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POWER SUPPLY, GROUND & CIRCUIT ELEMENTS

CONTENTS

POWER SUPPLY ROUTING CIRCUIT	Harness Layout	37
Schematic3	HOW TO READ HARNESS LAYOUT	37
Wiring Diagram — POWER —5	OUTLINE	38
BATTERY POWER SUPPLY — IGNITION SW.	MAIN HARNESS	39
IN ANY POSITION5	ENGINE ROOM HARNESS (LH VIEW)	41
ACCESSORY POWER SUPPLY — IGNITION	ENGINE ROOM HARNESS (RH VIEW)	44
SW. IN ACC OR ON9	ENGINE CONTROL HARNESS (QR25DE)	46
IGNITION POWER SUPPLY — IGNITION SW.	ENGINE CONTROL HARNESS (VQ35DE)	48
IN ON 10	BODY HARNESS	
IGNITION POWER SUPPLY — IGNITION SW.	BODY NO. 2 HARNESS	52
IN ON AND/OR START11	ROOM LAMP HARNESS	54
IPDM E/R (INTELLIGENT POWER DISTRIBUTION	FRONT DOOR LH HARNESS	55
MODULE ENGINE ROOM)14	FRONT DOOR RH HARNESS	55
System Description14	REAR DOOR LH HARNESS	56
SYSTEMS CONTROLLED BY IPDM E/R 14	REAR DOOR RH HARNESS	56
CAN COMMUNICATION LINE CONTROL 14	Wiring Diagram Codes (Cell Codes)	57
IPDM E/R STATUS CONTROL14	ELECTRICAL UNITS LOCATION	60
CAN Communication System Description 15	Electrical Units Location	
FOR TCS MODELS15	ENGINE COMPARTMENT	60
FOR A/T MODELS 16	PASSENGER COMPARTMENT	61
FOR M/T MODELS18	Fuse	63
Function of Detecting Ignition Relay Malfunction 19	Fusible Link	63
Auto Active Test19	Circuit Breaker (Built Into BCM)	63
DESCRIPTION 19	HARNESS CONNECTOR	64
OPERATION PROCEDURE19	Description	64
INSPECTION IN AUTO ACTIVE TEST MODE 20	HARNESS CONNECTOR (TAB-LOCKING	
Schematic22	TYPE)	64
IPDM E/R FUSE AND RELAY ARRANGEMENT 23	HARNESS CONNECTOR (SLIDE-LOCKING	
IPDM E/R TERMINAL ARRANGEMENT 23	TYPE)	
IPDM E/R Power/Ground Circuit Inspection 23	HARNESS CONNECTOR (DIRECT-CONNECT	-
Removal and Installation of IPDM E/R24	SRS COMPONENT TYPE)	
GROUND CIRCUIT 26	JOINT CONNECTOR (J/C)	67
Ground Distribution	Terminal Arrangement	
MAIN HARNESS26	ELECTRICAL UNITS	
ENGINE ROOM HARNESS28	Terminal Arrangement	
ENGINE CONTROL HARNESS (QR25DE) 30	STANDARDIZED RELAY	
ENGINE CONTROL HARNESS (VQ35DE) 32	Description	69
BODY HARNESS34	NORMAL OPEN, NORMAL CLOSED AND	
BODY NO. 2 HARNESS35	MIXED TYPE RELAYS	
HARNESS 37	TYPE OF STANDARDIZED RELAYS	69

FUSE BLOCK-JUNCTION BOX(J/B)71	FUSE AND FUSIBLE LINK BOX	72
Terminal Arrangement71	Terminal Arrangement	72

POWER SUPPLY ROUTING CIRCUIT

PFP:24110

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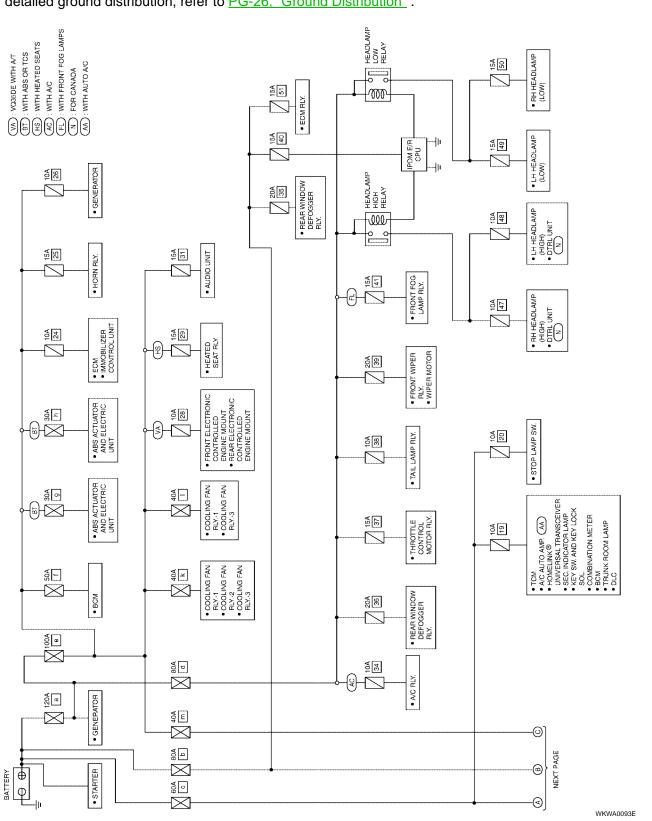
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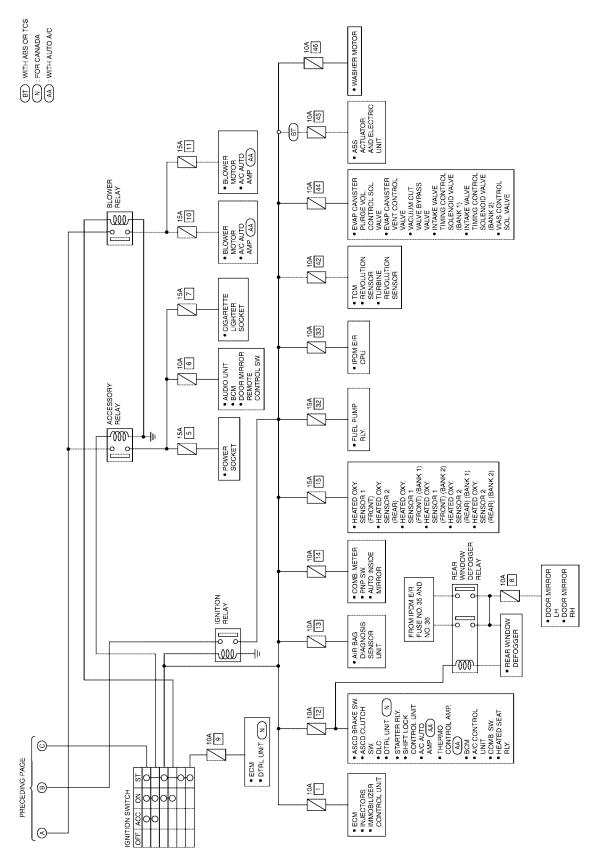
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Schematic

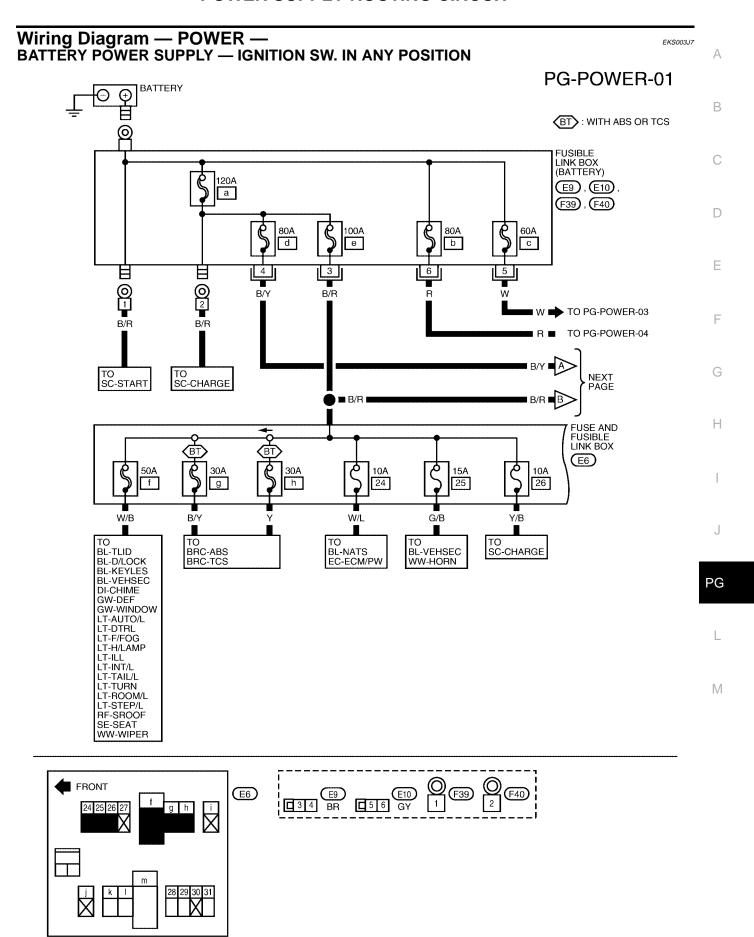
For detailed ground distribution, refer to PG-26, "Ground Distribution".





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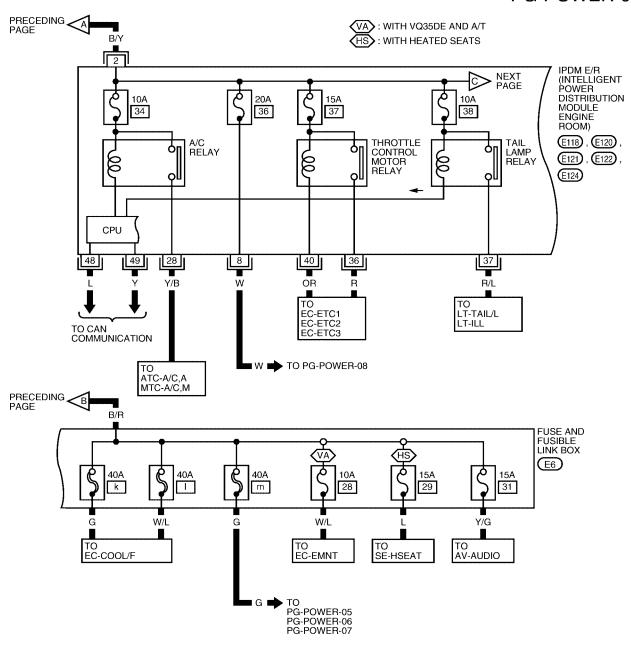
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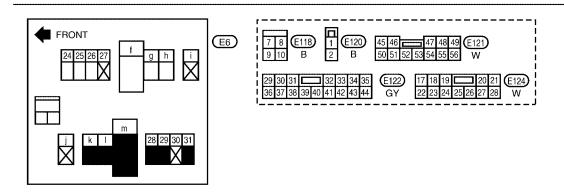


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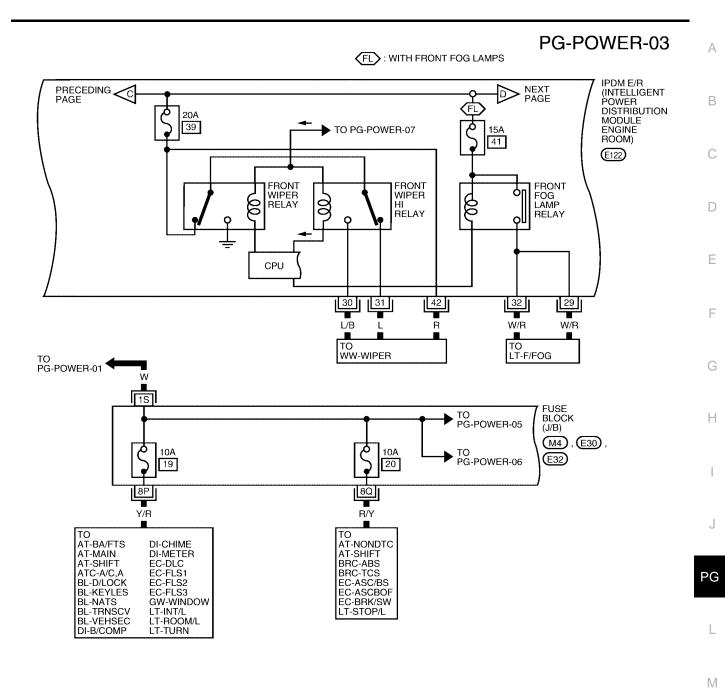
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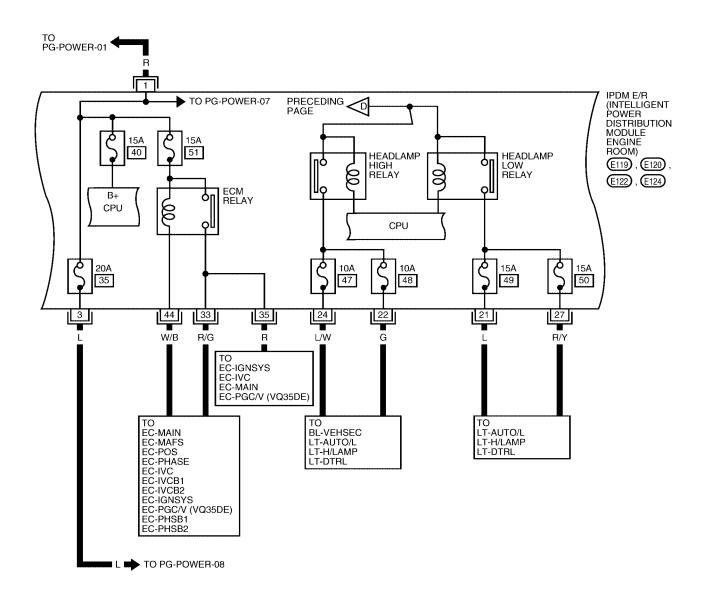


