

SECTION **PG**

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000001547048

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 SR 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 SR 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.

Precaution for Power Generation Variable Voltage Control System

INFOID:000000001547049

CAUTION:

For this model, the battery current sensor that is installed to the negative battery cable measures the charging/discharging current of the battery and performs various engine controls. If an electrical component is connected directly to the negative battery terminal, the current flowing through that component will not be measured by the battery current sensor. This condition may cause a malfunction of the engine control system and battery discharge may occur. Do not connect an electrical component or ground wire directly to the battery terminal.

PREPARATION

< PREPARATION >


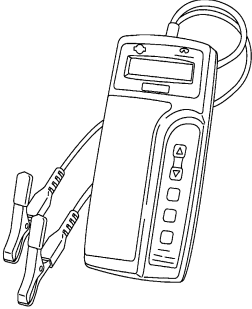
PREPARATION

PREPARATION

Special Service Tool

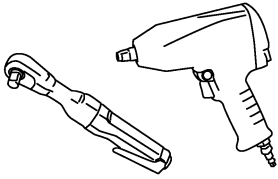
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
<p>— (J-48087) Battery Service Center</p>  <p style="text-align: right;">WKIA5280E</p>	<p>Tests battery. For operating instructions, refer to Technical Service Bulletin and Battery Service Center User Guide.</p>
<p>— (J-44373) Model 620 Battery/Starting/Charging system tester</p>  <p style="text-align: right;">SEL403X</p>	<p>Tests starting and charging systems. For operating instructions, refer to Technical Service Bulletin.</p>

Commercial Service Tool

INFOID:000000001547051

Tool number Tool name	Description
<p>Power tool</p>  <p style="text-align: right;">PBIC0190E</p>	<p>Loosening bolts and nuts</p>

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BATTERY

< BASIC INSPECTION >

BASIC INSPECTION

BATTERY

How to Handle Battery

INFOID:000000001712683

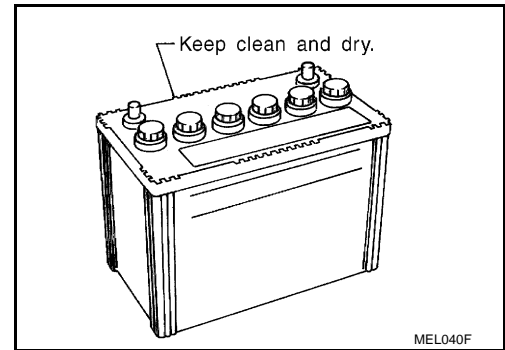
CAUTION:

- If it becomes necessary to start the engine with a booster battery and jumper cables, use a 12-volt booster battery.
- After connecting battery cables, ensure that they are tightly clamped to battery terminals for good contact.
- Never add distilled water through the hole used to check specific gravity.

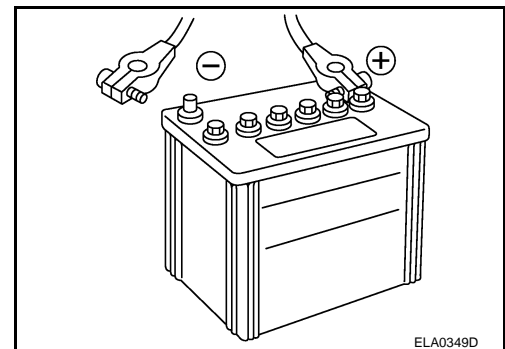
METHODS OF PREVENTING OVER-DISCHARGE

The following precautions must be taken to prevent over-discharging a battery.

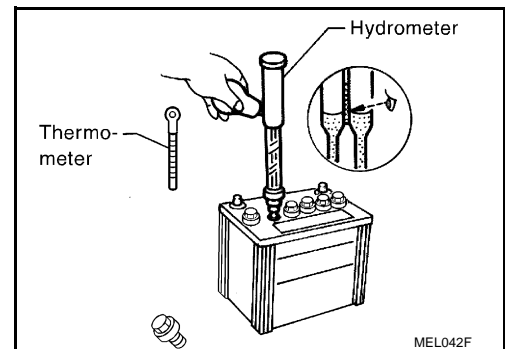
- The battery surface (particularly its top) should always be kept clean and dry.
- The terminal connections should be clean and tight.
- At every routine maintenance, check the electrolyte level. This also applies to batteries designated as "low maintenance" and "maintenance-free".



- When the vehicle is not going to be used over a long period of time, disconnect the battery cable from the negative terminal. (If the vehicle has an extended storage switch, turn it off.)



- Check the charge condition of the battery. Periodically check the specific gravity of the electrolyte. Keep a close check on charge condition to prevent over-discharge.



CHECKING ELECTROLYTE LEVEL

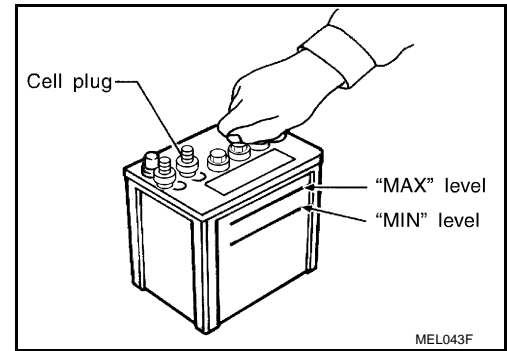
WARNING:

Never allow battery fluid to come in contact with skin, eyes, fabrics, or painted surfaces. After touching a battery, never touch or rub your eyes until you have thoroughly washed your hands. If acid contacts eyes, skin or clothing, immediately flush with water for 15 minutes and seek medical attention.

BATTERY

< BASIC INSPECTION >

- Remove the cell plug using a suitable tool.
- Add distilled water up to the MAX level.

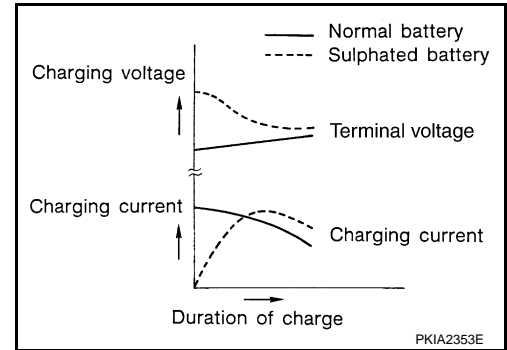


Sulphation

A battery will be completely discharged if it is left unattended for a long time and the specific gravity will become less than 1.100. This may result in sulphation on the cell plates.

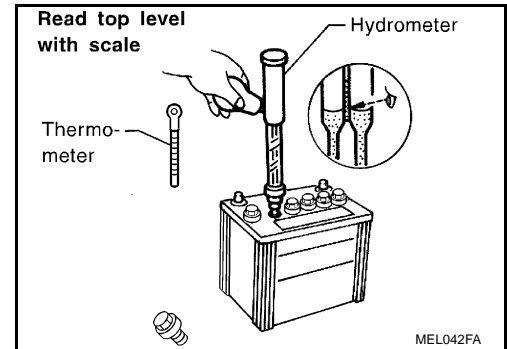
To determine if a battery has been “sulphated”, note its voltage and current when charging it. As shown in the figure, less current and higher voltage are observed in the initial stage of charging sulphated batteries.

A sulphated battery may sometimes be brought back into service by means of a long, slow charge, 12 hours or more, followed by a battery capacity test.



SPECIFIC GRAVITY CHECK

1. Read hydrometer and thermometer indications at eye level.
2. Use the chart below to correct your hydrometer reading according to electrolyte temperature.



Hydrometer Temperature Correction

Battery electrolyte temperature [°C (°F)]	Add to specific gravity reading
71 (160)	0.032
66 (150)	0.028
60 (140)	0.024
54 (130)	0.020
49 (120)	0.016
43 (110)	0.012
38 (100)	0.008
32 (90)	0.004
27 (80)	0
21 (70)	-0.004
16 (60)	-0.008
10 (50)	-0.012
4 (40)	-0.016
-1 (30)	-0.020
-7 (20)	-0.024

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BATTERY

< BASIC INSPECTION >

Battery electrolyte temperature [°C (°F)]	Add to specific gravity reading
-12 (10)	-0.028
-18 (0)	-0.032

Corrected specific gravity	Approximate charge condition
1.260 - 1.280	Fully charged
1.230 - 1.250	3/4 charged
1.200 - 1.220	1/2 charged
1.170 - 1.190	1/4 charged
1.140 - 1.160	Almost discharged
1.110 - 1.130	Completely discharged

CHARGING THE BATTERY

CAUTION:

- Never “quick charge” a fully discharged battery.
- Keep the battery away from open flame while it is being charged.
- When connecting the charger, connect the leads first, then turn on the charger. Never turn on the charger first, as this may cause a spark.
- If battery electrolyte temperature rises above 55 °C (131 °F), stop charging. Always charge battery at a temperature below 55 °C (131 °F).

Charging Rates

Amps	Time
50	1 hour
25	2 hours
10	5 hours
5	10 hours

Do not charge at more than 50 ampere rate.

NOTE:

The ammeter reading on your battery charger will automatically decrease as the battery charges. This indicates that the voltage of the battery is increasing normally as the state of charge improves. The charging amps indicated above refer to initial charge rate.

- If, after charging, the specific gravity of any two cells varies more than 0.050, the battery should be replaced.

Work Flow

INFOID:000000001712684

TROUBLE DIAGNOSIS WITH BATTERY SERVICE CENTER

For battery testing, use Battery Service Center (J-48087). For details and operating instructions, refer to Technical Service Bulletin and/or Battery Service Center User Guide.

POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

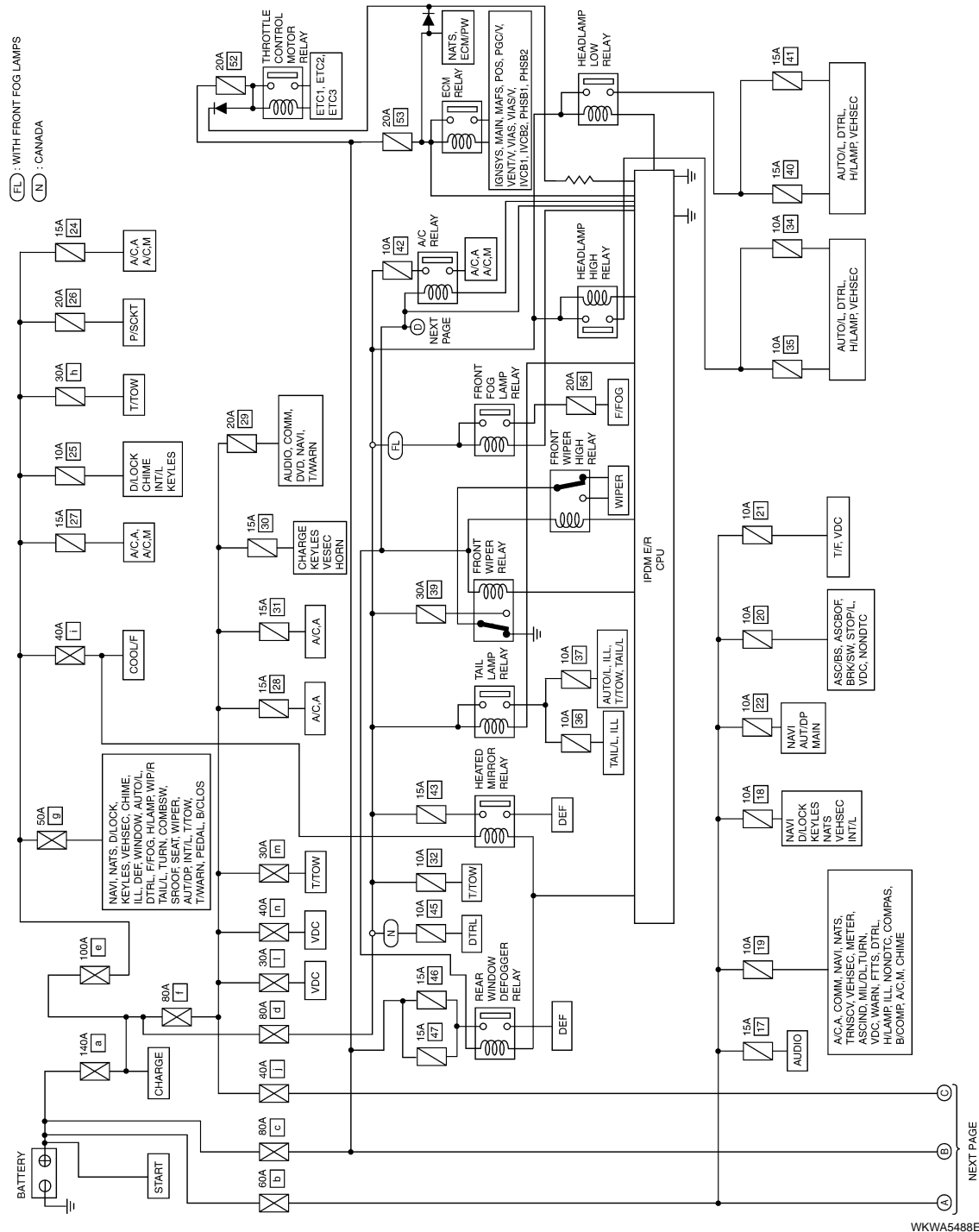
COMPONENT DIAGNOSIS

POWER SUPPLY ROUTING CIRCUIT

Schematic

INFOID:000000001731006

For detailed ground distribution, refer to [PG-21, "Ground Distribution"](#).



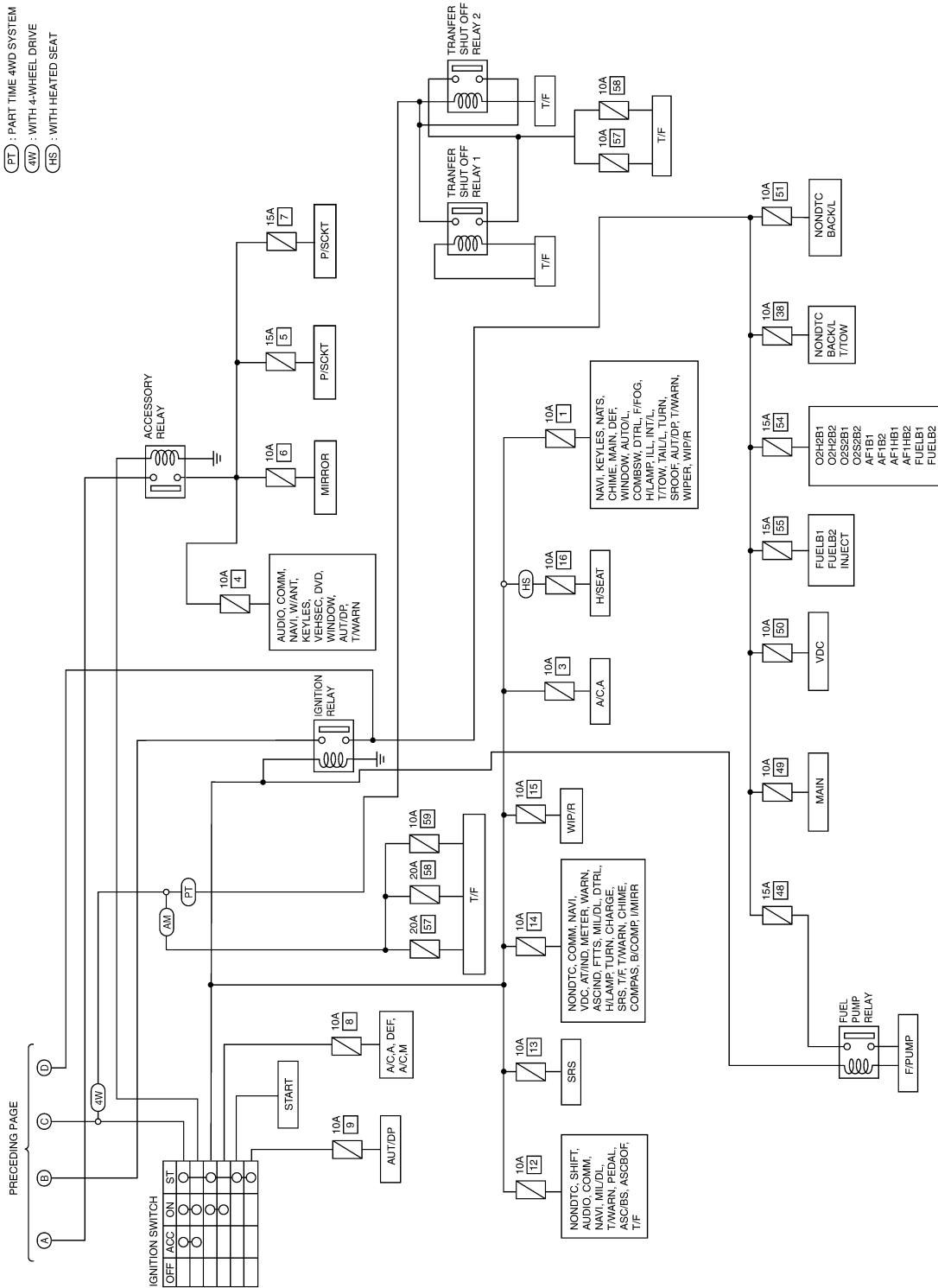
WKWA5488E

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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

- (AM) : ALL-MODE 4WD SYSTEM
- (PT) : PART TIME 4WD SYSTEM
- (4W) : WITH 4-WHEEL DRIVE
- (HS) : WITH HEATED SEAT



WKWA5489E

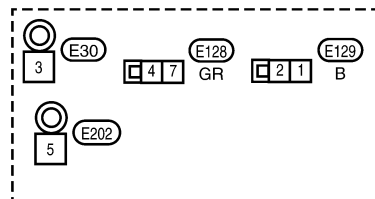
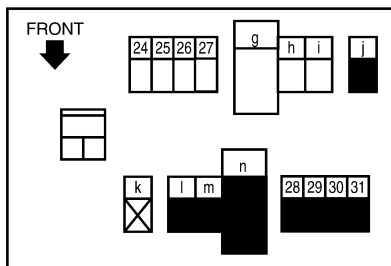
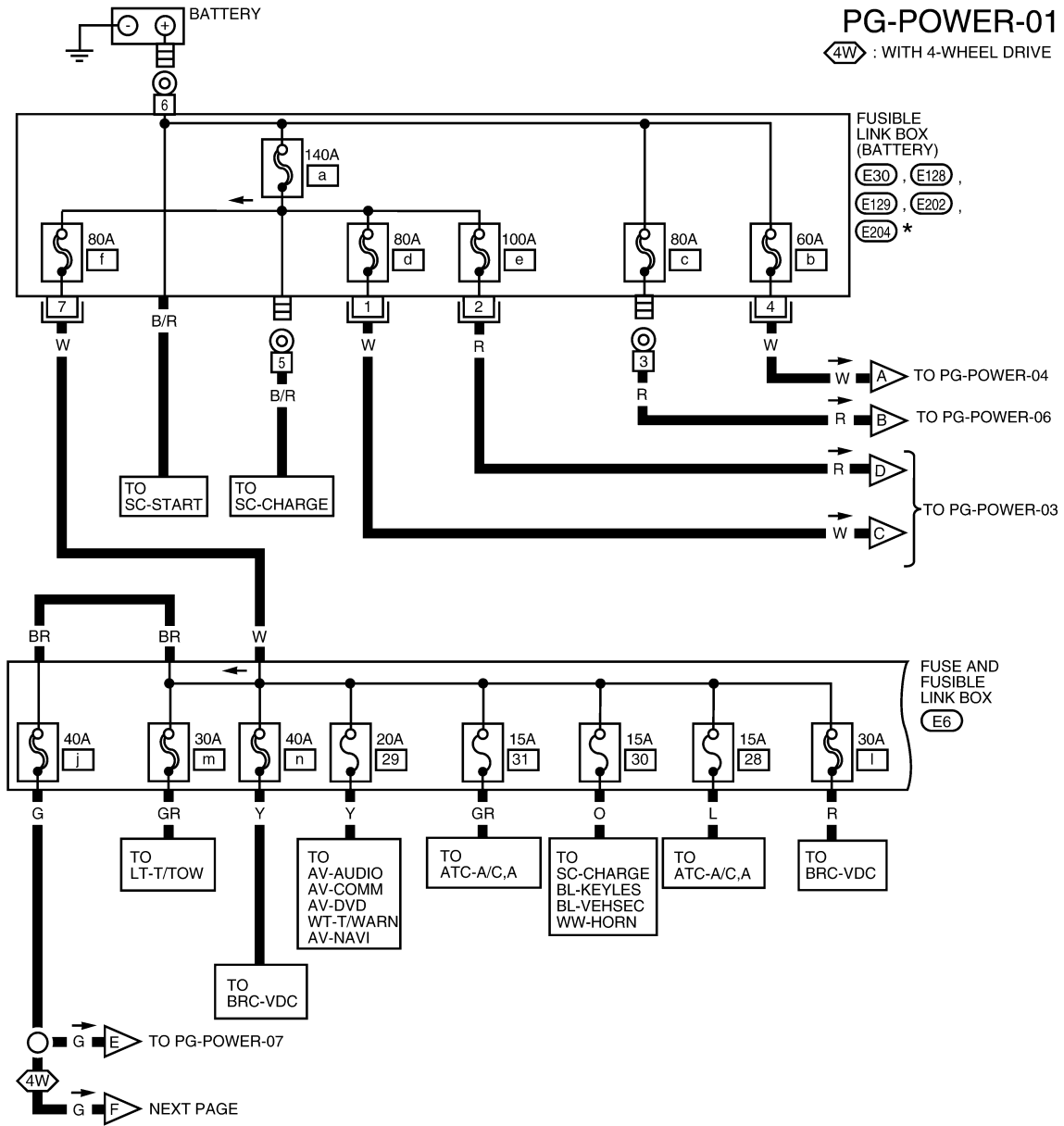
POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Wiring Diagram - POWER -

INFOID:000000001731007

BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION



* (E204) : IS AN INTEGRAL PART OF FUSIBLE LINK BOX (BATTERY)

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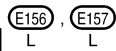
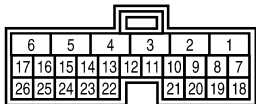
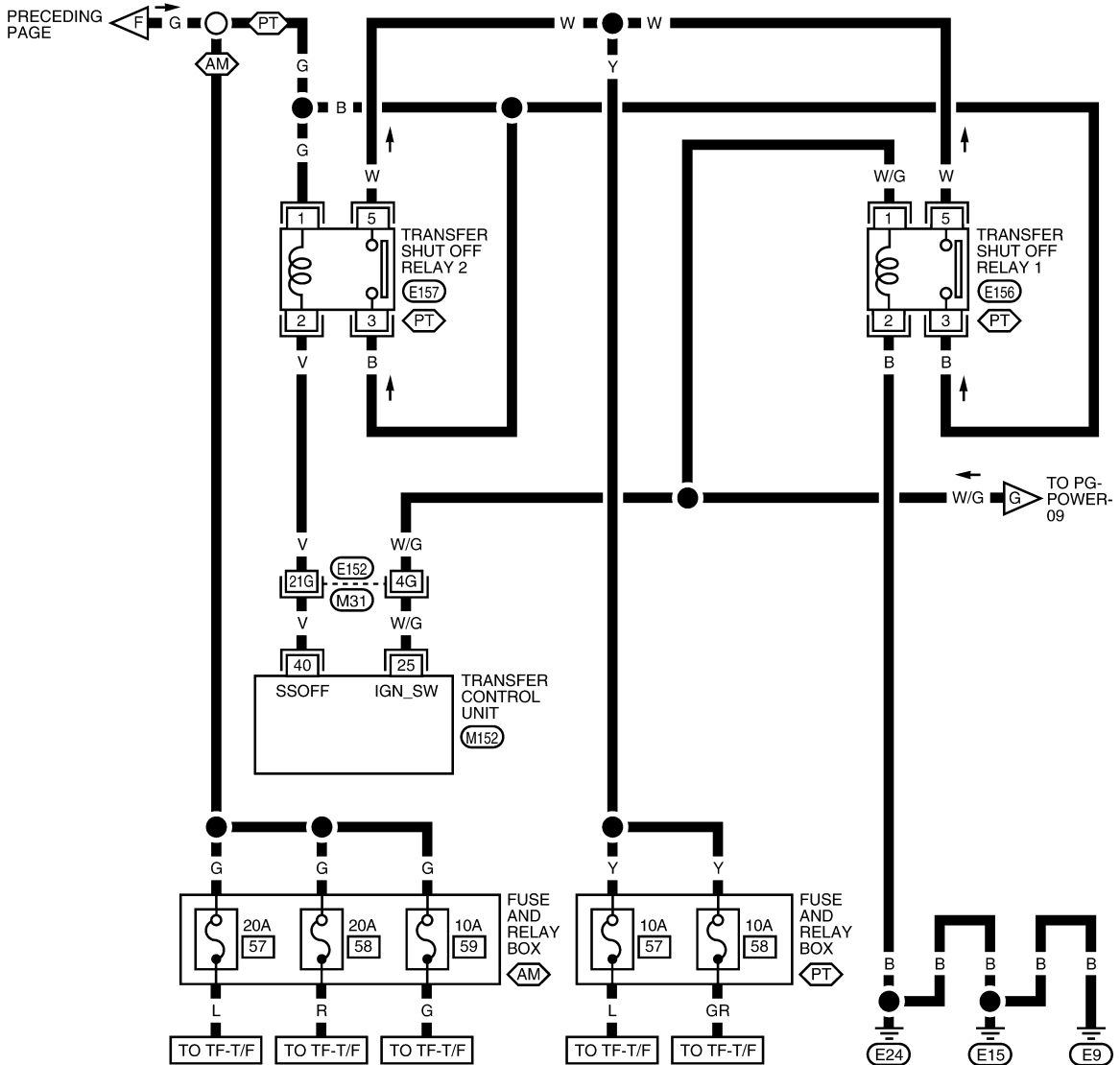
POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

PG-POWER-02

AM : ALL-MODE 4WD SYSTEM

PT : PART TIME 4WD SYSTEM



REFER TO THE FOLLOWING.

