

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

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

EKS0078U

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SRS and SB section of this Service Manual.

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SRS section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

Wiring Diagrams and Trouble Diagnosis

EKS0078W

When you read wiring diagrams, refer to the following:

- [GI-12, "How to Read Wiring Diagrams"](#)
- [PG-4, "POWER SUPPLY ROUTING CIRCUIT"](#)

When you perform trouble diagnosis, refer to the following:

- [GI-10, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES"](#)
- [GI-25, "How to Perform Efficient Diagnosis for an Electrical Incident"](#)

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POWER SUPPLY ROUTING CIRCUIT

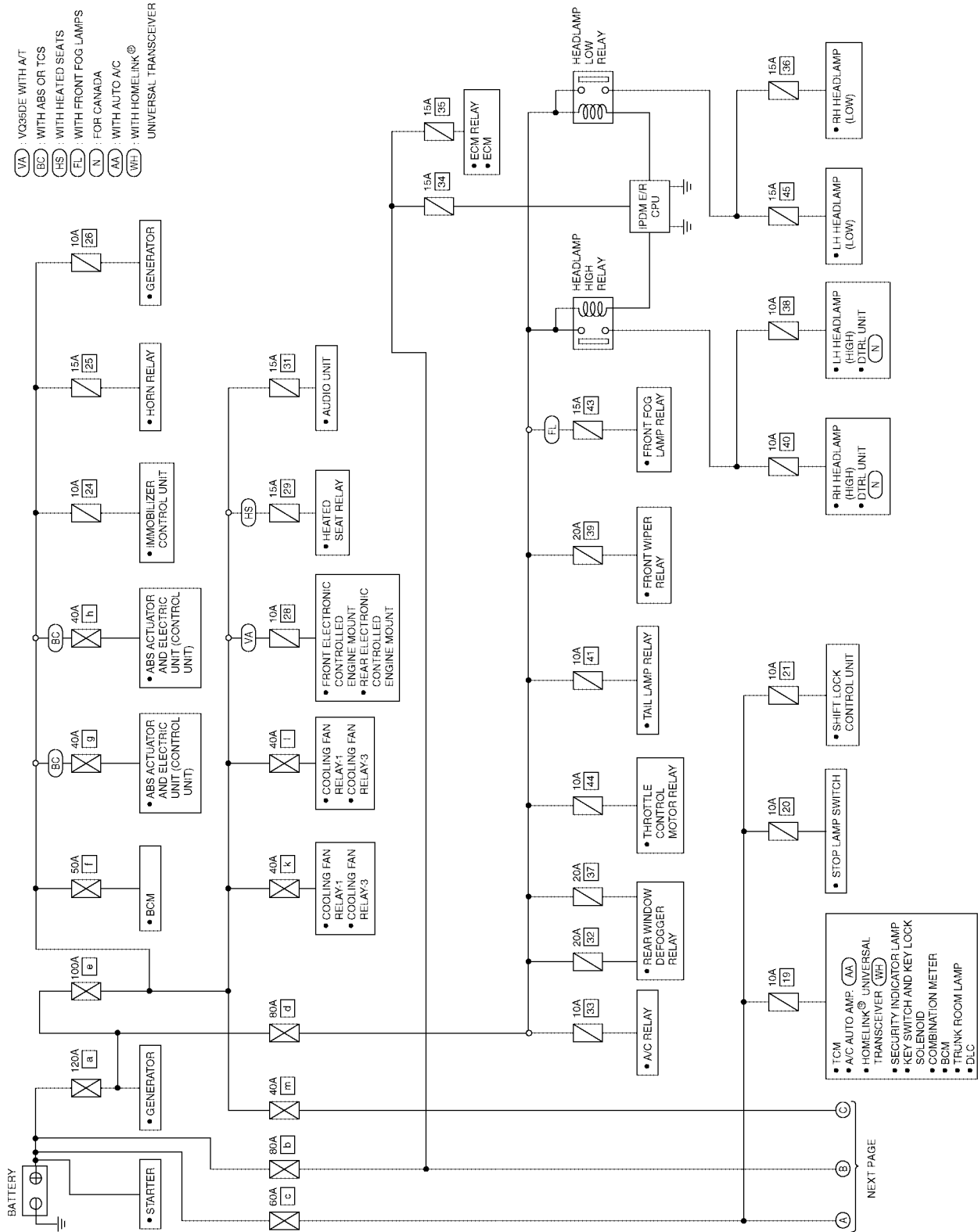
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EKS003J6

POWER SUPPLY ROUTING CIRCUIT

Schematic

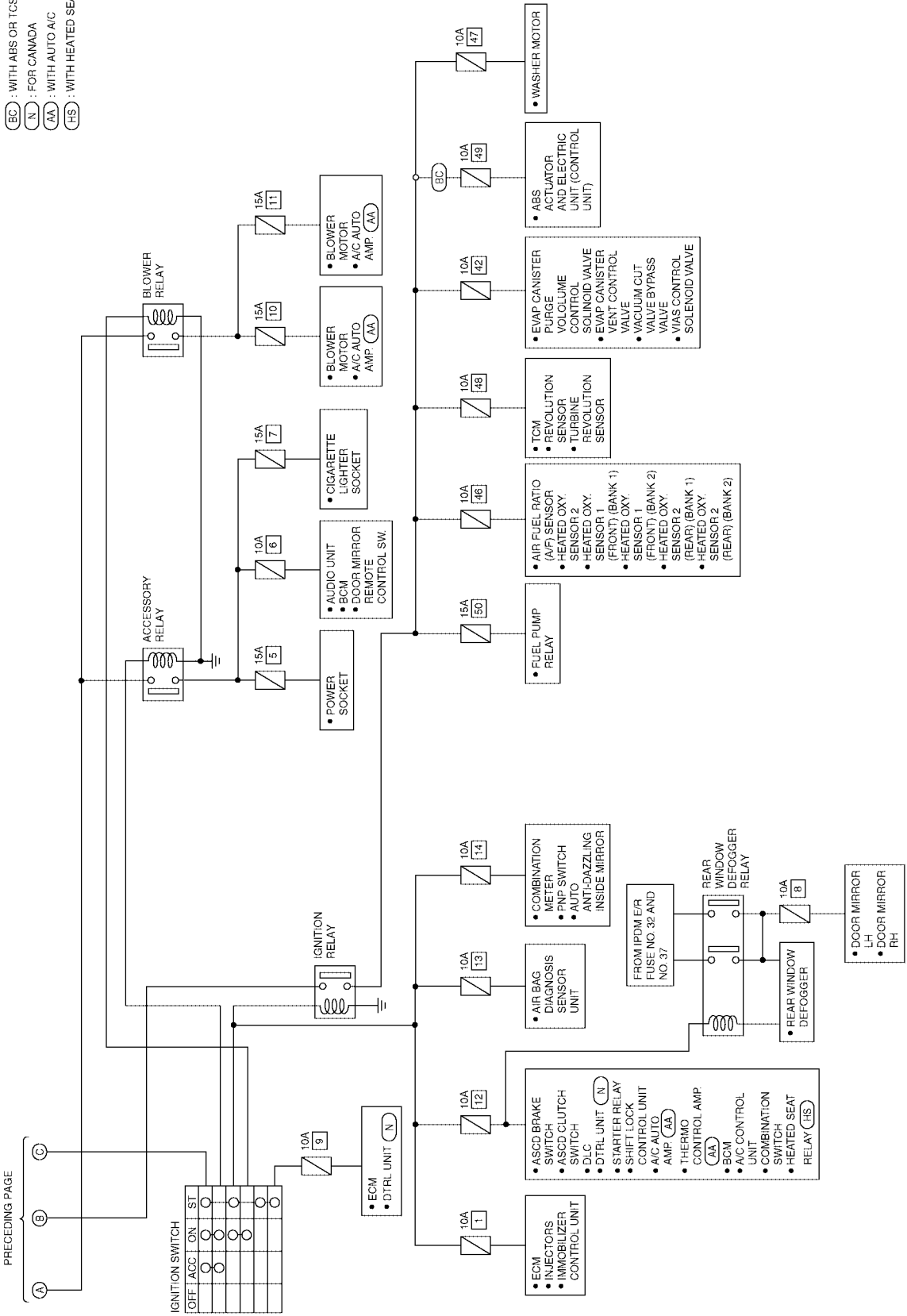
For detailed ground distribution, refer to [PG-28, "Ground Distribution"](#).



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POWER SUPPLY ROUTING CIRCUIT

- BC : WITH ABS OR TCS
- N : FOR CANADA
- AA : WITH AUTO A/C
- HS : WITH HEATED SEAT



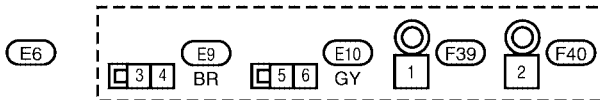
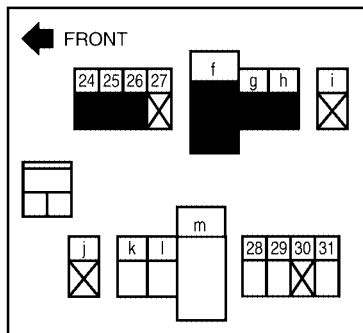
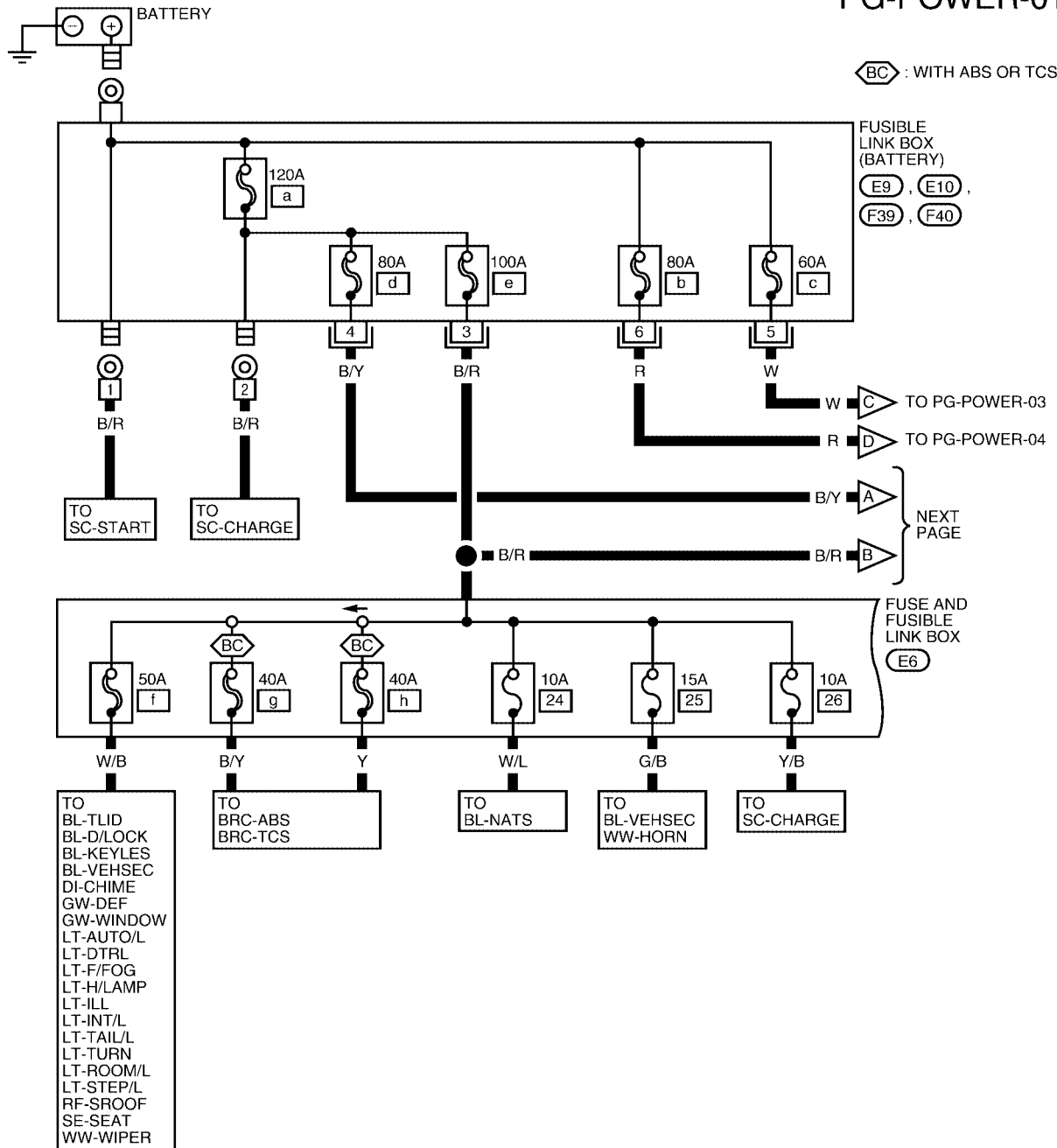
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POWER SUPPLY ROUTING CIRCUIT

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

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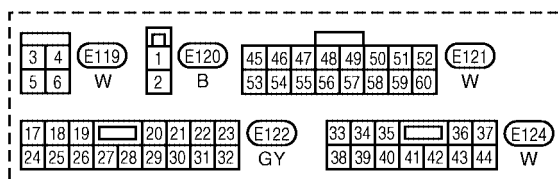
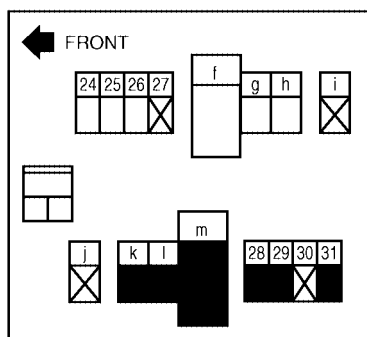
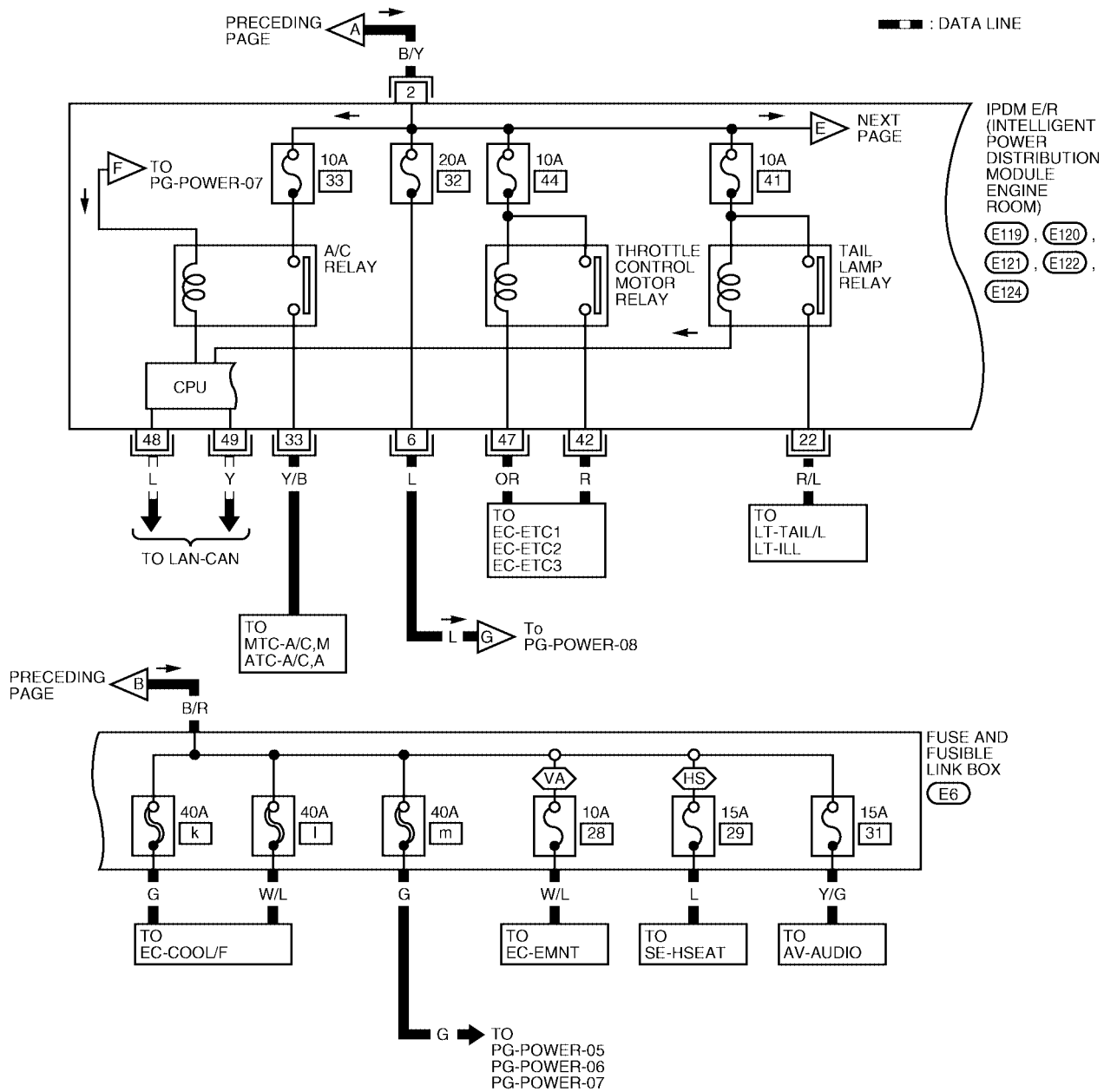
PG-POWER-01



WKWA0981E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02

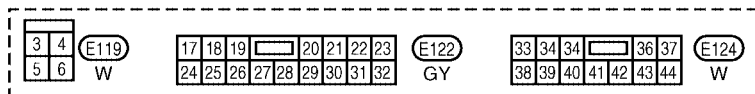
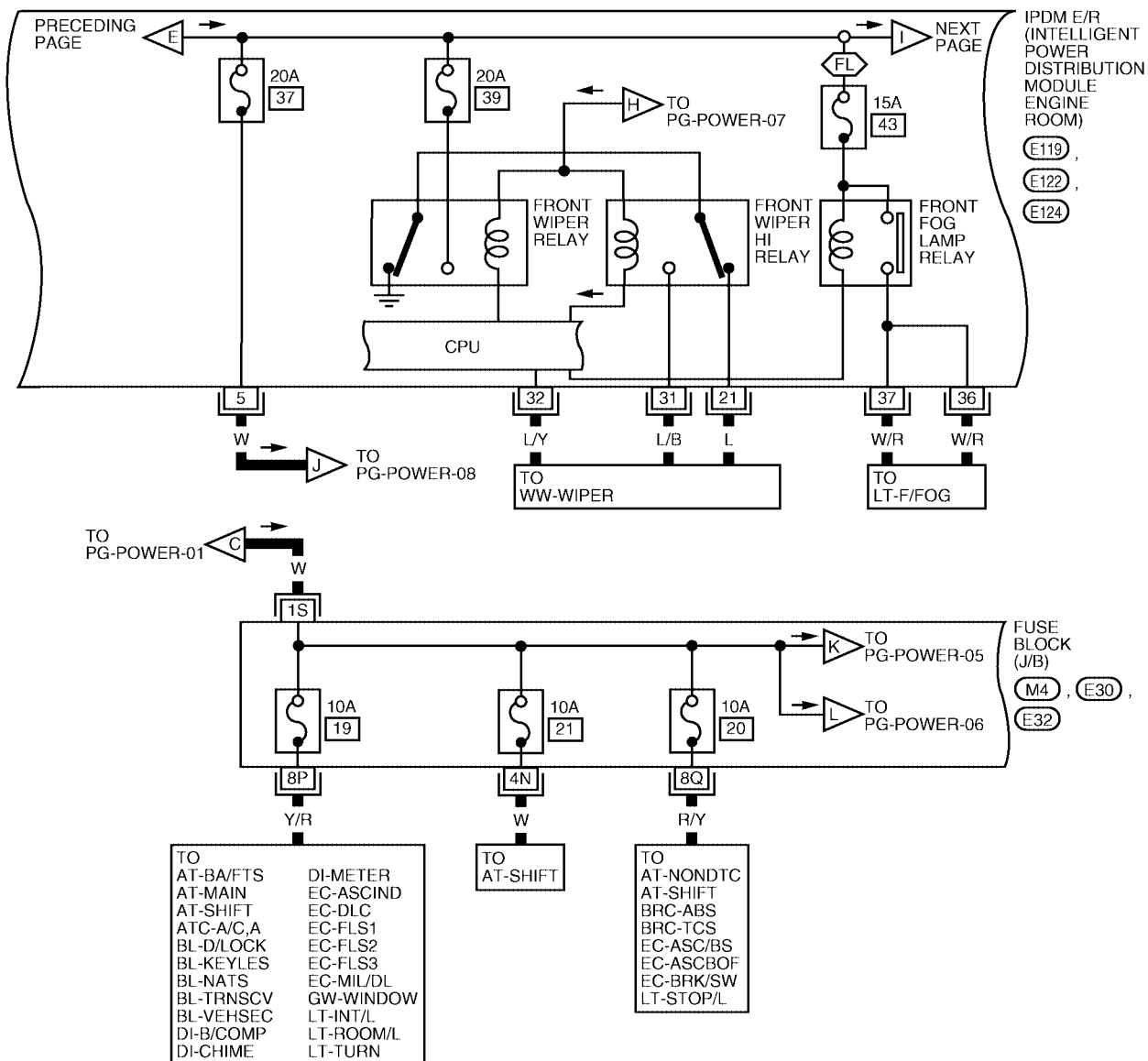


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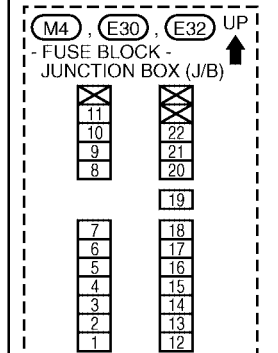
POWER SUPPLY ROUTING CIRCUIT

◁FL▷ : WITH FRONT FOG LAMPS

PG-POWER-03



REFER TO THE FOLLOWING.

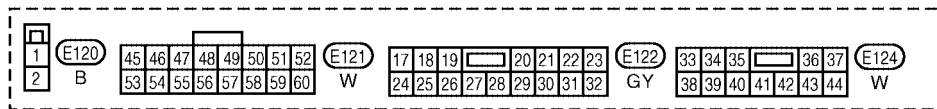
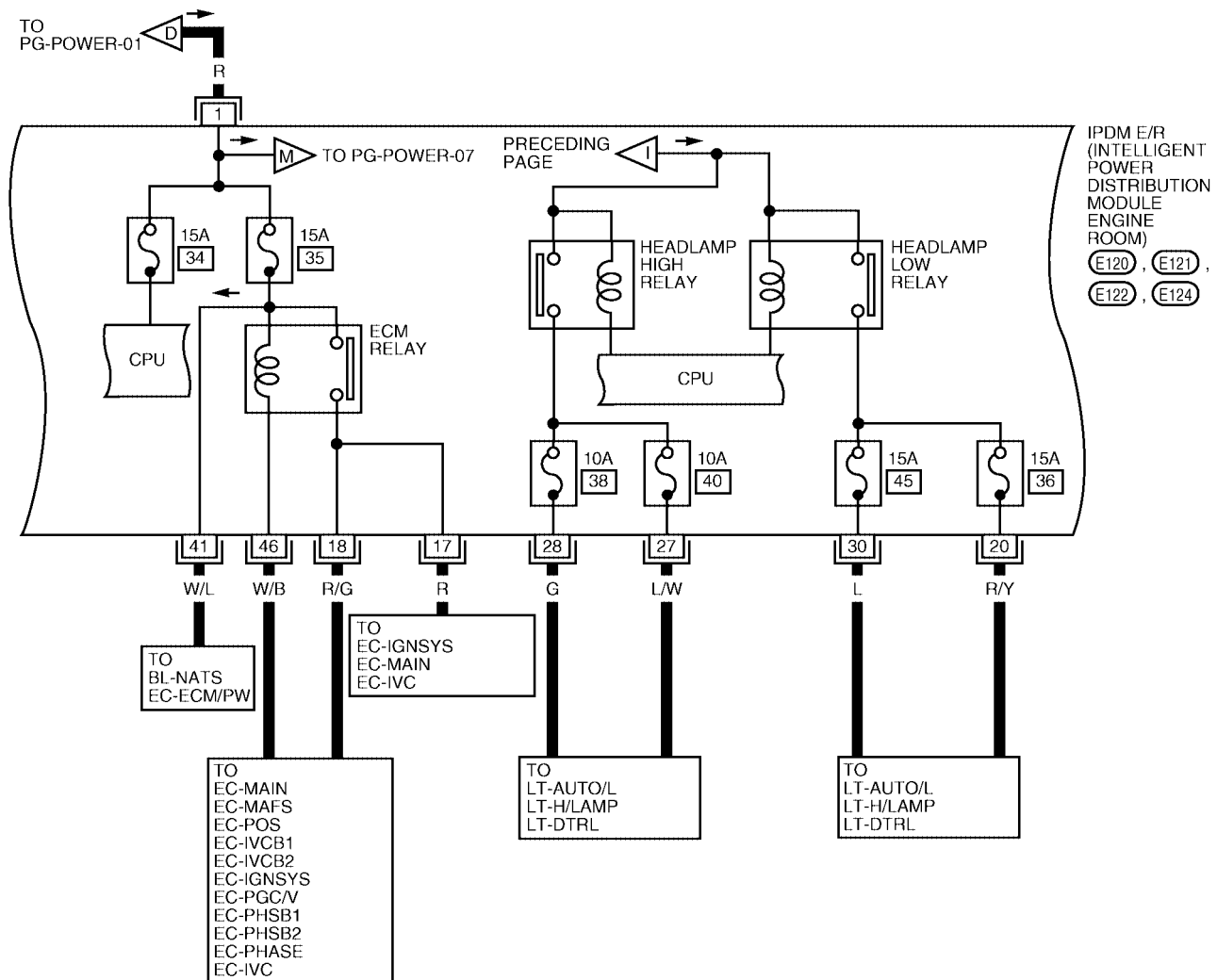


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POWER SUPPLY ROUTING CIRCUIT

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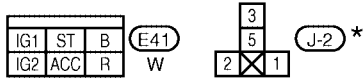
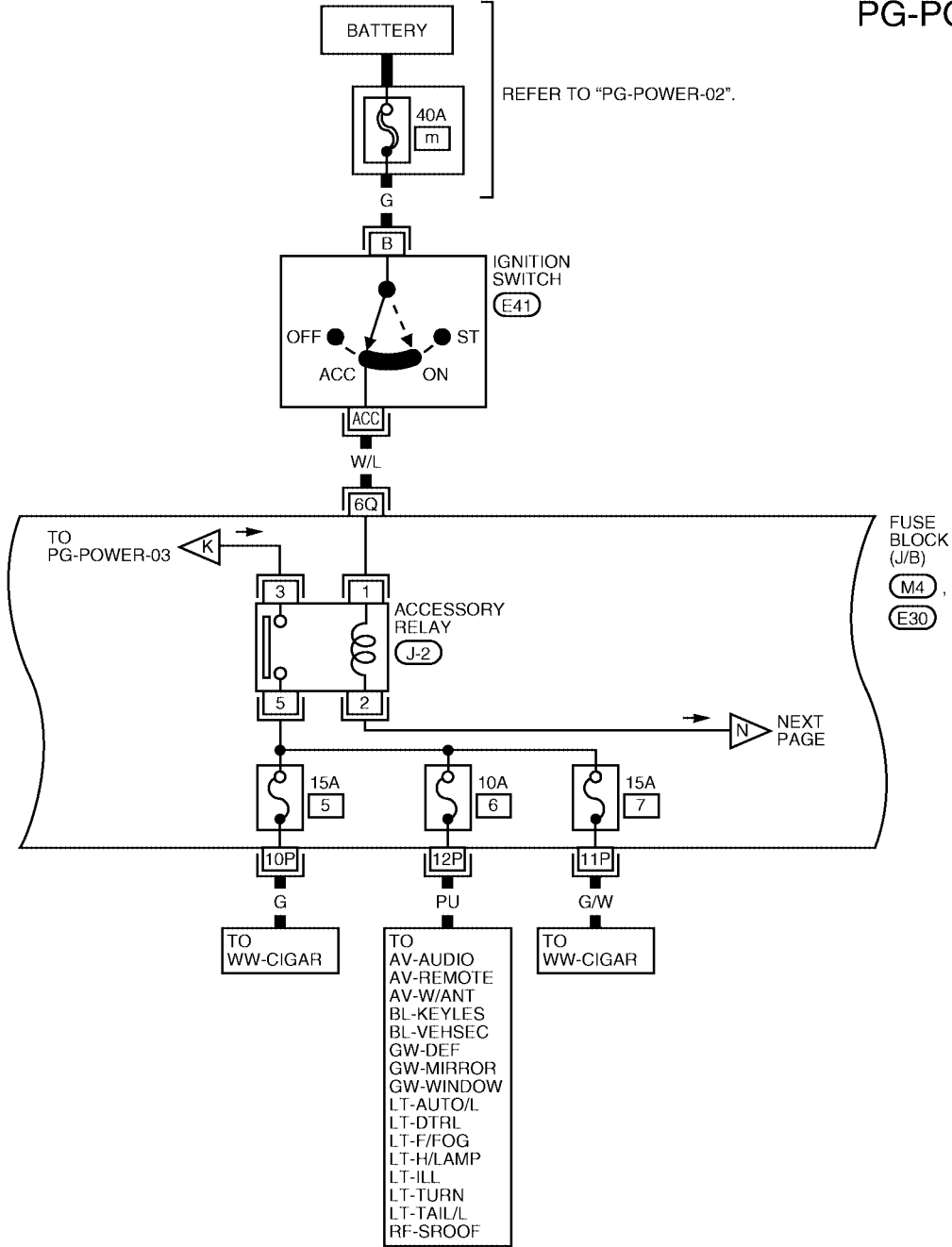


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POWER SUPPLY ROUTING CIRCUIT

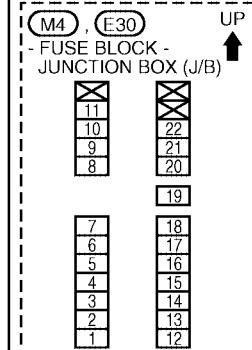
ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

PG-POWER-05



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

REFER TO THE FOLLOWING.



