

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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POWER SUPPLY ROUTING CIRCUIT

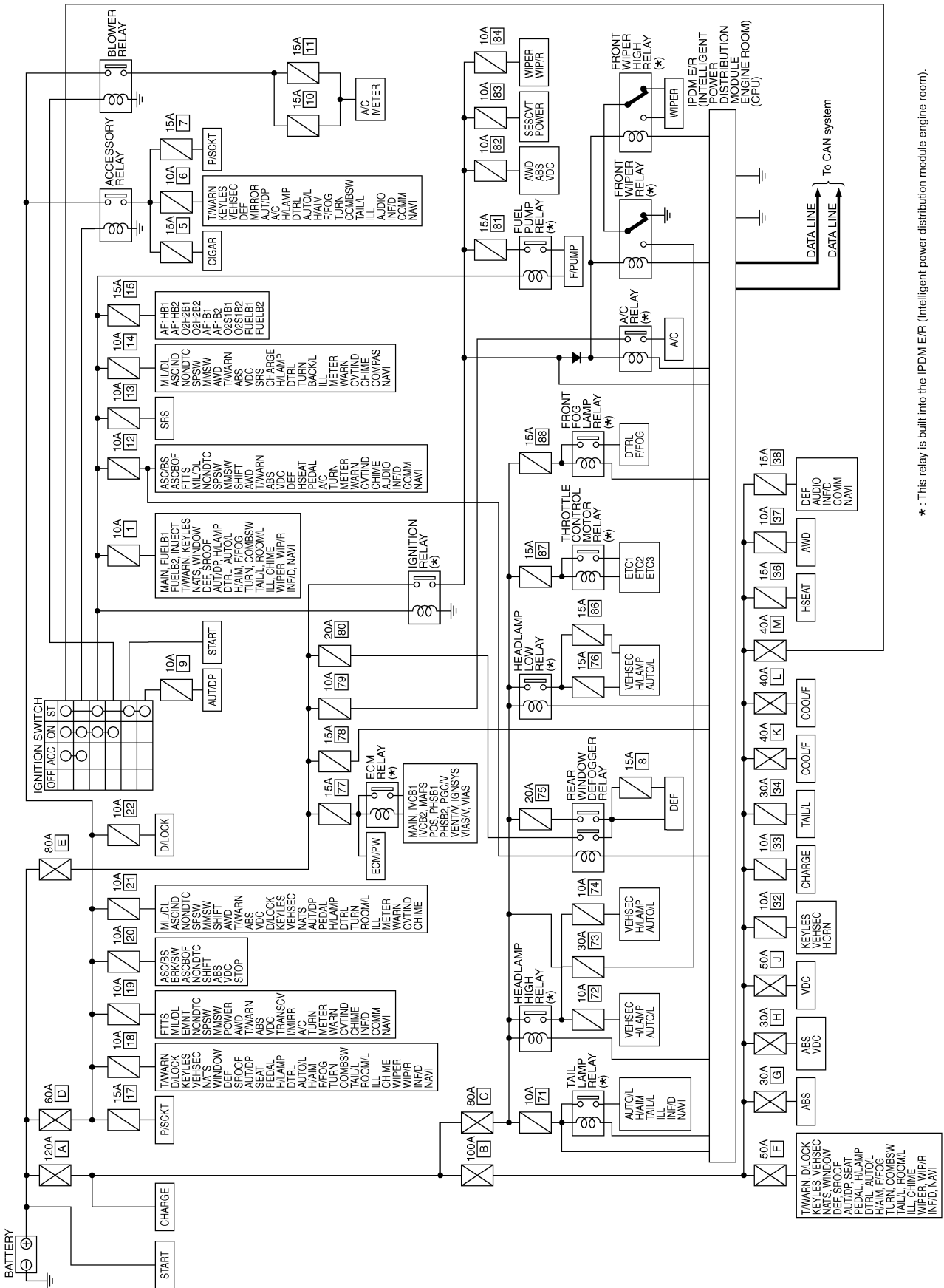
POWER SUPPLY ROUTING CIRCUIT

PPF:24110

Schematic

AKS007HE

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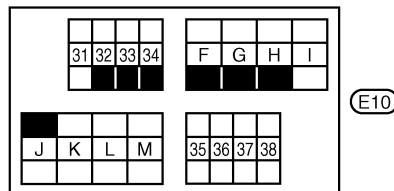
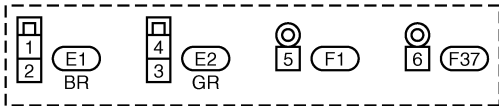
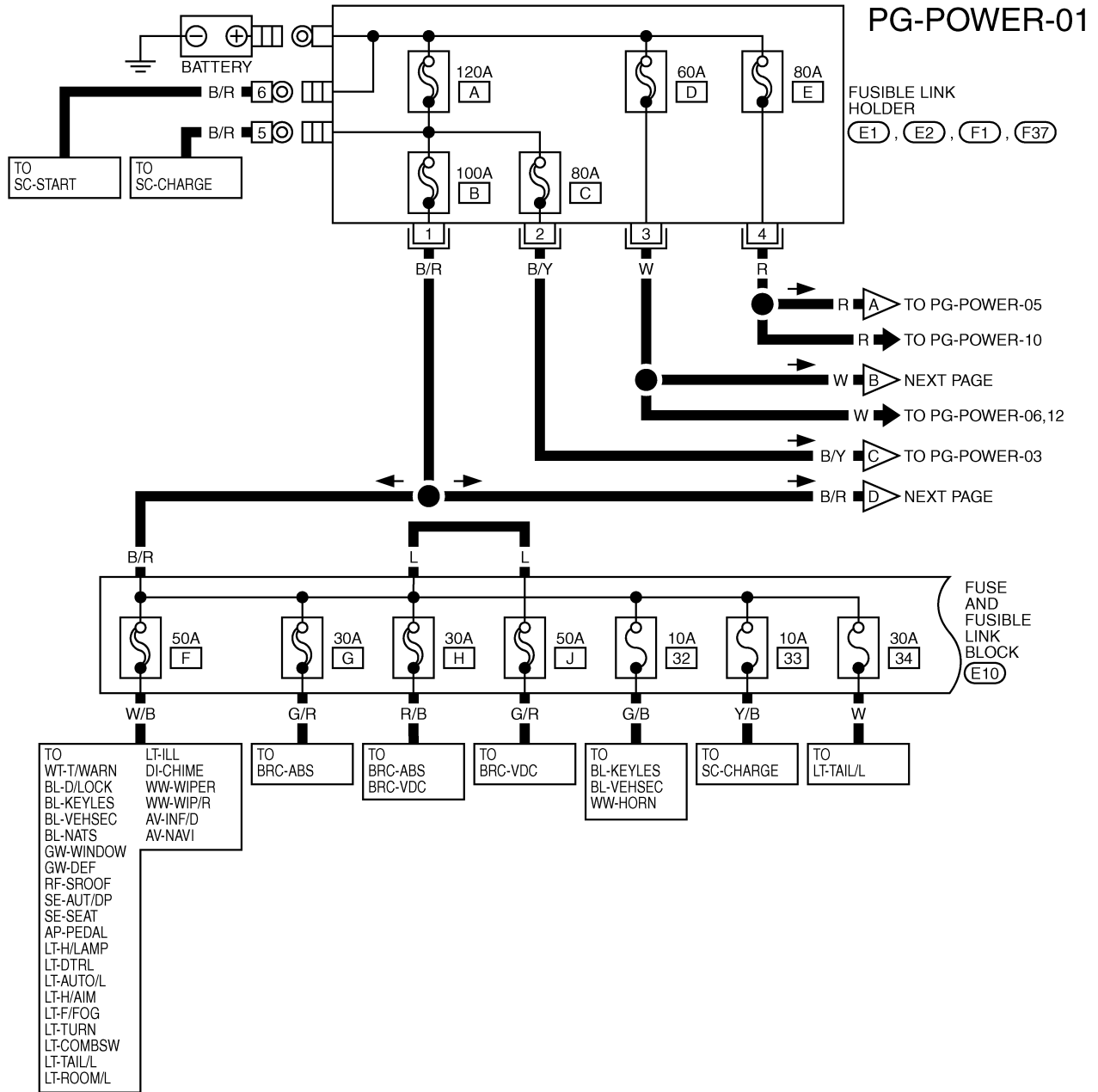


* : This relay is built into the IPDM E/R (Intelligent power distribution module engine room).

POWER SUPPLY ROUTING CIRCUIT

AKS007HF

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

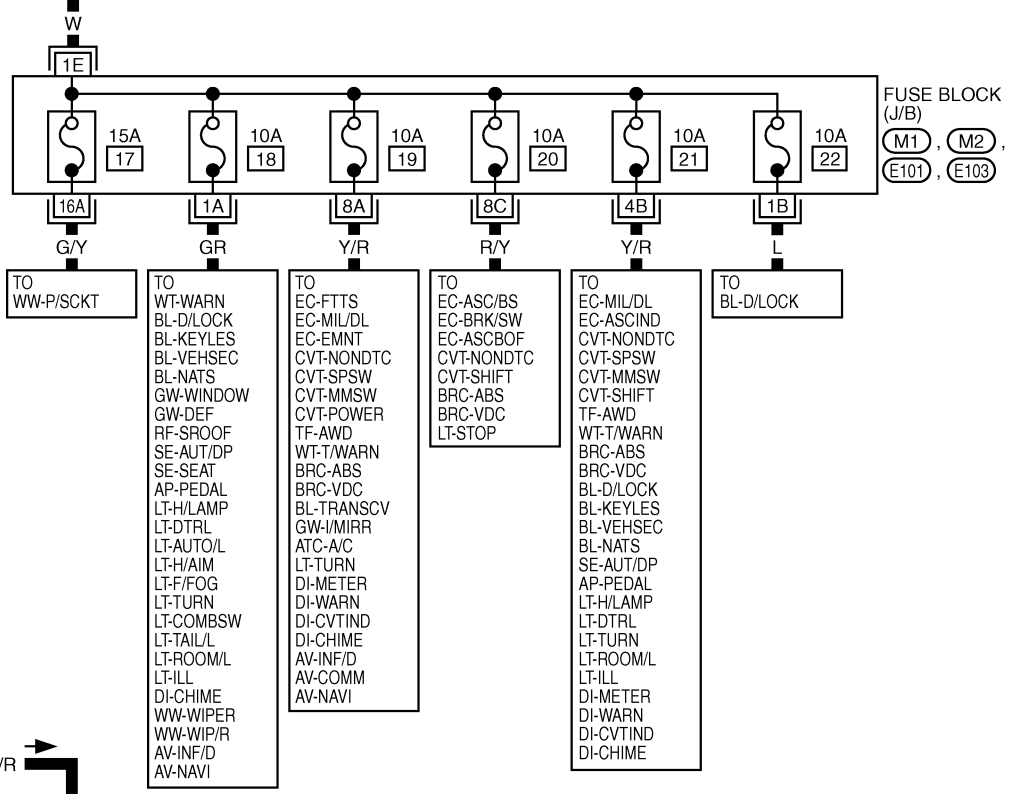


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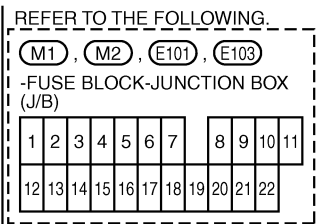
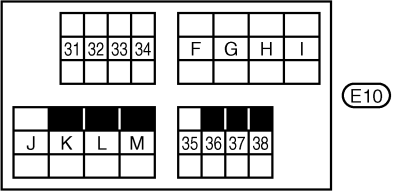
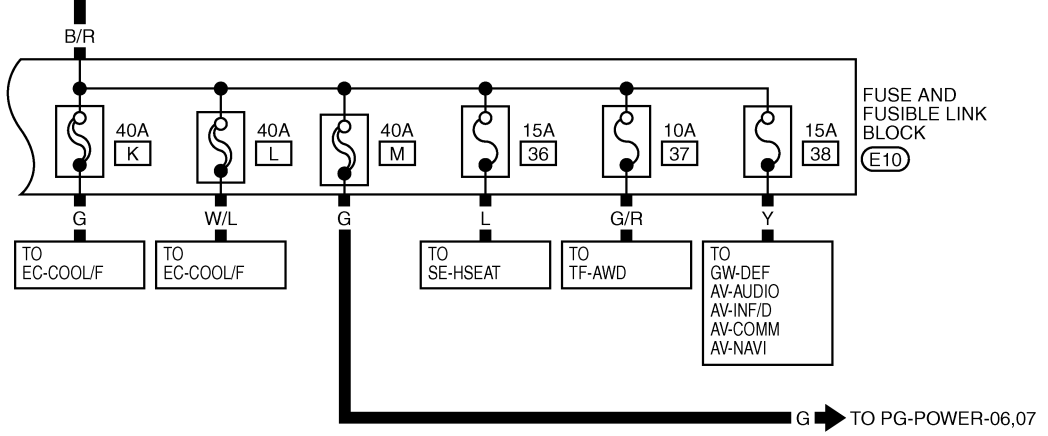
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-02

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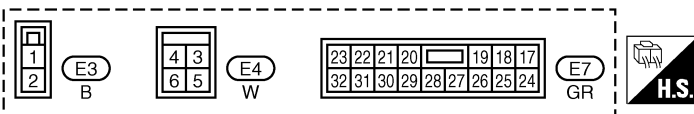
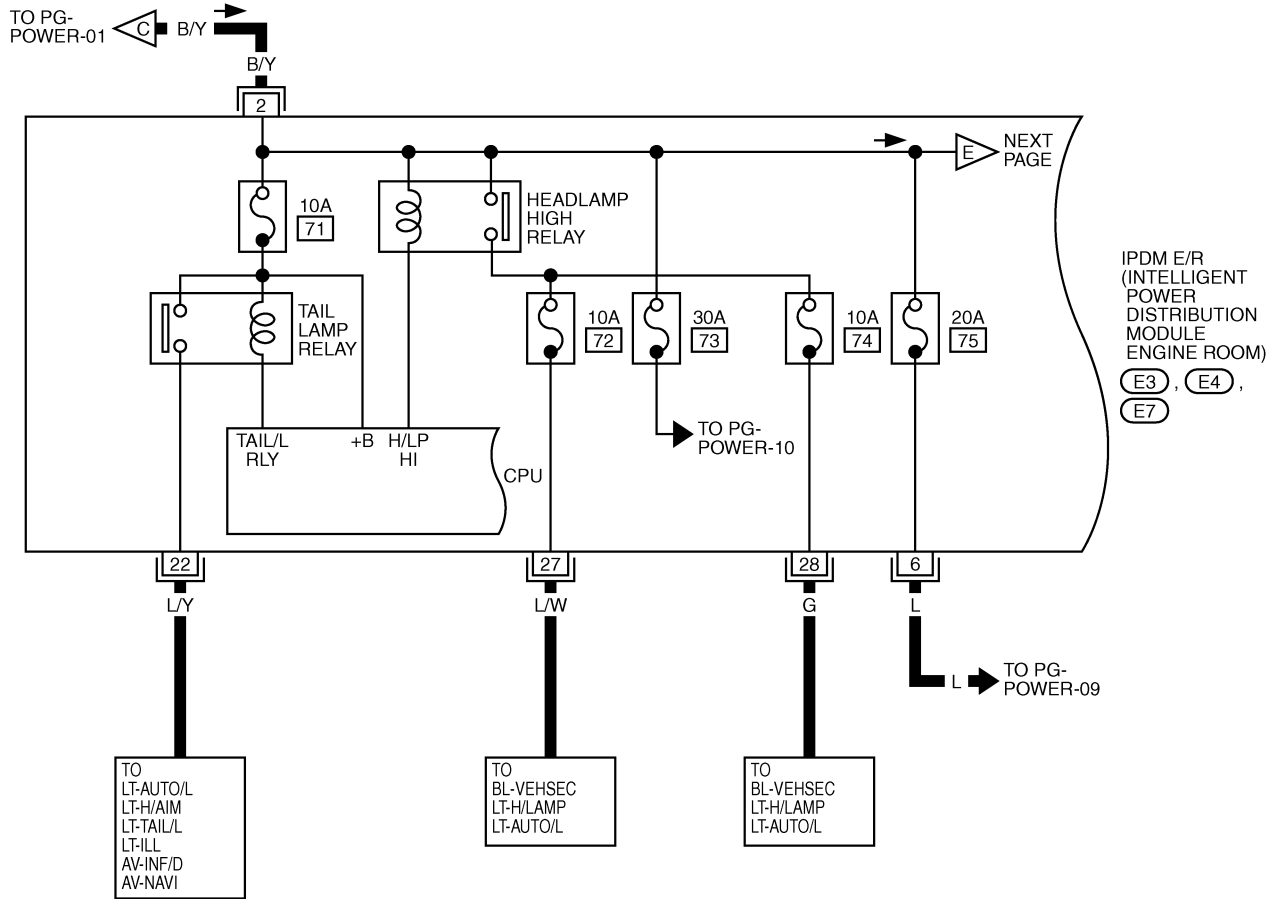
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POWER SUPPLY ROUTING CIRCUIT

PG-POWER-03

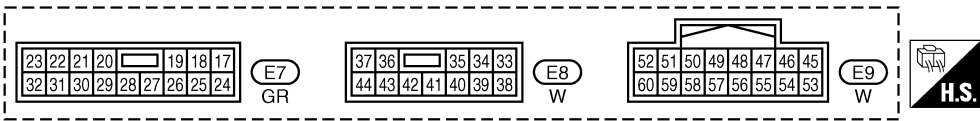
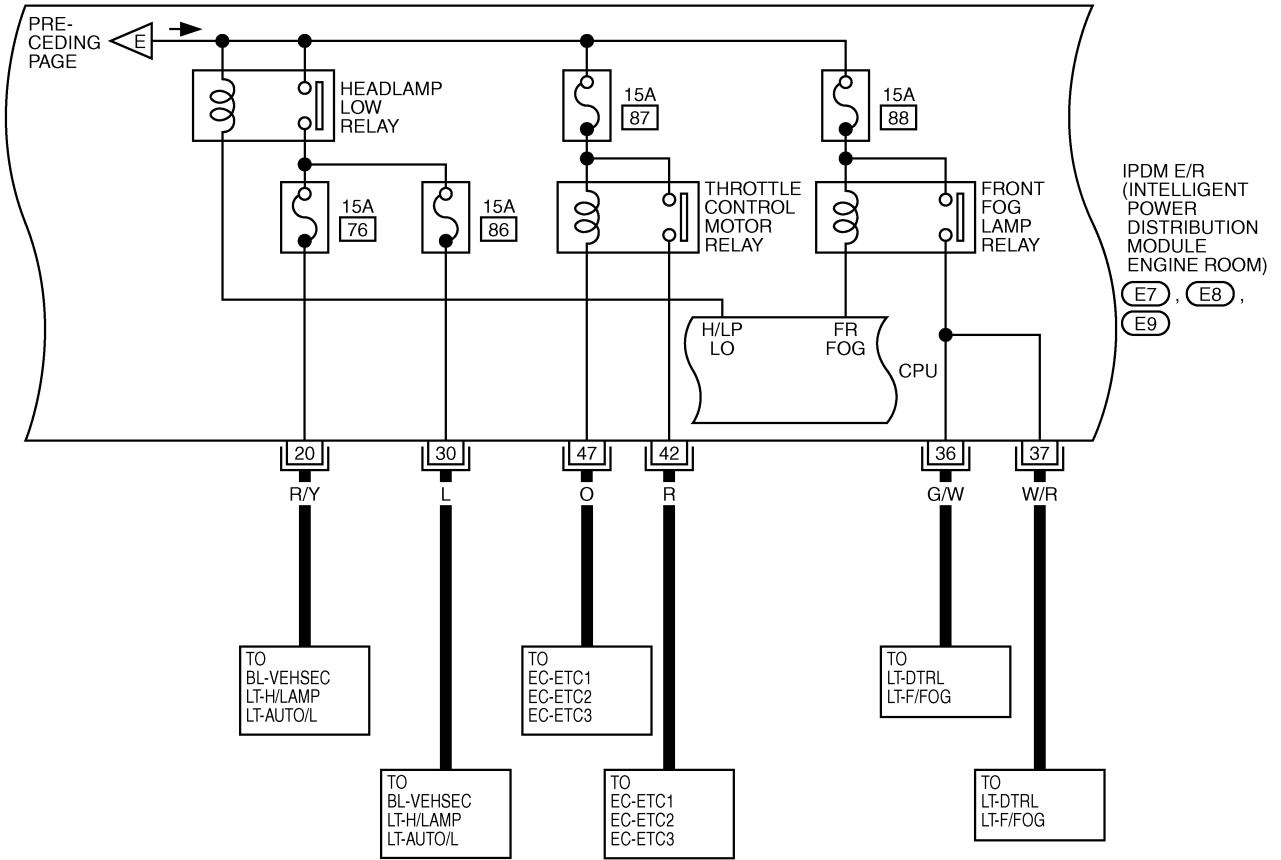


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POWER SUPPLY ROUTING CIRCUIT

PG-POWER-04

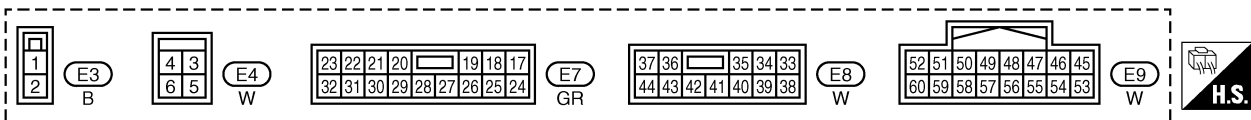
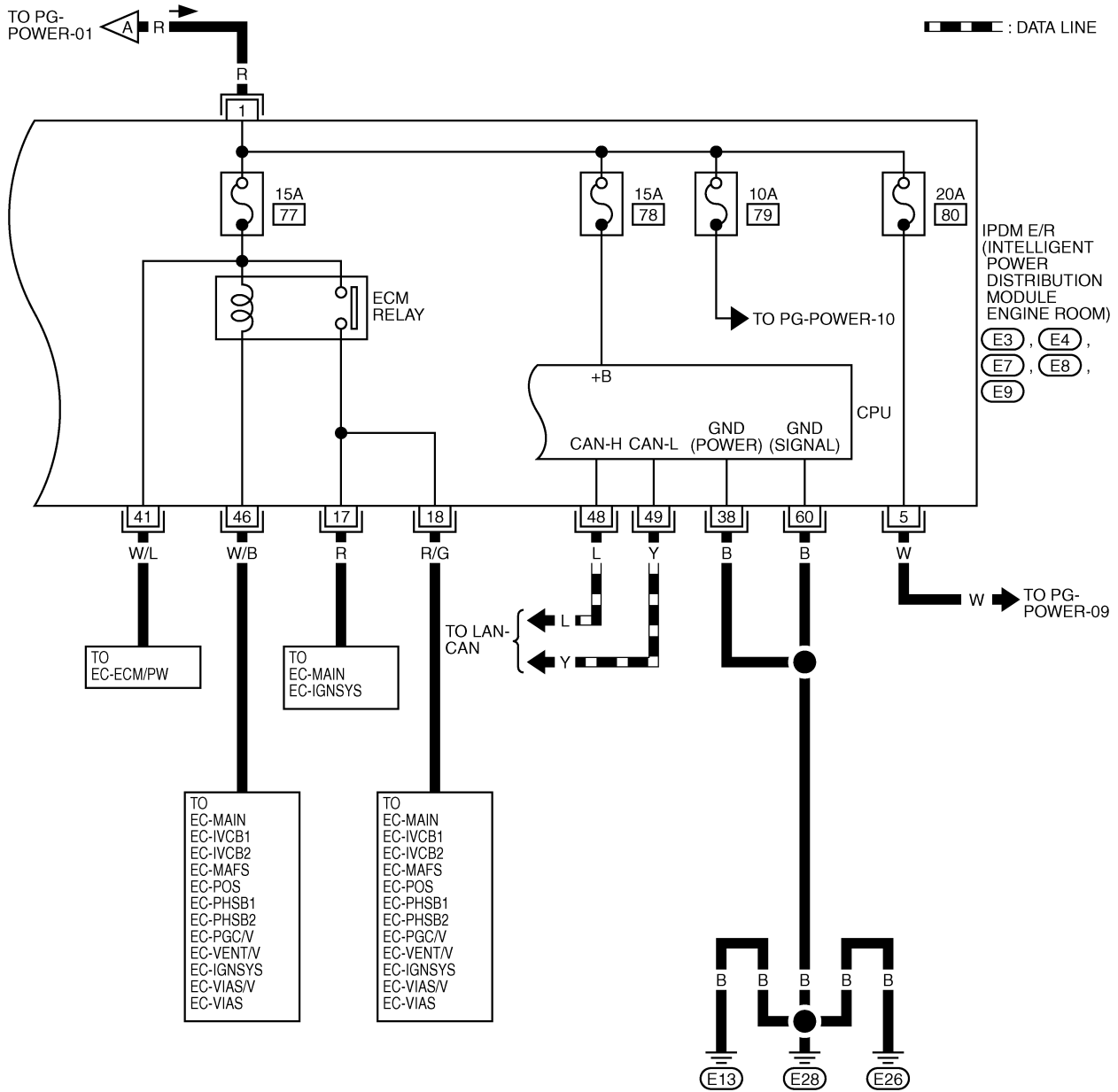
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TKWA1745E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-05

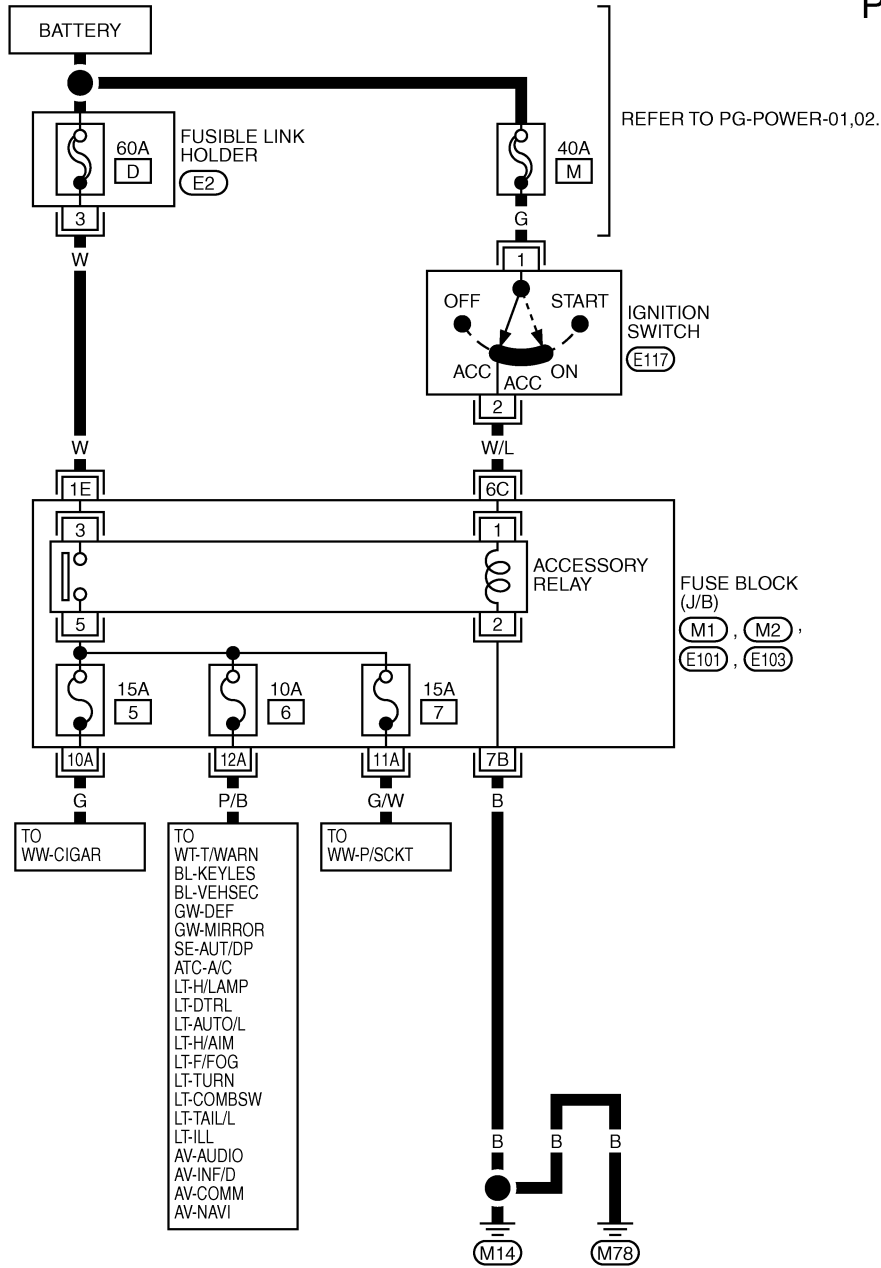


TKWA1746E

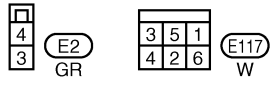
POWER SUPPLY ROUTING CIRCUIT

ACCESSORY POWER SUPPLY - IGNITION SW. IN "ACC" OR "ON"

PG-POWER-06



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REFER TO THE FOLLOWING.

