SECTION POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

PRECAUTIONS

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

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.

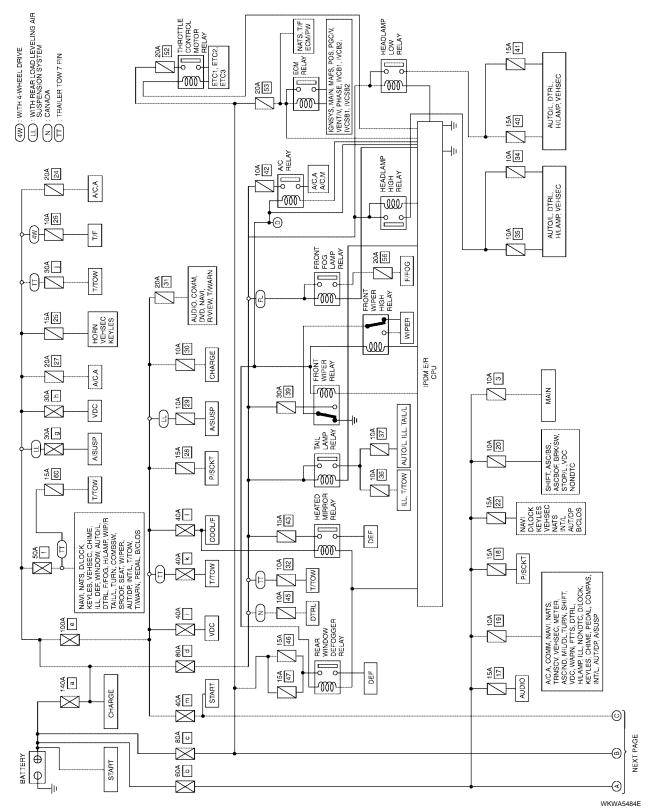
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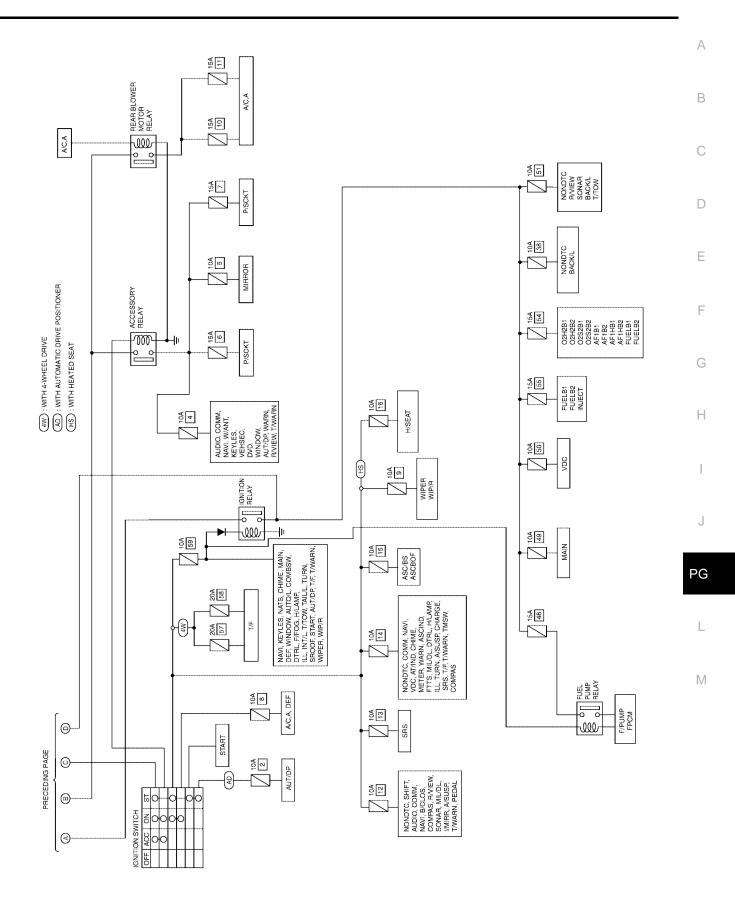
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Schematic

For detailed ground distribution, refer to PG-31, "Ground Distribution" .



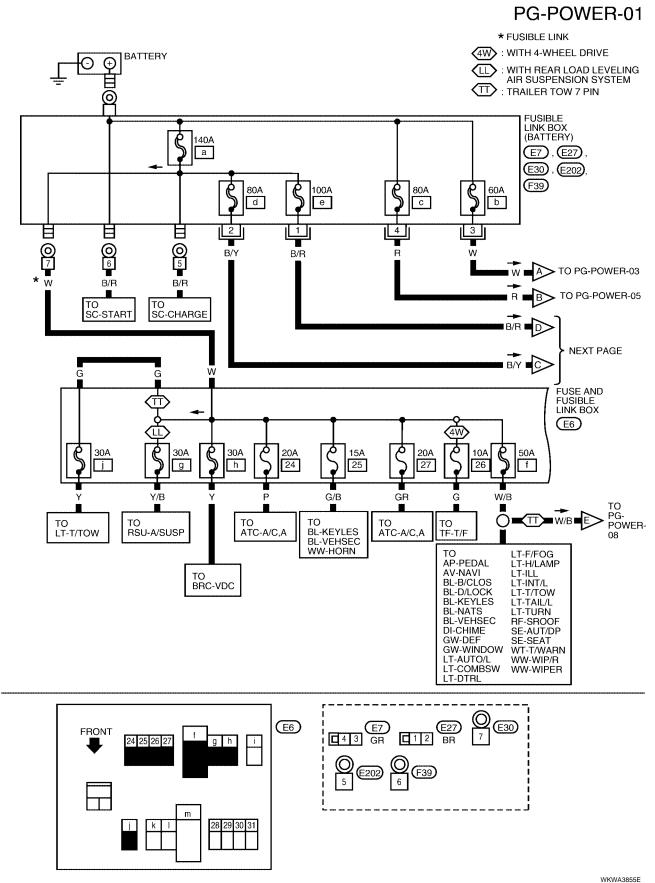
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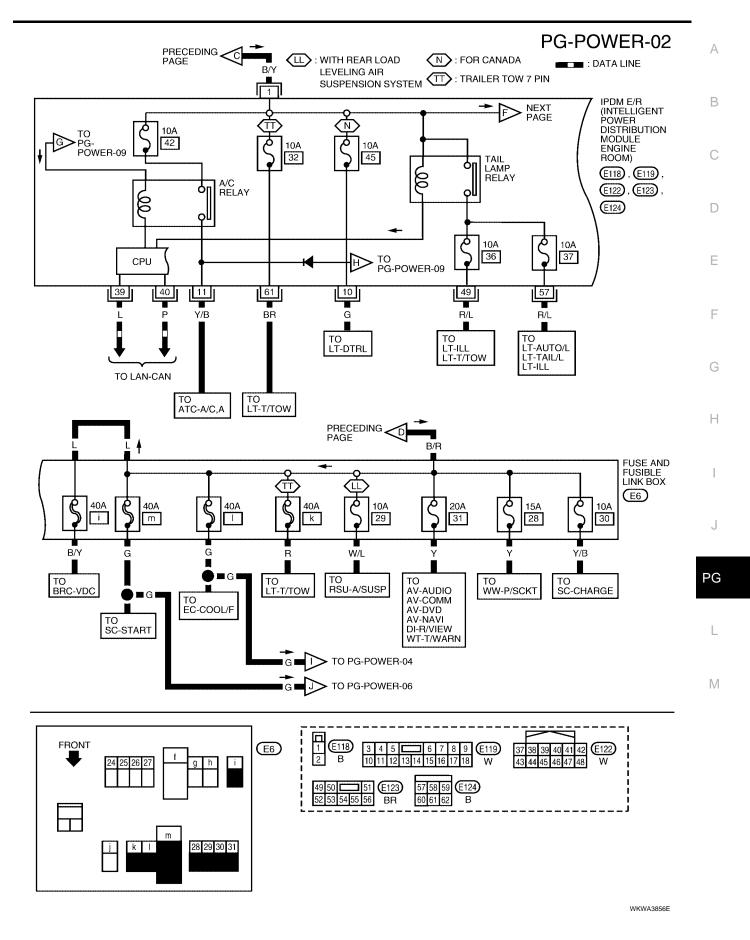


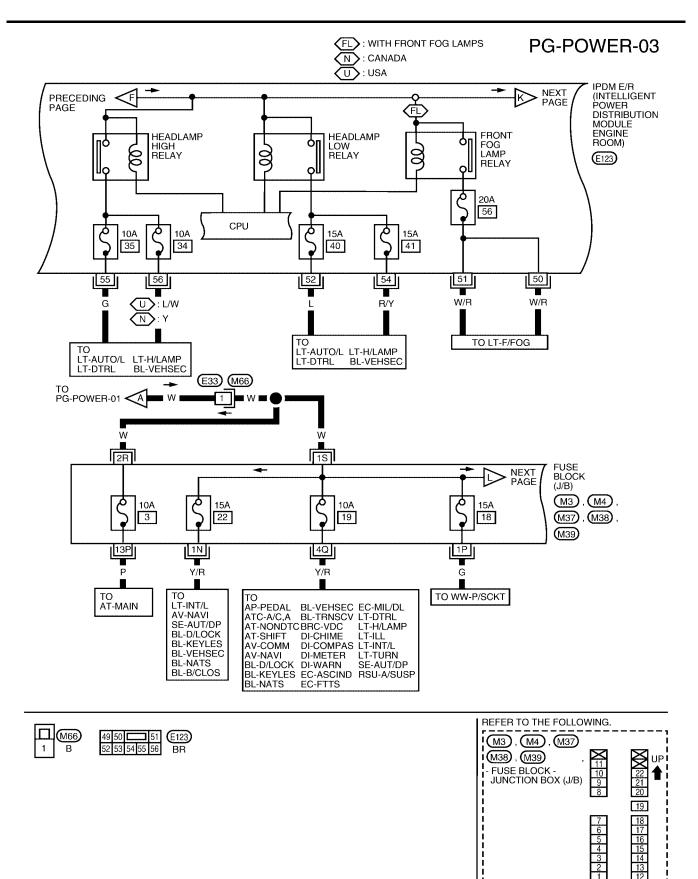
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Wiring Diagram — POWER — BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION

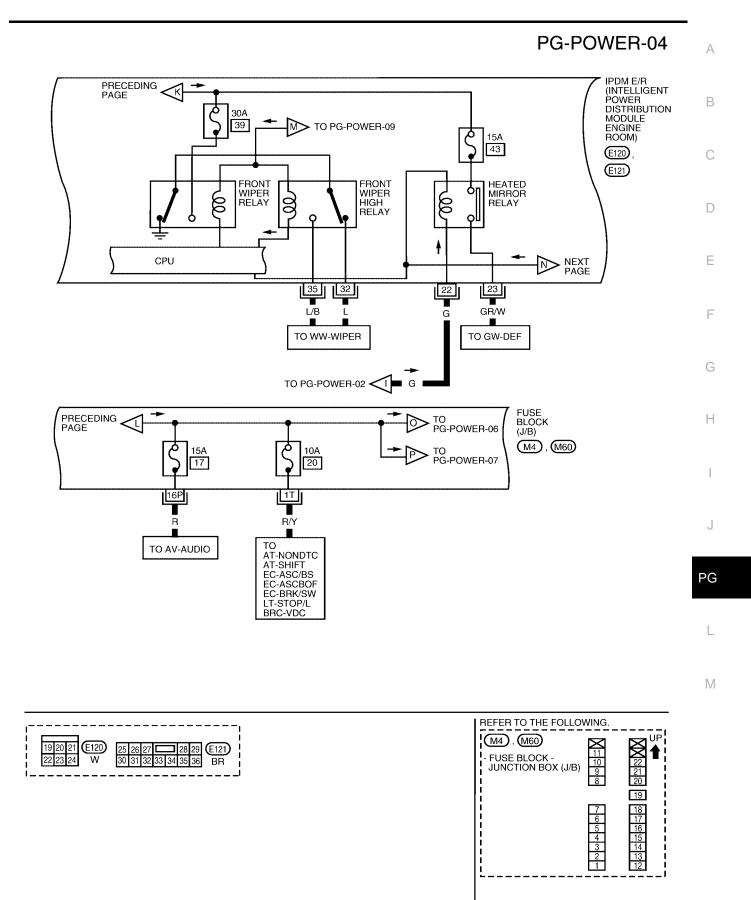






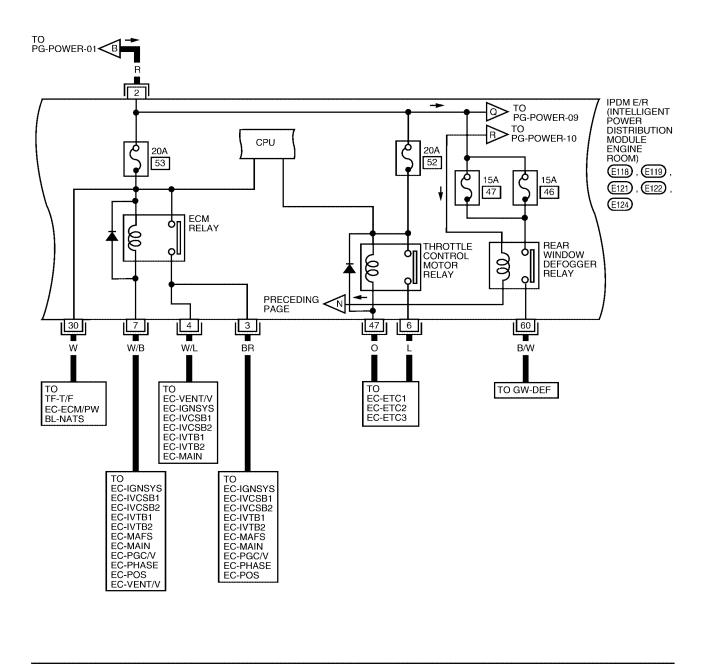


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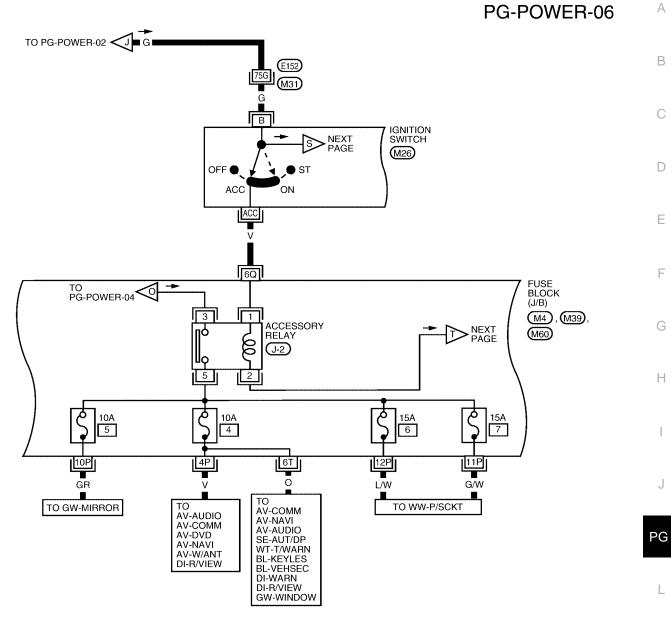
PG-POWER-05