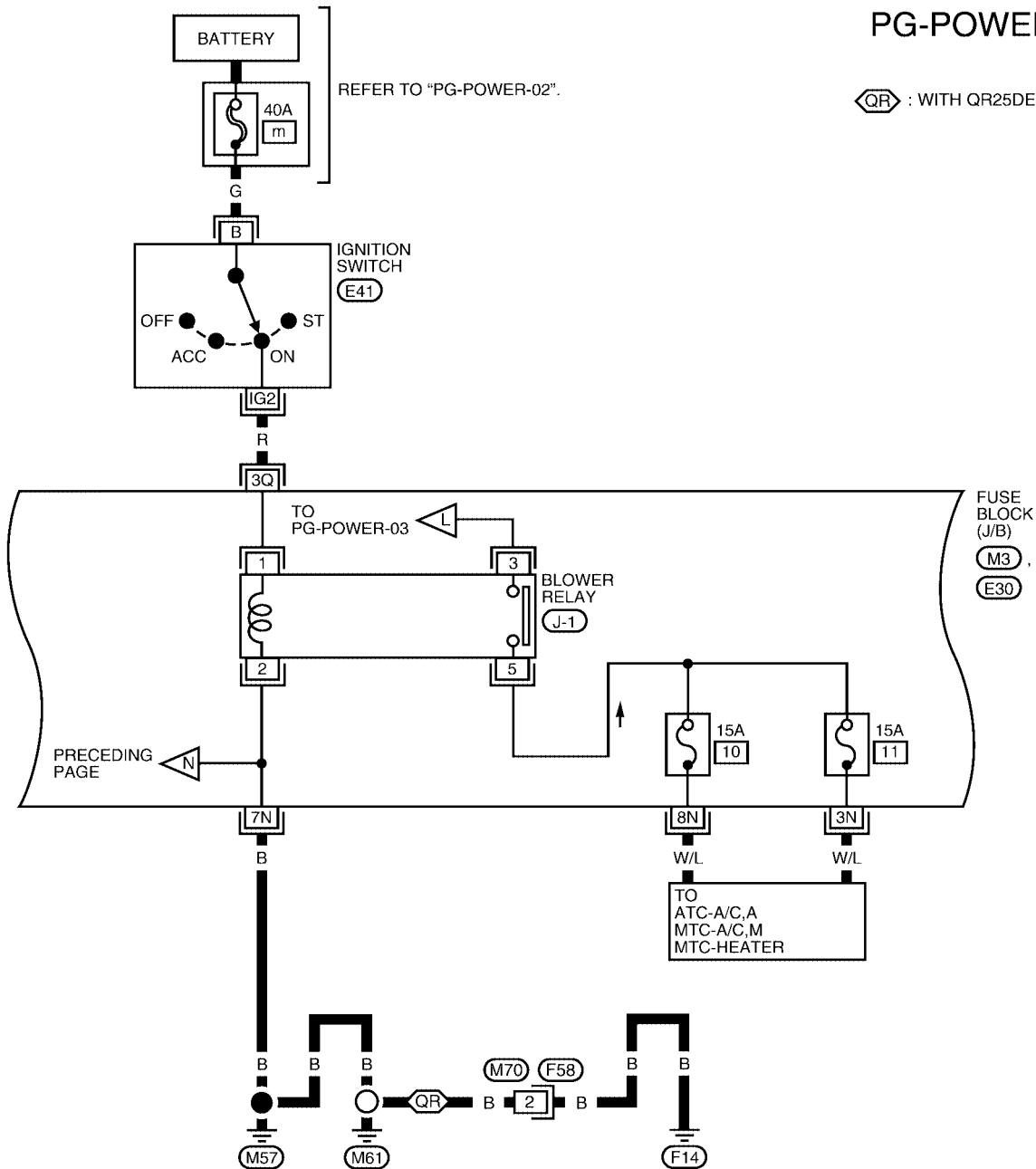
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POWER SUPPLY ROUTING CIRCUIT

IGNITION POWER SUPPLY — IGNITION SW. IN ON

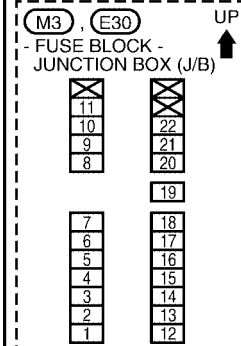
PG-POWER-06

QR : WITH QR25DE



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

REFER TO THE FOLLOWING.

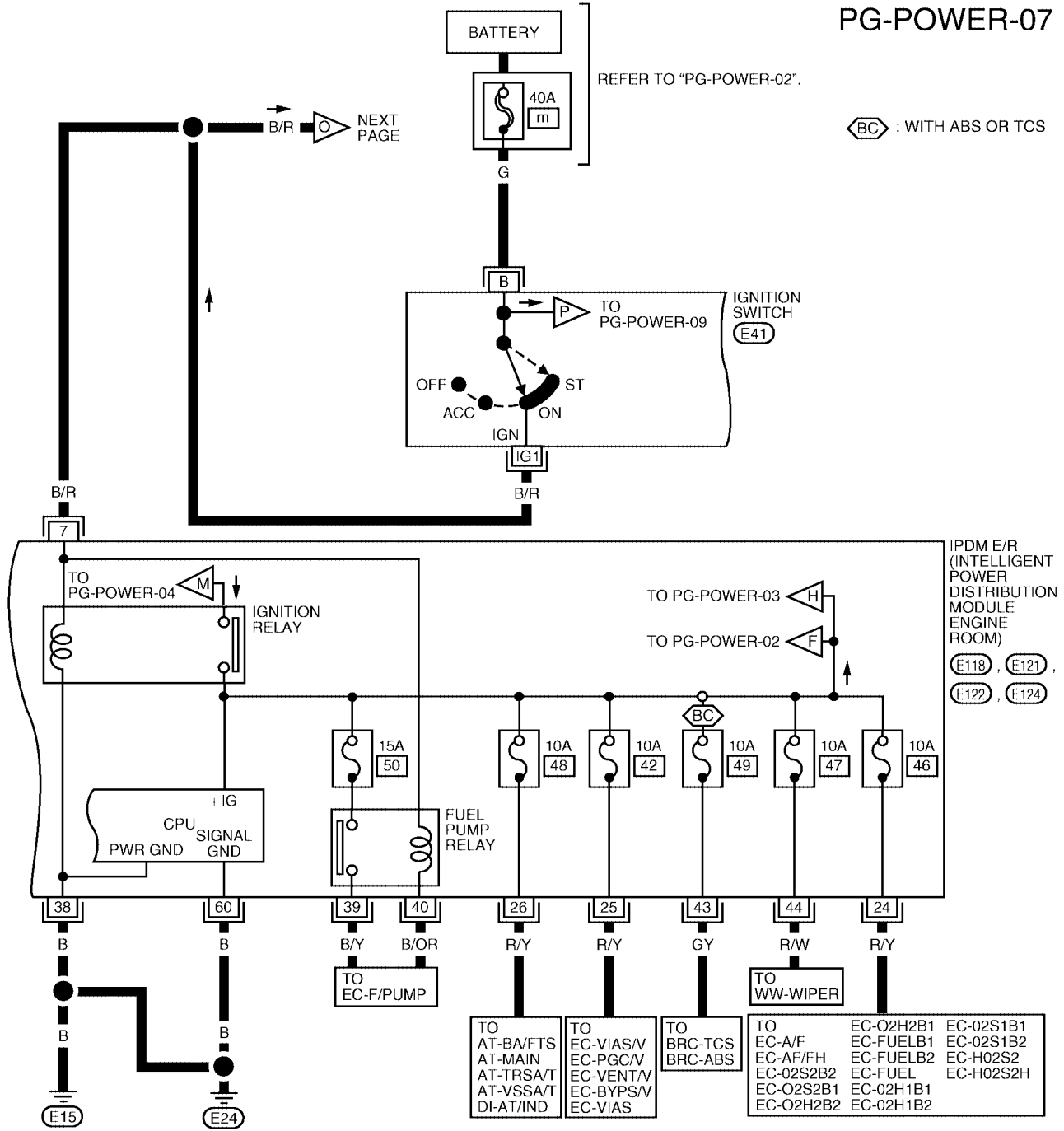


WKWA0986E

POWER SUPPLY ROUTING CIRCUIT

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

PG-POWER-07

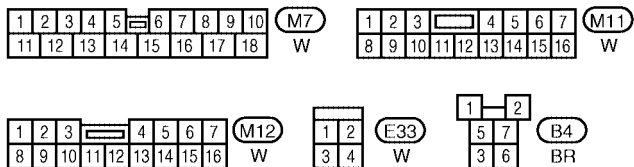
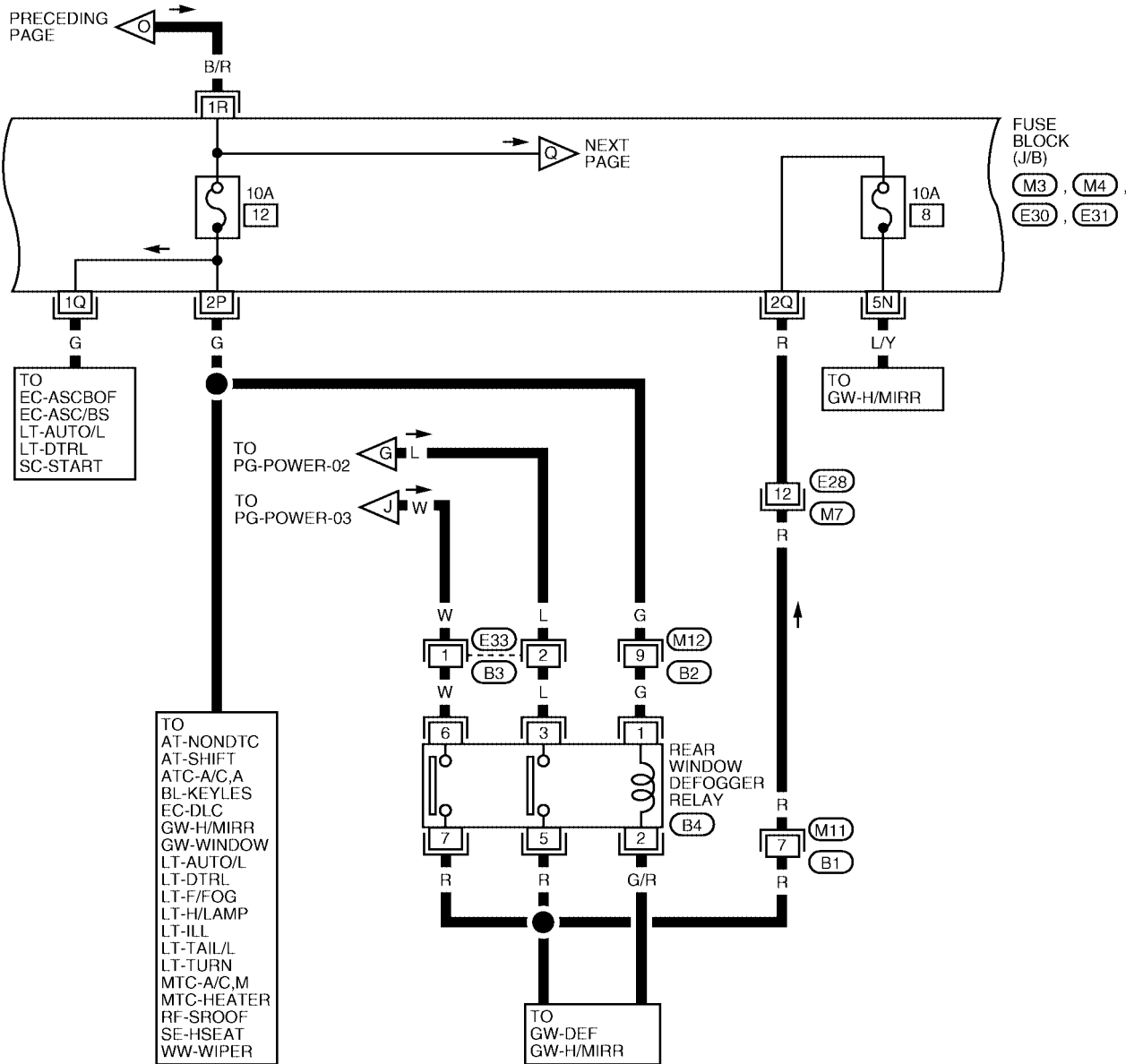


IG1	ST	B	(E41)	7	8	(E118)	45	46	47	48	49	50	51	52	(E121)	17	18	19	20	21	22	23	(E122)	33	34	35	36	37	(E124)				
IG2	ACC	R	W	9	10	B	53	54	55	56	57	58	59	60	W	24	25	26	27	28	29	30	31	32	GY	38	39	40	41	42	43	44	W

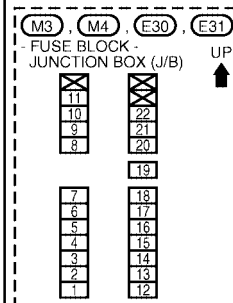
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POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08



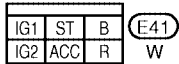
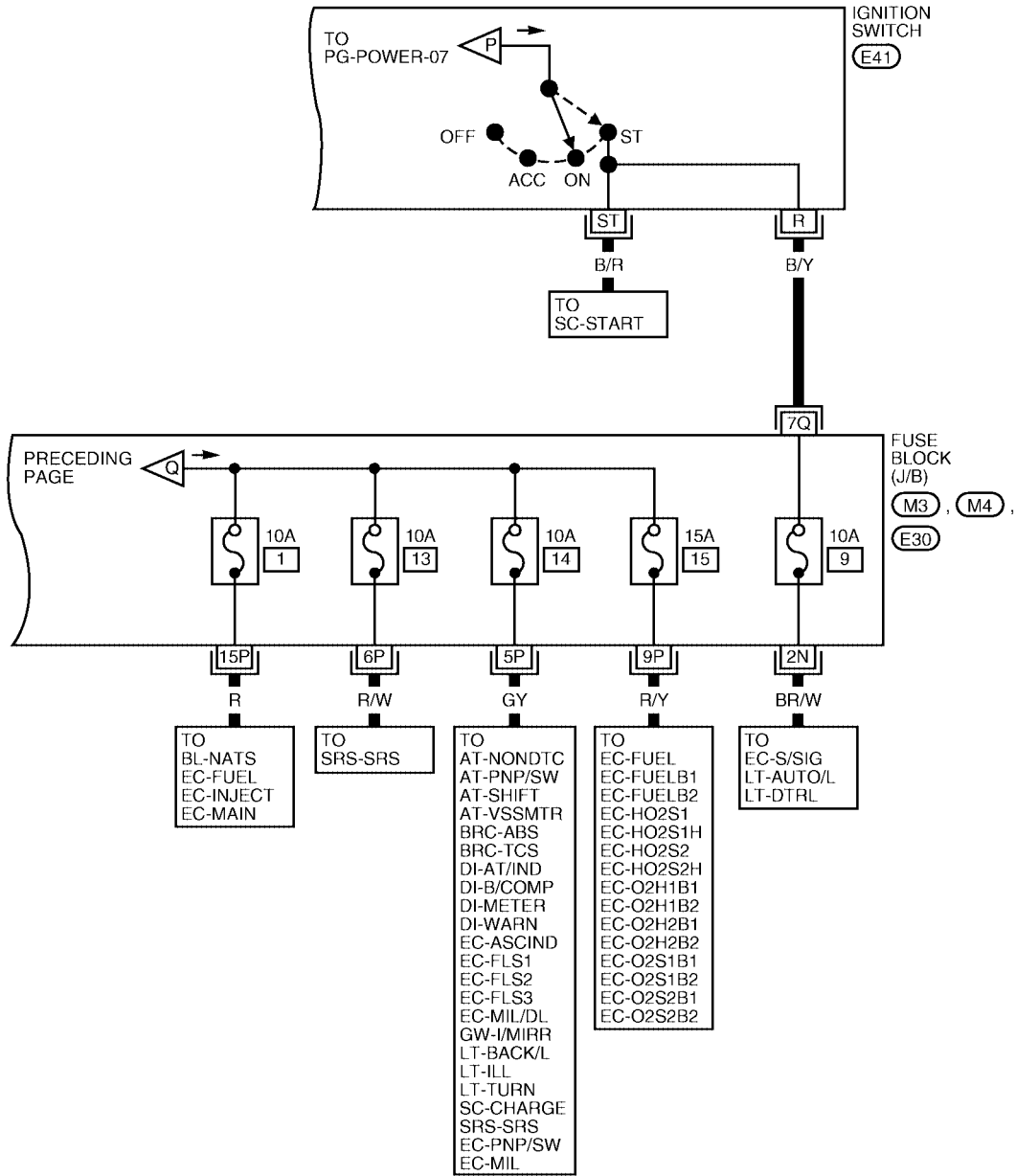
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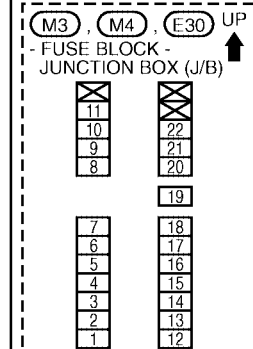
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POWER SUPPLY ROUTING CIRCUIT

PG-POWER-09



REFER TO THE FOLLOWING.



WKWA1800E

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

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

PF:284B7

System Description

EKS003J8

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

CAUTION:

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

SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control

Using CAN communication lines, it receives signals from the BCM and controls the following lamps:

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

2. Wiper control

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

3. Rear window defogger relay control

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

4. A/C compressor control

Using CAN communication lines, it receives signals from the ECM and controls the A/C compressor magnetic clutch).

5. Cooling fan control

Using CAN communication lines, it receives signals from the ECM and controls the cooling fan relays.

6. Horn control

Using CAN communication lines, it receives signals from the BCM and controls the horn relay.

CAN COMMUNICATION LINE CONTROL

With CAN communication, by connecting each control unit using two communication lines (CAN L-line, CAN H-line), it is possible to transmit 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 system	Fail-safe mode
Headlamp	<ul style="list-style-type: none">● With the ignition switch ON, the headlamp (low) is ON.● With the ignition switch OFF, the headlamp (low) is OFF.
Tail and parking lamps	<ul style="list-style-type: none">● With the ignition switch ON, the tail and parking lamps are ON.● With the ignition switch OFF, the tail and parking lamps are OFF.
Cooling fan	<ul style="list-style-type: none">● With the ignition switch ON, the cooling fan HI operates.● With the ignition switch OFF, the cooling fan stops.
Front wiper	Until the ignition switch is turned off, the front wiper LO and HI remains in the same status it was in just before fail-safe control was initiated.
Rear window defogger	Rear window defogger relay OFF
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

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

IPDM E/R STATUS CONTROL

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

1. CAN communication status
 - CAN communication is normally performed with other control units.
 - Individual unit control by IPDM E/R is normally performed.
 - When sleep request signal is received from BCM, mode is switched to sleep waiting status.
2. Sleep waiting status
 - Process to stop CAN communication is activated.
 - All systems controlled by IPDM E/R are stopped. When 1 second has 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 signal is detected, mode switches to CAN communication status.
 - When a change in ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

EKS0078X

Refer to [LAN-4, "CAN COMMUNICATION"](#) .

Function of Detecting Ignition Relay Malfunction

EKS0078Y

- When the integrated ignition relay is stuck in a "closed contact" position and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.
- When the state of the integrated ignition relay does not agree with the state of the ignition switch signal received via CAN communication, the IPDM E/R activates the tail lamp relay.

Ignition switch signal	Ignition relay status	Tail lamp relay
ON	ON	—
OFF	OFF	—
ON	OFF	—
OFF	ON	ON (10 minutes)

NOTE:

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

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

CONSULT-II Function (IPDM E/R)

EKS0078Z

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

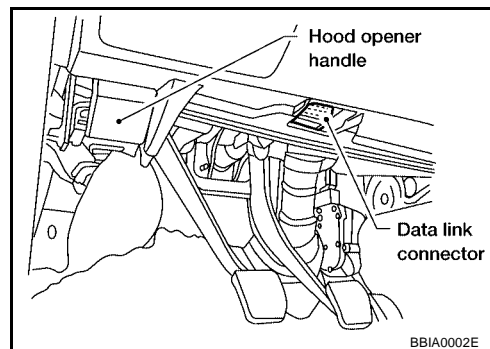
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
ACTIVE TEST	The IPDM E/R sends a drive signal to electronic components to check their operation.
CAN DIAG SUPPORT MNTR	The results of transmit/receive diagnosis of CAN communication can be read.

CONSULT-II BASIC OPERATION

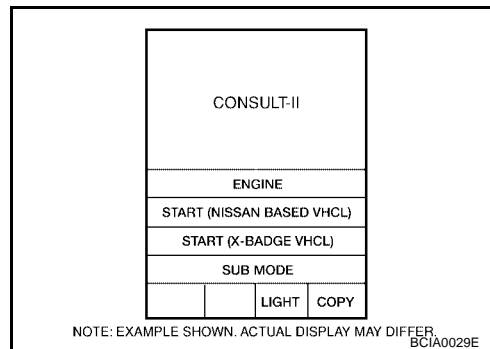
CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

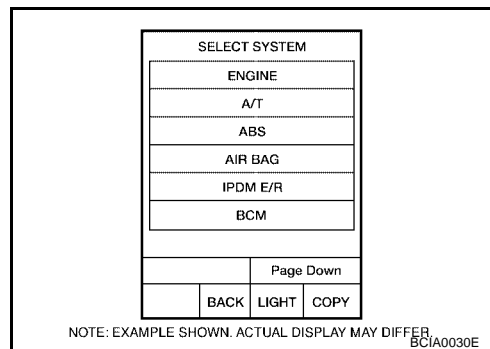
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn ignition switch ON.



2. Touch "START (NISSAN BASED VHCL)".

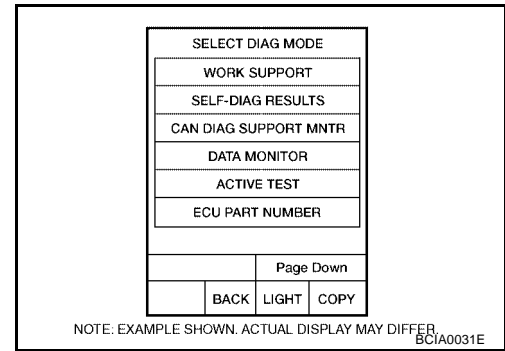


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, print "SELECT SYSTEM" screen, then refer to [LAN-2, "Precautions For Trouble Diagnosis"](#).



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

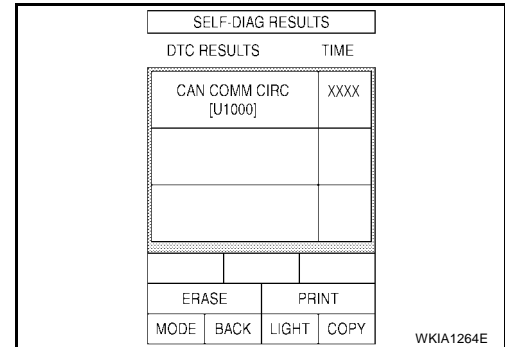
4. Select "SELF-DIAG RESULTS" or "DATA MONITOR".



SELF-DIAGNOSTIC RESULTS

Operation Procedure

1. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
2. Self-diagnosis results are displayed.



Display Item List

Display items	CONSULT-II display code	Malfunction detection	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	—	—	—	—	—
CAN COMM CIRC	U1000	<ul style="list-style-type: none"> ● If CAN communication reception/transmission data has a malfunction, or if any of the control units fail, data reception/transmission cannot be confirmed. ● When the data in CAN communication is not received before the specified time. 	X	X	Any of items listed below have errors: <ul style="list-style-type: none"> ● BCM/SEC ● ECM ● TRANSMIT DIAG

NOTE:

The details for display of the period are as follows:

- CRNT: Error currently detected with IPDM E/R.
- PAST: Error detected in the past and placed in IPDM E/R memory.