(M1), (M2), (E101), (E103)

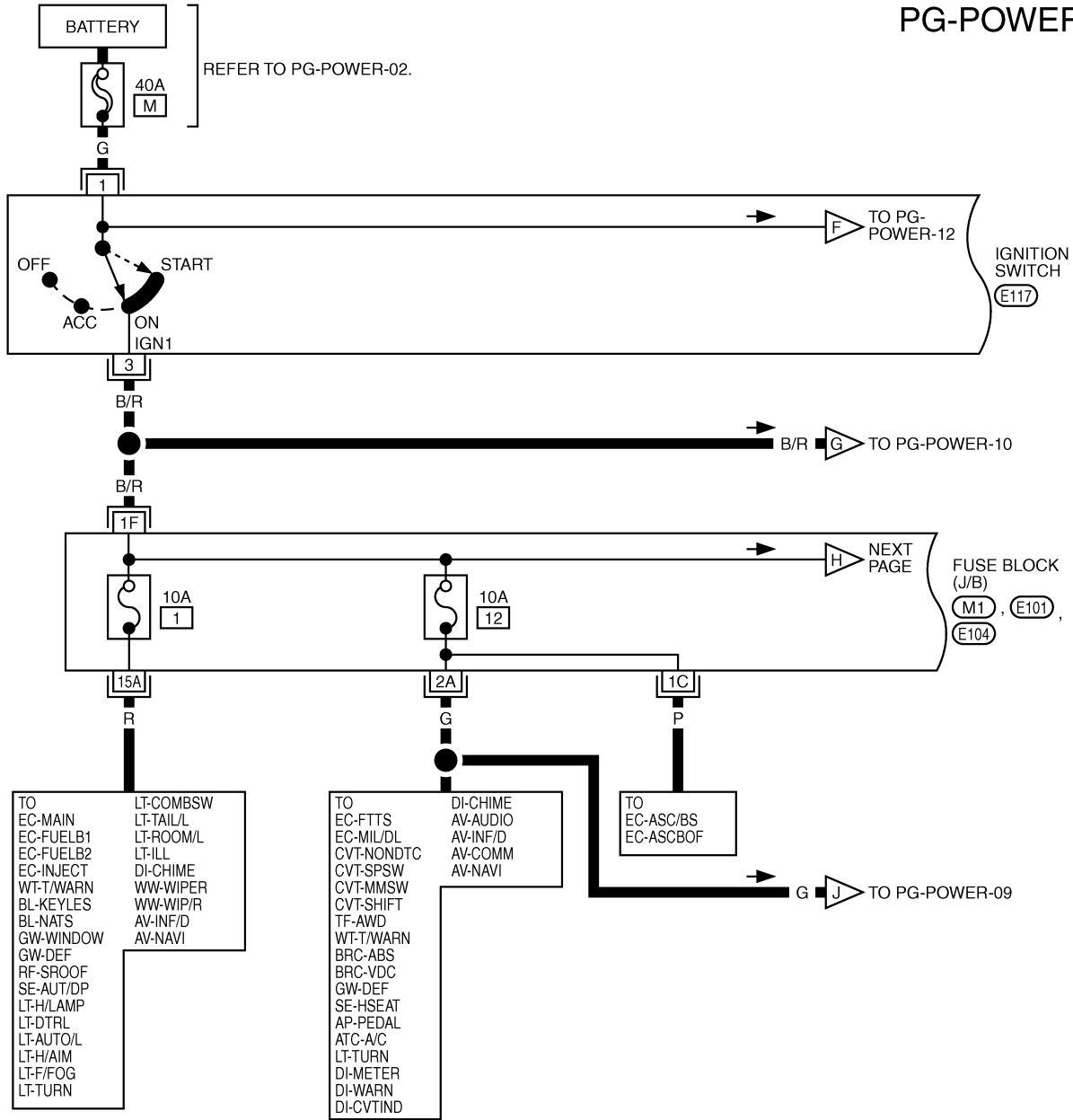
- FUSE BLOCK-JUNCTION BOX (J/B)

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

POWER SUPPLY ROUTING CIRCUIT

IGNITION POWER SUPPLY - IGNITION SW. IN "ON" AND/OR "START"

PG-POWER-07



3	5	1
4	2	6

(E117)
W

REFER TO THE FOLLOWING.

(M1), (E101), (E104)

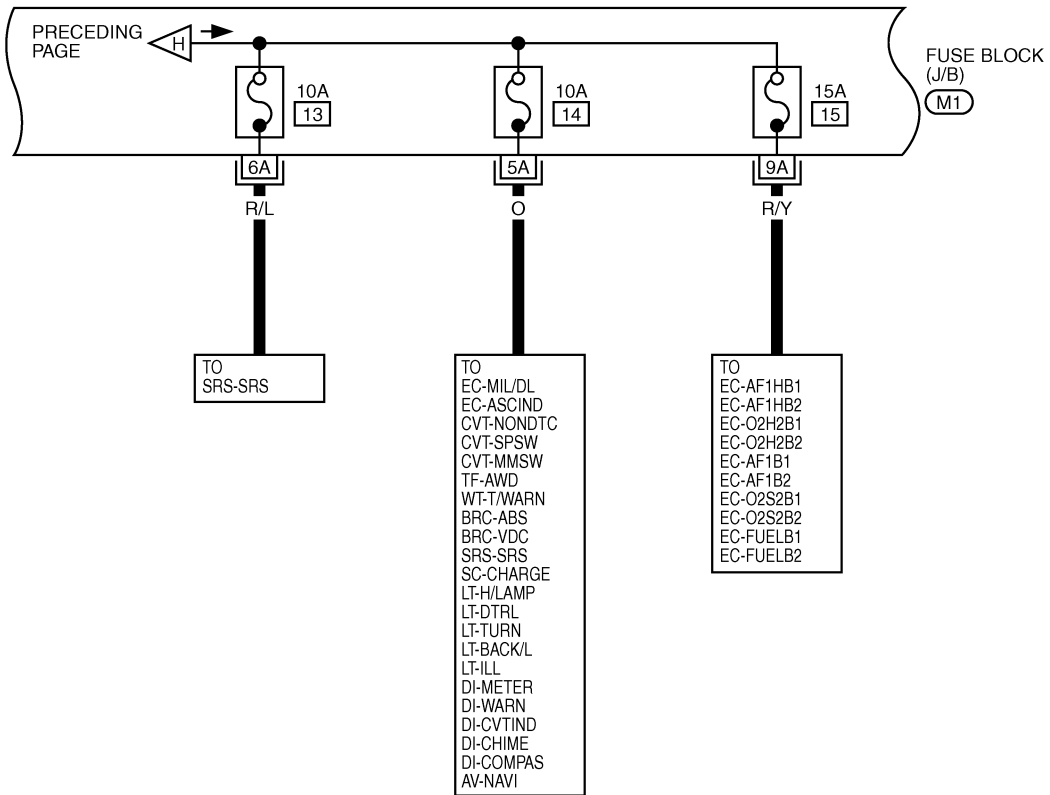
-FUSE BLOCK-JUNCTION BOX (J/B)

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

TKWA1748E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-08



REFER TO THE FOLLOWING.

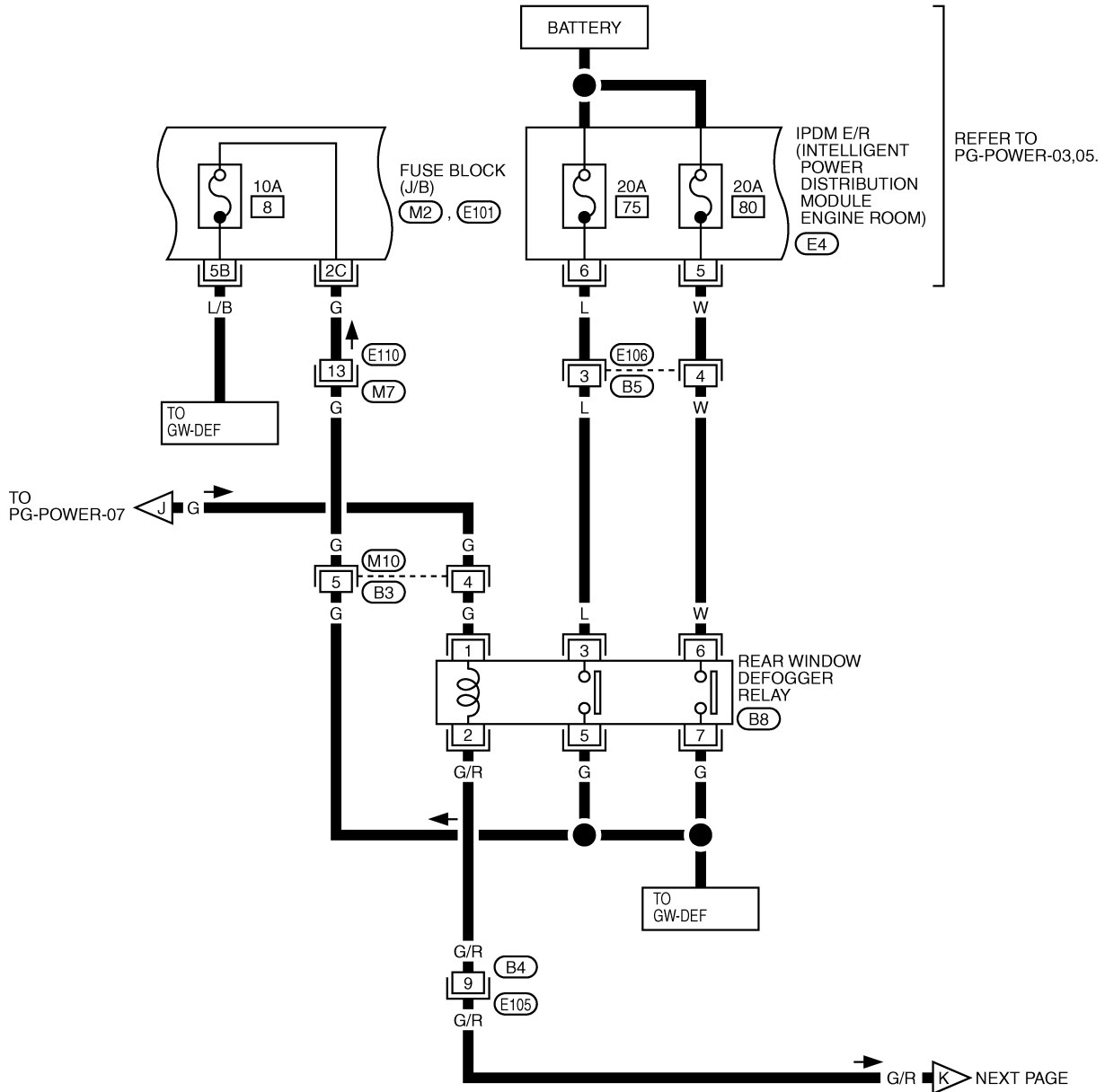
(M1) - FUSE BLOCK-JUNCTION BOX (J/B)

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

TKWA1749E

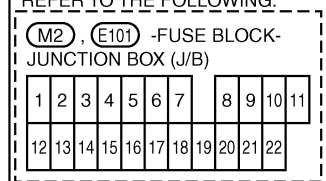
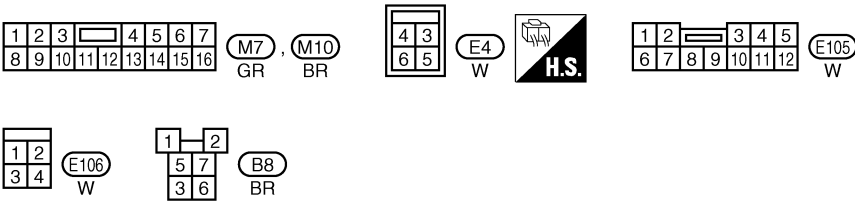
POWER SUPPLY ROUTING CIRCUIT

PG-POWER-09



REFER TO PG-POWER-03,05.

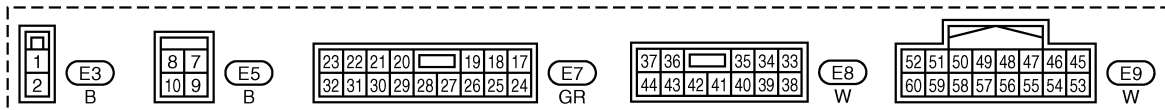
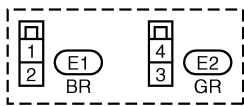
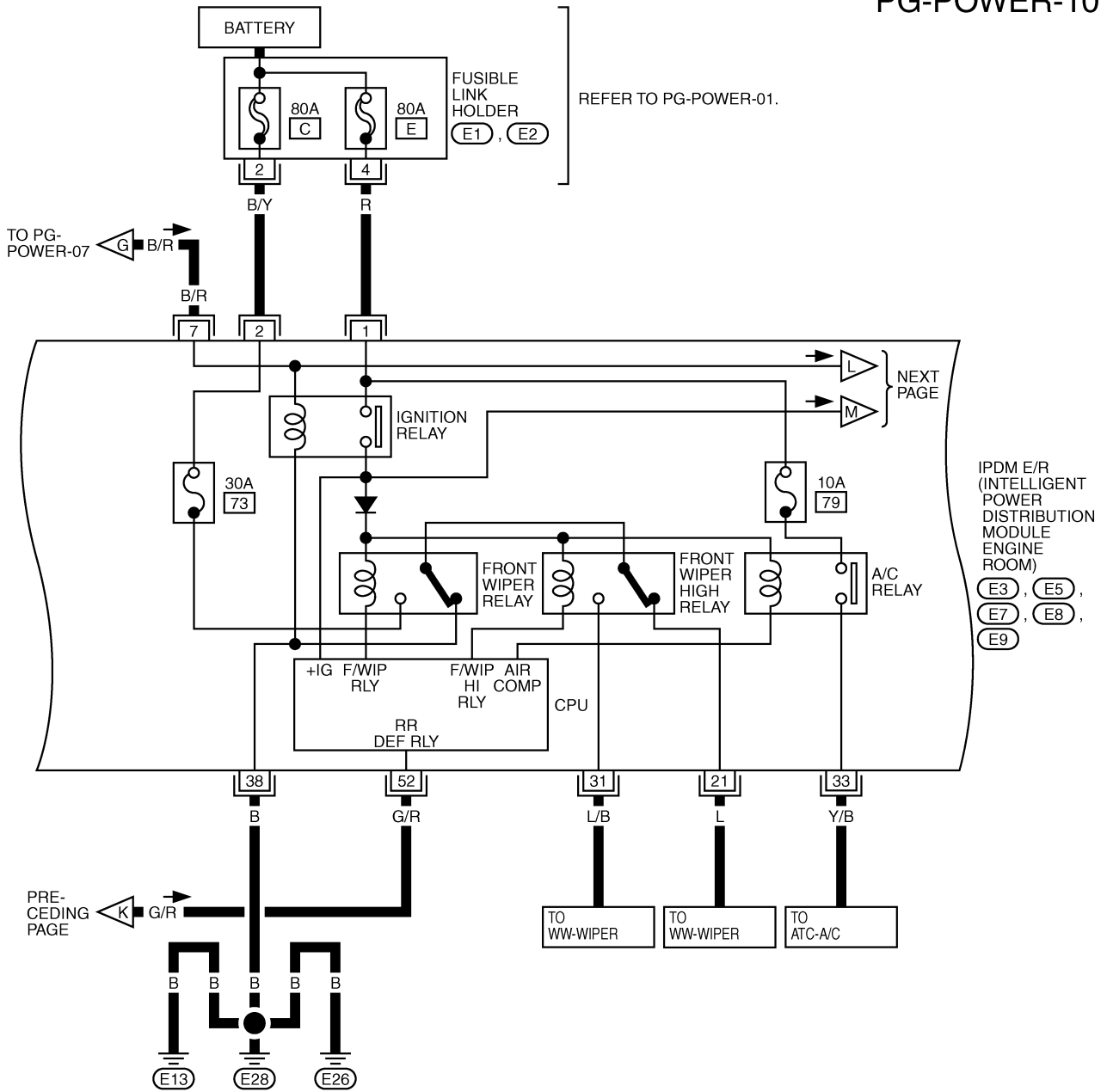
REFER TO THE FOLLOWING.



TKWA1750E

POWER SUPPLY ROUTING CIRCUIT

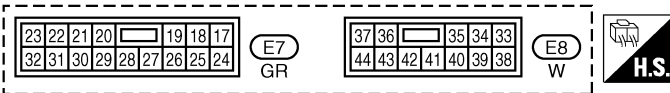
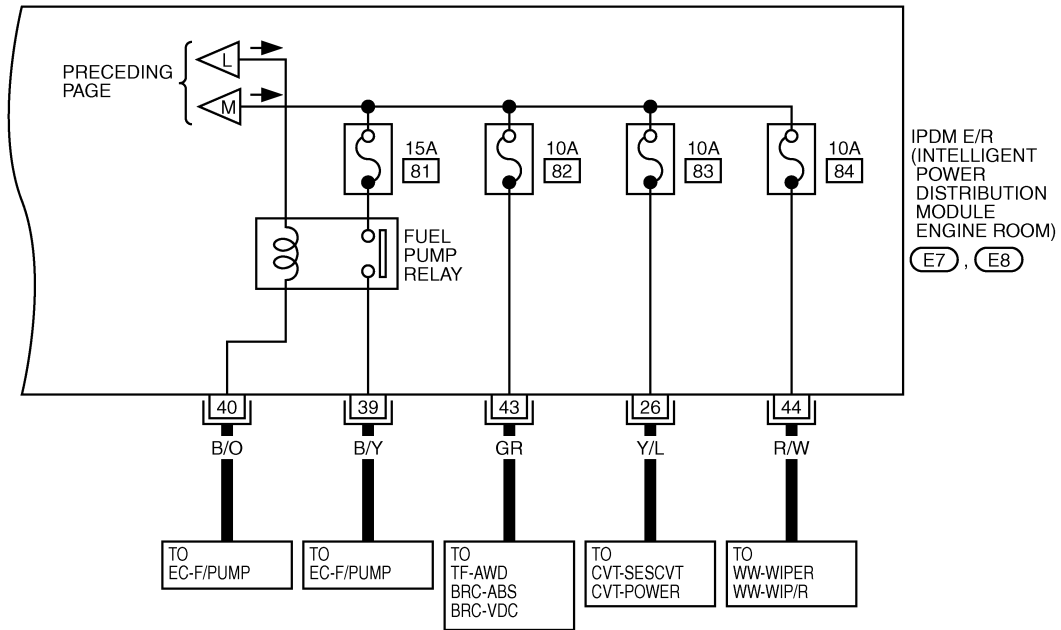
PG-POWER-10



TKWA1751E

POWER SUPPLY ROUTING CIRCUIT

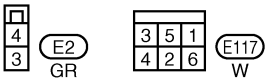
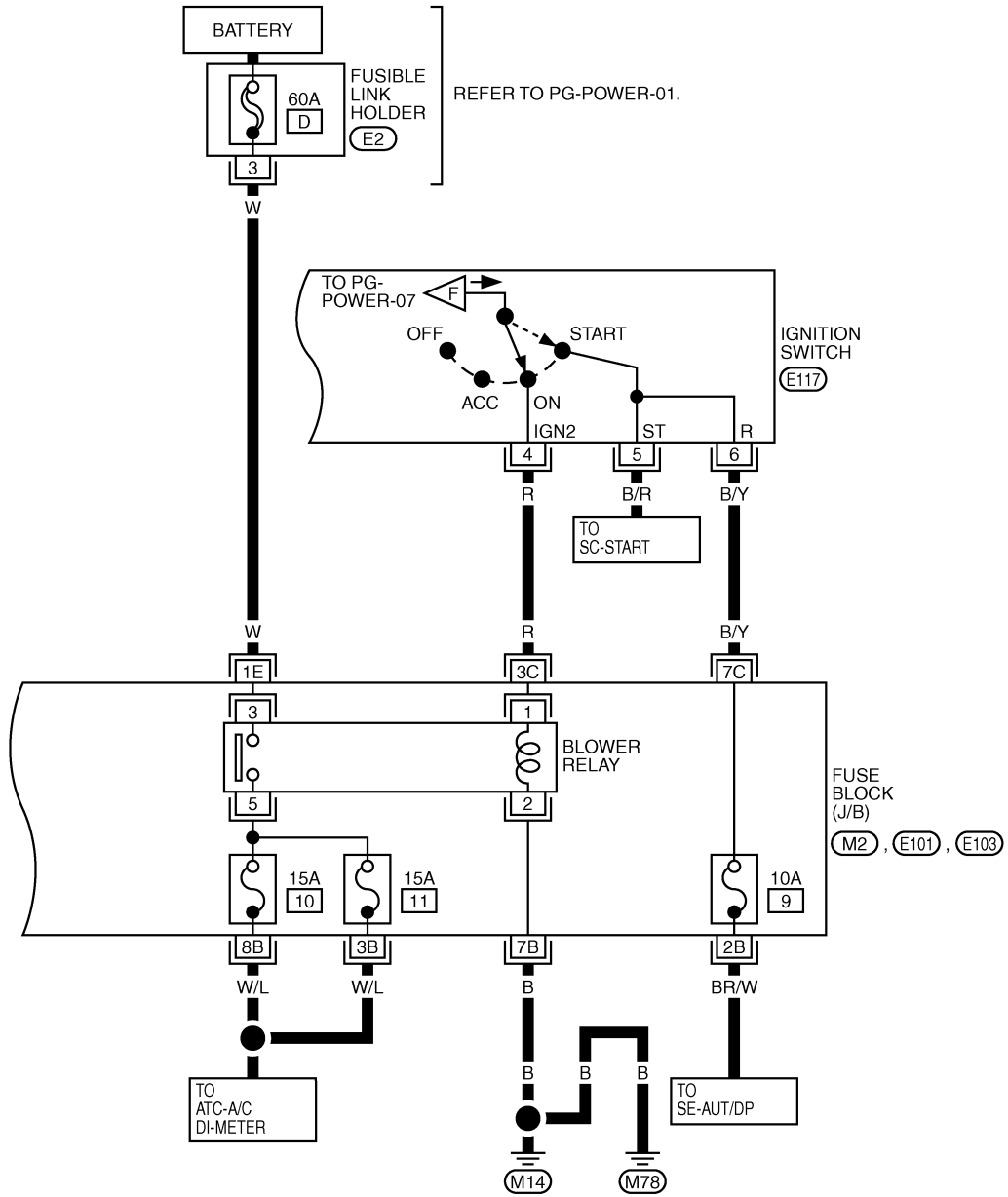
PG-POWER-11



TKWA1752E

POWER SUPPLY ROUTING CIRCUIT

PG-POWER-12



REFER TO THE FOLLOWING.

(M2), (E101), (E103) - FUSE BLOCK-JUNCTION BOX (J/B)

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

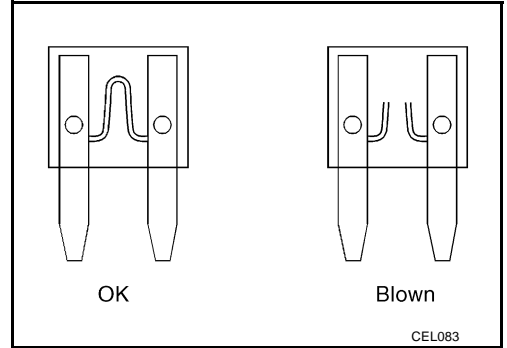
TKWA1753E

POWER SUPPLY ROUTING CIRCUIT

Fuse

AKS007HG

- 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.



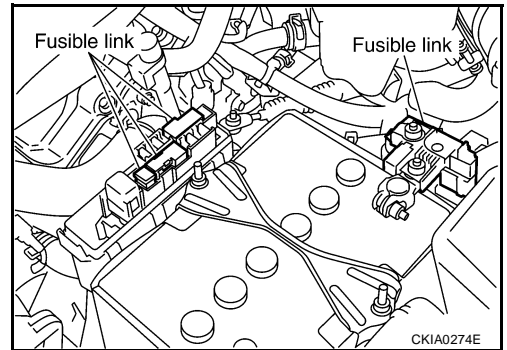
Fusible Link

AKS007HH

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

CAUTION:

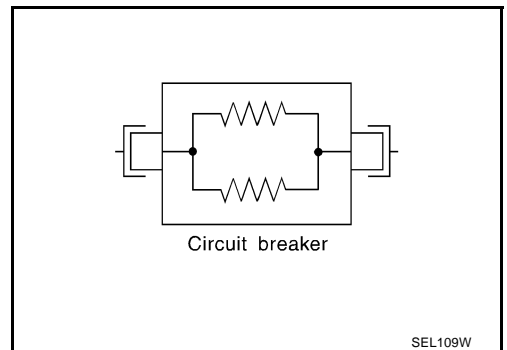
- If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.
- Never wrap outside of fusible link with vinyl tape. Important: Never let fusible link touch any other wiring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



Circuit Breaker

AKS007HI

The PTC thermistor generates heat in response to current flow. The temperature (and resistance) of the thermistor element varies with current flow. Excessive current flow will cause the element's temperature to rise. When the temperature reaches a specified level, the electrical resistance will rise sharply to control the circuit current. Reduced current flow will cause the element to cool. Resistance falls accordingly and normal circuit current flow is allowed to resume.



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

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

PFP:284B7

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System Description

AKS00A49

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine room. It controls integrated relay via IPDM E/R control circuit.
- IPDM E/R-integrated control circuit performs ON-OFF operation of relay, CAN communication control, oil pressure switch signal, hood switch signal reception, etc.
- It controls operation of each electrical part via ECM, 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 line, it receives signal from BCM and controls the following lamps:
 - Headlamps (Hi, Lo)
 - Parking lamps
 - Tail lamps
 - Front fog lamps
2. Wiper control
Using CAN communication line, it receives signals from BCM and controls the front wipers.
3. Rear window defogger relay control
Using CAN communication line, it receives signals from BCM and controls the rear window defogger relay.
4. A/C compressor control
Using CAN communication line, it receives signals from ECM and controls the A/C relay.
5. Cooling fan control
Using CAN communication line, it receives signals from ECM and controls cooling fan relay.
6. Horn control
Using CAN communication line, 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 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 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 is ON.● With the ignition switch OFF, the tail and parking lamps is 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

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 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
 - IPDM E/R operates in low current-consumption mode.
 - CAN communication is stopped.
 - When a change in CAN communication line is detected, mode switches to CAN communication status.
 - When a change hood switch or ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

AKS00A4A

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

CAN Communication Unit

AKS00A0H

Refer to [LAN-8, "CAN Communication Unit"](#) .

Function of Detecting Ignition Relay Malfunction

AKS00A4C

- When contact point of integrated ignition relay is stuck and cannot be turned OFF, IPDM E/R turns ON tail and parking lamps for 10 minutes to indicate IPDM E/R malfunction.
- When a state of ignition relay having built-in does not agree with a state of Ignition switch signal input by a CAN communication from BCM, IPDM E/R lets tail lamp relay operate.

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 lamp is OFF.

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

CONSULT-II

AKS00A4D

CONSULT-II performs the following functions with combination of data receiving, command and transmission using the CAN communication line from the IPDM E/R.