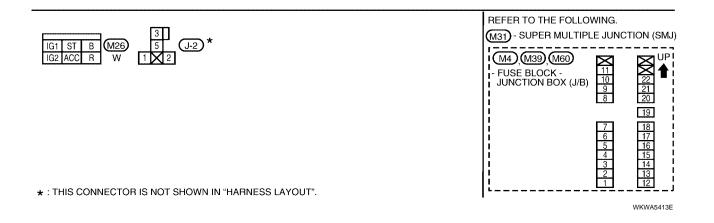




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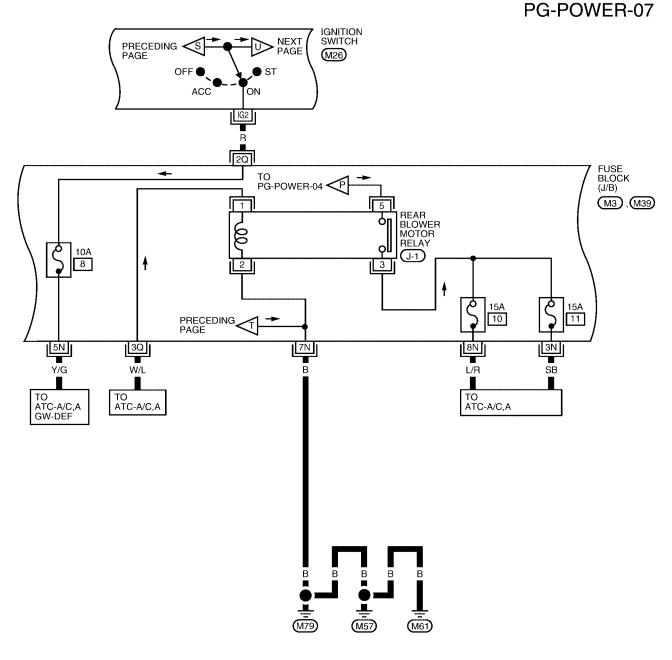
ACCESSORY POWER SUPPLY - IGNITION SW. IN ACC OR ON

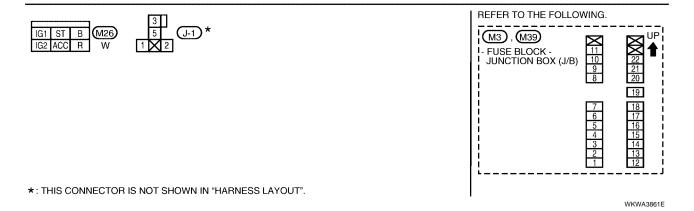




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IGNITION POWER SUPPLY — IGNITION SW. IN ON





Revision: July 2007

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

PG-POWER-08 4W: WITH 4-WHEEL DRIVE



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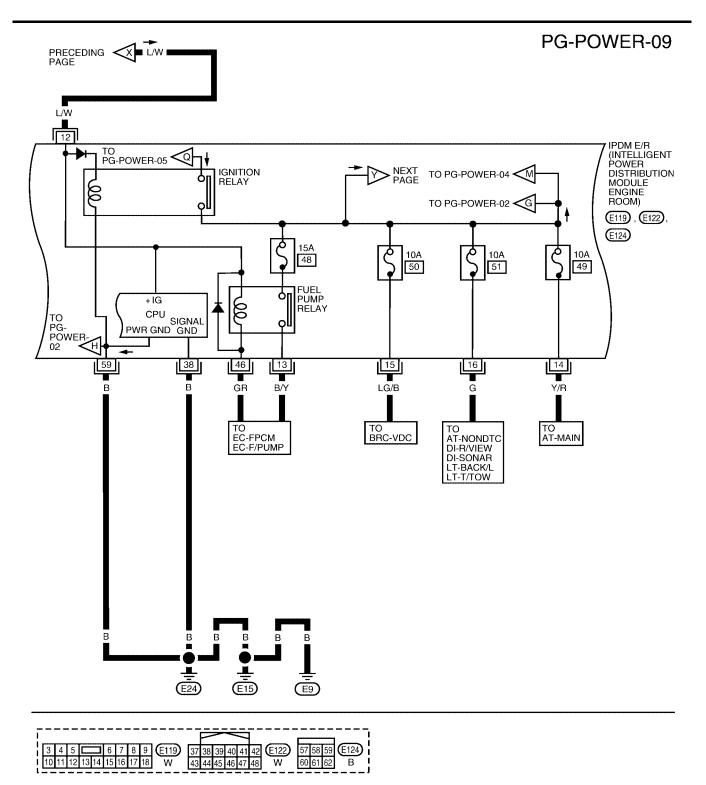
IGNITION ∇ TO PG-POWER-11 PRECEDING SWITCH PAGE M26 OFF ACC ON IGN IG1 B/R 🛚 B/R 🛋 🔊 TO PG-POWER-10 (M31) 77G E152 B/R TO PG-POWER-01 Ĩ B/R B/R FUSE AND RELAY BOX **4**W Ò ø Q 15A 60 **E**8 20A 20A 10A 57 58 59 LW R G/R LT-T/TOW 🖿 L/Ŵ 🖬 🔊 NEXT PAGE TO TF-T/F TO AV-NAVI BL-KEYLES LT-COMBSW LT-DTRL LT-TURN RF-SROOF SC-START PG BL-NATS DI-CHIME EC-MAIN LT-F/FOG SE-AUT/DP TF-T/F WT-T/WARN LT-H/LAMP LT-ILL LT-INT/L GW-DEF GW-WINDOW LT-T/TOW WW-WIPER LT-AUTO/L LT-TAIL/L WW-WIP/R

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REFER TO THE FOLLOWING. M31 - SUPER MULTIPLE IG1 ST B M26 IG2 ACC R W JUNCTION (SMJ) WKWA3862E

Revision: July 2007

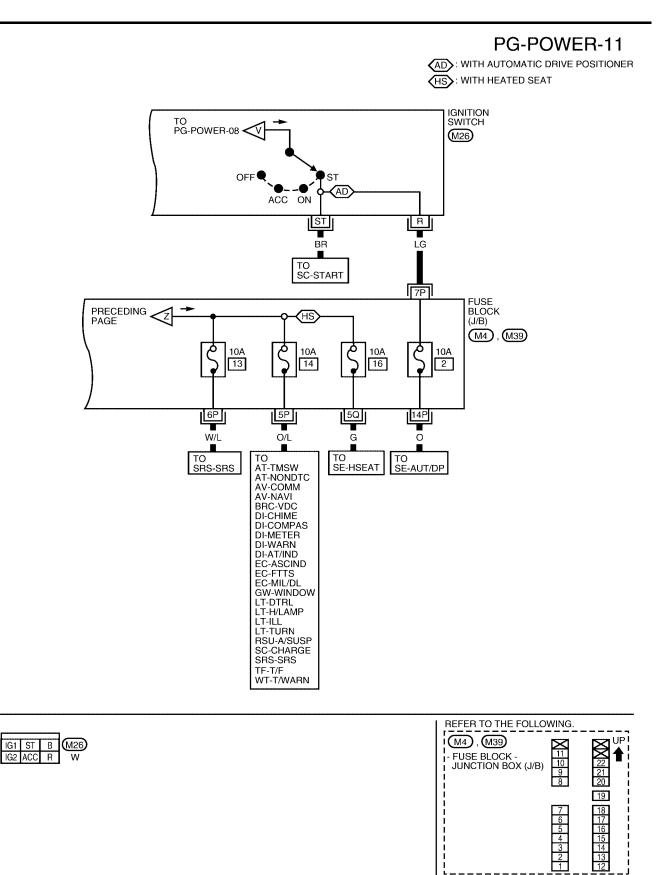
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PG-POWER-10 А IPDM E/R (INTELLIGENT POWER DISTRIBUTION В TO PG-POWER-05 PRECEDING ł MODULE PAGE Y ENGINE ROOM) С (E119), (E121) Ø Q Ó 10A 15A 15A 38 55 54 D 17 8 27 R/B W/B w Ε то TO то EC-02H2B1 EC-AF1B2 EC-02H2B2 EC-AF1HB1 EC-02S2B1 EC-AF1HB1 EC-02S2B2 EC-FUELB1 AT-NONDTC EC-FUELB1 EC-FUELB2 LT-BACK/L EC-INJECT F EC-AF1B1 EC-FUELB2 TO PG-POWER-08 🔨 B/R B/R B/R Н 1R 7Q FUSE BLOCK (J/B) -NEXT PAGE (M3), (M4) Þ Ò 10A 10A 10A 15 12 9 M38 , M39 9P 1Q 2N -R/L R/B G/R ΡG TO WW-WIPER то то EC-ASC/BS AP-PEDAL DI-COMPAS DI-R/VIEW DI-SONAR EC-MIL/DL WW-WIP/R EC-ASCBOF AT-NONDTC AT-SHIFT AV-AUDIO L AV-COMM **GW-I/MIRR** AV-NAVI BL-B/CLOS RSU-A/SUSP WT-T/WARN Μ REFER TO THE FOLLOWING. 3 4 5 6 7 8 9 E119 10 11 12 13 14 15 16 17 18 W 25 26 27 28 29 30 31 32 33 34 35 36 28 29 E121 UP 22 21 20 (M3), (M4), (M38) \mathbf{X}_{11} BR (M39) 10 - FUSE BLOCK -JUNCTION BOX (J/B) 9 8 19 18 17 16 15 14 13 12 7 6 4 3 1

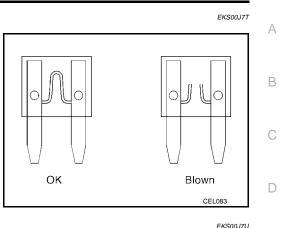
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Fuse

- 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:

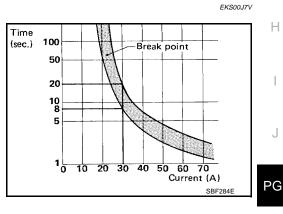
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.
- Never wrap outside of fusible link with vinyl tape.
- Never let fusible link touch any other wiring harness, 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 windows
- Power door locks
- Remote keyless entry system
- Power sunroof
- Rear window wiper



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System Description

EKS00J7W

- 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, etc.
- It controls operation of each electrical component via ECM, BCM and CAN communication lines.

CAUTION:

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

SYSTEMS CONTROLLED BY IPDM E/R

- 1. Lamp control
 - Using CAN communication lines, it receives signals from the BCM and controls the following lamps:
 - Headlamps (Hi, Lo)
 - Parking lamps
 - Tail and license lamps
 - Front fog lamps
- 2. Wiper control

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

- 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).
- 5. Starter control Using CAN communication lines, it receives signals from the BCM and controls the starter relay.
- Cooling fan control Using CAN communication lines, it receives signals from the ECM and controls the cooling fan relays.
- 7. 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 a maximum amount of information with minimum wiring. Each control unit can transmit and receive data, and reads necessary information only.

- 1. Fail-safe control
 - When CAN communication with other control units is impossible, IPDM E/R performs fail-safe control. After CAN communication returns to normal operation, 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.
	 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

Controlled system	Fai	I-safe mode
A/C compressor	A/C compressor OFF	
Front fog lamps	Front fog lamp relay OFF	
PDM E/R STATUS CONTR	ROL	
In order to save power, IPDM	E/R switches status by itself based on	each operating condition.
1. CAN communication statu	JS	
 CAN communication is 	normally performed with other control	units.
 Individual unit control b 	y IPDM E/R is normally performed.	
 When sleep request sig 	gnal is received from BCM, mode is swi	tched to sleep waiting status.
Sleep waiting status		
•	ommunication is activated.	
		cond has elapsed after CAN communica-
	inits is stopped, mode switches to sleep	o status.
	ow current-consumption mode.	
 CAN communication is 	•	
	••	ode switches to CAN communication sta-
tus.		
 When a change in ignit 	ion switch signal is detected, mode swi	tches to CAN communication status.
CAN Communication	System Description	EK\$00J7X
	SCRIPTION"LAN-4, "SYSTEM DESCI	
		<u> </u>
•	Ignition Relay Malfunction	EKS00J7Y
	ion relay is stuck in a "closed contact" p king lamps for 10 minutes to indicate IP	position and cannot be turned OFF, IPDM PDM E/R malfunction.
	egrated ignition relay does not agree w nication, the IPDM E/R activates the ta	vith the state of the ignition switch signal il lamp relay.
Ignition switch signal	Ignition relay status	Tail lamp relay
.gon onnon oighui		
ON	ON	—
	ON OFF	

NOTE:

When the ignition switch is turned ON, the tail lamps are OFF.

OFF

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ON (10 minutes)

ON

CONSULT-II Function (IPDM E/R)

EKS00J7Z

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

IPDM E/R diagnostic Mode	Description
SELF-DIAG RESULTS	Displays IPDM E/R self-diagnosis results.
DATA MONITOR	Displays IPDM E/R input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.

CONSULT-II START PROCEDURE

Refer to GI-38, "CONSULT-II Start Procedure" .

SELF-DIAGNOSTIC RESULTS

Display Item List

Display items	CONSULT-II	DNSULT-II Malfunction detection		ME	Possible causes
Display Kerno	display code		CRNT	PAST	
NO DTC IS DETECTED. FUR- THER 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. 	x	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 All Signals, Main Signals, Selection From Menu

Item name CONSULT-II screen display			Monitor item selection			
	Display or unit	ALL SIGNALS	MAIN SIGNALS	SELECTION 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
Parking, license, and tail lamp request	TAIL & CLR REQ	ON/OFF	x	х	х	Signal status input from BCM
Headlamp low beam request	HL LO REQ	ON/OFF	х	х	х	Signal status input from BCM
Headlamp high beam request	HL HI REQ	ON/OFF	х	х	х	Signal status input from BCM
Front fog request	FR FOG REQ	ON/OFF	Х	Х	Х	Signal status input from BCM
Front wiper request	FR WIP REQ	STOP/1LOW/ LOW/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/Block	Х	Х	Х	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	Х		Х	Status of input signal NOTE
gnition 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 (*1)	OPEN/CLOSE	Х		х	Signal status input from IPDM E/R
Hood switch	HOOD SW (*1)	OFF	Х			Signal status input from IPDM E/R
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
Daytime running lamp request	DTRL REQ	ON/OFF	х		х	Signal status input from BCM

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.

• (*1) This item is displayed, but does not function.

CAN DIAG SUPPORT MNTR

Refer to LAN-4, "SYSTEM DESCRIPTION" .

ACTIVE TEST

Operation Procedure

Test name	CONSULT-II screen display	Description
Rear defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear defogger relay can be oper- ated.
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.

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Test name	CONSULT-II screen display	Description
Lamp (HI, LO, TAIL, FOG) output	EXTERNAL LAMPS	With a certain operation (OFF, HI ON, LO ON, TAIL ON, FOG ON), the lamp relay (Low, High, Tail, Fog) can be operated.
Cornering lamp output	CORNERING LAMP	_
Horn output	HORN	With a certain ON-OFF operation, the horn relay can be operated.