DATA MONITOR

Operation Procedure

1. Touch "DATA MONITOR" on "SELECT DIAG MODE" screen.
2. Touch "ALL SIGNALS", "MAIN SIGNALS" or "SELECT FROM MENU" on the "DATA MONITOR" screen.

ALL SIGNALS	All signals will be monitored.
MAIN SIGNALS	Monitors the predetermined item(s).
SELECT FROM MENU	Selects and monitors individual signal(s).

3. Touch "START".
4. Touch the required monitoring item on "SELECT ITEM MENU".

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

5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

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

All Signals, Main Signals, Select From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECT FROM MENU	
Motor fan request	MOTOR FAN REQ	1/2/3/4	X	X	X	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	X	X	X	Signal status input from ECM
Tail & clear request	TAIL & CLR REQ	ON/OFF	X	X	X	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	X	X	X	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	X	X	X	Signal status input from BCM
FR fog request	FR FOG REQ	ON/OFF	X	X	X	Signal status input from BCM
FR wiper request	FR WIP REQ	STOP/1LO/LO/HI	X	X	X	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	X	X	X	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/LS/HS/Block	X	X	X	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	X		X	Status of input signal ^{NOTE}
Ignition relay status	IGN RLY	ON/OFF	X	X	X	Ignition relay status monitored with IPDM E/R
Rear defogger request	RR DEF REQ	ON/OFF	X	X	X	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	X		X	Signal status input from IPDM E/R
Hood switch	HOOD SW	OFF	X			Signal status input from IPDM E/R (function is not enabled)
Theft warning horn request	THFT HRN REQ	ON/OFF	X		X	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	X		X	Output status of IPDM E/R

NOTE:

Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is in ACC position, display may not be correct.

ACTIVE TEST

Operation Procedure

1. Touch "ACTIVE TEST" on "SELECT DIAG-MODE" screen.
2. Touch item to be tested, and check operation.
3. Touch "START".
4. Touch "STOP" while testing to stop the operation.

Test name	CONSULT-II screen display	Description
Tail lamp output	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be operated.
Rear defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear defogger relay can be operated.
Front wiper (HI, LO) output	FRONT WIPER	With a certain operation (OFF, HI ON, LO ON), the front wiper relay (Lo, Hi) can be operated.
Cooling fan output	MOTOR FAN	With a certain operation (1, 2, 3, 4), the cooling fan can be operated.
Lamp (HI, LO, FOG) output	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON), the lamp relay (Lo, Hi, Fog) can be operated.
Horn output	HORN	With a certain ON-OFF operation, the horn relay can be operated.

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

EKS003JB

Auto Active Test

DESCRIPTION

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

OPERATION PROCEDURE

1. Close hood and front door RH, and lift wiper arms away from windshield (to prevent glass damage by wiper operation).

NOTE:

When auto active test is performed with hood opened, sprinkle water on windshield beforehand.

2. Turn ignition switch OFF.
3. Turn ignition switch ON and, within 20 seconds, press front door switch LH 10 times. Then turn ignition switch OFF.
4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
5. When auto active test mode is actuated, horn chirps once.
6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

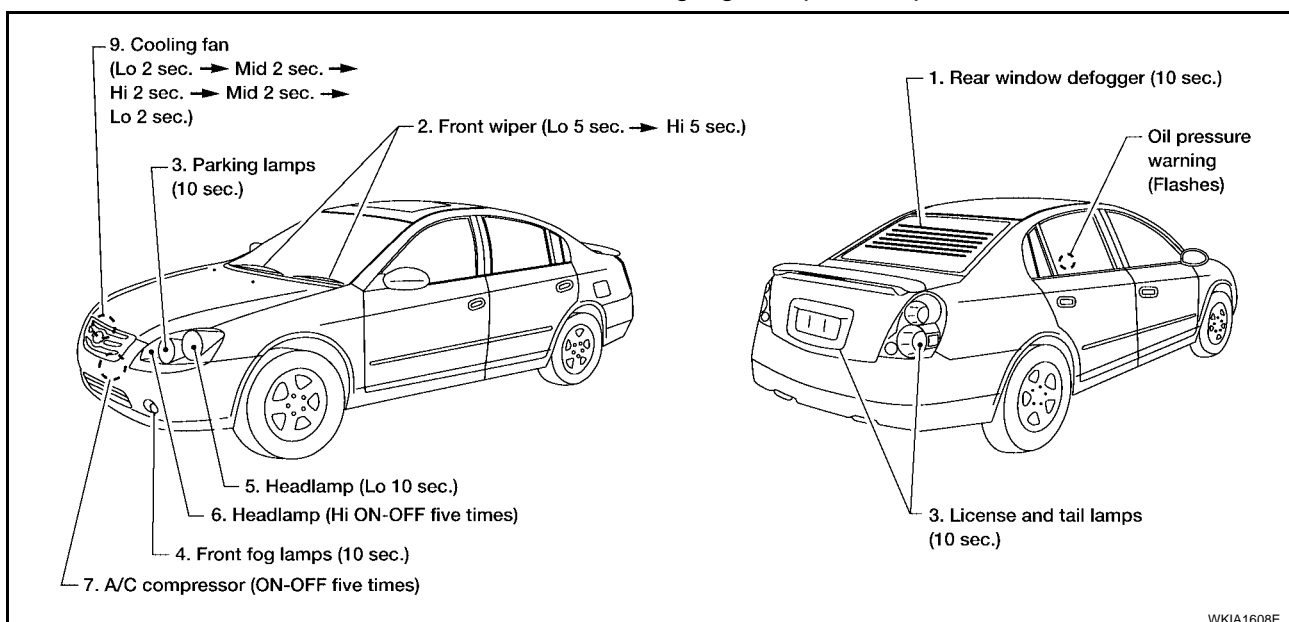
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform [BL-29, "Door Switch Check"](#) when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

- When auto active test mode is actuated, the following eight 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.

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

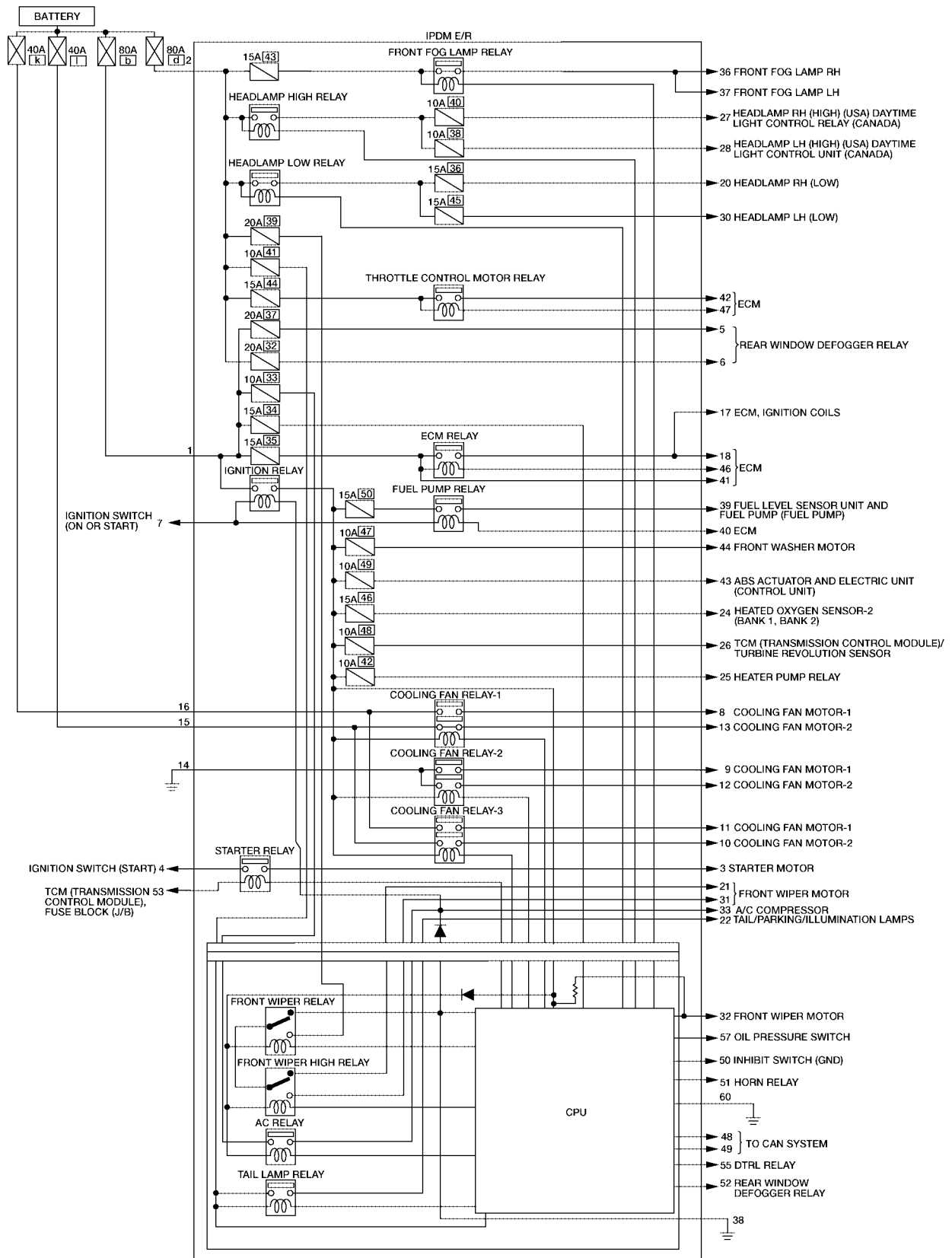
Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause	
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	<ul style="list-style-type: none"> ● BCM signal input circuit
		NO	<ul style="list-style-type: none"> ● Rear window defogger relay ● Open circuit of rear window defogger ● IPDM E/R malfunction ● Harness or connector malfunction between IPDM E/R and rear window defogger
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?	YES	<ul style="list-style-type: none"> ● BCM signal input system
		NO	<ul style="list-style-type: none"> ● Lamp/wiper motor malfunction ● Lamp/wiper motor ground circuit malfunction ● Harness/connector malfunction between IPDM E/R and system in question ● IPDM E/R (integrated relay) malfunction
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES	<ul style="list-style-type: none"> ● BCM signal input circuit ● CAN communication signal between BCM and ECM. ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● Magnetic clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnetic clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES	<ul style="list-style-type: none"> ● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> ● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction
Oil pressure warning lamp does not operate.	Perform auto active test. Does oil pressure warning lamp blink?	YES	<ul style="list-style-type: none"> ● Harness/connector malfunction between IPDM E/R and oil pressure switch ● Oil pressure switch malfunction ● IPDM E/R
		NO	<ul style="list-style-type: none"> ● CAN communication signal between BCM and Combination Meter ● Combination meter

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

EKS003JC

Schematic



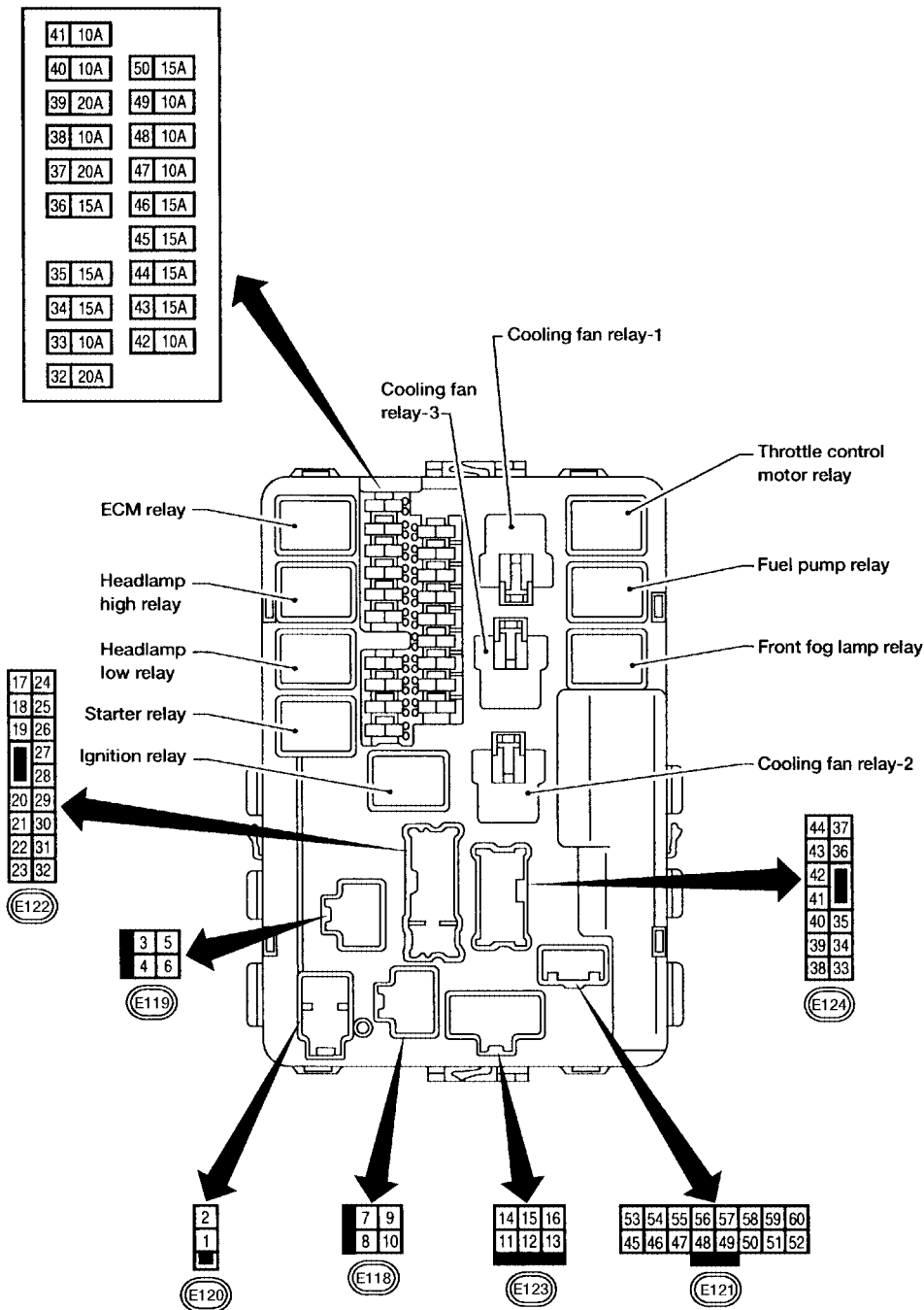
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WKWA1801E

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

IPDM E/R TERMINAL ARRANGEMENT



WKIA3022E

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

IPDM E/R Power/Ground Circuit Inspection

EKS003JD

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, 15, 16	Battery power	b, d, k, l

OK or NG

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

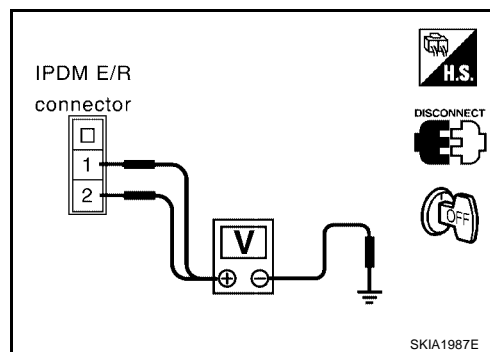
2. POWER CIRCUIT INSPECTION

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

Battery voltage should exist.

OK or NG

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



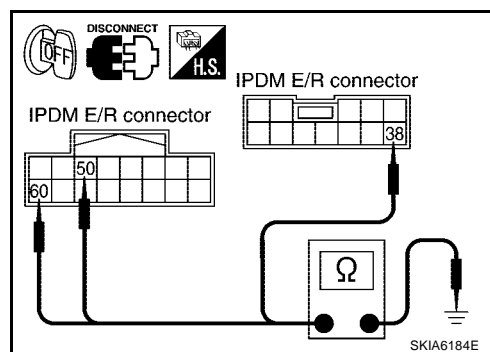
3. GROUND CIRCUIT INSPECTION

1. Disconnect IPDM E/R harness connectors E121 and E124.
2. Check continuity between IPDM E/R harness connector E121 terminal 50 (B), E121 terminal 60 (B), E124 terminal 38 (B) and ground.

Continuity should exist.

OK or NG

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



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

Inspection with CONSULT-II (Self-Diagnosis)

EKS00790

CAUTION:

If a CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on which control unit(s) carry out CAN communication.

1. SELF-DIAGNOSIS RESULT CHECK

1. Connect CONSULT-II and select "IPDM E/R" on the Diagnosis System Selection screen.
2. Select "SELF-DIAG RESULTS" on the diagnosis mode selection screen.
3. Check display content in self-diagnosis results.

CONSULT-II Display	CONSULT-II display code	TIME		Details of diagnosis result
		CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	—	—	—	No malfunction
CAN COMM CIRC	U1000	X	X	Any of items listed below have errors: <ul style="list-style-type: none">● BCM/SEC● ECM● TRANSMIT DIAG

NOTE:

The Details for Display for the Period are as follows:

- CRNT: Error currently detected by IPDM E/R.
- PAST: Error detected in the past and stored in IPDM E/R memory.

Contents displayed

NO DTC DETECTED. FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END.

CAN COMM CIRC>>Print out the self-diagnosis result and refer to [LAN-4, "CAN COMMUNICATION"](#) .

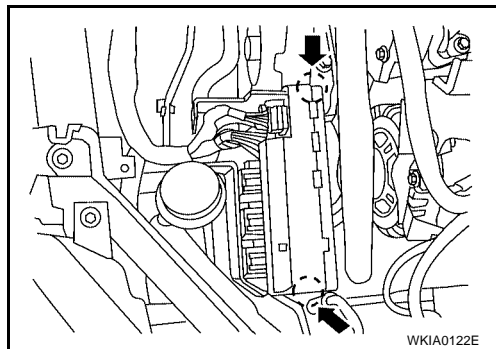
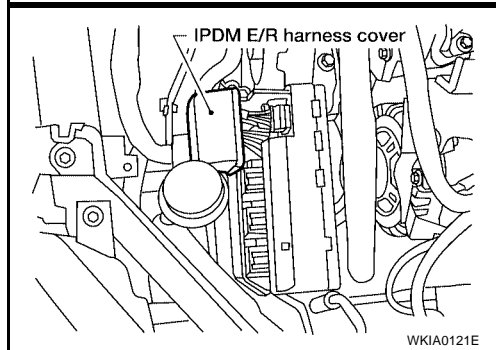
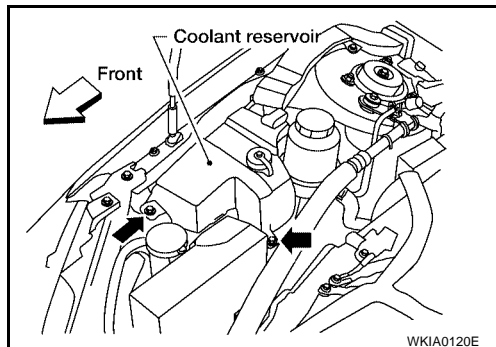
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

EKS003JE

Removal and Installation of IPDM E/R

REMOVAL

1. Disconnect the negative battery cable.
2. Remove 2 bolts and position coolant reservoir aside.
3. Remove IPDM E/R upper cover.
4. Remove IPDM E/R harness cover.
5. Release 2 clips and pull IPDM E/R up from case.
6. Disconnect IPDM E/R connectors and then remove the IPDM E/R.



INSTALLATION

1. Install in the reverse order of removal.

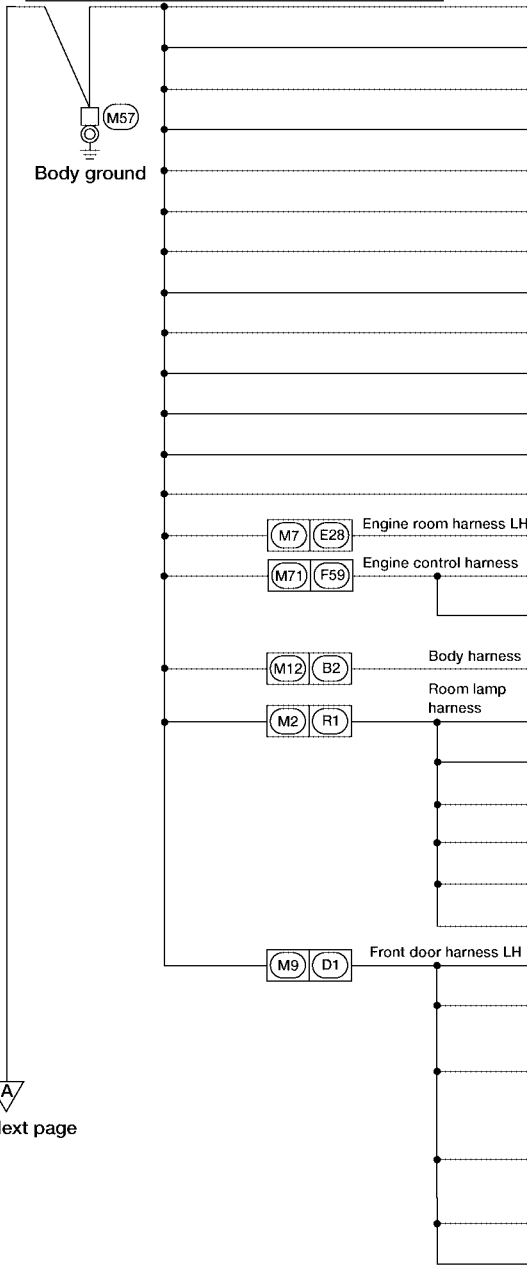
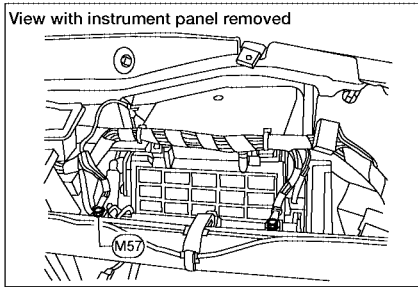
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GROUND CIRCUIT

PF2:24080

EKS003JF

GROUND CIRCUIT Ground Distribution MAIN HARNESS

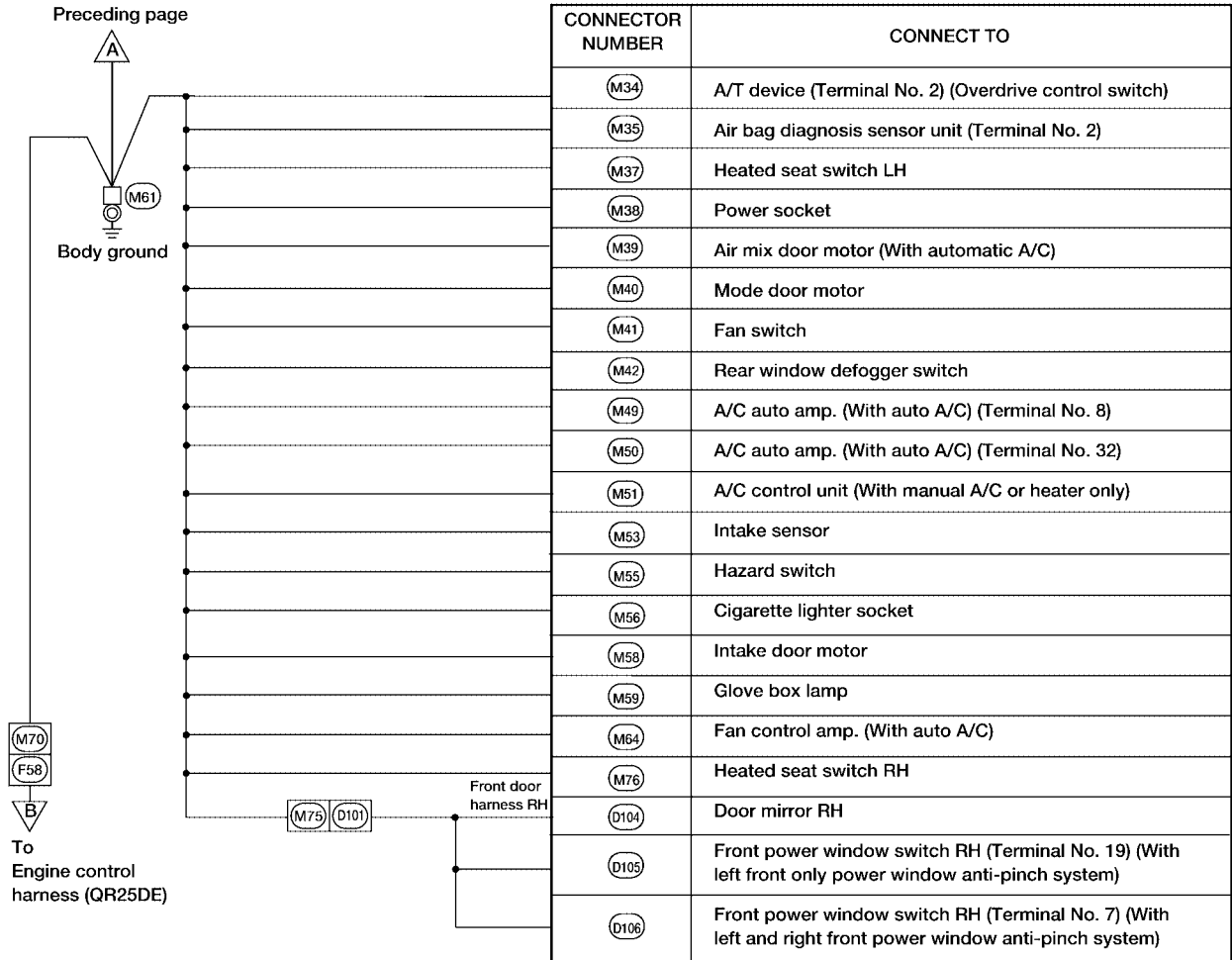
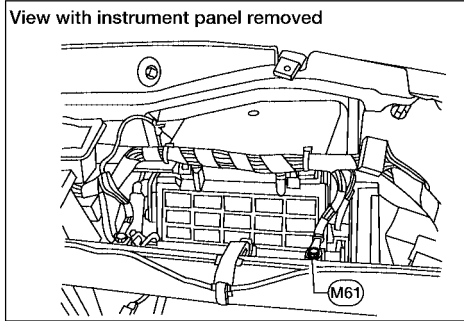


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CONNECTOR NUMBER	CONNECT TO
M3	Fuse box (J/B) (Terminal No. 7N)
M5	Illumination control switch
M6	TCS ON/OFF switch (With TCS)
M13	Heated seat relay
M19	BCM (Body control module) (Terminal No. 63)
M20	BCM (Body control module) (Terminal No. 27)
M22	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
M31	Shift lock control unit (Terminal No. 8)
E1	Ambient temperature sensor
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	Vanity mirror lamp LH
R2	Homelink [®] 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 door key cylinder switch LH