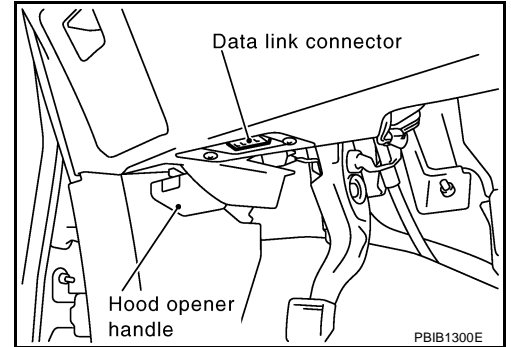
Inspection Item, Diagnosis Mode	Description
SELF-DIAG RESULTS	The IPDM E/R performs diagnosis of the CAN communication and self-diagnosis.
DATA MONITOR	The input/output data of the IPDM E/R is displayed in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication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

CONSULT-II INSPECTION PROCEDURE

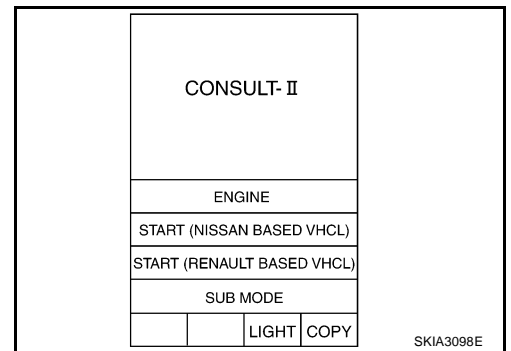
CAUTION:

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.

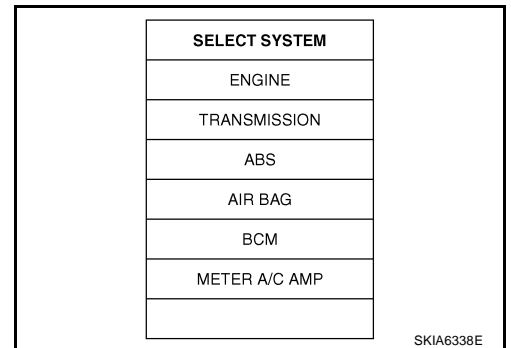
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn the ignition switch ON.



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

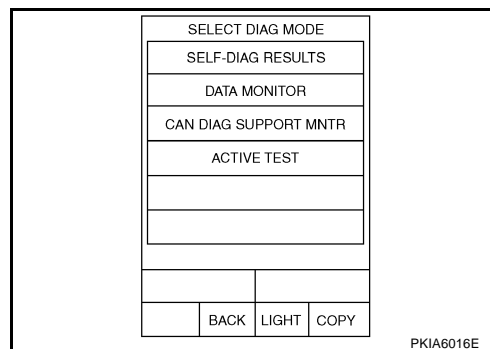


3. Touch "IPDM E/R" on "SELECT SYSTEM" screen.
 - If "IPDM E/R" is not displayed, print "SELECT SYSTEM" screen, then refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



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

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



SELF-DIAG RESULTS

Operation Procedure

- Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
- Check display content in self-diagnostic results.

Display Item List

Display Items	CONSULT-II display code	Malfunction detecting 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 a malfunction, or if any of the control units malfunction, data reception/transmission cannot be confirmed. When the data in CAN communication is not received before the specified time 	×	×	Any of or several items 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 memorized with IPDM E/R.

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

DATA MONITOR

Operation Procedure

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

ALL SIGNALS	All items will be monitored.
MAIN SIGNALS	Monitor the predetermined item.
SELECTION FROM MENU	Select any item for monitoring.

3. Touch "START".
4. Touch the required monitoring item on "SELECTION FROM MENU". In "ALL SIGNALS", all items are monitored. In "MAIN SIGNALS", predetermined items are monitored.
5. Touch "RECORD" while monitoring to record the status of the item being monitored. To stop recording, touch "STOP".

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	×	×	×	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	×	×	×	Signal status input from ECM
Tail & clear request	TAIL&CLR REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L LO request	HL LO REQ	ON/OFF	×	×	×	Signal status input from BCM
H/L HI request	HL HI REQ	ON/OFF	×	×	×	Signal status input from BCM
Front fog request	FR FOG REQ	ON/OFF	×	×	×	Signal status input from BCM
Head lamp washer request ^{NOTE}	HL WASHER REQ	ON/OFF	×		×	Signal status input from BCM
Front wiper request	FR WIP REQ	STOP/1LOW/LOW/HI	×	×	×	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	×	×	×	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/Block	×	×	×	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	×		×	Status of input signal ^{NOTE}
Ignition relay status	IGN RLY	ON/OFF	×	×	×	Ignition relay status monitored with IPDM E/R
Rear window defogger request	RR DEF REQ	ON/OFF	×	×	×	Signal status input from BCM
Oil pressure switch	OIL P SW	OPEN/CLOSE	×		×	Signal status input in IPDM E/R
Day time light request ^{NOTE}	DTRL REQ	ON/OFF	×		×	Signal status input from BCM
Hood switch	HOOD SW	ON/OFF	×		×	Signal status input in IPDM E/R
Theft warning horn request	THFT HRN REQ	ON/OFF	×		×	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	×		×	Output status of IPDM E/R

NOTE:

- Perform monitoring of IPDM E/R data with the ignition switch ON. When the ignition switch is at ACC, the display may not be correct.
- The head lamp washer request items are displayed, but they cannot be monitored.
- The Day time light request items are displayed, but they cannot be monitored.

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

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 item	CONSULT-II screen display	Description
Tail lamp output	TAIL LAMP	With a certain ON-OFF operation, the tail lamp relay can be operated.
Rear window defogger output	REAR DEFOGGER	With a certain ON-OFF operation, the rear window 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.
Headlamp washer	HEAD LAMP WASHER	—
Lamp (HI, LO, FOG ^{NOTE}) output	LAMPS	With a certain operation (OFF, HI ON, LO ON, FOG ON ^{NOTE}), the lamp relay (Lo, Hi, Fog ^{NOTE}) can be operated.
Horn output	HORN	Push "ON" button, horn relay operates 20ms.

NOTE:

The headlamp washer items are displayed, but they cannot be tested.

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 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, open and close 10 times of front door LH. 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:

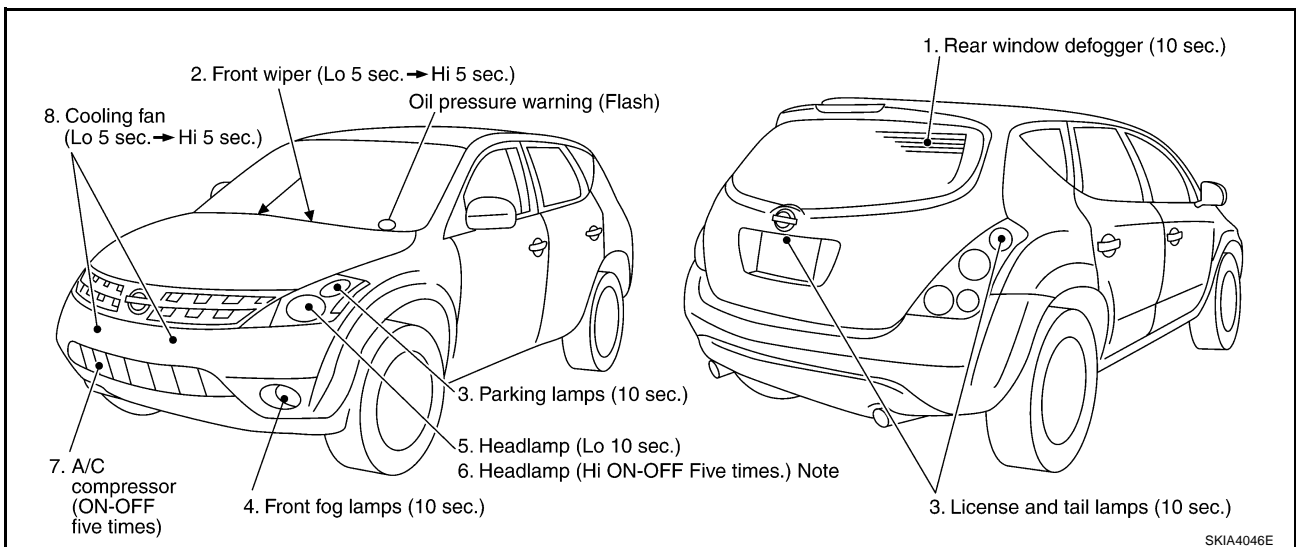
When auto active test mode has to be cancelled halfway, turn ignition switch OFF.

CAUTION:

Be sure to inspect **BL-37. "Check Door Switch"** 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.



NOTE:

Turns ON-OFF the solenoid to switch Hi/Lo. In this case, the bulb does not illuminate.

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

Concept of Auto Active Test

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

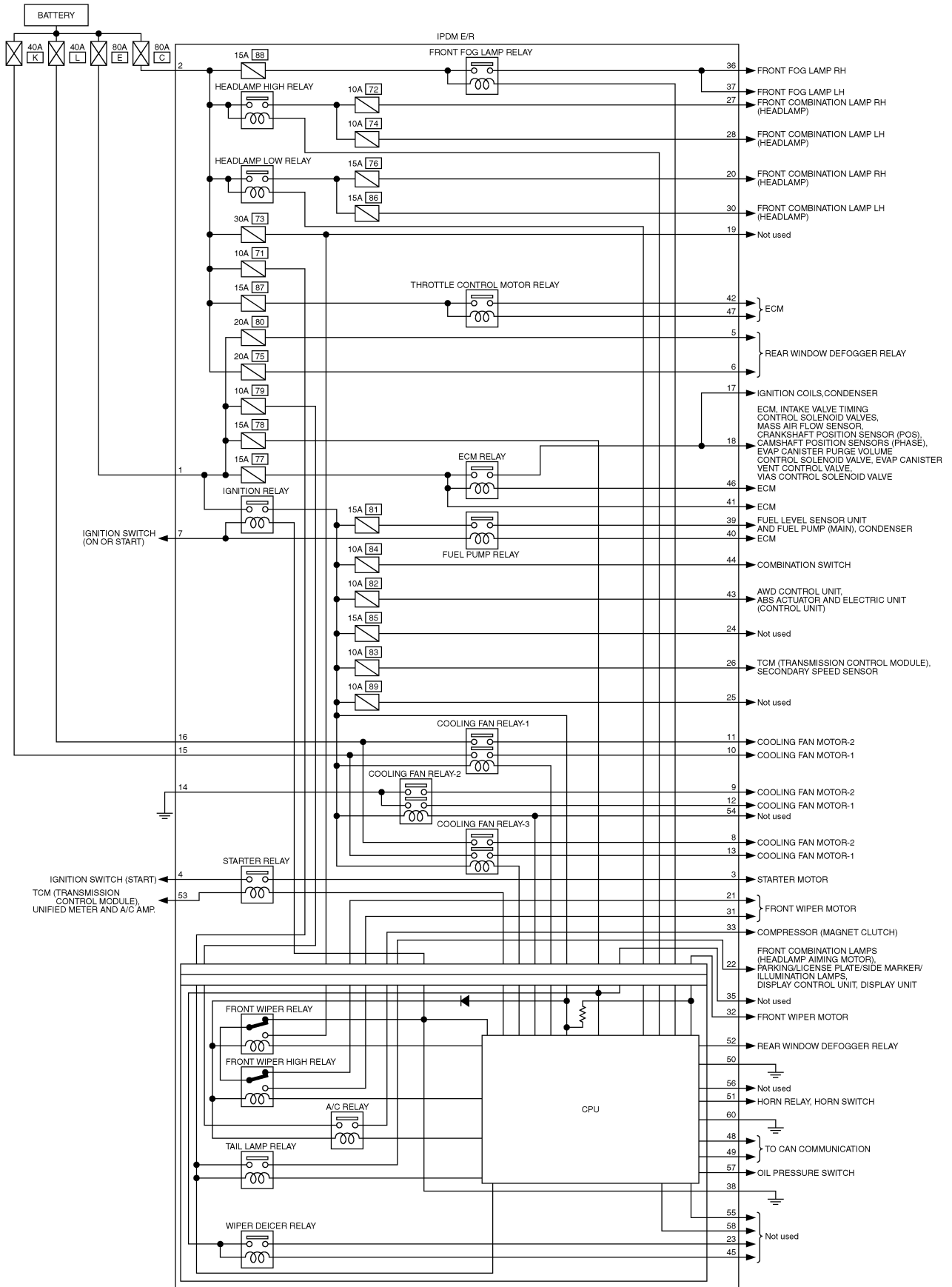
Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause	
Any of front wipers, tail and parking lamps, front fog lamps, and head lamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	YES	● 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
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	<ul style="list-style-type: none"> ● Rear window defogger relay circuit ● Open circuit of rear window defogger ● IPDM E/R 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 malfunction
		NO	<ul style="list-style-type: none"> ● CAN communication signal between BCM and Unified Meter and A/C Amp ● Combination meter

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

Schematic

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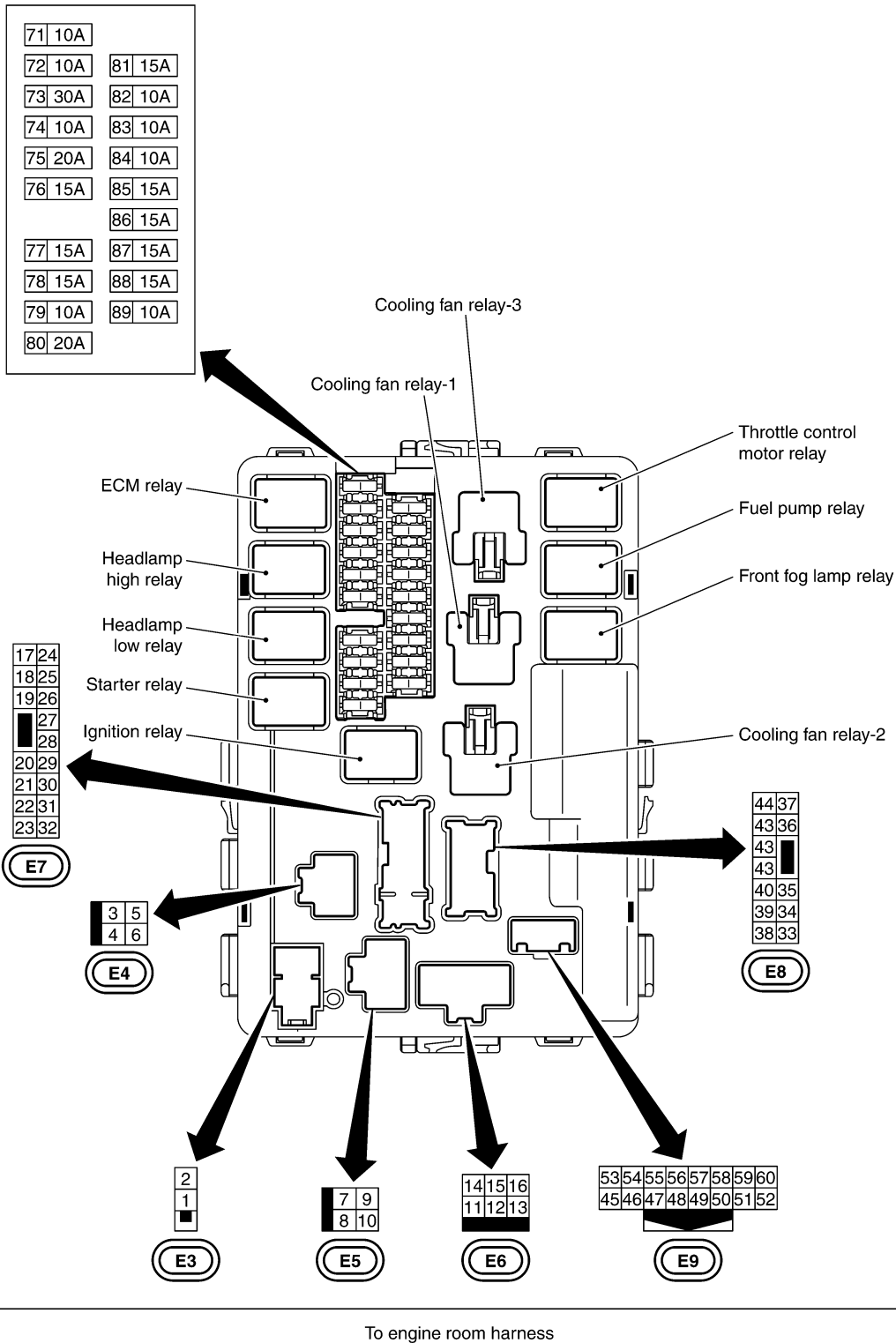
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IPDM E/R Terminal Arrangement

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

IPDM E/R Power/Ground Circuit Inspection

AKS00A4H

1. CHECK FUSE AND FUSIBLE LINK

- Make sure the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Signal name	Fuse, fusible link No.
1, 2, 16	Battery power	F/L-C, F/L-E, F/L-L, Fuse No. 71, 78

OK or NG

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

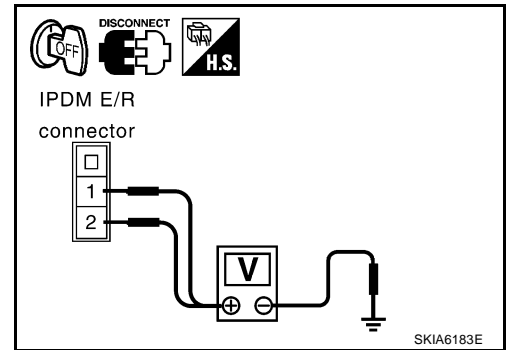
2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect IPDM E/R harness connector E3.
3. Check voltage between IPDM E/R harness connector E3 terminals 1 (R), 2 (W/L) and ground.

Battery voltage should exist

OK or NG

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



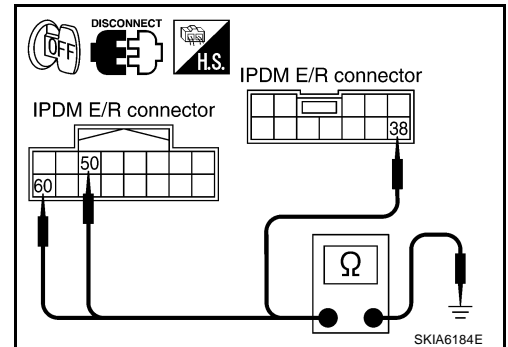
3. CHECK GROUND CIRCUIT

1. Disconnect IPDM E/R harness connectors E8 and E9.
2. Check continuity between IPDM E/R harness connectors E8 terminal 38 (B), E9 terminal 50 (B), 60 (B) and ground.

Continuity should exist

OK or NG

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



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Inspection With CONSULT-II (Self-Diagnosis)

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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. CHECK SELF DIAGNOSTIC RESULT

1. Connect CONSULT-II and select "IPDM E/R" on the Diagnosis System Selection screen.
2. Select "SELF-DIAG RESULTS" on the "SELECT DIAG MODE" screen.
3. Check display content in self diagnostic 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	×	×	Any of or several items 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 memorized with IPDM E/R.

Contents displayed

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

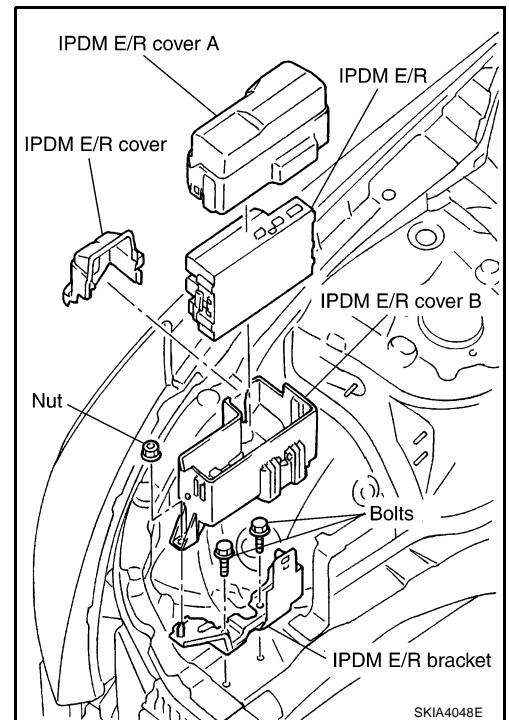
CAN COMM CIRC>>After print-out of the monitor items, refer to [LAN-6. "Precautions When Using CONSULT-II"](#) .

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

Removal and Installation of IPDM E/R REMOVAL

AKS00AAF

1. Remove IPDM E/R cover A and IPDM E/R cover.
2. While spreading pawls on both side of IPDM E/R cover B, remove IPDM E/R from IPDM E/R cover B.
3. Remove harness connector from IPDM E/R.



INSTALLATION

Install in the revers order of removal.

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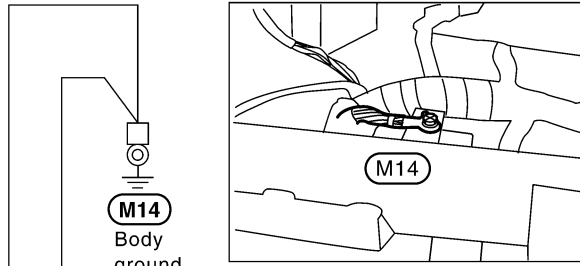
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GROUND

Ground Distribution MAIN HARNESS



CON-NECTOR NUMBER	CONNECT TO
M2	Fuse block (J/B) (Terminal No.7B) • Accessory relay • Blower relay
M17	VDC off switch
M18	Headlamp aiming switch
M20	Automatic drive positioner control unit (Terminal No. 40)
M20	Automatic drive positioner control unit (Terminal No. 48)
M22	Power socket relay
M24	Data link connector (Terminal No. 4)
M24	Data link connector (Terminal No. 5)
M27	Shift lock control unit
M29	Combination switch
M33	Steering angle sensor
M38	Display (With navigation system)
M39	Display unit (Without navigation system)
M42	Display control unit (With navigation system)
M48	A/C and AV switch
M50	Unified meter and A/C amp. (Terminal No. 29)
M50	Unified meter and A/C amp. (Terminal No. 30)
M60	Front power socket (Center console)
M62	NAVI control unit (Terminal No. 1)
M62	NAVI control unit (Terminal No. 4)
M64	Air bag diagnosis sensor unit
M73	Front power socket (Center cluster)
M88	Pedal adjusting control unit
M90	Cigarette lighter socket
M93	Condenser
M96	Option connector for DVD

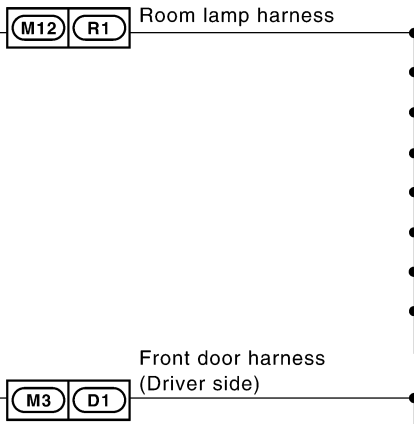
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GROUND

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CON-NECTOR NUMBER	CONNECT TO
R2	Vanity mirror lamp (Driver side)
R3	Map lamp
R4	Auto anti-dazzling inside mirror
R5	Sunroof switch
R6	Sunroof motor assembly
R7	Vanity mirror lamp (Passenger side)
R8	Personal lamp LH
R9	Room lamp
R10	Personal lamp RH
D2	Door mirror (Driver side) (With door mirror defogger)
D3	Seat memory switch
D7	Power window main switch • CPU • Door lock and unlock switch • Power window lock switch • Illumination
D10	Front door lock assembly (Driver side) • Door key cylinder switch • Door switch



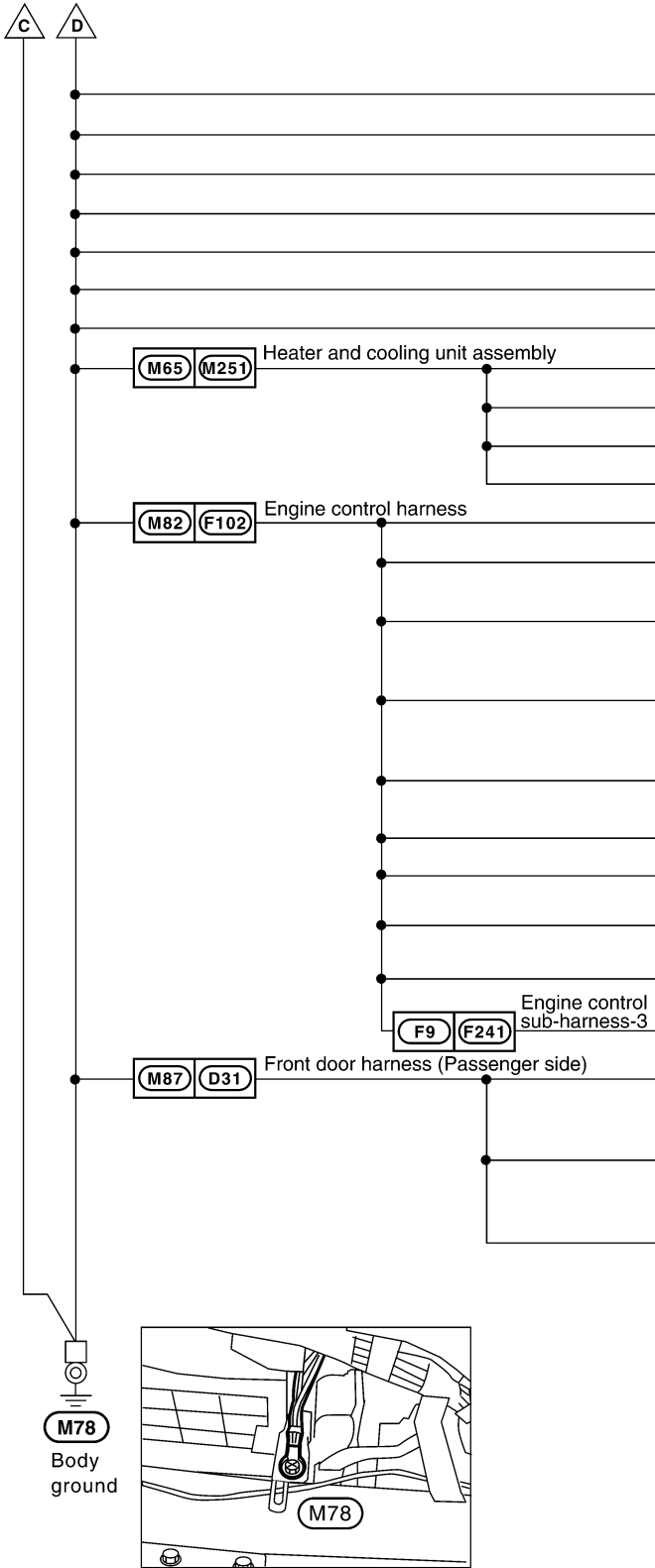
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CON-NECTOR NUMBER	CONNECT TO
M25	Combination meter (Terminal No.22)
M25	Combination meter (Terminal No.23)
M25	Combination meter (Terminal No.24)
M35	BCM (Body control module) (Terminal No.49)
M35	BCM (Body control module) (Terminal No.52)
M53	Heated seat switch (Passenger side)
M54	Heated seat switch (Driver side)
M55	AWD lock switch
M56	Door mirror remote control switch (Without memory mirror)
M57	CVT device (Terminal No.2) (Without manual mode switch)
M57	CVT device (Terminal No.11) (With manual mode switch)
M58	Coin box illumination
M66	Door mirror remote control switch (With memory mirror)

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GROUND

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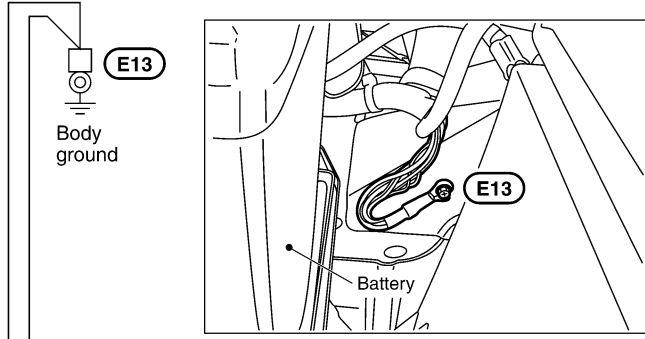
CON-NECTOR NUMBER	CONNECT TO
(M70)	Blower motor
(M75)	Glove box lamp
(M80)	ECM (Terminal No. 115)
(M80)	ECM (Terminal No. 116)
(M81)	Low tire pressure warning control unit
(M91)	Condenser
(M92)	Condenser
(M65) (M251)	Heater and cooling unit assembly
(M252)	Mode door motor
(M253)	Air mix door motor (Driver side)
(M254)	Air mix door motor (Passenger side)
(M255)	Intake door motor
(M82) (F102)	Engine control harness
(F8)	Camshaft position sensor (PHASE) (Bank 2)
(F20)	Crankshaft position sensor (POS)
(F33)	Shield wire [Electric throttle control actuator (Throttle position sensor)] (For circuit from terminal No. 1)
(F33)	Shield wire [Electric throttle control actuator (Throttle position sensor)] (For circuit from terminal No. 2,4,5)
(F33)	Shield wire [Electric throttle control actuator (Throttle control motor)] (For circuit from terminal No. 3,6)
(F34)	Camshaft position sensor (PHASE) (Bank 1)
(F101)	ECM (Terminal No. 1)
(F104)	TCM (Transmission control module) (Terminal No. 25)
(F104)	TCM (Transmission control module) (Terminal No. 48)
(F9) (F241)	Engine control sub-harness-3
(F242)	Shield wire (Knock sensor)
(M87) (D31)	Front door harness (Passenger side)
(D32)	Door mirror (Passenger side) (With door mirror defogger)
(D35)	Front power window switch (Passenger side) • CPU • Doorlock and unlock switch • Illumination
(D38)	Front door lock assembly (Passenger side) • Door switch

* : This sub-harness is not shown in "HARNES LAYOUT".