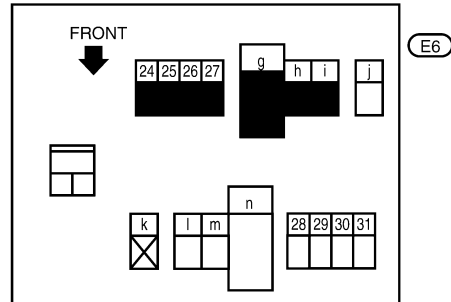
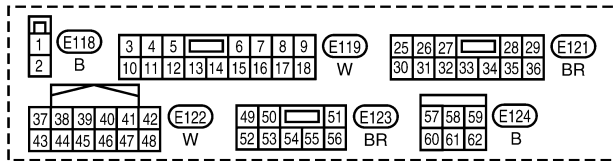
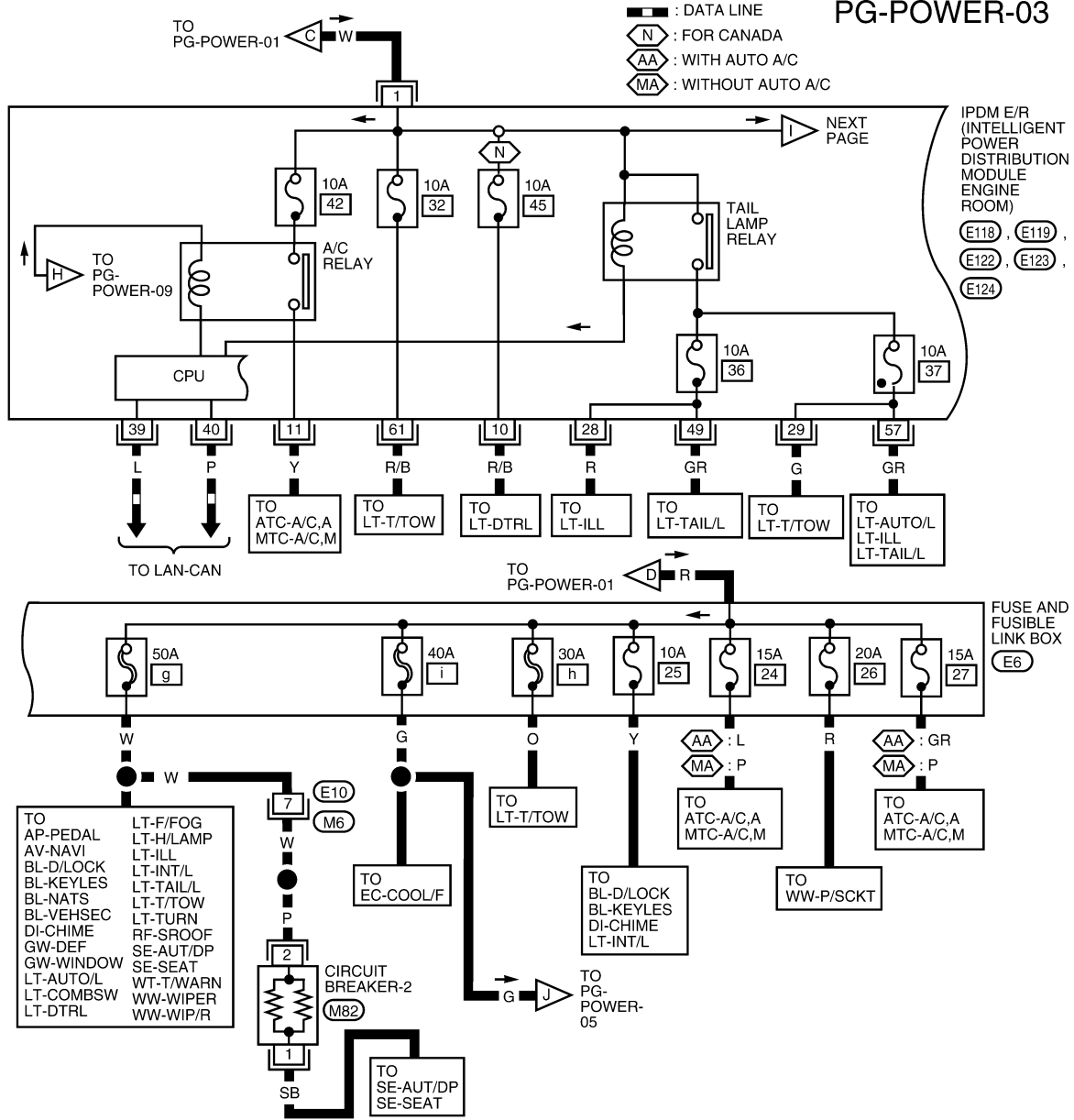
M31 - SUPER MULTIPLE JUNCTION (SMJ)

WKWA5491E

POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

PG-POWER-03



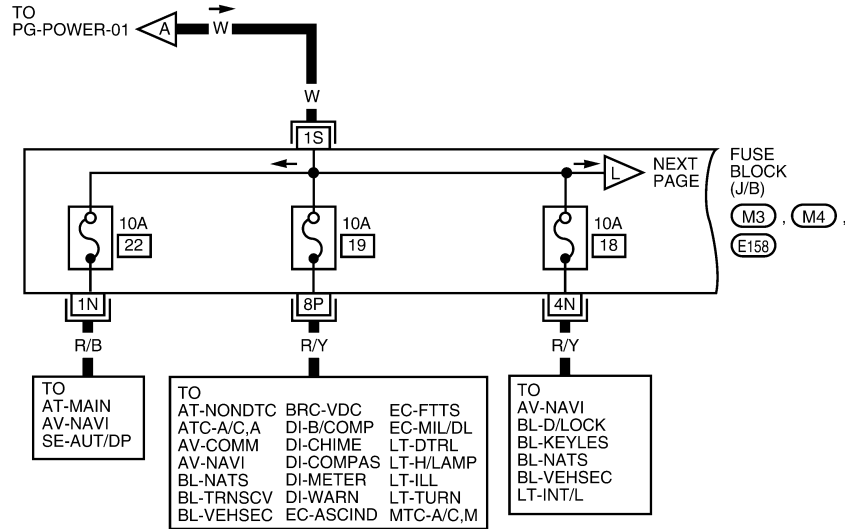
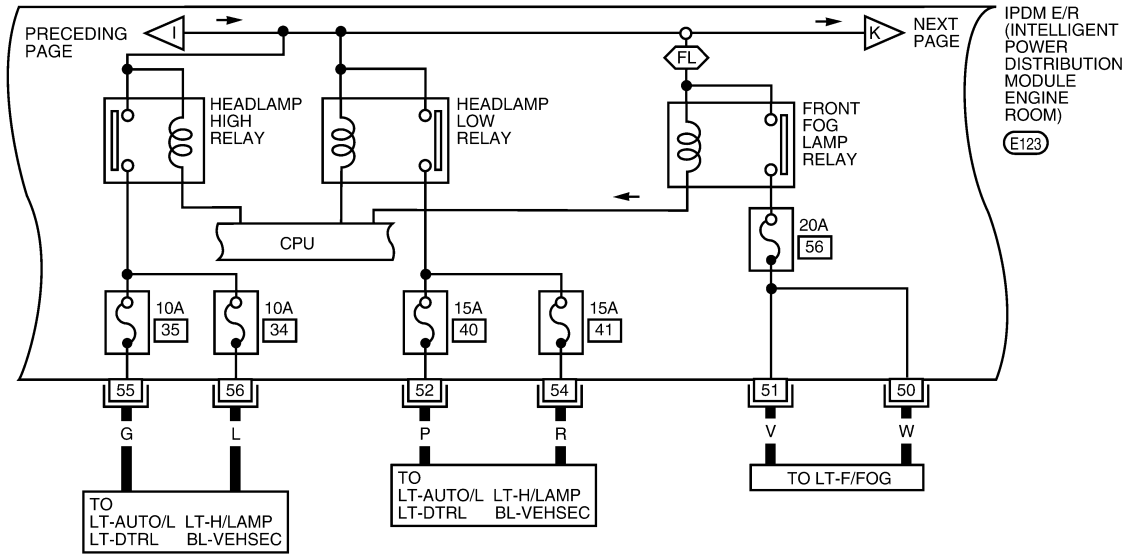
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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

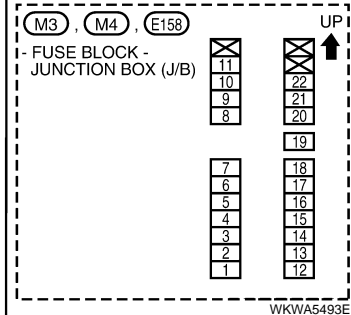
PG-POWER-04

(FL) : WITH FRONT FOG LAMPS



49	50	51	(E123)
52	53	54	55
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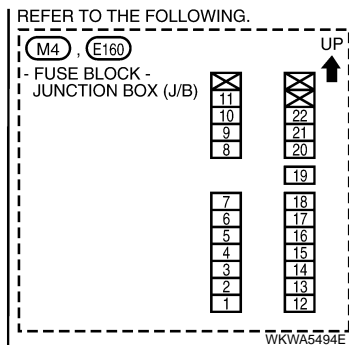
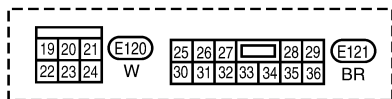
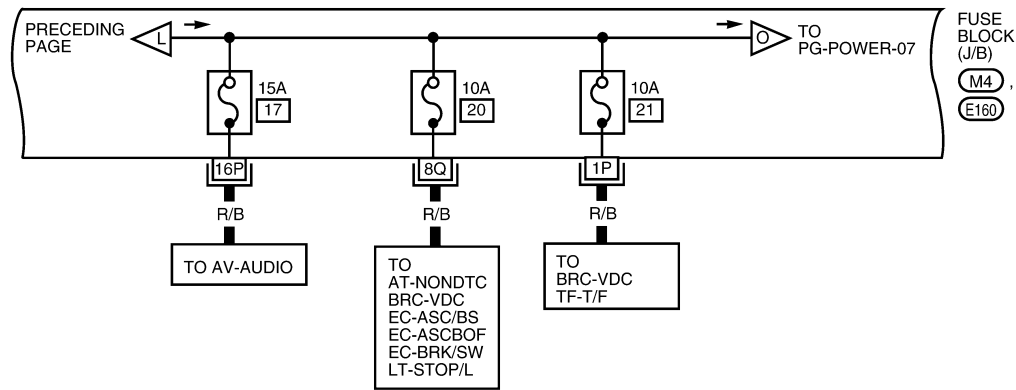
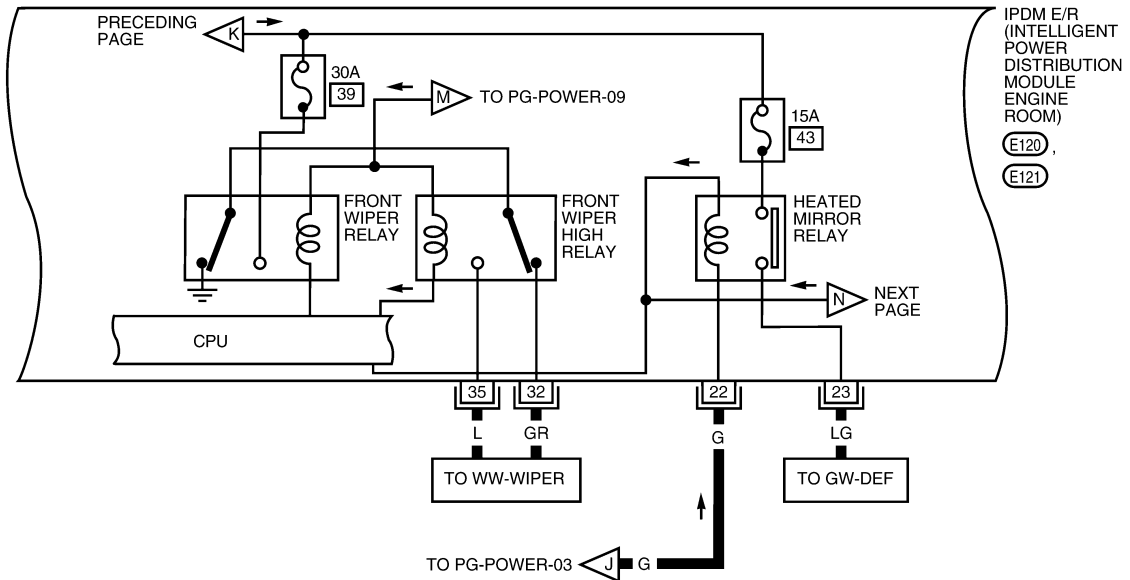
REFER TO THE FOLLOWING.



POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

PG-POWER-05



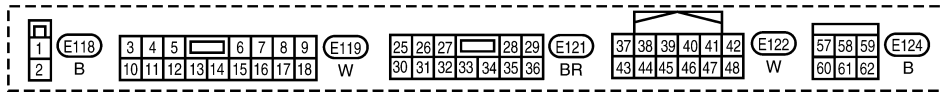
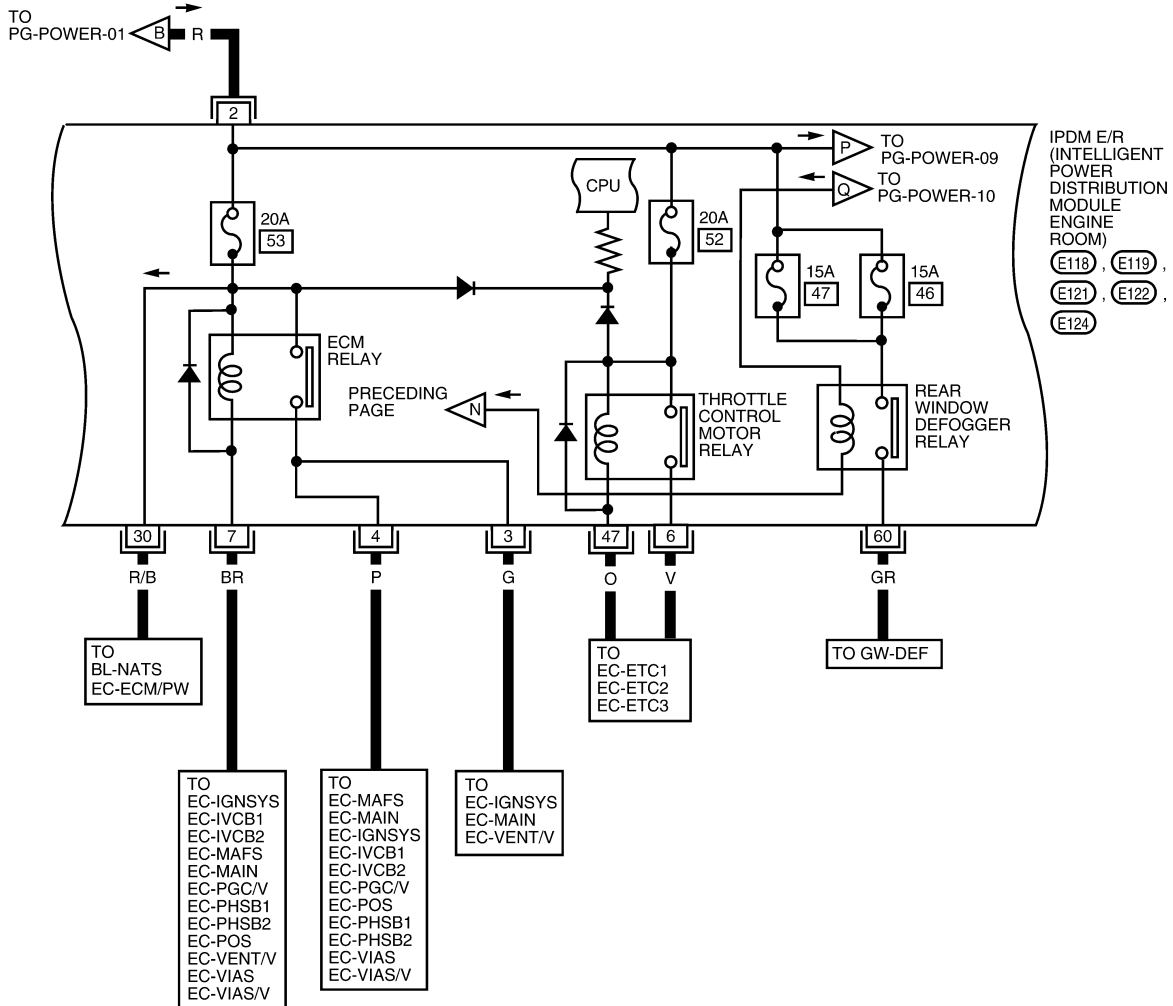
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POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

PG-POWER-06



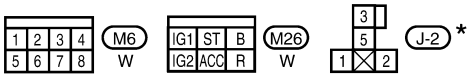
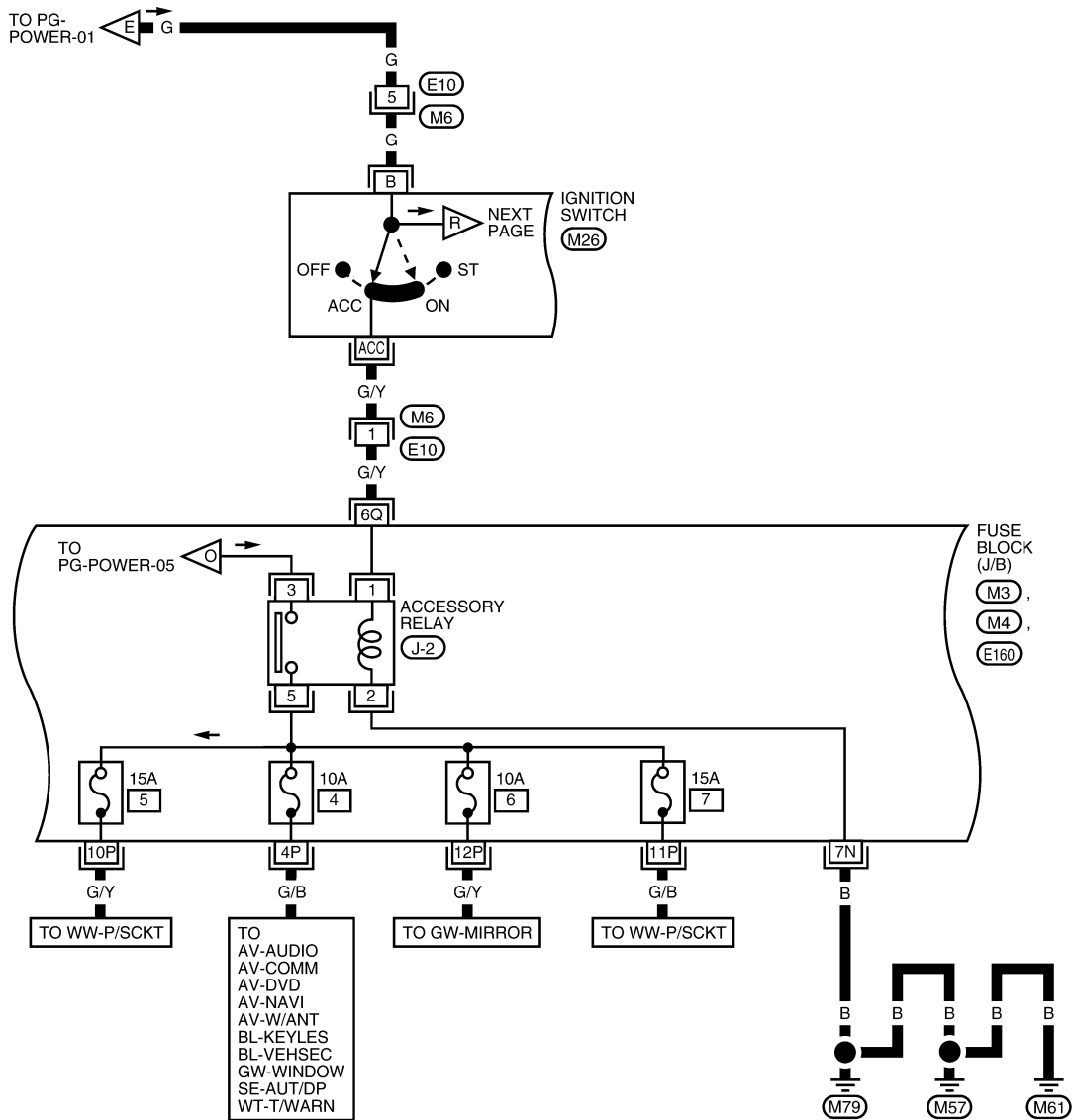
WKWA5495E

POWER SUPPLY ROUTING CIRCUIT

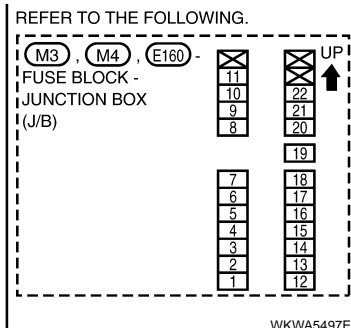
< COMPONENT DIAGNOSIS >

ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

PG-POWER-07



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



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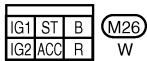
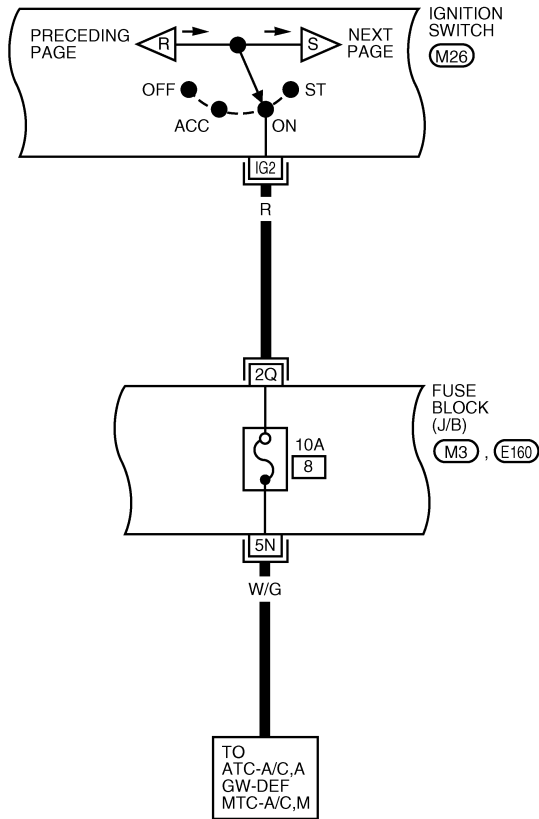
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POWER SUPPLY ROUTING CIRCUIT

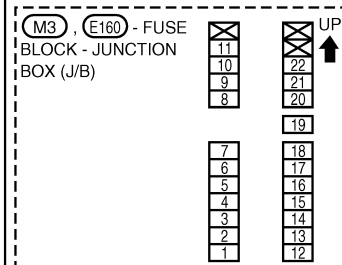
< COMPONENT DIAGNOSIS >

IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-08



REFER TO THE FOLLOWING.



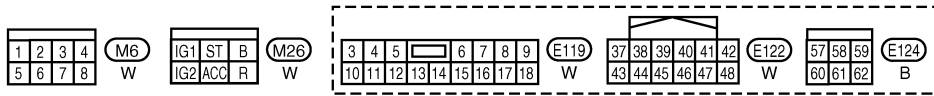
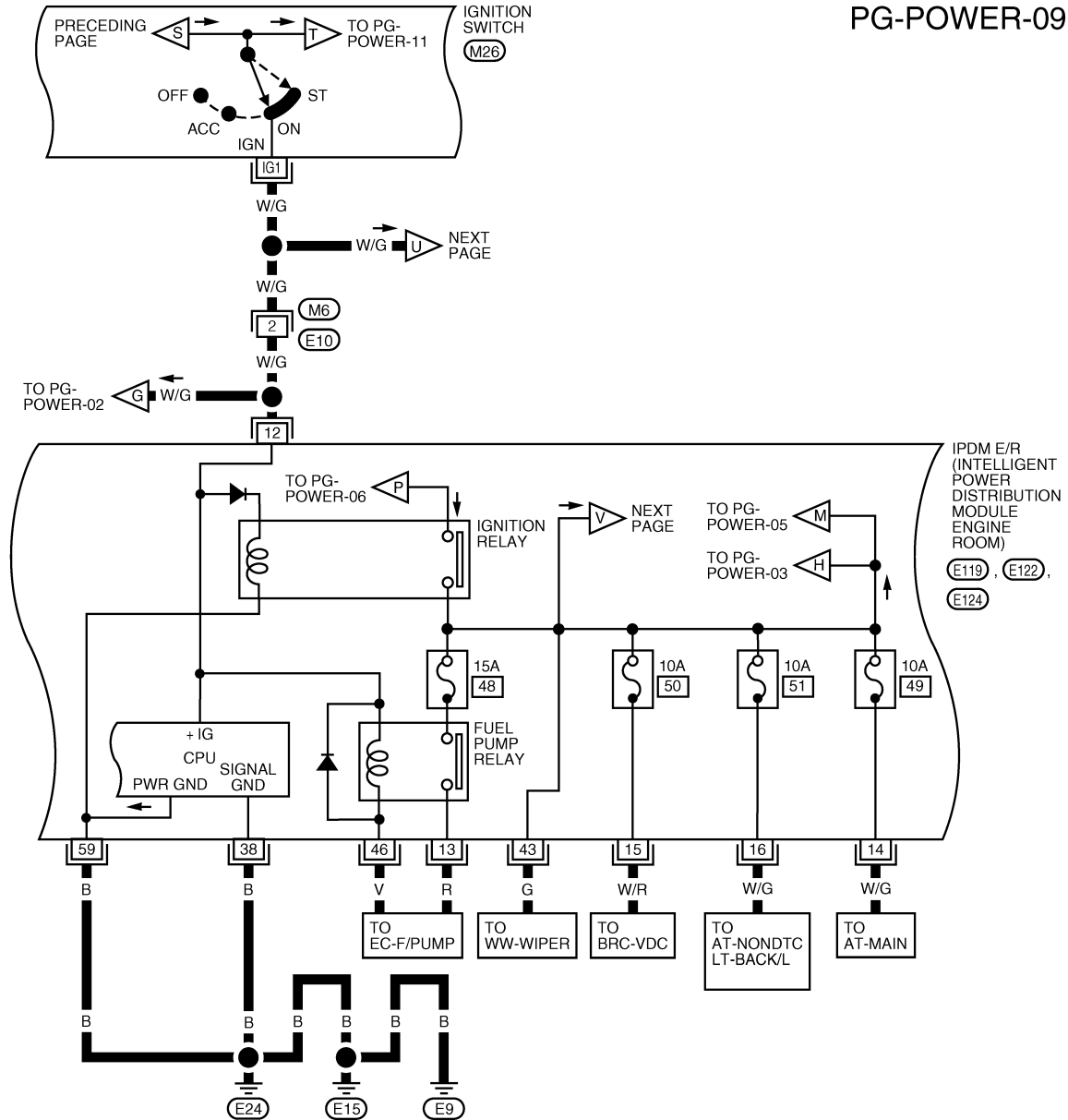
WKWA4410E

POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

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

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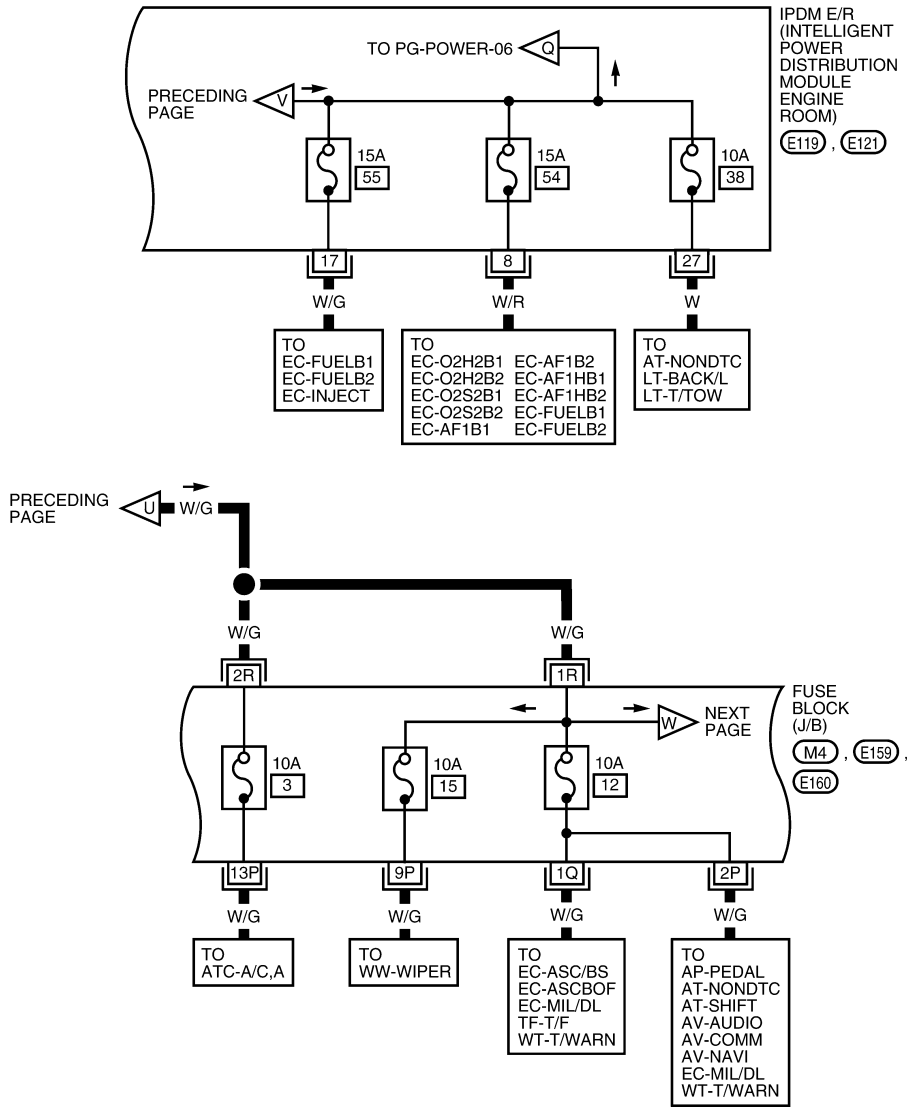
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WKWA4411E

POWER SUPPLY ROUTING CIRCUIT

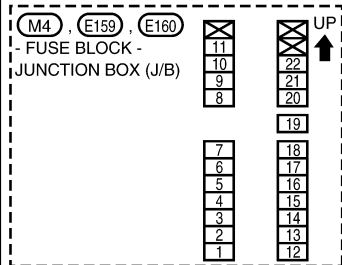
< COMPONENT DIAGNOSIS >

PG-POWER-10



3	4	5	6	7	8	9	(E119)	25	26	27	28	29	(E121)				
10	11	12	13	14	15	16	17	18	W	30	31	32	33	34	35	36	BR

REFER TO THE FOLLOWING.