Auto Active Test DESCRIPTION

In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the following systems:

- Rear window defogger
- Front wipers
- Tail, license 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.
- 4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
- 5. When auto active test mode is actuated, horn chirps once.
- 6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

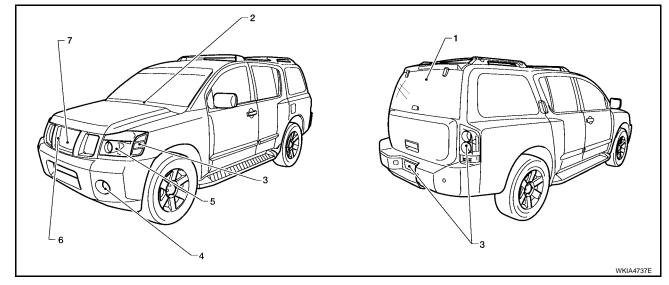
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform <u>BL-26, "Door Switch Check"</u> when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

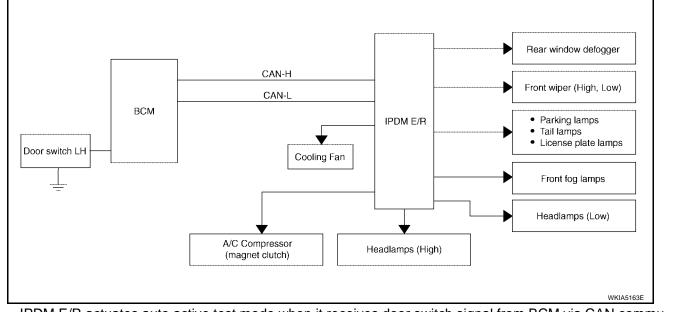
• When auto active test mode is actuated, the following seven steps are repeated three times.



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tem Number	Test Item	Operation Time/Frequency	
1	Rear window defogger	10 seconds	
2	Front wipers	LOW 5 seconds then HIGH 5 seconds	
3	Tail, license, and parking lamps	10 seconds	
4	Front fog lamps	10 seconds	
5	Headlamps	Low on for 10 seconds. High on-off five times.	
6	A/C compressor (magnetic clutch)	ON-OFF 5 times	
7	Cooling fan	10 seconds	

Concept of Auto Active Test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause	
		YES	BCM signal input circuit	
	Perform auto active		Rear window defogger relay	
Rear window defogger	test. Does rear win-		 Open circuit of rear window defogger 	
does not operate.	dow defogger oper-	NO	IPDM E/R malfunction	
	ate?		Harness or connector malfunction between IPDM E/R and rear window defogger	
	Perform auto active test. Does system in question operate?	YES	BCM signal input system	
Any of front wipers, tail		NO	Lamp/wiper motor malfunction	
and parking lamps, front fog lamps, and head-			 Lamp/wiper motor ground circuit malfunction 	
lamps (Hi, Lo) do not operate.			 Harness/connector malfunction between IPDM E/R and system in question 	
			• IPDM E/R (integrated relay) malfunction	

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Symptom	Inspection conte	nts	Possible cause
	Perform auto active	YES	 BCM signal input circuit CAN communication signal between BCM and ECM CAN communication signal between ECM and IPDM E/R
A/C compressor does not operate.	test. Does magnetic clutch operate?	NO	 Magnetic clutch malfunction Harness/connector malfunction between IPDM E/R and magnetic clutch IPDM E/R (integrated relay) malfunction
		YES	 ECM signal input circuit CAN communication signal between ECM and IPDM E/R
Cooling fan does not test	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 blink?	YES	 Harness/connector malfunction between IPDM E/R and oil pressure switch Oil pressure switch malfunction IPDM E/R
		NO	CAN communication signal between BCM and combination meter Combination meter

Terminals and Reference Values for IPDM E/R

EKS00J4X

					Measuring condition	
Terminal	Wire color	Signal name	Signal input/ output	Igni- tion switch	Operation or condition	Reference value (Approx.)
1	B/Y	Battery power supply	Input	OFF	—	Battery voltage
2	R	Battery power supply	Input	OFF	-	Battery voltage
3	BR	ECM relay	Output		Ignition switch ON or START	Battery voltage
3	DR	ECIMITEIAy	Output		Ignition switch OFF or ACC	0V
4	W/L	ECM relay	Output		Ignition switch ON or START	Battery voltage
4	VV/L	EGMITEIAy	Output		Ignition switch OFF or ACC	0V
6	6 L Throttle control motor relay	Output		Ignition switch ON or START	Battery voltage	
0		relay	Output		Ignition switch OFF or ACC	0V
7	7	ECM relay control	Input		Ignition switch ON or START	0V
1	W/B	ECIM relay control			Ignition switch OFF or ACC	Battery voltage
8	R/B	R/B Fuse 54	Output	ut —	Ignition switch ON or START	Battery voltage
0	N/D	Fuse 54	Output		Ignition switch OFF or ACC	0V
10	G	Daytime light relay	Output	ON	Daytime light system active	0V
10	G	control	Output	ON	Daytime light system inactive	Battery voltage
11			ON or	A/C switch ON or defrost A/C switch	Battery voltage	
11 Y/B A/C compressor	A/C complessor	Output	START	A/C switch OFF or defrost A/ C switch	0V	
12	L/W	Ignition switch sup-	Input		OFF or ACC	0V
١Z	L/VV	plied power	Input		ON or START	Battery voltage
13	B/Y		Output		Ignition switch ON or START	Battery voltage
13	B/ ĭ	Fuel pump relay	Output		Ignition switch OFF or ACC	0V

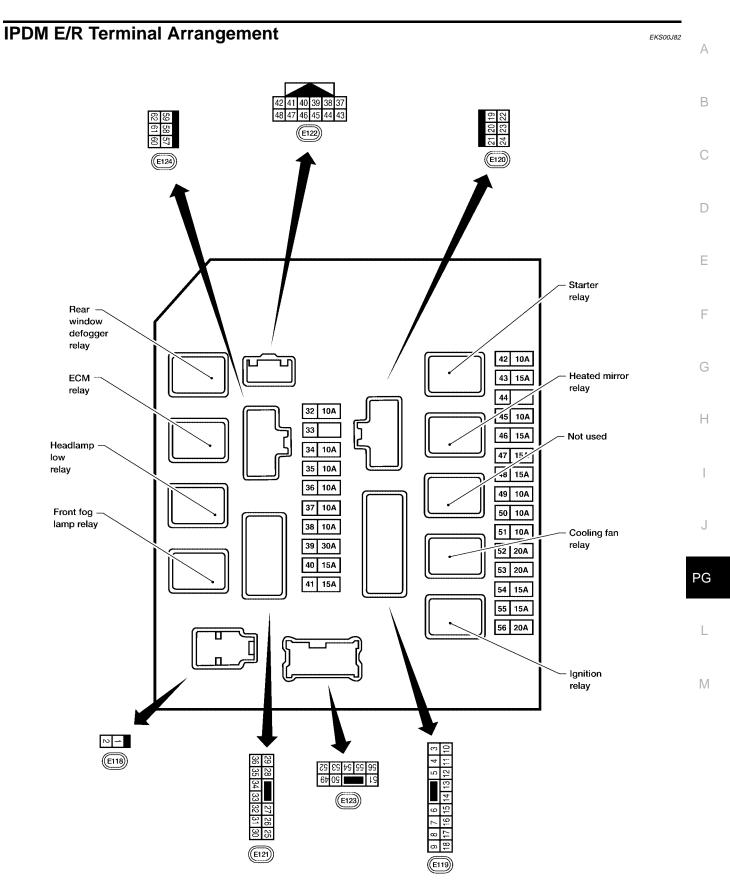
					Measuring con	dition		_
Terminal	Wire color	Signal name	Signal input/ output	lgni- tion switch	Operation or condition		Reference value (Approx.)	E
14	Y/R	Fuse 49	Output		Ignition switch	ON or START	Battery voltage	
14	1/K	ruse 49	Output		Ignition switch	OFF or ACC	0V	_
15	LG/B	Fuse 50	Output		Ignition switch	ON or START	Battery voltage	(
15	LG/B	Fuse 50	Output		Ignition switch	OFF or ACC	0V	_
40	0	Fuse 51	Output		Ignition switch	ON or START	Battery voltage	[
16	G	Fuse 51	Output	_	Ignition switch	OFF or ACC	0V	_ `
47	14/	Fires 55	Outrast		Ignition switch	ON or START	Battery voltage	_
17	W	Fuse 55	Output	_	Ignition switch	OFF or ACC	0V	_
19	W/R	Starter motor	Output	START	-	_	Battery voltage	_
		Ignition switch sup-			OFF or ACC		0V	_
21	BR	plied power	Input	—	START		Battery voltage	
22	G	Battery power supply	Output	OFF	-	_	Battery voltage	-
00		Door mirror defogger	Outrast		When rear def ON	ogger switch is	Battery voltage	(
23	GR/W	output signal	Output		When raker de is OFF	fogger switch	٥V	-
24	L/B	Cooling for roloy	Output		Conditions cor fan operation	rect for cooling	Battery voltage	_
24	L/D	Cooling fan relay	Output	_	Conditions not cooling fan ope		0V	_
27	W/B	Fuse 38	Output		Ignition switch	ON or START	Battery voltage	_
21	VV/D	1 436 30	Output	_	Ignition switch	OFF or ACC	0V	_
30	W	Fuse 53	Output		Ignition switch	ON or START	Battery voltage	
30	vv	Fuse 55	Output		Ignition switch	OFF or ACC	0V	P
32		Wiper low speed sig-	Output	ON or	Wiper switch	OFF	Battery voltage	- 17
32	L	nal	Output	START	wiper switch	LO or INT	0V	
05	L /D	Wiper high speed sig-	Outrast	ON or		OFF, LO, INT	Battery voltage	_
35	L/B	nal	Output	START	Wiper switch	HI	0V	
38	В	Ground	Input		-	_	0V	-
39	L	CAN-L	_	ON	-	_	_	_
40	Р	CAN-H	_	ON	-	_	_	-
43	L/Y	Wiper auto stop signal	Input	ON or START	Wiper switch	OFF, LO, INT	Battery voltage	_
		Daytime light relay			Daytime light s	system active	0V	
44	BR	control	Input	ON	Daytime light s	system inactive	Battery voltage	_
45	G/W	Horn relay control	Input	ON	When door loc ated using key ON)*1		Battery voltage \rightarrow 0V	_
46		Fuel pump relay con-	lanut.		Ignition switch	ON or START	0V	
46	GR	trol	Input		Ignition switch	OFF or ACC	Battery voltage	-
47	_	Throttle control motor			Ignition switch	ON or START	٥V	_
47	0	relay control	Input	_	Ignition switch	OFF or ACC	Battery voltage	-

	Signal			Measuring con	dition		
Terminal	Wire color	Signal name	input/ output	lgni- tion switch	Operation	or condition	Reference value (Approx.)
		Startar ralay (inhihit		ONLor	Selector lever	in "P" or "N"	0V
48	B/R	Starter relay (inhibit switch)	Input	ON or START	Selector lever tion	any other posi-	Battery voltage
					Lighting	OFF	0V
49	R/L	Trailer tow relay	Output	ON	switch must be in the 1st position	ON	Battery voltage
					Lighting	OFF	0V
50	W/R	Front fog lamp (LH)	Output	ON or START	switch must be in the 2nd position (LOW beam is ON) and the front fog lamp switch	ON	Battery voltage
					Lighting	OFF	0V
51	W/R	Front fog lamp (RH)	Output	ON or START	switch must be in the 2nd position (LOW beam is ON) and the front fog lamp switch	ON	Battery voltage
52	L	LH low beam head- lamp	Output	_	Lighting switch in 2nd position		Battery voltage
54	R/Y	RH low beam head- lamp	Output	_	Lighting switch	in 2nd position	Battery voltage
55	G	LH high beam head- lamp	Output	_	Lighting switch and placed in I position	in 2nd position HIGH or PASS	Battery voltage
56	L/W*2 Y*3	LH high beam head- lamp	Output		Lighting switch and placed in I position	in 2nd position HIGH or PASS	Battery voltage
	F ."	Parking, license, and	0 <i>i i</i>	<u></u>	Lighting	OFF	0V
57	R/L	tail lamp	Output	ON	switch 1st position	ON	Battery voltage
59	В	Ground	Input		-		0V
60	B/W	Rear window defog- ger relay	Output	ON or START	Rear defogger		Battery voltage
		gerielay			Rear defogger		0V
61	BR	Fuse 32	Output	_	Ignition switch		Battery voltage
					Ignition switch	OFF of ACC	0V

*1: When horn reminder is ON

*2: L/W is for U.S.A.

*3: Y is for Canada



WKIA5852E

IPDM E/R Power/Ground Circuit Inspection

1. FUSE AND FUSIBLE LINK INSPECTION

EKS00J83

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	a, c, d

OK or NG

OK >> GO TO 2.

NG >> Replace fuse or fusible link.

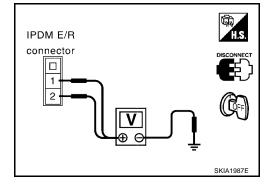
2. POWER CIRCUIT INSPECTION

- 1. Disconnect IPDM E/R harness connector E118.
- 2. Check voltage between IPDM E/R harness connector E118 terminals 1, 2 and ground.

Battery voltage should exist.

OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace IPDM E/R power circuit harness.



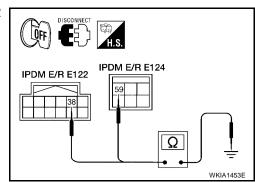
3. GROUND CIRCUIT INSPECTION

- 1. Disconnect IPDM E/R harness connectors E122 and E124.
- 2. Check continuity between IPDM E/R harness connector E122 terminal 38, and E124 terminal 59 and ground.

Continuity should exist.

OK or NG

- OK >> Inspection End.
- NG >> Repair or replace IPDM E/R ground circuit harness.



Inspection with CONSULT-II (Self-Diagnosis)

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.
- 3. Check display content in self-diagnosis results.

	CONSULT-II	TIME		Dotails of diagnosis result	
CONSULT-II Display	display code	CRNT	PAST	Details of diagnosis result	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	_	_	—	No malfunction	
CAN COMM CIRC	U1000	x	x	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-44, "TROUBLE DIAGNOSIS"</u>.

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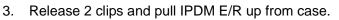
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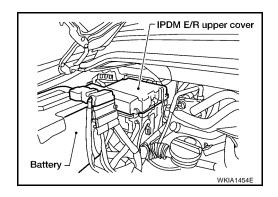
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Removal and Installation of IPDM E/R REMOVAL

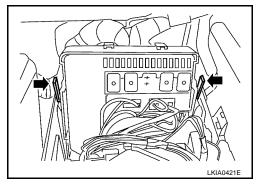
- 1. Disconnect negative battery cable.
- 2. Remove IPDM E/R upper cover.



4. Disconnect IPDM E/R connectors and remove the IPDM E/R.



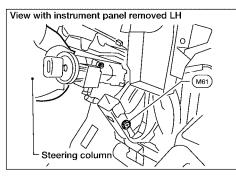
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INSTALLATION

Installation is in the reverse order of removal.