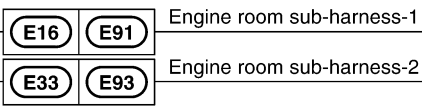
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GROUND

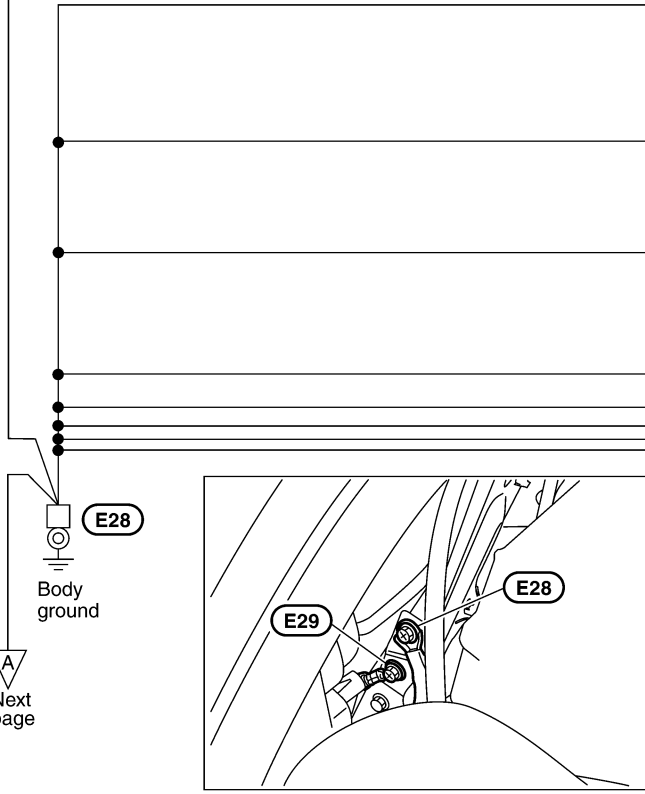
ENGINE ROOM HARNESS



CONNECTOR NUMBER	CONNECT TO
E6	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 14) Cooling fan relay-2
E17	Front combination lamp LH (Terminal No. 5) • Headlamp • Headlamp aiming motor • Parking • Side marker
E17	Front combination lamp LH (Terminal No. 8) • Turn signal
E21	Brake fluid level switch
E22	Front wiper motor
E92	Front fog lamp LH
E94	Front fog lamp RH



CONNECTOR NUMBER	CONNECT TO
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 38) • CPU • Ignitionrelay • Front wiper relay
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 50) • CPU
E9	IPDM E/R (Intelligent power distribution module engine room) (Terminal No. 60) • CPU
E30	Front combination lamp RH (Terminal No. 5) • Headlamp • Headlamp aiming motor • Parking • Side marker
E30	Front combination lamp RH (Terminal No. 8) Turn signal
E32	Washer level sensor
E38	Cooling fan motor-1
E39	Cooling fan motor-2

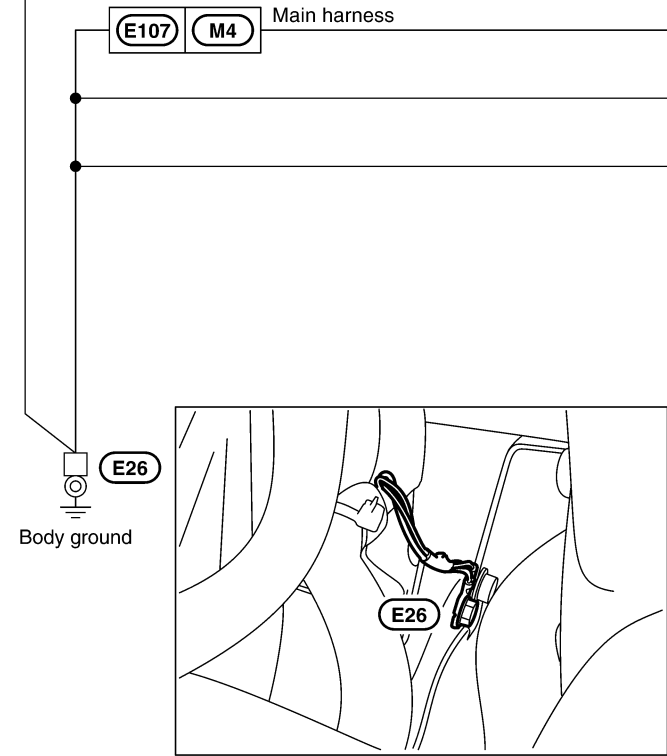


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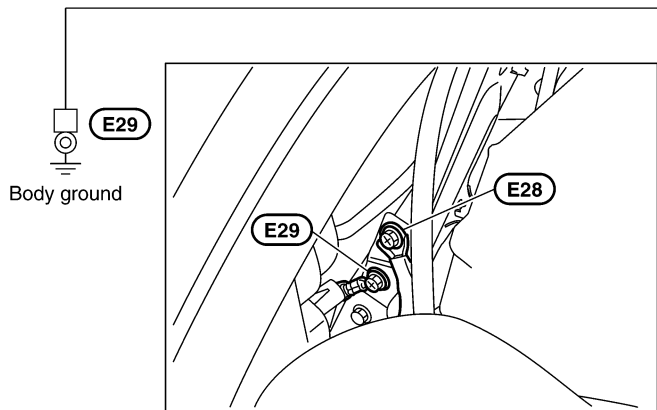
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GROUND

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CON-NECTOR NUMBER	CONNECTTO
M64	Shield wire (Air bag diagnosis sensor unit)
E24	ABS actuator and electric unit (Control unit) (Terminal No. 16)
E24	ABS actuator and electric unit (Control unit) (Terminal No. 47)

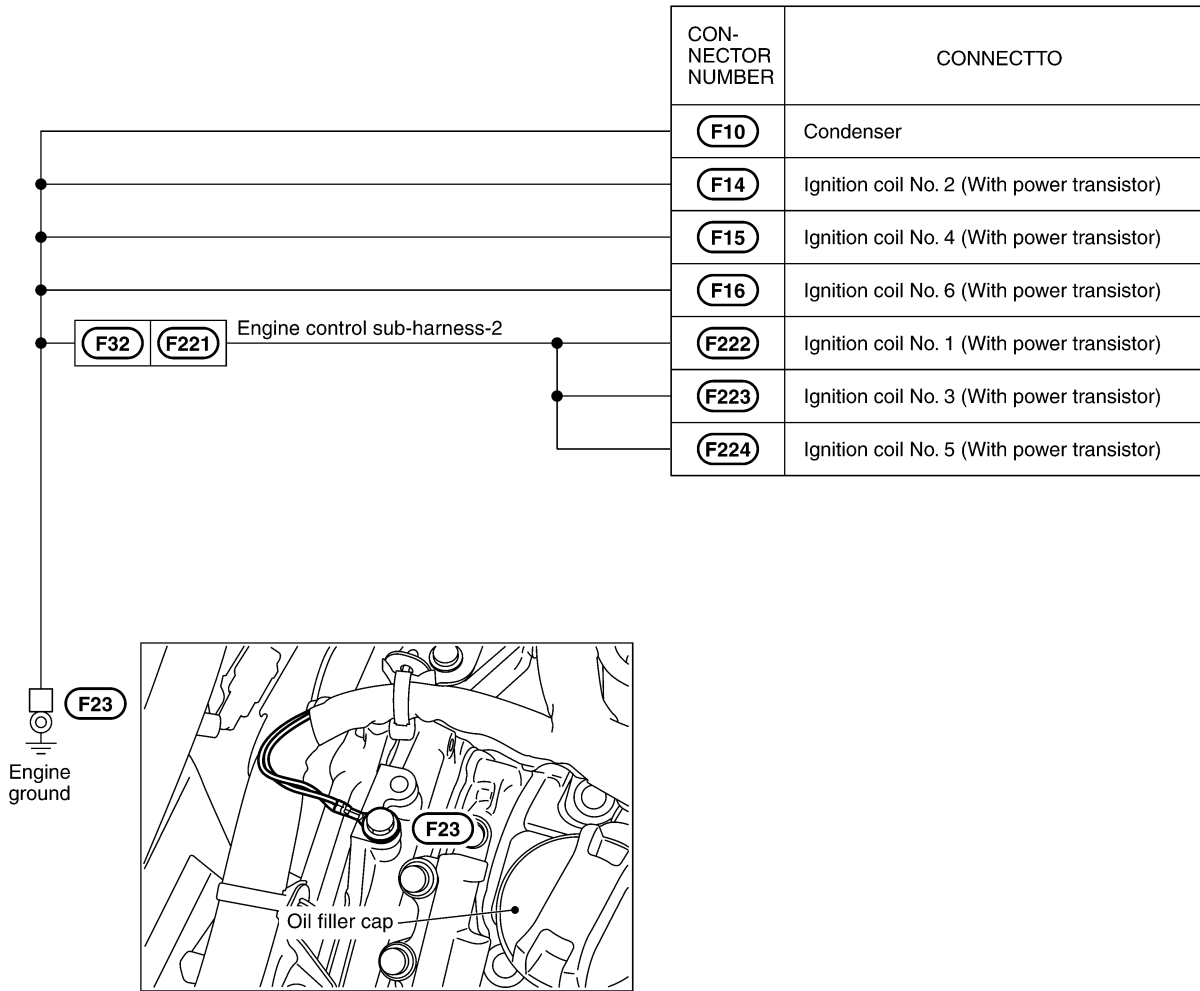


CON-NECTOR NUMBER	CONNECTTO
E35	Alternator (E)

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GROUND

ENGINE CONTROL HARNESS

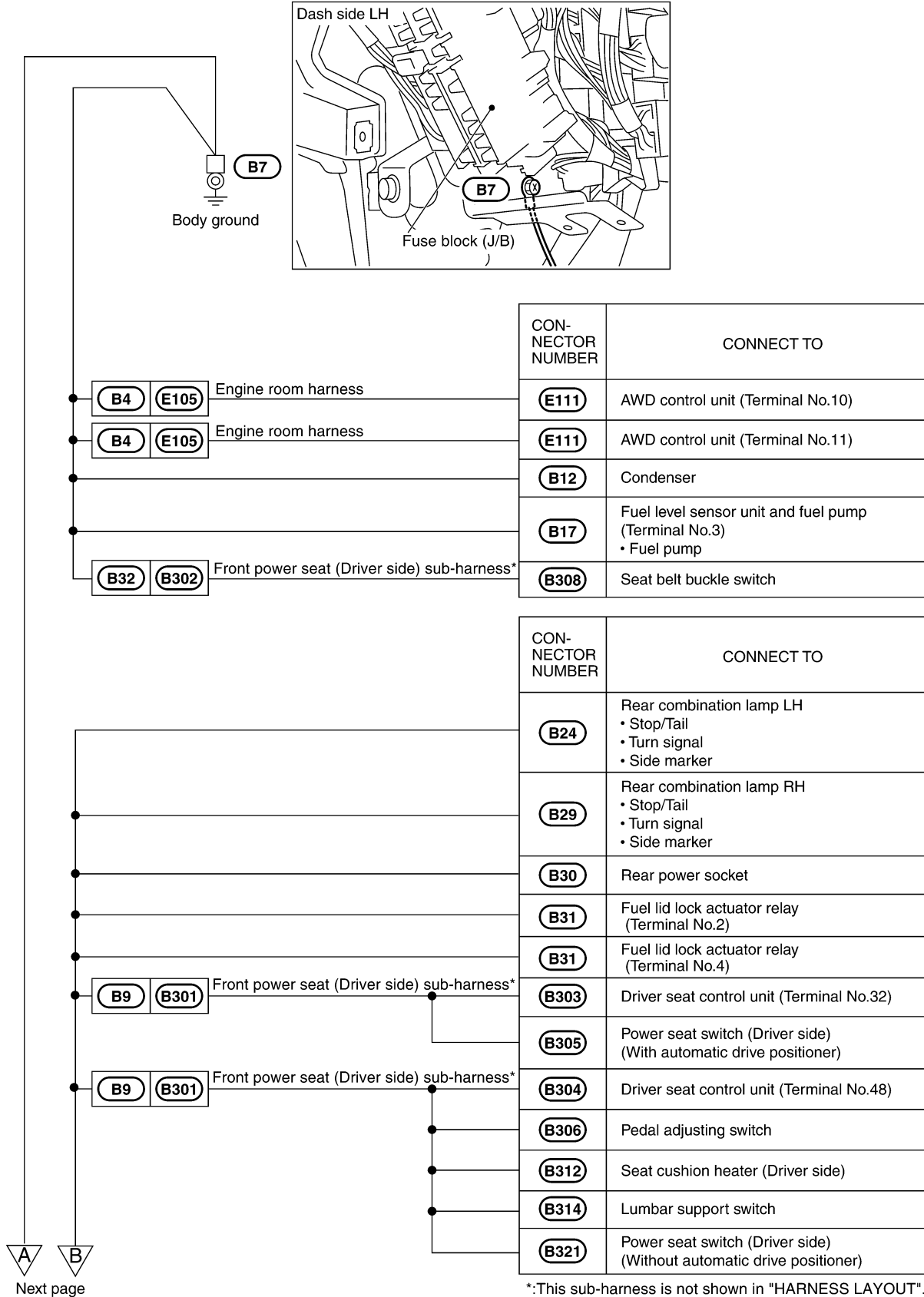


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GROUND

BODY HARNESS



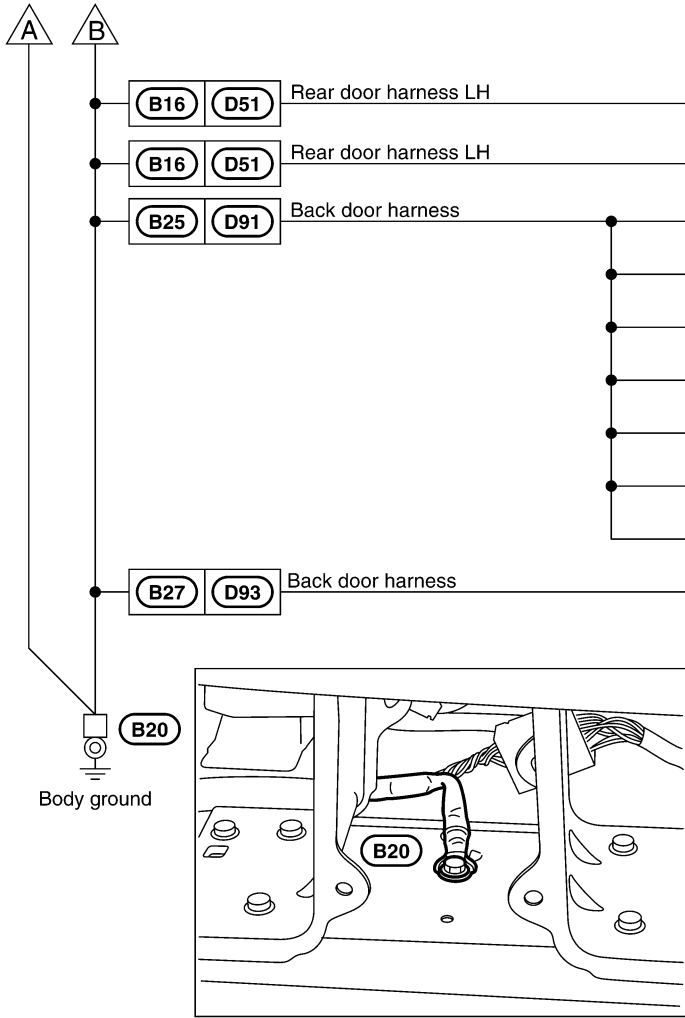
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*:This sub-harness is not shown in "HARNESS LAYOUT".

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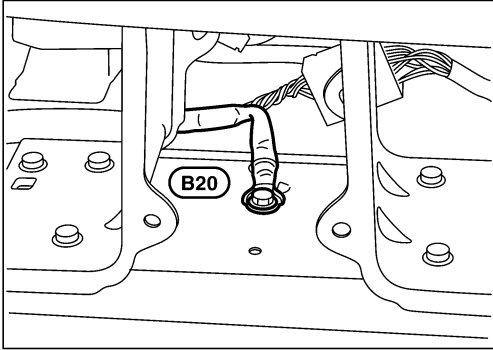
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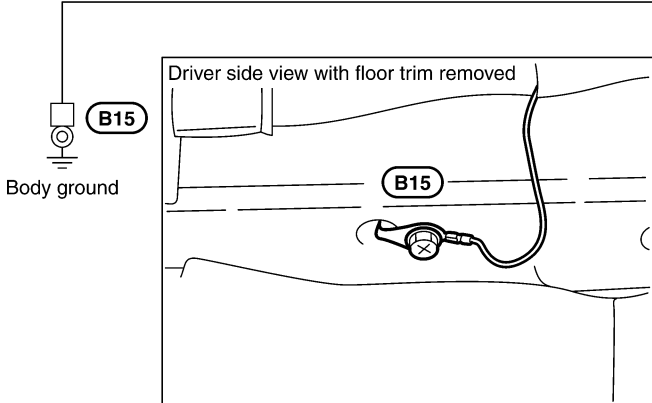


CON-NECTOR NUMBER	CONNECTTO
D55	Rear power window switch LH
D56	Rear door lock assembly LH • Door switch
D96	High-mounted stop lamp
D99	Back-up lamp LH
D100	Back door switch
D102	License plate lamp LH
D103	Rear wiper motor
D104	License plate lamp RH
D105	Back-up lamp RH
D107	Rear window defogger (-)

B20
Body ground



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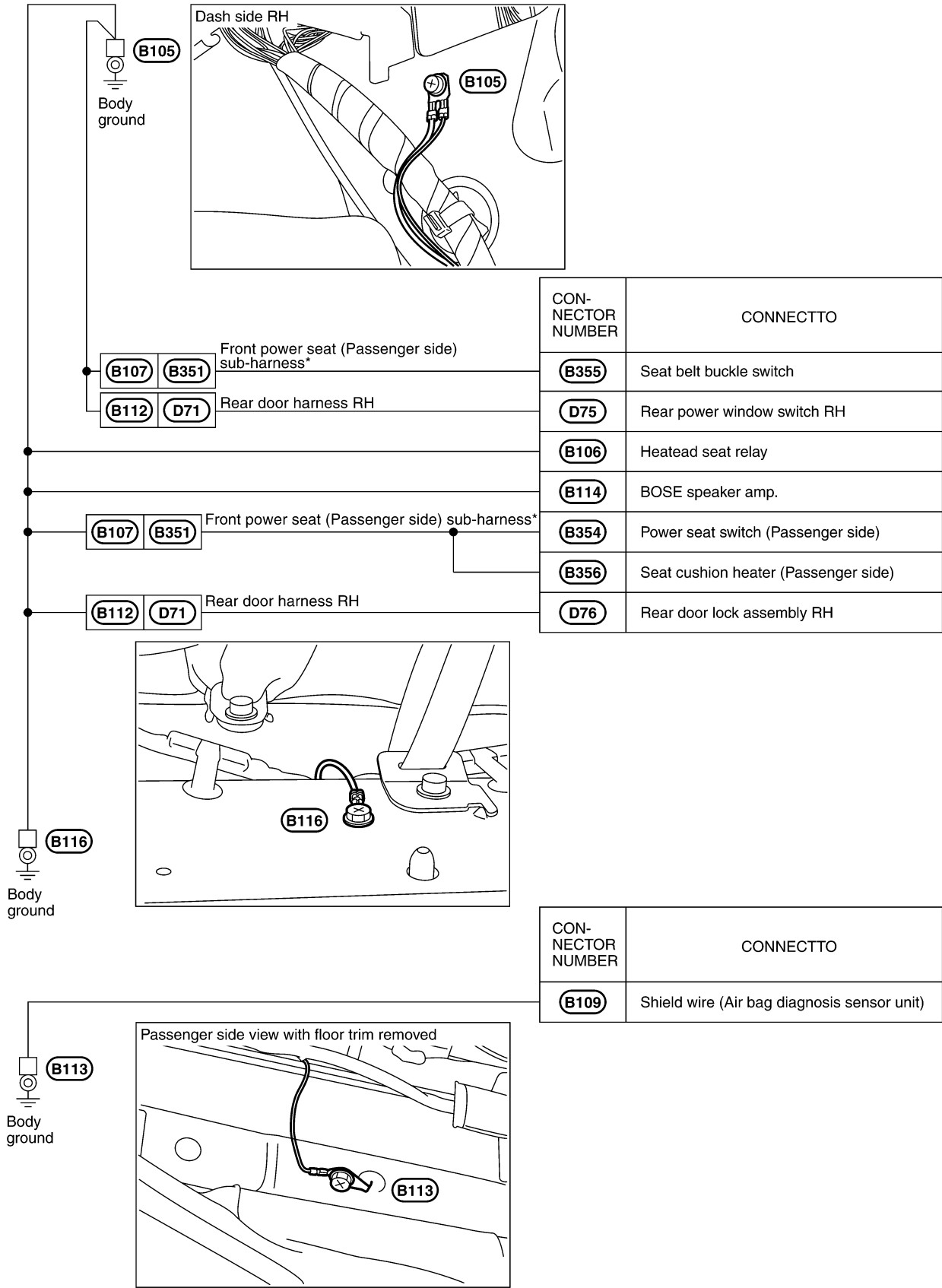
CON-NECTOR NUMBER	CONNECTTO
B11	Shield wire (Air bag diagnosis sensor unit)

B15
Body ground

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GROUND

BODY NO.2 HARNESS



*:This sub-harness is not shown in "HARNESS LAYOUT".

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HARNESS

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Harness Layout

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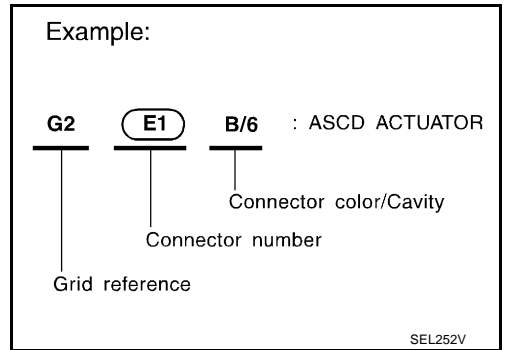
HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness (Engine Compartment)
- Engine Control Harness
- Body 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 in the below.

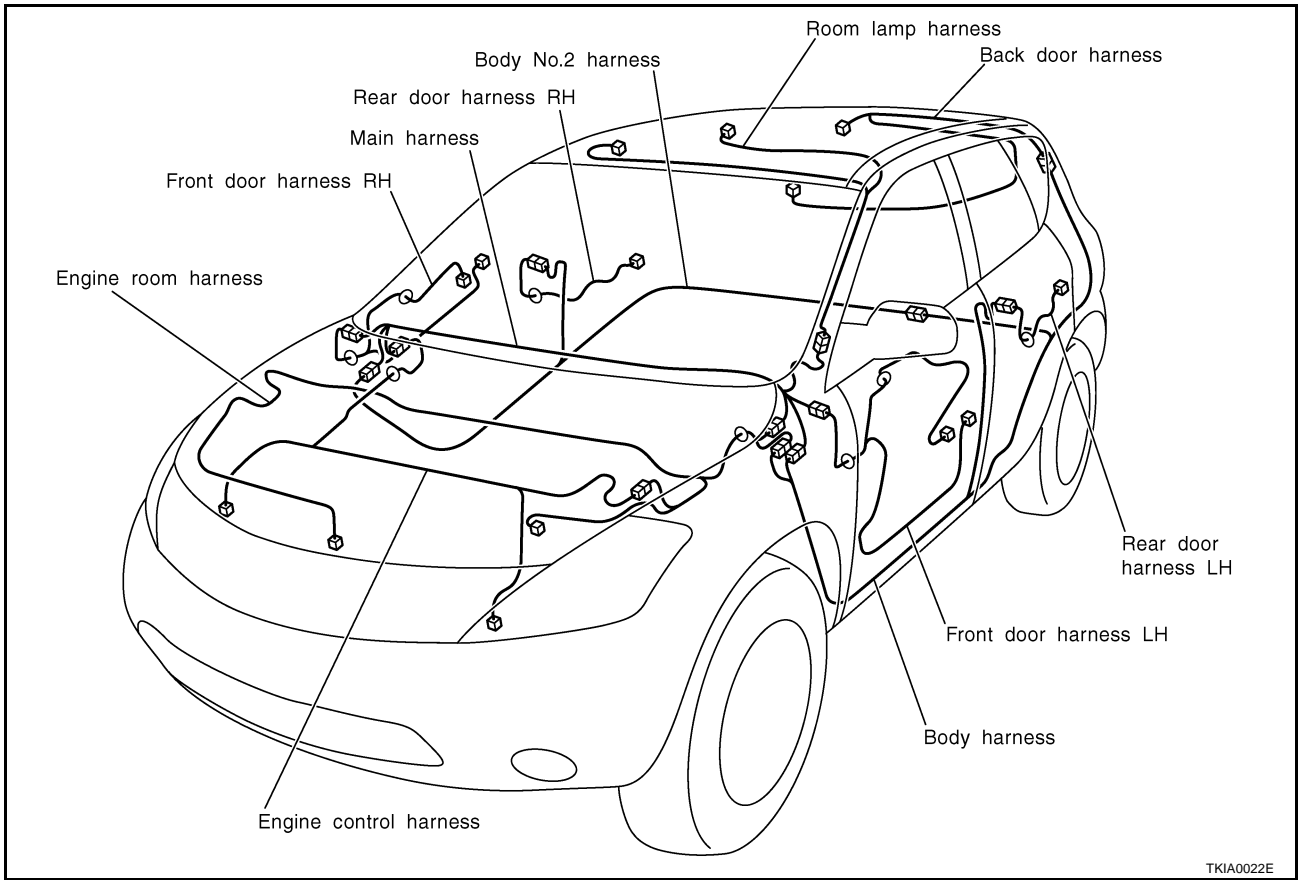
Connector type	Water proof type		Standard type	
	Male	Female	Male	Female
<ul style="list-style-type: none"> • Cavity: Less than 4 • Relay connector 				
<ul style="list-style-type: none"> • Cavity: From 5 to 8 				
<ul style="list-style-type: none"> • Cavity: More than 9 				
<ul style="list-style-type: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

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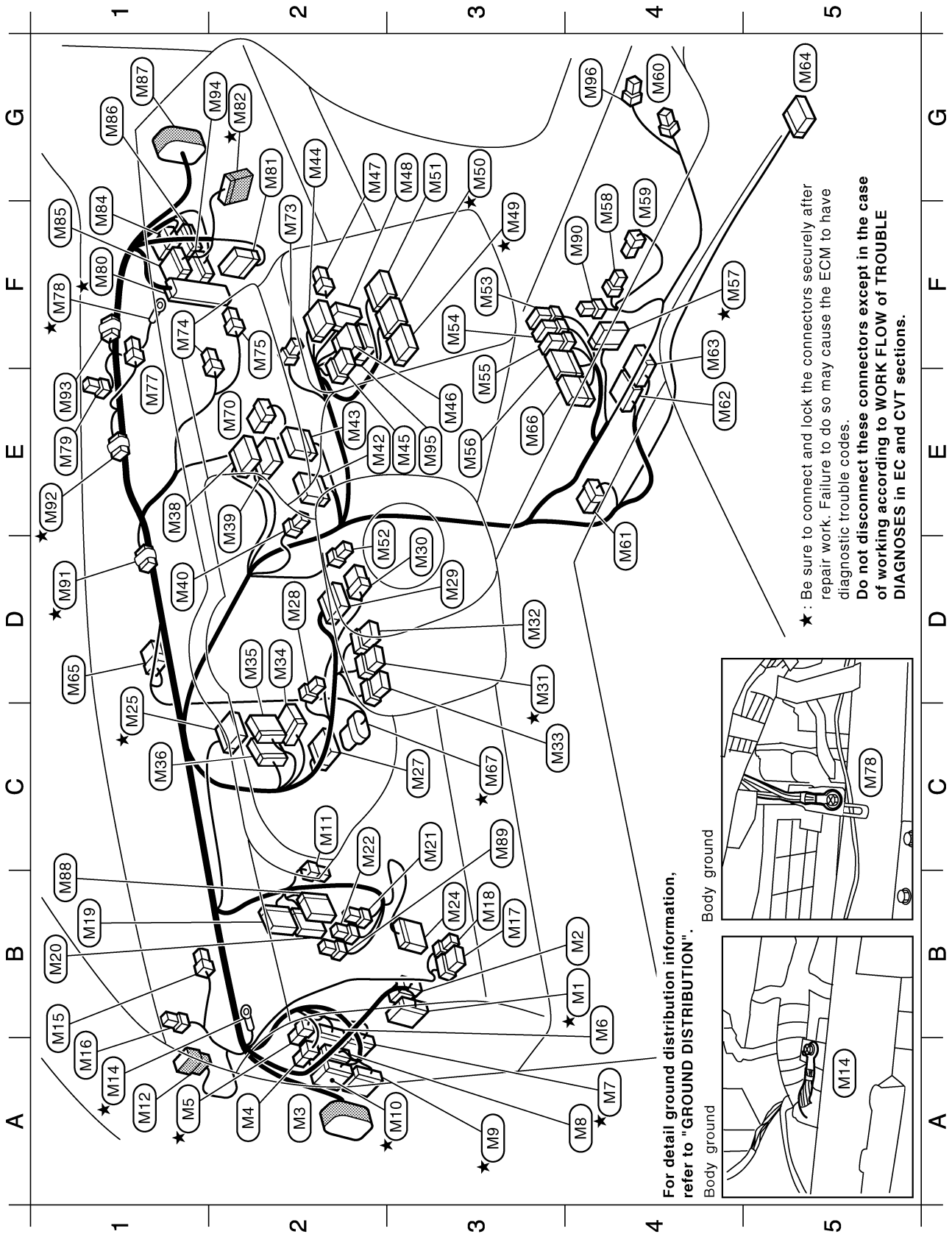
HARNESS

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 CVT sections.

