

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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NORMAL OPEN, NORMAL CLOSED AND			

PRECAUTIONS

PRECAUTIONS

PF0:00011

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

EKS00FSH

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.

A

B

C

D

E

F

G

H

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J

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L

M

POWER SUPPLY ROUTING CIRCUIT

POWER SUPPLY ROUTING CIRCUIT

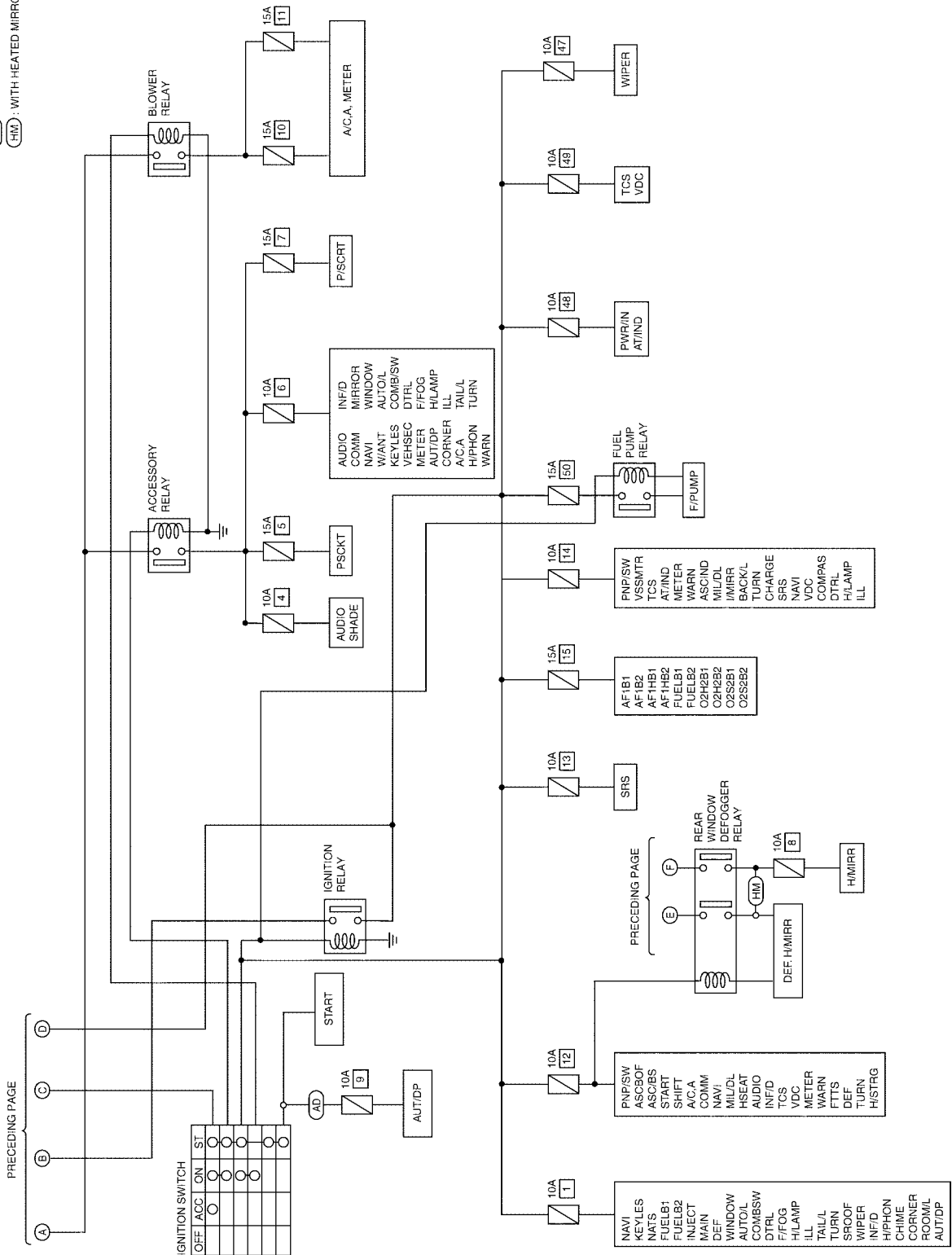
PF:24110

Schematic

EKS009HX

POWER SUPPLY ROUTING CIRCUIT

(AD) : WITH AUTOMATIC DRIVE POSITIONER
 (HM) : WITH HEATED MIRRORS



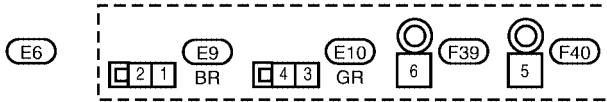
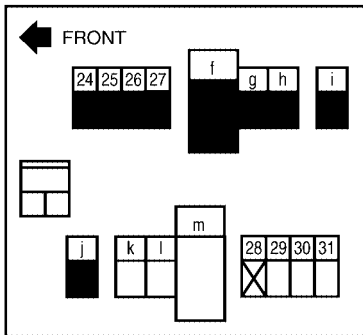
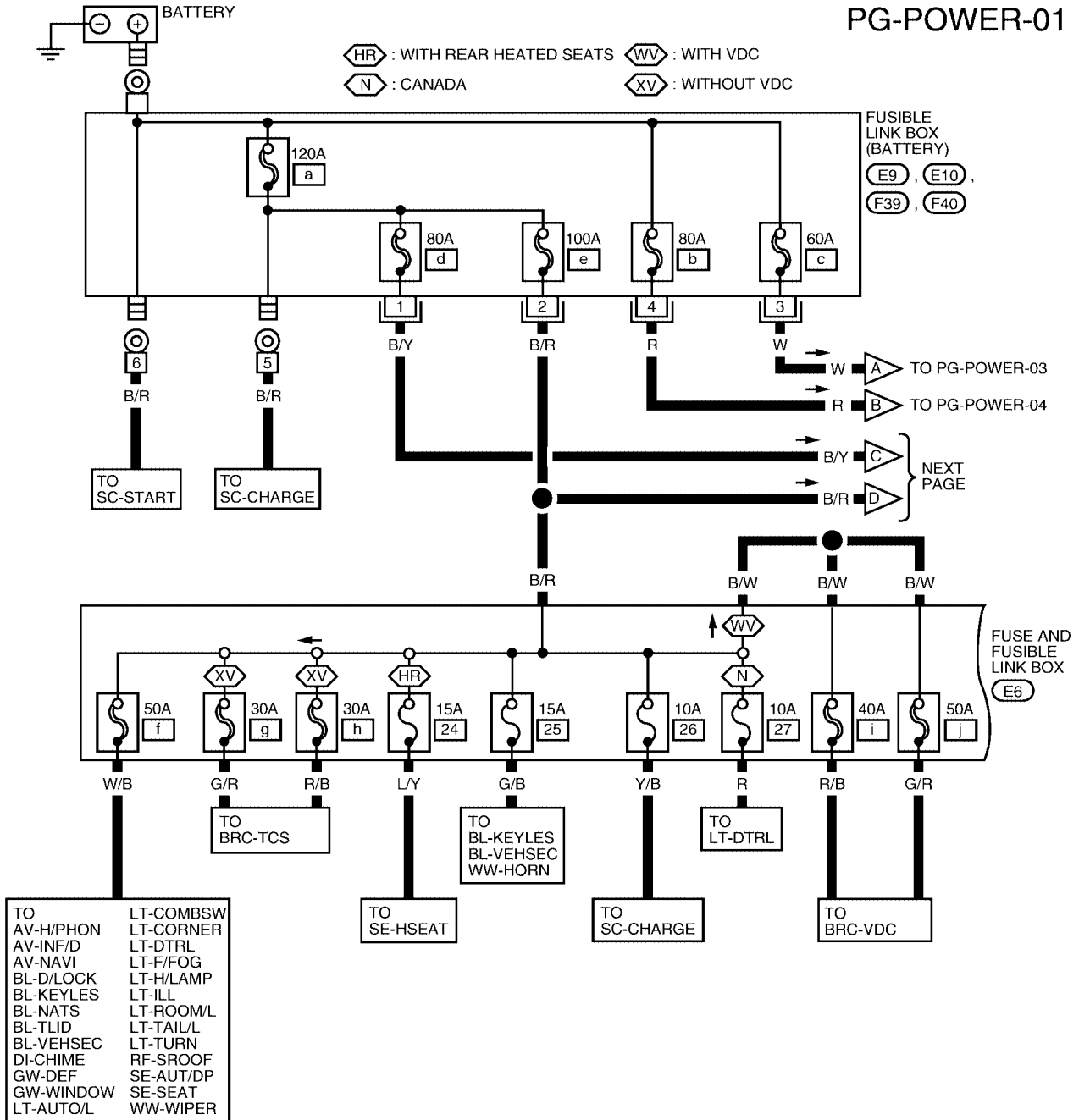
WKWA3799E

POWER SUPPLY ROUTING CIRCUIT

EKS009HY

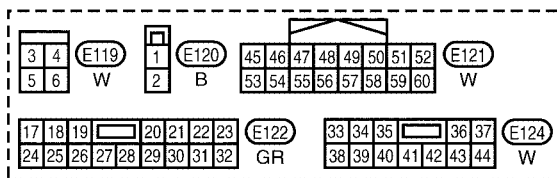
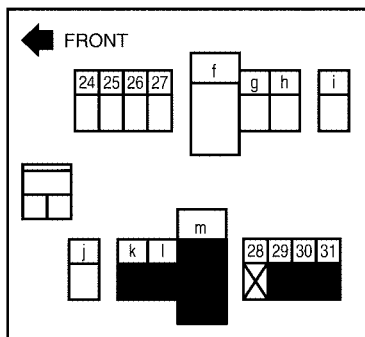
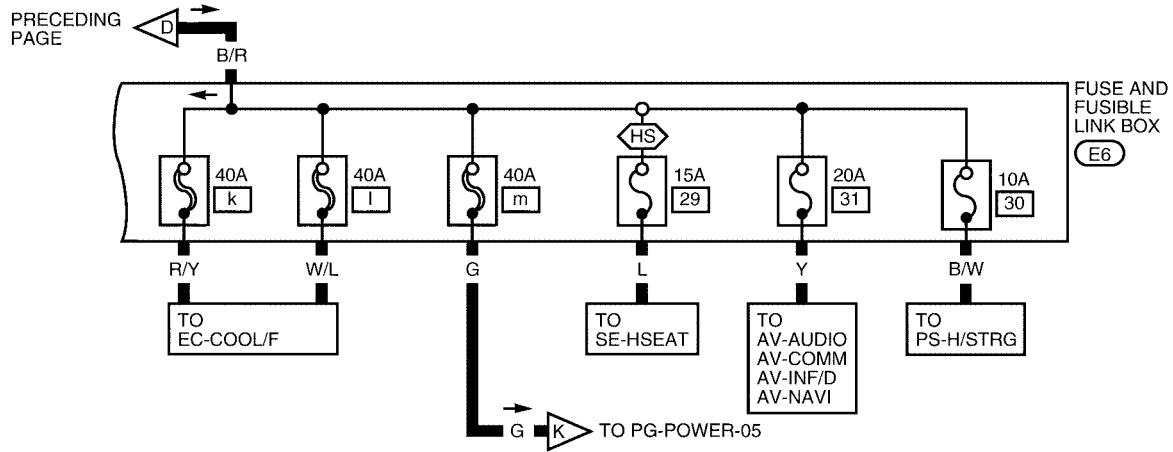
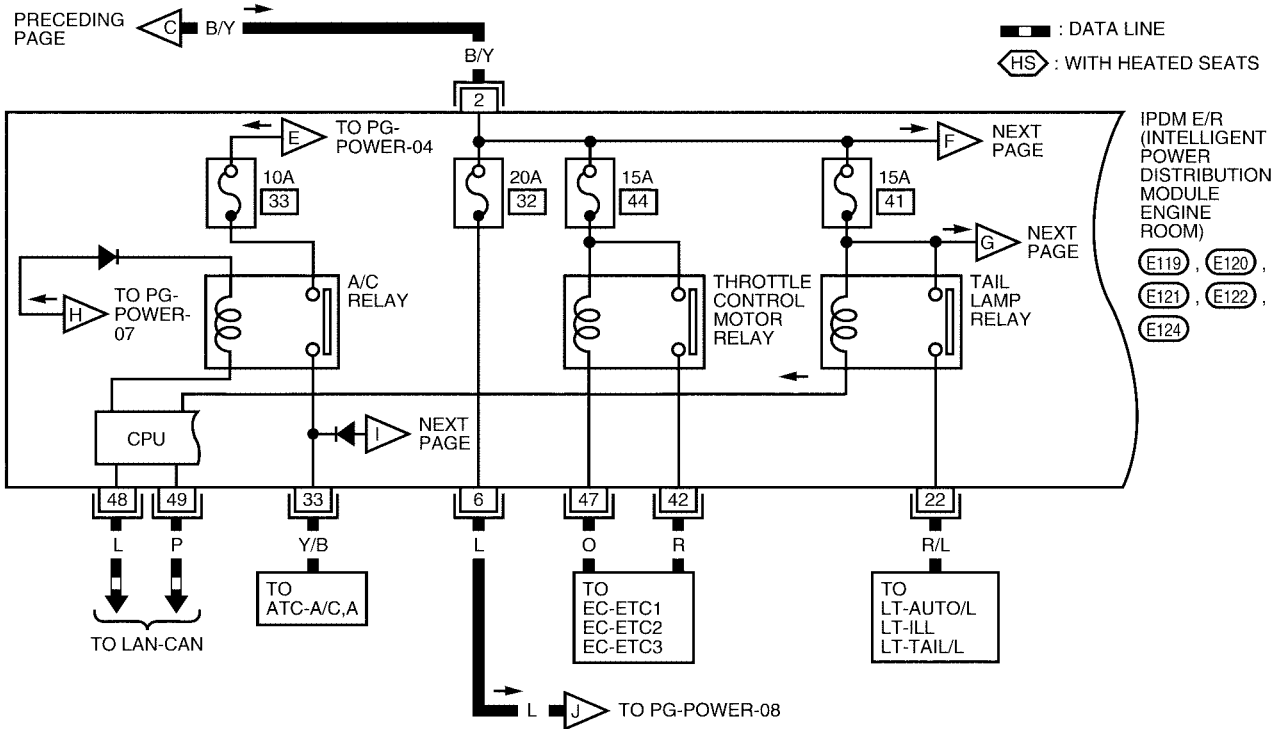
Wiring Diagram — POWER — BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION

PG-POWER-01



POWER SUPPLY ROUTING CIRCUIT

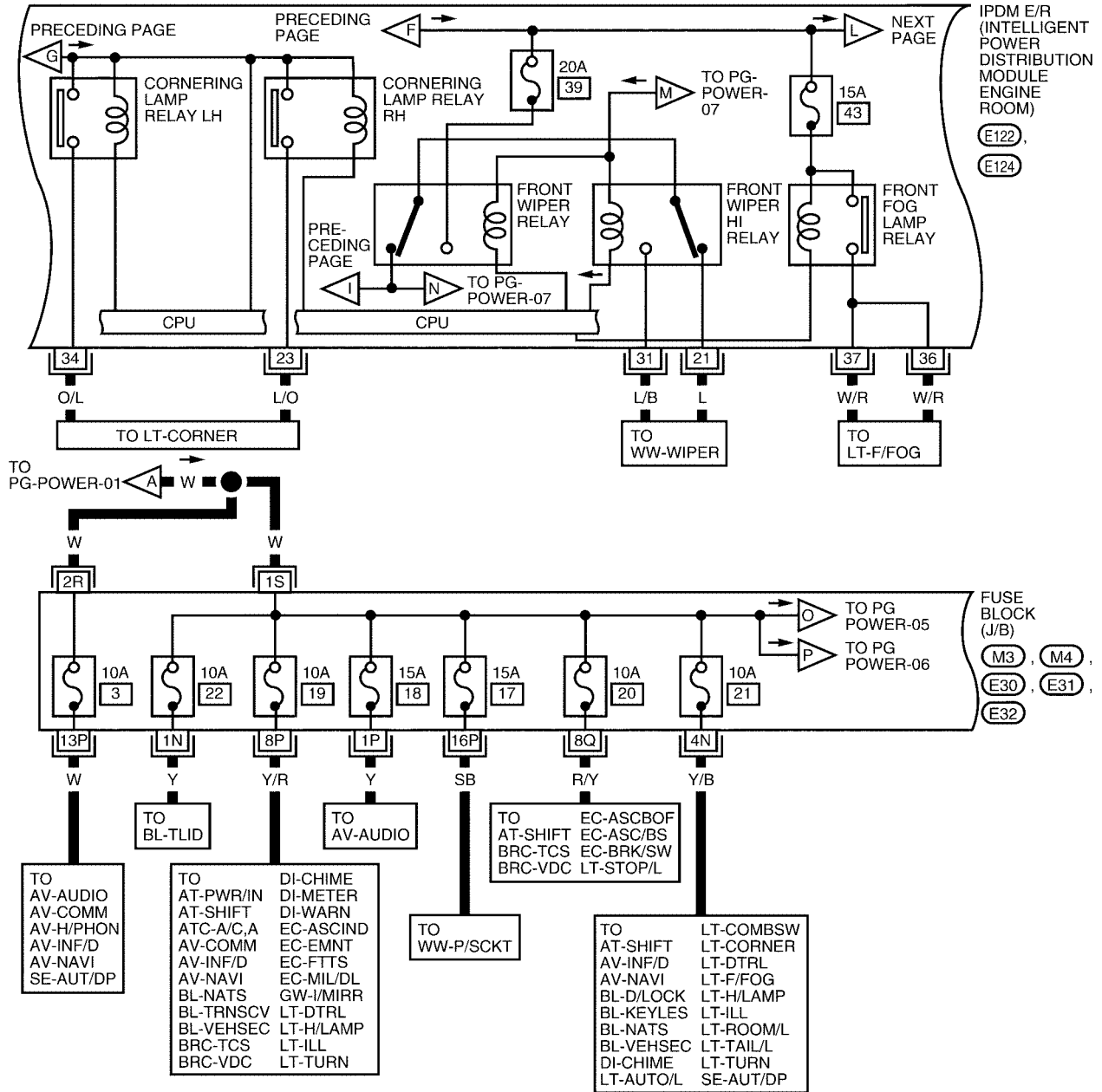
PG-POWER-02



WKWA3801E

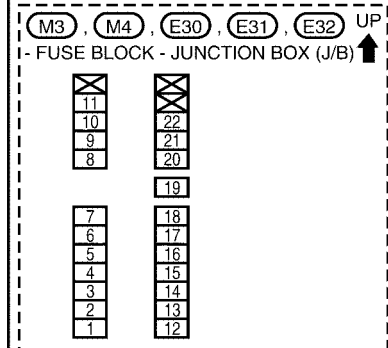
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03



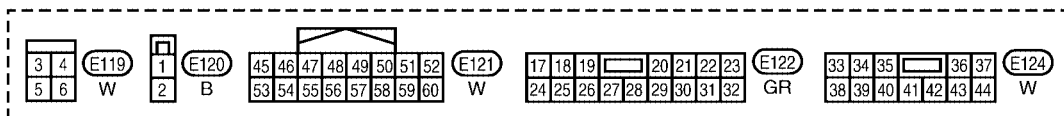
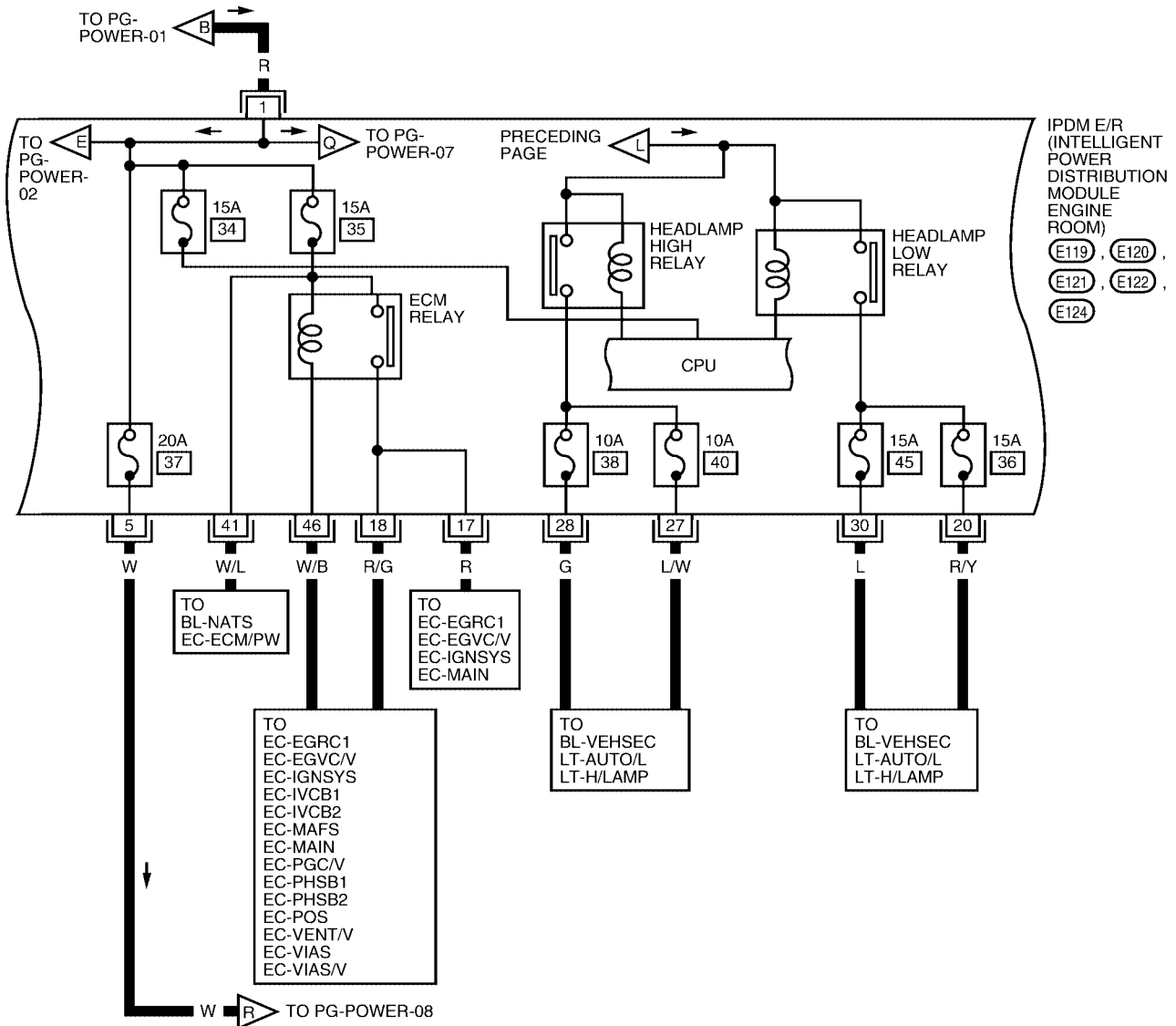
17	18	19	20	21	22	23	E122	33	34	34	36	37	E124		
24	25	26	27	28	29	30	GR	38	39	40	41	42	43	44	W

REFER TO THE FOLLOWING.



