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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.

Precautions for Work

NIS000RT

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

PREPARATION

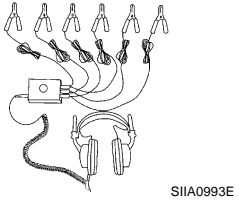
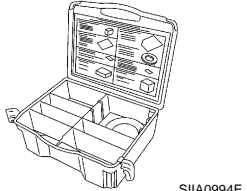
PREPARATION

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Special Service Tools

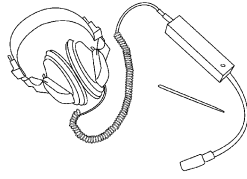
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name	Description
(J39570) Chassis ear  SIIA0993E	Locating the noise
(J43980) NISSAN Squeak and Rattle Kit  SIIA0994E	Repairing the cause of noise

Commercial Service Tools

NIS000RV

Tool name	Description
Engine ear  SIIA0995E	Locating the noise

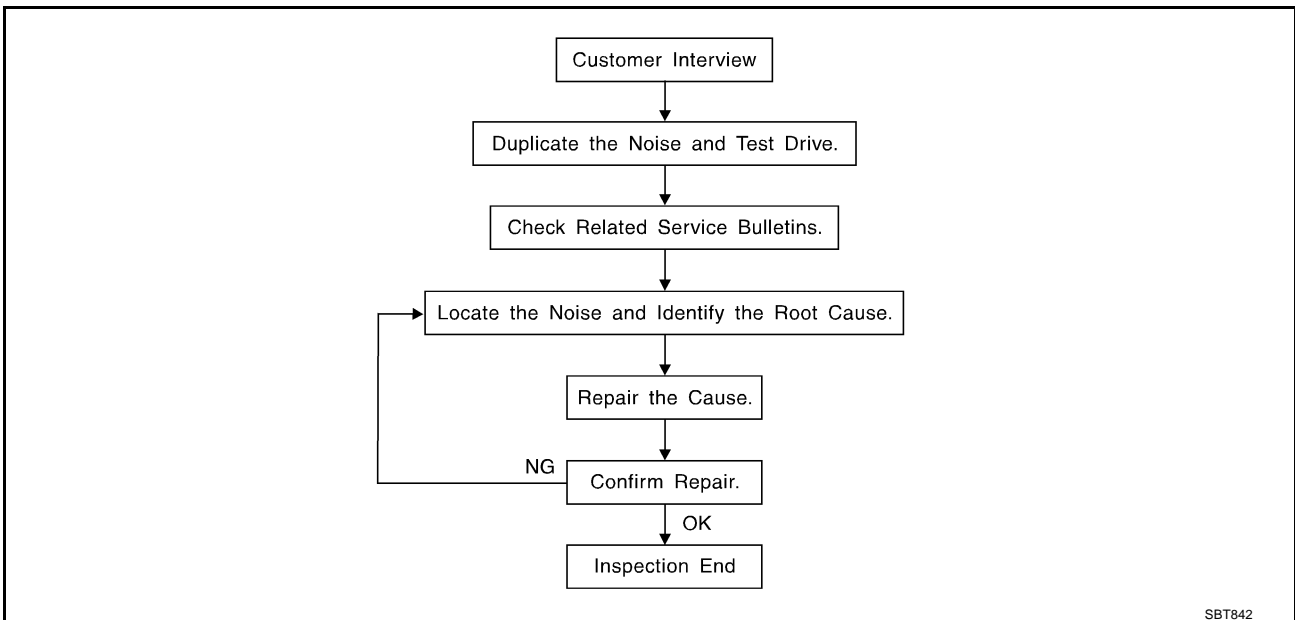
SQUEAK AND RATTLE TROUBLE DIAGNOSES

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: J39570, 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 (J43980) is available through your authorized Nissan Parts Department.

CAUTION:

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

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100 × 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

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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 (J43980) 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 underhood noise include:

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

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

SQUEAK AND RATTLE TROUBLE DIAGNOSES

Diagnostic Worksheet

NIS000RY



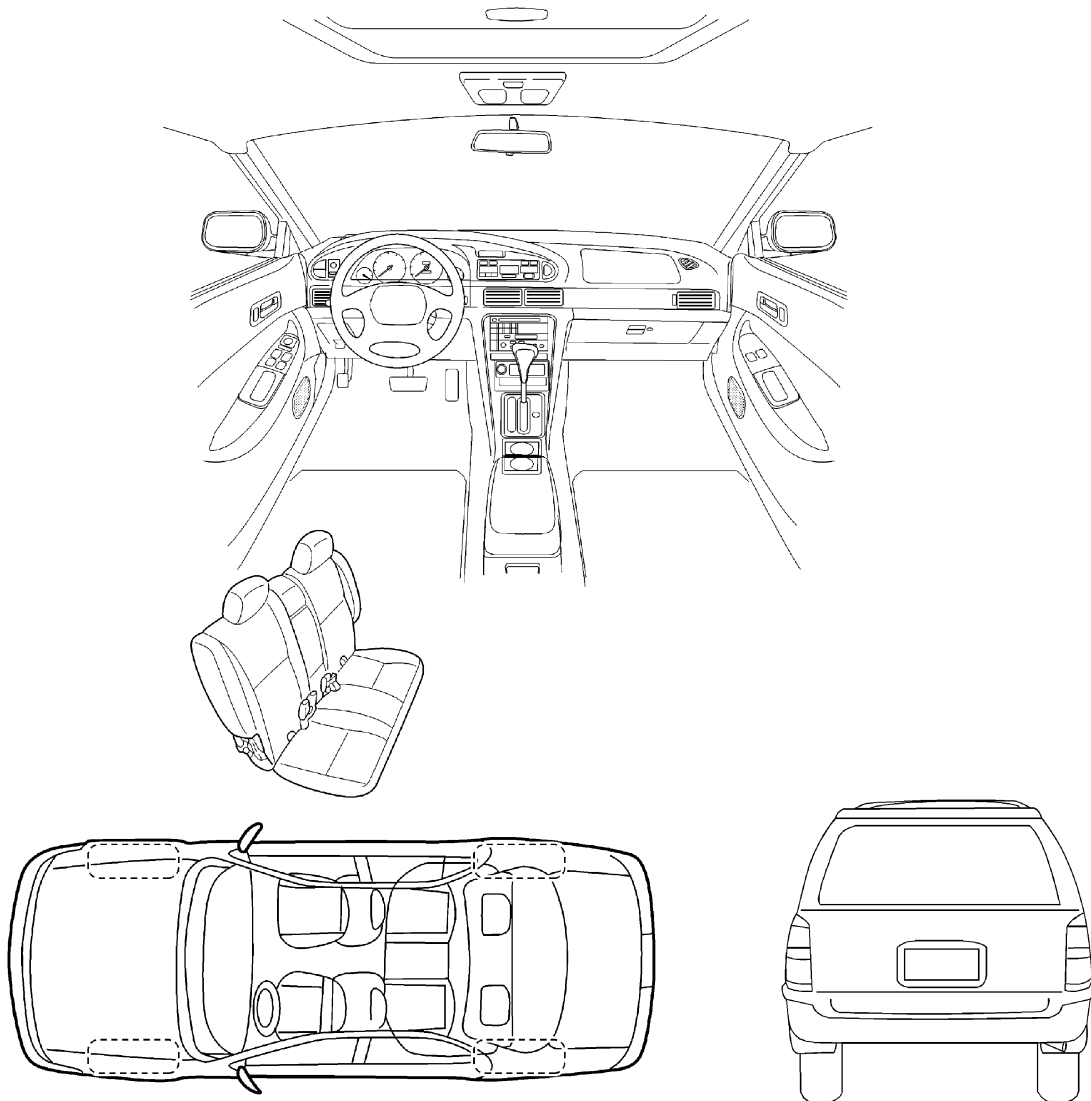
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Infiniti Customer:

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

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

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



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

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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? (check the boxes that apply)

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

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE?

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

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

VIN: _____ Customer Name: _____

W.O. #: _____ Date: _____

This form must be attached to Work Order

SBT844

AUTOMATIC DRIVE POSITIONER

AUTOMATIC DRIVE POSITIONER

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System Description

NIS000RZ

- 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) for 2 people. If the driver is changes, one-touch operation allows changing to the other driving position.
- Using CONSULT-II, the seat slide amount at entry/exit setting can be changed.

MANUAL OPERATION

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

NOTE:

The seat can be manually operated with the ignition switch OFF.

AUTOMATIC OPERATION

Function		Description
Memory switch operation		The seat, steering 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 and exiting 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, entry 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 power seat switch turned ON. ● When ADP steering switch turned ON (telescopic operation or tilt 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.

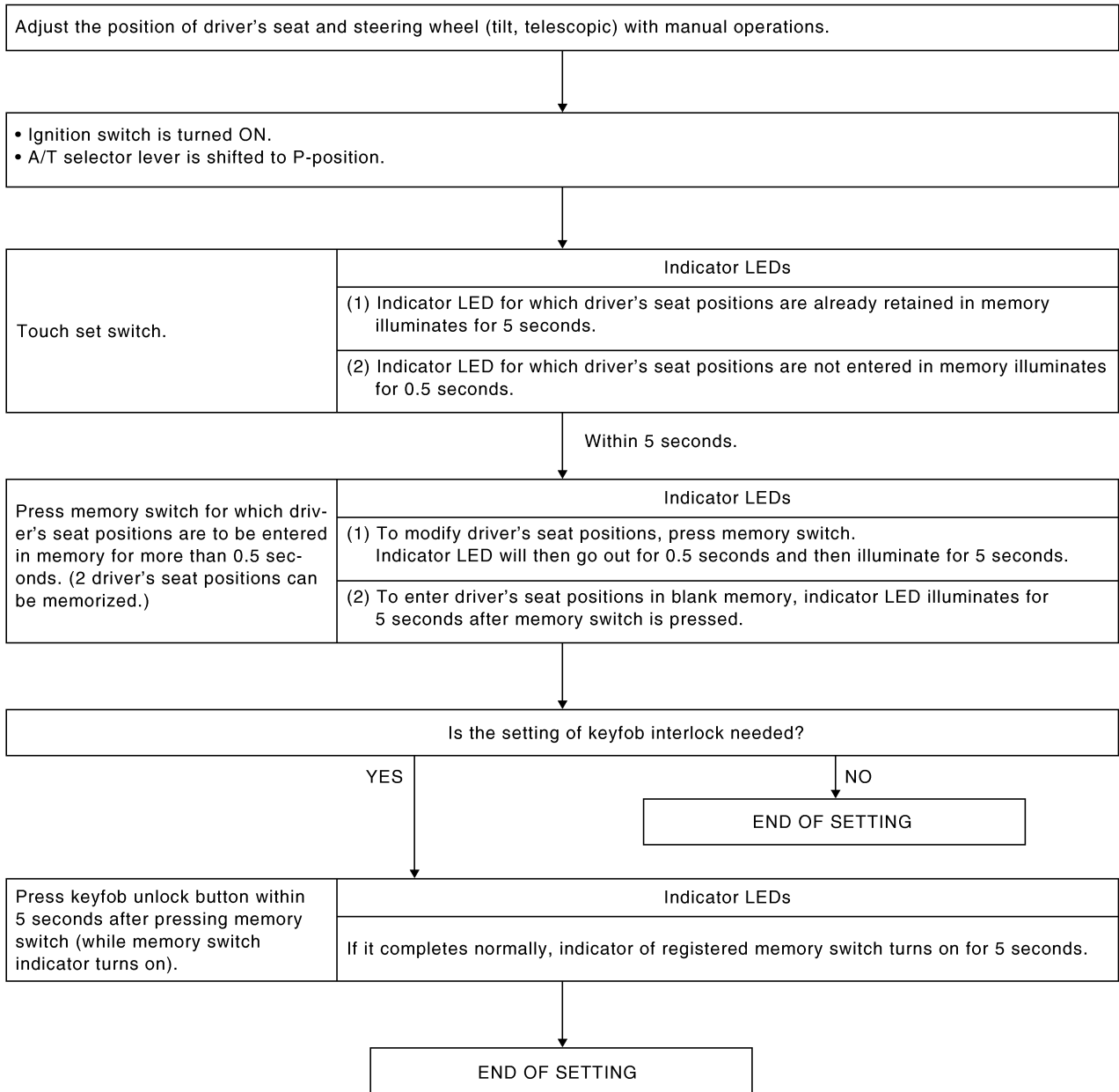
NOTE:

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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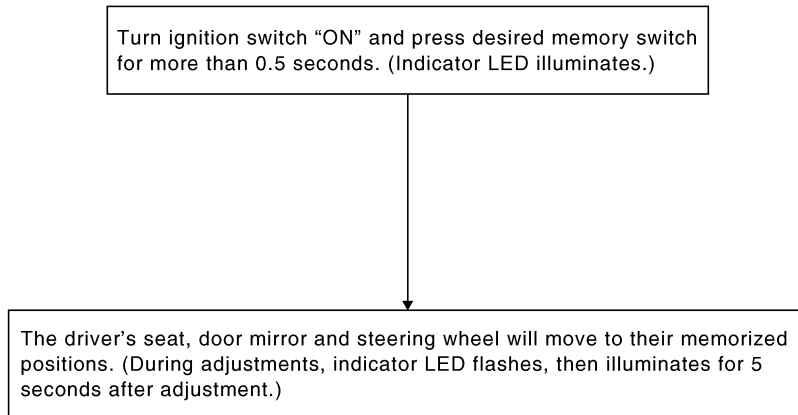
NOTE:

- 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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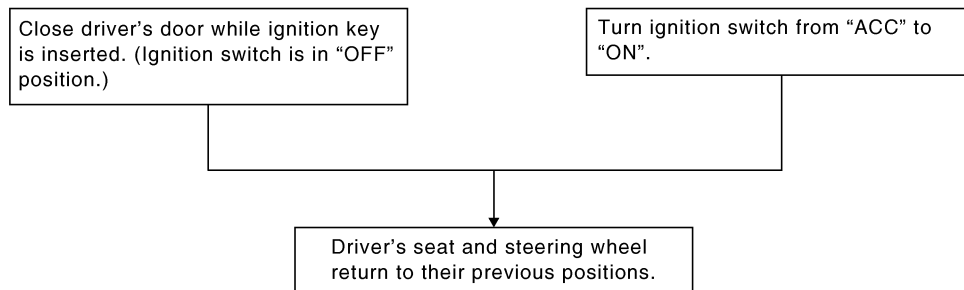
NOTE:

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	4	Seat reclining
2	Steering wheel telescoping	5	Seat lifter-FR
3	Steering wheel tilt	6	Seat lifter-RR

ENTRY OPERATION

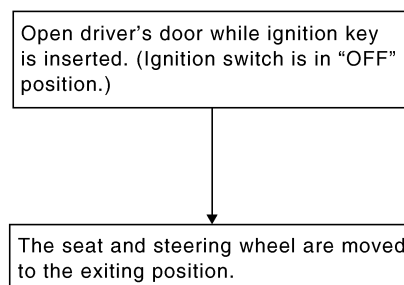
When the seat are on the exiting positions, the following operation moves the seat to the previous position before the exiting operation.



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EXITING OPERATION

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

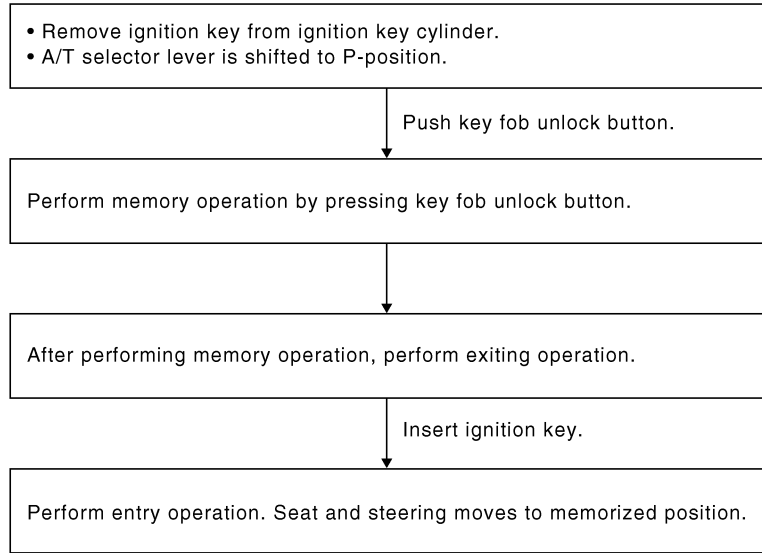


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AUTOMATIC DRIVE POSITIONER

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

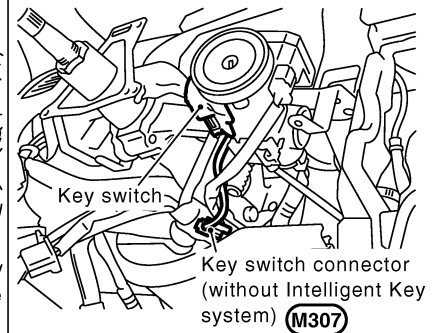
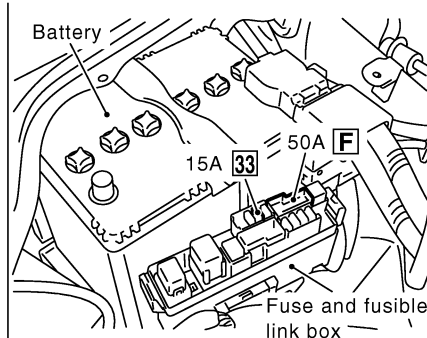
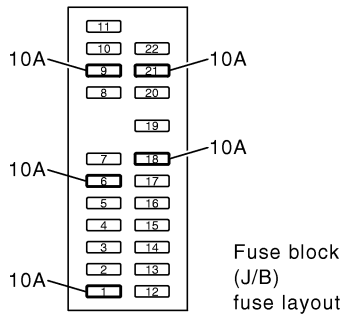
- The mode is cancelled when the selector lever is shifted to P position from any other position.

