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# PRECAUTIONS

## PRECAUTIONS

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### Service Notice

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

AIS0002

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.**

### Precautions for Battery Service

AIS001PC

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 interfere, 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 by the specified torque.
- After re-installation is completed, be sure to check that each part works properly.
- Follow the steps below to clean components.
  - Water soluble stain: Dip a soft cloth into lukewarm water, wring the water out of the cloth, and wipe the area.  
Then wipe with a soft and dry cloth.
  - Oily stain: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the area.  
Then dip a cloth into fresh water, wring the water out of the cloth, and wipe the detergent off from the area by the cloth. Then wipe with a soft and dry cloth.

## PRECAUTIONS

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- Do not use organic solvent such as thinner, benzene, alcohol, nor gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

# PREPARATION

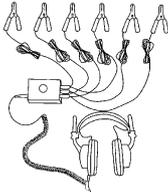
## PREPARATION

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### Special Service Tools

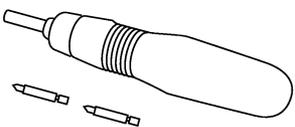
AIS00014

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

Tool number (Kent-Moore No.) Tool name	Description
(J-39570) Chassis ear   SIIA0993E	Locating the noise
(J-43980) NISSAN Squeak and Rattle Kit   SIIA0994E	Repairing the cause of noise

### Commercial Service Tools

AIS00015

Tool name	Description
Engine ear   SIIA0995E	Locating the noise
Power tool   PBIC0191E	

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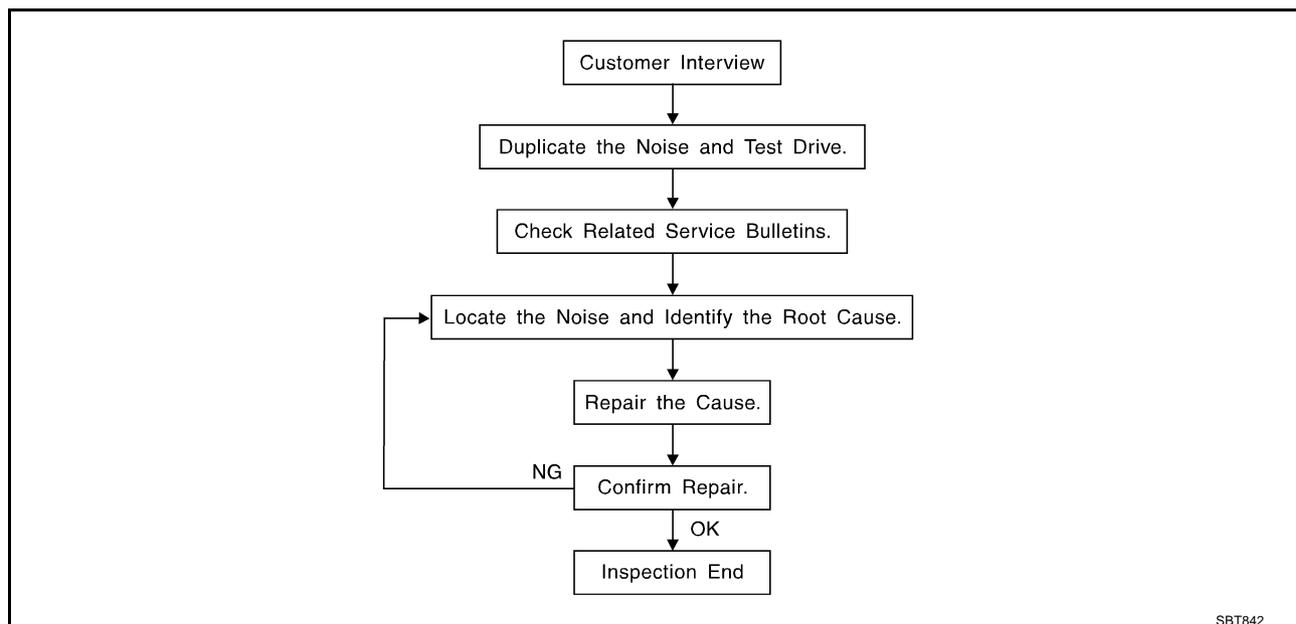
# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## SQUEAK AND RATTLE TROUBLE DIAGNOSES

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### Work Flow

AI/S00016



### 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 [SE-10, "Diagnostic Worksheet"](#). 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 cause of every noise that the customer is concerned about. This can be accomplished by a test driving of 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 that 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.

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## 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 that the customer states when the noise occurred.
  - 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 cause of the noise.

## LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a certain area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
  - removing the components in the area where you suspect that 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 as a cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise may be eliminated temporarily.
  - feeling for a vibration with your hand by touching the component that you suspect as a cause of the noise.
  - placing a piece of paper between components that you suspect as a cause of 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 (J-43980) is available through your authorized Nissan Parts Department.

### CAUTION:

**Do not use excessive force, as many components are made of plastic and may be damaged.**

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

**The following materials are included in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately if necessary.**

**URETHANE PADS [1.5 mm (0.059 in) thick]**

**Insulates connectors, harness, etc.**

**76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02: 15 × 25 mm (0.59 × 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 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)**

**INSULATOR (Light foam block)**

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

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

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## FELT CLOTH TAPE

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

68370-4B000: 15 × 25 mm (0.59 × 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 an area where UHMW tape 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 of 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:

1. 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 the area where is hard to reach). 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:

1. 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
3. 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 (J-43980) to repair the noise.

## TRUNK

Trunk noises are often caused by a loose jack or loose items put in the trunk by the owner.

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

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/HEADLINER

Noises in the sunroof/headliner 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 headliner 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

For isolating seat noise, it's important to know the position of the seat 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. Seat back lock and bracket

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

## UNDERHOOD

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

Causes of transmitted underhood noise include:

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

These noise 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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# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## Diagnostic Worksheet

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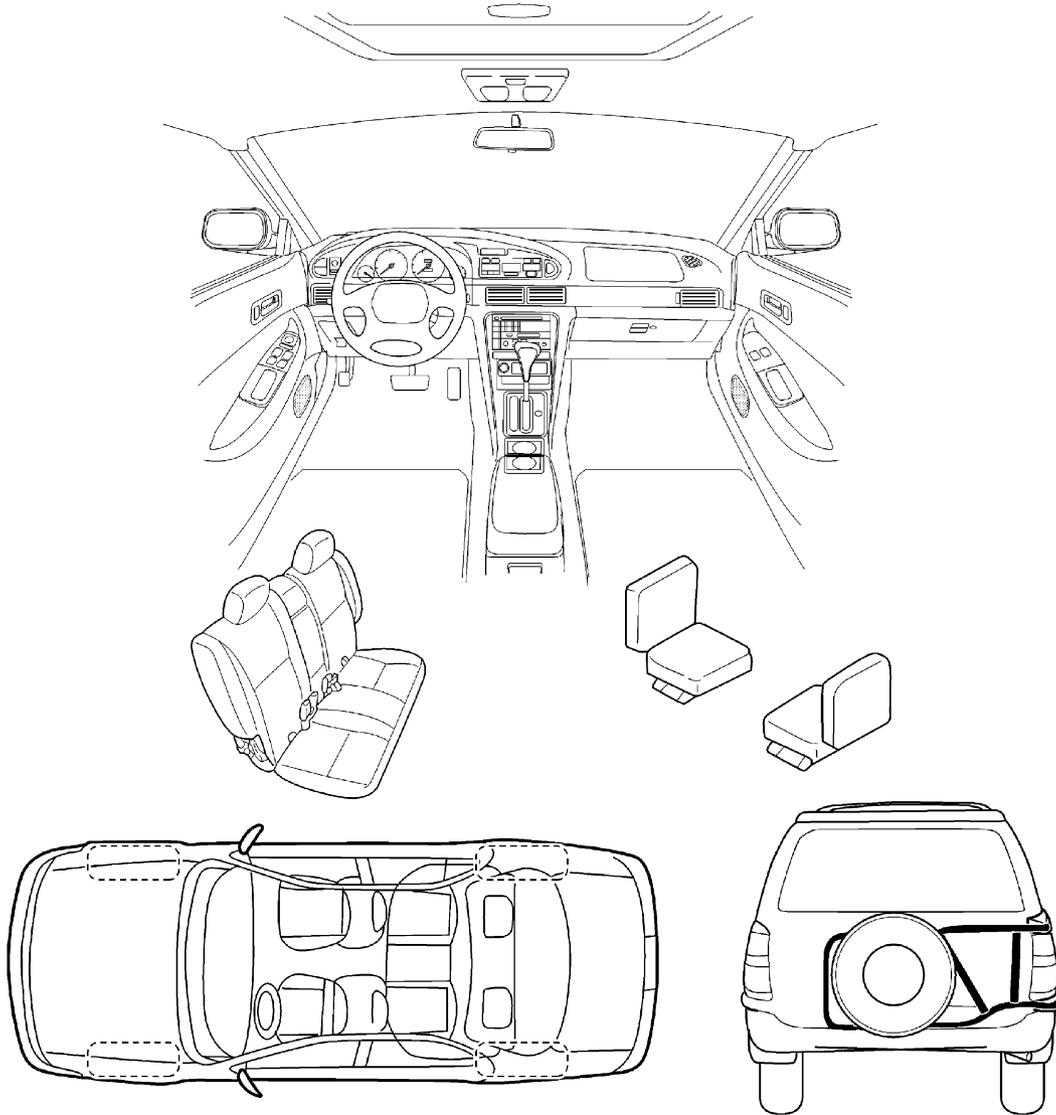
### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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.

SBT843

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

## SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

Briefly describe the location where the noise occurs:

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### II. WHEN DOES IT OCCUR? (check the boxes that apply)

- |  |   |
|--|---|
| <input type="checkbox"/> anytime                             | <input type="checkbox"/> after sitting out in the sun |
| <input type="checkbox"/> 1 <sup>st</sup> time in the morning | <input type="checkbox"/> when it is raining or wet    |
| <input type="checkbox"/> only when it is cold outside        | <input type="checkbox"/> dry or dusty conditions      |
| <input type="checkbox"/> only when it is hot outside         | <input type="checkbox"/> other: _____                 |

### III. WHEN DRIVING:

- through driveways
- over rough roads
- over speed bumps
- only at about \_\_\_\_ mph
- on acceleration
- coming to a stop
- on turns : left, right or either (circle)
- with passengers or cargo
- other: \_\_\_\_\_
- after driving \_\_\_\_ miles or \_\_\_\_ minutes

### IV. WHAT TYPE OF NOISE?

- squeak (like tennis shoes on a clean floor)
- creak (like walking on an old wooden floor)
- rattle (like shaking a baby rattle)
- knock (like a knock on a door)
- tick (like a clock second hand)
- thump (heavy, muffled knock noise)
- buzz (like a bumble bee)

### TO BE COMPLETED BY DEALERSHIP PERSONNEL

#### Test Drive Notes:

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	YES	NO	Initials of person performing
Vehicle test driven with customer	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise verified on test drive	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Noise source located and repaired	<input type="checkbox"/>	<input type="checkbox"/>	_____
- Follow up test drive performed to confirm repair	<input type="checkbox"/>	<input type="checkbox"/>	_____

VIN: \_\_\_\_\_ Customer Name: \_\_\_\_\_

W.O. #: \_\_\_\_\_ Date: \_\_\_\_\_

SBT844

This form must be attached to Work Order

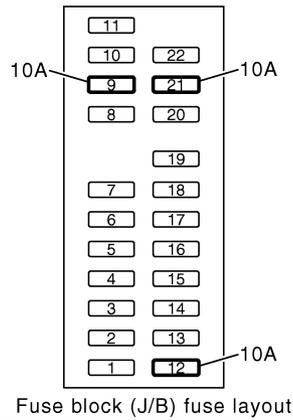
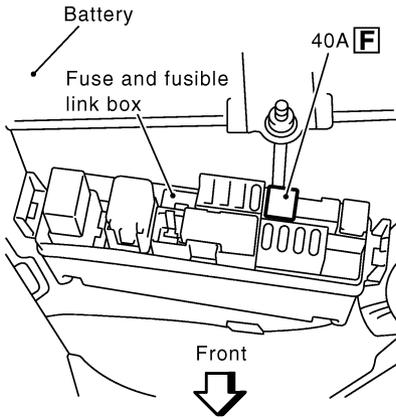
# POWER SEAT

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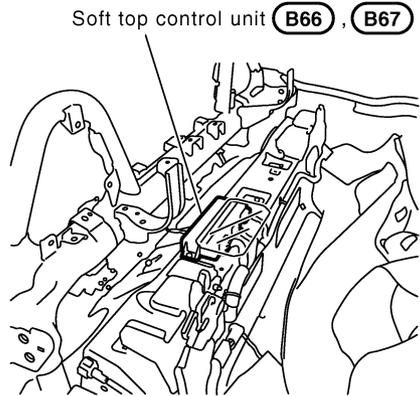
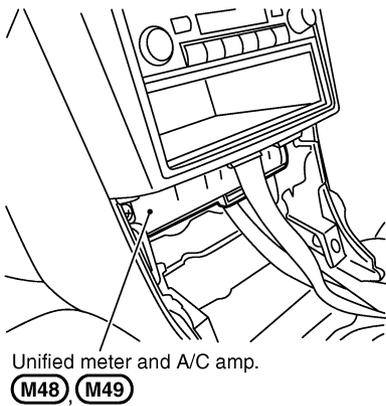
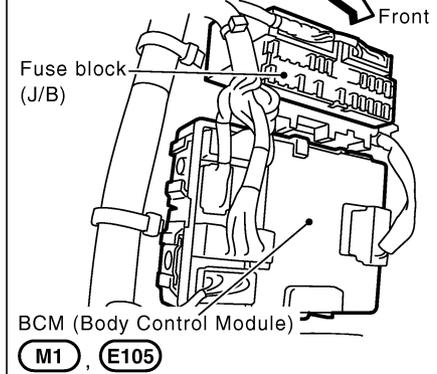
## POWER SEAT

### Component Parts and Harness Connector Location

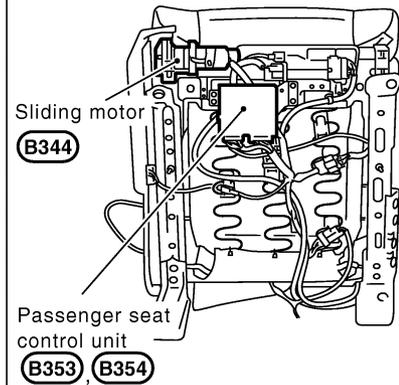
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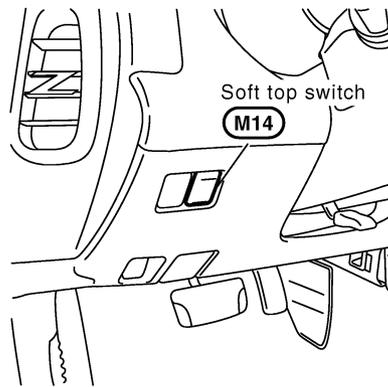
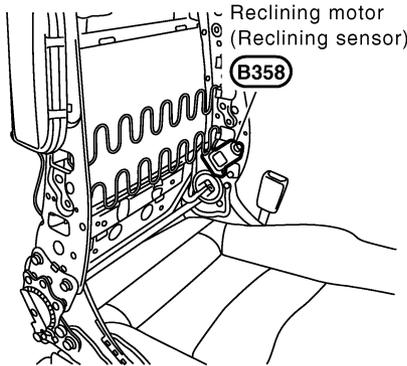
View without the LH side finisher from in board



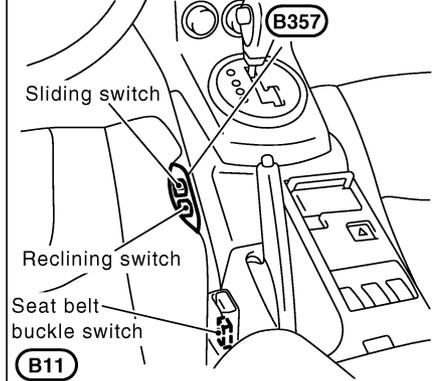
Bottom view of passenger seat



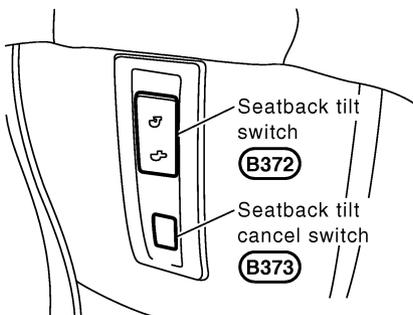
Front view of passenger side seatback without pad and trim removed



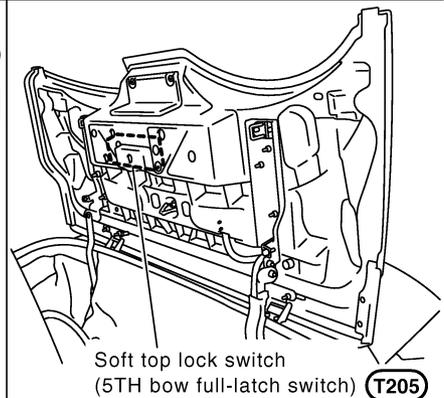
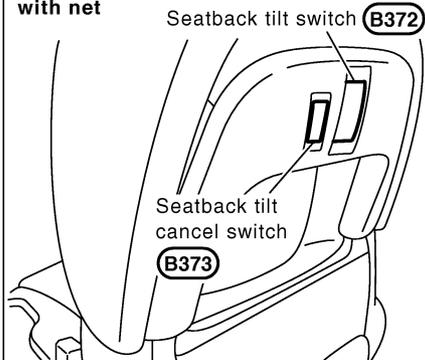
Power seat switch (Driver side)



Rear view of passenger side seatback without net

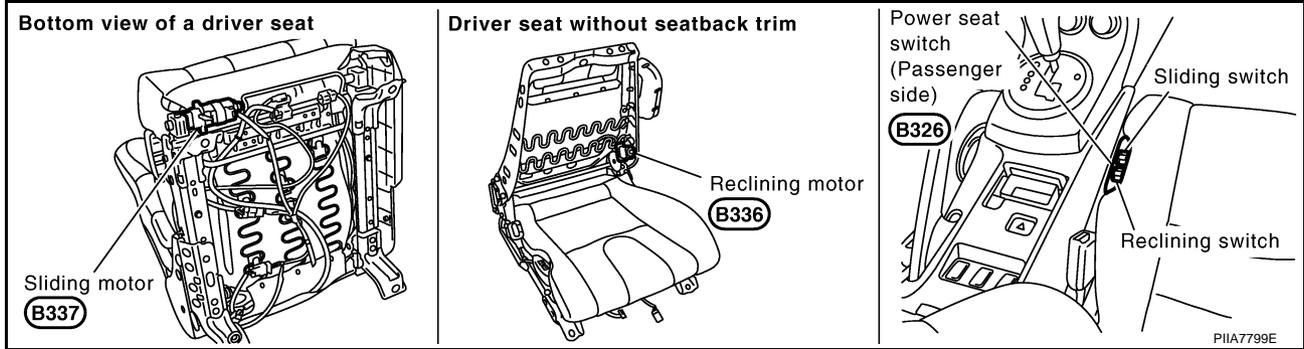


Rear view of passenger side seatback with net



PIIA7798E

# POWER SEAT



## Manual Operation

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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

AIS0043H

### PASSENGER SEATBACK TILTING FUNCTION

- When the “seatback 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”.

Conditions	<ul style="list-style-type: none"> <li>● Power seat switches (sliding and reclining) are OFF.</li> <li>● The seat belt is not fastened.</li> <li>● The vehicle speed is approximately 7 km/h or less.</li> <li>● The soft top is not currently in operation.*1</li> <li>● The ignition switch is not in the START position.</li> <li>● The seatback tilt cancel switch is in “AUTO”.</li> </ul>
------------	---

\*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.

Conditions	<ul style="list-style-type: none"> <li>● A power seat switch (sliding or reclining) is operated.</li> <li>● The seat belt is fastened.</li> <li>● The vehicle speed is approximately 7 km/h or more.</li> <li>● The soft top is in operation. (Stops only tilt-forward operation.)*2</li> <li>● The seatback tilting switch is operated while the seatback is in operation.</li> <li>● The ignition switch is turned to the START position.</li> <li>● Reclining motor lock is detected.</li> </ul>
------------	---

\*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 forward operation) when the soft top opens or closes.
- When open/close operation is completed, the seatback returns to the tilt start position (return operation).

# POWER SEAT

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## 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.

