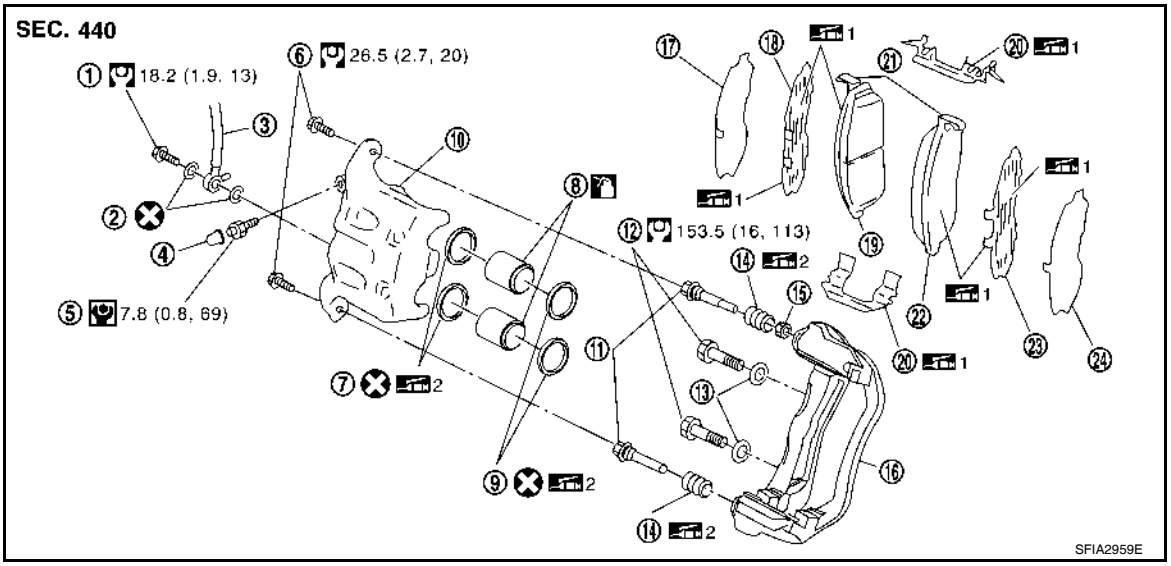
Edition: August 2008
Revision: November 2009
Publication No. SM0E-1A35U0

NISSAN MAXIMA

MODEL A35 SERIES

QUICK REFERENCE INDEX



1. Union bolt
2. Copper washer
3. Brake hose
4. Cap
5. Bleed valve
6. Sliding pin bolt
7. Piston seal
8. Piston
9. Piston boot
10. Cylinder body
11. Sliding pin
12. Torque member mounting bolt
13. Washer
14. Sliding pin boot
15. Bushing
16. Torque member
17. Inner shim cover
18. Inner shim
19. Inner pad
20. Pad retainer
21. Pad wear sensor
22. Outer pad
23. Outer shim
24. Outer shim cover

1: PBC (Poly Butyl Cuprysil) grease or silicone-based grease
2: Rubber grease
: Brake fluid

Refer to GI section for additional symbol definitions.

SYMBOLS

SYMBOL	DESCRIPTION		SYMBOL	DESCRIPTION
	Tightening torque The tightening torque specifications of bolts and nuts may be presented as either a range or a standard tightening torque.	: N•m (kg-m, ft-lb)		Always replace after every disassembly.
		: N•m (kg-m, in-lb)	P	Apply petroleum jelly.
	Should be lubricated with grease. Unless otherwise indicated, use recommended multi-purpose grease.		M	Apply molybdenum added petroleum jelly.
	Should be lubricated with oil.		ATF	Apply ATF.
	Sealing point		★	Select with proper thickness.
L	Sealing point with locking sealant.		☆	Adjustment is required.
	Checking point			

SAIA0749E

ECM		Sensor		
Connector	Terminal	Name	Connector	Terminal
F13	72	Refrigerant pressure sensor	E219	1
	76	CKP sensor (POS)	F30	1
E10	87	APP sensor	E40	6
	91	EVAP control system pressure sensor	B41	3

Is the inspection result normal?

YES >> GO TO 6.
NO >> Repair short to ground or short to power in harness or connectors.

6.CHECK COMPONENTS

Check the following.
- Crankshaft position sensor (POS) (Refer to EC-280, "Component Inspection".)
- EVAP control system pressure sensor (Refer to EC-325, "Component Inspection".)
- Refrigerant pressure sensor (Refer to EC-495, "Diagnosis Procedure".)

Is the inspection result normal?

YES >> GO TO 11.
NO >> Replace malfunctioning components.

7.CHECK APP SENSOR GROUND CIRCUIT FOR OPEN AND SHORT

1. Turn ignition switch OFF.
2. Disconnect ECM harness connector.
3. Check the continuity between APP sensor harness connector and ECM harness connector.