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

Body ground

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HARNESS

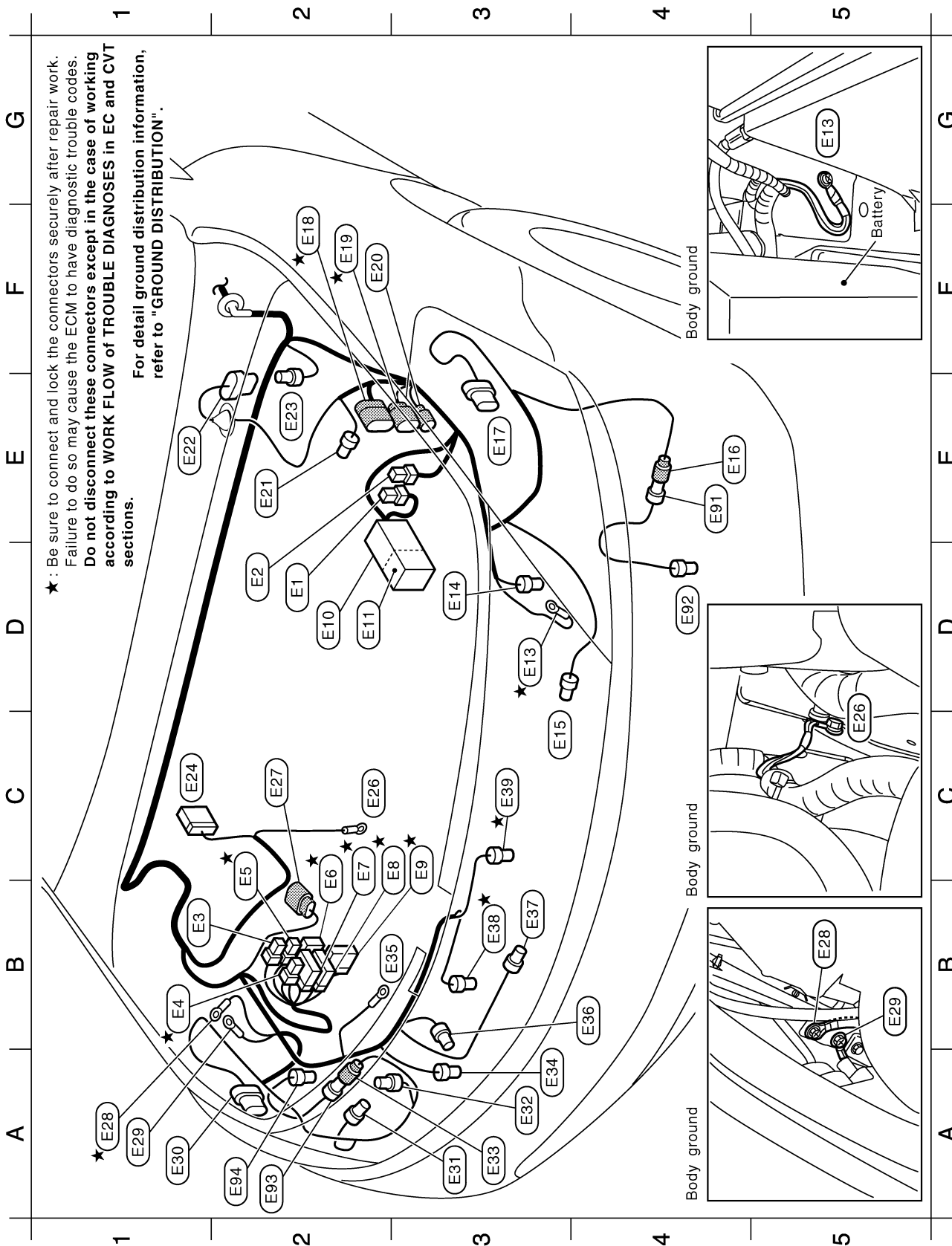
B4★	(M1)	W/16	: Fuse block (J/B)	E2	(M70)	W/6	: Blower motor
B4	(M2)	W/8	: Fuse block (J/B)	F2	(M73)	B/2	: Front power socket (Center cluster)
A2	(M3)	SMJ	: To (D1)	F1	(M74)	Y/4	: Front passenger air bag module
A2	(M4)	Y/4	: To (E107)	F2	(M75)	W/2	: Glove box lamp
A1★	(M5)	W/2	: To (E108)	E1	(M77)	BR/2	: Tweeter RH
B4	(M6)	W/24	: To (E109)	F1★	(M78)	—	: Body ground
A4★	(M7)	GR/16	: To (E110)	E1	(M79)	B/2	: Sunload sensor
A4	(M8)	BR/12	: To (B1)	F1★	(M80)	SMJ	: ECM
A3★	(M9)	W/20	: To (B2)	G2	(M81)	W/24	: Low tire pressure warning
A3★	(M10)	BR/16	: To (B3)	G2★	(M82)	W/18	: control unit
C2	(M11)	W/2	: Tire pressure warning check connector	F1	(M84)	W/6	: To (F102)
A1	(M12)	W/8	: To (RT)	F1	(M85)	W/18	: To (B102)
A1★	(M14)	—	: Body ground	G1	(M86)	BR/16	: To (B103)
B1	(M15)	BR/2	: Tweeter LH	G1	(M87)	SMJ	: To (D31)
A1	(M16)	W/3	: Optical sensor	B1	(M88)	W/16	: Pedal adjusting control unit
B3	(M17)	GR/6	: VDC off switch	C3	(M89)	W/2	: Circuit breaker
B3	(M18)	W/4	: Headlamp aiming switch	F4	(M90)	B/2	: Cigarette lighter socket
B1	(M19)	W/32	: Automatic drive positioner control unit	D1★	(M91)	GR/2	: Condenser
B1	(M20)	W/16	: Automatic drive positioner control unit	E1★	(M92)	GR/2	: Condenser
C3	(M21)	L/4	: Back-up lamp relay	E1	(M93)	W/2	: Condenser
C2	(M22)	L/4	: Power socket relay	G2	(M94)	W/12	: To (B12D)
B3	(M24)	W/16	: Data link connector	E3	(M95)	W/12	: Option connector for audio unit
C1★	(M25)	W/24	: Combination meter	G4	(M96)	W/3	: Option connector for DVD
C3	(M27)	GR/10	: Shift lock control unit				
D2	(M28)	W/4	: Key switch and key lock solenoid				
D3	(M29)	W/16	: Combination switch				
D3	(M30)	W/8	: NATS antenna amp.				
D3★	(M31)	GR/8	: Combination switch (Spiral cable)				
D3	(M32)	Y/6	: Combination switch (Spiral cable)				
C3	(M33)	W/8	: Steering angle sensor				
D2	(M34)	W/40	: BCM (Body control module)				
D2	(M35)	B/15	: BCM (Body control module)				
C1	(M36)	W/15	: BCM (Body control module)				
E1	(M38)	W/24	: Display (With NAVI)				
E2	(M39)	W/24	: Display unit (Without NAVI)				
D1	(M40)	W/2	: Ignition keyhole illumination				
E2	(M42)	W/24	: Display control unit (With NAVI)				
E2	(M43)	W/32	: Display control unit (With NAVI)				
G2	(M44)	W/10	: Audio unit				
E3	(M45)	W/6	: Audio unit				
E3	(M46)	W/16	: Audio unit				
G2	(M47)	BR/2	: Antenna amp.				
G3	(M48)	W/16	: A/C and AV switch				
F3★	(M49)	GR/20	: Unified meter and A/C amp.				
G3★	(M50)	GR/16	: Unified meter and A/C amp.				
F3	(M51)	W/24	: Unified meter and A/C amp.				
D2	(M52)	W/2	: In-vehicle sensor				
F3	(M53)	BR/6	: Heated seat switch (Passenger side)				
F3	(M54)	W/6	: Heated seat switch (Driver side)				
E3	(M55)	W/6	: AWD lock switch				
E3	(M56)	W/10	: Door mirror remote control switch (Without memory mirror)				
F4★	(M57)	W/16	: CVT device				
F4	(M58)	W/2	: Coin box illumination				
F4	(M59)	BR/2	: CVT illumination				
G4	(M60)	B/2	: Front power socket (Center console)				
D4	(M61)	B/6	: Yaw rate / side / decel G sensor				
E4	(M62)	W/24	: NAVI control unit				
F4	(M63)	GR/24	: NAVI control unit				
G5	(M64)	Y/28	: Air bag diagnosis sensor unit				
D1	(M65)	W/6	: Heater & cooling unit assembly				
E3	(M66)	W/12	: Door mirror remote control switch (With memory mirror)				
C3★	(M67)	B/8	: Accelerator pedal position sensor				

★ : 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 CVT sections.

HARNESS

ENGINE ROOM HARNESS

Engine Compartment



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TKIA0113E

D2	(E1)	BR/2	: Fusible link holder
D2	(E2)	GR/2	: Fusible link holder
B1	(E3)	B/2	: IPDM E/R (Intelligent power distribution module engine room)
B1	★(E4)	W/4	: IPDM E/R (Intelligent power distribution module engine room)
C2	★(E5)	B/4	: IPDM E/R (Intelligent power distribution module engine room)
B2	★(E6)	W/6	: IPDM E/R (Intelligent power distribution module engine room)
C2	★(E7)	GR/16	: IPDM E/R (Intelligent power distribution module engine room)
C2	★(E8)	W/12	: IPDM E/R (Intelligent power distribution module engine room)
C2	★(E9)	W/16	: IPDM E/R (Intelligent power distribution module engine room)
D2	(E10)	—	: Fuse and fusible link block
D2	(E11)	-/3	: Horn relay
D3	★(E13)	—	: Body ground
D3	(E14)	B/1	: Horn (Low)
C3	(E15)	B/2	: Ambient sensor
E4	(E16)	B/2	: To (E91)
E3	(E17)	GR/8	: Front combination lamp LH
F2	★(E18)	GR/9	: To (F2)
F2	★(E19)	B/8	: To (F3)
F2	(E20)	L/2	: Front wheel sensor LH
E2	(E21)	GR/2	: Brake fluid level switch
E1	(E22)	GR/6	: Front wiper motor
E2	(E23)	B/3	: Pressure sensor
C1	(E24)	B/47	: ABS actuator and electric unit
C2	(E26)	—	: Body ground
C2	(E27)	GR/2	: Front wheel sensor RH
A1	★(E28)	—	: Body ground
A1	(E29)	—	: Body ground
A1	(E30)	GR/8	: Front combination lamp RH
A3	(E31)	GR/2	: Front and rear washer motor
A3	(E32)	BR/2	: Washer level sensor
A3	(E33)	B/2	: To (E93)
A3	(E34)	B/1	: Horn (High)
B2	(E35)	—	: Alternator (E)
B4	(E36)	B/3	: Refrigerant pressure sensor
B3	(E37)	Y/2	: Crash zone sensor
B3	★(E38)	GR/4	: Cooling fan motor-1
C3	★(E39)	GR/4	: Cooling fan motor-2

Engine room sub-harness-1

E4 (E91) B/2 : To (E16)
 D4 (E92) BR/2 : Front fog lamp LH

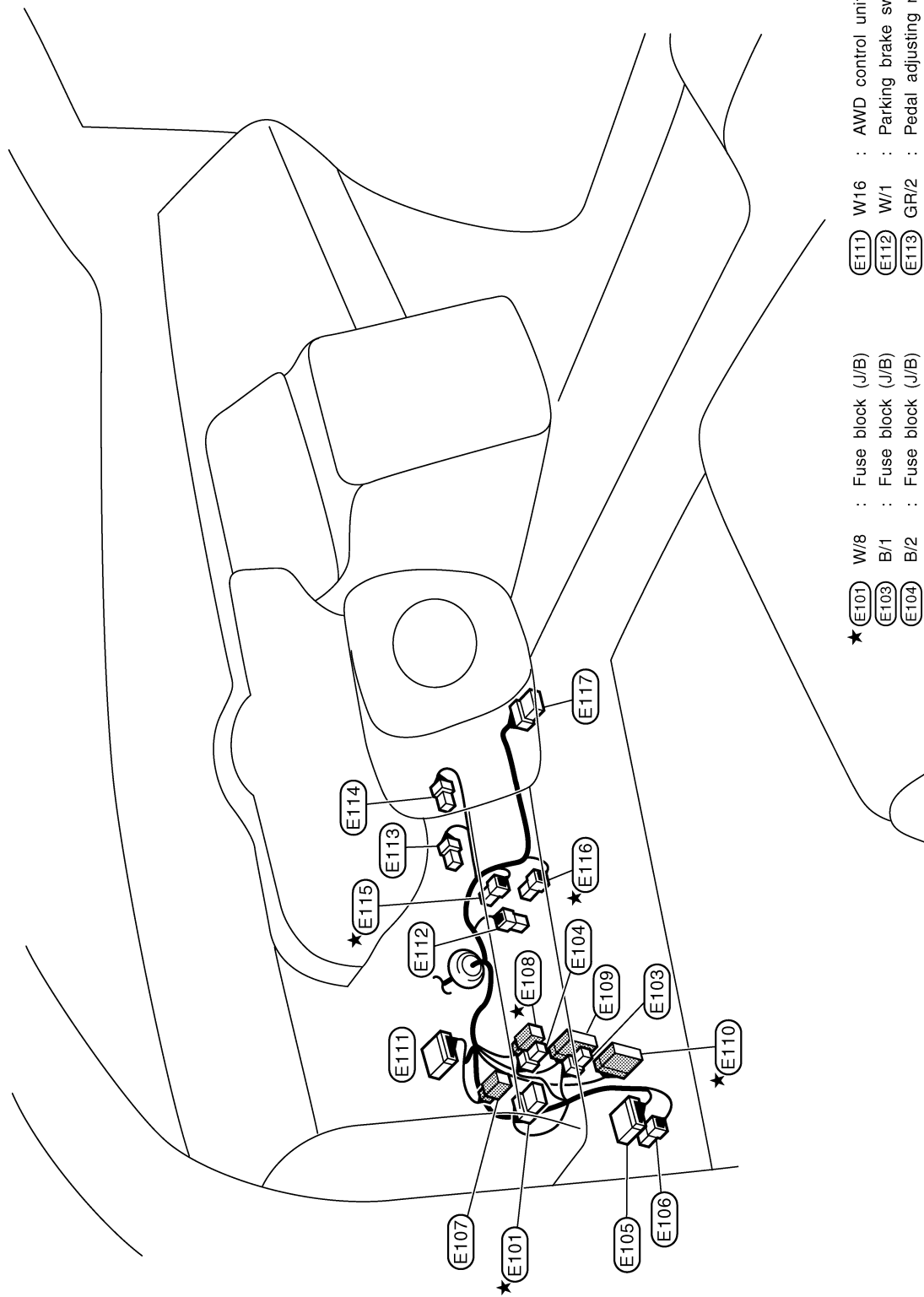
Engine room sub-harness-2

A2 (E93) B/2 : To (E33)
 A2 (E94) BR/2 : Front fog lamp RH

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

HARNESS

Passenger Compartment



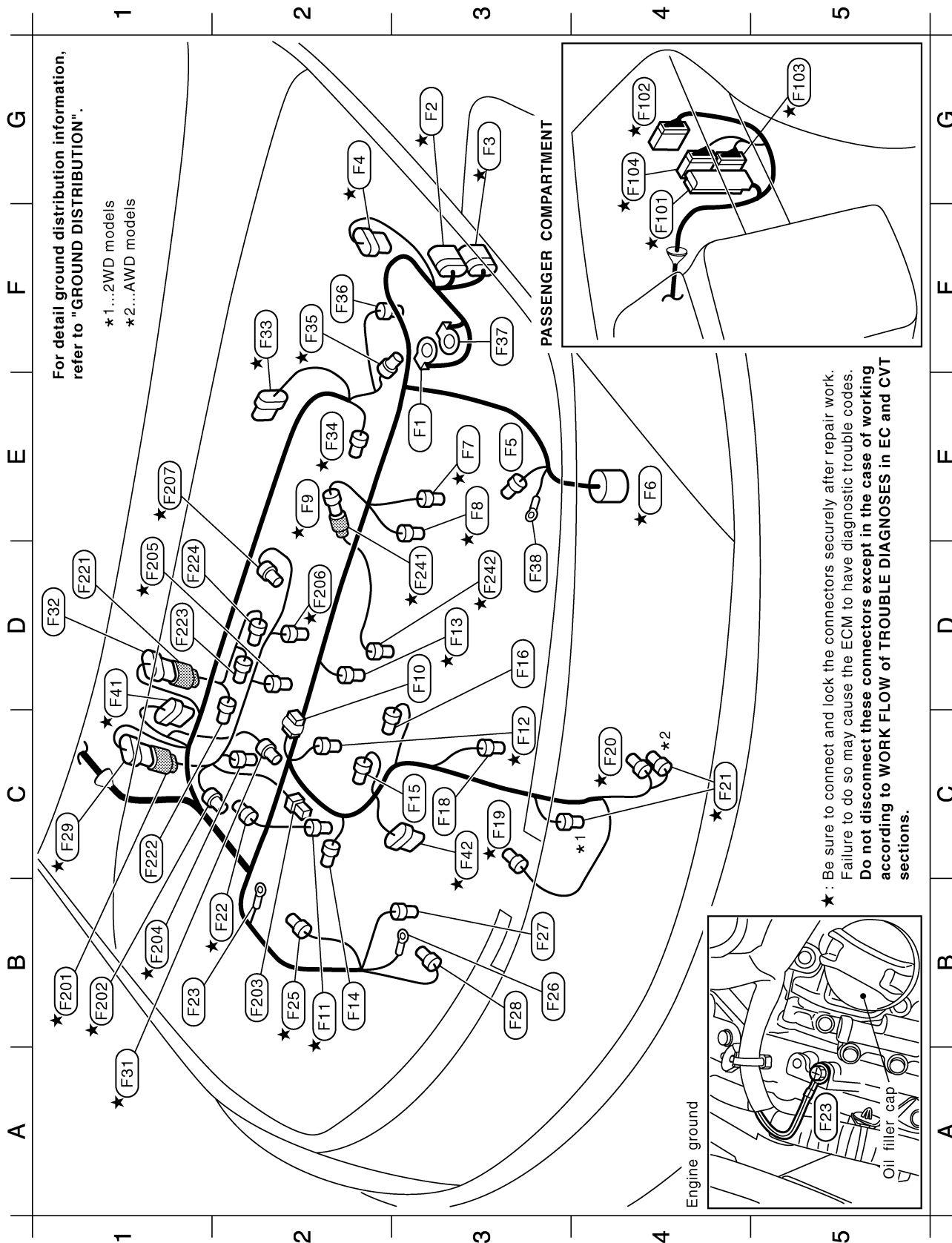
- ★ (E101) : W/8 : Fuse block (J/B)
- (E103) : B/1 : Fuse block (J/B)
- (E104) : B/2 : Fuse block (J/B)
- (E105) : W/12 : To (B4)
- (E106) : W/4 : To (B5)
- (E107) : Y/4 : To (M4)
- ★ (E108) : W/2 : To (M5)
- (E109) : W/24 : To (M6)
- ★ (E110) : GR/16 : To (M7)
- (E111) : W16 : AWD control unit
- (E112) : W/1 : Parking brake switch
- (E113) : GR/2 : Pedal adjusting motor
- (E114) : W/3 : Pedal adjusting motor
- ★ (E115) : BR/2 : ASCD brake switch
- ★ (E116) : B/2 : Stop lamp switch
- (E117) : 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 CVT sections.

TKIA0115E

HARNESS

ENGINE CONTROL HARNESS



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

*1...2WD models
*2...4WD models

* : 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 CVT sections.

Engine control harness

E3	(F1)	—	: Fusible link holder
G3	(F2)	GR/9	: To (E18)
G3	(F3)	B/8	: To (E19)
G2	(F4)	B/6	: Mass air flow sensor
E3	(F5)	GR/1	: Starter motor
E4	(F6)	-/22	: CVT unit
E3	(F7)	GR/2	: Engine coolant temperature sensor
E3	(F8)	B/3	: Camshaft position sensor (PHASE) (Bank 2)
E2	(F9)	GR/2	: To (F241)
D3	(F10)	GR/2	: Condenser
B2	(F11)	GR/2	: Injector No.2
C3	(F12)	GR/2	: Injector No.4
D3	(F13)	GR/2	: Injector No.6
B2	(F14)	GR/3	: Ignition coil No.2 (With power transistor)
C3	(F15)	GR/3	: Ignition coil No.4 (With power transistor)
D3	(F16)	GR/3	: Ignition coil No.6 (With power transistor)
C3	(F18)	BR/3	: Front electronic controlled engine mount
C3	(F19)	G/4	: Heated oxygen sensor 2 (Bank 1)
C4	(F20)	B/3	: Crankshaft position sensor (POS)
C4	(F21)	G/4	: Heated oxygen sensor 2 (Bank 2)
B2	(F22)	B/2	: VIAS control solenoid valve
B1	(F23)	—	: Engine ground
B2	(F25)	LGR/2	: Intake valve timing control solenoid valve (Bank 2)
B3	(F26)	—	: Alternator (B)
B3	(F27)	GR/4	: Alternator (S, L)
B3	(F28)	B/1	: Compressor
C1	(F29)	GR/8	: To (F201)
A1	(F31)	B/3	: Power steering pressure sensor
D1	(F32)	DGR/6	: To (F221)
F2	(F33)	DGR/6	: Electric throttle control actuator
E2	(F34)	G/3	: Camshaft position sensor (PHASE) (Bank 1)
F2	(F35)	B/3	: Secondary speed sensor
F2	(F36)	BR/3	: Rear electronic controlled engine mount (AWD models)
F3	(F37)	—	: Fusible link holder
D3	(F38)	—	: Starter motor
D1	(F41)	-/6	: Air fuel ratio (A/F) sensor 1 (Bank 1)
C3	(F42)	-/6	: Air fuel ratio (A/F) sensor 1 (Bank 2)

F4	(F101)	SMJ	: ECM
G4	(F102)	W/18	: To (M82)
G5	(F103)	W/24	: TCM (Transmission control module)
G4	(F104)	GR/24	: TCM (Transmission control module)

Engine control sub-harness-1

B1	(F201)	G/8	: To (F29)
B1	(F202)	G/2	: Intake valve timing control solenoid valve (Bank 1)
B2	(F203)	GR/1	: Oil pressure switch
B1	(F204)	GR/2	: Injector No.1
D1	(F205)	GR/2	: Injector No.3
D2	(F206)	GR/2	: Injector No.5
E1	(F207)	L/2	: EVAP canister purge volume control solenoid valve

Engine control sub-harness-2

D1	(F221)	G/6	: To (F32)
C1	(F222)	GR/3	: Ignition coil No.1 (With power transistor)
D1	(F223)	GR/3	: Ignition coil No.3 (With power transistor)
D1	(F224)	GR/3	: Ignition coil No.5 (With power transistor)

Engine control sub-harness-3

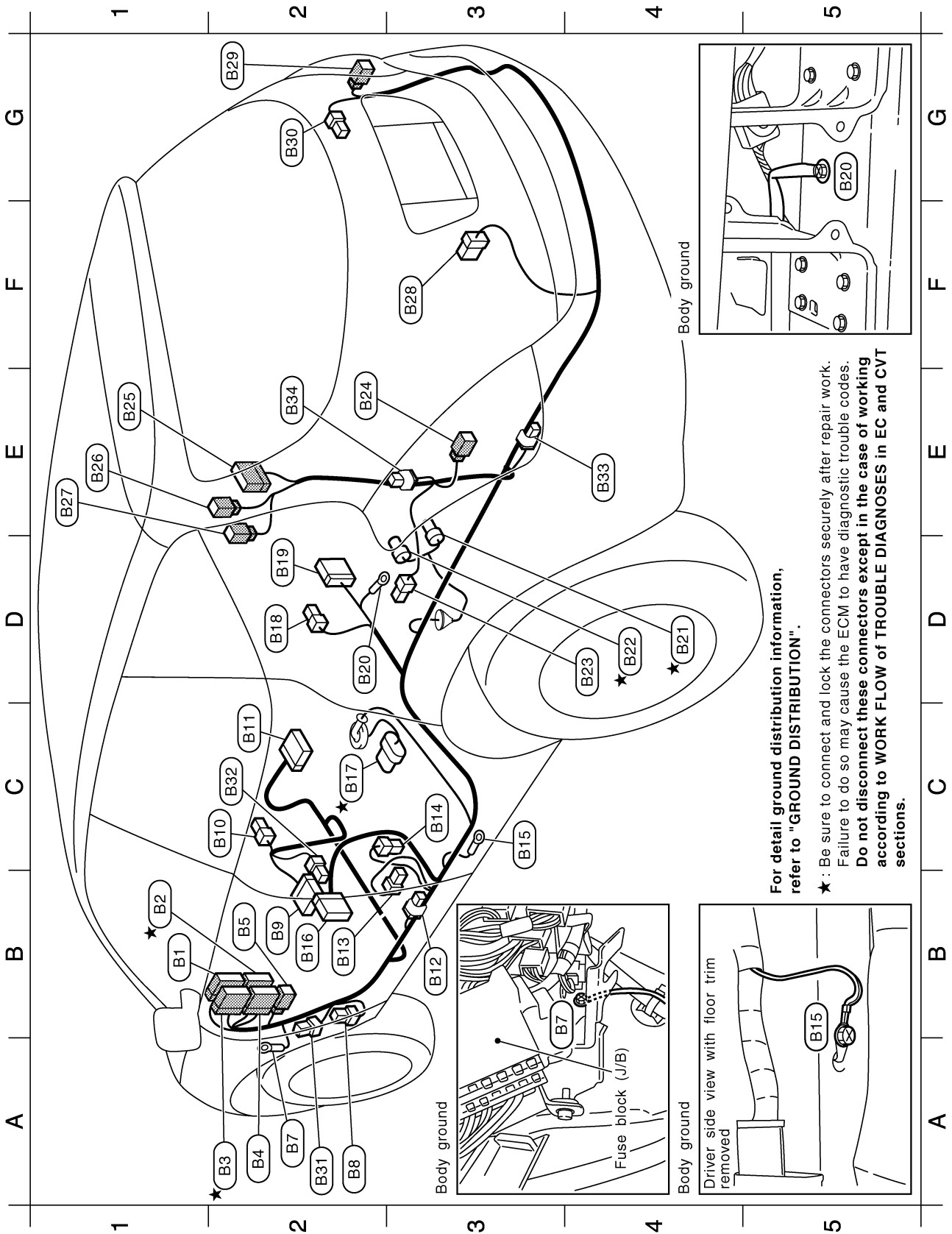
D3	(F241)	GR/2	: To (F9)
D3	(F242)	L/2	: Knock sensor

★: 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 CVT sections.

