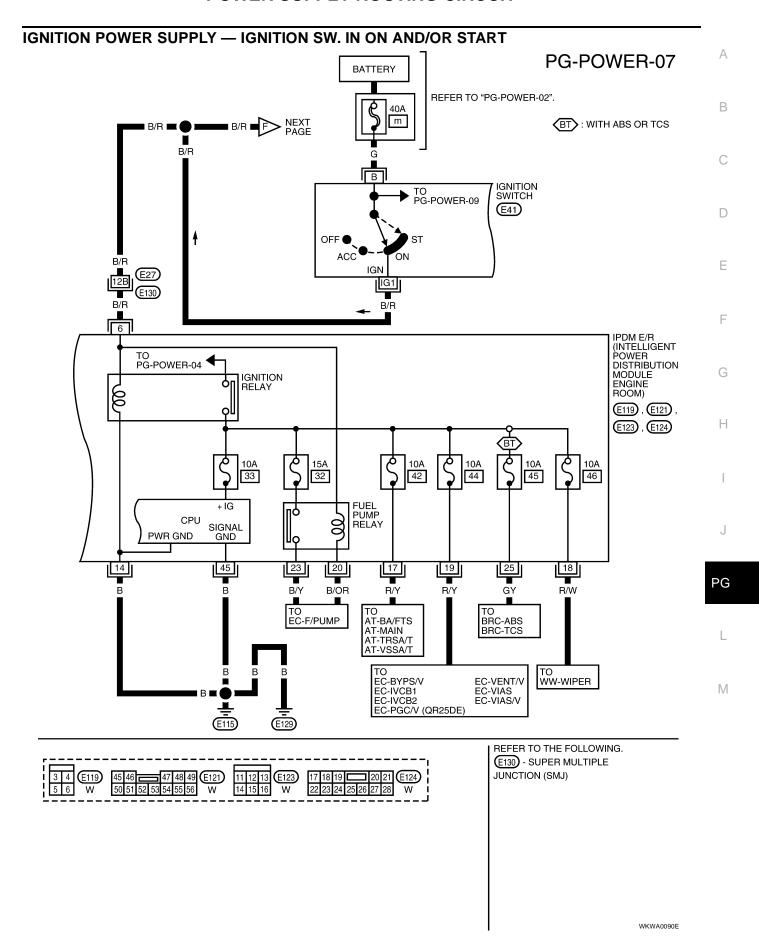
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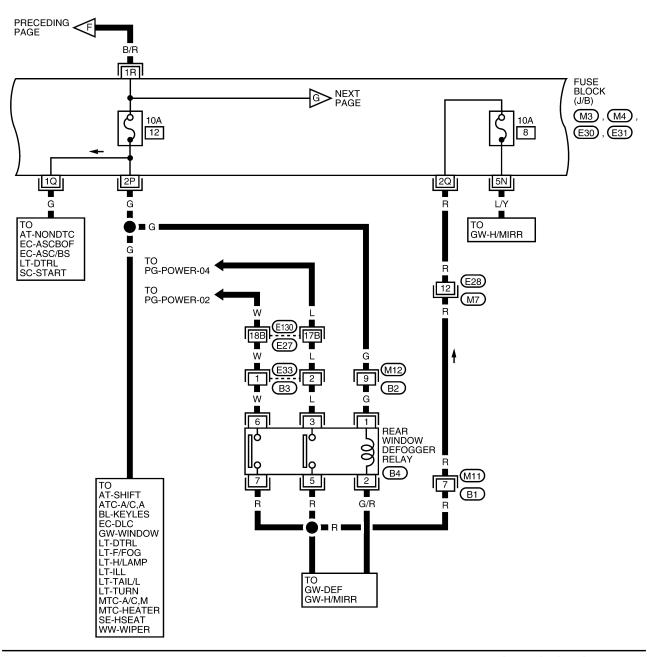


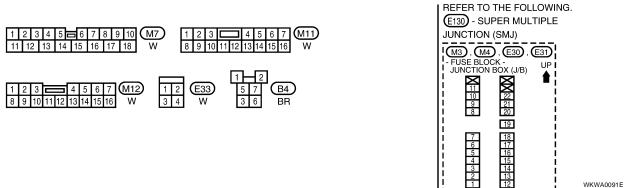






PG-POWER-08





PG-POWER-09 Α IGNITION В SWITCH TO PG-POWER-07 **E41** C ₽st OFF ACC ON R ST D B/R B/Y TO SC-START Е B/Y 7Q F **FUSE** PRECEDING G BLOCK PAGE (J/B) M3 , M4 , 10A 13 10A 10A **E**30 1 14 15 9 Н 9P 2N 15P 6P 5P R/W GΥ R/Y BR/W EC-FUEL AT-NONDTC AT-PNP/SW AT-SHIFT BL-NATS EC-FUEL EC-FUELB1 EC-S/SIG SRS-SRS EC-FUELB1 EC-FUELB2 LT-DTRL EC-FUELB2 EC-INJECT AT-VSSMTR BRC-ABS BRC-TCS EC-HO2S1 EC-HO2S1H EC-HO2S2 EC-HO2S2H **EC-MAIN** DI-AT/IND EC-O2H1B1 EC-O2H1B2 EC-O2H2B1 DI-B/COMP DI-METER DI-WARN PG EC-ASCIND EC-FLS1 EC-FLS2 EC-FLS3 EC-O2H2B2 EC-O2S1B1 EC-O2S1B2 EC-O2S2B1 EC-MIL GW-I/MIRR LT-BACK/L EC-02S2B2 LT-ILL LT-TURN SC-CHARGE SRS-SRS M REFER TO THE FOLLOWING. M3 , M4 , E30 UP FUSE BLOCK -JUNCTION BOX (J/B) **E**41 IG1 ST B IG2 ACC R 22 21 20 11 10 9 8 19 18 17

WKWA0092E

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

PFP:284B7

System Description

FKS002L7

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

CAUTION:

All IPDM E/R-integrated relays cannot be removed.

SYSTEMS CONTROLLED BY IPDM E/R

Lamp control

Using CAN communication line, it receives signal from BCM and controls the following lamps:

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

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

3. Rear window defogger relay control

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

4. A/C compressor control

Using CAN communication line, it receives signal from ECM and controls the A/C relay.

5. Cooling fan control

Using CAN communication line, it receives signal from ECM and controls cooling fan relay.

CAN COMMUNICATION LINE CONTROL

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

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

Controlled parts	Fail-safe mode
Headlamps	Headlamp relay (Lo) ON
Front fog lamps	Front fog lamp relay OFF
Tail and parking lamps	Tail lamp relay OFF
Front wipers	Until ignition switch is turned OFF, status immediately before fail-safe control is performed is maintained.
Rear window defogger	Rear window defogger relay OFF
Cooling fan	Cooling fan (HI) ON
A/C compressor	A/C relay 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.

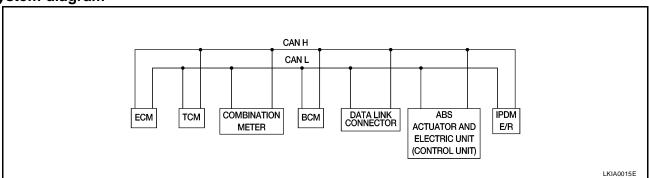
- When sleep request signal is received from BCM, mode is switched to sleep waiting status.
- 2. Sleep waiting status
 - Process to stop CAN communication is activated.
 - All systems controlled by IPDM E/R are stopped. When 3 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
- 3. Sleep status
 - IPDM E/R operates in low current-consumption mode.
 - CAN communication is stopped.
 - When a change in CAN communication line 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. Many electronic control units are equipped onto a vehicle, 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.

FOR TCS MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	COMBINA- TION METER	ВСМ	ABS/TCS control unit	IPDM E/R
Engine speed signal	Т		R		R	
Engine coolant temperature signal	Т		R			
Accelerator pedal position signal	Т					
Fuel consumption monitor signal	Т		R			
A/T warning lamp signal		Т	R			
A/T position indicator signal	R		R	R ^(R range only)	R	
ABS operation signal	R				Т	
TCS operation signal	R	R			Т	
Air conditioner switch signal	R			Т		
Air conditioner compressor signal	R					Т
A/C compressor request signal	Т					R
Cooling fan motor operation signal	R					Т
Cooling fan speed request signal	Т					R
Position lights request			R	Т		R
Position lights status				R		Т
Low beam request				Т		R

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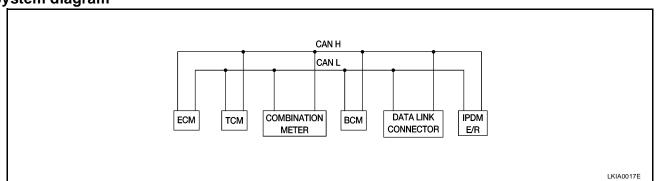
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Signals	ECM	TCM	COMBINA- TION METER	всм	ABS/TCS control unit	IPDM E/R
Low beam status	R			R		Т
High beam request			R	Т		R
High beam status	R			R		Т
Front fog lights request				Т		R
Front fog light status				R		Т
OD cancel switch signal		R	Т			R
Brake switch signal		R	Т			
Vahiala anadaimal	R	Т				
Vehicle speed signal	R		Т	R		
Oil pressure switch			R			Т
Sleep request1			R	Т		
Sleep request2				Т		R
N range switch signal		R	Т			
P range switch signal		R	Т			
Seat belt buckle switch signal			Т	R		
Door switch signal			R	Т		R
Tail lamp request			R	Т		R
Turn indicator signal			R	Т		
Buzzer output signal			R	Т		
Trunk switch signal			R	Т		
ASCD main switch signal	Т		R			
ASCD cruise signal	T		R			
Wiper operation				R		T
Wiper stop position signal				R		T
Rear window defogger switch signal				Т		R
Rear window defogger control signal	R			R		Т

FOR A/T MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	ТСМ	COMBINATION METER	ВСМ	IPDM E/R
Engine speed signal	Т		R		
Engine coolant temperature signal	Т		R		

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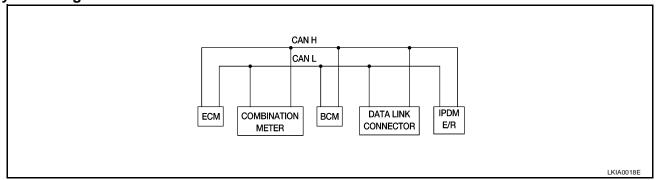
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Signals	ECM	TCM	COMBINATION METER	ВСМ	IPDM E/R
Accelerator pedal position signal	Т				R
Fuel consumption monitor signal	Т		R		
A/T warning lamp signal		Т	R		
A/T position indicator signal	R	Т	R	R ^(R range only)	
Air conditioner switch signal	R			Т	
Air conditioner compressor signal	R				Т
A/C compressor request signal	Т				R
Blower fan switch signal	R ^(QR25DE)			Т	
Cooling fan motor operation signal	R			Т	
Cooling fan speed request signal	Т				R
Position lights request			R	Т	R
Position lights status				R	T
Low beam request				Т	R
Low beam status	R			R	T
High beam request			R	Т	R
High beam status	R			R	Т
Front fog lights request				Т	R
Front fog light status				R	Т
OD cancel switch signal		R	Т		R
Brake switch signal		R	Т		
	R	Т			
Vehicle speed signal	R		Т	R	
Oil pressure switch			R		Т
Sleep request1			R	Т	
Sleep request2				Т	R
N range switch signal		R	Т		
P range switch signal		R	Т		
Seat belt buckle switch signal			Т	R	
Door switch signal			R	Т	R
Tail lamp request			R	Т	R
Turn indicator signal			R	Т	
Buzzer output signal			R	Т	
Trunk switch signal			R	Т	
ASCD main switch signal	Т		R		
ASCD cruise signal	Т		R		
Wiper operation				R	T
Wiper stop position signal				R	Т
Rear window defogger switch signal				Т	R
Rear window defogger control signal	R			R	Т

PG-17

FOR M/T MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	COMBINATION METER	BCM	IPDM E/R
Engine speed signal	Т			
Engine coolant temperature signal	Т			
Fuel consumption monitor signal	Т			
Air conditioner switch signal	R		Т	
Air conditioner compressor signal	R			Т
A/C compressor request signal	Т			R
Blower fan switch signal	R ^(QR25DE)		Т	
Cooling fan motor operation signal	R			Т
Cooling fan speed request signal	Т			R
Position lights request		R	T	R
Position lights status			R	Т
Low beam request			Т	R
Low beam status	R		R	Т
High beam request		R	Т	R
High beam status	R		R	Т
Front fog lights request			T	R
Front fog light status			R	Т
Vehicle speed signal	R	Т		
Oil pressure switch		R		Т
Sleep request1		R	Т	
Sleep request2			Т	R
Seat belt buckle switch signal		Т	R	
Door switch signal		R	Т	R
Tail lamp request		R	Т	R
Turn indicator signal		R	Т	
Buzzer output signal		R	Т	
Trunk switch signal		R	Т	
ASCD main switch signal	Т	R		
ASCD cruise signal	Т	R		
Wiper operation			R	Т
Wiper stop position signal			R	Т

Signals	ECM	COMBINATION METER	ВСМ	IPDM E/R
Rear window defogger switch signal			Т	R
Rear window defogger control signal	R		R	Т

Function of Detecting Ignition Relay Malfunction

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

Auto Active Test DESCRIPTION

FKS0021 A

- 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 (magnet clutch)
- Cooling fan

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OPERATION PROCEDURE

1. Close hood 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 10 seconds, press front door switch LH ten times. Then turn ignition switch OFF.

