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PRECAUTIONS

PRECAUTIONS

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

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

WARNING:

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

Service Notice

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

PREPARATION

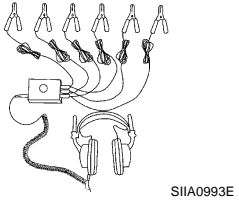
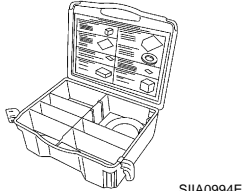
PREPARATION

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Special Service Tools

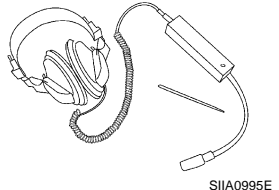
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

| Tool number (Kent-Moore No.) Tool name | Description |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| (J39570) Chassis ear |  Location the noise |
| (J43980) NISSAN Squeak and Rattle Kit |  Repairing the cause of the noise |

Commercial Service Tools

NIS001UK

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

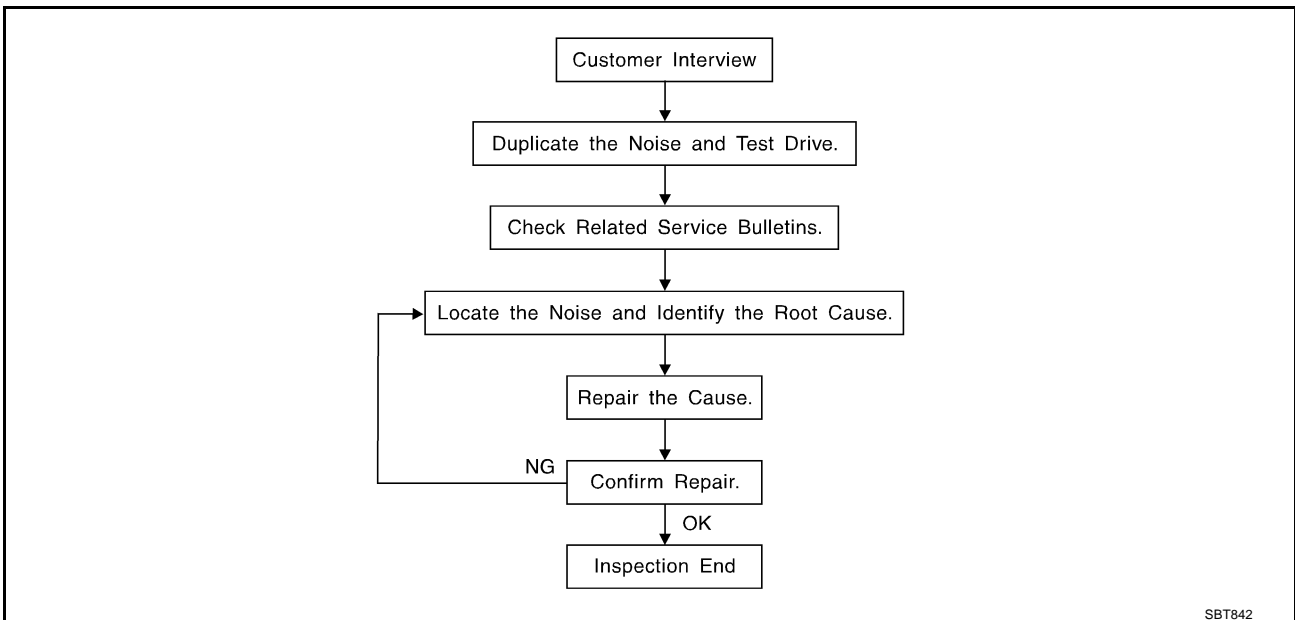
SQUEAK AND RATTLE TROUBLE DIAGNOSES

SQUEAK AND RATTLE TROUBLE DIAGNOSES

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Work Flow

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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-9, "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-7, "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.

NOTE:

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 × 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

NIS0028N

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. Sun-visor 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 under-hood 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.

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Diagnostic Worksheet

NIS00280



INFINITI.

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

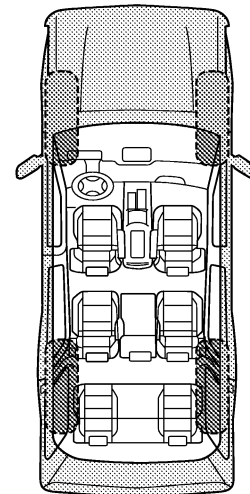
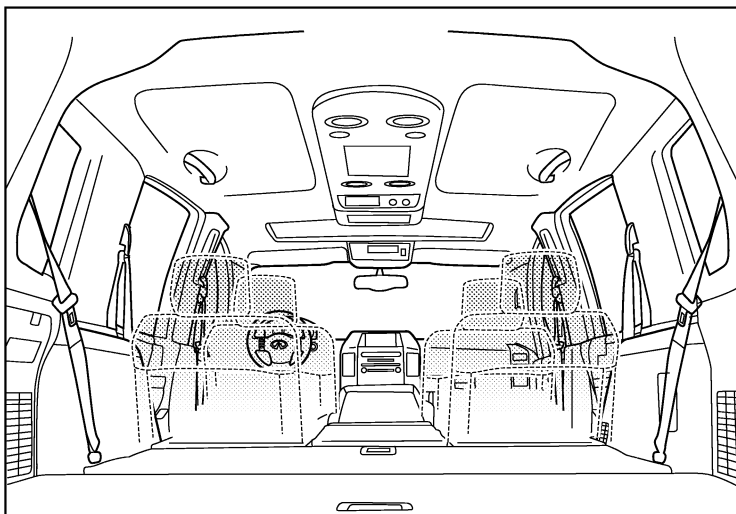
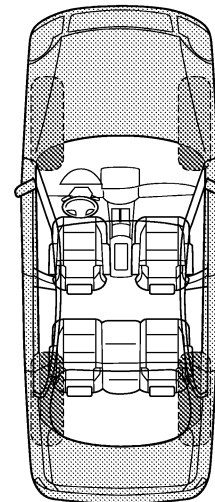
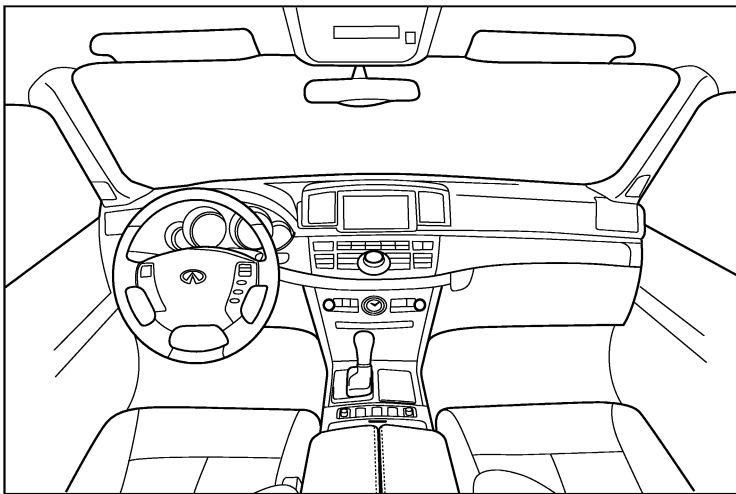
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Dear Infiniti Customer:

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

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

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



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

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SQUEAK AND RATTLE TROUBLE DIAGNOSES

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

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

- | | |
|-------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> anytime | <input type="checkbox"/> after sitting out in the rain |
| <input type="checkbox"/> 1st 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 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 at the door)
- tick (like a clock second hand)
- thump (heavy, muffled knock noise)
- buzz (like a bumble bee)

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

| | YES | NO | Initials of person performing |
|----------------------------------------------------|--------------------------|--------------------------|-------------------------------|
| Vehicle test driven with customer | <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

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AUTOMATIC DRIVE POSITIONER

AUTOMATIC DRIVE POSITIONER

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System Description

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- The system automatically moves the driver seat to facilitate entry/exit to/from the vehicle. The automatic drive positioner control unit can also store the optimum driving positions (driver seat, steering wheel position (tilt, telescopic) 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 sliding seat (Entry/Exiting operation) at entry/exit can be changed as desired, using the display unit in the center of the instrument panel. The set content is transmitted by CAN communication, from display control unit to driver seat control unit.
- Using CONSULT-II, the seat slide and steering wheel amount at entry/exit setting can be changed.

MANUAL OPERATION

The driving position [seat position, steering wheel position (tilt, telescopic) and door mirror position] can be adjusted with the power seat switch or ADP steering switch or door mirror remote control switch.

NOTE:

- The seat can be manually operated with the ignition switch OFF.
- The door mirrors can be manually operated with the ignition switch turned ACC or ON.

AUTOMATIC OPERATION

| Function | | Description |
|----------------------------|-------------------|-----------------------------------------------------------------------------------------------------------|
| Memory switch operation | | The seat, steering and door mirror move to the stored driving position by pushing memory switch (1 or 2). |
| Entry/Exiting function | Exiting operation | At exit, the seat moves backward and steering wheel moves forward/upward. |
| | Entry operation | At entry, the seat and steering wheel returns from the exiting position to the previous driving position. |
| keyfob interlock operation | | Perform memory operation, exiting operation and entry operation by pressing keyfob unlock button. |

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 operation becomes possible.
- After exiting operation is carried out, return operation can be operated.

| | |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Auto operation temporary stop conditions. | When ignition switch turned to START during memory switch operation and return operation, memory switch operation and entry operation is stopped. |
| Auto operation stop conditions. | <ul style="list-style-type: none"> ● When the vehicle speed becomes 7 km/h (4 MPH) or higher. ● When the setting switch, memory switch 1, or 2 are pressed. ● When A/T selector lever is in any position other than P. ● When the door mirror remote control switch is operated (when ignition switch turned to ON or ACC). ● When power seat switch turned ON. ● When ADP steering switch turned ON (telescopic operation or tilt operation). ● When door mirror operates (only memory switch operation). ● When driver seat sliding Entry/Exiting setting is OFF (only entry/exiting operation). ● When steering wheel tilt and telescopic Entry/Exiting setting is OFF (only entry/exiting operation). ● When the tilt and telescopic sensor malfunction is detected. |

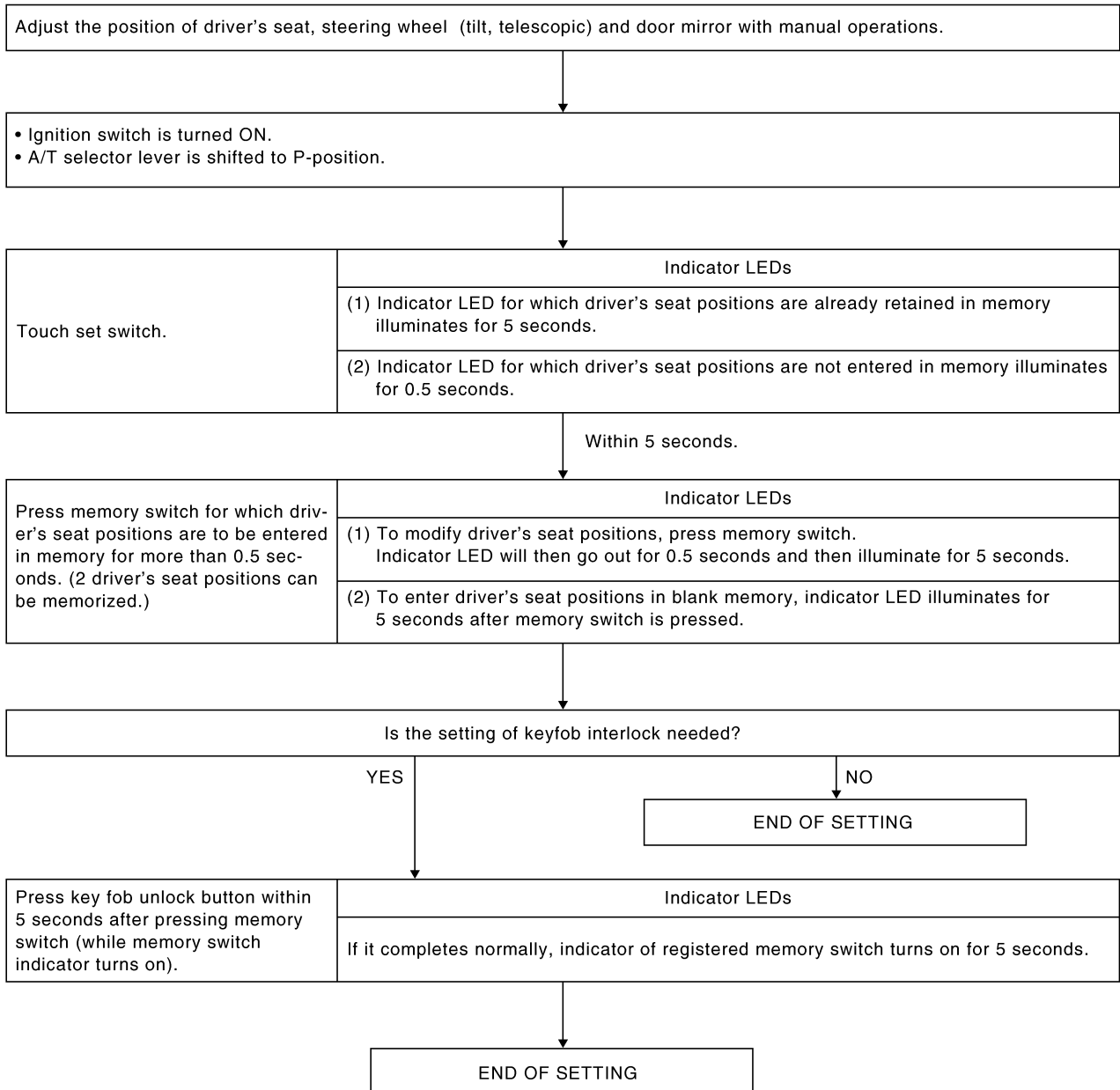
NOTE:

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.

AUTOMATIC DRIVE POSITIONER

MEMORY STORING AND KEYFOB INTERLOCK STORING

- Store the 2 driving positions and shifts to the stored driving position with the memory switch.
- Keyfob interlock function is set simultaneously with setting driving position memory. It can set driving position to memory position.



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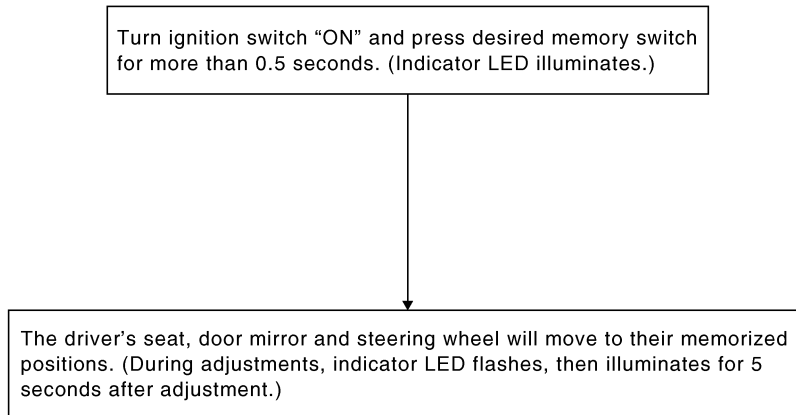
NOTE:

- If another keyfob interlock function setting is performed by same key, newly registered setting is valid.
- If new memory string is performed to memory switch that already set keyfob interlock function, keyfob interlock function setting is reset.
- If key does not set previously, keyfob interlock function cannot set.

AUTOMATIC DRIVE POSITIONER

MEMORY SWITCH OPERATION

Selecting the memory



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NOTE:

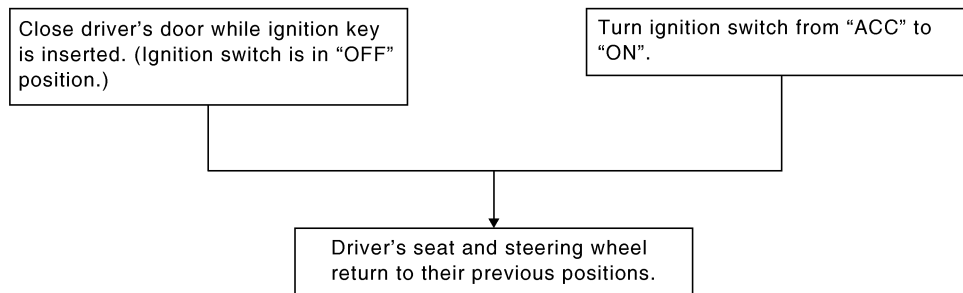
The driver's seat position and steering adjustment functions (see the following table) operate simultaneously in the order of priority.

| 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.

ENTRY OPERATION

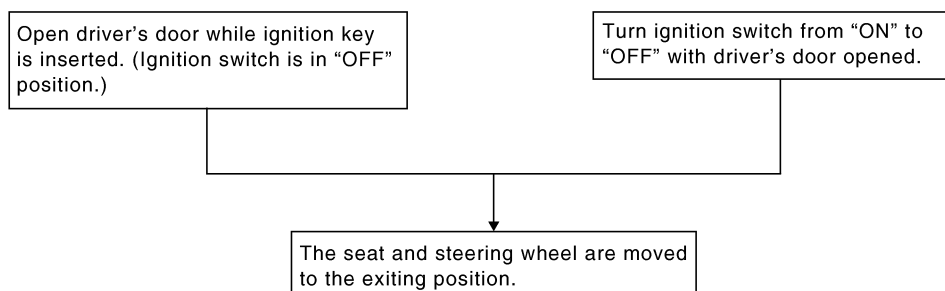
When the seat are on the exiting positions, the following operation moves the seat to the previous position before the exiting operation.



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EXITING OPERATION

At exit, the seat are automatically moved to the exiting position.

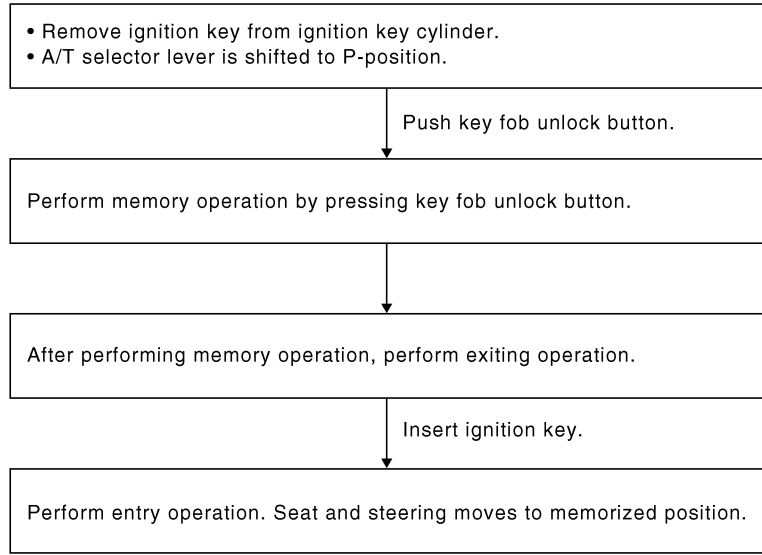


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AUTOMATIC DRIVE POSITIONER

KEYFOB INTERLOCK OPERATION

- Perform memory operation, exiting operation and entry operation by pressing keyfob unlock button.



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NOTE:

- If steering wheel operation is cancelled, the system performs seat and mirror operation only.
- If Entry/Exiting operation is cancelled, the system performs steering wheel operation and mirror operation only.
- If ignition switch turns ON in the middle of memory operation, the system does not perform exiting operation after memory operation.
- If ignition switch turns ON in the middle of exiting operation, entry operation starts at that time.

FAIL- SAFE MODE

When any manual and automatic operations are not performed, if any motor operations of seats or tilt of steering are detected for approx. 0.1 sec or more, status is judged "Output malfunction". Motor operation will be suspended automatically, and all automatic operations will be ineffective (in this case, the motor will not operate manually).

| | |
|------------------|----------------------|
| OPERATED PORTION | Seat sliding |
| | Seat reclining |
| | Seat lifting (Front) |
| | Seat lifting (Rear) |
| | steering tilt |
| | steering telescopic |

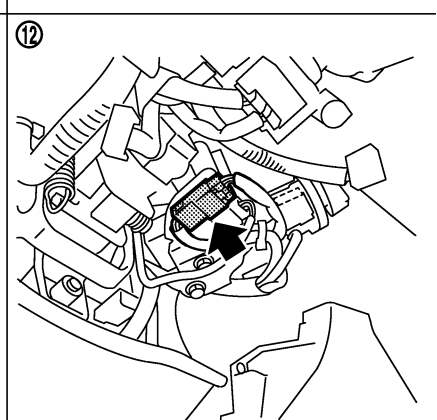
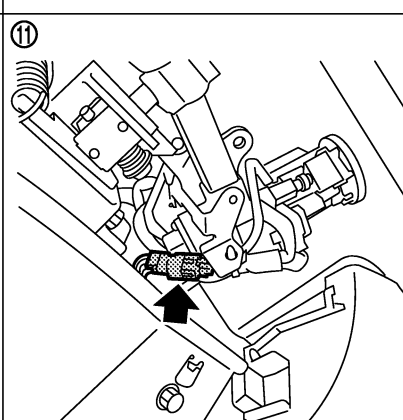
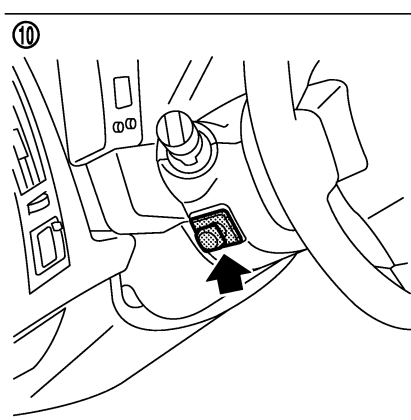
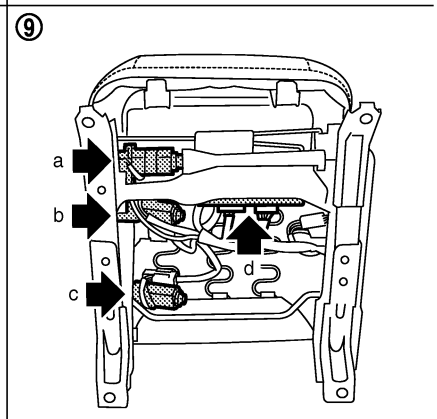
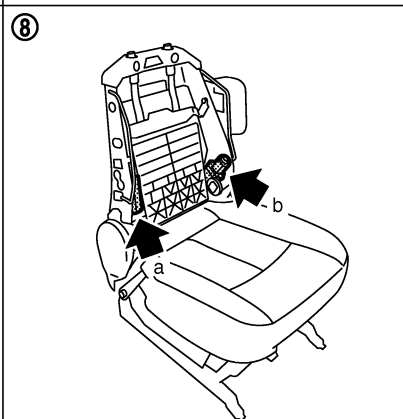
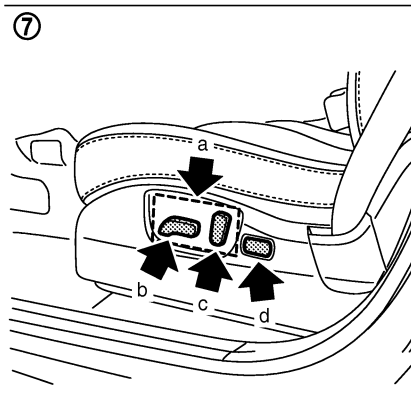
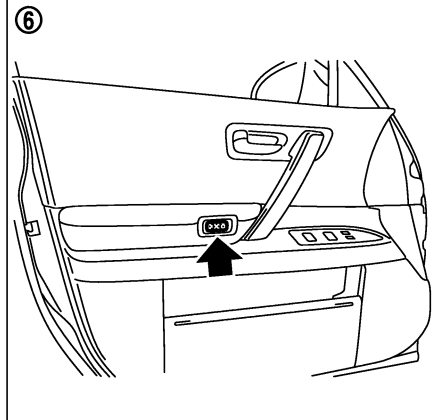
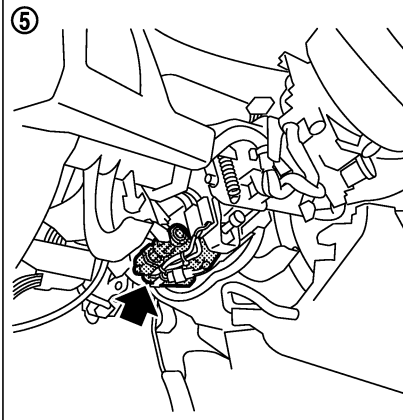
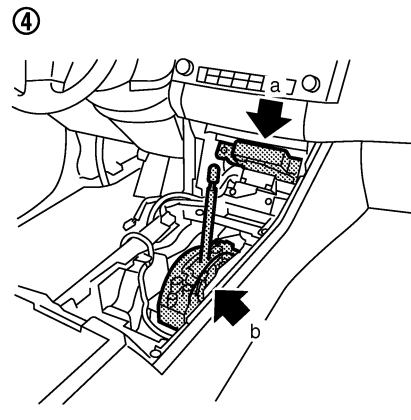
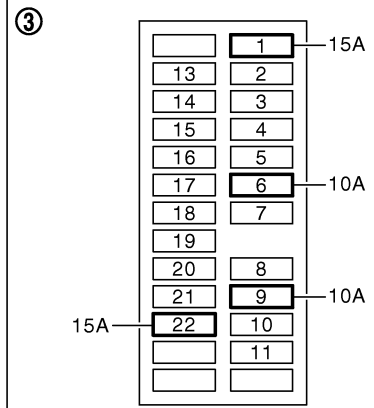
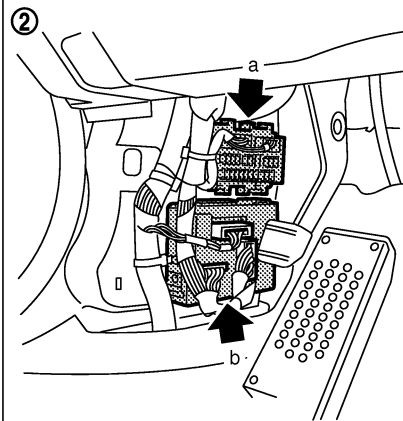
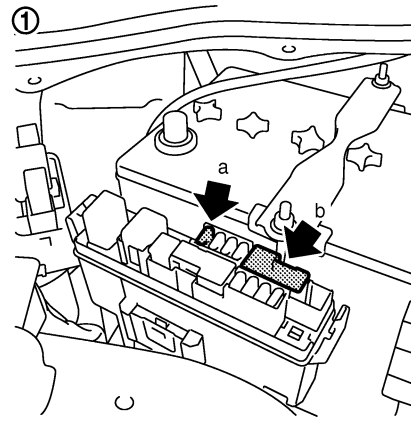
CANCEL OF FAIL-SAFE MODE

- The mode is cancelled when the selector lever is shifted to P position from any other position.

AUTOMATIC DRIVE POSITIONER

NIS001UP

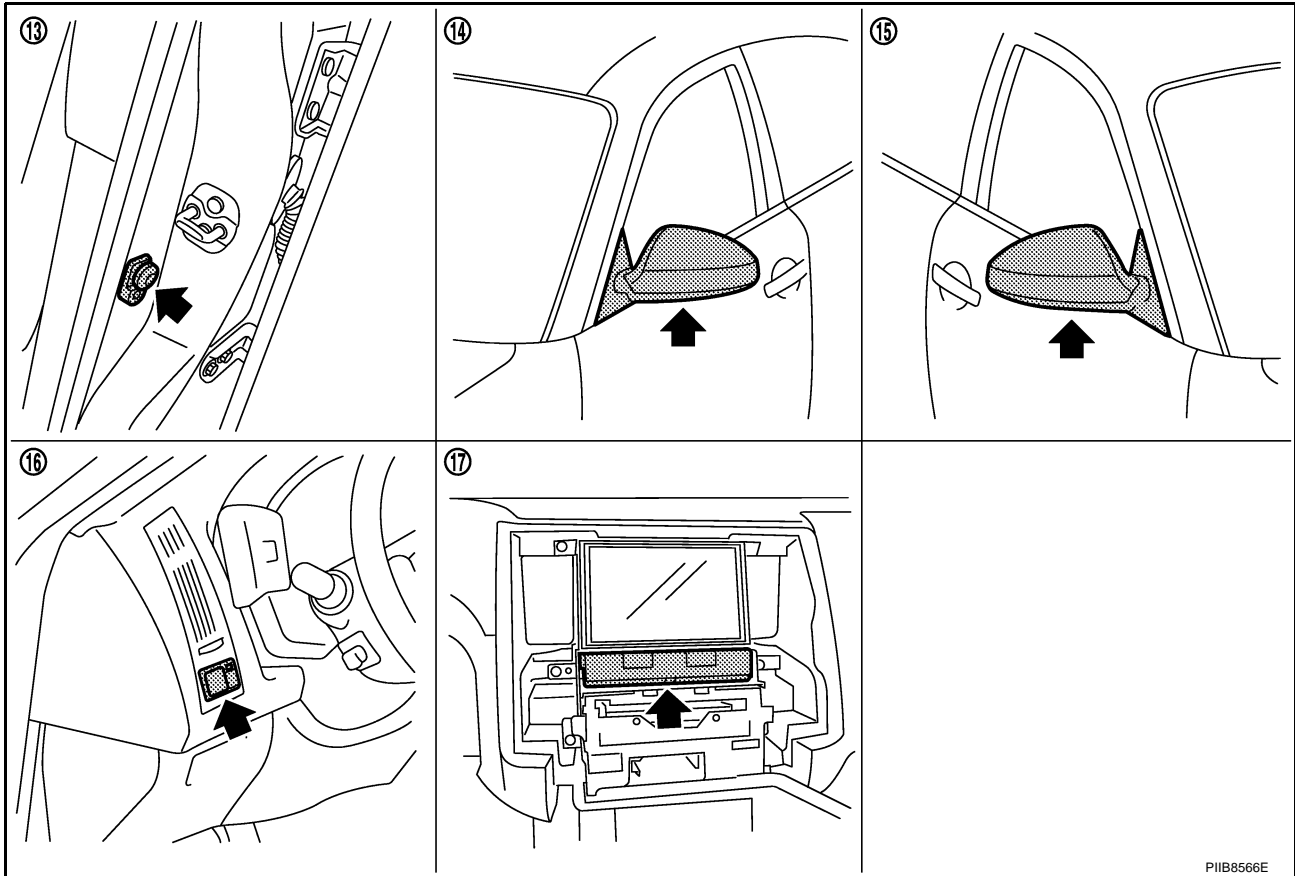
Component Parts and Harness Connector Location



PIIB8565E

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

AUTOMATIC DRIVE POSITIONER



- | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. a: 10A 38 fuse (With Intelligent Key) b: 50A M fusible link</p> <p>4. a: Automatic drive positioner control unit M49, M50 b: A/T device (park position switch) M67 (View with the center console removed)</p> <p>7. a: Power seat switch B175 b: Sliding switch & Lifting switch (front & rear) c: Reclining switch d: Lumbar support switch B158</p> <p>10. ADP steering switch M13</p> <p>13. Front door switch (Driver side) B26</p> <p>16. Door mirror remote control switch M18</p> | <p>2. a: Fuse block (J/B) M1, M2 b: BCM M3, M4, B14 (View with the dash side LH removed)</p> <p>5. Tilt motor and telescopic motor M27 Tilt sensor and telescopic sensor M28 (View with the instrument driver lower panel removed)</p> <p>8. a: Lumbar support motor B172 b: Reclining motor B166</p> <p>11. Key switch connector M23 (Without Intelligent Key)</p> <p>14. Door mirror (Driver side) D2</p> <p>17. Unified meter and A/C amp. M55 (View with the cluster lid C removed)</p> | <p>3. Fuse block (J/B) fuse layout</p> <p>6. Seat memory switch D22</p> <p>9. a: Sliding motor B161 b: Lifting motor (front) B164 c: Lifting motor (rear) B162 d: Driver seat control unit B152, B153</p> <p>12. Key switch and ignition knob switch connector M22 (With Intelligent Key)</p> <p>15. Door mirror (Passenger side) D32</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

CAN Communication System Description

NIS001UQ

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H line, CAN L line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

CAN Communication Unit

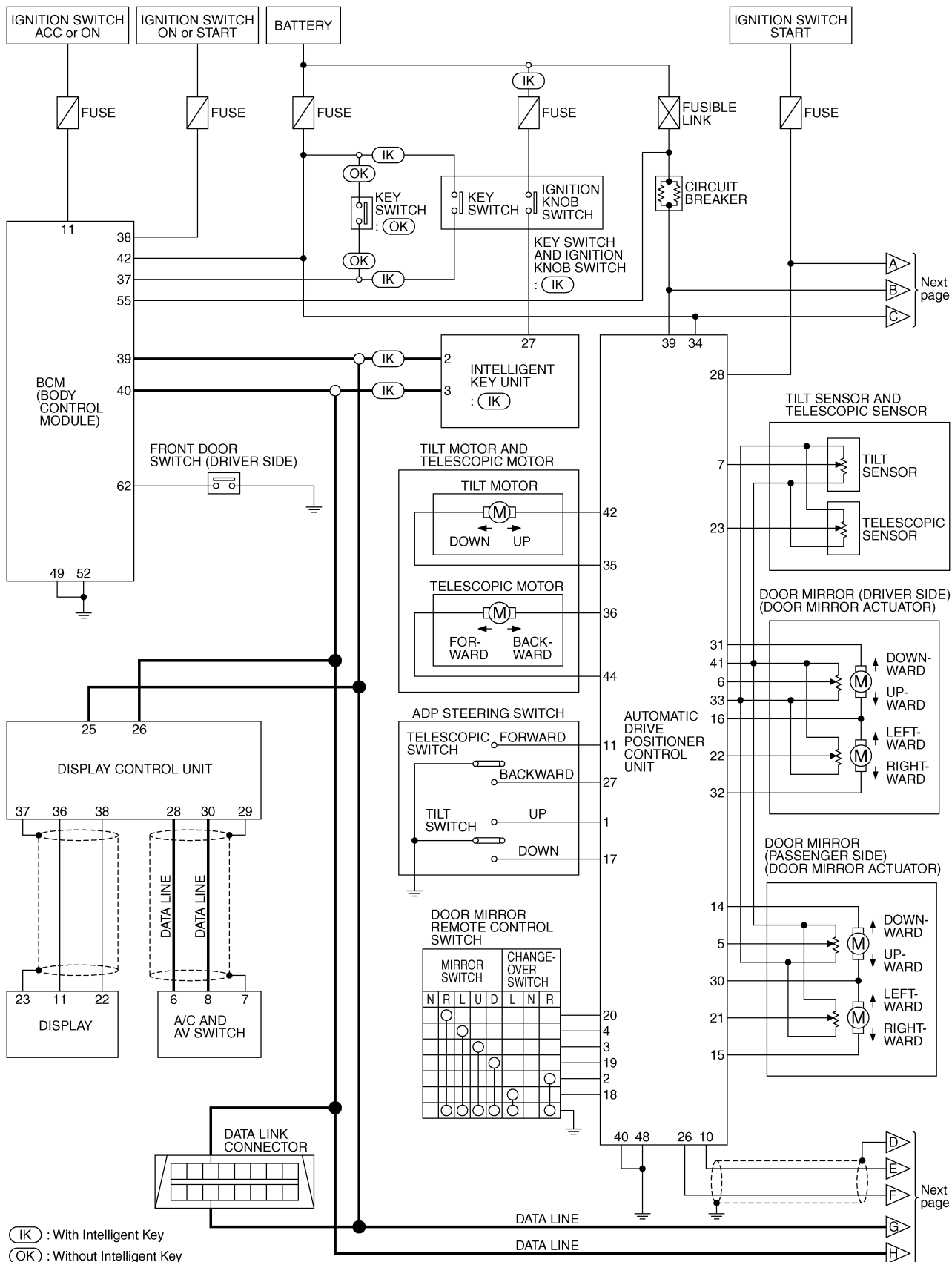
NIS001UR

Refer to [LAN-49, "CAN System Specification Chart"](#).