AUTOMATIC DRIVE POSITIONER

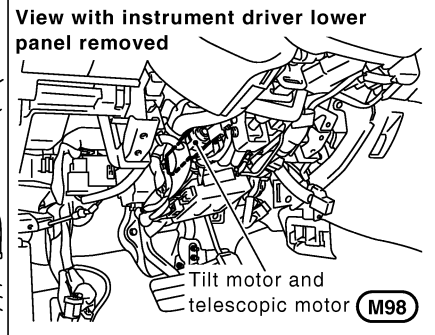
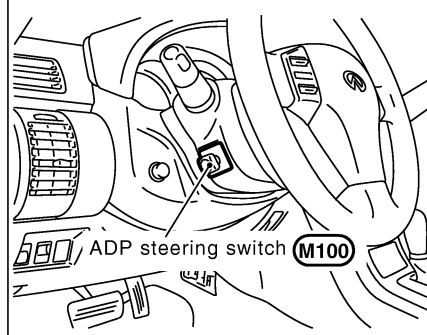
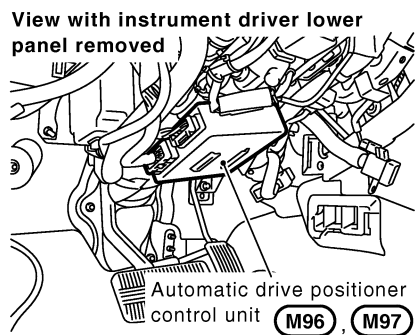
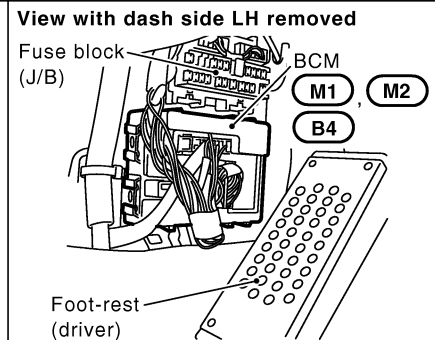
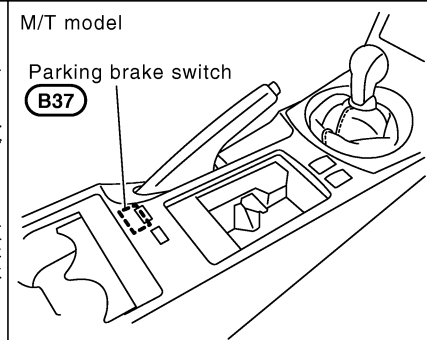
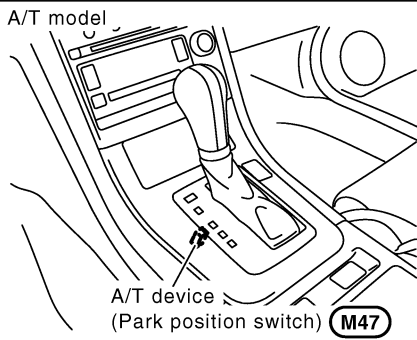
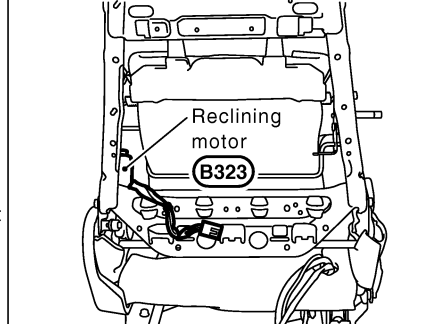
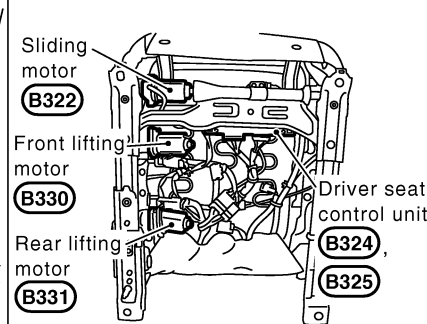
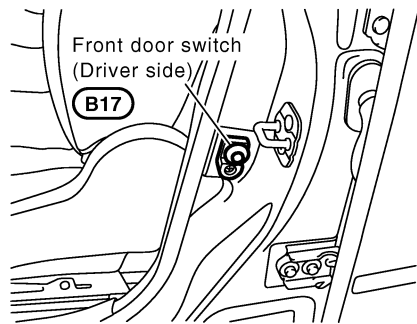
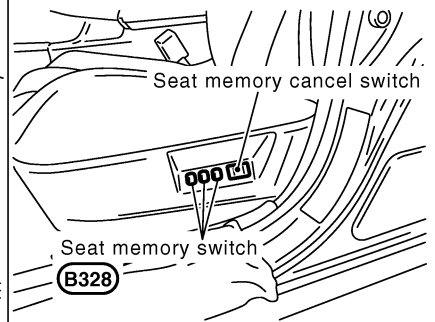
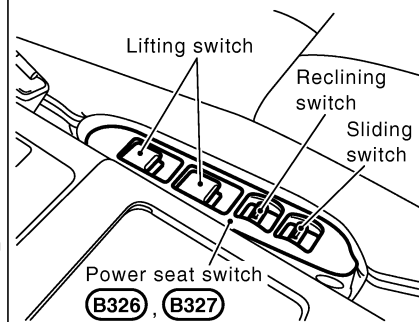
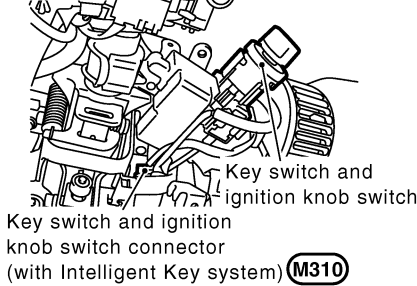
Component Parts and Harness Connector Location

NIS00050

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View with steering column cover removed



PIIB7450E

AUTOMATIC DRIVE POSITIONER

CAN Communication System Description

NIS000S1

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

NIS000S2

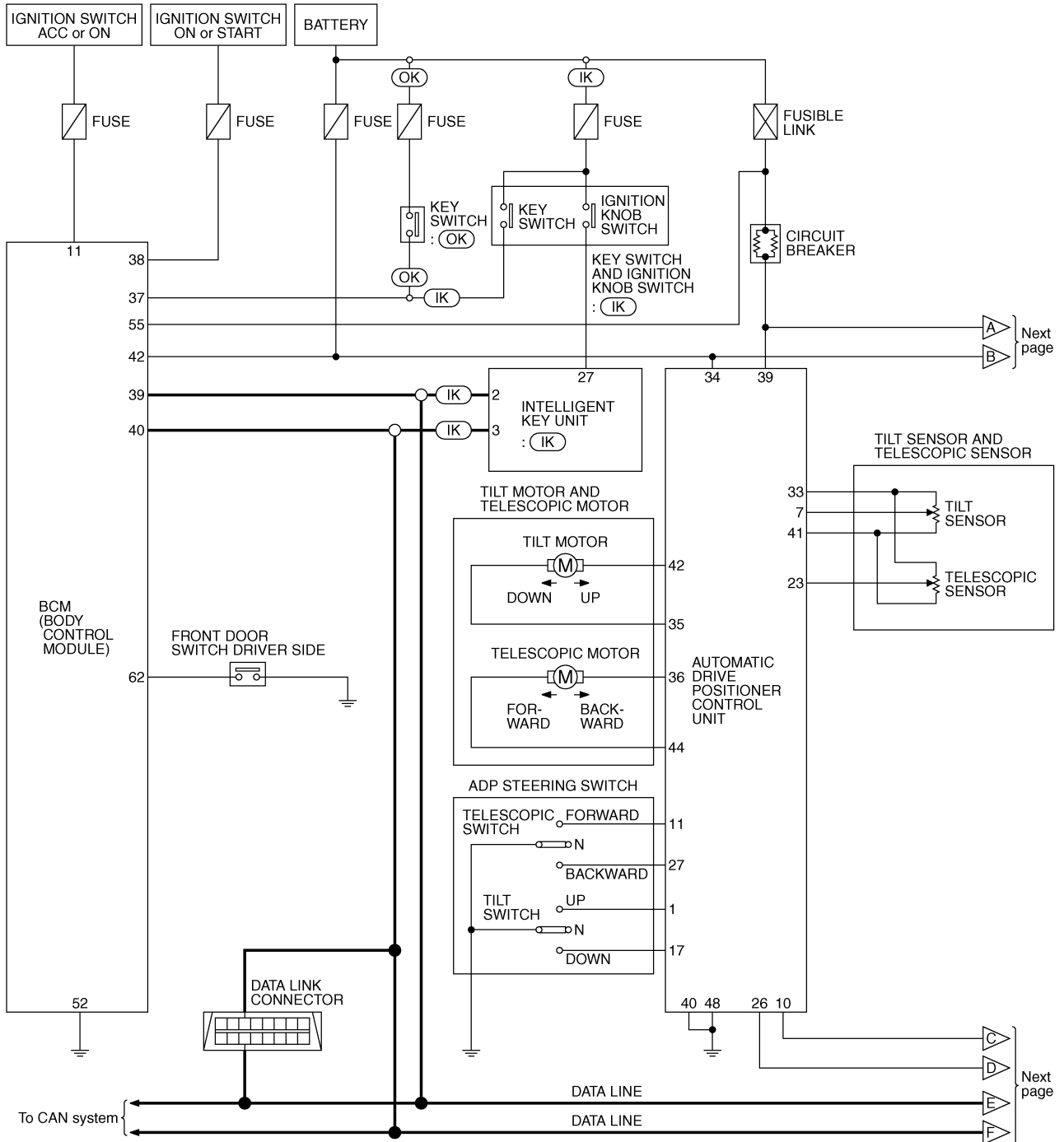
Refer to [LAN-27, "CAN Communication Unit"](#) .

AUTOMATIC DRIVE POSITIONER

Schematic

NIS000S3

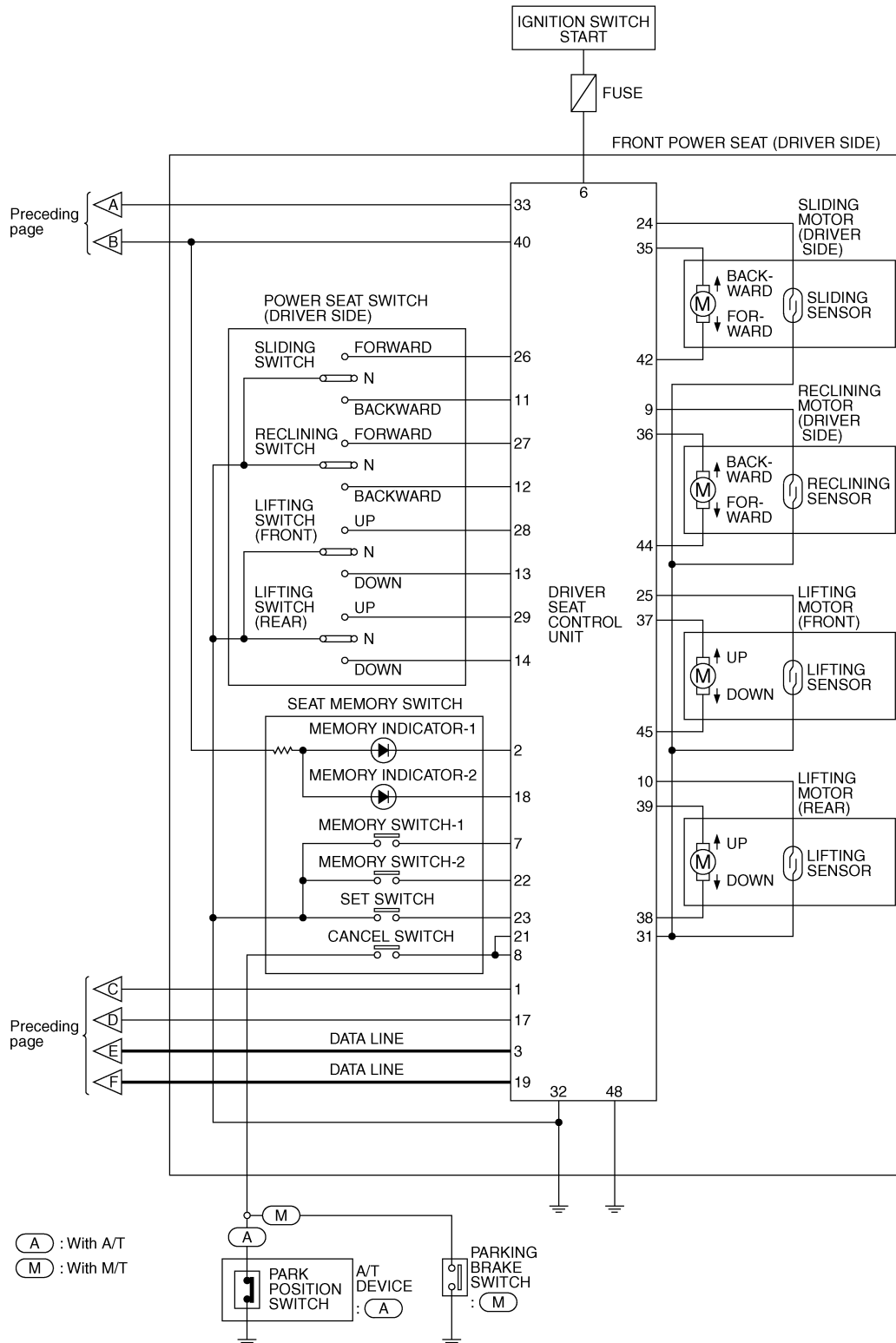
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(IK) : With Intelligent Key
(OK) : Without Intelligent Key

TIWM1453E

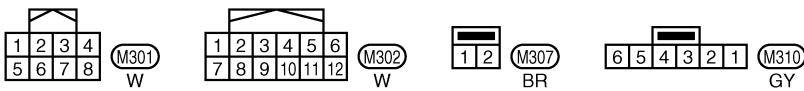
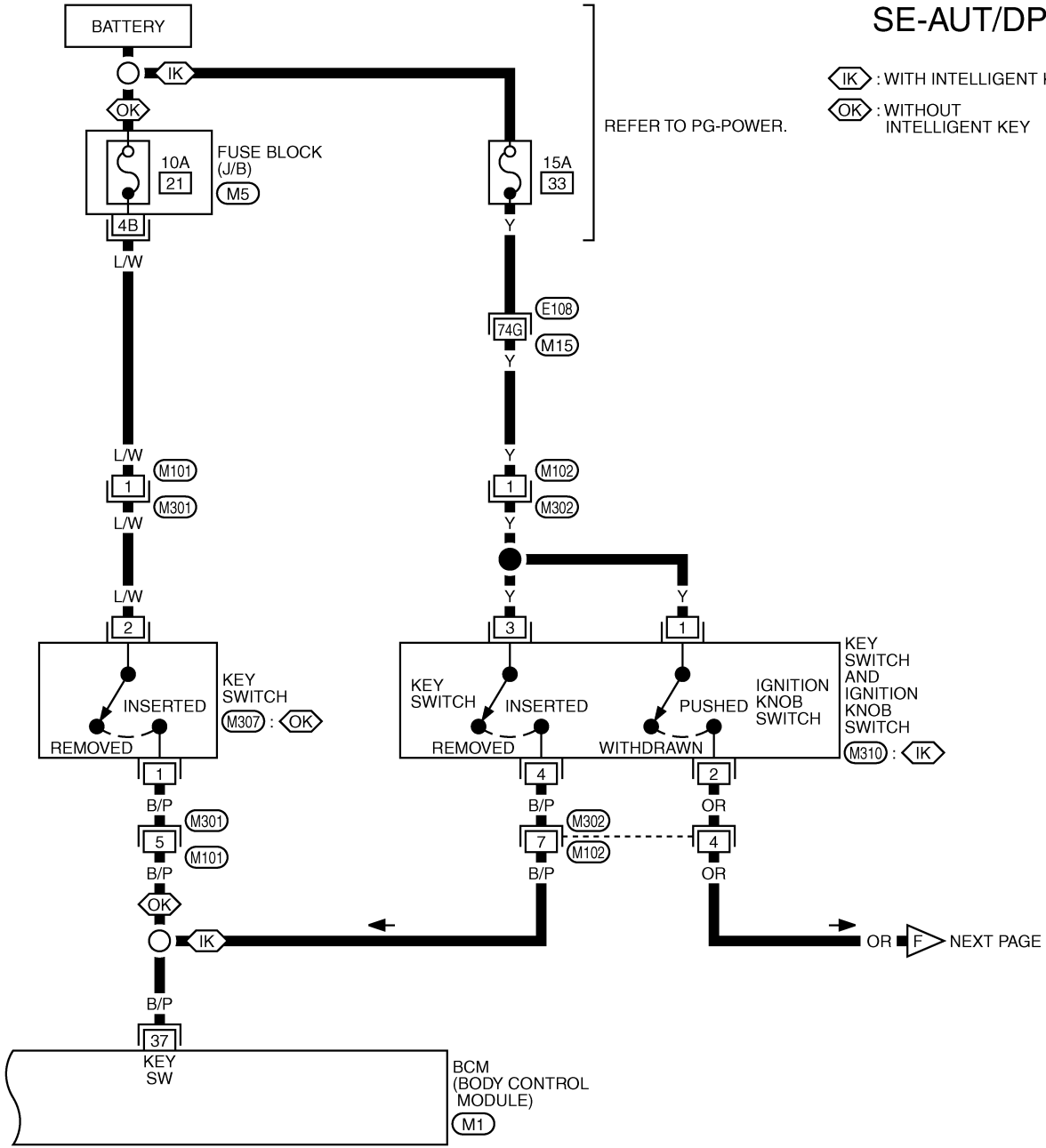
AUTOMATIC DRIVE POSITIONER



TIWM1093E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-02



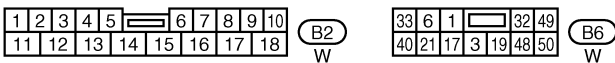
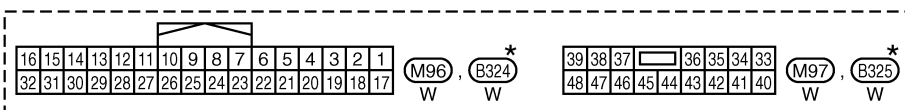
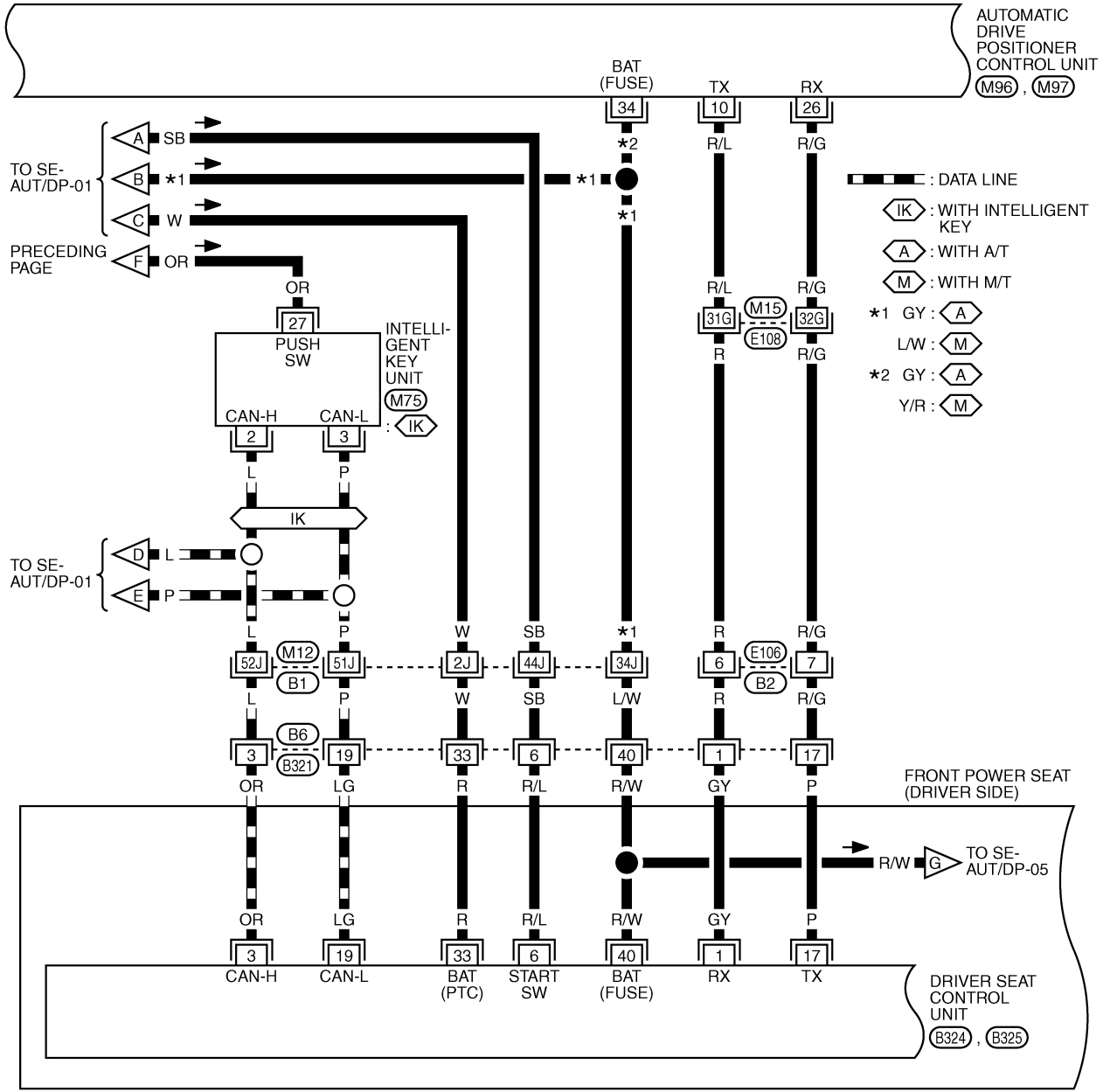
REFER TO THE FOLLOWING.