POWER SUPPLY ROUTING CIRCUIT

PG-POWER-04

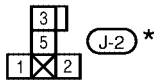
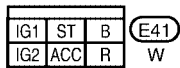
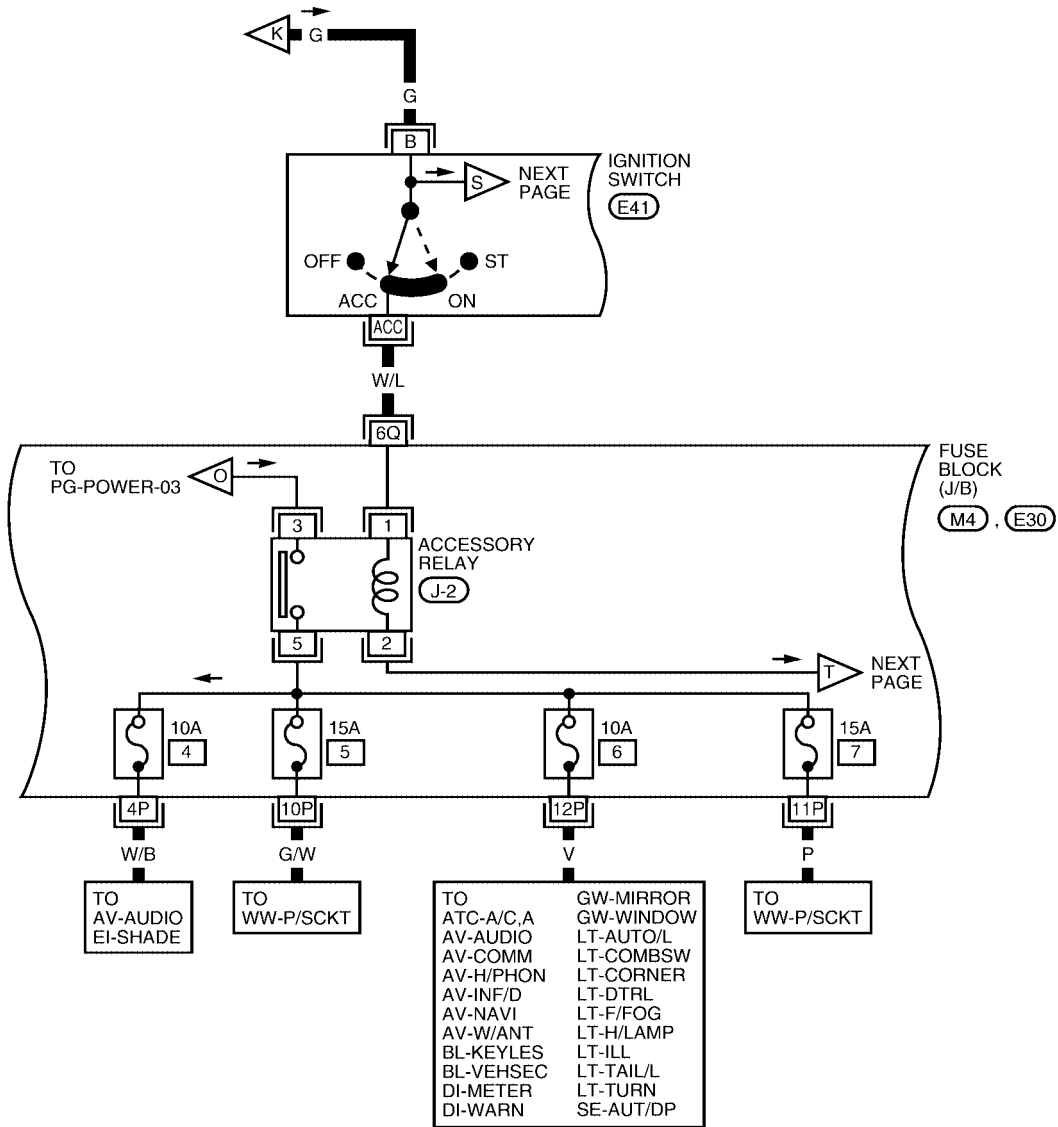


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POWER SUPPLY ROUTING CIRCUIT

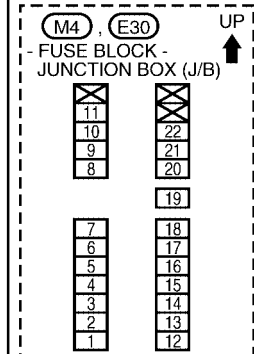
ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

PG-POWER-05



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

REFER TO THE FOLLOWING.

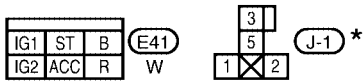
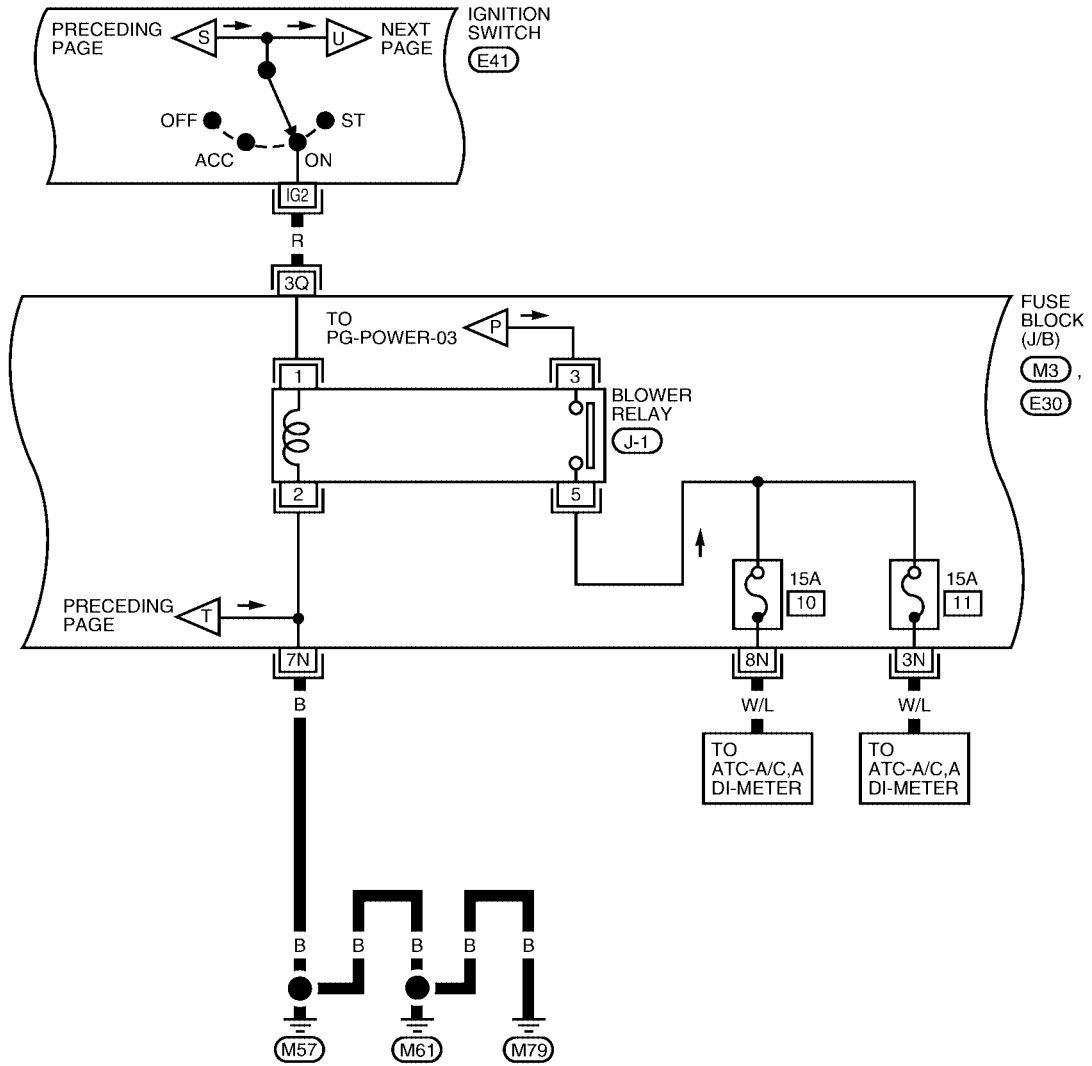


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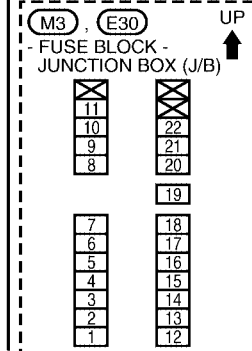
POWER SUPPLY ROUTING CIRCUIT

IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-06



REFER TO THE FOLLOWING.



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

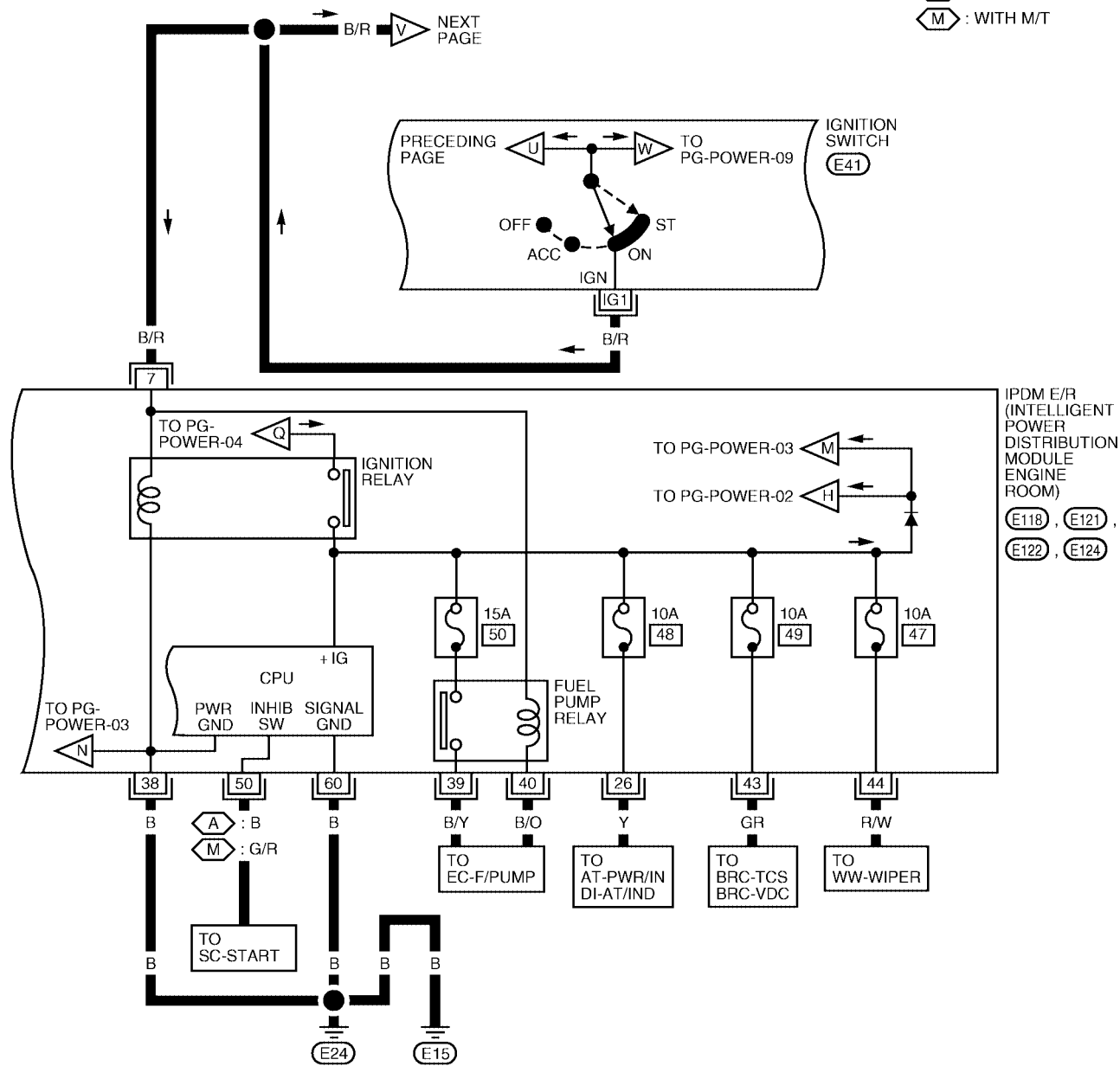
WKWA1979E

POWER SUPPLY ROUTING CIRCUIT

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

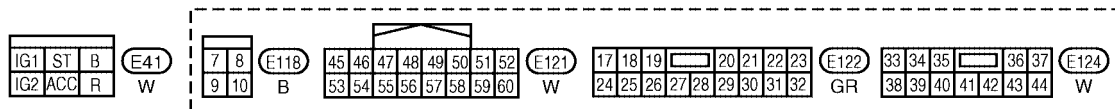
PG-POWER-07

⬡ : WITH A/T
 ⬢ : WITH M/T



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

⬡ E118, ⬡ E121
 ⬢ E122, ⬢ E124

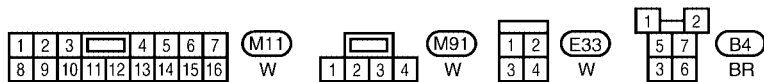
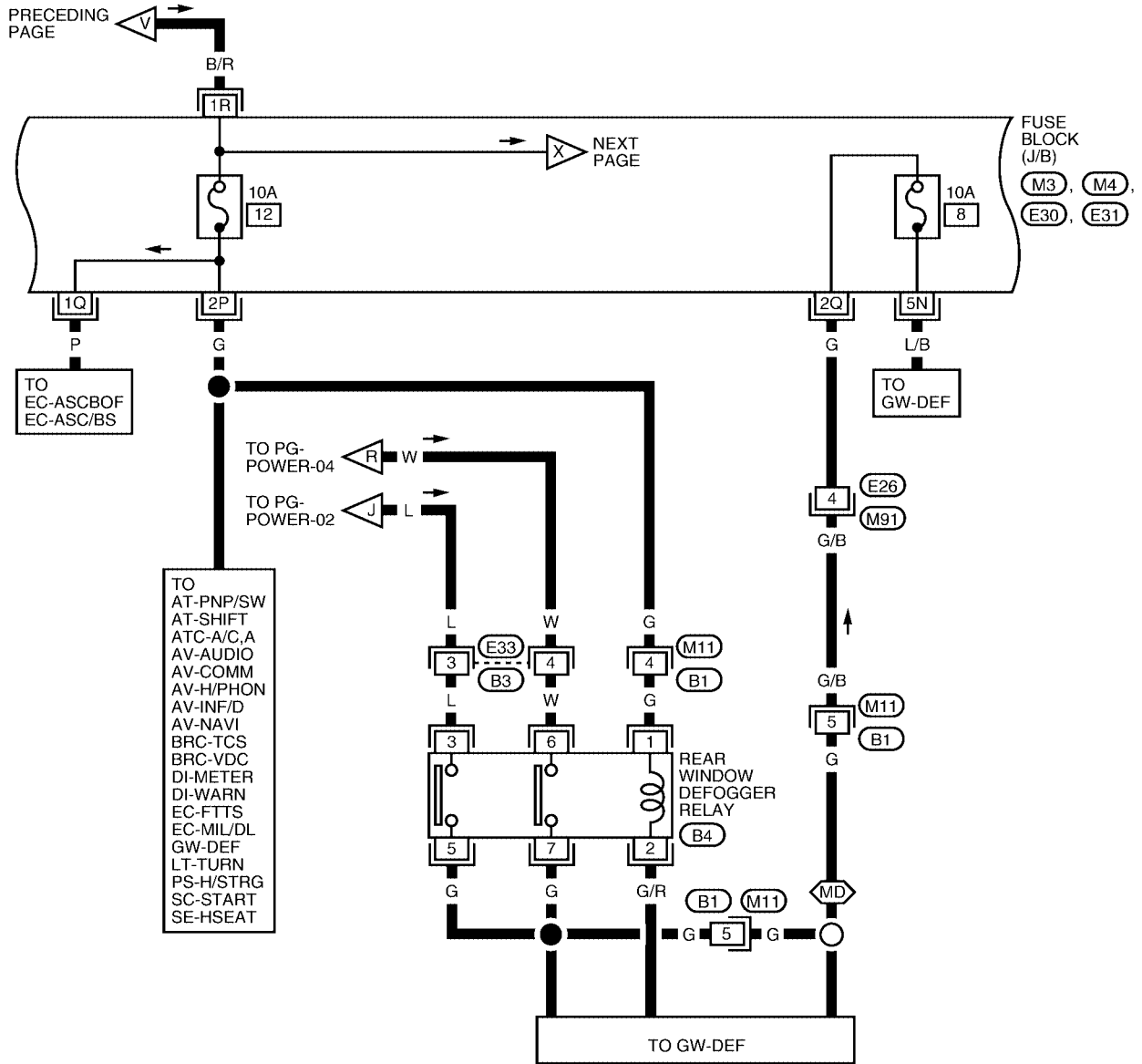


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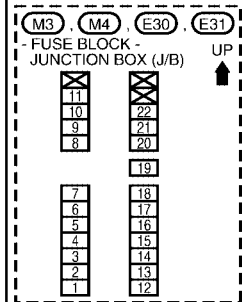
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08

MD : WITH MIRROR DEFOGGER



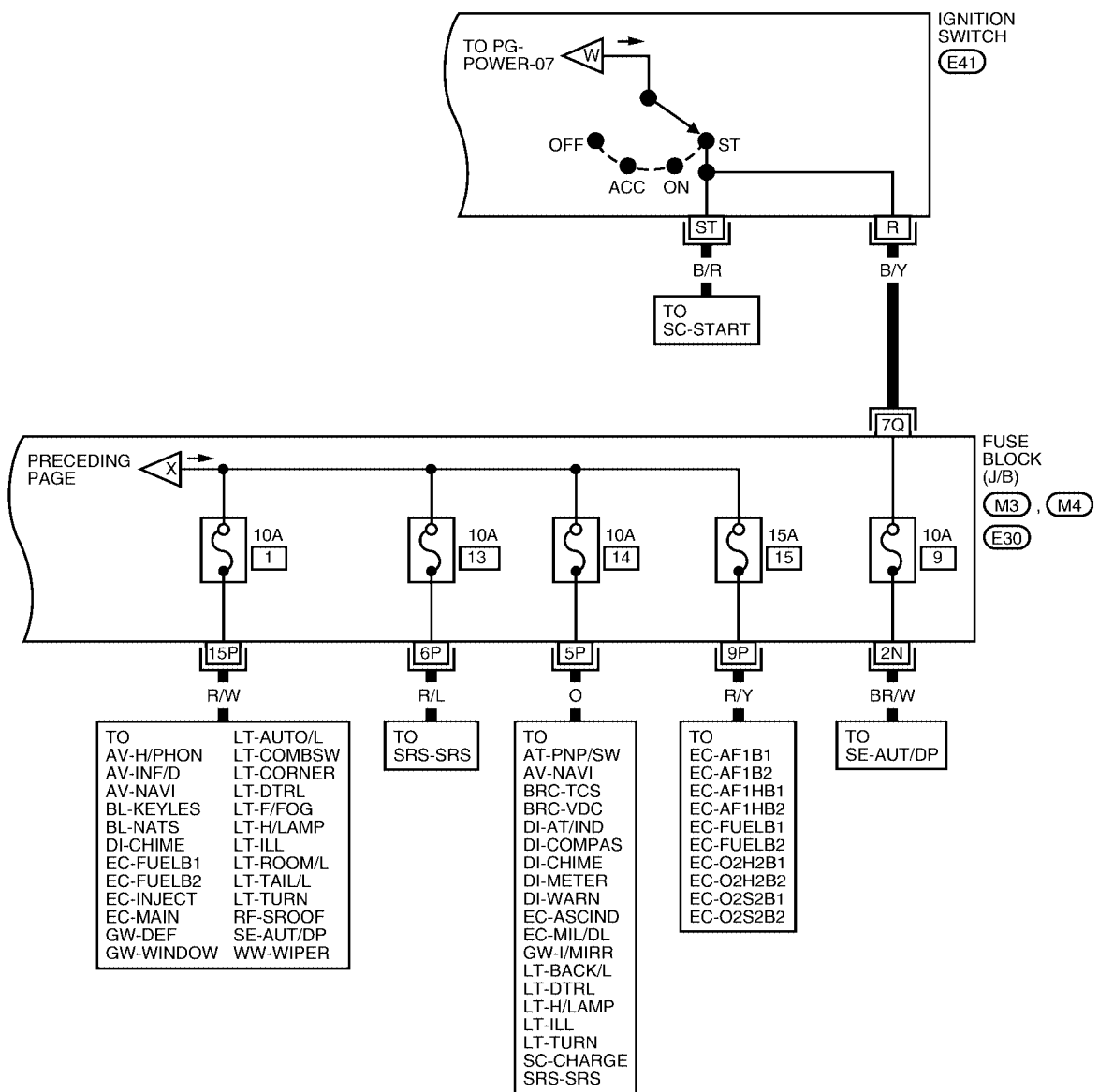
REFER TO THE FOLLOWING.



WKWA3806E

POWER SUPPLY ROUTING CIRCUIT

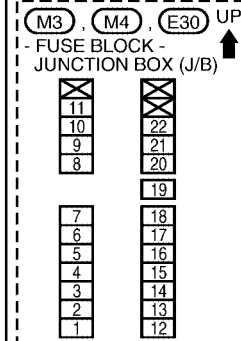
PG-POWER-09



IG1	ST	B	E41
IG2	ACC	R	

W

REFER TO THE FOLLOWING.



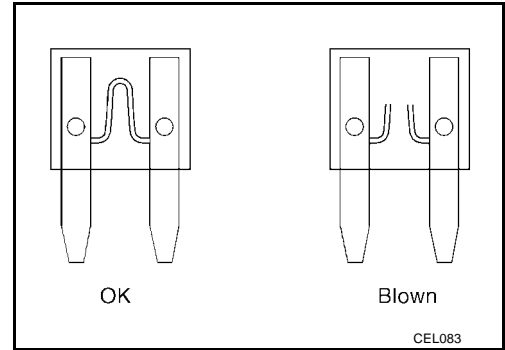
WKWA3807E

POWER SUPPLY ROUTING CIRCUIT

Fuse

EKS00GG0

- 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

EKS00GGP

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

CAUTION:

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

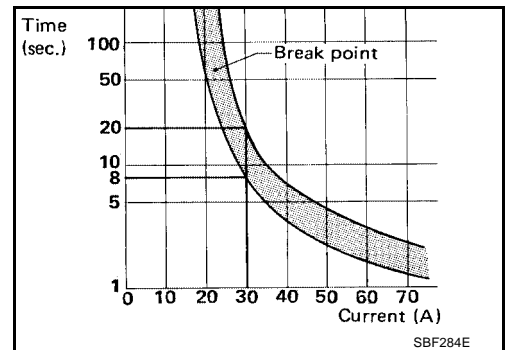
Circuit Breaker (Built Into BCM)

EKS00GGQ

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



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

PFP:284B7

System Description

EKS009HZ

- 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 circuit.
- IPDM E/R-integrated control circuit performs 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 removed.

SYSTEMS CONTROLLED BY IPDM E/R

1. Lamp control
Using CAN communication lines, it receives signal from BCM and controls the following lamps:
 - Head lamps (Hi, Lo)
 - Parking lamps
 - Tail lamps
 - License lamps
 - Cornering lamps
 - Front fog lamps
2. Wiper control
Using CAN communication lines, it receives signals from BCM and controls the front wipers.
3. Rear window defogger relay control
Using CAN communication lines, it receives signals from BCM and controls the rear window defogger relay.
4. A/C compressor control
Using CAN communication lines, it receives signals from ECM and controls the A/C compressor (magnetic clutch).
5. Cooling fan control
Using CAN communication lines, it receives signals from ECM and controls cooling fan.
6. Horn control
Using CAN communication lines, it receives signals from BCM and controls horn relay.

CAN COMMUNICATION LINE CONTROL

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

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

Controlled system	Fail-safe mode
Headlamp	<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

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

Controlled system	Fail-safe mode
A/C compressor	A/C compressor OFF
Front fog lamps	Front fog lamp relay OFF

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.

Function of Detecting Ignition Relay Malfunction

EKS00910

- 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.