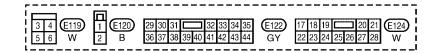
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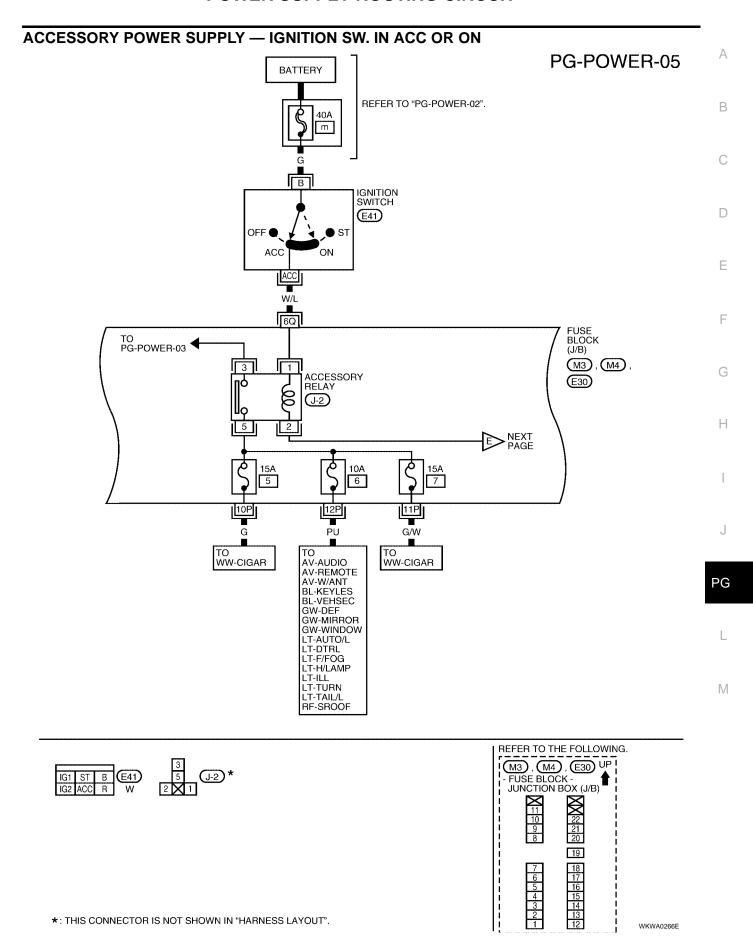


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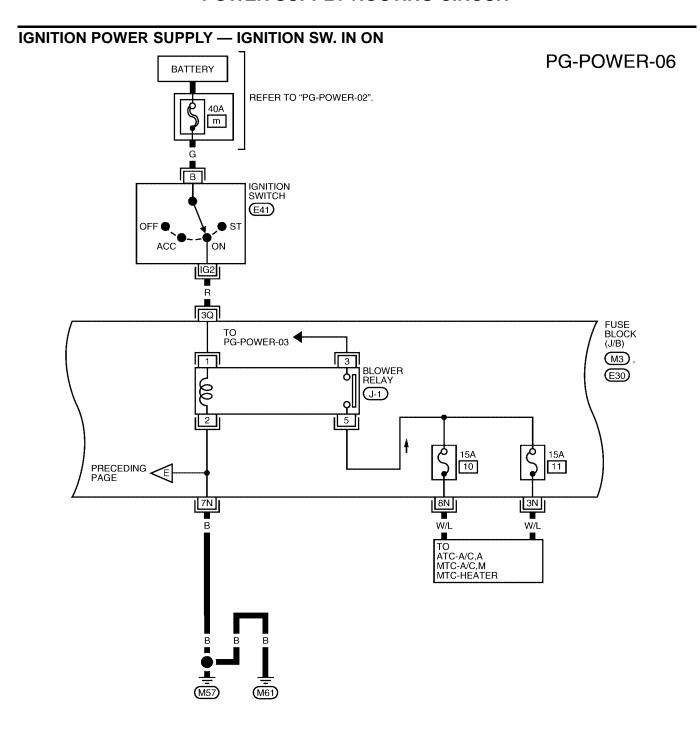


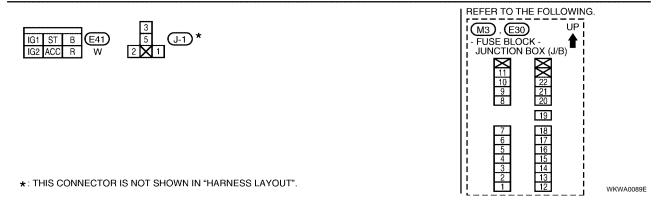


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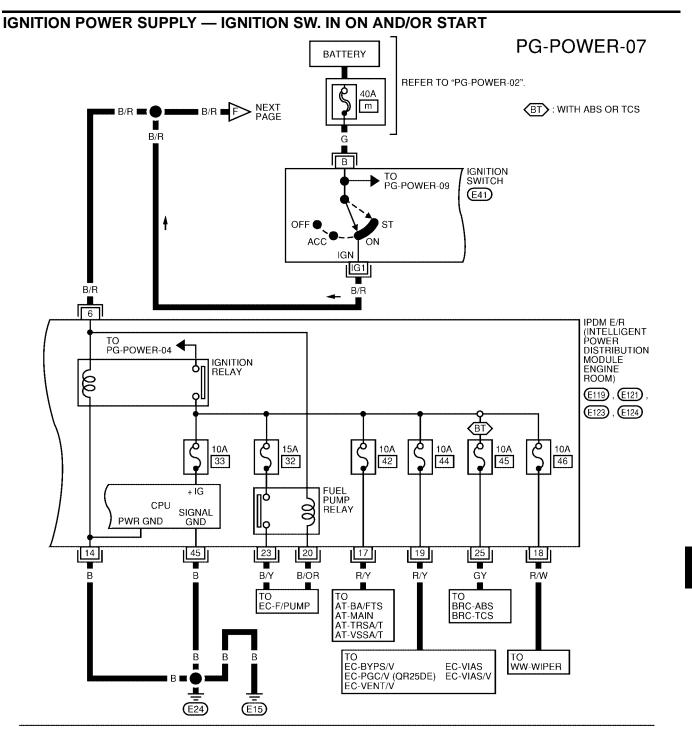


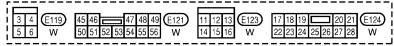
POWER SUPPLY ROUTING CIRCUIT





POWER SUPPLY ROUTING CIRCUIT





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Revision: May 2004 PG-11 2003 Altima

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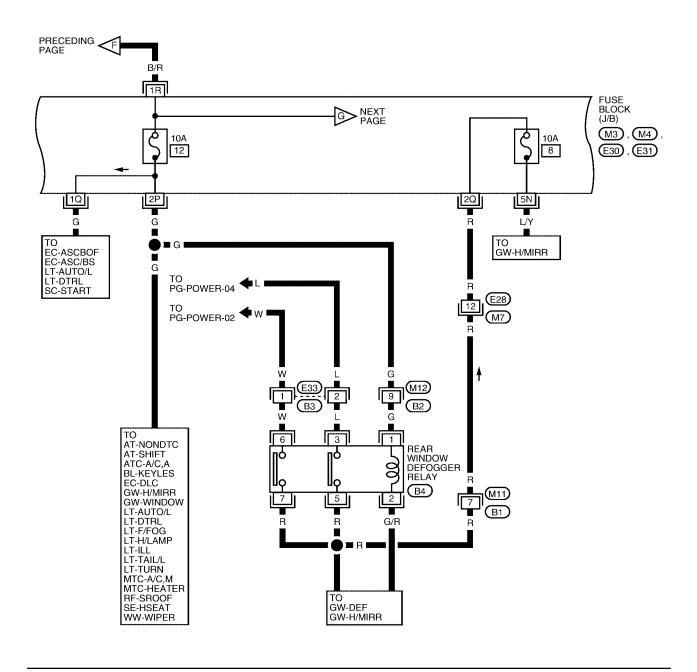
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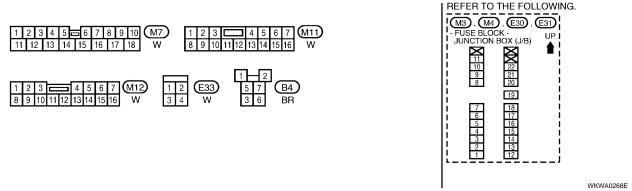
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PG-POWER-08





PG-POWER-09 Α IGNITION SWITCH В TO PG-POWER-07 **E41** C **₽**ST ACC ON D B/Y B/R TO SC-START Е B/Y 7Q **FUSE** PRECEDING G BLOCK PAGE (J/B) M3 , M4 , 10A 10A **E**30 13 1 14 15 9 Н 2N 15P 6P 5P 9P BR/W R/W GΥ R/Y BL-NATS EC-FUEL EC-FUELB1 AT-NONDTC AT-PNP/SW AT-SHIFT EC-FUEL SRS-SRS EC-S/SIG EC-FUELB1 LT-AUTO/L EC-FUELB2 LT-DTRL EC-FUELB2 AT-VSSMTR EC-HO2S1 EC-INJECT BRC-ABS BRC-TCS EC-HO2S1H EC-HO2S2 EC-MAIN DI-AT/IND EC-HO2S2H EC-O2H1B1 EC-O2H1B2 EC-O2H2B1 DI-B/COMP DI-METER DI-WARN DI-WARN EC-ASCIND EC-FLS1 EC-FLS2 EC-FLS3 EC-MIL GW-I/MIRR LT-BACK/L PG EC-O2H2B2 EC-O2S1B1 EC-O2S1B2 EC-O2S2B1 EC-02S2B2 LT-ILL LT-TURN SC-CHARGE SRS-SRS



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

PFP:284B7

System Description

EKS003J8

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

CAUTION:

All IPDM E/R-integrated relays cannot be removed.

SYSTEMS CONTROLLED BY IPDM E/R

Lamp control

Using CAN communication line, it receives signal from BCM and controls the following lamps:

- Headlamps (Hi, Lo)
- Parking lamps
- Tail lamps
- Front fog lamps
- 2. Wiper control

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

3. Rear window defogger relay control

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

4. A/C compressor control

Using CAN communication line, it receives signal from ECM and controls the A/C relay.

5. Cooling fan control

Using CAN communication line, it receives signal from ECM and controls cooling fan relay.

CAN COMMUNICATION LINE CONTROL

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

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

Controlled parts	Fail-safe mode
Headlamps	Headlamp relay (Lo) ON
Front fog lamps	Front fog lamp relay OFF
Tail and parking lamps	Tail lamp relay OFF
Front wipers	Until ignition switch is turned OFF, status immediately before fail-safe control is performed is maintained.
Rear window defogger	Rear window defogger relay OFF
Cooling fan	Cooling fan (HI) ON
A/C compressor	A/C relay OFF

IPDM E/R STATUS CONTROL

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

- CAN communication status
 - CAN communication is normally performed with other control units.
 - Individual unit control by IPDM E/R is normally performed.

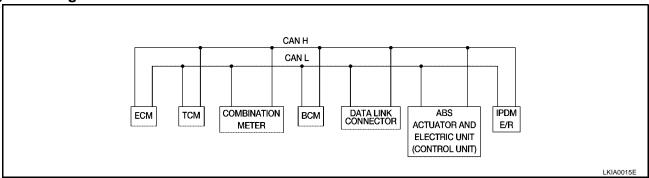
- When sleep request signal is received from BCM, mode is switched to sleep waiting status.
- 2. Sleep waiting status
 - Process to stop CAN communication is activated.
 - All systems controlled by IPDM E/R are stopped. When 3 seconds have elapsed after CAN communication with other control units is stopped, mode switches to sleep status.
- Sleep status
 - IPDM E/R operates in low current-consumption mode.
 - CAN communication is stopped.
 - When a change in CAN communication line is detected, mode switches to CAN communication status.

CAN Communication System Description

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

FOR TCS MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	ТСМ	COMBINA- TION METER	ВСМ	ABS/TCS control unit	IPDM E/R
Engine speed signal	T		R		R	
Engine coolant temperature signal	Т		R			
Accelerator pedal position signal	Т					
Fuel consumption monitor signal	Т		R			
A/T warning lamp signal		Т	R			
A/T position indicator signal	R	Т	R	R ^(R range only)	R	
ABS operation signal	R				T	
TCS operation signal	R	R			Т	
Air conditioner switch signal	R			Т		
Air conditioner compressor signal	R					Ţ
A/C compressor request signal	Т					R
Cooling fan motor operation signal	R					T
Cooling fan speed request signal	Т					R
Position lights request			R	Т		R
Position lights status				R		Т
Low beam request				Т		R

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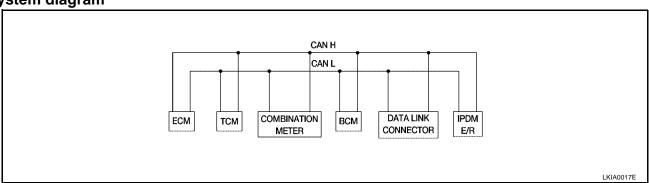
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Signals	ECM	TCM	COMBINA- TION METER	всм	ABS/TCS control unit	IPDM E/R
Low beam status	R			R		Т
High beam request			R	Т		R
High beam status	R			R		Т
Front fog lights request				Т		R
Front fog light status				R		T
OD cancel switch signal		R	Т			R
Brake switch signal		R	Т			
Vahiala an and signal	R		Т			
Vehicle speed signal	R		Т	R		
Oil pressure switch			R			T
Sleep request1			R	Т		
Sleep request2				Т		R
N range switch signal		R	Т			
P range switch signal		R	Т			
Seat belt buckle switch signal			Т	R		
Door switch signal			R	Т		R
Tail lamp request			R	Т		R
Turn indicator signal			R	Т		
Buzzer output signal			R	Т		
Trunk switch signal			R	Т		
ASCD main switch signal	T		R			
ASCD cruise signal	Т		R			
Wiper operation				R		Т
Wiper stop position signal				R		T
Rear window defogger switch signal				Т		R
Rear window defogger control signal	R			R		Т

FOR A/T MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	TCM	COMBINATION METER	ВСМ	IPDM E/R
Engine speed signal	Т		R		
Engine coolant temperature signal	Т		R		