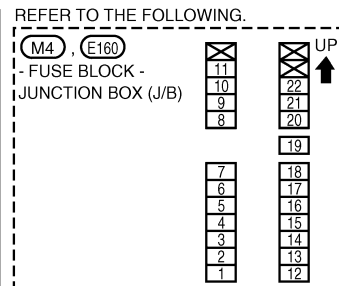
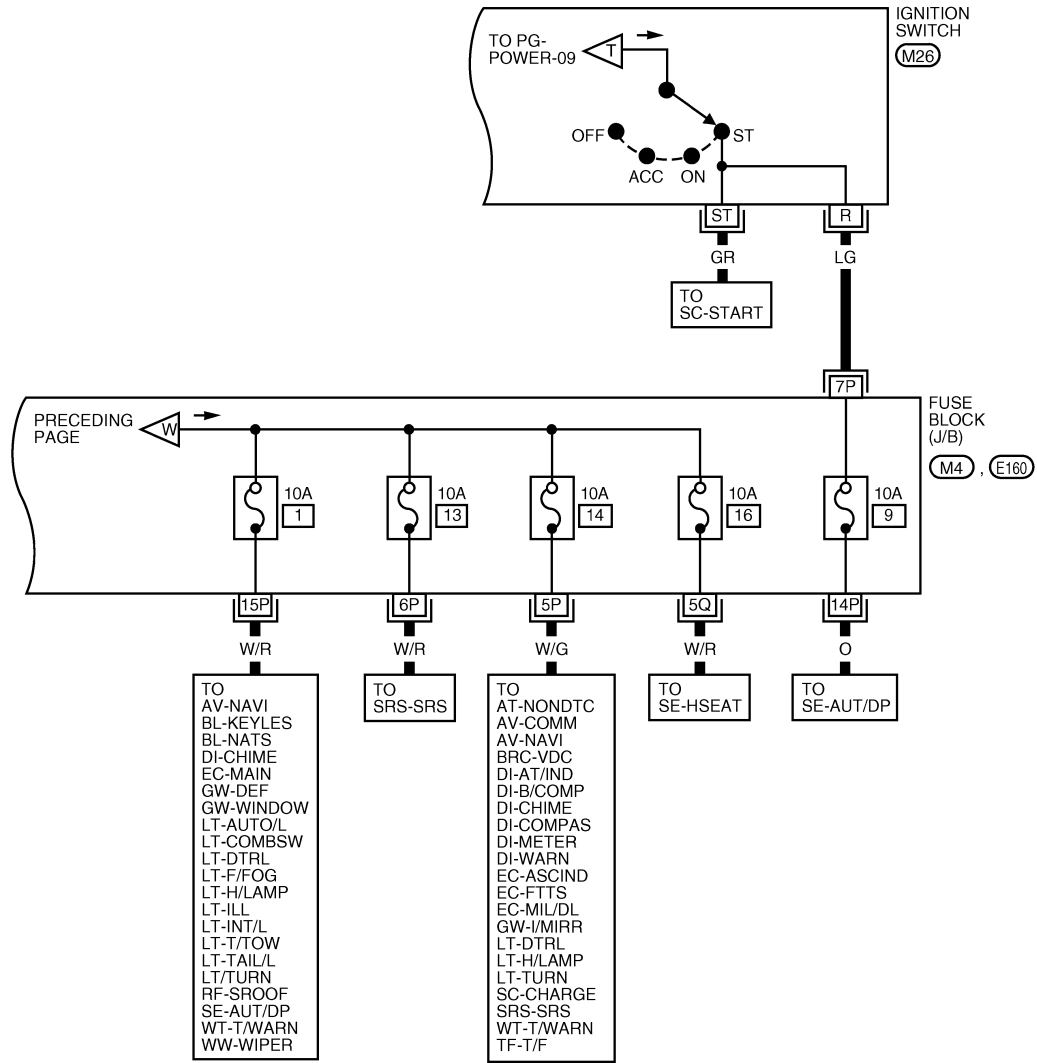
WKWA5496E

POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

IGNITION POWER SUPPLY — IGNITION SWITCH IN START

PG-POWER-11



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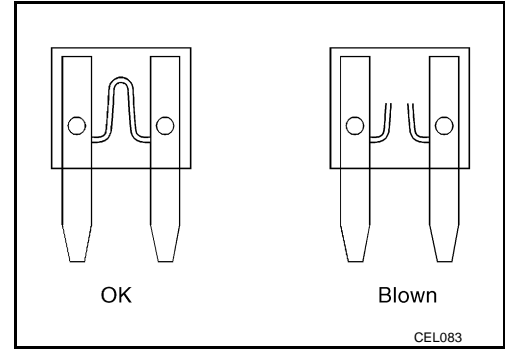
POWER SUPPLY ROUTING CIRCUIT

< COMPONENT DIAGNOSIS >

Fuse

INFOID:000000001731008

- 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

INFOID:000000001731009

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.

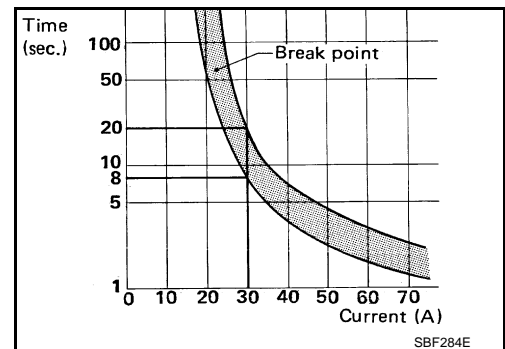
Circuit Breaker (Built Into BCM)

INFOID:000000001731010

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 windows
- Power sunroof



GROUND CIRCUIT

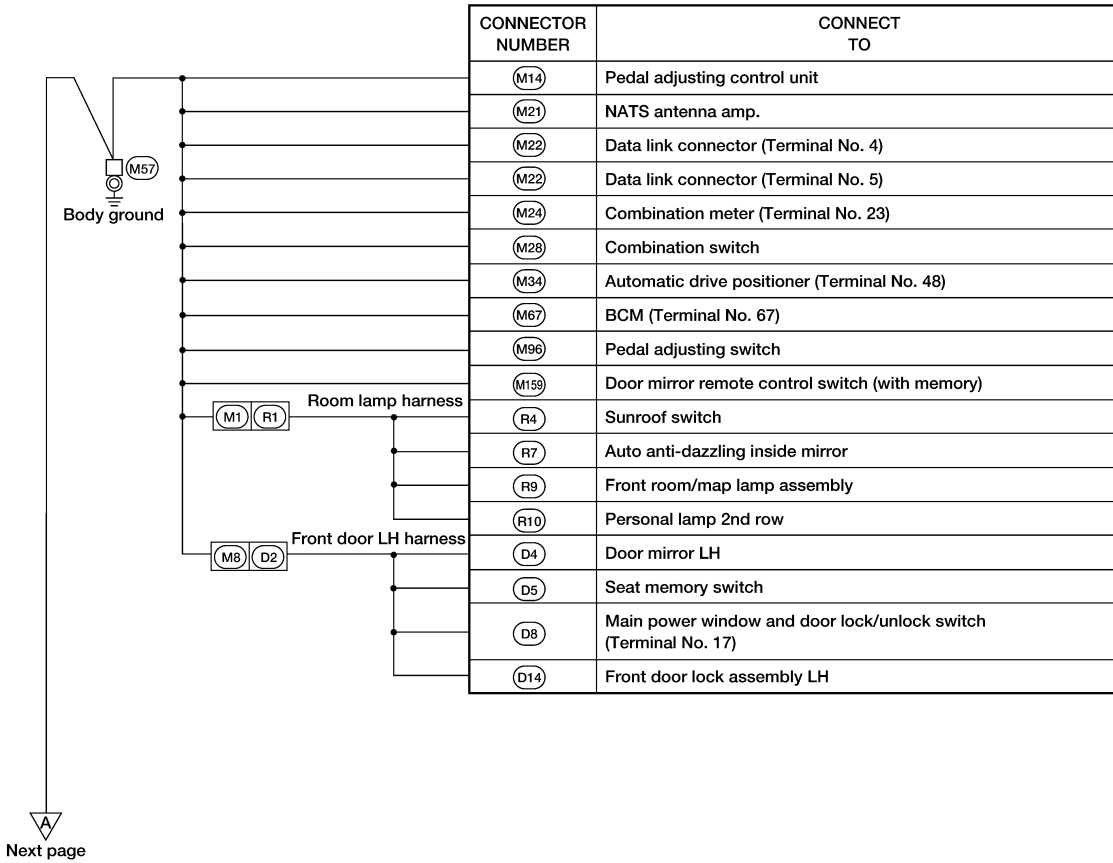
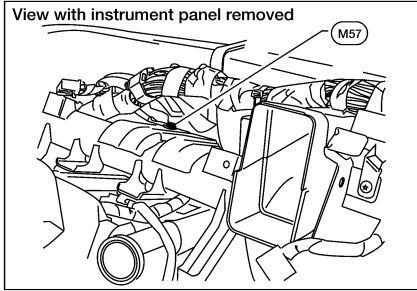
< COMPONENT DIAGNOSIS >

GROUND CIRCUIT

Ground Distribution

INFOID:000000001731011

Main Harness



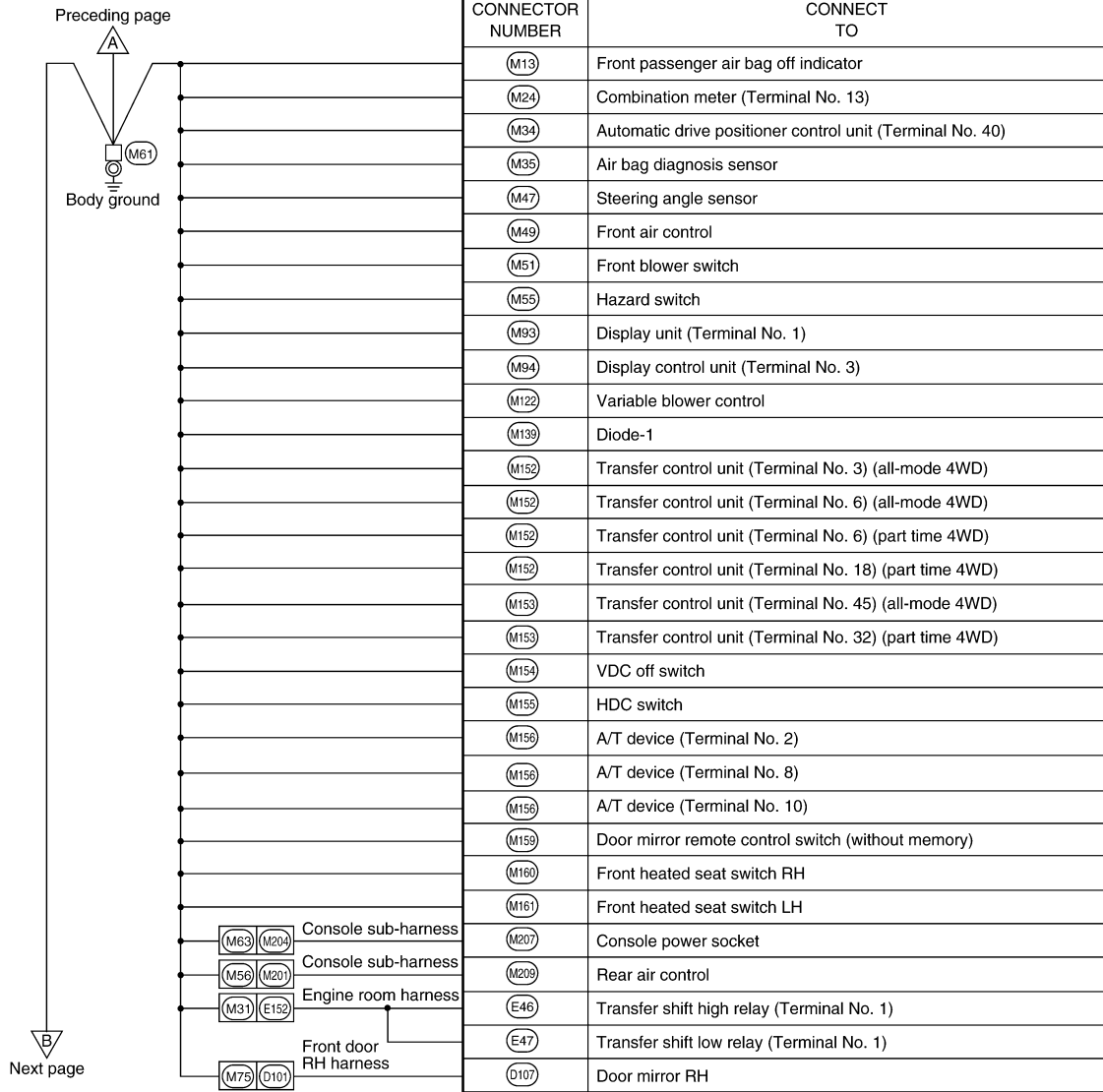
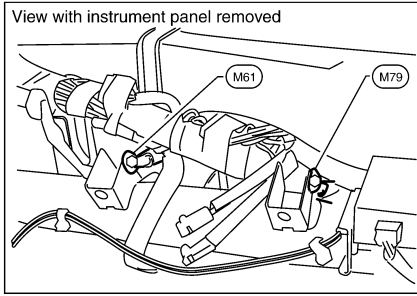
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WKIA5857E

GROUND CIRCUIT

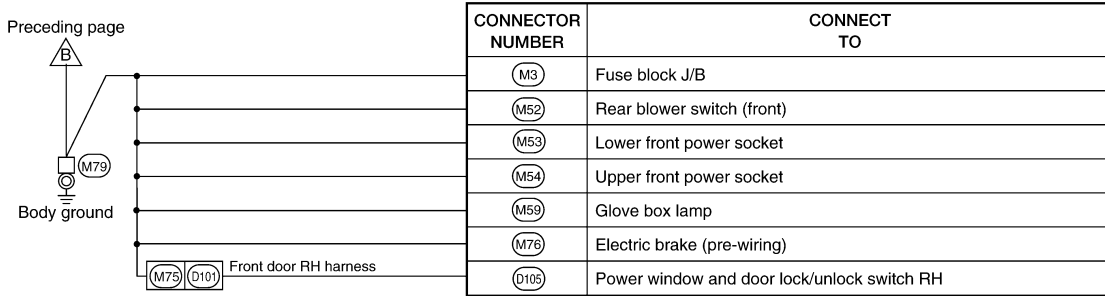
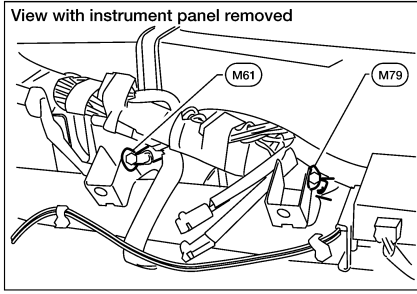
< COMPONENT DIAGNOSIS >



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GROUND CIRCUIT

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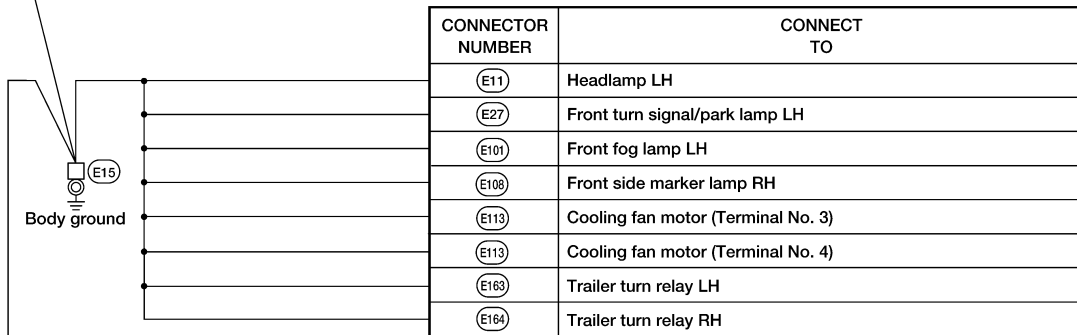
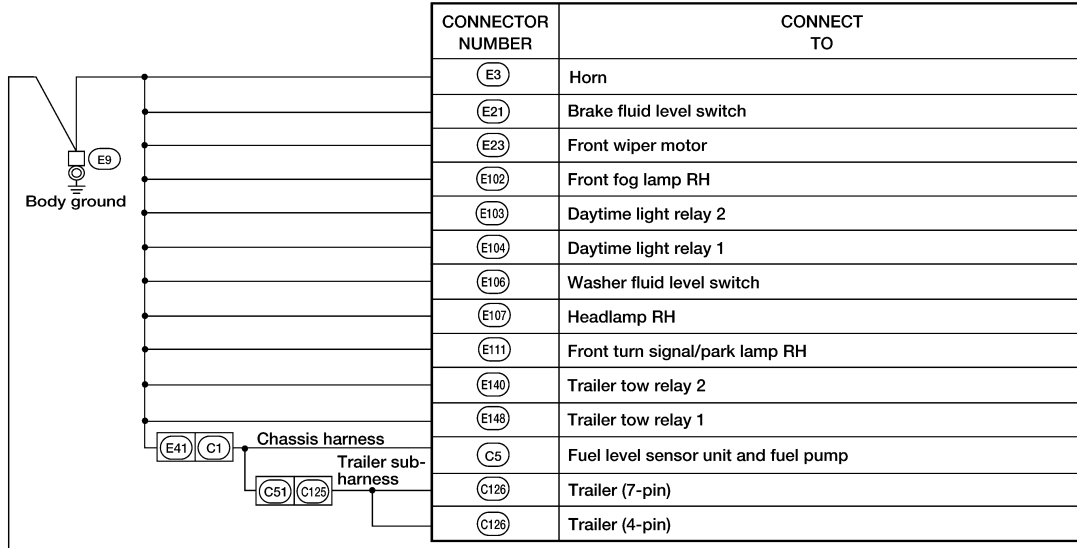
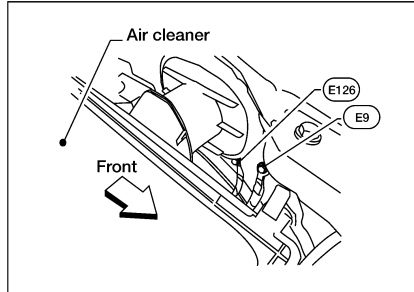
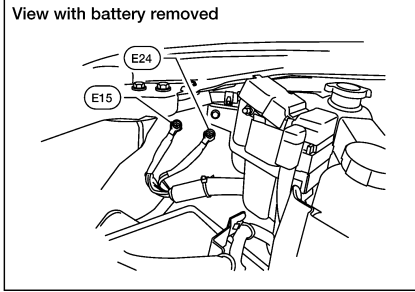
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WKIA3568E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Engine Room Harness

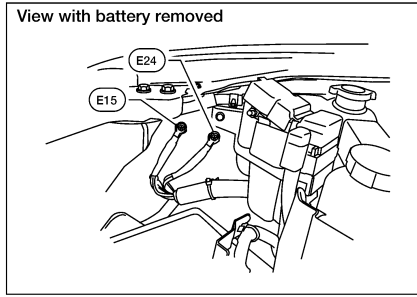


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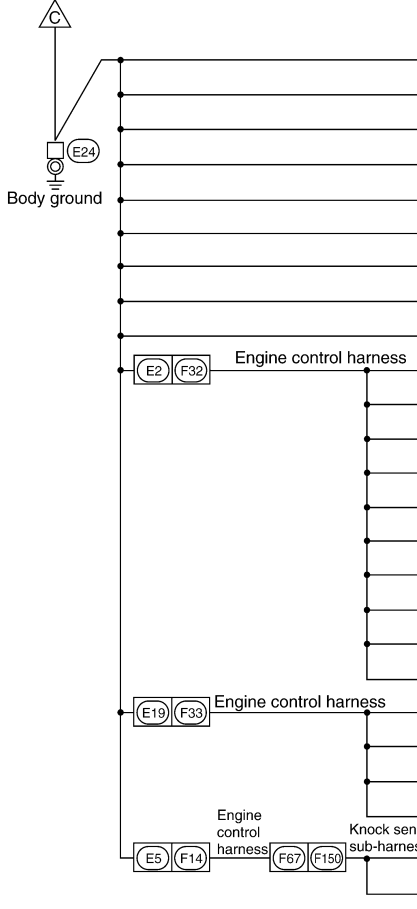
WKIA5859E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >



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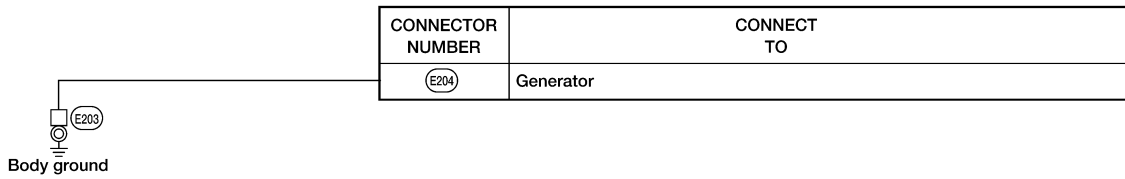
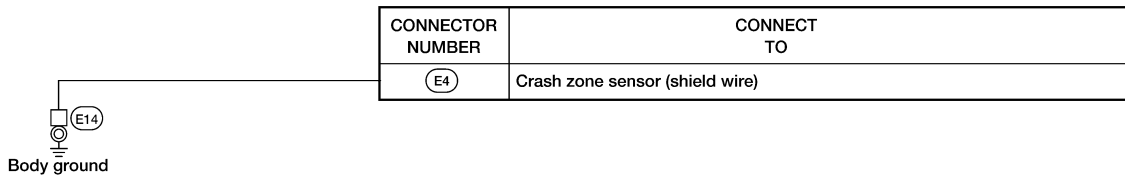
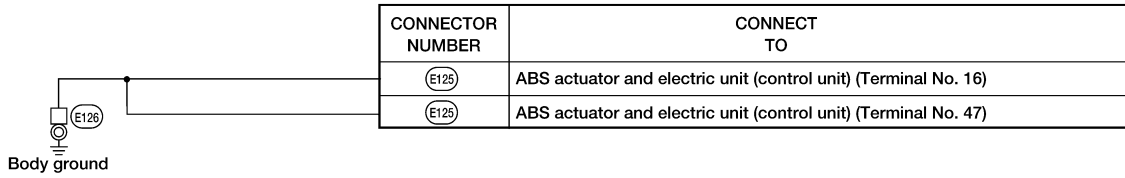
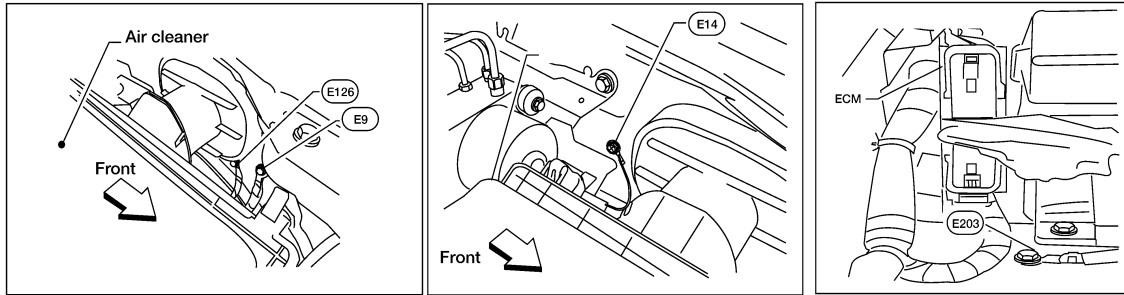
CONNECTOR NUMBER	CONNECT TO
(E16)	ECM (Terminal No. 115)
(E16)	ECM (Terminal No. 116)
(E46)	Transfer shift high relay (Terminal No. 4)
(E47)	Transfer shift low relay (Terminal No. 4)
(E54)	Front blower motor relay
(E56)	Transfer terminal cord assembly (all-mode 4WD) (Terminal No. 19)
(E122)	IPDM E/R (Terminal No. 38)
(E124)	IPDM E/R (Terminal No. 59)
(E156)	Transfer shut off relay 1
(F11)	Crankshaft position sensor
(F23)	Camshaft position sensor (PHASE) (bank 2)
(F50)	Electric throttle control actuator (shield wire)
(F54)	ECM (Terminal No. 1)
(F55)	ATP switch (all-mode 4WD)
(F57)	Transfer motor
(F58)	Transfer control device (all-mode 4WD)
(F59)	Wait detection switch (all-mode 4WD)
(F60)	Neutral 4LO switch (all-mode 4WD)
(F66)	Camshaft position sensor (PHASE) (bank 1)
(F55)	ATP switch (part time 4WD)
(F58)	Transfer control device (part time 4WD)
(F59)	Wait detection switch (part time 4WD)
(F60)	4LO switch (part time 4WD)
(F151)	Knock sensor (bank 1) (shield wire)
(F152)	Knock sensor (bank 2) (shield wire)

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WKIA5860E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

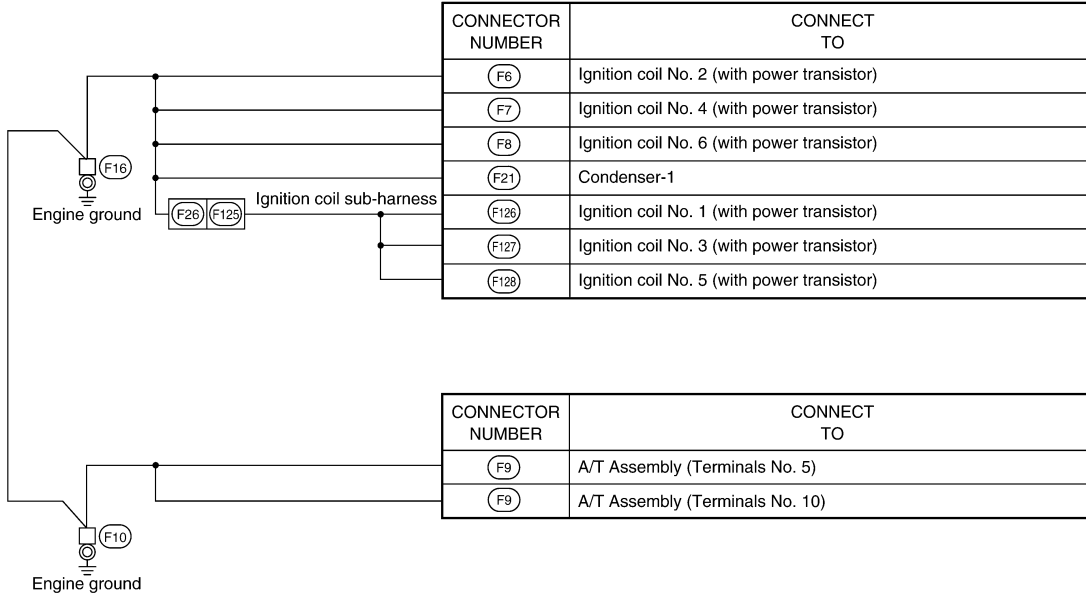
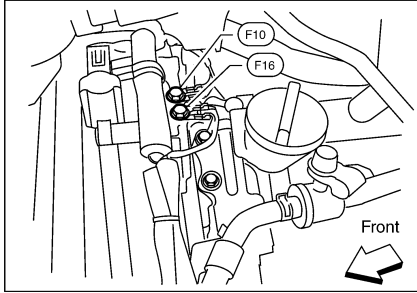


