

SECTION **SE**
SEAT

A
B
C

CONTENTS

D
E

| | | | | |
|---|-----------|---|----|----|
| PRECAUTIONS | 3 | Component Parts and Harness Connector Location.. | 17 | F |
| Precautions for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER" | 3 | Schematic | 19 | |
| Service Notice | 3 | Wiring Diagram — AUT/DP — | 20 | |
| Precautions for Work | 3 | Terminals and Reference Values for BCM | 32 | G |
| Precautions for Trouble Diagnosis | 4 | Terminals and Reference Values for Driver Seat Control Unit | 33 | |
| PREPARATION | 5 | Work Flow | 35 | H |
| Special Service Tools | 5 | Preliminary Check | 36 | |
| Commercial Service Tools | 5 | SETTING CHANGE FUNCTION | 36 | |
| SQUEAK AND RATTLE TROUBLE DIAGNOSES | 6 | POWER SUPPLY AND GROUND CIRCUIT INSPECTION | 36 | SE |
| Work Flow | 6 | CONSULT-II Function | 39 | |
| CUSTOMER INTERVIEW | 6 | CONSULT-II BASIC OPERATION PROCEDURE | 39 | J |
| DUPLICATE THE NOISE AND TEST DRIVE | 7 | IVMS COMMUNICATION INSPECTION | 40 | |
| CHECK RELATED SERVICE BULLETINS | 7 | COMMUNICATION SYSTEM A | 42 | |
| LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE | 7 | COMMUNICATION SYSTEM B | 42 | K |
| REPAIR THE CAUSE | 7 | COMMUNICATION SYSTEM C | 42 | |
| CONFIRM THE REPAIR | 8 | WORK SUPPORT | 42 | |
| Generic Squeak and Rattle Troubleshooting | 8 | SELF-DIAGNOSIS RESULTS | 43 | |
| INSTRUMENT PANEL | 8 | DATA MONITOR | 44 | L |
| CENTER CONSOLE | 8 | ACTIVE TEST | 45 | |
| DOORS | 8 | On Board Diagnosis | 46 | |
| TRUNK | 9 | DIAGNOSIS ITEM | 46 | M |
| SUNROOF/HEADLINING | 9 | COMMUNICATION DIAGNOSIS | 46 | |
| SEATS | 9 | COMMUNICATION SYSTEM A | 48 | |
| UNDERHOOD | 9 | COMMUNICATION SYSTEM B | 48 | |
| Diagnostic Worksheet | 10 | COMMUNICATION SYSTEM C | 49 | |
| CLIP AND FASTENER | 12 | SWITCH MONITOR | 49 | |
| Description | 12 | ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER | 51 | |
| AUTOMATIC DRIVE POSITIONER | 13 | Symptom Chart | 53 | |
| Manual Operation | 13 | Seat Sliding Motor Circuit Inspection | 55 | |
| Automatic Operation | 13 | Seat Reclining Motor Circuit Inspection | 56 | |
| System Description | 13 | Front End Seat Lifting Motor Circuit Inspection | 57 | |
| FAIL-SAFE MODE | 13 | Rear End Seat Lifting Motor Circuit Inspection | 59 | |
| CANCEL OF FAIL-SAFE MODE | 14 | Steering Wheel Telescopic Motor Circuit Inspection.. | 60 | |
| MEMORY STORING | 14 | Steering Wheel Tilt Motor Circuit Inspection | 62 | |
| MEMORY SWITCH OPERATION | 15 | Seat Sliding Sensor Circuit Inspection | 64 | |
| RETURN OPERATION | 15 | Seat Reclining Sensor Circuit Inspection | 65 | |
| TURNOUT OPERATION | 16 | | | |

| | | | |
|--|-----------|--|------------|
| Front End Seat Lifting Sensor Circuit Inspection ... | 66 | Inspection | 115 |
| Rear End Lifting Sensor Circuit Inspection | 67 | Climate Controlled Seat "COOL" Switch Circuit | |
| Detention Switch Circuit Inspection | 68 | Inspection | 116 |
| Telescopic Sensor Circuit Inspection | 69 | Climate Controlled Seat Temperature Dial Inspec- | |
| Tilt Sensor Circuit Inspection | 70 | tion | 117 |
| Key Switch and Key Lock Solenoid Circuit Inspec- | | Climate Controlled Seat Temperature Dial Circuit | |
| tion | 71 | Inspection | 117 |
| Front Door Switch (Driver Side) Circuit Inspection.. | 73 | Climate Controlled Seat Switch Ground Circuit | |
| Vehicle Speed Signal Inspection | 74 | Inspection | 119 |
| Seat Memory Switch Circuit Inspection | 76 | Seat Cushion Thermal Electric Device Circuit | |
| Seat Sliding Switch Circuit Inspection | 78 | Inspection | 120 |
| Seat Reclining Switch Inspection | 80 | Seat Cushion Thermal Electric Device Sensor Cir- | |
| Front End Seat Lifting Switch Circuit Inspection ... | 82 | cuit Inspection | 121 |
| Rear End Seat Lifting Switch Circuit Inspection ... | 84 | Seatback Thermal Electric Device Circuit Inspec- | |
| Steering Wheel Telescopic Switch Inspection | 86 | tion | 122 |
| Steering Wheel Tilt Switch Inspection | 87 | Seatback Thermal Electric Device Sensor Circuit | |
| Seat Memory Indicator Lamp System Inspection ... | 89 | Inspection | 123 |
| Lumber Support Motor Circuit Inspection | 91 | Blower Motor Power Supply Circuit Inspection ... | 124 |
| POWER SEAT | 93 | Blower Motor Speed Control Circuit Inspection ... | 125 |
| Schematic | 93 | Blower Motor Tachometer Signal Circuit Inspection | 126 |
| Wiring Diagram — SEAT — | 94 | Climate Controlled Seat Control Unit Inspection .. | 126 |
| CLIMATE CONTROLLED SEAT | 97 | FRONT SEAT | 127 |
| System Description | 97 | Removal and Installation | 127 |
| Component Parts and Harness Connector Location | 100 | CLIMATE CONTROLLED SEAT | 129 |
| Schematic — AHEAT — | 101 | REMOVAL | 130 |
| Wiring Diagram — AHEAT — | 102 | INSTALLATION | 130 |
| Terminal and Reference Value for Climate Con- | | Disassembly and Assembly | 131 |
| trolled Seat Control Unit | 107 | SEATBACK TRIM AND PAD | 131 |
| Work Flow | 108 | REMOVAL OF SEATBACK ASSEMBLY | 132 |
| Trouble Diagnosis Symptom Chart | 109 | INSTALLATION OF SEATBACK ASSEMBLY ... | 132 |
| Climate Controlled Relay Power Supply Circuit | | SEAT CUSHION TRIM AND PAD | 132 |
| Check | 110 | CLIMATE CONTROLLED SEAT | 132 |
| Driver Side Climate Controlled Seat Control Unit | | REAR SEAT | 133 |
| Power Supply and Ground Circuit Inspection | 111 | Removal and Installation | 133 |
| Passenger Side Climate Controlled Seat Control | | ARMREST ASSEMBLY | 134 |
| Unit Power Supply Circuit Inspection | 113 | REMOVAL | 134 |
| Climate Controlled Seat "HEAT" Switch Circuit | | INSTALLATION | 134 |

PRECAUTIONS

PRECAUTIONS

PF0:00001

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

AIS004W0

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

WARNING:

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

Service Notice

AIS001JC

- 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 Work

AIS004W1

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a cloth or vinyl tape to protect it.
- Protect the removed parts with a cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
 - Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.
Then rub with a soft and dry cloth.
 - Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3 %), and wipe the fouled area.
Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol, and gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

PRECAUTIONS

Precautions for Trouble Diagnosis

AIS004W2

- With the battery connected, if each local control unit (LCU) connector is left disconnected for at least 1 minute, the IVMS control unit stores a communication inactive malfunction. After reconnecting the connector, any of the following steps shall be done.
“Disconnect the IVMS control unit BAT power supply”
“using CONSULT-II, execute Erase memory”.

PREPARATION

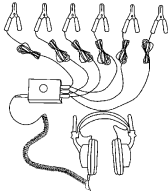
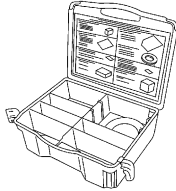
PREPARATION

PFP:00002

Special Service Tools

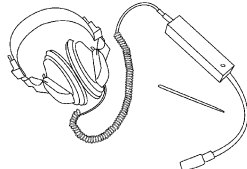
AIS001JG

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

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

Commercial Service Tools

AIS001JH

| Tool name | Description |
|--|--------------------|
| Engine ear  SIIA0995E | Location the noise |

A
B
C
D
E
F
G
H
SE
J
K
L
M

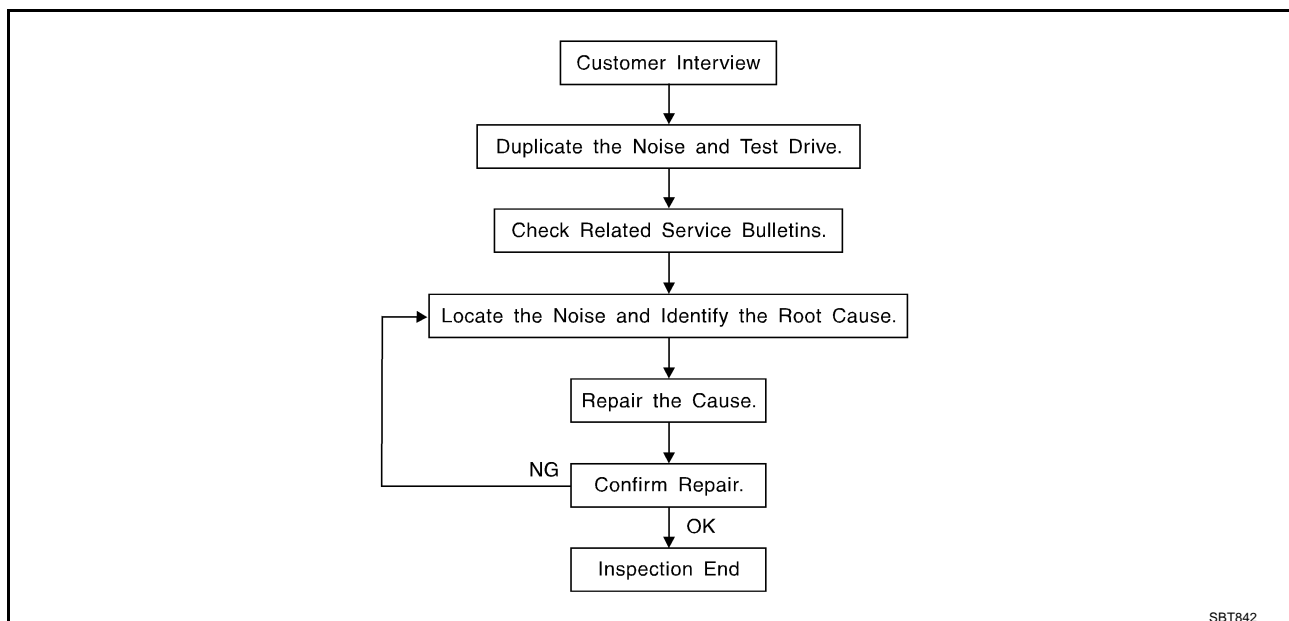
SQUEAK AND RATTLE TROUBLE DIAGNOSES

SQUEAK AND RATTLE TROUBLE DIAGNOSES

PFP:00000

Work Flow

AIS001JI



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 noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor)
Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces=higher pitch noise/softer surfaces=lower pitch noises/edge to surface=chirping
- Creak—(Like walking on an old wooden floor)
Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle)
Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door)
Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand)
Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise)
Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumble bee)
Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

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 the customer states exist when the noise occurs.
 - If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

CHECK RELATED SERVICE BULLETINS

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

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:
 - removing the components in the area that you suspect the noise is coming from.
Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
 - tapping or pushing/pulling the component that you suspect is causing the noise.
Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
 - feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
 - placing a piece of paper between components that you suspect are causing the noise.
 - looking for loose components and contact marks.
Refer to [SE-8, "Generic Squeak and Rattle Troubleshooting"](#).

REPAIR THE CAUSE

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

CAUTION:

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

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 × 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)

SQUEAK AND RATTLE TROUBLE DIAGNOSES

INSULATOR (Light foam block)

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

FELT CLOTHTAPE

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

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

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

UHMW (TEFLON) TAPE

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

SILICONE GREASE

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

Note: Will only last a few months.

SILICONE SPRAY

Use when grease cannot be applied.

DUCT TAPE

Use to eliminate movement.

CONFIRM THE REPAIR

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

Generic Squeak and Rattle Troubleshooting

AIS001JJ

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

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

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

CAUTION:

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

CENTER CONSOLE

Components to pay attention to include:

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.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

TRUNK

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

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

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

SUNROOF/HEADLINING

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

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

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

SEATS

When isolating seat noise it's important to note the position the seat is in and the load placed on the seat when the noise is present. These conditions should be duplicated when verifying and isolating the cause of the noise.

Cause of seat noise include:

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

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

UNDERHOOD

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

Causes of transmitted underhood noise include:

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

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

A

B

C

D

E

F

G

H

SE

J

K

L

M

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Diagnostic Worksheet

AIS001JK



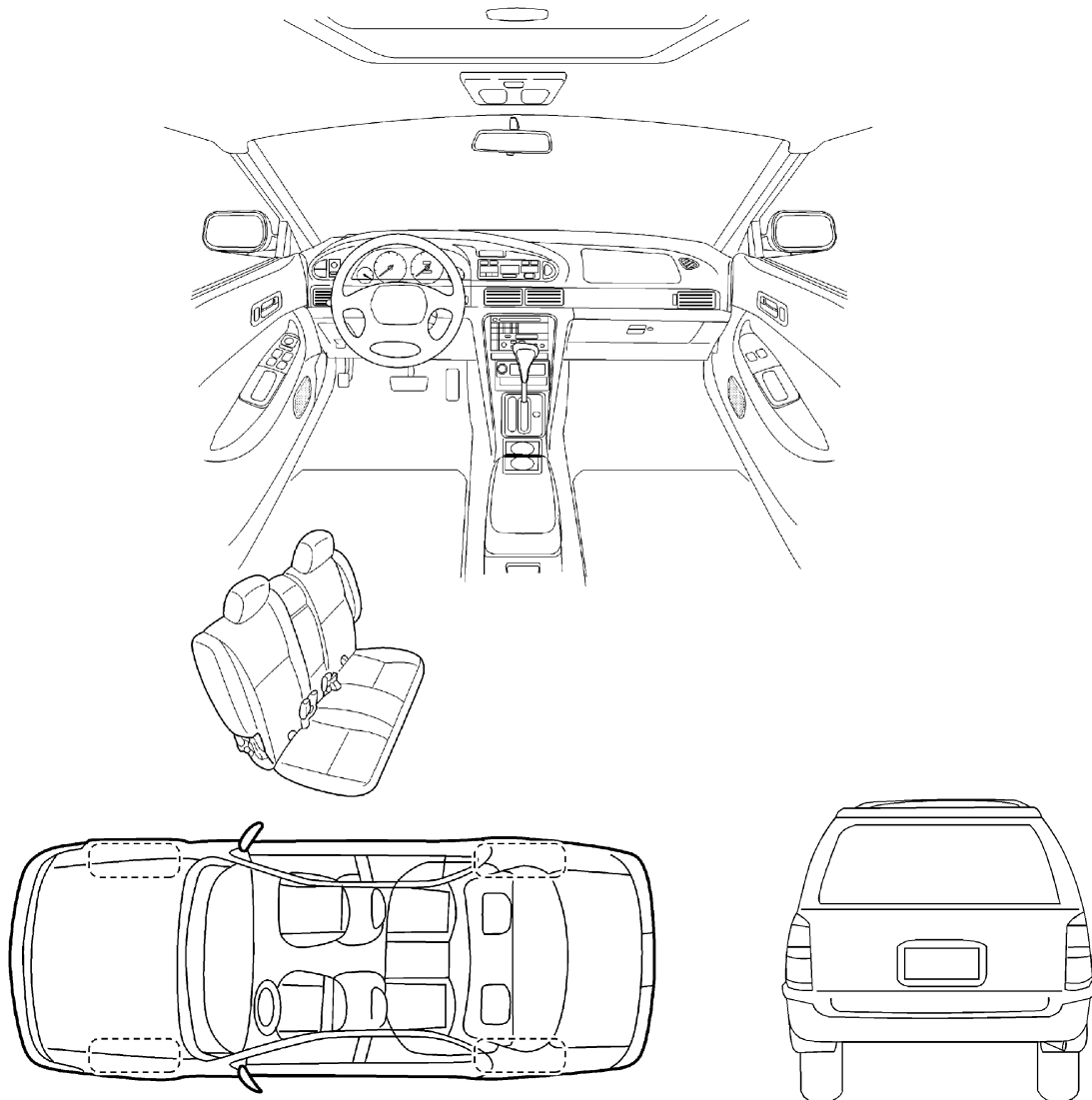
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:

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

SBT860

SQUEAK AND RATTLE TROUBLE DIAGNOSES

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

Briefly describe the location where the noise occurs:

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 st 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:

| | 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: _____

This form must be attached to Work Order

SBT844

CLIP AND FASTENER


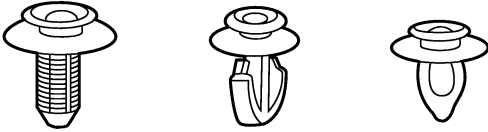


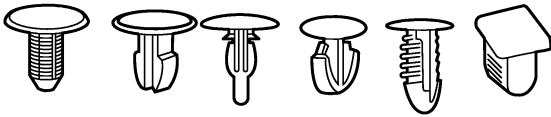
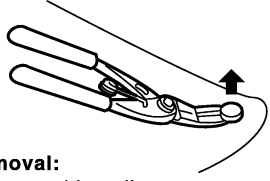
CLIP AND FASTENER

PFP:76906

Description

AIS001Q3

- Clips and fasteners in SE section correspond to the following numbers and symbols.
- Replace any clips and/or fasteners which are damaged during removal or installation.

| Symbol No. | Shapes | Removal & Installation |
|---|---|--|
| <p>C101</p>  |  | <p>Removal: Remove by bending up with flat-bladed screwdrivers or clip remover.</p>  |
| <p>C103</p>  |  |  <p>Removal: Remove with a clip remover.</p> |

PIIA3432E

AUTOMATIC DRIVE POSITIONER

AUTOMATIC DRIVE POSITIONER

PFP:28491

Manual Operation

AIS002J0

The driving position (seat position, steering wheel position, door mirror position) can be adjusted with the power seat switch or ADP (Automatic Drive Positioned) steering switch.

NOTE:

- The seat and steering wheel position can be manually operated with the ignition switch OFF.
- The door mirrors can be manually operated with the ignition switch in either ACC or ON.

Automatic Operation

AIS002J1

| Function | Description |
|--------------------------|--|
| Memory switch operation | The seat, steering wheel and door mirror move to the stored driving position by pushing memory switch. |
| Entry / Exiting function | |
| Return operation | At entry, the seat and steering wheel return from the exiting position to the previous driving position. before the turnout operation. |
| Turnout operation | At exit, the seat moves backward, and the steering wheel moves forward and upward.(turnout position) |

NOTE:

- Disconnecting the battery erases the stored memory.
- After connecting the battery, insert the key into the ignition cylinder and turn the driver door switch ON (open)→OFF (close)→ON (open), the Entry / Exiting function becomes possible.

| | |
|---------------------------------|--|
| Auto operation stop conditions. | <ul style="list-style-type: none"> ● When the vehicle speed becomes 7 km/h (4 MPH) or higher. ● When the manual switch is operated. ● When any two or more switches among the setting switch, memory switch 1, or 2 are pressed simultaneously. ● When the tilt sensor or telescoping sensor malfunction is detected. ● When the A/T selector lever is shifted to a position other than P-position. |
|---------------------------------|--|

NOTE:

During automatic operation, if the ignition switch is turned ON→START, the automatic operation is suspended. When the ignition switch returns to ON, it resumes.

System Description

AIS001JL

- The system automatically moves the driver seat and steering wheel to facilitate entry/exit to/from the vehicle by connecting the BCM (Body Control Module) to the driver seat control unit the multiple communication line. The BCM can also store the optimum driving positions (driver seat, steering wheel and door mirror position) for 2 people. If the driver is changes, one-touch operation allows changing to the other driving position.
- The settings (ON/OFF) of the automatic tilt steering wheel and sliding seat (Entry/exiting function) at entry/exit can be changed as desired, using the display unit in the center of the instrument panel.

FAIL-SAFE MODE

When the ignition switch is in the ON position, if any of the parts (indicated in the following chart) move more than the specified amount within a period "T2" when no ON input is sent from any of the switches (indicated in the following chart), or an output from the automatic drive positioner is not produced, an output malfunction is sensed. Motor operation will be suspended automatically, and all automatic operations will be ineffective. (In this case, the motor will not operate manually).

| OPERATED PORTION | T2 | Allowable measurement |
|------------------|------------------|---------------------------|
| Seat sliding | Approx. 2.5 sec. | Within 6 mm (0.24 in). |
| Seat reclining | Same as above | Change angel within 2.22° |
| Steering wheel | Same as above | Change angel within 1° |

AUTOMATIC DRIVE POSITIONER

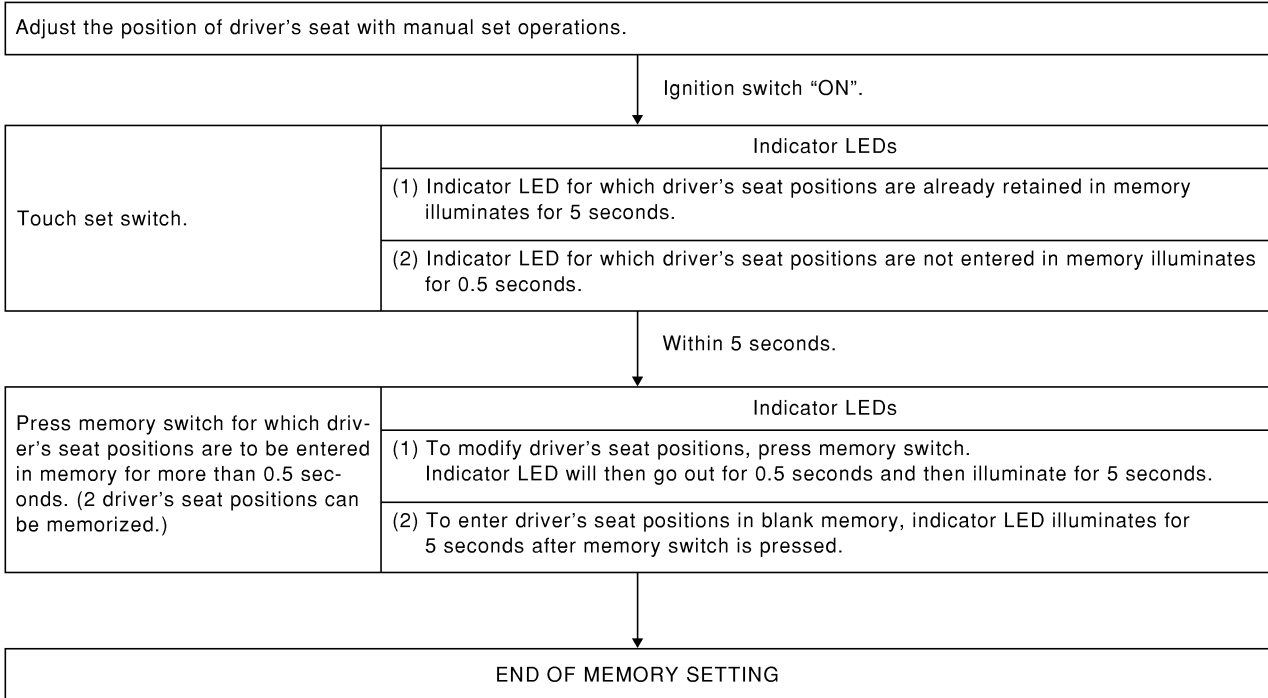
CANCEL OF FAIL-SAFE MODE

- The mode is cancelled when the selector lever is shifted to P-position from any other position.
- The mode can be cancelled with CONSULT-II.

MEMORY STORING

Store the 2 driving positions and shifts to the stored driving position with the memory switch.

PROCEDURE FOR STORING MEMORY



SEL592W

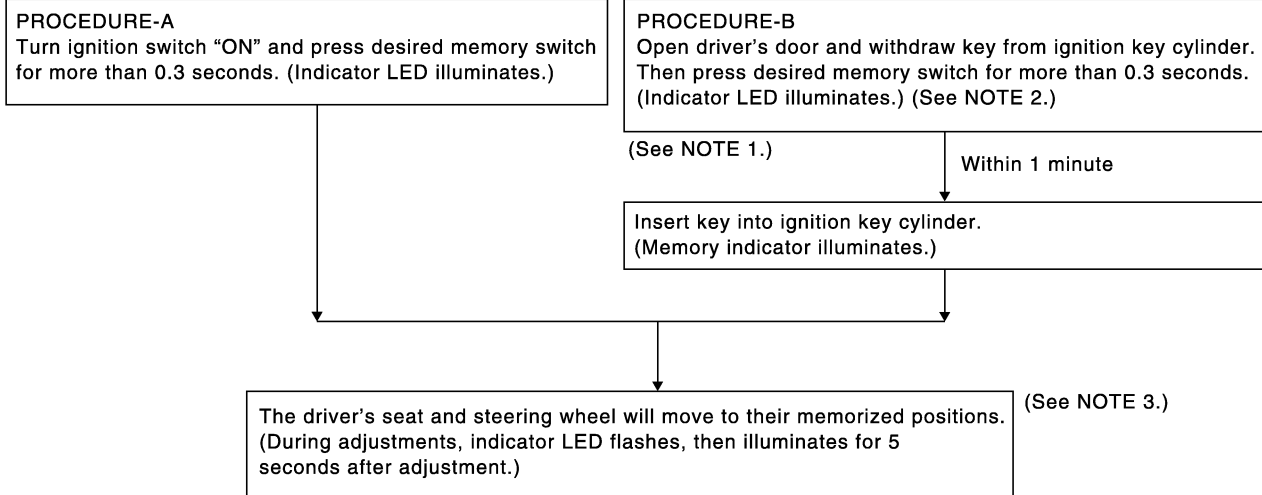
NOTE:

The memory switch can be reset within 0.5 seconds (0.5 is excluded) after the switch is pressed. If it is too late, press the setting switch and memory switch again.

AUTOMATIC DRIVE POSITIONER

MEMORY SWITCH OPERATION

SELECTING THE MEMORIZED POSITION



PIIA4467E

NOTE:

1. Do not sliding driver seat when Entry / Exiting vehicle setting as it will not operate. Refer to [SE-36, "SETTING CHANGE FUNCTION"](#).
2. Automatic turnout operation will be performed.
3. The driver's seat position and steering adjustment (see the following Table) operate simultaneously in the order of priority.

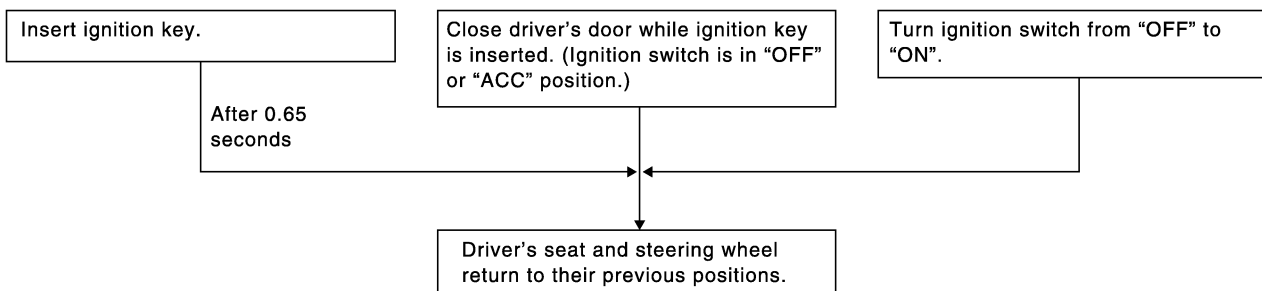
| Priority | Function | Priority | Function |
|----------|------------------------------------|----------|----------------|
| 1 | Seat sliding, (door mirror–LH/RH)* | 4 | Seat reclining |
| 2 | Steering wheel telescoping | 5 | Seat lifter–FR |
| 3 | Steering wheel tilt | 6 | Seat lifter–RR |

*: In conjunction with sliding the seat, the door mirrors are positioned vertically, and then horizontally (Procedure-A).

The mirror moves when the ignition switch is in ACC (Procedure-B)

RETURN OPERATION

When the seat and steering wheel are on the turnout positions, the following operation moves the seat and steering wheel to the previous position before the turnout operation.



PIIA4468E

NOTE:

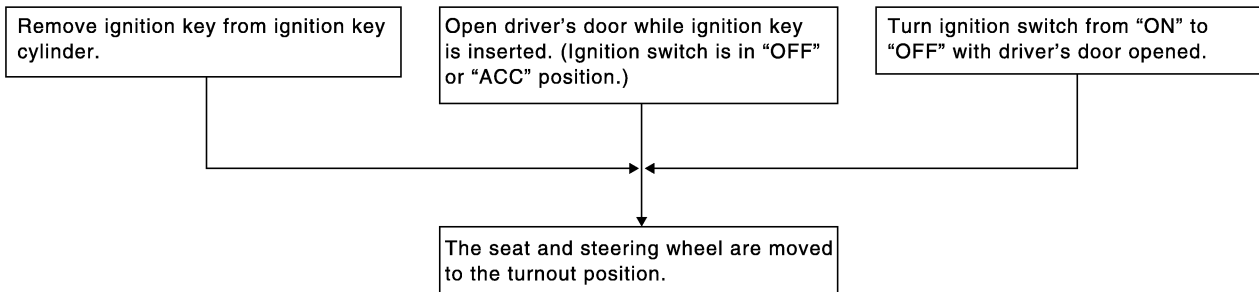
The seat sliding, steering wheel tilt, and telescoping return to the original positions simultaneously.

AUTOMATIC DRIVE POSITIONER

TURNOUT OPERATION

At exit, the seat and steering wheel are automatically moved to the turnout position.

- Seat: moves backward.
- Steering wheel: tilted upward and extended fully.



PIIA4469E

NOTE:

The seat sliding, steering wheel tilt, and telescoping are moved to the turnout position simultaneously.

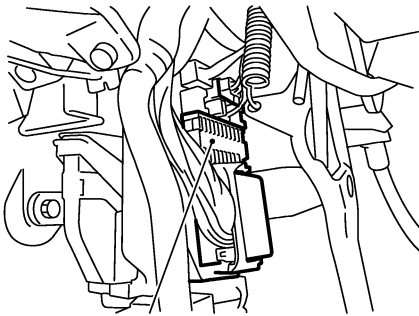
AUTOMATIC DRIVE POSITIONER

AIS001JM

Component Parts and Harness Connector Location

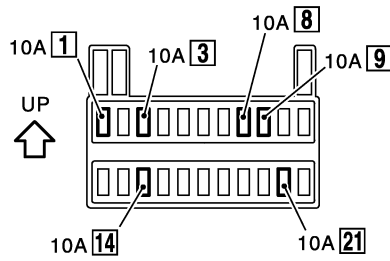
A
B
C
D
E
F
G
H
SE
J
K
L
M

Dash side LH

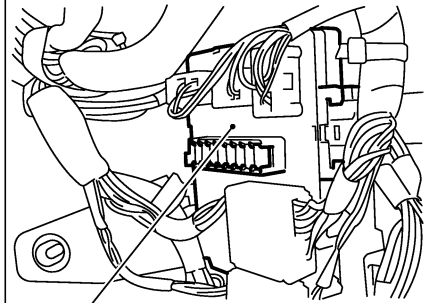


Fuse block (J/B) No. 1

Fuse block (J/B) No. 1

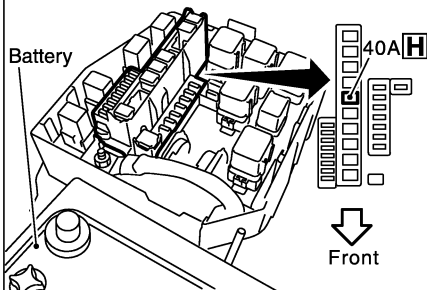
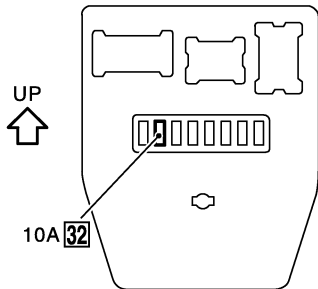


Dash side RH

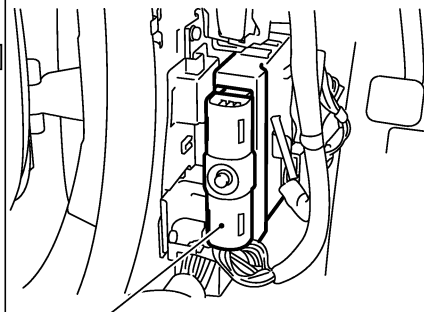


Fuse block (J/B) No. 2

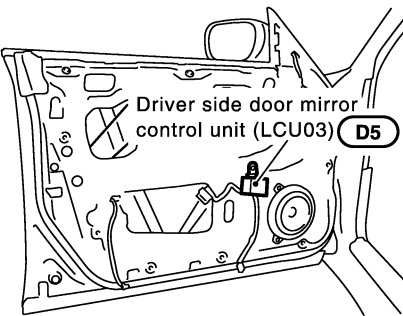
Fuse block (J/B) No. 2



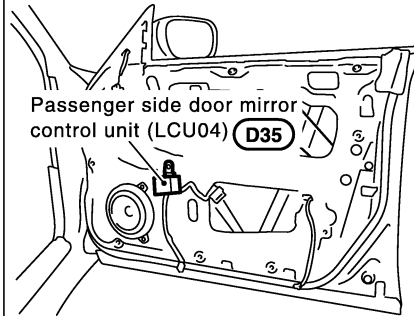
Dash side LH



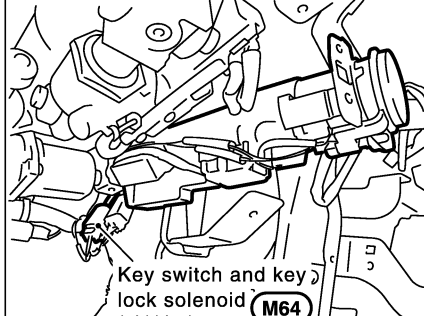
BCM (M4, B4)



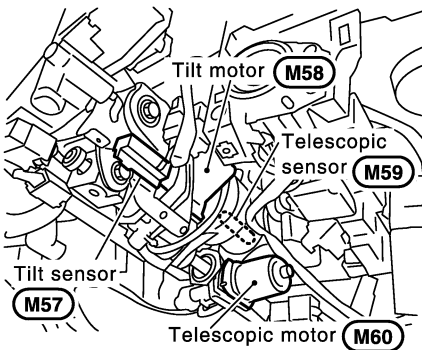
Driver side door mirror control unit (LCU03) (D5)



Passenger side door mirror control unit (LCU04) (D35)



Key switch and key lock solenoid (M64)

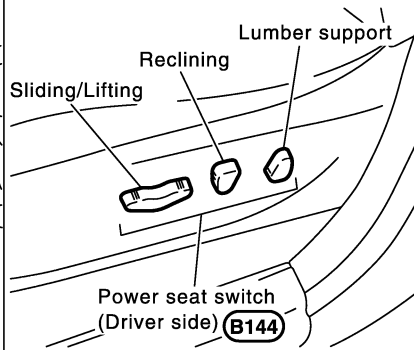


Tilt motor (M58)

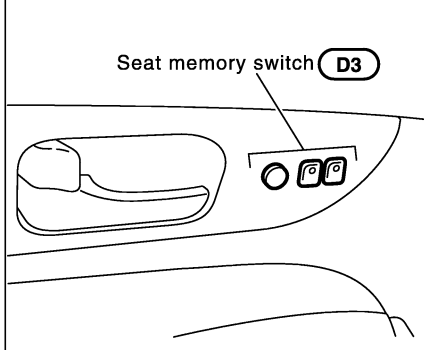
Telescopic sensor (M59)

Tilt sensor (M57)

Telescopic motor (M60)



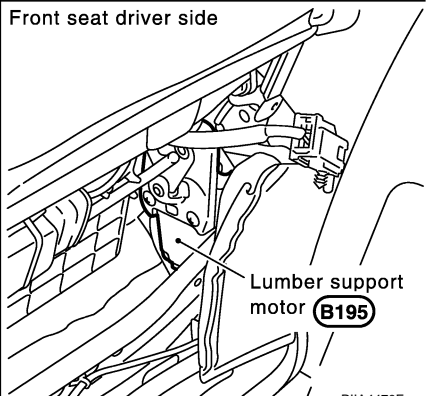
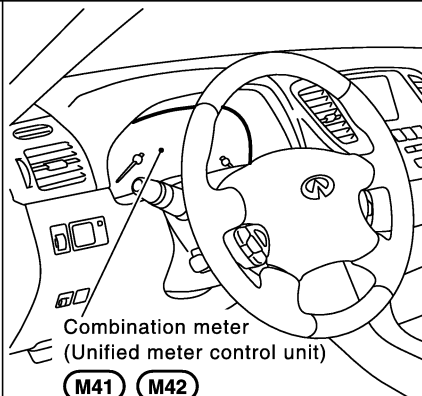
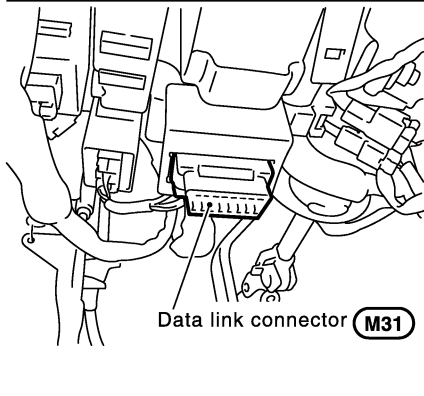
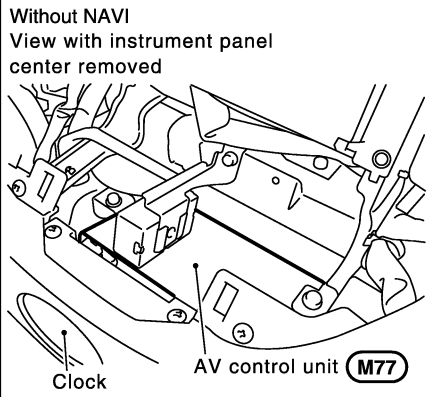
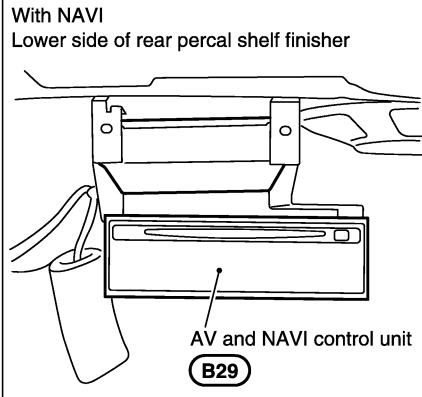
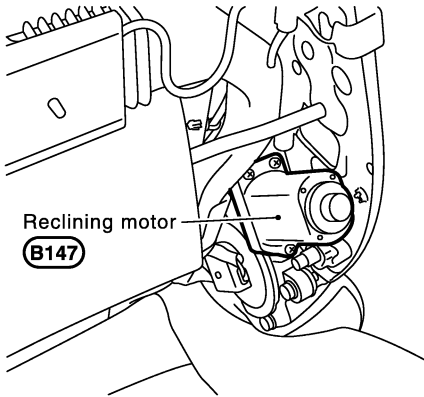
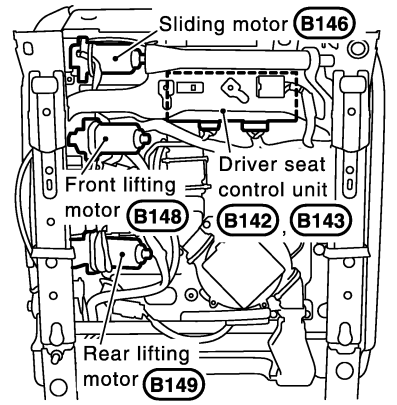
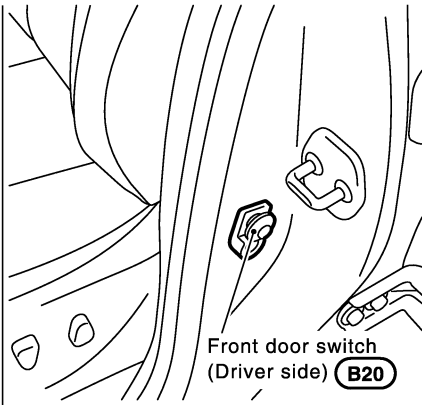
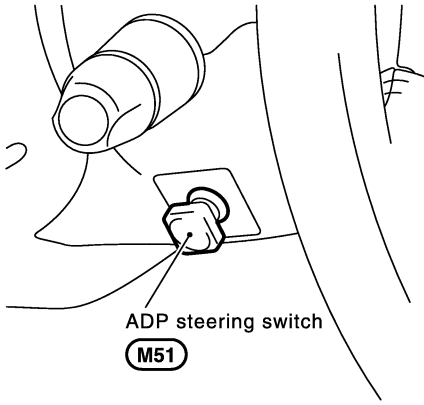
Power seat switch (Driver side) (B144)



Seat memory switch (D3)

PIIA2900E

AUTOMATIC DRIVE POSITIONER



PIIA4470E

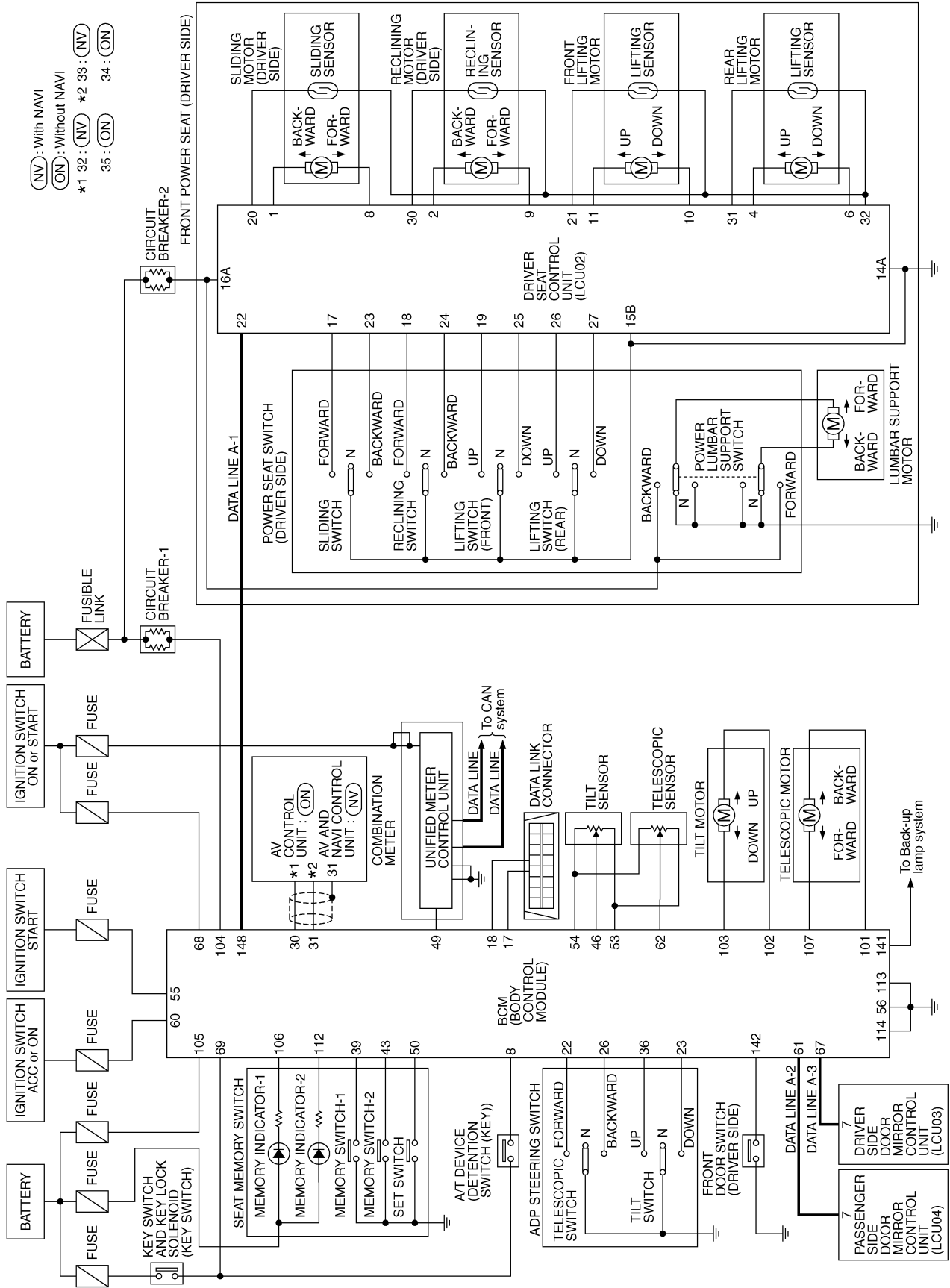
AUTOMATIC DRIVE POSITIONER

Schematic

AIS001JN

A
B
C
D
E
F
G
H
I
J
K
L
M

SE



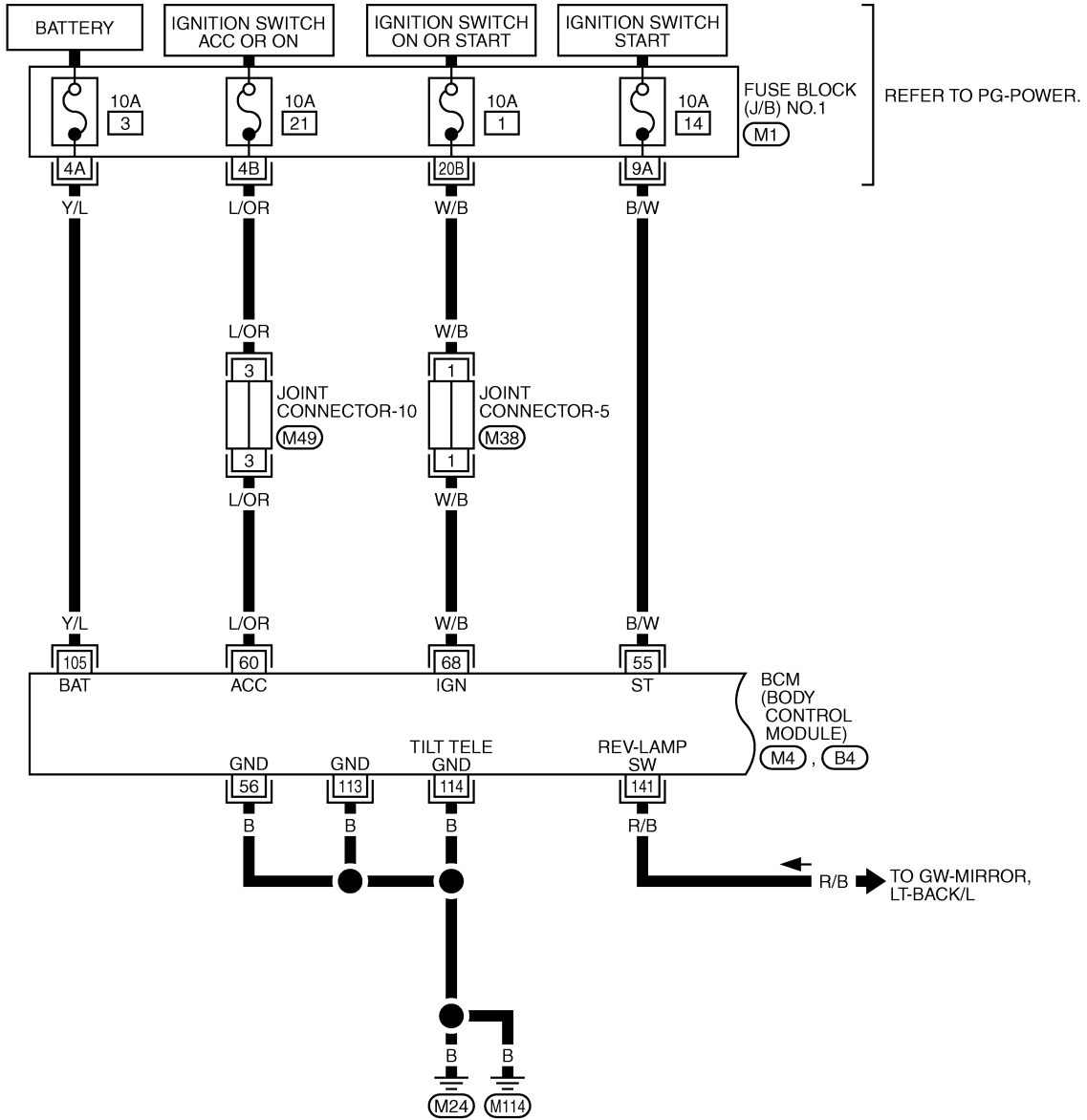
TIWA0239E

AUTOMATIC DRIVE POSITIONER

Wiring Diagram — AUT/DP —

AIS001JO

SE-AUT/DP-01



| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

(M38)
P

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |

(M49)
L

REFER TO THE FOLLOWING.

