

**SECTION PG**

**POWER SUPPLY, GROUND & CIRCUIT ELEMENTS**

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A  
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MIXED TYPE RELAYS .....	69	<b>FUSE AND FUSIBLE LINK BOX .....</b>	<b>72</b>
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# POWER SUPPLY ROUTING CIRCUIT

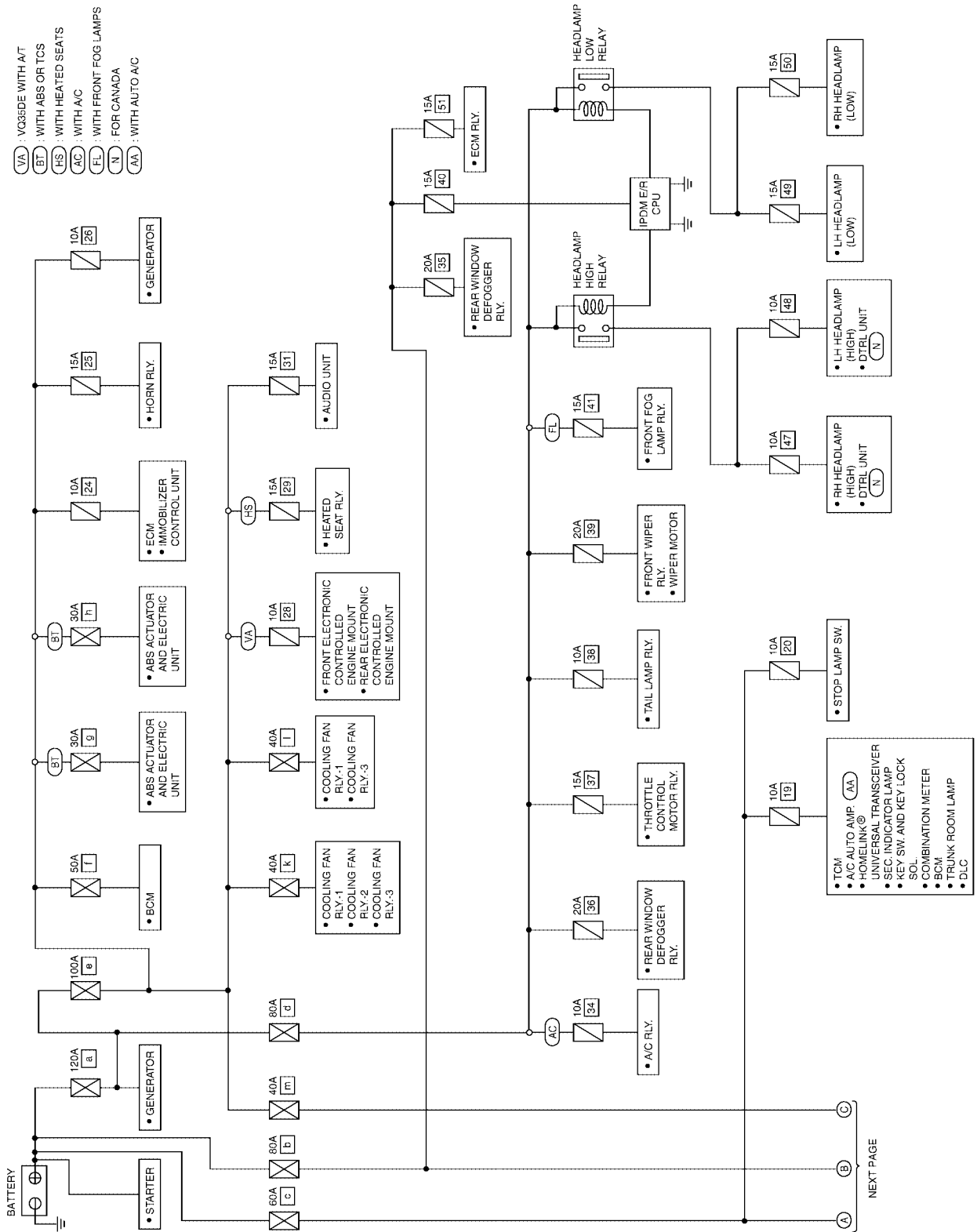
## POWER SUPPLY ROUTING CIRCUIT

### Schematic

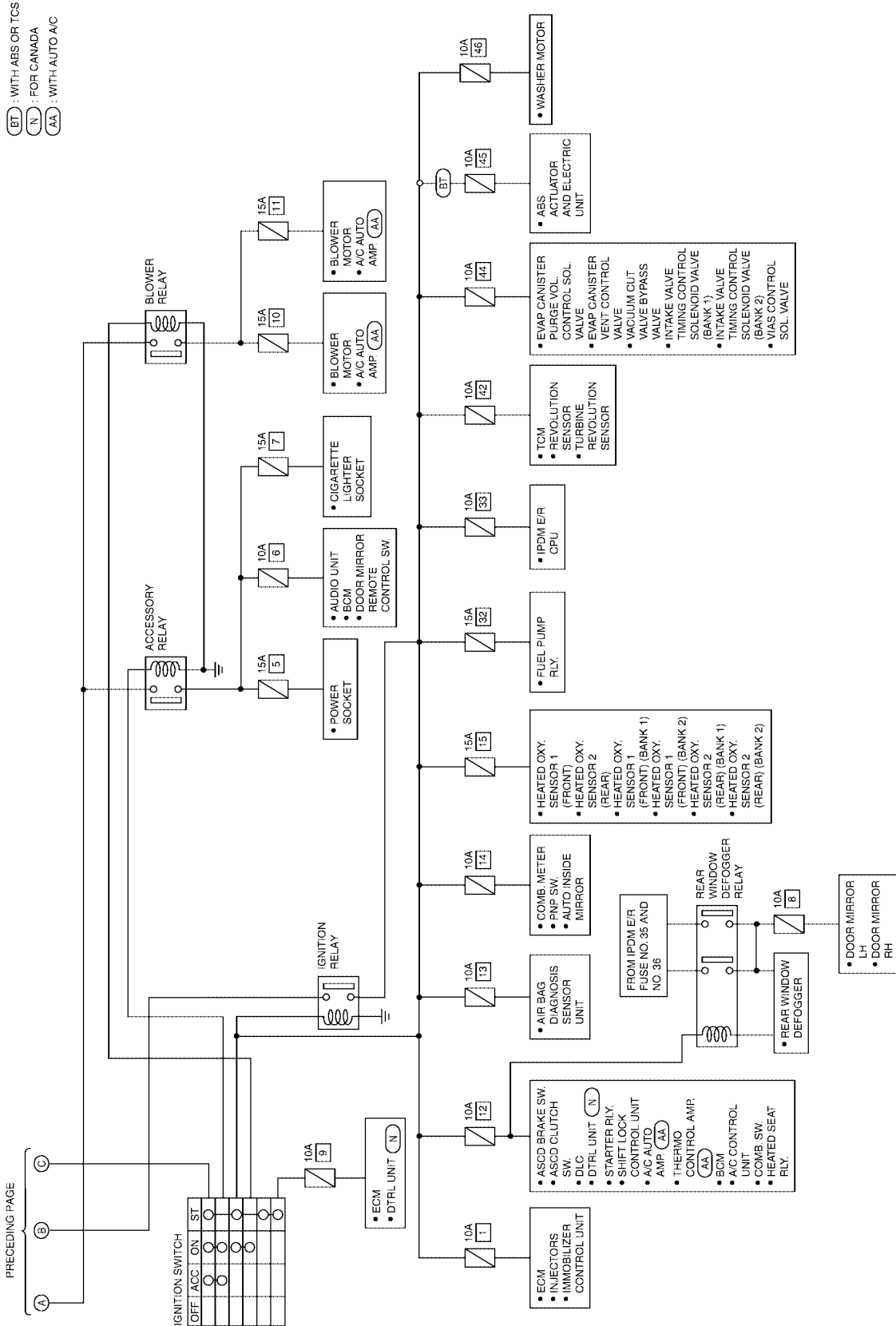
For detailed ground distribution, refer to [PG-26, "Ground Distribution"](#).

PF024110

EKS002L5



# POWER SUPPLY ROUTING CIRCUIT



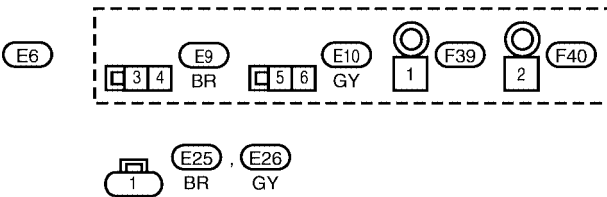
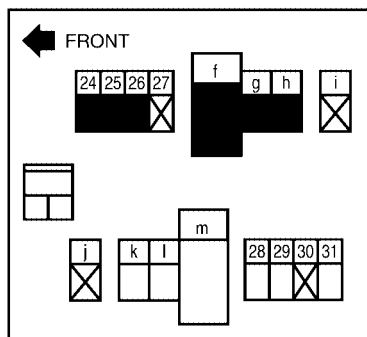
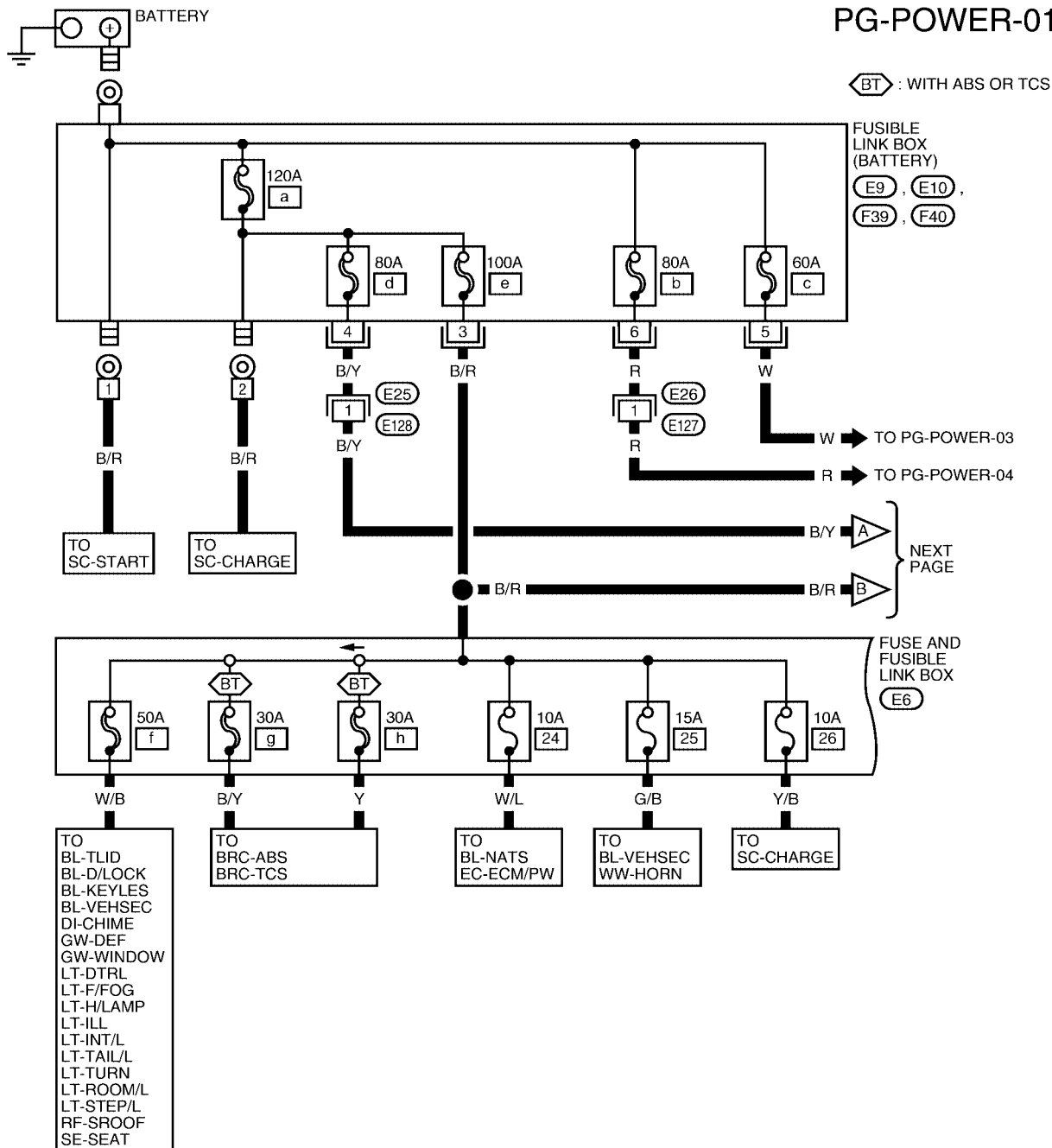
WKWA0094E

# POWER SUPPLY ROUTING CIRCUIT

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

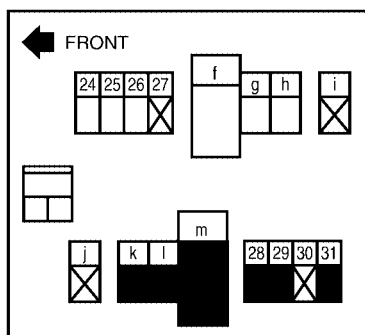
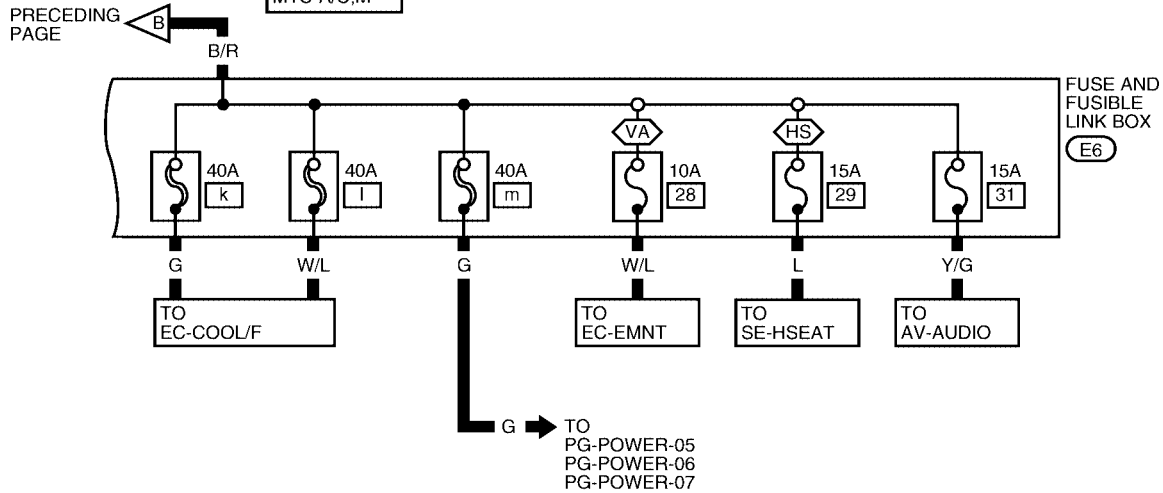
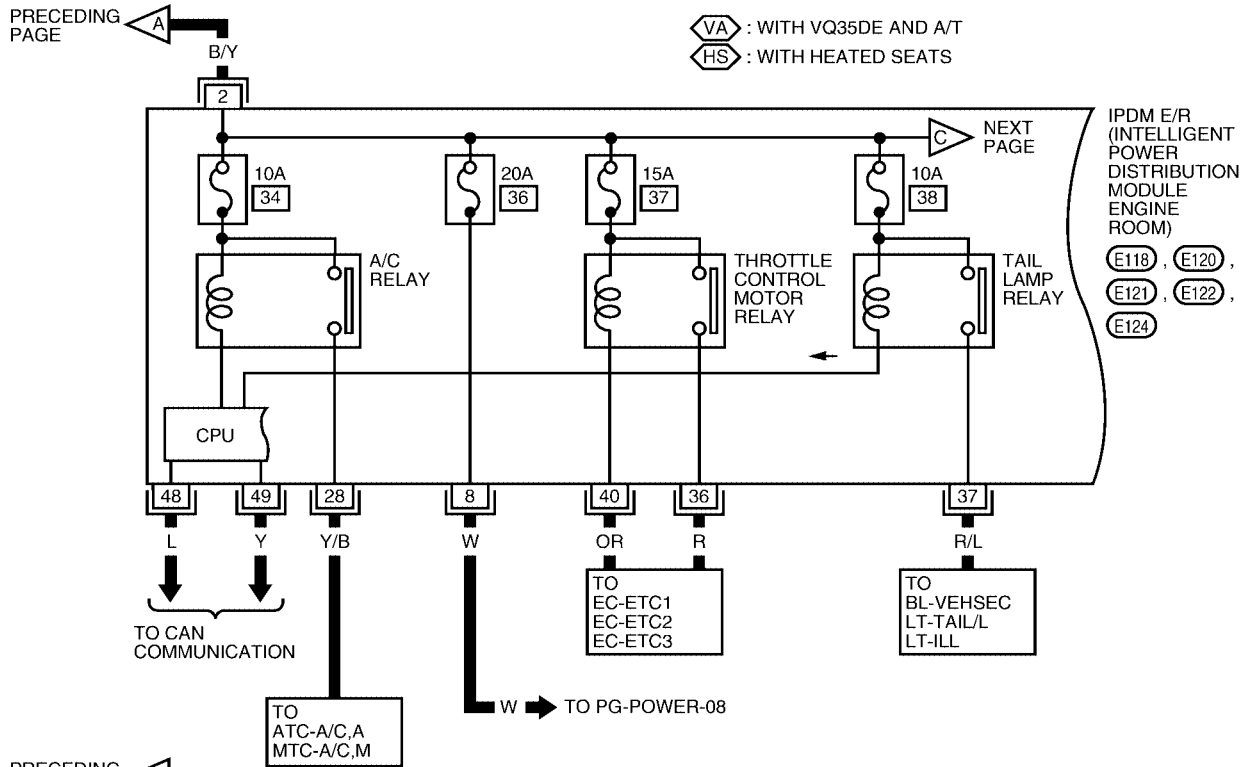
EKS002L6

PG-POWER-01

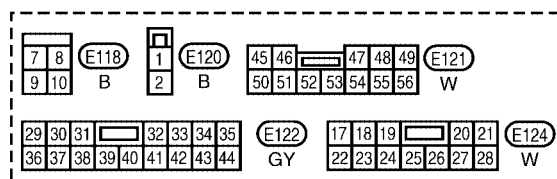


# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02



E6

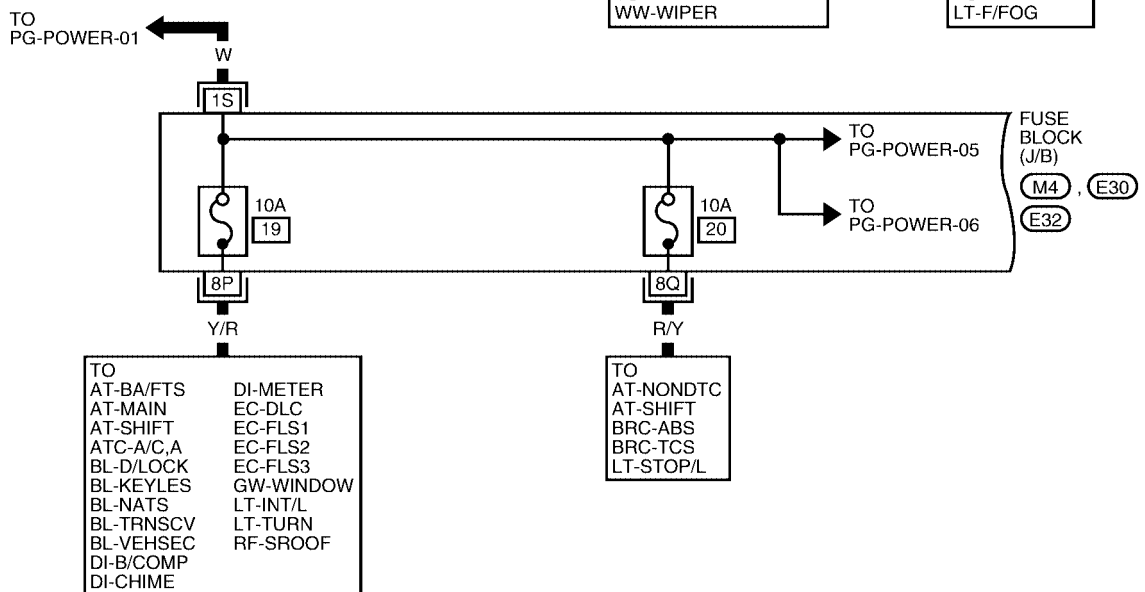
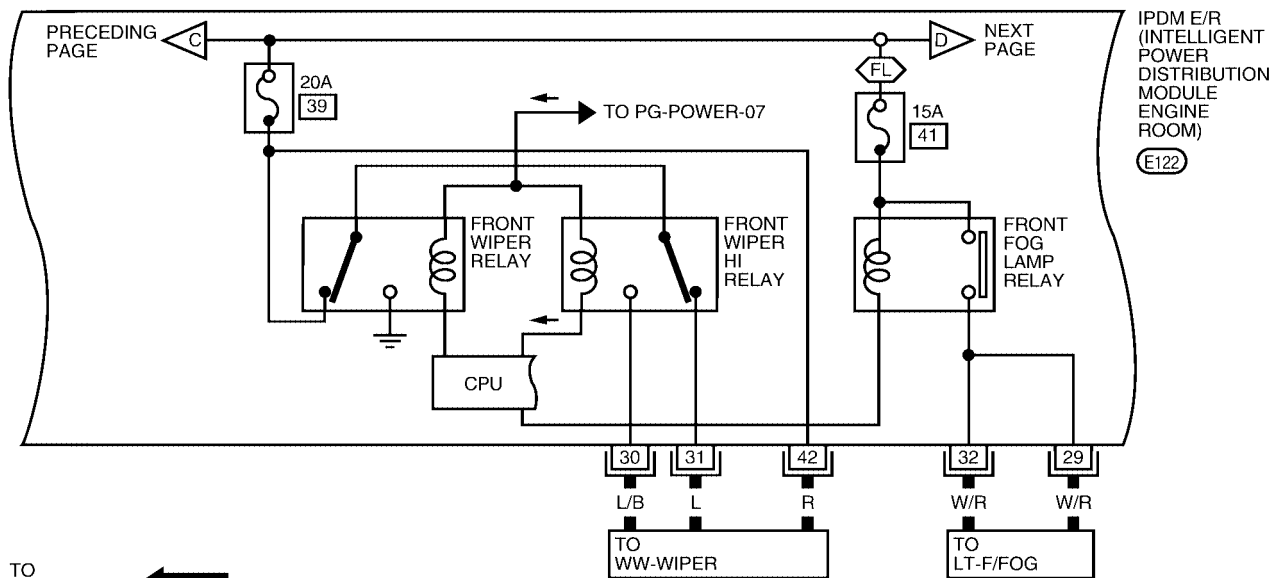


WKWA0085E

# POWER SUPPLY ROUTING CIRCUIT

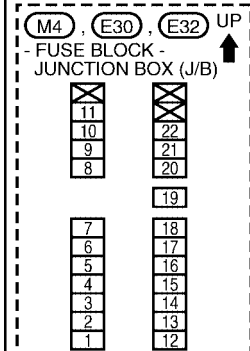
PG-POWER-03

⬡(FL) : WITH FRONT FOG LAMPS



29	30	31	32	33	34	35	E122 GY	
36	37	38	39	40	41	42		43

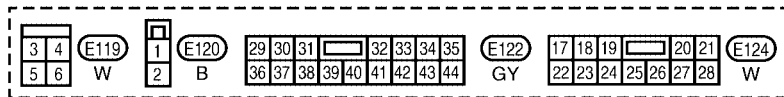
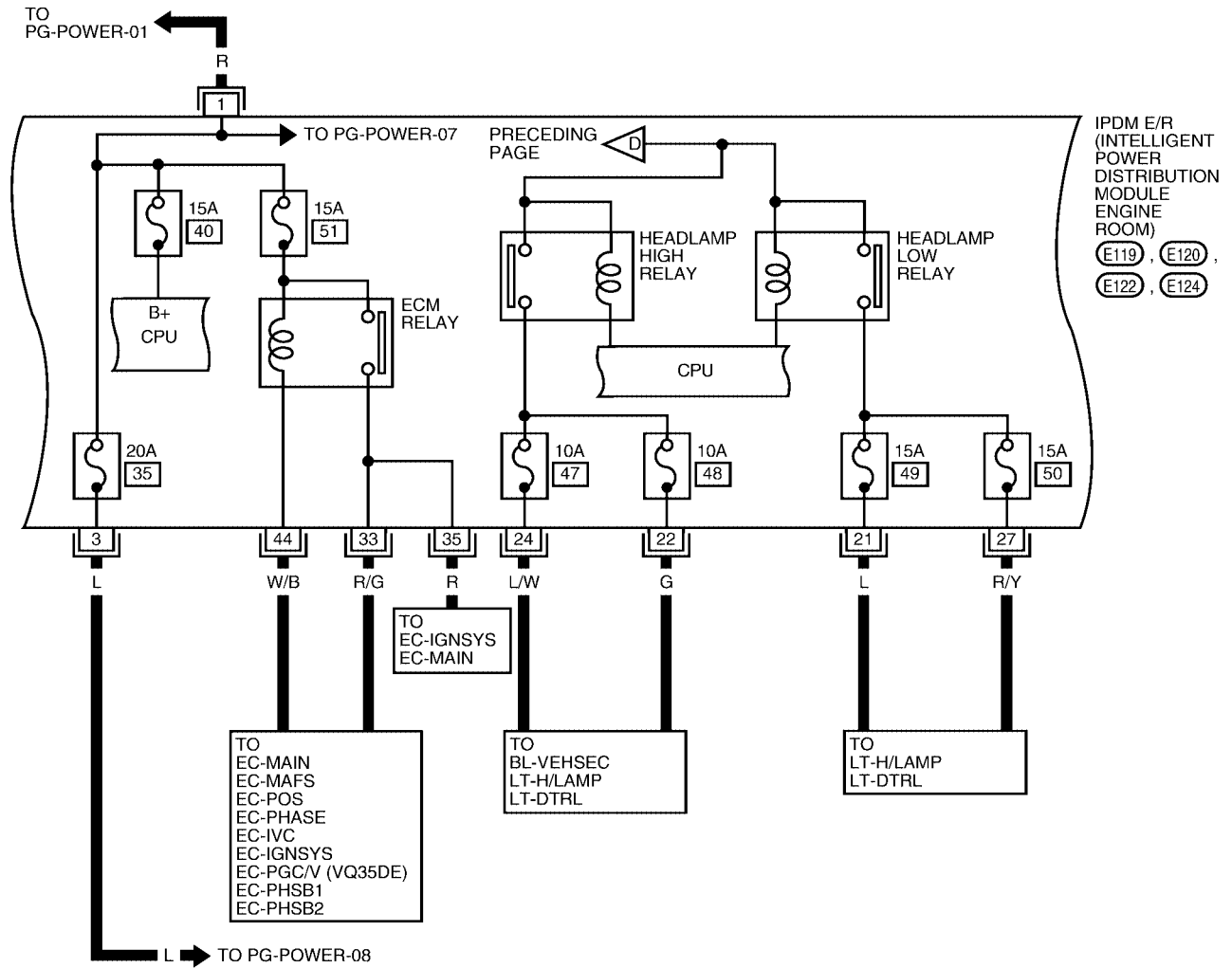
REFER TO THE FOLLOWING.