- E108 -SUPER MULTIPLE JUNCTION (SMJ)
- M5 -FUSE BLOCK-JUNCTION BOX (J/B)
- M1 -ELECTRICAL UNITS

TIWM1455E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-03



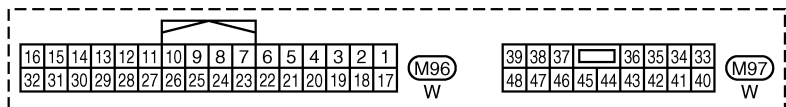
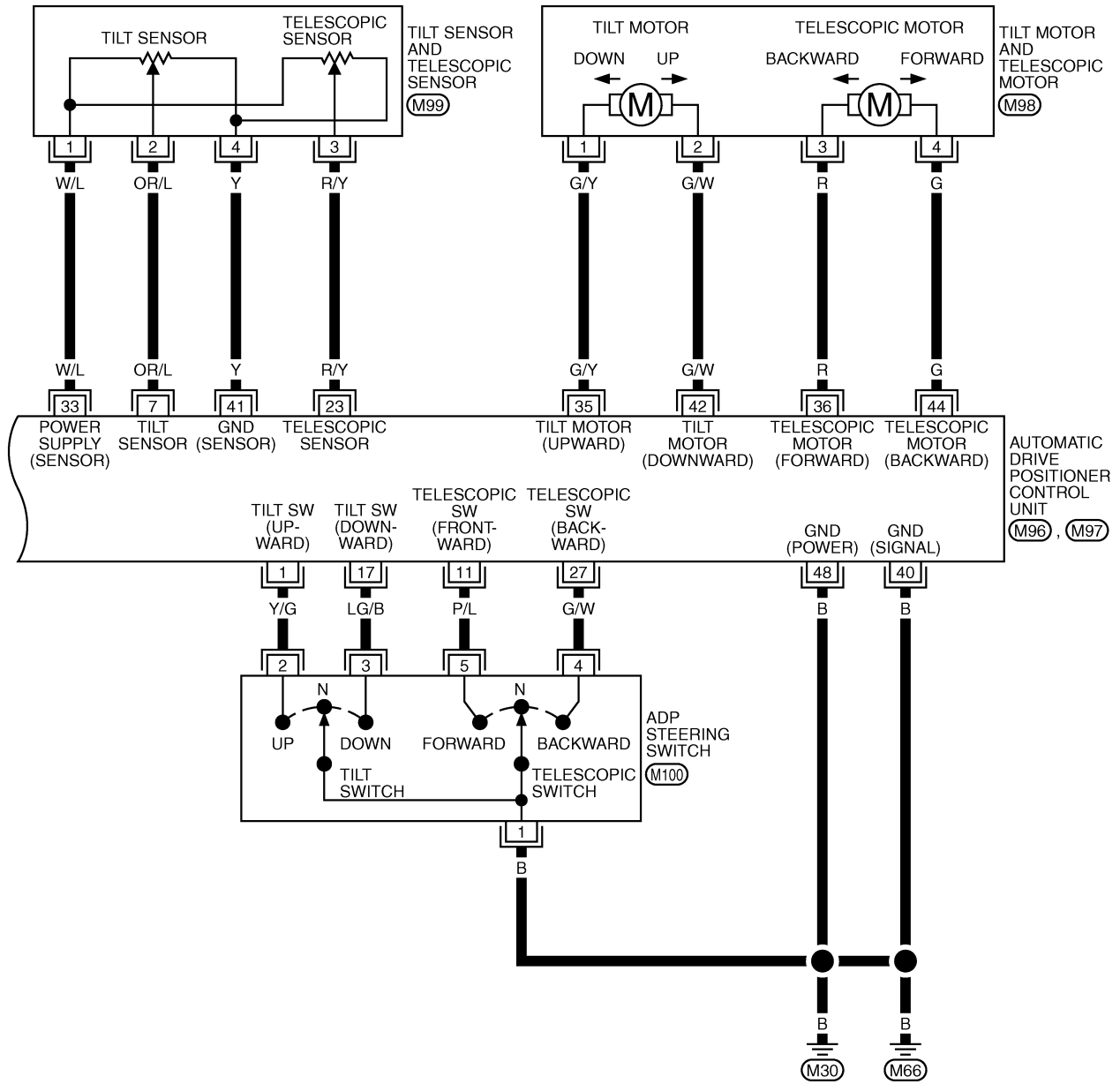
REFER TO THE FOLLOWING.
 (E108), (B1) -SUPER MULTIPLE JUNCTION (SMJ)
 (M75) -ELECTRICAL UNITS

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

TIWM1456E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-04

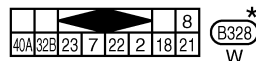
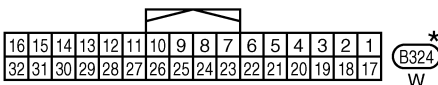
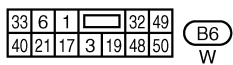
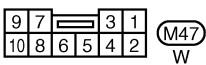
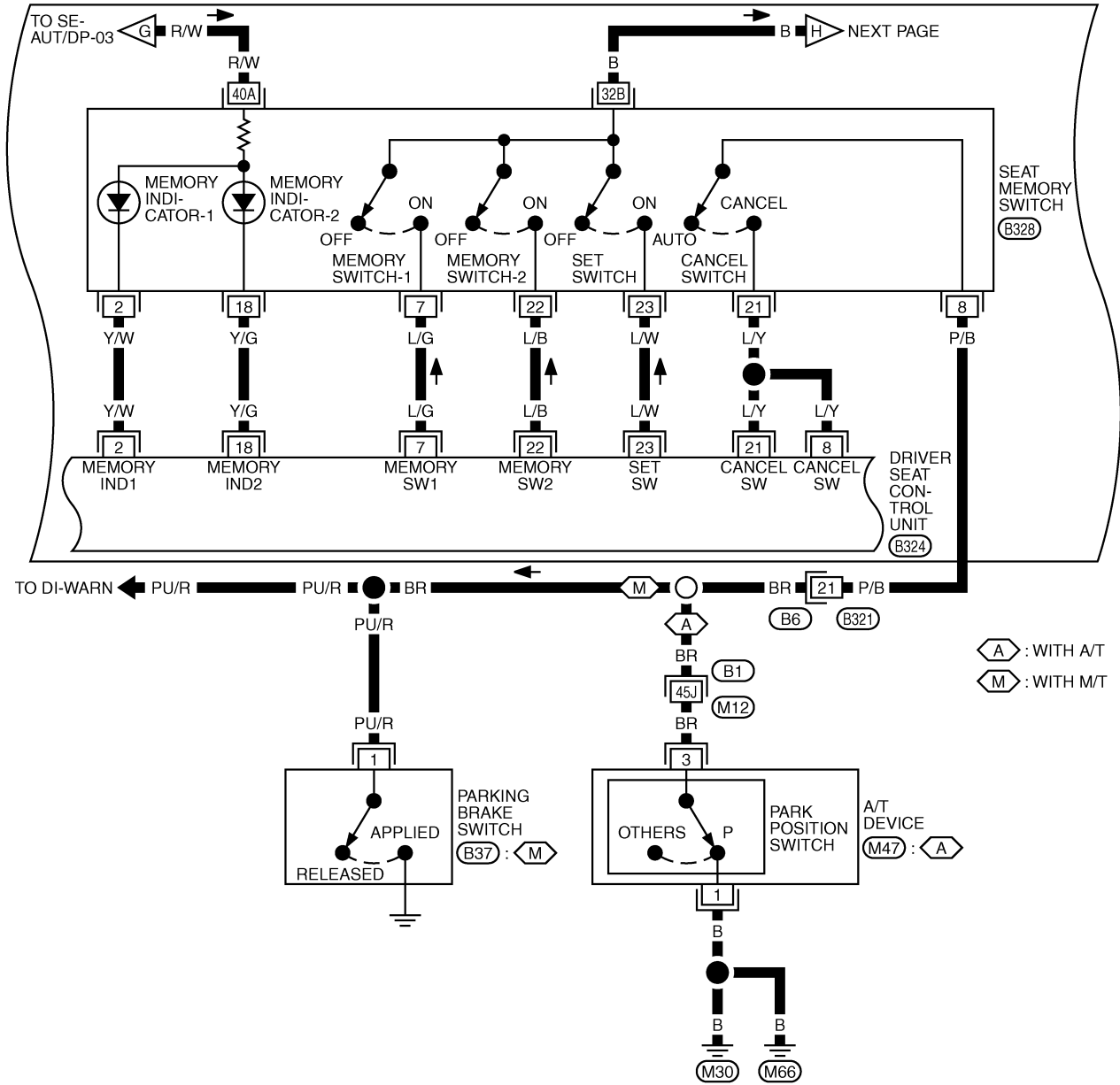


TIWM1097E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-05

FRONT POWER SEAT (DRIVER SIDE)



REFER TO THE FOLLOWING.

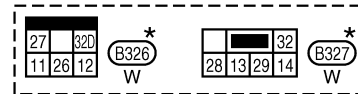
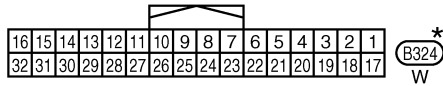
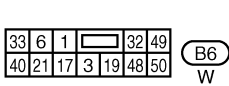
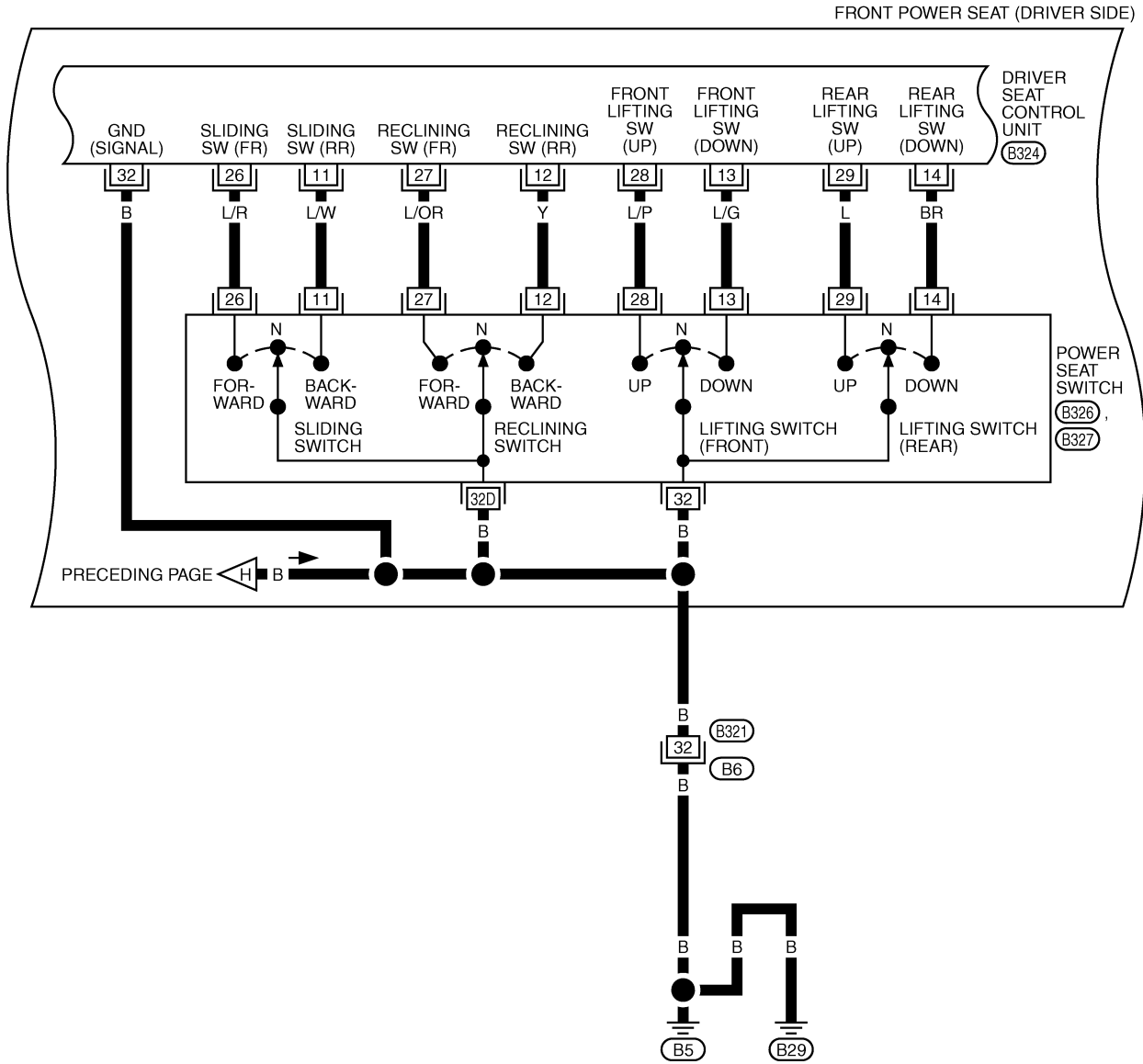
B1 -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1457E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-06

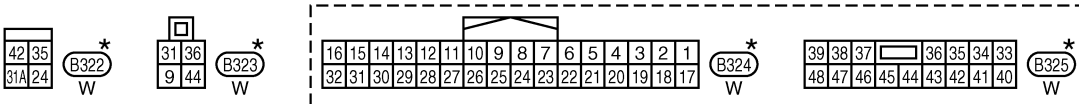
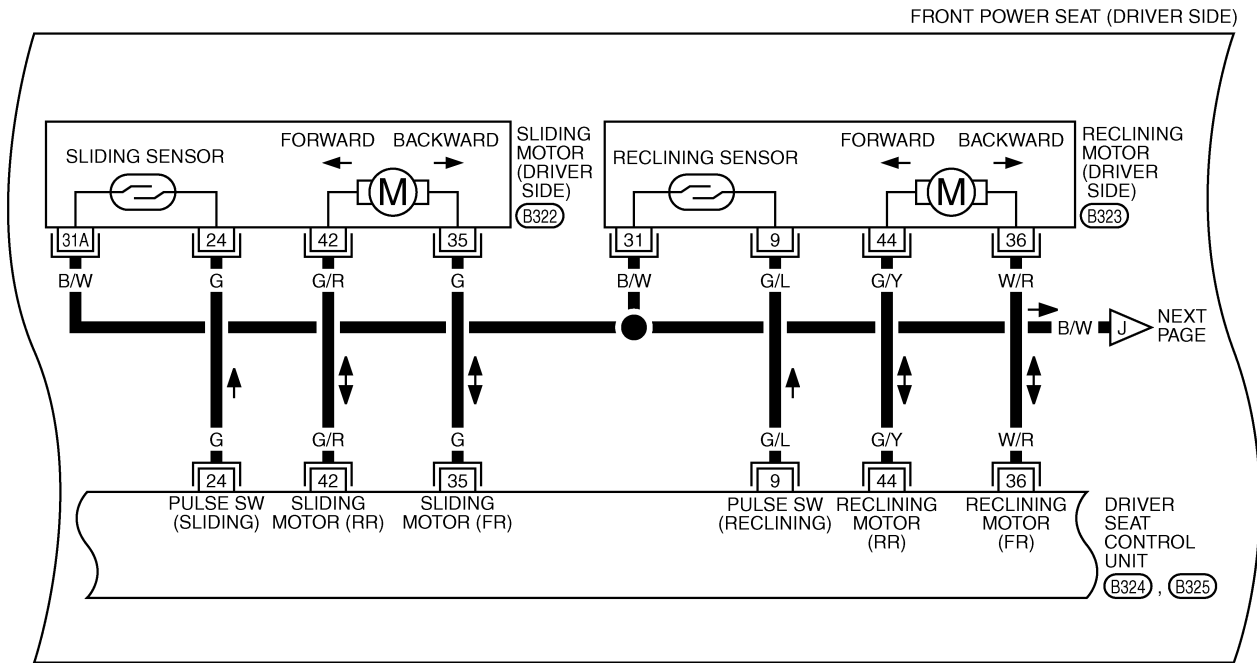


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1099E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-07

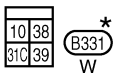
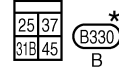
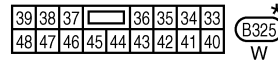
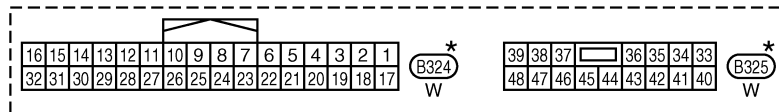
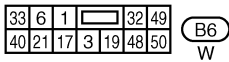
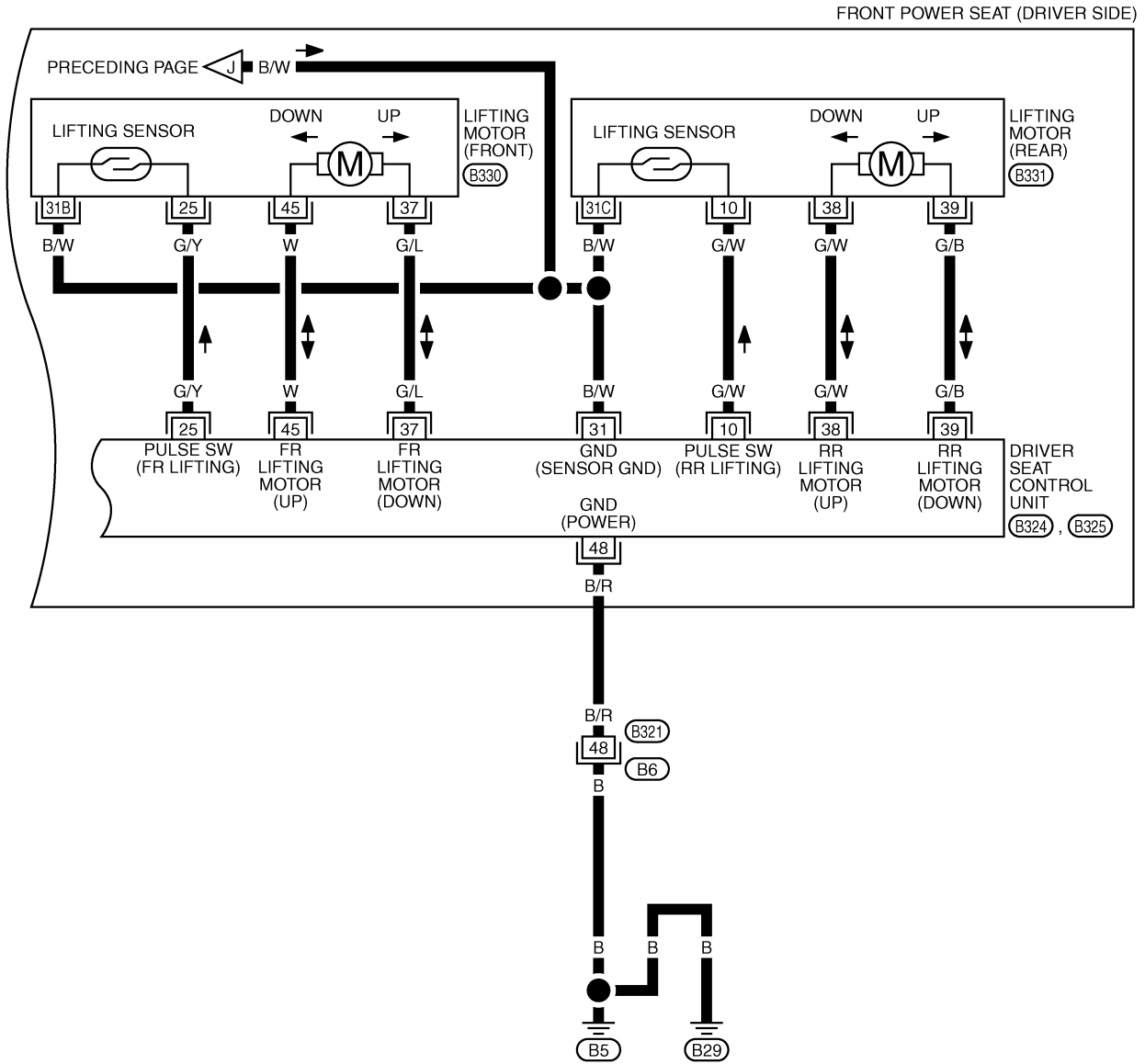


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1101E

AUTOMATIC DRIVE POSITIONER

SE-AUT/DP-08



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

TIWM1102E

AUTOMATIC DRIVE POSITIONER

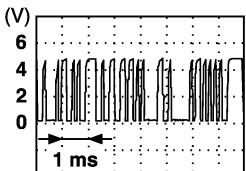
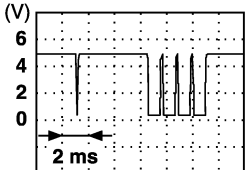
Terminals and Reference Values for BCM

NIS000S5

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
11	LG	Ignition switch (ACC)	Ignition switch (ACC or ON position)	Battery voltage
37	B/P	Key switch signal	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)	Ignition switch (ON or START position)	Battery voltage
39	L	CAN-H	—	—
40	P	CAN-L	—	—
42	GY	Power source (Fuse)	—	Battery voltage
52	B	Ground	—	0
55	W/R	Power supply (Fusible link)	—	Battery voltage
62	W	Front door switch (driver side)	ON (Open) → OFF (Closed)	0 → Battery voltage