(M1) - FUSE BLOCK-JUNCTION BOX (J/B) NO.1

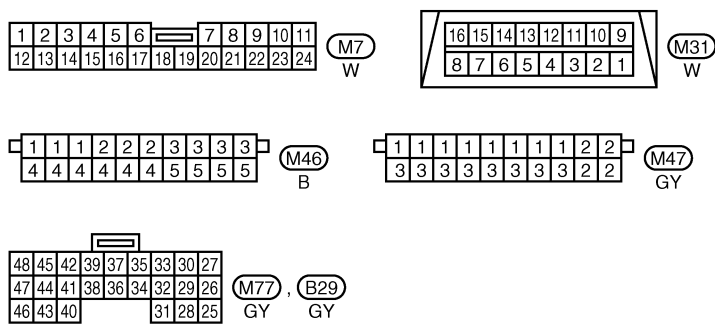
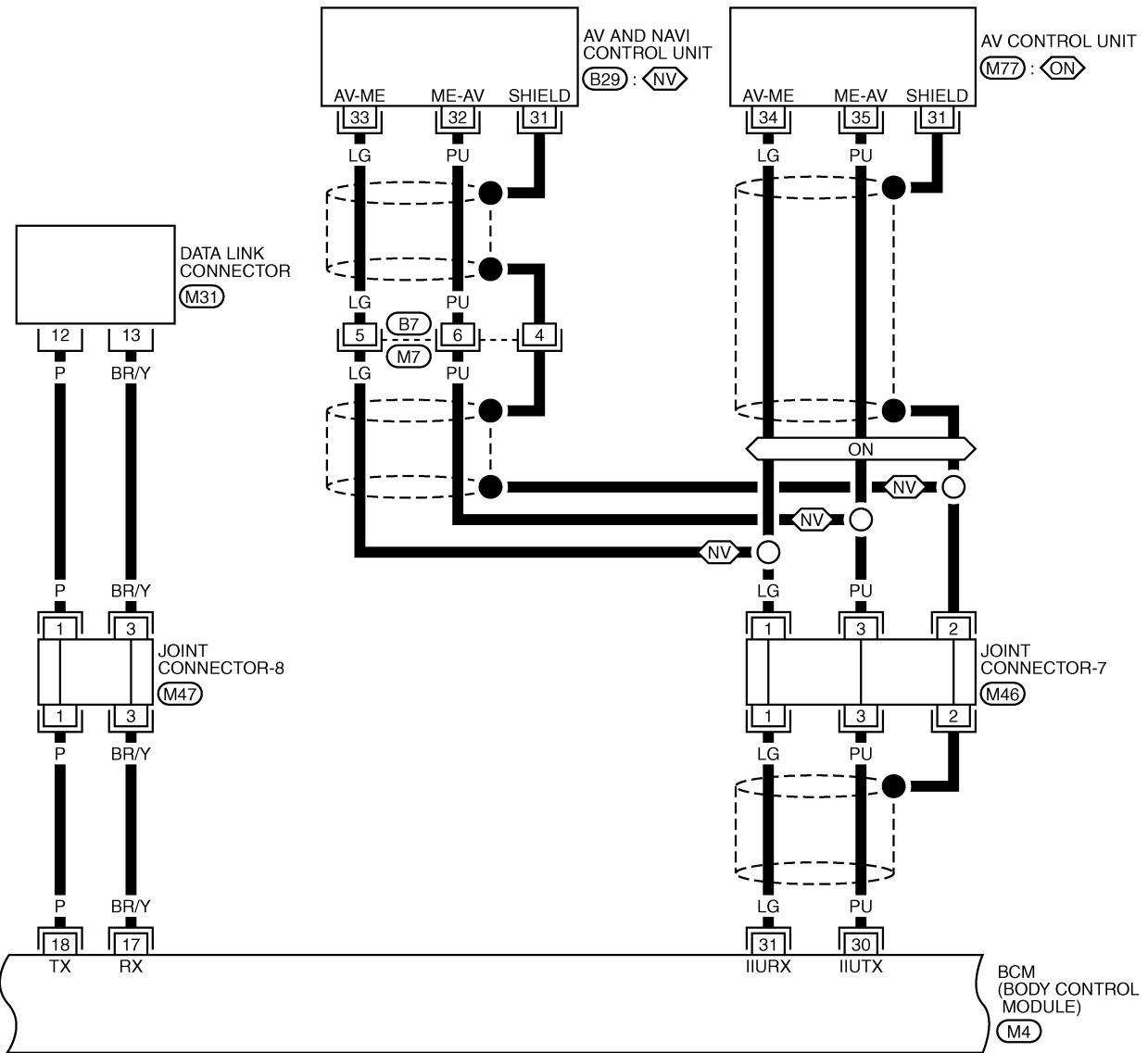
(M4), (B4) - ELECTRICAL UNITS

TIWA0240E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-02

◊NV◊ : WITH NAVI
 ◊ON◊ : WITHOUT NAVI



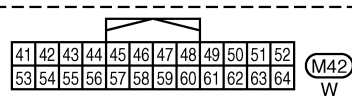
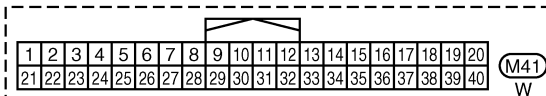
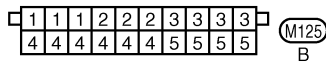
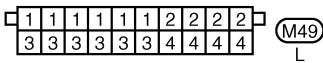
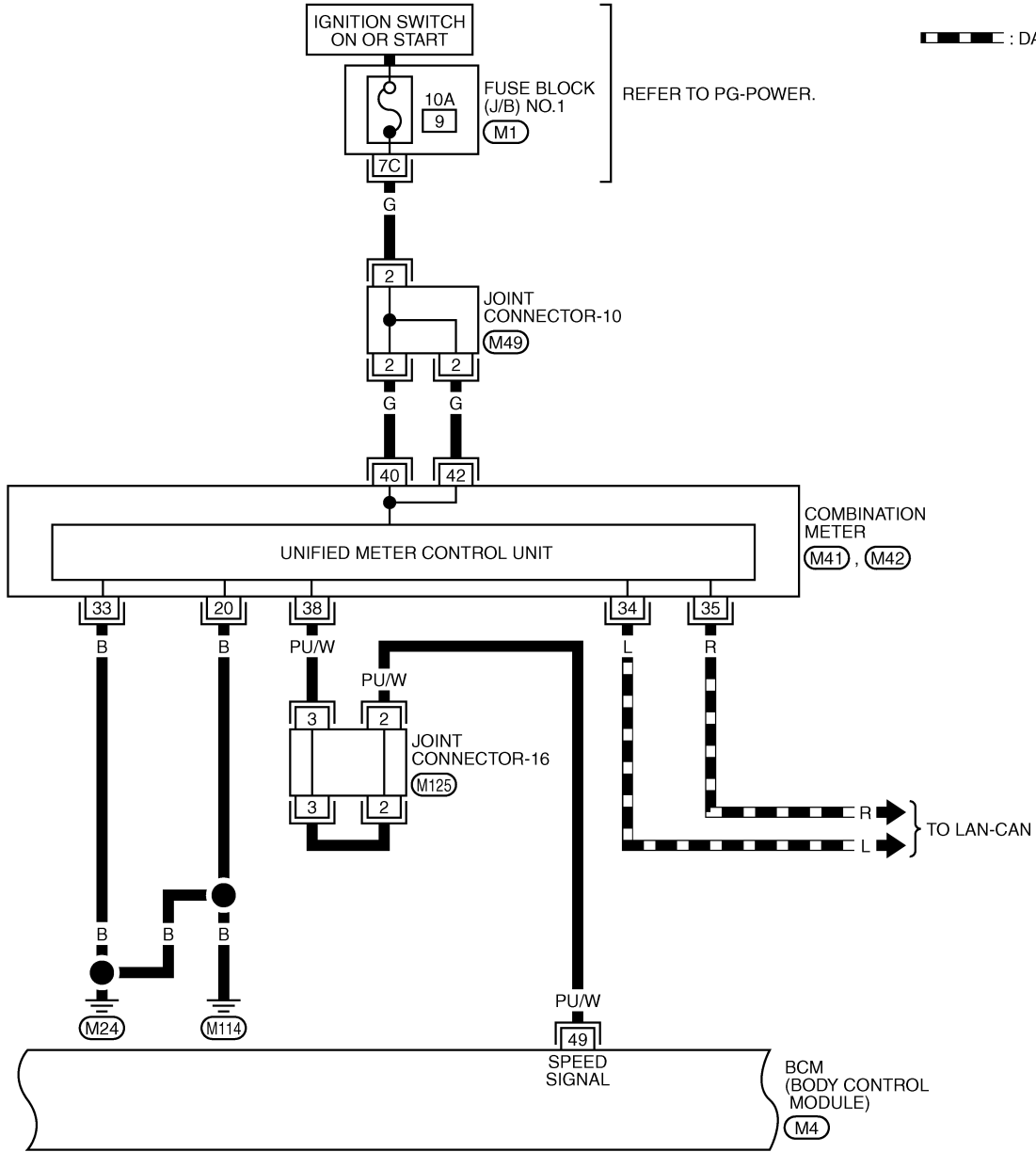
REFER TO THE FOLLOWING.
 ◊M4◊ -ELECTRICAL UNITS

TIWA0241E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-03

▬▬▬ : DATA LINE



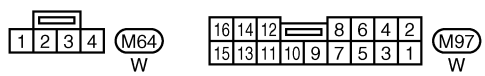
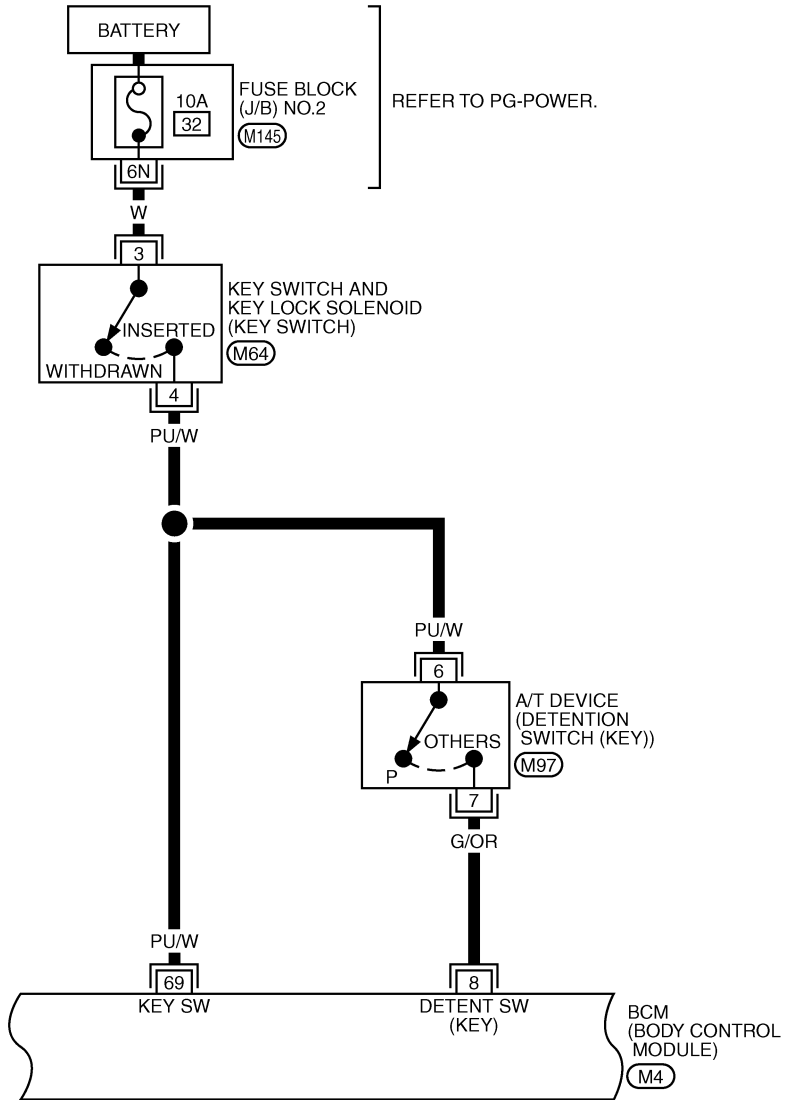
REFER TO THE FOLLOWING.
 (M1) - FUSE BLOCK-JUNCTION BOX (J/B) NO.1
 (M4) - ELECTRICAL UNITS

TIWA0242E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-04

A
B
C
D
E
F
G
H
SE
J
K
L
M



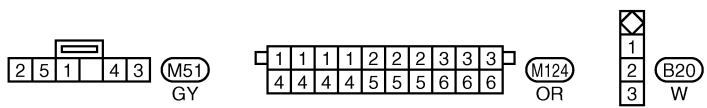
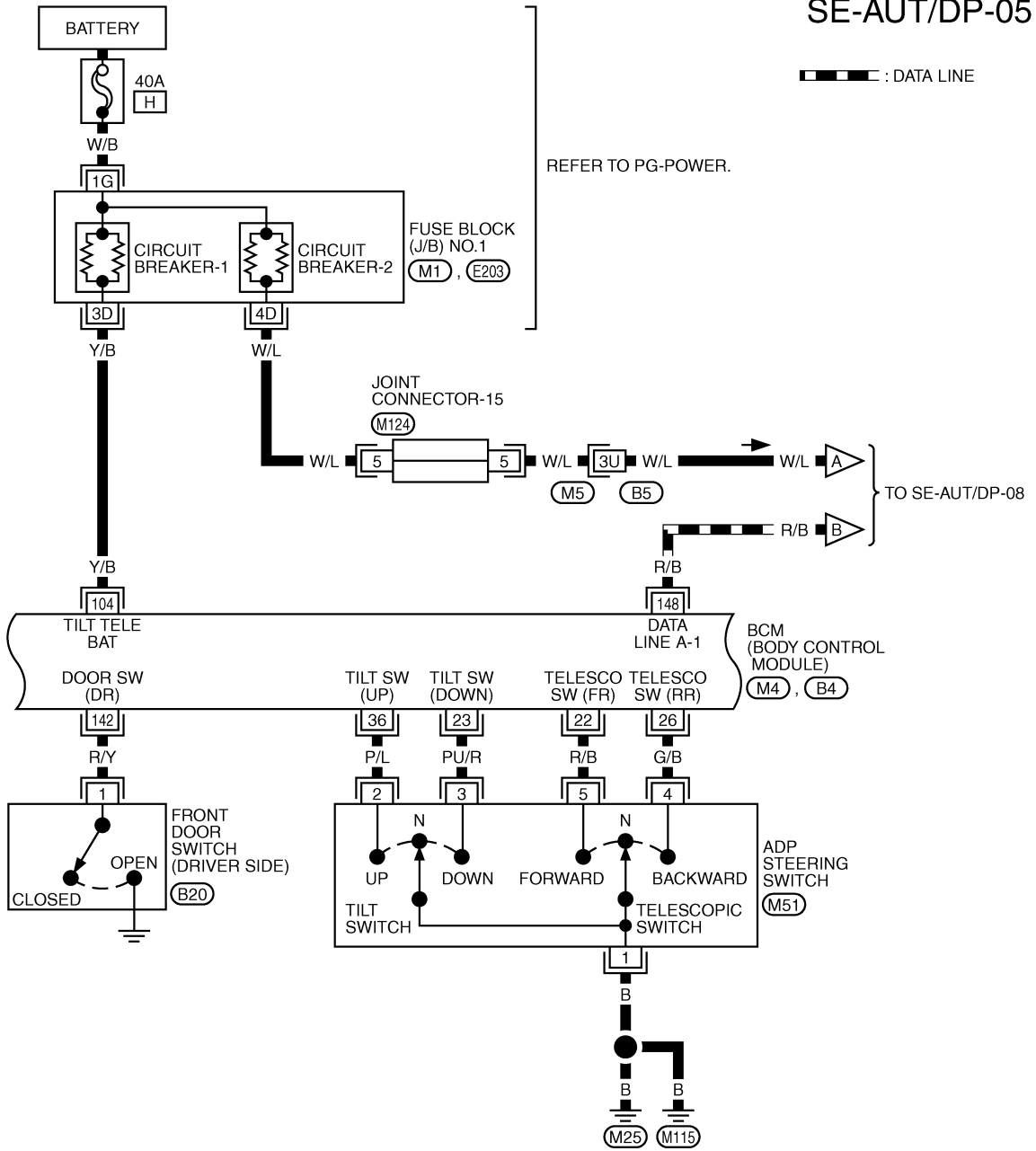
REFER TO THE FOLLOWING.
 (M145) -FUSE BLOCK-JUNCTION BOX (J/B) NO.2
 (M4) -ELECTRICAL UNITS

TIWA0485E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-05

▬ : DATA LINE



REFER TO THE FOLLOWING.

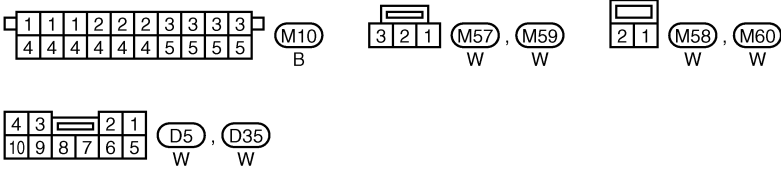
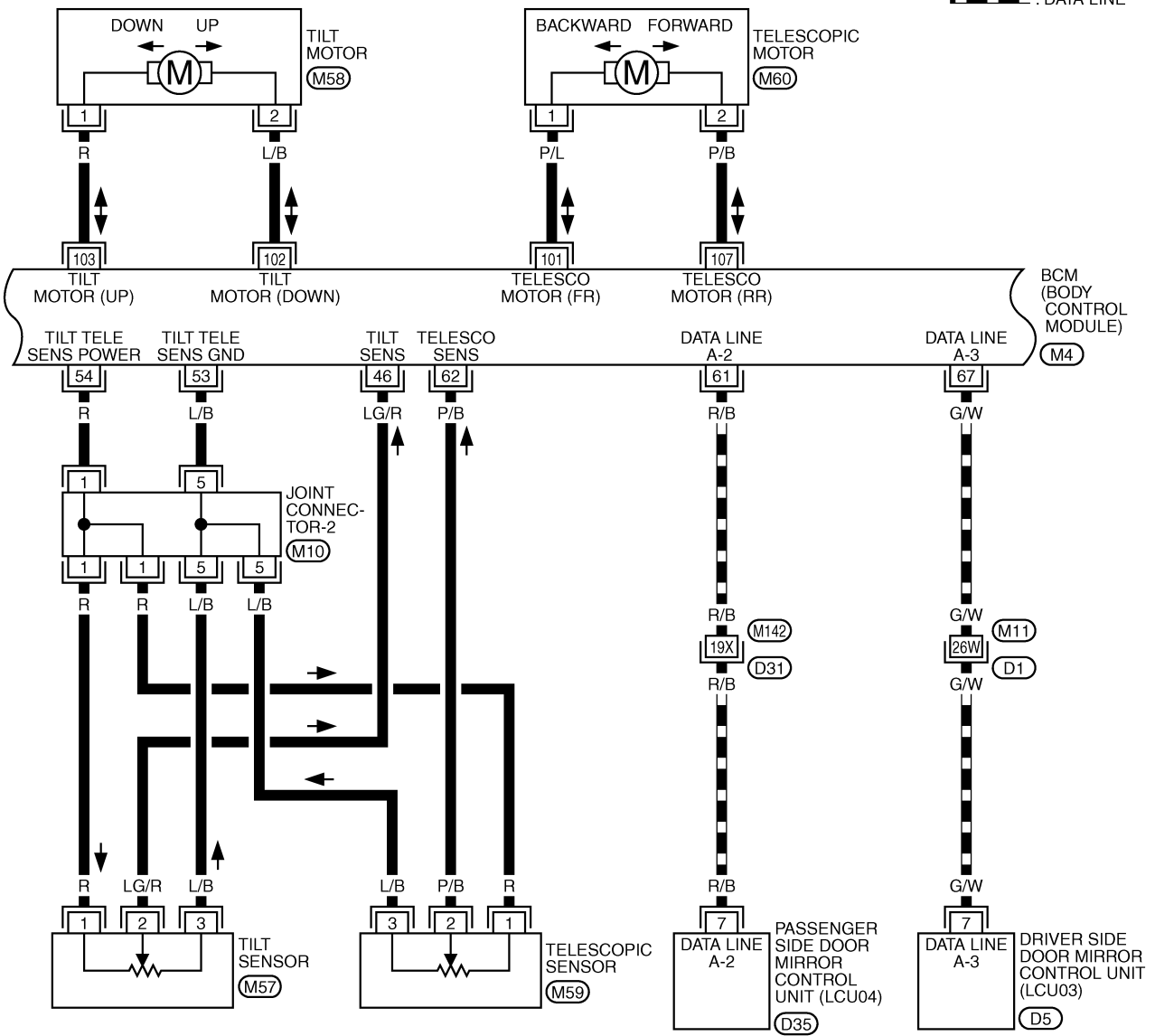
- (M5) -SUPER MULTIPLE JUNCTION (SMJ)
- (M1), (E203) -FUSE BLOCK-JUNCTION BOX (J/B) NO.1
- (M4), (B4) -ELECTRICAL UNITS

TIWA0244E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-06

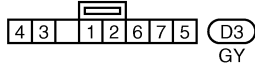
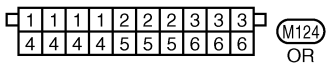
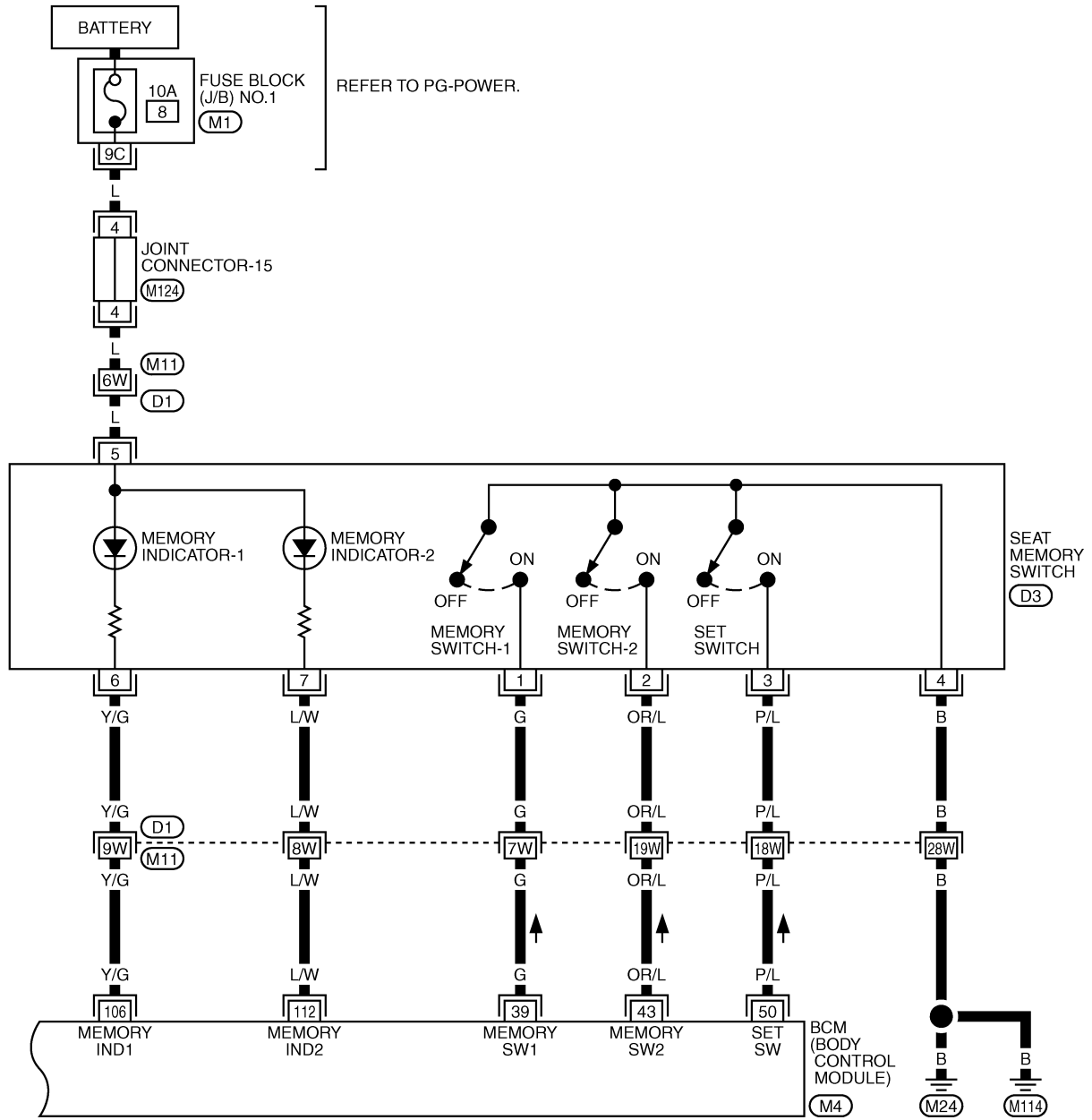
A
B
C
D
E
F
G
H
SE
J
K
L
M



REFER TO THE FOLLOWING.
 (D1), (D31) -SUPER MULTIPLE JUNCTION (SMJ)
 (M4) -ELECTRICAL UNITS

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-07



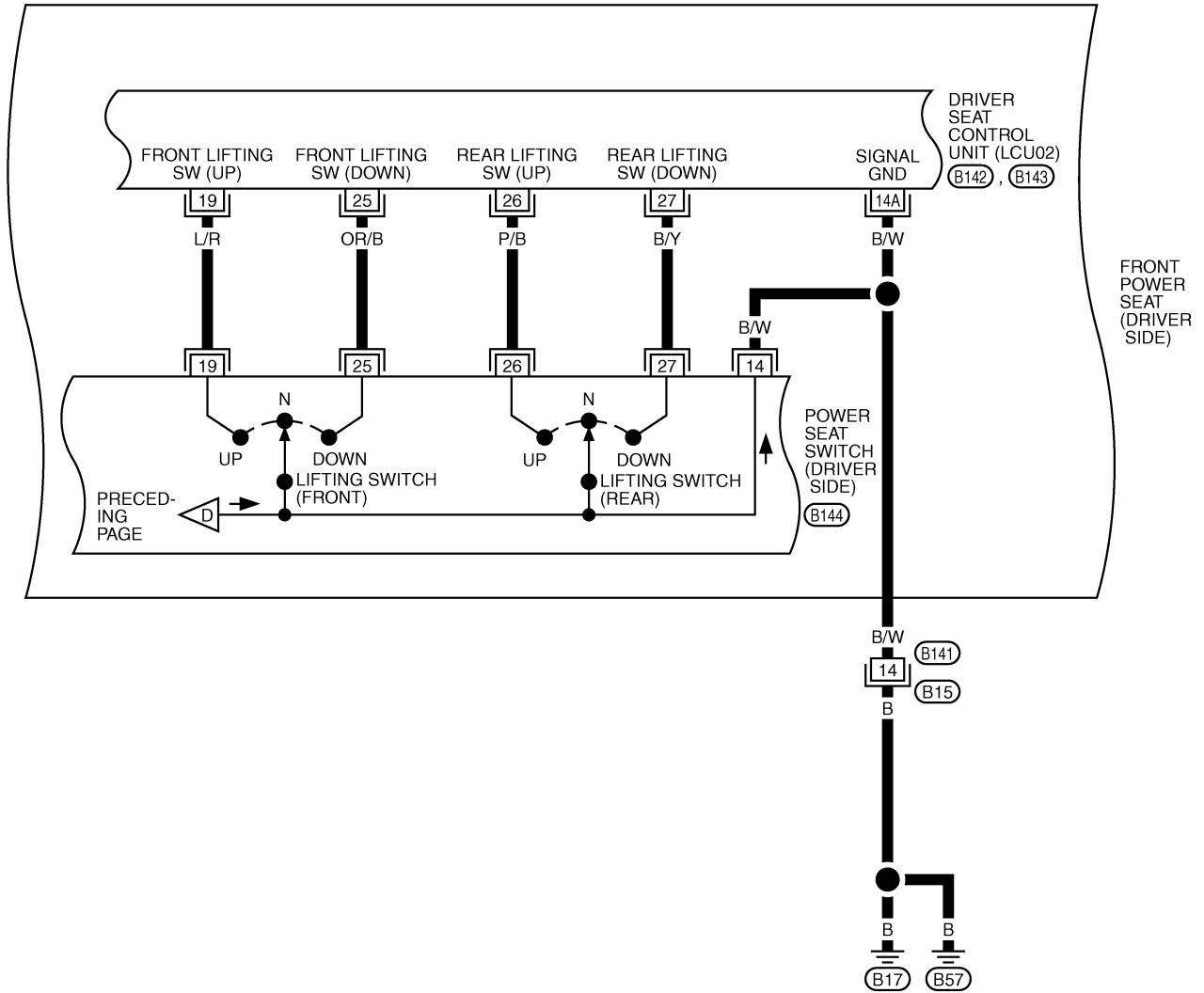
REFER TO THE FOLLOWING.

- (D1) -SUPER MULTIPLE JUNCTION (SMJ)
- (M1) -FUSE BLOCK-JUNCTION BOX (J/B) NO.1
- (M4) -ELECTRICAL UNITS

TIWA0246E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-09



| | | | |
|----|----|----|----|
| JB | 16 | L1 | 15 |
| JD | L2 | 41 | 14 |

(B15)
W

| | | | | |
|-----|-----|-----|----|----|
| 8 | 4 | 6 | 2 | 1 |
| 16A | 14A | 15B | 10 | 11 |

(B142)
W

| | | | | | | |
|----|----|----|----|----|----|----|
| 23 | 22 | 21 | 20 | 19 | 18 | 17 |
| 32 | 31 | 30 | 27 | 26 | 25 | 24 |

(B143)
W

| | | | | | |
|----|----|----|----|----|----|
| 17 | 18 | 15 | 16 | 14 | 3 |
| 23 | 24 | 25 | 19 | 27 | 26 |

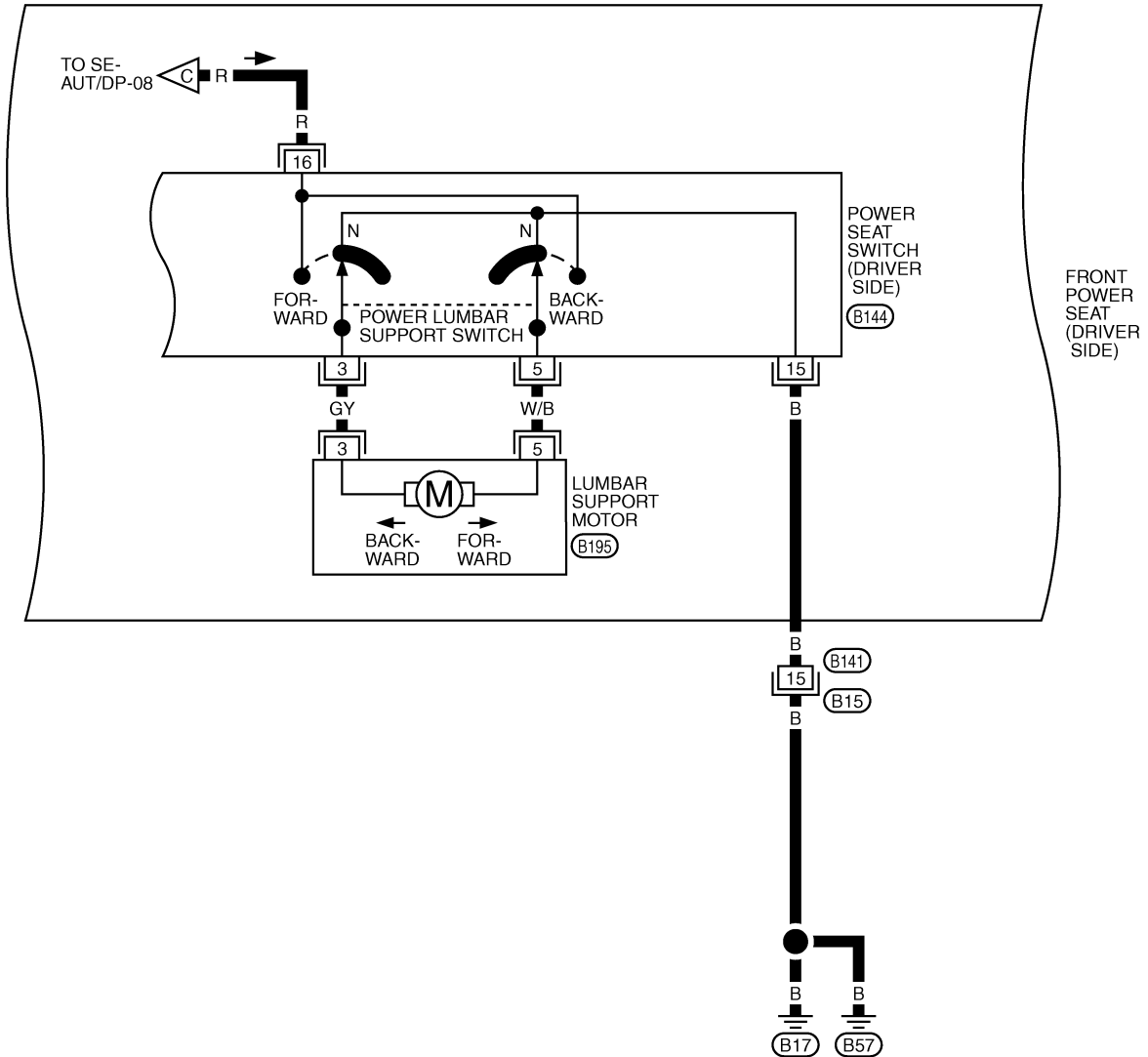
(B144)
W

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

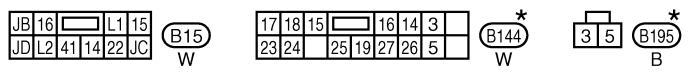
TIWA0248E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-10



A
B
C
D
E
F
G
H
SE
J
K
L
M

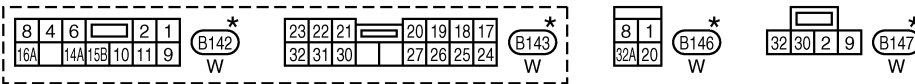
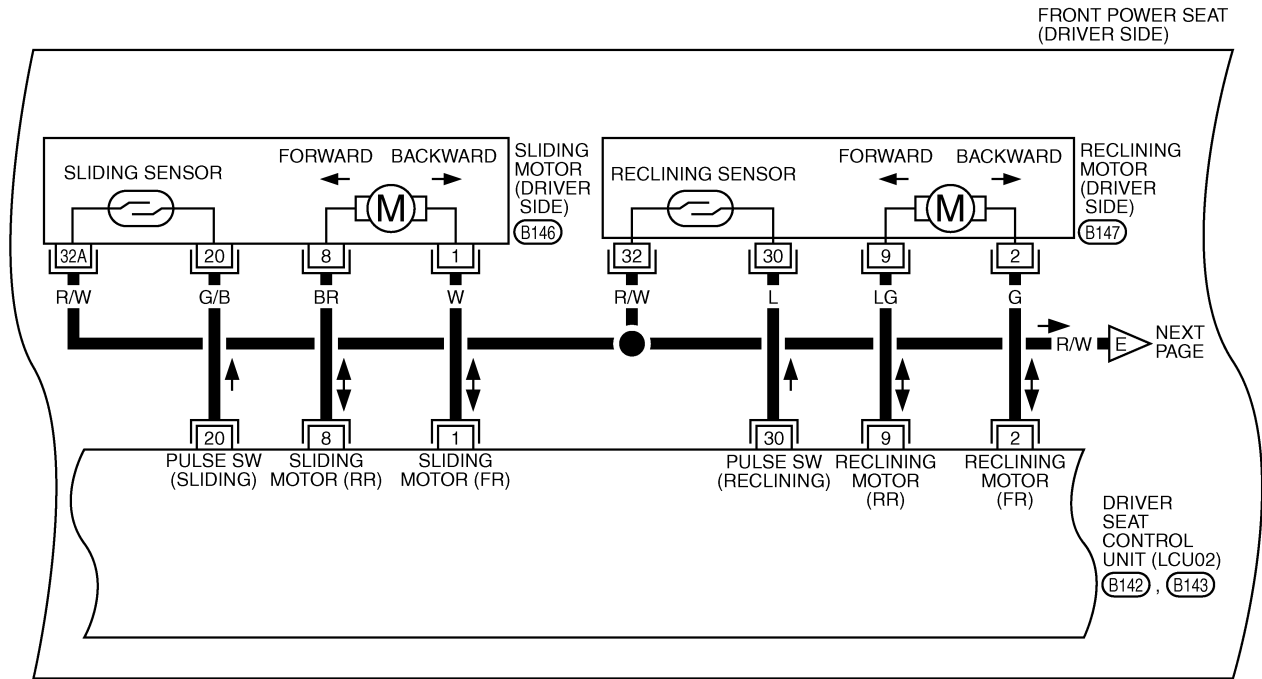


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWA0300E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-11



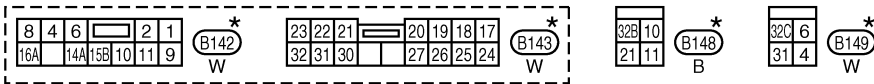
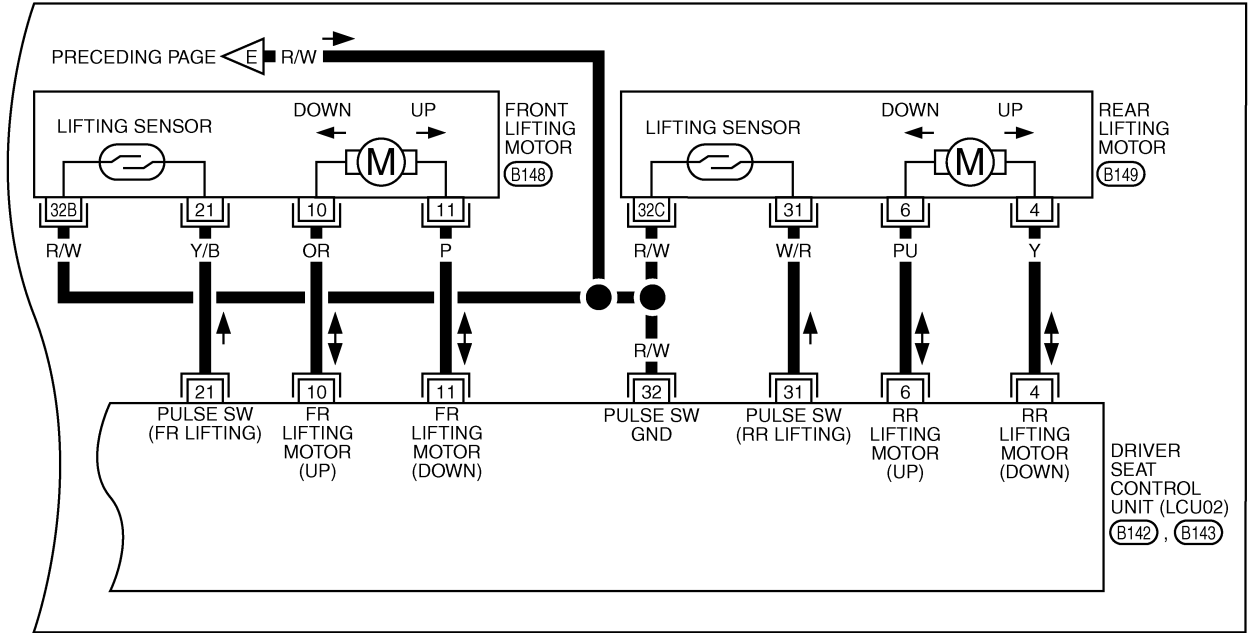
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWA0249E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-12

FRONT POWER SEAT (DRIVER SIDE)



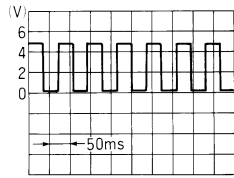
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWA0250E

AUTOMATIC DRIVE POSITIONER

Terminals and Reference Values for BCM

AIS001JP

| Terminal | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx) |
|----------|------------|---|--|-------------------------------------|---|
| 8 | G/OR | Detente switch signal. | Selector lever in P-position. | | 0 |
| | | | Selector lever in other than P-position. With ignition key in ignition key cylinder | | Battery voltage |
| 17 | BR/Y | Data link (RX line) | — | | — |
| 18 | P | Data link (TX line) | — | | — |
| 22 | R/B | Telescopic switch FR signal | Telescoping switch | Forward operation (Motor operated) | 0 |
| | | | | OFF | 5 |
| 23 | PU/R | Tilt switch DOWN signal | Tilt switch | DOWN operation (Motor operated) | 0 |
| | | | | OFF | 5 |
| 26 | G/B | Telescopic switch RR signal | Telescoping switch | Backward operation (Motor operated) | 0 |
| | | | | OFF | 5 |
| 30 | PU | Monitor line (TX) | — | | — |
| 31 | LG | Monitor line (RX) | — | | — |
| 36 | P/L | Tilt switch UP signal | Tilt switch | UP operation (Motor operated) | 0 |
| | | | | OFF | 5 |
| 39 | G | Memory switch 1 signal | Memory switch 1 | ON | 0 |
| | | | | OFF | 5 |
| 43 | OR/L | Memory switch 2 signal | Memory switch 2 | ON | 0 |
| | | | | OFF | 5 |
| 46 | LG/R | Tilt sensor input/output | Tilt position, top | | 2 |
| | | | Tilt position, bottom | | 4 |
| 49 | PU/W | Vehicle speed signal (2-pulse) | When vehicle speed is approx. 40 km/h (25 MPH). | |  |
| 50 | P/L | Seat memory setting switch signal | Setting switch | ON | 0 |
| | | | | OFF | 5 |
| 53 | L/B | Tilt and telescopic sensor ground | Ignition switch ON | | 0 |
| 54 | R | Tilt and telescopic sensor power supply | Ignition switch OFF | | 5 |
| 55 | B/W | IGN START power supply | Ignition switch START | | Battery voltage |
| 56 | B | ground | Ignition switch ON | | 0 |
| 60 | L/OR | ACC power supply | Ignition switch ACC | | Battery voltage |
| 61 | R/B | Data link A-2 | — | | — |
| 62 | P/B | Telescopic sensor input/output | Telescoping position, top | | 2 |
| | | | Telescoping position, bottom | | 4 |

AUTOMATIC DRIVE POSITIONER

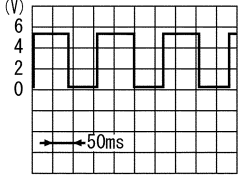
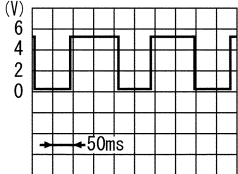
| Terminal | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx) |
|----------|------------|---|--------------------------|-------------------------|-------------------------|
| 67 | G/W | Data link A-3 | — | | — |
| 68 | W/B | IGN power supply | Ignition switch ON | | Battery voltage |
| 69 | PU/W | Key-in detection switch signal | Insert the key (ON). | | Battery voltage |
| | | | Remove the key (OFF). | | 0 |
| 101 | P/L | Telescopic motor FR signal | Telescoping switch | ON (forward operation) | Battery voltage |
| | | | | OFF | 0 |
| 102 | L/B | Tilt motor DOWN signal | Tilt switch | ON (DOWN operation) | Battery voltage |
| | | | | OFF | 0 |
| 103 | R | Tilt motor UP signal | Tilt switch | ON (UP operation) | Battery voltage |
| | | | | OFF | 0 |
| 104 | Y/B | Power supply for tilt and telescopic device | Ignition switch OFF | | Battery voltage |
| 105 | Y/L | BAT power supply | Ignition switch OFF | | Battery voltage |
| 106 | Y/G | Power seat memory indicator 1 signal | Indicator 1 | ON | 0 |
| | | | | OFF | Battery voltage |
| 107 | P/B | Telescopic motor RR signal. | Telescoping switch | ON (backward operation) | Battery voltage |
| | | | | OFF | 0 |
| 112 | L/W | Power seat memory indicator 2 signal | Indicator 2 | ON | 0 |
| | | | | OFF | Battery voltage |
| 113 | B | Ground | Ignition switch ON | | 0 |
| 114 | B | Ground for tilt and telescoping device | Ignition switch ON | | 0 |
| 142 | R/Y | Driver door switch signal | Driver door open (ON) | | 0 |
| | | | Driver door closed (OFF) | | Battery voltage |
| 148 | R/B | Data line A-1 | — | | — |

Terminals and Reference Values for Driver Seat Control Unit

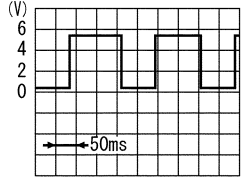
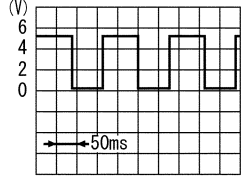
AIS001JQ

| TERMINAL | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx) |
|----------|------------|-----------------------------------|------------------------|-------------------------------------|-------------------------|
| 1 | W | Sliding motor FR signal | Sliding switch | Forward operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 2 | G | Reclining motor FR signal | Reclining switch | Forward operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 4 | Y | Rear end lifter motor DOWN signal | Rear end lifter switch | DOWN operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 6 | PU | Rear end lifter motor UP signal | Rear end lifter switch | UP operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 8 | BR | Sliding motor RR signal | Sliding switch | Backward operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |

AUTOMATIC DRIVE POSITIONER

| TERMI- NAL | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx) |
|---------------|---------------|--|----------------------------------|--|---|
| 9 | LG | Reclining motor RR signal | Reclining switch | Backward operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 10 | OR | Front end lifter motor UP signal | Front end lifter switch | UP operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 11 | P | Front end lifter motor DOWN signal | Front end lifter switch | DOWN operation (Motor operated) | Battery voltage |
| | | | | OFF | 0 |
| 14A | B/W | Ground | Ignition switch ON | | 0 |
| 15B | B | | | | |
| 16A | R | BAT power supply | Ignition switch OFF | | Battery voltage |
| 17 | Y/R | Sliding switch FR signal | Sliding switch | ON (forward opera- tion) | 0 |
| | | | | OFF | 5 |
| 18 | GY/B | Reclining switch FR signal | Reclining switch | ON (forward opera- tion) | 0 |
| | | | | OFF | 5 |
| 19 | L/R | Front end lifter switch UP input/output | Front end lifter switch | ON (UP operation) | 0 |
| | | | | OFF | 5 |
| 20 | G/B | Sliding sensor signal | Sliding motor operation | |  <p style="text-align: right; font-size: small;">S1IA0690J</p> |
| | | | Other than above. | | 0 or 5 |
| 21 | Y/B | Front end lifter sensor signal | Front end lifter motor operation | |  <p style="text-align: right; font-size: small;">S1IA0691J</p> |
| | | | Other than above. | | 0 or 5 |
| 22 | R/B | Data line A-1 | — | | — |
| 23 | G/W | Sliding switch RR signal | Sliding switch | ON (backward opera- tion) | 0 |
| | | | | OFF | 0 or 5 |
| 24 | SB | Reclining switch RR signal | Reclining switch | ON (backward opera- tion) | 0 |
| | | | | OFF | 0 or 5 |
| 25 | OR/B | Front end lifter switch DOWN signal | Front end lifter switch | ON (DOWN operation) | 0 |
| | | | | OFF | 0 or 5 |
| 26 | P/B | Rear end lifter switch UP signal | Rear end lifter switch | ON (UP operation) | 0 |
| | | | | OFF | 0 or 5 |

AUTOMATIC DRIVE POSITIONER

| TERMINAL | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx) |
|----------|------------|------------------------------------|---------------------------------|------------------------|--|
| | | | | | |
| 27 | B/Y | Rear end lifter switch DOWN signal | Rear end lifter switch | ON (DOWN operation) | 0 |
| | | | | OFF | 0 or 5 |
| 30 | L | Reclining sensor signal | Reclining motor operation | |  SIIA0692J |
| | | | Other than above. | | 0 |
| 31 | W/R | Rear end lifter sensor signal | Rear end lifter motor operation | |  SIIA0693J |
| | | | Other than above. | | 0 |
| 32 | R/W | Ground (sensor) | Ignition switch ON | | 0 |

Work Flow

AIS001JR

1. Check the symptom and customer's requests.
2. Understand the system description. Refer to [SE-13, "System Description"](#).
3. Perform the preliminary check. Refer to [SE-36, "Preliminary Check"](#).
4. Perform the communication diagnosis.
 With CONSULT-II, refer to [SE-40, "IVMS Communication Diagnosis"](#).
 Without CONSULT-II, refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).
 Is the communication diagnosis result OK?
 OK, GO TO 7.
 NG, GO TO 5.
5. Repair or replace depending on the diagnosis result.
6. Perform the communication diagnosis again.
 With CONSULT-II, refer to [SE-40, "IVMS Communication Diagnosis"](#).
 Without CONSULT-II, refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).
 Is the communication diagnosis result OK?
 OK, GO TO 7.
 NG, GO TO 5.
7. Perform the self-diagnosis.
 With CONSULT-II, refer to [SE-43, "SELF-DIAGNOSIS RESULTS"](#).
 Without CONSULT-II, refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).
 Is the self-diagnosis result OK?
 OK, GO TO 11.
 NG, GO TO 8.
8. Repair or replace depending on the self-diagnosis result.
9. Perform the self-diagnosis again.
 With CONSULT-II, refer to [SE-43, "SELF-DIAGNOSIS RESULTS"](#).
 Without CONSULT-II, refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).
 Is the self-diagnosis result OK?
 OK, GO TO 11.
 NG, GO TO 8.