WKIA5861E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Engine Control Harness



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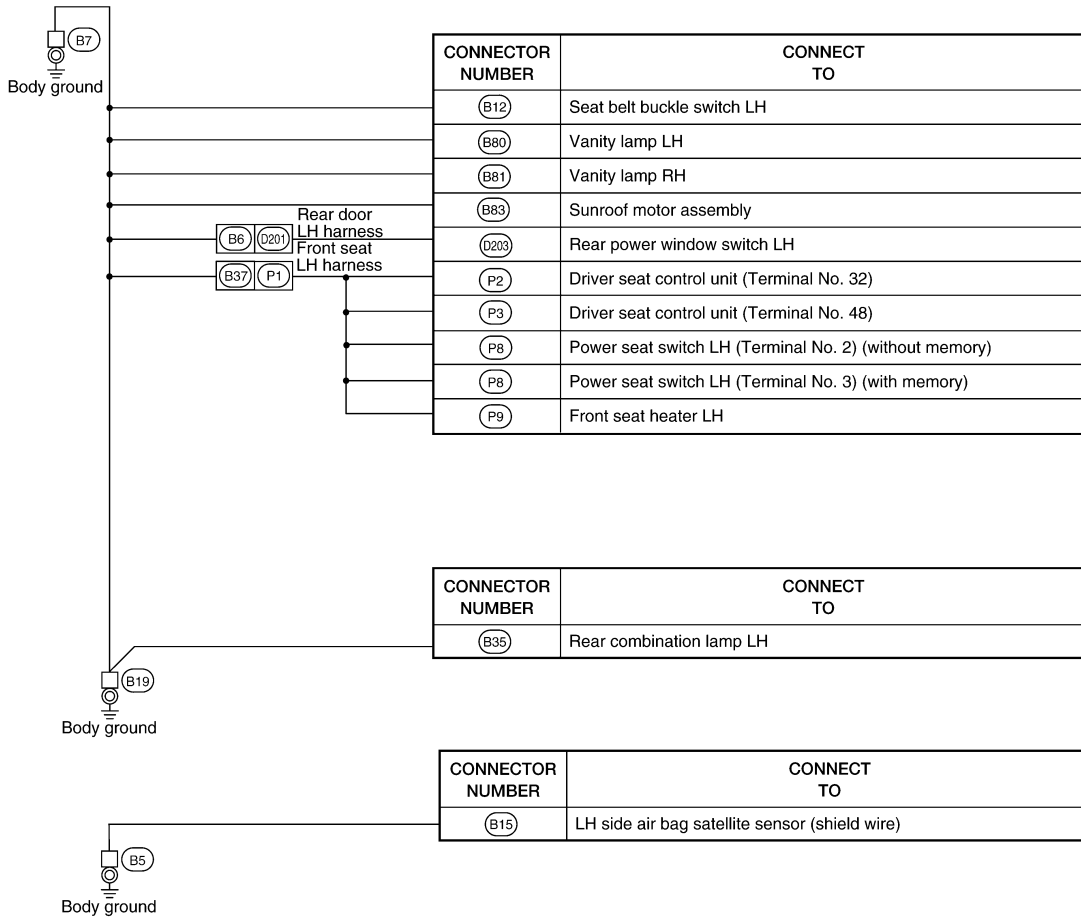
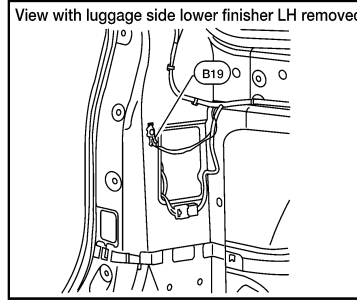
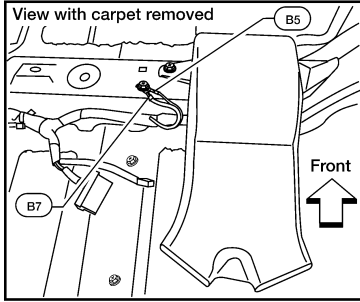
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WKIA5862E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Body Harness

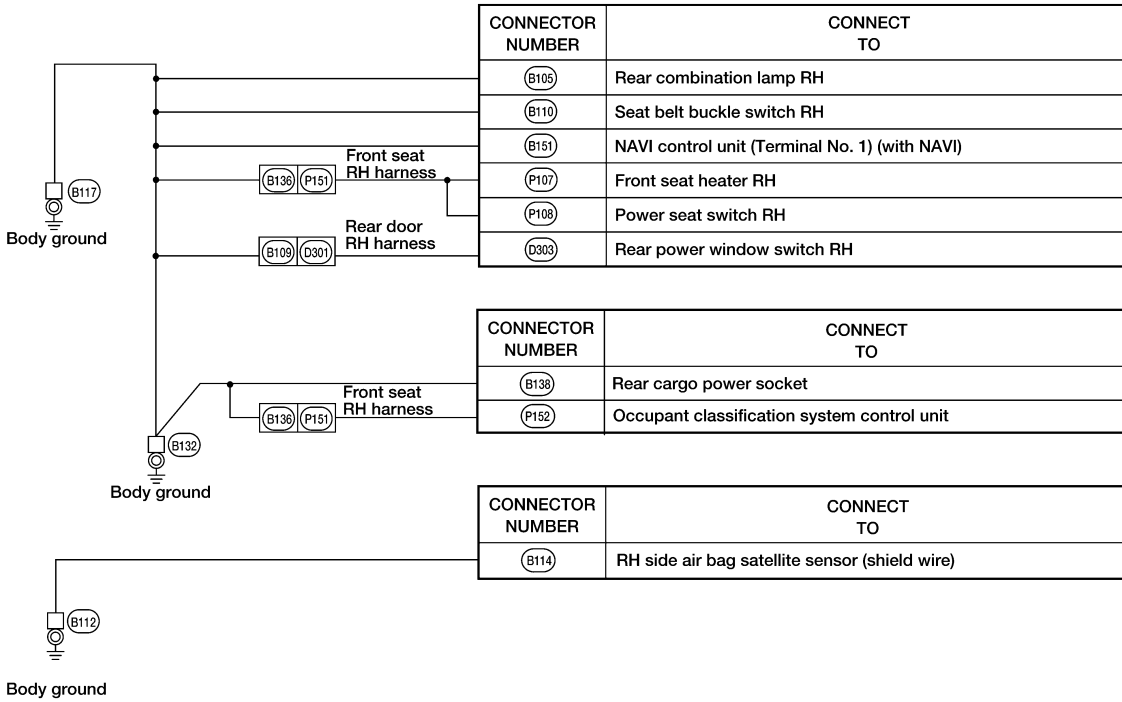
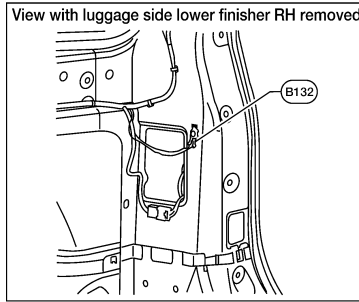
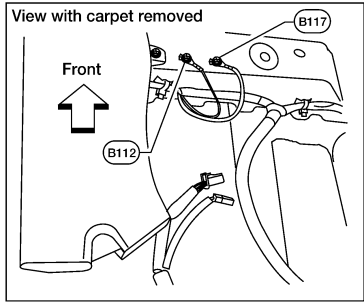


WKIA5863E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Body No. 2 Harness



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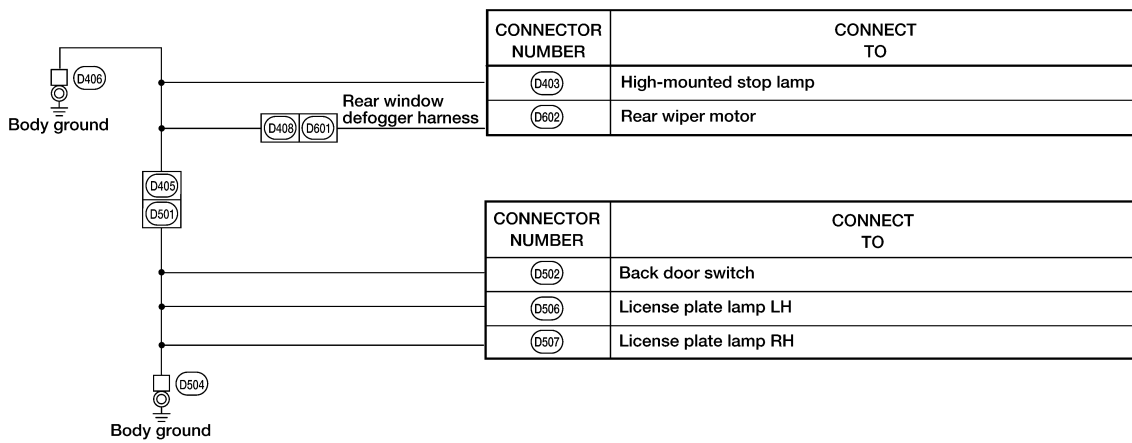
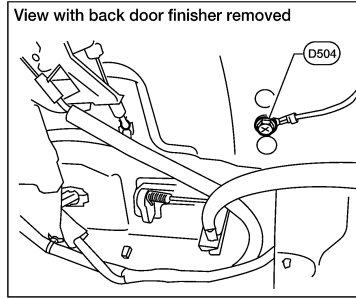
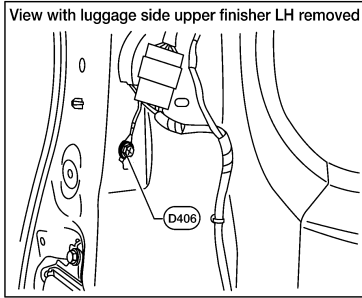
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WKIA5864E

GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

Back Door No. 2 and Back Door Harness



WKIA3575E

HARNESS

< COMPONENT DIAGNOSIS >

HARNESS

Harness Layout

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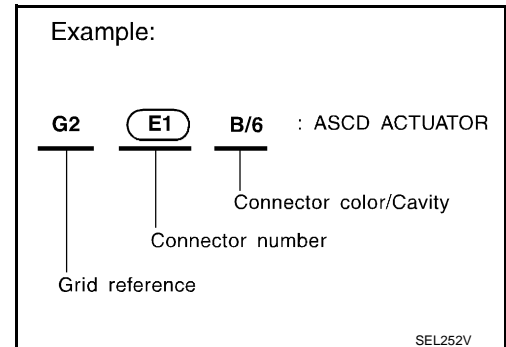
HOW TO READ HARNESS LAYOUT

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

- Main Harness and Console Sub-harness
- Engine Room Harness (RH View) Engine Compartment and Generator Sub-harness
- Engine Room Harness (Passenger Compartment)
- Engine Room Harness (LH View) Engine Compartment
- Engine Control Harness, Injector Sub-harness, Ignition Coil Sub-harness, and Knock Sensor Sub-harness
- Chassis Harness and Trailer Sub-harness
- Body Harness
- Body No. 2 Harness and Rear Blower Motor Sub-harness
- Room Lamp Harness
- Back Door Harness, Back Door No. 2 Harness, Rear Window Sub-harness, and Rear Window Defogger Sub-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.



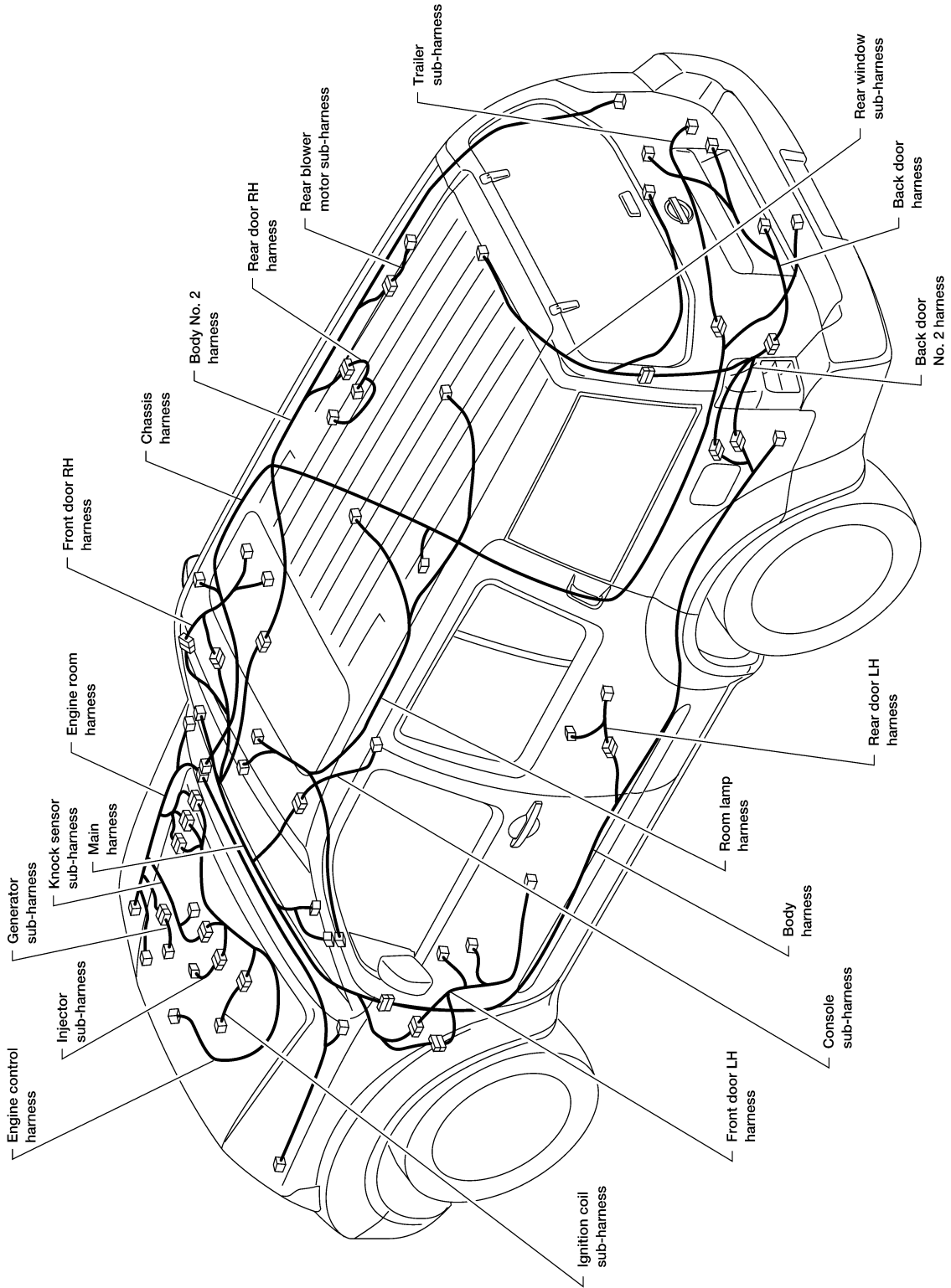
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HARNESS

< COMPONENT DIAGNOSIS >

OUTLINE



WKIA5865E

HARNESS

< COMPONENT DIAGNOSIS >

MAIN HARNESS

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Y-No-Frame Size

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WKIA5866E

A3	M1	W/12	: To R1	C3	M51	W/8	: Front blower switch
F1	M3	W/8	: Fuse block (J/B)	E3	M52	W/8	: Rear blower switch (front)
F2	M4	W/16	: Fuse block (J/B)	E3	M53	B/2	: Power socket
A5	M6	W/8	: To E10	E3	M54	GR/2	: Power socket
A4	M8	W/16	: To D2	C3	M55	W/4	: Hazard switch

HARNESS

< COMPONENT DIAGNOSIS >

A4	M9	W/24	: To D1	E4	M56	W/16	: To M201
A3	M10	Y/4	: To E29	B3	M57	—	: Body ground
C3	M13	W/3	: Front passenger air bag OFF indicator	E2	M58	B/6	: Intake door motor
B3	M14	W/16	: Pedal adjusting control unit	E1	M59	BR/2	: Glove box lamp
B2	M18	W/40	: BCM (body control module)	D2	M61	—	: Body ground
B3	M19	W/15	: BCM (body control module)	E2	M62	B/2	: Front blower motor
B3	M20	B/15	: BCM (body control module)	D4	M63	W/6	: To M204
C4	M21	W/4	: NATS antenna amp.	E4	M64	W/6	: To M202
C3	M22	W/16	: Data link connector	A3	M70	BR/1	: To M350 (with Sirius satellite tuner)
B2	M24	W/40	: Combination meter	A3	M70	V/1	: To M350 (with XM satellite tuner)
B3	M26	W/6	: Ignition switch	F2	M74	W/16	: To D102
B3	M27	W/2	: Key switch	F2	M75	W/12	: To D101
C3	M28	W/16	: Combination switch	B3	M76	W/6	: Electric brake (pre-wiring)
C4	M29	Y/6	: Combination switch (spiral cable)	D1	M77	Y/4	: Front passenger air bag module (service replacement)
C4	M30	GR/8	: Combination switch (spiral cable)	E1	M79	—	: Body ground
F2	M31	SMJ	: To E152	A3	M82	W/2	: Circuit breaker-2
C3	M32	W/4	: In-vehicle sensor	E2	M83	W/4	: To B142
B3	M33	W/32	: Automatic drive positioner control unit	E3	M85	W/4	: Aux in jack
B4	M34	W/16	: Automatic drive positioner control unit	B4	M91	W/16	: To E26
E5	M35	Y/28	: Air bag diagnosis sensor unit	D2	M93	W/24	: Display unit
F3	M36	SMJ	: To B149	D2	M94	W/24	: Display control unit (with NAVI)
A4	M40	SMJ	: To B69	D2	M95	W/32	: Display control unit (with NAVI)
A4	M41	W/12	: Pre-wiring for satellite radio tuner	B4	M96	BR/6	: Pedal adjusting switch
A4	M41	W/12	: Satellite radio tuner	B3	M97	BR/5	: Heated seat relay
C2	M42	W/12†	: Audio unit (without NAVI)	D2	M98	W/16	: AV switch
E3	M42	W/ 12††	: Audio unit (with NAVI)	E2	M105	Y/2	: Front passenger air bag module
C2	M43	W/10†	: Audio unit (without NAVI)	E2	M106	O/2	: Front passenger air bag module
E3	M43	W/ 10††	: Audio unit (with NAVI)	A2	M109	BR/2	: Front tweeter LH
C2	M44	W/6†	: Audio unit (without NAVI)	E1	M111	BR/2	: Front tweeter RH
E3	M44	W/6††	: Audio unit (with NAVI)	E2	M120	W/4	: Remote keyless entry receiver
D2	M45	W/16†	: Audio unit (without NAVI)	E2	M122	W/4	: Variable blower control (with ATC)
D3	M45	W/ 16††	: Audio unit (with NAVI)	E2	M122	B/4	: Front blower motor resistor (with MTC)
B4	M47	W/8	: Steering angle sensor	C4	M123	W/2	: Tire pressure warning check connector
E1	M48	BR/2	: To M501	B4	M129	BR/1	: Satellite radio tuner (with Sirius satellite tuner)
D3	M49	B/26	: Front air control	B4	M129	V/1	: Satellite radio tuner (with XM satellite tuner)
E3	M50	W/18	: Front air control	B2	M139	B/2	: Diode-1
B3	M140	B/2	: Diode-2				
D4	M141	GR/8	: 4WD shift switch				
C2	M142	B/6	: Mode door motor				
E2	M143	B/6	: Air mix door motor (passenger)				
C1	M145	B/4	: Optical sensor				

HARNESS

< COMPONENT DIAGNOSIS >

E2	M146	W/2	: Intake sensor					
D2	M147	B/6	: Air mix door motor (driver) (with ATC)					
D2	M147	B/6	: Air mix door motor (front) (with MTC)					
C3	M150	W/2	: Ignition keyhole illumination					
B4	M152	W/26	: Transfer case control unit (part time 4WD)					
B4	M152	W/24	: Transfer case control unit (all-mode 4WD)					
B4	M153	GR/24	: Transfer case control unit (all-mode 4WD)					
B4	M153	W/24	: Transfer case control unit (part time 4WD)					
D4	M154	GR/6	: VDC off switch					
D4	M155	W/8	: HDC switch					
D4	M156	W/10	: A/T device					
B4	M159	W/16	: Door mirror remote control switch					
D3	M160	BR/6	: Front heated seat switch RH					
D4	M161	BR/6	: Front heated seat switch LH					
F2	M162	W/2	: To B131					
A3	M163	BR/6	: Rear blower motor relay					
Console sub-harness								
E4	M201	W/16	: To M56					
E4	M202	W/6	: To M64					
E4	M204	W/6	: To M63					
E4	M205	GR/16	: DVD player					
F5	M206	L/16	: DVD player					
F5	M207	B/2	: Console power socket					
F5	M208	GR/5	: Rear air control					
F5	M209	GR/6	: Rear air control					
D4	M210	W/18	: To B77					

ENGINE ROOM HARNESS (RH VIEW)

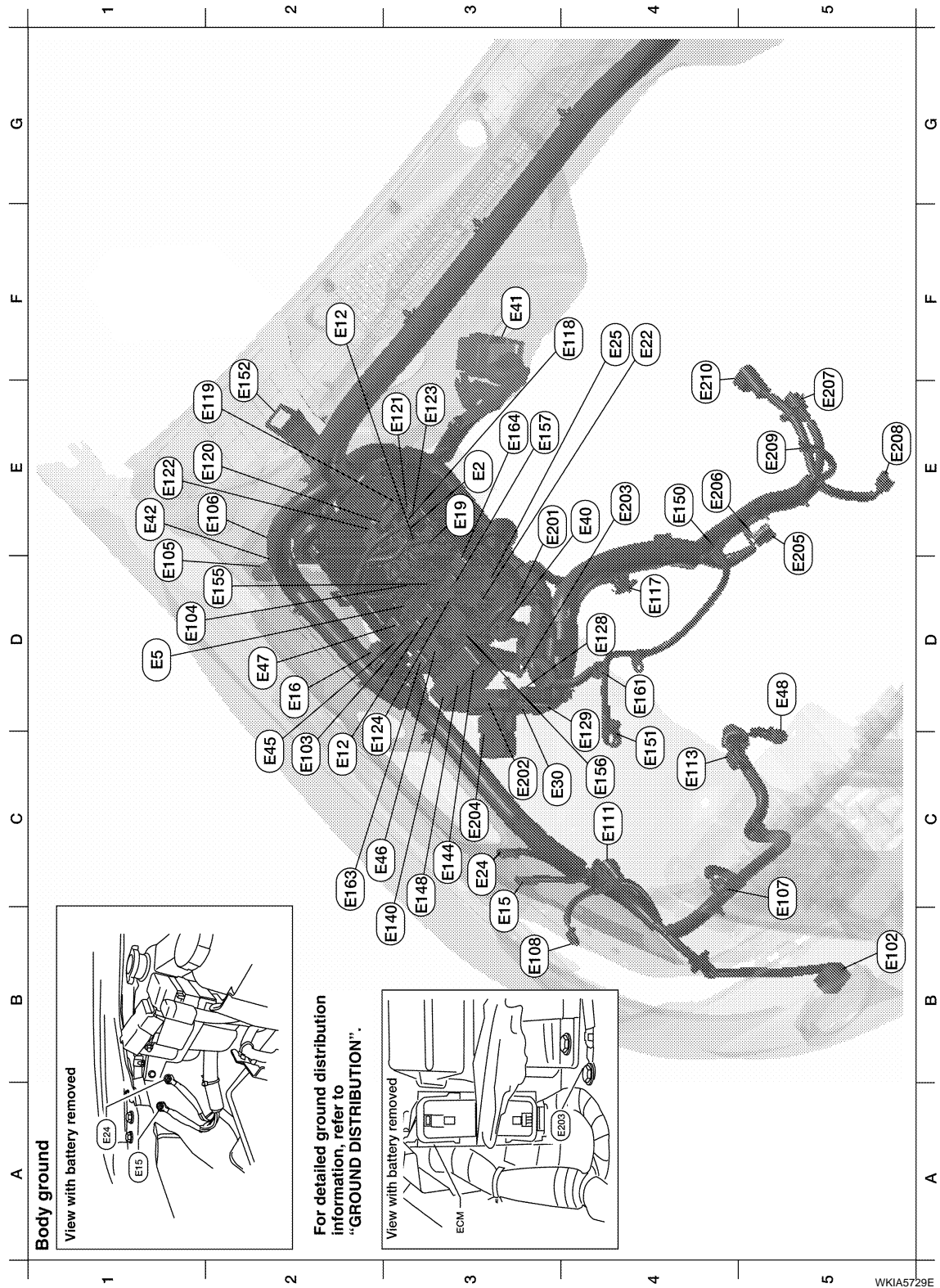
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HARNESS

< COMPONENT DIAGNOSIS >

Engine Compartment



Refer to "ENGINE ROOM HARNESS (LH VIEW)" for continuation of engine room harness.

