CONTENTS

PRECAUTION4	HE
PRECAUTIONS	cati HE tion
SIONER"4	SYS
Precaution Necessary for Steering Wheel Rota- tion after 12V Battery Disconnect4 Service Notice	POW PO
Precaution for Work5	LUMI LUI
PREPARATION6	tion
PREPARATION	CLIM CLI terr
CLIP LIST	CLI tem CLI
SYSTEM DESCRIPTION8	safe
COMPONENT PARTS8	HEAT HE
POWER SEAT SYSTEM	HE.
cation8 POWER SEAT SYSTEM : Component Descrip-	ECU
tion	
LUMBAR SUPPORT SYSTEM	Ref Fail
Parts Location9 LUMBAR SUPPORT SYSTEM : Component De- scription9	HEA SIDE Ref
CLIMATE CONTROLLED SEAT SYSTEM9 CLIMATE CONTROLLED SEAT SYSTEM : Com- ponent Parts Location	HEA GER Ref
HEATED SEAT SYSTEM11	WIR

HEATED SEAT SYSTEM : Component Parts Lo- cation	F
SYSTEM13	
OWER SEAT SYSTEM13 POWER SEAT SYSTEM : System Description13	Η
UMBAR SUPPORT SYSTEM 13 LUMBAR SUPPORT SYSTEM : System Description 13	I
CLIMATE CONTROLLED SEAT SYSTEM13 CLIMATE CONTROLLED SEAT SYSTEM : Sys-	SE
tem Diagram	K
CLIMATE CONTROLLED SEAT SYSTEM : Fail- safe	L
IEATED SEAT SYSTEM15HEATED SEAT SYSTEM : System Diagram16HEATED SEAT SYSTEM : System Description16	M
CU DIAGNOSIS INFORMATION17	1 V I
LIMATE CONTROLLED SEAT CONTROL INIT17	Ν
Reference Value	0
IEATED SEAT CONTROL UNIT (DRIVER SIDE)	P
IEATED SEAT CONTROL UNIT (PASSEN- SER SIDE)22 Reference Value	
VIRING DIAGRAM23	

А

С

D

Е

SEAT

SECTION SE

POWER SEAT CONTROL SYSTEM (PAS- SENGER SIDE)
LUMBAR SUPPORT SYSTEM
CLIMATE CONTROLLED SEAT SYSTEM 25 Wiring Diagram
HEATED SEAT SYSTEM
BASIC INSPECTION 28
DIAGNOSIS AND REPAIR WORK FLOW 28 Work Flow 28
DTC/CIRCUIT DIAGNOSIS 29
POWER SUPPLY AND GROUND CIRCUIT 29
CLIMATE CONTROLLED SEAT CONTROL UNIT 29 CLIMATE CONTROLLED SEAT CONTROL UNIT : Diagnosis Procedure
CLIMATE CONTROLLED SEAT CONTROL UNIT : Component Inspection 32
SEAT CUSHION HEATER
SEATBACK HEATER
HEATED SEAT SWITCH
CLIMATE CONTROLLED SEAT SWITCH 38
Component Function Check
Component Inspection 40
SEATBACK THERMAL ELECTRIC UNIT 41 Component Function Check
Diagnosis Procedure
SEATBACK THERMAL ELECTRIC UNIT
SENSOR
Diagnosis Procedure
SEAT CUSHION THERMAL ELECTRIC UNIT 45
Component Function Check
SEAT CUSHION THERMAL ELECTRIC UNIT
SENSOR
Diagnosis Procedure

CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR 49 Component Function Check 49 Diagnosis Procedure 49
CLIMATE CONTROLLED SEAT SWITCH IN- DICATOR
CLIMATE CONTROLLED SEAT BLOWER FILTER
HEATED SEAT SWITCH55Component Function Check55Diagnosis Procedure55Component Inspection56
HEATED SEAT RELAY57Component Function Check57Diagnosis Procedure57Component Inspection58
SEATBACK HEATER
HEATED SEAT SWITCH INDICATOR
SYMPTOM DIAGNOSIS 62
CLIMATE CONTROLLED SEAT DOES NOT OPERATE
TEMPERATURE ADJUSTMENT IS IMPOSSI- BLE
SEAT CUSHION
SEATBACK
CLIMATE CONTROLLED SEAT ACTIVATES ONCE BUT STOPS IMMEDIATELY
SEAT SWITCH INDICATOR IS NOT ILLUMI- NATED IN HEAT OR COOL POSITION
HEATED SEAT DOES NOT OPERATE
SEATBACK HEATER ONLY DOES NOT OP- ERATE

Diagnosis Procedure68	3
CANNOT ADJUST HEATED SEAT TEMPER- ATURE	
HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON	
SQUEAK AND RATTLE TROUBLE DIAG- NOSES	3
REMOVAL AND INSTALLATION77	,
FRONT SEAT	7
SEATBACK85 SEATBACK : Disassembly and Assembly85	

SEAT CUSHION87	
SEAT CUSHION : Disassembly and Assembly87	A
CLIMATE CONTROLLED SEAT UNIT	D
sembly and Assembly90	
REAR SEAT92	
Exploded View92	
Removal and Installation93	
Disassembly and Assembly93	i
POWER SEAT SWITCH95	. D
Removal and Installation95	
HEATED SEAT SWITCH96	-
Removal and Installation96	
CLIMATE CONTROLLED SEAT SWITCH97	,
Removal and Installation97	
CLIMATE CONTROLLED SEAT BLOWER	
FILTER	
Removal and Installation98	G

SE

Н

Κ

L

M

Ν

0

Ρ

< PRECAUTION >

PRECAUTION PRECAUTIONS

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

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 AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 "SRS AIR BAG".
- Never 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.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the 12V battery, and wait at least 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation after 12V Battery Disconnect

INFOID:000000008142126

For vehicle with steering lock unit, if the 12V battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the 12V battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

- Connect both 12V battery cables. NOTE: Supply power using jumper cables if 12V battery is discharged.
- 2. Turn the ignition switch to ACC position.
 - (At this time, the steering lock will be released.)
- 3. Disconnect both 12V battery cables. The steering lock will remain released with both 12V battery cables disconnected and the steering wheel can be turned.
- 4. Perform the necessary repair operation.
- 5. When the repair work is completed, re-connect both 12V battery cables. With the brake pedal released, turn the ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the ignition switch is turned to LOCK position.)
- Perform All DTC Reading using CONSULT and delete DTC. NOTE:

Multiple DTCs are detected when 12V battery cable is disconnected while ignition switch is in ACC position.

PRECAUTIONS

Service Notice	INFOID:00000008142127
 When removing or installing various parts, place a cloth or padding on scratches. 	to the vehicle body to prevent
 Handle trim, molding, instruments, grille, etc. carefully during removing or in damage them. Apply sealing compound where necessary when installing parts. When applying sealing compound, be careful that the sealing compound doe When replacing any metal parts (for example body outer panel, members, etc.) 	es not protrude from parts.
tion measures. Precaution for Work	INFOID:00000008142128

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- · When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component Е with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.

< PRECAUTION >

- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.

Then rub with a soft and dry cloth.

Н Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.

Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.

- Never use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

Κ

SE

А

D

F

Μ

Ν

Ρ

PREPARATION

< PREPARATION >

PREPARATION PREPARATION

Special Service Tool

INFOID:000000008142129

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

Tool number (Kent-Moore No.) Tool name		Description
(J39570) Chassis ear	SIIA0993E	Locates the noise
(J43980) NISSAN Squeak and Rattle Kit	SIIA0994E	Repairs the cause of noise
Commercial Service Tool		
	J	INFOID:000000008142130
Tool name	DI	INFOID:00000008142130 Description
	DI CORRECTION SIA0995E	

PIIB7923J

< PREPARATION > CLIP LIST

Clip List

А

INFOID:000000008142131

Shapes	Removal & Installation	Shapes	Removal & Installation	
\$ \$ \$	Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.	Clip A Clip B	Removal: Finisher Clip A	
T TT ST	Removal: Remove with a clip remover.	Clip A Clip B (Grommet)	Removal: Flat-bladed screwdriver Body panel Clip A Clip B (Grommet)	
	Removal: Push (Do not remove center pin by hitting it.) Push		Removal: Holder portion of clip must be spread out to remove rod.	
	Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.		Removal: 1. Screw out with a Phillips screwdriver. 2. Remove female portion with flat-bladed screwdriver.	S
	Removal:		Removal: Rotate 45° to remove. Removal:	
	Removal:		Removal:	

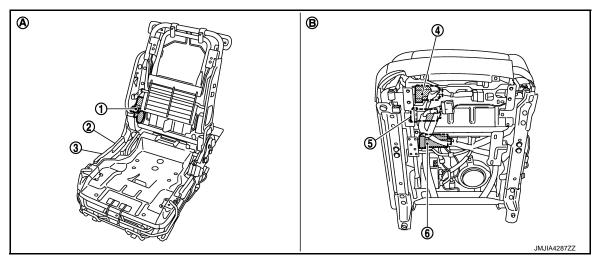
JMJIA3734GB

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS POWER SEAT SYSTEM

POWER SEAT SYSTEM : Component Parts Location

INFOID:000000008142132



- 1. Reclining motor
- 4. Sliding motor

- 2. Reclining switch
- 5. Lifting motor (front)
 - Back side of seat cushion
- 3. Lifting switch/sliding switch
- 6. Lifting motor (rear)

A. View with seat cushion pad and seat B. back pad are removed

INFOID:000000008142133

Item	Function

POWER SEAT SYSTEM : Component Description

Item	Function
BCM [*]	Supplies at all times the power received from 12V battery to power seat switch.
Power seat switch	Built-in reclining switch, sliding switch and lifting switch, controls the power supplied to each motor.
Reclining motor	With the power supplied from power seat switch, operates the forward and backward movement of seatback.
Sliding motor	With the power supplied from power seat switch, operates the forward and backward slide of seat.
Lifting motor (front/rear)	With the power supplied from power seat switch, operates the up and down movement of seat cushion.

*: Passenger side

LUMBAR SUPPORT SYSTEM

< SYSTEM DESCRIPTION >

LUMBAR SUPPORT SYSTEM : Component Parts Location

INFOID:000000008142134



В

С

D

Ε

F

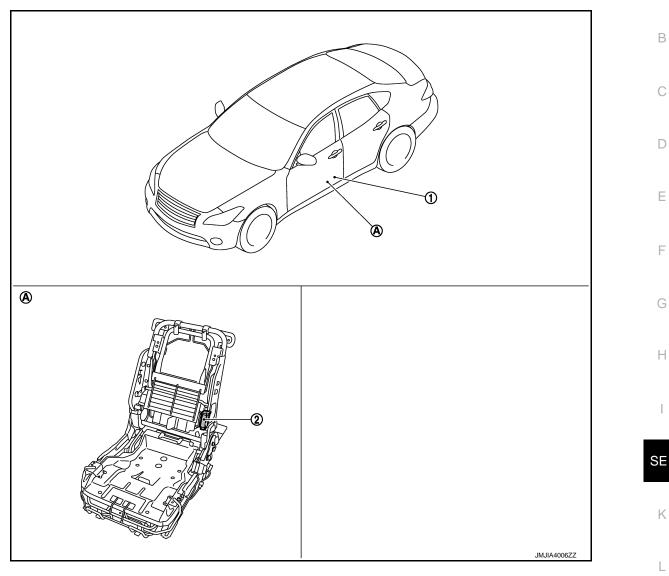
G

Н

Κ

L

Μ



Lumbar support switch 1.

2. Lumbar support motor

View with seatback pad is removed Α.

LUMBAR SUPPORT SYSTEM : Component Description

INFOID:000000008142135

Item	Function	-
BCM [*]	Supplies at all times the power received from 12V battery to lumber support switch.	-
Lumbar support switch	Controls the power supplied to lumbar support motor.	-
Lumbar support motor	With the power supplied from lumbar support switch, operates forward and backward movement of seatback support unit.	-
assenger side		• F

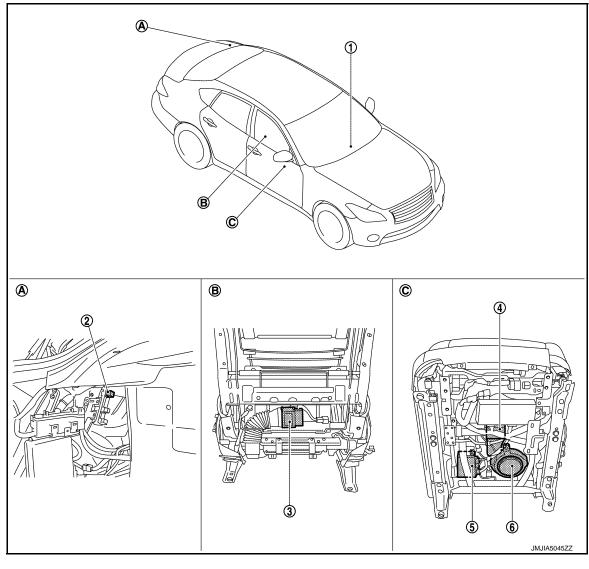
*: Passenger side

CLIMATE CONTROLLED SEAT SYSTEM

< SYSTEM DESCRIPTION >

CLIMATE CONTROLLED SEAT SYSTEM : Component Parts Location

INFOID:000000008142136



- 1. Climate controlled seat switch
- 4. Seat cushion thermal electric unit
- A. View with trunk side finisher LH removed
- 2. Climate controlled seat relay
- 5. Climate controlled seat control unit

View with seatback board removed

- 3. Seatback thermal electric unit
- 6. Climate controlled seat cushion blower motor
 - Backside of seat cushion

C.

CLIMATE CONTROLLED SEAT SYSTEM : Component Description

В.

INFOID:000000008142137

Item	Function
Climate controlled seat relay	Supplies power to the climate controlled seat control unit in accordance with the key switch position that is ON or START.
Climate controlled seat control unit	Installed in the seat cushion backside and controls the seat cushion blower mo- tor, seatback thermal electric unit, and seat cushion thermal electric unit in ac- cordance with the input signal.
Climate controlled seat switch	Installed in the center console and transmits signals to climate controlled seat control unit in accordance with the HEAT (heated airflow) or COOL (cooled airflow) switch operation and the temperature switch operation.

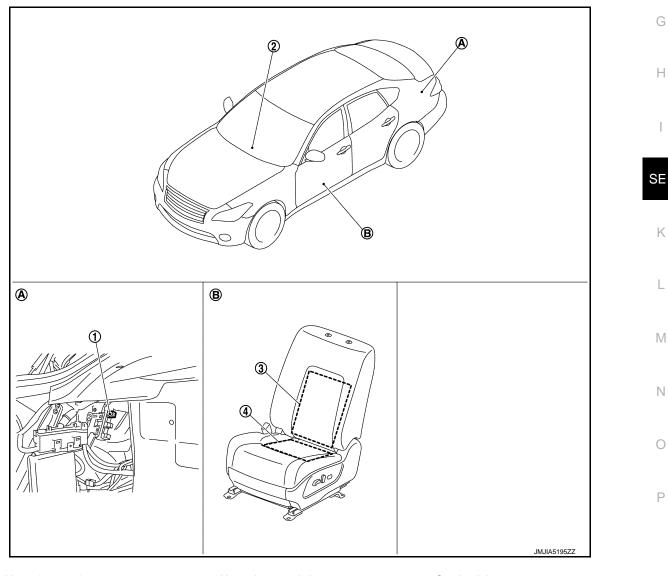
< SYSTEM DESCRIPTION >

Item	Function
Seat cushion blower motor	Installed in the seat cushion backside and sends the airflow to the seat cushion thermal electric unit in accordance with the control from the climate controlled seat control unit.
Seatback thermal electric unit	Installed in the seatback backside and heats or cools the airflow from the climate controlled seat blower motor in accordance with the control from the climate controlled seat control unit.
Seat cushion thermal electric unit	Installed in the seat cushion backside and heats or cools the airflow from the cli- mate controlled seat blower motor in accordance with the control from the cli- mate controlled seat control unit.
Seatback thermal electric unit sensor	Measures seatback temperature.
Seat cushion thermal electric unit sensor	Measures seat cushion temperature.
Climate controlled seat switch indicator	Turn ON the indicator that indicates the operating status of climate controlled seat HEAT or COOL mode.

HEATED SEAT SYSTEM

HEATED SEAT SYSTEM : Component Parts Location

INFOID:000000008142138



1. Heated seat relay

- 2. Heated seat switch
- 3. Seatback heater

< SYSTEM DESCRIPTION >

- 4. Seat cushion heater (with integrated in heated seat control unit)
- A. View with trunk side finisher LH re- B. Inside of front seat moved

HEATED SEAT SYSTEM : Component Description

INFOID:000000008142139

Item	Function
Heated seat control unit	 Heated seat control unit is integrated in seat cushion heater. Controls heated seat temperature and is independently placed in each seat cushion (driver seat and passenger seat).
Heated seat switch	 Adjusts heated seat temperature and deactivates heated seat. Equips indicator that indicates the operating condition.
Seat cushion heater	 Warms seat cushion. Contains heat sensor that outputs seat cushion heater temperature to heated seat control unit.
Seatback heater	Warms seatback.
Heated seat relay	Supplies power to the heated seat being controlled by ignition power supply.

< SYSTEM DESCRIPTION >				
SYSTEM				
POWER SEAT SYSTEM				А
POWER SEAT SYSTEM : System	n Descriptic	on	INFOID:000000008142140	В
Power seat can be operated regardless of plied to power seat switch.	the ignition sv	witch position, because pow	ver supply is always sup-	
SLIDING OPERATION While operating the sliding switch located front and back position adjustment possible		switch, sliding motor operation	ates and makes the seat	С
RECLINING OPERATION While operating the reclining switch located	d in power seat		rates and makes the seat	D
back forward and backward position adjust	ment possible.			Е
LIFTING OPERATION While operating the lifting switch located in ion up and down position adjustment possil LUMBAR SUPPORT SYSTEM		ritch, lifting motor operates a	and makes the seat cush-	F
	Svotom Doc	variation		
LUMBAR SUPPORT SYSTEM : S	-	-	INFOID:000000008142141	G
 Lumbar support can operate regardless of plied to lumber support switch. While operating the lumbar support switch 	U			
ward operation of seatback support. CLIMATE CONTROLLED SEAT				Н
		Svotom Diagram		I
CLIMATE CONTROLLED SEAT S	STSTEIVI.	System Diagram	INFOID:00000008142142	
			Seatback thermal electric unit	SE
		Seatback thermal electric unit operation signal	TEU	K
		Seatback thermal electric unit		
Climate controlled seat switch		temperature signal	Temperature sensor	L
HEAT/COOL LO/MID/HI			Seat cushion	M
	Climate controlled seat control unit	Seat cushion thermal electric unit operation signal	thermal electric unit	N
Indicator Indicator signal				Ν
		Seat cushion thermal electric unit temperature signal	Temperature sensor	0
				D

Seat cushion blower motor speed control signal

Seat cushion blower motor

JMJIA4009GB

SYSTEM

< SYSTEM DESCRIPTION >

CLIMATE CONTROLLED SEAT SYSTEM : System Description

INFOID:000000008142143

- The climate controlled seat system is controlled by the climate controlled seat control unit.
- Operation of the climate controlled switch sends heated or cooled airflow and adjusts the seat temperature.

SEAT CUSHION AND SEATBACK TEMPERATURE ADJUSTMENT FUNCTION

- One thermal electric unit is installed in each seat cushion and seatback. The unit heats or cools, sends airflow to the seat surface, and adjusts the seat temperature.
- The thermal electric unit is a heat exchanger that has a function to heat or cool the airflow from the seat cushion blower motor. By changing the direction of the current from the power supply, the unit takes or gives heat, and adjusts exchange process depending on voltage.

CAUTION:

- The thermal electric unit has a dual-climate function that allows one side to operate at a high temperature and the other to operate at a low temperature simultaneously.
- Before starting always turn OFF the switch and check that the electric unit is cold.

FAIL-SAFE

The fail-safe function is adopted for the climate controlled seat control to <u>SE-14, "CLIMATE CONTROLLED</u> <u>SEAT SYSTEM : Fail-safe"</u>.

CLIMATE CONTROLLED SEAT SYSTEM : Fail-safe

INFOID:000000008142144

- Climate controlled seat control unit equips fail-safe function.
- When a malfunction occurs in the systems shown below, climate controlled seat control unit stops output.