Terminals and Reference Values for Automatic Drive Positioner Control Unit

NIS000S6

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
1	Y/G	Tilt switch UPWARD signal	Tilt switch turned to upward	0
			Other than above	5
7	OR/L	Tilt sensor signal	Tilt position, top	1
			Tilt position, bottom	4
10	R/L	UART LINE (TX)	Memory switch 1 or 2 operated	 PIIA4813E
11	P/L	Telescopic switch FORWARD signal	Telescopic switch turned to forward	0
			Other than above	5
17	LG/B	Tilt switch DOWNWARD signal	Tilt switch turned to downward	0
			Other than above	5
23	R/Y	Telescopic sensor input	Telescopic position, top	0.4
			Telescopic position, bottom	0.6
26	R/G	UART LINE (RX)	Memory switch 1 or 2 operated	 PIIA4814E
27	G/W	Telescopic switch BACKWARD signal	Telescopic switch turned to back- ward	0
			Other than above	5
33	W/L	Sensor power supply	—	5

AUTOMATIC DRIVE POSITIONER

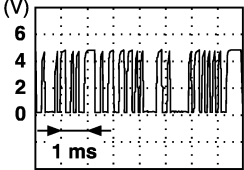
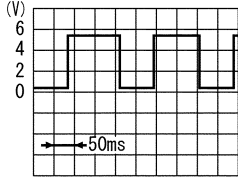
TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
34	GY*1 or Y/R*2	Power source (Fuse)	—	Battery voltage
35	G/Y	Tilt motor UPWARD signal	Tilt switch turned to upward	Battery voltage
			Other than above	0
36	R	Telescopic motor FORWARD signal	Telescopic switch turned to forward	Battery voltage
			OFF	0
39	W	Battery power supply	—	Battery voltage
40	B	Ground (signal)	—	0
41	Y	Sensor ground	—	0
42	G/W	Tilt motor DOWNWARD signal	Tilt switch turned to downward	Battery voltage
			Other than above	0
44	G	Telescopic motor BACKWARD signal	Telescopic switch turned to backward	Battery voltage
			Other than above	0
48	B	Ground (power)	—	0

*1: With A/T

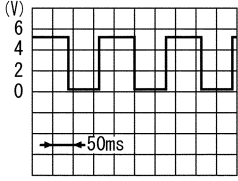
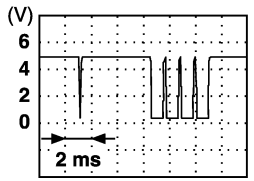
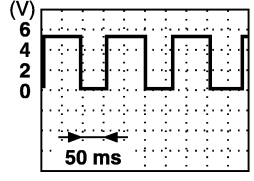
*2 : With M/T

Terminals and Reference Values for Driver Seat Control Unit

NIS000S7

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
1	GY	UART LINE (RX)	Memory switch 1 or 2 switch operated	 PIIA4813E
2	Y/W	Power seat memory switch indicator 1 signal	Memory switch 1: ON	1
			Memory switch 2: OFF	Battery voltage
3	OR	CAN-H	—	—
6	R/L	Ignition switch (START)	Ignition switch (START position)	Battery voltage
7	L/G	Power seat memory switch 1 signal	Memory switch 1: ON	0
			Memory switch 1: OFF	5
8	L/Y	Cancel switch signal	Cancel switch: CANCEL	0
			Cancel switch: AUTO	5
9	G/L	Reclining sensor signal	ON (reclining motor operation)	 SIIA0692J
			Other than above	0 or 5

AUTOMATIC DRIVE POSITIONER

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
10	G/W	Rear lifting sensor signal	ON (rear lifting motor operation)	 <p style="text-align: right; font-size: small;">SIIA0693J</p>
			Other than above	0 or 5
11	L/W	Seat sliding switch BACKWARD signal	When seat sliding switch BACKWARD operation	0
			Other than above	Battery voltage
12	Y	Seat reclining switch BACKWARD signal	When seat reclining switch BACKWARD operation	0
			Other than above	Battery voltage
13	L/G	Front lifting switch DOWN signal	When front lifting switch DOWN operation	0
			Other than above	Battery voltage
14	BR	Rear lifting switch DOWN signal	When rear lifting switch DOWN operation	0
			Other than above	Battery voltage
17	P	UART LINE (TX)	Memory switch 1 or 2 operated	 <p style="text-align: right; font-size: small;">PIIA4814E</p>
18	Y/G	Power seat memory switch inductor 2 signal	Memory switch 2: ON	1
			Memory switch 2: OFF	Battery voltage
19	LG	CAN-L	—	—
21	L/Y	Cancel switch signal	Cancel switch: CANCEL	0
			Cancel switch: AUTO	5
22	L/B	Power seat memory switch 2 signal	Memory switch 2: ON	0
			Memory switch 2: OFF	5
23	L/W	Set switch signal	Set witch: ON	0
			Set witch: OFF	5
24	G	Seat sliding sensor signal	ON (sliding motor operation)	 <p style="text-align: right; font-size: small;">PIIA3277E</p>
			Other than above	0 or 5

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AUTOMATIC DRIVE POSITIONER

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
25	G/Y	Front lifting sensor signal	ON (front lifting motor operation)	
			Other than above	0 or 5
26	L/R	Seat sliding switch FORWARD signal	When seat sliding switch FORWARD operation	0
			Other than above	Battery voltage
27	L/OR	Seat reclining switch FORWARD signal	When seat reclining switch FORWARD operation	0
			Other than above	Battery voltage
28	L/P	Front lifting switch UP signal	When front lifting switch UP operation	0
			Other than above	Battery voltage
29	L	Rear lifting switch UP signal	When rear lifting switch UP operation	0
			Other than above	Battery voltage
31	B/W	Sensor ground	—	0
32	B	Ground (signal)	—	0
33	R	Power source	—	Battery voltage
35	G	Sliding motor FORWARD signal	When sliding motor FORWARD operation	Battery voltage
			Other than above	0
36	W/R	Reclining motor FORWARD signal	When reclining motor FORWARD operation	Battery voltage
			Other than above	0
37	G/L	Front lifting motor DOWN signal	When front lifting motor DOWN operation	Battery voltage
			Other than above	0
38	G/W	Rear lifting motor UP signal	When rear lifting motor UP operation	Battery voltage
			Other than above	0
39	G/B	Rear lifting motor DOWN signal	When rear lifting motor DOWN operation	Battery voltage
			Other than above	0
40	R/W	Power source (Fuse)	—	Battery voltage
42	G/R	Sliding motor BACKWARD signal	When sliding motor BACKWARD operation	Battery voltage
			Other than above	0
44	G/Y	Reclining motor BACKWARD signal	When reclining motor BACKWARD operation	Battery voltage
			Other than above	0
45	W	Front lifting motor UP output signal	When front lifting motor UP operation	Battery voltage
			Other than above	0
48	B/R	Ground (power)	—	0

AUTOMATIC DRIVE POSITIONER

Work Flow

NIS0008

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-31, "Preliminary Check"](#) .
4. Perform the CAN communication inspection using CONSULT-II, refer to [SE-34, "CONSULT-II Function \(AUTO DRIVE POS.\)"](#) .
5. Perform the self-diagnosis. Refer to [SE-38, "Check Can Communication System Inspection"](#) .
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-38, "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

NIS0009

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	Lift 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 LEDs
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 **F** , located in the fuse and fusible link box.)
- Check 10A fuse [No.18, 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 blownout, 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)

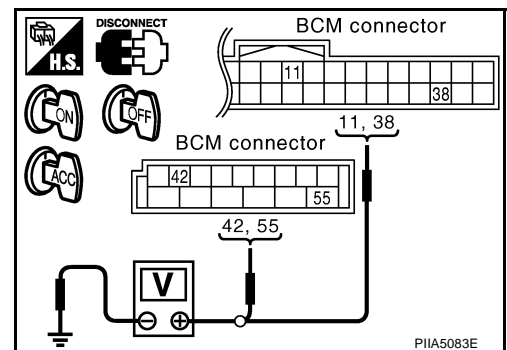
1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM connector and ground.

Connector	Terminals (Wire color)		Ignition switch	Voltage (V) (Approx.)
	(+)	(-)		
M1	11 (LG)	Ground	ACC	Battery voltage
	38 (W/L)		ON	
M2	42 (GY)		OFF	
	55 (W/R)			

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)

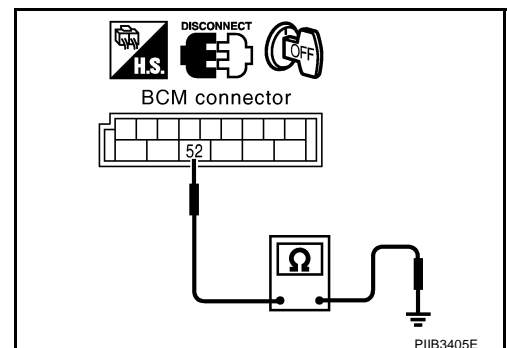
1. Turn ignition switch OFF.
2. Check continuity between BCM connector M2 terminal 52 and ground.

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 blownout, 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)

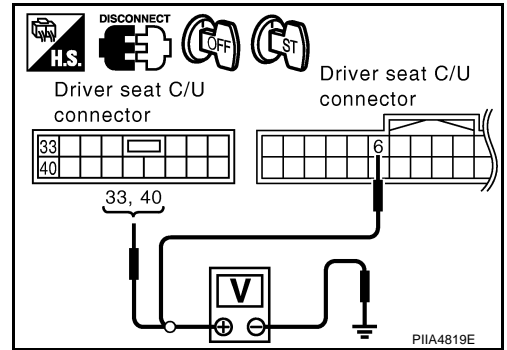
1. Disconnect driver seat control unit connector.
2. Check voltage between driver seat control unit and ground.

Connector	Terminals (Wire color)		Ignition switch	Voltage (V) (Approx.)
	(+)	(-)		
B324	6 (R/L)	Ground	START	Battery voltage
B325	33 (R)		OFF	
	40 (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 B324, B325 terminal 32, 48 and ground.

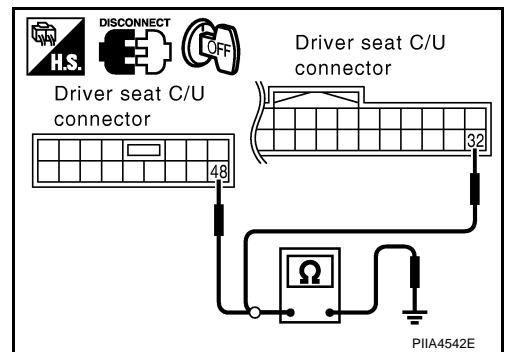
32 (B) – Ground : Continuity should exist.

48 (B/R) – Ground : Continuity should exist.

OK or NG

OK >> GO TO 7.

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



AUTOMATIC DRIVE POSITIONER

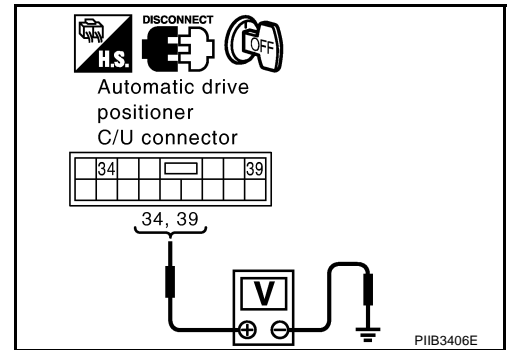
7. CHECK POWER SUPPLY CIRCUIT (AUTOMATIC DRIVE POSITIONER CONTROL UNIT)

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.)
	(+)	(-)		
M97	34 (GY*1 or Y/R*2)	Ground	OFF	Battery voltage
	39 (W)			

*1: With A/T

*2: With M/T



OK or NG

OK >> GO TO 8.

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

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

Check continuity between the automatic drive positioner control unit connector M97 terminal 40, 48 and ground.

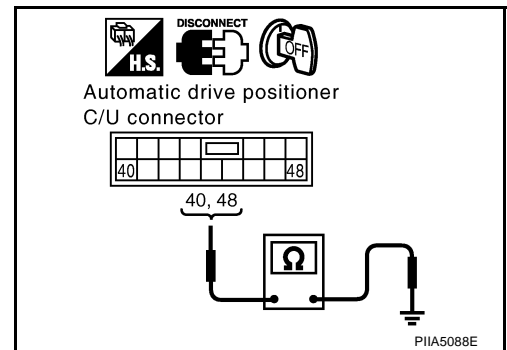
40 (B) – Ground : Continuity should exist.

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.)

NIS0005A

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

CONSULT-II diagnosis items	Inspection item, self-diagnosis mode		Content	Reference page
AUTO DRIVE POSITIONER	WORK SUPPORT*1		Changes the setting for each function.	—
	SELF-DIG RESULTS		Check the self-diagnosis results.	SE-35
	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-36
	CAN DIAG SUPPORT MONITOR		The results of transmit / receive diagnosis of CAN communication can be read	LAN-15
	ACTIVE TEST*2		Gives a drive signal to a load to check the operation.	SE-37
	ECU 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.

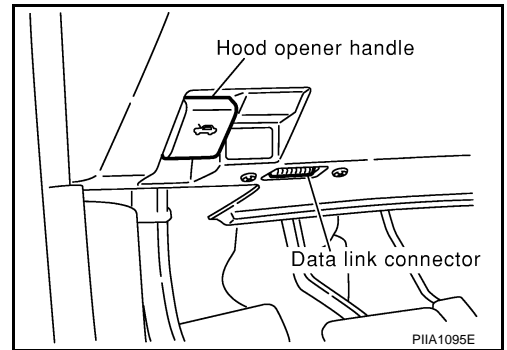
CONSULT-II INSPECTION PROCEDURE

CAUTION:

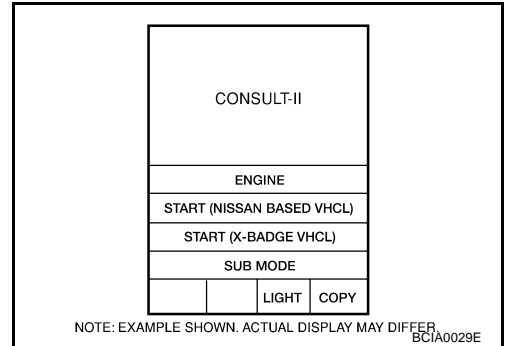
If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

AUTOMATIC DRIVE POSITIONER

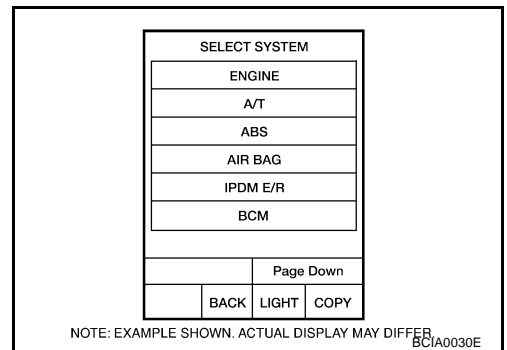
1. Turn ignition switch "OFF".
2. Connect "CONSULT-II" and "CONSULT-II CONVERTER" to the data link connector.



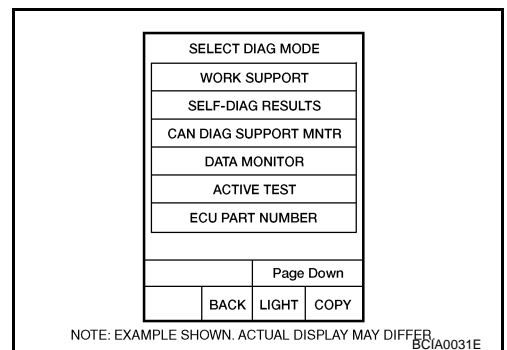
3. Turn ignition switch "ON".
4. Touch "START (NISSAN BASED VHCL)".



5. Touch "AUTO DRIVE POS" and "BCM".
If "AUTO DRIVE POS." is not indicated, refer to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).



6. Select diagnosis mode.
"DATA MONITOR", "ACTIVE TEST", "SELF-DIAG RESULTS", "ECU PART NUMBER" and "WORK SUPPORT" are available.



SELF-DIAGNOSIS RESULTS

Display Item List

CONSULT-II display	Item	Malfunction is detected when...	Reference page
CAN COMM CIRC [U1000]	CAN communication	Malfunction is detected in CAN communication.	SE-38
SEAT SLIDE [B2112]	Seat slide motor	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-39 SE-48

AUTOMATIC DRIVE POSITIONER

CONSULT-II display	Item	Malfunction is detected when...	Reference page
SEAT RECLINING [B2113]	Seat reclining motor	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-41 SE-49
SEAT LIFTER FR [B2114]	Seat lifting FR motor	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-42 SE-50
SEAT LIFTER RR [B2115]	Seat lifting RR motor	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-44 SE-51
TILT OUTPUT [B2116]	Tilt motor	When any manual and automatic operations are not performed, if any motor operations of seat tilt is detected for 0.1 second or more, status is judged "Output error".	SE-46
TILT SENSOR [B2118]	Tilt sensor	When tilt sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-53
TELESCO SENSOR [B2119]	Telescopic sensor	When telescopic sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-52
DETENT SW [B2126]	Detente SW	With the A/T selector lever in P position (Detente switch OFF), if the vehicle speed of 7 km/h (4 MPH) or higher was input the detente switch input system is judged malfunctioning.	SE-67
PARKING BRAKE [B2127]	Parking brake	With parking brake use (Parking brake switch ON), if a vehicle speed of 7km/h (4MPH) or higher is input, the parking brake switch input system is judged malfunctioning.	SE-69
UART COMM [B2128]	UART communication	Malfunction is detected in UART communication.	SE-77

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.

AUTOMATIC DRIVE POSITIONER

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.
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.
DETENT SW	“ON/OFF”	The selector lever position “OFF (P position) / ON (other than P position)” judged from the detention 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.
PARK BRAKE SW	“ON/OFF”	“ON/OFF” status from the parking brake switch signal 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.

AUTOMATIC DRIVE POSITIONER

Check Can Communication System Inspection

NIS000SB

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.

Ⓟ With CONSULT-II

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-3, "Precautions When Using CONSULT-II"](#) .
 No >> Inspection END.

Symptom Chart

NIS000SC

Symptom	Diagnoses / service procedure	Reference page
A part of seat system does not operate (both automatically and manually).	1. Check sliding motor circuit	SE-39
	2. Check reclining motor circuit	SE-41
	3. Check front lifter motor circuit	SE-42
	4. Check rear lifter motor circuit	SE-44
	5. If the above systems are normal, replace the driver seat control unit.	SE-15
A part of steering tilt and telescopic does not operate (both automatically and manually).	1. Check tilt motor circuit	SE-46
	2. Check telescopic motor circuit	SE-45
	3. 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-48
	2. Check reclining sensor circuit	SE-49
	3. Check front lifting sensor circuit	SE-50
	4. Check rear lifting sensor circuit	SE-51
	5. If the above systems are normal, replace the driver seat control unit.	SE-15
All the automatic operations do not operate.	1. Check park position switch (P range switch) circuit (A/T models)	SE-67
	2. Check parking brake switch circuit	SE-69
	3. Check key switch and ignition knob switch circuit (with intelligent key)	SE-70
	4. Check key switch circuit (without intelligent key)	SE-71
	5. Check UART communication line circuit	SE-77
	6. Check tilt sensor circuit	SE-53
	7. Check telescopic sensor circuit	SE-52
	8. If all the above systems are normal, replace the automatic drive positioner control unit.	SE-15

AUTOMATIC DRIVE POSITIONER

Symptom	Diagnoses / service procedure	Reference page
A part of seat system does not operate (only manual operation).	1. Check sliding switch circuit	SE-57
	2. Check reclining switch circuit	SE-58
	3. Check front lifting switch circuit	SE-60
	4. Check rear lifting switch circuit	SE-61
	5. If the above systems are normal, replace the driver seat control unit.	SE-15
A part of steering tilt and telescopic do not operate (only manual operation).	1. Check tilt switch	SE-65
	2. Check telescopic switch	SE-63
	3. If the above systems are normal, replace the automatic drive positioner control unit.	SE-15
Only seat memory and set switch operation does not operate.	1. Check seat memory and set switch circuit	SE-73
	2. If the above systems are normal, replace the driver seat control unit.	SE-15
Only seat memory cancel switch operation does not operate.	1. Check seat memory cancel switch circuit	SE-74
	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-75
	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-55
	2. If all the above systems are normal, replace the BCM	SE-15
Only steering system does not operated	Check tilt sensor and telescopic sensor power supply and ground circuit	SE-54
Only seat sliding and reclining operation does not operation	Check sliding and reclining switch ground circuit	SE-62
Only seat lifting (front and rear) operation does not operation	Check lifting switch (front and rear) ground circuit	SE-63

Check Sliding Motor Circuit

NIS000SD

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.