WKIA5729E

E3	E2	W/16	: To F32	E3	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)
D1	E5	W/24	: To F14	D2	E124	B/6	: IPDM E/R (intelligent power distribution module engine room)
F2	E12	L/5	: Stop lamp relay	D4	E128	GR/2	: Fusible link box (battery)

HARNESS

< COMPONENT DIAGNOSIS >

C3	E15	—	: Body ground	D4	E129	BR/2	: Fusible link box (battery)	A	
D2	E16	B/40	: ECM	B3	E140	BR/6	: Trailer tow relay 2	B	
E3	E19	W/16	: To F33	C3	E144	L/4	: Heater pump relay	B	
F4	E22	BR/6	: Front blower motor relay	C3	E148	L/4	: Trailer tow relay 1	C	
C3	E24	—	: Body ground	E4	E150	—	: Battery ground	D	
F4	E25	BR/6	: Rear blower motor relay	C4	E151	—	: Negative battery cable	D	
C3	E30	—	: Fusible link box (battery)	D2	E155	L/4	: Transfer shut off relay (all-mode 4WD)	E	
E4	E40	GR/9	: To E201	C4	E156	L/4	: Transfer shut off relay 1 (part time 4WD)	F	
F3	E41	SMJ	: To C1 (located RH rear of engine compartment)	E3	E157	L/4	: Transfer shut off relay 2 (part time 4WD)	F	
E1	E42	—	: Relay box	D4	E161	B/3	: Battery current sensor	G	
C2	E45	BR/6	: Back-up lamp relay	C2	E163	L/4	: Trailer turn relay RH	H	
C2	E46	B/5	: Transfer shift high relay	E3	E164	L/4	: Trailer turn relay LH	I	
D2	E47	B/5	: Transfer shift low relay	Generator sub-harness					I
D5	E48	B/3	: Refrigerant pressure sensor	E3	E201	GR/9	: To E40	J	
F1	E51	W/2	: To B104	C3	E202	B/1	: Fusible link box (battery)	K	
B5	E102	B/2	: Front fog lamp RH	E4	E203	—	: Body ground	L	
C2	E103	B/5	: Daytime light relay 1	C3	E204	—	: Battery (positive) starter	L	
D1	E104	L/4	: Daytime light relay 2	D5	E205	GR/3	: Generator	M	
D1	E105	B/2	: Front and rear washer motor	E4	E206	—	: Generator	N	
E2	E106	BR/2	: Washer fluid level switch	E4	E207	GR/1	: Starter motor	O	
C5	E107	B/3	: Front headlamp RH	D5	E208	GR/3	: Oil pressure switch	P	
B3	E108	GR/2	: Front side marker lamp RH	E5	E209	—	: Generator		
C4	E111	GR/3	: Front turn signal/parking lamp RH	F5	E210	—	: Starter motor		
C4	E113	GR/4	: Cooling fan motor						
D4	E117	GR/2	: Front wheel sensor RH						
F4	E118	B/2	: IPDM E/R (intelligent power distribution module engine room)						
F2	E119	W/18	: IPDM E/R (intelligent power distribution module engine room)						
E2	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)						
E3	E121	BR/12	: IPDM E/R (intelligent power distribution module engine room)						
E1	E122	W/12	: IPDM E/R (intelligent power distribution module engine room)						

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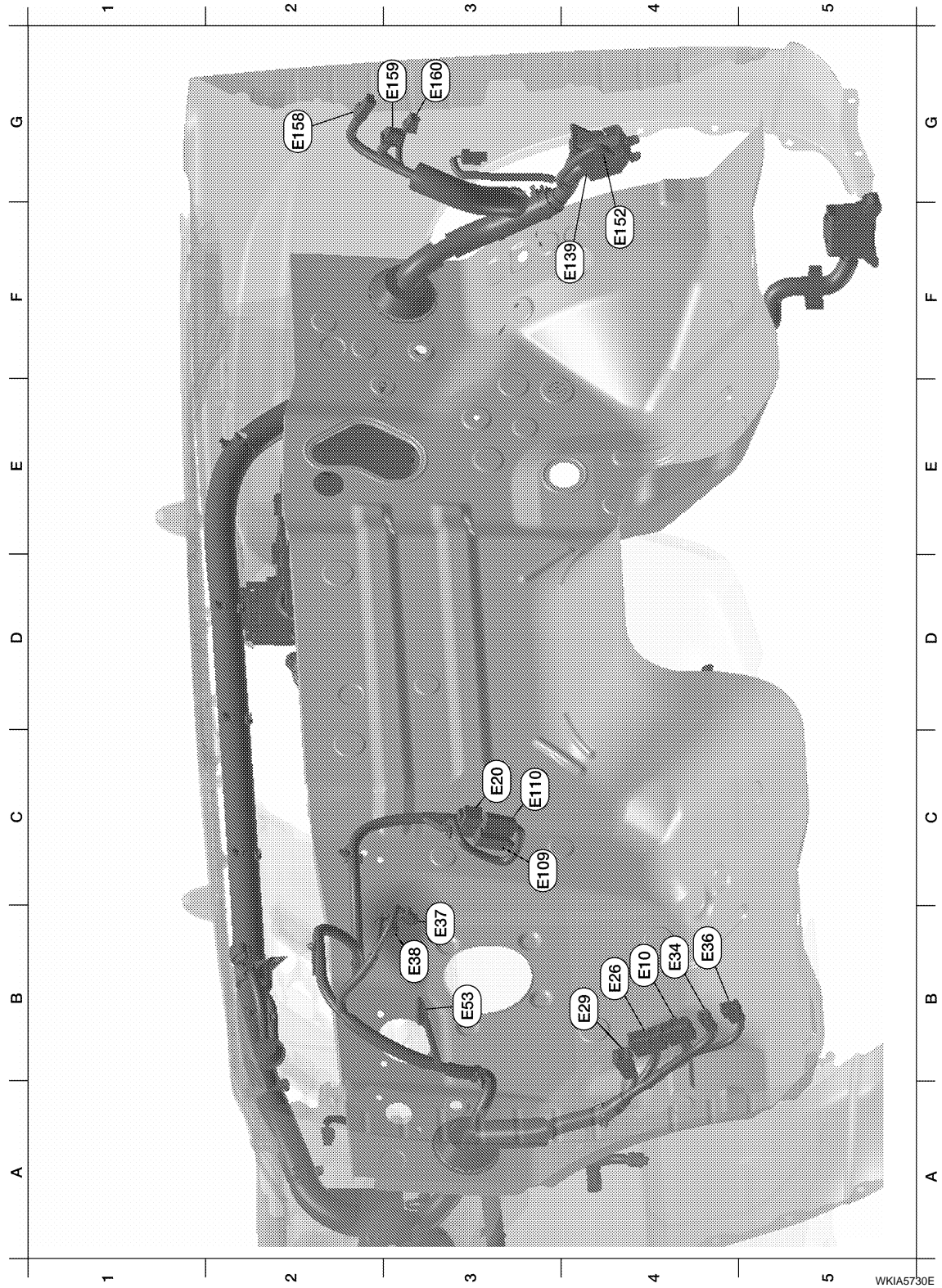
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HARNESS

< COMPONENT DIAGNOSIS >

Passenger Compartment



WKIA5730E

B4	E10	W/6	: To M6			
C3	E20	B/6	: Accelerator pedal position (APP) sensor			
B4	E26	W/16	: To M91			
B4	E29	Y/4	: To M10			
B4	E34	W/8	: To B40			

HARNESS

< COMPONENT DIAGNOSIS >

B4	E36	W/2	: To B42				
B3	E37	BR/2	: ASCD brake switch				
B3	E38	W/4	: Stop lamp switch				
B3	E53	B/1	: Park brake switch				
C3	E109	GR/2	: Pedal adjusting motor				
C3	E110	W/4	: Pedal adjusting motor				
F3	E139	W/8	: To B107				
F4	E152	SMJ	: To M31				
G2	E158	B/1	: Fuse block (J/B)				
G3	E159	B/2	: Fuse block (J/B)				
G3	E160	W/8	: Fuse block (J/B)				

ENGINE ROOM HARNESS (LH VIEW)

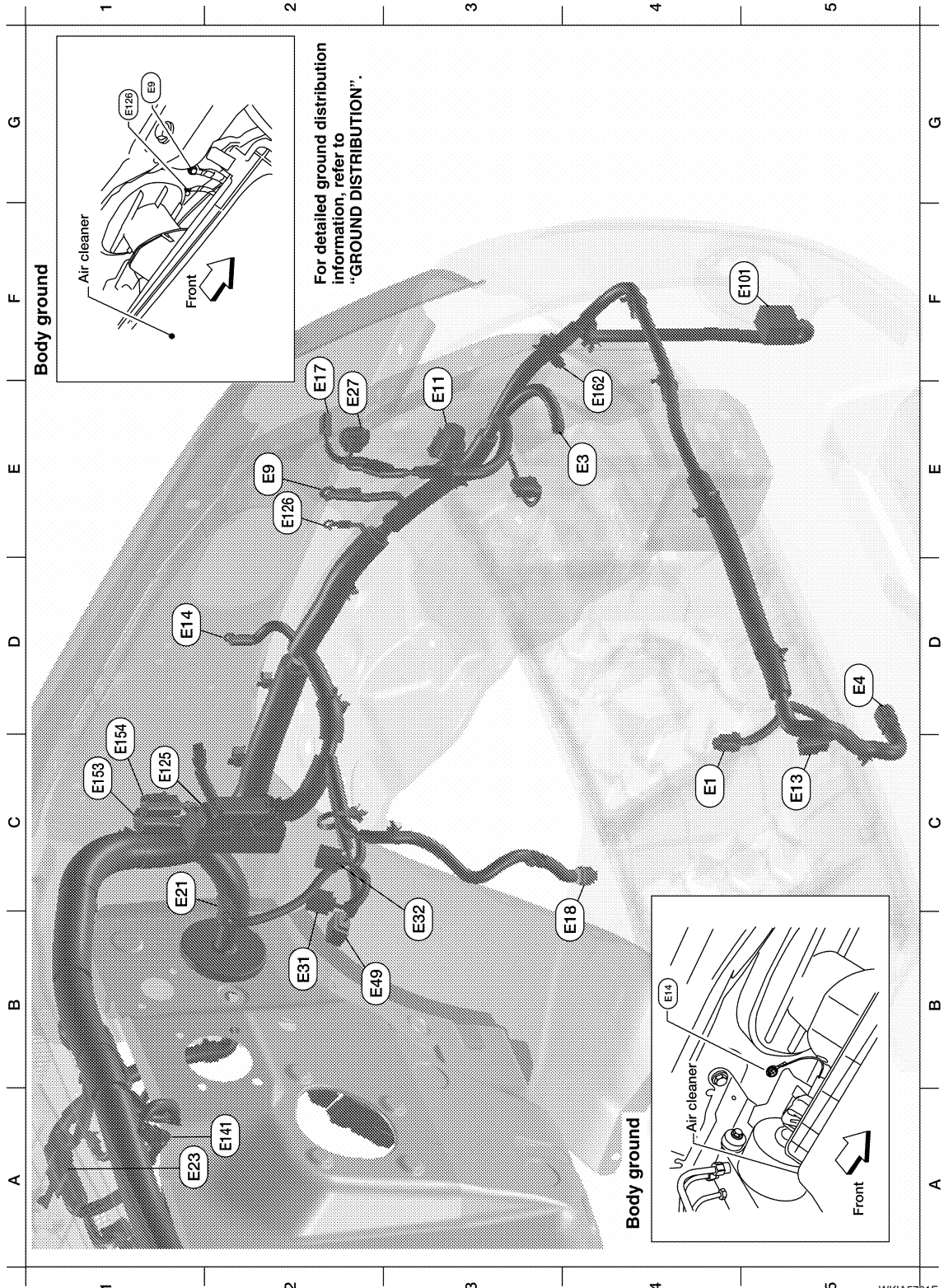
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HARNESS

< COMPONENT DIAGNOSIS >

Engine Compartment



Refer to "ENGINE ROOM HARNESS (RH VIEW)" for continuation of engine room harness.

WKIA5731E

C4	E1	B/2	: Ambient sensor 1			
E4	E3	B/1	: Horn (without dual note horn)			
E4	E3	B/2	: Horn (with dual note horn)			
D5	E4	Y/2	: Crash zone sensor			
E2	E9	—	: Body ground			

HARNESS

< COMPONENT DIAGNOSIS >

E3	E11	B/3	: Front headlamp LH							
C5	E13	GR/2	: Ambient sensor 2							
D1	E14	—	: Body ground							
F2	E17	GR/2	: Front side marker lamp LH							
B4	E18	GR/2	: Front wheel sensor LH							
C1	E21	GR/2	: Brake fluid level switch							
A1	E23	GR/5	: Front wiper motor							
E2	E27	GR/3	: Front turn signal/park lamp LH							
B2	E31	B/3	: Front pressure sensor							
C3	E32	B/3	: Rear pressure sensor							
B3	E49	B/6	: Active booster							
F5	E101	B/2	: Front fog lamp LH							
C1	E125	B/47	: ABS actuator and electric unit (control unit)							
E2	E126	—	: Body ground							
A2	E141	B/2	: Heater pump							
C1	E153	W/2	: Transfer motor relay (all-mode 4WD)							
C1	E154	W/2	: Transfer motor relay (all-mode 4WD)							
E4	E162	B/1	: Horn							

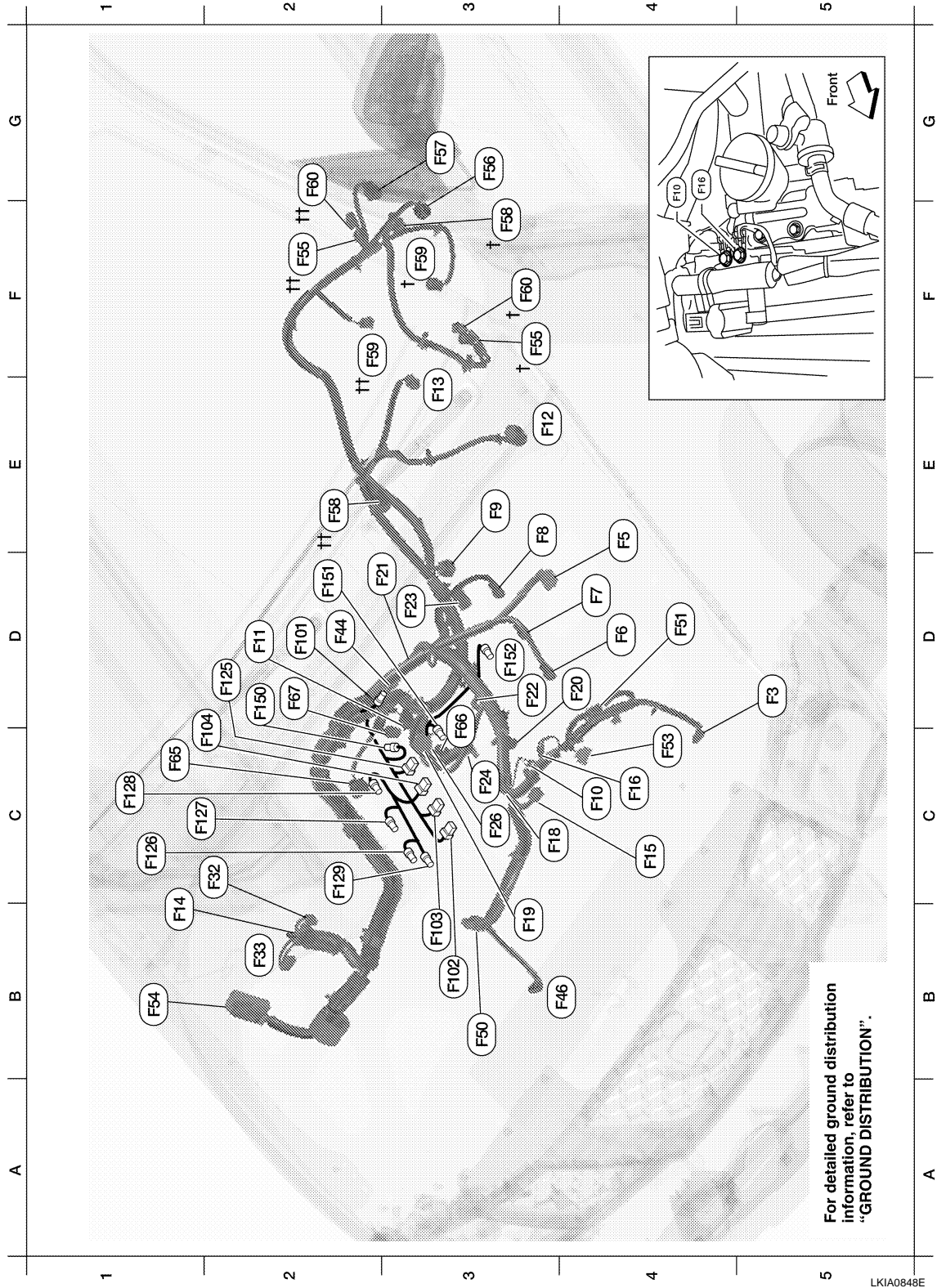
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HARNESS

< COMPONENT DIAGNOSIS > ENGINE CONTROL HARNESS



D5	F3	B/1	: A/C Compressor	E2	F58††	GR/6	: Transfer control device (all-mode 4WD)
E4	F5	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 2)	F3	F59†	GR/2	: Wait detection switch (part time 4WD)
D4	F6	GR/3	: Ignition coil No. 2 (with power transistor)	F2	F59††	B/2	: Wait detection switch (all mode 4WD)
D4	F7	GR/3	: Ignition coil No. 4 (with power transistor)	F3	F60†	GR/2	: 4LO switch (part time 4WD)

HARNESS

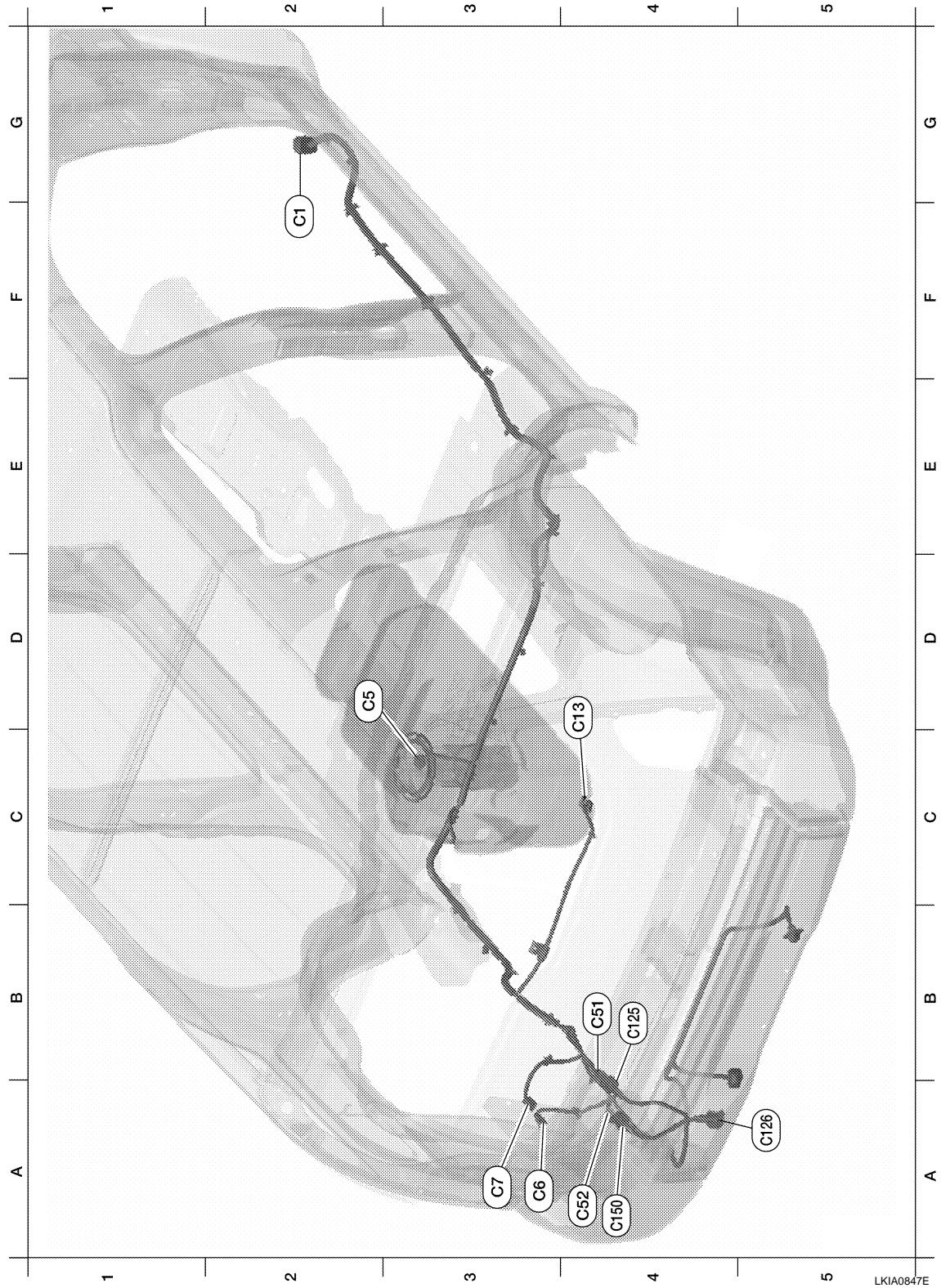
< COMPONENT DIAGNOSIS >

E3	F8	GR/3	: Ignition coil No. 6 (with power transistor)	G2	F60††	GR/2	: 4LO switch (all-mode 4WD)	A
E3	F9	G/10	: A/T assembly	C1	F65	GR/4	: Air fuel ratio (A/F) sensor 1 (bank 1)	B
C4	F10	—	: Engine ground	D3	F66	GR/3	: Camshaft position sensor (PHASE) (bank 1)	B
D2	F11	B/3	: Crankshaft position sensor (POS)	D2	F67	L/4	: To F150	C
E3	F12	G/4	: Heated oxygen sensor 2 (bank 2)	Injector sub-harness				
E3	F13	L/4	: Heated oxygen sensor 2 (bank 1)	D2	F101	GR/4	: To F44	C
B1	F14	W/24	: To E5	B3	F102	GR/2	: Fuel injector No. 1	D
C4	F15	L/2	: EVAP canister purge volume control solenoid valve	B3	F103	GR/2	: Fuel injector No. 3	D
C4	F16	—	: Engine ground	D2	F104	GR/2	: Fuel injector No. 5	E
C3	F18	GR/2	: Fuel injector No. 2	Ignition coil sub-harness				
B3	F19	B/2	: VIAS control solenoid valve	D2	F125	G/8	: To F26	E
D4	F20	GR/2	: Fuel injector No. 4	C1	F126	GR/3	: Ignition coil No. 1 (with power transistor)	F
D2	F21	GR/2	: Condenser-1	C1	F127	GR/3	: Ignition coil No. 3 (with power transistor)	F
D3	F22	GR/2	: Fuel injector No. 6	C1	F128	GR/3	: Ignition coil No. 5 (with power transistor)	G
D3	F23	B/3	: Camshaft position sensor (PHASE) (bank 1)	C2	F129	G/2	: Intake valve timing control solenoid valve (bank 1)	G
C3	F24	GR/2	: Engine coolant temperature sensor	Knock sensor sub-harness				
C3	F26	G/8	: To F125	D2	F150	L/4	: To F67	H
C2	F32	W/16	: To E2	D2	F151	B/2	: Knock sensor (bank 1)	H
B2	F33	W/16	: To E19	D3	F152	B/2	: Knock sensor (bank 2)	I
D2	F44	GR/4	: To F101					I
B4	F46	B/3	: Power steering pressure sensor					J
B3	F50	B/6	: Electric throttle control actuator					J
D4	F51	G/2	: Intake valve timing control solenoid valve (bank 2)					K
C4	F53	B/6	: Mass air flow sensor					K
B1	F54	B/81	: ECM					L
F3	F55†	B/2	: ATP switch (all-mode 4WD)					L
F2	F55††	B/2	: ATP switch (part time 4WD)					L
G3	F56	B/8	: Terminal cord assembly (all-mode 4WD)					PG
G3	F57	B/2	: Transfer motor (all-mode 4WD)					PG
F3	F58†	B/8	: Transfer control device (part time 4WD)					N
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HARNESS

< COMPONENT DIAGNOSIS >

CHASSIS HARNESS



LKIA0847E

F2	C1	SMJ	: To E41				
D2	C5	GR/5	: Fuel level sensor unit and fuel pump				
A3	C6	B/2	: EVAP canister vent control valve				
A3	C7	GR/3	: EVAP control system pressure sensor				
C3	C13	GR/4	: Rear wheel sensor assembly				

HARNESSES

< COMPONENT DIAGNOSIS >

B4	C51	GR/6	: To C125						A
A4	C52	B/2	: To C150						
Trailer sub-harness									
B4	C125	GR/6	: To C51						B
A5	C126	B/7	: Trailer (7-pin)						
A5	C126	B/4	: Trailer (4-pin)						C
A4	C150	B/2	: To C52						

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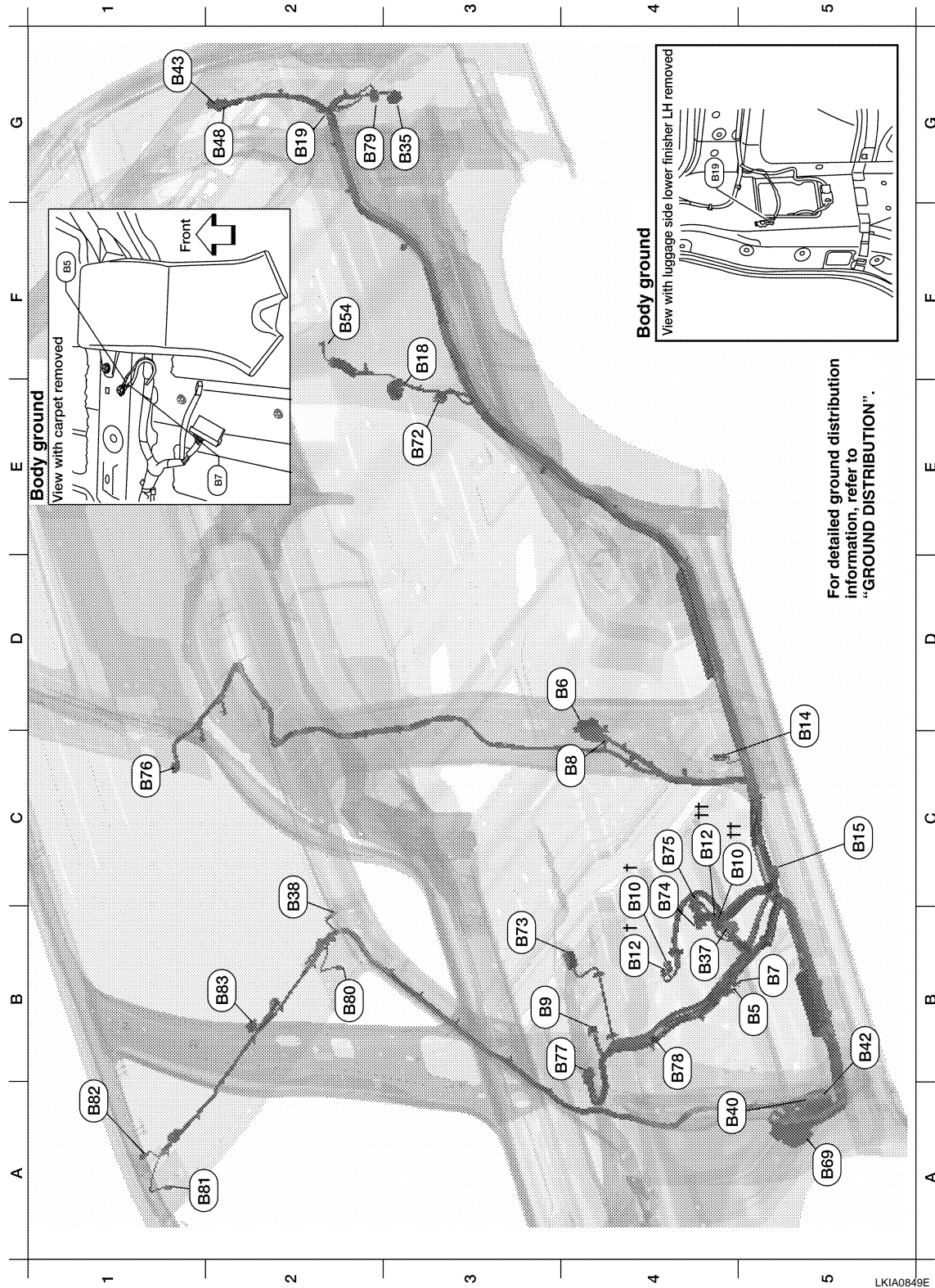
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HARNESS

< COMPONENT DIAGNOSIS >

BODY HARNESS



B5	B5	—	: LH side air bag satellite sensor (shield wire)			
D4	B6	W/12	: To D201			
B5	B7	—	: Body ground			
C4	B8	W/3	: Front door switch LH			
B3	B9	Y/12	: Air bag diagnosis sensor unit			

HARNESS

< COMPONENT DIAGNOSIS >

C4	B10	Y/2	: Front LH side air bag module					A
B4	B12	W/3	: Seat belt buckle switch LH					B
D5	B14	Y/2	: Front LH seat belt pre-tensioner					B
C5	B15	Y/2	: LH side air bag (satellite) sensor					B
F3	B18	W/3	: Rear door switch LH					C
G2	B19	—	: Body ground					C
G3	B35	W/6	: Rear combination lamp LH					C
B4	B37	W/16	: To P1					D
B2	B38	Y/2	: LH side front curtain air bag module					D
A4	B40	W/8	: To E34					D
B5	B42	W/2	: To E36					E
G1	B43	W/8	: To D401					E
G2	B48	W/6	: To D402					E
F2	B54	Y/2	: LH side rear curtain air bag module					F
A5	B69	SMJ	: To M40					F
E3	B72	W/8	: Subwoofer (with BOSE audio system)					G
B3	B73	B/6	: Yaw rate/side/decel G sensor					G
C4	B74	GR/8	: BOSE speaker amp.					H
C4	B75	B/24	: BOSE speaker amp.					H
C1	B76	W/16	: Video monitor					H
B4	B77	W/16	: Video monitor					I
B4	B78	Y/2	: To B157					I
G2	B79	W/4	: Fuel lid door lock actuator					J
B2	B80	W/2	: Vanity lamp LH					J
A1	B81	W/2	: Vanity lamp RH					K
A1	B82	Y/2	: RH side front curtain air bag module					K
B2	B83	B/10	: Sunroof motor assembly					K

