SECTION PG

POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

PRECAUTIONS

PFP:00011

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

EKS00EOD

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

WARNING:

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

Wiring Diagrams and Trouble Diagnosis

EKS00EOE

When you read wiring diagrams, refer to the following:

- Refer to GI-17, "How to Read Wiring Diagrams" in GI section.
- Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT" for power distribution.

When you perform trouble diagnosis, refer to the following:

- Refer to GI-13, "HOW TO FOLLOW TEST GROUPS IN TROUBLE DIAGNOSES" in GI section.
- Refer to GI-29, "How to Perform Efficient Diagnosis for an Electrical Incident" in GI section.

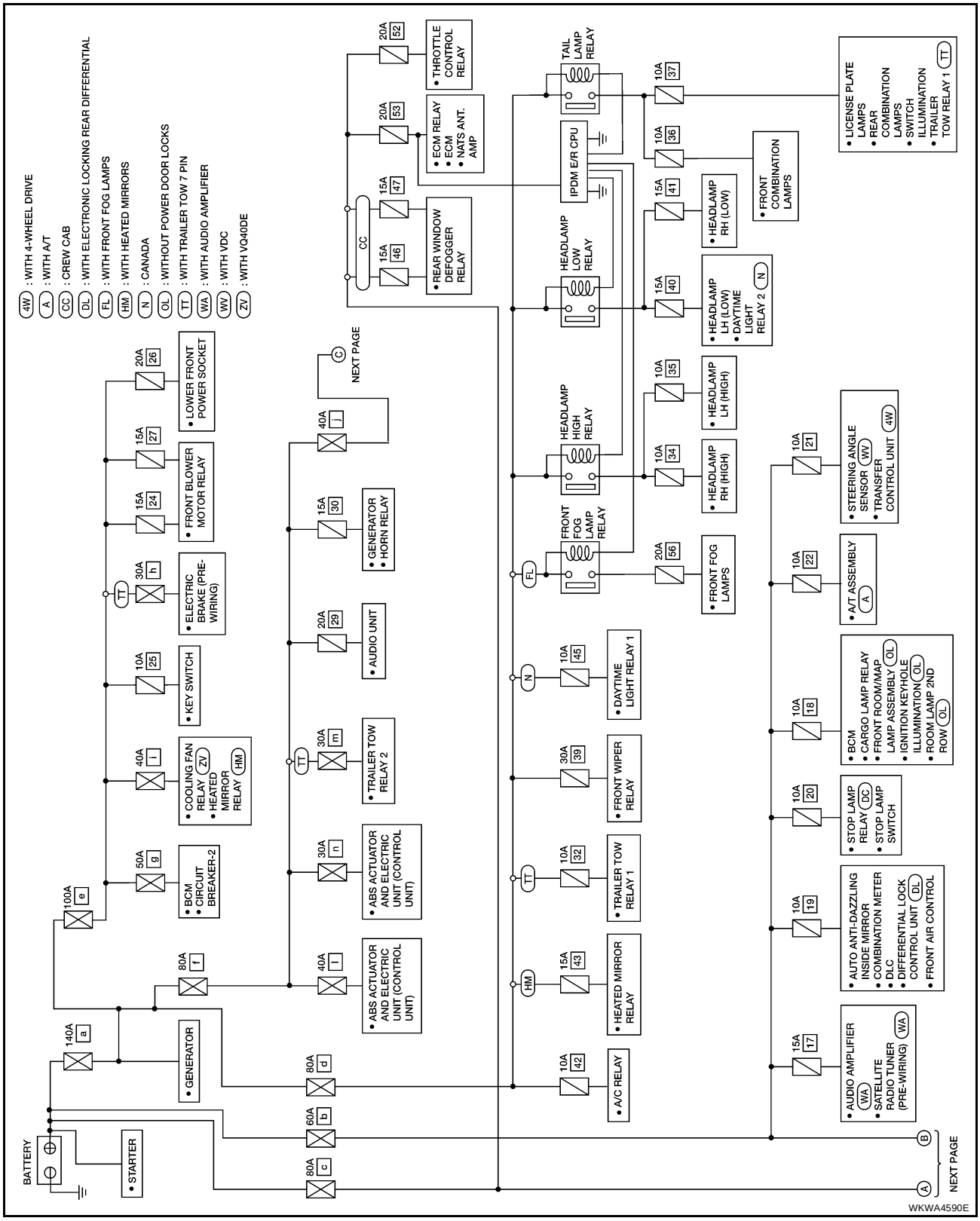
POWER SUPPLY ROUTING CIRCUIT

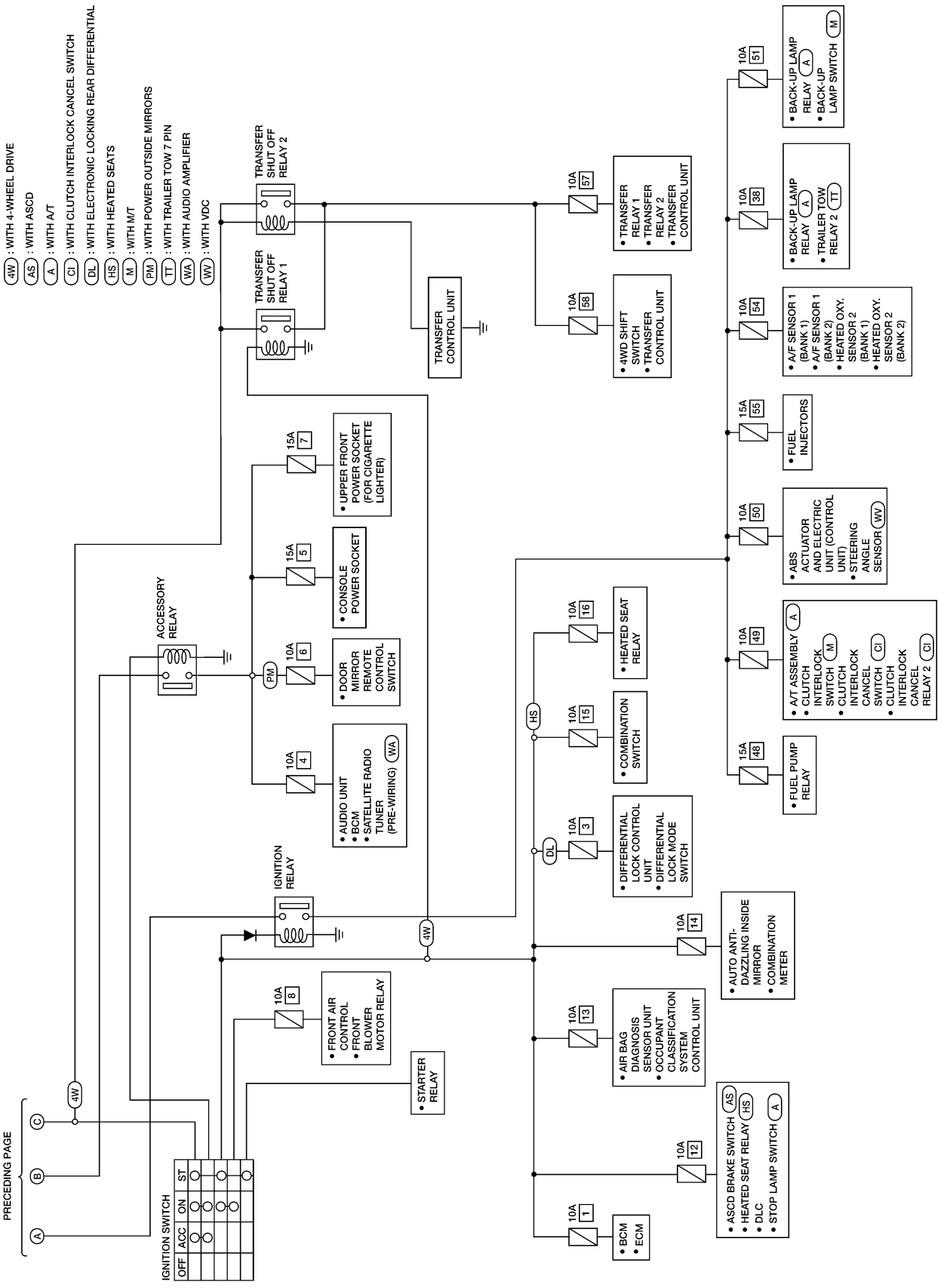
PFP:24110

Schematic

EKS00EOF

For detailed ground distribution, refer to PG-30, "Ground Distribution" .



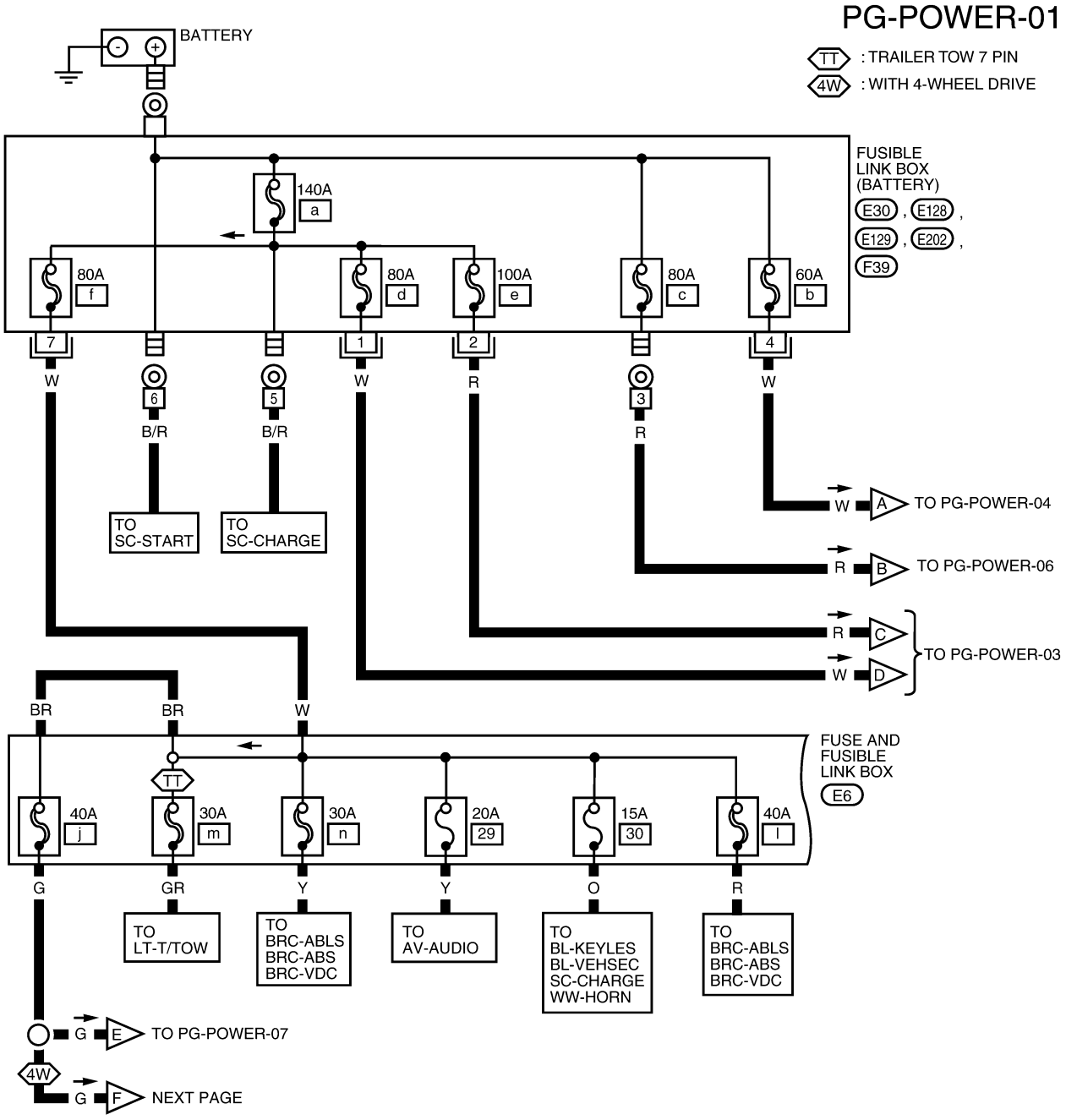

(4W) : WITH 4-WHEEL DRIVE
(AS) : WITH ASCD
(A) : WITH A/T
(CI) : WITH CLUTCH INTERLOCK CANCEL SWITCH
(DL) : WITH ELECTRONIC LOCKING REAR DIFFERENTIAL
(HS) : WITH HEATED SEATS
(M) : WITH M/T
(PM) : WITH POWER OUTSIDE MIRRORS
(TT) : WITH TRAILER TOW 7 PIN
(WA) : WITH AUDIO AMPLIFIER
(WV) : WITH VDC
PRECEDING PAGE
IGNITION SWITCH
OFF
ACC
ON
ST
BATTERY
IGNITION RELAY
ACCESSORY RELAY
STARTER RELAY
TRANSFER SHUT OFF RELAY 1
TRANSFER SHUT OFF RELAY 2
TRANSFER CONTROL UNIT
10A 1 • BCM • ECM
10A 3 • DIFFERENTIAL LOCK CONTROL UNIT • DIFFERENTIAL LOCK MODE SWITCH
10A 4 • AUDIO UNIT • BCM • SATELLITE RADIO TUNER (PRE-WIRING) (WA)
10A 6 • DOOR MIRROR REMOTE CONTROL SWITCH
15A 5 • CONSOLE POWER SOCKET
15A 7 • UPPER FRONT POWER SOCKET (FOR CIGARETTE LIGHTER)
10A 8 • FRONT AIR CONTROL • FRONT BLOWER MOTOR RELAY
10A 12 • ASCD BRAKE SWITCH (AS) • HEATED SEAT RELAY (HS) • DLC • STOP LAMP SWITCH (A)
10A 13 • AIR BAG DIAGNOSIS SENSOR UNIT • OCCUPANT CLASSIFICATION SYSTEM CONTROL UNIT
10A 14 • AUTO ANTI-DAZZLING INSIDE MIRROR • COMBINATION METER
10A 15 • COMBINATION SWITCH
10A 16 • HEATED SEAT RELAY
10A 57 • TRANSFER RELAY 1 • TRANSFER RELAY 2 • TRANSFER CONTROL UNIT
10A 58 • 4WD SHIFT SWITCH • TRANSFER CONTROL UNIT
15A 48 • FUEL PUMP RELAY
10A 49 • A/T ASSEMBLY (A) • CLUTCH INTERLOCK SWITCH (M) • CLUTCH INTERLOCK CANCEL SWITCH (CI) • CLUTCH INTERLOCK CANCEL RELAY 2 (CI)
10A 50 • ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) • STEERING ANGLE SENSOR (WV)
15A 55 • FUEL INJECTORS
10A 54 • A/F SENSOR 1 (BANK 1) • A/F SENSOR 1 (BANK 2) • HEATED OXY. SENSOR 2 (BANK 1) • HEATED OXY. SENSOR 2 (BANK 2)
10A 38 • BACK-UP LAMP RELAY (A) • TRAILER TOW RELAY 2 (TT)
10A 51 • BACK-UP LAMP RELAY (A) • BACK-UP LAMP SWITCH (M)

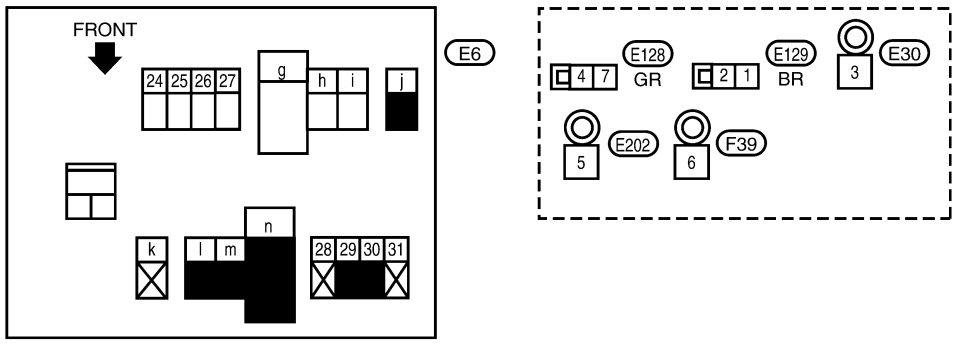
WKWA2991E

Wiring Diagram — POWER —

EKS00EOG

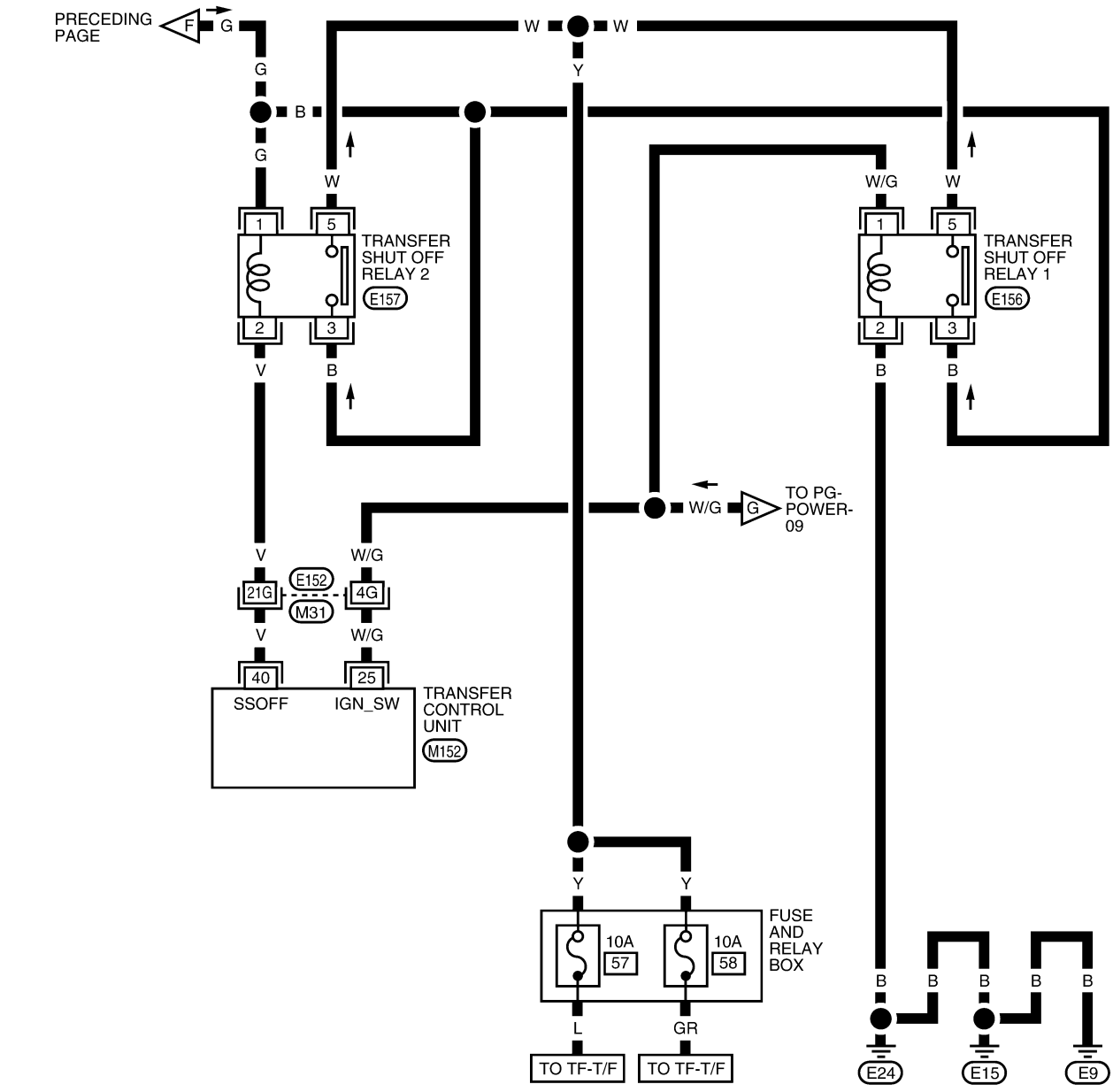
BATTERY POWER SUPPLY — IGNITION SW. IN ANY POSITION

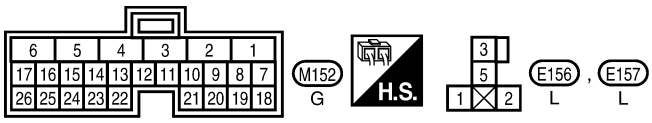




WKWA2992E

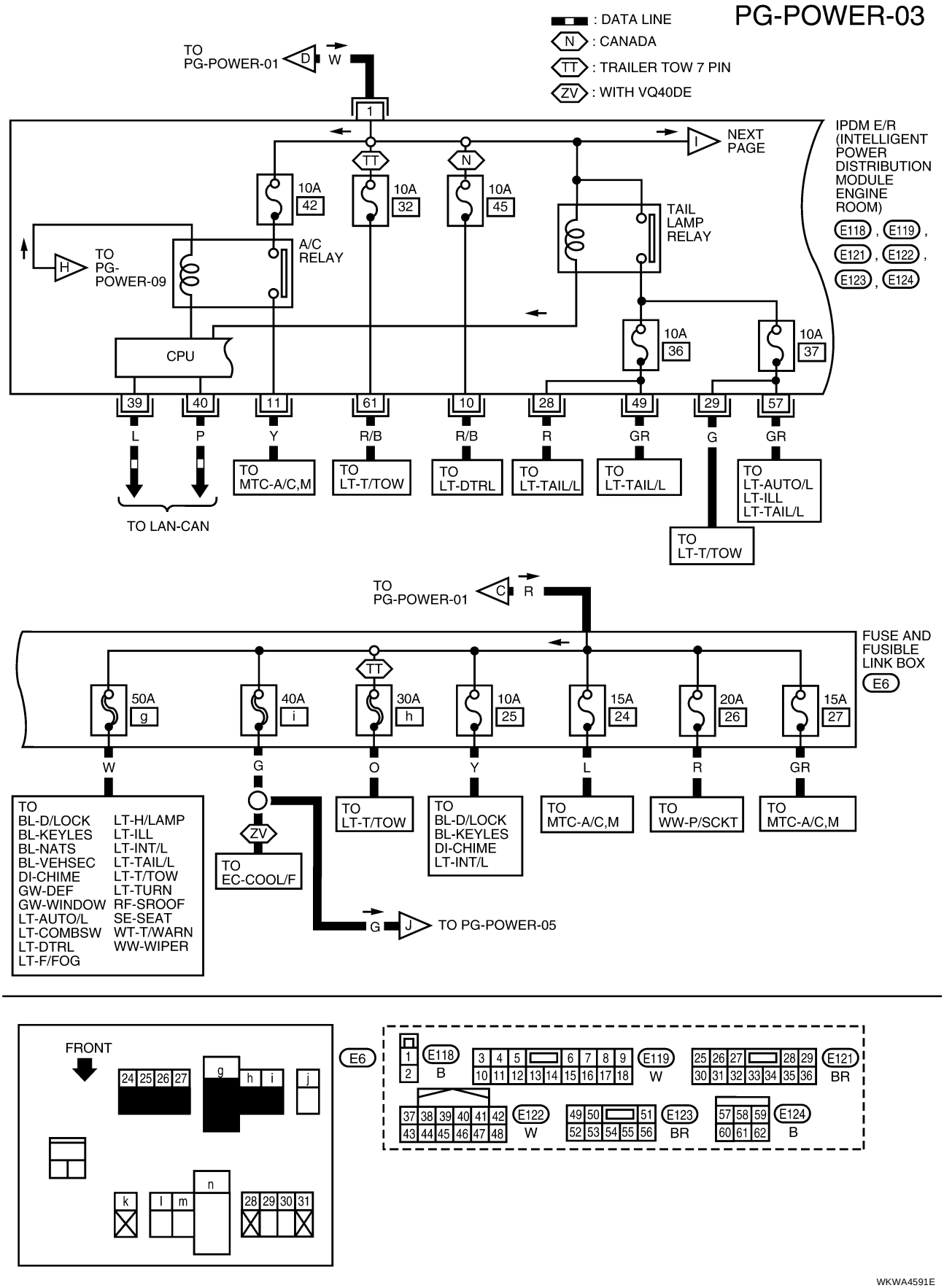
PG-POWER-02





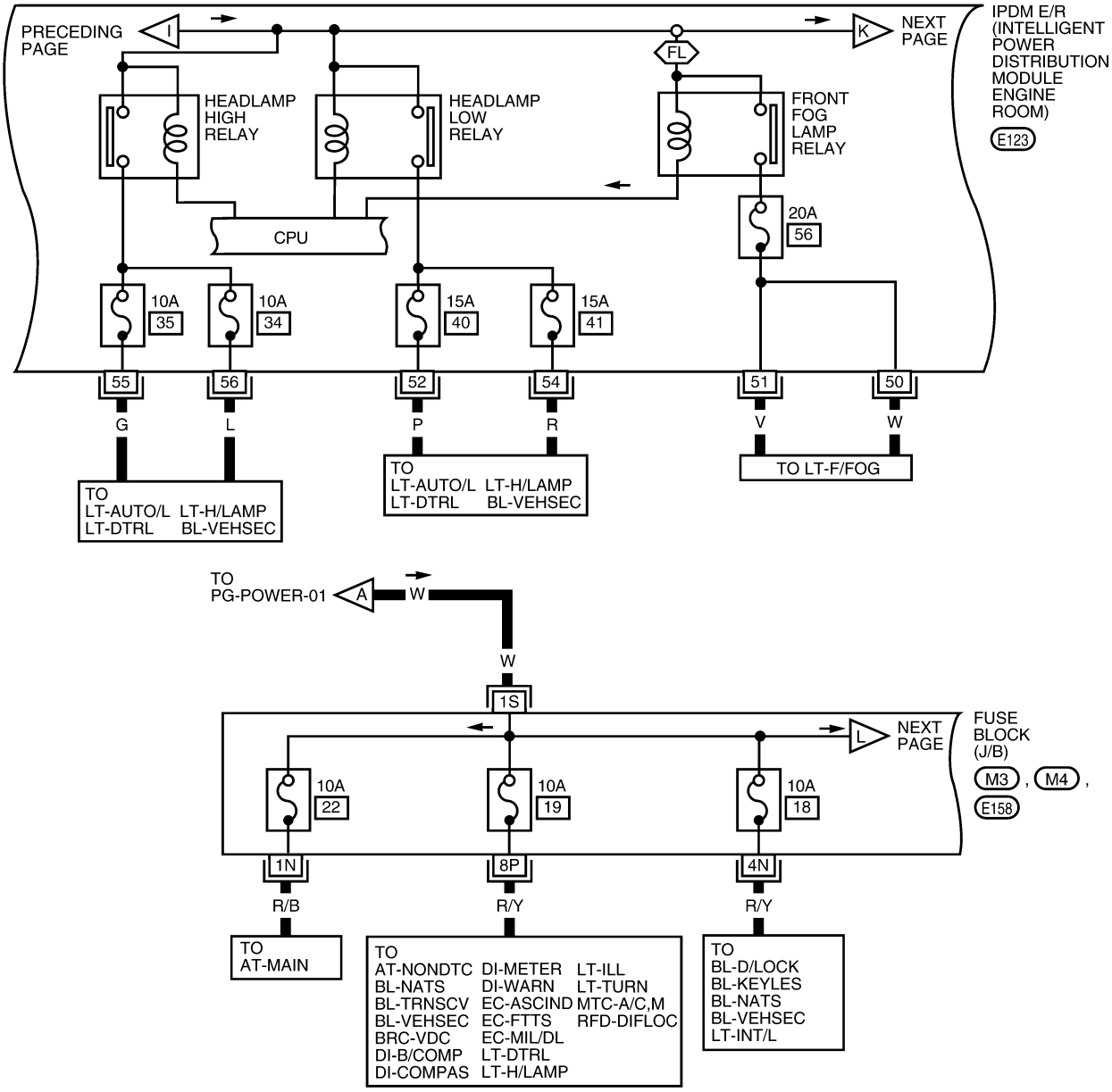
REFER TO THE FOLLOWING.
M31 - SUPER MULTIPLE JUNCTION (SMJ)

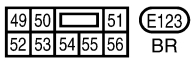
WKWA2993E


PG-POWER-03
: DATA LINE
N : CANADA
TT : TRAILER TOW 7 PIN
ZV : WITH VQ40DE
TO PG-POWER-01
D
W
1
NEXT PAGE
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E118, E119, E121, E122, E123, E124
10A 42
10A 32
10A 45
10A 36
10A 37
A/C RELAY
TAIL LAMP RELAY
TO PG-POWER-09
H
CPU
39 40 11 61 10 28 49 29 57
L P Y R/B R/B R GR G GR
TO MTC-A/C,M
TO LT-T/TOW
TO LT-DTRL
TO LT-TAIL/L
TO LT-TAIL/L
TO LT-AUTO/L LT-ILL LT-TAIL/L
TO LT-T/TOW
TO LAN-CAN
TO PG-POWER-01
C
R
FUSE AND FUSIBLE LINK BOX
E6
50A g
40A i
30A h
10A 25
15A 24
20A 26
15A 27
W G O Y L R GR
TO
BL-D/LOCK
BL-KEYLES
BL-NATS
BL-VEHSEC
DI-CHIME
GW-DEF
GW-WINDOW
LT-AUTO/L
LT-COMBSW
LT-DTRL
LT-F/FOG
LT-H/LAMP
LT-ILL
LT-INT/L
LT-TAIL/L
LT-T/TOW
LT-TURN
RF-SROOF
SE-SEAT
WT-T/WARN
WW-WIPER
ZV
TO EC-COOL/F
TO LT-T/TOW
TO BL-D/LOCK BL-KEYLES DI-CHIME LT-INT/L
TO MTC-A/C,M
TO WW-P/SCKT
TO MTC-A/C,M
G J TO PG-POWER-05
FRONT
E6
E118 B
E119 W
E121 BR
E122 W
E123 BR
E124 B
WKWA4591E

PG-POWER-04

FL : WITH FRONT FOG LAMPS





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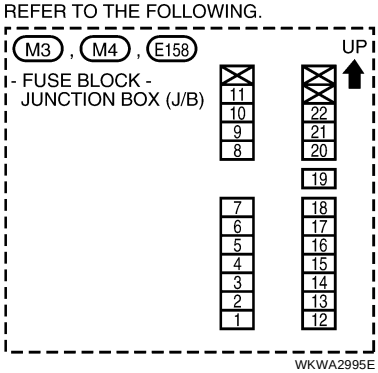
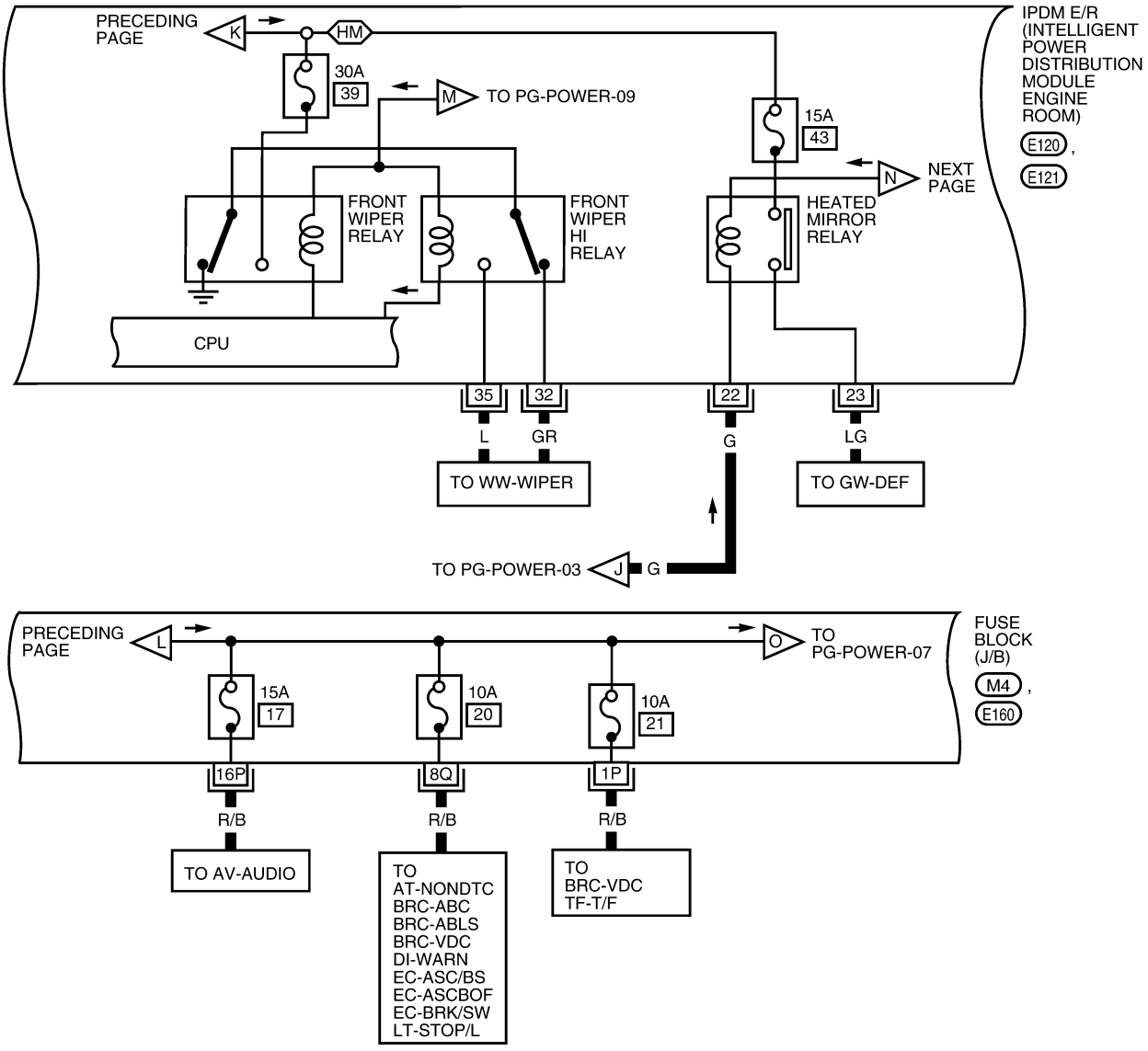
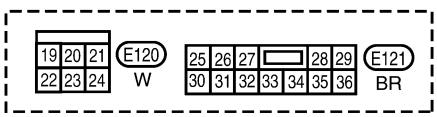