APP sensor		ECM		Continuity
Connector	Terminal	Connector	Terminal	
E40	4	E10	84	Existed
	2		100	

4. Also check harness for short to ground and short to power.

Is the inspection result normal?

YES >> GO TO 8.
NO >> Repair open circuit, short to ground or short to power in harness or connectors.

8.CHECK APP SENSOR INPUT SIGNAL CIRCUIT FOR OPEN AND SHORT

1. Check the continuity between APP sensor harness connector and ECM harness connector.

APP sensor		ECM		Continuity
Connector	Terminal	Connector	Terminal	
E40	3	E10	81	Existed
	1		82	

2. Also check harness for short to ground and short to power.

Is the inspection result normal?

YES >> GO TO 9.
NO >> Repair open circuit, short to ground or short to power in harness or connectors.

9.CHECK APP SENSOR

Refer to EC-457, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 11.
NO >> GO TO 10.

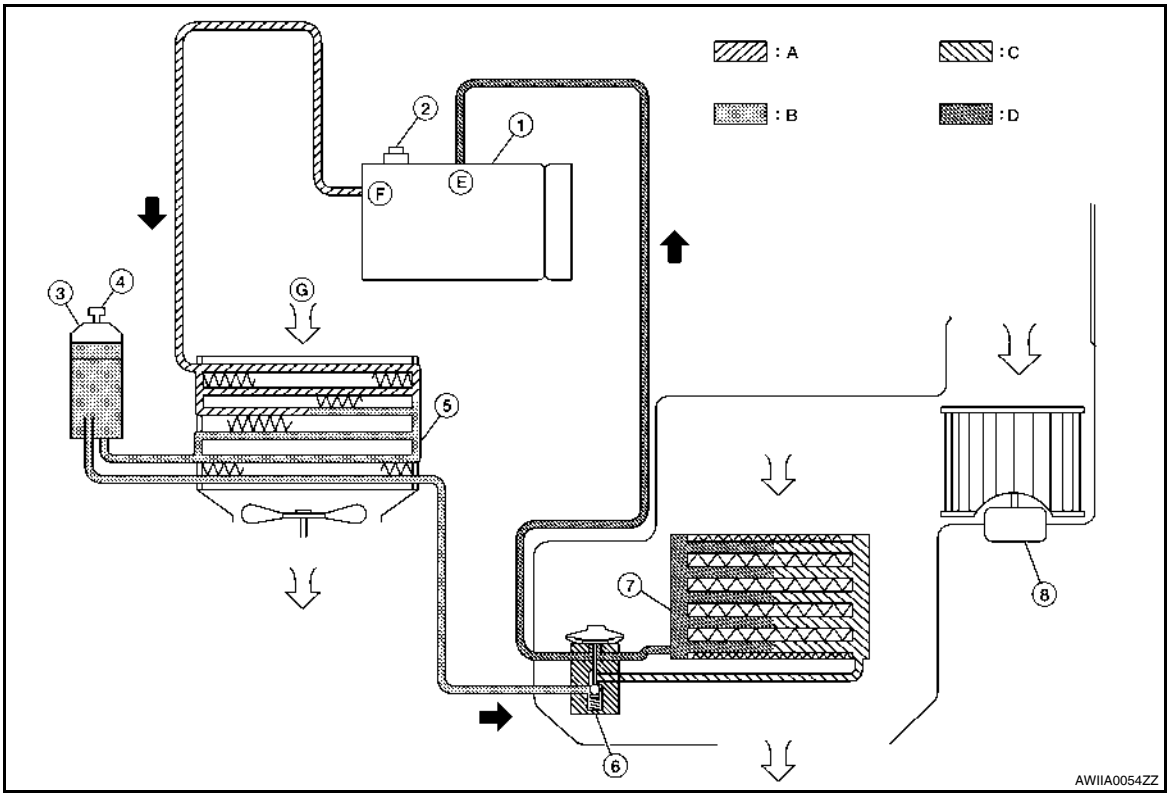
10.REPLACE ACCELERATOR PEDAL ASSEMBLY

Component	Reference
Air mix door motor (passenger side)	HAC-47, "Description"
Mode door motor	HAC-49, "Description"
Sunload sensor	HAC-42, "Description"
In-vehicle sensor	HAC-36, "Description"
A/C auto amp.	HAC-64, "A/C AUTO AMP. : Description"
Intake sensor	HAC-39, "Description"
Blower motor	HAC-54, "Description"

WITH MONOCHROME DISPLAY

WITH MONOCHROME DISPLAY : System Diagram

INFOID:0000000005462307



1. A/C compressor
2. Pressure relief valve
3. Liquid tank
4. Refrigerant pressure sensor
5. Condenser
6. Expansion valve
7. Evaporator
8. Blower motor
A. High-pressure gas
B. High-pressure liquid
C. Low-pressure liquid
D. Low-pressure gas
E. Suction port
F. Discharge port
G Outside air

