

SECTION **PG**

**POWER SUPPLY, GROUND & CIRCUIT ELEMENTS**

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# PRECAUTIONS

## PRECAUTIONS

PF:00001

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

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The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system may include seat belt switch inputs and dual stage front air bag modules. If equipped with 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.

The vehicle may be equipped with a passenger air bag deactivation switch. Because no rear seat exists where a rear-facing child restraint can be placed, the switch is designed to turn off the passenger air bag so that a rear-facing child restraint can be used in the front passenger seat. The switch is located in the center of the instrument panel, near the ashtray. When the switch is turned to the ON position, the passenger air bag is enabled and could inflate for certain types of collision. When the switch is turned to the OFF position, the passenger air bag is disabled and will not inflate. A passenger air bag OFF indicator on the instrument panel lights up when the passenger air bag is switched OFF. The driver air bag always remains enabled and is not affected by the passenger air bag deactivation switch.

#### **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.
- The vehicle may be equipped with a passenger air bag deactivation switch which can be operated by the customer. When the passenger air bag is switched OFF, the passenger air bag is disabled and will not inflate. When the passenger air bag is switched ON, the passenger air bag is enabled and could inflate for certain types of collision. After SRS maintenance or repair, make sure the passenger air bag deactivation switch is in the same position (ON or OFF) as when the vehicle arrived for service.

### Wiring Diagrams and Trouble Diagnosis

EKS006XO

When you read wiring diagrams, refer to the following:

- [GI-13, "How to Read Wiring Diagrams"](#).
- [PG-9, "POWER SUPPLY ROUTING"](#) for power distribution circuit.

When you perform trouble diagnosis, refer to the following:

- [GI-9, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#).
- [GI-25, "How to Perform Efficient Diagnosis for an Electrical Incident"](#).

Check for any Service bulletins before servicing the vehicle.

# HARNESS CONNECTOR

PFP:24010

EKS006XP

## HARNESS CONNECTOR

### Description

#### HARNESS CONNECTOR (TAB-LOCKING TYPE)

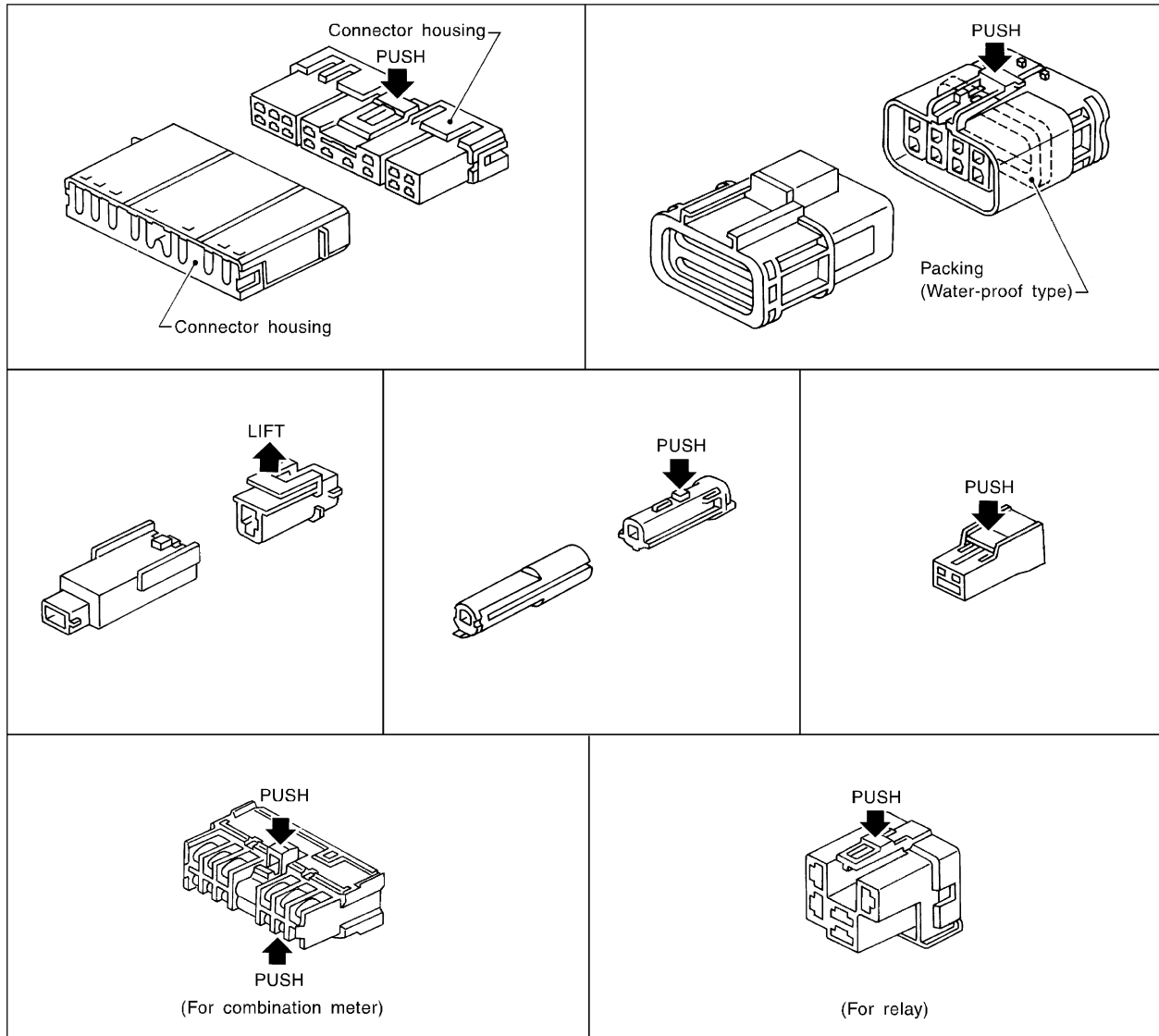
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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]



SEL769DA

# HARNES CONNECTOR

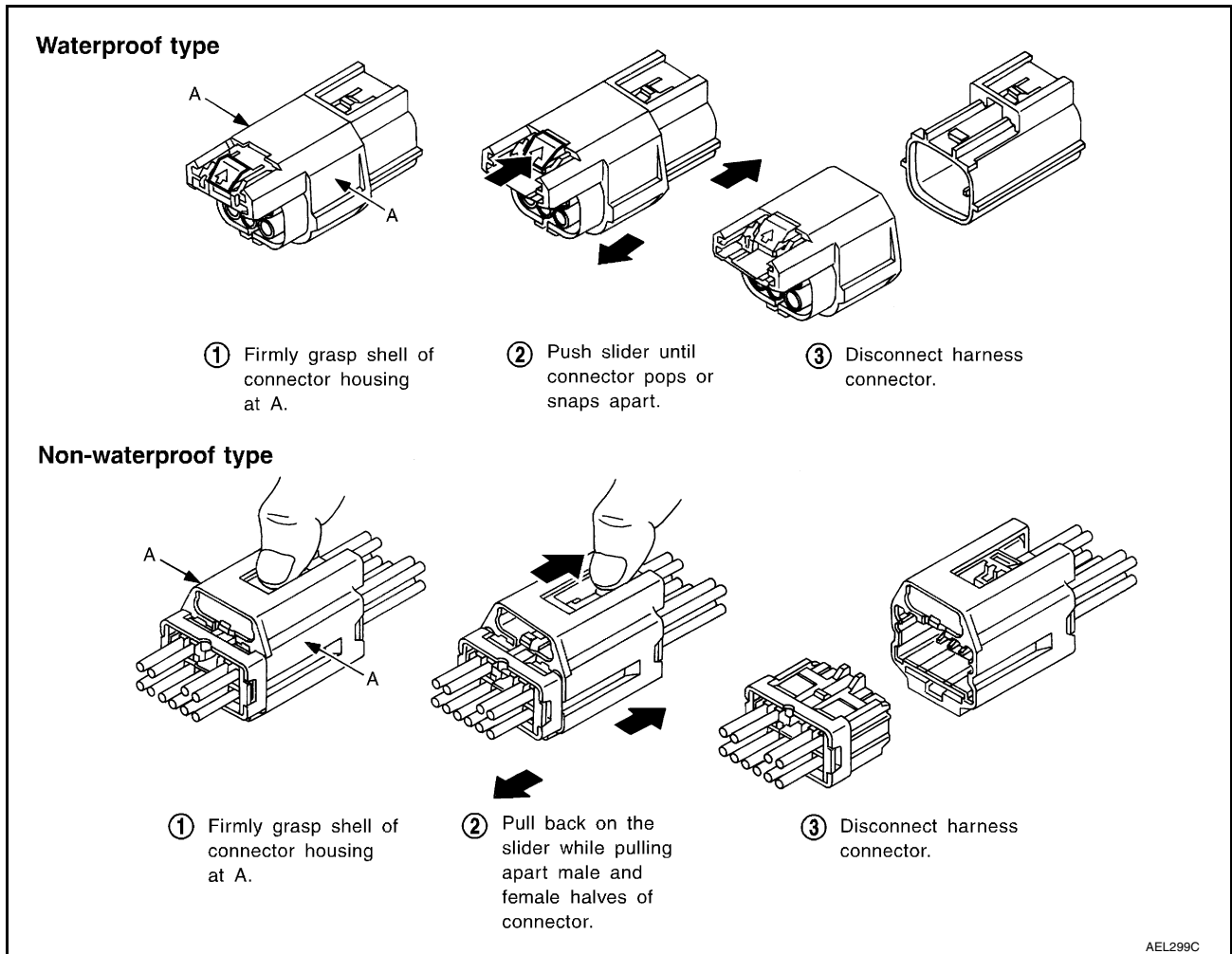
## HARNES CONNECTOR (SLIDE-LOCKING TYPE)

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

### CAUTION:

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

[Example]



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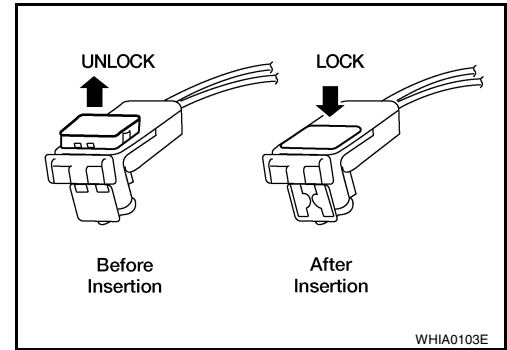
# HARNES CONNECTOR

## HARNES 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.



# STANDARDIZED RELAY

PFP:25230

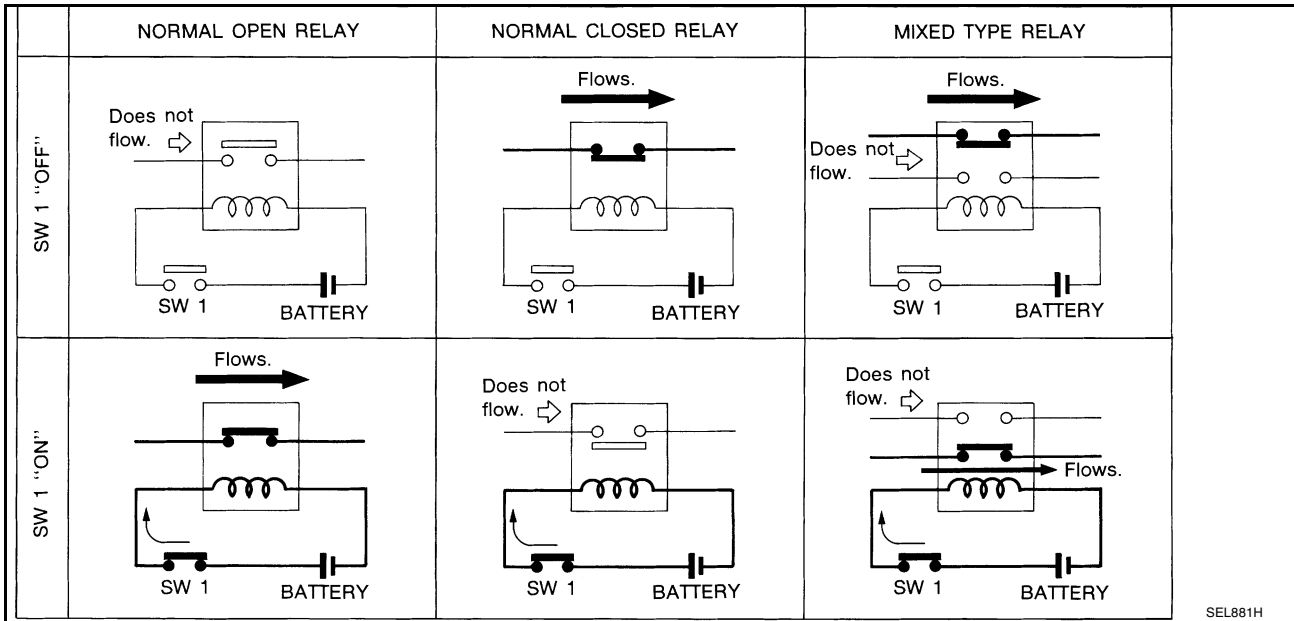
EKS006XQ

## STANDARDIZED RELAY

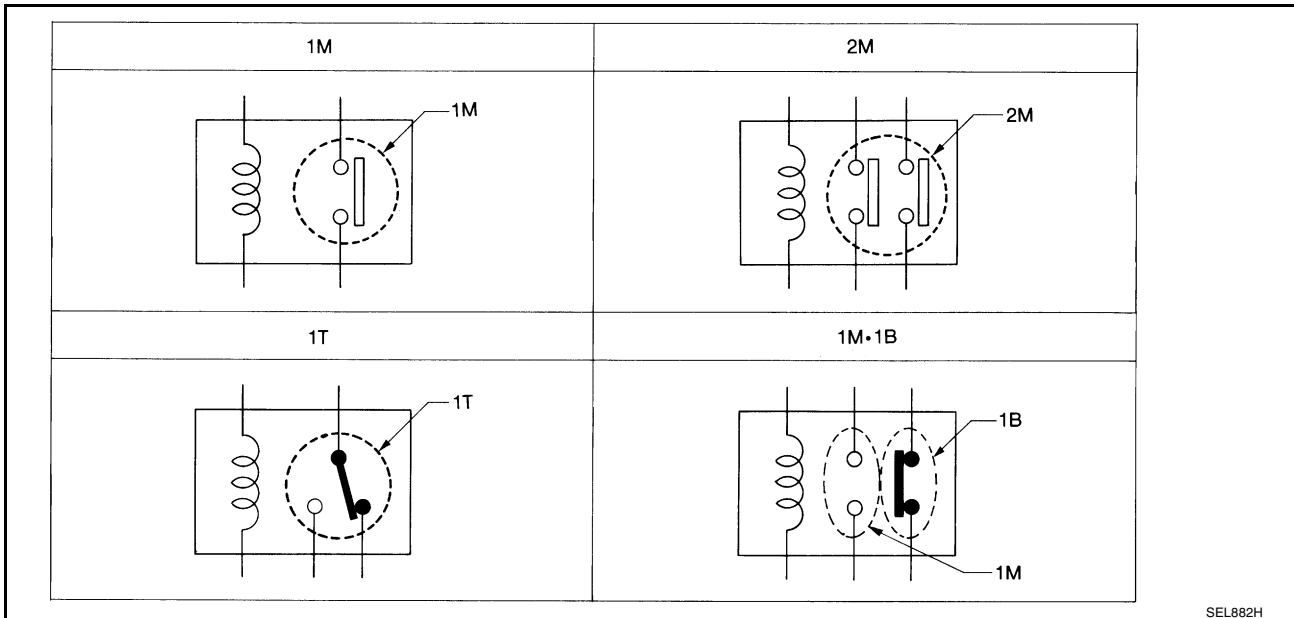
### Description

### NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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

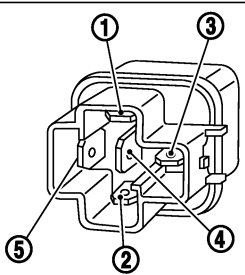
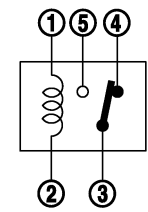
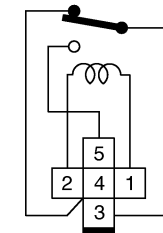
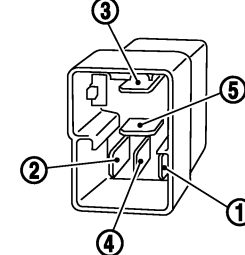
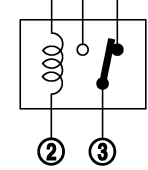
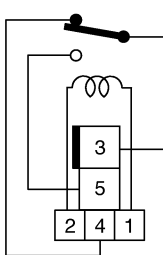
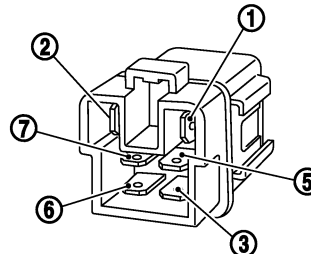
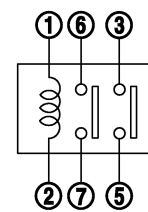
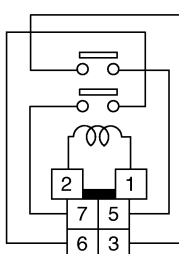
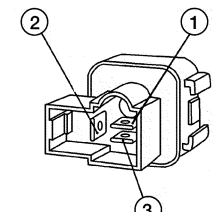
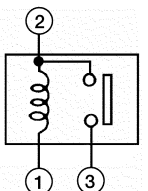
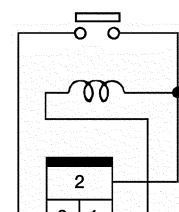
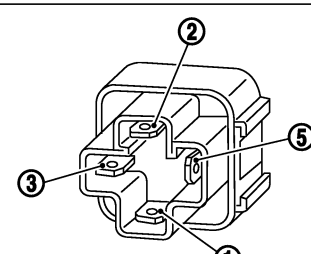
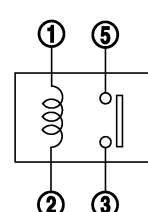
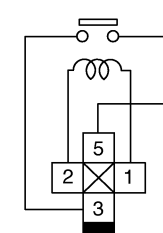


### TYPE OF STANDARDIZED RELAYS



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

# STANDARDIZED RELAY

Type	Outer view	Circuit	Connector symbol and connector	Case color
1T				BLACK
				
2M				BROWN
1M				BLACK
				BLUE

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

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# POWER SUPPLY ROUTING

## POWER SUPPLY ROUTING

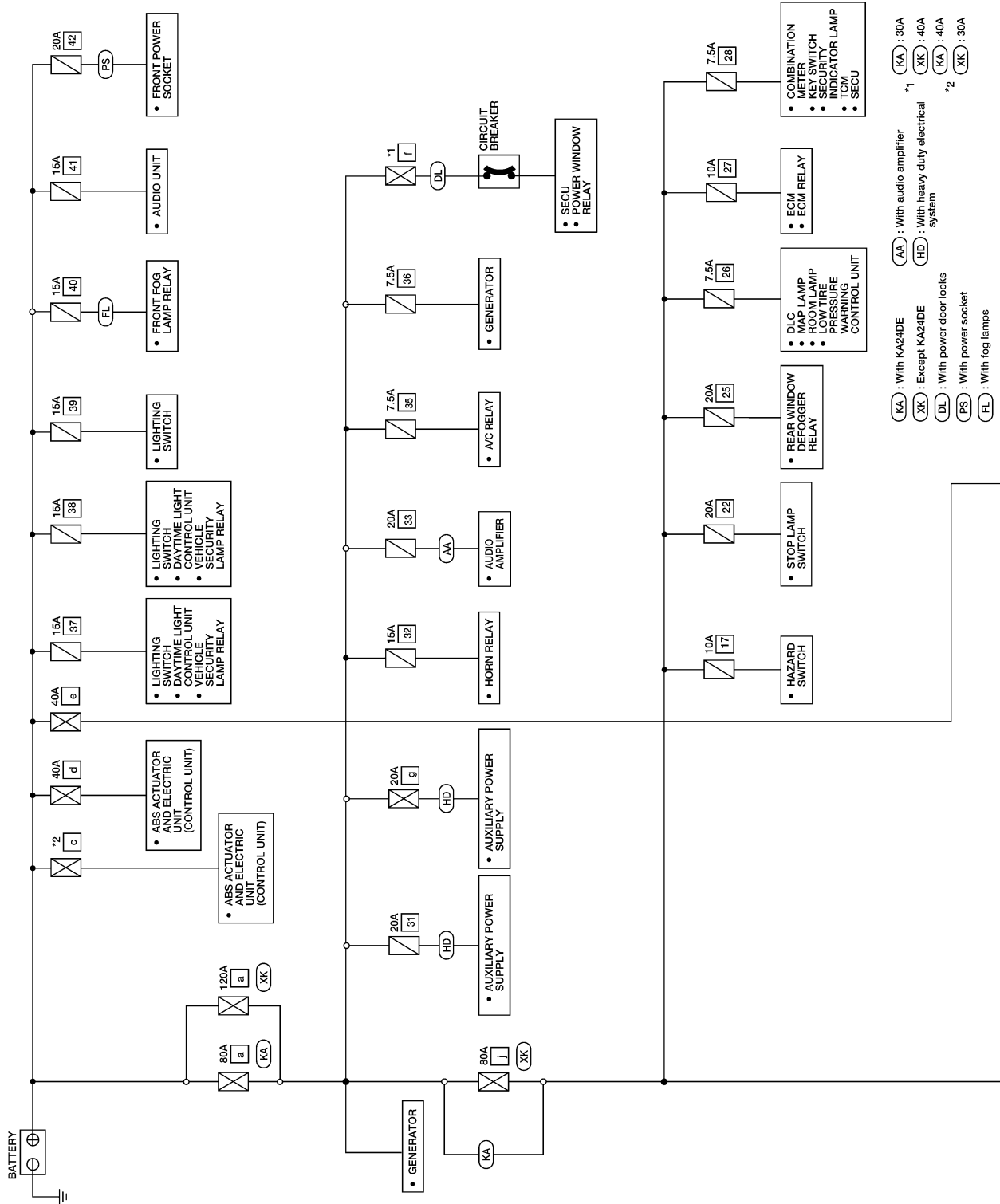
### Circuit Diagram

**NOTE:**

For detailed ground distribution information, refer to [PG-17, "Ground Distribution"](#).