NG >> Repair the malfunctioning part and check again.

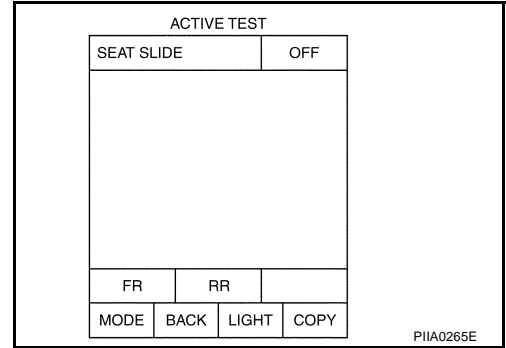
AUTOMATIC DRIVE POSITIONER

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.



Without CONSULT-II

GO TO 3.

OK or NG

OK >> Sliding motor circuit is OK.

NG >> GO TO 3.

3. CHECK SLIDING MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and sliding motor connector.
3. Check continuity between driver seat control unit connector B325 terminals 35, 42 and sliding motor connector B322 terminals 35, 42.

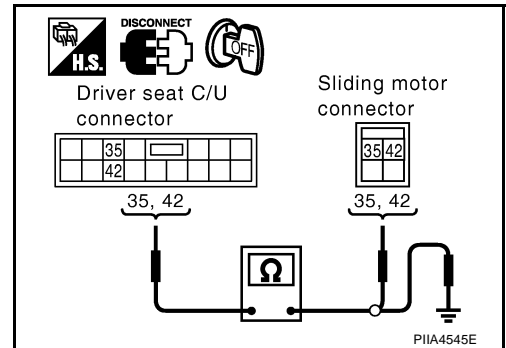
35 (G) – 35 (G) : Continuity should exist.

42 (G/R) – 42 (G/R) : Continuity should exist.

4. Check continuity between driver seat control unit connector B325 terminals 35, 42 and ground.

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

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



OK or NG

OK >> GO TO 4.

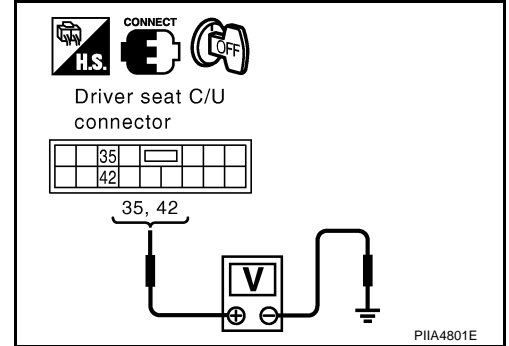
NG >> Repair or replace harness between driver seat control unit and sliding motor.

AUTOMATIC DRIVE POSITIONER

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Sliding switch condition	Voltage (V) (Approx.)
	(+)	(-)		
B325	35 (G)	Ground	FORWARD	Battery voltage
			Other than above	0
	42 (G/R)		BACKWARD	Battery voltage
			Other than above	0



OK or NG

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

Check Reclining Motor Circuit

NIS000SE

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

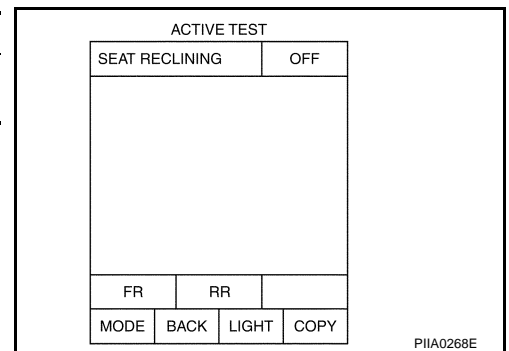
- OK >> GO TO 2.
- NG >> Repair the malfunctioning part and check again.

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.



ⓧ Without CONSULT-II

GO TO 3.

OK or NG

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

AUTOMATIC DRIVE POSITIONER

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 B325 terminals 36, 44 and reclining motor connector B323 terminals 36, 44.

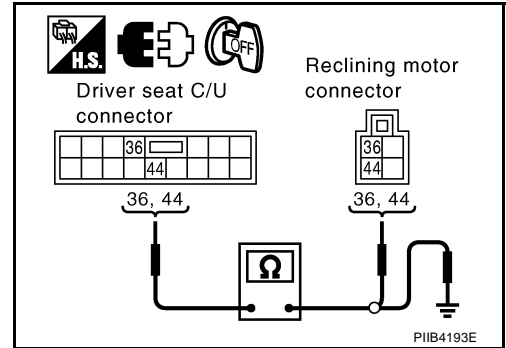
36 (W/R) – 36 (W/R) : Continuity should exist.

44 (G/Y) – 44 (G/Y) : Continuity should exist.

4. Check continuity between driver seat control unit connector B325 terminals 36, 44 and ground.

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

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



OK or NG

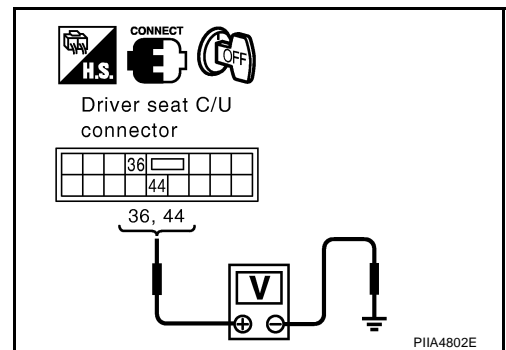
OK >> GO TO 4.

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

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.)
	(+)	(-)		
B325	36 (W/R)	Ground	FORWARD	Battery voltage
			Other than above	0
	44 (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

NIS000SF

1. CHECK FRONT END SEAT 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.

NG >> Repair the malfunctioning part and check again.

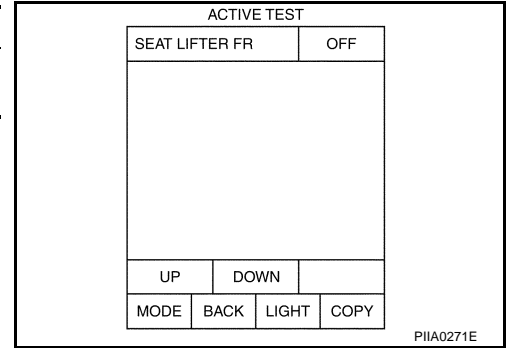
AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

With CONSULT-II

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

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



Without CONSULT-II

GO TO 3.

OK or NG

OK >> Front lifting motor circuit is OK.

NG >> GO TO 3.

3. CHECK FRONT LIFTING MOTOR HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect driver seat control unit connector and front lifting motor connector.
- Check continuity between driver seat control unit connector B325 and terminals 37, 45 and front lifting motor connector B330 terminals 37, 45.

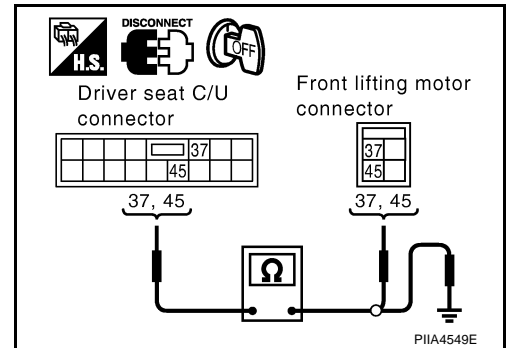
37 (G/L) – 37 (G/L) : Continuity should exist.

45 (W) – 45 (W) : Continuity should exist.

- Check continuity between driver seat control unit connector B325 and terminals 37, 45 and ground.

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

45 (W) – 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

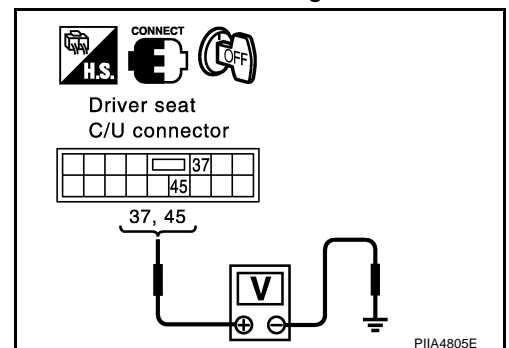
- Connect the driver seat control unit connector.
- Front lifting switch operate, check voltage between driver seat control unit connector and ground.

Connector	Terminals (Wire color)		Front lifting switch condition	Voltage (V) (Approx.)
	(+)	(-)		
B325	37 (G/L)	Ground	DOWN	Battery voltage
			Other than above	0
	45 (W)		UP	Battery voltage
			Other than above	0

OK or NG

OK >> Replace front lifting motor.

NG >> Replace driver seat control unit.



AUTOMATIC DRIVE POSITIONER

NIS000SG

Check Rear Lifting Motor Circuit

1. CHECK REAR END SEAT 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.

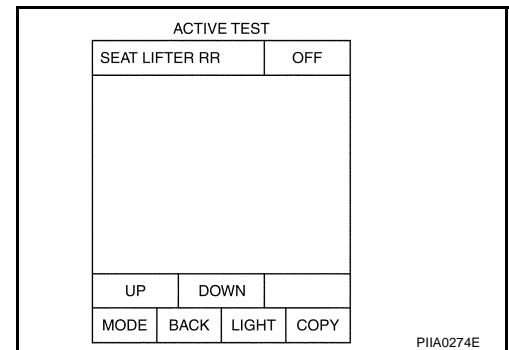
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

 **With CONSULT-II**

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

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



 **Without CONSULT-II**

GO TO 3.

OK or NG

OK >> Rear lifting motor check is OK.

NG >> GO TO 3.

3. CHECK REAR LIFTING HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and rear lifting motor connector.
3. Check continuity between driver seat control unit connector B325 terminals 38, 39 and lifting motor connector B331 terminals 38, 39.

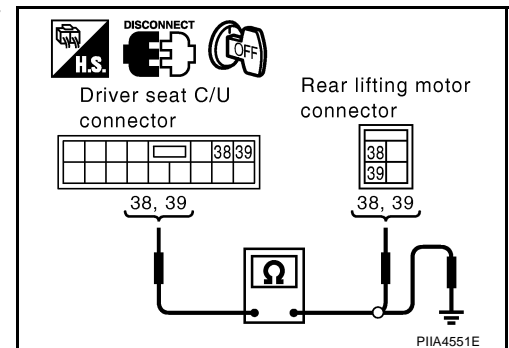
38 (G/W) – 38 (G/W) : Continuity should exist.

39 (G/B) – 39 (G/B) : Continuity should exist.

4. Check continuity between driver seat control unit B325 terminals 38, 39 and ground.

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

39 (G/B) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 4.

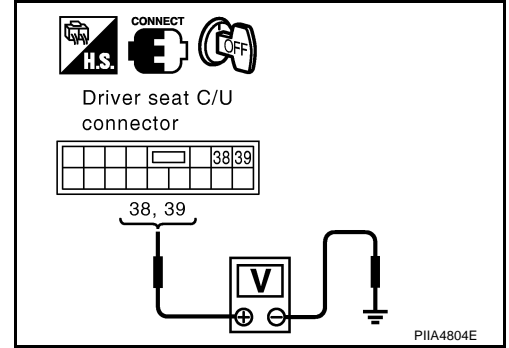
NG >> Repair or replace harness between driver seat control unit and rear lifting motor.

AUTOMATIC DRIVE POSITIONER

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect the driver seat control unit connector.
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.)
	(+)	(-)		
B325	38 (G/W)	Ground	UP	Battery voltage
			Other than above	0
	39 (G/B)		DOWN	Battery voltage
			Other than above	0



OK or NG

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

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

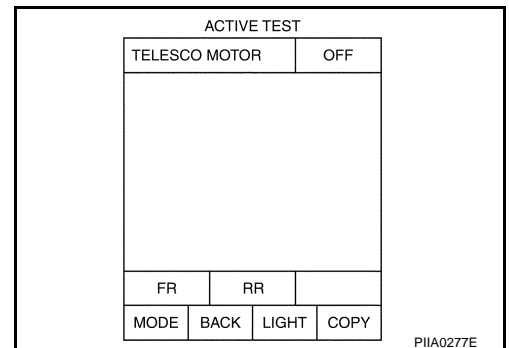
- OK >> GO TO 2.
- NG >> Repair the malfunctioning part and check again.

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.



Without CONSULT-II

GO TO 3.

OK or NG

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

AUTOMATIC DRIVE POSITIONER

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 M97 terminals 36, 44 and tilt motor and telescopic motor connector M98 terminals 3, 4.

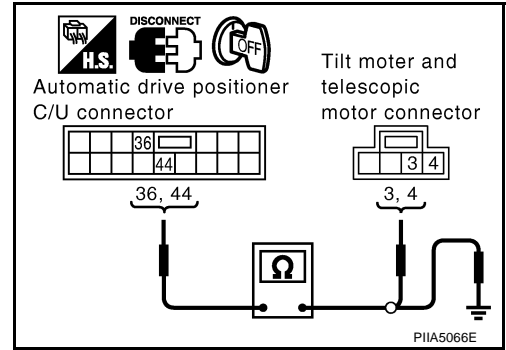
36 (R) – 3 (R) : Continuity should exist.

44 (G) – 4 (G) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M97 terminals 36, 44 and ground.

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

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



OK or NG

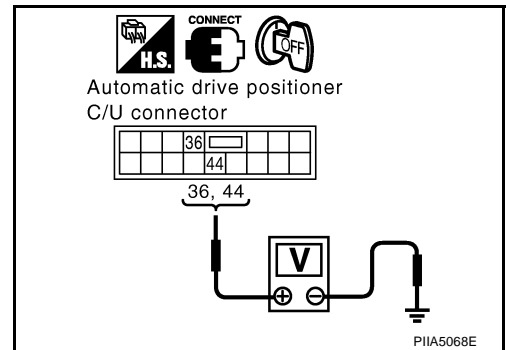
OK >> GO TO 4.

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

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.)
	(+)	(-)		
M97	36 (R)	Ground	FORWARD	Battery voltage
			Other than above	0
	44 (G)		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

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.

NG >> Repair the malfunctioning part.

NIS000SI

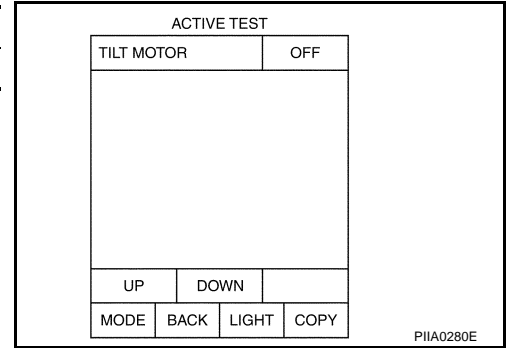
AUTOMATIC DRIVE POSITIONER

2. CHECK FUNCTION

With CONSULT-II

Check operation with "TILT MOTOR" in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

OK >> Steering tilt motor circuit is OK.

NG >> GO TO 3.

3. CHECK TILT MOTOR CIRCUIT HARNESS CONTINUITY

- Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit connector and tilt and telescopic motor connector.
- Check continuity between automatic drive positioner control unit connector M97 terminals 35, 42 and tilt and telescopic motor connector M98 terminals 1, 2.

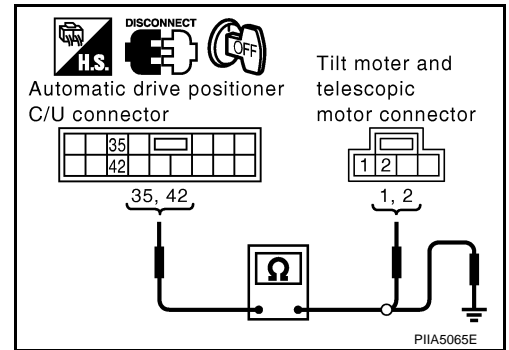
35 (G/Y) – 1 (G/Y) : Continuity should exist.

42 (G/W) – 2 (G/W) : Continuity should exist.

- Check continuity between automatic drive positioner control unit connector M97 terminals 35, 42 and ground.

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

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



OK or NG

OK >> GO TO 4.

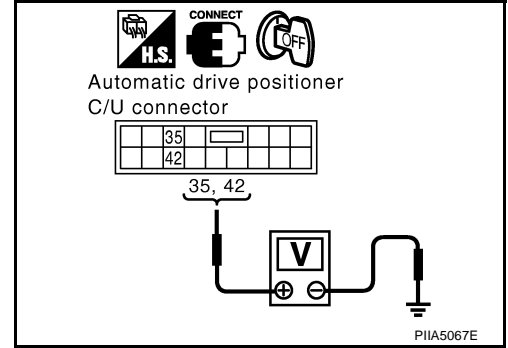
NG >> Repair or replace harness between automatic drive positioner control unit and tilt and telescopic motor.

AUTOMATIC DRIVE POSITIONER

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.)
	(+)	(-)		
M97	35 (G/Y)	Ground	UP	Battery voltage
			Other than above	0
	42 (G/W)		DOWN	Battery voltage
			Other than above	0



OK or NG

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

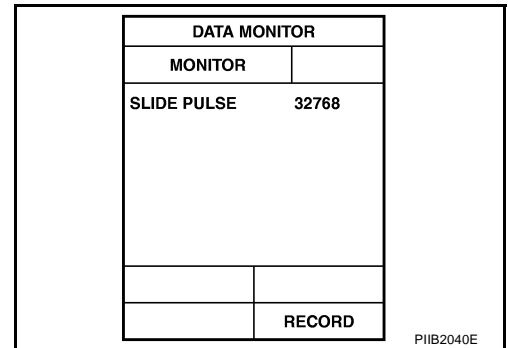
Check Sliding Sensor Circuit

1. CHECK FUNCTION

With CONSULT-II

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

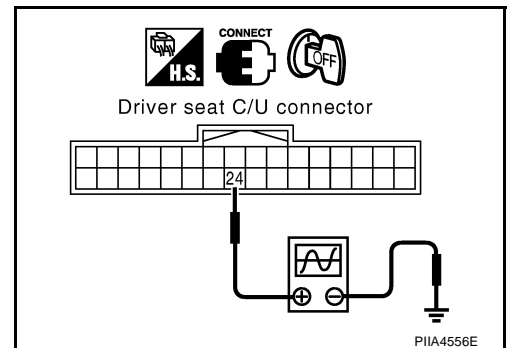
Monitor item [OPERATION or UNIT]	Contents
SLIDE PULSE	— The seat sliding position (pulse) judged from the sliding sensor signal is displayed.



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)
	(+)	(-)		
B324	24 (G)	Ground	Sliding motor operation	<p style="text-align: right;">PIIA3277E</p>



OK or NG

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

AUTOMATIC DRIVE POSITIONER

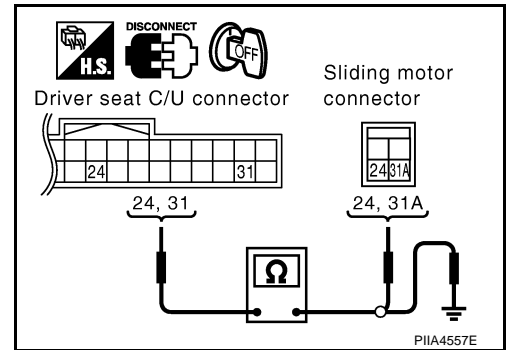
2. CHECK SLIDING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and sliding motor connector.
2. Check continuity between driver seat control unit connector B324 terminals 24, 31 and sliding motor B322 terminals 24, 31A.

24 (G) – 24 (G) : Continuity should exist.
31 (B/W) – 31A (B/W) : Continuity should exist.

3. Check continuity between driver seat control unit B324 terminals 24, 31 and ground.

24 (G) – Ground : Continuity should not exist.
31 (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.