GROUND CIRCUIT Ground Distribution MAIN HARNESS



		CONNECTOR NUMBER	CONNECT TO
		M5	Illumination control switch
		(M20)	BCM (Terminal No. 67)
		(M21)	NATS antenna amp
		(M22)	Data link connector (Terminal No. 4)
Body ground		(M22)	Data link connector (Terminal No. 5)
•		(M24)	Combination meter (Terminal No. 17)
		(M28)	Combination switch (Terminal No. 12)
•		(M35)	Air bag diagnosis sensor unit
+		(M47)	Steering angle sensor
•		(M112)	BOSE speaker amp (Terminal No. 17)
		(M122)	Variable blower control
•		(M139)	Diode-1
	M75 0101 Front door RH harness	(0107)	Door mirror RH (door mirror defogger)
	Console sub-harness	(M203)	A/T device (Terminal No. 2)
		(M203)	A/T device (Terminal No. 8)

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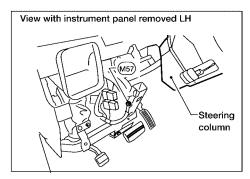
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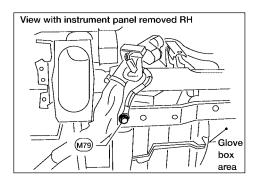
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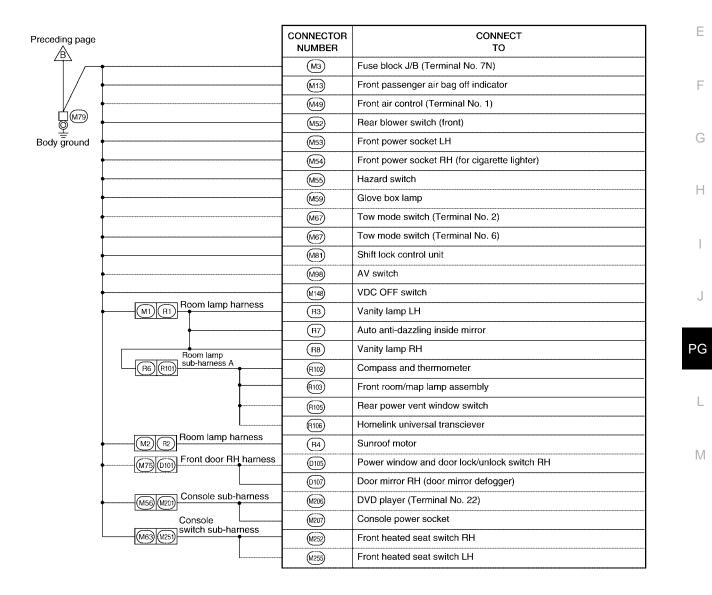


Preceding page	CONNECTOR NUMBER	CONNECT TO
	M14	Pedal adjusting control unit
	- M34	Automatic drive positioner (Terminal No. 40)
	- M34)	Automatic drive positioner (Terminal No. 48)
Q(M57)	- M76	Electric brake (pre-wiring)
Body ground	M87	Rear power vent window relay (open)
•	(M89)	Rear power vent window relay (close)
•	(M92)	Power liftgate switch
•	M93	Display unit (Terminal No. 1)
•	(M94)	Display control unit (Terminal No. 3)
•	(M96)	Pedal adjustable switch
•	- M116)	Rear sonar system OFF switch (Terminal No. 2)
•	- M116	Rear sonar system OFF switch (Terminal No. 6)
MB D2 Front door LH harness	D4	Door mirror LH (door mirror defogger)
	D5	Seat memory switch
	D8	Main power window and door lock/unlock switch (Terminal No. 17)
	D10	Door mirror remote control switch
	(D14)	Front door lock assembly LH

B Next page

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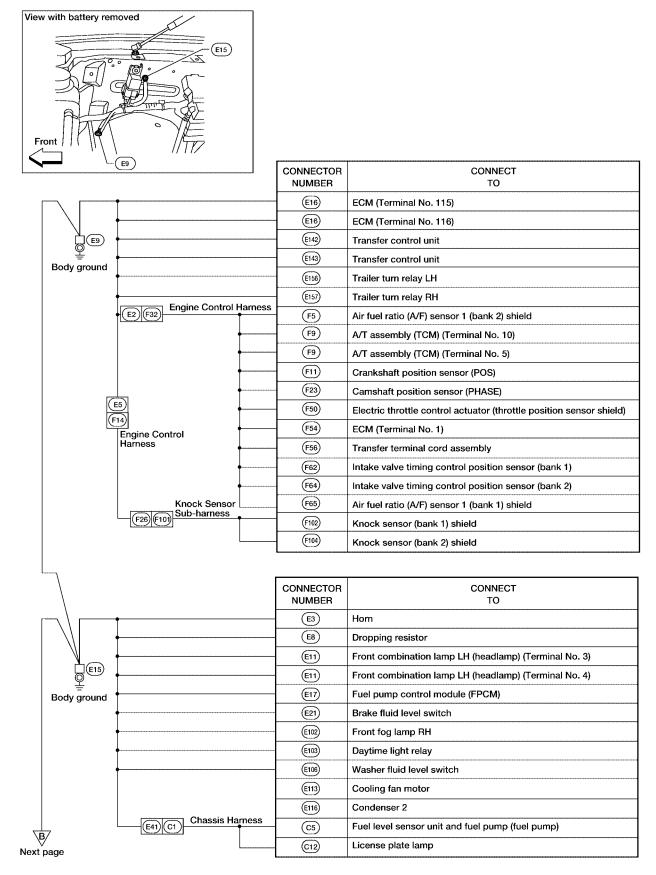
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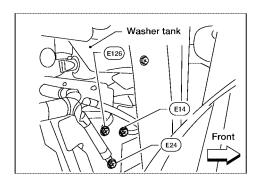
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ENGINE ROOM HARNESS



WKIA5757E



ng page	CONNECTOR NUMBER	CONNECT TO
	E46	Transfer shift high relay (Terminal No. 1)
	E46	Transfer shift high relay (Terminal No. 4)
	(E47)	Transfer shift low relay (Terminal No. 1)
	E47)	Transfer shift low relay (Terminal No. 4)
	(E130)	Compressor motor relay
	(E140)	Trailer tow relay 2
	E142)	Transfer control unit (Terminal No. 3)
E2 F32 Engine Control Harness	(F55)	ATP switch
•	(F57)	Transfer motor
	(F58)	Transfer control device (actuator position switch) (Terminal No. 22)
	(F59)	Wait detection switch
	(F60)	Neutral-4LO switch
E41 C1 Chassis Harness	C2	Trailer
•	(0)	Suspension air compressor (Terminal No. 1)
	(C9)	Suspension air compressor (Terminal No. 3)
	CONNECTOR	
	NUMBER	CONNECT TO
	E107	Front combination lamp RH (headlamp) (Terminal No. 3)
/	(E107)	Front combination lamp RH (headlamp) (Terminal No. 4)
	E23	Front wiper motor
(E24)	(E101)	Front fog lamp LH
~ ~		
ground	(E122)	IPDM E/R

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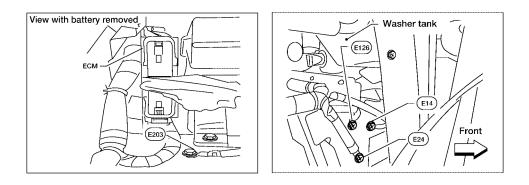
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WKIA4743E



CONNECTOR NUMBER	CONNECT TO
E206	Generator

Body ground

	CONNECTOR NUMBER	CONNECT TO
ſ	E125	ABS actuator and electric unit (control unit) (Terminal No. 16)
	E125	ABS actuator and electric unit (control unit) (Terminal No. 47)
坚 Body ground		

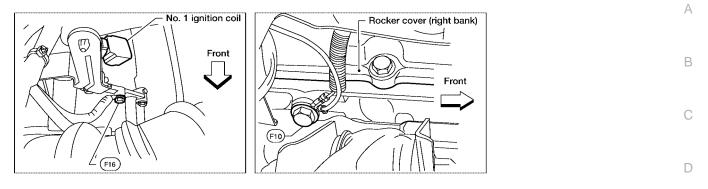
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    CONNECTOR
NUMBER
    CONNECT
TO

