SECTION FOR SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTIONS
Precautions for Supplemental Restraint System
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-
SIONER"
Wiring Diagrams and Trouble Diagnosis
HARNESS CONNECTOR 4
Description4
HARNESS CONNECTOR (TAB-LOCKING
TYPE)
HARNESS CONNECTOR (SLIDE-LOCKING
TYPE)5 HARNESS CONNECTOR (DIRECT-CONNECT
SRS COMPONENT TYPE)5
STANDARDIZED RELAY 6
Description6
NORMAL OPEN, NORMAL CLOSED AND
MIXED TYPE RELAYS6
TYPE OF STANDARDIZED RELAYS6
POWER SUPPLY ROUTING8
Circuit Diagram8
Wiring Diagram — POWER — 10
BATTERY POWER SUPPLY — IGNITION SW.
IN ANY POSITION 10
ACCESSORY POWER SUPPLY — IGNITION
SW. IN ACC OR ON 12
IGNITION POWER SUPPLY — IGNITION SW.
IN ON AND/OR START 13
Inspection15
FUSE 15
FUSIBLE LINK 15
CIRCUIT BREAKER 15

GROUND	F
Ground Distribution16	
MAIN HARNESS16	
ENGINE ROOM HARNESS18	G
ENGINE NO. 2 HARNESS	0
GENERATOR HARNESS23	
ENGINE CONTROL HARNESS24	Н
BODY HARNESS27	Н
BODY NO. 2 HARNESS	
BACK DOOR NO. 2 HARNESS	
ELECTRICAL UNITS LOCATION	
Engine Compartment	
Passenger Compartment	
HARNESS LAYOUT	J
How to Read Harness Layout	
TO USE THE GRID REFERENCE	
CONNECTOR SYMBOL	PG
Outline	٢G
Main Harness	
Engine Room Harness	
KA24DE	L
VG33E AND VG33ER41	
Engine Control Harness 44	
KA24DE	Μ
VG33E	
VG33ER	
Engine No. 2 Harness50	
KA24DE50	
VG33E51	
VG33ER52	
Body Harness53	
Body No. 2 and Chassis Harness	
Room Lamp Harness55	
Front Door Harness55	
Rear Door Harness56	
Back Door Harness58	
Wiring Diagram Codes (Cell Codes)59	
SUPER MULTIPLE JUNCTION (SMJ)	
Installation	
Terminal Arrangement63	

А

В

С

D

Ε

FUSE BLOCK — JUNCTION BOX (J/B)64	ELECTRIC
Terminal Arrangement64	Terminal
FUSE AND FUSIBLE LINK BOX65	
Terminal Arrangement65	

ELECTRICAL UNITS	66
Terminal Arrangeme	nt66

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.

Wiring Diagrams and Trouble Diagnosis

When you read wiring diagrams, refer to the following:

- GI-13, "How to Read Wiring Diagrams", and
- PG-8, "POWER SUPPLY ROUTING" for power distribution circuit.

When you perform trouble diagnosis, refer to the following:

- <u>GI-9, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"</u>, and
- GI-25, "How to Perform Efficient Diagnosis for an Electrical Incident".

Check for any Service bulletins before servicing the vehicle.

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HARNESS CONNECTOR

Description HARNESS CONNECTOR (TAB-LOCKING TYPE)

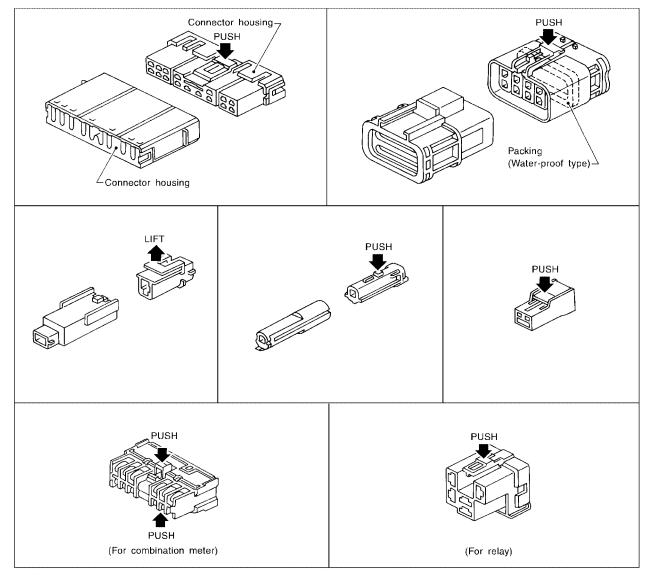
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



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EKS003NX

HARNESS CONNECTOR

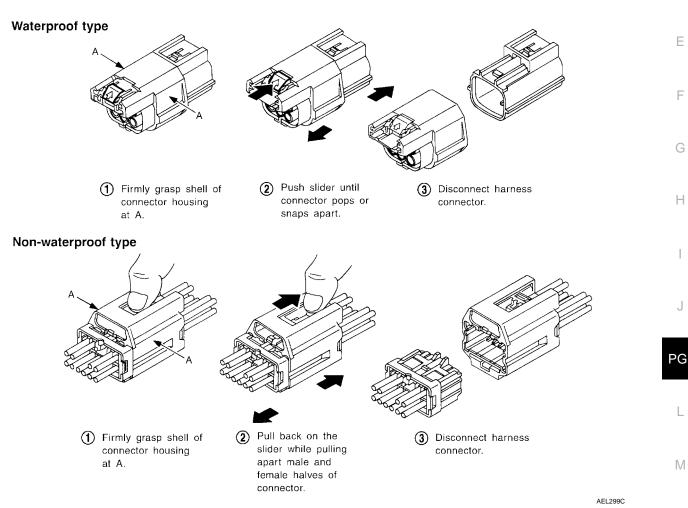
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]

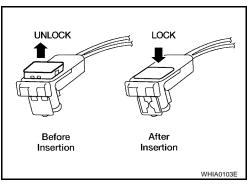


HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- 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.



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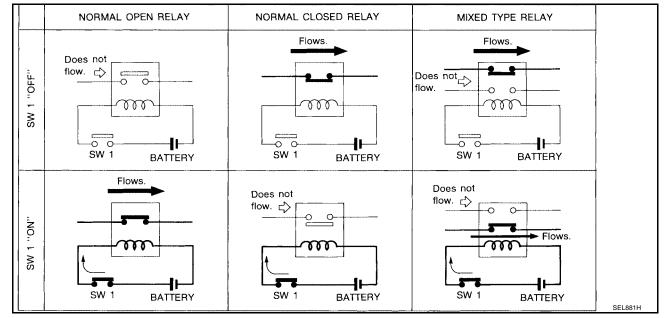
STANDARDIZED RELAY

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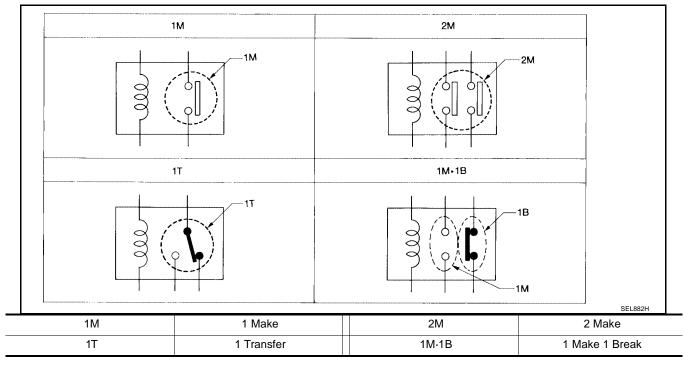
EKS0036P

Description NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

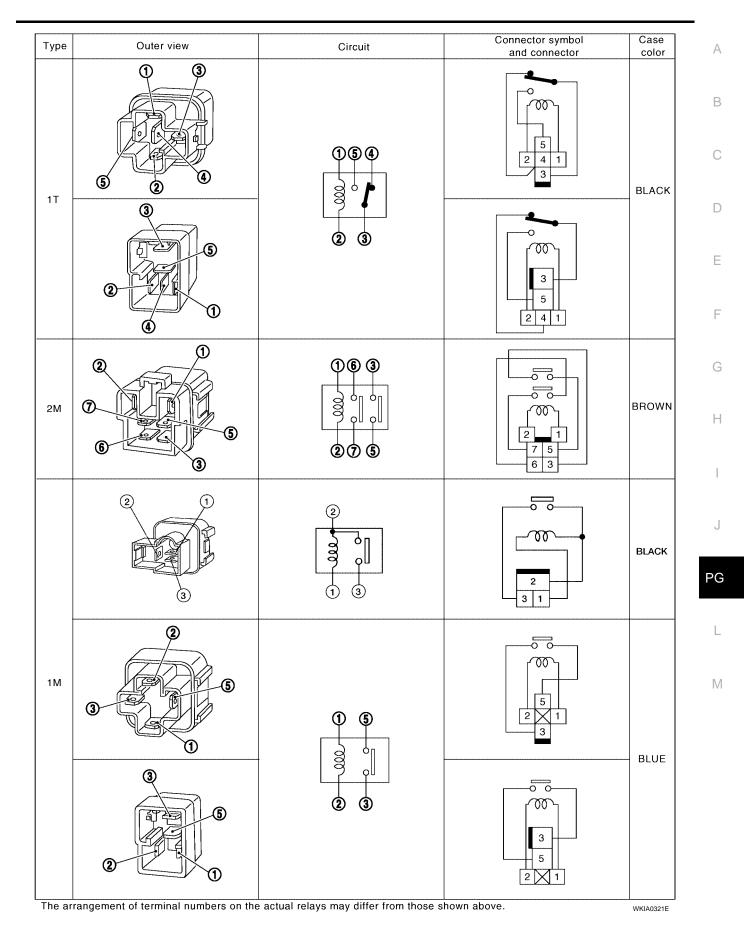
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



TYPE OF STANDARDIZED RELAYS



STANDARDIZED RELAY



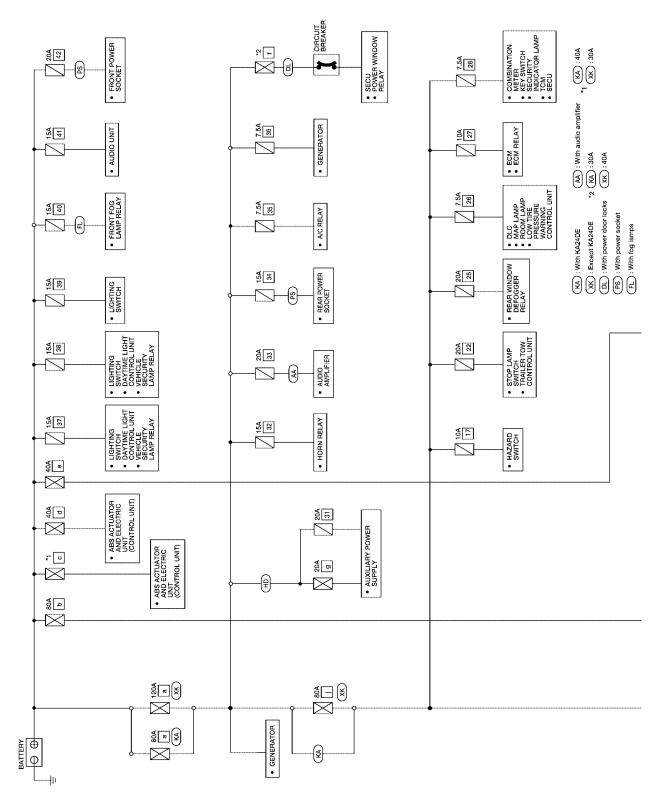
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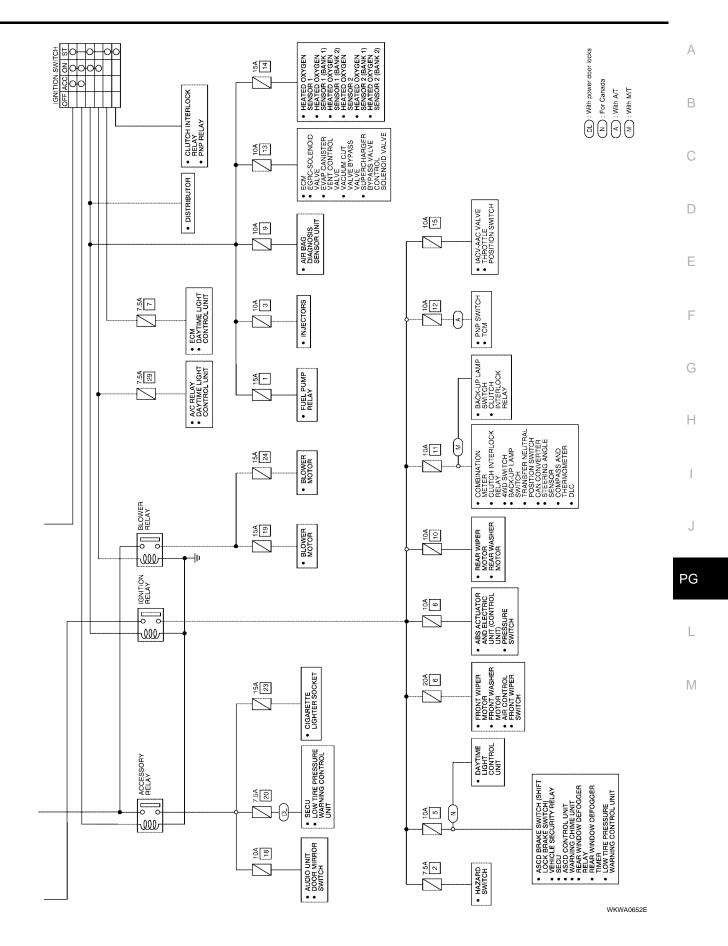
NOTE:

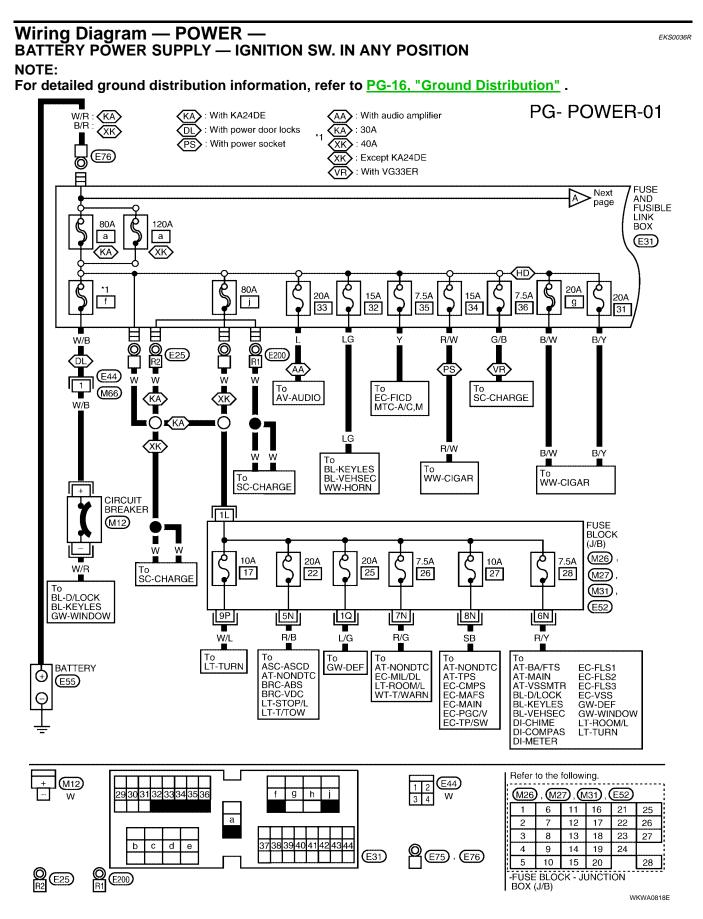
Circuit Diagram

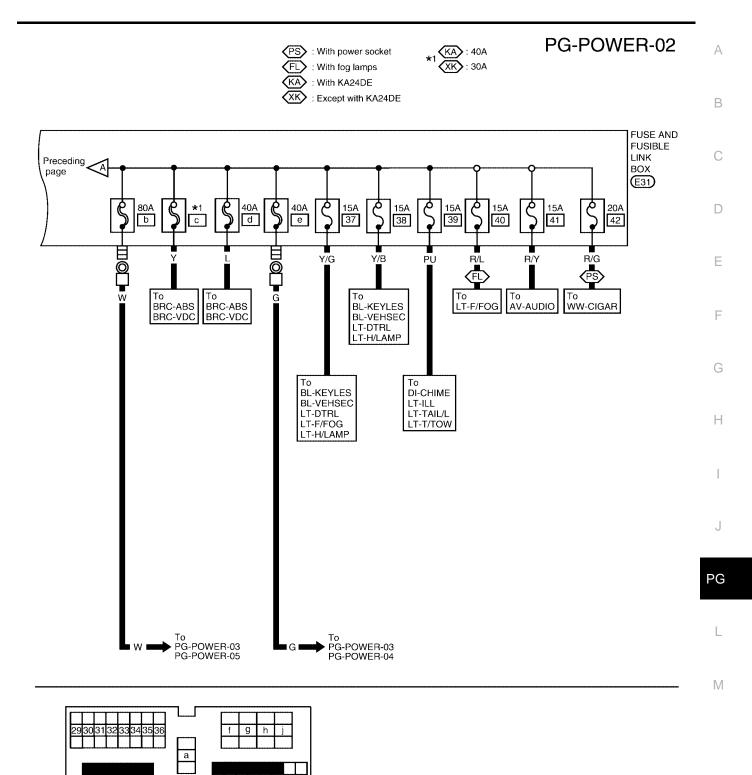
For detailed ground distribution information, refer to PG-16, "Ground Distribution" .



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WKWA0324E

3738394041424344

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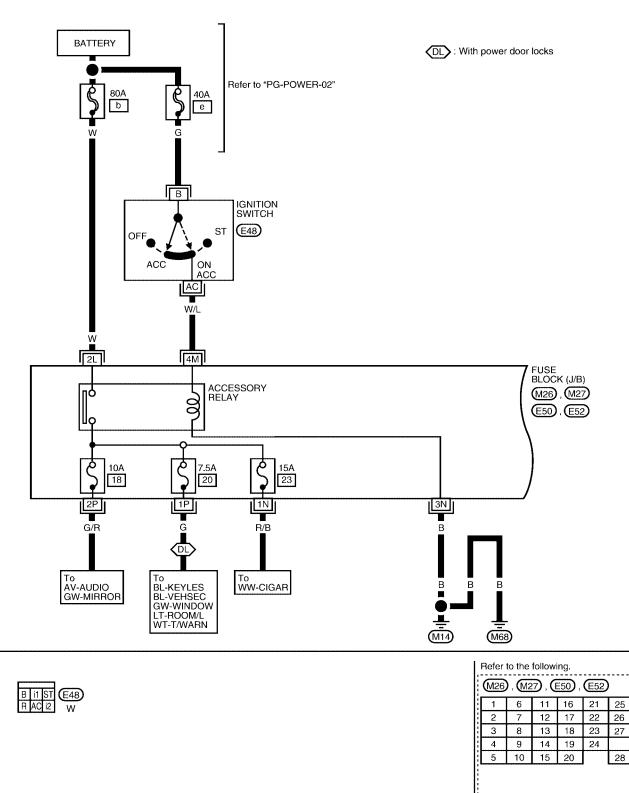
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ACCESSORY POWER SUPPLY - IGNITION SW. IN ACC OR ON

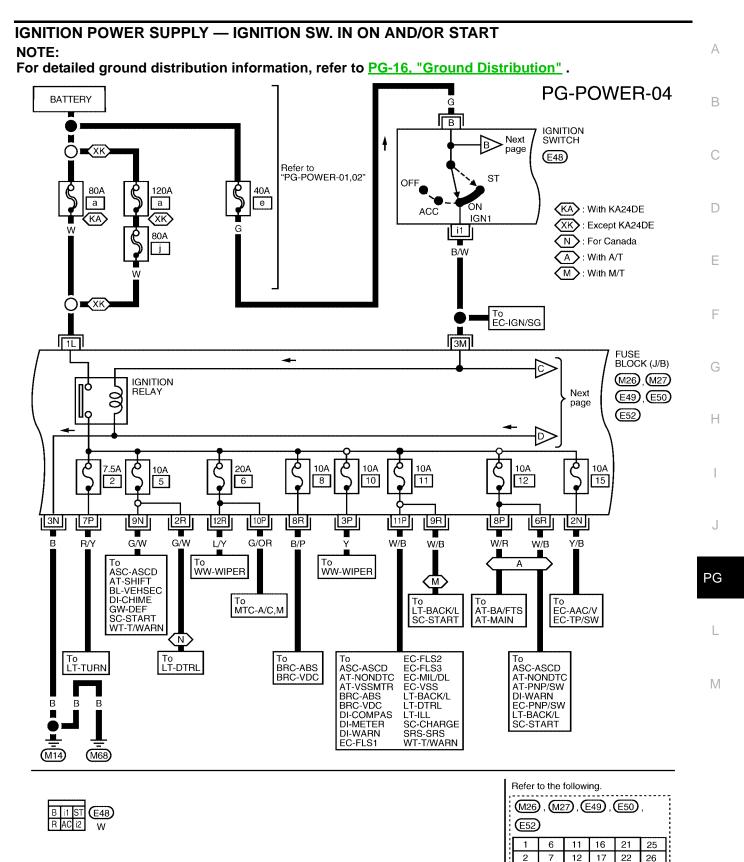
NOTE:

For detailed ground distribution information, refer to PG-16, "Ground Distribution" .

PG-POWER-03



-FUSE BLOCK - JUNCTION BOX (J/B)



3 8

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BOX (J/B)

9 14 19 24

10 15

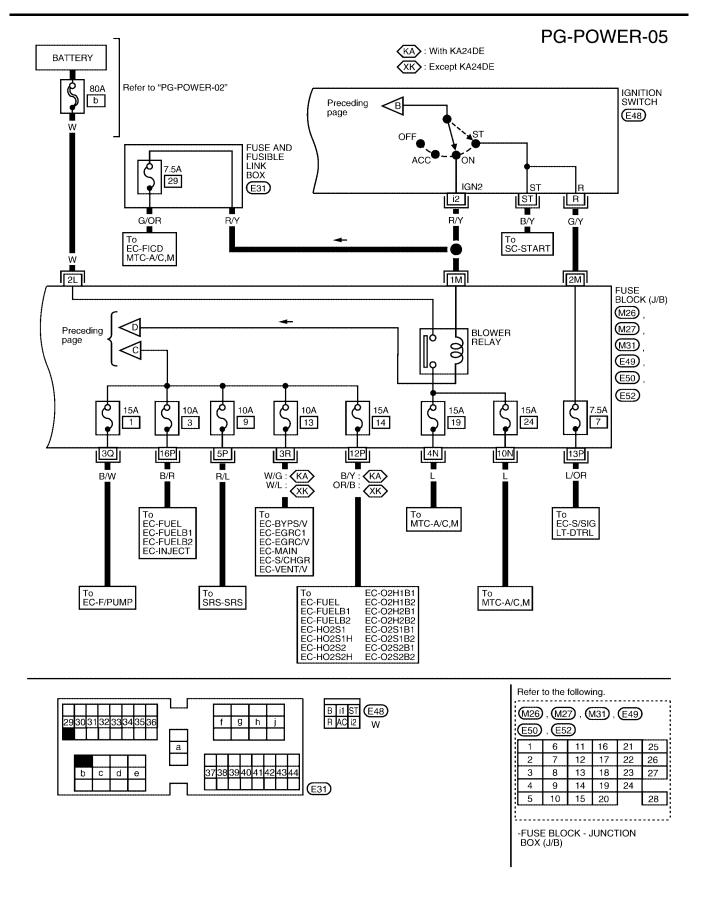
13 18 23 27

-FUSE BLOCK - JUNCTION

20

28

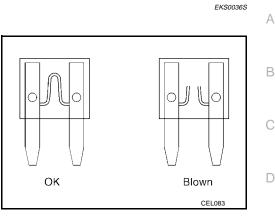
WKWA0819E



WKWA0327E

Inspection FUSE

- If fuse is blown, be sure to eliminate cause of problem 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 fingertip. If its condition is questionable, use circuit tester or test lamp.

CAUTION:

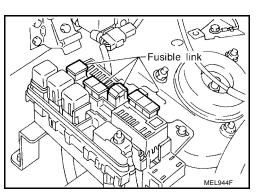
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of problem.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring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

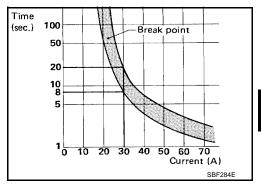
CIRCUIT BREAKER

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

Circuit breakers are used in the following systems.