AUTOMATIC DRIVE POSITIONER

Schematic

NIS001US



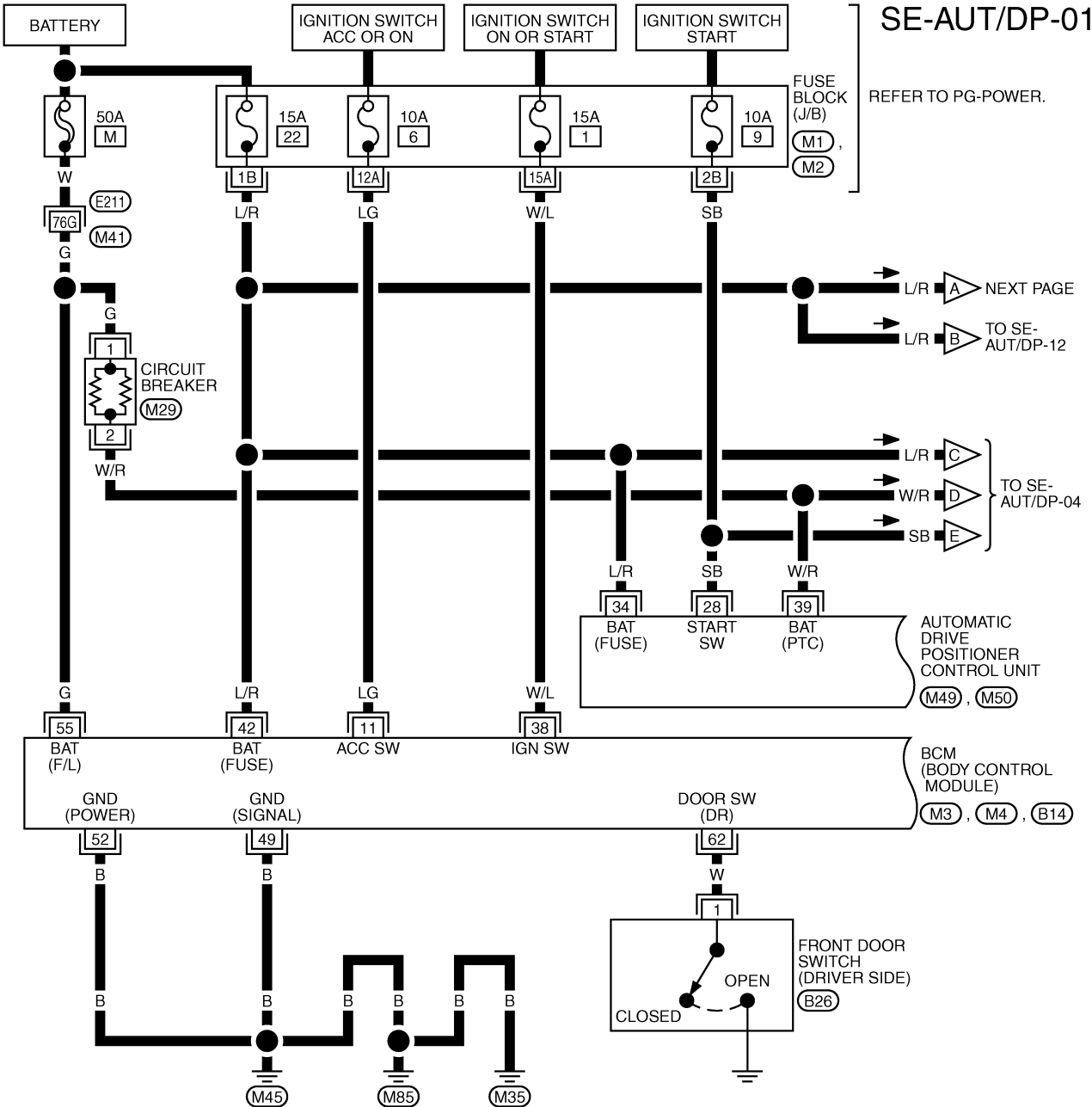
TIWM1692E

AUTOMATIC DRIVE POSITIONER

Wiring Diagram — AUT/DP —

NIS001UT

SE-AUT/DP-01



REFER TO PG-POWER.

NEXT PAGE

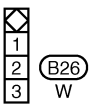
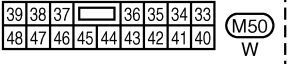
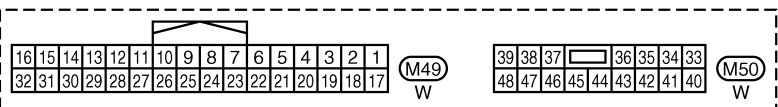
TO SE-AUT/DP-12

TO SE-AUT/DP-04

AUTOMATIC DRIVE POSITIONER CONTROL UNIT
(M49, M50)

BCM (BODY CONTROL MODULE)
(M3, M4, B14)

FRONT DOOR SWITCH (DRIVER SIDE)
(B26)



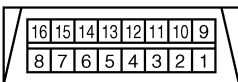
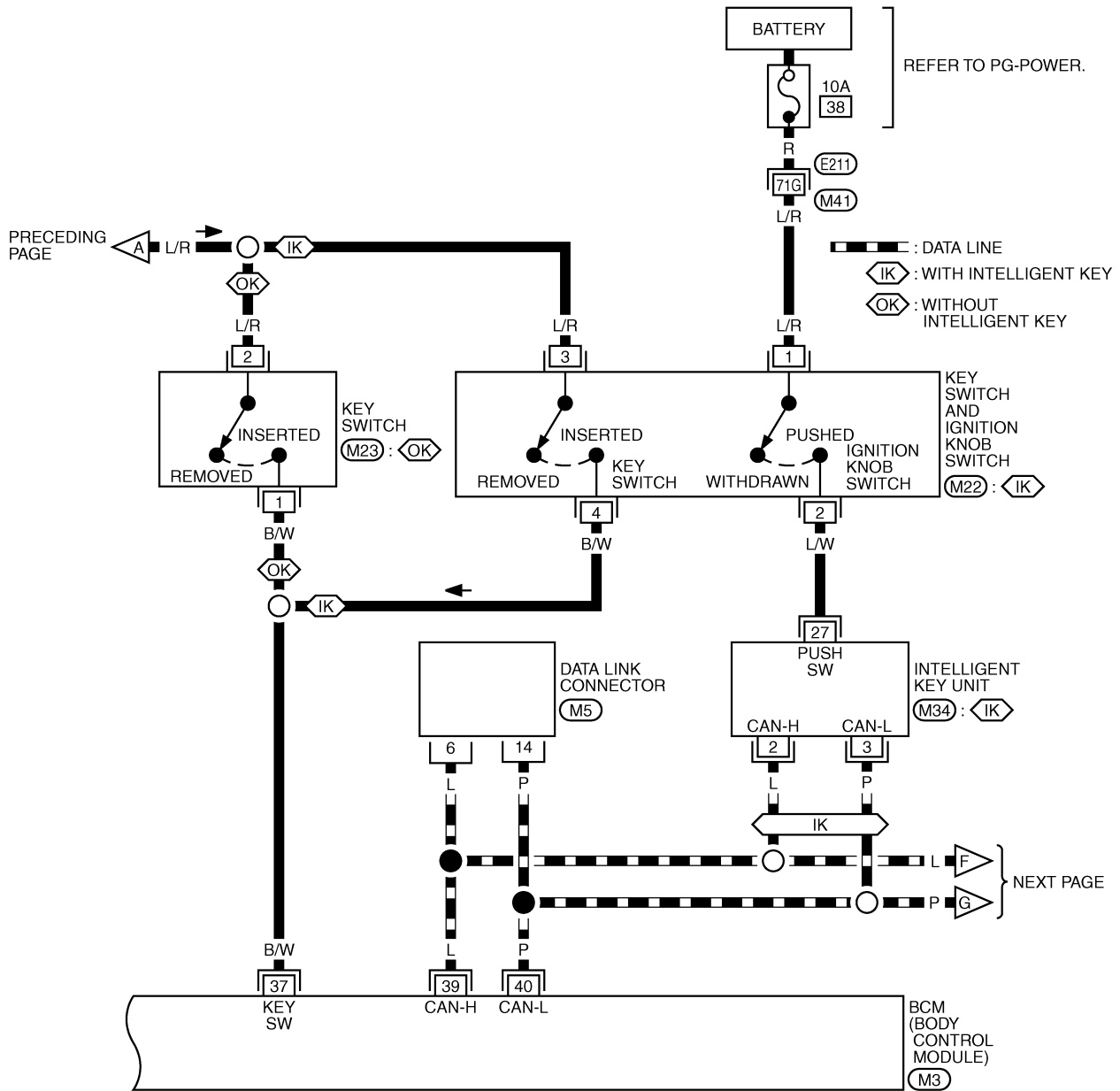
REFER TO THE FOLLOWING.

- (E211) -SUPER MULTIPLE JUNCTION (SMJ)
- (M1), (M2) -FUSE BLOCK-JUNCTION BOX (J/B)
- (M3), (M4), (B14) -ELECTRICAL UNITS

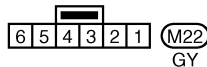
TIWM1694E

AUTOMATIC DRIVE POSITIONER

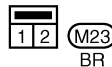
SE-AUT/DP-02



(M5) W



(M22) GY



(M23) BR

REFER TO THE FOLLOWING.

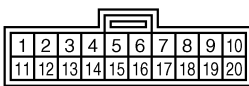
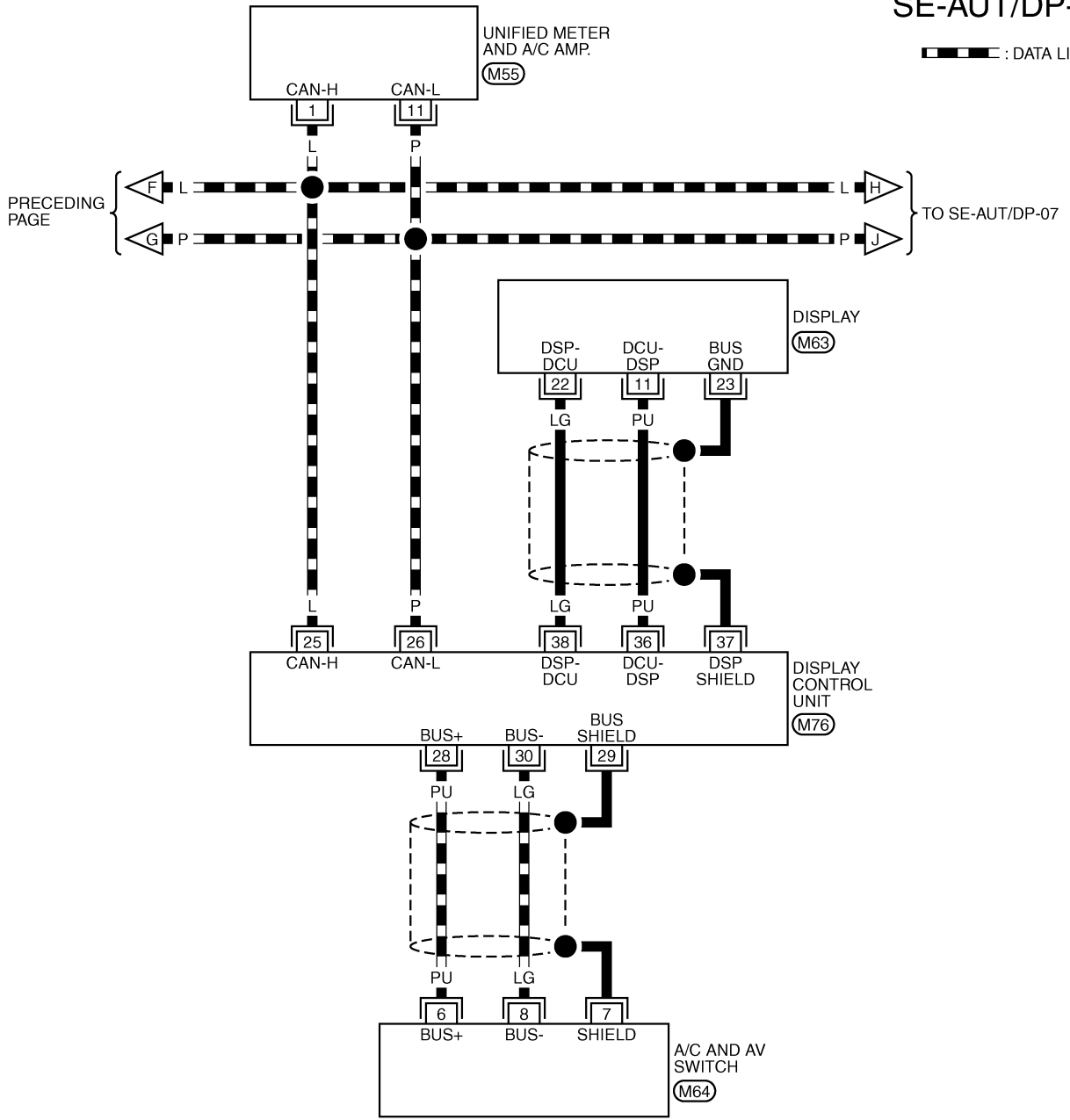
(E21) -SUPER MULTIPLE JUNCTION (SMJ)

(M3), (M34) -ELECTRICAL UNITS

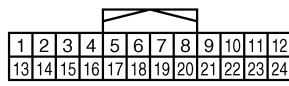
TIWM1695E

AUTOMATIC DRIVE POSITIONER

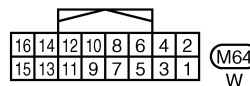
SE-AUT/DP-03



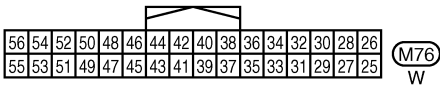
(M55)
GY



(M63)
W



(M64)
W

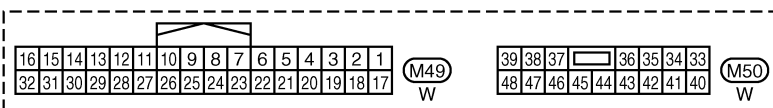
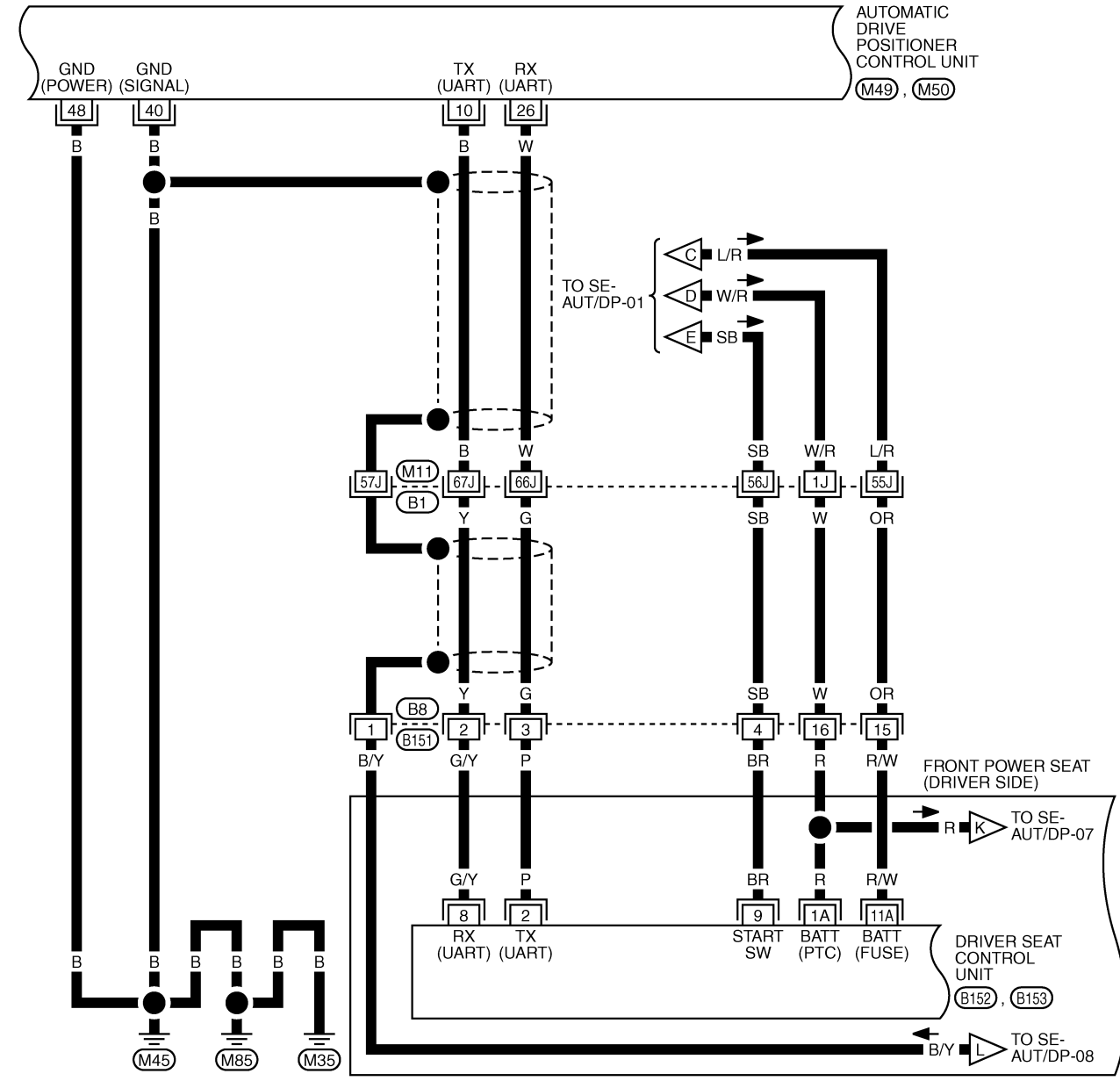


(M76)
W

TIWM1696E

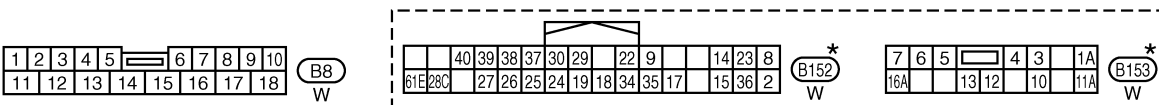
AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-04



REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

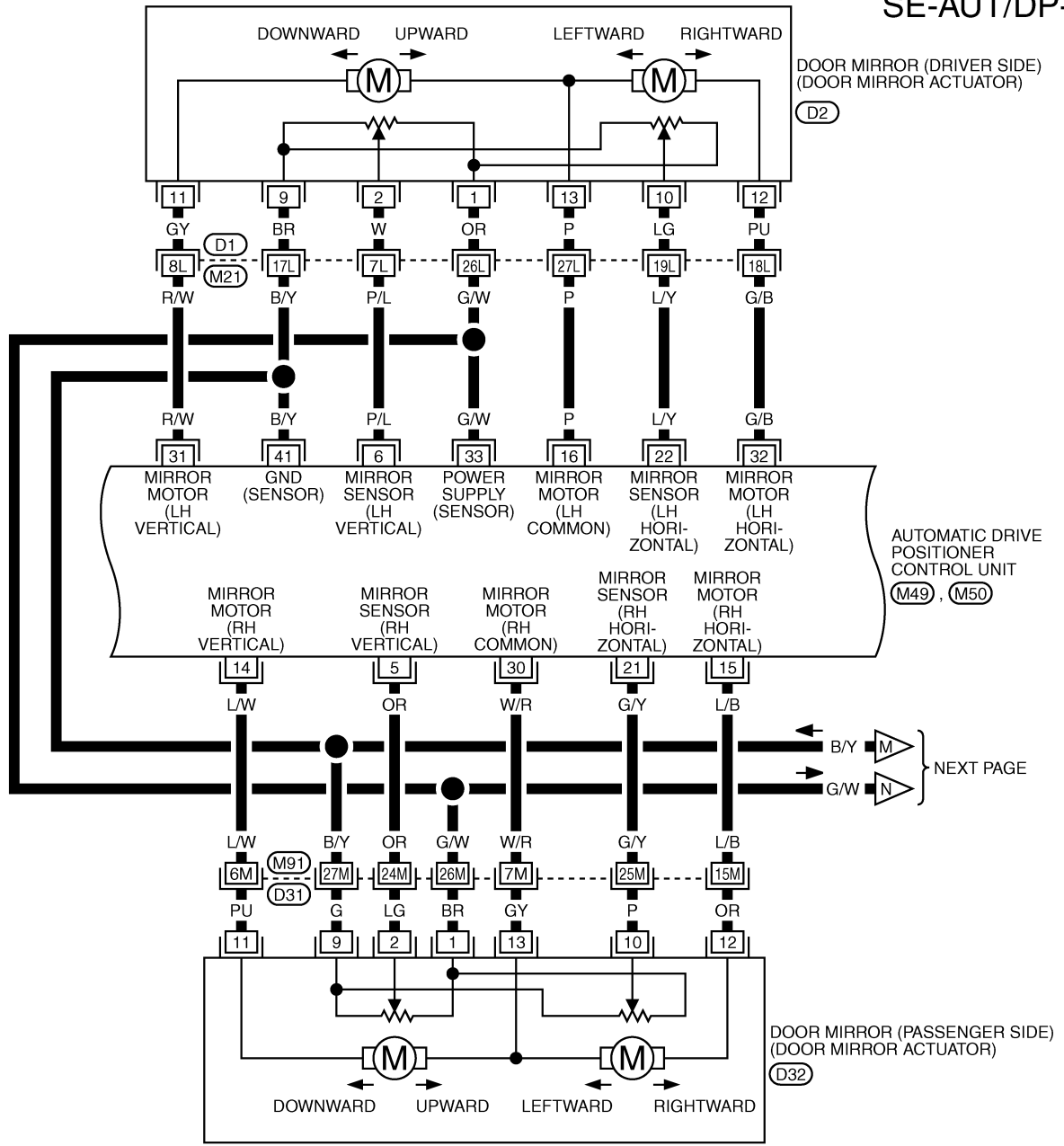


*: THIS CONNECTOR IS NOT SHOWN IN "HARNES LAYOUT", PG SECTION.

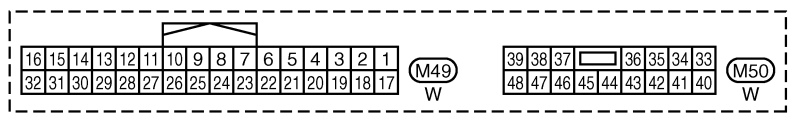
TIWM1697E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-05



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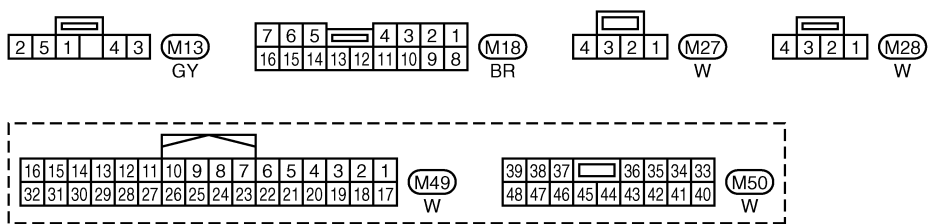
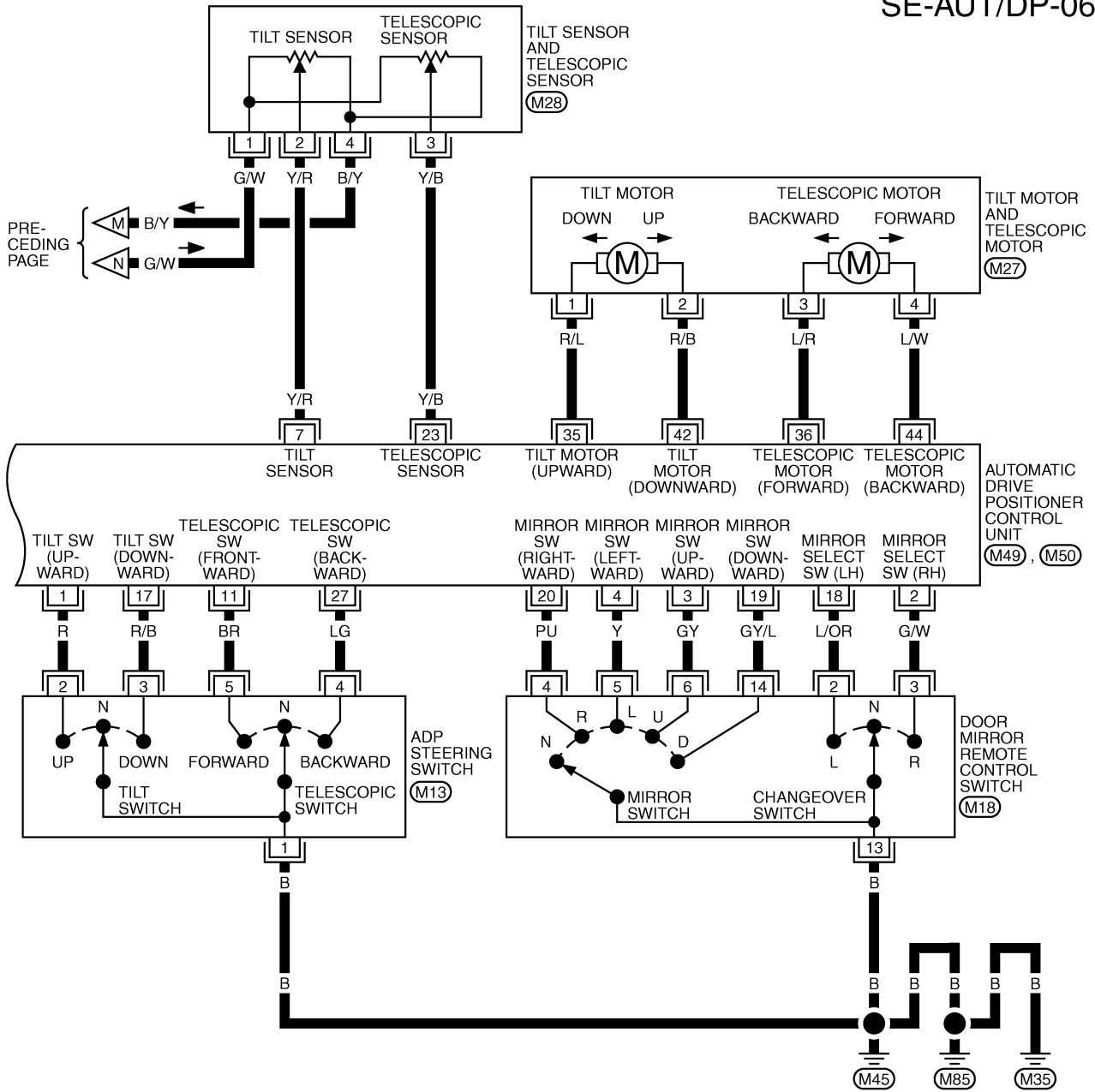


REFER TO THE FOLLOWING.
 (D1), (D31) -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1698E

AUTOMATIC DRIVE POSITIONER

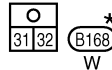
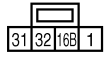
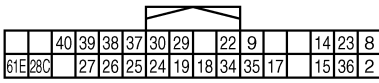
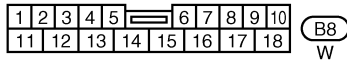
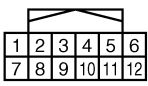
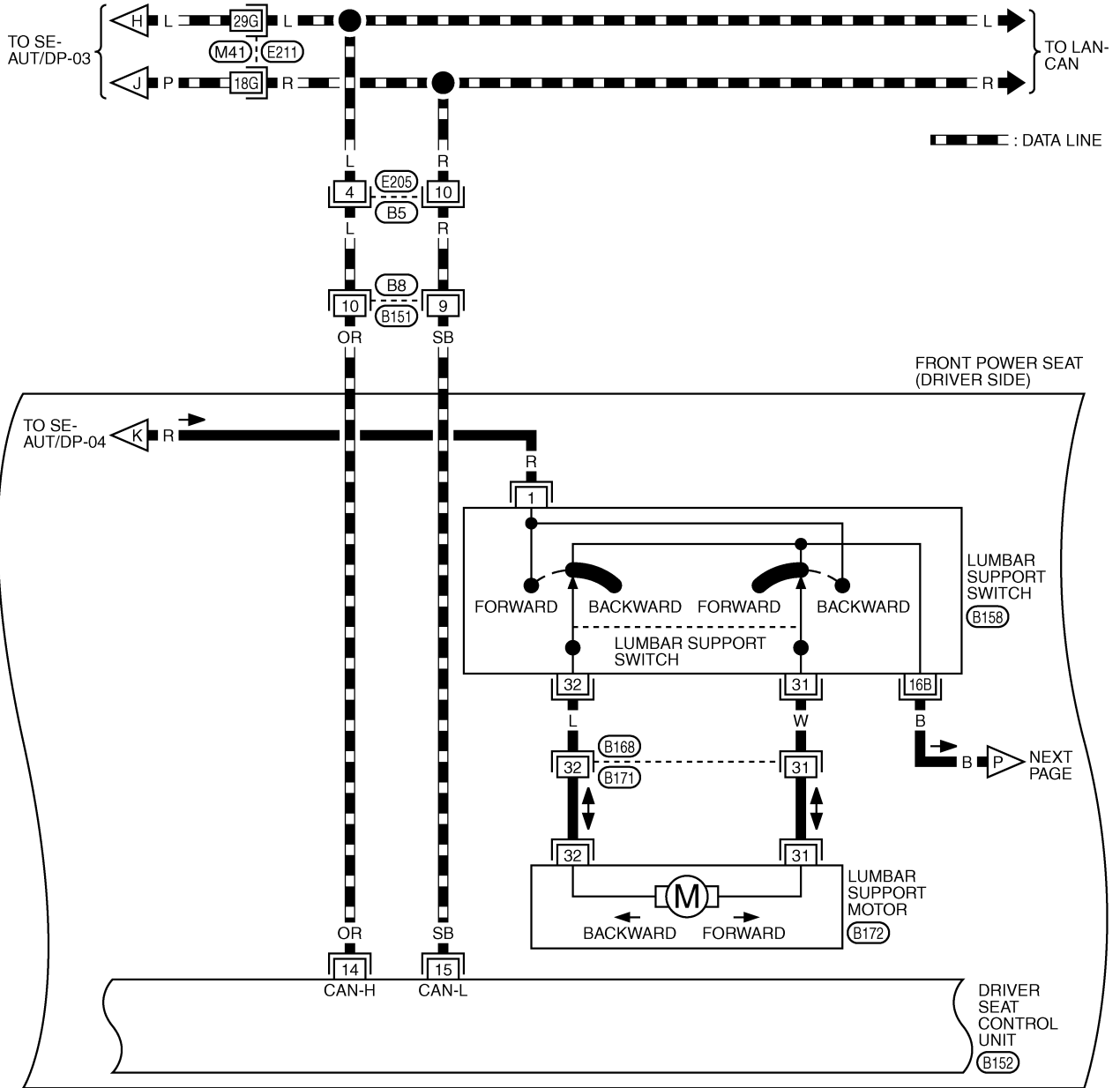
SE-AUT/DP-06



TIWM1699E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-07



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

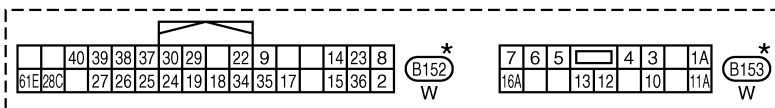
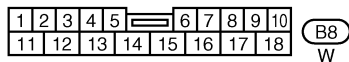
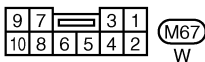
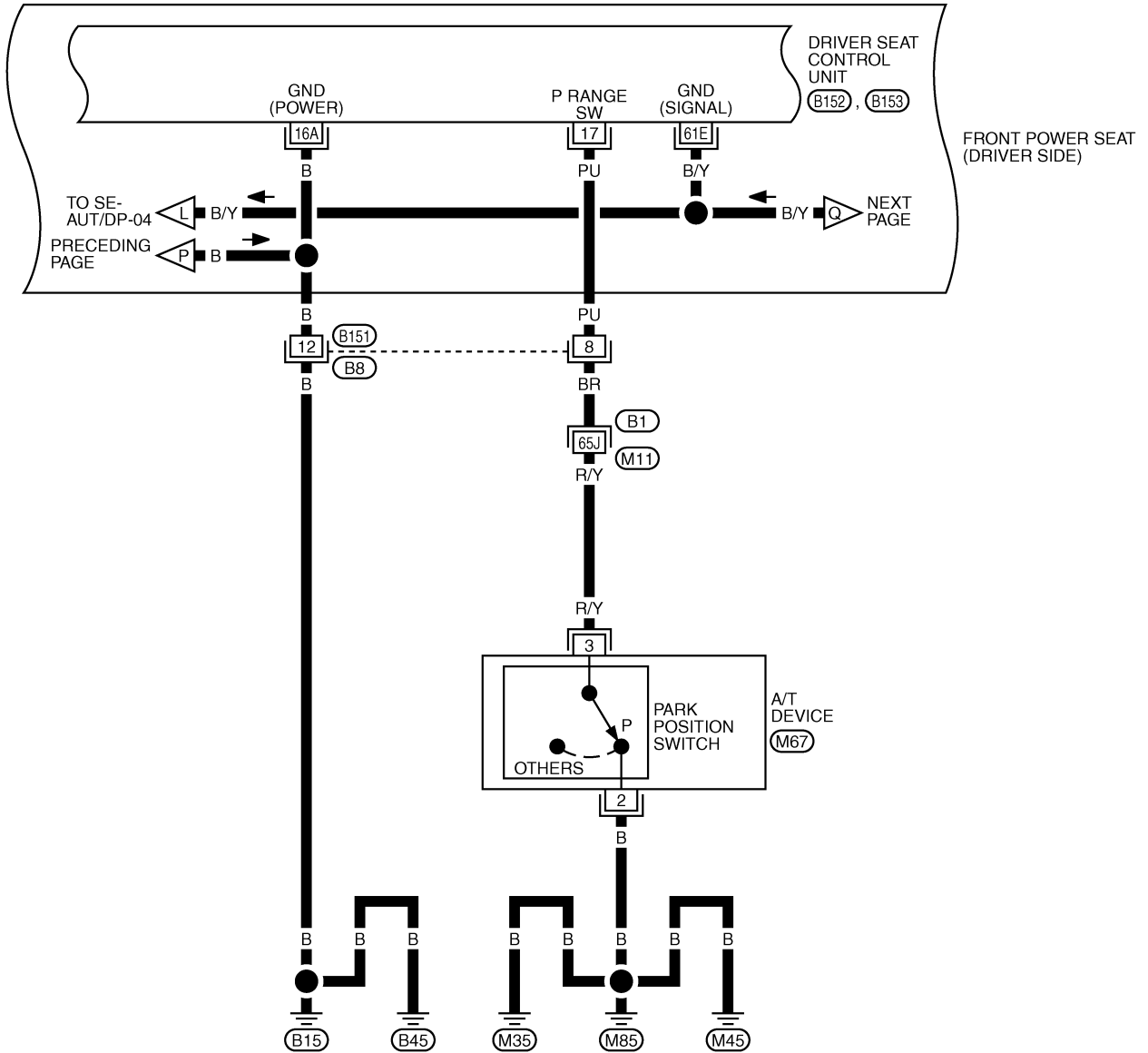
REFER TO THE FOLLOWING.