CAUTION:

Close front door RH.

- 4. Turn ignition switch ON.
- 5. When auto active test mode is actuated, horn chirps once, and oil pressure warning lamp starts blinking.
- 6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

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

CAUTION:

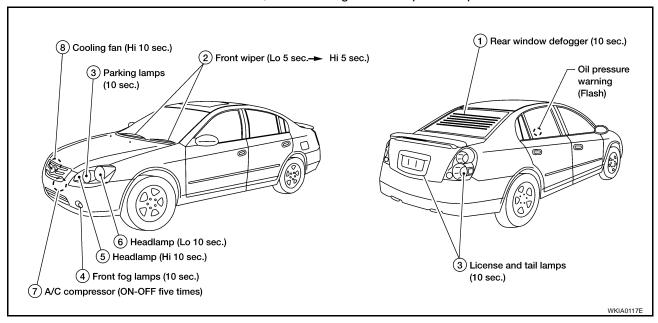
Be sure to inspect DI-38, "Oil Pressure Warning Lamp Stays Off (Ignition Switch ON)" and BL-28, "Door Switch Check" when the auto active test cannot be performed.

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INSPECTION IN AUTO ACTIVE TEST MODE

When auto active test mode is actuated, the following seven 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.

Diagnosis chart in auto active test mode

Symptom	Inspection content	S	Possible cause
Any of front wipers, tail	Perform auto active test. Does system in		BCM signal input system
and parking lamps, front fog lamps, and headlamps (Hi, Lo) do not operate.			 Lamp/motor malfunction Lamp/motor ground system malfunction Harness/connector malfunction between IPDM E/R and system in question IPDM E/R (integrated relay) malfunction
	Perform auto active	ОК	BCM signal input system
Rear window defogger does not operate.	test. Does rear win- dow defogger oper- ate?	NG	 Rear window defogger relay system Open circuit of rear window defogger IPDM E/R malfunction
A/C compressor does not operate.	Perform auto active test. Does magnet clutch operate?	ОК	 BCM signal input system CAN communication signal between BCM and ECM. CAN communication signal between ECM and IPDM E/R BCM ECM
	·	NG	 Magnet clutch malfunction Harness/connector malfunction between IPDM E/R and magnet clutch IPDM E/R (integrated relay) malfunction
Cooling fan does not	fest Does cooling fan E		 ECM signal input system CAN communication signal between ECM and IPDM E/R ECM
operate.			 Cooling fan motor malfunction Harness/connector malfunction between IPDM E/R and cooling fan motor IPDM E/R (integrated relay) malfunction

Symptom	Inspection contents		Possible cause
Oil pressure warning	Perform auto active test. Does oil pres-	ОК	 Harness/connector malfunction between IPDM E/R and oil pressure switch Oil pressure switch malfunction
lamp does not operate.	sure warning lamp blink?	NG	CAN communication signal between IPDM E/R and combination meter Combination meter

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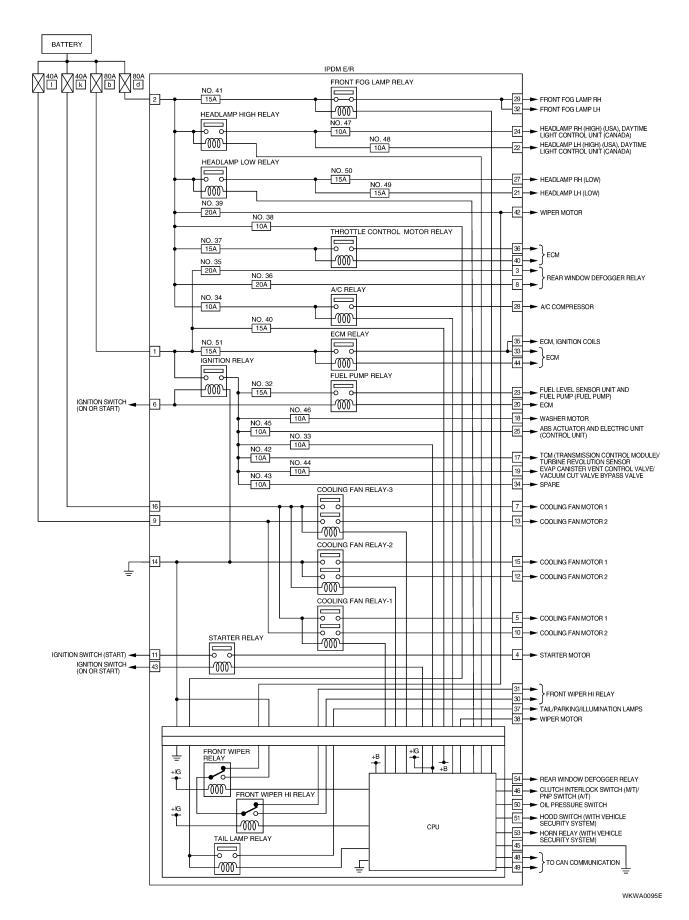
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Schematic



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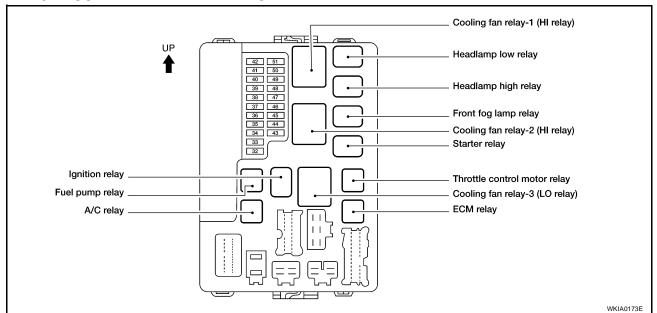
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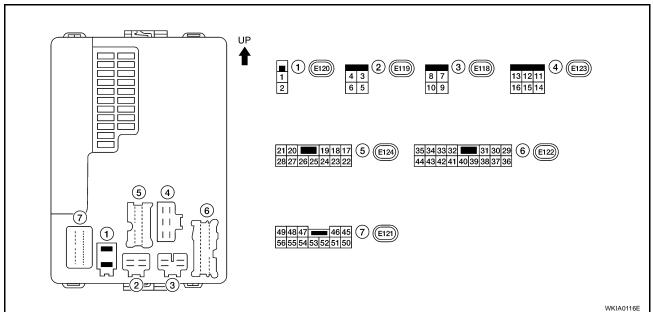
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EKS002LC

IPDM E/R FUSE AND RELAY ARRANGEMENT



IPDM E/R TERMINAL ARRANGEMENT



IPDM E/R Power/Ground Circuit Inspection

1. FUSE AND FUSIBLE LINK INSPECTION

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

Terminal No.	Signal name	Fuse, fusible link No.
1, 2	Battery power	F/L-b, F/L-d, Fuse No. 40
-	Ignition power	Fuse No. 33

OK or NG?

OK >> GO TO 2.

NG >> Replace fuse or fusible link.

PG-23

2. POWER CIRCUIT INSPECTION

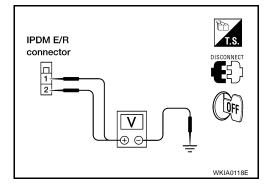
Disconnect IPDM E/R harness connector E120. Measure voltage between IPDM E/R harness connector E120 terminals 1 (R), 2 (B/Y) and body ground.

Terminal No.	Signal name	Ignition switch	Voltage (V)
1, 2	Battery power	OFF	Approx. 12

OK or NG?

OK >> GO TO 3.

NG >> Replace IPDM E/R power circuit harness.



3. GROUND CIRCUIT INSPECTION

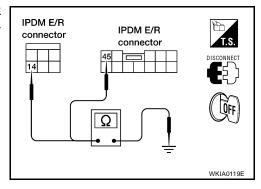
Disconnect IPDM E/R harness connectors E121 and E123. Check continuity between IPDM E/R harness connectors E123 terminal 14 (B), E121 terminal 45 (B) and body ground.

Terminal No.	Signal name	Ignition switch	Continuity
14, 45	Ground	OFF	YES

OK or NG?

OK >> Normal

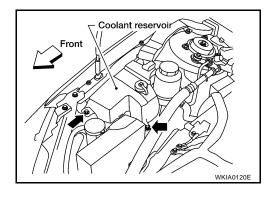
NG >> Replace ground circuit harness of IPDM E/R.



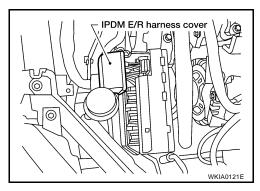
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Removal and Installation of IPDM E/R

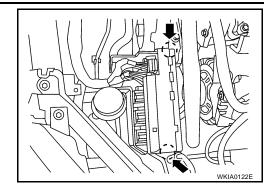
- 1. Disconnect the negative battery cable.
- 2. Remove 2 bolts and position coolant reservoir aside.
- 3. Remove IPDM E/R upper cover.