PF024110

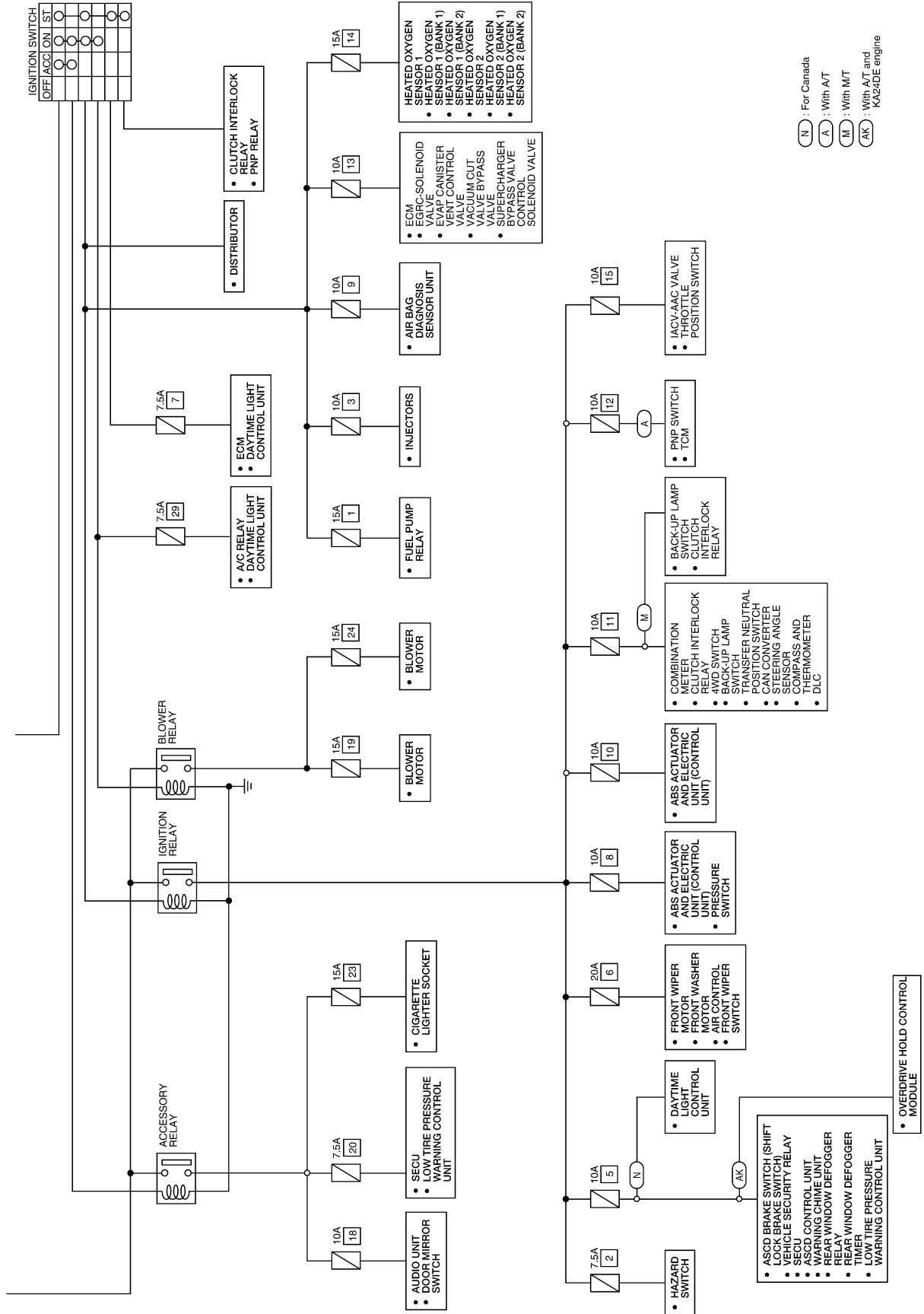
EKS006XR



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# POWER SUPPLY ROUTING



# POWER SUPPLY ROUTING

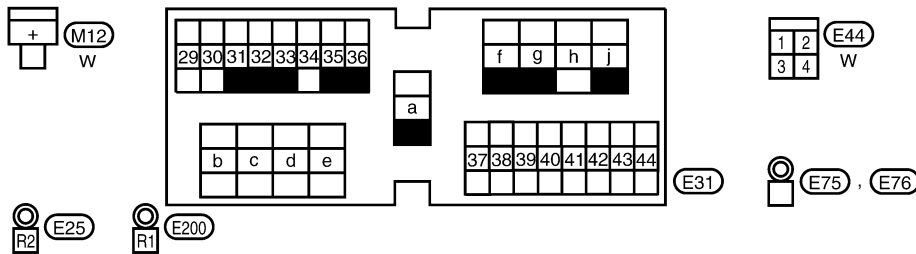
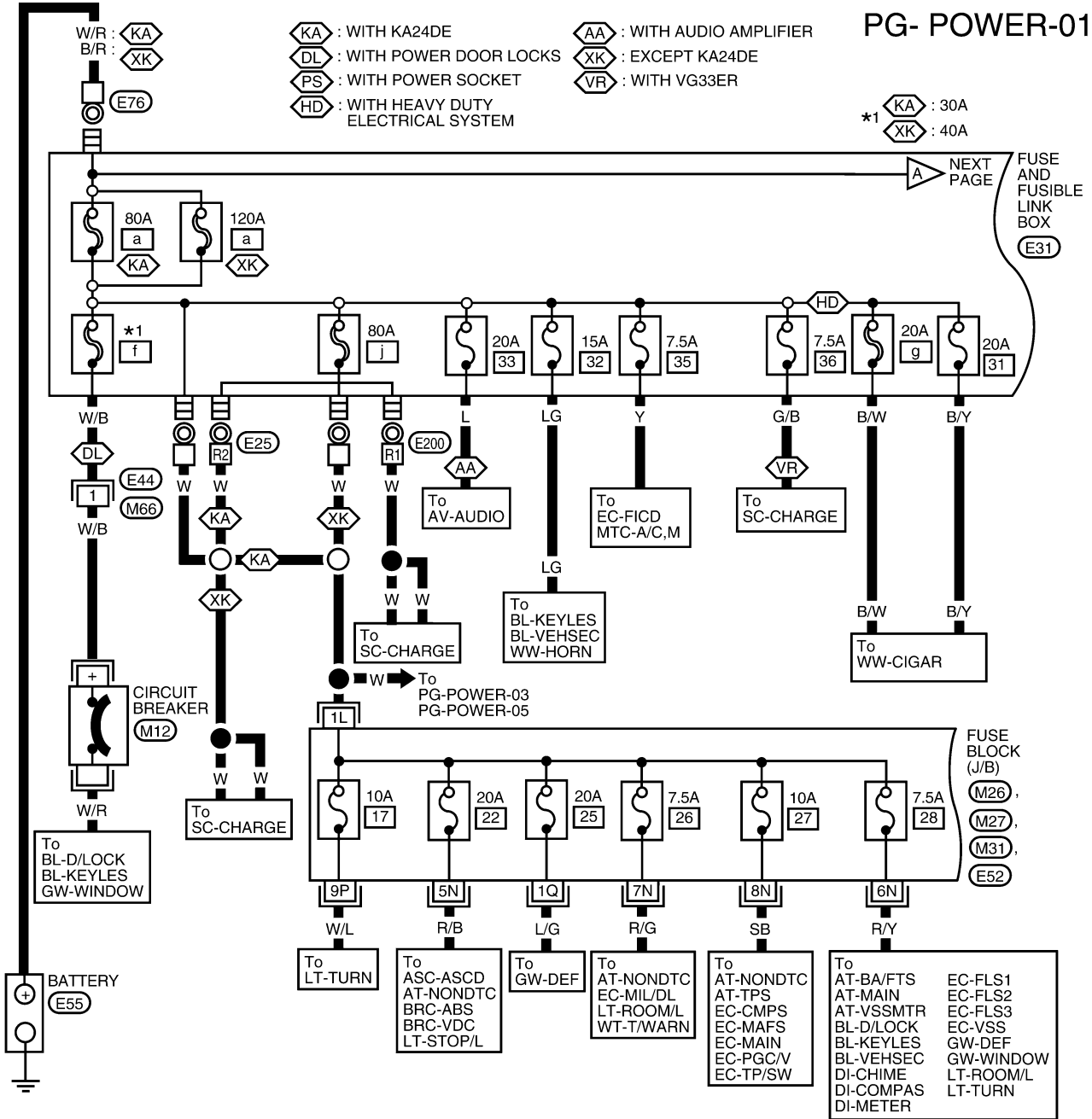
EKS006XS

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

NOTE:

For detailed ground distribution information, refer to [PG-17, "Ground Distribution"](#).

### PG- POWER-01



REFER TO THE FOLLOWING.







*1 KA, XK					
M26, M27, M31, E52					
1	6	11	16	21	25
2	7	12	17	22	26
3	8	13	18	23	27
4	9	14	19	24	
5	10	15	20	28	

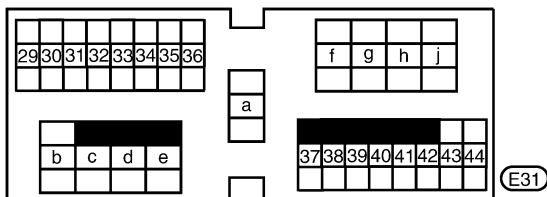
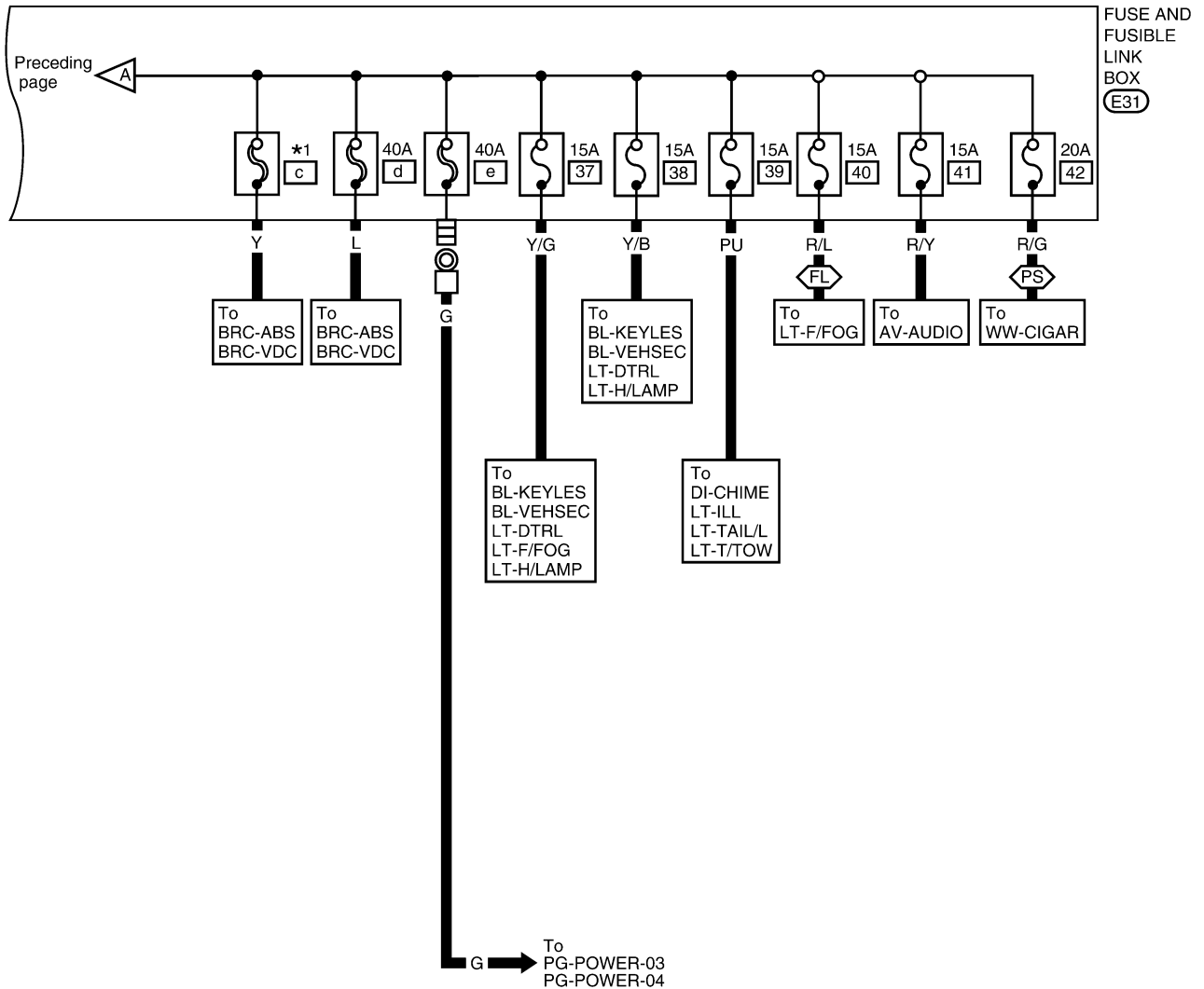
-FUSE BLOCK - JUNCTION BOX (J/B)

WKWA1003E

# POWER SUPPLY ROUTING

## PG-POWER-02

-  : With power socket
-  : With fog lamps
-  : With KA24DE engine
-  : Except with KA24DE engine
- \*1  : 40A
-  : 30A



WKWA0386E

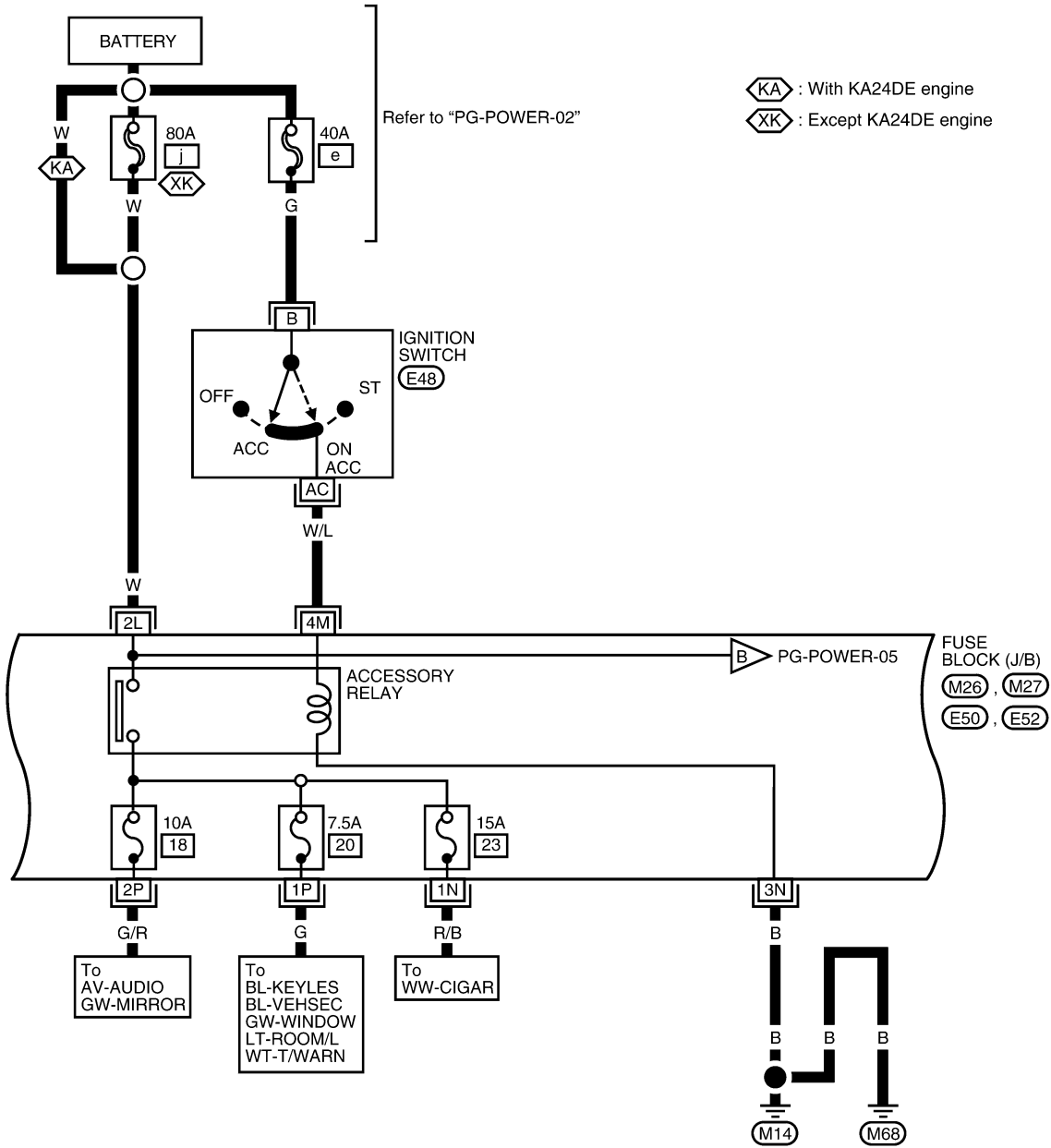
# POWER SUPPLY ROUTING

## ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

### NOTE:

For detailed ground distribution information, refer to [PG-17, "Ground Distribution"](#).

PG-POWER-03



Refer to the following.

(M26), (M27), (E50), (E52)

1	6	11	16	21	25
2	7	12	17	22	26
3	8	13	18	23	27
4	9	14	19	24	
5	10	15	20		28

-FUSE BLOCK - JUNCTION BOX (J/B)

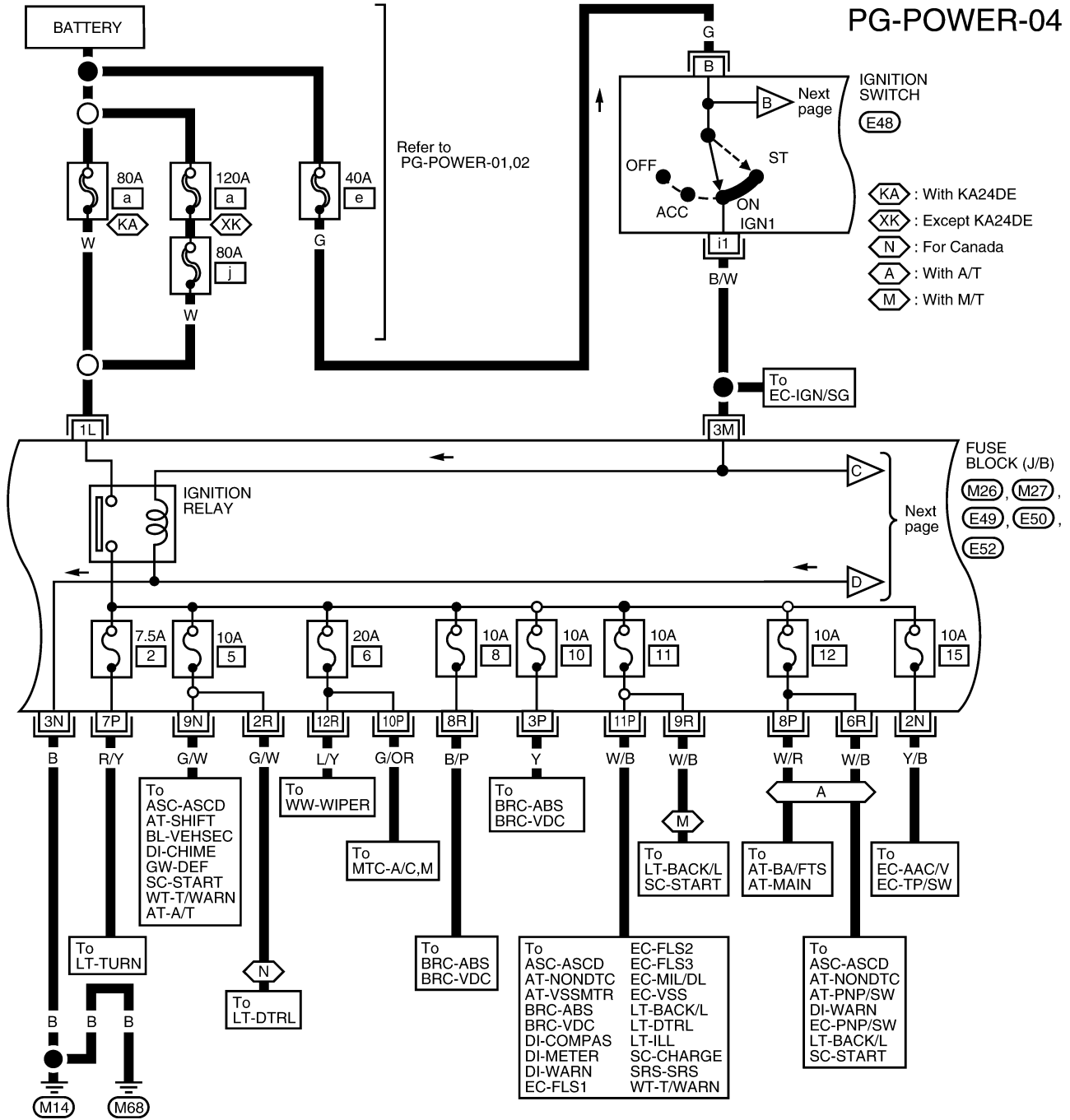
WKWA0654E

# POWER SUPPLY ROUTING

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

**NOTE:**

For detailed ground distribution information, refer to [PG-17, "Ground Distribution"](#).



Refer to the following.

M26, M27, E49, E50, E52

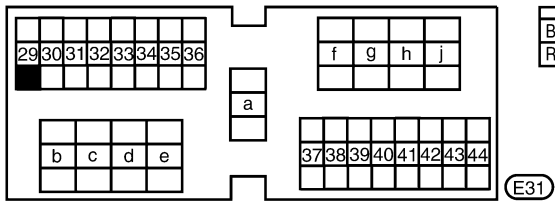
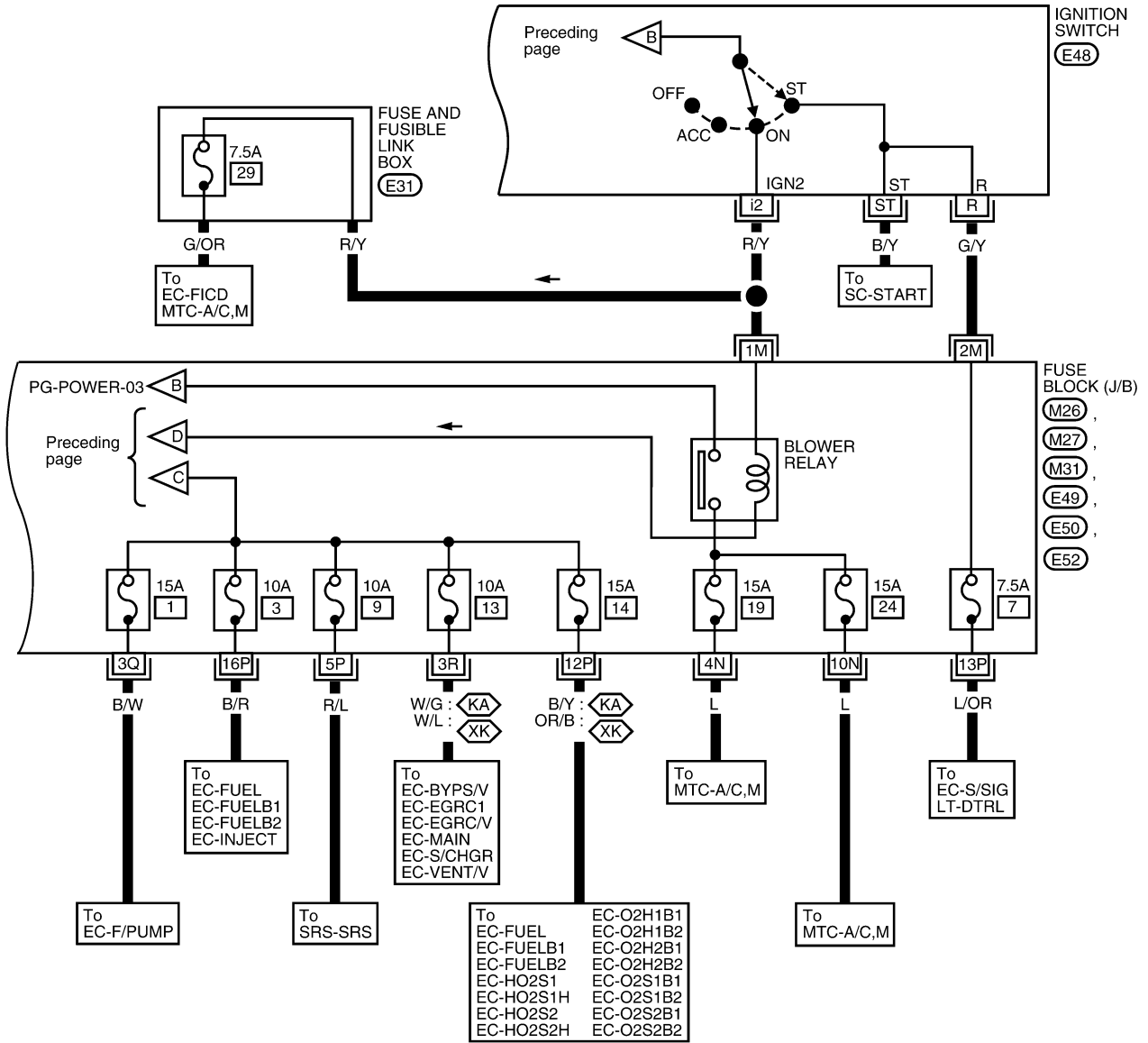
1	6	11	16	21	25
2	7	12	17	22	26
3	8	13	18	23	27
4	9	14	19	24	
5	10	15	20		28

-FUSE BLOCK - JUNCTION BOX (J/B)

# POWER SUPPLY ROUTING

## PG-POWER-05

KA : With KA24DE engine  
XK : Except KA24DE engine



Refer to the following.

M26 , M27 , M31 , E49  
E50 , E52

1	6	11	16	21	25
2	7	12	17	22	26
3	8	13	18	23	27
4	9	14	19	24	
5	10	15	20		28

- FUSE BLOCK - JUNCTION BOX (J/B)

WKWA0389E

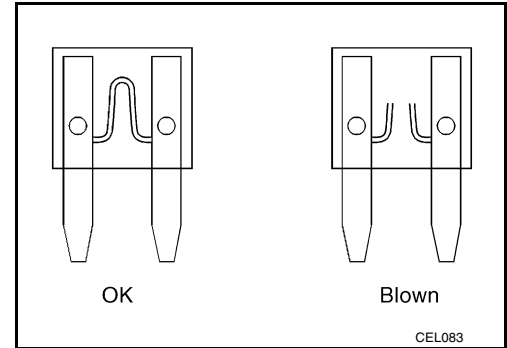
# POWER SUPPLY ROUTING

EKS006XT

## 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.

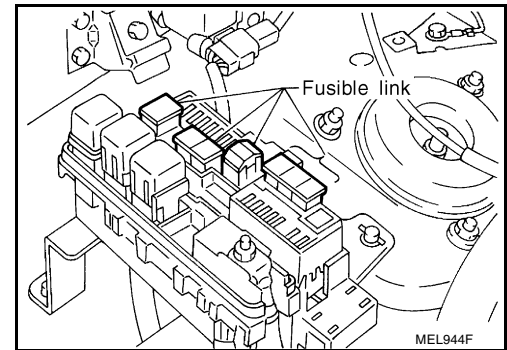


### FUSIBLE LINK

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.