---

Conditions	<ul style="list-style-type: none"><li>● The power seat switches (sliding and reclining) are OFF.</li><li>● The seatback tilt switch is OFF.</li><li>● The vehicle speed is 7 km/h or less.</li><li>● The ignition switch is ON.</li><li>● The seatback tilt cancel switch is turned to “AUTO”.</li></ul>
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## 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	<ul style="list-style-type: none"><li>● A power seat switch (sliding or reclining) is operated.</li><li>● Reclining motor lock is detected (return operation only).</li><li>● The seatback tilt switch is operated while the seatback is operating.</li><li>● The seatback tilt cancel switch is turned to “CANCEL”.</li></ul>
Pause condition	<ul style="list-style-type: none"><li>● The ignition switch is turned to the START position.</li></ul>

---

## 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"](#) .

# POWER SEAT

Seat status signal OFF→ ON condition	<ul style="list-style-type: none"> <li>● When a seatback tilt forward motion has been completed. (as a process during a soft top interlocking operation)</li> <li>● When a seatback tilt forward motion has been completed. (during a automatic operation by using a seatback tilt switch)</li> <li>● 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)</li> <li>● 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)</li> <li>● 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.</li> <li>● 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.)</li> </ul>	A  B  C  D  E
Seat status signal ON→ OFF condition	<ul style="list-style-type: none"> <li>● When a seatback tilt backward motion has been started. (as a process during a soft top interlocking operation)</li> <li>● 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)</li> <li>● 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)</li> <li>● 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.)</li> <li>● 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.)</li> <li>● 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)</li> <li>● 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)</li> </ul>	F  G  H  SE  J  K  L

\*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.

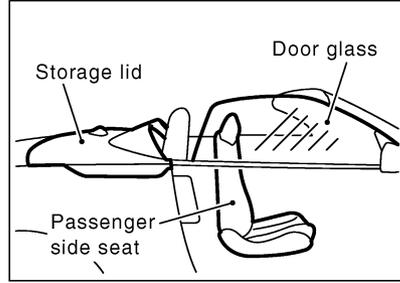
\*4: If tilt forward/backward operation stops as a result of the conditions below, the tilt start position does not change.

- 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.

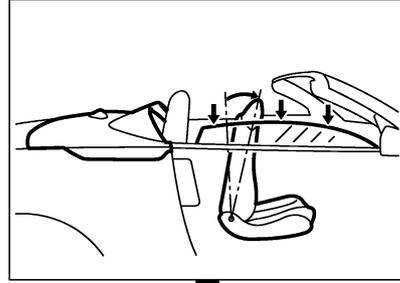
# POWER SEAT

## OPERATION OF THE PASSENGER SEAT LINKED WITH THE SOFT TOP

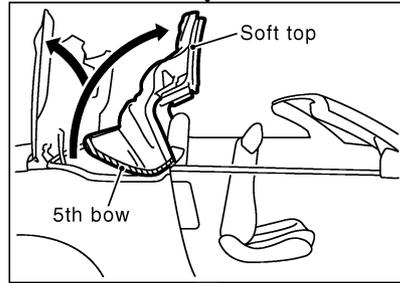
Passenger seat operation during soft top CLOSE operation



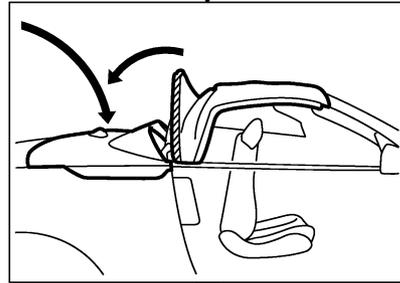
1. Passenger seatback tilts forward by approximately 6° as soon as windows go down, when soft top switch has been pushed on CLOSE.



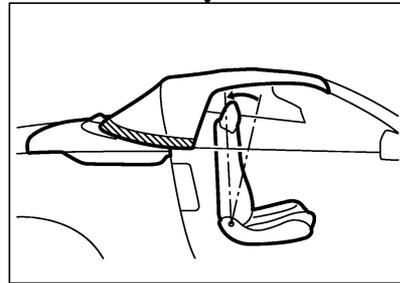
2. Soft top CLOSE operation starts as soon as the passenger seatback tilt forward operation completes.



3. Soft top continues the operation.



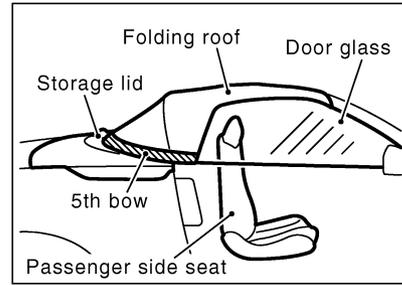
4. Passenger seatback goes back to the original position when 5th bow is closed.



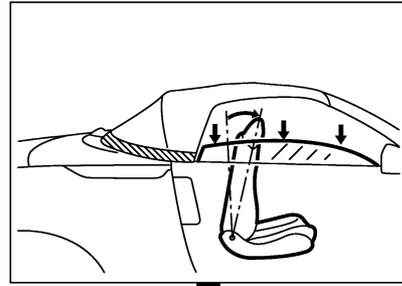
PIIA7847E

# POWER SEAT

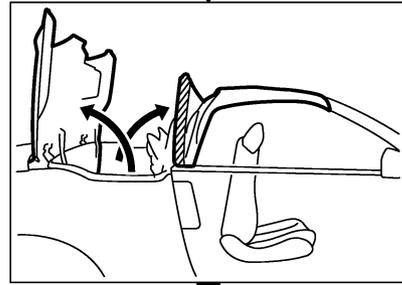
Passenger seat operation during soft top OPEN operation



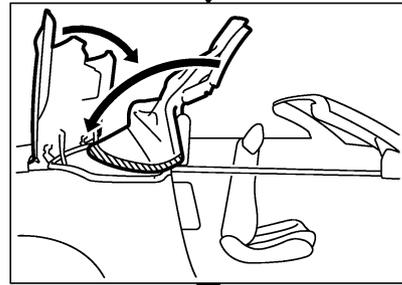
1. Passenger seatback tilts forward by approximately 6° as soon as windows go down, when soft top switch has been pushed on OPEN.



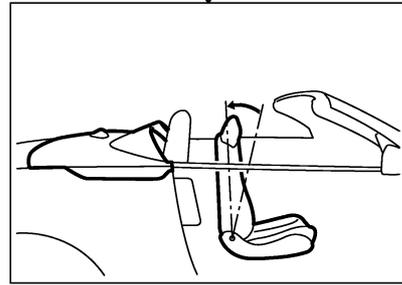
2. Soft top OPEN operation starts as soon as the passenger seatback tilt forward operation completes.



3. Soft top continues the operation.



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



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PIIA7848E

# POWER SEAT

## Cancel Function

AI S0043I

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

AI S0043J

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	<ul style="list-style-type: none"><li>● Sliding motor</li><li>● Reclining motor</li></ul>
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## CANCELING FAIL-SAFE MODE

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

## System Description

AI S0043B

Power is supplied at all times,

- to BCM terminal 7
- through 40A fusible link (mark F, located in the fusible link),
- to passenger seat control unit terminal 34
- through 10A fuse [No. 21, located in the fuse block (J/B)],
- to driver side power seat switch terminal 1 and passenger seat control unit terminal 39
- through BCM terminal 28.

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

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

When ignition switch in START position, power is supplied

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

## DRIVER SIDE SEAT OPERATION

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

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

Then ground is supplied

- to sliding motor terminal 6
- through power seat switch terminal 6
- through power seat switch terminal 2
- through body ground B5, B6 and T14.

The driver side seat moves forward.

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

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

# POWER SEAT

Then ground is supplied

- to sliding motor terminal 5
- through power seat switch terminal 5
- through power seat switch terminal 2
- through body ground B5, B6 and T14.

The driver side seat moves backward.

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

- to reclining motor terminal 3
- through power seat switch terminal 3.

Then ground is supplied

- to reclining motor terminal 4
- through power seat switch terminal 4
- through power seat switch terminal 2
- through body ground B5, B6 and T14.

The driver side seat folds forward.

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

- to reclining motor terminal 4
- through power seat switch terminal 4.

Then ground is supplied

- to reclining motor terminal 3
- through power seat switch terminal 3
- through power seat switch terminal 2
- through body ground B5, B6 and T14.

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

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

- to sliding motor terminal 37

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## POWER SEAT

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- through passenger seat control unit 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

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

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

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

## POWER SEAT

- 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

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

### INTERLOCKING OPERATION OF THE PASSENGER SEAT WITH THE SOFT TOP

#### NOTE:

See [RF-12. "System Description"](#) for detailed operation.

CLOSE → OPEN

When a soft top switch is operated to OPEN, ground is supplied

- 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.

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

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

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

Then ground is supplied

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

The passenger side seat returns to former position.

OPEN → 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

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## POWER SEAT

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- through soft top switch terminal 1
- through body ground M30 and M66.

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
- 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

- to reclining motor terminal 42
- through passenger seat control unit 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 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 terminal 3
- through soft top lock switch terminal 4
- through body ground T14, B5 and B6.

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

- to reclining motor terminal 35
- through passenger seat control unit 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 T14, B5 and B6.

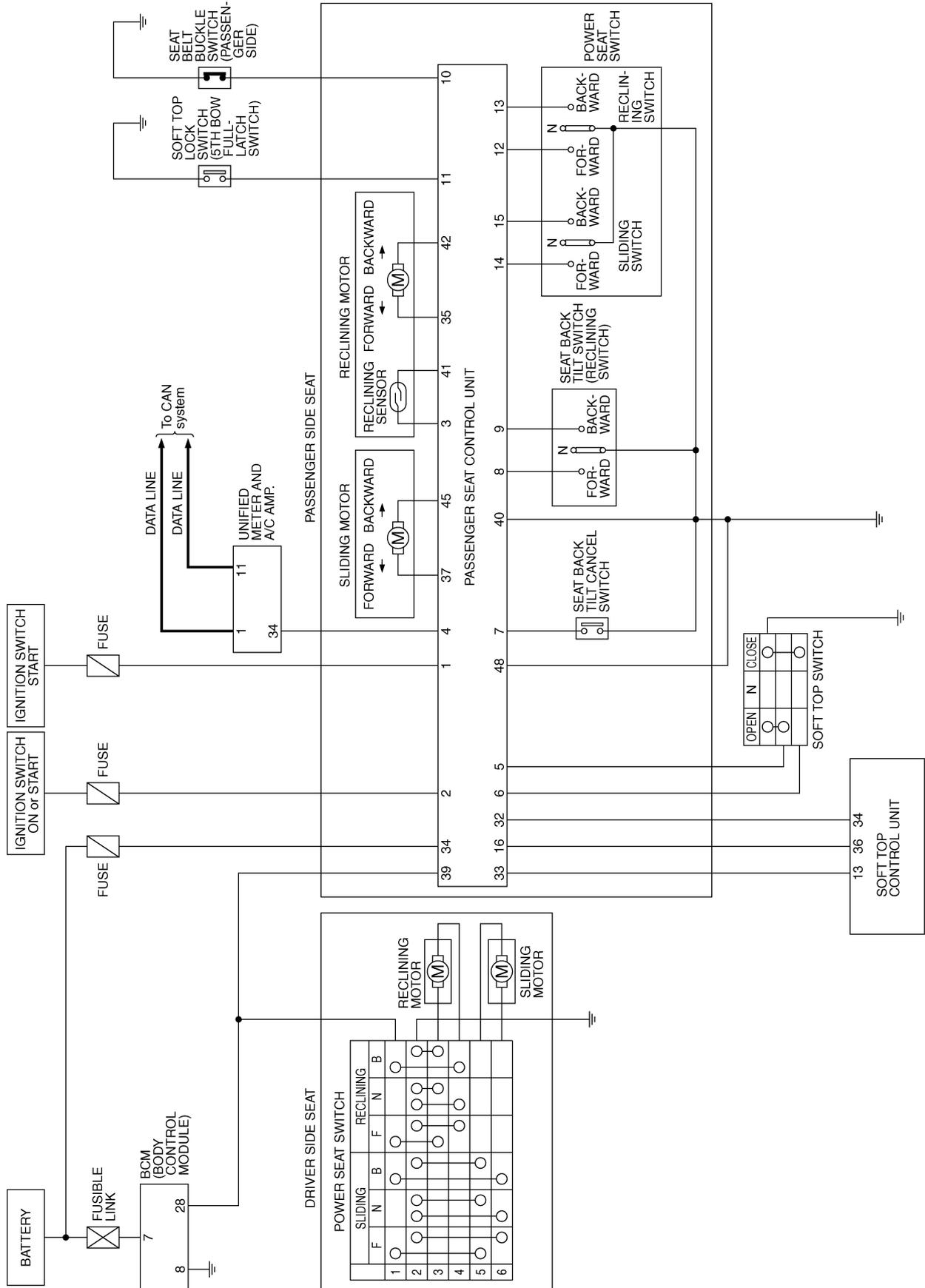
Then passenger seat control unit recognizes the CANCEL signal.

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

# POWER SEAT

## Schematic

AIS00439



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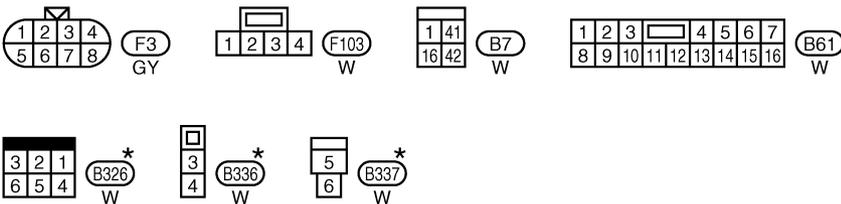
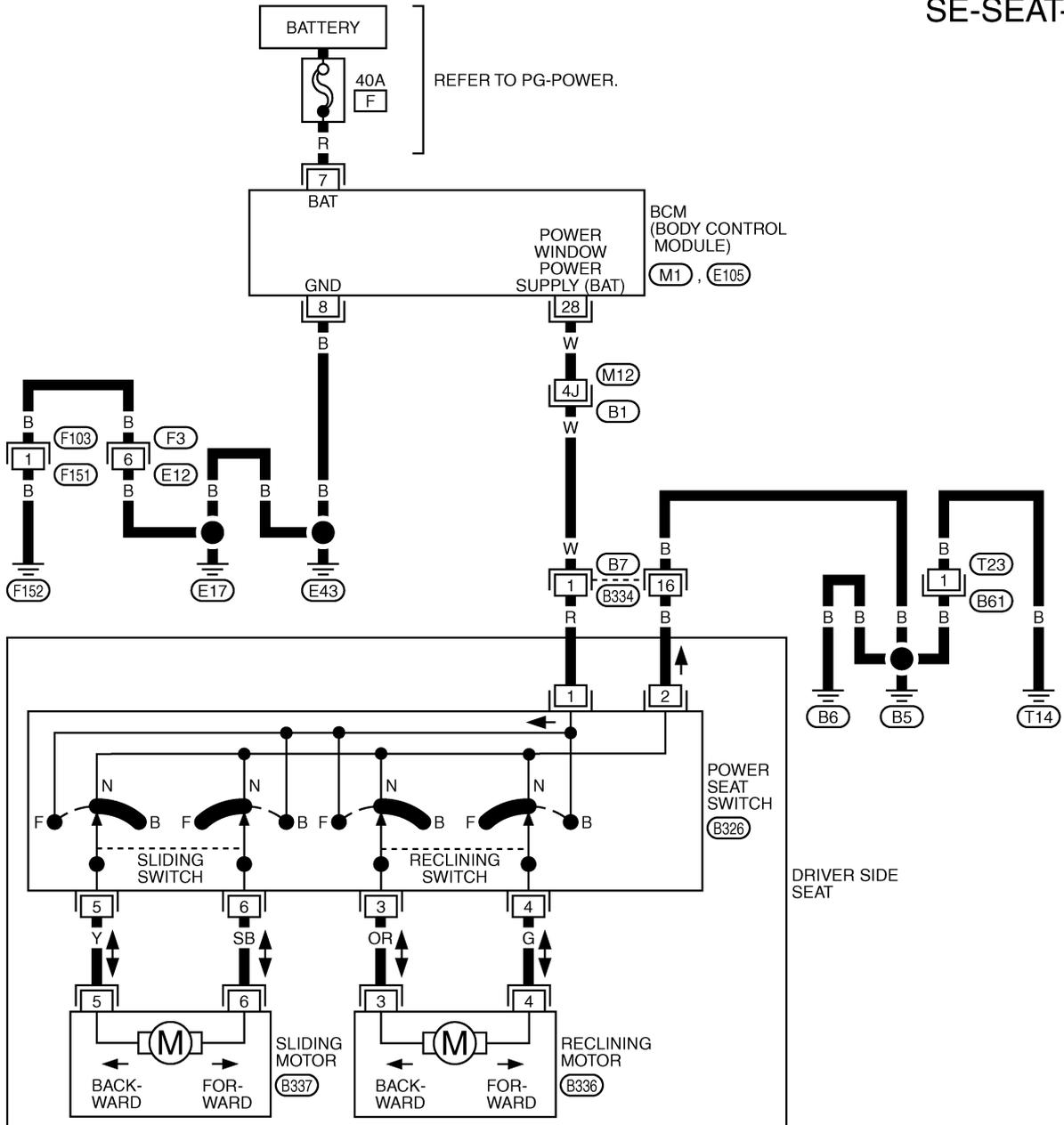
SE

# POWER SEAT

## Wiring Diagram-AUT/DP-

AIS0043A

SE-SEAT-01



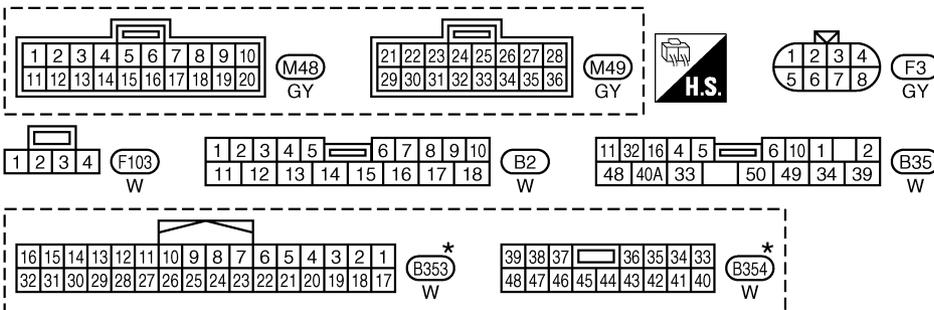
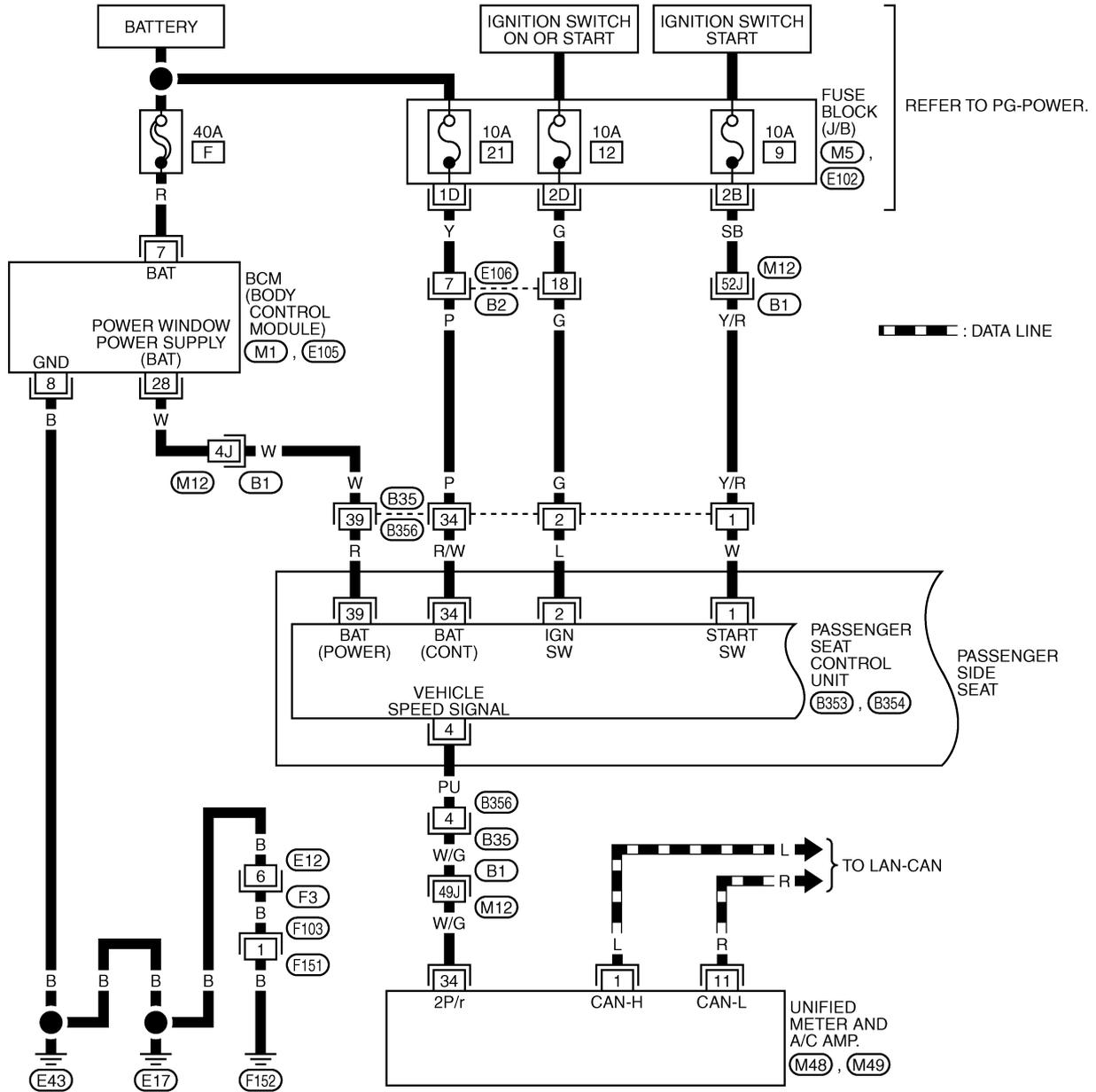
REFER TO THE FOLLOWING.  
 (B1) -SUPER MULTIPLE JUNCTION (SMJ)  
 (M1), (E105) -ELECTRICAL UNITS