WKIA3023E

GROUND CIRCUIT

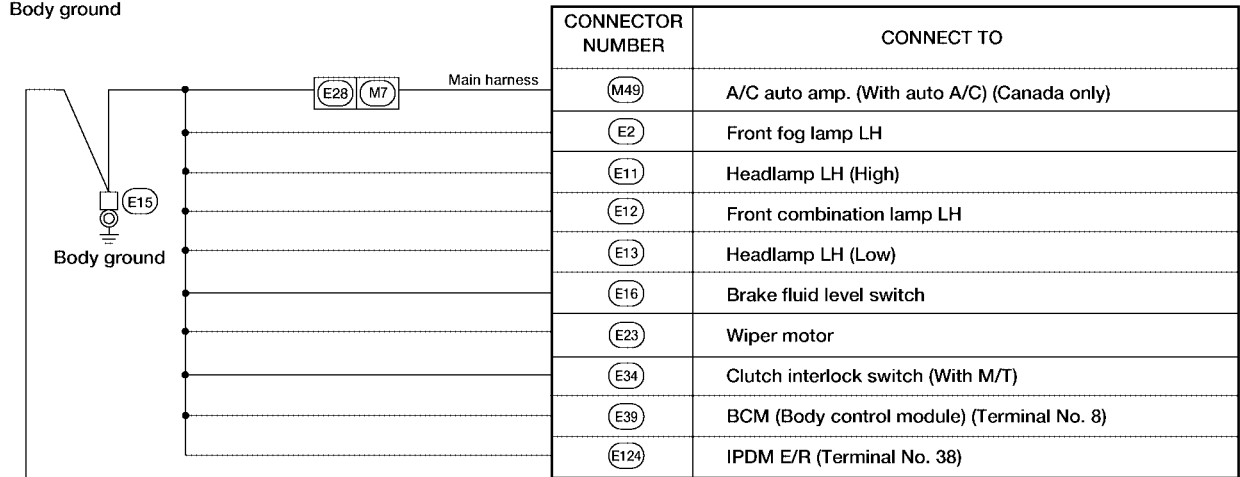
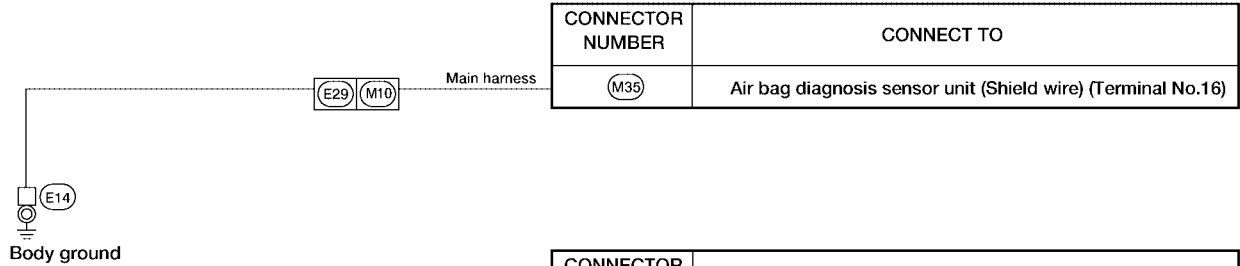
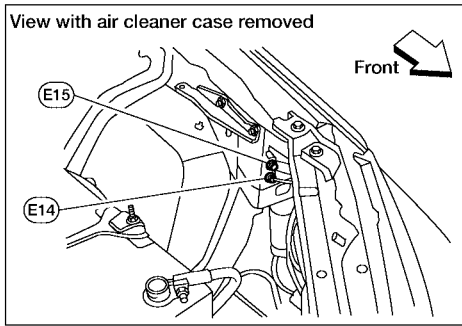


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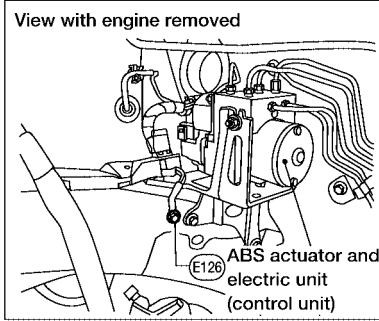
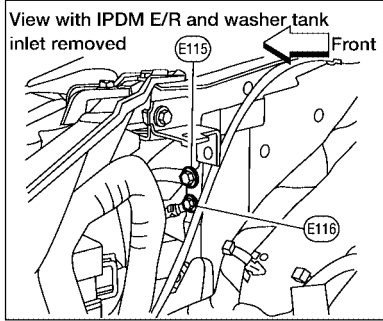
GROUND CIRCUIT

ENGINE ROOM HARNESS

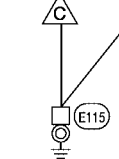


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GROUND CIRCUIT



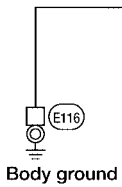
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Body ground

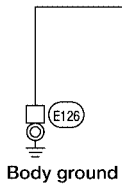
CONNECTOR NUMBER	CONNECT TO
E101	Front fog lamp RH
E103	Daytime light control unit (Canada only) (Terminal No. 13)
E103	Daytime light control unit (Canada only) (Terminal No. 14)
E104	Daytime light control unit (Canada only) (Terminal No. 16)
E106	Washer level switch
E107	Headlamp RH (Low)
E109	Front combination lamp RH
E110	Headlamp RH (High)
E113	Cooling fan motor 1
E114	Cooling fan motor 2
E121	IPDM E/R (Terminal No. 60)
E123	IPDM E/R [Cooling fan relay-2 (ground-relay)] (Terminal No. 14)

CONNECTOR NUMBER	CONNECT TO
E112	Generator



Body ground

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



Body ground

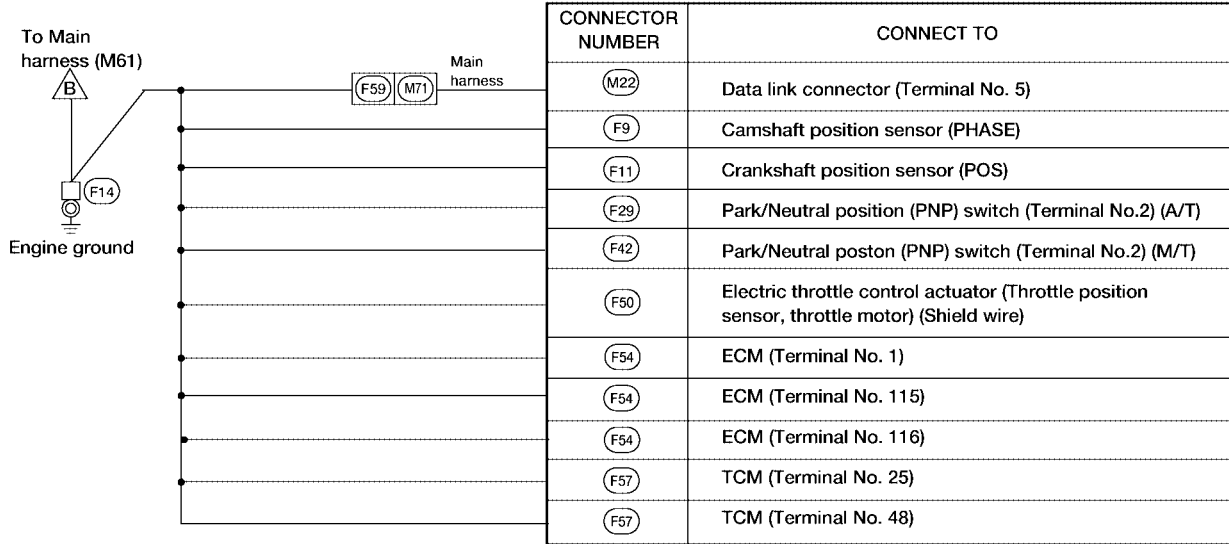
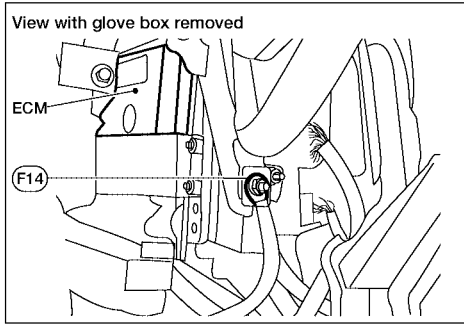
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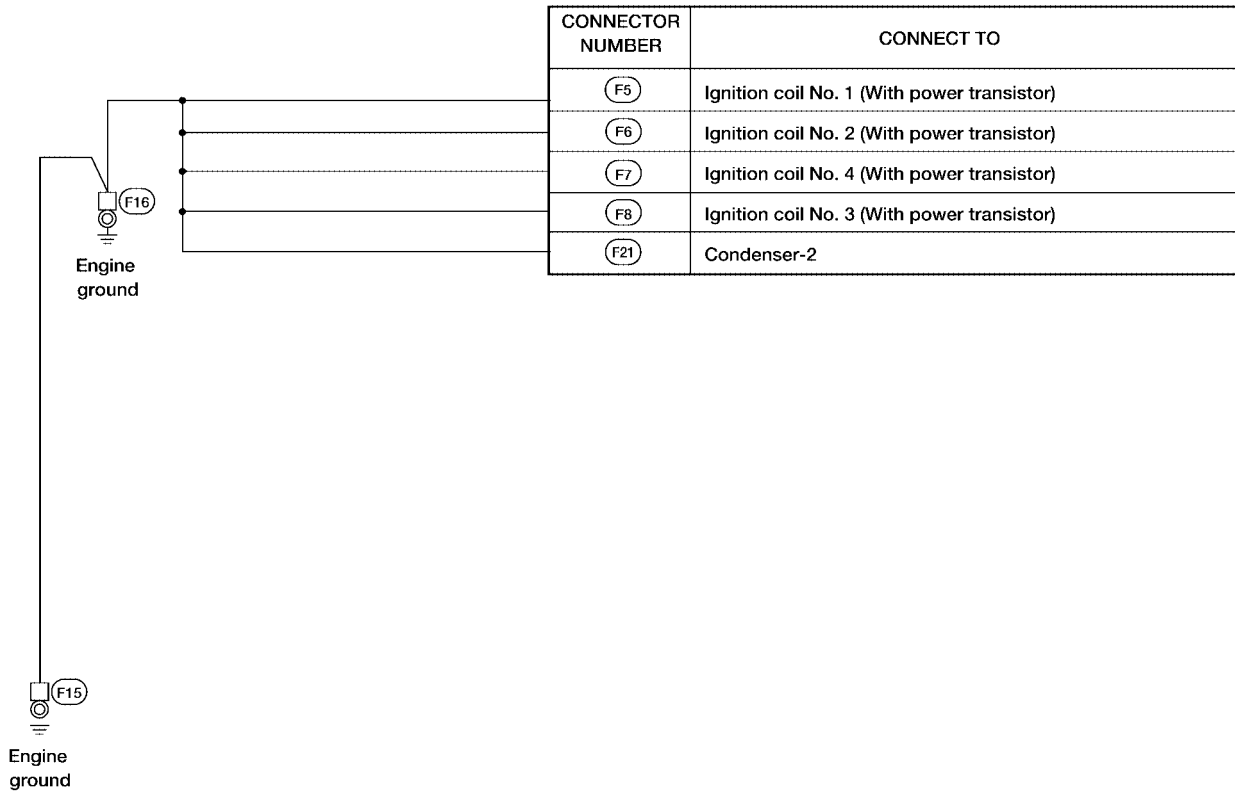
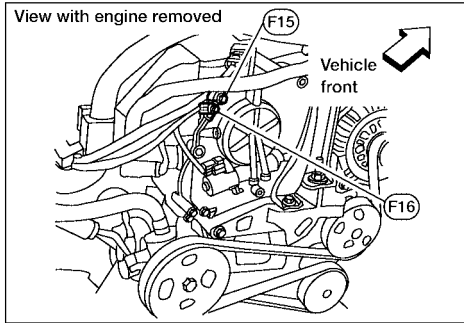
GROUND CIRCUIT

ENGINE CONTROL HARNESS (QR25DE)



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GROUND CIRCUIT



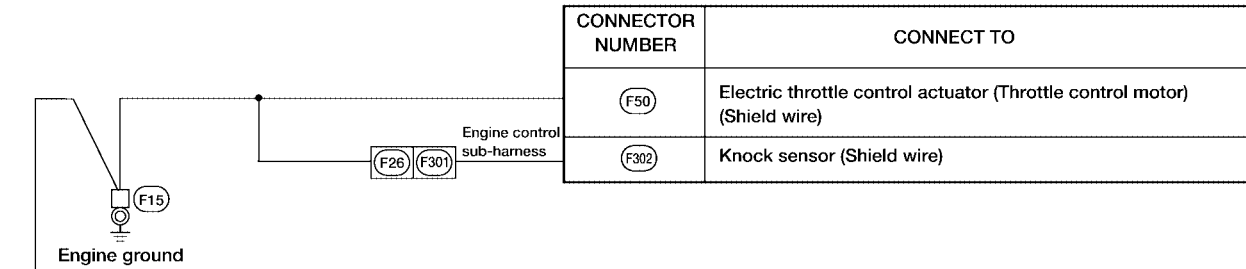
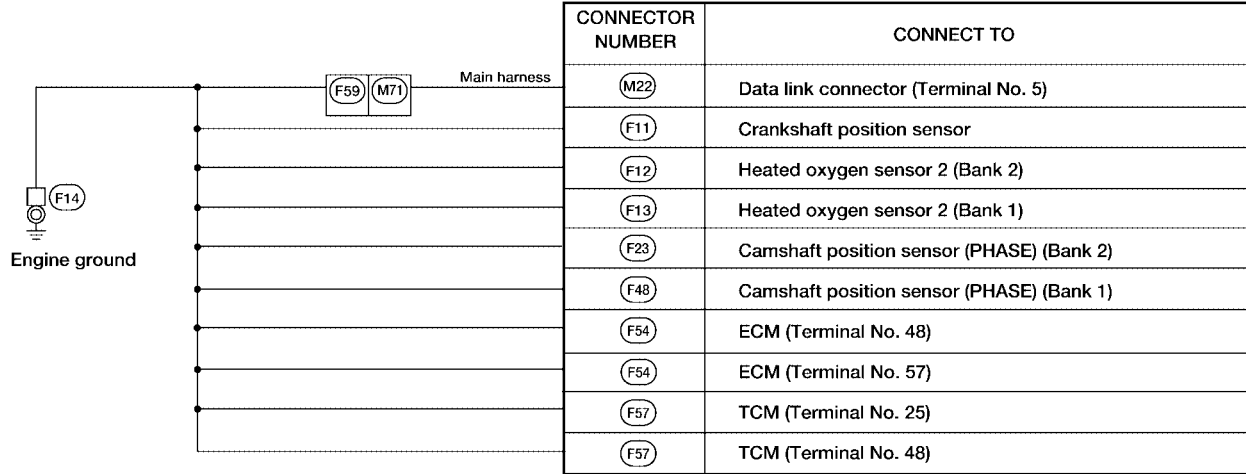
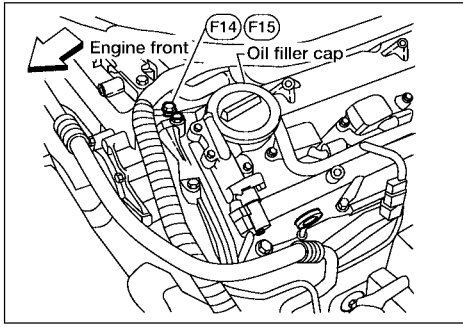
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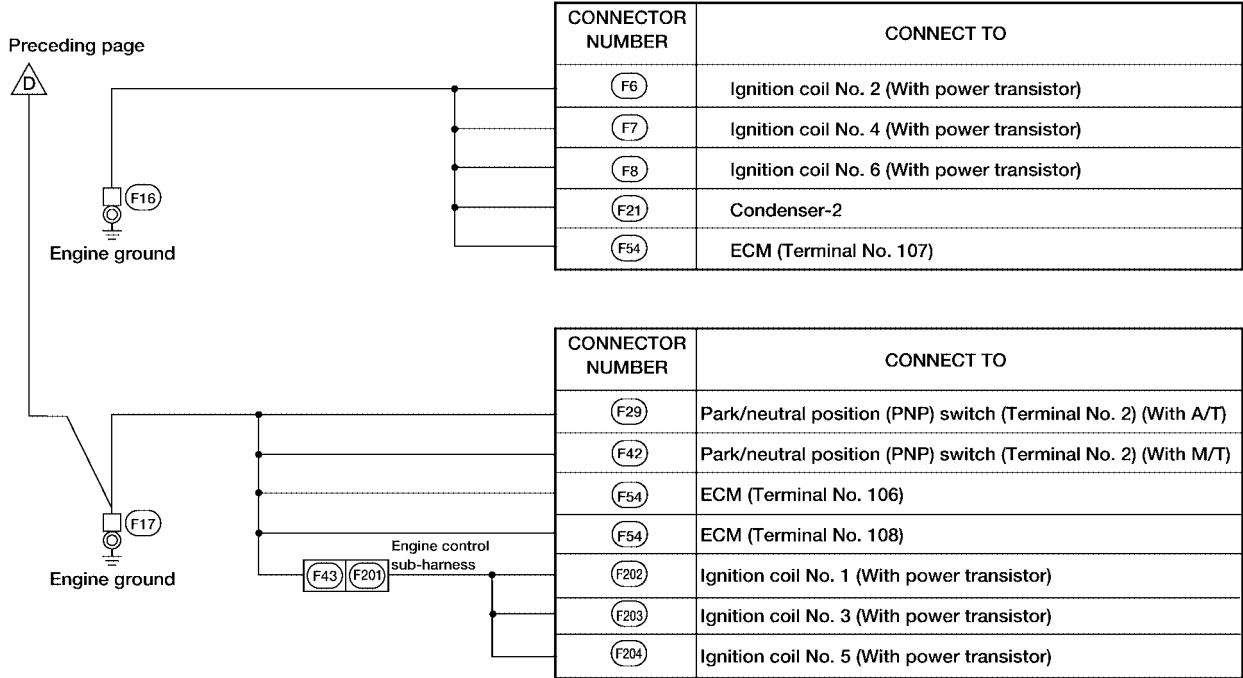
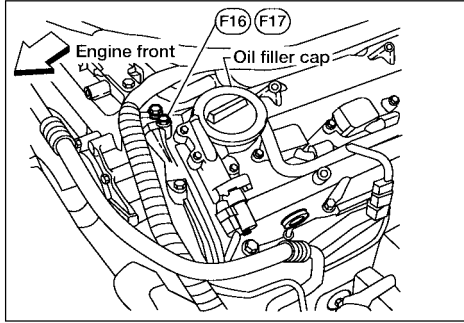
GROUND CIRCUIT

ENGINE CONTROL HARNESS (VQ35DE)



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Next page

GROUND CIRCUIT



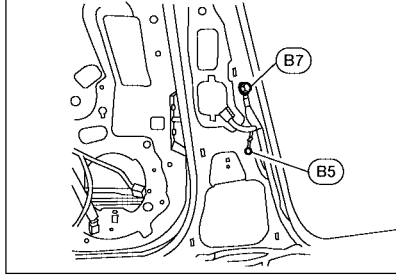
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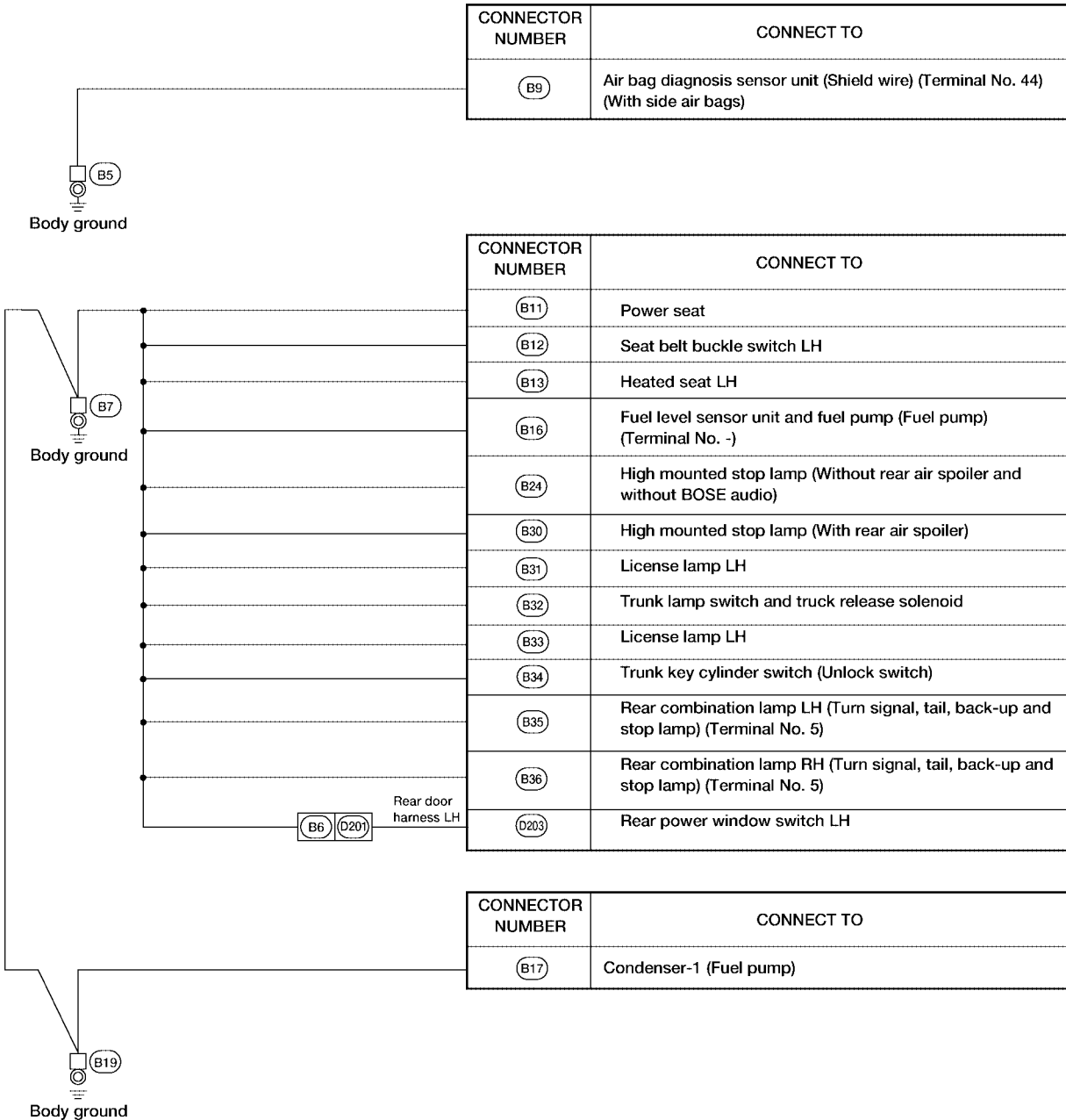
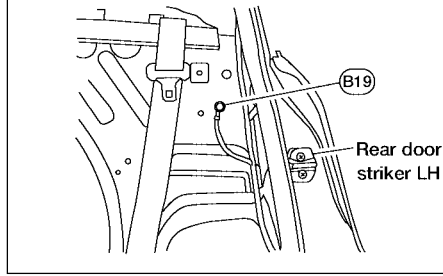
GROUND CIRCUIT

BODY HARNESS

View with center pillar garnish LH removed



View with rear seatback removed

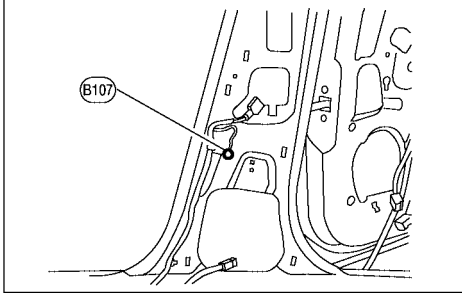


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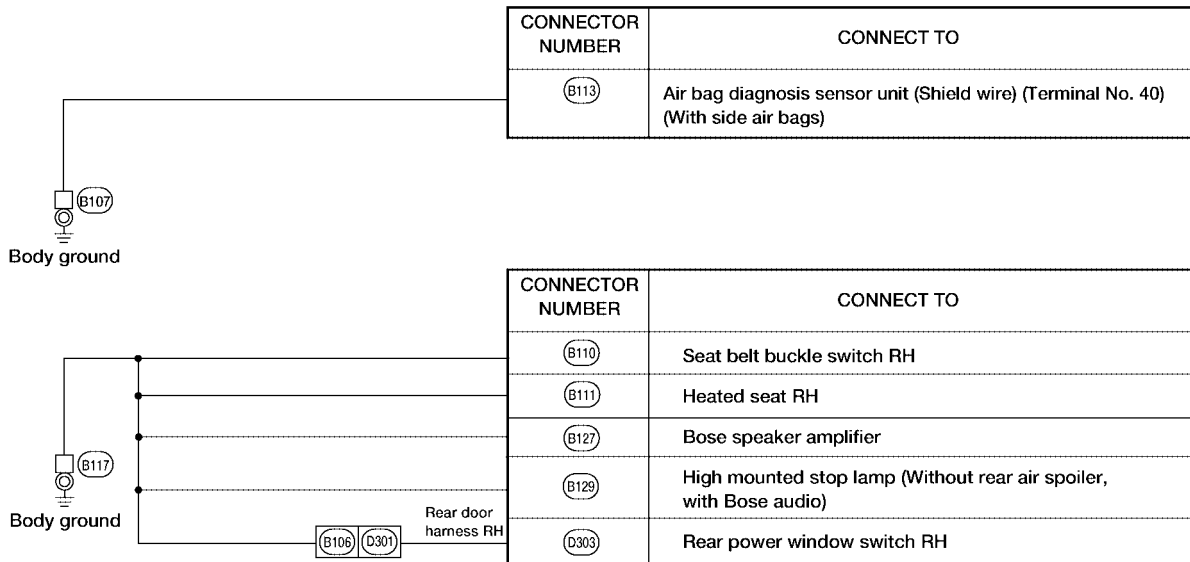
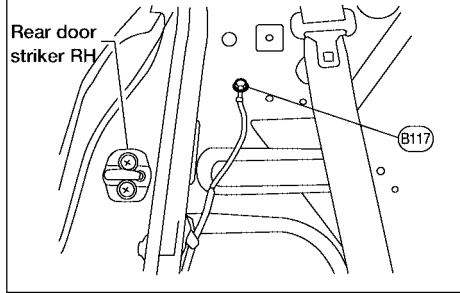
GROUND CIRCUIT

BODY NO. 2 HARNESS

View with center pillar garnish RH removed



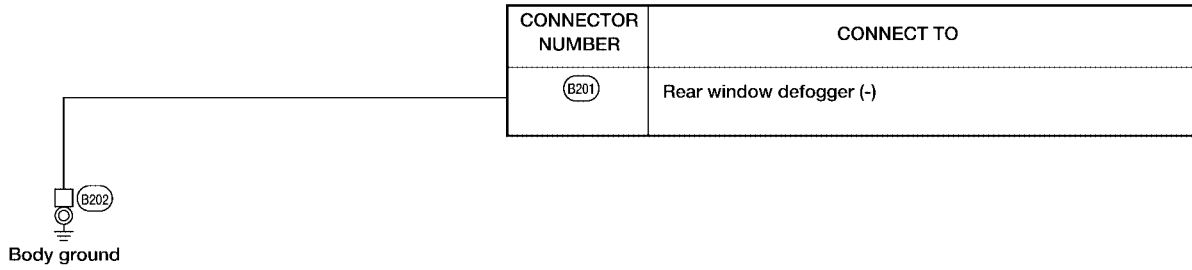
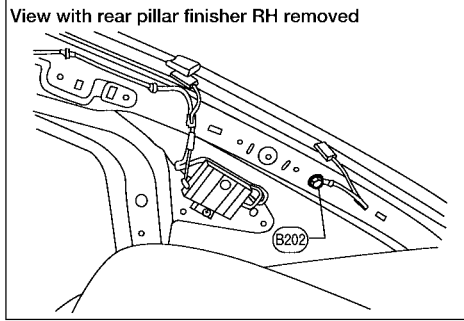
View with rear seatback removed



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GROUND CIRCUIT



WKIA0090E

HARNESS

Harness Layout

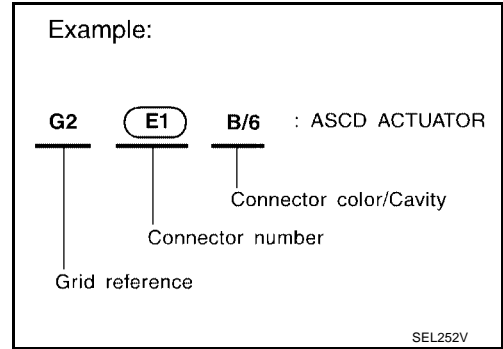
HOW TO READ HARNESS LAYOUT

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.