PG-POWER-05

HM : WITH HEATED MIRRORS





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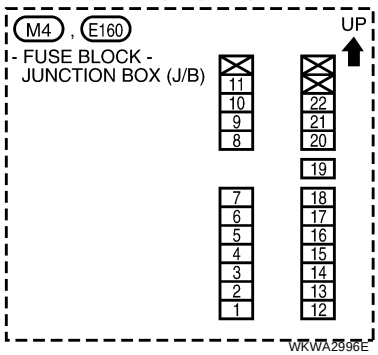
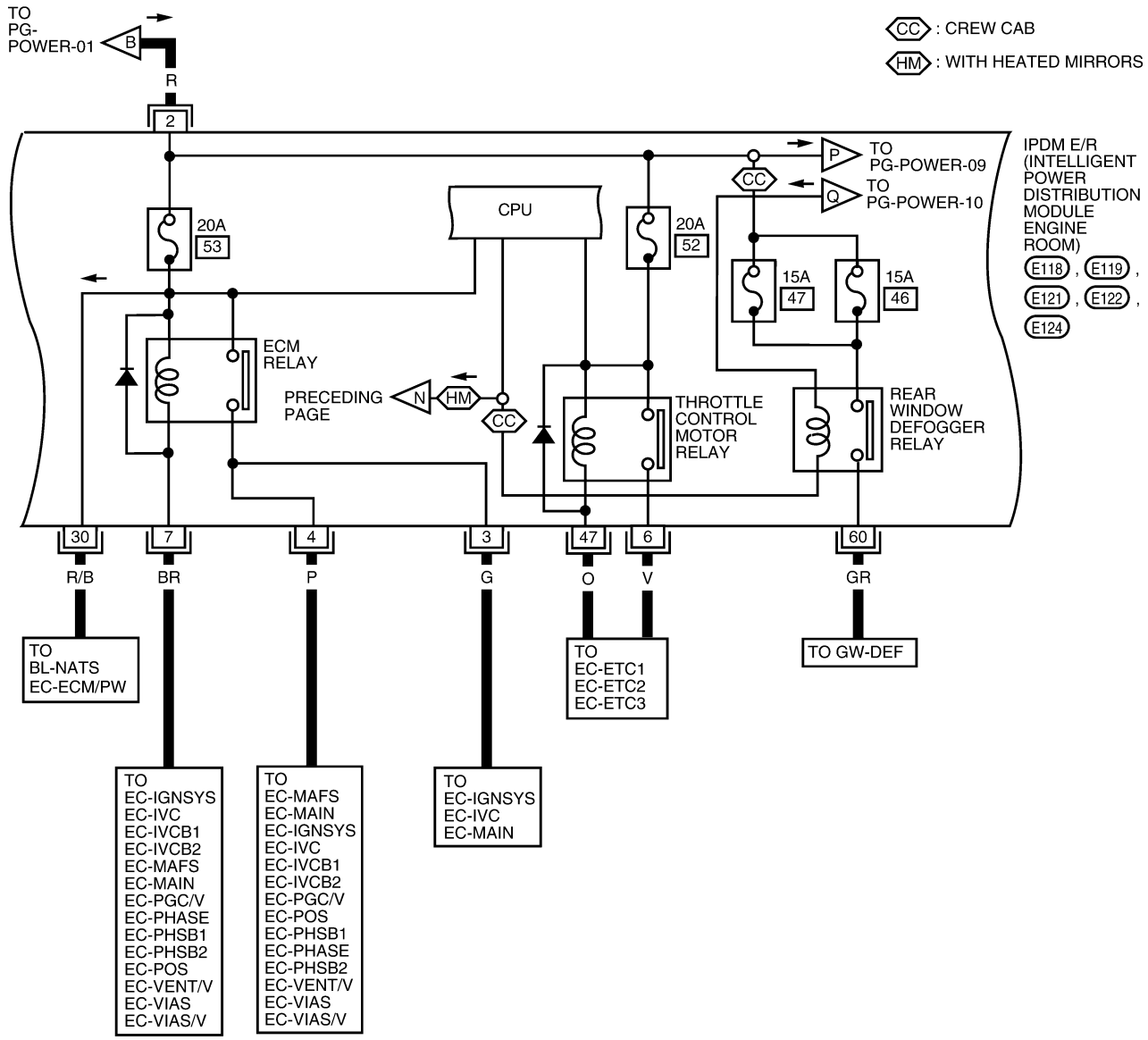
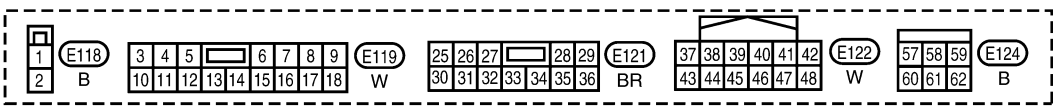


PG-POWER-06

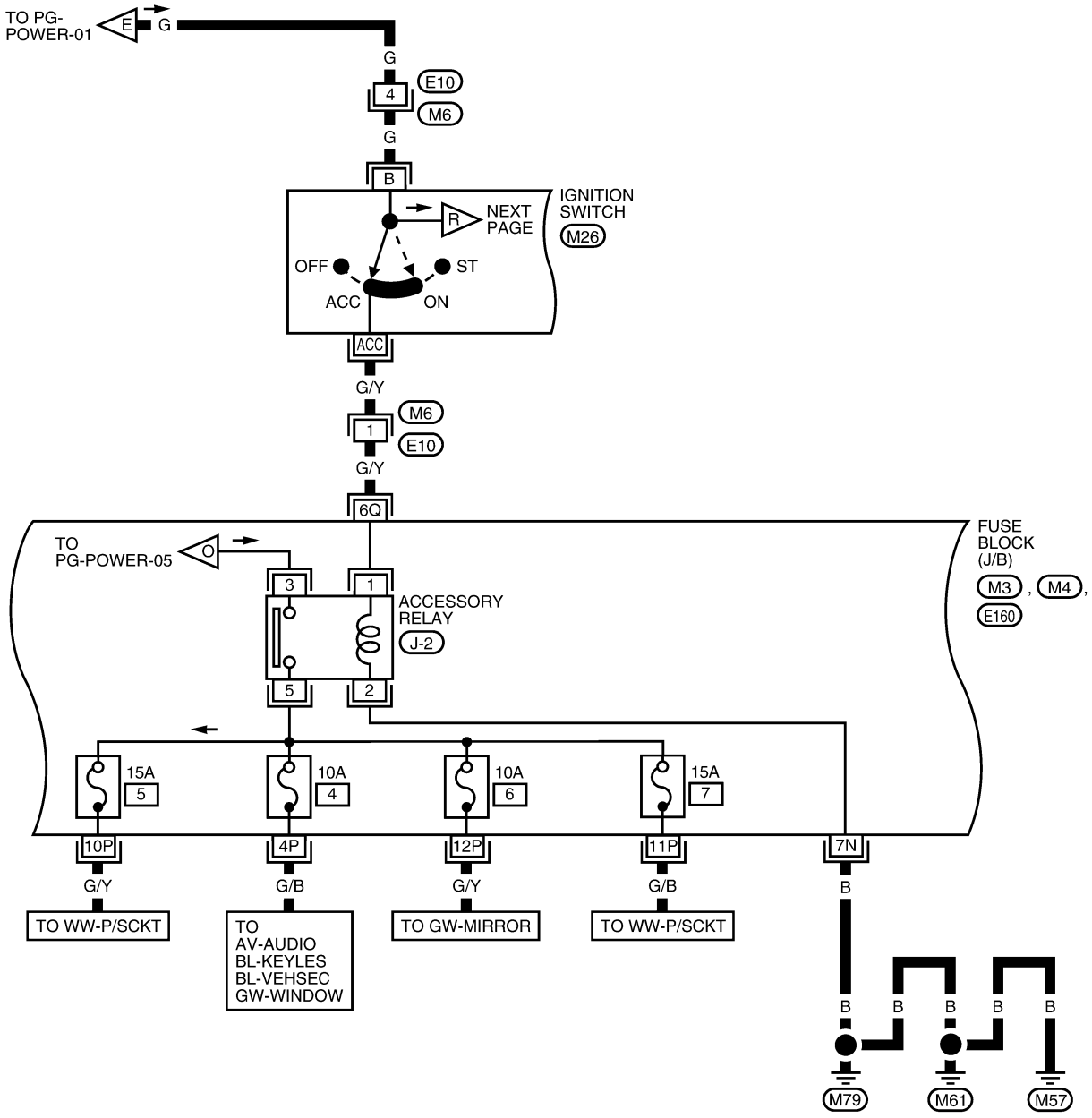


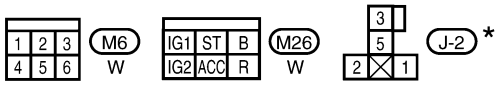


WKWA2997E

ACCESSORY POWER SUPPLY — IGNITION SW. IN ACC OR ON

PG-POWER-07





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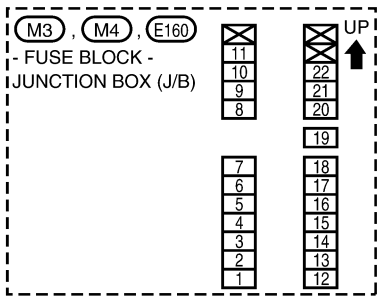
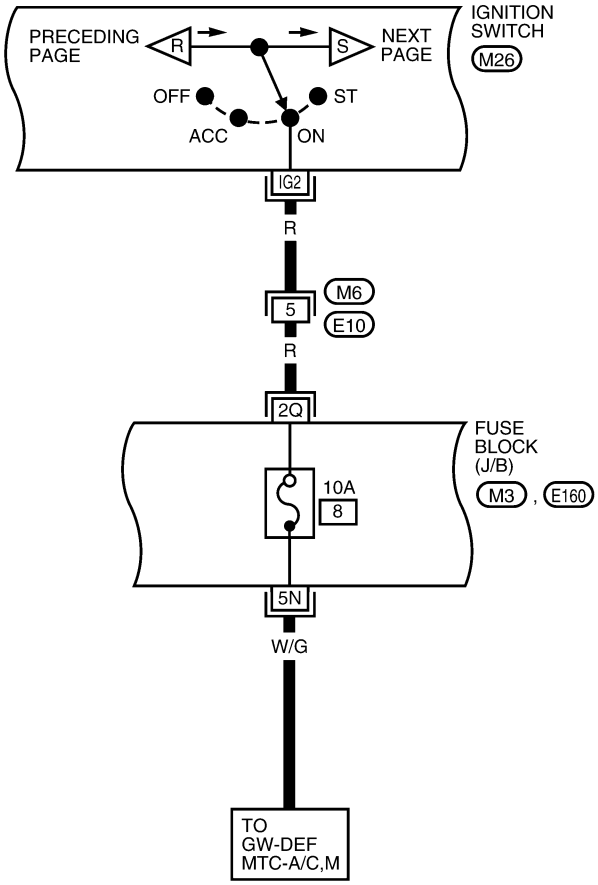


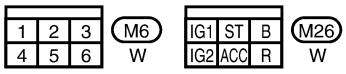
* : THIS CONNECTOR IS NOT SHOWN IN “HARNESS LAYOUT”.

WKWA2723E

IGNITION POWER SUPPLY — IGNITION SW. IN ON

PG-POWER-08





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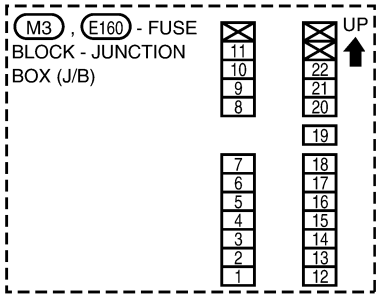
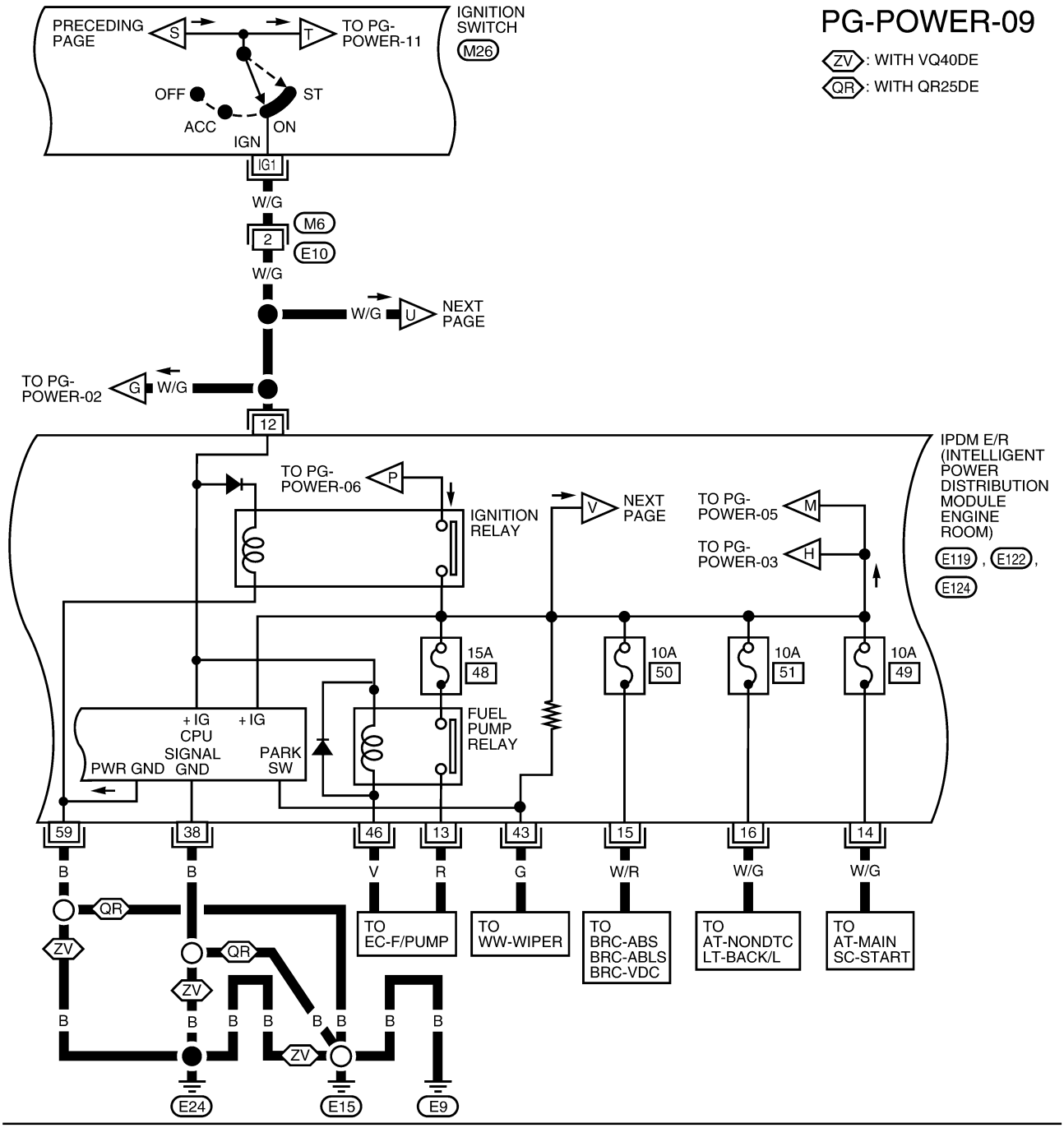
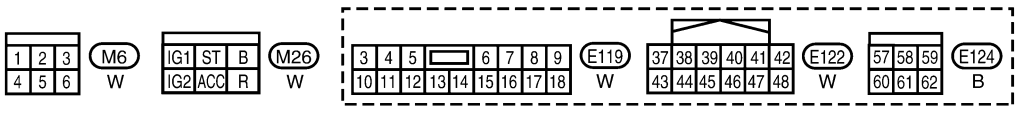


WKWA2724E

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

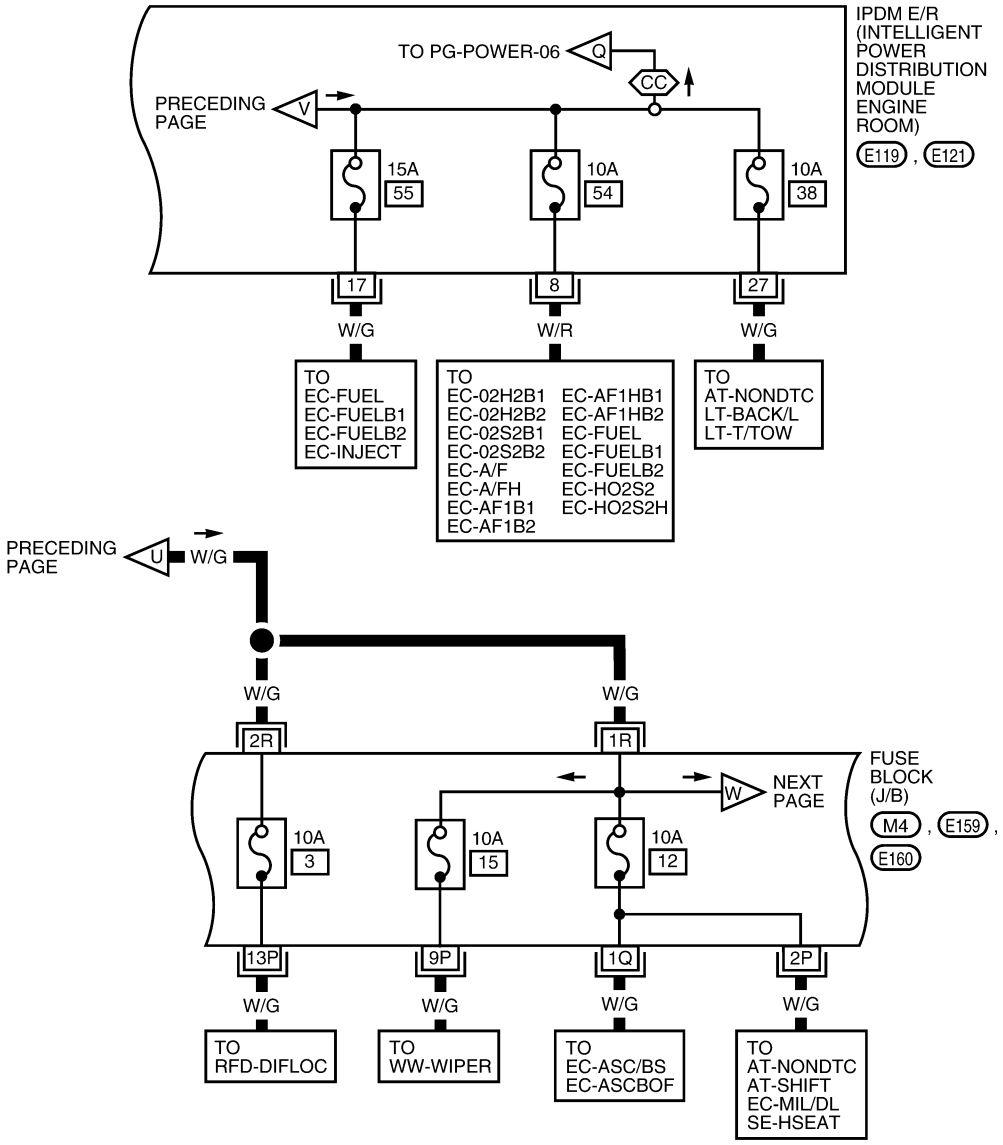


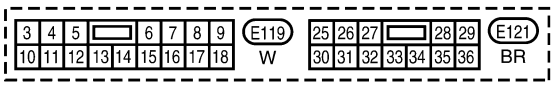


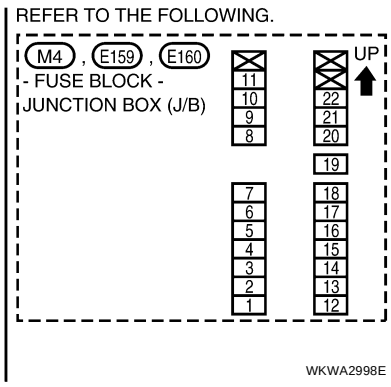
WKWA3013E

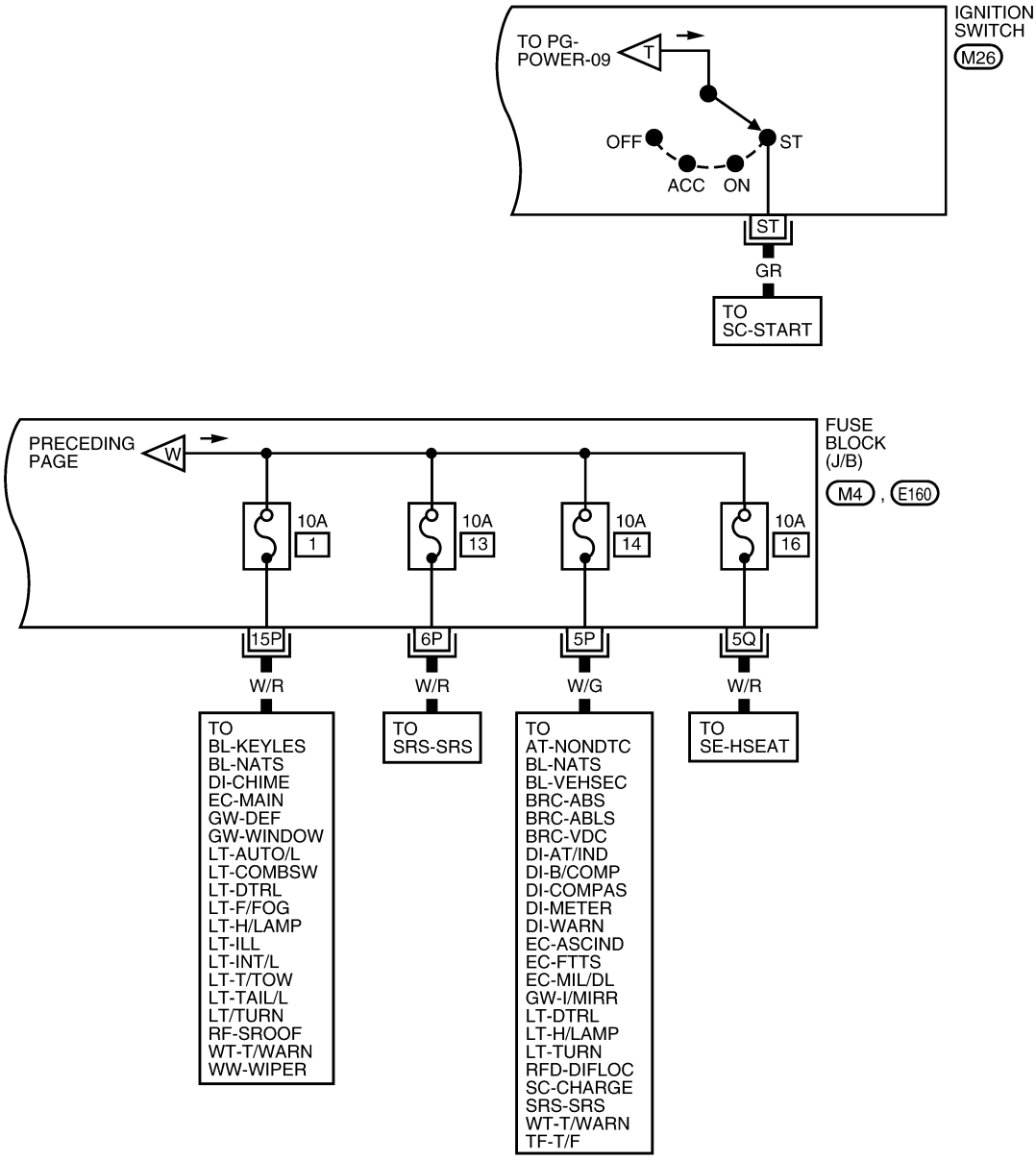
PG-POWER-10

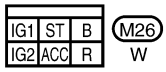
CC : CREW CAB

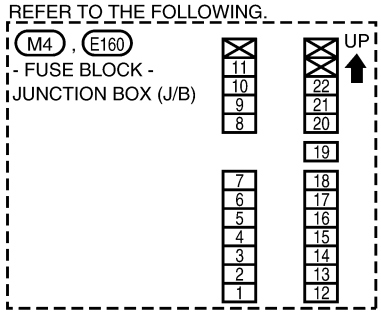







IGNITION SWITCH
M26
TO PG-POWER-09
T
OFF
ACC
ON
ST
ST
GR
TO SC-START
PRECEDING PAGE
W
FUSE BLOCK (J/B)
M4 , E160
10A 1
10A 13
10A 14
10A 16
15P
6P
5P
5Q
W/R
W/R
W/G
W/R
TO BL-KEYLES BL-NATS DI-CHIME EC-MAIN GW-DEF GW-WINDOW LT-AUTO/L LT-COMBSW LT-DTRL LT-F/FOG LT-H/LAMP LT-ILL LT-INT/L LT-T/TOW LT-TAIL/L LT/TURN RF-SROOF WT-T/WARN WW-WIPER
TO SRS-SRS
TO AT-NONDTC BL-NATS BL-VEHSEC BRC-ABS BRC-ABLS BRC-VDC DI-AT/IND DI-B/COMP DI-COMPAS DI-METER DI-WARN EC-ASCIND EC-FTTS EC-MIL/DL GW-I/MIRR LT-DTRL LT-H/LAMP LT-TURN RFD-DIFLOC SC-CHARGE SRS-SRS WT-T/WARN TF-T/F
TO SE-HSEAT


IG1 ST B
IG2 ACC R
M26
W


REFER TO THE FOLLOWING.
M4 , E160
- FUSE BLOCK - JUNCTION BOX (J/B)
UP
11 10 9 8
22 21 20 19
7 6 5 4 3 2 1
18 17 16 15 14 13 12

WKWA2999E

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

PFP:284B7

System Description

EKS00EOH

- IPDM E/R (Intelligent Power Distribution Module Engine Room) integrates the relay box and fuse block which were originally placed in engine compartment. It controls integrated relays via IPDM E/R control circuits.
- IPDM E/R-integrated control circuits perform ON-OFF operation of relays, CAN communication control, etc.
- It controls operation of each electrical component 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 lines, it receives signals from the BCM and controls the following lamps:
   - Headlamps (High, Low)
   - Parking lamps
   - Daytime light relay control (Canada only)
   - Tail and license plate lamps
   - Front fog lamps
2. Daytime light relay control (Canada only)
   Using CAN communication lines, it receives signals from the BCM and controls the daytime light relay.
3. Wiper control
   Using CAN communication lines, it receives signals from the BCM and controls the front wipers.
4. Rear window defogger relay control (crew cab only)
   Using CAN communication lines, it receives signals from the BCM and controls the rear window defogger relay.
5. A/C compressor control
   Using CAN communication lines, it receives signals from the BCM and controls the A/C compressor (magnetic clutch).
6. Starter control
   Using CAN communication lines, it receives signals from the BCM and controls the starter relay.
7. Cooling fan control (with VQ40DE)
   Using CAN communication lines, it receives signals from the ECM and controls the cooling fan relays.
8. Horn control
   Using CAN communication lines, it receives signals from the BCM and controls the horn relay.

CAN COMMUNICATION LINE CONTROL

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

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

Controlled system	Fail-safe mode
Headlamp	● With the ignition switch ON, the headlamp (low) is ON. ● With the ignition switch OFF, the headlamp (low) is OFF.
Tail, license plate and parking lamps	● With the ignition switch ON, the tail lamp relay is ON. ● With the ignition switch OFF, the tail lamp relay is OFF.
Cooling fan	● With the ignition switch ON, the cooling fan HIGH operates. ● With the ignition switch OFF, the cooling fan stops.

Controlled system	Fail-safe mode
Front wiper	Until the ignition switch is turned off, the front wiper LOW and HIGH 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 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 3 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
3. Sleep status
   - IPDM E/R operates in low current-consumption mode.
   - CAN communication is stopped.
   - When a change in CAN communication signal is detected, mode switches to CAN communication status.
   - When a change in ignition switch signal is detected, mode switches to CAN communication status.

CAN Communication System Description

EKS00EOI

Refer to LAN-22, "CAN COMMUNICATION" .

Function of Detecting Ignition Relay Malfunction

EKS00EOJ

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

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

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

CONSULT-II Function (IPDM E/R)

EKS00EOK

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

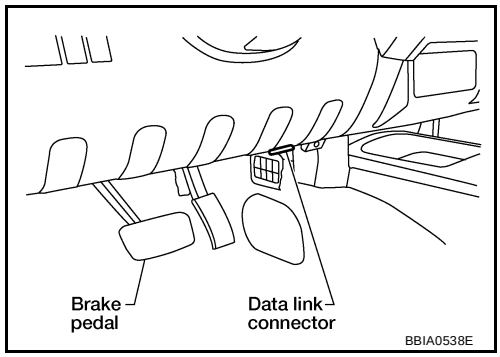
IPDM E/R diagnostic Mode	Description
SELF-DIAG RESULTS	Displays IPDM E/R self-diagnosis results.
DATA MONITOR	Displays IPDM E/R input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Operation of electrical loads can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

CONSULT-II BASIC OPERATION

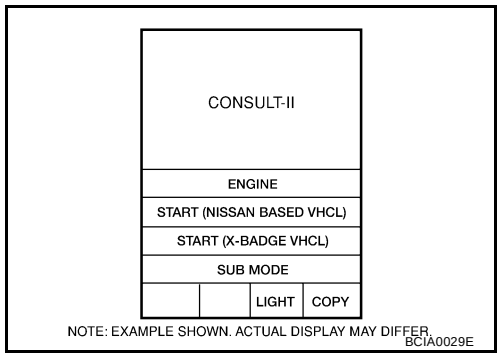
CAUTION:

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

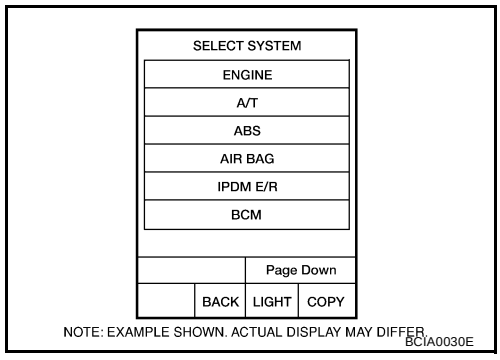
1. With the ignition switch OFF, connect CONSULT-II and CONSULT-II CONVERTER to the data link connector, then turn ignition switch ON.



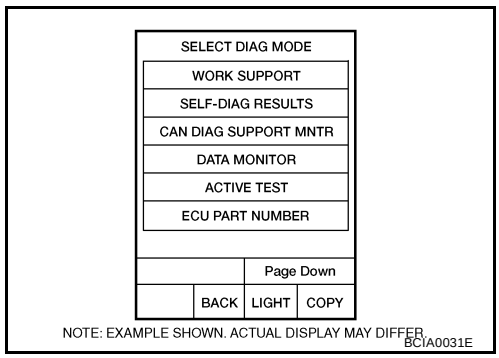
2. Touch “START (NISSAN BASED VHCL)”.



3. Touch “IPDM E/R” on “SELECT SYSTEM” screen.
   - If “IPDM E/R” is not displayed, go to GI-40, "CONSULT-II Data Link Connector (DLC) Circuit" .



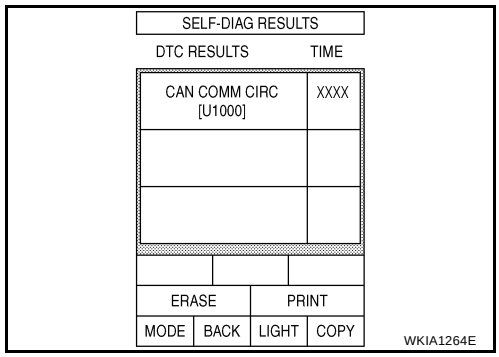
4. Select the desired part to be diagnosed on the "SELECT DIAG MODE" screen.“



SELF-DIAGNOSTIC RESULTS

Operation Procedure

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



Display Item List

Display items	CONSULT-II display code	Malfunction detection	TIME		Possible causes
			CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	—	—	—	—	—
CAN COMM CIRC	U1000	● If CAN communication reception/transmission data has a malfunction, or if any of the control units fail, data reception/transmission cannot be confirmed. ● When the data in CAN communication is not received before the specified time.	X	X	Any of items listed below have errors: ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:
The details for display of the period are as follows:

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

DATA MONITOR

Operation Procedure

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

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

3. Touch “START”.

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

All Signals, Main Signals, Selection From Menu

Item name	CONSULT-II screen display	Display or unit	Monitor item selection			Description
			ALL SIGNALS	MAIN SIGNALS	SELECTION FROM MENU	
Motor fan request	MOTOR FAN REQ	1/2/3/4	X	X	X	Signal status input from ECM
Compressor request	AC COMP REQ	ON/OFF	X	X	X	Signal status input from BCM
Parking, license plate, and tail lamp request	TAIL & CLR REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp low beam request	HL LO REQ	ON/OFF	X	X	X	Signal status input from BCM
Headlamp high beam request	HL HI REQ	ON/OFF	X	X	X	Signal status input from BCM
Front fog lamps request	FR FOG REQ	ON/OFF	X	X	X	Signal status input from BCM
Front wiper request	FR WIP REQ	STOP/1LO/LO/HI	X	X	X	Signal status input from BCM
Wiper auto stop	WIP AUTO STOP	ACT P/STOP P	X	X	X	Output status of IPDM E/R
Wiper protection	WIP PROT	OFF/LS/HS/ BLOCK	X	X	X	Control status of IPDM E/R
Starter request	ST RLY REQ	ON/OFF	X		X	Status of input signal NOTE
Ignition relay status	IGN RLY	ON/OFF	X	X	X	Ignition relay status monitored with IPDM E/R
Rear defogger request	RR DEF REQ	ON/OFF	X	X	X	Signal status input from BCM
Hood switch	HOOD SW	OFF	X			Signal status input from IPDM E/R (function is not enabled)
Theft warning horn request	THFT HRN REQ	ON/OFF	X		X	Signal status input from BCM
Horn chirp	HORN CHIRP	ON/OFF	X		X	Output status of IPDM E/R
Daytime lights request	DTRL REQ	ON/OFF	X		X	Signal status input from BCM
Oil pressure switch	OILPSW	OPEN/CLOSE	X		X	Signal status input from IPDM E/R

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

ACTIVE TEST

Operation Procedure

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

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

Auto Active Test

EKS00EOL

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, license plate, front fog, and parking lamps
  - Headlamps (High, Low)
  - A/C compressor (magnetic clutch)
  - Cooling fan (with VQ40DE)

OPERATION PROCEDURE

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

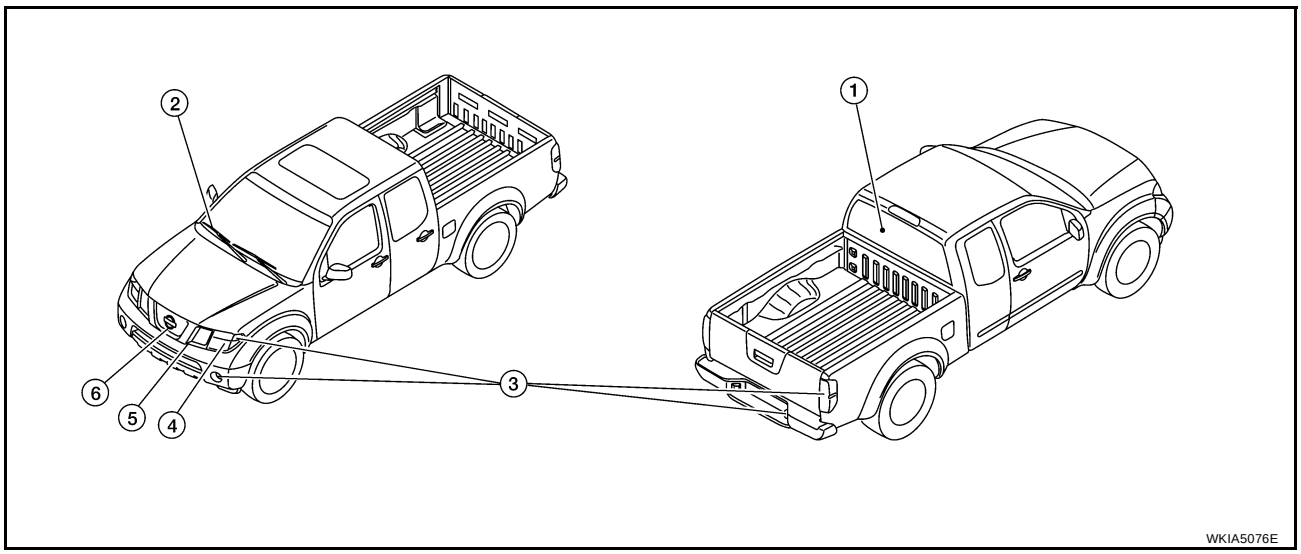
   NOTE:
   When auto active test is performed with hood opened, sprinkle water on windshield beforehand.
2. Turn ignition switch OFF.
3. Turn ignition switch ON and, within 20 seconds, press front door switch LH 10 times. Then turn ignition switch OFF.
4. Turn ignition switch ON within 10 seconds after ignition switch OFF.
5. When auto active test mode is actuated, horn chirps once.
6. After a series of operations is repeated three times, auto active test is completed.