(E211) -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1700E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-08



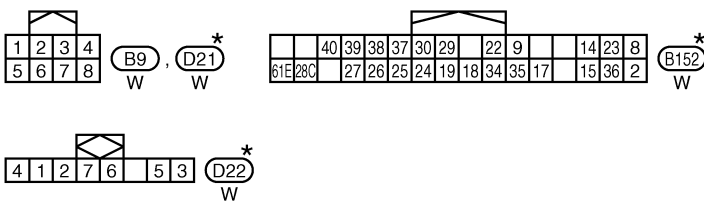
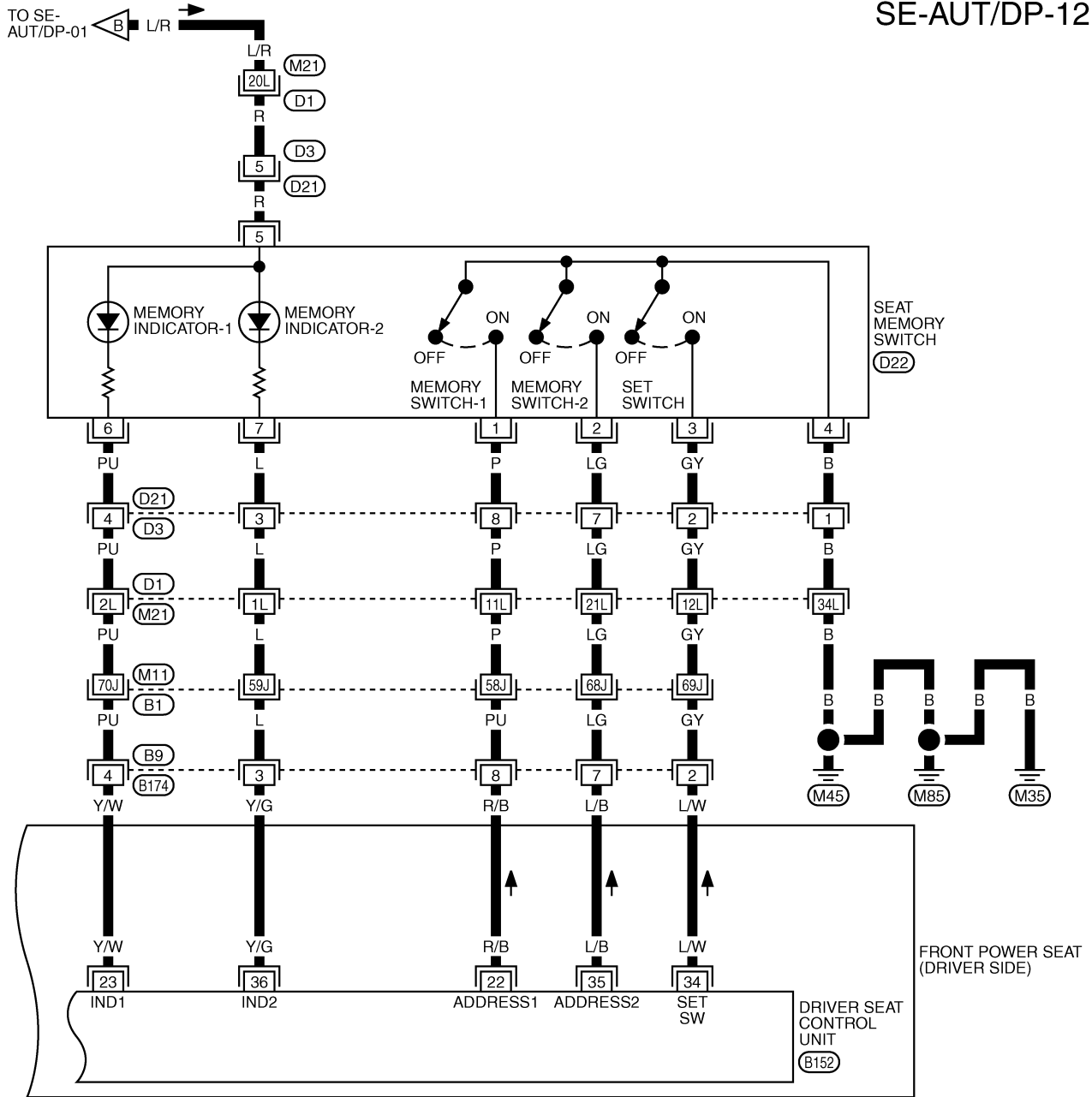
REFER TO THE FOLLOWING.
(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1987E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-12



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

REFER TO THE FOLLOWING.
 (B1), (D1) -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1704E

AUTOMATIC DRIVE POSITIONER

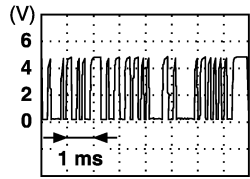
Terminals and Reference Values for BCM

NIS001UU

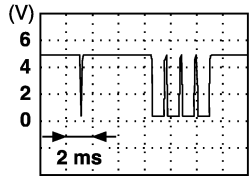
| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|---------------------------------|---------------------|------------------------------------------------------------|-----------------------|
| 11 | LG | Ignition switch (ACC) | Input | Ignition switch (ACC or ON position) | Battery voltage |
| 37 | B/W | Key switch signal | Input | Key switch ON (key is inserted in ignition key cylinder) | Battery voltage |
| | | | | Key switch OFF (key is removed from ignition key cylinder) | 0 |
| 38 | W/L | Ignition switch (ON) | Input | Ignition switch (ON or START position) | Battery voltage |
| 39 | L | CAN-H | Input/Output | — | — |
| 40 | P | CAN-L | Input/Output | — | — |
| 42 | L/R | Power source (Fuse) | Input | — | Battery voltage |
| 49 | B | Ground (signal) | — | — | 0 |
| 52 | B | Ground (power) | — | — | 0 |
| 55 | G | Power supply (Fusible link) | Input | — | Battery voltage |
| 62 | W | Front door switch (driver side) | Output | ON (Open) → OFF (Closed) | 0 → Battery voltage |

Terminals and Reference Values for Automatic Drive Positioner Control Unit

NIS001UV

| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|------------------------------------------------|---------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 1 | R | Tilt switch UP signal | Input | Tilt switch turned to upward | 0 |
| | | | | Other than above | 5 |
| 2 | G/W | Changeover switch RH signal | Input | When changeover switch in RH position | 0 |
| | | | | Other than above | 5 |
| 3 | GY | Mirror switch UP signal | Input | When mirror switch in turned to upward position | 0 |
| | | | | Other than above | 5 |
| 4 | Y | Mirror switch LEFT signal | Input | When mirror switch in turned to leftward position | 0 |
| | | | | Other than above | 5 |
| 5 | OR | Passenger side mirror sensor (vertical) signal | Input | When passenger side mirror motor is UP or DOWN operation | Changes between 3 (close to perk) - 1 (close to valley) |
| 6 | P/L | Driver side mirror sensor (vertical) signal | Input | When driver side mirror motor is UP or DOWN operation | Changes between 3 (close to perk) - 1 (close to valley) |
| 7 | Y/R | Tilt sensor signal | Input | Tilt position, top | 2 |
| | | | | Tilt position, bottom | 4 |
| 10 | B | UART LINE (TX) | Output | Memory switch 1 or 2 operated |  <p style="text-align: right;">PIIA4813E</p> |
| 11 | BR | Telescopic switch FORWARD signal | Input | Telescopic switch turned to forward | 0 |
| | | | | Other than above | 5 |

AUTOMATIC DRIVE POSITIONER

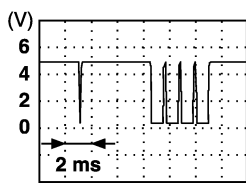
| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|--------------------------------------------------|---------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 14 | L/W | Passenger side mirror motor UP signal | Output | When passenger side mirror motor UP operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| 15 | L/B | Passenger side mirror motor LEFT signal | Output | When passenger side mirror motor LEFT operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| 16 | P | Driver side mirror motor DOWN signal | Output | When driver side mirror motor DOWN operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| | | Driver side mirror motor RIGTH signal | | When driver side mirror motor RIGHT operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| 17 | R/B | Tilt switch DOWN signal | Input | Tilt switch turned to downward | 0 |
| | | | | Other than above | 5 |
| 18 | L/OR | Changeover switch LH signal | Input | When changeover switch in LH position | 0 |
| | | | | Other than above | 5 |
| 19 | GY/L | Mirror switch DOWN signal | Input | When mirror switch in turned to downward position | 0 |
| | | | | Other than above | 5 |
| 20 | PU | Mirror switch RIGHT signal | Input | When mirror switch in turned to rightward position | 0 |
| | | | | Other than above | 5 |
| 21 | G/Y | Passenger side mirror sensor (horizontal) signal | Input | When passenger side mirror motor is LEFT or RIGHT operation | Changes between 1 (close to left edge) - 3 (close to right edge) |
| 22 | L/Y | Driver side mirror sensor (horizontal) signal | Input | When driver side mirror motor is LEFT or RIGHT operation | Changes between 1 (close to right edge) - 3 (close to left edge) |
| 23 | Y/B | Telescopic sensor signal | Input | Telescopic position, top | 1 |
| | | | | Telescopic position, bottom | 4 |
| 26 | W | UART LINE (RX) | Input | Memory switch 1 or 2 operated |  PIIA4814E |
| 27 | LG | Telescopic switch BACKWARD signal | Input | Telescopic switch turned to backward | 0 |
| | | | | Other than above | 5 |
| 28 | SB | Ignition switch (START) | Input | Ignition switch (START position) | Battery voltage |
| 30 | W/R | Passenger side mirror motor DOWN signal | Output | When passenger side mirror motor downward | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| | | Passenger side mirror motor RIGTH signal | | When passenger side mirror motor RIGHT operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |

AUTOMATIC DRIVE POSITIONER

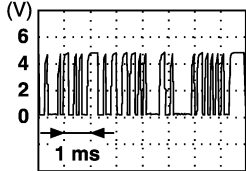
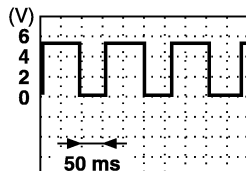
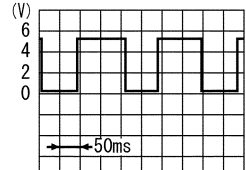
| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|--------------------------------------|---------------------|----------------------------------------------|-----------------------|
| 31 | R/W | Driver side mirror motor UP signal | Output | When driver side mirror motor upward | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| 32 | G/B | Driver side mirror motor LEFT signal | Output | When driver side mirror motor LEFT operation | 1.5 - Battery voltage |
| | | | | Other than above | 0 |
| 33 | G/W | Sensor power supply | Input | — | 5 |
| 34 | L/R | Battery power supply | Input | — | Battery voltage |
| 35 | R/L | Tilt motor UP signal | Output | Tilt switch turned to upward | Battery voltage |
| | | | | Other than above | 0 |
| 36 | L/R | Telescopic motor FORWARD signal | Output | Telescopic switch turned to forward | Battery voltage |
| | | | | OFF | 0 |
| 39 | W/R | Battery power supply | Input | — | Battery voltage |
| 40 | B | Ground (signal) | — | — | 0 |
| 41 | B/Y | Ground (sensor) | — | — | 0 |
| 42 | R/B | Tilt motor DOWN signal | Output | Tilt switch turned to downward | Battery voltage |
| | | | | Other than above | 0 |
| 44 | L/W | Telescopic motor BACKWARD signal | Output | Telescopic switch turned to backward | Battery voltage |
| | | | | Other than above | 0 |
| 48 | B | Ground (power) | — | — | 0 |

Terminals and Reference Values for Driver Seat Control Unit

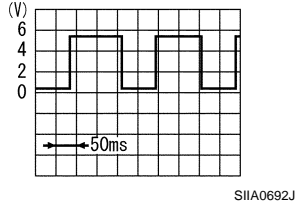
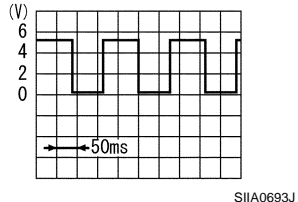
NIS001UW

| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|---------------------------------|---------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1A | R | Power source (Fusible link) | Input | — | Battery voltage |
| 2 | P | UART LINE (TX) | Output | Memory switch 1 or 2 operated |  <p style="text-align: right; font-size: small;">PIIA4814E</p> |
| 3 | G | Sliding motor FORWARD signal | Output | When sliding motor FORWARD operation | Battery voltage |
| | | | | Other than above | 0 |
| 4 | G/L | Reclining motor FORWARD signal | Output | When reclining motor FORWARD operation | Battery voltage |
| | | | | Other than above | 0 |
| 5 | LG | Front lifting motor DOWN signal | Output | When front lifting motor DOWN operation | Battery voltage |
| | | | | Other than above | 0 |
| 6 | G/W | Rear lifting motor UP signal | Output | When rear lifting motor UP operation | Battery voltage |
| | | | | Other than above | 0 |

AUTOMATIC DRIVE POSITIONER

| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|---------------------------------------------|---------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------|
| 7 | G/B | Rear lifting motor DOWN signal | Output | When rear lifting motor DOWN operation | Battery voltage |
| | | | | Other than above | 0 |
| 8 | G/Y | UART LINE (RX) | Input | Memory switch 1 or 2 switch operated |  PIIA4813E |
| 9 | BR | Ignition switch (START) | Input | Ignition switch (START position) | Battery voltage |
| 10 | G/R | Sliding motor BACKWARD signal | Output | When sliding motor BACKWARD operation | Battery voltage |
| | | | | Other than above | 0 |
| 11A | R/W | Power source (Fuse) | Input | — | Battery voltage |
| 12 | G/Y | Reclining motor BACKWARD signal | Output | When reclining motor BACKWARD operation | Battery voltage |
| | | | | Other than above | 0 |
| 13 | Y | Front lifting motor UP signal | Output | When front lifting motor UP operation | Battery voltage |
| | | | | Other than above | 0 |
| 14 | OR | CAN-H | Input/Output | — | — |
| 15 | SB | CAN-L | Input/Output | — | — |
| 16A | B | Ground (power) | — | — | 0 |
| 17 | PU | Park position switch signal | Input | Selector lever other than P position | Battery voltage |
| | | | | Selector lever is sifted to P position | 0 |
| 18 | G/L | Seat sliding sensor signal | Input | ON (sliding motor operation) |  PIIA3277E |
| | | | | Other than above | 0 or 5 |
| 19 | G/R | Front lifting sensor signal | Input | ON (front lifting motor operation) |  SIIA0691J |
| | | | | Other than above | 0 or 5 |
| 22 | R/B | Power seat memory switch 1 signal | Input | Memory switch 1: ON | 0 |
| | | | | Memory switch 1: OFF | 5 |
| 23 | Y/W | Power seat memory switch indicator 1 signal | Output | Memory switch 1: ON | 1 |
| | | | | Memory switch 1: OFF | Battery voltage |

AUTOMATIC DRIVE POSITIONER

| Terminal | Wire Color | Item | Signal Input/Output | Condition | Voltage (V) (Approx.) |
|----------|------------|--------------------------------------------|---------------------|-----------------------------------------------|---------------------------------------------------------------------------------------|
| 24 | L/R | Seat sliding switch FORWARD signal | Input | When seat sliding switch FORWARD operation | 0 |
| | | | | Other than above | Battery voltage |
| 25 | L/OR | Seat reclining switch FORWARD signal | Input | When seat reclining switch FORWARD operation | 0 |
| | | | | Other than above | Battery voltage |
| 26 | L/P | Front lifting switch UP signal | Input | When front lifting switch UP operation | 0 |
| | | | | Other than above | Battery voltage |
| 27 | L | Rear lifting switch UP signal | Input | When rear lifting switch UP operation | 0 |
| | | | | Other than above | Battery voltage |
| 28C | B/W | Ground (sensor) | — | — | 0 |
| 29 | G | Reclining sensor signal | Input | ON (reclining motor operation) |  |
| | | | | Other than above | 0 or 5 |
| 30 | R/W | Rear lifting sensor signal | Input | ON (rear lifting motor operation) |  |
| | | | | Other than above | 0 or 5 |
| 34 | L/W | Set switch signal | Input | Set switch: ON | 0 |
| | | | | Set switch: OFF | 5 |
| 35 | L/B | Power seat memory switch 2 signal | Input | Memory switch 2: ON | 0 |
| | | | | Memory switch 2: OFF | 5 |
| 36 | Y/G | Power seat memory switch inductor 2 signal | Output | Memory switch 2: ON | 1 |
| | | | | Memory switch 2: OFF | Battery voltage |
| 37 | W | Seat sliding switch BACKWARD signal | Input | When seat sliding switch BACKWARD operation | 0 |
| | | | | Other than above | Battery voltage |
| 38 | LG/B | Seat reclining switch BACKWARD signal | Input | When seat reclining switch BACKWARD operation | 0 |
| | | | | Other than above | Battery voltage |
| 39 | L/G | Front lifting switch DOWN signal | Input | When front lifting switch DOWN operation | 0 |
| | | | | Other than above | Battery voltage |
| 40 | L/Y | Rear lifting switch DOWN signal | Input | When rear lifting switch DOWN operation | 0 |
| | | | | Other than above | Battery voltage |
| 61E | B/Y | Ground (signal) | — | — | 0 |

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AUTOMATIC DRIVE POSITIONER

Work Flow

NIS001UX

1. Check the symptom and customer's requests.
2. Understand the system description. Refer to [SE-11, "System Description"](#) .
3. Perform the preliminary check, refer to [SE-36, "Preliminary Check"](#) .
4. Perform the CAN communication inspection using CONSULT-II, refer to [SE-39, "CONSULT-II Function \(AUTO DRIVE POS.\)"](#) .
5. Perform the self-diagnosis. Refer to [SE-42, "Check CAN Communication System"](#) .
6. Repair or replace depending on the self-diagnostic results.
7. Based on the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to [SE-42, "Symptom Chart"](#) .
8. Does the automatic drive positioner system operate normally?
If it is normal, GO TO 8.
If it is not normal, GO TO 3.
9. INSPECTION END

Preliminary Check SETTING CHANGE FUNCTION

NIS001UY

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

×: Applicable –: Not applicable

| Setting item | Content | CONSULT-II (WORK SUPPORT) | Display unit | Factory setting |
|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|--------------------|
| Change seat sliding volume setting | The distance at retain operation can be selected from the following 3 modes. | 40 mm | — | × |
| | | 80 mm | | — |
| | | 150 mm | | — |
| Change the Entry/Exit seat slide function setting | The seat sliding turnout and return at entry/exit can be selected: ON (operated) – OFF (not operated) | ON | ON: Indicator lamp ON | × |
| | | OFF | OFF: Indicator lamp OFF | — |
| Change the Entry/Exit tilt steering wheel function setting | Tilt up and backward steering wheel at entry and exit can be selected: ON (operated) - OFF (not operated) | ON | ON: Indicator lamp ON | × |
| | | OFF | OFF: Indicator lamp OFF | — |
| Reset custom settings | All settings to default. | — | Default: Setting button OFF | — |

It is possible to set sliding driver seat for entry/exit of vehicle by pressing set switch.

| Content | Setting change operation | Indicator LED |
|--------------------------------------------------------------------------------------------|-----------------------------------------------|----------------|
| The seat sliding turnout and steering wheel up/backward at entry/exit can be operated. | Press the set switch for more than 10 seconds | Blinking twice |
| The seat sliding turnout and steering wheel up/backward at entry/exit can be not operated. | | Blinking ones |

NOTE:

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

AUTOMATIC DRIVE POSITIONER

CHECK POWER SUPPLY AND GROUND

1. CHECK FUSE

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

- Check 50A fusible link (letter **M** , located in the fuse and fusible link box.)
- Check 15A fuse [No.22, located in the fuse block (J/B)]
- Check 10A fuse [No.1, located in the fuse block (J/B)]
- Check 10A fuse [No.6, located in the fuse block (J/B)]

NOTE:

Refer to [SE-15, "Component Parts and Harness Connector Location"](#) .

OK or NG

OK >> GO TO 2.

NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to [SE-15, "Component Parts and Harness Connector Location"](#) .

2. CHECK POWER SUPPLY CIRCUIT (BCM)

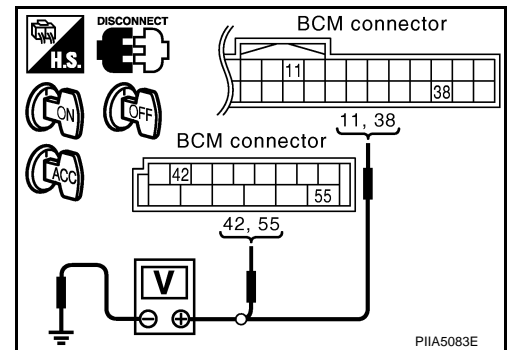
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM connector and ground.

| Connector | Terminals (Wire color) | | Ignition switch | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-----------------|--------------------------|
| | (+) | (-) | | |
| M3 | 11 (LG) | Ground | ACC | Battery voltage |
| | 38 (W/L) | | ON | |
| M4 | 42 (L/R) | | OFF | |
| | 55 (G) | | | |

OK or NG

OK >> GO TO 3.

NG >> Check harness for open and short between BCM and fuse or fusible link.



3. CHECK GROUND CIRCUIT (BCM)

1. Turn ignition switch OFF.
2. Check continuity between BCM connector M4 terminal 49, 52 and ground.

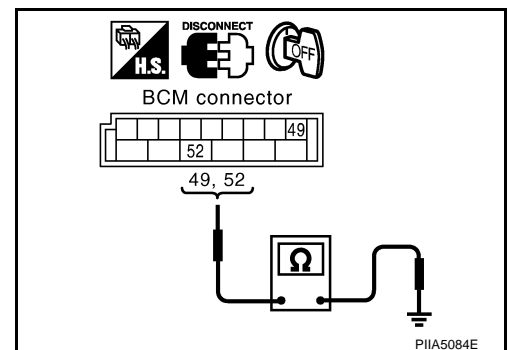
49 (B) – Ground : Continuity should exist.

52 (B) – Ground : 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 FUSE

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

NOTE:

Refer to [SE-15, "Component Parts and Harness Connector Location"](#) .

OK or NG

OK >> GO TO 5.

NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to [SE-15, "Component Parts and Harness Connector Location"](#) .

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

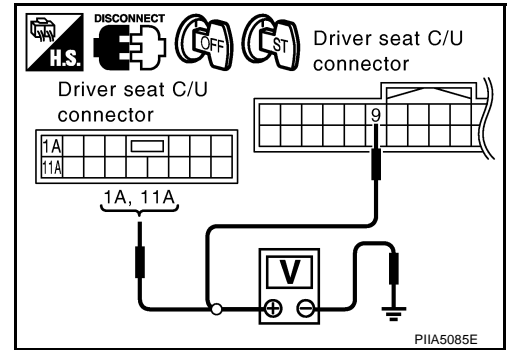
1. Disconnect driver seat control unit connector.
2. Check voltage between driver seat control unit and ground.

| Connector | Terminals (Wire color) | | Ignition switch | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-----------------|-----------------------|
| | (+) | (-) | | |
| B152 | 9 (BR) | Ground | START | Battery voltage |
| B153 | 1A (R) | | OFF | |
| | 11A (R/W) | | | |

OK or NG

OK >> GO TO 6.

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



6. CHECK GROUND CIRCUIT (DRIVER SEAT CONTROL UNIT)

1. Turn ignition switch OFF.
2. Check continuity between the driver seat control unit connector B152, B153 terminal 16A, 61E and ground.

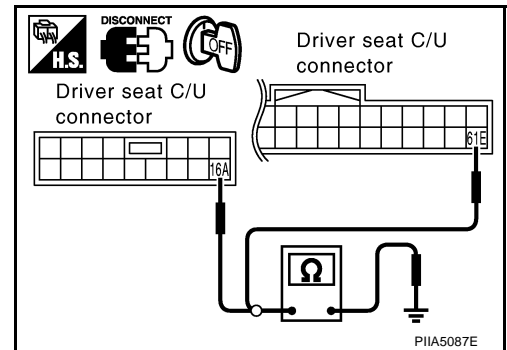
16A (B) – Ground : Continuity should exist.

61E (B/Y) – Ground : Continuity should exist.

OK or NG

OK >> GO TO 7.

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



7. CHECK POWER SUPPLY CIRCUIT (AUTOMATIC DRIVE POSITIONER CONTROL UNIT)

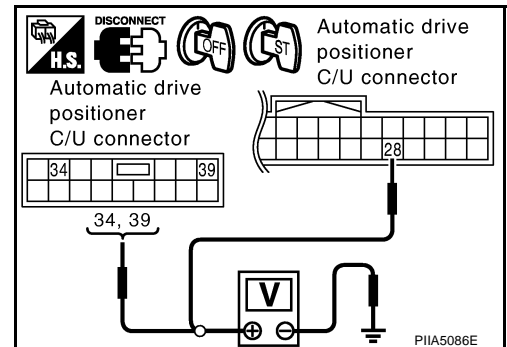
1. Disconnect automatic drive positioner control unit connector.
2. Check voltage between automatic drive positioner control unit and ground.

| Connector | Terminals (Wire color) | | Ignition switch | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-----------------|-----------------------|
| | (+) | (-) | | |
| M49 | 28 (SB) | Ground | START | Battery voltage |
| M50 | 34 (L/R) | | OFF | |
| | 39 (W/R) | | | |

OK or NG

OK >> GO TO 8.

NG >> Repair or replace harness between automatic drive positioner control unit and fuse block (J/B).



AUTOMATIC DRIVE POSITIONER

8. CHECK GROUND CIRCUIT (AUTOMATIC DRIVE POSITIONER CONTROL UNIT)

Check continuity between the automatic drive positioner control unit connector M50 terminal 40, 48 and ground.

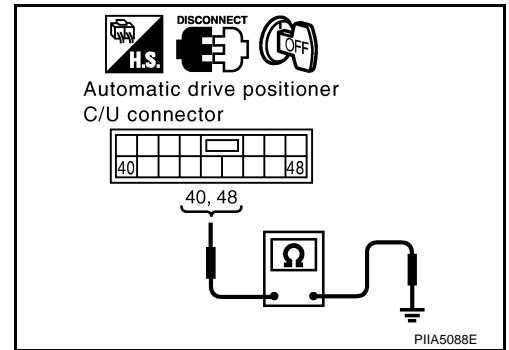
40 (B) – Ground : Continuity should exist.

48 (B) – Ground : Continuity should exist.

OK or NG

OK >> Driver seat control unit circuit is OK.

NG >> Repair or replace harness between automatic drive positioner control unit and ground.



CONSULT-II Function (AUTO DRIVE POS.)

NIS001UZ

CONSULT-II can display each diagnostic item using the diagnostic test modes shown following.

| CONSULT-II diagnosis items | Inspection item, self-diagnosis mode | | Content | Refer to page |
|----------------------------|--------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------|
| AUTO DRIVE POSITIONER | WORK SUPPORT*1 | | Changes the setting for each function. | SE-36 |
| | SELF-DIG RESULTS | | Check the self-diagnosis results. | SE-39 |
| | DATA MONITOR | Selection from menu | Displays the input data to driver seat control unit and automatic driving positioned control unit on real-time basis. | SE-40 |
| | CAN DIAGNOSTIC SUPPORT MONITOR | | The results of transmit / receive diagnosis of CAN communication can be read | LAN-47 |
| | ACTIVE TEST*2 | | Gives a drive signal to a load to check the operation. | SE-41 |
| | DRIVER SEAT CONTROL UNIT PART NUMBER | | Displays driver seat control unit part No. | — |
| BCM | DATA MONITOR | Selection from menu | Displays the input data to BCM on real-time basis | BL-37 |

*1: For setting automatic drive positioner functions only.

*2: During vehicle driving, do not perform active test.

CONSULT-II START PROCEDURE

Refer to [GI-38, "CONSULT-II Start Procedure"](#) .

SELF-DIAGNOSIS RESULTS

Display Item List

| DTC | Self-diagnosis item (CONSULT-II indication) | DTC detection condition | Reference page |
|-------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| U1000 | CAN COMM CIRCUIT | When driver seat control unit is not transmitting or receiving CAN communication signal for 2 seconds or more. | SE-42 |
| B2112 | SEAT SLIDE | When any manual and automatic operations are not performed, if any motor operations of seat slide is detected for 0.1 second or more, status is judged "Output error". | SE-43 SE-55 |
| B2113 | SEAT RECLINING | When any manual and automatic operations are not performed, if any motor operations of seat reclining is detected for 0.1 second or more, status is judged "Output error". | SE-45 SE-56 |
| B2114 | SEAT LIFTER FR | When any manual and automatic operations are not performed, if any motor operations of seat lifting FR is detected for 0.1 second or more, status is judged "Output error". | SE-46 SE-57 |
| B2115 | SEAT LIFTER RR | When any manual and automatic operations are not performed, if any motor operations of seat lifting RR is detected for 0.1 second or more, status is judged "Output error". | SE-47 SE-58 |

AUTOMATIC DRIVE POSITIONER

| DTC | Self-diagnosis item (CONSULT-II indication) | DTC detection condition | Reference page |
|-------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| B2116 | TILT OUTPUT | When any manual and automatic operations are not performed, if any motor operations of steering tilt is detected for 0.1 second or more, status is judged "Output error". | SE-50 SE-60 |
| B2118 | TILT SENSOR | When tilt sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more. | SE-60 |
| B2119 | TELESCO SENSOR | When telescopic sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more. | SE-59 |
| B2125 | P RANGE SW | With the A/T selector lever in P position, if the vehicle speed of 7 km/h (4 MPH) or higher was input the park position switch input system is judged malfunctioning. | SE-81 |
| B2128 | UART COMM | Malfunction is detected in UART communication. | SE-88 |

NOTE:

- The displays of CAN communication and P range switch display error detecting condition from memory erase to the present on "TIME".
 - If error is detected in the past and present error is detected, "CRNT" is displayed.
 - If error is detected in the past and present error is not detected, "PAST" is displayed.
 - If error has never been detected, nothing is displayed on "TIME".
- Any items other than CAN communication and P range switch count error detection frequency occurred after erase history to "1-127".
 - If error was detected in the past, error detection frequency from memory erase to the present is displayed on "TIME".
 - If error has never been detected, nothing is displayed on "TIME".
 - Can clear the detected memory.
 - Normal: Clear memory in normal condition, history is erased and nothing is displayed on "TIME".
 - Error: Clear memory in error condition, error is detected again and "1" is displayed on "TIME".

DATA MONITOR

Selection from Menu

| 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. |
| RECLN SW-FR | "ON/OFF" ON/OFF status judged from the reclining switch (FR) signal is displayed. |
| RECLN 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. |
| 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. |
| 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. |

AUTOMATIC DRIVE POSITIONER

| Monitor item [OPERATION or UNIT] | | Contents |
|----------------------------------|----------|------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| SET SW | “ON/OFF” | ON/OFF status judged from the setting switch 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. |
| P POSI SW | “ON/OFF” | The selector lever position “ON (P position) / OFF (other than P position)” judged from the park position switch signal is displayed. |
| STARTER 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. |
| SLIDE PULSE | — | Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases. |
| RECLN RULSE | — | Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases. |
| LIFT FR PULSE | — | Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases. |
| LIFT RR PULSE | — | Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases. |
| 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 | “V” | Voltage output from RH door mirror sensor (LH/RH) is displayed. |
| MIR/SE RH U-D | “V” | Voltage output from RH door mirror sensor (UP/DOWN) is displayed. |
| MIR/SE LH R-L | “V” | Voltage output from LH door mirror sensor (LH/RH) is displayed. |
| MIR/SE LH U-D | “V” | Voltage output from LH door mirror sensor (UP/DOWN) is displayed. |

ACTIVE TEST

CAUTION:

During vehicle driving, do not perform active test.

NOTE:

If active test is performed, reset seat memory and key fob interlock drive positioner after performing work.

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. |
| 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. |

AUTOMATIC DRIVE POSITIONER

Check CAN Communication System

NIS001V0

1. CHECK SELF-DIAGNOSTIC RESULT

CAUTION:

If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

1. Connect CONSULT-II, and turn ignition switch ON.
2. Touch "AUTO DRIVE POS." on "SELECT SYSTEM" screen.
3. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
4. Check display content in self-diagnostic results.

Displayed U1000?

- Yes >> GO TO [LAN-49. "CAN System Specification Chart"](#) .
 No >> Inspection END.

Symptom Chart

NIS001V1

| Symptom | Diagnoses / service procedure | Refer to page |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
| Only setting change function cannot be set with display. | Interacted display system (without NAVI) | AV-54 |
| | Navigation system (with NAVI) | AV-93 |
| A part of seat system does not operate (both automatically and manually). | 1. Check sliding motor circuit | SE-43 |
| | 2. Check reclining motor circuit | SE-45 |
| | 3. Check front lifter motor circuit | SE-46 |
| | 4. Check rear lifter motor circuit | SE-47 |
| | 5. If the above systems are normal, replace the driver seat control unit | SE-15 |
| A part of steering tilt, telescopic and door mirror does not operate (both automatically and manually). | 1. Check tilt motor circuit | SE-50 |
| | 2. Check telescopic motor circuit | SE-49 |
| | 3. Check driver side mirror motor circuit | SE-51 |
| | 4. Check passenger side mirror motor circuit | SE-53 |
| | 5. If the above systems are normal, replace the automatic drive positioner control unit | SE-15 |
| A part of seat system does not operate (only automatic operation). | 1. Check sliding sensor circuit | SE-55 |
| | 2. Check reclining sensor circuit | SE-56 |
| | 3. Check front lifting sensor circuit | SE-57 |
| | 4. Check rear lifting sensor circuit | SE-58 |
| | 5. If the above systems are normal, replace the driver seat control unit | SE-15 |
| A part of steering tilt, telescopic system and door mirror system dose not operate (only automatic operation). | 1. Check steering and door mirror sensor power supply and ground circuit | SE-64 |
| | 2. Check driver side mirror sensor circuit | SE-61 |
| | 3. Check passenger side mirror sensor circuit | SE-62 |
| | 4. Check tilt sensor circuit | SE-60 |
| | 5. Check telescopic sensor circuit | SE-59 |
| | 6. If all the above systems are normal, replace the automatic drive positioner control unit | SE-15 |

AUTOMATIC DRIVE POSITIONER

| Symptom | Diagnoses / service procedure | Refer to page | |
|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------|----|
| All the automatic operations do not operate. | 1. Check A/T device (park position switch) circuit | SE-81 | A |
| | 2. Check key switch circuit (with intelligent key) | SE-82 | B |
| | 3. Check key switch circuit (without intelligent key) | SE-84 | C |
| | 4. Check UART communication line circuit | SE-88 | |
| | 5. If all the above systems are normal, replace the automatic drive positioner control unit | SE-15 | |
| A part of seat system does not operate (only manual operation). | 1. Check sliding switch circuit | SE-67 | D |
| | 2. Check reclining switch circuit | SE-68 | E |
| | 3. Check front lifting switch circuit | SE-70 | F |
| | 4. Check rear lifting switch circuit | SE-71 | G |
| | 5. If the above systems are normal, replace the driver seat control unit | SE-15 | H |
| A part of steering tilt, telescopic and door mirror does not operate (only manual operation). | 1. Check door mirror remote control switch (changeover switch) circuit | SE-77 | I |
| | 2. Check door mirror remote control switch (mirror switch) circuit | SE-79 | J |
| | 3. Check tilt switch circuit | SE-75 | K |
| | 4. Check telescopic switch circuit | SE-73 | L |
| | 5. If the above systems are normal, replace the automatic drive positioner control unit | SE-15 | M |
| Only seat memory switch operation dose not operate. | 1. Check seat memory switch circuit | SE-85 | SE |
| | 2. If the above systems are normal, replace the driver seat control unit | SE-15 | |
| Seat memory indicator lamps 1 and 2 do not illuminate. | 1. Check seat memory indicator lamp circuit | SE-87 | J |
| | 2. If all the above systems are normal, replace the driver seat control unit | SE-15 | |
| The Entry/Exiting does not operated when door is opened and closed. (The Entry/Exiting operates with key switch) | 1. Check front door switch (driver side) circuit | SE-65 | K |
| | 2. If all the above systems are normal, replace the BCM | BCS-14 | |
| Only seat sliding, seat reclining and seat lifting (front and rear) operations do not operate. | Check power seat switch ground circuit | SE-72 | |
| Only lumbar support does not operate. | Check lumbar support circuit | SE-90 | |

Check Sliding Motor Circuit

NIS001V2

1. CHECK SEAT SLIDING MECHANISM

Check the following.

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

OK or NG

- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).

NG >> Repair the malfunctioning part and check again.

AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

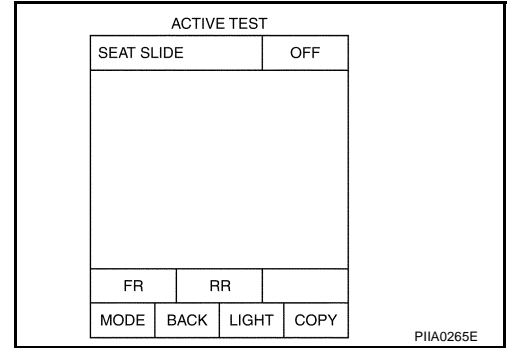
With CONSULT-II

Check operation with "SEAT SLIDE" in ACTIVE TEST.