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

TIWT0511E

# POWER SEAT

SE-SEAT-02



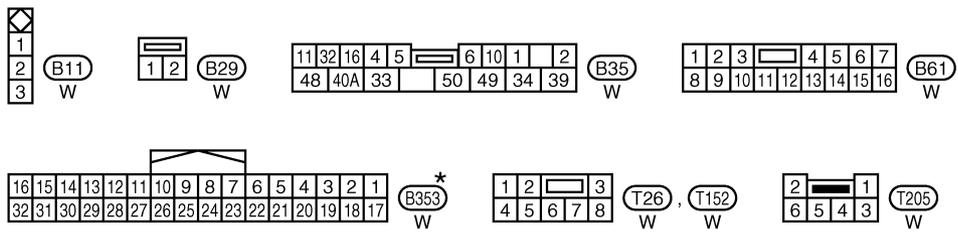
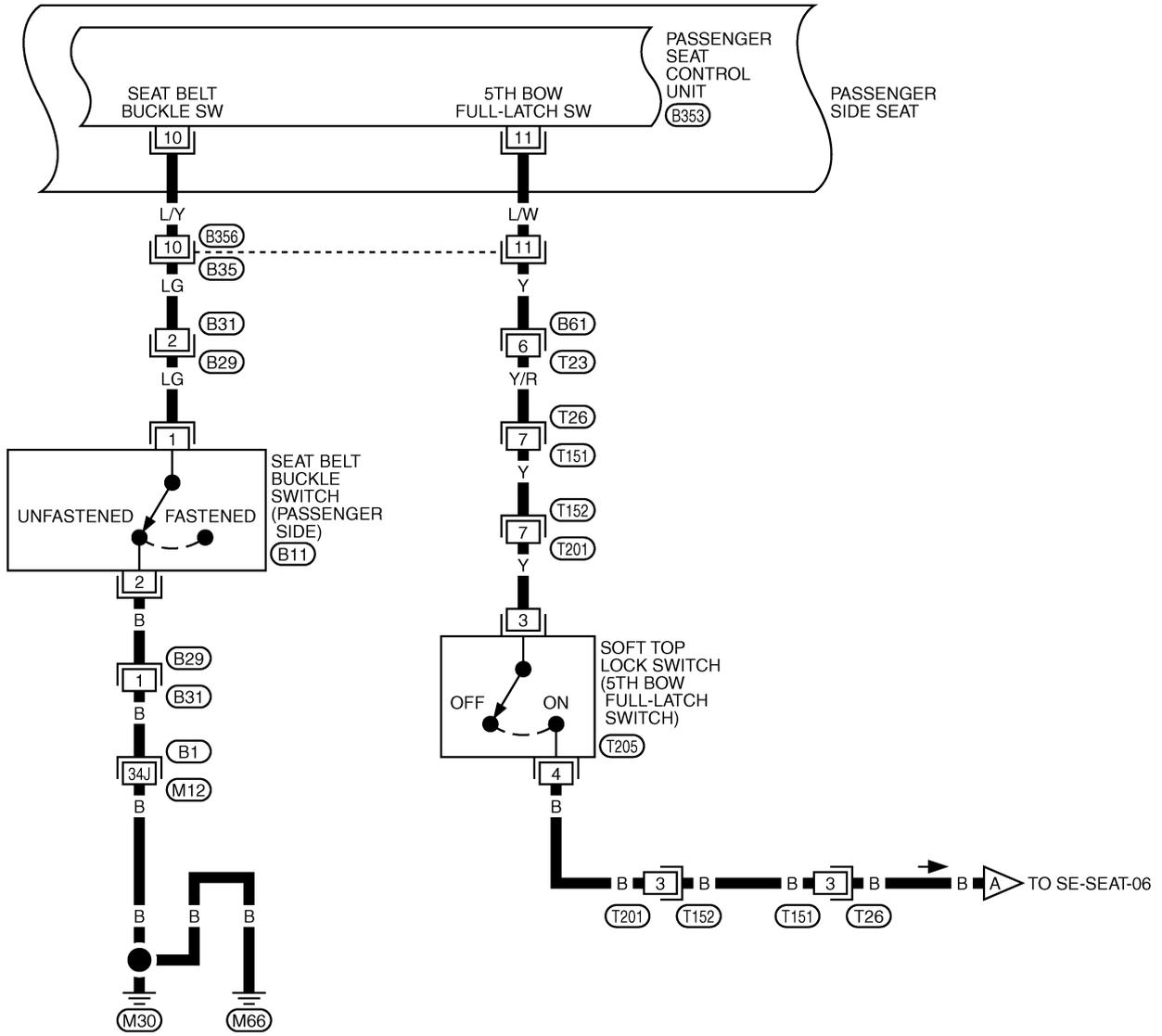
REFER TO THE FOLLOWING.

- (B1) -SUPER MULTIPLE JUNCTION (SMJ)
- (M5), (E102) -FUSE BLOCK-JUNCTION BOX (J/B)
- (M1), (E105) -ELECTRICAL UNITS

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

# POWER SEAT

SE-SEAT-03



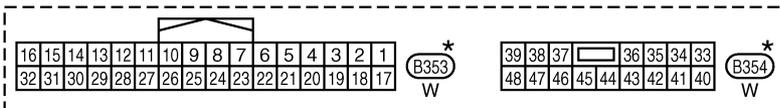
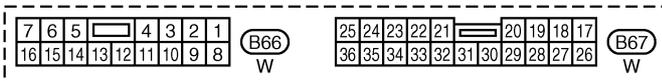
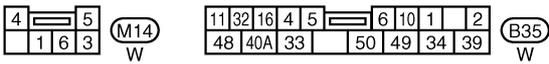
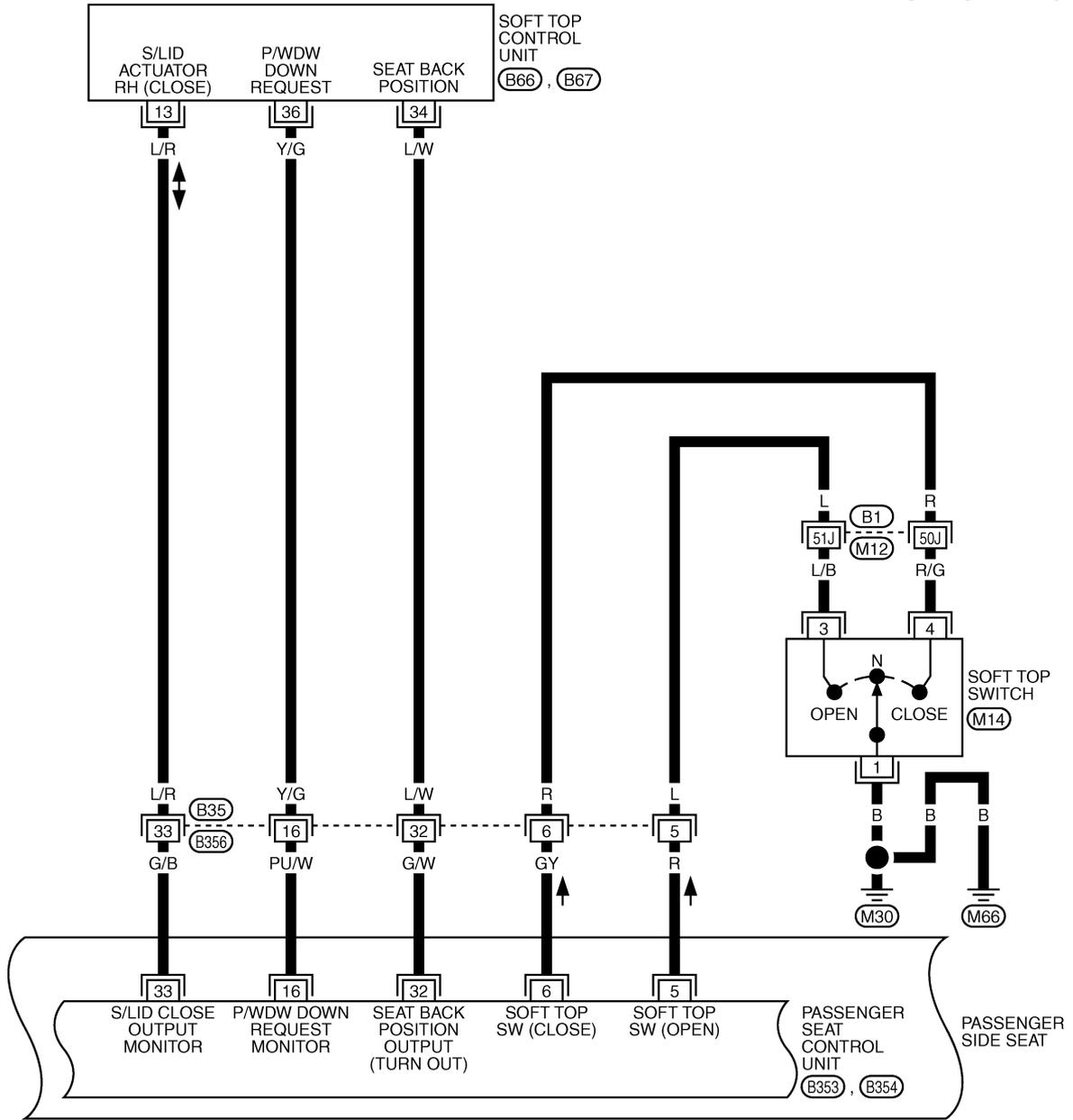
REFER TO THE FOLLOWING.  
 (B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

# POWER SEAT

SE-SEAT-04

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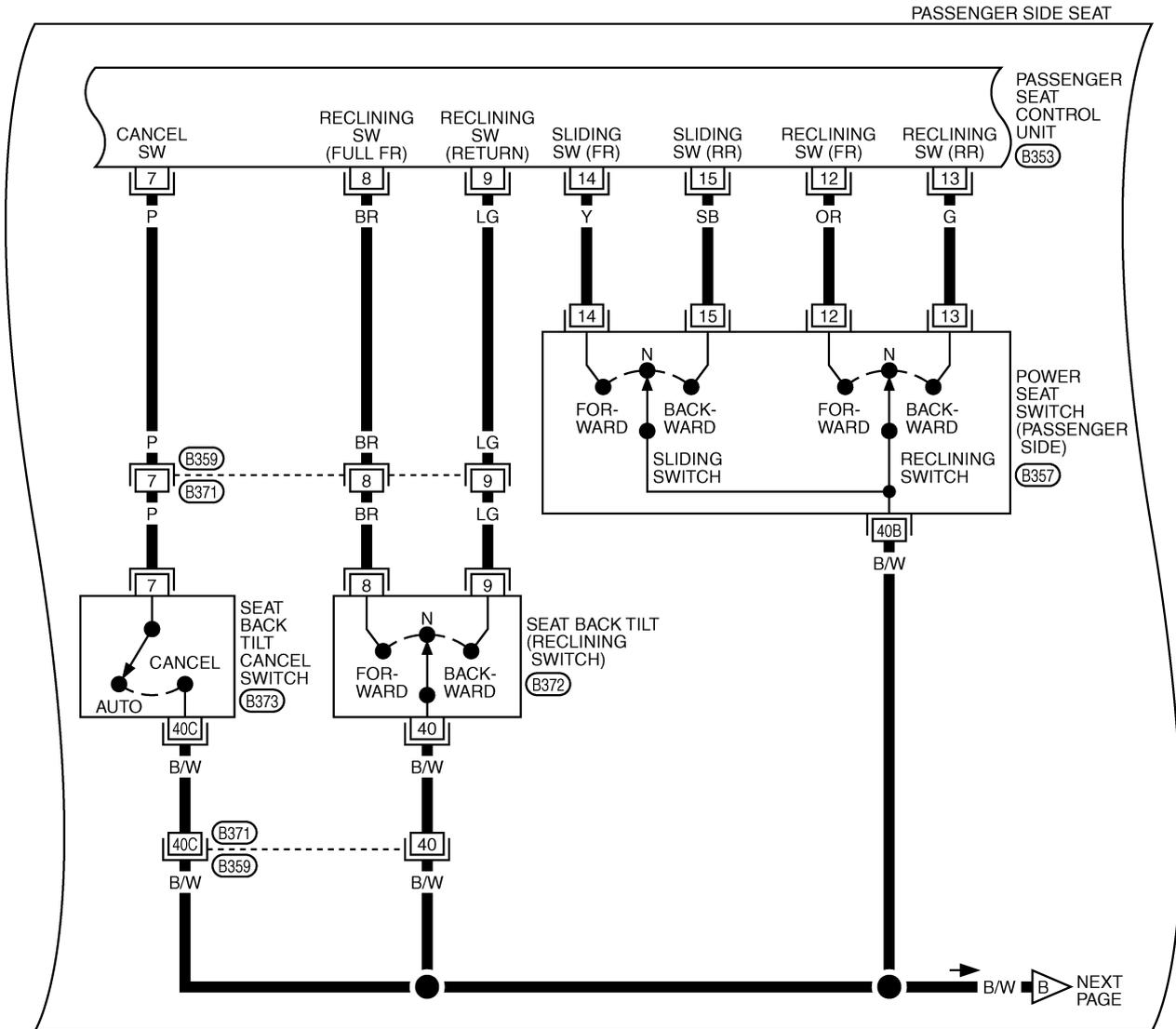
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

# POWER SEAT

SE-SEAT-05



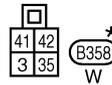
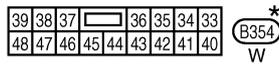
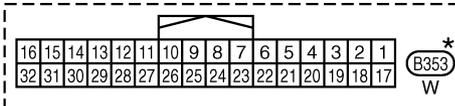
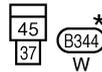
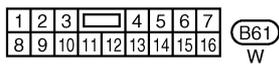
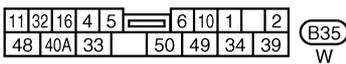
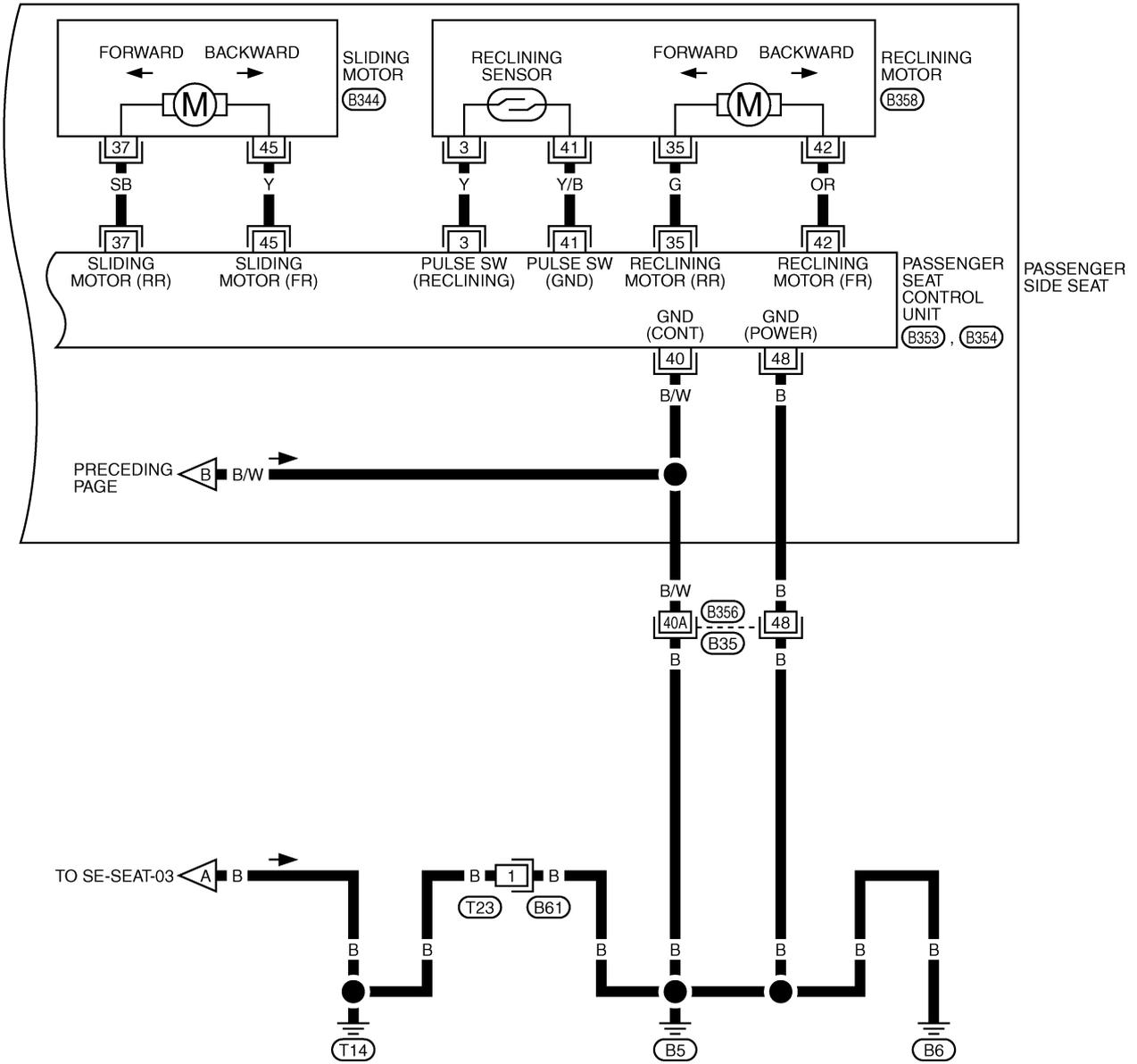
\* : THIS CONNECTOR IS NOT SHOWN IN "HARNES LAYOUT", PG SECTION.

TIWT0515E

# POWER SEAT

SE-SEAT-06

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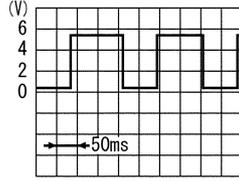
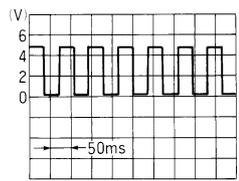
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWT0516E

# POWER SEAT

## Terminals and Reference Values of Passenger Seat Control Unit

AIS0043B

TERMI-NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
1	W	Ignition switch START	Ignition switch is in START position	Battery voltage
2	L	Ignition switch ON	Ignition switch is in ON or START position	Battery voltage
3	Y	Reclining sensor input	When reclining motor is operated	 <p style="text-align: right; font-size: small;">SIIA0692J</p>
			Other than above	0 or 5
4	PU	Speed signal (2puls)	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	 <p style="text-align: right; font-size: small;">ELF1080D</p>
5	R	Soft top switch open signal	When soft top switch is turned to OPEN	0
			Other than above	Battery voltage
6	GY	Soft top switch close signal	When soft top switch is turned to CLOSE	0
			Other than above	Battery voltage
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	Seatback tilt switch forward signal	When seatback tilt switch is turned to FORWARD	0
			Other than above	Battery voltage
9	LG	Seatback tilt switch backward signal	When seatback tilt switch is turned to BACKWARD	0
			Other than above	Battery voltage
10	L/Y	Seat belt buckle switch signal	When seat belt is fastened (OFF)	5
			When seat belt is unfastened (ON)	0
11	L/W	Soft top lock switch signal	Soft top lock switch ON	0
			Soft top lock switch OFF	5
12	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
			Other than above	Battery voltage
14	Y	Sliding switch forward signal	When power seat sliding switch is turned to FORWARD	0
			Other than above	Battery voltage

# POWER SEAT

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 close signal	When storage lid actuator is in a closed operation	Battery voltage
			Other than above	0
34	R/W	Battery power supply (signal)	—	Battery voltage
35	G	Reclining motor backward output	Reclining switch backward operation (Motor operated)	Battery voltage
			Reclining motor OFF	0
37	SB	Sliding motor backward output	Sliding switch backward operation (Motor operated)	Battery voltage
			Sliding motor OFF	0
39	R	Battery power supply (power)	—	Battery voltage
40	B/W	Ground (control unit)	Ignition switch ON	0
41	Y/B	Ground (sensor)	Ignition switch ON	0
42	OR	Reclining motor forward output	Reclining switch forward operation (Motor operated)	Battery voltage
			Reclining motor OFF	0
45	Y	Sliding motor forward output	Sliding switch forward operation (Motor operated)	Battery voltage
			Sliding motor OFF	0
48	B	Ground (power)	Ignition switch ON	0

## Terminals and Reference Values of BCM

AIS0043C

TERMI-NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
7	R	Battery power supply	—	Battery voltage
8	B	Ground	Ignition switch ON	0
28	W	Power window power supply output (driver side power seat switch and passenger seat control unit power supply)	—	Battery voltage

## Terminals and Reference Values of Soft Top Control Unit

AIS0043D

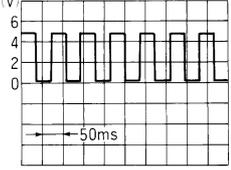
TERMI-NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
13	L/R	Storage lid actuator RH close signal	When storage lid actuator is in a closing operation	Battery voltage
			Other than above	0
34	L/W	Seatback position signal	When the seatback is tilted by the interlocking operation with soft top	0
			Other than above	5

# POWER SEAT

TERMI-NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
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.