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

   CAUTION:
   Be sure to perform BL-35, "Door Switch Check (King Cab)" or BL-37, "Door Switch Check (Crew Cab)" when the auto active test cannot be performed.

INSPECTION IN AUTO ACTIVE TEST MODE

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



Item Number	Test Item	Operation Time/Frequency
1	Rear window defogger (crew cab only)	10 seconds
2	Front wipers	LOW 5 seconds then HIGH 5 seconds
3	Tail, license plate, front fog and parking lamps	10 seconds
4	Headlamps	Low on for 10 seconds. High on-off five times.
5	A/C compressor (magnetic clutch)	ON-OFF 5 times
6	Cooling fan (with VQ40DE)	LOW 5 seconds then HIGH 5 seconds

Concept of Auto Active Test

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

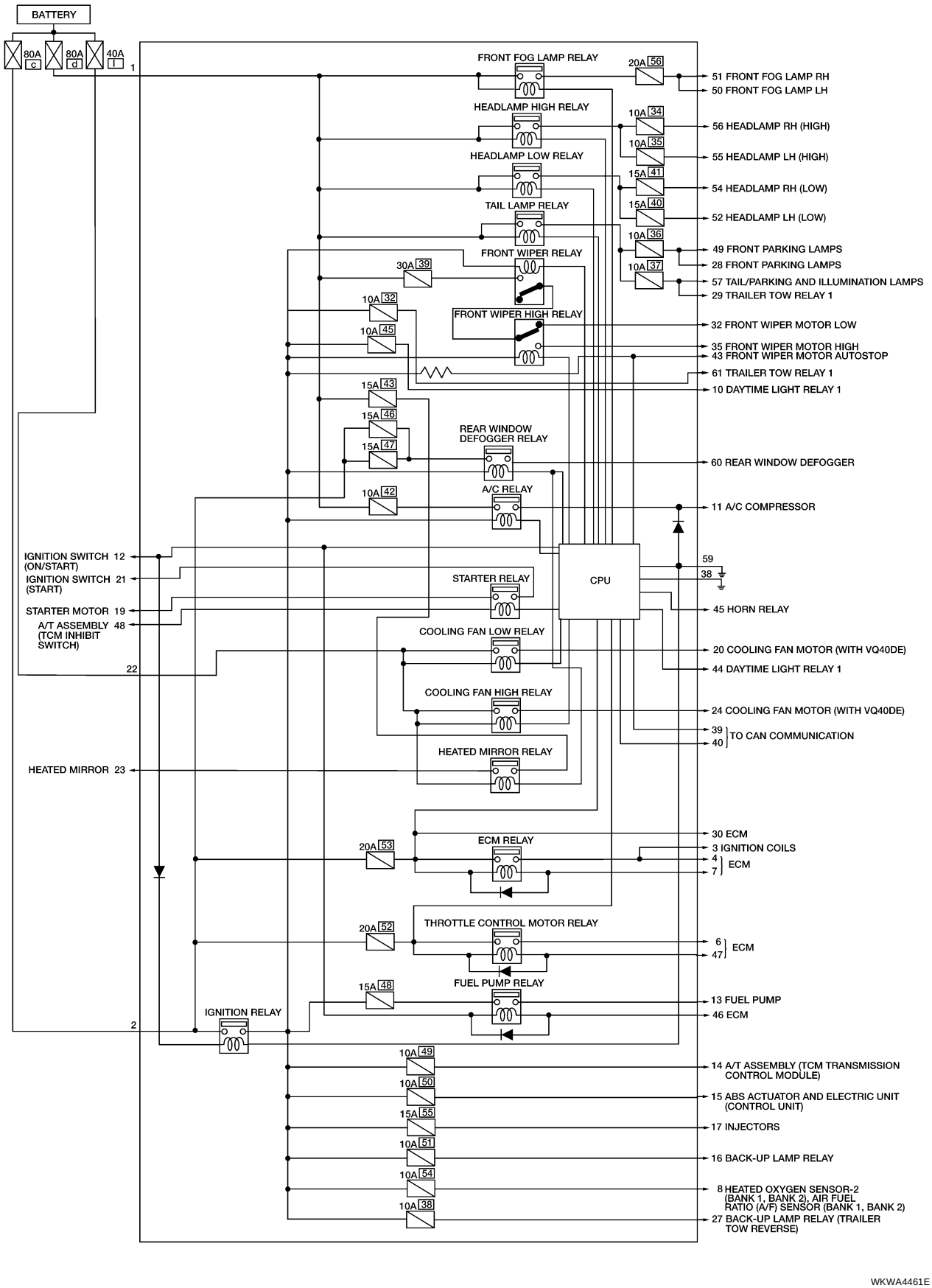
Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Rear window defogger does not operate.	Perform auto active test. Does rear window defogger operate?	YES	● BCM signal input circuit
		NO	● Rear window defogger relay ● Open circuit of rear window defogger ● IPDM E/R malfunction ● Harness or connector malfunction between IPDM E/R and rear window defogger
Any of front wipers, tail and parking lamps, front fog lamps, and headlamps (High, Low) do not operate.	Perform auto active test. Does system in question operate?	YES	● BCM signal input system
		NO	● Lamp/wiper motor malfunction ● Lamp/wiper motor ground circuit malfunction ● Harness/connector malfunction between IPDM E/R and system in question ● IPDM E/R (integrated relay) malfunction

Symptom	Inspection contents		Possible cause
A/C compressor does not operate.	Perform auto active test. Does magnetic clutch operate?	YES	● BCM signal input circuit ● CAN communication signal between BCM and ECM ● CAN communication signal between ECM and IPDM E/R
		NO	● Magnetic clutch malfunction ● Harness/connector malfunction between IPDM E/R and magnetic clutch ● IPDM E/R (integrated relay) malfunction
Cooling fan does not operate.	Perform auto active test. Does cooling fan operate?	YES	● ECM signal input circuit ● CAN communication signal between ECM and IPDM E/R
		NO	● Cooling fan motor malfunction ● Harness/connector malfunction between IPDM E/R and cooling fan motor ● IPDM E/R (integrated relay) malfunction

Schematic

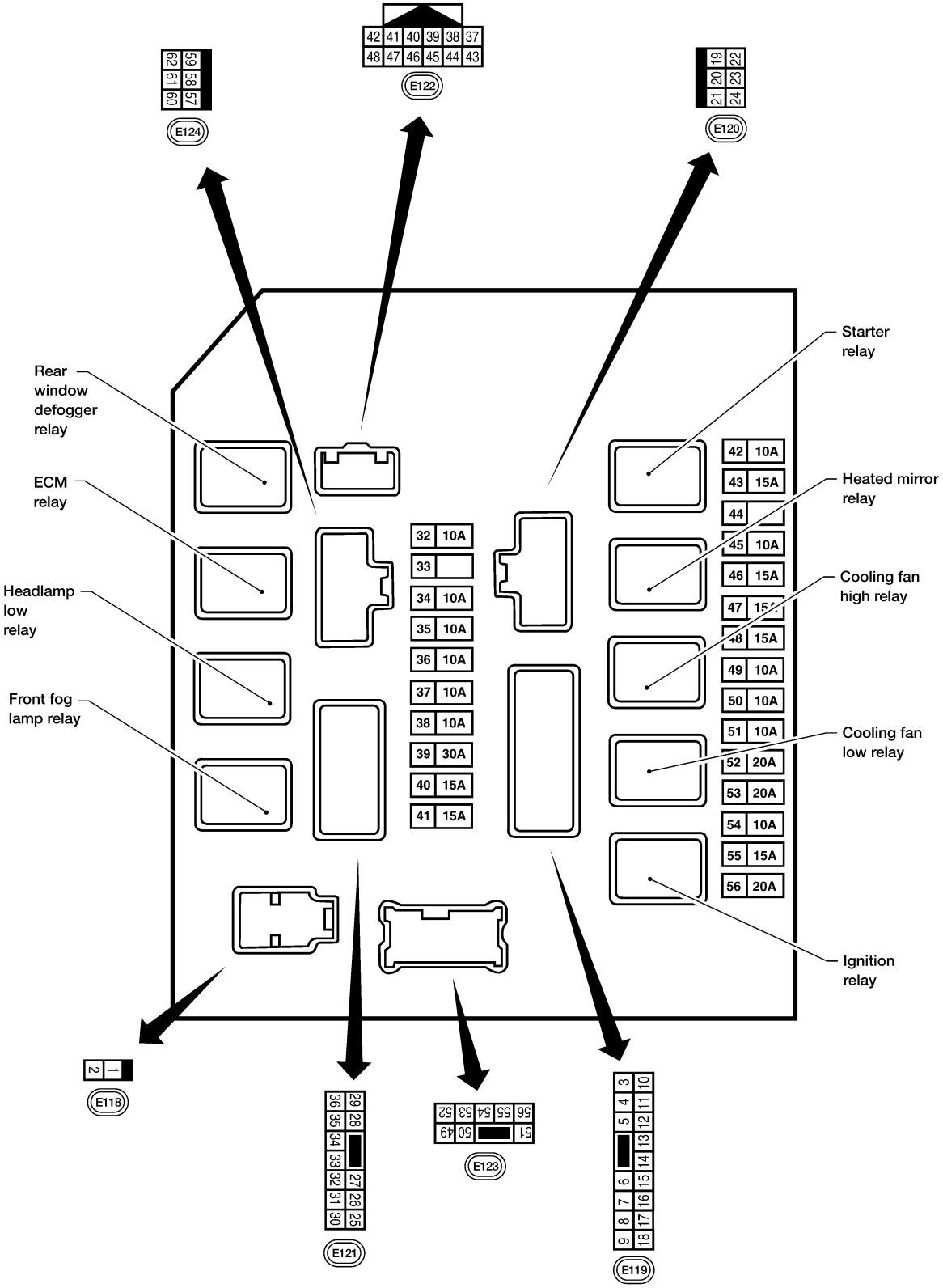
EKS00EOM



WKWA4461E

IPDM E/R Terminal Arrangement

EKS00EON



WKIA1695E

IPDM E/R Power/Ground Circuit Inspection

EKS00FPK

1. FUSE AND FUSIBLE LINK INSPECTION

Check that the following fusible links are not blown.

Terminal No.	Signal name	Fusible link No.
1, 2	Battery power	a, c, d

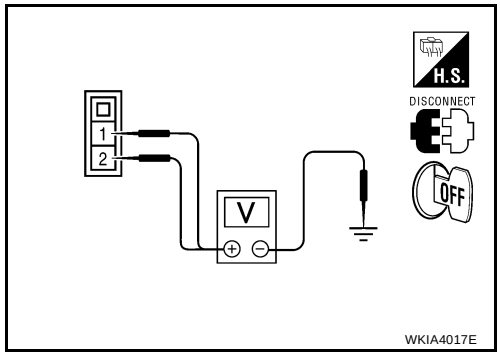
OK or NG

OK >> GO TO 2.
NG >> Replace fusible link.

2. POWER CIRCUIT INSPECTION

1. Turn ignition switch off.
2. Disconnect IPDM E/R harness connector E118.
3. Check voltage between IPDM E/R harness connector and ground.

Terminals			Voltage (Approx.)
(+)		(-)	
IPDM E/R connector	Terminal		
E118	1, 2	Ground	Battery voltage



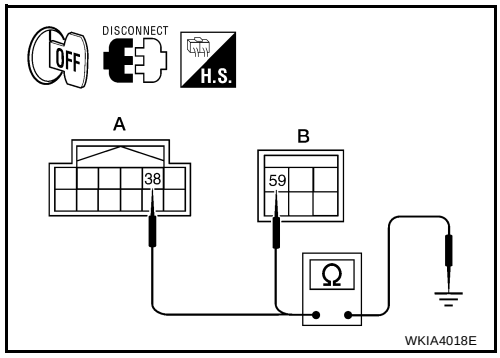
OK or NG

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

3. GROUND CIRCUIT INSPECTION

1. Disconnect IPDM E/R harness connectors E122 and E124.
2. Check continuity between IPDM E/R harness connectors and ground.

A		B		Continuity
Connector	Terminal	Connector	Terminal	
IPDM E/R: E122	38	IPDM E/R: E124	59	Yes



OK or NG

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

Inspection with CONSULT-II (Self-Diagnosis)

EKS00EOP

CAUTION:

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

1. SELF-DIAGNOSIS RESULT CHECK

1. Connect CONSULT-II and select "IPDM E/R" on the "SELECT SYSTEM" screen.
2. Select "SELF-DIAG RESULTS" on the "SELECT DIAG MODE" screen.
3. Check display content in self-diagnosis results.

CONSULT-II Display	CONSULT-II display code	TIME		Details of diagnosis result
		CRNT	PAST	
NO DTC IS DETECTED. FURTHER TESTING MAY BE REQUIRED.	—	—	—	No malfunction
CAN COMM CIRC	U1000	X	X	Any of items listed below have errors: ● TRANSMIT DIAG ● ECM ● BCM/SEC

NOTE:

The Details for Display for the Period are as follows:

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

Contents displayed

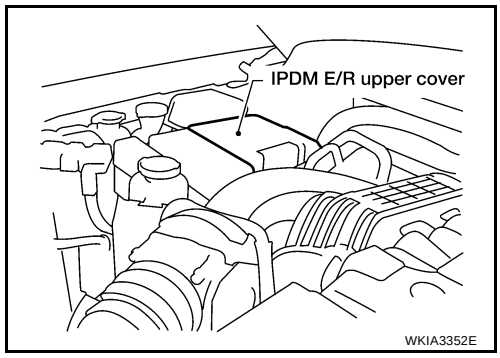
NO DTC DETECTED. FURTHER TESTING MAY BE REQUIRED.>>INSPECTION END.
CAN COMM CIRC>>Print out the self-diagnosis result and refer to LAN-22, "CAN COMMUNICATION" .

Removal and Installation of IPDM E/R

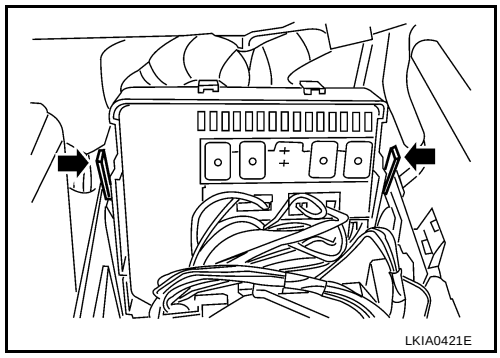
EKS00EOQ

REMOVAL

1. Disconnect negative battery cable.
2. Remove IPDM E/R upper cover.



3. Release 2 clips and pull IPDM E/R up from case.
4. Disconnect IPDM E/R connectors and remove the IPDM E/R.



INSTALLATION

Installation is in the reverse order of removal.

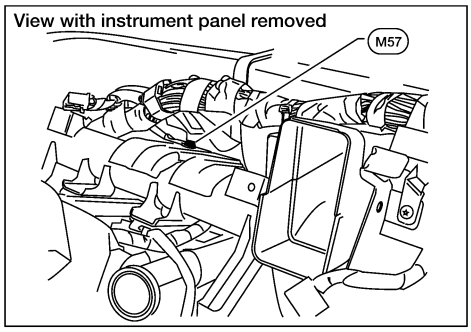
GROUND CIRCUIT

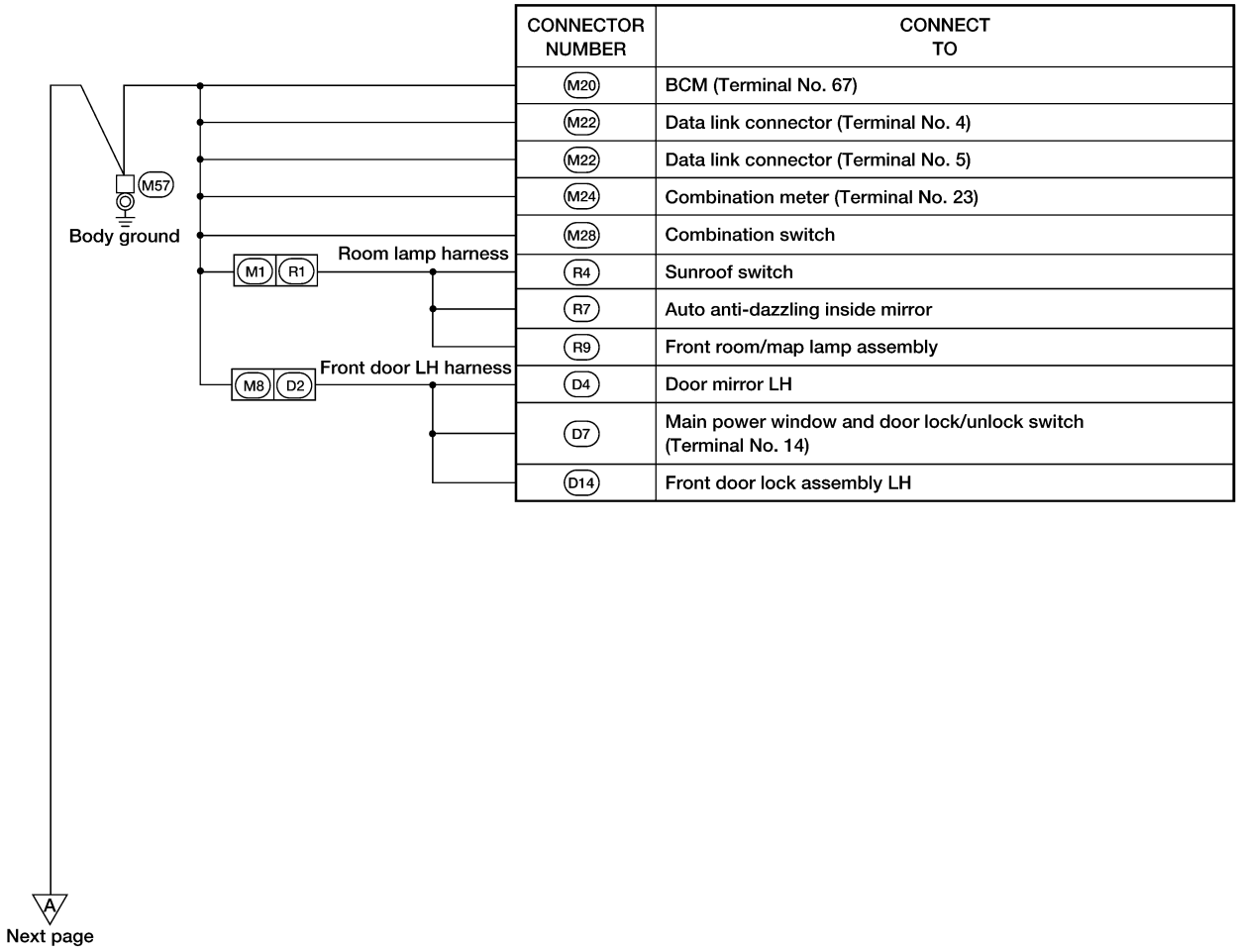
PFP:24080

Ground Distribution

EKS00EOR

MAIN HARNESS





CONNECTOR NUMBER	CONNECT TO
M20	BCM (Terminal No. 67)
M22	Data link connector (Terminal No. 4)
M22	Data link connector (Terminal No. 5)
M24	Combination meter (Terminal No. 23)
M28	Combination switch
R4	Sunroof switch
R7	Auto anti-dazzling inside mirror
R9	Front room/map lamp assembly
D4	Door mirror LH
D7	Main power window and door lock/unlock switch (Terminal No. 14)
D14	Front door lock assembly LH

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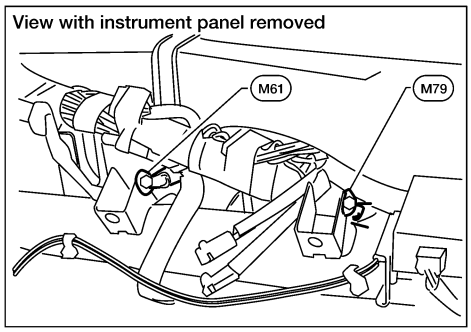
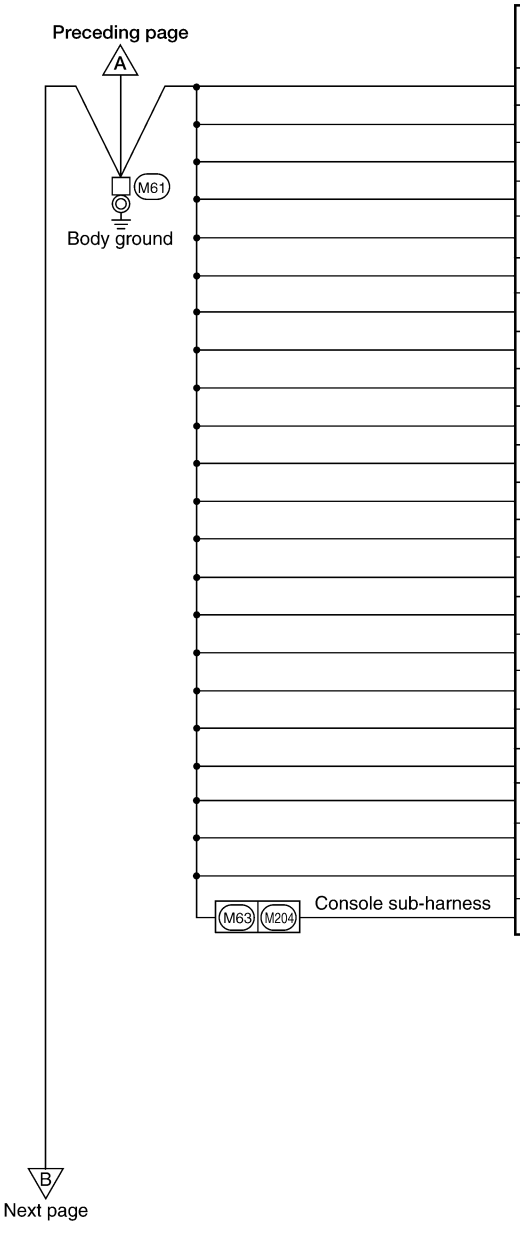
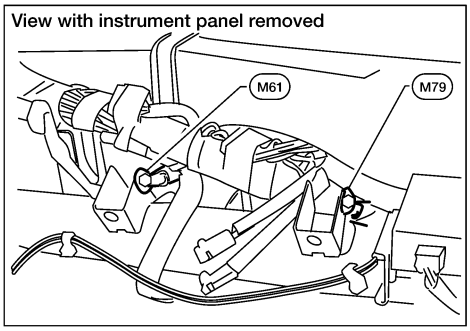




CONNECTOR NUMBER	CONNECT TO
M13	Front passenger air bag off indicator
M21	NATS antenna amp.
M24	Combination meter (Terminal No. 13)
M35	Air bag diagnosis sensor
M47	Steering angle sensor
M49	Front air control
M51	Front blower switch
M55	Hazard switch
M71	Cargo lamp switch
M97	Heated seat relay
M152	Transfer control unit (Terminal No. 6)
M152	Transfer control unit (Terminal No. 18)
M153	Transfer control unit (Terminal No. 32)
M154	VDC off switch
M155	HDC switch
M156	A/T device (Terminal No. 2)
M156	A/T device (Terminal No. 8)
M156	A/T device (Terminal No. 10)
M159	Door mirror remote control switch
M160	Front heated seat switch RH
M161	Front heated seat switch LH
M163	Clutch interlock cancel switch
M207	Console power socket

WKIA4051E



CONNECTOR NUMBER	CONNECT TO
M3	Fuse block (J/B)
M53	Lower front power socket
M54	Upper front power socket
M76	Electric brake (pre-wiring)
D105	Power window and door lock/unlock switch RH
D107	Door mirror RH

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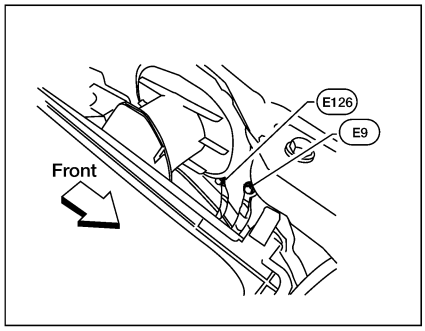
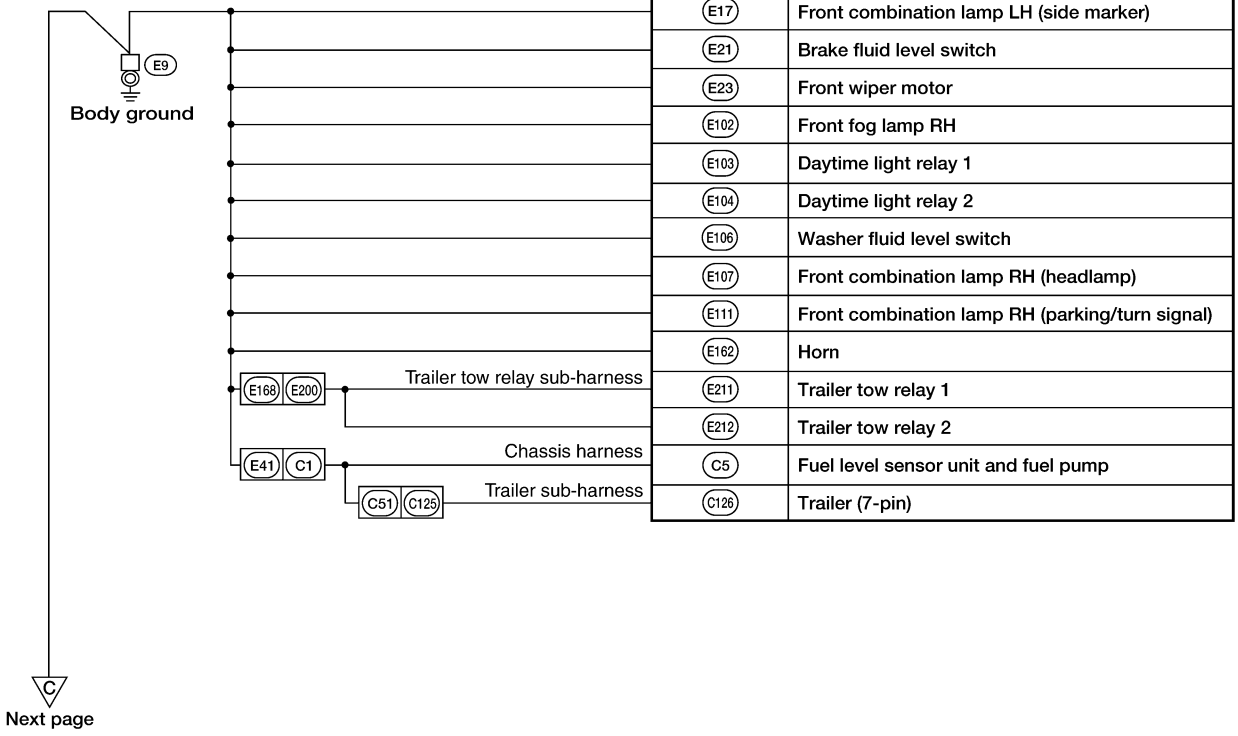
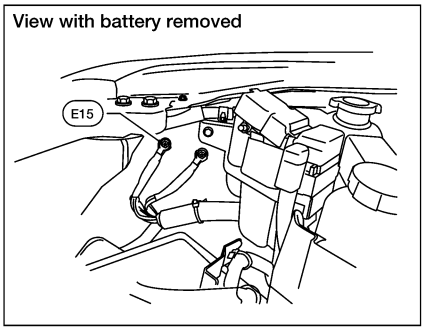
ENGINE ROOM HARNESS



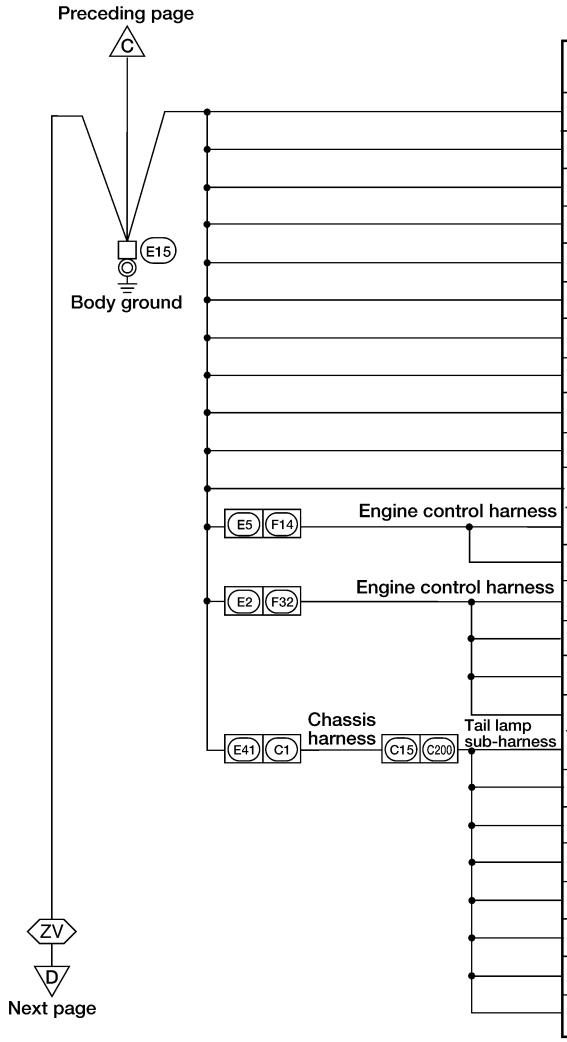


CONNECTOR NUMBER	CONNECT TO
E17	Front combination lamp LH (side marker)
E21	Brake fluid level switch
E23	Front wiper motor
E102	Front fog lamp RH
E103	Daytime light relay 1
E104	Daytime light relay 2
E106	Washer fluid level switch
E107	Front combination lamp RH (headlamp)
E111	Front combination lamp RH (parking/turn signal)
E162	Horn
E211	Trailer tow relay 1
E212	Trailer tow relay 2
C5	Fuel level sensor unit and fuel pump
C126	Trailer (7-pin)