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

OK or NG

- OK >> Sliding motor circuit is OK.
- NG >> GO TO 3.



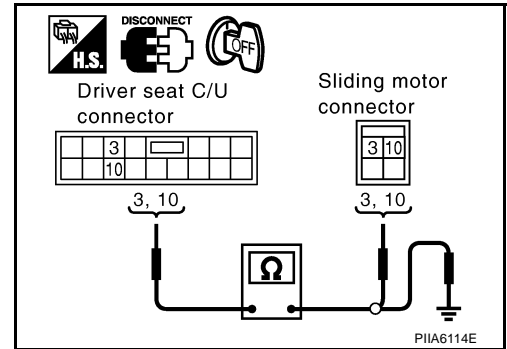
3. CHECK SLIDING MOTOR HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector and sliding motor connector.
- Check continuity between driver seat control unit connector B153 terminals 3, 10 and sliding motor connector B161 terminals 3, 10.

- 3 (G) – 3 (G) : Continuity should exist.**
- 10 (G/R) – 10 (G/R) : Continuity should exist.**

- Check continuity between driver seat control unit connector B153 terminals 3, 10 and ground.

- 3 (G) – Ground : Continuity should not exist.**
- 10 (G/R) – 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.

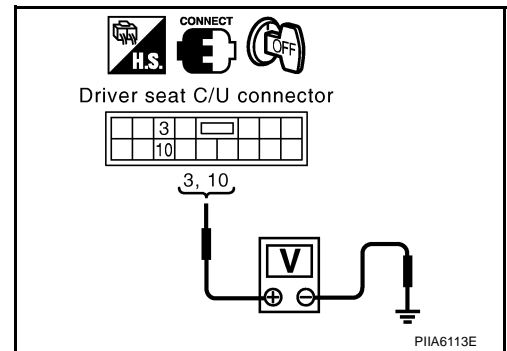
4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

- Connect the driver seat control unit connector.
- Sliding switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Sliding switch condition | Voltage (V) (Approx.) |
|-----------|------------------------|--------|--------------------------|-----------------------|
| | (+) | (-) | | |
| B153 | 3 (G) | Ground | FORWARD | Battery voltage |
| | | | Other than above | 0 |
| | 10 (G/R) | | BACKWARD | Battery voltage |
| | | | Other than above | 0 |

OK or NG

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



AUTOMATIC DRIVE POSITIONER

NIS001V3

Check Reclining Motor Circuit

1. CHECK SEAT RECLINING MECHANISM

Check the following.

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

OK or NG

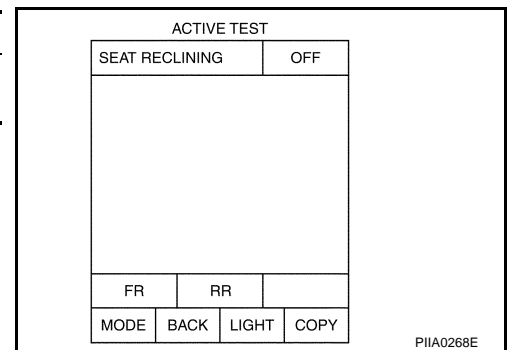
- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).
- NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

 **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. |



OK or NG

- OK >> Reclining motor circuit is OK.
- NG >> GO TO 3.

3. CHECK RECLINING MOTOR 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 B153 terminals 4, 12 and reclining motor connector B166 terminals 4, 12.

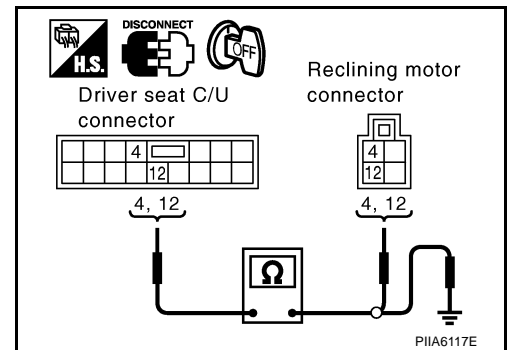
4 (G/L) – 4 (G/L) : Continuity should exist.

12 (G/Y) – 12 (G/Y) : Continuity should exist.

4. Check continuity between driver seat control unit connector B153 terminals 4, 12 and ground.

4 (G/L) – Ground : Continuity should not exist.

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



OK or NG

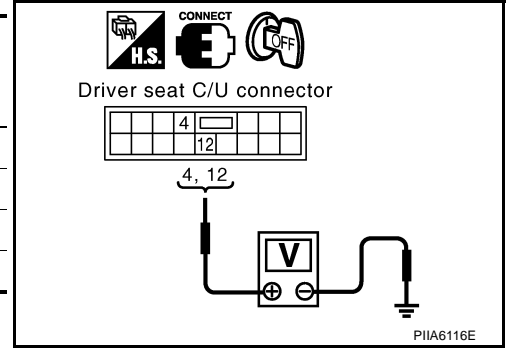
- OK >> GO TO 4.
- NG >> Repair or replace harness between driver seat control unit and reclining motor.

AUTOMATIC DRIVE POSITIONER

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit.
2. Reclining switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Reclining switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|----------------------------|--------------------------|
| | (+) | (-) | | |
| B153 | 4 (G/L) | Ground | FORWARD | Battery voltage |
| | | | Other than above | 0 |
| | 12 (G/Y) | | BACKWARD | Battery voltage |
| | | | Other than above | 0 |



OK or NG

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

Check Front Lifting Motor Circuit

NIS001V4

1. CHECK FRONT LIFTING MECHANISM

Check the following.

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

OK or NG

- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).
 NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

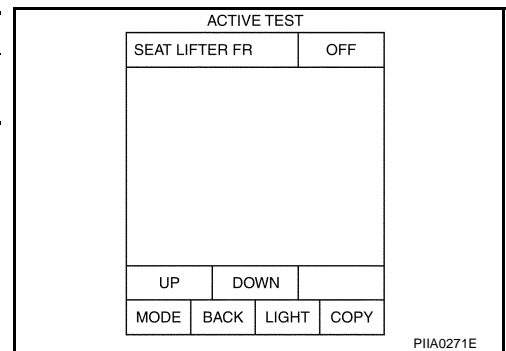
Ⓜ With CONSULT-II

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. |

OK or NG

- OK >> Front lifting motor circuit is OK.
 NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

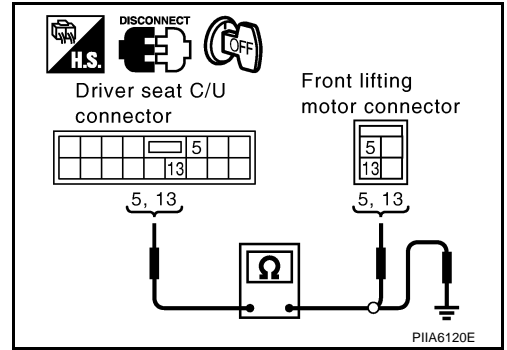
3. CHECK FRONT LIFTING MOTOR HARNESS CONTINUITY

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 B153 and terminals 5, 13 and front lifting motor connector B164 terminals 5, 13.

5 (LG) – 5 (LG) : Continuity should exist.
13 (Y) – 13 (Y) : Continuity should exist.

4. Check continuity between driver seat control unit connector B153 and terminals 5, 13 and ground.

5 (LG) – Ground : Continuity should not exist.
13 (Y) – Ground : Continuity should not exist.



OK or NG

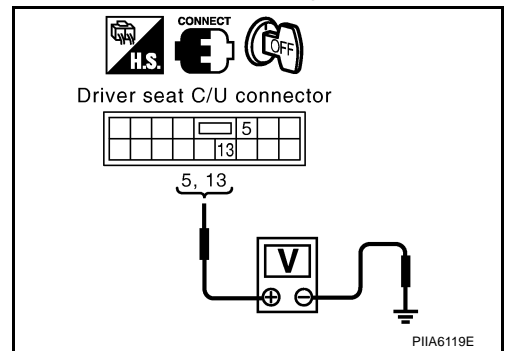
OK >> GO TO 4.

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit connector.
2. Front lifting switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Front lifting switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|--------------------------------|--------------------------|
| | (+) | (-) | | |
| B153 | 5 (LG) | Ground | DOWN | Battery voltage |
| | | | Other than above | 0 |
| | 13 (Y) | | UP | Battery voltage |
| | | | Other than above | 0 |



OK or NG

OK >> Replace front lifting motor.

NG >> Replace driver seat control unit.

Check Rear Lifting Motor Circuit

1. CHECK REAR LIFTING MECHANISM

Check the following.

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

OK or NG

OK >> ● GO TO 2 (With CONSULT-II).

● GO TO 3 (Without CONSULT-II).

NG >> Repair the malfunctioning part and check again.

NIS001V5

AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

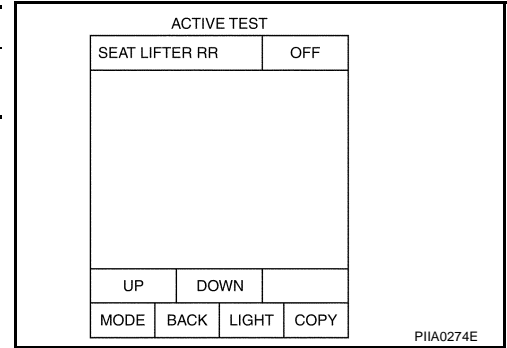
With CONSULT-II

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. |

OK or NG

- OK >> Rear lifting motor check is OK.
- NG >> GO TO 3.



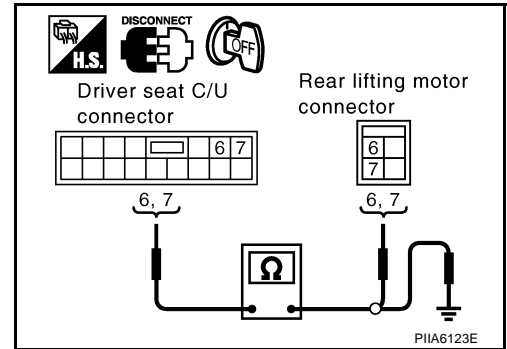
3. CHECK REAR LIFTING HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector and rear lifting motor connector.
- Check continuity between driver seat control unit connector B153 terminals 6, 7 and rear lifting motor connector B162 terminals 6, 7.

- 6 (G/W) – 6 (G/W) : Continuity should exist.**
- 7 (G/B) – 7 (G/B) : Continuity should exist.**

- Check continuity between driver seat control unit connector B153 terminals 6, 7 and ground.

- 6 (G/W) – Ground : Continuity should not exist.**
- 7 (G/B) – 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.

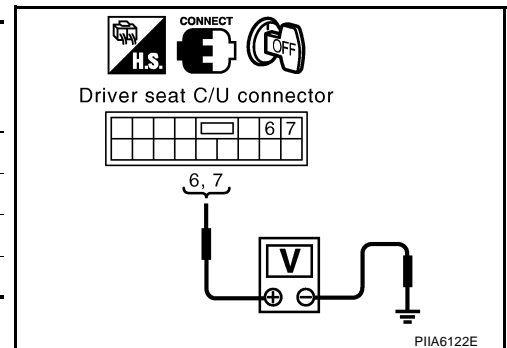
4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

- Connect the driver seat control unit connector.
- Rear lifting switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Rear lifting switch condition | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-------------------------------|-----------------------|
| | (+) | (-) | | |
| B153 | 6 (G/W) | Ground | UP | Battery voltage |
| | | | Other than above | 0 |
| | 7 (G/B) | | DOWN | Battery voltage |
| | | | Other than above | 0 |

OK or NG

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



AUTOMATIC DRIVE POSITIONER

NIS001V6

Check Telescopic Motor Circuit

1. CHECK STEERING WHEEL TELESCOPIC MECHANISM

Check following.

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

OK or NG

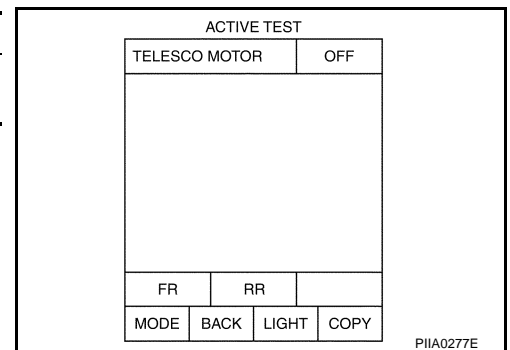
- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).
- NG >> Repair the malfunctioning part and check again.

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. |



OK or NG

- OK >> Steering telescopic motor circuit is OK.
- NG >> GO TO 3.

3. CHECK TELESCOPIC MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and tilt motor and telescopic motor connector.
3. Check continuity between automatic drive positioner control unit connector M50 terminals 36, 44 and tilt motor and telescopic motor connector M27 terminals 3, 4.

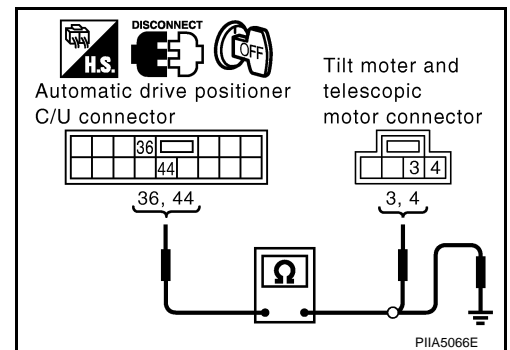
36 (L/R) – 3 (L/R) : Continuity should exist.

44 (L/W) – 4 (L/W) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M50 terminals 36, 44 and ground.

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

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



OK or NG

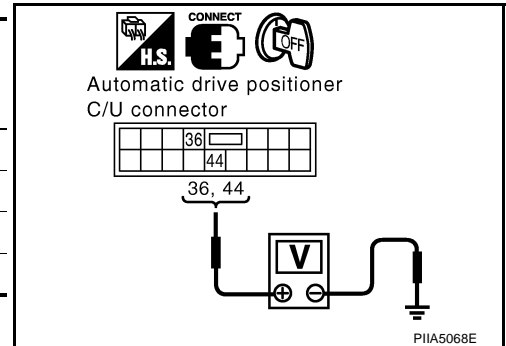
- OK >> GO TO 4.
- NG >> Repair or replace harness between automatic drive positioner control unit and tilt motor and telescopic motor.

AUTOMATIC DRIVE POSITIONER

4. CHECK BCM OUTPUT SIGNAL

1. Connect the automatic drive positioner control unit connector.
2. Telescopic switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Telescopic switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-----------------------------|--------------------------|
| | (+) | (-) | | |
| M50 | 36 (L/R) | Ground | FORWARD | Battery voltage |
| | | | Other than above | 0 |
| | 44 (L/W) | | BACKWARD | Battery voltage |
| | | | Other than above | 0 |



OK or NG

- OK >> Replace tilt and telescopic motor.
 NG >> Replace automatic drive positioner control unit.

Check Tilt Motor Circuit

NIS001V7

1. CHECK STEERING WHEEL TILT MECHANISM

Check following.

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

OK or NG

- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).
 NG >> Repair the malfunctioning part.

2. CHECK FUNCTION

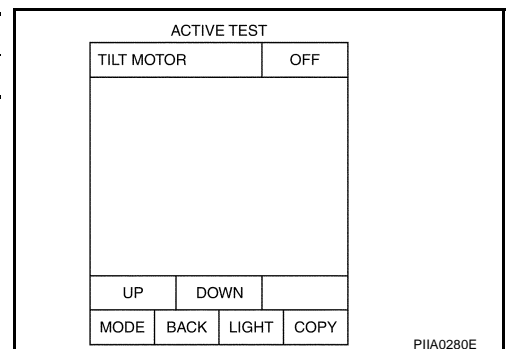
With CONSULT-II

Check operation with "TILT MOTOR" in ACTIVE TEST.

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

OK or NG

- OK >> Steering tilt motor circuit is OK.
 NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

3. CHECK TILT MOTOR CIRCUIT HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector and tilt and telescopic motor connector.
3. Check continuity between automatic drive positioner control unit connector M50 terminals 35, 42 and tilt and telescopic motor connector M27 terminals 1, 2.

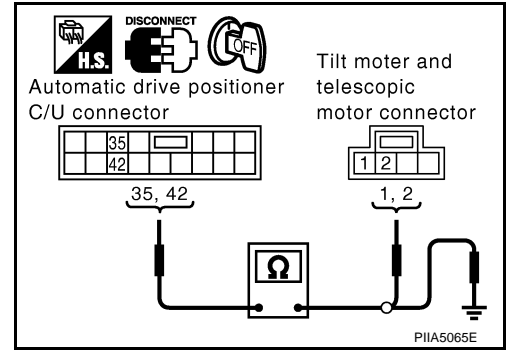
35 (R/L) – 1 (R/L) : Continuity should exist.

42 (R/B) – 2 (R/B) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M50 terminals 35, 42 and ground.

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

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



OK or NG

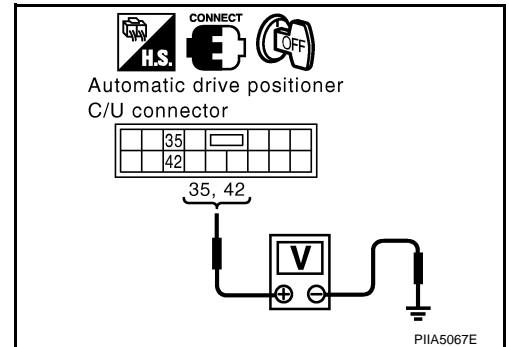
OK >> GO TO 4.

NG >> Repair or replace harness between automatic drive positioner control unit and tilt and telescopic motor.

4. CHECK BCM OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector and tilt and telescopic motor connector.
2. Tilt switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Tilt switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-----------------------|--------------------------|
| | (+) | (-) | | |
| M50 | 35 (R/L) | Ground | UP | Battery voltage |
| | | | Other than above | 0 |
| | 42 (R/B) | | DOWN | Battery voltage |
| | | | Other than above | 0 |



OK or NG

OK >> Replace tilt and telescopic motor.

NG >> Replace automatic drive positioner control unit.

Check Driver Side Mirror Motor Circuit

1. CHECK DOOR MIRROR FUNCTION

Check the following.

Operation malfunction caused by a foreign object caught in door mirror face edge.

OK or NG

OK >> ● GO TO 2 (With CONSULT-II).

● GO TO 3 (Without CONSULT-II).

NG >> Repair the malfunctioning parts, and check the symptom again.

AUTOMATIC DRIVE POSITIONER

2. CHECK MIRROR MOTOR

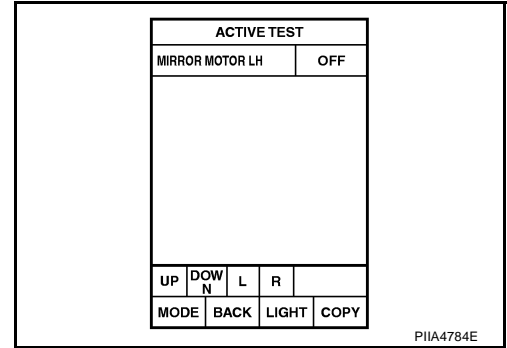
With CONSULT-II

Check the operation with "MIRROR MOTOR LH" in the ACTIVE TEST.

| Test item | Description |
|-----------------|--------------------------------------------------------------------------------------------|
| MIRROR MOTOR LH | The LH mirror motor moves the mirror UP/DOWN and LEFT/RIGHT by receiving the drive signal. |

OK or NG

- OK >> Driver side mirror motor circuit is OK.
 NG >> GO TO 3.



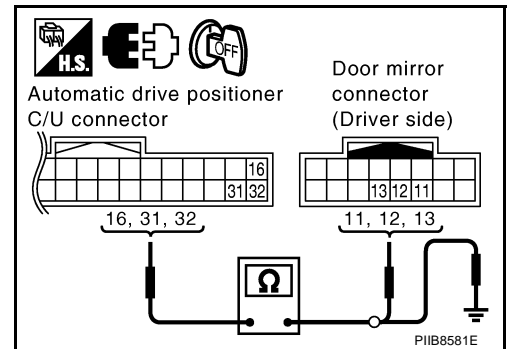
3. CHECK DOOR MIRROR MOTOR (DRIVER SIDE) HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit connector and door mirror (driver side) connector.
- Check continuity between automatic drive positioner control unit connector M49 terminal 16, 31, 32 and door mirror (driver side) connector D2 terminal 11, 12, 13.

- 16 (P) – 13 (P) : Continuity should exist.**
31 (R/W) – 11 (GY) : Continuity should exist.
32 (G/B) – 12 (PU) : Continuity should exist.

- Check continuity between automatic drive positioner control unit connector M49 terminal 16, 31, 32 and ground.

- 16 (P) – Ground : Continuity should not exist.**
31 (R/W) – Ground : Continuity should not exist.
32 (G/B) – Ground : Continuity should not exist.



OK or NG

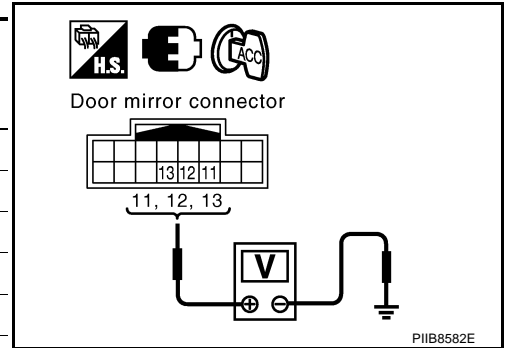
- OK >> GO TO 4.
 NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side).

AUTOMATIC DRIVE POSITIONER

4. CHECK MIRROR MOTOR SIGNAL

1. Connect automatic drive positioner control unit and door mirror (driver side) connector.
2. Turn ignition switch ACC.
3. Turn changeover switch LH position.
4. Mirror switch operate, check voltage between door mirror (driver side) connector and ground.

| Connector | Terminals (Wire color) | | Mirror switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-------------------------|--------------------------|
| | (+) | (-) | | |
| D2 | 11 (GY) | Ground | UP | Battery voltage |
| | | | Other than above | 0 |
| | 12 (PU) | | LEFT | Battery voltage |
| | | | Other than above | 0 |
| | 13 (P) | | DOWN or RIGHT | Battery voltage |
| | | | Other than above | 0 |



OK or NG

- OK >> Replace door mirror motor (driver side).
 NG >> Check the condition of the harness and the connector.

Check Passenger Side Mirror Motor Circuit

NIS001V9

1. CHECK DOOR MIRROR FUNCTION

Check the following.
 Operation malfunction caused by a foreign object caught in door mirror face edge.

OK or NG

- OK >> ● GO TO 2 (With CONSULT-II).
 ● GO TO 3 (Without CONSULT-II).
 NG >> Repair the malfunctioning parts, and check the symptom again.

2. CHECK MIRROR MOTOR

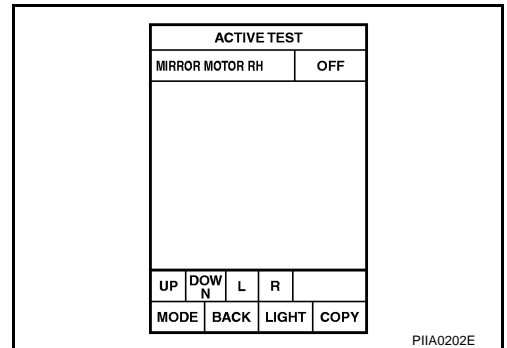
With CONSULT-II

Check the operation with "MIRROR MOTOR RH" in the ACTIVE TEST.

| Test item | Description |
|-----------------|--------------------------------------------------------------------------------------------|
| MIRROR MOTOR RH | The RH mirror motor moves the mirror UP/DOWN and LEFT/RIGHT by receiving the drive signal. |

OK or NG

- OK >> Passenger side mirror motor circuit is OK.
 NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

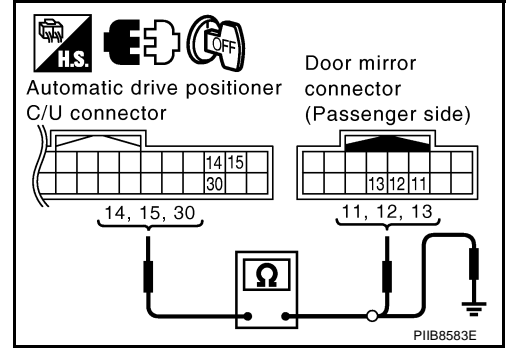
3. CHECK DOOR MIRROR MOTOR (PASSENGER SIDE) HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector and door mirror (passenger side) connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 14, 15, 30 and door mirror (passenger side) connector D32 terminal 11, 12, 13.

14 (L/W) – 11 (PU) : Continuity should exist.
15 (L/B) – 12 (OR) : Continuity should exist.
30 (W/R) – 13 (GY) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminal 14, 15, 30 and ground.

14 (L/W) – Ground : Continuity should not exist.
15 (L/B) – Ground : Continuity should not exist.
30 (W/R) – Ground : Continuity should not exist.



OK or NG

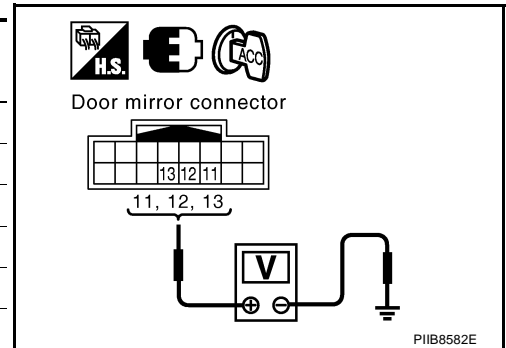
OK >> GO TO 4.

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (passenger side).

4. CHECK MIRROR MOTOR SIGNAL

1. Connect automatic drive positioner control unit and door mirror (passenger side) connector.
2. Turn ignition switch ACC.
3. Turn changeover switch RH position.
4. Mirror switch operate, check voltage between door mirror (passenger side) connector and ground.

| Connector | Terminals (Wire color) | | Mirror switch condition | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-------------------------|--------------------------|
| | (+) | (-) | | |
| D32 | 11 (PU) | Ground | UP | Battery voltage |
| | | | Other than above | 0 |
| | 12 (OR) | | LEFT | Battery voltage |
| | | | Other than above | 0 |
| | 13 (G/Y) | | DOWN or RIGHT | Battery voltage |
| | | | Other than above | 0 |



OK or NG

OK >> Replace door mirror motor (passenger side).

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

AUTOMATIC DRIVE POSITIONER

NIS001VA

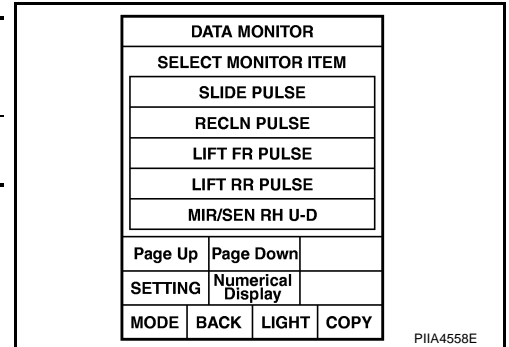
Check Sliding Sensor Circuit

1. CHECK FUNCTION

With CONSULT-II

Check operation with "SLIDE PULSE" on the DATA MONITOR to make sure the pulse changes.

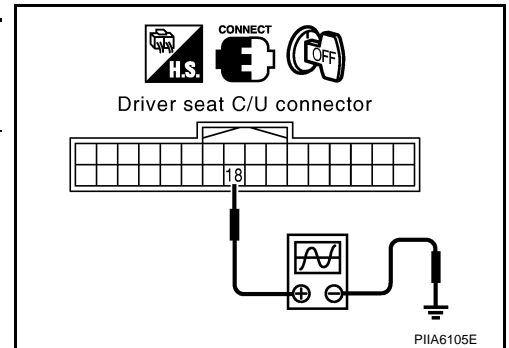
| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------------|---------------------------------------------------------------------------------------|
| SLIDE PULSE | The seat sliding position (pulse) judged from the sliding sensor signal is displayed. |



Without CONSULT-II

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

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|-------------------------|-----------------------------|
| | (+) | (-) | | |
| B152 | 18 (G/L) | Ground | Sliding motor operation | |



OK or NG

- OK >> Sliding sensor circuit is OK.
 NG >> GO TO 2.

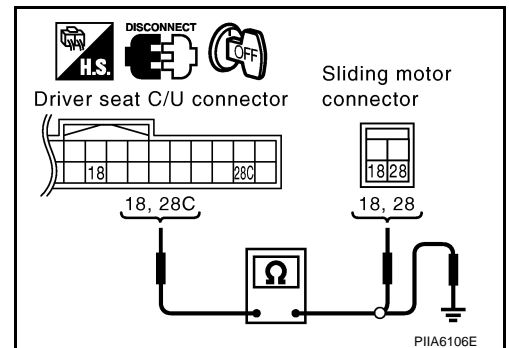
2. CHECK SLIDING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and sliding motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 18, 28C and sliding motor connector B161 terminals 18, 28.

- 18 (G/L) – 18 (G/L) : Continuity should exist.**
28C (B/W) – 28 (B/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 18, 28C and ground.

- 18 (G/L) – Ground : Continuity should not exist.**
28C (B/W) – Ground : Continuity should not exist.



OK or NG

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

AUTOMATIC DRIVE POSITIONER

NIS001VB

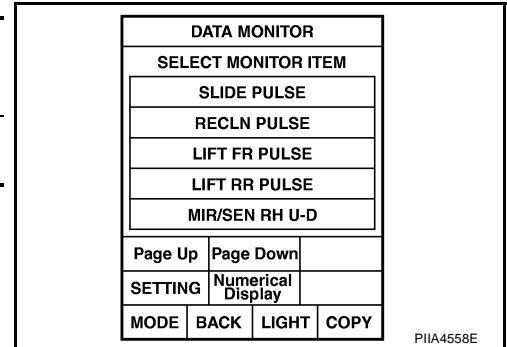
Check Reclining Sensor Circuit

1. CHECK FUNCTION

With CONSULT-II

Check operation with "RECLINING PULSE" on the DATA MONITOR to make sure the pulse changes.

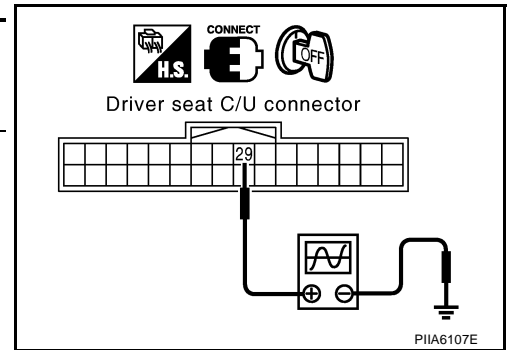
| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------------|-----------------------------------------------------------------------------------|
| RECLN PULSE | The seat reclining position (pulse) judged from the reclining sensor is displayed |



Without CONSULT-II

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

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|---------------------------|-----------------------------|
| | (+) | (-) | | |
| B152 | 29 (G) | Ground | Reclining motor operation | |



OK or NG

- OK >> Reclining sensor circuit is OK.
 NG >> GO TO 2.

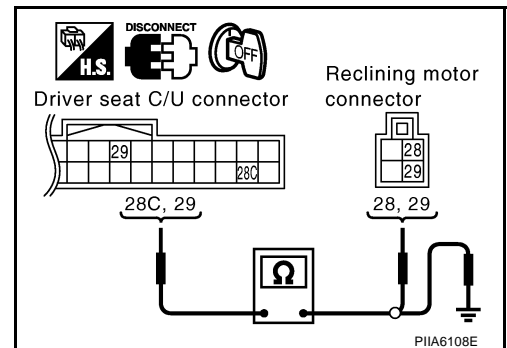
2. CHECK RECLINING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and reclining motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 28C, 29 and reclining motor connector B166 terminals 28, 29.

- 28C (B/W) – 28 (B/W) : Continuity should exist.**
29 (G) – 29 (G) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 28C, 29 and ground.

- 28C (B/W) – Ground : Continuity should not exist.**
29 (G) – Ground : Continuity should not exist.



OK or NG

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

AUTOMATIC DRIVE POSITIONER

NIS001VC

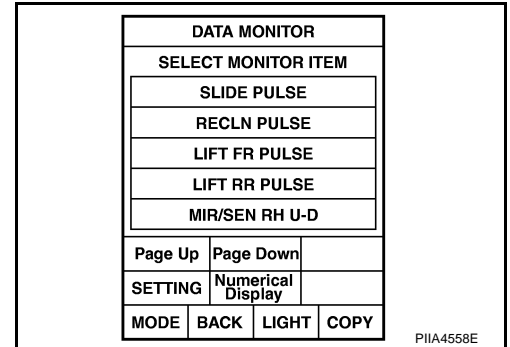
Check Front Lifting Sensor Circuit

1. CHECK FUNCTION

With CONSULT-II

Check operation with "LIFT FR PULSE" on the DATA MONITOR to make sure the pulse changes.

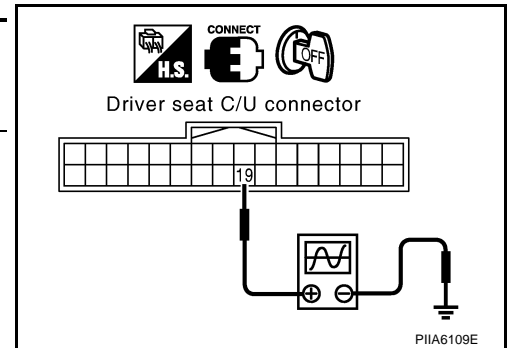
| Monitor item [OPERATION or UNIT] | Contents |
|----------------------------------------|--------------------------------------------------------------------------------------|
| LIFT FR PULSE | The front lifting position (pulse) judged from the front lifting sensor is displayed |



Without CONSULT-II

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

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|-------------------------------|-----------------------------|
| | (+) | (-) | | |
| B152 | 19 (G/R) | Ground | Front lifting motor operation | <p>SIIA0691J</p> |



OK or NG

- OK >> Front lifting sensor circuit is OK.
 NG >> GO TO 2.

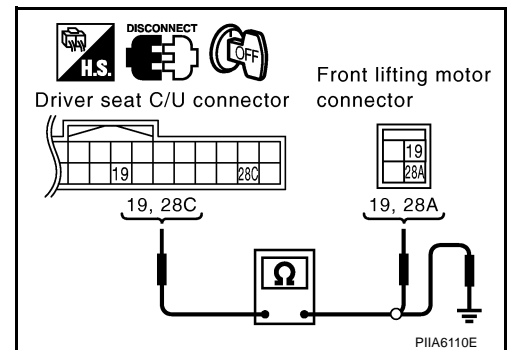
2. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY

- Disconnect driver seat control unit connector and front lifting motor connector.
- Check continuity between driver seat control unit connector B152 terminals 19, 28C and front lifting motor connector B164 terminals 19, 28A.

- 19 (G/R) – 19 (G/R) : Continuity should exist.**
28C (B/W) – 28A (B/W) : Continuity should exist.

- Check continuity between driver seat control unit connector B152 terminals 19, 28C and ground.

- 19 (G/R) – Ground : Continuity should not exist.**
28C (B/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

NIS001VD

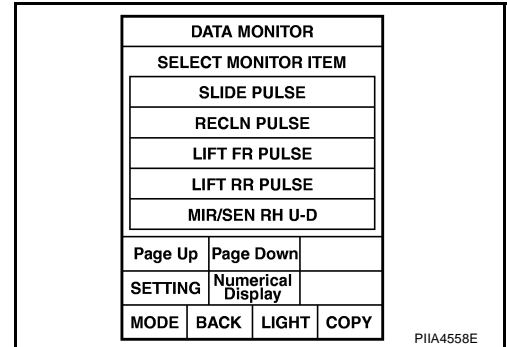
Check Rear Lifting Sensor Circuit

1. CHECK REAR LIFTING SENSOR INPUT/OUTPUT SIGNAL

With CONSULT-II

Check operation with "LIFT RP PULSE" on the DATA MONITOR to make sure pulse changes.

