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PRECAUTIONS PFP:00001

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

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

WARNING:

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

Service Notice

- When removing or installing various parts, place a cloth or padding onto the vehicle body to prevent scratches.
- Handle trim, molding, instruments, grille, etc. carefully during removing or installing. Be careful not to oil or damage them.
- Apply sealing compound where necessary when installing parts.
- When applying sealing compound, be careful that the sealing compound does not protrude from parts.
- When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.

Precautions for Battery Service

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Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Precautions for Work

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- 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 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.
- 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.
- 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.

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PRECAUTIONS

- Do not use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PREPARATION

PREPARATION			PFP:00002
Special Service Tool	s		AIS00014
The actual shapes of Kent-N	Moore tools may differ from those of s	special service tools illustrated h	nere.
Tool number (Kent-Moore No.) Tool name		Description	
(J39570) Chassis ear	SIIA0993E	Locating the noise	
(J43980) NISSAN Squeak and Rattle Kit	SIIA0994E	Repairing the cause of noise	
Commercial Service	Tools		AIS00015
Tool name		Description	
Engine ear		Locating the noise	

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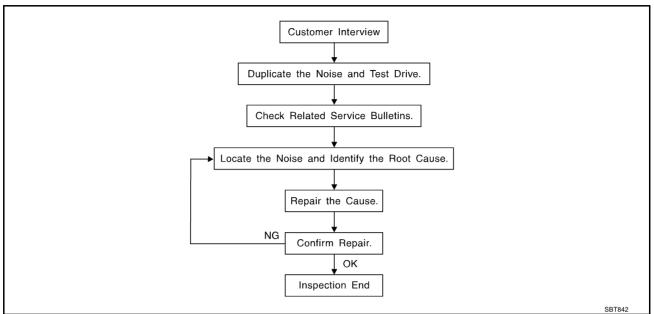
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Work Flow



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 customer's comments; refer to <u>SE-10</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, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics
 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=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 bumble bee)
 Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you 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 you confirm the repair.

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 model, drive position on A/T model).
- 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

- Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J39570, Engine Ear and mechanics stethoscope).
- Narrow down the noise to a more specific area and identify the cause of the noise by:
- removing the components in the area that you suspect the noise is coming from. 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 you suspect is causing 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 with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks. Refer to SE-8, "Generic Squeak and Rattle Troubleshooting".

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 (J43980) is available through your authorized Nissan Parts Department.

CAUTION:

Do not use excessive force as many components are constructed of plastic and may be damaged. Always check with the Parts Department for the latest parts information.

The following materials are contained in the Nissan Squeak and Rattle Kit (J43980). Each item can be ordered separately as needed.

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: $100 \times 135 \text{ mm}$ (3.94 × 5.31 in)/76884-71L01: $60 \times 85 \text{ mm}$ (2.36 × 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, $50 \times 50 \text{ mm } (1.97 \times 1.97 \text{ in})$

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INSULATOR (Light foam block)

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

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

68370-4B000: 15×25 mm (0.59 \times 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll

The following materials, not found in the kit, can also be used to repair squeaks and rattles.

UHMW (TEFLON) TAPE

Insulates where slight movement is present. Ideal for instrument panel applications.

SILICONE GREASE

Used in place of UHMW tape that will be visible or not fit.

Note: Will only last a few months.

SILICONE SPRAY

Use when grease cannot be applied.

DUCT TAPE

Use to eliminate movement.

CONFIRM THE REPAIR

Confirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same conditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.

Generic Squeak and Rattle Troubleshooting

AIS00017

Refer to Table of Contents for specific component removal and installation information.

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

- Cluster lid A and instrument panel
- 2. Acrylic lens and combination meter housing
- 3. Instrument panel to front pillar garnish
- 4. Instrument panel to windshield
- 5. Instrument panel mounting pins
- 6. Wiring harnesses behind the combination meter
- 7. A/C defroster duct and duct joint

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:

Do not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will not be able to recheck the repair.

CENTER CONSOLE

Components to pay attention to include:

- Shifter assembly cover to finisher
- 2. A/C control unit and cluster lid C
- 3. Wiring harnesses behind audio and A/C control unit

The instrument panel repair and isolation procedures also apply to the center console.

DOORS

Pay attention to the:

- 1. Finisher and inner panel making a slapping noise
- 2. Inside handle escutcheon to door finisher
- Wiring harnesses tapping
- 4. Door striker out of alignment causing a popping noise on starts and stops

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J43980) to repair the noise.

TRUNK

Trunk noises are often caused by a loose jack or loose items put into the trunk by the owner. In addition look for:

- 1. Trunk lid dumpers out of adjustment
- 2. Trunk lid striker out of adjustment
- 3. Trunk lid torsion bars knocking together
- 4. A loose license plate or bracket

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 seat is in and the load placed on the seat when the noise is present. 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. 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:

- Any component mounted to the engine wall
- 2. Components that pass through the engine wall
- Engine wall mounts and connectors
- 4. Loose radiator mounting pins
- 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.

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Diagnostic Worksheet

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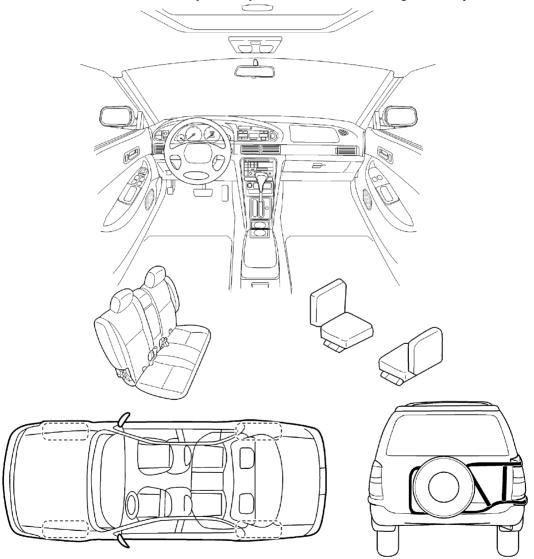
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan 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 advisor 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 the back 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.

PIIB0723E

SQUEAR & RA	ATTLE DIAGNOST	IC WORK	SHEE	i- paye z
Briefly describe the location	where the noise o	ccurs:		
WHEN DOES IT OCCU	R? (check the box	ces that a	pply)	
anytime	□ after si	tting out ir	the su	ın
1 1st time in the morning		t is raining		
only when it is cold outside	•	dusty con		
only when it is hot outside	☐ other:			
I. WHEN DRIVING:	IV.	WHATT	YPE O	F NOISE?
through driveways		•		shoes on a clean floor)
l over rough roads		•	_	on an old wooden floor)
iover speed bumps ionly at about mph		•	_	a baby rattle) con a door)
on acceleration		·		cond hand)
coming to a stop		-		led knock noise)
on turns : left, right or either (circle) 🖵 bu	ızz (like a	bumble	e bee)
☐ with passengers or cargo ☐ other:				
after driving miles or	minutes			
		AINIEI		
O BE COMPLETED BY DEA est Drive Notes:	ALERSHIP PERSO	MNEL		
				Initials of person
		<u>YES</u>	<u>NO</u>	performing
ehicle test driven with custom	er			
Noise verified on test drive				
Noise source located and rep				
Follow up test drive performe	a to confirm repair			
/IN:	_ Customer Name	ə:		
NO #.	Data			
[/] .O. #:	Date:			

This form must be attached to Work Order

SBT844

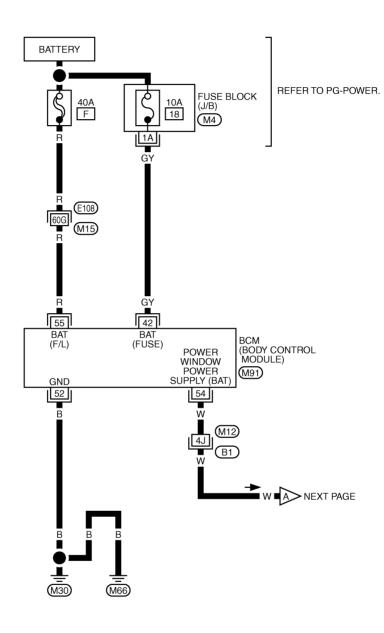
POWER SEAT/FOR COUPE

POWER SEAT/FOR COUPE

PFP:87016

Wiring Diagram-SEAT-/For Driver Seat

SE-SEAT-01



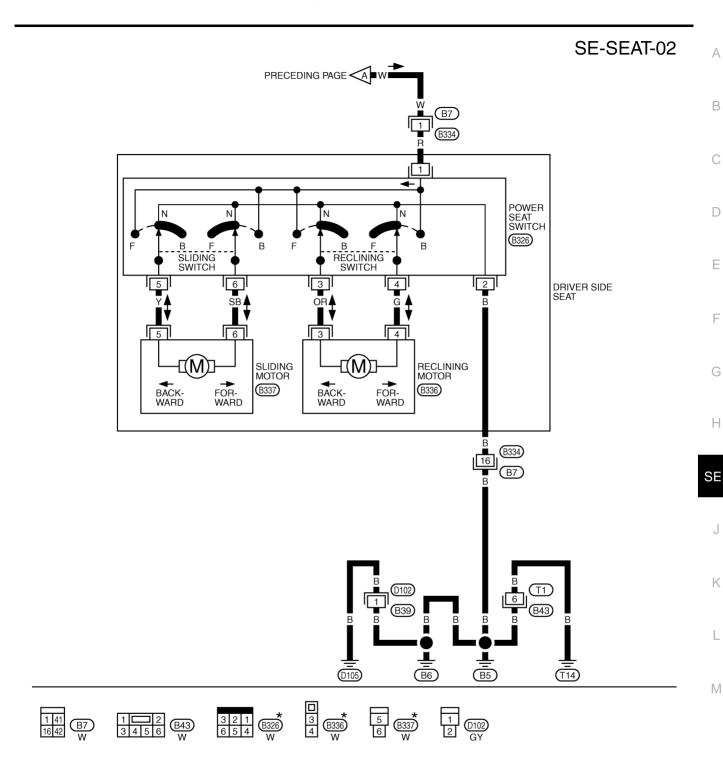
REFER TO THE FOLLOWING.

(£108), (B1) -SUPER MULTIPLE
JUNCTION (SMJ)

(M4) -FUSE BLOCK-JUNCTION
BOX (J/B)

(M91) -ELECTRICAL UNITS

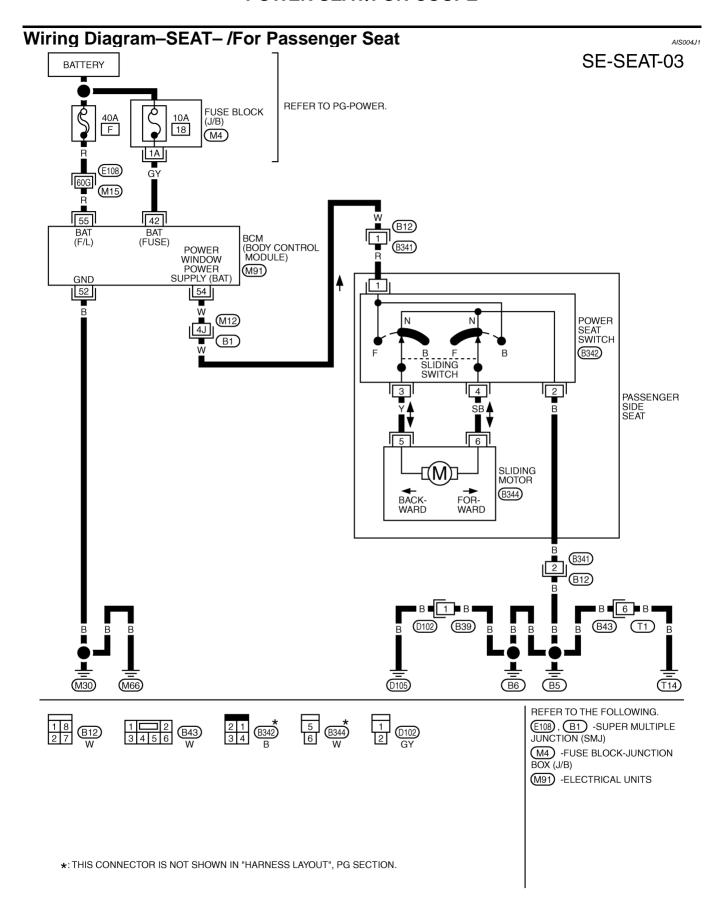
POWER SEAT/FOR COUPE



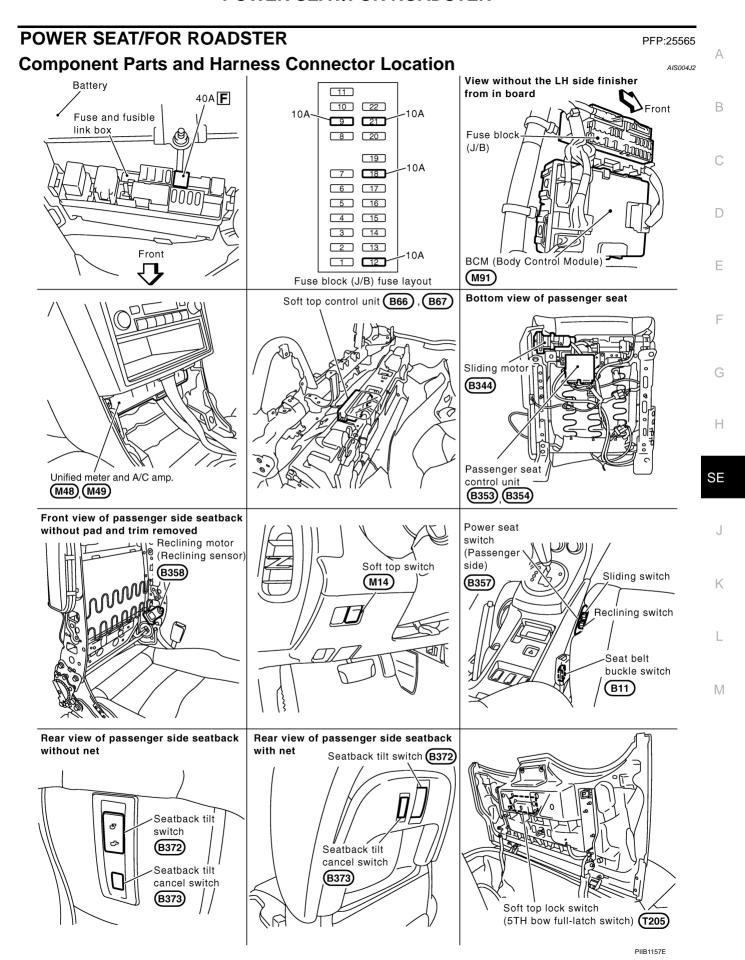
 $\star:$ THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

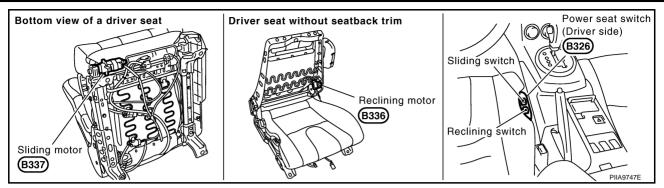
TIWT0723E

POWER SEAT/FOR COUPE



TIWT0829E





System Description

AIS004.17

Power is supplied at all times,

- through 40A fusible link (letter F, located in the fusible link)
- to BCM terminal 55,
- through 10A fuse [No.18, located in the fuse block (J/B)]
- to BCM terminal 42,
- through 10A fuse [No.21, located in the fuse block (J/B)]
- to passenger seat control unit terminal 34,
- through BCM terminal 54
- to driver side power seat switch terminal 1 and passenger seat control unit terminal 39.