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HARNESS

BODY HARNESS



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

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

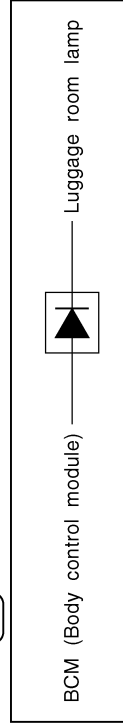
TKIA0118E

B1	(B1)	BR/12	:	To (M8)
B1	★ (B2)	W/20	:	To (M9)
A2	★ (B3)	BR/16	:	To (M10)
A2	(B4)	W/12	:	To (E105)
B2	(B5)	W/4	:	To (E106)
A2	(B7)	—	:	Body ground
A2	(B8)	BR/6	:	Rear window defogger relay
B2	(B9)	W/16	:	Front power seat (Driver side)
C2	(B10)	Y/2	:	Front LH side air bag module
C2	(B11)	Y/12	:	Air bag diagnosis sensor unit
B3	(B12)	W/2	:	Condenser
B2	(B13)	Y/2	:	LH side air bag (satellite) sensor
C3	(B14)	Y/2	:	Front LH seat belt pre-tensioner
C3	(B15)	—	:	Body ground
B2	(B16)	W/18	:	To (D51)
C2	★ (B17)	GR/5	:	Fuel level sensor unit and fuel pump
D2	(B18)	Y/2	:	To (E118)
D2	(B19)	W/12	:	To (E117)
D2	(B20)	—	:	Body ground
D4	★ (B21)	B/2	:	EVAP canister vent control valve
D4	★ (B22)	GR/3	:	EVAP control system pressure sensor
D4	(B23)	W/4	:	Fuel lid lock actuator
E2	(B24)	W/4	:	Rear combination lamp LH

E1	(B25)	W/12	:	To (D91)
E1	(B26)	Y/4	:	To (D92)
E1	(B27)	W/2	:	To (D93)
F3	(B28)	GR/6	:	Woofer
G2	(B29)	W/4	:	Rear combination lamp RH
G2	(B30)	B/2	:	Rear power socket
A2	(B31)	B/5	:	Fuel lid lock actuator relay
C2	(B32)	W/2	:	Front power seat (Driver side)
E4	(B33)	W/1	:	Option connector for trailer
E2	(B34)	W/2	:	Diode

★ : 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 CVT sections.

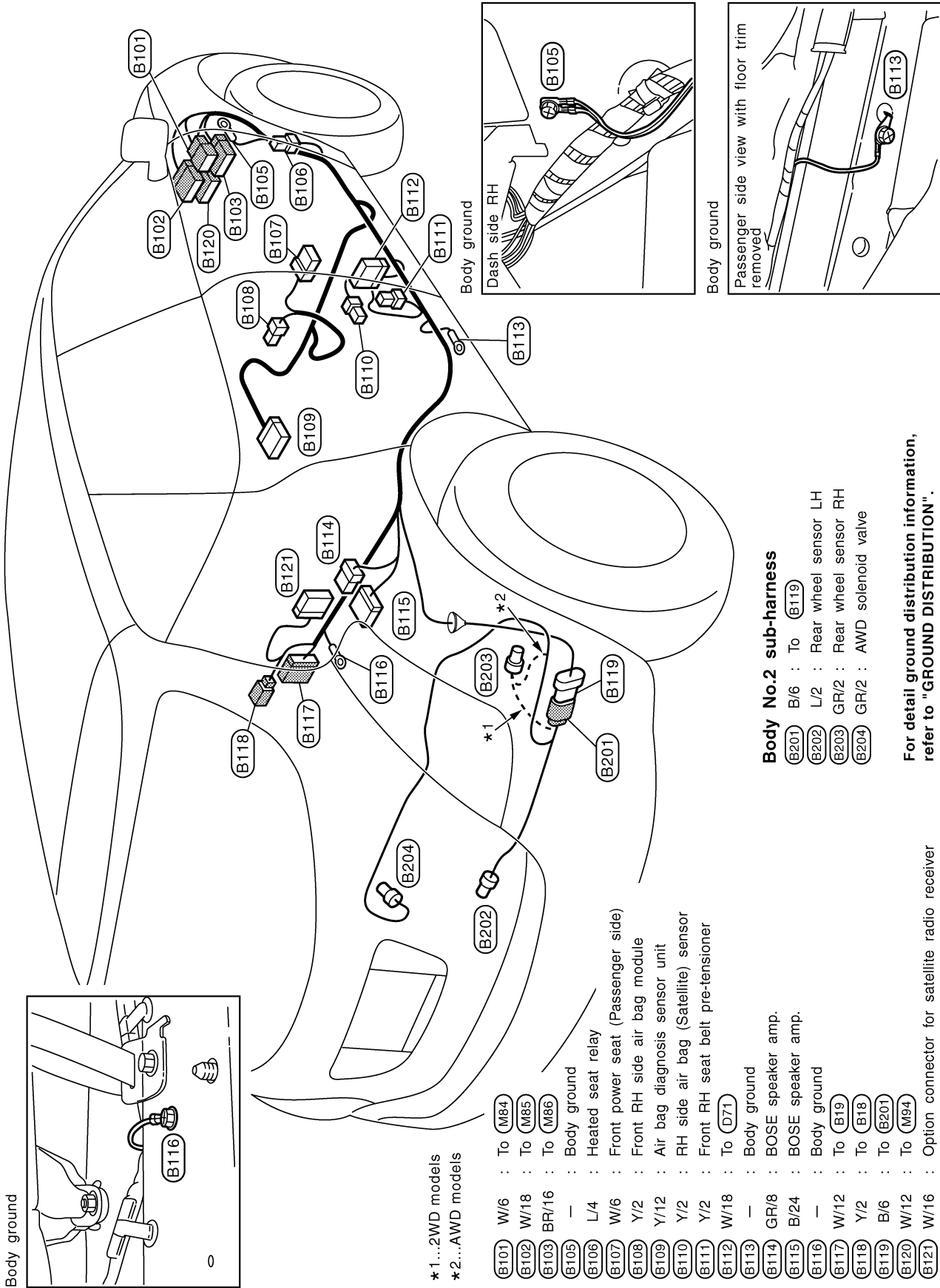
Diode (B34)



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HARNESS

BODY NO.2 HARNESS



*1...2WD models

*2...4WD models

- (B101) W/6 : To (M84)
- (B102) W/18 : To (M85)
- (B103) BR/16 : To (M86)
- (B105) — : Body ground
- (B106) L/4 : Heated seat relay
- (B107) W/6 : Front power seat (Passenger side)
- (B108) Y/2 : Front RH side air bag module
- (B109) Y/12 : Air bag diagnosis sensor unit
- (B110) Y/2 : RH side air bag (Satellite) sensor
- (B111) Y/2 : Front RH seat belt pre-tensioner
- (B112) W/18 : To (D71)
- (B113) — : Body ground
- (B114) GR/8 : BOSE speaker amp.
- (B115) B/24 : BOSE speaker amp.
- (B116) — : Body ground
- (B117) W/12 : To (B19)
- (B118) Y/2 : To (B18)
- (B119) B/6 : To (B201)
- (B120) W/12 : To (M94)
- (B121) W/16 : Option connector for satellite radio receiver

Body No.2 sub-harness

- (B201) B/6 : To (B119)
- (B202) L/2 : Rear wheel sensor LH
- (B203) GR/2 : Rear wheel sensor RH
- (B204) GR/2 : AWD solenoid valve

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

TKIB0002E

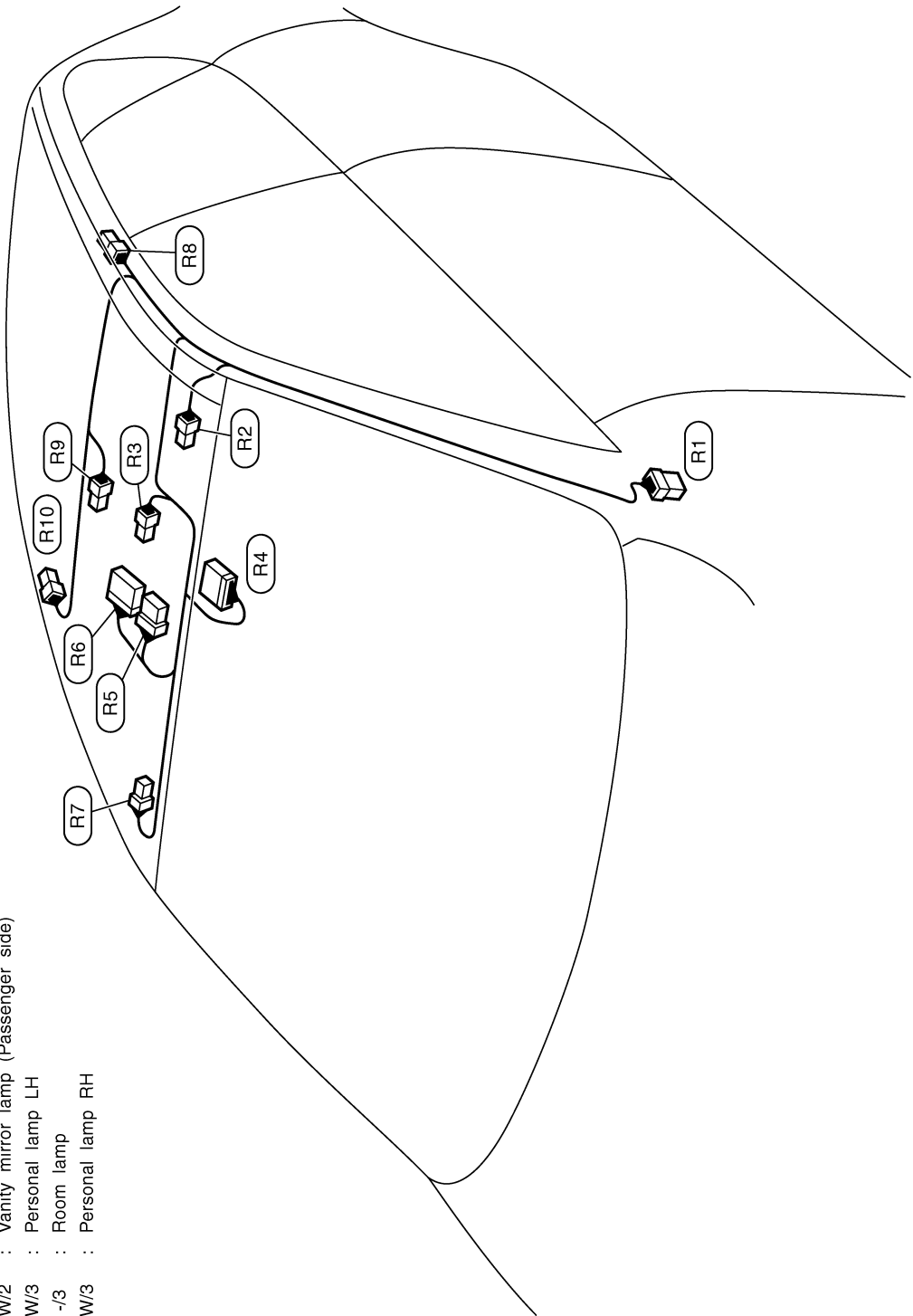
HARNESS

ROOM LAMP HARNESS

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- (R1) : To (MT12)
- (R2) : Vanity mirror lamp (Driver side)
- (R3) : Map lamp
- (R4) : Auto anti-dazzling inside mirror
- (R5) : Sunroof switch
- (R6) : Sunroof motor assembly
- (R7) : Vanity mirror lamp (Passenger side)
- (R8) : Personal lamp LH
- (R9) : Room lamp
- (R10) : Personal lamp RH

- W/8
- W/2
- W/2
- B/10
- GR/6
- W/10
- W/2
- W/3
- /3
- W/3



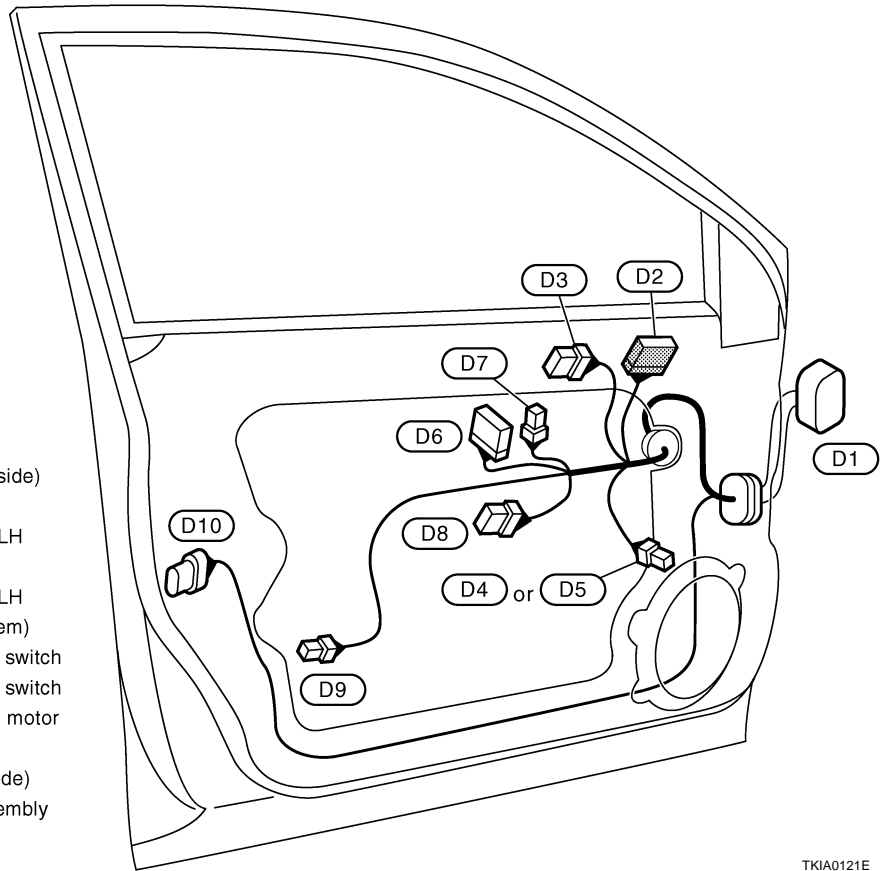
TKIA0035E

HARNESS

FRONT DOOR HARNESS

LH Side

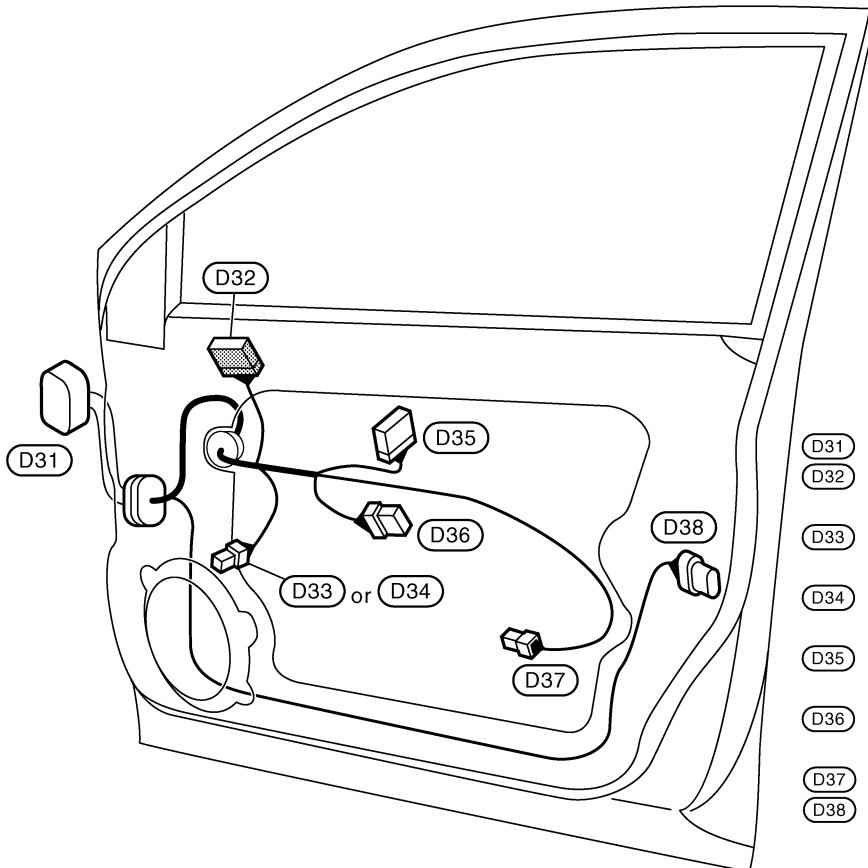
- (D1) SMJ : To (M3)
- (D2) W/10 : Door mirror (Driver side)
- (D3) W/8 : Seat memory switch
- (D4) BR/2 : Front door speaker LH
(With BOSE system)
- (D5) W/2 : Front door speaker LH
(Without BOSE system)
- (D6) W/16 : Power window main switch
- (D7) W/3 : Power window main switch
- (D8) W/6 : Front power window motor
(Driver side)
- (D9) W/2 : Step lamp (Driver side)
- (D10) B/6 : Front door lock assembly
(Driver side)



TKIA0121E

RH Side

- (D31) SMJ : To (M87)
- (D32) W/10 : Door mirror (Passenger side)
- (D33) BR/2 : Front door speaker RH
(With BOSE system)
- (D34) W/2 : Front door speaker RH
(Without BOSE system)
- (D35) W/16 : Front power window switch
(Passenger side)
- (D36) W/6 : Front power window motor
(Passenger side)
- (D37) W/2 : Step lamp (Passenger side)
- (D38) B/6 : Front door lock assembly
(Passenger side)



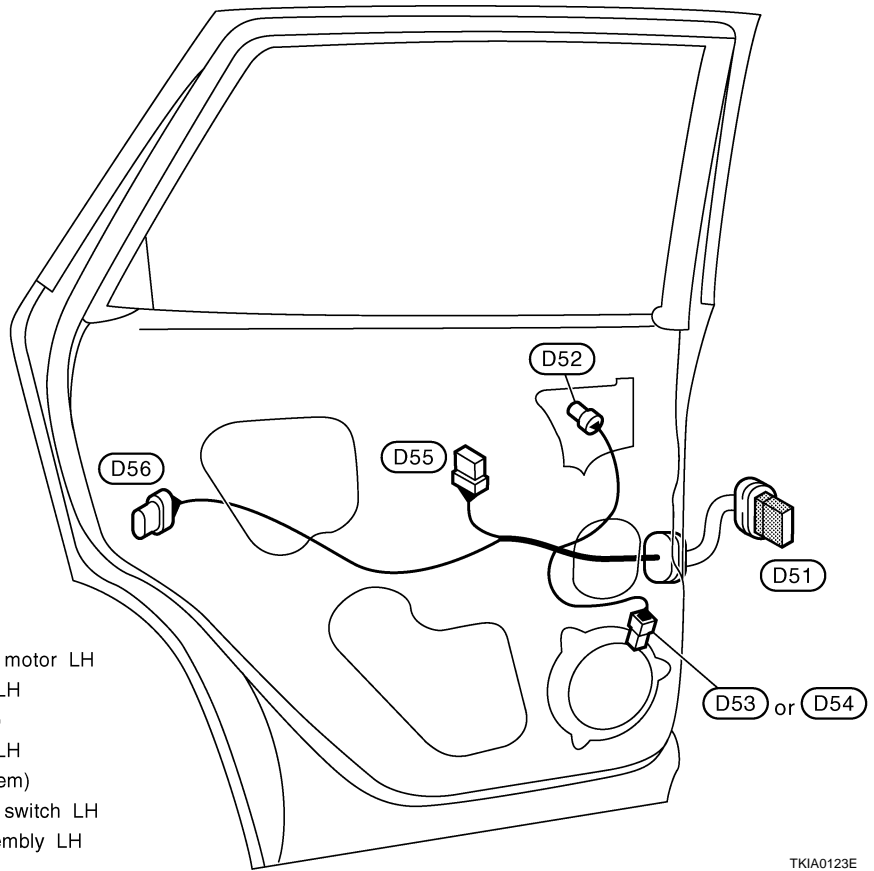
TKIA0122E

HARNESS

REAR DOOR HARNESS

LH Side

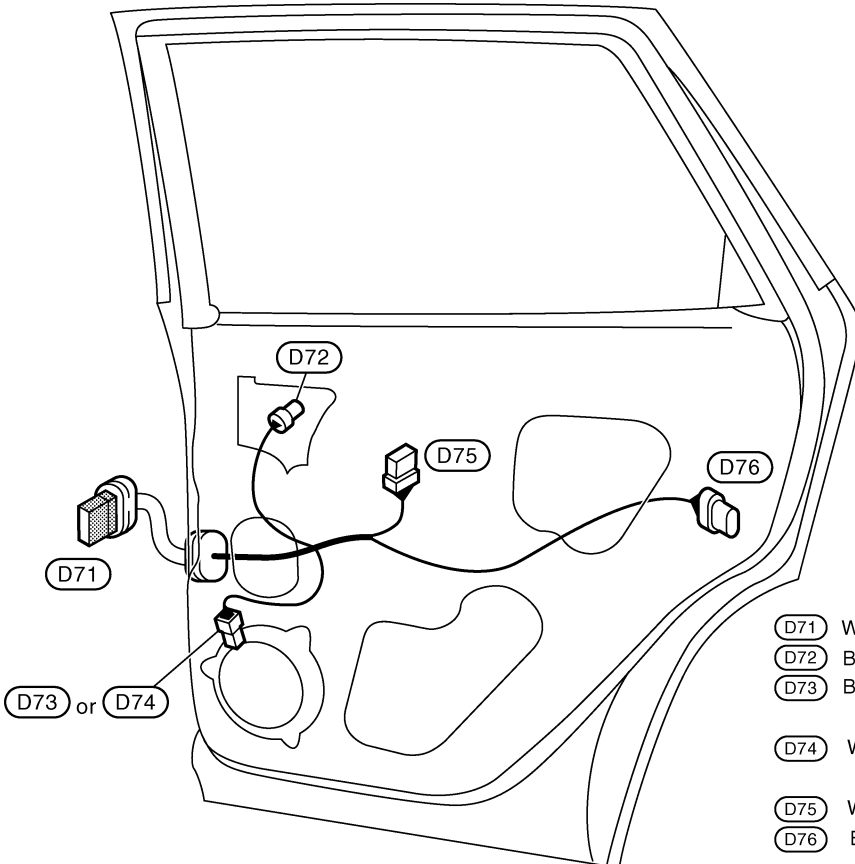
- (D51) W/18 : To (B16)
- (D52) BR/2 : Rear power window motor LH
- (D53) BR/2 : Rear door speaker LH
(With BOSE system)
- (D54) W/2 : Rear door speaker LH
(Without BOSE system)
- (D55) W/8 : Rear power window switch LH
- (D56) B/6 : Rear door lock assembly LH



TKIA0123E

RH Side

- (D71) W/18 : To (B112)
- (D72) BR/2 : Rear power window motor RH
- (D73) BR/2 : Rear door speaker RH
(With BOSE system)
- (D74) W/2 : Rear door speaker RH
(Without BOSE system)
- (D75) W/8 : Rear power window switch RH
- (D76) B/6 : Rear door lock assembly RH



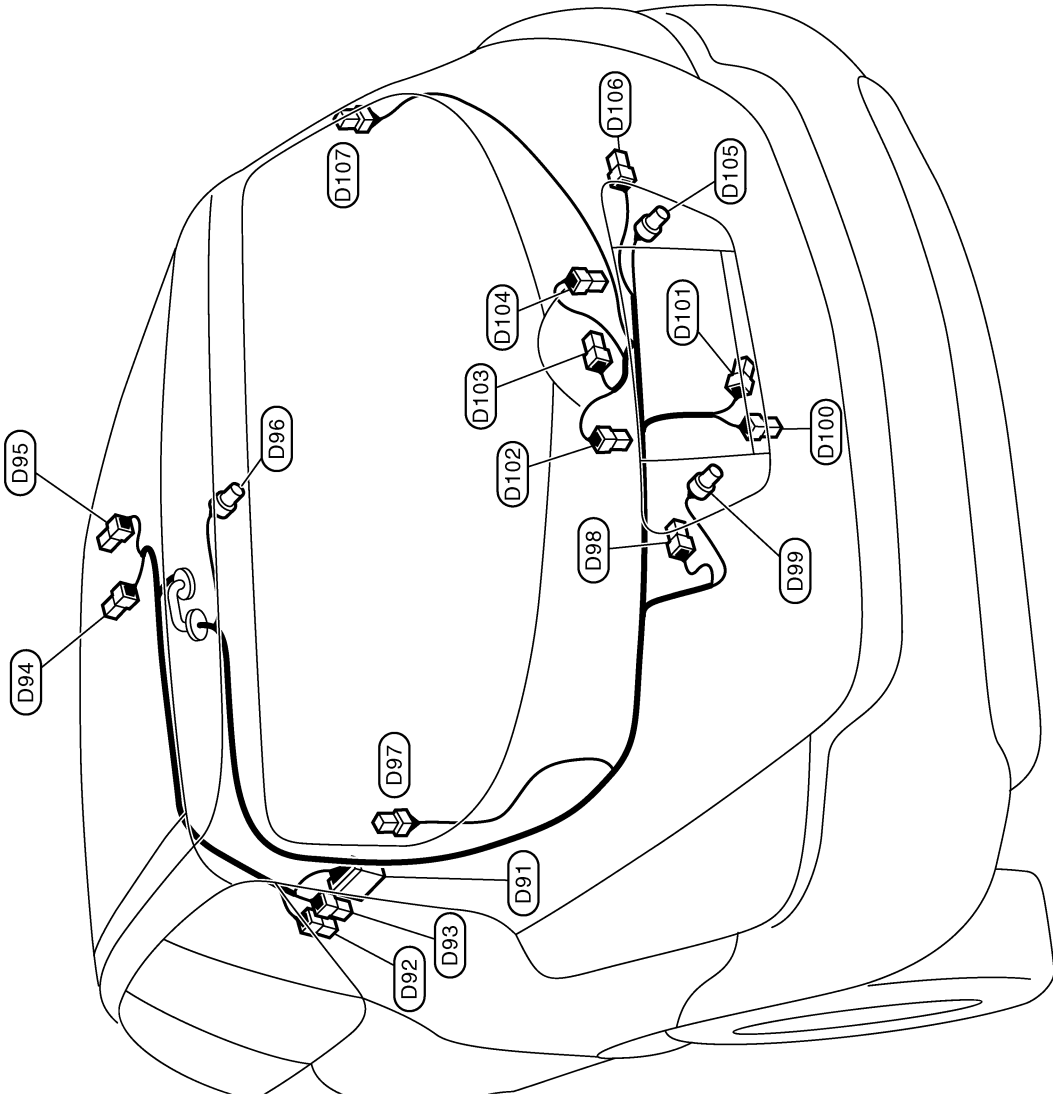
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HARNESS