- power window
- power door lock
- remote keyless entry





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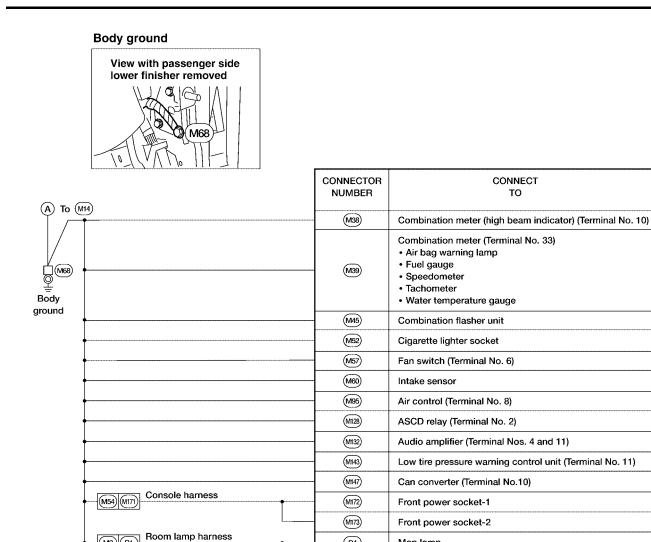
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GROUND Ground Distribution MAIN HARNESS

Body ground View with driver side lower

			CONNECTOR NUMBER	CONNECT TO
	J.		M5	Clutch interlock switch (Terminal No. 2) (with M/T)
	M14		M6)	Vehicle security relay (Terminal No. 3) (with power door locks) (with A/T, except KA24DE)
\ [1		(M11)	Warning chime unit (Terminal No. 8) (without power door locks)
	•		(M13)	Power window relay (Terminal No. 1) (with power windows)
늪 ody ground	•		(M19)	Seat belt buckle switch LH (Terminal No. 2)
	•		(M27)	Fuse block (J/B) (Terminal No. 3N) • Accessory relay • Blower relay • Ignition relay
	•		(M28)	Illumination control switch (Terminal No. 5)
			(M32)	Data link connector (Terminal No. 4)
			(M35)	A/T device (shift lock) (Terminal No. 1) (with A/T)
			(M35)	A/T device (overdrive control switch) (Terminal No. 5) (with A/T)
	•		(M38)	Combination meter (Terminal No. 13) • Four wheel drive indicator • Turn signal indicators • ABS warning lamp
			M76	ATP relay (Terminal Nos. 2 and 4) (with 4-wheel drive and A/T)
			(M85)	Rear window defogger timer (Terminal No. 4) (without power door locks)
				Rear wiper switch (Terminal No. 3) (with rear wiper)
			(M11)	Smart entrance control unit (Terminal No. 43) (with power door locks)
				Smart entrance control unit (Terminal No. 64) (with power door locks)
			(M114)	Air bag diagnosis sensor unit (Terminal No. 2)
				ASCD control unit (Terminal No. 17) (with ASCD)
	•		(M131)	Seat belt buckle switch RH (Terminal No. 2)
(M68)	•		(M145)	Steering angle sensor (Terminal No. 1)
	+		(M146)	VDC off switch (Terminal No. 1)
	M9 D1 Do	or harness (LH side)	- 07	Main power window and door lock/unlock switch (with power door locks) (Terminal No. 10)
		•	D9	Front door key cylinder switch LH (with power door locks) (Terminal No. 2)
			(D10)	Door mirror switch (Terminal No. 3)

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(M2)(R1)

M63 D101

Door harness (RH side)

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(R4)

(R5)

(D107)

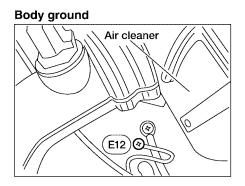
Map lamp

(with power door locks)

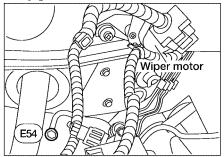
Compass and thermometer (Terminal No. 2)

Front door lock and unlock switch RH (Terminal No. 4)

ENGINE ROOM HARNESS KA24DE



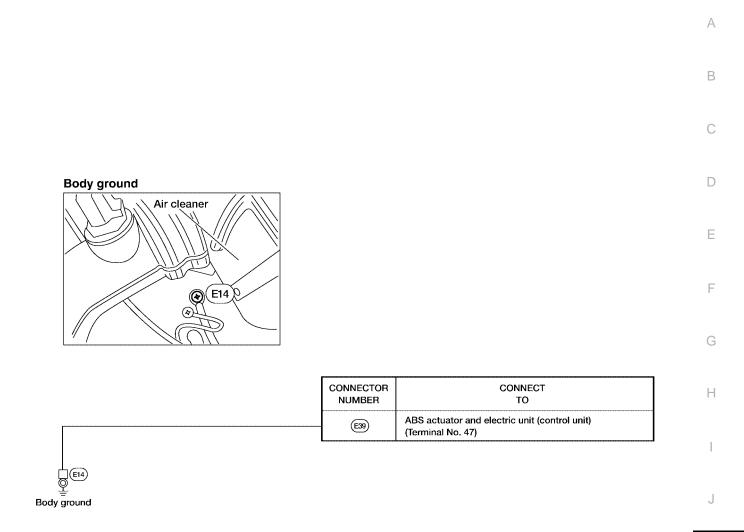




		CONNECTOR NUMBER	CONNECT TO
	Main harness	M114)	Air bag diagnosis sensor unit (shield wire)
	•	E7	Headlamp LH
Body ground		E13)	Front combination lamp LH (Terminal No. 2) • Parking lamp • Turn signal lamp
	•	E37	Brake fluid level switch (Terminal No. 2)
		E39	ABS actuator and electric unit (control unit) (Terminal No. 16)
	•	(E46)	Front wiper switch (Terminal No. 17)
		E37	Side marker lamp LH (Terminal No. 2)

		CONNECTOR NUMBER	CONNECT TO
	•	E1	Headlamp RH
Body ground		E19	Front combination lamp RH (Terminal No. 2) • Parking lamp • Turn signal lamp
Body ground	•	(E42)	Front wiper motor (Terminal No. E)
		(E86)	Side marker lamp RH (Terminal No. 2)
	Engine No. 2 harness	(E218)	Park neutral position (PNP) switch (Terminal No. 2)

WKWA0330E



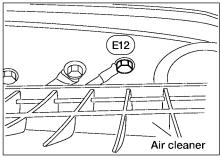
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VG33E and VG33ER

Body ground

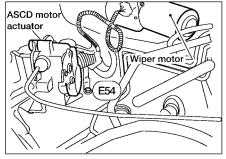


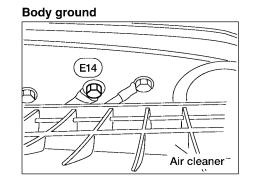
		CONNECTOR NUMBER	CONNECT TO
	Main harness	(M114)	Air bag diagnosis sensor unit (shield wire)
E12	•	(5)	Washer fluid level switch (VG33E and VG33ER)
P P	•	E7	Headlamp LH
Body ground	•	E 9	Hood switch (with power door locks)
		E13)	Front combination lamp LH (Terminal No. 2) • Parking lamp • Turn signal lamp
	•	E37)	Brake fluid level switch (Terminal No. 2)
	•	E39)	ABS actuator and electric unit (control unit) (Terminal No. 16)
		(E46)	Front wiper switch (Terminal No. 17)
	•	(E56)	Front fog lamp relay (Terminal No. 1)
	•	(E58)	Front fog lamp LH (Terminal No. 2) (with fog lamps)
		E68	Ambient air temperature switch
	L	(E87)	Side marker lamp LH (Terminal No. 2)

B To (54)

WKWA0332E







B To (E12)		CONNECTOR NUMBER	CONNECT TO
	E43 Main harness	(M6)	Vehicle security relay (Terminal No. 4) (with vehicle security system)
Q E54		EI	Headlamp RH
坚 Body ground		(E17)	Daytime light control unit (Terminal No. 9) (for Canada)
body ground		(E19)	Front combination lamp RH (Terminal No. 2) • Parking lamp • Turn signal lamp
	•	(E22)	Vehicle security lamp relay (Terminal No. 2)
		E27	Park/neutral position (PNP) relay (Terminal No. 1) (with A/T)
		(27)	Park/neutral position (PNP) relay (Terminal No. 6) (with A/T)
		(E42)	Front wiper motor (Terminal No. E)
		(E57)	Front fog lamp RH (Terminal No. 2) (with fog lamps)
		(E86)	Side marker lamp RH (Terminal No. 2)

CONNECTOR NUMBER	CONNECT TO
E39	ABS actuator and electric unit (control unit) (Terminal No. 47)



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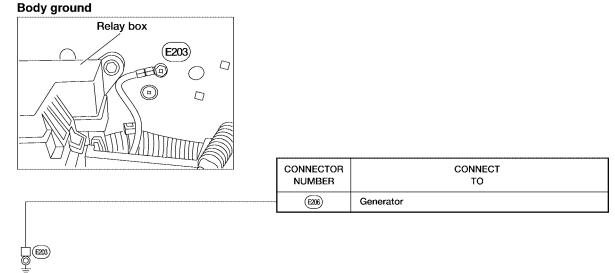
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ENGINE NO. 2 HARNESS KA24DE

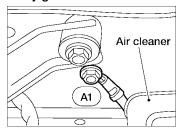


Body ground

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GENERATOR HARNESS VG33E and VG33ER





CONNECTOR NUMBER	CONNECT TO
(A7)	Generator

Body ground

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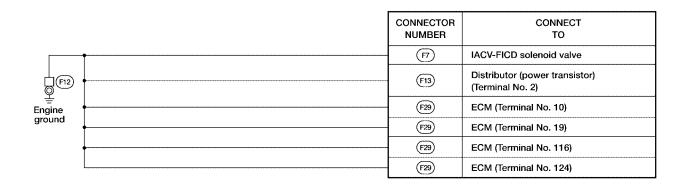
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ENGINE CONTROL HARNESS KA24DE

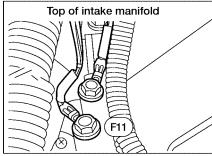
Engine coolant temperature sensor F11 F12		
	CONNECTOR NUMBER	CONNECT TO
Terr Main	arness (M21)	Heated oxygen sensor 2 (Terminal No. 4)
(F27) (M59)	arness (M21)	Heated oxygen sensor 2 (shield wire)
[F36] (M81)	arness (M32)	Data link connector (Terminal No. 5)
Engine room Engine Engine room Engine room Figure F	No. 2 S (E211)	Crankshaft position sensor (OBD) (shield wire)
	(F1	Mass air flow sensor (shield wire)
F2 F102 Engine control sub harness		Knock sensor (shield wire)
	F3	Throttle position sensor (shield wire)
	(F13)	Distributor (camshaft position sensor) (shield wire)
	(F13)	Distributor (camshaft position sensor) (Terminal No. 6)
•	(F14)	Resistor (ignition coil) (shield wire)
	F16	Heated oxygen sensor 1 (shield wire)
•	F29	ECM (Terminal No. 25)
	F29	ECM (Terminal No. 32)
	(F29)	ECM (shield wire)



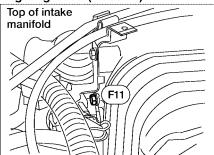
WKWA0334E

VG33E and VG33ER

Engine ground (VG33E)







		CONNECTOR NUMBER	CONNECT TO
[F27 M59 Main harness	(M32)	Data link connector (Terminal No. 5)
F11	F28 (M58) Main harness	M78	TCM (transmission control module) (Terminal Nos. 25, 42 and 48) (with A/T)
Engine ground	F28 M58 Main harness F23 E43 Engine room harness	(E72)	A/T fluid temperature sensor (with A/T)
	(MB2) E74 Engine room harness	(E73)	Revolution sensor (with A/T)
		(E73)	Revolution sensor (shield wire) (with A/T)
	F28 M58 Main harness MB2 E74 Engine room harness	EB3	Turbine revolution sensor (VG33ER with A/T)
		EB3	Turbine revolution sensor (shield wire) (VG33ER with A/T)
		(F1)	Mass air flow sensor (shield wire)
		F3	Throttle position sensor (shield wire)
		(F13)	Distributor (camshaft position sensor) (Terminal No. 6)
+		(F13)	Distributor (camshaft position sensor) (shield wire)
		(F14)	Resistor (ignition coil) (shield wire)
		(F29)	ECM (Terminal No. 25)
		F29	ECM (Terminal No. 32)
ł	F37 (F10) Engine sub harness	(F109)	Knock sensor (shield wire)
	F38 F102 Engine sub harness	(F110)	Crankshaft position sensor (OBD) (shield wire)

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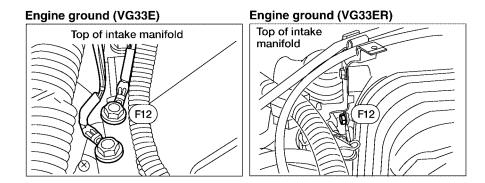
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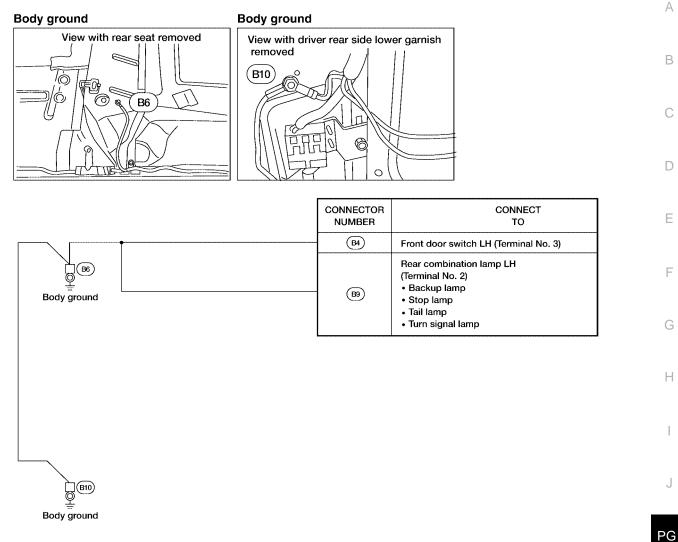
J