AUTOMATIC DRIVE POSITIONER

10. Based on the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to [SE-53, "Symptom Chart"](#).
11. Does the automatic drive positioned system operate normally?
OK, GO TO 12.
NG, GO TO 3.
12. Inspection END.

Preliminary Check SETTING CHANGE FUNCTION

AIS001JS

The settings of the automatic driving position system can be changed, using CONSULT-II and the display unit in the center of the instrument panel.

| Setting item | Content | CONSULT-II (WORK SUPPORT) | Display unit | Factory setting |
|---|---|-----------------------------------|-------------------------|--------------------|
| EXITING OPERATION PART SET | The applied parts at exit can be selected from the following 4 modes. | Mode 1 Steering wheel and seat | — | × |
| | | Mode 2 Steering wheel only | | — |
| | | Mode 3 Seat only | | — |
| | | Mode 4 No operation | | — |
| Tilt Steering Wheel When Entry / Exiting Vehicle | Tilt of the steering wheel at entry and exit can be selected: ON (operated)—OFF (not operated) | — | ON: Indicator lamp ON | × |
| | | | OFF: Indicator lamp OFF | — |
| Sliding Driver Seat When Entry / Exiting Vehicle | The seat sliding turnout and return at entry/exit can be selected: ON (operated)—OFF (not operated) | — | ON: Indicator lamp ON | × |
| | | | OFF: Indicator lamp OFF | — |

×: Applicable —: Not applicable

NOTE:

After the setting is registered, the new setting is effective, even if the battery is disconnected.

POWER SUPPLY AND GROUND CIRCUIT INSPECTION

1. CHECK FUSE

Check that any of the following fuses in the BCM are blown.

| Unit | Terminal No. | Power source | Fuse No. |
|------|--------------|---------------------------|----------|
| BCM | 104 | Battery power supply | H |
| | 105 | | 3 |
| | 60 | ACC power supply | 21 |
| | 55 | START power supply | 14 |
| | 68 | IGN or STRAT power supply | 1 |

NOTE:

Refer to [SE-17, "Component Parts and Harness Connector Location"](#).

OK or NG

OK >> GO TO 2.

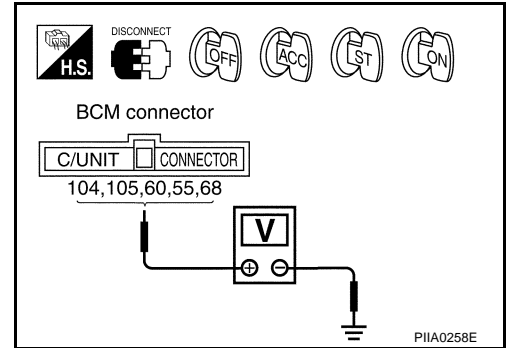
NG >> If fuse is blown, be sure to eliminate cause of problem before installing new fuse. Refer to [SE-17, "Component Parts and Harness Connector Location"](#).

AUTOMATIC DRIVE POSITIONER

2. CHECK POWER SUPPLY CIRCUIT (BCM)

1. Disconnect BCM connector.
2. Check voltage between BCM and body ground.

| Connector | Terminals (Wire color) | | Power source | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|--------|------------------------|-----------------------|-------------------------|
| | (+) | (-) | | | |
| M4 | 104 (Y/B), 105 (Y/L) | Ground | BAT power supply | Ignition switch OFF | Battery voltage |
| | 60 (L/OR) | Ground | ACC or ON power supply | Ignition switch ACC | Battery voltage |
| | 55 (B/W) | Ground | START power supply | Ignition switch START | Battery voltage |
| | 68 (W/B) | Ground | IGN power supply | Ignition switch ON | Battery voltage |



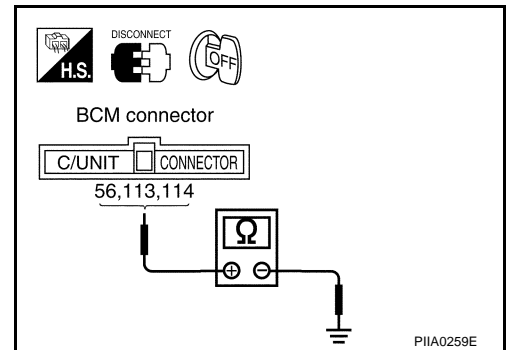
OK or NG

- OK >> GO TO 3.
 NG >> Check harness for open and short between BCM and fuse.

3. GROUND CIRCUIT INSPECTION (BCM)

Check continuity between BCM and body ground.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|--------|---------------------|-------------------------|
| | (+) | (-) | | |
| M4 | 56 (B) | Ground | Ignition switch OFF | Continuity should exist |
| | 113 (B) | Ground | Ignition switch OFF | Continuity should exist |
| | 114 (B) | Ground | Ignition switch OFF | Continuity should exist |



OK or NG

- OK >> BCM circuit is OK. Check the driver seat control unit. GO TO 4.
 NG >> Repair or replace the harness between BCM and ground.

AUTOMATIC DRIVE POSITIONER

4. CHECK POWER SUPPLY CIRCUIT (DRIVER SEAT CONTROL UNIT)

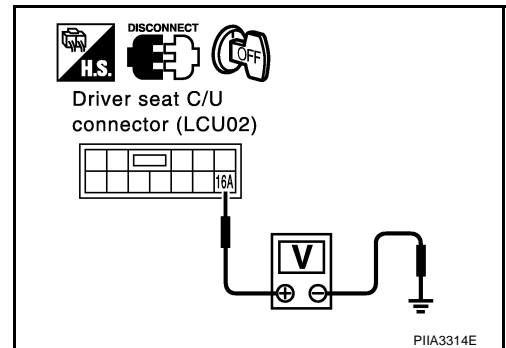
1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector.
3. Check voltage between driver seat control unit connector B142 terminal 16A (R) and body ground.

16A (R) – Ground : Battery voltage

OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness between driver seat control unit and fuse block (J/B) No. 1.



5. CHECK GROUND CIRCUIT (DRIVER SEAT CONTROL UNIT)

Check continuity between the driver seat control unit connector B142 terminal 14A (B/W), 15B (B) and body ground.

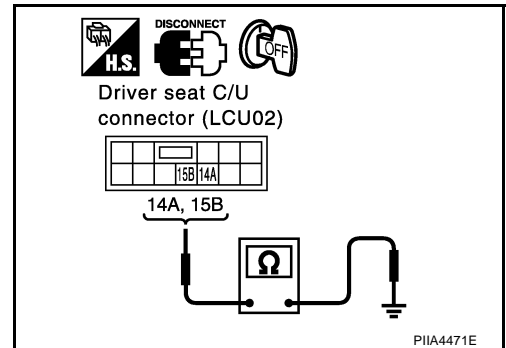
14A (B/W) – Ground : Continuity should exist.

15B (B) – Ground : Continuity should exist.

OK or NG

OK >> Driver seat control unit circuit is OK.

NG >> Repair or place harness between driver seat control unit (LCU 02) and body ground.



AUTOMATIC DRIVE POSITIONER

CONSULT-II Function

AIS001JT

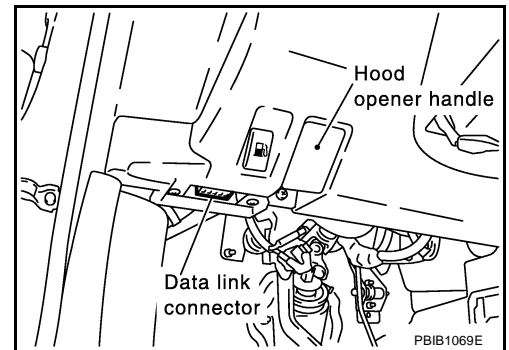
CONSULT-II executes the following functions by combining data received and transmits command transmission via the communication line from the BCM. IVMS communication inspection, work support by part, self-diagnosis, data monitor, and active test display.

| IVMS diagnosis items | Inspection item, self-diagnosis mode | Content |
|-----------------------|--------------------------------------|--|
| IVMS – COMM CHECK | IVMS– COMM DIAGNOSIS | Diagnoses a communication malfunction, inactive communication, and sleep malfunction in the communication line between the BCM and each LCU. |
| | WAKE– UP DIAGNOSIS | Diagnoses the wake-up signals output from each LCU. |
| AUTO DRIVE POSITIONER | WORK SUPPORT* | Changes the setting for each function. |
| | SELF– DIG RESULTS | Perform the self-diagnosis. |
| | DATA MONITOR | Displays the input data of the BCM and each LCU on real-time basis. |
| | ACTIVE TEST | Gives a drive signal to a load to check the operation. |
| BCM PART NUMBER | | Displays BCM part No. |

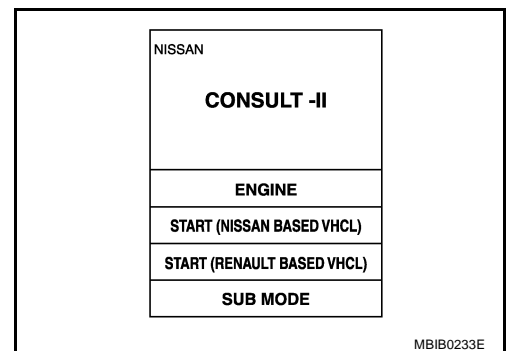
*: For setting seat and steering functions only.

CONSULT-II BASIC OPERATION PROCEDURE

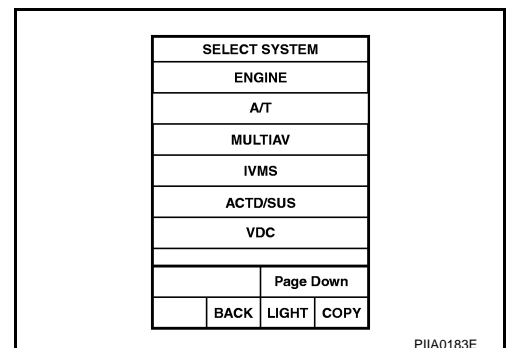
1. Turn ignition switch OFF.
2. Connect "CONSULT-II" and CONSULT-II CONVERTER to data link connector.



3. Turn ignition switch ON.
4. Touch "START (NISSAN BASED VHCL)".

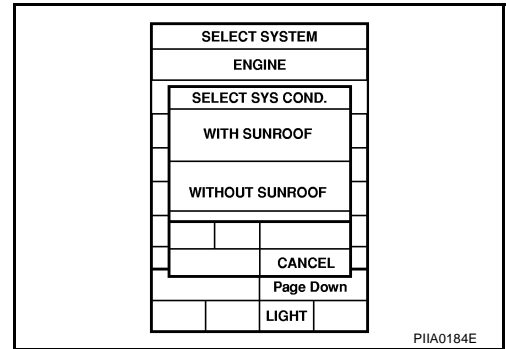


5. Touch "IVMS" on the "SELECT SYSTEM" screen. If "IVMS" is not indicated, go to [GI-38, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



AUTOMATIC DRIVE POSITIONER

6. Check the model specification, and touch either “WITH SUNROOF” or “WITHOUT SUNROOF” on the “SELECT SYS COND” screen.
7. Touch “OK”. If the selection is wrong, touch “CANCEL”.
8. Select the desired part to be diagnosed on the “SELECT TEST ITEM” screen.



IVMS COMMUNICATION INSPECTION

IVMS contains the IVMS communication diagnosis and wake-up diagnosis.

IVMS Communication Diagnosis

- The function also stores the communication malfunction records and inactive communication records, and displays the data on the CONSULT-II screen. (malfunction record diagnosis.)

NOTE:

Sleep is a power saving function when a vehicle is stationary (all BCM related electrical equipment: OFF, and the timer: OFF).

| Malfunction | CONSULT-II display item | Diagnosis content |
|----------------------------|-------------------------|--|
| Communication malfunction | COMM DATA | Communicating with each LCU is judged normal when communication is normally completed and when both transmitted data and received data are equal. In other cases, it is judged malfunctioning. If the communication is inactive, no diagnosis result is displayed. |
| Inactive communication | NO RESPONSE | Communicating with each LCU is judged normal when at least 1 communication is normally completed within 3 trials. In other cases, it is judged malfunctioning. |
| Sleep malfunction | SLEEP | Check that each LCU switches to sleep mode. |
| Communication malfunction* | PAST COMM DATA | The records when communication signal, malfunctions were continuously detected while the communication was normal are displayed, or a malfunction was detected during the sleep control in the past are displayed. |
| Inactive communication* | PAST NO RESPONSE | The records when inactive communications were continuously detected while the communication was normal are displayed. |

*: Malfunction item record

Operation Procedure

1. Touch “IVMS-COMM CHECK” on “SELECT TEST ITEM”.
2. Touch “IVMS-COMM DIAGNOSIS” on the “SELECT DIAG ITEM” screen.
3. Touch “START” on the “IVMS-COMM DIAGNOSIS” screen to start the diagnosis.
4. After the diagnosis is completed, the malfunctioning system name is displayed.
5. When the malfunctioning items are displayed, touch “PRINT” to keep the records.
6. Touch “ERASE”.
7. Carry out the communication inspection again to check that any malfunctioning item is displayed.
8. Check the displayed items.

Wake-up Diagnosis

The wake-up diagnosis is carried out when the BCM detects the wake-up signal from each local control unit (LCU). When the switch shown on the screen is operated as instructed, each local control unit (LCU) outputs the wake-up signal. If the BCM cannot detect the wake-up signal, it is judged malfunctioning. The malfunctioning local control unit (LCU) is displayed on the screen.

Operation Procedure

1. Touch “IVMS-COMM CHECK” on the “SELECT TEST ITEM” screen.
2. Touch “WAKE-UP DIAGNOSIS” on the “SELECT DIAG ITEM” screen.
3. Touch “START” on the “WAKE-UP DIAGNOSIS” screen to start the diagnosis.

AUTOMATIC DRIVE POSITIONER

4. Touch "NEXT" to select the local control unit (LCU) to be diagnosed.
5. Check that any malfunction is displayed. If necessary, touch "PRINT" to keep the record.
6. Carry out the inspection of the malfunctioning item.

Trouble Diagnosis Chart

| Malfunctioning item | Display unit | CONSULT-II IVMS communication diagnosis content | Self-diagnosis trouble code No. | Malfunctioning system and reference |
|---------------------|------------------------------|---|--|--|
| COMM DATA | One LCU is displayed. | POWER WINDOW C/U-DR "COM-MDATA" | 24 | Replace the displayed LCU. |
| | | DOOR MIRROR C/U-RH "COM-MDATA" | 27 | |
| | | DOOR MIRROR C/U-LH "COM-MDATA" | 37 | |
| | | POWER SEAT C/U-DR "COMMDATA" | 47 | |
| | Multiple LCUs are displayed. | BCM "COMMFAL1", "COMMFAL2" | Displays in order of 24 →27→37→47 →and cycles from 24. | Communication system A: Refer to SE-42 . |
| NO RESPONSE | One LCU is displayed. | POWER WINDOW C/U-DR "NORE-SPONSE" | 25 | Communication system B: Refer to SE-42 . |
| | | DOOR MIRROR C/U-RH "NORE-SPONSE" | 28 | |
| | | DOOR MIRROR C/U-LH "NORE-SPONSE" | 38 | |
| | | POWER SEAT C/U-DR "NORESPONSE" | 48 | |
| | Multiple LCUs are displayed. | BCM/HARNESS | Displays in order of 25→28→38→48 and cycles from 25. | Communication system C: Refer to SE-42 . |
| SLEEP malfunction | One LCU is displayed. | POWER WINDOW C/U-DR "SLEEP" | No self-diagnosis function | Replace the displayed LCU. |
| | | DOOR MIRROR C/U-RH "SLEEP" | | |
| | | DOOR MIRROR C/U-LH "SLEEP" | | |
| | | POWER SEAT C/U-DR "SLEEP" | | |
| | Multiple LCUs are displayed. | All the above control units are displayed. | No self-diagnosis function | Communication system A: Refer to SE-42 . |

NOTE:

- For a specific local control unit (LCU), either "PAST COMM DATA" or "PAST NO RESPONSE" may be displayed instead of the above results. The data record, causes this, so erase the records.
(The display only shows the incident records, they are not malfunctions caused during the diagnosis. One possible cause is that an intermittent incident occurred.)
- Follow the steps below to erase the memory.
Carry out either disconnect BCM battery power supply or erase memory with CONSULT-II.
- With the battery connected, if the local control unit (LCU) connector is disconnected and left for approximately 1 minute, the BCM stores "NO RESPONSE" record.

AUTOMATIC DRIVE POSITIONER

COMMUNICATION SYSTEM A

1. CHECK BCM

Replace the BCM with a known-good one, and carry out the communication diagnosis. Refer to [SE-40, "IVMS Communication Diagnosis"](#) .

OK or NG

- OK >> The harness and connector is checked, and it is normal, replace BCM.
- NG >> GO TO 2.

2. CHECK LCU

1. Replace with the previously installed BCM.
2. Replace the LCU with a known-good one, and carry out the communication diagnosis. Refer to [SE-40, "IVMS Communication Diagnosis"](#) .

OK or NG

- OK >> The harness and connector is checked, and it is normal, replace LCU.
- NG >> Repair or replace harness between the LCU and BCM.

COMMUNICATION SYSTEM B

1. CHECK HARNESS CONNECTOR

Check terminals (at the control unit and harness) on the malfunctioning LCU for disconnection, bend, loose connection, and other malfunctions.

OK or NG

- OK >> GO TO 2.
- NG >> Repair the terminals and connectors.

2. CHECK LCU

Replace the malfunctioning LCU with a known-good one, and carry out the communication diagnosis. Refer to [SE-40, "IVMS Communication Diagnosis"](#) .

OK or NG

- OK >> The harness and connector is checked, and it is normal, replace LCU.
- NG >> Repair the harness between the indicated LCU and BCM.

COMMUNICATION SYSTEM C

1. CHECK HARNESS CONNECTOR

Check terminals (at the control unit and harness) on BCM and LCU for disconnection, bend, loose connection, and other malfunctions.

OK or NG

- OK >> GO TO 2.
- NG >> Repair the terminals and connectors.

2. CHECK BCM

Replace the malfunctioning BCM with a known-good one, and carry out the communication diagnosis. Refer to [SE-40, "IVMS Communication Diagnosis"](#) .

OK or NG

- OK >> The harness and connector is checked, and it is normal, replace BCM.
- NG >> Repair the harness between the LCU and BCM control.

WORK SUPPORT

Display Item List

Refer to [SE-36, "SETTING CHANGE FUNCTION"](#) .

AUTOMATIC DRIVE POSITIONER

SELF-DIAGNOSIS RESULTS

Display Item List

| Malfunctioning system | Malfunction detecting condition | Diagnostic procedure | Reference page |
|------------------------|--|---|--|
| SEAT SLIDE | When the sliding sensor pulse changes 2 times or less, while the sliding motor moves the seat backward for 2.5 seconds, and then forward for 2.5 seconds. | Seat sliding motor check Seat sliding sensor check | SE-55 SE-64 |
| SEAT RECLINING | When the reclining sensor pulse changes 2 times or less, while the reclining motor moves the seat forward for 2.5 seconds, and then backward for 2.5 seconds. | Seat reclining motor check Seat reclining sensor check | SE-56 SE-65 |
| SEAT LIFTER-FR | When the lifter sensor (front end) pulse changes 2 times or less, while the lifter motor (front end) moves the seat downward for 2.5 seconds, and then upward for 2.5 seconds. | Front lifting motor check Front end lifting sensor check | SE-57 SE-66 |
| SEAT LIFTER-RR | When the lifter sensor (rear end) pulse changes 2 times or less, while the lifter motor (rear end) moves the seat downward for 2.5 seconds, and then upward for 2.5 seconds. | Rear lifting motor check Rear end lifting sensor check | SE-59 SE-67 |
| STEERING TILT | ,When the tilt sensor output voltage is 0.2V or less, while the tilt motor moves the steering wheel upward for 1 second, and then downward for 1 second. | Steering tilt motor check Steering tilt sensor check | SE-62 SE-70 |
| STEERING TELESCO | When the telescoping sensor output voltage is 0.2V or less, while the telescope motor moves the steering wheel forward for 1 second, and then backward for 1 second, | Steering telescopic motor check Steering telescopic sensor check | SE-60 SE-69 |
| DOOR MIRROR-LH-UP-DOWN | When LH door mirror sensor detects 0.2V or lower, or 4.5V or higher, for 0.5 seconds or more. | Mirror sensor check | GW-113 |
| DOOR MIRROR-LH-L-R | | | |
| DOOR MIRROR-RH-UP-DOWN | When RH door mirror sensor detects 0.2V or lower, or 4.5V or higher, for 0.5 seconds or more. | Mirror sensor check | GW-113 |
| DOOR MIRROR-RH-L-R | | | |
| VEHICLE SPEED SENSOR | When the vehicle speed is less than 7 km/h (4 MPH) for 15 seconds after the diagnosis for the seat and steering wheel is completed. | Vehicle speed sensor check | SE-74 |

A
B
C
D
E
F
G
H
SE
J
K
L
M

AUTOMATIC DRIVE POSITIONER

Auto Drive Positioner Incident Memory

It stores the incident records of the input/output system related to the auto driving position system, and displays them on the CONSULT-II screen.

| Malfunctioning system | Malfunction detecting condition | Diagnostic procedure | Reference page |
|--------------------------------------|--|---|--|
| SEAT SLIDE "PAST OUTPUT FAIL" | If the following conditions are met, the seat sliding output system is judged malfunctioning. If there is no manual input in the past or any auto operation output, and then within 2.5 seconds the sliding sensor receives an input signal showing that the seat has slid by 6 mm or more. | Seat sliding motor check Seat sliding sensor check | SE-55 SE-78 |
| SEAT RECLINING "PAST OUTPUT FAIL" | If the following conditions are met, the seat reclining output system is judged malfunctioning. If there is no manual input in the past nor any auto operation output, and then within 2.5 seconds the reclining sensor receives an input signal showing that the seat has reclined by 1° or more. | Seat reclining motor check Seat reclining sensor check | SE-56 SE-80 |
| STEERING TILT "PAST OUTPUT FAIL" | If the following conditions are met, the steering tilt output system is judged malfunctioning. If there is no manual input in the past nor any auto operation output, and then within 2.5 seconds the steering tilt sensor receives an input signal showing that the steering wheel is tilted by 1° or more. | Steering tilt motor check Steering tilt sensor check | SE-62 SE-70 |
| DETENTION SW "PAST INPUT FAIL" | With the A/T selector lever in P-position (Detention switch OFF), if the vehicle speed of 7 km/h (4 MPH) or higher was input for at least 2 seconds, the detention switch input system is judged malfunctioning. | Detention switch check | SE-68 |
| TELESCO SENSOR "PAST" | If the voltage value detected by the telescopic sensor was 0.1V or less, or 4.9 V or more, the telescoping sensor is judged malfunctioning. | steering telescopic sensor check | SE-69 |
| TILT SENSOR "PAST" | If the voltage value detected by the tilt sensor was 0.1V or less, or 4.9 V or more, the tilt sensor is judged malfunctioning. | steering tilt sensor check | SE-70 |

DATA MONITOR

Display Item List

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|---|
| SLIDE SW-FR | "ON/OFF" ON/OFF status judged from the sliding switch (FR) signal is displayed. |
| SLIDE SW-RR | "ON/OFF" ON/OFF status judged from the sliding switch (RR) signal is displayed. |
| RECLIN SW-FR | "ON/OFF" ON/OFF status judged from the reclining switch (FR) signal is displayed. |
| RECLIN SW-RR | "ON/OFF" ON/OFF status judged from the reclining switch (RR) signal is displayed. |
| LIFT FR SW-UP | "ON/OFF" ON/OFF status judged from the FR lifter switch (UP) signal is displayed. |
| LIFT FR SW-DN | "ON/OFF" ON/OFF status judged from the FR lifter switch (DOWN) signal is displayed. |
| LIFT RR SW-UP | "ON/OFF" ON/OFF status judged from the RR lifter switch (UP) signal is displayed. |
| LIFT RR SW-DN | "ON/OFF" ON/OFF status judged from the RR lifter switch (DOWN) signal is displayed. |
| MIR CON SW-UP | "ON/OFF" ON/OFF status judged from the door mirror remote control switch (UP) signal is displayed. |
| MIR CON SW-DN | "ON/OFF" ON/OFF status judged from the door mirror remote control switch (DOWN) signal is displayed. |
| MIR CON SW-RH | "ON/OFF" ON/OFF status judged from the door mirror remote control switch (RIGHT) signal is displayed. |

AUTOMATIC DRIVE POSITIONER

| Monitor item [OPERATION or UNIT] | | Contents |
|----------------------------------|-----------------|---|
| MIR CON SW-LH | "ON/OFF" | ON/OFF status judged from the door mirror remote control switch (LEFT) signal is displayed. |
| MIR CHNG SW-R | "ON/OFF" | ON/OFF status judged from the door mirror remote control switch (switching to RIGHT) signal is displayed. |
| MIR CHNG SW-L | "ON/OFF" | ON/OFF status judged from the door mirror remote control switch (switching to LEFT) signal is displayed. |
| SET SW | "ON/OFF" | ON/OFF status judged from the setting switch signal is displayed. |
| TELESCO SW-FR | "ON/OFF" | ON/OFF status judged from the telescoping switch (FR) signal is displayed. |
| TELESCO SW-RR | "ON/OFF" | ON/OFF status judged from the telescoping switch (RR) signal is displayed. |
| TILT SW-UP | "ON/OFF" | ON/OFF status judged from the tilt switch (UP) signal is displayed. |
| TILT SW-DOWN | "ON/OFF" | ON/OFF status judged from the tilt switch (DOWN) signal is displayed. |
| MEMORY SW1 | "ON/OFF" | ON/OFF status judged from the seat memory switch 1 signal is displayed. |
| MEMORY SW2 | "ON/OFF" | ON/OFF status judged from the seat memory switch 2 signal is displayed. |
| CANCEL SW | "ON/OFF" | Setting status is displayed with the display unit: "Active (ON)/inactive (OFF)" |
| DOOR SW DR | "ON/OFF" | ON (Door open) / OFF (door closed) status judged from the driver door switch is displayed. |
| VHCL SPEED SE | "<7km/ >7km" | The present vehicle speed (less than 7 km/h (4 MPH), or 7 km/h (4 MPH) or higher) is displayed. |
| DETENT SW | "ON/OFF" | The selector lever position "ON (P position) / OFF (other than P position)" judged from the detention switch signal is displayed. |
| IGN ON SW | "ON/OFF" | Ignition key switch ON (IGN ON)/OFF (ignition switch START, ACC, or OFF) status judged from the ignition switch signal is displayed. |
| IGN ACC SW | "ON/OFF" | Ignition key switch ON (ACC or IGN ON)/ OFF (ignition switch START, or OFF) status judged from the ignition switch signal is displayed. |
| IGN START SW | "ON/OFF" | Ignition key switch ON (START, ON) /OFF (ignition switch IGN, ACC, or OFF) status judged from the ignition switch signal is displayed. |
| IGN KEY SW | "ON/OFF" | Key inserted (ON)/key removed (OFF) status judged from the key detection switch is displayed. |
| R POSITION SW | "ON/OFF" | R position (ON)/Other than R position of shift position signal from back-up lamp relay is displayed. |
| TILT SEN | "V" | The tilt position (voltage) judged from the tilt sensor signal is displayed. |
| TELESCO SEN | "V" | The telescoping position (voltage) judged from the telescoping sensor signal is displayed. |
| MIR/SE RH R-L | "ON/OFF" | ON (normal value)/OFF (abnormal value) *of voltage value judged from RH door mirror sensor output voltage (LH/RH) is displayed. |
| MIR/SE RH U-D | "ON/OFF" | ON (normal value)/OFF (abnormal value) *of voltage value judged from RH door mirror sensor output voltage (UP/DOWN) is displayed. |
| MIR/SE LH R-L | "ON/OFF" | ON (normal value)/OFF (abnormal value) *of voltage value judged from LH door mirror sensor output voltage (LH/RH) is displayed. |
| MIR/SE LH U-D | "ON/OFF" | ON (normal value)/OFF (abnormal value) *of voltage value judged from LH door mirror sensor output voltage (UP/DOWN) is displayed. |
| Voltage | "V" | Displays measured values by voltage probe. |
| Frequency | "ms,Hz,%" | Displays value measured with pulse probe. |

*: Abnormal value indicates that the sensor output voltage is 0.2V or lower, or 4.5V or higher.

ACTIVE TEST

Display Item List

| Test item | Description |
|---------------|--|
| TILT MOTOR | The tilt motor is activated by receiving the drive signal. |
| TELESCO MOTOR | The telescopic motor is activated by receiving the drive signal. |

AUTOMATIC DRIVE POSITIONER

| Test item | Description |
|------------------|--|
| SEAT SLIDE | The sliding motor is activated by receiving the drive signal. |
| SEAT RECLINING | The reclining motor is activated by receiving the drive signal. |
| SEAT LIFTER FR | The front end lifter motor is activated by receiving the drive signal. |
| SEAT LIFTER RR | The rear end lifter motor is activated by receiving the drive signal. |
| MEMORY SW INDCTR | The memory switch indicator is lit by receiving the drive signal. |
| MIRROR MOTOR RH | The RH mirror motor moves the mirror UP/DOWN and LEFT/RIGHT by receiving the drive signal. |
| MIRROR MOTOR LH | The LH mirror motor moves the mirror UP/DOWN and LEFT/RIGHT by receiving the drive signal. |

On Board Diagnosis

AIS001JU

BCM can check each local unit (LCU), switches, loads, and malfunctions in communication with the self-diagnosis.

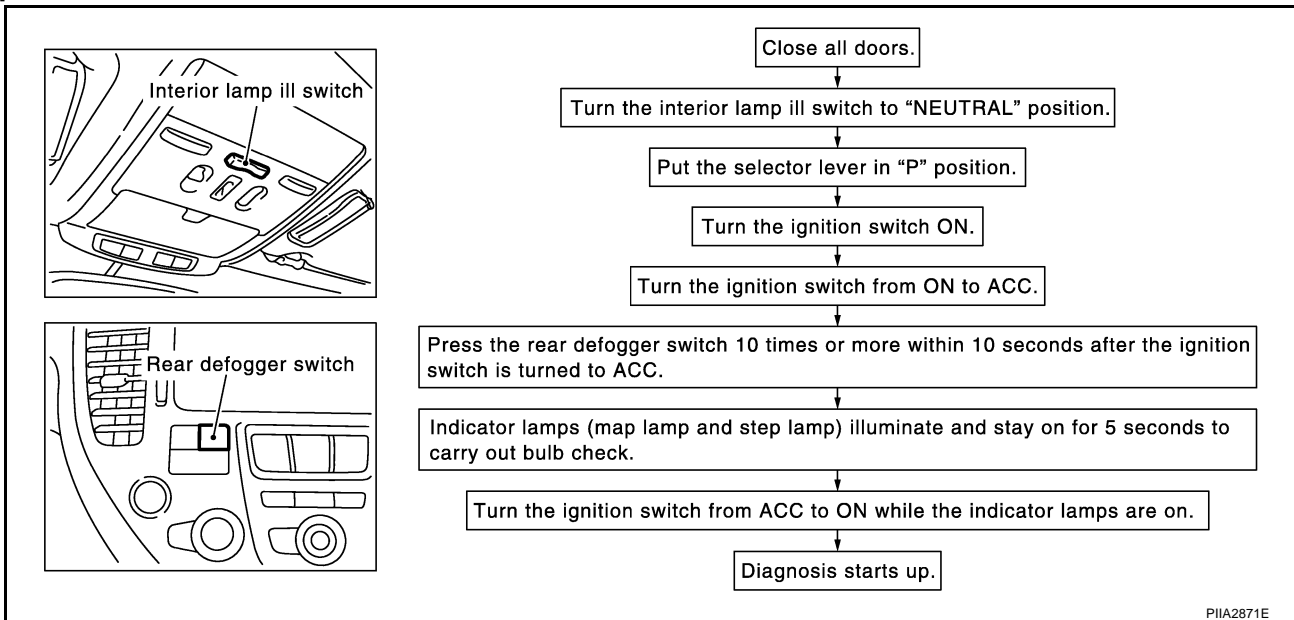
DIAGNOSIS ITEM

| Diagnosis item | Description |
|--|---|
| Communication diagnosis | It can check the communication line between BCM and each LCU, and also each LCU, for a communication and malfunction. |
| Switch monitor | It can check the switch systems which send data to BCM and each LCU for a malfunction. |
| Self-diagnosis for auto drive positioner | Diagnosis malfunctions in each motor and sensor in the electrical load parts of the driver power seat system (sliding, reclining, and lifter [front/rear]), of the steering wheel system (tilt, telescoping), and of door mirror. |

COMMUNICATION DIAGNOSIS

Check the communication between BCM and each local control unit (LCU).

Operation Procedure



PIIA2871E

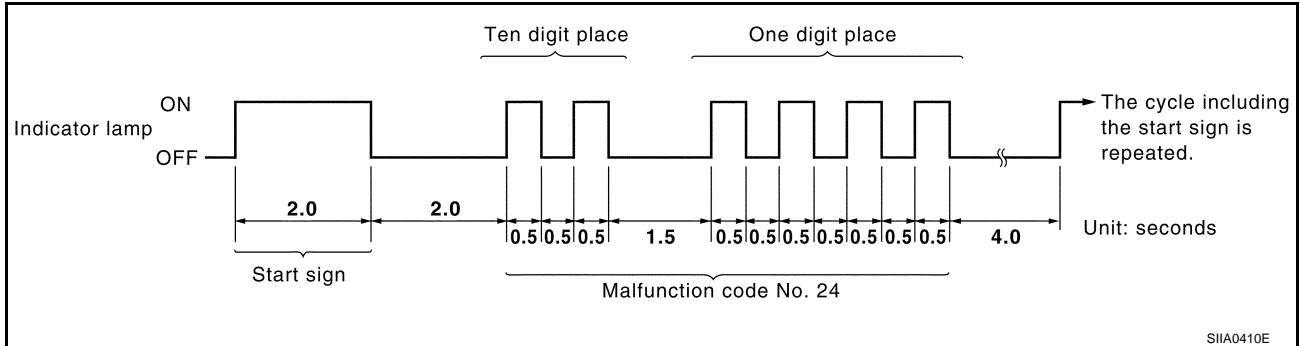
Diagnosis Result Display

- The indicator lamps (the map lamp and step lamp) turn ON (illuminate) for 2 seconds and OFF (go off) for 2 seconds to indicate that the diagnosis has started, then indicate the diagnosis trouble code.
- To indicate the diagnosis trouble code, the indicator lamps illuminate or flash.
- At first, the lamps indicate the second place by ON/OFF with 0.5 second-interval, then OFF for 1.5 seconds. Next, they indicate the first place by ON/OFF with 0.5 second interval.

AUTOMATIC DRIVE POSITIONER

- If there are multiple malfunctioning parts, the lamps indicate them in sequence from the smallest diagnosis trouble code.
- The diagnosis results repeat until the diagnosis is cancelled.
- If a malfunction is indicated, carry out the communication diagnosis again to check that the same diagnosis trouble code is indicated.

Diagnosis Trouble Code Indication Example



Trouble Diagnosis Chart

| Malfunctioning item | Display unit | CONSULT-II IVMS communication diagnosis content | Self-diagnosis trouble code No. | Malfunctioning system and reference |
|---------------------|-----------------------------|---|--|--|
| COMM DATA | One LCU is displayed. | POWER WINDOW C/U-DR "COM-MDATA" | 24 | Replace the displayed LCU. |
| | | DOOR MIRROR C/U-RH "COM-MDATA" | 27 | |
| | | DOOR MIRROR C/U-LH "COM-MDATA" | 37 | |
| | | POWER SEAT C/U-DR "COMMDATA" | 47 | |
| | Multiple LCUs are displayed | BCM "COMMFAIL1", "COMMFAIL2" | Displays in order of 24 →27→37→47 →and cycles from 24. | Communication system A: Refer to SE-48 . |
| NO RESPONSE | One LCU is displayed. | POWER WINDOW C/U-DR "NORE-SPONSE" | 25 | Communication system B: Refer to SE-48 . |
| | | DOOR MIRROR C/U-RH "NORE-SPONSE" | 28 | |
| | | DOOR MIRROR C/U-LH "NORE-SPONSE" | 38 | |
| | | POWER SEAT C/U-DR "NORESPONSE" | 48 | |
| | Multiple LCUs are displayed | BCM/HARNESS | Displays in order of 25→28→38→48 and cycles from 25. | Communication system C: Refer to SE-49 . |

AUTOMATIC DRIVE POSITIONER

| Malfunctioning item | Display unit | CONSULT-II IVMS communication diagnosis content | Self-diagnosis trouble code No. | Malfunctioning system and reference |
|---------------------|-----------------------------|---|---------------------------------|--|
| SLEEP malfunction | One LCU is displayed. | POWER WINDOW C/U-DR "SLEEP" | No self-diagnosis function | Replace the displayed LCU. |
| | | DOOR MIRROR C/U-RH "SLEEP" | | |
| | | DOOR MIRROR C/U-LH "SLEEP" | | |
| | POWER SEAT C/U-DR "SLEEP" | | | |
| | Multiple LCUs are displayed | All the above control units are displayed. | No self-diagnosis function | Communication system A: Refer to SE-48 . |

NOTE:

- For a specific local control unit (LCU), either "PAST COMM DATA" or "PAST NO RESPONSE" may be displayed instead of the above results. This is caused by the data record, so erase the records.
(The display only shows the incident records, they are not malfunctions caused during the diagnosis. One possible cause is that an reproducible incident occurred.)
- Follow the steps below to erase the memory.
Carry out either disconnect BCM battery power supply or erase memory with CONSULT-II.
- With the battery connected, if the local control unit (LCU) connector is disconnected and left for approximately 1 minute, the BCM stores "NO RESPONSE" record.

Cancel of Communication Diagnosis

If one of the following conditions is satisfied, the communication diagnosis is cancelled.

- When the ignition switch is turned OFF.
- The vehicle speed becomes 7 km/h (4 MPH) or higher.
- Ten minutes have passed since the diagnostic result indication start without no diagnosis cancel operation.

COMMUNICATION SYSTEM A

1. CHECK BCM

Replace the BCM with a known-good one, and carry out the communication diagnosis. Refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).

OK or NG

- OK >> Replace BCM.
- NG >> GO TO 2.

2. CHECK LCU

- Replace with the previously installed BCM.
- Replace the LCU with a known-good one, and carry out the communication diagnosis. Refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).

OK or NG

- OK >> Replace LCU.
- NG >> Repair the harness between the LCU and BCM.

COMMUNICATION SYSTEM B

1. CHECK HARNESS CONNECTOR

Check terminals (at the control unit and harness) on the malfunctioning LCU for disconnection, bend, poor connection and other malfunctions.

OK or NG

- OK >> GO TO 2.
- NG >> Repair the terminals and connectors.

AUTOMATIC DRIVE POSITIONER

2. CHECK LCU

Replace the malfunctioning LCU with a known-good one, and carry out the communication diagnosis. Refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).

OK or NG

- OK >> Replace LCU.
- NG >> Repair the harness between the indicated LCU and BCM.

COMMUNICATION SYSTEM C

1. CHECK HARNESS CONNECTOR

Check terminals (at the control unit and harness) on BCM and LCU for disconnection, bend, poor connection, and other malfunctions.

OK or NG

- OK >> GO TO 2.
- NG >> Repair the terminals and connectors.

2. CHECK BCM

Replace the malfunctioning BCM with a known-good one, and carry out the communication diagnosis. Refer to [SE-46, "COMMUNICATION DIAGNOSIS"](#).

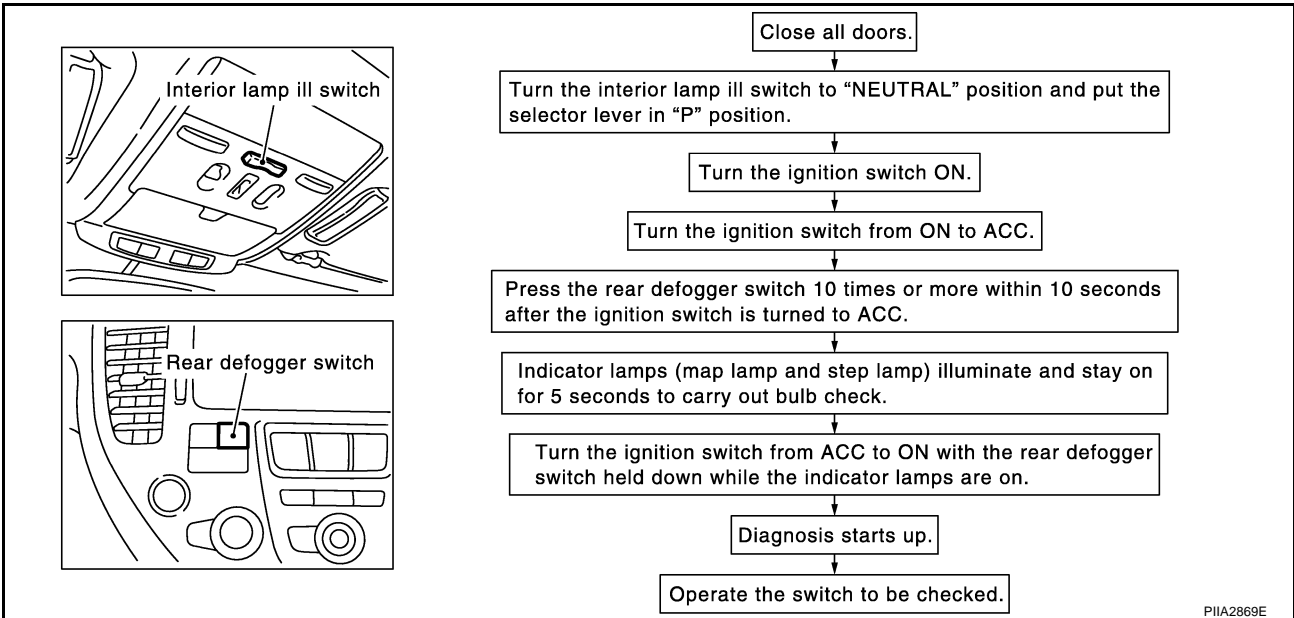
OK or NG

- OK >> Replace BCM.
- NG >> Repair the harness between the LCU and BCM control.

SWITCH MONITOR

Perform the diagnosis for the switch system input to each control unit.