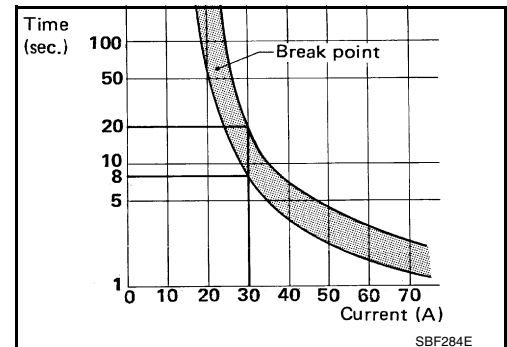


### CIRCUIT BREAKER

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
- room lamp





# GROUND

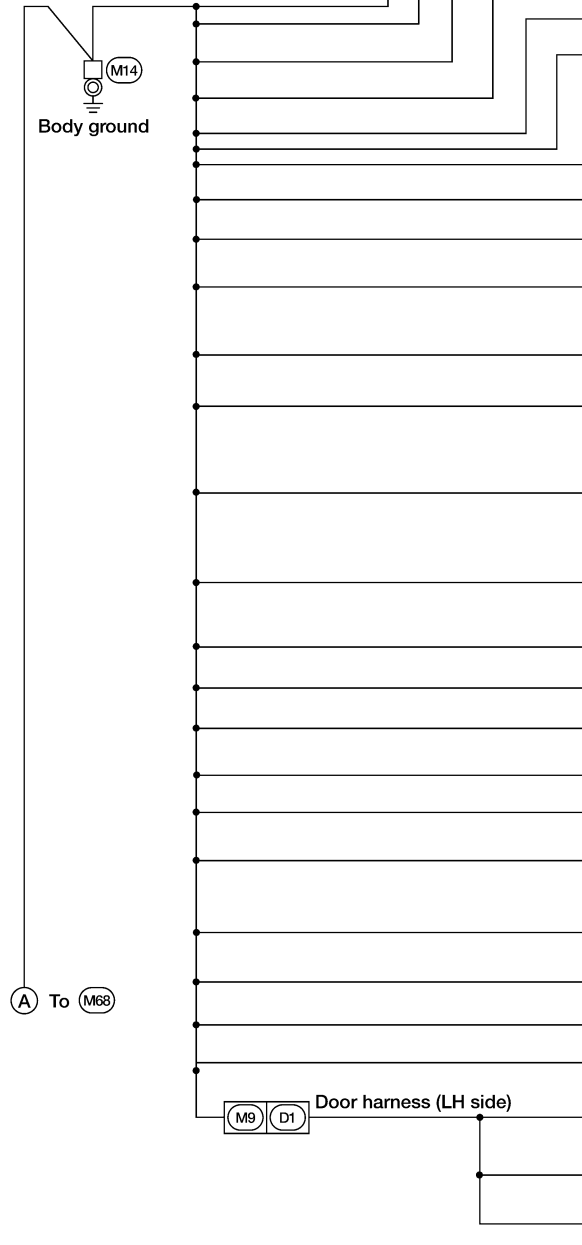
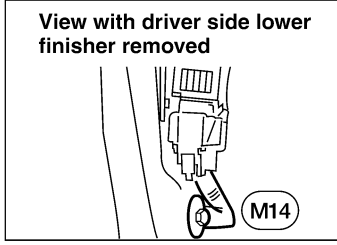
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EKS006XU

## GROUND

### Ground Distribution MAIN HARNESS

Body ground



CONNECTOR NUMBER	CONNECT TO
M5	Clutch interlock switch (Terminal No. 2) (with M/T)
M6	Vehicle security relay (Terminal No. 3) (with power door locks) (with A/T except KA24DE)
M11	Warning chime unit (Terminal No. 8) (without power door locks)
M13	Power window relay (Terminal No. 1) (with power windows)
M19	Seat belt buckle switch LH (Terminal No. 2)
M20	Front door switch LH
M27	Fuse block (J/B) (Terminal No. 3N) <ul style="list-style-type: none"> <li>Accessory relay</li> <li>Blower relay</li> <li>Ignition relay</li> </ul>
M28	Illumination control switch (Terminal No. 5)
M32	Data link connector (Terminal No. 4)
M35	A/T device (shift lock) (Terminal No. 1) (with VG engine and A/T)
M35	A/T device (overdrive control switch) (Terminal No. 5) (with A/T)
M36	Overdrive control switch (with KA engine and A/T)
M38	Combination meter (Terminal No. 13) <ul style="list-style-type: none"> <li>Four wheel drive indicator</li> <li>Turn signal indicators</li> <li>ABS warning lamp</li> </ul>
M76	ATP relay (Terminal Nos. 2 and 4) (with 4-wheel drive and A/T)
M112	Smart entrance control unit (Terminal No. 64) (with power door locks)
M114	Air bag diagnosis sensor unit (Terminal No. 2)
M119	ASCD control unit (Terminal No. 17) (with ASCD)
M122	Rear window defogger timer (if equipped)
M124	Passenger air bag deactivation switch (King Cab models)
M126	Passenger air bag deactivation switch indicator (King Cab models)
M130	Overdrive hold control module (Terminal No. 4) (with KA engine and A/T)
M145	Steering angle sensor (Terminal No. 1)
M149	VDC off switch (Terminal No. 1)
M150	Seat belt buckle switch RH (Terminal No. 3)
D7	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)

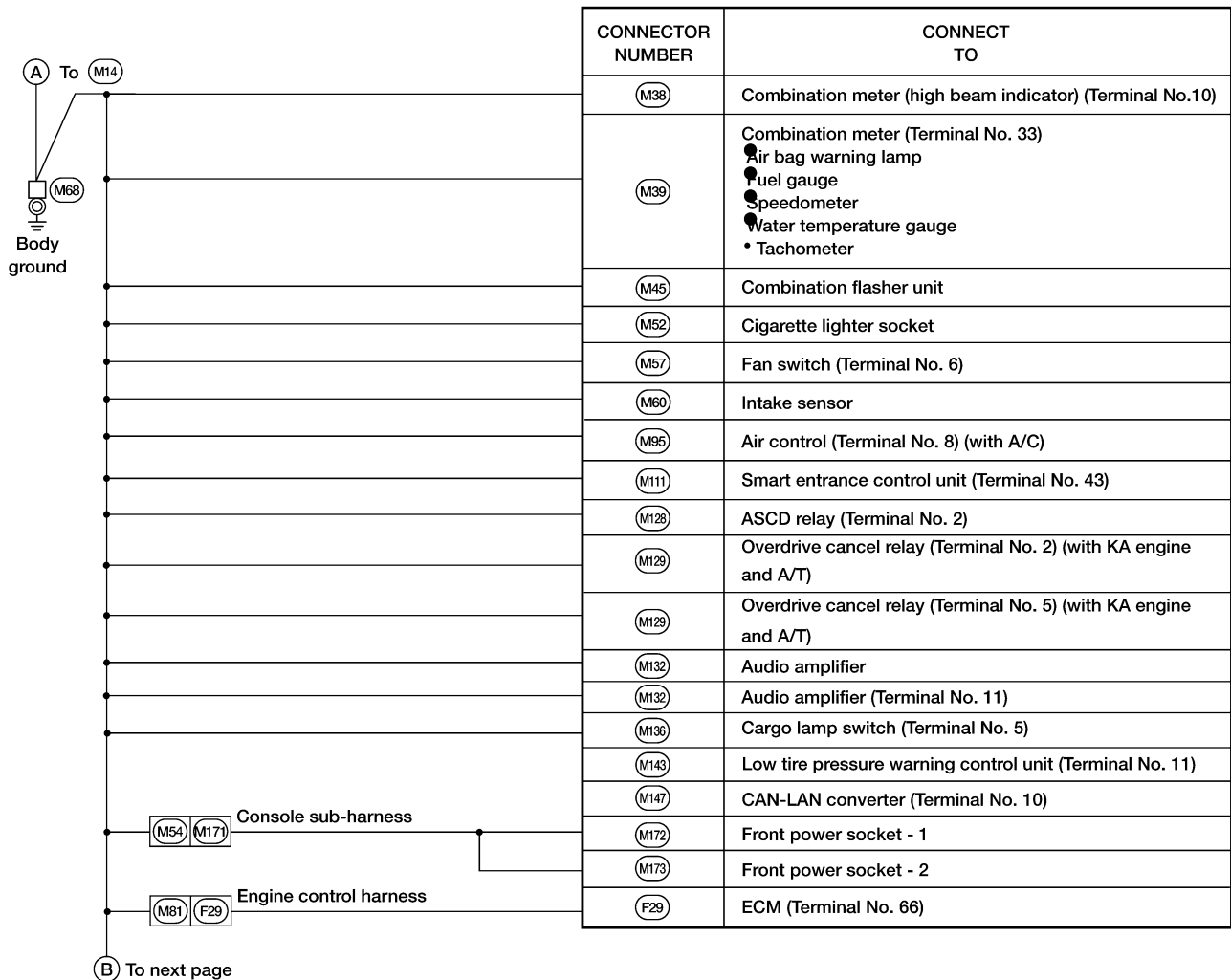
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# GROUND

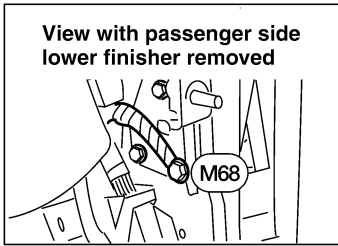
## Body ground



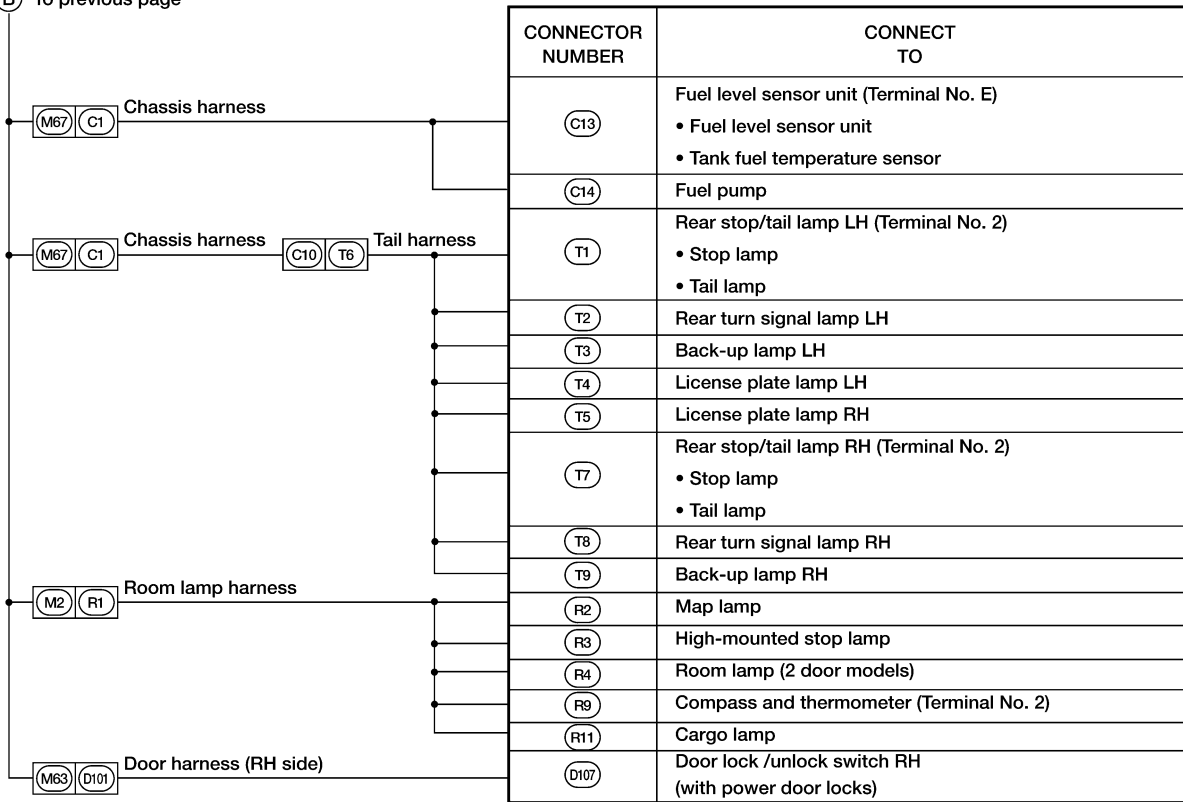
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# GROUND

## Body ground



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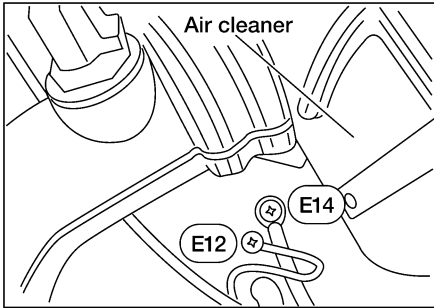
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WKIA0346E

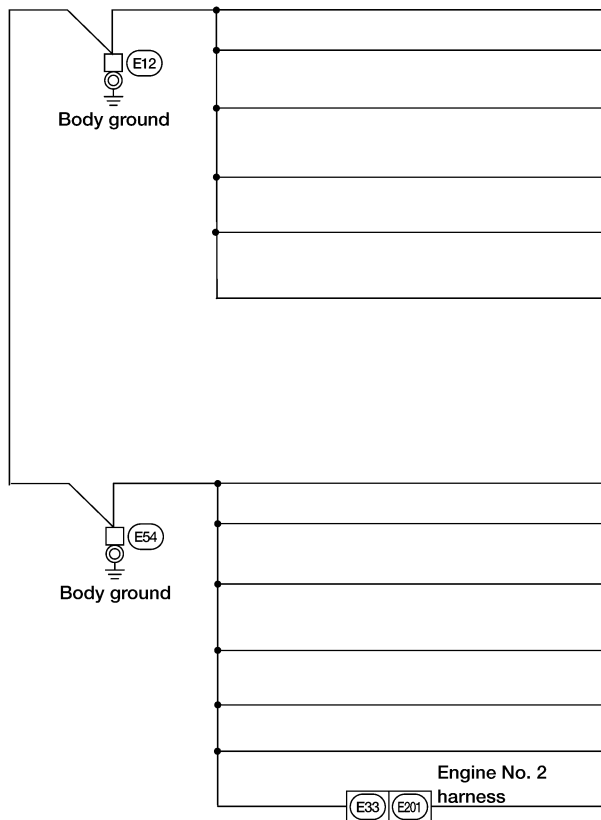
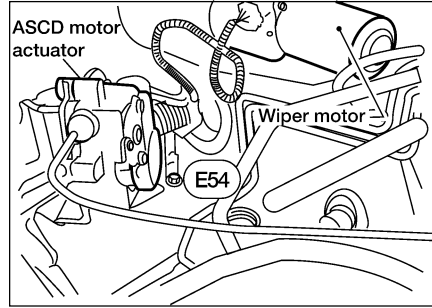
# GROUND

## ENGINE ROOM HARNESS KA24DE

Body ground



Body ground



CONNECTOR NUMBER	CONNECT TO
(E5)	Washer fluid level switch (for Canada)
(E7)	Headlamp LH
(E13)	Front combination lamp LH (Terminal No.2) • Parking lamp • Turn signal lamp
(E37)	Brake fluid level switch
(E39)	ABS actuator and electric unit (control unit) (Terminal No. 16)
(E46)	Front wiper switch (Terminal No. 17)

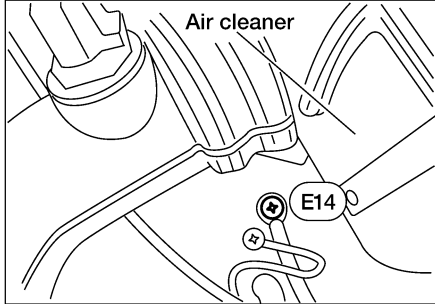
CONNECTOR NUMBER	CONNECT TO
(E1)	Headlamp RH
(E17)	Daytime light control unit (Terminal No. 9) (for Canada)
(E19)	Front combination lamp RH (Terminal No.2) • Parking lamp • Turn signal lamp
(E27)	Park neutral position (PNP) relay (Terminal No. 1)
(E27)	Park neutral position (PNP) relay (Terminal No. 6)
(E42)	Front wiper motor (Terminal No. E)
(E218)	Park neutral position (PNP) relay (Terminal No. 2)

WKIA0347E

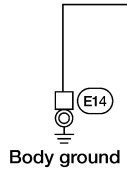
# GROUND

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
PG  
L  
M

**Body ground**



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

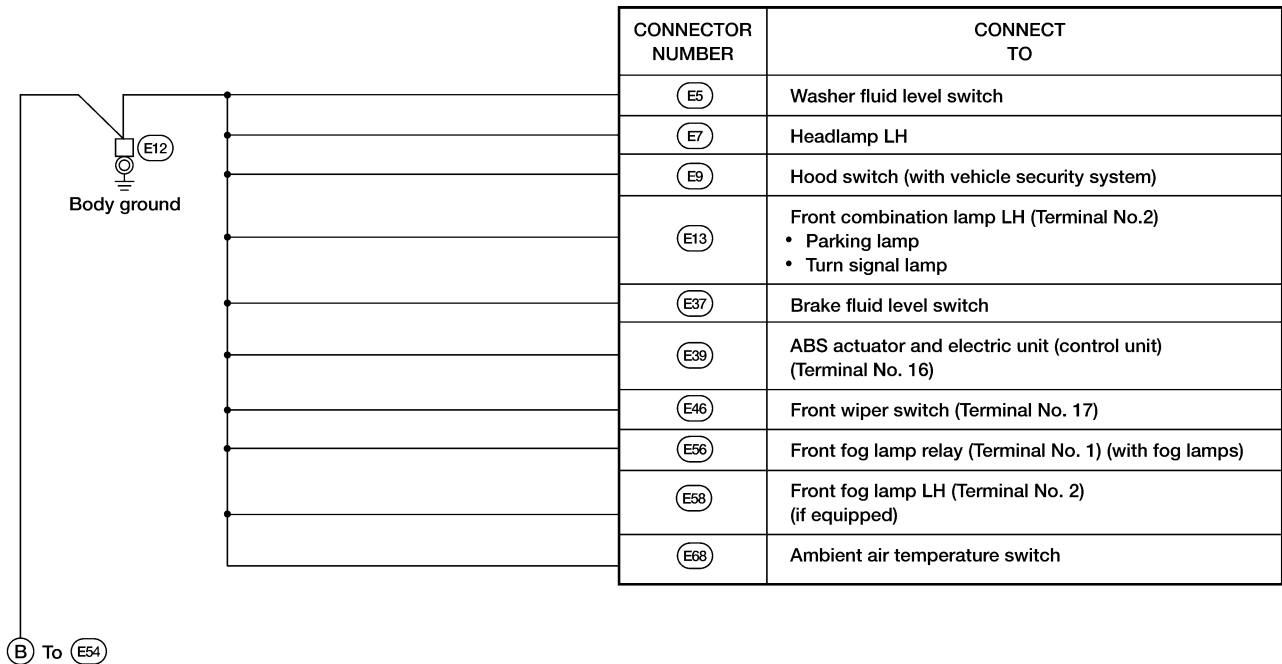
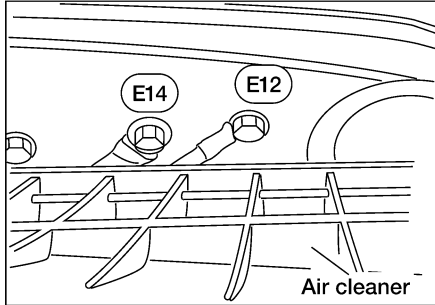


WKWA0331E

# GROUND

## VG33E and VG33ER

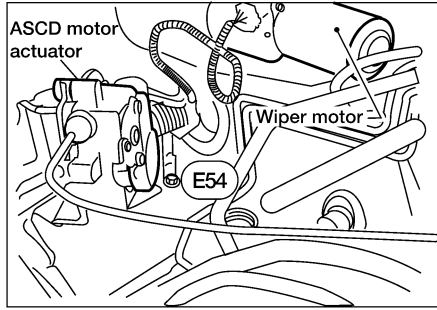
### Body ground



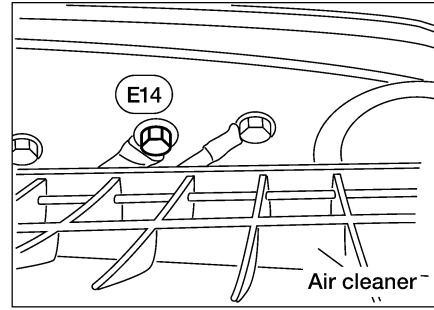
WKIA0348E

# GROUND

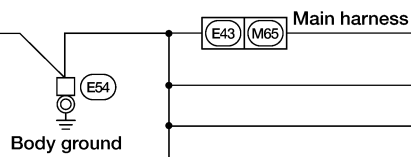
Body ground



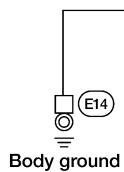
Body ground



(B) To (E12)



CONNECTOR NUMBER	CONNECT TO
(M6)	Vehicle security relay (Terminal No. 4) (with vehicle security system)
(E1)	Headlamp RH
(E17)	Daytime light control unit (Terminal No. 9) (for Canada)
(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)
(E27)	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)



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

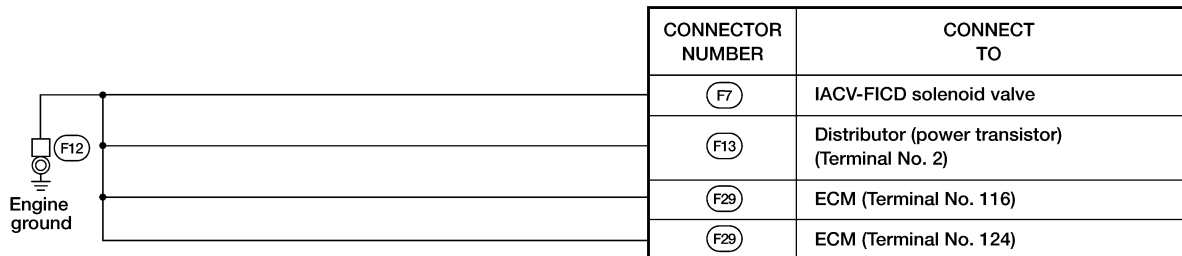
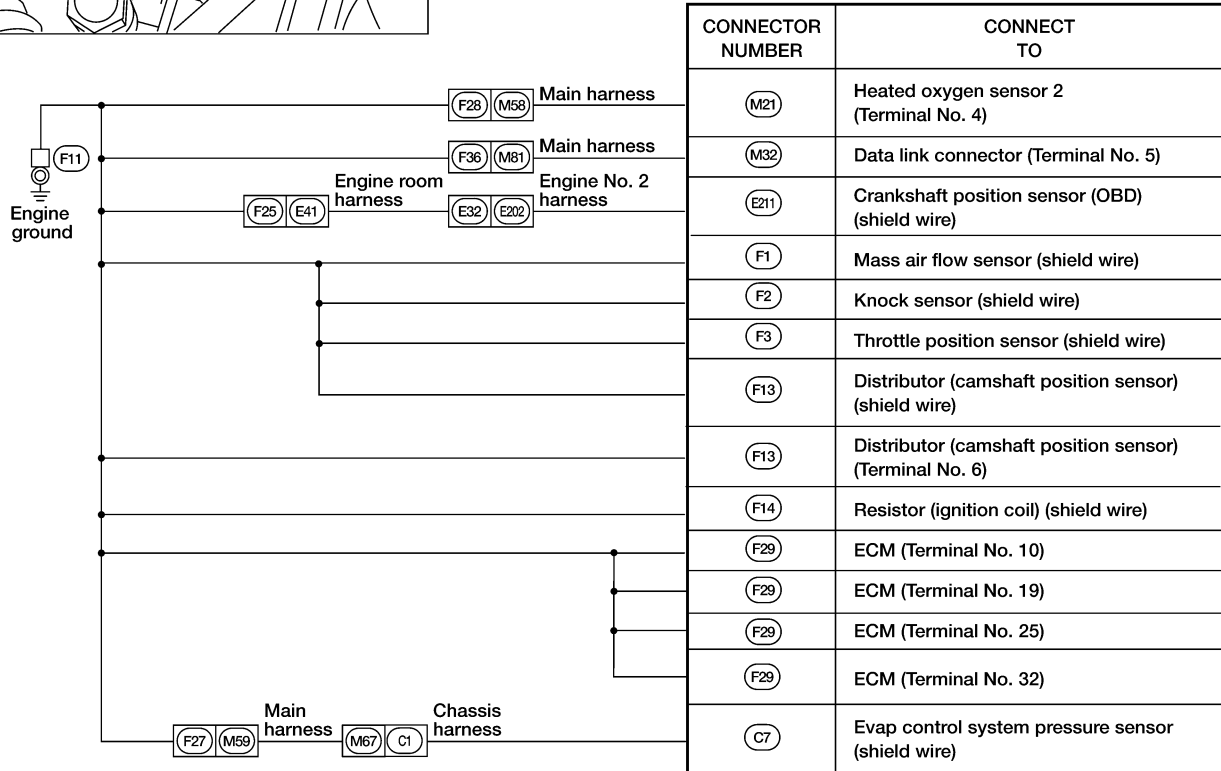
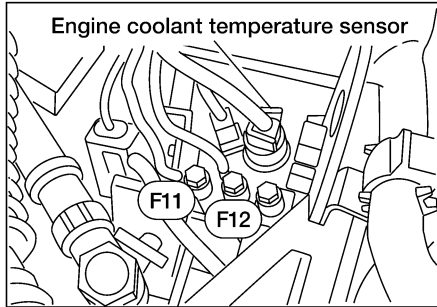
A  
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WKIA0349E