WKWA0086E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-04



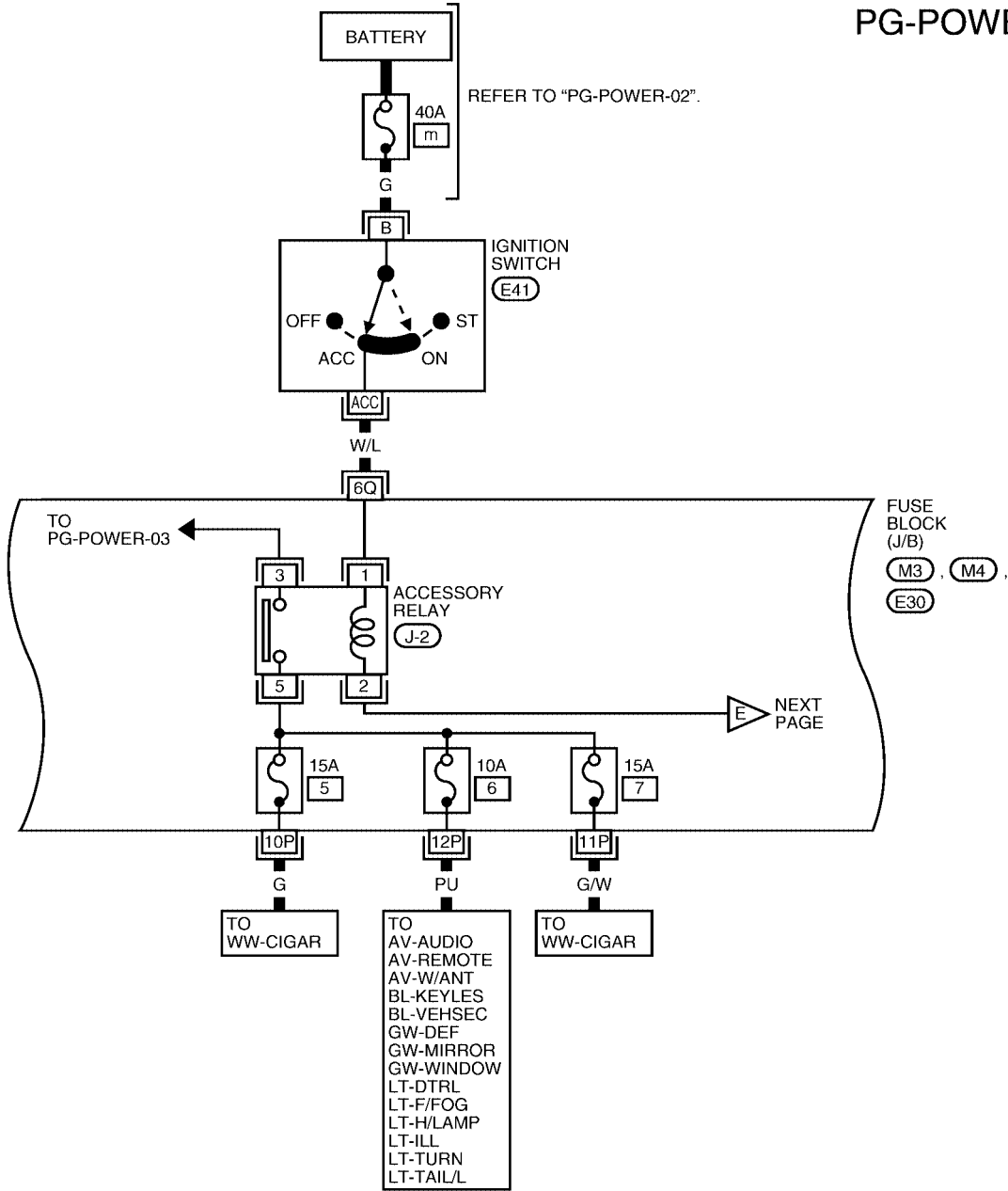
WKWA0087E



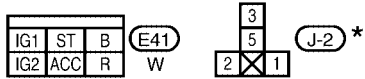
# POWER SUPPLY ROUTING CIRCUIT

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

PG-POWER-05

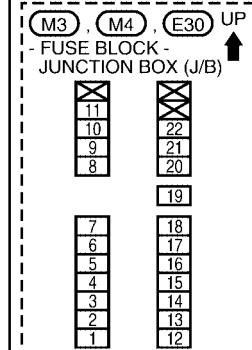


A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
PG  
L  
M



\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT".

REFER TO THE FOLLOWING.

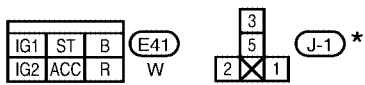
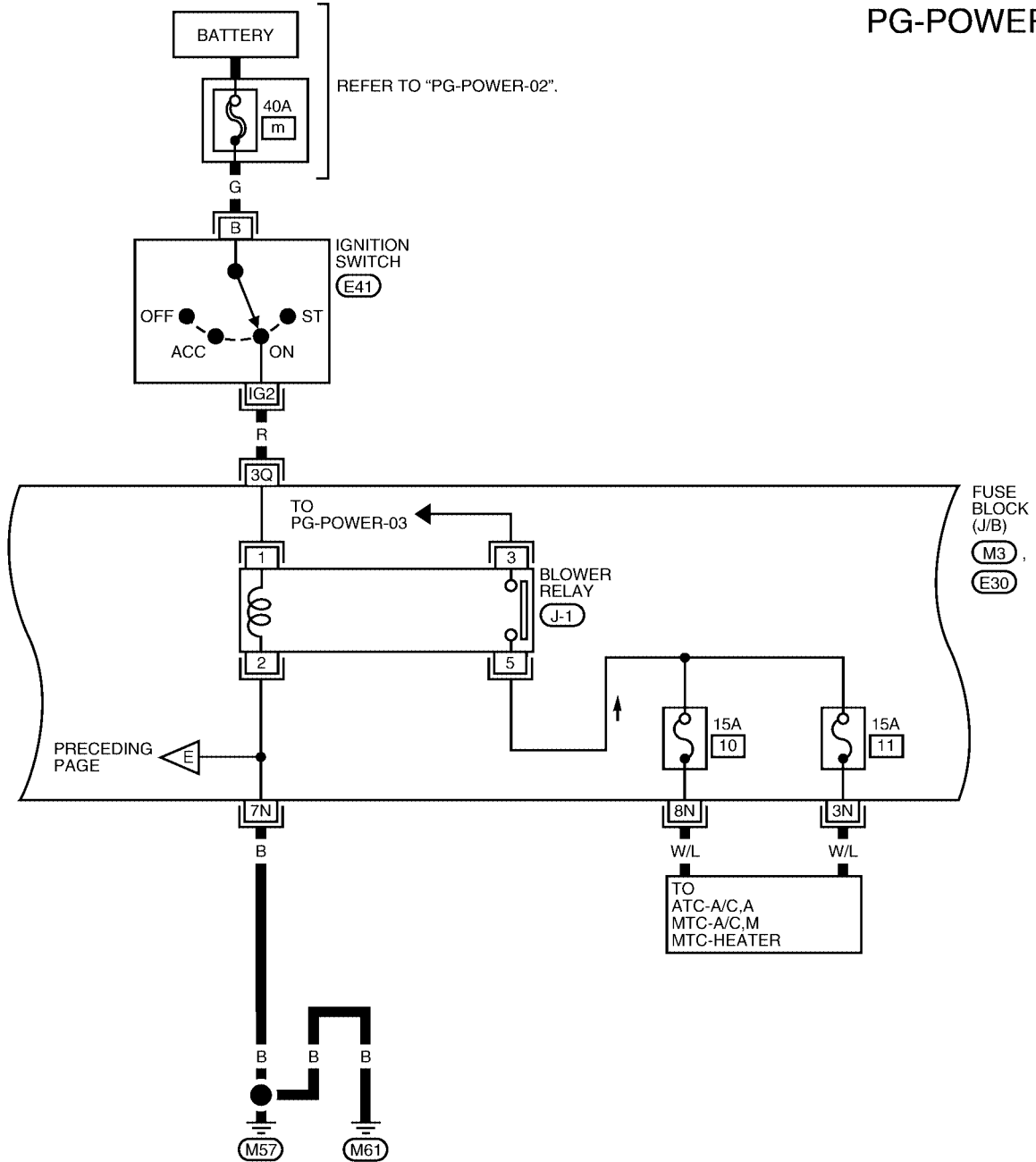


WKWA0088E

# POWER SUPPLY ROUTING CIRCUIT

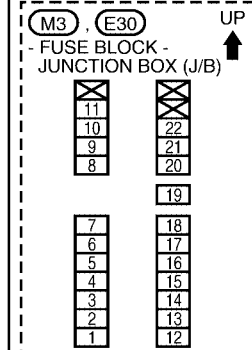
## IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-06



\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT".

REFER TO THE FOLLOWING.

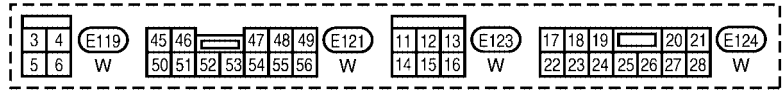
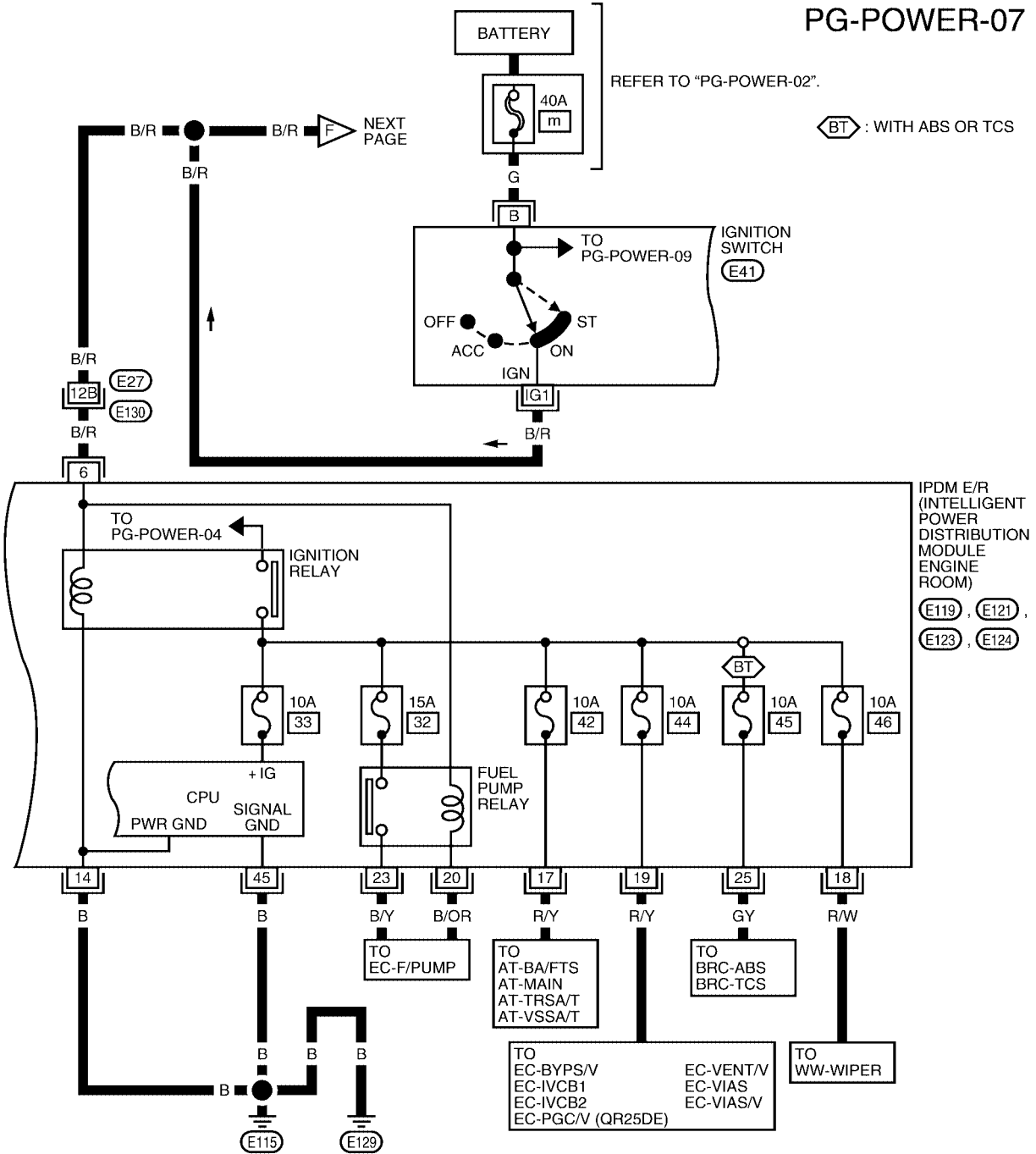


WKWA0089E

# POWER SUPPLY ROUTING CIRCUIT

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

PG-POWER-07

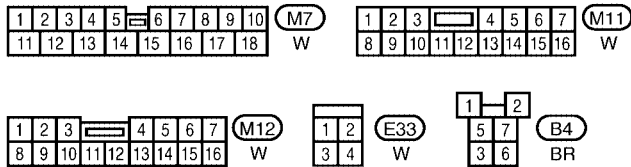
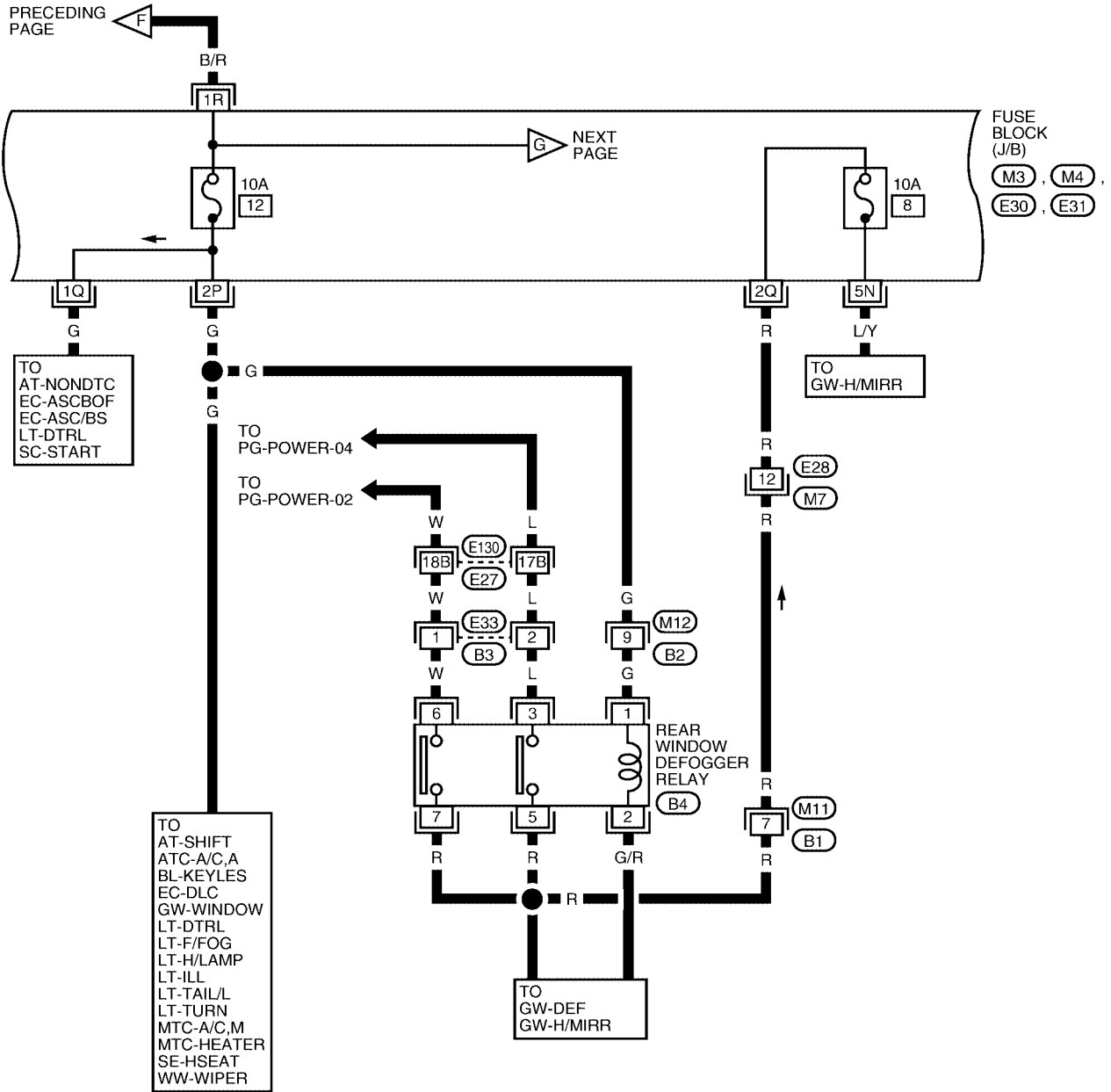


REFER TO THE FOLLOWING.  
 (E130) - SUPER MULTIPLE  
 JUNCTION (SMJ)

WKWA0090E

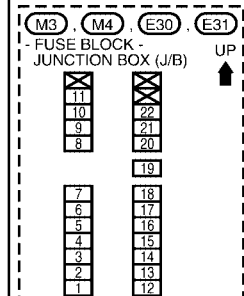
# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08



REFER TO THE FOLLOWING.

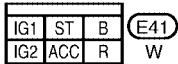
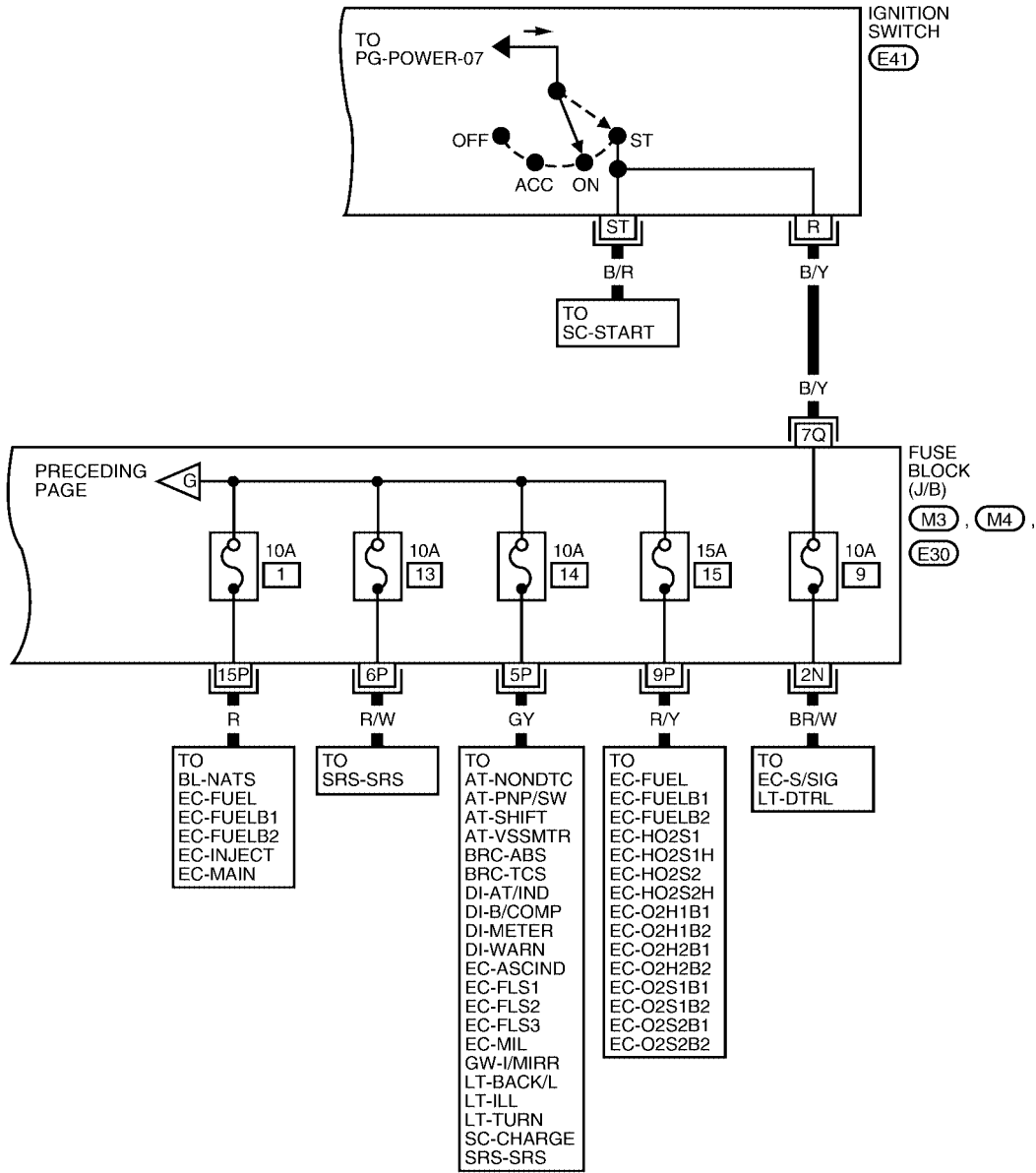
(E130) - SUPER MULTIPLE JUNCTION (SMJ)



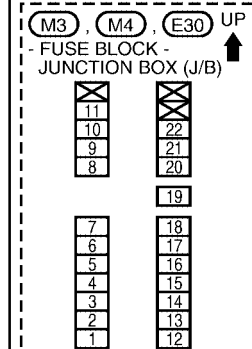
WKWA0091E

# POWER SUPPLY ROUTING CIRCUIT

PG-POWER-09



REFER TO THE FOLLOWING.



WKWA0092E

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

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

PF:284B7

### System Description

EKS002L7

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

#### CAUTION:

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

### SYSTEMS CONTROLLED BY IPDM E/R

#### 1. Lamp control

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

- Headlamps (Hi, Lo)
- Parking lamps
- Tail lamps
- Front fog lamps

#### 2. Wiper control

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

#### 3. Rear window defogger relay control

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

#### 4. A/C compressor control

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

#### 5. Cooling fan control

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

### CAN COMMUNICATION LINE CONTROL

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

#### 1. Fail-safe control

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

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

### IPDM E/R STATUS CONTROL

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

#### 1. CAN communication status

- CAN communication is normally performed with other control units.
- Individual unit control by IPDM E/R is normally performed.

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

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

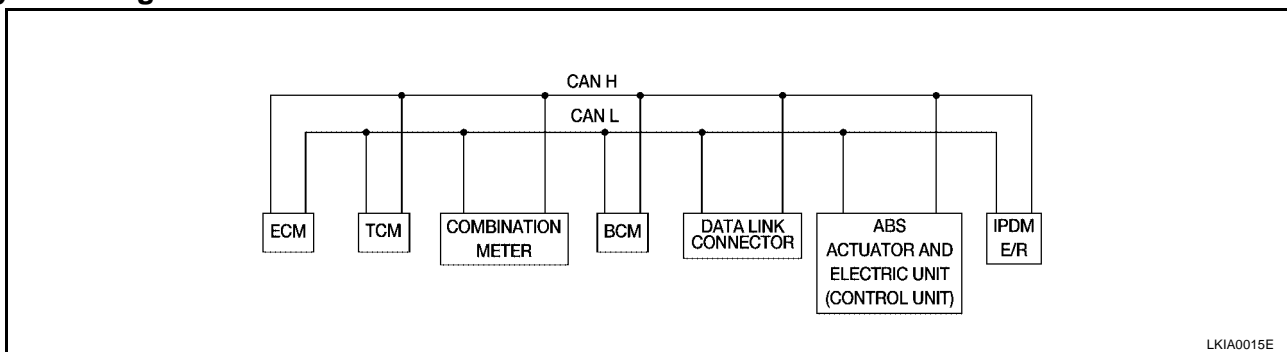
## CAN Communication System Description

EKS002L8

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

### FOR TCS MODELS

#### System diagram



#### Input/output signal chart

T: Transmit R: Receive

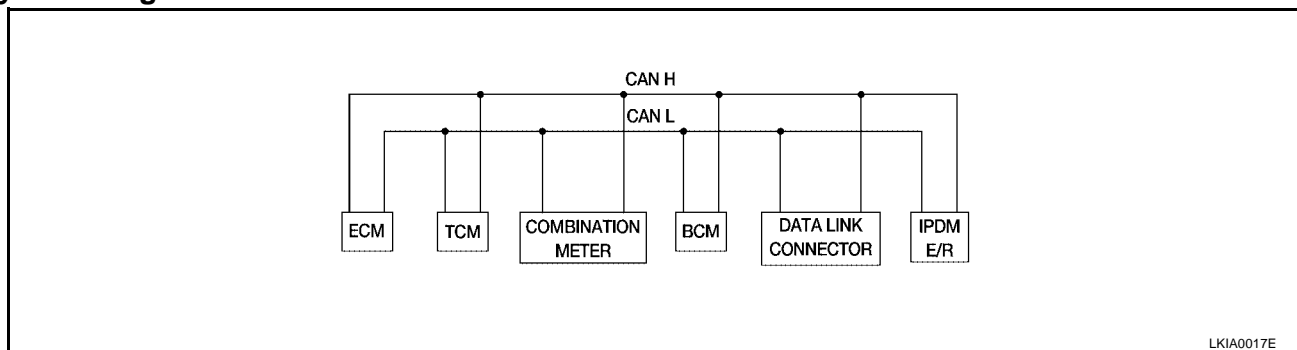
Signals	ECM	TCM	COMBINATION METER	BCM	ABS/TCS control unit	IPDM E/R
Engine speed signal	T		R		R	
Engine coolant temperature signal	T		R			
Accelerator pedal position signal	T					
Fuel consumption monitor signal	T		R			
A/T warning lamp signal		T	R			
A/T position indicator signal	R		R	R (R range only)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

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

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

## FOR A/T MODELS

### System diagram



LKIA0017E

### Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	COMBINATION METER	BCM	IPDM E/R
Engine speed signal	T		R		
Engine coolant temperature signal	T		R		



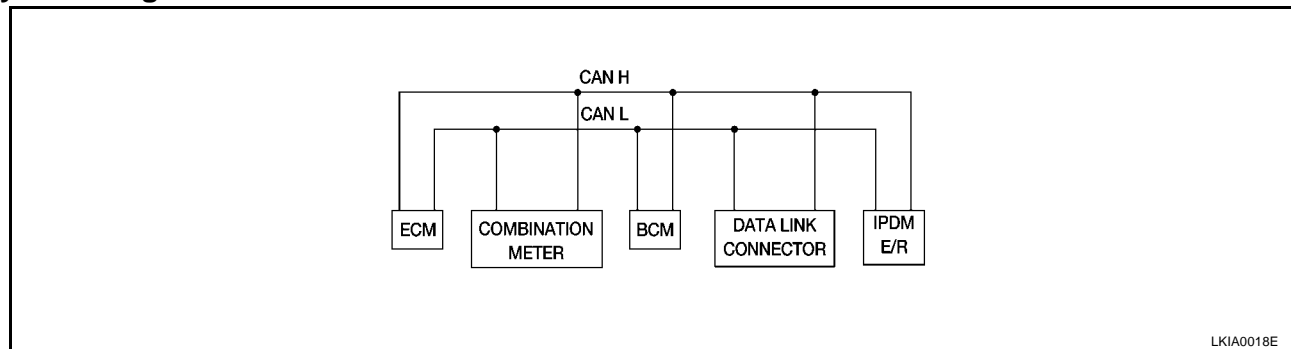
# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

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

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

## FOR M/T MODELS

### System diagram



LKIA0018E

### Input/output signal chart

T: Transmit R: Receive

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

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

Signals	ECM	COMBINATION METER	BCM	IPDM E/R
Rear window defogger switch signal			T	R
Rear window defogger control signal	R		R	T

## Function of Detecting Ignition Relay Malfunction

EKS002L9

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

## Auto Active Test

EKS002LA

### DESCRIPTION

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

### OPERATION PROCEDURE

- Close hood and lift wiper arms away from windshield (to prevent glass damage by wiper operation).  
**NOTE:**  
When auto active test is performed with hood opened, sprinkle water on windshield beforehand.
- Turn ignition switch OFF.
- Turn ignition switch ON and, within 10 seconds, press front door switch LH ten times. Then turn ignition switch OFF.