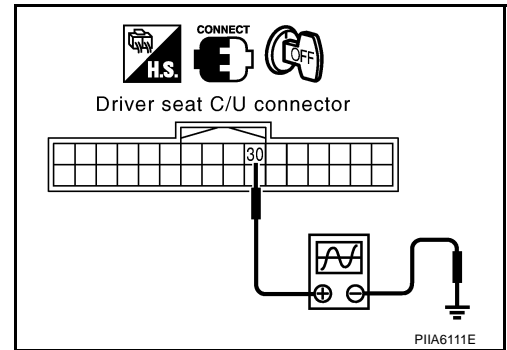
| Monitor item [OPERATION or UNIT | Contents |
|---------------------------------------|-------------------------------------------------------------------------------------|
| LIFT RR PULSE | The rear lifting position (pulse) judged from the rear lifting sensor is displayed. |



Without CONSULT-II

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

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|------------------------------|-----------------------------|
| | (+) | (-) | | |
| B152 | 30 (R/W) | Ground | Rear lifting motor operation | |



OK or NG

- OK >> Rear lifting sensor circuit is OK.
 NG >> GO TO 2.

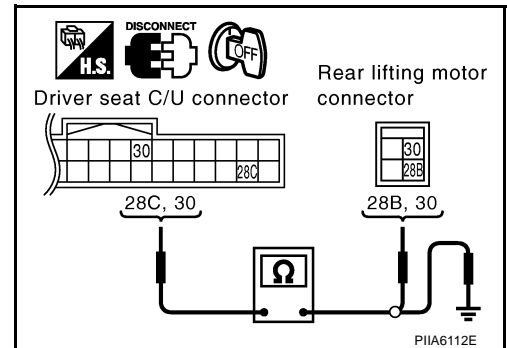
2. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and rear lifting motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 28C, 30 and rear lifting motor connector B162 terminals 28B, 30.

- 28C (B/W) – 28B (B/W) : Continuity should exist.**
30 (R/W) – 30 (R/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 28C, 30 and ground.

- 28C (B/W) – Ground : Continuity should not exist.**
30 (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

NIS001VE

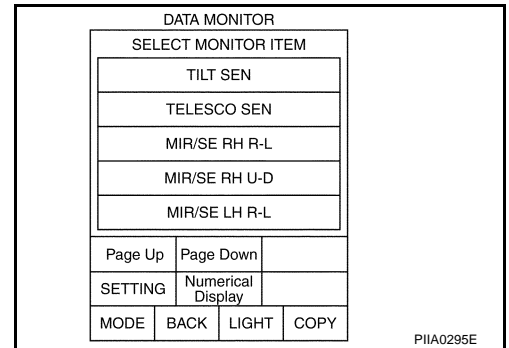
Check Telescopic Sensor Circuit

1. CHECK FUNCTION

With CONSULT-II

Operate the telescopic switch with "TELESCO SEN" on the DATA MONITOR to make sure the voltage changes.

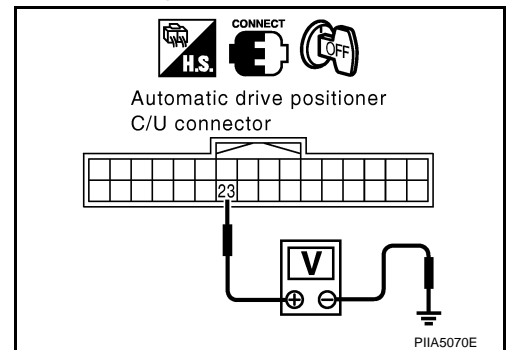
| Monitor item [OPERATION or UNIT] | Contents | |
|-------------------------------------|----------|--------------------------------------------------------------------------------------------|
| TELESCO SEN | "V" | The telescoping position (voltage) judged from the telescoping sensor signal is displayed.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



Without CONSULT-II

- Turn ignition switch OFF.
- Check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|----------------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 23 (Y/B) | Ground | Telescopic top position | 1 |
| | | | Telescopic bottom position | 4 |



OK or NG

- OK >> Telescopic sensor circuit is OK.
 NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

- Disconnect automatic drive positioner control unit connector and tilt sensor and telescopic sensor connector.
- Check continuity harness between automatic drive positioner control unit connector M49 terminals 23 and tilt sensor and telescopic sensor connector M28 terminals 3.

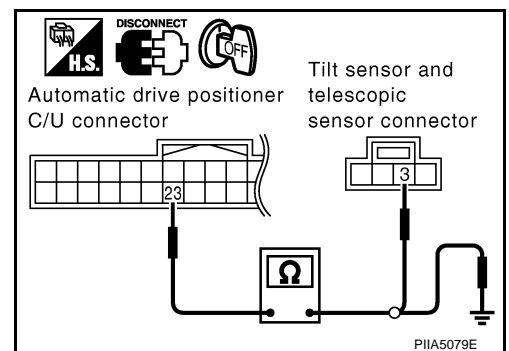
23 (Y/B) – 3 (Y/B) : Continuity should exist.

- Check continuity harness between automatic drive positioner control unit connector M49 terminals 23 and ground.

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

OK or NG

- OK >> Replace tilt sensor and telescopic sensor.
 NG >> Repair or replace harness between automatic drive positioner control unit and tilt sensor and telescopic sensor.



AUTOMATIC DRIVE POSITIONER

NIS001VF

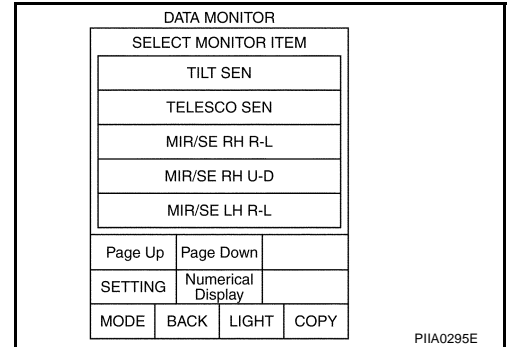
Check Tilt Sensor Circuit

1. CHECK TILT SENSOR

With CONSULT-II

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

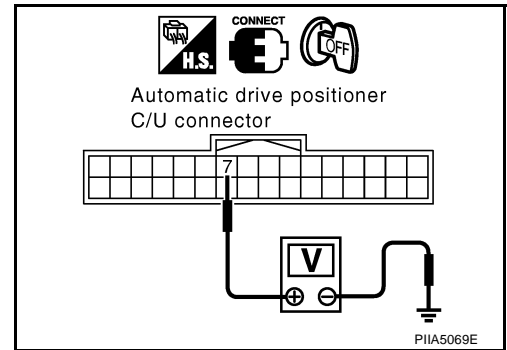
| Monitor item [OPERATION or UNIT] | Contents | |
|-------------------------------------|----------|------------------------------------------------------------------------------|
| TILT SEN | "V" | The tilt position (voltage) judged from the tilt sensor signal is displayed. |



Without CONSULT-II

1. Turn ignition switch OFF.
2. Check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|----------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 7 (Y/R) | Ground | Tilt top position | 2 |
| | | | Tilt bottom position | 4 |



OK or NG

- OK >> Tilt sensor circuit is OK.
 NG >> GO TO 2.

2. CHECK HARNESS

1. Disconnect automatic drive positioner control unit connector and tilt sensor and telescopic sensor connector.
2. Check continuity harness between automatic drive positioner control unit connector M49 terminals 7 and tilt sensor and telescopic sensor connector M28 terminals 2.

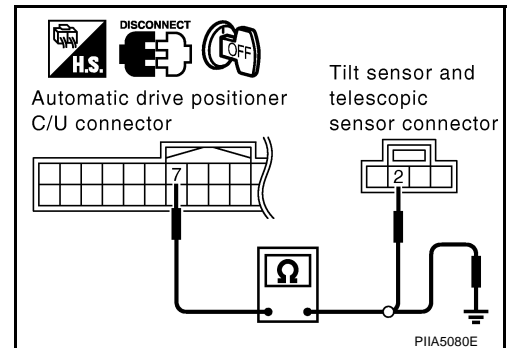
7 (Y/R) – 2 (Y/R) : Continuity should exist.

3. Check continuity harness between automatic drive positioner control unit connector M49 terminals 7 and ground.

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

OK or NG

- OK >> Replace tilt sensor and telescopic sensor.
 NG >> Repair or replace harness between automatic drive positioner control unit and tilt sensor and telescopic sensor.



AUTOMATIC DRIVE POSITIONER

NIS001VG

Check Driver Side Mirror Sensor Circuit

1. CHECK DOOR MIRROR FUNCTION

Check the following.
Operation malfunction in memory control

NOTE:

If a door mirror face position is set to an implausible angle, the set position may not be reproduced.

OK or NG

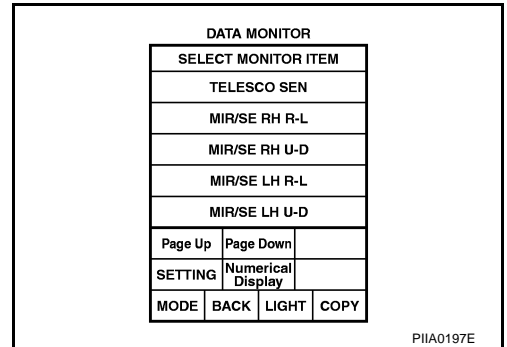
- OK >> GO TO 2.
- NG >> Repair the malfunctioning parts, and check the symptom again.

2. CHECK MIRROR SENSOR INSPECTION

With CONSULT-II

Make sure "ON" is displayed on "MIR/SE LH R-L, MIR/SE LH U-D" in the DATA MONITOR.

| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|-----|-------------------------------------------------------------------|
| MIR/SE LH R-L | "V" | Voltage output from LH door mirror sensor (LH/RH) is displayed. |
| MIR/SE LH U-D | "V" | Voltage output from LH door mirror sensor (UP/DOWN) is displayed. |



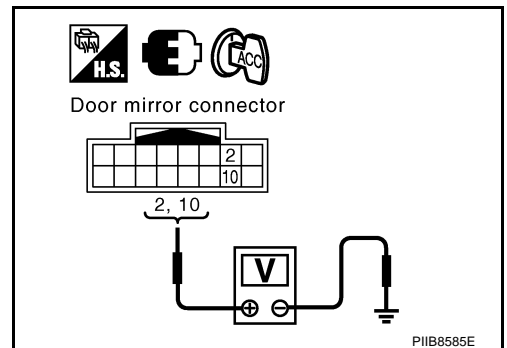
Without CONSULT-II

1. Turn ignition switch to ACC position.
2. Check voltage between door mirror (driver side) connector and ground.

| Con- nector | Terminals (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|------------------------|--------|---------------------------------------|------------------------------------------------------------------|
| | (+) | (-) | | |
| D2 | 2 (W) | Ground | When motor is UP or DOWN operation | Changes between 3 (close to perk) – 1 (close to valley) |
| | 10 (LG) | | When motor is LEFT or RIGHT operation | Changes between 3 (close to right edge) – 1 (close to left edge) |

OK or NG

- OK >> Driver side mirror sensor circuit is OK.
- NG >> GO TO 3.



AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY 1

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror (driver side) connector.
3. Check continuity between automatic drive positioner control unit connector M50 terminals 33, 41 and door mirror (driver side) connector D2 terminals 1, 9.

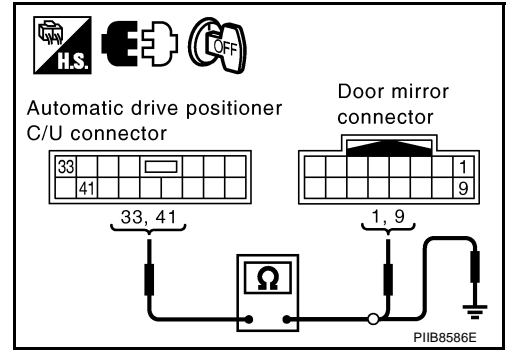
33 (G/W) – 1 (OR) : Continuity should exist.

41 (B/Y) – 9 (BR) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminals 33, 41 and ground.

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

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



OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side).

4. CHECK HARNESS CONTINUITY 2

1. Check continuity between automatic drive positioner control unit connector M49 terminal 6, 22 and door mirror (driver side) connector D2 terminal 2, 10.

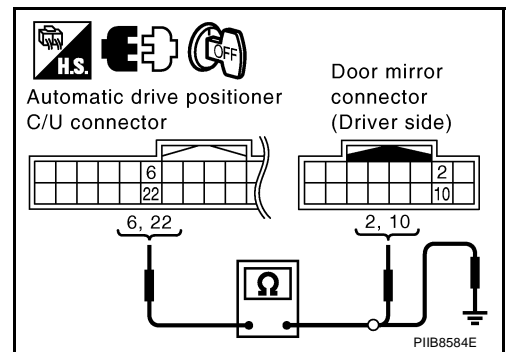
6 (P/L) – 2 (W) : Continuity should exist.

22 (L/Y) – 10 (LG) : Continuity should exist.

2. Check continuity between automatic drive positioner control unit connector M49 terminal 6, 22 and ground.

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

22 (L/Y) – Ground : Continuity should not exist.



OK or NG

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

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side).

Check Passenger Side Mirror Sensor Circuit

NIS001VH

1. CHECK DOOR MIRROR FUNCTION

Check the following.

Operation malfunction in memory control

NOTE:

If a door mirror face position is set to an implausible angle, the set position may not be reproduced.

OK or NG

OK >> GO TO 2.

NG >> Repair the malfunctioning parts, and check the symptom again.

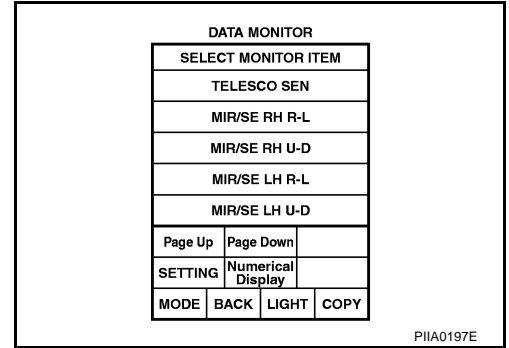
AUTOMATIC DRIVE POSITIONER

2. CHECK MIRROR SENSOR INSPECTION

With CONSULT-II

Make sure "ON" is displayed on "MIR/SE RH R-L, MIR/SE RH U-D" in the DATA MONITOR.

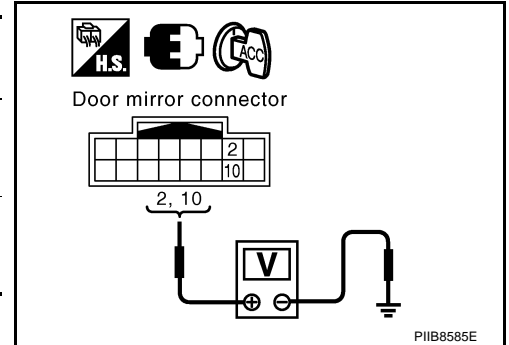
| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|-----|-------------------------------------------------------------------|
| MIR/SE RH R-L | "V" | Voltage output from RH door mirror sensor (LH/RH) is displayed. |
| MIR/SE RH U-D | "V" | Voltage output from RH door mirror sensor (UP/DOWN) is displayed. |



Without CONSULT-II

- Turn ignition switch to ACC position.
- Check voltage between door mirror (passenger side) connector and ground.

| Con- nector | Terminals (Wire color) | | Condition | Voltage (V) (Approx.) |
|----------------|------------------------|--------|---------------------------------------|------------------------------------------------------------------|
| | (+) | (-) | | |
| D32 | 2 (LG) | Ground | When motor is UP or DOWN operation | Changes between 3 (close to perk) – 1 (close to valley) |
| | 10 (P) | | When motor is LEFT or RIGHT operation | Changes between 1 (close to left edge) – 3 (close to right edge) |



OK or NG

- OK >> Passenger side mirror sensor circuit is OK.
 NG >> GO TO 3.

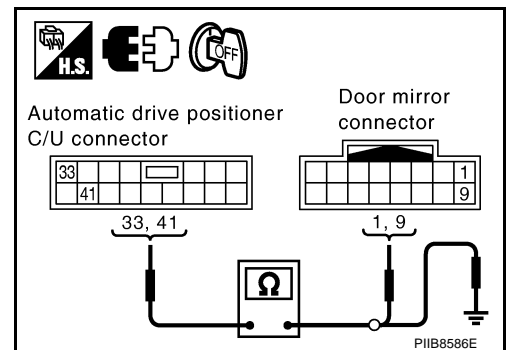
3. CHECK HARNESS CONTINUITY 1

- Disconnect automatic drive positioner control unit and door mirror (passenger side) connector.
- Check continuity between automatic drive positioner control unit connector M50 terminal 33, 41 and door mirror (passenger side) connector D32 terminal 1, 9.

- 33 (G/W) – 1 (BR) : Continuity should exist.**
41 (B/Y) – 9 (G) : Continuity should exist.

- Check continuity between automatic drive positioner control unit connector M50 terminals 33, 41 and ground.

- 33 (G/W) – Ground : Continuity should not exist.**
41 (B/Y) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (passenger side).

AUTOMATIC DRIVE POSITIONER

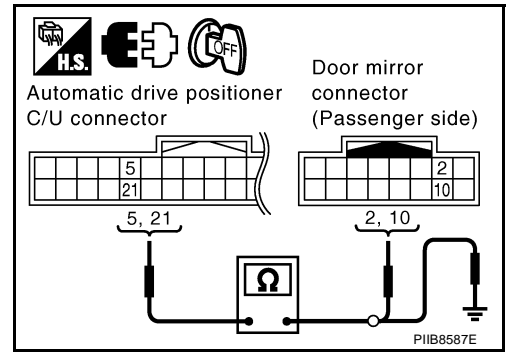
4. CHECK HARNESS CONTINUITY 2

1. Check continuity between automatic drive positioner control unit connector M49 terminal 5, 21 and door mirror (passenger side) connector D32 terminal 2, 10.

5 (OR) – 2 (LG) : Continuity should exist.
21 (G/Y) – 10 (P) : Continuity should exist.

2. Check continuity between automatic drive positioner control unit connector M49 terminal 5, 21 and ground.

5 (OR) – Ground : Continuity should not exist.
21 (G/Y) – Ground : Continuity should not exist.



OK or NG

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

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (passenger side).

Check Steering and Door Mirror Sensor Power Supply and Ground Circuit

NIS001VI

1. CHECK STEERING AND DOOR MIRROR SENSOR POWER SUPPLY

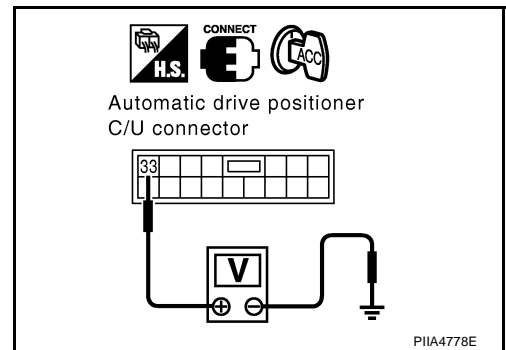
1. Turn ignition switch OFF.
2. Check voltage between automatic drive positioner control unit connector M50 terminal 33 and ground.

33 (G/W) – Ground : Approx. 5V

OK or NG

OK >> GO TO 2.

NG >> Replace automatic drive positioner control unit.



2. CHECK STEERING AND DOOR MIRROR SENSOR GROUND CIRCUIT

Check continuity between automatic drive positioner control unit connector M50 terminal 41 and ground.

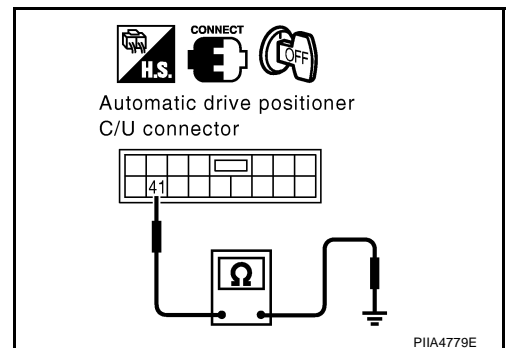
41 (B/Y) – Ground : Continuity should exist.

OK or NG

OK >> ● GO TO 3. (Door mirror sensor)

● GO TO 4. (Steering sensor)

NG >> Replace automatic drive positioner control unit.



AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY (DOOR MIRROR SENSOR)

1. Disconnect automatic drive positioner control unit and door mirror (driver side or passenger side) connector.
2. Check continuity between automatic drive positioner control unit connector M50 terminal 33, 41 and door mirror connector D2 (driver side) or D32 (passenger side) terminal 1, 9.

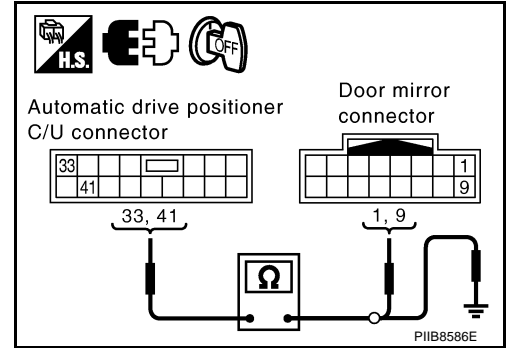
33 (G/W) – 1 (OR) : Continuity should exist.

41 (B/Y) – 9 (BR) : Continuity should exist.

3. Check continuity between automatic drive positioner control unit connector M50 terminal 33, 41 and ground.

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

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



OK or NG

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

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side or passenger side).

4. CHECK HARNESS CONTINUITY (STEERING SENSOR)

1. Disconnect automatic drive positioner control unit and tilt sensor and telescopic sensor connector.
2. Check continuity between automatic drive positioner control unit connector M50 terminal 33, 41 and tilt sensor and telescopic sensor connector M28 terminal 1, 4.

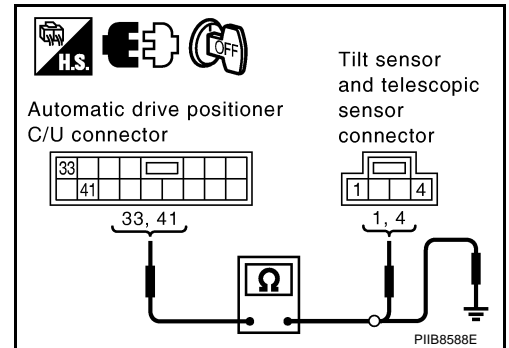
33 (G/W) – 1 (G/W) : Continuity should exist.

41 (B/Y) – 4 (B/Y) : Continuity should exist.

3. Check continuity between automatic drive positioner control unit connector M50 terminal 33, 41 and ground.

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

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



OK or NG

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

NG >> Repair or replace harness between automatic drive positioner control unit and tilt sensor and telescopic sensor.

Check Front Door Switch (Driver Side) Circuit

NIS001VJ

1. CHECK FUNCTION (WITH CONSULT-II)

With CONSULT-II

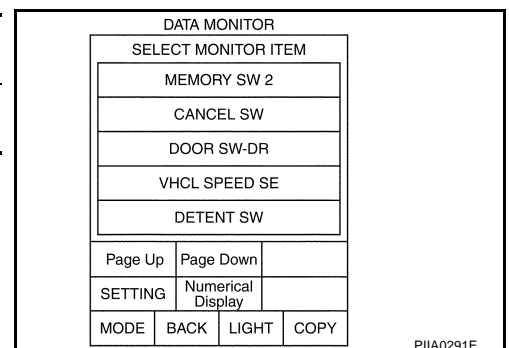
Touch "BCM" with "DOOR SW-DR" on the DATA MONITOR, check ON/OFF operation when the driver door is open and closed. *: Refer to [BL-37, "Data Monitor"](#).

| 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. |

OK or NG

OK >> Front door switch (driver side) circuit is OK.

NG >> GO TO 2.



PIIA0291E

AUTOMATIC DRIVE POSITIONER

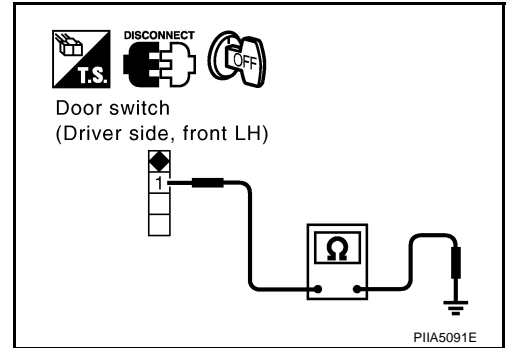
2. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

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

| Terminals | | Door switch | Continuity |
|-----------|----------------------------|-------------|------------|
| 1 | Ground part of door switch | Pushed | No |
| | | Released | Yes |

OK or NG

- OK >> GO TO 3.
 NG >> Replace front door switch (driver side).



3. CHECK FRONT DOOR (DRIVER SIDE) HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector B14 terminal 62 and front door switch connector B26 terminal 1.

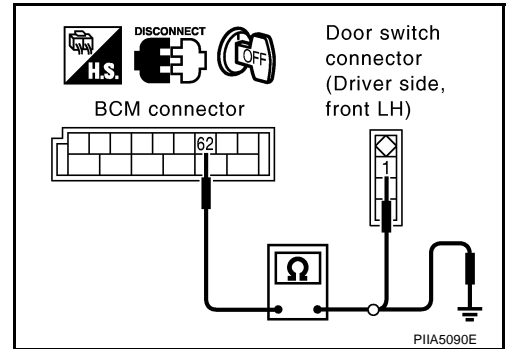
62 (W) – 1 (W) : Continuity should exist.

3. Check continuity between BCM connector B14 terminal 62 and ground.

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

OK or NG

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



AUTOMATIC DRIVE POSITIONER

NIS001VK

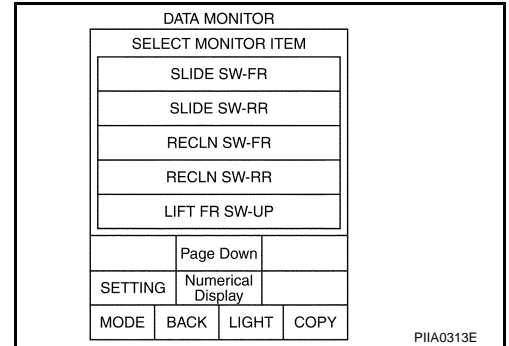
Check Sliding Switch Circuit

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.

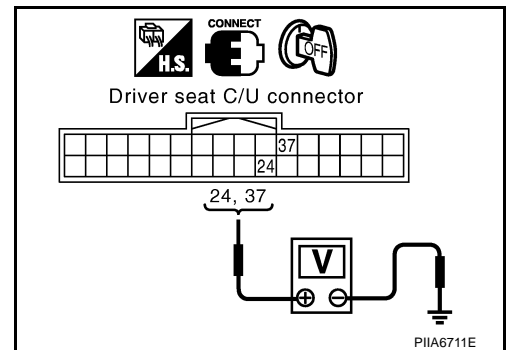
| Monitor item [OPERATION or UNIT] | Contents | |
|-------------------------------------|--------------|------------------------------------------------------------------------|
| SLIDE SW - FR | "ON/ OFF" | ON/OFF status judged from the sliding switch (FR) signal is displayed. |
| SLIDE SW - RR | "ON/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



Without CONSULT-II

- Turn ignition switch OFF.
- Sliding switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Sliding switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|--------------------------|--------------------------|
| | (+) | (-) | | |
| B152 | 24 (L/R) | Ground | FORWARD | 0 |
| | | | Other than above | Battery voltage |
| | 37 (W) | | BACKWARD | 0 |
| | | | Other than above | Battery voltage |



OK or NG

- OK >> Sliding switch circuit is OK.
 NG >> GO TO 2.

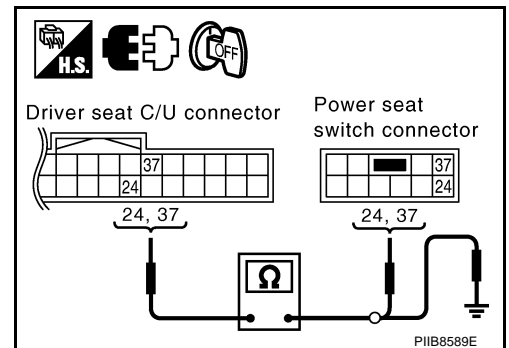
2. CHECK HARNESS CONTINUITY

- Disconnect driver seat control unit connector and power seat switch connector.
- Check continuity between driver seat control unit connector B152 terminals 24, 37 and power seat switch connector B175 terminals 24, 37.

24 (L/R) - 24 (L/R) : Continuity should exist.
37 (W) - 37 (W) : Continuity should exist.

- Check continuity between driver seat control unit connector B152 terminals 24, 37 and ground.

24 (L/R) - Ground : Continuity should not exist.
37 (W) - Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between driver seat control unit and power seat switch.

AUTOMATIC DRIVE POSITIONER

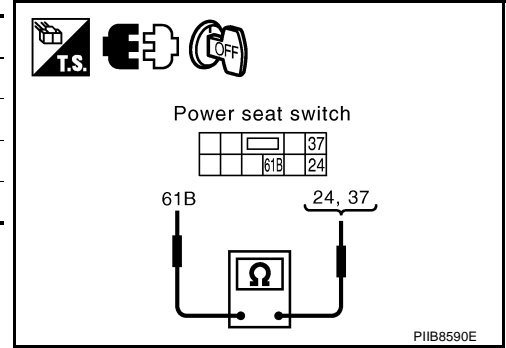
3. CHECK SLIDING SWITCH

Sliding switch operate, check continuity between power seat switch connector B175 terminal 24, 27 and 61B.

| Connector | Terminal | Sliding switch condition | Continuity |
|-----------|----------|--------------------------|------------|
| B175 | 24 | FORWARD | Yes |
| | | Other than above | No |
| | 37 | BACKWARD | Yes |
| | | Other than above | No |

OK or NG

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



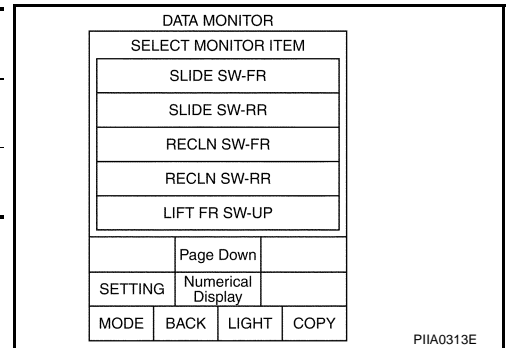
Check Reclining Switch Circuit

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. |
| RECLN SW - RR | "ON/OFF" ON/OFF status judged from the reclining switch (RR) signal is displayed. |



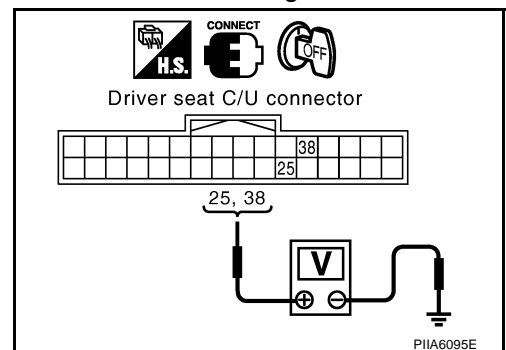
Without CONSULT-II

1. Turn ignition switch OFF.
2. Reclining switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Reclining switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-------------------------------|--------------------------|
| | (+) | (-) | | |
| B152 | 25 (L/OR) | Ground | FORWARD | 0 |
| | | | Other than above | Battery voltage |
| | 38 (LG/B) | | BACKWARD | 0 |
| | | | Other than above | Battery voltage |

OK or NG

- OK >> Reclining switch circuit is OK.
- NG >> GO TO 2.



AUTOMATIC DRIVE POSITIONER

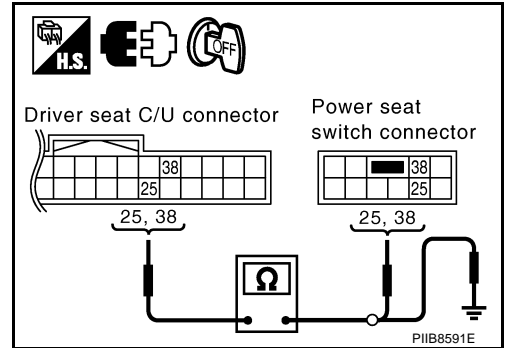
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 25, 38 and power seat switch connector B175 terminals 25, 38.

25 (L/OR) – 25 (L/OR) : Continuity should exist.
38 (LG/B) – 38 (LG/B) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 25, 38 and ground.

25 (LO/R) – Ground : Continuity should not exist.
38 (LG/B) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 3.

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

3. CHECK RECLINING SWITCH

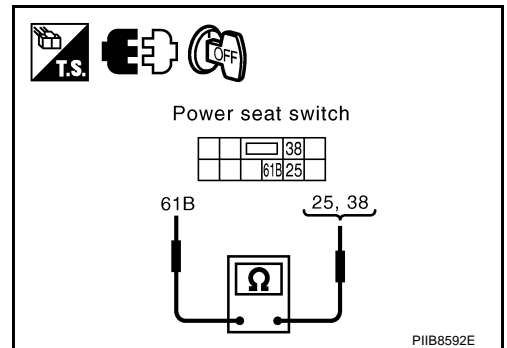
Reclining switch operate, check continuity between power seat switch connector B175 terminal 25, 38 and 61B.

| Connector | Terminal | Reclining switch condition | Continuity |
|-----------|----------|----------------------------|------------|
| B175 | 25 | FORWARD | Yes |
| | | Other than above | No |
| | 38 | BACKWARD | Yes |
| | | Other than above | No |

OK or NG

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

NG >> Replace power seat switch.



A
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AUTOMATIC DRIVE POSITIONER

NIS001VM

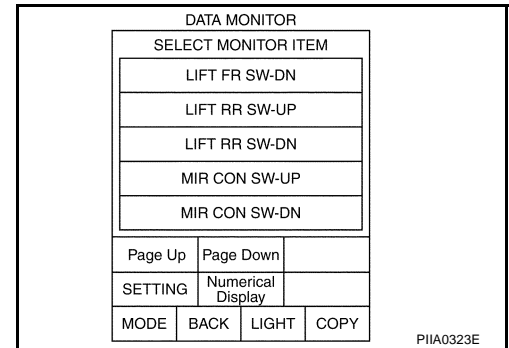
Check Front Lifting Switch Circuit

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.

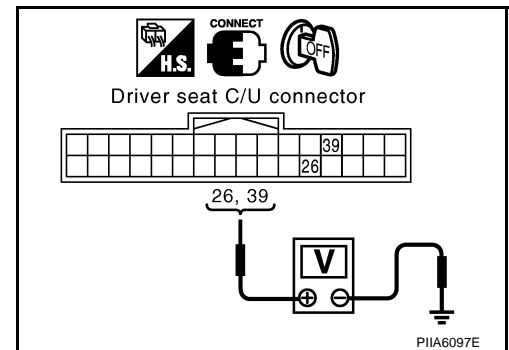
| Monitor item [OPERATION or UNIT] | Contents | |
|-------------------------------------|--------------|----------------------------------------------------------------------------|
| LIFT FR SW – DN | "ON/ OFF" | ON/OFF status judged from the FR lifter switch (DOWN) signal is displayed. |
| LIFT RR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



Without CONSULT-II

1. Turn ignition switch OFF.
2. Front lifting switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Front lifting switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-----------------------------------|--------------------------|
| | (+) | (-) | | |
| B152 | 26 (L/P) | Ground | UP | 0 |
| | | | Other than above | Battery voltage |
| | 39 (L/G) | | DOWN | 0 |
| | | | Other than above | Battery voltage |



OK or NG

- OK >> Front lifting switch circuit is OK.
 NG >> GO TO 2.

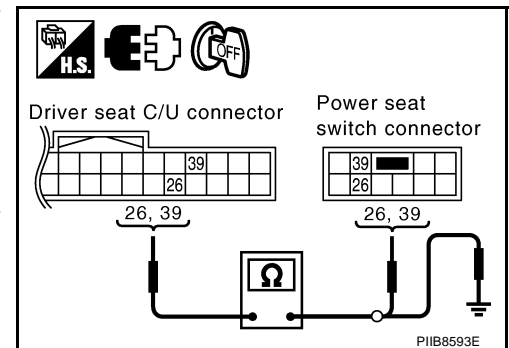
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 26, 39 and power seat switch connector B175 terminals 26, 39.