# GROUND

## ENGINE CONTROL HARNESS KA24DE

### Engine ground



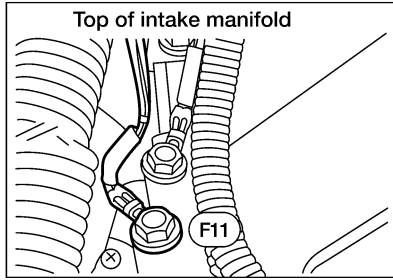
WKIA0350E



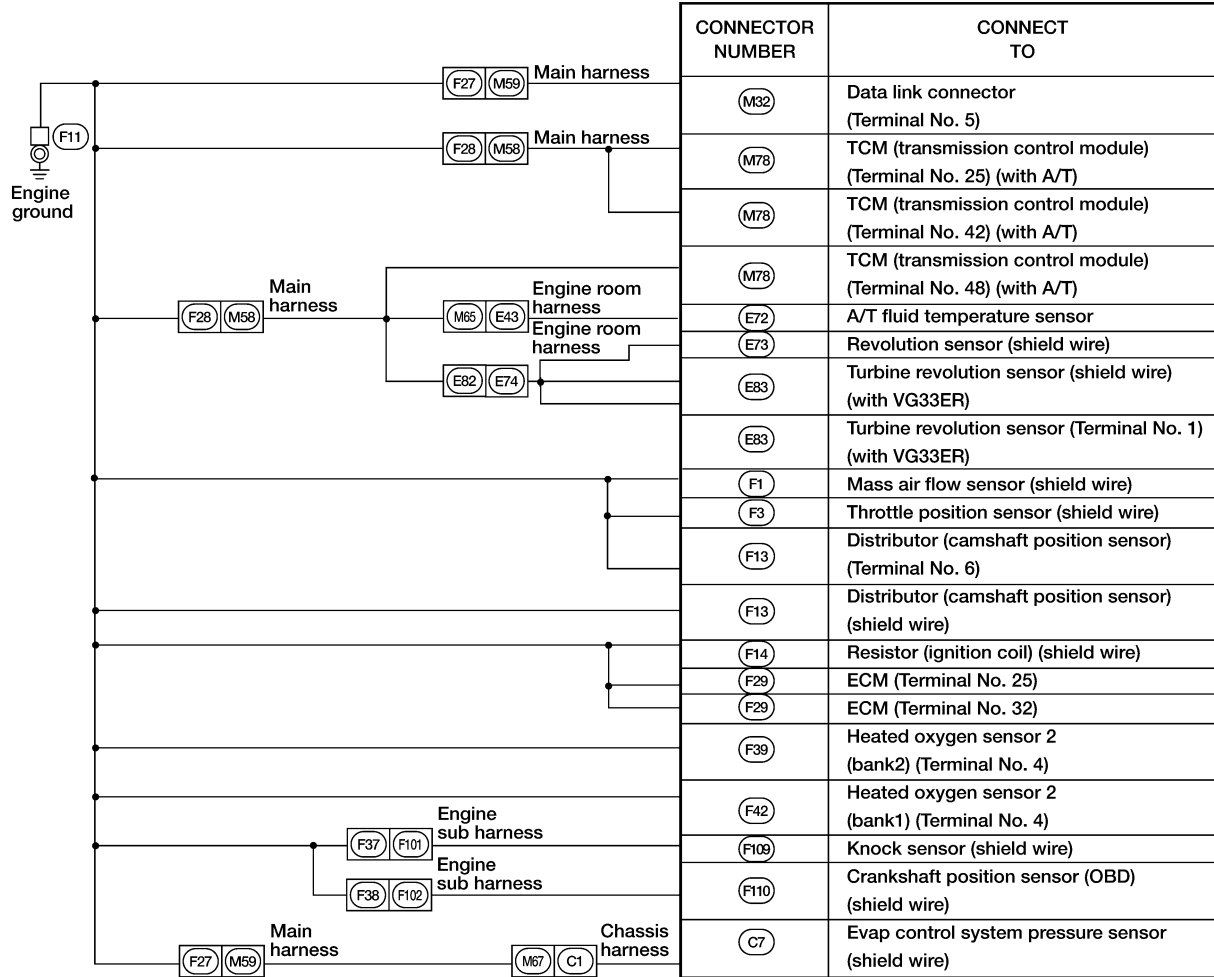
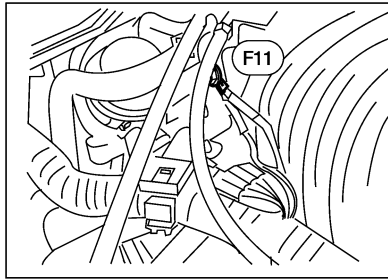
# GROUND

## VG33E and VG33ER

Engine ground (VG33E)



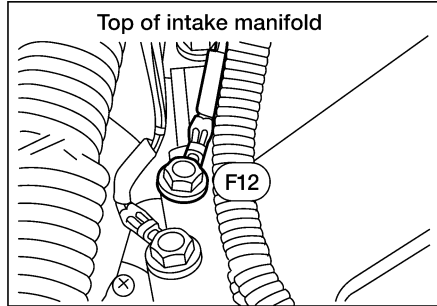
Engine ground (VG33ER)



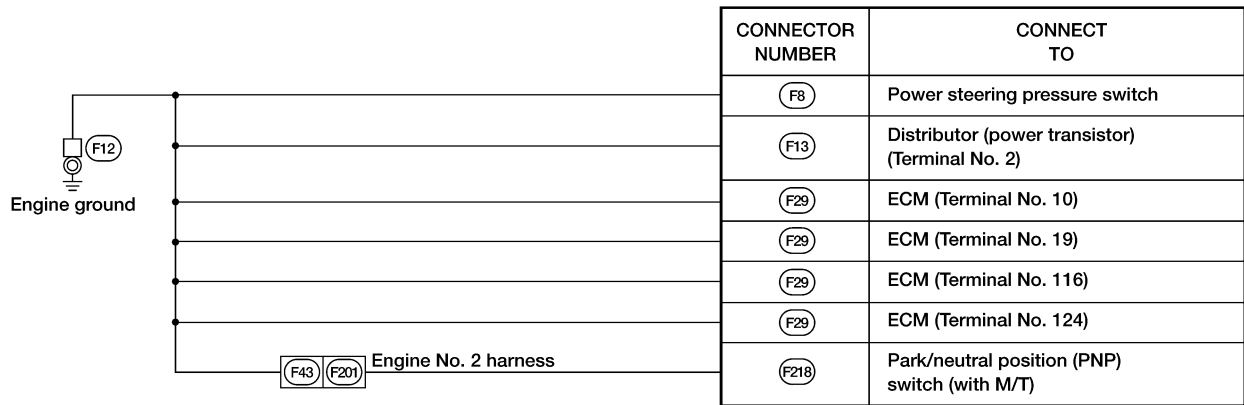
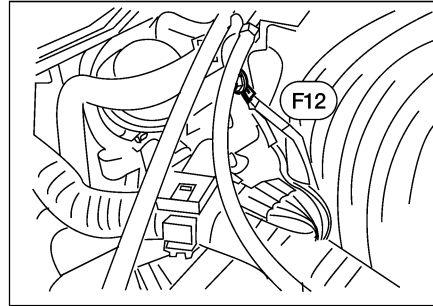
A  
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M

# GROUND

**Engine ground (VG33E)**



**Engine ground (VG33ER)**

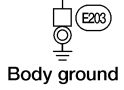
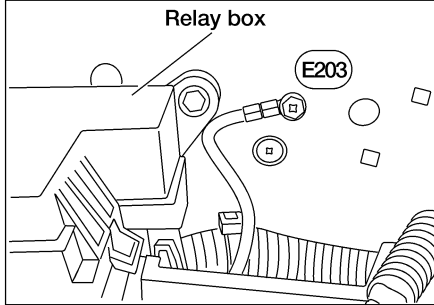


WKIA0352E

# GROUND

## ENGINE NO. 2 HARNESS KA24DE

Body ground



CONNECTOR NUMBER	CONNECT TO
E206	Generator

AEL710C

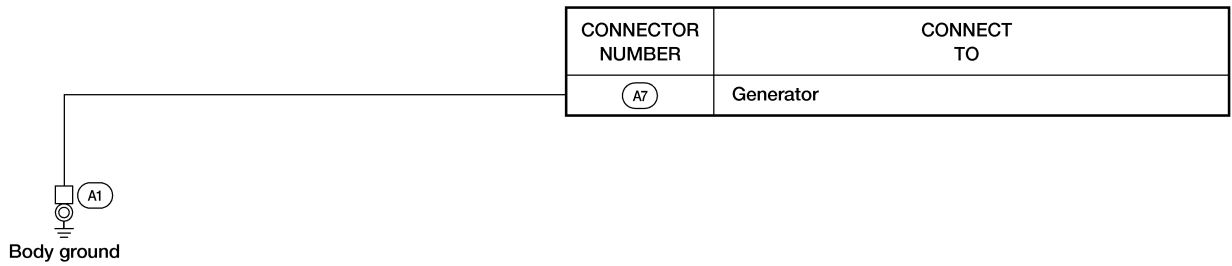
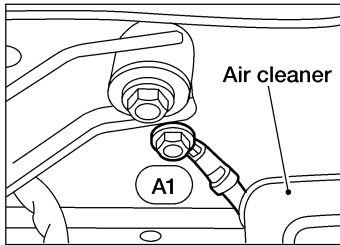
A  
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D  
E  
F  
G  
H  
I  
J  
L  
M

PG

# GROUND

## GENERATOR HARNESS VG33E and VG33ER

Body ground



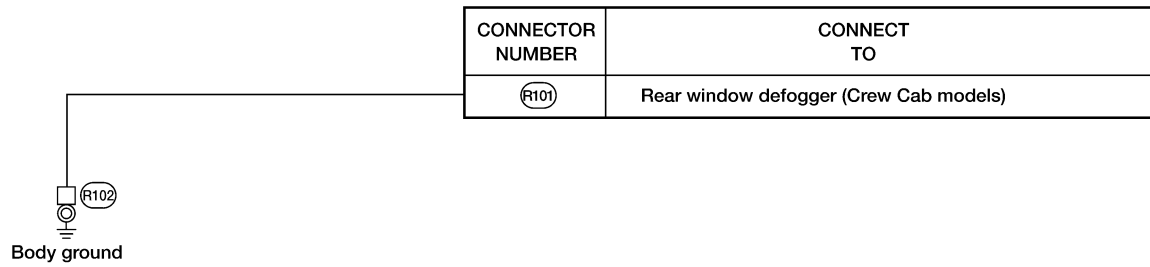
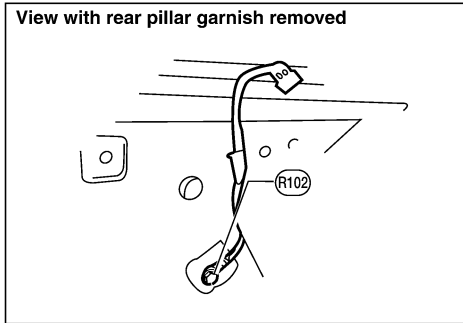
AEL697C

# GROUND

## ROOM LAMP HARNESS

Crew Cab models

A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
PG  
L  
M



WEL453A

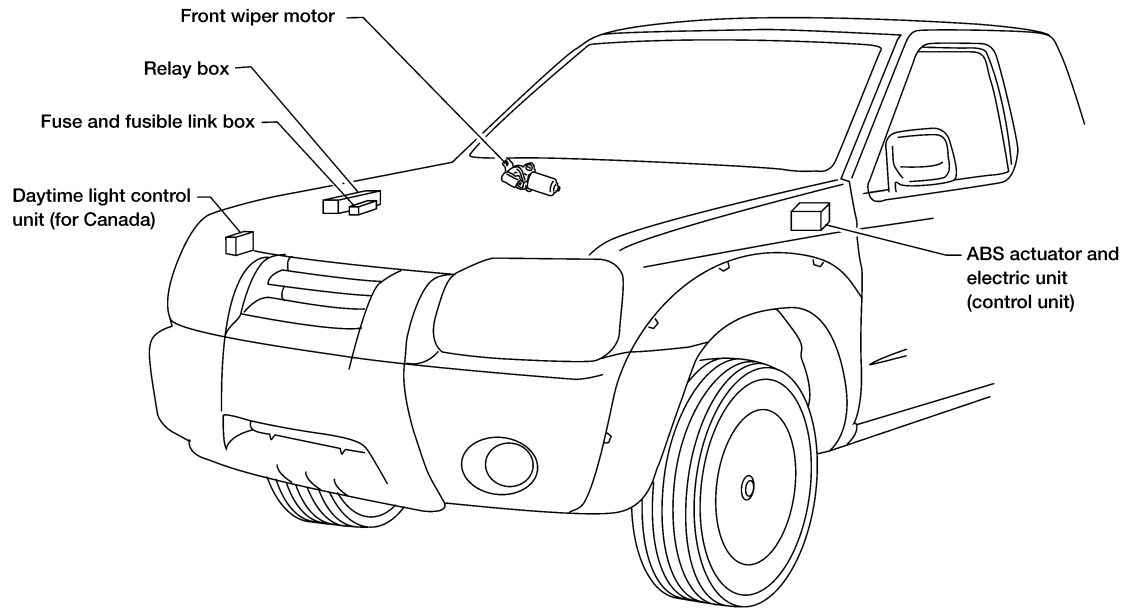
# ELECTRICAL UNITS LOCATION

PFP:25230

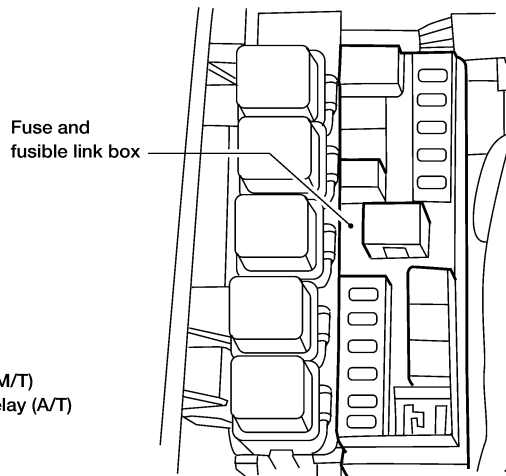
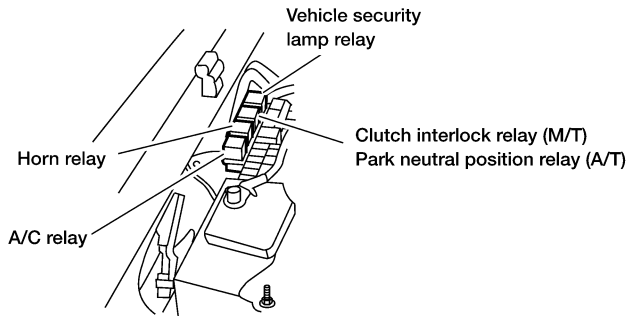
EKS006XV

## ELECTRICAL UNITS LOCATION

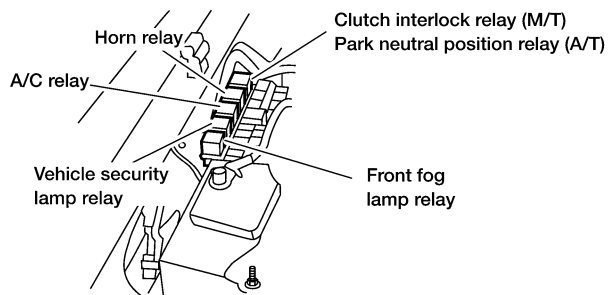
### Engine Compartment



#### KA24DE



#### VG33E and VG33ER

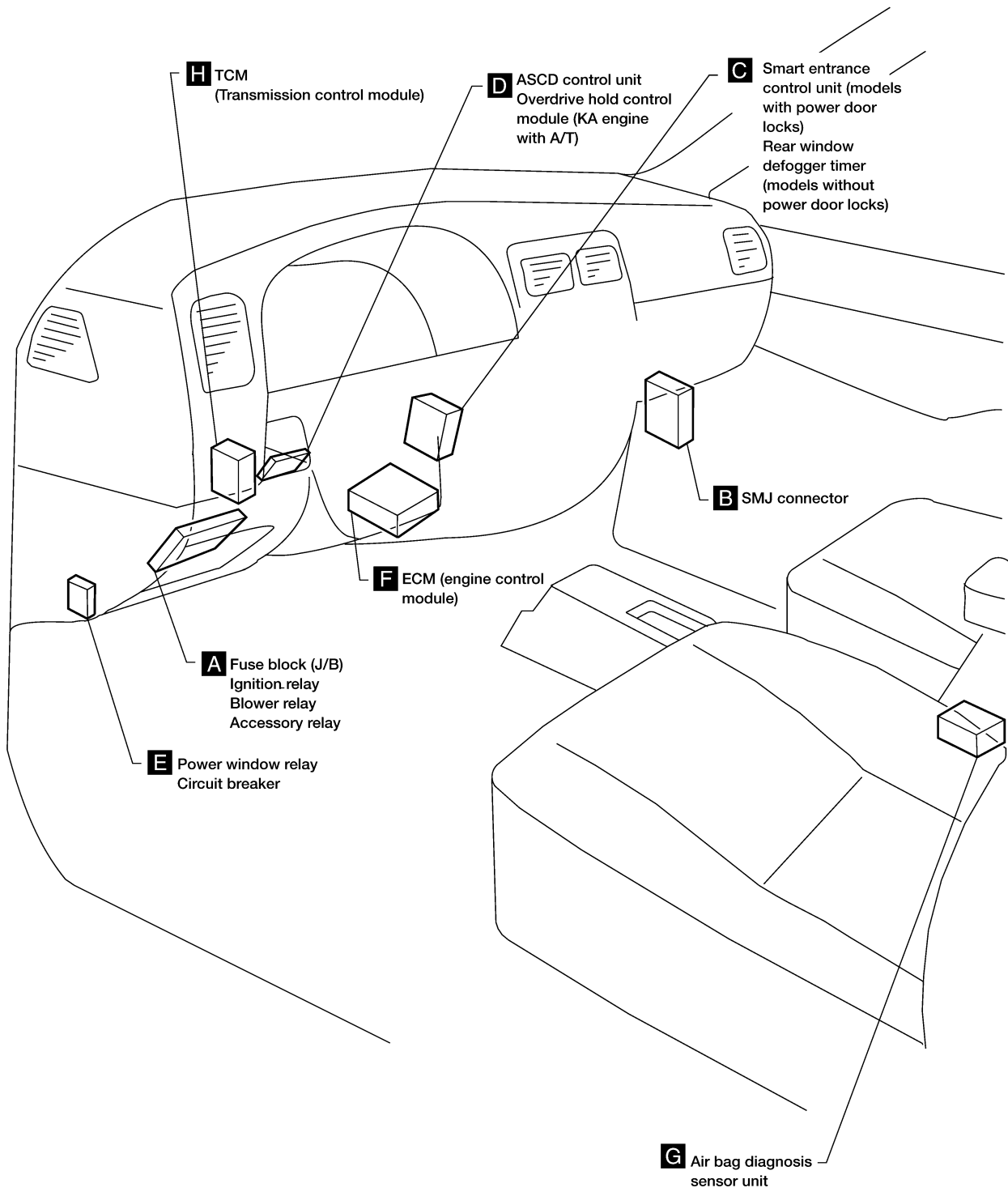


WKIA0327E

# ELECTRICAL UNITS LOCATION

## Passenger Compartment

EKS006XW



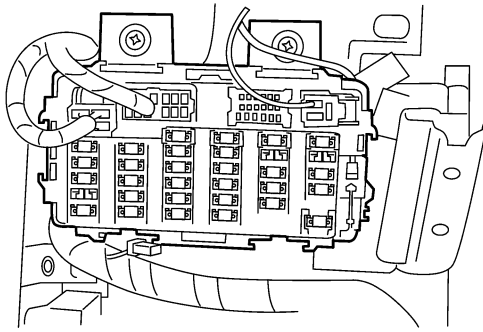
A  
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PG

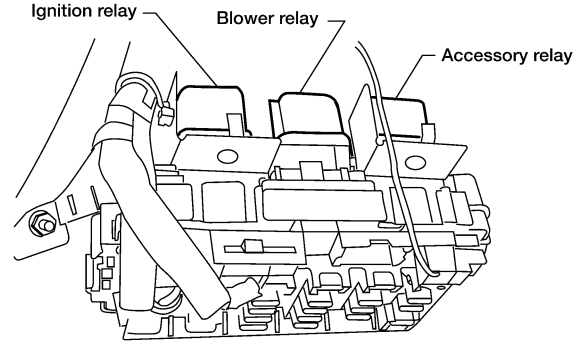
WKIA0325E

# ELECTRICAL UNITS LOCATION

**A**



Rear view of fuse block (J/B)



**B** View with dash side finisher right hand removed

SMJ

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

**C** Smart entrance control unit — Parking brake release

M110 M111 M112

**D** View with instrument lower panel driver's side removed

ASCD control unit M33

Overdrive hold control module (KA engine) (if equipped)

**E**

Power window relay  
Circuit breaker

**F** View with instrument stay cover removed

ECM F29

**G** Air bag diagnosis sensor unit

Front

**H** View with instrument lower panel LH removed

TCM (Transmission control module)



# HARNESS LAYOUT

PF24010

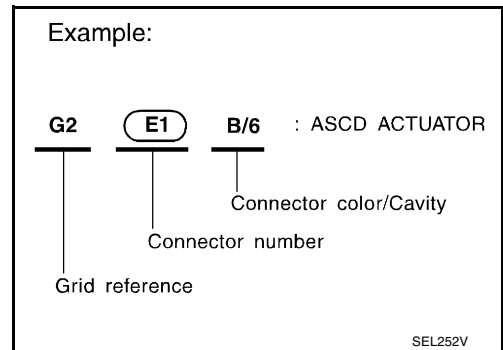
EKS006XX

## 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



### 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

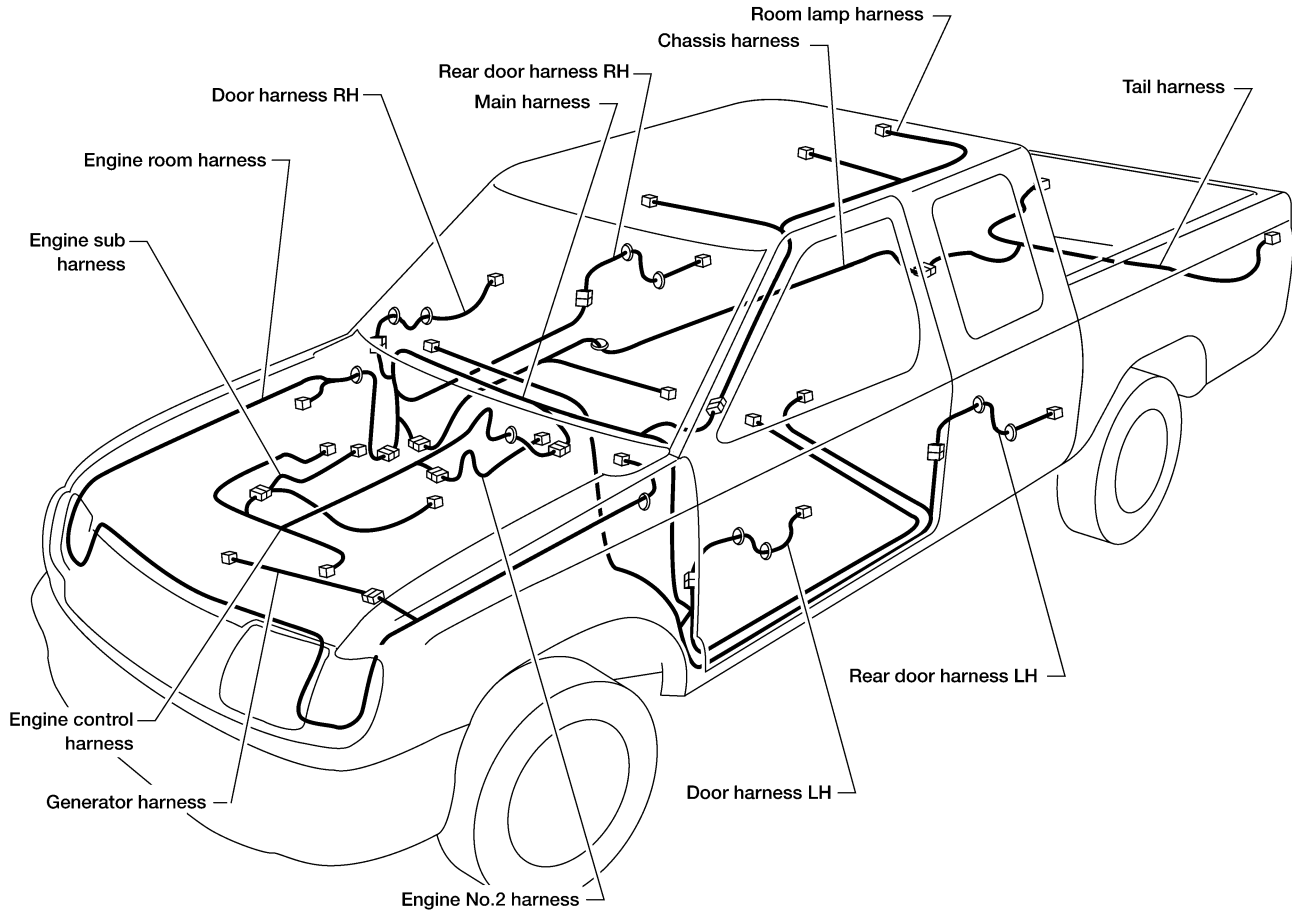
Main symbols of connector (in Harness Layout) are indicated below.

Connector type	Waterproof type		Standard type	
	Male	Female	Male	Female
<ul style="list-style-type: none"> <li>● Cavity: Less than 4</li> <li>● Relay connector</li> </ul>				
<ul style="list-style-type: none"> <li>● Cavity: From 5 to 8</li> </ul>				
<ul style="list-style-type: none"> <li>● Cavity: More than 9</li> </ul>				
<ul style="list-style-type: none"> <li>● Ground terminal etc.</li> </ul>	—			

# HARNESSES LAYOUT

## Outline

EKS006XY



LEL425A

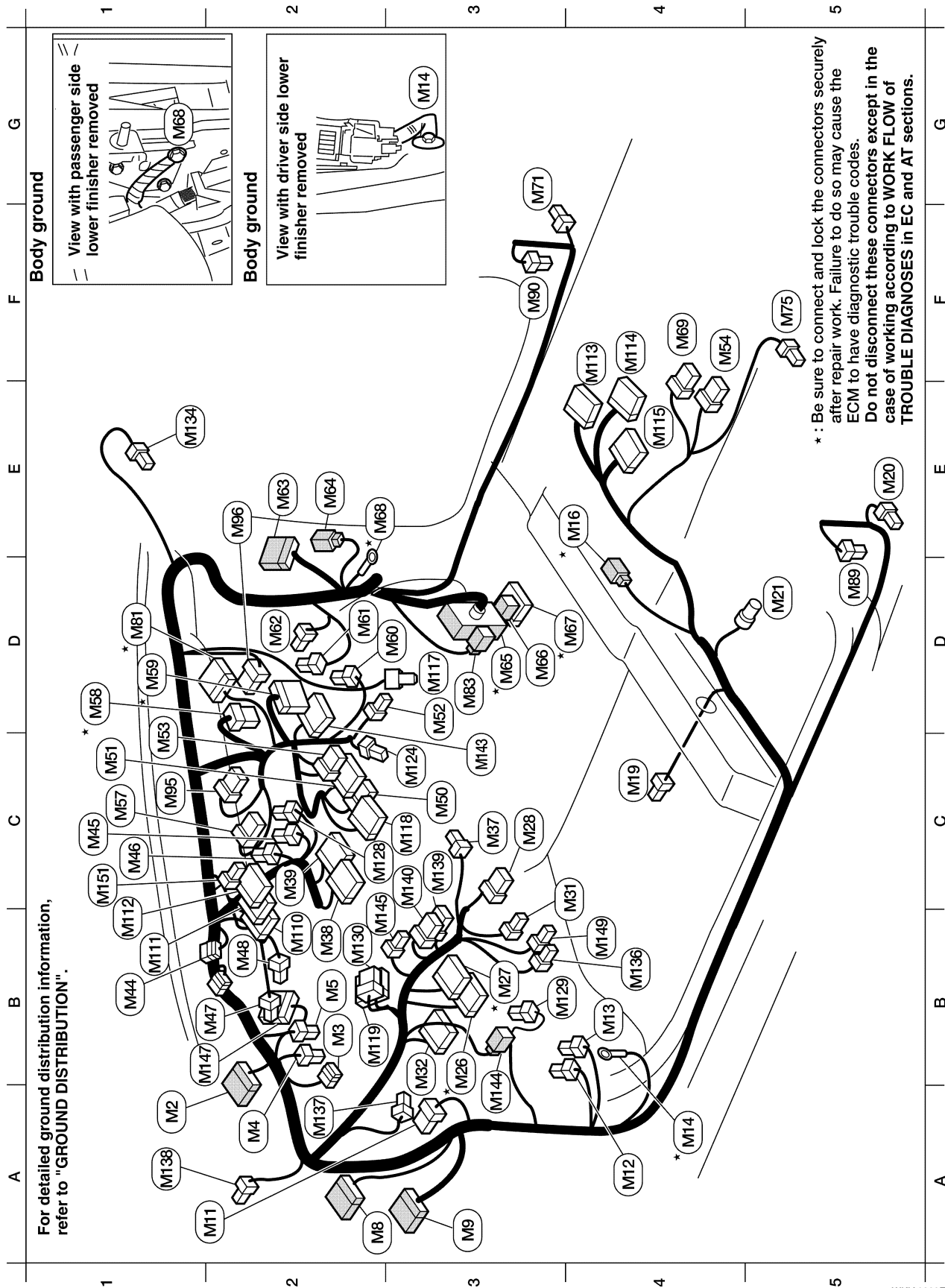
### NOTE:

For detailed ground distribution information, refer to [PG-17, "Ground Distribution"](#) .