Malfunction	Malfunctioning condition
The temperature difference between the seatback ther- mal electric unit and seat cushion thermal electric unit is more than 40°C	 When it detects for 4 seconds that the temperature difference between the seatback thermal electric unit and seat cushion thermal electric unit is more than 40°, it stops the output to the thermal electric unit, activates the climate controlled seat blower motor at the maximum position, and sends the external airflow for 30 seconds. If the temperature difference is still more than 40°C after 30 seconds pass, it stops all output and enters the system OFF condition. When the temperature difference between seatback thermal electric unit and seat cushion thermal electric unit becomes less than 20°C, the system recovers automatically. If it detects that the temperature difference is more than 40°C after the automatic system recovery, it immediately stops all output and enters the system OFF condition. NOTE: When the switch operation is performed before entering the system OFF condition, the fail-safe mode is reset.
The temperature of thermal electric unit is more than 110°C in the HEAT mode (any thermal electric unit in the seatback or seat cushion)	 When it detects for 4 seconds that the temperature of the thermal electric unit is more than 110°C, it stops the output to the thermal electric unit, activates the climate controlled seat blower motor at the maximum position, and sends the external airflow for 30 seconds. If the temperature does not become less than 105°C after 30 seconds pass, it stops all output and enters the system OFF condition. When the temperature of the thermal electric unit becomes less than 105°C, the system recovers automatically. If it detects that the temperature of the thermal electric unit is more than 110°C after the automatic system recovery, it immediately stops all output and enters the system OFF condition.
The temperature of the thermal electric unit is more than 45°C in the COOL mode (any thermal electric unit in the seatback or seat cushion)	 When it detects for 4 seconds that the temperature of the thermal electric unit is more than 45°C and less than 70°C, it starts the temperature monitoring of the thermal electric unit at 3 second intervals. While monitoring, if it detects that the temperature continuously rises 2°C or more 4 times or reaches 70°C or more, it stops all output and enters the system OFF condition. If it detects other results of monitoring, it continues activating in the COOL mode.
Thermal electric unit sensor open circuit (in either the back and the cushion)	• When it detects for 4 seconds that the thermal electric unit sensor is an open circuit, it stops all output and enters the system OFF condition.

SYSTEM

< SYSTEM DESCRIPTION >

Malfunction	Malfunctioning condition
Climate controlled seat blower motor system open circuit (in the cushion blower)	 When it detects for 2 seconds that climate controlled seat blower motor is an open circuit while the climate controlled seat is being activated, and the battery status has been stable for the same 2 second period, it stops output to the thermal electric unit. When it detects for 10 seconds that the climate controlled seat blower motor is an open circuit while the climate controlled seat is being activated, and the battery status has been stable for the same 10second period, it stops all output and enters the system OFF condition. NOTE: After detecting the climate seat blower motor system open circuit for 2 seconds, the system recovers automatically if the activation of the climate controlled seat blower motor is detected for 1 second or more.
Switch input out of the specified range (either heat input or cool input)	 When it detects for 4 seconds that the rotary switch input is less than 30% of the vehicle battery voltage, it stops all output and enters the system OFF condition. When the switch input returns to a value within the specified range, the system recovers automatically.
HEAT or COOL switch input out of the specified range	 During the standby mode, heating or cooling states, if the rotary switch input is 6% or less of the vehicle battery voltage, it stops all output and enters the system OFF condition. When the switch input returns to a value within the specified range, the system recovers automatically.
System voltage out of range	 If the system voltage at the climate controlled seat control unit falls outside of the 8.5 to 16.5 V operating range, it stops all output after a 500ms time period. When the system voltage returns to the normal operating range (10.5-15.5V with a 500ms hysteresis), the system recovers automatically.

*: System voltage is the voltage between the climate controlled seat control unit power source and ground.

NOTE:

When the ignition status changes to OFF during the fail-safe mode, the control unit shall enter the OFF condition. If the ignition is turned ON, the system shall return to the standby mode. If the system enters in the fail-safe mode again after performing ignition cycle, start the diagnosis.

HEATED SEAT SYSTEM

SE

L

Μ

Ν

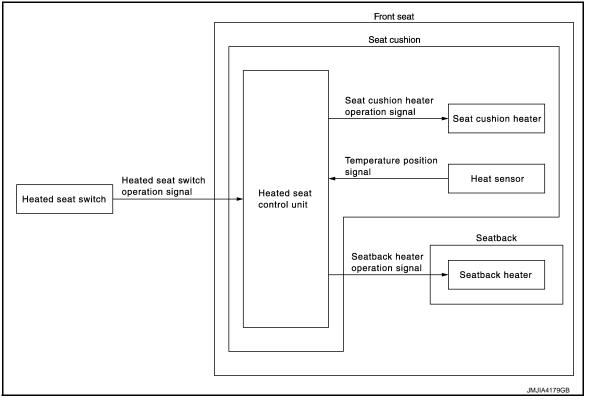
Ο

Ρ

SYSTEM

< SYSTEM DESCRIPTION >

HEATED SEAT SYSTEM : System Diagram



HEATED SEAT SYSTEM : System Description

INFOID:000000008142146

INFOID:000000008142145

- Heated seat is activated by heated seat switch while ignition switch is ON, and has the function to warm seat cushion and seatback.
- Heated seat equips the 6-stage temperature adjustment function that adjusts temperature by operating heated seat switch to the optimal position.
- Heated seat equips a thermostat in heater unit to prevent heater unit overheating.

OPERATION DESCRIPTION

- When operating heated seat switch to any position between 1 and 6 while ignition switch is ON, indicator illuminates, heated seat control unit controls heater unit, and warms seat cushion and seatback.
- Heat sensor that is built in seat cushion heater detects seat cushion heater temperature and outputs to heated seat control unit.
- Heated seat control unit monitors heated seat switch position and heat sensor temperature, and interrupts ground circuit to heater unit when heat sensor temperature reaches preset temperature.
- Heated seat control unit adjusts temperature to preset temperature by interrupting ground circuit to heater unit.

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION CLIMATE CONTROLLED SEAT CONTROL UNIT

Reference Value

INFOID:000000008142147 B

А

С

D

Е

F

TERMINAL LAYOUT Image: state st

PHYSICAL VALUES

Termin (Wire		Description		Condition		Voltage (V)	(
+	-	Signal name	Input/ Output	Condition			(Approx.)	
52 (L/B)	Ground	Climate controlled seat switch power supply	Output	Ignition switch ON			12	
53				Climate controlled	COOL		12	
(Y/W)	Ground	COOL switch indicator signal	Output	seat switch	Other the abo	han the ove	0	
						HI	2.6 - 4.2	
54	Ground	HEAT switch signal	Input	Climate controlled	HEAT	MID	1.6 - 2.5	S
(Y)	Giouna	TIEAT SWICH Signal	mput	seat switch		LO	0.8 - 1.5	
					O	FF	0	
55 (G/R)* ¹ (R/L)* ²	Ground	Ignition switch power supply	Input	Ignition switch ON			Battery voltage	
						HI	2.6 - 4.2	
56			COOL switch signal Input Climate controlled seat switch COOL	COOL	MID	1.6 - 2.5		
(V)	Ground	COOL switch signal		seat switch	LO	0.8 - 1.5	ſ	
					O	FF	0	
F7				Climate controlled	HE	AT	12	
57 (B/P)	Ground	HEAT switch indicator signal	Output	Climate controlled seat switch	Other the abo		0	I
58 (B)* ¹ (B/W)* ²	Ground	Ground	_	_		0	(
59	Cround	Seatback thermal electric unit	Output	Climate controlled HEAT or COO		r COOL	0 - 12*	1
(LG/R)	Ground	HEAT signal	Output	seat switch OFF		0		
60	Ground	Seatback thermal electric unit Climate controlled		Climate controlled	HEAT or COOL OFF		0 - 12*	
(LG/B)	Giouna	COOL signal Output		COOL signal Seat switch			seat switch	0
61	Cround	Seat cushion thermal electric	Output	Climate controlled	HEAT o	r COOL	0 - 12*	
(Y/R)	Ground	unit HEAT signal	Output	seat switch	O	FF	0	

< ECU DIAGNOSIS INFORMATION >

62	Ground	Seat cushion thermal electric	Output	Climate controlled	HEAT o	r COOL	0 - 12 [*]		
(B/R)	Cround	unit COOL signal	output	seat switch	OFF		0		
63 (R)	Ground	Ignition switch power supply	Input	Ignition switch ON			Battery voltage		
64 (W/R)	Ground	Seat cushion blower motor pow- er supply	Output			r COOL	12		
(**/13)				Other than the above			0		
65 (W/B)	Ground	Seat cushion blower motor ground	_	_	_		0		
					HE	AT	6.5 - 8		
66	Ground	Seat cushion blower motor	Output Climate con seat switch	Output	Output	Climate controlled		н	10
(Y/G)	Giouna	speed control signal			seat switch	COOL	MID	8	
						LO	6		
67 (L/R)	Ground	Seatback thermal electric unit sensor signal	Input	Climate controlled seat	t operated		1 - 5		
68 (L)	Ground	Seatback thermal electric unit sensor ground	_	Ignition switch ON		0			
69 (G/B)	Ground	Seat cushion thermal electric unit sensor signal	Input	Climate controlled seat operated		1 - 5			
70 (G/W)	Ground	Seat cushion thermal electric unit sensor ground	—	Ignition switch ON			0		

*: It value changes between 12 V and 0 V.

*1: Driver side

*2: Passenger side

NOTE:

• Measure the value on the condition that the battery voltage is 14 V.

• Wait 1 minute or more after thermal electric unit is activated, and then start the measurement.

Fail-safe

INFOID:000000008142148

• Climate controlled seat control unit equips fail-safe function.

• When a malfunction occurs in the systems shown below, climate controlled seat control unit stops output.

< ECU DIAGNOSIS INFORMATION >

Malfunction	Malfunctioning condition	
The temperature difference between the seatback ther- mal electric unit and seat cushion thermal electric unit is more than 40°C	 When it detects for 4 seconds that the temperature difference between the seatback thermal electric unit and seat cushion thermal electric unit is more than 40°, it stops the output to the thermal electric unit, activates the climate controlled seat blower motor at the maximum position, and sends the external airflow for 30 seconds. If the temperature difference is still more than 40°C after 30 seconds pass, it stops all output and enters the system OFF condition. When the temperature difference between seatback thermal electric unit and seat cushion thermal electric unit becomes less than 20°C, the system recovers automatically. If it detects that the temperature difference is more than 40°C after the automatic system recovery, it immediately stops all output and enters the system OFF condition. NOTE: When the switch operation is performed before entering the system OFF condition, the fail-safe mode is reset. 	E ([
The temperature of thermal electric unit is more than 110°C in the HEAT mode (any thermal electric unit in the seatback or seat cushion)	 When it detects for 4 seconds that the temperature of the thermal electric unit is more than 110°C, it stops the output to the thermal electric unit, activates the climate controlled seat blower motor at the maximum position, and sends the external airflow for 30 seconds. If the temperature does not become less than 105°C after 30 seconds pass, it stops all output and enters the system OFF condition. When the temperature of the thermal electric unit becomes less than 105°C, the system recovers automatically. If it detects that the temperature of the thermal electric unit is more than 110°C after the automatic system recovery, it immediately stops all output and enters the system OFF condition. 	F
The temperature of the thermal electric unit is more than 45°C in the COOL mode (any thermal electric unit in the seatback or seat cushion)	 When it detects for 4 seconds that the temperature of the thermal electric unit is more than 45°C and less than 70°C, it starts the temperature monitoring of the thermal electric unit at 3 second intervals. While monitoring, if it detects that the temperature continuously rises 2°C or more 4 times or reaches 70°C or more, it stops all output and enters the system OFF condition. If it detects other results of monitoring, it continues activating in the COOL mode. 	SE
Thermal electric unit sensor open circuit (in either the back and the cushion)	• When it detects for 4 seconds that the thermal electric unit sensor is an open circuit, it stops all output and enters the system OFF condition.	k
Climate controlled seat blower motor system open circuit (in the cushion blower)	 When it detects for 2 seconds that climate controlled seat blower motor is an open circuit while the climate controlled seat is being activated, and the battery status has been stable for the same 2 second period, it stops output to the thermal electric unit. When it detects for 10 seconds that the climate controlled seat blower motor is an open circuit while the climate controlled seat is being activat- ed, and the battery status has been stable for the same 10second period, it stops all output and enters the system OFF condition. 	L
	NOTE: After detecting the climate seat blower motor system open circuit for 2 seconds, the system recovers automatically if the activation of the climate controlled seat blower motor is detected for 1 second or more.	Ν
Switch input out of the specified range (either heat input or cool input)	 When it detects for 4 seconds that the rotary switch input is less than 30% of the vehicle battery voltage, it stops all output and enters the system OFF condition. When the switch input returns to a value within the specified range, the system recovers automatically. 	F

< ECU DIAGNOSIS INFORMATION >

Malfunction	Malfunctioning condition			
HEAT or COOL switch input out of the specified range	 During the standby mode, heating or cooling states, if the rotary switch input is 6% or less of the vehicle battery voltage, it stops all output and enters the system OFF condition. When the switch input returns to a value within the specified range, the system recovers automatically. 			
System voltage out of range	 If the system voltage at the climate controlled seat control unit falls outside of the 8.5 to 16.5 V operating range, it stops all output after a 500ms time period. When the system voltage returns to the normal operating range (10.5-15.5V with a 500ms hysteresis), the system recovers automatically. 			

*: System voltage is the voltage between the climate controlled seat control unit power source and ground.

NOTE:

When the ignition status changes to OFF during the fail-safe mode, the control unit shall enter the OFF condition. If the ignition is turned ON, the system shall return to the standby mode. If the system enters in the fail-safe mode again after performing ignition cycle, start the diagnosis.

HEATED SEAT CONTROL UNIT (DRIVER SIDE)

< ECU DIAGNOSIS INFORMATION >

HEATED SEAT CONTROL UNIT (DRIVER SIDE)

Reference Value

INFOID:000000008142149

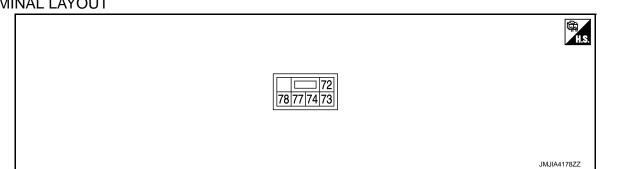
А

В

С

D

Ε



PHYSICAL VALUES

	nal No. color)	Description			Condition																	
+	-	Signal name	Input/ Output		Condition	(Approx.)																
					OFF	0																
					1 (Min. temperature)	10.66 ^{*1}																
					2	11.18 ^{*1}																
72 (LG/B)	Ground	Heated seat switch signal	Input	Heated seat switch	3	11.76 ^{*1}																
(20,2)		4 5			Switch		4	12.12 ^{*1}														
					5	12.47 ^{*1}																
																						6 (Max. temperature)
73	Ground	Heated seat operation sig-	Input	Heated seat	ON	Battery voltage																
(LG/R)	Giouna	nal	input	switch	OFF	0																
74 (B)	Ground	Ground	_		_	0																
77	Ground	Battery power supply	Input	Ignition switch	ON	Battery voltage																
(R)	Gibunu	Dattery power supply	input	ignition switch	Other than the above	0																
78 (LG/Y)	Ground	Seatback heater signal	Input	Heated seat	Operated	0.48 ^{*2}																

^{*1} : When thermistor temperature is 20° C (68° F).

*2 : Voltage changes according to temperature of seatback heater.

Ν

Ο

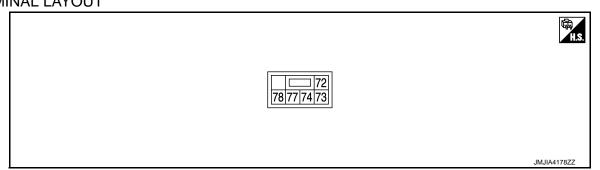
HEATED SEAT CONTROL UNIT (PASSENGER SIDE)

< ECU DIAGNOSIS INFORMATION >

HEATED SEAT CONTROL UNIT (PASSENGER SIDE)

Reference Value

INFOID:000000008142150



PHYSICAL VALUES

Termir (Wire		Description		Condition		Voltage (V) (Approx.)
+	-	Signal name	Input/ Output		Condition	
					OFF	0
					1 (Min. temperature)	10.66 ^{*1}
					2	11.18 ^{*1}
72 (LG/B)	Ground	Heated seat switch signal	Input	Heated seat switch	3	11.76 ^{*1}
(_0,_)				4	12.12 ^{*1}	
					5	12.47 ^{*1}
					6 (Max. temperature)	12.83 ^{*1}
73	Ground	Heated seat operation sig-	loout	Heated seat	ON	Battery voltage
(LG/R)	Giouna	nal	Input	switch	OFF	0
74 (B/W)	Ground	Ground	_		_	0
77	Ground	Pottory power aupply	loout	Ignition owitch	ON	Battery voltage
(R/W)	Giouna	Battery power supply	Input	Ignition switch	Other than the above	0
78 (LG/Y)	Ground	Seatback heater signal	Input	Heated seat	Operated	0.48 ^{*2}

 *1 : When thermistor temperature is 20°C (68°F).

*2 : Voltage changes according to temperature of seatback heater.

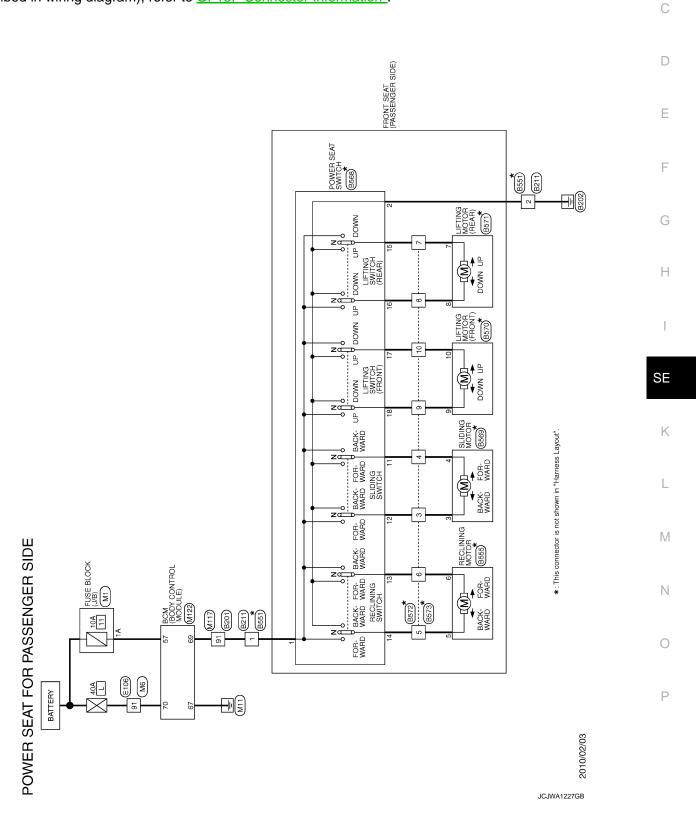
POWER SEAT CONTROL SYSTEM (PASSENGER SIDE)

< WIRING DIAGRAM >

WIRING DIAGRAM POWER SEAT CONTROL SYSTEM (PASSENGER SIDE)

Wiring Diagram

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-13, "Connector Information"</u>.



А

В

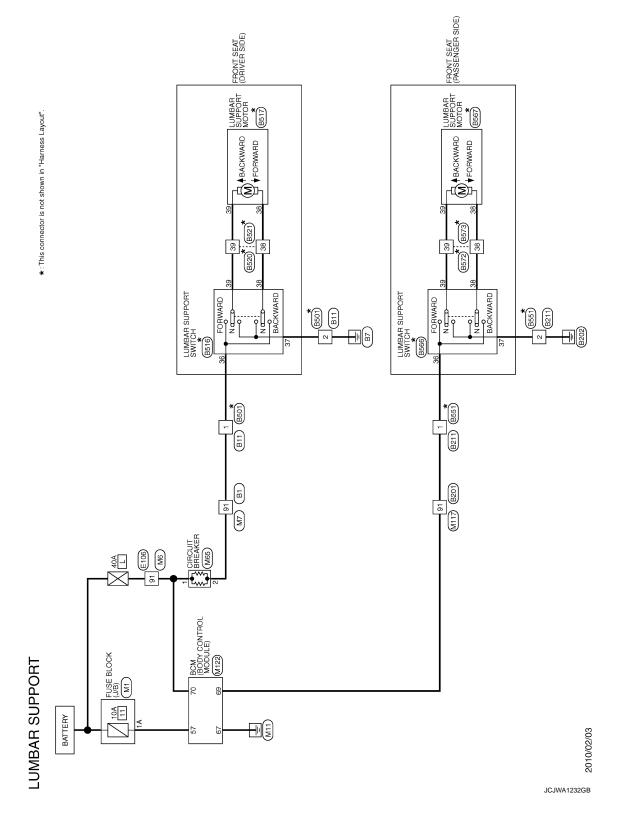
INFOID:000000008142151

LUMBAR SUPPORT SYSTEM

Wiring Diagram

INFOID:000000008142152

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-13, "Connector Information"</u>.