Check Reclining Sensor Circuit

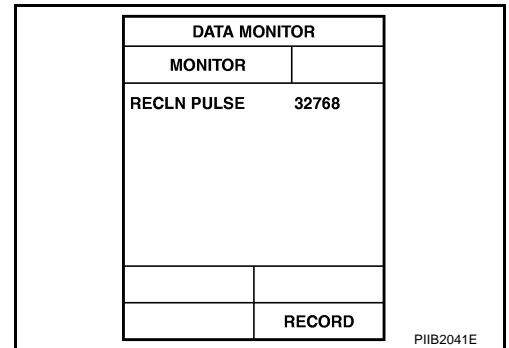
NIS000SK

1. CHECK FUNCTION

With CONSULT-II

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

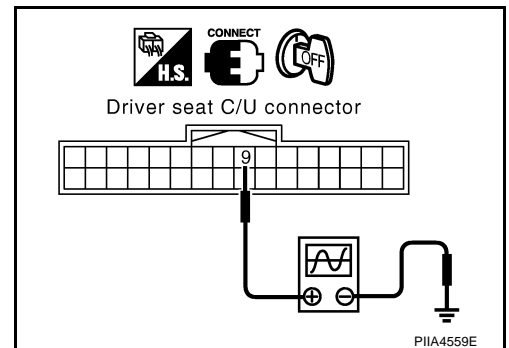
Monitor item [POERATION or UNIT]	Contents
RECLN PULSE	— The seat reclining position (pulse) judged from the reclining sensor is displayed



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)
	(+)	(-)		
B324	9 (G/L)	Ground	Reclining motor operation	



OK or NG

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

AUTOMATIC DRIVE POSITIONER

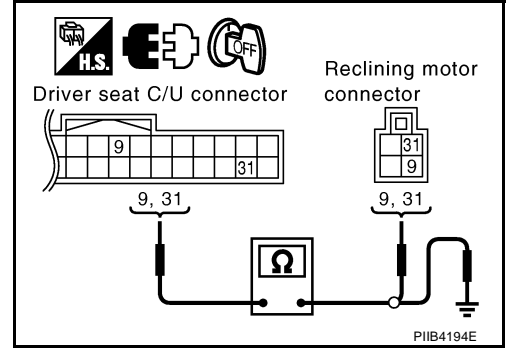
2. CHECK RECLINING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and reclining motor connector.
2. Check continuity between driver seat control unit connector B324 terminals 9, 31 and reclining motor connector B323 terminals 9, 31.

9 (G/L) – 9 (G/L) : Continuity should exist.
31 (B/W) – 31 (B/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 9, 31 and ground.

9 (G/L) – Ground : Continuity should not exist.
31 (B/W) – 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.

Check Front Lifting Sensor Circuit

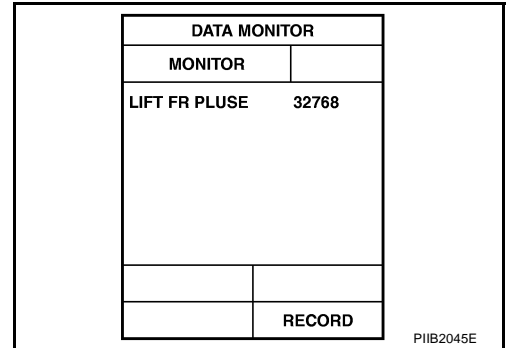
NIS000SL

1. CHECK FUNCTION

With CONSULT-II

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

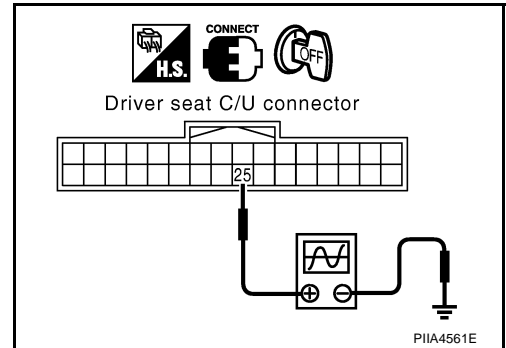
Monitor item [OPERATION or UNIT]	Contents
LIFT FR PULSE	— The front lifting position (pulse) judged from the front lifting sensor is displayed



Without CONSULT-II

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)
	(+)	(-)		
B324	25 (G/Y)	Ground	Front lifting motor operation	<p style="text-align: right; font-size: small;">S1IA0691J</p>



OK or NG

OK >> Front lifting sensor circuit is OK.

NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

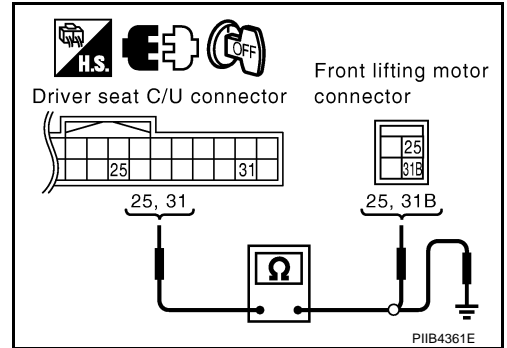
2. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and front lifting motor connector.
2. Check continuity between driver seat control unit connector B324 terminals 25, 31 and front lifting motor connector B330 terminals 25, 31B.

25 (G/Y) – 25 (G/Y) : Continuity should exist.
31 (B/W) – 31B (B/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 25, 31 and ground.

25 (G/Y) – Ground : Continuity should not exist.
31 (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.

Check Rear Lifting Sensor Circuit

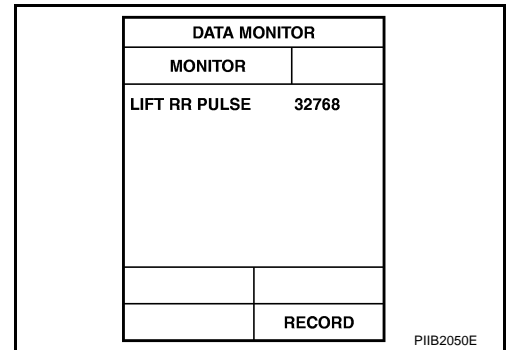
NIS000SM

1. CHECK REAR END LIFTING SENSOR INPUT/OUTPUT SIGNAL

Ⓟ With CONSULT-II

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

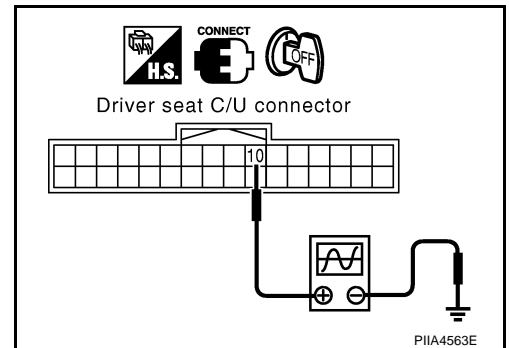
Monitor item [OPERATION or UNIT]		
LIFT RR PULSE	—	The rear lifting position (pulse) judged from the rear lifting sensor is displayed.



⊗ 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)
	(+)	(-)		
B324	10 (G/W)	Ground	Rear lifting motor operation	<p style="text-align: right; font-size: small;">SIIA0693J</p>



OK or NG

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

AUTOMATIC DRIVE POSITIONER

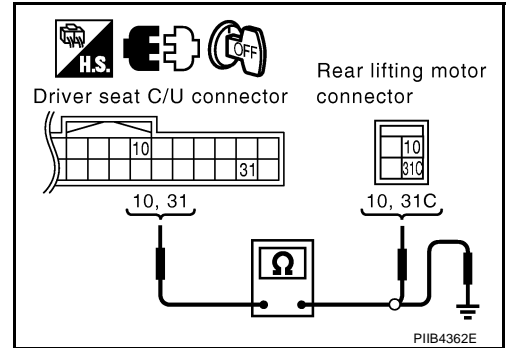
2. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and rear lifting motor connector.
2. Check continuity between driver seat control unit connector B324 terminals 10, 31 and rear lifting motor connector B331 terminals 10, 31C.

10 (G/W) – 10 (G/W) : Continuity should exist.
31 (B/W) – 31C (B/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 10, 31 and ground.

10 (G/W) – Ground : Continuity should not exist.
31 (B/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.

Check Telescopic Sensor Circuit

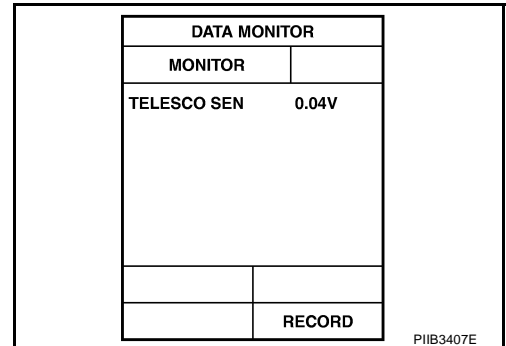
NIS000SN

1. CHECK FUNCTION

With CONSULT-II

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

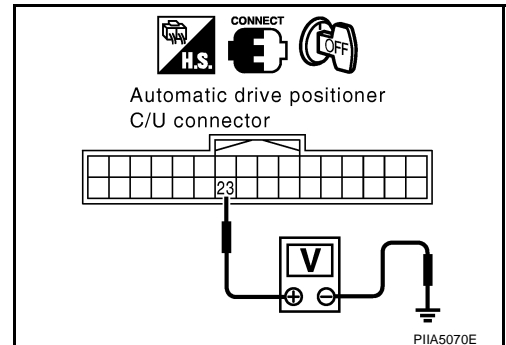
Monitor item [OPERATION or UNIT]	Contents	
TELESCO SEN	“V”	The telescoping position (voltage) judged from the telescoping sensor signal is displayed.



Without CONSULT-II

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.)
	(+)	(-)		
M96	23 (R/Y)	Ground	Telescopic top position	0.4
			Telescopic bottom position	4.6



OK or NG

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

AUTOMATIC DRIVE POSITIONER

2. CHECK HARNESS CONTINUITY

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 M96 terminals 23 and tilt sensor and telescopic sensor connector M99 terminals 3.

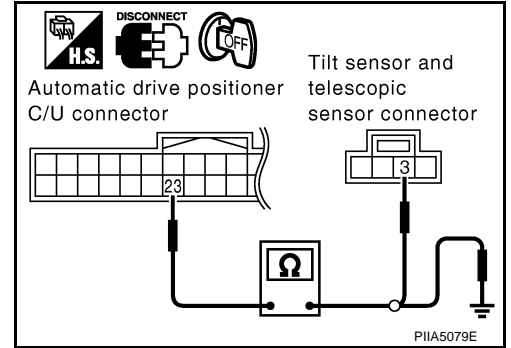
23 (R/Y) – 3 (R/Y) : Continuity should exist.

3. Check continuity harness between automatic drive positioner control unit connector M96 terminals 23 and ground.

23 (R/Y) – 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.



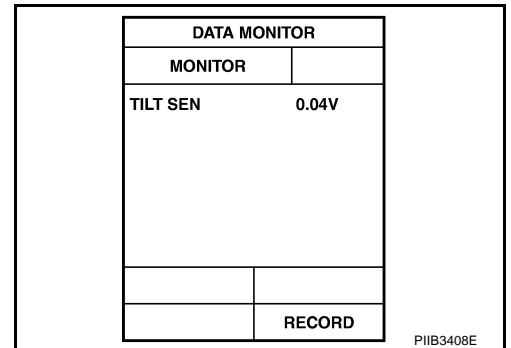
Check Tilt Sensor Circuit

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.



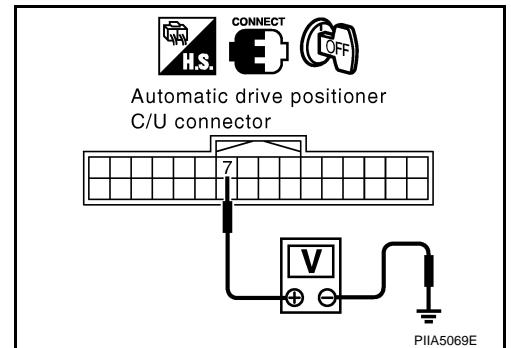
Without CONSULT-II

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.)
	(+)	(-)		
M96	7 (OR/L)	Ground	Tilt top position	1
			Tilt bottom position	4

OK or NG

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



AUTOMATIC DRIVE POSITIONER

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 M96 terminals 7 and tilt sensor and telescopic sensor connector M99 terminals 2.

7 (OR/L) – 2 (OR/L) : Continuity should exist.

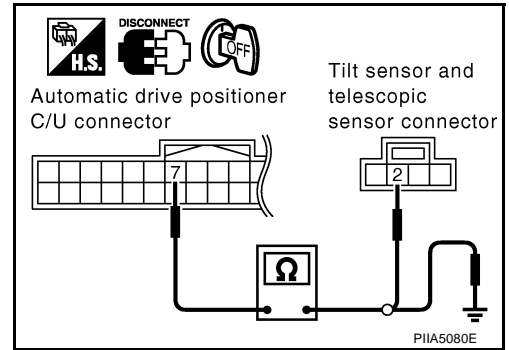
3. Automatic drive positioner control unit connector M96 terminals 7 and ground.

7 (OR/L) – 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.



Check Tilt Sensor and Telescopic Sensor Power and Ground Circuit

NIS000SP

1. CHECK TILT SENSOR AND TELESCOPIC SENSOR POWER SUPPLY

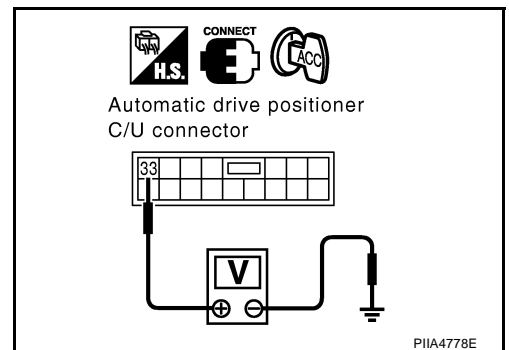
1. Turn ignition switch OFF.
2. Check voltage between automatic drive positioner control unit connector M97 terminal 33 and ground.

33 (W/L) – Ground : Approx. 5V

OK or NG

OK >> GO TO 2.

NG >> Replace automatic drive positioner control unit.



2. CHECK TILT SENSOR AND TELESCOPIC SENSOR GROUND CIRCUIT

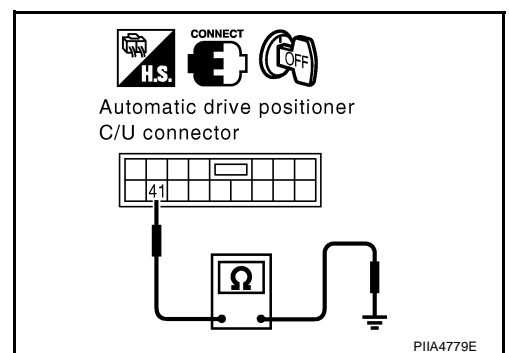
Check continuity between automatic drive positioner control unit connector M97 terminal 41 and ground.

41 (Y) – Ground : Continuity should exist.

OK or NG

OK >> GO TO 3.

NG >> Replace automatic drive positioner control unit.



AUTOMATIC DRIVE POSITIONER

3. CHECK HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit and tilt sensor and telescopic sensor.
2. Check continuity between automatic drive positioner control unit connector M97 terminal 33, 41 and tilt sensor and telescopic sensor connector M99 terminal 1, 4.

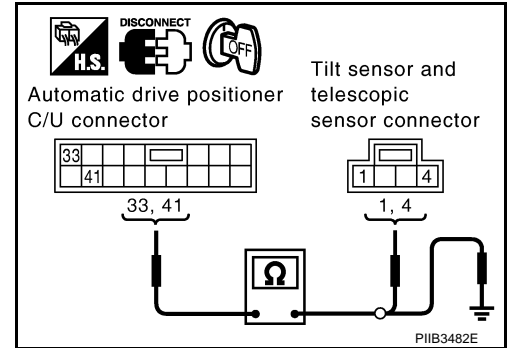
33 (W/L) – 1 (W/L) : Continuity should exist.

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

3. Check continuity between automatic drive positioner control unit connector M97 terminal 33, 41 and ground.

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

41 (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

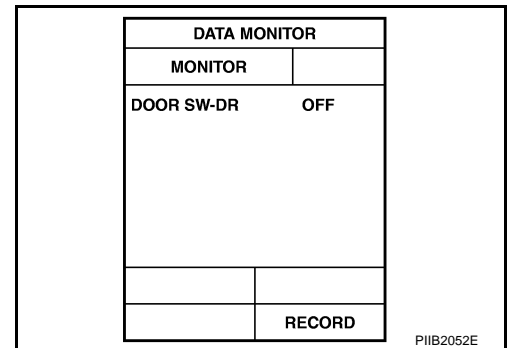
NIS000SQ

1. CHECK FUNCTION

Ⓜ 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.



ⓧ Without CONSULT-II

GO TO 2.

OK or NG

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

NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

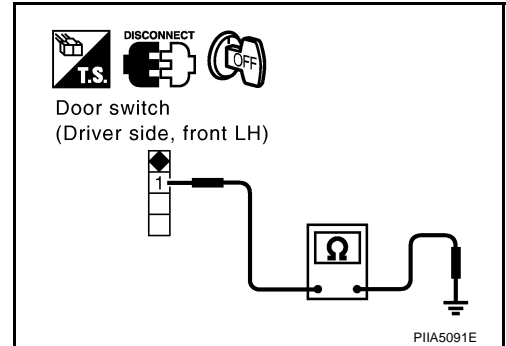
2. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

1. Turn ignition switch OFF.
2. Disconnect front door switch connector.
3. Check continuity between 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 B4 terminal 62 and front door switch connector B17 terminal 1.

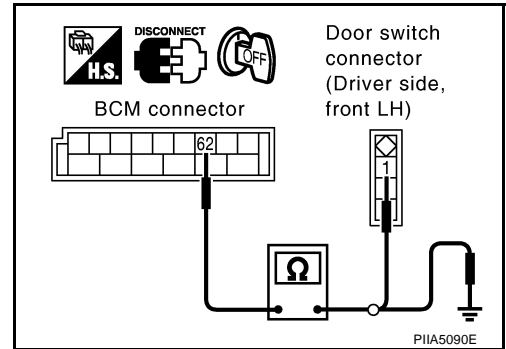
62 (W) – 1 (W) : Continuity should exist.

3. Check continuity between BCM connector B4 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

NIS000SR

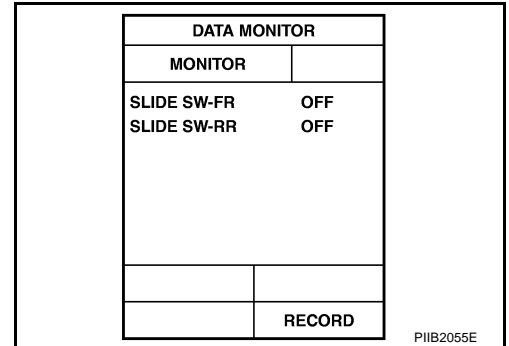
Check Sliding Switch Circuit

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.

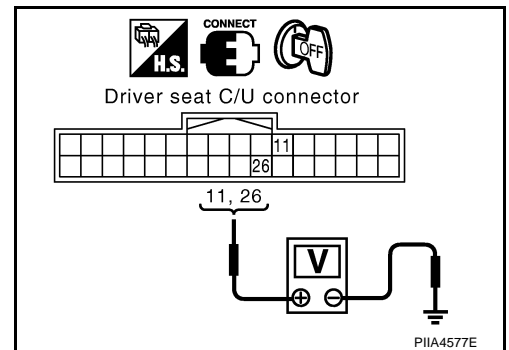
Monitor item [OPERATION or UNIT]	Contents	
SLIDE SW – FR	"ON/ OFF"	ON/OFF status judged from the sliding switch (FR) signal is displayed.
SLIDE SW – RR	"ON/ OFF"	ON/OFF status judged from the sliding switch (RR) signal is displayed.



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.)
	(+)	(-)		
B324	26 (L/R)	Ground	FORWARD	0
			Other than above	Battery voltage
	11 (L/W)		BACKWARD	0
			Other than above	Battery voltage



OK or NG

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

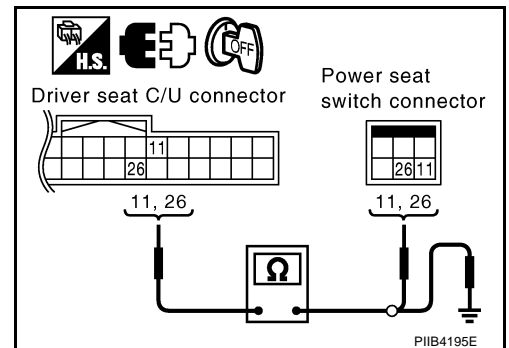
2. CHECK HARNESS CONTINUITY

- Disconnect driver seat control unit connector and power seat switch (driver side) connector.
- Check continuity between driver seat control unit connector B324 terminals 11, 26 and driver power seat switch connector B326 terminals 11, 26.

11 (L/W) – 11 (L/W) : Continuity should exist.
26 (L/R) – 26 (L/R) : Continuity should exist.

- Check continuity between driver seat control unit connector B324 terminals 11, 26 and ground.