WITH MONOCHROME DISPLAY : System Description

INFOID:0000000005462308

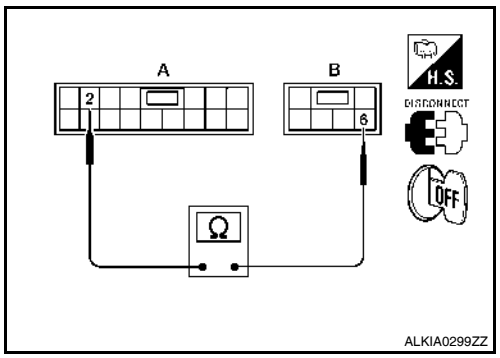
REFRIGERANT FLOW

The refrigerant flows in the standard pattern, that is, through the compressor, the condenser with liquid tank, through the evaporator, and back to the compressor. The refrigerant evaporation through the evaporator coil is controlled by an externally equalized expansion valve, located inside the evaporator case.

REFRIGERANT PRESSURE SENSOR

The refrigerant system is protected against excessively high or low pressures by the refrigerant pressure sensor, located on the liquid tank attached to the condenser. If the system pressure rises above or falls below the specifications, the refrigerant pressure sensor detects the pressure inside the refrigerant line and sends the

1. Disconnect main power window and door lock/unlock switch connector D7.
2. Check continuity between main power window and door lock/unlock switch connector D7 (A) terminal 2 and front power window motor LH connector D9 (B) terminal 6.



Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7 (A)	2	D9 (B)	6	Yes

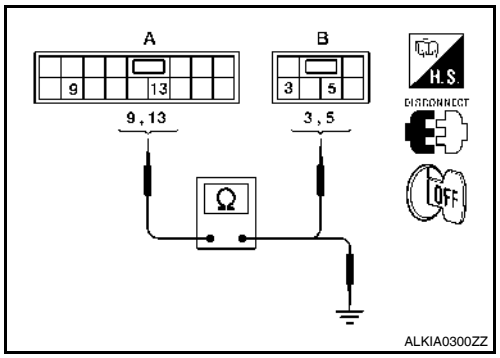
Is the inspection result normal?

YES >> Replace main power window and door lock/unlock switch. Refer to PWC-128, "Removal and Installation".

NO >> Repair or replace harness or connectors.

6. CHECK HARNESS CONTINUITY 3

1. Disconnect main power window and door lock/unlock switch connector D7.
2. Check continuity between main power window and door lock/unlock switch connector D7 (A) terminals 9, 13 and front power window motor LH connector D9 (B) terminals 3, 5.



Main power window and door lock/unlock switch connector	Terminal	Front power window motor LH connector	Terminal	Continuity
D7 (A)	9	D9 (B)	5	Yes
	13		3	

3. Check continuity between main power window and door lock/unlock switch connector D7 (A) terminals 9, 13 and ground.

Main power window and door lock/unlock switch connector	Terminal	Ground	Continuity
D7 (A)	9		No
	13		

Is the inspection result normal?

YES >> Replace front power window motor LH. Refer to GW-19, "Removal and Installation".

NO >> Repair or replace harness or connectors.

DRIVER SIDE : Special Repair Requirement

INFOID:0000000005461404

1. PERFORM INITIALIZATION PROCEDURE

Perform initialization procedure. Refer to PWC-9, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement" and PWC-9, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> GO TO 2