PG

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

EKS0091

CONSULT-II Function (IPDM E/R)

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

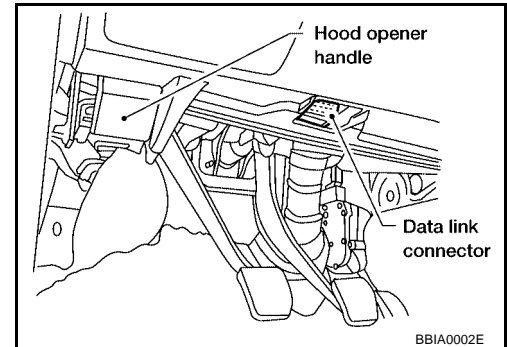
IPDM E/R diagnostic Mode	Description
SELF-DIAG RESULTS	Displays IPDM E/R self-diagnosis results.
DATA MONITOR	Displays IPDM E/R input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Operation of electrical loads can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

CONSULT-II BASIC OPERATION

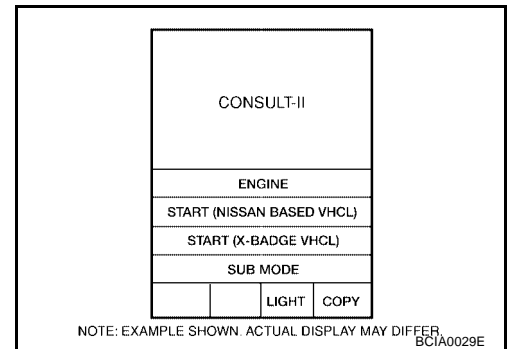
CAUTION:

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

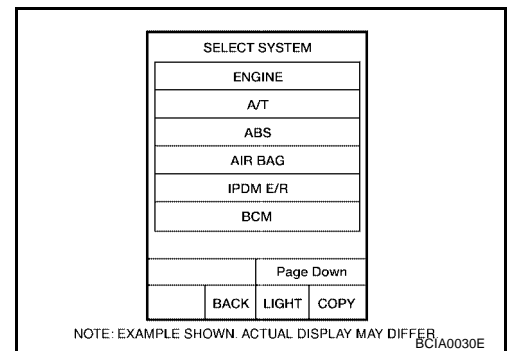
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn ignition switch ON.



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

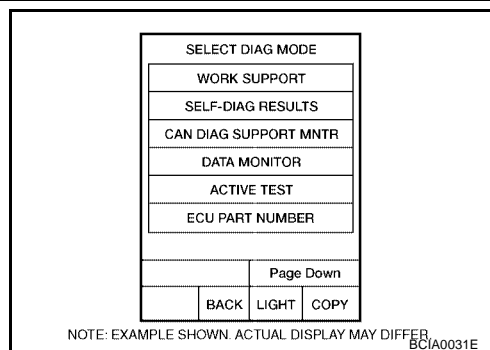


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, then refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



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

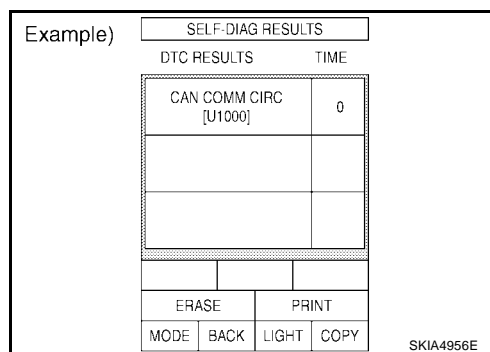
- Select the desired part to be diagnosed on the “SELECT DIAG MODE” screen.



SELF-DIAGNOSTIC RESULTS

Operation Procedure

- Touch “SELF-DIAG RESULTS” on “SELECT DIAG MODE” screen.
- Self-diagnosis results are displayed.



Display Item List

Display items	CONSULT-II display code	Error return condition	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 an error, 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"> TRANSMIT DIAG ECM BCM/SEC

NOTE:

The details for display of the period are as follows:

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

DATA MONITOR

Operation Procedure

- Touch “DATA MONITOR” on “SELECT DIAG MODE” screen.
- Touch “ALL SIGNALS”, “MAIN SIGNALS” or “SELECTION FROM MENU” on the “DATA MONITOR” screen.

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

- Touch “START”.

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

4. When "SELECTION FROM MENU" is selected, touch items to be monitored. When "ALL SIGNALS" is selected, all the items will be monitored. When "MAIN SIGNALS" is selected, predetermined items are monitored.
5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

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

All Signals, Main Signals, Selection From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECTION 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
Parking, license, and tail lamp request	TAIL & CLR REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp low request	HL LO REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp high request	HL HI REQ	ON/OFF	X	X	X	Signal status input from BCM
Front fog lights request	FR FOG REQ	ON/OFF	X	X	X	Signal status input from BCM
FR wiper request	FR WIP REQ	STOP/1LOW/LOW/ 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	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
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
Cornering lamp request	CRNRNG LMP REQ	OFF/LEFT/RIGHT	X		X	Signal status input from BCM

NOTE:

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

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.

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

Test name	CONSULT-II screen display	Description
Cornering lamp output	CORNERING LAMP	With a certain operation (OFF, ON), the cornering lamp relay (RH, LH) can be operated.
Horn output	HORN	With a certain ON-OFF operation, the horn relay can be operated.

Auto Active Test DESCRIPTION

EKS00912

- In auto active test mode, operation inspection can be performed when IPDM E/R sends a drive signal to the following systems:
 - Rear window defogger
 - Front wipers
 - Tail, license and parking lamps
 - Cornering 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:

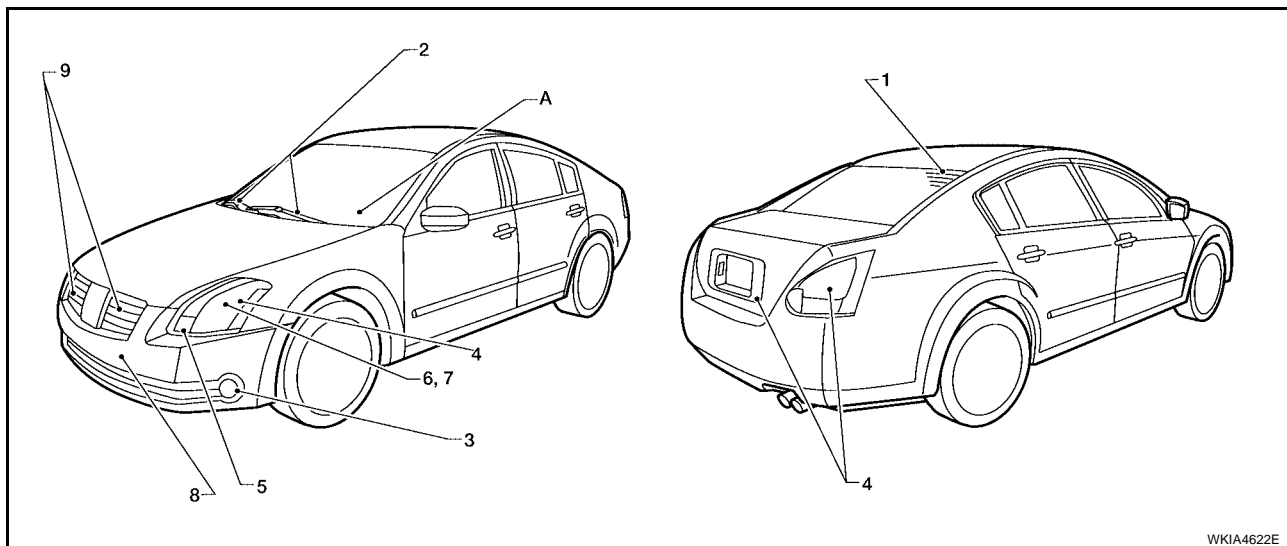
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to perform [BL-30. "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 nine steps are repeated three times.



WKIA4622E

(A): Oil pressure warning lamp is blinking when the auto active test is operating.

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

Item Number	Test Item	Operation Time/Frequency
1	Rear window defogger	10 seconds
2	Front wipers	LOW 5 seconds then HIGH 5 seconds
3	Cornering lamps	10 seconds
4	Tail, license, and parking lamps	10 seconds
5	Front fog lamps	10 seconds
6	Headlamps (low)	10 seconds
7	Headlamps (high)	ON-OFF 5 times (Turns ON-OFF the solenoid to switch Hi/Lo. In this case, the bulb does not illuminate.)
8	A/C compressor (magnetic clutch)	ON-OFF 5 times
9	Cooling fan	LOW 2 seconds → MID 2 seconds → HIGH 2 seconds → MID 2 seconds → LOW 2 seconds

Concept of Auto Active Test

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

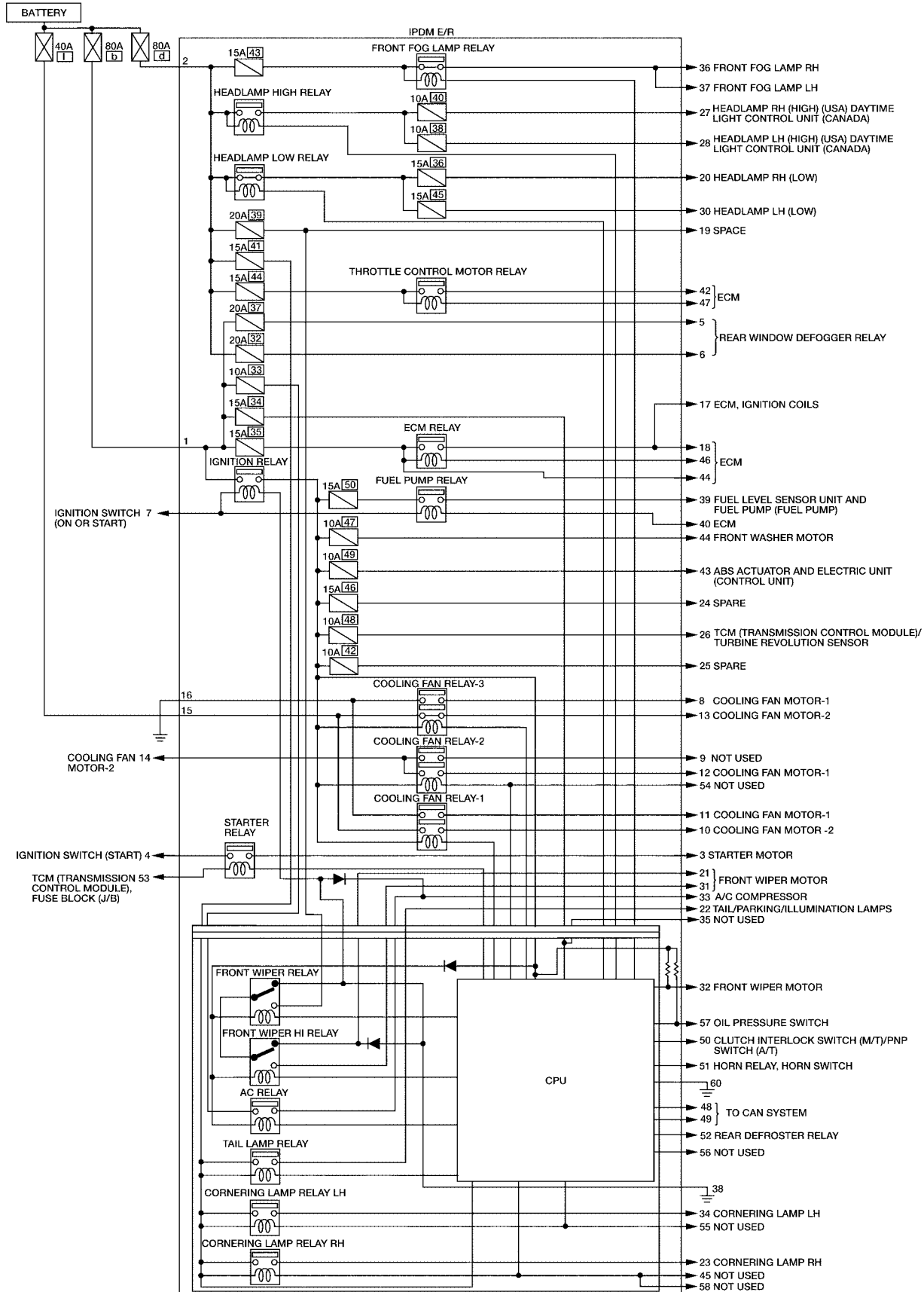
Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause
Any of front wipers, tail and parking lamps, front fog lamps, cornering lamps, and head lamps (Hi, Lo) do not operate.	YES	● BCM signal input system
	NO	● 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
Rear window defogger does not operate.	YES	● BCM signal input circuit
	NO	● Rear window defogger relay circuit ● Open circuit of rear window defogger ● IPDM E/R malfunction
A/C compressor does not operate.	YES	● BCM signal input circuit ● CAN communication signal between BCM and ECM. ● CAN communication signal between ECM and IPDM E/R
	NO	● Magnetic clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnetic clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	YES	● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
	NO	● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction
Oil pressure warning lamp does not operate.	YES	● Harness/connector malfunction between IPDM E/R and oil pressure switch ● Oil pressure switch malfunction
	NO	● CAN communication signal between BCM and Unified Meter and A/C Amp ● Combination meter

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

EKS00913

Schematic



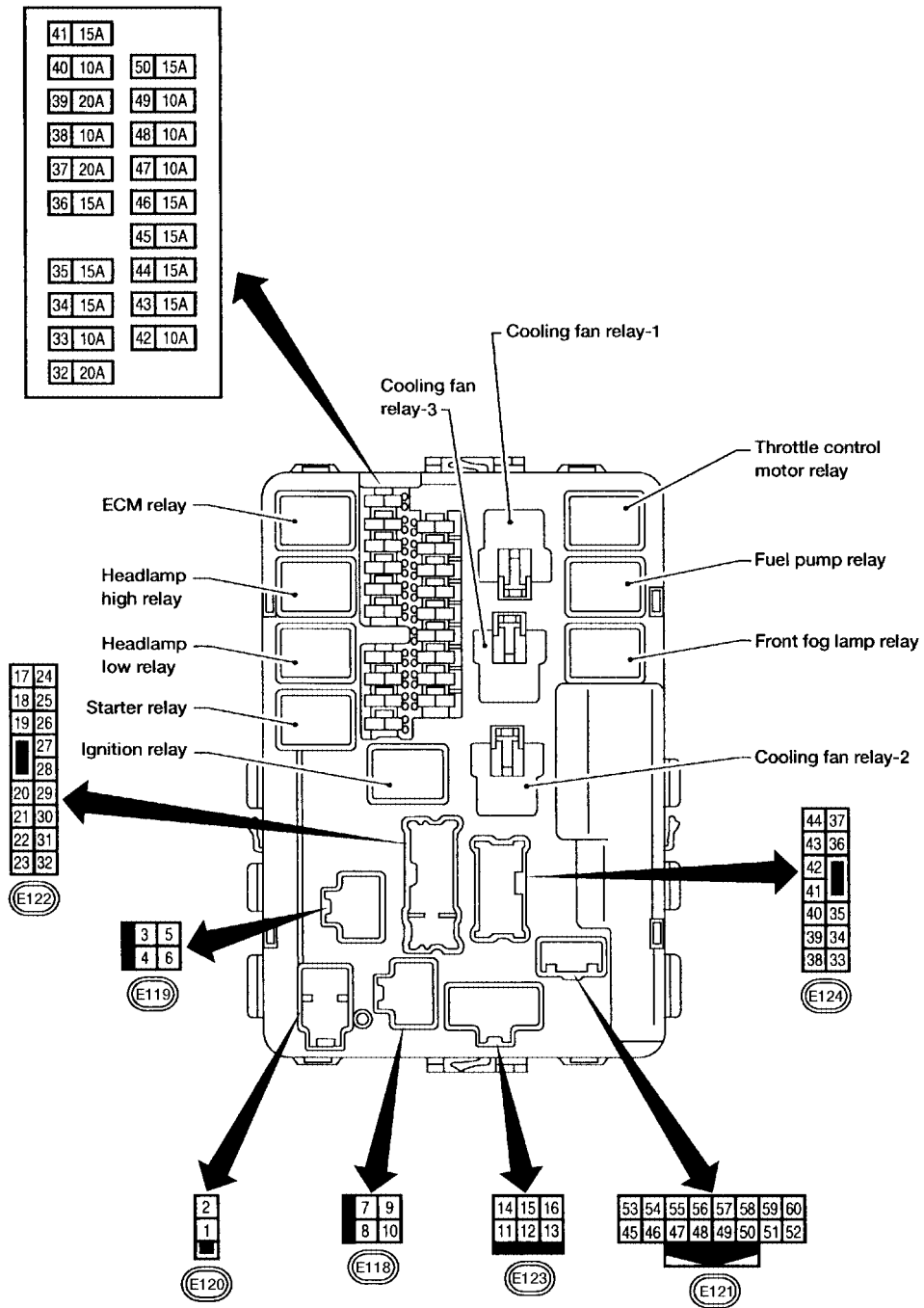
WKWA3808E

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

IPDM E/R Terminal Arrangement

EKS00914

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WKWA5549E

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

EKS00915

IPDM E/R Power/Ground Circuit Inspection

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	a, b, d

OK or NG

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

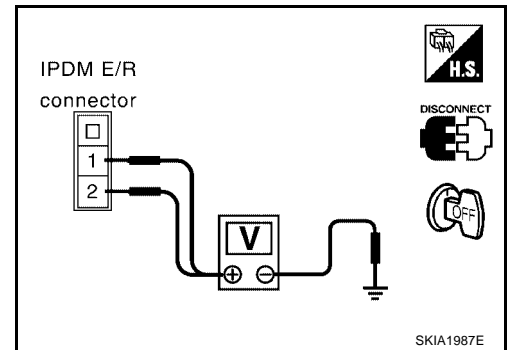
2. POWER CIRCUIT INSPECTION

1. Disconnect IPDM E/R harness connector 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.



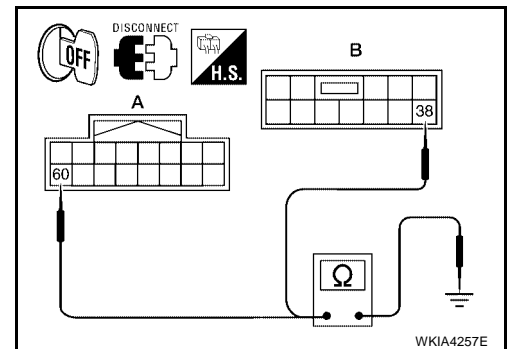
3. GROUND CIRCUIT INSPECTION

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



Inspection with CONSULT-II (Self-Diagnosis)

CAUTION:

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

1. SELF-DIAGNOSIS RESULT CHECK

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

CONSULT-II 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"> ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The Details for Display for the Period are as follows:

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

Contents displayed

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

CAN COMM CIRC>>Print out the self diagnosis results and refer to [LAN-25, "CAN COMMUNICATION"](#) .

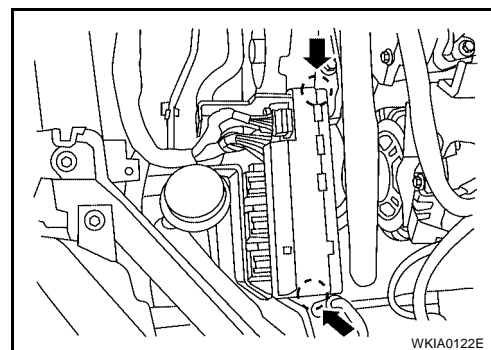
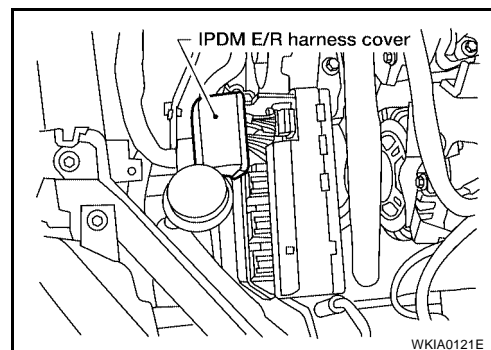
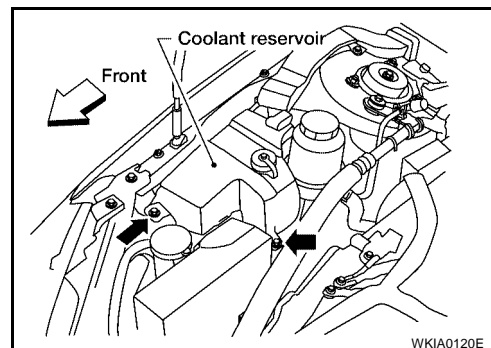
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

EKS00917

Removal and Installation of IPDM E/R

REMOVAL

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



INSTALLATION

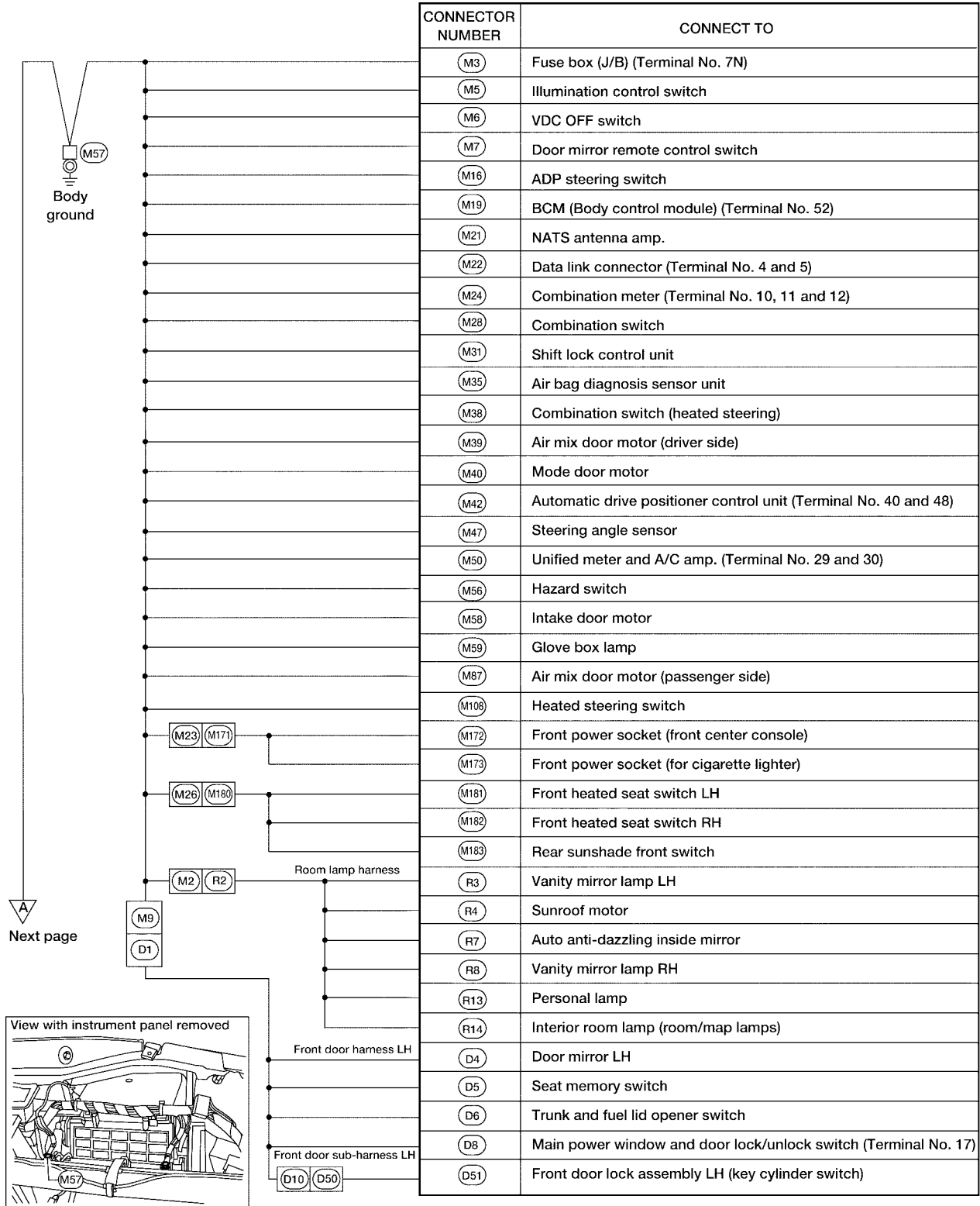
Installation is in the reverse order of removal.