**CAUTION:**

**Close front door RH.**

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

**NOTE:**

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

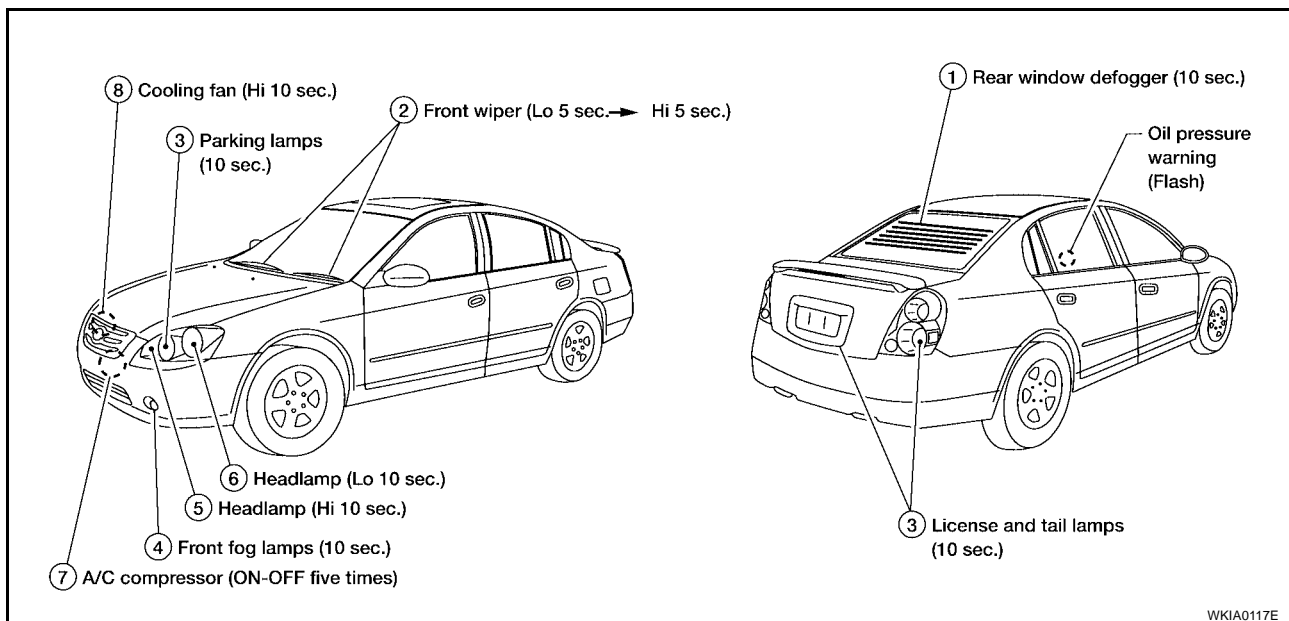
**CAUTION:**

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

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

## INSPECTION IN AUTO ACTIVE TEST MODE

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



### Concept of Auto Active Test

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

### Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause
Any of front wipers, tail and parking lamps, front fog lamps, and headlamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	OK <ul style="list-style-type: none"> <li>● BCM signal input system</li> </ul>
		NG <ul style="list-style-type: none"> <li>● Lamp/motor malfunction</li> <li>● Lamp/motor ground system malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and system in question</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	OK <ul style="list-style-type: none"> <li>● BCM signal input system</li> </ul>
		NG <ul style="list-style-type: none"> <li>● Rear window defogger relay system</li> <li>● Open circuit of rear window defogger</li> <li>● IPDM E/R malfunction</li> </ul>
A/C compressor does not operate.	Perform auto active test. Does magnet clutch operate?	OK <ul style="list-style-type: none"> <li>● BCM signal input system</li> <li>● CAN communication signal between BCM and ECM.</li> <li>● CAN communication signal between ECM and IPDM E/R</li> <li>● BCM</li> <li>● ECM</li> </ul>
		NG <ul style="list-style-type: none"> <li>● Magnet clutch malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and magnet clutch</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	OK <ul style="list-style-type: none"> <li>● ECM signal input system</li> <li>● CAN communication signal between ECM and IPDM E/R</li> <li>● ECM</li> </ul>
		NG <ul style="list-style-type: none"> <li>● Cooling fan motor malfunction</li> <li>● Harness/connector malfunction between IPDM E/R and cooling fan motor</li> <li>● IPDM E/R (integrated relay) malfunction</li> </ul>

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

Symptom	Inspection contents	Possible cause
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pressure warning lamp blink?	OK <ul style="list-style-type: none"> <li>● Harness/connector malfunction between IPDM E/R and oil pressure switch</li> <li>● Oil pressure switch malfunction</li> </ul>
		NG <ul style="list-style-type: none"> <li>● CAN communication signal between IPDM E/R and combination meter</li> <li>● Combination meter</li> </ul>

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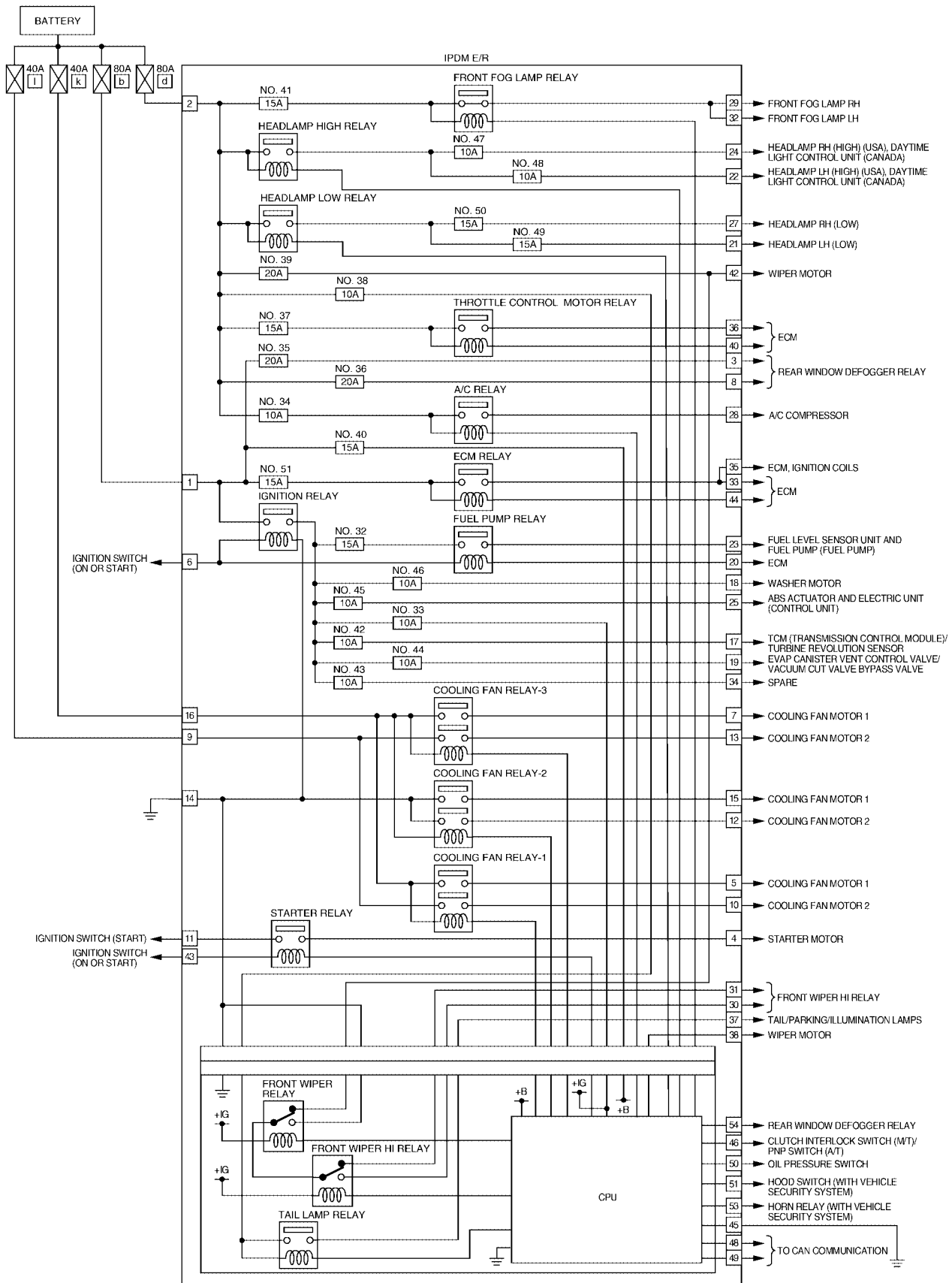
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# IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

## Schematic

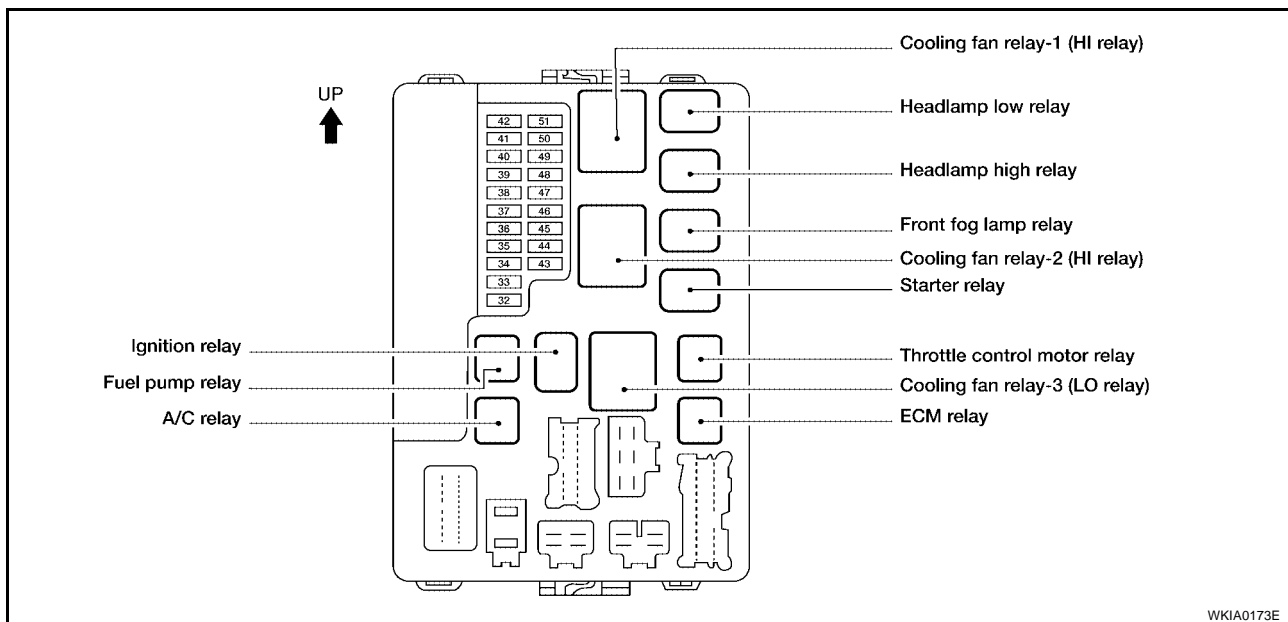
EKS002LB



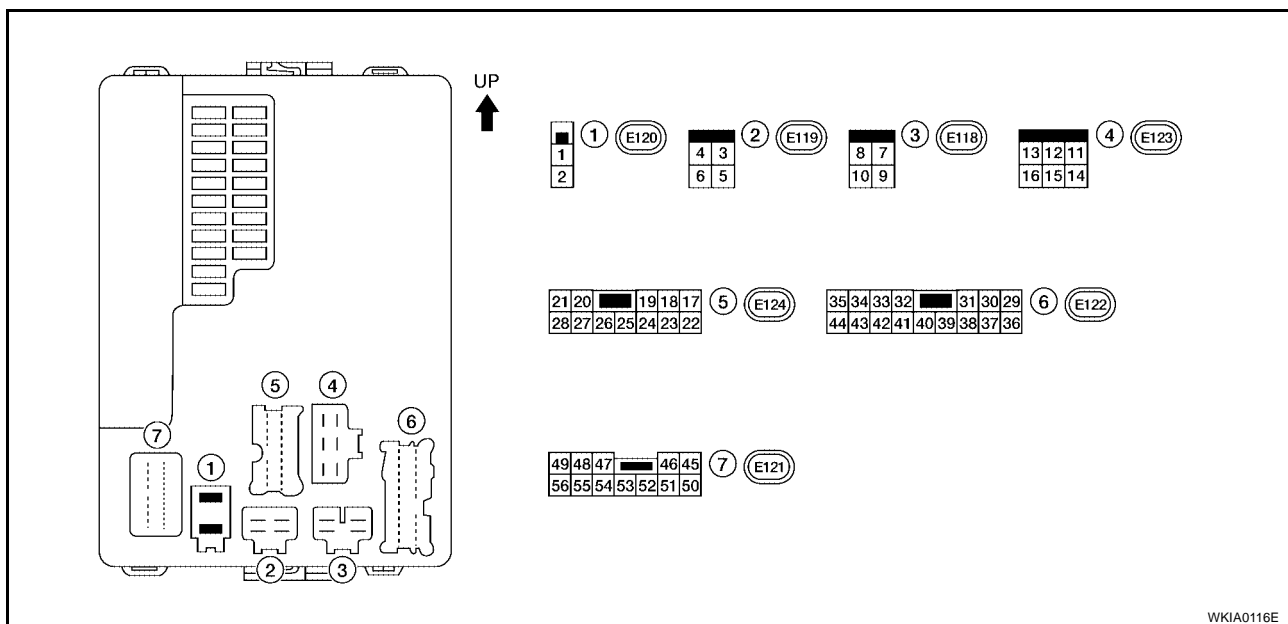
WKWA0095E

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

## IPDM E/R FUSE AND RELAY ARRANGEMENT



## IPDM E/R TERMINAL ARRANGEMENT



## IPDM E/R Power/Ground Circuit Inspection

EKS002LC

### 1. FUSE AND FUSIBLE LINK INSPECTION

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

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

OK or NG?

- OK >> GO TO 2.
- NG >> Replace fuse or fusible link.

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

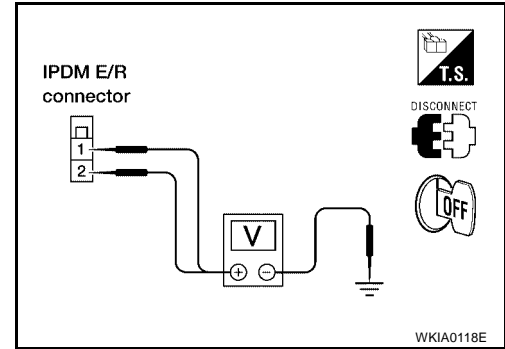
## 2. POWER CIRCUIT INSPECTION

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

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

OK or NG?

- OK >> GO TO 3.
- NG >> Replace IPDM E/R power circuit harness.



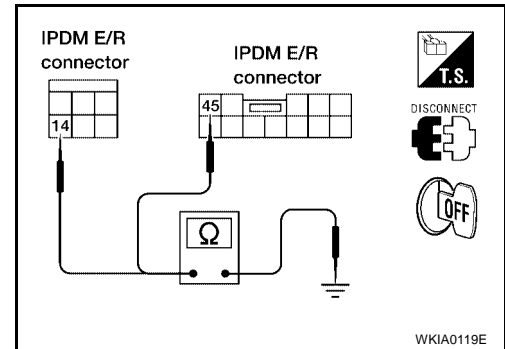
## 3. GROUND CIRCUIT INSPECTION

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

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

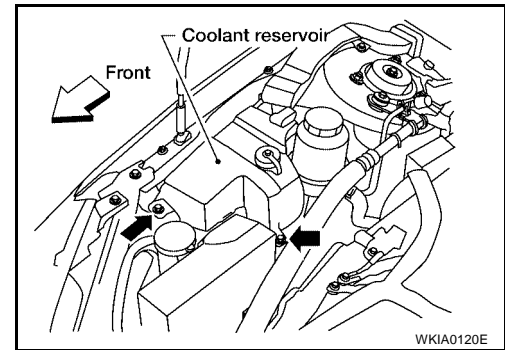
OK or NG?

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

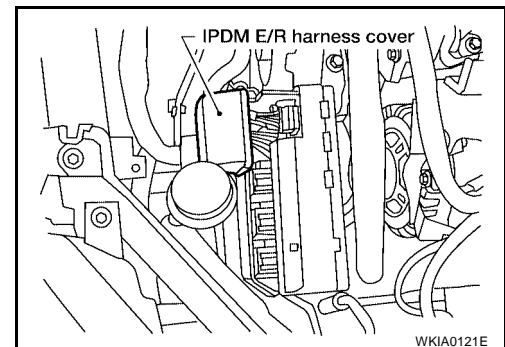


## Removal and Installation of IPDM E/R

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



4. Remove IPDM E/R harness cover.

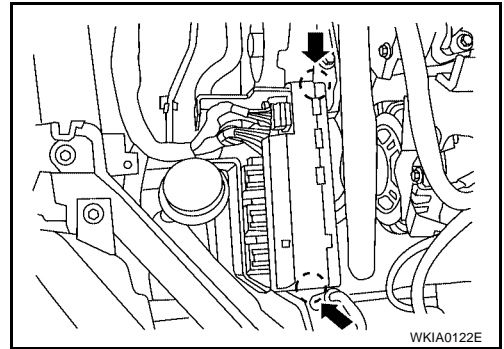


EKS002LD



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

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



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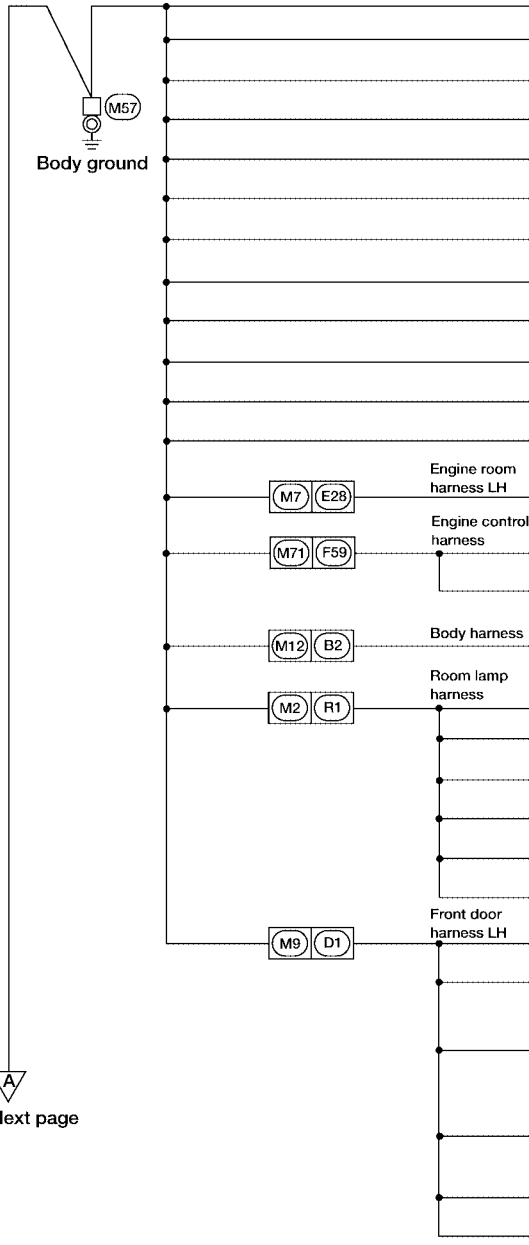
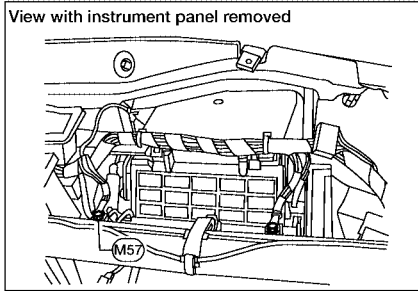
# GROUND CIRCUIT

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## GROUND CIRCUIT

### Ground Distribution MAIN HARNESS

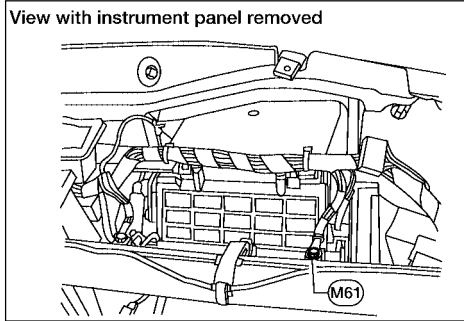


CONNECTOR NUMBER	CONNECT TO
M3	Fuse box (J/B) (Terminal No. 7N)
M5	Illumination control switch
M6	TCS ON/OFF switch (With TCS)
M13	Heated seat relay
M18	BCM (Body control module) (Terminal No. 63)
M20	BCM (Body control module) (Terminal No. 27)
M22	Data link connector (Terminal No. 4)
M23	Combination meter (Terminal No. 35) (A/T indicator)
M23	Combination meter (Terminal No. 39)
M24	Combination meter (Terminal No. 6)
M27	Immobilizer control unit (Terminal No. 4)
M28	Combination switch
E1	Ambient temperture sensor (With manual A/C and body computer)
F54	ECM (Terminal No. 77) (QR25DE)
F54	ECM (Terminal No. 78) (VQ35DE)
B16	Fuel level sensor unit and fuel pump (fuel level sensor, fuel tank temperature sensor) (Terminal No. E)
R2	Vanit mirror lamp LH
R2	Homelink <sup>®</sup> universal transceiver
R3	Spot lamp
R5	Sunroof motor assembly
R6	Auto anti-dazzling inside mirror
R7	Vanity mirror lamp RH
D4	Door mirror LH
D5	Door mirror remote control switch (Terminal No. 1)
D6	Main power window and door lock/unlock switch (Terminal No. 19) (With left front only power window anti-pinch system)
D7	Main power window and door lock/unlock switch (Terminal No. 11) (With left and right front power window anti-pinch system)
D9	Trunk lid opener switch
D50	Front dor key cylinder switch LH

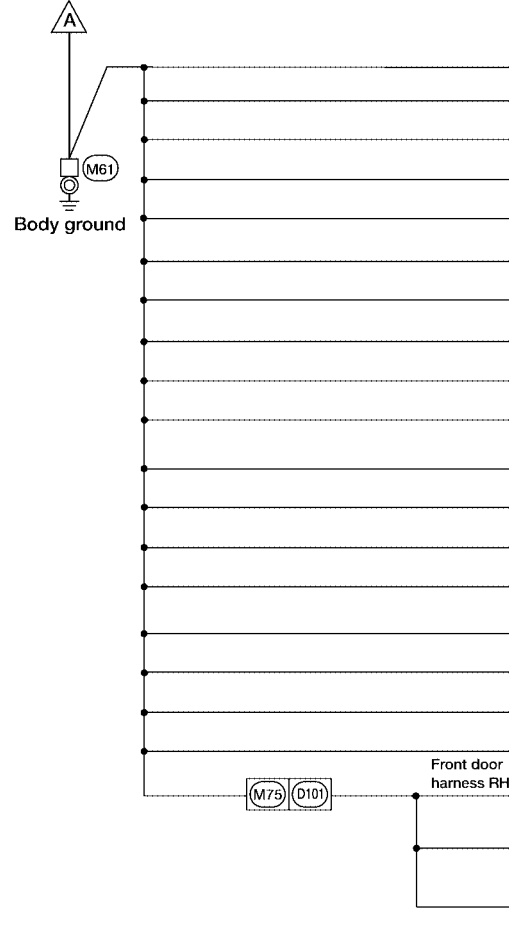
Next page

WKIA0080E

# GROUND CIRCUIT



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CONNECTOR NUMBER	CONNECT TO
M34	A/T device (Terminal No. 2) (Overdrive control switch)
M35	Air bag diagnosis sensor unit (Terminal No. 2)
M37	Heated seat switch LH
M38	Power socket
M39	Air mix door motor (With automatic A/C)
M40	Mode door motor
M41	Fan switch
M42	Rear window defogger switch
M49	A/C auto amp. (With auto A/C) (Terminal Nos. 8 and 14)
M50	A/C auto amp. (With auto A/C) (Terminal No. 32)
M51	A/C control unit (With manual A/C or heater only)
M53	Intake sensor
M55	Hazard switch
M56	Cigarette lighter socket
M58	Intake door motor
M59	Glove box lamp
M64	Fan control amp. (With auto A/C)
M76	Heated seat switch RH
D104	Door mirror RH
D105	Front power window switch RH (Terminal No. 19) (With left front only power window anti-pinch system)
D106	Front power window switch RH (Terminal No. 7) (With left and right front power window anti-pinch system)

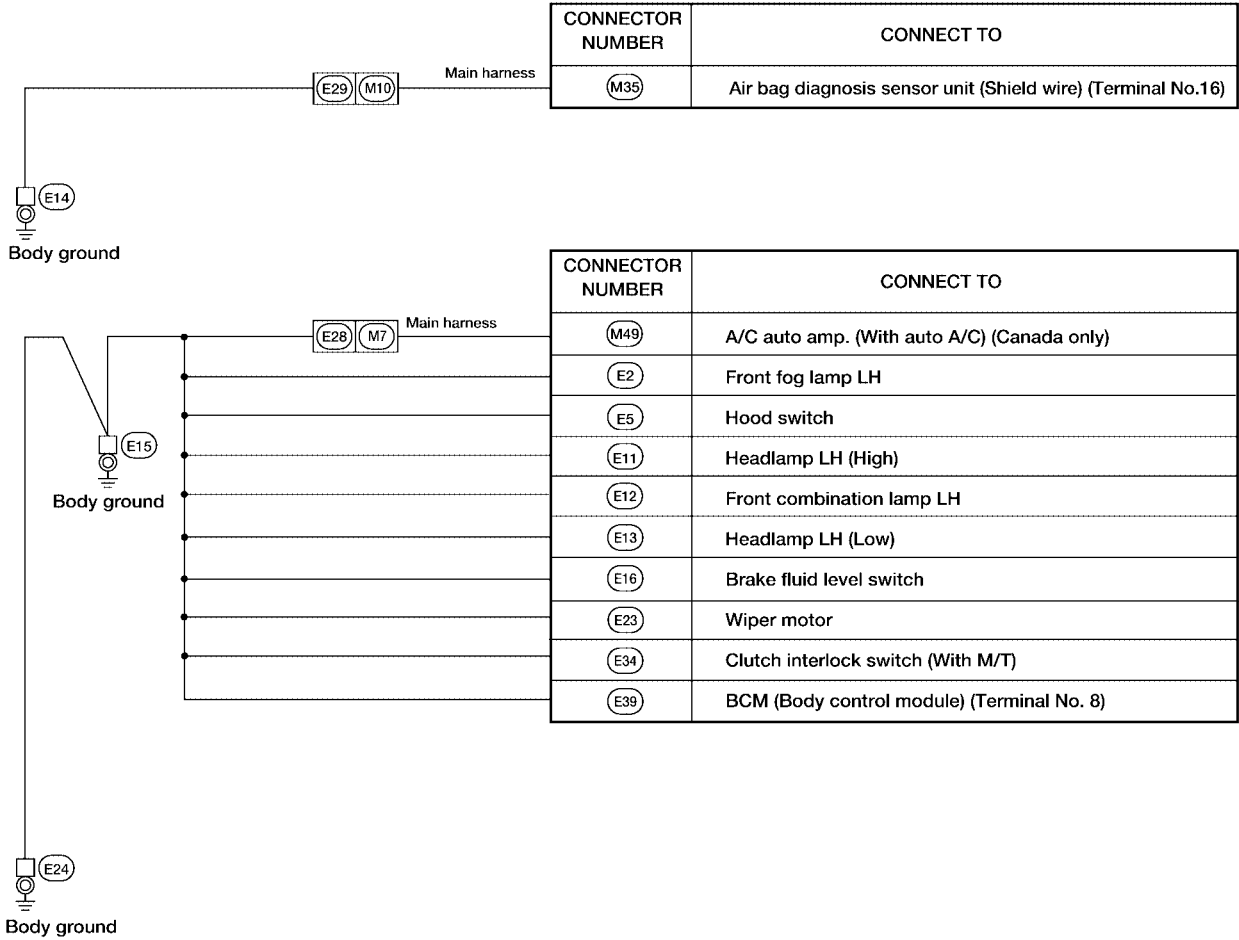
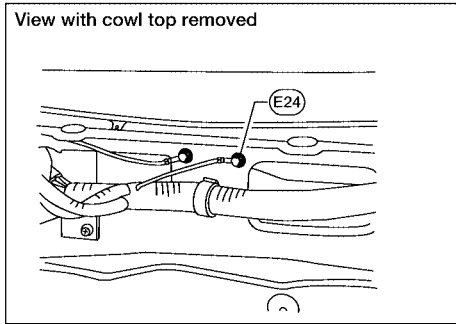
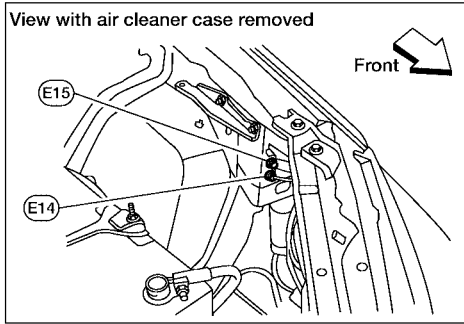
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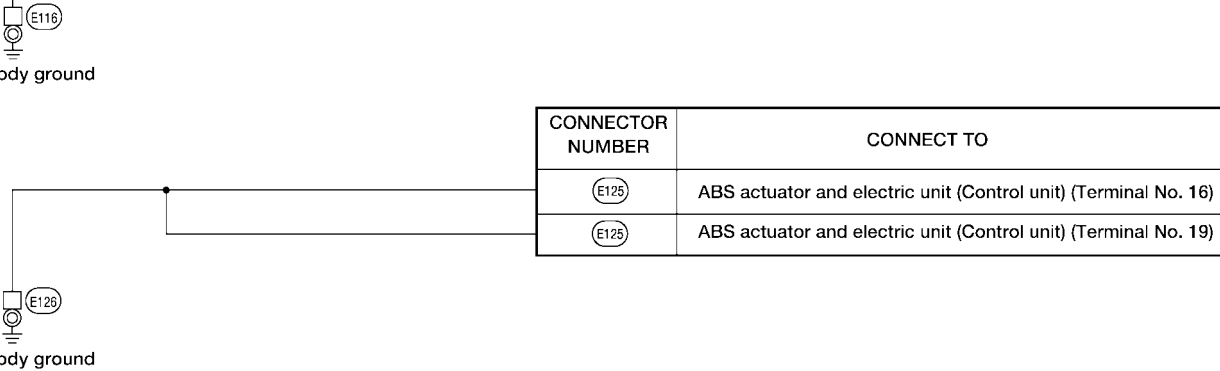
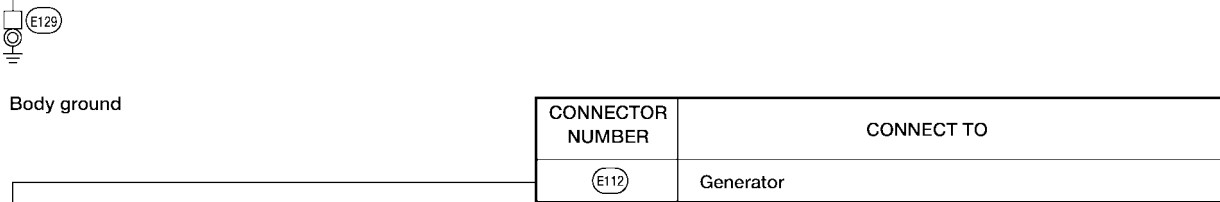
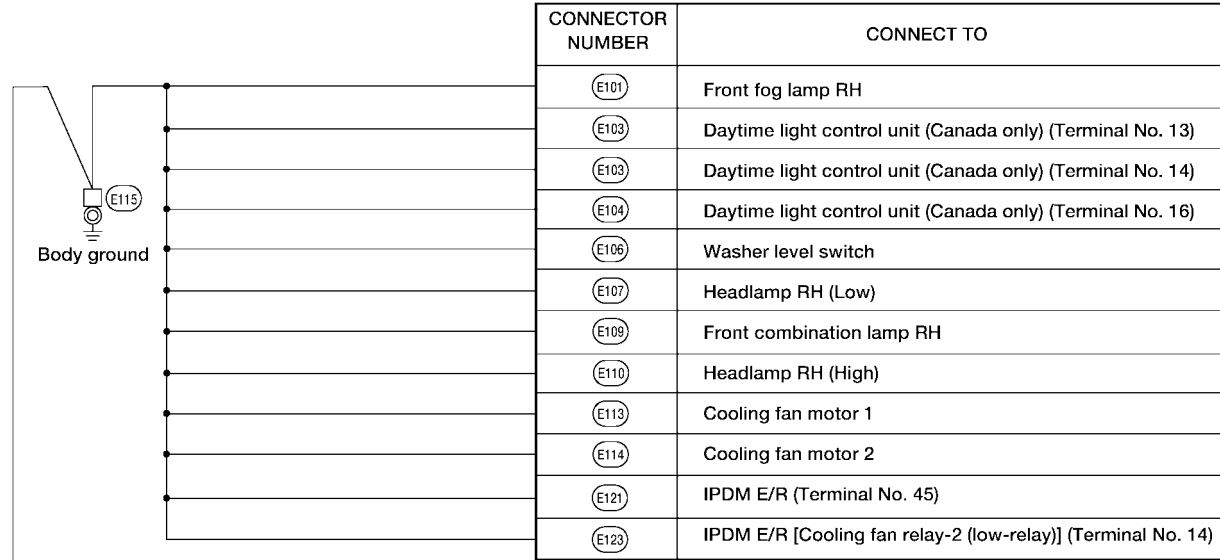
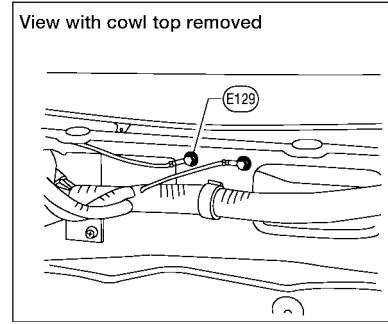
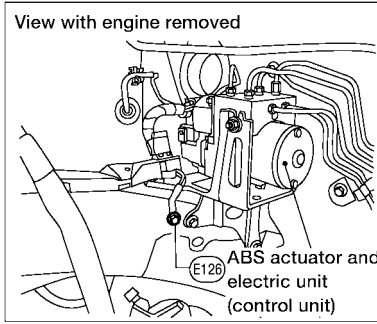
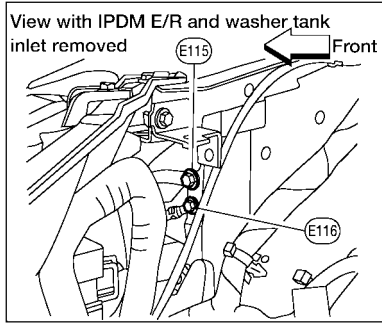
# GROUND CIRCUIT