    E4
    Crash zone sensor (shield wire)
```



WKIA5758E

ENGINE CONTROL HARNESS



		CONNECTOR NUMBER	CONNECT TO
		(F6)	Ignition coil No. 2 (with power transistor)
		F 7	Ignition coil No. 4 (with power transistor)
		F8	Ignition coil No. 6 (with power transistor)
Engine		(F21)	Condenser-1
Engine		(F47)	Ignition coil No. 1 (with power transistor)
ground		(F48)	Ignition coil No. 3 (with power transistor)
		(F49)	Ignition coil No. 5 (with power transistor)
		(F51)	Ignition coil No. 7 (with power transistor)
	l	(F52)	Ignition coil No. 8 (with power transistor)



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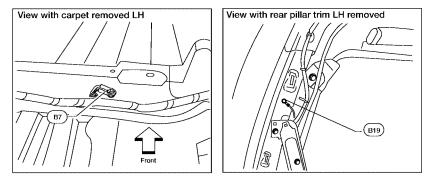
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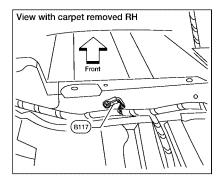
BODY HARNESS

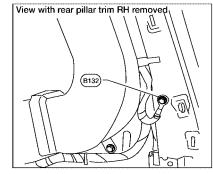


		CONNECTOR NUMBER	CONNECT TO
	•	B3	Suspension control unit (Terminal No. 16)
		(B35)	Rear combination lamp LH (turn signal)
		B55	Back door control unit (Terminal No. 1)
<u> </u>		B55	Back door control unit (Terminal No. 2)
Body ground	•	(B56)	Sonar control unit
		B63)	Back door close switch
		(B70)	Rear combination lamp LH (stop/tail lamp)
	•	(B71)	Back-up lamp LH
		(B72)	Subwoofer
		(B73)	Rear view camera control unit
	Rear door	(B74)	Seat belt buckle pre-tensioner assembly LH
	B6 D201 LH harness Back door No. 2	D203	Rear power window switch LH
	B48 0401 LH harness Front seat	D403	High mounted stop lamp
	B37 P1 LH harness	(P2)	Driver seat control unit (signal ground) (Terminal No. 32)
	•	(P3)	Driver seat control unit (power ground) (Terminal No. 48)
		(P8)	Power seat switch LH (Terminal No. 3)
	Back door No. 2 LH Back door	(P9)	Front seat heater LH
	B4B 0401 harness 0405 0501 LH harness	(D502)	Back door switch
_		(D503)	Back door latch
[((B19)	(D504)	Rear view camera
Body	± around		

Body ground

BODY NO. 2 HARNESS





		CONNECTOR NUMBER	CONNECT TO
		(B105)	Rear combination lamp RH (turn signal)
	•	B118	Front seat heater RH
		(B119)	Condenser-3
(B117)	•	(B120)	Condenser-4
<u>ě</u>	•	B130	Rear combination lamp RH (stop/tail lamp)
Body ground	•	(B135)	Back-up lamp RH
	•	(B138)	Rear cargo power socket
	•	(B151)	NAVI control unit (Terminal No. 1)
	Room lamp	(B157)	Seatbelt buckle pre-tensioner assembly RH
	B146 R201 sub-harness B	(R202)	Video monitor
		(R203)	Personal lamp 2nd row
		(R204)	Rear audio remote control unit (Terminal No. 15)
	•	(R205)	Personal lamp 3rd row
	Back door No. 2 RH Back door	(R209)	Rear air control switch
	B140 0601 harness 0609 0702 RH harness	D704)	Rear wiper motor (Terminal No. 3)
	•	D704)	Rear wiper motor (Terminal No. 5)
	Front seat	D706	Back door handle switch
	B154 Pto3 RH harness Bear door	(P108)	Power seat switch RH
	B106 D301 RH harness	D303	Rear power window switch RH
	Front seat RH harness	CONNECTOR NUMBER	CONNECT TO
	(B130) (P151)	(P152)	Occupant classification system control unit
	B132		

≚ Body ground

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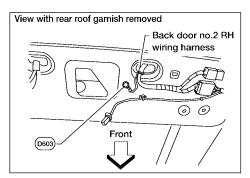
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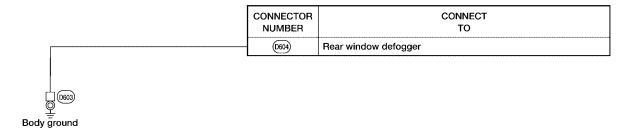
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BACK DOOR NO. 2 RH HARNESS





WKIA1461E

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 View (Engine Compartment)
- Engine Room Harness RH View (Engine Compartment)
- **Engine Control Harness**
- Chassis Harness and Rear Sonar Sensor Sub-harness
- **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.

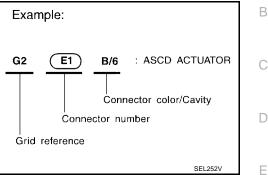
Connector type	Water p	proof type	Standa	ard type	
Connector type	Male	Female	Male	Female	
Cavity: 4 or LessRelay connector	Ø	- CD	Ø		
Cavity: From 5 to 8	\bigcirc		\bigcirc		J
Cavity: 9 or More	\bigcirc	\bigcirc	\bigcirc	\bigcirc	
Ground terminal etc.			Ø	P	PG

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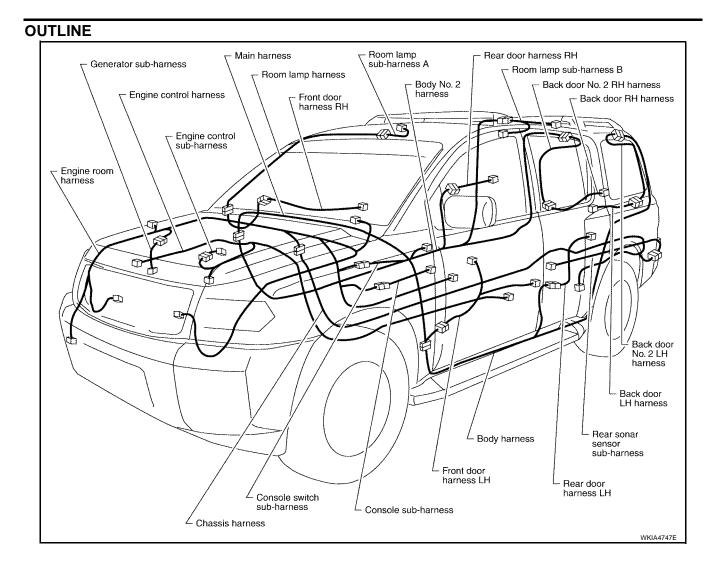
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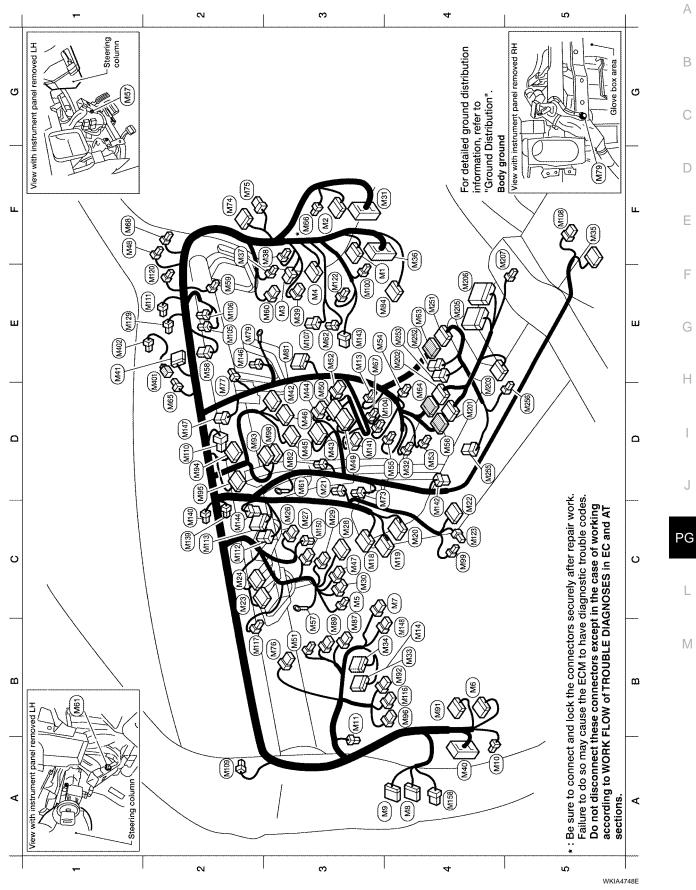
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	: To (RI	-		W/18	: Front air control	E2	(W105)	Y/2	: Front passenger air bag module
	: To (R2)		M51	L/4	: Trailer tow relay 1	Ы	(M100	0/2	: Front passenger air bag module
	: Fuse block (J/B)	Ш Ш	(M52	W/8	: Rear blower switch (front)	ដ	(internet internet in	BR/6	: Front blower motor relay
	: Fuse block (J/B)	5	W23	B/2	: Front power socket LH	F5	(W100	B/6	: Yaw rate/side decel G-sensor
	: Illumination control switch	E E	(M54	B/2	: Front power socket RH	A2	60 FW	BR/2	: Front tweeter LH
	: To (E10)				(for cigarette lighter)	D2	(HII)	BR/2	: Center speaker (with BOSE)
	: To (D2)	6 2	M55	W/8	: Hazard switch	E2	(H)	BR/2	: Front tweeter RH
	: To Di	D4		W/16	: To (M201	C2	(M112)	W/8	: BOSE speaker amp.
	: To (E29)	B3	(MS7)	ı	: Body ground	ö	(LIM	L/24	: BOSE speaker amp.
	: Parking brake switch	E2	(M58)	B/6	: Intake door motor	B4	(M116)	GR/8	: Rear sonar system OFF switch
	: Front passenger air bag off indicator	E	- 69W	BR/2	: Glove box lamp	B2	(11)	B/2	: Sonar buzzer
	: Pedal adjusting control unit	E3	(Meo	W/6	: Fuse block (J/B)	E2	(W120)	W/4	: Remote keyless entry receiver
	: BCM (body control module)	E E	(Me)	ı	: Body ground	E3	(M122)	W/4	: Variable blower control (with ATC)
	: BCM (body control module)	E	(M62	B/2	: Front blower motor	5	M123	W/2	: Tire pressure warning check connector
	: BCM (body control module)	Е4 С	(M63)	BR/20	: To (M251)	Π	(M129	BR/1	: Satellite radio tuner (with Sirius satellite radio)
	: NATS antenna amplifier	6 7	(N64)	BR/24	: To (M202)	μ	(M129	۲/۱	: Satellite radio tuner (with XM satellite radio)
9	: Data link connector	D2	M65	W/4	: To (M401)	ö	(ELW)	B/2	: Diode-1
	: Combination meter	F3 *	Mee	B/1	: To E33	ö	(M140)	B/2	: Diode-2
	: Combination meter	E3	(M67	GR/8	: Tow mode switch	B	(M141)	W/8	: 4WD shift switch