Operation Procedure

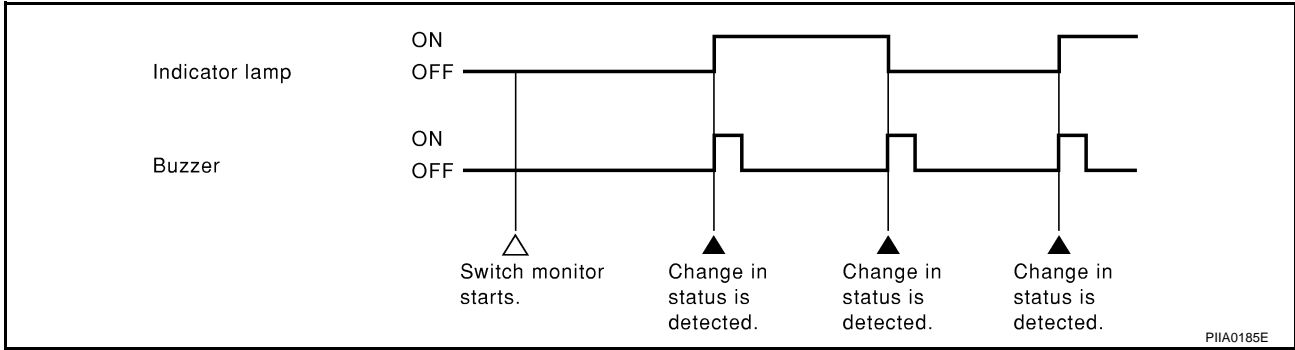


Diagnosis Result Display

- Detects the status change (switch ON/OFF operation) of the switch to be checked, and turns on/off the indicator lamps (the map lamp and step lamp). Also sounds the buzzer (the key remainder and light remainder) for 0.5 seconds.

AUTOMATIC DRIVE POSITIONER

- If a malfunction is detected, no indicator lamp and buzzer react.



Diagnosis Item

The status of the switch (except the ignition switch, interior lamp switch, and map lamp switch) input to each control unit can be monitored.

| Control unit | Item |
|--------------------------|---|
| BCM | Detente switch |
| | Steering wheel position switch (telescopic switch and tilt switch) |
| | Seat memory switch (memory switch 1, memory switch 2, and setting switch) |
| | Driver door switch |
| | Door mirror remote control switch |
| Driver seat control unit | Slide switch (FR/RR) |
| | Reclining switch (FR/RR) |
| | Front end lifting switch (UP/DOWN) |
| | Rear end lifting switch (UP/DOWN) |

Cancel of Switch Monitor

If one of the following conditions is satisfied, the switch monitor is cancelled.

- When the ignition switch is turned OFF.
- The vehicle speed becomes 7 km/h (4 MPH) or higher.

AUTOMATIC DRIVE POSITIONER

Diagnostic Result Display

- The malfunctioning items are indicated by how many times LEDs on the seat memory switches 1 and 2 flash simultaneously.

| Code No. | Detected items | Indication of seat memory switches 1 and 2 | Explanation |
|----------|-----------------------------------|--|--|
| 1 | Seat sliding | IND1, IND2 | While the seat motors are moving for 2.5 seconds, if the number of seat sliding/reclining/lifting sensor pulses changes 2 times or less, the seat device is determined to be malfunctioning. |
| 2 | Seat reclining | IND1, IND2 | |
| 3 | Seat lifting front | IND1, IND2 | |
| 4 | Seat lifting rear | IND1, IND2 | |
| 5 | Steering telescopic | IND1, IND2 | While the steering motors are moving, if the steering sensor output changes 0.2 volts or less, the steering device is determined to be malfunctioning. |
| 6 | Steering tilt | IND1, IND2 | |
| 7 | Door mirrors (upper and lower) | IND1, IND2 | When output voltage of either LH or RH door mirror sensor continues at less than 0.2V or more than 4.5V for 0.5 seconds or more, the door mirror is determined to be malfunctioning. |
| 8 | Door mirrors (LH and RH) | IND1, IND2 | When output voltage of either LH or RH door mirror sensor continues at less than 0.2V or more than 4.5V for 0.5 seconds or more, the door mirror is determined to be malfunctioning. |
| 9 | Vehicle speed sensor circuit | IND1, IND2 | If the vehicle speed sensor output of less than 7 km/h (4 MPH) is detected, the vehicle speed sensor is determined to be malfunctioning. |
| - | No malfunction in the above items | | — |

PIIA0190E

- If the vehicle speed is less than 7 km/h (4 MPH) for 15 seconds after the diagnosis for the seat and steering wheel systems were completed, the vehicle speed signal is judged malfunctioning.
- If LH door mirror is malfunctioning, only indicator lamp on the memory switch 1 flashes, and if RH door mirror is malfunctioning, only indicator lamp on the memory switch 2 flashes.
- When all the diagnosis are finished normally, the indicator lamps on the memory switches 1 and 2 go off after the vehicle speed signal diagnosis.
- If there are multiple malfunctioning parts, the lamps indicate them in sequence from the smallest diagnosis trouble code.
- The diagnosis results repeat until the diagnosis mode is cancelled.

AUTOMATIC DRIVE POSITIONER

Symptom Chart

AIS001JV

| Symptom | Diagnoses / service procedure | Refer to page |
|---|---|------------------------|
| A part of seat system does not operate (both automatically and manually). | 1. Seat sliding motor circuit inspection | SE-55 |
| | 2. Seat reclining motor circuit inspection | SE-56 |
| | 3. Front end seat lifter motor circuit inspection | SE-66 |
| | 4. Rear end seat lifter motor circuit inspection | SE-67 |
| | 5. If the above systems are normal, replace the BCM | — |
| A part of steering wheel system does not operate (both automatically and manually). | 1. Steering wheel telescopic motor circuit inspection | SE-60 |
| | 2. Steering wheel tilt motor circuit inspection | SE-62 |
| | 3. If the above systems are normal, replace the BCM | — |
| Door mirrors cannot be actuated by both automatic and manual. | 1. Door mirror remote control switch (changeover switch) circuit inspection | GW-107 |
| | 2. Door mirror remote control switch (mirror switch) system inspection | GW-110 |
| | 3. If the above systems are normal, replace the BCM. | — |
| A part of seat system does not operate (only automatic operation). | 1. Seat sliding sensor circuit inspection | SE-64 |
| | 2. Seat reclining sensor circuit inspection | SE-65 |
| | 3. Front end seat lifter sensor circuit inspection | SE-66 |
| | 4. Rear end seat lifter sensor circuit inspection | SE-67 |
| | 5. If the above systems are normal, replace the driver seat control unit | — |
| Door mirrors cannot be actuated in automatic mode. | 1. R-position signal circuit inspection | GW-109 |
| | 2. Mirror sensor circuit inspection1 | GW-113 |
| | 3. If the above systems are normal, replace the door mirror control unit. | — |
| All the automatic operations do not operate. | 1. Detention switch circuit inspection | SE-68 |
| | 2. Telescopic sensor circuit inspection | SE-69 |
| | 3. Tilt sensor circuit inspection | SE-70 |
| | 4. Vehicle speed signal circuit inspection | SE-74 |
| | 5. If all the above systems are normal, replace the BCM | — |
| Seat or steering wheel memory does not work | 1. Seat memory switch circuit inspection | SE-76 |
| | 2. If the above systems are normal, replace the BCM. | — |
| Only manual operation does not operate. | 1. Seat sliding switch circuit inspection | SE-78 |
| | 2. Seat reclining switch circuit inspection | SE-80 |
| | 3. Front end seat lifter switch circuit inspection | SE-82 |
| | 4. Rear end seat lifter switch circuit inspection | SE-84 |
| | 5. Steering wheel telescoping switch circuit inspection | SE-86 |
| | 6. Steering wheel tilt switch circuit inspection | SE-87 |
| | 7. Door mirror remote control switch (mirror switch) circuit inspection | GW-110 |
| | 8. If all the above systems are normal, replace the driver seat control unit for the seat system, the BCM for the steering wheel system | — |
| Seat memory indicator lamps 1 and 2 do not illuminate. | 1. Seat memory indicator lamp circuit inspection | SE-89 |
| | 2. If all the above systems are normal, replace the BCM. | — |

AUTOMATIC DRIVE POSITIONER

| Symptom | Diagnoses / service procedure | Refer to page |
|---|---|-----------------------|
| The entry / exiting does not operated when door is opened and closed. (The entry / exiting operates with key switch) | 1. Driver door switch circuit inspection | SE-73 |
| | 2. If all the above systems are normal, replace the BCM. | - |
| Auto driving position system self-diagnosis does not work.(Without CONSULT-II) | 1. Detente switch circuit inspection | SE-68 |
| | 2. Key switch and key lock solenoid circuit inspection | SE-71 |
| | 3. Seat memory switch circuit inspection | SE-76 |
| | 4. Seat memory indicator lamp circuit inspection | SE-89 |
| | 5. Vehicle speed signal circuit inspection | SE-74 |
| | 6. If all the above systems are normal, retry the self-diagnosis. If the self-diagnosis are still disable, check the driver seat control unit connector and terminals for looseness and damage. | - |
| Lumber support motor does not operated. | 1. Lumber support motor circuit inspection | SE-91 |

AUTOMATIC DRIVE POSITIONER

AIS001JW

Seat Sliding Motor Circuit Inspection

1. CHECK SEAT SLIDING MECHANISM

Check the following.

1. Operation malfunction caused by sliding rail deformation or pinched harness or other foreign materials
2. Operation malfunction caused by foreign materials adhered to the sliding motor or sliding rail connector rod
3. Operation malfunction and interference with other parts by poor installation.

OK or NG

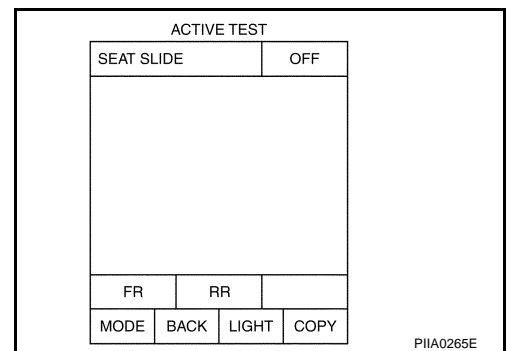
- OK >> GO TO 2.
 NG >> Repair the malfunction part and check again.

2. CHECK FUNCTION

 With CONSULT-II

Check operation with "SEAT SLIDE" in ACTIVE TEST.

| Test item | Description |
|------------|---|
| SEAT SLIDE | The sliding motor is activated by receiving the drive signal. |



 Without CONSULT-II

Perform the self-diagnosis. Refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).

OK or NG

- OK >> System is OK.
 NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and sliding motor connector.
3. Check continuity between driver seat control unit connector B142 terminals 1 (W), 8 (BR) and sliding motor connector B146 terminals 1 (W), 8 (BR).

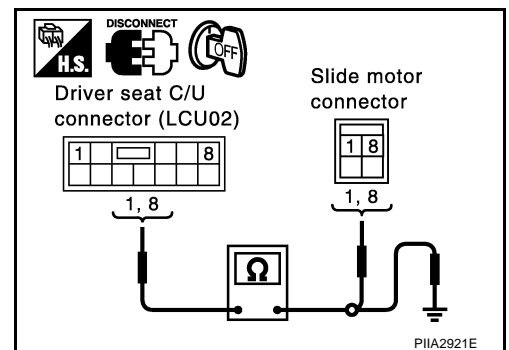
1 (W) – 1 (W) : Continuity should exist.

8 (BR) – 8 (BR) : Continuity should exist.

4. Check continuity between driver seat control unit connector B142 terminals 1, 8 and body ground.

1 (W) – Ground : Continuity should not exist.

8 (BR) – Ground : Continuity should not exist.



OK or NG

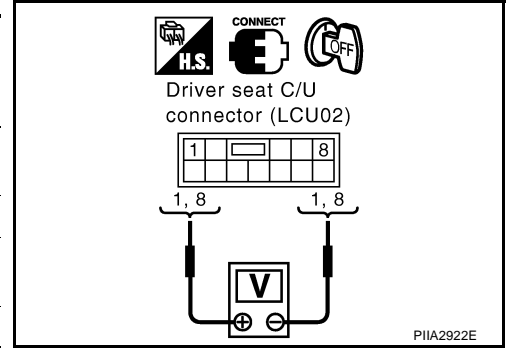
- OK >> GO TO 4.
 NG >> Repair or replace harness between driver seat control unit and sliding motor.

AUTOMATIC DRIVE POSITIONER

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit connector and sliding motor connector.
2. Check voltage between the driver seat control unit connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|--------|----------------------------------|-------------------------|
| | (+) | (-) | | |
| B142 | 1 (W) | 8 (BR) | Sliding switch (FR operation) | Battery voltage |
| | | | Sliding switch OFF | 0 |
| | 8 (BR) | 1 (W) | Sliding switch (RR operation) | Battery voltage |
| | | | Sliding switch OFF | 0 |



OK or NG

- OK >> Replace sliding motor.
- NG >> Replace driver seat control unit.

Seat Reclining Motor Circuit Inspection

AIS001JX

1. CHECK SEAT RECLINING MECHANISM

Check following.

1. Operation malfunction caused by an interference with the center pillar or center console.
2. Operation malfunction and interference with other parts by poor installation.

OK or NG

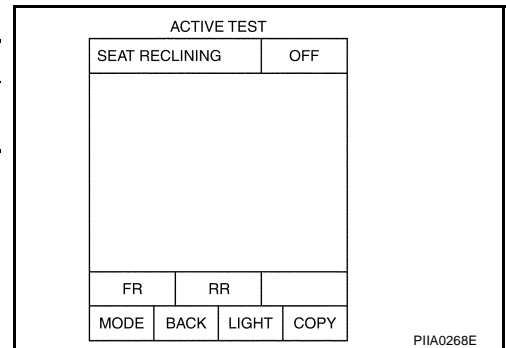
- OK >> GO TO 2.
- NG >> Repair the malfunction part and check again.

2. CHECK FUNCTIONAL

With CONSULT-II

Check operation with "SEAT RECLINING" in ACTIVE TEST.

| Test item | Description |
|----------------|---|
| SEAT RECLINING | The reclining motor is activated by receiving the drive signal. |



Without CONSULT-II

Perform the self-diagnosis. Refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and reclining motor connector.
3. Check continuity between driver seat control unit connector B142 terminals 2 (G), 9 (LG) and reclining motor connector B147 terminals 2 (G), 9 (LG).

2 (G) – 2 (G) : Continuity should exist.

9 (LG) – 9 (LG) : Continuity should exist.

4. Check continuity between driver seat control unit connector B142 terminals 2 (G), 9 (LG) and body ground.

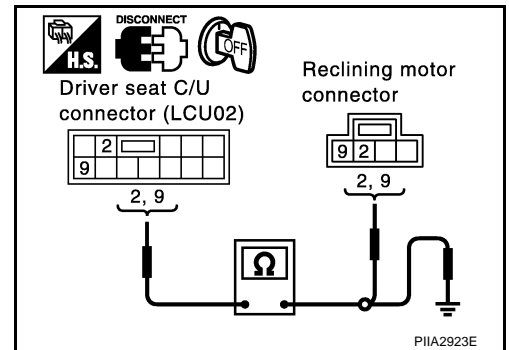
2 (G) – Ground : Continuity should not exist.

9 (LG) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

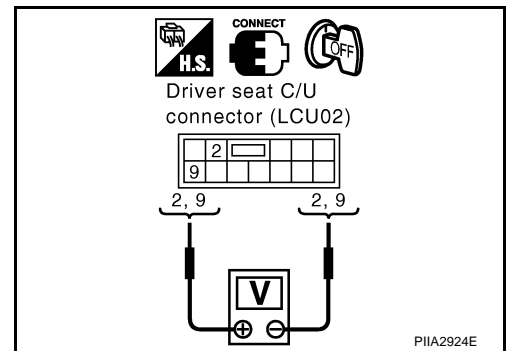
NG >> Repair or replace harness between driver seat control unit and reclining motor.



4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit and reclining motor connector.
2. Check voltage between driver seat control unit connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|--------|------------------------------------|-------------------------|
| | (+) | (-) | | |
| B142 | 2 (G) | 9 (LG) | Reclining switch (FR operation) | Battery voltage |
| | | | Reclining switch OFF | 0 |
| | 9 (LG) | 2 (G) | Reclining switch (RR operation) | Battery voltage |
| | | | Reclining switch OFF | 0 |



OK or NG

OK >> Replace reclining motor.

NG >> Replace driver seat control unit.

Front End Seat Lifting Motor Circuit Inspection

AIS001JY

1. CHECK FRONT END SEAT LIFTING MECHANISM

Check the following.

1. Operation malfunction caused by lifter mechanism deformation or pinched harness or other foreign materials.
2. Operation malfunction caused by foreign materials adhered to the lifter motor or lead screws.
3. Operation malfunction and interference with other parts by installation.

OK or NG

OK >> GO TO 2.

NG >> Repair the malfunctioning part and check again.

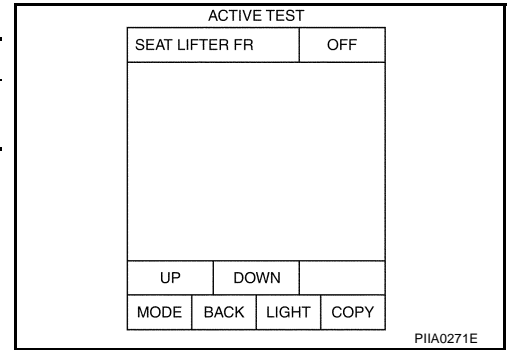
AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

With CONSULT-II

Check operation with "SEAT LIFTER FR" in ACTIVE TEST.

| Test item | Description |
|----------------|--|
| SEAT LIFTER FR | The front end lifter motor is activated by receiving the drive signal. |



Without CONSULT-II

Carry out the self-diagnosis. Refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and front lifting motor connector.
3. Check continuity between driver seat control unit connector B142 and terminals 10 (OR), 11 (P) and front lifting motor connector B148 terminals 10 (OR), 11 (P).

10 (OR) – 10 (OR) : Continuity should exist.

11 (P) – 11 (P) : Continuity should exist.

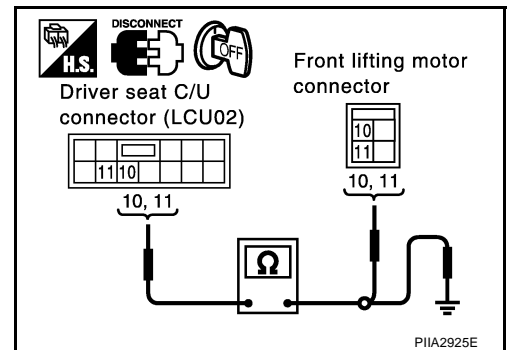
4. Check continuity between driver seat control unit connector B142 and terminals 10 (OR), 11 (P) and body ground.

10 (OR) – Ground : Continuity should not exist.

11 (P) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 4.
- NG >> Repair or replace harness between driver seat control unit and front lifting motor.

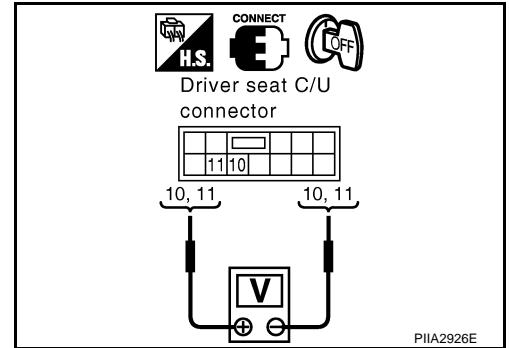


AUTOMATIC DRIVE POSITIONER

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit connector and front lifting motor connector.
2. Check voltage between driver seat control unit connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|---------|--|-------------------------|
| | (+) | (-) | | |
| B142 | 10 (OR) | 11 (P) | Front end lifting switch (UP operation) | Battery voltage |
| | | | Front end lifting switch OFF | 0 |
| | 11 (P) | 10 (OR) | Front end lifting switch (DOWN operation) | Battery voltage |
| | | | Front end lifting switch OFF | 0 |



OK or NG

- OK >> Replace front lifting motor.
 NG >> Replace driver seat control unit.

Rear End Seat Lifting Motor Circuit Inspection

AIS001JZ

1. CHECK REAR END SEAT LIFTING MECHANISM

Check following items.

1. Operation malfunction caused by lifter mechanism deformation or pinched harness or other foreign materials.
2. Operation malfunction caused by foreign materials adhered to the lifter motor or lead screws.
3. Operation malfunction and interference with other parts by poor installation.

OK or NG

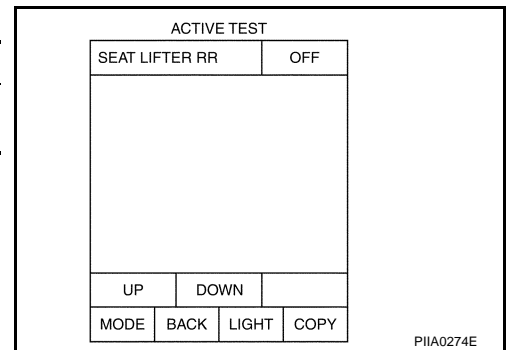
- OK >> GO TO 2.
 NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with "SEAT LIFTER RR" in ACTIVE TEST.

| Test item | Description |
|----------------|---|
| SEAT LIFTER RR | The rear end lifter motor is activated by receiving the drive signal. |



Without CONSULT-II

Carry out the self-diagnosis. Refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).

OK or NG

- OK >> System is OK.
 NG >> GO TO 3.

AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and rear lifting motor connector.
3. Check continuity between driver seat control unit connector B142 terminals 4 (Y), 6 (PU) and lifting motor connector B149 terminals 4 (Y), 6 (PU).

4 (Y) – 4 (Y) : Continuity should exist.

6 (PU) – 6 (PU) : Continuity should exist.

4. Check continuity between driver seat control unit B142 terminals 4 (Y), 6 (PU) and body ground.

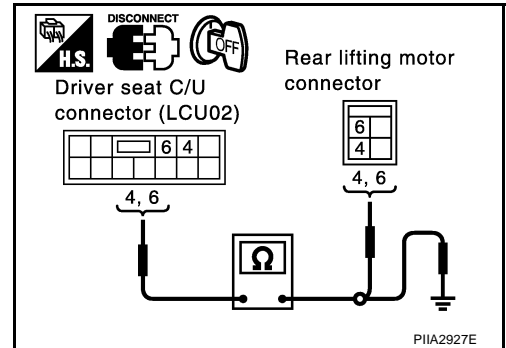
4 (Y) – Ground : Continuity should not exist.

6 (PU) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

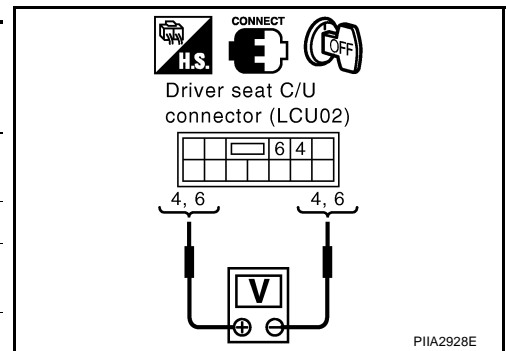
NG >> Repair or replace harness between driver seat control unit and rear lifting motor.



4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the connectors B142 for the driver seat control unit and rear lifting motor.
2. Check voltage between driver seat control unit connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|--------|---|-------------------------|
| | (+) | (-) | | |
| B142 | 6 (PU) | 4 (Y) | Rear end lifting switch (UP operation) | Battery voltage |
| | | | Rear end lifting switch OFF | 0 |
| | 4 (Y) | 6 (PU) | Rear end lifting switch (DOWN operation) | Battery voltage |
| | | | Rear end lifting switch OFF | 0 |



OK or NG

OK >> Replace rear lifting motor.

NG >> Replace driver seat control unit.

Steering Wheel Telescopic Motor Circuit Inspection

AIS001K0

1. CHECK STEERING WHEEL TELESCOPIC MECHANISM

Check following.

1. Operation malfunction caused by steering wheel telescopic mechanism deformation or pinched harness or other foreign materials.
2. Operation malfunction and interference with other parts by poor installation.

OK or NG

OK >> GO TO 2.

NG >> Repair the malfunctioning part and check again.

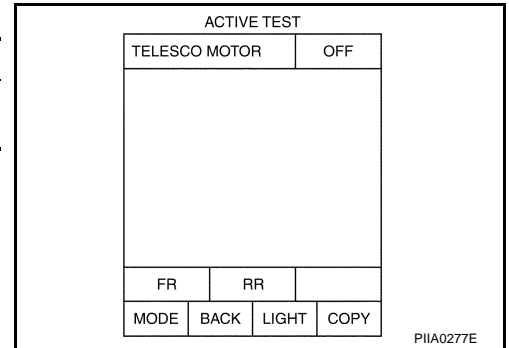
AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

With CONSULT-II

Check operation with "TELESCO MOTOR" in ACTIVE TEST.

| Test item | Description |
|---------------|--|
| TELESCO MOTOR | The telescopic motor is activated by receiving the drive signal. |



Without CONSULT-II

Carry out the self-diagnosis. Refer to [SE-46, "On Board Diagnosis"](#).

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and telescopic motor connector.
3. Check continuity between BCM connector M4 terminals 101, 107 and telescopic motor connector M60 terminals 1, 2.

101 (P/L) – 1 (P/L) : Continuity should exist.

107 (P/B) – 2 (P/B) : Continuity should exist.

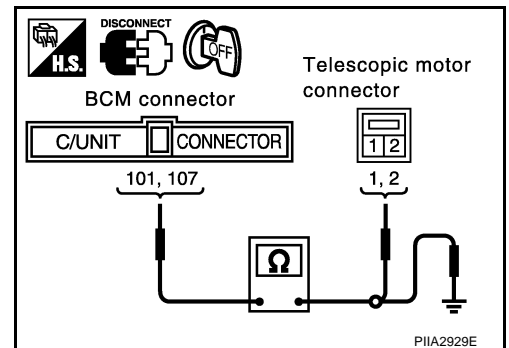
4. Check continuity between BCM connector M4 terminals 101, 107 and body ground.

101 (P/L) – Ground : Continuity should not exist.

107 (P/B) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 4.
- NG >> Repair or replace harness between BCM and telescopic motor.

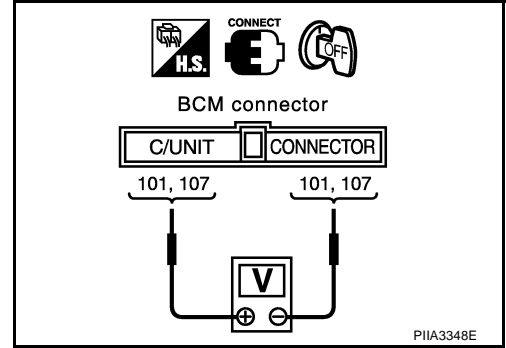


AUTOMATIC DRIVE POSITIONER

4. CHECK BCM OUTPUT SIGNAL

1. Connect the BCM connector and telescopic motor connector.
2. Check voltage between BCM connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|-----------|-------------------------------------|-------------------------|
| | (+) | (-) | | |
| M4 | 101 (P/L) | 107 (P/B) | Telescopic switch (FR operation) | Battery volt- age |
| | | | Telescopic switch OFF | 0 |
| | 107 (P/B) | 101 (P/L) | Telescopic switch (RR operation) | Battery volt- age |
| | | | Telescopic switch OFF | 0 |



OK or NG

- OK >> Replace telescopic motor.
- NG >> Replace BCM.

Steering Wheel Tilt Motor Circuit Inspection

AIS001K1

1. CHECK STEERING WHEEL TILT MECHANISM

Check following.

1. Operation malfunction caused by steering wheel tilt mechanism deformation or pinched harness and other foreign materials.
2. Operation malfunction and interference with other parts by poor installation.

OK or NG

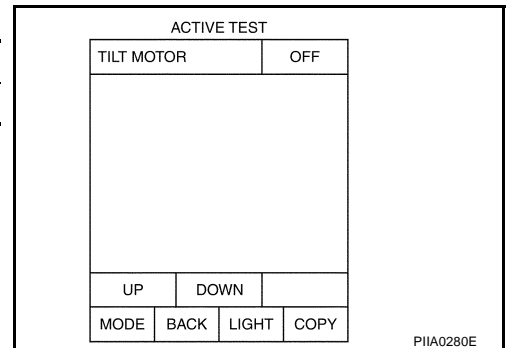
- OK >> GO TO 2.
- NG >> Repair the malfunctioning part.

2. CHECK FUNCTION

With CONSULT-II

Check operation with "TILT MOTOR" in ACTIVE TEST.

| Test item | Description |
|------------|--|
| TILT MOTOR | The tilt motor is activated by receiving the drive signal. |



Without CONSULT-II

Carry out the self-diagnosis. Refer to [SE-46, "On Board Diagnosis"](#).

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM connector and tilt motor connector.
3. Check continuity between BCM connector M4 terminals 102 (L/B), 103 (R) and tilt motor connector M58 terminals 1 (R), 2 (L/B).

102 (L/B) – 2 (L/B) : Continuity should exist.

103 (R) – 1 (R) : Continuity should exist.

4. Check continuity between BCM connector M4 terminals 102 (L/B), 103 (R) and body ground.

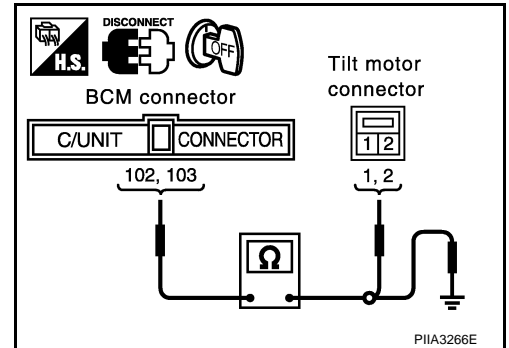
102 (L/B) – Ground : Continuity should not exist.

103 (R) – Ground : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness between BCM and tilt motor.



4. CHECK BCM OUTPUT SIGNAL

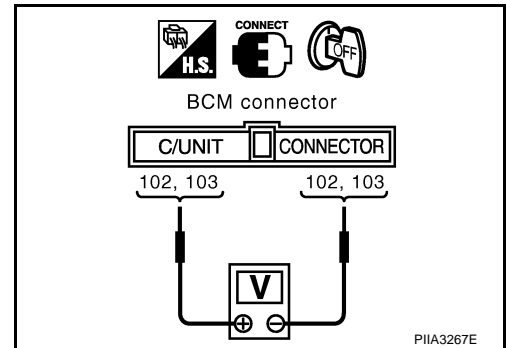
1. Connect BCM connector and tilt motor connector.
2. Check voltage between BCM connector.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|---------------------------|-----------|---------------------------------|-------------------------|
| | (+) | (-) | | |
| M4 | 102 (L/B) | 103 (R) | Tilt switch (DOWN operation) | Battery voltage |
| | | | Tilt switch OFF | 0 |
| | 103 (R) | 102 (L/B) | Tilt switch (UP operation) | Battery voltage |
| | | | Tilt switch OFF | 0 |

OK or NG

OK >> Replace tilt motor.

NG >> Replace BCM.



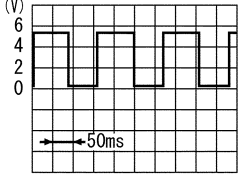
AUTOMATIC DRIVE POSITIONER

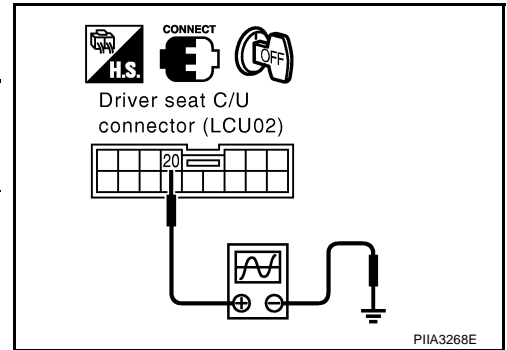
AISS001K2

Seat Sliding Sensor Circuit Inspection

1. CHECK SLIDING SENSOR INPUT/OUTPUT SIGNAL

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

| Connector | Terminals (Wire color) | | Condition | Signal |
|-----------|---------------------------|--------|-------------------------|---|
| | (+) | (-) | | |
| B143 | 20 (G/B) | Ground | Sliding motor operation |  <p style="text-align: right;">SIIA0690J</p> |



OK or NG

- OK >> System is OK.
 NG >> GO TO 2.

2. CHECK SLIDING SENSOR MECHANISM

Check the operation malfunction caused by sliding rail deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
 NG >> Repair the malfunctioning parts.

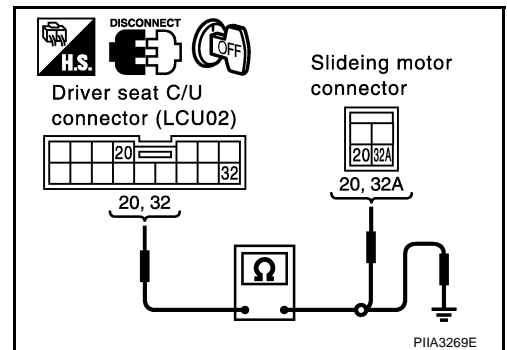
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and sliding motor connector.
2. Check continuity between driver seat control unit connector B143 terminals 20 (G/B), 32 (R/W) and sliding motor B146 terminals 20 (G/B), 32A (R/W).

20 (G/B) – 20 (G/B) : Continuity should exist.
32 (R/W) – 32A (R/W) : Continuity should exist.

3. Check continuity between driver seat control unit B143 terminals 20 (G/B), 32 (R/W) and body ground.

20 (G/B) – Ground : Continuity should not exist.
32 (R/W) – Ground : Continuity should not exist.



OK or NG

- OK >> Replace sliding motor.
 NG >> Repair or replace harness driver seat control unit and sliding motor.

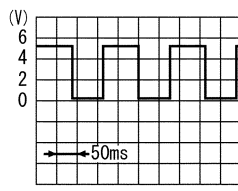
AUTOMATIC DRIVE POSITIONER

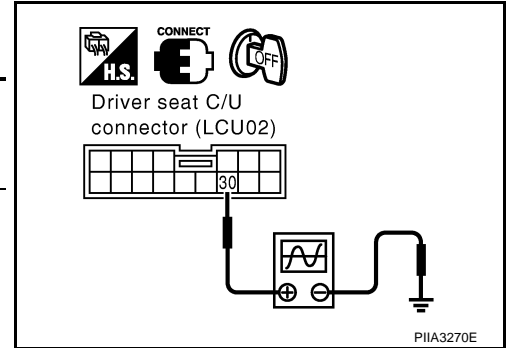
AIIS001K3

Seat Reclining Sensor Circuit Inspection

1. CHECK RECLINING SENSOR INPUT/OUTPUT SIGNAL

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

| Connector | Terminals (Wire color) | | Condition | Signal |
|-----------|---------------------------|--------|---------------------------|---|
| | (+) | (-) | | |
| B143 | 30 (L) | Ground | Reclining motor operation |  <p style="text-align: right;">S1IA0693J</p> |



OK or NG

- OK >> System is OK.
 NG >> GO TO 2.

2. CHECK RECLINING SENSOR MECHANISM

Check the operation malfunction caused by reclining mechanism deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
 NG >> Repair the malfunctioning parts.

3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and reclining motor connector.
2. Check continuity between driver seat control unit connector B143 terminals 30 (L), 32 (R/W) and reclining motor connector B147 terminals 30 (L), 32 (R/W).

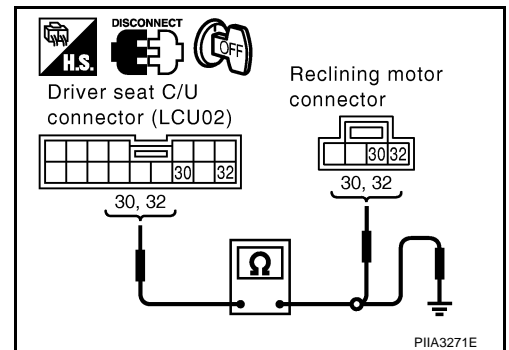
30 (L) – 30 (L) : Continuity should exist.

32 (R/W) – 32 (R/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B143 terminals 30, 32 and body ground.

30 (L) – Ground : Continuity should not exist.

32 (R/W) – Ground : Continuity should not exist.



OK or NG

- OK >> Replace reclining motor.
 NG >> Repair or replace harness between driver seat control unit and reclining motor.

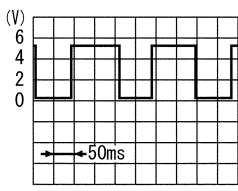
AUTOMATIC DRIVE POSITIONER

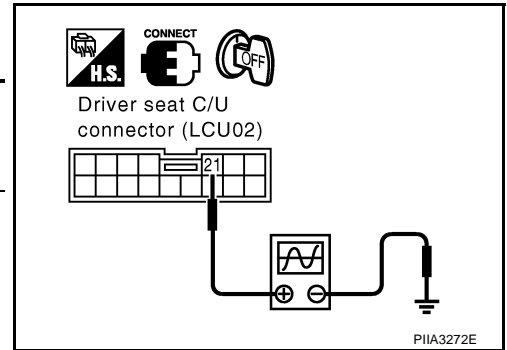
AI5001K4

Front End Seat Lifting Sensor Circuit Inspection

1. CHECK FRONT END LIFTING SENSOR INPUT/OUTPUT SIGNAL

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

| Connector | Terminals (Wire color) | | Condition | Signal |
|-----------|---------------------------|--------|-------------------------------|---|
| | (+) | (-) | | |
| B143 | 21 (Y/B) | Ground | Front lifting motor operation |  <p>(V) 6 4 2 0</p> <p>50ms</p> <p>SIIA0691J</p> |



OK or NG

- OK >> System is OK.
NG >> GO TO 2.

2. CHECK FRONT END LIFTING SENSOR MECHANISM

Check the operation malfunction caused by lifter mechanism deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
NG >> Repair the malfunctioning parts.

3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and front lifting motor connector.
2. Check continuity between driver seat control unit connector B143 terminals 21 (Y/B), 32 (R/W) and front lifting motor connector B148 terminals 21 (Y/B), 32B (R/W).

21 (Y/B) – 21 (Y/B) : Continuity should exist.

32 (R/W) – 32B (R/W) : Continuity should exist.

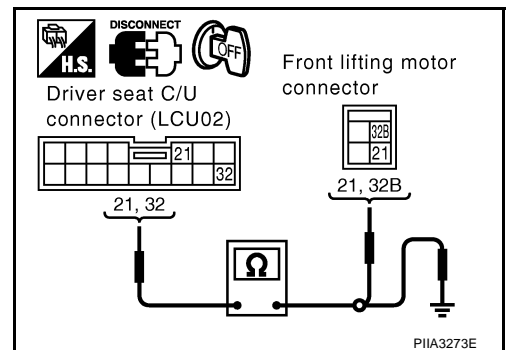
3. Check continuity between driver seat control unit connector B143 terminals 21 (Y/B), 32 (R/W) and body ground.

21 (Y/B) – Ground : Continuity should not exist.

32 (R/W) – Ground : Continuity should not exist.

OK or NG

- OK >> Replace front lifting motor.
NG >> Repair or replace harness between driver seat control unit and front lifting motor.



AUTOMATIC DRIVE POSITIONER

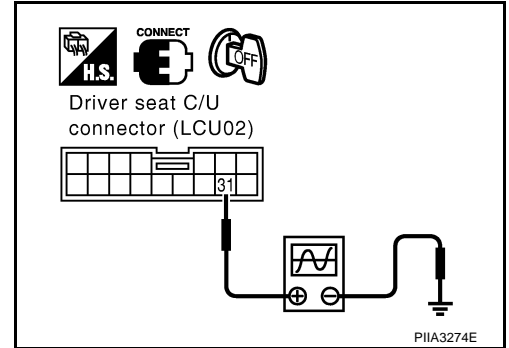
Rear End Lifting Sensor Circuit Inspection

AIS001K5

1. CHECK REAR END LIFTING SENSOR INPUT/OUTPUT SIGNAL

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

| Connector | Terminals (Wire color) | | Condition | Signal |
|-----------|---------------------------|--------|------------------------------|---|
| | (+) | (-) | | |
| B143 | 31 (W/R) | Ground | Rear lifting motor operation | <p style="text-align: right;">S11A0693J</p> |



OK or NG

- OK >> System is OK.
 NG >> GO TO 2.

2. CHECK REAR END LIFTING SENSOR MECHANISM

Check the malfunction caused by lifter mechanism deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
 NG >> Repair the malfunctioning parts.

3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and rear lifting motor connector.
2. Check continuity between driver seat control unit connector B143 terminals 31 (W/R), 32 (R/W) and rear lifting motor connector B149 terminals 31 (W/R), 32C (R/W).

31 (W/R) – 31 (W/R) : Continuity should exist.

32 (R/W) – 32C (R/W) : Continuity should exist.

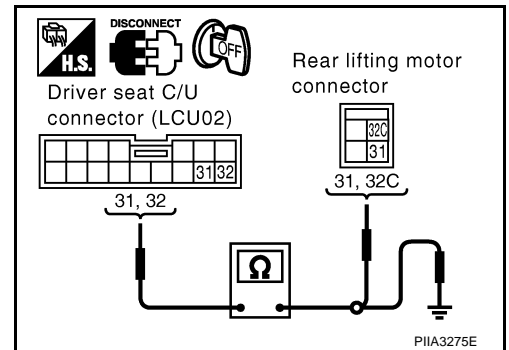
3. Check continuity between driver seat control unit connector B143 terminals 31 (W/R), 32 (R/W) and body ground.

31 (W/R) – Ground : Continuity should not exist.

32 (R/W) – Ground : Continuity should not exist.

OK or NG

- OK >> Replace rear lifting motor.
 NG >> Repair or replace harness between driver seat control unit and rear lifting motor.



AUTOMATIC DRIVE POSITIONER

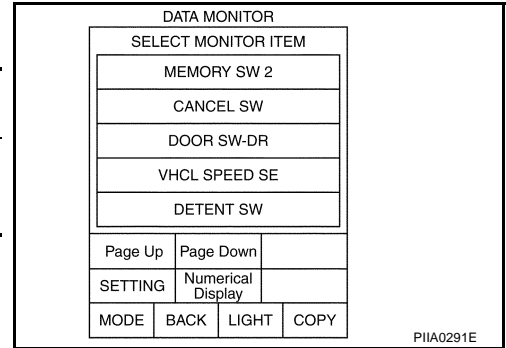
AI/S001K6

Detention Switch Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

Check that when the A/T selector lever is in P-position, "DETENT SW" on the DATA MONITOR becomes ON.



| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|------------|---|
| DETENT SW | ON/ OFF | The selector lever position "P position (ON)/other than P position (OFF)" judged from the detente switch signal is displayed. |

Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the A/T selector lever to check. Refer to [SE-49](#).

OK or NG

- OK >> System is OK.
- NG >> GO TO 2.

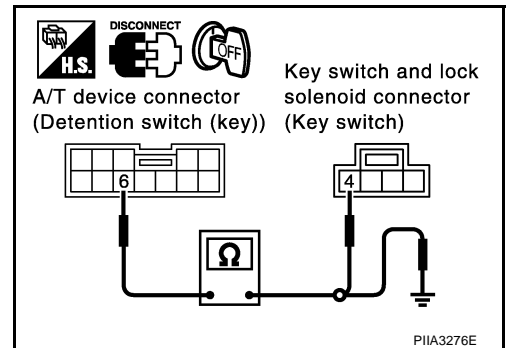
2. CHECK DETENTION SWITCH POWER SUPPLY CIRCUIT HARNESS

- Turn ignition switch OFF.
- Disconnect A/T device (detention switch) connector and "key switch and key lock solenoid" connector.
- Check continuity harness between A/T device (detention switch) connector M97 terminal 6 (PU/W) and key switch and key lock solenoid connector M64 terminal 4 (PU/W).

6 (PU/W) – 4 (PU/W) : Continuity should exist.

- Check continuity harness between A/T device (detention switch) connector M97 terminal 6 (PU/W) and body ground.

6 (PU/W) – Ground : Continuity should not exist.



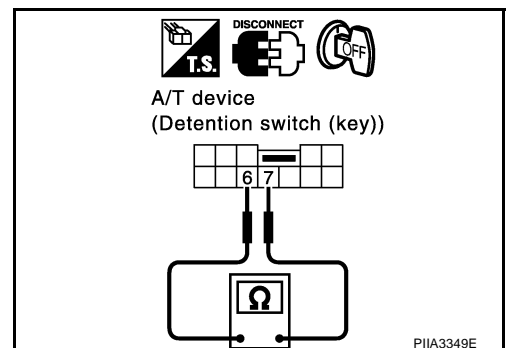
OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness between A/T device (detention switch) and key switch and key lock solenoid.

3. CHECK DETENTION SWITCH

Check continuity between detection switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------|-----------------------|-----------------------------|
| | (+) | (-) | | |
| M97 | 6 (PU/W) | 7 (G/OR) | P-position | Continuity should not exist |
| | | | Other than P-position | Continuity should exist |



OK or NG

- OK >> GO TO 4.
- NG >> Replace detention switch.

AUTOMATIC DRIVE POSITIONER

4. CHECK DETENTION SWITCH SIGNAL HARNESS

1. Disconnect BCM connector.
2. Check continuity between BCM connector M4 terminal 8 (G/OR) and A/T device (detention switch) connector M97 terminal 7 (G/OR).

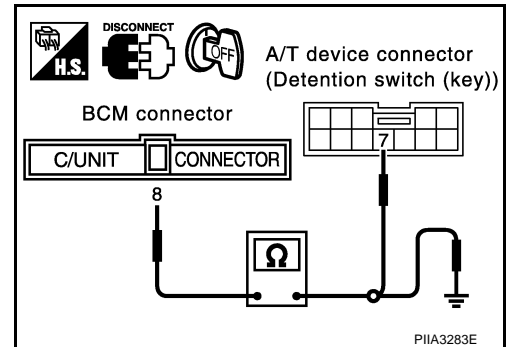
8 (G/OR) – 7(G/OR) : Continuity should exist.

3. Check continuity harness between BCM connector M4 terminal 8 (G/OR) and body ground.

8 (G/OR) – Ground : Continuity should not exist.

OK or NG

- OK >> Replace BCM.
 NG >> Repair or replace harness between BCM and A/T device (detention switch).



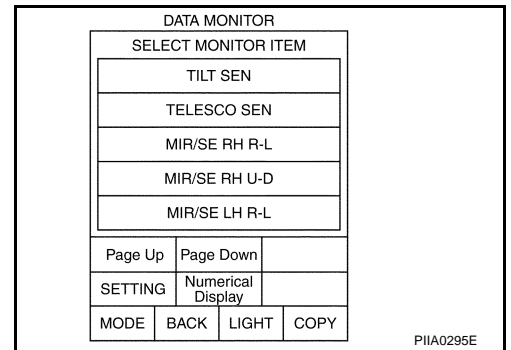
Telescopic Sensor Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

Operate the telescopic switch with "TELESCO SEN" on the DATA MONITOR to check that the voltage changes.

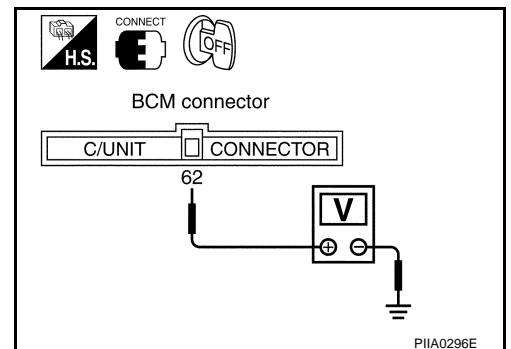
| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|--|
| TELESCO SEN | "V" The telescoping position (voltage) judged from the telescoping sensor signal is displayed. |



Without CONSULT-II

1. Turn ignition switch OFF.
2. Check voltage between BCM connector and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|----------------------------|----------------------|
| | (+) | (-) | | |
| M4 | 62 (P/B) | Ground | Telescopic top position | 2 |
| | | | Telescopic bottom position | 4 |



OK or NG

- OK >> System is OK.
 NG >> GO TO 2.