# HARNESS LAYOUT

## Main Harness (King Cab Models)

EKS006XZ



For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

PG

WKIA0329E

# HARNES LAYOUT

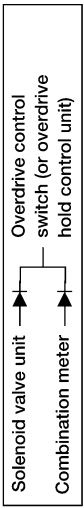
A1	(M2)	W/12	: To (R1)					
B2	(M3)	B/3	: Diode-3 (with A/T)					
B1	(M4)	L/2	: ASCD clutch switch (with M/T)					
B2	(M5)	L/2	: Clutch interlock switch (with M/T)					
A2	(M8)	W/6	: To (D2)					
A3	(M9)	W/12	: To (D1)					
A2	(M11)	W/8	: Warning chime unit (without power door locks)					
A4	(M12)	W/2	: Circuit breaker (with power door locks)					
B4	(M13)	L/4	: Power window relay (with power windows)					
A4	(M14)	-	: Body ground					
D4	(M16)	W/2	: To (C15)					
C4	(M19)	W/3	: Seatbelt buckle switch					
E5	(M20)	B/3	: Front door switch LH					
D5	(M21)	GY/4	: Heated oxygen sensor 2					
B3	(M26)	W/16	: Fuse block (J/B)					
B2	(M27)	W/10	: Fuse block (J/B)					
C4	(M28)	W/3	: Illumination control switch					
B4	(M31)	W/3	: Fuse block (J/B)					
B2	(M32)	W/16	: Data link connector					
	(M36)	W/3	: Override control switch					
C3	(M37)	W/2	: Key switch					
B2	(M38)	W/24	: Combination meter					
C2	(M39)	BR/24	: Combination meter					
B1	(M44)	SB/2	: Diode-1 (for Canada)					
C1	(M45)	B/3	: Combination flasher unit					
B1	(M46)	L/4	: Fuel pump relay					
B2	(M47)	B/2	: Stop lamp switch					
B2	(M48)	L/2	: ASCD brake switch (A/T shift lock brake switch)					
B4	(M49)	B/1	: Parking brake switch					
C3	(M50)	W/6	: Audio unit					
C1	(M51)	W/10	: Audio unit					
D3	(M52)	B/3	: Cigarette lighter socket					
C1	(M53)	W/8	: Hazard switch					
F4	(M54)	W/2	: To (M7)					
C1	(M57)	W/6	: Fan switch					
D1	(M58)	W/6	: To (F28)					
E1	(M59)	W/16	: To (F27)					
D3	(M60)	W/3	: Intake sensor					
D2	(M61)	BR/4	: Fan resistor					
D2	(M62)	W/2	: Blower motor					
E2	(M63)	W/12	: To (D10)					
E2	(M64)	W/2	: To (D12)					
D3	(M65)	SMJ	: To (E43)					
E3	(M66)	B/2	: To (E44)					
E3	(M67)	W/18	: To (C1)					
E3	(M68)	-	: Body ground					
F4	(M69)	B/6	: Yaw rate/side G-sensor					
G4	(M71)	BR/1	: Front door switch RH					
F5	(M75)	W/4	: Subwoofer					
D1	(M81)	W/20	: To (F36)					
E3	(M83)	W/4	: To (C1)					
D5	(M89)	Y/2	: Driver seatbelt pre-tensioner					
F3	(M90)	Y/2	: Passenger seatbelt pre-tensioner					
C1	(M95)	B/12	: Air control					
E2	(M96)	B/6	: Intake door motor					
B2	(M110)	W/24	: Smart entrance control unit (with power door locks)					
B1	(M11)	GY/24	: Smart entrance control unit (with power door locks)					
C2	(M12)	GY/16	: Smart entrance control unit (with power door locks)					
E4	(M13)	Y/12	: Air bag diagnosis sensor unit					
E4	(M14)	Y/20	: Air bag diagnosis sensor unit					
E4	(M15)	Y/12	: Air bag diagnosis sensor unit					
D3	(M17)	Y/2	: Passenger air bag module					
C3	(M18)	W/16	: Audio unit					
B2	(M19)	BR/24	: ASCD control unit					
C3	(M24)	W/3	: Passenger air bag deactivation unit					
D2	(M28)	W/2	: Passenger air bag deactivation unit					
C3	(M27)	W/2	: A/T illumination					
B/4	(M28)	B/5	: ASCD relay					
B2	(M29)	L/4	: Override cancel relay (with A/T)					
B2	(M30)	W/6	: Override hold control module (with A/T)					
E1	(M34)	BR/2	: Pillar tweeter RH					
B3	(M36)	L/6	: Cargo lamp switch					
A1	(M38)	BR/2	: Pillar tweeter LH					
B3	(M39)	Y/6	: Spiral cable					
B3	(M40)	GY/8	: Spiral cable					
C3	(M43)	W/16	: Low tire pressure warning control unit					
B3	(M44)	L/2	: Low tire pressure warning check connector					
B3	(M45)	B/7	: Steering angle sensor					
B1	(M47)	W/16	: CAN-LAN converter (with VDC)					
B3	(M49)	GY/6	: VDC off switch (with VDC)					
C1	(M51)	BR/6	: Low tire pressure warning relay					

### Console sub-harness

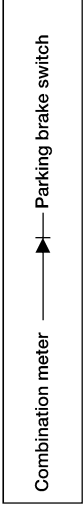
(M17)	W/2	: To (M54)
(M12)	B/2	: Front power socket-1
(M13)	B/2	: Front power socket-2

\* : 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.**

### Diode-3 (M3)



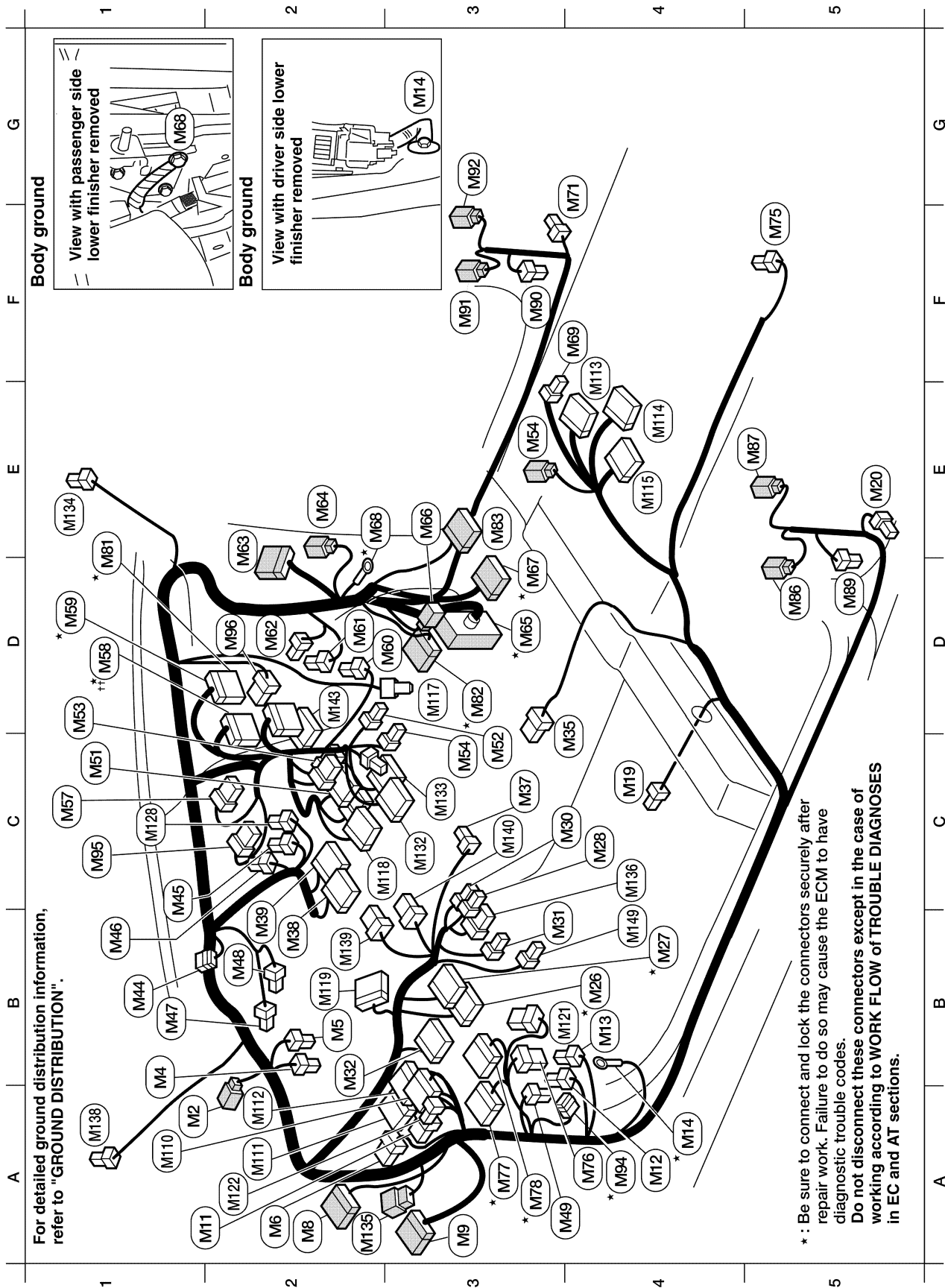
### Diode-1 (M4)



# HARNESS LAYOUT

## Main Harness (Crew Cab Models)

EKS006Y0



For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

\* : 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.

PG

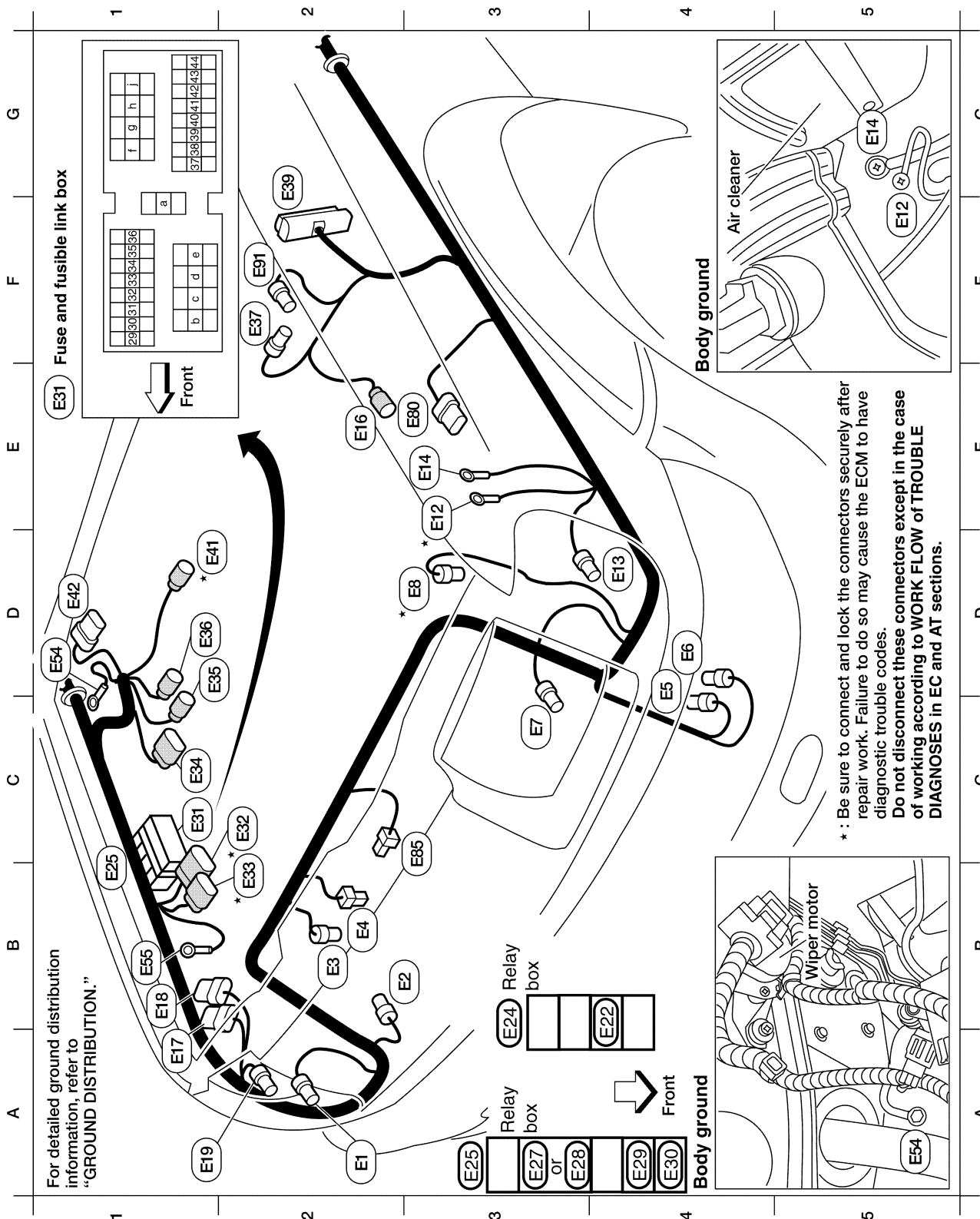
WKIA0331E



# HARNESS LAYOUT

## Engine Room Harness (KA24DE Models) ENGINE COMPARTMENT

EKS006Y1



For detailed ground distribution information, refer to "GROUND DISTRIBUTION."

\* : 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.

PG

WKIA0333E

# HARNES LAYOUT

A2	(E1)	B/3	: Headlamp RH	A1	(E19)	GY/3	: Front combination lamp RH	F2	(E37)	GY/2	: Brake fluid level switch
B2	(E2)	GY/2	: Front wheel sensor RH	B4	(E22)	BR/6	: Vehicle security lamp relay (with remote keyless entry)	F2	(E39)	B/31	: ABS actuator and electric unit (control unit)
B2	(E3)	B/2	: Dual-pressure switch (with A/C)	B1	(E25)	-	: Relay box	D1	(E41)	GY/3	: To (F25)
B2	(E4)	B/1	: Horn	A3	(E27)	BR/6	: Park/neutral position (PNP) relay (with A/T)	D1	(E42)	GY/6	: Front wiper motor
C4	(E5)	BR/2	: Washer fluid level switch	A3	(E28)	L/4	: Clutch interlock relay (with M/T)	C1	(E54)	-	: Body ground
D4	(E6)	GY/2	: Front washer motor	A4	(E29)	W/3	: Horn relay	B1	(E55)	-	: Battery
C3	(E7)	B/3	: Headlamp LH	A4	(E30)	L/4	: Air conditioner relay (with A/C)	E3	(E80)	GY/6	: ASCD motor actuator (with ASCD)
D3	(E8)	B/2	: Intake air temperature sensor	C1	(E31)	-	: Fuse and fusible link box	C2	(E85)	Y/2	: Crash zone sensor
D3	(E9)	GY/2	: Hood switch (with remote keyless entry)	C2	(E32)	GY/9	: To (E202)	F2	(E91)	B/2	: Pressure switch (2WD with ABS)
D3	(E12)	-	: Body ground	B2	(E33)	GY/6	: To (E201)				
D4	(E13)	GY/3	: Front combination lamp LH	C1	(E34)	GY/8	: Park/neutral position (PNP) switch (with A/T)				
E3	(E14)	-	: Body ground (with ABS)	C1	(E35)	W/2	: Park/neutral position (PNP) switch (with A/T)				
E2	(E16)	BR/2	: Front wheel sensor LH	D1	(E36)	GY/3	: Solenoid valve unit				
A1	(E17)	SB/8	: Daytime light control unit (with DTRL)								
B1	(E18)	GY/6	: Daytime light control unit (with DTRL)								

\* : 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.

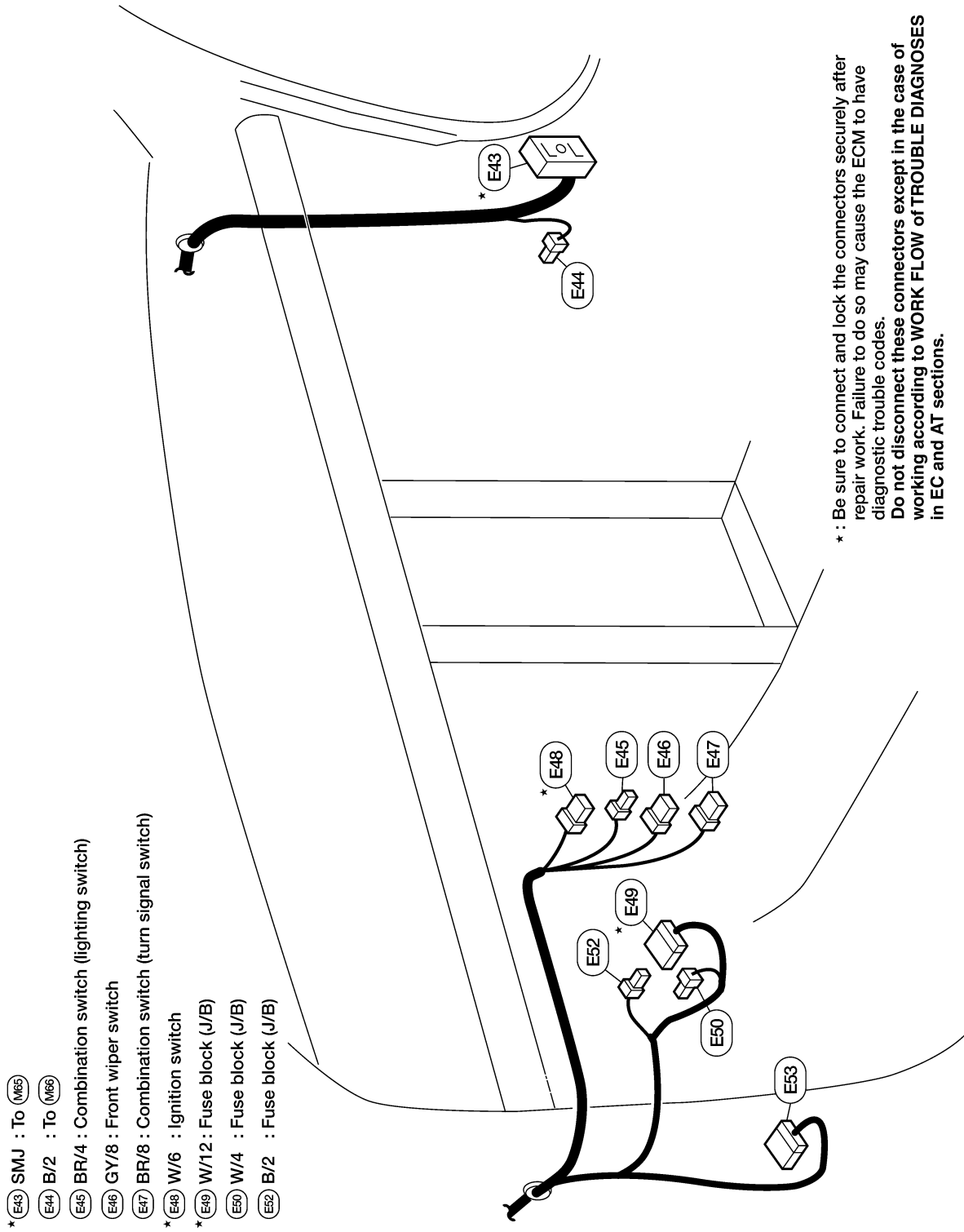
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

WKIA1149E



# HARNESS LAYOUT

## PASSENGER COMPARTMENT

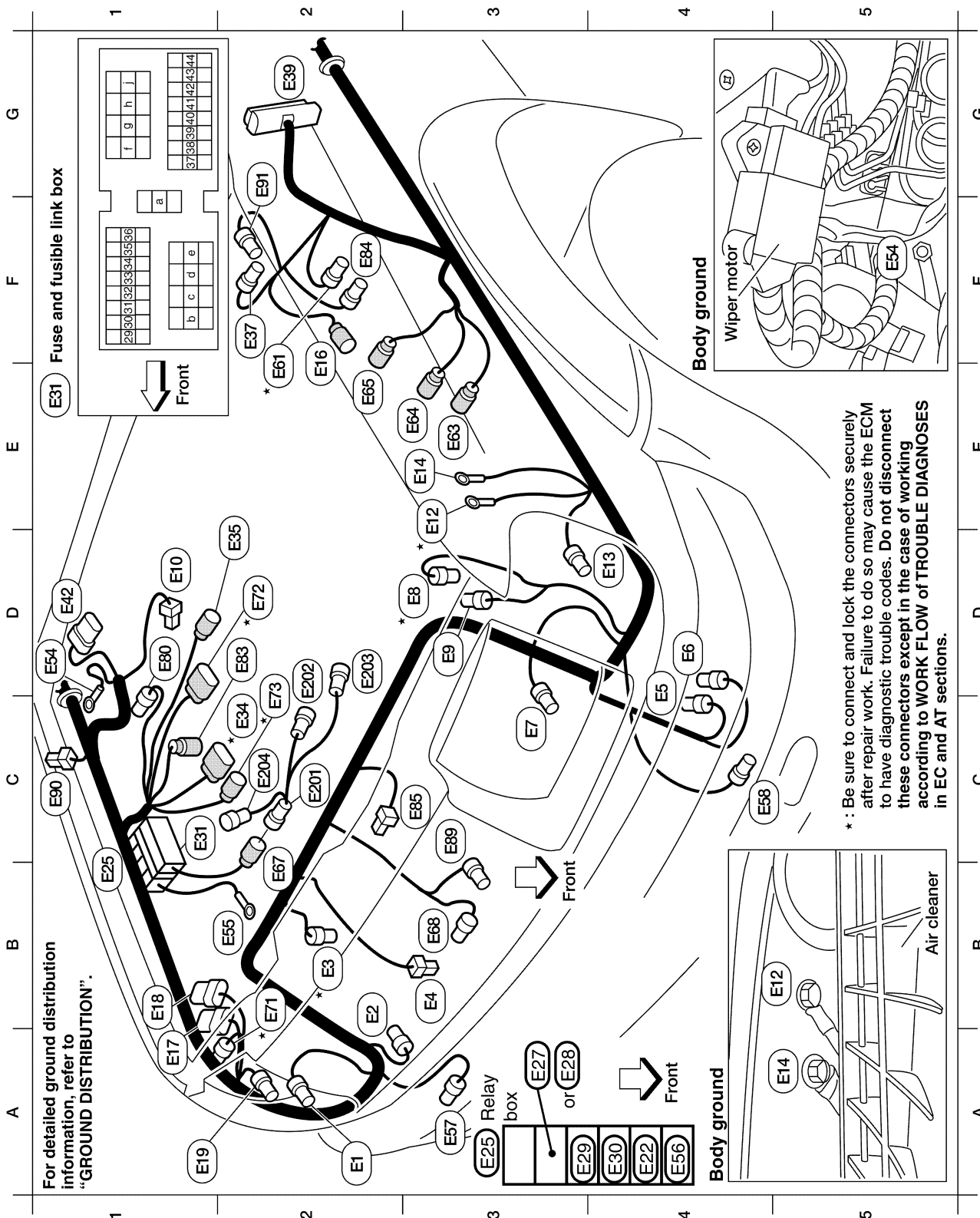


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# HARNESS LAYOUT

## Engine Room Harness (VG33E and VG33ER Models) ENGINE COMPARTMENT

EKS006Y2



WKIA0335E

# HARNESS LAYOUT

A2	(E1)	B/3	: Headlamp RH	A4	(E28)	L/4	: Clutch interlock relay (with M/T)	E2	(E65)	GY/4	: To (A5)	
B2	(E2)	GY/2	: Front wheel sensor RH	A4	(E29)	W/3	: Horn relay	C2	(E67)	GY/1	: To (E201)	
B2	*	(E3)	B/2	A4	(E30)	L/4	: A/C relay	B3	(E68)	GY/2	: Ambient air temperature switch	
B3	(E4)	B/1	: Horn	C1	(E31)	-	: Fuse and fusible link box	B2	*	(E71)	GY/2	: Dropping resistor
C4	(E5)	BR/2	: Washer fluid level switch	C2	*	(E34)	GY/8	D2	(E72)	BR/8	: Terminal cord assembly	
D4	(E6)	GY/2	: Front washer motor	E2	(E35)	GY/2	: Park/neutral position (PNP) switch (with A/T)	C2	*	(E73)	GY/3	: Revolution sensor
C3	(E7)	B/3	: Headlamp LH	G2	(E37)	GY/2	: Brake fluid level switch	D1	(E80)	GY/6	: ASCD motor actuator	
D3	*	(E8)	B/2	G2	(E39)	B/31	: ABS actuator and electric unit (control unit)	D2	(E83)	BR/4	: Turbine revolution sensor (with VG33ER and A/T)	
D3	(E9)	GY/2	: Hood switch (with vehicle security system)	D1	(E42)	SB/6	: Front wiper motor	F3	(E84)	B/2	: Supercharger bypass valve control solenoid valve (VG33ER models)	
D3	*	(E12)	-	D1	*	(E54)	-	C2	(E85)	Y/2	: Crash zone sensor	
D4	(E13)	GY/3	: Front combination lamp LH	B2	(E55)	-	: Battery	B3	(E89)	B/2	: Ambient air temperature sensor	
E3	(E14)	-	: Body ground (with ABS)	A3	(E56)	L/4	: Front fog lamp relay (relay box)	C1	(E90)	W/2	: Auxiliary power supply	
E2	(E16)	BR/2	: Front wheel sensor LH	A3	(E57)	GY/2	: Front fog lamp RH	F2	(E91)	B/3	: Pressure sensor (with VDC)	
A1	(E17)	SB/8	: Daytime light control unit (with DTRL)	C4	(E58)	GY/2	: Front fog lamp LH	F2	(E91)	B/2	: Pressure sensor (2WD with ABS)	
B1	(E18)	SB/6	: Daytime light control unit (with DTRL)	E2	*	(E61)	L/2	C2	(E201)	GY/1	: To (E87)	
A1	(E19)	GY/3	: Front combination lamp RH	E3	(E63)	GY/1	: To (A3)	D2	(E202)	GY/1	: Starter motor	
A3	(E22)	BR/6	: Vehicle security lamp relay (with power door locks)	E3	(E64)	GY/1	: To (A4)	D2	(E203)	-	: Starter motor	
C1	(E25)	-	: Relay box	E3	(E64)	GY/1	: To (A4)	C2	(E204)	-	: Battery	
A3	*	(E27)	BR/6									