4. Remove IPDM E/R harness cover.



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



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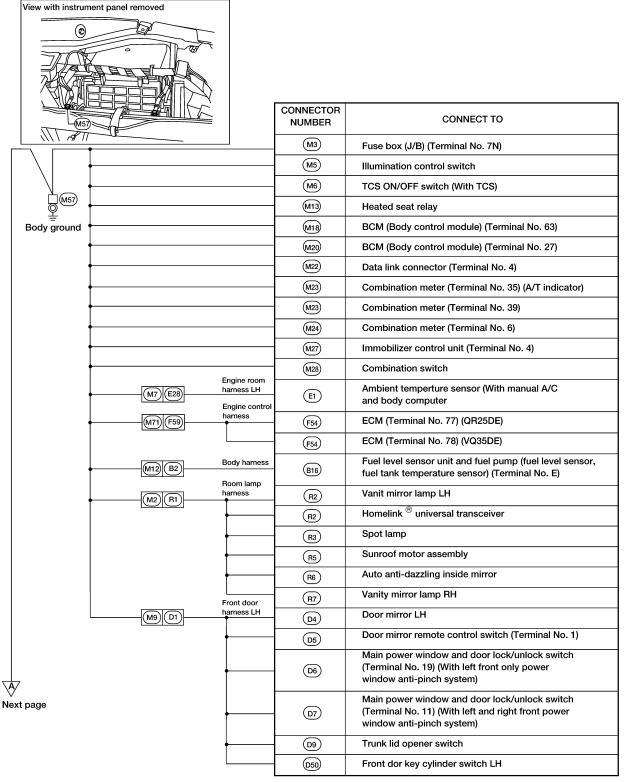
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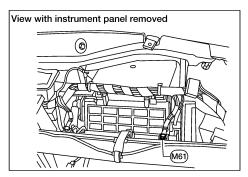
GROUND CIRCUIT PFP:24080

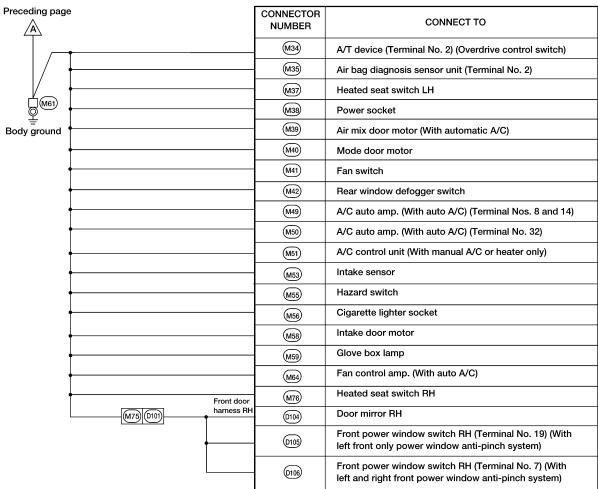
Ground Distribution MAIN HARNESS

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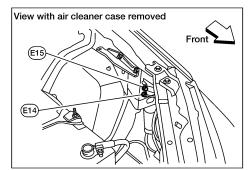
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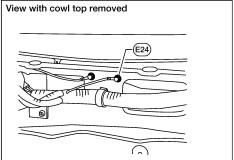
N /

ENGINE ROOM LH HARNESS

E14

Body ground





		CONNECTOR NUMBER	CONNECT TO
(E29) (M10)	Main harness	(M35)	Air bag diagnosis sensor unit (Shield wire) (Terminal No.16)
	ı		

Body ground

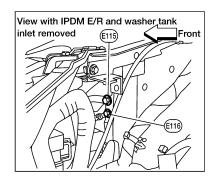
E28 M7 Main harness

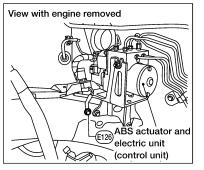
Body ground

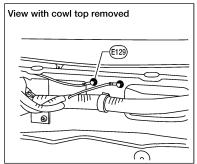
	CONNECTOR NUMBER	CONNECT TO	
	M49	A/C auto amp. (With auto A/C) (Canada only)	
4	(E2)	Front fog lamp LH	
-	E5	Hood switch	
-	E11)	Headlamp LH (High)	
-	E12	Front combination lamp LH	
	E13)	Headlamp LH (Low)	
	E16)	Brake fluid level switch	
	E23	Wiper motor	
1	E34)	Clutch interlock switch (With M/T)	
-	E39	BCM (Body control module) (Terminal No. 8)	

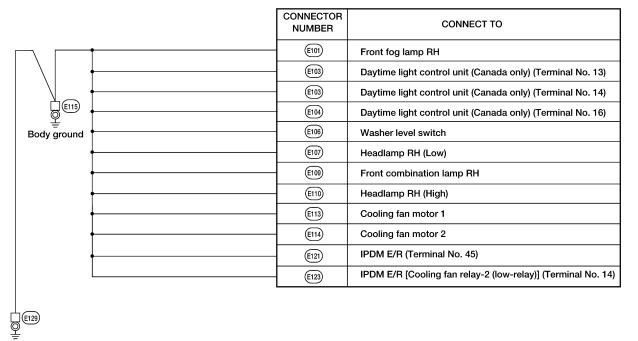
WKIA0354E

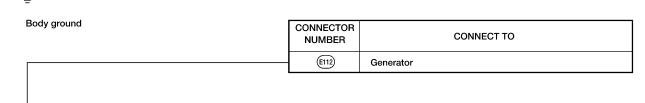
ENGINE ROOM RH HARNESS













Body ground

CONNECTOR NUMBER	CONNECT TO	
E125	ABS actuator and electric unit (Control unit) (Terminal No. 16)	
E125)	ABS actuator and electric unit (Control unit) (Terminal No. 19)	

WKIA0355E

PG-29

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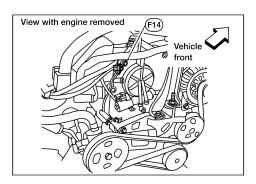
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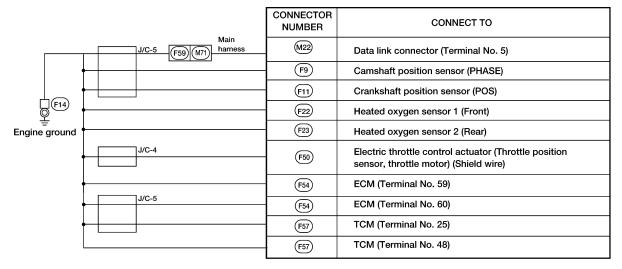
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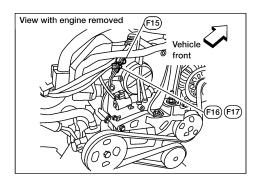
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ENGINE CONTROL HARNESS (QR25DE)





J/C : Joint connector



[☐ F15] Engine ground CONNECTOR CONNECT TO 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) F16 (F8) Ignition coil No. 3 (With power transistor) (F21) Condenser-2 Engine ground (F29) Park/neutral position (PNP) switch (Terminal No. 2) (With A/T) (F42) Park/neutral position (PNP) switch (Terminal No. 2) (With M/T) (F54) ECM (Terminal No. 106) (F54) ECM (Terminal No. 108)

 NNECTOR UMBER	CONNECT TO	
(F54)	ECM (Terminal No. 115)	

F17
Engine ground

WKIA0085E

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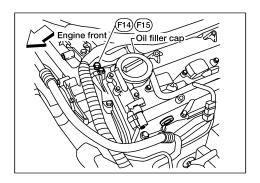
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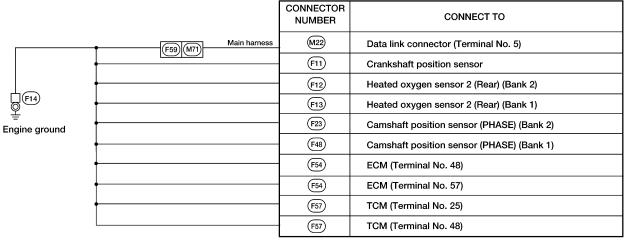
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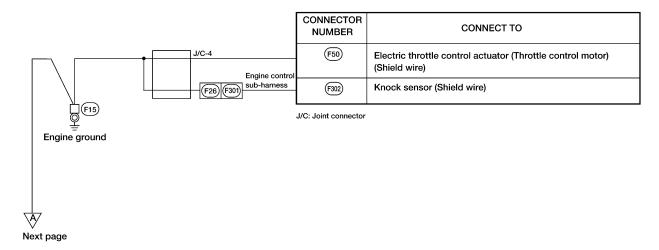
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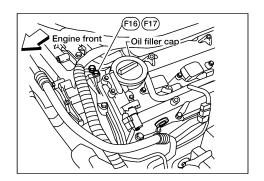
ENGINE CONTROL HARNESS (VQ35DE)

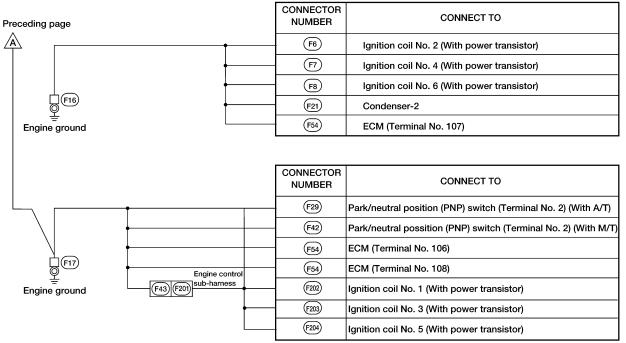






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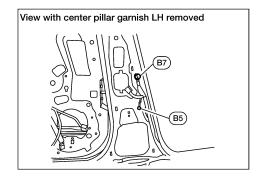
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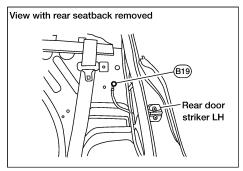
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BODY HARNESS

Body ground





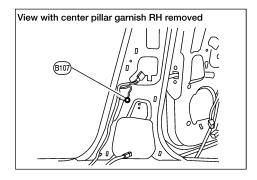
		CONNECTOR NUMBER	CONNECT TO
		B9	Air bag diagnosis sensor unit (Shield wire) (Terminal No. 44) (With side air bags)
B5 B5 Body ground			
Dody ground		CONNECTOR NUMBER	CONNECT TO
_		B11)	Power seat
\		B12	Seat belt buckle switch LH
		B13	Heated seat LH
Body ground		B16	Fuel level sensor unit and fuel pump (Fuel pump) (Terminal No)
Body ground		B24)	High mounted stop lamp (Without rear air spoiler and without Bose audio)
-		B30	High mounted stop lamp (With rear air spoiler)
		B31	License lamp LH
_	J/C-7	B32	Trunk lamp switch and truck release solenoid
-		B33	License lamp LH
-		(B34)	Trunk key cylinder switch (Unlock switch)
+	J/C-7	B35)	Rear combination lamp LH (Turn signal, tail, back-up and stop lamp) (Terminal No. 5)
+	Rear door	(B36)	Rear combination lamp RH (Turn signal, tail, back-up and stop lamp) (Terminal No. 5)
	B6 D201 harness LH	D203	Rear power window switch LH
		J/C: Joint connector	
		CONNECTOR NUMBER	CONNECT TO
_		(B17)	Condenser-1 (Fuel pump)
	1		

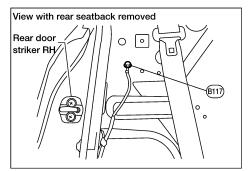
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BODY NO. 2 HARNESS

□ B107

Body ground





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

Body ground

Rear door harness RH

CONNECTOR NUMBER	CONNECT TO	
B110	Seat belt buckle switch RH	
B111	Heated seat RH	
B127	Bose speaker amplifier	
B129	High mounted stop lamp (Without rear air spoiler, with Bose audio)	
B303	Rear power window switch RH	

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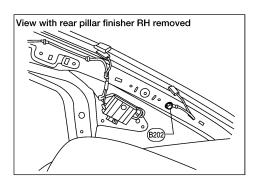
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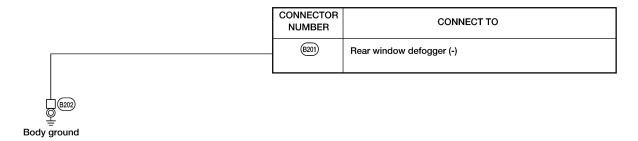
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HARNESS PFP:24010

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
- Engine Room Harness LH (Engine Compartment)
- Engine Room Harness RH (Engine Compartment)
- Engine Control Harness (QR25DE)
- Engine Control Harness (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 pr	roof type	Standard type					
Connector type	Male	Female	Male	Female				
Cavity: Less than 4		<u> </u>		\otimes				
 Relay connector 								
Cavity: From 5 to 8			**					
Cavity: More than 9	\Diamond	\Diamond						
Ground terminal etc.	_	_	Ø	2				

Example:

G2 E1 B/6 : ASCD ACTUATOR

Connector color/Cavity

Connector number

Grid reference

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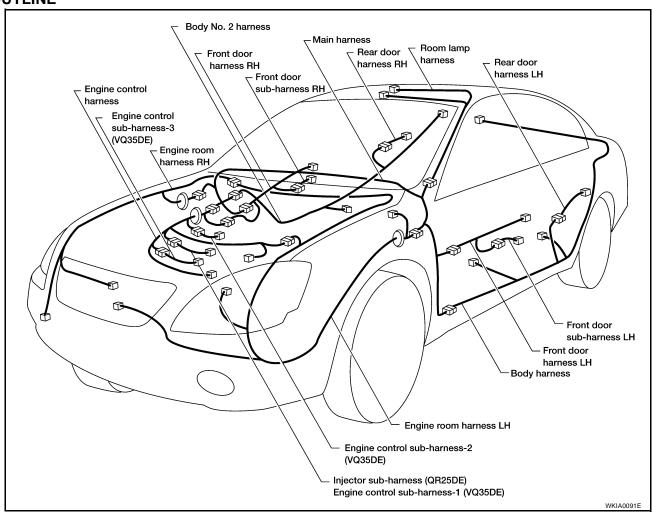
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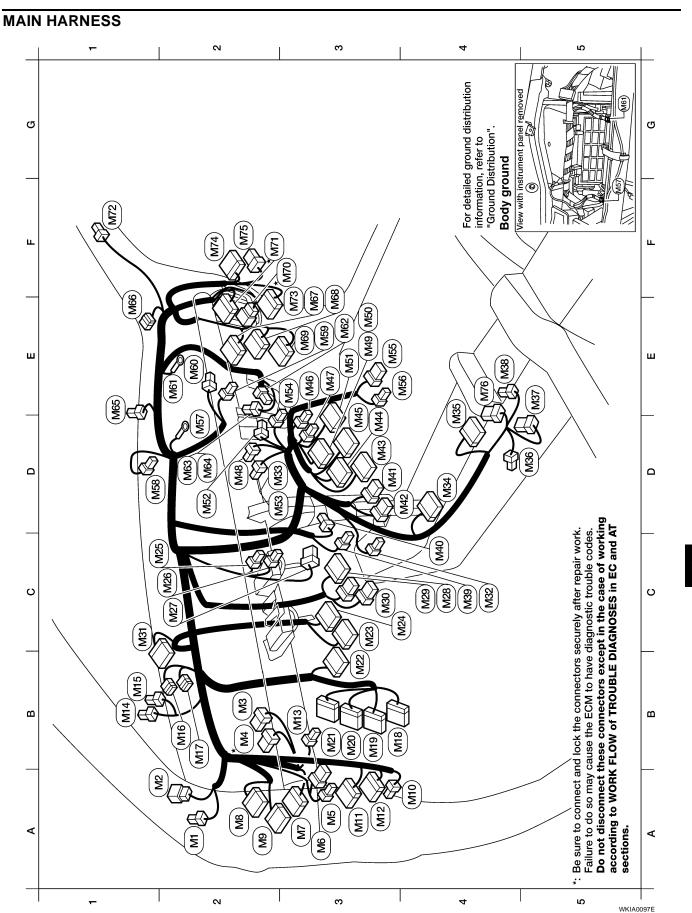
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M

OUTLINE





PG-39

PG

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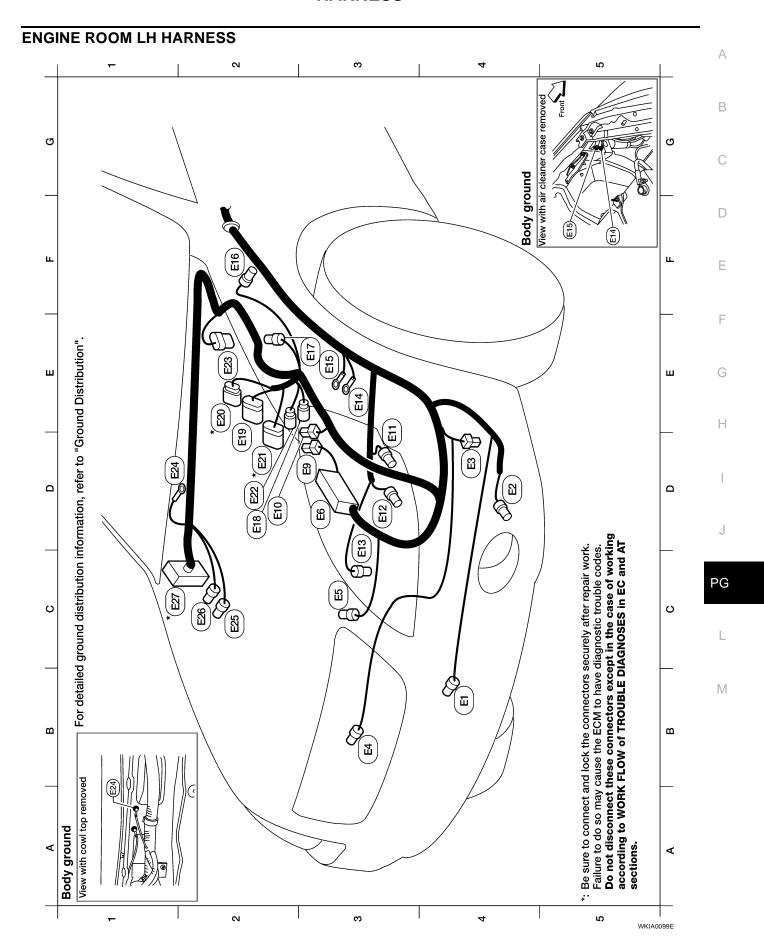
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(Met) - : Body ground	(M62) W/2 : Blower motor	(M63) BR/4 : Blower motor resistor (with manual A/C)		(M64) W/4 : Fan control amp. (with auto A/C)	(M65) B/2 : Sunload sensor (with auto A/C)	Me BR/20 : Joint connector-3	(M67) W/10 : To (E13)	(MS) W/10 : To (B102)	(MS) W/18 : To (B104)	*(M70) W/6 : To (F58)	* (M71) W/24 : To (F59)	(M72) BR/2 : Tweeter RH	M73 W/16 : To (8103)	(M74) W/10 : To (G102)	(M75) W/8 : To (p10)	(M76) W/6 : Heated seat switch RH																Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT	
E 2	E3	D2		D 5	Ш	E2	8	E3	83	£	£	Ε	F3	F2	F2	E 4															inect a so may	nnect WOR	
: Intake sensor (with auto A/C)	: A/T device	: Air bag diagnosis sensor unit	: Parking brake switch	: Heated seat switch LH	: Power socket	· Air mix door motor (with auto A/C)	· Mode door motor	· For ewitch (with month) A/C or	heater only)	: Rear window defogger switch	: Audio unit	: Audio unit	: Audio unit	: (Not used)	: (Not used)	: Antenna amplifier	: A/C auto amp. (with auto A/C)	: A/C auto amp. (with auto A/C)	: A/C control unit (with manual A/C or	neater only)	: Thermo control amplifier (with auto A/C)	: Intake sensor (with manual A/C)	: Trunk lid opener cancel switch	: Hazard switch	: Cigarette lighter	: Body ground	: Intake door motor	: Glove box lamp	: Front passenger air bag module	*	: be sure to cor Failure to do s	Do not discor according to	sections
W/2	W/12	Y/28	B/1	9/M	B/2	. ×	2 × ×	9/%	•	9/M	W/10	9/M	W/16	W/4	B/2	W/2	GY/20	GY/16	W/12		W/3	W/2	W/2	8/M	B/2		W/3	BR/2	Y/4				
(M33)	M34	M35	(M36)	(M37)					L4M	M42	M43	M44 44	(M45)	(M46)	(M47)	M48	(M49)	(M50)	MS1		(M52)	(M53)	(M54)	(MSS)	(M56)	(M57)	_		(Me0))			
D3	D 4	E	D 4	E2	E 4	. 5	2 2	5 2	3	D3	<u> </u>	E	Ш	E3	E3	D2	E	£	E		D2	D3	8	ដ	E4	D2	D2	ដ	E 2				
: Tweeter LH	: To R1 (without vanity mirror	lamps) : To B1 (with vanity mirror lamps)		: Fuse block (J/B)	: Fuse block (J/B)	: Illumination control switch	: TCS ON/OFF switch (with TCS)A3	: To (E28)	: To (D2)	: To @1	: To (E29)	: To (B1)	: To (B2)	: Heated seat relay	: Security indicator lamp	: Auto light sensor (with auto lights)	: Joint connector-1	: Joint connector-2	: BCM (Body control module)	: BCM (Body control module)	: BCM (Body control module)	: BCM (Body control module)	: Data link connector	: Combination meter	: Combination meter	: Ignition key illumination	: Key switch and key lock solenoid	: Immobilizer control unit	: Combination switch	: Combination switch	: Combination switch	: Shift lock control unit (with A/T)	: In-vehicle sensor (with auto A/C)
A2 M1 BR/2	A2 M2 W/6	A2 (M2) W/8	(B2 (M3) W/8	B2 *(M4) W/16	A3 (M5) W/3	A3 M6 GY/6	A3 (M7) W/18	A2 MB W/16	A2 (M9) W/12	A4 M10 Y/4	A3 M11 W/16	A3 (M12) W/16	ВЗ (М13) L/4	B1 (M14) BR/2	B1 (M15) W/3	B2 M16 BR/20	B2 (M17) P/20	B4 (M18) BR/24	B3 (M19 W/16	B3 (M20) W/16	B3 (M21) W/12	B3 (M22) W/16	C3 (M23) W/24	C4 (M24) BR/24	C2 (M25) B/2	C2 (M26) W/4	C2 (M27) W/8	C4 M28 W/16	C4 (M29) Y/6	C3 (M30) GY/8	C1 (M31) GY/10	C4 (M32) W/2

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PG-41

Fuse and fusible link box : Crash zone sensor : Front fog lamp LH : Hood switch : Horn (low) GY/2 **B**/ **Y**//2 (E) (H) (E2) (E) (8) **4** 4 8 8 8 23

: Ambient sensor

B/2

B4

: Fusible link box (battery) : Fusible link box (battery) BR/2 GY/2 (E) E10 D2 23

: Horn relay (inside fuse and fusible link box)

W/3

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: Front combination lamp LH : Headlamp LH (high) B/2 B/3 E12 <u>E</u>3 മ

: Headlamp LH (low) (conventional type) : Headlamp LH (low) (xenon type) BR/2 B/2 E13 23

: Body ground E13 (F14) D3 E3

: Brake fluid level switch **Body ground** GY/2 (E16) E15 F2 : Dropping resistor (with A/T) : Front wheel sensor LH GY/2 E17)

: To (F33) BR/2 GY/9 E18 (E19) E3 D2

: To (F32) : **To** (F34) GY/10 B/8 E20 E2 **D**2

: To F35 (with A/T) : Wiper motor GY/6 (E23) E22 **D**2 E2

B/2

: Body ground : To (E128) BR/1 E24 (E25) **D**2 2

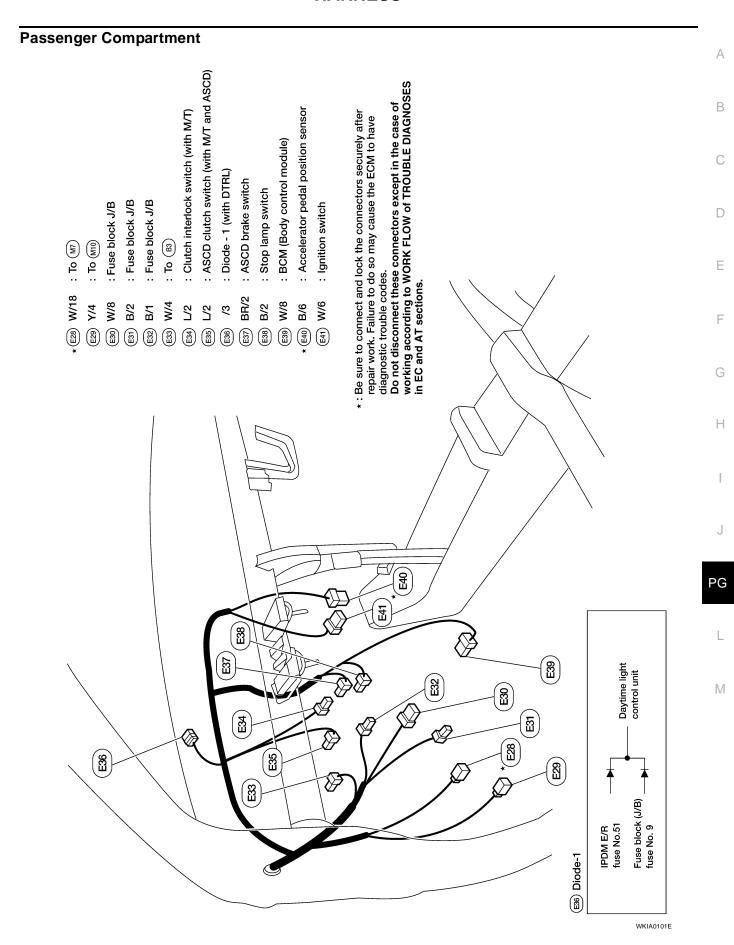
: **To** (E127) : To (E130) SMJ (E27) E26