When ignition switch in ON or START position, power is supplied

- thought 10A fuse [No. 12, located in the fuse block (J/B)]
- to passenger seat control unit terminal 2.

When ignition switch in START position, power is supplied

- thought 10A fuse [No. 9, located in the fuse block (J/B)]
- to passenger seat control unit terminal 1.

Ground supplied

- to BCM terminal 52
- through body grounds M30 and M60,
- to power seat switch terminal 2 and
- to passenger side seat control unit terminals 40, 48
- through body grounds B5, B6 and T14.

DRIVER SIDE SEAT OPERATION

When a driver side seat sliding switch is operated forward, power is supplied

- through power seat switch terminal 5
- to sliding motor terminal 5.

Then ground is supplied

- to sliding motor terminal 6
- through power seat switch terminal 6
- through power seat switch terminal 2

The driver side seat moves forward.

When a driver side seat sliding switch is operated backward, power is supplied

- through power seat switch terminal 6
- to sliding motor terminal 6.

Then ground is supplied

to sliding motor terminal 5

POWER SEAT/FOR ROADSTER					
through power seat switch terminal 5					
 through power seat switch terminal 2 					
The driver side seat moves backward.					
When a driver side seat reclining switch is operated forward, power is supplied					
through power seat switch terminal 3 to reclining motor terminal 3					
to reclining motor terminal 3. Then ground is supplied.					
Then ground is suppliedto reclining motor terminal 4					
•					
 through power seat switch terminal 4 through power seat switch terminal 2 					
The driver side seat folds forward.					
When a driver side seat reclining switch is operated backward, power is supplied					
through power seat switch terminal 4					
to reclining motor terminal 4.					
Then ground is supplied					
to reclining motor terminal 3					
through power seat switch terminal 3					
through power seat switch terminal 2					
The driver side seat reclines backward.					
PASSENGER SIDE SEAT MANUAL OPERATION					
When a passenger side seat sliding switch is operated forward, ground is supplied					
to passenger seat control unit terminal 14					
through power seat switch terminal 14					
through power seat switch terminal 40B					
• through body ground B5, B6 and T14.					
Then passenger seat control unit recognizes the forward signal, power is supplied simultaneously					
 through passenger seat control unit terminal 45 					
to sliding motor terminal 45					
Then ground is supplied					
to sliding motor terminal 37					
 through passenger seat control unit terminal 37 					
The passenger side seat moves forward. When a passenger side seat sliding switch is operated backward, ground is supplied					
to passenger seat control unit terminal 15					
through power seat switch terminal 15					

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- through power seat switch terminal 40B
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the backward signal, power is supplied simultaneously

- through passenger seat control unit terminal 37
- to sliding motor terminal 37

Then ground is supplied.

- to sliding motor terminal 45
- through passenger seat control unit terminal 45

The passenger side seat moves backward.

When a passenger side seat reclining switch is operated forward, ground is supplied

- to passenger seat control unit terminal 12
- through power seat switch terminal 12
- through power seat switch terminal 40B
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the forward signal, power is supplied simultaneously

- through passenger seat control unit terminal 42
- to reclining motor terminal 42

Then ground is supplied

- to reclining motor terminal 35
- through passenger seat control unit terminal 35

The passenger side seat folds forward.

When a passenger side seat reclining switch is operated backward, ground is supplied

- to passenger seat control unit terminal 13
- through power seat switch terminal 13
- through power seat switch terminal 40B
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the back ward signal, power is supplied simultaneously

- through passenger seat control unit terminal 35
- to reclining motor terminal 35

Then ground is supplied

- to reclining motor terminal 42
- through passenger seat control unit terminal 42

The passenger side seat reclines backward.

PASSENGER SEATBACK TILT FORWARD/BACKWARD OPERATION

When a passenger side seatback tilt switch is operated forward, ground is supplied

- to passenger seat control unit terminal 8
- through seatback tilt switch terminal 8
- through seatback tilt switch terminal 40
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the forward signal, power is supplied simultaneously

- through passenger seat control unit terminal 42
- to reclining motor terminal 42

Then ground is supplied

- to reclining motor terminal 35
- through passenger seat control unit terminal 35

Then, a seat folds front most forward.

When a passenger side seatback tilt switch is operated backward, ground is supplied

- to passenger seat control unit terminal 9
- through seatback tilt switch terminal 9
- through seatback tilt switch terminal 40
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the backward signal,

power is supplied simultaneously Α through passenger seat control unit terminal 35 to reclining motor terminal 35 Then ground is supplied В to reclining motor terminal 42 through passenger seat control unit terminal 42. The passenger side seat returns to former position. INTERLOCKING OPERATION OF THE PASSENGER SEAT WITH THE SOFT TOP NOTE: Refer to RF-12, "System Description" for detailed operation. CLOSE → OPEN When a soft top switch is operated to OPEN, ground is supplied F to passenger seat control unit terminal 5 through soft top switch terminal 3 through soft top switch terminal 1 through body ground M30 and M66. Then passenger seat control unit recognizes the soft top OPEN signal. Soft top control unit transmits power window down signal to passenger seat control unit, through soft top control unit terminal 36 to passenger seat control unit terminal 16. Н When passenger seat control unit receives power window down signal and soft top OPEN signal, power is supplied simultaneously through passenger seat control unit terminal 42 SE to reclining motor terminal 42 Then ground is supplied to reclining motor terminal 35 through passenger seat control unit terminal 35 Then, a seat folds 6° forward. When storage lid closed, soft top control unit transmits a storage lid close signal to passenger seat control unit, through soft top control unit terminal 13 to passenger seat control unit terminal 33. When passenger seat control unit receives storage lid close signal, power is supplied simultaneously through passenger seat control unit terminal 35 M to reclining motor terminal 35 Then ground is supplied to reclining motor terminal 42 through passenger seat control unit terminal 42. The passenger side seat returns to former position. $OPEN \rightarrow CLOSE$ When a soft top switch is operated to CLOSE, ground is supplied to passenger seat control unit terminal 6 through soft top switch terminal 4 through soft top switch terminal 1

Then passenger seat control unit recognizes the soft top CLOSE signal, soft top control unit transmits power window down signal to passenger seat control unit,

through soft top control unit terminal 36

through body ground M30 and M66.

to passenger seat control unit terminal 16.

When passenger seat control unit receives power window down signal and soft top CLOSE signal, power is supplied simultaneously

- through passenger seat control unit terminal 42
- to reclining motor terminal 42

Then ground is supplied

- to reclining motor terminal 35
- through passenger seat control unit terminal 35

Then, a seat folds 6° forward.

When soft top lock switch (5th bow full latch switch) is turned ON, soft top control unit transmits a soft top lock signal to passenger seat control unit, ground is supplied

- to passenger seat control unit terminal 11
- through soft top lock switch (5th bow full latch swtich) terminal 3
- through soft top lock switch (5th bow full latch swtich) terminal 4
- through body ground B5, B6 and T14.

When passenger seat control unit receives soft top lock switch ON signal, power is supplied simultaneously

- through passenger seat control unit terminal 35
- to reclining motor terminal 35

Then ground is supplied

- to reclining motor terminal 42
- through passenger seat control unit terminal 42.

The passenger side seat returns to former position.

PASSENGER SIDE RECLINING MOTOR OPERATION

When a passenger side seat reclining motor is operated, signal is transmitted

- to passenger seat control unit terminal 3
- through reclining motor terminal 3
- through reclining motor terminal 41
- through passenger seat control unit terminal 41.

Then passenger seat control unit judges seatback angle by receiving reclining sensor signal.

SEATBACK TILT CANCEL SWITCH OPERATION

When a passenger side seatback tilt cancel switch is operated to CANCEL, ground is supplied

- to passenger seat control unit terminal 7
- through seatback tilt cancel switch terminal 7
- through seatback tilt cancel switch terminal 40C
- through body ground B5, B6 and T14.

Then passenger seat control unit recognizes the CANCEL signal.

When a "seatback tilt cancel switch" is operated to CANCEL, the automatic operation of a passenger seat is not performed.

MANUAL OPERATION

The seat positions can be adjusted by operating the sliding switch and reclining switch located on the side of both driver and passenger seat cushions.

AUTOMATIC OPERATION

Passenger Seatback Tilting Function

- When theseatback tilt switch on the rear side of the passenger seatback is operated to tilt forward, the seatback tilts forward to the front most position.
- To tilt the seatback backward or restore its position, push the seatback tilt switch on the tilt-backward direction. The seatback will be tilting backwards while the switch is operated. It can be moved backwards until it reaches to its start position.

Conditions For the Operation

When the following conditions are satisfied, the seatback tilts forward or backward by operating the seatback tilt switch.

	Power seat switches (sliding and reclining) are OFF.	
	The seat belt is not fastened.	
Conditions	The vehicle speed is approximately 6 km/h or less.	
Conditions	• The soft top is not currently in operation.*1	
	The ignition switch is not in the START position.	
	The seatback tilt cancel switch is in AUTO.	

^{*1:} The operation will be stopped only while the reclining motor is operating.

Conditions for Stopping the Operation

Seatback tilting operation stops when any one of the conditions below is satisfied.

A power seat switch (sliding or reclining) is operated.
The seat belt is fastened.
The vehicle speed is approximately 7 km/h or more.
• The soft top is in operation. (Stops only tilt-forward operation.)*2
• The seatback tilting switch is operated while the seatback is in operation.
The ignition switch is turned to the START position.
Reclining motor lock is detected.

^{*2:} Operation will be stopped only while the reclining motor is operating.

NOTE:

If operation stops as a result of the conditions below, use the reclining switch to tilt the seat backward.

- A power seat switch (sliding or reclining) is operated.
- The seat belt is fastened.
- The seatback tilt cancel switch is turned to "CANCEL".

Soft Top Interlocking Operation Function

- The seatback tilts forward by approximately 6° (tilt froward operation) when the soft top opens or closes.
- When open/close operation is completed, the seatback returns to the tilt start position (return operation).

Conditions for the Operation

When the soft top switch is pushed to OPEN or CLOSE, and all of the conditions below are satisfied, then the seatback operates, linked with the operation of the soft top.

	• The power seat switches (sliding and reclining) are OFF.
	The seatback tilt switch is OFF.
Conditions	• The vehicle speed is 6 km/h or less.
	• The ignition switch is ON.
	• The seatback tilt cancel switch is turned to AUTO.

Conditions for the Pauseing/Stopping Operation

Operation is paused or stopped if any of the conditions below are satisfied during soft top operation.

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Stop conditions	 A power seat switch (sliding or reclining) is operated. 	
	 Reclining motor lock is detected (return operation only). 	
	• The seatback tilt switch is operated while the seatback is operating.	
	The seatback tilt cancel switch is turned to CANCEL.	
Pause condition	ndition • The ignition switch is turned to the START position.	

Seat Status Output Signal

- Depending on the seat status, the "passenger seat control unit" sends the seat status output signal to the "soft top control unit".
- The "soft top control unit" controls the soft top open/close operation based on whether the seat status signal is ON or OFF. For details about soft top control, refer to RF-19, "Operation Chart".

	FF. For details about soft top control, refer to RF-19, "Operation Chart".	
	When a seatback tilt forward motion has been completed. (as a process during a soft top interlocking operation)	
	When a seatback tilt forward motion has been completed. (during a automatic operation by using a seatback tilt switch)	
Ocatatata simal	 When a seatback tilt forward permission condition is satisfied for a soft top interlocking operation, and a tilt forward / backward operation is under going, and if the seatback is tilted more than 6 degree from the start position of the tilt forward / backward operation. (during a automatic operation by using a seatback tilt switch) 	
Seat status signal OFF→ ON condition	• When a seatback tilt forward permission condition is satisfied for a soft top interlocking operation, and a tilt forward operation was under going, but the operation was stopped under some conditions, (See below *4.) and if the seatback is tilted more than 6 degree from the start position of the tilt forward operation. (after an automatic operation by using a seatback tilt switch)	
	When a seatback tilt forward permission condition is satisfied for a soft top interlocking operation, and also the seatback tilt cancel switch is in "Cancel" position.	
	When the ignition switch has been turned from "START" to "ON" position. (during a soft top interlocking operation. After an engine start operation, the soft top interlocking operation is accepted.)	
	When a seatback tilt backward motion has been started. (as a process during a soft top interlocking operation)	
	 When a seatback tilt backward permission condition is satisfied for a soft top interlocking operation, after a tilt forward operation has been finished. (during a automatic operation by using a seatback tilt switch) 	
	 When a seatback tilt backward permission condition is satisfied for a soft top interlocking operation, and a tilt forward / backward operation is under going, and if the seatback is tilted more than 6 degree from the start position of the tilt forward / backward operation. (during a automatic operation by using a seatback tilt switch) 	
Seat status signal ON→ OFF condition	 When a seatback tilt backward permission condition is satisfied for a soft top interlocking operation, and a tilt forward operation was under going, but the operation was stopped under some conditions, (See below *4.) and if the seatback is still tilted more than 6 degree from the start position of the tilt forward operation. (after an automatic operation by using a seatback tilt switch.) 	
	 When the ignition switch has been turned from "ON" to "START" position. (during a soft top interlocking operation. During an engine start operation, the soft top interlocking operation is paused.) 	
	 When a seatback tilt forward motion has been started by the seatback tilt switch, just after the seatback tilt forward motion has been finished for a soft top interlocking operation. (for the seatback tilt switch operation during a soft top interlocking operation) 	
	When a seatback tilt forward motion has been started by the passenger seat reclining switch, just after the seatback tilt forward motion has been finished for a soft top interlocking operation. (for the seat reclining switch operation during a soft top interlocking operation)	

^{*3:} After that, seat condition signal stays ON if cancel switch turns to AUTO.

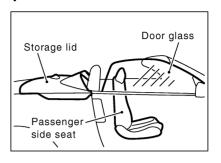
The seat status signal turns ON only when power window DOWN signal input is ON.

- The vehicle speed is approximately 7 km/h or more.
- The seatback tilt switch is operated while the seatback is operating.
- The ignition switch is turned to the START position.