		CONNECTOR NUMBER	CONNECT TO
[F 8	Power steering oil pressure switch
F12		(F13)	Distributor (power transistor) (Terminal No. 2)
Engine ground		(F29)	ECM (Terminal No. 10)
	•	(F29)	ECM (Terminal No. 19)
		(F29)	ECM (Terminal No. 116)
		(F29)	ECM (Terminal No. 124)
		(F39)	Heated oxygen sensor 2 (bank 2) (Terminal No.4)
		(F42)	Heated oxygen sensor 2 (bank 1) (Terminal No.4)
	(F43) (F201) Engine No. 2 harness	(F218)	Park/neutral position (PNP) switch (with M/T)

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BODY HARNESS



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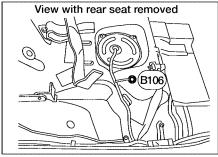
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BODY NO. 2 HARNESS

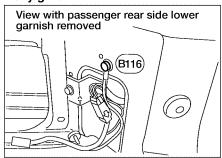
Body ground

B116

Body ground



Body ground

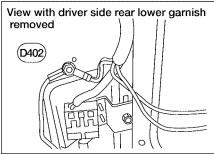


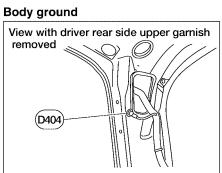
	CONNECTOR NUMBER	CONNECT TO
(B112) C2 Chassis harness	- (C8)	License plate lamp
Body ground Bill C1 harness C9 C10 sub harne		Trailer (Terminal No. 1) (with trailer tow) • Stop/turn LH Iamp • Stop/turn RH Iamp • Tail Iamp
•	(B107)	Fuel pump
		Fuel level sensor unit (Terminal No. 4)
•	B114)	Trailer tow control unit (Terminal No. 7) (with trailer tow)
Engine	B115	Rear combination lamp RH (Terminal No. 2) • Back up lamp • Stop lamp • Tail lamp • Turn signal lamp
Main control BIO (M67) harness (M81) (F36) harness	(F29)	ECM (Terminal No. 66)

WKWA0382E

BACK DOOR NO. 2 HARNESS

Body ground





	CONNECTOR NUMBER	CONNECT TO
	D405	Rear power socket (with power socket)
D403 0501 Back door harness	D503	High mounted stop lamp
Back door harness	D506)	Back door key cylinder switch (Terminal No. 2) (with power door locks)
Back door harness	- (D507)	Rear window defogger

	CONNECTOR NUMBER	CONNECT TO
D403 (D501) Back door harness	(D504)	Back door switch
(H04) (550) Back door harness	(0505)	Rear wiper motor (Terminal No. E) (with rear wiper)

또 Body ground

Body ground

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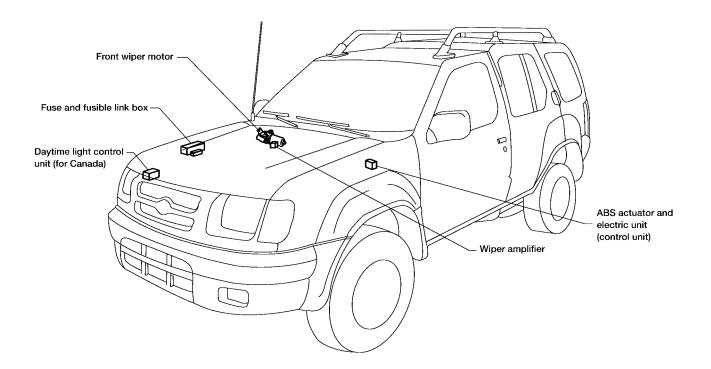
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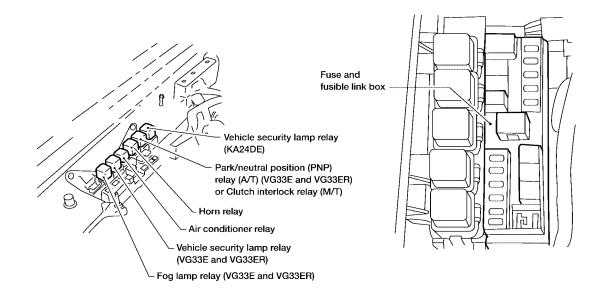
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ELECTRICAL UNITS LOCATION Engine Compartment

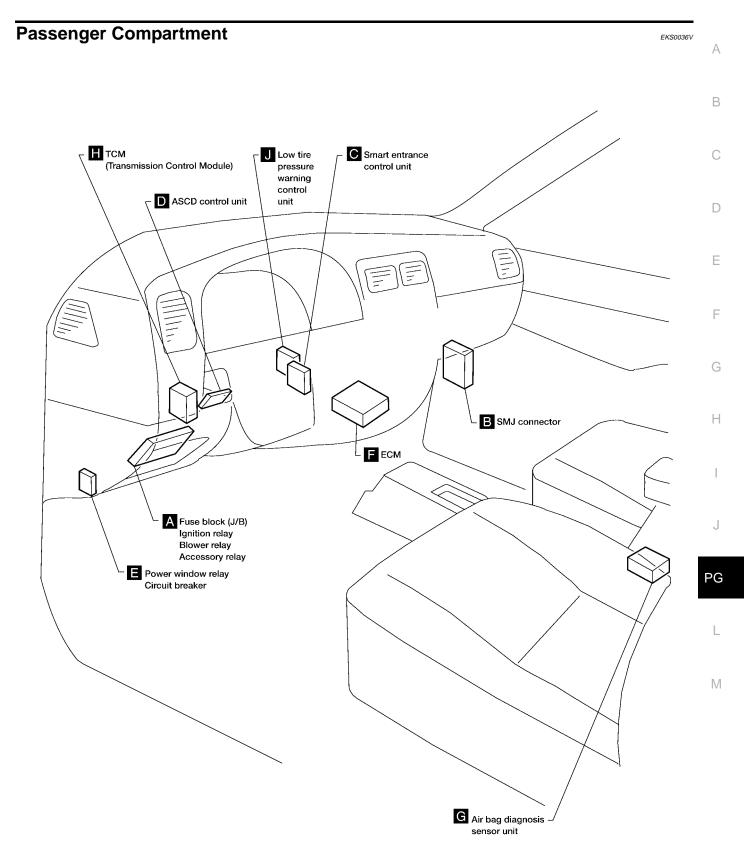
PFP:25230

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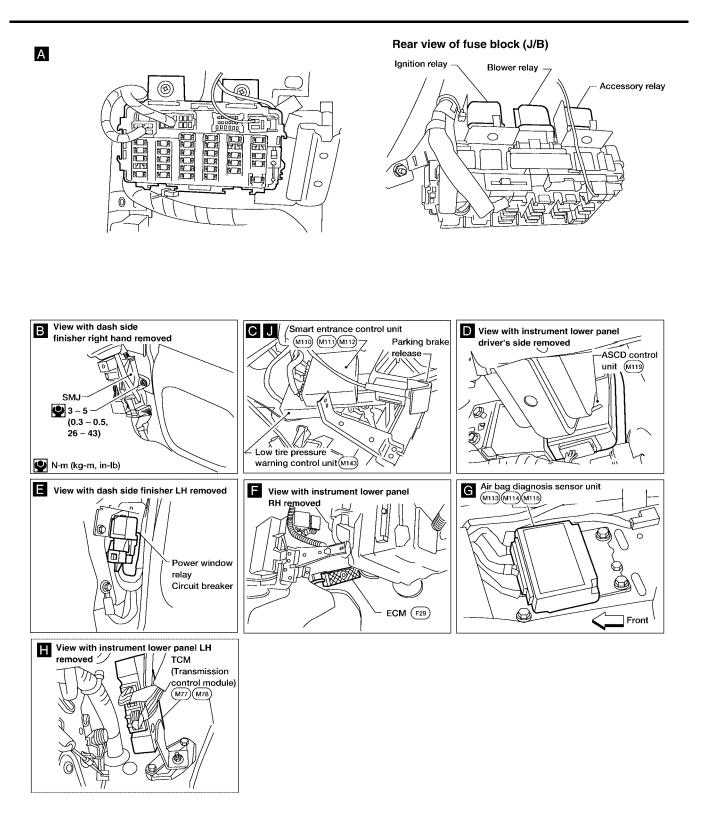


ELECTRICAL UNITS LOCATION



WKIA0322E

ELECTRICAL UNITS LOCATION



WKIA0323E

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 (Engine Compartment)
- Engine Control Harness

EKS0036W
Example:
G2 E1 B/6 : ASCD ACTUATOR Connector color/Cavity Connector number Grid reference
SEL252V

PFP:24010

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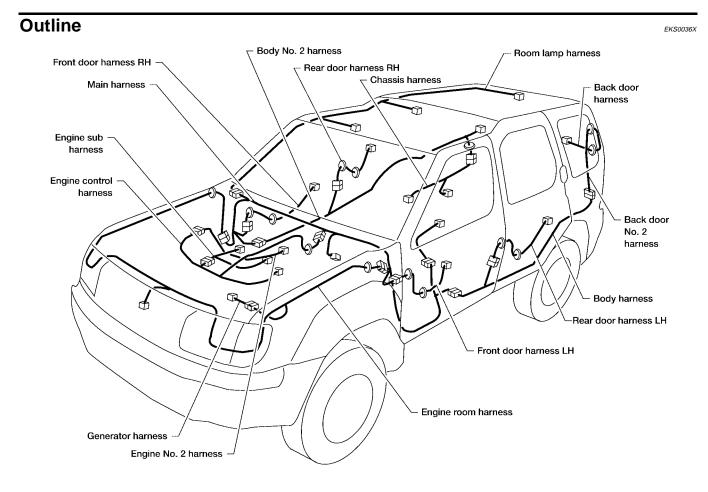
TO USE THE GRID REFERENCE

- 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

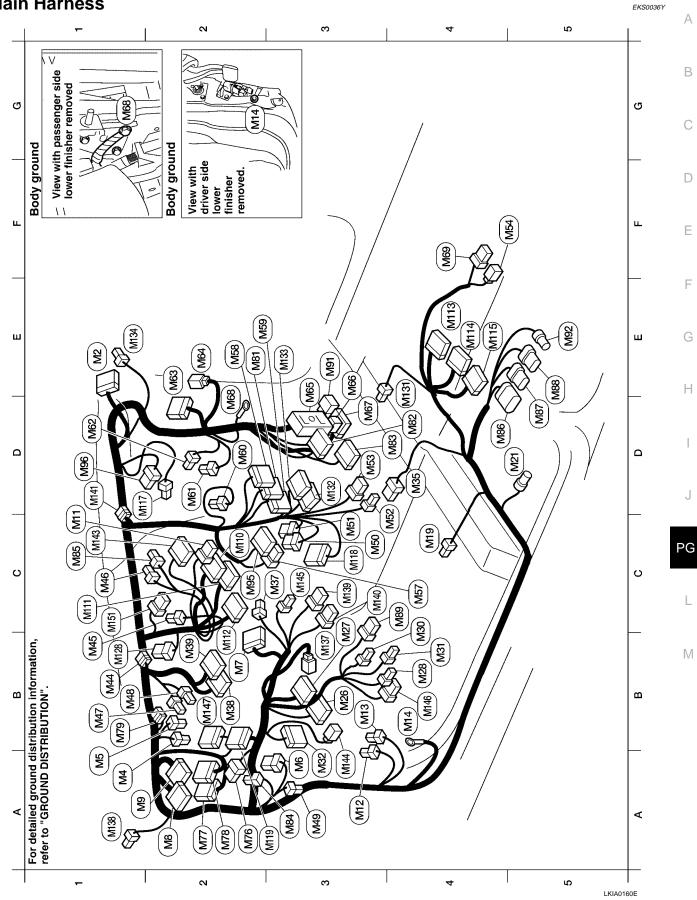
Main symbols of connector (in Harness Layout) are indicated below.