AI/S0043E

TERMI-NAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx)
1	L	CAN-H	—	—
11	R	CAN-L	—	—
34	W/G	Speed signal (2puls)	Speedometer is in operation [When vehicle speed is approx. 40 km/h (25 MPH)]	

ELF1080D

## Work Flow

AI/S0043E

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to [SE-18. "System Description"](#) .
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to [SE-32. "Trouble Diagnosis Symptom Chart"](#) .
4. Does power seat system operate normally? If Yes, GO TO 5, If No, GO TO 3.
5. INSPECTION END.

## Trouble Diagnosis Symptom Chart

AI/S0043E

Always check the "WORK FLOW" before troubleshooting. Refer to [SE-32. "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).	1. BCM power supply and ground circuit inspection	<a href="#">SE-33</a>
Functions of a driver side power seat do not operate.	1. Driver side power seat power supply and ground inspection	<a href="#">SE-34</a>
A part of driver side power seat system does not operate.	1. Driver side seat sliding motor circuit inspection	<a href="#">SE-35</a>
	2. Driver side seat reclining motor circuit inspection	<a href="#">SE-37</a>
All the passenger side power seat systems do not operate.	1. Passenger seat control unit power supply and ground inspection	<a href="#">SE-38</a>
A passenger seat does not a sliding operation.	1. Passenger side seat sliding motor circuit inspection	<a href="#">SE-40</a>
A passenger seat does not carry out a reclining operation (Neither manual operation nor an automatic operation can be performed).	1. Passenger side seat reclining motor circuit inspection	<a href="#">SE-41</a>
The automatic operation of a passenger seat can not be performed (a manual operation can be performed).	1. Passenger side seat reclining sensor circuit inspection	<a href="#">SE-42</a>
	2. Seatback tilt cancel switch circuit inspection	<a href="#">SE-47</a>
	3. If the above systems are normal, replace passenger seat control unit.	<a href="#">SE-12</a>
A passenger seat operates automatically when the vehicle is running.	1. Vehicle speed signal inspection	<a href="#">SE-53</a>
Passenger seatback does not return during a soft top CLOSE operation.	1. Soft top lock switch circuit inspection	<a href="#">SE-51</a>
Passenger seatback does not tilt forward and return during a soft top OPEN operation.	1. Storage lid close signal circuit inspection	<a href="#">SE-50</a>

# POWER SEAT

Symptom	Diagnosis / service procedure	Refer to page
Passenger seatback does not tilt forward during a soft top CLOSE operation or OPEN operation.	1. Power window down request signal circuit inspection	<a href="#">SE-50</a>
	2. Soft top switch circuit inspection	<a href="#">SE-48</a>
	3. If the above systems are normal, replace passenger seat control unit.	<a href="#">SE-12</a>
Seat does not tilt when passenger seatback tilt switch is pushed (other functions operate normally).	1. Seatback tilt switch circuit inspection	<a href="#">SE-46</a>
	2. Seat belt buckle switch circuit inspection	<a href="#">SE-52</a>
	3. If the above systems are normal, replace passenger seat control unit	<a href="#">SE-12</a>
A part of passenger seat system does not operate (only manual).	1. Passenger side seat sliding switch circuit inspection	<a href="#">SE-43</a>
	2. Passenger side seat reclining switch circuit inspection	<a href="#">SE-44</a>
Passenger seatback does not go back to the original position during a soft top CLOSE or OPEN operation.	1. Passenger seat control unit ignition signal circuit inspection	<a href="#">SE-39</a>
The manual operation of a passenger seat cannot be performed (a automatic operation can be performed).	1. Passenger side power seat ground circuit inspection	<a href="#">SE-45</a>

## BCM Power Supply and Ground Inspection

AIS00437

### 1. CHECK FUSE

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

#### NOTE:

Refer to [SE-12, "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 BCM POWER SUPPLY CIRCUIT

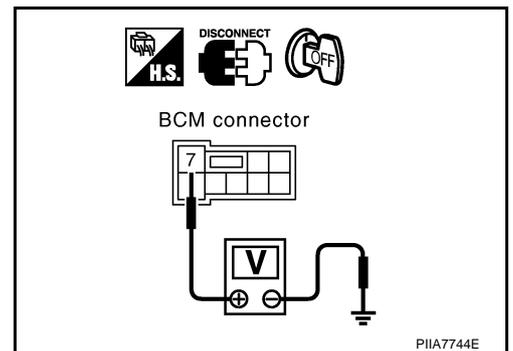
1. Disconnect BCM connector.
2. Turn ignition switch OFF.
3. Check voltage between BCM connector E105 terminal 7 (R) and ground.

**7 (R) - Ground : Battery voltage**

OK or NG

OK >> GO TO 3.

NG >> Repair or replace the harness between BCM and fusible link.



### 3. CHECK BCM GROUND CIRCUIT

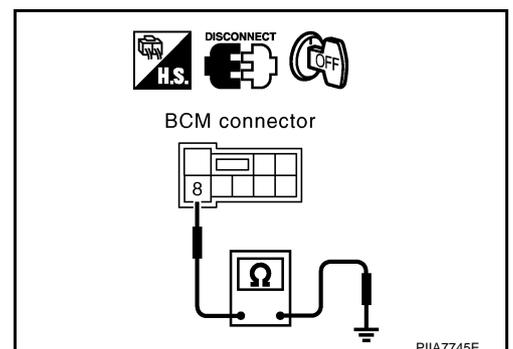
Check continuity between BCM connector E105 terminal 8 (B) and ground.

**8 (B) - Ground : Continuity should exist.**

OK or NG

OK >> GO TO 4.

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



# POWER SEAT

## 4. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

1. Disconnect power seat switch and passenger seat control unit connector.
2. Check continuity between BCM connector M1 terminal 28 (W) and power seat switch connector B326 terminal 1 (R).

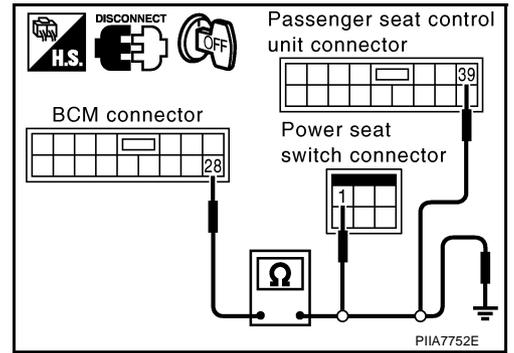
**28 (W) - 1 (R) : Continuity should exist.**

3. Check continuity between BCM connector M1 terminal 28 (W) and passenger seat control unit connector B354 terminal 39 (R).

**28 (W) - 39 (R) : Continuity should exist.**

4. Check continuity between BCM connector M1 terminal 28 (W) and ground.

**28 (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

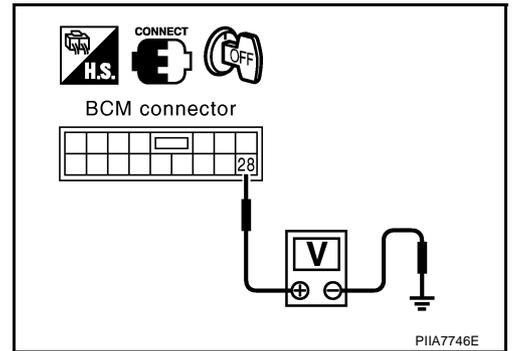
1. Connect BCM connector.
2. Check voltage between BCM connector M1 terminal 28 (W) and ground.

**28 (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 Inspection

AIS0042M

### 1. CHECK POWER SEAT SWITCH POWER SUPPLY

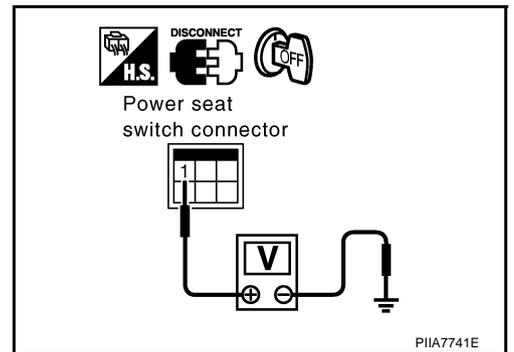
1. Disconnect power seat switch connector.
2. Check voltage between power seat switch connector B326 terminal 1 (R) and ground.

**1 (R) - Ground : Battery voltage**

OK or NG

OK >> GO TO 3.

NG >> GO TO 2.



# POWER SEAT

## 2. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

1. Disconnect power seat switch and passenger seat control unit connector.
2. Check continuity between BCM connector M1 terminal 28 (W) and power seat switch connector B326 terminal 1 (R).

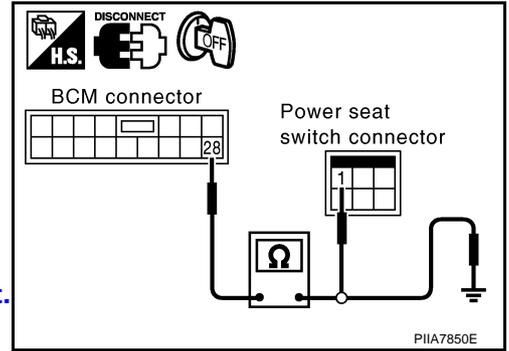
**28 (W) - 1 (R) : Continuity should exist.**

3. Check continuity between BCM connector M1 terminal 28 (W) and ground.

**28 (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.



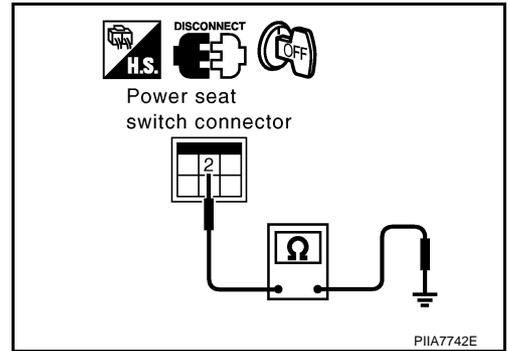
## 3. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B326 terminal 2 (B) 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.



## Driver Side Seat Sliding Motor Circuit Inspection

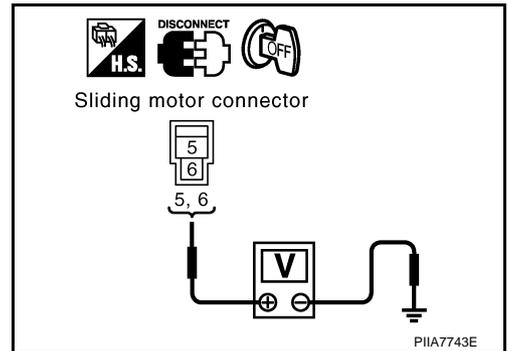
### 1. CHECK SLIDING MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect sliding motor connector.
3. Check voltage between sliding motor connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B337	5 (Y)	Ground	When sliding switch is turned to forward.	Battery voltage
			Other than above.	0
	6 (SB)	Ground	When sliding switch is turned to backward.	Battery voltage
			Other than above.	0

### OK or NG

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



# POWER SEAT

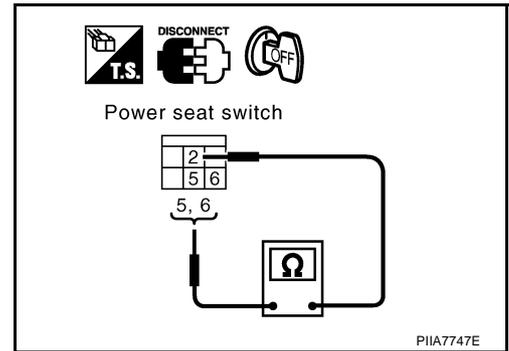
## 2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
5	When sliding switch is turned to backward.	Yes
	When sliding switch is turned to forward.	No
6	When sliding switch is turned to forward.	Yes
	When sliding switch is turned to backward.	No

OK or NG

- OK >> Replace sliding motor.  
 NG >> Replace power seat switch.



## 3. CHECK SLIDING MOTOR CIRCUIT HARNESS

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch connector B326 terminal 5 (Y), 6 (SB) and sliding motor connector B337 terminal 5 (Y), 6 (SB).

**5 (Y) - 5 (Y) : Continuity should exist.**

**6 (SB) - 6 (SB) : Continuity should exist.**

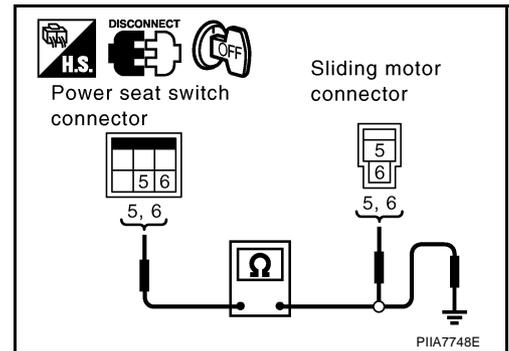
3. Check continuity between power seat switch connector B326 terminal 5 (Y), 6 (SB) and ground.

**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.



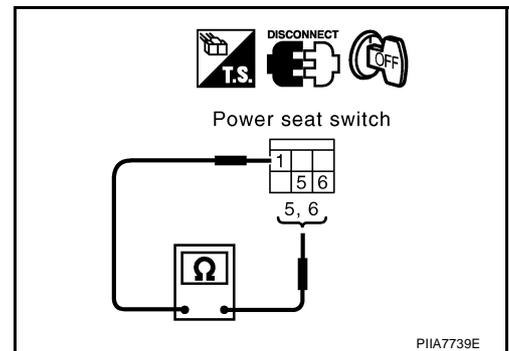
## 4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
5	When sliding switch is turned to forward.	Yes
	When sliding switch is turned to neutral.	No
6	When sliding switch is turned to backward.	Yes
	When sliding switch is turned to neutral.	No

OK or NG

- OK >> Check the condition of the harness and connector.  
 NG >> Replace power seat switch.



# POWER SEAT

AIS00420

## Driver Side Seat Reclining Motor Circuit Inspection

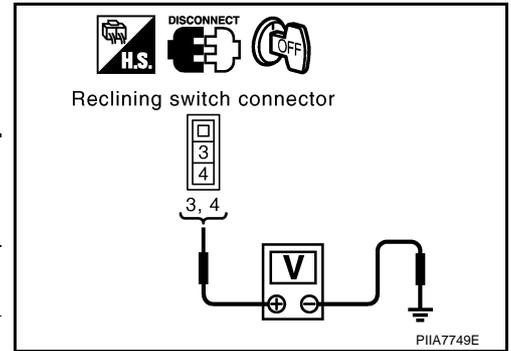
### 1. CHECK RECLINING MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect reclining motor connector.
3. Check voltage between reclining motor and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B336	3 (OR)	Ground	When reclining switch is turned to forward.	Battery voltage
			Other than above.	0
	4 (G)	Ground	When reclining switch is turned to backward.	Battery voltage
			Other than above.	0

OK or NG

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



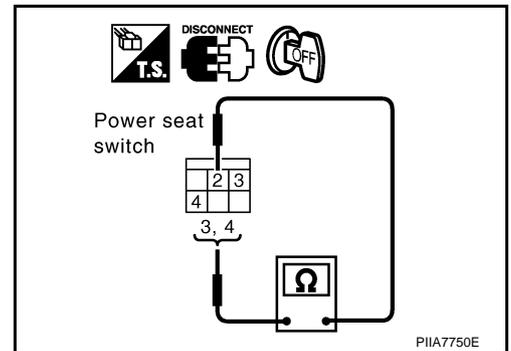
### 2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
3	When reclining switch is turned to backward.	Yes
	When reclining switch is turned to forward.	No
4	When reclining switch is turned to forward.	Yes
	When reclining switch is turned to backward.	No

OK or NG

- OK >> Replace reclining motor.  
 NG >> Replace power seat switch.



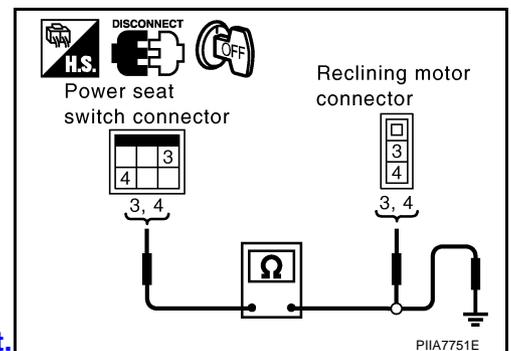
### 3. CHECK RECLINING MOTOR CIRCUIT HARNESS

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

- 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 (OR), 4 (G) 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.

# POWER SEAT

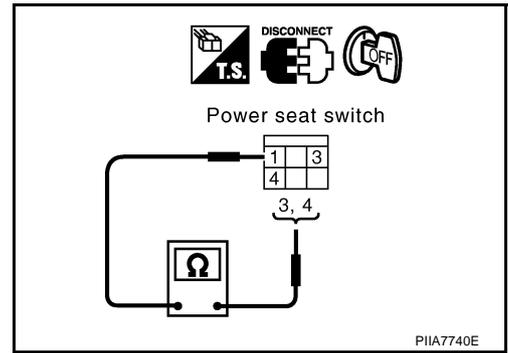
## 4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
3	When reclining switch is turned to forward.	Yes
	When reclining switch is turned to neutral.	No
4	When reclining switch is turned to backward.	Yes
	When reclining switch is turned to neutral.	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 Inspection

AIS0042P

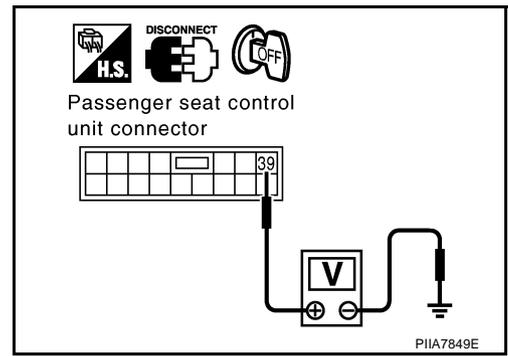
### 1. CHECK PASSENGER SEAT CONTROL UNIT POWER SUPPLY

1. Disconnect passenger seat control unit switch connector.
2. Check voltage between passenger seat control unit connector B354 terminal 39 (R) and ground.

**39 (R) - Ground : Battery voltage.**

OK or NG

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



### 2. CHECK BCM OUTPUT POWER SUPPLY CIRCUIT

1. Disconnect power seat switch connector and passenger seat control unit connector.
2. Check continuity between BCM connector M1 terminal 28 (W) and passenger seat control unit connector B354 terminal 39 (R).

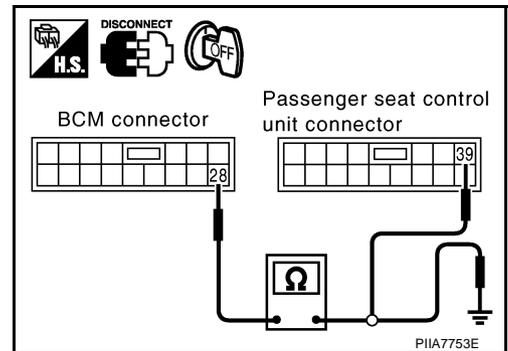
**28 (W) - 39 (R) : Continuity should exist.**

3. Check continuity between BCM connector M1 terminal 28 (W) and ground.

**28 (W) - Ground : Continuity should not exist.**

OK or NG

- OK >> Check the condition of the harness and connector.  
 NG >> Repair or replace the harness between BCM and passenger seat control unit.