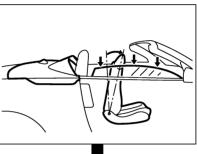
^{*4:} If tilt forward/backward operation stops as a result of the conditions below, the tilt start position does not change.

Operation of the Passenger Seat Linked with the Soft Top

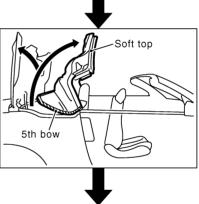
Passenger seat operation during soft top CLOSE operation



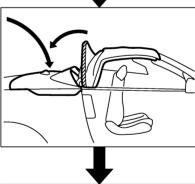
 Passenger seatback tilts forward by approximately 6° as soon as windows go down, when soft top switch has been pushed on CLOSE.



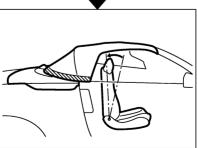
2. Soft top CLOSE operation starts as soon as the passenger seatback tilt forward operation completes.



3. Soft top continues the operation.



4. Passenger seatback goes back to the original position when 5th bow is closed.



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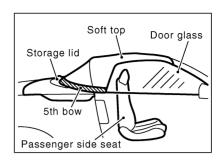
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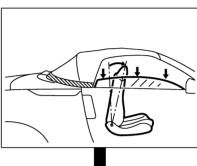
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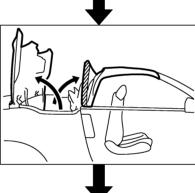
Passenger seat operation during soft top OPEN operation



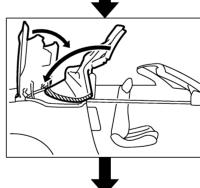
 Passenger seatback tilts forward by approximately 6° as soon as windows go down, when soft top switch has been pushed on OPEN.



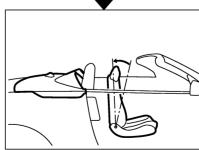
2. Soft top OPEN operation starts as soon as the passenger seatback tilt forward operation completes.



3. Soft top continues the operation.



4. Passenger seatback goes back to the original position when storage lid is closed.



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CANCEL FUNCTION

The seatback tilt cancel switch can be used to set following functions ON or OFF.

- The seatback tilt forward/backward function
- The soft top interlocking operation function

CAUTION:

• If a child seat is installed, turn the seat tilt cancel switch OFF to disable the seatback tilt forward/backward function and the soft top interlock operation function.

FAIL-SAFE MODE

If the power seat switch is not operated, nor the seat back tilt switch is not operated, nor the soft top interlocking operation is not under operation, and if the passenger seat control unit detects a motor operation power from the soft top control unit, the passenger seat control unit stops the motor by switching the motor power line to ground.

Operation location	Sliding motor
Operation location	Reclining motor

Canceling Fail-Safe Mode

- Disconnect and reconnect the battery terminal.
- Disconnect and reconnect the passenger seat control unit connector.

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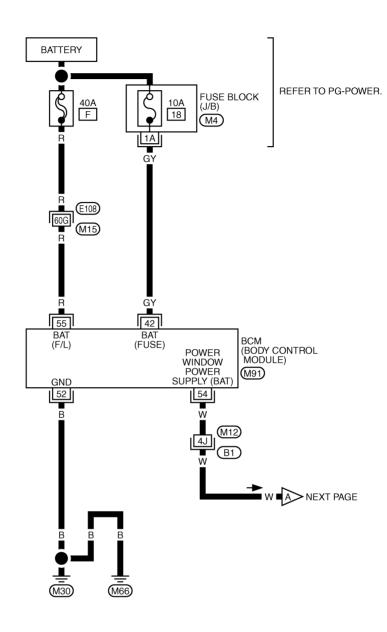
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Wiring Diagram-SEAT- / For Driver Seat

AISO04X0

SE-SEAT-04



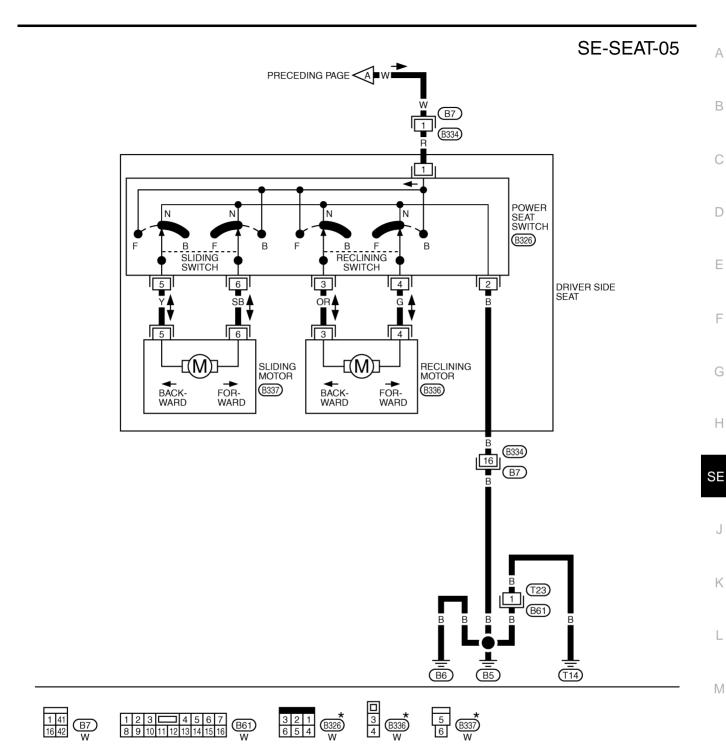
REFER TO THE FOLLOWING.

(£108), (B1) -SUPER MULTIPLE
JUNCTION (SMJ)

(M4) -FUSE BLOCK-JUNCTION
BOX (J/B)

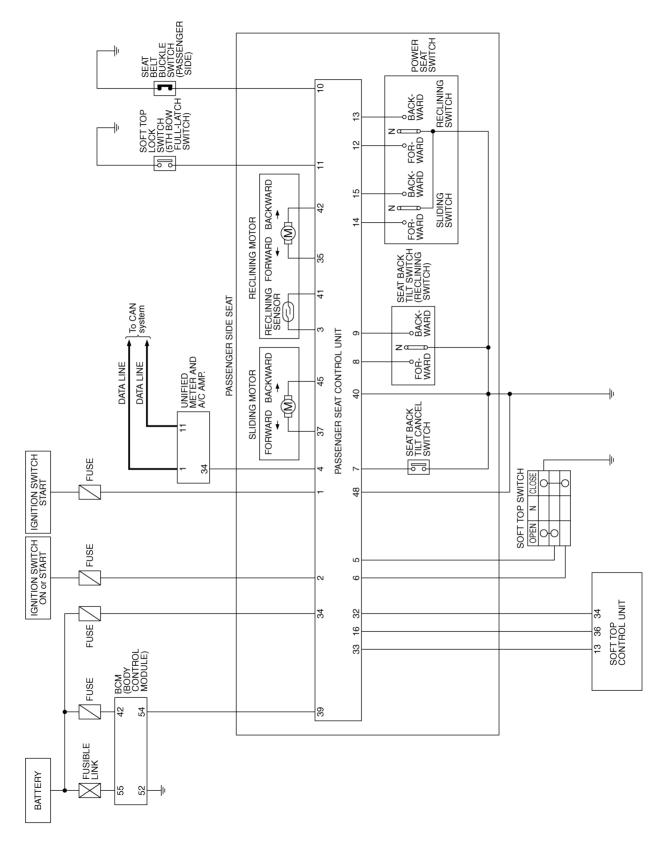
(M91) -ELECTRICAL UNITS

TIWT0832E

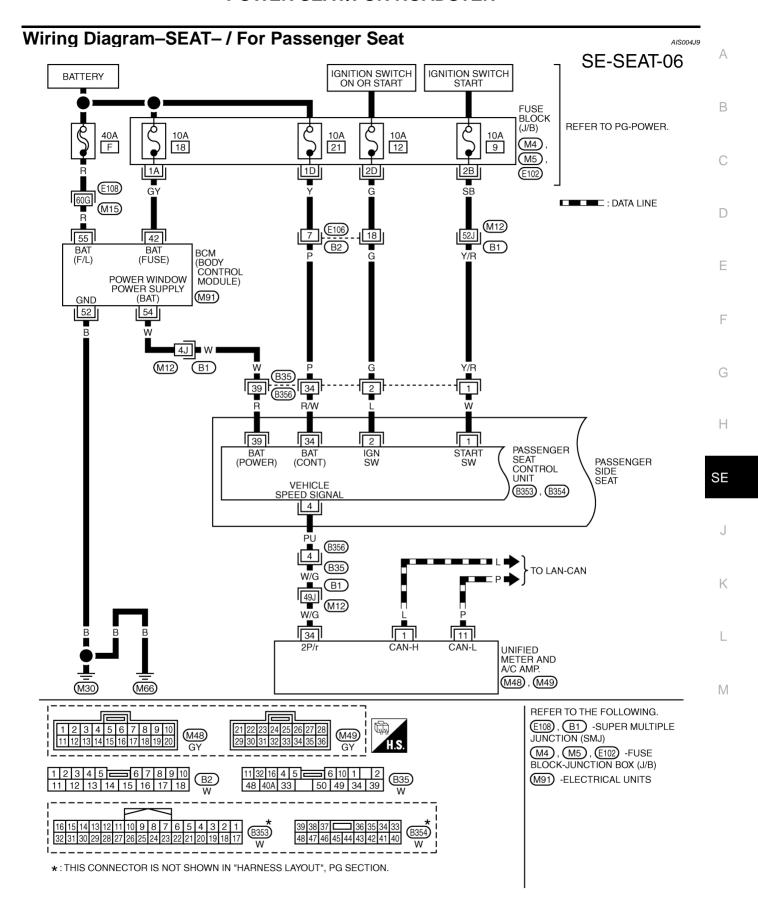


 $\star:$ THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWT0774E

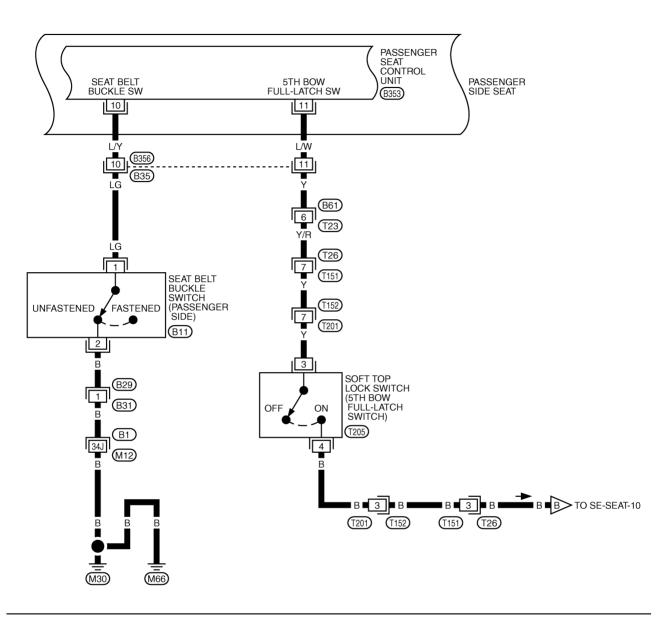


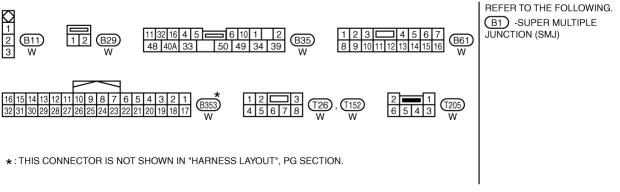
TIWT0839E



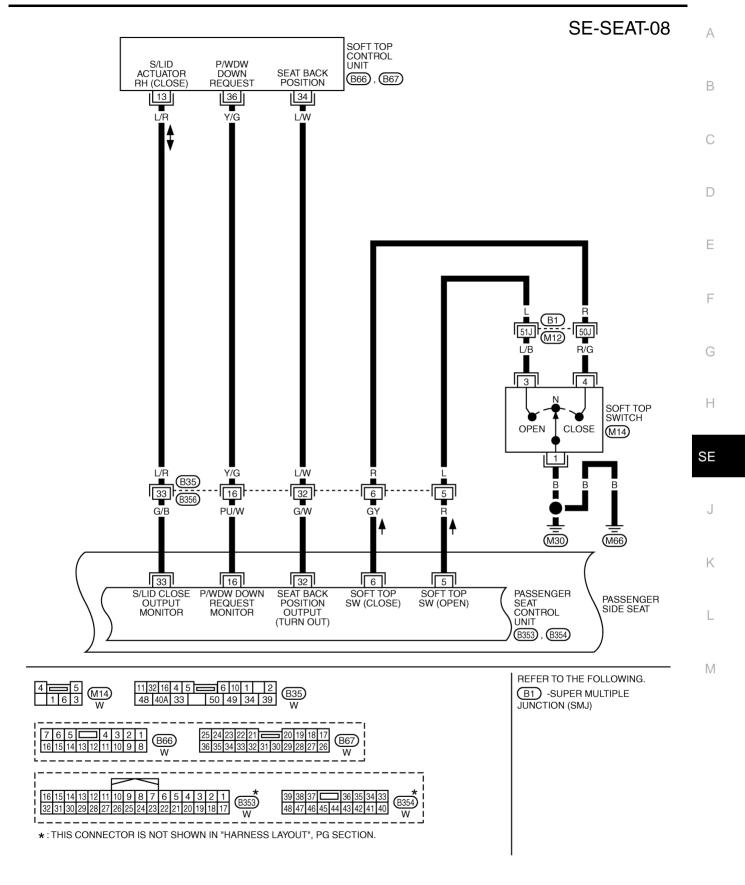
TIWT0840E

SE-SEAT-07



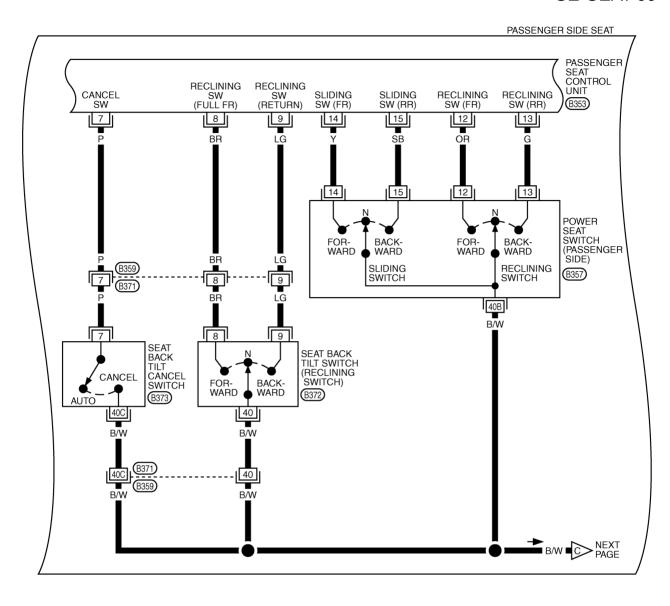


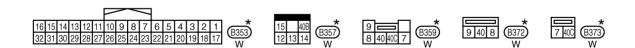
TIWT0727E



TIWT0728E

SE-SEAT-09





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

TIWT0729E

SE-SEAT-10 Α FORWARD BACKWARD FORWARD BACKWARD SLIDING MOTOR RECLINING SENSOR RECLINING MOTOR В (B344) (B358) (M)41 35 42 45 37 3 Y/B OR 42 37 45 41 3 35 D SLIDING MOTOR (RR) PULSE SW (GND) RECLINING MOTOR (RR) RECLINING MOTOR (FR) SLIDING MOTOR (FR) PULSE SW **PASSENGER PASSENGER** (RECLINING) SEAT SIDE SEAT CONTROL UNIT GND GND (POWER) (CONT) (B353), (B354) Е 48 40 B/W В PRECEDING C B/W G Н SE J TO SE-SEAT-07 ✓B ■ B B **■** 1 **■** B **■** (T23) (B61) ┸ (B5) (B6) M 45 B344 W 11 32 16 4 5 6 10 1 2 48 40A 33 50 49 34 39 B61 W (B353)