GROUND CIRCUIT

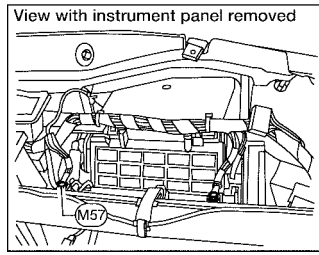
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EKS00918

GROUND CIRCUIT Ground Distribution MAIN HARNESS



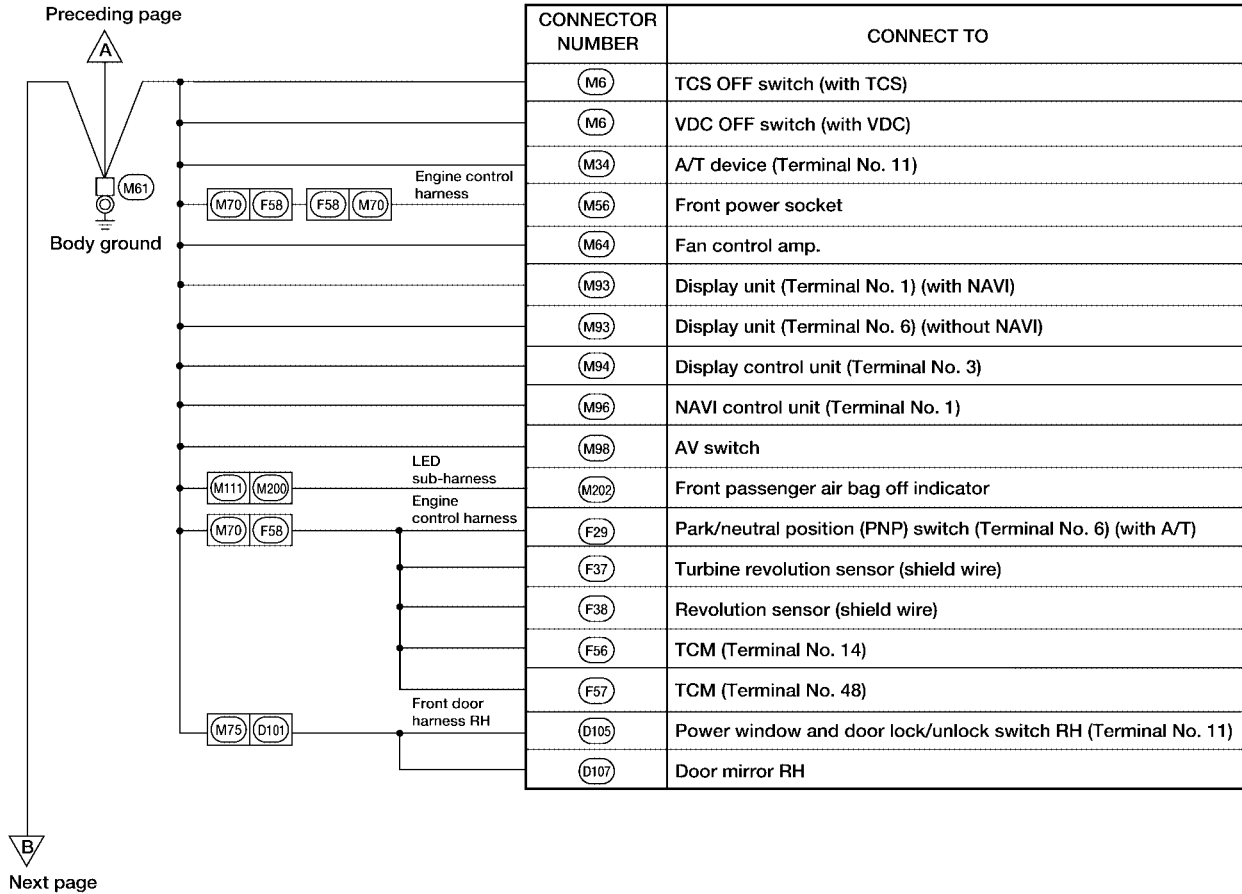
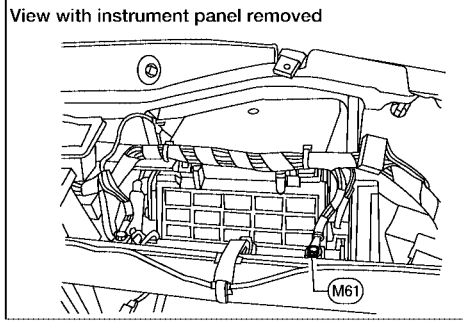
Next page



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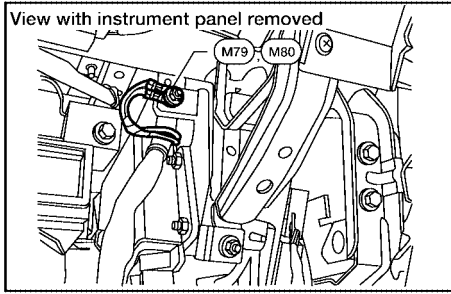
WKIA4623E

GROUND CIRCUIT

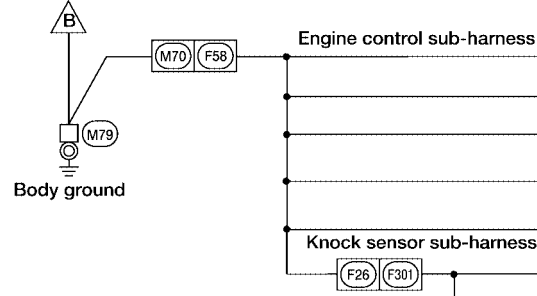


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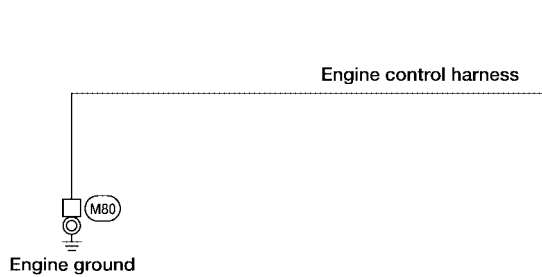
GROUND CIRCUIT



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CONNECTOR NUMBER	CONNECT TO
F11	Crankshaft position sensor (POS)
F23	Camshaft position sensor (PHASE) (Bank 2)
F42	Park/neutral position (PNP) switch (Terminal No. 2) (with M/T)
F50	Electric throttle control actuator (throttle position sensor) (shield wire)
F54	ECM (Terminal No.1)
F302	Knock sensor (shield wire)
F303	Camshaft position sensor (PHASE) (Bank 1)



CONNECTOR NUMBER	CONNECT TO
M82	ECM (Terminal No. 115)

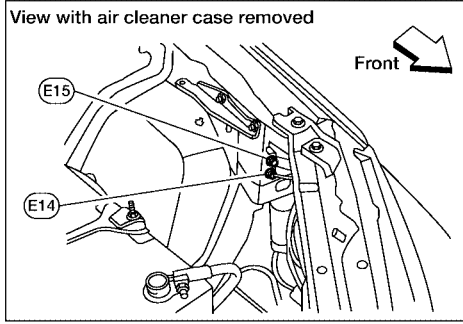
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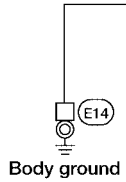
WKIA4625E

GROUND CIRCUIT

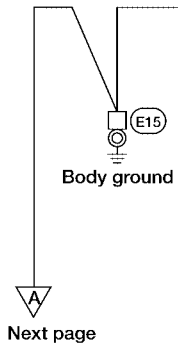
ENGINE ROOM HARNESS



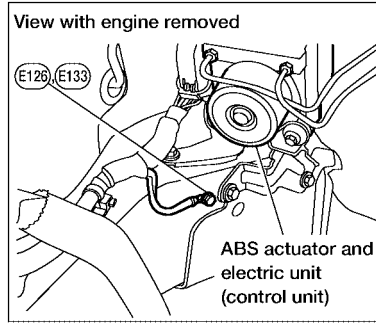
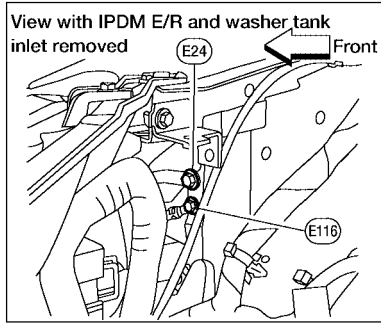
CONNECTOR NUMBER	CONNECT TO
E4	Crash zone sensor (shield wire)



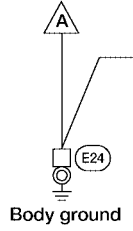
CONNECTOR NUMBER	CONNECT TO
E11	Front combination lamp LH (Terminal No. 4)
E11	Front combination lamp LH (Terminal No. 8)
E11	Front combination lamp LH (Terminal No. 10)
E11	Front combination lamp LH (Terminal No. 12)
E21	Brake fluid level switch
E23	Front wiper motor
E34	Clutch interlock switch (with M/T)
E43	Cornering lamp LH



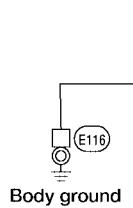
GROUND CIRCUIT



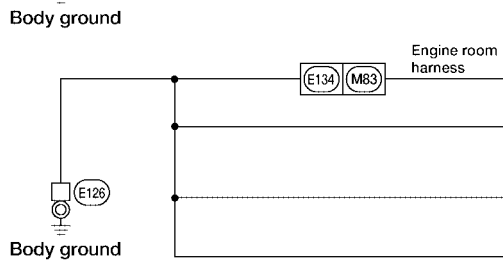
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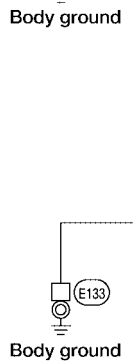
CONNECTOR NUMBER	CONNECT TO
E106	Washer fluid level switch
E107	Front combination lamp RH (Terminal No. 4)
E107	Front combination lamp RH (Terminal No. 8)
E107	Front combination lamp RH (Terminal No. 10)
E107	Front combination lamp RH (Terminal No. 12)
E114	Cooling fan motor 2
E121	IPDM E/R (Terminal No. 50) (with A/T)
E121	IPDM E/R (Terminal No. 60)
E123	IPDM E/R (Terminal No. 16)
E124	IPDM E/R (Terminal No. 38)
E137	Cornering lamp RH



CONNECTOR NUMBER	CONNECT TO
E112	Generator



CONNECTOR NUMBER	CONNECT TO
M46	Yaw rate/side/decel G sensor (shield wire)
E125	ABS actuator and electric unit (control unit) (Terminal No. 16) (with TCS)
E125	ABS actuator and electric unit (control unit) (Terminal No. 30) (with TCS)
E125	ABS actuator and electric unit (control unit) (Terminal No. 31) (with VDC)



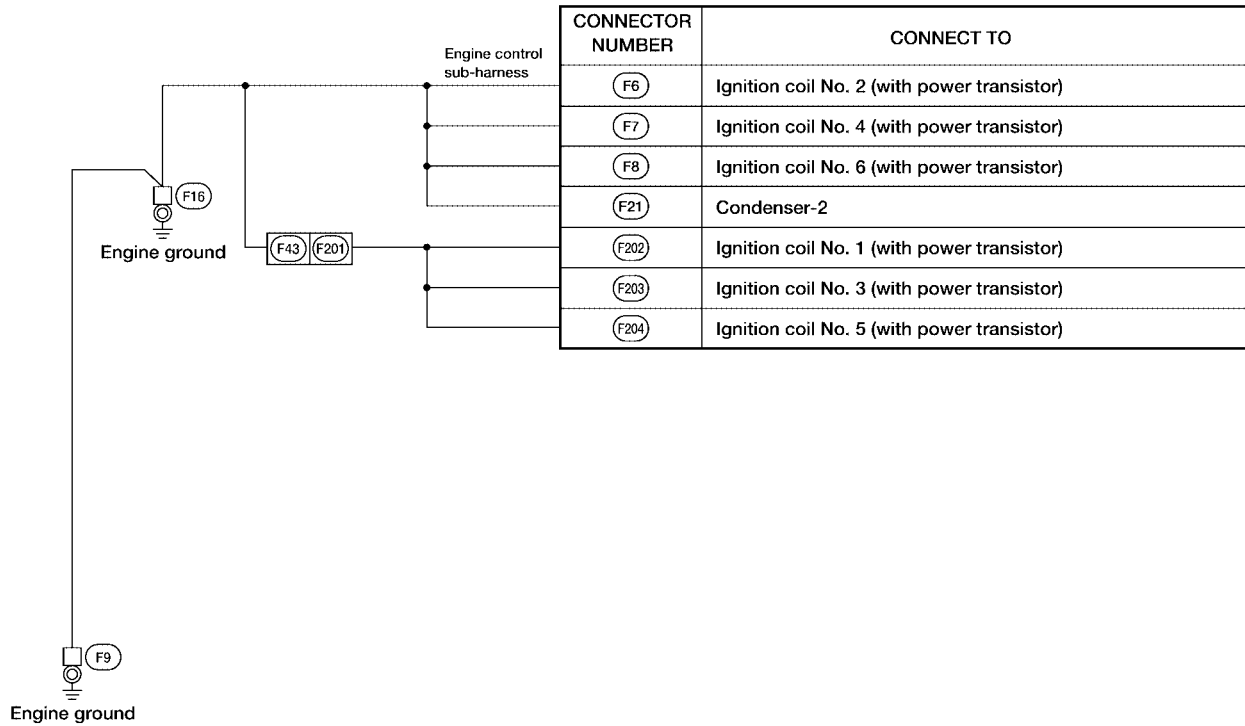
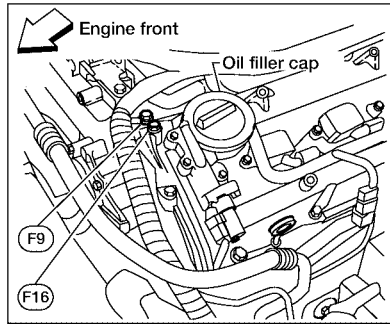
CONNECTOR NUMBER	CONNECT TO
E125	ABS actuator and electric unit (control unit) (Terminal No. 46) (with VDC)

WKIA5914E

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GROUND CIRCUIT

ENGINE CONTROL HARNESS

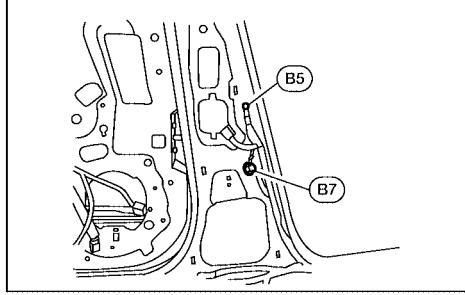


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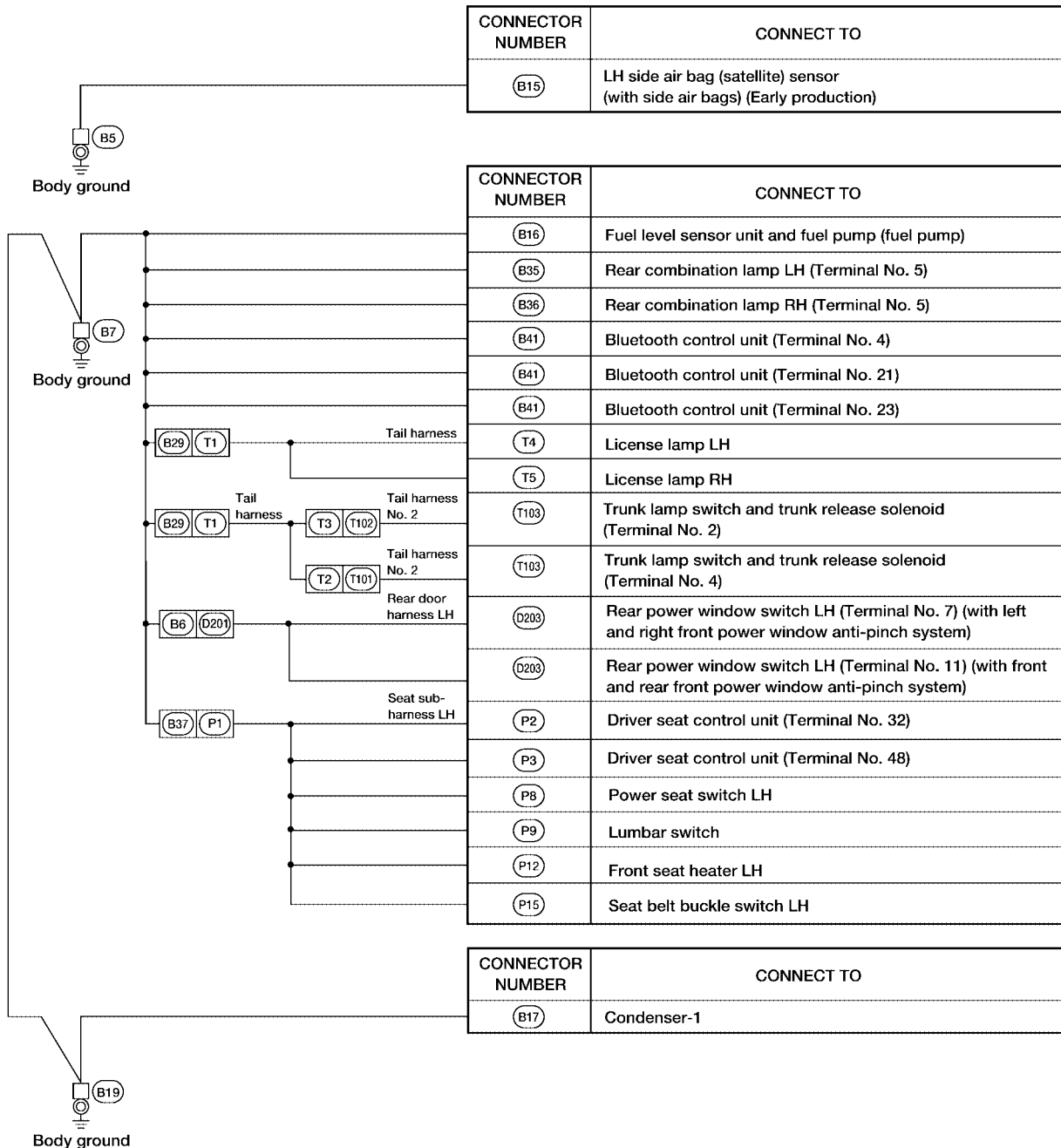
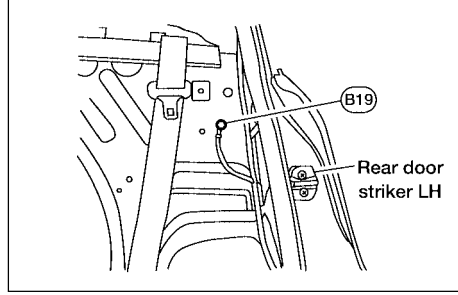
GROUND CIRCUIT

BODY HARNESS

View with center pillar garnish LH removed



View with rear seatback removed

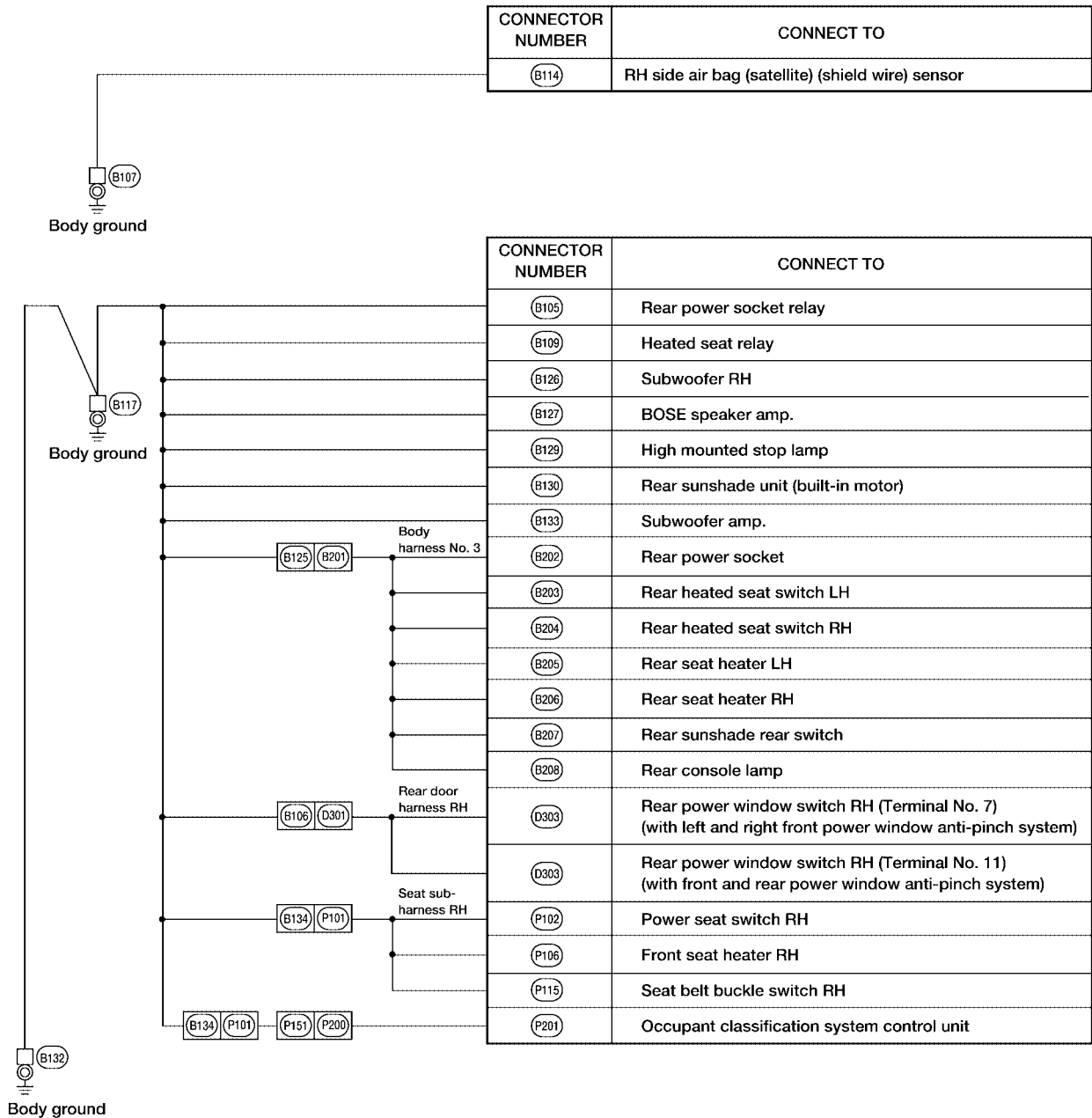
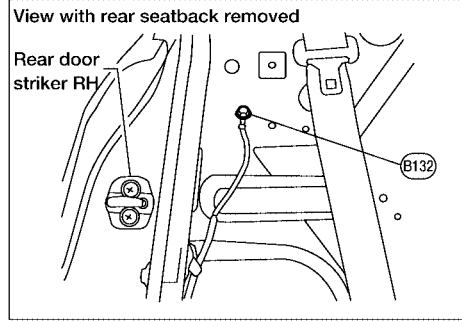
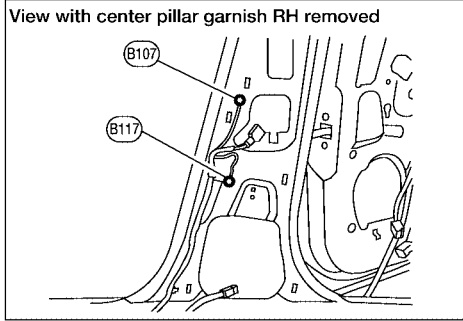


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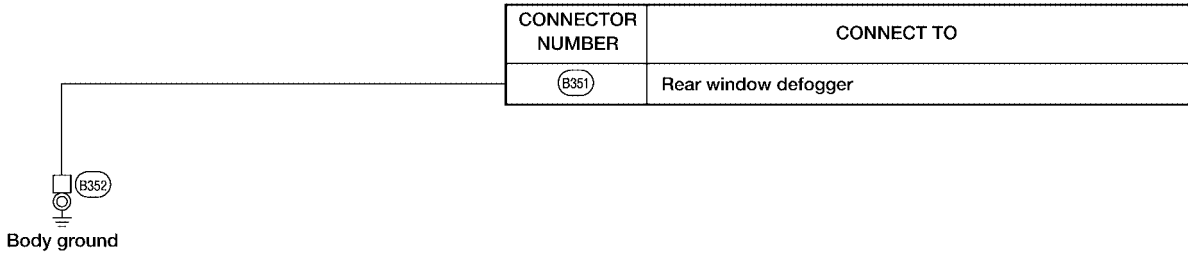
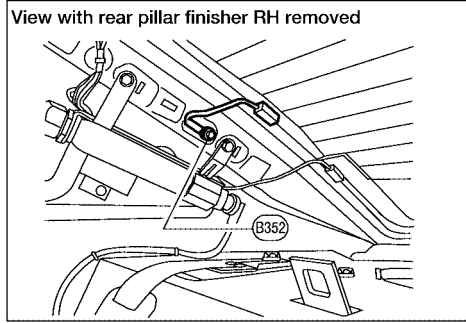
GROUND CIRCUIT

BODY NO. 2 HARNESS



WKIA4629E

GROUND CIRCUIT



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HARNESS

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EKS00919

HARNESS

Harness Layout

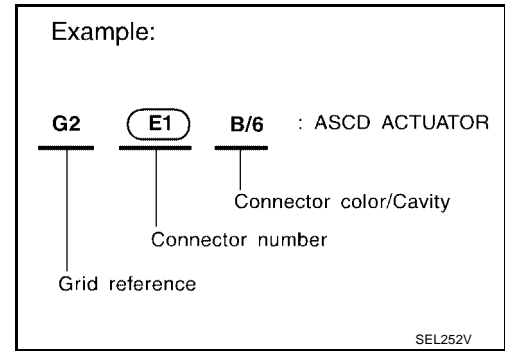
HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness LH View (Engine Compartment)
- Engine Room Harness RH View (Engine Compartment)
- Engine Control Harness
- Body Harness and Tail Harness
- Body No. 2 Harness and Body No. 3 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.