Connector turne	Waterproof type		Standard type		
Connector type	Male Female		Male	Female	
Cavity: Less than 4Relay connector	Ø	Ŵ	Ø	Ø	
• Cavity: From 5 to 8	\bigcirc		\bigcirc		
Cavity: More than 9	\bigcirc	\bigcirc		\bigcirc	_
 Ground terminal etc. 		_	Ø		



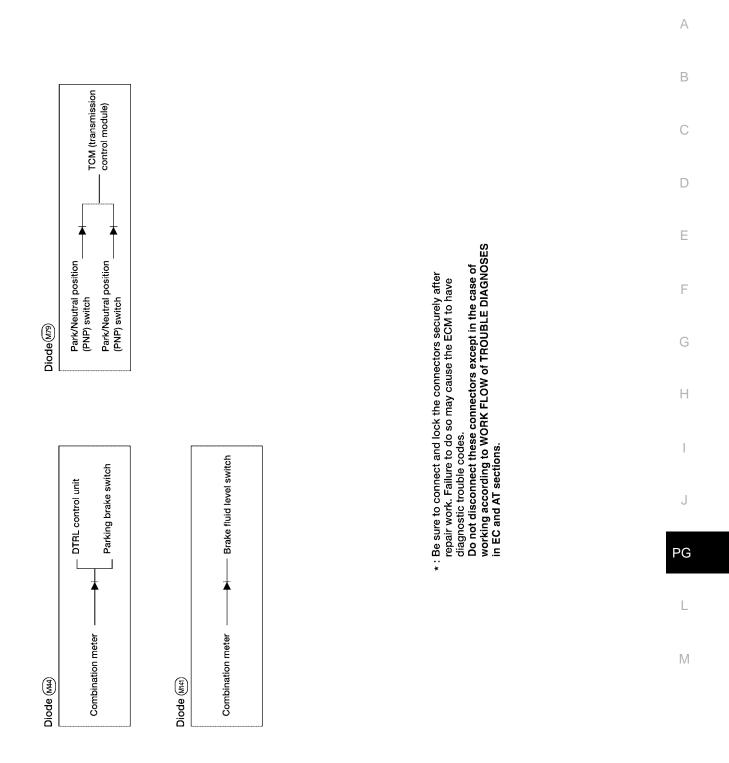
NOTE: For detailed ground distribution information, refer to <u>PG-16</u>, "Ground Distribution". LEL161A

Main Harness



LKIA0161E

PG-36

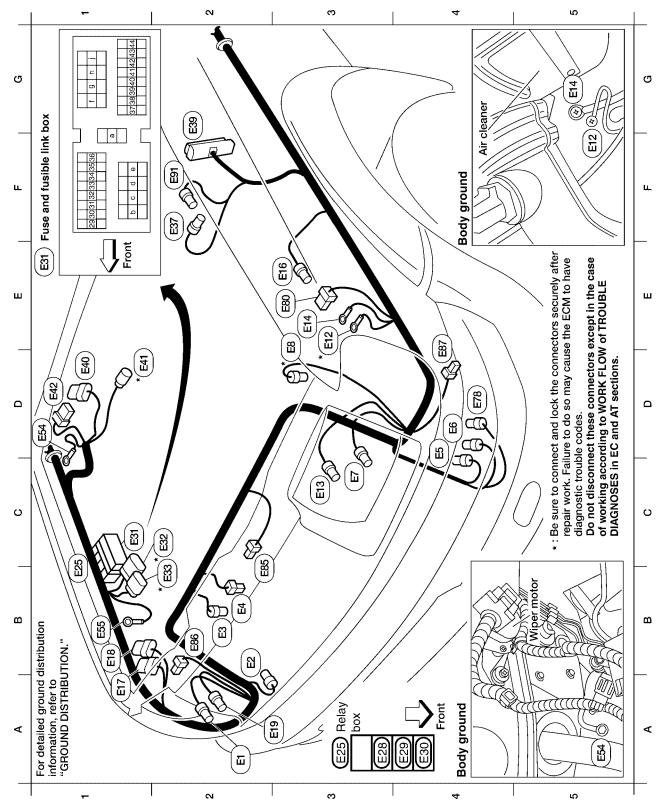


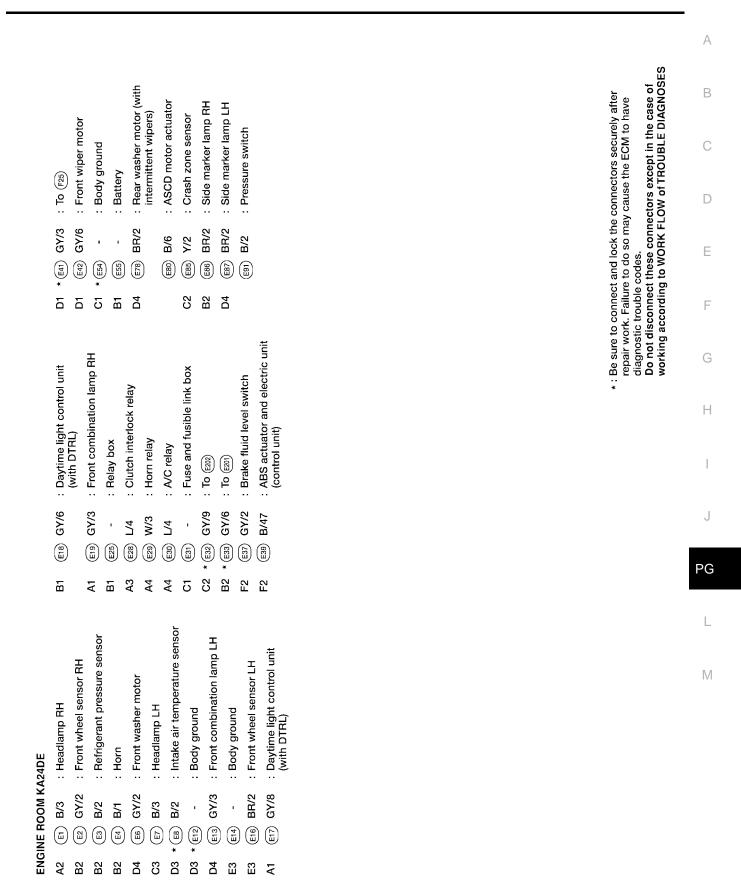
WKIA0298E

Engine Room Harness KA24DE

EKS0036Z

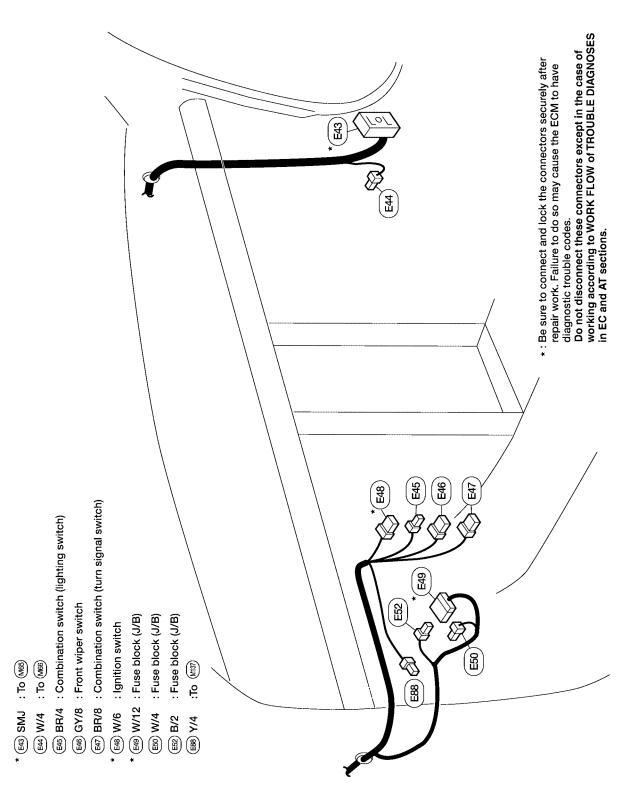
Engine Compartment





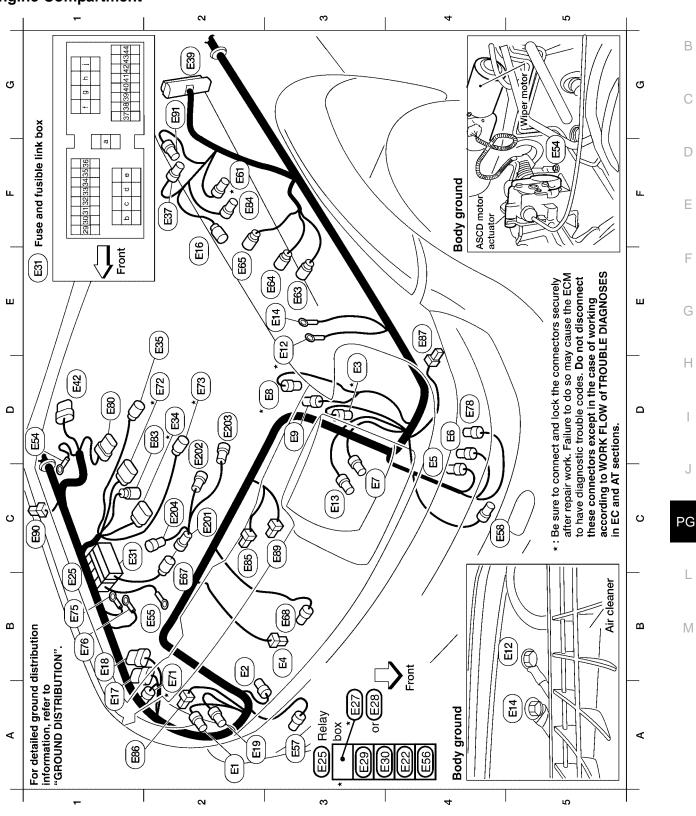
WKIA2695E

Passenger Compartment



WKIA0301E

VG33E AND VG33ER Engine Compartment



А

	: Dropping resistor	: Terminal cord assembly	: Revolution sensor	: To (E31)	: To (E31)	: Rear washer motor	: ASCD motor actuator	: Turbine revolution sensor	: Supercharger bypass valve control solenoid valve	: Crash zone sensor	: Side marker lamp RH	: Side marker lamp LH	: Ambient air temperature sensor	: Auxiliary power supply	: Pressure switch	: To Eer	: Starter motor	: Starter motor	: Battery				
	Er) GY/2	* E72 BR/8	* E73 GY/3	- (E75)	* (E76) .	* E78 BR/2	E80 GY/6	E83 BR/4	E84 B/2	E85 Y/2	E86 BR/2	E87 BR/2	E89 B/2	E90 W/2	E91 B/2	E201) GY/1	E202 GY/1	- 503	-				
	B2	5	ö	81	8	D4	5	5	F2	ö	B2	D4	B3	Ω	G2	S	D2	D2	ö				
	: Clutch interlock relay (with M/T)	: Horn relay	: A/C relay	: Fuse and fusible link box	: Park/neutral position (PNP) switch		: Park/neutral position (PNP) switch (with A/T)	: Brake fluid level switch	: ABS actuator and electric unit (control unit)	: Front wiper motor	: Body ground	: Battery	: Front fog lamp relay	: Front fog lamp RH	: Front fog lamp LH	: EVAP canister purge volume	control solenoid valve	: To A3	: To 🖈	: To (A5)	: To (E201)	: Ambient air temperature switch	
	E28) L/4	E29 W/3	E30 L/4	-	E34 GY/8		(E35) W/2	(E37) GY/2	* E39 B/47	(E42) SB/6	* E54 -	- E55) -	* (E56) L/4	(E57) GY/2	(E58) GY/2)	EE3 GY/1	E64 GY/1	E65 GY/3	EE7 GY/1	E68) GY/2	
	A4	A4	A4	δ	8	ć	02	G2	G2	5	5	B2	B4	A3	04 0	E2		Ш	Ë	E2	ö	B3	
ENGINE ROOM VG33E AND VG33ER	: Headlamp RH	: Front wheel sensor RH	: Refrigerant pressure sensor	: Horn	: Washer fluid level switch	: Front washer motor	: Headlamp LH	: Intake air temperature sensor	: Hood switch (with vehicle security system)	: Body ground	: Front combination lamp LH	: Body ground	: Front wheel sensor LH	: Daytime light control unit		: Daytime light control unit (with DTRL)	: Front combination lamp RH	: Vehicle security lamp relay	(with vehicle security system)	: Relay box	: Park/neutral position (PNP) relay	(WILL A/ I)	
NE ROOM VG	E1 B/3	E2) GY/2	E3 B/2	E4 B/1	(E6) BR/2	E6 GY/2	(E7) B/3	* (E8) B/2	E9 W/2	* (E12) -	E13 GY/3	E14 -	E16 BR/2	E17 GY/8		E18) GY/6	(E19) GY/3	(E22) BR/6)	E26 -	E27 BR/6		
ENG	A2	B2	B2	B3	9	D4	ប៊	р3 С	<u>B</u>	ъ В	D4	ш	E2	A1	i	81	A1	B3		5	A3		

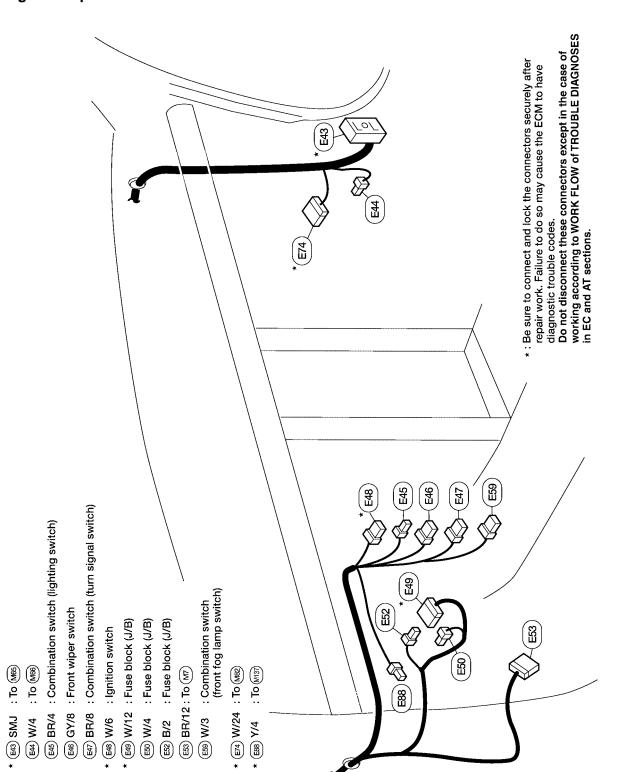
 * : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.
 Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES

HARNESS LAYOUT

WKIA2696E

PG-42

Passenger Compartment



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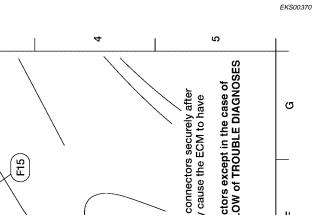
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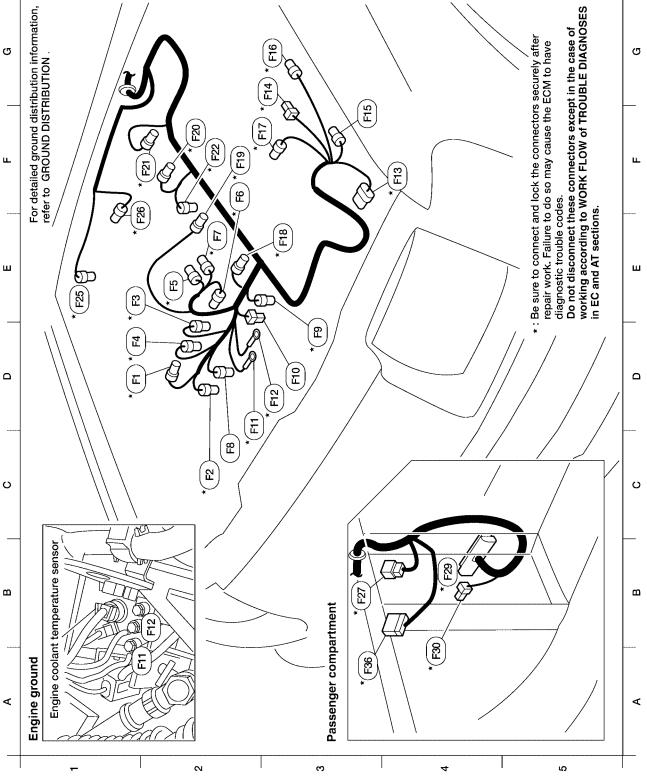
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Engine Control Harness KA24DE

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WKIA0305E

F3 * (F17) GY/2 : Dis	E3 * F18 B/2 : Inj	F2 * (F19) B/2 : Inj	nd F2 * (F20) B/2 : Inj	* * * *	F2 (F2) G/3 : E0	* EP6 L/2	* E37 W/16	* Em GV/124) (1 *	* E3 W/20					
: Mass air flow sensor	: To Fu	: Throttle position sensor	: Throttle position switch (closed throttle position switch and	wide open unoure position switch)	: IACV-AAC valve	: IACV-FICD solenoid valve	: Power steering pressure switch	: Engine coolant temperature sensor	: Thermal transmitter	: Engine ground	: Engine ground	: Distributor (camshaft position sensor)	: Resistor	: A/C compressor	: Heated oxygen sensor 1
D2 * (FI) BR/4	* F2 GY/2	* F3 BR/3	* (F4) GY/3	* (F5) GY/2	* E BR/2	* (F) PU/2	F8 B/1	* (F9) GY/2	F10 B/1	- (1) *	* F12	* F13 GY/6	* F14 GY/2	(F15)-1 B/1	* (F16) SB/3
D2	ö	02	D2	E	Ę	E2	8	<u>D</u> 3	ß	02	<u>D</u> 3	F 4	ទួ	£	G3

ス) GY/2 : Distributor (ignition coil)	B/2 : Injector No. 1	9) B/2 : Injector No. 2	B/2 : Injector No. 3	 B/2 : Injector No. 4 	2) G/2 : EGRC-solenoid valve	6) GV/3 : To (E41)	Comparison of the second	* (FZT) W/16 : To (M59)	9 GY/124 : ECM	D L/4 : ECM relay	* (F36) W/20 : To (M81)	
*	* F18	*	* F20	* F21	* F22	* (F25	* F26		* F29	*		
e	3	2	N	N	N		2	ŝ	4	4	g	

* : 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.

WKIA0306E

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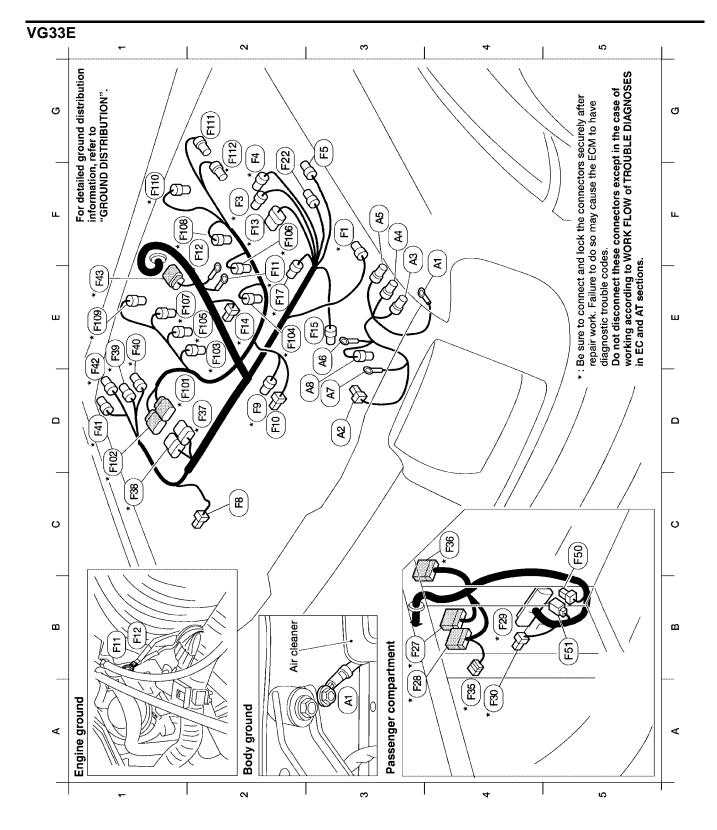
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- : Mass air flow sensor BR/4 (E £
- : Throttle position sensor BR/3 (E Ъ
- : Throttle position switch (closed throttle position switch and wide open throttle position switch) : EGR temperature sensor GY/3 GY/2 **F** E) 잂 ដ
 - : Power steering oil pressure switch B/2 (B2) 8
- : Engine coolant temperature sensor GY/2 20
- : Thermal transmitter B () 1 Ы
- : Engine ground (II) БZ
- Engine ground * F12 R
- : Distributor (camshaft position sensor) GY/6 * F13) ы
- : Resistor GY/2 (F1 Ы
 - : A/C compressor B F15) ш
- : Distributor (ignition coil) GY/2 E 1 Ы

 - : EGRC solenoid valve B/2 F22 g
 - - : To M59 W/16 (F27) B
 - : To (M58) W/16 * F28 A3
 - GY/124 : ECM F29 **B**4
- : ECM relay Ц4 * * A4
- : Diode-5 B/2 * (F35) ¥
- : To MB1 W/24 * F36 2
 - To (F101) B/8 F37) 20
 - GY/8 * F38 δ

 - To (F102) GY/4 * (F39) Ш
- : Heated oxygen sensor 2 (bank 2) : Heated oxygen sensor 1 (bank 2) GY/3 * (140) * Ш
- : Heated oxygen sensor 1 (bank 1) : Heated oxygen sensor 2 (bank 1) GY/3 GY/4 * F41) * (F42) Б
 - : To F201 GY/8 * (F43) Б Ш

 - Diode F35
- ECM solenoid valve IACV-FICD

WKIA0308E

- ENGINE CONTROL HARNESS (CONTINUED)
- ۲/W E51 S
- : Injector No. 2 : Injector No. 3 : Injector No. 5 Injector No. 6 : Knock sensor : Injector No. 1 : Injector No. 4 : To F38 : To (F37) GY/8 GY/2 GY/3 GY/2 BR/2 B/8 B/2 B/2 B/2 B/2 B/2 B/2 * F102 * (F109) (11) * * F103 * F105 (100) * * (E110) * (F112) * (F101) * (F104 * (F107) * (F108) ß 8 Б Ы Б 62 Ш Ы F2 Ы ۲.
- : Crankshaft position sensor (OBD) Ш
 - : IACV-FICD solenoid valve
- : IACV-AAC valve

GENERATOR HARNESS

Oil pressure switch : Body ground Generator : Generator : To E64 : To (E65) To E63 GY/3 GY/1 GY/1 GYH . **(**¥) F (¥ (F) (P2) (F4 ଞ୍ଚ Ŧ ñ £ £ £ Ш ñ ñ

: Generator

GY/2

(8) (8)

- 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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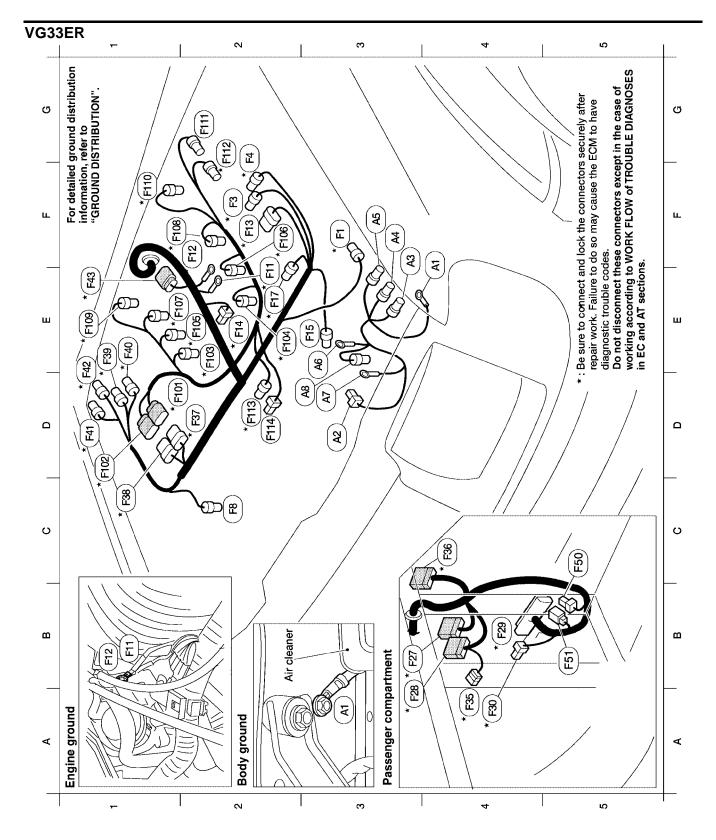
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PG-47

: To Est (F50) W/1

: To F50 B5

ENGINE SUB HARNESS



WKIA0309E



flow sensor
air
Mass a
••
BR/4
E
*
Г3

	: Throttle position sensor	
	BR/3	
)	F2 * F3	(
	F2	í

: Throttle position switch (closed throttle position switch and	wide open throttle position switch)
) GY/3	
)

- : Power steering oil pressure switch B/2 (BE 8
- : Engine ground Ē ы
- : Engine ground F12) ЧZ
- : Distributor (camshaft position sensor) GY/6 F13 Ъ
- : Resistor GY/2 [14] Ы
- : A/C compressor 5 F15 ш
- : Distributor (ignition coil) GY/2 E17) Ы
 - : To M59 W/16 F27 B
 - : To (M58) W/16 * (F28) A3
 - GY/124 : ECM * F29 8
- : ECM relay 4 * E30 A4
 - : Diode SB/2 * F35 A4
- : To M81 : To (F101) W/24 G/10 €36 * * (F37) 9 20

PG-49

- : To (F102) GY/10 * F38 5
- : Heated oxygen sensor 2 (bank 2) : Heated oxygen sensor 1 (bank 2) GY/4 GY/3 € 139 * F40 Ш Ш
- : Heated oxygen sensor 1 (bank 1) GY/3 * [141) Б
- : Heated oxygen sensor 2 (bank 1) GY/4 Б
 - F42
 - : To (F201) B/8 F43 Ш
 - W/1 (B) S

 - : To (F50) : To F51 N/ F51 B5
- ECM ≱ solenoid valve IACV-FICD Diode (F35)

WKIA0310E

: To F38 : To (F37) GY/10 G/10 * F101 * F102

20 5

ENGINE SUB HARNESS

- Injector No. 2 : Injector No. 1 B/2 B/2 * E103 * (F104) Ы Ы
- : Injector No. 3 B/2 * (F105 Ш
- : Injector No. 4 B/2 * (F106) R
- : Injector No. 5 B/2 * E107 Ы
 - : Injector No. 6 B/2 * (F108) Ш
- Knock sensor GY/2 E100 Ξ
- : Crankshaft position sensor (OBD) GY/2 * (F110) Ш
 - : IACV-FICD solenoid valve GY/2 E III В
 - : IACV-AAC valve BR/2 * (F112) g
 - GY/2 * F113 D2
- : Engine coolant temperature sensor
 - : Thermal transmitter B/1 * (F114) ß

GENERATOR HARNESS

: Oil pressure switch : Body ground Generator Generator : To (E65) : To E63 To E64 GY/3 GY/1 GY/1 GY/1 ī (84) ৰি (R) **(**7 **(**¥ (A5 (¥ (₹) F4 ñ ĥ ĥ ĥ Ш ã ã

: Generator

GY/2

- * 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.