2. CHECK ANTI-PINCH OPERATION

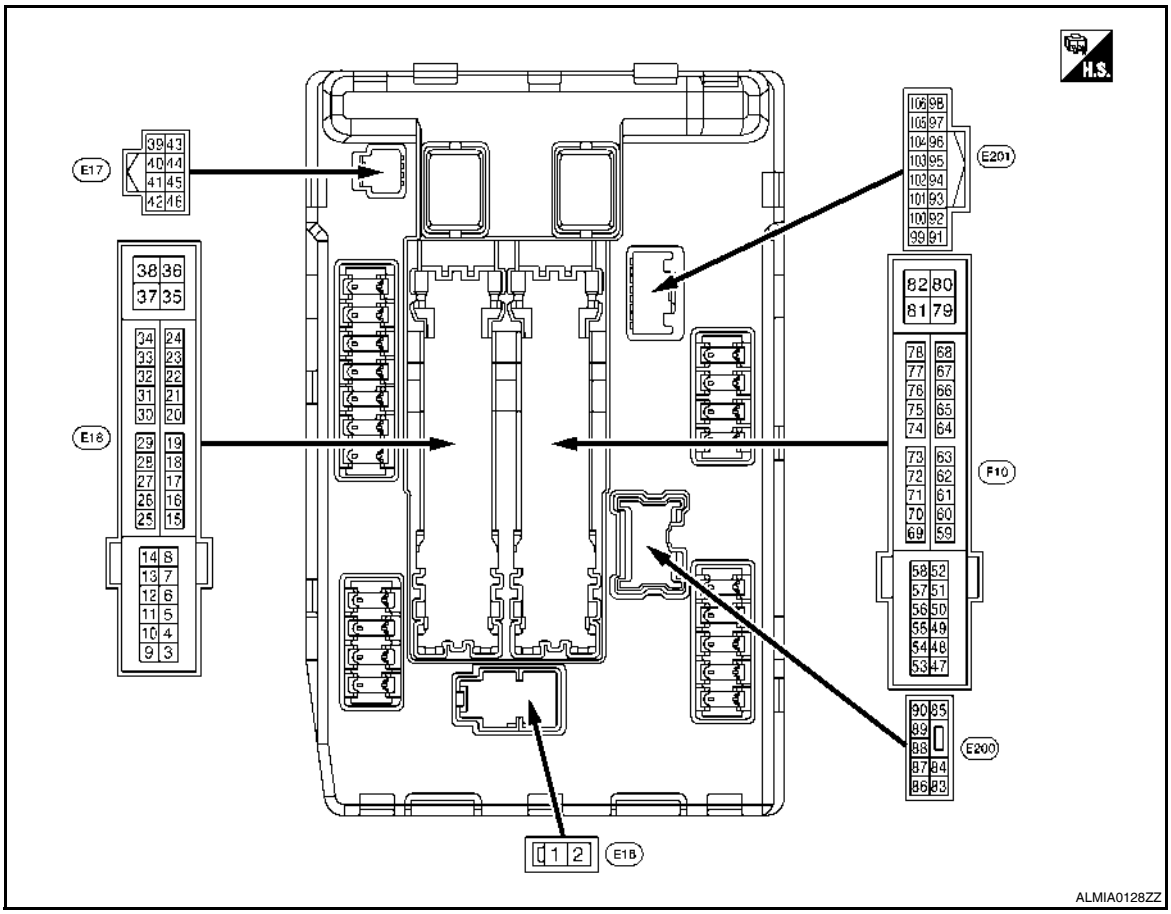
Check anti-pinch operation. Refer to PWC-9, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement" and PWC-9, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement".

>> End.

PASSENGER SIDE

Monitor Item	Condition	Value/Status
CDL LOCK SW	Other than power door lock switch LOCK	OFF
	Power door lock switch LOCK	ON
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF
	Power door lock switch UNLOCK	ON
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF
	Driver door key cylinder LOCK position	ON
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF
	Driver door key cylinder UNLOCK position	ON
HAZARD SW	When hazard switch is not pressed	OFF
	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF
	Trunk lid opener cancel switch ON	ON
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF
	While the trunk lid opener switch is turned ON	ON
TRNK/HAT MNTR	Trunk lid closed	OFF
	Trunk lid opened	ON
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
	When PANIC button of Intelligent Key is pressed	ON
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF
	When UNLOCK button of Intelligent Key is pressed and held	ON
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V
	When outside of the vehicle is dark	Close to 0 V
REQ SW-DR	When front door request switch is not pressed (driver side)	OFF
	When front door request switch is pressed (driver side)	ON
REQ SW-AS	When front door request switch is not pressed (passenger side)	OFF
	When front door request switch is pressed (passenger side)	ON
REQ SW-RL	When rear door request switch is not pressed (driver side)	OFF
	When rear door request switch is pressed (driver side)	ON
REQ SW-RR	When rear door request switch is not pressed (passenger side)	OFF
	When rear door request switch is pressed (passenger side)	ON
REQ SW-BD/TR	When trunk request switch is not pressed	OFF
	When trunk request switch is pressed	ON
PUSH SW	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (LG)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (Y)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
6 (L)	Ground	Daytime light relay power supply (Canada models only)	Output	Ignition switch OFF		Battery voltage
7 (GR)	Ground	Tail, license plate lamps & interior lamps	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
10 (BR)	Ground	ECM relay power supply	Output	Ignition switch OFF (For a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage

Display contents of CONSULT	Fail-safe	Cancellation
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED*	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2562: LO VOLTAGE	• Inhibit engine cranking • Inhibit electronic steering column lock*	100 ms after the power supply voltage increases to more than 8.8 V
B2601: SHIFT POSITION*	Inhibit electronic steering column lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION*	Inhibit electronic steering column lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h or more
B2603: SHIFT POSI STATUS*	Inhibit electronic steering column lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever transmission range switch signal: Except P and N positions (0 V)
B2604: TRANSMISSION RANGE SWITCH*	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever transmission range switch signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever transmission range switch signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: TRANSMISSION RANGE SWITCH*	Inhibit electronic steering column lock	500 ms after any of the following BCM recognition conditions is fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever transmission range switch signal: Except P and N positions (0 V) - Transmission range switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever transmission range switch signal: P or N position (battery voltage) - Transmission range switch signal (CAN): ON
B2606: S/L RELAY*	Inhibit engine cranking	500 ms after the following CAN signal communication status has become consistent • Electronic steering column lock relay signal (Request signal) • Electronic steering column lock relay signal (Condition signal)

CAN COMMUNICATION CIRCUIT

Diagnosis Procedure

INFOID:0000000005519376

Regarding Wiring Diagram information, refer to LAN-30, "Wiring Diagram - CAN SYSTEM -".

1.CONNECTOR INSPECTION

1. Turn the ignition switch OFF.
2. Disconnect the battery cable from the negative terminal.
3. Disconnect all the unit connectors on CAN communication system.
4. Check terminals and connectors for damage, bend and loose connection.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Repair the terminal and connector.

2.CHECK HARNESS CONTINUITY (SHORT CIRCUIT)

Check the continuity between the data link connector terminals.

Data link connector			Continuity
Connector No.	Terminal No.		
M22	6	14	Not existed

Is the inspection result normal?

YES >> GO TO 3.
NO >> Check the harness and repair the root cause.

3.CHECK HARNESS CONTINUITY (SHORT CIRCUIT)

Check the continuity between the data link connector and the ground.

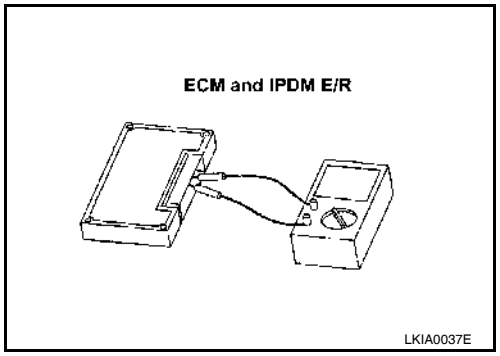
Data link connector		Ground	Continuity
Connector No.	Terminal No.		
M22	6		Not existed
	14		Not existed

Is the inspection result normal?

YES >> GO TO 4.
NO >> Check the harness and repair the root cause.

4.CHECK ECM AND IPDM E/R TERMINATION CIRCUIT

1. Remove the ECM and the IPDM E/R.
2. Check the resistance between the ECM terminals.



ECM		Resistance (Ω)
Terminal No.		
98	97	Approx. 108 – 132

3. Check the resistance between the IPDM E/R terminals.

IPDM E/R		Resistance (Ω)
Terminal No.		
40	39	Approx. 108 – 132

Is the measurement value within the specification?

YES >> GO TO 5.
NO >> Replace the ECM and/or the IPDM E/R.