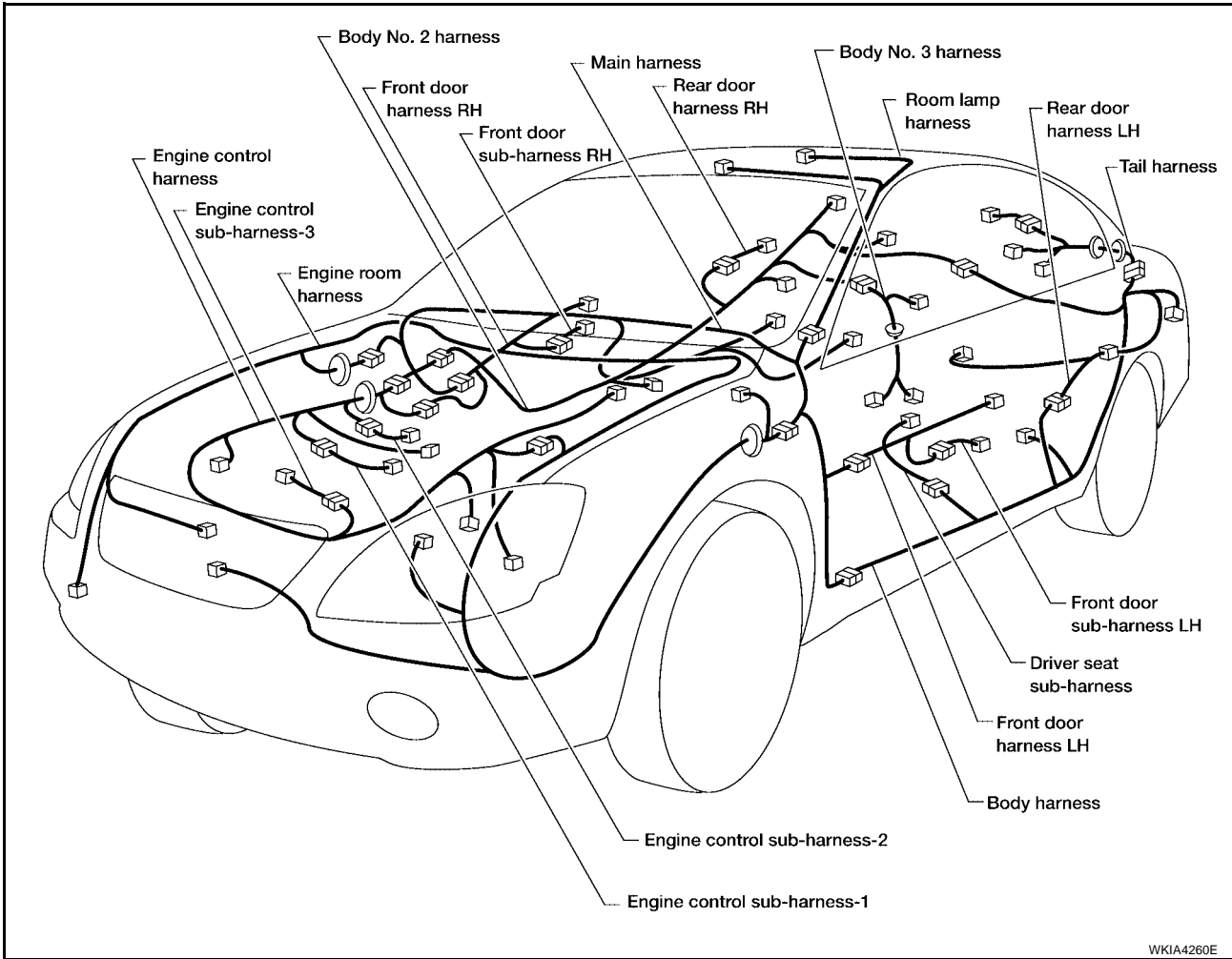
CONNECTOR SYMBOL

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

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

HARNESS

OUTLINE



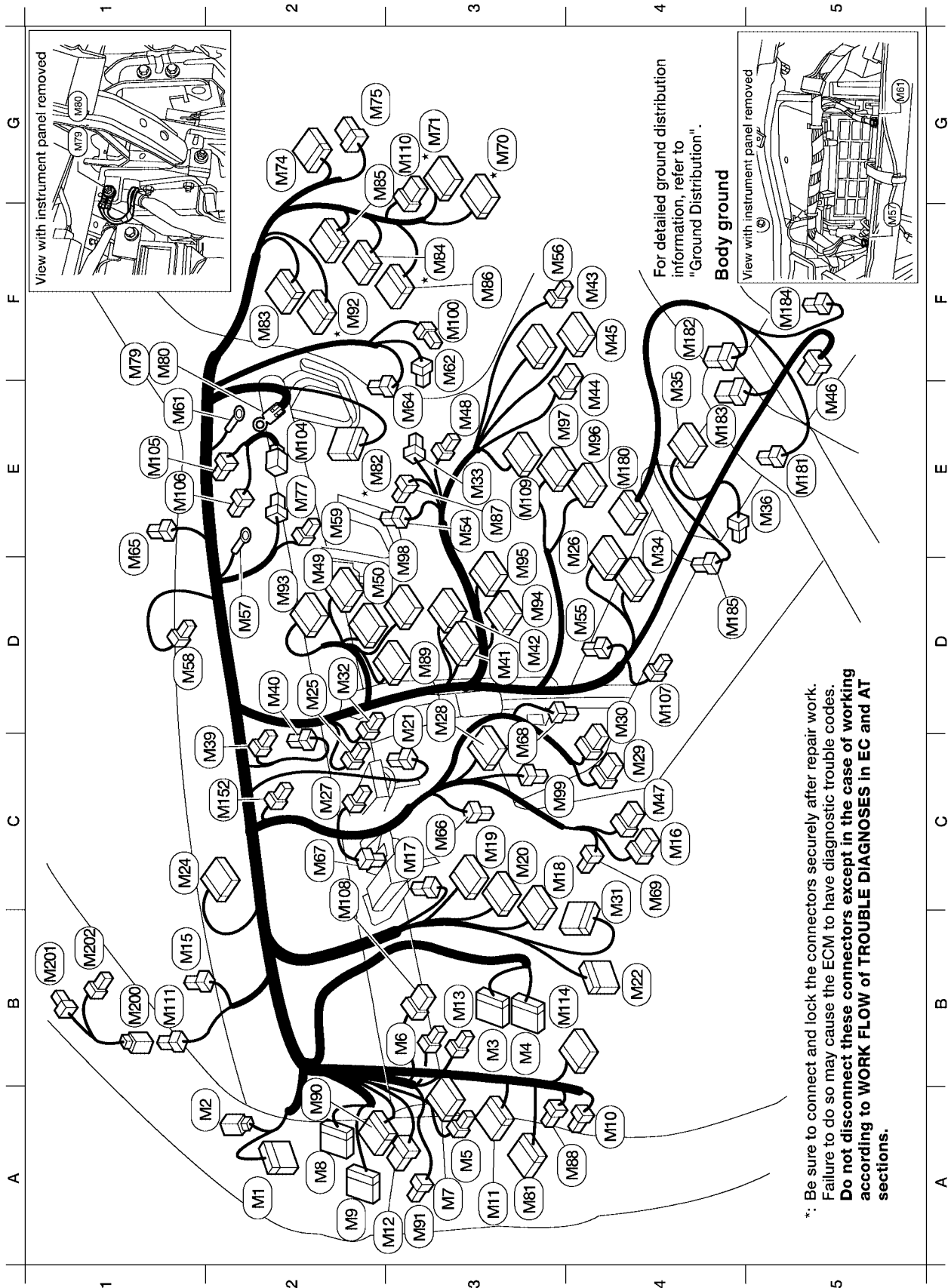
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HARNESS

MAIN HARNESS



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

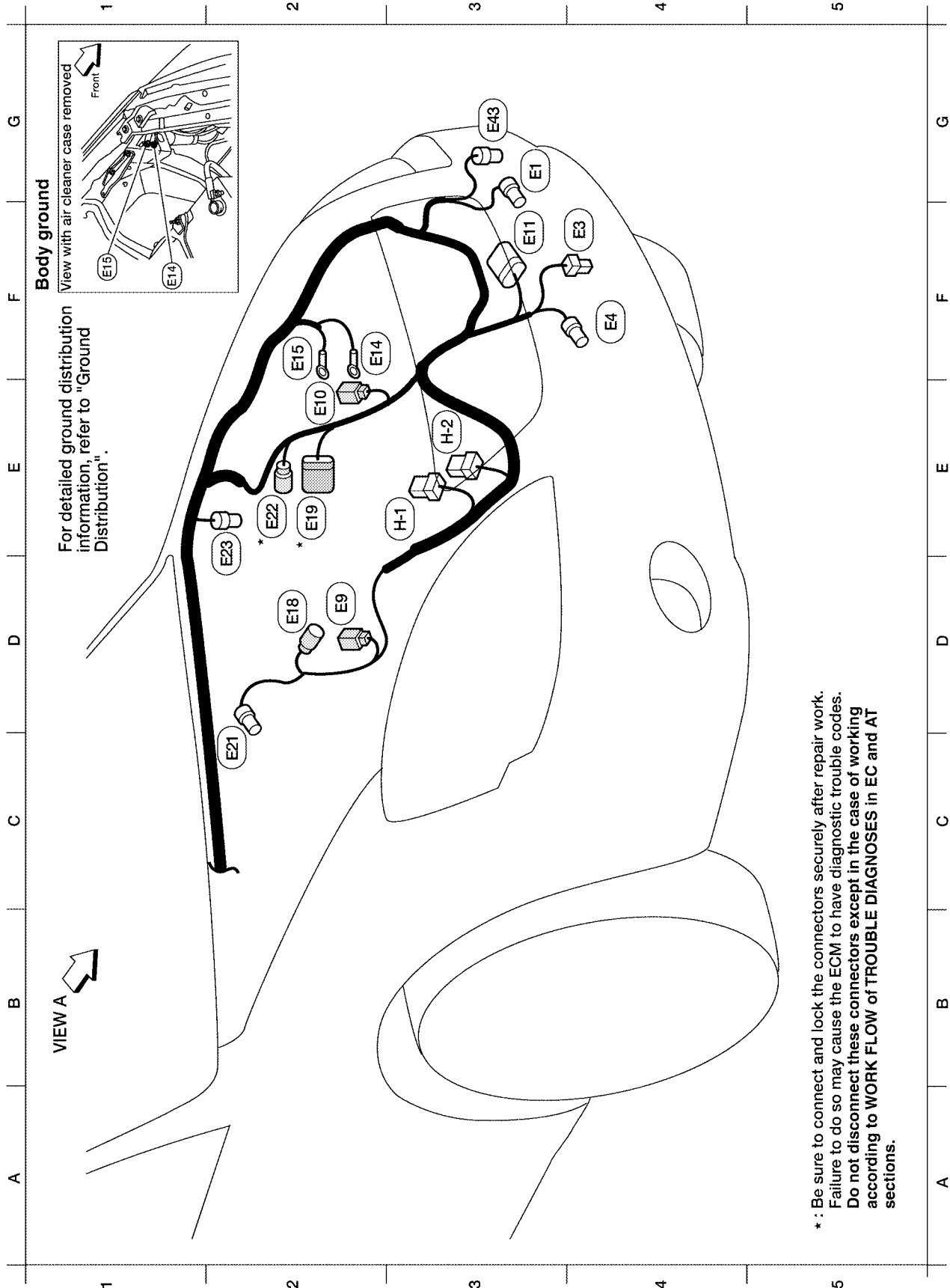
Body ground

*: 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.

WKIA5916E

HARNESS

ENGINE ROOM HARNESS LH VIEW (ENGINE COMPARTMENT)



Refer to [PG-47, "ENGINE ROOM HARNESS RH VIEW \(ENGINE COMPARTMENT\)"](#) for continuation of engine room harness.

WKIA4632E

HARNESS

G3	(E1)	B/2	: Ambient sensor
F4	(E3)	B/1	: Horn (low)
F4	(E4)	Y/2	: Crash zone sensor
E3	(H-1)	B/3	: Horn relay (inside fuse and fusible link box)
E3	(H-2)	L/4	: Daytime light relay
D2	(E9)	BR/2	: Fusible link box (battery)
E2	(E10)	GR/2	: Fusible link box (battery)
F3	(E11)	GR/12	: Front combination lamp LH
F2	(E14)	-	: Body ground
F2	(E15)	-	: Body ground
D2	(E18)	B/2	: Front wheel sensor LH
E2	(E19)	GR/9	: To (F33)
C2	(E21)	GR/2	: Brake fluid level switch
E2	(E22)	B/2	: To (F35)
E2	(E23)	GR/6	: Front wiper motor
G3	(E43)	GR/2	: Cornering lamp LH

*: 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.

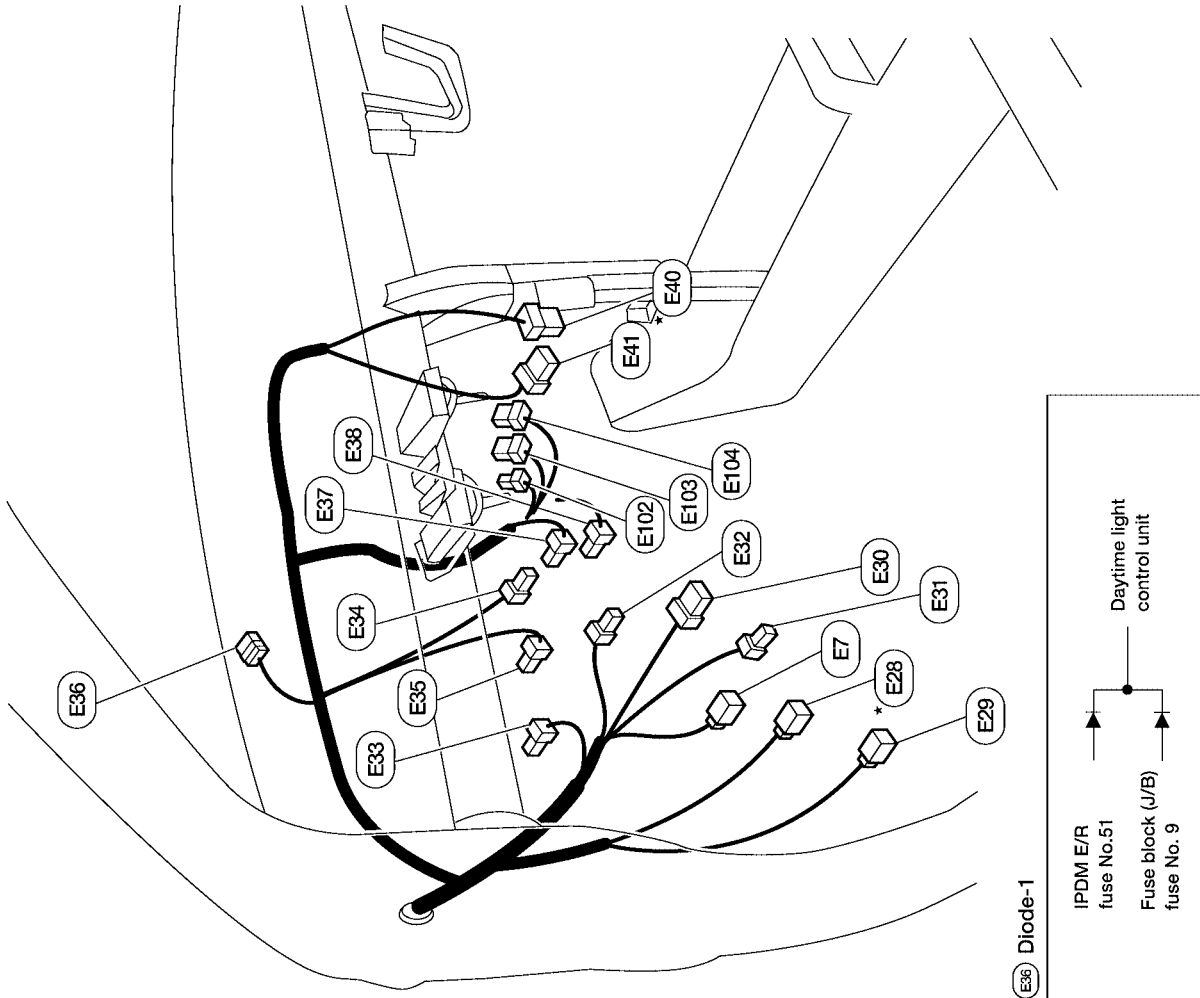
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HARNESS

PASSENGER COMPARTMENT

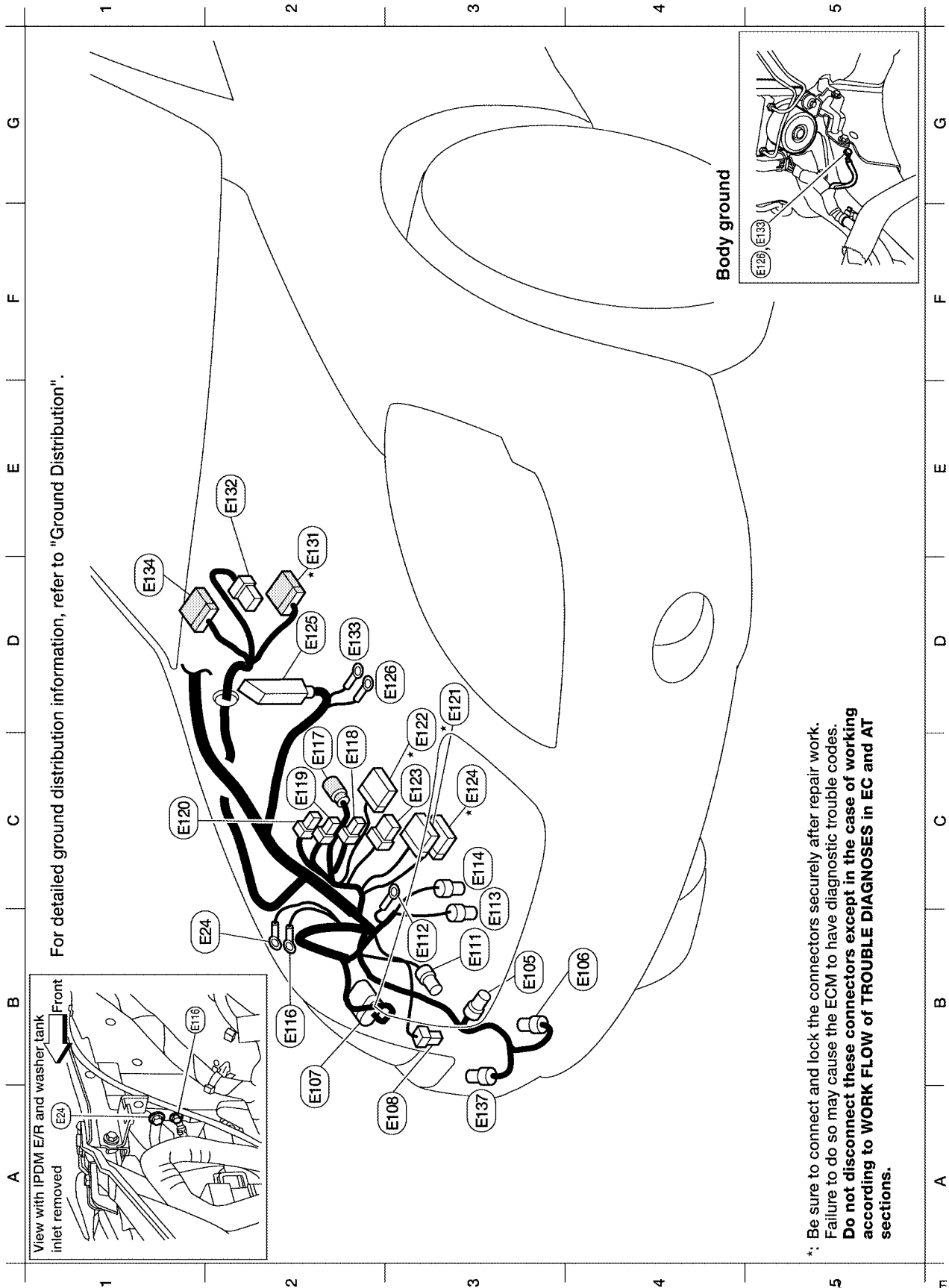
- (E7) B/2 : To (M46)
- * (E28) W/18 : To (M7)
- (E29) Y/4 : To (M10)
- (E30) W/8 : Fuse block J/B
- (E31) B/2 : Fuse block J/B
- (E32) B/1 : Fuse block J/B
- (E33) W/4 : To (E3)
- (E34) L/2 : Clutch interlock switch (with M/T)
- (E35) L/2 : ASCD clutch switch (with M/T and ASCD)
- (E36) B/3 : Diode-1 (with DTRL)
- (E37) BR/2 : ASCD brake switch
- (E38) B/2 : Stop lamp switch
- * (E40) B/6 : Accelerator pedal position sensor
- (E41) W/6 : Ignition switch
- (E102) GY/4 : Daytime light control unit (for Canada)
- (E103) GY/6 : Daytime light control unit (for Canada)
- (E104) GY/8 : Daytime light control unit (for Canada)

* : 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 ROOM HARNESS RH VIEW (ENGINE COMPARTMENT)



*: 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-44, "ENGINE ROOM HARNESS LH VIEW \(ENGINE COMPARTMENT\)"](#) for continuation of engine room harness.