GY/1

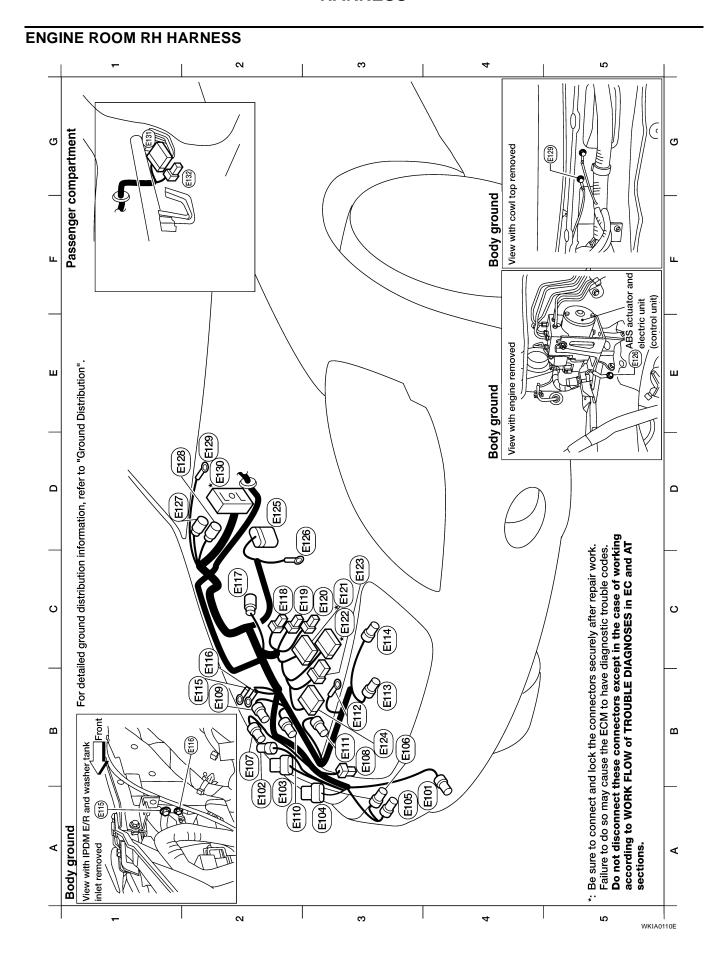
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Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT *: Be sure to connect and lock the connectors securely after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

WKIA0356E



PG-43



PG-44

: Headlamp RH (low) (conventional type) : Daytime light control unit (for Canada) : Daytime light control unit (for Canada) : Washer fluid level sensor : Front washer motor GY/6 GY/8 GY/2 BR/2 B/2 E103 (E) E105 E107 (F)

A3 B3

B2 B2 B3

: Daytime light control unit (for Canada)

: Front fog lamp RH

BR/2 GY/4

El O

¥ ΑZ 42 A3

: Headlamp RH (low) (xenon type) 퓬 : Front combination lamp : Horn (high) **BR/2** <u>B</u> B/3 E107 E108 (F100)

B2

: Refrigerant pressure sensor : Headlamp RH (high) **B**/2 B/3 E110 A2 B3

Cooling fan motor-1 : Generator (ground) GY/4 E113 E112 B3 B3

: Cooling fan motor-2 GY/4 E114 ဗ္ဗ

Front wheel sensor RH **Body ground** : Body ground **GY/2** (E117) E115 E116 **B**2 8 \aleph

: IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) **W/4** B/4 E118 E119 8ဗ္ဗ

: IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) W/12 B/2 E120 ဗ 8

: IPDM E/R (Intelligent Power Distribution Module Engine Room) GY/16 (E121) E122 ဗ

: IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) W/12 9/M E123 \aleph

: ABS actuator and electric unit (with ABS or TCS) B/31 E124 (E125) \aleph 2

: Body ground E128 8

To (E26) To (E25) GY/1 BR/1 (E127) E128 20 2

: Body ground E25 မ SMJ (E) E129

2

: To (M67) (With ABS or TCS) (With ABS or TCS) <u>و</u> .. W/10 **4/**W E131 E132 **D**2 g 5

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. Failure to do so may cause the ECM to have diagnostic trouble codes. sections.

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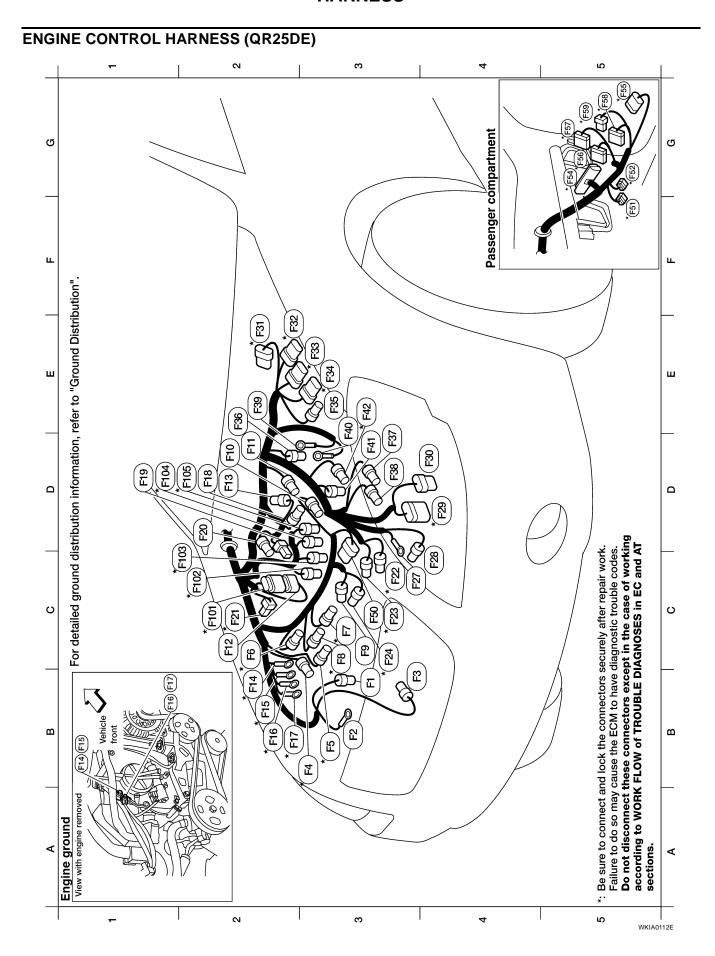
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PG-46

: TCM (transmission control module) (with A/T) Park/neutral position (PNP) switch (with M/T) : TCM (transmission control module) (with A/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 : To (E22) (with A/T) : Joint connector-4 : Joint connector-5 Battery (positive) : Injector No. 2 : Injector No. 3 : Injector No. 4 : Injector No. 1 (E13) oT : To (8105) (E) To (E21) : To (F12) . To M70 : To M71 **Engine control sub-harness** : ECM <u>و</u> .. GY/10 **GY/24** W/24 W/24 GY/9 W/12 GY/2 GY/2 GY/2 GY/2 GY/2 112 112 SMJ 9// B/8 B/2 B/3 9/9 B/6 F34 * (F58) * (F59) * F104 * F105 * (F32) * F33 (F42) F54 * (F55 * (F56) * (F57) * Floi * (F102) * F103 (85) F38 F37 (33) (F39) F40 (I (F50 (FS) (F52) G5 95 G5 35 35 5 5 5 \aleph 35 35 贸 23 23 23 8 3 ᆷ <u>E</u>3 83 **E**2 **E**2 23 EVAP canister purge volume control solenoid valve Park/neutral position (PNP) switch (with A/T) Intake valve timing control solenoid valve Ignition coil No. 2 (with power transistor) Ignition coil No. 3 (with power transistor) Ignition coil No. 4 (with power transistor) Ignition coil No. 1 (with power transistor) Camshaft position sensor (PHASE) Engine coolant temperature sensor Power steering oil pressure switch Terminal cord assembly (with A/T) Heated oxygen sensor 1 (Front) Heated oxygen sensor 2 (Rear) : VISA control solenoid valve Crankshaft position sensor Oil pressure switch : A/C compressor **Engine ground Engine ground Engine ground Engine ground** Knock sensor Starter motor Starter motor Condenser 2 Generator **To** (F101 GY/3 GY/3 GY/2 GY/3 GY/3 BR/2 GY/2 GY/2 B/10 GY/1 GY/1 B/3 B/3 B/6 **G**/4 **G/**2 B/1 7 B/8 B/1 Γ (F10) (F) (E) (E) Œ *(F12) F13 (FI5) FI6 **(FI7**) (E) F20 (F21) r (F22) r (F23) **₹**(F24 (F29) (F30) (E *(F5) FI4 F27 F28 4 Ę, 8 83 B3 8ဗ \aleph \aleph **D**2 2 \aleph D2 **B**2 **B**2 **B**2 **B**2 2 D2 8ဗ \aleph ဗ 2 2 5