 $\ensuremath{\bigstar}$: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWT0730E

Terminals and Reference Values of Passenger Seat Control Unit				
TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
1	W	Ignition switch START power supply	Ignition switch (START position)	Battery voltage
2	L	Ignition switch ON power supply	Ignition switch (ON or START position)	Battery voltage
3	Y	Reclining sensor input signal	When reclining motor is operated	(V) 6 4 2 0 ***50ms
			Other than above	0 or 5
4	PU	Vehicle speed signal (2puls)	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	(V) 15 10 5 0 50ms
5	R	Soft top switch OPEN signal	When soft top switch is turned to OPEN	0
			Other than above	Battery voltage
6	GY	Y Soft top switch CLOSE signal	When soft top switch is turned to CLOSE	0
			Other than above	Battery voltage
7	7 P	Seatback tilt cancel switch signal	When seatback tilt cancel switch is turned to AUTO	5
,			When seatback tilt cancel switch is turned to CANCEL	0
8	BR	BR Seatback tilt switch FORWARD signal	When seatback tilt switch is turned to FORWARD	0
			Other than above	Battery voltage
9	9 LG	LG Seatback tilt switch BACKWARD signal	When seatback tilt switch is turned to BACKWARD	0
		BACKWARD Signal	Other than above	Battery voltage
10	10 10	L/Y Seat belt buckle switch signal	When seat belt is fastened (OFF)	5
	D .	D i Geat belt buckle switch signal	When seat belt is unfastened (ON)	0
11	11 1 ////	L/W Soft top lock switch (5th bow full latch swtich) signal	5th bow full latch switch : ON	0
	_,		5th bow full latch switch :OFF	5
12	12 OR	OR Reclining switch FORWARD signal	When power seat reclining switch is turned to FORWARD	0
			Other than above	Battery voltage
13	G	Reclining switch BACKWARD signal	When power seat reclining switch is turned to BACKWARD	0
		Signal	Other than above	Battery voltage
14	Y	Y Sliding switch FORWARD signal	When power seat sliding switch is turned to FORWARD	0
			Other than above	Battery voltage

TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
15	SB	Sliding switch BACKWARD signal	When power seat sliding switch is turned to BACKWARD	0
			Other than above	Battery voltage
16	PU/W	Power window down signal	When soft top switch is turned to ON	0
			Other than above	5
32	G/W	Seatback position signal	When the seatback is tilted by the interlocking operation with soft top	0
			Other than above	5
33	G/B	Storage lid actuator RH	When storage lid actuator is in a closed operation	Battery voltage
		CLOSE signal	Other than above	0
34	R/W	Battery power supply (control unit)	_	Battery voltage
35	G	Reclining motor	Reclining switch backward operation (Motor operated)	Battery voltage
		BACKWARD output	Other than above	0
37	SB	Sliding motor BACKWARD output	Sliding switch backward operation (Motor operated)	Battery voltage
			Other than above	0
39	R	Battery power supply (power)	_	Battery voltage
40	B/W	Ground (control unit)	_	0
41	Y/B	Ground (sensor)	_	0
42	OR	Reclining motor FORWARD output	Reclining switch forward operation (Motor operated)	Battery voltage
		1 OKWARD output	Other than above	0
45	Υ	Sliding motor FORWARD output	Sliding switch forward operation (Motor operated)	Battery voltage
			Other than above	0
48	В	Ground (power)	_	0
ermin	als and	d Reference Values of	BCM	AlS004.
TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
42	GY	Battery power supply (Fuse)	_	Battery voltage
52	В	Ground	_	0
54	W	Power window power supply out- put (driver side power seat switch and passenger seat control unit power supply)	_	Battery voltage
55	R	Battery power supply (Fusible link)	_	Battery voltage
ermin	als and	d Reference Values of	Soft Top Control Unit	AIS004.
TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
13	L/R	L/R Storage lid actuator RH CLOSE signal	When storage lid actuator is in a closing operation	Battery voltage
			Other than above	0

SE-35

TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
34	L/W	Seatback position signal	When the seatback is tilted by the interlocking operation with soft top	0
			Other than above	5
36	Y/G	Power window down signal	When soft top switch is turned to ON	0
			Other than above	5

Terminals and Reference Values of Unified Meter and A/c Amp.

AIS004JD

TERMI- NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)	
1	L	CAN-H	_	_	
11	Р	CAN-L	_	_	
34	W/G	Speed signal (2puls)	Speedometer is in operation [When vehicle speed is approx. 40 km/h (25 MPH)]	(V) 15 10 5 0 5 0 9 180078J	

Work Flow

- 1. Check the symptom and customer's requests.
- 2. Understand the outline of system. Refer to <a>SE-16, "System Description".
- 3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to <u>SE-36</u>, <u>"Trouble Diagnosis Symptom Chart"</u>.
- 4. Does power seat system operate normally? If Yes, GO TO 5, If No, GO TO 3.
- 5. INSPECTION END.

Trouble Diagnosis Symptom Chart

AIS004JF

Always check the "WORK FLOW" before troubleshooting. Refer to SE-36, "Work Flow" .

Symptom		Diagnosis / service procedure	Refer to page
Power seat systems do not operate (Neither driver side seat nor passenger side seat operation can be performed).			<u>SE-37</u>
Functions of a driver side power seat do not operate.	Driver side power seat power supply and ground check		<u>SE-39</u>
A part of driver side power seat system does not	Driver side seat sliding motor circuit check		<u>SE-40</u>
operate.	2.	Driver side seat reclining motor circuit check	<u>SE-41</u>
All the passenger side power seat systems do not operate.	Passenger seat control unit power supply and ground check		<u>SE-42</u>
A passenger seat does not a sliding operation.	Passenger side seat sliding motor circuit check		<u>SE-44</u>
A passenger seat does not carry out a reclining operation (Neither manual operation nor an automatic operation can be performed).	Passenger side seat reclining motor circuit check		<u>SE-44</u>
	1.	Passenger side seat reclining sensor circuit check	<u>SE-45</u>
The automatic operation of a passenger seat can not be performed (a manual operation can be per-	2.	Seatback tilt cancel switch circuit check	<u>SE-50</u>
formed).	3.	If the above systems are normal, replace passenger seat control unit.	<u>SE-15</u>
A passenger seat operates automatically when the vehicle is running.	Vehicle speed signal check		<u>SE-56</u>

Symptom		Diagnosis / service procedure	Refer to page
Passenger seatback does not return during a soft top CLOSE operation.	So	ft top lock switch circuit check	<u>SE-54</u>
Passenger seatback does not tilt forward and return during a soft top OPEN operation.	Sto	orage lid close signal circuit check	<u>SE-53</u>
	1.	Power window down request signal circuit check	SE-52
Passenger seatback does not tilt forward during a	2.	Soft top switch circuit check	<u>SE-51</u>
soft top CLOSE operation or OPEN operation.	3.	If the above systems are normal, replace passenger seat control unit.	<u>SE-15</u>
	1.	Seatback tilt switch circuit check	<u>SE-49</u>
Seat does not tilt when passenger seatback tilt switch is pushed (other functions operate nor-	2.	Seat belt buckle switch circuit check	<u>SE-54</u>
mally).	3.	If the above systems are normal, replace passenger seat control unit	<u>SE-15</u>
A part of passenger seat system does not operate	1.	Passenger side seat sliding switch circuit check	SE-46
(only manual).	2.	Passenger side seat reclining switch circuit check	<u>SE-47</u>
Passenger seatback dose not go back to the original position during a soft top CLOSE or OPEN operation.	Pa	ssenger seat control unit ignition signal circuit check	<u>SE-43</u>
The manual operation of a passenger seat cannot be performed (a automatic operation can be performed).	Pa	ssenger side power seat ground circuit check	<u>SE-48</u>

BCM Power Supply and Ground Check

...-..

1. CHECK FUSE

Check 40A fusible link (letter F located in the fuse and fusible link box).

Check 10A fuse [No.18, located in the fuse block (J/B)]

NOTE:

Refer to <u>SE-15, "Component Parts and Harness Connector Location"</u>.

OK or NG

OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to <u>PG-4, "POWER SUPPLY ROUTING CIRCUIT"</u>.

2. CHECK BCM POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect BCM connector.
- 3. Check voltage between BCM connector M91 terminal 42, 55 and ground.

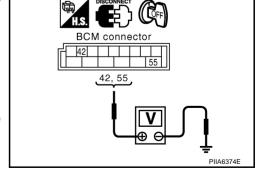
42 (GY) - Ground : Battery voltage 55 (R) - Ground : Battery voltage

OK or NG

NG

OK >> GO TO 3.

>> Repair or replace the harness between BCM and fusible



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3. CHECK BCM GROUND CIRCUIT

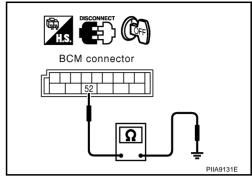
Check continuity between BCM connector M91 terminal 52 and ground.

52 (B) - Ground : Continuity should exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace the harness between BCM and ground.



4. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

- 1. Disconnect power seat switch and passenger seat control unit connector.
- 2. Check continuity between BCM connector M91 terminal 54 and power seat switch connector B326 terminal 1.

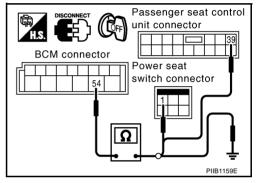
54 (W) - 1 (R) : Continuity should exist.

3. Check continuity between BCM connector M91 terminal 54 and passenger seat control unit connector B354 terminal 39.

54 (W) - 39 (R) : Continuity should exist.

4. Check continuity between BCM connector M91 terminal 54 and ground.

54 (W) - Ground : Continuity should not exist.



OK or NG

OK >> GO TO 5.

NG >> Replace harness between BCM and power seat switch or passenger seat control unit.

5. CHECK BCM OUTPUT POWER SUPPLY

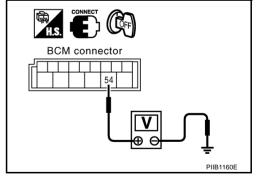
- 1. Connect BCM connector.
- Check voltage between BCM connector M91 terminal 54 and ground.

54 (W) - Ground : Battery voltage

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace BCM.



Driver Side Seat Power Supply and Ground Check

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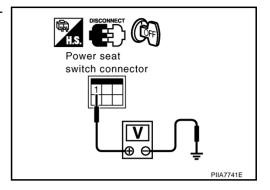
1. CHECK POWER SEAT SWITCH POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect power seat switch connector.
- 3. Check voltage between power seat switch connector B326 terminal 1 and ground.

1 (R) - Ground : Battery voltage

OK or NG

OK >> GO TO 3. NG >> GO TO 2.



2. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

- 1. Disconnect passenger seat control unit connector.
- 2. Check continuity between BCM connector M91 terminal 54 and power seat switch connector B326 terminal 1.

54 (W) - 1 (R) : Continuity should exist.

3. Check continuity between BCM connector M91 terminal 54 and ground.

54 (W) - Ground : Continuity should not exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace harness between BCM and power seat switch.

Power seat switch connector

3. CHECK POWER SEAT SWITCH GROUND CIRCUIT

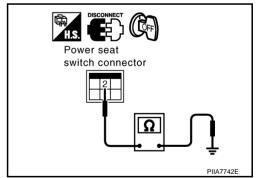
Check continuity between power seat switch connector B326 terminal 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace the harness between power seat switch and ground.



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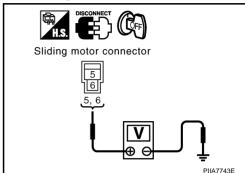
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Driver Side Seat Sliding Motor Circuit Check

1. CHECK SLIDING MOTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect sliding motor connector.
- 3. Sliding switch operate, check voltage between sliding motor connector and ground.

Connector	Terminal (Wire color)		Sliding switch condition	Voltage (V) (Approx.)
	(+)	(-)		(дриох.)
5 (Y) B337 6 (SB)	F (V)	Ground	FORWARD	Battery voltage
	3(1)		Other than above	0
	Giodila	BACKWARD	Battery voltage	
	6 (56)		Other than above	0



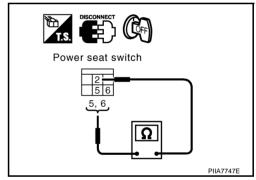
OK or NG

OK >> GO TO 2. NG >> GO TO 3.

2. CHECK POWER SEAT SWITCH 1

- Disconnect power seat switch connector.
- 2. Sliding switch operate, check continuity between power seat switch terminal 5, 6 and 2.

Term	ninals	Sliding swtich condition	Continuity
5		BACKWARD	Yes
3		Other than above	No
6	6	FORWARD	Yes
		Other than above	No



OK or NG

OK >> Replace sliding motor.

NG >> Replace power seat switch.

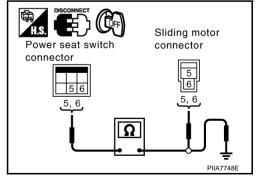
3. CHECK SLIDING MOTOR CIRCUIT HARNESS

- Disconnect power seat switch connector.
- 2. Check continuity between power seat switch connector B326 terminal 5, 6 and sliding motor connector B337 terminal 5, 6.

5 (Y) - 5 (Y) : Continuity should exist. 6 (SB) - 6 (SB) : Continuity should exist.

3. Check continuity between power seat switch connector B326 terminal 5, 6 and ground.

5 (Y) - Ground : Continuity should not exist. 6 (SB) - Ground : Continuity should not exist.



OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness between power seat switch and sliding motor.

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4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Term	ninals	Sliding swtich condition	Continuity
5		FORWARD	Yes
3	1	Other than above	No
6	'	BACKWARD	Yes
6	Other than above	No	

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace power seat switch.

Power seat switch 5 6 5, 6 PIIA7739E

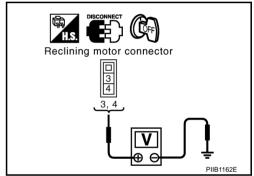
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Driver Side Seat Reclining Motor Circuit Check

1. CHECK RECLINING MOTOR POWER SUPPLY

- Turn ignition switch OFF.
- Disconnect reclining motor connector.
- Reclining switch operate, check voltage between reclining motor connector and ground. 3.

Connector	Terminal (Wire color)		Reclining swtich condition	Voltage (V) (Approx.)
(+)		(-)		
B336 —	3 (OR) 4 (G)	Ground	FORWARD	Battery voltage
			Other than above	0
			BACKWARD	Battery voltage
			Other than above	0



OK or NG

OK >> GO TO 2.

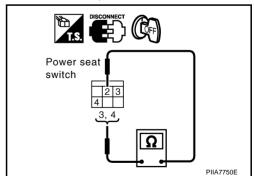
NG >> GO TO 3.

2. CHECK POWER SEAT SWITCH 1

Disconnect power seat switch connector. 1.

Reclining switch operate, check continuity between power seat switch terminal 3, 4 and 2.

Term	ninals	Reclining swtich condition	Continuity
3		FORWARD	Yes
3	2	Other than above	No
	2	BACKWARD	Yes
4	4	Other than above	No



OK or NG

OK >> Replace reclining motor.

NG >> Replace power seat switch. В

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$\overline{3}$. CHECK RECLINING MOTOR CIRCUIT HARNESS

- 1. Disconnect power seat switch connector.
- 2. Check continuity between power seat switch connector B326 terminal 3, 4 and reclining motor connector B336 terminal 3, 4.

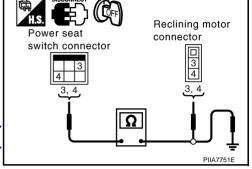
3 (OR) - 3 (OR) : Continuity should exist.

4 (G) - 4 (G) : Continuity should exist.

3. Check continuity between power seat switch connector B326 terminal 3, 4 and ground.

3 (OR) - Ground : Continuity should not exist.

4 (G) - Ground : Continuity should not exist.



OK or NG

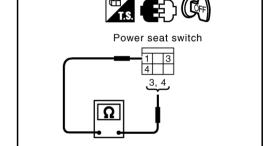
OK >> GO TO 4.

NG >> Repair or replace harness between power seat switch and reclining motor.

4. CHECK POWER SEAT SWITCH 2

Reclining switch operate, check continuity between power seat switch as follows.

Term	ninals	Reclining swtich condition	Continuity
3		FORWARD	Yes
3	1	Other than above	No
	'	BACKWARD	Yes
4		Other than above	No



OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace power seat switch.

Passenger Seat Control Unit Power Supply and Ground Check

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1. CHECK FUSE

Check 10A fuse [No.21, located in the fuse block (J/B)].

NOTE:

Refer to SE-15, "Component Parts and Harness Connector Location".

OK or NG

OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT".

2. CHECK PASSENGER SEAT CONTROL UNIT POWER SUPPLY

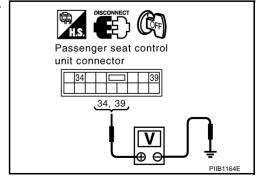
Check voltage between passenger seat control unit connector B354 terminal 34, 39 and ground.

34 (R/W) - Ground : Battery voltage.

39 (R) - Ground : Battery voltage.

OK or NG

OK >> GO TO 4. NG >> GO TO 3.



$\overline{3}$. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

- Turn ignition swtich OFF.
- 2. Disconnect BCM, power seat switch connector and passenger seat control unit connector.
- Check continuity between BCM connector M91 terminal 54 and passenger seat control unit connector B354 terminal 39.

54 (W) - 39 (R)

: Continuity should exist.

4. Check continuity between BCM connector M91 terminal 54 and around.

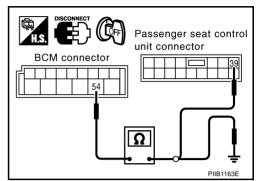
54 (W) - Ground

: Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace the harness between BCM and passenger seat control unit.



4. CHECK PASSENGER SEAT CONTROL UNIT GROUND CIRCUIT

Check continuity between passenger seat control unit connector B354 terminal 40, 48 and ground.

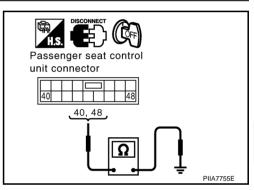
> 40 (B/W) - Ground : Continuity should exist. 48 (B) - Ground : Continuity should exist.

OK or NG

NG

OK >> Passenger seat control unit power supply and ground is

> >> Repair or replace the harness between passenger seat control unit and ground.



Passenger Seat Control Unit Ignition Signal Circuit Check

CHECK FUSE

- Check 10A fuse [No.9, located in the fuse block (J/B)].
- Check 10A fuse [No.12, located in the fuse block (J/B)].

Refer to SE-15, "Component Parts and Harness Connector Location".

OK or NG

OK >> GO TO 2.

>> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-NG 4, "POWER SUPPLY ROUTING CIRCUIT".

2. CHECK PASSENGER SEAT CONTROL UNIT POWER SUPPLY

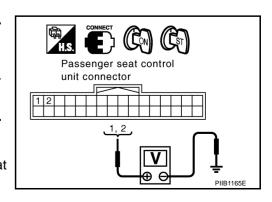
Check voltage between passenger seat control unit and ground.

Connec- tor	Term (Wire		Condition		Voltage (V) (Approx.)
toi	(+)	(-)			(дрргох.)
B353	1 (W)	Ground	Ignition switch	: START	Battery voltage
D333 -	2 (L)	Giodila	ignition switch	: ON	Ballery vollage

OK or NG

OK >> Replace passenger seat control unit.

NG >> Repair or replace the harness between passenger seat control unit and fuse block (J/B).



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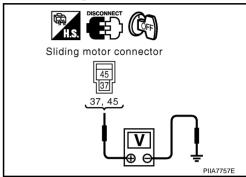
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Passenger Side Seat Sliding Motor Circuit Check

1. CHECK SLIDING MOTOR POWER SUPPLY

- Turn ignition switch OFF.
- 2. Disconnect sliding motor connector.
- 3. Slinding switch operated, check voltage between sliding motor connector and ground.

Connector	Terminal (Wire color)		Sliding switch condition	Voltage (V) (Approx.)
	(+)	(-)		(Арргох.)
37 (27 (CD)		BACKWARD	Battery voltage
	37 (36)	Ground	Other than above	0
D344	B344 45 (Y)	Giouna	FORWARD	Battery voltage
			Other than above	0



OK or NG

OK >> Replace sliding motor.

NG >> GO TO 2.

2. CHECK SLIDING MOTOR CIRCUIT HARNESS

- Disconnect passenger seat control unit connector.
- Check continuity between passenger seat control unit connector B354 terminal 37, 45 and sliding motor connector B344 terminal 37, 45.

37 (SB) - 37 (SB) : Continuity should exist. 45 (Y) - 45 (Y) : Continuity should exist.

Check continuity between passenger seat control unit connector B354 terminal 37, 45 and ground.

> 37 (SB) - Ground : Continuity should not exist. 45 (Y) - Ground : Continuity should not exist.

Passenger seat control unit connector 37, 45 37, 45 PIIAT756E

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace harness between passenger seat control unit and sliding motor.

Passenger Side Seat Reclining Motor Circuit Check

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1. CHECK RECLINING MOTOR POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect reclining motor connector.
- 3. Reclining swtich operated, check voltage between reclining motor and ground.

		ninal color)	Reclining swtich condition	Voltage (V) (Approx.)
		(-)		
35 (G) B358 42 (OR)	25 (C)	Ground	BACKWARD	Battery voltage
	33 (G)		Other than above	0
	Giodila	FORWARD	Battery voltage	
	42 (OR)		Other than above	0

Reclining motor connector 35, 42 PIIA7759E

OK or NG

OK >> Replace reclining motor.

NG >> GO TO 2.

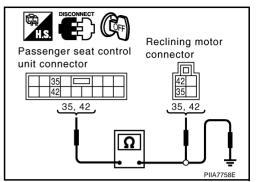
$\overline{2}$. CHECK RECLINING MOTOR CIRCUIT HARNESS

- Disconnect passenger seat control unit connector.
- Check continuity between passenger seat control unit connector B354 terminal 35, 42 and reclining motor connector B358 terminal 35, 42,

35 (G) - 35 (G) : Continuity should exist. 42 (OR) - 42 (OR) : Continuity should exist.

Check continuity between passenger seat control unit connector B354 terminal 35, 42 and ground.

> : Continuity should not exist. 35 (G) - Ground 42 (OR) - Ground : Continuity should not exist.



OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace harness between passenger seat control unit and reclining motor.

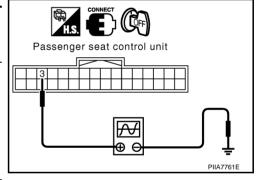
Passenger Side Seat Reclining Sensor Circuit Check

CHECK RECLINING SENSOR OUTPUT SIGNAL

Turn ignition switch OFF.

Check signal between passenger seat control unit connector and ground, with oscilloscope.

Con- nector	_	ninal color)	Condition	Signal	
nector	(+)	(-)		(Reference value)	
B353	3 (Y)	Ground	When reclining motor is operated.	(V) 6 4 2 0 ++50ms SIIA0692J	



OK or NG

OK >> Passenger side seat reclining motor circuit is OK.

NG1 >> When voltage waveform dose not appear with a constant voltage (approx. 5V), GO TO 3.

>> When voltage waveform dose not appear with a constant voltage (approx. 0V), GO TO 2. NG2

2. Check reclining sensor circuit harness

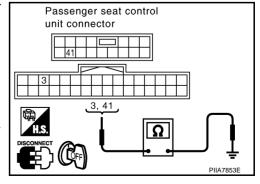
- Disconnect passenger seat control unit connector.
- Check continuity between passenger seat control unit connector B354 terminal 3, 41 and ground.

3 (Y) - Ground : Continuity should not exist. 41 (Y/B) - Ground : Continuity should not exist.

OK or NG

OK >> Replace passenger seat control unit.

NG >> Repair or replace harness between passenger seat control unit and reclining motor.



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3. CHECK RECLINING SENSOR CIRCUIT HARNESS

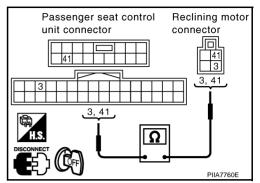
- 1. Disconnect passenger seat control unit connector.
- 2. Check continuity between passenger seat control unit connector B354 terminal 3, 41 and reclining motor connector B358 terminal 3, 41.

3 (Y) - 3 (Y) : Continuity should exist. 41 (Y/B) - 41 (Y/B) : Continuity should exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness between passenger seat control unit and reclining motor.



4. CHECK RECLINING SENSOR GROUND CIRCUIT

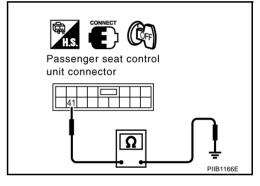
- 1. Connect passenger seat control unit connector.
- 2. Check continuity between passenger seat control unit connector B354 terminal 41and ground.

41 (Y/B) - Ground : Continuity should exist.

OK or NG

OK >> Replace reclining motor.

NG >> Replace passenger seat control unit.



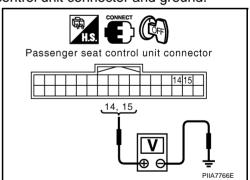
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Passenger Side Seat Sliding Switch Circuit Check

1. CHECK SLIDING SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Slining switch operated, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Sliding switch condition	Voltage (V) (Approx.)
	(+)	(-)		(Арргох.)
B353	14 (Y)	Ground	FORWARD	0
			Other than above	Battery voltage
	15 (SB)		BACKWARD	0
			Other than above	Battery voltage



OK or NG

OK >> Replace passenger seat control unit.

NG >> GO TO 2.

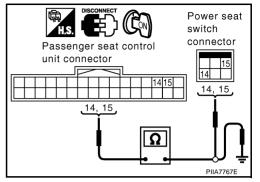
$\overline{2}$. CHECK SLIDING SWITCH CIRCUIT HARNESS

- Disconnect passenger seat control unit connector and power seat switch connector.
- Check continuity between passenger seat control unit connector B353 terminal 14, 15 and power seat switch connector B357 terminal 14, 15.

14 (Y) - 14 (Y) : Continuity should exist. 15 (SB) - 15 (SB) : Continuity should exist.

Check continuity between passenger seat control unit connector B353 terminal 14, 15 and ground.

> : Continuity should not exist. 14 (Y) - Ground 15 (SB) - Ground : Continuity should not exist.



OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between passenger seat control unit and power seat switch.

3. CHECK POWER SEAT SWITCH

Slinding swtich operated, check continuity between power seat switch terminal 14, 15 and 40B.

Term	ninals	Sliding swtich condition	Continuity
14		FORWARD	Yes
14	40B	Other than above	No
15	15	BACKWARD	Yes
		Other than above	No

Power seat switch 40B 15 14, 15 PIIA7768E

OK or NG

OK >> Check the condition of the harness and connector.

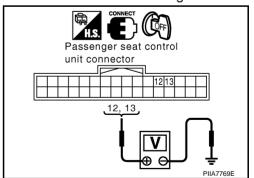
NG >> Replace power seat switch.

Passenger Side Seat Reclining Switch Circuit Check

1. CHECK RECLINING SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- Reclining swtich operated, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Reclining swtich condition	Voltage (V) (Approx.)
	(+)	(-)		(Арргох.)
B353	12 (OR)	Ground	FORWARD	0
			Other than above	Battery voltage
	13 (G)		BACKWARD	0
			Other than above	Battery voltage
OK as NO				



OK or NG

OK >> Passenger side seat reclining switch circuit is OK.

NG >> GO TO 2. Α

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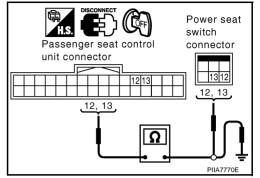
$\overline{2}$. CHECK RECLINING SWITCH CIRCUIT HARNESS

- Disconnect passenger seat control unit connector and power seat switch connector.
- 2. Check continuity between passenger seat control unit connector B353 terminal 12, 13 and power seat switch connector B357 terminal 12, 13.

12 (OR) - 12 (OR) : Continuity should exist. 13 (G) - 13 (G) : Continuity should exist.