2. CHECK STEERING WHEEL TILT MECHANISM

Check the operation malfunction caused by steering wheel tilt mechanism deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
 NG >> Repair the malfunctioning parts.

AUTOMATIC DRIVE POSITIONER

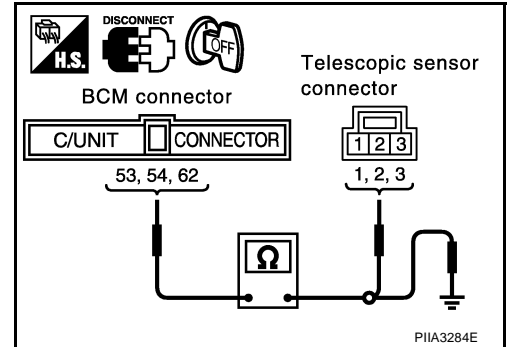
3. CHECK HARNESS CONTINUITY

- Disconnect BCM and telescopic sensor connector.
- Check continuity harness between BCM connector M4 terminals 53 (L/B), 54 (R), 62 (P/B) and telescopic sensor connector M59 terminals 1 (R), 2 (P/B), 3 (L/B).

53 (L/B) – 3 (L/B) : Continuity should exist.
54(R) – 1 (R) : Continuity should exist.
62 (P/B) – 2 (P/B) : Continuity should exist.

- Check continuity harness between BCM connector M59 terminals 53 (L/B), 54 (R), 62 (P/B) and body ground.

53 (L/B) – Ground : Continuity should not exist.
54 (R) – Ground : Continuity should not exist.
62 (P/B) – Ground : Continuity should not exist.



OK or NG

- OK >> Replace telescopic sensor.
 NG >> Repair or replace harness between BCM and telescopic sensor.

Tilt Sensor Circuit Inspection

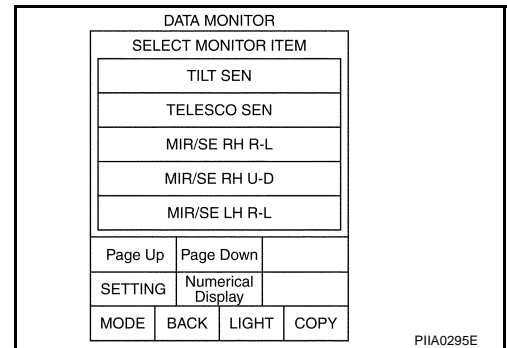
AIS001K8

1. CHECK FUNCTION

With CONSULT-II

With "TILT SEN" on the DATA MONITOR, operate the tilt switch to check that the voltage changes.

| Monitor item [OPERATION or UNIT] | Contents | |
|----------------------------------|----------|--|
| TILT SEN | "V" | The tilt position (voltage) judged from the tilt sensor signal is displayed. |



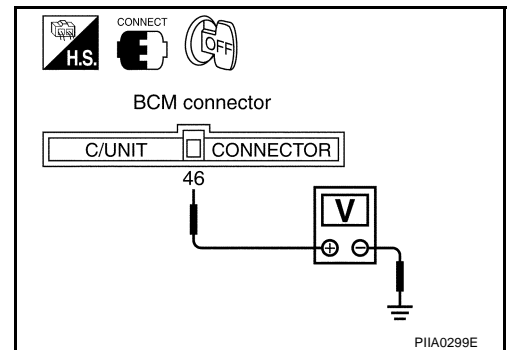
Without CONSULT-II

- Turn ignition switch OFF.
- Check voltage between BCM connector and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|----------------------|----------------------|
| | (+) | (-) | | |
| M4 | 46 (LG/R) | Ground | Tilt top position | 2 |
| | | | Tilt bottom position | 4 |

OK or NG

- OK >> System is OK.
 NG >> GO TO 2.



2. CHECK TILT STEERING MECHANISM

Check the operation malfunction caused by steering wheel tilt mechanism deformation or parts are loose.

OK or NG

- OK >> GO TO 3.
 NG >> Repair the malfunctioning parts.

AUTOMATIC DRIVE POSITIONER

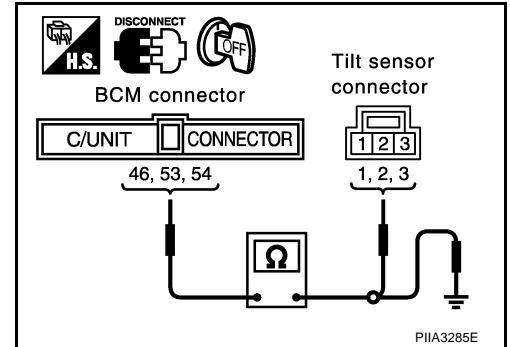
3. CHECK HARNESS

1. Disconnect BCM connector and tilt sensor connector.
2. Check continuity harness between BCM connector M4 terminals 46 (LG/R), 53 (L/B), 54 (R) and tilt sensor connector M57 terminals 1 (R), 2 (LG/R), 3 (L/B).

- 46 (LG/R) – 2 (LG/R) : Continuity should exist.**
53 (L/B) – 3 (L/B) : Continuity should exist.
54 (R) – 1 (R) : Continuity should exist.

3. BCM connector M4 terminals 46 (LG/R), 53 (L/B), 54 (R) and body ground.

- 46 (LG/R) – Ground : Continuity should not exist.**
53 (L/B) – Ground : Continuity should not exist.
54 (R) – Ground : Continuity should not exist.



OK or NG

- OK >> Replace tilt sensor.
 NG >> Repair or replace harness between BCM and tilt sensor.

Key Switch and Key Lock Solenoid Circuit Inspection

AIS001K9

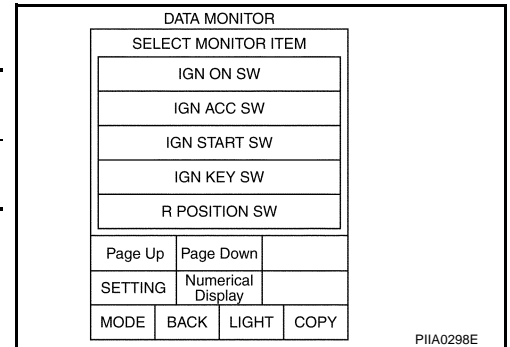
1. CHECK KEY SWITCH AND KEY LOCK SOLENOID

Connect the key switch and key lock solenoid connector M64.

With CONSULT-II

With "IGN KEY SW" on the DATA MONITOR, Check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|---|
| IGN KEY SW ON/OFF | Key inserted (ON)/key removed (OFF) status judged from the key detection switch is displayed. |



Without CONSULT-II

GO TO 2.

OK or NG

- OK >> System is OK.
 NG >> GO TO 2.

2. CHECK FUSE

Check if any of the following fuses is blown.

| Unit | Terminal No. | Power source | Fuse No. |
|------------------------|--------------|------------------|----------|
| Fuse block (J/B) No. 2 | 6N | BAT power supply | 32 |

NOTE:

Refer to [SE-17, "Component Parts and Harness Connector Location"](#).

OK or NG

- OK >> GO TO 3.
 NG >> If fuse is blown, be sure to eliminate cause of problem before installing new fuse. Refer to [SE-17, "Component Parts and Harness Connector Location"](#).

AUTOMATIC DRIVE POSITIONER

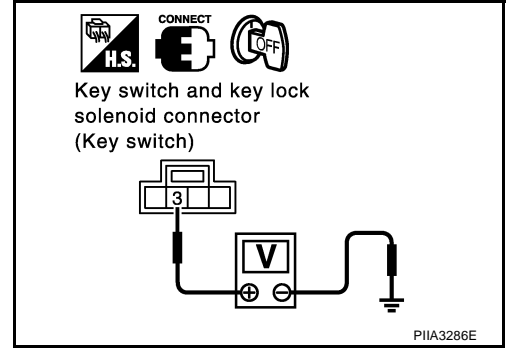
3. KEY SWITCH AND KEY LOCK SOLENOID POWER SUPPLY CIRCUIT INSPECTION

1. Turn ignition switch OFF.
2. Disconnect key switch connector and key lock solenoid connector.
3. Check voltage between key switch and key lock solenoid connector M64 terminal 3 (W) and body ground.

3 (W) – Ground : Battery voltage

OK or NG

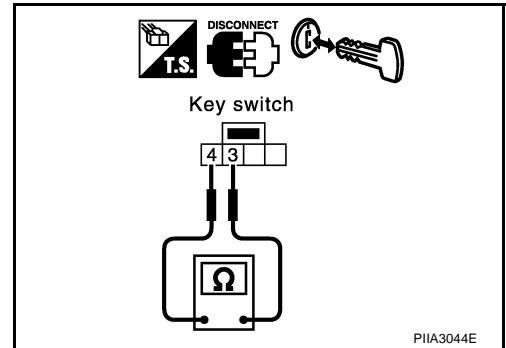
- OK >> GO TO 4.
 NG >> Check harness between key switch and key lock solenoid and fuse.



4. CHECK KEY SWITCH

Check continuity between key switch.

| Connector | Terminals | Condition | Continuity |
|-----------|-----------|--|------------|
| M64 | 3 – 4 | Key is inserted in ignition key cylinder. | Yes |
| | | Key is removed from ignition key cylinder. | No |



OK or NG

- OK >> GO TO 5.
 NG >> Replace key switch and key lock solenoid.

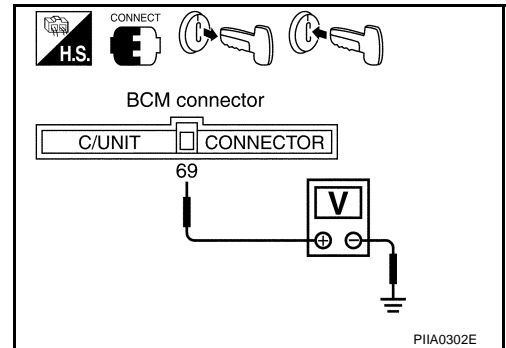
5. CHECK KEY SWITCH SIGNAL

Check voltage between BCM connector body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|----------------|----------------------|
| | (+) | (-) | | |
| M4 | 69 (PU/W) | ground | Remove the key | 0 |
| | | ground | Insert the key | Battery voltage |

OK or NG

- OK >> System is OK.
 NG >> GO TO 6.



AUTOMATIC DRIVE POSITIONER

6. CHECK HARNESS CONTINUITY

1. Disconnect key switch and key lock solenoid connector and BCM connector.
2. Check continuity between key switch and key lock solenoid connector M64 terminal 4 (PU/W) and BCM connector M4 terminal 69 (PU/W).

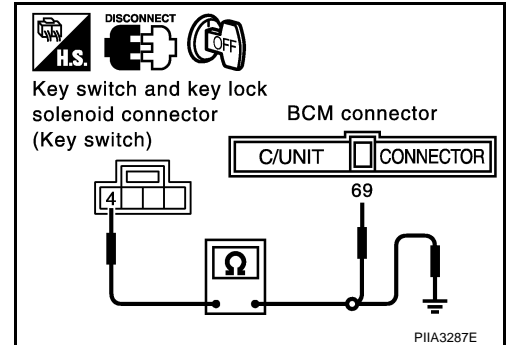
4 (PU/W) – 69 (PU/W) : Continuity should exist.

3. Check continuity between key switch and key lock solenoid connector M64 terminal 4 (PU/W) and body ground.

4 (PU/W) – Ground : Continuity should not exist.

OK or NG

- OK >> Check the harness and connector.
 NG >> Repair or replace harness between key switch and key lock solenoid and BCM.



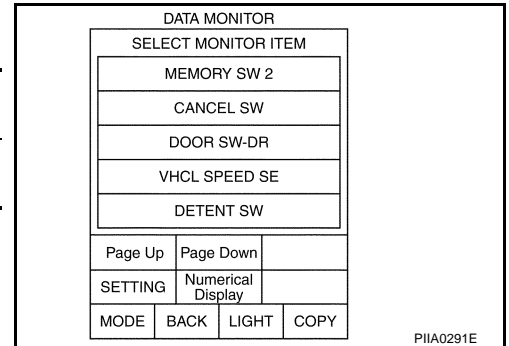
Front Door Switch (Driver Side) Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

With "DOOR SW DR" on the DATA MONITOR, check ON/OFF operation when the driver door is open and closed.

| Monitor item [OPERATION or UNIT] | | Contents |
|----------------------------------|--------|--|
| DOOR SW DR | ON/OFF | Door open (ON)/door closed (OFF) status judged from the driver door switch is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and open and close the driver door to check. Refer to [SE-49](#).

OK or NG

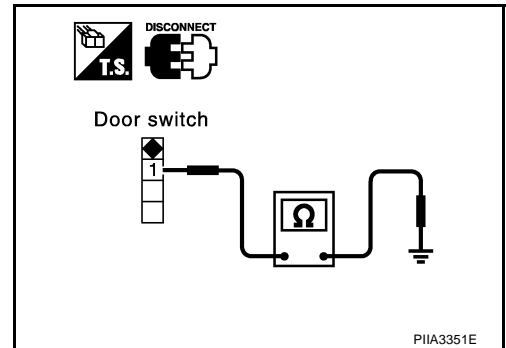
- OK >> System is OK.
 NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

2. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

1. Turn ignition switch OFF.
2. Disconnect front door switch connector.
3. Check continuity between driver door switch connector and ground part of door switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------------------------|---|------------|
| | (+) | (-) | | |
| B20 | 1 | Ground part of door switch | With the front door switch (driver side) pressed | No |
| | | | With the front door switch (driver side) released | Yes |



OK or NG

- OK >> GO TO 3.
 NG >> Replace driver door switch.

3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M4 terminal 142 (R/Y) and front door switch connector B20 terminal 1 (R/Y).

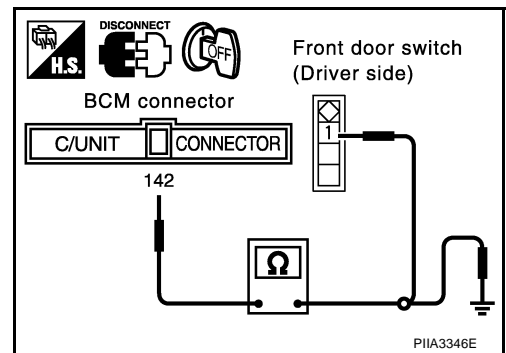
142 (R/Y) – 1 (R/Y) : Continuity should exist.

3. Check continuity between BCM connector M4 terminal 142 (R/Y) and body ground.

142 (R/Y) – Ground : Continuity should not exist.

OK or NG

- OK >> Replace BCM.
 NG >> Repair or replace harness between BCM and front door switch (driver side).



Vehicle Speed Signal Inspection

1. CHECK SYMPTOM

Check that the speedometer in the combination meter operates normally.

OK or NG

- OK >> GO TO 2.
 NG >> Check vehicle speed signal. Refer to [DI-122, "Vehicle Speed Signal Inspection"](#) .

AIS001KB

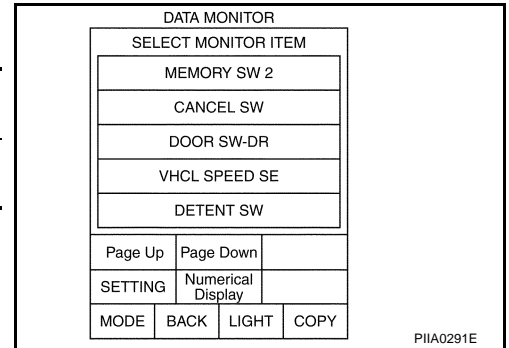
AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

With CONSULT-II

With "VHCL SPEED SE" on the DATA MONITOR, Check vehicle speed signal.

| Monitor item [OPERATION or UNIT] | Contents | |
|----------------------------------|-------------|---|
| VHCL SPEED SE | "<7km/>7km" | The present vehicle speed (less than 7 km/h (4 MPH), or 7 km/h (4 MPH) or higher) is displayed. |



Without CONSULT-II

Carry out the self-diagnosis. Refer to [SE-51, "ON BOARD DIAGNOSIS FOR AUTOMATIC DRIVE POSITIONER"](#).

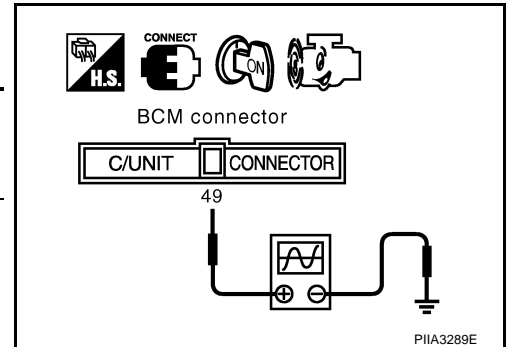
OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

3. CHECK VEHICLE SPEED INPUT/OUTPUT

- Start the engine.
- Check signal between BCM connector and body ground, with oscilloscope.

| Connector | Terminals (Wire color) | | Condition | Signal |
|-----------|------------------------|--------|--|---|
| | (+) | (-) | | |
| M4 | 49 (PU/W) | Ground | Vehicle speed is approx.40 km/h (25 MPH) | <p style="text-align: right;">PIIA3279E</p> |



OK or NG

- OK >> Replace BCM.
- NG >> GO TO 4.

AUTOMATIC DRIVE POSITIONER

4. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect BCM and combination meter connector.
3. Check continuity between BCM connector M4 terminal 49 (PU/W) and combination meter connector M41 terminal 38 (PU/W).

49 (PU/W) – 38 (PU/W) : Continuity should exist.

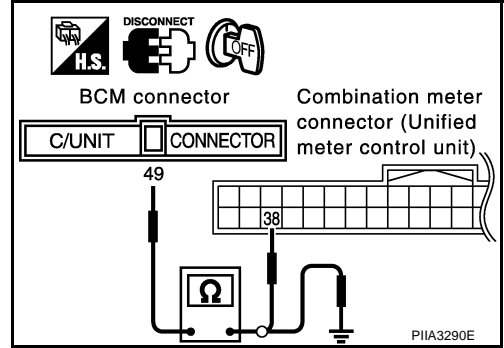
4. Check continuity between BCM connector M4 terminal 49 (PU/W) and body ground.

49 (PU/W) – Ground : Continuity should not exist.

OK or NG

OK >> Check meter control unit, refer to [DI-6, "COMBINATION METERS"](#).

NG >> Repair or replace harness between BCM and combination meter.



Seat Memory Switch Circuit Inspection

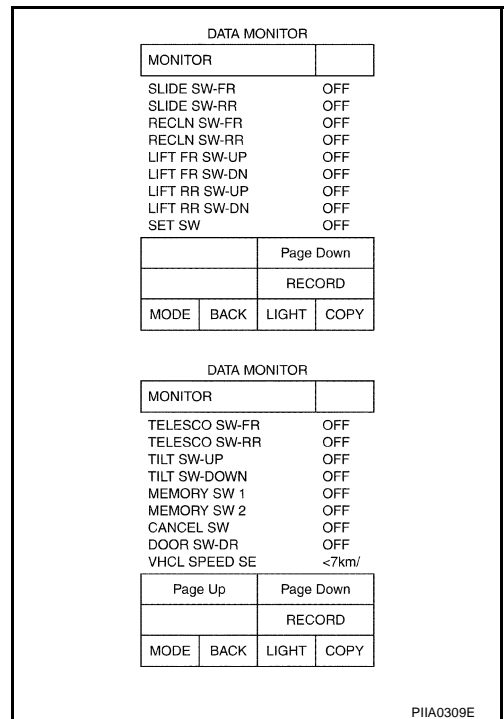
AIS001KC

1. CHECK FUNCTION

With CONSULT-II

With "SET SW, MEMORY SW1, MEMORY SW2" on the DATA MONITOR, operate the switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|--|
| MEMORY SW1 | "ON/OFF" ON / OFF status judged from the seat memory switch 1 signal is displayed. |
| MEMORY SW2 | "ON/OFF" ON / OFF status judged from the seat memory switch 2 signal is displayed. |
| SET SW | "ON/OFF" ON/OFF status judged from the setting switch signal is displayed. |



Without CONSULT-II

Carry out "switch monitor" in the self-diagnosis function, and operate "Setting switch, memory switch 1, memory switch 2" to check. Refer to [SE-49, "SWITCH MONITOR"](#).

OK or NG

OK >> System is OK.

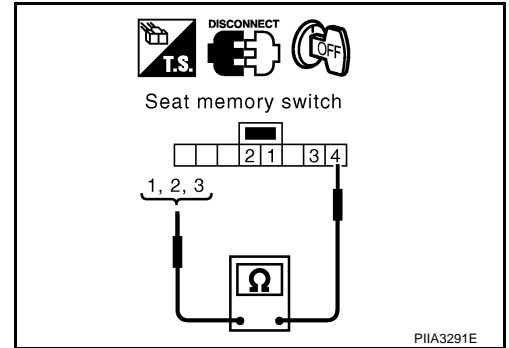
NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

2. CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Operate the setting switch and memory switch.
4. Check continuity between seat memory switch connector and body ground.

| Terminals (Wire color) | | Condition | Continuity | |
|---------------------------|----------|-----------------|-----------------------------|------------------------------|
| Con- nector | Terminal | | | |
| D3 | 3 (P/L) | Set switch: ON | Continuity should exist | |
| | | Set switch: OFF | Continuity should not exist | |
| | 1 (G) | 4 (B) | Memory switch 1 ON | Continuity should exist |
| | | | Memory switch 1: OFF | Continuity should not exist. |
| | | 2 (OR/ L) | Memory switch 2: ON | Continuity should exist |
| | | | Memory switch 2: OFF | Continuity should not exist. |



OK or NG

- OK >> GO TO 3.
 NG >> Replace seat memory switch.

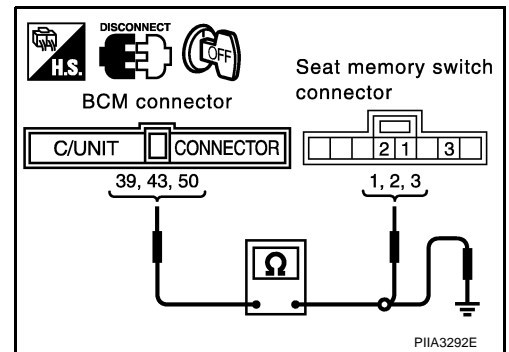
3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M4 terminals 39 (G), 43 (OR/L), 50 (P/L) and seat memory switch connector D3 terminals 1 (G), 2 (OR/L), 3 (P/L).

- 39 (G) – 1 (G) : Continuity should exist.**
43 (OR/L) – 2 (OR/L) : Continuity should exist.
50 (P/L) – 3 (P/L) : Continuity should exist.

3. Check continuity between BCM connector M4 terminals 39 (G), 43 (OR/L), 50 (P/L) and body ground.

- 39 (G) – Ground : Continuity should not exist.**
43 (OR/L) – Ground : Continuity should not exist.
50 (P/L) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 4.
 NG >> Repair or replace harness between BCM and seat memory switch.

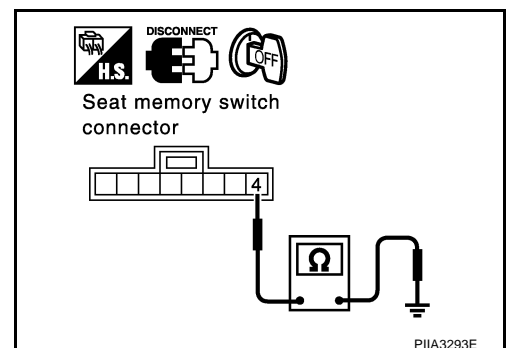
4. CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

Check continuity at harness between seat memory switch D3 terminal 4 (B) and body ground.

- 4 (B) – Ground : Continuity should exist.**

OK or NG

- OK >> Replace BCM.
 NG >> Repair or replace harness between seat memory switch and body ground.



AUTOMATIC DRIVE POSITIONER

AIS001KD

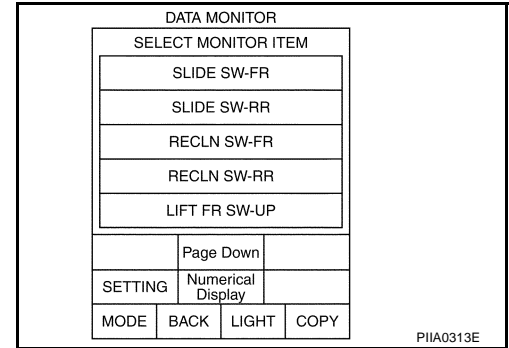
Seat Sliding Switch Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

With "SLIDE SW-FR, SLIDE SW-RR" on the DATA MONITOR, operate the sliding switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents | |
|----------------------------------|--|--|
| SLIDE SW-FR "ON/OFF" | ON / OFF status judged from the sliding switch (FR) signal is displayed. | |
| SLIDE SW-RR "ON/OFF" | ON / OFF status judged from the sliding switch (RR) signal is displayed. | |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the sliding switch to check. Refer to [SE-49, "SWITCH MONITOR"](#).

OK or NG

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

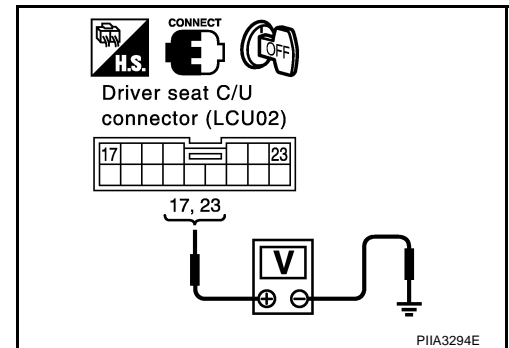
2. CHECK SLIDING SWITCH INPUT/OUTPUT

- Turn ignition switch OFF.
- Check voltage between driver seat control unit connector and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|---------------------------------|----------------------|
| | (+) | (-) | | |
| B143 | 17 (Y/R) | Ground | Sliding switch ON(FR operation) | 0 |
| | | | Sliding switch OFF | 5 |
| | 23 (G/W) | | Sliding switch ON(RR operation) | 0 |
| | | | Sliding switch OFF | 5 |

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector .
2. Check continuity between driver seat control unit connector B143 terminals 17 (Y/R), 23 (G/W) and driver power seat switch connector B144 terminals 17 (Y/R), 23 (G/W).

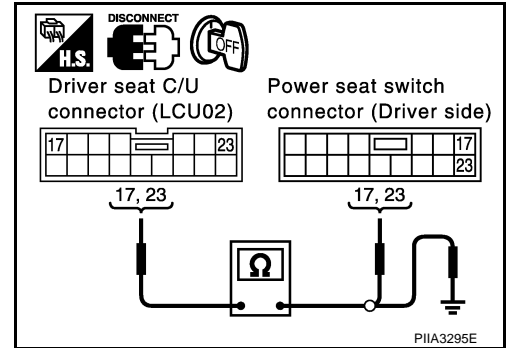
17 (Y/R) – 17 (Y/R) : Continuity should exist.

23 (G/W) – 23 (G/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B143 terminals 17(Y/R), 23 (G/W) and body ground.

17 (Y/R) – Ground : Continuity should not exist.

23 (G/W) – Ground : Continuity should not exist.



OK or NG

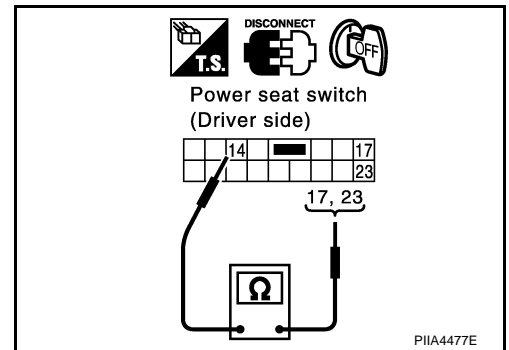
OK >> GO TO 4.

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

4. CHECK SLIDING SWITCH

Check continuity between driver seat switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------|---------------------------------|------------|
| | (+) | (-) | | |
| B143 | 17 (Y/R) | 14 (B/W) | Sliding switch ON(FR operation) | Yes |
| | | | Sliding switch OFF | No |
| | 23 (G/W) | | Sliding switch ON(RR operation) | Yes |
| | | | Sliding switch OFF | No |



OK or NG

OK >> GO TO 5.

NG >> Replace driver power seat switch.

5. CHECK POWER SEAT SWITCH GROUND CIRCUIT

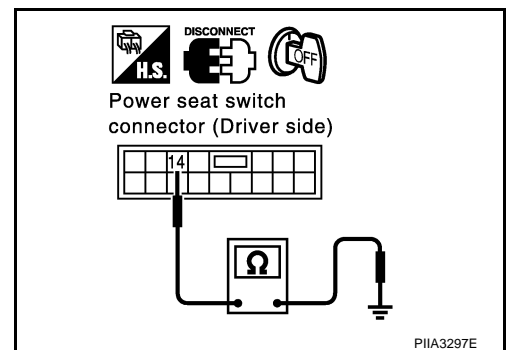
Check continuity between power seat switch (driver side) connector B144 terminal 14 (B/W) and body ground.

14 (B/W) – Ground : Continuity should exist.

OK or NG

OK >> Check the harness and connector.

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



AUTOMATIC DRIVE POSITIONER

AIS001KE

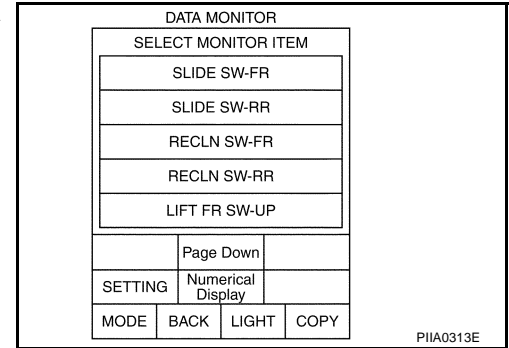
Seat Reclining Switch Inspection

1. CHECK FUNCTION

With CONSULT-II

With "RECLINING SW-FR, RECLINING SW-RR" on the DATA MONITOR, operate the reclining switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents | |
|----------------------------------|--------------|--|
| RECLN SW -FR | "ON/ OFF" | ON / OFF status judged from the reclining switch (FR) signal is displayed. |
| RECLIN S W-RR | "ON/ OFF" | ON / OFF status judged from the reclining switch (RR) signal is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the reclining switch to check. Refer to [SE-49, "SWITCH MONITOR"](#).

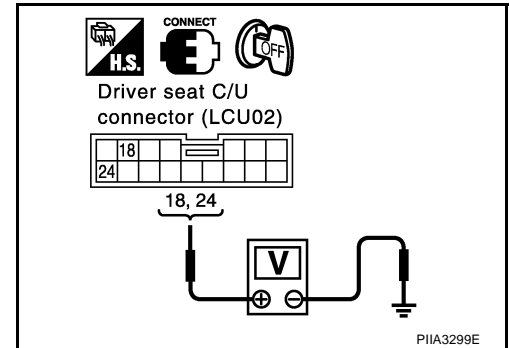
OK or NG

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

2. RECLINING SWITCH INPUT/OUTPUT INSPECTION

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

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|------------------------------------|----------------------|
| | (+) | (-) | | |
| B143 | 18 (GY/B) | Ground | Reclining switch ON (FR operation) | 0 |
| | | | Reclining switch OFF | 5 |
| | 24 (SB) | | Reclining switch ON (RR operation) | 0 |
| | | | Reclining switch OFF | 5 |



OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

AUTOMATIC DRIVE POSITIONER

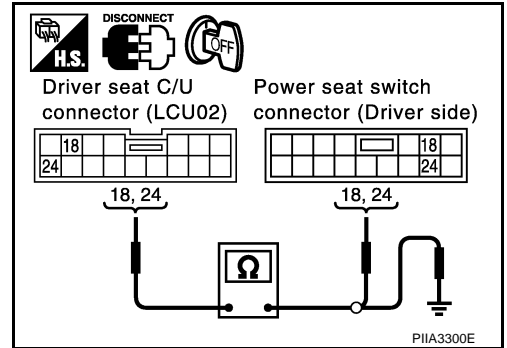
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector.
2. Check continuity between driver seat control unit connector B143 terminals 18 (GY/B), 24 (SB) and power seat switch (driver side) connector B144 terminals 18 (GY/B), 24 (SB).

18 (GY/B) – 18 (GY/B) : Continuity should exist.
24 (SB) – 24 (SB) : Continuity should exist.

3. Check continuity between driver seat control unit connector B143 terminals 18 (GY/B), 24 (SB) and body ground.

18 (GY/B) – Ground : Continuity should not exist.
24 (SB) – Ground : Continuity should not exist.



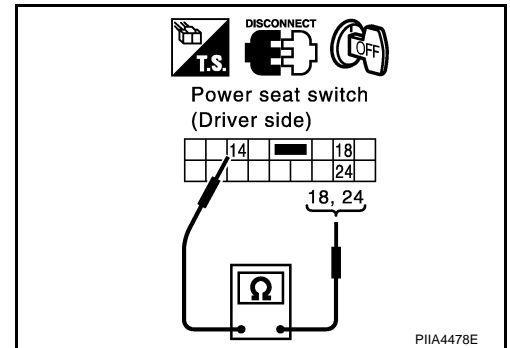
OK or NG

- OK >> GO TO 4.
- NG >> Repair or replace harness between driver seat control unit and power seat switch.

4. RECLINING SWITCH INSPECTION

Check continuity between driver seat switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------|------------------------------------|------------|
| | (+) | (-) | | |
| B143 | 18 (GY/B) | 14 (B/W) | Reclining switch ON (FR operation) | Yes |
| | | | Reclining switch OFF | No |
| | 24 (SB) | | Reclining switch ON (RR operation) | Yes |
| | | | Reclining switch OFF | No |



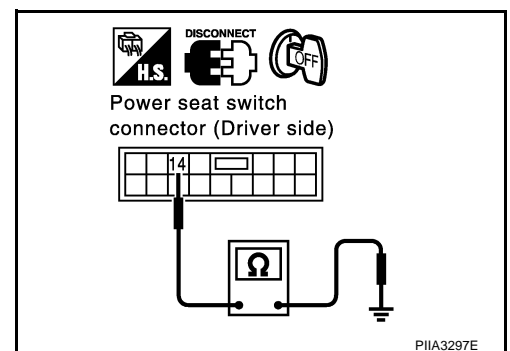
OK or NG

- OK >> GO TO 5.
- NG >> Replace power seat switch (driver side).

5. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch B144 terminal 14 (B/W) and body ground.

14 (B/W) – Ground : Continuity should exist.



OK or NG

- OK >> Check the harness and connector.
- NG >> Repair or replace harness between power seat switch (driver side) and body ground.

AUTOMATIC DRIVE POSITIONER

AIS001KF

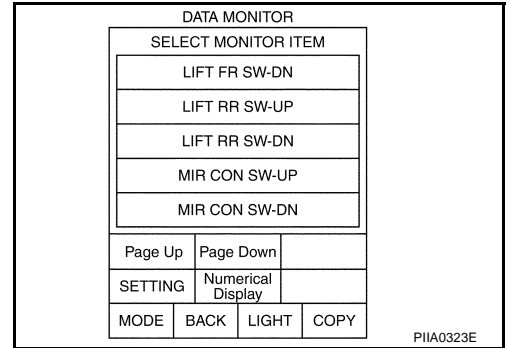
Front End Seat Lifting Switch Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

With "LIFT FR SW-UP, LIFT FR SW-DN" on the DATA MONITOR, operate the front lifting switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|--|
| LIFT FR SW-DN "ON/OFF" | ON / OFF status judged from the FR lifter switch (DOWN) signal is displayed. |
| LIFT RR SW-UP "ON/OFF" | ON / OFF status judged from the RR lifter switch (UP) signal is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the front lifting switch to check. Refer to [SE-49. "SWITCH MONITOR"](#).

OK or NG

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

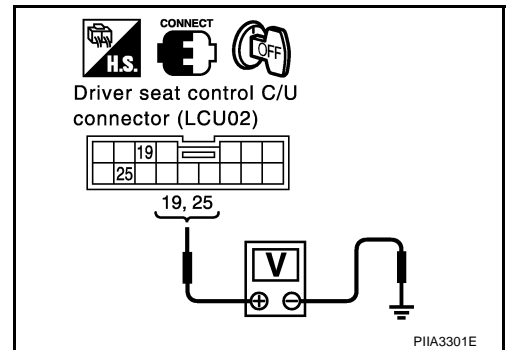
2. CHECK FRONT END LIFTING SWITCH INPUT/OUTPUT

1. Turn ignition switch OFF.
2. Check voltage between driver seat control unit B143 and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|--|----------------------|
| | (+) | (-) | | |
| B143 | 19 (L/R) | Ground | Front lifting switch ON (UP operation) | 0 |
| | | | Front lifting switch OFF | 5 |
| | 25 (OR/B) | | Front lifting switch ON (DOWN operation) | 0 |
| | | | Front lifting switch OFF | 5 |

OK or NG

- OK >> System is OK.
- NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

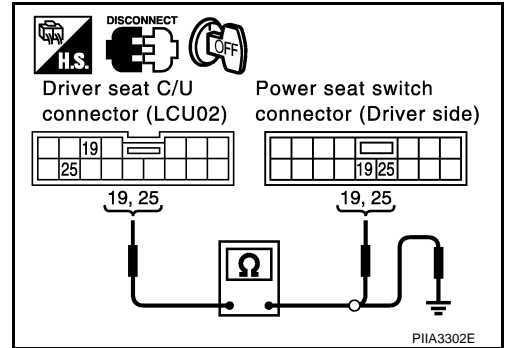
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector.
2. Check continuity between driver seat control unit connector B143 terminals 19 (L/R), 25 (OR/B) and driver seat switch connector B144 terminals 19 (L/R), 25 (OR/B).

19 (L/R) – 19 (L/R) : Continuity should exist.
25 (OR/B) – 25 (OR/B) : Continuity should exist.

3. Check continuity between driver seat control unit connector B143 terminals 19 (L/R), 25 (OR/B) and body ground.

19 (L/R) – Ground : Continuity should not exist.
25 (OR/B) – Ground : Continuity should not exist.



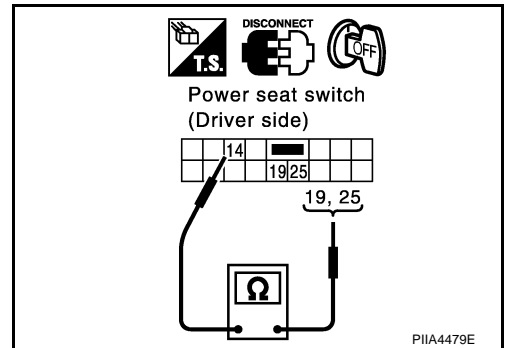
OK or NG

- OK >> GO TO 4.
 NG >> Repair or replace harness between driver seat control unit and power seat switch.

4. CHECK FRONT END LIFTING SWITCH

Check continuity between driver seat switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------|--|------------|
| | (+) | (-) | | |
| B143 | 19 (L/R) | 14 (B/W) | Front lifting switch ON (UP operation) | Yes |
| | | | Front lifting switch OFF | No |
| | 25 (OR/B) | | Front lifting switch ON (DOWN operation) | Yes |
| | | | Front lifting switch OFF | No |



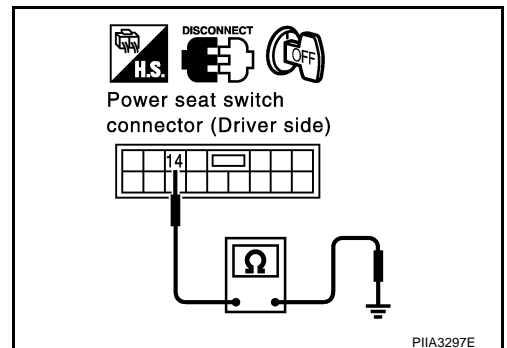
OK or NG

- OK >> GO TO 5.
 NG >> Replace driver power seat switch.

5. CHECK POWER SEAT SWITCH GROUND CIRCUIT

- Check continuity between power seat switch connector B144 terminal 14 (B/W) and body ground.

14 (B/W) – Ground : Continuity should exist.



OK or NG

- OK >> Check the harness and connector.
 NG >> Repair or replace harness between power seat switch and body ground.

AUTOMATIC DRIVE POSITIONER

AI001KG

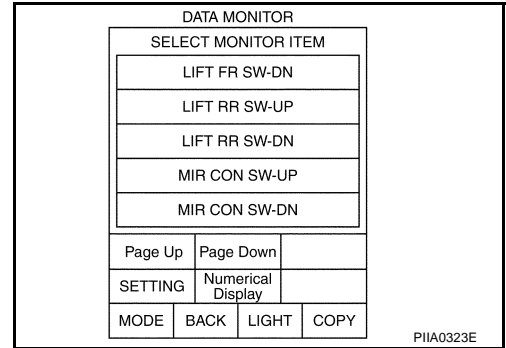
Rear End Seat Lifting Switch Circuit Inspection

1. CHECK FUNCTION

With CONSULT-II

With "LIFT RR SW-UP, LIFT RR SW-DN" on the DATA MONITOR, operate the rear lifting switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|---|
| LIFT RR SW-UP "ON/OFF" | Operation (ON)/open (OFF) status judged from the RR lifter switch (UP) signal is displayed. |
| LIFT RR SW-DN "ON/OFF" | Operation (ON)/open (OFF) status judged from the RR lifter switch (DOWN) signal is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the rear lifting switch to check. Refer to [SE-49. "SWITCH MONITOR"](#).

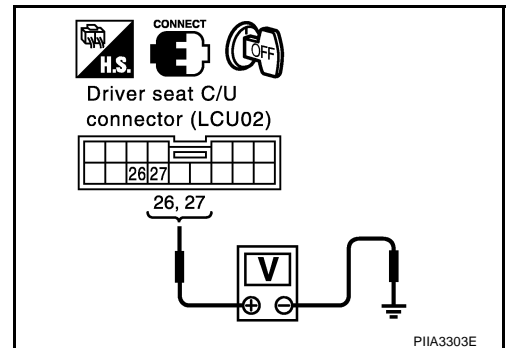
OK or NG

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

2. CHECK REAR END LIFTING SWITCH INPUT/OUTPUT

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

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|---|----------------------|
| | (+) | (-) | | |
| B143 | 26 (P/B) | Ground | Rear lifting switch ON(UP operation) | 0 |
| | | | Rear lifting switch OFF | 5 |
| | 27 (B/Y) | | Rear lifting switch ON (DOWN operation) | 0 |
| | | | Rear lifting switch OFF | 5 |



OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

AUTOMATIC DRIVE POSITIONER

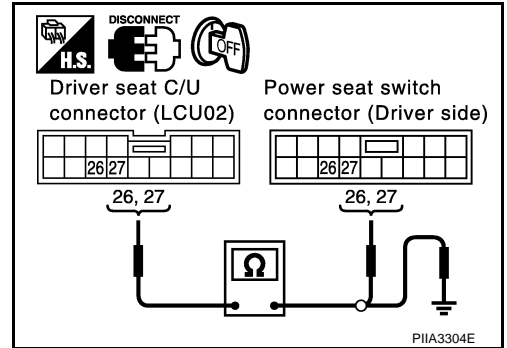
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and driver power seat switch connector.
2. Check continuity between driver seat control unit connector B143 terminals 26 (P/B), 27 (B/Y) and power seat switch (driver side) connector B144 terminals 26 (P/B), 27 (B/Y).

26 (P/B) – 26 (P/B) : Continuity should exist.
27 (B/Y) – 27 (P/Y) : Continuity should exist.

3. Check continuity between driver seat control unit connector B143 terminals 26 (P/B), 27 (B/Y) and body ground.

26 (P/B) – Ground : Continuity should not exist.
27 (B/Y) – Ground : Continuity should not exist.



OK or NG

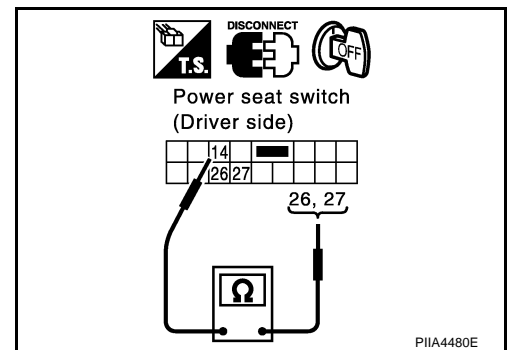
OK >> GO TO 4.

NG >> Repair or replace harness between driver seat control unit and driver power seat switch (driver side).

4. CHECK REAR END LIFTING SWITCH

Check continuity between driver seat switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|----------|---|------------|
| | (+) | (-) | | |
| B143 | 26 (P/B) | 14 (B/W) | Rear lifting switch ON(UP operation) | Yes |
| | | | Rear lifting switch OFF | No |
| | 27 (B/Y) | | Rear lifting switch ON (DOWN operation) | Yes |
| | | | Rear lifting switch OFF | No |



OK or NG

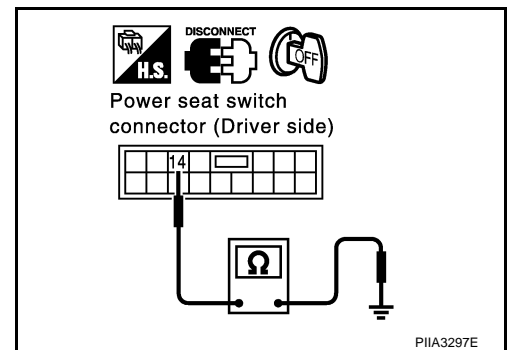
OK >> GO TO 5.

NG >> Replace power seat switch (driver side).

5. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B144 terminal 14 (B/W) and body ground.

14 (B/W) – Ground : Continuity should exist.



OK or NG

OK >> Check the harness and connector.

NG >> Repair or replace harness between power seat switch (driver side) and body ground.

AUTOMATIC DRIVE POSITIONER

AI5001KH

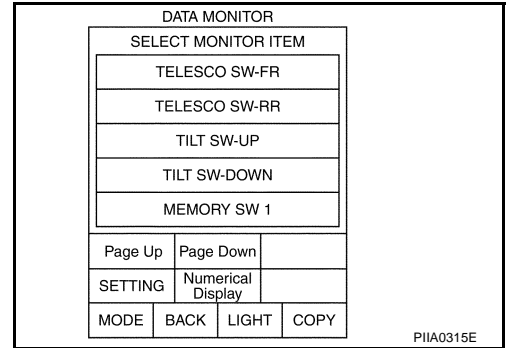
Steering Wheel Telescopic Switch Inspection

1. CHECK FUNCTION

With CONSULT-II

With "TELESCO SW-FR, TELESCO SW-RR" on the DATA MONITOR, operate the ADP steering switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|---|
| TELESCO SW-FR "ON/OFF" | Operation (ON)/open (OFF) status judged from the telescoping switch (FR) signal is displayed. |
| TELESCO SW-RR "ON/OFF" | Operation (ON)/open (OFF) status judged from the telescoping switch (RR) signal is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the ADP steering switch to check. Refer to [SE-49](#).

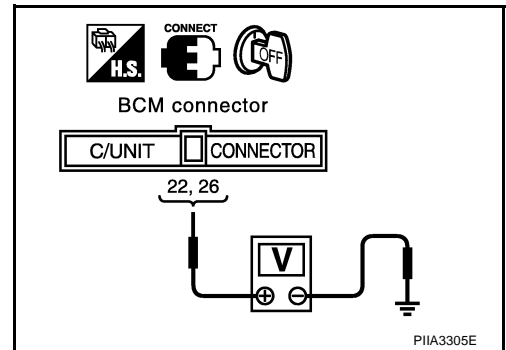
OK or NG

- OK >> System is OK.
- NG >> GO TO 2.