# POWER SEAT

## 3. CHECK FUSE

Check the following fuse.

Unit	Signal name	No,	Location
Driver seat control unit	Battery power supply	21 (10A)	Fuse block (J/B)
	IGN STRAT signal	9 (10A)	

### NOTE:

Refer to [SE-12, "Component Parts and Harness Connector Location"](#) .

### OK or NG

OK >> GO TO 4.

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

## 4. CHECK PASSENGER SEAT CONTROL UNIT POWER SUPPLY

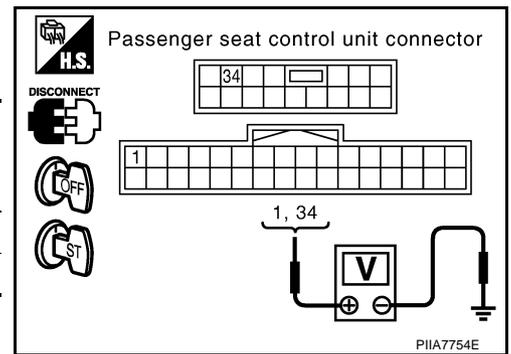
1. Disconnect passenger seat control unit connector.
2. Check voltage between passenger seat control unit and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	1 (W)	Ground	Turn ignition switch START	Battery voltage
B354	34 (R/W)		Turn ignition switch OFF	Battery voltage

### OK or NG

OK >> GO TO 5.

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



## 5. CHECK PASSENGER SEAT CONTROL UNIT GROUND CIRCUIT

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

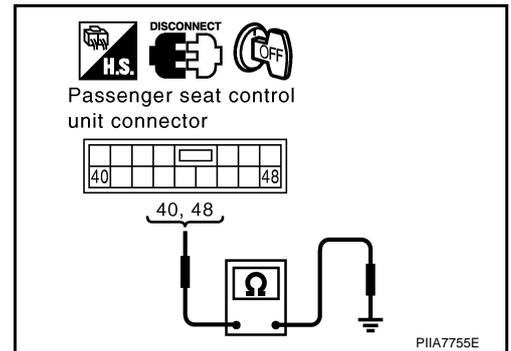
**40 (B/W) - Ground : Continuity should exist.**

**48 (B) - Ground : Continuity should exist.**

### OK or NG

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

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



## Passenger Seat Control Unit Ignition Signal Circuit Inspection

AI/S0042Q

### 1. CHECK FUSE

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

### NOTE:

Refer to [SE-12, "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"](#) .

# POWER SEAT

## 2. CHECK PASSENGER SEAT CONTROL UNIT POWER SUPPLY

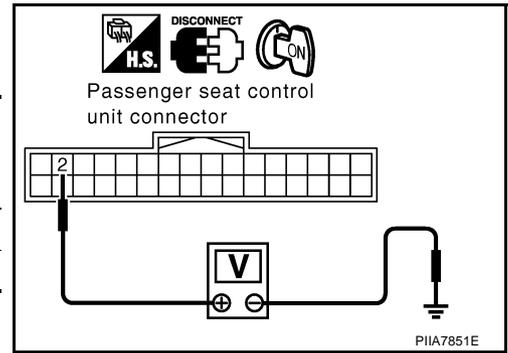
1. Disconnect passenger seat control unit connector.
2. Check voltage between passenger seat control unit and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	2 (L)	Ground	Turn ignition switch ON	Battery voltage
			Turn ignition switch OFF	0

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).



## Passenger Side Seat Sliding Motor Circuit Inspection

AIS0042R

### 1. CHECK SLIDING MOTOR POWER SUPPLY

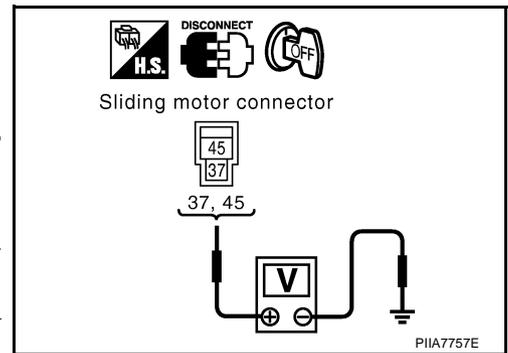
1. Turn ignition switch OFF.
2. Disconnect sliding motor connector.
3. Check voltage between sliding motor and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B344	37 (SB)	Ground	When sliding switch is turned to backward.	Battery voltage
			Other than above.	0
	45 (Y)	Ground	When sliding switch is turned to forward.	Battery voltage
			Other than above.	0

OK or NG

OK >> Replace sliding motor.

NG >> GO TO 2.



### 2. CHECK SLIDING MOTOR CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B354 terminal 37 (SB), 45 (Y) and sliding motor connector B344 terminal 37 (SB), 45 (Y).

**37 (SB) - 37 (SB) : Continuity should exist.**

**45 (Y) - 45 (Y) : Continuity should exist.**

3. Check continuity between passenger seat control unit connector B354 terminal 37 (SB), 45 (Y) and ground.

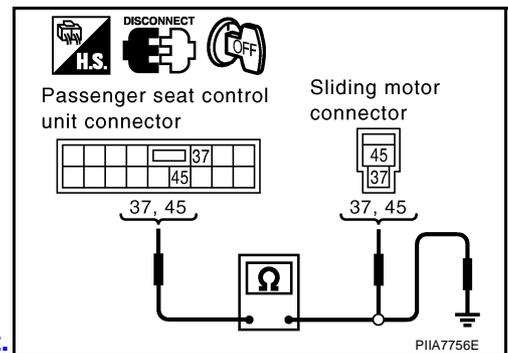
**37 (SB) - Ground : Continuity should not exist.**

**45 (Y) - 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 sliding motor.



# POWER SEAT

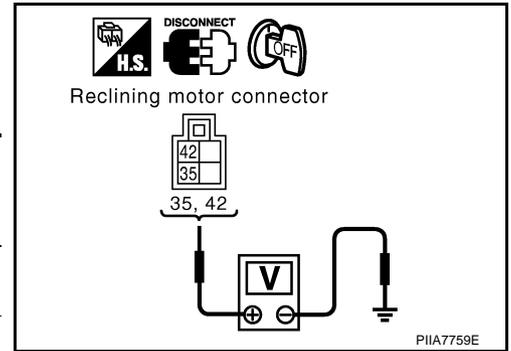
## Passenger Side Seat Reclining Motor Circuit Inspection

AIS0042S

### 1. CHECK RECLINING MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect reclining motor connector.
3. Check voltage between reclining motor and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B358	35 (G)	Ground	When reclining switch is turned to backward.	Battery voltage
			Other than above.	0
	42 (OR)	Ground	When reclining switch is turned to forward.	Battery voltage
			Other than above.	0



#### OK or NG

- OK >> Replace reclining motor.  
 NG >> GO TO 2.

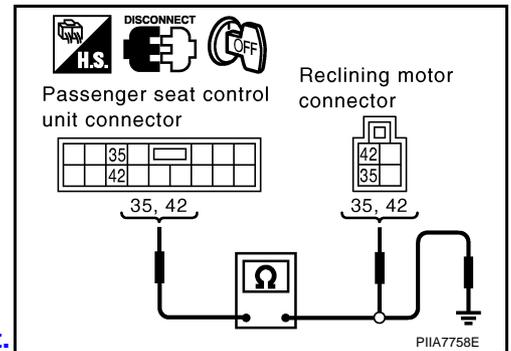
### 2. CHECK RECLINING MOTOR CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B354 terminal 35 (G), 42 (OR) and reclining motor connector B358 terminal 35 (G), 42 (OR).

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

3. Check continuity between passenger seat control unit connector B354 terminal 35 (G), 42 (OR) and ground.

**35 (G) - Ground : Continuity should not exist.**  
**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.

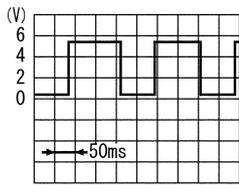
# POWER SEAT

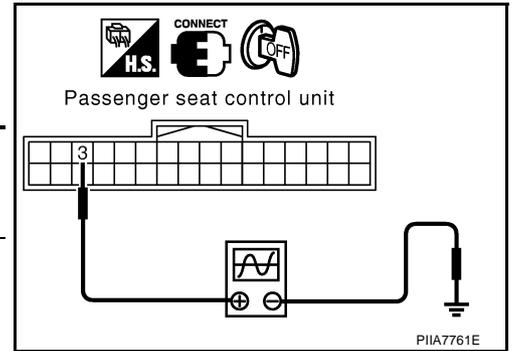
AIS0042T

## Passenger Side Seat Reclining Sensor Circuit Inspection

### 1. CHECK RECLINING SENSOR OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B354	3 (Y)	Ground	When reclining motor is operated.	 <p style="text-align: right;">SIIA0692J</p>



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

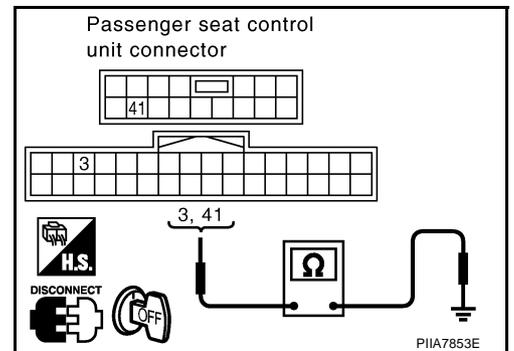
### 2. CHECK RECLINING MOTOR CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B354 terminal 3 (Y), 41 (Y/B) 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.



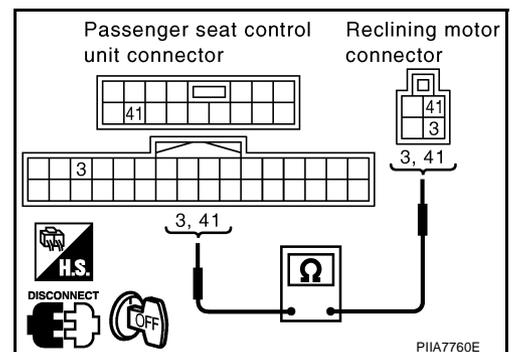
### 3. CHECK RECLINING MOTOR CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B354 terminal 3 (Y), 41 (Y/B) and reclining motor connector B358 terminal 3 (G), 41 (Y/B).

- 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.



# POWER SEAT

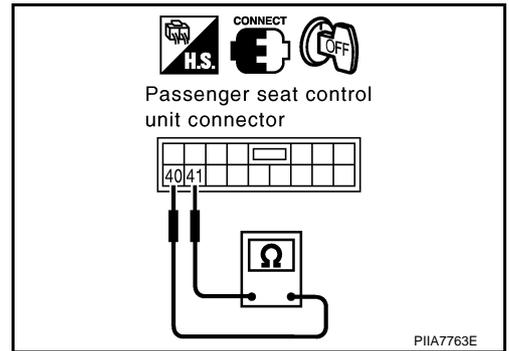
## 4. CHECK PASSENGER SEAT CONTROL UNIT GROUND CIRCUIT

Check continuity between passenger seat control unit connector B354 terminal 41 (Y/B) and 40 (B/W).

**41 (Y/B) - 40 (B/W) : Continuity should exist.**

OK or NG

- OK >> Replace reclining motor.
- NG >> Replace passenger seat control unit.



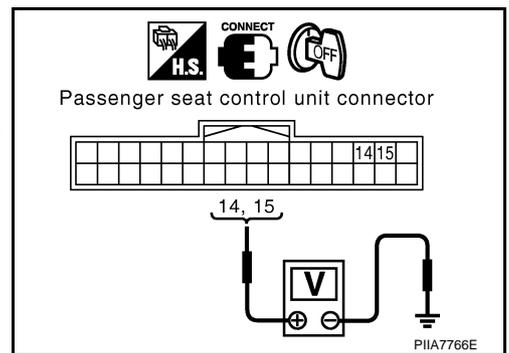
## Passenger Side Seat Sliding Switch Circuit Inspection

AIS0042U

### 1. CHECK SLIDING SWITCH OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	14 (Y)	Ground	When sliding switch is turned to forward.	0
			Other than above.	Battery voltage
	15 (SB)		When sliding switch is turned to backward.	0
			Other than above.	Battery voltage



OK or NG

- OK >> Replace passenger seat control unit.
- NG >> GO TO 2.

### 2. CHECK SLIDING SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and power seat switch.
2. Check continuity between passenger seat control unit connector B353 terminal 14 (Y), 15 (SB) and power seat switch connector B357 terminal 14 (Y), 15 (SB).

**14 (Y) - 14 (Y) : Continuity should exist.**

**15 (SB) - 15 (SB) : Continuity should exist.**

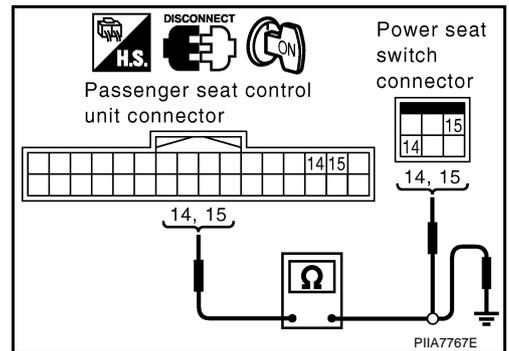
3. Check continuity between passenger seat control unit connector B353 terminal 14 (Y), 15 (SB) and ground.

**14 (Y) - Ground : Continuity should not exist.**

**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.



# POWER SEAT

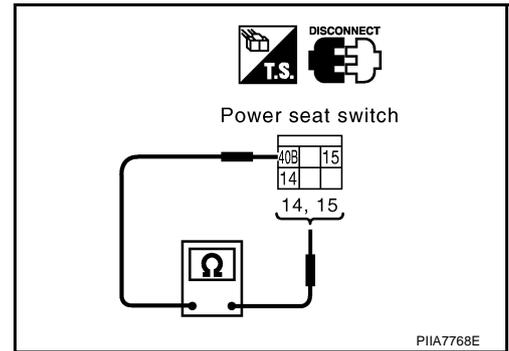
## 3. CHECK POWER SEAT SWITCH

Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
14	When sliding switch is turned to forward.	Yes
	When sliding switch is turned to neutral.	No
15	When sliding switch is turned to backward.	Yes
	When sliding switch is turned to neutral.	No

OK or NG

- OK >> Check the condition of the harness and connector.  
 NG >> Replace power seat switch.



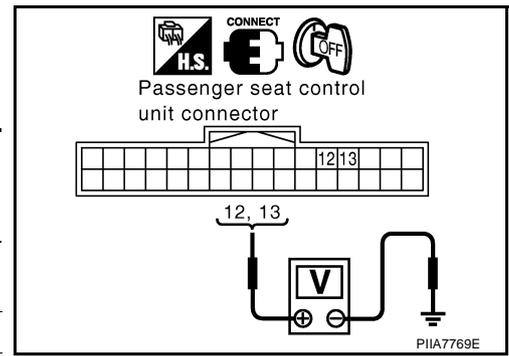
## Passenger Side Seat Reclining Switch Circuit Inspection

AIS0042V

### 1. CHECK RECLINING SWITCH OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	12 (OR)	Ground	When reclining switch is turned to forward.	0
			Other than above.	Battery voltage
	13 (G)		When reclining switch is turned to backward	0
			Other than above.	Battery voltage



OK or NG

- OK >> Passenger side seat reclining switch circuit is OK.  
 NG >> GO TO 2.

### 2. CHECK RECLINING SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and power seat switch.
2. Check continuity between passenger seat control unit connector B353 terminal 12 (OR), 13 (G) and power seat switch connector B357 terminal 12 (OR), 13 (G).

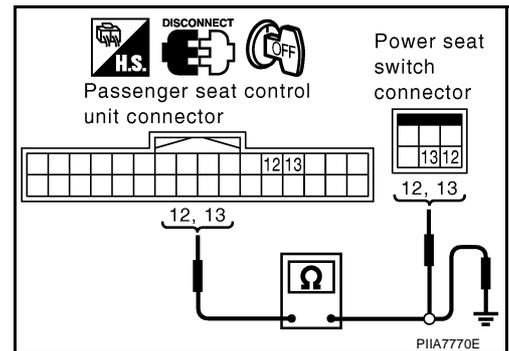
**12 (OR) - 12 (OR) : Continuity should exist.**  
**13 (G) - 13 (G) : Continuity should exist.**

3. Check continuity between passenger seat control unit connector B353 terminal 12 (OR), 13 (G) 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.



# POWER SEAT

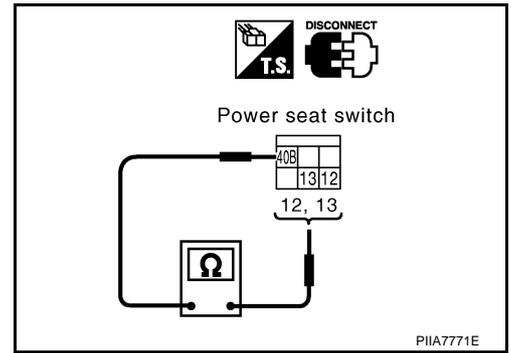
## 3. CHECK POWER SEAT SWITCH

Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
12	When reclining switch is turned to forward.	Yes
	When reclining switch is turned to neutral.	No
13	When reclining switch is turned to backward.	Yes
	When reclining switch is turned to neutral.	No

OK or NG

- OK >> Check the condition of the harness and connector.  
 NG >> Replace power seat switch.



## Passenger Side Power Seat Switch Ground Circuit Inspection

AIS0042W

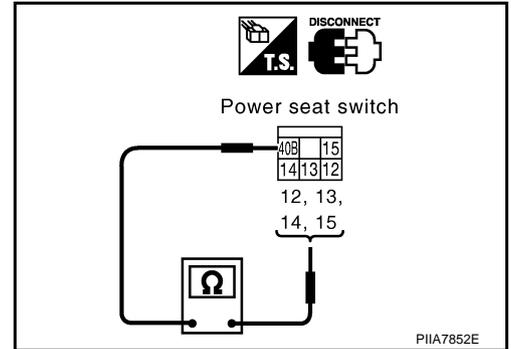
### 1. CHECK POWER SEAT SWITCH

1. Disconnect passenger seat control unit connector and power seat switch.
2. Check continuity between power seat switch as follows.

Terminals	Condition	Continuity
12	When reclining switch is turned to forward.	Yes
	When reclining switch is turned to neutral.	No
13	When reclining switch is turned to backward.	Yes
	When reclining switch is turned to neutral.	No
14	When sliding switch is turned to forward.	Yes
	When sliding switch is turned to neutral.	No
15	When sliding switch is turned to backward.	Yes
	When sliding switch is turned to neutral.	No

OK or NG

- OK >> GO TO 2.  
 NG >> Replace power seat switch.



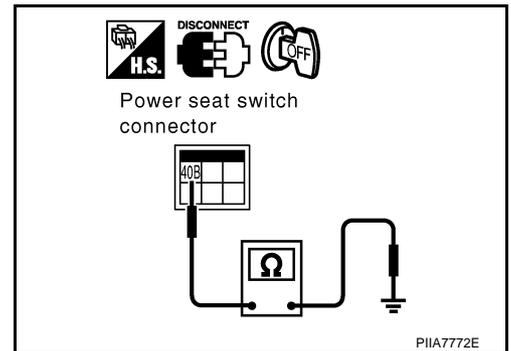
### 2. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B357 terminal 40B (B/W) and ground.

**40B (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 power seat switch and ground.



# POWER SEAT

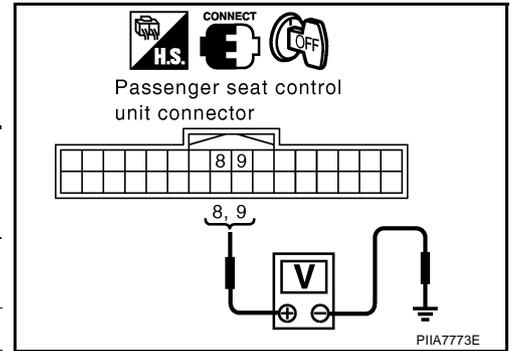
AI50042X

## Seatback Tilt Switch Circuit Inspection

### 1. CHECK SEATBACK TILT SWITCH OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	8 (BR)	Ground	When tilt switch is turned to forward.	0
			Other than above.	Battery voltage
	9 (LG)	Ground	When reclining switch is turned to backward.	0
			Other than above.	Battery voltage



OK or NG

- OK >> Seatback tilt switch circuit is OK.  
 NG >> GO TO 2.