- 26 (L/P) – 26 (L/P) : Continuity should exist.**
39 (L/G) – 39 (L/G) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 26, 39 and ground

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



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between driver seat control unit and power seat switch.

AUTOMATIC DRIVE POSITIONER

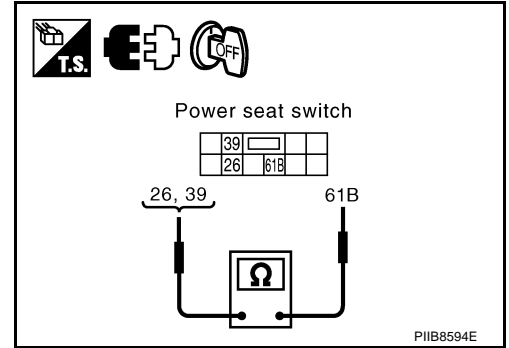
3. CHECK FRONT LIFTING SWITCH

Front lifting switch operate, check continuity between power seat switch connector B175 terminal 26, 39 and 61B.

| Connector | Terminals | | Front lifting switch condition | Continuity |
|-----------|-----------|-----|--------------------------------|------------|
| B175 | 26 | 61B | UP | Yes |
| | | | Other than above | No |
| | 39 | | DOWN | Yes |
| | | | Other than above | No |

OK or NG

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



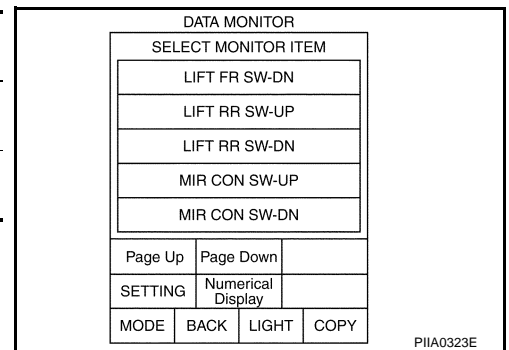
Check Rear Lifting Switch Circuit

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" | (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. |



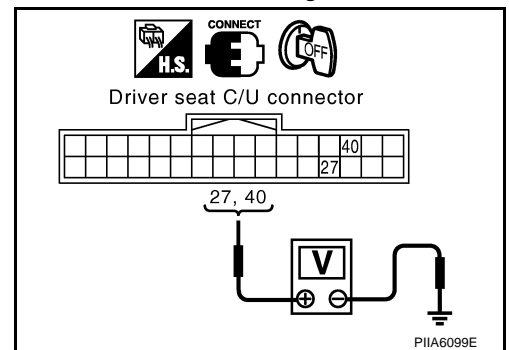
Without CONSULT-II

1. Turn ignition switch OFF.
2. Rear lifting switch operate, check voltage between driver seat control unit connector and ground.

| Connector | Terminals (Wire color) | | Rear lifting switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|----------------------------------|--------------------------|
| | (+) | (-) | | |
| B152 | 27 (L) | Ground | UP | 0 |
| | | | Other than above | Battery voltage |
| | 40 (L/Y) | | DOWN | 0 |
| | | | Other than above | Battery voltage |

OK or NG

- OK >> Rear seat lifting switch circuit is OK.
- NG >> GO TO 2.



AUTOMATIC DRIVE POSITIONER

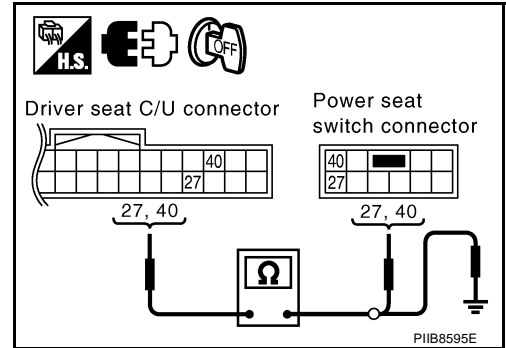
2. CHECK REAR LIFTING SWITCH HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 27, 40 and power seat switch connector B175 terminals 27, 40.

27 (L) – 27 (L) : Continuity should exist.
40 (L/Y) – 40 (L/Y) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 27, 40 and ground.

27 (L) – Ground : Continuity should not exist.
40 (L/Y) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between driver seat control unit and power seat switch.

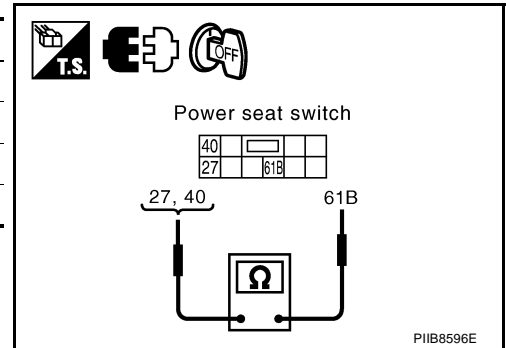
3. CHECK REAR LIFTING SWITCH

Rear lifting switch operate, check continuity between power seat switch connector B175 terminal 27, 40 and 61B.

| Connector | Terminal | | Rear lifting switch condition | Continuity |
|-----------|----------|-----|-------------------------------|------------|
| B175 | 27 | 61B | UP | Yes |
| | | | Other than above | No |
| | 40 | | DOWN | Yes |
| | | | Other than above | No |

OK or NG

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



Check Power Seat Switch Ground Circuit

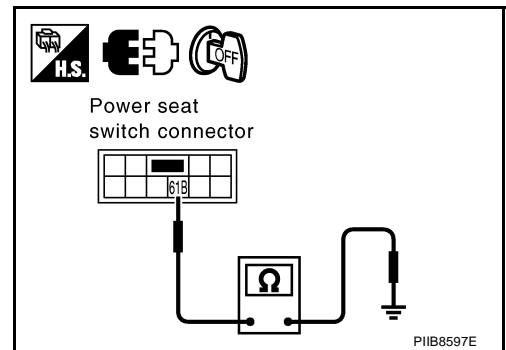
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Check continuity between power seat switch connector B175 terminal 61B and ground.

61B (B/Y) – Ground : Continuity should exist.

OK or NG

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



AUTOMATIC DRIVE POSITIONER

NIS001VQ

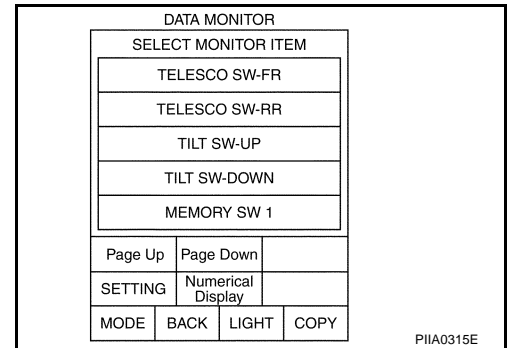
Check Telescopic Switch Circuit

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.

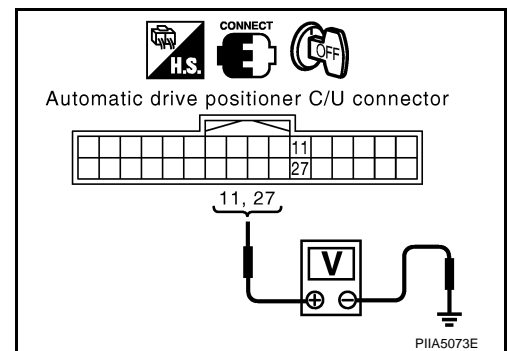
| Monitor item [OPERATION or UNIT] | Contents |
|-------------------------------------|---------------------------------------------------------------------------------------|
| TELESCO SW-FR | "ON/OFF" (ON/OFF) status judged from the telescoping switch (FR) signal is displayed. |
| TELESCO SW-RR | "ON/OFF"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



Without CONSULT-II

- Turn ignition switch OFF.
- Telescopic switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Telescopic switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-----------------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 11 (BR) | Ground | FORWARD | 0 |
| | | | Other than above | 5 |
| | 27 (LG) | | BACKWARD | 0 |
| | | | Other than above | 5 |



OK or NG

- OK >> Telescopic switch circuit is OK.
 NG >> GO TO 2.

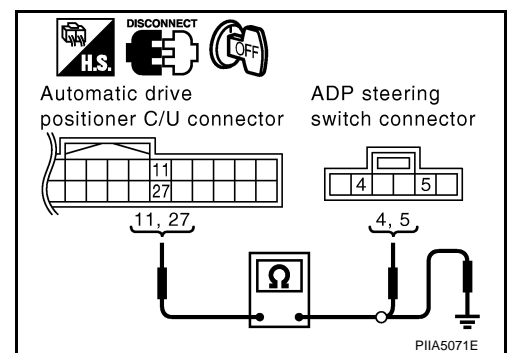
2. CHECK TELESCOPIC CIRCUIT HARNESS CONTINUITY

- Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
- Check continuity between automatic drive positioner control unit connector M49 terminals 11, 27 and ADP steering switch connector M13 terminals 4, 5.

- 11 (BR) – 5 (BR) : Continuity should exist.**
27 (LG) – 4 (LG) : Continuity should exist.

- Check continuity between automatic drive positioner control unit connector M49 terminals 11, 27 and ground.

- 11 (BR) – Ground : Continuity should not exist.**
27 (LG) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between automatic drive positioner control unit and ADP steering switch.

AUTOMATIC DRIVE POSITIONER

3. CHECK TELESCOPIC SWITCH

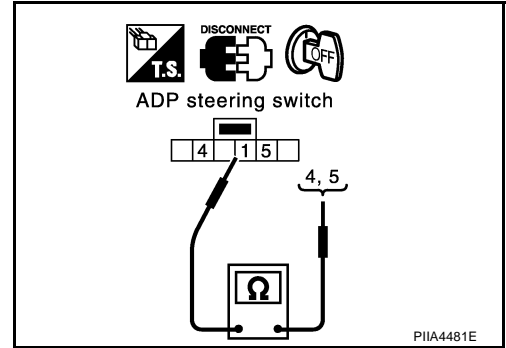
ADP steering switch operate, check continuity between ADP steering switch connector M13 terminal 4, 5 and 1.

| Connector | Terminal | ADP steering switch condition | Continuity |
|-----------|----------|-------------------------------|------------|
| M13 | 5 | FORWARD | Yes |
| | | Other than above | No |
| | 4 | BACKWARD | Yes |
| | | Other than above | No |

OK or NG

OK >> GO TO 4.

NG >> Replace ADP steering switch.



4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

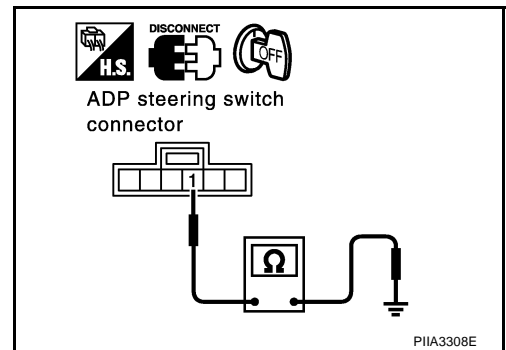
Check continuity between ADP steering switch connector M13 terminal 1 and ground.

1 (B) – Ground : Continuity should exist.

OK or NG

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

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



AUTOMATIC DRIVE POSITIONER

NIS001VR

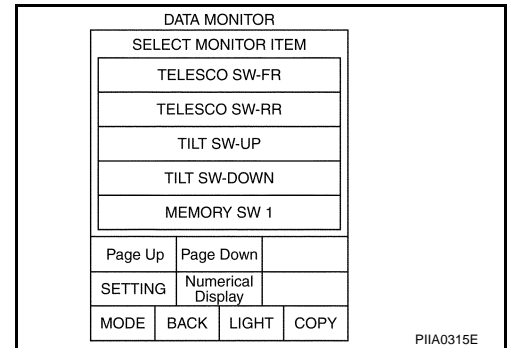
Check Tilt Switch Circuit

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.

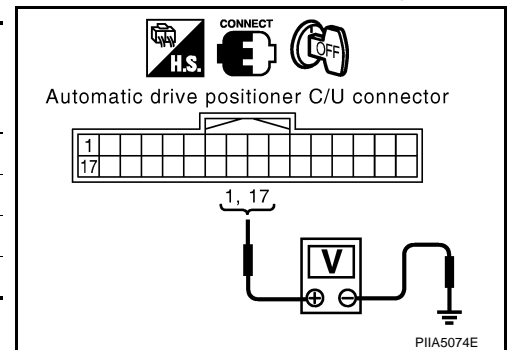
| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|----------|-------------------------------------------------------------------------|
| TILT SW-UP | "ON/OFF" | (ON/OFF) status judged from the tilt switch (UP) signal is displayed. |
| TILT SW-DOWN | "ON/OFF" |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



Without CONSULT-II

- Turn ignition switch OFF.
- Tilt switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Tilt switch condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|-----------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 1 (R) | Ground | UP | 0 |
| | | | Other than above | 5 |
| | 17 (R/B) | | DOWN | 0 |
| | | | Other than above | 5 |



OK or NG

- OK >> Tilt switch circuit is OK.
 NG >> GO TO 2.

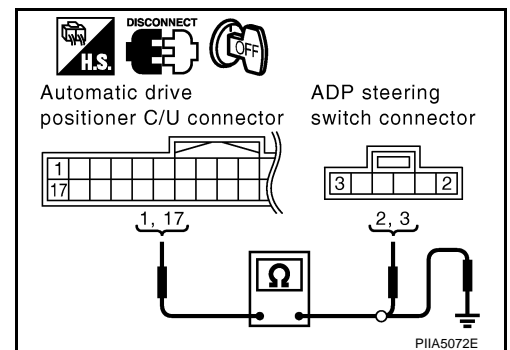
2. CHECK TILT SWITCH CIRCUIT HARNESS CONTINUITY

- Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
- Check continuity between automatic drive positioner control unit connector M49 terminals 1, 17 and ADP steering switch connector M13 terminals 2, 3.

- 1 (R) – 2 (R) : Continuity should exist.**
17 (R/B) – 3 (R/B) : Continuity should exist.

- Check continuity between automatic drive positioner control unit connector M49 terminals 1, 17 and ground.

- 1 (R) – Ground : Continuity should not exist.**
17 (R/B) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between automatic drive positioner control unit and ADP steering switch.

AUTOMATIC DRIVE POSITIONER

3. CHECK ADP TILT STEERING SWITCH

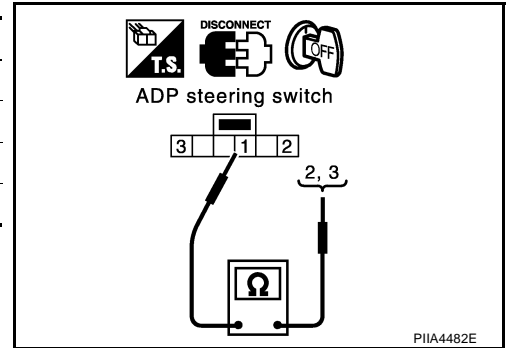
ADP steering switch operate, check continuity between ADP steering switch.

| Connector | Terminal | ADP steering switch condition | Continuity |
|-----------|----------|-------------------------------|------------|
| M13 | 2 | UP | Yes |
| | | Other than above | No |
| | 3 | DOWN | Yes |
| | | Other than above | No |

OK or NG

OK >> GO TO 6.

NG >> Replace ADP steering switch.



4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

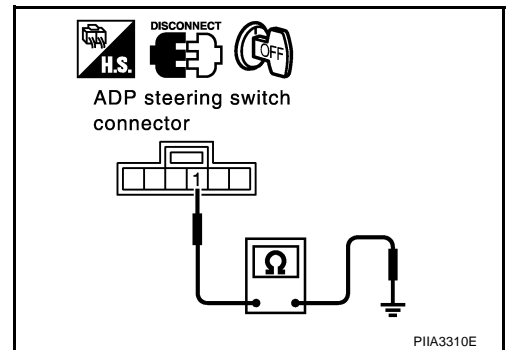
Check continuity between ADP steering switch connector M13 terminal 1 and ground.

1 (B) – Ground : Continuity should exist.

OK or NG

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

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



AUTOMATIC DRIVE POSITIONER

Check Door Mirror Remote Control Switch (Changeover Switch) Circuit

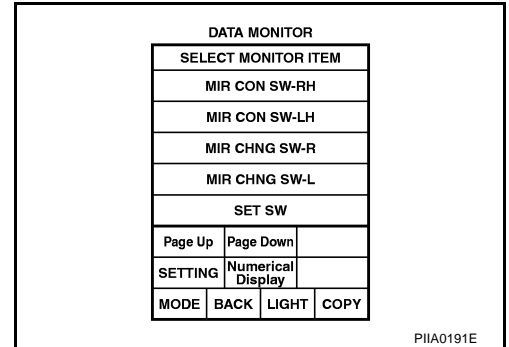
NIS001VS

1. CHECK FUNCTION

With CONSULT-II

Check the operation on "MIR CHNG SW-R" or "MIR CHNG SW-L" in the DATA MONITOR.

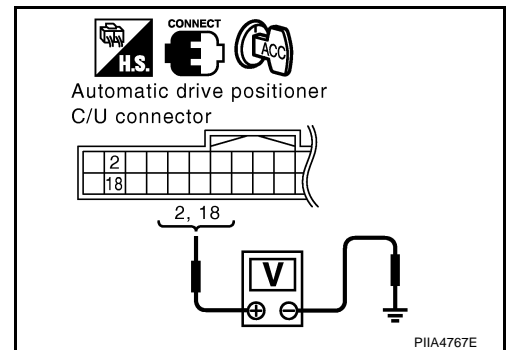
| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------|
| MIR CHNG SW-R | "ON/ OFF" | ON/OFF status judged from the door mirror remote control switch (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. |



Without CONSULT-II

1. Turn ignition switch ACC.
2. Changeover switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Changeover switch condition | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-----------------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 2 (G/W) | Ground | RIGHT | 0 |
| | | | Other than above | 5 |
| | 18 (L/OR) | | LEFT | 0 |
| | | | Other than above | 5 |



OK or NG

- OK >> Door mirror remote control switch (changeover switch) circuit is OK.
 NG >> GO TO 2.

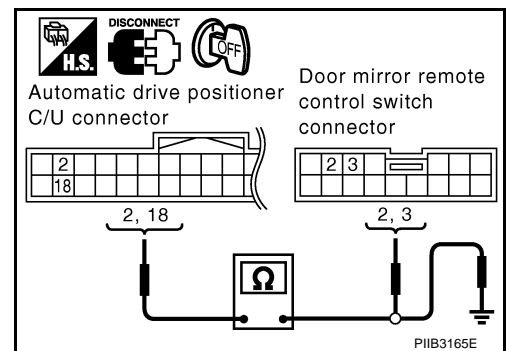
2. CHECK CHANGEOVER SWITCH CIRCUIT HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror remote control switch connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 2, 18 and door mirror remote control switch connector M18 terminal 2, 3.

2 (G/W) – 3 (G/W) : Continuity should exist.
18 (L/OR) – 2 (L/OR) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminal 2, 18 and ground.

2 (G/W) – Ground : Continuity should not exist.
18 (L/OR) – Ground : Continuity should not exist.



OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between automatic drive positioner control unit and door remote control switch.

AUTOMATIC DRIVE POSITIONER

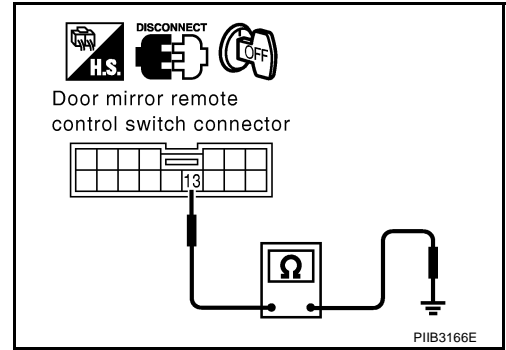
3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

Check continuity between door mirror remote control switch connector M18 terminal 13 and ground.

13 (B) – Ground : Continuity should exist.

OK or NG

- OK >> GO TO 4.
- NG >> Repair or replace harness.



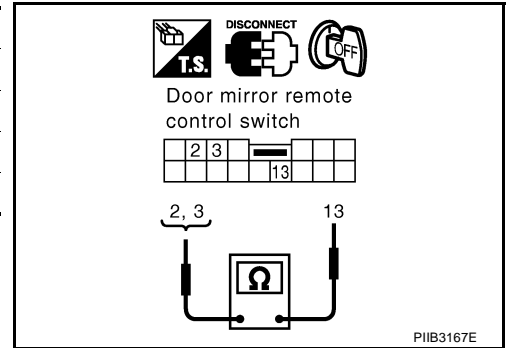
4. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (CANGEOVER SWITCH)

Changeover switch operate, check continuity between door mirror remote control switch connector M18 terminal 2, 3 and 13.

| Connector | Terminal | Changeover switch condition | Continuity |
|-----------|----------|-----------------------------|------------|
| M18 | 3 | RIGHT | Yes |
| | | Other than above | No |
| | 2 | LEFT | Yes |
| | | Other than above | No |

OK or NG

- OK >> Check the condition of the harness and the connector.
- NG >> Replace door mirror remote control switch.



AUTOMATIC DRIVE POSITIONER

Check Door Mirror Remote Control Switch (Mirror Switch) Circuit

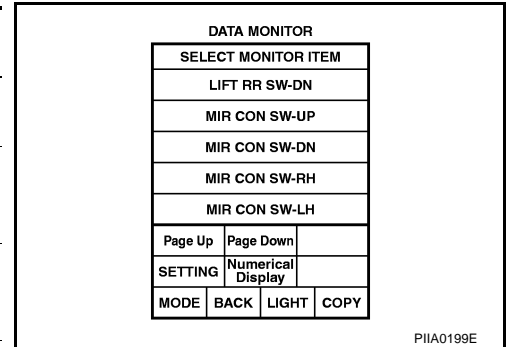
NIS001VT

1. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH) SIGNAL

With CONSULT-II

Check the operation on "MIR CON SW-UP/DN" and "MIR CON SW-RH/LH" in the DATA MONITOR.

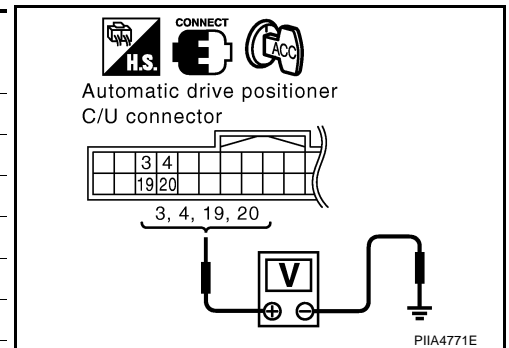
| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|--------------|----------------------------------------------------------------------------------------------|
| MIR CON SW-UP | "ON/ OFF" | ON/OFF status judged from the door mirror remote control switch (UP) signal 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. |
| MIR CON SW-LH | "ON/ OFF" | ON/OFF status judged from the door mirror remote control switch (LEFT) signal is displayed. |



Without CONSULT-II

- Turn ignition switch ACC.
- Mirror switch operate, check voltage between automatic drive positioner control unit connector and ground.

| Connector | Terminals (Wire color) | | Mirror switch condition | Voltage (V) (Approx.) |
|-----------|------------------------|--------|-------------------------|--------------------------|
| | (+) | (-) | | |
| M49 | 3 (GY) | Ground | UP | 0 |
| | | | Other than above | 5 |
| | 4 (Y) | | LEFT | 0 |
| | | | Other than above | 5 |
| | 19 (GY/L) | | DOWN | 0 |
| | | | Other than above | 5 |
| | 20 (PU) | | RIGHT | 0 |
| | | | Other than above | 5 |



OK or NG

- OK >> Door mirror remote control switch (mirror switch) circuit is OK.
- NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

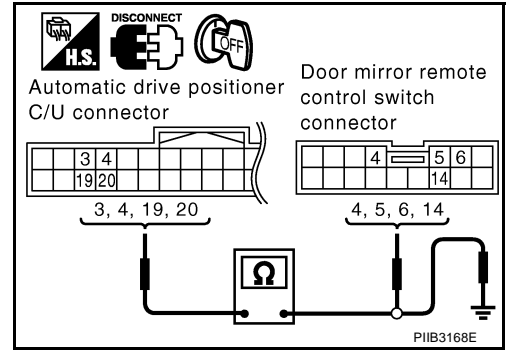
2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror remote control switch connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 3, 4, 19, 20 and door mirror remote control switch connector M18 terminal 4, 5, 6, 14.

- 3 (GY) – 6 (GY) : Continuity should exist.**
4 (Y) – 5 (Y) : Continuity should exist.
19 (GY/L) – 14 (GY/L) : Continuity should exist.
20 (PU) – 4 (PU) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminal 3, 4, 19, 20 and ground.

- 3 (GY) – Ground : Continuity should not exist.**
4 (Y) – Ground : Continuity should not exist.
19 (GY/L) – Ground : Continuity should not exist.
20 (PU) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness between automatic drive positioner control unit and door mirror remote control switch.

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

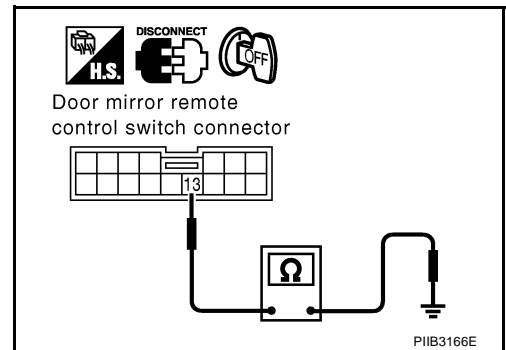
Check continuity between door mirror remote control switch connector M18 terminal 13 and ground.

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

OK or NG

OK >> GO TO 4.

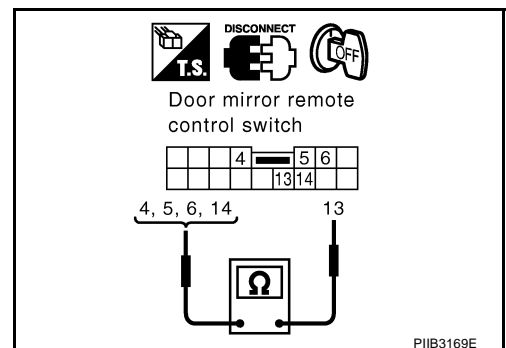
NG >> Repair or replace harness.



4. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH)

Mirror switch operate, check continuity between door mirror remote control switch connector M18 terminal 4, 5, 6, 14 and 13.

| Connector | Terminal | Mirror switch condition | Continuity |
|-----------|----------|-------------------------|------------|
| M18 | 4 | RIGHT | Yes |
| | | Other than above | No |
| | 5 | LEFT | Yes |
| | | Other than above | No |
| | 6 | UP | Yes |
| | | Other than above | No |
| | 14 | DOWN | Yes |
| | | Other than above | No |



OK or NG

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

NG >> Replace door mirror remote control switch.

AUTOMATIC DRIVE POSITIONER

Check A/T Device (Park Position Switch) Circuit

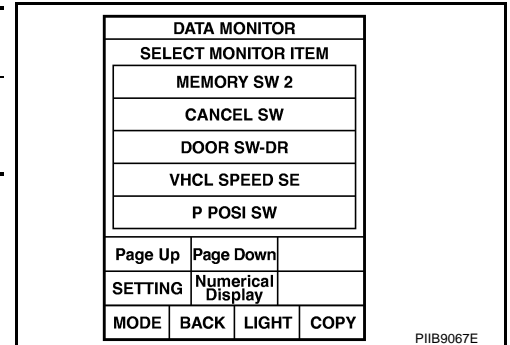
NIS001VU

1. CHECK FUNCTION

With CONSULT-II

Make sure when the A/T selector lever is in P position, "P POSI SW" on the DATA MONITOR becomes ON.

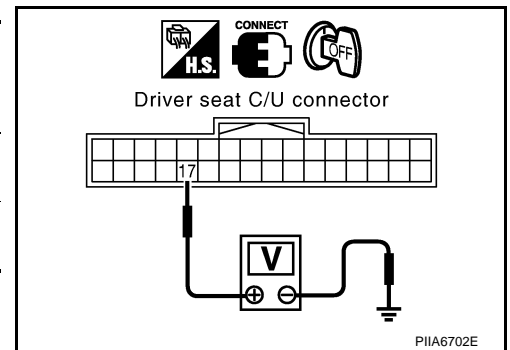
| Monitor item [OPERATION or UNIT] | | Contents |
|-------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------|
| P POSI SW | "ON/ OFF" | The selector lever position "P position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



Without CONSULT-II

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

| Connector | Terminals (Wire color) | | Condition | Voltage (V) (Approx.) |
|-----------|---------------------------|--------|---------------------------------------|--------------------------|
| | (+) | (-) | | |
| B152 | 17 (PU) | Ground | Selector lever sifted to P position. | 0 |
| | | | Selector lever other than P position. | Battery voltage |



OK or NG

- OK >> Park position switch circuit is OK.
 NG >> GO TO 2.

2. CHECK PARK POSITION SWITCH POWER SUPPLY CIRCUIT HARNESS

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector and A/T device (park position switch) connector.
- Check continuity between driver seat control unit connector B152 terminal 17 and A/T device (park position switch) connector M67 terminal 3.

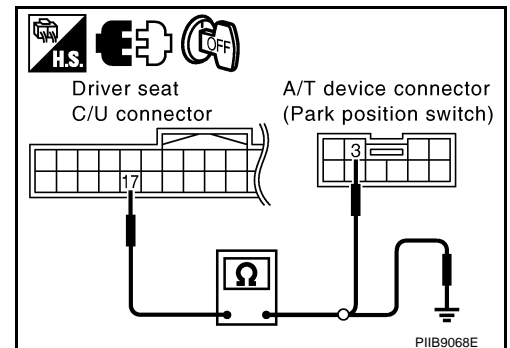
17 (PU) – 3 (R/Y) : Continuity should exist.

- Check continuity between driver seat control unit connector B152 terminal 17 and ground.

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

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between driver seat control unit and A/T device (park position switch).



AUTOMATIC DRIVE POSITIONER

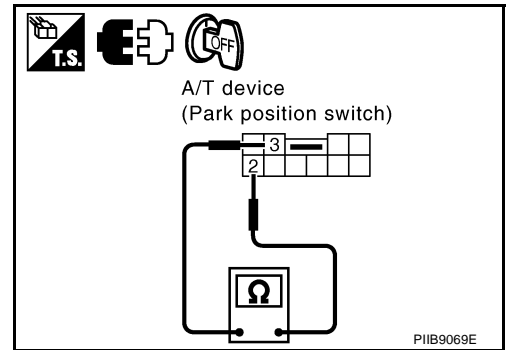
3. CHECK A/T DEVICE (PARK POSITION SWITCH)

Check continuity between A/T device (park position switch) connector M67 terminal 2 and 3.

| Connector | Terminal | | Condition | Continuity |
|-----------|----------|---|-----------------------|------------|
| M67 | 2 | 3 | P position | Yes |
| | | | Other than P position | No |

OK or NG

- OK >> GO TO 4.
- NG >> Replace A/T device (park position switch).



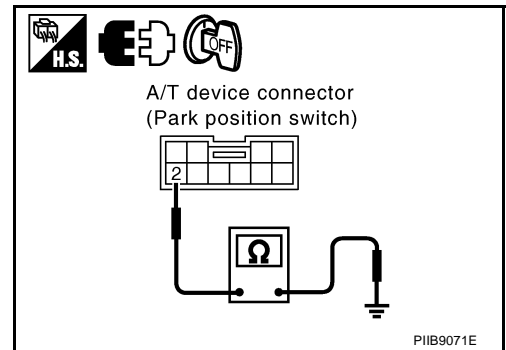
4. CHECK A/T DEVICE (PARK POSITION SWITCH) GROUND HARNESS

Check continuity between A/T device (park position switch) connector M67 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check the condition of the harness and connector.
- NG >> Repair or replace harness between A/T device (park position switch) and ground.



Check Key Switch Circuit (With Intelligent Key)

1. CHECK KEY SWITCH POWER SUPPLY CIRCUIT (WITH CONSULT-II)

With CONSULT-II

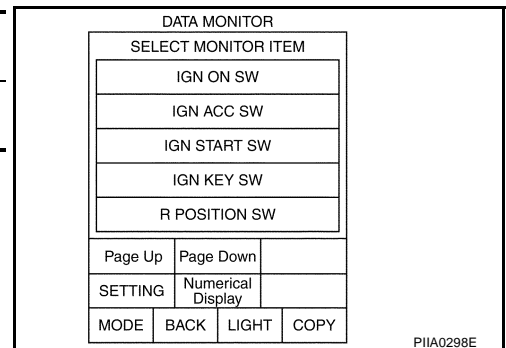
Touch "BCM". With "IGN KEY SW" on the DATA MONITOR, Check ON/OFF operation.

*: Refer to [BL-37, "Data Monitor"](#) .

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

OK or NG

- OK >> Key switch circuit is OK.
- NG >> GO TO 2.



AUTOMATIC DRIVE POSITIONER

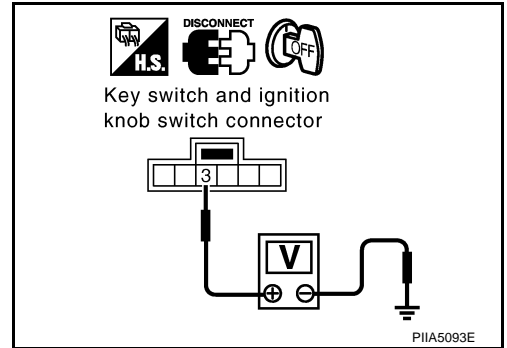
2. CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key switch and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M22 terminal 3 and ground.

3 (L/R) – Ground : Battery voltage.

OK or NG

- OK >> GO TO 3.
 NG >> Check harness between key switch and fuse.



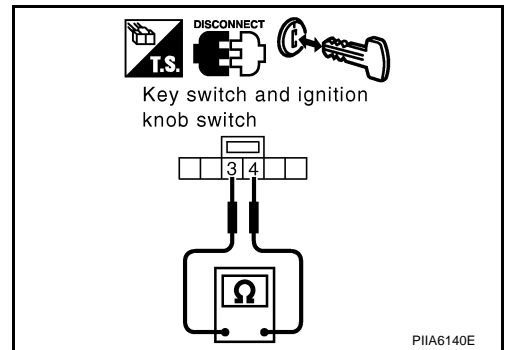
3. CHECK KEY SWITCH

Check continuity between key switch and ignition knob switch connector M22 terminal 3 and 4.

| Connector | Terminal | Condition | Continuity |
|-----------|----------|--------------------------------------------|------------|
| M22 | 3 4 | Key is inserted in ignition key cylinder. | Yes |
| | | Key is removed from ignition key cylinder. | No |

OK or NG

- OK >> GO TO 4.
 NG >> Replace key switch and ignition knob switch.



4. CHECK HARNESS CONTINUITY

1. Disconnect key switch and ignition knob switch connector and BCM connector.
2. Check continuity between key switch and ignition knob switch connector M22 terminal 4 and BCM connector M3 terminal 37.

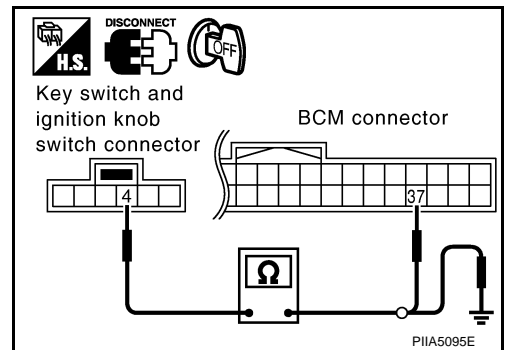
4 (B/W) – 37 (B/W) : Continuity should exist.

3. Check continuity between key switch and ignition knob switch connector M22 terminal 4 and ground.

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

OK or NG

- OK >> Key switch circuit is OK.
 NG >> Repair or replace harness between key switch and ignition knob switch and BCM.