CLIMATE CONTROLLED SEAT SYSTEM

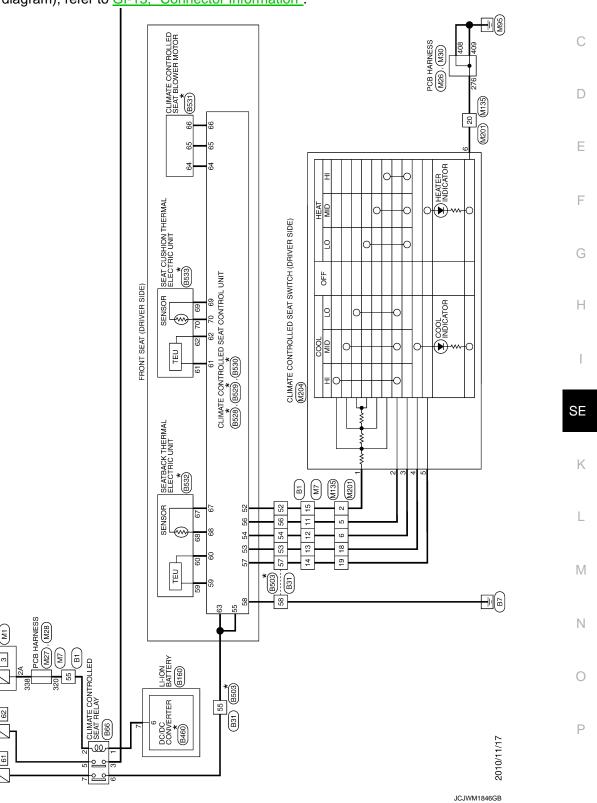
Wiring Diagram

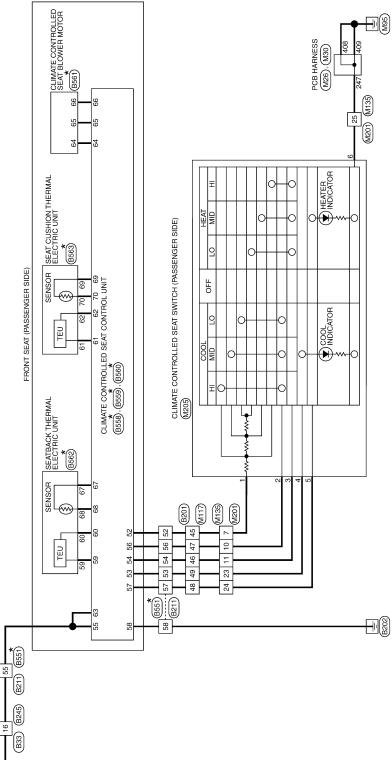
INFOID:000000008142153

А

For connector terminal arrangements, harness layouts, and alphabets in a 🔿 (option abbreviation; if not В described in wiring diagram), refer to GI-13, "Connector Information".

* : This connector is not shown in "Harness Layout" FUSE BLOCK (J/B) CLIMATE CONTROLLED SEAT CB HARNESS M27), (M28) Ē IGNITION SWITCH ON or START M27) 10A ۲7 E E UTROLLED 15A 62 15A 61 BATTERY





*: This connector is not shown in "Harness Layout".

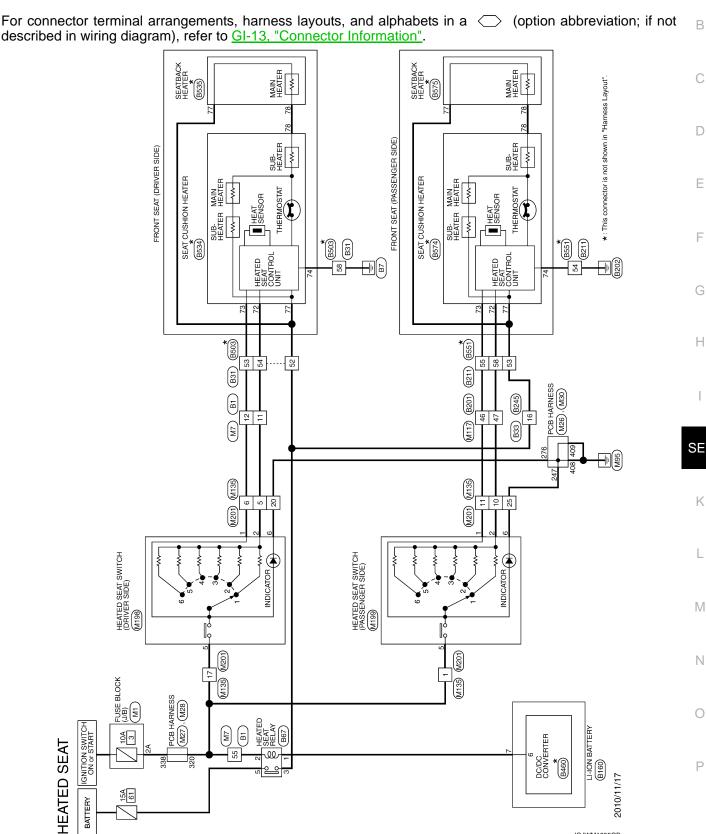
JCJWM1847GB

HEATED SEAT SYSTEM

Wiring Diagram

INFOID:000000008142154

А



JCJWM1855GB

< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000008142155

DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain the malfunction information (conditions and environment when the malfunction occurred) as much as possible when the customer brings the vehicle in.

>> GO TO 2.

2.REPRODUCE THE MALFUNCTION INFORMATION

Check the malfunction on the vehicle that the customer describes. Inspect the relation of the symptoms and the condition when the symptoms occur.

>> GO TO 3.

3. IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"

Use "Symptom diagnosis" from the symptom inspection result in step 2 and then identify where to start performing the diagnosis based on possible causes and symptoms.

>> GO TO 4.

4. IDENTIFY THE MALFUNCTIONING PARTS WITH "DTC/CIRCUIT DIAGNOSIS"

Perform the diagnosis with "DTC/CIRCUIT DIAGNOSIS" of the applicable system.

>> GO TO 5.

5.REPAIR OR REPLACE THE MALFUNCTIONING PARTS

Repair or replace the specified malfunctioning parts.

>> GO TO 6.

6.FINAL CHECK

Check that malfunctions are not reproduced when obtaining the malfunction information from the customer, referring to the symptom inspection result in step 2.

Are the malfunctions corrected?

YES >> INSPECTION END NO >> GO TO 3.

POWER SUPPLY AND GROUND CIRCUIT < DTC/CIRCUIT DIAGNOSIS > DTC/CIRCUIT DIAGNOSIS А POWER SUPPLY AND GROUND CIRCUIT CLIMATE CONTROLLED SEAT CONTROL UNIT В CLIMATE CONTROLLED SEAT CONTROL UNIT : Diagnosis Procedure Driver side **1.**CHECK FUSE Check that the following fuse and fusible link are not fusing. D Signal name Fuse No. 3 (10 A) Ignition power supply Е Battery power supply 61 (15 A) Is the inspection result normal? F YES >> GO TO 2. NO >> Replace the blown fuse after repairing the affected circuit. 2.check climate controlled seat control unit (driver side) power supply 1. Turn ignition switch OFF. Disconnect climate controlled seat control unit (driver side) connector. 2. 3. Turn ignition switch ON. Н 4. Check voltage between climate controlled seat control unit (driver side) harness connector and ground. (+) Voltage (V) Climate controlled seat control unit (driver side) (-) (Approx.) Connector Terminal B528 55 SE Ground Battery voltage B529 63 Is the inspection result normal? Κ YES >> GO TO 3. NO >> GO TO 4. ${f 3.}$ CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT (DRIVER SIDE) GROUND CIRCUIT Turn ignition switch OFF. 1. 2. Check continuity between climate control unit (driver side) harness connector and ground. M Climate controlled seat control unit (driver side) Continuity Connector Terminal Ground

B528 Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

 ${f 4.}$ CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT (DRIVER SIDE) POWER SUPPLY CIRCUIT

58

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat relay.

3. Check continuity between climate controlled seat control unit (driver side) harness connector and climate controlled seat relay harness connector.

Ν

Ρ

Existed

< DTC/CIRCUIT DIAGNOSIS >

Climate controlled seat	control unit (driver side)	Climate controlled seat relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B528	55	B66	6	Existed
B529	63	DOO	0	LXISIEU

4. Check continuity between climate controlled seat control unit (driver side) harness connector and ground.

Climate controlled sea	control unit (driver side)		Continuity
Connector	Terminal	Ground	Continuity
B528	55	Ground	Not existed
B529	63		NOI EXISIEU

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5.CHECK CILMATE CONTROLLED SEAT RELAY POWER SUPPLY

1. Turn ignition switch ON.

2. Check voltage between climate controlled seat relay harness connector and ground.

	(+) Climate controlled seat relay		Voltage (V) (Approx.)	
Connector	Terminal		(
	2	Ground	Battony voltago	
	7	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

${f 6}.$ CHECK CLIMATE CONTROLLED SEAT RELAY GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between climate controlled seat relay harness connector and ground.

Climate contro	blled seat relay		Continuity	
Connector	Terminal	Ground	Continuity	
B66	1		Existed	

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK CLIMATE CONTROLLED SEAT RELAY

Check climate controlled seat relay.

Refer to SE-32, "CLIMATE CONTROLLED SEAT CONTROL UNIT : Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace climate controlled seat relay.

8. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> INSPECTION END

Passenger side

1.CHECK FUSE

< DTC/CIRCUIT DIAGNOSIS >

Check that the following fuse and fusible link are not fusing.

		A
Signal name	Fuse No.	
Ignition power supply	3 (10 A)	
Battery power supply	62 (15 A)	В

Is the fuse fusing?

- YES >> Replace the blown fuse after repairing the affected circuit.
- NO >> GO TO 2.

2.CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT (PASSENGER SIDE) POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect climate controlled seat control unit (passenger side) connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between climate controlled seat control unit (passenger side) harness connector and ground.

(+)			- -
Climate controlled seat co	ontrol unit (passenger side)	(-)	Voltage (V) (Approx.)	Г
Connector	Terminal		()	
B558	55	Ground	Battery voltage	G
B559	63	Ground	Ballery vollage	-

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 4.

 $\mathbf{3.}$ CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT (PASSENGER SIDE) GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between harness connector and ground.

_	Climate controlled seat co	ontrol unit (passenger side)		Continuity	- SE
_	Connector	Terminal	Ground	Continuity	
_	B558	58		Existed	K

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

4.CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT (PASSENGER SIDE) POWER SUPPLY CIR-CUIT

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat relay.

 Check continuity between climate controlled seat control unit (passenger side) harness connector and climate controlled seat relay harness connector.

	Climate controlled seat co	ontrol unit (passenger side)	Climate contro	olled seat relay	Continuity	
-	Connector	Terminal	Connector	Terminal	Continuity	0
-	B558	55	B66	2	Existed	
-	B559	63	DOO	3	Existed	Р

4. Check continuity between climate controlled seat control unit (passenger side) harness connector and ground.

D

Н

L

Μ

< DTC/CIRCUIT DIAGNOSIS >

Climate controlled seat co	Climate controlled seat control unit (passenger side)		Continuity
Connector	Terminal	Ground	Continuity
B558	55	- Ground	Not existed
B559	63		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

5. CHECK CILMATE CONTROLLED SEAT RELAY POWER SUPPLY

1. Turn ignition switch ON.

2. Check voltage between climate controlled seat relay harness connector and ground.

	(+) Climate controlled seat relay		Voltage (V) (Approx.)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B66	2	Ground	Pottony voltago	
DOO	5	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK CLIMATE CONTROLLED SEAT RELAY GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Check continuity between climate controlled seat relay harness connector and ground.

	Climate contro	olled seat relay		Continuity
-	Connector	Terminal	Ground	Continuity
-	B66	1	1	Existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness.

7.CHECK CLIMATE CONTROLLED SEAT RELAY

Check climate controlled seat relay.

Refer to SE-32, "CLIMATE CONTROLLED SEAT CONTROL UNIT : Component Inspection".

Is the inspection result normal?

- YES >> GO TO 8.
- NO >> Replace climate controlled seat relay.

8.CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> INSPECTION END

CLIMATE CONTROLLED SEAT CONTROL UNIT : Component Inspection INFOLD.00000008142157

1.CHECK CLIMATE CONTROLLED SEAT RELAY

1. Turn ignition switch OFF.

2. Remove climate controlled seat relay.

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between climate controlled seat relay terminals under the following conditions.

		5		1	
Tern	ninal	Condition	Continuity	2	
3	5	12 V direct current supply between ter- minals 1 and 2.	Existed		
		No current supply	Not existed	5	
6	7	12 V direct current supply between ter- minals 1 and 2.	Existed	6 3	6 3
		No current supply	Not existed		JMJIA2104ZZ

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace climate controlled seat relay.

SEAT CUSHION HEATER

SEAT CUSHION HEATER : Diagnosis Procedure

1.CHECK FUSE

Check that the following fuse and fusible link are not fusing.

Signal name	Fuse No.	
Battery power supply	61 (15 A)	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit.

2.CHECK SEAT CUSHION HEATER POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect seat cushion heater connector.

3. Turn ignition switch ON.

4. Check voltage between seat cushion heater harness connector and ground.

Seat cushion heater (-) Connector Terminal Driver side B534 77			(+)		
Driver side B534 77 Groun	Voltage (V) (Approx.)	(-)		Seat cushion heater	
77 Groun			Terminal	nector	Conr
	Pottony voltage	Ground	77	B534	Driver side
Passenger side B574	Battery voltage	Giouna	11	B574	Passenger side

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

3.CHECK SEAT CUSHION HEATER POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect heated seat relay.
- 3. Check continuity between seat cushion heater harness connector and heated seat relay terminal connector.

Seat cushion heater			Heated	Continuity	
Con	nector	Terminal	Connector	Terminal	Continuity
Driver side	B534	77	B67	2	Existed
Passenger side	B574		607	5	Existed

4. Check continuity between seat cushion heater harness connector and ground.

SE

А

В

D

Е

F

INFOID:000000008142158

- Ν
- ~

Ρ

< DTC/CIRCUIT DIAGNOSIS >

	Seat cushion heater		Continuity	
Connector		Terminal	Ground	Continuity
Driver side	B534	77	Giouna	Not existed
Passenger side	B574	11		NUL EXISTED

Is the inspection result normal?

YES >> Repair or replace harness between heated seat relay and fuse holder.

NO >> Repair or replace harness between seat cushion heater and heated seat relay.

4.CHECK HEATED SEAT OPERATION SIGNAL

Check voltage between seat cushion heater harness connector and ground.

	(+)					
Seat cushion heater		(-)	Condition		Voltage (V) (Approx.)	
Conne	ctor	Terminal				(/ (ppi 0x.)
Driver side	B534				ON	Battery voltage
Dilverside	D004	73 Ground	Heated seat switch	OFF	0	
Passenger side B574	73 GIO	Giouna	Healeu Seal Switch	ON	Battery voltage	
Passenger side	6574				OFF	0

Is the inspection result normal?

YES >> GO TO 7.

NO >> GO TO 5.

5. CHECK HEATED SEAT OPERATION SIGNAL CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat switch connector.

3. Check continuity between seat cushion heater harness connector and heated seat switch harness connector.

Seat cushion heater			Heated s	Continuity	
Conr	nector	Terminal	Connector	Terminal	Continuity
Driver side	B534	73	M198	1	Existed
Passenger side	B574	13	M199	· I	LAISIEU

4. Check continuity between seat cushion heater harness connector and ground.

	Seat cushion heater		Continuity	
Connector		Terminal	Ground	Continuity
Driver side	B534	72	Giouna	Not existed
Passenger side	B574	73		NOT EXISTED

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

6.CHECK HEATED SEAT SWITCH

Check heated seat switch.

Refer to SE-56. "Component Inspection".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace heated seat switch.

7. CHECK SEAT CUSHION HEATER GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between seat cushion heater harness connector and ground.

< DTC/CIRCUIT DIAGNOSIS >

Coni	nector	Term	inal		Continuity
Driver side Passenger side	B534 B574	74	1	Ground	Exists
the inspection result	normal?				
YES >> INSPECTION					
$\mathbf{B}.$ CHECK INTERMITT	ENT INCIDENT				
Check intermittent incic Refer to <u>GI-49, "Intermi</u>					
>> INSPECTION					
EATBACK HEAT	ER : Diagnosis	Procedure	е		INFOID:0000000814215
.CHECK SEATBACK		SUPPLY			
. Turn ignition switch					
. Disconnect seatba	ck heater connector.				
. Turn ignition switch . Check voltage betw	n ON. ween seatback heate	r harness co	onnector s	and around	
	(+)				
				4	Voltago (V)
	Seatback heater			(-)	Voltage (V) (Approx.)
	nector	Term	inal	(-)	
Driver side	B535	Term	-	(-) Ground	
Driver side Passenger side	B535 B575	-	-		(Approx.)
Driver side Passenger side the inspection result YES >> INSPECTION	B535 B575 normal?	-	-		(Approx.)
Driver side Passenger side the inspection result YES >> INSPECTION NO >> GO TO 2.	B535 B575 normal? ON END	77	7		(Approx.)
Driver side Passenger side the inspection result YES >> INSPECTION NO >> GO TO 2. CHECK SEATBACK	nector B535 B575 normal? ON END	77	7		(Approx.)
Driver side Passenger side the inspection result YES >> INSPECTION NO >> GO TO 2. CHECK SEATBACK . Turn ignition switch . Disconnect heated	nector B535 B575 normal? ON END CHEATER POWER S OFF. seat relay.	SUPPLY CIR	RCUIT	Ground	(Approx.) Battery voltage
Driver side Passenger side s the inspection result YES >> INSPECTION NO >> GO TO 2. CHECK SEATBACK . Turn ignition switch . Disconnect heated . Check continuity be	nector B535 B575 normal? ON END CHEATER POWER S OFF. seat relay. etween seatback hea	SUPPLY CIR	CUIT	Ground or and heated seat re	(Approx.)
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be	nector B535 B575 normal? ON END CHEATER POWER S O OFF. seat relay. etween seatback heater	SUPPLY CIR	CUIT	Ground or and heated seat re Heated seat relay	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTION NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect	B535 B575 Normal? ON END CHEATER POWER S O OFF. seat relay. etween seatback heater Seatback heater	SUPPLY CIR	CUIT	Ground or and heated seat re Heated seat relay	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side	nector B535 B575 normal? ON END CHEATER POWER S OFF. seat relay. etween seatback heater or B535	SUPPLY CIR	CUIT	Ground or and heated seat re Heated seat relay ctor Terminal	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side Passenger side	B535 B575 Normal? ON END CHEATER POWER S O OFF. seat relay. etween seatback heater or 1 B535 B575	SUPPLY CIR ater harness Ferminal	CUIT connecto Conne B67	Ground or and heated seat re Heated seat relay ctor Terminal 7 3	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side Passenger side	nector B535 B575 normal? ON END CHEATER POWER S OFF. seat relay. etween seatback heater or B535	SUPPLY CIR ater harness Ferminal	CUIT connecto Conne B67	Ground or and heated seat re Heated seat relay ctor Terminal 7 3	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side Passenger side	B535 B575 Normal? ON END CHEATER POWER S O OFF. seat relay. etween seatback heater or 1 B535 B575	SUPPLY CIR ater harness Ferminal	CUIT connecto Conne B67	Ground or and heated seat re Heated seat relay ctor Terminal 7 3	elay terminal connector.
Driver side Passenger side sthe inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side Passenger side Context	nector B535 B575 NOT END CHEATER POWER S OFF. seat relay. etween seatback heater or B535 B575 etween seatback heater seatback heater nector	SUPPLY CIR ater harness Ferminal	CUIT connecto Connecto B67 connecto	Ground or and heated seat re Heated seat relay ctor Terminal 7 3	elay terminal connector.
Driver side Passenger side the inspection result YES >> INSPECTIO NO >> GO TO 2. CHECK SEATBACK Turn ignition switch Disconnect heated Check continuity be Connect Driver side Passenger side Check continuity be	B535 B575 normal? ON END C HEATER POWER S OFF. seat relay. etween seatback heater or 1 B535 B575 etween seatback heater or 1 B535 B575 etween seatback heater	SUPPLY CIR ater harness Ferminal 77 ater harness	RCUIT connecto Connec B67 connecto	Ground or and heated seat re Heated seat relay ctor Terminal 7 3 or and ground.	elay terminal connector.