BACK DOOR HARNESS



D91	W/12	:	To	B25
D92	Y/4	:	To	B26
D93	W/2	:	To	B27
D94	O/2	:	LH side curtain air bag module	
D95	Y/2	:	RH side curtain air bag module	
D96	W/2	:	High-mounted stop lamp	
D97	B/1	:	Rear window defogger (+)	
D98	W/4	:	Luggage room lamp LH	
D99	W/2	:	Back-up lamp LH	
D100	W/3	:	Back door switch	
D101	W/4	:	Back door lock actuator	
D102	BR/2	:	License plate lamp LH	
D103	W/4	:	Rear wiper motor	
D104	BR/2	:	License plate lamp RH	
D105	W/2	:	Back-up lamp RH	
D106	W/4	:	Luggage room lamp RH	
D107	B/1	:	Rear window defogger (-)	

TKIA0087E

HARNESS

Wiring Diagram Codes (Cell Codes)

AKS007HU

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
A/C	ATC	Air Conditioner
ABS	BRC	Anti-lock Brake System
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
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASC/BS	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASC/SW	EC	Automatic Speed Control Device (ASCD) Steering Switch
ASCBOF	EC	Automatic Speed Control Device (ASCD) Brake Switch
ASCIND	EC	Automatic Speed Control Device (ASCD) Indicator
AUDIO	AV	Audio
AUT/DP	SE	Automatic Drive Positioner
AUTO/L	LT	Automatic Light System
AWD	TF	AWD System
BACK/L	LT	Back-Up Lamp
BRK/SW	EC	Brake Switch
CAN	CVT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COMBSW	LT	Combination Switch
COMM	AV	Audio Visual Communication Line
COMPAS	DI	Compass
COOL/F	EC	Cooling Fan Control
CVTIND	DI	CVT Indicator Lamp
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Daytime Light System
ECM/PW	EC	ECM Power Supply For Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
EMNT	EC	Engine Mount
ETC1	EC	Electrical Throttle Control Function
ETC2	EC	Electrical Throttle Control Motor Relay
ETC3	EC	Electrical Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump

HARNESS

Code	Section	Wiring Diagram Name
FTS	CVT	CVT Fluid Temperature Sensor Circuit
FTTS	EC	Fuel Tank Temperature Sensor
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/AIM	LT	Headlamp Aiming Control System
H/LAMP	LT	Headlamp
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
INF/D	AV	Vehicle Information And Integrated Switch System
INJECT	EC	Injector
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
LUSSV	CVT	Lock-Up Select Solenoid Valve
LPSV	CVT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	EC	Main Power Supply And Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., And Fuel Gauges
MIL/DL	EC	Mil & Data Link Connectors
MIRROR	GW	Power Door Mirror
MMSW	CVT	Manual Mode Switch
NATS	BL	Nissan Anti - Theft System
NAVI	AV	Navigation System
NONDTC	CVT	Non-Detective Items
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 Heater Bank 2
O2S2B1	EC	Rear Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Rear Heated Oxygen Sensor 2 Bank 2
P/SCKT	WW	Power Socket
PEDAL	AP	Adjustable Pedal System
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHSB1	EC	Camshaft Position Sensor (PHASE) (Bank1)
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank2)
PNP/SW	CVT	Park / Neutral Position Switch
PNP/SW	EC	Park / Neutral Position Switch
POS	EC	Crankshaft Position Sensor (CKPS) (POS)
POWER	CVT	Transmission Control Module (Power Supply)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor

HARNESSES

Code	Section	Wiring Diagram Name	
PRIPS	CVT	Primary Pressure Sensor	A
PRSCVT	CVT	Primary Speed Sensor CVT (Revolution Sensor)	
PS/SEN	EC	Power Steering Pressure Sensor	B
ROOM/L	LT	Interior Room Lamp	
RP/SEN	EC	Refrigerant Pressure Sensor	
SEAT	SE	Power Seat	C
SECPS	CVT	Secondary Pressure Sensor	
SECPSV	CVT	Secondary Pressure Solenoid Valve	D
SEN/PW	EC	Sensor Power Supply	
SESCVT	CVT	Secondary Speed Sensor CVT (Revolution Sensor)	
SHIFT	CVT	CVT Shift Lock System	E
SPSW	CVT	Second position Switch	
SROOF	RF	Sunroof	
SRS	SRS	Supplemental Restraint System	F
START	SC	Starting System	
STM	CVT	Step Motor	G
STOP/L	LT	Stop Lamp	
STSIG	CVT	Start Signal Circuit	H
T/WARN	WT	Low Tire Pressure Warning System	
TAIL/L	LT	Parking, License and Tail Lamps	
TCV	CVT	Torque Converter Clutch Solenoid Valve	I
TPS1	EC	Throttle Position Sensor (Sensor 1)	
TPS2	EC	Throttle Position Sensor (Sensor 2)	J
TPS3	EC	Throttle Position Sensor	
TRANSCV	BL	Homelink Universal Transceiver	
TURN	LT	Turn Signal and Hazard Warning Lamp	PG
VDC	BRC	Vehicle Dynamics Control System	
VEHSEC	BL	Vehicle Security System	
VENT/V	EC	EVAP Canister Vent Control Valve	L
VIAS	EC	Variable Induction Air Control System	
VIAS/V	EC	VIAS Control Solenoid Valve	M
WARN	DI	Warning Lamps	
WINDOW	GW	Power Window	
WIP/R	WW	Rear Wiper and Washer	
WIPER	WW	Front Wiper and Washer	

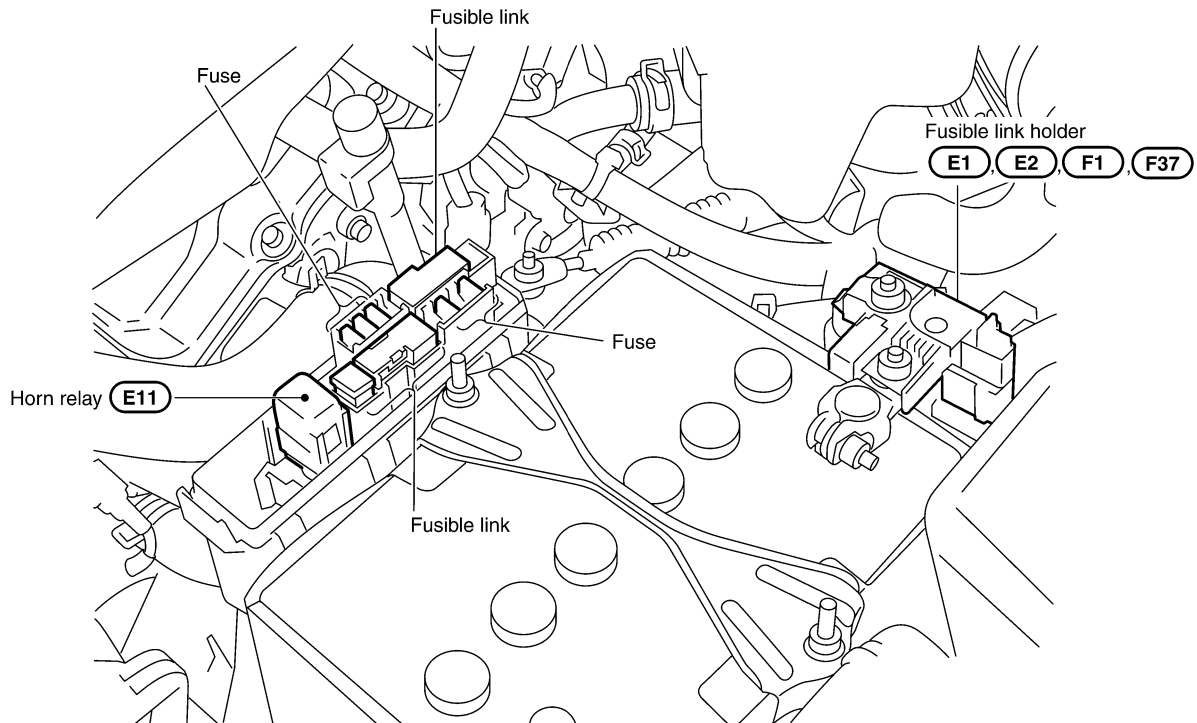
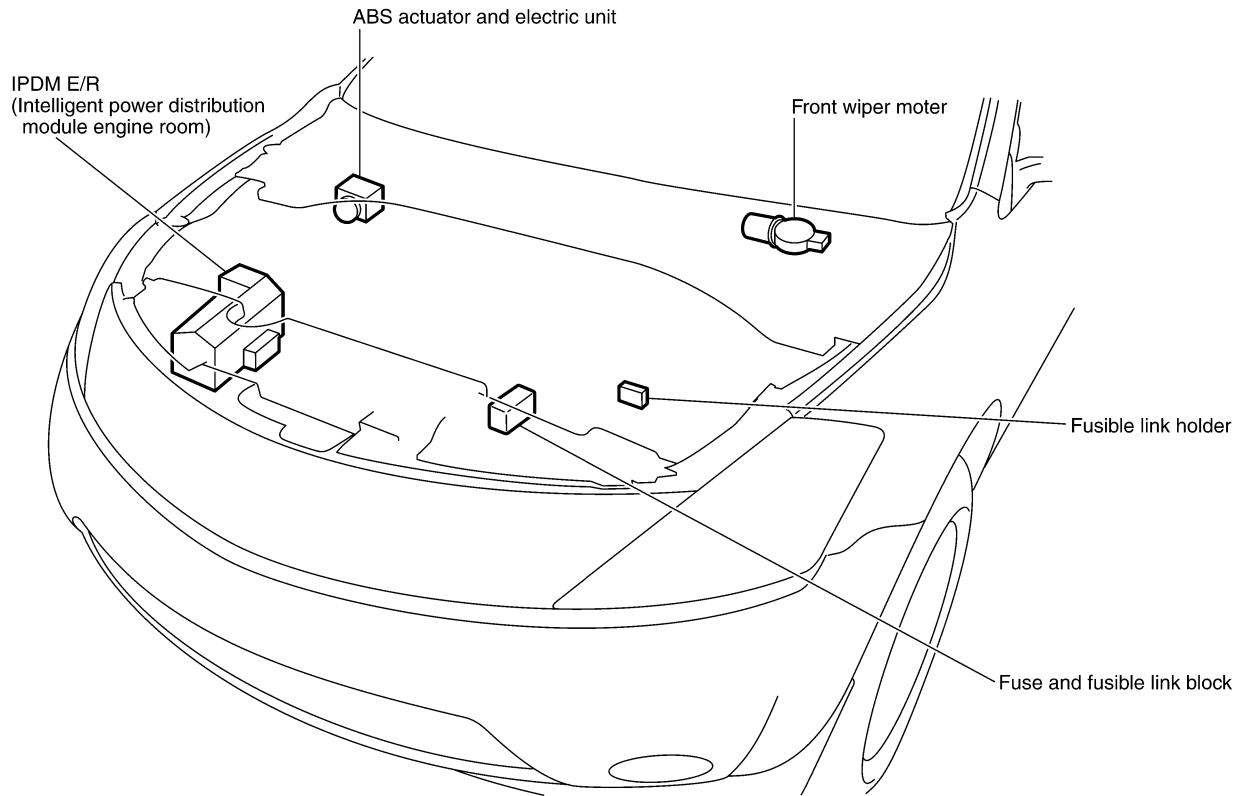
ELECTRICAL UNITS LOCATION

ELECTRICAL UNITS LOCATION

PFP:25230

Electrical Units Location ENGINE COMPARTMENT

AKS007HM

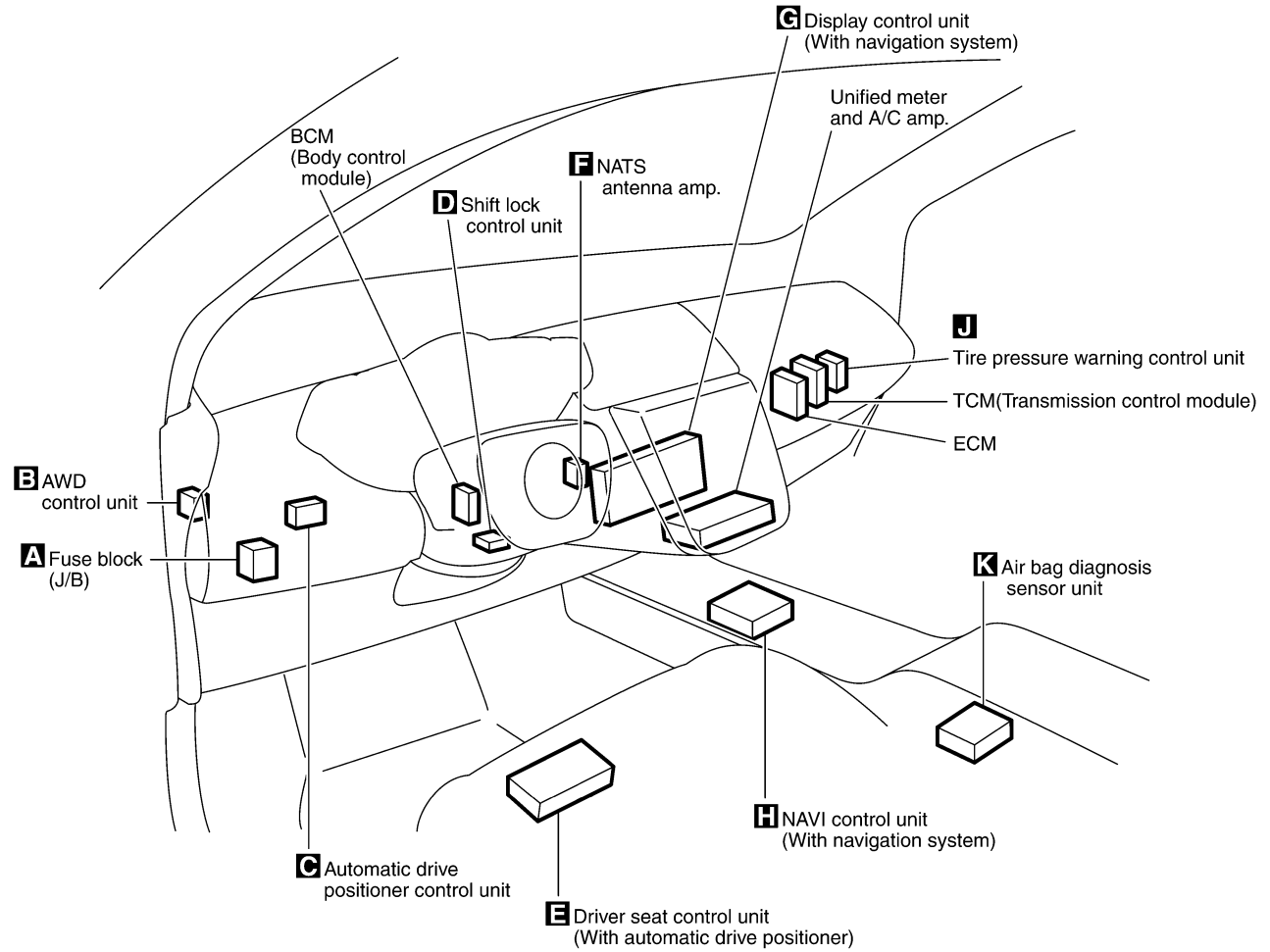


CKIA0319E

ELECTRICAL UNITS LOCATION

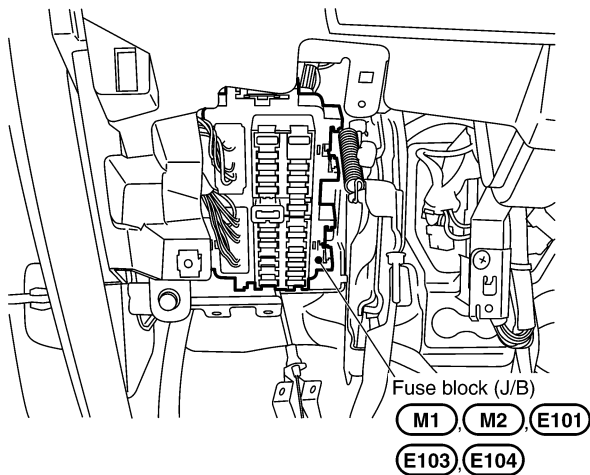
PASSENGER COMPARTMENT

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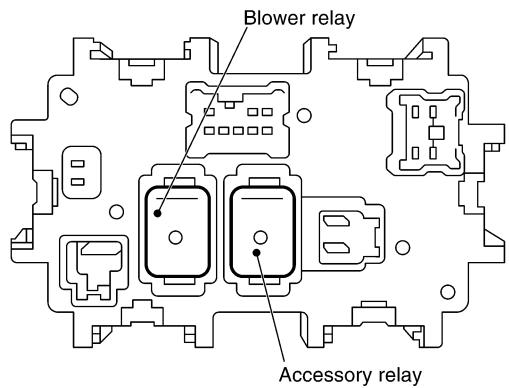


PG

A Driver side view with lower instrument panel removed



Fuse block (J/B) rear view

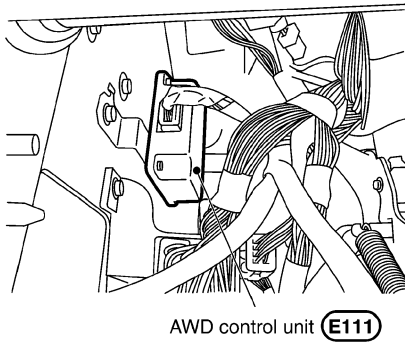


L
M

CKIA0320E

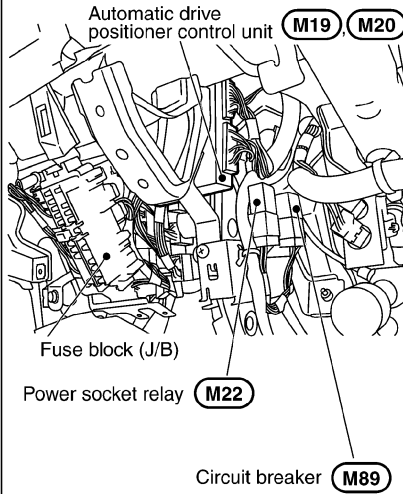
ELECTRICAL UNITS LOCATION

B Dash side LH



AWD control unit (E111)

C Driver side view with lower instrument panel removed



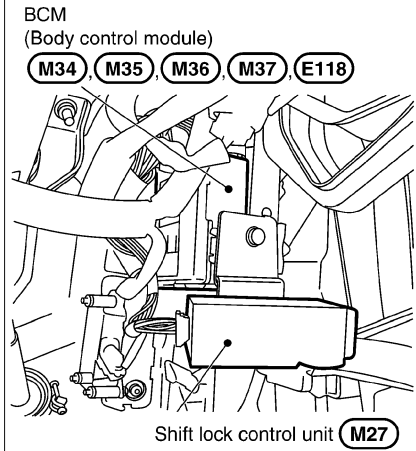
Automatic drive positioner control unit (M19, M20)

Fuse block (J/B)

Power socket relay (M22)

Circuit breaker (M89)

D Driver side view with lower instrument panel removed

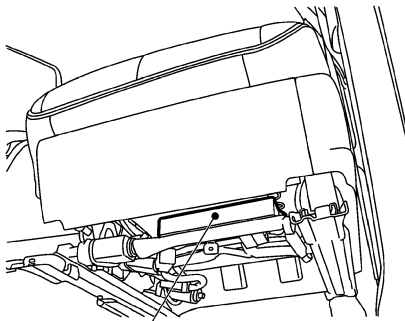


BCM (Body control module)

(M34, M35, M36, M37, E118)

Shift lock control unit (M27)

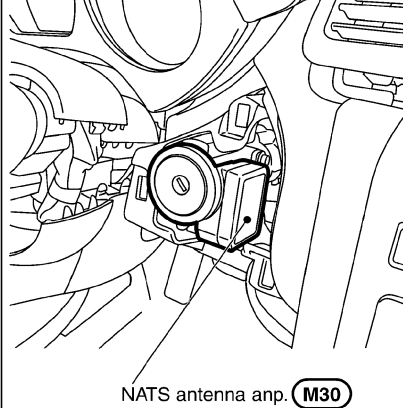
E Under driver seat



Driver seat control unit (With automatic drive positioner)

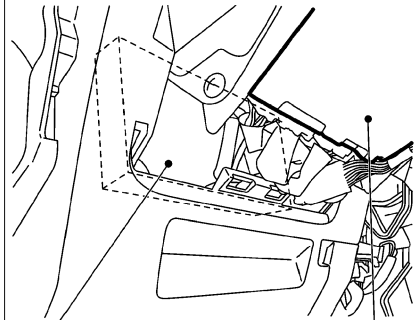
(B303, B304)

F Driver side view with cluster lid A removed



NATS antenna amp. (M30)

G View with instrument panel center removed

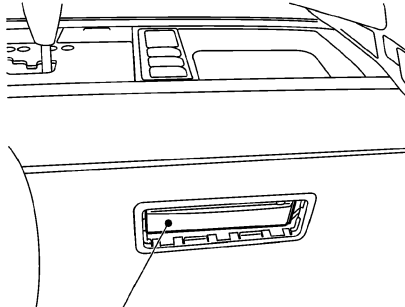


Display control unit (M42, M43)

Unified meter and A/C amp.

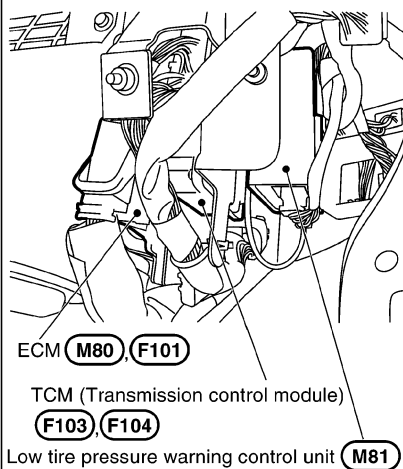
(M49, M50, M51)

H



NAVI control unit (M62, M63)

J Behind lower instrument panel on passenger side



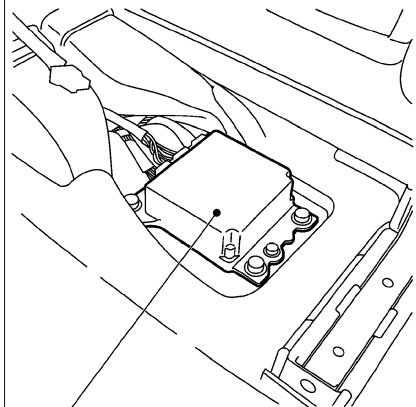
ECM (M80, F101)

TCM (Transmission control module)

(F103, F104)

Low tire pressure warning control unit (M81)

K View with floor console box removed

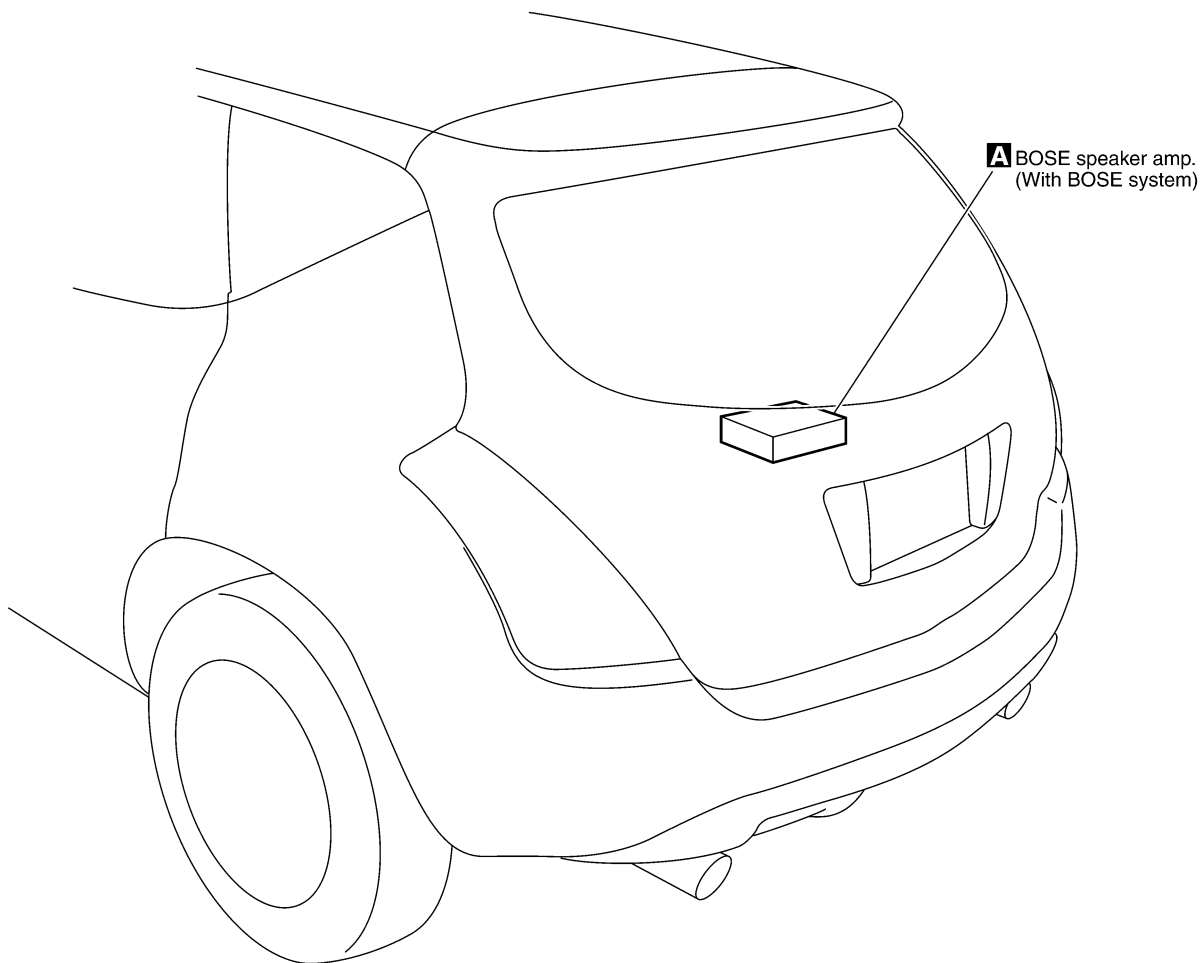


Air bag diagnosis sensor unit (M64)

CKIA0321E

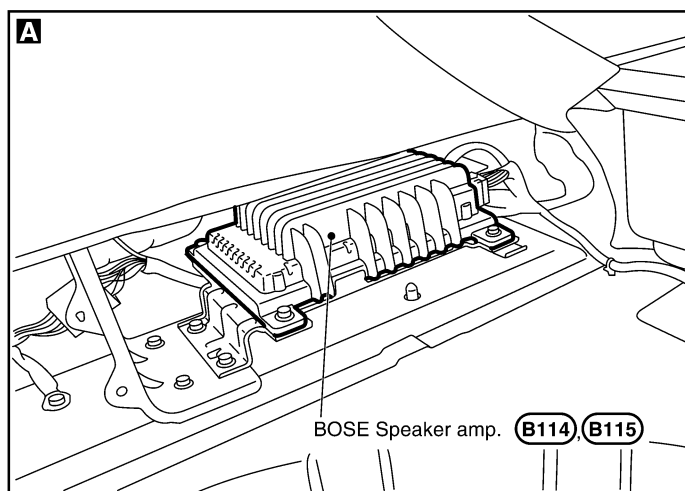
ELECTRICAL UNITS LOCATION

LUGGAGE COMPARTMENT



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PG



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M

CKIA0288E

HARNESS CONNECTOR

PFP:00011

HARNESS CONNECTOR

Description

HARNESS CONNECTOR (TAB-LOCKING TYPE)