AUTOMATIC DRIVE POSITIONER

NIS001VW

Check Key Switch Circuit (Without Intelligent Key)

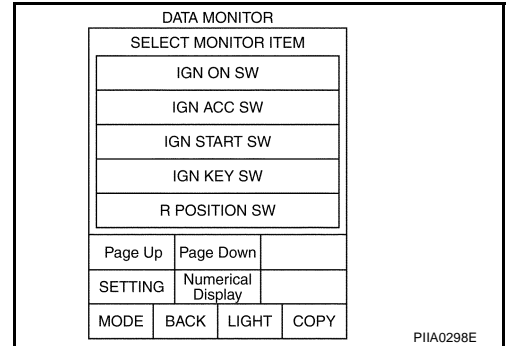
1. CHECK KEY SWITCH (WITH CONSULT-II)

With CONSULT-II

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

*: Refer to [BL-37, "Data Monitor"](#)

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



OK or NG

- OK >> Key switch circuit is OK.
- NG >> GO TO 2.

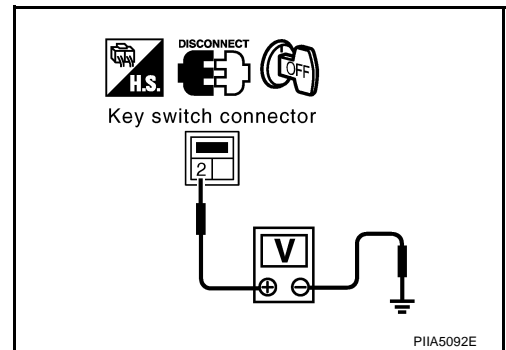
2. CHECK KEY SWITCH AND KEY LOCK SOLENOID POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key switch connector.
3. Check voltage between key switch connector M23 terminal 2 and ground.

2 (L/R) – Ground : Battery voltage.

OK or NG

- OK >> GO TO 3.
- NG >> Check harness between key switch and fuse.



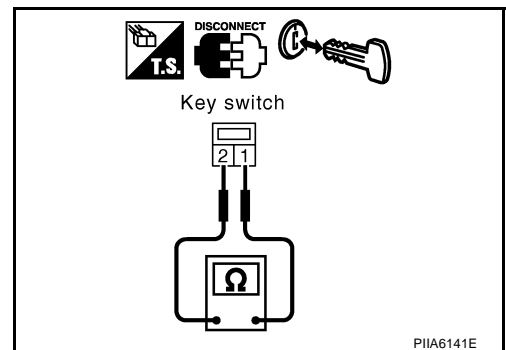
3. CHECK KEY SWITCH

Check continuity between key switch connector M23 terminal 1 and 2.

| Con- nector | Terminal | | Condition | Continuity |
|----------------|----------|---|--------------------------------------------|------------|
| M23 | 1 | 2 | Key is inserted in ignition key cylinder. | Yes |
| | | | Key is removed from ignition key cylinder. | No |

OK or NG

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



AUTOMATIC DRIVE POSITIONER

4. CHECK HARNESS CONTINUITY

1. Disconnect key switch connector and BCM connector.
2. Check continuity between key switch connector M23 terminal 1 and BCM connector M3 terminal 37.

1 (B/W) – 37 (B/W) : Continuity should exist.

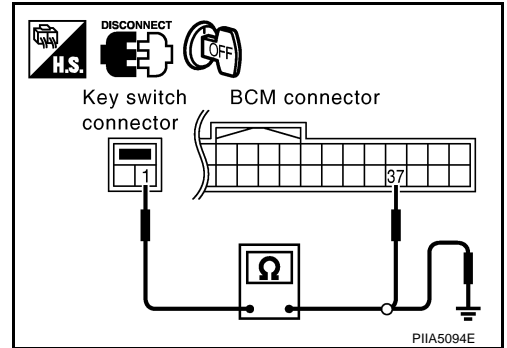
3. Check continuity between key switch connector M23 terminal 1 and ground.

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

OK or NG

OK >> Key switch circuit is OK.

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



Check Seat Memory Switch Circuit

NIS001VX

1. CHECK FUNCTION (WITH CONSULT-II)

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. |

DATA MONITOR

| | | | |
|---------------|--|-----|--|
| MONITOR | | | |
| SLIDE SW-FR | | OFF | |
| SLIDE SW-RR | | OFF | |
| RECLN SW-FR | | OFF | |
| RECLN SW-RR | | OFF | |
| LIFT FR SW-UP | | OFF | |
| LIFT FR SW-DN | | OFF | |
| LIFT RR SW-UP | | OFF | |
| LIFT RR SW-DN | | OFF | |
| SET SW | | OFF | |

| | | | |
|------|------|-----------|------|
| | | Page Down | |
| | | RECORD | |
| MODE | BACK | LIGHT | COPY |

DATA MONITOR

| | | | |
|---------------|--|-------|--|
| MONITOR | | | |
| TELESCO SW-FR | | OFF | |
| TELESCO SW-RR | | OFF | |
| TILT SW-UP | | OFF | |
| TILT SW-DOWN | | OFF | |
| MEMORY SW 1 | | OFF | |
| MEMORY SW 2 | | OFF | |
| CANCEL SW | | OFF | |
| DOOR SW-DR | | OFF | |
| VHCL SPEED SE | | <7km/ | |

| | | | | | |
|------|------|---------|------|-----------|--|
| | | Page Up | | Page Down | |
| | | RECORD | | | |
| MODE | BACK | LIGHT | COPY | | |

PIIA0309E

OK or NG

OK >> Seat memory switch circuit is OK.

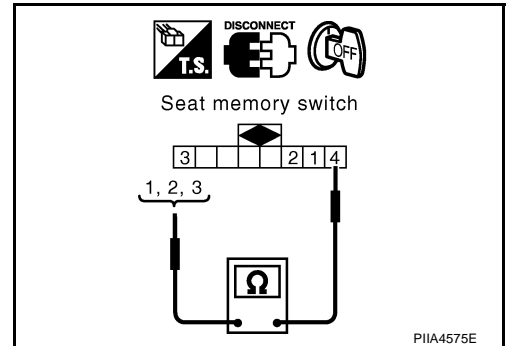
NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

2. CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch connector D22 terminal 1, 2, 3 and 4.

| Connector | Terminals | Condition | Continuity |
|-----------|-----------|----------------------|------------|
| D22 | 1 | Memory switch 1: ON | Yes |
| | | Memory switch 1: OFF | No |
| | 2 | Memory switch 2: ON | Yes |
| | | Memory switch 2: OFF | No |
| | 3 | Set switch: ON | Yes |
| | | Set switch: OFF | No |



OK or NG

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

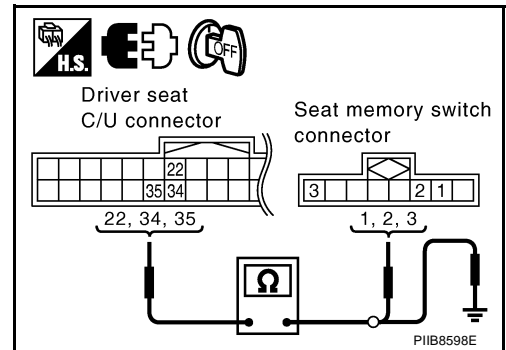
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B152 terminals 22, 34, 35 and seat memory switch connector D22 terminals 1, 2, 3.

- 22 (R/B) – 1 (P) : Continuity should exist.**
34 (L/W) – 3 (GY) : Continuity should exist.
35 (L/B) – 2 (LG) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 22, 34, 35 and ground.

- 22 (R/B) – Ground : Continuity should not exist.**
34 (L/W) – Ground : Continuity should not exist.
35 (L/B) – Ground : Continuity should not exist.



OK or NG

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

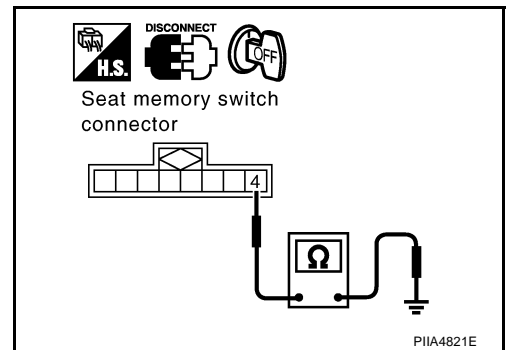
4. CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch connector D22 terminal 4 and ground.

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

OK or NG

- OK >> Replace driver seat control unit.
 NG >> Repair or replace harness between seat memory switch and ground.



AUTOMATIC DRIVE POSITIONER

NIS001VY

Check Seat Memory Indicator Lamp Circuit

1. CHECK FUNCTION (WITH CONSULT-II)

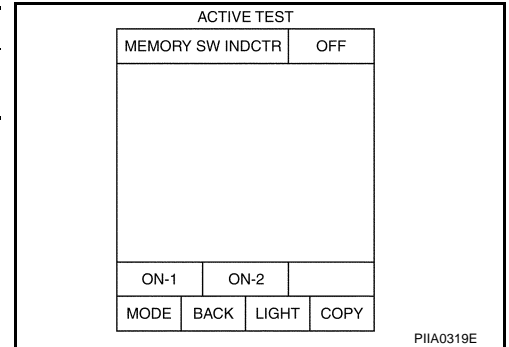
With CONSULT-II

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. |

OK or NG

- OK >> Seat memory indicator lamp circuit is OK.
 NG >> GO TO 2.



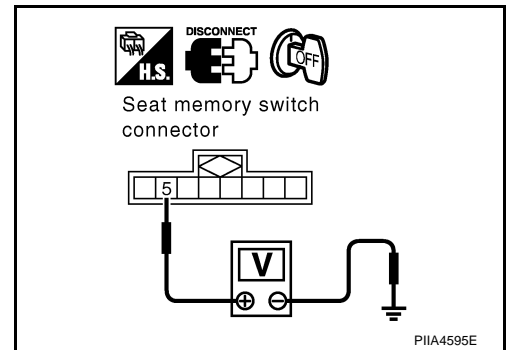
2. CHECK SEAT MEMORY SWITCH POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- Disconnect seat memory switch connector.
- Check voltage between seat memory switch connector D22 terminal 5 and ground.

5 (R) – Ground : Battery voltage

OK or NG

- OK >> GO TO 4.
 NG >> Repair or replace harness between fuse block (J/B) and seat memory switch.



3. CHECK HARNESS CONTINUITY

- Disconnect driver seat control unit connector.
- Check continuity between driver seat control unit connector B152 terminals 23, 36 and seat memory switch connector D22 terminals 6, 7.

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

36 (Y/G) – 7 (L) : Continuity should exist.

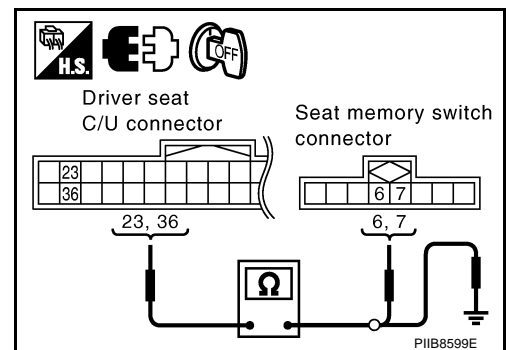
- Check continuity between driver seat control unit connector B152 terminals 23, 36 and ground.

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

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

OK or NG

- OK >> GO TO 5.
 NG >> Repair or replace harness between driver seat control unit and seat memory switch.



AUTOMATIC DRIVE POSITIONER

4. CHECK SEAT MEMORY SWITCH INDICATOR SIGNAL

Check voltage between driver seat control unit connector B152 terminals 23, 36 and ground.

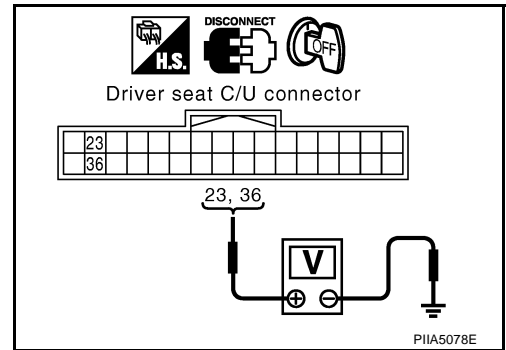
23 (Y/W) – Ground : Battery voltage

36 (Y/G) – Ground : Battery voltage

OK or NG

OK >> Seat memory indicator lamp circuit is OK.

NG >> Replace seat memory switch.



Check UART Communication Line Circuit

1. CHECK UART LINE HERNESS

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and automatic drive positioner control unit connector.
3. Check continuity between driver seat control unit connector B152 terminal 2, 8 and automatic drive positioner connector M49 terminal 10, 26.

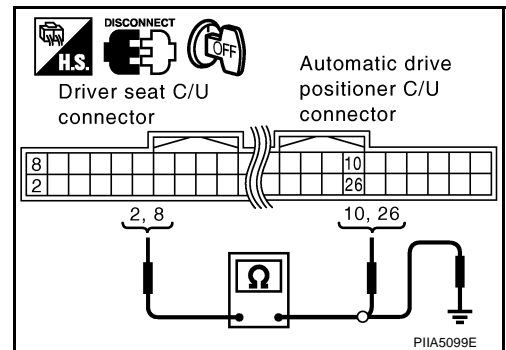
2 (P) – 26 (W) : Continuity should exist.

8 (G/Y) – 10 (B) : Continuity should exist.

4. Check continuity between driver seat control unit connector B152 terminal 2, 8 and ground.

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

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



OK or NG

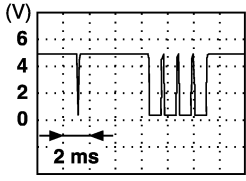
OK >> GO TO 2.

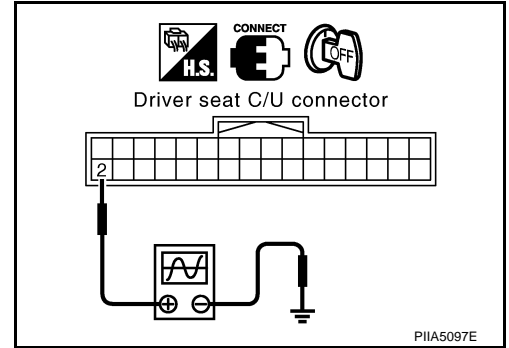
NG >> Repair or replace harness between driver seat control unit and automatic drive positioner control unit.

AUTOMATIC DRIVE POSITIONER

2. CHECK UART LINE SIGNAL 1

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

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|-------------------------------------|------------------------------------------------------------------------------------------------|
| | (+) | (-) | | |
| B152 | 2 (P) | Ground | Seat memory switch 1 or 2 operation |  PIIA4814E |



OK or NG

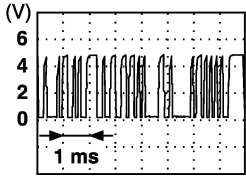
OK >> GO TO 3.

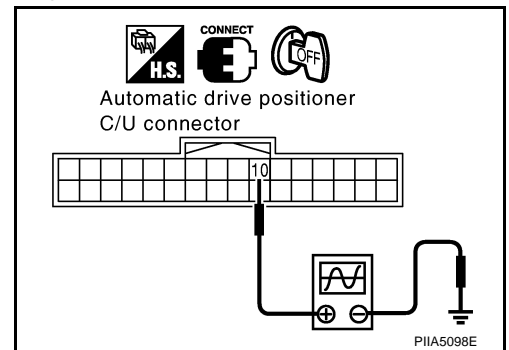
NG >> Check the flowing.

- When voltage signal dose not appear with a constant voltage (approx. 5V), replace driver seat control unit.
- When voltage signal dose not appear with a constant voltage (approx. 0V), replace automatic drive positioner control unit.

3. CHECK UART LINE SIGNAL 2

Check signal between automatic driver positioner control unit connector ground, with oscilloscope.

| Connector | Terminals (Wire color) | | Condition | Signal (Reference value) |
|-----------|---------------------------|--------|-------------------------------------|--------------------------------------------------------------------------------------------------|
| | (+) | (-) | | |
| M49 | 10 (B) | Ground | Seat memory switch 1 or 2 operation |  PIIA4813E |



OK or NG

OK >> GO TO 4.

NG >> Check the flowing.

- When voltage signal dose not appear with a constant voltage (approx. 5V), replace automatic driver seat control unit.
- When voltage signal dose not appear with a constant voltage (approx. 0V), replace driver seat control unit.

4. CHECK DRIVER SEAT CONTROL UNIT

Dose the automatic drive positioner operate, when the driver seat control unit exchanged?

Does seat memory function operate?

YES >> Replace automatic drive positioner control unit.

NG >> Replace driver seat control unit.

AUTOMATIC DRIVE POSITIONER

NIS001W0

Check Lumbar Support Circuit

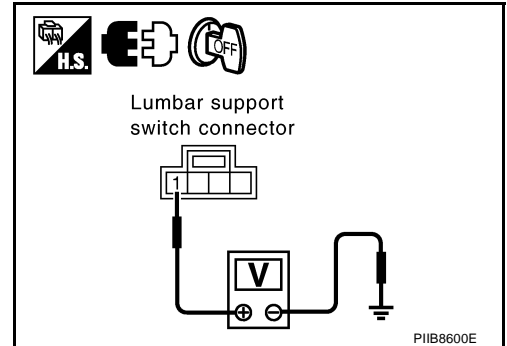
1. CHECK LUMBAR SUPPORT SWITCH

1. Turn ignition switch OFF.
2. Disconnect lumbar support switch connector.
3. Check voltage between lumbar support switch connector B158 terminal 1 and ground.

1 (R) – Ground: : Battery voltage

OK or NG

- OK >> GO TO 2.
 NG >> Repair or replace harness between fuse block (J/B) and lumbar support switch.



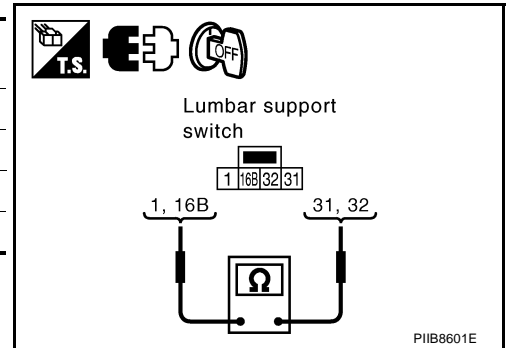
2. CHECK LUMBAR SUPPORT SWITCH

Lumbar support switch operate, check continuity lumbar support switch connector B158 terminal 31, 32 and 1, 16B.

| Con- nector | Terminal | | Lumbar support switch condition | Continuity |
|----------------|----------|-----|------------------------------------|------------|
| B158 | 31 | 1 | BACKWARD | Yes |
| | | 16B | Other than above | No |
| | 32 | 1 | FORWARD | Yes |
| | | 16B | Other than above | No |

OK or NG

- OK >> GO TO 3.
 NG >> Replace lumbar support switch.



3. CHECK LUMBAR SUPPORT MOTOR HARNESS

1. Disconnect lumbar support motor connector.
2. Check continuity between lumbar support switch connector B158 terminal 31, 32 and lumbar support motor connector B172 terminal 31, 32.

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

32 (L) – 32 (L) : Continuity should exist.

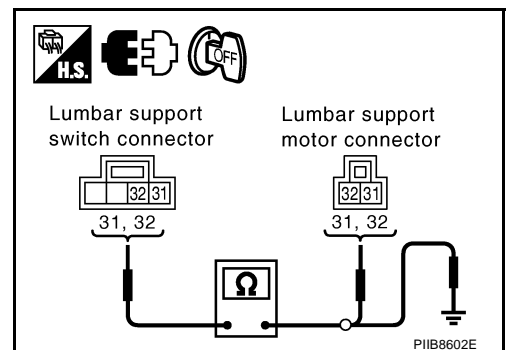
3. Check continuity between lumbar support switch connector B158 terminal 31, 32 and ground.

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

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

OK or NG

- OK >> GO TO 4.
 NG >> Repair or replace harness between lumbar support switch and lumbar support motor.



AUTOMATIC DRIVE POSITIONER

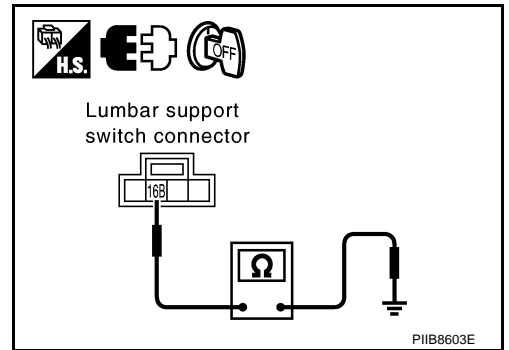
4. CHECK LUMBAR SUPPORT SWITCH GROUND CIRCUIT

Check continuity between lumbar support switch connector B158 terminal 16B and ground.

16B (B) – Ground : Continuity should exist.

OK or NG

- OK >> Check the condition of the harness and connector.
- NG >> Repair or replace harness between lumbar support switch and ground.



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

POWER SEAT

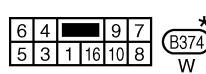
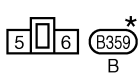
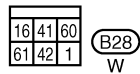
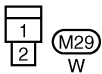
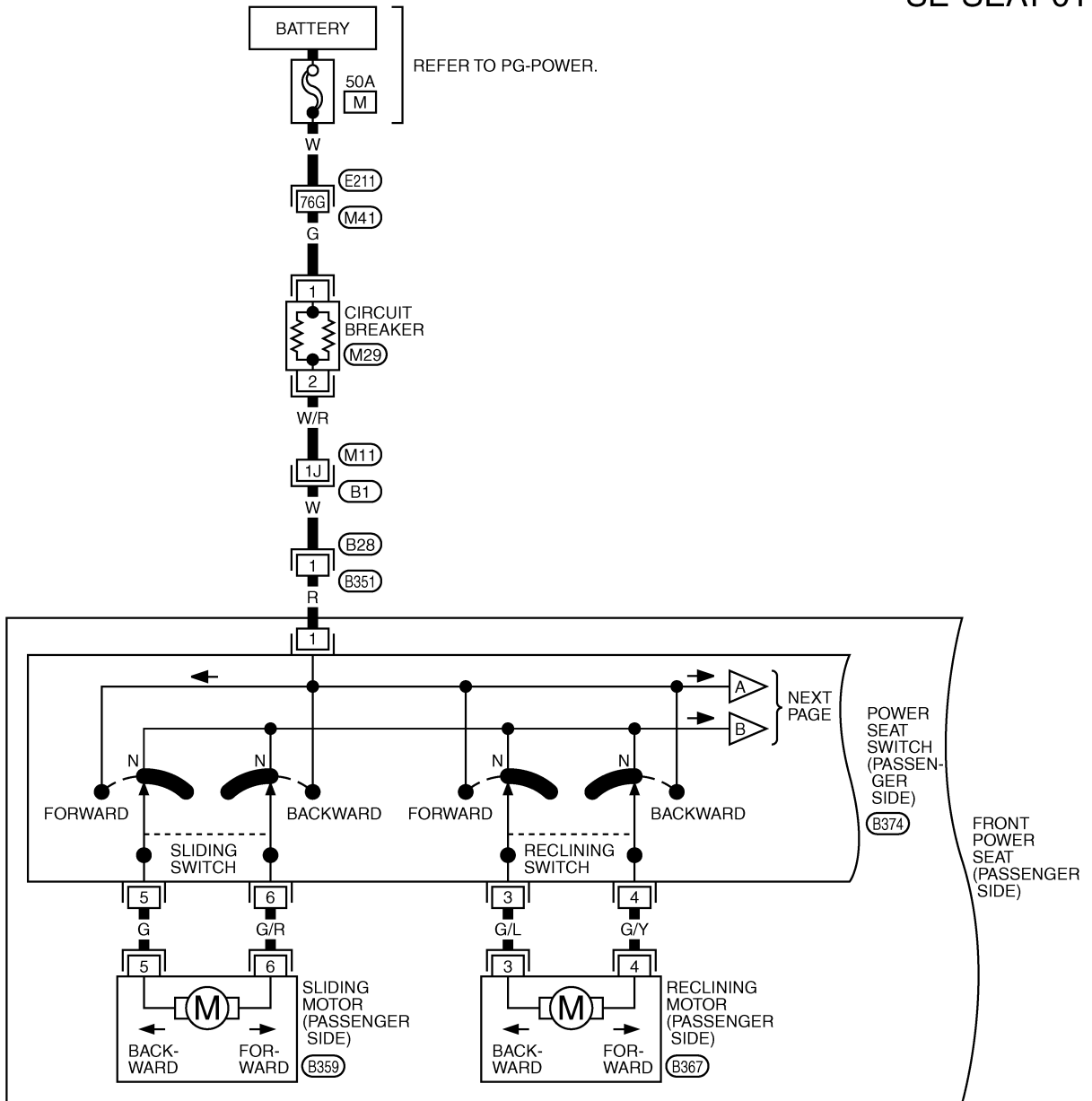
PFP:87016

NIS001W3

SE-SEAT-01

POWER SEAT

Wiring Diagram — SEAT —



REFER TO THE FOLLOWING.
 (E211), (B1) -SUPER MULTIPLE JUNCTION (SMJ)

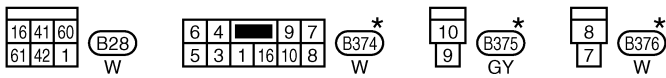
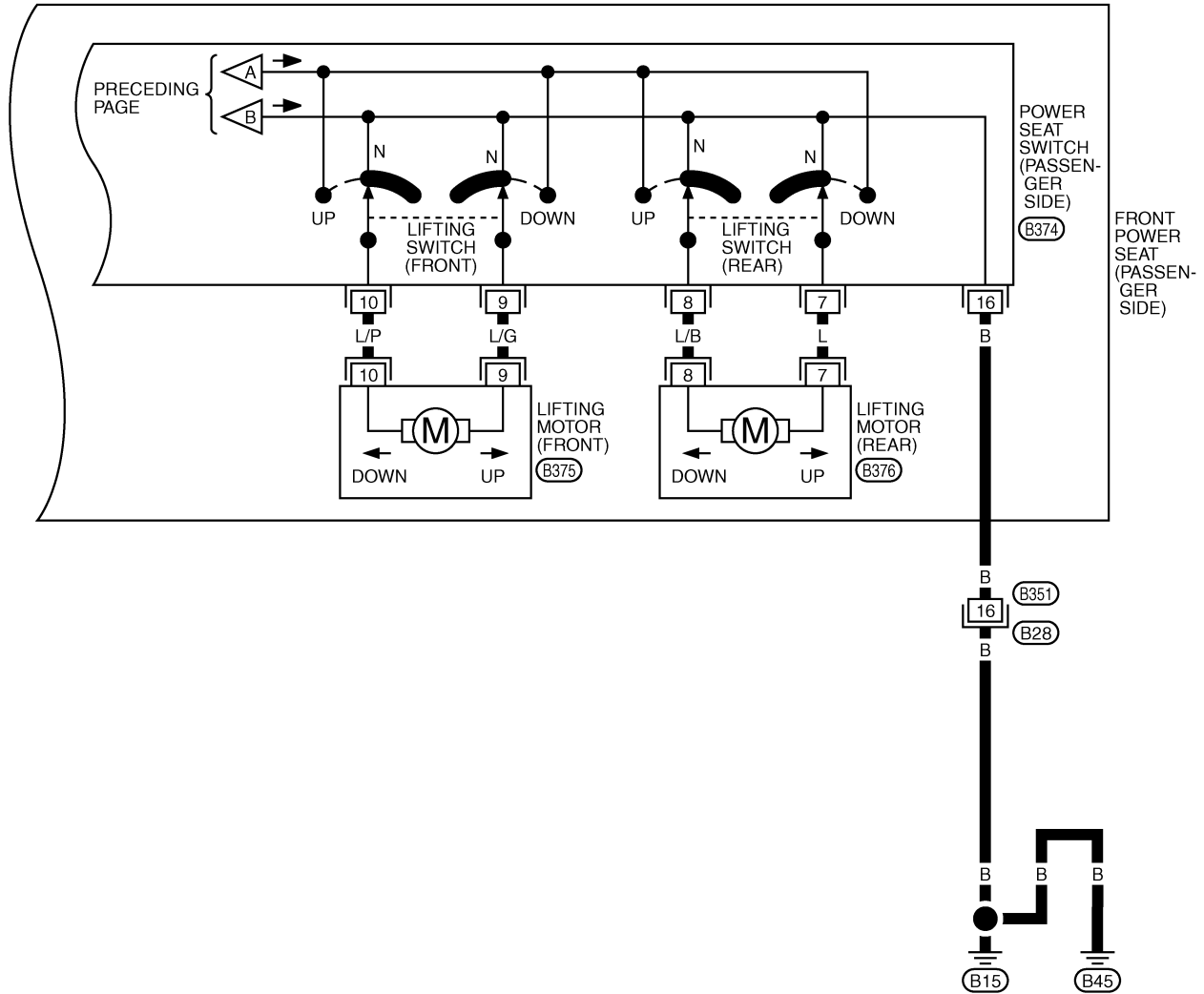
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1705E

POWER SEAT

SE-SEAT-02

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

TIWM1717E

HEATED SEAT

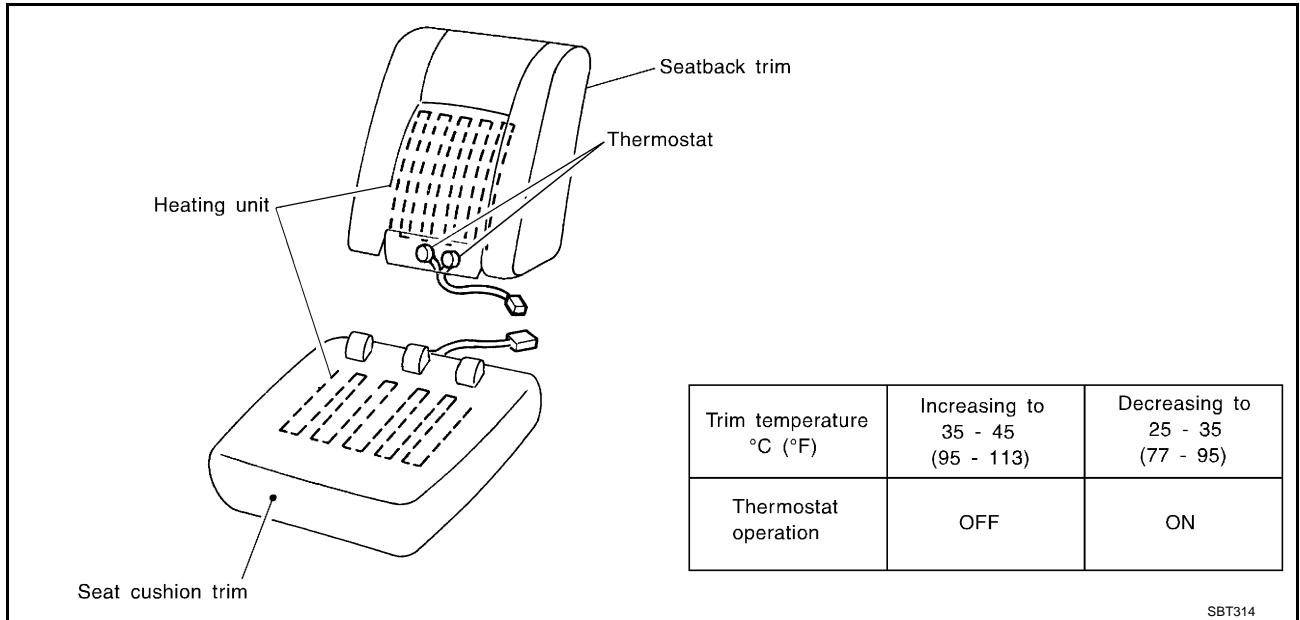
HEATED SEAT

PFP:87335

Description

NIS001W5

- When handling seat, be extremely careful not to scratch heating unit.
- To replace heating unit, seat trim and pad should be separated.
- Do not use any organic solvent, such as thinner, benzene, alcohol, etc. to clean trims.

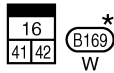
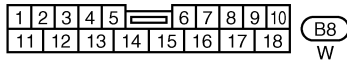
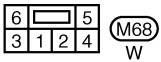
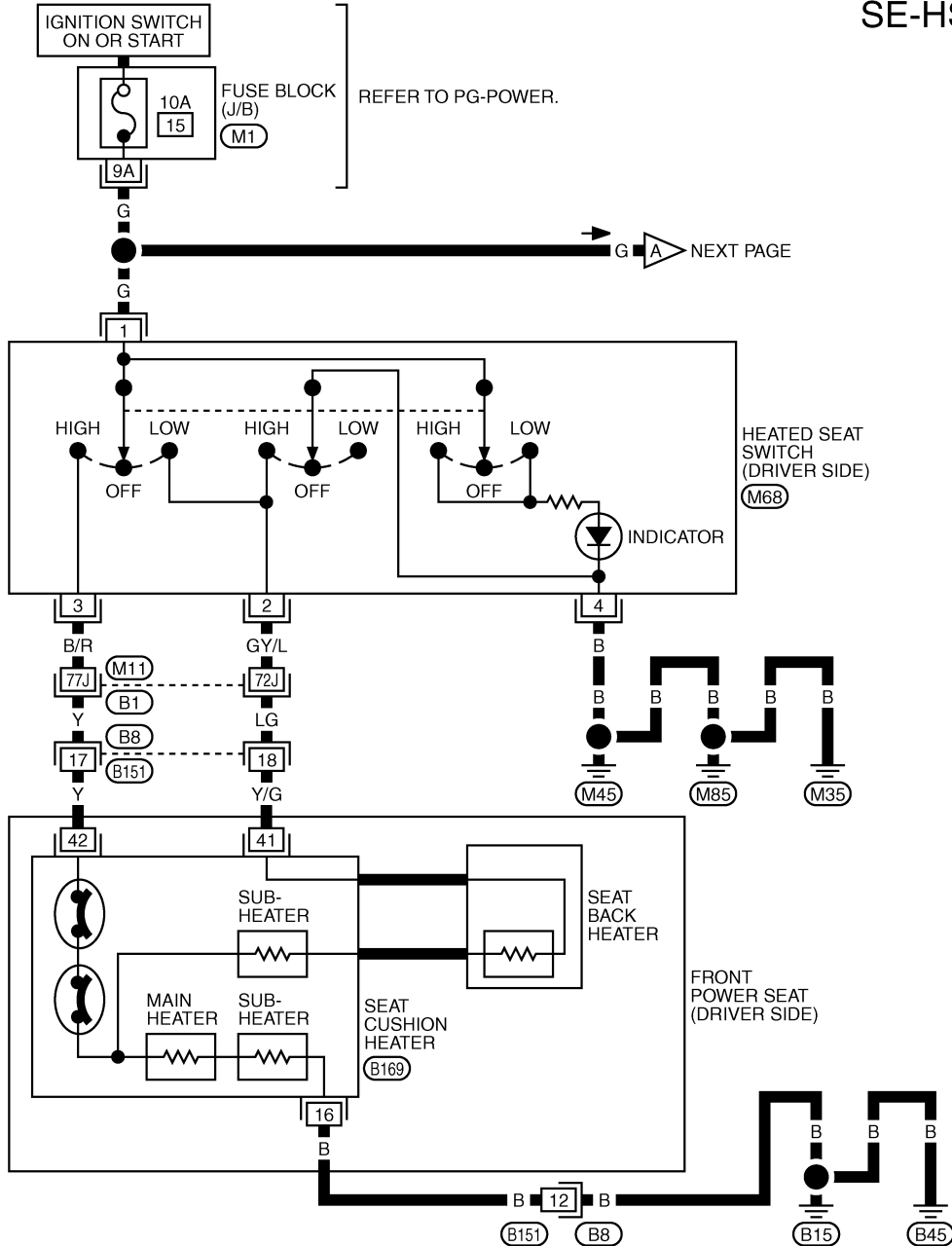


HEATED SEAT

Wiring Diagram — HSEAT —

NIS001W6

SE-HSEAT-01



REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

(M1) -FUSE BLOCK-JUNCTION BOX (J/B)

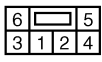
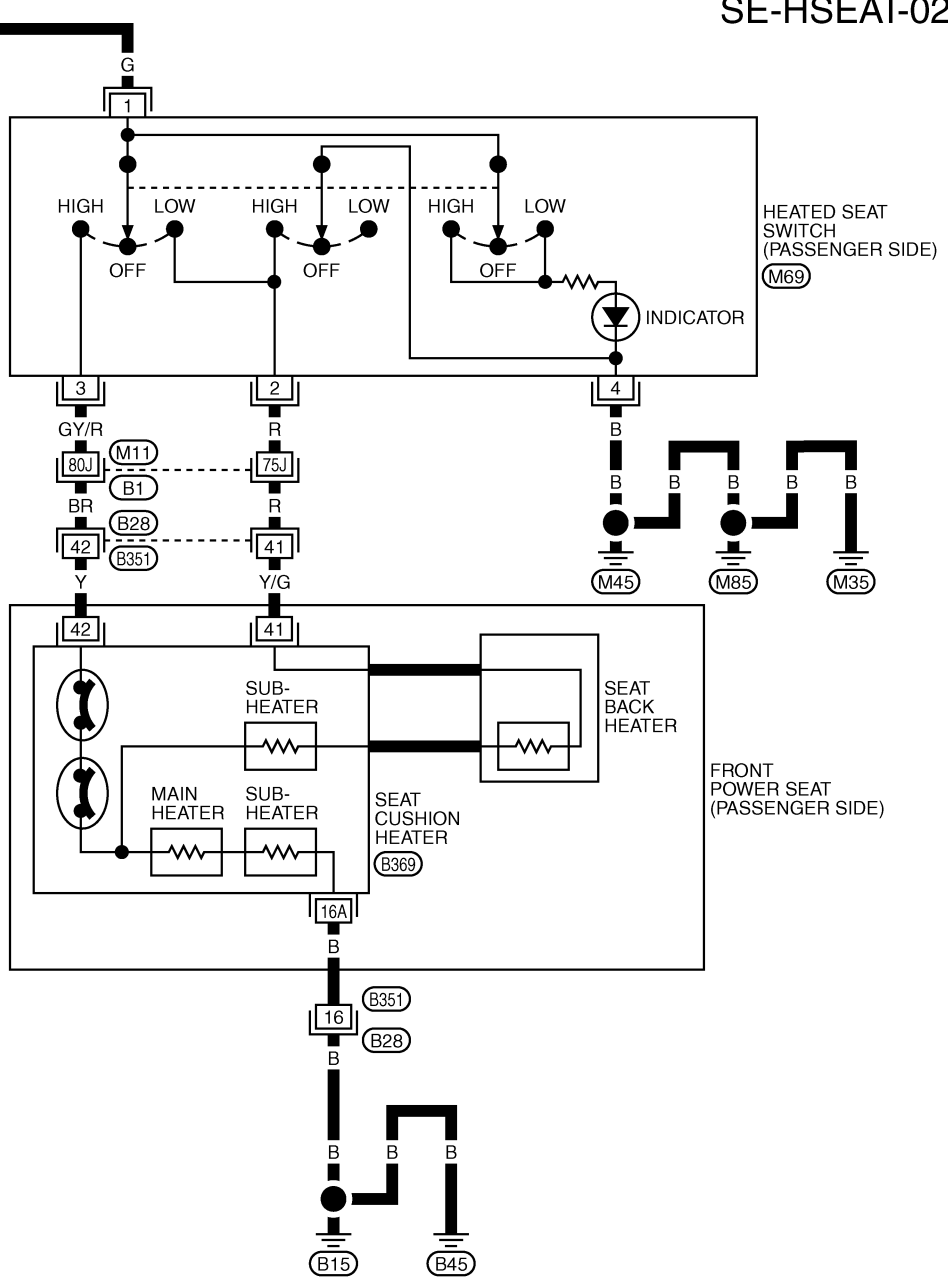
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1706E

HEATED SEAT

SE-HSEAT-02

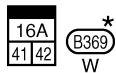
PRECEDING PAGE



M69
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B28
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16A
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B369
W

REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1707E

FRONT SEAT

FRONT SEAT

PFP:87000

Removal and Installation

NIS001W7

CAUTION:

Do not disassembly the component parts of only front passenger seat in the dotted lines shown in the figure below.