	: Ignition switch	F2	M68	BR/1	: To (M350)(with Sirius satellite radio)	9 2	M142	B/6	: Mode door motor
	: Key switch and key lock solenoid	F2	(M68)	۲/1	: To (M350)(with XM satellite radio)	£	M143	B/6	: Air mix door motor (passenger)
	: Combination switch	ñ		BR/6	: Back-up lamp relay	C C	M144	B/6	: Defroster door motor
	: Combination switch (spiral cable)	F2	M74	BR/20	: To (5102)	E2	M146	GR/2	: Intake sensor
	: Combination switch (spiral cable)	E2	GLW	W/10	: To (pto)	D2	(W142)	B/6	: Air mix door motor (driver) (with ATC)
	: To (E152)	B3	(M76	9/N	: Electric brake (pre-wiring)	D2	(H147)	B/6	: Air mix door motor (front) (with MTC)
	: In-vehicle sensor	E3		Y/4	: Front passenger air bag module	B4	M148	GR/6	: VDC off switch
	: Automatic drive positioner control unit				(service replacement)	ទ	(M150)	W/2	: Ignition key hole illumination
	: Automatic drive positioner control unit	E	(62M)	,	: Body ground	A 4	(M158)	01/W	: To 📴
	: Air bag diagnosis sensor unit	E	Legy	GR/10	: Shift lock control unit	Con	sole su	Console sub-harness	SS
	: To (B149)	E B	(M82)	GR/2	: Circuit breaker-2	D4	(NZO)	91/W	: To M56
	: Fuse block (J/B)	Е Т	(MB)	W/16	: To (B101)	Е4	(M202	BR/24	: To (M64)
	: Fuse block (J/B)	B3	(M87	B/5	: Rear power vent window relay (open)	D4	(N203	W/12	: A/T device
	: Fuse block (J/B)	B3	- @w	B/5	: Rear power vent window	E4	M205	GR/16	: DVD player
	: To (B69)		I		relay (close)	E4	(N200	L/16	: DVD player
	: Satellite radio tuner or pre-wiring for	B4	Lew)	W/16	: To E26	E5	(VZO)	B/2	: Console power socket
	satellite radio	B4	(Sem	GR/6	: Power liftgate switch	Console		ritch sut	switch sub-harness
ő	: Audio unit	D2	- (60)	W/24	: Display unit	Ε4	M251	BR/20	: To (M63)
	: Audio unit	D2	(194	W/24	: Display control unit (with NAVI)	E4	(M252)	BR/6	: Front heated seat switch RH
	: Audio unit	S	Sem)	W/32	: Display control unit (with NAVI)	E4	M253	GR/6	: VDC OFF switch
	: Audio unit	B4	96W)	BR/6	: Pedal adjusting switch	54	M255	BR/6	: Front heated seat switch LH
	: Audio unit	D3	- W	W/24	: AV switch	D5	M256	B/2	: A/T device illumination
	: Steering angle sensor	04 10) (66W)	BR/2	: Foot lamp LH	Opti	cal sen	sor sub	Optical sensor sub-harness
	: To (M501)	ដ	(OFM)	BR/2	: Foot lamp RH	D2	(M401	W/4	: To (M65)
	: Front air control	D4	-)(10 10	W/4	: Auxiliary in jack (audio)	E2	(M402)	B/4	: Optical sensor *: Refer to previous page
		I)		

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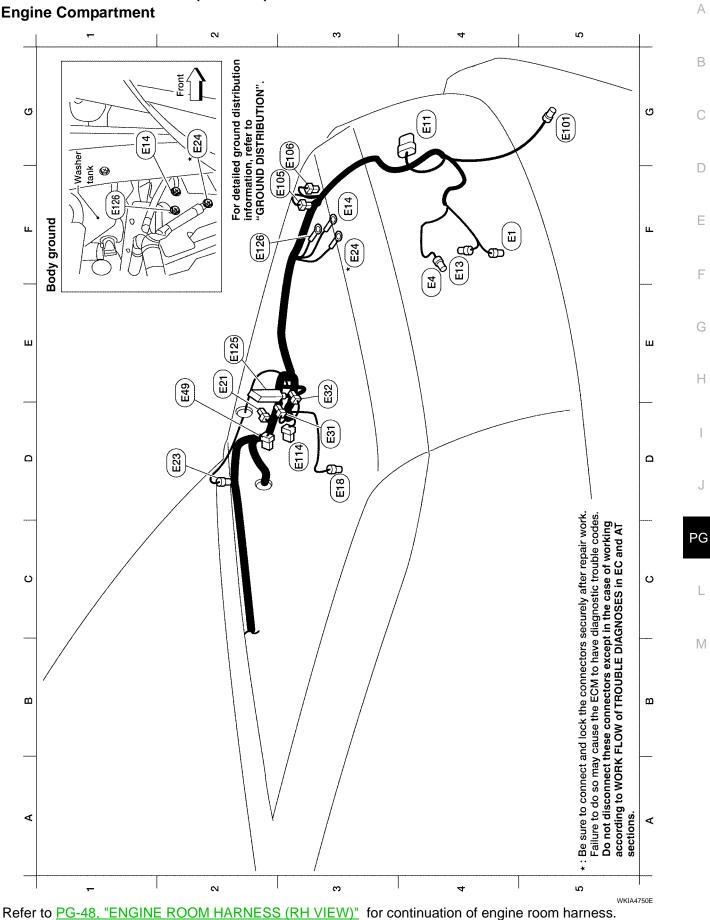
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ENGINE ROOM HARNESS (LH VIEW) Engine Compartment

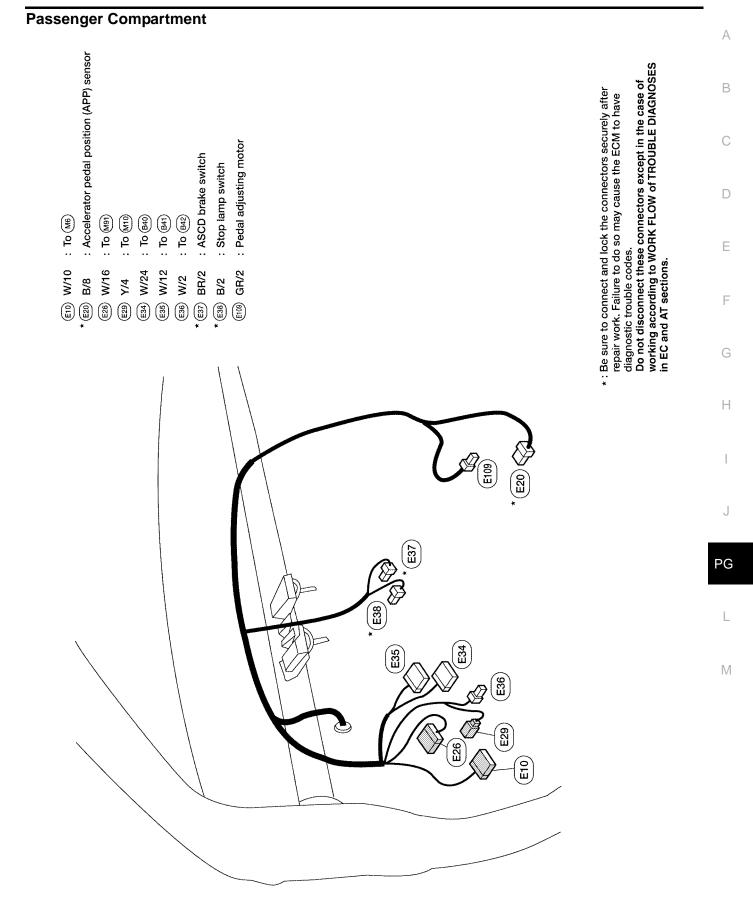


PG-45

WKIA4751E

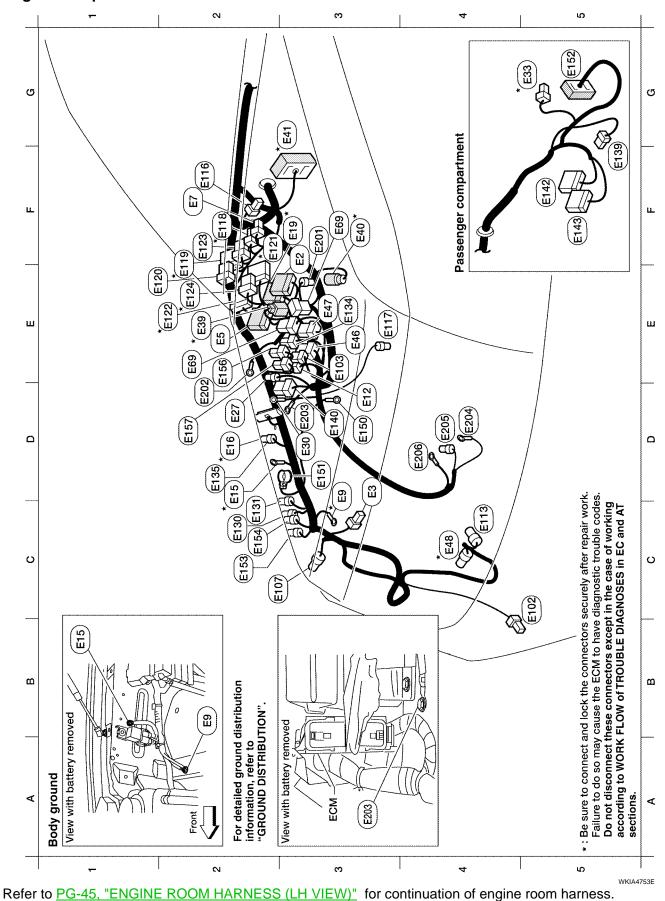
ABS actuator and electric unit (control unit) : Front and rear washer motor : Front combination lamp LH : Washer fluid level switch : Brake fluid level switch : Front wheel sensor LH : Front pressure sensor : Rear pressure sensor : Delta stroke sensor : Crash zone sensor : Front wiper motor : Front fog lamp LH : Ambient sensor 2 : Ambient sensor : Active booster Body ground Body ground : Body ground GR/2 GR/2 GR/2 GR/2 GR/6 GR/3 GR/3 BR/2 BR/2 B/47 B/6 ۲/2 B/6 B/2 B/6 • . ı * E24 (E)
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 (E31 (E23 E3 (E49 (E105 (E100 (E114 (iii) E125 E126 G3 E2 F2

 * : 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.

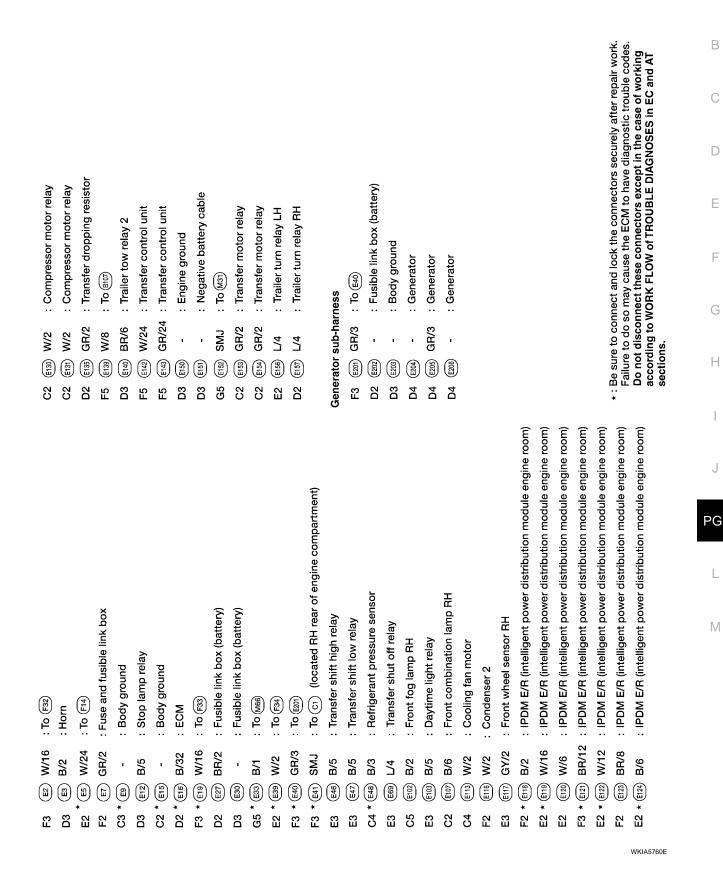


WKIA4752E

ENGINE ROOM HARNESS (RH VIEW) Engine Compartment



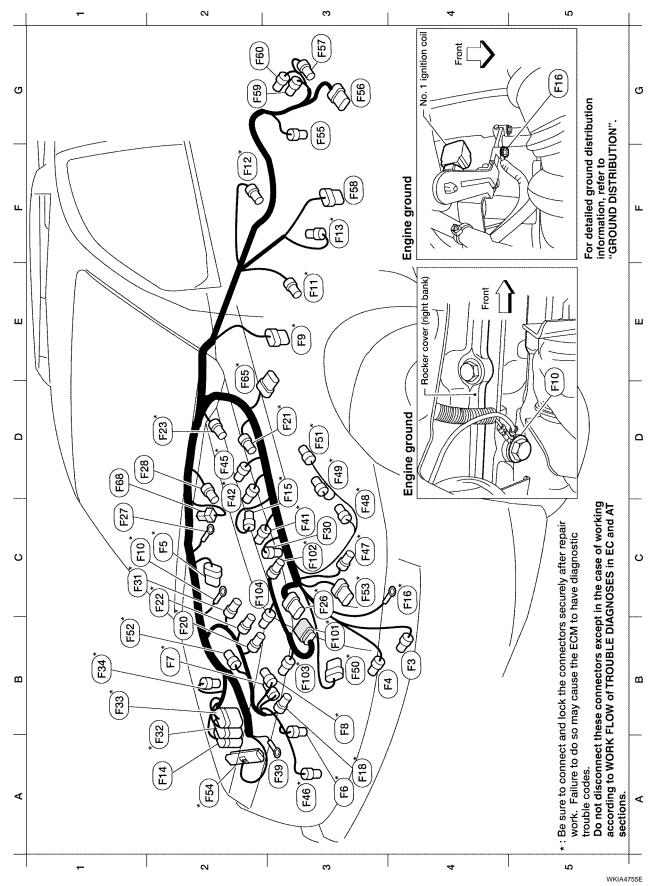
Revision: July 2007



2007 Armada

A





: Ignition coil No. 3 (with power transistor)	: Ignition coil No. 5 (with power transistor)	: Electric throttle control actuator	: Ignition coil No. 7 (with power transistor)	: Ignition coil No. 8 (with power transistor)	: Mass air flow sensor	: ECM	: ATP switch (4WD only)	: Transfer terminal cord assembly (4WD only)	: Transfer motor (4WD only)	: Transfer control device (4WD only)	: Wait detection switch (4WD only)	: Neutral-4LO switch (4WD only)	: Air fuel ratio (A/F) sensor 1 (bank 1)	: Water valve	ub-harness	: To F26	: Knock sensor (bank 1)	: Engine coolant temperature sensor	: Knock sensor (bank 2)										• • Re sure to connect and lock the connectors securaly after renair 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	
C3 * F48 GR/3	D3 * (F49) GR/3	B3 * (F50) B/6	D3 * (F51) GR/3	B1 * (F52) GR/3	C3 * (F53) B/6	A2 * (F54) B/81	G3 (F55) B/2	G3 (F36) B/8	G3 (F57) B/2	F3 (F58) GR/6	G2 (F39) B/2	G2 (F60) GR/2	D2 * (F65) B/6	D1 F68 B/2	Engine control sub-harness	B3 * F101 B/6	C3 * F102 B/2	B3 * F103 GR/2	C2 F104 B/2										+ · Be sure to c	Failure to do	Do not disc accordina to	sections.
: A/C compressor	: Oil pressure sensor	: Air fuel ratio (A/F) sensor 1 (bank 2)	: Ignition coil No. 2 (with power transistor)	: Ignition coil No. 4 (with power transistor)	: Ignition coil No. 6 (with power transistor)	: A/T assembly	: Engine ground	: Crankshaft position sensor (POS)	: Heated oxygen sensor 2 (bank 2)	: Heated oxygen sensor 2 (bank 1)	: To (E5)	: EVAP canister purge volume control solenoid valve	: Engine ground	: Fuel injector No. 2	: Fuel injector No. 4	: Condenser-1	: Fuel injector No. 6	: Camshaft position sensor (PHASE)	: To ^(FI0)	: Starter motor	: Starter motor	: Fuel injector No. 1	: Fuel injector No. 8	: To (E2)	: To ^(E19)	: To E3	: Fusible link box (battery)	: Fuel injector No. 3	: Fuel injector No. 5	: Fuel injector No. 7	: Power steering pressure sensor	: Ignition coil No. 1 (with power transistor)
B4 F3 B/1	B4 F4 B/3	C2 * (F5) B/6	A3 * (F6) GR/3	B2 * (F7) GR/3	A3 * (F8) GR/3	E3 F9 G/10	C1 * F10 -	E3 * (F1) B/3	F2 * F12) G/4	F3 * F13 G/4	A2 (F14) W/24	C3 * F15 L/2	C4 * F16 -	A3 * F18 GR/2	B2 * F20 GR/2	D3 * F21 GR/2	C2 * (F22) GR/2	D2 * F23 B/3	C3 * F26 B/6	C1 (F27) B/1	D2 (F28) GR/1	C3 * F30 GR/2	C1 * F31 GR/2	A2 * F32 W/16	B1 * F33 W/16	B1 * F34 W/2	A3 (F39) -	C3 * (F41) GR/2	C2 * F42) GR/2	D2 * (F45) GR/2	A3 * F46 B/3	C3 * (F47) GR/3