\* : 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.**

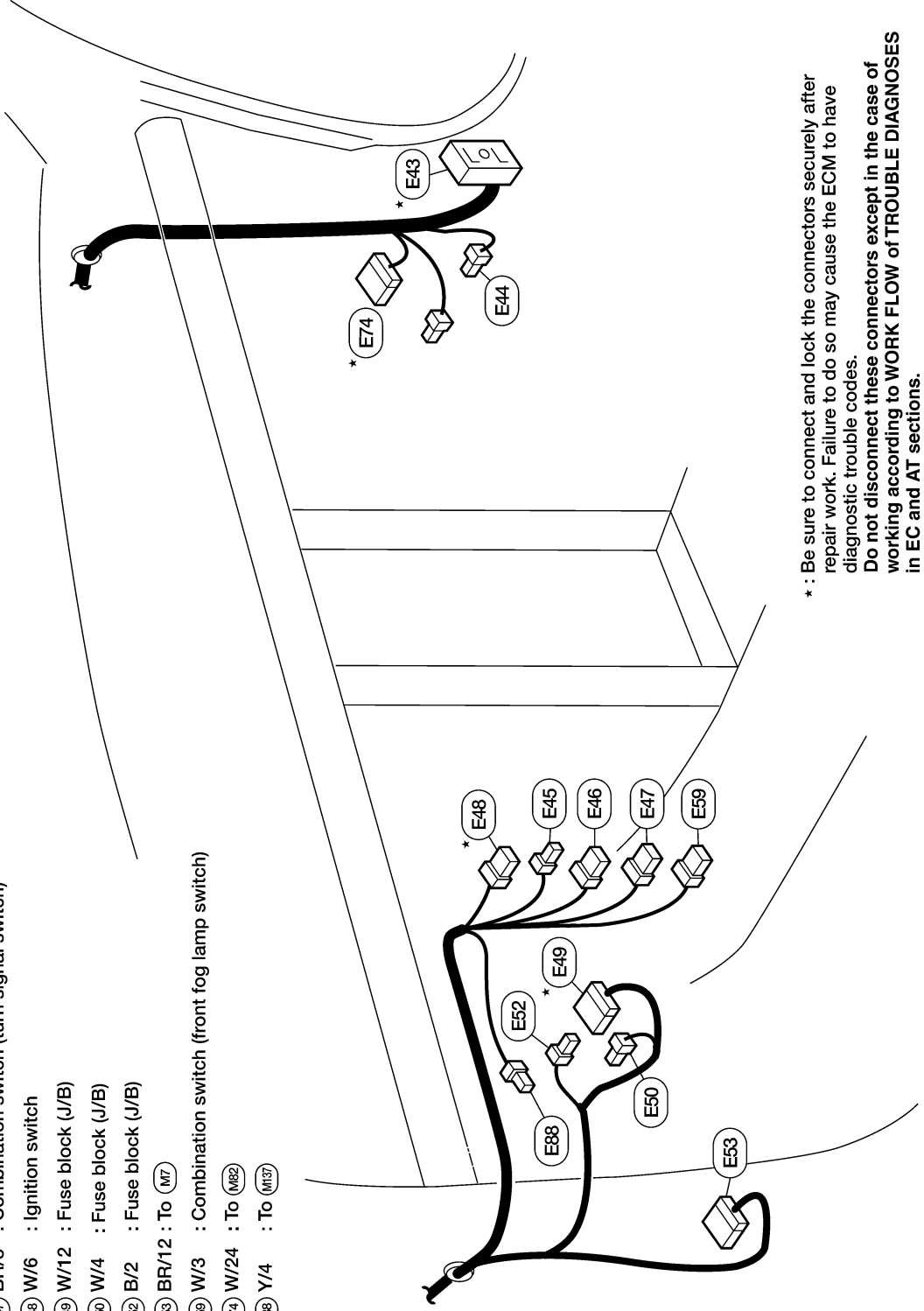
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# HARNESS LAYOUT

## PASSENGER COMPARTMENT

- \* E43 SMJ : To (M65)
- E44 W/4 : To (M68)
- E45 BR/4 : Combination switch (lighting switch)
- E46 GY/8 : Front wiper switch
- E47 BR/8 : Combination switch (turn signal switch)
- \* E48 W/6 : Ignition switch
- \* E49 W/12 : Fuse block (J/B)
- E50 W/4 : Fuse block (J/B)
- E52 B/2 : Fuse block (J/B)
- E53 BR/12 : To (M7)
- E59 W/3 : Combination switch (front fog lamp switch)
- \* E74 W/24 : To (M82)
- E88 Y/4 : To (M137)

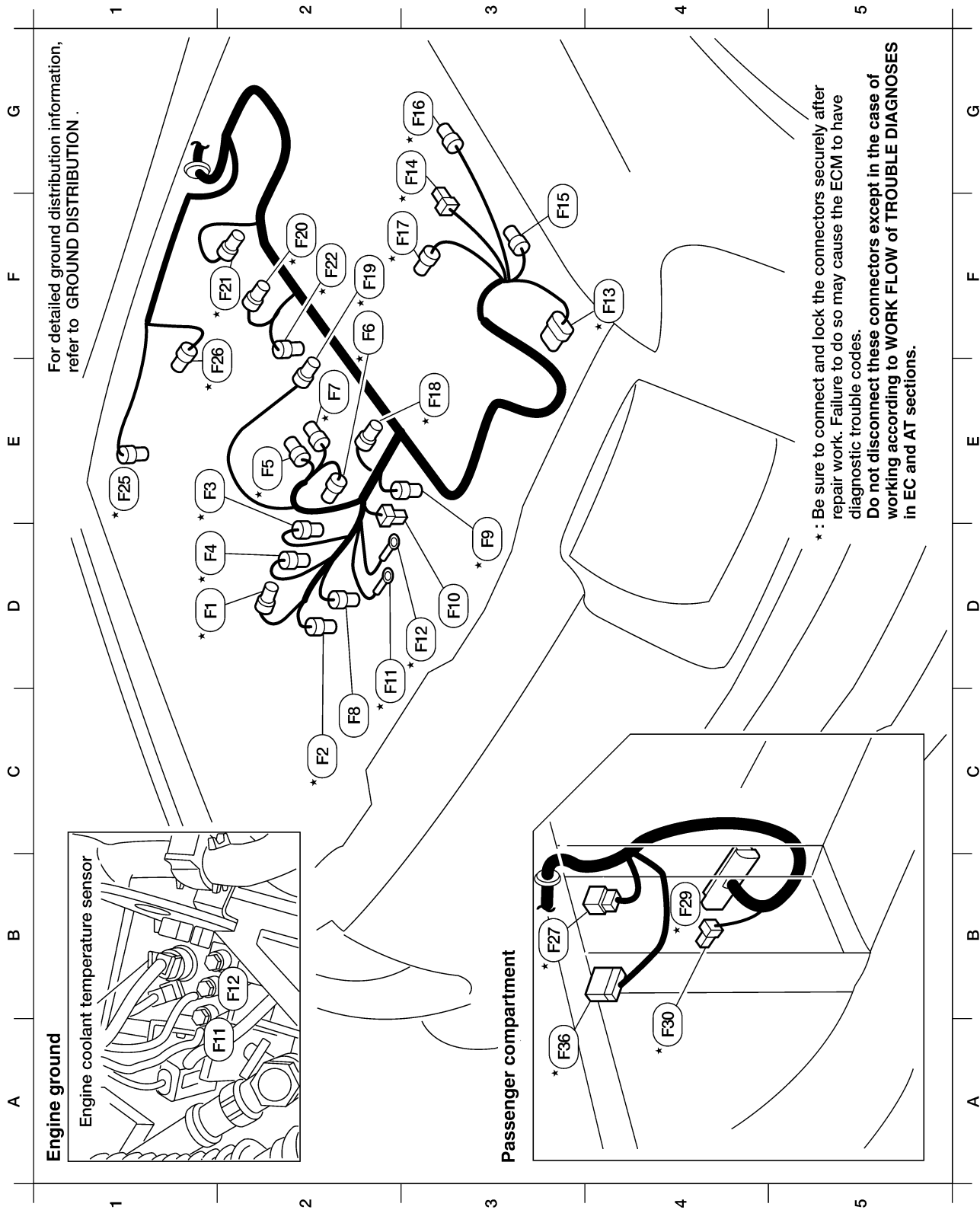


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 Do not disconnect these connectors except in the case of working according to **WORK FLOW of TROUBLE DIAGNOSES** in EC and AT sections.

# HARNESS LAYOUT

## Engine Control Harness (KA24DE Models)

EKS006Y3



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WKIA0305E

# HARNES LAYOUT

D2	*	F1	BR/4	: Mass air flow sensor	F3	*	F17	GY/2	: Distributor (ignition coil)
C2	*	F2	GY/2	: To F101	E3	*	F18	B/2	: Injector No. 1
D2	*	F3	BR/3	: Throttle position sensor	F2	*	F19	B/2	: Injector No. 2
D2	*	F4	GY/3	: Throttle position switch (closed throttle position switch and wide open throttle position switch)	F2	*	F20	B/2	: Injector No. 3
E2	*	F5	GY/2	: EGR temperature sensor	F2	*	F21	B/2	: Injector No. 4
F2	*	F6	BR/2	: IACV-AAC valve	F2	*	F22	G/2	: EGRC-solenoid valve
E2	*	F7	PU/2	: IACV-FICD solenoid valve	E1	*	F25	GY/3	: To E41
C2	*	F8	B/1	: Power steering pressure switch	E2	*	F26	L/2	: EVAP canister purge volume control solenoid valve
D3	*	F9	GY/2	: Engine coolant temperature sensor	B3	*	F27	W/16	: To M59
D3	*	F10	B/1	: Thermal transmitter	B4	*	F29	GY/124	: ECM
D2	*	F11	-	: Engine ground	A4	*	F30	L/4	: ECM relay
D3	*	F12	-	: Engine ground	A3	*	F36	W/20	: To M81
F4	*	F13	GY/6	: Distributor (camshaft position sensor)					
G3	*	F14	GY/2	: Resistor					
F3		F15	B/1	: A/C compressor					
G3	*	F16	SB/3	: Heated oxygen sensor 1					

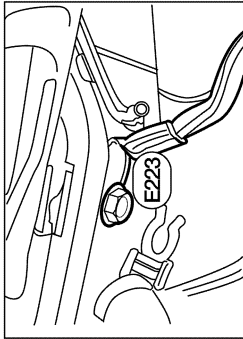
\* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.  
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

# HARNESS LAYOUT

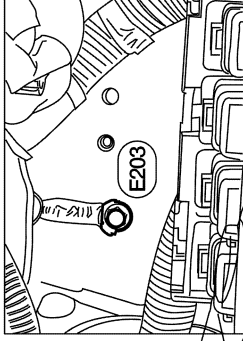
## Engine No. 2 Harness (KA24DE Models)

EKS006Y4

### Engine ground

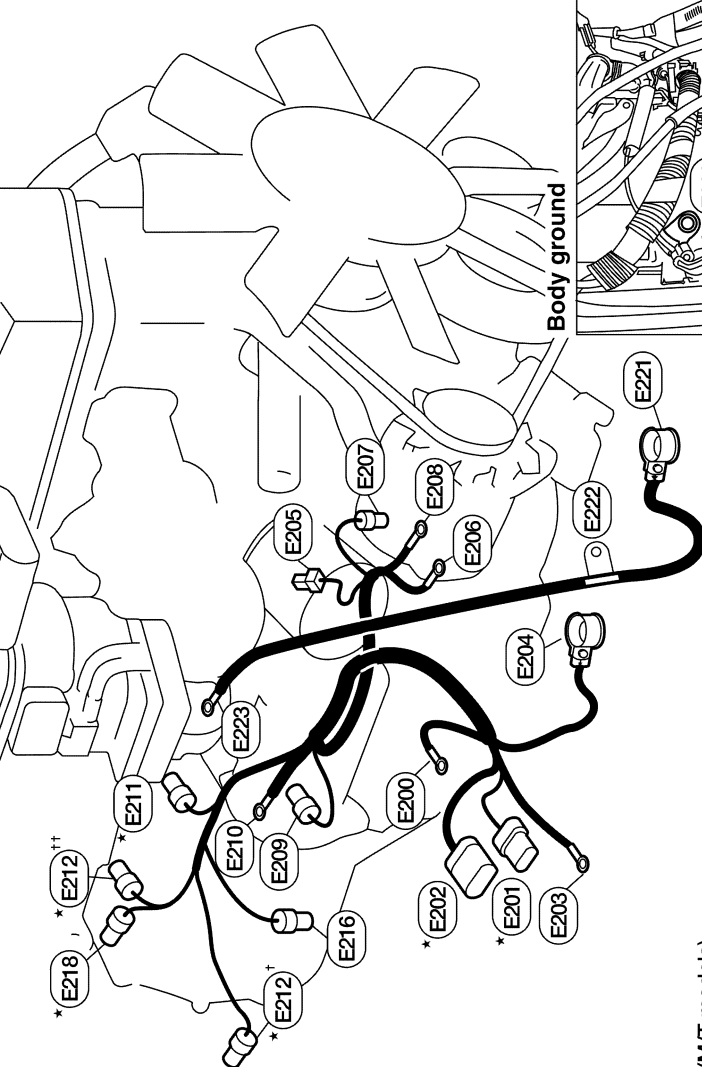


### Body ground



For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

- Ⓔ200 - : Relay box
- \* Ⓔ201 SB/6 : To Ⓔ33
- \* Ⓔ202 GY/9 : To Ⓔ32
- Ⓔ203 - : Body ground
- Ⓔ204 - : Battery positive terminal
- Ⓔ205 GY/1 : Oil pressure switch
- Ⓔ206 - : Generator
- Ⓔ207 GY/2 : Generator
- Ⓔ208 - : Generator
- Ⓔ209 GY/1 : Starter motor
- Ⓔ210 - : Starter motor
- \* Ⓔ211 GY/2 : Crankshaft position sensor (OBD)
- \* Ⓔ212+ GY/2 : Vehicle speed sensor (A/T models)
- \* Ⓔ212++ GY/2 : Vehicle speed sensor (M/T models)
- Ⓔ216 GY/2 : Back-up lamp switch (M/T models)
- \* Ⓔ218 B/2 : Park/neutral position (PNP) switch (M/T models)



- Ⓔ221 - : Battery negative terminal
- Ⓔ222 - : Body ground
- Ⓔ223 - : Engine ground

\* : 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 to the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

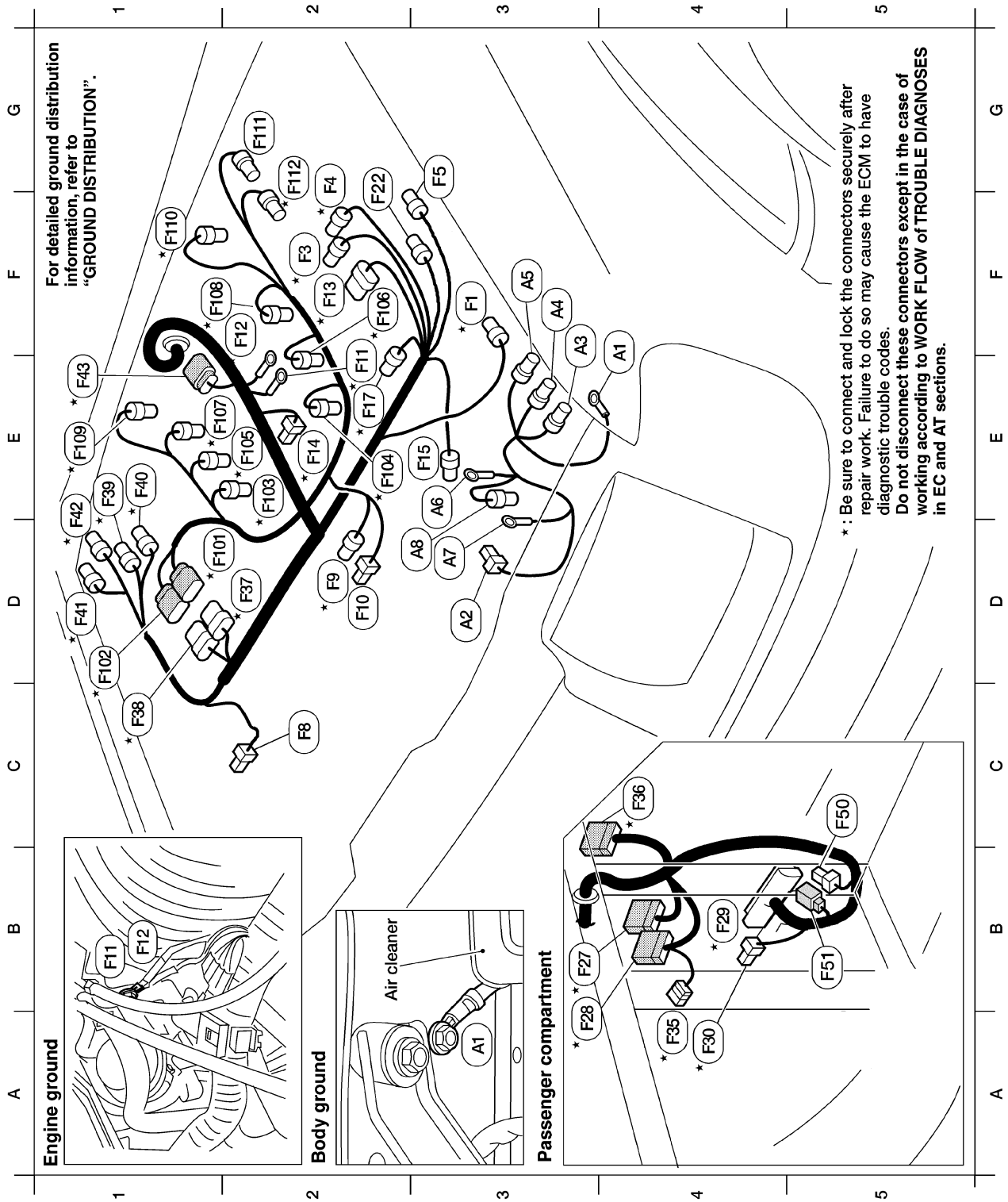
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# HARNES LAYOUT

## Engine Control Harness (VG33E Models)

EKS006Y5



For detailed ground distribution information, refer to "GROUND DISTRIBUTION".

\* : 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.

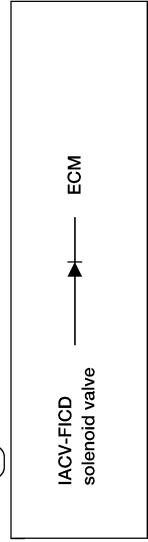


# HARNESS LAYOUT

## ENGINE CONTROL HARNESS

- F3 \* (F1) BR/4 : Mass air flow sensor
- F2 \* (F3) BR/3 : Throttle position sensor
- F2 (F4) GY/3 : Throttle position switch (closed throttle position switch and wide open throttle position switch)
- G3 (F5) GY/2 : EGR temperature sensor
- C2 (F8) B/2 : Power steering oil pressure switch
- D2 \* (F9) GY/2 : Engine coolant temperature sensor
- D2 (F10) B/1 : Thermal transmitter
- E2 \* (F11) - : Engine ground
- F2 \* (F12) - : Engine ground
- F2 \* (F13) GY/6 : Distributor (camshaft position sensor)
- E2 \* (F14) GY/2 : Resistor
- E3 (F15) B/1 : A/C compressor
- E2 \* (F17) GY/2 : Distributor (ignition coil)
- G2 (F22) B/2 : EGRC solenoid valve
- B3 \* (F27) W/16 : To (M59)
- A3 \* (F28) W/16 : To (M56)
- B4 \* (F29) GY/124 : ECM
- A4 \* (F30) L/4 : ECM relay
- A4 \* (F35) B/2 : Diode-5
- C4 \* (F36) W/24 : To (M81)
- D2 \* (F37) B/8 : To (F10)
- C1 \* (F38) GY/8 : To (F102)
- E1 \* (F39) B/4 : Heated oxygen sensor 2 (bank 2)
- E1 \* (F40) B/3 : Heated oxygen sensor 1 (bank 2)
- D1 \* (F41) B/3 : Heated oxygen sensor 1 (bank 1)
- D1 \* (F42) B/4 : Heated oxygen sensor 2 (bank 1)
- E1 \* (F43) GY/8 : To (F20)

Diode (F35)



## ENGINE CONTROL HARNESS (CONTINUED)

- C5 (F50) W/1 : To (F51)
- B5 (F51) W/1 : To (F50)

## ENGINE SUB HARNESS

- D2 \* (F101) B/8 : To (F37)
- D1 \* (F102) GY/8 : To (F38)
- E2 \* (F103) B/2 : Injector No. 1
- E2 \* (F104) B/2 : Injector No. 2
- E2 \* (F105) B/2 : Injector No. 3
- F2 \* (F106) B/2 : Injector No. 4
- E2 \* (F107) B/2 : Injector No. 5
- F1 \* (F108) B/2 : Injector No. 6
- E1 \* (F109) GY/2 : Knock sensor
- F1 \* (F110) GY/3 : Crankshaft position sensor (OBD)
- G2 \* (F111) GY/2 : IACV-FICD solenoid valve
- G2 \* (F112) BR/2 : IACV-AAC valve