HARNESSES

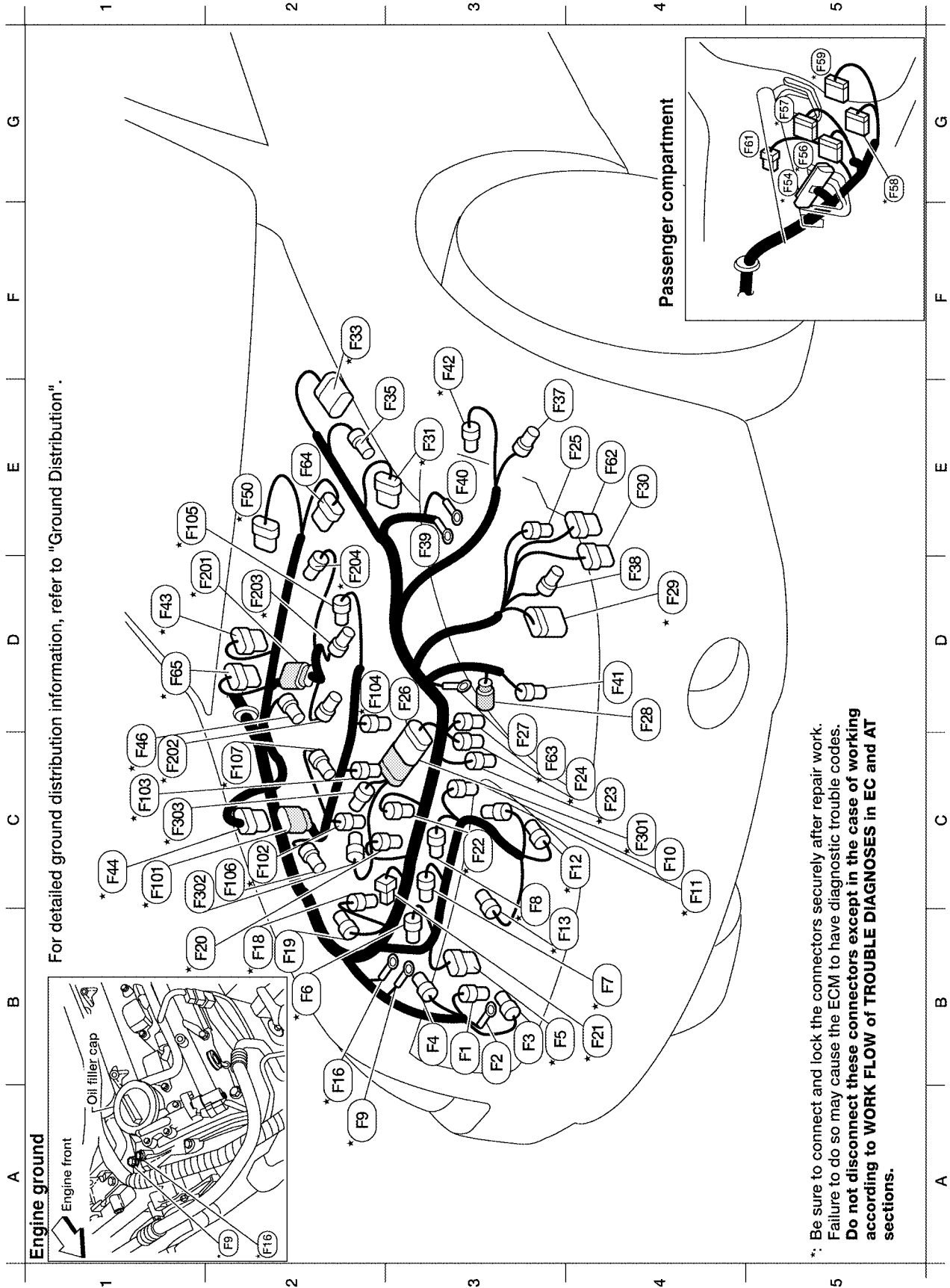
B2	(E24)	-	: Body ground
B3	(E105)	GR/2	: Front washer motor
B4	(E106)	BR/2	: Washer fluid level switch
B2	(E107)	GR/12	: Front combination lamp RH
B3	(E108)	B/1	: Horn (high)
B3	(E111)	B/3	: Refrigerant pressure sensor
B3	(E112)	-	: Generator (ground)
B3	(E113)	GR/4	: Cooling fan motor-1
C3	(E114)	GR/4	: Cooling fan motor-2
B2	(E116)	-	: Body ground
C2	(E117)	GR/2	: Front wheel sensor RH
C2	(E118)	B/4	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C2	(E119)	W/4	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
C1	(E120)	B/2	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
D3	*(E121)	W/16	: IPDM E/R (Intelligent Power Distribution Module Engine Room)
D3	*(E122)	GR/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)	GR/30	: ABS actuator and electric unit (control unit) (with TCS)
D2	(E125)	B/46	: ABS actuator and electric unit (control unit) (with VDC)
D3	(E126)	-	: Body ground
E2	*(E131)	W/10	: To (M92)
E2	(E132)	W/8	: To (E104)
D2	(E133)		: Body ground (with VDC)
D1	(E134)	W/20	: To (M82)
A3	(E137)	GR/2	: Cornering lamp RH

*: Be sure to connect and lock the connectors securely after repair work.
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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.

WKIA4635E

HARNESS

ENGINE CONTROL HARNESS



WKIA3268E

HARNESS

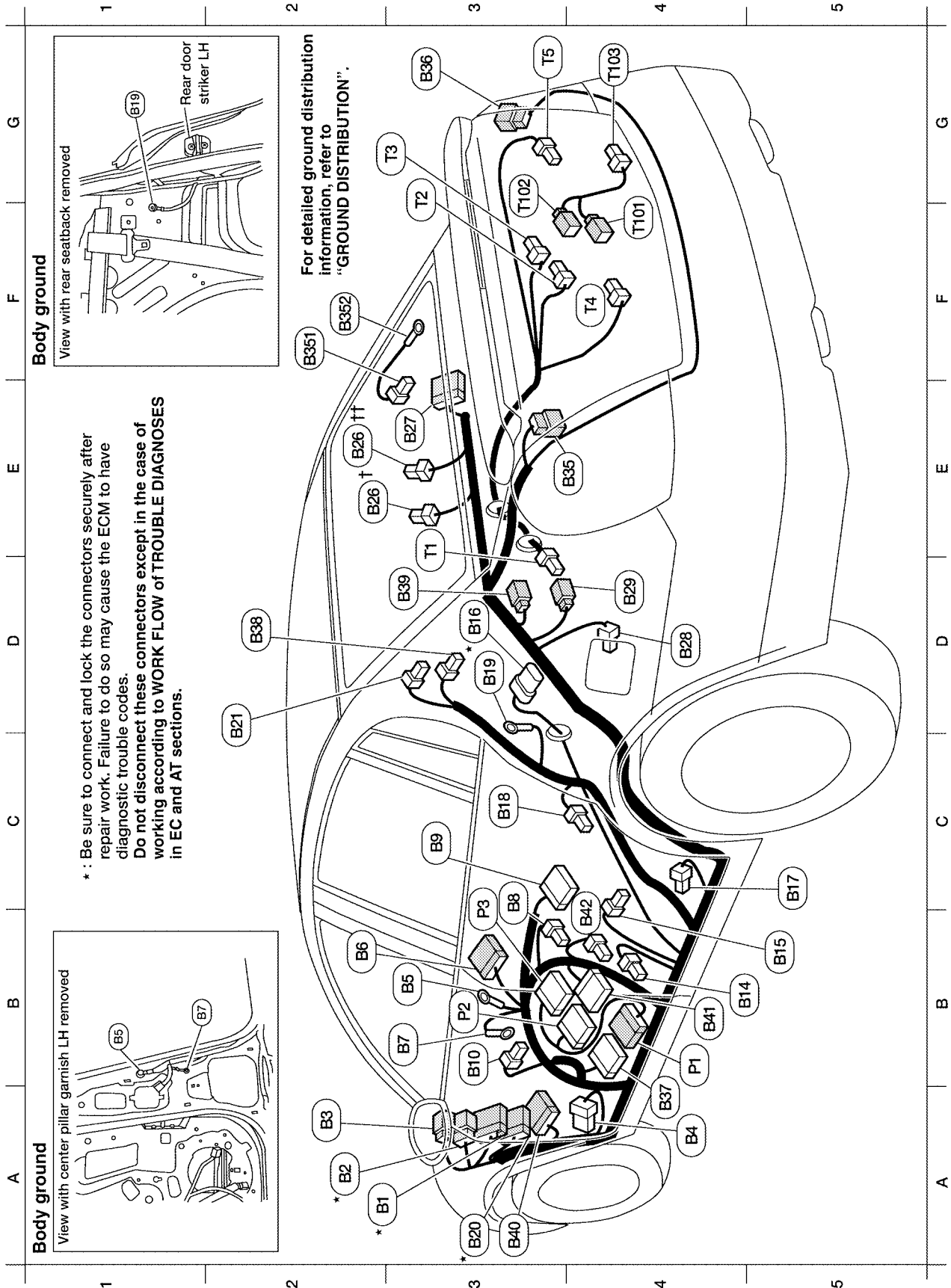
B3	(F1)	GR/2	: Generator	E4	(F30)	BR/8	: Terminal cord assembly	Engine control sub-harness-1	C1	(F101)	G/8	: To (F44)
B3	(F2)	-	: Generator	E3	(F31)	B/6	: Mass air flow sensor		C2	(F102)	GR/2	: Fuel injector No. 1
B3	(F3)	B/1	: A/C compressor	F2	(F33)	GR/9	: To (E19)		C1	(F103)	GR/2	: Fuel injector No. 3
B3	(F4)	GR/2	: Intake valve timing control solenoid valve (Bank 2)	E3	(F35)	GR/2	: To (E22)		D2	(F104)	GR/2	: Fuel injector No. 5
B3	(F5)	B/6	: Air fuel ratio (A/F) sensor 1 (Bank 2)	E3	(F37)	L/2	: Turbine revolution sensor		E1	(F105)	L/2	: EVAP canister purge volume control solenoid valve
B2	(F6)	GR/3	: Ignition coil No. 2 (with power transistor)	D4	(F38)	L/2	: Revolution sensor		C2	(F106)	B/1	: Oil pressure switch
B4	(F7)	GR/3	: Ignition coil No. 4 (with power transistor)	E3	(F40)	-	: Fusible link box (battery)		C2	(F107)	G/2	: Intake valve timing control solenoid valve (Bank 1)
C3	(F8)	GR/3	: Ignition coil No. 6 (with power transistor)	D4	(F41)	B/2	: Back-up lamp switch (with M/T)					
A2	(F9)	-	: Engine ground	F3	(F42)	B/2	: Park/neutral position (PNP) switch (with M/T)	Engine control sub-harness-2	D1	(F201)	G/6	: To (F43)
C4	(F10)	BR/3	: Front electronic controlled engine mount	D1	(F43)	G/6	: To (F201)		C1	(F202)	GR/3	: Ignition coil No. 1 (with power transistor)
C4	(F11)	B/3	: Crankshaft position sensor (POS)	C1	(F44)	G/8	: To (F101)		D2	(F203)	GR/3	: Ignition coil No. 3 (with power transistor)
C3	(F12)	B/4	: Heated oxygen sensor 2 (Bank 2)	C1	(F46)	B/3	: Power steering pressure sensor		D2	(F204)	GR/3	: Ignition coil No. 5 (with power transistor)
B3	(F13)	G/4	: Heated oxygen sensor 2 (Bank 1)	G5	(F48)	B/81	: ECM					
B2	(F16)	-	: Engine ground	G5	(F56)	GR/20	: TCM (transmission control module)	Engine control sub-harness-2	C4	(F301)	GR/6	: To (F26)
B2	(F18)	GR/2	: Fuel injector No. 2	G5	(F57)	GR/28	: TCM (transmission control module)		C1	(F302)	B/2	: Knock sensor
B2	(F19)	B/2	: VIAS control solenoid valve	G5	(F58)	W/16	: To (M70)		C1	(F303)	G/3	: Camshaft position sensor (PHASE) (Bank 1)
B1	(F20)	GR/2	: Fuel injector No. 4	G5	(F59)	W/16	: To (M71)					
B4	(F21)	GR/2	: Condenser-2	G5	(F61)	L/4	: A/T PV IGN Relay					
C3	(F22)	GR/2	: Fuel injector No. 6	E4	(F62)	GR/6	: Terminal cord assembly					
C4	(F23)	B/3	: Camshaft position sensor (PHASE) (Bank 2)	C3	(F63)	GR/2	: EGR temperature sensor					
C4	(F24)	GR/2	: Engine coolant temperature sensor	E2	(F64)	GR/6	: EGR volume control valve					
E4	(F25)	BR/3	: Rear electronic controlled engine mount (with A/T)	D1	(F65)	B/6	: Air fuel ratio (A/F) sensor 1 (Bank 1)					
D3	(F26)	GR/6	: To (F301)									
C3	(F27)	-	: Starter motor									
D4	(F28)	GR/1	: Starter motor									
D4	(F29)	GR/10	: Park/neutral position (PNP) switch (with A/T)									

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

WKIA4636E

HARNESS

BODY HARNESS AND TAIL HARNESS



WKIA4637E

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PG

HARNESS

Body harness

A2	(B1)	W/16	: To (M1)
A2	(B2)	W/6	: To (M12)
A2	(B3)	W/4	: To (E3)
A4	(B4)	BR/6	: Rear window defogger relay
B3	(B5)	-	: Body ground (Early production)
B2	(B6)	W/12	: 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
B5	(B14)	Y/2	: Front LH seat belt pre-tensioner
B5	(B15)	Y/2	: LH side air bag (satellite) sensor
D3	(B16)	GR/5	: Fuel level sensor unit and fuel pump
C5	(B17)	W/2	: Condenser-1
C3	(B18)	W/1	: Rear door switch LH
D3	(B19)	*	: Body ground
A4	(B20)	W/24	: To (M8)
D2	(B21)	W/1	: Condenser
E2	(B26) [†]	W/2	: Subwoofer LH (without BOSE audio system)
E2	(B26) ^{††}	W/6	: Subwoofer LH (with BOSE audio system)
E3	(B27)	W/12	: To (E13)
D4	(B28)	W/4	: Fuel lid opener actuator
D4	(B29)	W/4	: To (T1)
E4	(B35)	W/6	: Rear combination lamp LH
G3	(B36)	W/6	: Rear combination lamp RH

B4	(B37)	W/18	: To (P1)
D2	(B38)	Y/2	: LH side curtain air bag module
D3	(B39)	W/2	: Diode-5
A3	(B40)	W/20	: To (M11)
B4	(B41)	W/32	: Bluetooth control unit
C4	(B42)	GR/1	: Bluetooth control unit

Driver seat sub-harness

B4	(P1)	W/18	: To (B37)
B3	(P2)	W/32	: Driver seat control unit
B3	(P3)	W/16	: Driver seat control unit

Tail harness

E3	(T1)	W/4	: To (B2)
F3	(T2)	B/2	: To (T10)
G3	(T3)	W/2	: To (T102)
F4	(T4)	B/2	: License lamp LH
G3	(T5)	B/2	: License lamp RH
F4	(T10)	B/2	: To (T2)
G3	(T102)	W/2	: To (T3)
G4	(T103)	W/4	: Trunk lamp switch and trunk release solenoid

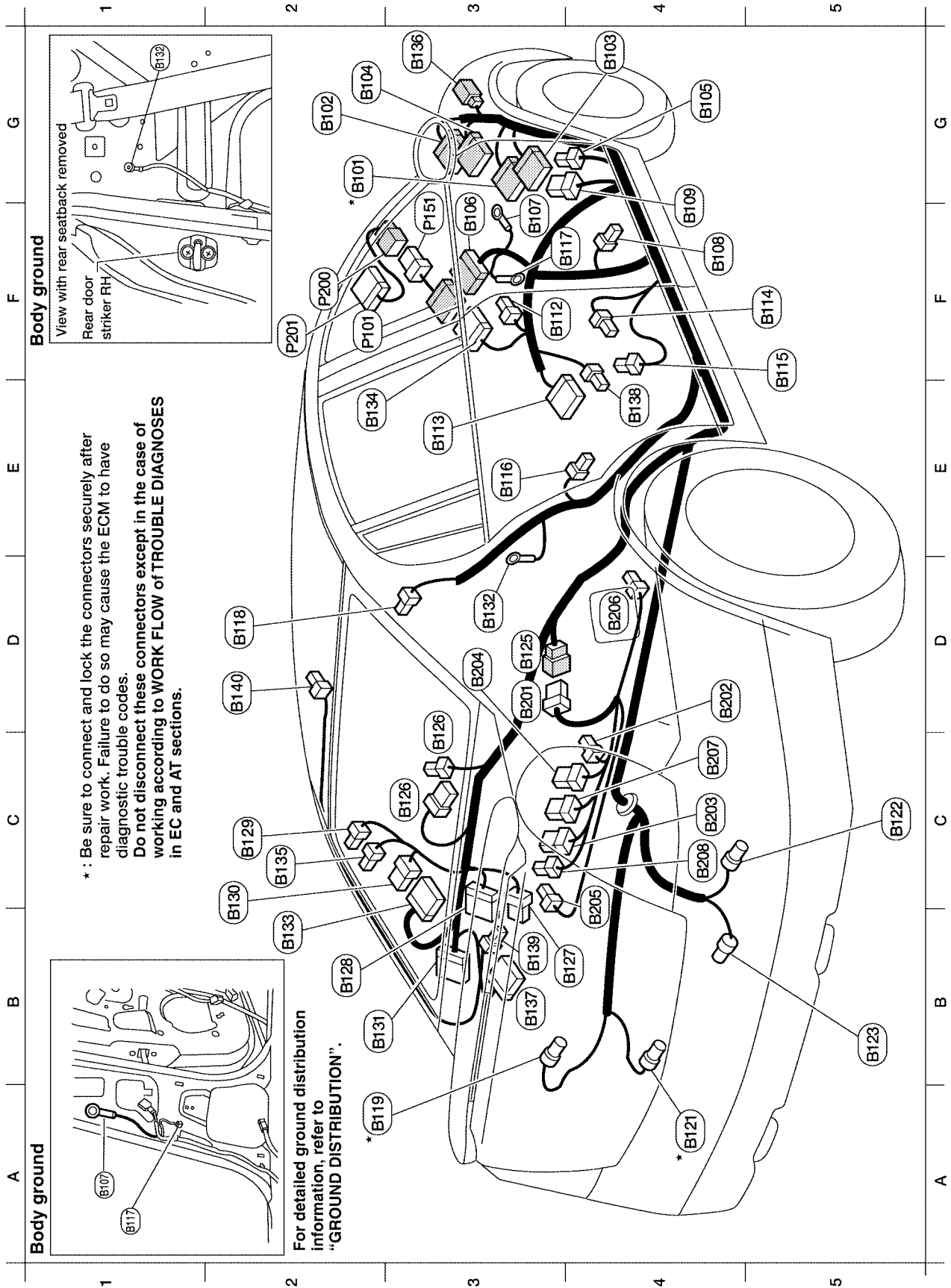
Rear defogger ground harness

F2	(B35)	B/1	: Rear window defogger
F2	(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.

HARNESS

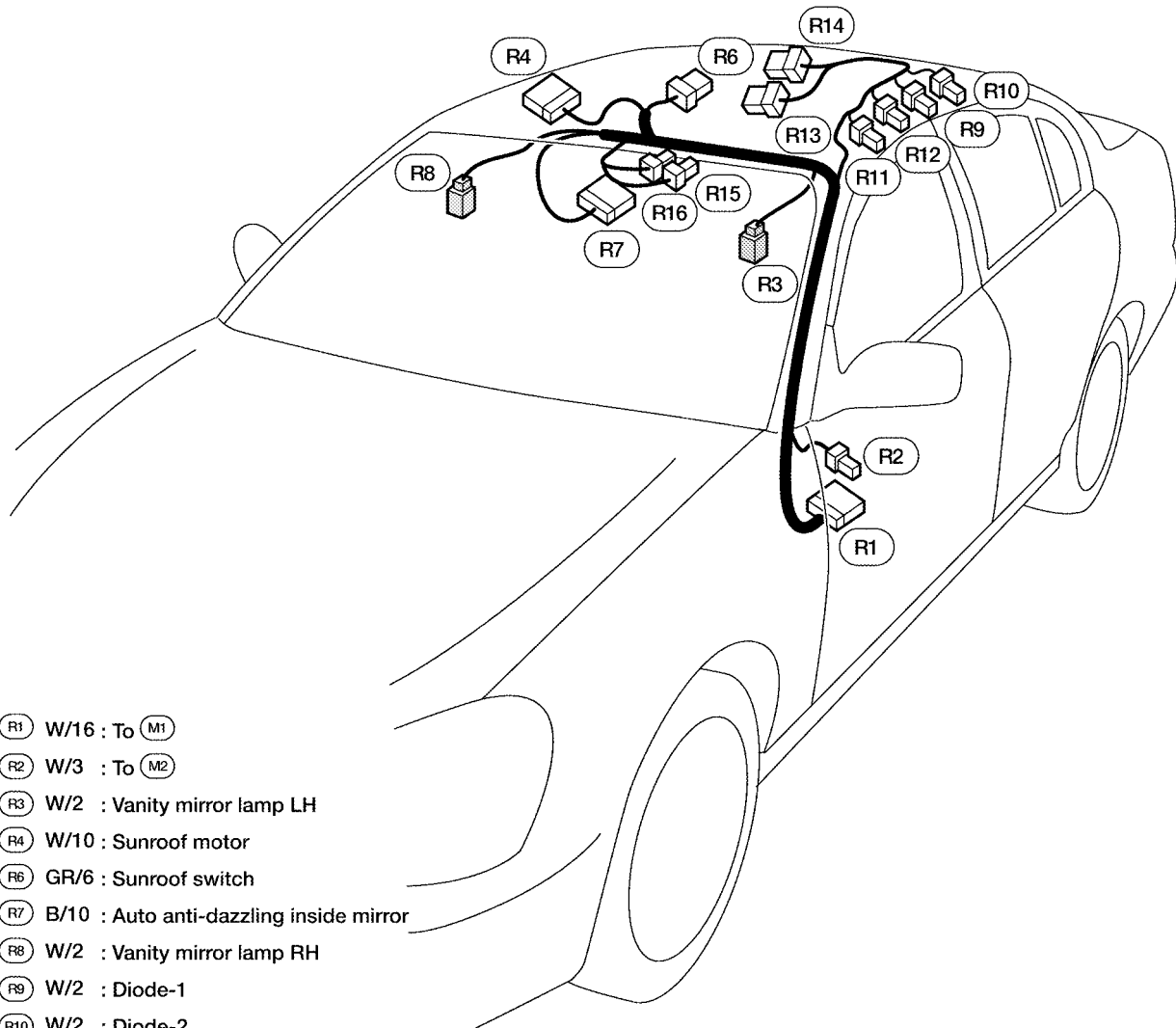
BODY NO. 2 HARNESS AND BODY NO. 3 HARNESS



WKIA4639E

HARNESS

ROOM LAMP HARNESS



- (R1) W/16 : To (M1)
- (R2) W/3 : To (M2)
- (R3) W/2 : Vanity mirror lamp LH
- (R4) W/10 : Sunroof motor
- (R6) GR/6 : Sunroof switch
- (R7) B/10 : Auto anti-dazzling inside mirror
- (R8) W/2 : Vanity mirror lamp RH
- (R9) W/2 : Diode-1
- (R10) W/2 : Diode-2
- (R11) W/2 : Diode-3
- (R12) W/2 : Diode-4
- (R13) W/6 : Personal lamp (with sunroof)
- (R14) W/8 : Interior room lamp (without sunroof)
- (R15) W/4 : Microphone
- (R16) W/4 : Bluetooth on indicator

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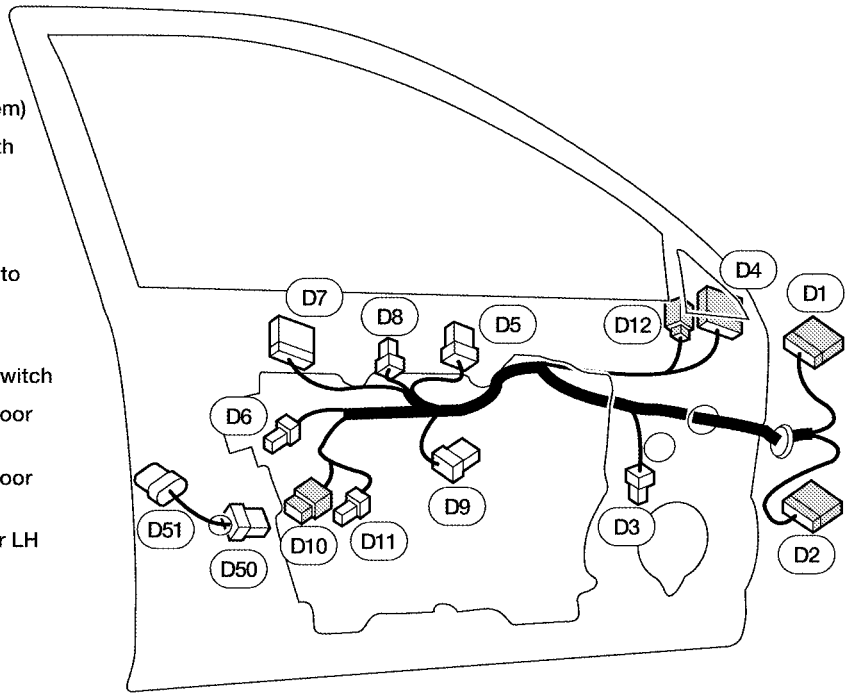
HARNESS