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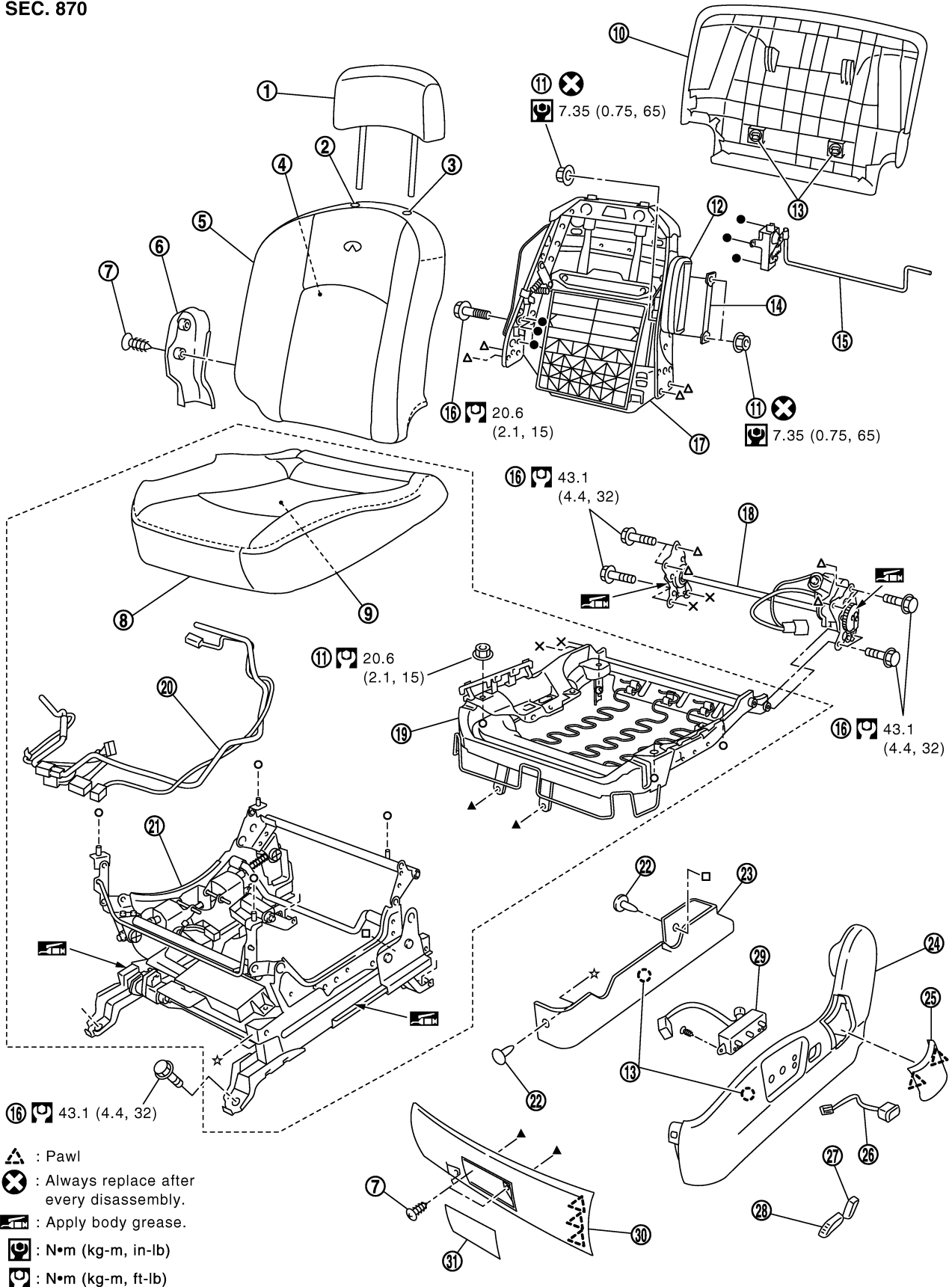
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FRONT SEAT

SEC. 870



PIIB8524E

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|-----------------|---------------------------|--------------------------------|
| 1. Headrest | 2. Headrest holder (free) | 3. Headrest holder (locked) |
| 4. Seatback pad | 5. Seatback trim | 6. Seat cushion inner finisher |
| 7. Screw | 8. Seat cushion trim | 9. Seat cushion pad |

FRONT SEAT

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|---------------------------------------|------------------------------------|-----------------------------------|
| 10. Seatback garnish | 11. Nut | 12. Side air bag module |
| 13. Clip (C101) | 14. Inner cloth stay | 15. Lumber support device |
| 16. Bolt | 17. Seatback frame | 18. Reclining device assembly |
| 19. Seat cushion frame | 20. Seat harness assembly | 21. Seat adjust assembly |
| 22. Clip (C103) | 23. Seat adjust assembly cover | 24. Seat cushion outer finisher |
| 25. Seat cushion outer finisher cover | 26. Lumber support switch assembly | 27. Seat reclining switch knob |
| 28. Seat slide and lifter switch knob | 29. Seat control switch | 30. Seat cushion forward finisher |
| 31. Seat cushion forward finisher lid | | |

REMOVAL

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

CAUTION:

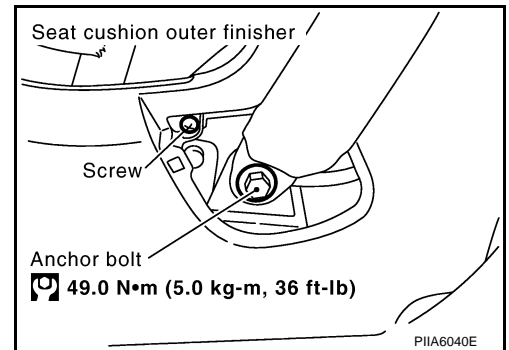
- Before removing the front seat, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.
- When checking the power seat circuit for continuity using a circuit tester, do not confuse its connector with the side air bag module connector. Such an error may cause the air bag 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 seat cushion outer finisher cover.
2. Remove the front seat belt anchor bolt. Refer to [SB-4, "Removal and Installation of Front Seat Belt"](#).

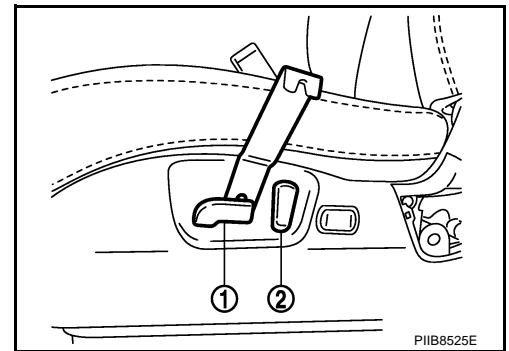
CAUTION:

Set the front and rear cushion lifter to the down position.

3. Remove the screw.



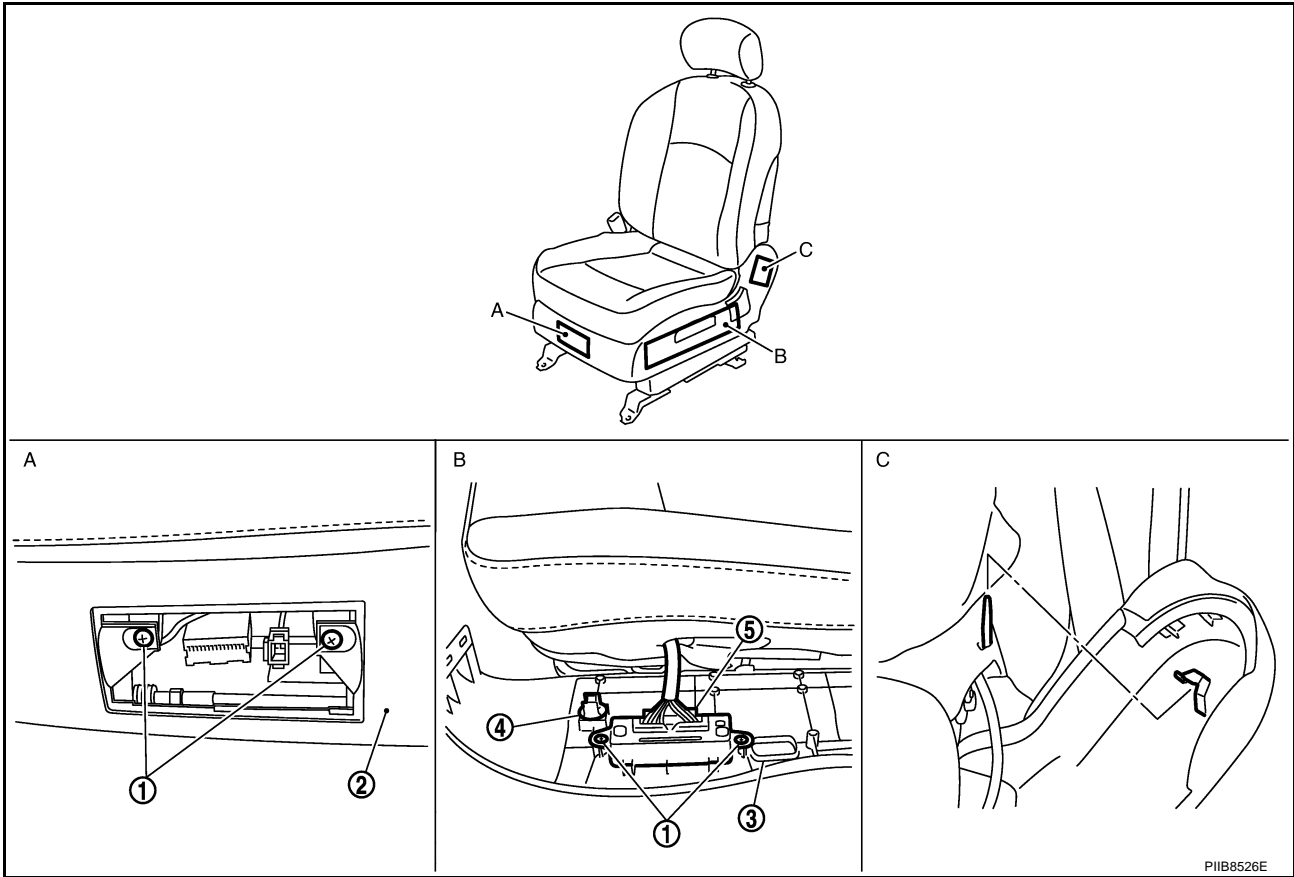
4. Remove the seat cushion forward finisher lid.
5. Remove the seat cushion forward finisher.
6. Remove the seat slide and lifter switch knob (1) and seat reclining switch knob (2).



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FRONT SEAT

7. Remove the seat cushion outer finisher.

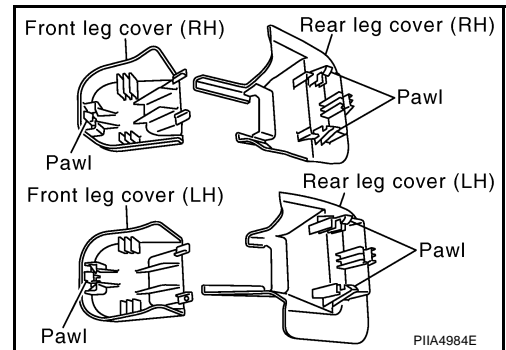


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- | | | |
|---------------|----------------------------------|--------------------------------|
| 1. Screw | 2. Seat cushion forward finisher | 3. Seat cushion outer finisher |
| 4. Clip(C101) | 5. Seat control switch | |
8. Remove the seat control switch assembly.
 9. Remove the lumbar support switch assembly.
 10. Remove the front and rear leg cover (LH and 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 and RH of the rear leg cover and tabs engaged into the rail. Then pull the cover toward the rear of the vehicle.



PIIA4984E

11. 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 and rear cushion lifter to the top position.

12. Disconnect both battery cables.
 13. Remove the harness connector for the side air bag module.
 14. Remove the power seat harness connector and vehicle harness fixing clip.
 15. Remove the front seat.

NOTE:

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

FRONT SEAT

INSTALLATION

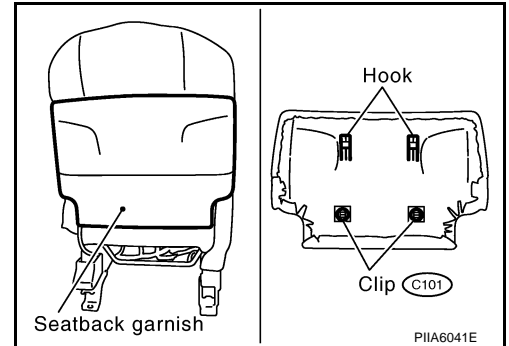
Install in the reverse order of removal.

NOTE:

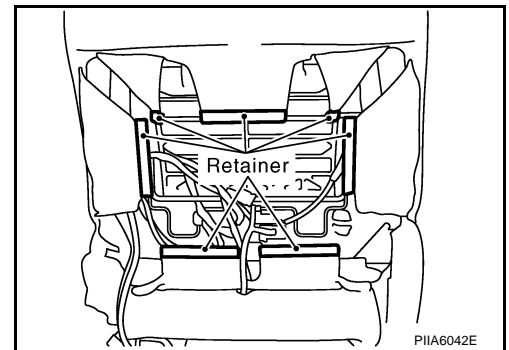
Be sure to insert the rear end tab of the rear leg cover under the rail.

REMOVAL OF SEATBACK TRIM AND PAD

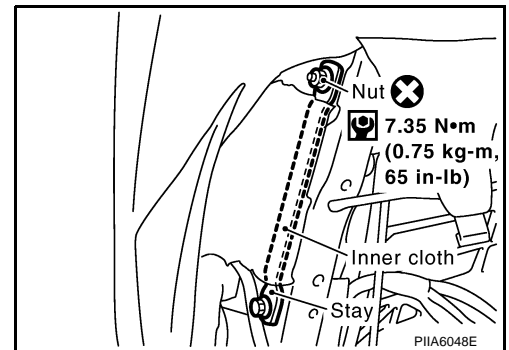
1. Remove the seatback garnish.



2. Remove the retainer.



3. Remove the stay securing the inner cloth.



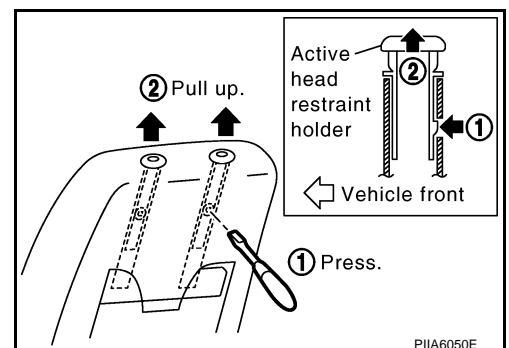
4. Remove the headrest.

5. Remove the headrest holder.

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:

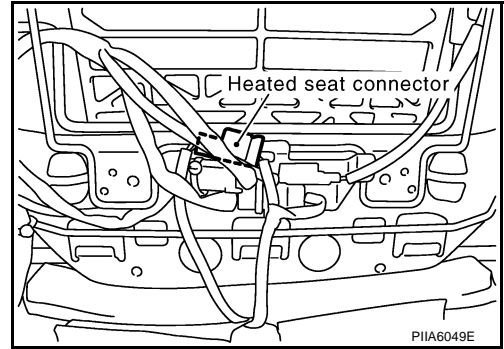
Before installing the headrest holder, check its orientation (front, rear, left and right).



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FRONT SEAT

6. Remove the heated seat connector.



7. After removing the seatback trim and pad, remove the hog rings to separate the trim, pad, and seatback heater unit.

INSTALLATION OF SEATBACK TRIM AND PAD

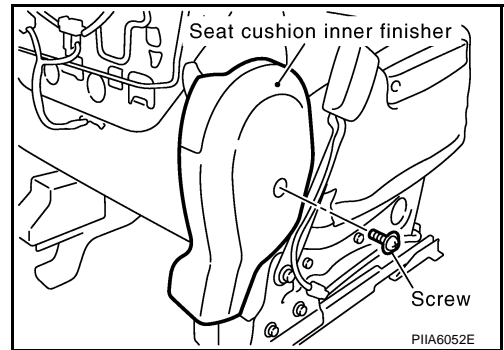
Install in the reverse order of removal.

REMOVAL OF SEAT CUSHION TRIM AND PAD

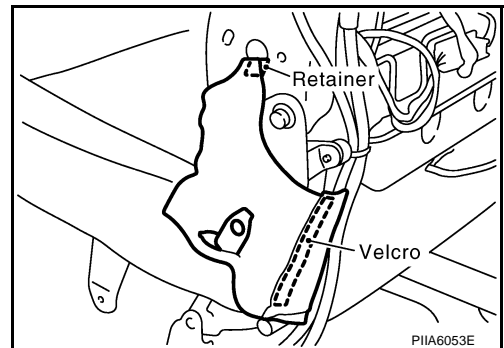
CAUTION:

Do not disassemble the component parts of only front passenger seat in the dotted lines shown in the figure. Refer to [SE-97](#) .

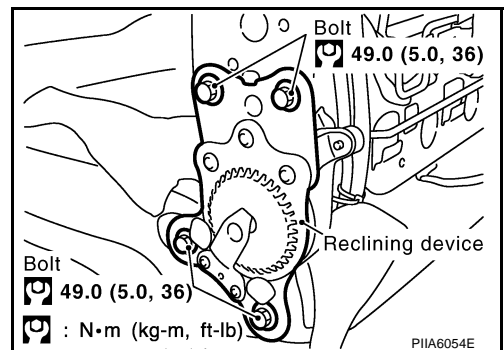
1. Remove the seat cushion inner finisher.



2. Remove the velcro and retainer.

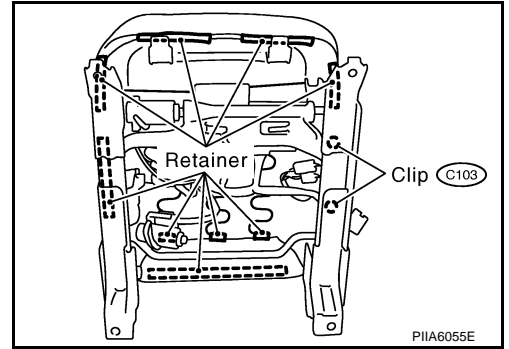


3. Remove the seat harness connector.
4. Remove the seatback frame.
5. Remove the reclining device assembly.



FRONT SEAT

6. Remove the retainer and clip.



7. After removing the seat cushion trim and pad, remove the hog rings to separate the trim and pad and the seat cushion heater unit.

INSTALLATION OF SEAT CUSHION TRIM AND PAD

Install in the reverse order of removal.

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REAR SEAT

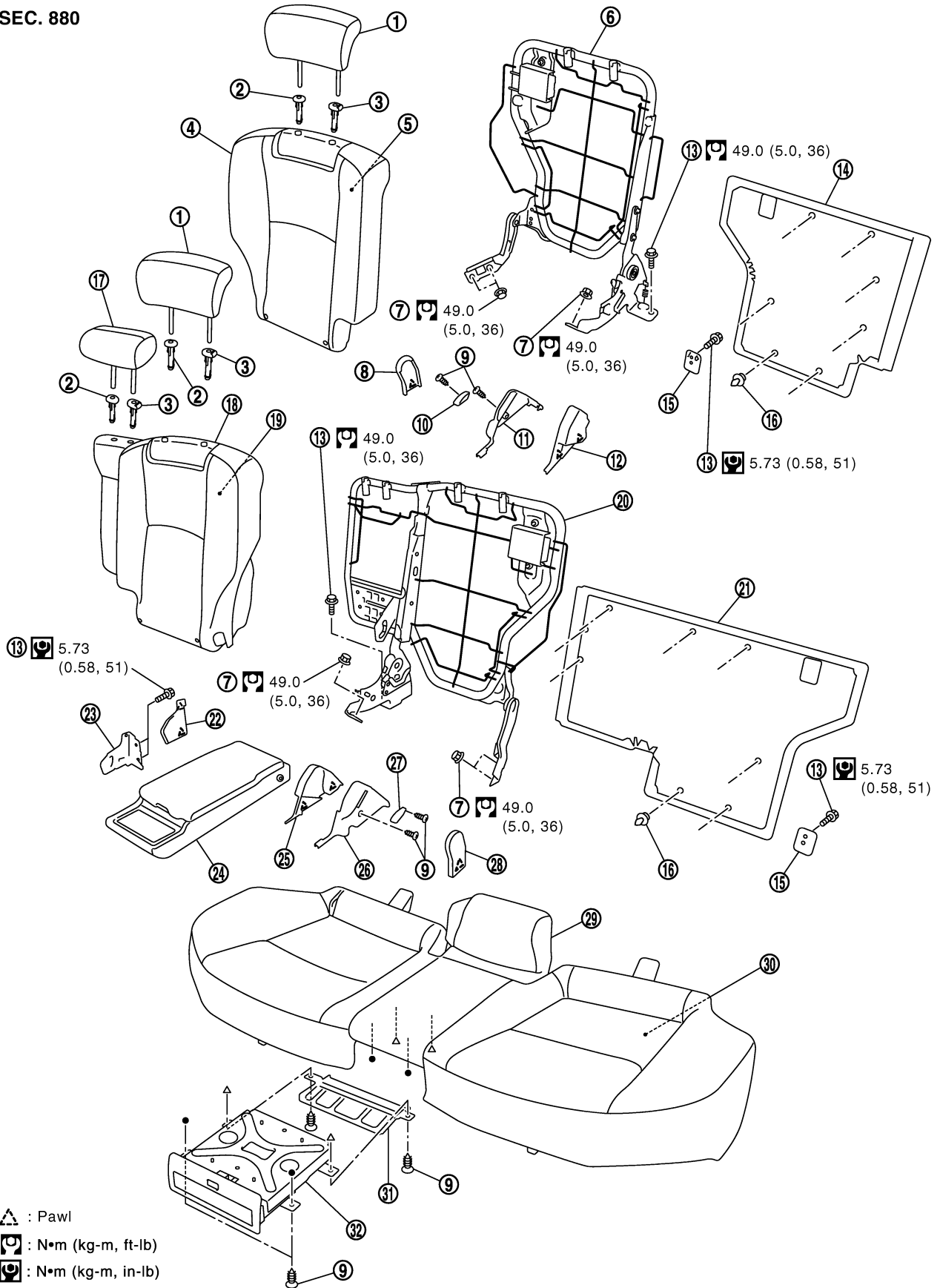
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REAR SEAT

Removal and Installation

SEC. 880



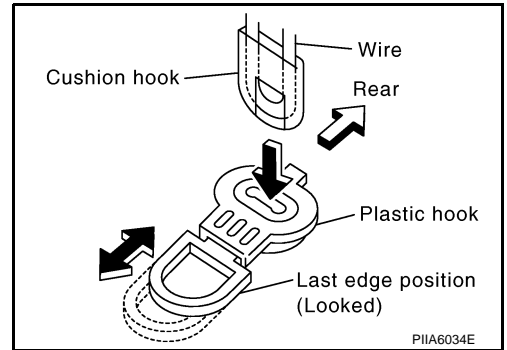
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REAR SEAT

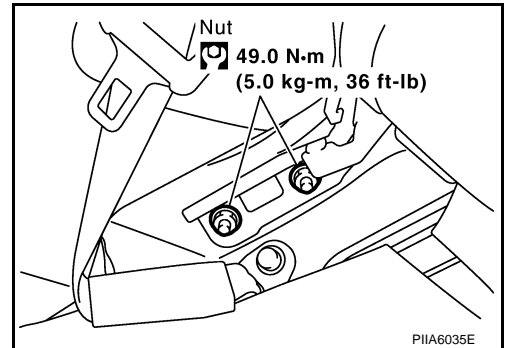
- | | | |
|---------------------------------------|---------------------------------------|---------------------------------------|
| 1. Headrest (side) | 2. Headrest holder (free) | 3. Headrest holder (locked) |
| 4. Seatback trim (RH) | 5. Seatback pad (RH) | 6. Seatback frame (RH) |
| 7. Nut | 8. Seat hinge cover (RH) | 9. Screw |
| 10. Reclining lever (RH) | 11. Reclining device outer cover (RH) | 12. Reclining device inner cover (RH) |
| 13. Bolt | 14. Seatback garnish (RH) | 15. Trunk net hook |
| 16. Clip (C101) | 17. Headrest (center) | 18. Seatback trim (LH) |
| 19. Seatback pad (LH) | 20. Seatback frame (LH) | 21. Seatback garnish (LH) |
| 22. Armrest bracket cover | 23. Armrest bracket | 24. Armrest |
| 25. Reclining device inner cover (LH) | 26. Reclining device outer cover (LH) | 27. Reclining lever (LH) |
| 28. Seat hinge cover (LH) | 29. Seat cushion trim | 30. Seat cushion pad |
| 31. Cup holder bracket | 32. Cup holder | |

REMOVAL

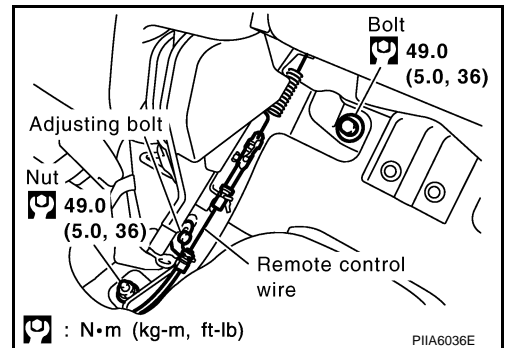
1. Pull the lock at the front bottom of the seat cushion forward (1 for each side), and pull the seat cushion upward to release the wire from the plastic hook, then pull the seat cushion forward to remove.



2. Remove the seatback mounting nuts.



3. Remove the seatback mounting bolt and nut. Remove the remote control wire.



INSTALLATION

Install in the reverse order of removal.

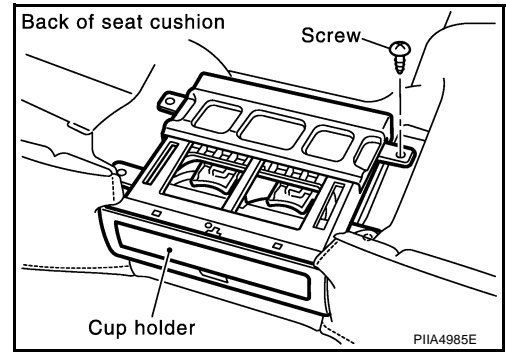
NOTE:

After rear wheel house finisher assembly is remove the seatback is installed. Refer to [EI-45, "Removal and Installation"](#) .

REAR SEAT

REMOVAL OF SEAT CUSHION TRIM AND PAD

1. Remove the cup holder in the back of the seat cushion.



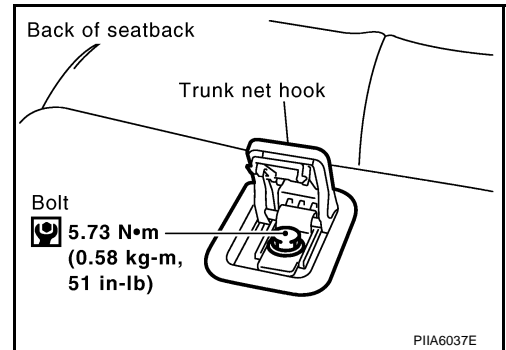
2. Removal the hog rings to separate the trim and pad.

INSTALLATION OF SEAT CUSHION TRIM AND PAD

Install in the reverse order of removal.

REMOVAL OF SEATBACK TRIM AND PAD

1. Remove the trunk net hook in the back of the seatback.



2. After removing the seatback garnish, remove the hog rings.

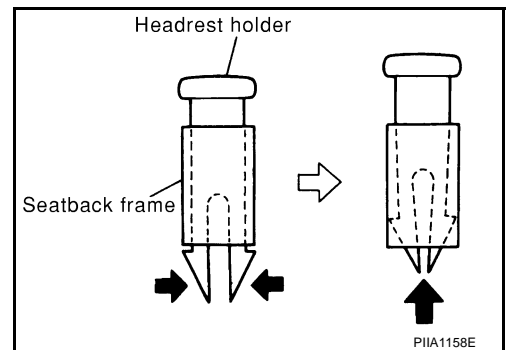
3. Remove the headrest.

4. Remove the headrest holder.

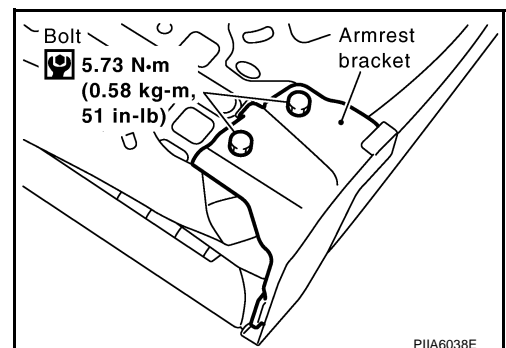
Squeeze and pull up headrest holder tabs to remove from seatback frame.

NOTE:

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



5. Remove the armrest (LH only).



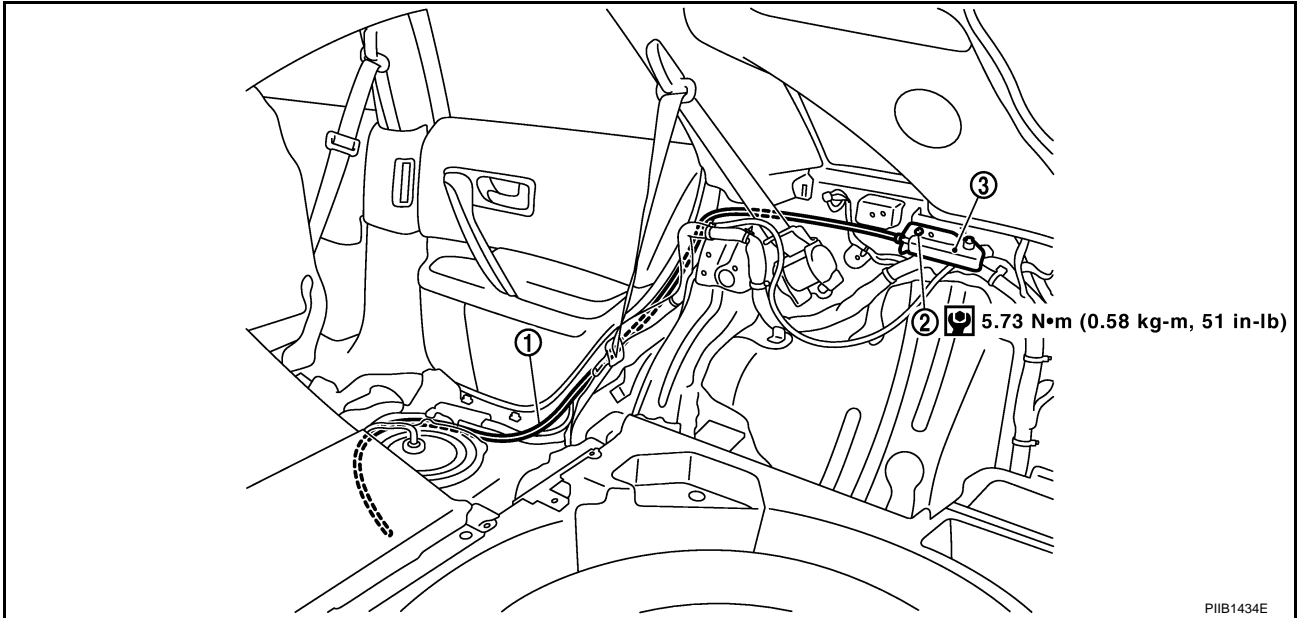
6. After removing the seatback trim and pad, separate the trim and pad.

REAR SEAT

INSTALLATION OF SEATBACK TRIM AND PAD

Install in the reverse order of removal.

REMOVAL OF REMOTE CONTROL LEVER



1. Remote control wire

2. Bolt

3. Remote control lever

1. Remove the rear seat. Refer to [SE-105, "REMOVAL"](#).
2. Remove the luggage side finisher assembly. Refer to [EI-45, "Removal and Installation"](#).
3. Remove the remote control lever.
4. Remove the remote control lever mounting bolt.
5. Remove the remote control lever assembly.

INSTALLATION OF REMOTE CONTROL LEVER

Install in the reverse order of removal.

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REAR SEAT