2007 Armada

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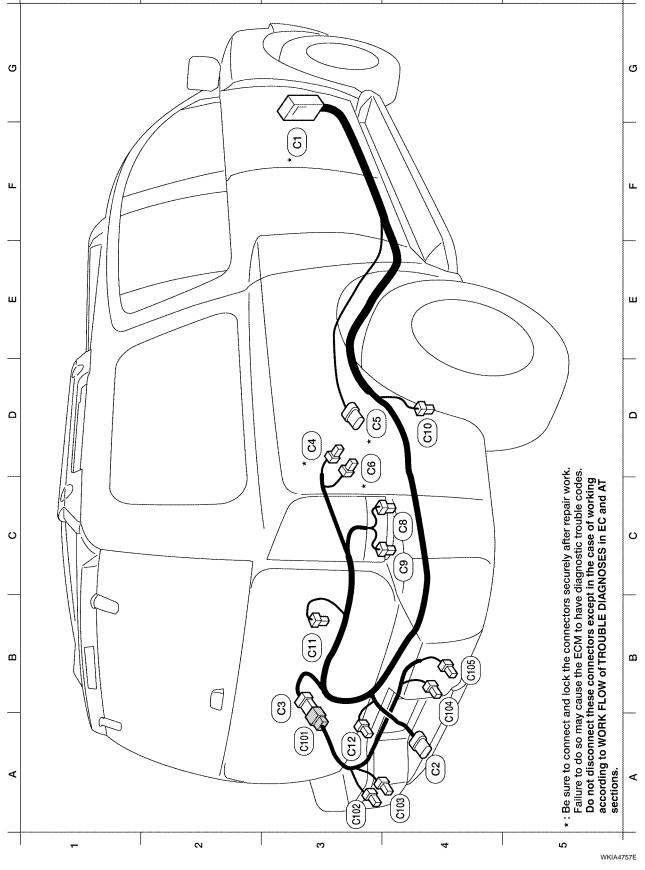
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CHASSIS HARNESS

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Revision: July 2007

PG-53

- : To (E_{41}) (located RH rear of engine compartment) : EVAP control system pressure sensor Fuel level sensor unit and fuel pump : EVAP canister vent control valve : Suspension air compressor Rear wheel sensor RH : Rear wheel sensor LH : License plate lamps : Height sensor Rear sonar sensor sub-harness : **To** : To (C10) : Trailer GR/3 GR/5 GR/6 GR/6 BR/2 BR/2 SMJ W/2 B/2 B/3 B/4 B/7 5 3 (C) * () * (i) 5 612 Ctot (8) (8) 8 (8) * 5 ខ **A**4 B ß 2 2 4 B3 A3 A3 £
 - A3 (Critic) GHVID : 10 (C3) A3 (Critic) B/3 : Rear sonar sensor LH outer
- A4 (100) B/3 : Rear sonar sensor LH inner B4 (100) B/3 : Rear sonar sensor RH inner
- B4
 (10)
 B/3
 : Rear sonar sensor RH inner

 B4
 (10)
 B/3
 : Rear sonar sensor RH outer

WKIA4758E

* : 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. А

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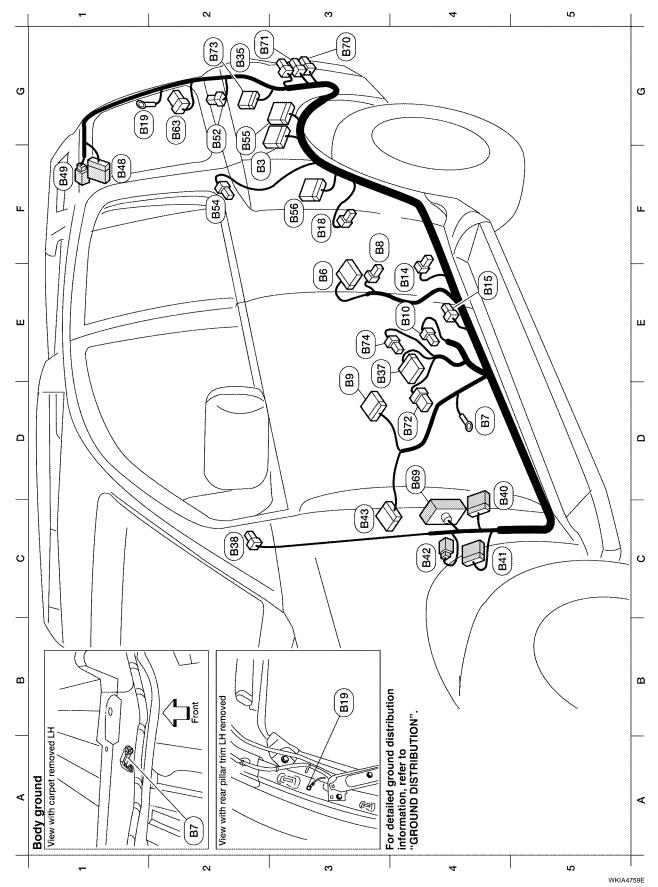
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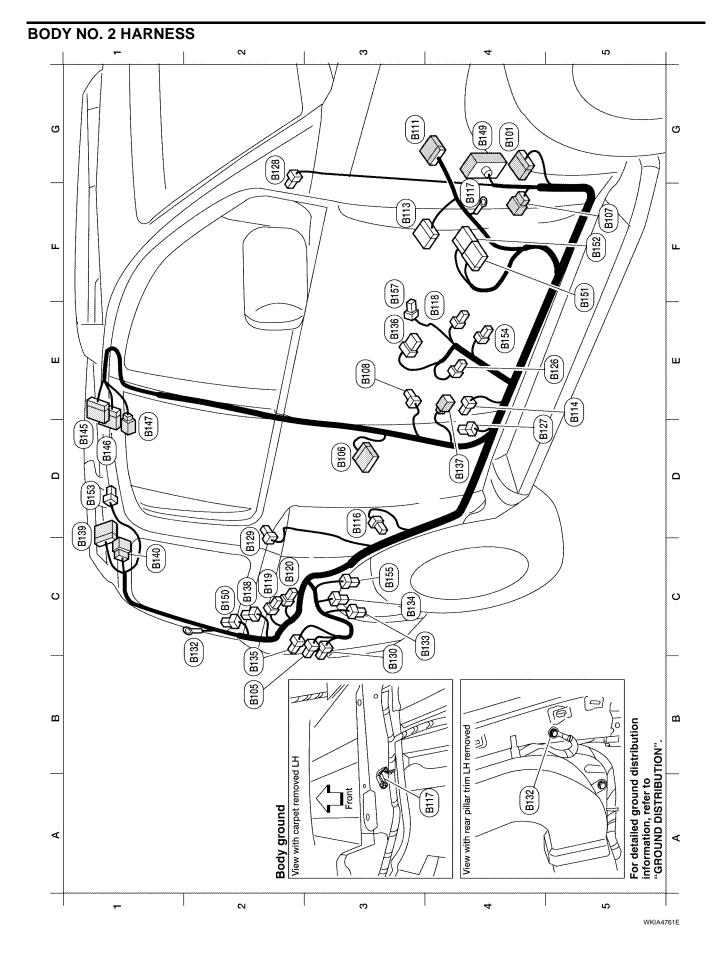
M

BODY HARNESS



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it oner nsor nsor nsor nsor ner signal) otor LH module (stop/tail) (stop/tail) ic system) if	L
 Suspension control unit To (20) Body ground Front door switch LH Front door switch LH Front door switch LH Front LH side air bag module Front LH seat belt pre-tensioner LH side air bag (satellite) sensor Rear door switch LH Body ground LH side front curtain air bag module To (Fi) To (Ei) To (Ei)	Μ
F2 83 80 W/16 D4 87 8 W/18 F3 80 W/3 W/16 F3 80 W/3 W/3 F4 87 W W/12 F3 80 W/3 W/3 F3 80 W/3 W/3 F4 81 W/4 W/3 F3 80 W/3 W/3 F3 80 W/3 W/3 F3 80 W/3 W/3 F4 80 W/3 W/3 F3 80 W/3 W/3 F4 80 W/3 W/3 F3 80 W/3 W/3 F4 80 W/3 W/3 F3 80 W/3 W/3 F4 80 W/3 W/3	

WKIA4760E



: Seat belt buckle pre-tensioner assembly RH : Rear power vent window motor RH : Air mix door motor (rear) : NAVI control unit : NAVI control unit : Cargo lamp : To M36 : To Pro W/40 W/32 SMJ C2 (8150) W/2 W/2 W/2 B/6 Y/4 F5 BISI G4 ^{B149} F5 (8152) D1 ^{B153} E4 8154 C3 (B155) F3 (8157) : Rear combination lamp RH (turn signal) : Rear combination lamp RH (stop/tail) : RH side front curtain air bag module RH side rear curtain air bag module : RH side air bag (satellite) sensor : Front RH seat belt pre-tensioner : Front RH side air bag module : Air bag diagnosis sensor unit Rear blower motor resistor : Rear cargo power socket : Front door switch RH : Rear door switch RH : Front seat heater RH : Belt tension sensor : Rear blower motor Back-up lamp RH Body ground : Condensor-3 : Condensor-4 Body ground : To Pist : To (M84) : To Reo : To (200) : To (200) : To (B43) : To (R200) : To (E139) : To 🞯 BR/24 W/16 W/16 W/18 W/12 W/16 Y/12 W/2 W/2 W/3 W/6 W/8 W/4 B/3 W/3 W/3 W/4 W/2 W/8 W/3 B/2 Y/2 Y/2 Y/2 Y/2 Y/2 B/3 B/2 ī . Biol (B105 (B100 (L) 8018 Bitt B113 (B114 B116 B118 (611B B120 B126 B127 B128 B129 (B130) B133 B134 B136 B136 (B137) B138 (E13) B140 B145 B146 B147 8117 (B132 ß ñ **F**4 8 8 S 8 2 ខ B2 4 8 5 B2 **F**5 ш 8 £ <u>Е</u>5 Б5 4 БZ B Б Е4 В δ 5 Б Б

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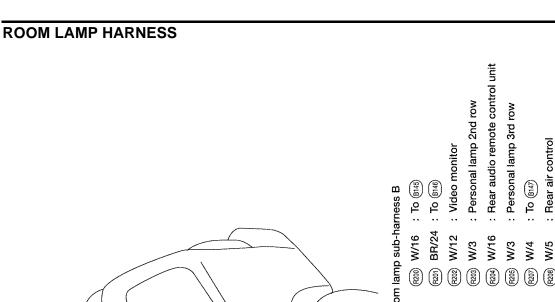
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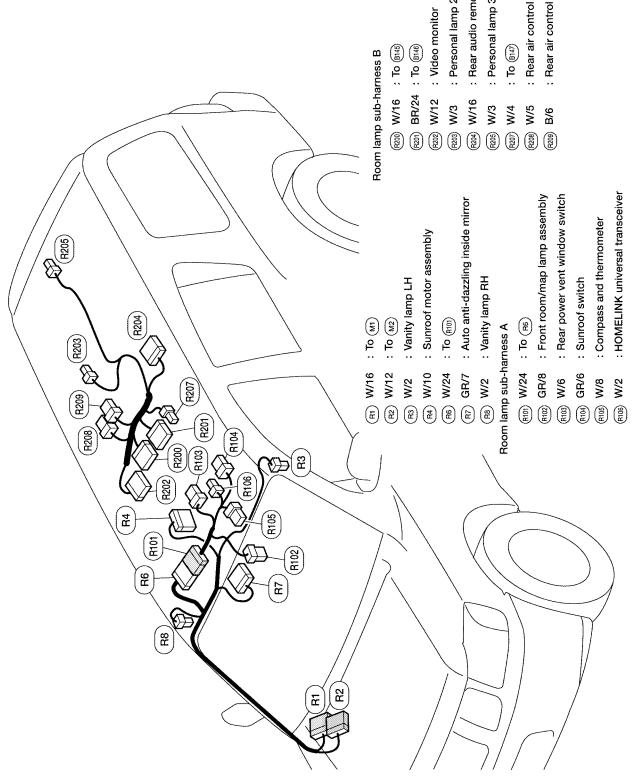
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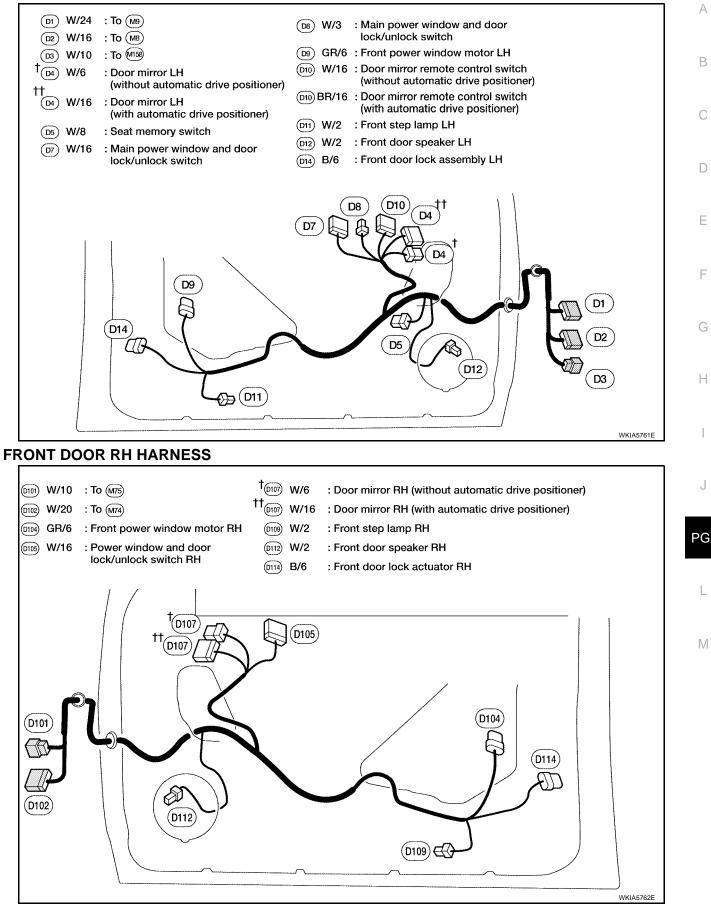
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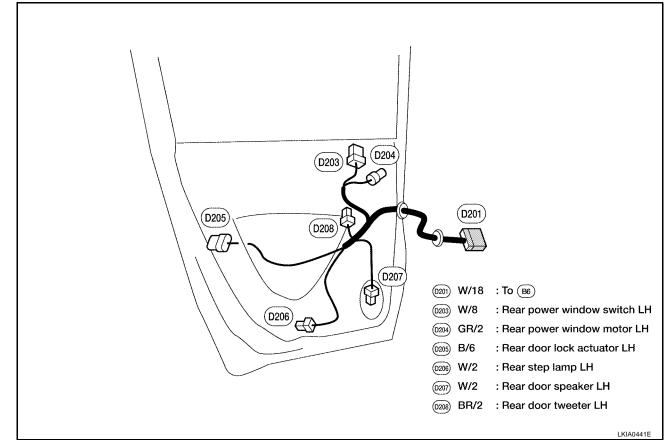


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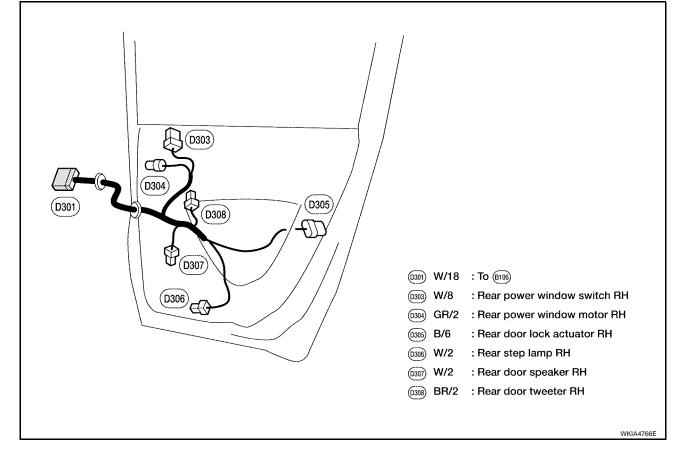
FRONT DOOR LH HARNESS



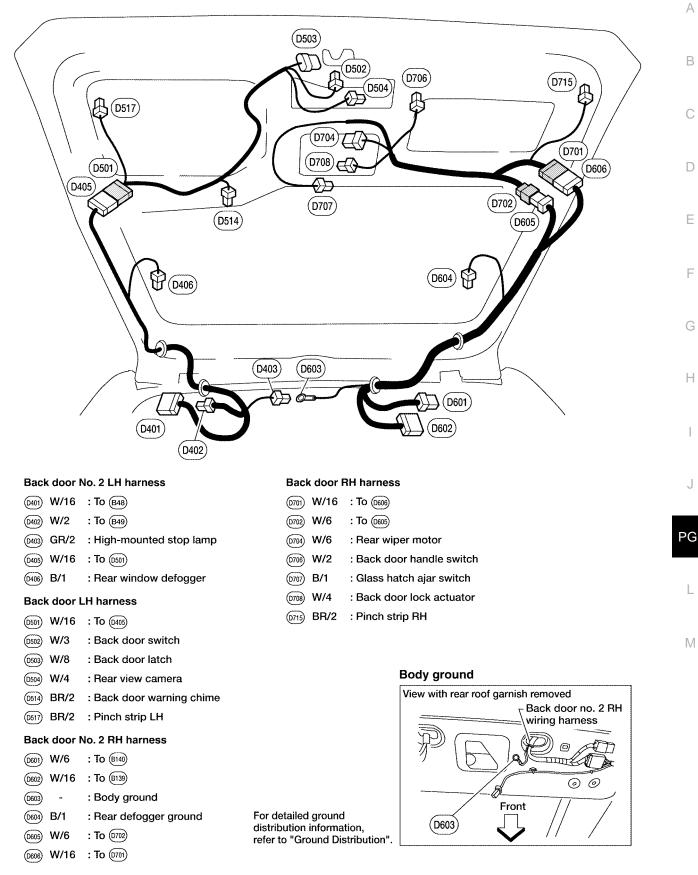
REAR DOOR LH HARNESS



REAR DOOR RH HARNESS



BACK DOOR HARNESS



WKIA4767E

Wiring Diagram Codes (Cell Codes)

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

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

Code	Section	Wiring Diagram Name
A/C,A	ATC	Auto Air Conditioner
A/SUSP	RSU	Rear Air Suspension
AF1B1	EC	Air Fuel Ratio (A/F) Sensor 1 (Bank 1)
AF1B2	EC	Air Fuel Ratio (A/F) Sensor 1 (Bank 2)
AF1HB1	EC	Air Fuel Ratio (A/F) Sensor 1 (Bank 1)
AF1HB2	EC	Air Fuel Ratio (A/F) Sensor 1 (Bank 2)
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASC/BS	EC	ASCD Brake Switch
ASC/SW	EC	ASCD Steering Switch
ASCBOF	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
A/T	AT	A/T Assembly
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUTO/DP	SE	Automatic Drive Positioner
AUTO/L	LT	Auto Light Control
B/CLOS	BL	Back Door Auto Closure System
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
COOL/F	EC	Cooling Fan Control
COMBSW	LT	Combination Switch
СОММ	AV	Audio Visual Communication System
COMPAS	DI	Compass and Thermometer
CUR/SE	EC	Current Sensor
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
DVD	AV	DVD Entertainment System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
FPCM	EC	Fuel Pump Control Module
F/PUMP	EC	Fuel Pump
FTS	AT	Fuel Tank Temperature Sensor
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Bank 1
FUELB2	EC	Fuel Injection System Bank 2

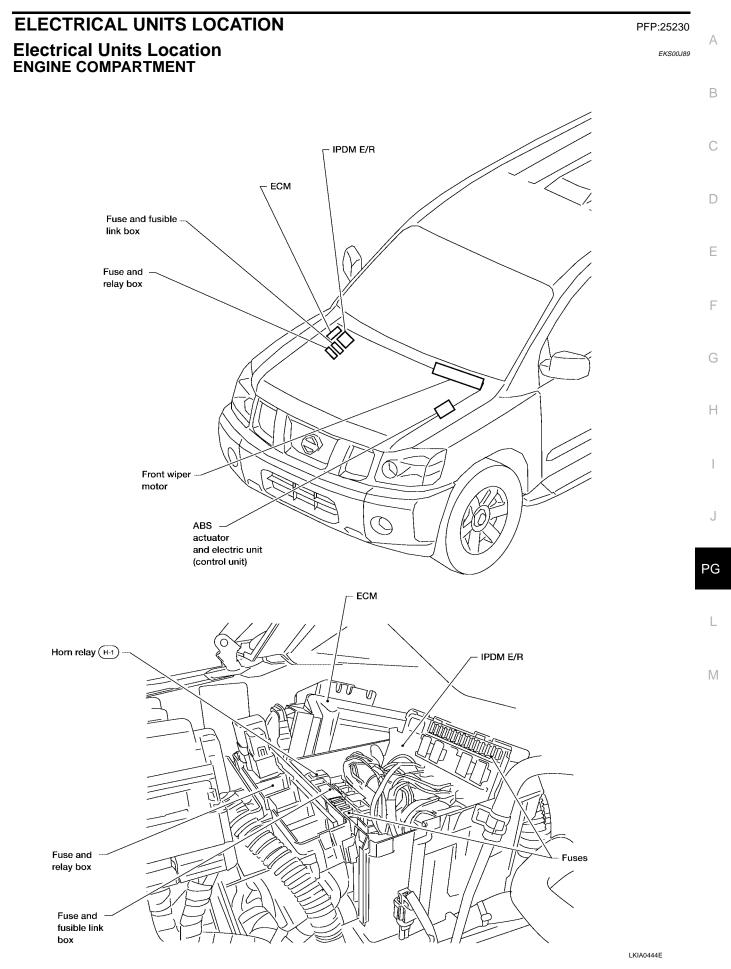
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	17	Headlema	
H/LAMP HORN	LT	Headlamp Horn	Α
HSEAT	SE	Heated Seat	
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)	
IATS	EC	Intake Air Temperature Sensor	В
IGNSYS	EC	Ignition System	
ILL		Illumination	
INJECT	EC		C
INT/L		Injectors Room/Map, Vanity, Cargo, Personal, Foot, Step, and Puddle Lamps	
IVCB1	EC	Intake Valve Timing Control Solenoid Valve (Bank 1)	