WKIA4052E



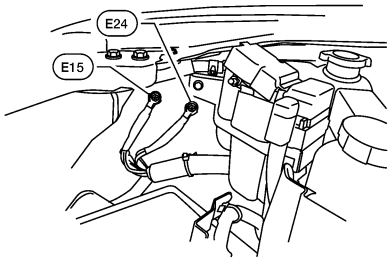
ZV : WITH VQ40DE

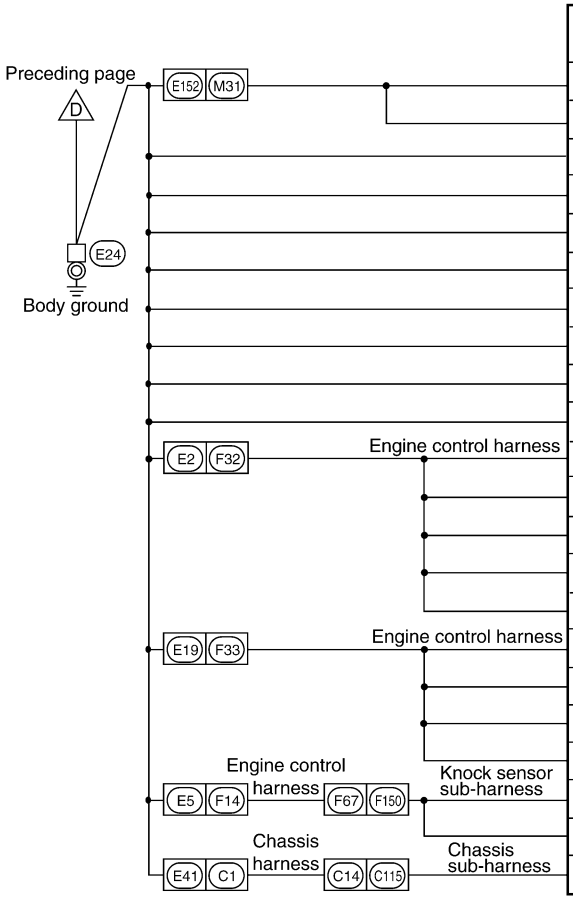


CONNECTOR NUMBER	CONNECT TO
E11	Front combination lamp LH (headlamp)
E16	ECM (Terminal No. 115) (with QR25DE)
E16	ECM (Terminal No. 116) (with QR25DE)
E27	Front combination lamp LH (parking/turn signal)
E54	Front blower motor relay (with QR25DE)
E101	Front fog lamp LH
E108	Front combination lamp RH (side marker)
E113	Cooling fan motor (Terminal No. 3) (with VQ40DE)
E113	Cooling fan motor (Terminal No. 4) (with VQ40DE)
E122	IPDM E/R (Terminal No. 38) (with QR25DE)
E124	IPDM E/R (Terminal No. 59) (with QR25DE)
F18	Knock sensor shield (with QR25DE)
F66	Park/neutral position switch (with M/T)
F11	Crankshaft position sensor (POS) (with QR25DE)
F23	Camshaft position sensor (PHASE) (with QR25DE)
F50	Electric throttle control actuator (shield wire) (with QR25DE)
F54	ECM (Terminal No. 1) (with QR25DE)
C201	Rear combination lamp LH (tail/stop)
C202	Rear combination lamp RH (tail/stop)
C203	License plate lamp LH
C204	License plate lamp RH
C205	Rear combination lamp LH (back-up)
C206	Rear combination lamp RH (back-up)
C207	Rear combination lamp LH (turn signal)
C208	Rear combination lamp RH (turn signal)

WKIA5155E

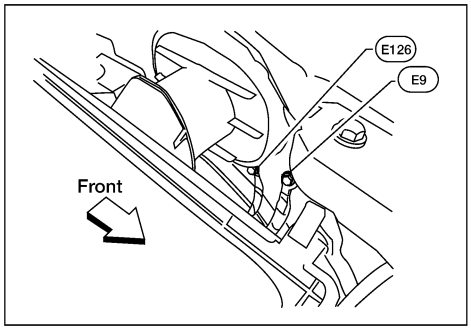
View with battery removed

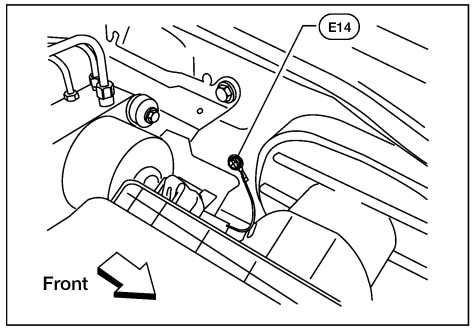


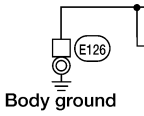


CONNECTOR NUMBER	CONNECT TO
M70	Differential lock control unit (Terminal No. 3)
M70	Differential lock control unit (Terminal No. 10)
E16	ECM (Terminal No. 115)
E16	ECM (Terminal No. 116)
E54	Front blower motor relay
E122	IPDM E/R (Terminal No. 38)
E124	IPDM E/R (Terminal No. 59)
E156	Transfer shut off relay 1
E165	Clutch interlock cancel relay 1
E166	Clutch interlock cancel relay 2
F11	Crankshaft position sensor
F23	Camshaft position sensor (PHASE) (bank 2)
F50	Electric throttle control actuator (shield wire)
F54	ECM (Terminal No. 1)
F70	Camshaft position sensor (PHASE) (bank 1)
F55	ATP switch
F58	Transfer control device
F59	Wait detection switch
F60	4LO switch
F151	Knock sensor (bank 1) shield
F152	Knock sensor (bank 2) shield
C116	Differential lock position switch

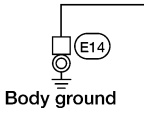
WKIA4054E







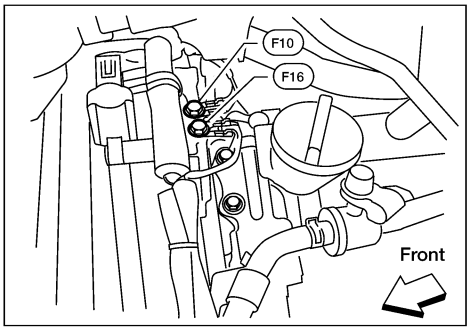
CONNECTOR NUMBER	CONNECT TO
E125	ABS actuator and electric unit (control unit) (Terminal No. 16)
E125	ABS actuator and electric unit (control unit) (Terminal No. 47)

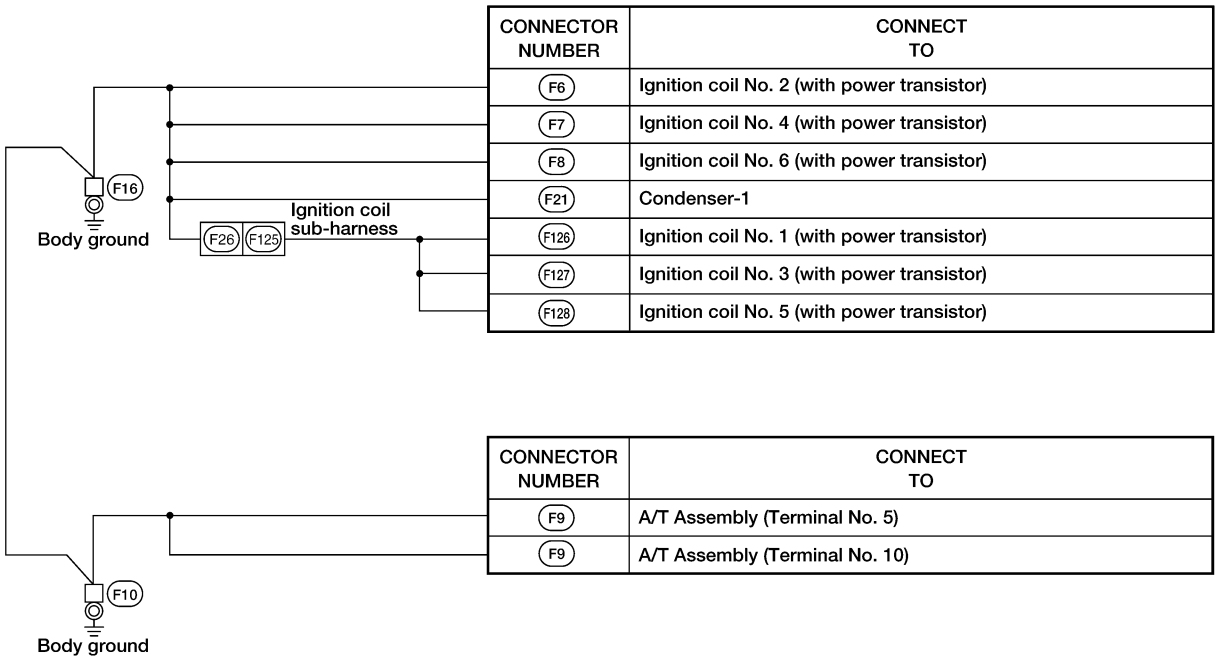


CONNECTOR NUMBER	CONNECT TO
E4	Crash zone sensor (shield wire)

WKIA3571E

ENGINE CONTROL HARNESS (VQ40DE MODELS)



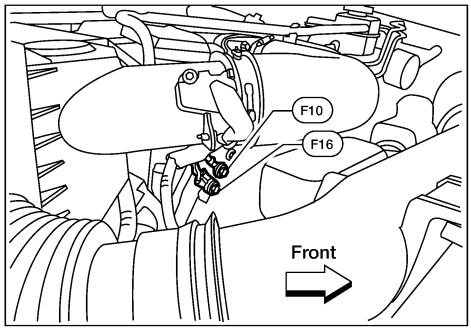


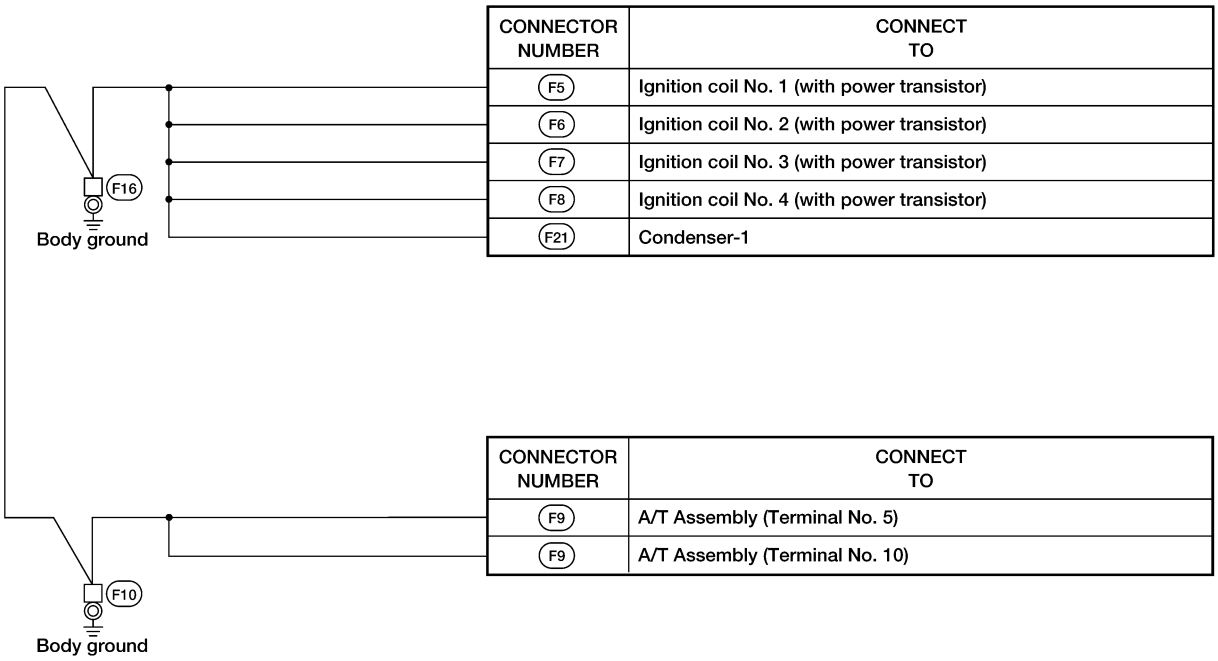
CONNECTOR NUMBER	CONNECT TO
F6	Ignition coil No. 2 (with power transistor)
F7	Ignition coil No. 4 (with power transistor)
F8	Ignition coil No. 6 (with power transistor)
F21	Condenser-1
F126	Ignition coil No. 1 (with power transistor)
F127	Ignition coil No. 3 (with power transistor)
F128	Ignition coil No. 5 (with power transistor)

CONNECTOR NUMBER	CONNECT TO
F9	A/T Assembly (Terminal No. 5)
F9	A/T Assembly (Terminal No. 10)

WKIA4055E

ENGINE CONTROL HARNESS (QR25DE MODELS)



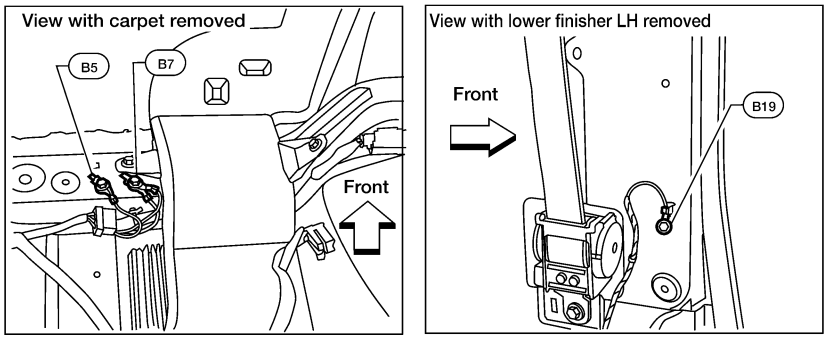


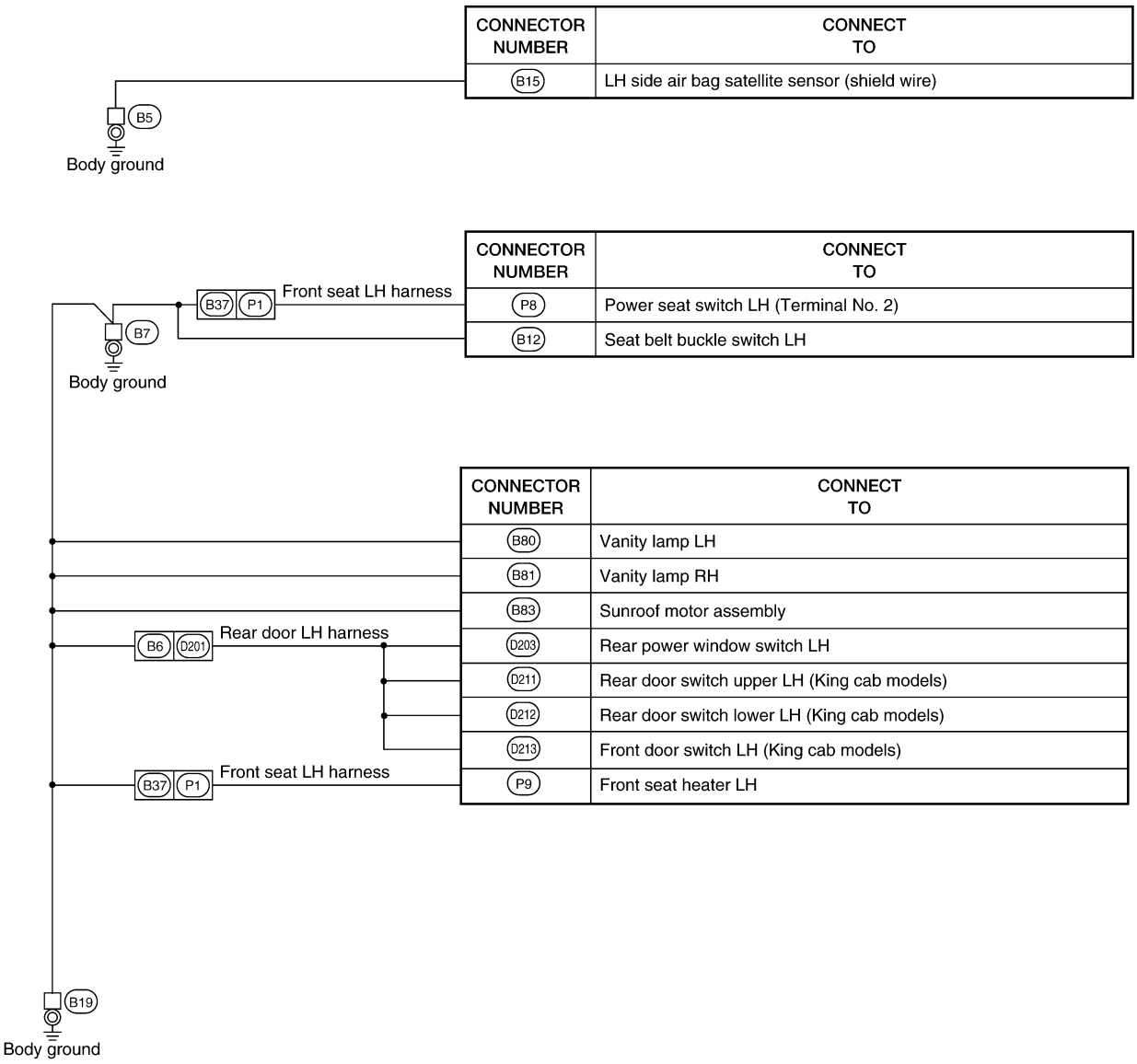
CONNECTOR NUMBER	CONNECT TO
F5	Ignition coil No. 1 (with power transistor)
F6	Ignition coil No. 2 (with power transistor)
F7	Ignition coil No. 3 (with power transistor)
F8	Ignition coil No. 4 (with power transistor)
F21	Condenser-1

CONNECTOR NUMBER	CONNECT TO
F9	A/T Assembly (Terminal No. 5)
F9	A/T Assembly (Terminal No. 10)

WKIA4056E

BODY HARNESS





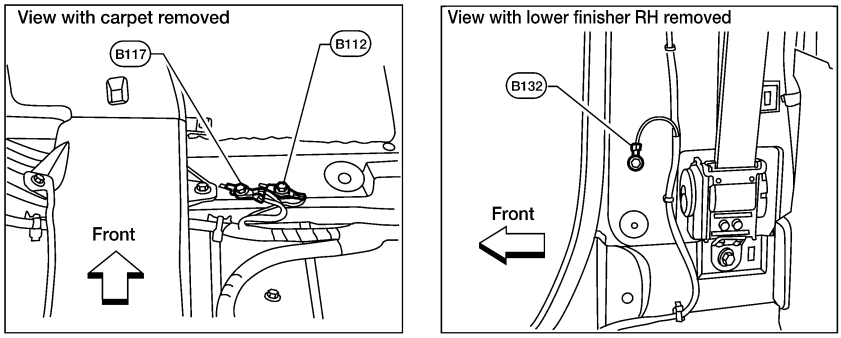
CONNECTOR NUMBER	CONNECT TO
B15	LH side air bag satellite sensor (shield wire)

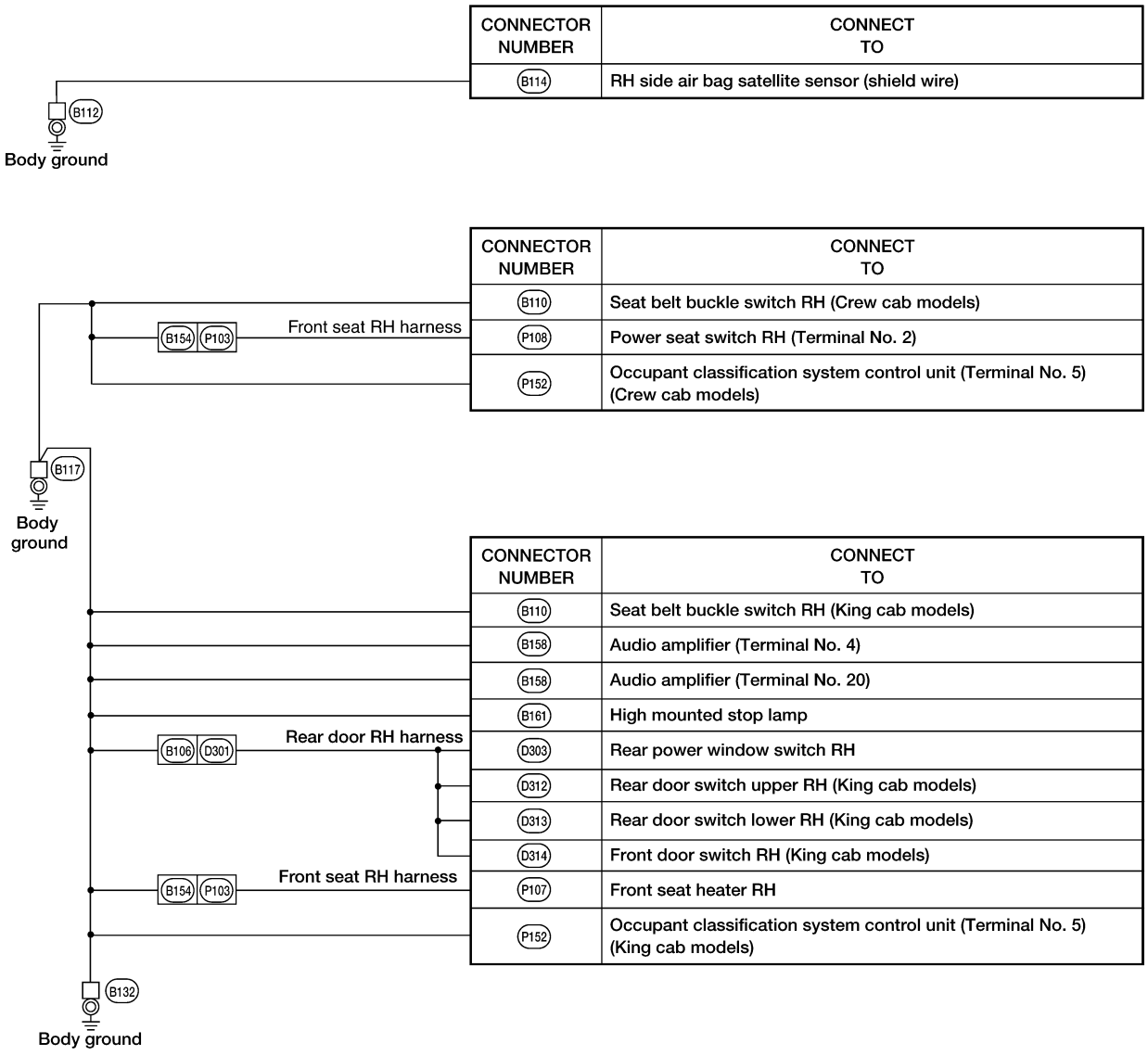
CONNECTOR NUMBER	CONNECT TO
P8	Power seat switch LH (Terminal No. 2)
B12	Seat belt buckle switch LH

CONNECTOR NUMBER	CONNECT TO
B80	Vanity lamp LH
B81	Vanity lamp RH
B83	Sunroof motor assembly
D203	Rear power window switch LH
D211	Rear door switch upper LH (King cab models)
D212	Rear door switch lower LH (King cab models)
D213	Front door switch LH (King cab models)
P9	Front seat heater LH

WKIA4057E

BODY NO. 2 HARNESS





CONNECTOR NUMBER	CONNECT TO
B114	RH side air bag satellite sensor (shield wire)

CONNECTOR NUMBER	CONNECT TO
B110	Seat belt buckle switch RH (Crew cab models)
P108	Power seat switch RH (Terminal No. 2)
P152	Occupant classification system control unit (Terminal No. 5) (Crew cab models)

CONNECTOR NUMBER	CONNECT TO
B110	Seat belt buckle switch RH (King cab models)
B158	Audio amplifier (Terminal No. 4)
B158	Audio amplifier (Terminal No. 20)
B161	High mounted stop lamp
D303	Rear power window switch RH
D312	Rear door switch upper RH (King cab models)
D313	Rear door switch lower RH (King cab models)
D314	Front door switch RH (King cab models)
P107	Front seat heater RH
P152	Occupant classification system control unit (Terminal No. 5) (King cab models)

WKIA4058E

HARNESS

PFP:24010

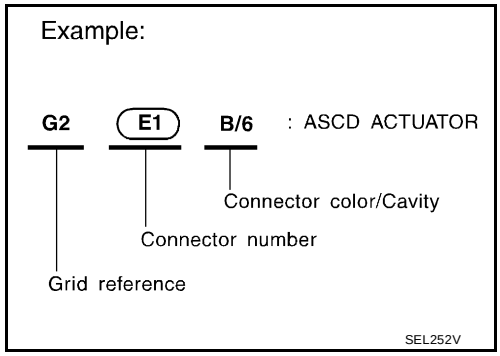
Harness Layout

EKS00EOS

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 RH View (Engine Compartment)
- Engine Room Harness (Passenger Compartment)
- Engine Room Harness LH View (Engine Compartment)
- Engine Control Harness (QR25DE Models)
- Engine Control Harness (VQ40DE Models)
- Chassis Harness
- Body Harness (King Cab Models)
- Body Harness (Crew Cab Models)
- Body No. 2 Harness (King Cab Models)
- Body No. 2 Harness (Crew Cab Models)
- Room Lamp Harness



To use the grid reference

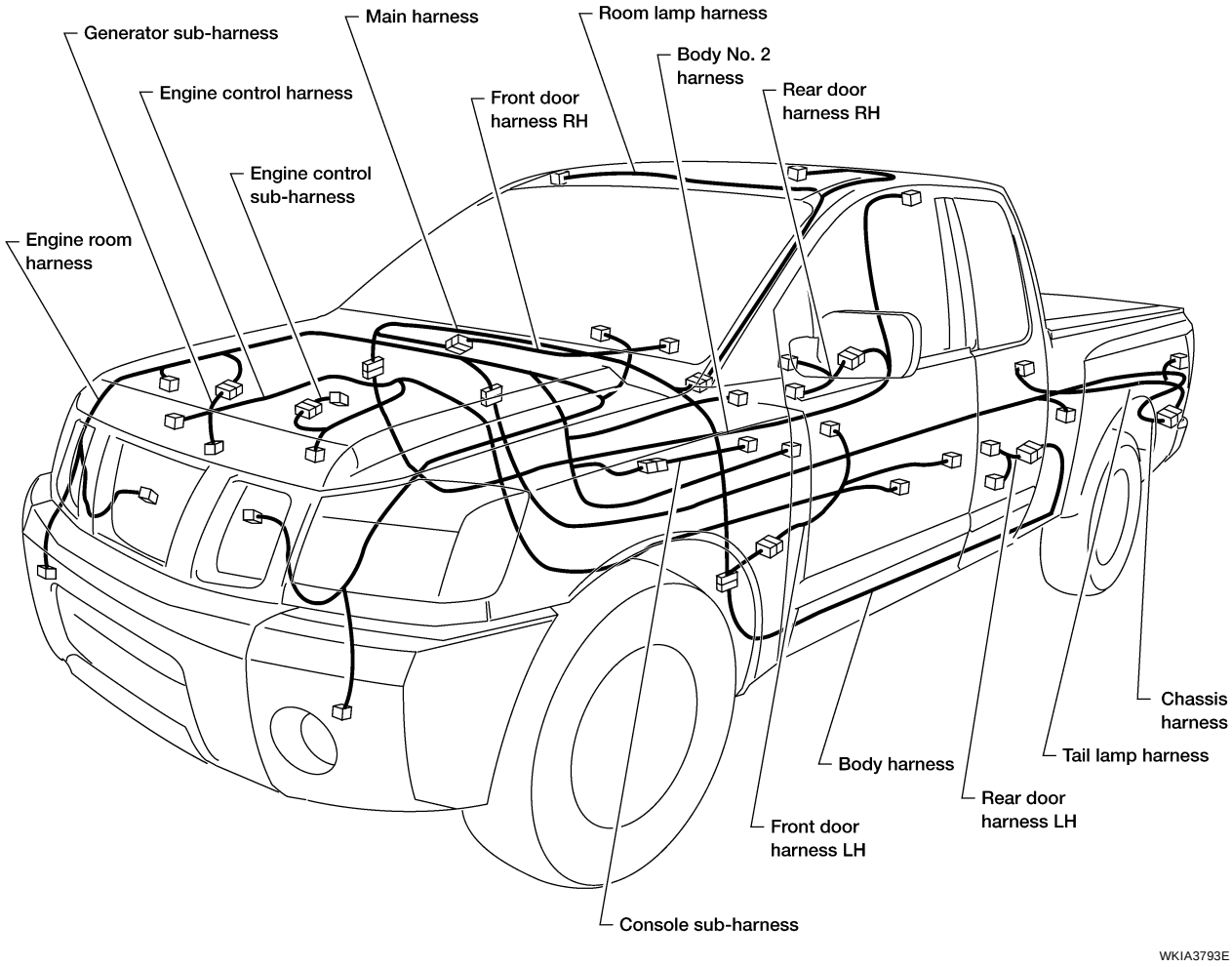
1. Find the desired connector number on the connector list.
2. Find the grid reference.
3. On the drawing, find the crossing of the grid reference letter column and number row.
4. Find the connector number in the crossing zone.
5. Follow the line to the connector.

CONNECTOR SYMBOL

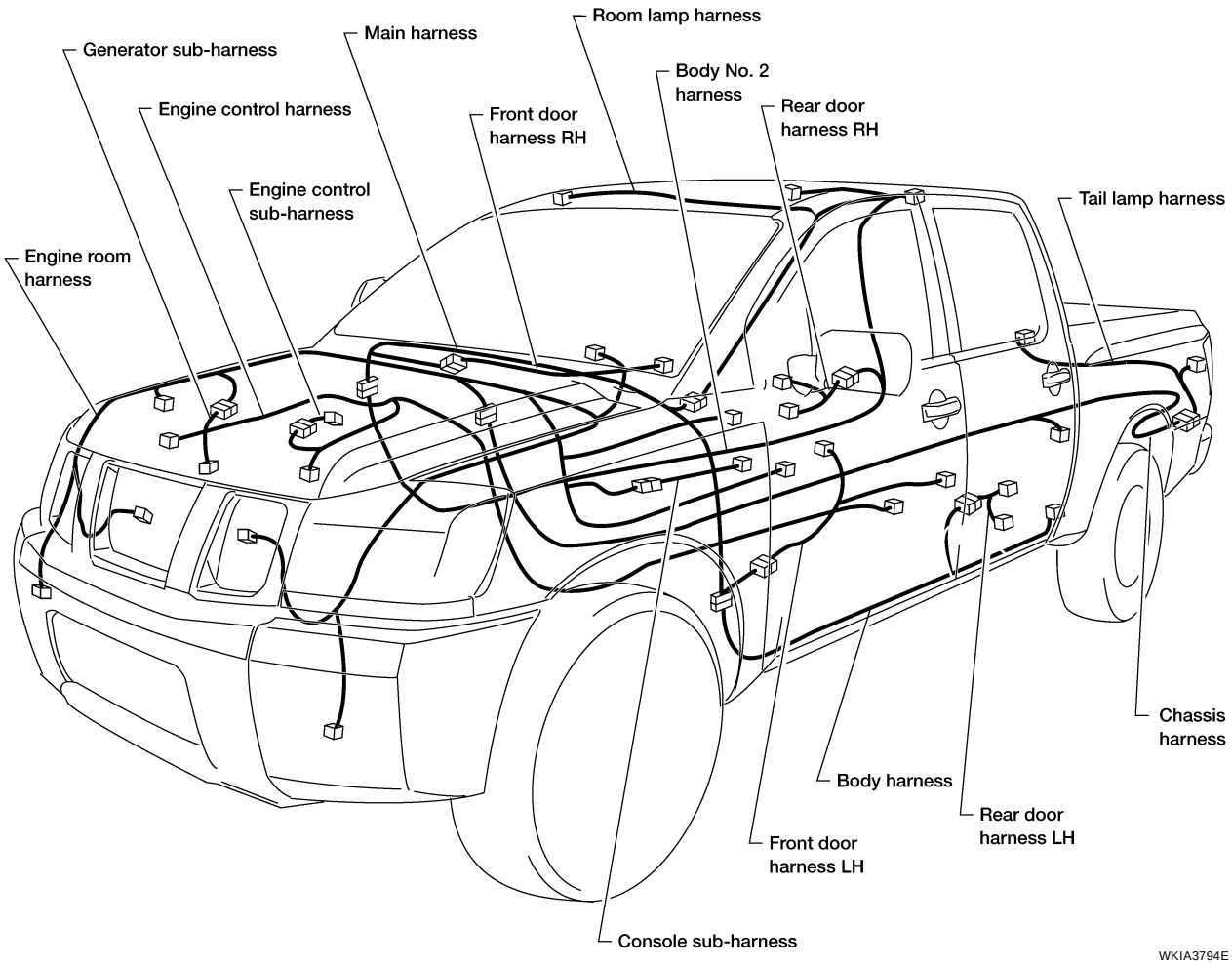
Main symbols of connector (in Harness Layout) are indicated below.