11 (L/W) – Ground : Continuity should not exist.
26 (L/R) – 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

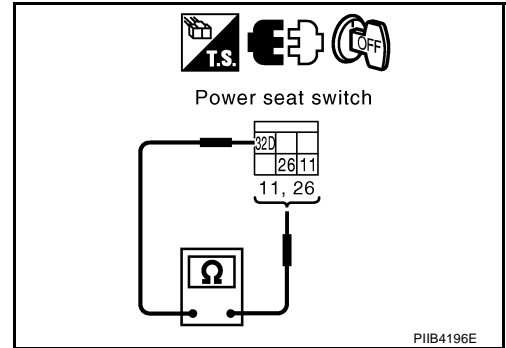
3. CHECK SLIDING SWITCH

Check continuity between power seat switch as follows.

Terminal	Sliding switch condition	Continuity
26	FORWARD	Yes
	Other than above	No
11	BACKWARD	Yes
	Other than above	No

OK or NG

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



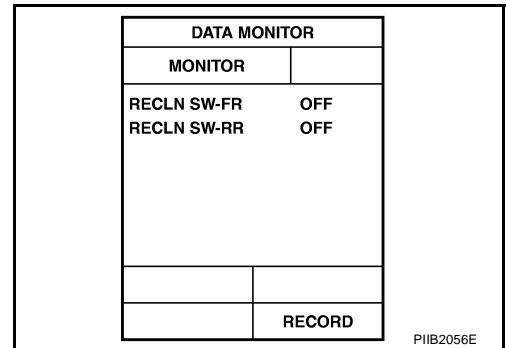
Check Reclining Switch Circuit

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.



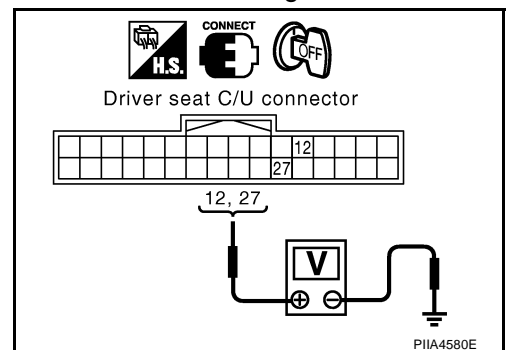
Without CONSULT-II

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

Connector	Terminals (Wire color)		Reclining switch condition	Voltage (V) (Approx.)
	(+)	(-)		
B324	27 (L/OR)	Ground	FORWARD	0
			Other than above	Battery voltage
	12 (Y)		BACKWARD	0
			Other than above	Battery voltage

OK or NG

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



AUTOMATIC DRIVE POSITIONER

2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector.
2. Check continuity between driver seat control unit connector B324 terminals 12, 27 and power seat switch (driver side) connector B326 terminals 12, 27.

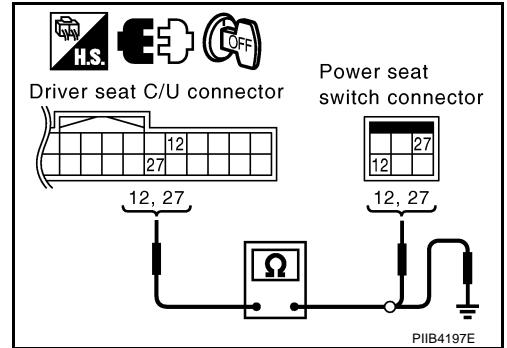
12 (Y) – 12 (Y) : Continuity should exist.

27 (L/OR) – 27 (L/OR) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 12, 27 and ground.

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

27 (L/OR) – 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

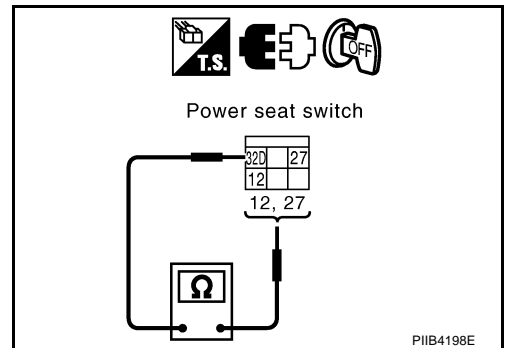
Check continuity between power seat switch as follows.

Terminal	Reclining switch condition	Continuity
27	FORWARD	Yes
	Other than above	No
12	BACKWARD	Yes
	Other than above	No

OK or NG

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

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



A
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AUTOMATIC DRIVE POSITIONER

NIS000ST

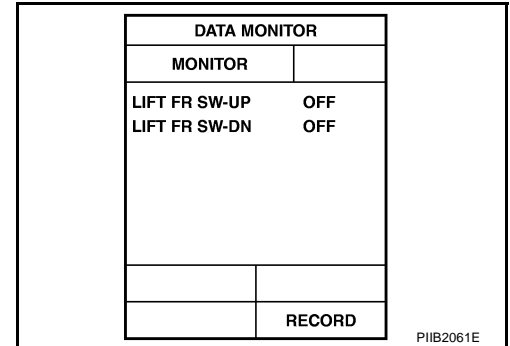
Check Front Lifting Switch Circuit

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.

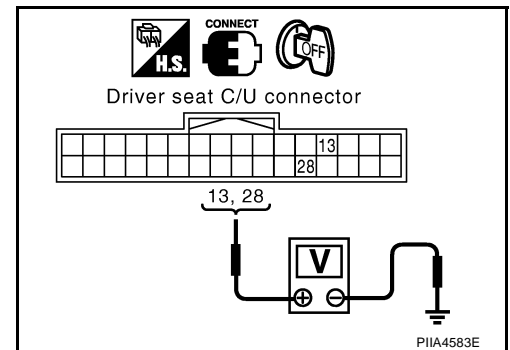
Monitor item [OPERATION or UNIT]	Contents	
LIFT FR SW – DN	"ON/ OFF"	ON/OFF status judged from the FR lifter switch (DOWN) signal is displayed.
LIFT RR SW – UP	"ON/ OFF"	ON/OFF status judged from the RR lifter switch (UP) signal is displayed.



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.)
	(+)	(-)		
B324	28 (L/P)	Ground	UP	0
			Other than above	Battery voltage
	13 (L/G)		DOWN	0
			Other than above	Battery voltage



OK or NG

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

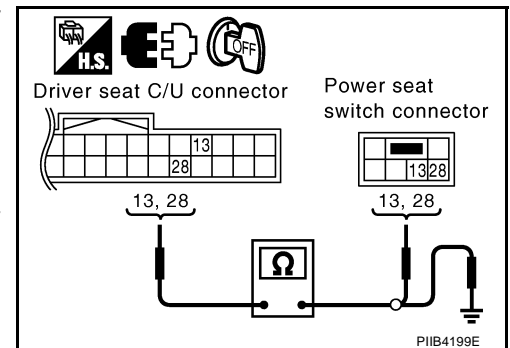
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector.
2. Check continuity between driver seat control unit connector B324 terminals 13, 28 and power seat switch (driver side) connector B327 terminals 13, 28.

13 (L/G) – 13 (L/G) : Continuity should exist.
28 (L/P) – 28 (L/P) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 13, 28 and ground

13 (L/G) – Ground : Continuity should not exist.
28 (L/P) – 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

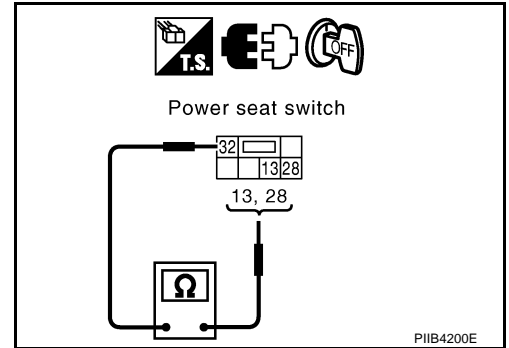
3. CHECK FRONT END LIFTING SWITCH

Check continuity between power seat switch as follows.

Terminals	Front lifting switch condition	Continuity
28	UP	Yes
	Other than above	No
13	DOWN	Yes
	Other than above	No

OK or NG

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



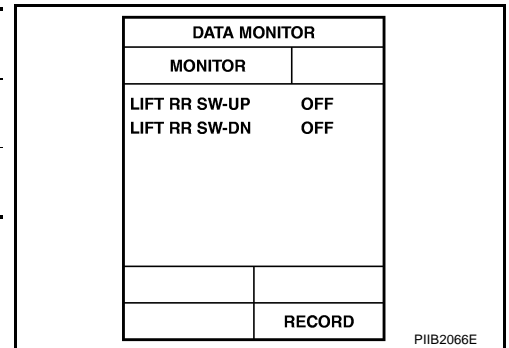
Check Rear Lifting Switch Circuit

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.



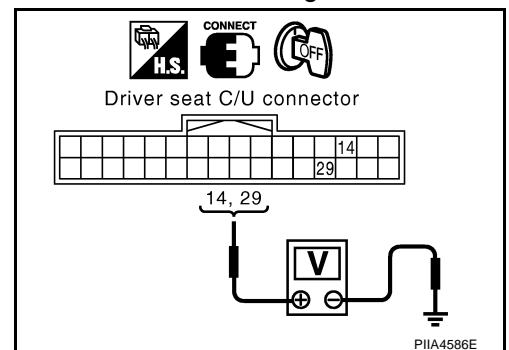
Without CONSULT-II

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.)
	(+)	(-)		
B324	29 (L)	Ground	UP	0
			Other than above	Battery voltage
	14 (BR)		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

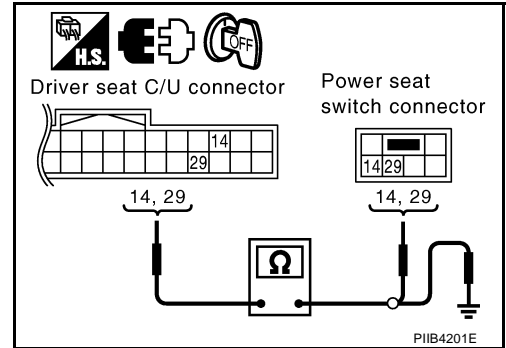
2. CHECK REAR LIFTING SWITCH HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and driver power seat switch connector.
2. Check continuity between driver seat control unit connector B324 terminals 14, 29 and power seat switch (driver side) connector B327 terminals 14, 29.

14 (BR) – 14 (BR) : Continuity should exist.
29 (L) – 29 (L) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 14, 29 and ground.

14 (BR) – Ground : Continuity should not exist.
29 (L) – Ground : Continuity should not exist.



OK or NG

OK >> GO TO 3.

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

3. CHECK REAR LIFTING SWITCH

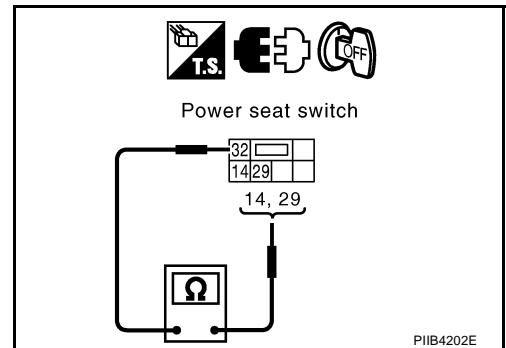
Check continuity between power seat switch as follows.

Terminal	Rear lifting switch condition	Continuity
29	UP	Yes
	Other than above	No
14	DOWN	Yes
	Other than above	No

OK or NG

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

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



Check Sliding and Reclining Switch Ground Circuit

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

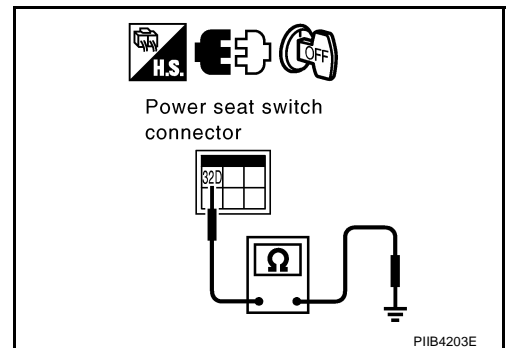
1. Turn ignition switch OFF.
2. Disconnect power seat switch (driver side) connector.
3. Check continuity between power seat switch connector B326 terminal 32D and ground.

32D(B) – 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

Check Lifting Switch (Front and Rear) Ground Circuit

NIS000SW

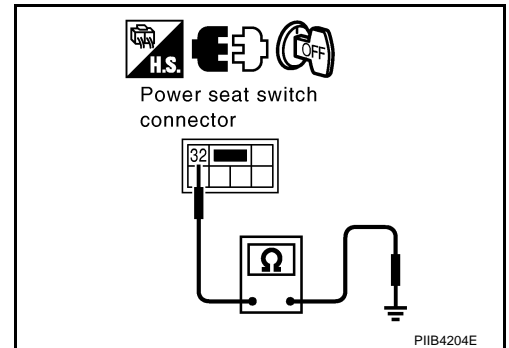
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power seat switch (driver side) connector.
3. Check continuity between power seat switch connector B327 terminal 32 and ground.

32 (B)– 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.



Check Telescopic Switch Circuit

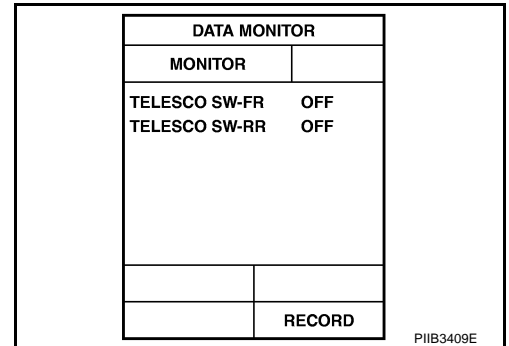
NIS000SX

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.



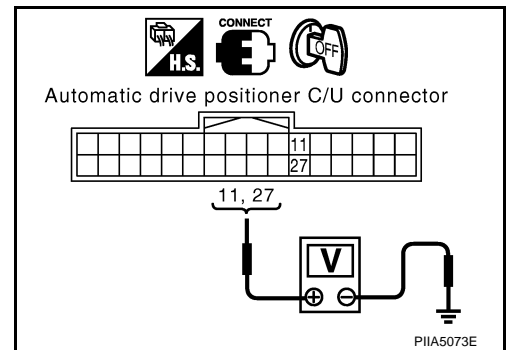
⊗ Without CONSULT-II

1. Turn ignition switch OFF.
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.)
	(+)	(-)		
M96	11 (P/L)	Ground	FORWARD	0
			Other than above	5
	27 (G/W)		BACKWARD	0
			Other than above	5

OK or NG

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



AUTOMATIC DRIVE POSITIONER

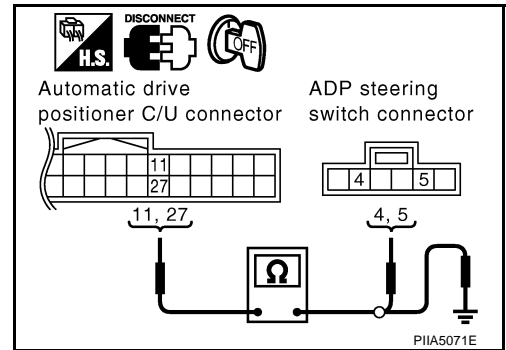
2. CHECK TELESCOPIC CIRCUIT HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
2. Check continuity between automatic drive positioner control unit connector M96 terminals 11, 27 and ADP steering switch connector M100 terminals 4, 5.

11 (P/L) – 5 (P/L) : Continuity should exist.
27 (G/W) – 4 (G/W) : Continuity should exist.

3. Check continuity between automatic drive positioner control unit connector M96 terminals 11, 27 and ground.

11 (P/L) – Ground : Continuity should not exist.
27 (G/W) – 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.

3. CHECK TELESCOPIC SWITCH

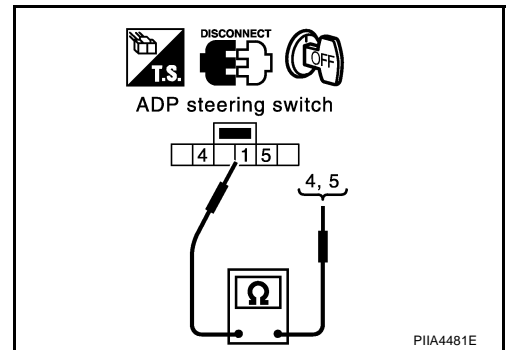
Check continuity between ADP steering switch as follows.

Terminal	ADP steering switch condition	Continuity
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

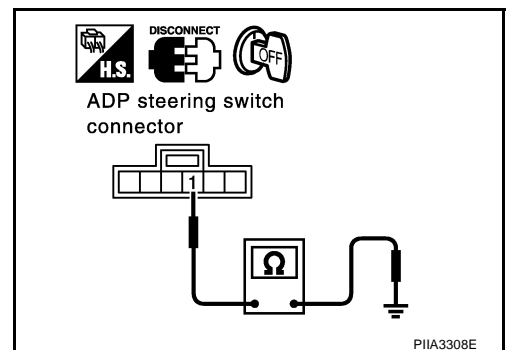
Check continuity between ADP steering switch connector M100 terminal 1 and ground.

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

NIS000SY

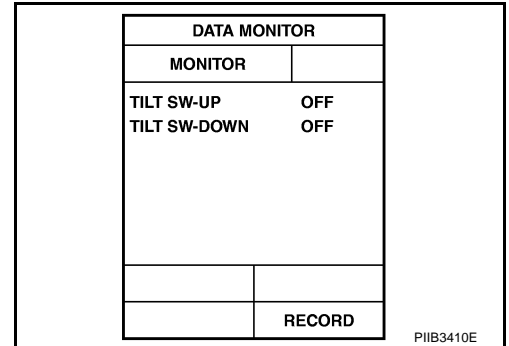
Check Tilt Switch Circuit

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.

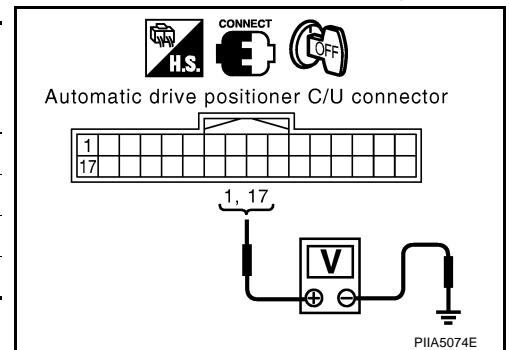
Monitor item [OPERATION or UNIT]		Contents
TILT SW-UP	"ON/OFF"	(ON/OFF) status judged from the tilt switch (UP) signal is displayed.
TILT SW-DOWN	"ON/OFF"	(ON/OFF) status judged from the tilt switch (DOWN) signal is displayed.



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.)
	(+)	(-)		
M96	1 (Y/G)	Ground	UP	0
			Other than above	5
	17 (LG/B)		DOWN	0
			Other than above	5



OK or NG

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

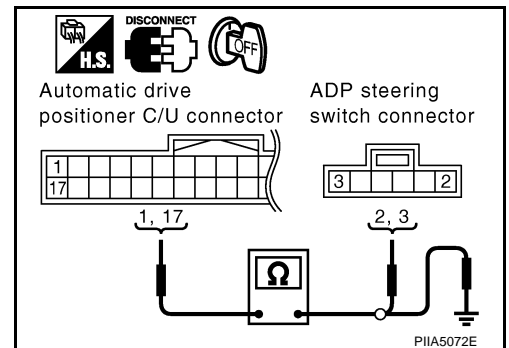
2. CHECK TILT SWITCH CIRCUIT HARNESS CONTINUITY

- Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
- Check continuity between automatic drive positioner control unit connector M96 terminals 1, 17 and ADP steering switch connector M100 terminals 2, 3.

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

- Check continuity between automatic drive positioner control unit connector M96 terminals 1, 17 and ground.

- 1 (Y/G) – Ground : Continuity should not exist.**
17 (LG/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

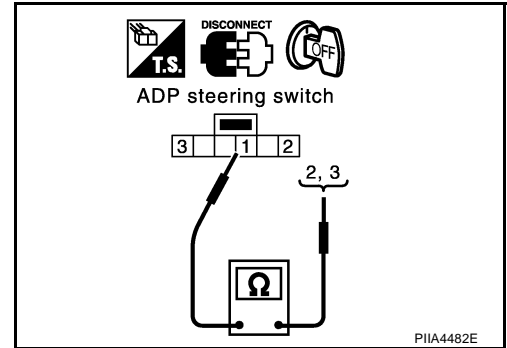
Check continuity between ADP steering switch as follows.