FRONT DOOR LH HARNESS

- (D1) W/12 : To (M9)
- (D2) W/24 : To (M8)
- (D3) W/2 : Front door speaker LH (without BOSE audio system)
- (D3) BR/2 : Front door speaker LH (with BOSE audio system)
- (D4) W/16 : Door mirror LH (with auto dimming outside mirrors)
- (D4) W/12 : Door mirror LH (without auto dimming outside mirrors)
- (D5) W/8 : Seat memory switch
- (D6) W/4 : Trunk and fuel lid opener switch
- (D7) W/16 : Main power window and door lock/unlock switch
- (D8) W/3 : Main power window and door lock/unlock switch
- (D9) W/6 : Front power window motor LH
- (D10) W/6 : To (D50)
- (D11) W/2 : Front step lamp LH
- (D12) BR/2 : Tweeter LH

Front door LH sub-harness

- (D50) W/6 : To (D10)
- (D51) B/6 : Front door lock assembly LH



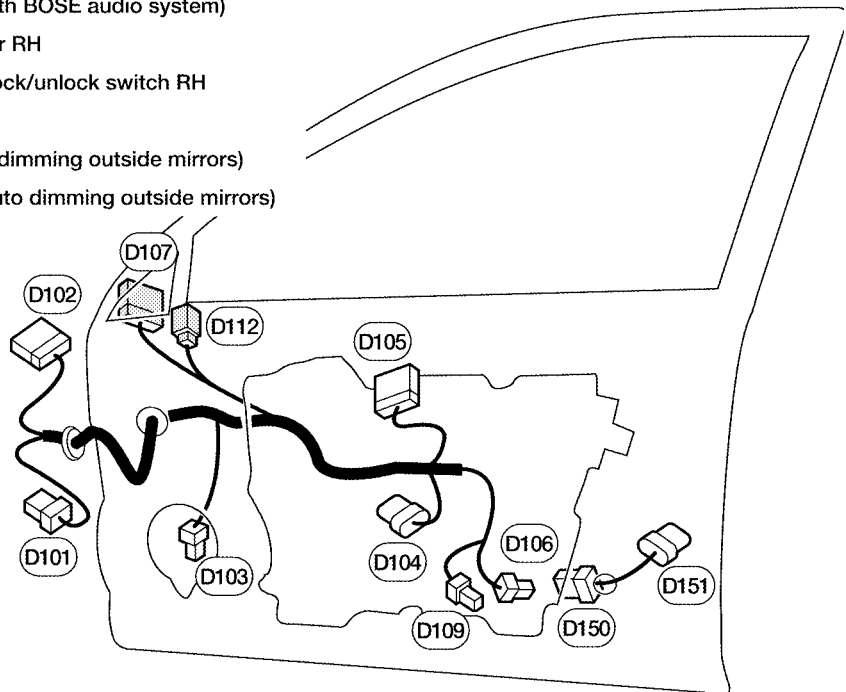
WKIA4642E

FRONT DOOR RH HARNESS

- (D101) W/8 : To (M75)
- (D102) W/16 : To (M74)
- (D103) W/2 : Front door speaker RH (without BOSE audio system)
- (D103) BR/2 : Front door speaker RH (with BOSE audio system)
- (D104) W/6 : Front power window motor RH
- (D105) W/16 : Power window and door lock/unlock switch RH
- (D106) W/2 : To (D150)
- (D107) W/16 : Door mirror RH (with auto dimming outside mirrors)
- (D107) W/12 : Door mirror RH (without auto dimming outside mirrors)
- (D109) W/2 : Front step lamp RH
- (D112) BR/2 : Tweeter RH

Front door RH sub-harness

- (D150) W/2 : To (D106)
- (D151) W/6 : Front door lock actuator RH

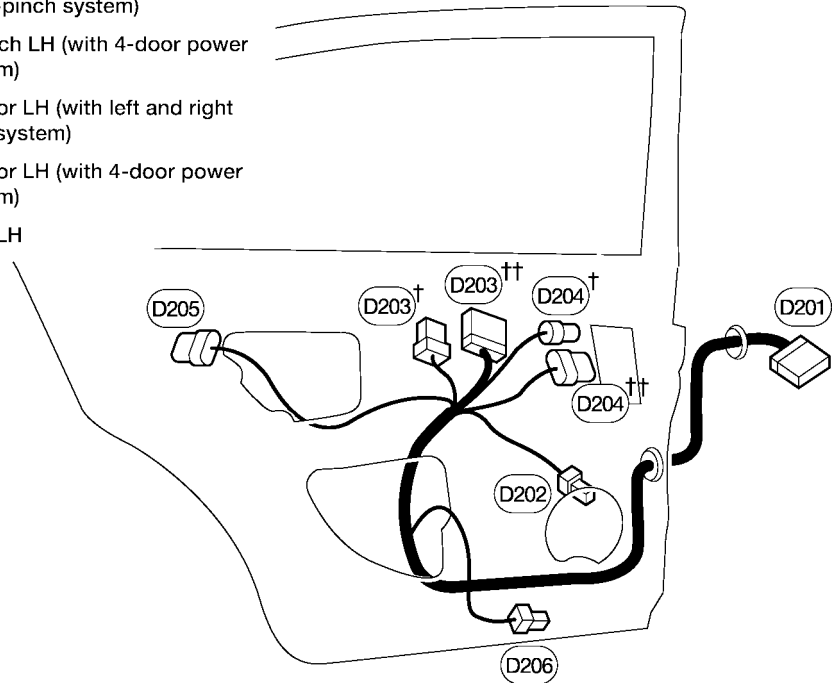


WKIA3276E

HARNESS

REAR DOOR LH HARNESS

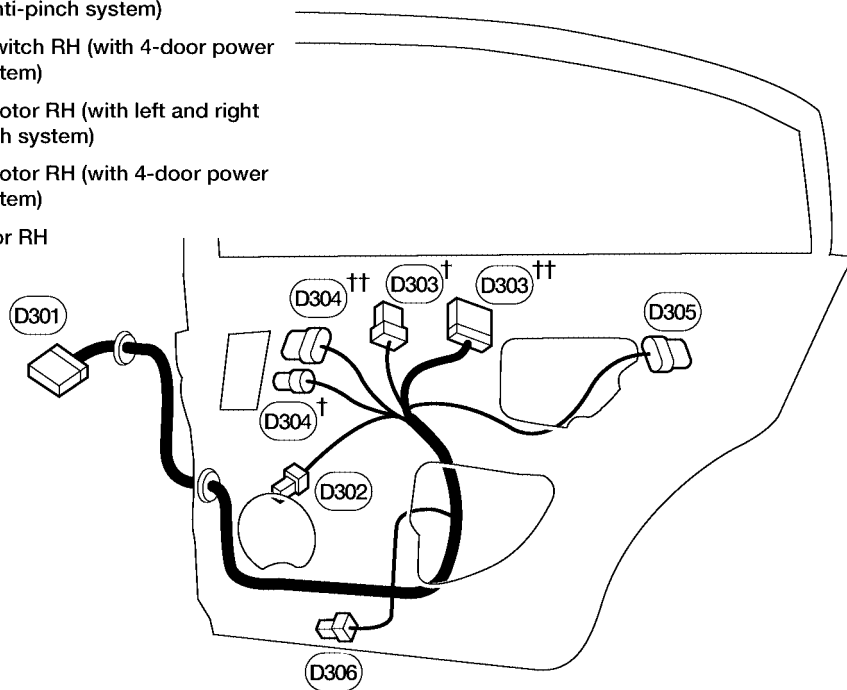
- (D201) W/12 : To (B6)
- (D202) BR/2 : Rear door speaker LH (with BOSE audio system)
- (D202) W/2 : Rear door speaker LH (without BOSE audio system)
- (D203)[†] W/8 : Rear power window switch LH (with left and right front power window anti-pinch system)
- (D203)^{††} W/16 : Rear power window switch LH (with 4-door power window anti-pinch system)
- (D204)[†] GR/2 : Rear power window motor LH (with left and right front window anti-pinch system)
- (D204)^{††} GR/6 : Rear power window motor LH (with 4-door power window anti-pinch system)
- (D205) B/6 : Rear door lock actuator LH
- (D206) W/2 : Rear step lamp LH



WKIA3277E

REAR DOOR RH HARNESS

- (D301) W/12 : To (B106)
- (D302) W/2 : Rear door speaker RH (without BOSE audio system)
- (D302) BR/2 : Rear door speaker RH (with BOSE audio system)
- (D303)[†] W/8 : Rear power window switch RH (with left and right front power window anti-pinch system)
- (D303)^{††} W/16 : Rear power window switch RH (with 4-door power window anti-pinch system)
- (D304)[†] GR/2 : Rear power window motor RH (with left and right front window anti-pinch system)
- (D304)^{††} GR/6 : Rear power window motor RH (with 4-door power window anti-pinch system)
- (D305) B/6 : Rear door lock actuator RH
- (D306) W/2 : Rear step lamp RH



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HARNESS

EKS0091A

Wiring Diagram Codes (Cell Codes)

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

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

Code	Section	Wiring Diagram Name
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
5THSIG	AT	A/T 5th Signal
A/C,A	ATC	Auto Air Conditioner
AF1B1	EC	Air Fuel Ratio Sensor 1 Bank 1
AF1B2	EC	Air Fuel Ratio Sensor 1 Bank 2
AF1HB1	EC	Air Fuel Ratio Sensor 1 Heater Bank 1
AF1HB2	EC	Air Fuel Ratio Sensor 1 Heater Bank 2
AUTO/L	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
AUT/DP	SE	Automatic Drive Positioner
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
COOL/F	EC	Cooling Fan Control
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication System
COMPAS	DI	Compass
CORNER	LT	Cornering Lamps
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
EGRC1	EC	EGR Function
EGR/TS	EC	EGR Temperature Sensor
EGVC/V	EC	EGR Volume Control Valve
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

HARNESSES

F/PUMP	EC	Fuel Pump	
FTS	AT	A/T Fluid Temperature Sensor	A
FTSP	AT	A/T Fluid Temperature Sensor Failure	
FTTS	EC	Fuel Tank Temperature Sensor	
FUELB1	EC	Fuel Injection System Bank 1	B
FUELB2	EC	Fuel Injection System Bank 2	
H/LAMP	LT	Headlamp	
HORN	WW	Horn	C
H/PHON	AV	Hands Free Telephone	
HSEAT	SE	Heated Seat	
H/STRG	PS	Heated Steering Wheel	D
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)	
IATS	EC	Intake Air Temperature Sensor	E
IGNSYS	EC	Ignition System	
ILL	LT	Illumination	
INF/D	AV	Vehicle Information and Integrated Switch System	F
INJECT	EC	Injector	
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1	
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2	G
KEYLES	BL	Remote Keyless Entry System	
KS	EC	Knock Sensor	
MAFS	EC	Mass Air Flow Sensor	H
MAIN	EC	Main Power Supply and Ground Circuit	
METER	DI	Speedometer, Tachometer, Temp., Oil and Fuel Gauges	
MIL/DL	EC	Malfunction Indicator Lamp	I
MIRROR	GW	Door Mirror	
MMSW	AT	Manual Mode Switch	
NATS	BL	Nissan Anti-Theft System	J
NAVI	AV	Navigation System	
O2H2B1	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 1	
O2H2B2	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 2	
O2S2B1	EC	Heated Oxygen Sensor 2 (Rear) Bank 1	PG
O2S2B2	EC	Heated Oxygen Sensor 2 (Rear) Bank 2	
PC/A	AT	Line Pressure Solenoid Valve	L
PC/B	AT	Shift Pressure Solenoid Valve	
PC/C	AT	Pressure Control Solenoid Valve	
PC/CS	AT	Pressure Control Solenoid Valve Failure	M
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve	
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	
P/SCKT	WW	Power Socket	
PS/SEN	EC	Power Steering Oil Pressure Sensor	
PWR/IN	AT	TCM Ignition Power	
ROOM/L	LT	Interior Room Lamp	
RP/SEN	EC	Refrigerant Pressure Sensor	
S/SIG	EC	Start Signal	
SEAT	SE	Power Seat	

HARNESSES

SEN/PW	EC	Sensor Power Supply
SFTFNC	AT	Unusual Shifting
SHADE	EI	Rear Sunshade
SHIFT	AT	A/T Shift Lock System
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
SSV/A	AT	Shift Solenoid Valve A
SSV/B	AT	Shift Solenoid Valve B
SSV/C	AT	Shift Solenoid Valve C
SSV/CS	AT	Shift Solenoid Valve C Failure
SSV/D	AT	Shift Solenoid Valve D
SSV/E	AT	Shift Solenoid Valve E
START	SC	Starting System
STOP/L	LT	Stop Lamp
TLID	BL	Trunk Lid Opener
TAIL/L	LT	Parking, License and Tail Lamps
TCCSIG	AT	A/T TCC Signal (Lock Up)
TCS	BRC	Traction Control System
TPS1	EC	Throttle Position Sensor
TPS2	EC	Throttle Position Sensor
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	HOMELINK® Universal Transceiver
TRSC	AT	Turbine Revolution Sensor
TURN	LT	Turn Signal and Hazard Warning Lamps
VDC	BRC	Vehicle Dynamic Control System
VEHSEC	BL	Vehicle Security System
VENT/V	EC	EVAP Canister Vent Control Valve
VIAS	EC	Variable Air Induction Control System
VIAS/V	EC	Variable Air Induction Control System Valve
VSSATC	AT	Revolution Sensor
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

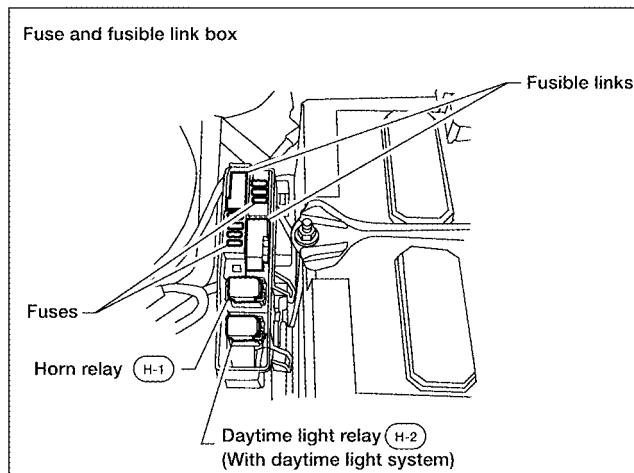
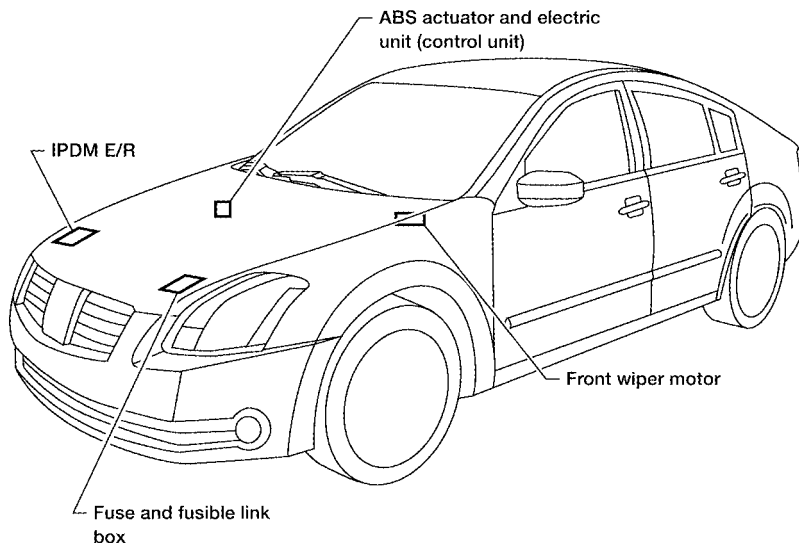
ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

PFP:25230

Electrical Units Location ENGINE COMPARTMENT

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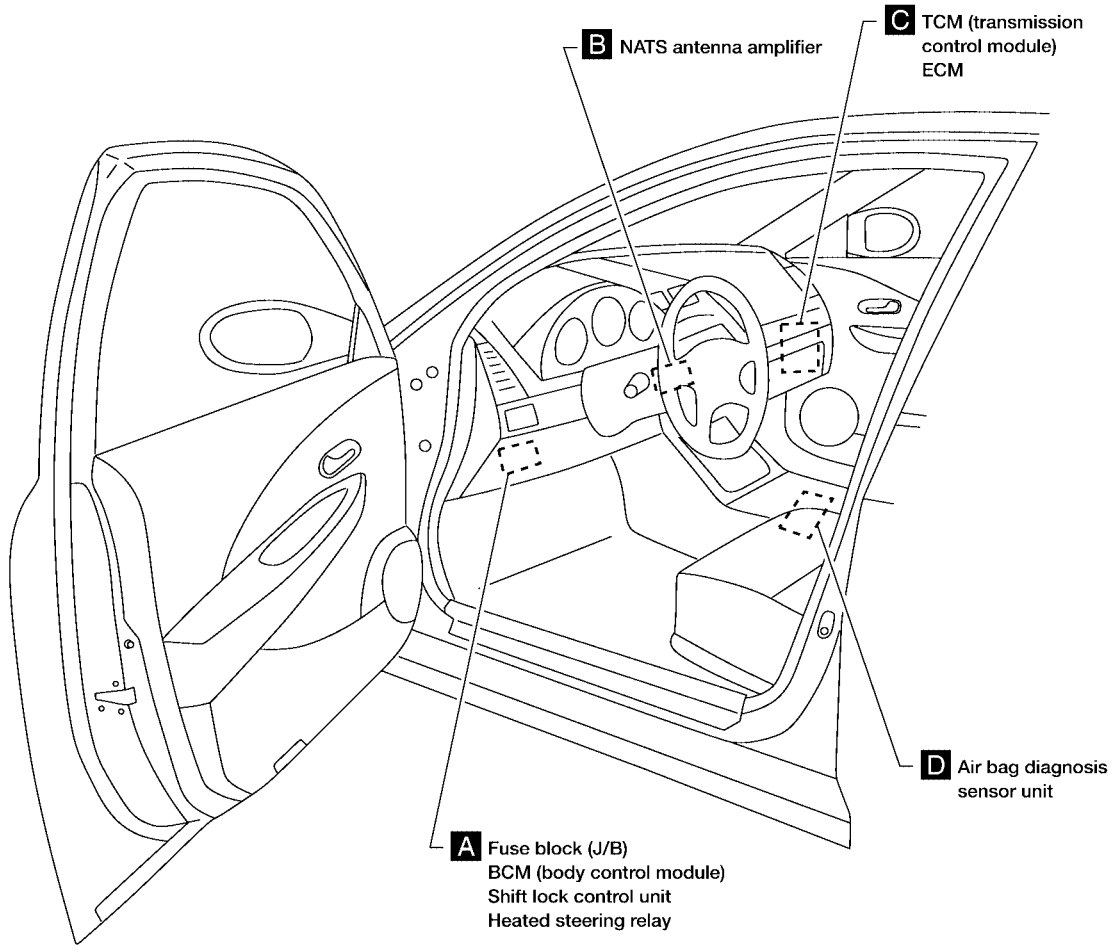
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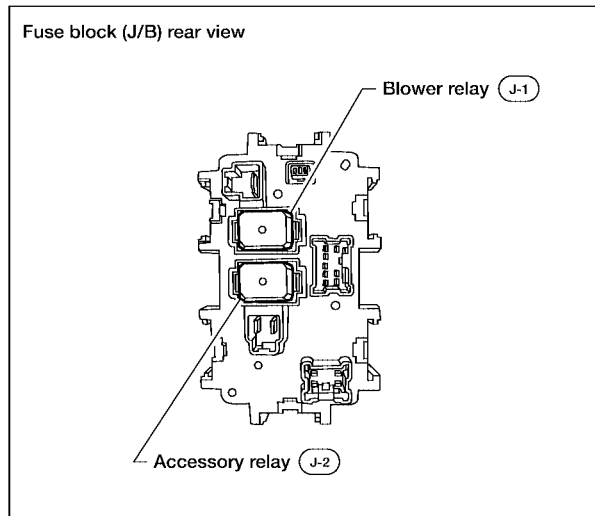
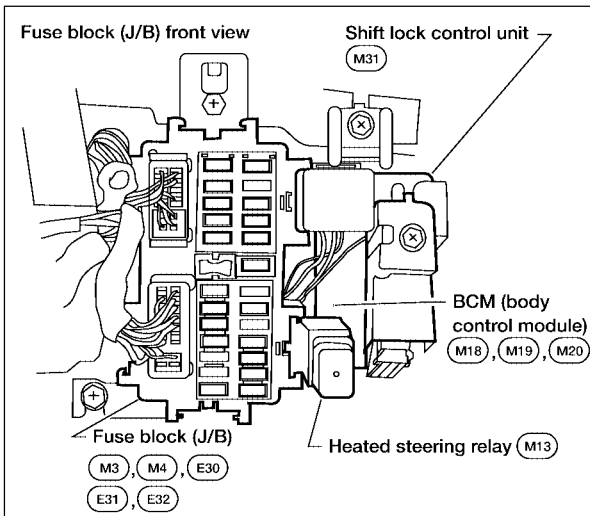
WKIA4273E

ELECTRICAL UNITS LOCATION

PASSENGER COMPARTMENT

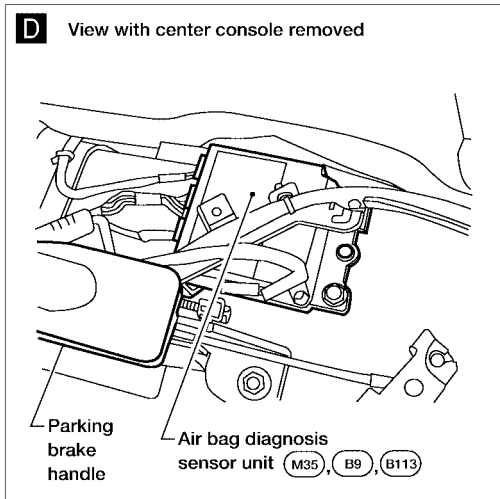
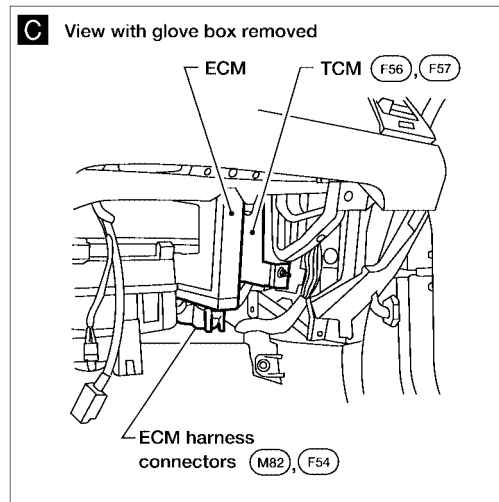
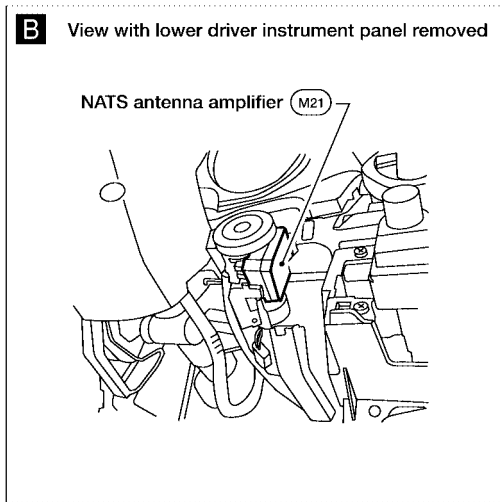


A Instrument panel side LH



WKIA3221E

ELECTRICAL UNITS LOCATION



A
B
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I
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PG
L
M

WKIA0476E

HARNESS CONNECTOR

PF: B4341

EKS0091F

HARNESS CONNECTOR

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

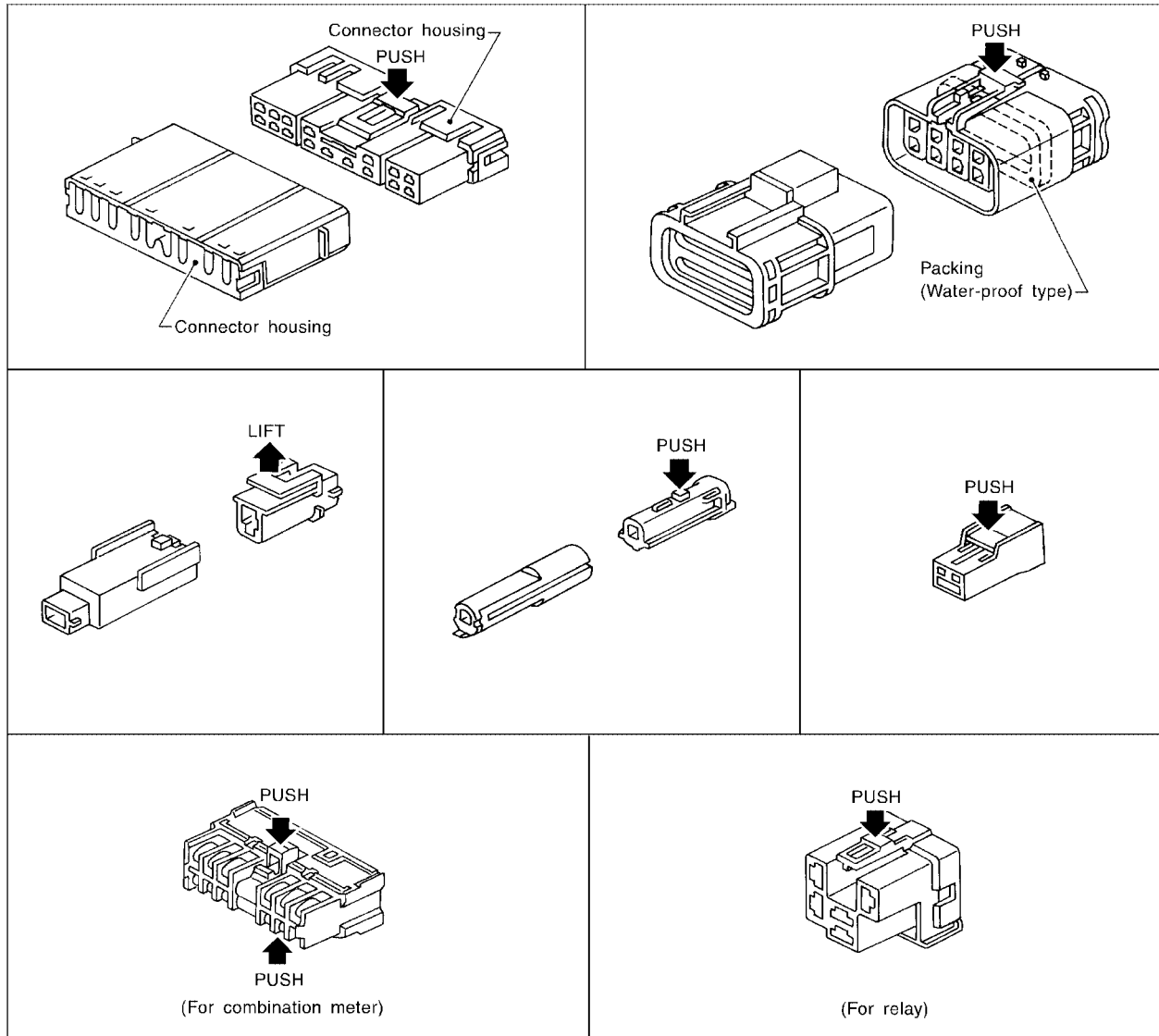
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

Refer to the next page for description of the slide-locking type connector.