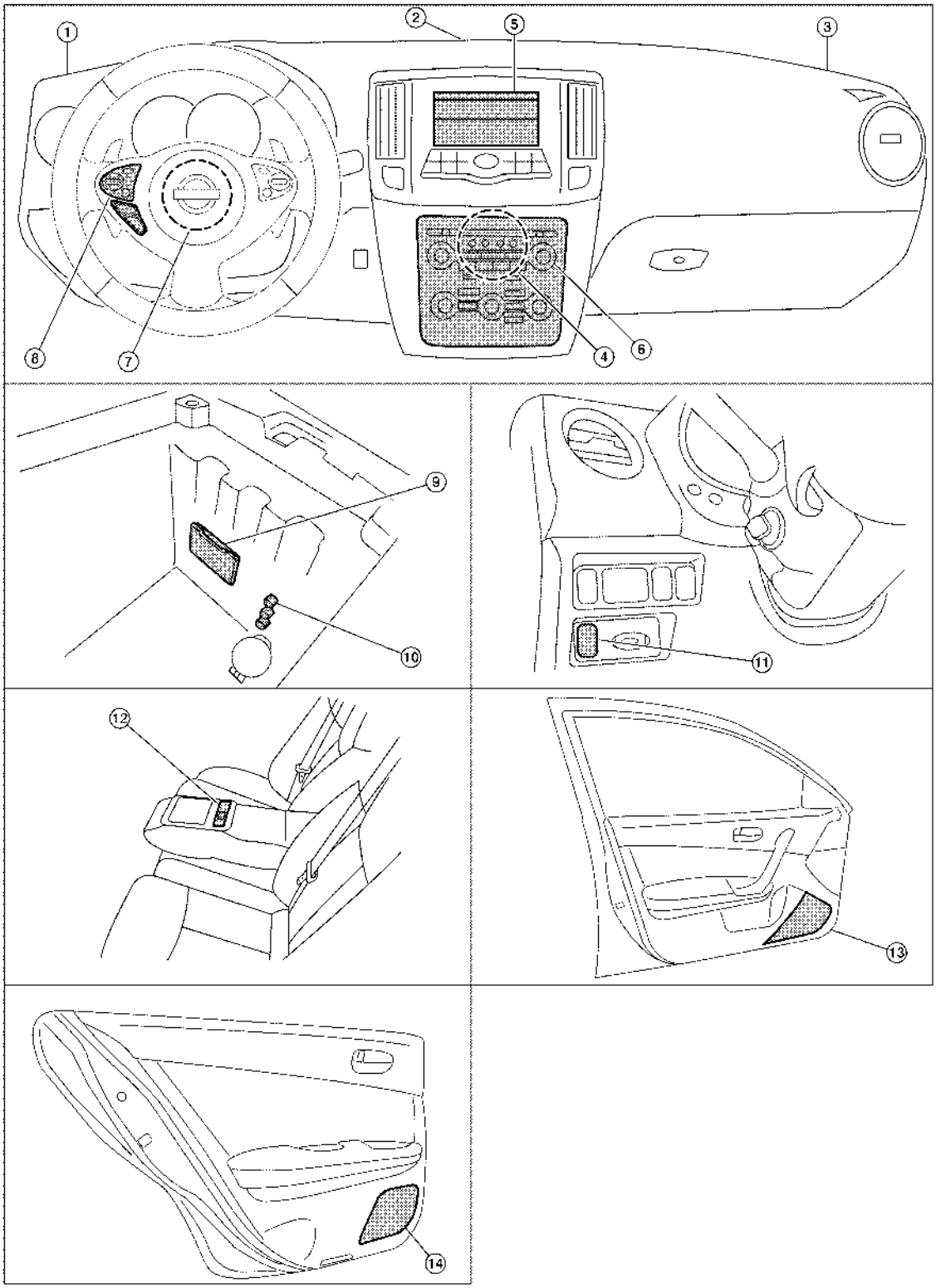
Symptom	Possible cause	Reference page
Inoperative	• Satellite radio tuner power or ground circuit • Satellite radio tuner communication circuit • Satellite radio tuner	• AV-238, "SATELLITE RADIO TUNER : Diagnosis Procedure" • AV-267, "SATELLITE RADIO TUNER : Diagnosis Procedure" • AV-335, "Removal and Installation"
Right or left channel does not sound	• Satellite radio tuner right channel audio signal circuit • Satellite radio tuner left channel audio signal circuit • Satellite radio tuner	• AV-270, "SATELLITE RADIO TUNER : Diagnosis Procedure" • AV-270, "SATELLITE RADIO TUNER : Diagnosis Procedure" • AV-335, "Removal and Installation"

HANDS-FREE PHONE

Symptom	Possible cause	Reference page
Inoperative	• Bluetooth control unit power and ground circuit • Bluetooth control unit	• AV-240, "BLUETOOTH CONTROL UNIT : Diagnosis Procedure" • AV-344
Steering switch does not operate	• Steering switch • Bluetooth control unit	• AV-337 • AV-344
Voice activated control does not operate	• Microphone • Steering switch • Bluetooth control unit	• AV-342 • AV-337 • AV-344

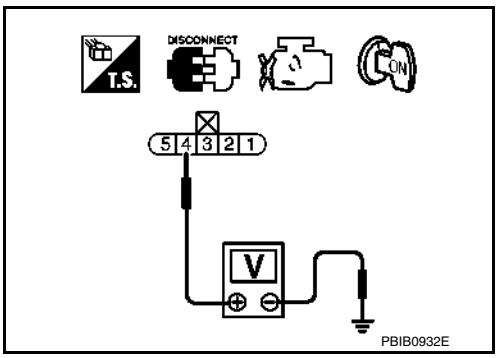
Component Parts Location

INFOID:0000000005519031



AWNIA1919ZZ

4. Check the voltage between “fuel level sensor unit and fuel pump” harness connector and ground.



Fuel level sensor unit and fuel pump		Ground	Voltage
Connector	Terminal		
B42	4	Ground	Approx. 5 V

Is the inspection result normal?

YES >> GO TO 5.
NO >> GO TO 4.

4. DETECT MALFUNCTIONING PART

Check the following.
- Harness connectors B10, E29
- Harness for open or short between ECM and “fuel level sensor unit and fuel pump”

>> Repair open circuit, short to ground or short to power in harness or connector.

5. CHECK FUEL TANK TEMPERATURE SENSOR GROUND CIRCUIT FOR OPEN AND SHORT

1. Turn ignition switch OFF.
2. Disconnect ECM harness connector.
3. Check the continuity between “fuel level sensor unit and fuel pump” harness connector and ECM harness connector.