## ENGINE ROOM LH HARNESS



# GROUND CIRCUIT

## ENGINE ROOM RH HARNESS



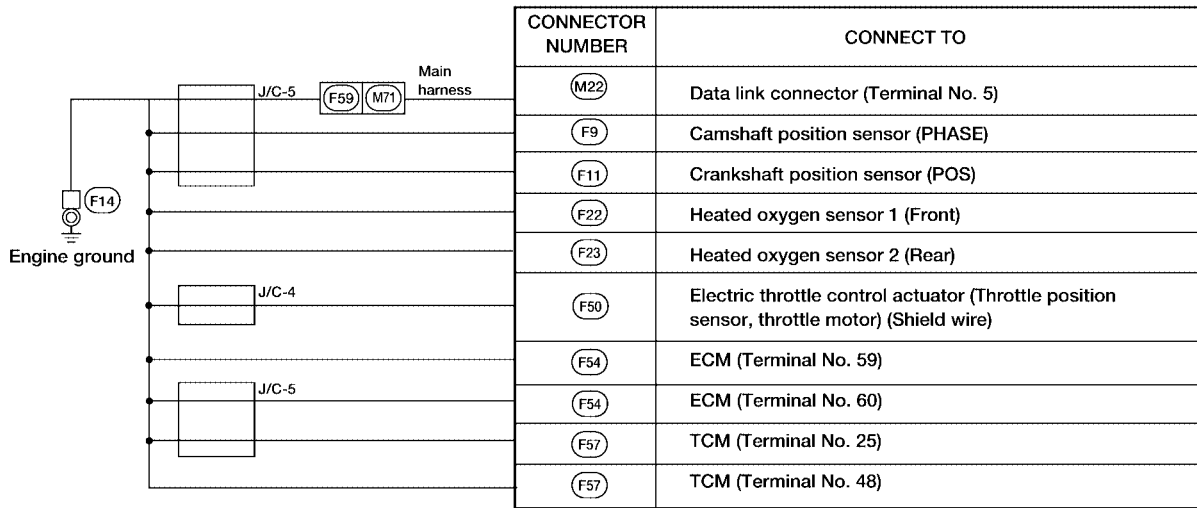
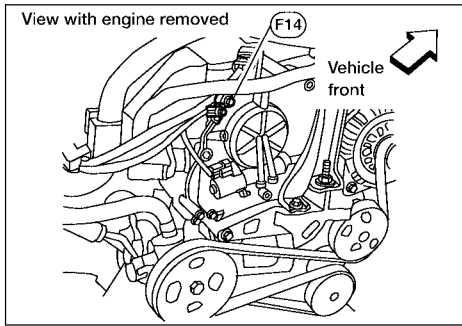
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# GROUND CIRCUIT

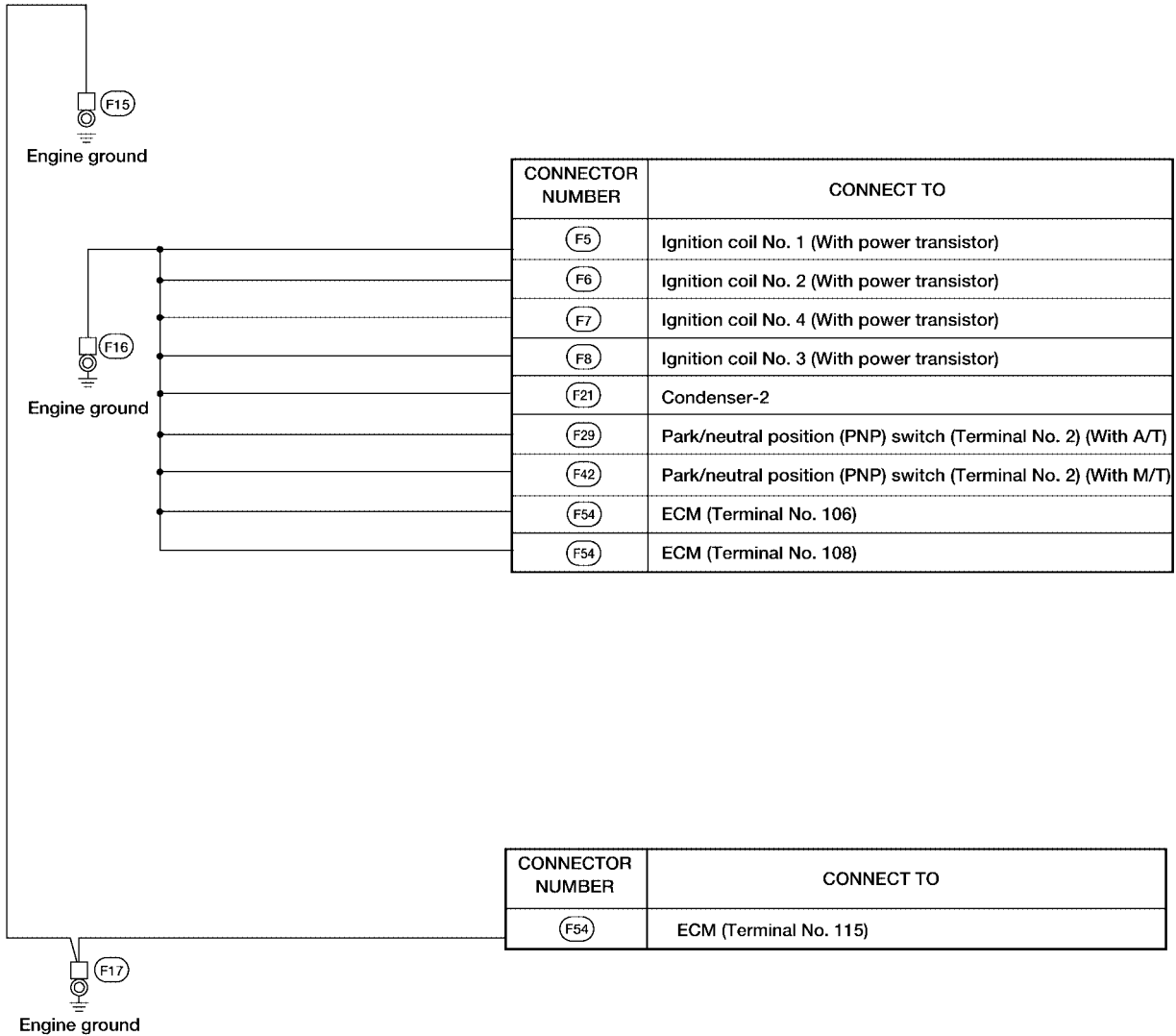
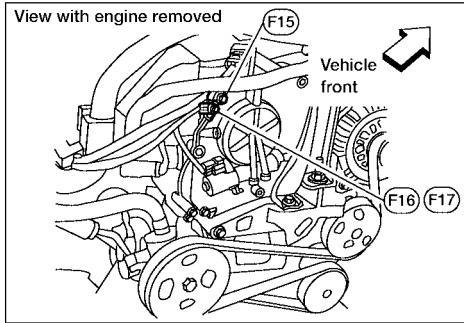
## ENGINE CONTROL HARNESS (QR25DE)



J/C : Joint connector

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# GROUND CIRCUIT

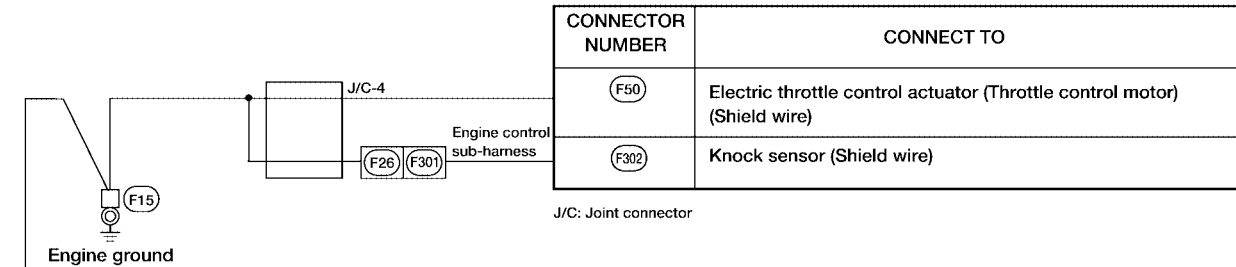
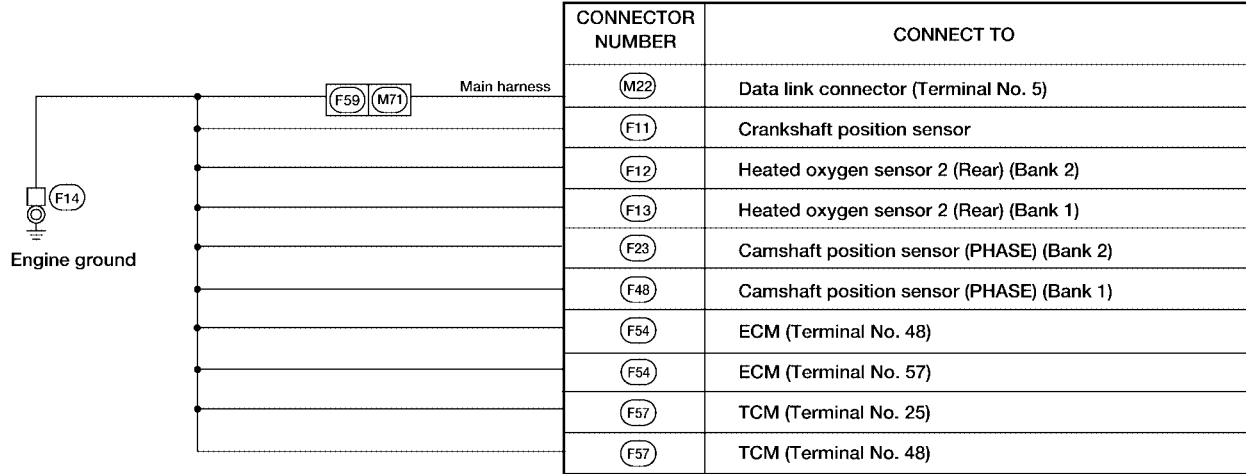
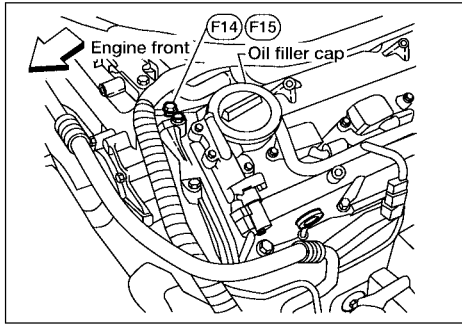


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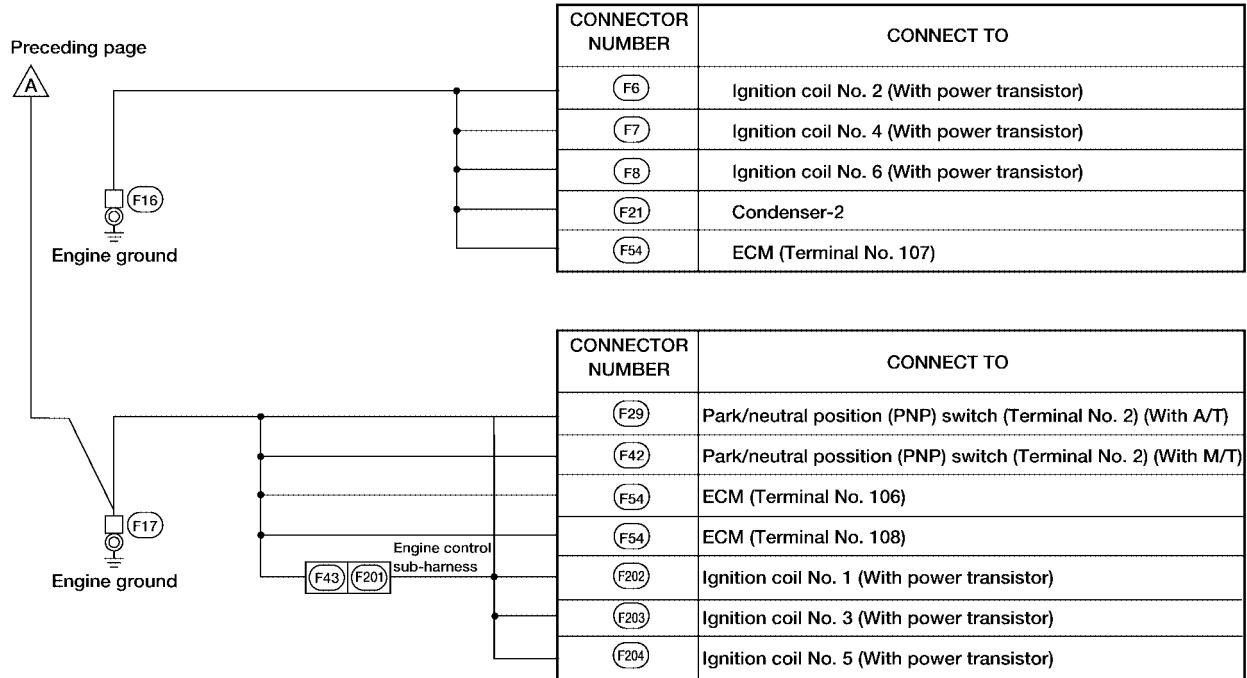
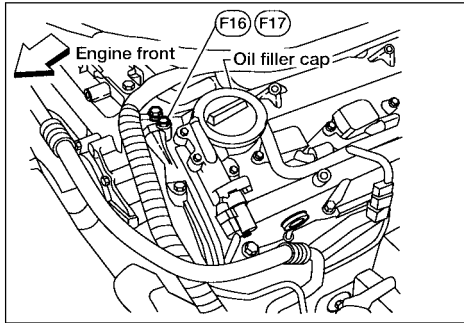
## ENGINE CONTROL HARNESS (VQ35DE)



Next page



# GROUND CIRCUIT



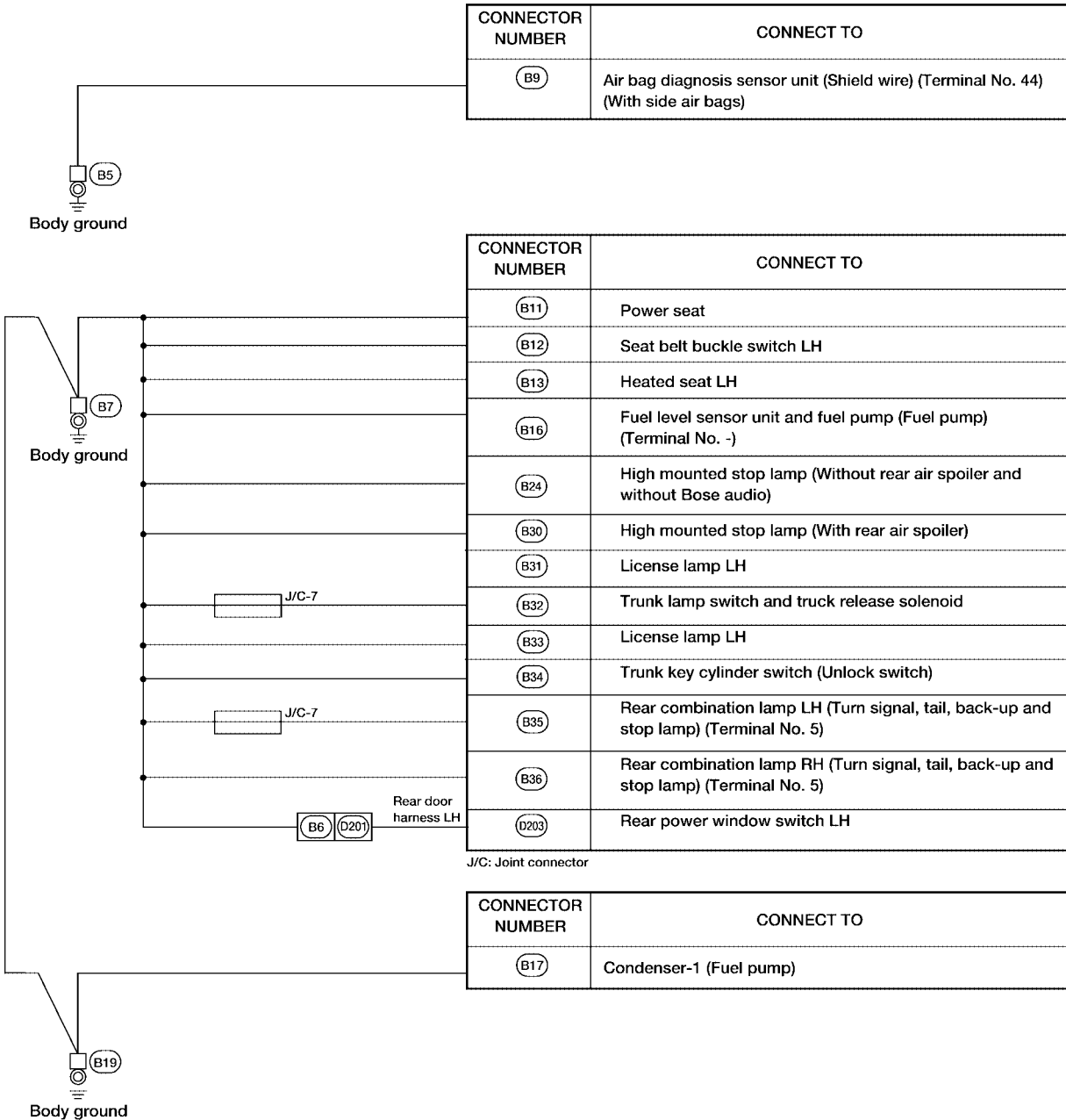
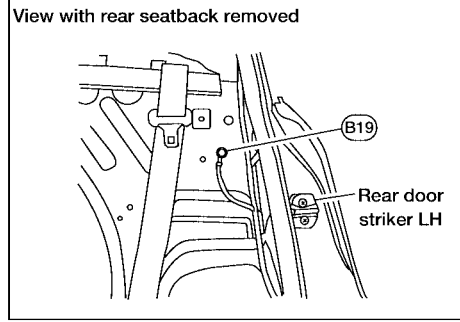
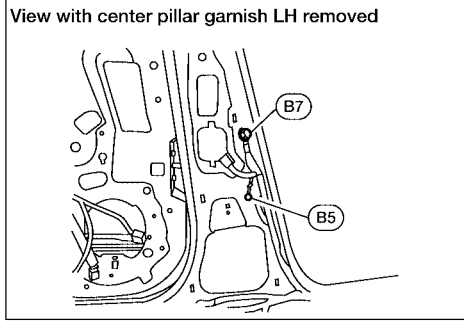
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# GROUND CIRCUIT

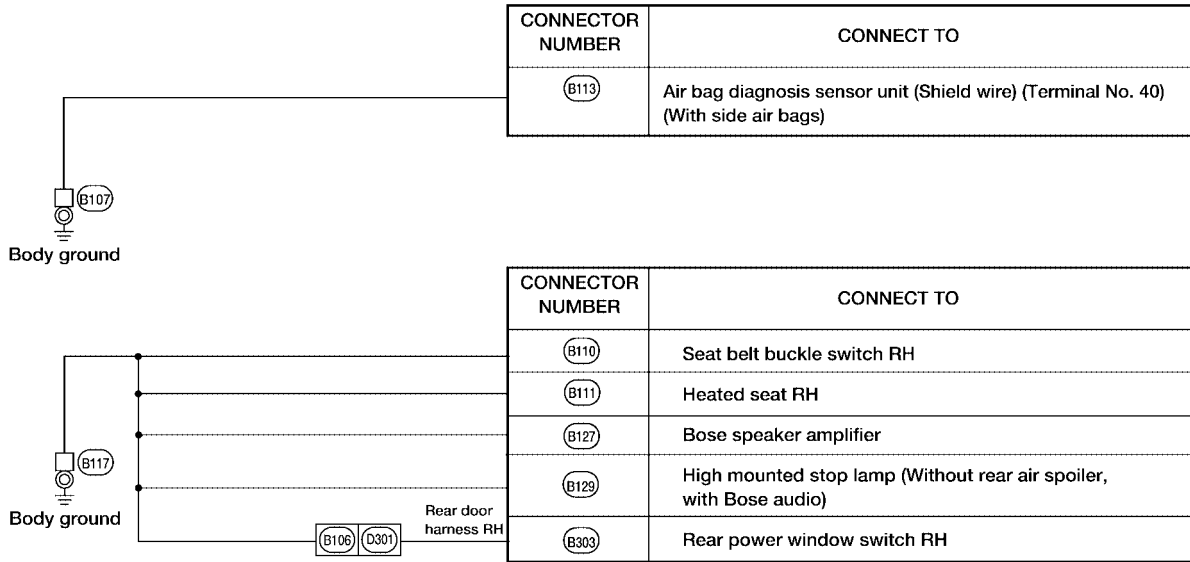
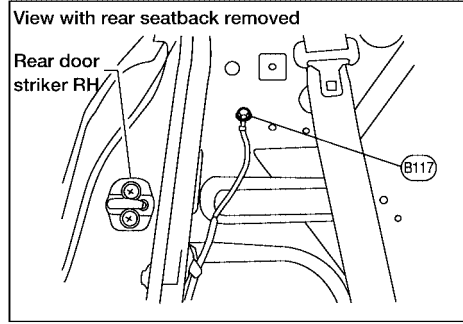
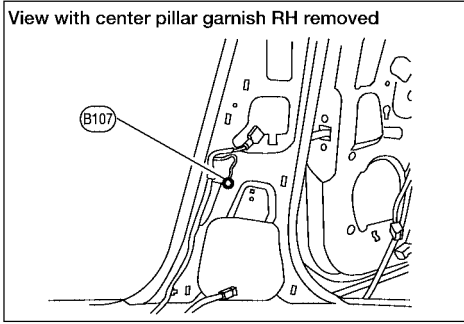
## BODY HARNESS



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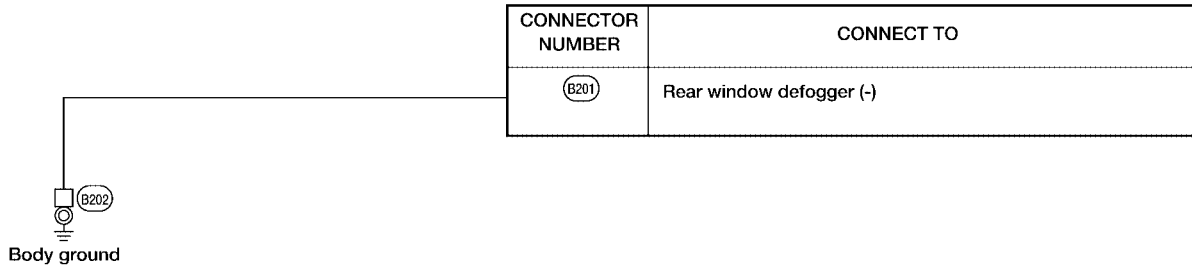
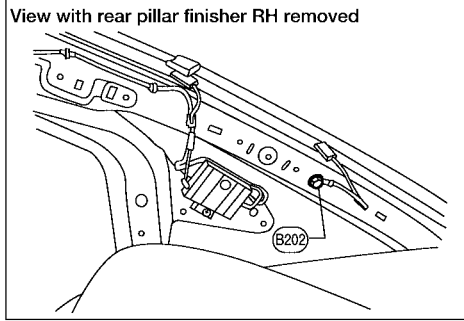
# GROUND CIRCUIT

## BODY NO. 2 HARNESS



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# GROUND CIRCUIT



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## HARNESS

### Harness Layout

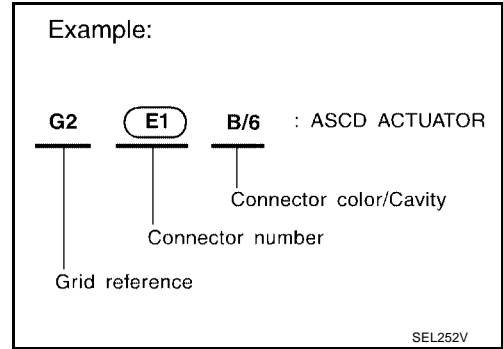
#### HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness LH (Engine Compartment)
- Engine Room Harness RH (Engine Compartment)
- Engine Control Harness (QR25DE)
- Engine Control Harness (VQ35DE)
- Body Harness
- Body No. 2 Harness