3. Check continuity between passenger seat control unit connector B353 terminal 12, 13 and ground.

12 (OR) - Ground : Continuity should not exist. 13 (G) - Ground : Continuity should not exist.



OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between passenger seat control unit and power seat switch.

3. CHECK POWER SEAT SWITCH

Rclining swtich operated, check continuity between power seat switch terminal 12, 13 and 40B.

Term	ninals	Reclining swtich condition	Continuity
12		FORWARD	Yes
12		Other than above	No
13	40B	BACKWARD	Yes
	13	Other than above	No

Power seat switch 13/12 12, 13

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Replace power seat switch.

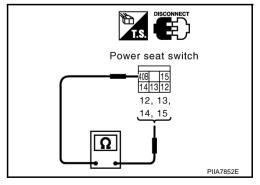
Passenger Side Power Seat Switch Ground Circuit Check

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1. CHECK POWER SEAT SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect power seat switch connector.
- Check continuity between power seat switch terminal 12, 13, 14, 15 and 40B.

Term	Terminals Condition		Continuity
12		When reclining switch is turned to forward	Yes
12		Other than above	No
13		When reclining switch is turned to backward	Yes
	Other than above	No	
14 40B	When sliding switch is turned to forward	Yes	
	Other than above	No	
	When sliding switch is turned to backward	Yes	
	Other than above	No	



OK or NG

OK >> GO TO 2.

NG >> Replace power seat switch.

$\overline{2}$. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B357 terminal 40B and ground.

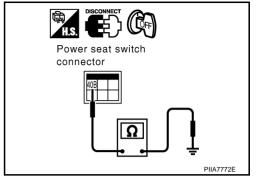
> 40B (B/W) - Ground : Continuity should exist.

OK or NG

OK NG

>> Check the condition of the harness and connector.

>> Repair or replace the harness between power seat switch and ground.

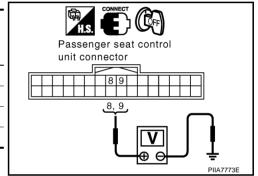


Seatback Tilt Switch Circuit Check

1. CHECK SEATBACK TILT SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Seatback tilt switch operated, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Seatback tilt swtich condition	Voltage (V) (Approx.)
	(+)	(-)	Condition	(дрргох.)
B353	8 (BR)	Ground	FORWARD	0
			Other than above.	Battery voltage
	9 (LG)		BACKWARD	0
			Other than above.	Battery voltage



OK or NG

OK >> Seatback tilt switch circuit is OK.

NG >> GO TO 2.

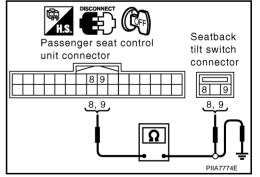
2. CHECK SEATBACK TILT SWITCH CIRCUIT HARNESS

- Disconnect passenger seat control unit connector and seatback tilt switch.
- Check continuity between passenger seat control unit connector B353 terminal 8, 9 and seatback tilt switch connector B372 terminal 8, 9.

8 (BR) - 8 (BR) : Continuity should exist. 9 (LG) - 9 (LG) : Continuity should exist.

Check continuity between passenger seat control unit connector B353 terminal 8, 9 and ground.

> 8 (BR) - Ground : Continuity should not exist. 9 (LG) - Ground : Continuity should not exist.



OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between passenger seat control unit and seatback tilt switch.

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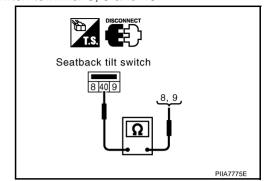
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$\overline{3}$. CHECK SEATBACK TILT SWITCH

Seatback switch operated, check continuity between seatback tilt switch terminal 8, 9 and 40.

Term	ninals	Seatback swtich condition Co	
8		FORWARD	Yes
O	40	Other than above	No
9	40	BACKWARD	Yes
9	9	Other than above	No



OK or NG

OK >> GO TO 4.

NG >> Replace seatback tilt switch.

4. CHECK SEATBACK TILT SWITCH GROUND CIRCUIT

Check continuity between seatback tilt switch connector B372 terminal 40 and ground.

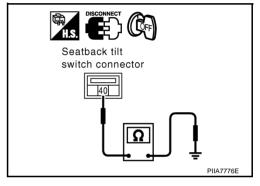
40 (B/W) - Ground

: Continuity should exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace the harness between seatback tilt switch and ground.



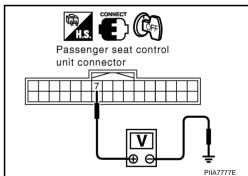
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Seatback Tilt Cancel Switch Circuit Check

1. CHECK SEATBACK TILT CANCEL SWITCH OUTPUT SIGNAL

- Turn ignition switch OFF.
- Seatback tilt cancel swtich operated, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Seatback tilt swtich cancel swtich condition	Voltage (V) (Approx.)
	(+)	(-)	Swiich condition	(дрргох.)
B353	7 (P)	Ground	CANCEL	0
DSSS	7 (P) Grou	Giodila	AUTO	5



OK or NG

OK >> Passenger seatback tilt cancel switch circuit is OK.

NG >> GO TO 2.

$\overline{2}$. CHECK SEATBACK TILT CANCEL SWITCH CIRCUIT HARNESS

- Disconnect passenger seat control unit connector and seatback tilt cancel switch.
- Check continuity between passenger seat control unit connector B353 terminal 7 and seatback tilt cancel switch connector B373 terminal 7.

7 (P) - 7 (P) : Continuity should exist.

Check continuity between passenger seat control unit connector B353 terminal 7 and ground.

> 7 (P) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between passenger seat control unit and seatback tilt cancel switch.

3. CHECK SEATBACK TILT CANCEL SWITCH

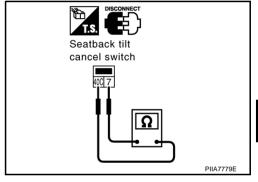
Seatback tilt cancel swtich operated, check continuity between seatback tilt cancel switch terminal 7 and 40C.

Term	ninals	Seatback tilt cancel swtich condition	Continuity
7	40C	CANCEL	Yes
,		AUTO	No

OK or NG

OK >> GO TO 4.

NG >> Replace seatback tilt cancel switch.



4. CHECK SEATBACK TILT CANCEL SWITCH GROUND CIRCUIT

Check continuity between seatback tilt cancel switch connector B373 terminal 40C and ground.

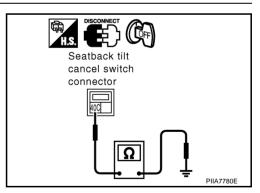
> 40C (B/W) - Ground : Continuity should exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG

>> Repair or replace the harness between seatback tilt cancel switch and ground.



AIS004JU

Soft Top Switch Circuit Check

1. CHECK SOFT TOP SYSTEM

Soft top is operated.

Operate normally?

Yes >> GO TO 2.

No >> Further inspection necessary. Refer to

Seatback tilt cancel Passenger seat control switch unit connector connector PΠΔ7778F

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$\overline{2}$. CHECK SOFT TOP SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Soft top switch operated, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Soft top switch condition	Voltage (V) (Approx.)
	(+)	(-)		(Αρρίολ.)
B353	5 (R) 6 (GY)	Ground	OPEN*	0
			Other than above	Battery voltage
			CLOSE*	0
			Other than above	Battery voltage

Passenger seat control unit connector

5,6

PliA7781E

OK or NG

OK >> Soft top switch circuit is OK.

NG >> GO TO 3.

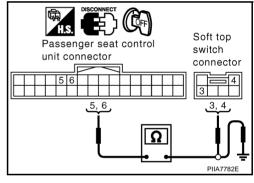
3. CHECK SOFT TOP SWITCH CIRCUIT HARNESS

- Disconnect passenger seat control unit connector and soft top switch.
- 2. Check continuity between passenger seat control unit connector B353 terminal 5, 6 and soft top switch connector M14 terminal 3, 4.

5 (R) - 3 (L/B) : Continuity should exist. 6 (GY) - 4 (R/G) : Continuity should exist.

Check continuity between passenger seat control unit connector B353 terminal 5, 6 and ground.

> 5 (R) - Ground : Continuity should not exist. 6 (GY) - Ground : Continuity should not exist.



OK or NG

OK >> Check the condition of the harness and the connector.

NG >> Repair or replace harness between passenger seat control unit and soft top switch.

Power Window Down Request Signal Circuit Check

AIS004JV

1. CHECK POWER WINDOW DOWN REQUEST SUGNAL INPUT

- Turn ignition switch ON.
- 2. Check voltage between passenger seat control unit connector and ground.

Con-		minal e color)	Condition	Voltage (V) (Approx.)
,	(+)	(-)		(лрыох.)
B353	16 (PU/W)	Ground	When soft top switch is turned to OPEN or CLOSE.*	0
	16 (PO/W) Ground		Other than above.	5

^{*:} Turn ignition switch ON and depress brake pedal when soft top switch operates.

Passenger seat control unit connector

OK or NG

OK >> Power window down request signal circuit is OK.

NG >> GO TO 2.

^{*:} Turn ignition switch ON and depress brake pedal when soft top switch operates.

$\overline{2}$. CHECK POWER WINDOW DOWN REQUEST SUGNAL CIRCUIT HARNESS

- 1. Turn ignition swtich OFF.
- 2. Disconnect soft top control unit and passenger seat control unit connector.
- Check continuity between passenger seat control unit connector B353 terminal 16 and soft top control unit connector B67 terminal 36.

: Continuity should exist. 16 (PU/W) - 36 (Y/G)

Check continuity between passenger seat control unit connector B353 terminal 16 and ground.

> 16 (PU/W) - Ground : Continuity should not exist.

OK or NG

OK >> Power window down request signal circuit is OK. Further inspection is necessary. Refer to RF-80, "Power Window Down Request Signal Check".

NG >> Repair or replace harness between passenger seat control unit and soft top control unit.

Storage Lid Close Signal Circuit Check

1. CHECK STORAGE LID CLOSE SIGNAL

- Turn ignition switch ON. 1.
- Soft top operates in OPEN, check voltage between passenger seat control unit connector and ground. 2.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
•	(+)	(-)		(πρρίολ.)
B353	33 (G/B)	Ground	When storage lid is in a closing operation	Battery voltage
			Other than above.	0

Passenger seat control unit connector

Passenger seat control

unit connector

OK or NG

OK >> Replace passenger seat control unit.

NG >> GO TO 2.

2. Check storage lid close signal circuit harness

- Turn ignition swtich OFF. 1.
- 2. Disconnect soft top control unit and storage lid actuator and passenger seat control unit connector.
- Check continuity between passenger seat control unit connector B353 terminal 33 and soft top control unit connector B66 terminal 13.

33 (G/B) - 13 (L/R) : Continuity should exist.

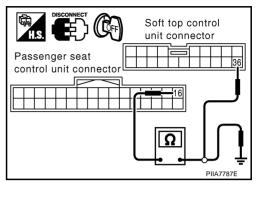
Check continuity between passenger seat control unit connector B353 terminal 33 and ground.

> 33 (G/B) - Ground : Continuity should not exist.

OK or NG

OK >> Storage lid close signal circuit is OK. Further inspection is necessary. Refer to RF-61, "Storage Lid Actuator Check (Close Operate)".

NG >> Repair or replace harness between passenger seat control unit and soft top control unit.



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Soft top control

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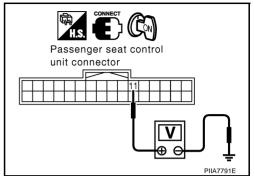


Soft Top Lock Switch Circuit Inspection

1. CHECK SOFT TOP LOCK SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Soft top operates in CLOSE, check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		(Арргох.)
B353	11 (L/W)	Ground	5th bow full latch switch is turned to ON	0
			Other than above	5



OK or NG

OK >> Replace passenger seat control unit.

NG >> GO TO 2.

2. CHECK SOFT TOP LOCK SWITCH CIRCUIT HARNESS

- 1. Turn ignition swtich OFF.
- 2. Disconnect passenger seat control unit and soft top lock swtich connector.
- Check continuity between passenger seat control unit connector B353 terminal 11 and soft top lock switch connector T205 terminal 3.

11 (L/W) - 3 (Y) : Continuity should exist.

 Check continuity between passenger seat control unit connector B353 terminal 11 and ground.

11 (L/W) - Ground : Continuity should not exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace harness between passenger seat control unit and soft top control unit.

Passenger seat control unit connector Soft top lock switch connector In the passenger seat control unit connector Pilagriae

Seat Belt Buckle Switch Circuit Check

1. CHECK SEAT BELT BUCKLE SWITCH OUTPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between passenger seat control unit connector and ground.

Connector	_	ninal color)	Con	dition	Voltage (V) (Approx.)	
	(+)	(-)				
B353	10 (L/Y)	Ground	Seat belt.	: Fastened	5	
	10 (L/1) Glound		Seat beit.	: Unfastened	0	

Passenger seat control unit connector

OK or NG

OK >> Seat belt buckle switch circuit is OK.

NG >> GO TO 2.

AIS004JX

AIS004JY

2. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT HARNESS

- Turn ignition swtich OFF.
- 2. Disconnect passenger seat control unit connector and seat belt buckle switch connector.
- Check continuity between passenger seat control unit connector B353 terminal 10 and seat belt buckle switch connector B373 terminal 1.

10 (L/Y) - 1 (LG) : Continuity should exist.

4. Check continuity between passenger seat control unit connector B353 terminal 10 and ground.

10 (L/Y) - Ground : Continuity should not exist.

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between passenger seat control unit and seat belt buckle switch.

Passenger seat control unit connector Unit connector Passenger seat control connector Pilar794E

3. CHECK SEAT BELT BUCKLE SWITCH

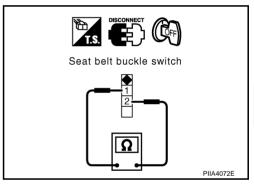
Check continuity between seat belt buckle switch terminal 1 and 2.

Term	ninals		Continuity	
1	2	Seat belt	: Fastened	No
'		Seat beit	: Unfastened	Yes

OK or NG

OK >> GO TO 4.

NG >> Replace seat belt buckle switch.



4. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

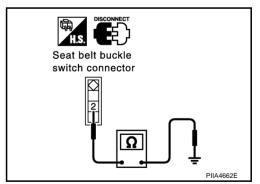
Check continuity between seat belt buckle switch connector B11 terminal 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

OK >> Check the condition of the harness and connector.

NG >> Repair or replace the harness between seat belt buckle switch and ground.



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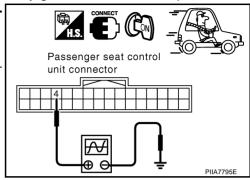
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Vehicle Speed Signal Check

1. CHECK VEHICLE SPEED SIGNAL

- 1. Turn ignition switch ON.
- 2. Check signal between passenger seat control unit connector and body ground with oscilloscope.