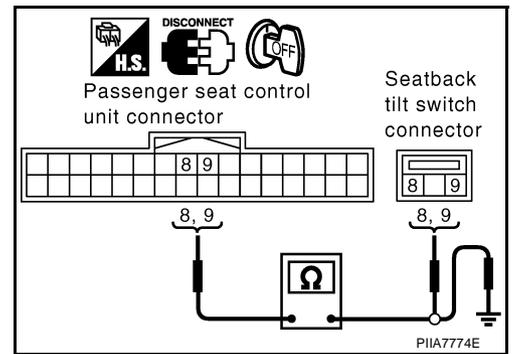
### 2. CHECK SEATBACK TILT SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and seatback tilt switch.
2. Check continuity between passenger seat control unit connector B353 terminal 8 (BR), 9(LG) and seatback tilt switch connector B372 terminal 8 (BR), 9(LG).

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

3. Check continuity between passenger seat control unit connector B353 terminal 8 (BR), 9(LG) 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.

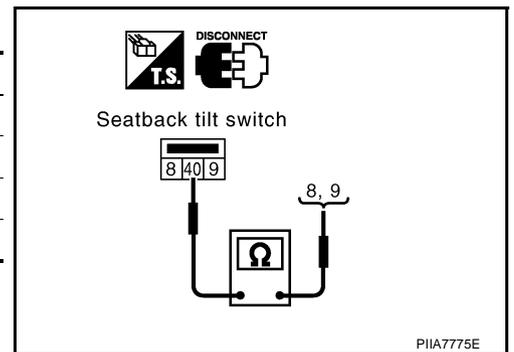
### 3. CHECK SEATBACK TILT SWITCH

Check continuity between seatback tilt switch as follows.

Terminals	Condition	Continuity
8	When seatback tilt switch is turned to forward.	Yes
	When seatback tilt switch is turned to neutral.	No
9	When seatback tilt switch is turned to backward.	Yes
	When seatback tilt switch is turned to neutral.	No

OK or NG

- OK >> GO TO 4.  
 NG >> Replace seatback tilt switch.



# POWER SEAT

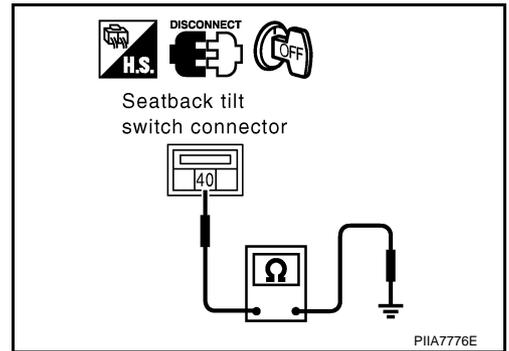
## 4. CHECK SEATBACK TILT SWITCH GROUND CIRCUIT

Check continuity between seatback tilt switch connector B372 terminal 40 (B/W) 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.

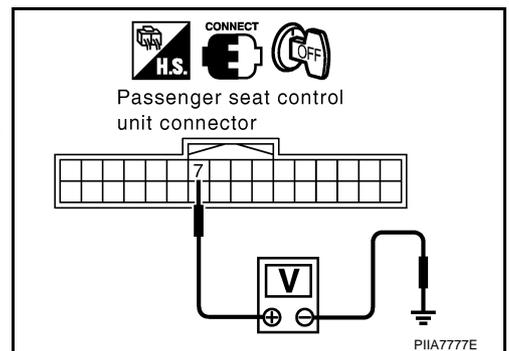


## Seatback Tilt Cancel Switch Circuit Inspection

### 1. CHECK SEATBACK TILT CANCEL SWITCH OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	7 (P)	Ground	When seatback tilt cancel switch is turned to CANCEL.	0
			When seatback tilt cancel switch is turned to AUTO.	5



OK or NG

- OK >> Passenger seatback tilt cancel switch circuit is OK.
- NG >> GO TO 2.

### 2. CHECK SEATBACK TILT CANCEL SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and seatback tilt cancel switch.
2. Check continuity between passenger seat control unit connector B353 terminal 7 (P) and seatback tilt cancel switch connector B373 terminal 7 (P).

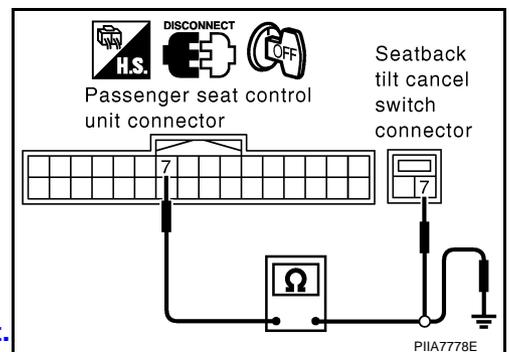
**7 (P) - 7 (P) : Continuity should exist.**

3. Check continuity between passenger seat control unit connector B353 terminal 7 (P) 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.



# POWER SEAT

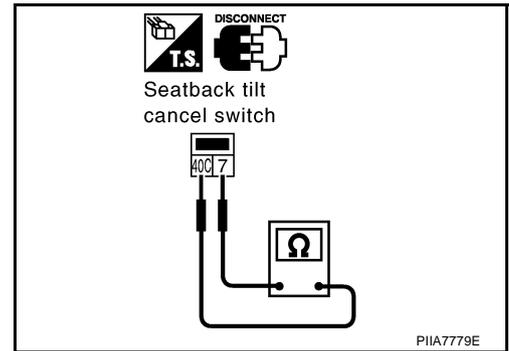
## 3. CHECK SEATBACK TILT CANCEL SWITCH

Check continuity between seatback tilt cancel switch as follows.

Terminals		Condition	Continuity
7	40C	When seatback tilt cancel switch is turned to CANCEL.	Yes
		When seatback tilt cancel switch is turned to AUTO.	No

OK or NG

- OK >> GO TO 4.
- NG >> Replace seatback tilt cancel switch.



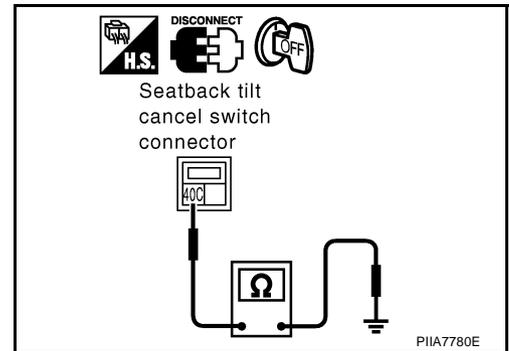
## 4. CHECK SEATBACK TILT CANCEL SWITCH GROUND CIRCUIT

Check continuity between seatback tilt cancel switch connector B373 terminal 40 (B/W) 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.



## Soft Top Switch Circuit Inspection

### 1. CHECK SOFT TOP SWITCH OUTPUT SIGNAL

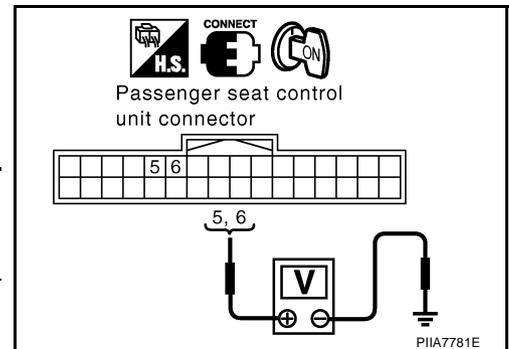
1. Disconnect soft top control unit connector.
2. Turn ignition switch ON.
3. Check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	5 (R)	Ground	When soft top switch is turned to OPEN*.	0
			Other than above.	Battery voltage
	6 (GY)		When soft top switch is turned to CLOSE*.	0
			Other than above.	Battery voltage

\*: Turn ignition switch ON and depress brake pedal when soft top switch operates.

OK or NG

- OK >> Soft top switch circuit is OK.
- NG >> GO TO 2.



# POWER SEAT

## 2. CHECK SOFT TOP SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and soft top switch.
2. Check continuity between passenger seat control unit connector B353 terminal 5 (R), 6 (GY) and soft top switch connector M14 terminal 3 (L/B), 4(R/G).

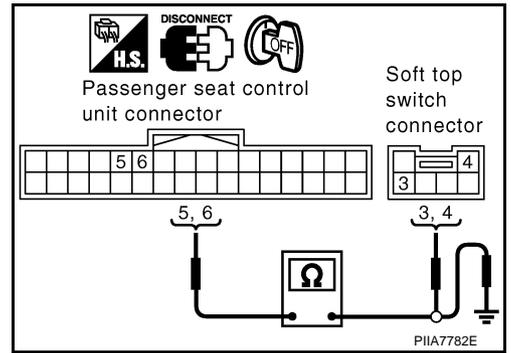
**5 (R) - 3 (L/B) : Continuity should exist.**

**6 (GY) - 4 (R/G) : Continuity should exist.**

3. Check continuity between passenger seat control unit connector B353 terminal 5 (R), 6 (GY) and ground.

**5 (R) - Ground : Continuity should not exist.**

**6 (GY) - Ground : Continuity should not exist.**



OK or NG

OK >> GO TO 3.

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

## 3. CHECK SOFT TOP SWITCH

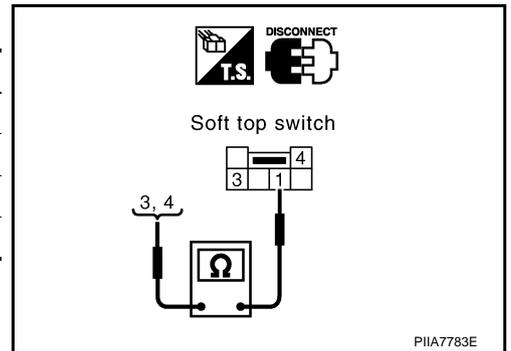
Check continuity between soft top switch as follows.

Terminals	Condition	Continuity	
3	1	When soft top switch is turned to OPEN.	Yes
		When soft top switch is turned to neutral.	No
4	1	When soft top switch is turned to CLOSE.	Yes
		When soft top switch is turned to neutral.	No

OK or NG

OK >> GO TO 4.

NG >> Replace soft top switch.



## 4. CHECK SOFT TOP SWITCH GROUND CIRCUIT

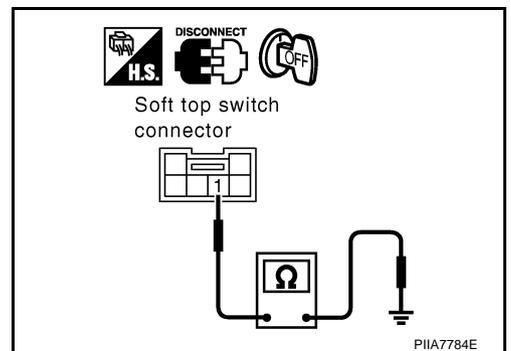
Check continuity between soft top switch connector M14 terminal 1 (B) and ground.

**1 (B) - Ground : Continuity should exist.**

OK or NG

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

NG >> Repair or replace the harness between soft top switch and ground.



# POWER SEAT

AI500430

## Power Window Down Request Signal Circuit Inspection

### 1. CHECK POWER WINDOW DOWN REQUEST SIGNAL INPUT

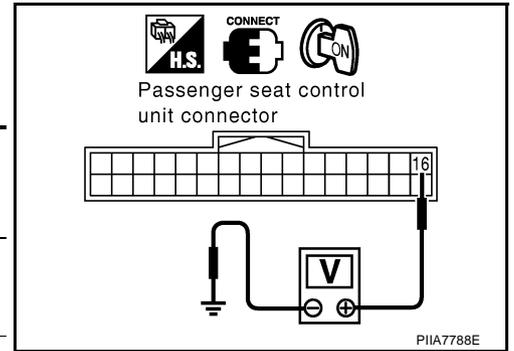
1. Turn ignition switch ON.
2. Check voltage between passenger seat control unit connector and ground.

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	16 (PU/W)	Ground	When soft top switch is turned to OPEN or CLOSE.*	0
			Other than above.	5

\*: Turn ignition switch ON and depress brake pedal when soft top switch operates.

#### OK or NG

- OK >> Power window down request signal circuit is OK.  
 NG >> GO TO 2.



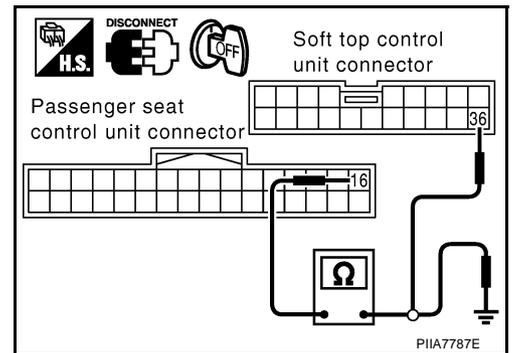
### 2. CHECK POWER WINDOW DOWN REQUEST SIGNAL HARNESS

1. Disconnect soft top control unit and passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B353 terminal 16 (PU/W) and soft top control unit connector B67 terminal 36 (Y/G).

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

3. Check continuity between passenger seat control unit connector B353 terminal 16 (PU/W) 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.

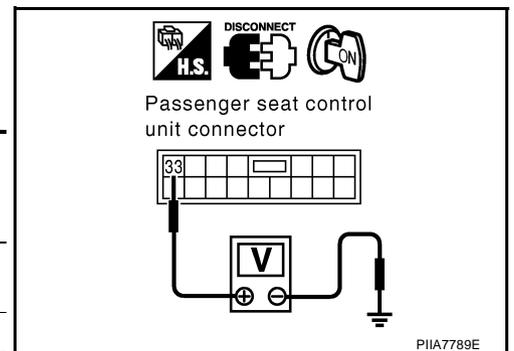
## Storage Lid Close Signal Circuit Inspection

AI500431

### 1. CHECK STORAGE LID CLOSE SIGNAL

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

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



#### OK or NG

- OK >> Replace passenger seat control unit.  
 NG >> GO TO 2.

# POWER SEAT

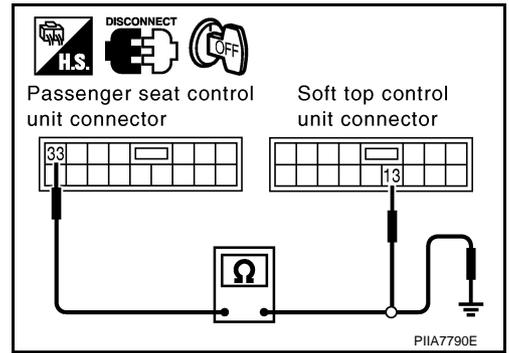
## 2. CHECK STORAGE LID CLOSE SIGNAL CIRCUIT HARNESS

1. Disconnect soft top control unit and storage lid actuator and passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B353 terminal 33 (G/B) and soft top control unit connector B66 terminal 13 (L/R).

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

3. Check continuity between passenger seat control unit connector B353 terminal 33 (G/B) 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-51, "Storage Lid Actuator Check \(Open Operate\)"](#) .
- NG >> Repair or replace harness between passenger seat control unit and soft top control unit.

## Soft Top Lock Switch Circuit Inspection

AIS00432

### 1. CHECK SOFT TOP MECHANISM

When a soft top switch is operated, does a soft top operate normally?

YES or NO

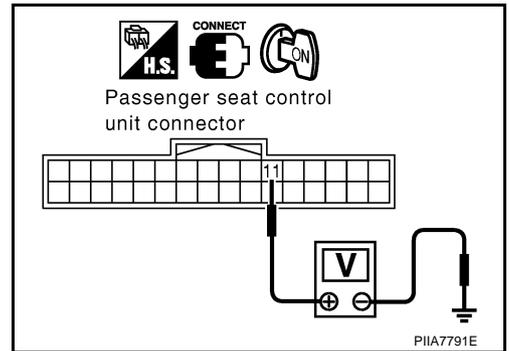
Yes, it operates normally>>GO TO 2.

No, it does not operate normally>>Further inspection is necessary. Refer to [RF-11, "SOFT TOP"](#) .

### 2. CHECK SOFT TOP LOCK SWITCH OUTPUT SIGNAL

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

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	11 (L/W)	Ground	When soft top lock switch is turned to ON*	0
			When soft top lock switch is turned to OFF*	5



\*:For detail ON or OFF conditions of a soft top lock switch, refer to [RF-19, "Operation Chart"](#) .

OK or NG

- OK >> Replace passenger seat control unit.
- NG >> GO TO 3.

# POWER SEAT

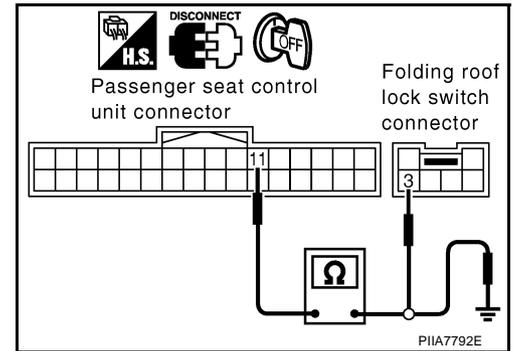
## 3. CHECK SOFT TOP LOCK SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit.
2. Check continuity between passenger seat control unit connector B353 terminal 11 (L/W) and soft top lock switch connector T205 terminal 3 (Y).

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

3. Check continuity between passenger seat control unit connector B353 terminal 11 (L/W) 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.

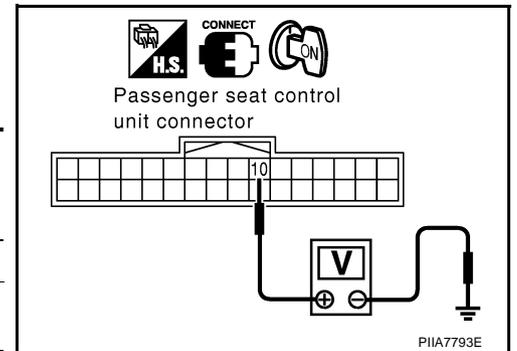
## Seat Belt Buckle Switch Circuit Inspection

AIS00433

### 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	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	10 (L/Y)	Ground	When seat belt is fastened.	5
			When seat belt is unfastened.	0



OK or NG

OK >> Seat belt buckle switch circuit is OK.

NG >> GO TO 2.

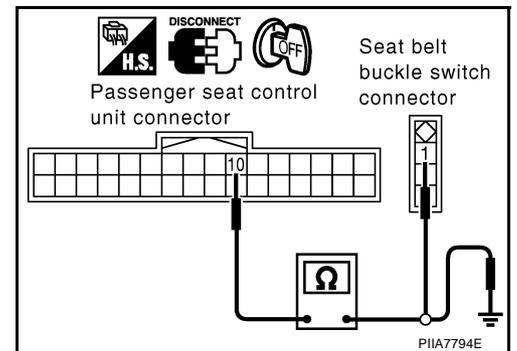
### 2. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and seat belt buckle switch.
2. Check continuity between passenger seat control unit connector B353 terminal 10 (L/Y) and seat belt buckle switch connector B373 terminal 1 (LG).

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

3. Check continuity between passenger seat control unit connector B353 terminal 10 (L/Y) 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.

# POWER SEAT

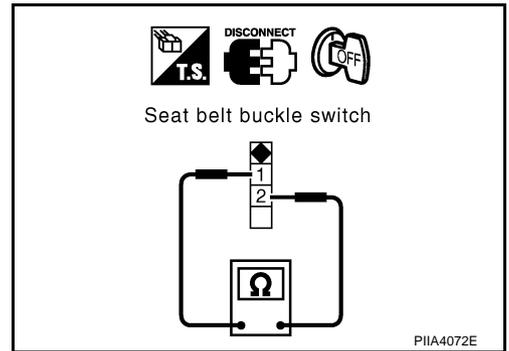
## 3. CHECK SEAT BELT BUCKLE SWITCH

Check continuity between seat belt buckle switch as follows.

Terminals		Condition	Continuity
1	2	When seat belt is unfastened.	Yes
		When seat belt is fastened.	No

OK or NG

- OK >> GO TO 4.
- NG >> Replace seat belt buckle switch.



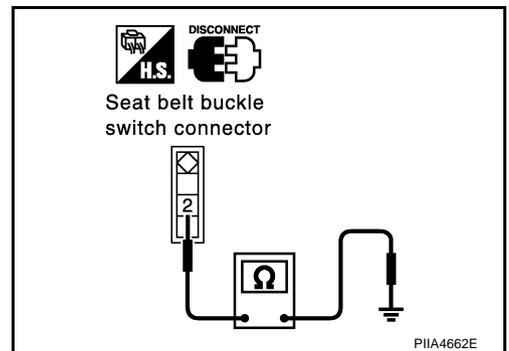
## 4. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch connector B11 terminal 2 (B) 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.