Signals	ECM	ТСМ	COMBINATION METER	ВСМ	IPDM E/R
Accelerator pedal position signal	Т				R
Fuel consumption monitor signal	Т		R		
A/T warning lamp signal		Т	R		
A/T position indicator signal	R	Т	R	R ^(R range only)	
Air conditioner switch signal	R			Т	
Air conditioner compressor signal	R				Т
A/C compressor request signal	Т				R
Blower fan switch signal	R ^(QR25DE)			Т	
Cooling fan motor operation signal	R			Т	
Cooling fan speed request signal	Т				R
Position lights request			R	Т	R
Position lights status				R	Т
Low beam request				Т	R
Low beam status	R			R	Т
High beam request			R	Т	R
High beam status	R			R	Т
Front fog lights request				Т	R
Front fog light status				R	Т
OD cancel switch signal		R	Т		R
Brake switch signal		R	Т		
Vahiala anadairaal	R		Т		
Vehicle speed signal	R		Т	R	
Oil pressure switch			R		Т
Sleep request1			R	Т	
Sleep request2				Т	R
N range switch signal		R	Т		
P range switch signal		R	Т		
Seat belt buckle switch signal			Т	R	
Door switch signal			R	Т	R
Tail lamp request			R	Т	R
Turn indicator signal			R	Т	
Buzzer output signal			R	Т	
Trunk switch signal			R	Т	
ASCD main switch signal	Т		R		
ASCD cruise signal	Т		R		
Wiper operation				R	Т
Wiper stop position signal				R	Т
Rear window defogger switch signal				Т	R
Rear window defogger control signal	R			R	Т

Revision: May 2004 PG-17 2003 Altima

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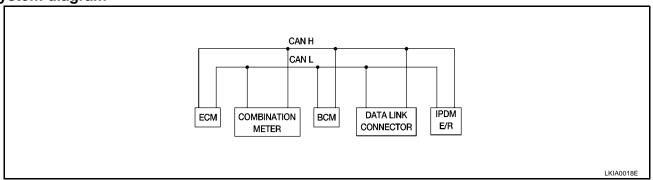
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FOR M/T MODELS

System diagram



Input/output signal chart

T: Transmit R: Receive

Signals	ECM	COMBINATION METER	ВСМ	IPDM E/R
Engine speed signal	Т			
Engine coolant temperature signal	Т			
Fuel consumption monitor signal	Т			
Air conditioner switch signal	R		Т	
Air conditioner compressor signal	R			Т
A/C compressor request signal	Т			R
Blower fan switch signal	R ^(QR25DE)		Т	
Cooling fan motor operation signal	R			Т
Cooling fan speed request signal	Т			R
Position lights request		R	Т	R
Position lights status			R	Т
Low beam request			Т	R
Low beam status	R		R	Т
High beam request		R	Т	R
High beam status	R		R	Т
Front fog lights request			Т	R
Front fog light status			R	Т
Vehicle speed signal	R	Т		
Oil pressure switch		R		Т
Sleep request1		R	Т	
Sleep request2			Т	R
Seat belt buckle switch signal		Т	R	
Door switch signal		R	Т	R
Tail lamp request		R	Т	R
Turn indicator signal		R	Т	
Buzzer output signal		R	Т	
Trunk switch signal		R	Т	
ASCD main switch signal	Т	R		
ASCD cruise signal	Т	R		
Wiper operation			R	Т
Wiper stop position signal			R	Т

Signals	ECM	COMBINATION METER	ВСМ	IPDM E/R
Rear window defogger switch signal			Т	R
Rear window defogger control signal	R		R	Т

Function of Detecting Ignition Relay Malfunction

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When contact point of integrated ignition relay is stuck and cannot be turned OFF, IPDM E/R turns ON tail
and parking lamps for 10 minutes to indicate IPDM E/R malfunction.

Auto Active Test DESCRIPTION

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

OPERATION PROCEDURE

1. Close hood 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. Within 20 seconds, turn the ignition switch ON and press the front door switch LH ten times, then turn the ignition switch OFF.

CAUTION:

Close front door RH.

- 4. Turn ignition switch ON.
- 5. When auto active test mode is actuated, horn chirps once, and oil pressure warning lamp starts blinking.
- 6. After a series of operations is repeated three times, auto active test is completed.

NOTE:

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

CAUTION

Be sure to inspect DI-37, "Oil Pressure Warning Lamp Stays Off (Ignition Switch ON)" and BL-28, "Door Switch Check" when the auto active test cannot be performed.

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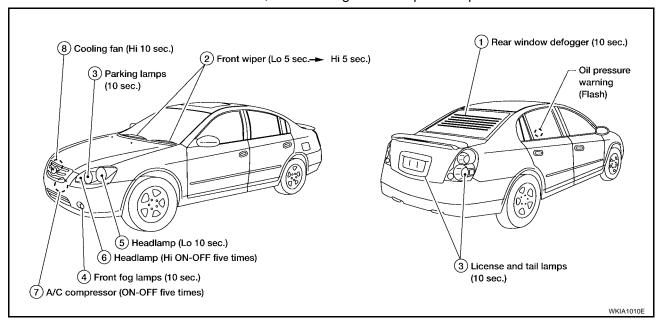
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INSPECTION IN AUTO ACTIVE TEST MODE

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



Concept of Auto Active Test

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

Diagnosis chart in auto active test mode

Symptom	Inspection content	S	Possible cause
Any of front wipers, tail			BCM signal input system
and parking lamps, front fog lamps, and headlamps (Hi, Lo) do not operate.	Perform auto active test. Does system in question operate?	NG	 Lamp/motor malfunction Lamp/motor ground system malfunction Harness/connector malfunction between IPDM E/R and system in question IPDM E/R (integrated relay) malfunction
	Perform auto active	OK	BCM signal input system
Rear window defogger does not operate.	test. Does rear window defogger operate?	NG	 Rear window defogger relay system Open circuit of rear window defogger IPDM E/R malfunction
A/C compressor does not operate.	' test Does magnet		 BCM signal input system CAN communication signal between BCM and ECM. CAN communication signal between ECM and IPDM E/R BCM ECM
	outon spotato.	NG	Magnet clutch malfunction Harness/connector malfunction between IPDM E/R and magnet clutch IPDM E/R (integrated relay) malfunction
Cooling fan does not	Cooling fan does not Perform auto active		 ECM signal input system CAN communication signal between ECM and IPDM E/R ECM
operate. test. Does cooling fan operate?	NG	 Cooling fan motor malfunction Harness/connector malfunction between IPDM E/R and cooling fan motor IPDM E/R (integrated relay) malfunction 	

Symptom	Inspection contents		Possible cause
Oil pressure warning	Perform auto active test. Does oil pres-	ок	 Harness/connector malfunction between IPDM E/R and oil pressure switch Oil pressure switch malfunction
lamp does not operate.	sure warning lamp blink?	NG	CAN communication signal between IPDM E/R and combination meter Combination meter

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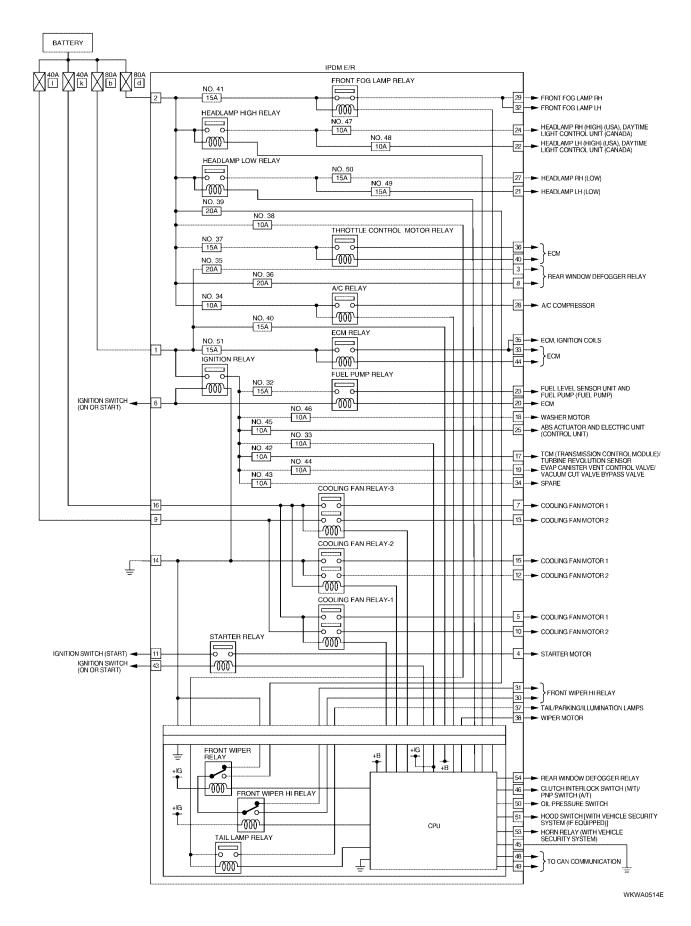
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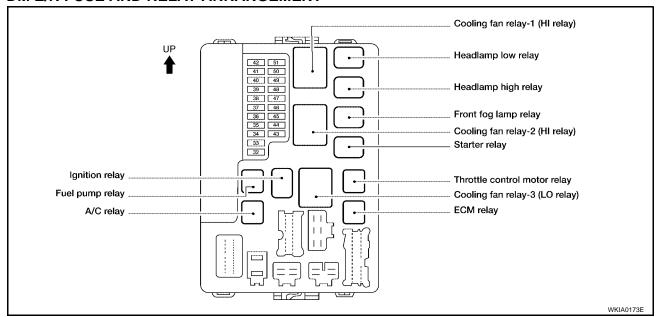
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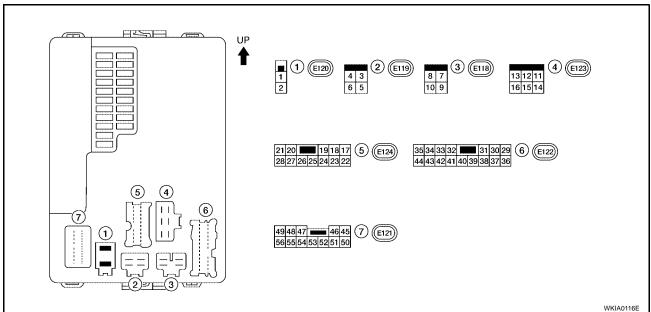
Schematic



IPDM E/R FUSE AND RELAY ARRANGEMENT



IPDM E/R TERMINAL ARRANGEMENT



IPDM E/R Power/Ground Circuit Inspection

1. FUSE AND FUSIBLE LINK INSPECTION

Check that the following fusible links or IPDM E/R fuses are not blown.

Terminal No.	Signal name	Fuse, fusible link No.
1, 2	Battery power	F/L-b, F/L-d, Fuse No. 40
_	Ignition power	Fuse No. 33

OK or NG?

OK >> GO TO 2.

NG >> Replace fuse or fusible link.

Revision: May 2004 PG-23 2003 Altima

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2. POWER CIRCUIT INSPECTION

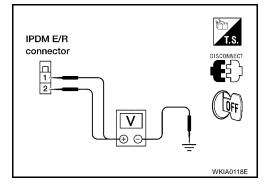
Disconnect IPDM E/R harness connector E120. Measure voltage between IPDM E/R harness connector E120 terminals 1 (R), 2 (B/Y) and body ground.

Terminal No.	Signal name	Ignition switch	Voltage (V)
1, 2	Battery power	OFF	Approx. 12

OK or NG?

OK >> GO TO 3.

NG >> Replace IPDM E/R power circuit harness.



3. GROUND CIRCUIT INSPECTION

Disconnect IPDM E/R harness connectors E121 and E123. Check continuity between IPDM E/R harness connectors E123 terminal 14 (B), E121 terminal 45 (B) and body ground.

Terminal No.	Signal name	Ignition switch	Continuity
14, 45	Ground	OFF	YES

OK or NG?

OK >> Normal.

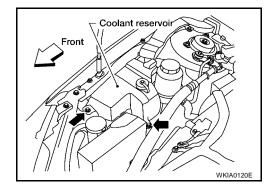
NG >> Replace ground circuit harness of IPDM E/R.

IPDM E/R connector Connector DISCONNECT DISCONNECT WKIA0119E

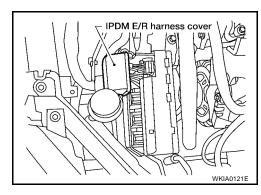
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Removal and Installation of IPDM E/R

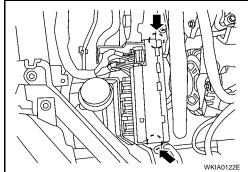
- 1. Disconnect the negative battery cable.
- 2. Remove 2 bolts and position coolant reservoir aside.
- 3. Remove IPDM E/R upper cover.