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

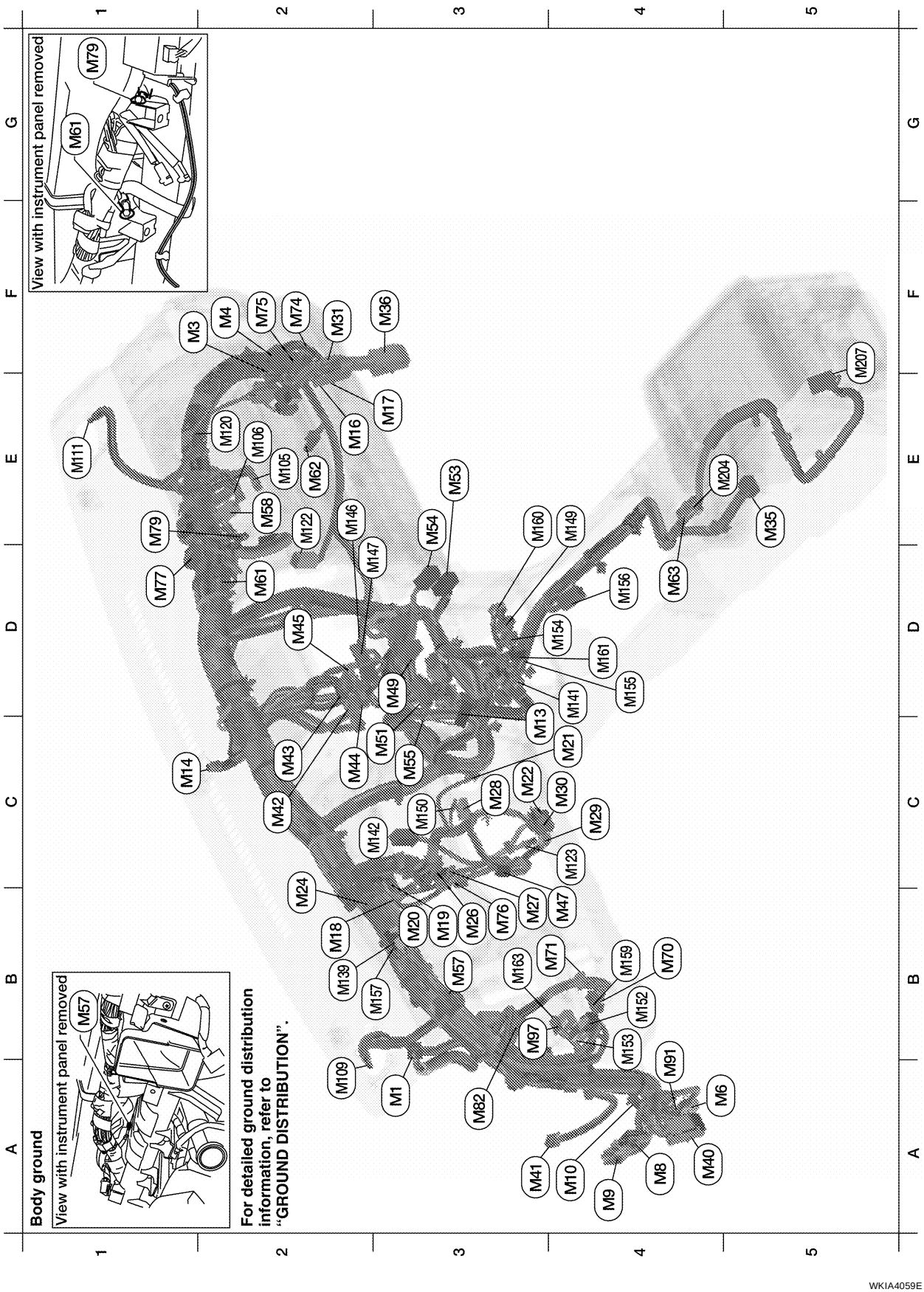
OUTLINE (KING CAB MODELS)



OUTLINE (CREW CAB MODELS)



MAIN HARNESS



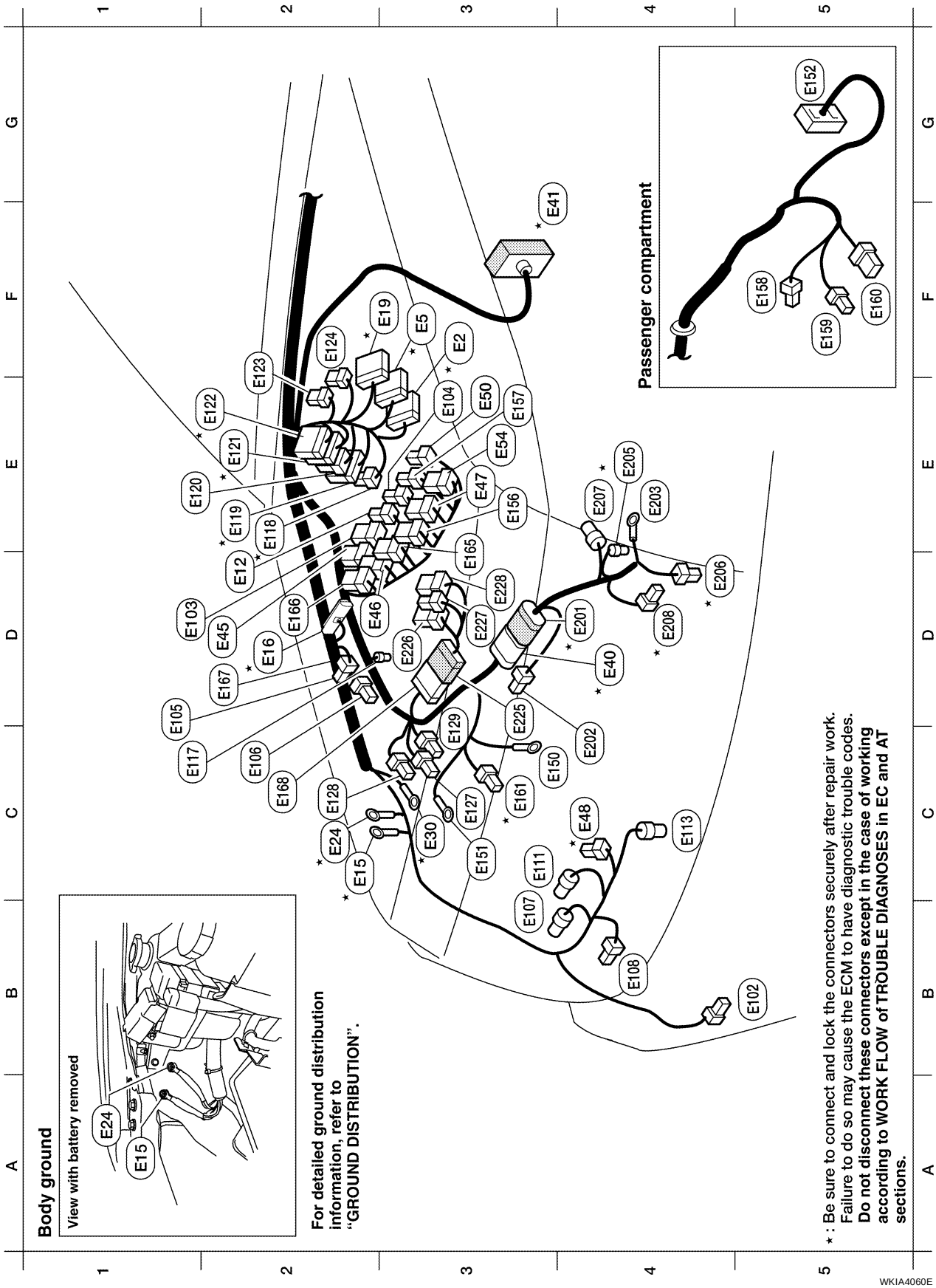
WKIA4059E

A3	M1	W/12	: To R1	B4	M71	W/6	: Cargo lamp switch
F1	M3	W/8	: Fuse block (J/B)	F2	M74	W/16	: To D201
F2	M4	W/16	: Fuse block (J/B)	F2	M75	W/12	: To D101
A5	M6	W/6	: To E10	B3	M76	W/6	: Electric brake (pre-wiring)
A4	M8	W/16	: To D2	D1	M77	Y/4	: Front passenger air bag module (service replacement)
A4	M9	W/24	: To D1	E1	M79	—	: Body ground
A4	M10	Y/4	: To E29	A3	M82	W/2	: Circuit breaker 2
C3	M13	W/3	: Front passenger air bag OFF indicator	A4	M91	W/16	: To E26
C1	M14	B/4	: Optical sensor	B3	M97	L/4	: Heated seat relay
E2	M16	W/12	: To B162	E2	M105	Y/2	: Front passenger air bag module
E3	M17	W/16	: To B163	E2	M106	O/2	: Front passenger air bag module
B2	M18	W/40	: BCM (body control module)	A2	M109	BR/2	: Front tweeter LH
B3	M19	W/15	: BCM (body control module)	E1	M111	BR/2	: Front tweeter RH
B3	M20	B/15	: BCM (body control module)	E2	M120	W/4	: Remote keyless entry receiver
C4	M21	W/4	: NATS antenna amp.	E2	M122	B/4	: Front blower motor resistor
C3	M22	W/16	: Data link connector	C4	M123	W/2	: Tire pressure warning check connector
B2	M24	W/40	: Combination meter	B2	M139	B/2	: Diode-6
B3	M26	W/6	: Ignition switch	D4	M141	GR/8	: 4WD shift switch
B3	M27	W/2	: Key switch	C3	M142	B/6	: Mode door motor
C3	M28	W/16	: Combination switch	E2	M146	W/2	: Intake sensor
C4	M29	Y/6	: Combination switch (spiral cable)	D2	M147	B/6	: Air mix door motor front
C4	M30	GR/8	: Combination switch (spiral cable)	E4	M149	W/6	: Differential lock mode switch
F2	M31	SMJ	: To E152	C3	M150	B/2	: Ignition keyhole illumination
E5	M35	Y/28	: Air bag diagnosis sensor unit	B4	M152	W/26	: Transfer case control unit
F3	M36	SMJ	: To B149	B4	M153	W/24	: Transfer case control unit
A4	M40	SMJ	: To B69	D4	M154	GR/6	: VDC off switch
A3	M41	W/16	: Satellite radio tuner (pre-wiring)	C4	M155	W/8	: HDC switch
C2	M42	W/12	: Audio unit	D4	M156	W/10	: A/T device
C2	M43	W/10	: Audio unit	B2	M157	W/2	: Diode-5
C2	M44	W/6	: Audio unit	B4	M159	W/16	: Door mirror remote control switch
D2	M45	W/16	: Audio unit	E3	M160	BR/6	: Front heated seat switch RH
B4	M47	W/8	: Steering angle sensor	D4	M161	W/6	: Front heated seat switch LH
D3	M49	B/26	: Front air control	B3	M163	W/8	: Clutch interlock cancel switch
C3	M51	W/8	: Front blower switch	Console sub-harness			
E3	M53	B/2	: Lower front power socket	E5	M204	W/6	: To M63
E3	M54	GR/2	: Upper front power socket	F5	M207	B/2	: Console power socket
C3	M55	W/4	: Hazard switch				
B3	M57	—	: Body ground				
E2	M58	B6	: Intake door motor				
D2	M61	—	: Body ground				
E2	M62	B/2	: Front blower motor				
E3	M63	W/6	: To M204				
B4	M70	W/26	: Differential lock control unit				

*: 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 DIAGNOSIS in EC and AT sections.

ENGINE ROOM HARNESS (RH VIEW)

Engine Compartment

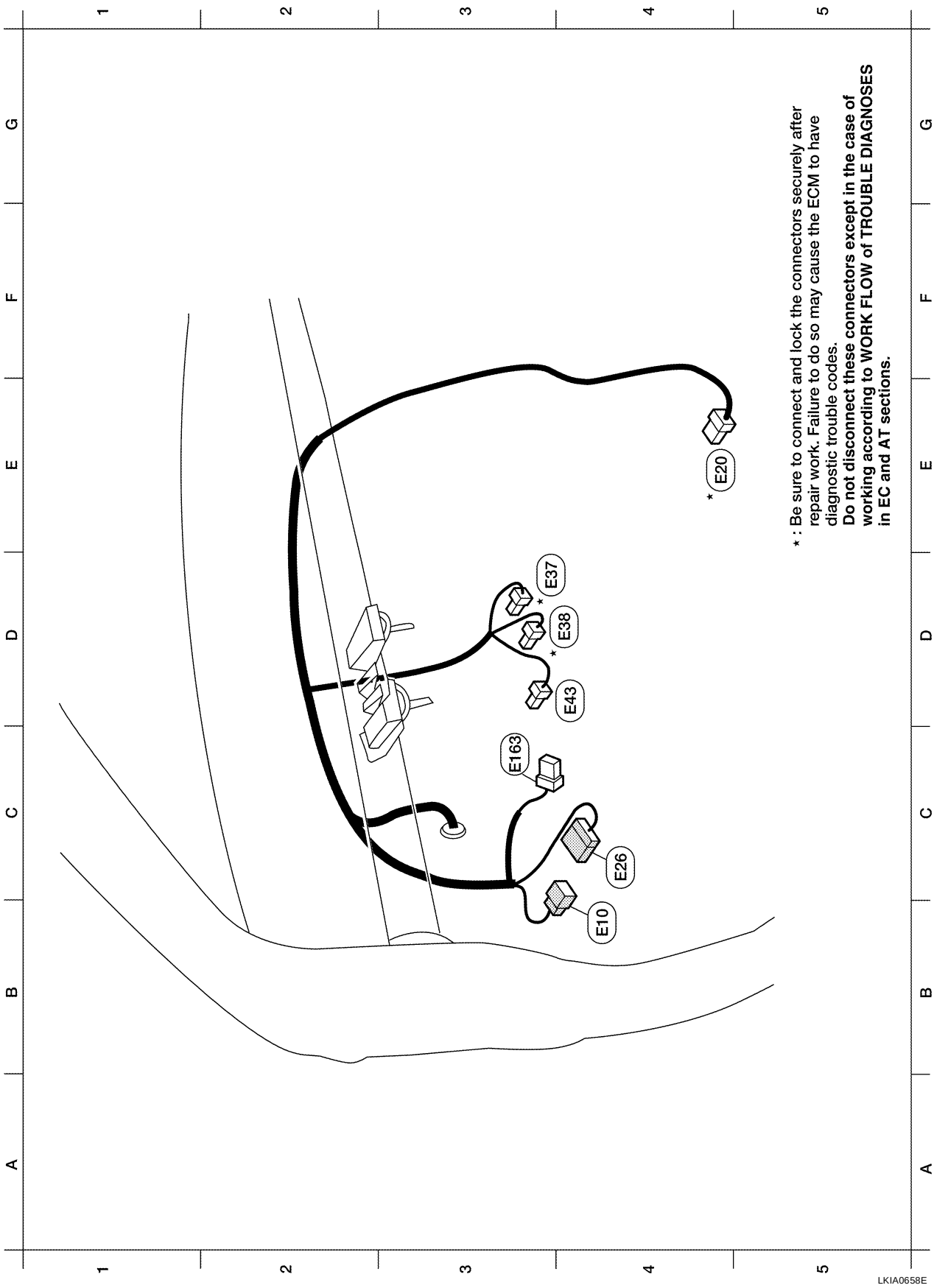


Refer to PG-50, "ENGINE ROOM HARNESS (LH VIEW)" for continuation of engine room harness.

F3	*E2	W/16	: To F32	C3	E127	—	: Fusible link box (battery)
F3	*E5	W/24	: To F14	C2	E128	GR/2	: Fusible link box (battery)
D2	E12	L/5	: Stop lamp relay	C3	E129	BR/2	: Fusible link box (battery)
C2	*E15	—	: Body ground	C3	E150	—	: Battery ground
D2	*E16	B/40	: ECM	C3	E151	—	: Negative battery cable
F2	*E19	W/16	: To F33	G5	E152	SMJ	: To M31
C2	*E24	—	: Body ground	E3	E156	L/4	: Transfer shut off relay 1
C3	*E30	—	: Fusible link box (battery)	E3	E157	L/4	: Transfer shut off relay 2
D4	*E40	GR/9	: To E201	F5	E158	B/1	: Fuse block (J/B)
F3	*E41	SMJ	: To C1 (located RH rear of engine compartment)	F5	E159	B/2	: Fuse block (J/B)
D2	E45	BR/6	: Back-up lamp relay (with A/T)	F5	E160	W/8	: Fuse block (J/B)
D3	E46	B/5	: Transfer relay 1	C3	*E161	B/3	: Battery current sensor
E3	E47	B/5	: Transfer relay 2	D3	E165	B/5	: Clutch interlock cancel relay 1
C4	*E48	B/3	: Refrigerant pressure sensor	D2	E166	BR/6	: Clutch interlock cancel relay 2
E3	E50	L/4	: Cargo lamp relay	D2	E167	B/2	: Diode-3
E3	E54	BR/6	: Front blower motor relay	C2	E168	W/12	: To E225
B5	E102	B/2	: Front fog lamp RH	Generator sub-harness			
D1	E103	B/5	: Daytime light relay 1	D4	*E201	GR/9	: To E40
E3	E104	L/4	: Daytime light relay 2	C4	E202	B/1	: To fuse and fusible link box
D1	E105	B/2	: Washer motor	E4	E203	—	: Body ground
C2	E106	BR/2	: Washer fluid level switch	E4	*E205	B/3	: Generator
B3	E107	B/3	: Front combination lamp RH (headlamp)	D4	*E206	B/1	: Generator
B4	E108	GR/2	: Front combination lamp RH (side marker)	E4	E207	GR/1	: Starter motor
C3	E111	GR/3	: Front combination lamp RH (parking/turn signal)	D4	*E208	B/3	: Oil pressure sensor
C4	E113	GR/4	: Cooling fan motor	Trailer tow harness			
C1	E117	GR/2	: Front wheel sensor RH	C3	E225	W/12	:To E168
E2	*E118	B/2	: IPDM E/R (intelligent power distribution module engine room)	D3	E226	L/6	: Back-up lamp relay (with M/T)
E2	*E119	W/16	: IPDM E/R (intelligent power distribution module engine room)	D3	E227	L/4	: Trailer tow relay 1
E1	E120	W/6	: IPDM E/R (intelligent power distribution module engine room)	D3	E228	BR/6	: Trailer tow relay 2
E2	*E121	BR/12	: IPDM E/R (intelligent power distribution module engine room				
E2	*E122	W/12	: IPDM E/R (intelligent power distribution module engine room)				
E2	E123	BR/8	: IPDM E/R (intelligent power distribution module engine room)				
F2	*E124	B/6	: IPDM E/R (intelligent power distribution module engine room)				

*: 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 DIAGNOSIS in EC and AT sections.

Passenger Compartment

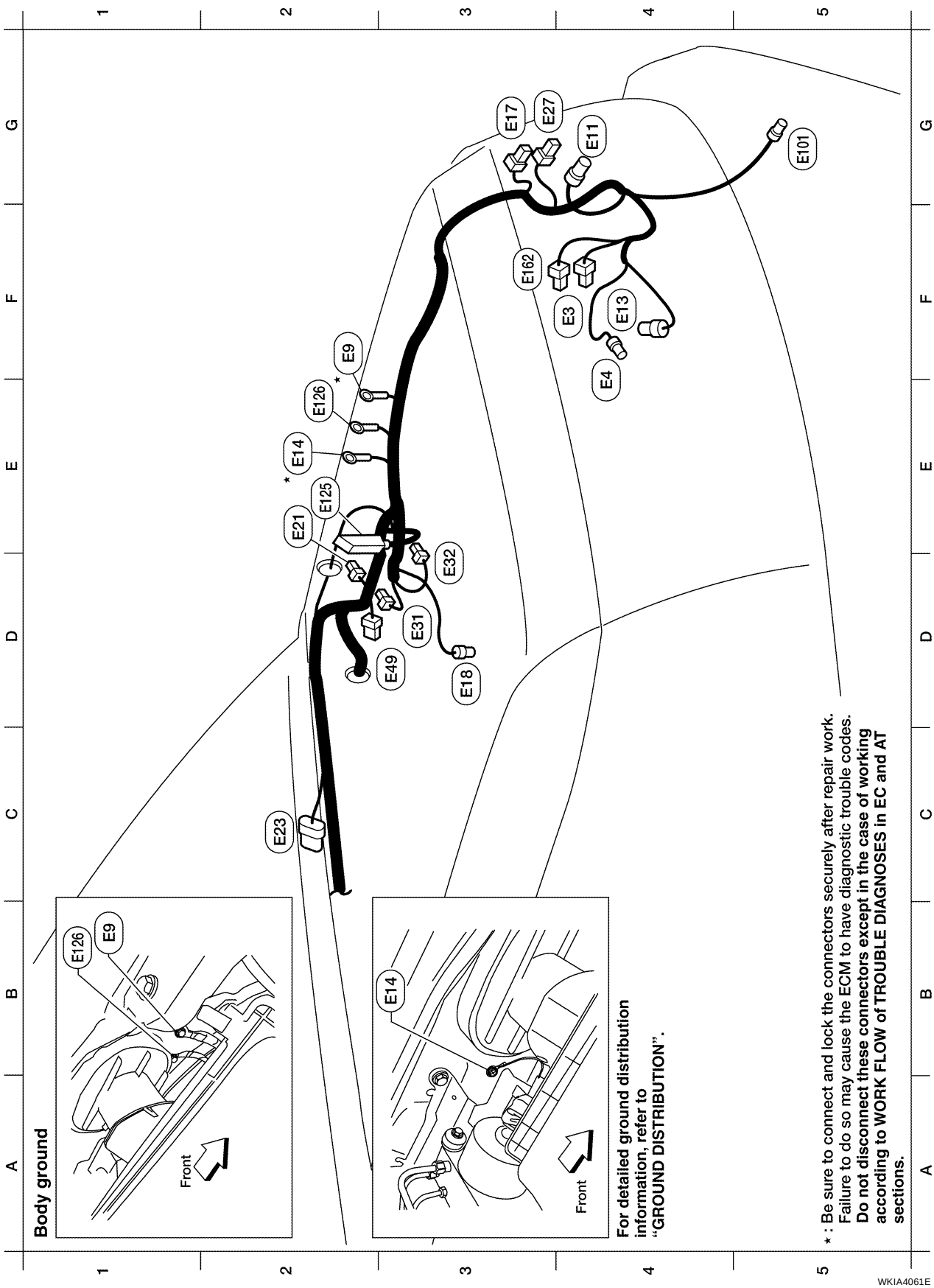


B4	E10	W/6	: To M6				
E4	*E20	B/6	: Accelerator pedal position (APP) sensor				
C4	E26	W/16	: To M91				
D4	*E37	BR/2	: ASCD brake switch				
D4	E38	W/4	: Stop lamp switch (with A/T)				
D4	E38	B/2	: Stop lamp switch (with M/T)				
D4	E43	L/2	: ASCD clutch switch				
C3	E163	L/2	: Clutch interlock switch				

*: 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 DIAGNOSIS in EC and AT sections.

ENGINE ROOM HARNESS (LH VIEW)

Engine Compartment

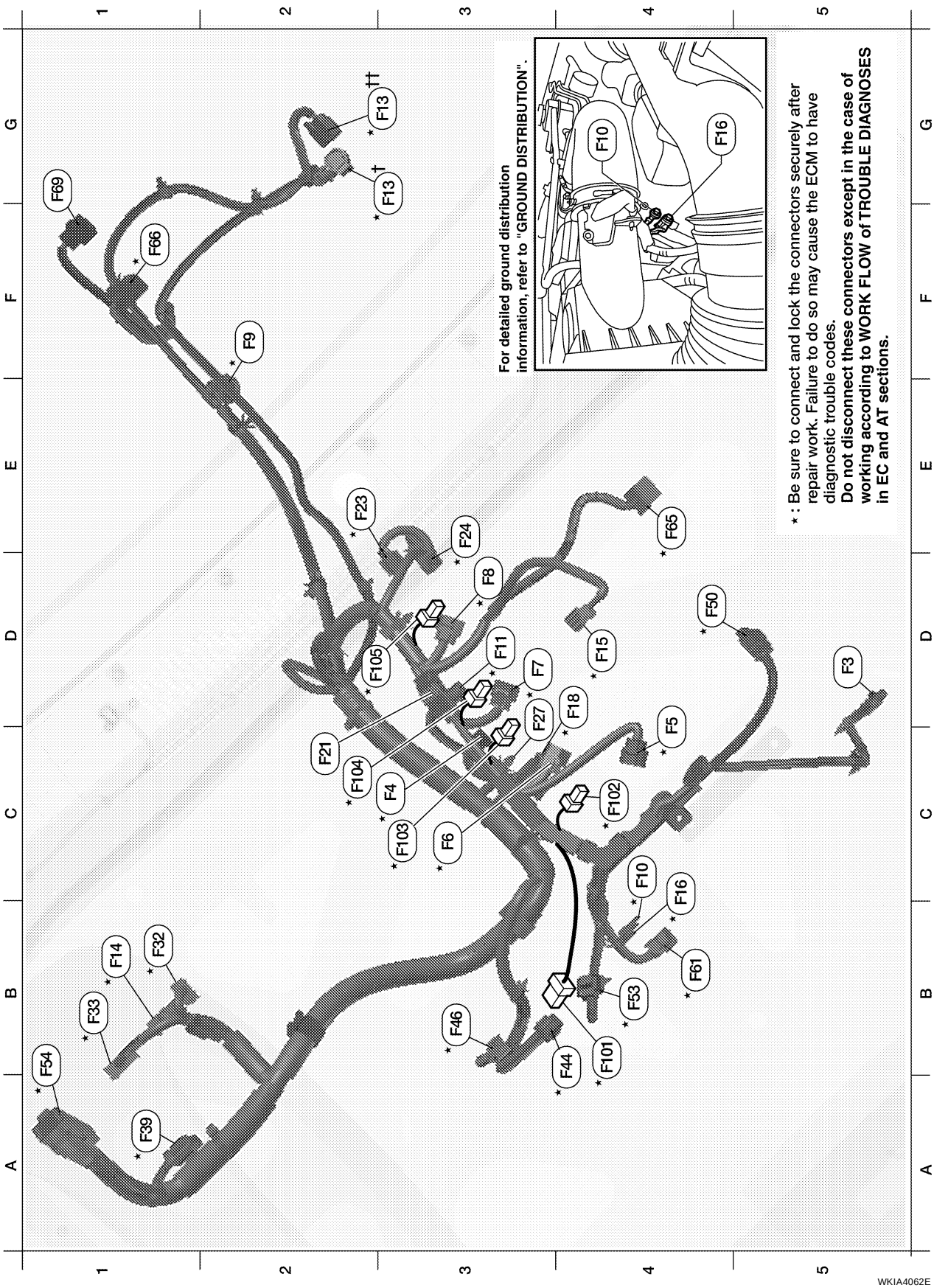


Refer to PG-46, "ENGINE ROOM HARNESS (RH VIEW)" for continuation of engine room harness.

F4	E3	B/1	: Horn				
E4	E4	Y/2	: Crash zone sensor				
F2	*E9	—	: Body ground				
G4	E11	B/3	: Front combination lamp LH (headlamp)				
F4	E13	GR/2	: Ambient sensor 2				
E2	*E14	—	: Body ground				
G3	E17	GR/2	: Front combination lamp LH (side marker)				
D3	E18	GR/2	: Front wheel sensor LH				
E2	E21	GR/2	: Brake fluid level switch				
C2	E23	GR/5	: Front wiper motor				
G3	E27	GR/3	: Front combination lamp LH (parking/turn signal)				
D3	E31	B/3	: Front pressure sensor				
D3	E32	B/3	: Rear pressure sensor				
D3	E49	B/6	: Active booster				
G5	E101	B/2	: Front fog lamp LH				
E2	E125	B/47	: ABS actuator and electric unit (control unit)				
E2	E126	—	: Body ground				
F3	E162	B/1	: Horn				

*: 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 DIAGNOSIS in EC and AT sections.

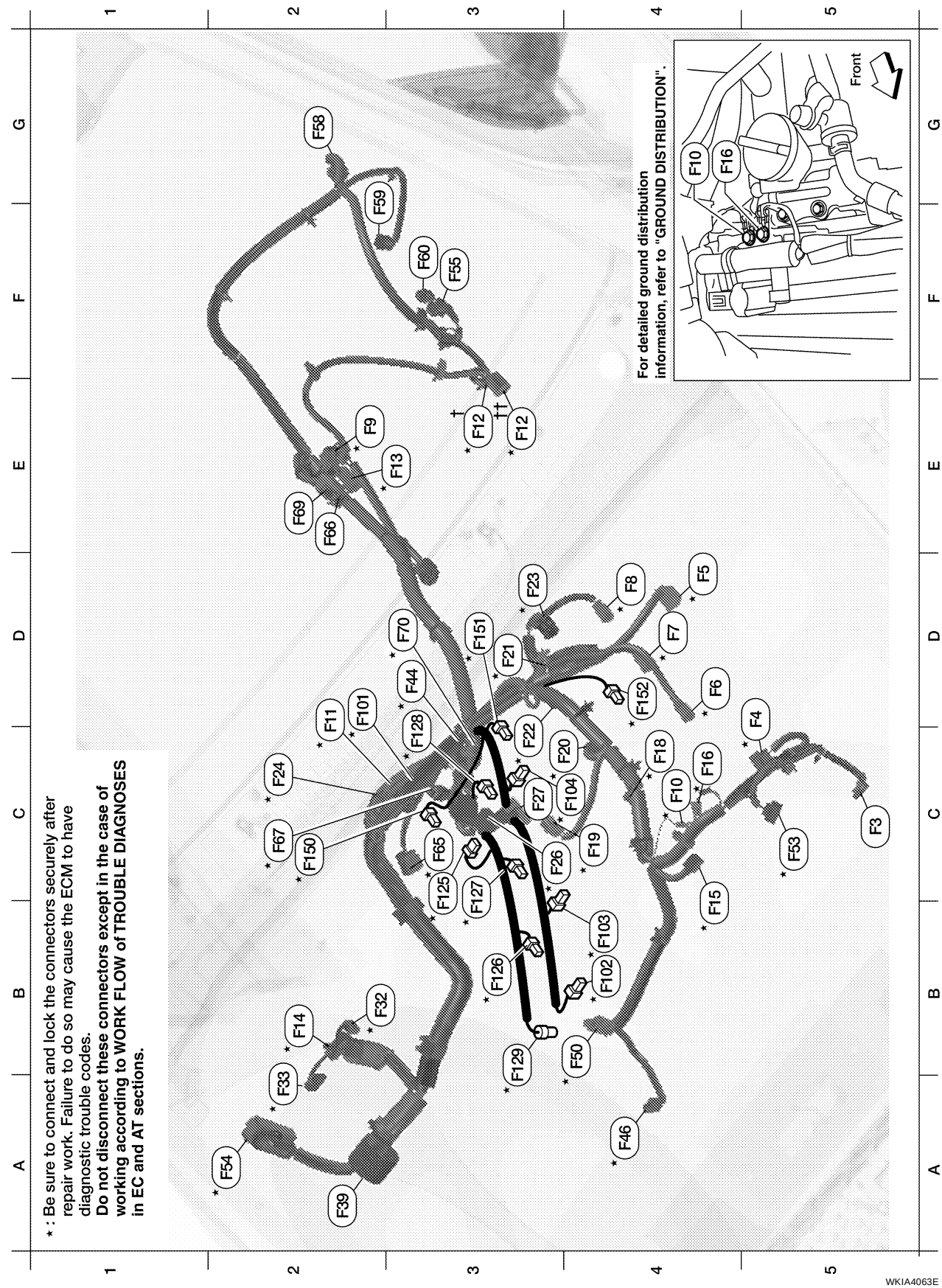
ENGINE CONTROL HARNESS (QR25DE MODELS)



D5	F3	B/1	: A/C Compressor	B1	*F32	W/16	: To E2
C3	*F4	B/1	: Oil pressure switch	B1	*F33	GR/6	: To E19
C4	*F5	B/6	: Ignition coil No. 1 (with power transistor)	A1	*F39	—	: Fusible link box (battery)
C3	*F6	GR/3	: Ignition coil No. 2 (with power transistor)	B4	*F44	B/6	: To F101
D3	*F7	GR/3	: Ignition coil No. 3 (with power transistor)	B3	*F46	B/2	: Power steering pressure sensor
D3	*F8	GR/3	: Ignition coil No. 4 (with power transistor)	D4	*F50	GR/2	: Electric throttle control actuator
F2	*F9	G/10	: A/T assembly	B4	*F53	B/6	: Mass air flow sensor
C4	*F10	—	: Engine ground	B1	*F54	B/81	: ECM
D3	*F11	B/3	: Crankshaft position sensor (POS)	B4	*F61	G/2	: Intake valve timing control solenoid valve
G3	*F13†	G/4	: Heated oxygen sensor 2 (with A/T)	E4	*F65	L/4	: Air fuel ratio (A/F) sensor
G3	*F13††	L/4	: Heated oxygen sensor 2 (with M/T)	F1	*F66	B/2	: Park/neutral position switch (with M/T)
B1	*F14	W/24	: To E5	G1	F69	W/2	: Back-up lamp switch (with M/T)
D4	*F15	L/2	: EVAP canister purge volume control solenoid valve	Injector sub-harness			
C4	*F16	—	: Engine ground	B4	*F101	B/6	: To F44
D4	*F18	C3	: Knock sensor	C4	*F102	GR/2	: Injector No. 1
C2	*F21	GR/2	: Condenser-1	C3	*F103	GR/2	: Injector No. 2
E2	*F23	B/3	: Camshaft position sensor (PHASE)	C2	*F104	GR/2	: Injector No. 3
E3	*F24	GR/2	: Engine coolant temperature sensor	D2	*F105	GR/2	: Injector No. 4
C3	F27	B/1	: Starter motor				

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

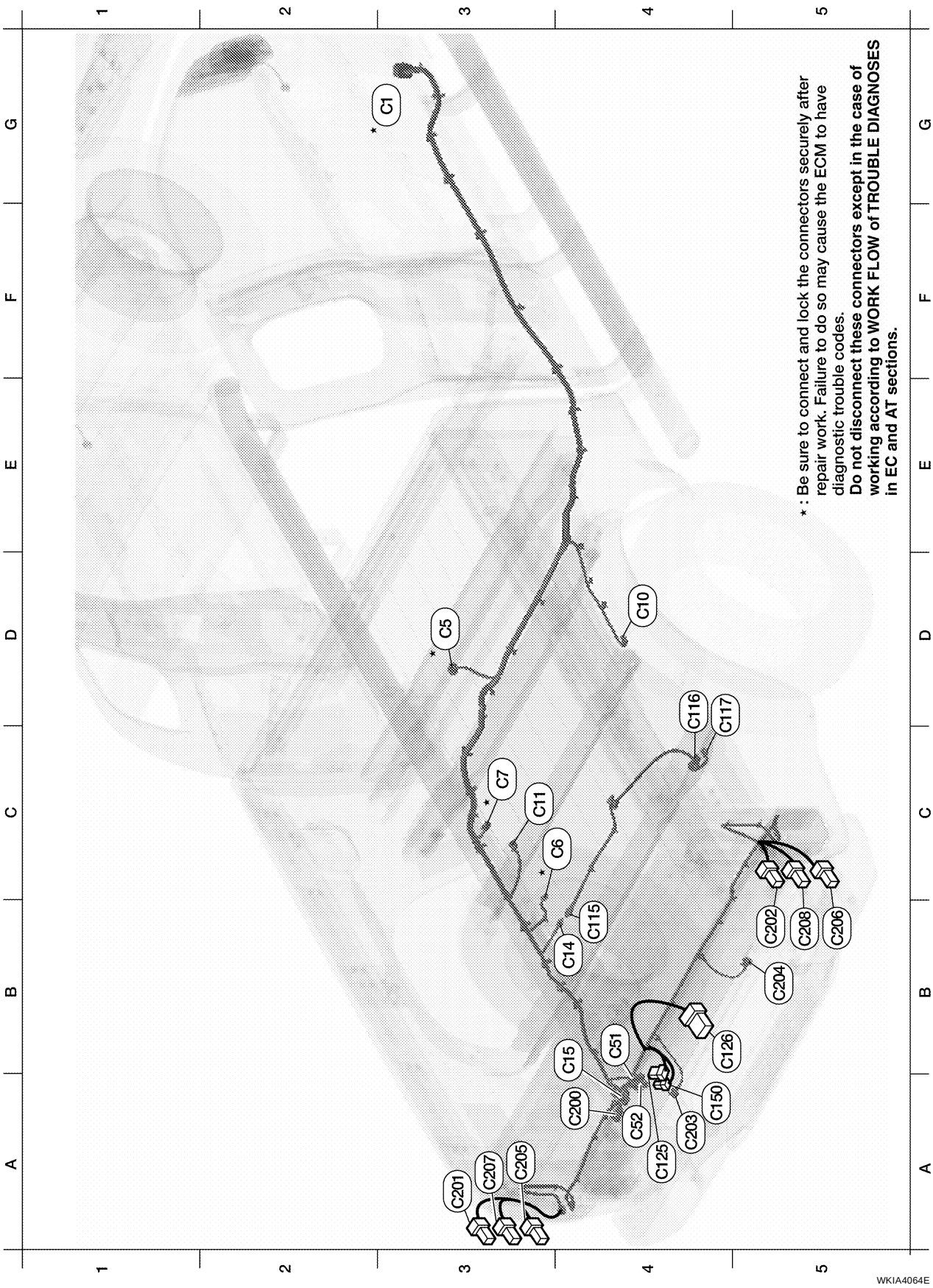
ENGINE CONTROL HARNESS (VQ40DE MODELS)



C5	F3	B/1	: A/C Compressor	A4	*F46	B/3	: Power steering pressure sensor
D5	*F4	G/2	: Intake valve timing control solenoid valve (bank 2)	B4	*F50	B/6	: Electric throttle control actuator
D4	*F5	B/6	: Air fuel ratio (A/F) sensor 1 (bank 2)	C5	*F53	B/6	: Mass air flow sensor
D4	*F6	GR/3	: Ignition coil No. 2 (with power transistor)	A2	*F54	B/81	: ECM
D4	*F7	GR/3	: Ignition coil No. 4 (with power transistor)	F3	F55	B/2	: ATP switch
D4	*F8	GR/3	: Ignition coil No. 6 (with power transistor)	G2	F58	B/8	: Transfer control device
E2	*F9	G/10	: A/T assembly	F2	F59	GR/2	: Wait detection switch
C4	*F10	—	: Engine ground	F3	F60	GR/2	: 4LO switch
D2	*F11	B/3	: Crankshaft position sensor (POS)	C3	*F65	B/6	: Air fuel ratio (A/F) sensor 1 (bank 1)
E3	†*F12	G/4	: Heated oxygen sensor 2 (bank 2) (with A/T)	E2	*F66	B/2	: Park/neutral position switch (with M/T)
E3	††*F12	G/4	: Heated oxygen sensor 2 (bank 2) (with M/T)	C2	*F67	L/4	: To F150
E3	*F13	L/4	: Heated oxygen sensor 2 (bank 1)	E2	F69	W/2	: Back-up lamp switch (with M/T)
B2	*F14	W/24	: To E5	D3	*F70	GR/3	: Camshaft position sensor (PHASE) (bank 1)
B4	*F15	L/2	: EVAP canister purge volume control solenoid valve	Injector sub-harness			
C4	*F16	—	: Engine ground	D2	*F101	GR/4	: To F44
C4	*F18	GR/2	: Injector No. 2	B4	*F102	GR/2	: Injector No. 1
C4	*F19	B/2	: VIAS control solenoid valve	B4	*F103	GR/2	: Injector No. 3
C4	*F20	GR/2	: Injector No. 4	C4	*F104	GR/2	: Injector No. 5
D3	*F21	GR/2	: Condenser-1	Ignition coil sub-harness			
C3	*F22	GR/2	: Injector No. 6	C3	*F125	G/8	: To F26
D3	*F23	B/3	: Camshaft position sensor (PHASE) (bank 2)	B3	*F126	GR/3	: Ignition coil No. 1 (with power transistor)
C2	*F24	GR/2	: Engine coolant temperature sensor	B3	*F127	GR/3	: Ignition coil No. 3 (with power transistor)
C3	*F26	G/8	: To F125	C3	*F128	GR/3	: Ignition coil No. 5 (with power transistor)
C3	*F27	B/1	: Starter motor	B3	*F129	G/2	: Intake valve timing control solenoid valve (bank 1)
B2	*F32	W/16	: To E2	Knock sensor sub-harness			
A2	*F33	W/16	: To E19	C2	*F150	L/4	: To F67
A2	F39	—	: Fusible link box (battery)	D3	*F151	B/2	: Knock sensor (bank 1)
D3	*F44	GR/4	: To F101	D4	*F152	B/2	: Knock sensor (bank 2)

*: 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 DIAGNOSIS in EC and AT sections.