## GENERATOR HARNESS

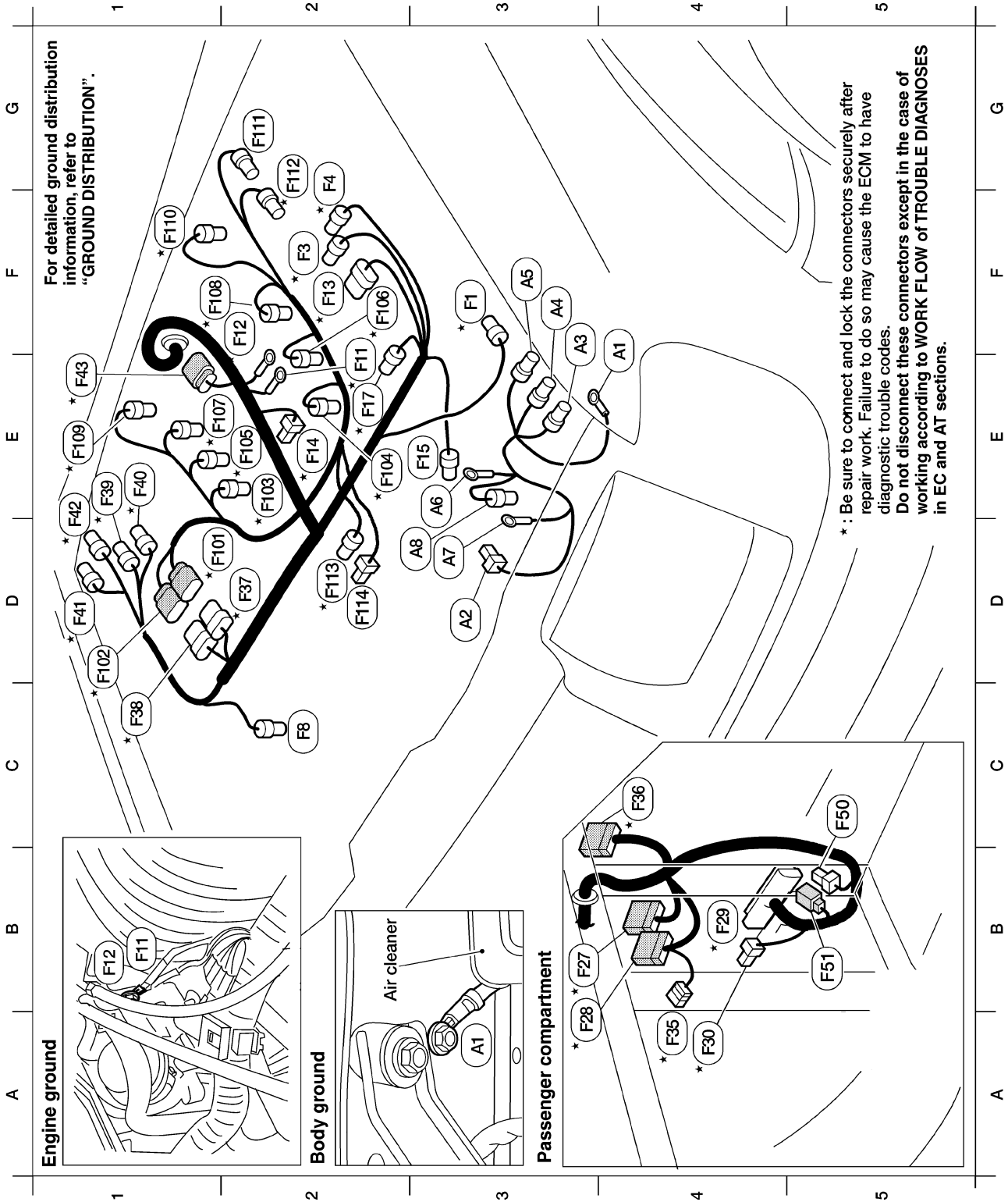
- F4 (A1) - : Body ground
- D3 (A2) GY/1 : Oil pressure switch
- F3 (A3) GY/1 : To (E63)
- F3 (A4) GY/1 : To (E64)
- F3 (A5) GY/3 : To (E66)
- E3 (A6) - : Generator
- D3 (A7) - : Generator
- D3 (A8) GY/2 : Generator

\* : 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

## Engine Control Harness (VG33ER Models)

EKS006Y6



WKIA0309E

# HARNESS LAYOUT

## ENGINE SUB HARNESS

D2	* F101	G/10	: To F57
D1	* F102	GY/10	: To F38
E2	* F103	B/2	: Injector No. 1
E2	* F104	B/2	: Injector No. 2
E2	* F105	B/2	: Injector No. 3
F2	* F106	B/2	: Injector No. 4
E2	* F107	B/2	: Injector No. 5
F1	* F108	B/2	: Injector No. 6
E1	* F109	GY/2	: Knock sensor
F1	* F110	GY/2	: Crankshaft position sensor (OBD)
G2	F111	GY/2	: IACV-FICD solenoid valve
G2	* F112	BR/2	: IACV-AAC valve
D2	* F113	GY/2	: Engine coolant temperature sensor
D2	* F114	B/1	: Thermal transmitter

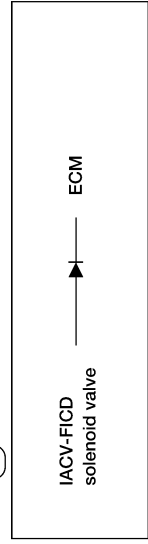
## GENERATOR HARNESS

F4	A1	-	: Body ground
D3	A2	GY/1	: Oil pressure switch
F3	A3	GY/1	: To E63
F3	A4	GY/1	: To E64
F3	A5	GY/3	: To E65
E3	A6	-	: Generator
D3	A7	-	: Generator
D3	A8	GY/2	: Generator

## ENGINE CONTROL HARNESS

F3	* F1	BR/4	: Mass air flow sensor
F2	* F3	BR/3	: Throttle position sensor
F2	F4	GY/3	: Throttle position switch (closed throttle position switch and wide open throttle position switch)
C2	F6	B/2	: Power steering oil pressure switch
E2	* F11	-	: Engine ground
F2	* F12	-	: Engine ground
F2	* F13	GY/6	: Distributor (camshaft position sensor)
E2	* F14	GY/2	: Resistor
E3	F15	B/1	: A/C compressor
E2	* F17	GY/2	: Distributor (ignition coil)
B3	* F27	W/16	: To M59
A3	* F28	W/16	: To M58
B4	* F29	GY/124	: ECM
A4	* F30	L/4	: ECM relay
A4	* F35	SB/2	: Diode
C4	* F36	W/24	: To M81
D2	* F37	G/10	: To F101
C1	* F38	GY/10	: To F102
E1	* F39	B/4	: Heated oxygen sensor 2 (bank 2)
E1	* F40	B/3	: Heated oxygen sensor 1 (bank 2)
D1	* F41	B/3	: Heated oxygen sensor 1 (bank 1)
D1	* F42	B/4	: Heated oxygen sensor 2 (bank 1)
E1	* F43	B/8	: To F201
C5	F50	W/1	: To F51
B5	F51	W/1	: To F50

Diode F35

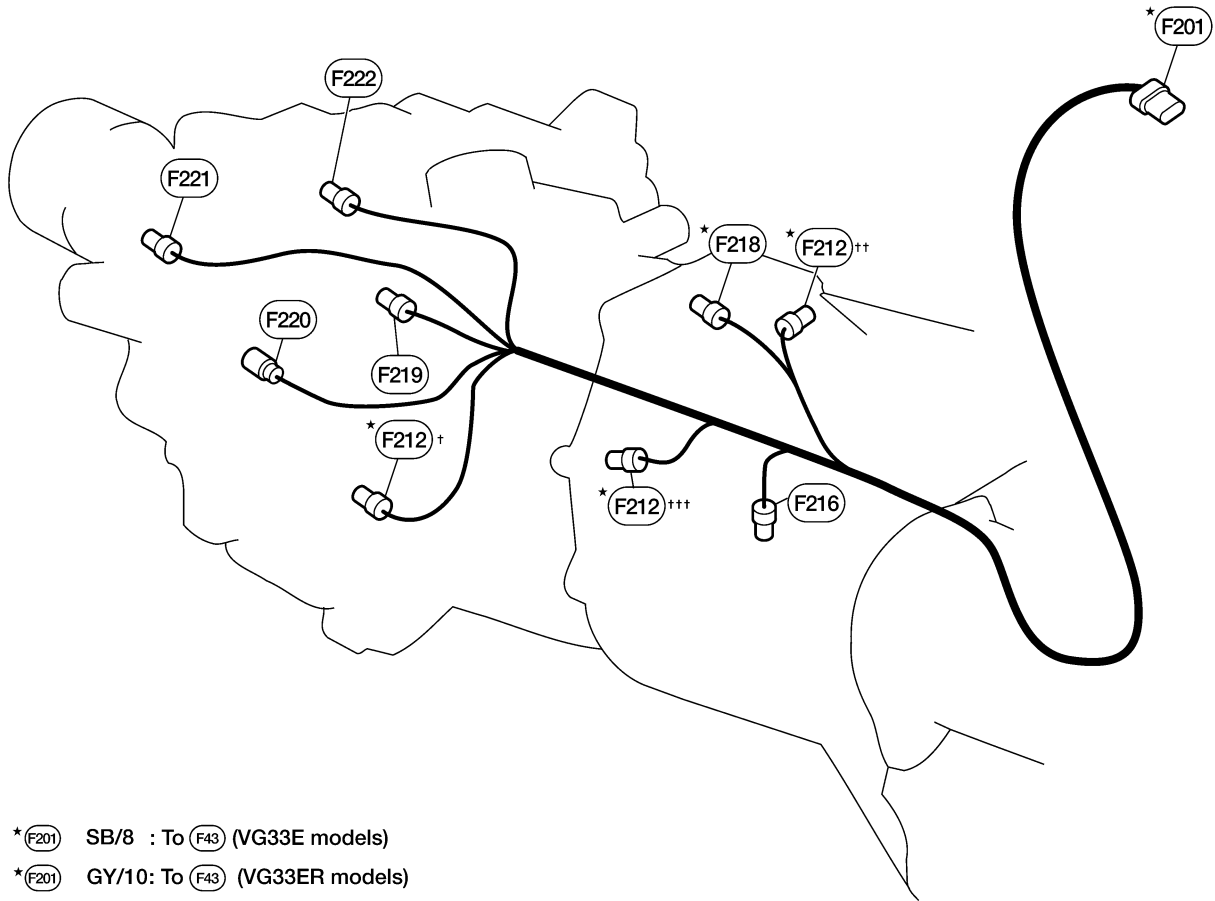


\* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.  
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

# HARNES LAYOUT

## Engine No. 2 Harness (VG33E and VG33ER Models)

EKS006Y7



- \* (F201) SB/8 : To (F43) (VG33E models)
- \* (F201) GY/10: To (F43) (VG33ER models)
- \* (F212)+ GY/2 : Vehicle speed sensor (with 4WD)
- \* (F212)++ GY/2 : Vehicle speed sensor (with 2WD M/T)
- \* (F212)+++ GY/2 : Vehicle speed sensor (with 2WD A/T)
- (F216) GY/2 : Back-up lamp switch (with M/T)
- \* (F218) B/2 : Park/neutral position (PNP) switch (with M/T)
- (F219) GY/1 : 4WD switch (with M/T)
- (F220) GY/1 : 4WD switch (with M/T)
- (F221) GY/2 : 4WD switch (with A/T)
- (F222) B/2 : Transfer neutral position switch (with A/T)

\* : 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.**

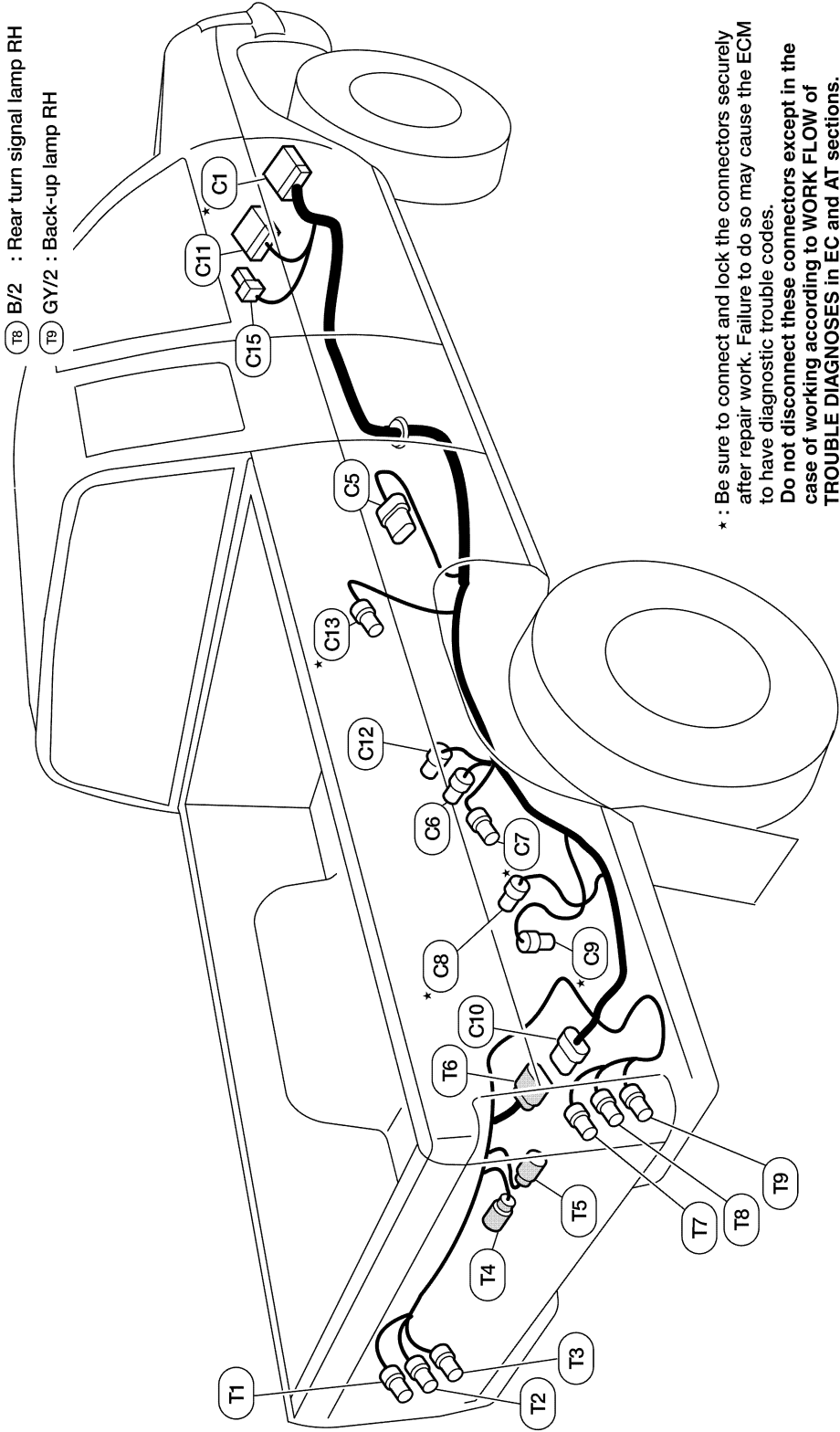
WEL964A

# HARNESS LAYOUT

## Chassis and Tail Harness (KA24DE Models)

EKS006Y8

- Chassis harness**
- \* (C1) W/16 : To (M67)
  - (C5) GY/6 : Fuel level sensor unit and fuel pump
  - (C6) GY/2 : Rear wheel sensor
  - \* (C7) BR/3 : EVAP control system pressure sensor
  - \* (C8) B/2 : EVAP canister vent control valve
  - \* (C9) G/2 : Vacuum cut valve bypass valve
  - (C10) GY/6 : To (T6)
- Chassis harness**
- (C12) GY/4 : Rear wheel sensor
  - (C15) W/2 : To (M16)
- Tail harness**
- (T1) B/3 : Rear stop/tail lamp LH
  - (T2) B/2 : Turn signal lamp LH
  - (T3) GY/2 : Back-up lamp LH
  - (T4) GY/2 : License plate lamp LH
  - (T5) GY/2 : License plate lamp RH
  - (T6) GY/6 : To (C10)
  - (T7) B/3 : Rear stop/tail lamp RH
  - (T8) B/2 : Rear turn signal lamp RH
  - (T9) GY/2 : Back-up lamp RH



\* : 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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# HARNES LAYOUT

## Chassis and Tail Harness (VG33E and VG33ER Models)

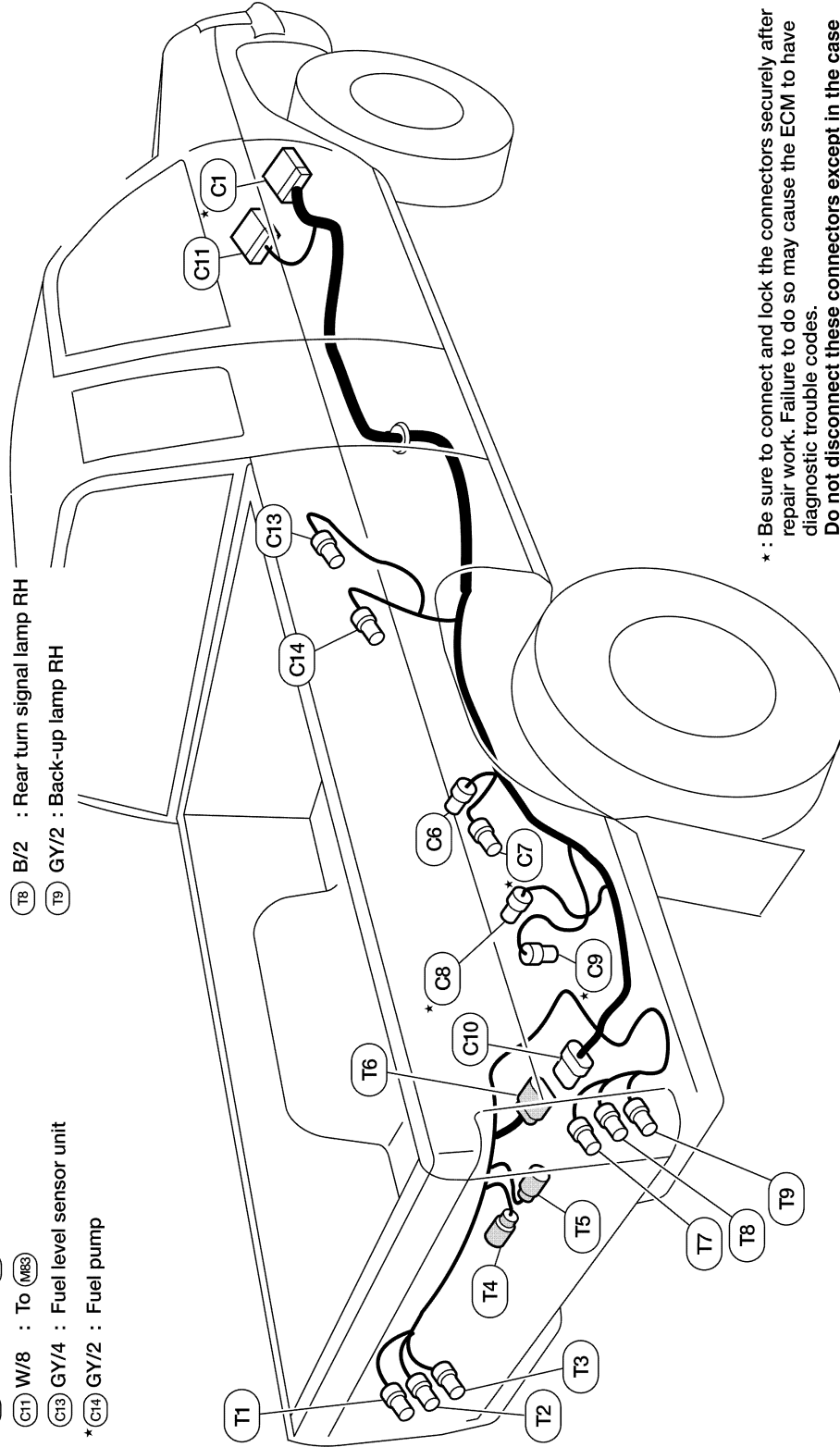
EKS006Y9

### Chassis harness

- \* C1 W/16 : To (N67)
- C6 GY/2 : Rear wheel sensor (2WD)
- C8 GY/4 : Rear wheel sensor (4WD)
- C7 BR/3 : EVAP control system pressure sensor
- \* C8 GY/2 : EVAP canister vent control valve
- \* C9 G/2 : Vacuum cut valve bypass valve
- C10 GY/6 : To T6
- C11 W/8 : To (N68)
- C13 GY/4 : Fuel level sensor unit
- \* C14 GY/2 : Fuel pump

### Tail harness

- T1 B/3 : Rear stop/tail lamp LH
- T2 B/2 : Turn signal lamp LH
- T3 GY/2 : Back-up lamp LH
- T4 GY/2 : License plate lamp LH
- T5 GY/2 : License plate lamp RH
- T6 GY/6 : To C10
- T7 B/3 : Rear stop/tail lamp RH
- T8 B/2 : Rear turn signal lamp RH
- T9 GY/2 : Back-up lamp RH



\* : 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.

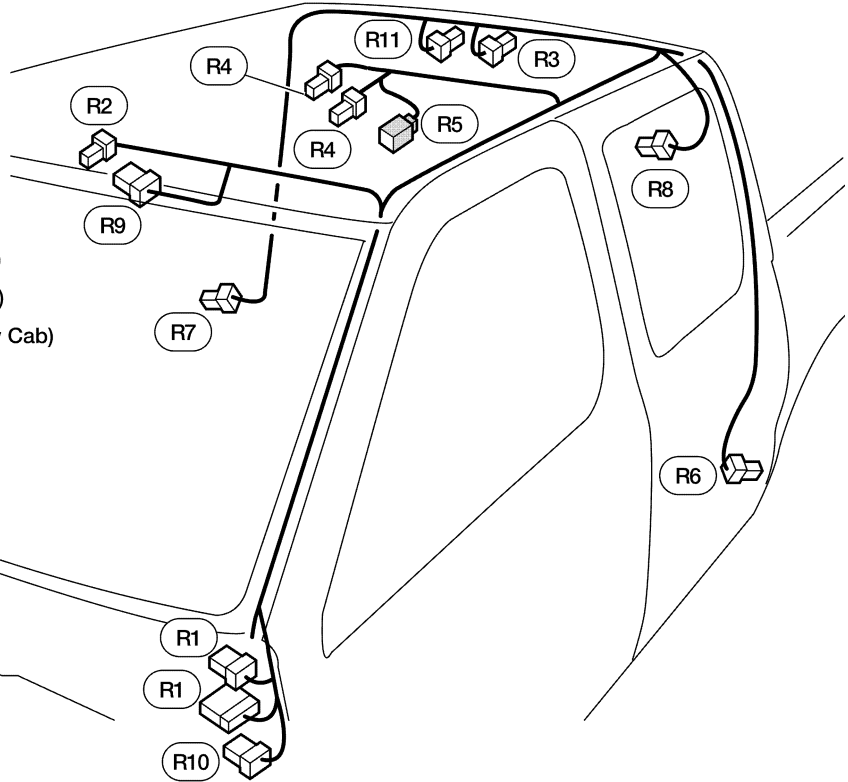
WKIA0340E

# HARNESS LAYOUT

## Room Lamp Harness

EKS006YA

- (R1) W/12 : To (M2) (King Cab)
- (R1) BR/8 : To (M2) (Crew Cab)
- (R2) W/2 : Map lamp (with map lamp)
- (R3) B/2 : High mounted stop lamp
- (R4) W/1 : Room lamp (Crew Cab)
- (R4) W/3 : Room lamp (King Cab)
- (R5) BR/1 : Room lamp (Crew Cab)
- (R6) BR/1 : Rear door switch LH (Crew Cab)
- (R7) BR/1 : Rear door switch RH (Crew Cab)
- (R8) B/1 : Rear window defogger (+) (Crew Cab)
- (R9) W/8 : Compass and thermometer
- (R10) W/8 : To (M135) (Crew Cab)
- (R11) BR/2 : Cargo lamp (King Cab)

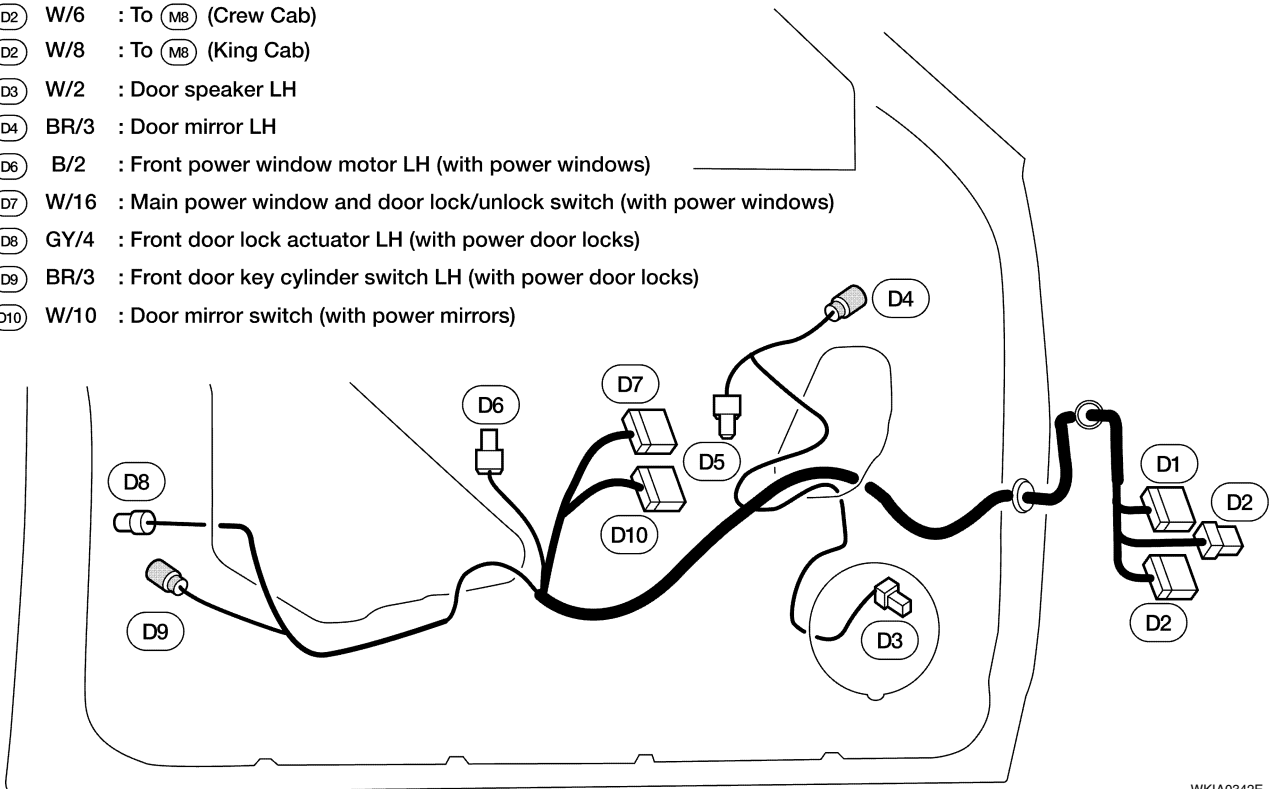


WKIA0341E

## Front Door Harness LH SIDE

EKS006YB

- (D1) W/12 : To (M9)
- (D2) W/6 : To (M8) (Crew Cab)
- (D2) W/8 : To (M8) (King Cab)
- (D3) W/2 : Door speaker LH
- (D4) BR/3 : Door mirror LH
- (D6) B/2 : Front power window motor LH (with power windows)
- (D7) W/16 : Main power window and door lock/unlock switch (with power windows)
- (D8) GY/4 : Front door lock actuator LH (with power door locks)
- (D9) BR/3 : Front door key cylinder switch LH (with power door locks)
- (D10) W/10 : Door mirror switch (with power mirrors)