#### To use the grid reference

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



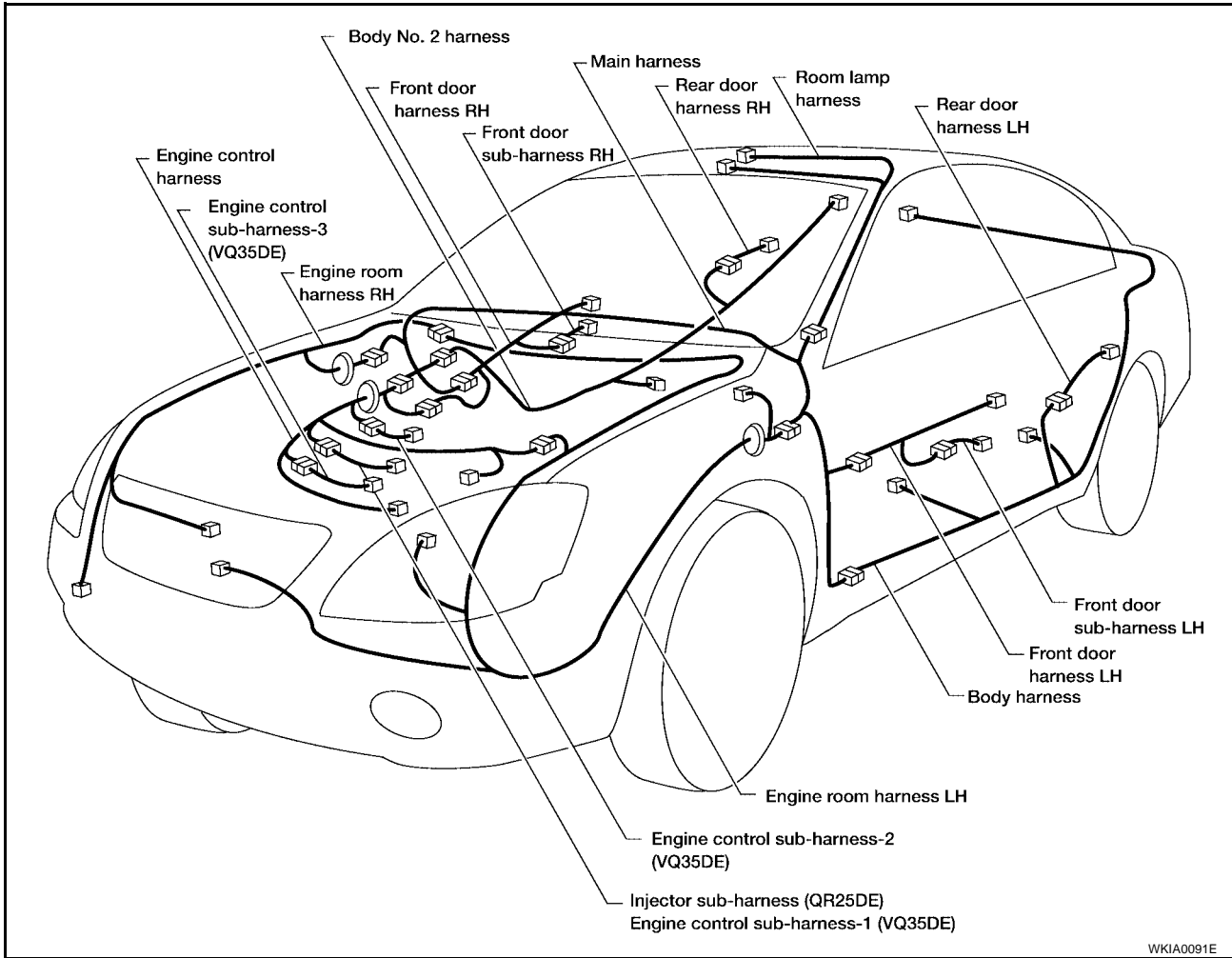
#### CONNECTOR SYMBOL

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

Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
● Cavity: Less than 4 ● Relay connector				
● Cavity: From 5 to 8				
● Cavity: More than 9				
● Ground terminal etc.	—			

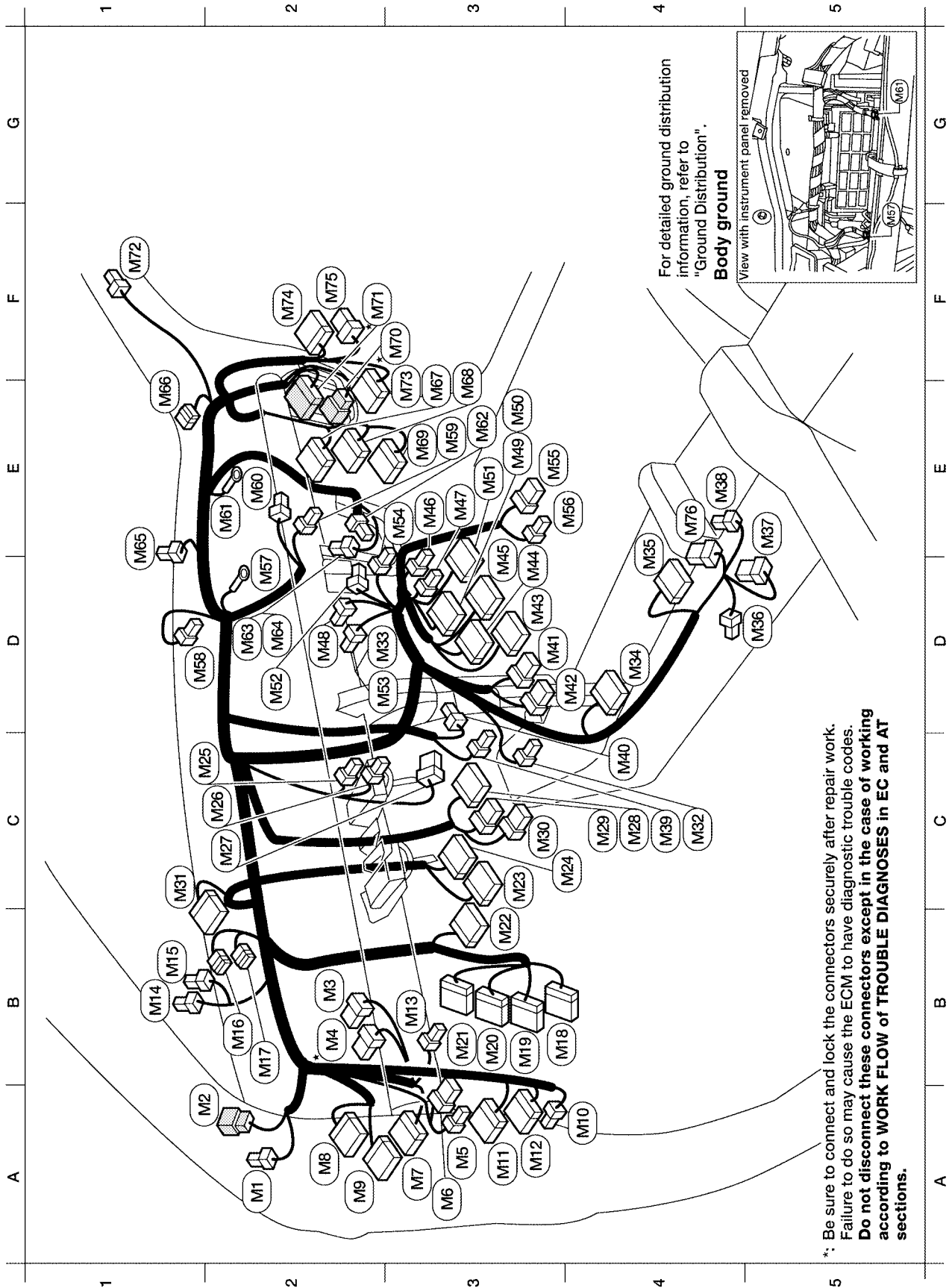
# HARNESS

## OUTLINE



# HARNESS

## MAIN HARNESS



WKIA0097E

# HARNESSES

A2	(M1) BR/2	: Tweeter LH	D3	(M33) W/2	: Intake sensor (with auto A/C)	E2	(M61) -	: Body ground
A2	(M2) W/6	: To R1 (without vanity mirror lamps)	D4	(M34) W/12	: A/T device	E3	(M62) W/2	: Blower motor
A2	(M2) W/8	: To R1 (with vanity mirror lamps)	E4	(M35) Y/28	: Air bag diagnosis sensor unit	D2	(M63) BR/4	: Blower motor resistor (with manual A/C)
B2	(M3) W/8	: Fuse block (J/B)	D4	(M36) B/1	: Parking brake switch	D2	(M64) W/4	: Fan control amp. (with auto A/C)
B2 *	(M4) W/16	: Fuse block (J/B)	E5	(M37) W/6	: Heated seat switch LH	E1	(M65) B/2	: Sunload sensor (with auto A/C)
A3	(M5) W/3	: Illumination control switch	E4	(M38) B/2	: Power socket	E2	(M66) BR/20	: Joint connector-3
A3	(M6) GY/6	: TCS ON/OFF switch (with TCS)A3	C4	(M39) W/3	: Air mix door motor (with auto A/C)	E3	(M67) W/10	: To (E13)
A3	(M7) W/18	: To (E28)	C4	(M40) W/3	: Mode door motor	E3	(M68) W/10	: To (E102)
A2	(M8) W/16	: To (D2)	D3	(M41) W/6	: Fan switch (with manual A/C or heater only)	E3	(M69) W/18	: To (B104)
A2	(M9) W/12	: To (D1)	D3	(M42) W/6	: Rear window defogger switch	F3	(M70) W/6	: To (F58)
A4	(M10) Y/4	: To (E29)	D3	(M43) W/10	: Audio unit	F3	(M71) W/24	: To (F59)
A3	(M11) W/16	: To (B1)	E3	(M44) W/6	: Audio unit	F1	(M72) BR/2	: Tweeter RH
A3	(M12) W/16	: To (B2)	E3	(M45) W/16	: Audio unit	F3	(M73) W/16	: To (E103)
B3	(M13) L/4	: Heated seat relay	E3	(M46) W/4	: (Not used)	F2	(M74) W/10	: To (D102)
B1	(M14) BR/2	: Security indicator lamp	E3	(M47) B/2	: (Not used)	F2	(M75) W/8	: To (D101)
B1	(M15) W/3	: Auto light sensor (with auto lights)	D2	(M48) W/2	: Antenna amplifier	E4	(M76) W/6	: Heated seat switch RH
B2	(M16) BR/20	: Joint connector-1	E3	(M49) GY/20	: A/C auto amp. (with auto A/C)			
B2	(M17) P/20	: Joint connector-2	F3	(M50) GY/16	: A/C auto amp. (with auto A/C)			
B4	(M18) BR/24	: BCM (Body control module)	E3	(M51) W/12	: A/C control unit (with manual A/C or heater only)			
B3	(M19) W/16	: BCM (Body control module)	D2	(M52) W/3	: Thermo control amplifier (with auto A/C)			
B3	(M20) W/16	: BCM (Body control module)	D3	(M53) W/2	: Intake sensor (with manual A/C)			
B3	(M21) W/12	: BCM (Body control module)	E3	(M54) W/2	: Trunk lid opener cancel switch			
B3	(M22) W/16	: Data link connector	E3	(M55) W/8	: Hazard switch			
C3	(M23) W/24	: Combination meter	E4	(M56) B/2	: Cigarette lighter			
C4	(M24) BR/24	: Combination meter	D2	(M57) -	: Body ground			
C2	(M25) B/2	: Ignition key illumination	D2	(M58) W/3	: Intake door motor			
C2	(M26) W/4	: Key switch and key lock solenoid	E3	(M59) BR/2	: Glove box lamp			
C2	(M27) W/8	: Immobilizer control unit	E2	(M60) Y/4	: Front passenger air bag module			
C4	(M28) W/16	: Combination switch						
C4	(M29) Y/6	: Combination switch						
C3	(M30) GY/8	: Combination switch						
C1	(M31) GY/10	: Shift lock control unit (with A/T)						
C4	(M32) W/2	: In-vehicle sensor (with auto A/C)						

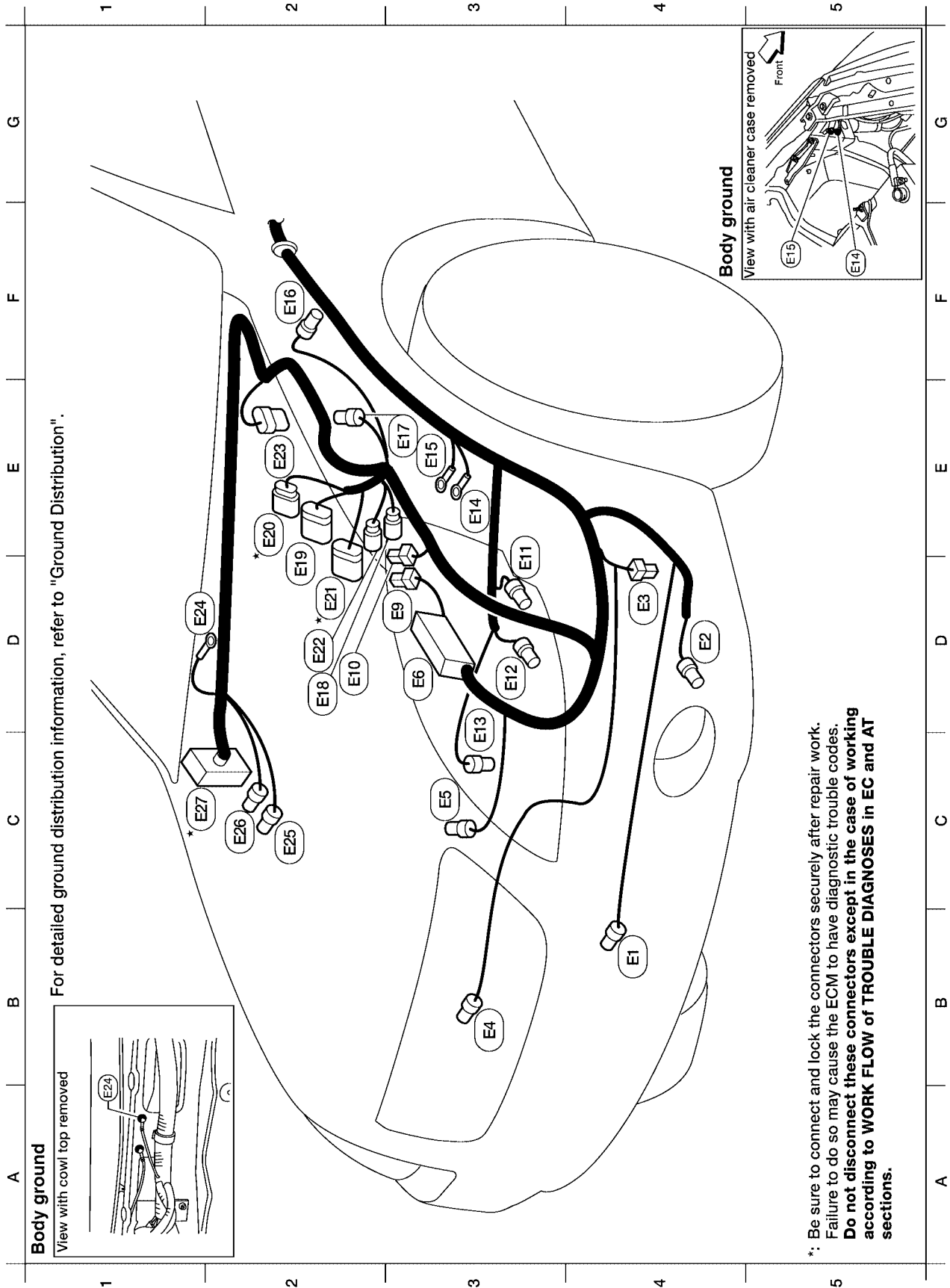
\*: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. **Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.**

WKIA0098E



# HARNESS

## ENGINE ROOM LH HARNESS



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WKIA0099E

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

# HARNESS

B4	(E1)	B/2	: Ambient sensor
D4	(E2)	BR/2	: Front fog lamp LH
D4	(E3)	B/1	: Horn (low)
B3	(E4)	Y/2	: Crash zone sensor
C3	(E5)	GY/2	: Hood switch
D3	(E6)	-	: Fuse and fusible link box
	(H-1)	W/3	: Horn relay (inside fuse and fusible link box)
D3	(E9)	BR/2	: Fusible link box (battery)
D2	(E10)	GY/2	: Fusible link box (battery)
E3	(E11)	B/2	: Headlamp LH (high)
D3	(E12)	B/3	: Front combination lamp LH
D3	(E13)	B/2	: Headlamp LH (low) (conventional type)
D3	(E13)	BR/2	: Headlamp LH (low) (xenon type)
E3	(E14)	-	: Body ground
E3	(E15)	-	: Body ground
F2	(E16)	GY/2	: Brake fluid level switch
E3	(E17)	GY/2	: Dropping resistor (with A/T)
D2	(E18)	BR/2	: Front wheel sensor LH
D2	(E19)	GY/9	: To (F33)
E2	(E20)	B/8	: To (F32)
D2	(E21)	GY/10	: To (F34)
D2	(E22)	B/2	: To (F36) (with A/T)
E2	(E23)	GY/6	: Wiper motor
D2	(E24)	-	: Body ground
C2	(E25)	BR/1	: To (E128)
C2	(E26)	GY/1	: To (E127)
C1	(E27)	SMJ	: To (E130)

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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.**

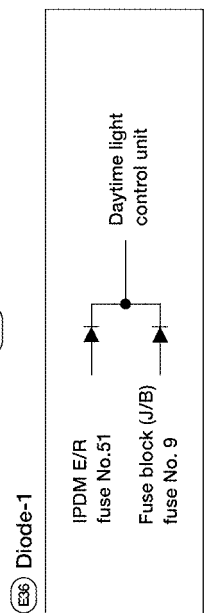
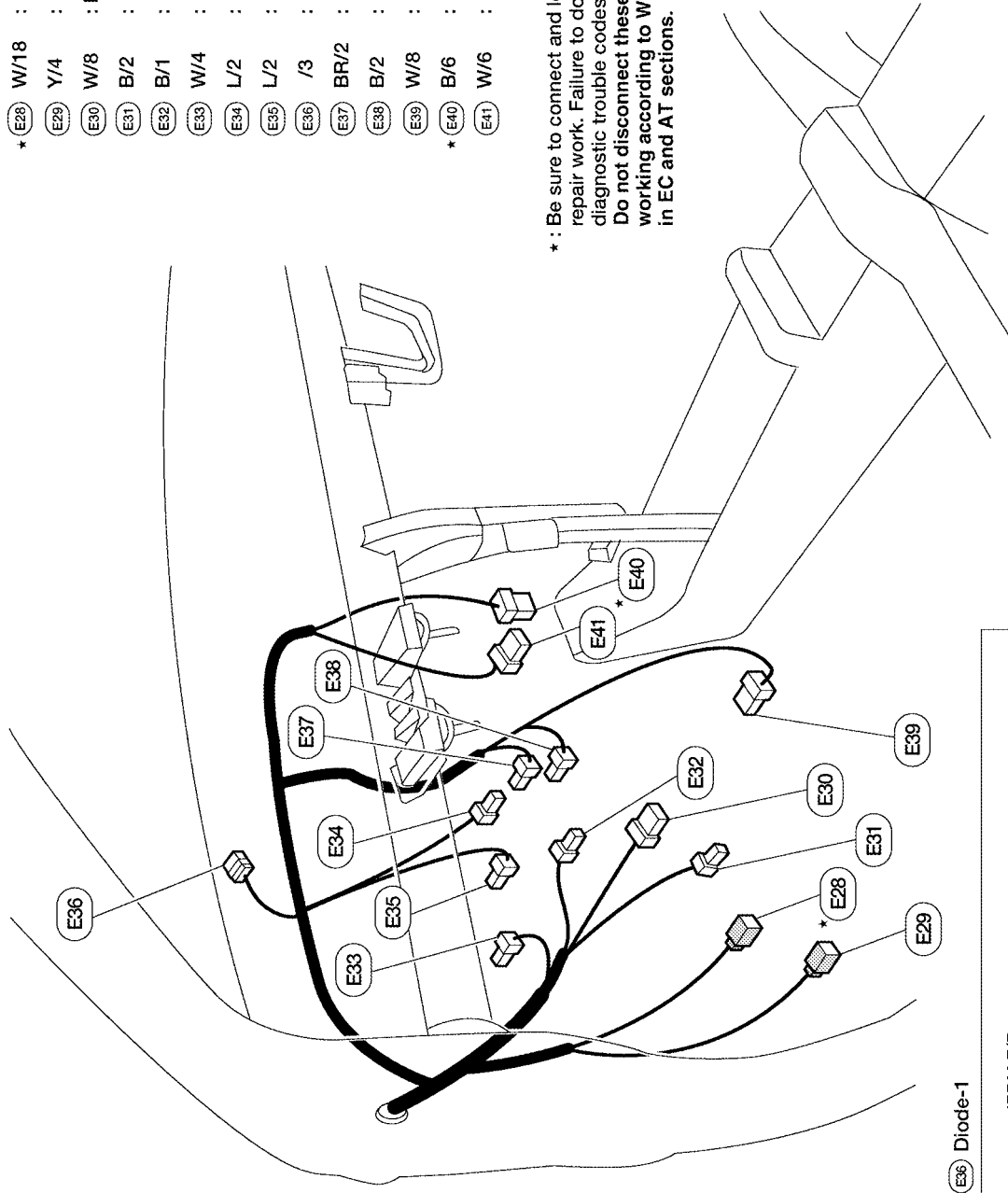
WKIA0356E

# HARNESS

## Passenger Compartment

- ★ E28 W/18 : To M7
- E29 Y/4 : To M10
- E30 W/8 : Fuse block J/B
- E31 B/2 : Fuse block J/B
- E32 B/1 : Fuse block J/B
- E33 W/4 : To B3
- E34 L/2 : Clutch interlock switch (with M/T)
- E35 L/2 : ASCD clutch switch (with M/T and ASCD)
- E36 /3 : Diode - 1 (with DTRL)
- E37 BR/2 : ASCD brake switch
- E38 B/2 : Stop lamp switch
- E39 W/8 : BCM (Body control module)
- ★ E40 B/6 : Accelerator pedal position sensor
- E41 W/6 : Ignition switch

★ : 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.



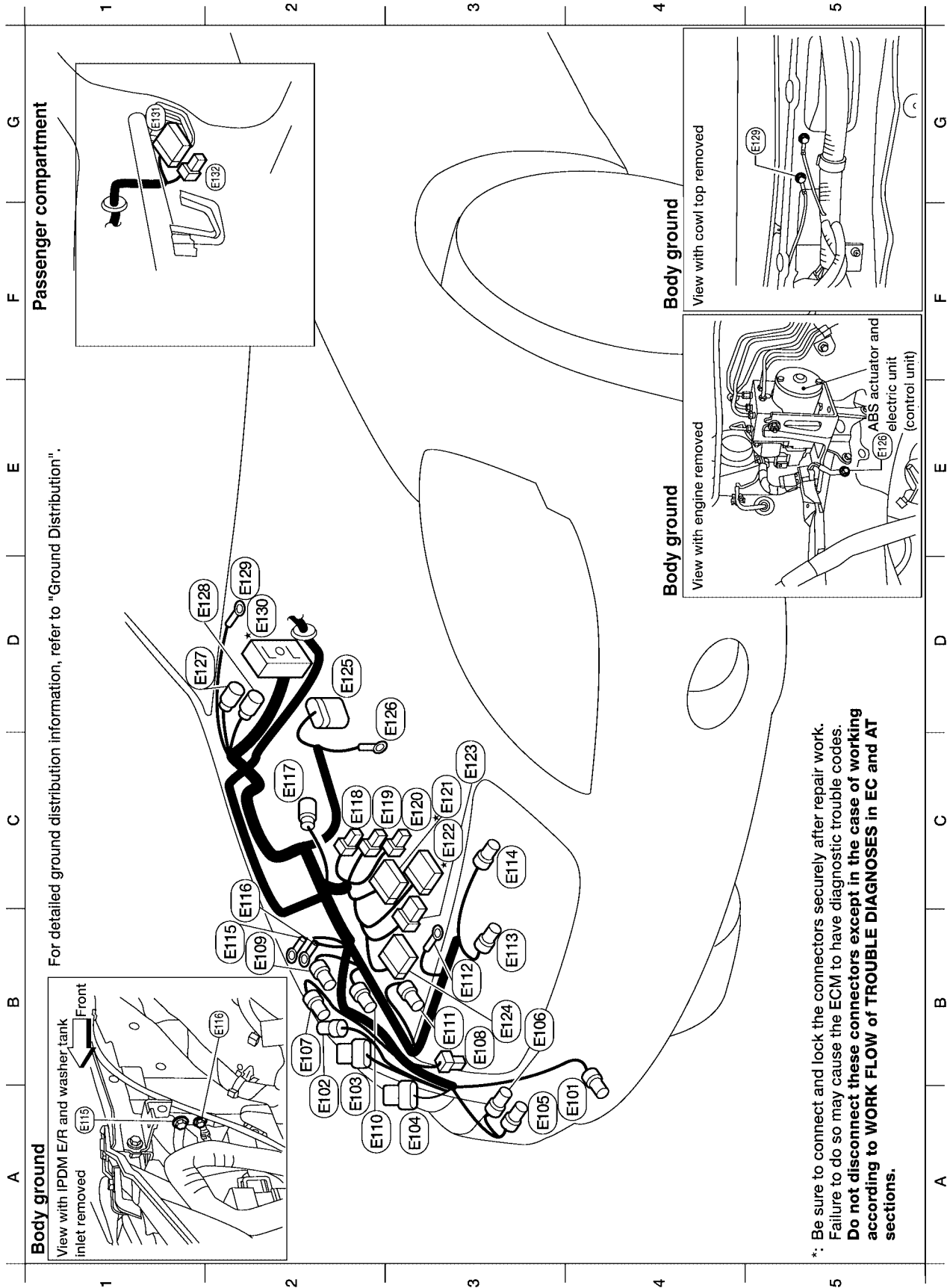
WKIA0101E

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

PG

# HARNESS

## ENGINE ROOM RH HARNESS



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WKIA0110E

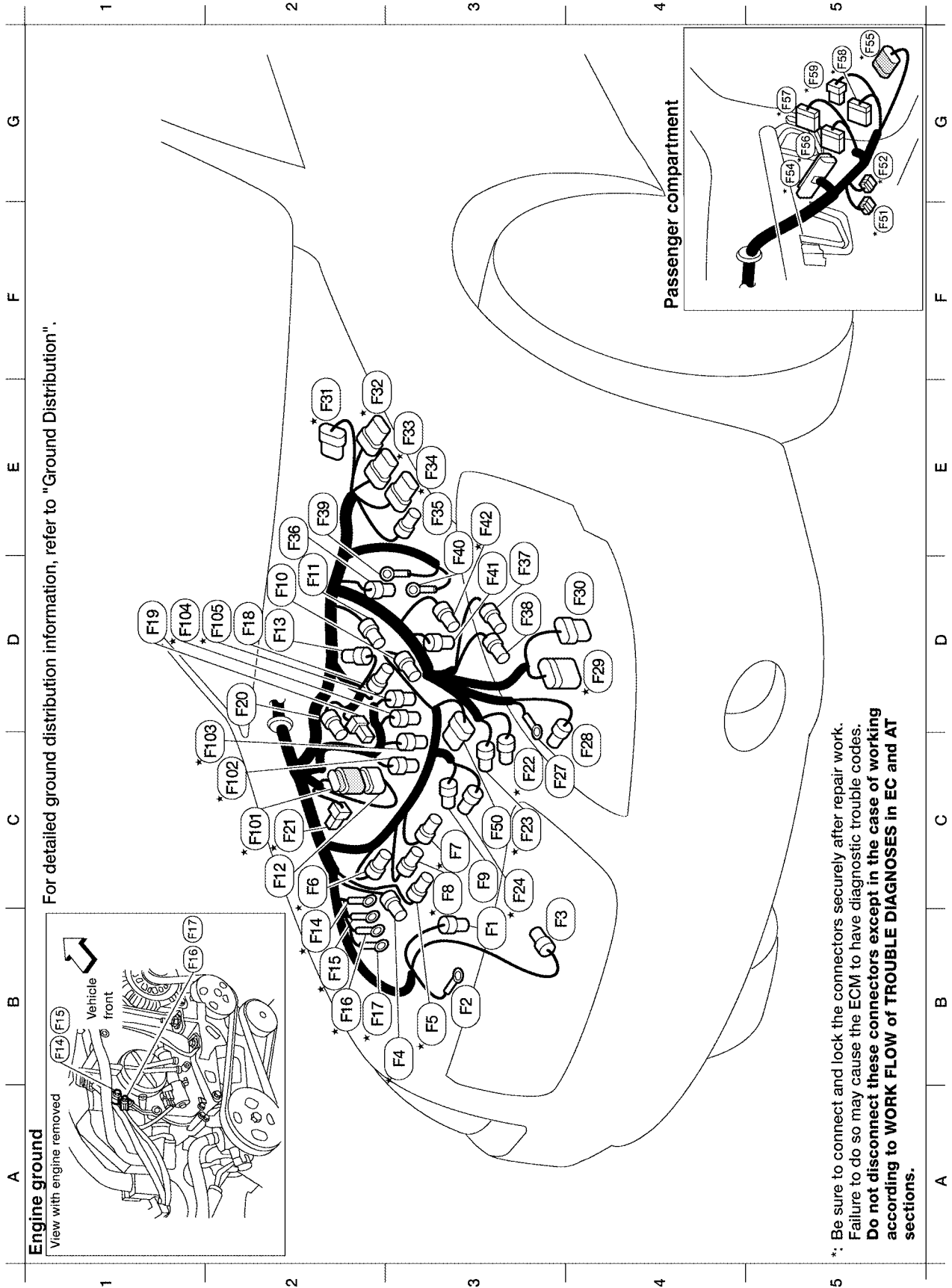
A4	(E101)	BR/2	: Front fog lamp RH
A2	(E102)	GY/4	: Daytime light control unit (for Canada)
A2	(E103)	GY/6	: Daytime light control unit (for Canada)
A3	(E104)	GY/8	: Daytime light control unit (for Canada)
A3	(E105)	GY/2	: Front washer motor
B3	(E106)	BR/2	: Washer fluid level sensor
B2	(E107)	B/2	: Headlamp RH (low) (conventional type)
B2	(E107)	BR/2	: Headlamp RH (low) (xenon type)
B3	(E108)	B/1	: Horn (high)
B2	(E109)	B/3	: Front combination lamp RH
A2	(E110)	B/2	: Headlamp RH (high)
B3	(E111)	B/3	: Refrigerant pressure sensor
B3	(E112)	-	: Generator (ground)
B3	(E113)	GY/4	: Cooling fan motor-1
C3	(E114)	GY/4	: Cooling fan motor-2
B2	(E115)	-	: Body ground
C2	(E116)	-	: Body ground
C2	(E117)	GY/2	: Front wheel sensor RH
C2	(E118)	B/4	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E119)	W/4	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E120)	B/2	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E121)	W/12	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E122)	GY/16	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E123)	W/6	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C3	(E124)	W/12	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
D2	(E125)	B/31	: ABS actuator and electric unit (with ABS or TCS)
D3	(E126)	-	: Body ground
D2	(E127)	GY/1	: To (E26)
D2	(E128)	BR/1	: To (E25)
D2	(E129)	-	: Body ground
D2	(E130)	SMJ	: To (E25)
G1	(E131)	W/10	: To (M67) (With ABS or TCS)
G2	(E132)	W/4	: To (6101) (With ABS or TCS)