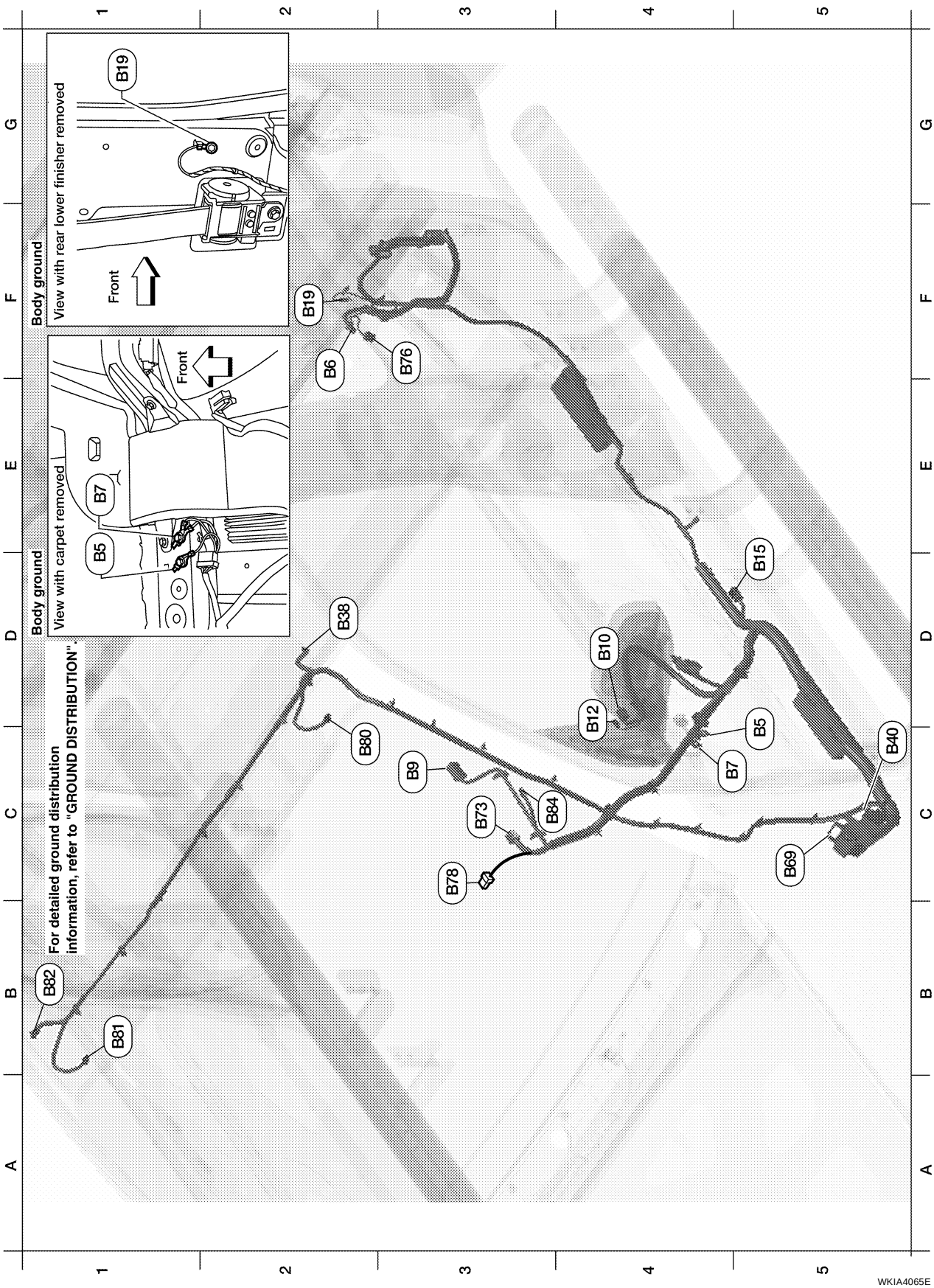
CHASSIS HARNESS



G3	*C1	SMJ	: To E41				
D3	*C5	GR/5	: Fuel level sensor unit and fuel pump				
C4	*C6	B/2	: EVAP canister vent control valve				
C3	*C7	GR/3	: EVAP control system pressure sensor				
D4	C10	GR/2	: Rear wheel sensor RH				
C3	C11	GR/2	: Rear wheel sensor LH				
B4	C14	GR/4	: To C115				
B4	C15	GR/8	: To C200				
B4	C51	GR/6	: To C125				
A4	C52	B/2	: To C150				
Differential lock sub-harness							
B4	C115	GR/4	: To C14				
D4	C116	GR/2	: Differential lock position switch				
D4	C117	B/2	: Differential lock solenoid				
Trailer sub-harness							
A4	C125	GR/6	: To C51				
B5	†C126	B/7	: Trailer (7-pin)				
B5	††C126	B/4	: Trailer (4-pin)				
A4	C150	B/2	: To C52				
Tail lamp sub-harness							
A4	C200	GR/8	: To C15				
A3	C201	BR/3	: Rear combination lamp LH (tail/stop)				
B5	C202	BR/3	: Rear combination lamp RH (tail/stop)				
A4	C203	GR/2	: License plate lamp LH				
B5	C204	GR/2	: License plate lamp RH				
A3	C205	GR/2	: Rear combination lamp LH (back-up)				
B5	C206	GR/2	: Rear combination lamp RH (back-up)				
A3	C207	GR/2	: Rear combination lamp LH (turn signal)				
B5	C208	GR/2	: Rear combination lamp RH (turn signal)				

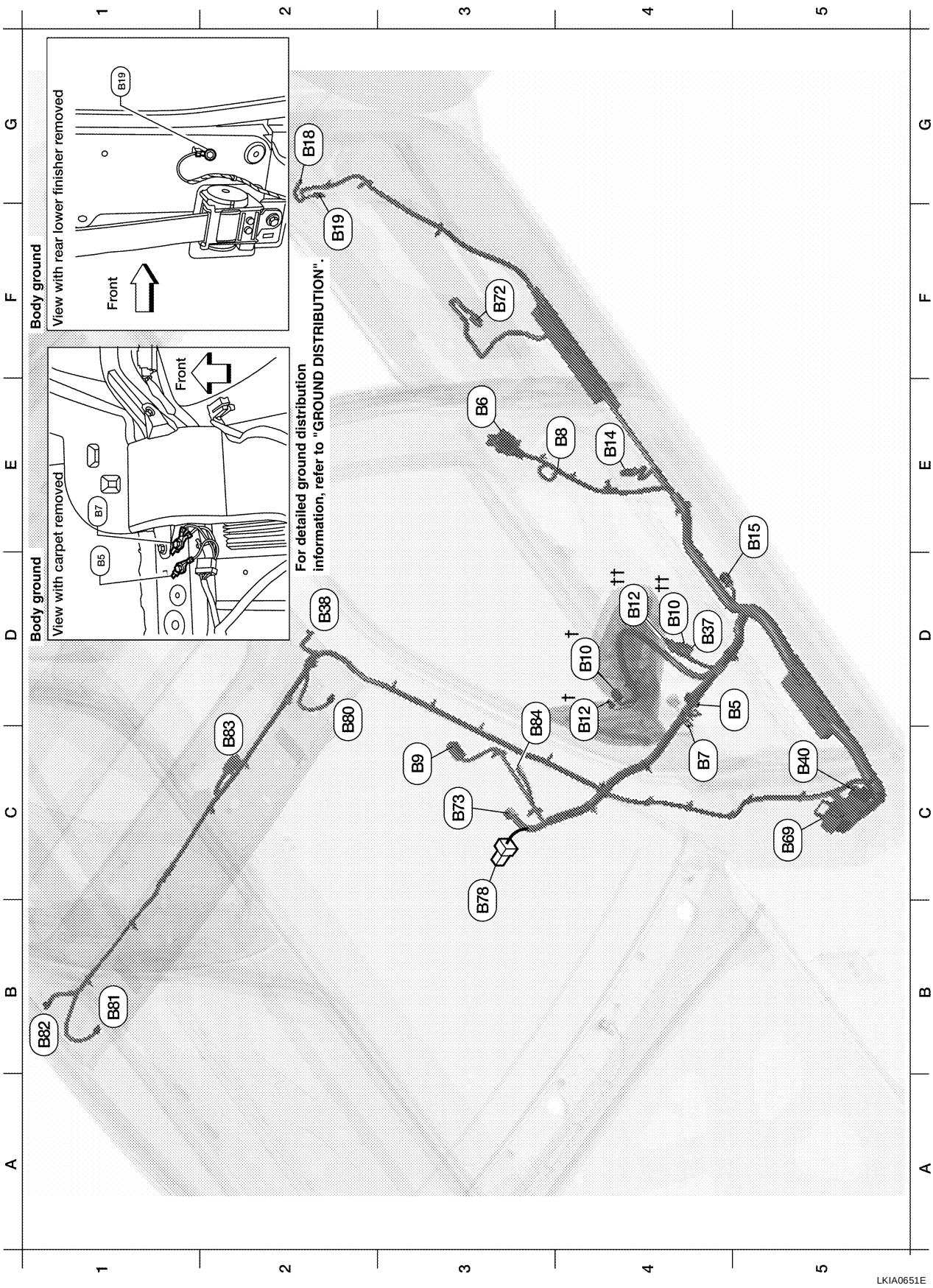
*: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSIS in EC and AT sections.

BODY HARNESS (KING CAB MODELS)



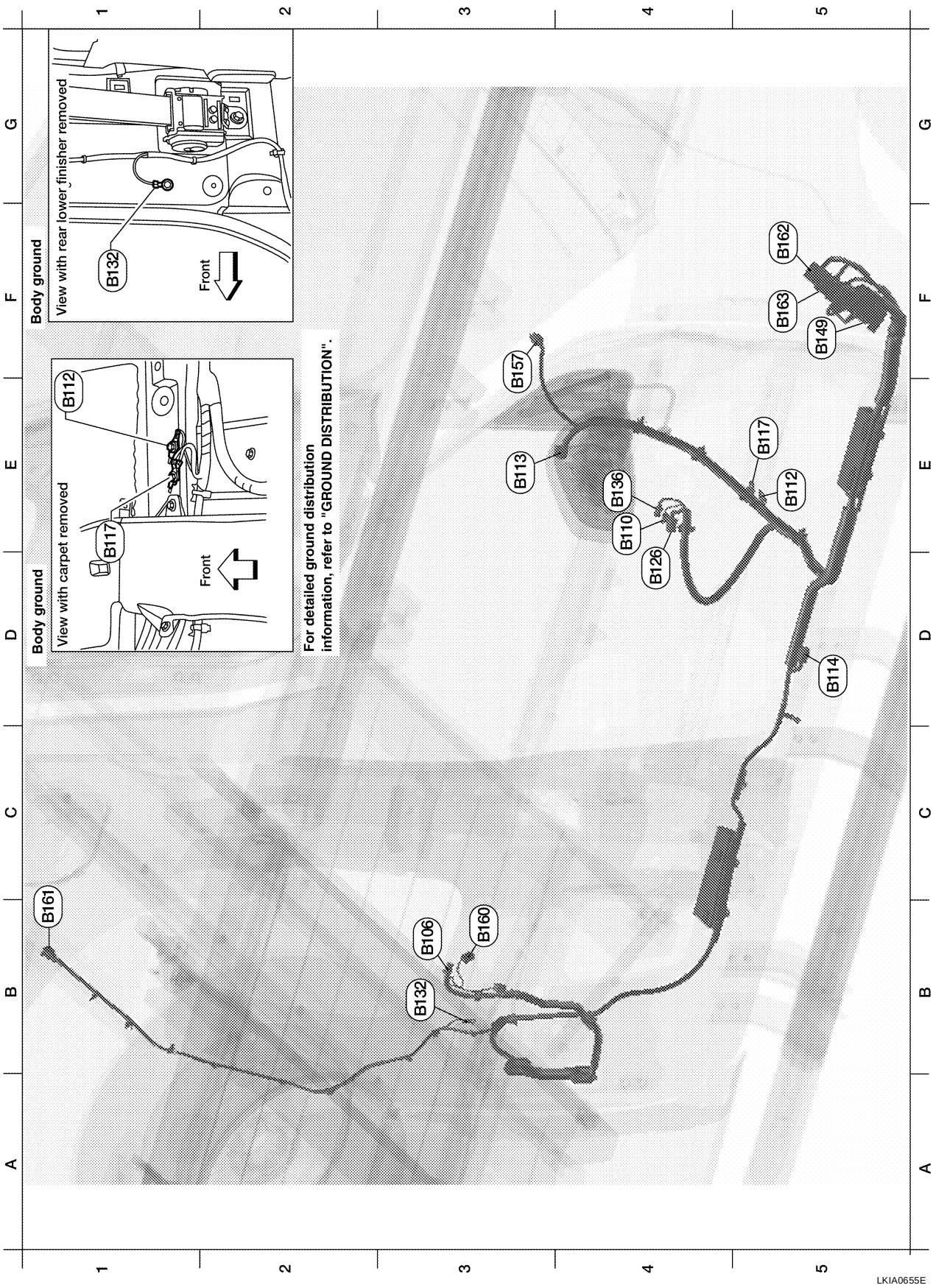
D5	B5	—	: Body ground (LH satellite sensor)				
E2	B6	W/8	: To D201				
C4	B7	—	: Body ground				
C3	B9	Y/12	: Air bag diagnosis sensor unit				
D4	B10	Y/2	: Front LH side air bag module				
D4	B12	W/3	: Seat belt buckle switch LH				
E5	B15	Y/2	: LH side air bag (satellite) sensor				
F2	B19	—	: Body ground				
D2	B38	Y/2	: LH side curtain air bag module				
C5	B40	W/8	: To E34				
C5	B69	SMJ	: To M40				
C3	B73	B/6	: Yaw rate/side/decel G sensor				
F3	B76	W/2	: Rear door speaker LH				
C3	B78	Y/2	: To B157				
C2	B80	W/2	: Vanity lamp LH				
B1	B81	W/2	: Vanity lamp RH				
B1	B82	Y/2	: RH side curtain air bag module				
C3	B84	B/1	: Parking brake switch				

BODY HARNESS (CREW CAB MODELS)



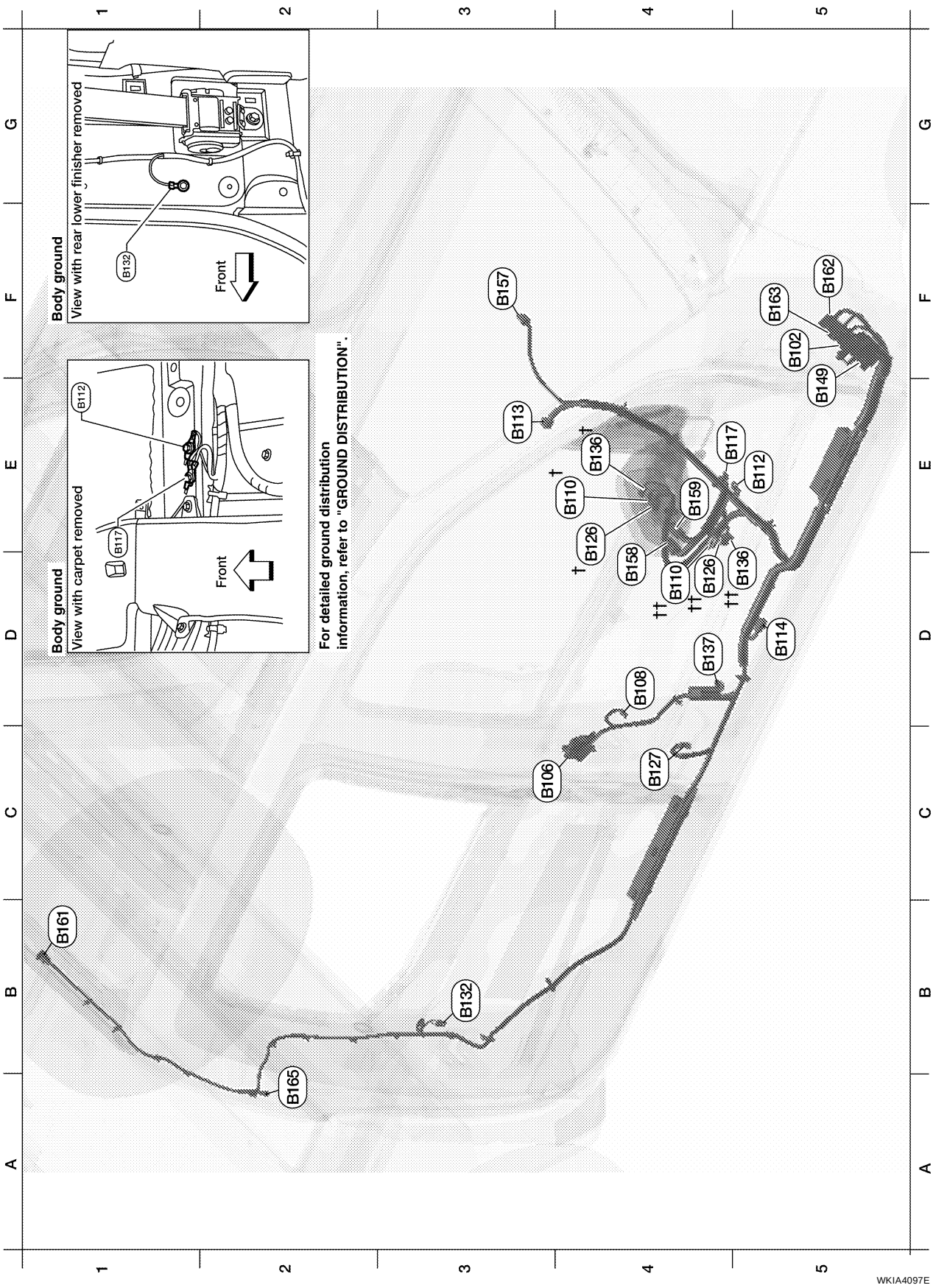
D4	B5	—	: Body ground (LH satellite sensor)				
E3	B6	W/12	: To D201				
C4	B7	—	: Body ground				
E4	B8	W/3	: Front door switch LH				
C3	B9	Y/12	: Air bag diagnosis sensor unit				
D4	†B10	Y/2	: Front LH side air bag module (without power seat)				
D4	††B10	Y/2	: Front LH side air bag module (with power seat)				
D4	†B12	W/3	: Seat belt buckle switch LH (without power seat)				
D4	††B12	W/3	: Seat belt buckle switch LH (with power seat)				
E4	B14	Y/2	: Front LH seat belt pre-tensioner				
E5	B15	Y/2	: LH side air bag (satellite) sensor				
G2	B18	W/3	: Rear door switch LH				
F2	B19	—	: Body ground				
D4	B37	W/16	: To P1				
D2	B38	Y/2	: LH side curtain air bag module				
C5	B40	W/8	: To E34				
C5	B69	SMJ	: To M40				
F3	B72	GR/4	: Subwoofer (with audio amplifier)				
C3	B73	B/6	: Yaw rate/side/decel G sensor				
C3	B78	Y/2	: To B157				
C2	B80	W/2	: Vanity lamp LH				
B1	B81	W/2	: Vanity lamp RH				
B1	B82	Y/2	: RH side curtain air bag module				
C2	B83	B/10	: Sunroof motor assembly				
C3	B84	B/1	: Parking brake switch				

BODY NO. 2 HARNESS (KING CAB MODELS)



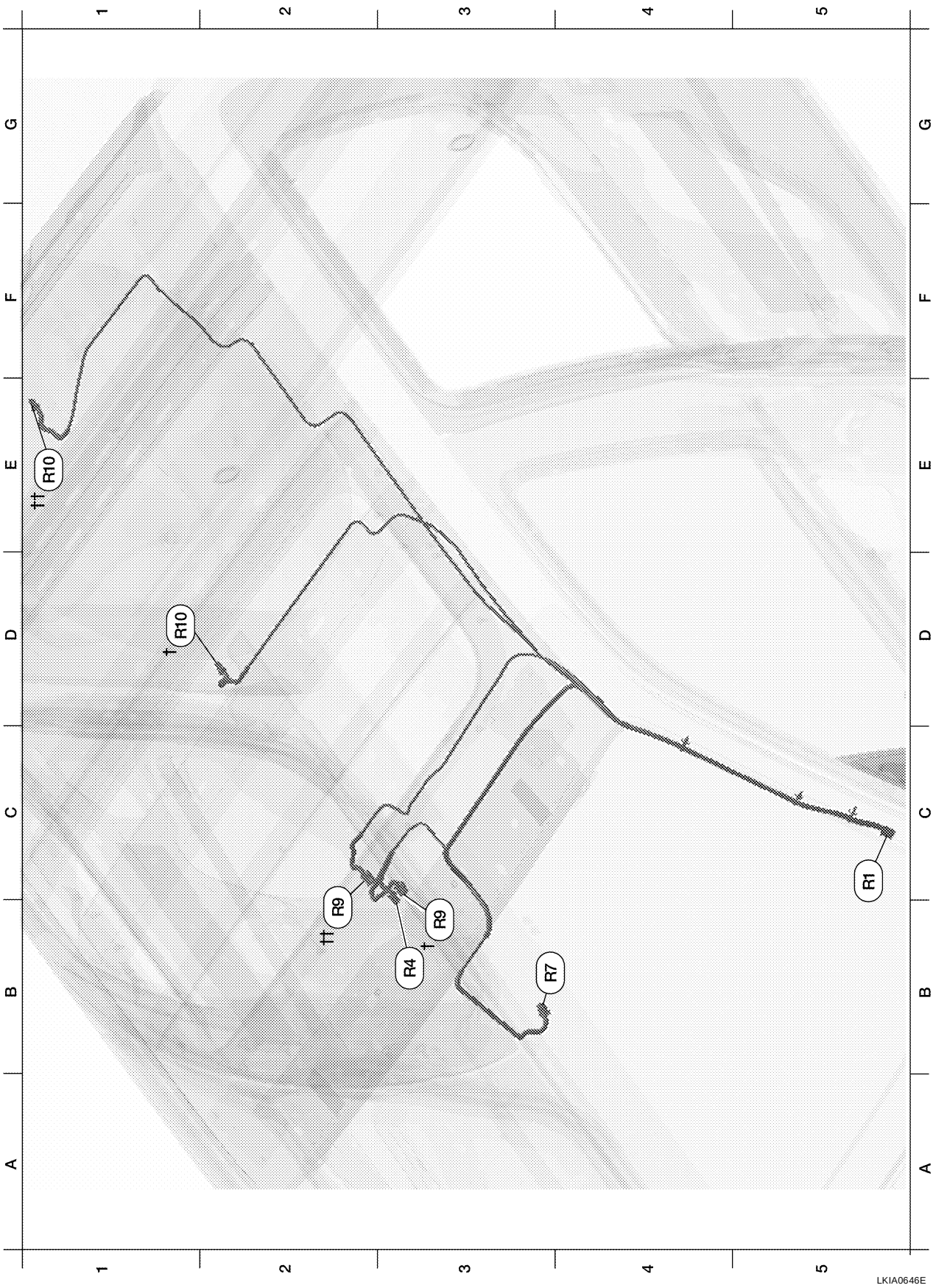
C3	B106	W/8	: To D301				
E4	B110	W/3	: Seat belt buckle switch RH				
E5	B112	—	: Body ground (RH satellite sensor)				
E3	B113	Y/12	: Air bag diagnosis sensor unit				
D5	B114	Y/2	: RH side air bag (satellite) sensor				
E5	B117	—	: Body ground				
D4	B126	Y/2	: Front RH side air bag module				
B3	B132	—	: Body ground				
E4	B136	W/8	: To P151				
F5	B149	SMJ	: To M36				
F3	B157	Y/2	: To B78				
B3	B160	W/2	: Rear door speaker RH				
B1	B161	W/3	: High-mounted stop lamp				
F5	B162	W/12	: To M16				
F5	B163	W/16	: To M17				

BODY NO. 2 HARNESS (CREW CAB MODELS)



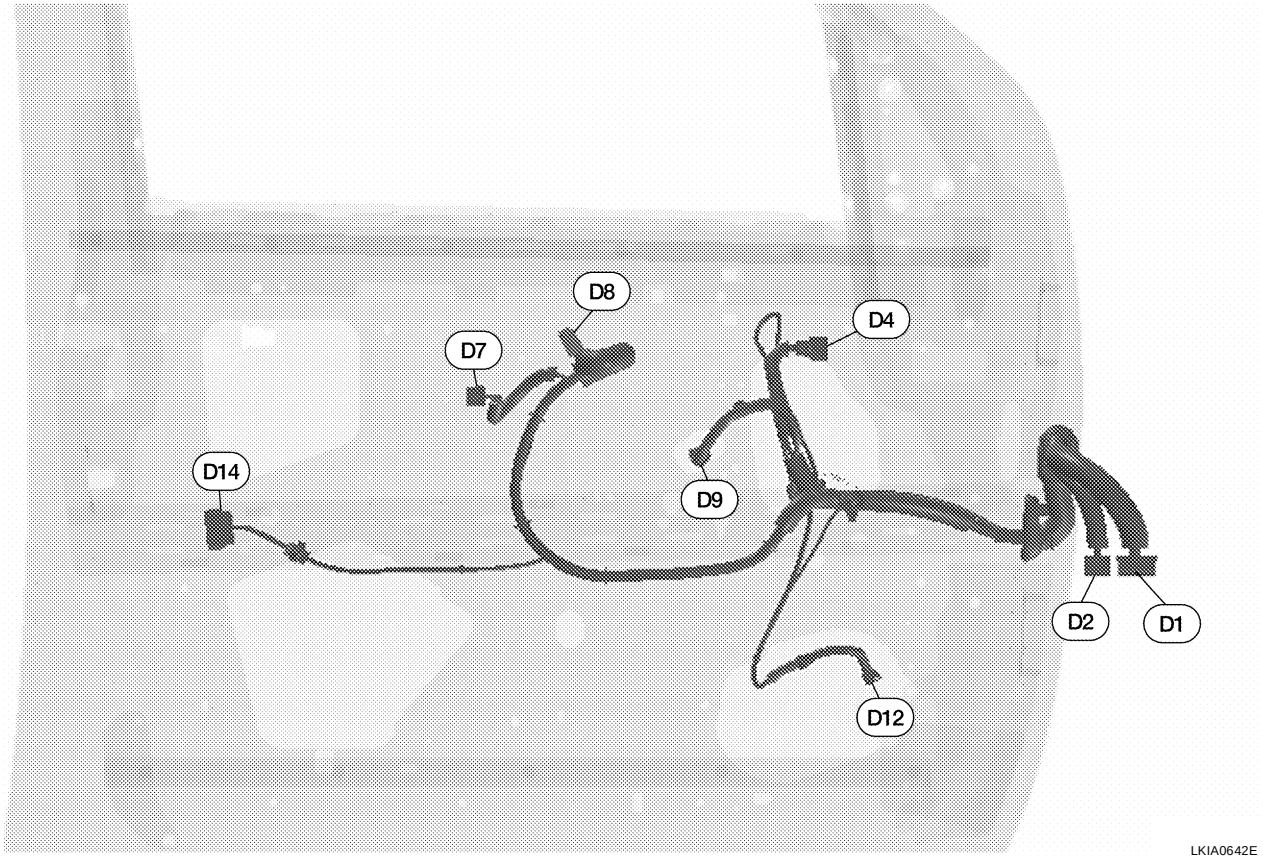
F5	B102	W/2	: To E36				
C3	B106	W/12	: To D301				
D4	B108	W/3	: To D301				
E4	†B110	W/3	: Front door switch RH (without power seat)				
D4	††B110	W/3	: Front door switch RH (with power seat)				
E5	B112	—	: Body ground (RH satellite sensor)				
E3	B113	Y/12	: Air bag diagnosis sensor unit				
D5	B114	Y/2	: RH side air bag (satellite) sensor				
E5	B117	—	: Body ground				
D4	†B126	Y/2	: Front RH side air bag module (without power seat)				
D4	††B126	Y/2	: Front RH side air bag module (with power seat)				
C4	B127	Y/2	: Front RH seat belt pretensioner				
B3	B132	—	: Body ground				
E4	†B136	W/8	: To P151 (without power seat)				
D5	††B136	W/16	: To P151 (with power seat)				
D4	B137	B/3	: Belt tension sensor				
E5	B149	SMJ	: To M36				
F3	B157	Y/2	: To B78				
D4	B158	W/8	: Audio amplifier				
E4	B159	W/24	: Audio amplifier				
B1	B161	W/3	: High-mounted stop lamp				
F5	B162	W/12	: To M16				
F5	B163	W/16	: To M17				
A2	B165	B/1	: Rear window defogger				

ROOM LAMP HARNESS



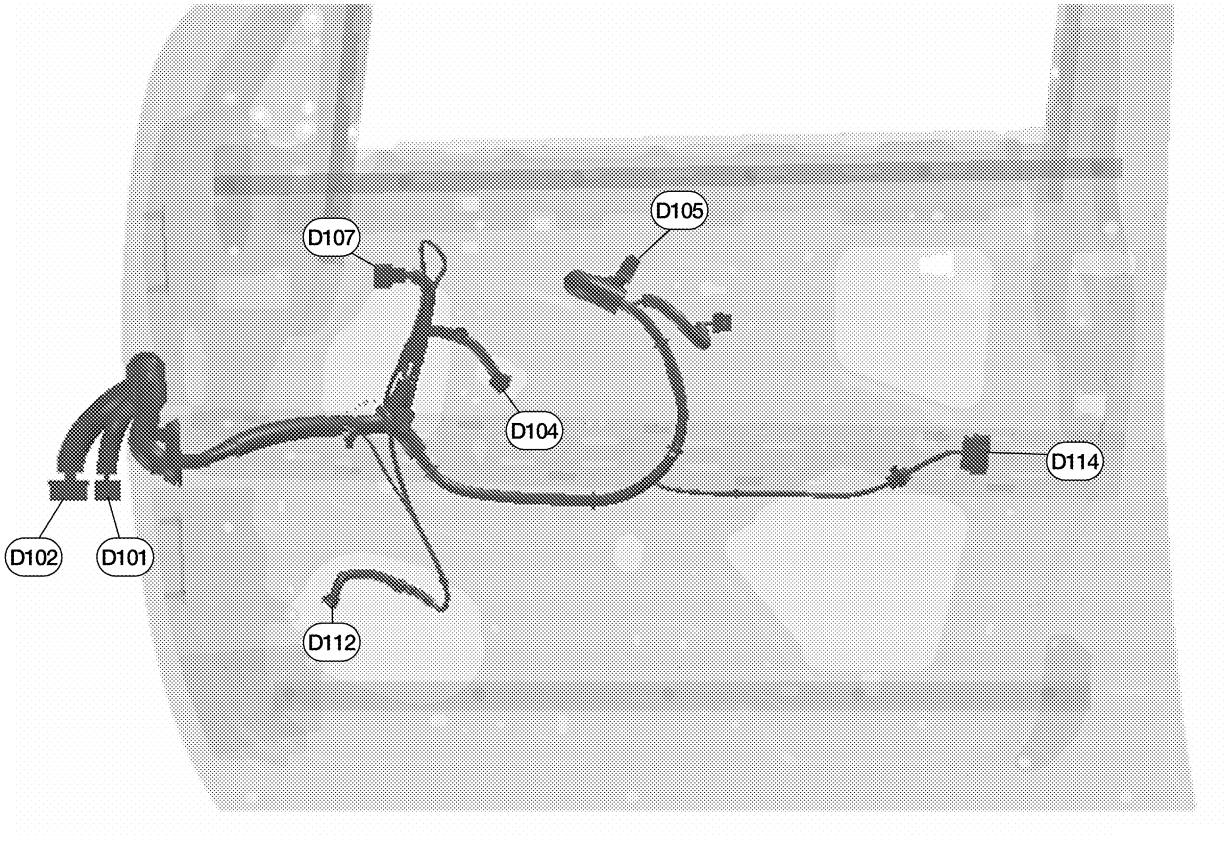
C5	R1	W/12	: To M1				
B3	R4	W/3	: Sunroof switch				
B4	R7	B/10	: Auto anti-dazzling inside mirror (with HOMELINK universal transceiver)				
B3	†R9	W/3	: Front room/map lamp assembly (with sunroof)				
B2	††R9	W/3	: Front room/map lamp assembly (without sunroof)				
E1	††R10	W/2	: Room lamp 2nd row (Crew cab models)				
D1	†R10	W/2	: Room lamp 2nd row (King cab models)				