< DTC/CIRCUIT DIAGNOSIS >

Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.

>> INSPECTION END HEATED SEAT SWITCH

HEATED SEAT SWITCH : Diagnosis Procedure

INFOID:000000008142160

1.CHECK FUSE

Check that the following fuse and fusible link are not fusing.

Signal name	Fuse No.
Ignition power supply	3 (10 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit.

2.CHECK HEATED SEAT SWITCH POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect heated seat switch connector.

3. Turn ignition switch ON.

4. Check voltage between heated seat switch harness connector and ground.

(+) Heated seat switch				
			(-)	Voltage (V) (Approx.)
Connector		Terminal		()
Driver side	M198	5	Ground	Pottony voltago
Passenger side	M199	5	Ground	Battery voltage

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 3.

 $\mathbf{3}$.check heated seat switch power supply circuit

1. Turn ignition switch OFF.

2. Disconnect fuse block (J/B) connector.

3. Check continuity between heated seat switch harness connector and fuse block (J/B) harness connector.

	Heated seat switch		Fuse bl	Continuity	
Con	nector	Terminal	Connector	Terminal	Continuity
Driver side	M198	5	M1	2A	Existed
Passenger side	M199	- 5		28	LAISted

4. Check continuity between heated seat switch harness connector and ground.

Heated seat switch				Continuity
Connector Terminal		Terminal	- Ground	Continuity
Driver side	M198	5	Giouna	Not existed
Passenger side	M199	_ 5		NOT EXISTEN

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK FUSE BLOCK (J/B)

1. Turn ignition switch ON.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

2. Check voltage between fuse block (J/B) connector (fuse block side) and ground.

Fuse block (Connector M1 the inspection result normal? ES >> GO TO 5. O >> Repair or replace fus	I/B) Terminal 2A	(-) Ground	Voltage (V) (Approx.) Battery voltage
M1 the inspection result normal? ES >> GO TO 5.		Ground	
the inspection result normal? ES >> GO TO 5.	2A	Ground	Battery voltage
ES >> GO TO 5.			
CHECK INTERMITTENT INC	. ,		
eck intermittent incident. fer to <u>GI-49, "Intermittent Incic</u> >> INSPECTION END	lent".		

|

Н

G

K

L

Μ

Ν

Ο

Ρ

SE

< DTC/CIRCUIT DIAGNOSIS >

CLIMATE CONTROLLED SEAT SWITCH

Component Function Check

1.CHECK CLIMATE CONTROLLED SEAT SWITCH FUNCTION

Check that climate controlled seat activates when operating climate controlled seat control switch.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>SE-38</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000008142162

INFOID:000000008142161

1. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT INPUT SIGNAL

1. Turn ignition switch ON.

2. Check voltage between climate controlled seat control unit harness connector and ground.

Climate contr	(+) Climate controlled seat control unit Connector Terminal		(-) Condition				Voltage (V) (Approx.)
Connec							
			50			HI	2.6 - 4.2
		EG			COOL	MID	1.6 - 2.5
		56				LO	0.8 - 1.5
Driver eide	DEOO		Climate controlled seat switch (driver side)	Climate controlled seat	OFF		0
Driver side	B529			switch (driver side)		HI	2.6 - 4.2
		54			HEAT	MID	1.6 - 2.5
	54				LO	0.8 - 1.5	
			- Ground		OFF		0
						HI	2.6 - 4.2
		50			COOL	MID	1.6 - 2.5
		56				LO	0.8 - 1.5
Dessenger side	Deco			Climate controlled seat	OFF		0
Passenger side	B559			switch (passenger seat)	<u> </u>	HI	2.6 - 4.2
					HEAT	MID	1.6 - 2.5
		54				LO	0.8 - 1.5
					OFF	-	0

Is the inspection result normal?

YES >> INSPECTION END

NO-1 : HEAT or COOL mode is NG>>GO TO 2.

NO-2 : HEAT and COOL modes are NG>>GO TO 3.

2. Check climate controlled seat switch circuit

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat switch connector and climate controlled seat control unit connector.

3. Check continuity between climate controlled seat switch harness connector and climate controlled seat control unit harness connector.

CLIMATE CONTROLLED SEAT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	Climate controlled seat switch		Climat	e controll	ed seat control u	t Continuity	
	Connector		Terminal	Coni	nector	Terminal	Continuity
Driver side	COOL	M204	2	D1	529	56	
Driver side	HEAT	M204	3		525	54	Existed
Desserverside	COOL	MOOF	2	D	50	56	Existed
Passenger side	HEAT	M205	3	— В:	559	54	
Check continu	ity between cli	mate contro	lled seat swi	tch harne	ss conr	nector and gro	ound.
	Climate c	ontrolled seat	switch				Questionity
	Connector			Termina	al		Continuity
	COOL			2		a	
Driver side	HEAT	r	M204	3		Ground	
	COOL			2			Not existed
Passenger side	HEAT	r	M205	3			
e inspection re	sult normal?				1		
Turn ignition so Check voltage		ite controlle	ed seat switc	h harness	conne	ctor and grou	nd.
		(+)					
	Climate contro	olled seat swite	seat switch			(-)	Voltage (V) (Approx.)
	^		Tarmain				· · · · /
	Connector		Termin	al			
Driver side		204		al		Fround	12
Passenger side	M	204 205	1 termin	al	G	Ground	12
Passenger side he inspection re ES >> GO TC O >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir	M sult normal? 5. 4. TE CONTROLI witch OFF. mate controlled ity between cli	205 LED SEAT	1 SWITCH PC ol unit conne	WER SU	PPLY C	IRCUIT	
Passenger side he inspection re ES >> GO TC O >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir Check continu control unit ha	M sult normal? 5. 4. TE CONTROLI witch OFF. mate controlled ity between cli	LED SEAT	1 SWITCH PC ol unit conne	WER SU ector. witch harr	PPLY C	IRCUIT	climate controlled
Passenger side <u>ne inspection re</u> ES >> GO TC D >> GO TC CHECK CLIMA Turn ignition su Disconnect clir Check continu control unit hau Cli	M Sult normal? 5. 4. TE CONTROLI witch OFF. mate controlled ity between cli rness connecto	205 LED SEAT I seat contro mate contro pr.	1 SWITCH PC ol unit conne	WER SU ector. witch harr	PPLY C	IRCUIT	
Passenger side ie inspection re S >> GO TC D >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir Check continu control unit har Clir Cor	M sult normal? 5. 4. TE CONTROLI witch OFF. mate controlled ity between cli rness connector mate controlled se	205 LED SEAT I seat contro mate contro pr.	1 SWITCH PC ol unit conne olled seat sy	WER SU ector. witch harr	PPLY C	IRCUIT	climate controlled
Passenger side le inspection re S >> GO TC D >> GO TC CHECK CLIMA Turn ignition so Disconnect clir Check continu control unit hat Cli Cor Driver side	M Sult normal? 0 5. 0 4. TE CONTROLING witch OFF. mate controlled ity between cling mate controlled set mate controlled set mate controlled set mate controlled set mate controlled set mate controlled set mate controlled set	205 LED SEAT I seat contro mate contro pr.	1 SWITCH PC ol unit conne olled seat sy	WER SU octor. witch harr Climate co Connect	PPLY C	IRCUIT	climate controlled
Passenger side <u>e inspection re</u> S >> GO TC >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir Check continu control unit hat Cli Cor Driver side Passenger side	M Sult normal? O 5. O 4. TE CONTROLI witch OFF. mate controlled ity between cli rness connector mate controlled se mector M204 M205	205 LED SEAT I seat contromate contro pat switch	1 SWITCH PC ol unit conne olled seat sv erminal	WER SU octor. witch harr Climate co Connect B529 B559	PPLY C ness col pontrolled	IRCUIT	Climate controlled Continuity Existed
Passenger side ie inspection re S >> GO TC D >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir Check continu control unit hal Cli Cor Driver side Passenger side	M Sult normal? O 5. O 4. TE CONTROLI witch OFF. mate controlled ity between cli rness connector mate controlled se mector M204 M205	205 LED SEAT I seat contro mate contro or.	1 SWITCH PC ol unit conne olled seat sw erminal 1 ulled seat sw	WER SU octor. witch harr Climate co Connect B529 B559	PPLY C ness col pontrolled	IRCUIT	climate controlled Continuity Existed
Passenger side ne inspection re S >> GO TC D >> GO TC CHECK CLIMA Turn ignition so Disconnect clir Check continu control unit hat Cli Cor Driver side	M Sult normal? 5. 4. TE CONTROLING witch OFF. mate controlled ity between cling mate controlled set mate	205 LED SEAT I seat contro mate contro or.	1 SWITCH PC ol unit conne olled seat sw erminal 1 ulled seat sw	WER SU ector. witch harr Climate co Connect B529 B559 itch harne	PPLY C ness con ontrolled a or ss conr	IRCUIT	Climate controlled Continuity Existed
Passenger side <u>ne inspection re</u> ES >> GO TC D >> GO TC CHECK CLIMA ^T Turn ignition sv Disconnect clir Check continu control unit har Cli Cor Driver side Passenger side	M Sult normal? S.	205 LED SEAT I seat contro mate contro or.	1 SWITCH PC ol unit conne olled seat sw erminal 1 ulled seat sw ch	WER SU ector. witch harr Climate co Connect B529 B559 itch harne	PPLY C ness con ontrolled a or ss conr	IRCUIT	climate controlled Continuity Existed

Is the inspection result normal?

CLIMATE CONTROLLED SEAT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

YES >> Replace climate controlled seat control unit.

NO >> Repair or replace harness.

5.CHECK CLIMATE CONTROLLED SEAT SWITCH

Check climate controlled seat switch.

Refer to SE-40, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace climate controlled seat switch.

6. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> INSPECTION END

Component Inspection

INFOID:000000008142163

1. CHECK CLIMATE CONTROLLED SEAT SWITCH

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat switch connector.

3. Check continuity between climate controlled seat switch terminals under the following conditions.

Terr	minal	Co	Continuity		
C				ON	Existed
2	1	Climate controlled seat switch	COOL mode	OFF	Not existed
2		Climate controlled seat switch	HEAT mode	ON	Existed
3			HEAT MODE	OFF	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace climate controlled seat switch.

SEATBACK THERMAL ELECTRIC UNIT	
< DTC/CIRCUIT DIAGNOSIS >	
SEATBACK THERMAL ELECTRIC UNIT	Λ
Component Function Check	A
1. CHECK SEATBACK THERMAL ELECTRIC UNIT FUNCTION	В
Check whether or not the temperature of the seatback thermal electric unit changes in accordance with the HEAT or COOL switch operation of the climate controlled seat control switch.	
Is the inspection result normal?	С
YES >> INSPECTION END NO >> Refer to <u>SE-41, "Diagnosis Procedure"</u> .	_
Diagnosis Procedure	D
1. CHECK SEATBACK THERMAL ELECTRIC UNIT INPUT SIGNAL	Е

1. Turn ignition switch ON.

2. Check voltage between seatback thermal electric unit harness connector and ground.

	(+)		(-) Condition			Voltage (V)				
Seatback	Seatback thermal electric unit				(-) Condition		Condition			
Conne	ctor	Terminal				(Approx.)				
		59			HEAT or COOL	0 - 12 [*]				
Driver side	B532	59						Climate controlled seat	Other than the above	0
Driver side	D002	switch	switch	HEAT or COOL	0 - 12 [*]					
	60	Oneveral	Ground	Ground	Ground		Other than the above	0		
		50				Giouna	Giouna	Giouna		HEAT or COOL
Decenaer eide	BECO	59		Climate controlled seat	Other than the above	0				
Passenger side	B562	60			switch	HEAT or COOL	0 - 12 [*]			
		00			Other than the above	0				

*: It value changes between 12 V and 0 V

NOTE:

Wait 1 minute or more after the activation start, and then start the measurement.

Is the inspection result normal?

YES >> Replace seatback thermal electric unit.

2. CHECK SEATBACK THERMAL ELECTRIC UNIT CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat control unit connector and seatback thermal electric unit connector.

3. Check continuity between climate controlled seat control unit harness connector and seatback thermal electric unit harness connector.

Clima	te controlled seat cont	rol unit	Seatback thermal electric unit		Continuity	
Con	nector	Terminal	Connector	Terminal	Continuity	0
	DECO	59	D500	59		
Driver side B52	B528	60	B532	60	Eviated	Р
D	DEEQ	59	BEAG	59	Existed	
Passenger side	B558	60	B562	60		

4. Check continuity between climate controlled seat control unit harness connector and ground.

L

Μ

Ν

SEATBACK THERMAL ELECTRIC UNIT

< DTC/CIRCUIT DIAGNOSIS >

Clin	nate controlled seat contro		Continuity		
Coni	nector	Terminal		Continuity	
Driver side	B528	59	Ground		
Driver side	D320	60	Ground	Not existed	
Passenger side	DEEQ	59			
	B558	60	_		

Is the inspection result normal?

YES >> Replace climate controlled seat control unit.

NO >> Repair or replace harness.

< DTC/CIRCUIT D		THE	RMAL E	ELECTRI	C UI	NIT SENSOR	
SEATBACK T	HERMAL E	LECT	RIC U	NIT SEN	SO	R	A
Component Fu	Inction Check	K					INFOID:00000008142166
1. CHECK SEATBA	ACK THERMAL E	LECTR		SENSOR FL	JNCT	ION	В
	tch operation of t	he clima	ate contro				C
Diagnosis Proc	edure						D INFOID:000000008142167
1. CHECK SEATBA	ACK THERMAL E	LECTR		SENSOR SI	GNAL	-	E
 Turn ignition sw Check voltage 		k therm	al electric	unit harness	s conr	nector and ground.	
	(+)						Voltage (V)
	back thermal electric		· .	(-)		Condition	(Approx.)
Conn Driver side	B532	Iern	ninal				G
Passenger side	B562	6	67	Ground		limate controlled seat perated	1 - 5
3. Check continui	ACK THERMAL E vitch OFF. nate controlled se	at conti	rol unit coi	nnector and	seatb	ack thermal electri	c unit connector. d seatback thermal
Clima	te controlled seat cor	trol unit		Seatba	ack the	rmal electric unit	K
Con	nector	Т	erminal	Connec	tor	Terminal	Continuity
Driver side Passenger side	B530 B560	_	67	B532 B562		- 67	Existed
4. Check continuit	ty between climat	e contro	olled seat	control unit	narne	ss connector and g	ground.
	Climate controlled se	eat contro	ol unit				
	Connector		Te	rminal		Ground	Continuity
Driver side	B530		_	67		Cround	Not existed
Passenger side	B560 sult pormal2						
YES >> Replac NO >> Repair 3. CHECK SEATB/	e climate controllo or replace harnes ACK THERMAL E	SS.			ROUN	ID CIRCUIT	P
3. Check continui	nate controlled se					ack thermal electri ness connector an	c unit connector. d seatback thermal

SEATBACK THERMAL ELECTRIC UNIT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Clima	te controlled seat con	trol unit	Seatback ther	Continuity		
Con	nector	Terminal	Connector	Terminal	Continuity	
Driver side	B530	68	B532	68	Evicted	
Passenger side	B560	00	B562	- 00	Existed	

4. Check continuity between climate controlled seat control unit harness connector and ground.

С	imate controlled seat contro		Continuity	
Connector		Terminal		
Driver side	B530	69	Giound	Not ovisted
Passenger side	B560	- 68		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK SEATBACK THERMAL ELECTRIC UNIT SENSOR

Check seatback thermal electric unit sensor. Refer to SE-44, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seatback thermal electric unit.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK SEATBACK THERMAL ELECTRIC UNIT SENSOR

- 1. Turn ignition switch OFF.
- 2. Disconnect seatback thermal electric unit connector.
- 3. Check resistance between seatback thermal electric unit terminals.

Seatback therr	Resistance (KΩ) (Approx.)				
Tern	Terminal				
67	67 68				

 * : When sensor temperature is 25°C (77°F).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seatback thermal electric unit.

Revision: 2013 March

INFOID:000000008142168

SEAT CUSHION THERMAL ELECTRIC UNIT		
< DTC/CIRCUIT DIAGNOSIS >		
SEAT CUSHION THERMAL ELECTRIC UNIT		A
Component Function Check	INFOID:000000008142169	A
1. CHECK SEAT CUSHION THERMAL ELECTRIC UNIT FUNCTION		В
Check whether or not the temperature of the seat cushion thermal electric unit changes in acco HEAT or COOL switch operation of the climate controlled seat control switch.	rdance with the	
Is the inspection result normal?		С
YES >> INSPECTION END NO >> Refer to <u>SE-41, "Diagnosis Procedure"</u> .		
Diagnosis Procedure	INFOID:000000008142170	D
1. CHECK SEAT CUSHION THERMAL ELECTRIC UNIT INPUT SIGNAL		Е
1 Turn ignition switch ON		

1. Turn ignition switch ON.

2. Check voltage between seat cushion thermal electric unit harness connector and ground.

	(+)					
Seat cushic	Seat cushion thermal electric unit		(-) Condition		Voltage (V) (Approx.)	
Conne	ector	Terminal				(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		61			HEAT or COOL	0 - 12*
Driver side B533	B5 22	01		Climate controlled	Other than the above	0
			seat switch	HEAT or COOL	0 - 12*	
		62	Ground		Other than the above	0
		61	Ground		HEAT or COOL	0 - 12*
Passenger	senger	01		Climate controlled	Other than the above	0
side B563 -	62		seat switch	HEAT or COOL	0 - 12*	
	02			Other than the above	0	

*: It value changes between 12 V and 0 V

NOTE:

Wait 1 minute or more after the activation start, and then start the measurement.

Is the inspection result normal?

YES >> Replace seat cushion thermal electric unit.

NO >> GO TO 2.

2.CHECK SEAT CUSHION THERMAL ELECTRIC UNIT CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat control unit connector and seat cushion thermal electric unit connector.

3. Check continuity between climate controlled seat control unit harness connector and seat cushion thermal electric unit harness connector.

Climate controlled seat control unit			Seat cushion the	ermal electric unit	Continuity	_	
Connector		Terminal	Connector	Terminal	- Continuity	0	
Deixer side	Dairean aide	61	B533	61			
Driver side	B528	62	D000	62	Existed	Р	
Design of the DESS	Passenger side B558	61 BEEO	61	B563	61	Existed	
Passenger side		62	D303	62	1		

4. Check continuity between climate controlled seat control unit harness connector and ground.

L

Μ

Ν

SEAT CUSHION THERMAL ELECTRIC UNIT

< DTC/CIRCUIT DIAGNOSIS >

Clin	nate controlled seat contro		Continuity		
Con	Connector Terminal			Continuity	
Driver side	DE29	61	Ground		
Driver side	B528	62		Ground	Not existed
D	DEEQ	61		Not existed	
Passenger side	B558	62			

Is the inspection result normal?

YES >> Replace climate controlled seat control unit.

NO >> Repair or replace harness.