IVCB1	EC	Intake Valve Timing Control Solenoid Valve (Bank 1)	D
IVCB2	EC	Intake Valve Timing Control Solenoid Valve (Bank 2)	
IVCSB1	EC	Intake Valve Timing Control Solenoid Valve (Bank 1)	
IVC3B2	EC	Intake Valve Timing Control Solenoid Valve (Bank 2)	— E
IVTB1	EC	Intake Valve Timing Control System (Bank T)	
KEYLES	BL	Remote Keyless Entry System	— F
KS	EC EC	Knock Sensor Mass Air Flow Sensor	
MAFS			
MAIN	AT EC	Main Power Supply and Ground Circuit	G
MAIN		Main Power Supply and Ground Circuit	
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges	
MIL/DL	EC	Malfunction Indicator Lamp	Η
MIRROR	GW	Door Mirror	
NATS	BL	Nissan Anti-Theft System	
NAVI	AV	Navigation System	
NONDTC	AT	Non Detective Item	
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1	
O2H2B2	EC	Rear Heated Oxygen Sensor 2 Heater Bank 2	J
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1	
02S2B2	EC	Heated Oxygen Sensor 2 Bank 2	
P/SCKT	WW	Power Socket	PG
PEDAL	AP	Adjustable Pedal System	
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve	
PHASE	EC	Camshaft Position Sensor (PHASE) (Bank 1)	L
PNP/SW	AT	Park/Neutral Position Switch	
PNP/SW	EC	Park/Neutral Position Switch	
POS	EC	Crankshaft Position Sensor (POS)	M
POWER	PG	Power Supply Routing	
PRE/SE	EC	EVAP Control System Pressure Sensor	
PS/SEN	EC	Power Steering Pressure Sensor	
R/VIEW	DI	Rear View Camera	
RP/SEN	EC	Refrigerant Pressure Sensor	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SONAR	DI	Rear Sonar System	
SROOF	RF	Sunroof	
SRS	SRS	Supplemental Restraint System	
START	SC	Starting System	
STOP/L	LT	Stop Lamp	
STSIG	AT	Start Signal Circuit	
T/TOW	LT	Trailer Tow	



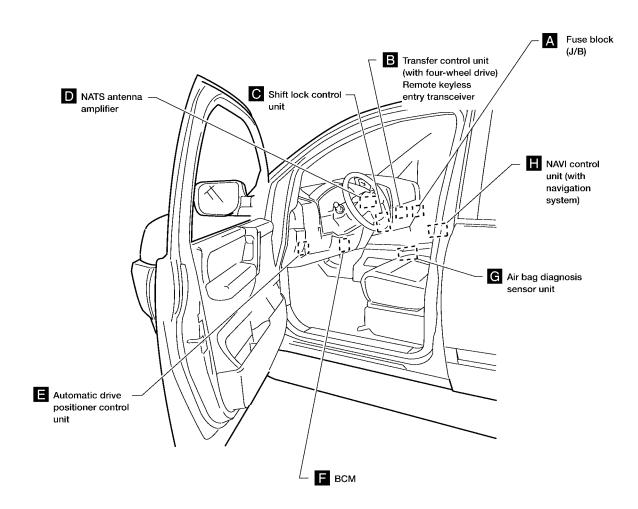
T/WARN	WT	Low Tire Pressure Warning System				
TAIL/L	LT	Parking, License and Tail Lamps				
T/F	TF	Transfer Case				
TMSW	AT	Tow Mode Switch				
TPS1	EC	Throttle Position Sensor				
TPS2	EC	Throttle Position Sensor				
TPS3	EC	Throttle Position Sensor				
TRNSCV	BL	HOMELINK® Universal Transceiver				
TURN	LT	Turn Signal and Hazard Warning Lamps				
VDC BRC		Vehicle Dynamic Control System				
VEHSEC	BL	Vehicle security (theft warning) system				
VENT/V	EC	EVAP Canister Vent Control Valve				
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)				
W/ANT	AV	Audio Antenna				
WARN	DI	Warning Lamps				
WINDOW	GW	Power Window				
WIP/R	WW	Rear Wiper and Washer				
WIPER	WW	Front Wiper and Washer				

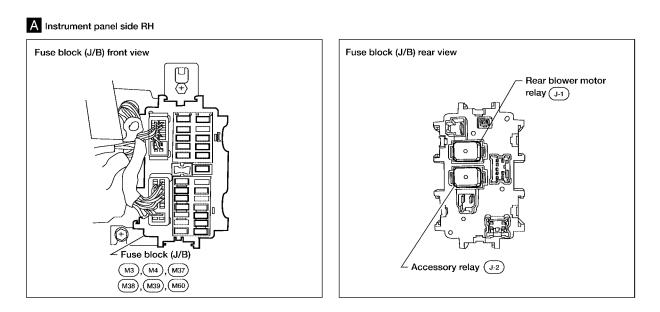
ELECTRICAL UNITS LOCATION



ELECTRICAL UNITS LOCATION

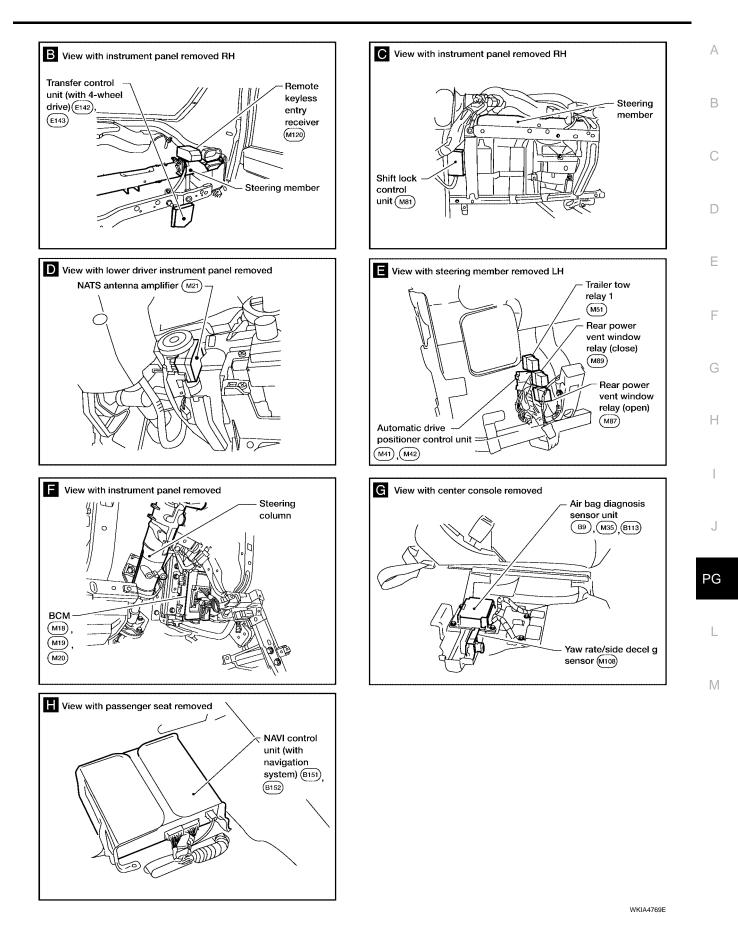
PASSENGER COMPARTMENT





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ELECTRICAL UNITS LOCATION



HARNESS CONNECTOR

Description HARNESS CONNECTOR (TAB-LOCKING TYPE)

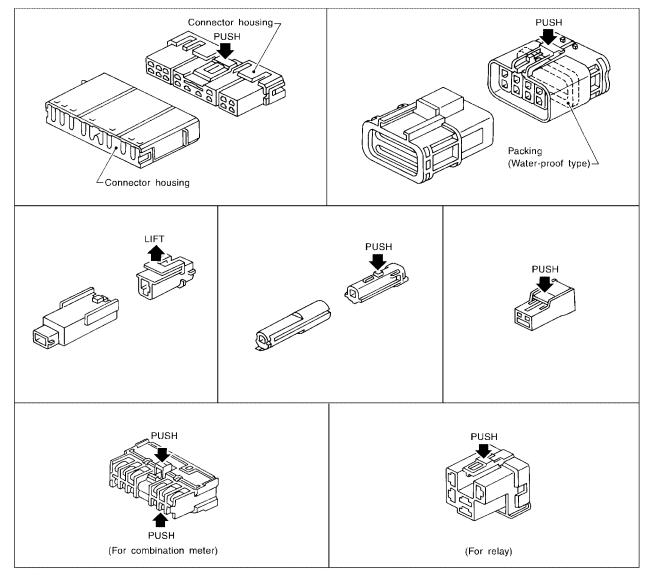
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



PFP:B4341

EKS00J8A

HARNESS CONNECTOR

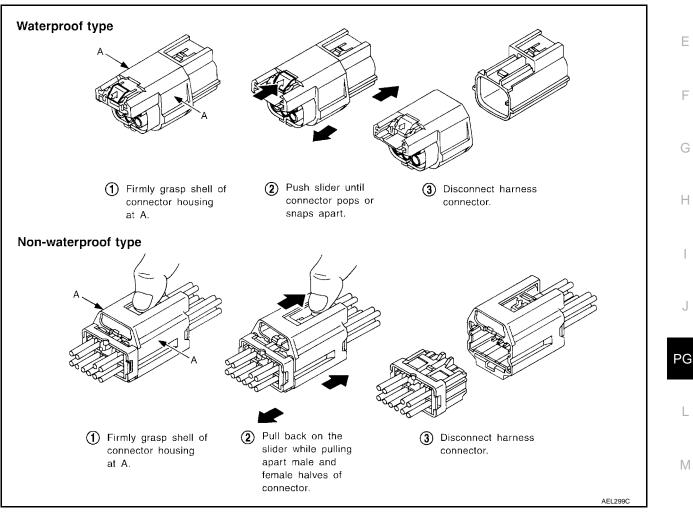
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



В

С

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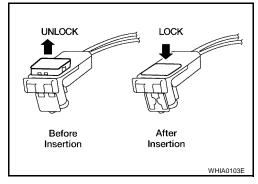
HARNESS CONNECTOR

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.

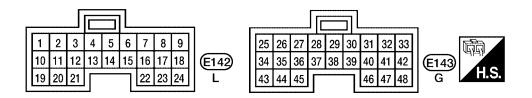
CAUTION:

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



ELECTRICAL UNITS	PFP:23710
Terminal Arrangement	A eksooj8b
	P
BCM (BODY CONTROL MODULE)	В
1 2 3 4 5 6 7 8 9 101112 1314151617181920 2122232425262728293031323334353637383940 W	С
41/42/43/44/45/46/47/48/49 (M19) 56/57/58/59/60/61/62/63/64 (M20) 50 51 52 53 54 55 W 65 66 67 68 69 70 B H.S.	D
	E
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)	
	F
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 B	G
	Н
ECM	I
98 99 100 101 102 103 104 105 117 118 90 91 92 93 94 95 96 97 82 83 84 85 86 87 88 89 114 115 116 B	J
	PG
4 5 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 3 5	L
1 2 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 (F54) 1 2 81 80 79 78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 B H.S.	M

TRANSFER CONTROL UNIT



WKIA4770E

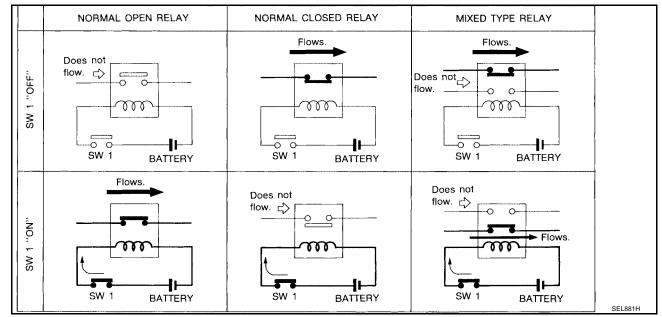
STANDARDIZED RELAY

PFP:25230

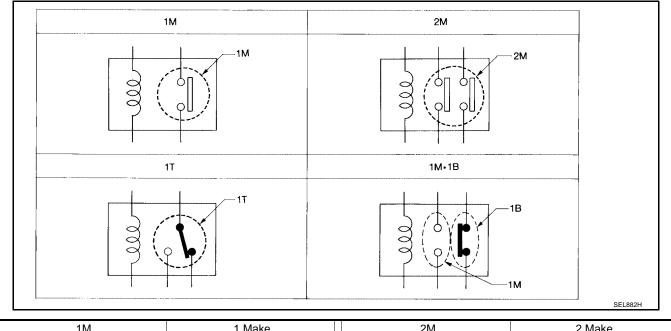
EKS00J8C

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

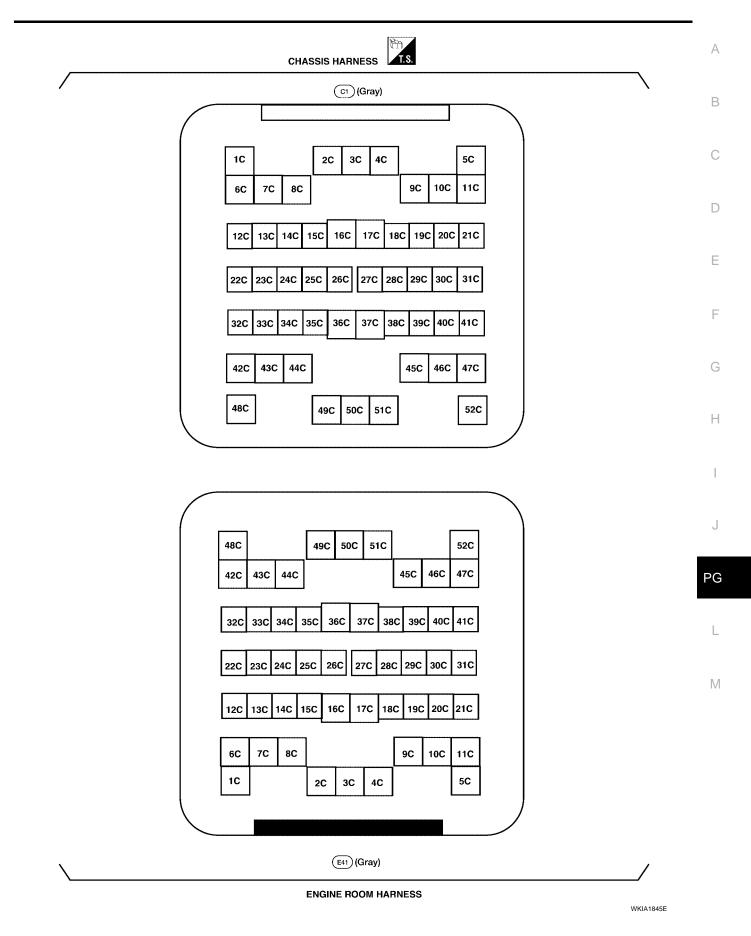
STANDARDIZED RELAY

Туре	Outer view	Circuit	Connector Symbol and connection	Case color	А
1T				BLACK	B
2М				BROWN	E F G
1M -1B				GRAY	H I J
1M				BLACK	PG L
	a for the second			BLUE	

WKIA0253E

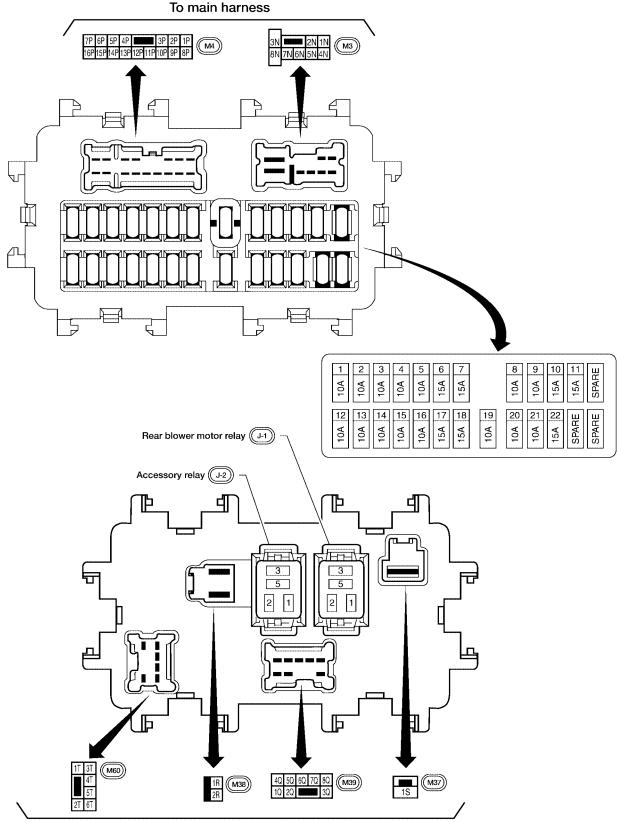
SUPER MULTIPLE JUNCTION (SMJ) PFP:84341 **Terminal Arrangement** EKS00J8D 1.S. MAIN HARNESS (M31) (White) (M36) (White) (M40) (White) 2M 3M 4M 1M 5M 2.1 3J 8M 9N 0 6.1 7.1 8. 11G 12G 20G 21G 11M 12M 15M16M 18M19M20M21N 20J 21J 13G 166 19G 14N 17M 16. 17. 18.1 19. 30J 41G 31M 35M 36M 41M 36J 40J 34G 37N 31 34J 38J 39J 41J 37. 49J 47. 48.1 50. ΔΔ 45. 46 51M 52M 61G 54M65M66M57M58M 59M 60M 61M 510 300 53N 51J 54J 56J 58J 60J 61J 68 750 71M 72M 3M 74 71.1 72. 73.1 74.1 75. 80G 76N 79J 801 76J 78.1 80J 76J 79J 80J 71N 71J 70 70 60M61M 60.1 616 61. 46. 47 49.1 50 40J 41N 36 39.1 41J 28M 29N 29J 30. 26J 27. 18M19M20M21M 11G 20G 21G 14M 16M17M 18J 19J 20J 21J Qr. 11M12M 131/ 15M 11J 12J 13J 14J 15J 16J 17J 6M 8M 6J 7J 9J 7M 9M 8J 10J 00 10N 3M 4M 1G 1M 2M 5M1J 2J 3J 4J 5J (E152) (White) (B149) (White) (B69) (White) ENGINE ROOM HARNESS **BODY HARNESS NO.2 BODY HARNESS**

SUPER MULTIPLE JUNCTION (SMJ)



FUSE BLOCK-JUNCTION BOX (J/B)

Terminal Arrangement



To main harness

PFP:24350

EKS00J8E

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX PFP:24381 А **Terminal Arrangement** EKS00J8F В С (E6)D f Front g 24 25 26 27 h i 50A 30A 30A 40A 20A15A10A20A Ε 2 1 | 3 m (H-1) F k Ì 28 29 30 31 30A 40A 40A 40A 15A 10A 10A 20A 24 - 31: FUSE f - m: FUSIBLE LINK Н

WKIA4772E

I

J

PG

L

Μ

FUSE AND RELAY BOX Terminal Arrangement

PFP:24012

EKS00J8G