: Mass air flow sensor

GY//5

r F31

: Generator

(E

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*: 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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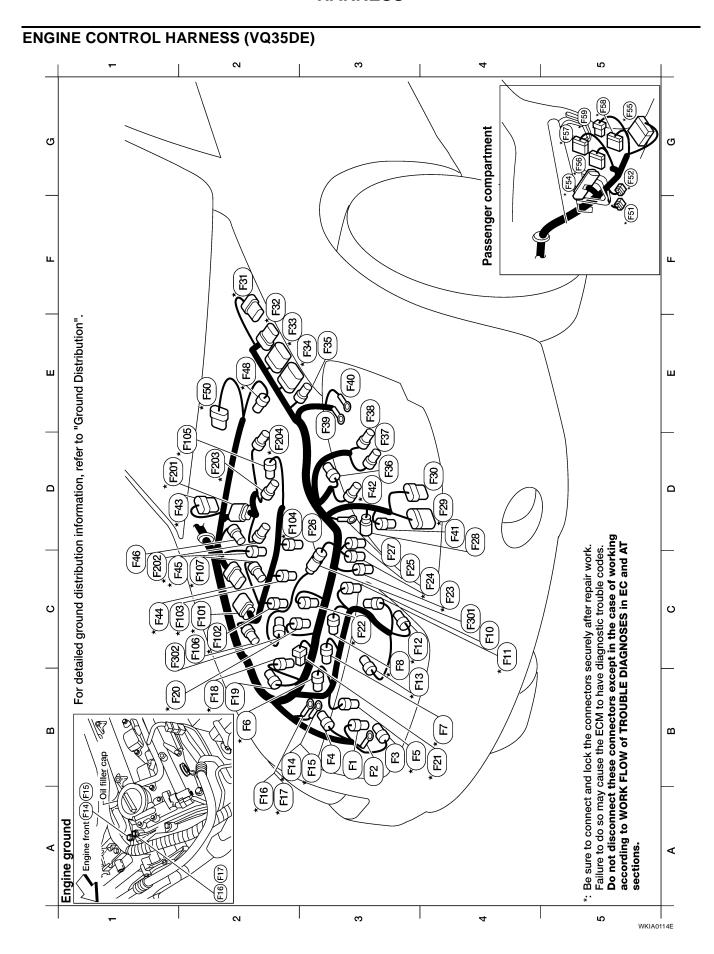
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Engine control sub-harness-1	C2 *F101 G/8 : To (=44)	A/T) C2 ★(Fit@) GY/2 : Injector No. 1	C2 ★(Fi®) GY/2 : Injector No. 3	D2 ★ঢ়ড় GY/2 : Injector No. 5	D2 * (F105) L/2 : EVAP canister purge volume control solenoid valve	C2 (Fig.) B/1 : Oil pressure switch	C2 ★(Ft07) G/2 : Intake valve timing control solenoid	Engine control	D1 * (₹20) G/6 : To (₹43)	C1 * (F22) GY/3 : Ignition coil No. 1 (with power transistor)	D2 *(F203) GY/3 :	D2 * (F204) GY/3 :	transistor) Engine control sub-harness-3	C4 (F30) B/2 : To (F26)	t) C1 (EXX) GY/2 : Knock sensor	insor	ASE)	Š	5				dule)	dule)	*. 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
: Park/neutral position (PNP) switch	(with A/T)	: Terminal cord assembly (with A/T)	: Mass air flow sensor	: To (E20)	: To E19 : To E21		: Vehicle speed sensor	: Turbine revolution sensor (with A/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)	: To F201	: 10 (Fig)	(Bank 1)	: Power steering oil pressure sensor	: Camshaft position sensor (PHASE)	(Dailk 1)	. Idea opposter 4	. Joint connector 5		F	: TCM (transmission control module)	<pre>(with A/ I) : TCM (transmission control module) (with A/T)</pre>		Do not di accordin
4 * F29 B/10		4 F30 B/8	2 *(F31) GY/5	2 *F32 B/8	3 * F33 GY/9	(E) (E)) (E)	3 (F37) B/3		3 F39	4 (F41) B/2	D3* (F42) B/2	* *	, * 44 (2	£)	1 (F46) B/3	2 *F48 G/3	* (EEO) * C				(£	*	5 *(F57) GY/24	5 * (F58) W/6 5 * (F59) W/24	l
: Generator		. Compressor	F2 Figure 1 Pressor F2	valve (Bank 2)	: Heated oxygen sensor 1 (Front) E3 (Bank 2) E3	: Ignition coil No. 2 (with power	il No. 4 (with power	transistor) D3	: Ignition coil No. 6 (with power E3 transistor)	. Front electronic controlled engine mount	: Crankshaft position sensor D4	: Heated oxygen sensor 2 (Rear) D: (Bank 2)	: Heated oxygen sensor 2 (Rear) D2 (Bank 1)	Iround		: Engine ground	: Engine ground	: Injector No. 2	: VIAS control solenoid valve	: Injector No. 4	: Condenser 2	: Injector No. 6	: Camshaft position sensor (PHASE) G5 (Bank 2)	: Engine coolant temperature sensor G5 : Rear electronic controlled engine	mount G5 : To (50)	: Starter motor : Starter motor
B3 (F) GY/2			2) (2	_	B3*(F5) B/3	B2*(F6) GY/3	B4*(F) GY/3		C3*(F8) GY/3	C4 (F10) BR/3	C4*(F11) B/3	C3*(F12) G/4	B3*(F₁3) L/4	B2*(F14) -	B3*(F15) -	A2*(F16) -	A2*(F17) -	B2×(F18) GY/2	B2 (F19) B/2	B2* (F20) GY/2	B4* (F21) GY/2	C3*(F22) GY/2	C4* F23 B/3	C4*(F24) GY/2 C3 (F25) BR/3		C3 (F27) - D4 (F38) GY/1

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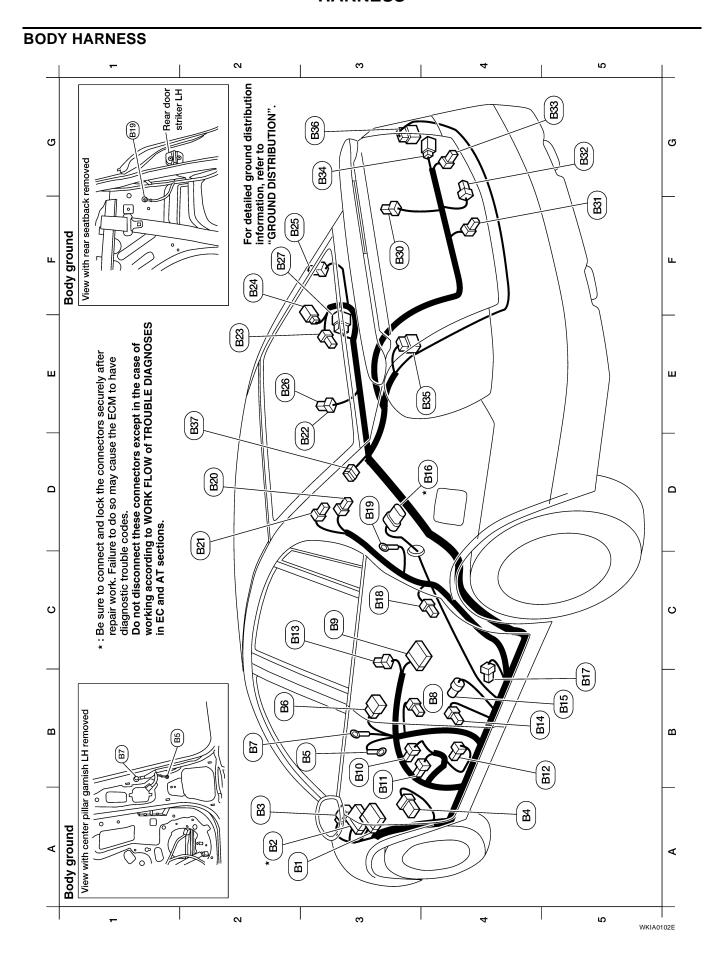
F

G

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PG

M



: Body ground (B19) ន 2

: LH side curtain air bag module Υ/2 (B20) Rear window defogger condenser × (B21)

8

ឧ **E**2

: Rear window defogger relay

BR/6

4

To (M12) : **To**

* (B2)

Ϋ́ ¥2

W/16 W/16

(BI

42

: To (E33)

W/4

(B3 (B) **Body ground**

To (0201)

8∕8

(8)

83 **B**4 ဗ B3 B3

(8)

A3 B3

 $\overline{\Sigma}$

 Ξ \mathbf{E}_{2}

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

Y/12

(a)

: Front door switch LH

W/3

(8)

Body ground

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

Truck room lamp (without Bose audio system) W/2 B23 (B22)

: High mounted stop lamp (without rear spoiler and with Bose W/2 (B24)

audio system)

Rear speaker RH (without Bose audio system) BR/2 (B25)

: Subwoofer LH (with BOSE audio system) To (B131) (with Bose audio system) W/2 8/W B26 B27 : High mounted stop lamp (with rear spoiler)

B30

 \mathbb{E} \overline{F}

BR/2

: License lamp LH BR/2 B31 Truck lamp switch and truck release solenoid **W/4**

B32

35 G5

3

: License lamp RH BR/2 (B33)

Truck key cylinder switch W/2 B34

Rear combination lamp LH 9/M B35 င္ဗ

Rear combination lamp RH 9// ဗ္ဗ **4**

: Fuel level sensor unit and fuel pump

GY//5

D4 ★ B16

: Rear door switch LH

M

B18

(B17)

: Condenser-1

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

Y//2 Y/2

(B14) (B15)

B5

: Seatbelt buckle switch LH

Power seat

W/2 W/3 W/3

(B11)

B12 B13

B5

ဗ္ဗ

۲//2

(B10)

Heated seat switch

: Joint connector-7 B/20 B37 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 in EC and AT sections. diagnostic trouble codes.

PG

Α

В

C

D

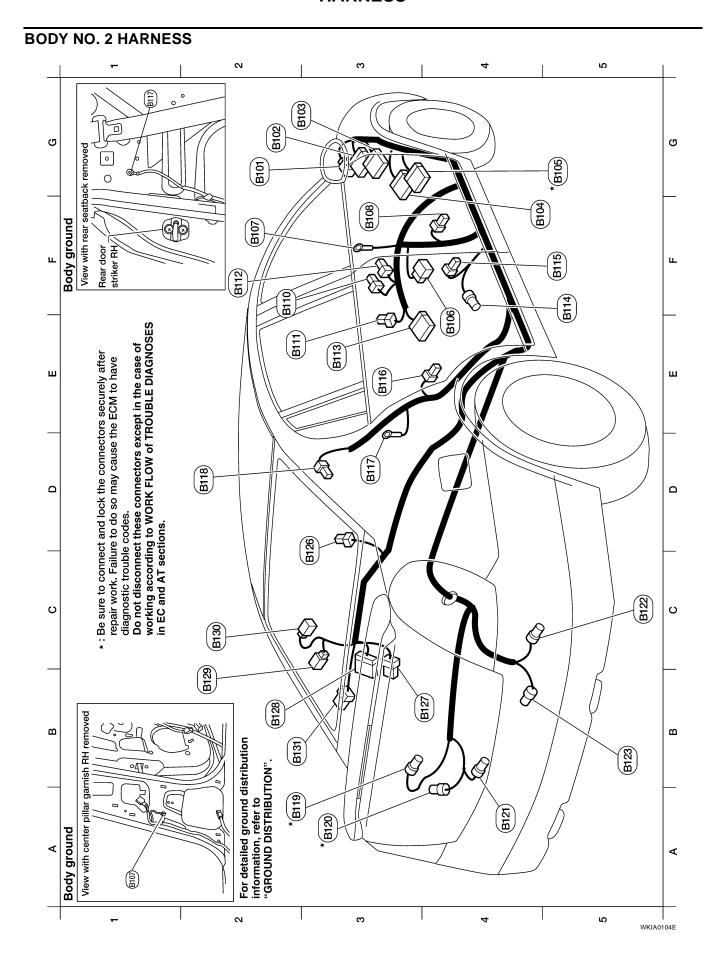
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WKIA0103E



: EVAP control system pressure sensor (QR25DE) : RH side curtain air bag module BR/3 B118 * (B119) ΥS

EVAP control system pressure sensor (VQ35DE) GY/3 * ®119

EVAP canister vent control valve : Vacuum cut valve bypass valve **G/**2 B/2

* (B120)

A3 44 C_5 B5 ဗ္ဗ **B**4 **B**2

(69M)

W/18 W/16

7

(F55 : **To** [3301]

W/12

F5 * 8105

8/8

B106

F4

(M68) M73

<u>o</u> <u>ء</u> ..

(B102)

<u>ء</u> <u>آ</u> <u>و</u> ..

B103 B104

8

42

* B121

: Rear wheel sensor RH GY/2 B122

Rear wheel sensor LH BR/2 B123

: Subwoofer RH (with BOSE audio system) W/2 (B126)

Bose Speaker Amp. GY/8 B127)

B/24 B128

: Bose Speaker Amp.