FRONT DOOR LH HARNESS



D1	W/24	: To M9	D8	W/3	: Main power window and door lock/unlock switch
D2	W/16	: To M8	D9	GR/2	: Front power window motor LH
D4	B/10	: Door mirror remote control switch	D12	W/2	: Front door speaker LH
D7	W/16	: Main power window and door lock/unlock switch	D14	GR/6	: Front door lock actuator LH (key cylinder switch)

FRONT DOOR RH HARNESS



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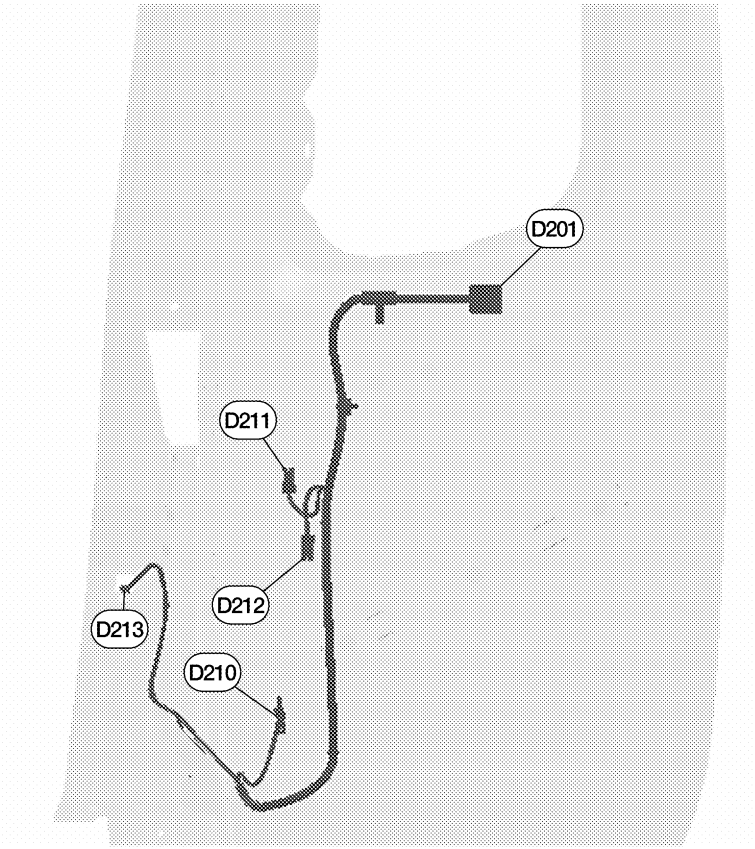
D101	W/12	: To M75	D107	B/10	Door mirror RH
D102	W/16	: To M74	D112	W/2	Front door speaker RH
D104	GR/2	: Front power window motor RH	D114	BR/2	Front door lock actuator RH
D105	W/12	: Power window and door lock/unlock switch			

REAR DOOR LH HARNESS (KING CAB MODELS)



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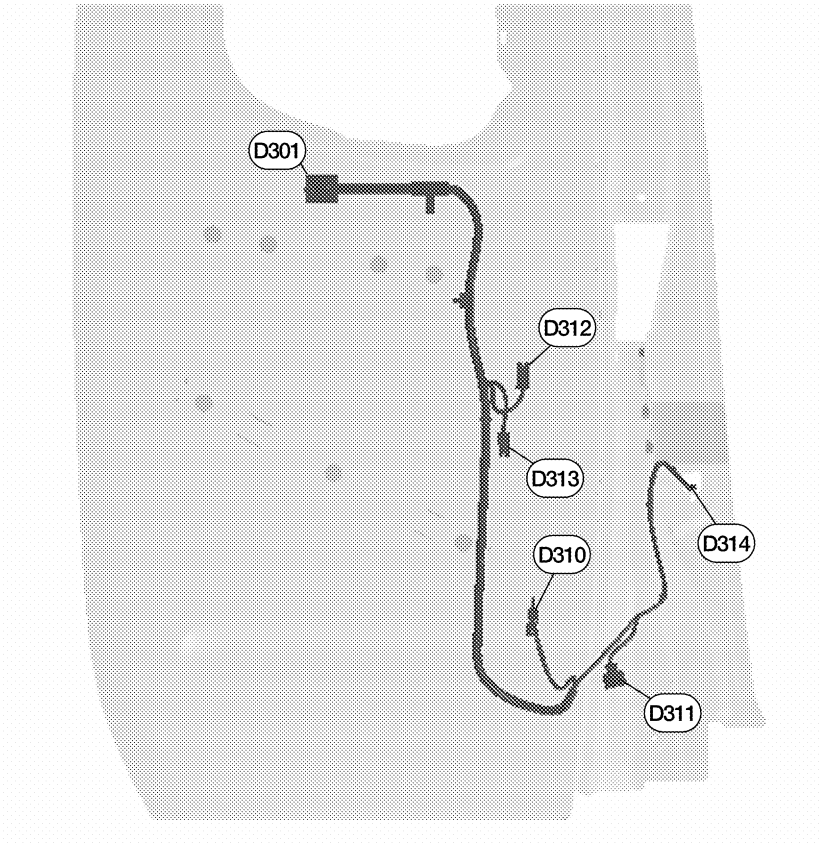
D201	W/8	: To B6	D212	GR/2	: Rear door switch lower LH
D210	Y/2	: Front LH seat belt pretensioner	D213	W/3	: Front door switch LH
D211	B/2	: Rear door switch upper LH			

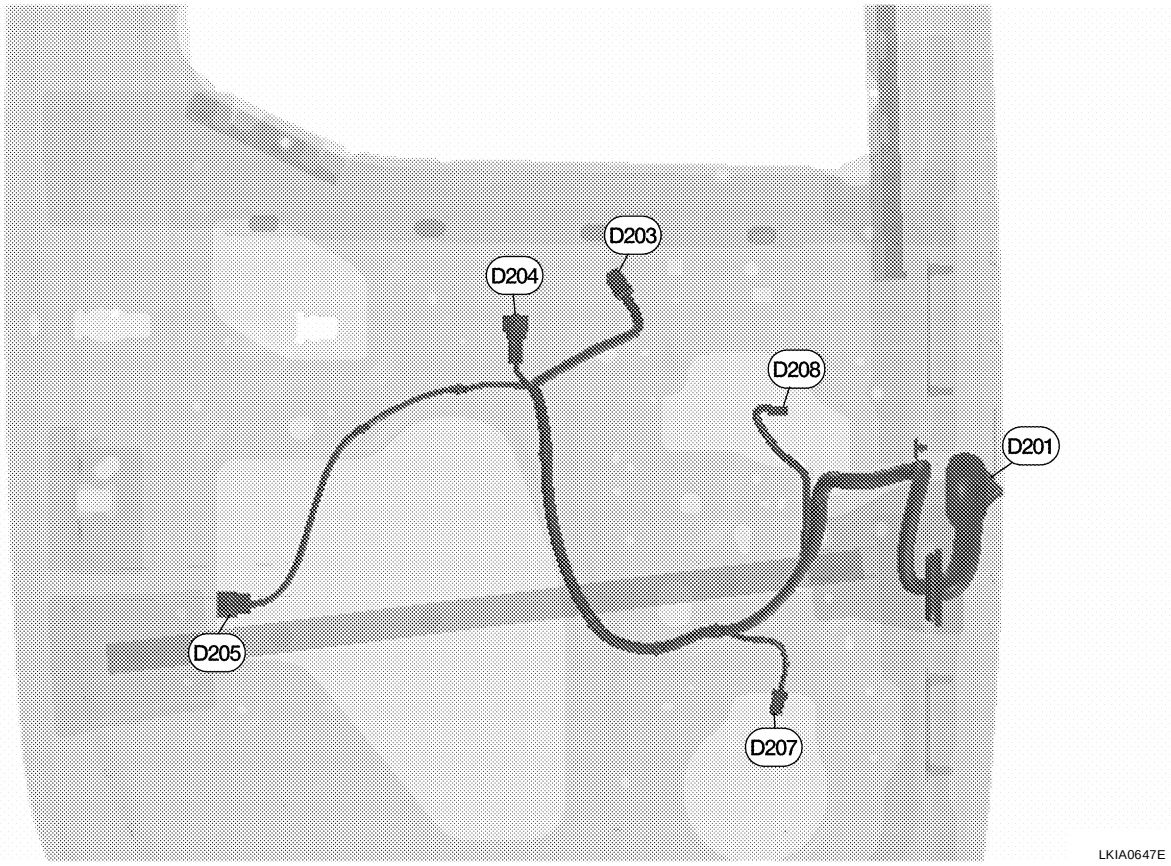
REAR DOOR RH HARNESS (KING CAB MODELS)



LKIA0645E

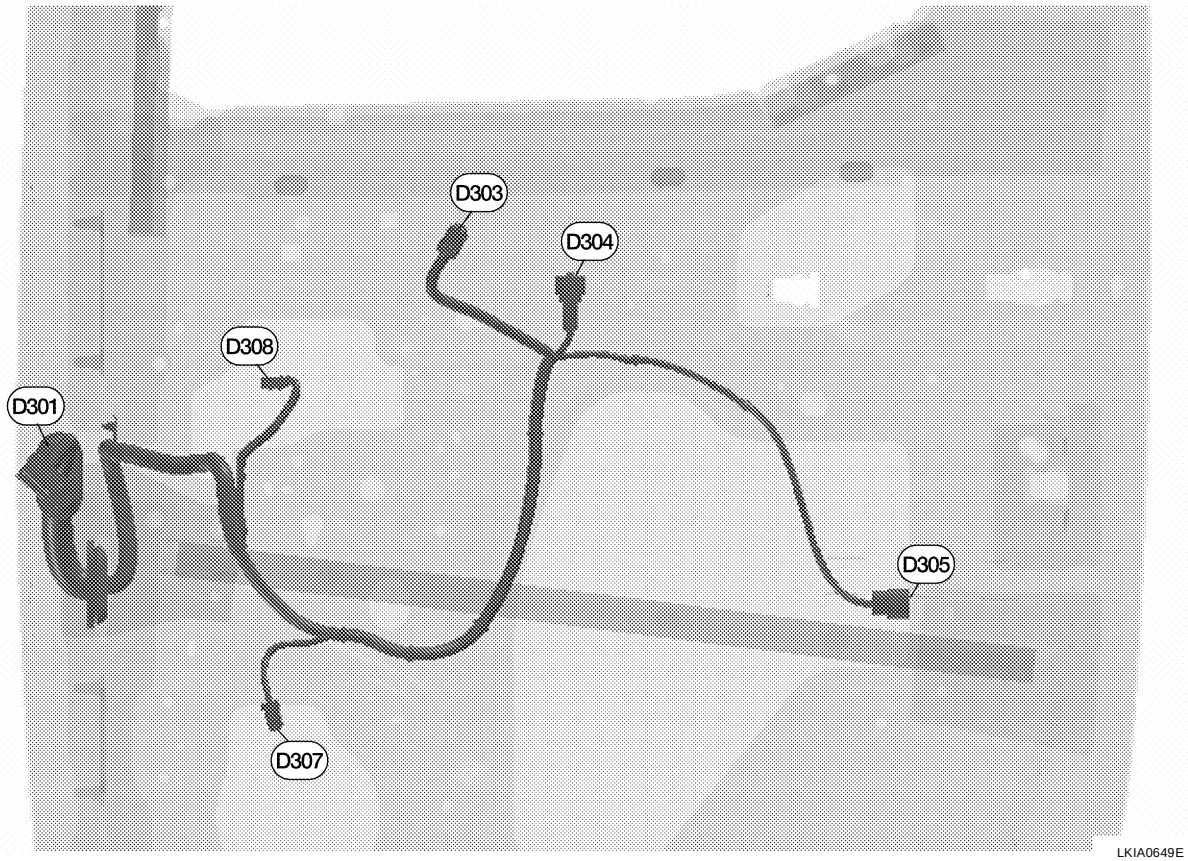
D301	W/8	: To B106	D312	B/2	: Rear door switch upper RH
D310	Y/2	: Front RH seat belt pretensioner	D313	B/2	: Rear door switch lower RH
D311	B/3	: Belt tension sensor	D314	W/3	: Front door switch RH

REAR DOOR LH HARNESS (CREW CAB MODELS)



D201	W/12	: To B6	D207	W/2	: Rear door speaker LH (base audio)
D203	W/8	: Rear power window switch LH	D207	BR/2	: Rear door speaker LH (premium audio)
D204	B/2	: Rear power window motor LH	D208	BR/2	: Rear door tweeter LH
D205	BR/2	: Rear door lock actuator LH			

REAR DOOR RH HARNESS (CREW CAB MODELS)



D301	W/12	: To B106	D307	W/2	: Rear door speaker RH (base audio)
D303	W/8	: Rear power window switch RH	D307	BR/2	: Rear door speaker RH (premium audio)
D304	B/2	: Rear power window motor RH	D308	BR/2	: Rear door tweeter RH
D305	BR/2	: Rear door lock actuator RH			

Wiring Diagram Codes (Cell Codes)

EKS00EOT

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,M	MTC	Manual Air Conditioner
A/F	EC	Air Fuel Ratio (A/F) Sensor
A/FH	EC	Air Fuel Ratio (A/F) Sensor
ABLS	BRC	Anti-Lock Brake System Limited Slip
ABS	BRC	Anti-Lock Brake System
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
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
CHIME	DI	Warning Chime
COOL/F	EC	Cooling Fan Control
COMBSW	LT	Combination Switch
COMPAS	DI	Compass
CUR/SE	EC	Battery Current Sensor
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DTRL	LT	Headlamp - With Daytime Light System
DIFLOC	RFD	Electronic Locking Differential
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FTS	AT	A/T Fluid Temperature Sensor
FTTS	EC	Fuel Tank Temperature Sensor
FUEL	EC	Fuel Injection System Function
FUELB1	EC	Fuel Injection System Bank 1
FUELB2	EC	Fuel Injection System Bank 2

HEATER	MTC	Heater System
H/LAMP	LT	Headlamp
H/MIRR	GW	Door Mirror With Heated Mirror
HO2S2H	EC	Heated Oxygen Sensor 2 Heater
HO2S2	EC	Heated Oxygen Sensor 2
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/MIRR	GW	Inside Mirror (Auto Anti-Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injectors
INT/L	LT	Room/Map, Vanity, Cargo, and Personal Lamps
IVC	EC	Intake Valve Timing Control Solenoid Valve
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp. and Fuel Gauges
MIL/DL	EC	Malfunction Indicator Lamp
MIRROR	GW	Door Mirror
NATS	BL	Nissan Anti-Theft System
NONDTC	AT	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	Heated Oxygen Sensor 2 Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 Bank 2
P/SCKT	WW	Power Socket
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHASE	EC	Camshaft Position Sensor (PHASE)
PHSB1	EC	Camshaft Position Sensor (PHASE) (Bank 1)
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank 1)
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)
WARN	DI	Warning Lamps
WINDOW	GW	Power Window
WIPER	WW	Front Wiper and Washer

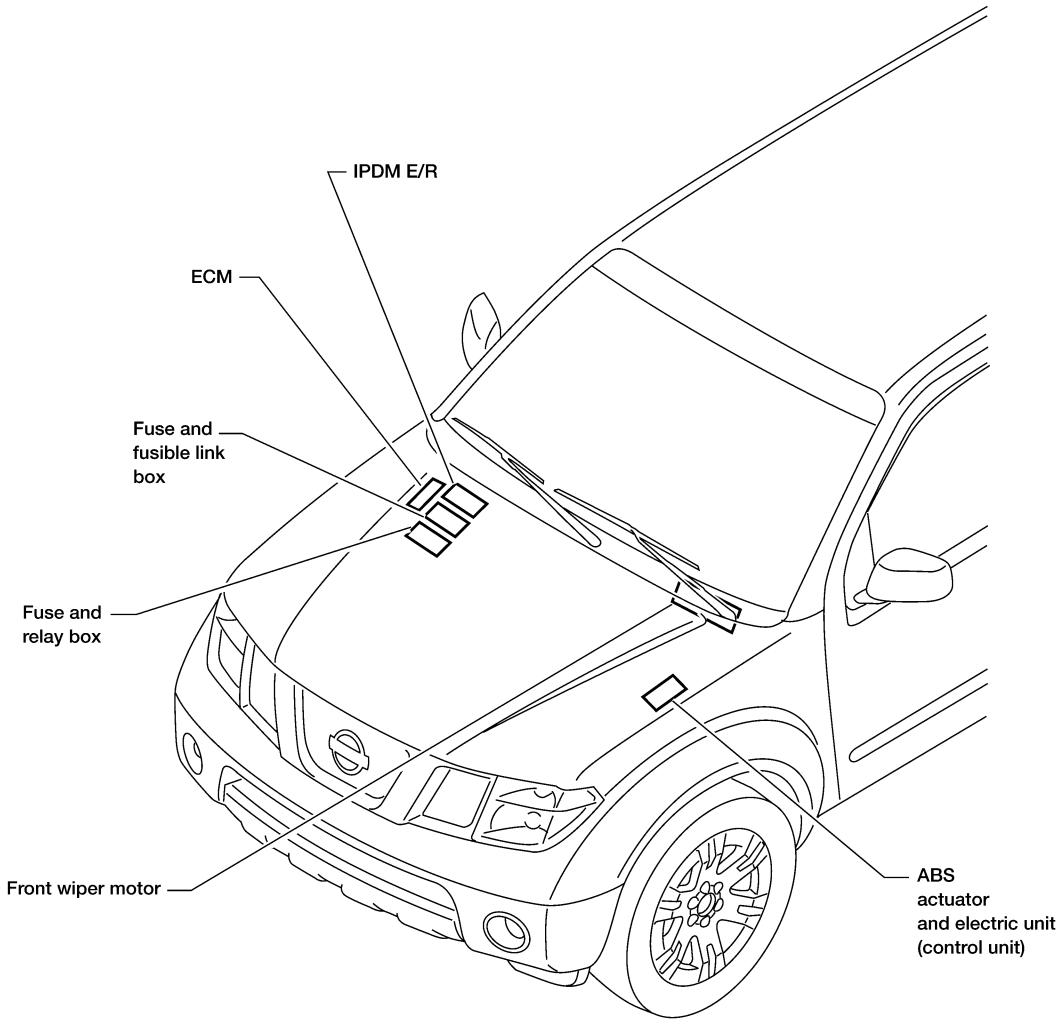
ELECTRICAL UNITS LOCATION

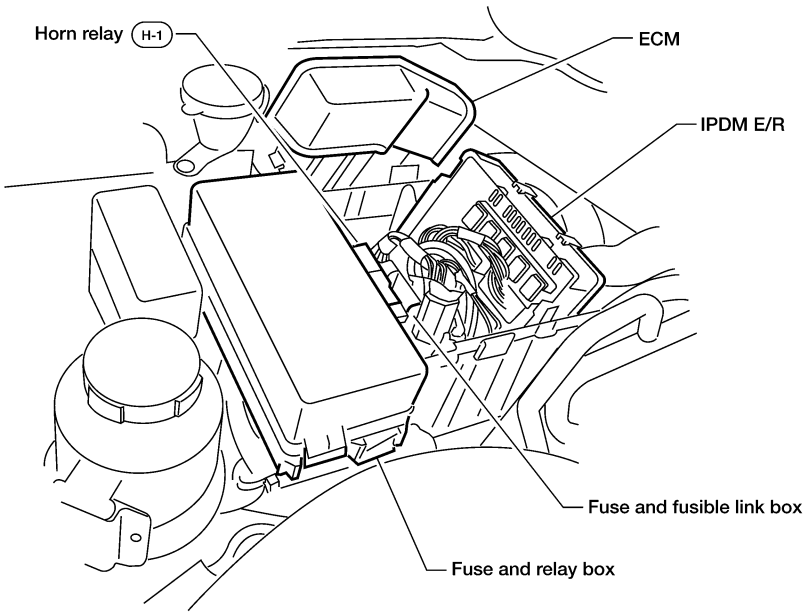
PFP:25230

Electrical Units Location

EKS00EOU

ENGINE COMPARTMENT





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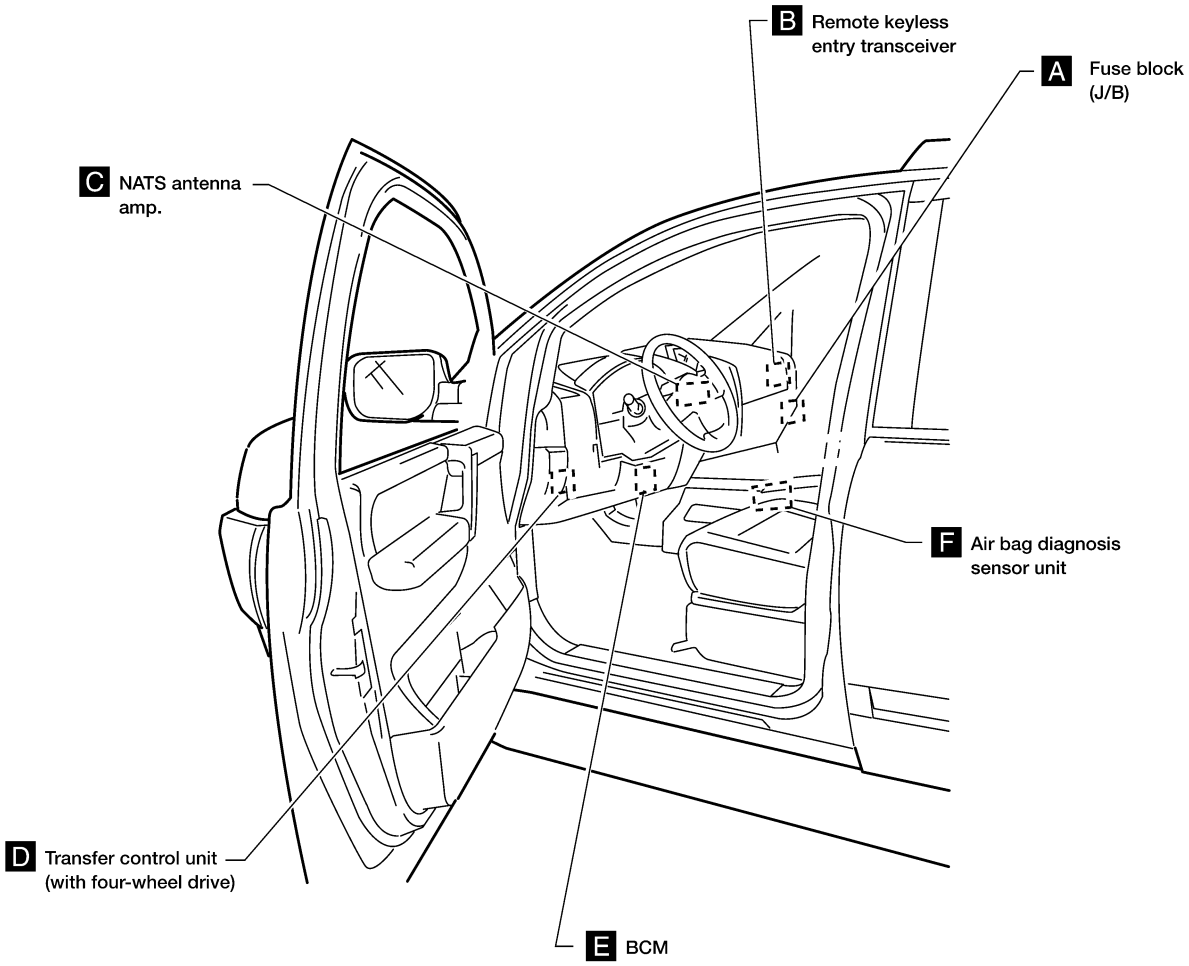
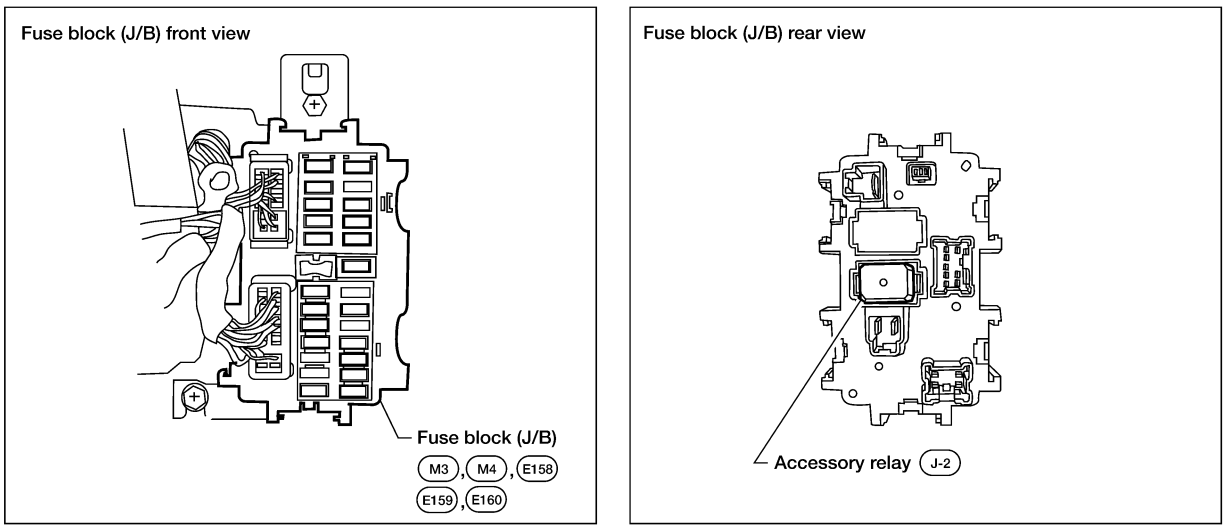
PASSENGER COMPARTMENT



A Instrument panel side RH



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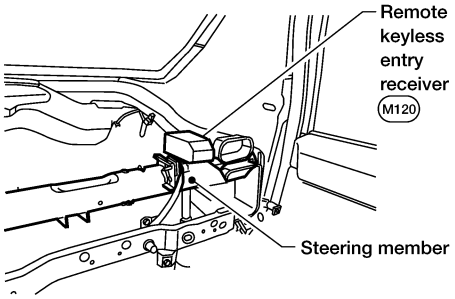
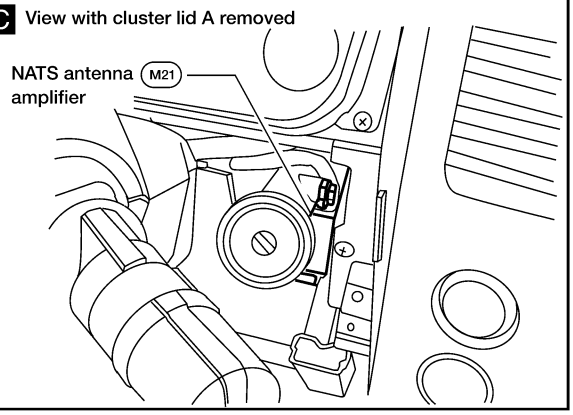
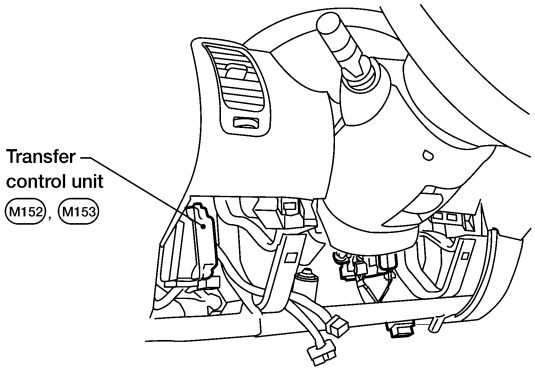
B View with instrument panel removed RH



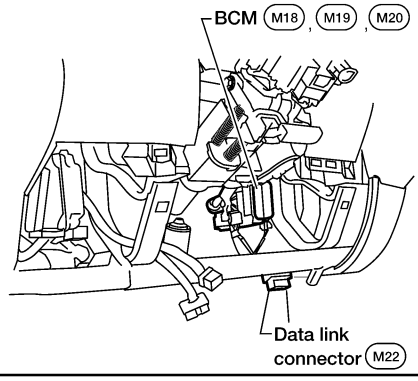
C View with cluster lid A removed



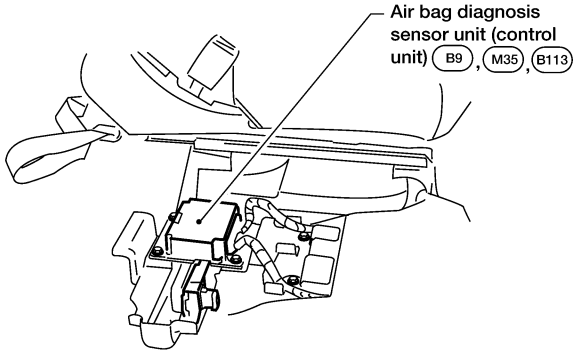
D View with lower instrument cover removed



E View with instrument lower panel LH removed



F View with center console removed

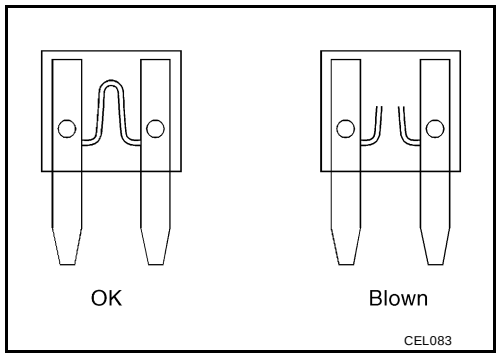


WKIA3790E

Fuse

EKS00EOV

- 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

EKS00EOW

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:

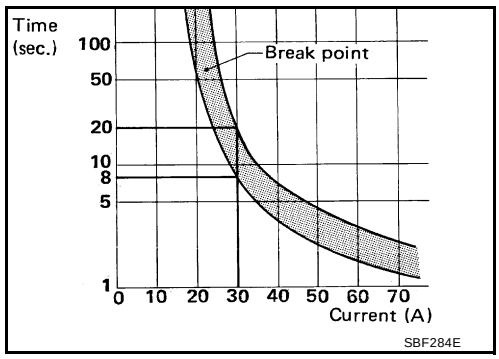
- **If fusible link should melt, it is possible that critical circuit (power supply or large current carrying circuit) is shorted. In such a case, carefully check and eliminate cause of incident.**
- **Never wrap outside of fusible link with vinyl tape.**
- **Never let fusible link touch any other wiring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

Circuit Breaker (Built Into BCM)

EKS00EOX

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
- Sunroof



HARNESS CONNECTOR

PFP:B4341

Description

EKS00EOY

HARNESS CONNECTOR (TAB-LOCKING TYPE)

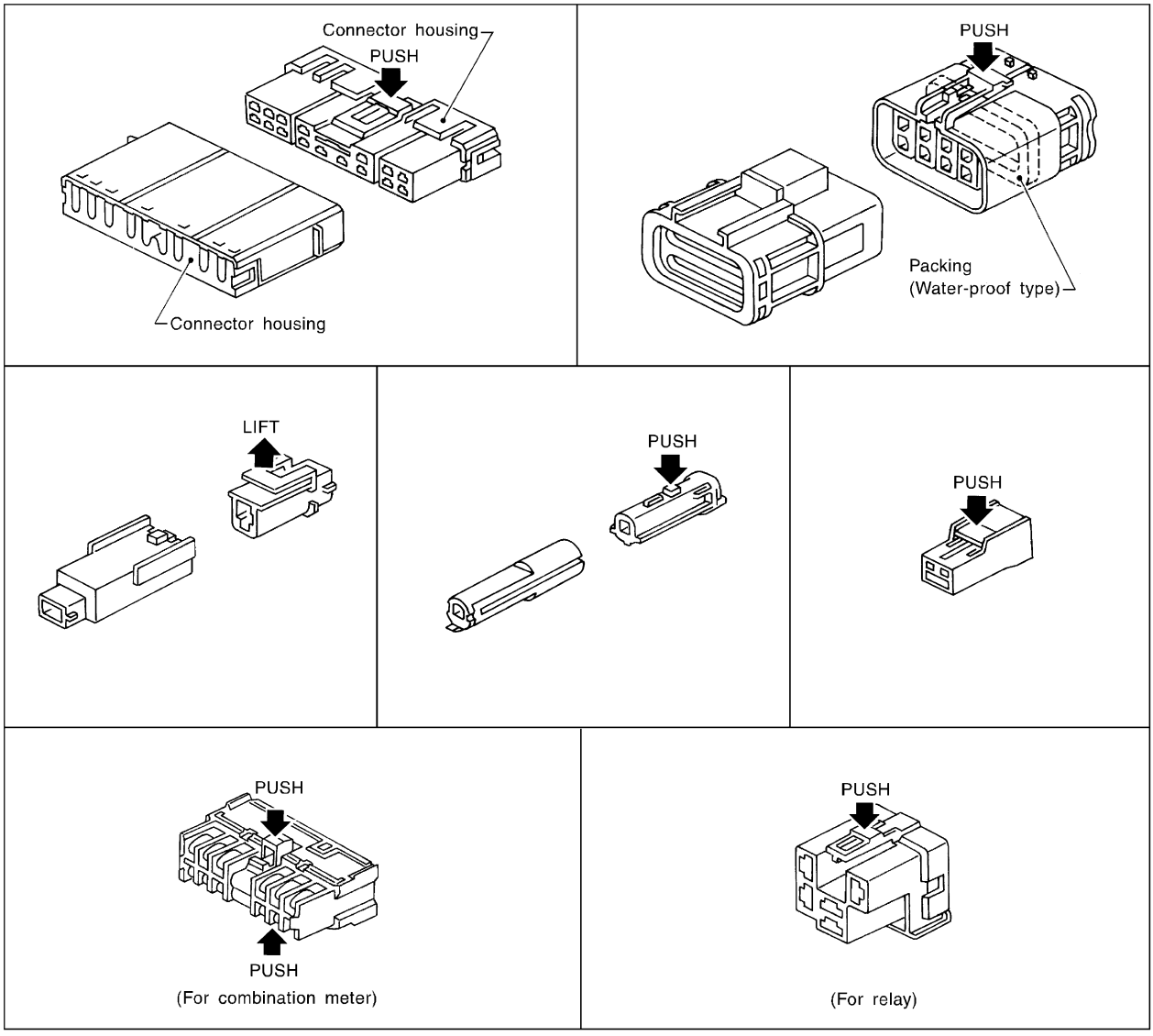
- The tab-locking type connectors help prevent accidental looseness or disconnection.
- The tab-locking type connectors are disconnected by pushing or lifting the locking tab(s). Refer to the illustration below.