S < DTC/CIRCUIT DI	EAT CUS AGNOSIS >	-		ELECT	RIC UN		OR
SEAT CUSHIC	ON THEF	RMAL EL	ECTRIC	UNIT	SENS	OR	
Component Fui	nction Ch	eck					INFOID:000000008142171
1 .CHECK SEAT CU	JSHION THE	ERMAL ELE		T SENSO	OR FUNCT	ION	
HEAT or COOL swit I <u>s the inspection res</u> YES >> INSPEC	ch operation ult normal?	of the clima	te controllec				in accordance with the
Diagnosis Proce	edure						INFOID:00000008142172
CHECK SEAT CU	ISHION THE	RMAL FLF		T SENS(OR SIGNA	I	
 Turn ignition sw Check voltage b 	itch ON.						round.
	(+)						
	n thermal electr	1	(-)		Condition	n	Voltage (V) (Approx.)
Connec Driver side	tor B533	Terminal					
Passenger side	B563	69	Ground	Climate	controlled se	eat operated	1 - 5
	itch OFF. ate controlled y between cli	d seat contro mate contro	ol unit conne	ctor and	seat cushi	ion thermal	electric unit connector. d seat cushion thermal
Climat	e controlled sea	t control unit		Seat cu	shion therma	I electric unit	Continuity
Conn	ector	Te	erminal	Conne	ctor	Terminal	Continuity
Driver side Passenger side	B530 B560		69 —	B53	-	69	Existed
. Check continuity		mate contro	olled seat cor			onnector an	d ground.
	Climate controll	ed seat contro	l unit				
	Connector		Termir	nal	0		Continuity
Driver side	E	3530	69		Gro	bund –	Not existed
Passenger side		3560					
NO >> Repair o CHECK SEAT CU	e climate con or replace ha JSHION THE	rness.		T SENSO	DR GROUI	ND CIRCUI	Т
	ate controlleo y between cli	mate contro					electric unit connector. d seat cushion thermal

SEAT CUSHION THERMAL ELECTRIC UNIT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Climate controlled seat control unit			Seat cushion the	Continuity		
Coni	nector	Terminal	Connector	Terminal	Continuity	
Driver side	B530	70	B533	70	Evicted	
Passenger side	B560	70	70 B563 70		Existed	

4. Check continuity between climate controlled seat control unit harness connector and ground.

CI	mate controlled seat contro		Continuity	
Со	nnector	Terminal	Ground	Continuity
Driver side	B530	70	Giouna	Not existed
Passenger side	B560	70		NOL EXISTED

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

4.CHECK SEAT CUSHION THERMAL ELECTRIC UNIT SENSOR

Check seat cushion thermal electric unit sensor. Refer to <u>SE-48</u>, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace seat cushion thermal electric unit.

5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> INSPECTION END

Component Inspection

 $1. {\sf check \ seat \ cushion \ thermal \ electric \ unit \ sensor}$

- 1. Turn ignition switch OFF.
- 2. Disconnect seat cushion thermal electric unit connector.
- 3. Check resistance between seat cushion thermal electric unit terminals.

Seat cushion the	Resistance (KΩ)			
Tern	(Approx.)			
69	69 70			

 * : When sensor temperature is 25°C (77°F).

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat cushion thermal electric unit.

Revision: 2013 March

INFOID:000000008142173

Revision: 2013 March

CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR

< DTC/CIRCUIT DIAGNOSIS >

CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR

Component Function Check

1. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR FUNCTION

When turning the climate controlled seat switch to the HEAT or COOL mode position, check that the climate controlled seat cushion blower is operated in each specific mode.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to SE-49, "Diagnosis Procedure".

Diagnosis Procedure

1. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR POWER SUPPLY

- 1. Turn ignition switch ON.
- Check voltage between climate controlled seat cushion blower motor harness connector and ground. 2.

	(+)										
Climate controlled seat cushion blower motor		(-) Condition		Condition Voltage (V) (Approx.)							
Connector		Terminal								(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	C
Driver side B531		B531					HEAT mode	12			
	B531				Climate controlled seat switch	COOL mode	12				
	64	Oneveral	Ground		Other than the above	0	F				
	64	04		HEAT mode	12						
Passenger side B561	B561	-	Climate controlled seat switch	COOL mode	12						
				Other than the above	0						

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect climate controlled seat cushion blower motor connector and climate controlled seat control unit connector.
- Check continuity between climate controlled seat cushion blower motor harness connector and climate 3. controlled seat control unit harness connector.

Climate controlled seat cushion blower motor			Climate controlle	d seat control unit	Continuity	N
Conr	ector	Terminal	Connector	Terminal	Continuity	
Driver side	B531	- 64	B530	64	Existed	N
Passenger side	B561	- 04	B560	64	Existed	IN

Check continuity between climate controlled seat cushion blower motor harness connector and ground. 4

Climate	controlled seat cushion blov		Continuity	0	
Connector		Terminal	Ground	Continuity	
Driver side	B531	64	Ground	Not ovisted	P
Passenger side	senger side B561			Not existed	

Is the inspection result normal?

YES >> Replace climate controlled seat control unit.

NO >> Repair or replace harness.

 ${
m 3.}$ CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR SPEED CONTROL SIGNAL

SE

Κ

L

Е

В

А

INFOID:000000008142174

D INFOID:000000008142175

CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Check voltage between climate controlled seat cushion blower motor harness connector and ground.

Climate controlle	(+) Climate controlled seat cushion blower motor		(-) Condit		lition		Voltage (V) (Approx.)		
Connector Terminal									
					HEAT		6.5 - 8		
					HI	10			
Driver side B531			Climate controlled seat switch	Climate controlled seat	COOL	MID	8		
		66 Gr				LO	6		
			- 66	Ground		Other than	the above	0	
				00	Ground		HEAT		6.5 - 8
Passenger side	B561				Climate controlled seat switch	COOL	MID	8	
				SWIGH		LO	6		
						Other than	the above	0	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

4.CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR SPEED CONTROL SIGNAL CIR-CUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect climate controlled seat cushion blower motor connector and climate controlled seat control unit connector.
- 3. Check continuity between climate controlled seat cushion blower motor harness connector and climate controlled seat control unit harness connector.

Climate co	ntrolled seat cushion b	plower motor	Climate controlle	Continuity		
Con	nector	Terminal	Connector Terminal		Continuity	
Driver side	B531	66	B530	66	Eviated	
Passenger side	B561	66	B560	66	Existed	

4. Check continuity between climate controlled seat cushion blower motor harness connector and ground.

Climate	e controlled seat cushion blo		Continuity		
Connector		Terminal	Ground	Continuity	
Driver side	B531	66	Ground	Not existed	
Passenger side	B561	0		NOT EXISTED	

Is the inspection result normal?

YES >> Replace climate controlled seat control unit.

NO >> Repair or replace harness.

5.check climate controlled seat cushion blower motor ground circuit

- 1. Turn ignition switch OFF.
- 2. Disconnect climate controlled seat cushion blower motor and climate controlled seat control unit connector.
- 3. Check continuity between climate controlled seat cushion blower motor harness connector and climate controlled seat control unit harness connector.

CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Connector Terminal Connector Terminal Continuity Driver side B531 65 B530 65 Existed Passenger side B561 65 B560 65 Existed Check continuity between climate controlled seat cushion blower motor Continuity Continuity Continuity Climate controlled seat cushion blower motor Continuity Continuity Continuity Climate controlled seat cushion blower motor Continuity Continuity Continuity Climate controlled seat cushion blower motor Continuity Continuity Continuity Driver side B531 65 Continuity Continuity Passenger side B561 65 Not existed Not existed Passenger side B561 65 Not existed Not existed e.inspection result normal? S >> Replace climate controlled seat cushion blower motor. S >> Repair or replace harness.	B531 B530 65 assenger side B561 65 Check continuity between climate controlled seat cushion blower motor harness connect Climate controlled seat cushion blower motor Connector Terminal Ground Ground	Existed
Passenger side B561 65 Existed Check continuity between climate controlled seat cushion blower motor harness connector and ground Climate controlled seat cushion blower motor Connector Connector Connector Driver side B531 Passenger side B561 65 Continuity Continuity Continuity Continuity Continuity Continuity B531 Passenger side B561 B561 B561 B561 B561 B562	assenger side B561 65 B560 65 Check continuity between climate controlled seat cushion blower motor harness connect Climate controlled seat cushion blower motor Connector Terminal Connector Terminal Ground Ground	
Passenger side B561 B560 Check continuity between climate controlled seat cushion blower motor harness connector and ground Climate controlled seat cushion blower motor Continuity Connector Terminal Oriver side B531 Passenger side B561 Passenger side B561 Passenger side B561 S >> Replace climate controlled seat cushion blower motor.	assenger side B561 B560 Check continuity between climate controlled seat cushion blower motor harness connect Climate controlled seat cushion blower motor Connector Terminal Ground Fiver side B531	
Climate controlled seat cushion blower motor Continuity Connector Terminal Ground Driver side B531 65 Passenger side B561 Not existed De inspection result normal? S >> Replace climate controlled seat cushion blower motor.	Climate controlled seat cushion blower motor Ground Connector Terminal Iriver side B531 65	or and ground
Connector Terminal Ground Driver side B531 65 Passenger side B561 65 Despection result normal? S S >> Replace climate controlled seat cushion blower motor.	Connector Terminal Iriver side B531 65	
Connector Terminal Driver side B531 Passenger side B561 Passenger side B561 Ine inspection result normal? S >> Replace climate controlled seat cushion blower motor.	river side B531 65	Continuity
Driver side B531 Passenger side B561 le inspection result normal? S >> Replace climate controlled seat cushion blower motor.	rriver side B531 65	
e inspection result normal? S >> Replace climate controlled seat cushion blower motor.		Not existed
S >> Replace climate controlled seat cushion blower motor.		

CLIMATE CONTROLLED SEAT SWITCH INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

CLIMATE CONTROLLED SEAT SWITCH INDICATOR

Component Function Check

1.CHECK CLIMATE CONTROLLED SEAT SWITCH INDICATOR FUNCTION

Check that the related indicator lamp illuminates when climate controlled seat switch is set to HEAT or COOL mode.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to SE-52, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000008142177

INFOID:000000008142176

1. CHECK CLIMATE CONTROLLED SEAT SWITCH INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between climate controlled seat switch harness connector and ground.

Climate cor	(+) Climate controlled seat switch		(-) Condit		ition	Voltage (V)		
Connect		Terminal	()			(Approx.)		
		4			COOL mode	12		
Driverseide	14004	4	4	4	Climate controlled seat	Other than the above	0	
Driver side	M204	r		switch (driver side)	HEAT mode	12		
		5	Ground		Other than the above	0		
		4		Ground	Ground	Ground	Ground	COOL mode
Deserves side	MOOF	4		Climate controlled seat	Other than the above	0		
Passenger side	M205			switch (passenger side)	HEAT mode	12		
		5			Other than the above	0		

Is the inspection result normal?

YES >> GO TO 3. NO >> GO TO 2.

NO >> GO TO Z.

2.CHECK CLIMATE CONTROLLED SEAT SWITCH INDICATOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect climate controlled seat control unit connector and climate controlled seat switch connector.

 Check continuity between climate controlled seat control unit harness connector and climate controlled seat switch harness connector.

Clin	nate controlled seat sv	witch	Climate controlle	Continuity		
Connector		Terminal	Connector	Terminal	Continuity	
Driver side	Driver side M204		B530	53		
Driver side	101204	5	0000	57	Existed	
Passangar sida	M205	4	D.C.O.	53	Existed	
Passenger side	WZ05	5	B560	57		

4. Check continuity between climate controlled seat switch harness connector and ground.

CLIMATE CONTROLLED SEAT SWITCH INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

C	Climate controlled seat swit	Terminal	-	Continuity
Con	hector	4		
Driver side	M204	5	Ground	
		4		Not existed
Passenger side	M205	5	-	
the inspection result	normal?			
	imate controlled seat	control unit.		
	eplace harness.			
	CONTROLLED SEAT	SWITCH GROUND (CIRCUIT	
Turn ignition switcl	n OFF. e controlled seat switc	h connector		
	etween climate contro		less connector and g	round.
		I.		
	Climate controlled seat swit	Terminal		Continuity
Driver side	M204	Terminar	Ground	
Passenger side	M205	6		Existed
the inspection result	imate controlled seat			
·	eplace harness.			
·				
	epiace namess.			

CLIMATE CONTROLLED SEAT BLOWER FILTER

< DTC/CIRCUIT DIAGNOSIS >

CLIMATE CONTROLLED SEAT BLOWER FILTER

Diagnosis Procedure

INFOID:000000008142178

 $1. {\sf check\ climate\ controlled\ seat\ cushion\ blower\ filter}$

Remove climate controlled seat cushion blower filter and check that there is no clogging by dirt or foreign matters.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace climate controlled seat cushion blower filter.

	DIAGNO	010 2				
EATED SE	AT SW	/ITCH				
omponent F	unction	Check				INFOID:000000008142179
CHECK HEATE	ED SEAT	SWITCH FL	JNCTION			
	d seat wa	rms to prese	et temperatu	ure when operating	heated seat switch to	the optimal posi-
n. the inspection re	esult norr	nal?				
ES >> INSPI						
IO >> Refer	to <u>SE-55</u>	<u>, "Diagnosis</u>	Procedure'	2		
agnosis Pro	cedure					INFOID:000000008142180
CHECK SEAT	CUSHIO	N HEATER I	NPUT SIGN	JAI		
Turn ignition s						<u>.</u>
Disconnect se	eat cushic	on heater cor	nnector.			
Turn ignition s			n haatar ha	rnaaa aannaatar ar	a around	
Check voltage	e betweer	i seat cushic	n nealer na	arness connector ar	la grouna.	
	(+)					
Seato	cushion hea	tor	(-)	Condition		Voltage (V)
			(-)		manion	(Approx.)
Connecto		Terminal	(-)			(Approx.)
			(-)		OFF	(Approx.)
			(-)		OFF 1 (Min. temperature)	(Approx.) 0 10.66 [*]
			(-)		OFF 1 (Min. temperature) 2	(Approx.) 0 10.66 [*] 11.18 [*]
			(')	Heated seat switch (driver side)	OFF 1 (Min. temperature) 2 3	(Approx.) 0 10.66* 11.18* 11.76*
Connecto	or	Terminal	()	Heated seat switch	OFF 1 (Min. temperature) 2	(Approx.) 0 10.66 [*] 11.18 [*]
Connecto	or	Terminal	(-)	Heated seat switch	OFF 1 (Min. temperature) 2 3	(Approx.) 0 10.66* 11.18* 11.76*
Connecto	or	Terminal		Heated seat switch	OFF 1 (Min. temperature) 2 3 4	(Approx.) 0 10.66* 11.18* 11.76* 12.12*
Connecto	or	Terminal	Ground	Heated seat switch	OFF 1 (Min. temperature) 2 3 4 5	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47*
Connecto	or	Terminal		Heated seat switch	OFF 1 (Min. temperature) 2 3 4 5 6 (Max. temperature)	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47* 12.83*
Connecto	or	Terminal		Heated seat switch (driver side)	OFF 1 (Min. temperature) 2 3 4 5 6 (Max. temperature) OFF	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47* 12.83* 0
Connecto	or	Terminal		Heated seat switch (driver side) Heated seat switch	OFF 1 (Min. temperature) 2 3 4 5 6 (Max. temperature) OFF 1 (Min. temperature)	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47* 12.83* 0 10.66*
Connector	B534	Terminal 72		Heated seat switch (driver side)	OFF 1 (Min. temperature) 2 3 4 5 6 (Max. temperature) OFF 1 (Min. temperature) 2	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47* 12.83* 0 10.66* 11.18*
Connector	B534	Terminal 72		Heated seat switch (driver side) Heated seat switch	OFF 1 (Min. temperature) 2 3 4 5 6 (Max. temperature) OFF 1 (Min. temperature) 2 3	(Approx.) 0 10.66* 11.18* 11.76* 12.12* 12.47* 12.83* 0 10.66* 11.18* 11.76*

*: When thermistor temperature is $20^{\circ}C$ ($68^{\circ}F$).

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK HEATED SEAT SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect heated seat switch connector.

3. Check continuity between heated seat switch harness connector and seat cushion heater harness connector.

Ο

Ρ

HEATED SEAT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

	Heated seat switch	Seat cush	Continuity		
Conne	ector	Terminal	Connector	Terminal	Continuity
Driver side	M198	2	B534	72	Existed
Passenger side	M199		B574	12	EXISTED

4. Check continuity between heated seat switch harness connector and ground.

	Heated seat switch			Continuity
Co	nnector	Terminal	Ground	Continuity
Driver side	M198	0	Ground	Not evicted
Passenger side	M199	2		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK HEATED SEAT SWITCH

Check heated seat switch. Refer to <u>SE-56, "Component Inspection"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace heated seat switch.

4.CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-49</u>, "Intermittent Incident".

>> INSPECTION END

Component Inspection

1.CHECK FRONT HEATED SEAT SWITCH

- 1. Turn ignition OFF.
- 2. Disconnect heated seat switch connector.
- 3. Check resistance between heated seat switch terminals under the following conditions.

	seat switch minal	Condition		Resistance (KΩ) (Approx.)	
			ON	0	
	1		OFF	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
		Heated seat switch	OFF	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
			1 (Min. temperature)	1 (Min. temperature)	2.400
5			2	1.800	
	2		3	1.200	
			4	0.910	
			5	0.620	
			6 (Max. temperature)	0.348	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat switch.