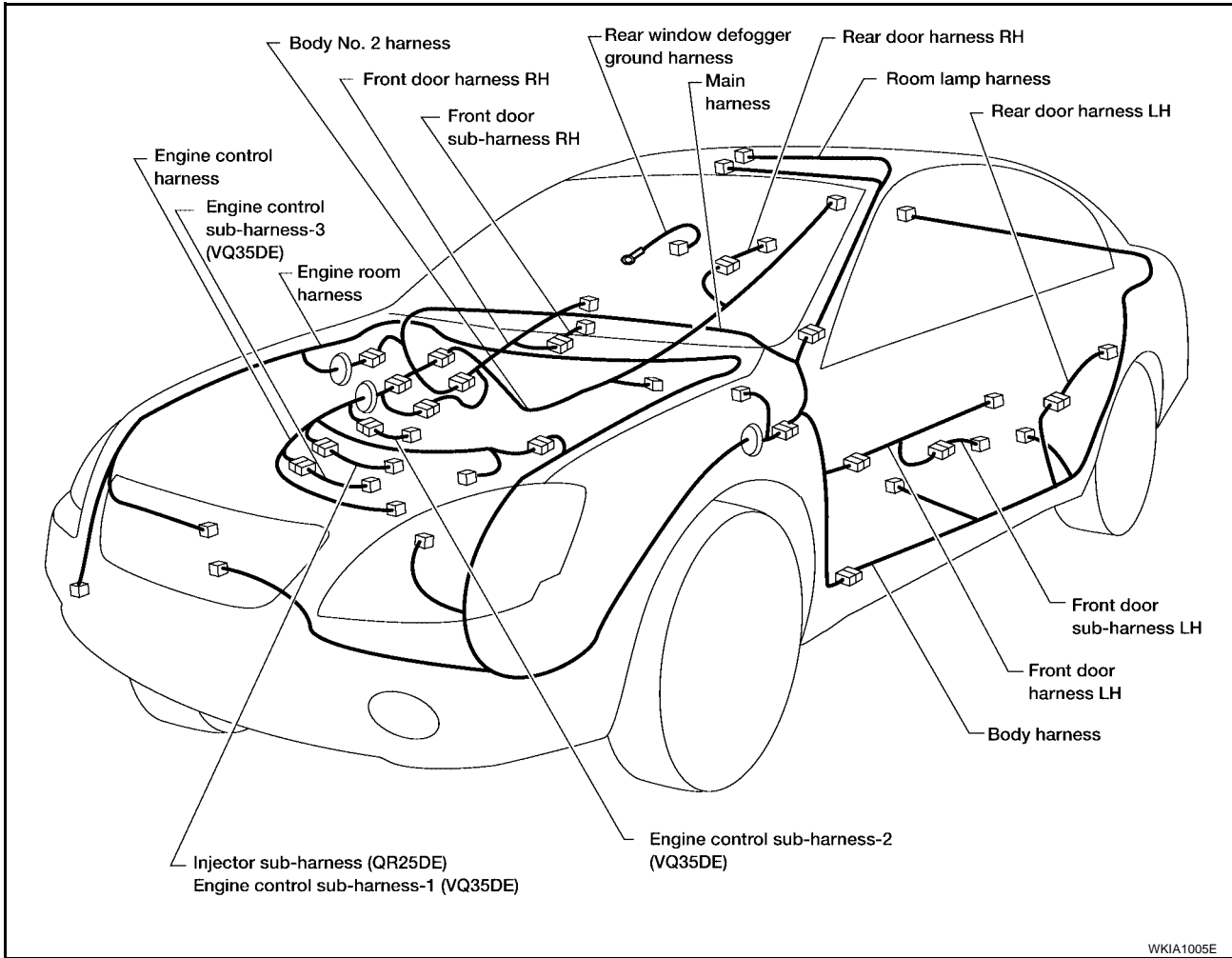
CONNECTOR SYMBOL

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.	—			

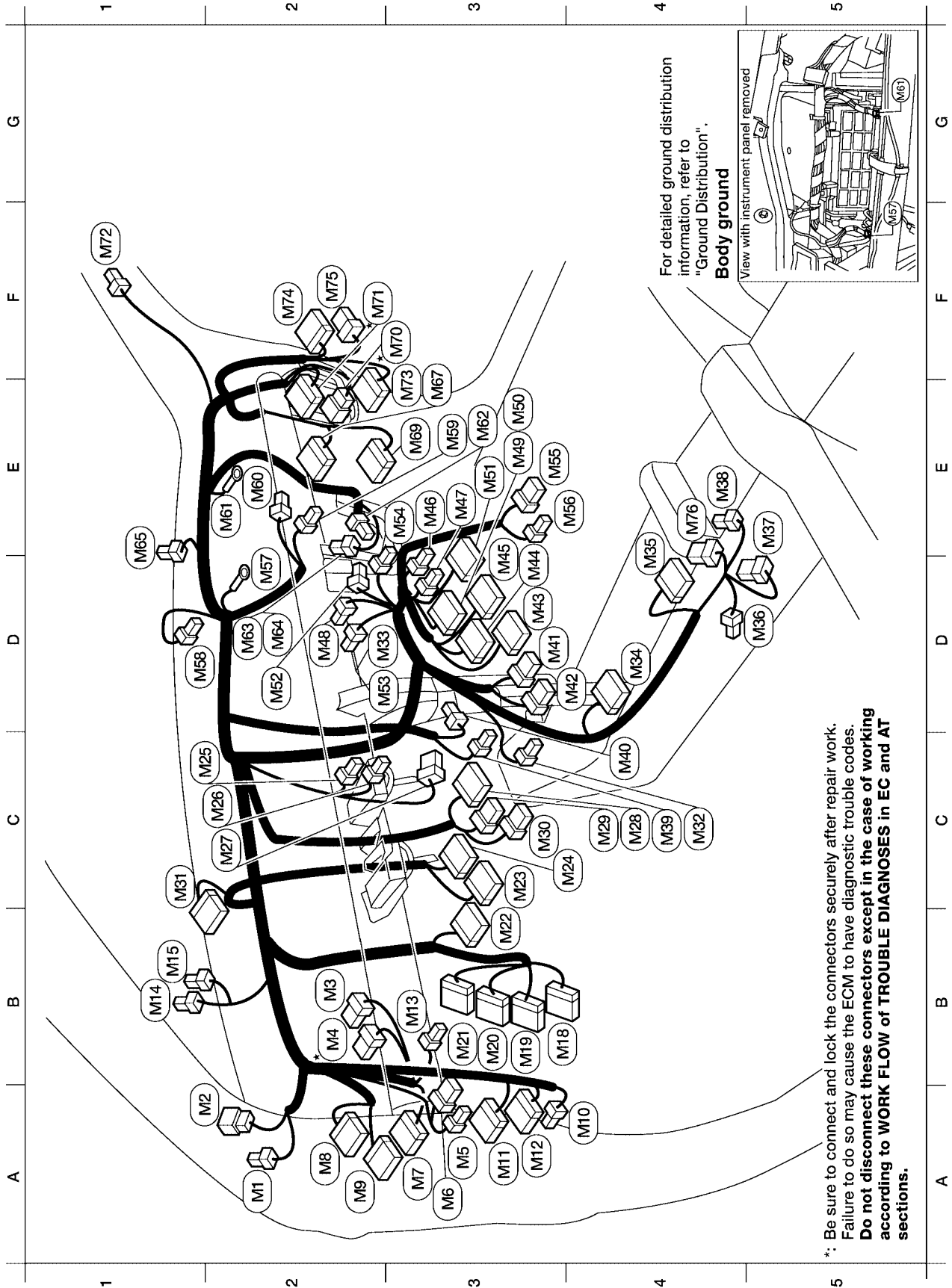
HARNESS

OUTLINE



HARNESS

MAIN HARNESS



*: 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.

WKIA1624E



HARNESSES

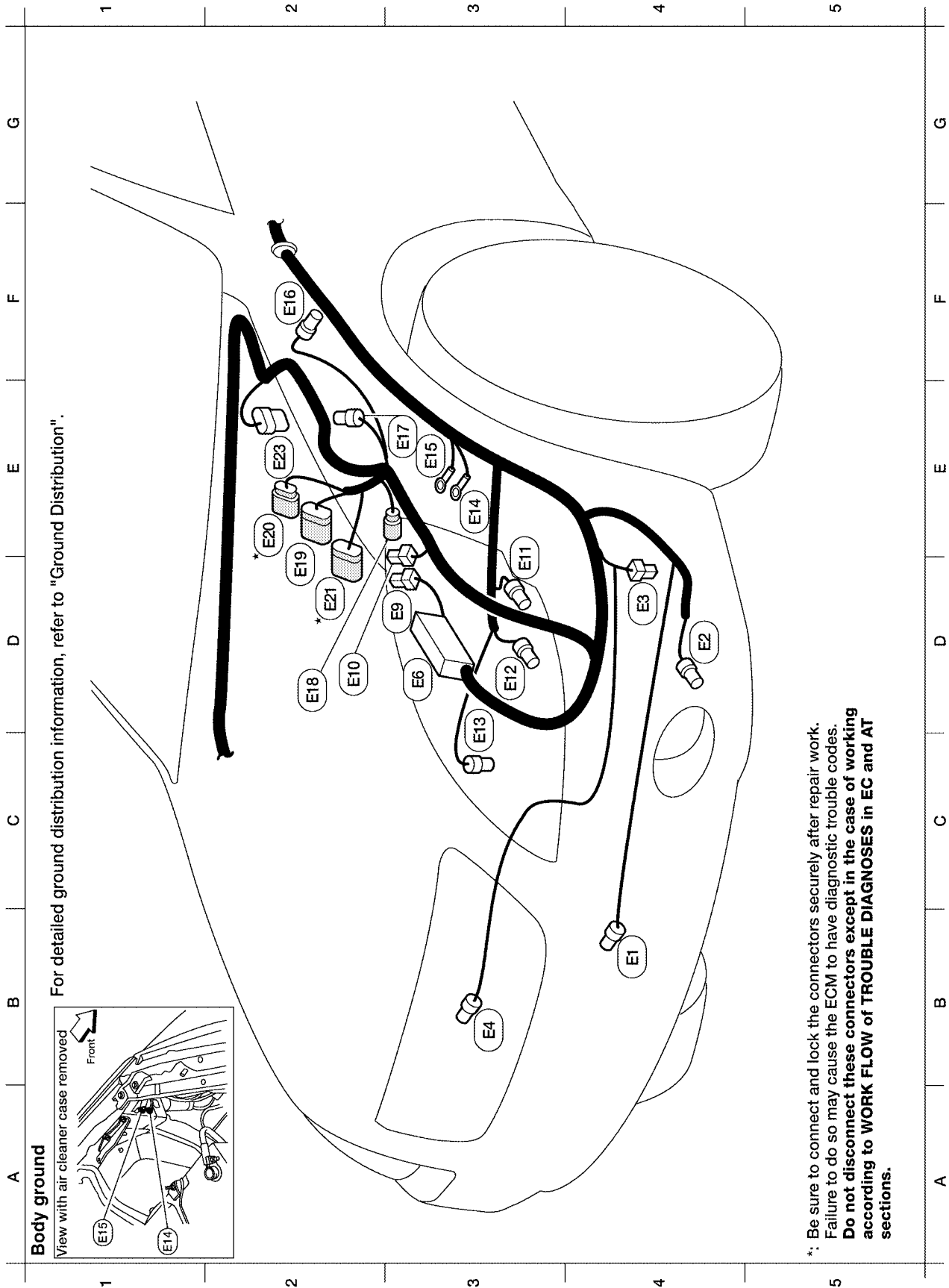
A2	(M1) BR/2	: Tweeter LH	C4	(M32) W/2	: In-vehicle sensor (with auto A/C)	E2	(M61) -	: Body ground
A2	(M2) W/6	: To R1 (without vanity mirror lamps)	D3	(M33) W/2	: Intake sensor (with auto A/C)	E3	(M52) W/2	: Blower motor
A2	(M2) W/8	: To R1 (with vanity mirror lamps)	D4	(M34) W/12	: A/T device	D2	(M53) BR/4	: Blower motor resistor (with manual A/C)
B2	(M3) W/8	: Fuse block (J/B)	E4	(M35) Y/28	: Air bag diagnosis sensor unit	D2	(M64) W/4	: Fan control amp. (with auto A/C)
B2 *	(M4) W/16	: Fuse block (J/B)	D4	(M36) B/1	: Parking brake switch	E1	(M65) B/2	: Sunload sensor (with auto A/C)
A3	(M5) W/3	: Illumination control switch	E5	(M37) W/6	: Heated seat switch LH	E3	(M67) W/8	: To (E131)
A3	(M6) GY/6	: TCS ON/OFF switch (with TCS)	E4	(M38) B/2	: Power socket	E3	(M69) W/16	: To (E104)
A3	(M7) W/18	: To (E28)	C4	(M39) W/3	: Air mix door motor (with auto A/C)	F3	(M70) W/6	: To (F58)
A2	(M8) W/16	: To (D2)	C4	(M40) W/3	: Mode door motor	F3	(M71) W/24	: To (F59)
A2	(M9) W/12	: To (D1)	D3	(M41) W/6	: Fan switch (with manual A/C or heater only)	F1	(M72) BR/2	: Tweeter RH
A4	(M10) Y/4	: To (E29)	D3	(M42) W/6	: Rear window defogger switch	F3	(M73) W/12	: To (E103)
A3	(M11) W/16	: To (B1)	D3	(M43) W/10	: Audio unit	F2	(M74) W/10	: To (D102)
A3	(M12) W/16	: To (B2)	E3	(M44) W/6	: Audio unit	F2	(M75) W/8	: To (D101)
B3	(M13) L/4	: Heated seat relay	E3	(M45) W/16	: Audio unit	E4	(M76) BR/6	: Heated seat switch RH
B1	(M14) BR/2	: Security indicator lamp	D2	(M48) W/2	: Antenna amplifier	E2	(M77) Y/2	: Front passenger air bag module
B1	(M15) W/3	: Auto light sensor (with auto lights)	E3	(M49) GY/20	: A/C auto amp. (with auto A/C)	E2	(M78) OR/2	: Front passenger air bag module
B4	(M18) BR/24	: BCM (Body control module)	F3	(M50) GY/16	: A/C auto amp. (with auto A/C)			
B3	(M19) W/16	: BCM (Body control module)	E3	(M51) W/12	: A/C control unit (with manual A/C or heater only)			
B3	(M20) W/16	: BCM (Body control module)	D2	(M52) W/3	: Thermo control amplifier (with auto A/C)			
B3	(M21) W/12	: BCM (Body control module)	D3	(M53) W/2	: Intake sensor (with manual A/C)			
B3	(M22) W/16	: Data link connector	E3	(M54) W/2	: Trunk lid opener cancel switch			
C3	(M23) W/24	: Combination meter	E3	(M55) W/8	: Hazard switch			
C4	(M24) BR/24	: Combination meter	E4	(M56) B/2	: Cigarette lighter			
C2	(M25) B/2	: Ignition key illumination	D2	(M57) -	: Body ground			
C2	(M26) W/4	: Key switch and key lock solenoid	D2	(M58) W/3	: Intake door motor			
C2	(M27) W/8	: Immobilizer control unit	D2	(M59) BR/2	: Glove box lamp			
C4	(M28) W/16	: Combination switch	E3	(M60) Y/4	: Front passenger air bag service replacement connector			
C4	(M29) Y/6	: Combination switch	E2					
C3	(M30) GY/8	: Combination switch						
C1	(M31) GY/10	: Shift lock control unit (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.

WKIA1618E

HARNESS

ENGINE ROOM HARNESS (LH VIEW)



Refer to [PG-46, "Engine Room Harness \(RH View\)"](#) for continuation of engine room harness.

WKIA1620E

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
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
D2	(E18)	BR/2	: Front wheel sensor LH
D2	(E19)	GY/9	: To (F33)
E2	(E20)	B/8	: To (F32)
D2	(E21)	B/12	: To (F34)
E2	(E23)	GY/6	: Wiper motor

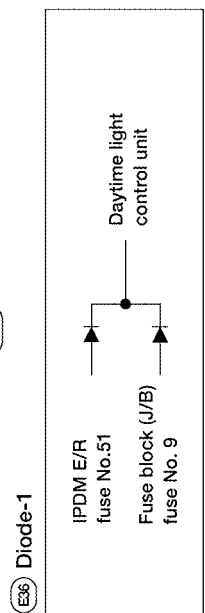
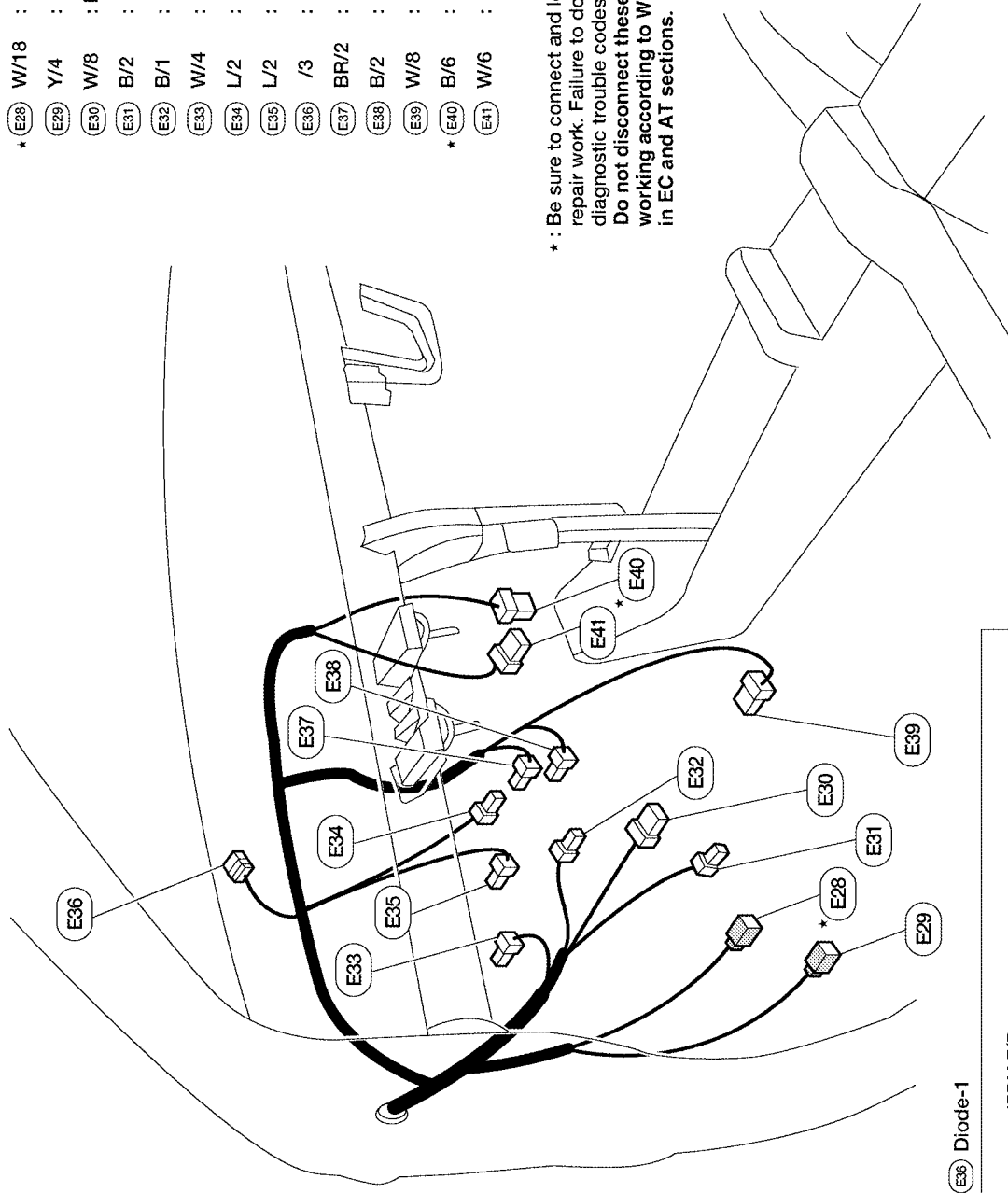
*: Be sure to connect and lock the connectors securely after repair work.
 Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

HARNESS

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.



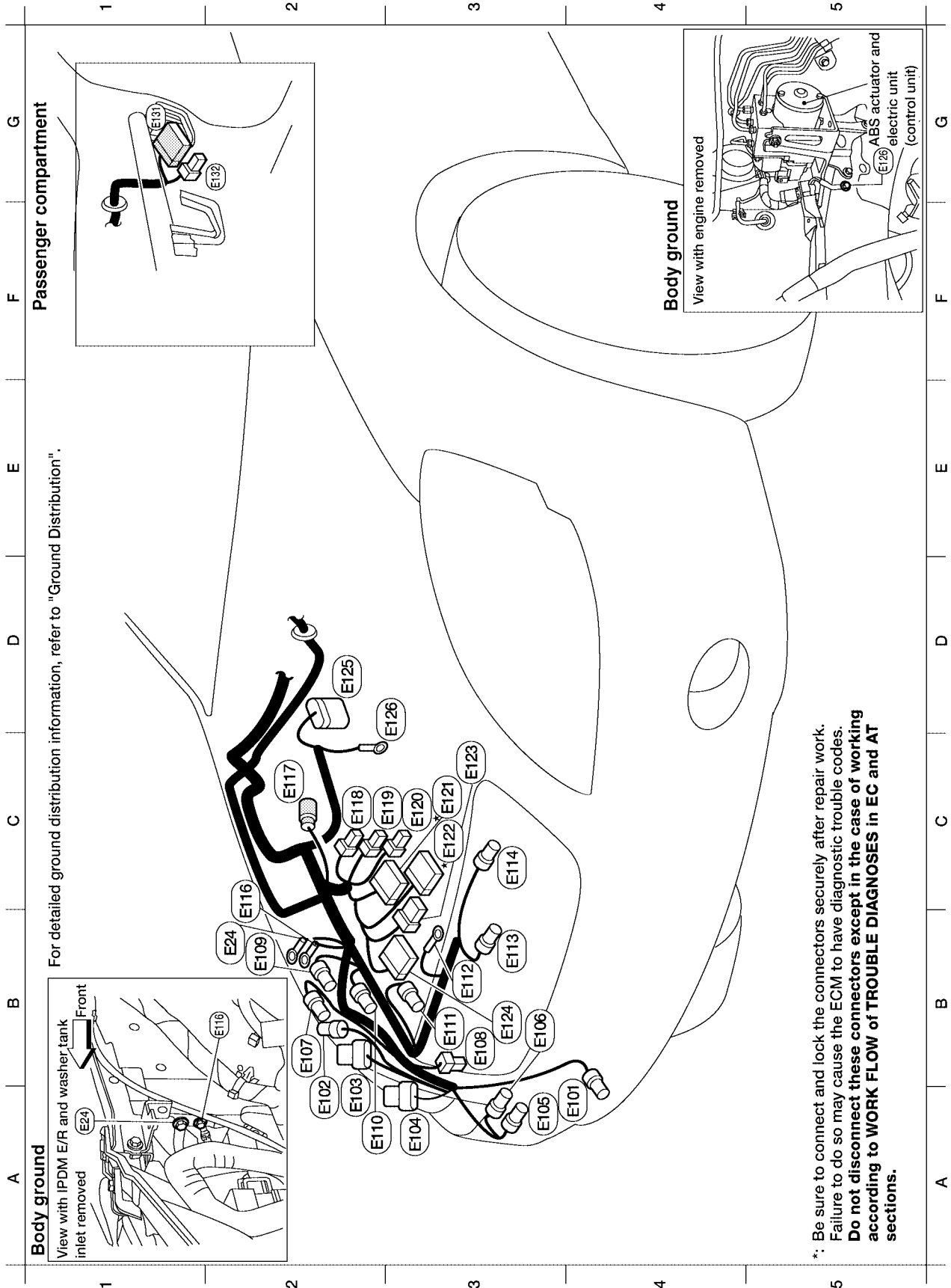
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HARNESS

ENGINE ROOM HARNESS (RH VIEW)



*: 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.**

Refer to [PG-43, "Engine Room Harness \(LH View\)"](#) for continuation of engine room harness.