AKS007HN

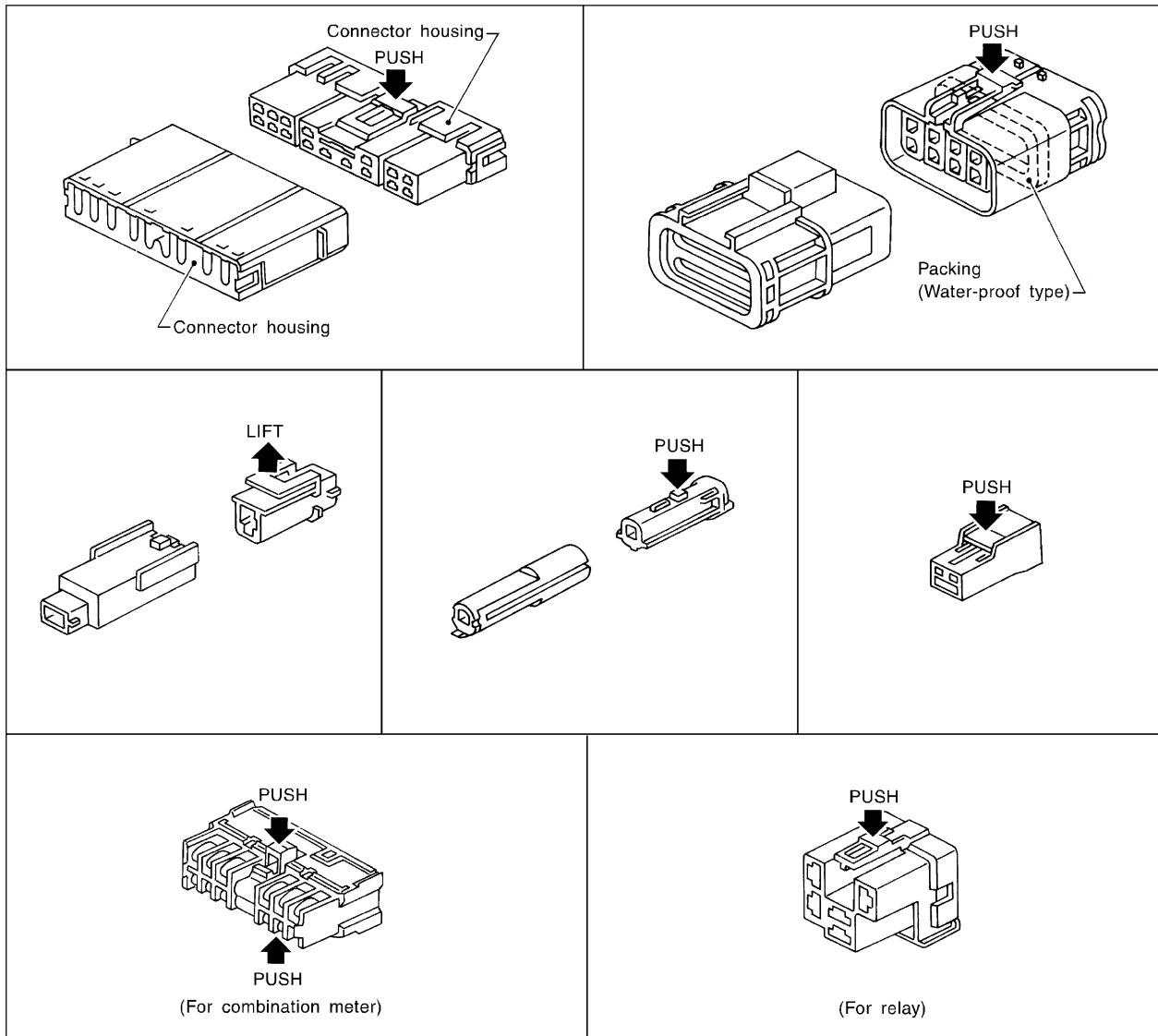
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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

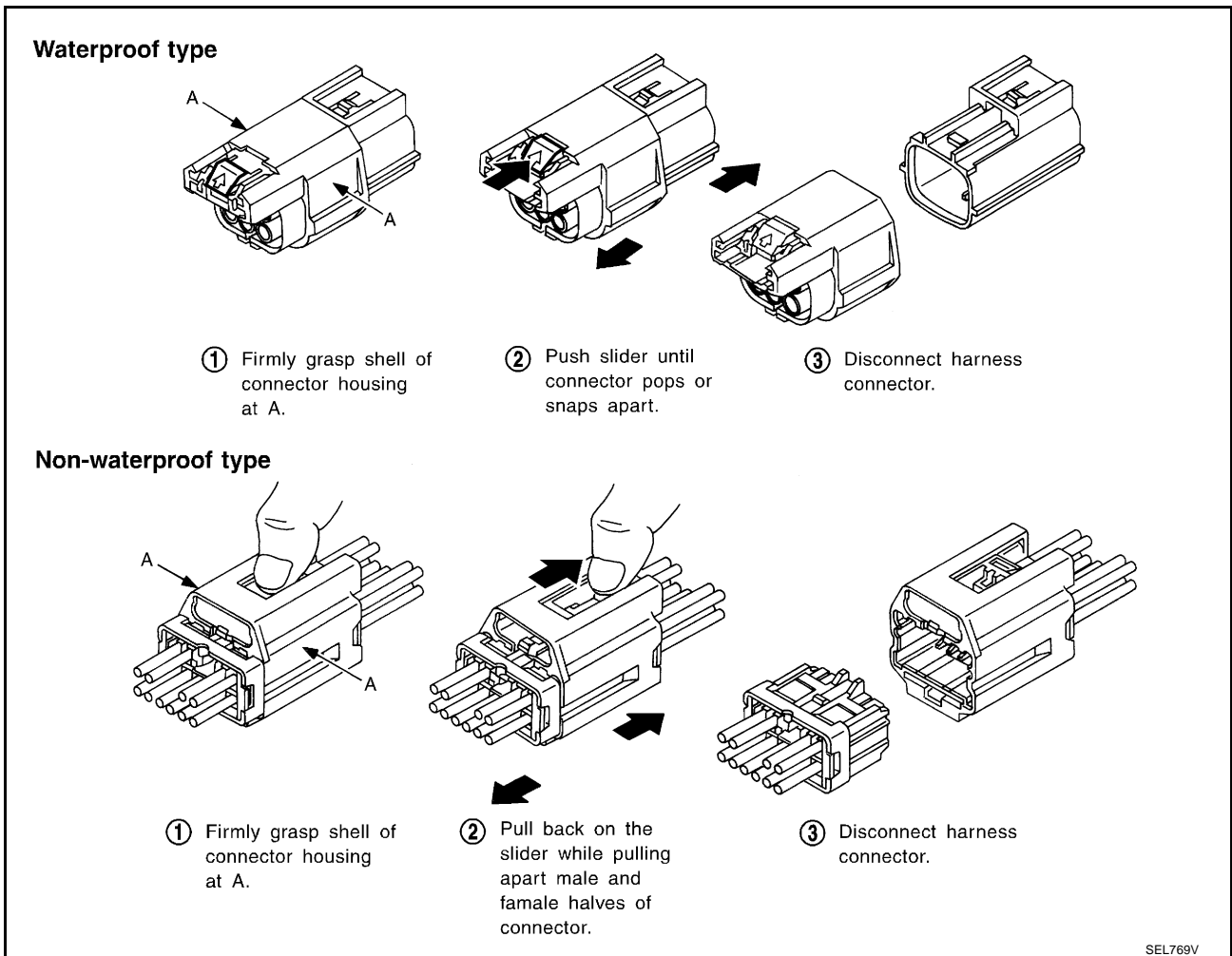
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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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ELECTRICAL UNITS

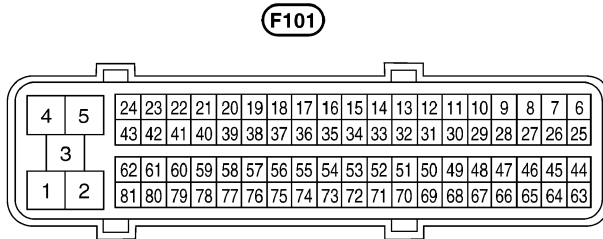
ELECTRICAL UNITS

PFP:00011

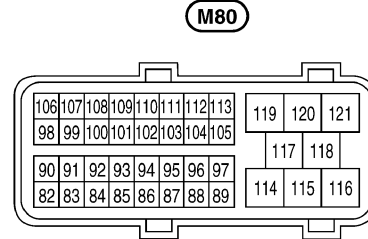
Terminal Arrangement

AKS007HP

ECM



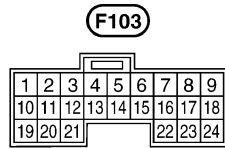
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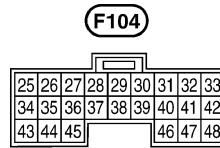
(Black)



TCM (TRANSMISSION CONTROL MODULE)



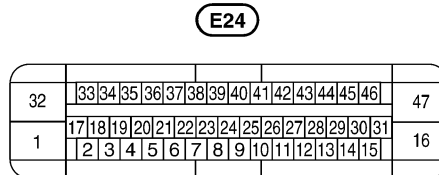
(White)



(Gray)



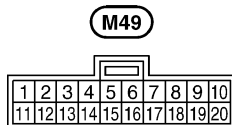
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



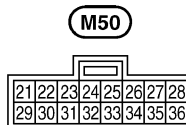
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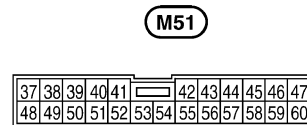
UNIFIED METER AND A/C AMP.



(Gray)



(Gray)



(White)

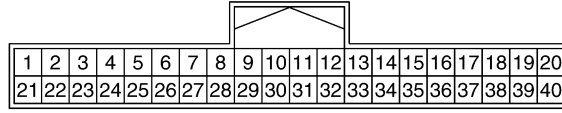


CKIA0322E

ELECTRICAL UNITS

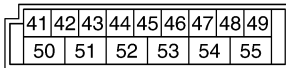
BCM (BODY CONTROL MODULE)

M34



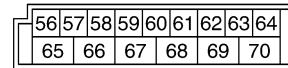
(White)

M35



(Black)

M36



(White)

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CKIA0356E

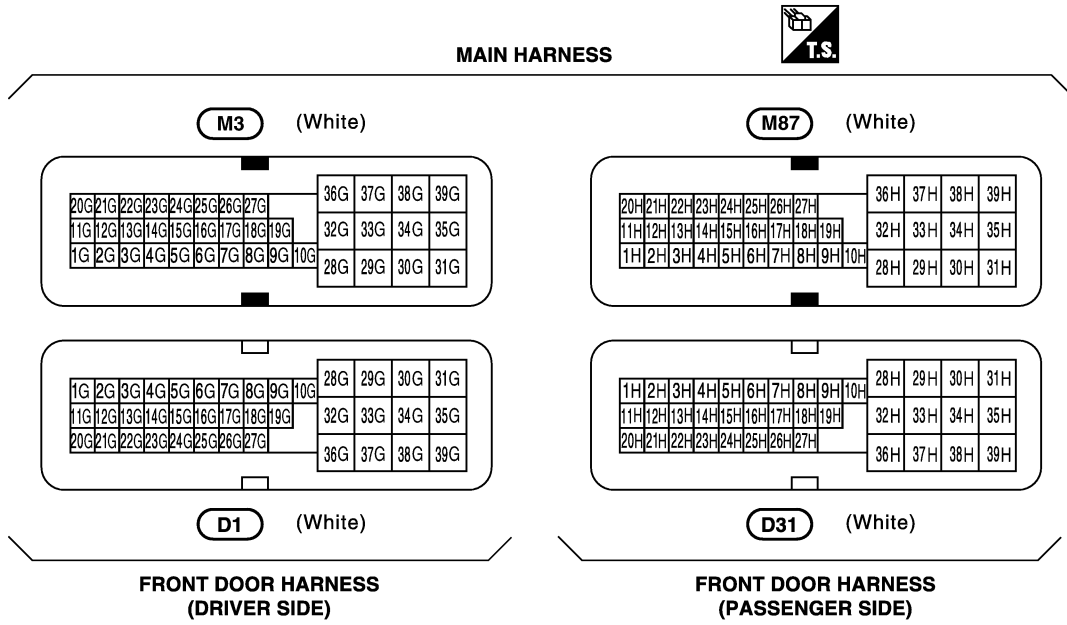
SMJ (SUPER MULTIPLE JUNCTION)

SMJ (SUPER MULTIPLE JUNCTION)

PFP:B4341

Terminal Arrangement

AKS007HQ



STANDARDIZED RELAY

PFP:00011

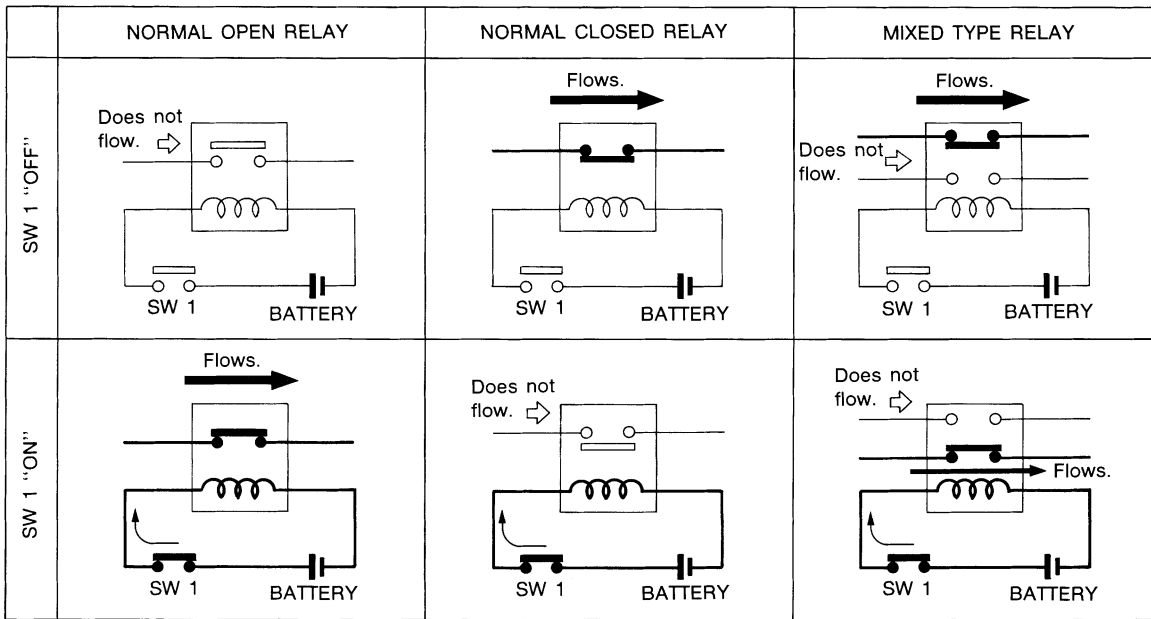
AKS007HR

STANDARDIZED RELAY

Description

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

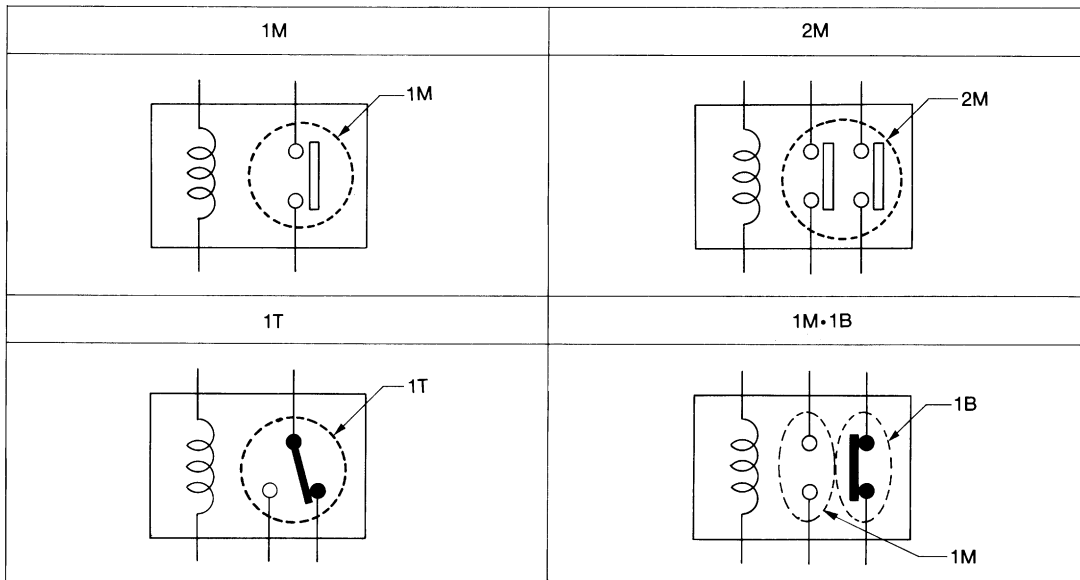
Relays can mainly be divided into three types: normal open, normal closed and mixed type relays.



SEL881H

TYPE OF STANDARDIZED RELAYS

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

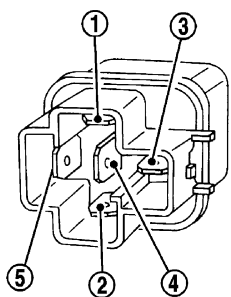
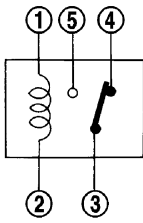
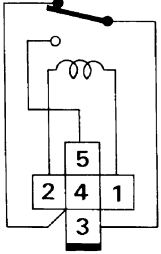
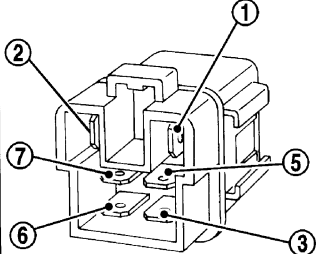
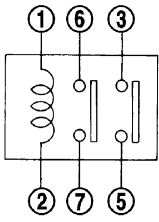
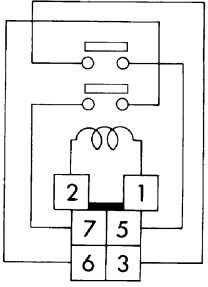
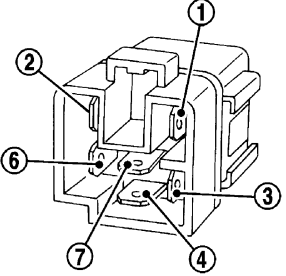
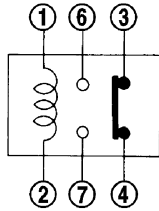
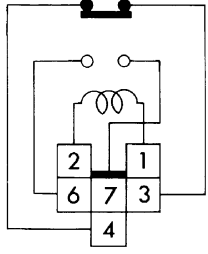
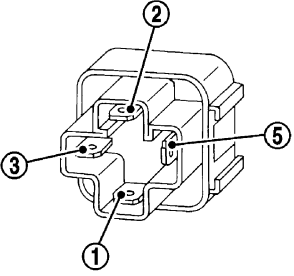
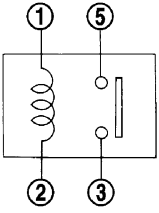
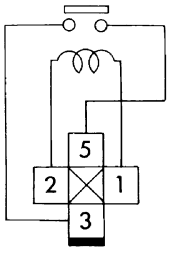
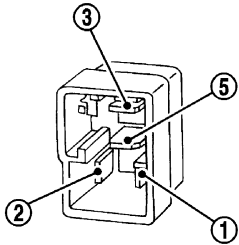
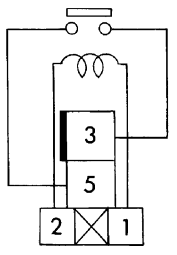


SEL882H

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PG

STANDARDIZED RELAY

Type	Outer view	Circuit	Connector symbol and connection	Case color
1T				BLACK
2M				BROWN
1M•1B				GRAY
1M				BLUE
				

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

SEL188W

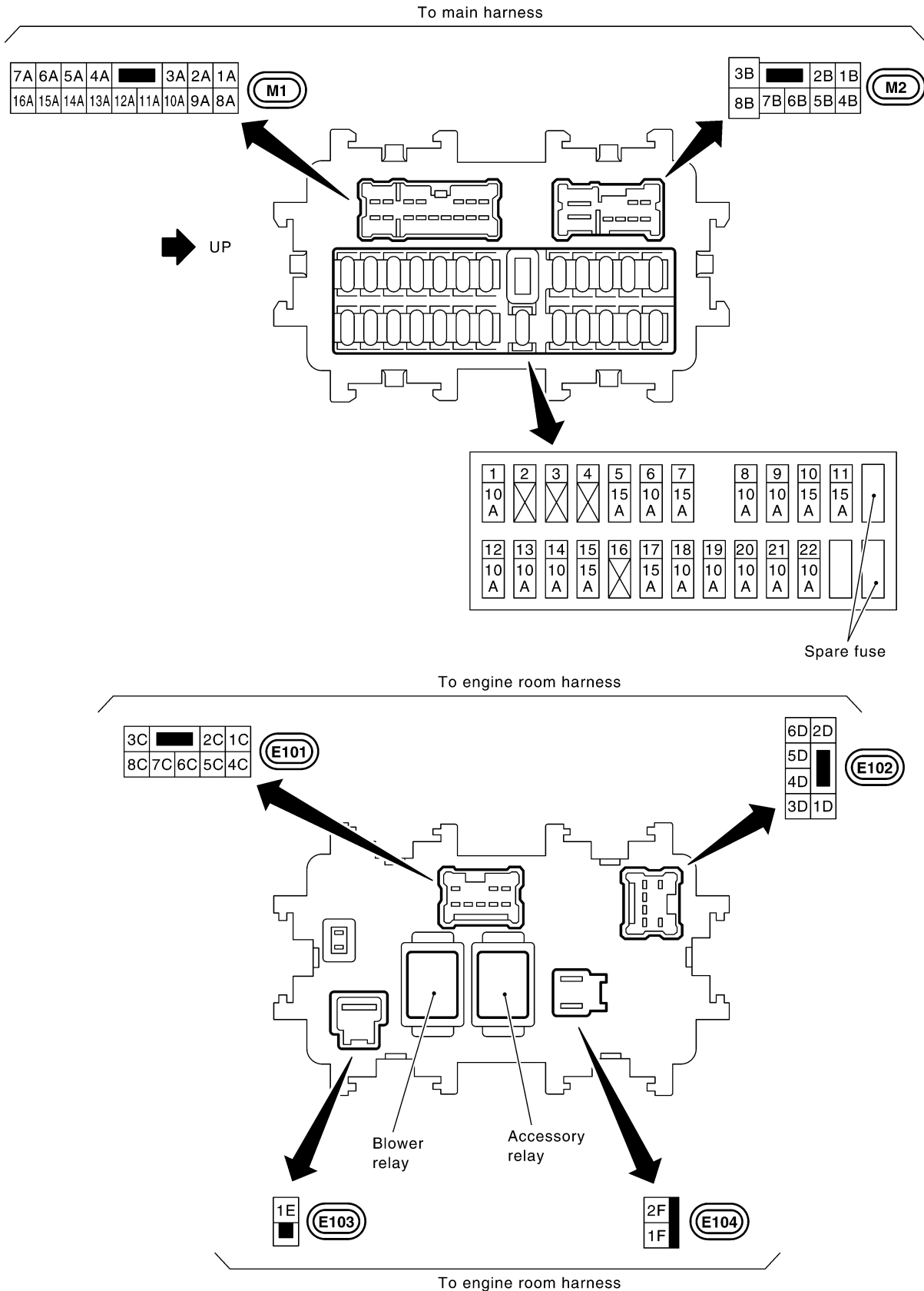
FUSE BLOCK - JUNCTION BOX (J/B)

FUSE BLOCK - JUNCTION BOX (J/B)

PPF:24350

Terminal Arrangement

AKS007HS



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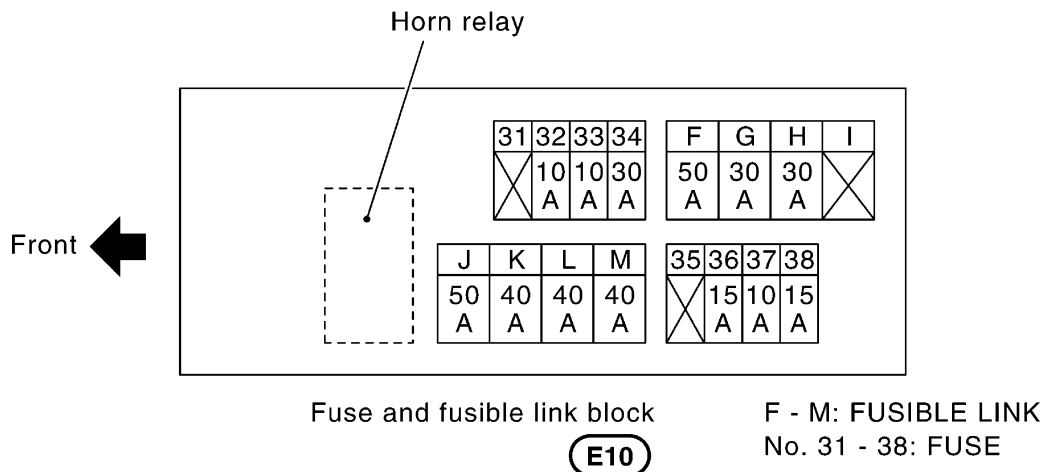
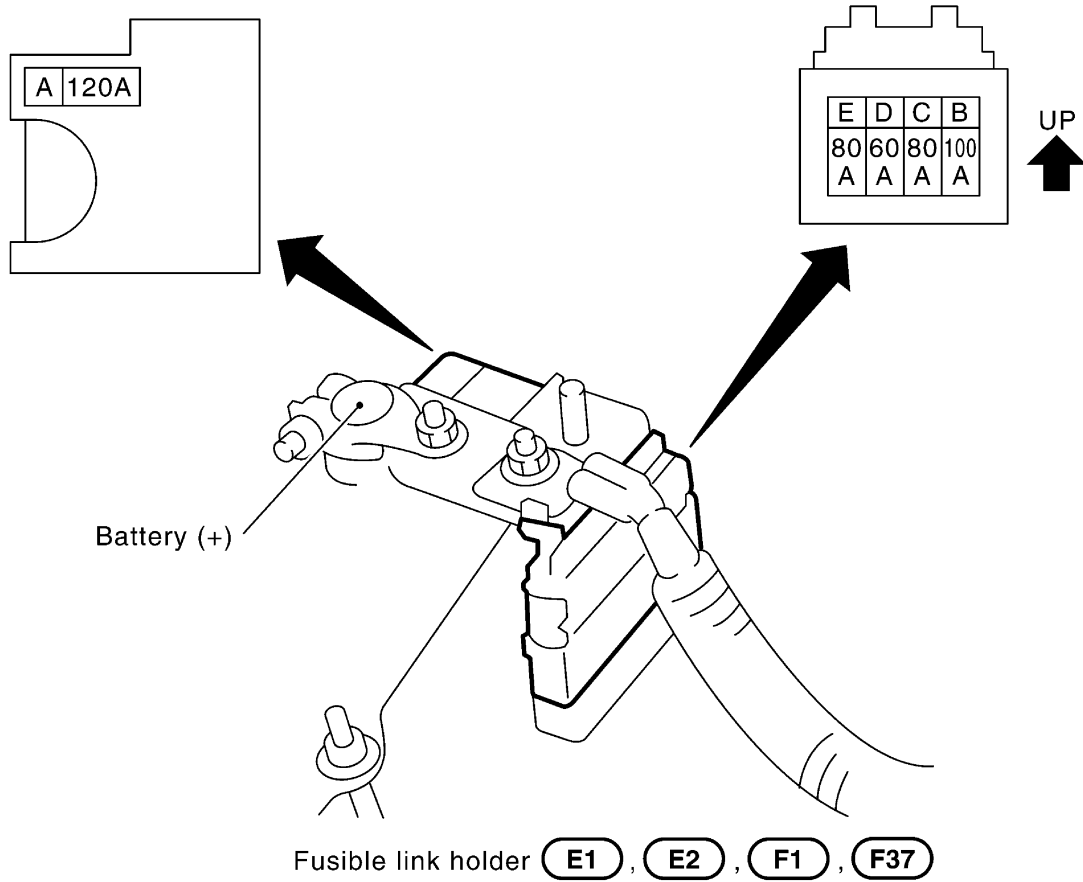
FUSE, FUSIBLE LINK AND RELAY BOX

PFP:24382

AKS007HT

FUSE, FUSIBLE LINK AND RELAY BOX

Terminal Arrangement



CKIA0358E