INFOID:000000008142181

A. HEARED SEAT RELAY FUNCTION Check that heated seat warms to preset temperature when operating heated seat switch to the optimal prism. Sithe inspection result normal? YES >> NDSPECTION END NO >> Refer to SE-57, "Diagnosis Procedure" Diagnosis Procedure			ALED SEAL		
Component Function Check A.CHECK HEATED SEAT RELAY FUNCTION Check that heated seat warms to preset temperature when operating heated seat switch to the optimal plant. S the inspection result normal? YES >> INSPECTION END NO >> Refer to <u>SE-57</u> . "Diagnosis Procedure" Diagnosis Procedure A.CHECK HEATED SEAT RELAY POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect heated seat relay. (1) Voltage (V) (Approx.) Connector Terminal B67 2 Ground Battery voltage (2) Heated seat relay (1) Voltage (JB) Continuity between heated seat relay terminal connector and ground. (Heated seat relay (2) Heated seat relay (3) Connector Terminal Continuity between heated seat relay terminal connector and ground. (Heated seat relay (Connector Terminal Continuity between heated seat relay terminal connector and ground. (Heated seat relay (Connector Terminal Continuity between heated seat relay terminal connector and ground. (Heated seat relay (Connector Terminal Continuity between heated seat relay terminal connector and ground. (Heated seat relay (Connector Terminal Continuity (Connector Termina					
CHECK HEATED SEAT RELAY FUNCTION Check that heated seat warms to preset temperature when operating heated seat switch to the optimal processory Sithe inspection result normal? YES >> INSPECTION END NO >> Refer to SE-57, "Diagnosis Procedure" Diagnosis Procedure reversessory CHECK HEATED SEAT RELAY POWER SUPPLY Turn ignition switch OFF. Disconnect heated seat relay. Turn ignition switch OFF. Disconnect large discussion of the seat relay terminal connector and ground. (+) Heated seat relay (-) Voltage (V) (Approx.) Connector Terminal B67 2 Ground Battery voltage sthe inspection result normal? YES >> GO TO 3. NO >> GO TO 2. CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT Turn ignition switch OFF. Disconnect large block (J/B) connector. Continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Connector Terminal B67 2 M1 2A Existed Heated seat relay Fuse block (J/B) harness connect Heated seat relay Continuity B67 2 M1 2A Existed Continuity B67 2 M1 2A Continuity B67 2 M1 2A Existed Continuity Existed Continuity Existed Continuity Existed Continuity Existed Continuity Existed Continuity Connector Terminal Ground Continuity Existed Continuity Existed Continuity Existed Continuity Existed Continuity Existed Connector Terminal Ground Continu					
tion. Is the inspection result normal? YES → INSPECTION END NO →> Refer to SE-57, "Diagnosis Procedure" Diagnosis Procedure 1. CHECK HEATED SEAT RELAY POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect heated seat relay. 3. Turn ignition switch ON. 4. Check voltage between heated seat relay terminal connector and ground. (+) Heated seat relay (,) (Approx.) Connector Terminal B67 2 Ground Battery voltage Is the inspection result normal? YES → GO TO 3. NO → SO TO 2. 2.CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Fuse block (J/B) Connector Connector Terminal B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Connector Terminal Ground Continuity Kest relay Continuity between heated seat relay terminal connector and ground. Heated seat relay Connector Terminal Ground Continuity YES → GO TO 5. NO → Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn giniton switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Connector Terminal Ground Continuity Connector Terminal Ground Continuity Kest → GO TO 5. NO → Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn giniton switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Circuit Kest → GO TO 5. NO → Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn giniton switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Circuit Kest → GO TO 5. NO → Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn giniton switch OFF. 3. Check continuity between heated seat relay terminal connector and ground.	Component Function	Check			INFOID:00000008142182
YES >> INSPECTION END NO >>> Refer to SE-57. "Diagnosis Procedure" Diagnosis Procedure	1. CHECK HEATED SEAT	RELAY FUNCTIO	NC		
Is the inspection result normal? YES >> INSPECTION END NO >> Refer to SE-57. "Diagnosis Procedure" Diagnosis Procedure		ms to preset terr	perature when o	perating heated seat	switch to the optimal posi-
YES >> INSPECTION END NO >> Refer to SE-57, "Diagnosis Procedure" Diagnosis Procedure		nal?			
Diagnosis Procedure Diagnosis Procedure 1. CHECK HEATED SEAT RELAY POWER SUPPLY 1. Turn ignition switch OFF. 2. Disconnect heated seat relay. 3. Turn ignition switch ON. 4. Check voltage between heated seat relay terminal connector and ground. Image: terminal seat relay (r) (Approx.) B67 2 Ground Battery voltage Is the inspection result normal? YES > GO TO 3. NO >> GO TO 2. 2. CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connector 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connector 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Not existed Sisted Is the inspection result normal? Y	YES >> INSPECTION E	ND			
1. Turn ignition switch OFF. 2. Disconnect heated seat relay. 3. Turn ignition switch ON. 4. Check voltage between heated seat relay terminal connector and ground. (+) Heated seat relay (-) Voltage (V) (Approx.) B67 2 Ground Battery voltage Is the inspection result normal? YES > GO TO 3. NO > GO TO 2. 2. CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Fuse block (J/B) Ground B67 2 Meated seat relay Fuse block (J/B) B67 2 M1 2. Matted seat relay Continuity B67 2 M1 2A 4. Check continuity between heated seat relay terminal connector and ground. Continuity B67 2 M1 2A Is the inspection result normal? YES > GO TO 5. NO > Repair or replace harness.		<u>"Diagnosis Proc</u>	<u>edure"</u>		
1. Turn ignition switch OFF. 2. Disconnect heated seat relay. 3. Turn ignition switch ON. 4. Check voltage between heated seat relay terminal connector and ground. (+) Heated seat relay (-) (-)	Diagnosis Procedure				INFOID:000000008142183
2. Disconnect heated seat relay. 3. Turn ignition switch ON. 4. Check voltage between heated seat relay terminal connector and ground. (+) Heated seat relay (-) Voltage (V) (Approx.) B67 2 Gonnector Terminal B67 2 Check voltage between heated seat relay terminal connector and ground. YES >S GO TO 3. NO >S GO TO 2. 2. CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Fuse block (J/B) Connector Terminal Connector Terminal Connector Terminal Connector Terminal B67 2 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity B67 B67 2 Mot existed Stein spection result normal? YES >> GO TO 5.	1. CHECK HEATED SEAT	RELAY POWER	SUPPLY		
3. Turn ignition switch ON. Image: Contract of the set of the s					
(+) Heated seat relay (-) Voltage (V) (Approx.) B67 2 Ground Battery voltage Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) Continuity Meated seat relay Fuse block (J/B) Continuity B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity B67 2 M1 2A Existed Is the inspection result normal? YES > GO TO 5. NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. Check continuity between heated seat relay terminal connector and ground. Heated seat relay	3. Turn ignition switch ON				
Veltage (V) (Approx.) Veltage (V) (Approx.) B67 2 Ground Battery voltage Is the inspection result normal? YES > GO TO 3. NO >> SO TO 3. NO >> GO TO 2. 2 Ground Battery voltage 2. CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1 Turn ignition switch OFF. 2 Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Continuity Heated seat relay Fuse block (J/B) Continuity Gonnector Terminal Continuity B67 2 M1 2A Existed 4. Heated seat relay Ground Continuity B67 2 M1 2A Existed 4. Heated seat relay Ground Continuity B67 2 M1 2A Existed 1s the inspection result normal? Yes > GO TO 5. No >> Repair or replace harness. 3CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Che	4. Check voltage between	heated seat rela	y terminal conne	ctor and ground.	
Tealed sear relay (-) (Approx.) Connector Terminal Ground Battery voltage Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. NO >> GO TO 3. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Image: Connector Terminal Continuity Continuity Image: Connector Terminal Continuity Image: Connector Terminal Continuity Image: Connector Terminal Continuity Image: Connector Terminal Ground Continuity S		(+)			
B67 2 Ground Battery voltage Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 3. NO >> GO TO 2. 2.CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Fuse block (J/B) Continuity Generative Connector Terminal B67 2 M1 2A Existed Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity B67 2 M1 2A Existed Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity B67 2 Not existed Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. 3. Check continuity between heated seat relay terminal connector and ground. Image: Continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity between heated seat relay terminal connector and ground.		-		(-)	
Is the inspection result normal? YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Heated seat relay Fuse block (J/B) Continuity Connector Terminal Connector Terminal B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Continuity B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity B67 2 M1 Continuity Not existed Is the inspection result normal? YES >> GO TO 5. NO NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 1. Turn ignition switch OFF. 1. Check continuity between heated seat relay terminal connector and ground. Heated seat relay </td <td></td> <td></td> <td>al</td> <td>Orecurs d</td> <td>Dettermine</td>			al	Orecurs d	Dettermine
YES >> GO TO 3. NO >> GO TO 2. 2.CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT 1. Turn ignition switch OFF. 2. Disconnect fuse block (J/B) connector. 3. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connect Image: Heated seat relay Fuse block (J/B) Connector Terminal Connector Terminal Connector Terminal B67 2 4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Ground Connector Terminal Go TO 5. So GO TO 5. NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Image: Section result normal? YES >> GO TO 5. NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Image: Section in thea				Ground	Battery voltage
Connector Terminal Connector Terminal B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Existed Heated seat relay Ground Continuity B67 2 Oregin and the seat relay Continuity Connector Terminal Ground Continuity B67 2 Oregin and the seat relay Continuity Connector Terminal Ground Continuity B67 2 Oregin and the seat relay Continuity YES > GO TO 5. Not existed Not existed S.CHECK HEATED SEAT RELAY GROUND CIRCUIT Intuining inition switch OFF. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Continuity Continuity Heated seat relay Continuity Continuity Connector Terminal Ground Existed	2. Disconnect fuse block (J/B) connector.	elay terminal con	nector and fuse block	(J/B) harness connector.
Connector Terminal Connector Terminal B67 2 M1 2A Existed 4. Check continuity between heated seat relay terminal connector and ground. Is issued Continuity Heated seat relay Ground Continuity B67 2 Oregin of the inspection result normal? Continuity YES >> GO TO 5. Not existed Not existed 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. Continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity between heated seat relay terminal connector and ground. Continuity	Heated seat r	elay	Fu	se block (J/B)	
4. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Connector Terminal Ground Continuity B67 2 Not existed Not existed Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. 3. CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Continuity Heated seat relay Continuity Connector Terminal Ground	Connector	Terminal	Connector	Terminal	Continuity
Heated seat relay Continuity Ground Continuity B67 2 Not existed Is the inspection result normal? YES >> GO TO 5. Not existed YES >> GO TO 5. NO >> Repair or replace harness. Scheck HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Heated seat relay Continuity Connector Terminal Ground	B67	2	M1	2A	Existed
Connector Terminal Ground Continuity B67 2 Not existed Not existed Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. S.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Continuity Ground Heated seat relay Continuity Existed Ground Existed	4. Check continuity betwe	en heated seat re	elay terminal con	nector and ground.	
Connector Terminal Ground B67 2 Not existed Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Connector Terminal Ground Existed Existed	Heated	seat relay			Continuity
Is the inspection result normal? YES >> GO TO 5. NO >> Repair or replace harness. 3. CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Ground Existed	Connector	Termina	al	Ground	Continuity
YES >> GO TO 5. NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Connector Terminal Ground Existed Existed	B67	2			Not existed
NO >> Repair or replace harness. 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Ground Existed	· · ·	<u>nal?</u>			
 3.CHECK HEATED SEAT RELAY GROUND CIRCUIT 1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Connector Terminal Ground Existed 		re harness			
1. Turn ignition switch OFF. 2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Connector Terminal Ground Existed	• · ·		O CIRCUIT		
2. Check continuity between heated seat relay terminal connector and ground. Heated seat relay Continuity Connector Terminal Ground Existed					
Connector Terminal Ground Existed			elay terminal con	nector and ground.	
Existed	Heated	seat relay			Continuity
	Connector	Termina	al	Ground	Evistad
	B67	1			
Is the inspection result normal?	•	nal?			
Is the inspection result normal? YES >> GO TO 4.	B67 Is the inspection result norm	1	al	Ground	Existed

Revision: 2013 March

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness.

4.CHECK HEATED SEAT RELAY

Check heated seat relay.

Refer to SE-58, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace heated seat relay.

5. CHECK INTERMITTENT INCIDENT

Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.

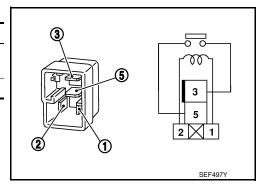
>> INSPECTION END

Component Inspection

1.CHECK HEATED SEAT RELAY

- 1. Turn ignition switch OFF.
- 2. Disconnect heated seat relay.
- 3. Check continuity between heated seat relay terminals.

Terr	ninal	Condition	Continuity
3	5	12 V direct current supply between termi- nals 1 and 2.	Existed
		No current supply	Not existed



Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat relay.

INFOID:000000008142184

DTC/CIRCUIT D								
Component Fu	nction (Check					INFOID:000000008142185	
CHECK SEATBA	ACK HEAT	ER FUNCTIO	N					
Check that heated a ion.	seat warm	s to preset ter	nperature	when oper	ating hea	ited seat swi	tch to the optimal posi-	
s the inspection res	sult normal	<u> ?</u>						
YES >> INSPE								
		Component In	spection".					
Diagnosis Proc							INFOID:000000008142186	
.CHECK SEATBA	ACK HEAT	ER SIGNAL C	IRCUIT					
 Turn ignition sw Disconnect sea Check continuit tor. 	t cushion h						eater harness connec-	
	Seat cushic				Seatback		Continuity	
Coni Driver side	nector B53		erminal	Conne B53		Terminal		
Passenger side	B57		78	B57	-	78	Existed	
 Check continuit 		hion heater ha	arness coni	nector and	ground.			
	Connector		Terminal			Continuity		
Driver side		B534	- 7	78	G	Ground	Not existed	
Passenger side		B574						
s the inspection res YES >> GO TO NO >> Repair 2.CHECK SEATBA	2. or replace ACK HEAT	harness.						
Check seatback hea Refer to <u>SE-59, "Co</u>		nspection".						
s the inspection res								
YES >> Replace NO >> Replace		hion heater.						
Component Ins							INFOID:000000008142187	
	p • • • • • • •							
CHECK SEATBA	ACK HEAT	ER						
	/itch OFF. itback heat	ter connector.	ater termin	als.				
CHECK SEATBA Turn ignition sw Disconnect sea Check resistant Seatback he	vitch OFF. tback heat ce betweer ^{ater}	ter connector.		als.			Resistance (Ω) (Approx.)	
CHECK SEATBA Turn ignition sw Disconnect sea Check resistant	vitch OFF. tback heat ce betweer ^{ater}	ter connector.	С	condition	C (68°F)		Resistance (Ω) (Approx.) 5.39 - 6.57	

NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

SEATBACK HEATER

< DTC/CIRCUIT DIAGNOSIS >

- YES >> INSPECTION END
- NO >> Replace seatback heater.

HEATED SEAT SWITCH INDICATOR	
< DTC/CIRCUIT DIAGNOSIS >	
HEATED SEAT SWITCH INDICATOR	А
Component Function Check	A
1. CHECK HEATED SEAT SWITCH INDICATOR FUNCTION	В
Check that the related indicator lamp illuminates when heated seat switch is turned ON.	
Is the inspection result normal?	C
YES >> INSPECTION END	C
NO >> Refer to <u>SE-61, "Diagnosis Procedure"</u> .	
Diagnosis Procedure	000000008142189
1. CHECK HEATED SEAT SWITCH INDICATOR GROUND CIRCUIT	
1. Turn ignition switch OFF.	E
 Disconnect heated seat switch connector. Check continuity between heated seat switch harness connector and ground. 	
e. Check continuity between notice beat switch namess connector and ground.	— F
Heated seat switch Continuity	
Connector Terminal Ground	y
Driver side M198 6 Existed	G
Passenger side M199	
Is the inspection result normal?	Н
YES >> Replace heated seat switch.	
NO >> Repair or replace harness.	
	SE

Κ

L

M

Ν

0

Ρ

CLIMATE CONTROLLED SEAT DOES NOT OPERATE.

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS	
-------------------	--

CLIMATE CONTROLLED SEAT DOES NOT OPERATE.

Diagnosis Procedure

INFOID:000000008142190

1. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Check climate controlled seat control unit power supply and ground circuit. Refer to SE-29, "CLIMATE CONTROLLED SEAT CONTROL UNIT : Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK CLIMATE CONTROLLED SEAT SWITCH

Check climate controlled seat switch.

Refer to SE-38. "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 $\mathbf{3.}$ CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR

Check climate controlled seat cushion blower motor. Refer to <u>SE-49, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

4.REPLACE CLIMATE CONTROLLED SEAT CONTROL UNIT

Replace climate controlled seat control unit.

Is the inspection result normal?

YES >> INSPECTION END NO >> GO TO 5.

F

5.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.

NO >> GO TO 1.

TEMPERATURE ADJUSTMENT IS IMPOSSIBLE

< SYMPTOM DIAGNOSIS >	
TEMPERATURE ADJUSTMENT IS IMPOSSIBLE	A
SEAT CUSHION	~
SEAT CUSHION : Diagnosis Procedure	INFOID:000000008142191
1. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER FILTER	
Check climate controlled seat cushion blower filter. Refer to <u>SE-54, "Diagnosis Procedure"</u> . Is the inspection result normal?	С
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	D
2. CHECK CLIMATE CONTROLLED SEAT SWITCH	
Check climate controlled seat switch. Refer to <u>SE-38, "Component Function Check"</u> . Is the inspection result normal?	E
YES $>>$ GO TO 3.	F
NO >> Repair or replace the malfunctioning parts.	
3. CHECK SEAT CUSHION THERMAL ELECTRIC UNIT SENSOR	G
Check seat cushion thermal electric unit sensor. Refer to <u>SE-47, "Component Function Check"</u> .	9
Is the inspection result normal? YES >> GO TO 4.	Н
NO >> Repair or replace the malfunctioning parts.	
4. CHECK SEAT CUSHION THERMAL ELECTRIC UNIT	I
Check seat cushion thermal electric unit. Refer to <u>SE-45, "Component Function Check"</u> .	
Is the inspection result normal?	SE
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.	
5. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR	K
Check climate controlled seat cushion blower motor. Refer to <u>SE-49, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 6. NO >> Repair or replace the malfunctioning parts.	Μ
6.CONFIRM THE OPERATION	1 V I
Confirm the operation again.	
Is the inspection result normal? YES >> Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u> . NO >> GO TO 1.	N
SEATBACK	0
SEATBACK : Diagnosis Procedure	INFOID:000000008142192
1. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER FILTER	P
Check climate controlled seat cushion blower filter. Refer to <u>SE-54, "Diagnosis Procedure"</u> .	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	

Revision: 2013 March

TEMPERATURE ADJUSTMENT IS IMPOSSIBLE

< SYMPTOM DIAGNOSIS >

2.CHECK CLIMATE CONTROLLED SEAT SWITCH
Check climate controlled seat switch. Refer to <u>SE-38, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts.
3. CHECK SEATBACK THERMAL ELECTRIC UNIT SENSOR
Check seatback thermal electric unit sensor. Refer to <u>SE-43, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.
4. CHECK SEATBACK THERMAL ELECTRIC UNIT
Check seatback thermal electric unit. Refer to <u>SE-41, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 5. NO >> Repair or replace the malfunctioning parts.
5. CHECK CLIMATE CONTROLLED SEAT CUSHION BLOWER MOTOR
Check climate controlled seat cushion blower motor. Refer to <u>SE-49, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 6.

- YES >> GO TO 6.
- NO >> Repair or replace the malfunctioning parts.

6.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.
- NO >> GO TO 1.

CLIMATE CONTROLLED SEAT ACTIVATES ONCE BUT STOPS IMMEDIATELY < SYMPTOM DIAGNOSIS >

CLIMATE CONTROLLED SEAT ACTIVATES ONCE BUT STOPS IMMEDI-ATELY

Description INFOID:000000008142193 В When turning climate controlled seat switch ON (COOL or HEAT), climate controlled seat activates once but stops immediately. (Repeats the same operation when turning ignition switch OFF and turning ignition switch ON again.) С **Diagnosis** Procedure INFOID:00000008142194 1.CHECK FAIL-SAFE D Check fail-safe detecting conditions and repair cause of fail-safe status. Refer to SE-14, "CLIMATE CONTROLLED SEAT SYSTEM : Fail-safe". Е Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. F 2.CHECK TEMPERTURE ADJUSTMENT FUNCTION Check temperature adjustment function of climated controlled seat. Refer to SE-63, "SEAT CUSHION : Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunctioning parts. Н **3.**CONFIRM THE OPERATION Confirm the operation again. Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-49, "Intermittent Incident". NO >> GO TO 1. SE

Revision: 2013 March

А

Κ

L

Μ

Ν

Ρ

SEAT SWITCH INDICATOR IS NOT ILLUMINATED IN HEAT OR COOL POSI-TION

< SYMPTOM DIAGNOSIS >

SEAT SWITCH INDICATOR IS NOT ILLUMINATED IN HEAT OR COOL PO-SITION

Diagnosis Procedure

INFOID:000000008142195

1.CHECK CLIMATE CONTROLLED SEAT SWITCH INDICATOR

Check climate controlled seat switch indicator. Refer to <u>SE-52, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49. "Intermittent Incident".

NO >> GO TO 1.

HEATED SEAT DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
HEATED SEAT DOES NOT OPERATE	А
Diagnosis Procedure	~
1.CHECK HEATED SEAT SWITCH POWER SUPPLY	В
Check heated seat switch power supply. Refer to <u>SE-36, "HEATED SEAT SWITCH : Diagnosis Procedure"</u> .	
Is the inspection result normal?	С
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts.	
2.CHECK HEATED SEAT RELAY	D
Check heated seat relay. Refer to <u>SE-57, "Component Function Check"</u> .	
<u>Is the inspection result normal?</u>	E
YES >> GO TO 3.	
NO >> Repair or replace the malfunctioning parts. 3.CHECK SEAT CUSHION HEATER POWER SUPPLY AND GROUND CIRCUIT	F
Check seat cushion heater power supply and ground circuit.	
Refer to <u>SE-33, "SEAT CUSHION HEATER : Diagnosis Procedure"</u> .	G
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunctioning parts.	Н
4. CHECK HEATED SEAT SWITCH	
Check heated seat switch.	I
Refer to <u>SE-55, "Component Function Check"</u> .	1
<u>Is the inspection result normal?</u> YES >> GO TO 5.	0
NO >> Repair or replace the malfunctioning parts.	SE
5. CONFIRM THE OPERATION	
Confirm the operation again.	Κ
Is the inspection result normal?	
 YES >> Check intermittent incident. Refer to <u>GI-49. "Intermittent Incident"</u>. NO >> GO TO 1. 	L
	M
	Ν
	0

Ρ

SEATBACK HEATER ONLY DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

SEATBACK HEATER ONLY DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000008142197

1.CHECK SEATBACK HEATER

Check seatback heater. Refer to <u>SE-59, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.

NO >> GO TO 1.

CANNOT ADJUST HEATED SEAT TEMPERATURE

< SYMPTOM DIAGNOSIS >	
CANNOT ADJUST HEATED SEAT TEMPERATURE	А
Diagnosis Procedure	
1.CHECK HEATED SEAT SWITCH	В
Check heated seat switch. Refer to <u>SE-55, "Component Function Check"</u> .	
Is the inspection result normal?	С
YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CONFIRM THE OPERATION	D
Confirm the operation again. <u>Is the inspection result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-49. "Intermittent Incident"</u> .	E
NO >> Replace seat cushion heater.	F
	G
	Н

I

SE

L

Ν

0

Р

HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON

Diagnosis Procedure

INFOID:000000008142199

1.CHECK HEATED SEAT SWITCH INDICATOR

Check heated seat switch indicator. Refer to <u>SE-61</u>, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-49, "Intermittent Incident"</u>.