2. CHECK TELESCOPIC SWITCH INPUT/OUTPUT

Check voltage between BCM connector and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|-----------|------------------------|--------|-------------------------------------|----------------------|
| | (+) | (-) | | |
| M4 | 22 (R/B) | Ground | Telescopic switch ON (FR operation) | 0 |
| | | | Telescopic switch OFF | 5 |
| | 26 (G/B) | | Telescopic switch ON (RR operation) | 0 |
| | | | Telescopic switch OFF | 5 |



OK or NG

- OK >> System is OK.
- NG >> GO TO 3.

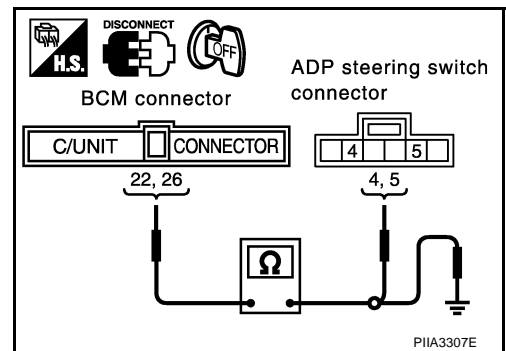
3. CHECK HARNESS CONTINUITY

- Disconnect BCM connector and ADP steering switch connector.
- Check continuity between BCM connector M4 terminals 22 (R/B), 26 (G/B) and ADP steering switch connector M51 terminals 4 (G/B), 5 (R/B).

- 22 (R/B) – 5 (R/B) : Continuity should exist.**
- 26 (G/B) – 4 (G/B) : Continuity should exist.**

- Check continuity between BCM connector M4 terminals 22 (R/B), 26 (G/B) and body ground.

- 22 (R/B) – Ground : Continuity should not exist.**
- 26 (G/B) – Ground : Continuity should not exist.**



OK or NG

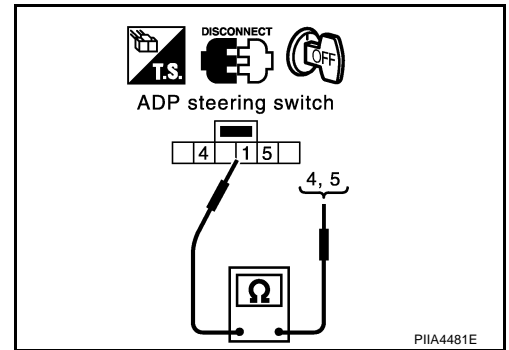
- OK >> GO TO 4.
- NG >> Repair or replace harness between BCM and ADP steering switch.

AUTOMATIC DRIVE POSITIONER

4. CHECK TELESCOPIC SWITCH

Check continuity between ADP steering switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|-------|-------------------------------------|------------|
| | (+) | (-) | | |
| M51 | 4 (G/B) | 1 (B) | Telescopic switch ON (RR operation) | Yes |
| | | | Telescopic switch OFF | No |
| | 5 (R/B) | | Telescopic switch ON (FR operation) | Yes |
| | | | Telescopic switch OFF | No |



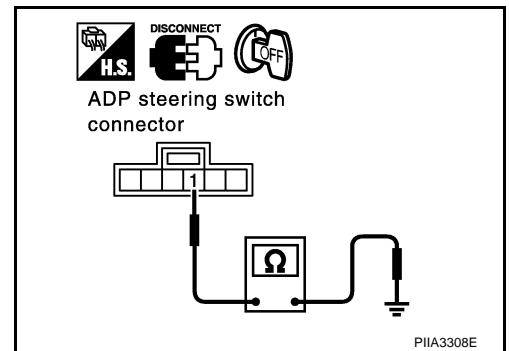
OK or NG

- OK >> GO TO 5.
- NG >> Replace ADP steering switch.

5. CHECK ADP STEERING SWITCH GROUND CIRCUIT

Check continuity between ADP steering switch connector M51 terminal 1 (B) and body ground.

1 (B) – Ground : Continuity should exist.



OK or NG

- OK >> Check the harness and connector.
- NG >> Replace or replace harness between ADP steering switch and body ground.

Steering Wheel Tilt Switch Inspection

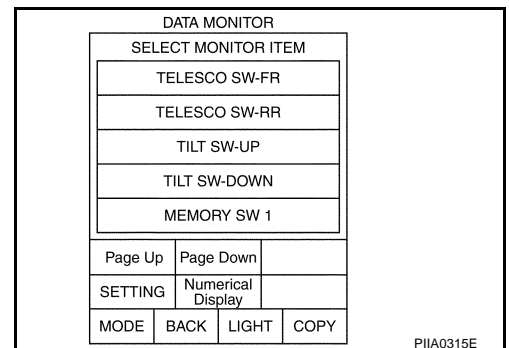
AIS001KI

1. CHECK FUNCTION

With CONSULT-II

With "TILT SW-UP, TILT SW-DOWN" on the DATA MONITOR, operate the ADP steering switch to check ON/OFF operation.

| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------|--|
| TILT SW-UP "ON/OFF" | Operation (ON)/open (OFF) status judged from the tilt switch (UP) signal is displayed. |
| TILT SW-DOWN "ON/OFF" | Operation (ON)/open (OFF) status judged from the tilt switch (DOWN) signal is displayed. |



Without CONSULT-II

Carry out "SWITCH MONITOR" in the self-diagnosis function, and operate the ADP steering switch to check. Refer to [SE-49. "SWITCH MONITOR"](#).

OK or NG

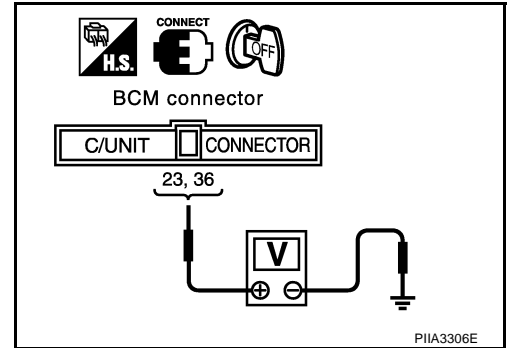
- OK >> System is OK.
- NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

2. CHECK ADP STEERING SWITCH (TILT) INPUT/OUTPUT

1. Turn ignition switch turn OFF.
2. Check voltage between BCM connector and body ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx) |
|--------------|---------------------------|--------|------------------------------------|-------------------------|
| | (+) | (-) | | |
| M4 Ground | 23 (PU/R) | Ground | Tilt switch ON (DOWN operation) | 0 |
| | | | Tilt switch OFF | 5 |
| | 36 (P/L) | | Tilt switch ON (UP operation) | 0 |
| | | | Tilt switch OFF | 5 |



OK or NG

- OK >> System is OK.
 NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector and ADP steering switch connector.
2. Check continuity between BCM connector M4 terminals 23 (PU/R), 36 (P/L) and ADP steering switch connector M51 terminals 2 (P/L), 3 (PU/R).

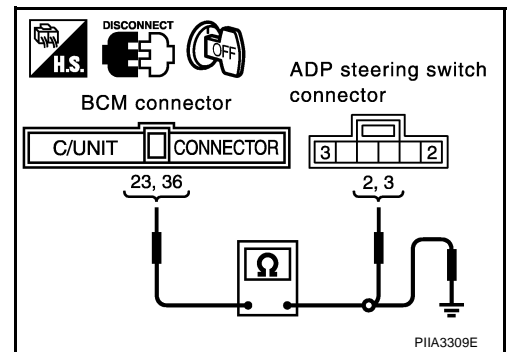
23 (PU/R) – 3 (PU/R) : Continuity should exist.

36 (P/L) – 2 (P/L) : Continuity should exist.

3. Check continuity between BCM connector M4 terminals 23 (PU/R), 36 (P/L) and body ground.

23 (PU/R) – Ground : Continuity should not exist.

36 (P/L) – Ground : Continuity should not exist.



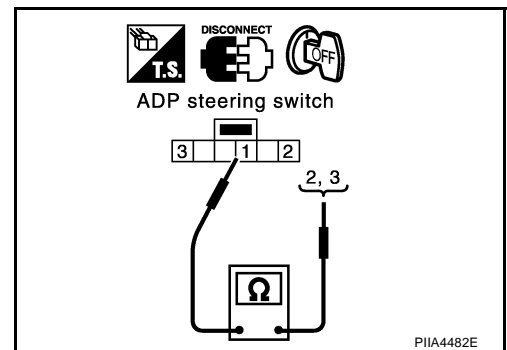
OK or NG

- OK >> GO TO 4.
 NG >> Repair or replace harness between BCM and ADP steering switch.

4. CHECK ADP STEERING SWITCH (TILT)

Check continuity between ADP steering switch.

| Connector | Terminals (Wire color) | | Condition | Continuity |
|-----------|---------------------------|-------|---------------------------------|------------|
| | (+) | (-) | | |
| M51 | 2 (P/L) | 1 (B) | Tilt switch ON (UP operation) | Yes |
| | | | Tilt switch OFF | No |
| | 3 (PU/R) | | Tilt switch ON (DOWN operation) | Yes |
| | | | Tilt switch OFF | No |



OK or NG

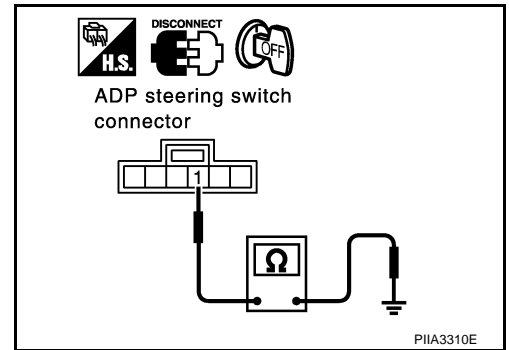
- OK >> GO TO 5.
 NG >> Replace ADP steering switch.

AUTOMATIC DRIVE POSITIONER

5. CHECK ADP STEERING SWITCH GROUND CIRCUIT

Check continuity between ADP steering switch connector M51 terminal 1 (B) and body ground.

1 (B) – Ground : Continuity should exist.



OK or NG

OK >> Check the harness and connector.

NG >> Repair or replace harness between ADP steering switch and body ground.

Seat Memory Indicator Lamp System Inspection

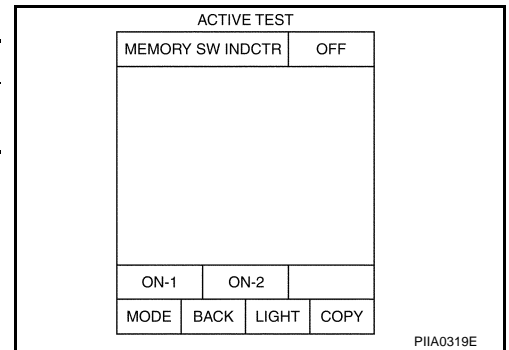
AIS001KJ

1. CHECK FUNCTION

With CONSULT-II

With "MEMORY SW INDCTR" in ACTIVE TEST, Check operation.

| Test item | Description |
|------------------|---|
| MEMORY SW INDCTR | The memory switch indicator is lit by receiving the drive signal. |



Without CONSULT-II

GO TO 2.

OK or NG

OK >> System is OK.

NG >> GO TO 2.

2. CHECK FUSE

Check if any of the following fuses for fuse block (J/B) are blown.

| COMPONENT PARTS | TERMINAL NO. (SIGNAL) | AMPERE | FUSE NO. |
|-----------------------|-----------------------|--------|----------|
| Fuse block (J/B) No.1 | 9C (BAT power supply) | 10A | #8 |

NOTE:

Refer to [SE-17, "Component Parts and Harness Connector Location"](#) .

OK or NG

OK >> GO TO 2.

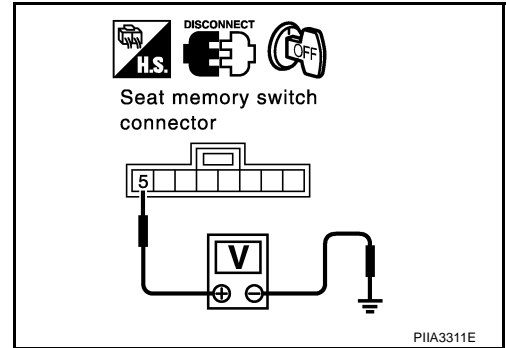
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse, refer to [SE-17, "Component Parts and Harness Connector Location"](#) .

AUTOMATIC DRIVE POSITIONER

3. CHECK SEAT MEMORY SWITCH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check voltage between seat memory switch connector D3 terminal 5 (L) and body ground.

5 (L) – Ground : Battery voltage



OK or NG

OK >> GO TO 4.

NG >> Check following.

- 10A fuse [No. 8, located in the fuse block (J/B) No. 1]
- Harness for open short between seat memory switch and fuse.

4. CHECK HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector M4 terminals 106 (Y/G), 112 (L/W) and seat memory switch connector D3 terminals 6 (Y/G), 7 (L/W).

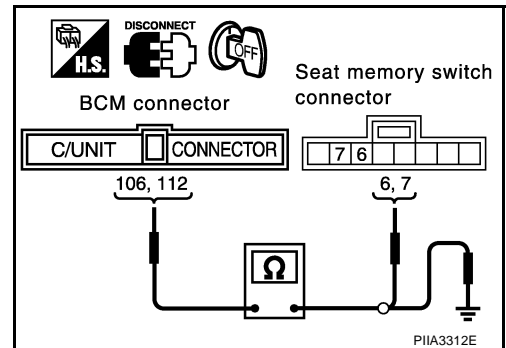
106 (Y/G) – 6 (Y/G) : Continuity should exist.

112 (L/W) – 7 (L/W) : Continuity should exist.

3. Check continuity between BCM connector M4 terminals 106 (Y/G), 112 (L/W) and body ground.

106 (Y/G) – Ground : Continuity should not exist.

112 (L/W) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness between BCM and memory switch.

5. CHECK SEAT MEMORY SWITCH INDICATOR SIGNAL

Check voltage between BCM connector M4 terminals 106 (Y/G), 112 (L/W) and body ground.

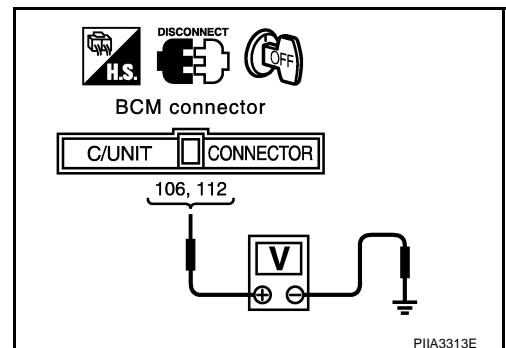
106 (Y/G) – Ground : Battery voltage

112 (L/W) – Ground : Battery voltage

OK or NG

OK >> Replace BCM.

NG >> Replace seat memory switch.



AUTOMATIC DRIVE POSITIONER

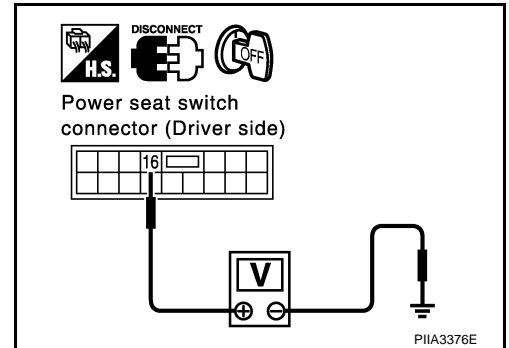
AIS002CL

Lumber Support Motor Circuit Inspection

1. CHECK LUMBER SUPPORT SWITCH

1. Turn ignition switch OFF.
2. Disconnect front power seat switch (driver side) connector.
3. Check voltage between power seat switch (driver side) connector B144 terminal 16 (R) and body ground.

16 (R) – Ground : Battery voltage



OK or NG

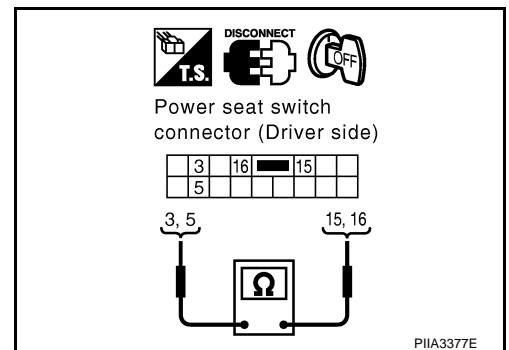
OK >> GO TO 2.

NG >> Repair or replace harness between fuse block (J/B) and power seat switch (Driver side).

2. CHECK LUMBER SUPPORT SWITCH

Check continuity power seat switch.

| Con- nector | Terminal | | Condition | Continuity |
|----------------|----------|-----|---------------------------------|-------------------------|
| | (+) | (-) | | |
| B144 | 3 | 16 | Lumber support switch forward. | Continuity should exist |
| | | 15 | Lumber support switch backward. | Continuity should exist |
| | 5 | 16 | Lumber support switch backward. | Continuity should exist |
| | | 15 | Lumber support switch forward. | Continuity should exist |



OK or NG

OK >> GO TO 3.

NG >> Replace power seat switch.

3. CHECK LUMBER SUPPORT MOTOR HARNESS

1. Disconnect lumber support motor connector.
2. Check continuity between power seat switch connector (driver side) B144 terminal 3 (GY), 5 (W/B) and lumber support motor connector B195 terminal 3 (GY), 5 (W/B).

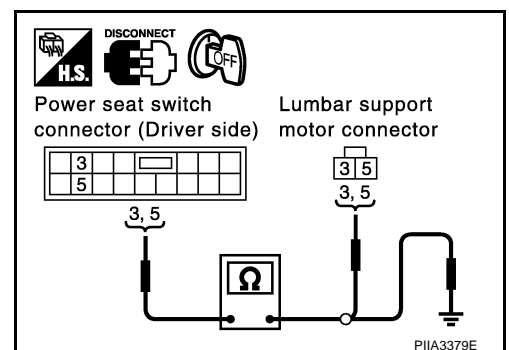
3 (GY) – 3 (GY) : Continuity should exist.

5 (W/B) – 5 (W/B) : Continuity should exist.

3. Check continuity between power seat switch connector (driver side) B144 terminal 3 (GY), 5 (W/B) and body ground.

3 (GY) – Ground : Continuity should not exist.

5 (W/B) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 4.

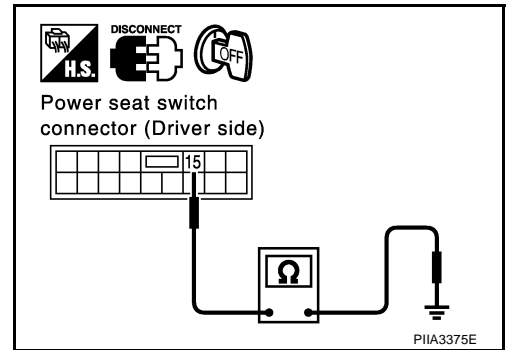
NG >> Repair or replace harness between power seat switch (driver side) and lumber support motor.

AUTOMATIC DRIVE POSITIONER

4. LUMBER SUPPORT SWITCH INSPECTION

Check continuity between power seat switch connector (driver side) B144 terminal 15 (B) and body ground.

15 (B) – Ground : Continuity should exist.



OK or NG

OK >> Replace rumbler support motor.

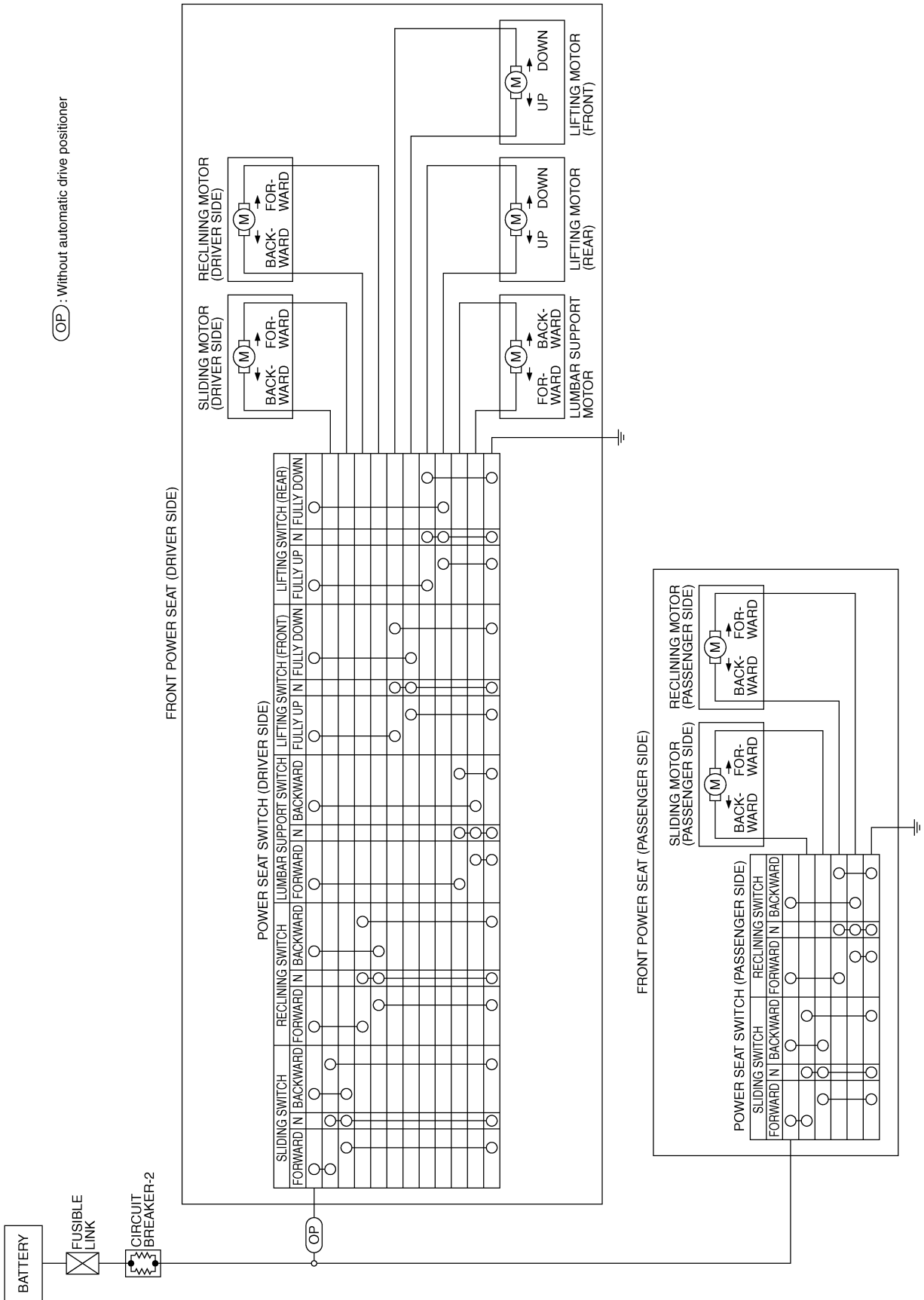
NG >> Repair or replace harness between power seat switch (driver side) and body ground.

POWER SEAT

POWER SEAT Schematic

PPF:87016

AIS001KM



A
B
C
D
E
F
G
H
SE
J
K
L
M

POWER SEAT

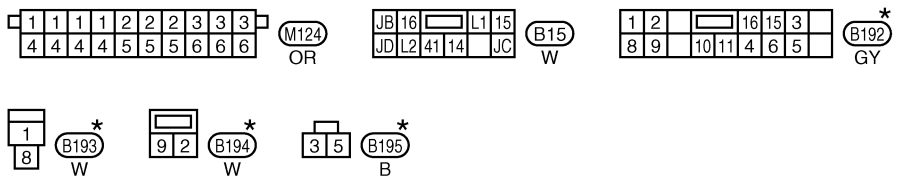
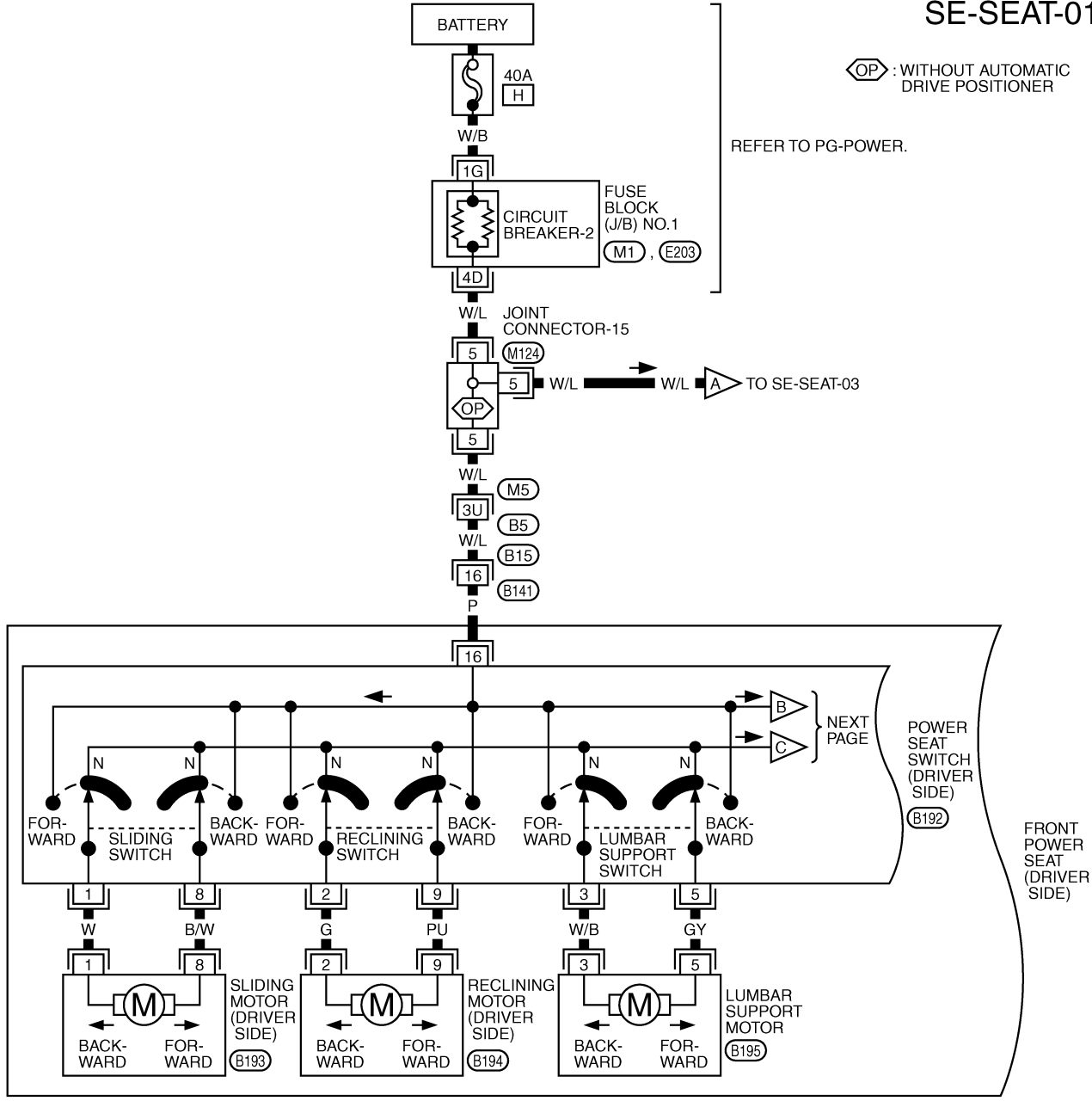
Wiring Diagram — SEAT —

AIS001KN

SE-SEAT-01

⬡ (OP) : WITHOUT AUTOMATIC DRIVE POSITIONER

REFER TO PG-POWER.



REFER TO THE FOLLOWING.

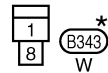
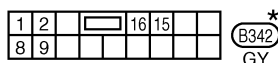
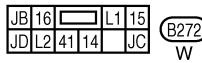
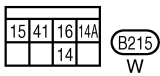
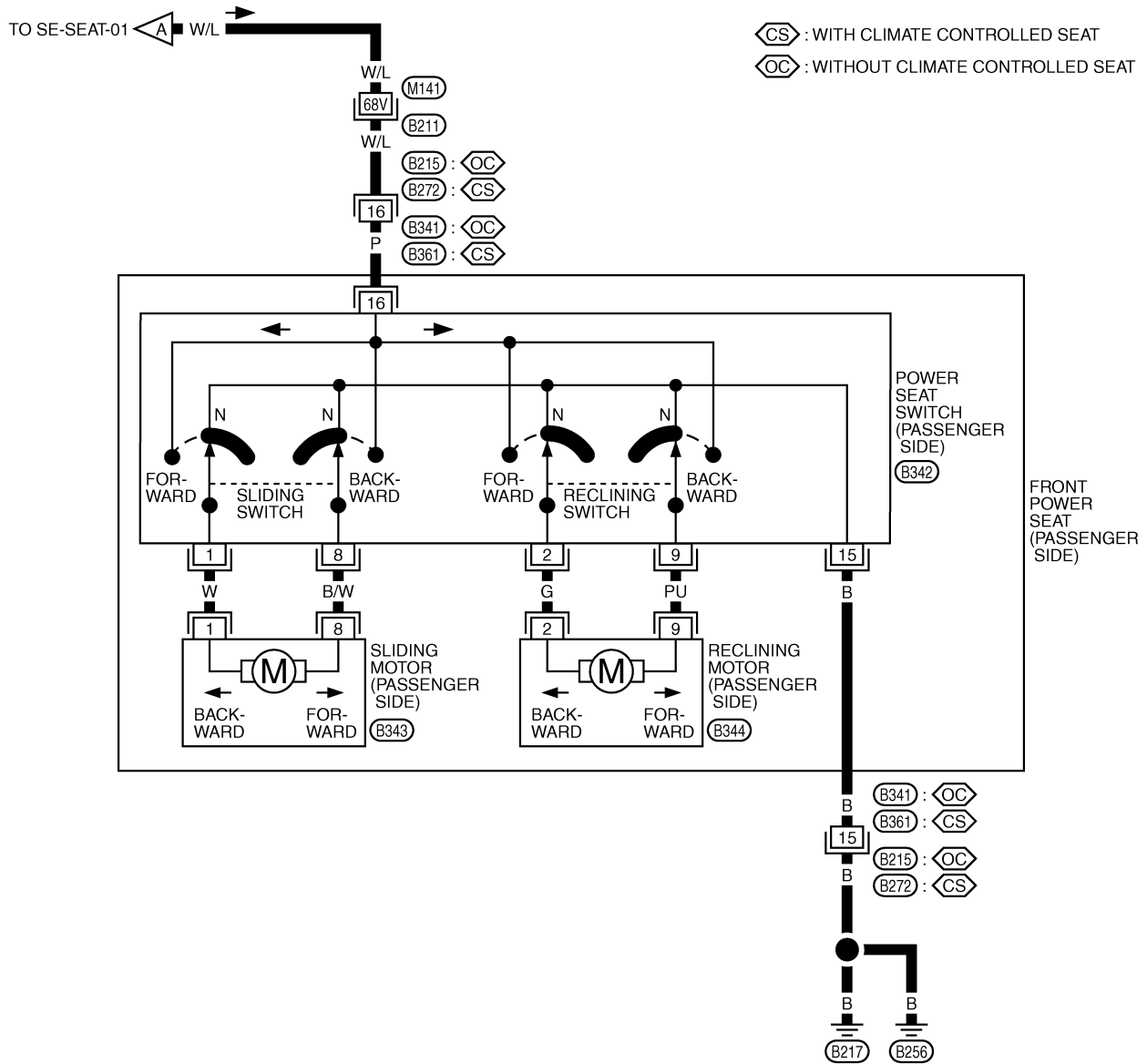
- (M5) -SUPER MULTIPLE JUNCTION (SMJ)
- (M1), (E203) -FUSE BLOCK-JUNCTION BOX (J/B) NO.1

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

TIWA0236E

POWER SEAT

SE-SEAT-03



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

REFER TO THE FOLLOWING.

B211 -SUPER MULTIPLE JUNCTION (SMJ)

TIWA0238E

CLIMATE CONTROLLED SEAT

CLIMATE CONTROLLED SEAT

PFP:870U6

System Description

AIS002BX

The climate controlled seat system is controlled by climate controlled seat control unit. Heating and cooling are possible for a thermal electric device (heat conversion machine).

NOTE:

- The climate controlled seat system is downed when the temperature sensor set as the seat cushion and the seat back's thermal electric device machine detects 20 °C (68 °F) or more of mutual differences of temperature.
- In this case, by turning off ignition switch, system down is canceled and it can be reused by turning on ignition switch again.
- The climate controlled seat blower keep low speed for approximately 60 seconds after turning the temperature switch or the dial.

CAUTION:

- **The thermal electric device has the character in which, as for an opposite side. one side becomes high temperature at the time of low temperature.**
- **At the time of work, please turn OFF a switch, and carry it out after checking that the thermal electric device has got cold.**

Power is at all times supplied

- through 15A fuse [No. 71, and 72, located in the fuse fusible link and relay unit]
- to climate controlled seat relay terminals 5 and 7.

When the ignition switch turned to ON or START position,
Power is supplied

- through 10A fuse [No. 1, located in the fuse block (J/B)]
- to climate controlled seat relay terminal 2, and
- to climate controlled seat control unit (driver side and passenger side) terminal JB.

Then ground is supplied

- to climate controlled seat relay terminal 1,
- through body grounds E42, and E 62,

Then climate controlled seat relay is energized,
When climate controlled seat relay is turned to ON,
Power is supplied,

- through climate controlled seat relay terminal 3,
- to driver side climate controlled seat control unit terminal JD.

When climate controlled seat relay is turned to ON,
Power is supplied,

- through climate controlled seat relay terminal 6,
- to passenger side climate controlled seat control unit terminal JD.

When climate controlled switch select "HEAT", ground is supply

- through climate controlled seat switch terminal J6,
- to climate controlled seat control unit terminal J6,
- through climate controlled seat switch terminal JCA,
- through body grounds B17 and B57.

Then, the climate controlled control unit receives climate controlled switch "HEAT" signal.

When climate controlled switch select "COOL", ground is supply

- through climate controlled seat switch terminal J16,
- to climate controlled seat control unit terminal J16,
- through climate controlled seat switch terminal JCA,
- through body grounds B17 and B57.

Then, the climate controlled control unit receives climate controlled switch "COOL" signal.

When the climate controlled seat control unit receives climate controlled seat switch signal, power is supply

- to climate controlled seat temperature dial terminal J7,

A
B
C
D
E
F
G
H
SE
J
K
L
M

CLIMATE CONTROLLED SEAT

- through climate controlled seat control unit terminal J7,

And then ground is supplied

- through climate controlled seat control unit terminal J15,
- to climate controlled seat temperature dial terminal J15,

Then, the climate controlled seat control unit receives climate controlled seat temperature dial signal.
When blower motor rotates, signal is transmitted

- to climate controlled seat control unit terminal J14,
- through climate controlled seat blower motor terminal J14.

This is climate controlled seat blower motor tachometer signal.

When climate controlled seat control unit receives climate controlled seat switch (HEAT, COOL) signal, climate controlled seat temperature dial signal and tachometer signal,
Power is supplied

- to climate controlled seat blower motor terminal J13,
- through climate controlled seat control unit terminal J13,

This is blower motor revolution control signal.

When blower motor receives blower motor revolution control signal,
Power is supplied

- through climate controlled seat control unit terminal J10,
- to climate controlled seat blower motor terminal J10.

When number of rotations correspond signal,
Ground is supplied

- to climate controlled seat blower motor terminal J3,
- through climate controlled seat control unit terminal J3,
- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

Then motor revolution is controlled.

When the ignition switch turned to ON or START position,
Power is supplied

- to climate controlled seat cushion thermal electric device terminal J18,
- through climate controlled seat control unit terminal J18.

Then ground is supplied

- to climate controlled seat control unit terminal J17,
- through climate controlled seat cushion thermal electric device terminal J17,

Then the climate controlled seat control unit recognizes seat cushion thermal electric device sensor signal.
When climate controlled control unit recognizes climate controlled switch "HEAT" signal and, seat cushion thermal electric device sensor signal,
Power is supplied

- to climate controlled seat cushion thermal electric device terminal J1,
- through climate controlled seat control unit terminal J1,

Then ground is supplied

- through climate controlled seat cushion thermal electric device terminal J2,
- to climate controlled seat control unit terminal J2.
- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

When climate controlled control unit recognizes climate controlled switch "COOL" signal and, climate controlled seat cushion thermal electric device sensor signal,
Power is supplied

- to climate controlled seat cushion thermal electric device terminal J2,
- through climate controlled seat control unit terminal J2,

Then ground is supplied

- through climate controlled seat cushion thermal electric device terminal J1,
- to climate controlled seat control unit terminal J1.

CLIMATE CONTROLLED SEAT

- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

When the ignition switch turned to ON or START position,
Power is supplied

- to climate controlled seatback thermal electric device terminal J19,
- through climate controlled seat control unit terminal J19.

Then ground is supplied

- to climate controlled seat control unit terminal J20,
- through climate controlled seatback thermal electric device terminal J20.
- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

Then the climate controlled seat control unit recognizes seatback thermal electric device sensor signal.

When climate controlled control unit recognizes climate controlled switch "HEAT" signal and climate controlled seatback thermal electric device sensor signal,
Power is supplied

- to climate controlled seatback thermal electric device terminal J11,
 - through climate controlled seat control unit terminal J11,
- ground is supplied

- to climate controlled seat control unit terminal J12,
- through climate controlled seatback thermal electric device terminal J12,
- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

this climate controlled seatback thermal electric device generates heat wind is warmed.

When climate controlled control unit recognizes climate controlled switch "COOL" signal and climate controlled seatback thermal electric device sensor signal,
Power is supplied

- to climate controlled seatback thermal electric device terminal J12,
 - through climate controlled seat control unit terminal J12,
- ground is supplied

- to climate controlled seat control unit terminal J11,
- through climate controlled seatback thermal electric device terminal J11,
- through climate controlled seat control unit terminal JC,
- through body grounds B217 and B256.

When climate controlled switch selects "HEAT",
Power is supplied

- to climate controlled seat switch terminal J4,
- through climate controlled seat control unit terminal J4.

Ground is supplied

- to the climate controlled seat switch terminal JCA,
- through body grounds B17 and B57

Then climate controlled seat switch "HEAT" indicator is energized.

When climate controlled switch select "COOL",
Power is supplied

- to climate controlled seat switch terminal J4,
- through climate controlled seat control unit terminal J5,

Ground is supplied

- to the climate controlled seat switch terminal JCA,
- through body grounds B17 and B57.

Then climate controlled seat switch "COOL" indicator is energized.

A

B

C

D

E

F

G

H

SE

J

K

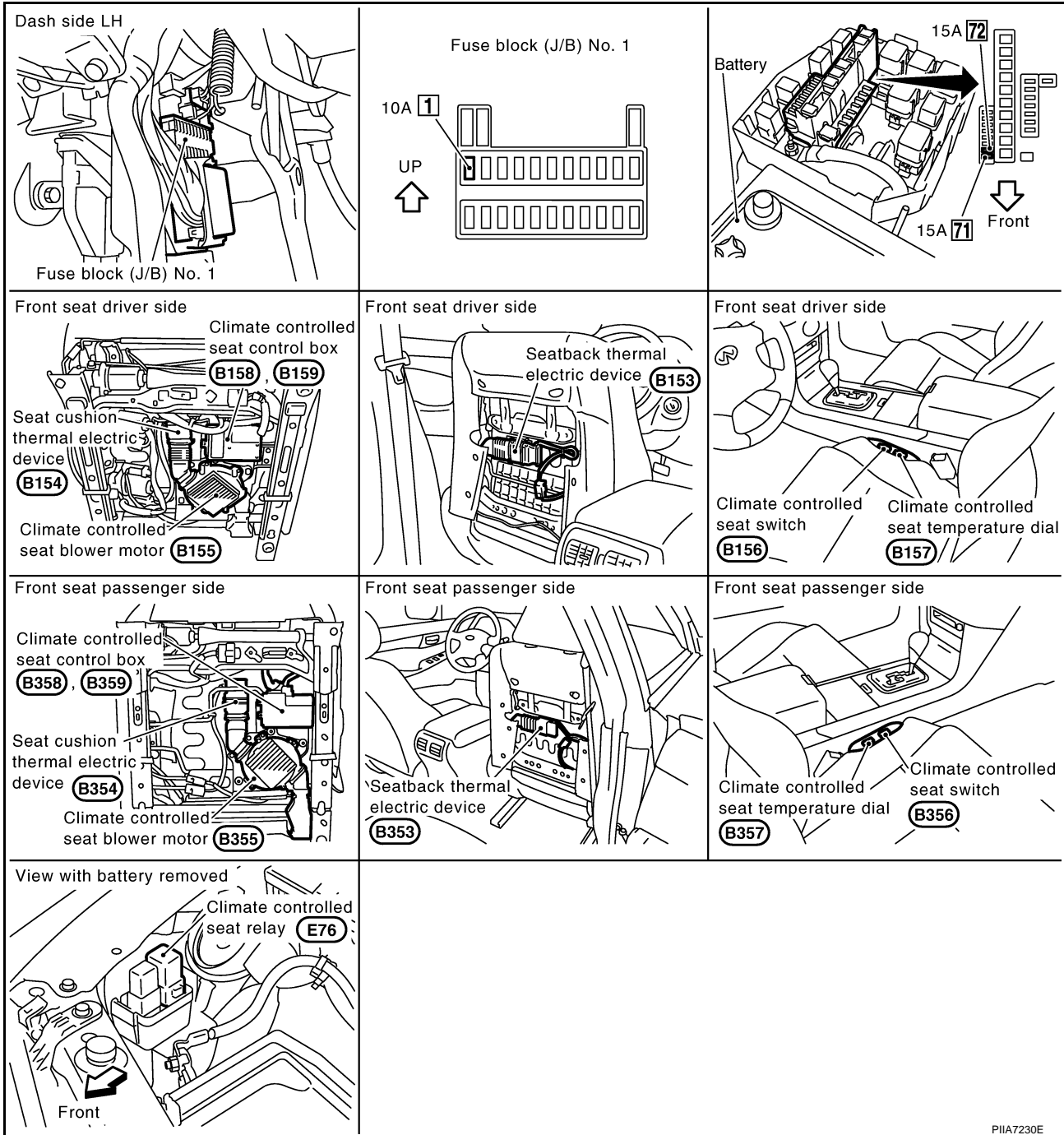
L

M

CLIMATE CONTROLLED SEAT

AIS002BY

Component Parts and Harness Connector Location

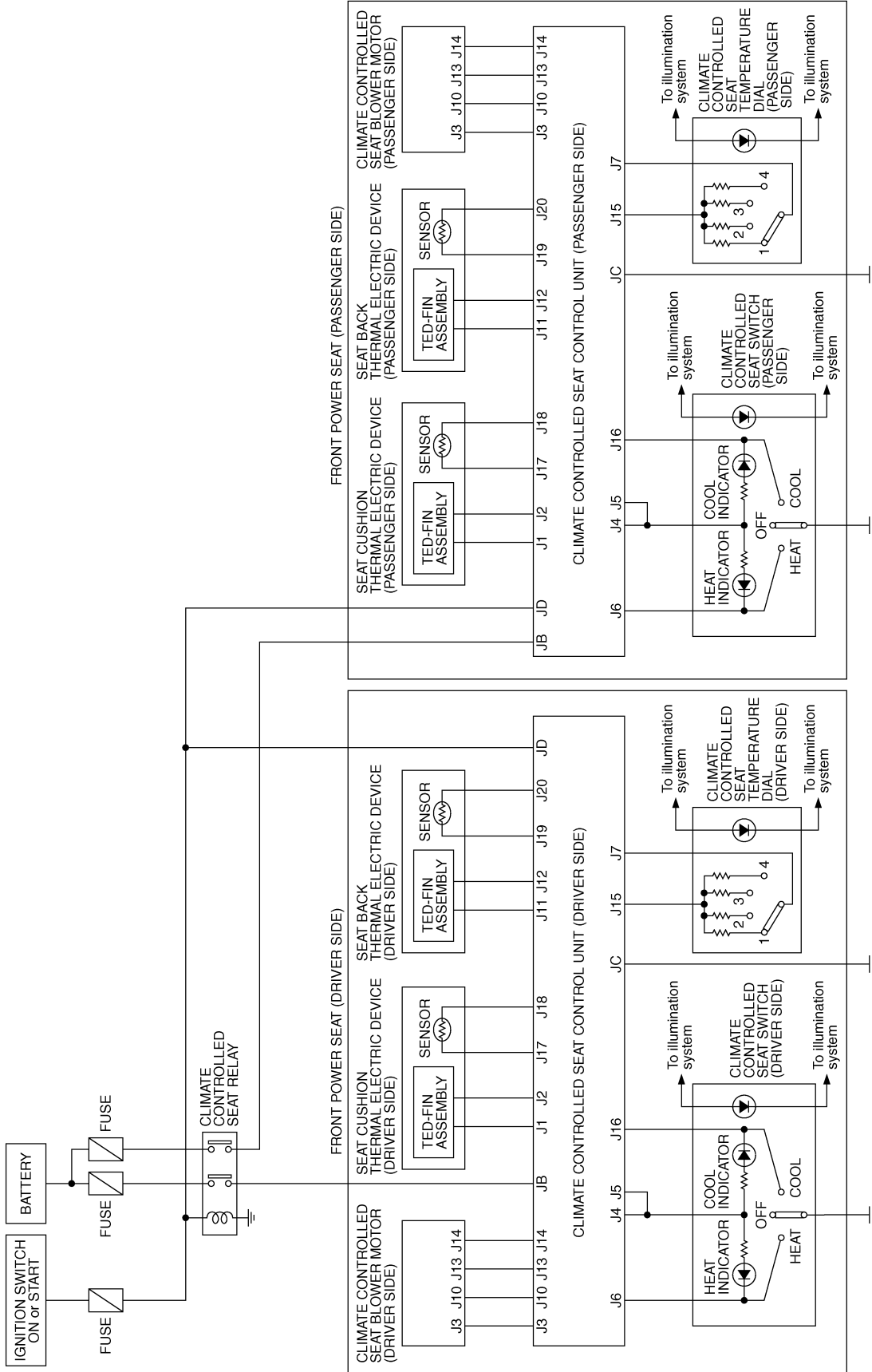


PIIA7230E

CLIMATE CONTROLLED SEAT

Schematic — AHEAT —

AIS002BZ



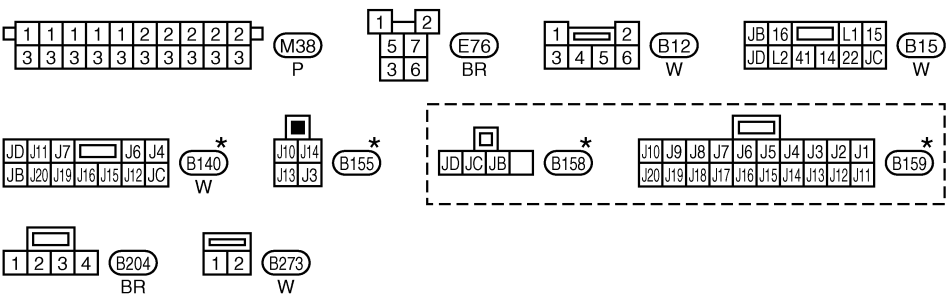
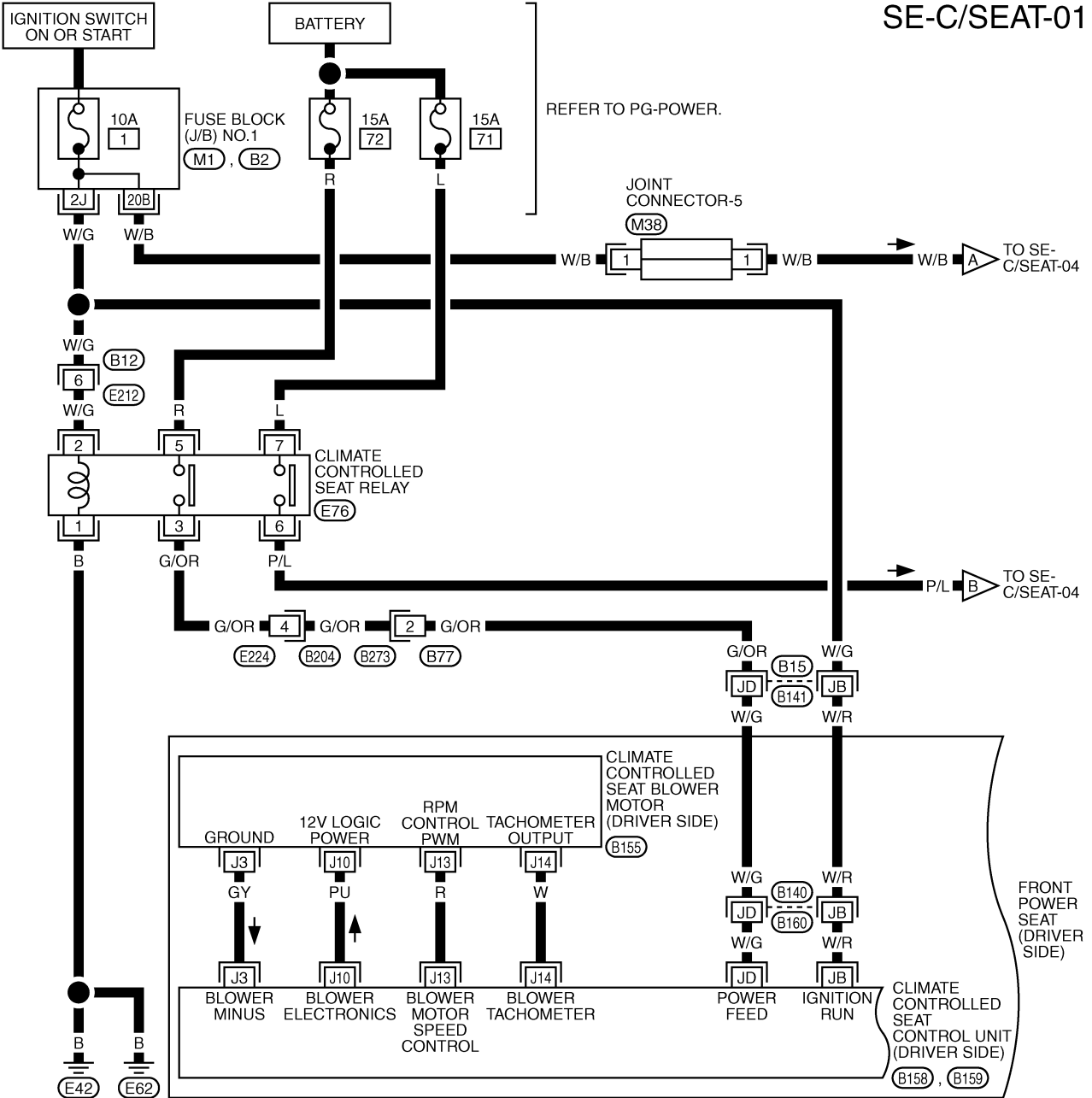
A
B
C
D
E
F
G
H
SE
J
K
L
M