Connector	Terminal (Wire color)		Condition	Signal		
	(+)	(-)		(Reference value)		
B353	4 (PU)	Ground	When vehicle speed is approx. 40 km/ h (25 MPH)	(V) 15 10 5 0 5 5 0 PIIB0078J		



AIS004JZ

OK or NG

OK >> Replace passenger seat control unit.

NG >> GO TO 2.

2. CHECK VEHICLE SPEED SIGNAL CIRCUIT HARNESS

- 1. Turn ignition swtich OFF.
- 2. Disconnect passenger seat control unit connector and unified meter and A/C amp.
- Check continuity between passenger seat control unit connector B353 terminal 4 and unified meter and A/C amp. connector M49 terminal 34.

4 (PU) - 34 (W/G) : Continuity should exist.

 Check continuity between passenger seat control unit connector B353 terminal 4 and ground.

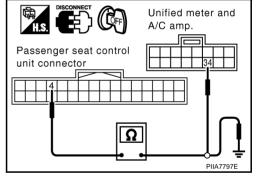
4 (PU) - Ground : Continuity should not exist.

OK or NG

OK

>> Vehicle speed signal circuit is OK. Further inspection is necessary. Refer to <u>DI-18</u>, "Vehicle Speed Signal Inspection".

NG >> Repair or replace harness between passenger seat control unit and unified meter and A/C amp.

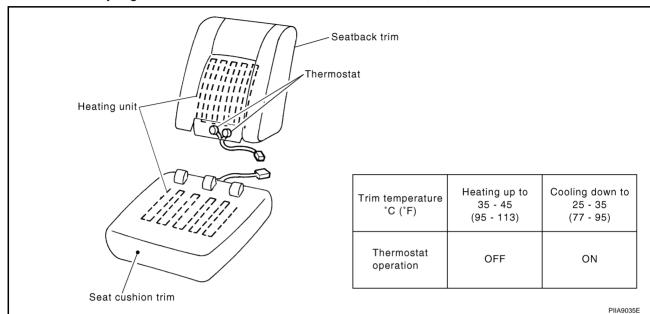


HEATED SEAT PFP:87335

Description

When handling seat, be extremely careful not to scratch heating unit.
To replace heating unit, seat trim and pad should be separated.

• Do not use any organic solvent, such as thinner, benzene, alcohol, etc. to clean trims.



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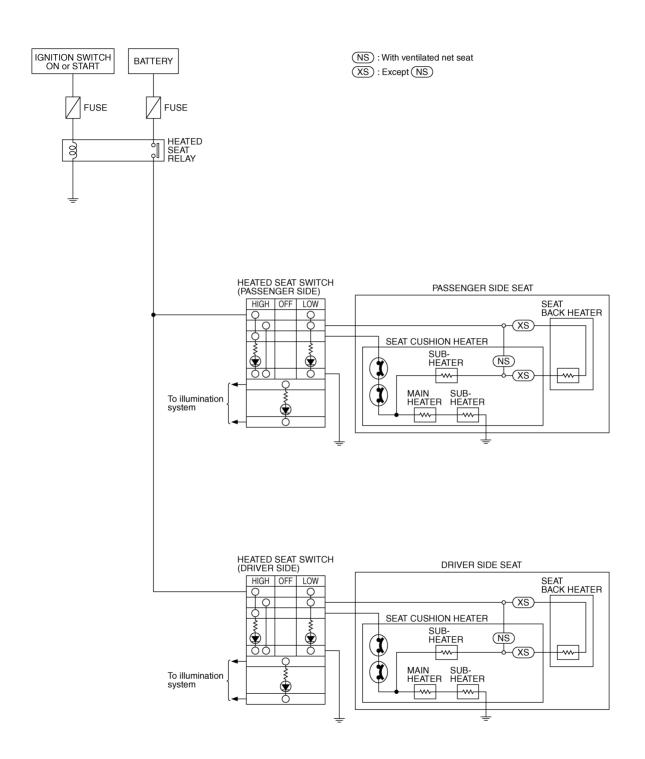
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Schematic



TIWT0517E

Wiring Diagram-HSEAT-/For Coupe

US004SE

SE-HSEAT-01



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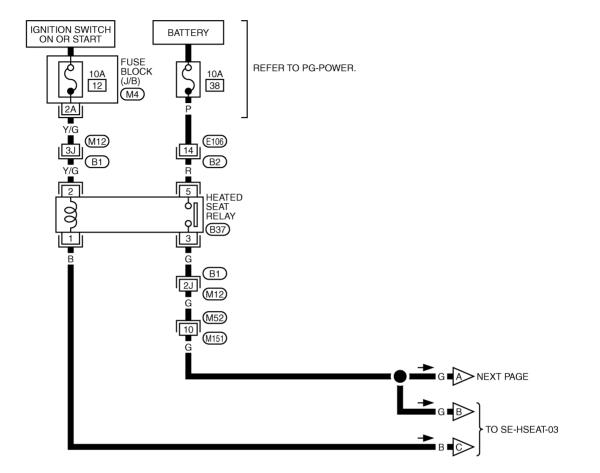
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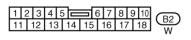
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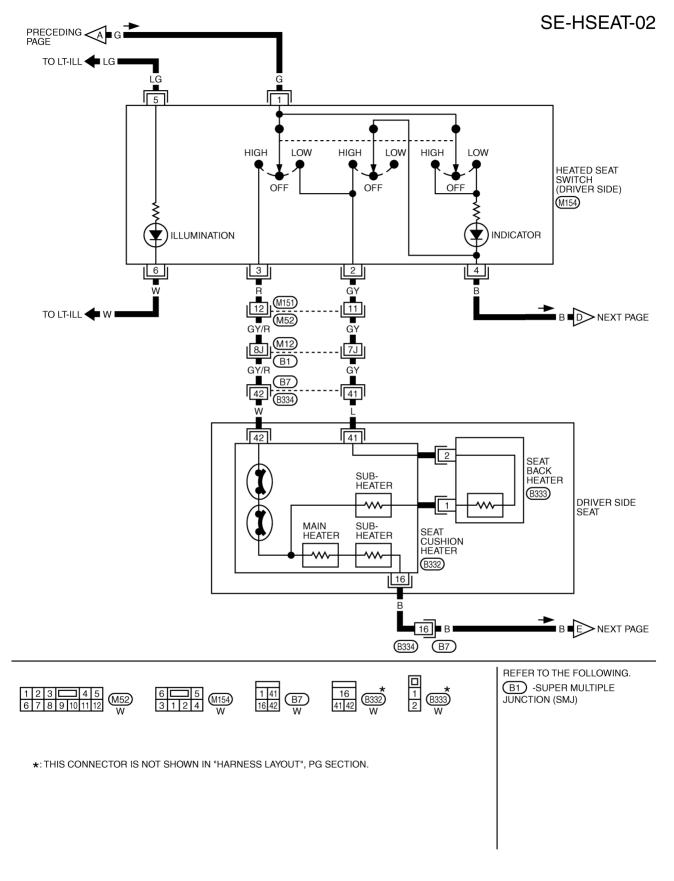




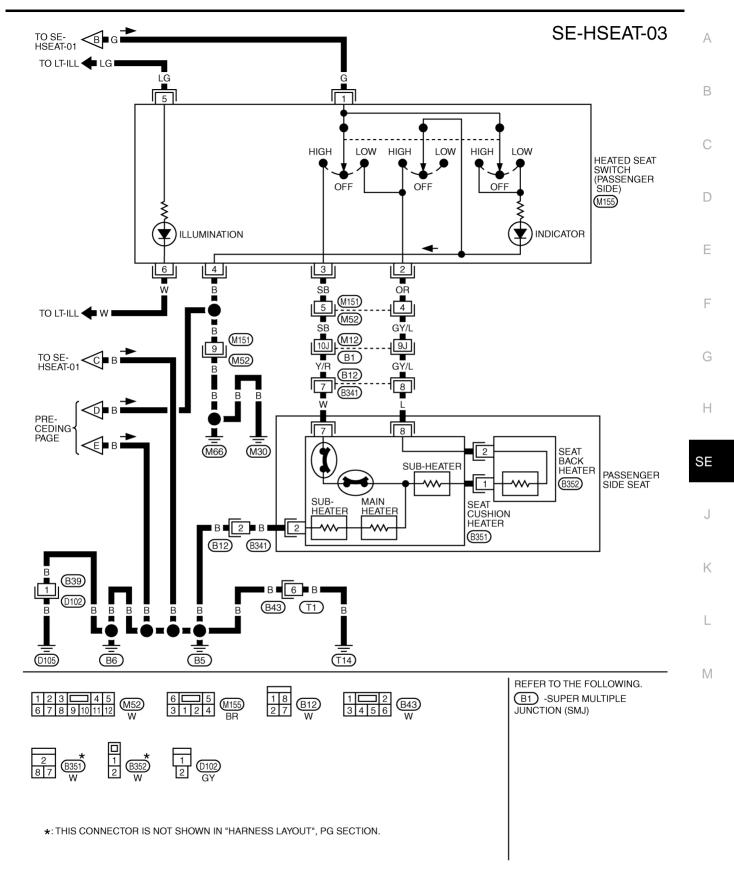
(B1) -SUPER MULTIPLE JUNCTION (SMJ) (M4) -FUSE BLOCK-JUNCTION BOX (J/B)

REFER TO THE FOLLOWING.

TIWT0445E



TIWT0446E

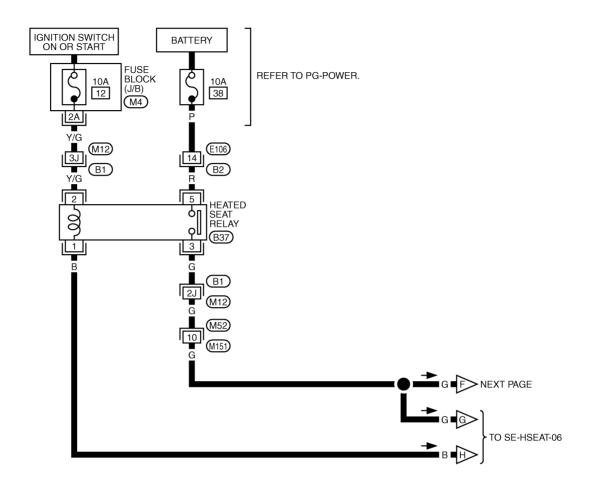


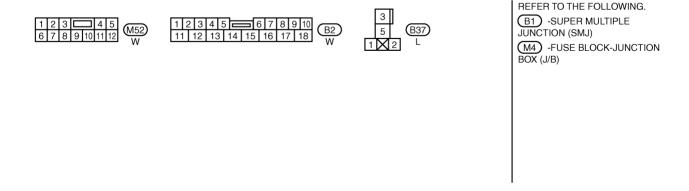
TIWT0593E

Wiring Diagram-For Roadster-

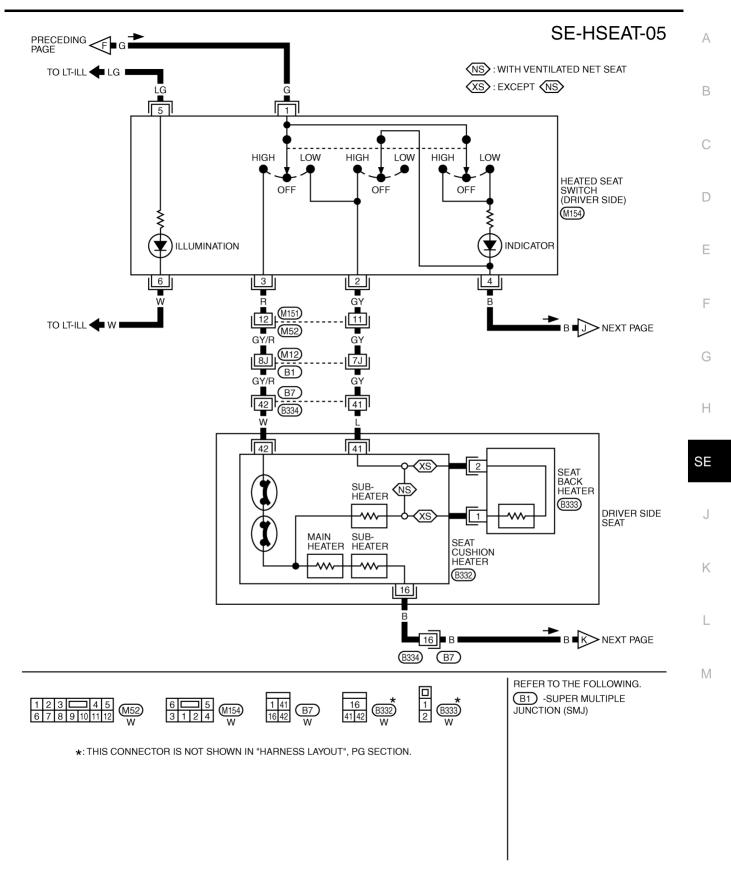
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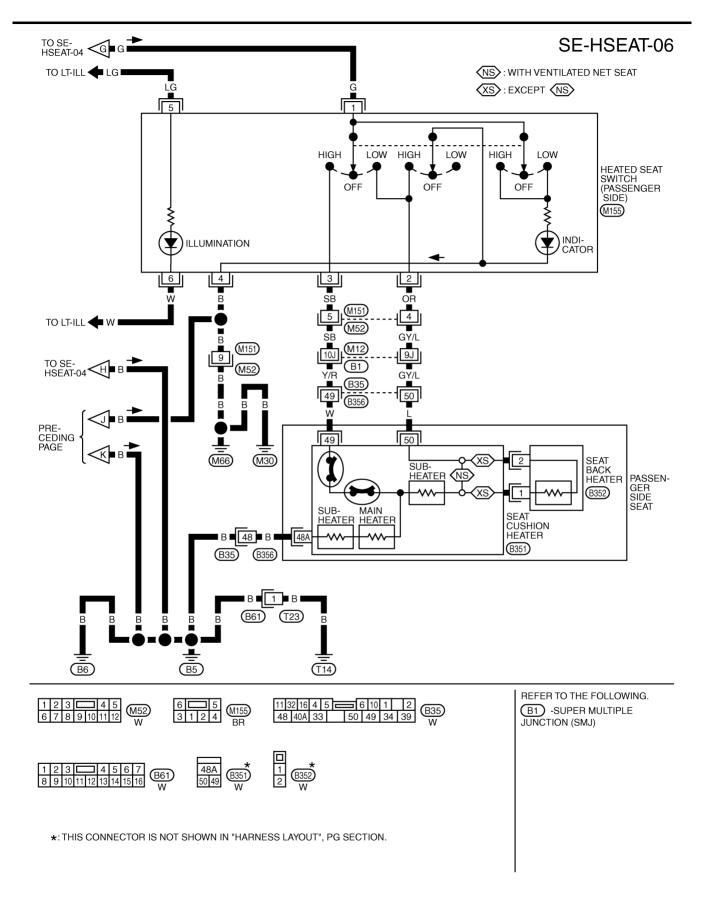