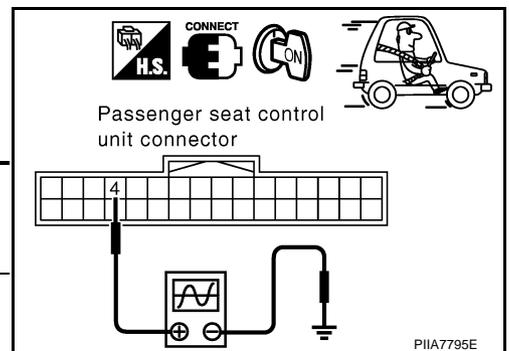


## Vehicle Speed Signal Inspection

### 1. CHECK VEHICLE SPEED SIGNAL

1. Turn ignition switch ON.
2. Check signal between passenger seat control unit connector and body ground, with oscilloscope when vehicle speed is approx. 40 km/h (25 MPH).

Connector	Terminal (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B353	4 (PU)	Ground	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)].	



OK or NG

- OK >> Replace passenger seat control unit.
- NG >> GO TO 2.

# POWER SEAT

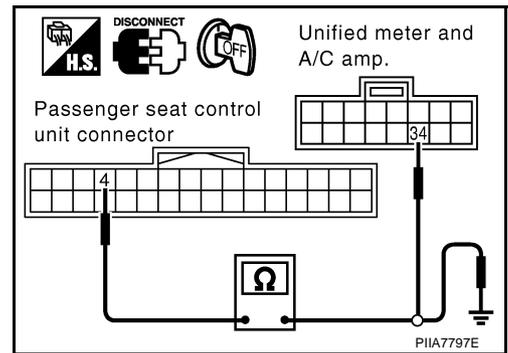
## 2. CHECK VEHICLE SPEED SIGNAL CIRCUIT HARNESS

1. Disconnect passenger seat control unit connector and unified meter and A/C amp.
2. Check continuity between passenger seat control unit connector B353 terminal 4 (PU) and unified meter and A/C amp. connector M49 terminal 34 (W/G).

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

3. Check continuity between passenger seat control unit connector B353 terminal 4 (PU) 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 [DI-19, "Vehicle Speed Signal Inspection"](#).
- NG >> Repair or replace harness between passenger seat control unit and unified meter and A/C amp.

# HEATED SEAT

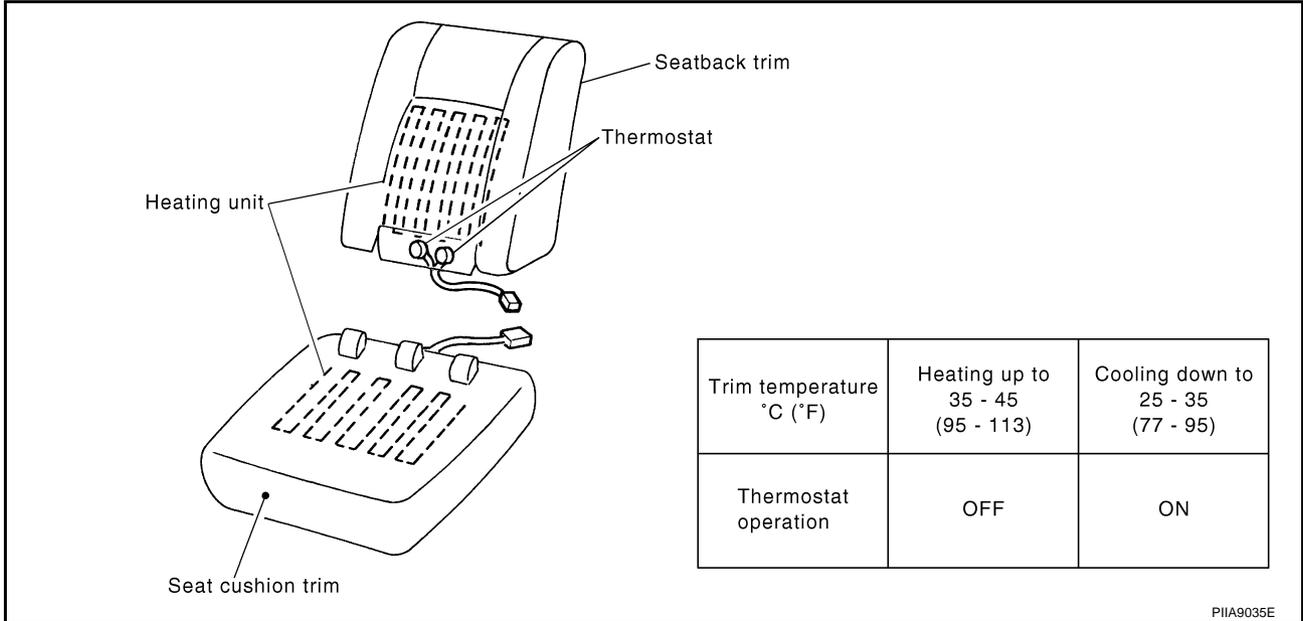
## HEATED SEAT

PFP:87335

### Description

AIS000IH

- When handling the 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.

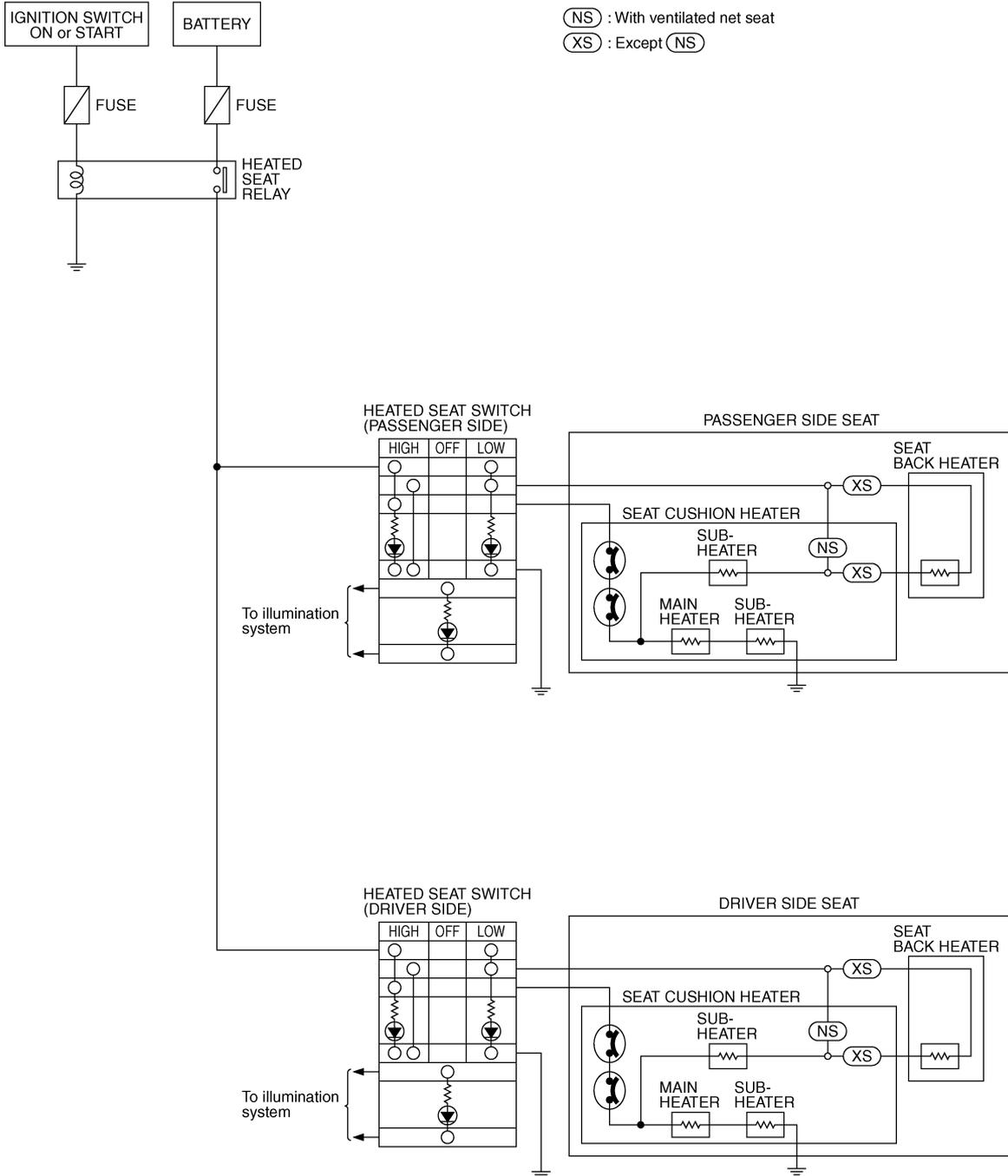


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# HEATED SEAT

## Schematic

AI50040Y



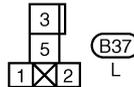
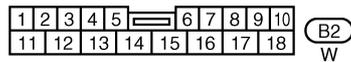
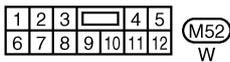
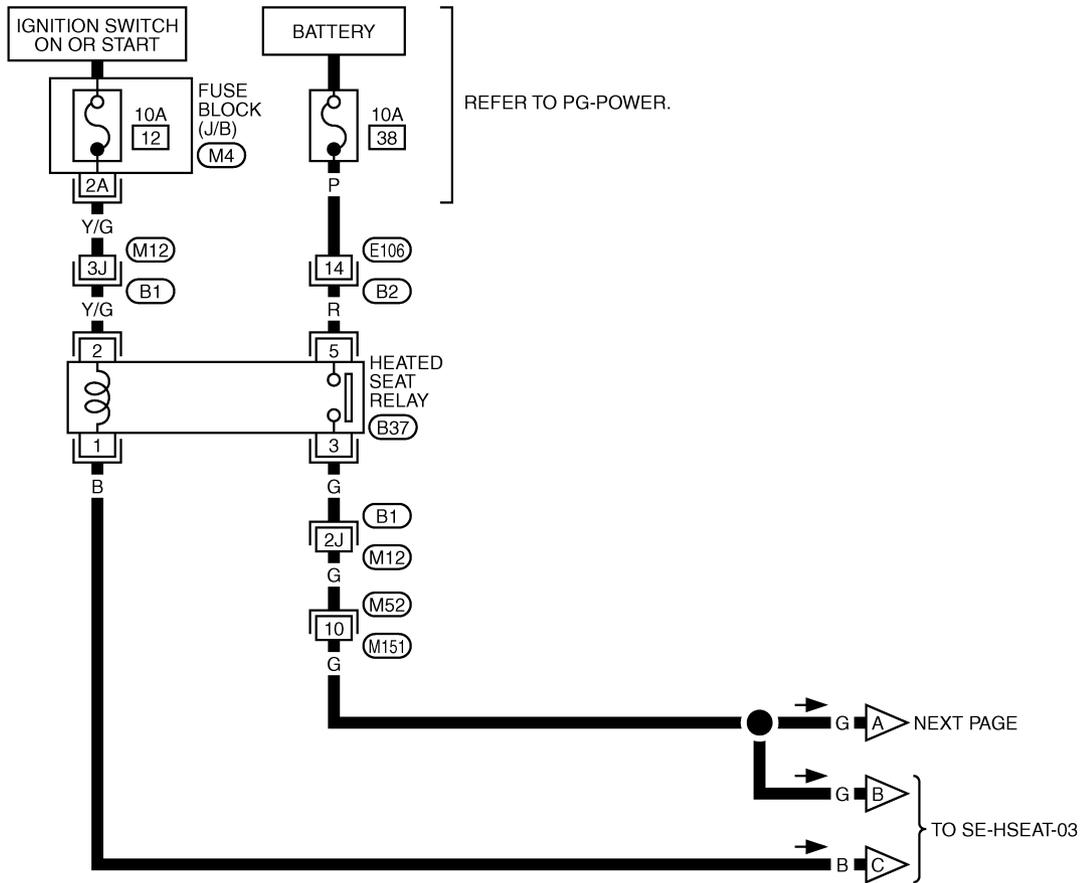
TIWT0517E

# HEATED SEAT

## Wiring Diagram – HSEAT –

AIS0043K

SE-HSEAT-01



REFER TO THE FOLLOWING.

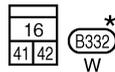
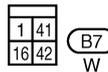
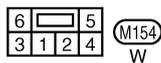
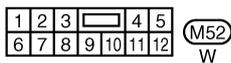
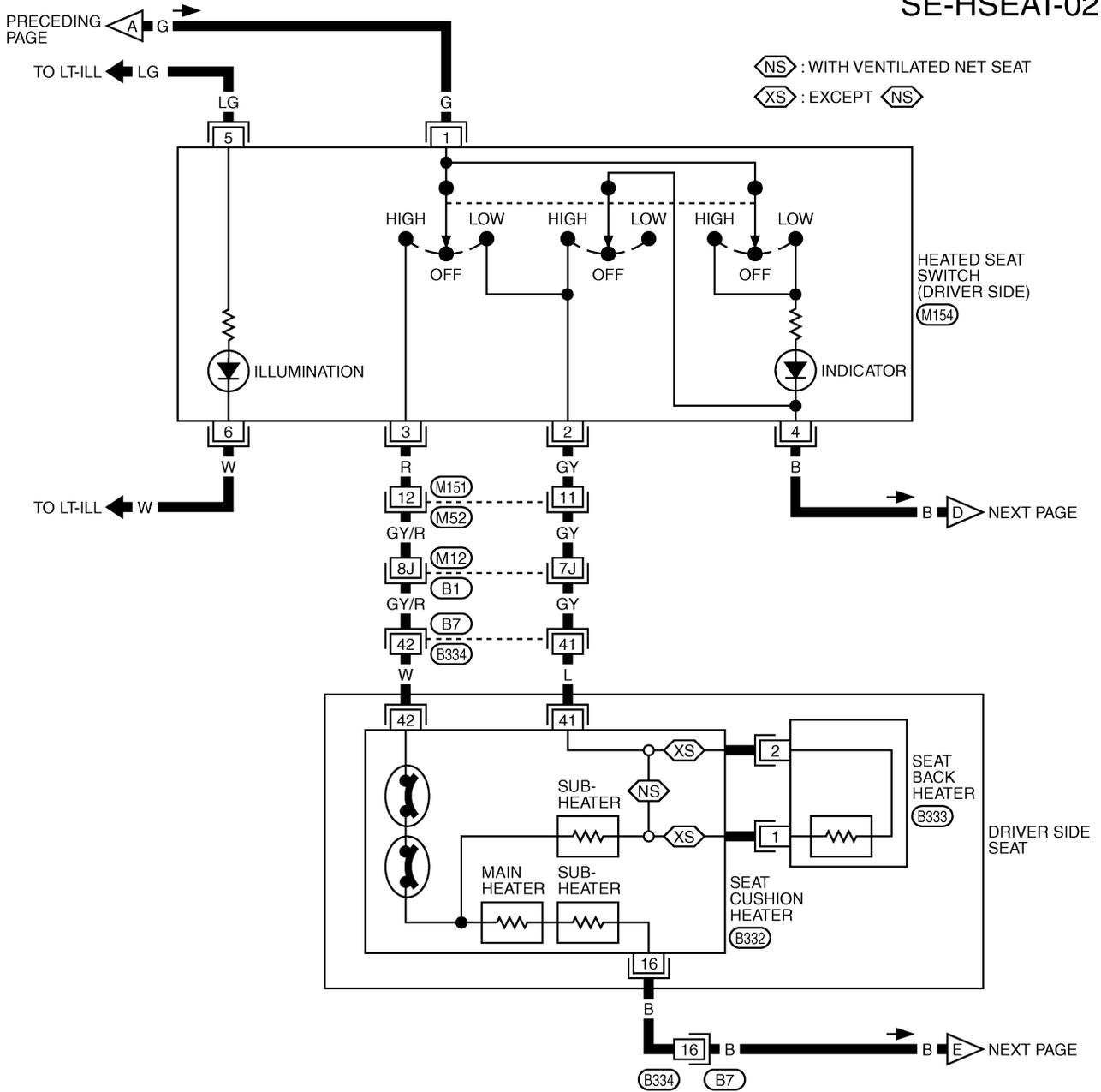
(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWT0518E

# HEATED SEAT

SE-HSEAT-02



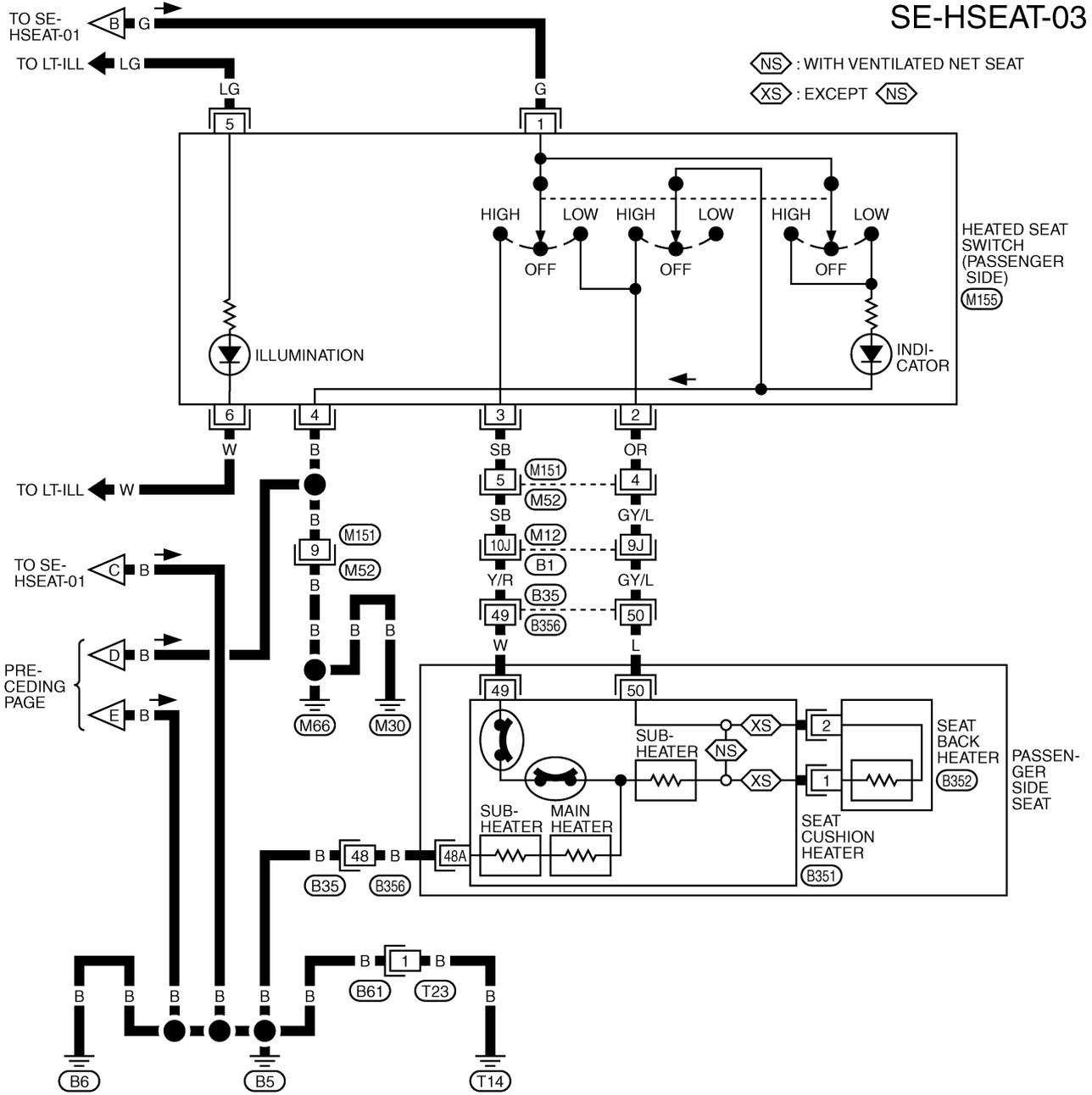
REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