WKIA0292E

HARNESSES

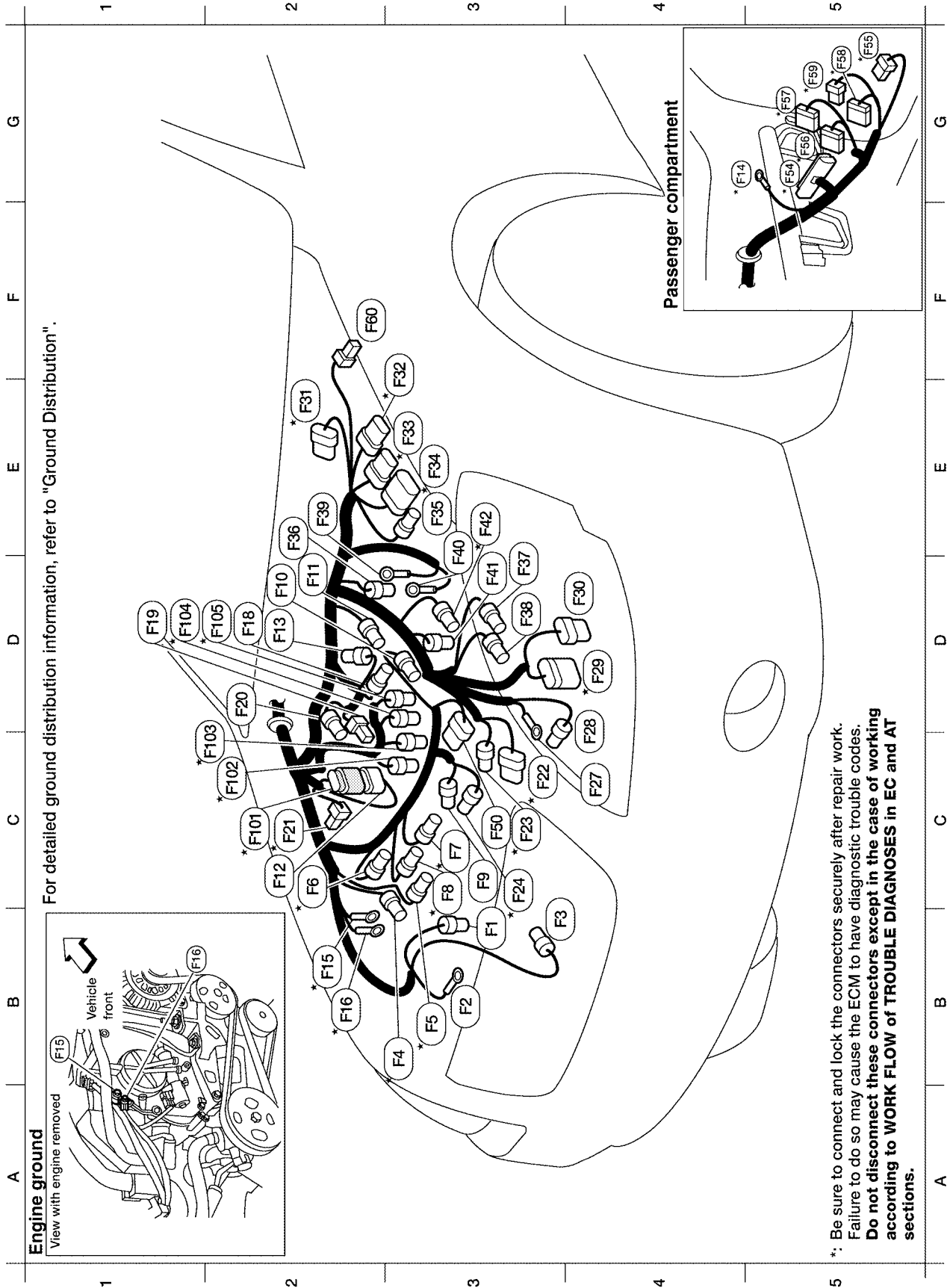
B2	(E24)	-	: Body ground
A4	(E101)	BR/2	: Front fog lamp RH
A2	(E102)	GY/4	: Daytime light control unit (for Canada)
A2	(E103)	GY/6	: Daytime light control unit (for Canada)
A3	(E104)	GY/8	: Daytime light control unit (for Canada)
A3	(E105)	GY/2	: Front washer motor
B3	(E106)	BR/2	: Washer fluid level 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
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/16	: 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 (control unit) (with ABS or TCS)
D3	(E126)	-	: Body ground
G1	(E131)	W/8	: To (6167) (With ABS or TCS)
G2	(E132)	W/4	: To (E101) (With ABS or TCS)

*: 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.

WKIA3028E

HARNESS

ENGINE CONTROL HARNESS (QR25DE)



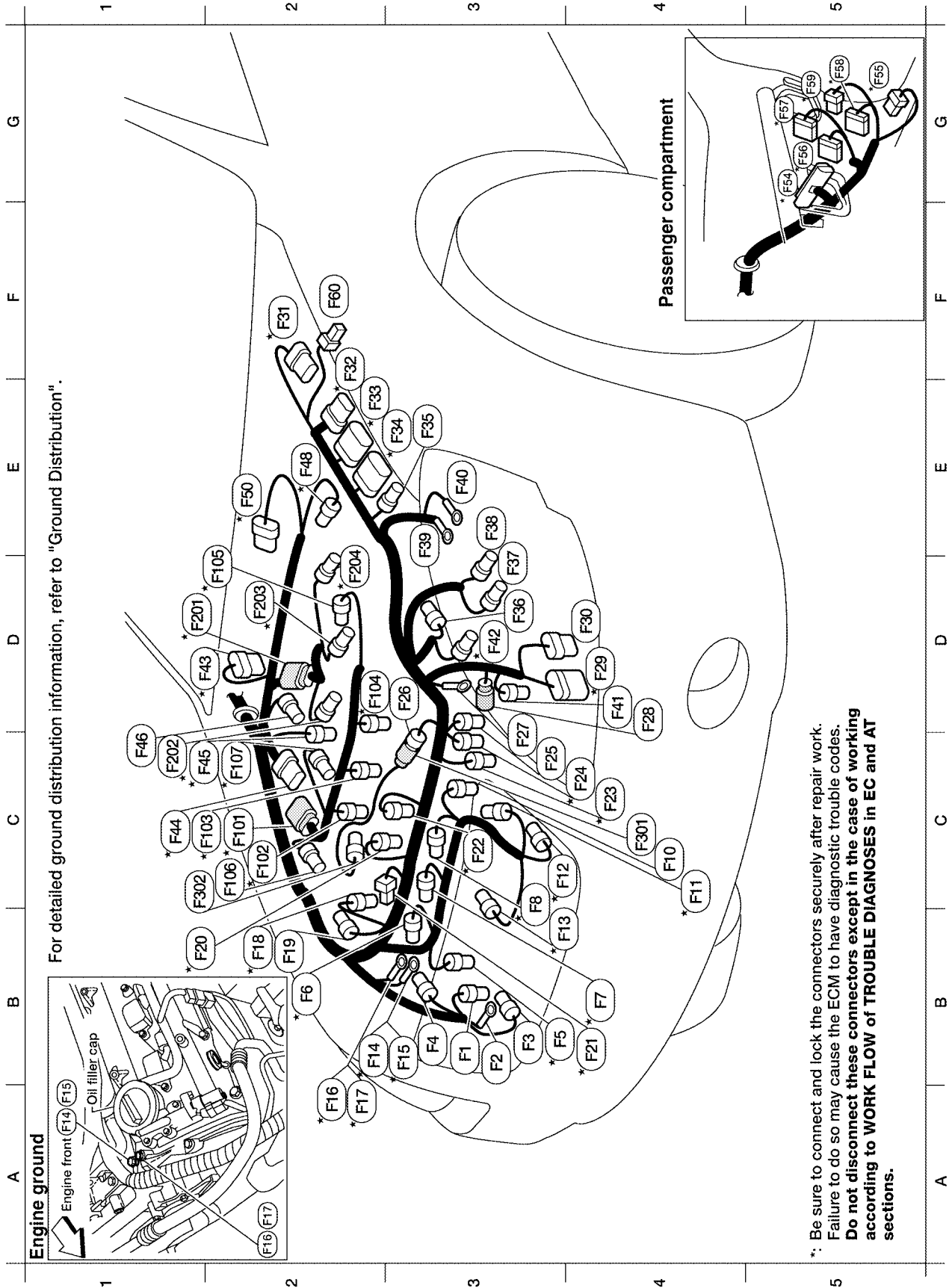
WKIA1622E

B3	(F1)	GY/2	: Generator	E2	(F31)	B/6	: 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)	G/2	: Intake valve timing control solenoid valve	E3	(F34)	B/12	: To (E21)
B3	(F5)	GY/3	: Ignition coil No. 1 (with power transistor)	E2	(F36)	GY/2	: Vehicle speed sensor
C2	(F6)	GY/3	: Ignition coil No. 2 (with power transistor)	D3	(F37)	B/3	: Turbine revolution sensor (with A/T)
C3	(F7)	GY/3	: Ignition coil No. 4 (with power transistor)	D3	(F38)	B/3	: Revolution sensor (with A/T)
C3	(F8)	GY/3	: Ignition coil No. 3 (with power transistor)	E2	(F39)	-	: Battery (positive)
C3	(F9)	B/3	: Camshaft position sensor (PHASE)	D3	(F40)	-	: Fusible link box (battery)
D2	(F10)	L/2	: EVAP canister purge volume control solenoid valve	D3	(F41)	B/2	: Back-up lamp switch (with M/T)
D2	(F11)	B/3	: Crankshaft position sensor	E3	(F42)	B/2	: Park/neutral position (PNP) switch (with M/T)
C2	(F12)	B/6	: To (F10)	C3	(F50)	G/6	: Electric throttle control actuator
D2	(F13)	BR/2	: VIAS control solenoid valve	G5	(F54)	SMJ	: ECM
G4	(F14)	-	: Engine ground	G5	(F55)	BR/8	: To (S105)
B2	(F15)	-	: Engine ground	G5	(F56)	W/24	: TCM (transmission control module) (with A/T)
B2	(F16)	-	: Engine ground	G5	(F57)	GY/24	: TCM (transmission control module) (with A/T)
D2	(F18)	B/2	: Knock sensor	G5	(F58)	W/6	: To (M70)
D1	(F19)	GY/1	: Oil pressure switch	G5	(F59)	W/24	: To (M71)
D2	(F20)	B/3	: Power steering pressure sensor	F2	(F60)	GY/2	: Dropping resistor
C2	(F21)	W/2	: Condenser 2	Engine control sub-harness			
C3	(F22)	G/6	: Air fuel ratio (A/F) sensor	C2	(F101)	B/6	: To (F12)
C3	(F23)	G/4	: Heated oxygen sensor 2 (Rear)	C2	(F102)	GY/2	: Injector No. 1
C3	(F24)	GY/2	: Engine coolant temperature sensor	C2	(F103)	GY/2	: Injector No. 2
C4	(F27)	-	: Starter motor	D1	(F104)	GY/2	: Injector No. 3
C4	(F28)	GY/1	: Starter motor	D2	(F105)	GY/2	: Injector No. 4
D4	(F29)	B/10	: Park/neutral position (PNP) switch (with A/T)				
D4	(F30)	B/8	: Terminal cord assembly (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.

HARNESS

ENGINE CONTROL HARNESS (VQ35DE)



WKIA1625E

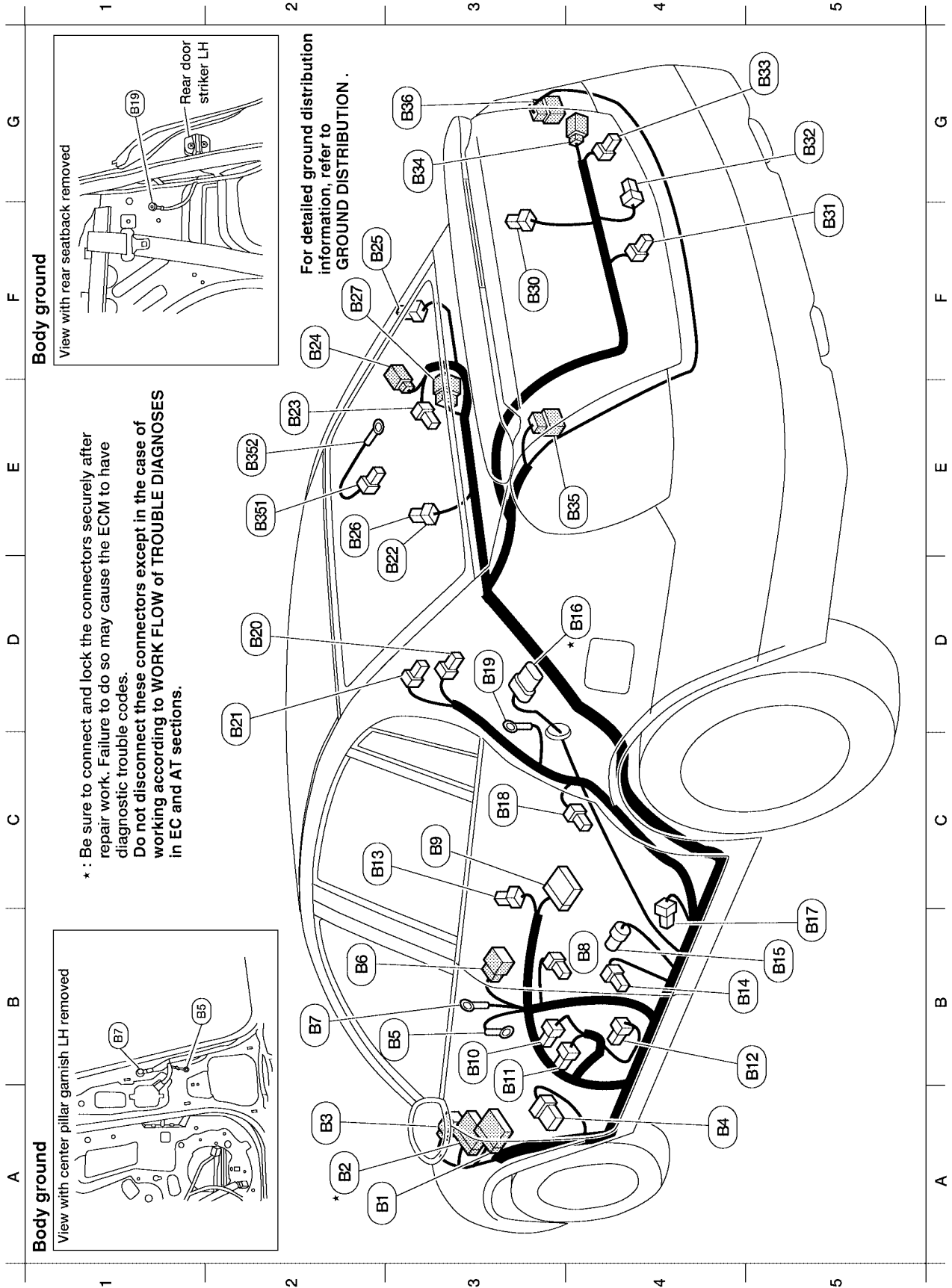
B3 (F1) GY/2	: Generator	D4 * (F29) B/10	: Park/neutral position (PNP) switch (with A/T)
B3 (F2) -	: Generator	D4 (F30) B/8	: Terminal cord assembly (with A/T)
B3 (F3) B/1	: A/C compressor	F2 * (F31) B/6	: Mass air flow sensor
B3* (F4) G/2	: Intake valve timing control solenoid valve (Bank 2)	F2 * (F32) B/8	: To (E20)
B3* (F5) B/3	: Heated oxygen sensor 1 (Front) (Bank 2)	E3 * (F33) GY/9	: To (E19)
B2* (F6) GY/3	: Ignition coil No. 2 (with power transistor)	E3 * (F34) B/12	: To (E21)
B4* (F7) GY/3	: Ignition coil No. 4 (with power transistor)	D3 (F36) GY/2	: Vehicle speed sensor
C3* (F8) GY/3	: Ignition coil No. 6 (with power transistor)	D3 (F37) B/3	: Turbine revolution sensor (with A/T)
C4 (F10) BR/3	: Front electronic controlled engine mount	E3 (F38) B/3	: Revolution sensor (with A/T)
C4* (F11) B/3	: Crankshaft position sensor	D3 (F39) -	: Battery (positive)
C3* (F12) G/4	: Heated oxygen sensor 2 (Rear) (Bank 2)	E3 (F40) -	: Fusible link box (battery)
B3* (F13) L/4	: Heated oxygen sensor 2 (Rear) (Bank 1)	D4 (F41) B/2	: Back-up lamp switch (with M/T)
B2* (F14) -	: Engine ground	D3* (F42) B/2	: Park/neutral position (PNP) switch (with M/T)
B3* (F15) -	: Engine ground	D2 * (F43) G/6	: To (F201)
A2* (F16) -	: Engine ground	C1 * (F44) G/8	: To (F101)
A2* (F17) -	: Engine ground	C2 * (F45) B/3	: Heated oxygen sensor 1 (Front) (Bank 1)
B2* (F18) GY/2	: Injector No. 2	C1 (F46) B/3	: Power steering oil pressure sensor
B2 (F19) B/2	: VIAS control solenoid valve	E2 * (F48) G/3	: Camshaft position sensor (PHASE) (Bank 1)
B2* (F20) GY/2	: Injector No. 4	E2 * (F50) G/6	: Electric throttle control actuator
B4* (F21) GY/2	: Condenser 2	G5 * (F54) SMJ	: ECM
C3* (F22) GY/2	: Injector No. 6	G5 * (F55) BR/8	: To (E105)
C4* (F23) B/3	: Camshaft position sensor (PHASE) (Bank 2)	G5 * (F56) W/24	: TCM (transmission control module) (with A/T)
C4* (F24) GY/2	: Engine coolant temperature sensor	G5 * (F57) GY/24	: TCM (transmission control module) (with A/T)
C3 (F25) BR/3	: Rear electronic controlled engine mount	G5 * (F58) W/6	: To (M70)
C3 (F26) B/2	: To (F301)	G5 * (F59) W/24	: To (M71)
C3 (F27) -	: Starter motor	F2 (F60) GY/2	: Dropping resistor
D4 (F28) GY/1	: Starter motor		

*: 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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BODY HARNESS



WKIA3030E

HARNESSES

A2	(B1)	W/16	: To (M11)
A2 *	(B2)	W/16	: To (M12)
A2	(B3)	W/4	: To (E33)
A4	(B4)	BR/6	: Rear window defogger relay
A3	(B5)	-	: Body ground
B3	(B6)	W/8	: To (D20)
B3	(B7)	-	: Body ground
B4	(B8)	W/3	: Front door switch LH
C3	(B9)	Y/12	: Air bag diagnosis sensor unit
B3	(B10)	Y/2	: Front LH side air bag module
B3	(B11)	W/2	: Power seat
B5	(B12)	W/3	: Seatbelt buckle switch LH
C3	(B13)	W/3	: Heated seat switch
B5	(B14)	Y/2	: Front LH seat belt pre-tensioner
B5	(B15)	Y/2	: LH side airbag (satellite) sensor
D4 *	(B16)	GY/5	: Fuel level sensor unit and fuel pump
B5	(B17)	W/2	: Condenser-1
C3	(B18)	W/1	: Rear door switch LH
D3	(B19)	-	: Body ground

D2	(B20)	Y/2	: LH side curtain air bag module
C2	(B21)	W/1	: Rear window defogger condenser
D3	(B22)	BR/2	: Rear speaker LH (without BOSE audio system)
E2	(B23)	W/2	: Trunk room lamp (without BOSE audio system)
F2	(B24)	W/2	: High mounted stop lamp (without rear spoiler and with BOSE audio system)
F3	(B25)	BR/2	: Rear speaker RH (without BOSE audio system)
E2	(B26)	W/2	: Subwoofer LH (with BOSE audio system)
F2	(B27)	W/8	: To (B131) (with BOSE audio system)
F3	(B30)	BR/2	: High mounted stop lamp (with rear spoiler)
F5	(B31)	BR/2	: License lamp LH
G5	(B32)	W/4	: Trunk lamp switch and trunk release solenoid
G5	(B33)	BR/2	: License lamp RH
G3	(B34)	W/2	: Trunk key cylinder switch
E4	(B35)	W/6	: Rear combination lamp LH
G3	(B36)	W/6	: Rear combination lamp RH
E2	(B35)	B/1	: Rear window defogger
E2	(B32)	-	: Body ground

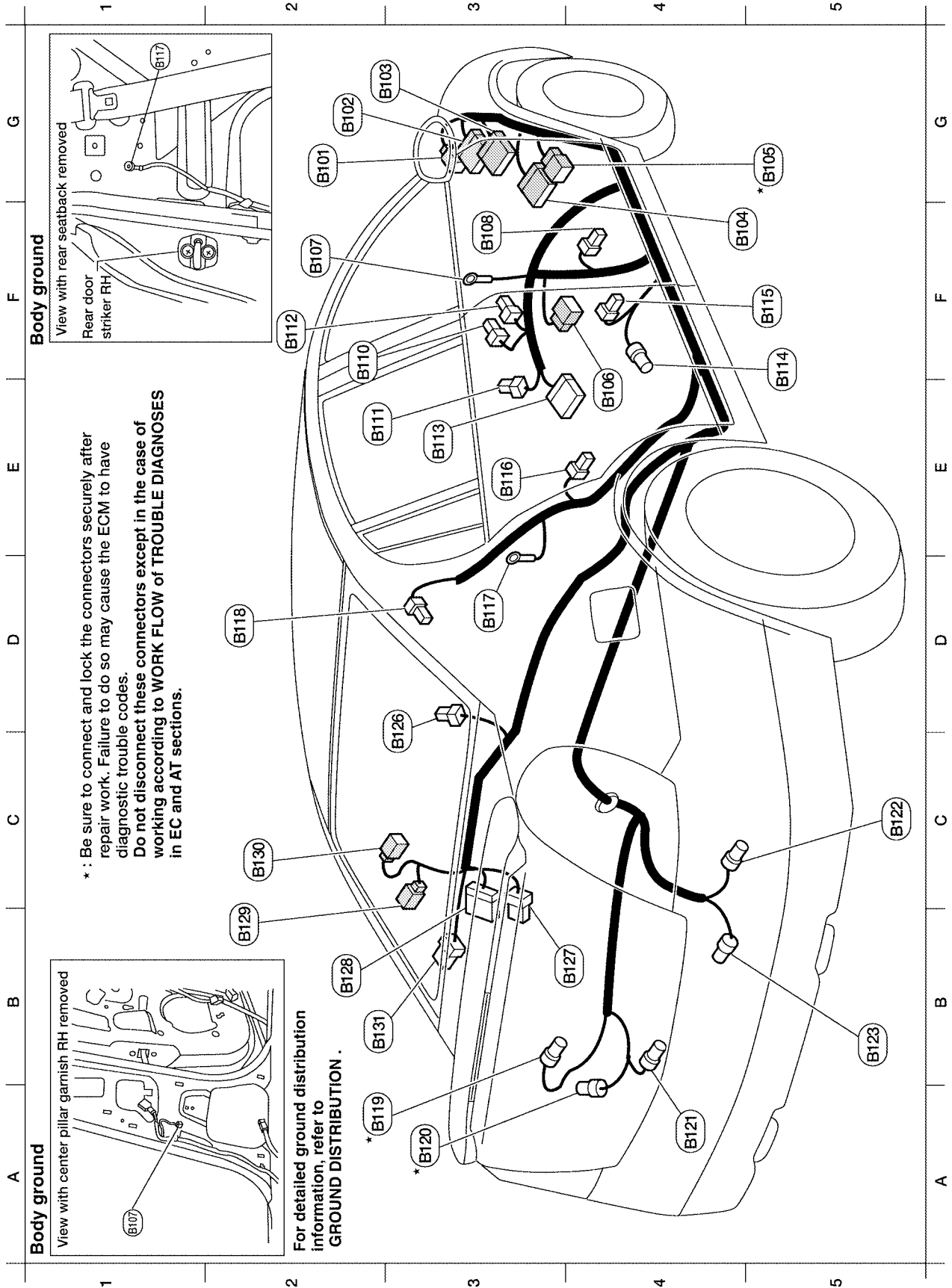
* : Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.
Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

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HARNESS

BODY NO. 2 HARNESS



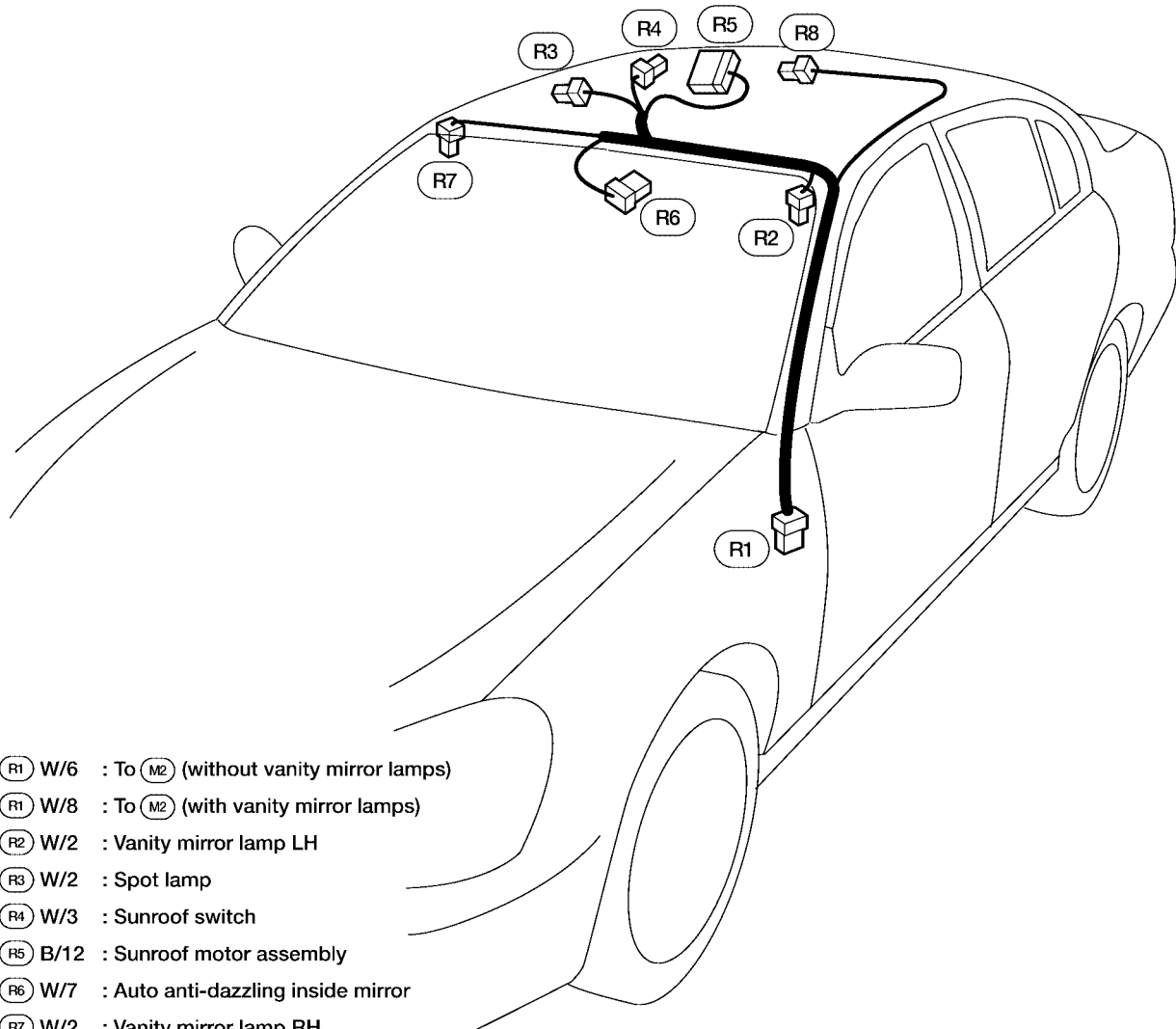
WKIA1627E

G2	(8107)	W/4	: To (E132)	D2	(8119)	Y/2	: RH side curtain air bag module
G2	(8103)	W/12	: To (M73)	A2	*	(8119)	BR/3 : EVAP control system pressure sensor (QR25DE)
F4	(8104)	W/16	: To (M619)	A2	*	(8119)	GY/3 : EVAP control system pressure sensor (VQ35DE)
F5	*	(8105)	BR/8 : To (F55)	A3	*	(8120)	G/2 : Vacuum cut valve bypass valve
F4	(8106)	W/8	: To (D301)	A4	*	(8121)	B/2 : EVAP canister vent control valve
F2	(8107)	-	: Body ground	C5	(8122)	GY/2	: Rear wheel sensor RH
F3	(8108)	W/3	: Front door switch RH	B5	(8123)	BR/2	: Rear wheel sensor LH
F2	(8110)	W/3	: Seat belt buckle switch RH	C3	(8126)	W/2	: Subwoofer RH (with BOSE audio system)
E2	(8111)	W/3	: Heated seat switch RH	B4	(8127)	GY/8	: BOSE Speaker Amp.
F2	(8112)	Y/2	: Front RH side air bag module	B2	(8128)	B/24	: BOSE Speaker Amp.
E3	(8113)	Y/12	: Air bag diagnosis sensor unit	B2	(8128)	W/2	: High mounted stop lamp (without rear spoiler and with BOSE audio system)
F5	(8114)	Y/2	: RH side air bag (satellite) sensor	C2	(8130)	W/2	: Trunk room lamp (with BOSE audio system)
F5	(8115)	Y/2	: Front RH seatbelt pre-tensioner	B2	(8131)	W/8	: To (827) (with BOSE audio system)
E3	(8116)	W/1	: Rear door switch RH				
D3	(8117)	-	: Body 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 in the case of working according to **WORK FLOW of TROUBLE DIAGNOSES** in EC and AT sections.