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WKIA0357E

# HARNESS

## ENGINE CONTROL HARNESS (QR25DE)



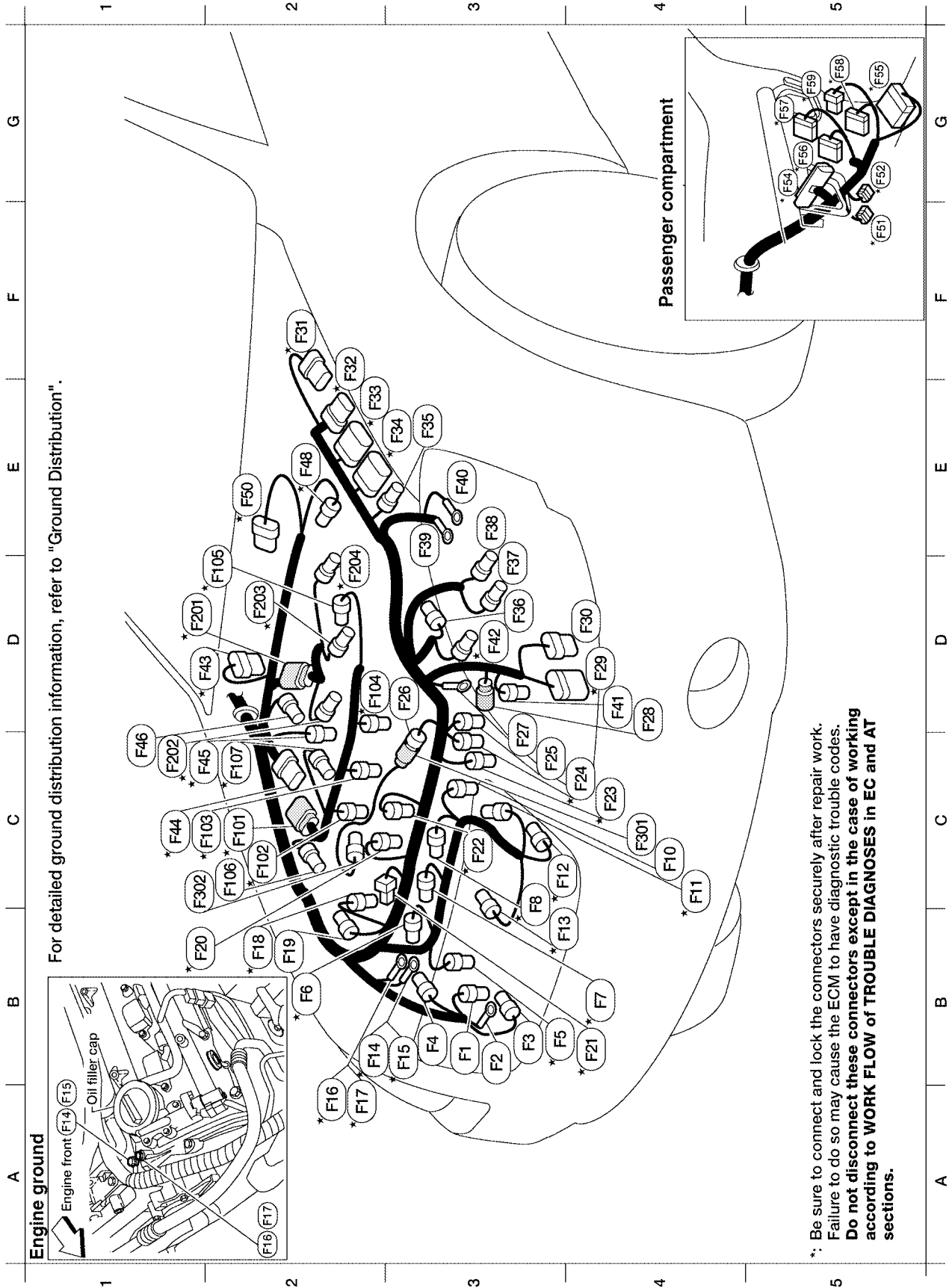
WKIA0112E

B3	(F1)	GY/2	: Generator	E2	(F31)	GY/5	: Mass air flow sensor
B3	(F2)	-	: Generator	E3	(F32)	B/8	: To (E20)
B4	(F3)	B/1	: A/C compressor	E3	(F33)	GY/9	: To (E19)
B3	(F4)	GY/2	: Intake valve timing control solenoid valve	E3	(F34)	GY/10	: To (E21)
B3	(F5)	GY/3	: Ignition coil No. 1 (with power transistor)	E3	(F35)	B/2	: To (E22) (with A/T)
C2	(F6)	GY/3	: Ignition coil No. 2 (with power transistor)	E2	(F36)	GY/2	: Vehicle speed sensor
C3	(F7)	GY/3	: Ignition coil No. 4 (with power transistor)	D3	(F37)	B/3	: Turbine revolution sensor (with A/T)
C3	(F8)	GY/3	: Ignition coil No. 3 (with power transistor)	D3	(F38)	B/3	: Revolution sensor (with A/T)
C3	(F9)	B/3	: Camshaft position sensor (PHASE)	E2	(F39)	-	: Battery (positive)
D2	(F10)	L/2	: EVAP canister purge volume control solenoid valve	D3	(F40)	-	: Fusible link box (battery)
D2	(F11)	B/3	: Crankshaft position sensor	D3	(F41)	B/2	: Back-up lamp switch (with M/T)
C2	(F12)	B/6	: To (F101)	E3	(F42)	B/2	: Park/neutral position (PNP) switch (with M/T)
D2	(F13)	BR/2	: VISA control solenoid valve	C3	(F50)	G/6	: Electric throttle control actuator
B2	(F14)	-	: Engine ground	F5	(F51)	L/12	: Joint connector-4
B2	(F15)	-	: Engine ground	G5	(F52)	L/12	: Joint connector-5
B2	(F16)	-	: Engine ground	G5	(F54)	SMJ	: ECM
B2	(F17)	-	: Engine ground	G5	(F55)	W/12	: To (B105)
D2	(F18)	GY/2	: Knock sensor	G5	(F56)	W/24	: TCM (transmission control module) (with A/T)
D1	(F19)	GY/1	: Oil pressure switch	G5	(F57)	GY/24	: TCM (transmission control module) (with A/T)
D2	(F20)	B/1	: Power steering oil pressure switch	G5	(F58)	W/6	: To (M70)
C2	(F21)	GY/2	: Condenser 2	G5	(F59)	W/24	: To (M71)
C3	(F22)	G/4	: Heated oxygen sensor 1 (Front)	Engine control sub-harness			
C3	(F23)	L/4	: Heated oxygen sensor 2 (Rear)	C2	(F101)	B/6	: To (F12)
C3	(F24)	GY/2	: Engine coolant temperature sensor	C2	(F102)	GY/2	: Injector No. 1
C4	(F27)	-	: Starter motor	C2	(F103)	GY/2	: Injector No. 2
C4	(F28)	GY/1	: Starter motor	D1	(F104)	GY/2	: Injector No. 3
D4	(F29)	B/10	: Park/neutral position (PNP) switch (with A/T)	D2	(F105)	GY/2	: Injector No. 4
D4	(F30)	B/8	: Terminal cord assembly (with A/T)				

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# HARNESS

## ENGINE CONTROL HARNESS (VQ35DE)



WKIA0114E



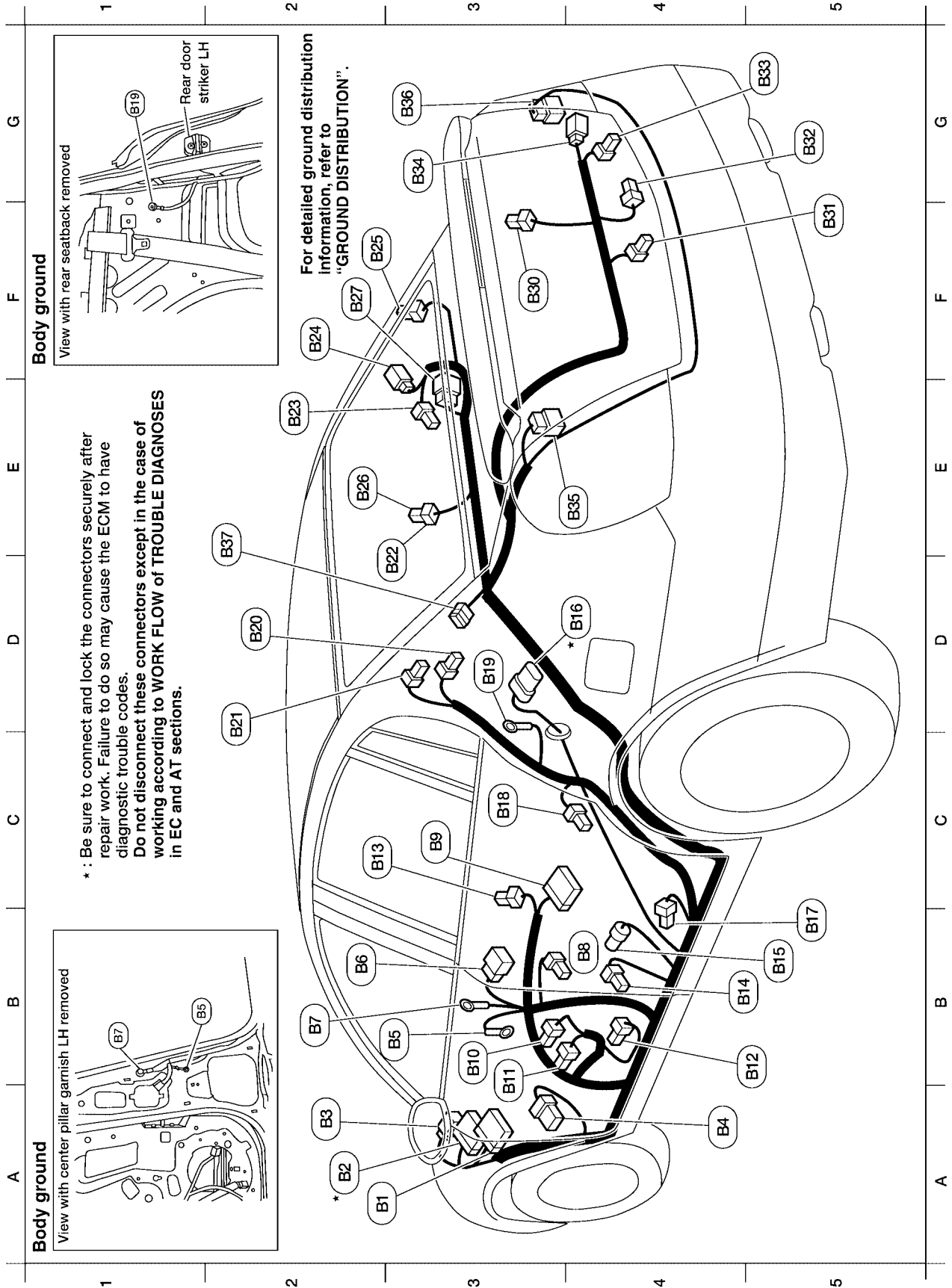
B3 (F1) GY/2 : Generator B3 (F2) - : Generator B3 (F3) B/1 : A/C compressor B3*(F4) G/2 : Intake valve timing control solenoid valve (Bank 2) B3*(F5) B/3 : Heated oxygen sensor 1 (Front) (Bank 2) B2*(F6) GY/3 : Ignition coil No. 2 (with power transistor) B4*(F7) GY/3 : Ignition coil No. 4 (with power transistor) C3*(F8) GY/3 : Ignition coil No. 6 (with power transistor) C4 (F10) BR/3 : Front electronic controlled engine mount C4*(F11) B/3 : Crankshaft position sensor C3*(F12) G/4 : Heated oxygen sensor 2 (Rear) (Bank 2) B3*(F13) L/4 : Heated oxygen sensor 2 (Rear) (Bank 1) B2*(F14) - : Engine ground B3*(F15) - : Engine ground A2*(F16) - : Engine ground A2*(F17) - : Engine ground B2*(F18) GY/2 : Injector No. 2 B2 (F19) B/2 : VIAS control solenoid valve B2*(F20) GY/2 : Injector No. 4 B4*(F21) GY/2 : Condenser 2 C3*(F22) GY/2 : Injector No. 6 C4*(F23) B/3 : Camshaft position sensor (PHASE) (Bank 2) C4*(F24) GY/2 : Engine coolant temperature sensor C3 (F25) BR/3 : Rear electronic controlled engine mount C3 (F26) B/2 : To (F30) C3 (F27) - : Starter motor D4 (F28) GY/1 : Starter motor	D4 *(F29) B/10 : Park/neutral position (PNP) switch (with A/T) D4 (F30) B/8 : Terminal cord assembly (with A/T) F2 *(F31) GY/5 : Mass air flow sensor F2 *(F32) B/8 : To (E20) E3 *(F33) GY/9 : To (E19) E3 *(F34) GY/10 : To (E21) E3 (F35) B/2 : To (E22) (with A/T) D3 (F36) GY/2 : Vehicle speed sensor D3 (F37) B/3 : Turbine revolution sensor (with A/T) E3 (F38) B/3 : Revolution sensor (with A/T) D3 (F39) - : Battery (positive) E3 (F40) - : Fusible link box (battery) D4 (F41) B/2 : Back-up lamp switch (with M/T) D3*(F42) B/2 : Park/neutral position (PNP) switch (with M/T) D2 *(F43) G/6 : To (F20) C1 *(F44) G/8 : To (F10) C2 *(F45) B/3 : Heated oxygen sensor 1 (Front) (Bank 1) C1 (F46) B/3 : Power steering oil pressure sensor E2 *(F48) G/3 : Camshaft position sensor (PHASE) (Bank 1) E2 *(F50) G/6 : Electric throttle control actuator F5 *(F51) L/12 : Joint connector-4 G5 *(F52) L/12 : Joint connector-5 G5 *(F54) SMJ : ECM G5 *(F55) W/12 : To (B105) G5 *(F56) W/24 : TCM (transmission control module) (with A/T) G5 *(F57) GY/24 : TCM (transmission control module) (with A/T) G5 *(F58) W/6 : To (M70) G5 *(F59) W/24 : To (M71)	<b>Engine control sub-harness-1</b> C2 *(F10) G/8 : To (F44) C2 *(F102) GY/2 : Injector No. 1 C2 *(F103) GY/2 : Injector No. 3 D2 *(F104) GY/2 : Injector No. 5 D2 *(F105) L/2 : EVAP canister purge volume control solenoid valve C2 (F106) B/1 : Oil pressure switch C2 *(F107) G/2 : Intake valve timing control solenoid valve (Bank 1)	<b>Engine control sub-harness-2</b> D1 *(F201) G/6 : To (F43) C1 *(F202) GY/3 : Ignition coil No. 1 (with power transistor) D2 *(F203) GY/3 : Ignition coil No. 3 (with power transistor) D2 *(F204) GY/3 : Ignition coil No. 5 (with power transistor)	<b>Engine control sub-harness-3</b> C4 (F301) B/2 : To (F26) C1 (F302) GY/2 : Knock sensor
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# HARNESS

## BODY HARNESS



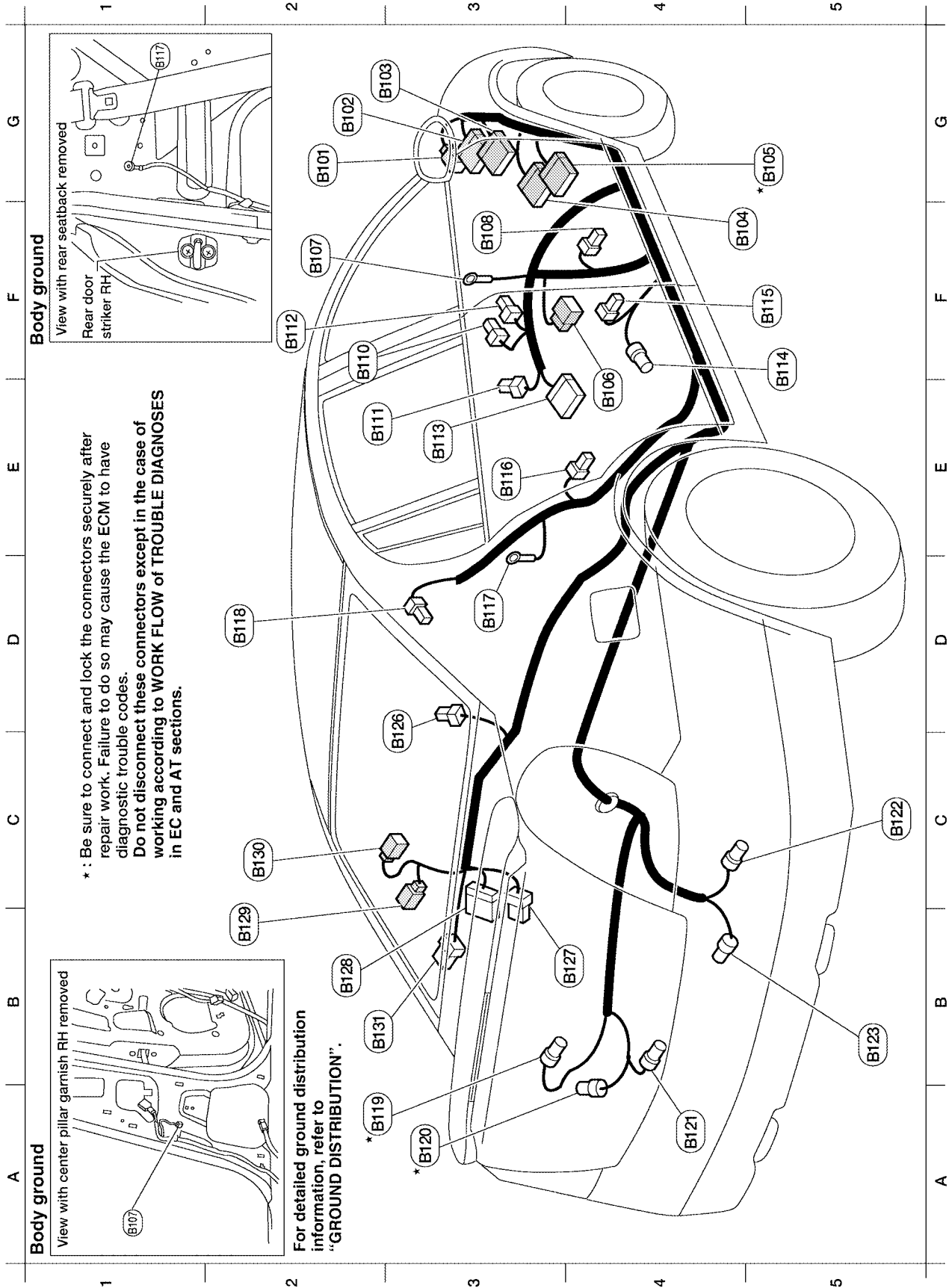
WKIA0102E

A2	(B1)	W/16	: To (M11)	D3	(B19)	-	: Body ground
A2 *	(B2)	W/16	: To (M12)	D2	(B20)	Y/2	: LH side curtain air bag module
A2	(B3)	W/4	: To (E33)	C2	(B21)	W/1	: Rear window defogger condenser
A4	(B4)	BR/6	: Rear window defogger relay	D3	(B22)	BR/2	: Rear speaker LH (without Bose audio system)
A3	(B5)	-	: Body ground	E2	(B23)	W/2	: Truck room lamp (without Bose audio system)
B3	(B6)	W/8	: To (D20)	F2	(B24)	W/2	: High mounted stop lamp (without rear spoiler and with Bose audio system)
B3	(B7)	-	: Body ground	F3	(B25)	BR/2	: Rear speaker RH (without Bose audio system)
B4	(B8)	W/3	: Front door switch LH	E2	(B26)	W/2	: Subwoofer LH (with BOSE audio system)
C3	(B9)	Y/12	: Air bag diagnosis sensor unit	F2	(B27)	W/8	: To (B13) (with Bose audio system)
B3	(B10)	Y/2	: Front LH side air bag module	F3	(B30)	BR/2	: High mounted stop lamp (with rear spoiler)
B3	(B11)	W/2	: Power seat	F5	(B31)	BR/2	: License lamp LH
B5	(B12)	W/3	: Seatbelt buckle switch LH	G5	(B32)	W/4	: Truck lamp switch and truck release solenoid
C3	(B13)	W/3	: Heated seat switch	G5	(B33)	BR/2	: License lamp RH
B5	(B14)	Y/2	: Front LH seat belt pre-tensioner	G3	(B34)	W/2	: Truck key cylinder switch
B5	(B15)	Y/2	: LH side airbag (satellite) sensor	E4	(B35)	W/6	: Rear combination lamp LH
D4 *	(B16)	GY/5	: Fuel level sensor unit and fuel pump	G3	(B36)	W/6	: Rear combination lamp RH
B5	(B17)	W/2	: Condenser-1	E2	(B37)	B/20	: Joint connector-7
C3	(B18)	W/1	: Rear door switch LH				

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# HARNESS

## BODY NO. 2 HARNESS



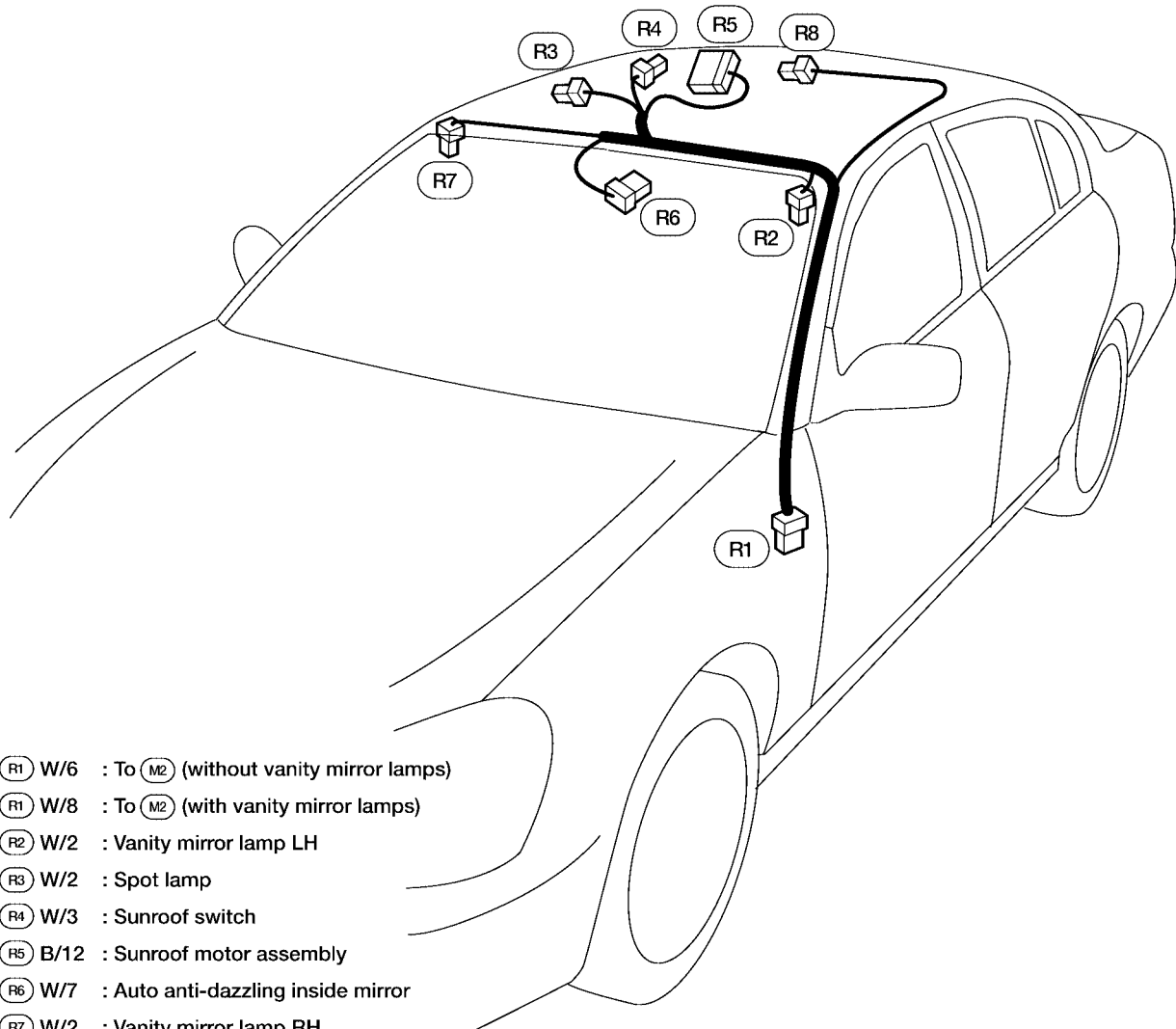
WKIA0104E

G2 (6101)	W/4	: To (E192)	D2 (6119)	Y/2	: RH side curtain air bag module
G2 (6102)	W/10	: To (M66)	A2 *	BR/3	: EVAP control system pressure sensor (QR25DE)
G2 (6103)	W/16	: To (M73)	A2 *	GY/3	: EVAP control system pressure sensor (VQ35DE)
F4 (6104)	W/18	: To (M69)	A3 *	G/2	: Vacuum cut valve bypass valve
F5 *	W/12	: To (F55)	A4 *	B/2	: EVAP canister vent control valve
F4 (6106)	W/8	: To (D301)	C5 (6122)	GY/2	: Rear wheel sensor RH
F2 (6107)	-	: Body ground	B5 (6123)	BR/2	: Rear wheel sensor LH
F3 (6108)	W/3	: Front door switch RH	C3 (6126)	W/2	: Subwoofer RH (with BOSE audio system)
F2 (6110)	W/3	: Seat belt buckle switch RH	B4 (6127)	GY/8	: Bose Speaker Amp.
E2 (6111)	W/3	: Heated seat switch RH	B2 (6128)	B/24	: Bose Speaker Amp.
F2 (6112)	Y/2	: Front RH side air bag module	B2 (6128)	W/2	: High mounted stop lamp (without rear spoiler and with BOSE audio system)
E3 (6113)	Y/12	: Air bag diagnosis sensor unit	C2 (6130)	W/2	: Truck room lamp (with BOSE audio system)
F5 (6114)	Y/2	: RH side air bag (satellite) sensor	B2 (6131)	W/8	: To (627) (with BOSE audio system)
F5 (6115)	Y/2	: Front RH seatbelt pre-tensionor			
E3 (6116)	W/1	: Rear door switch RH			
D3 (6117)	-	: Body ground			

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# HARNESS

## ROOM LAMP HARNESS



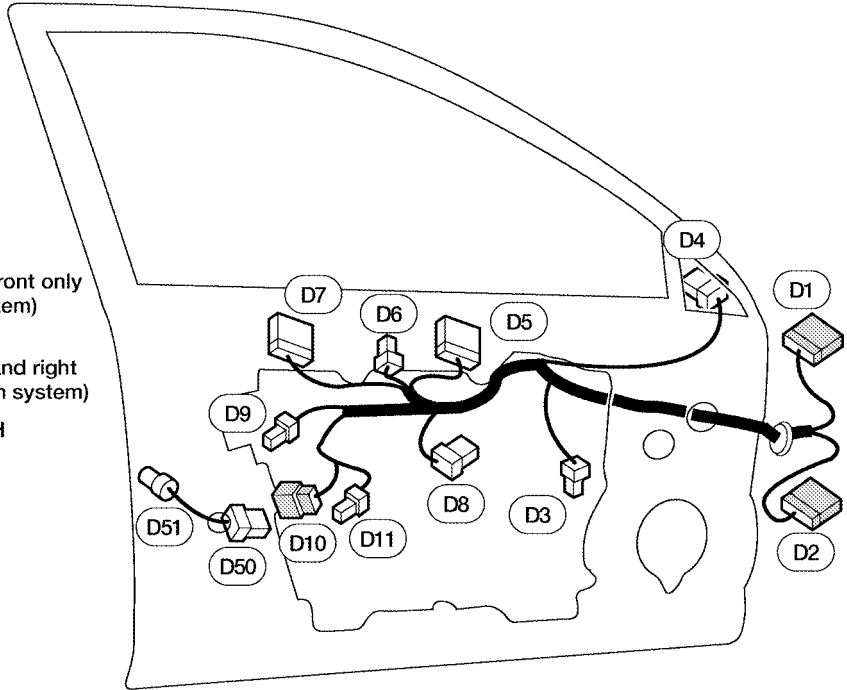
- Ⓡ1 W/6 : To Ⓜ2 (without vanity mirror lamps)
- Ⓡ1 W/8 : To Ⓜ2 (with vanity mirror lamps)
- Ⓡ2 W/2 : Vanity mirror lamp LH
- Ⓡ3 W/2 : Spot lamp
- Ⓡ4 W/3 : Sunroof switch
- Ⓡ5 B/12 : Sunroof motor assembly
- Ⓡ6 W/7 : Auto anti-dazzling inside mirror
- Ⓡ7 W/2 : Vanity mirror lamp RH
- Ⓡ8 W/2 : Room lamp