4. Remove IPDM E/R harness cover.



- 5. Release 2 clips and pull IPDM E/R up from case.
- 6. Disconnect IPDM E/R connectors and then remove the IPDM E/ $\rm R.\ .$



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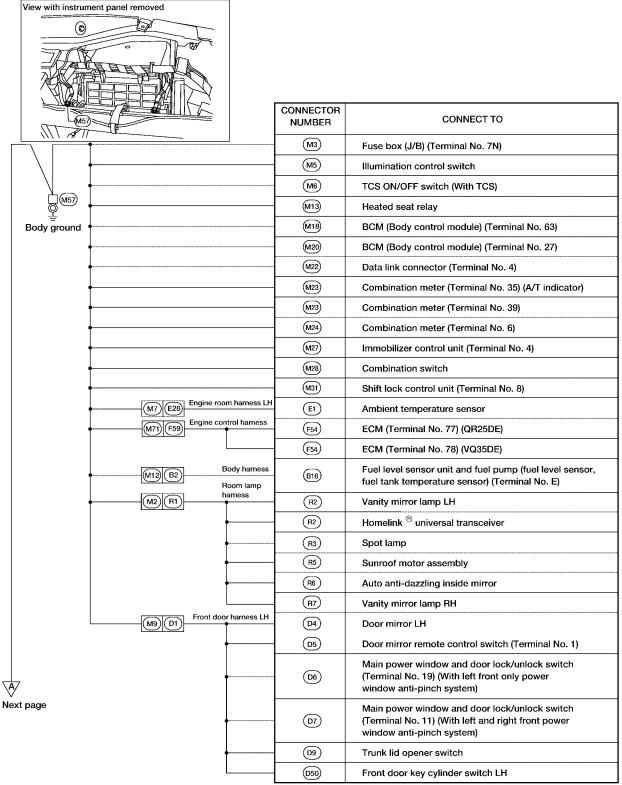
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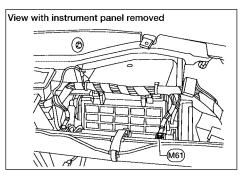
GROUND CIRCUIT PFP:24080

Ground Distribution MAIN HARNESS

EKS003JF



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Preceding page		CONNECTOR NUMBER	CONNECT TO
		(M34)	A/T device (Terminal No. 2) (Overdrive control switch)
		(M35)	Air bag diagnosis sensor unit (Terminal No. 2)
		(M37)	Heated seat switch LH
©(M61) □		M38	Power socket
Body ground		M39	Air mix door motor (With automatic A/C)
+		M40	Mode door motor
+		(M41)	Fan switch
+		(M42)	Rear window defogger switch
-		(M49)	A/C auto amp. (With auto A/C) (Terminal No. 8)
<u> </u>		M50)	A/C auto amp. (With auto A/C) (Terminal No. 32)
-		M51)	A/C control unit (With manual A/C or heater only)
+	·	M53	Intake sensor
+		M55	Hazard switch
-		M56	Cigarette lighter socket
-		M58	Intake door motor
-		M59	Glove box lamp
+		M64	Fan control amp. (With auto A/C)
+	Front door	M76	Heated seat switch RH
	M75 D101 harness RH	(D104)	Door mirror RH
		D105	Front power window switch RH (Terminal No. 19) (With left front only power window anti-pinch system)
		D106	Front power window switch RH (Terminal No. 7) (With left and right front power window anti-pinch system)

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Revision: May 2004 PG-27 2003 Altima

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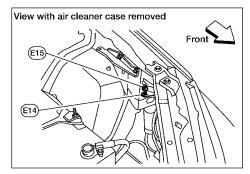
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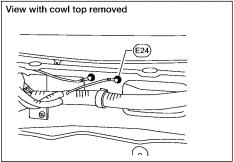
L

ENGINE ROOM HARNESS

E14)

Body ground





	CONNECTOR NUMBER	CONNECT TO
E29 (M10) Main harness	(M35)	Air bag diagnosis sensor unit (Shield wire) (Terminal No.16)

Body ground

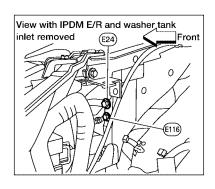
(E28) M7

Main harness

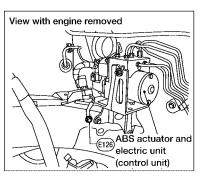
Body ground

	CONNECTOR NUMBER	CONNECT TO	
ss	M49)	A/C auto amp. (With auto A/C) (Canada only)	
\dashv	(E2)	Front fog lamp LH	
[E 5	Hood switch (If equipped)	
	(E11)	Headlamp LH (High)	
	(E12)	Front combination lamp LH	
\dashv	(E13)	Headlamp LH (Low)	
	E16)	Brake fluid level switch	
\dashv	(E23)	Wiper motor	
	(E34)	Clutch interlock switch (With M/T)	
[E39	BCM (Body control module) (Terminal No. 8)	

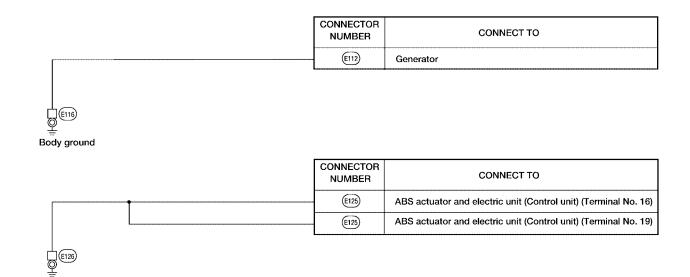
WKIA1044E



Body ground



Preceding page	CONNECTOR NUMBER	CONNECT TO
A	(E101)	Front fog lamp RH
Τ/+	E103)	Daytime light control unit (Canada only) (Terminal No. 13)
	E103)	Daytime light control unit (Canada only) (Terminal No. 14)
¥(24)	E104)	Daytime light control unit (Canada only) (Terminal No. 16)
Body ground	E106)	Washer level switch
	E107)	Headlamp RH (Low)
•	E109	Front combination lamp RH
	E110)	Headlamp RH (High)
•	E113)	Cooling fan motor 1
	E114)	Cooling fan motor 2
	E121)	IPDM E/R (Terminal No. 45)
	E123	IPDM E/R [Cooling fan relay-2 (low-relay)] (Terminal No. 14)



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Revision: May 2004 PG-29 2003 Altima

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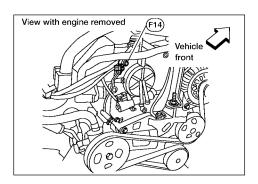
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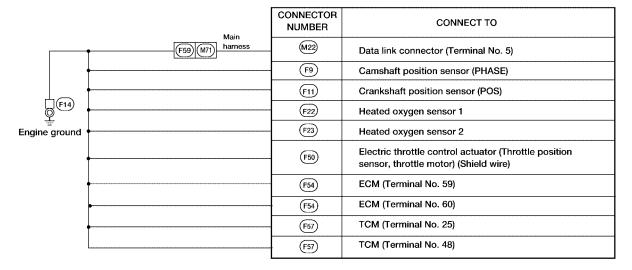
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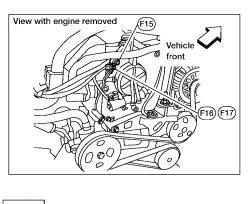
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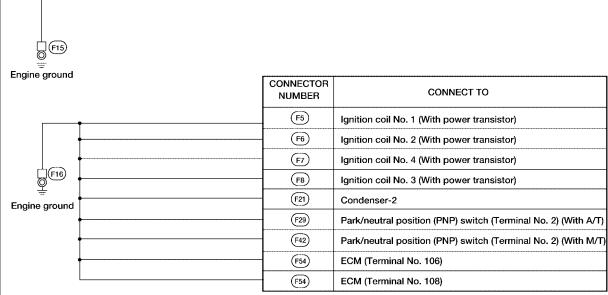
ENGINE CONTROL HARNESS (QR25DE)







F17 Engine ground



CONNECTOR NUMBER	CONNECT TO
 (F54)	ECM (Terminal No. 115)

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Revision: May 2004 PG-31 2003 Altima

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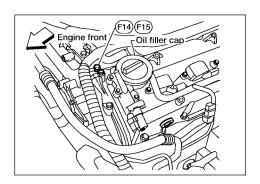
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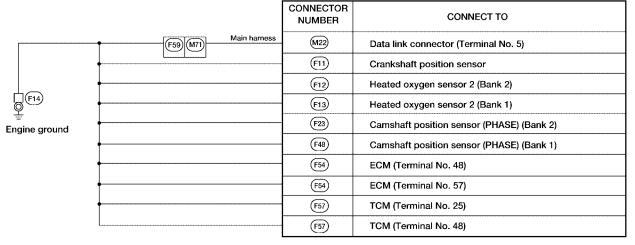
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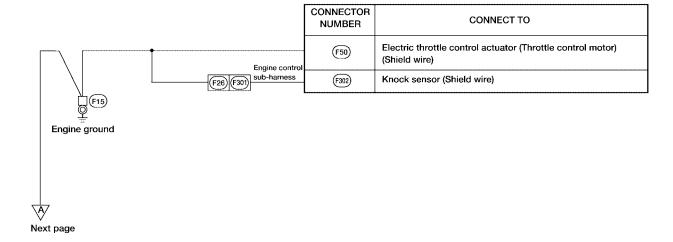
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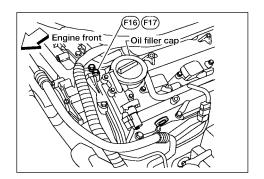
ENGINE CONTROL HARNESS (VQ35DE)

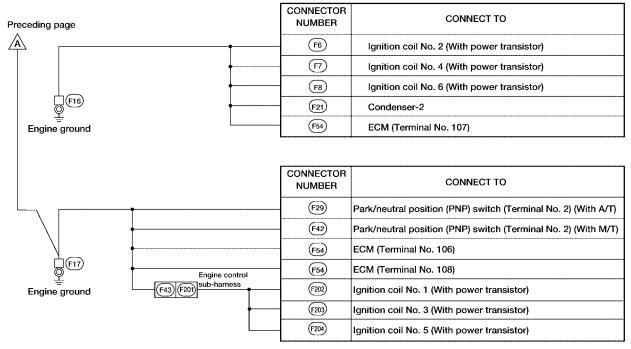






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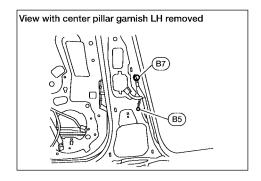
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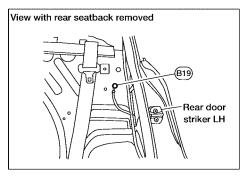
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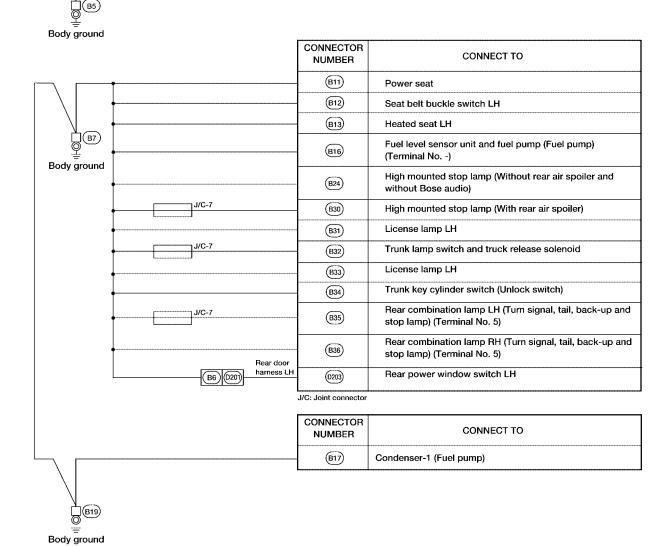
BODY HARNESS





CONNECTOR
NUMBER
CONNECT TO

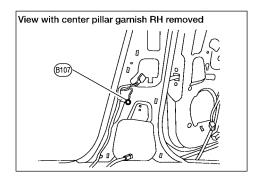
Air bag diagnosis sensor unit (Shield wire) (Terminal No. 44)
(With side air bags)

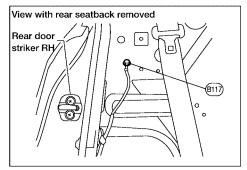


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BODY NO. 2 HARNESS

Body ground





CONNECTOR NUMBER	CONNECT TO
(B113)	Air bag diagnosis sensor unit (Shield wire) (Terminal No. 40) (With side air bags)
×	

Body ground

Rear door harness RH

	CONNECTOR NUMBER	CONNECT TO	
$\left\{ \right\}$	(B110)	Seat belt buckle switch RH	
1	(B111)	Heated seat RH	
$\left[\right]$	(B127)	Bose speaker amplifier	
	(B129)	High mounted stop lamp (Without rear air spoiler, with Bose audio)	
1	(B303)	Rear power window switch RH	

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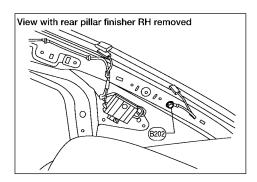
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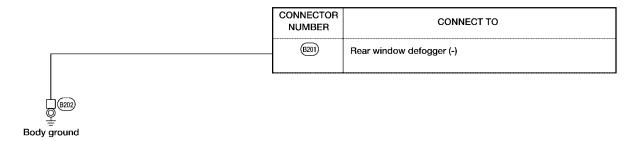
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HARNESS PFP:24010

Harness Layout HOW TO READ HARNESS LAYOUT

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

- Main Harness
- Engine Room Harness LH (Engine Compartment)
- Engine Room Harness RH (Engine Compartment)
- Engine Control Harness (QR25DE)
- Engine Control Harness (VQ35DE)
- Body Harness
- Body No. 2 Harness

To use the grid reference

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

CONNECTOR SYMBOL

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

Connector type	Water p	roof type	Standard type						
Connector type	Male	Female	Male	Female					
Cavity: Less than 4		<u> </u>		A					
 Relay connector 		لالك							
Cavity: From 5 to 8			\$						
Cavity: More than 9	\Diamond	\Diamond		\Diamond					
Ground terminal etc.	-	_	0						

Example:

G2 E1 B/6 : ASCD ACTUATOR

Connector color/Cavity

Connector number

Grid reference

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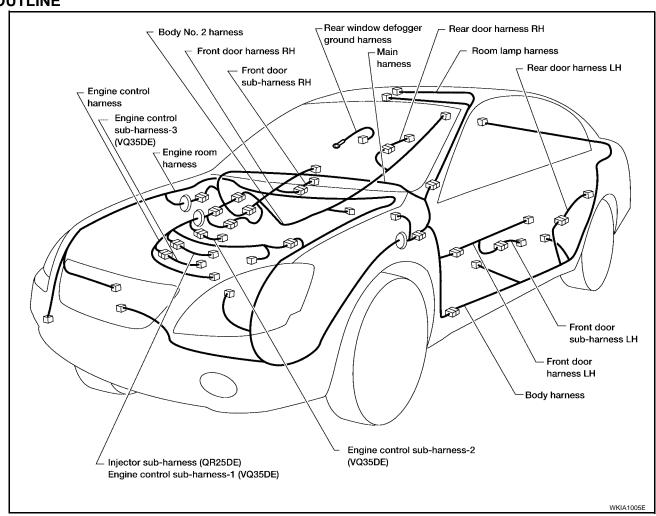
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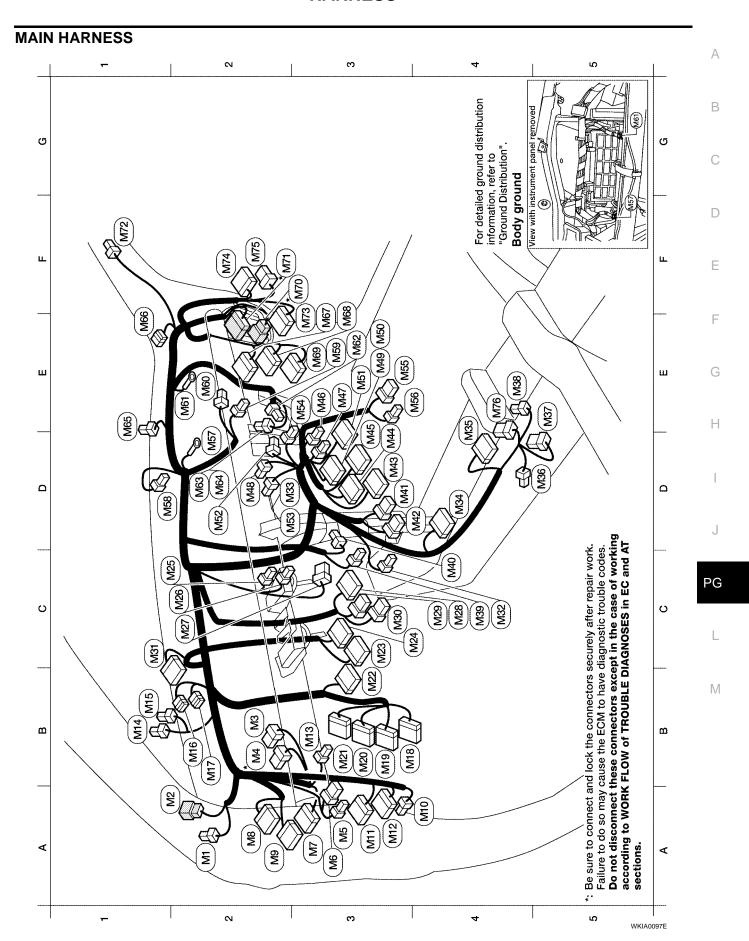
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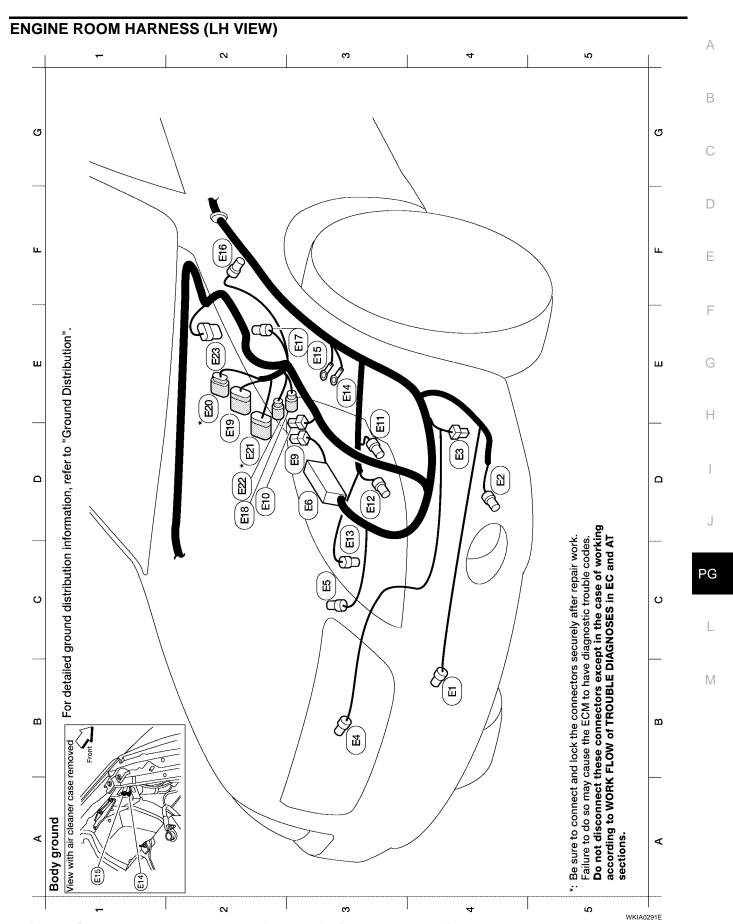
OUTLINE





A2 (Mt BR/2	: Tweeter LH	2	(M32) W/2	: In-vehicle sensor (with auto A/C)	E2	M61	: Body ground
A2 (M2 W/6	: To R1 (without vanity mirror	D3	M33 W/2	: Intake sensor (with auto A/C)	E3	M62 W/2	: Blower motor
		lamps)	D 4	M34 W/12	: A/T device	D2	Me3 BR/4	: Blower motor resistor
) V	(M2) W/8	: To R1 (with vanity mirror lamps)	E4	(M35) Y/28	: Air bag diagnosis sensor unit			(with manual A/C)
B2 (M3 W/8	: Fuse block (J/B)	D4		: Parking brake switch	D2	(M64) W/4	: Fan control amp. (with auto A/C)
B2 *(* (M4) W/16	: Fuse block (J/B)	. E	-	. Heated seat switch I H	Ш	(M65) B/2	: Sunload sensor (with auto A/C)
A3 (M5 W/3	: Illumination control switch	1 H		· Power socket	E2	M66 BR/20	: Joint connector-3
A3 (M6 GY/6	: TCS ON/OFF switch (with TCS)	2 2		. Air mix door motor (with auto A/C)	E3	(M67) W/8	: To (Ei3)
A3 (M7 W/18	: To (£28)	2 2	-	. Mode door motor	E3	M68 W/10	: To 🕮 early production
A2 (M8 W/16	: To (DZ)	5 6		· Fan switch (with manual A/C or	E	M69 W/12	: To (8104) early production
A2 ((M) W/12	: To @1	3		heater only)	E3	91/W (e)W)	: To (Big) late production
A4 (M10 Y/4	: To (E29)	23	(M42) W/6	: Rear window defogger switch	£	M70 W/6	: To (FSB)
A3 (M11) W/16	: To (B1)	23	M43 W/10	: Audio unit	F3	(M71) W/24	: To (F59)
A3 (M12 W/16	: To (B2)	E3	M44 W/6	: Audio unit	Ε	M72 BR/2	: Tweeter RH
B3 (M13 L/4	: Heated seat relay	E3	(M45) W/16	: Audio unit	£	(M73) W/12	: To ®1®
18	M14 BR/2	: Security indicator lamp	D2	(M48) W/2	: Antenna amplifier	F2	M74 W/10	: To (910)
B1 (M15 W/3	: Auto light sensor (with auto lights)	E3	(M49) GY/20	: A/C auto amp. (with auto A/C)	F2	M75 W/8	: To 0101)
B2 (M16 BR/20	: Joint connector-1	F3	M50 GY/16	: A/C auto amp. (with auto A/C)	E4	9/M (M76)	: Heated seat switch RH
B2 (M17 P/20	: Joint connector-2	E3	M51 W/12	: A/C control unit (with manual A/C or	E2	M77 Y/2	: Front passenger air bag module
B4 (M18 BR/24	: BCM (Body control module)			heater only)	E2	M78 Y/2	: Front passenger air bag module
B3 (01/W €tM	: BCM (Body control module)	05	(M52) W/3	: Thermo control amplifier (with auto A/C)			
B3 (M20 W/16	: BCM (Body control module)	03	(M53) W/2	: Intake sensor (with manual A/C)			
B3 (M21 W/12	: BCM (Body control module)	ដ	(M54) W/2	: Trunk lid opener cancel switch			
B3	M22 W/16	: Data link connector	E	M55 W/8	: Hazard switch			
င်ဒ	M23 W/24	: Combination meter	E 4	M56 B/2	: Cigarette lighter			
2	M24 BR/24	: Combination meter	D2	(M57)	: Body ground			
25	M25 B/2	: Ignition key illumination	D2	(M58) W/3	: Intake door motor			
C2 (M26 W/4	: Key switch and key lock solenoid	E3	(M59) BR/2	: Glove box lamp			
C5	M27 W/8	: Immobilizer control unit)				
2	M28 W/16	: Combination switch			*: Be sure to conne	ct and l	ock the conn	Be sure to connect and lock the connectors securely after repair work.
2	M29 Y/6	: Combination switch			Failure to do so r	nay cau	se the ECM i	Failure to do so may cause the ECM to have diagnostic trouble codes.
ပ္ပ	M30 GY/8	: Combination switch			according to	WORK	FLOW of TR	according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT
5	M31 GY/10	: Shift lock control unit (with A/T)			sections.			

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Refer to PG-44, "Engine Room Harness (RH View)" for continuation of engine room harness.

Failure to do so may cause the ECM to have diagnostic trouble codes.

Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT *: Be sure to connect and lock the connectors securely after repair work. sections.

: Headlamp LH (low) (conventional type) Headlamp LH (low) (xenon type) : Front combination lamp LH : Fusible link box (battery) : Fusible link box (battery) : Brake fluid level switch Front wheel sensor LH : Headlamp LH (high) : To F35 (with A/T) : Body ground **Body ground** : To : To (F32) : **To** (F34) GY/10 GY/2 BR/2 GY/2 BR/2 GY/9 BR/2 B/2 B/8 B/2 B/3 B/2 E12 (E19) (S) r(E21) (E) (E16) (E) (B)

: Horn relay (inside fuse and fusible link box)

W/3

(I

D3 D2 E3

(11)

: Hood switch (If equipped) : Fuse and fusible link box

GY/2

Crash zone sensor

: Front fog lamp LH

: Horn (low)

B/1 Y/2

D4 D4 D4 C3 C3 C3

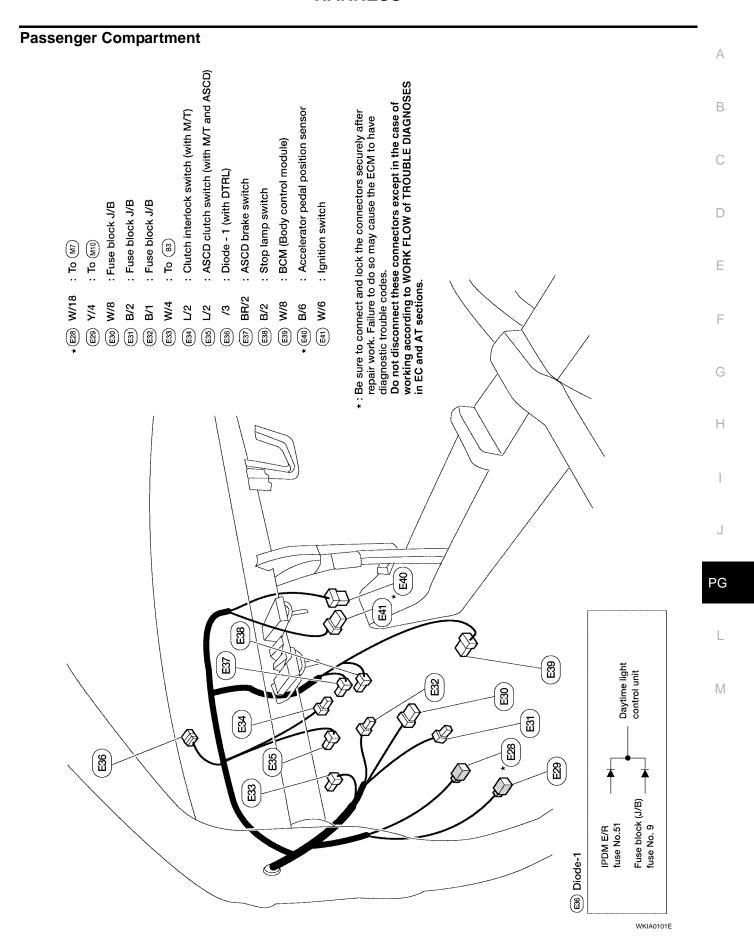
: Ambient sensor

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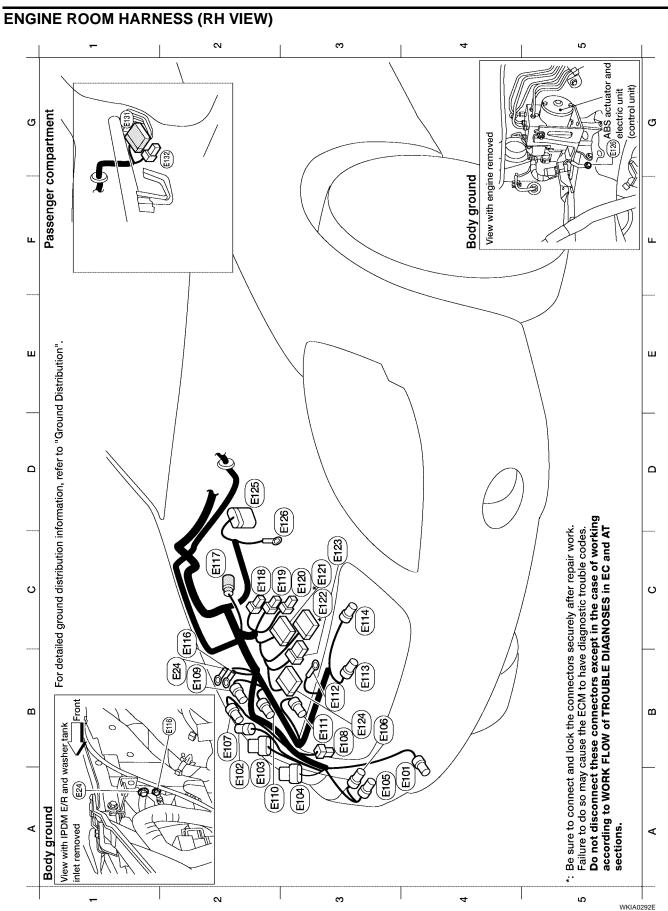
: Wiper motor

GY/6

E23



Revision: May 2004 PG-43 2003 Altima



Refer to PG-41, "Engine Room Harness (LH View)" for continuation of engine room harness.

Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT *: 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. sections : ABS actuator and electric unit (with ABS or TCS) To (M67) (With ABS or TCS) (With ABS or TCS) : Body ground ပု

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PG-45 Revision: May 2004 2003 Altima

: IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room) : IPDM E/R (Intelligent Power Distribution Module Engine Room)

: Front wheel sensor RH

GY/2

C5 C_{2} W/4

(F119)

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B/4

(E18)

B/2

E120 (E121) GY/16

r (E122)

W/12

9//

E123 (F)

 \mathbb{S} \aleph D2 D3

B/31

E125 E126 8//8 W/4

E131 E132

5

W/12

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Body ground

Cooling fan motor-2

GY/4

(E) E116)

Cooling fan motor-1 Generator (ground)

GY/4

(E13)

E112

B3 B3 \Im 22

A2 B3

: Headlamp RH (low) (conventional type)

: Washer fluid level sensor

BR/2

A2 A2 A3 A3 B2 B2 B3

: Front washer motor

GY/2

GY/8

: Headlamp RH (low) (xenon type)

BR/2

B/2

Refrigerant pressure sensor

: Front combination lamp RH

: Horn (high)

B/1 B/3 B/2 B/3

(E)

(E)

B2

: Headlamp RH (high)

: Daytime light control unit (for Canada) Daytime light control unit (for Canada) Daytime light control unit (for Canada)

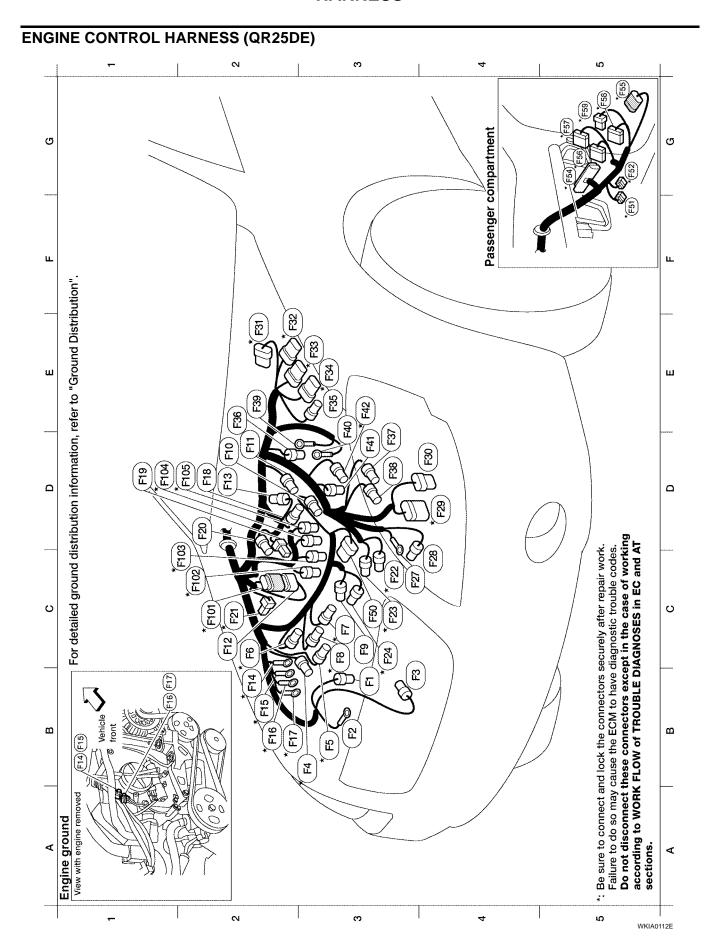
GY/4 **GY/6**

(F) (F) (F) E105 (F10) E103 (F)

: Front fog lamp RH : Body ground

BR/2

B2 44



: TCM (transmission control module) (with A/T) : TCM (transmission control module) (with A/T) Park/neutral position (PNP) switch (with M/T) : Turbine revolution sensor (with A/T) Back-up lamp switch (with M/T) Electric throttle control actuator Revolution sensor (with A/T) Fusible link box (battery) Vehicle speed sensor : Mass air flow sensor : To (E22) (with A/T) : Joint connector-4 : Joint connector-5 Battery (positive) : Injector No. 2 : Injector No. 3 : Injector No. 4 : Injector No. 1 . To (E19) To (图105) (1) : To M70 : To (M71) : To (F12) EZ Engine control sub-harness : ECM <u>o</u> ٥ GY/10 **GY/24** W/24 W/24 GY/2 **GY//5** GY/9 W/12 GY/2 GY/2 GY/2 GY/2 712 SMJ 9/M B/6 B/8 **B**/2 B/3 9/9 B/2 * (F58) * (F59) * (F105) F32 F33 (F42) F54 (F55 * (F56) * (F57) * Floi * (F102) * F103 * F104 F34 (33) (138) F37 (13) (E) F40 (<u>F</u> (F) (F) (F52) (FE G5 gS 95 g S G5 \ddot{c} 5 35 35 D3 23 23 23 贸 \aleph 55 5 5 贸 8 8 E2 臣 EVAP canister purge volume control solenoid valve Park/neutral position (PNP) switch (with A/T) Intake valve timing control solenoid valve Ignition coil No. 3 (with power transistor) Ignition coil No. 1 (with power transistor) Ignition coil No. 2 (with power transistor) Ignition coil No. 4 (with power transistor) Camshaft position sensor (PHASE) Engine coolant temperature sensor Power steering oil pressure switch Terminal cord assembly (with A/T) Heated oxygen sensor 1 (Front) Heated oxygen sensor 2 (Rear) : VISA control solenoid valve Crankshaft position sensor Oil pressure switch : A/C compressor **Engine ground Engine ground Engine ground** Engine ground Knock sensor Starter motor Starter motor Condenser 2 : Generator Generator **To** (F101) GY/2 GY/3 GY/3 GY/2 GY/2 GY/3 GY/3 **BR/2 GY/2** B/10 GY/1 GY/1 B/3 B/3 B/6 B/1 **G/4** B/8 7 B/1 $\frac{7}{2}$ (F) FI FI (E) (E) (E) *(F12) F13 F14 (FE) F18 F20 F21) r F22 r (F23) F24 (2) (28) (F29 (Z (E (8) B3 **B**4 B3 B3 8 \aleph 8 \aleph 22 02 \aleph 2 **B**2 B2 B2 **B**2 2 D2 \aleph \aleph පි ខ 2 2 ద

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

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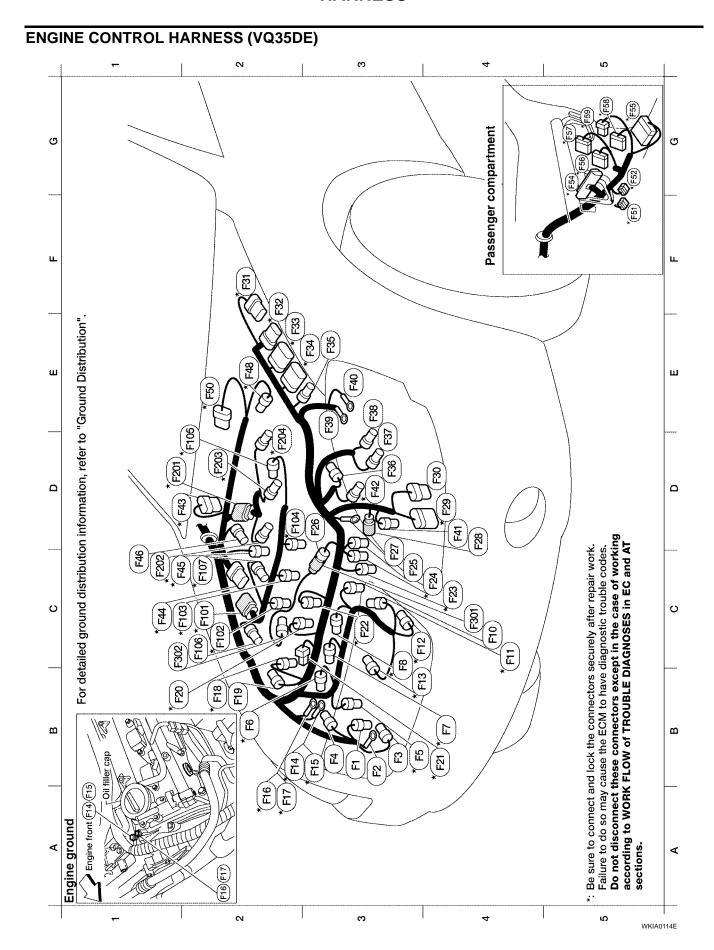
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Engine control sub-harness-1 * சொர்தி தூக்கார் சுதி	9	GY/2	GY/2 : Injector No.	* (F104) GY/Z : Injector No. 5	* (দ্যক্ত L/2 : EVAP canister purge volume control solenoid valve	(Fig. B/1 : Oil pressure switch	* (Fig.) G/2 : Intake valve timing control solenoid valve (Bank 1)	Engine control sub-harness-2	* (E201) G/6 : To (F43)	* (ROD) GV/3 : Ignition coil No. 1 (with power transistor)	* (Right) GY/3 : Ignition coil No. 3 (with power	*(F204) GY/3 : Ignition coil No. 5 (with power	ranskor) Engine control sub-harness-3	(F301) B/2 : To (F26)	(Fig.) GY/2 : Knock sensor												Be sure to connect and lock the connectors securely after repair work.	Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working	according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.
	3 3	C C	8 8	Z	D5	C	C5		5	δ	D2	D2	ш	2	5										_		nnect	so may onnect	o WOR
: Park/neutral position (PNP) switch		: lerminal cord assembly (with A/1)	: Mass air flow sensor : To (53)		: To (E19) : To (E21)	: To (E22) (with A/T)	: Vehicle speed sensor	: Turbine revolution sensor (with A/T)	: Revolution sensor (with A/T)	: Battery (positive) : Fusible link box (battery)	: Back-up lamp switch (with M/T)	: Park/neutral position (PNP) switch (with M/T)	. To (E201)		: Heated oxygen sensor 1 (Front) (Bank 1)	: Power steering oil pressure sensor	: Camshaft position sensor (PHASE)	(ballk I)	: Electric throttle control actuator	: Joint connector-4	: Joint connector-5	: ECM	: To (8105)	: TCM (transmission control module)	: TCM (transmission control module)	(with A/T)	.* (M70)	: To (M71) Failure to do Do not disce	according to sections.
* (F29) B/10			*(F31) GY/5 *(F32) B/8		* (F33) GY/9 * (F34) GY/10		(F36) GY/2	(F37) B/3	(F38) B/3	F30 	(F41) B/2	(F42) B/2	* (F43) G/6 * (E44) G/8		* F45 B/3	(F46) B/3	* F48 G/3		4,F80 G/6	*(F51) L/12	*(F52) L/12	* (F54) SMJ	×(F55) W/12	* (F56) W/24	*(F67) GY/24		*(F58) W/6	* (F59) W/24	
D4	č	7	2 G	-	E E	E3	23	D3	E3	E3	Δ	D3*	20 5	5 6	3	5	E2	Ĺ	L Z	F2	G5	G5	G5	G5	G5		G5	G 5	
: Generator	: Generator	: A/C compressor	: Intake valve timing control solenoid	Vaive (Dailh 2)	: Heated oxygen sensor 1 (Front) (Bank 2)	: Ignition coil No. 2 (with power	: Ignition coil No. 4 (with power	transistor)	: Ignition coil No. 6 (with power transistor)	: Front electronic controlled engine mount	: Crankshaft position sensor	: Heated oxygen sensor 2 (Rear) (Bank 2)	: Heated oxygen sensor 2 (Rear) (Bank 1)	: Engine around	: Engine ground	: Engine ground	: Engine ground	: Injector No. 2	: VIAS control solenoid valve	: Injector No. 4		· Colideriser z	. Injection wo. o	: Camsnart position sensor (PHASE) (Bank 2)		: Kear electronic controlled engine mount	: To (F301)	: Starter motor	: Starter motor
	B3 (F2) -	B3 F3 B/1	B3*(F4) G/2		В3*(ғ₅) В/3	B2*(F6) GY/3	B4*(F7) GY/3		C3*(F8) GY/3	C4 (F10) BR/3	C4*(F11) B/3	C3*(F12) G/4	B3*F₁3 L/4	B2*(F14) -	B3*(F15) -	A2* (F16) -	A2* (F17) -	B2* F18 GY/2	B2 (F19) B/2			64* (FZI) G1/2		C4* (F23) B/3	(F24)	C3 (F25) BR/3	C3 (F26) B/2	(F27)	D4 (F28) GY/1
																												WKIA	0115E

BODY HARNESS Q က 2 For detailed ground distribution information, refer to GROUND DISTRIBUTION. -Rear door striker LH 88 836 O თ B32 View with rear seatback removed (B) 图 B25 **Body ground** 830 B27 ш B24 *: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections. 823 B352 ш ш B35 B351 B26 B37 B22) B16 (B20) Ω Ω B19 B18 O O 82 B13 B17 8 B15 8 View with center pillar garnish LH removed B14 ω Ω B₇ 絽 B10 B12) (B) **\(\frac{\pi}{2}\) Body ground** SE SE ⋖ <u>ਜ਼</u> Q က 2 WKIA1007E

Rear window defogger condenser : LH side curtain air bag module × (BZ0) B21

Rear speaker LH (without Bose audio system) BR/2 B22 (BZ3)

Trunk room lamp (without Bose audio system)

W/2 W/2

Rear window defogger relay

BR/6

(g)

44 A3

: To (M12) : To (M11)

W/16 W/16

(<u>a</u> * (B2)

A2 A2. **A**2

: To (E33)

W/4

(R)

Body ground

To (2201)

(8)

B3

(a)

ដ E2 (B24)

 \overline{F}

High mounted stop lamp (without rear spoiler and with Bose audio system)

: Rear speaker RH (without Bose audio system) BR/2

(B25)

 Ξ E2

Subwoofer LH (with Bose audio system) W/2 B26 High mounted stop lamp (with rear spoiler) BR/2

: To (B131) (with Bose audio system)

W/8

(B27)

 Ξ

£

: Front LH side air bag module Air bag diagnosis sensor unit

: Front door switch LH

Y/12

۲//2

(B10) (E) B12 B13

83

Body ground

(a) (8) (8)

B3 **B**4 \aleph Seatbelt buckle switch LH

Power seat

W/2 W/3 W/3

83 B5 \aleph

Heated seat switch

: License lamp LH BR/2 (B30)

Trunk lamp switch and trunk release solenoid

B31 F5

W/4 (B32) G5

: License lamp RH

BR/2

(B33)

G5

Rear combination lamp LH Trunk key cylinder switch 9/M W/2 B34 ဌ

(B35) **E**4

Rear combination lamp RH 9/M 838 838 ဗ္ဗ

Rear window defogger : Joint connector-7 B/1 (B37) BSS **E**2

B/20

: Fuel level sensor unit and fuel pump

GY/5

D4 * B16

: Rear door switch LH

Condenser-1

W/2

B17 B18

X

: Body ground

(E)

: Front LH seat belt pre-tensioner LH side airbag (satellite) sensor

Y//2 **Y/2**

(B14) B15

B5 **B**5 **Body ground**

B352

*: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.

Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

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BODY NO. 2 HARNESS N ო S B103 回 B102 Q G View with rear seatback removed *B105 ВПО B104 **Body ground** B107 Rear door B115 ш. (B112) B114 B106 *: Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes. Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections. B11 B113 B116 ш ш (B117) B118 Ω Ω (B126) B122 O O B130 B129 B127) B128 Ω Ω For detailed ground distribution (हाअ (B123) 품 information, refer to "GROUND DISTRIBUTION". (B119) View with center pillar B121 B120 **Body ground** ⋖ Q က 5 WKIA0104E

: RH side curtain air bag module A2

EVAP control system pressure sensor (QR25DE) BR/3 * (B119)

EVAP control system pressure sensor (VQ35DE) GY/3 * @119

42 A3 **A**4

: To (MBB) early production

W/10

(B102) (B100) (H)

gS G2 g

M73 <u>ء</u>

To (M69) early production : To (Meg) late production

: Vacuum cut valve bypass valve G/2 (B120) ★

EVAP canister vent control valve B/2

* B121

: Rear wheel sensor RH GY/2 B122

SS B5

Rear wheel sensor LH BR/2 B123

: Subwoofer RH (with Bose audio system) **W**/2 B126

င္ပ **B**4

Bose Speaker Amp. GY/8 B127)

: Bose Speaker Amp. B/24 B128 **B**2

High mounted stop lamp (without rear spoiler and with Bose audio system) **W/2** (812) **B**2

: Trunk room lamp (with Bose audio system) W/2 B130

: To (827) (with Bose audio system) (B131) W/8 C2 B2

> : RH side air bag (satellite) sensor : Front RH seatbelt pre-tensioner

: Rear door switch RH

(B116) (B117)

: Body ground

: Front RH side air bag module : Air bag diagnosis sensor unit

Y/12

Y/2 Υ/2 ≶

B114 B115

: Seat belt buckle switch RH

: Front door switch RH

W/3 **8**/3 W/3 ۲//2

(B)

(B)

(H)

: Body ground

B107

: To (F55) : To

-(9) * B104

5

8/%

B106

F4 F2 \mathbf{E} F2 E F2 E3 5 5

W/16 W/12

W/12 W/12

> **F**4 **F**4

: Heated seat switch RH

PG

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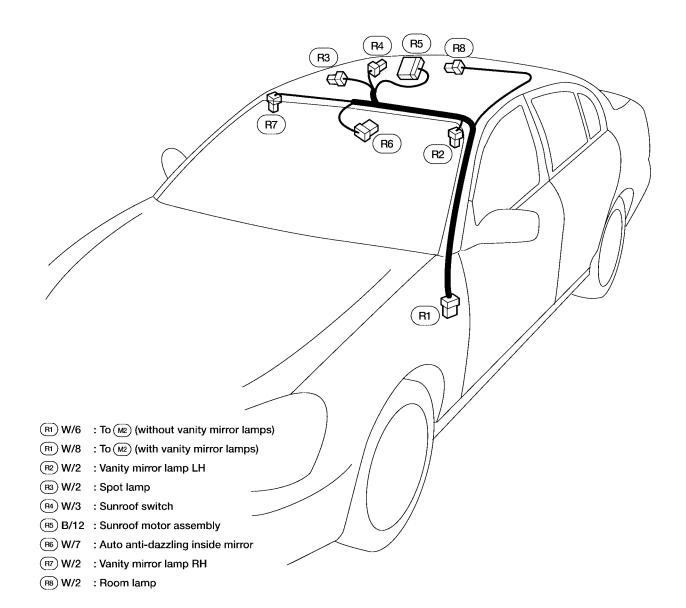
M

Be sure to connect and lock the connectors securely after repair work. Failure to do so may cause the ECM to have diagnostic trouble codes.

Do not disconnect these connectors except in the case of working according to WORK FLOW of TROUBLE DIAGNOSES in EC and AT sections.

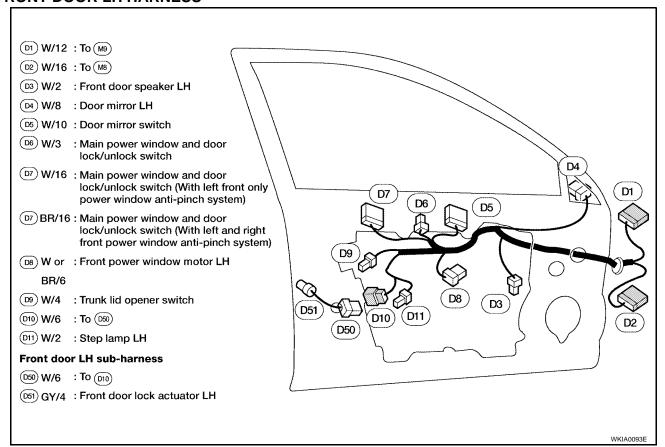
WKIA1009E

ROOM LAMP HARNESS

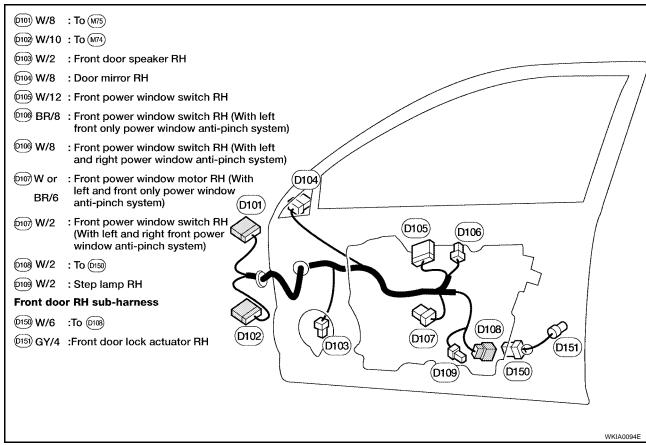


WKIA0092E

FRONT DOOR LH HARNESS



FRONT DOOR RH HARNESS



Revision: May 2004 PG-55 2003 Altima

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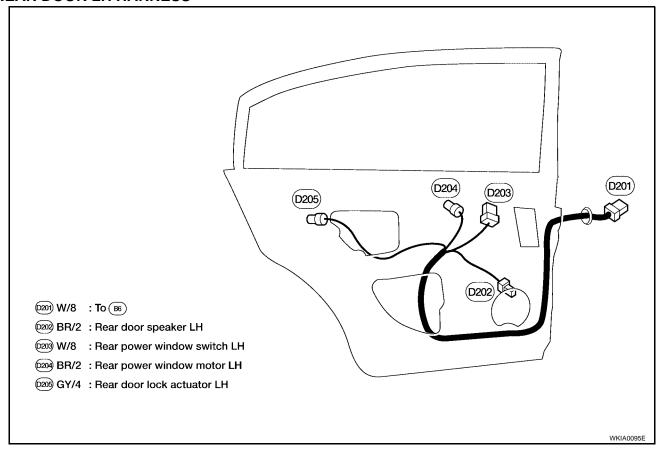
Н

PG

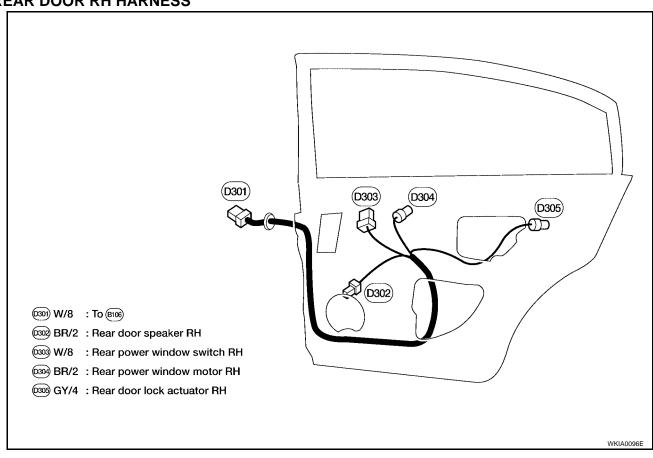
L

N.

REAR DOOR LH HARNESS



REAR DOOR RH HARNESS



Wiring Diagram Codes (Cell Codes)

Revision: May 2004

EKS003JH

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

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

Code	Section	Wiring Diagram Name
1STSIG	AT	A/T 1st Signal
2NDSIG	AT	A/T 2nd Signal
3RDSIG	AT	A/T 3rd Signal
4THSIG	AT	A/T 4th Signal
A/C,A	ATC	Auto Air Conditioner
A/C,M	MTC	Manual Air Conditioner
A/LIGHT	LT	Auto Light Control
ABS	BRC	Anti-Lock Brake System
APPS1	EC	Accelerator Pedal Position Sensor
APPS2	EC	Accelerator Pedal Position Sensor
APPS3	EC	Accelerator Pedal Position Sensor
ASCBOF	EC	ASCD Brake Switch
ASC/BS	EC	ASCD Brake Switch
ASCIND	EC	ASCD Indicator
ASC/SW	EC	ASCD Steering Switch
AT/IND	DI	A/T Indicator Lamp
AUDIO	AV	Audio
B/COMP	DI	Board Computer
BAF/TS	AT	A/T Fluid Temperature Sensor and TCM Power Supply
BACK/L	LT	Back-up Lamp
BRK/SW	EC	Brake Switch
BYPS/V	EC	Vacuum Cut Valve Bypass Valve
CAN	AT	CAN Communication Line
CAN	EC	CAN Communication Line
CAN	LAN	CAN System
CHARGE	SC	Charging System
CHIME	DI	Warning Chime
CIGAR	WW	Cigarette Lighter
COOL/F	EC	Cooling Fan Control
D/LOCK	BL	Power Door Lock
DEF	GW	Rear Window Defogger
DLC	EC	Data Link Connector
DTRL	LT	Headlamp - With Daytime Light System
ECM/PW	EC	ECM Power Supply for Back-Up
ECTS	EC	Engine Coolant Temperature Sensor
ENGSS	AT	Engine Speed Signal
EMNT	EC	Engine Mount
ETC1	EC	Electric Throttle Control Function
ETC2	EC	Throttle Control Motor Relay
ETC3	EC	Throttle Control Motor
F/FOG	LT	Front Fog Lamp
F/PUMP	EC	Fuel Pump
FLS1	EC	Fuel Level Sensor Function (SLOSH)
FLS2	EC	Fuel Level Sensor Circuit
FLS3	EC	Fuel Level Sensor Circuit (Ground Signal)
FTS	AT	A/T Fluid Temperature Sensor
FTTS	EC	Fuel Tank Temperature Sensor

PG-57 2003 Altima

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FUEL	EC	Fuel Injection System Function
FUELB1	EC	Fuel Injection System Function (Bank 1)
FUELB2	EC	Fuel Injection System Function (Bank 2)
H/LAMP	LT	Headlamp
H/MIRR	GW	Door Mirror with Heated Mirror
HEATER	MTC	Heater System
HO2S1	EC	Heated Oxygen Sensor 1 (Front)
HO2S1H	EC	Heated Oxygen Sensor 1 (Front) Heater
HO2S2	EC	Heated Oxygen Sensor 2 (Rear)
HO2S2H	EC	Heated Oxygen Sensor 2 (Rear) Heater
HORN	WW	Horn
HSEAT	SE	Heated Seat
I/MIRR	GW	Inside Mirror (Auto-Anti Dazzling Mirror)
IATS	EC	Intake Air Temperature Sensor
IGNSYS	EC	Ignition System
ILL	LT	Illumination
INJECT	EC	Injector
INT/L	LT	Spot, Vanity Mirror and Trunk Room Lamps
IVC	EC	Intake Valve Timing Control Solenoid Valve
IVCB1	EC	Intake Valve Timing Control Solenoid Valve Bank 1
IVCB2	EC	Intake Valve Timing Control Solenoid Valve Bank 2
IVCSB1	EC	Intake Valve Timing Control Position Sensor Bank 1
IVCSB2	EC	Intake Valve Timing Control Position Sensor Bank 2
KEYLES	BL	Remote Keyless Entry System
KS	EC	Knock Sensor
LPSV	AT	Line Pressure Solenoid Valve
MAFS	EC	Mass Air Flow Sensor
MAIN	AT	Main Power Supply and Ground Circuit
MAIN	EC	Main Power Supply and Ground Circuit
METER	DI	Speedometer, Tachometer, Temp., Oil and Fuel Gauges
MIL	EC	Malfunction Indicator Lamp
MIRROR	GW	Door Mirror
NATS	BL	Nissan Anti-Theft System
NONDTC	AT	Non-detective Items
O2H1B1	EC	Heated Oxygen Sensor 1(Front) Heater Bank 1
O2H1B2	EC	Heated Oxygen Sensor 1 (Front) Heater Bank 2
O2H2B1	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 1
O2H2B2	EC	Rear Heated Oxygen Sensor 2 (Rear) Heater Bank 2
O2S1B1	EC	Heated Oxygen Sensor 1 (Front) Bank 1
O2S1B2	EC	Heated Oxygen Sensor 1 (Front) Bank 2
O2S2B1	EC	Heated Oxygen Sensor 2 (Rear) Bank 1
O2S2B2	EC	Heated Oxygen Sensor 2 (Rear) Bank 2
OVRCSV	AT	Over Run Clutch Solenoid Valve
PGC/V	EC	EVAP Canister Purge Volume Control Solenoid Valve
PHASE	EC	Camshaft Position Sensor (PHASE)
PHSB1	EC	Camshaft Position Sensor (PHASE) (Bank 1)
PHSB2	EC	Camshaft Position Sensor (PHASE) (Bank 1) Camshaft Position Sensor (PHASE) (Bank 2)
PNP/SW	AT	Park/Neutral Position Switch
PNP/SW	EC	Park/Neutral Position Switch Park/Neutral Position Switch
POS	EC	Crankshaft Position Sensor (CKPS) (POS)
POWER	PG	Power Supply Routing
PRE/SE	EC	EVAP Control System Pressure Sensor

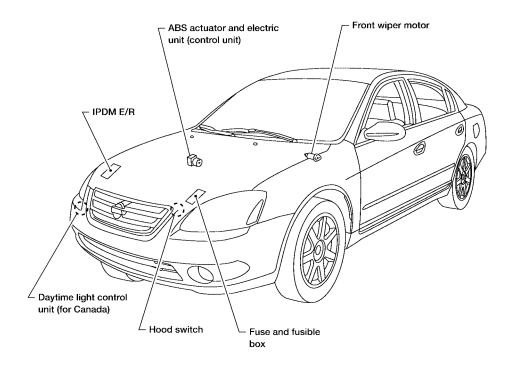
PS/SEN	EC	Power Steering Oil Pressure Sensor	
PST/SW	EC	Power Steering Oil Pressure Switch	A
REMOTE	AV	Audio (Remote Control Switch)	
ROOM/L	LT	Interior Room Lamp	
RP/SEN	EC	Refrigerant Pressure Sensor	В
S/SIG	EC	Start Signal	
SEAT	SE	Power Seat	
SEN/PW	EC	Sensor Power Supply	
SHIFT	AT	A/T Shift Lock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