PG

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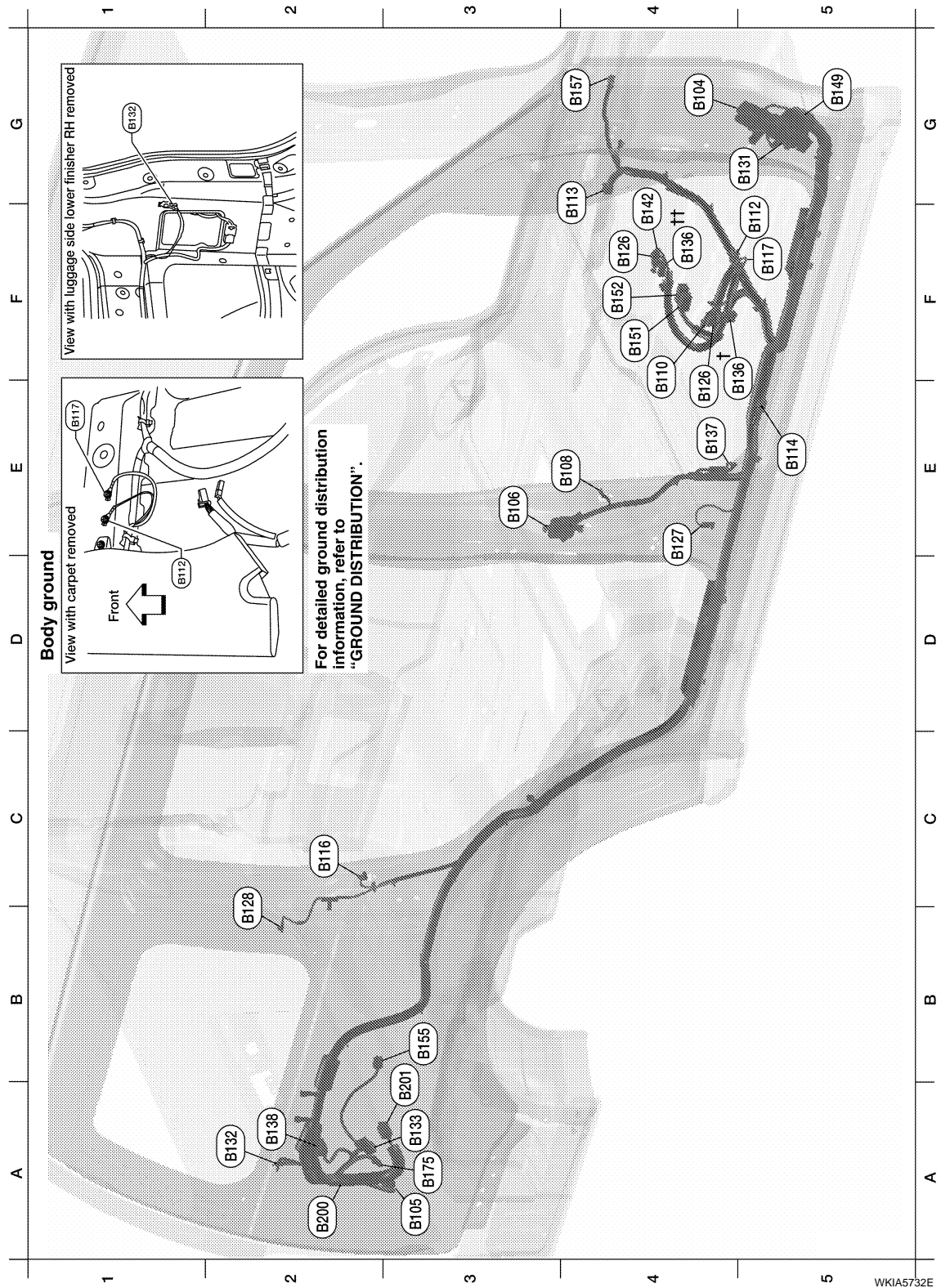
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HARNESS

< COMPONENT DIAGNOSIS >

BODY NO. 2 HARNESS



WKIA6732E

G4	B104	W/2	: To E51				
A3	B105	W/6	: Rear combination lamp RH				
E3	B106	W/12	: To D301				
E4	B108	W/3	: Front door switch RH				
F4	B110	W/3	: Seat belt buckle switch RH				

HARNESS

< COMPONENT DIAGNOSIS >

F5	B112	—	: RH side air bad satellite sensor (shield wire)							
G3	B113	Y/12	: Air bag diagnosis sensor unit							A
E5	B114	Y/2	: RH side air bag (satellite) sensor							
C2	B116	W/3	: Rear door switch RH							B
F5	B117	—	: Body ground							
F4	B126	Y/2	: Front RH side air bag module							C
E4	B127	Y/2	: Front RH seat belt pre-tensioner							
B2	B128	Y/2	: RH side rear curtain air bag module							
G5	B131	W/2	: To M162							D
A2	B132	—	: Body ground							
A3	B133	W/4	: Rear blower motor resistor							
F4	†B136	W/16	: To P151 (with power seat)							E
F4	††B136	W/8	: To P151 (without power seat)							
E4	B137	B/3	: Belt tension sensor							F
A2	B138	B/2	: Rear cargo power socket							
F4	B142	W/4	: To M83							
G5	B149	SMJ	: To M36							G
F4	B151	W/40	: NAVI control unit (with NAVI)							
F4	B152	W/32	: NAVI control unit (with NAVI)							H
B3	B155	B/6	: Air mix door motor (rear)							I
G4	B157	Y/2	: To B78							
A3	B175	W/2	: To B200							
Rear blower motor sub-harness										
A2	B200	W/2	: To B175							J
B3	B201	B/2	: Rear blower motor							

PG

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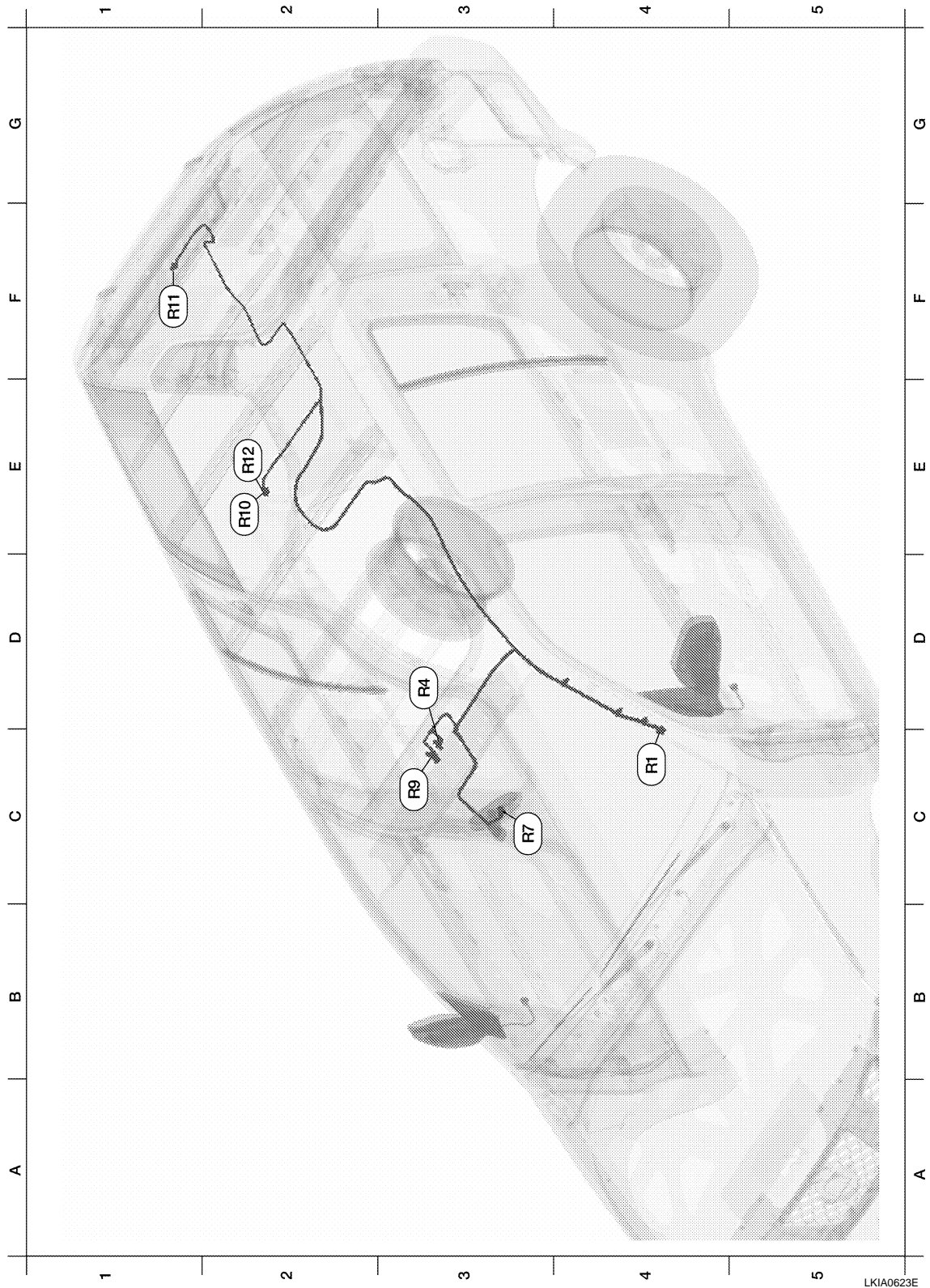
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HARNESS

< COMPONENT DIAGNOSIS >

ROOM LAMP HARNESS



LKIA0623E

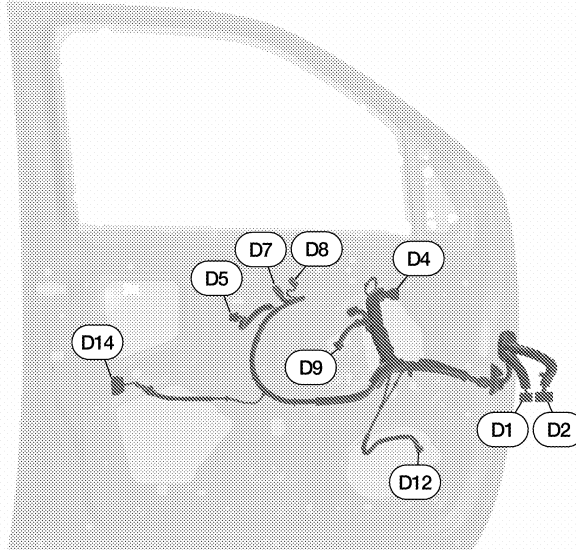
C4	R1	W/12	: To M1			
D3	R4	W/3	: Sunroof switch			
C3	R7	W/7	: Auto anti-dazzling inside mirror (without HOMELINK® universal transceiver)			

HARNESS

< COMPONENT DIAGNOSIS >

C3	R7	B/10	: Auto day/night inside mirror (with HOMELINK® universal transceiver)				
C3	R9	W/3	: Front room/map lamp assembly				
E2	R10	W/3	: Personal lamp 2nd row				
F1	R11	W/2	: Cargo lamp				
E2	R12	W/3	: Room lamp 2nd row				

FRONT DOOR LH HARNESS



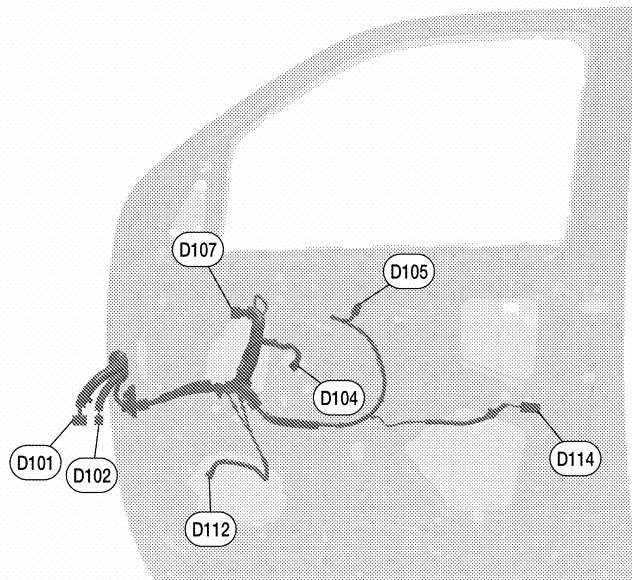
WKIA5184E

D1	W/24	: To M9	D9	B/6	: Front power window motor LH
D2	W/16	: To M8	D12	W/2	: Tweeter LH
D4	B/10	: Door mirror LH (with heated mirrors)	D14	GR/6	: Front door lock assembly LH
D4	B/3	: Door mirror LH (without heated mirrors)			
D5	W/8	: Seat memory switch			
D7	W/16	: Main power window and door lock/unlock switch			
D8	W/3	: Main power window and door lock/unlock switch			

HARNESS

< COMPONENT DIAGNOSIS >

FRONT DOOR RH HARNESS



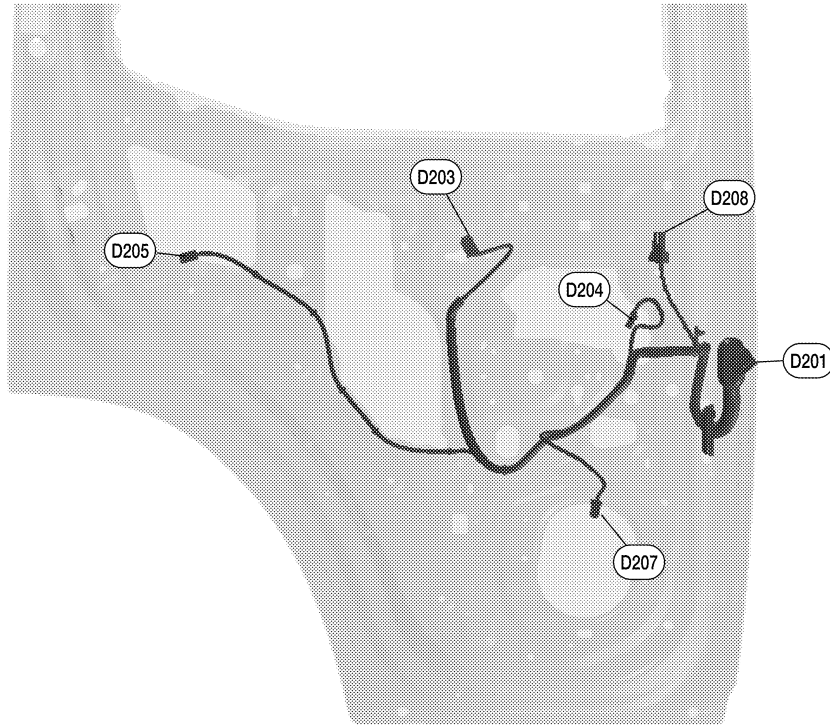
WKIA5185E

D101	W/12	: To M75	D107	B/10	: Door mirror RH (with heated mirrors)
D102	W/16	: To M74	D112	W/2	: Front door speaker RH
D104	B/6	: Front power window motor RH	D114	W/2	: Front door lock actuator RH
D105	W/12	: Power window and door lock/unlock switch RH			
D107	B/3	: Door mirror RH (without heated mirrors)			

HARNESS

< COMPONENT DIAGNOSIS >

REAR DOOR LH HARNESS



LKIA0850E

D201	W/12	: To B6	D207	W/2	: Rear door speaker LH (without BOSE)
D203	W/8	: Rear power window switch LH	D207	BR/2	: Rear door speaker LH (with BOSE)
D204	B/2	: Rear power window motor LH	D208	BR/2	: Rear door tweeter LH
D205	W/2	: Rear door lock actuator LH			

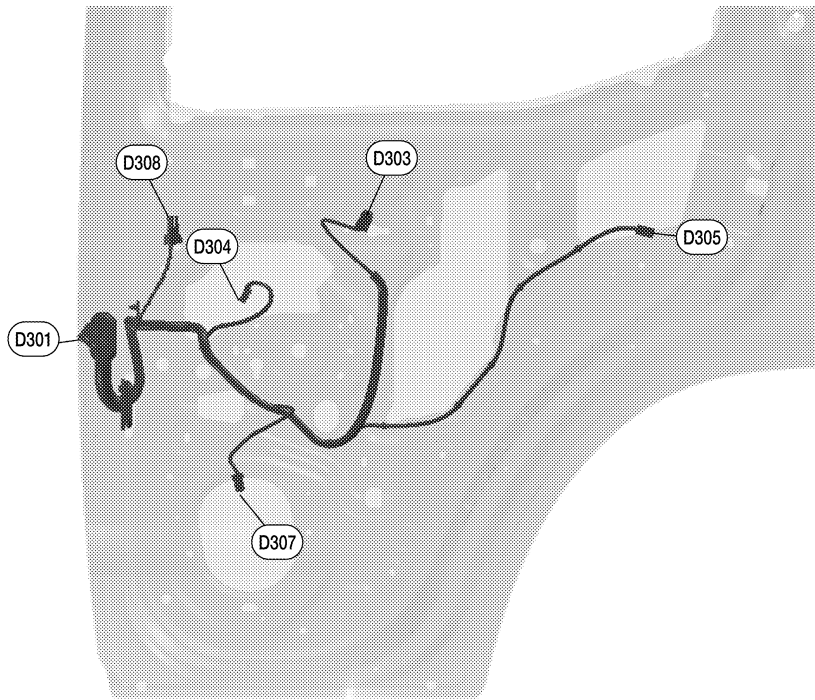
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HARNESS

< COMPONENT DIAGNOSIS >

REAR DOOR RH HARNESS



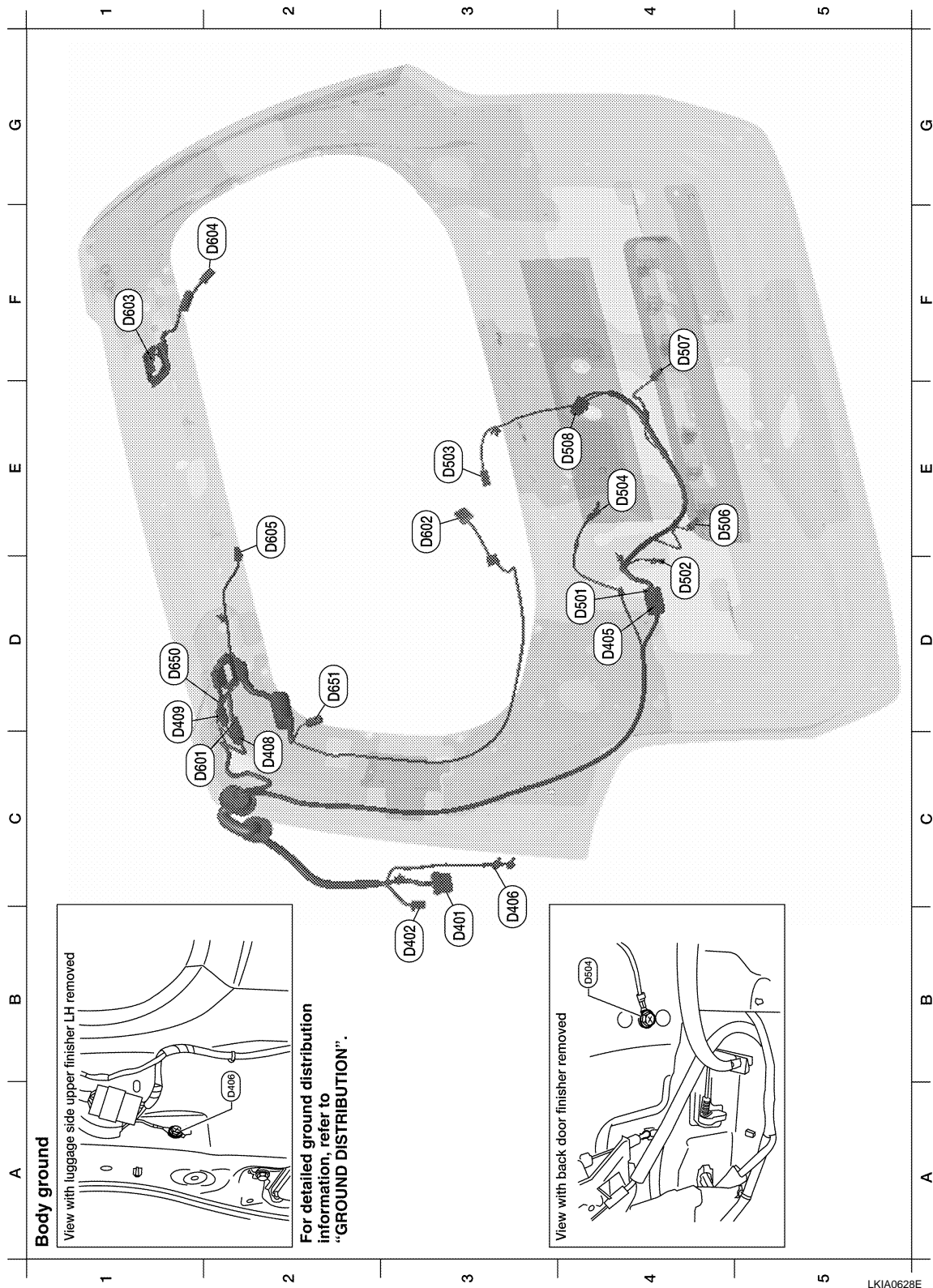
LKIA0851E

D301	W/12	: To B106	D307	W/2	: Rear door speaker RH (without BOSE)
D303	W/8	: Rear power window switch RH	D307	BR/2	: Rear door speaker RH (with BOSE)
D304	B/2	: Rear power window motor RH	D308	BR/2	: Rear door tweeter RH
D305	W/2	: Rear door lock actuator RH			

HARNESS

< COMPONENT DIAGNOSIS >

BACK DOOR HARNESS



LKIA0628E

Back door No. 2 harness

B3	D401	W/8	: To B43
B3	D402	W/6	: To B48
D4	D405	W/8	: To D501
B3	D406	—	: Body ground

HARNESS

< COMPONENT DIAGNOSIS >

C2	D408	W/4	: To D601				
D1	D409	W/1	: To D650				
Back door harness							
D4	D501	W/8	: To D405				
D4	D502	W/3	: Back door switch				
E3	D503	B/1	: Glass hatch ajar switch				
E4	D504	—	: Body ground				
E4	D506	W/2	: License plate lamp LH				
F4	D507	W/2	: License plate lamp RH				
E4	D508	W/4	: Back door lock actuator				
Rear window sub-harness							
C1	D601	W/4	: To D405				
E3	D602	W/4	: Rear wiper motor				
F1	D603	—	: Body ground (defogger)				
F2	D604	B/1	: Rear window defogger				
E2	D605	W/2	: High mounted stop lamp				
Rear window defogger sub-harness							
D1	D650	W/1	: To D409				
D2	D651	B/1	: Rear window defogger				

Wiring Diagram Codes (Cell Codes)

INFOID:000000001731013

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,A	ATC	Auto Air Conditioner
A/C,M	MTC	Manual Air Conditioner
AF1B1	EC	Air Fuel Ratio (A/F) Sensor 1 Bank 1
AF1B2	EC	Air Fuel Ratio (A/F) Sensor 1 Bank 2
AF1HB1	EC	Air Fuel Ratio (A/F) Sensor 1 Heater Bank 1
AF1HB2	EC	Air Fuel Ratio (A/F) 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	ASCD Brake Switch
ASC/SW	EC	ASCD Steering Switch
ASCBOF	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
AUT/DP	SE	Automatic Drive Positioner
AUTO/L	LT	Auto Light Control
B/COMP	DI	Combination Meter Board Computer
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

HARNES

< COMPONENT DIAGNOSIS >

CHIME	DI	Warning Chime	A
COOL/F	EC	Cooling Fan Control	
COMBSW	LT	Combination Switch	
COMM	AV	Audio Visual Communication System	B
COMPAS	DI	Compass	
CUR/SE	EC	Battery Current Sensor	
D/LOCK	BL	Power Door Lock	C
DEF	GW	Rear Window Defogger	
DTRL	LT	Headlamp - With Daytime Light System	
DVD	AV	DVD Entertainment System	D
ECM/PW	EC	ECM Power Supply for Back-Up	
ECTS	EC	Engine Coolant Temperature Sensor	
ETC1	EC	Electric Throttle Control Function	E
ETC2	EC	Throttle Control Motor Relay	
ETC3	EC	Throttle Control Motor	
F/FOG	LT	Front Fog Lamp	F
F/PUMP	EC	Fuel Pump	
FTS	AT	A/T Fluid Temperature Sensor	
FTTS	EC	Fuel Tank Temperature Sensor	G
FUELB1	EC	Fuel Injection System Bank 1	
FUELB2	EC	Fuel Injection System Bank 2	
H/LAMP	LT	Headlamp	H
HORN	WW	Horn	
HSEAT	SE	Heated Seat	
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)	I
IATS	EC	Intake Air Temperature Sensor	
IGNSYS	EC	Ignition System	
ILL	LT	Illumination	J
INJECT	EC	Injectors	
INT/L	LT	Room/Map, Vanity, Cargo, and Personal Lamps	
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1	K
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2	
KEYLES	BL	Remote Keyless Entry System	
KS	EC	Knock Sensor	L
MAFS	EC	Mass Air Flow Sensor	
MAIN	AT	Main Power Supply and Ground Circuit	
MAIN	EC	Main Power Supply and Ground Circuit	PG
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges	
MIL/DL	EC	Malfunction Indicator Lamp	
MIRROR	GW	Door Mirror	N
NATS	BL	Nissan Anti-Theft System	
NAVI	AV	Navigation System	
NONDTC	AT	Non-Detective Items	O
O2H2B1	EC	Rear Heated Oxygen Sensor 2 Heater Bank 1	
O2H2B2	EC	Rear Heated Oxygen Sensor 2 Heater Bank 2	
O2S2B1	EC	Heated Oxygen Sensor 2 Bank 1	P
O2S2B2	EC	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) (Bank 1)	
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank 1)	

HARNESSES

< COMPONENT DIAGNOSIS >

PNP/SW	AT	Park/Neutral Position Switch
PNP/SW	EC	Park/Neutral Position Switch
POS	EC	Crankshaft Position Sensor (POS)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor
PS/SEN	EC	Power Steering Pressure Sensor
RP/SEN	EC	Refrigerant Pressure Sensor
SEAT	SE	Power Seat
SEN/PW	EC	Sensor Power Supply
SHIFT	AT	A/T Shift Lock System
SROOF	RF	Sunroof
SRS	SRS	Supplemental Restraint System
STSIG	AT	Start Signal Circuit
START	SC	Starting System
STOP/L	LT	Stop Lamp
T/TOW	LT	Trailer Tow
T/WARN	WT	Low Tire Pressure Warning System
TAIL/L	LT	Parking, License and Tail Lamps
T/F	TF	Transfer Case
TPS1	EC	Throttle Position Sensor
TPS2	EC	Throttle Position Sensor
TPS3	EC	Throttle Position Sensor
TRNSCV	BL	HOMELINK® Universal Transceiver
TURN	LT	Turn Signal and Hazard Warning Lamps
VDC	BRC	Vehicle Dynamic Control System
VEHSEC	BL	Vehicle security (theft warning) 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
VSSA/T	AT	Vehicle Speed Sensor A/T (Revolution Sensor)
W/ANT	AV	Audio Antenna
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIP/R	WW	Rear Wiper and Washer
WIPER	WW	Front Wiper and Washer