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# HARNESS

## FRONT DOOR LH HARNESS

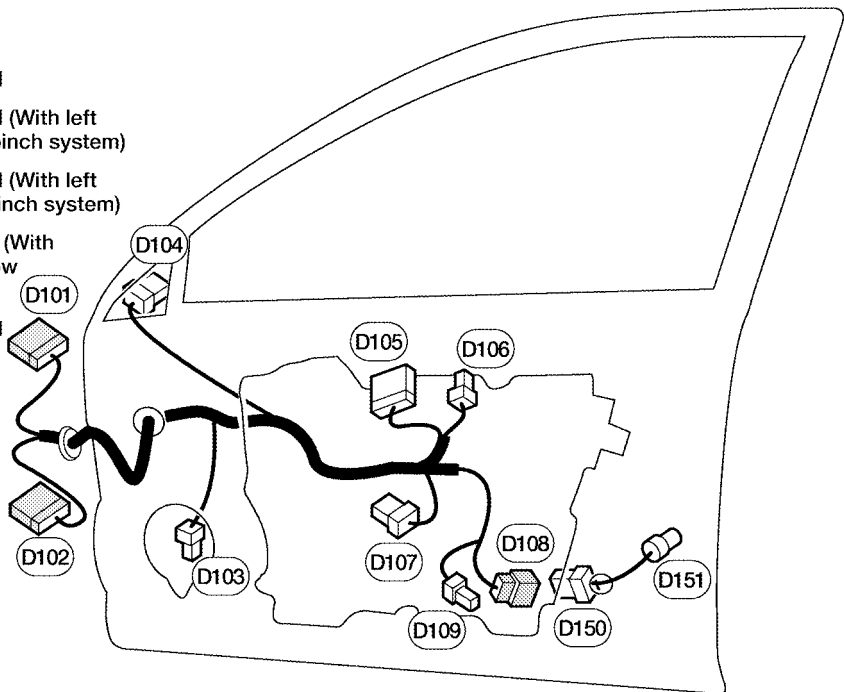
- (D1) W/12 : To (M9)
  - (D2) W/16 : To (M8)
  - (D3) W/2 : Front door speaker LH
  - (D4) W/8 : Door mirror LH
  - (D5) W/10 : Door mirror switch
  - (D6) W/3 : Main power window and door lock/unlock switch
  - (D7) W/16 : Main power window and door lock/unlock switch (With left front only power window anti-pinch system)
  - (D7) BR/16 : Main power window and door lock/unlock switch (With left and right front power window anti-pinch system)
  - (D8) W or BR/6 : Front power window motor LH
  - (D9) W/4 : Trunk lid opener switch
  - (D10) W/6 : To (D50)
  - (D11) W/2 : Step lamp LH
- Front door LH sub-harness**
- (D50) W/6 : To (D10)
  - (D51) GY/4 : Front door lock actuator LH



WKIA0093E

## FRONT DOOR RH HARNESS

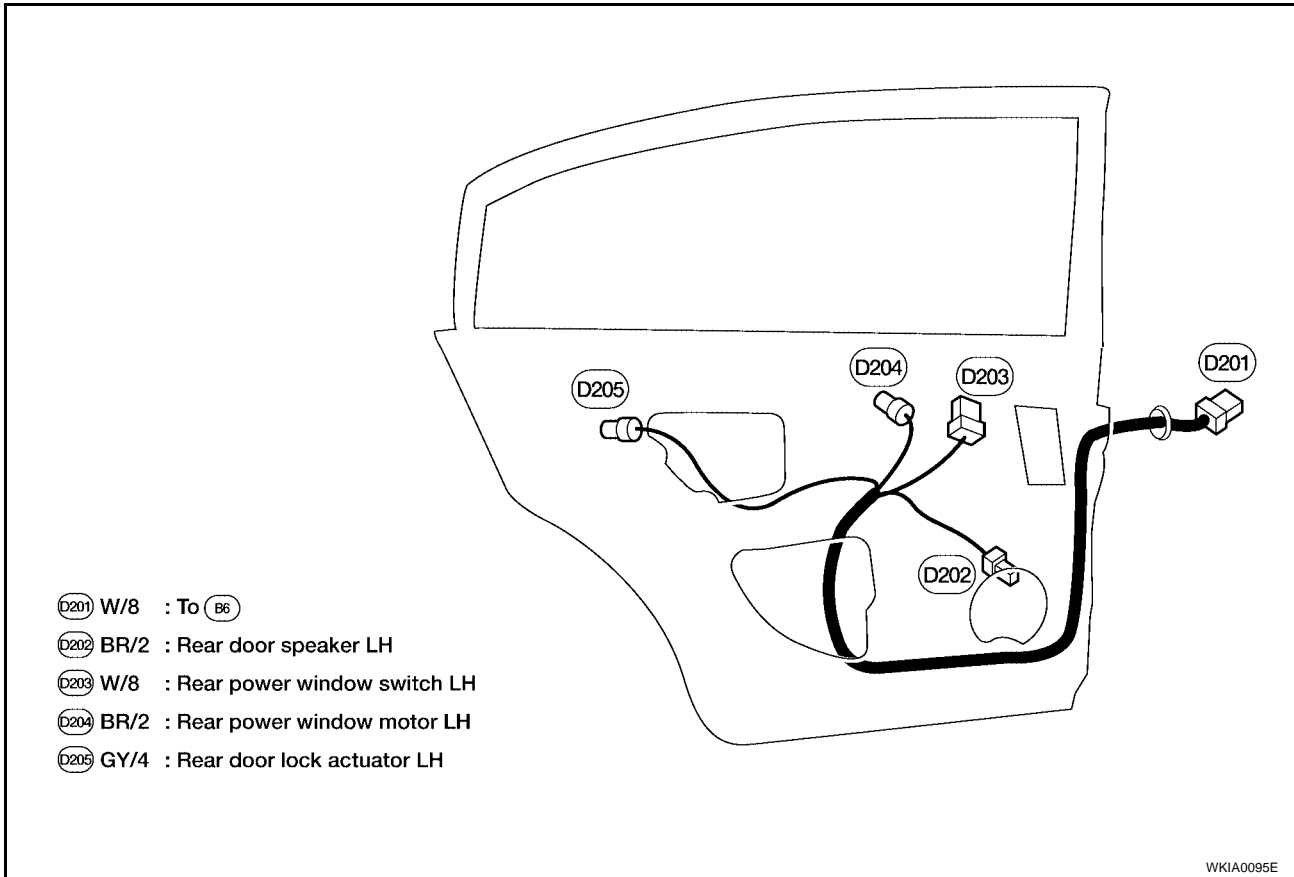
- (D101) W/8 : To (M75)
  - (D102) W/10 : To (M74)
  - (D103) W/2 : Front door speaker RH
  - (D104) W/8 : Door mirror RH
  - (D105) W/12 : Front power window switch RH
  - (D106) BR/8 : Front power window switch RH (With left front only power window anti-pinch system)
  - (D106) W/8 : Front power window switch RH (With left and right power window anti-pinch system)
  - (D107) W or BR/6 : Front power window motor RH (With left and front only power window anti-pinch system)
  - (D107) W/2 : Front power window switch RH (With left and right front power window anti-pinch system)
  - (D108) W/2 : To (D150)
  - (D109) W/2 : Step lamp RH
- Front door RH sub-harness**
- (D150) W/6 : To (D108)
  - (D151) GY/4 : Front door lock actuator RH



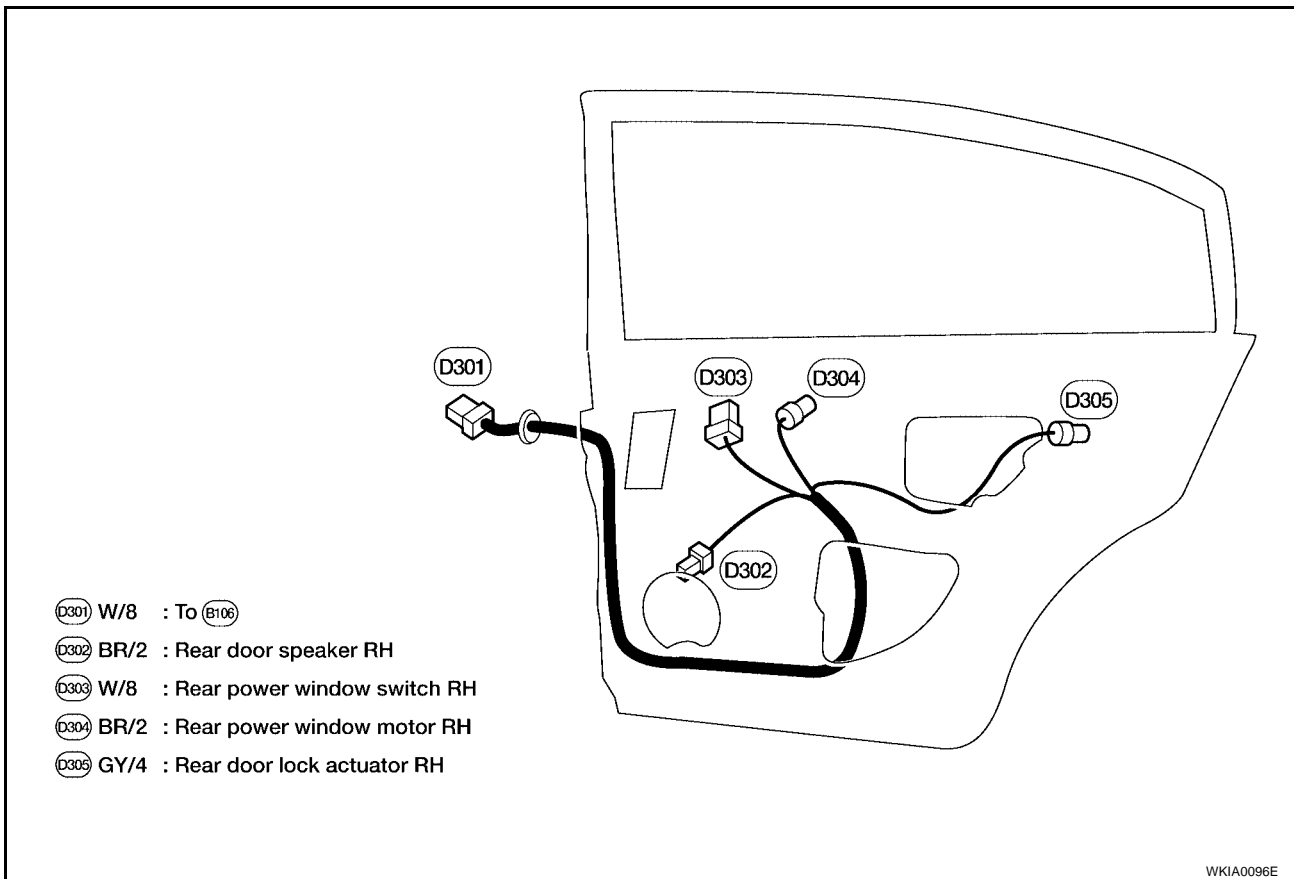
WKIA0094E

# HARNESS

## REAR DOOR LH HARNESS



## REAR DOOR RH HARNESS





# HARNESSES

## Wiring Diagram Codes (Cell Codes)

EKS002LG

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

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

Code	Section	Wiring Diagram Name
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
A/C,A	ATC	Auto Air Conditioner
A/C,M	MTC	Manual Air Conditioner
A/LIGHT	LT	Auto Light Control
ABS	BRC	Anti-Lock Brake System
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASCBOF	EC	ASCD Brake Switch
ASC/BS	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
ASC/SW	EC	ASCD Steering Switch
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
B/COMP	DI	Board Computer
BAF/TS	AT	A/T Fluid Temperature Sensor and TCM Power Supply
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
BYP/SV	EC	Vacuum Cut Valve Bypass Valve
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DLC	EC	Data Link Connector
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ENGSS	AT	Engine Speed Signal
EMNT	EC	Engine Mount
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FLS1	EC	Fuel Level Sensor Function (SLOSH)
FLS2	EC	Fuel Level Sensor Circuit
FLS3	EC	Fuel Level Sensor Circuit (Ground Signal)
FTS	AT	A/T Fluid Temperature Sensor
FTTS	EC	Fuel tank Temperature Sensor

# HARNESSES

FUEL	EC	Fuel Injection System Function
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
H/MIRR	GW	Door Mirror with Heated Mirror
HEATER	MTC	Heater System
HO2S1	EC	Heated Oxygen Sensor 1 (Front)
HO2S1H	EC	Heated Oxygen Sensor 1 (Front) Heater
HO2S2	EC	Heated Oxygen Sensor 2 (Rear)
HO2S2H	EC	Heated Oxygen Sensor 2 (Rear) Heater
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/MIRR	GW	Inside Mirror (Auto-Anti Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
INT/L	LT	Spot, Vanity Mirror and Trunk Room Lamps
IVC	EC	Intake Valve Timing Control Solenoid Valve
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
IVCSB1	EC	Intake Valve Timing Control Position Sensor Bank 1
IVCSB2	EC	Intake Valve Timing Control Position Sensor Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., Oil and Fuel Gauges
MIL	EC	Malfunction Indicator Lamp
MIRROR	GW	Door Mirror
NATS	BL	Nissan Anti-Theft System
NONDTC	AT	Non-detective Items
O2H1B1	EC	Heated Oxygen Sensor 1(Front) Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 (Front) Heater Bank 2
O2H2B1	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 (Front) Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 (Front) Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 (Rear) Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 (Rear) Bank 2
OVRCSV	AT	Over Run Clutch Solenoid Valve
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHASE	EC	Camshaft Position Sensor (PHASE)
PHSB1	EC	Camshaft Position Sensor (PHASE) (Bank 1)
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank 2)
PNP/SW	AT	Park/Neutral Position Switch
PNP/SW	EC	Park/Neutral Position Switch
POS	EC	Crankshaft Position Sensor (CKPS) (POS)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor

# HARNESSES

PS/SEN	EC	Power Steering Oil Pressure Sensor	A
PST/SW	EC	Power Steering Oil Pressure Switch	
REMOTE	AV	Audio (Remote Control Switch)	
ROOM/L	LT	Interior Room Lamp	B
RP/SEN	EC	Refrigerant Pressure Sensor	
S/SIG	EC	Start Signal	
SEAT	SE	Power Seat	C
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock System	
SROOF	RF	Sunroof	D
SRS	SRS	Supplemental Restraint System	
SSV/A	AT	Shift Solenoid Valve A	
SSV/B	AT	Shift Solenoid Valve B	E
START	SC	Starting System	
STEP/L	LT	Step Lamp	
STOP/L	LT	Stop Lamp	F
TLID	BL	Trunk Lid Opener	
TAIL/L	LT	Parking, License and Tail Lamps	
TCCSIG	AT	A/T TCC Signal (Lock Up)	G
TCS	BRC	Traction Control System	
TCV	AT	Torque Converter Clutch Solenoid Valve	
TPS	AT	Throttle Position Sensor	H
TPS1	EC	Throttle Position Sensor	
TPS2	EC	Throttle Position Sensor	
TPS3	EC	Throttle Position Sensor	I
TRNSCV	BL	HOMELINK® Universal Transceiver	
TRSA/T	AT	Turbine Revolution Sensor	
TURN	LT	Turn Signal and Hazard Warning Lamps	J
VEHSEC	BL	Vehicle Security System	
VENT/V	EC	EVAP Canister Vent Control Valve	
VIAS	EC	Variable Air Induction Control System	PG
VIAS/V	EC	Variable Air Induction Control System Valve	
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)	
VSSMTR	AT	Vehicle Speed Sensor Meter	L
W/ANT	AV	Audio Antenna	
WARN	DI	Warning Lamps	
WINDOW	GW	Power Window	M
WIPER	WW	Front Wiper and Washer	

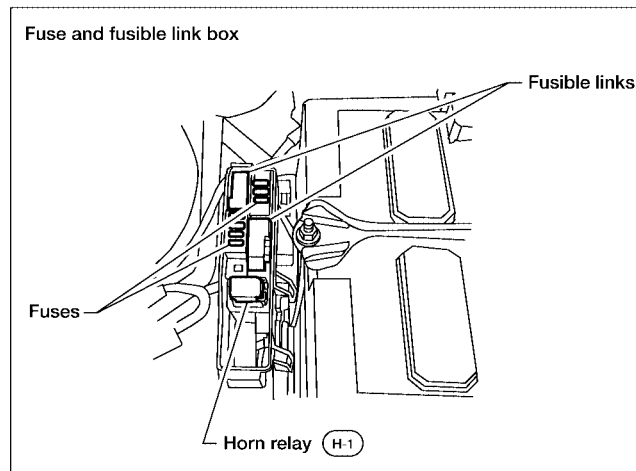
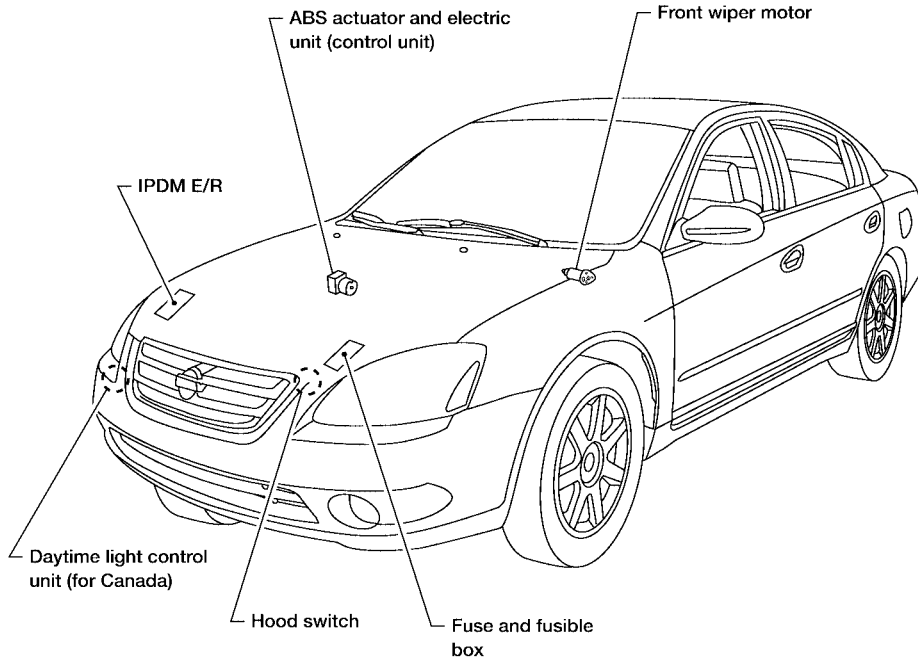
# ELECTRICAL UNITS LOCATION

PF2:25230

EKS002LH

## ELECTRICAL UNITS LOCATION

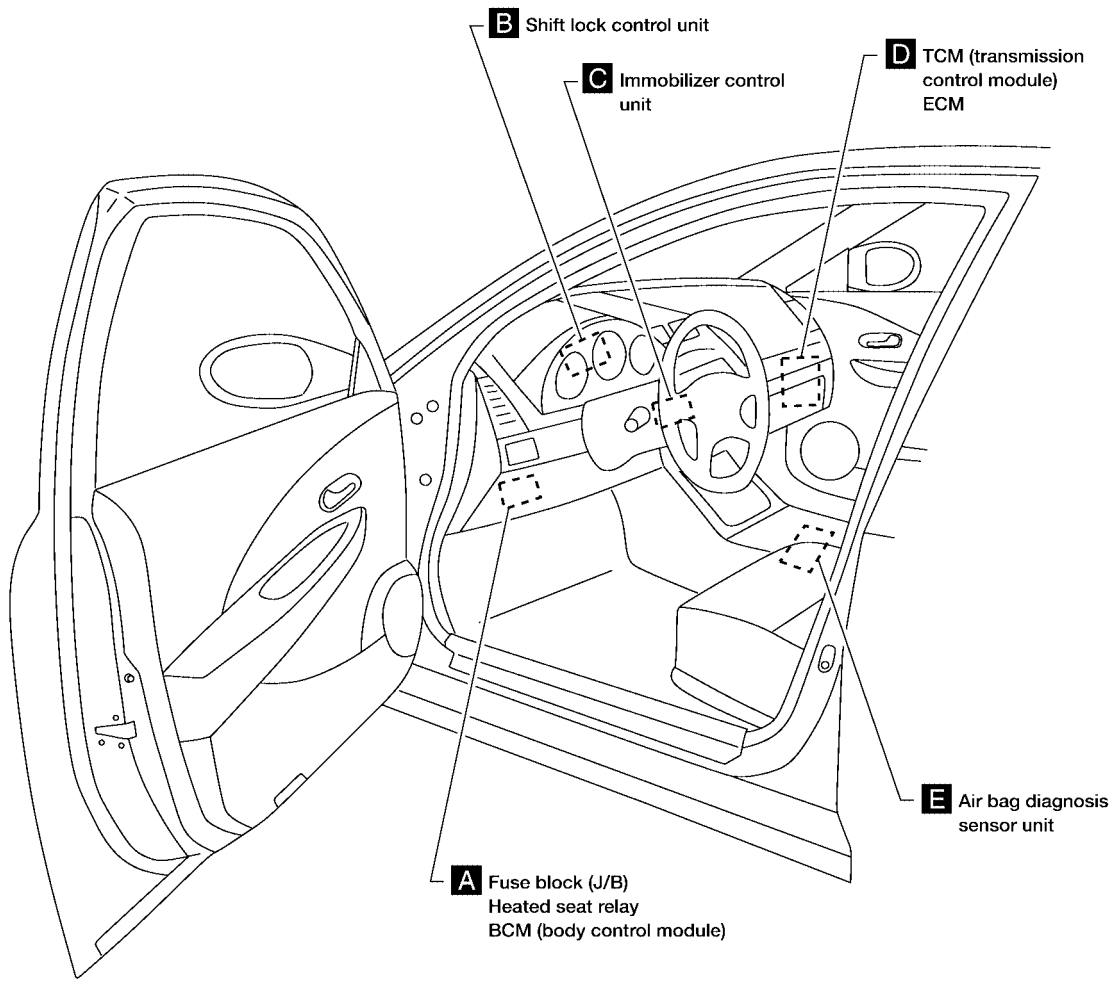
### Electrical Units Location ENGINE COMPARTMENT



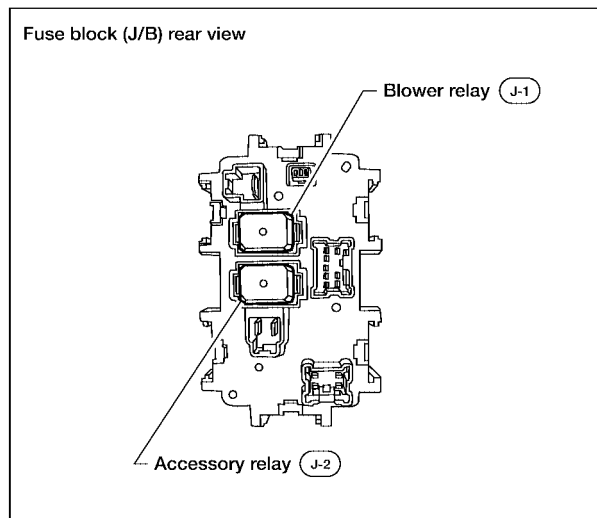
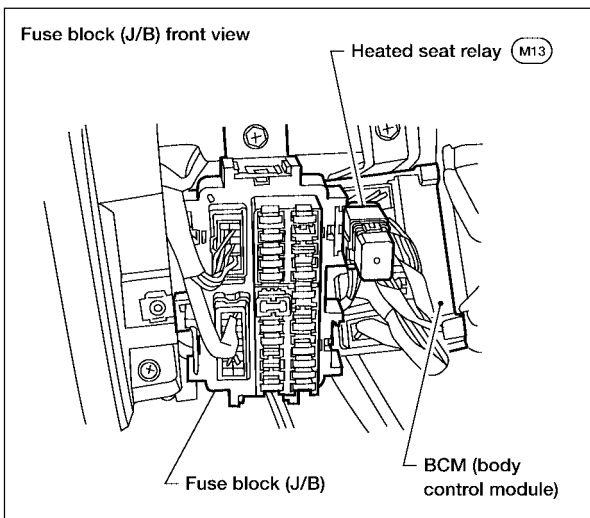
WKIA0124E

# ELECTRICAL UNITS LOCATION

## PASSENGER COMPARTMENT

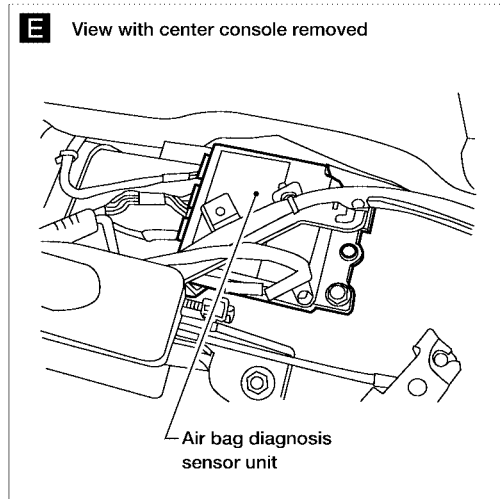
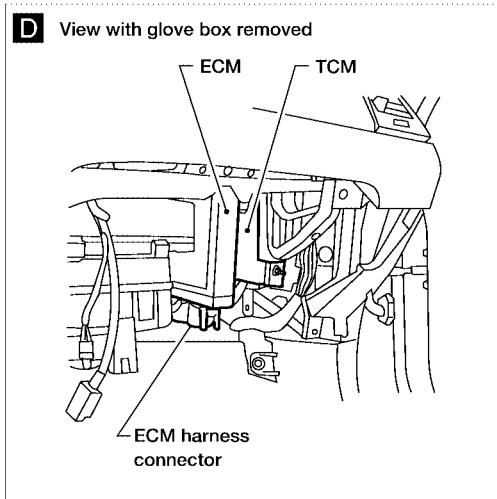
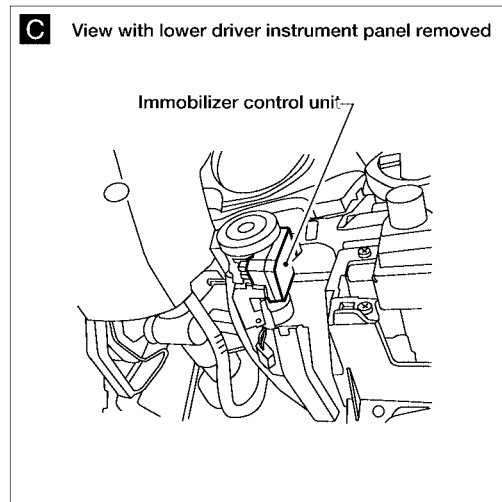
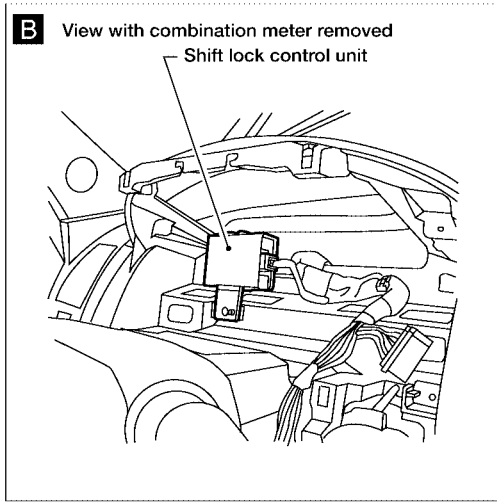


### **A** Dash side LH



WKIA0125E

# ELECTRICAL UNITS LOCATION



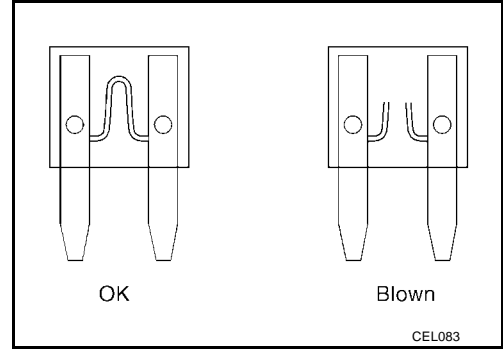
WKIA0131E

# ELECTRICAL UNITS LOCATION

## Fuse

EKS002LI

- If fuse is blown, be sure to eliminate cause of incident before installing new fuse.
- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.