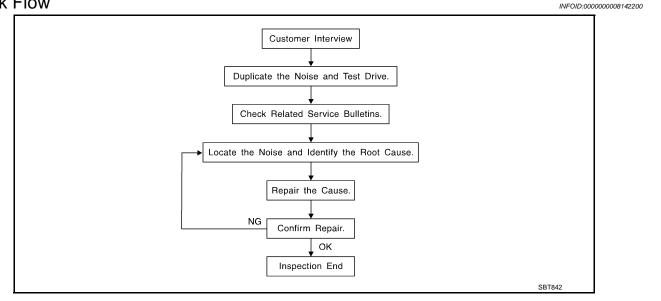
NO >> GO TO 1.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Work Flow



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any of customer's comments; refer to <u>SE-75</u>, "<u>Diagnostic Worksheet</u>". This information is necessary to duplicate the conditions that exist when the noise occurs.

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics SE are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak (Like tennis shoes on a clean floor)
 Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces
 a higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping
- Creak (Like walking on an old wooden floor)
 Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle (Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock (Like a knock on a door)
 Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick (Like a clock second hand)
 Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump (Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz (Like a bumblebee)
 Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when the repair is reconfirmed.

А

E

Ν

SQUEAK AND RATTLE TROUBLE DIAGNOSES

< SYMPTOM DIAGNOSIS >

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T models, drive position on A/T models).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.

If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- Tapping or pushing/pulling the component that is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.

Refer to <u>SE-73, "Inspection Procedure"</u>.

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-43980) is available through the authorized Nissan Parts Department.

CAUTION:

Never use excessive force as many components are constructed of plastic and may be damaged. NOTE:

Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 \times 135 mm (3.94 \times 5.31 in)/76884-71L01: 60 \times 85 mm (2.36 \times 3.35 in)/76884-71L02:15 \times 25 mm (0.59 \times 0.98 in)

INSULATOR (Foam blocks)

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97 \times 1.97 in)/73982-

50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97 \times 1.97 in)

INSULATOR (Light foam block)

80845-71L00: 30 mm (1.18 in) thick, 30×50 mm (1.18 \times 1.97in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications. 68370-4B000: $15 \times 25 \text{ mm} (0.59 \times 0.98 \text{ in}) \text{ pad}/68239-13E00: 5 \text{ mm} (0.20 \text{ in}) \text{ wide tape roll}$ The following materials, not found in the kit, can also be used to repair squeaks and rattles. UHMW (TEFLON) TAPE

< S	SYMPTOM DIAGNOSIS >	
	ulates where slight movement is present. Ideal for instrument panel applications.	
Use	ICONE GREASE ed in place of UHMW tape that is be visible or does not fit. Will only last a few months. ICONE SPRAY	A
Use	ed when grease cannot be applied.	В
	CT TAPE ed to eliminate movement.	D
	INFIRM THE REPAIR	
Co	nfirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same inditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.	С
Ins	spection Procedure	D
Ref	fer to Table of Contents for specific component removal and installation information.	
INS	STRUMENT PANEL	Е
Мо	st incidents are caused by contact and movement between:	
1.	The cluster lid A and instrument panel	
2.	Acrylic lens and combination meter housing	F
3.	Instrument panel to front pillar garnish	
4.	Instrument panel to windshield	0
5.	Instrument panel mounting pins	G
6.	Wiring harnesses behind the combination meter	
7.	A/C defroster duct and duct joint	Н
	These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by	
	applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness. CAUTION:	I
	Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.	SE
CE	NTER CONSOLE	
Co	mponents to pay attention to include:	
1.	Shifter assembly cover to finisher	Κ
2.	A/C control unit and cluster lid C	
3.	Wiring harnesses behind audio and A/C control unit	
The	e instrument panel repair and isolation procedures also apply to the center console.	L
	ORS	
Pay	y attention to the following:	M
1.	Finisher and inner panel making a slapping noise	
2.	Inside handle escutcheon to door finisher	
3.	Wiring harnesses tapping	Ν
4.	Door striker out of alignment causing a popping noise on starts and stops	
ma	oping or moving the components or pressing on them while driving to duplicate the conditions can isolate ny of these incidents. The areas can usually be insulated with felt cloth tape or insulator foam blocks from Nissan Squeak and Rattle Kit (J-43980) to repair the noise.	0
TR	UNK	
	ink noises are often caused by a loose jack or loose items put into the trunk by the customer. addition look for the following:	Ρ
1.	Trunk lid dumpers out of adjustment	
2.	Trunk lid striker out of adjustment	

- 3. The trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

< SYMPTOM DIAGNOSIS >

Most of these incidents can be repaired by adjusting, securing or insulating the item(s) or component(s) causing the noise.

SUNROOF/HEADLINING

Noises in the sunroof/headlining area can often be traced to one of the following:

- 1. Sunroof lid, rail, linkage or seals making a rattle or light knocking noise
- 2. Sunvisor shaft shaking in the holder
- 3. Front or rear windshield touching headlining and squeaking

Again, pressing on the components to stop the noise while duplicating the conditions can isolate most of these incidents. Repairs usually consist of insulating with felt cloth tape.

SEATS

When isolating seat noise it's important to note the position the seats in and the load placed on the seat when the noise occurs. These conditions should be duplicated when verifying and isolating the cause of the noise. Cause of seat noise include:

- 1. Headrest rods and holder
- 2. A squeak between the seat pad cushion and frame
- 3. The rear seatback lock and bracket

These noises can be isolated by moving or pressing on the suspected components while duplicating the conditions under which the noise occurs. Most of these incidents can be repaired by repositioning the component or applying urethane tape to the contact area.

UNDERHOOD

Some interior noise may be caused by components under the hood or on the engine wall. The noise is then transmitted into the passenger compartment.

Causes of transmitted underhood noise include:

- 1. Any component mounted to the engine wall
- 2. Components that pass through the engine wall
- 3. Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 5. Hood bumpers out of adjustment
- 6. Hood striker out of adjustment

These noises can be difficult to isolate since they cannot be reached from the interior of the vehicle. The best method is to secure, move or insulate one component at a time and test drive the vehicle. Also, engine RPM or load can be changed to isolate the noise. Repairs can usually be made by moving, adjusting, securing, or insulating the component causing the noise.

< SYMPTOM DIAGNOSIS >

Diagnostic Worksheet



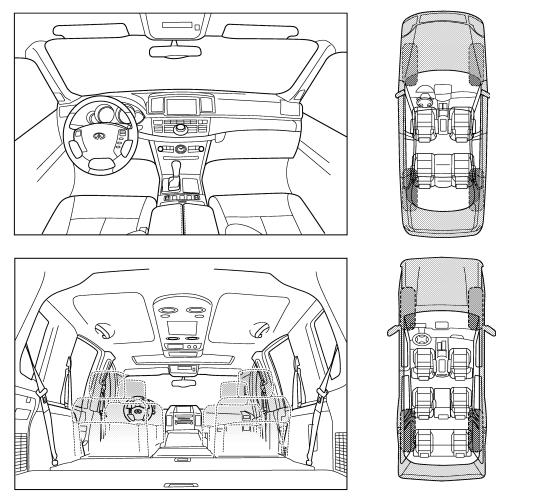
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:

We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under what conditions. You may be asked to take a test drive with a service consultant or technician to ensure we confirm the noise you are hearing.

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)

The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.



Continue to page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

INFOID:000000008142202

А

В

D

Е

F

Н

SE

Κ

L

Μ

Ν

Ρ

< SYMPTOM DIAGNOSIS >

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

II. WHEN DOES IT OCCUR? (please check the boxes that apply)						
 anytime 1st time in the morning only when it is cold outside only when it is hot outside 	 after sitting out in the rain when it is raining or wet dry or dusty conditions other: 					
III. WHEN DRIVING:	IV. WHAT TYPE OF NOISE					
 through driveways over rough roads over speed bumps only about mph on acceleration coming to a stop on turns: left, right or either (circle) with passengers or cargo other: after driving miles or min 	 squeak (like tennis shoes on a clean floor) creak (like walking on an old wooden floor) rattle (like shaking a baby rattle) knock (like a knock at the door) tick (like a clock second hand) thump (heavy, muffled knock noise) buzz (like a bumble bee) 					

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair			
		me:	

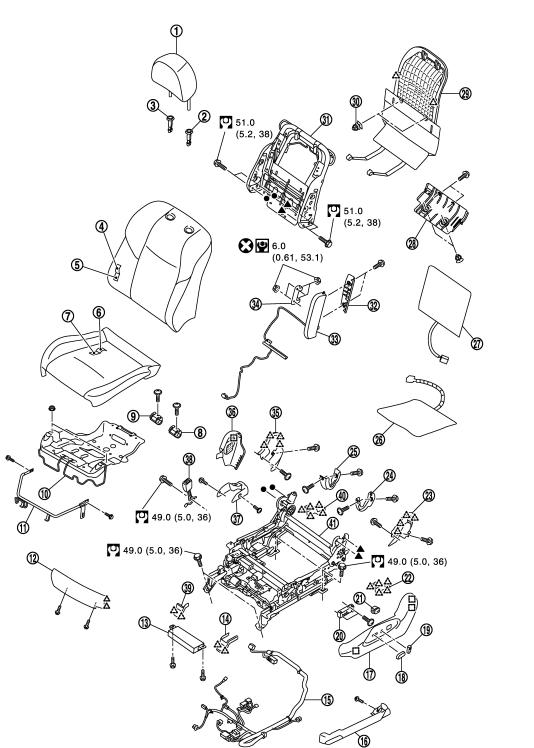
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION FRONT SEAT

Exploded View

DRIVER SEAT WITH SEAT HEATER

SEC. 870



JMJIA4128GB

А

В

С

D

Ε

F

G

Н

SE

Κ

L

Μ

Ν

Ο

Ρ

INFOID:000000008142203

< REMOVAL AND INSTALLATION >

- 1. Headrest
- 4. Seatback trim
- 7. Seat cushion pad
- 10. Seat cushion frame
- 13. Seat control unit
- 16. Seat cushion lower outer finisher
- 19. Seat reclining switch knob
- 22. Rear leg outer cover
- 25. Seat cushion rear finisher (RH)
- 28. Seat cushion rear finisher
- 31. Seatback frame
- 34. Side air bag module bracket
- 37. Seat cushion lower inner finisher
- 40. Rear leg inner cover
- ,^ : Pawl
- [] : Metal clip

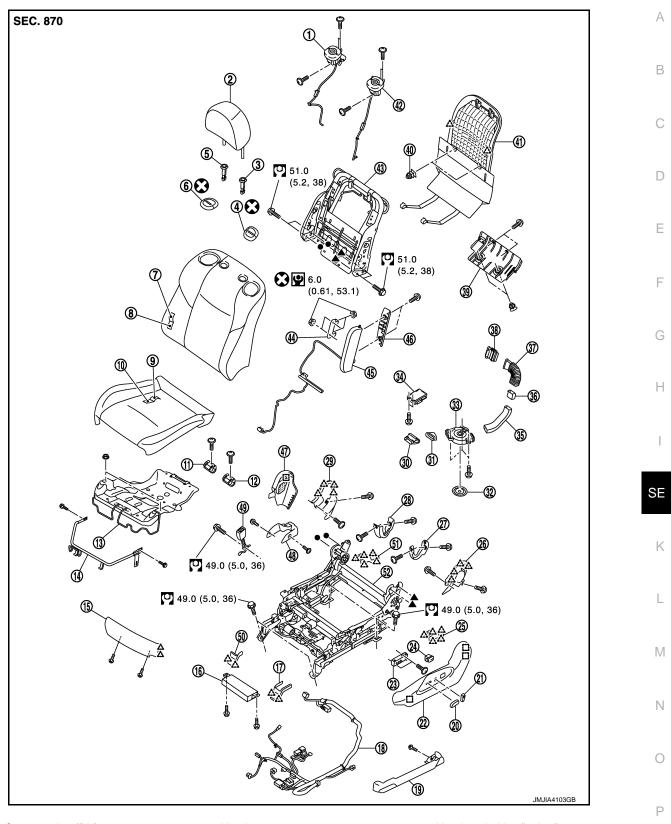
Refer to GI-5, "Components" for symbols in the figure.

- 2. Headrest holder (locked)
- 5. Seatback pad
- 8. Seat cushion frame bracket (LH)
- 11. Seat adjuster bar
- 14. Front leg outer cover
- 17. Seat cushion outer finisher (LH)
- 20. Seat control switch
- 23. Seat cushion inner finisher (LH)
- 26. Seat cushion heater unit
- 29. Seatback board
- 32. Side air bag module cover
- 35. Seat cushion inner finisher (RH)
- 38. Seat belt buckle
- 41. Seat adjuster assembly

- 3. Headrest holder (free)
- 6. Seat cushion trim
- 9. Seat cushion frame bracket (RH)
- 12. Seat cushion finisher (front)
- 15. Seat harness
- 18. Seat slide and lifter switch knob
- 21. Lumber support switch
- 24. Seat cushion rear finisher (LH)
- 27. Seatback heater unit
- 30. Seatback board clip
- 33. Side air bag module
- 36. Seat cushion outer finisher (RH)
- 39. Front leg inner cover

DRIVER SEAT WITH SEAT SPEAKER AND CLIMATE CONTROLLED SEAT

< REMOVAL AND INSTALLATION >



- 1. Seat speaker (RH)
- 4. Seat speaker grill (LH)
- 7. Seatback trim
- 10. Seat cushion pad
- 13. Seat cushion frame
- 16. Seat control unit

- 2. Headrest
- 5. Headrest holder (free)
- 8. Seatback pad
- 11. Seat cushion frame bracket (RH)
- 14. Seat adjuster bar
- 17. Front leg outer cover

- 3. Headrest holder (locked)
- 6. Seat speaker grill (RH)
- 9. Seat cushion trim
- 12. Seat cushion frame bracket (LH)
- 15. Seat cushion finisher (front)
- 18. Seat harness

SE-79

< REMOVAL AND INSTALLATION >

- 19. Seat cushion lower outer finisher
- 22. Seat cushion outer finisher (LH)
- 25. Rear leg outer cover
- 28. Seat cushion rear finisher (RH)
- 31. Seat cushion duct
- 34. Climate controlled seat control unit
- 37. Seatback duct
- 40. Seatback board clip
- 43. Seatback frame
- 46. Side air bag module cover
- 49. Seat belt buckle
- 52. Seat adjuster assembly
- کے : Pawl
- [] : Metal clip

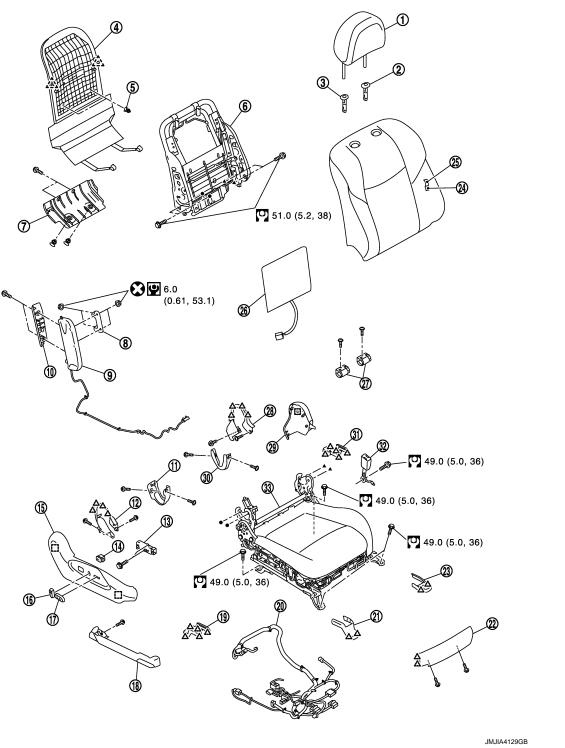
Refer to GI-5, "Components" for symbols in the figure.

PASSENGER SEAT WITH SEAT HEATER

- 20. Seat slide and lifter switch knob
- 23. Seat control switch
- 26. Seat cushion inner finisher (LH)
- 29. Seat cushion inner finisher (RH)
- 32. Climate controlled seat blower filter
- 35. Seatback duct
- 38. Seatback thermal electric unit
- 41. Seatback board
- 44. Side air bag module bracket
- 47. Seat cushion outer finisher (RH)
- 50. Front leg inner cover

- 21. Seat reclining switch knob
- 24. Lumber support switch
- 27. Seat cushion rear finisher (LH)
- 30. Seat cushion thermal electric unit
- 33. Climate controlled seat blower motor
- 36. Seatback duct
- 39. Seat cushion rear finisher
- 42. Seat speaker (LH)
- 45. Side air bag module
- 48. Seat cushion lower inner finisher
- 51. Rear leg inner cover

SEC. 870



- 1. Headrest
- 4. Seatback board
- 7. Seat cushion rear finisher
- Side air bag module cover 10.
- 13. Seat control switch
- 16. Seat reclining switch knob
- 2. Headrest holder (locked)
- 5. Seatback board clip
- 8. Side air bag module bracket
- Seat cushion rear finisher (RH) 11.
- 14. Lumber support switch
- 17. Seat slide and lifter switch knob

- Ρ

А

В

С

D

Е

F

Н

SE

Κ

L

Μ

Ν

Ο

- Seatback frame
- 9. Side air bag module

3.

6.

12. Seat cushion inner finisher (LH)

Headrest holder (free)

- 15. Seat cushion outer finisher (RH)
- 18. Seat cushion lower outer finisher

< REMOVAL AND INSTALLATION >

19. Rear leg outer cover

22. Seat cushion finisher (front)

28. Seat cushion inner finisher (LH)

- 20. Seat harness
 - 23. Front leg inner cover
 - 26. Seatback heater unit
 - 29. Seat cushion outer finisher (RH)
 - 32. Seat belt buckle

- 21. Front leg outer cover
- 24. Seatback pad
- 27. Seat cushion frame bracket
- 30. Seat cushion rear finisher (LH)
- 33. Seat cushion assembly

31. Rear leg inner cover

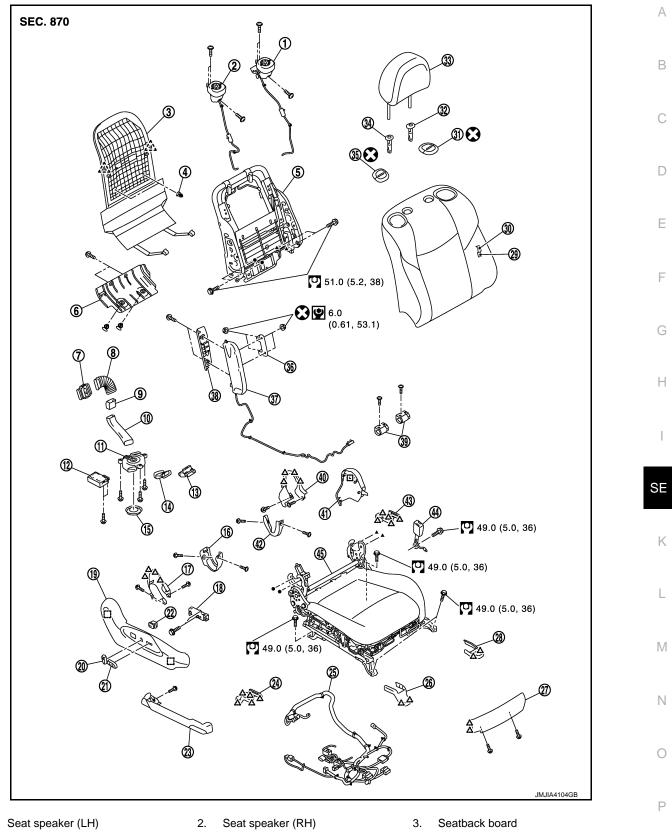
25. Seatback trim

- / : Pawl
- : Metal clip

Refer to GI-5, "Components" for symbols in the figure.

PASSENGER SEAT WITH SEAT SPEAKER AND CLIMATE CONTROLLED SEAT

< REMOVAL AND INSTALLATION >



4. Seatback board clip

1.

- 7. Seatback thermal electric unit
- 10. Seatback duct
- 13. Seat cushion thermal electric unit
- 16. Seat cushion rear finisher (RH)
- 5. Seatback frame
- 8. Seatback duct
- Climate controlled seat blower motor 12. 11.
- 14. Seat cushion duct
- 17. Seat cushion inner finisher (LH)
- 6. Seat cushion rear finisher
- 9. Seatback duct
- Climate controlled seat control unit
- 15. Climate controlled seat blower filter
- 18. Seat control switch

SE-83

< REMOVAL AND INSTALLATION >

- 19. Lumber support switch
- 22. Seat slide and lifter switch knob
- 25. Seat harness
- 28. Front leg inner cover
- 31. Seat speaker grill (LH)
- 34. Headrest holder (free)
- 37. Side air bag module
- 40. Seat cushion inner finisher (LH)
- 43. Rear leg inner cover
- ,^ : Pawl
- [] : Metal clip

Refer to GI-5, "Components" for symbols in the figure.