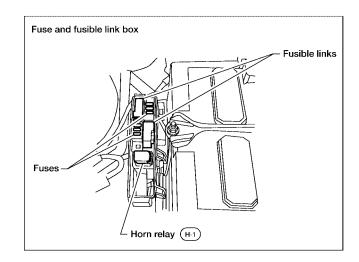
ELECTRICAL UNITS LOCATION

PFP:25230

EKS003JI

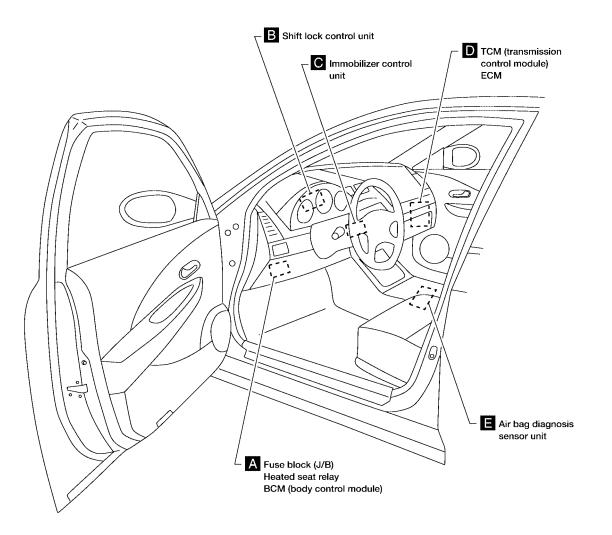
Electrical Units Location ENGINE COMPARTMENT



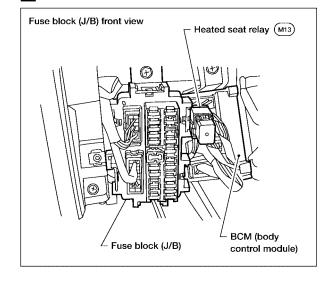


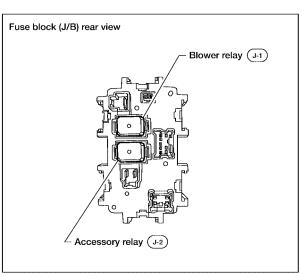
WKIA0124E

PASSENGER COMPARTMENT



A Dash side LH





WKIA0125E

Revision: May 2004 PG-61 2003 Altima

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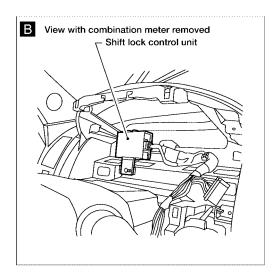
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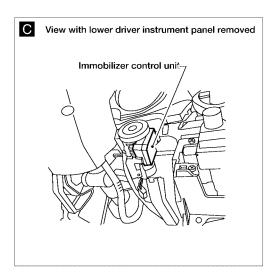
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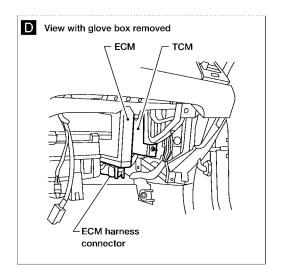
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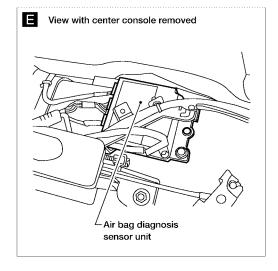
PG

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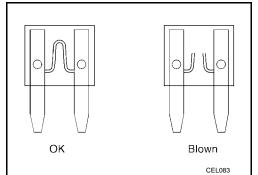


WKIA0131E

Fuse EKS003JJ

 If fuse is blown, be sure to eliminate cause of incident before installing new fuse.

- Use fuse of specified rating. Never use fuse of more than specified rating.
- Do not partially install fuse; always insert it into fuse holder properly.
- Remove fuse for "ELECTRICAL PARTS (BAT)" if vehicle is not used for a long period of time.



Fusible Link

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

CAUTION:

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

Fusible links Battery WKIA0123F

EKS003JL

FKS003.JK

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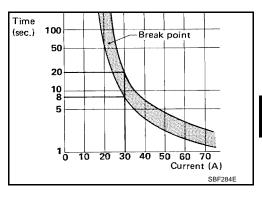
Н

Circuit Breaker (Built Into BCM)

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

A circuit breaker is used for the following systems:

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



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Revision: May 2004 PG-63 2003 Altima

HARNESS CONNECTOR

HARNESS CONNECTOR

PFP:B4341

DescriptionHARNESS CONNECTOR (TAB-LOCKING TYPE)

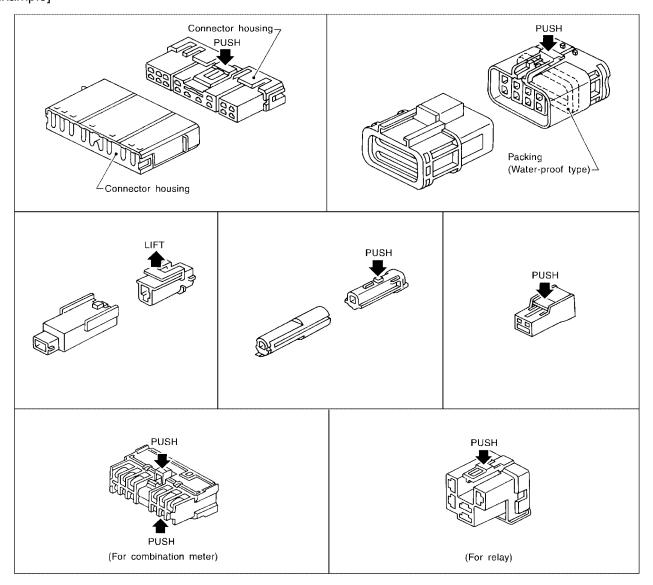
EKS003JM

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

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

CAUTION:

Do not pull the harness or wires when disconnecting the connector. [Example]



SEL769DA

HARNESS CONNECTOR

HARNESS CONNECTOR (SLIDE-LOCKING TYPE)

- A new style slide-locking type connector is used on certain systems and components, especially those related to OBD.
- The slide-locking type connectors help prevent incomplete locking and accidental looseness or disconnection.

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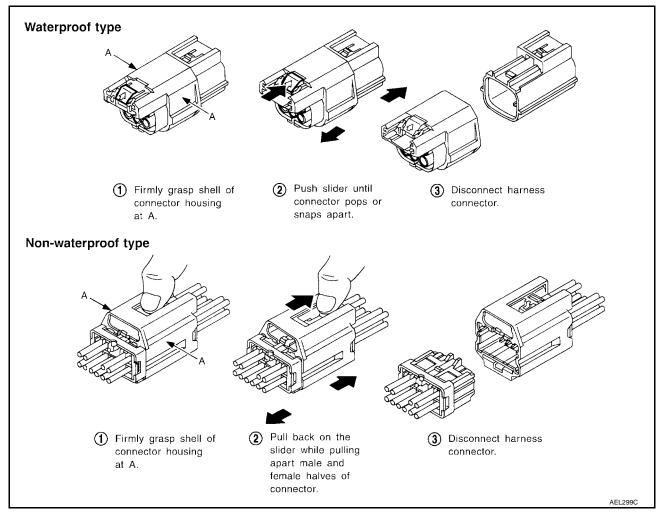
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The slide-locking type connectors are disconnected by pushing or pulling the slider. Refer to the illustration below.

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]



Revision: May 2004 PG-65 2003 Altima

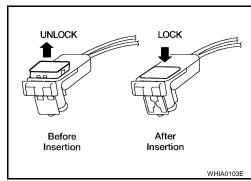
HARNESS CONNECTOR

HARNESS CONNECTOR (DIRECT-CONNECT SRS COMPONENT TYPE)

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

CAUTION:

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



JOINT CONNECTOR (J/C)

JOINT CONNECTOR (J/C) PFP:B4341 Α **Terminal Arrangement** EKS003JN В Joint connector-1 M16 Joint connector-2 M17 C D Е (Pink) (Brown) F Joint connector-7 (B37) Joint connector-3 M66 Н (Brown) (Black) PG Joint connector-4 (F51) Joint connector-5 F52 M 2 2 2 2 2 2 2 (Blue) (Blue)

WKIA0126E

ELECTRICAL UNITS

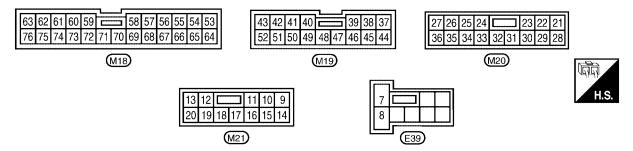
ELECTRICAL UNITS

PFP:23710

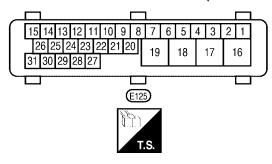
Terminal Arrangement

EKS003JO

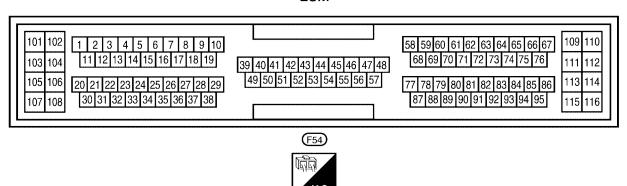
BCM (BODY CONTROL MODULE)



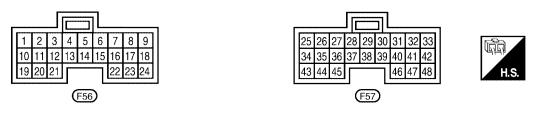
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)



ECM



TCM (TRANSMISSION CONTROL MODULE)



WKIA0127E

STANDARDIZED RELAY

STANDARDIZED RELAY

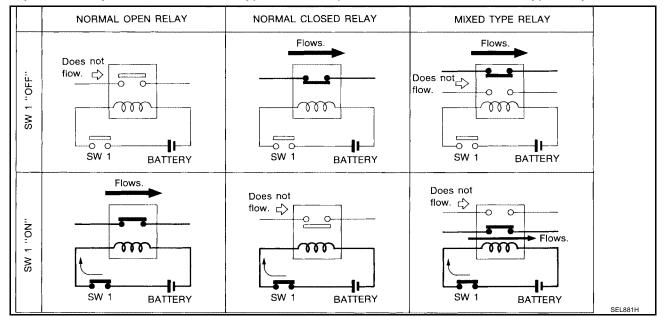
PFP:25230

EKS003JQ

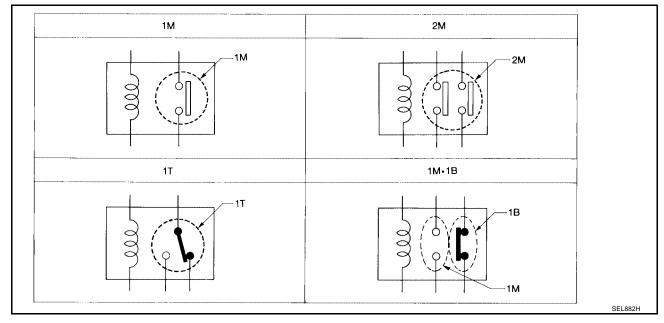
Description

NORMAL OPEN, NORMAL CLOSED AND MIXED TYPE RELAYS

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



TYPE OF STANDARDIZED RELAYS



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

Revision: May 2004 PG-69 2003 Altima

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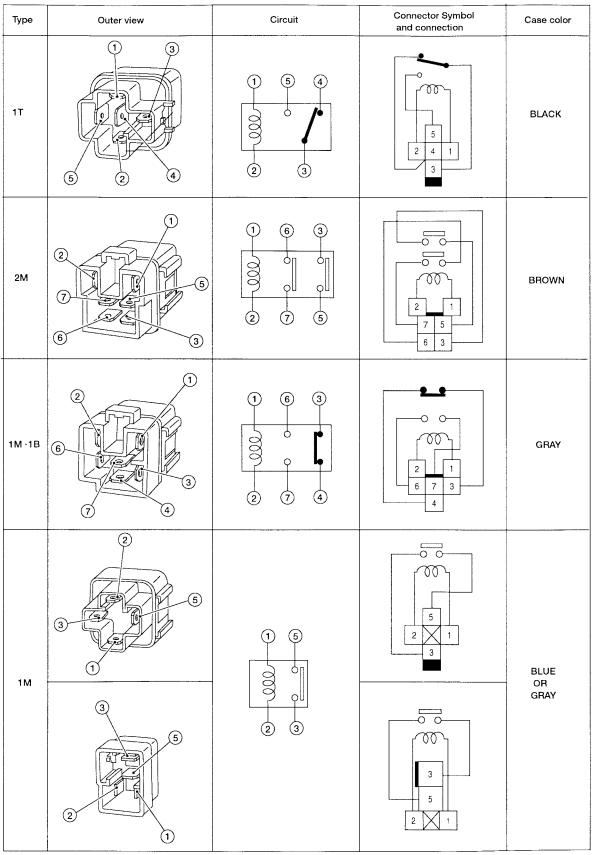
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STANDARDIZED RELAY



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

LEL638

FUSE BLOCK-JUNCTION BOX(J/B) PFP:24350 Α **Terminal Arrangement** EKS003JR To main harness В C D Е Н 10**A** Blower relay (J-1) Accessory relay (J-2) PG 5 M Not used 1S E32 (E31) (E30) 2R 1R To engine room harness LH

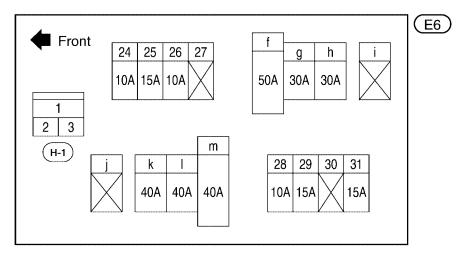
FUSE AND FUSIBLE LINK BOX

FUSE AND FUSIBLE LINK BOX

PFP:24381

Terminal Arrangement

EKS003JS



24 - 31: FUSE f - m: FUSBILE LINK