CLIMATE CONTROLLED SEAT

AIS002C0

Wiring Diagram — AHEAT —

SE-C/SEAT-01



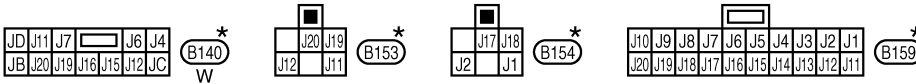
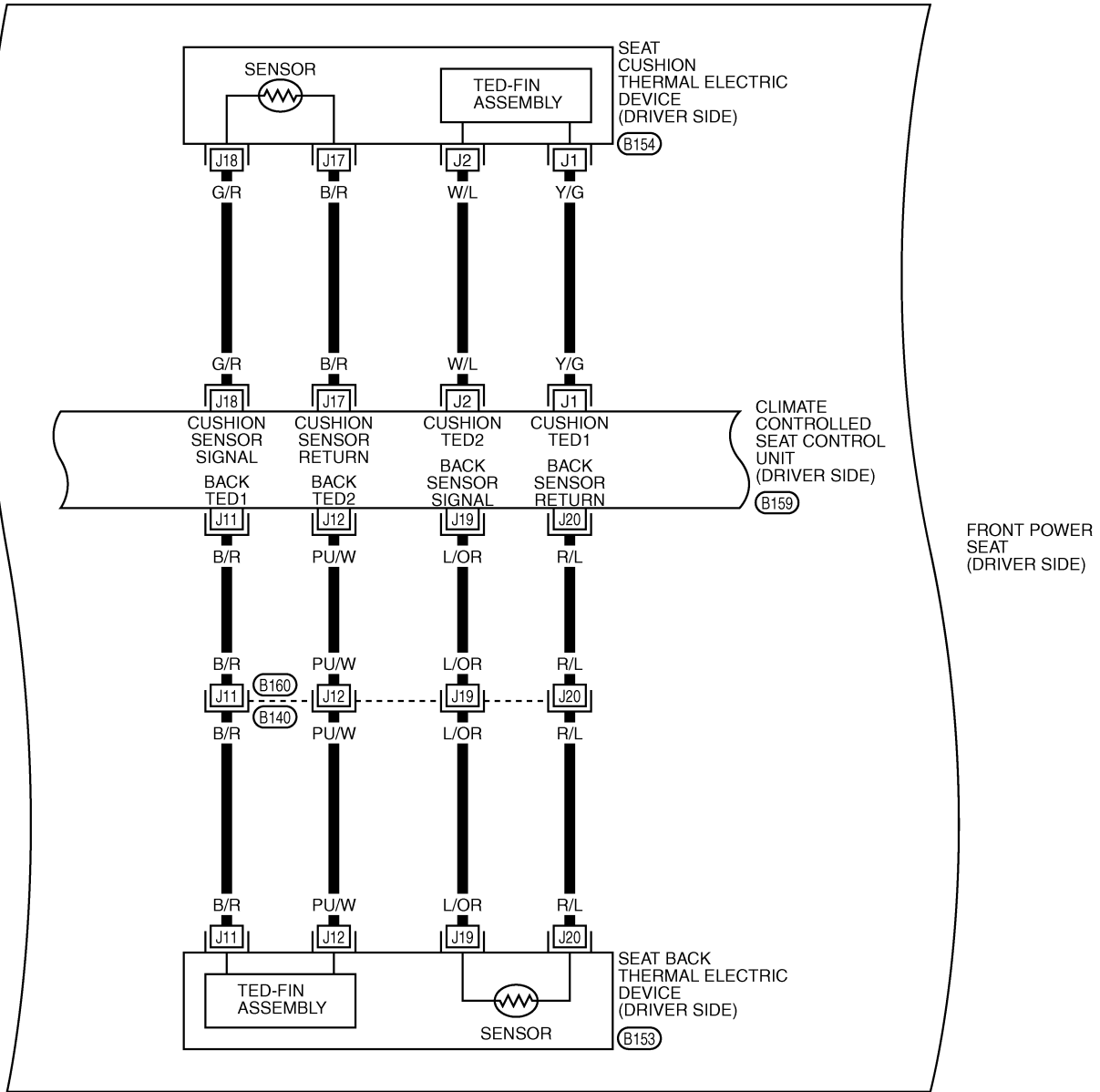
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWA0262E

CLIMATE CONTROLLED SEAT

SE-C/SEAT-02

A
B
C
D
E
F
G
H
SE
J
K
L
M

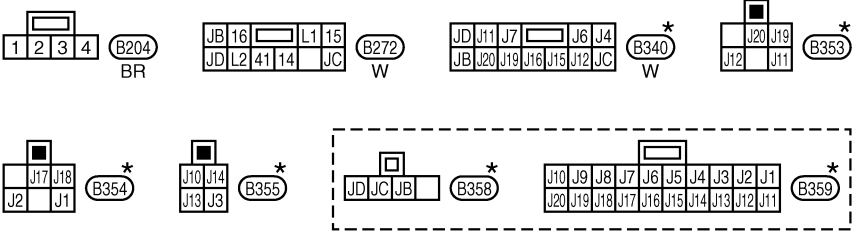
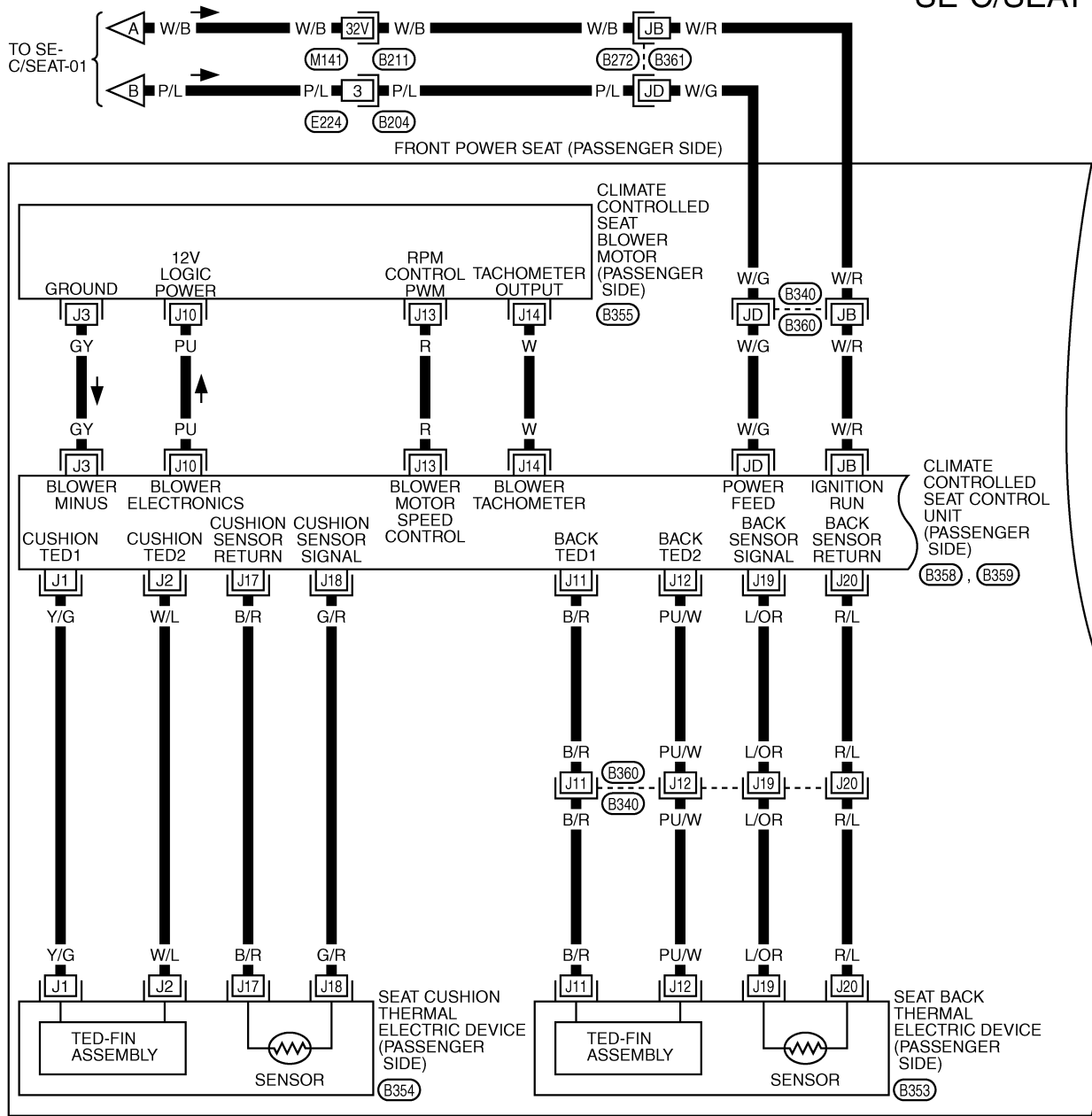


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWA0263E

CLIMATE CONTROLLED SEAT

SE-C/SEAT-04

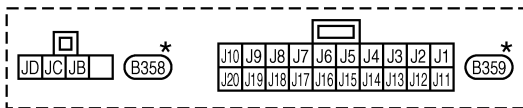
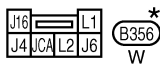
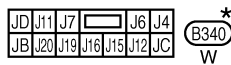
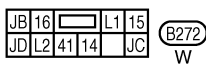
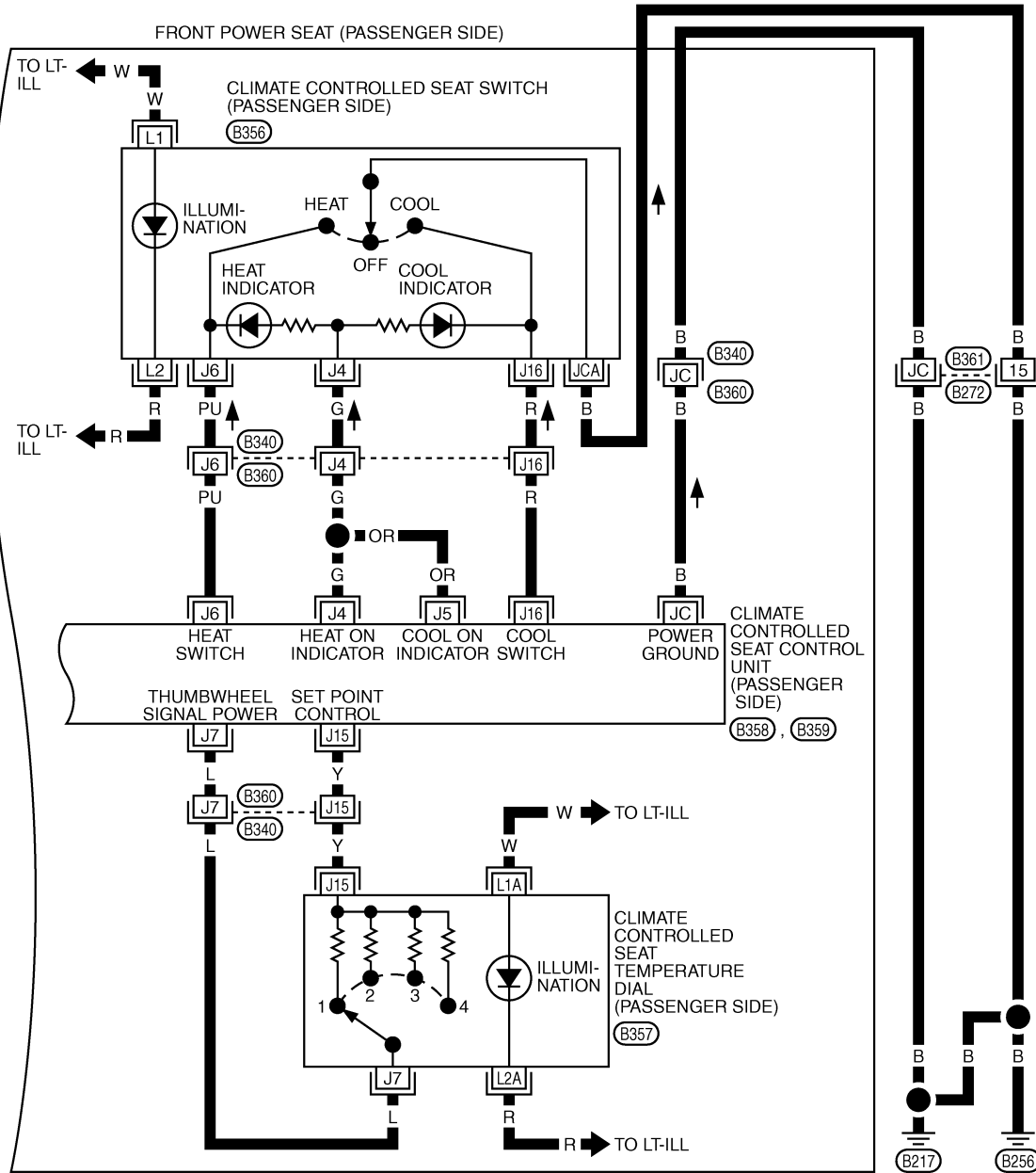


REFER TO THE FOLLOWING.
 (B211) -SUPER MULTIPLE JUNCTION (SMJ)

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

CLIMATE CONTROLLED SEAT

SE-C/SEAT-05



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

TIWA0299E

CLIMATE CONTROLLED SEAT

Terminal and Reference Value for Climate Controlled Seat Control Unit

AIS002C1

| TER-MINAL | WIRE COLOR | ITEM | CONDITION | VOLTAGE (V) (Approx.) | |
|-----------|------------|--|--|--|-----------------|
| JB | W/R | IGN power supply | IGN ON or START | Battery voltage | |
| JC | B | Ground | — | 0 | |
| JD | W/G | IGN power supply | IGN ON or START | Battery voltage | |
| J 1 | Y/G | Seat cushion thermal electric device power supply (HEAT) | IGN ON or START | Climate controlled seat switch select "HEAT" | Battery voltage |
| | | | | Climate controlled seat switch select "OFF" | 0 |
| J 2 | W/L | Seat cushion thermal electric device power supply (COOL) | IGN ON or START | Climate controlled seat switch select "COOL" | Battery voltage |
| | | | | Climate controlled seat switch select "OFF" | 0 |
| J3 | GY | Climate controlled seat blower motor ground | — | 0 | |
| J4 | G | "HEAT" switch ON indicate | IGN ON or START | Climate controlled seat switch select "HEAT" | Battery voltage |
| | | | | IGN OFF | 0 |
| J5 | OR | "COOL" switch ON indicator | IGN ON or START | Climate controlled seat switch select "COOL" | Battery voltage |
| | | | | IGN OFF | 0 |
| J6 | PU | "HEAT" switch ON signal | IGN ON or START | Climate controlled seat switch select "HEAT" | 0 |
| | | | | Climate controlled seat switch OFF | Battery voltage |
| J7 | L | Climate controlled seat temperature dial power supply | Climate controlled seat temperature dial 1 – 4 | 7.1 – 11.4 | |
| J10 | PU | Blower motor power supply | IGN ON or START | Climate controlled seat switch select "HEAT" or "COOL" | 6 – 12 |
| | | | | Climate controlled seat temperature dial 1 – 4 | Battery voltage |
| J 11 | B/R | Seatback thermal electric device power supply (HEAT) | IGN ON or START | Climate controlled seat switch select "HEAT" | Battery voltage |
| | | | | Climate controlled seat switch select "OFF" | 0 |
| J 12 | PU/W | Seatback thermal electric device power supply (COOL) | IGN ON or START | Climate controlled seat switch select "COOL" | Battery voltage |
| | | | | Climate controlled seat switch select "OFF" | 0 |
| J 13 | R | Blower motor speed control signal | IGN ON or START | Climate controlled seat switch select "HEAT" or "COOL" | 6 – 12 |
| | | | | climate controlled seat temperature dial 1 – 4 | 0 |
| J14 | W | Blower motor tachometer signal | IGN ON or START | Climate controlled seat switch select "HEAT" or "COOL" | 5 – 7 |
| | | | | Climate controlled seat switch OFF | Battery voltage |

CLIMATE CONTROLLED SEAT

| TER-MINAL | WIRE COLOR | ITEM | CONDITION | | VOLTAGE (V) (Approx.) |
|-----------|------------|--|--|--|--------------------------|
| J15 | Y | Climate controlled seat temperature dial signal | Climate controlled seat temperature dial 1 – 4 | | 0 – 5 |
| J16 | R | “COOL” switch ON signal | IGN ON or START | climate controlled seat switch select “COOL” | 0 |
| | | | | climate controlled seat switch OFF | Battery voltage |
| J17 | B/R | Seat cushion thermal electric device sensor ground | IGN ON or START | | 0 |
| J18 | G/R | Seat cushion thermal electric device sensor signal | IGN ON or START | | 0.5 – 4 |
| J19 | L/OR | Seatback thermal electric device sensor signal | IGN ON or START | | 0.5 – 4 |
| J20 | R/L | Seatback thermal electric device sensor ground | IGN ON or START | | 0 |

Work Flow

AIS002C2

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to [SE-97, "System Description"](#) .
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to [SE-109, "Trouble Diagnosis Symptom Chart"](#) .
4. Does climate controlled seat operate normally? YES: GO TO 5. NO: GO TO 4.
5. INSPECTION END.

CLIMATE CONTROLLED SEAT

Trouble Diagnosis Symptom Chart

AIS002C4

- Check that other systems using the signal of the following systems operate normally.

| Symptom | Diagnoses / service procedure | Refer to page |
|--|--|------------------------|
| Climate controlled seat do not operate (Neither the driver's side nor passenger's side operate). | 1. Climate controlled seat relay power supply circuit inspection | SE-110 |
| Driver side climate controlled seat do not operate (Passenger side is operate). | 1. Driver side climate controlled seat control unit power supply circuit inspection | SE-111 |
| | 2. Climate controlled seat temperature dial circuit inspection | SE-117 |
| | 3. Climate controlled seat switch ground circuit inspection | SE-119 |
| | 4. Blower motor power supply circuit inspection | SE-124 |
| | 5. Replace blower motor assembly | — |
| Passenger side climate controlled seat do not operate (Driver side is operate) | 1. Passenger side climate controlled seat control unit power supply circuit inspection | SE-113 |
| | 2. Climate controlled seat temperature dial circuit inspection | SE-117 |
| | 3. Climate controlled seat switch ground circuit inspection | SE-119 |
| | 4. Blower motor power supply circuit inspection | SE-124 |
| | 5. Replace blower motor assembly | — |
| Blower motor speed cannot adjust. | 1. Climate controlled temperature dial inspection | SE-117 |
| | 2. Climate controlled seat control unit inspection | SE-126 |
| | 3. Replace blower motor assembly | — |
| The climate controlled seat dose not operates when the switch is done in "HEAT" (The wind rises when the switch is made "COOL"). | 1. Climate controlled seat "HEAT" switch circuit inspection | SE-115 |
| The climate controlled seat dose not operates when the switch is done in "COOL" (The wind rises when the switch is made "HEAT"). | 1. Climate controlled seat "COOL" switch circuit inspection | SE-116 |
| When the climate controlled seat switch is turned on, operation stopped at once (When the climate controlled seat switch is mode "HEAT" or "COOL" after ignition switch is turned ON again, the motor operates). | 1. Seat cushion Thermal electric device sensor circuit inspection | SE-121 |
| | 2. Seat cushion Thermal electric device circuit inspection | SE-120 |
| | 3. Seatback Thermal electric device sensor circuit inspection | SE-123 |
| | 4. Seatback Thermal electric device circuit inspection | SE-122 |
| | 5. Blower motor speed control circuit inspection | SE-125 |
| | 6. Blower motor tachometer signal circuit inspection | SE-126 |
| | 7. Replace Climate controlled seat control unit | — |

NOTE:

- The climate controlled seat blower keep low speed for approximately 60 seconds after turning the switch or the climate controlled dial.
- The climate controlled seat system is downed when the temperature sensor set as the seat cushion and the seat back's thermal electric device machine detects 20 °C (68 °F) or more of mutual differences of temperature.

CLIMATE CONTROLLED SEAT

AIS002C5

Climate Controlled Relay Power Supply Circuit Check

1. CHECK FUSE

Check if any of the following fuses for Fuse block (J/B) are blown.

| COMPONENT PARTS | TERMINAL NO. (SIGNAL) | AMPERE | FUSE NO. |
|------------------|-----------------------|--------|----------|
| Fuse block (J/B) | 2J (IGN power supply) | 10A | 1 |

NOTE:

Refer to [SE-100, "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 [SE-100, "Component Parts and Harness Connector Location"](#) .

2. CHECK SEAT RELAY POWER SUPPLY CIRCUIT

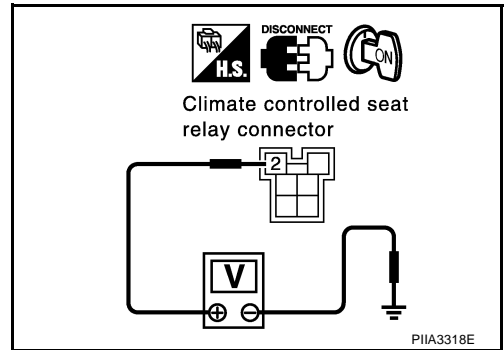
1. Turn ignition switch OFF.
2. Disconnect climate controlled seat relay connector.
3. Check voltage between climate controlled seat relay connector E76 terminal 2 (W/G) and ground.

| Con- nector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|--------------------------|--------|---------------------------|--------------------------|
| | (+) | (-) | | |
| E76 | 2 (W/G) | Ground | Turn ignition switch ON. | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between fuse block (J/B) and climate controlled seat relay.



3. CHECK CLIMATE CONTROLLED SEAT RELAY

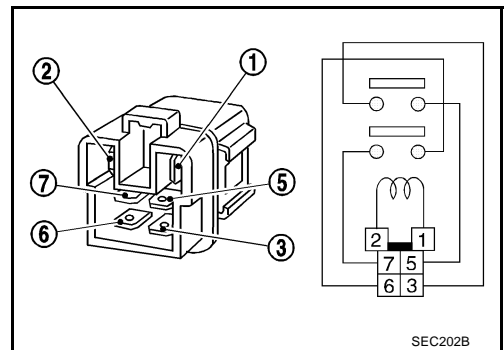
Check continuity between climate controlled relay terminals 3 and 5, 6 and 7.

| Terminal | Terminal | Condition | Continuity |
|----------|----------|---|------------|
| 3 | 5 | 12V direct current supply between terminals 1 and 2 | Yes |
| | | No current supply | No |
| 6 | 7 | 12V direct current supply between terminals 1 and 2 | Yes |
| | | No current supply | No |

OK or NG

OK >> GO TO 4.

NG >> Replace climate controlled seat relay.



CLIMATE CONTROLLED SEAT

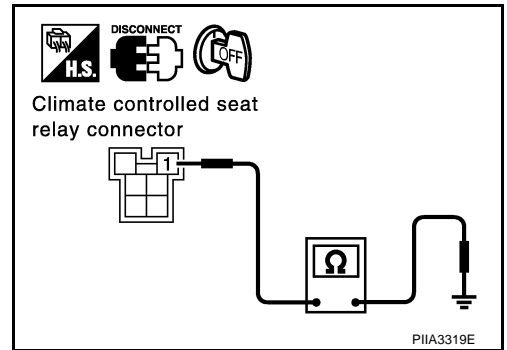
4. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT GROUND CIRCUIT

Check continuity between climate controlled seat relay connector E76 terminal 1 (B) and ground.

1 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Climate controlled seat relay power supply circuit check is OK.
- NG >> Repair or replace harness between climate controlled seat relay and body ground.



Driver Side Climate Controlled Seat Control Unit Power Supply and Ground Circuit Inspection

AIS002C6

1. CHECK FUSE

Check if any of the following fuses for Fuse, fusible link and relay unit (J/B) are blown.

| COMPONENT PARTS | AMPERE | FUSE NO. |
|-----------------------------------|--------|----------|
| Fuse, fusible link and relay unit | 15A | 72 |

NOTE:

Refer to [SE-100, "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 [SE-100, "Component Parts and Harness Connector Location"](#).

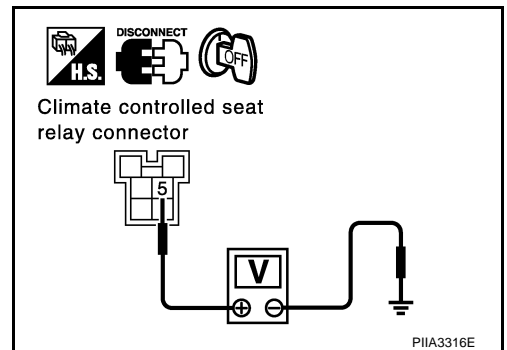
2. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT 1

1. Turn ignition switch OFF.
2. Remove climate controlled seat relay.
3. Check voltage between climate controlled seat relay connector E76 terminal 5 (R) and ground.

5 (R) – Ground : Battery voltage

OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness between fuse and climate controlled seat relay.



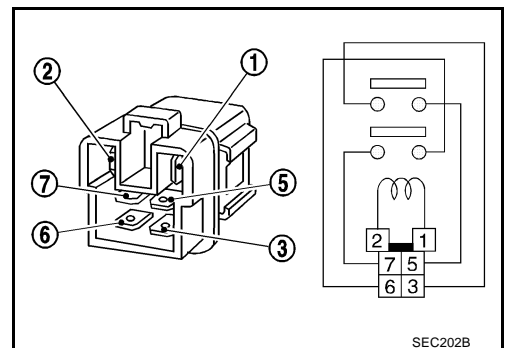
3. CHECK CLIMATE CONTROLLED SEAT RELAY

Check continuity between climate controlled seat relay terminals 3 and 5.

| Terminal | Condition | Continuity |
|----------|---|------------|
| 3 | 12V direct current supply between terminals 1 and 2 | Yes |
| 5 | No current supply | No |

OK or NG

- OK >> GO TO 4.
- NG >> Replace climate controlled seat relay.



CLIMATE CONTROLLED SEAT

4. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT 2

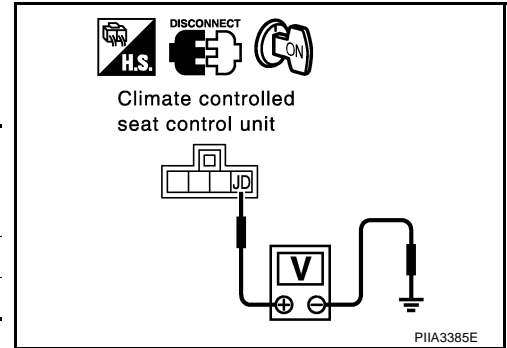
1. Connect climate controlled seat relay.
2. Disconnect climate controlled seat control unit connector.
3. Turn ignition switch ON.
4. Check voltage between climate controlled seat control unit connector and ground.

| Con- nector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|--------------------------|--------|---------------------------|--------------------------|
| | (+) | (-) | | |
| B158 | JD(W/G) | Ground | Turn ignition switch ON. | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness between climate controlled seat relay and climate controlled seat control unit.



5. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT 3

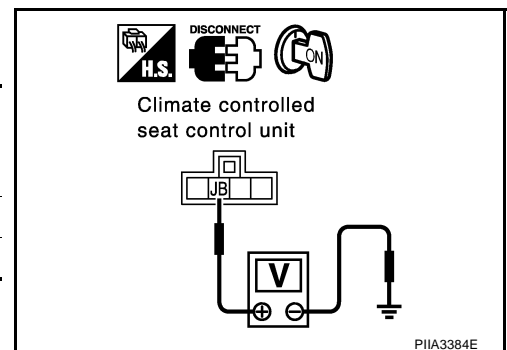
Check voltage between climate controlled seat control unit connector and ground.

| Con- nector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|--------------------------|--------|---------------------------|--------------------------|
| | (+) | (-) | | |
| B158 | JB(W/R) | Ground | Turn ignition switch ON. | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> GO TO 6.

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



6. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT GROUND CIRCUIT

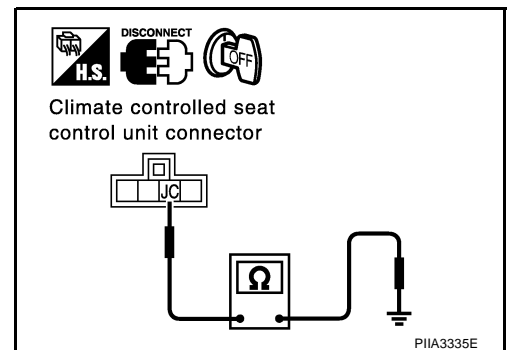
1. Turn ignition switch OFF.
2. Check continuity between climate controlled seat control unit connector B158 terminal JC (B) and ground.

JC (B) – Ground : Continuity should exist.

OK or NG

OK >> Driver side climate controlled seat control unit power supply and ground circuit check is OK.

NG >> Repair or replace harness between climate controlled seat control unit and ground.



CLIMATE CONTROLLED SEAT

Passenger Side Climate Controlled Seat Control Unit Power Supply Circuit Inspection

AIS002C7

1. CHECK FUSE

Check if any of the following fuses for Fuse, fusible link and relay unit block (J/B) are blown.

| COMPONENT PARTS | AMPERE | FUSE NO. |
|-----------------------------------|--------|----------|
| Fuse, fusible link and relay unit | 15A | 71 |

NOTE:

Refer to [SE-100, "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 [SE-100, "Component Parts and Harness Connector Location"](#).

2. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT1

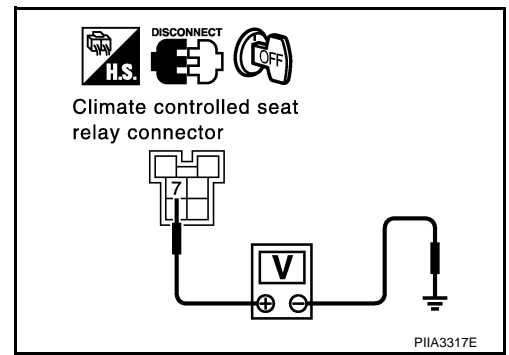
1. Turn ignition switch OFF.
2. Disconnect climate controlled seat relay.
3. Check voltage between climate controlled seat relay connector E76 terminal 7 (L) and ground.

7 (L) – Ground : Battery voltage

OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between fuse block (J/B) and climate controlled seat relay.



3. CHECK CLIMATE CONTROLLED SEAT RELAY

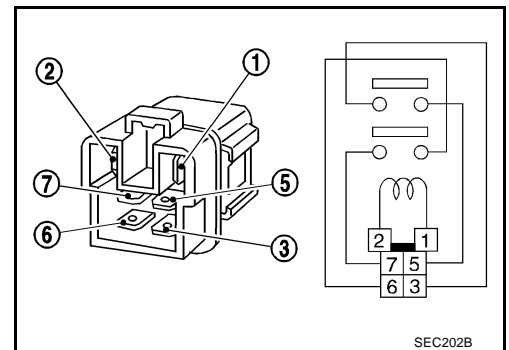
Check continuity between climate controlled seat relay terminals 6 and 7.

| Terminal | Condition | Continuity |
|----------|---|------------|
| 6 | 12V direct current supply between terminals 1 and 2 | Yes |
| 7 | No current supply | No |

OK or NG

OK >> GO TO 4.

NG >> Replace climate controlled seat relay.



CLIMATE CONTROLLED SEAT

4. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT 2

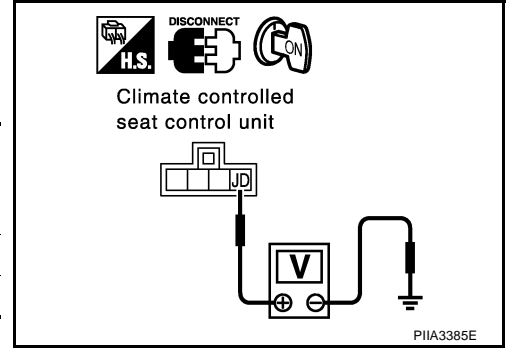
1. Connect climate controlled seat relay.
2. Disconnect climate controlled seat control unit connector.
3. Turn ignition switch ON.
4. Check voltage between climate controlled seat control unit connector and ground.

| Con- nector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|--------------------------|--------|---------------------------|--------------------------|
| | (+) | (-) | | |
| B358 | JD(W/G) | Ground | Turn ignition switch ON. | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> GO TO 5.

NG >> Repair or replace harness between climate controlled seat relay and climate controlled seat control unit.



5. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT POWER SUPPLY CIRCUIT 3

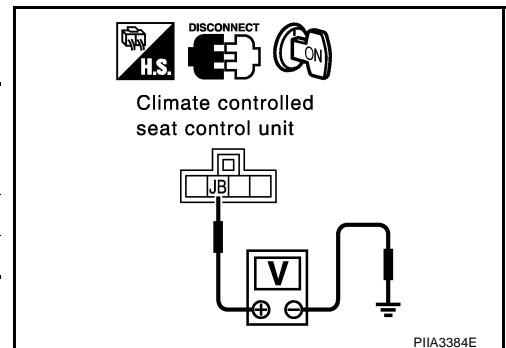
Check voltage between climate controlled seat control unit connector and ground.

| Con- nector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|--------------------------|--------|---------------------------|--------------------------|
| | (+) | (-) | | |
| B358 | JB(W/R) | Ground | Turn ignition switch ON. | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> GO TO 6.

NG >> Repair or replace harness between fuse block and climate controlled seat control unit.



6. CHECK CLIMATE CONTROLLED SEAT CONTROL UNIT GROUND CIRCUIT

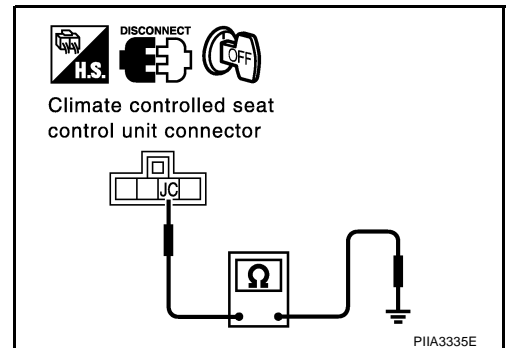
1. Turn ignition switch OFF.
2. Check continuity between climate controlled seat control unit connector B358 terminal JC (B) and ground.

JC (B) – Ground : Continuity should exist.

OK or NG

OK >> Passenger side climate controlled seat unit power supply and ground circuit check is OK.

NG >> Repair or replace harness between climate controlled seat control unit and ground.



CLIMATE CONTROLLED SEAT

Climate Controlled Seat “HEAT” Switch Circuit Inspection

AI/S002C8

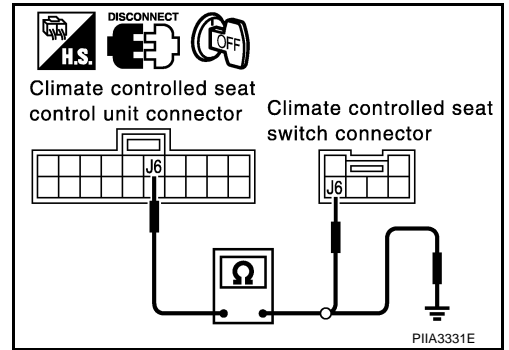
1. CHECK CLIMATE CONTROLLED SEAT HEAT SWITCH HARNESS CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit and climate controlled seat switch connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J6 (PU) and climate controlled seat switch connector B156 (driver side), B356 (passenger side) terminal J6 (PU).

J6 (PU) – J6 (PU) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J6 (PU) and ground.

J6 (PU) – Ground : Continuity should not exist.



OK or NG

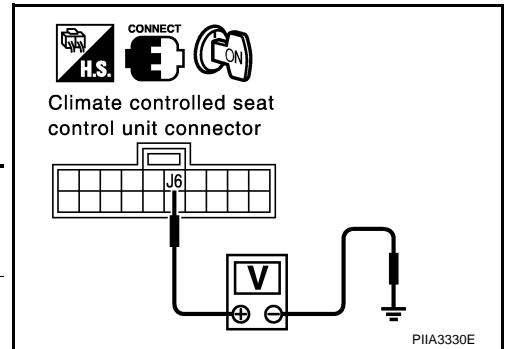
OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and climate controlled seat switch.

2. CHECK CLIMATE CONTROLLED SEAT HEAT SWITCH POWER SUPPLY CIRCUIT

1. Connect climate controlled seat control unit connector and climate controlled seat switch.
2. Turn ignition switch ON.
3. Turn climate controlled seat switch “HEAT”.
4. Check voltage between climate controlled seat control unit connector and body ground.

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|--|-----------------------|--------|---|-----------------------|
| | (+) | (-) | | |
| B156 (Driver side), B356 (Passenger side) | J6 (PU) | Ground | Turn ignition switch ON. Turn climate controlled seat switch “HEAT”. | 0 |
| | | | Climate controlled seat switch OFF. | Battery voltage |



OK or NG

OK >> Replace climate controlled seat control unit.

NG >> GO TO 3.

3. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL

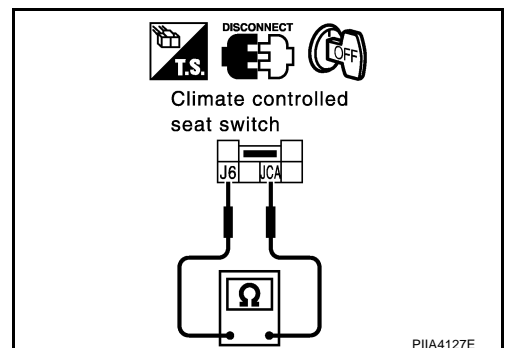
1. Turn ignition switch OFF.
2. Disconnect climate controlled seat switch connector.
3. Check continuity between climate controlled seat switch.

| Terminal | | Condition | Continuity |
|----------|-----|---|------------|
| J6 | JCA | Climate controlled seat switch HEAT position. | Yes |
| | | Climate controlled seat switch OFF. | No |

OK or NG

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

NG >> Replace climate controlled seat switch.



CLIMATE CONTROLLED SEAT

AIS002C9

Climate Controlled Seat “COOL” Switch Circuit Inspection

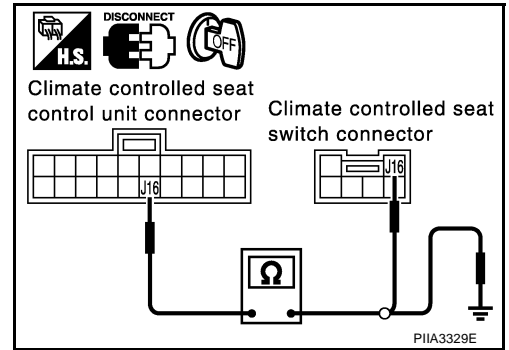
1. CHECK CLIMATE CONTROLLED SEAT COOL SWITCH HARNESS CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit and climate controlled seat switch connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J16 (R) and climate controlled seat switch connector B156 (driver side), B356 (passenger side) terminal J16 (R).

J16 (R) – J16 (R) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J16 (R) and ground.

J16 (R) – Ground : Continuity should not exist.



OK or NG

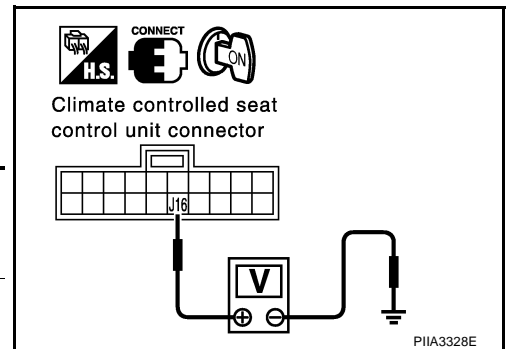
OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and climate controlled seat switch.

2. CHECK CLIMATE CONTROLLED SEAT COOL SWITCH POWER SUPPLY CIRCUIT

1. Connect climate controlled seat control unit connector and climate controlled seat switch.
2. Turn ignition switch ON.
3. Turn climate controlled seat switch COOL.
4. Check voltage between climate controlled seat control unit connector and body ground.

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|--|-----------------------|--------|---|-----------------------|
| | (+) | (-) | | |
| B156 (Driver side), B356 (Passenger side) | J16 (R) | Ground | Turn ignition switch ON. Turn climate controlled seat switch COOL. | 0 |
| | | | Climate controlled seat switch OFF. | Battery voltage |



OK or NG

OK >> Replace climate controlled seat control unit.

NG >> GO TO 3.

3. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL

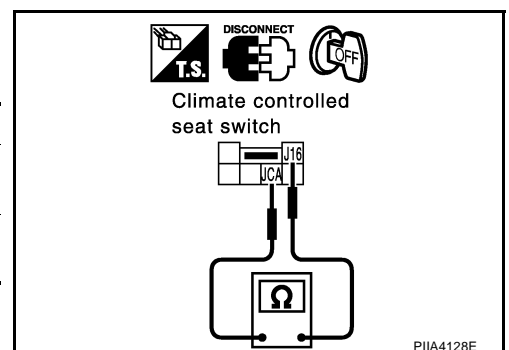
1. Turn ignition switch OFF.
2. Disconnect climate controlled seat switch connector.
3. Check continuity between climate controlled seat switch.

| Terminal | | Condition | Continuity |
|----------|-----|---|------------|
| J16 | JCA | | |
| | | Climate controlled seat switch COOL position. | Yes |
| | | Climate controlled seat switch OFF. | No |

OK or NG

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

NG >> Replace climate controlled seat switch.



CLIMATE CONTROLLED SEAT

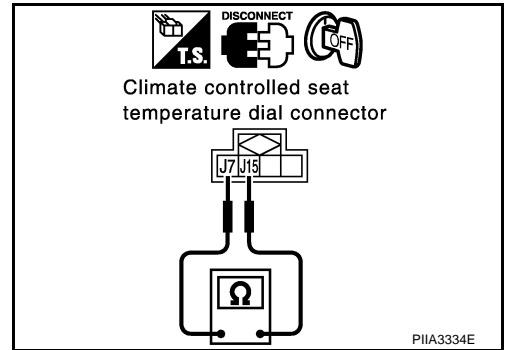
Climate Controlled Seat Temperature Dial Inspection

AIS002CA

1. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat temperature dial connector.
3. Check continuity between climate controlled seat temperature dial.

| Terminal | | Condition | ContinuityΩ (Approx.) |
|----------|-----|-----------------------|--------------------------|
| J7 | J15 | Temperature dial 1st. | 2370 |
| | | Temperature dial 2nd. | 1100 |
| | | Temperature dial 3rd. | 619 |
| | | Temperature dial 4th. | 237 |



OK or NG

- OK >> Climate controlled seat temperature dial check is OK.
 NG >> Replace climate controlled seat temperature dial.

Climate Controlled Seat Temperature Dial Circuit Inspection

AIS002CB

1. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and climate controlled seat temperature dial connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J7 (L), J15 (Y) and climate controlled seat temperature dial connector B157 (driver side), B357 (passenger side) terminal J7 (L), J15 (Y).

J7 (L) – J7 (L) : Continuity should exist.

J15 (Y) – J15 (Y) : Continuity should exist.

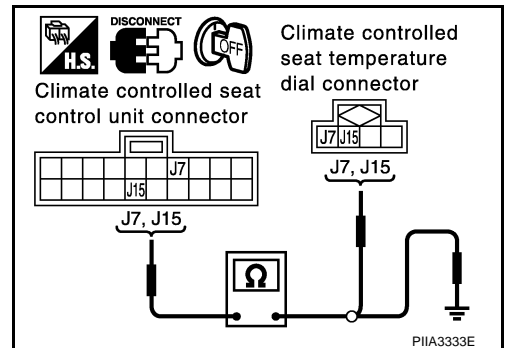
4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J7 (L), J15 (Y) and ground.

J7 (L) – Ground : Continuity should not exist.

J15 (Y) – Ground : Continuity should not exist.

OK or NG

- OK >> GO TO 2.
 NG >> Repair or replace harness between climate controlled seat control unit and climate controlled seat temperature dial.