Fuel level sensor unit and fuel pump		ECM		Continuity
Connector	Terminal	Connector	Terminal	
B42	5	E10	104	Existed

4. Also check harness for short to ground and short to power.

Is the inspection result normal?

YES >> GO TO 7.
NO >> GO TO 6.

6. DETECT MALFUNCTIONING PART

Check the following.
- Harness connectors B1, M6
- Harness connectors E30, M1
- Harness for open or short between “fuel level sensor unit and fuel pump” and ECM

>> Repair open circuit, short to ground or short to power in harness or connector.

7. CHECK FUEL TANK TEMPERATURE SENSOR

Refer to EC-272, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.
NO >> Replace “fuel level sensor unit and fuel pump”. Refer to FL-6, "Removal and Installation".

8. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:0000000010094965

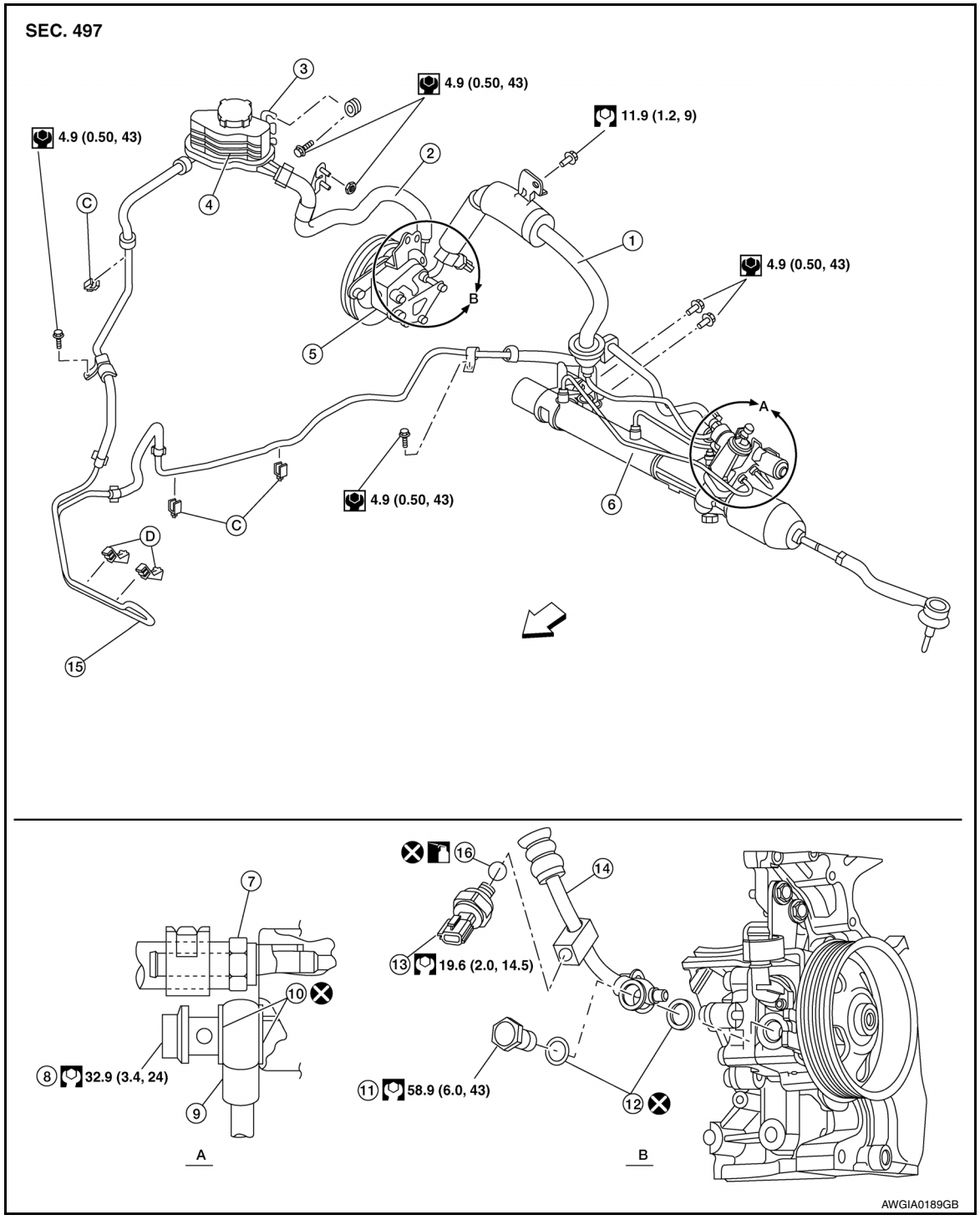
1. CHECK FUEL TANK TEMPERATURE SENSOR

1. Turn ignition switch OFF.

HYDRAULIC LINE

Exploded View

INFOID:0000000009465784

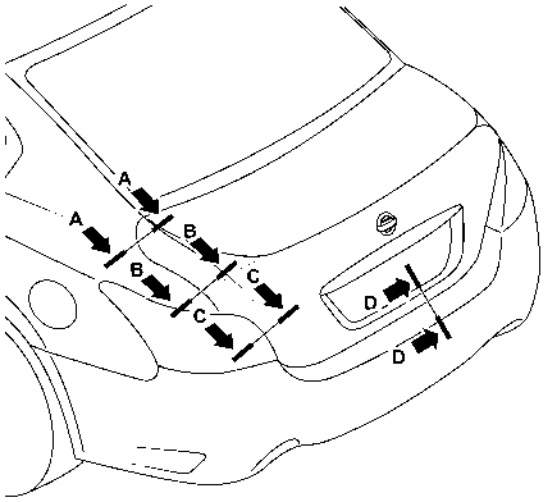


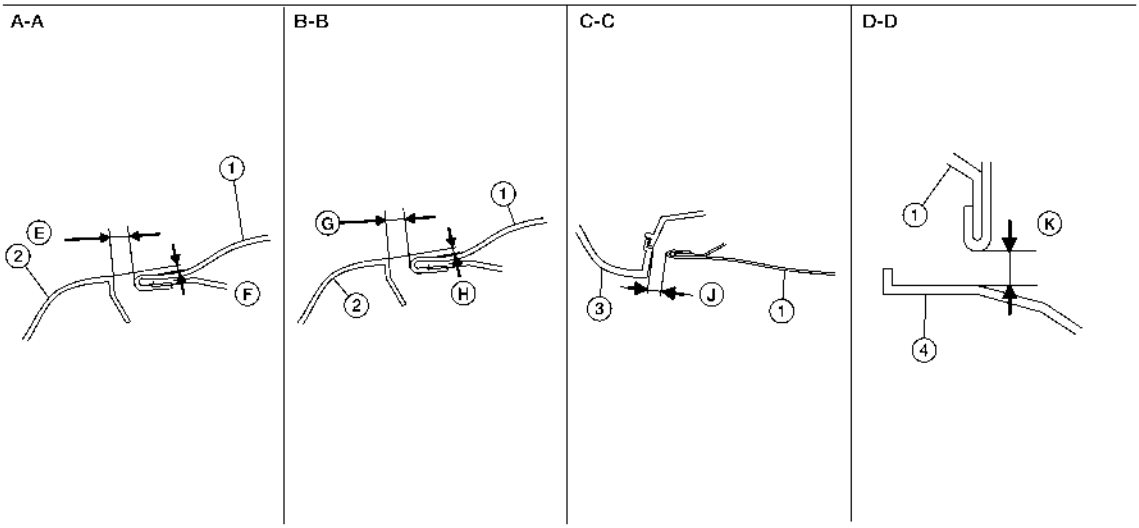
1. High pressure hose
2. Suction hose
3. Reservoir tank bracket
4. Reservoir tank
5. Oil pump assembly
6. Steering gear assembly
7. Low pressure piping
8. Eye bolt
9. High pressure piping