ELECTRICAL UNITS LOCATION

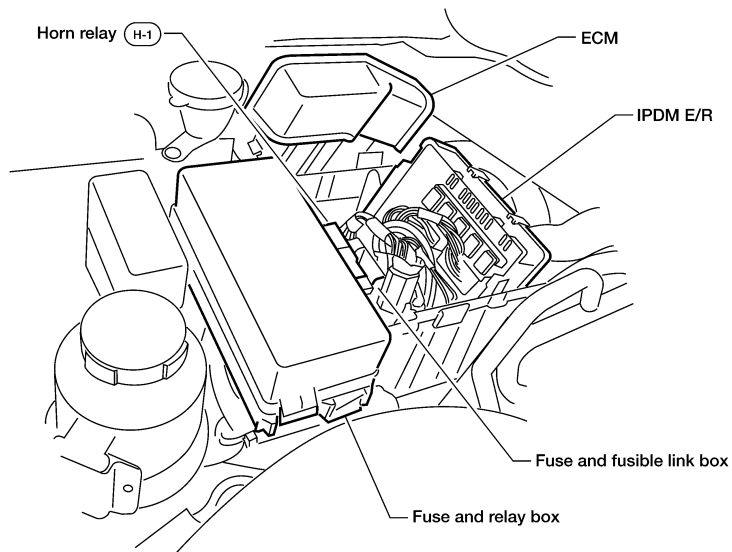
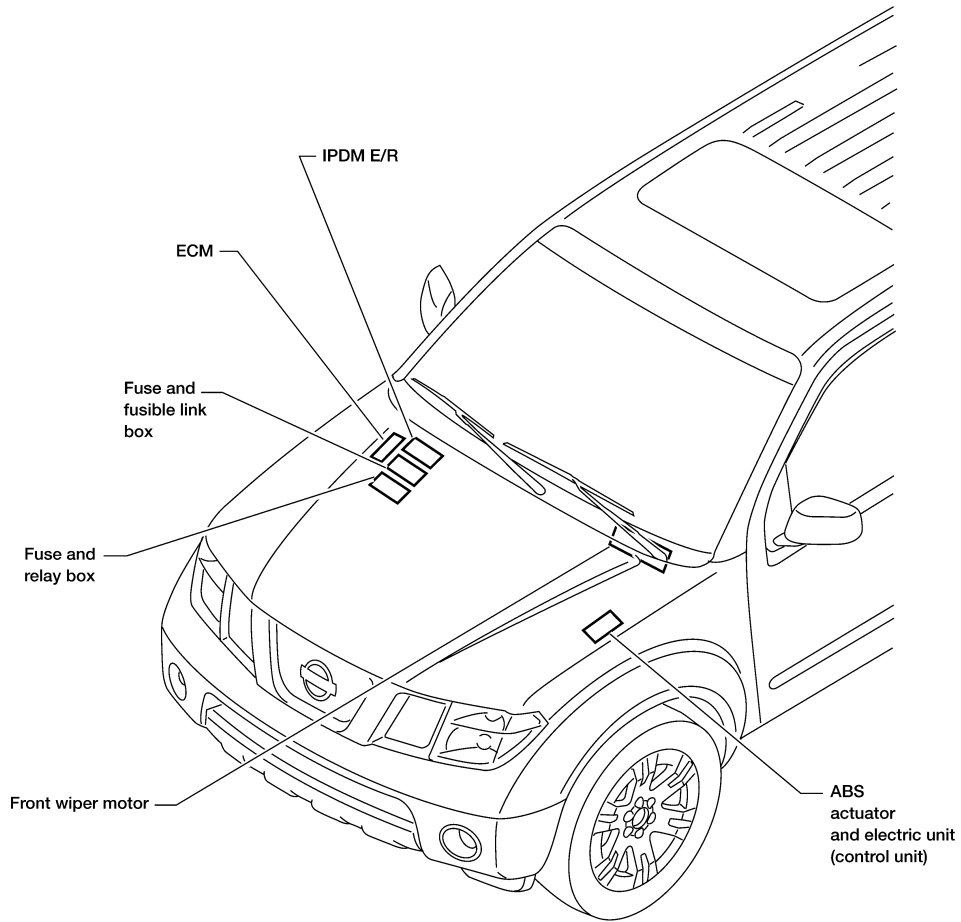
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ELECTRICAL UNITS LOCATION

Electrical Units Location

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ENGINE COMPARTMENT

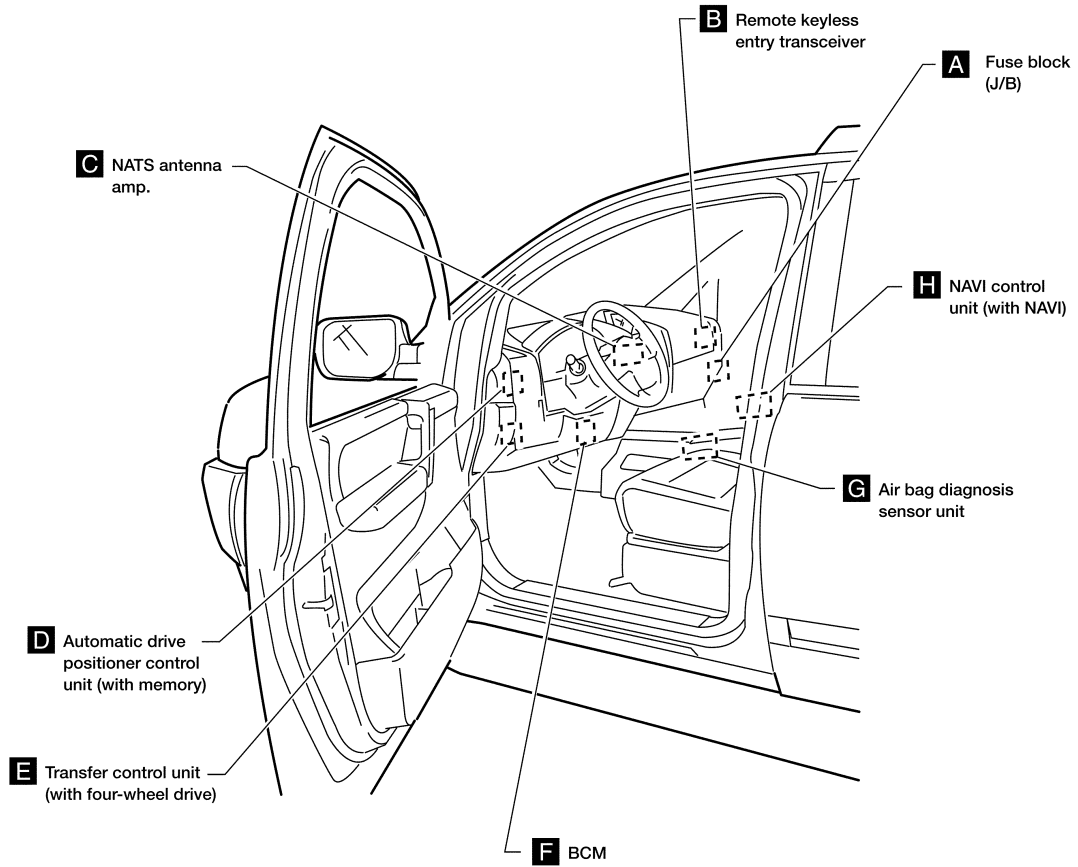


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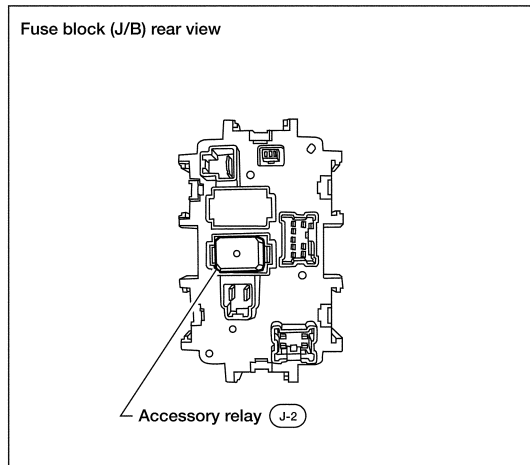
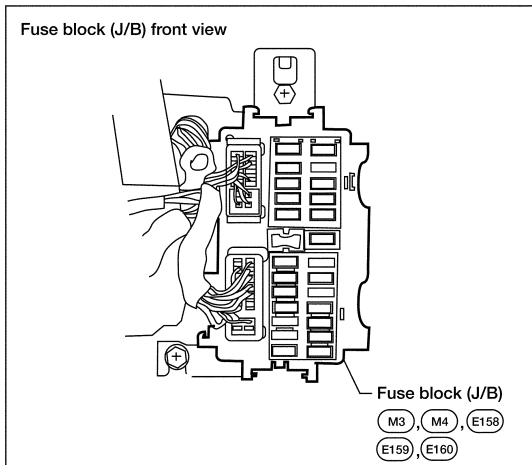
LKIA0629E

ELECTRICAL UNITS LOCATION

< COMPONENT DIAGNOSIS > PASSENGER COMPARTMENT



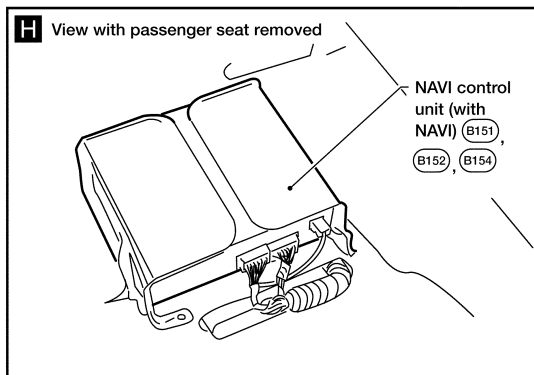
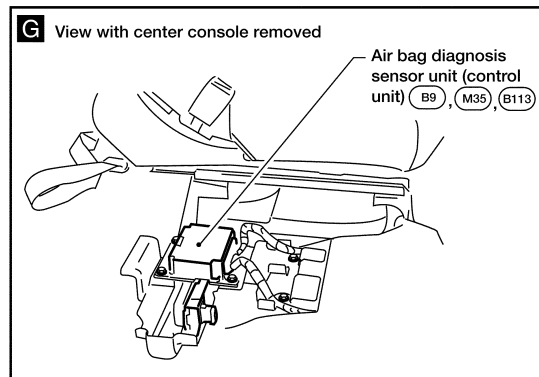
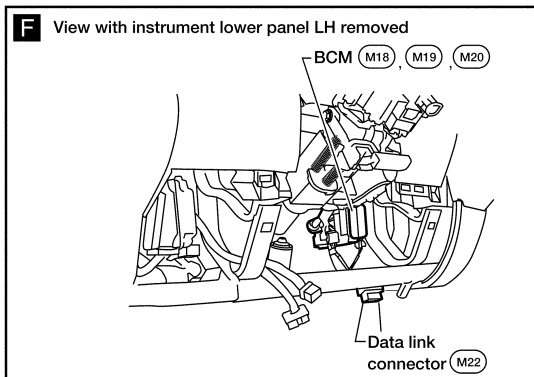
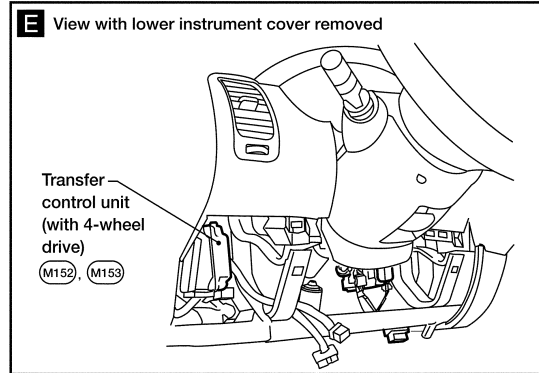
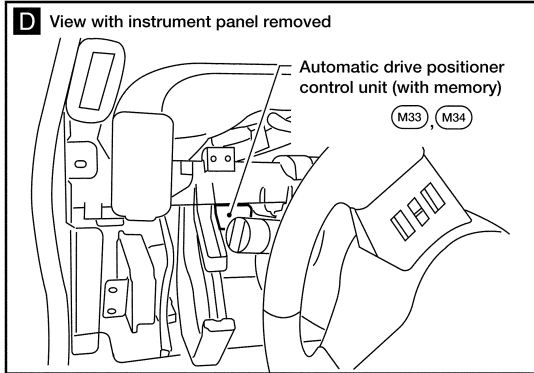
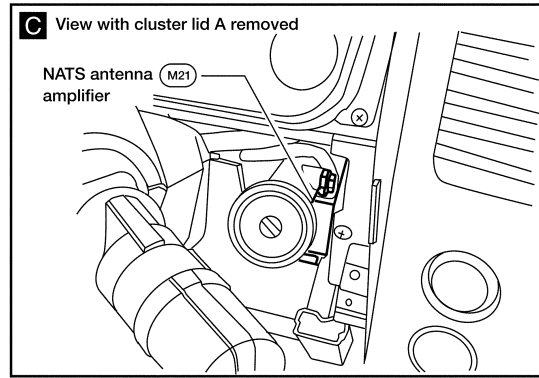
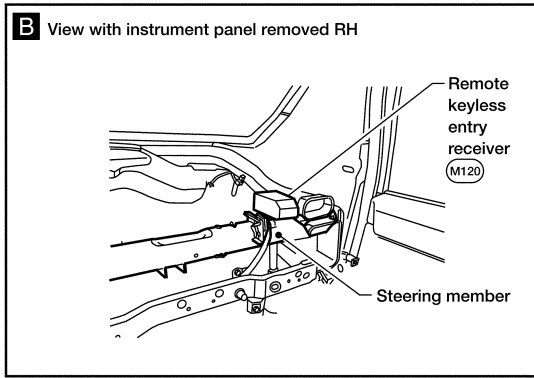
A Instrument panel side RH



WKIA5024E

ELECTRICAL UNITS LOCATION

< COMPONENT DIAGNOSIS >



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WKIA5025E

HARNESS CONNECTOR

< COMPONENT DIAGNOSIS >

HARNESS CONNECTOR

Description

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HARNESS CONNECTOR (TAB-LOCKING TYPE)

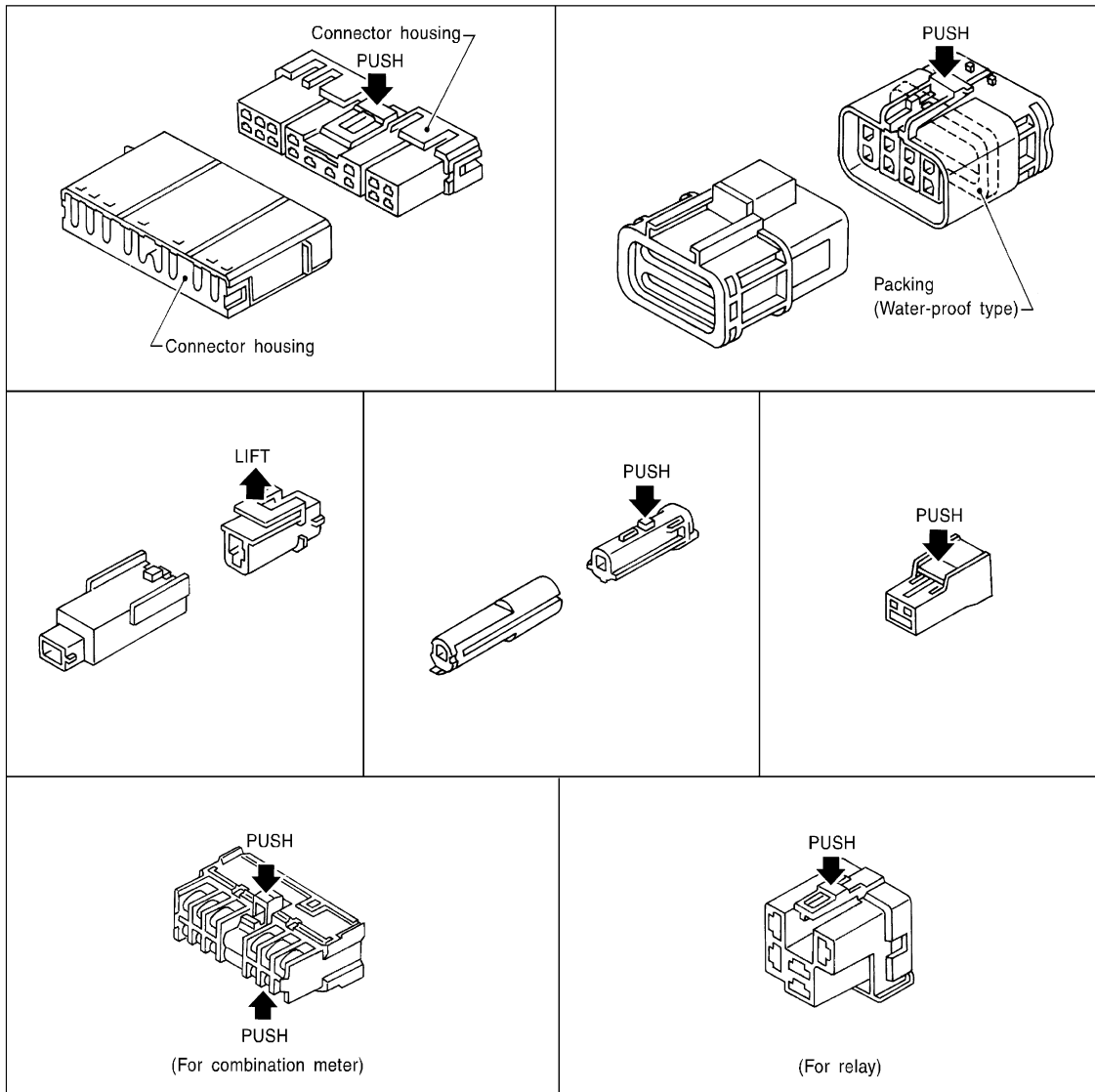
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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 (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.

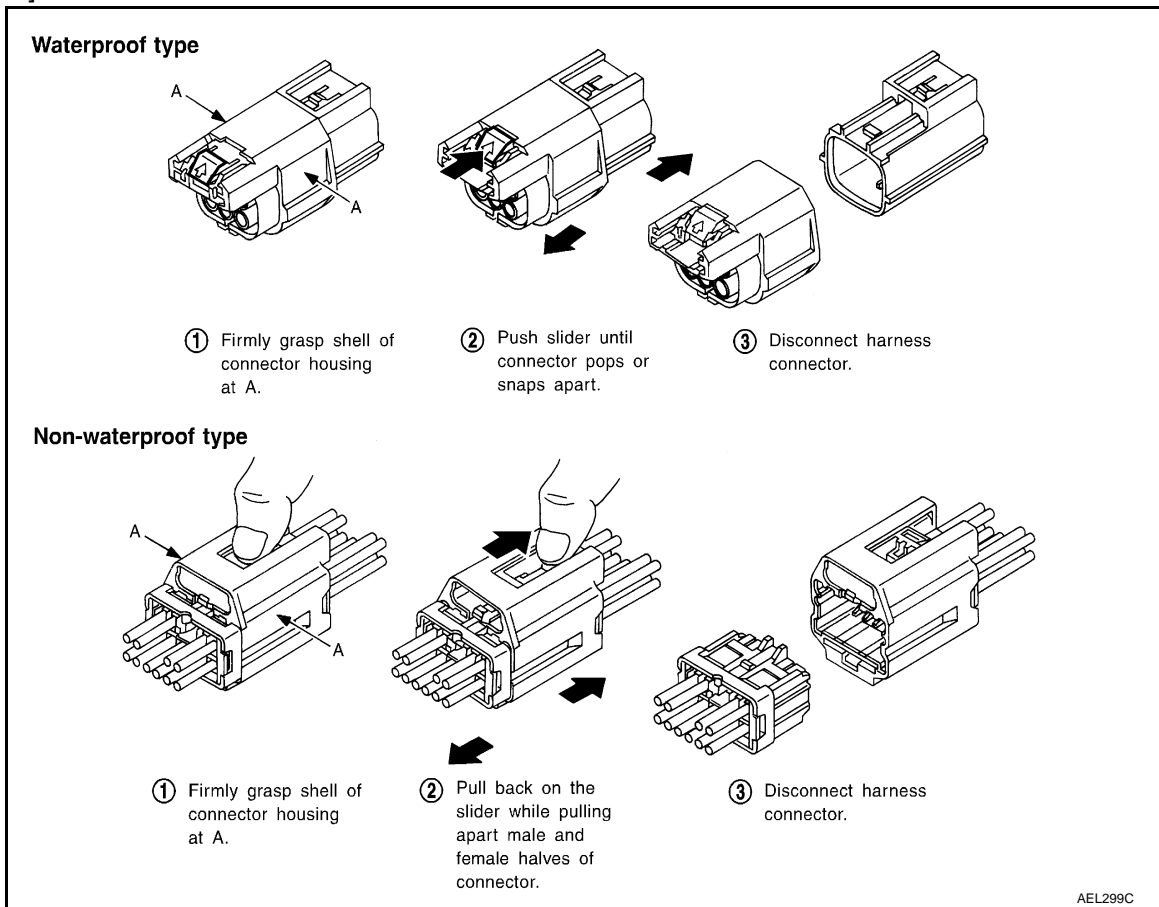
HARNESS CONNECTOR

< COMPONENT DIAGNOSIS >

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]



HARNESS CONNECTOR (LEVER LOCKING TYPE)

- Lever locking type harness connectors are used on certain control units and control modules such as ECM, ABS actuator and electric unit (control unit), etc.
- Lever locking type harness connectors are also used on super multiple junction (SMJ) connectors.
- Always confirm the lever is fully locked in place by moving the lever as far as it will go to ensure full connection.

CAUTION:

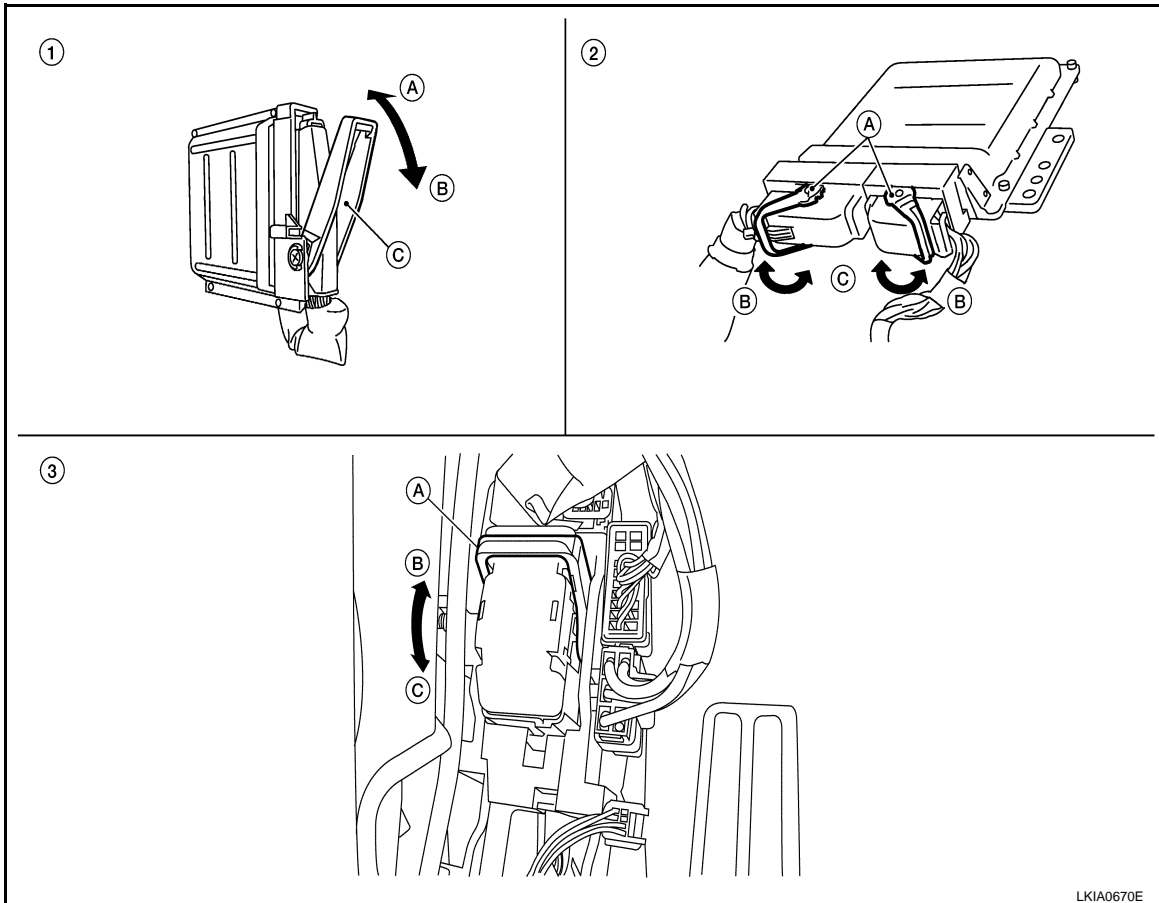
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HARNESS CONNECTOR

< COMPONENT DIAGNOSIS >

Always confirm the lever is fully released (loosened) before attempting to disconnect or connect these connectors to avoid damage to the connector housing or terminals.



LKIA0670E

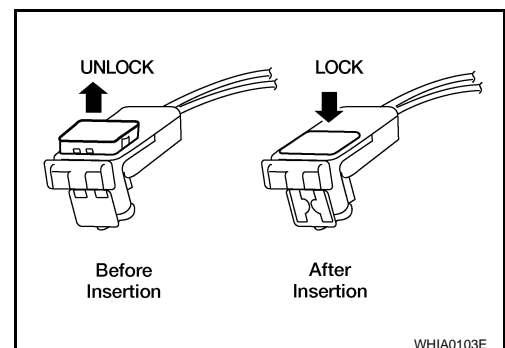
- | | | |
|--|--|---|
| <p>1. Control unit with single lever</p> <p>A. Fasten</p> <p>B. Loosen</p> <p>C. Lever</p> | <p>2. Control unit with dual levers</p> <p>A. Levers</p> <p>B. Fasten</p> <p>C. Loosen</p> | <p>3. SMJ connector</p> <p>A. Lever</p> <p>B. Fasten</p> <p>C. Loosen</p> |
|--|--|---|

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.