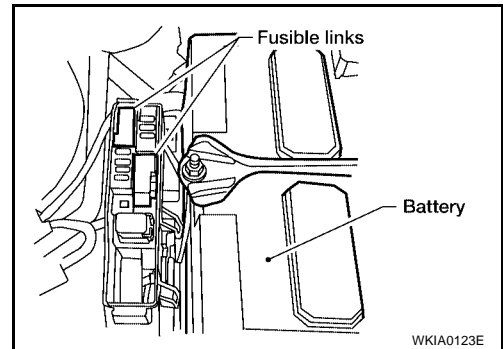
## Fusible Link

EKS002LJ

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

### CAUTION:

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



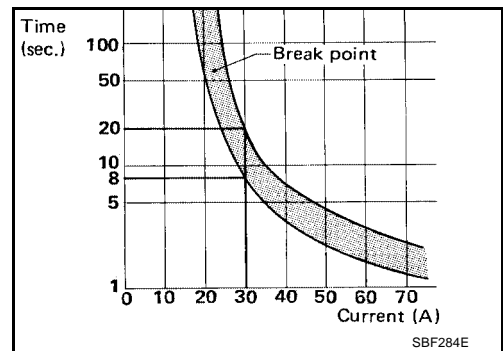
## Circuit Breaker (Built Into BCM)

EKS002LK

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

A circuit breaker is used for the following systems:

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



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

# HARNESS CONNECTOR

PFP:B4341

## HARNESS CONNECTOR

EKS002LL

### Description

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

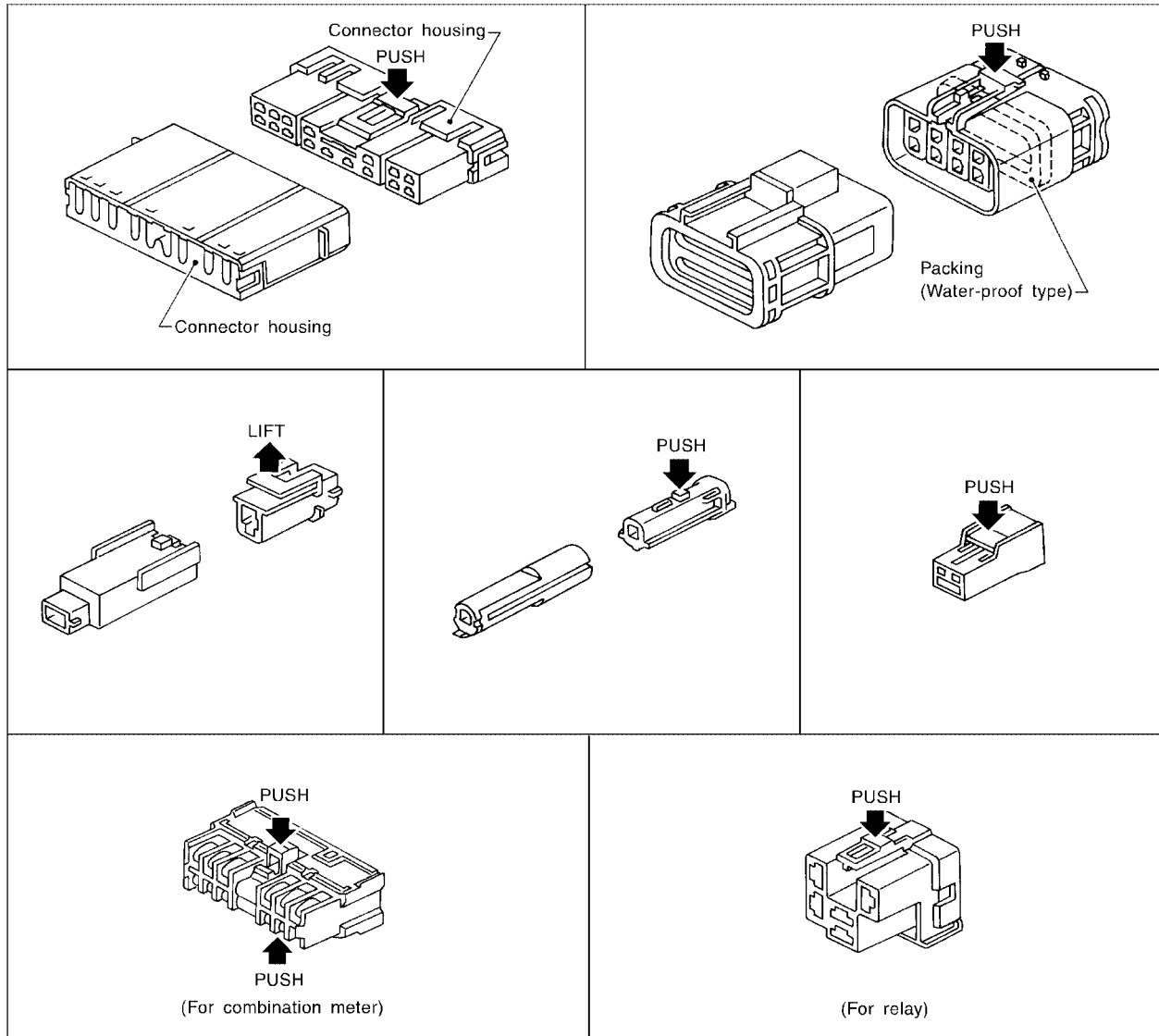
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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



# HARNESS CONNECTOR

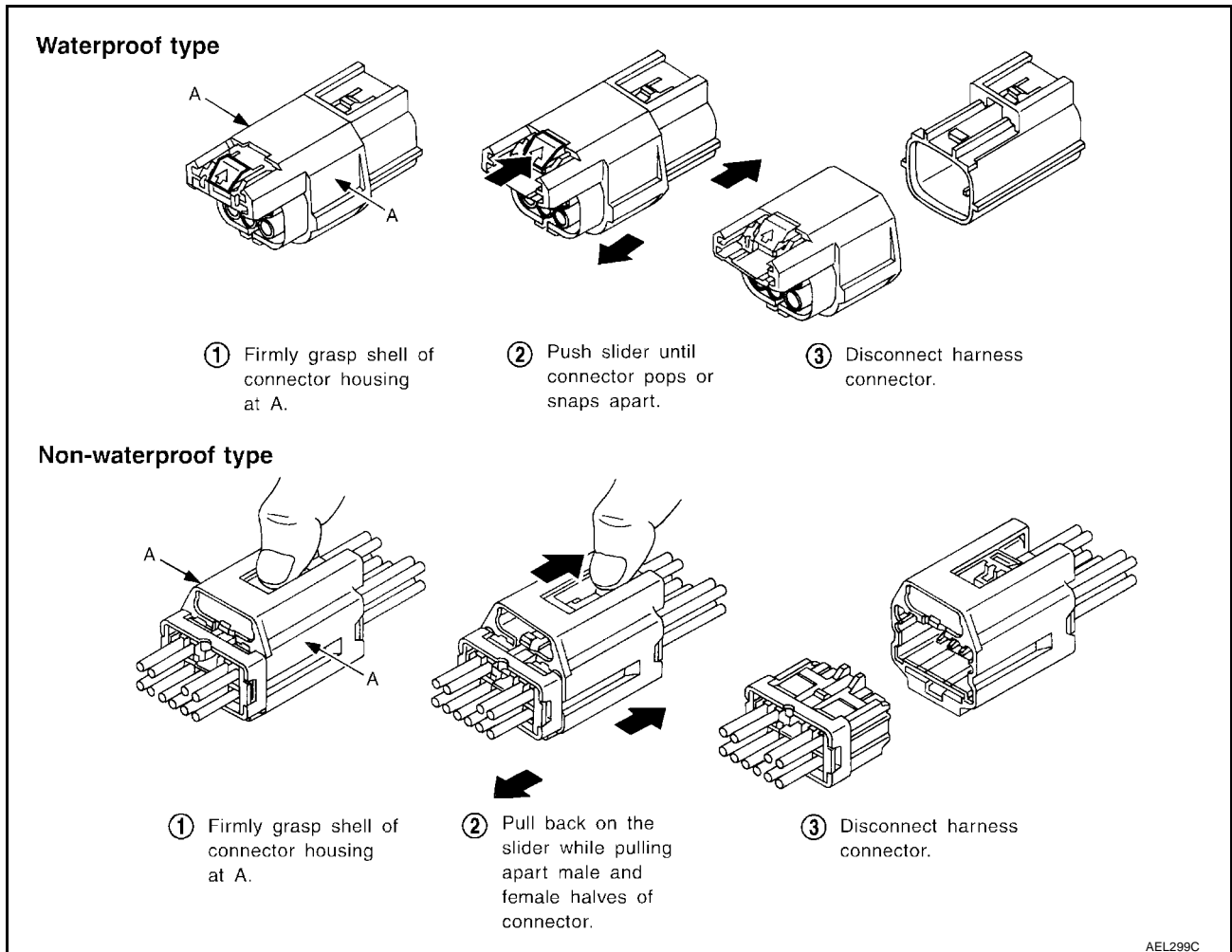
## HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



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

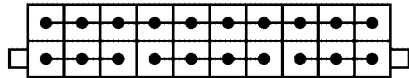
# JOINT CONNECTOR (J/C)

## JOINT CONNECTOR (J/C) Terminal Arrangement

PF-P:B4341

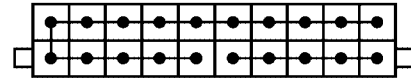
EKS002LM

Joint connector-1 (M16)



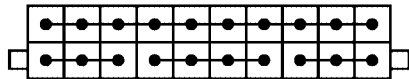
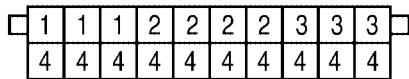
(Brown)

Joint connector-2 (M17)



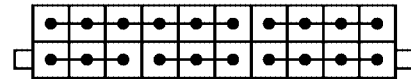
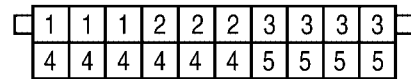
(Pink)

Joint connector-3 (M66)



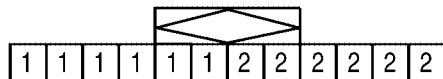
(Brown)

Joint connector-7 (B37)



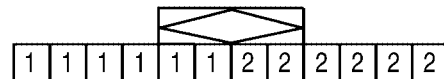
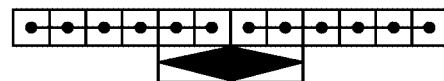
(Black)

Joint connector-4 (F51)



(Blue)

Joint connector-5 (F52)



(Blue)

WKIA0126E

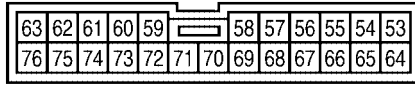
# ELECTRICAL UNITS

## ELECTRICAL UNITS Terminal Arrangement

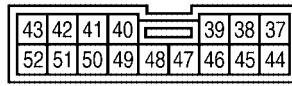
PFP:23710

EKS002LN

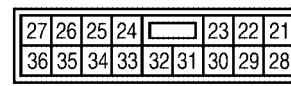
### BCM (BODY CONTROL MODULE)



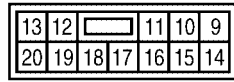
(M18)



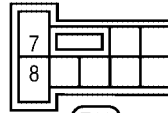
(M19)



(M20)



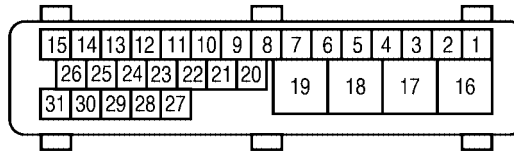
(M21)



(E39)



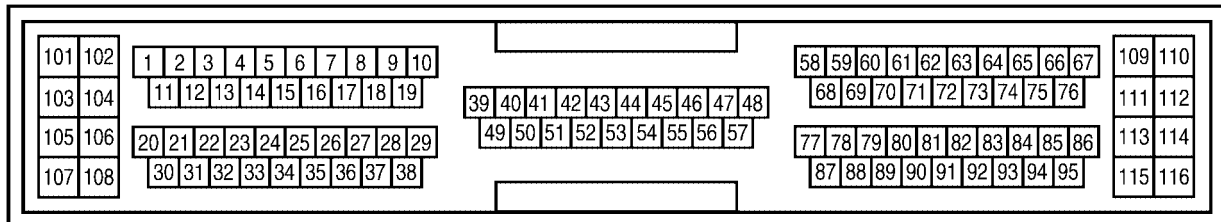
### ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



(E125)



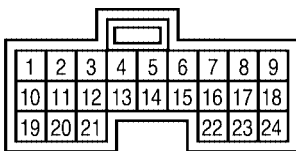
### ECM



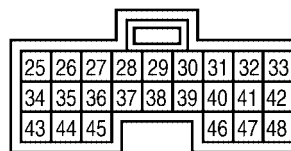
(F54)



### TCM (TRANSMISSION CONTROL MODULE)



(F56)



(F57)



WKIA0127E

# SMJ (SUPER MULTIPLE JUNCTION)

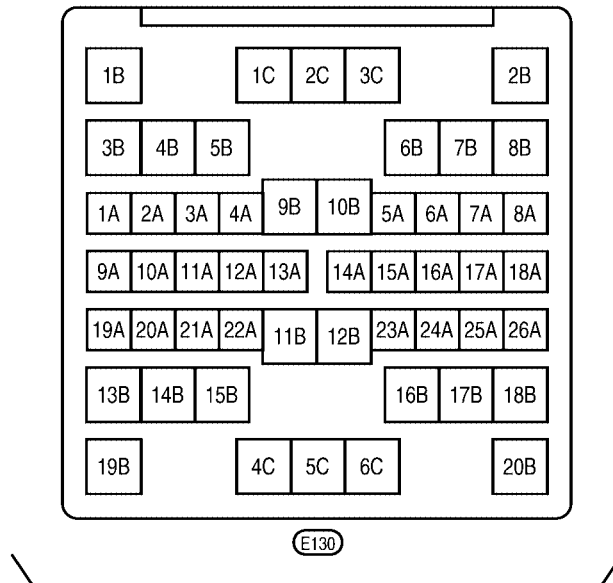
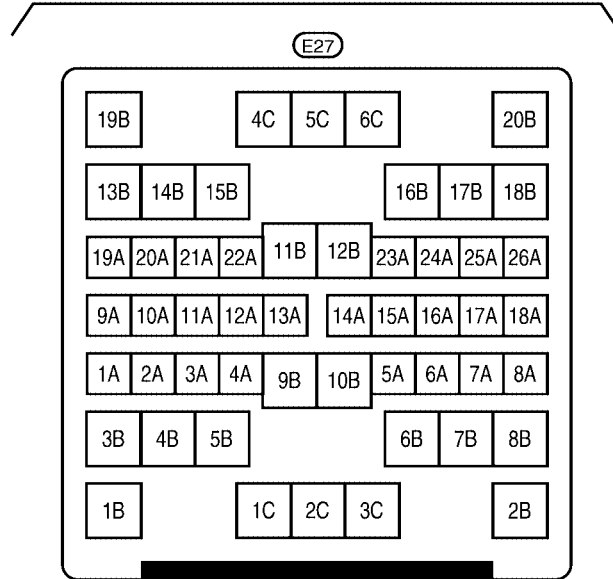
PF0:B4341

EKS002LO

## SMJ (SUPER MULTIPLE JUNCTION)

### Terminal Arrangement

#### ENGINE ROOM HARNESS LH



#### ENGINE ROOM HARNESS RH

WKIA0128E

# STANDARDIZED RELAY

PFP:25230

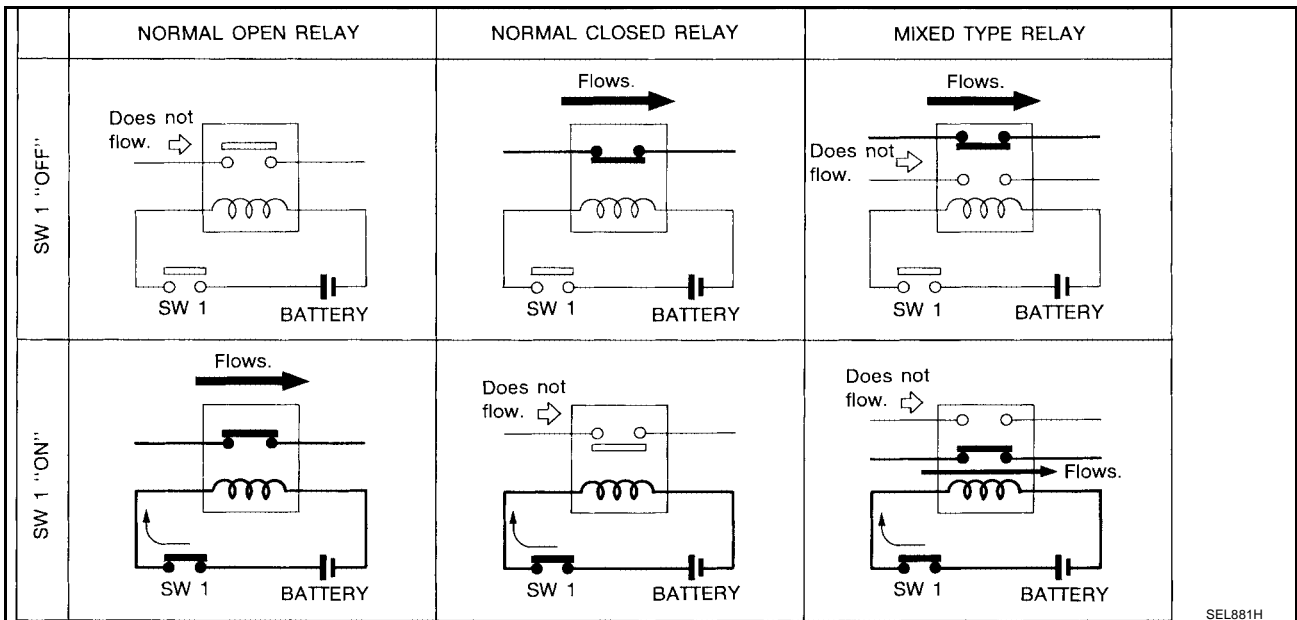
EKS002LP

## STANDARDIZED RELAY

### Description

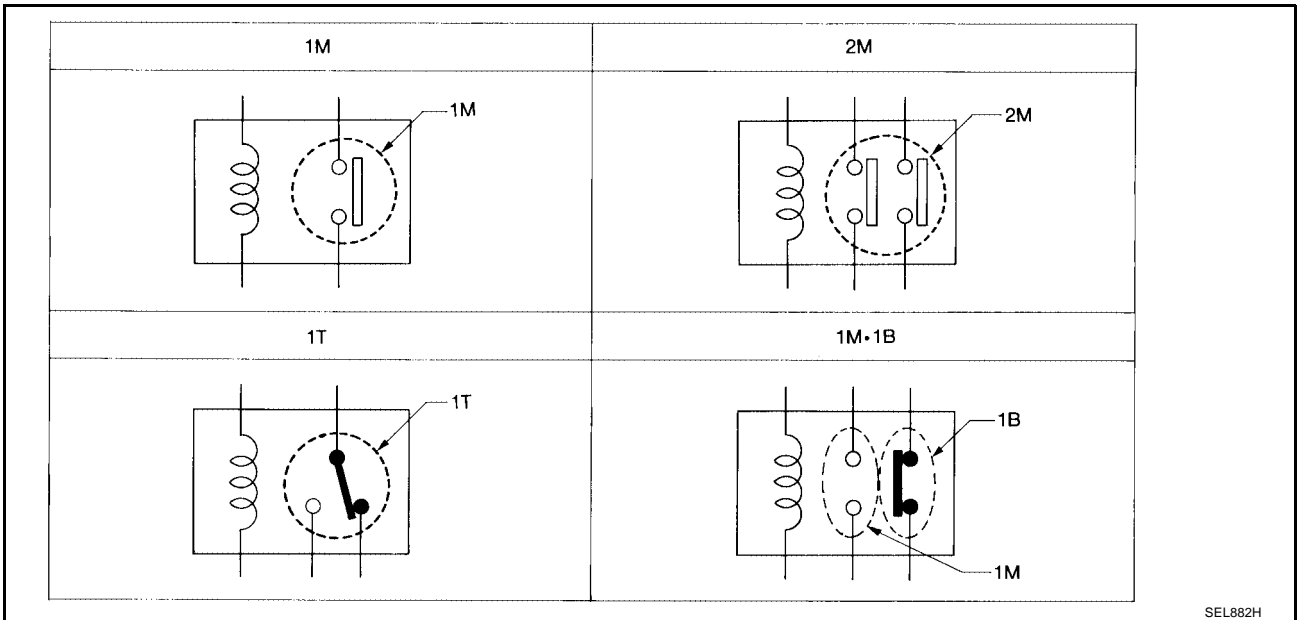
#### NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



SEL881H

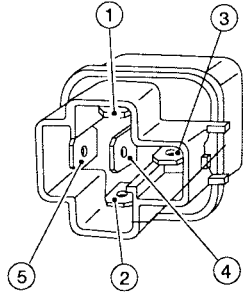
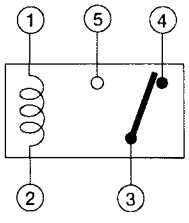
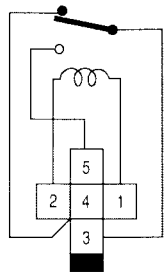
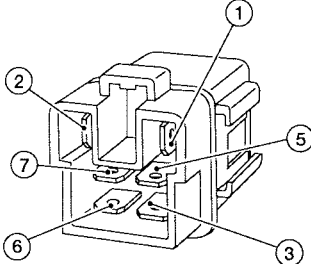
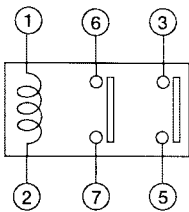
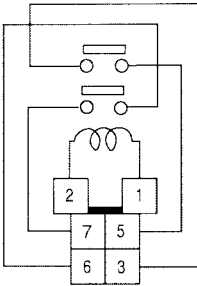
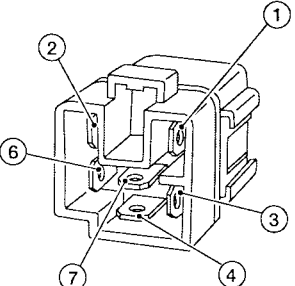
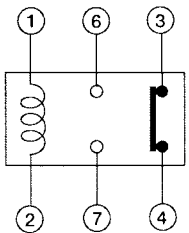
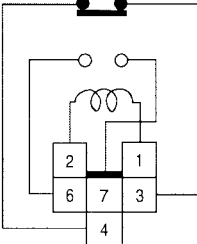
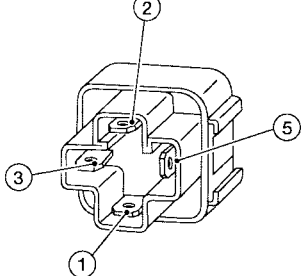
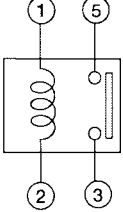
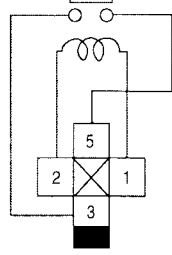
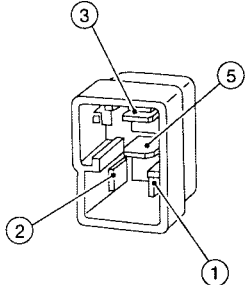
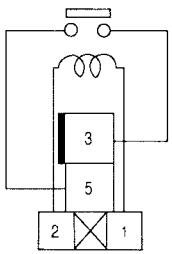
### TYPE OF STANDARDIZED RELAYS



SEL882H

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

# STANDARDIZED RELAY

Type	Outer view	Circuit	Connector Symbol and connection	Case color
1T				BLACK
2M				BROWN
1M · 1B				GRAY
1M				BLUE OR GRAY
				

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

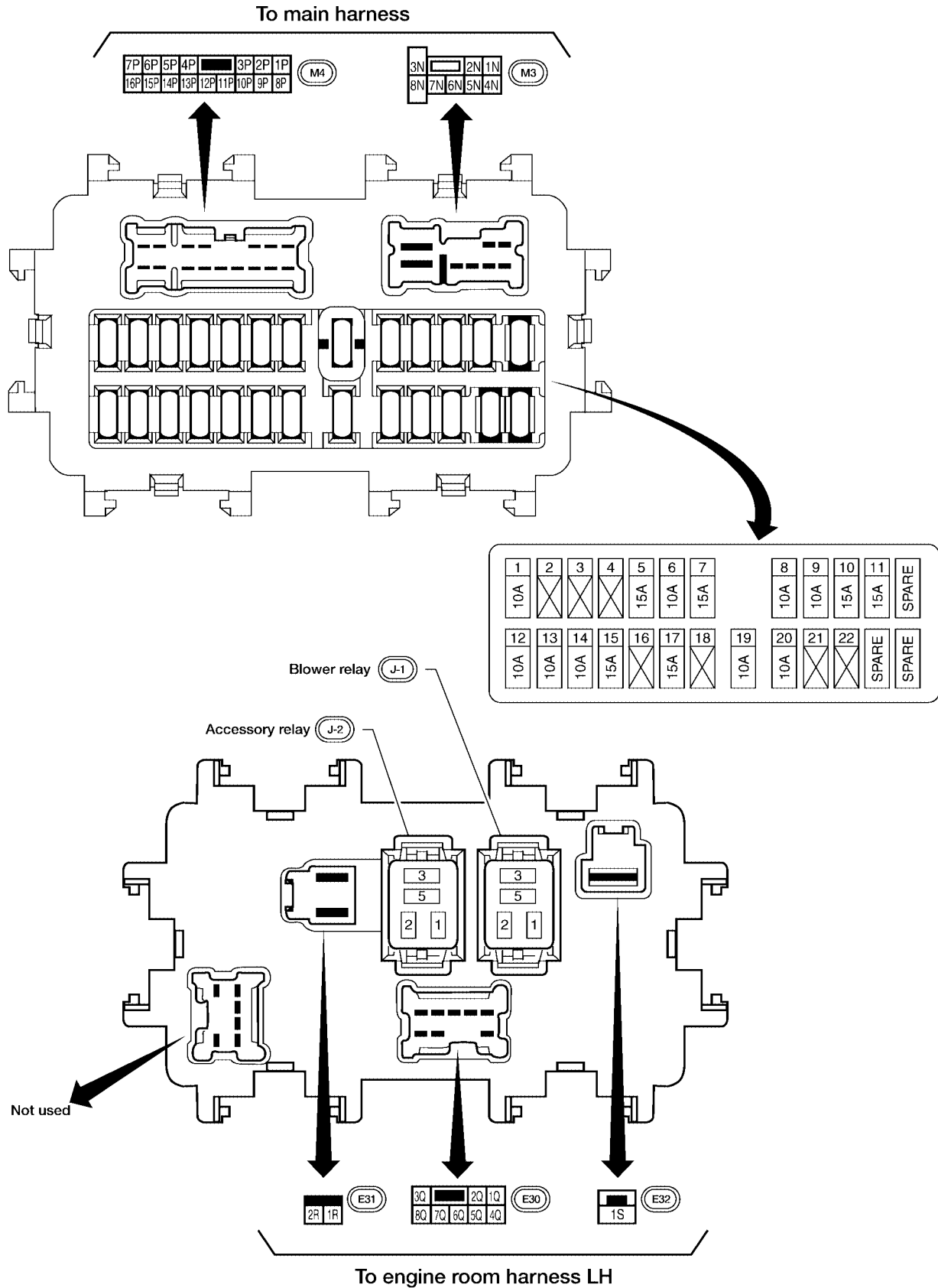
LEL638

# FUSE BLOCK-JUNCTION BOX(J/B)

## FUSE BLOCK-JUNCTION BOX(J/B) Terminal Arrangement

PF24350

EKS002LQ



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

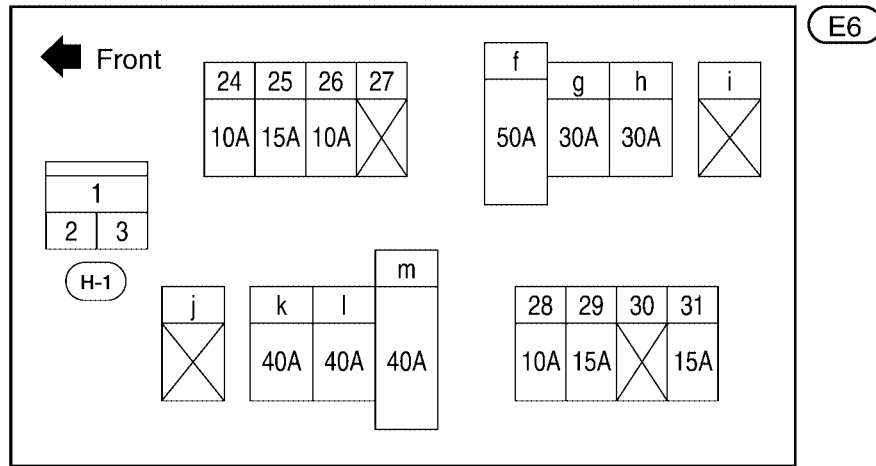
# FUSE AND FUSIBLE LINK BOX

## FUSE AND FUSIBLE LINK BOX

PF24381

### Terminal Arrangement

EKS002LR



24 - 31: FUSE      f - m: FUSIBLE LINK