# HEATED SEAT

SE-HSEAT-03



1	2	3	4	5
6	7	8	9	10
11	12			

(M52) W

6	5
3	1
2	4

(M155) BR

11	32	16	4	5	6	10	1	2
48	40A	33		50	49	34	39	

(B35) W

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

(B61) W

48A	*
50	49

(B351) W

1	*
2	

(B352) W

REFER TO THE FOLLOWING.  
(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

# SEAT

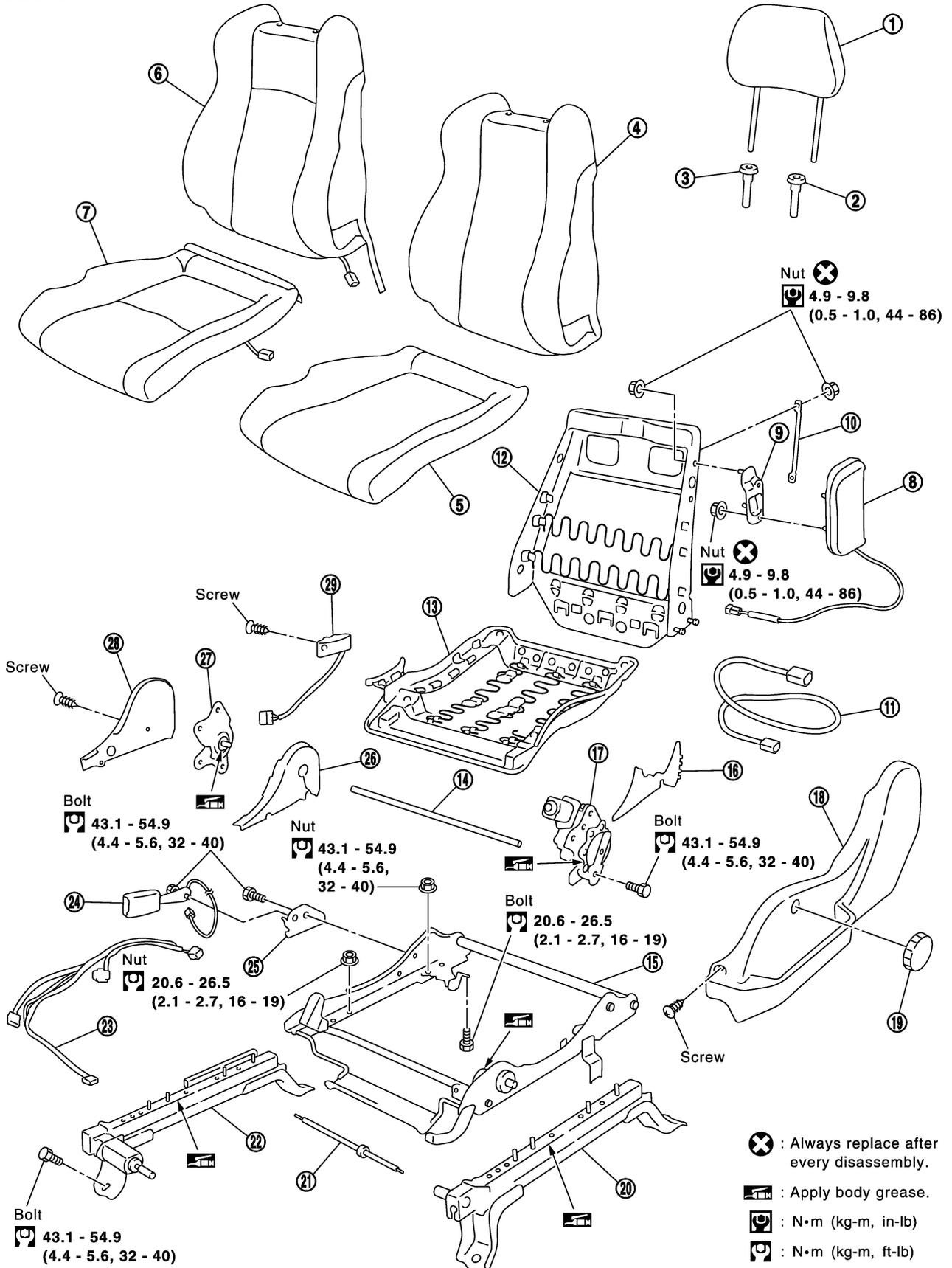
## SEAT

PF8:87000

### Removal and Installation POWER SEAT

AIS000IK

SEC. 870



PIIA2480E

SE-60

# SEAT

---

1. Headrest	2. Headrest holder (with lock)	3. Headrest holder (without lock)	A
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	B
13. Seat cushion frame	14. Reclining device rod	15. Seat thigh support adjuster assembly	
16. Reclining device inner cover (LH)	17. Reclining device outer	18. Seat cushion outer finisher	C
19. Thigh support adjuster 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. Reclining device inner cover (RH)	27. Reclining device inner	D
28. Seat cushion inner finisher	29. Power seat switch		

E

F

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**SE**

J

K

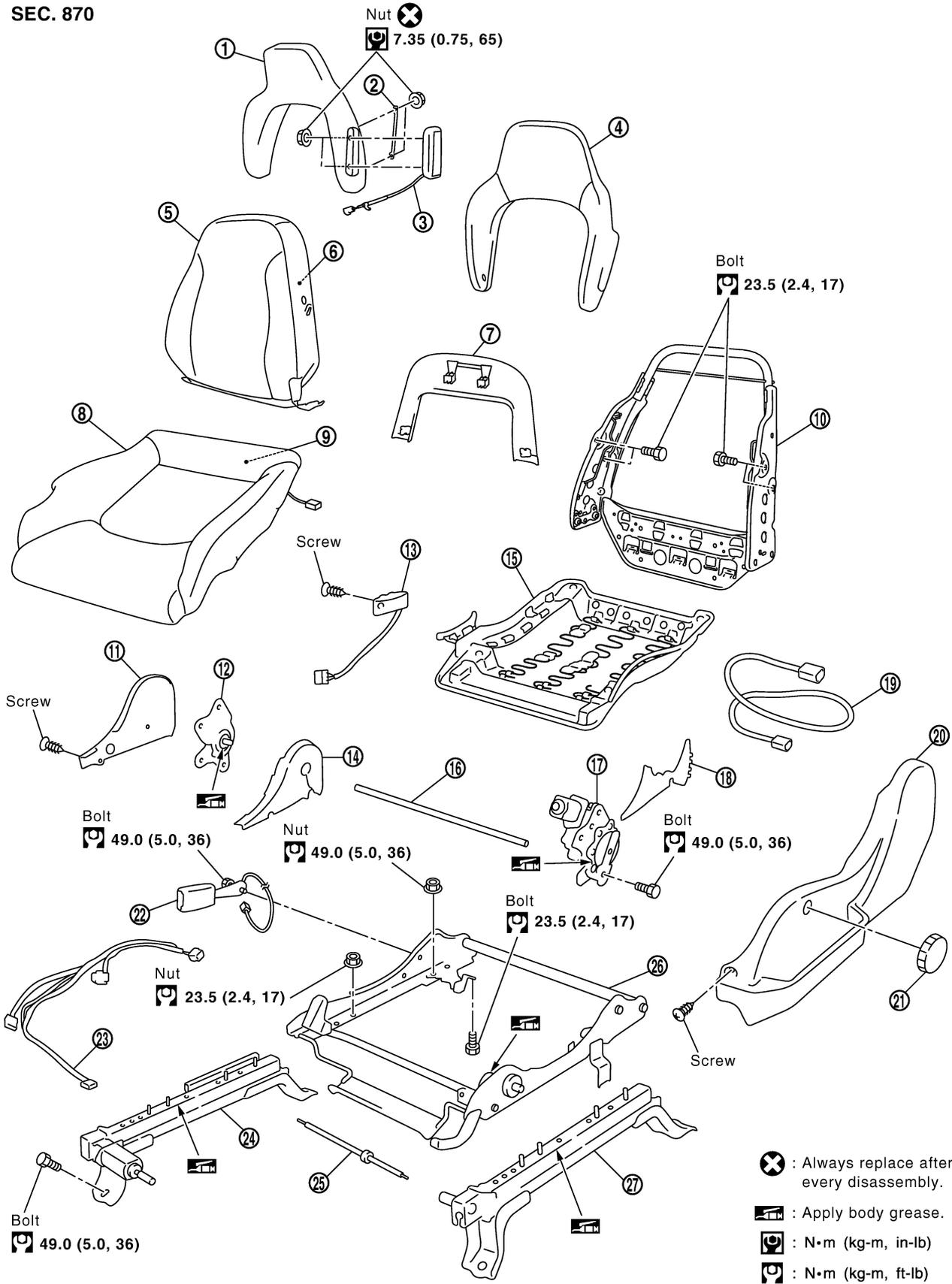
L

M

# SEAT

## NET SEAT

### SEC. 870



- : Always replace after every disassembly.
- : Apply body grease.
- : N•m (kg-m, in-lb)
- : N•m (kg-m, ft-lb)

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

# SEAT

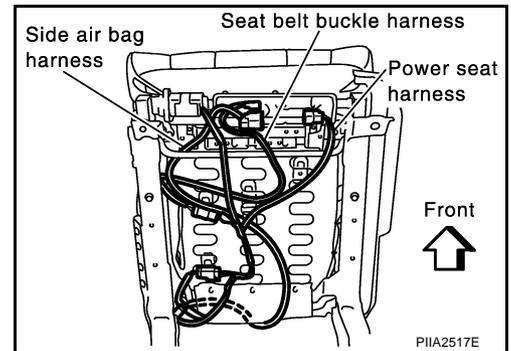
- |                                 |  |                                       |
|---------------------------------|--|---------------------------------------|
| 7. Seatback garnish             | 8. Seat cushion trim                     | 9. Seat cushion pad                   |
| 10. Seatback frame              | 11. Seat cushion inner finisher          | 12. Reclining inner device            |
| 13. Power seat switch           | 14. Reclining device inner cover (RH)    | 15. Seat cushion frame                |
| 16. Reclining device rod        | 17. Reclining outer device               | 18. Reclining device inner cover (LH) |
| 19. Side air bag module harness | 20. Seat cushion outer finisher          | 21. Thigh support adjuster 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, handle it carefully 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, or hit the side air bag module installed in the seat. Always handle the module with care.
1. Remove the front leg cover and rear leg cover. (LH/RH)
  2. Slide the seat until the seat 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 the under side of the seat cushion.
  6. Remove clips under seat cushion, and remove the cushion from the seat frame.



## INSTALLATION

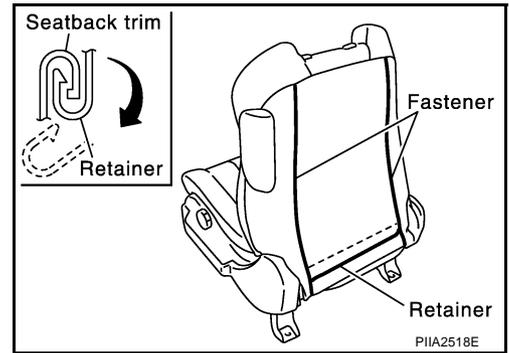
Install in the reverse order of removal.

# SEAT

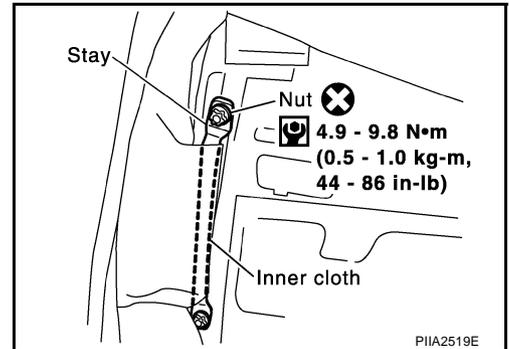
AI5000L

## Disassembly and Assembly (Power Seat) SEATBACK TRIM AND PAD

1. Open fastener on the rear of seatback, and remove retainer from seatback trim.



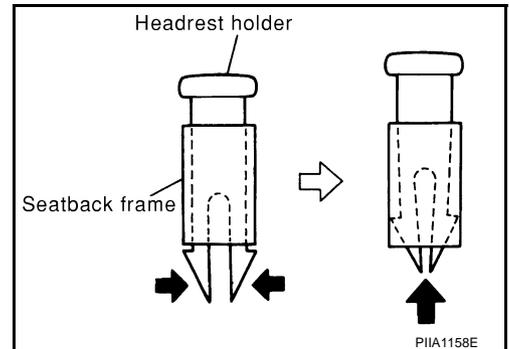
2. Remove the stay fixing the inner cloth.



3. Remove headrest holders from seatback frame by disconnecting the hook.

### NOTE:

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



4. 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. (with models heating seat only)

## REMOVAL OF SEATBACK ASSEMBLY

1. After completing the steps 1 of "SEATBACK TRIM AND PAD" disassembly, remove the harness connectors for the reclining motor (driver seat only).
2. Pull out the harness connector of 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 installing 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

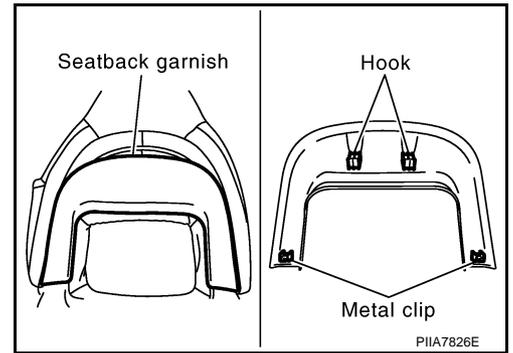
Install in the reverse order of removal.

# SEAT

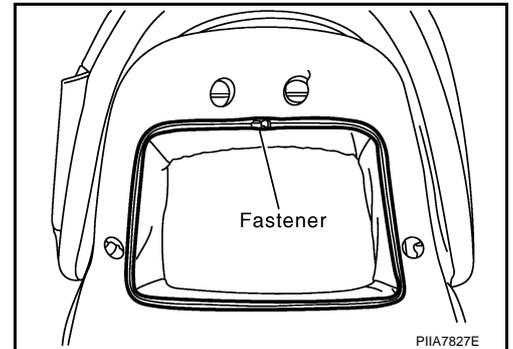
## Disassembly and Assembly (Net Seat) SEATBACK TRIM AND PAD

AIS003XU

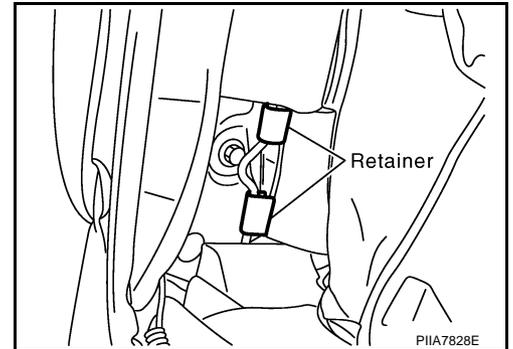
1. Remove the seatback garnish.



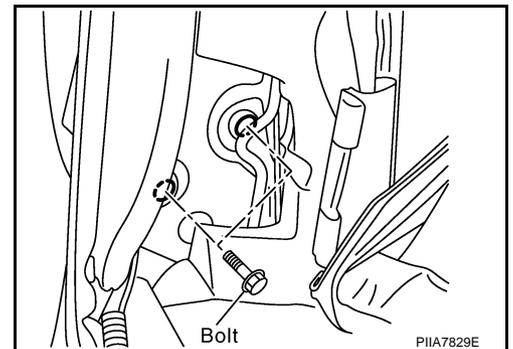
2. Open fastener on seatback lower.



3. Remove the retainer.



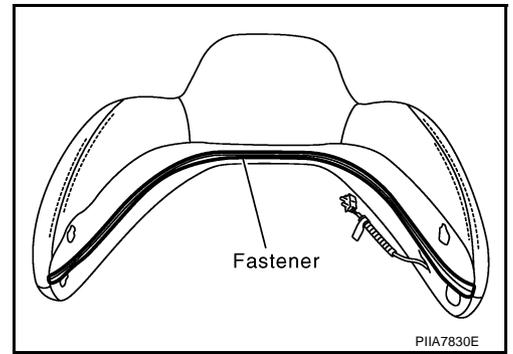
4. Disconnect side air bag connector.
5. Remove the seatback upper mounting bolts.



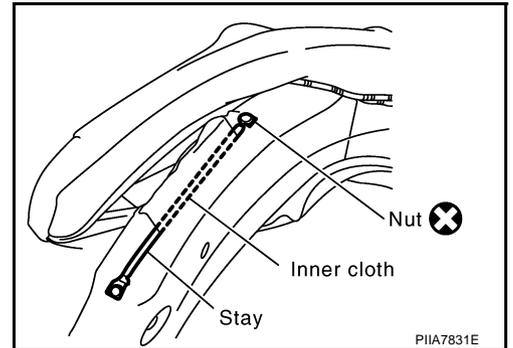
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# SEAT

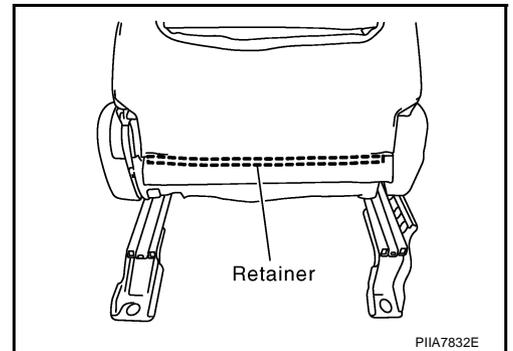
6. Open fastener on seatback upper.



7. Remove the stay fixing the inner cloth.



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

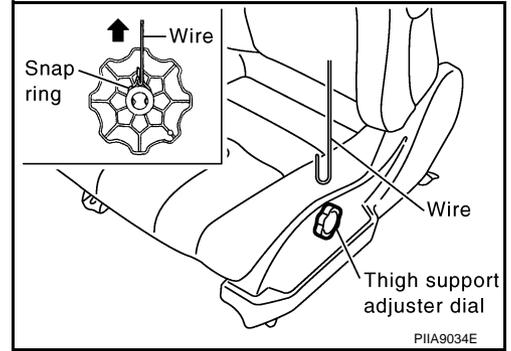


10. After removing the seatback trim and pad, remove the hog rings to separate the trim, and pad.

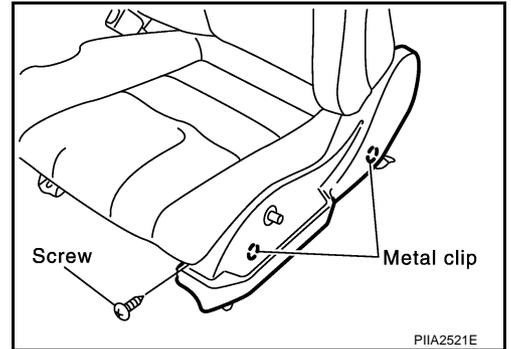
# SEAT

## SEAT CUSHION TRIM AND PAD

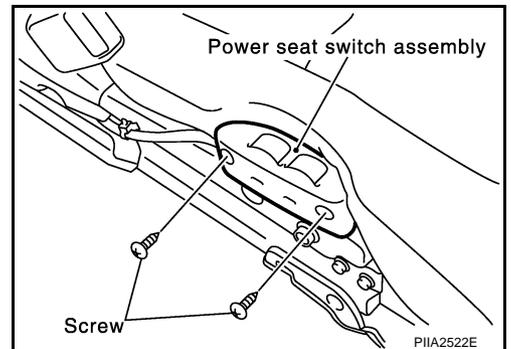
1. Hook snap ring with wire, and pull it up to remove. Remove thigh support adjuster dial.



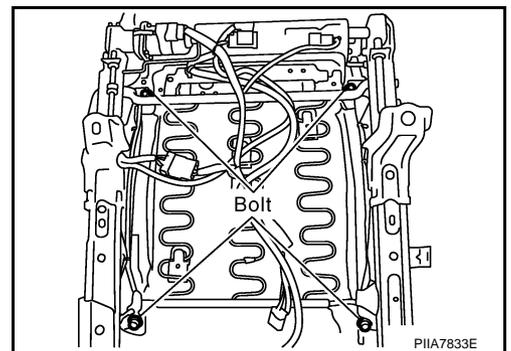
2. Remove the screw and metal clip and remove the seat cushion outer finisher.



3. Remove screws and remove the power seat switch.



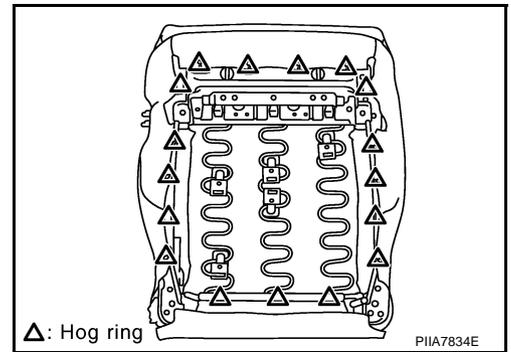
4. Remove bolts on the under side of seat cushion.



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# SEAT

5. Remove hog rings from the under side of seat cushion frame.



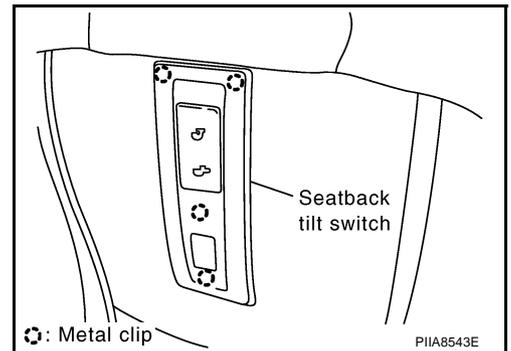
6. Disconnect harness connector from seat cushion heater unit.
7. After removing the seat cushion trim and pad, remove the hog rings to separate the trim and pad.

**NOTE:**

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

## PASSENGER SIDE SEATBACK TILT SWITCH

1. Remove the seatback tilt switch.



2. Disconnect seatback tilt switch harness connector.
3. Remove passenger side seatback trim and pad. Refer to [SE-64, "SEATBACK TRIM AND PAD"](#).