10. Copper sealing washers
11. Eye bolt
12. Copper sealing washers
13. Power steering pressure sensor
14. High pressure hose piping
15. Power steering fluid cooler

TRUNK LID ASSEMBLY : Adjustment

INFOID:0000000009471778

SEC. 843





AWKIA1553GB

1. Trunk lid assembly
2. Body side outer
3. Rear combination lamp
4. Rear bumper fascia
⇦ Front

Check the clearance and the surface height between trunk lid and each part by visual inspection and tactile feel.

Connector No.	E6
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE

H.S.

7P 6P 5P 4P 3P 2P 1P
16P 15P 14P 13P 12P 11P 10P 9P 8P

Terminal No.	Color of Wire	Signal Name
9P	GR	–

Connector No.	E17
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

42 41 40 39
46 45 44 43

Terminal No.	Color of Wire	Signal Name
39	P	CAN-L
40	L	CAN-H
41	B	GND (SIGNAL)

Connector No.	E18
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Color	WHITE

H.S.

9 10 11 12 13 14
3 4 5 6 7 8

25 26 27 28 29 30 31 32 33 34
15 16 17 18 19 20 21 22 23 24

37 38
35 36

Terminal No.	Color of Wire	Signal Name
7	GR	TAIL/ILLUMI
12	B	GND (POWER)

Connector No.	E21
Connector Name	JOINT CONNECTOR-E03
Connector Color	WHITE

H.S.

4 3 2 1

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–

ABLIA4004GB