WHIA0103E

ELECTRICAL UNITS

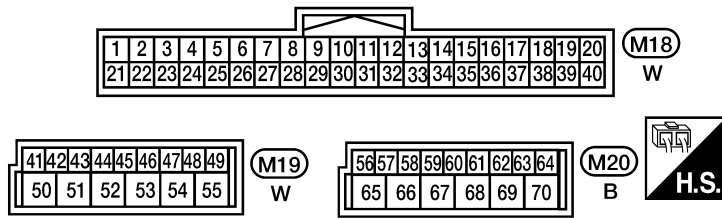
< COMPONENT DIAGNOSIS >

ELECTRICAL UNITS

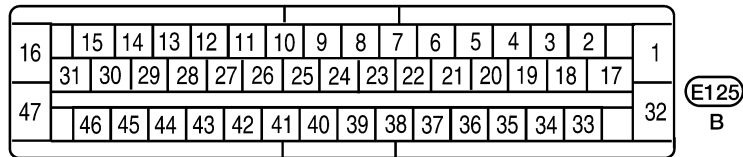
Terminal Arrangement

INFOID:000000001731016

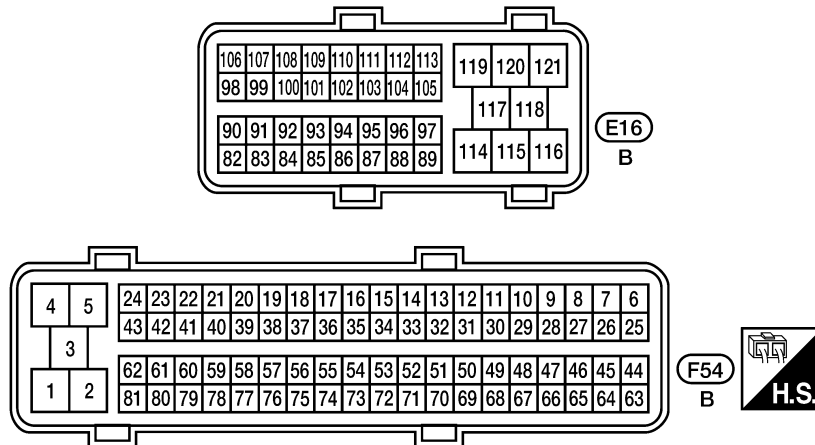
BCM (BODY CONTROL MODULE)



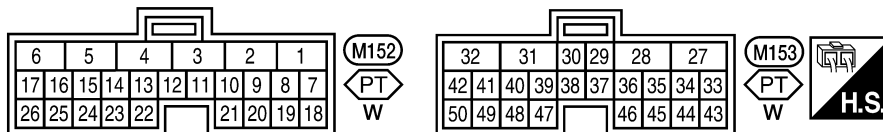
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



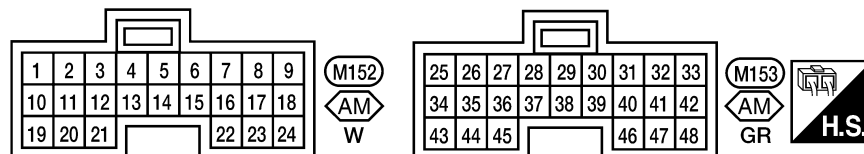
ECM



TRANSFER CONTROL UNIT



TRANSFER CONTROL UNIT



: ALL-MODE 4WD SYSTEM : PART TIME 4WD SYSTEM

WKIA5869E

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STANDARDIZED RELAY

< COMPONENT DIAGNOSIS >

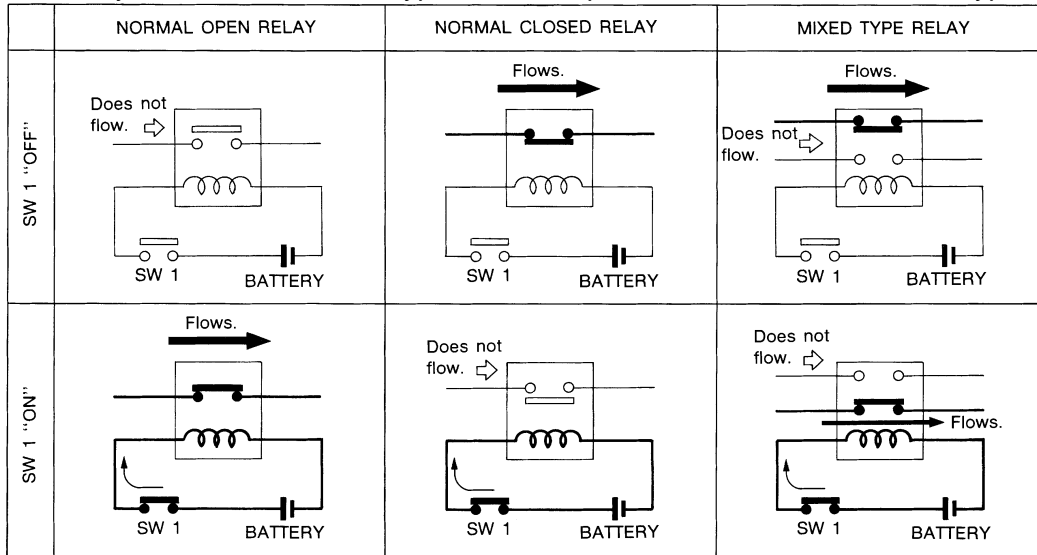
STANDARDIZED RELAY

Description

INFOID:000000001731017

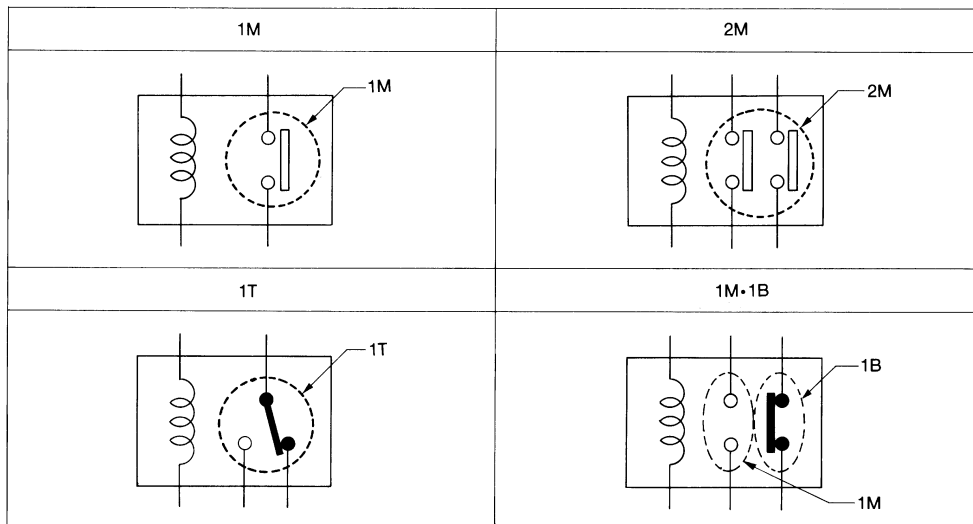
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



SEL881H

TYPE OF STANDARDIZED RELAYS

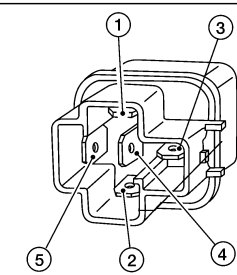
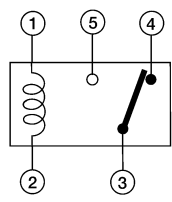
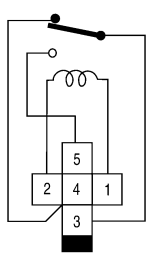
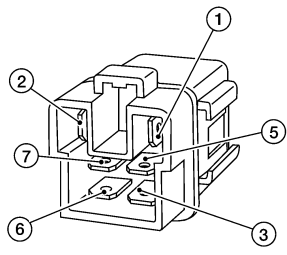
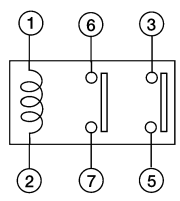
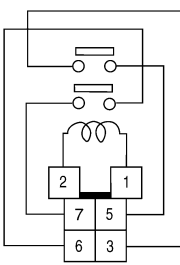
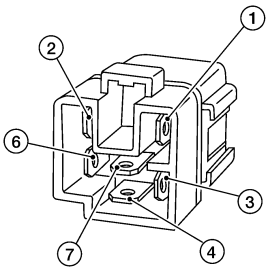
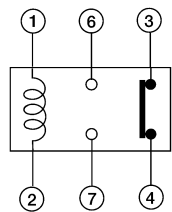
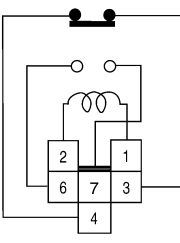
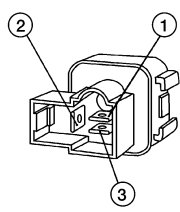
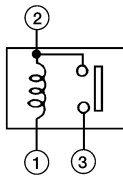
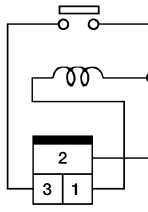
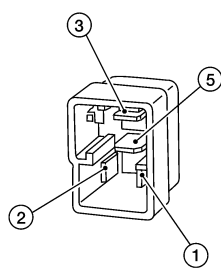
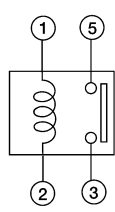
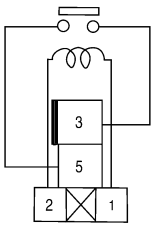


SEL882H

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

STANDARDIZED RELAY

< COMPONENT DIAGNOSIS >

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.

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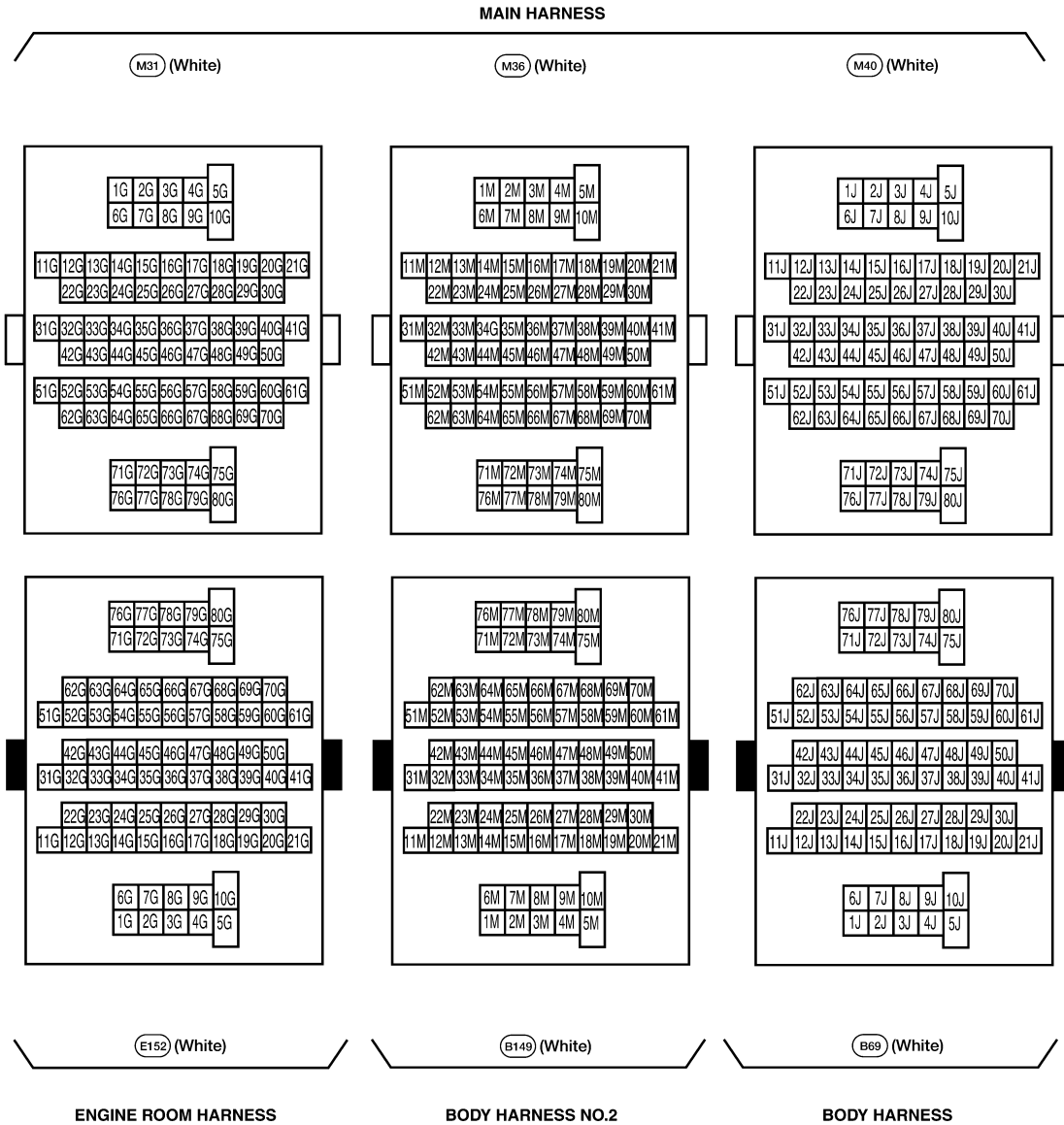
SUPER MULTIPLE JUNCTION (SMJ)

< COMPONENT DIAGNOSIS >

SUPER MULTIPLE JUNCTION (SMJ)

Terminal Arrangement

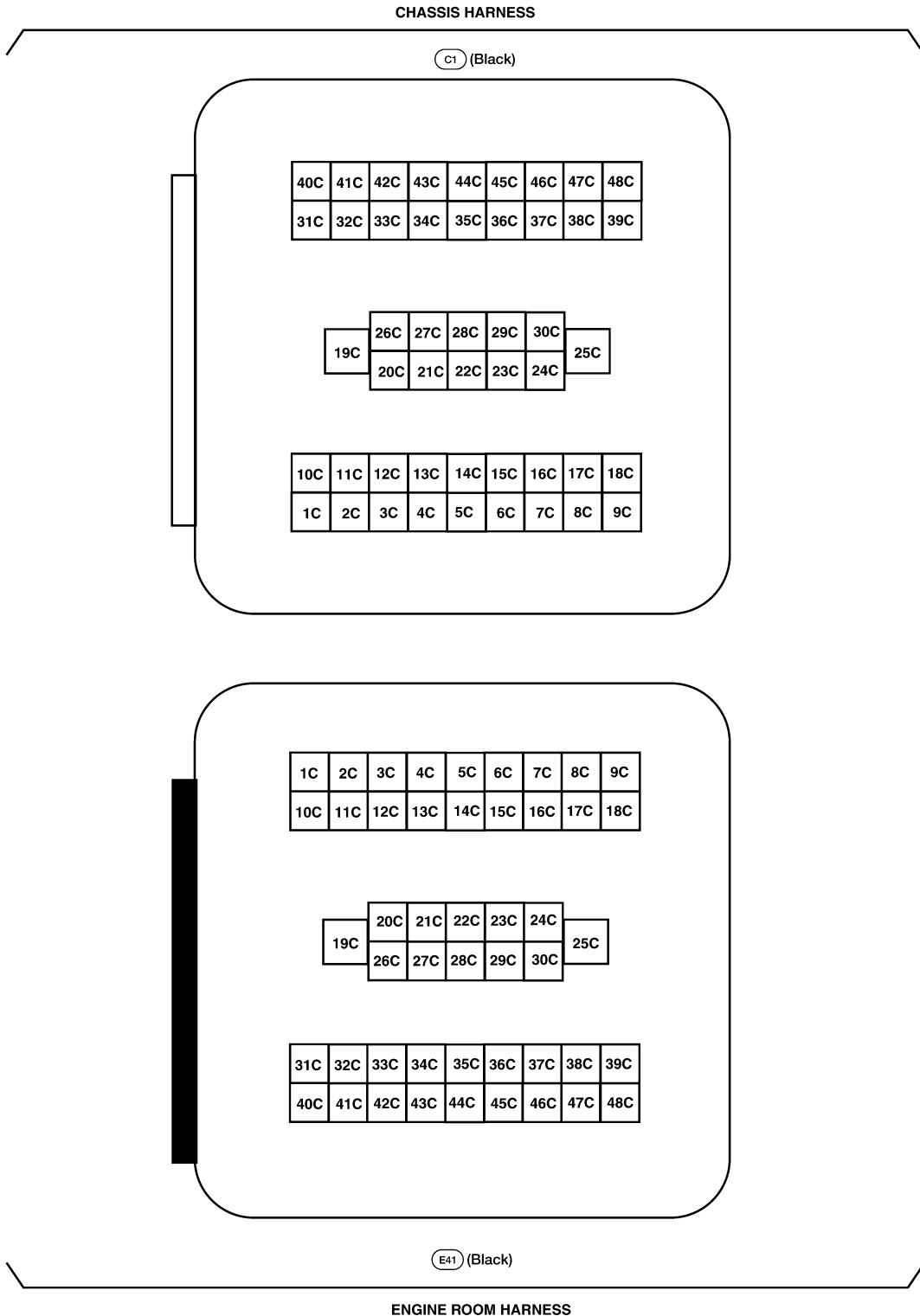
INFOID:000000001731018



WKIA3590E

SUPER MULTIPLE JUNCTION (SMJ)

< COMPONENT DIAGNOSIS >



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WKIA4179E

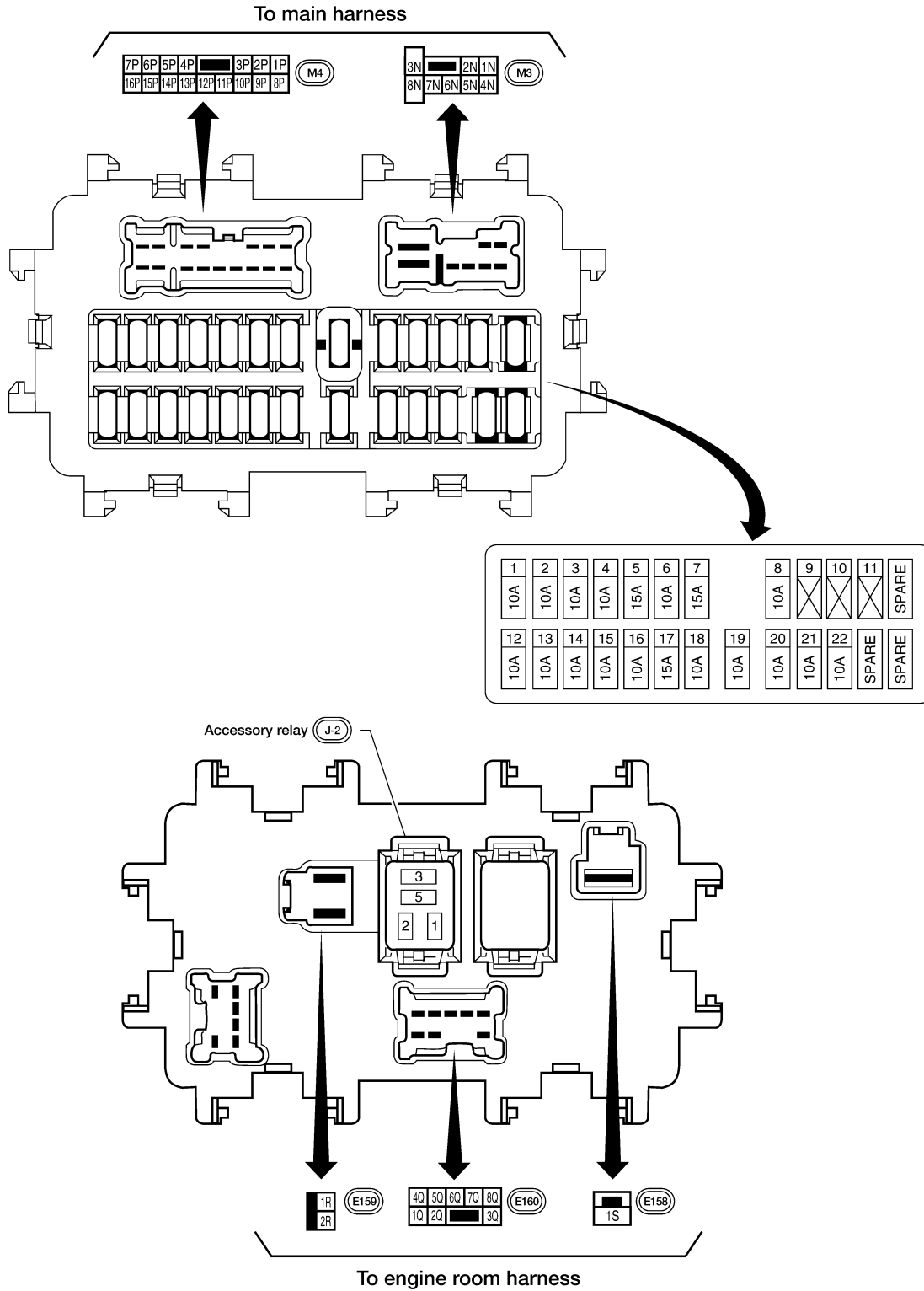
FUSE BLOCK-JUNCTION BOX (J/B)

< COMPONENT DIAGNOSIS >

FUSE BLOCK-JUNCTION BOX (J/B)

Terminal Arrangement

INFOID:000000001731019



WKIA5012E

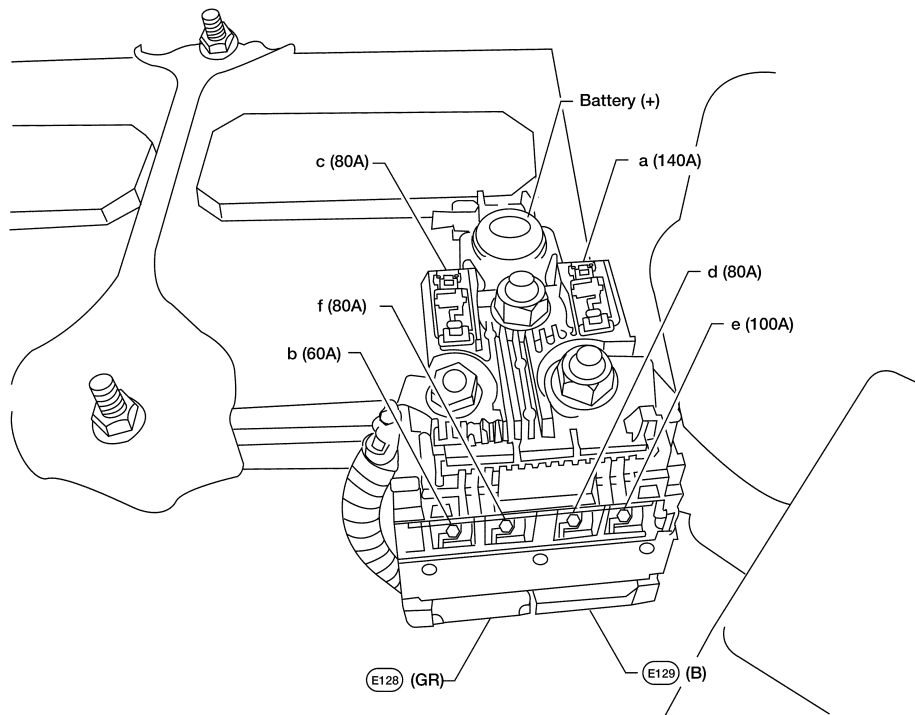
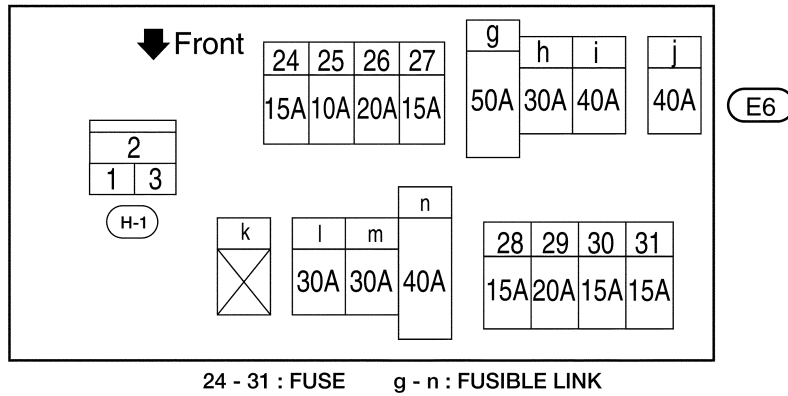
FUSE AND FUSIBLE LINK BOX

< COMPONENT DIAGNOSIS >

FUSE AND FUSIBLE LINK BOX

Terminal Arrangement

INFOID:000000001731020



FUSIBLE LINK BOX (BATTERY)

(E30), (E128), (E129), (E202), (F38)

WKIA5013E





FUSE AND RELAY BOX

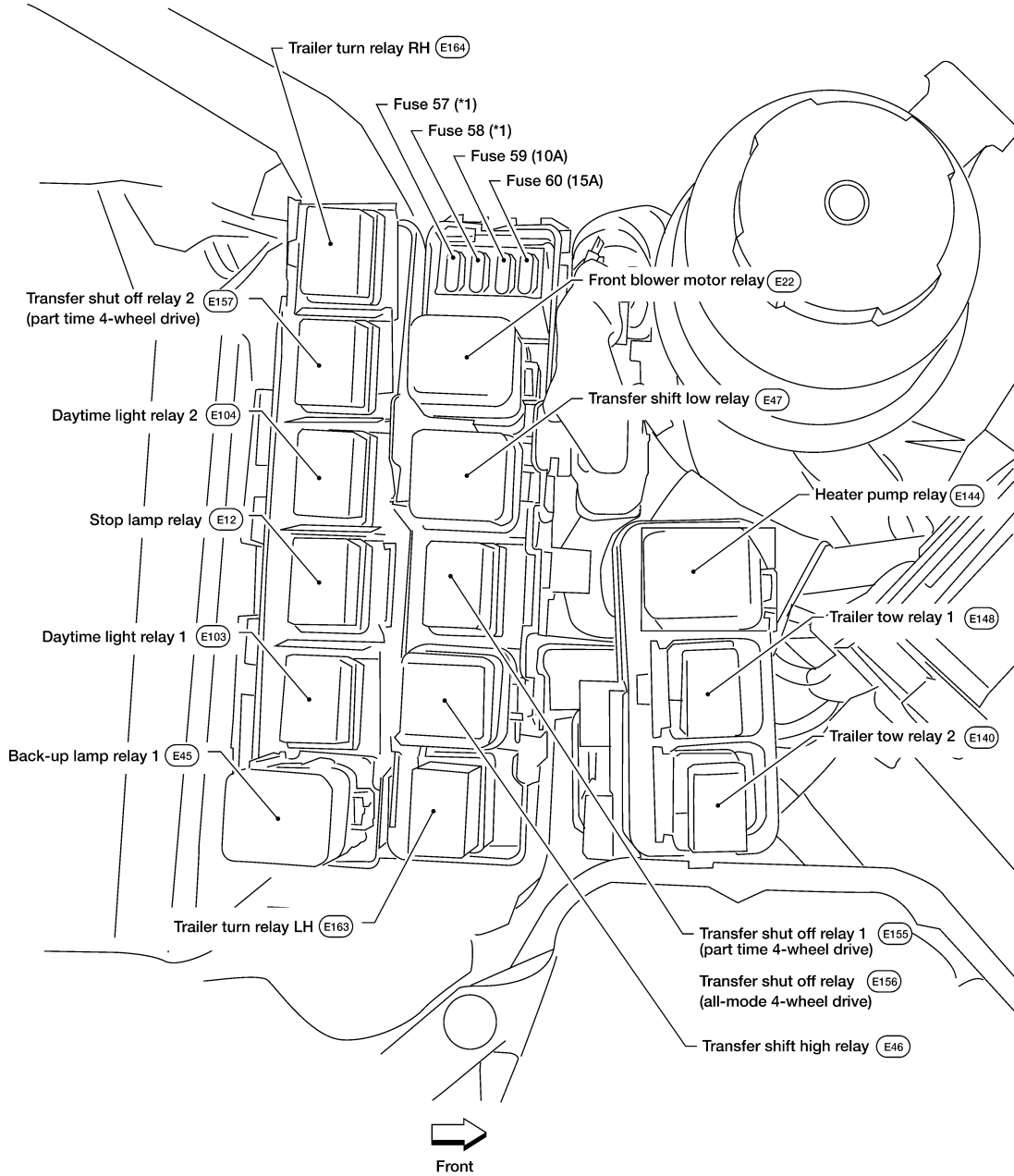
< COMPONENT DIAGNOSIS >

FUSE AND RELAY BOX

Terminal Arrangement

INFOID:000000001731021

-  : ALL-MODE 4WD SYSTEM
-  : PART TIME 4WD SYSTEM
-  : 20A
- *1  : 10A



WKIA5870E

BATTERY

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

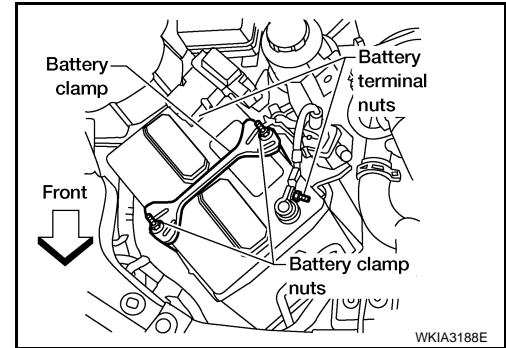
BATTERY

Removal and Installation

INFOID:000000001547054

REMOVAL

1. Disconnect both negative and positive battery terminal.
CAUTION:
Remove negative battery terminal first.
2. Remove battery clamp nuts and battery clamp.
3. Remove battery.



INSTALLATION

Installation is in the reverse order of removal.

CAUTION:

Install positive battery terminal first.

Battery clamp nuts : 3.4 N·m (0.35 kg-m, 30 in-lb)

Battery terminal nut : 3.4 N·m (0.35 kg-m, 30 in-lb)

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BATTERY

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

BATTERY

Battery

INFOID:000000001547053

	Standard battery
Type	Gr. 24
Capacity (20 HR) minimum V-AH	63
Cold cranking current A (For reference value)	550