HARNESS LAYOUT



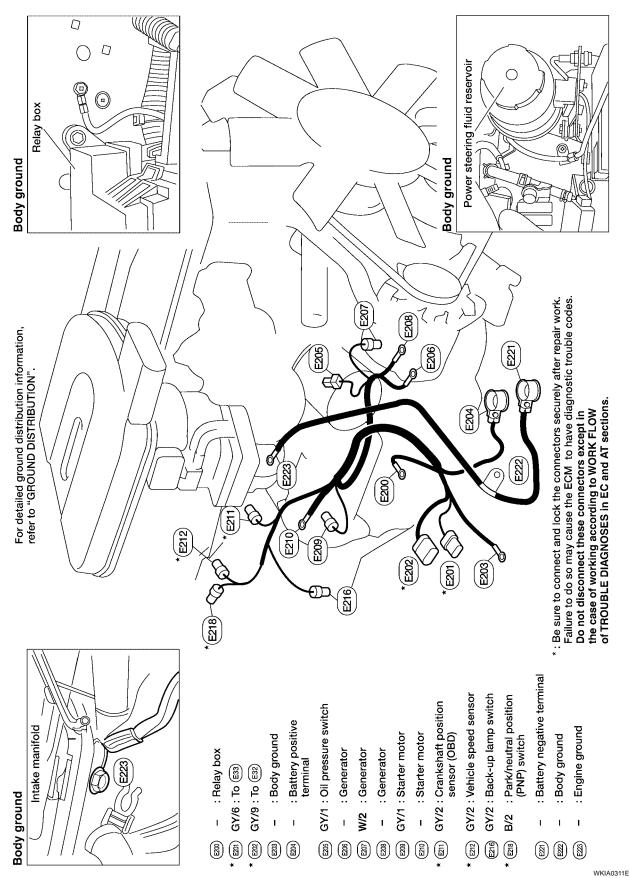
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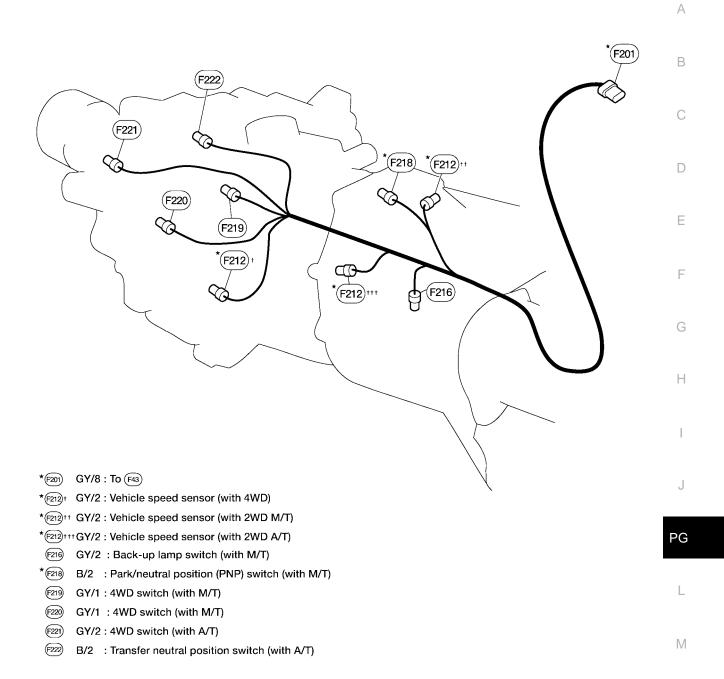


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Engine No. 2 Harness KA24DE

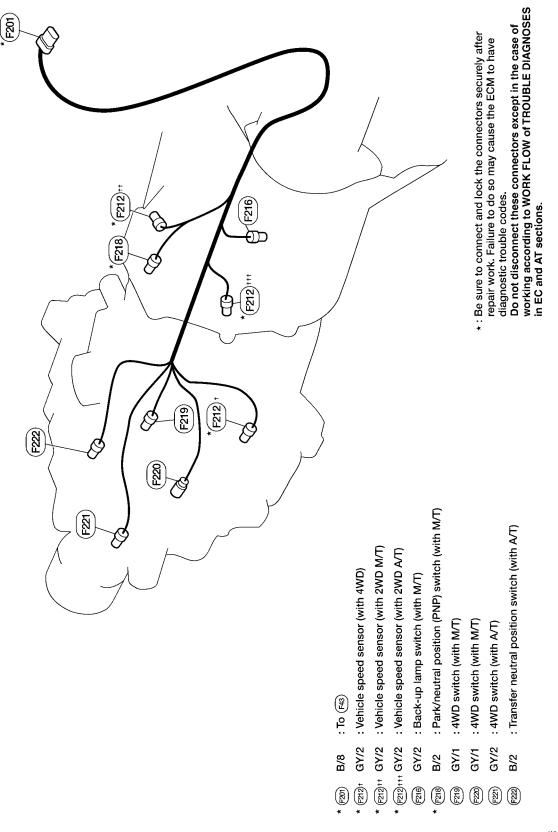


VG33E

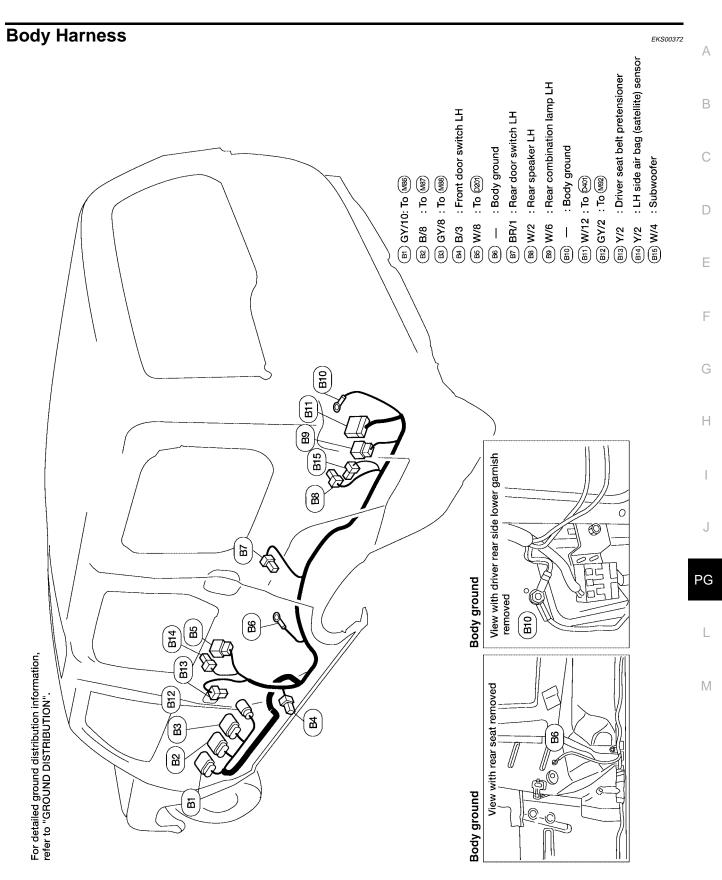


 * : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.
 Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

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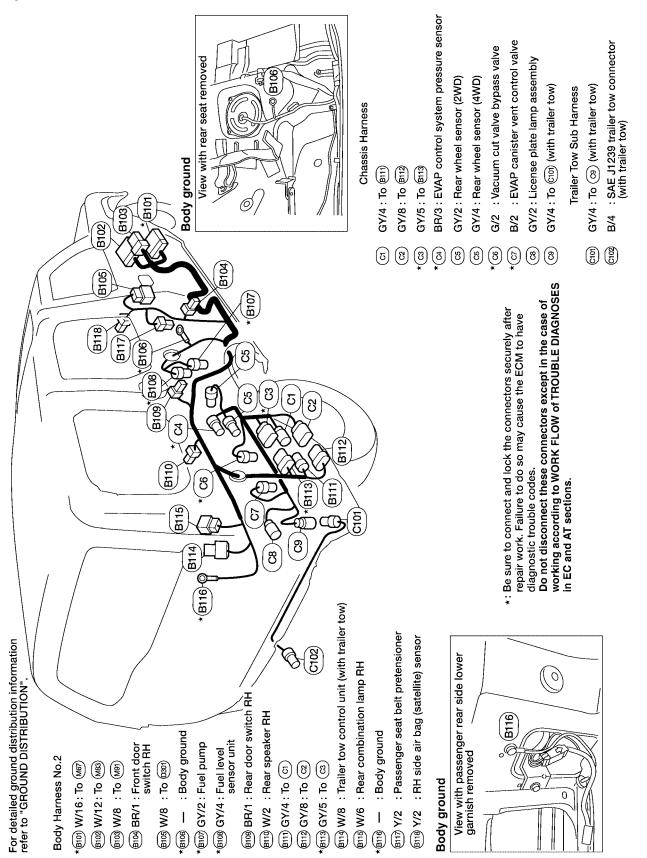


WKIA0312E



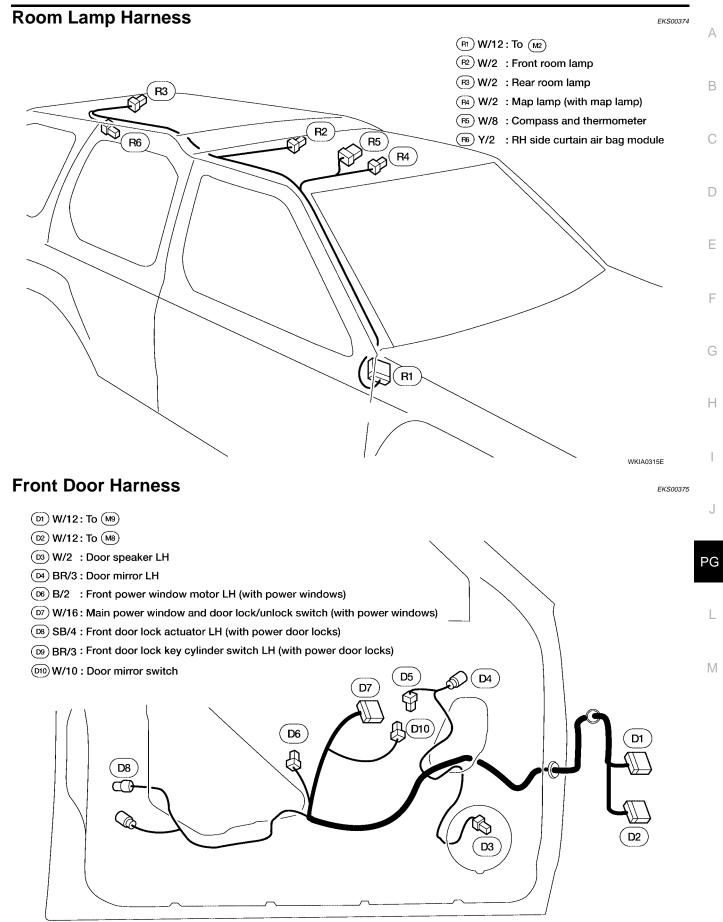
WKIA0313E

Body No. 2 and Chassis Harness

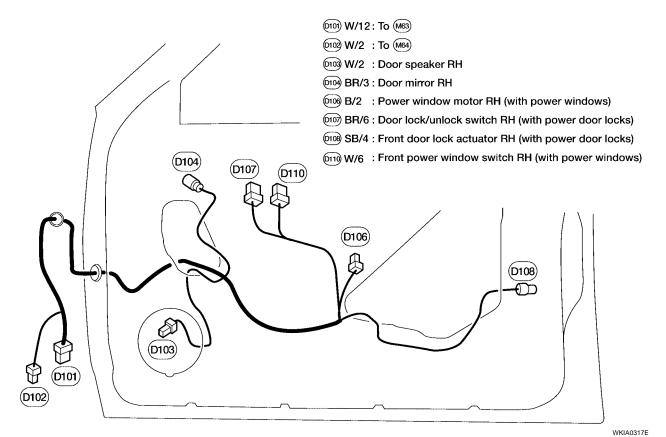


WKIA0314E

EKS00373



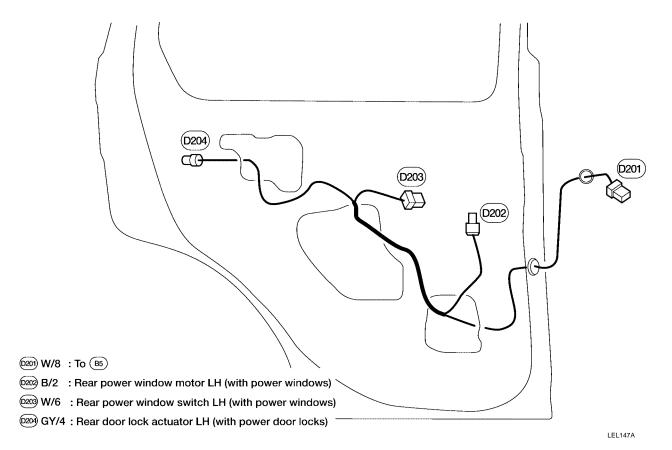
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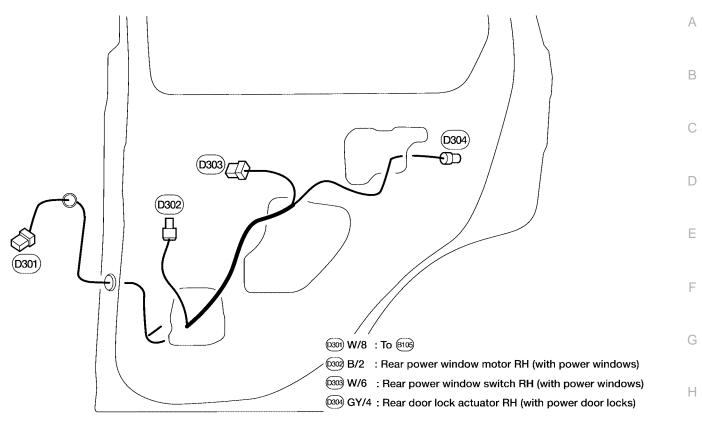