High mounted stop lamp (without rear spoiler and with BOSE W/2 (B129)

audio system)

Truck room lamp (with BOSE audio system) W/2 B130

: To (B27) (with BOSE audio system) 8/M (B131) C2 B2

> RH side air bag (satellite) sensor : Front RH seatbelt pre-tensionor

: Rear door switch RH

: Body ground

(B117)

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

Y/12

B113 B114

B112

(B111)

 E_2 $\frac{1}{2}$ 贸 **F**2 **F**5

Y//2 **Y/2** ≶

(B115)

Seat belt buckle switch RH : Heated seat switch RH

: Front door switch RH

W/3 м/3 W/3 **Y**//2

B108

B110

 E_2

: Body ground

(B107)

 $\overline{\Sigma}$ Ξ PG

Α

В

C

D

Е

F

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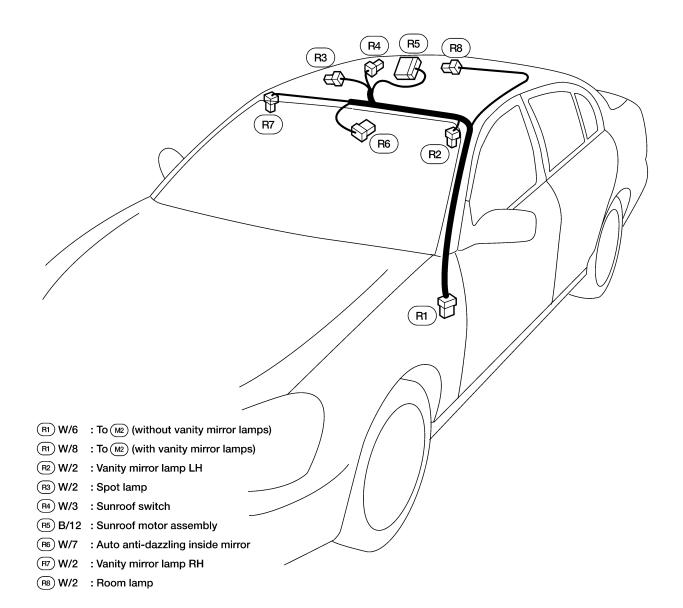
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diagnostic trouble codes.

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

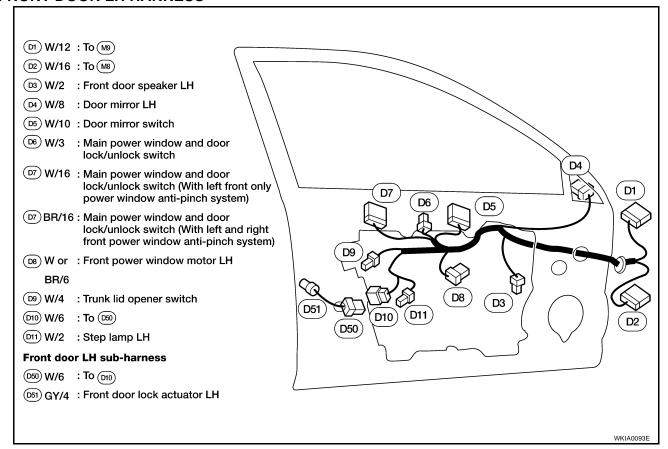
WKIA0105E

ROOM LAMP HARNESS

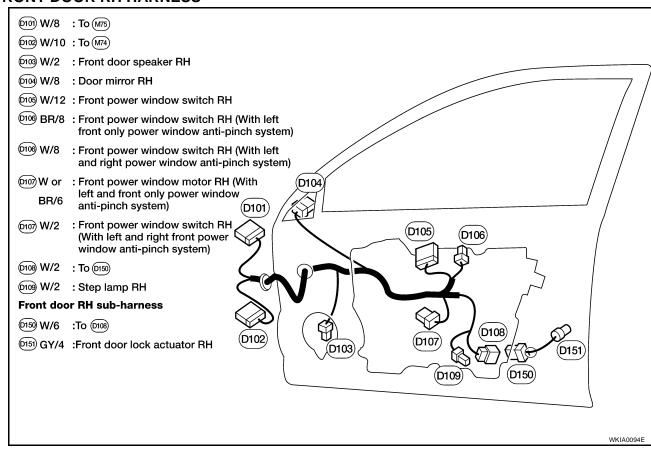


WKIA0092E

FRONT DOOR LH HARNESS



FRONT DOOR RH HARNESS



PG-55

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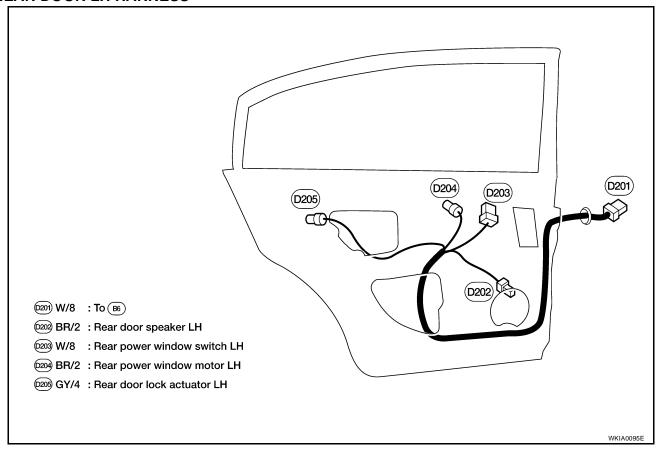
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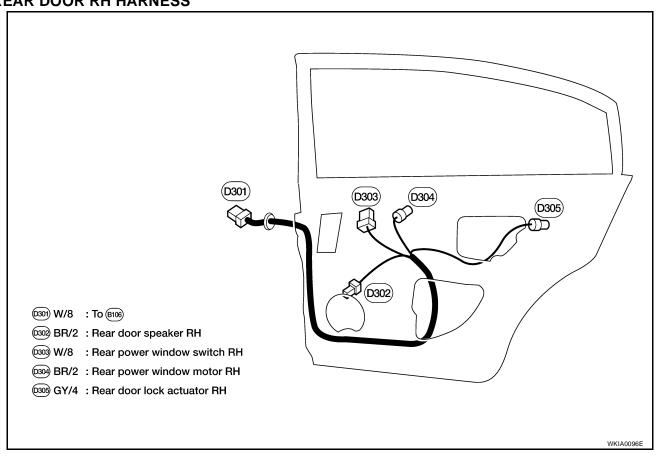
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REAR DOOR LH HARNESS



REAR DOOR RH HARNESS



Wiring Diagram Codes (Cell Codes)

EKS002LG

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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
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
A/C,A	ATC	Auto Air Conditioner
A/C,M	MTC	Manual Air Conditioner
A/LIGHT	LT	Auto Light Control
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
B/COMP	DI	Board Computer
BAF/TS	AT	A/T Fluid Temperature Sensor and TCM Power Supply
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
BYPS/V	EC	Vacuum Cut Valve Bypass Valve
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DLC	EC	Data Link Connector
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
EMNT	EC	Engine Mount
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FLS1	EC	Fuel Level Sensor Function (SLOSH)
FLS2	EC	Fuel Level Sensor Circuit
	EC	Fuel Level Sensor Circuit (Ground Signal)
FLS3		
FLS3 FTS	AT	A/T Fluid 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
HO2S1	EC	Heated Oxygen Sensor 1 (Front)
HO2S1H	EC	Heated Oxygen Sensor 1 (Front) Heater
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
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCSB1	EC	Intake Valve Timing Control Position Sensor Bank 1
IVCSB1	EC	Intake Valve Timing Control Position Sensor 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 Power Supply and Ground Circuit
MAIN	EC	,
METER MIL	DI EC	Speedometer, Tachometer, Temp., Oil and Fuel Gauges Malfunction Indicator Lamp
		·
MIRROR	GW	Door Mirror
NATS	BL	Nissan Anti-Theft System
NONDTC	AT	Non-detective Items
O2H1B1	EC	Heated Oxygen Sensor 1(Front) Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 (Front) Heater Bank 2
O2H2B1	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 (Front) Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 (Front) 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
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

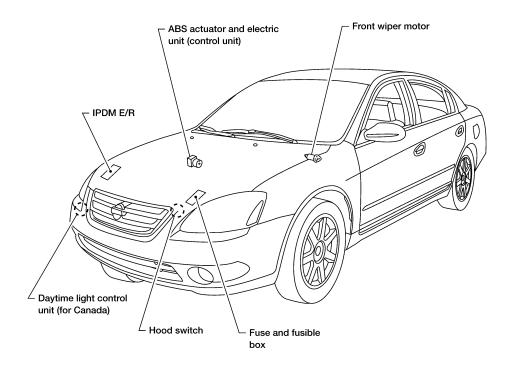
PS/SEN	EC	Power Steering Oil Pressure Sensor	
PST/SW	EC	Power Steering Oil Pressure Switch	A
REMOTE	AV	Audio (Remote Control Switch)	
ROOM/L	LT	Interior Room Lamp	
RP/SEN	EC	Refrigerant Pressure Sensor	В
S/SIG	EC	Start Signal	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	C
SHIFT	AT	A/T Shift Lock System	
SROOF	RF	Sunroof	
SRS	SRS	Supplemental Restraint System	D
SSV/A	AT	Shift Solenoid Valve A	
SSV/B	AT	Shift Solenoid Valve B	E
START	SC	Starting System	
STEP/L	LT	Step Lamp	
STOP/L	LT	Stop Lamp	F
TLID	BL	Trunk Lid Opener	
TAIL/L	LT	Parking, License and Tail Lamps	
TCCSIG	AT	A/T TCC Signal (Lock Up)	G
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	
TURN	LT	Turn Signal and Hazard Warning Lamps	J
VEHSEC	BL	Vehicle Security System	
VENT/V	EC	EVAP Canister Vent Control Valve	
VIAS	EC	Variable Air Induction Control System	PG
VIAS/V	EC	Variable Air Induction Control System Valve	
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)	
VSSMTR	AT	Vehicle Speed Sensor Meter	L
W/ANT	AV	Audio Antenna	
WARN	DI	Warning Lamps	
WINDOW	GW	Power Window	M
WIPER	WW	Front Wiper and Washer	

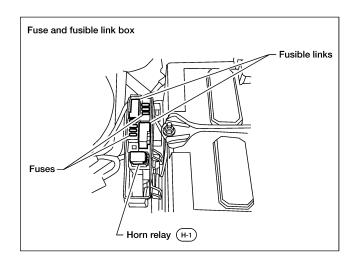
ELECTRICAL UNITS LOCATION

PFP:25230

Electrical Units Location ENGINE COMPARTMENT

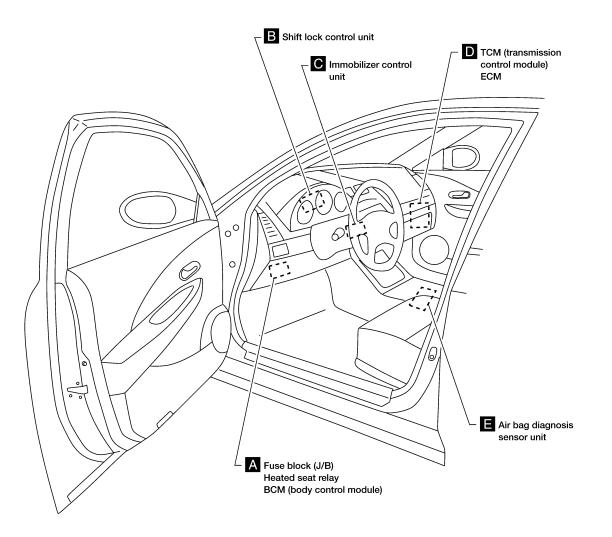
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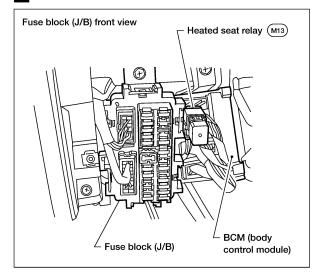


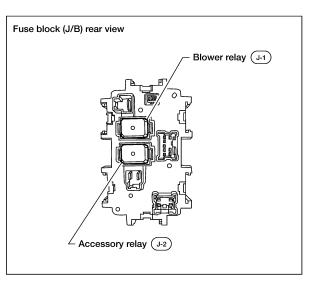
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PASSENGER COMPARTMENT



A Dash side LH





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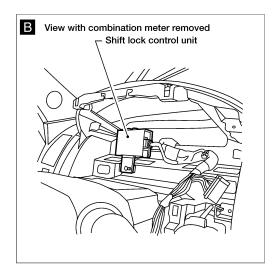
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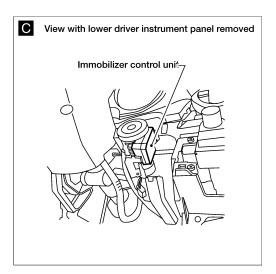
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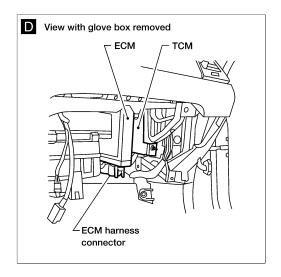
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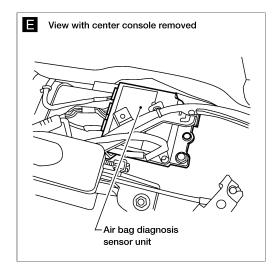
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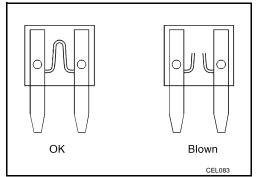




Fuse

 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.