HARNESS

ROOM LAMP HARNESS



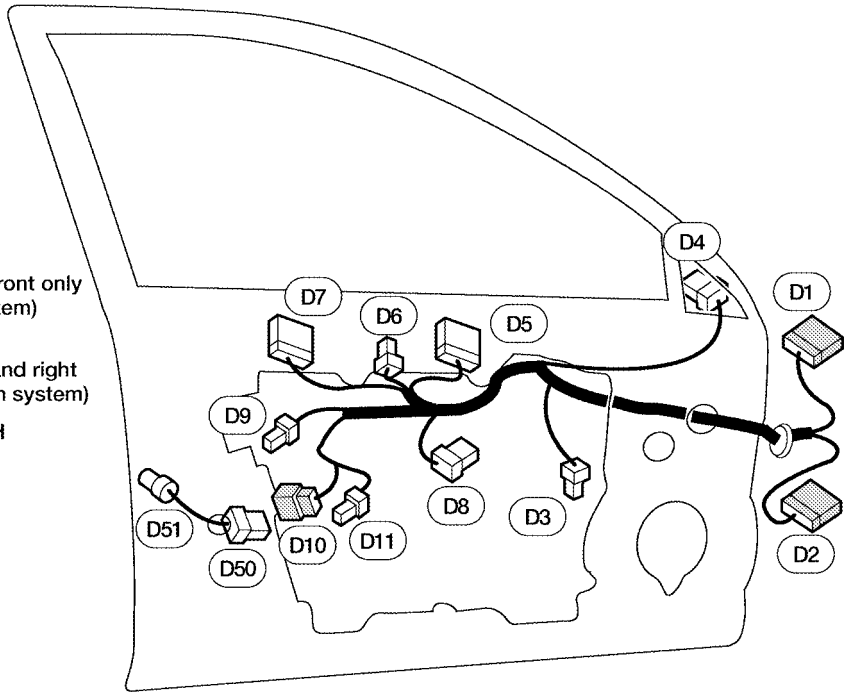
- Ⓡ1 W/6 : To Ⓜ2 (without vanity mirror lamps)
- Ⓡ1 W/8 : To Ⓜ2 (with vanity mirror lamps)
- Ⓡ2 W/2 : Vanity mirror lamp LH
- Ⓡ3 W/2 : Spot lamp
- Ⓡ4 W/3 : Sunroof switch
- Ⓡ5 B/12 : Sunroof motor assembly
- Ⓡ6 W/7 : Auto anti-dazzling inside mirror
- Ⓡ7 W/2 : Vanity mirror lamp RH
- Ⓡ8 W/2 : Room lamp

WKIA0092E

HARNESS

FRONT DOOR LH HARNESS

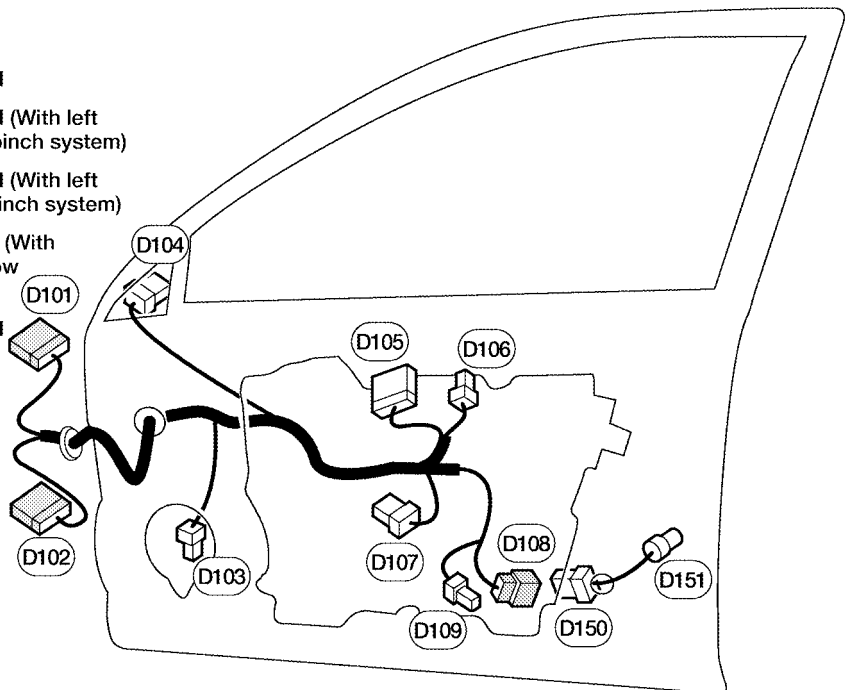
- (D1) W/12 : To (M9)
 - (D2) W/16 : To (M8)
 - (D3) W/2 : Front door speaker LH
 - (D4) W/8 : Door mirror LH
 - (D5) W/10 : Door mirror switch
 - (D6) W/3 : Main power window and door lock/unlock switch
 - (D7) W/16 : Main power window and door lock/unlock switch (With left front only power window anti-pinch 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

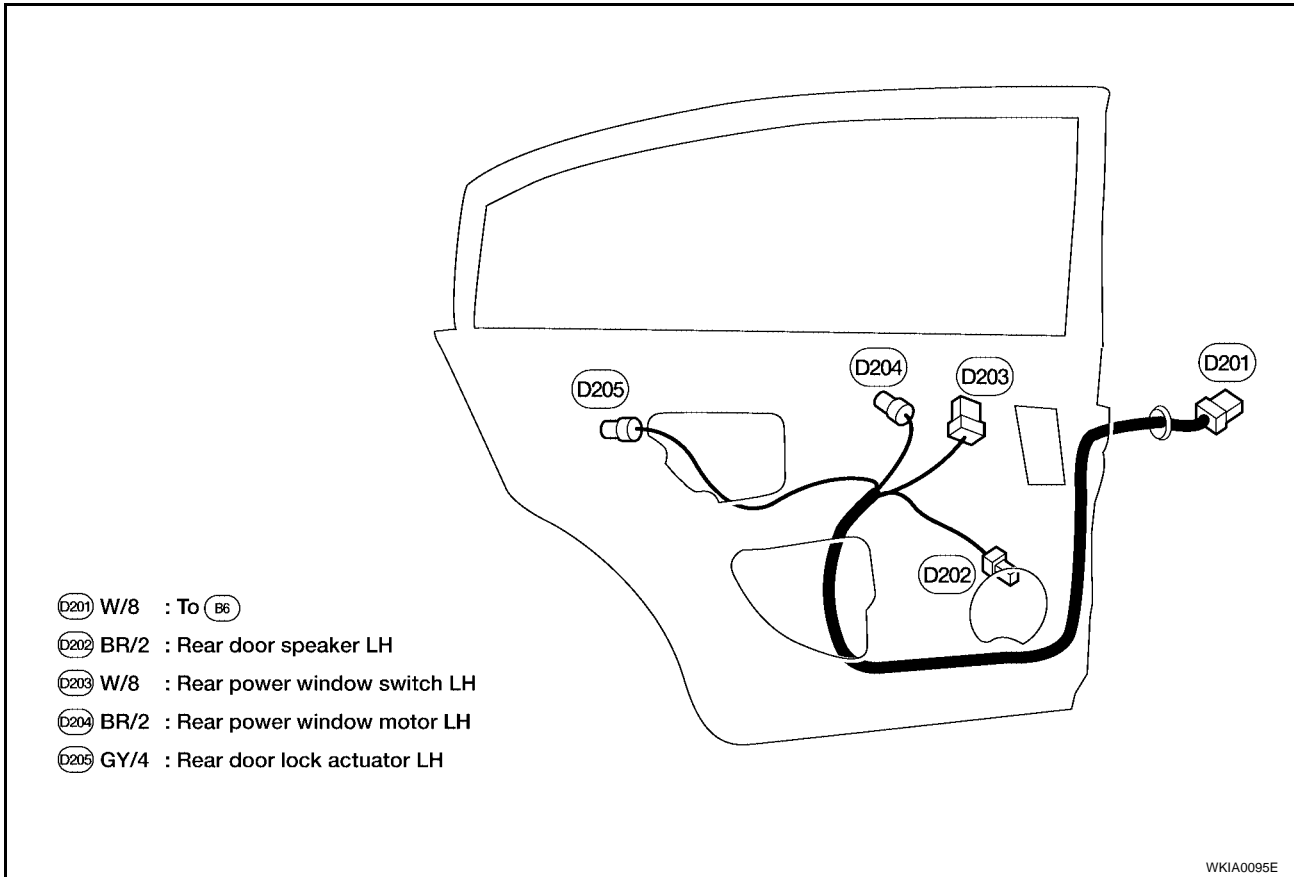


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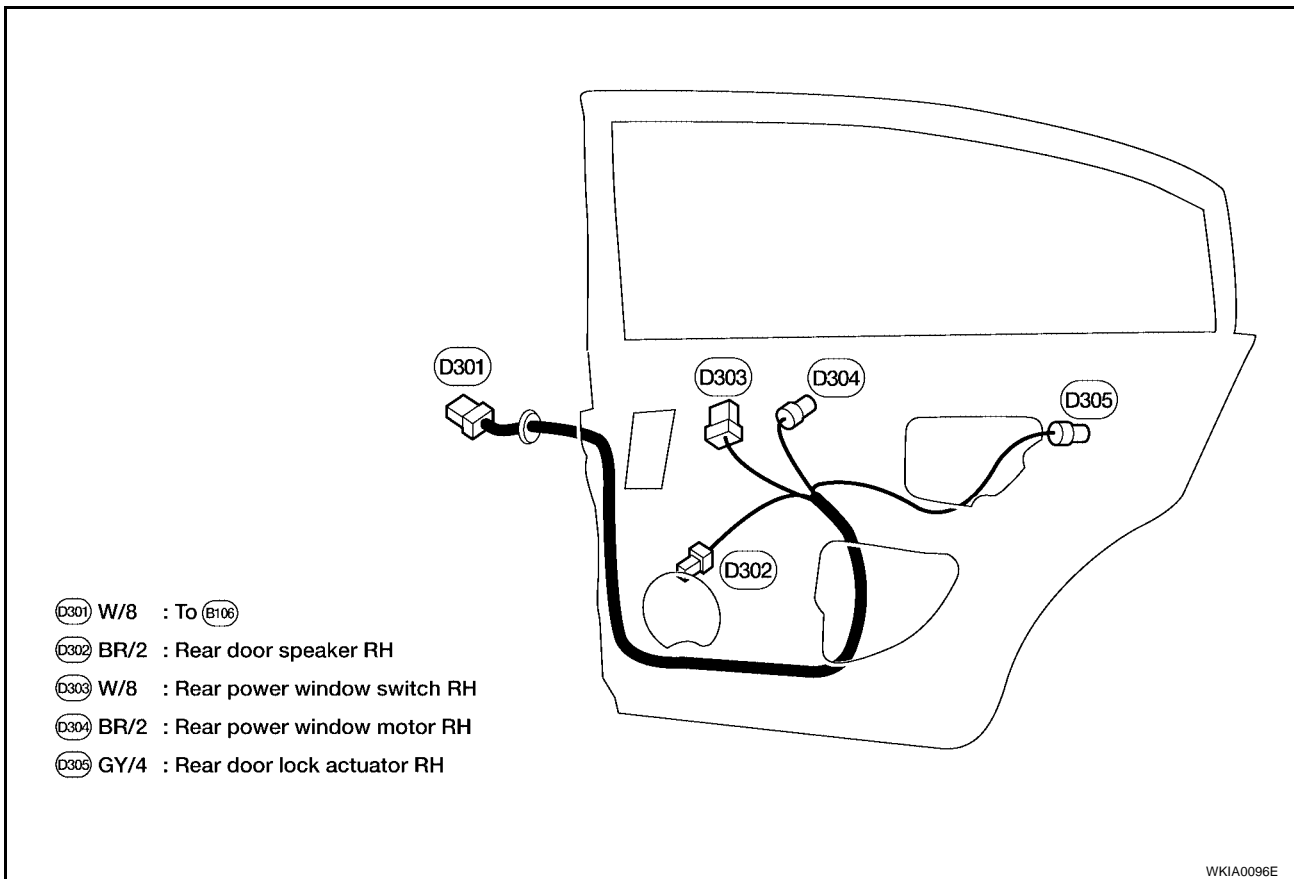
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HARNESS

REAR DOOR LH HARNESS



REAR DOOR RH HARNESS



HARNESS

Wiring Diagram Codes (Cell Codes)

EKS003JH

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/F	EC	Air Fuel Ratio Sensor
A/FH	EC	Air Fuel Ratio Sensor
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
BYPSS/V	EC	Vacuum Cut Valve Bypass Valve
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DLC	EC	Data Link Connector
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ENGSS	AT	Engine Speed Signal
EMNT	EC	Engine Mount
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FLS1	EC	Fuel Level Sensor Function (SLOSH)
FLS2	EC	Fuel Level Sensor Circuit
FLS3	EC	Fuel Level Sensor Circuit (Ground Signal)

HARNESS

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
H/MIRR	GW	Door Mirror with Heated Mirror
HEATER	MTC	Heater System
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
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
MIL/DL	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
PS/SEN	EC	Power Steering Oil Pressure Sensor

HARNESSES

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

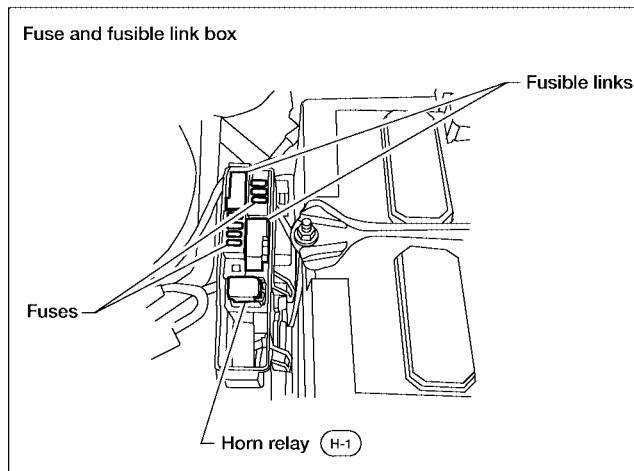
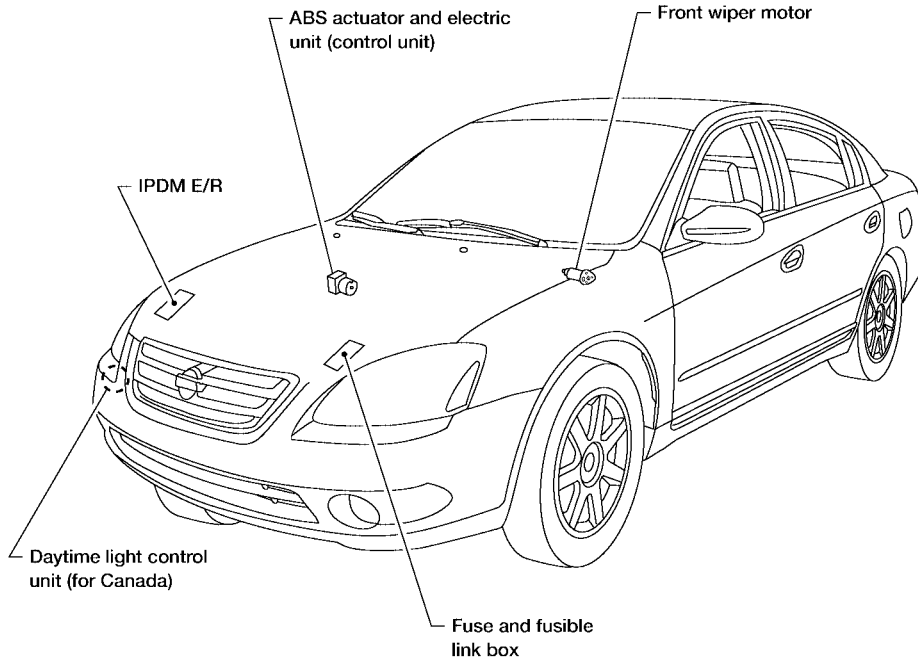
ELECTRICAL UNITS LOCATION

PFP:25230

EKS003JI

ELECTRICAL UNITS LOCATION

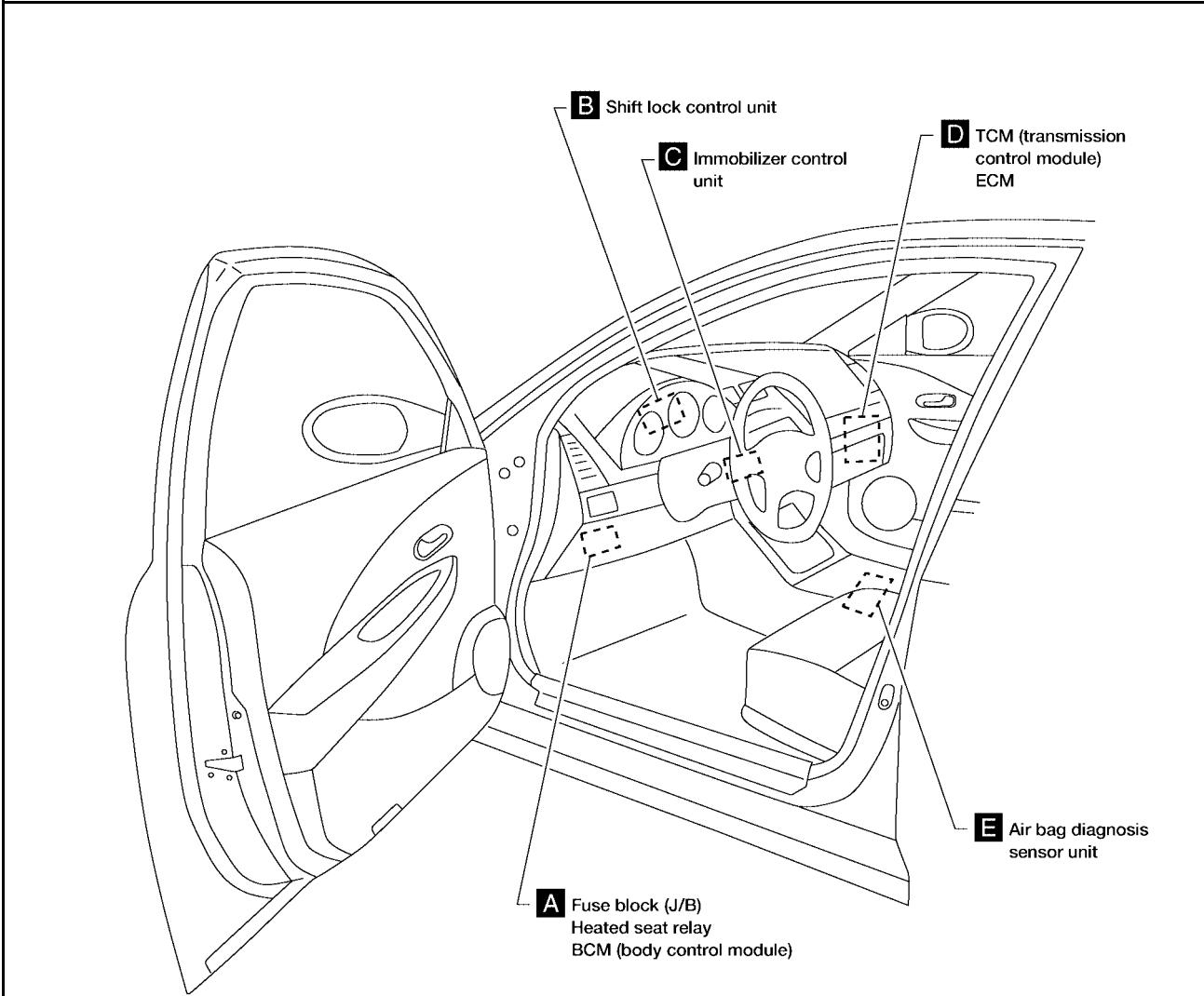
Electrical Units Location ENGINE COMPARTMENT



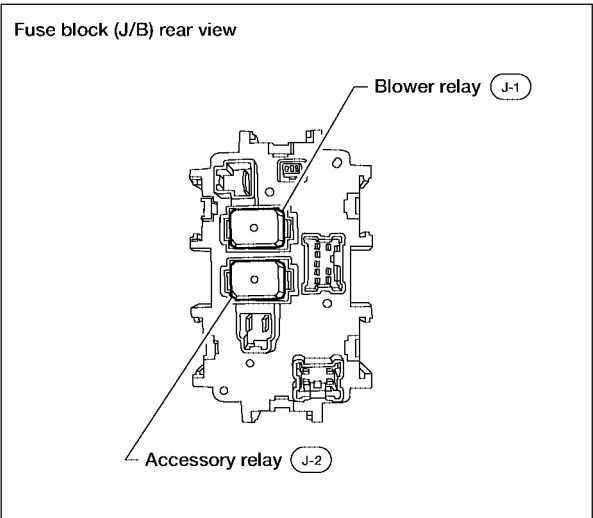
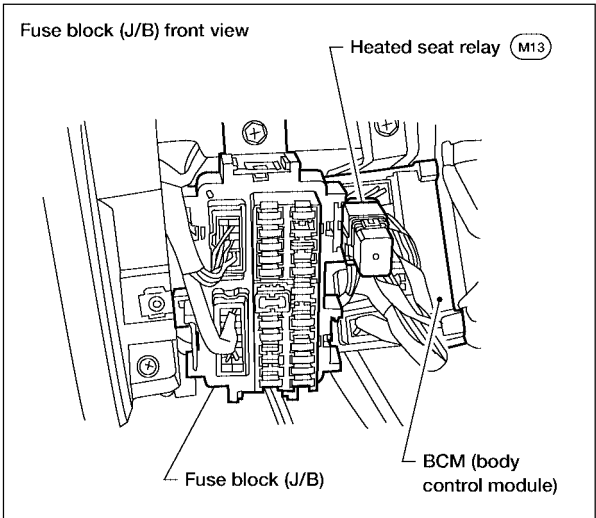
WKIA3033E

ELECTRICAL UNITS LOCATION

PASSENGER COMPARTMENT



A Instrument panel side LH



WKIA3034E

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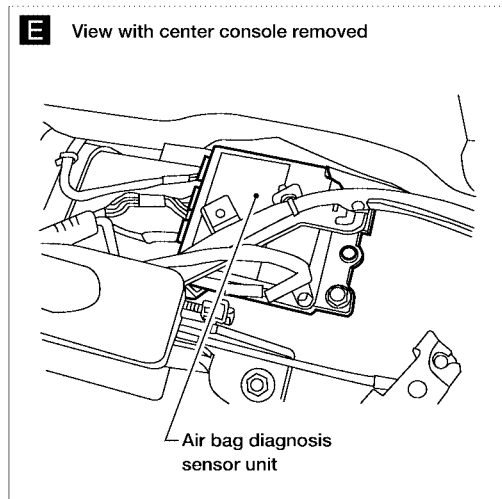
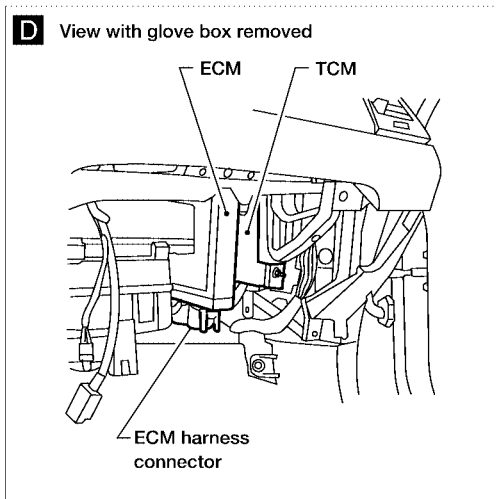
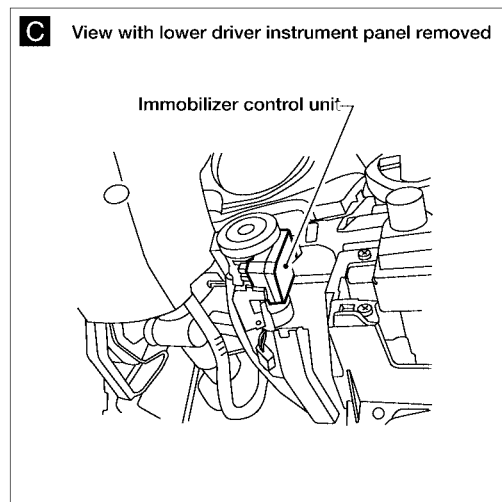
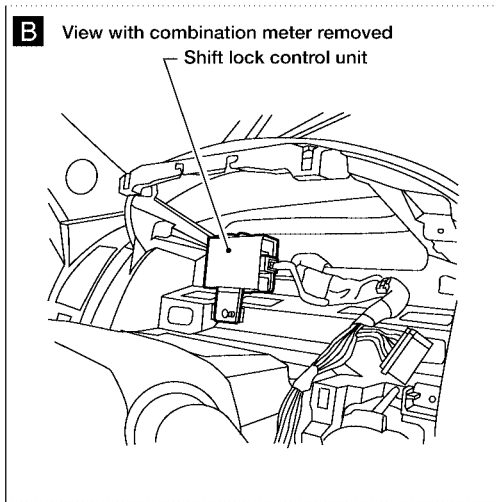
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ELECTRICAL UNITS LOCATION