CAUTION:

Do not pull the harness or wires when disconnecting the connector.

[Example]



SEL769DA

HARNESS CONNECTOR

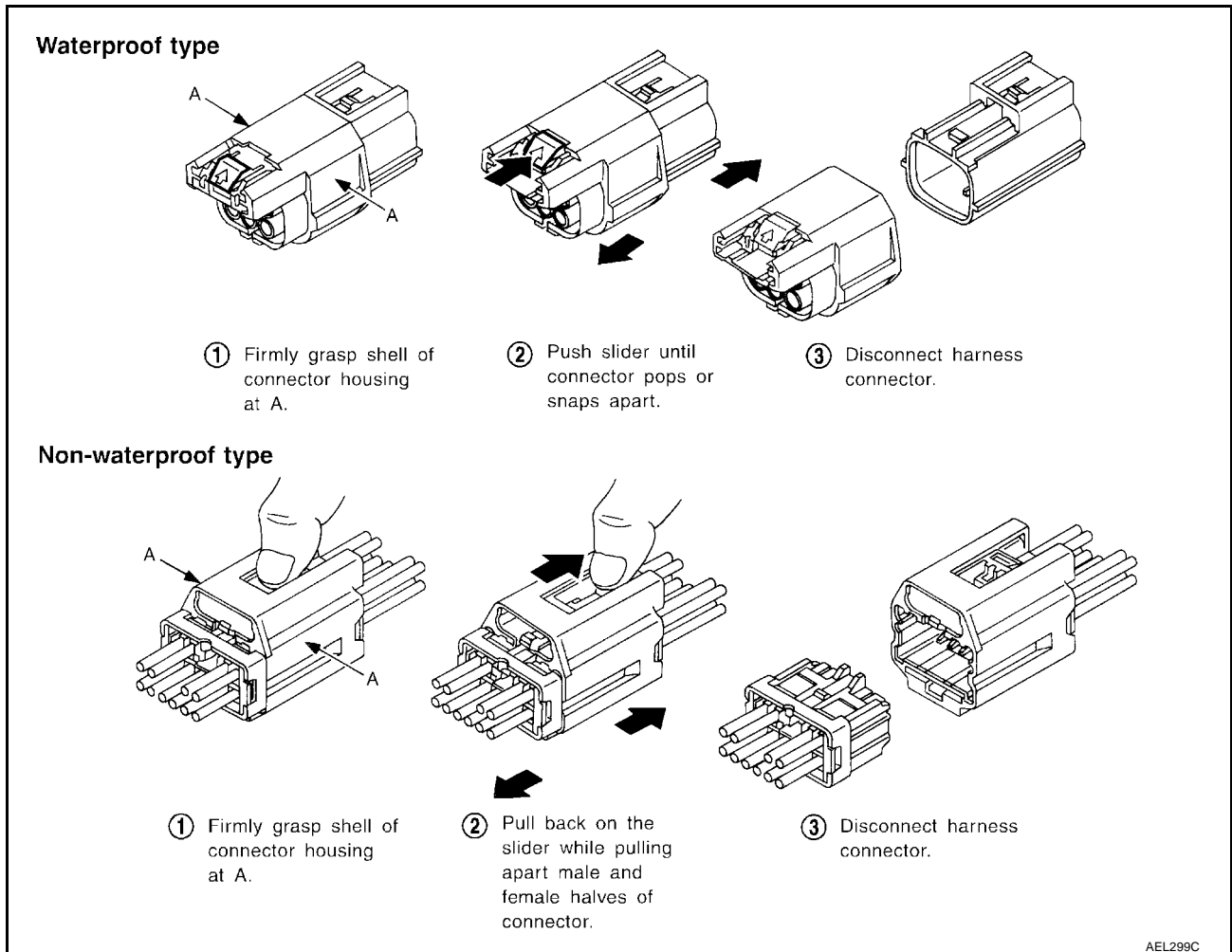
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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
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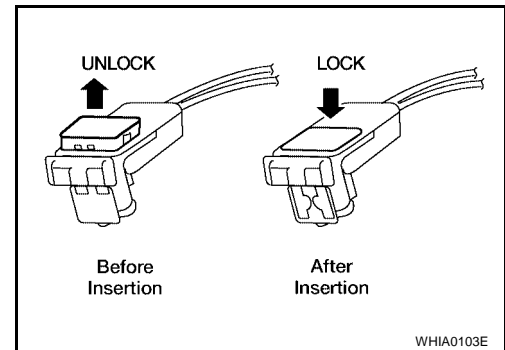
HARNESS CONNECTOR

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

- SRS direct-connect type harness connectors are used on certain SRS components such as air bag modules and seat belt pre-tensioners.
- Always pull up to release black locking tab prior to removing connector from SRS component.
- Always push down to lock black locking tab after installing connector to SRS component. When locked, the black locking tab is level with the connector housing.

CAUTION:

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





ELECTRICAL UNITS

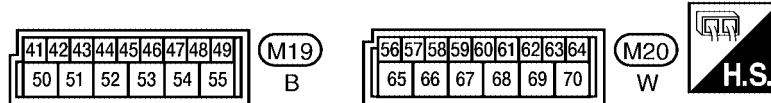
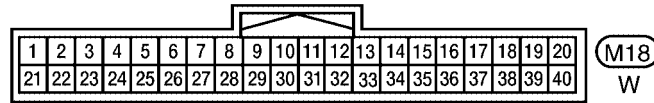
ELECTRICAL UNITS Terminal Arrangement

PF:23710

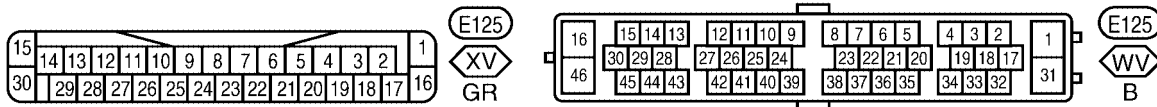
EKS009IG

 : WITHOUT VDC
 : WITH VDC

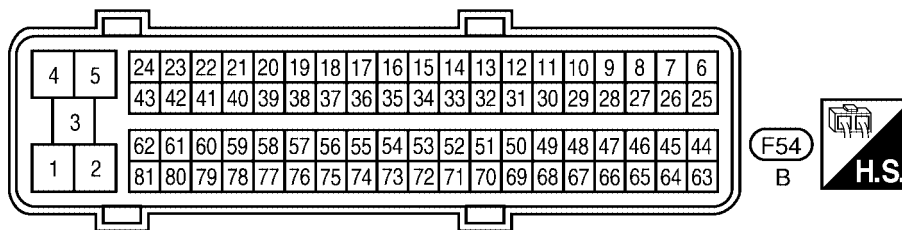
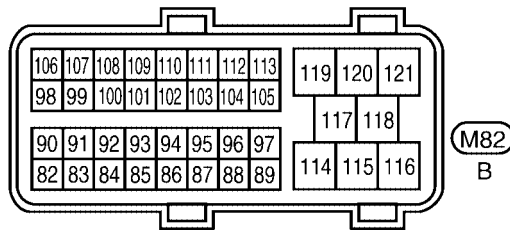
BCM (BODY CONTROL MODULE)



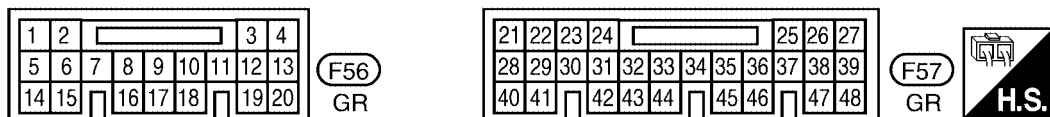
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



ECM



TCM (TRANSMISSION CONTROL MODULE)



WKIA4261E

STANDARDIZED RELAY

PFP:25230

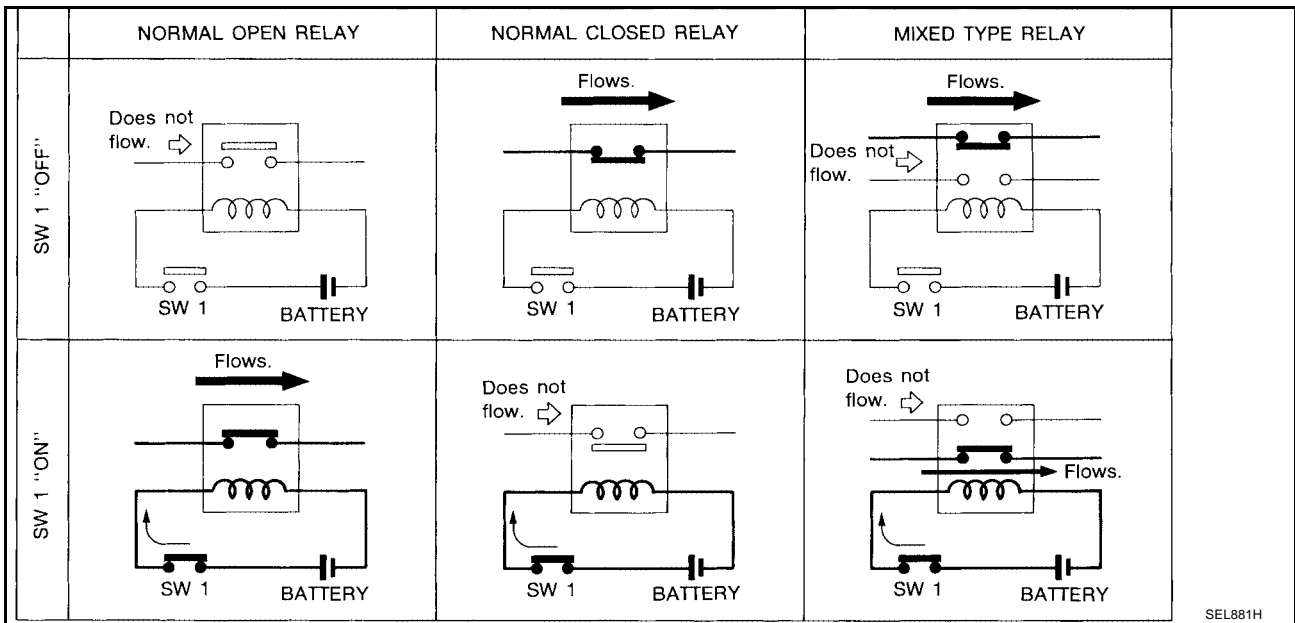
EKS0091H

STANDARDIZED RELAY

Description

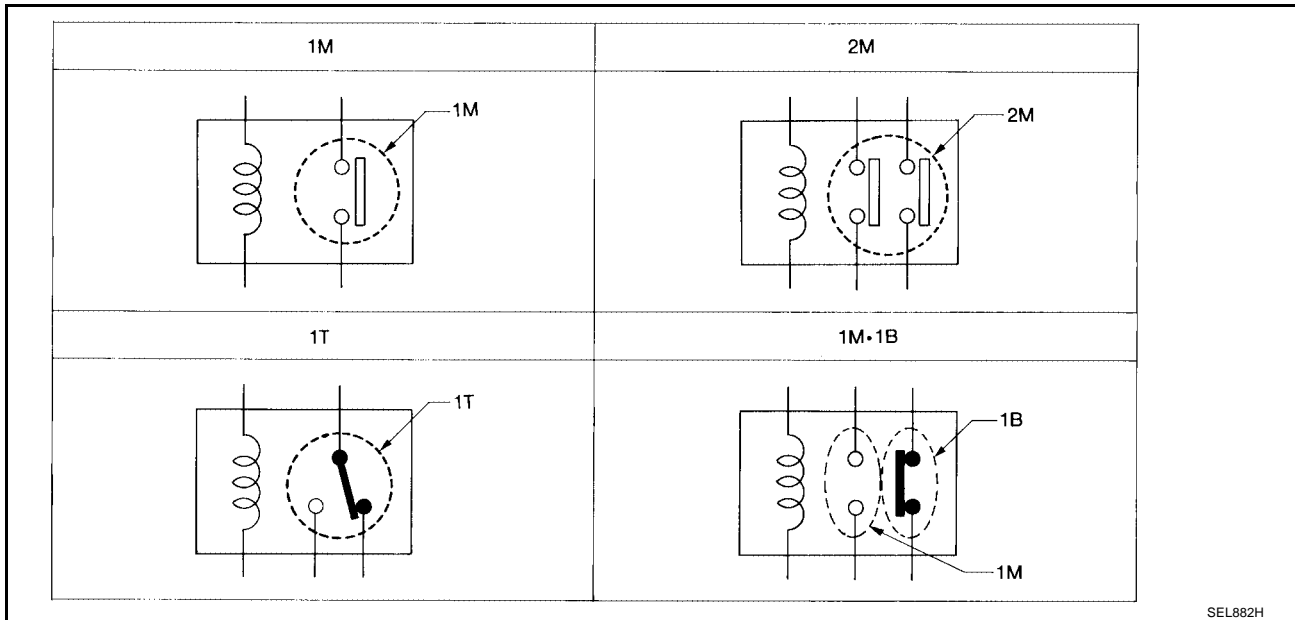
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



SEL881H

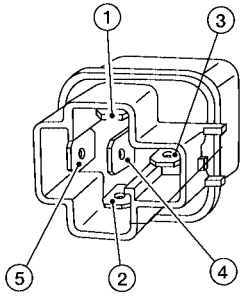
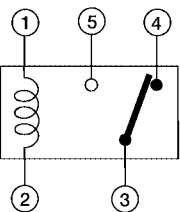
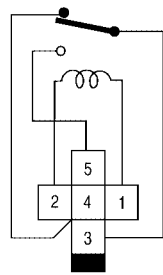
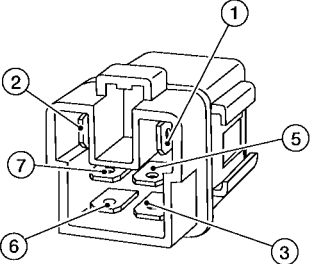
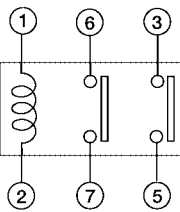
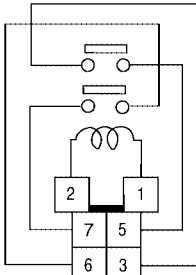
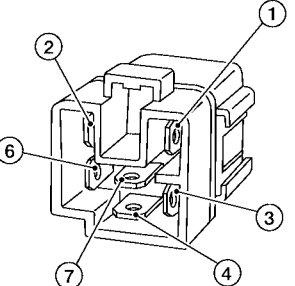
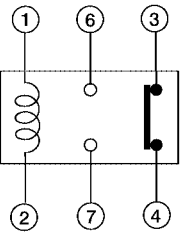
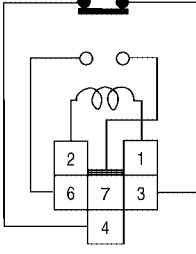
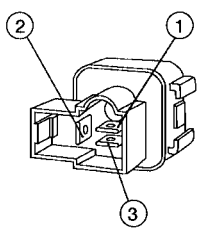
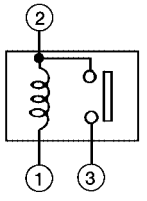
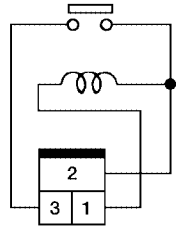
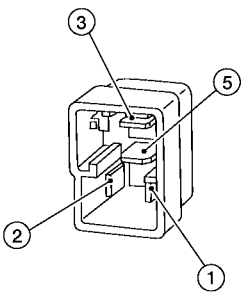
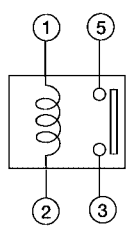
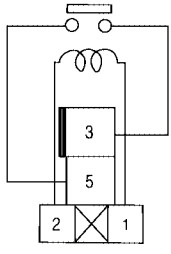
TYPE OF STANDARDIZED RELAYS



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				BLACK
				BLUE

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

WKIA0253E

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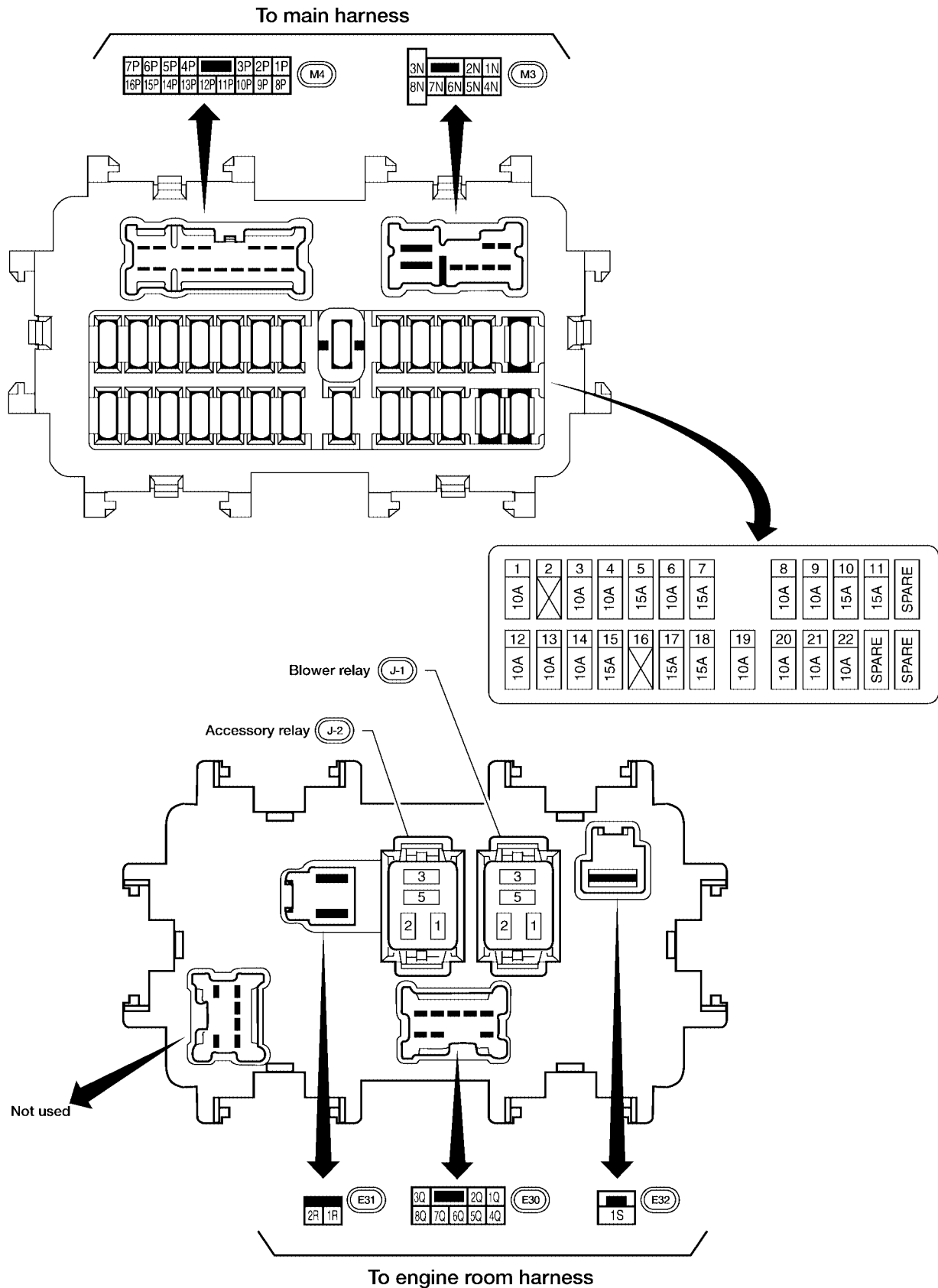
FUSE BLOCK-JUNCTION BOX (J/B)

PF24350

EKS009II

FUSE BLOCK-JUNCTION BOX (J/B)

Terminal Arrangement



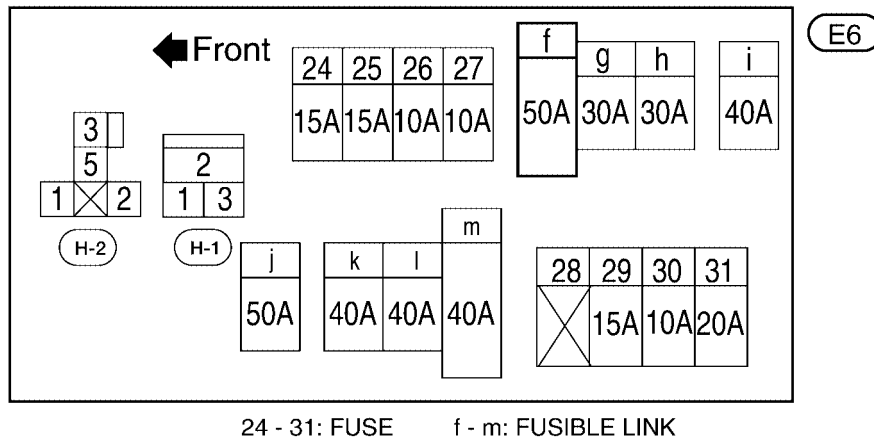
WKIA4643E

FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX Terminal Arrangement

PFP:24381

EKS009U



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J
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M

PG

FUSE AND FUSIBLE LINK BOX