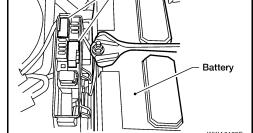


Fusible Link

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.

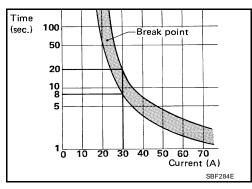


Circuit Breaker (Built Into BCM)

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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EKS002LK

HARNESS CONNECTOR

HARNESS CONNECTOR

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EKS002LL

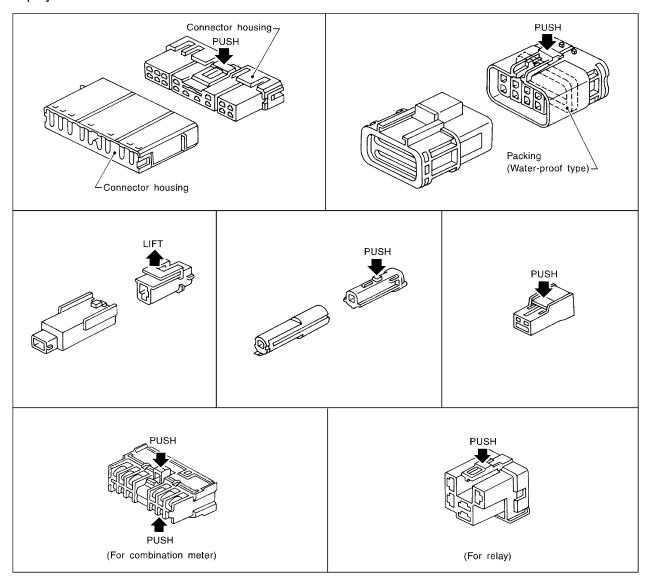
DescriptionHARNESS CONNECTOR (TAB-LOCKING TYPE)

- 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 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.

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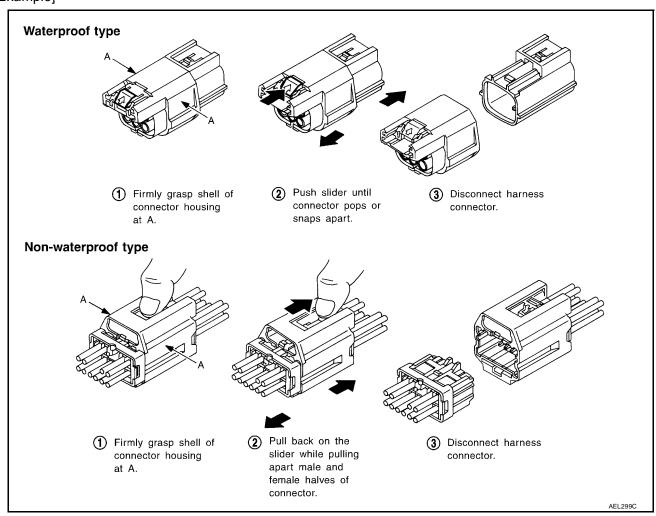
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The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the illustration below.

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]



PG-65

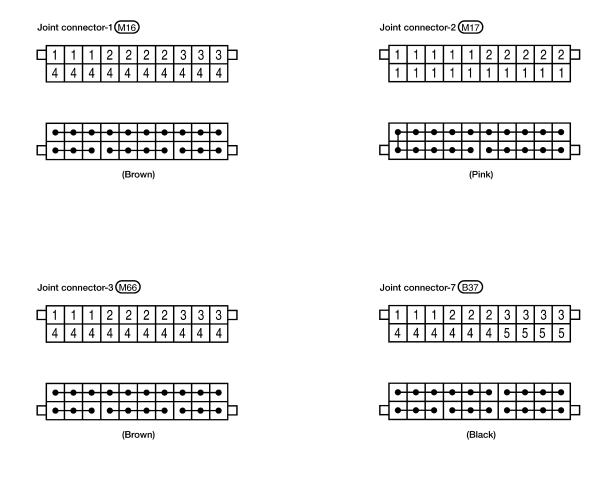
JOINT CONNECTOR (J/C)

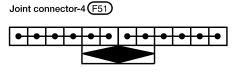
JOINT CONNECTOR (J/C)

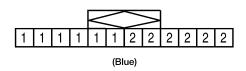
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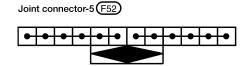
Terminal Arrangement

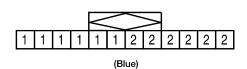
EKS002LM











ELECTRICAL UNITS

ELECTRICAL UNITS PFP:23710 Α **Terminal Arrangement** FKS0021 N В **BCM (BODY CONTROL MODULE)** 63 62 61 60 59 58 57 56 55 54 53 43 42 41 40 74 73 72 71 70 69 68 67 66 50 49 48 47 34 33 32 31 30 29 28 35 (M18) (M19) (M20) D 19 18 17 16 (M21) Е ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) 14 13 12 11 10 9 8 7 6 5 4 3 25 24 23 22 21 20 18 17 16 30 29 28 27 Н (E125) **ECM** 110 101 102 109 1 2 3 4 5 6 7 8 9 10 58 59 60 61 62 63 64 65 66 67 PG 11 12 13 14 15 16 17 18 19 68 69 70 71 72 73 74 75 76 111 112 103 104 39 40 41 42 43 44 45 46 47 48 105 106 113 114 20 21 22 23 24 25 26 27 28 29 77 78 79 80 81 82 83 84 85 86 30 31 32 33 34 35 36 37 38 87 88 89 90 91 92 93 94 95 107 115 (F54) M TCM (TRANSMISSION CONTROL MODULE) 36 44 45 (F56) (F57)

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SMJ (SUPER MULTIPLE JUNCTION)

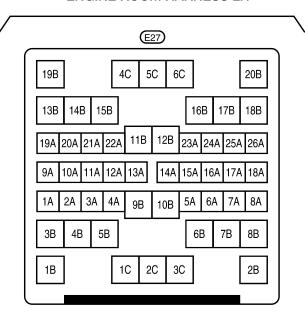
SMJ (SUPER MULTIPLE JUNCTION)

PFP:B4341

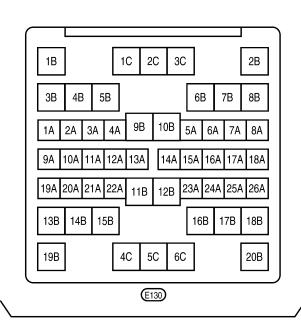
Terminal Arrangement

EKS002LO

ENGINE ROOM HARNESS LH







ENGINE ROOM HARNESS RH

STANDARDIZED RELAY

STANDARDIZED RELAY

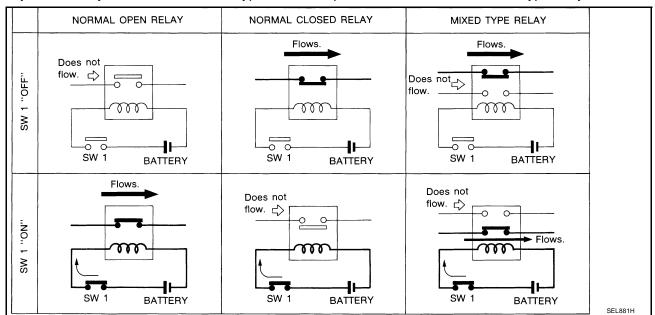
PFP:25230

EKS002LP

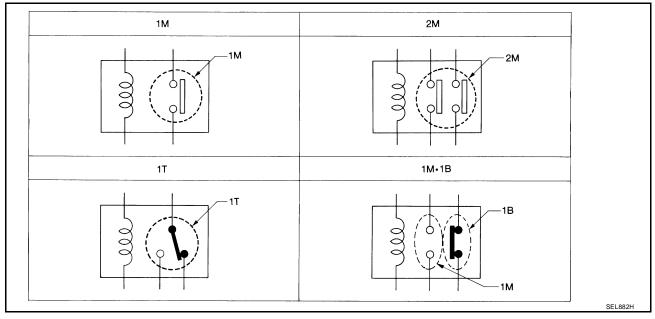
Description

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



TYPE OF STANDARDIZED RELAYS



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

PG-69

Α

В

D

Е

F

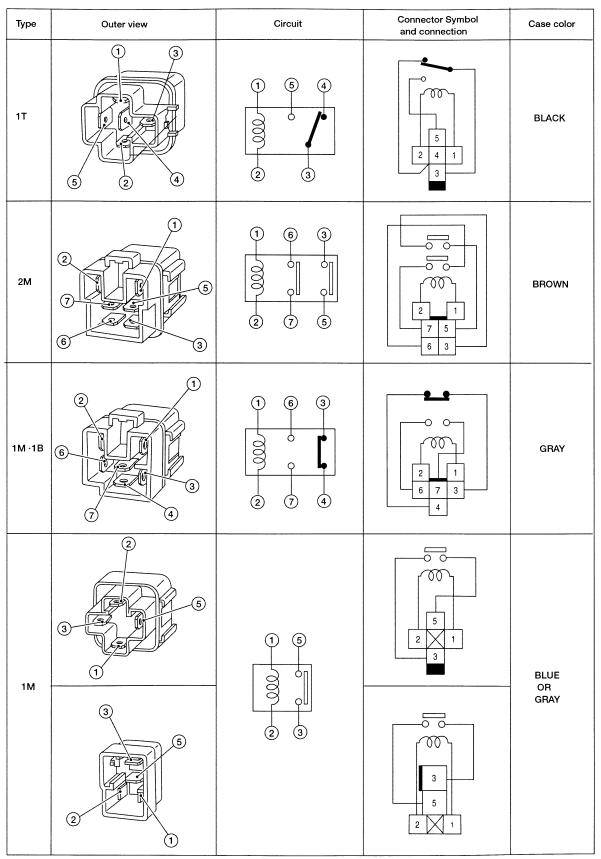
G

Н

PG

M

STANDARDIZED RELAY



The arrangement of terminal numbers on the actual relays may differ from those shown above.

LEL638

FUSE BLOCK-JUNCTION BOX(J/B)

FUSE BLOCK-JUNCTION BOX(J/B) PFP:24350 **Terminal Arrangement** EKS002LQ To main harness В С D Е F G Н 10A 15 10A 10A 15A Blower relay (J-1) Accessory relay (J-2) PG M Not used 1S E32 (E31) (E30) 2R 1R To engine room harness LH

WKIA0129E

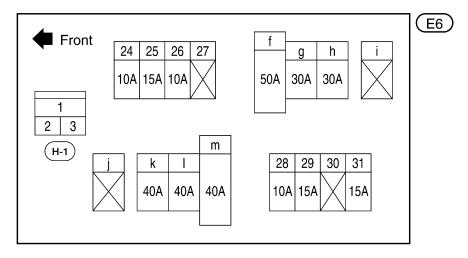
FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX

PFP:24381

Terminal Arrangement

EKS002LR



24 - 31: FUSE f - m: FUSBILE LINK