Rear Door Harness

0317E

EKS00376





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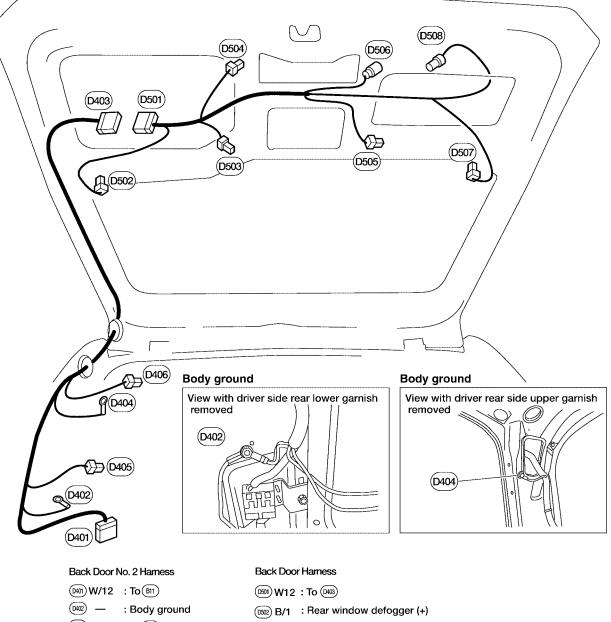
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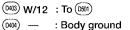
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Back Door Harness





- B/2 : Rear power socket
- Y/2 : LH side curtain air bag module
- (DS03) W/2 : High mounted stop lamp
- ()504) B/2 : Back door switch
- 1505 W/4 : Rear wiper motor (with rear wiper)
- BR/3 : Back door key cylinder switch (with power door locks)
- (DS07) B/1 : Rear window defogger (-)
- GY/4 : Back door lock actuator (with power door locks)

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	0
1STSIG	AT	A/T 1st Signal	
2NDSIG	AT	A/T 2nd Signal	D
3RDSIG	AT	A/T 3rd Signal	
4THSIG	AT	A/T 4th Signal	
AAC/V	EC	IACV-AAC Valve	E
ABS	BRC	Anti-Lock Brake System	
A/C,M	MTC	Manual Air Conditioner	
ASCD	ASC	Automatic Speed Control Device	F
AT/C	EC	A/T Control	
AT/DIAG	EC	A/T Diagnosis Communication Line	
AUDIO	AV	Audio	G
BACK/L	LT	Back-up Lamp	
BA/FTS	AT	A/T Fluid Temperature Sensor and TCM Power Supply	
BYPS/V	EC	Vacuum Cut Valve Bypass Valve	H
CAN	EC	CAN Communication Line	
CHARGE	SC	Charging System	
CHIME	DI	Warning Chime	
CIGAR	WW	Cigarette Lighter	
CKPS	EC	Crank Shaft Position Sensor (OBD)	
CMPS	EC	Camshaft Position Sensor (OBD)	J
COMPAS	DI	Compass and Thermometer	
DEF	GW	Rear Window Defogger	
D/LOCK	BL	Power Door Lock	PG
DTRL	LT	Headlamp - With Daytime Light System	_
ECTS	EC	Engine Coolant Temperature Sensor	
EGRC/V	EC	EGRC - Solenoid Valve	L
EGRC1	EC	EGR Function	
EGR/TS	EC	EGR Temperature Sensor	
ENGSS	AT	Engine Speed Signal	M
F/FOG	LT	Front Fog Lamp	
FICD	EC	IACV-FICD Solenoid Valve	
FLS1	EC	Fuel Level Sensor Function (SLOSH)	
FLS2	EC	Fuel Level Sensor Circuit	
FLS3	EC	Fuel Level Sensor Circuit (Ground Signal)	
F/PUMP	EC	Fuel Pump	
FTS	AT	A/T Fluid Temperature Sensor	
FTTS	EC	Fuel Tank Temperature Sensor	
FUEL	EC	Fuel Injection System Function	
FUELB1	EC	Fuel Injection System Function (Bank 1)	
FUELB2	EC	Fuel Injection System Function (Bank 2)	
H/LAMP	LT	Headlamp	
HO2S1	EC	Heated Oxygen Sensor 1	
HO2S1H	EC	Heated Oxygen Sensor 1 Heater	
HO2S2	EC	Heated Oxygen Sensor 2	

EKS003MX

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В



HO2S2H	EC	Heated Oxygen Sensor 2 Heater
HORN	WW	Horn
IATS	EC	Intake Air Temperature Sensor
IGN/SG	EC	Ignition Signal
ILL	LT	Illumination
INJECT	EC	Injector
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., and Fuel Gauges
MIL/DL	EC	MIL and Data Link Connectors
MIRROR	GW	Door Mirror
NONDTC	AT	Non-detectable Items
O2H1B1	EC	Heated Oxygen Sensor 1Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 Heater Bank 2
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2
OVRCSV	AT	Over Run Clutch Solenoid Valve
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PNP/SW	AT	Park/Neutral Position Switch
PNP/SW	EC	Park/Neutral Position Switch
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor
PST/SW	EC	Power Steering Oil Pressure Switch
ROOM/L	LT	Interior Room Lamp
S/CHGR	EC	Supercharger Bypass Valve Control
SHIFT	AT	A/T Shift Lock System
SRS	SRS	Supplemental Restraint System
S/SIG	EC	Start Signal
SSV/A	AT	Shift Solenoid Valve A
SSV/B	AT	Shift Solenoid Valve B
START	SC	Starting System
STOP/L	LT	Stop Lamp
TAIL/L		Parking, License and Tail Lamps
TCCSIG	AT	A/T TCC Signal (Lock Up)
TCV	AT	Torque Converter Clutch Solenoid Valve
TPS	AT	Throttle Position Sensor
TPS	EC	Throttle Position Sensor Throttle Position Sensor
TP/SW	EC	Throttle Position Sensor
TRSA/T	AT	Turbine Revolution Sensor
T/TOW		Trailer Tow
TURN	LT	Turn Signal and Hazard Warning Lamps
T/WARN	WT	Low Tire Pressure Warning System
VDC	BRC	Vehicle Dynamics Control System
VEHSEC	BL	Vehicle Security System



VENT/V	EC	EVAP Canister Vent Control Valve	
VSS	EC	Vehicle Speed Sensor	A
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)	
VSSMTR	AT	Vehicle Speed Sensor Meter	
WARN	DI	Warning Lamps	В
WINDOW	GW	Power Window	
WIPER	WW	Front Wiper and Washer	0
WIP/R	WW	Rear Wiper and Washer	C

D

Е

F

G

Н

J

PG

L

M

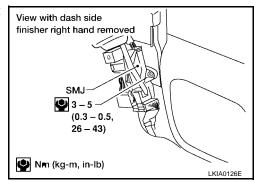
SUPER MULTIPLE JUNCTION (SMJ)

Installation

Securely fit and lock SMJ connectors. Tighten harness bracket bolt to the specified torque.

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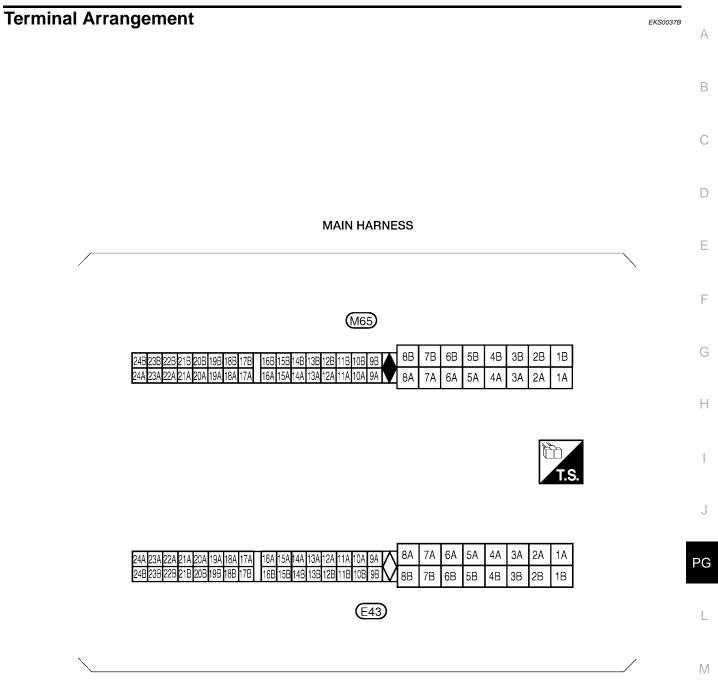
: 3 - 5 N·m (0.3 - 0.5 kg-m, 26 - 43 in-lb)



PFP:84341

EKS0037A

SUPER MULTIPLE JUNCTION (SMJ)



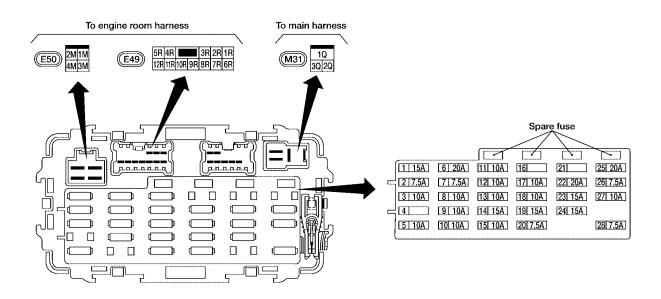
ENGINE ROOM HARNESS

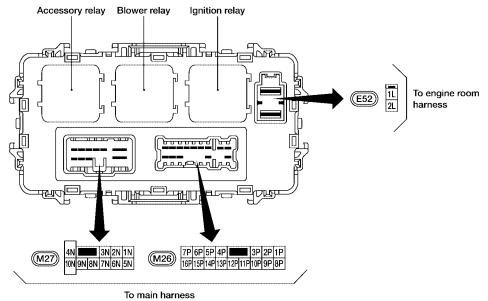
AEL646B

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

PFP:24350

EKS0037C





mainmaineeee

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX PFP:24381 А **Terminal Arrangement** EKS0037D В For KA24DE С FRONT $\leq \Box$ D 29 30 31 32 33 34 35 36 f h j Е g 7.5A 15A 15A 7.5A 7.5A а 30A F (E31) 80A b с d е 38 39 40 42 43 37 41 44 80A 40A 40A 40A 15A 15A 15A 15A 20A Н a - j: FUSIBLE LINK No. 29 - 44: FUSE I J For VG33E and VG33ER FRONT PG L 29 30 31 32 33 34 35 36 f h j g 7.5A 20A 15A 20A 15A 7.5A 7.5A а 40A 80A 20A Μ E31) 120A d е b С 37 38 39 40 41 42 43 44 80A 30A 40A 40A 15A 20A 15A 15A 15A 15A

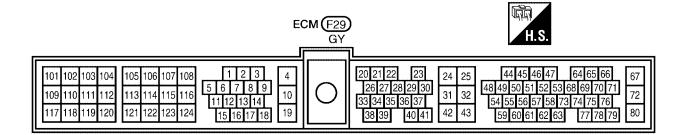
No. 29 - 44: FUSE

a - j: FUSIBLE LINK

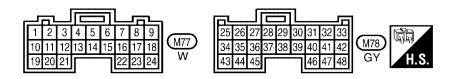
PG-65

ELECTRICAL UNITS Terminal Arrangement

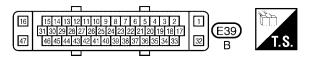
EKS0037F



TCM (TRANSMISSION CONTROL MODULE)



ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



SMART ENTRANCE CONTROL UNIT