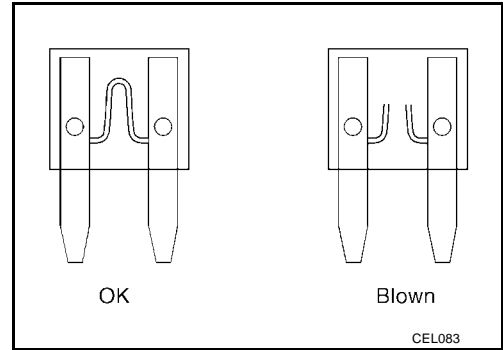
WKIA0131E

ELECTRICAL UNITS LOCATION

Fuse

EKS003JJ

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



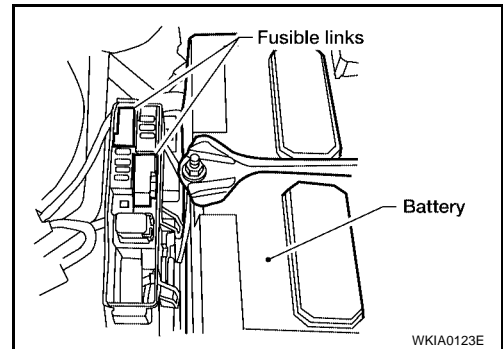
Fusible Link

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

CAUTION:

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

EKS003JK



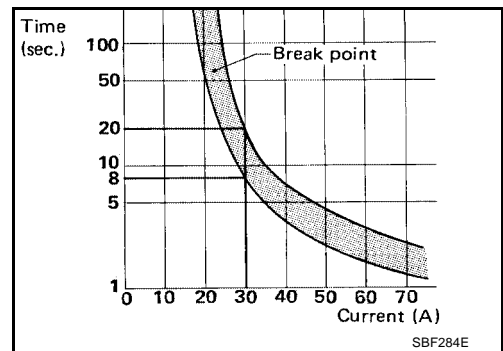
Circuit Breaker (Built Into BCM)

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

A circuit breaker is used for the following systems:

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

EKS003JL



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HARNESS CONNECTOR

PFP:B4341

HARNESS CONNECTOR

EKS003JM

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

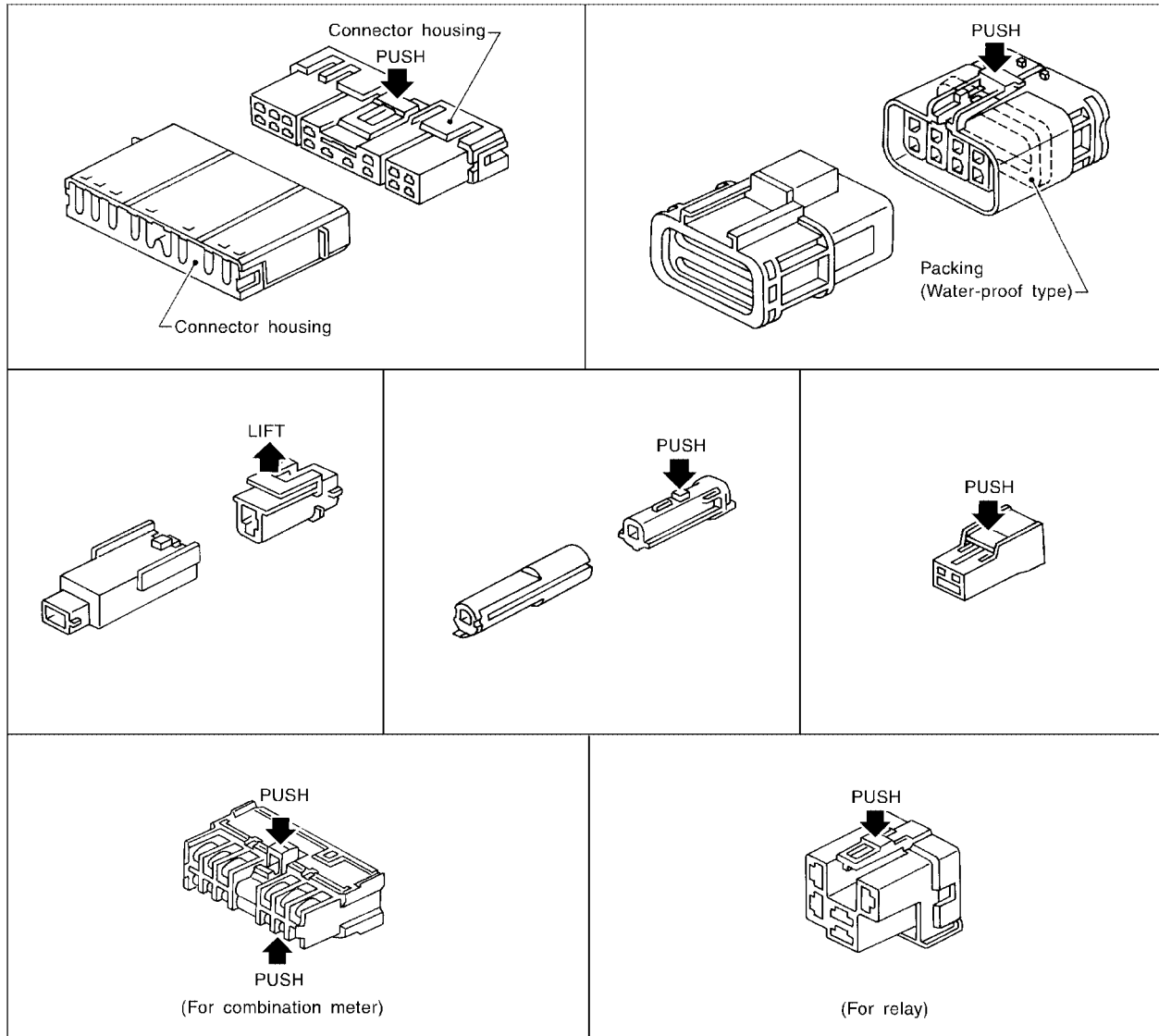
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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

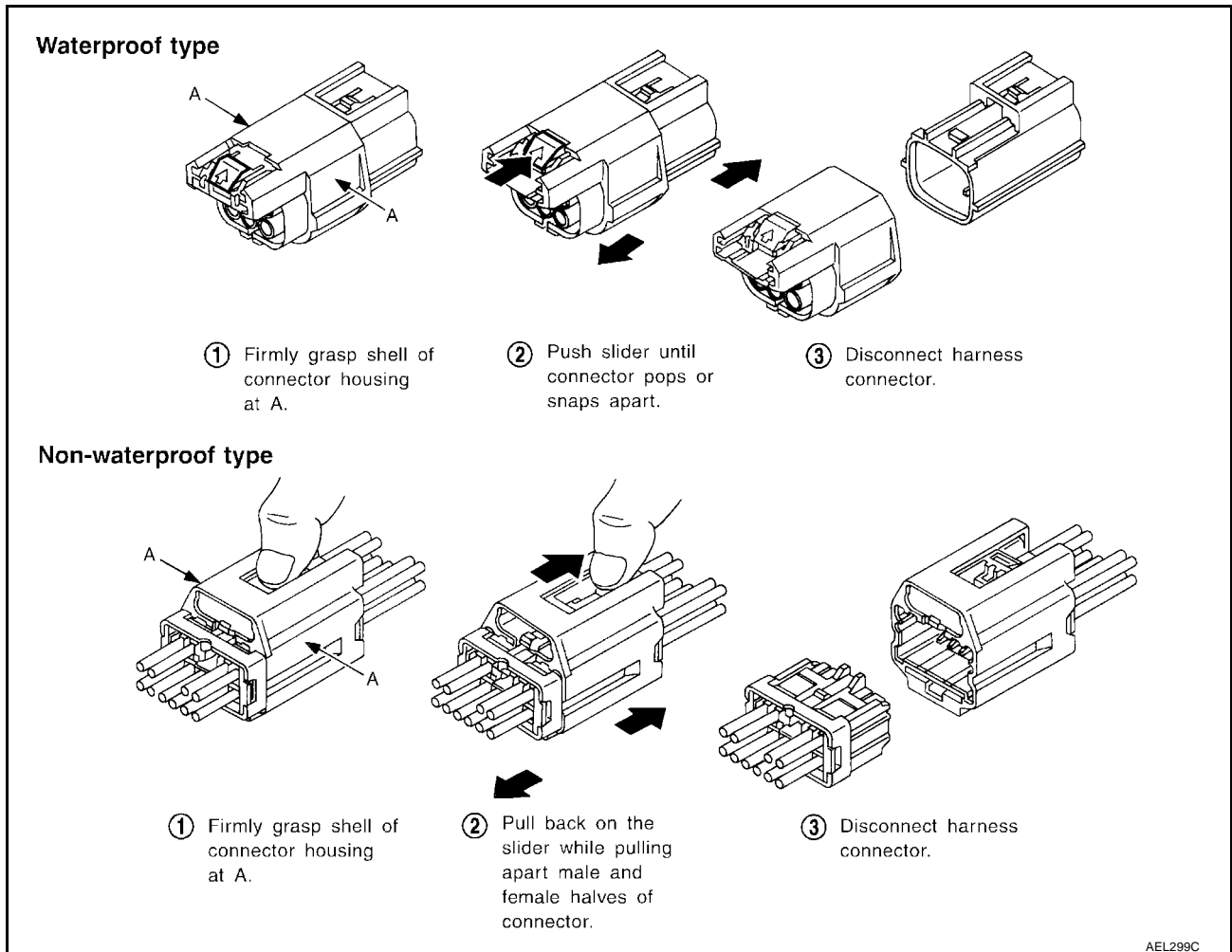
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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]



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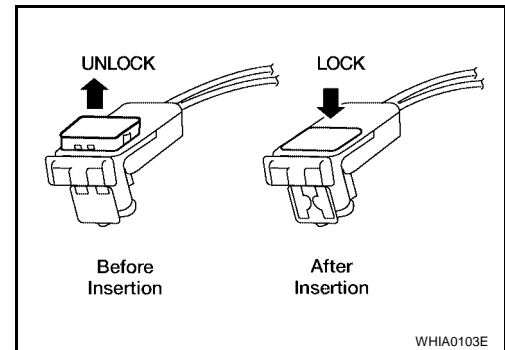
HARNES CONNECTOR

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.**



ELECTRICAL UNITS

ELECTRICAL UNITS

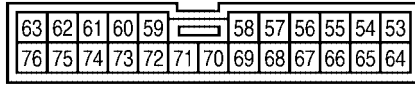
Terminal Arrangement

PF2:23710

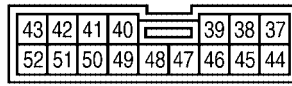
EKS003JO

BCM (BODY CONTROL MODULE)

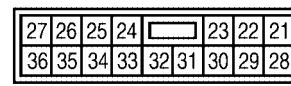
QR : WITH QR25DE
VQ : WITH VQ35DE



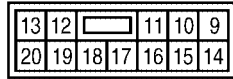
M18
BR



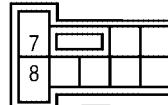
M19
W



M20
W



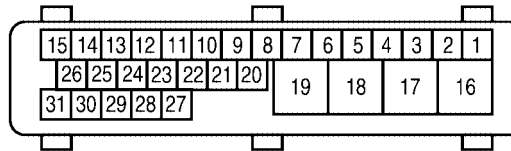
M21
W



E39
W



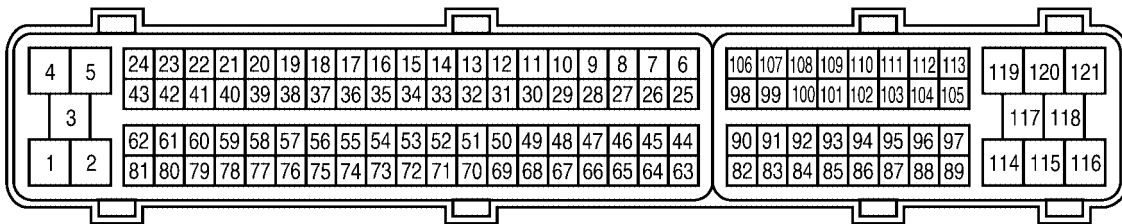
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



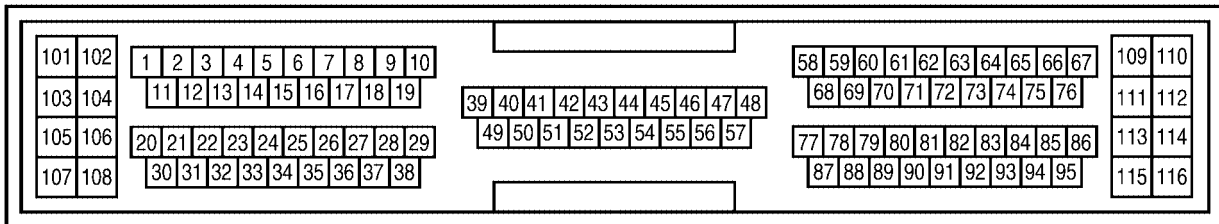
E125
B



ECM



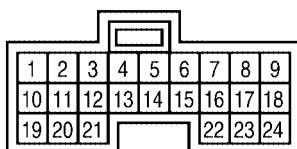
F54
QR
B



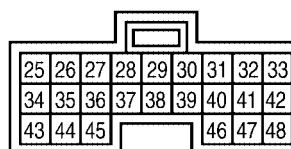
F54
VQ
GY



TCM (TRANSMISSION CONTROL MODULE)



F56
W



F57
GY



WKIA1630E

STANDARDIZED RELAY

PFP:25230

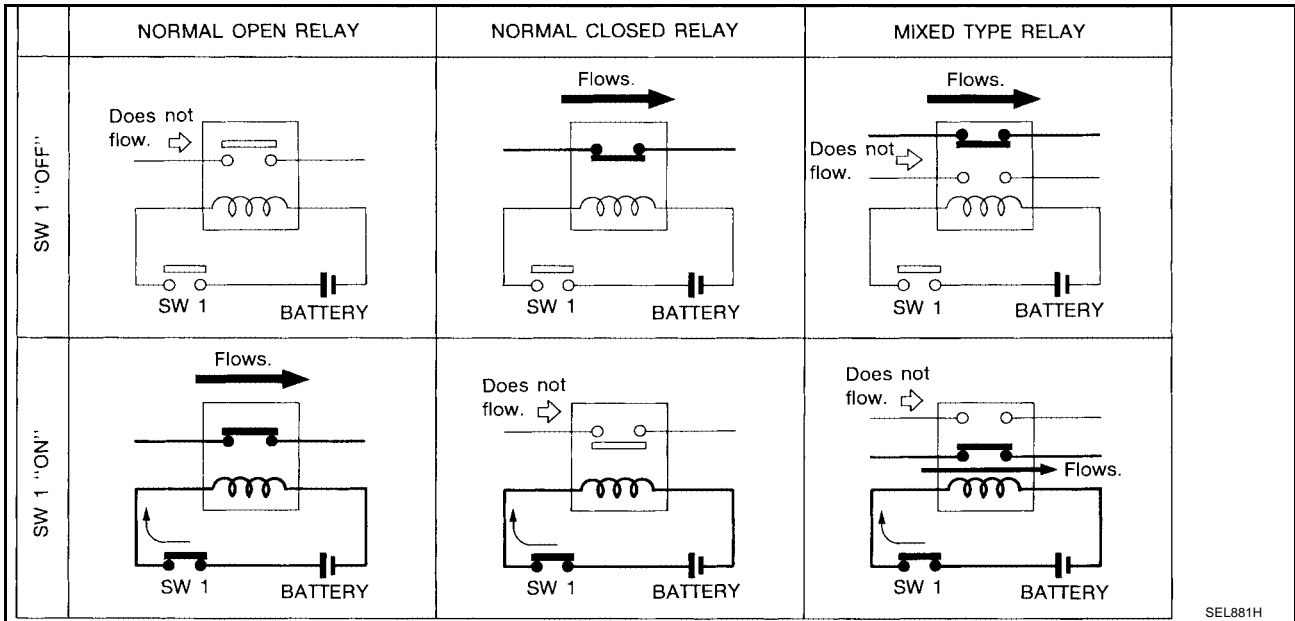
EKS003JQ

STANDARDIZED RELAY

Description

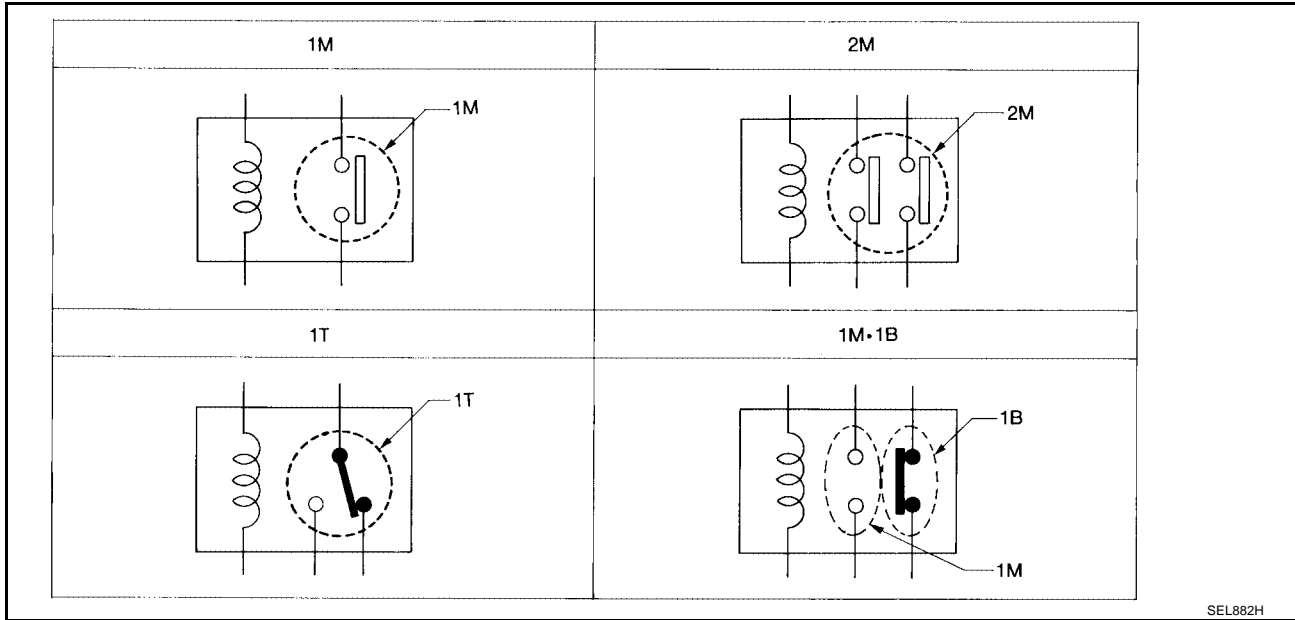
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



SEL881H

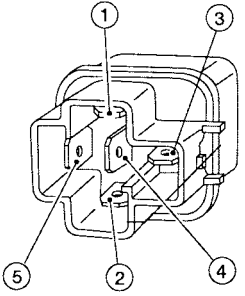
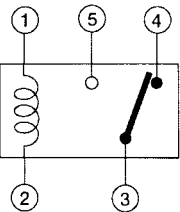
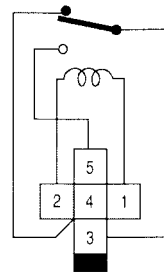
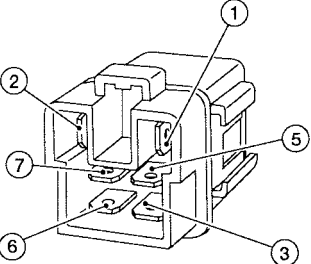
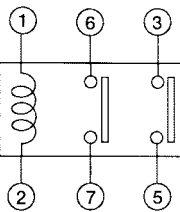
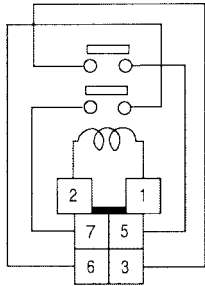
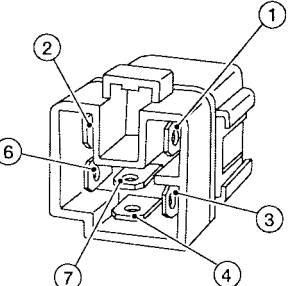
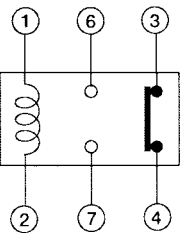
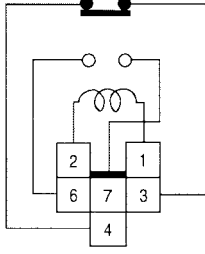
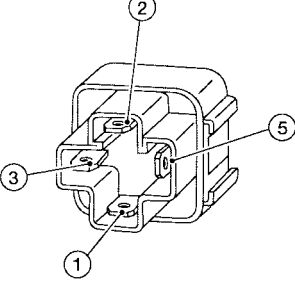
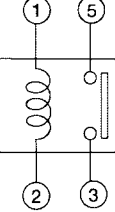
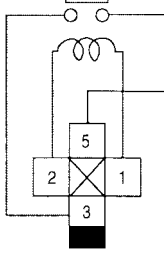
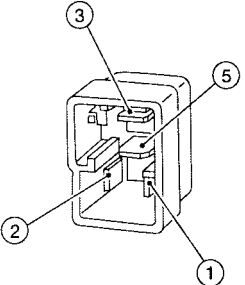
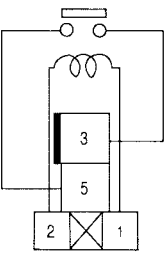
TYPE OF STANDARDIZED RELAYS



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

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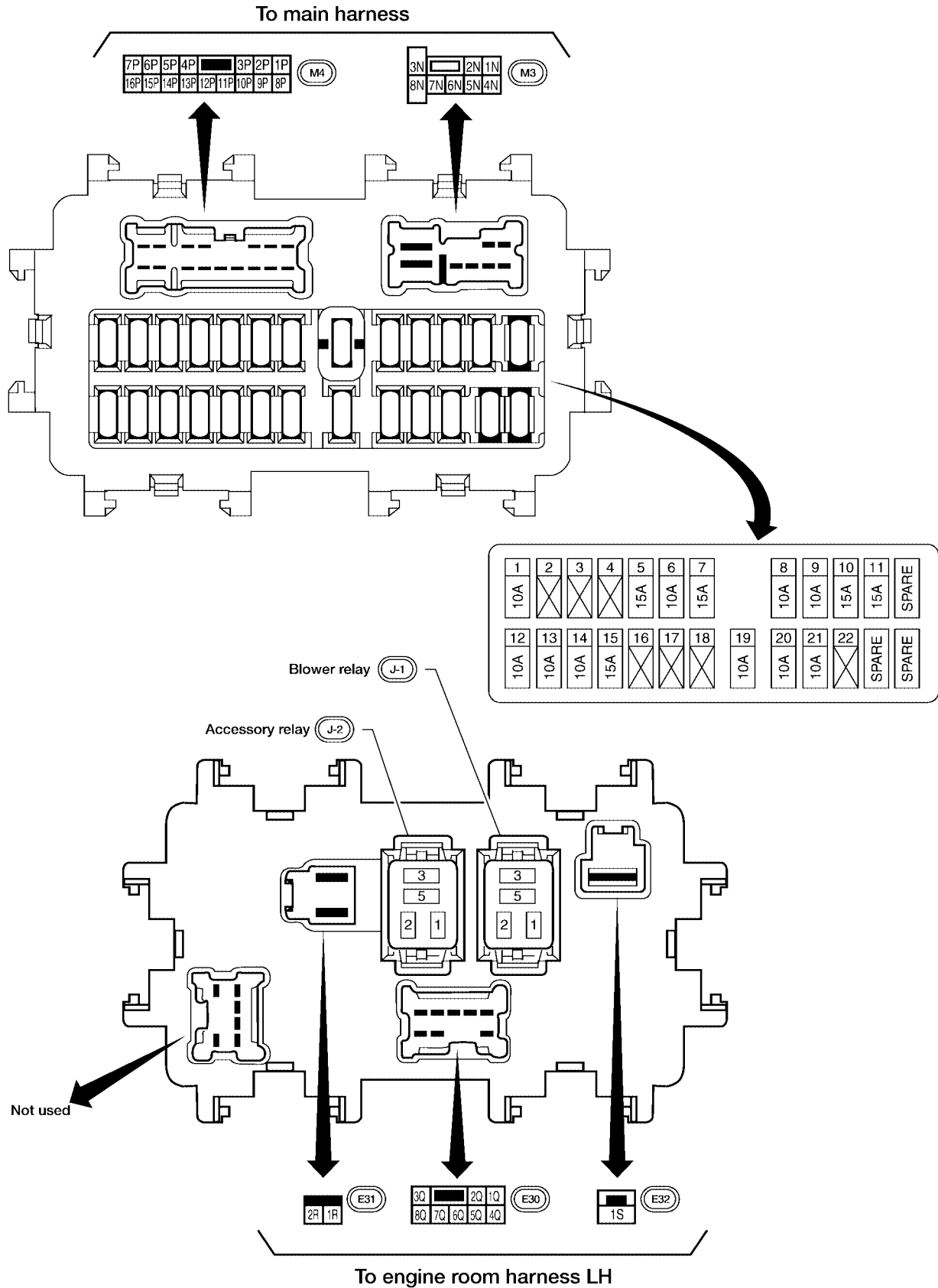
FUSE BLOCK-JUNCTION BOX(J/B)

PF24350

EKS003JR

FUSE BLOCK-JUNCTION BOX(J/B)

Terminal Arrangement



WKIA1631E

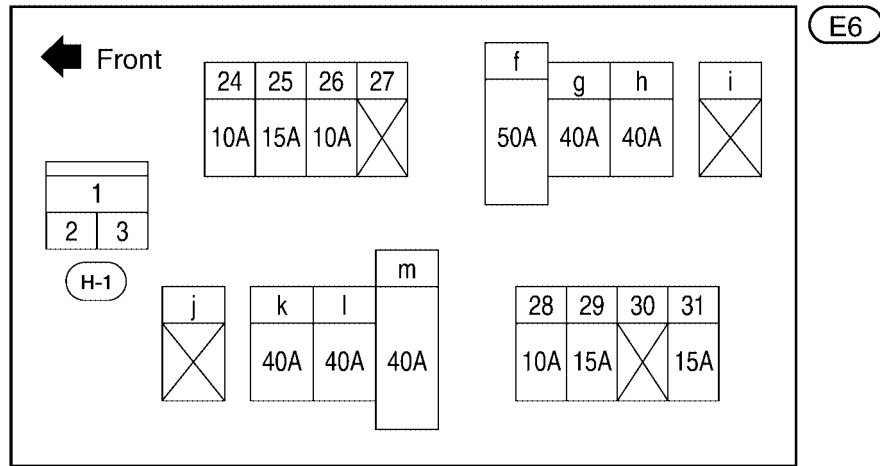
FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX

PF24381

Terminal Arrangement

EKS003JS



24 - 31: FUSE f - m: FUSIBLE LINK

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WKIA1632E

FUSE AND FUSIBLE LINK BOX