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

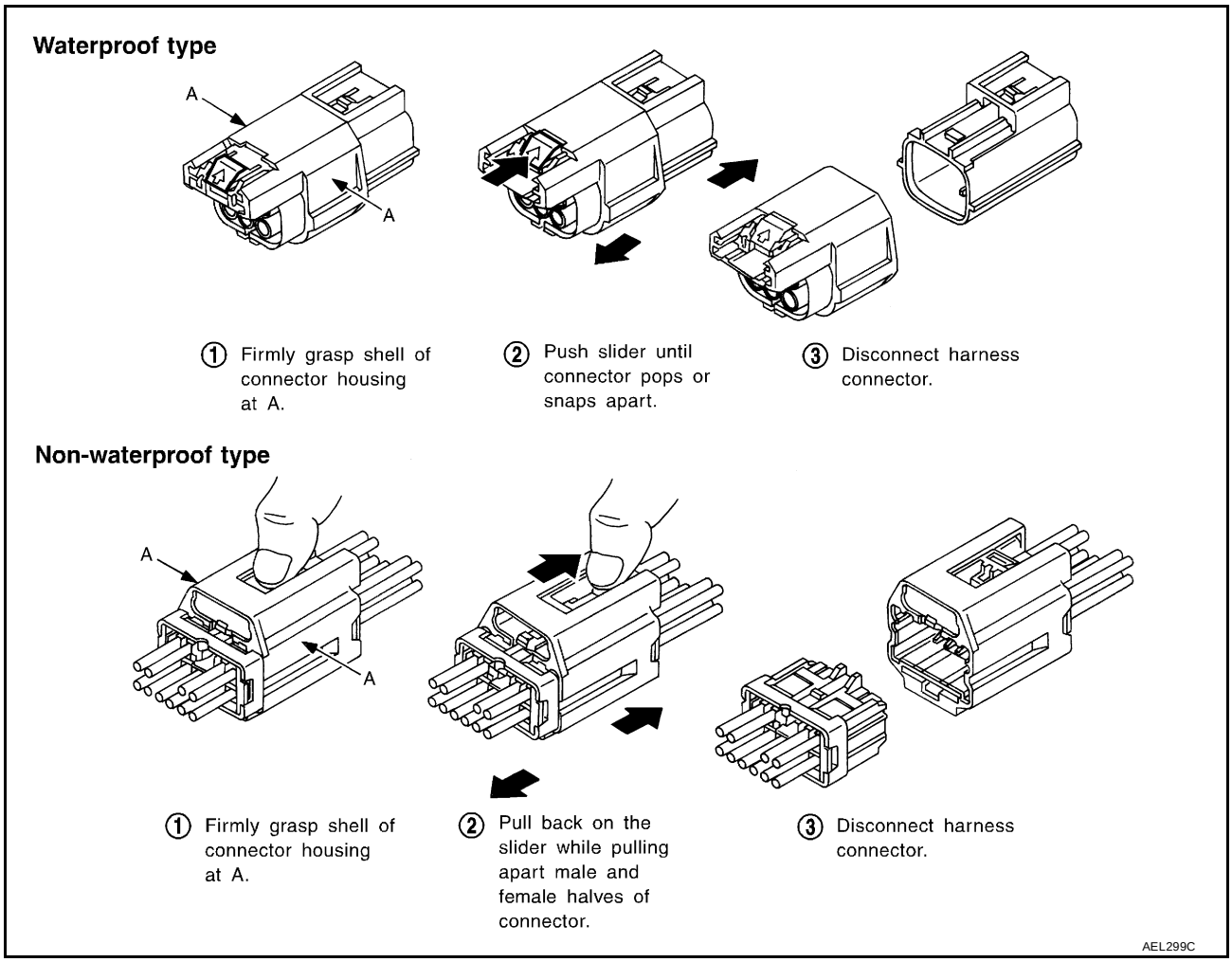
HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- 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.

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]

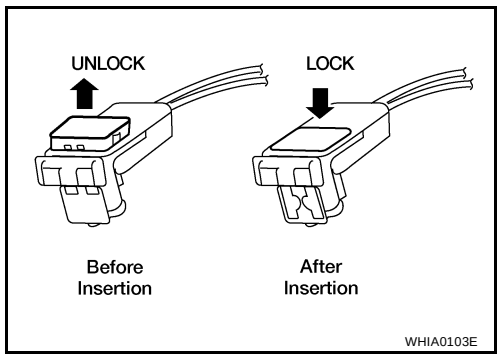


HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

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

CAUTION:

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



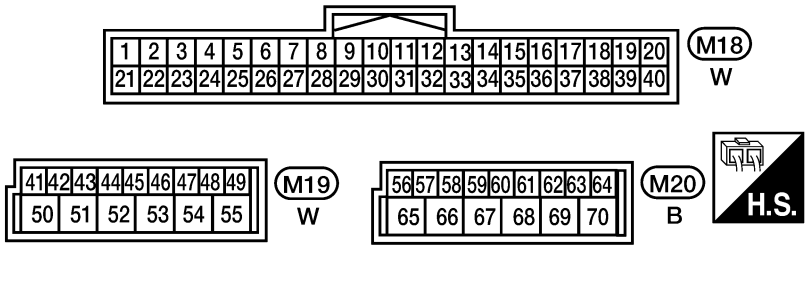
ELECTRICAL UNITS

PFP:23710

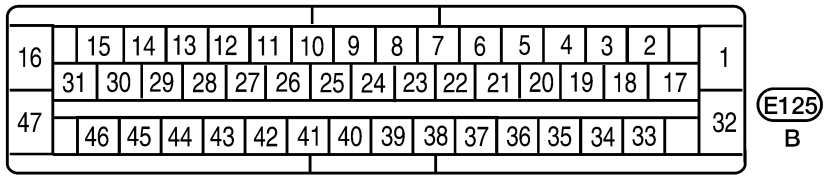
Terminal Arrangement

EKS00EOZ

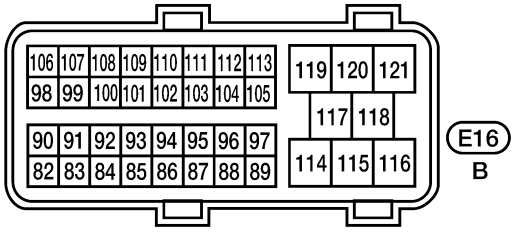
BCM (BODY CONTROL MODULE)

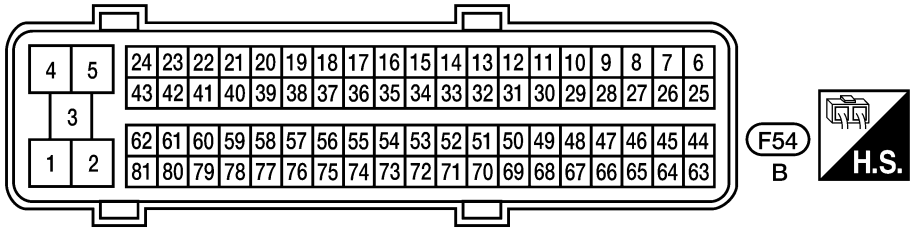


ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

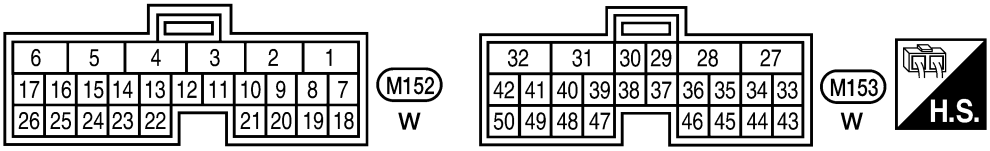


ECM





TRANSFER CONTROL UNIT



WKIA3785E

STANDARDIZED RELAY

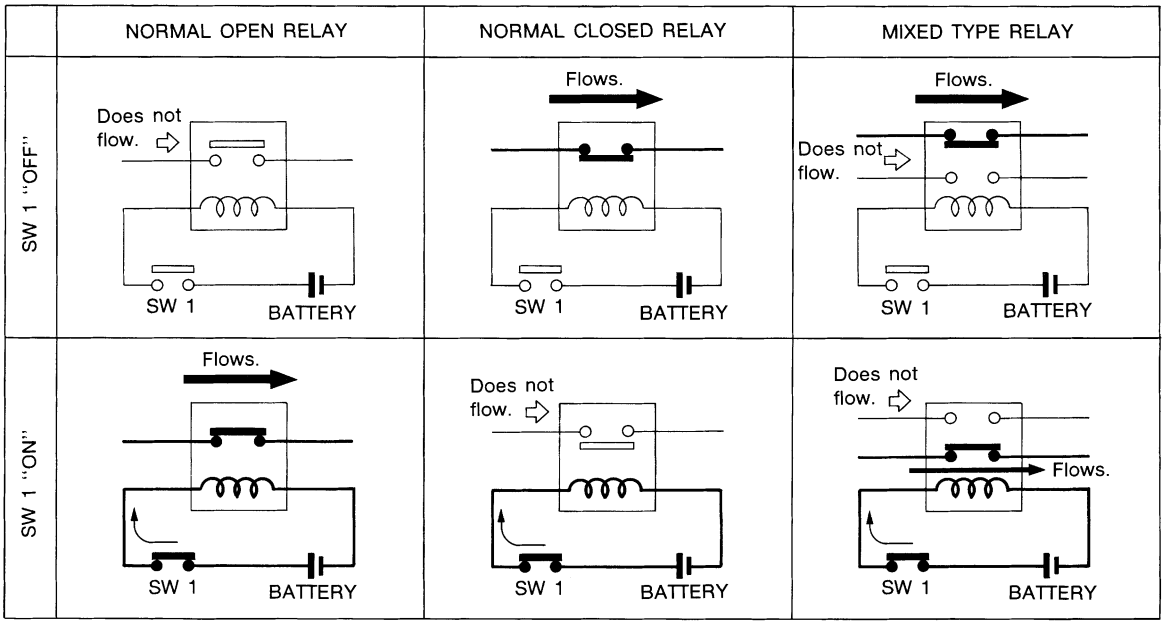
PFP:25230

Description

EKS00EP0

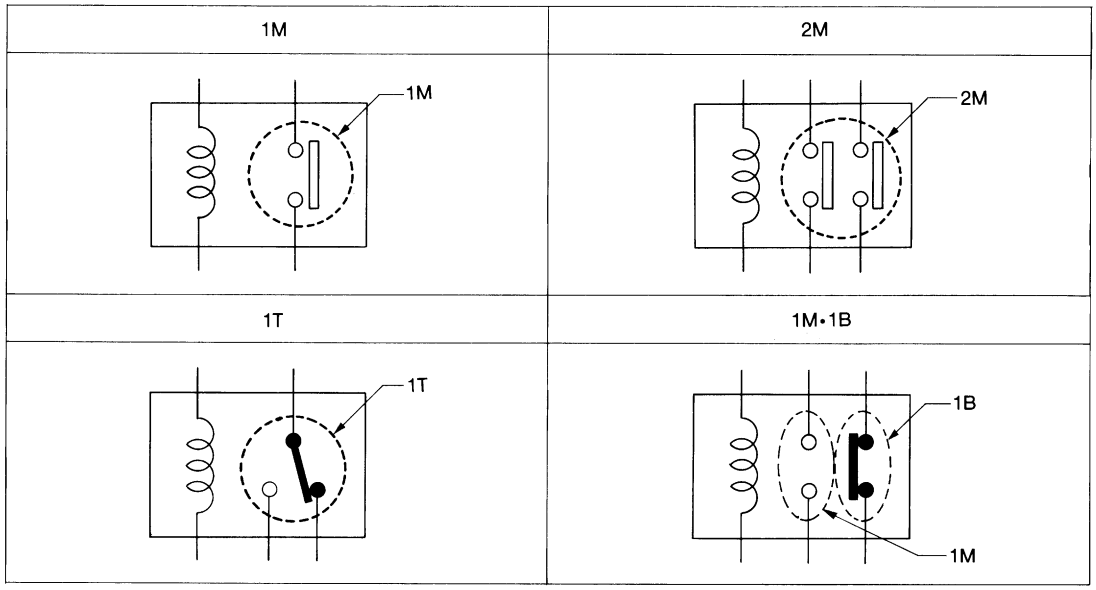
NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



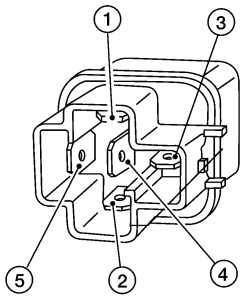
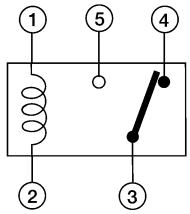
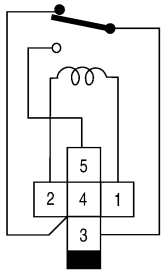
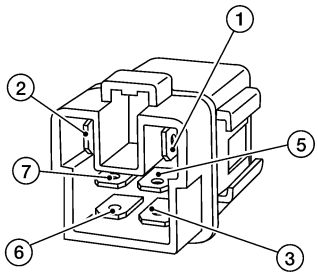
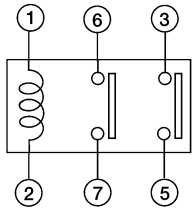
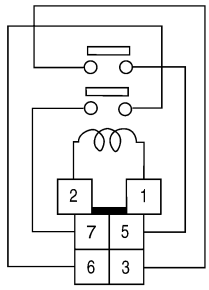
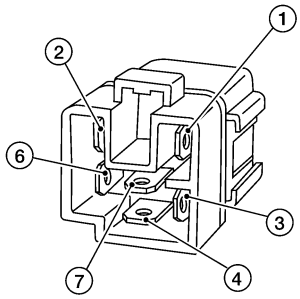
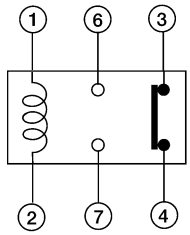
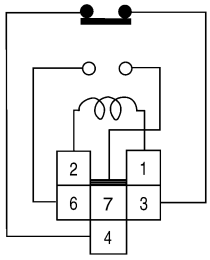
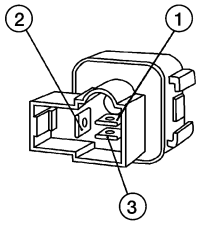
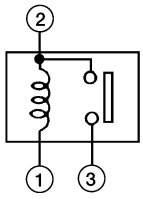
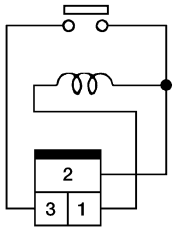
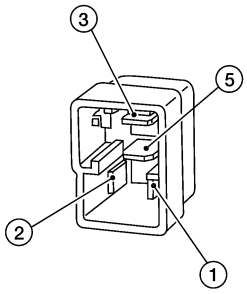
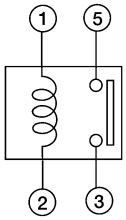
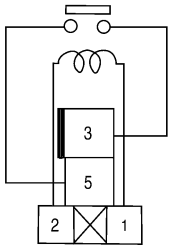
SEL881H

TYPE OF STANDARDIZED RELAYS



SEL882H

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

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

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

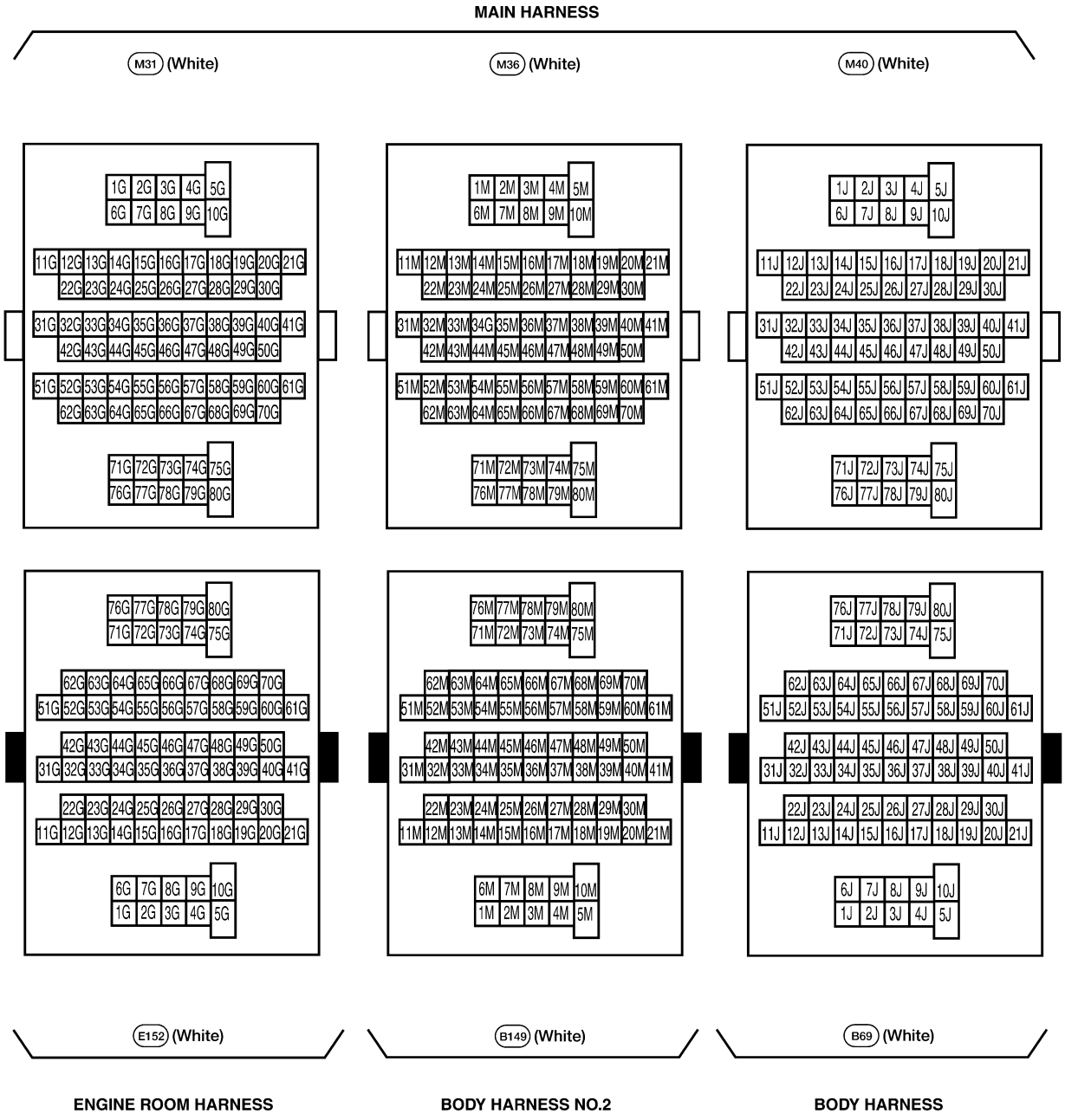
WKIA0253E

SUPER MULTIPLE JUNCTION (SMJ)

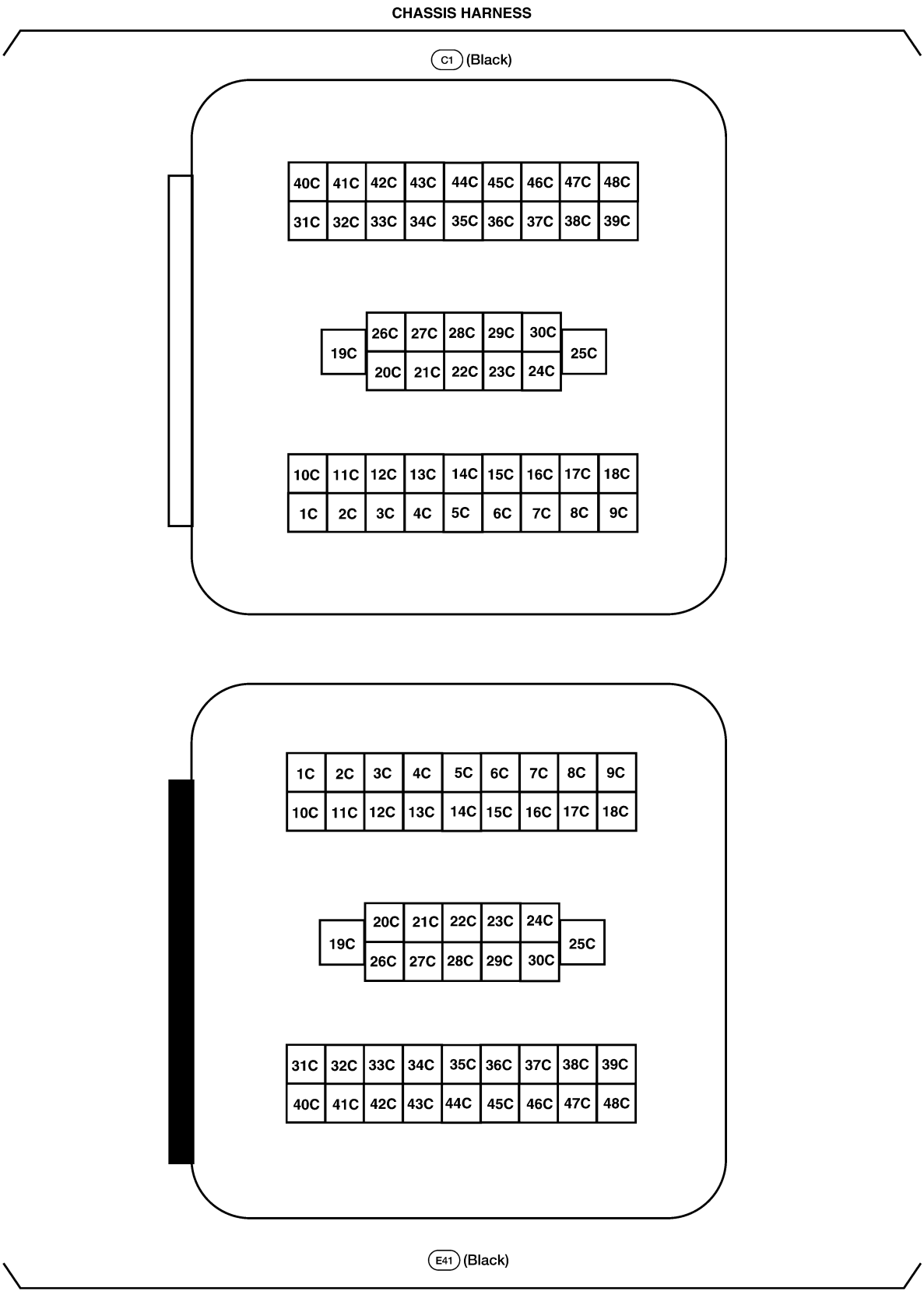
PFP:84341

Terminal Arrangement

EKS00EP1



WKIA3590E


CHASSIS HARNESS
C1 (Black)
40C 41C 42C 43C 44C 45C 46C 47C 48C
31C 32C 33C 34C 35C 36C 37C 38C 39C
19C
26C 27C 28C 29C 30C
20C 21C 22C 23C 24C
25C
10C 11C 12C 13C 14C 15C 16C 17C 18C
1C 2C 3C 4C 5C 6C 7C 8C 9C
1C 2C 3C 4C 5C 6C 7C 8C 9C
10C 11C 12C 13C 14C 15C 16C 17C 18C
19C
20C 21C 22C 23C 24C
26C 27C 28C 29C 30C
25C
31C 32C 33C 34C 35C 36C 37C 38C 39C
40C 41C 42C 43C 44C 45C 46C 47C 48C
E41 (Black)
ENGINE ROOM HARNESS

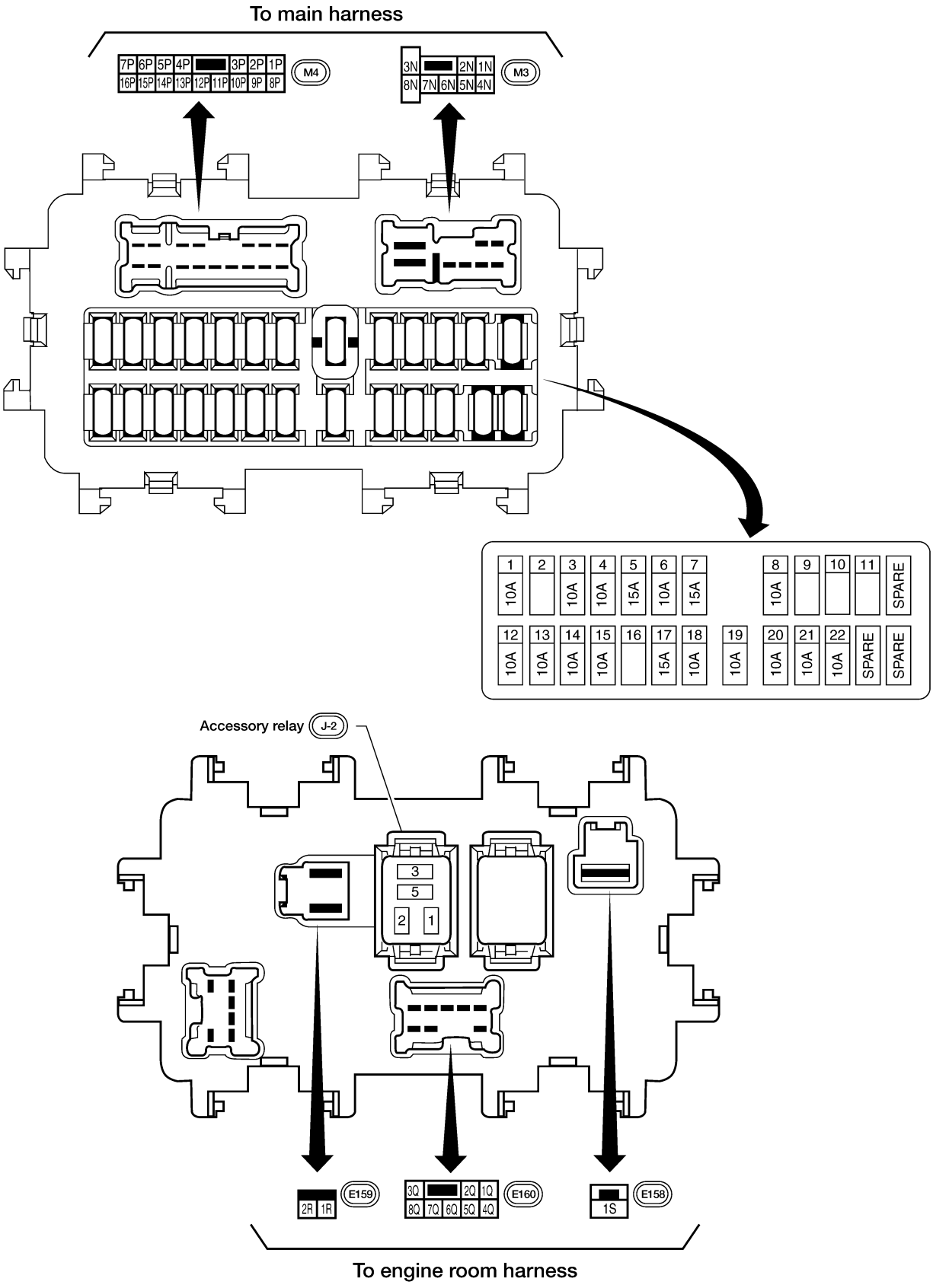
WKIA4067E

FUSE BLOCK-JUNCTION BOX(J/B)

PFP:24350

Terminal Arrangement

EKS00EP2



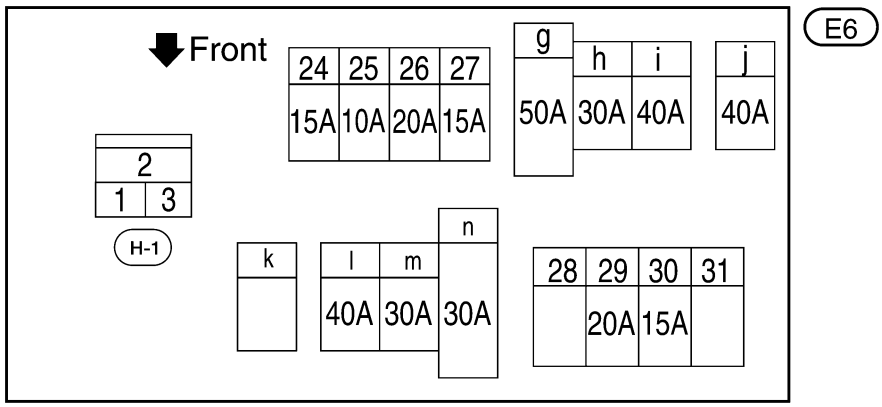
WKIA4068E

FUSE AND FUSIBLE LINK BOX

PFP:24381

Terminal Arrangement

EKS00EP3



24 - 31: FUSE g - n: FUSIBLE LINK

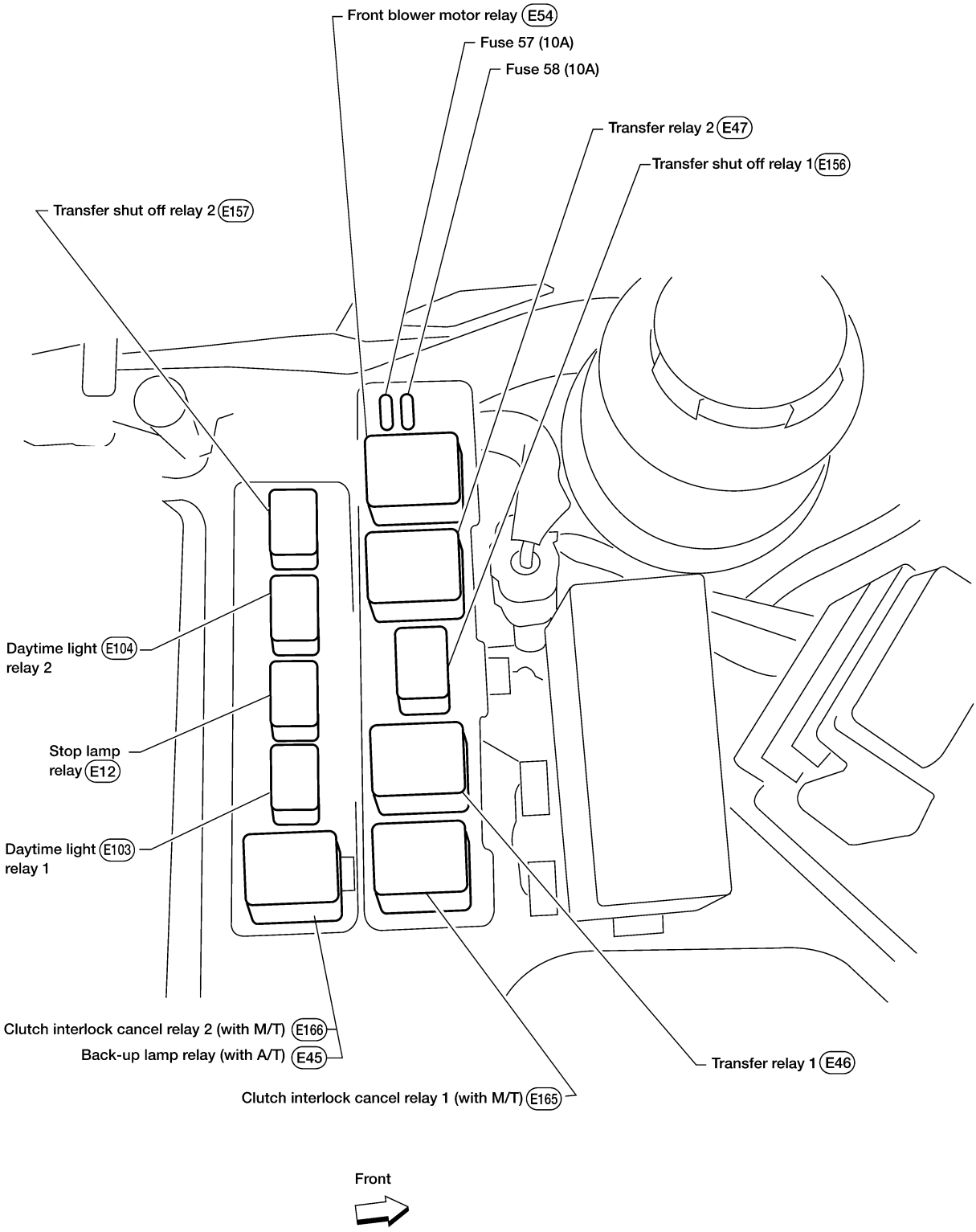
WKIA4069E

FUSE AND RELAY BOX

PFP:24012

Terminal Arrangement

EKS00EP4



WKIA4070E