TIWT0731E



TIWT0732E



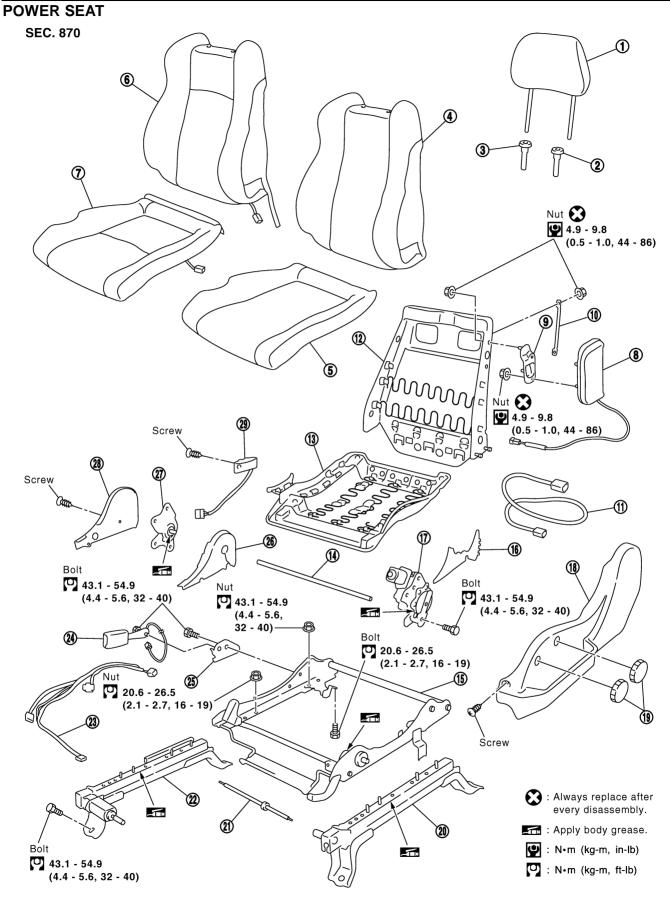
TIWT0733E

SEAT PFP:87000 Α **Removal and Installation** AIS000IK MANUAL SEAT (COUPE) **SEC. 870** В С 6 4 D 3 Е Nut **(3) 4.9 - 9.8** F (0.5 - 1.0, 44 - 86) G **(C)** 10 Н **8** SE Nut 🔇 4.9 - 9.8 Screw (0.5 - 1.0, 44 - 86)Bolt J 20.6 - 26.5 (2.1 - 2.7, 16 - 19) Κ Bolt 43.1 - 54.9 (4.4 - 5.6, 32 - 40) Bolt 43.1 - 54.9 (4.4 - 5.6, (15) M 32 - 40) **-1** Bolt 0 20.6 - 26.5 (2.1 - 2.7 16 - 19) Screw. Screw Screw : Always replace after every disassembly. <u>.</u> : Apply body grease. Bolt 21 20.6 - 26.5 : N•m (kg-m, ft-lb) (2.1 - 2.7, 16 - 19) PIIA2479E

SE-65

SEAT

1.	Headrest	2.	Headrest holder (locked)	3.	Headrest holder (free)
4.	Seatback pad	5.	Seat cushion pad	6.	Seatback trim
7.	Seat cushion trim	8.	Side air bag module	9.	Side air bag module bracket
10.	Inner cloth stay	11.	Side air bag module harness	12.	Seatback frame
13.	Seat cushion frame	14.	Connector rod	15.	Rear gusset
16.	Inner cover outer device	17.	Seat cushion outer finisher	18.	Reclining lever knob
19.	Thigh support adjuster dial	20.	Sliding and reclining device outer	21.	Front gusset
22.	Seat thigh support adjuster	23.	Wire pull	24.	Sliding and reclining device inner
25.	Seat belt buckle	26.	Inner cover inner device	27.	Seat cushion inner finisher



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Headrest

4. Seatback pad

2. Headrest holder (locked)

SE-67

5. Seat cushion pad

3. Headrest holder (free)

6. Seatback trim

SEAT

7.	Seat cushion trim	8.	Side air bag module	9.	Side air bag module bracket
10.	Inner cloth stay	11.	Side air bag module harness	12.	Seatback frame
13.	Seat cushion frame	14.	Reclining device rod	15.	Seat thigh support adjuster assembly
16.	Inner cover outer device	17.	Reclining device outer	18.	Seat cushion outer finisher
19.	Lifter dial	20.	Sliding outer assembly	21.	Flexible wire
22.	Sliding inner assembly	23.	Power seat harness	24.	Seat belt buckle
25.	Seat belt buckle bracket	26.	Inner cover inner device	27.	Reclining device inner
28	Seat cushion inner finisher	29	Power seat switch		

NET SEAT (ROADSTER) Α Nut **(3)** 7.35 (0.75, 65) **SEC. 870** В С (5) D 23.5 (2.4, 17) Е F 8 G Screw Н SE 1 Screw K Bolt 49.0 (5.0, 36) 49.0 (5.0, 36) 49.0 (5.0, 36) 23.5 (2.4, 17) M 23.5 (2.4, 17) Screw : Always replace after every disassembly. : Apply body grease. 49.0 (5.0, 36) : N•m (kg-m, in-lb) : N•m (kg-m, ft-lb)

PIIA8728E

- 1. Seatback frame and pad upper
- 4. Seatback trim upper
- 2. Inner cloth stay
- 5. Seatback trim lower
- 3. Side air bag module
- 6. Seatback pad lower

SEAT

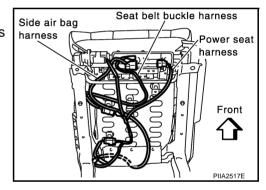
7.	Seatback garnish	8.	Seat cushion trim	9.	Seat cushion pad
10.	Seatback frame	11.	Seat cushion inner finisher	12.	Reclining inner device
13.	Power seat switch	14.	Inner cover inner device	15.	Seat cushion frame
16.	Reclining device rod	17.	Reclining outer device	18.	Inner cover outer device
19.	Side air bag module harness	20.	Seat cushion outer finisher	21.	Lifter dial
22.	Seat belt buckle	23.	Power seat harness	24.	Sliding inner assembly
25.	Flexible wire	26.	Seat thigh support adjuster assembly	27.	Sliding outer assembly

REMOVAL

When removing or installing the seat trim, carefully handle it to keep dirt out and avoid damage.

CAUTION:

- Before removing the seat, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
- When checking the power seat circuit for continuity using a circuit tester, do not confuse its connector with the side air bag module connector. Such an error may cause the air bag to deploy.
- Do not drop, tilt, or bump the side air bag module installing in the seat. Always handle it with care.
- 1. Remove the front leg cover and rear leg cover (LH/RH).
- 2. Slide the seat until the body mounting bolts are visible and a tool can be inserted.
- 3. Remove mounting bolts from vehicle.
- 4. Disconnect both battery cables.
- 5. Disconnect harness connector from under seat cushion.
- 6. Remove fastening clips under seat cushion, and remove seats from vehicle.



INSTALLATION

Install in the reverse order of removal.

Disassembly and Assembly SEATBACK TRIM AND PAD (MANUAL SEAT AND POWER SEAT)

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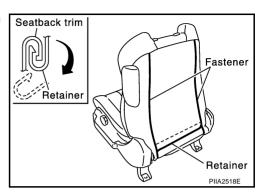
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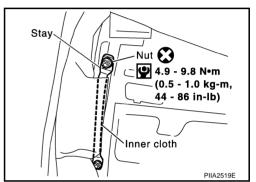
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Disassembly

 Open fastener on back of seatback, and remove retainer from seatback trim.



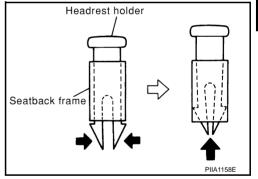
2. Remove the stay securing the inner cloth.



Squeeze and pull up headrest holder tabs to remove from seatback frame.

NOTE:

Before installing the headrest holder, check its orientation (front/rear and right/left).



Remove the seat heater harness connector. After removing the seatback trim and pad, remove the hog
ring to separate the trim and pad.

NOTE:

Seatback heater unit is stitched into seatback trim. It cannot be separated (for heated seat models only).

Assembly

Assemble in the reverse order of disassembly.

REMOVAL OF SEATBACK ASSEMBLY

- 1. After completing the steps 1 of "SEATBACK TRIM AND PAD", remove the harness connectors for the reclining motor (driver seat only).
- 2. Pull out the harness connector for the side air bag from the seat cushion.
- 3. Remove the reclining device mounting bolts on the seatback frame, and remove the seatback assembly. **NOTE:**

When assembling the seatback frame, make sure that the reclining device are locked on both sides, and be sure to temporarily tighten the bolts, then tighten them finally.

INSTALLATION OF SEATBACK ASSEMBLY

Install in the reverse order of removal.

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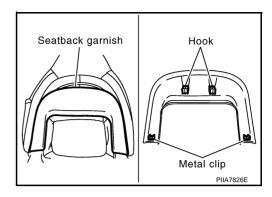
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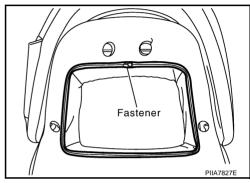
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SEATBACK TRIM AND PAD (NET SEAT FOR ROADSTER) Disassembly

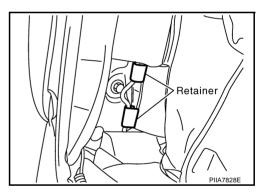
1. Remove the seatback garnish.



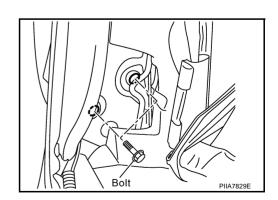
2. Open fastener on seatback lower.



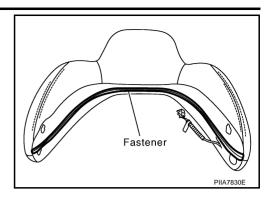
3. Remove the retainer.



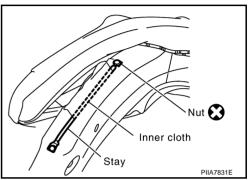
- 4. Disconnect side air bag connector.
- 5. Remove the seatback upper mounting bolts.



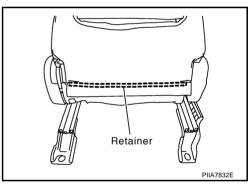
Open fastener on seatback upper.



Remove the stay securing the inner cloth.



- Separate the seatback frame and pad upper and seatback trim upper.
- 9. Remove the retainer.



10. After removing the seatback trim and pad, remove the hog rings to separate the trim and pad.

Assembly

Assemble in the reverse order of disassembly.

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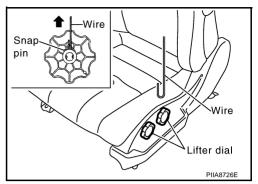
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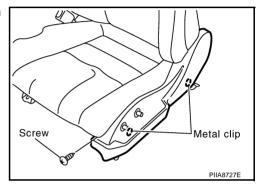
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SEAT CUSHION TRIM AND PAD (POWER SEAT AND NET SEAT) Disassembly

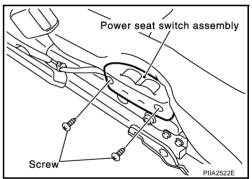
1. Hang snap ring on wire, and pull it up to remove. Remove Lifter dial.



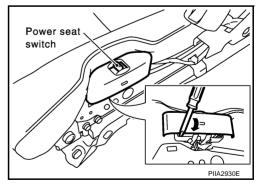
2. Unfasten the screw and metal clip and remove the seat cushion outer finisher.



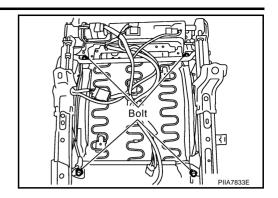
3. Unfasten screws and remove the power seat switch assembly.



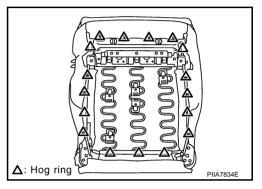
Insert a screwdriver in lower side of power seat switch and remove it (passenger seat for coupe).



4. Remove bolts on the under side of seat cushion.



5. Remove hog rings from under seat cushion frame.



- 6. Disconnect harness connector from seat cushion heater unit.
- 7. After removing the seat cushion trim and pad, remove the hog rings to separate the trim and pad.

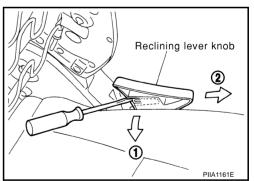
Seat cushion heater unit is stitched into seat cushion trim. It cannot be separated.

Assembly

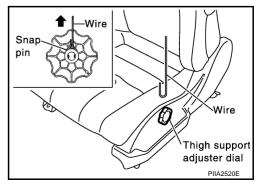
Assemble in the reverse order of disassembly.

SEAT CUSHION TRIM AND PAD (MANUAL SEAT FOR COUPE) Disassembly

1. Pull up tabs of reclining lever from inside. Slide knob forward to remove.



2. Hang snap ring on wire, and pull it up to remove. Remove thigh support adjuster dial.



С

D

F

G

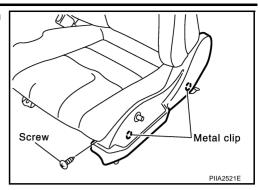
SE

Н

J

L

Unfasten the screw and metal clip and remove the seat cushion outer finisher.



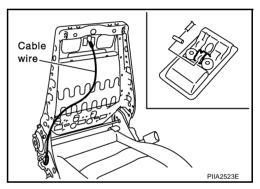
- 4. Remove bolts on the under side of seat cushion.
- 5. Remove hog rings from under seat cushion frame.
- 6. After removing the seat cushion trim and pad, remove the hog rings to separate the trim and pad.

Assembly

Assemble in the reverse order of disassembly.

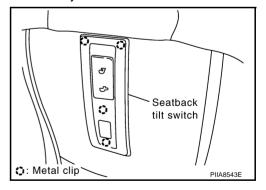
PASSENGER SIDE SEATBACK FORWARD RECLINING (COUPE)

- Remove passenger side seatback trim and pad. Refer to <u>SE-71, "SEATBACK TRIM AND PAD (MANUAL SEAT AND POWER SEAT)"</u>.
- 2. Remove screw and fixing clip, then disconnect cable wire.



PASSENGER SIDE SEATBACK FORWARD RECLINING (ROADSTER)

1. Remove the seatback tilt switch.



- 2. Disconnect seatback tilt switch harness connector.
- Remove passenger side seatback trim and pad. Refer to <u>SE-71, "SEATBACK TRIM AND PAD (MANUAL SEAT AND POWER SEAT)"</u>.