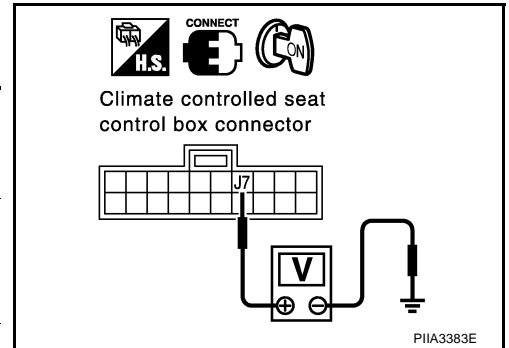


CLIMATE CONTROLLED SEAT

2. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL POWER SUPPLY CIRCUIT

1. Connect climate controlled seat control unit connector and climate controlled seat temperature dial connector.
2. Turn ignition switch ON.
3. Check voltage between climate controlled seat control unit connector and ground.

| Connector | Terminal (Wire color) | | Condition | | Voltage (V) (Approx.) |
|--|-----------------------|--------|---------------------------|------------------------|-----------------------|
| | (+) | (-) | | | |
| B159 (Driver side), B359 (Passenger side) | J7(L) | Ground | Turn ignition switch ON. | temperature dial 1 – 4 | 7.1 – 11.4 |
| | | | Turn ignition switch OFF. | | 0 |



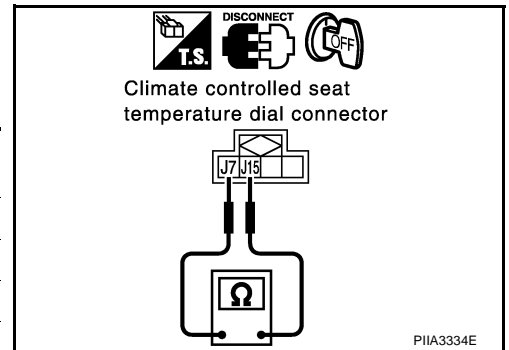
OK or NG

- OK >> Climate controlled seat temperature dial circuit check is OK.
 NG >> When turn ignition ON and temperature dial adjust the following
- When voltage is 12V, GO TO3.
 - When voltage is 0V, Replace climate controlled seat control unit.

3. CHECK CLIMATE CONTROLLED SEAT TEMPERATURE DIAL

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat temperature dial connector.
3. Check continuity between climate controlled seat temperature dial.

| Terminal | | Condition | ContinuityΩ (Approx.) |
|----------|-----|-----------------------|-----------------------|
| J7 | J15 | Temperature dial 1st. | 2370 |
| | | Temperature dial 2nd. | 1100 |
| | | Temperature dial 3rd. | 619 |
| | | Temperature dial 4th. | 237 |



OK or NG

- OK >> Replace climate controlled seat control unit.
 NG >> Replace climate controlled seat temperature dial.

CLIMATE CONTROLLED SEAT

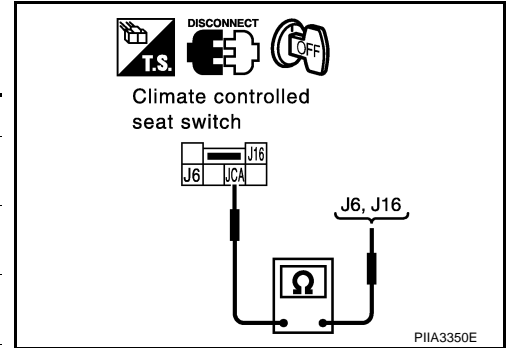
Climate Controlled Seat Switch Ground Circuit Inspection

AIS002CC

1. CHECK CLIMATE CONTROLLED SEAT SWITCH

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat switch connector.
3. Check continuity between climate controlled seat switch.

| Terminal | Condition | Continuity |
|----------|---|------------|
| J6 | Climate controlled seat switch HEAT position. | Yes |
| | Climate controlled seat switch OFF. | No |
| J16 | Climate controlled seat switch COOL position. | Yes |
| | Climate controlled seat switch OFF. | No |



OK or NG

- OK >> GO TO 2.
 NG >> Replace climate controlled seat switch.

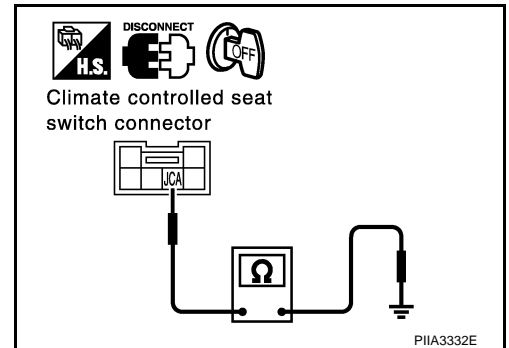
2. CHECK CLIMATE CONTROLLED SEAT SWITCH GROUND CIRCUIT

Check continuity between climate controlled seat switch connector B156 (driver side), B356 (passenger side) terminal JCA (B).

JCA (B) – Ground : Continuity should exist.

OK or NG

- OK >> Climate controlled seat control circuit check is OK.
 NG >> Repair or replace harness between climate controlled seat switch and body ground.



CLIMATE CONTROLLED SEAT

AIS002CD

Seat Cushion Thermal Electric Device Circuit Inspection

1. CHECK SEAT CUSHION THERMAL ELECTRIC DEVICE HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and seat cushion thermal electric device connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J1 (Y/G), J2 (W/L) and climate controlled seat temperature dial connector B154 (driver side), B354 (passenger side) terminal J1 (Y/G), J2 (W/L).

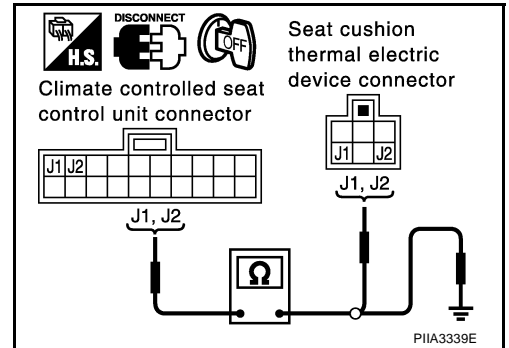
J1 (Y/G) – J1 (Y/G) : Continuity should exist.

J2 (W/L) – J2 (W/L) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J1 (Y/G), J2 (W/L) and ground.

J1 (Y/G) – Ground : Continuity should not exist.

J2 (W/L) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and seat cushion thermal electric device.

2. CHECK SEAT CUSHION THERMAL ELECTRIC DEVICE POWER SUPPLY CIRCUIT POWER SUPPLY CIRCUIT

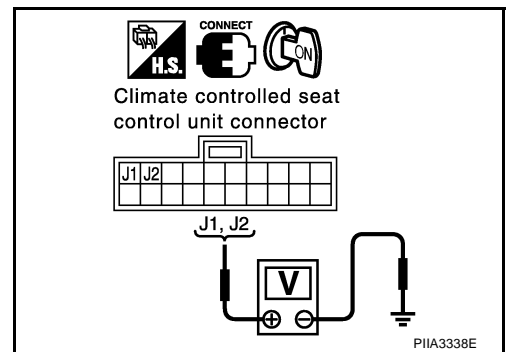
1. Connect climate controlled seat control unit connector.
2. Turn ignition switch ON.
3. Check voltage between climate controlled seat control unit connector and ground.

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|---|-----------------------|--------|--|-----------------------|
| | (+) | (-) | | |
| B159 (Driver side), B359 (Passenger side) | J1(Y/G) | Ground | Turn ignition switch ON, climate controlled seat switch turn "HEAT". | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |
| | J2(WL) | Ground | Turn ignition switch ON, climate controlled seat switch turn "COOL". | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |

OK or NG

OK >> Seat cushion Thelma electric device circuit check is OK.

NG >> Replace seat cushion thermal electric device.



CLIMATE CONTROLLED SEAT

Seat Cushion Thermal Electric Device Sensor Circuit Inspection

AIS002CE

1. CHECK SEAT CUSHION THERMAL ELECTRIC DEVICE HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and seat cushion thermal electric device connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J17 (B/R), J18 (G/R) and seat cushion thermal electric device dial connector B154 (driver side), B354 (passenger side) terminal J17 (B/R), J18 (G/R).

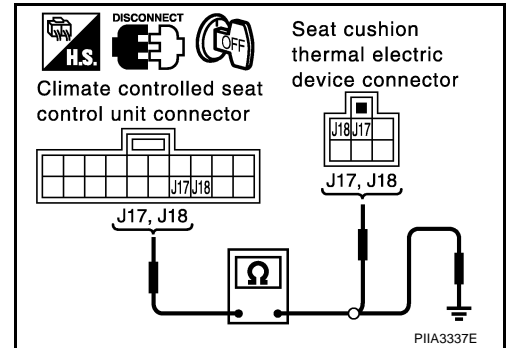
J17 (B/R) – J17 (B/R) : Continuity should exist.

J18 (G/R) – J18 (G/R) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J17 (B/R), J18 (G/R) and ground.

J17 (B/R) – Ground : Continuity should not exist.

J18 (G/R) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and seat cushion thermal electric device.

2. CHECK SEAT CUSHION THERMAL ELECTRIC DEVICE SENSOR

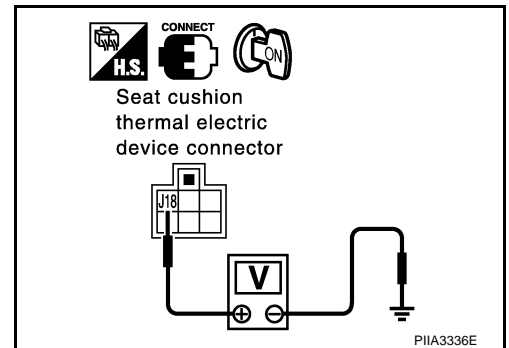
- Connect climate controlled seat control unit connector and seat cushion thermal electric device connector.
- Turn ignition switch ON.
- Check voltage between seat cushion thermal electric device connector B154 (driver side), B354 (passenger side) terminal J18 (G/R) and ground.

J18 (G/R) – Ground : 0.5V – 4V (Approx.)

OK or NG

OK >> Seat cushion thermal electric device sensor circuit inspection is OK.

NG >> Replace seat cushion thermal electric device.



CLIMATE CONTROLLED SEAT

AIS002CF

Seatback Thermal Electric Device Circuit Inspection

1. CHECK SEATBACK THERMAL ELECTRIC DEVICE HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and seatback thermal electric device connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J11 (B/R), J12 (PU/W) and seatback thermal electric device connector B153 (driver side), B353 (passenger side) terminal J11 (B/R), J12 (PU/W).

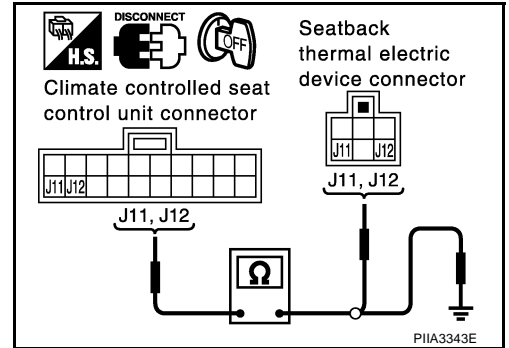
J11 (B/R) – J11 (B/R) : Continuity should exist.

J12 (PU/W) – J12 (PU/W) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J11 (B/R), J12 (PU/W) and ground.

J11 (B/R) – Ground : Continuity should not exist.

J12 (PU/W) – Ground : Continuity should not exist.



OK or NG

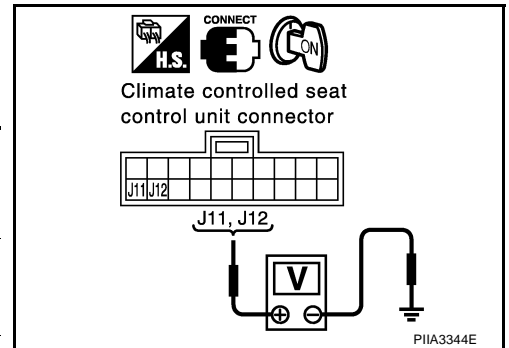
OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and seatback thermal electric device.

2. CHECK SEATBACK THERMAL ELECTRIC DEVICE POWER SUPPLY CIRCUIT

1. Connect climate controlled seat control unit connector and seatback thermal electric device connector.
2. Turn ignition switch ON.
3. Check voltage between climate controlled seat control unit connector and ground.

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|---|-----------------------|--------|--|-----------------------|
| | (+) | (-) | | |
| B159 (Driver side), B359 (Passenger side) | J11(B/R) | Ground | Turn ignition switch ON, climate controlled seat switch turn "HEAT". | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |
| | J12 (PU/W) | Ground | Turn ignition switch ON, climate controlled seat switch turn "COOL". | Battery voltage |
| | | | Turn ignition switch OFF. | 0 |



OK or NG

OK >> Seatback thermal electric device circuit check is OK.

NG >> Replace seat cushion thermal electric device.

CLIMATE CONTROLLED SEAT

Seatback Thermal Electric Device Sensor Circuit Inspection

AIS002CG

1. CHECK SEATBACK THERMAL ELECTRIC DEVICE HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and seatback thermal electric device connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J19 (L/OR), J20 (R/L) and seatback thermal electric device connector B153 (driver side), B353 (passenger side) terminal J19 (L/OR), J20 (R/L).

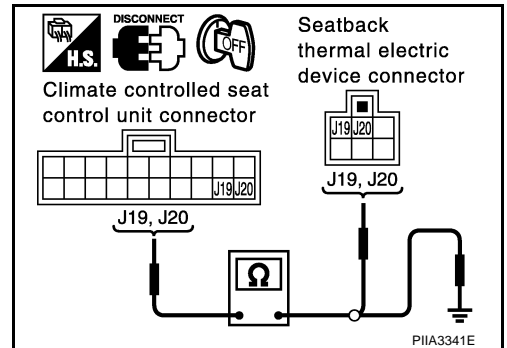
J19 (L/OR) – J19 (L/OR) : Continuity should exist.

J20 (R/L) – J20 (R/L) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J19 (L/OR), J20 (R/L) and ground.

J19 (L/OR) – Ground : Continuity should not exist.

J20 (R/L) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and seatback thermal electric device.

2. CHECK SEAT CUSHION THERMAL ELECTRIC DEVICE SENSOR

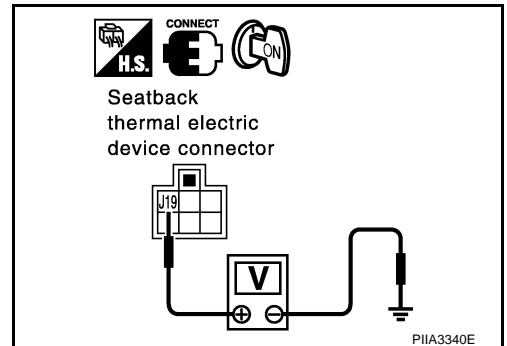
1. Connect climate controlled seat control unit connector and seatback thermal electric device connector.
2. Turn ignition switch ON.
3. Check voltage between seat cushion thermal electric device connector B153 (driver side), B353 (passenger side) terminal J19 (L/OR) and ground.

J19 (L/OR) – Ground : 0.5V – 4V (Approx)

OK or NG

OK >> Seatback thermal electric device sensor circuit inspection is OK.

NG >> Replace seatback thermal electric device.



CLIMATE CONTROLLED SEAT

AIS002CH

Blower Motor Power Supply Circuit Inspection

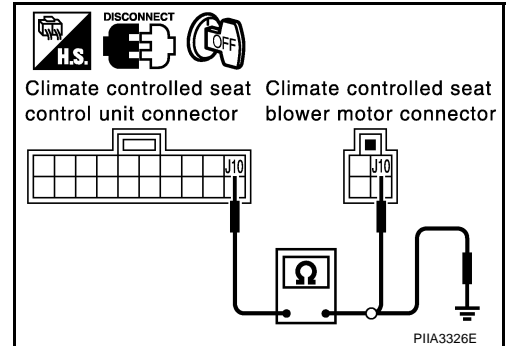
1. CHECK BLOWER MOTOR HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit and blower motor connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J10 (PU) and blower motor connector B155 (driver side), B355 (passenger side) terminal J10 (PU).

J10 (PU) – J10 (PU) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J10 (PU) and ground.

J10 (PU) – Ground : Continuity should not exist.



OK or NG

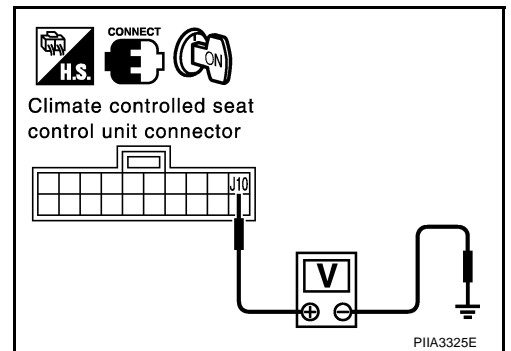
OK >> GO TO 2.

NG >> Repair or replace harness between climate controlled seat control unit and blower motor.

2. CHECK BLOWER MOTOR POWER SUPPLY CIRCUIT

1. Connect climate controlled seat control unit connector and blower motor connector.
2. Turn ignition switch ON.
3. Check voltage between climate controlled seat control unit connector and ground.

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|---|-----------------------|--------|---|-----------------------|
| | (+) | (-) | | |
| B159 (Driver side), B359 (Passenger side) | J10(PU) | Ground | Turn ignition switch ON Climate controlled seat switch "HEAT" or "COOL". | 6 – 12 |
| | | | Turn ignition switch OFF. | 0 |



OK or NG

OK >> GO TO 3.

NG >> Replace climate controlled seat control unit.

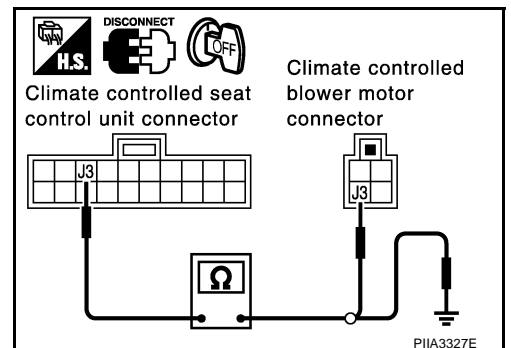
3. CHECK BLOWER MOTOR GROUND HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit connector and climate controlled blower motor connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J3 (GY) and climate controlled blower motor connector B155 (driver side), B355 (passenger side) terminal J3 (GY).

J3 (GY) – J3 (GY) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J3 (GY) and ground.

J3 (GY) – Ground : Continuity should not exist.



CLIMATE CONTROLLED SEAT

OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness between climate controlled seat control unit and climate controlled blower motor.

4. CHECK BLOWER MOTOR GROUND HARNESS

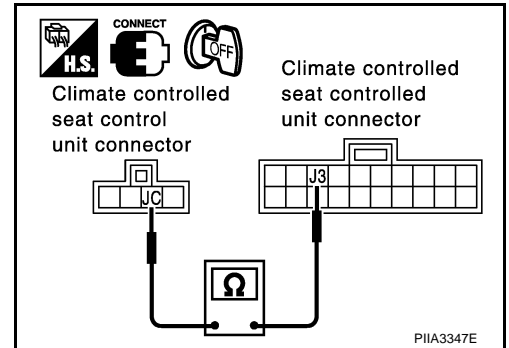
1. Connect climate controlled seat control unit connector.
2. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J3 (GY) and climate controlled seat control unit connector B158 (driver side), B358 (passenger side) terminal JC (B).

J3 (GY) – JC (B) : Continuity should exist.

OK or NG

OK >> Blower motor circuit check is OK.

NG >> Replace climate controlled seat control unit.

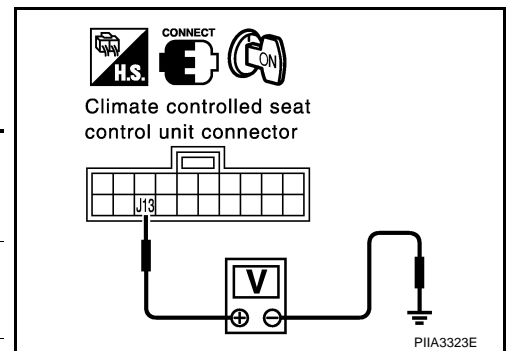


Blower Motor Speed Control Circuit Inspection

1. CHECK BLOWER MOTOR SPEED CONTROL SIGNAL CIRCUIT

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

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|---|-----------------------|--------|---|-----------------------|
| | (+) | (-) | | |
| B159 (Driver side), B359 (Passenger side) | J13(R) | Ground | Turn ignition switch ON Climate controlled seat switch "HEAT" or "COOL". | 6 – 12 |
| | | | Turn ignition switch OFF. | 0 |



OK or NG

OK >> GO TO 2.

NG >> Replace climate controlled seat control unit.

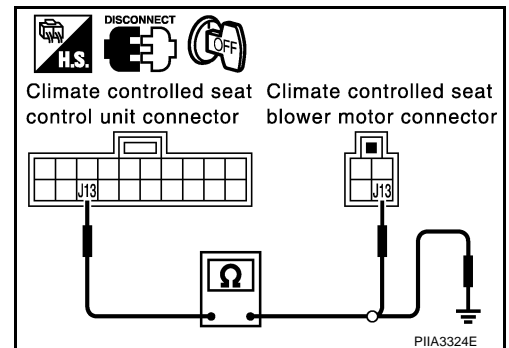
2. CHECK BLOWER MOTOR HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit and climate controlled seat blower motor connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J13 (R) and climate controlled seat blower motor connector B155 (driver side), B355 (passenger side) terminal J13 (R).

J13 (R) – J13 (R) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J13 (R) and ground.

J13 (R) – Ground : Continuity should not exist.



OK or NG

OK >> Blower motor control circuit check is OK.

NG >> Repair or replace harness between climate controlled seat control unit and blower motor.

CLIMATE CONTROLLED SEAT

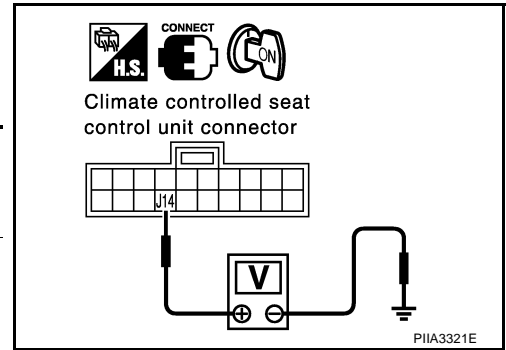
Blower Motor Tachometer Signal Circuit Inspection

AIS002CJ

1. CHECK BLOWER MOTOR TACHOMETER SIGNAL CIRCUIT

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

| Connector | Terminal (Wire color) | | Condition | Voltage (V) (Approx.) |
|--|--------------------------|--------|--|--------------------------|
| | (+) | (-) | | |
| B159 (Driver side), B359 (Passenger side) | J14(W) | Ground | Turn ignition switch ON Climate controlled seat switch "HEAT" or "COOL" temperature dial 1 - 4. | 5 - 7 |
| | | | Turn ignition switch OFF. | 0 |



OK or NG

- OK >> GO TO 2.
NG >> Replace climate controlled seat blower motor.

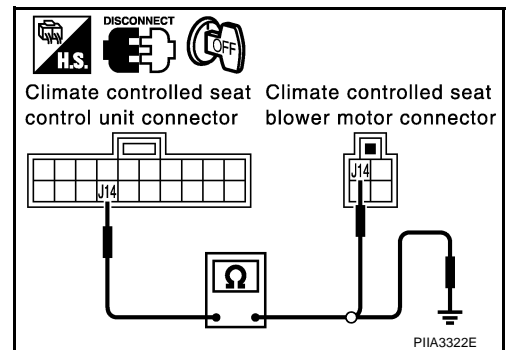
2. CHECK BLOWER MOTOR HARNESS

1. Turn ignition switch OFF.
2. Disconnect climate controlled seat control unit and climate controlled seat blower motor connector.
3. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J14 (W) and climate controlled seat blower motor connector B155 (driver side), B355 (passenger side) terminal J14 (W).

J14 (W) – J14 (W) : Continuity should exist.

4. Check continuity between climate controlled seat control unit connector B159 (driver side), B359 (passenger side) terminal J14 (W) and ground.

J14 (W) – Ground : Continuity should not exist.



OK or NG

- OK >> Blower motor tachometer signal circuit check is OK.
NG >> Repair or replace harness between climate controlled seat control unit and climate controlled seat blower motor.

Climate Controlled Seat Control Unit Inspection

AIS002N3

1. CHECK THE CLIMATE CONTROLLED SEAT CONTROL UNIT

Does the climate controlled seat operate normally the driver side or passenger side climate controlled seat control unit is exchanged.

OK or NG

- OK >> Climate controlled seat control unit check is OK.
NG >> Replace climate controlled seat control unit.

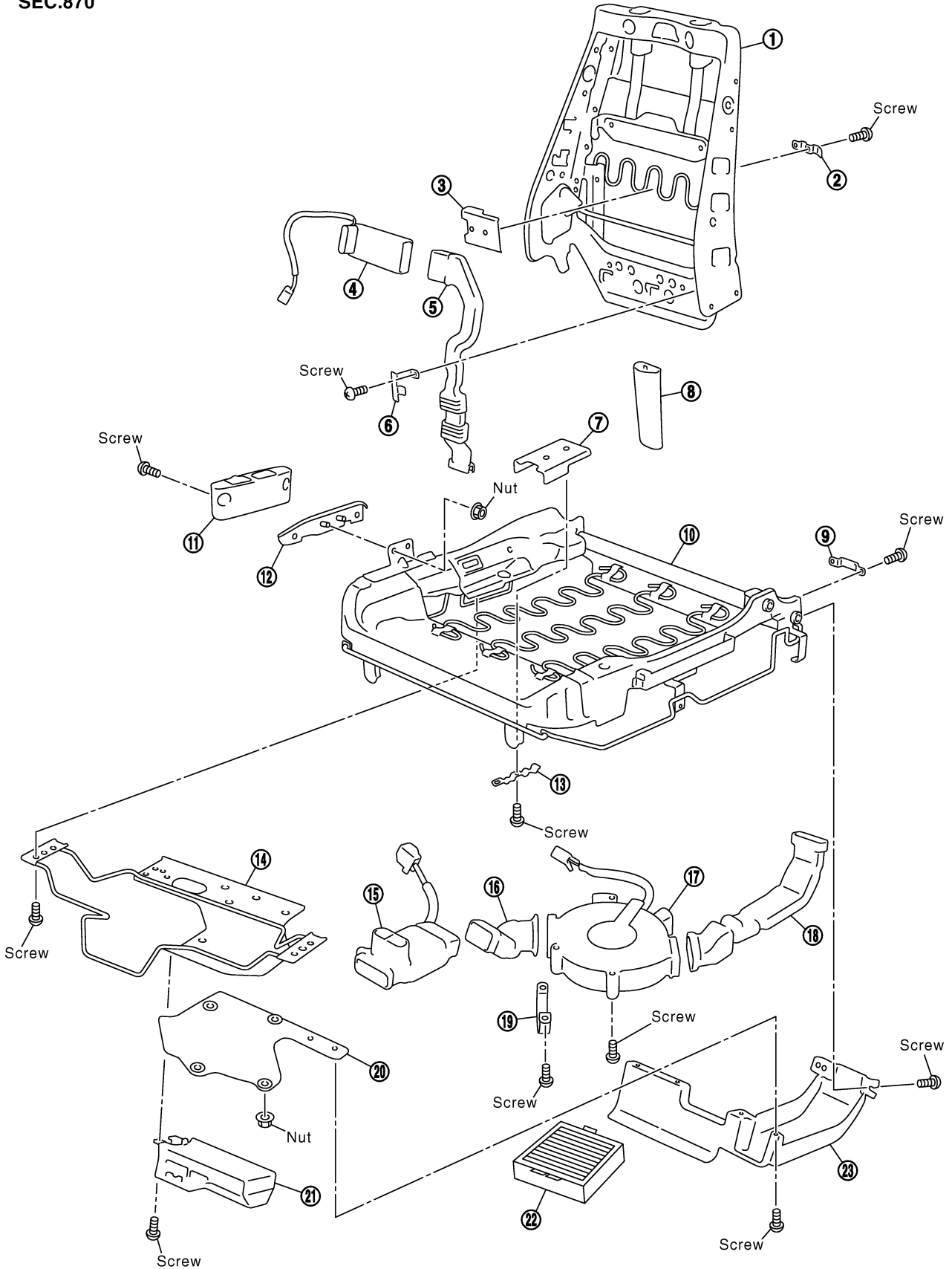
FRONT SEAT

- | | | |
|-----------------------------------|---|--|
| 1. Seatback board | 2. Inner stay | 3. Side air bag module |
| 4. Seatback frame | 5. Lumber support link | 6. Lumbar support plate |
| 7. Headrest | 8. Headrest holder (locked) | 9. Headrest holder (free) |
| 10. Seatback trim | 11. Seatback pad | 12. Seat cushion trim |
| 13. Seat cushion pad | 14. Reclining inner device | 15. Reclining device rod |
| 16. Reclining outer device | 17. Climate controlled seat switch assembly | 18. Climate controlled seat switch bracket |
| 19. Seat cushion frame | 20. Power seat switch | 21. Seat cushion outer finisher |
| 22. Lumbar support switch knob | 23. Reclining switch knob | 24. Slide & lifter switch knob |
| 25. Power seat harness | 26. Seat cushion inner finisher | 27. Seat belt buckle |
| 28. Seat lifter link rear bracket | 29. Seat cushion inner rod | 30. Lifter motor unit assembly |
| 31. Inner sliding assembly | 32. Outer sliding assembly | 33. Seat lifter link front bracket |
| 34. Driver seat control unit | 35. Seat cushion outer rod | 36. Sliding motor inner cover |
| 37. Sliding motor inner | 38. Sliding motor wire pad | 39. Driver seat control unit bracket |
| 40. Flexible wire | 41. Seat cushion front finisher | 42. Sliding motor outer cover |
| 43. Sliding motor outer | | |

FRONT SEAT

CLIMATE CONTROLLED SEAT

SEC.870



A
B
C
D
E
F
G
H
SE
J
K
L
M

PIIB0731E

FRONT SEAT

- | | | |
|-------------------------------------|---|--|
| 1. Seatback frame | 2. Seatback outer bracket | 3. Seatback inner bracket |
| 4. Seatback thermal electric device | 5. Seatback duct | 6. Seatback duct upper bracket |
| 7. Seat cushion inner bracket | 8. Seatback duct cover | 9. Seatback duct lower bracket |
| 10. Seat cushion frame | 11. Climate controlled seat switch assembly | 12. Climate controlled seat switch bracket |
| 13. Seat cushion outer bracket | 14. Seat cushion mounting upper bracket | 15. Seat cushion thermal electric device |
| 16. Seat cushion front duct | 17. Climate controlled seat blower motor | 18. Seat cushion rear duct |
| 19. Seat cushion duct lower bracket | 20. Seat cushion mounting lower bracket | 21. Climate controlled seat control unit |
| 22. Climate controlled seat filter | 23. Seat cushion rear duct protector | |

REMOVAL

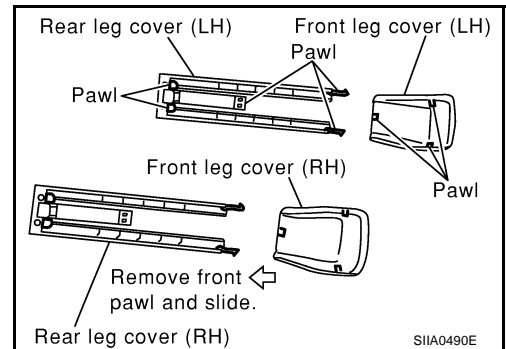
When removing or installing the seat trim, carefully handle it to keep dirt out and avoid damage.

CAUTION:

- Before removing the front seat, turn the ignition switch off, disconnect both battery cables and wait at least 3 minutes.
 - When checking the power seat circuit for continuity using a circuit tester, do not confuse its connector with the side air bag module connector. Such an error may cause the air bag to deploy.
 - Do not drop, tilt, or bump the side air bag module installing in the seat. Always handle it with care.
1. Remove the front leg cover and rear leg cover (LH/RH).

NOTE:

- Slide the seat backward, and disconnect the front tabs on the front leg cover. Then move the cover toward the rear of the vehicle, and pull up to remove.
- Slide the seat forward, then disengage the tabs on the front LH/RH of the rear leg cover and tabs engaged into the rail. Then pull the cover toward the rear of the vehicle.



2. Slide the seat until the body mounting bolts are visible and a tool can be inserted.

NOTE:

When disassembling the driver seat after removal, set the front/rear cushion lifter to the top position.

3. Remove the body mounting bolts.
4. Disconnect both battery cables.
5. Remove the harness connector for the side air bag module.
6. Remove the power seat harness connector and vehicle harness fixing clip out of the vehicle.

NOTE:

When removing and installing, using shop clothes, protect the parts from damage where it may interfere with others.

INSTALLATION

Install in the reverse order of removal.

NOTE:

Be sure to insert the rear end tab of the rear leg cover under the rail.

FRONT SEAT

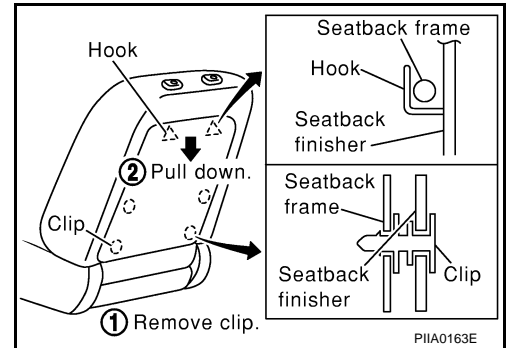
AIS001KX

Disassembly and Assembly SEATBACK TRIM AND PAD

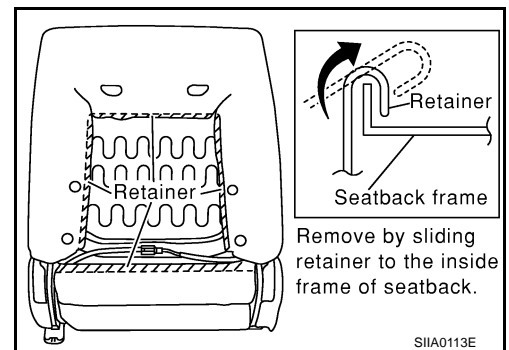
NOTE:

Be sure to set the front/rear cushion lifter to the top position.

1. Remove the seatback board from the back of the seatback.



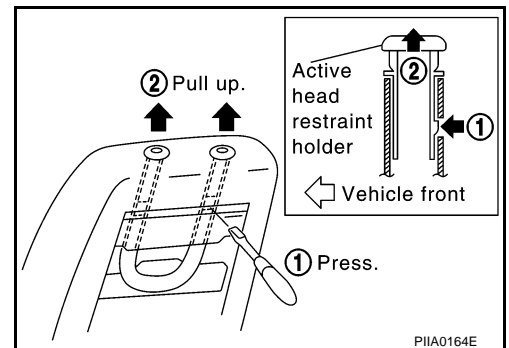
2. Remove the retainer.



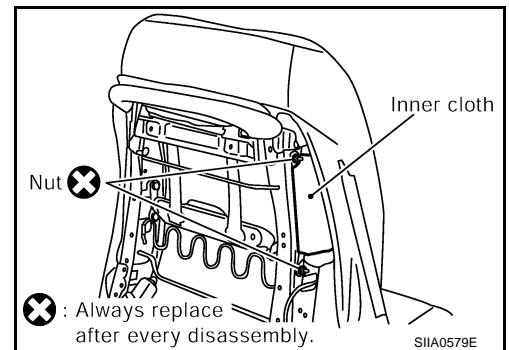
3. From the back of the seatback, press the headrest holder tab of the stay pipe hole to disengage. Then pull the headrest holder up to remove.

NOTE:

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



4. Remove the stay securing the inner cloth.



5. After removing the seatback trim & pad, remove the hog ring to separate the trim and pad.

A
B
C
D
E
F
G
H
SE
J
K
L
M

FRONT SEAT

REMOVAL OF SEATBACK ASSEMBLY

1. After completing the steps 1 and 2 of "Seatback trim and pad", remove the harness connectors for the reclining motor and lumbar support motor (driver seat only).
2. Pull out the harness connector for the side air bag from the seat cushion.
3. Remove the reclining device mounting bolts on the seatback frame, and remove the seatback assembly.

NOTE:

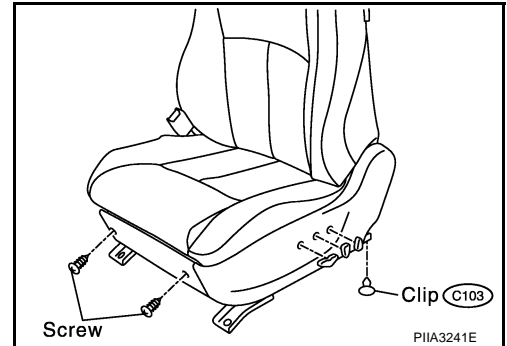
When assembling the seatback frame, make sure that the reclining device are, and be sure to temporarily tighten the bolts, then tighten them finally.

INSTALLATION OF SEATBACK ASSEMBLY

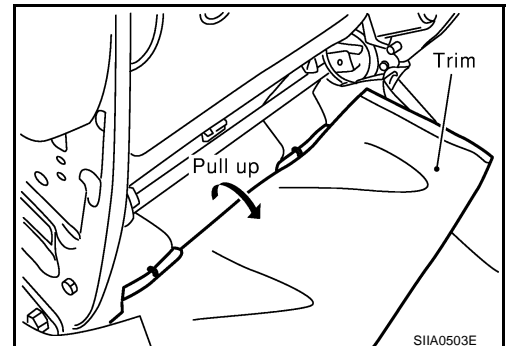
Install in the reverse order of removal.

SEAT CUSHION TRIM AND PAD

1. Remove the seat cushion front finisher.
2. Remove the power seat switch knob.
3. Remove the seat cushion outer finisher.



4. Remove the power seat switch assembly.
5. Partially pull off the trim at the rear of the seat cushion forward, and remove the hog rings on the seat cushion pad.



6. Remove the retainer on the seat cushion frame.
7. After removing the seat cushion trim & pad, remove the hog rings to separate the trim and pad.

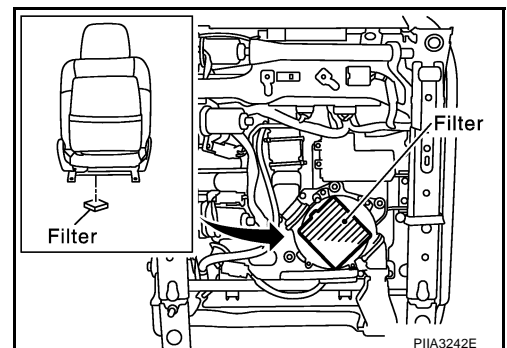
CLIMATE CONTROLLED SEAT

Blower Filter Replacement

Put your hand behind front seat cushion, pull filter downward and remove it. Replace filter with a new one.

NOTE:

- When replacing, be sure to set the front/rear driver seat lifter to the top position.
- When installing, do not confuse up-down direction of the filter.



REAR SEAT

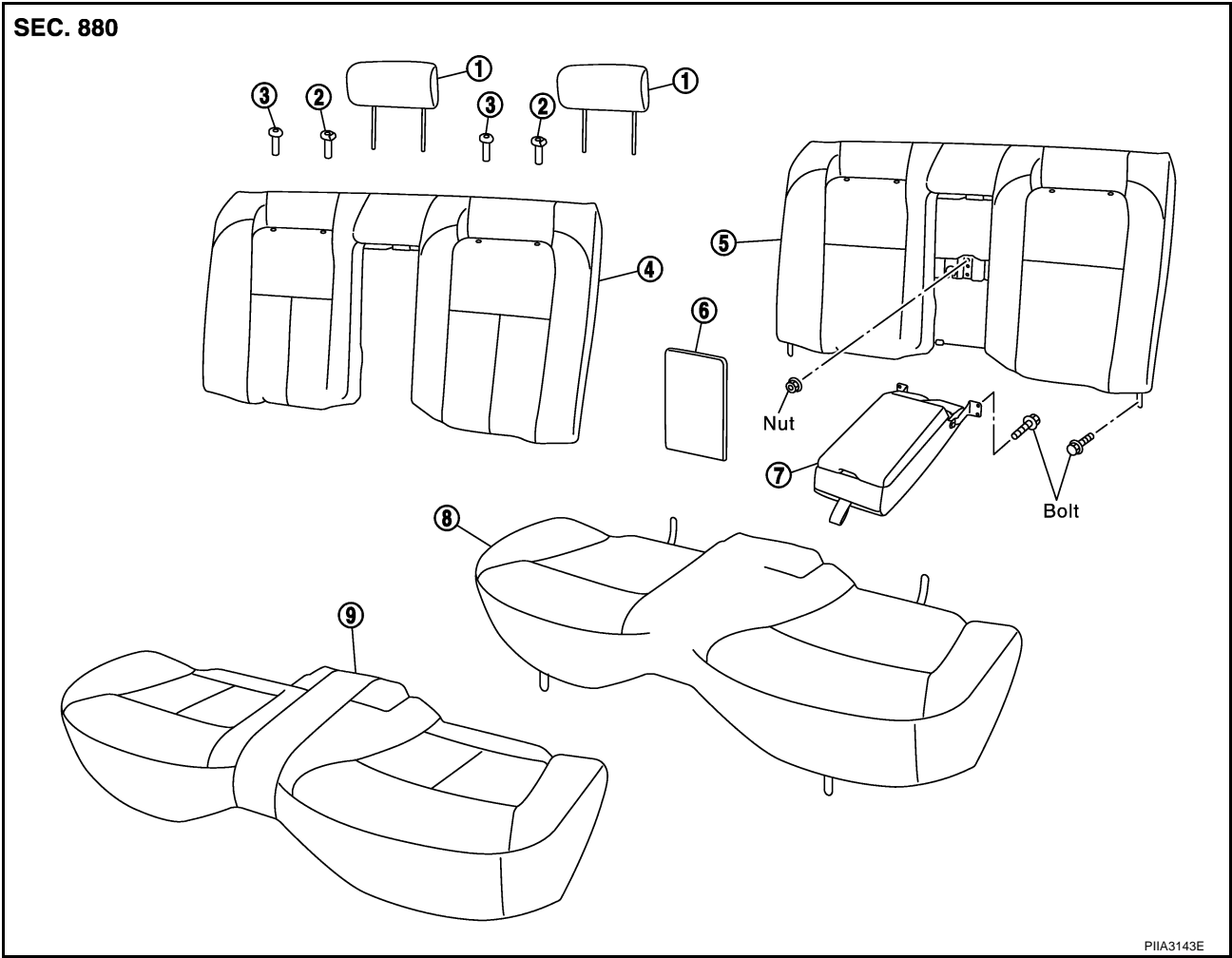
REAR SEAT

PPF:88300

Removal and Installation

AIS001KY

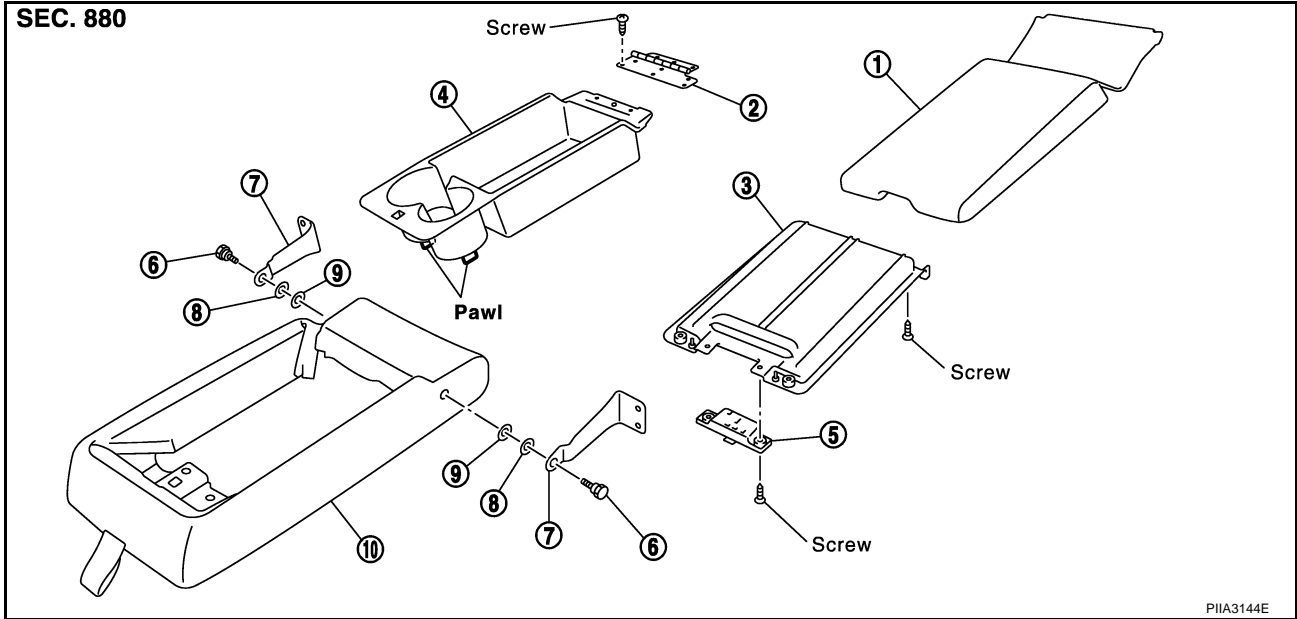
A
B
C
D
E
F
G
H
SE
J
K
L
M



- | | | |
|-----------------------|-----------------------------|---------------------------|
| 1. Headrest (LH/RH) | 2. Headrest holder (locked) | 3. Headrest holder (free) |
| 4. Rear seatback trim | 5. Rear seatback pad | 6. Rear seatback board |
| 7. Rear seat armrest | 8. Rear seat cushion pad | 9. Rear seat cushion trim |

REAR SEAT

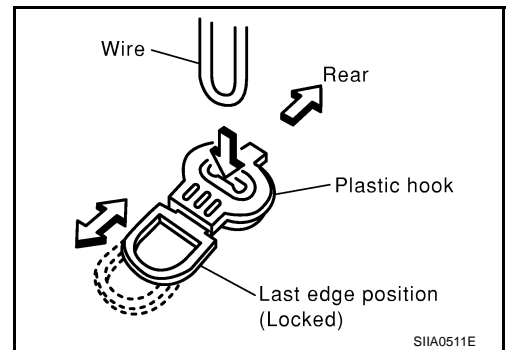
ARMREST ASSEMBLY



- | | | |
|-------------------------|---------------------|-------------------------|
| 1. Armrest lid assembly | 2. Lid hinge | 3. Armrest lid finisher |
| 4. Armrest tray box | 5. Armrest lid lock | 6. Special bolt |
| 7. Armrest bracket | 8. Plain washer | 9. Plastic washer |
| 10. Armrest frame & pad | | |

REMOVAL

1. Pull the lock at the front bottom of the seat cushion forward, and pull the seat cushion upward to release the wire from the plastic hook, then pull the seat cushion forward to remove.



2. Partially remove the seatback board to disconnect and remove the nuts.
3. Remove the LH and RH screws on the seatback.
4. Slide the seatback upward and remove the seatback.
5. After removing, remove the hog ring to separate the trim and pad.

INSTALLATION

Install in the reverse order of removal.