WKIA0342E

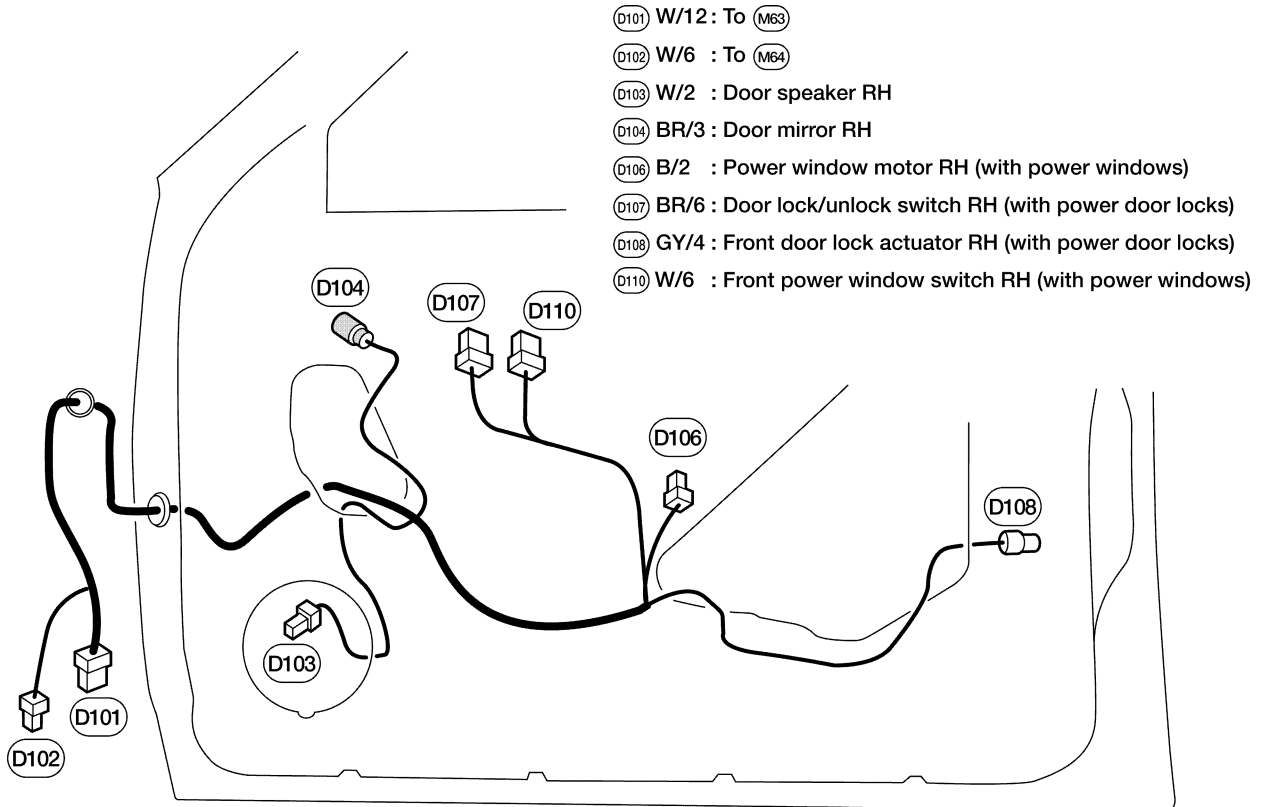
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# HARNES LAYOUT

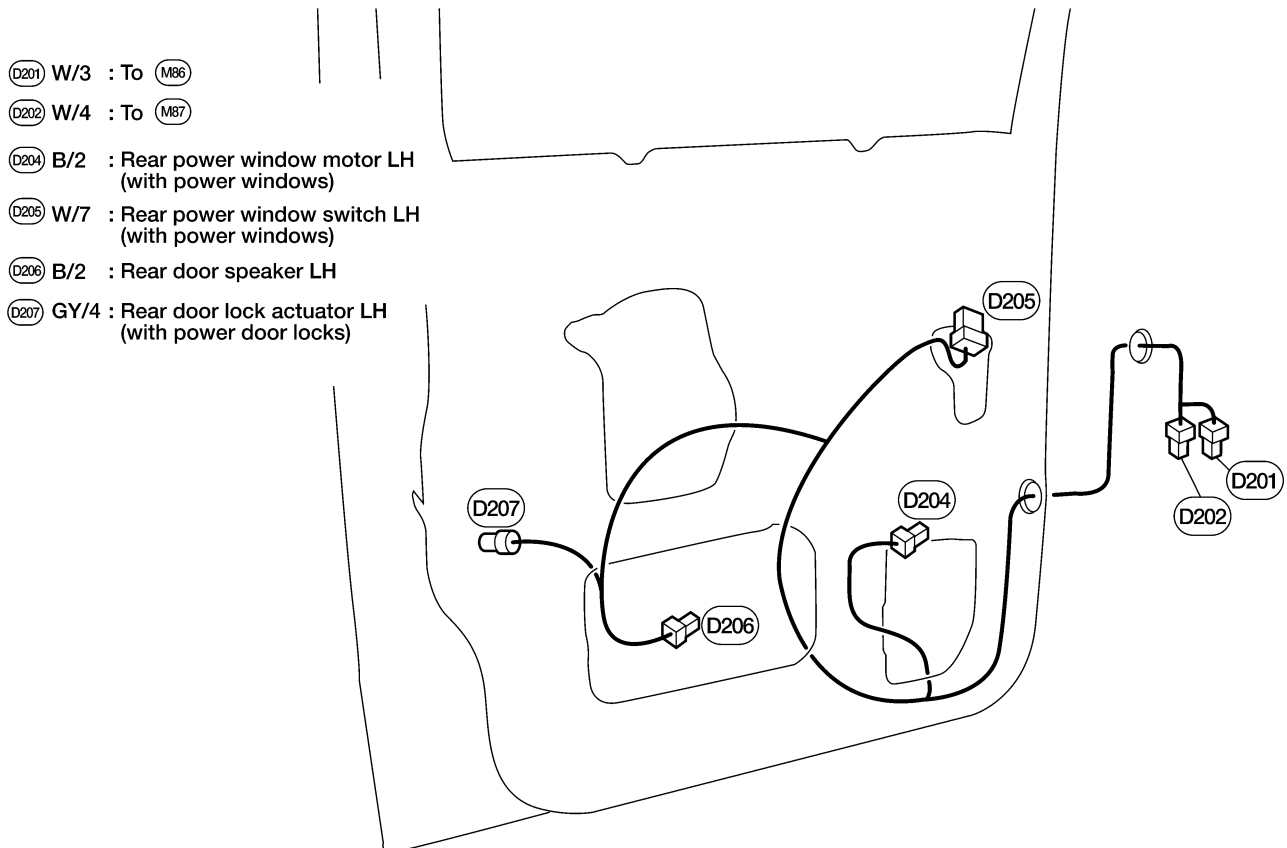
## RH SIDE



WKIA0343E

## Rear Door Harness LH SIDE

EKS006YC

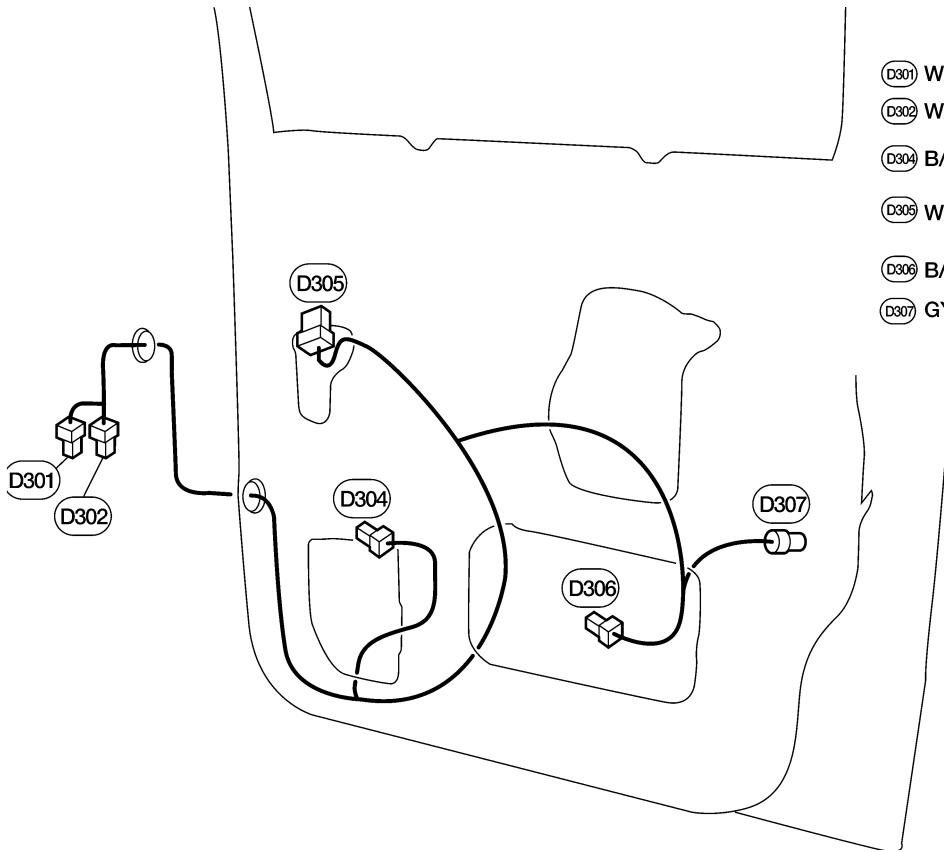


WEL970A



# HARNESS LAYOUT

RH SIDE



D301 W/3 : To M91

D302 W/4 : To M92

D304 B/2 : Rear power window motor RH  
(with power windows)

D305 W/7 : Rear power window switch RH  
(with power windows)

D306 B/2 : Rear door speaker RH

D307 GY/4 : Rear door lock actuator RH  
(with power door locks)

WEL971A

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# HARNES LAYOUT

EKS006YD

## 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
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
AAC/V	EC	IACV-AAC Valve
ABS	BRC	Anti-Lock Brake System
A/C,M	MTC	Manual Air Conditioner
ASCD	ASC	Automatic Speed Control Device
A/T	AT	A/T
AT/C	EC	A/T Control
ATDIAG	EC	A/T Diagnosis Communication Line
AUDIO	AV	Audio
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
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)
COMPAS	DI	Compass and Thermometer
DEF	GW	Rear Window Defogger
D/LOCK	BL	Power Door Lock
DTRL	LT	Headlamp - With Daytime Light System
ECTS	EC	Engine Coolant Temperature Sensor
EGRC/V	EC	EGRC - Solenoid Valve
EGRC1	EC	EGR Function
EGR/TS	EC	EGR Temperature Sensor
ENGSS	AT	Engine Speed Signal
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
HO2S2H	EC	Heated Oxygen Sensor 2 Heater
HORN	WW	Horn

# HARNES LAYOUT

IATS	EC	Intake Air Temperature Sensor	A
IGN/SG	EC	Ignition Signal	
ILL	LT	Illumination	
INJECT	EC	Injector	B
KEYLES	BL	Remote Keyless Entry System	
KS	EC	Knock Sensor	
LPSV	AT	Line Pressure Solenoid Valve	C
MAFS	EC	Mass Air Flow Sensor	
MAIN	AT	Main Power Supply and Ground Circuit	
MAIN	EC	Main Power Supply and Ground Circuit	D
METER	DI	Speedometer, Tachometer, Temp., and Fuel Gauges	
MIL/DL	EC	MIL and Data Link Connectors	
MIRROR	GW	Door Mirror	E
NONDTC	AT	Non-detectable Items	
O2H1B1	EC	Heated Oxygen Sensor 1 Heater Bank 1	
O2H1B2	EC	Heated Oxygen Sensor 1 Heater Bank 2	F
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	G
O2S1B2	EC	Heated Oxygen Sensor 1 Bank 2	
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1	
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2	H
OVRCSV	AT	Over Run Clutch Solenoid Valve	
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve	
PNP/SW	AT	Park/Neutral Position Switch	I
PNP/SW	EC	Park/Neutral Position Switch	
POWER	PG	Power Supply Routing	
PRE/SE	EC	EVAP Control System Pressure Sensor	J
PST/SW	EC	Power Steering Oil Pressure Switch	
ROOM/L	LT	Interior Room Lamp	
S/CHGR	EC	Supercharger Bypass Valve Control	PG
SHIFT	AT	A/T Shift Lock System	
SRS	SRS	Supplemental Restraint System	
S/SIG	EC	Start Signal	L
SSV/A	AT	Shift Solenoid Valve A	
SSV/B	AT	Shift Solenoid Valve B	
START	SC	Starting System	M
STOP/L	LT	Stop Lamp	
TAIL/L	LT	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	
TP/SW	EC	Throttle Position Switch	
TRSA/T	AT	Turbine Revolution Sensor	
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	
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)	

## HARNES LAYOUT

VSSMTR	AT	Vehicle Speed Sensor Meter
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

# SUPER MULTIPLE JUNCTION (SMJ)

## SUPER MULTIPLE JUNCTION (SMJ)

PFP:84341

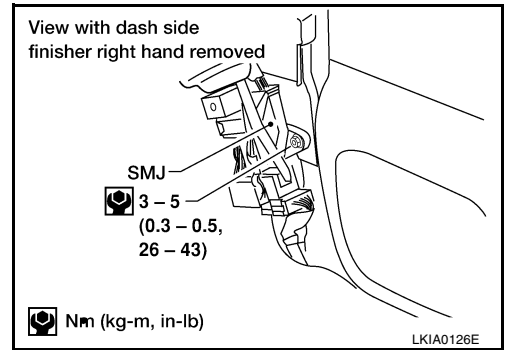
### Installation

EKS006YE

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



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



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# SUPER MULTIPLE JUNCTION (SMJ)

## Terminal Arrangement

EKS006YF

### MAIN HARNESS

(M65)

24B	23B	22B	21B	20B	19B	18B	17B	16B	15B	14B	13B	12B	11B	10B	9B	8B	7B	6B	5B	4B	3B	2B	1B
24A	23A	22A	21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A	10A	9A	8A	7A	6A	5A	4A	3A	2A	1A



24A	23A	22A	21A	20A	19A	18A	17A	16A	15A	14A	13A	12A	11A	10A	9A	8A	7A	6A	5A	4A	3A	2A	1A
24B	23B	22B	21B	20B	19B	18B	17B	16B	15B	14B	13B	12B	11B	10B	9B	8B	7B	6B	5B	4B	3B	2B	1B

(E43)

### ENGINE ROOM HARNESS

AEL646B

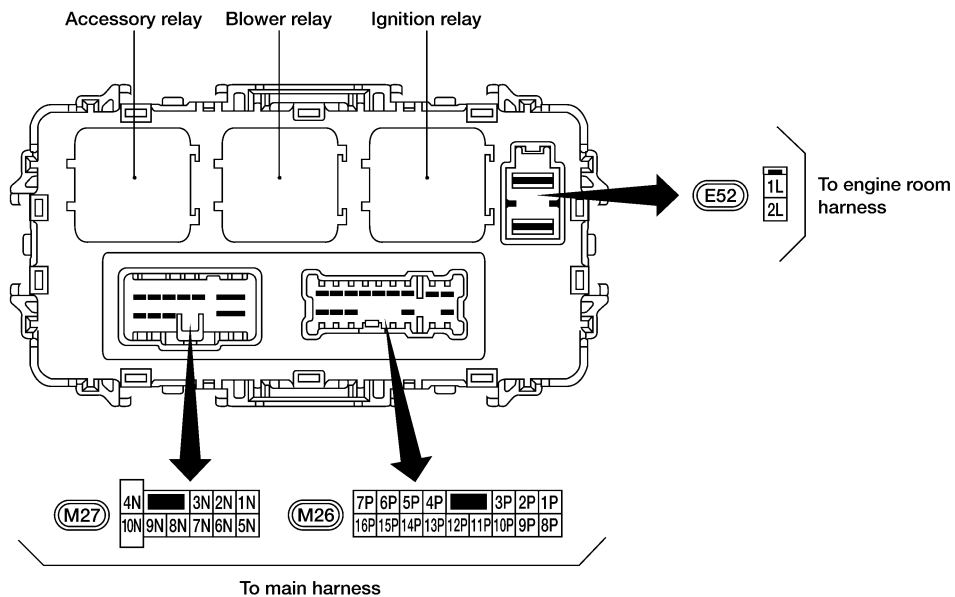
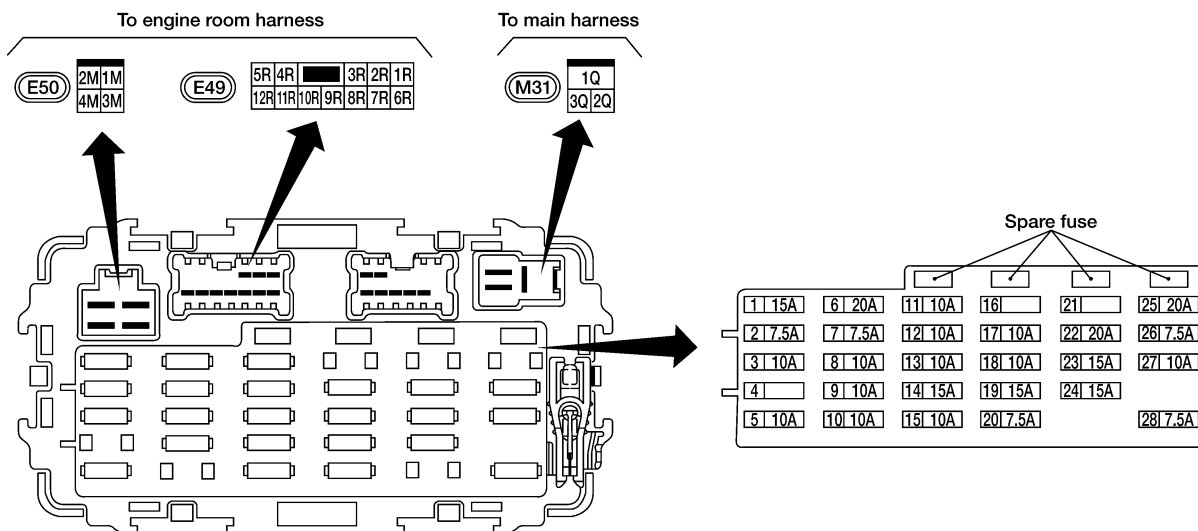
# FUSE BLOCK — JUNCTION BOX (J/B)

## FUSE BLOCK — JUNCTION BOX (J/B)

PF24350

### Terminal Arrangement

EKS006YG



WEL913A

# FUSE AND FUSIBLE LINK BOX

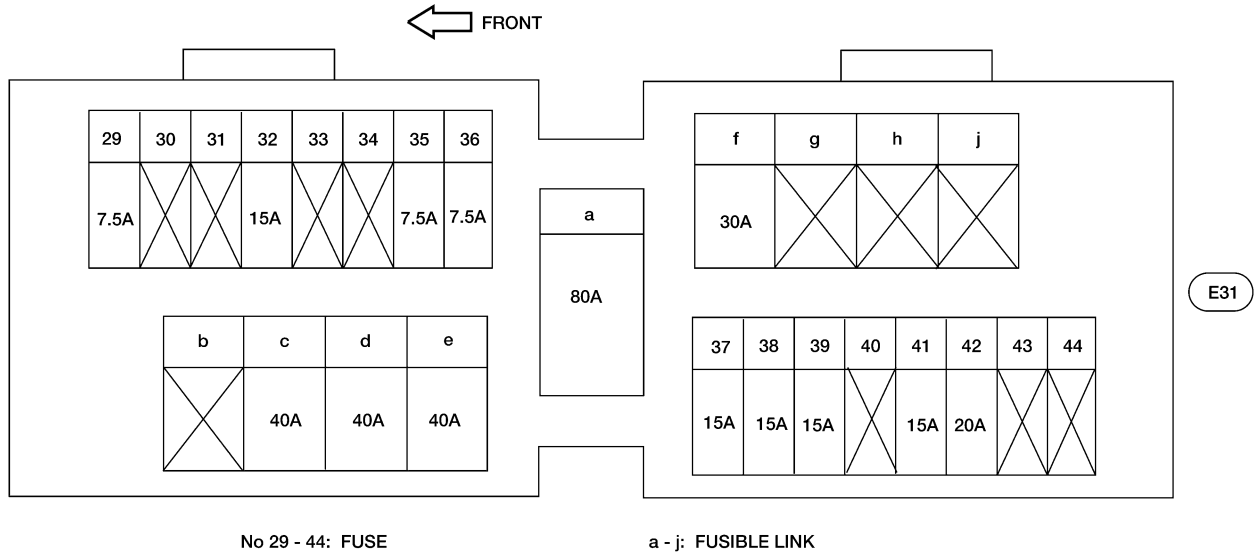
PF2:24381

EKS006YH

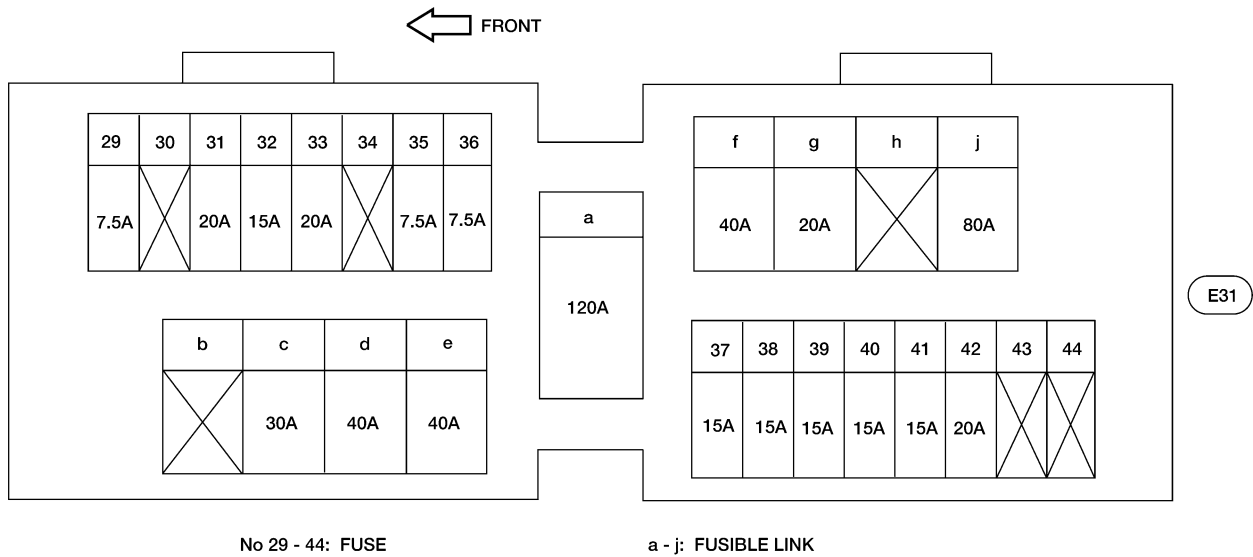
## FUSE AND FUSIBLE LINK BOX

### Terminal Arrangement

For KA24DE ENGINE



For VG33E and VG33ER ENGINES





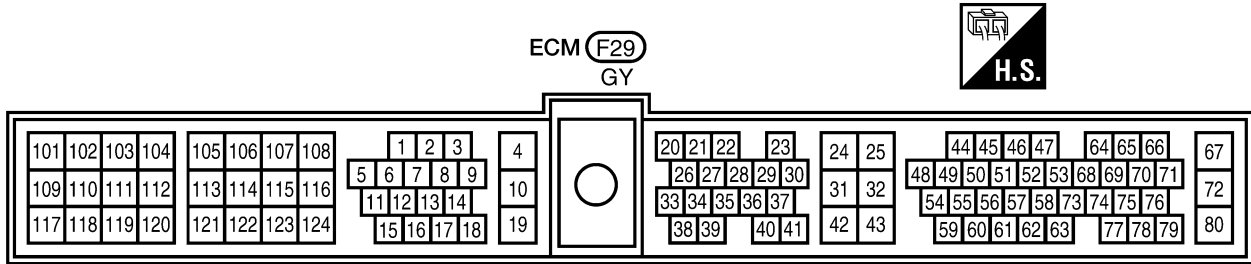
# ELECTRICAL UNITS

## ELECTRICAL UNITS Terminal Arrangement

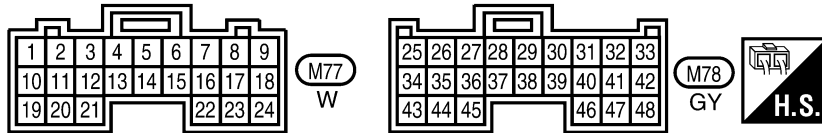
PF2:23710

EKS006YI

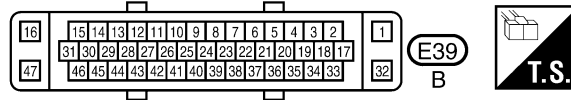
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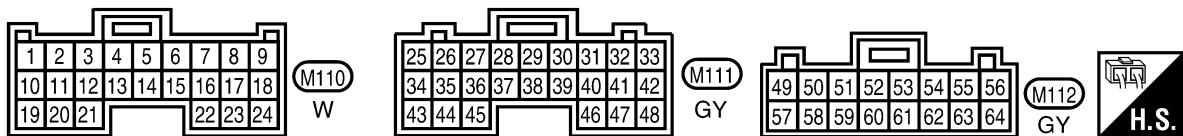
TCM (TRANSMISSION CONTROL MODULE)



ABS ACTUATOR AND ELECTRIC UNIT  
(CONTROL UNIT)



SMART ENTRANCE CONTROL UNIT



# ELECTRICAL UNITS

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