Removal and Installation

REMOVAL

CAUTION:

b.

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove the headrest.
- 2. Remove the front leg cover.
- a. Front outer leg cover
 - Slide the seat to the rearmost position.

Slide seat to the rearmost position.

Slide front leg cover foreword to remove.

• Pull front leg cover outer front clips upward to disengage.

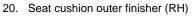
• Pull front leg cover inner front pawls upward to disengage.

• Slide front leg cover outer foreword to remove.



Front inner leg cover

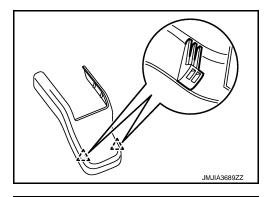
六 : Pawl

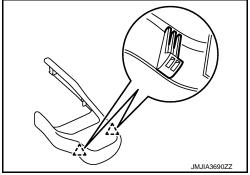


- 23. Seat cushion lower outer finisher
- 26. Front leg outer cover
- 29. Seatback pad
- 32. Headrest holder (locked)
- 35. Seat speaker grill (RH)
- 38. Side air bag module cover
- 41. Seat cushion outer finisher (RH)
- 44. Seat belt buckle

- 21. Seat reclining switch knob
- 24. Rear leg outer cover
- 27. Seat cushion finisher (front)
- 30. Seatback trim
- 33. Headrest
- 36. Side air bag module bracket
- 39. Seat cushion frame bracket
- 42. Seat cushion rear finisher (LH)
- 45. Seat cushion assembly

INFOID:000000008142204





- 3. Remove mounting bolts from the front of front seat.
- 4. Remove rear leg covers.

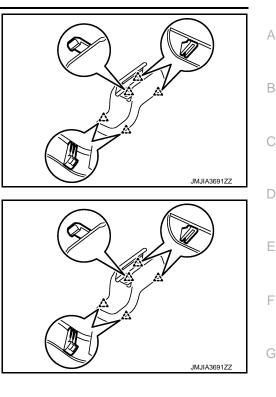
< REMOVAL AND INSTALLATION >

- a. Rear outer leg cover
 - Slide seat to the frontmost position.
 - Pull rear leg cover outer rear pawls upward to disengage and remove.
 - Open rear leg cover inner front, and then disengage and remove pawls.

2 : Pawl

- b. Rear inner leg cover
 - Slide the seat to the frontmost position.
 - Pull rear leg cover inner rear pawls upward to disengage and remove.
 - Open rear leg cover inner front, and then disengage and remove pawls.





Н

SE

Κ

L

Μ

Ν

Ρ

F	Domovio mounting	halta fram	the frent eest	troor oldo
э.	Remove mounting		the nonit sea	l lear side.

- 6. Set the seatback vertically.
- 7. Remove seat cushion lower harness connector and harness clamp.

WARNING:

Before servicing, turn ignition switch OFF, disconnect 12V battery negative terminal and wait for 3 minutes or more.

8. Remove the front seat from the vehicle. CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Always fix the harness clamp in position. NOTE:

Perform "Operation when disconnecting battery cable from negative terminal" after connecting the battery cable to the negative terminal. Refer to <u>ADP-45, "Description"</u>. SEATBACK

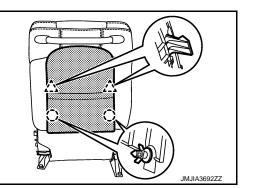
SEATBACK : Disassembly and Assembly

Disassembly

- 1. Remove the seatback board.
 - 1. Pull seatback board forward. Disengage clips of lower side, and then disengage pawls.
 - 2. Pull seatback board downward. Remove seatback board.

(_) : Clip

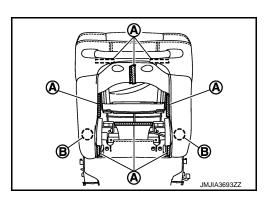
2 : Pawl



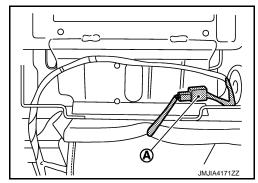
INFOID:000000008142205

< REMOVAL AND INSTALLATION >

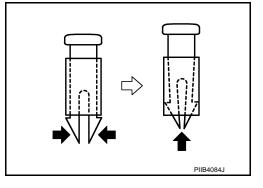
- 2. Remove seatback trim and seatback pad.
 - 1. Remove seatback retainer (A).
 - 2. Remove mounting clips (B).



3. Disconnect the seatback heater unit harness connector. (Heated seat model only.)



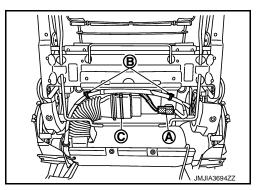
 Remove the headrest holder.
 CAUTION: Before installing headrest holder check its orientation. (Front/rear and right/left)



- 5. Remove the side air bag module cover.
- 6. Remove the side air bag module mounting nuts. Refer to <u>SR-18, "Removal and Installation"</u>.
- 7. Remove the speaker grill (seat with speaker only). Refer to AV-272, "Removal and Installation".
- 8. Remove the seatback trim and seatback pad from the seatback frame. **NOTE:**

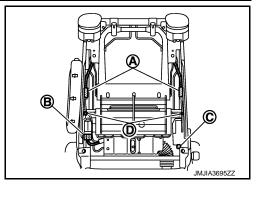
For models with seat heater, remove seatback heater unit, seatback trim, and seatback pad as a set.9. Remove the hog rings, and separate the seatback trim and seatback pad.

- 3. Remove the seatback silencer.
- 4. Remove the seatback thermal electric unit harness connector (A).
- 5. Remove the harness clips (B).
- 6. Cut mounting band (C) of seatback thermal electric unit.



< REMOVAL AND INSTALLATION >

7. Disconnect seatback speaker harness connector (A), reclining motor harness connector (B), Lumbar support motor harness connector (C), and harness clip (D).



А

В

D

Е

F

Н

SE

Κ

L

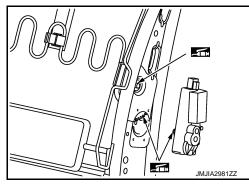
INFOID:000000008142206

8. Remove mounting bolts, and then remove seatback frame.

Assembly

Note the following item, and then assembly in the reverse order of disassembly. **CAUTION:**

- Install the hog rings of seat trim in position, and then securely connect the trim or trim cord with the pad side wire.
- Apply door regulator grease or an equivalent to shaft and gear positions of lumber support unit. (Models with power lumber support only)



SEAT CUSHION

SEAT CUSHION : Disassembly and Assembly

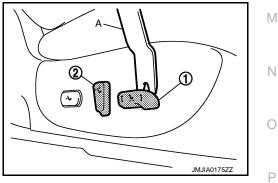
Disassembly

CAUTION:

Do not disassemble front passenger seat cushion assembly (USA/Canada model only). Always replace as an assembly.

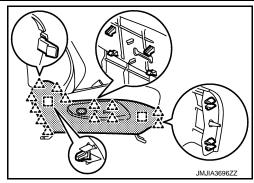
For front passenger seat service parts, refer to the service part catalogue.

- 1. Remove the seat cushion outer finisher.
 - 1. Remove the seat slide & lifter switch and seat reclining switch (1) knob (2) using a remover tool.



< REMOVAL AND INSTALLATION >

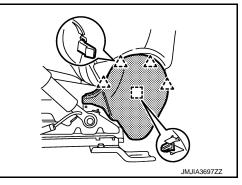
- 2. Pull seat cushion outer finisher forward. Disengage metal clips and pawls.
 - 2 : Pawl
 - : Metal clip



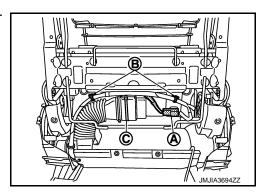
- 3. Remove the lumber support switch harness connector.
- 2. Remove the seat cushion inner finisher.

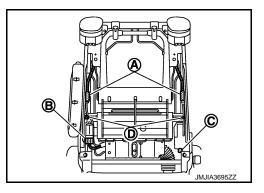
Pull seat cushion inner finisher forward. Disengage pawls and metal clips.

<u>^</u>	: Pawl
[]]	: Metal clip



- 3. Remove the seatback trim and seatback pad from the seatback frame. Refer to <u>SE-85, "SEATBACK : Disassembly and Assembly"</u>.
- 4. Remove the seatback silencer.
- 5. Remove the seatback thermal electric unit harness connector (A).
- 6. Remove the harness clips (B).
- 7. Cut mounting band (C) of seatback thermal electric unit.





8. Disconnect seatback speaker harness connector (A), reclining motor harness connector (B), lumber support motor harness connector (C), and harness clip (D).

< REMOVAL AND INSTALLATION >

9. Remove the mounting screw (A). Remove the seat cushion front finisher.

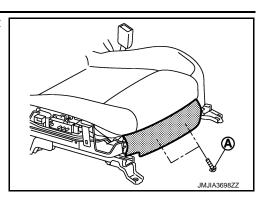
- 10. Remove the seat cushion rear finisher.
- 11. Disconnect the seatback heater unit harness connector. (Heated seat model only.)

- 12. Disconnect harness connector (A) and harness clip (B) of seat cushion frame lower.
 - Driver's seat

Passenger's seat

- 13. Remove the mounting nut and screw. Remove seat cushion frame.
- 14. Remove the thermal electric unit from seat cushion frame.
- 15. Remove the seat cushion trim and seat cushion pad.
 - 1. Remove the seat cushion retainer.
 - 2. Remove the seat cushion trim and seat cushion pad from the seat cushion frame. **NOTE:**

SE-89



А

В

D

Е

F

Н

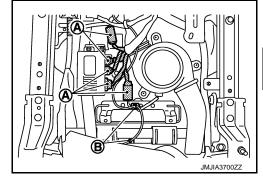
SE

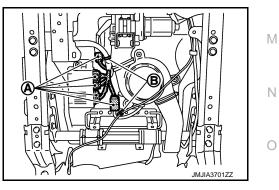
K

L

(A)

JMJIA4172ZZ





Ρ

< REMOVAL AND INSTALLATION >

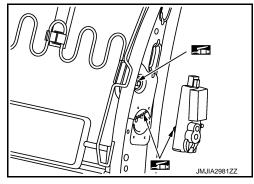
- For models with seat heater, remove seat cushion heater unit, seat cushion trim, and seat cushion pad as a set.
- 3. Remove the hog rings, and separate the seat cushion trim and seat cushion pad.
- 16. Remove the following parts from seat adjuster assembly.
 - Seat cushion inner finisher
 - Seat cushion rear finisher
 - Seat cushion outer finisher lower
 - Seat belt buckle: Refer to SB-11, "SEAT BELT BUCKLE : Removal and Installation".

Assembly

Note the following item, and then assembly in the reverse order of disassembly.

CAUTION:

- Install the hog rings of seat trim in position, and then securely connect the trim or trim cord with the pad side wire.
- Apply door regulator grease or an equivalent to shaft and gear positions of lumber support unit. (Models with power lumber support only)



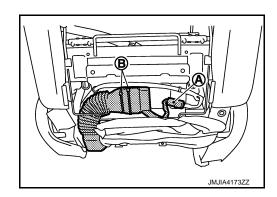
CLIMATE CONTROLLED SEAT UNIT

CLIMATE CONTROLLED SEAT UNIT : Disassembly and Assembly

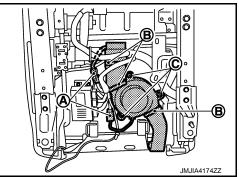
INFOID:000000008142207

Disassembly

- 1. Remove the seatback duct and seatback thermal electric unit.
 - 1. Remove the harness connector (A).
 - 2. Remove the band (B).

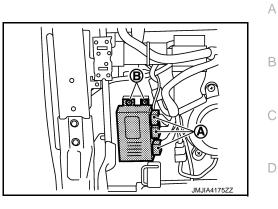


- 2. Remove the seatback duct.
- 3. Remove the seat cushion duct, seat cushion thermal electric unit and climate controlled seat blower motor.
 - 1. Disconnect the harness connectors (A).
 - 2. Remove the band (B)
 - 3. Remove the climate controlled seat blower motor mounting screws (C).



< REMOVAL AND INSTALLATION >

- 4. Remove the seat cushion duct.
- 5. Remove the climate controlled seat control unit.
 - 1. Disconnect the harness connectors (A).
 - 2. Remove the climate controlled seat control unit mounting screws (B).



Assembly

Assemble in the reverse order of disassembly.



L

Μ

Ν

Ο

Ρ

SE

Е

F

G

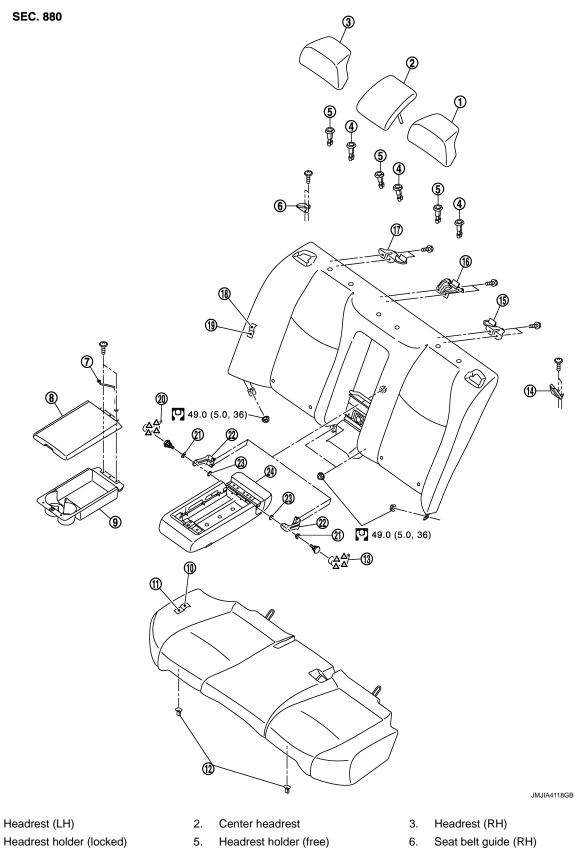
Н

Revision: 2013 March

REAR SEAT

Exploded View

INFOID:000000008142208



- 1.
- 4.
- Earth wire 7.

- Center armrest lid 8.
- Seat belt guide (RH)
- 9. Center armrest try & tray



REAR SEAT

< REMOVAL AND INSTALLATION >

10.	Seat cushion trim	11.	Seat cushion pad	12.	Seat cushion hook	
13.	Center armrest hinge escutcheon (LH)	14.	Seat belt guide (LH)	15.	Seatback bracket (LH)	А
16.	Center seatback bracket	17.	Seatback bracket (LH)	18.	Seatback trim	
19.	Seatback pad	20.	Center armrest hinge escutcheon (RH)	21.	Center armrest bush	В
22.	Center armrest hinge	23.	Center armrest washer	24.	Center armrest trim & pad	
∠; pawl Refer to <u>GI-5, "Components"</u> for symbols in the figure.					С	

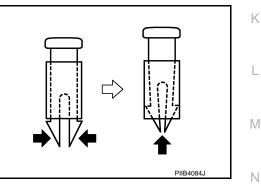
Removal and Installation

REMOVAL CAUTION: When removing and installing, use shop cloths to protect parts from damage.		Е
1. Lift up seat cushion. Disengage seat cushion hook. Remove seat cushion.		
2. Remove all rear headrests.		F
3. Remove mounting nuts of seatback.		
4. Lift up seatback, release wire on back of seatback from seatback hook and then remove sea	atback.	
5. Remove mounting nuts from back of seatback. Remove center armrest.		G
INSTALLATION Install in the reverse order of removal.		Н
Disassembly and Assembly	INFOID:000000008142210	

SEATBACK

DISASSEMBLY

- 1. Remove mounting bolts, and then remove seat belt guide LH and RH.
- Remove mounting bolts, and thernemove seat beit guide Errand RH.
 Remove mounting bolts. Remove seatback bracket (LH), seatback bracket (RH) and center seatback bracket.
- 3. Remove the headrest holder.
 - CAUTION: Before installing headrest holder check its orientation. (front/rear and right/left)



INFOID:000000008142209

D

4. Remove hog rings and remove seatback trim from seatback pad.

ASSEMBLY

Assemble in the reverse order of disassembly.

CAUTION:

Install the hog rings of seat trim in position, and then securely connect the trim or trim cord with the $$_{\rm P}$$ pad side wire.

SEAT CUSHION

DISASSEMBLY

Remove hog rings and remove seat cushion trim from seat cushion pad.

ASSEMBLY

Assemble in the reverse order of disassembly.

REAR SEAT

< REMOVAL AND INSTALLATION >

CAUTION:

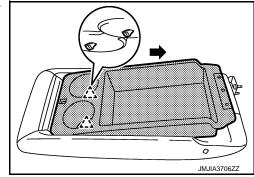
Install the hog rings of seat trim in position, and then securely connect the trim or trim cord with the pad side wire.

ARMREST

DISASSEMBLY

- 1. Remove mounting screws. Remove center armrest lid.
- 2. Slide center armrest tray & box. Disengage pawls. Remove center armrest tray & box.

<u>ک</u>ے : Pawl



- 3. Remove center armrest hinge escutcheon.
- 4. Remove mounting bolts. Remove center armrest hinge.

ASSEMBLY

Assemble in the reverse order of disassembly.

POWER SEAT SWITCH

< F	REMOVAL AND INSTALLATION >	
P	OWER SEAT SWITCH	٨
Re	emoval and Installation	A
СА	MOVAL NUTION: Then removing and installing, use shop cloths to protect parts from damage.	В
1.	Remove front seat. Refer to SE-84, "Removal and Installation".	С
2.	Remove seat cushion outer finisher. Refer to SE-87, "SEAT CUSHION : Disassembly and Assembly".	
3.	Disconnect power seat switch connector.	D
4.	Remove screws.	
5.	Remove power seat switch from seat cushion outer finisher.	_
	TE: e same procedure is also performed for passenger side.	E
INS	STALLATION	F
Ins CA	tall in the reverse order of removal. UTION:	
Alv	ways clamp the harness to the right place.	G
		Н

|

-

Κ

L

SE

Ν

0

Р

< REMOVAL AND INSTALLATION >

HEATED SEAT SWITCH

Removal and Installation

INFOID:000000008142212

REMOVAL

CAUTION: When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove console finisher assembly from center console assembly. Refer to <u>IP-24, "Removal and Installa-</u> tion".
- 2. Remove console indicator finisher from console finisher assembly. Refer to <u>IP-27</u>, "<u>Disassembly and</u> <u>Assembly</u>".
- 3. Disconnect heated seat switch connector.
- 4. Remove heated seat switch from switch panel using a flat-bladed screwdriver.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Always clamp the harness to the right place.

CLIMATE CONTROLLED SEAT SWITCH

< REMOVAL AND INSTALLATION >

CLIMATE CONTROLLED SEAT SWITCH

А **Removal and Installation** INFOID:000000008142213 REMOVAL В CAUTION: When removing and installing, use shop cloths to protect parts from damage. Remove console finisher assembly from center console assembly. Refer to IP-24, "Removal and Installa-1. С tion". 2. Remove console indicator finisher from console finisher assembly. Refer to IP-27, "Disassembly and Assembly". D 3. Disconnect climate controlled seat switch connector. 4. Remove climate controlled seat switch from switch panel using a flat-bladed screwdriver. Е **INSTALLATION** Install in the reverse order of removal. CAUTION: F Always clamp the harness to the right place.

Н

SE

Κ

L

Ν

Р

CLIMATE CONTROLLED SEAT BLOWER FILTER

< REMOVAL AND INSTALLATION >

CLIMATE CONTROLLED SEAT BLOWER FILTER

Removal and Installation

INFOID:000000008142214

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

1. Remove front seat. Refer to <u>SE-84, "Removal and Installation"</u>.

2. Turn blower filter counter clockwise and remove it from climate controlled seat cushion blower motor. **NOTE:**

The same procedure is also performed for passenger side.

INSTALLATION

Install in the reverse order of removal.