Terminal	ADP steering switch condition	Continuity
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

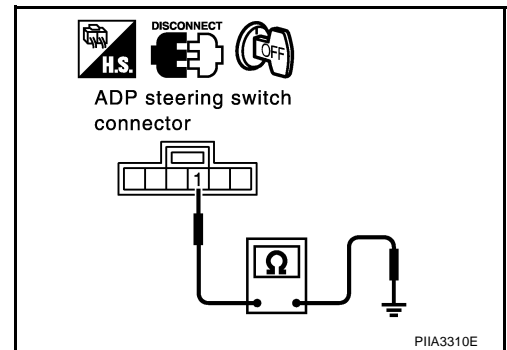
Check continuity between ADP steering switch connector M100 terminal 1 and ground.

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 Park Position Switch (P Range Switch) Circuit (A/T Models)

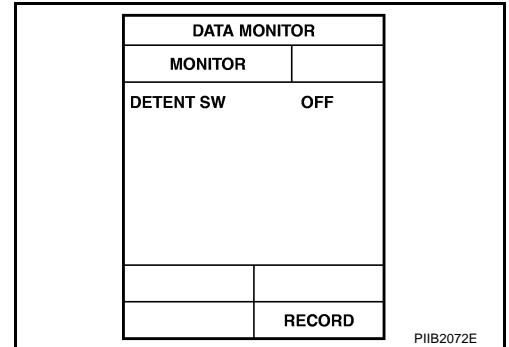
NIS000SZ

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.

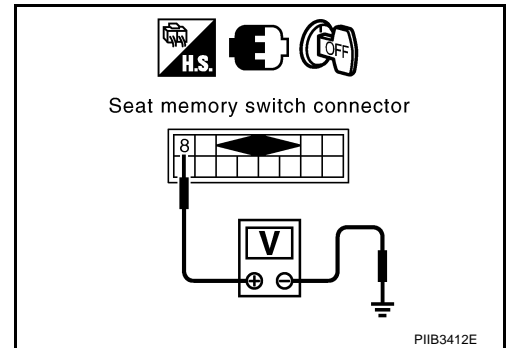
Monitor item [OPERATION or UNIT]		Contents
DETENT SW	"ON/ OFF"	The selector lever position "P position (ON)/other than P position (OFF)" judged from the detente switch signal is displayed.



Without CONSULT-II

1. Turn ignition switch OFF.
2. Check voltage between seat memory switch connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B328	8 (P/B)	Ground	Selector lever sifted to P position.	0
			Selector lever other than P position.	Battery voltage



OK or NG

- OK >> AT device (park position switch) circuit is OK.
 NG >> GO TO 2.

2. CHECK PARK POSITION SWITCH POWER SUPPLY CIRCUIT HARNESS

1. Disconnect seat memory switch connector and A/T device (park position switch) connector.
2. Check continuity between seat memory switch connector B328 terminal 8 and A/T device (park position switch) connector M47 terminal 3.

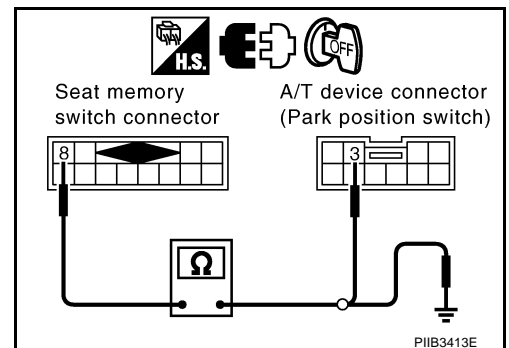
8 (P/B) – 3 (BR) : Continuity should exist.

3. Check continuity between seat memory switch connector B328 terminal 8 and ground.

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

OK or NG

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



AUTOMATIC DRIVE POSITIONER

3. CHECK PARK POSITION SWITCH

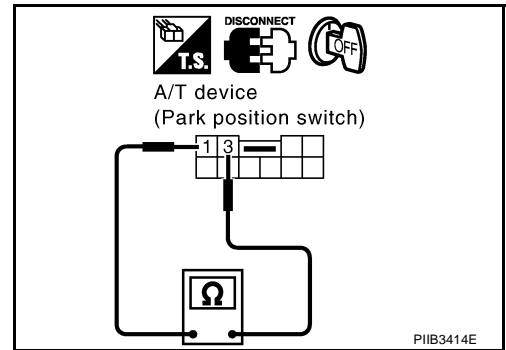
Check continuity between A/T device (park position switch) as follows.

Terminal		Condition	Continuity
3	1	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 PARK POSITION SWITCH GROUND HARNESS

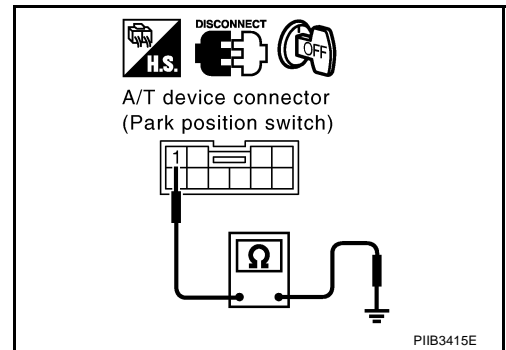
Check continuity between A/T device (park position switch) connector M47 terminal 1 and ground.

1 (B) – Ground : Continuity should exist.

OK or NG

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

NG >> Repair or replace harness between A/T device (park position switch) and ground.



AUTOMATIC DRIVE POSITIONER

Check Parking Brake Switch Circuit (M/T Models)

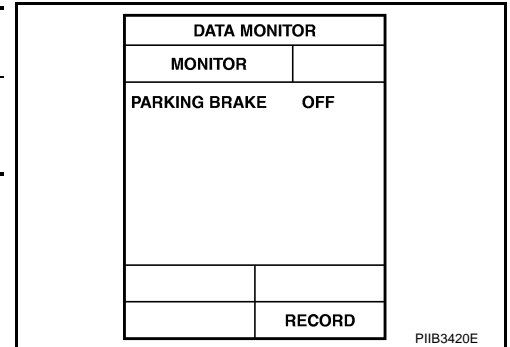
NIS00070

1. CHECK FUNCTION

With CONSULT-II

Check that when the parking brake is released, "PARKING BRAKE" on the DATA MONITOR becomes OFF.

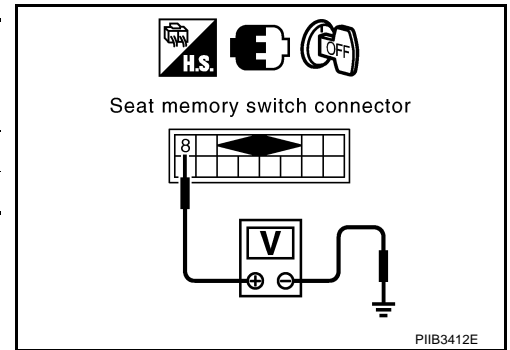
Monitor item [OPERATION or UNIT]		Contents
PARKING BRAKE	"ON/ OFF"	The parking brake is "released (OFF)/parking brake is applied (ON)" judged from the parking brake switch signal is displayed.



Without CONSULT-II

1. Turn ignition switch OFF.
2. Check voltage between seat memory switch connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B328	8 (P/B)	Ground	Parking brake applied.	0
			Parking brake released.	Battery voltage



OK or NG

- OK >> Parking brake switch circuit is OK.
 NG >> GO TO 2.

2. CHECK PARKING BRAKE SWITCH POWER SUPPLY CIRCUIT HARNESS

1. Disconnect seat memory switch connector and parking brake switch connector.
2. Check continuity between seat memory switch connector B328 terminal 8 and parking brake switch connector B37 terminal 1.

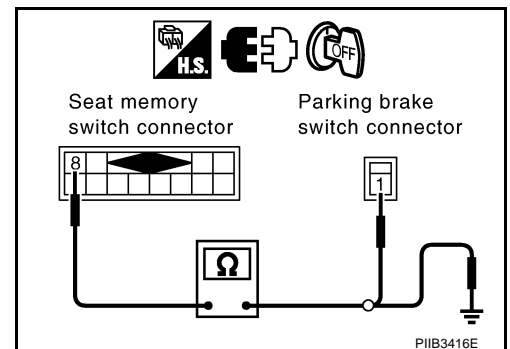
8 (P/B) – 1 (PU/R) : Continuity should exist.

3. Check continuity between seat memory switch connector B328 terminal 8 and ground.

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

OK or NG

- OK >> GO TO 3.
 NG >> Repair or replace harness between seat memory switch and parking brake switch.



AUTOMATIC DRIVE POSITIONER

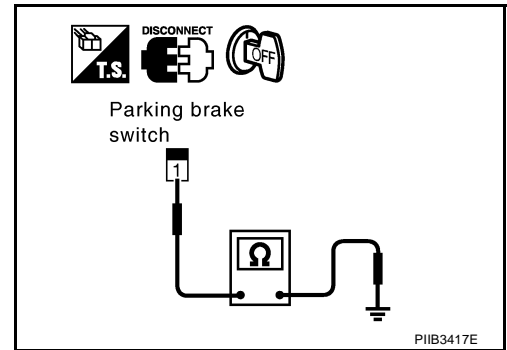
3. CHECK PARKING BRAKE SWITCH

Check continuity between parking brake switch connector B37 terminal 1 and ground.

Terminal	Condition	Continuity
1	Parking brake applied.	Yes
	Parking brake released.	No

OK or NG

- OK >> Check the condition of the harness and connector.
- NG >> Replace parking brake switch.



Check Key Switch and Ignition Knob Switch Circuit (With Intelligent Key)

NIS000T1

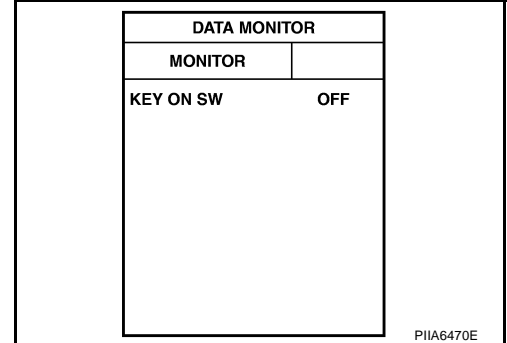
1. CHECK KEY SWITCH AND IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

With CONSULT-II

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

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

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



Without CONSULT-II

GO TO 2.

OK or NG

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

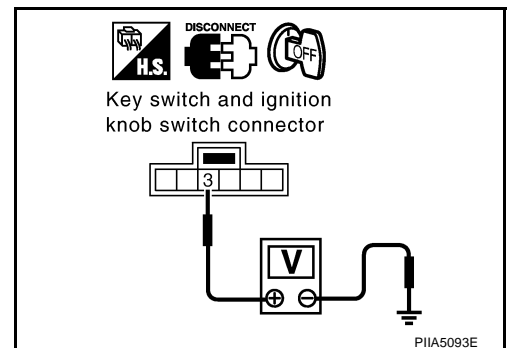
2. CHECK KEY SWITCH AND IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT

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 M310 terminal 3 and ground.

3 (Y) – Ground : Battery voltage.

OK or NG

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



AUTOMATIC DRIVE POSITIONER

3. CHECK KEY SWITCH AND IGNITION KNOB SWITCH

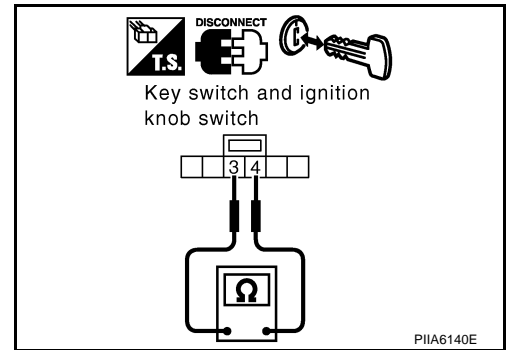
Check continuity between key switch and ignition knob switch connector M310 terminal 3 and 4.

Connector	Terminal		Condition	Continuity
M310	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 M310 terminal 4 and BCM connector M1 terminal 37.

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

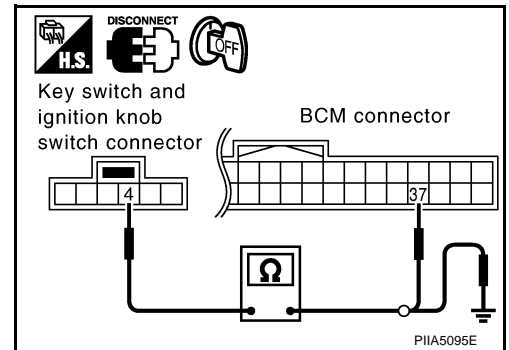
3. Check continuity between key switch and ignition knob switch connector M310 terminal 4 and ground.

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

OK or NG

OK >> Key switch and ignition knob switch circuit is OK.

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



Check Key Switch Circuit (Without Intelligent Key)

NIS00072

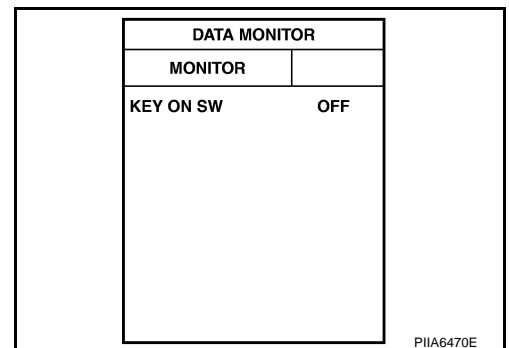
1. CHECK KEY SWITCH

With CONSULT-II

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

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

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



Without CONSULT-II

GO TO 2.

OK or NG

OK >> Key switch circuit is OK.

NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

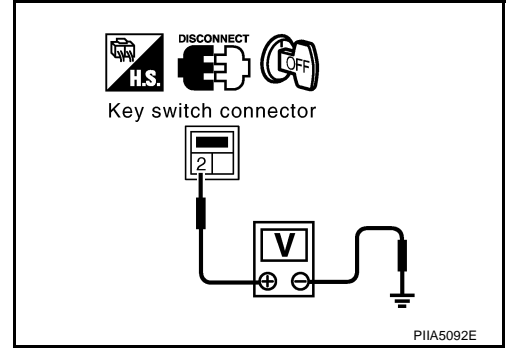
2. CHECK KEY SWITCH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key switch connector.
3. Check voltage between key switch connector M307 terminal 2 and ground.

2 (L/W) – Ground : Battery voltage.

OK or NG

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



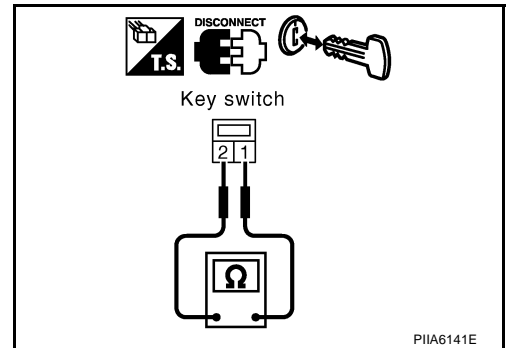
3. CHECK KEY SWITCH

Check continuity between key switch connector M307 terminal 1 and 2.

Con- nector	Terminal		Condition	Continuity
M307	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.



4. CHECK HARNESS CONTINUITY

1. Disconnect key switch and connector and BCM connector.
2. Check continuity between key switch connector M307 terminal 1 and BCM connector M1 terminal 37.

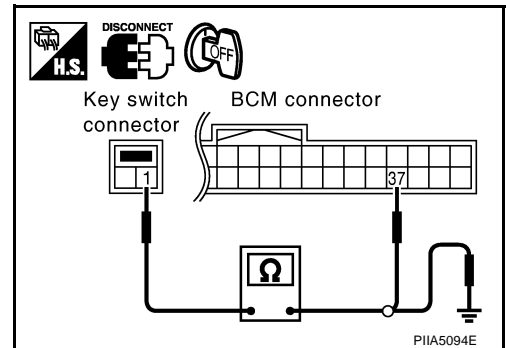
1 (B/P) – 37 (B/P) : Continuity should exist.

3. Check continuity between key switch connector M307 terminal 1 and ground.

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

OK or NG

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



AUTOMATIC DRIVE POSITIONER

Check Seat Memory and Set Switch Circuit

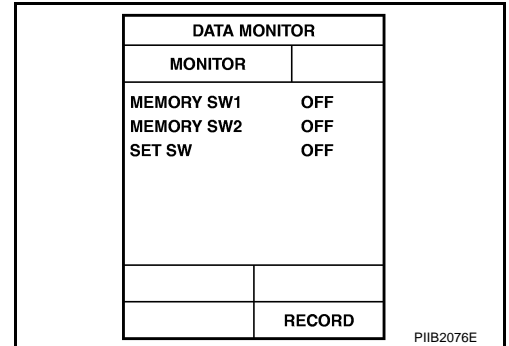
NIS000T3

1. CHECK FUNCTION

With CONSULT-II

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

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



Without CONSULT-II

GO TO 2.

OK or NG

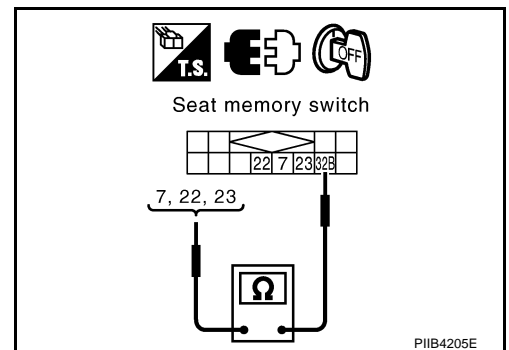
OK >> Seat memory switch circuit is OK.

NG >> GO TO 2.

2. CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch connector B328 terminal 7, 22, 23 and 32B.

Connector	Terminals	Condition	Continuity
B328	7	Memory switch 1: ON	Yes
		Memory switch 1: OFF	No
	22	Memory switch 2: ON	Yes
		Memory switch 2: OFF	No
	23	Set switch: ON	Yes
		Set switch: OFF	No



OK or NG

OK >> GO TO 3.

NG >> Replace seat memory switch.

AUTOMATIC DRIVE POSITIONER

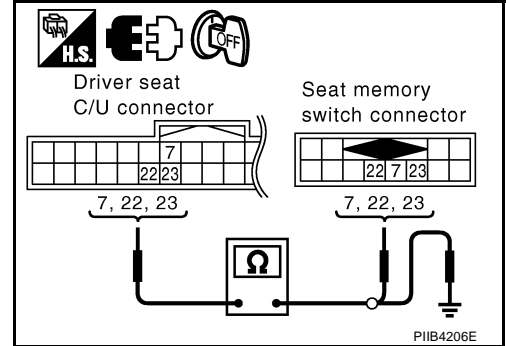
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B324 terminals 7, 22, 23 and seat memory switch connector B328 terminals 7, 22, 23.

7 (L/G) – 7 (L/G) : Continuity should exist.
22 (L/B) – 22 (L/B) : Continuity should exist.
23 (L/W) – 23 (L/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector M324 terminals 7, 22, 23 and ground.

7 (L/G) – Ground : Continuity should not exist.
22 (L/B) – Ground : Continuity should not exist.
23 (L/W) – 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

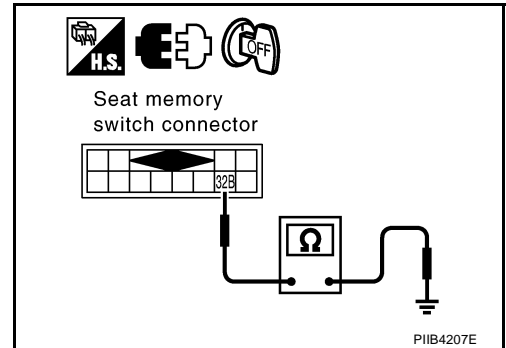
Check continuity between seat memory switch connector B328 terminal 32B and ground.

32B (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.



Check Seat Memory Cancel Switch Circuit

1. CHECK SEAT MEMORY SWITCH

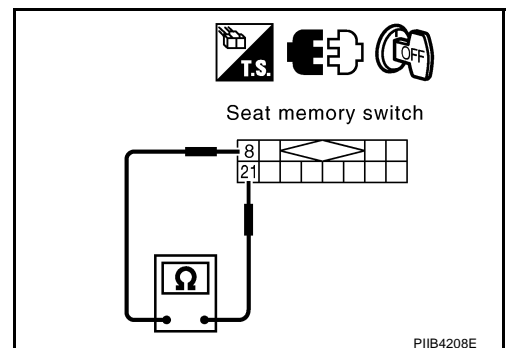
1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch connector B328 terminals 21 and 8.

Connector	Terminals		Condition	Continuity
B328	21	8	Cancel switch: CANCEL	Yes
			Cancel switch: AUTO	No

OK or NG

OK >> GO TO 2.

NG >> Replace seat memory switch.



AUTOMATIC DRIVE POSITIONER

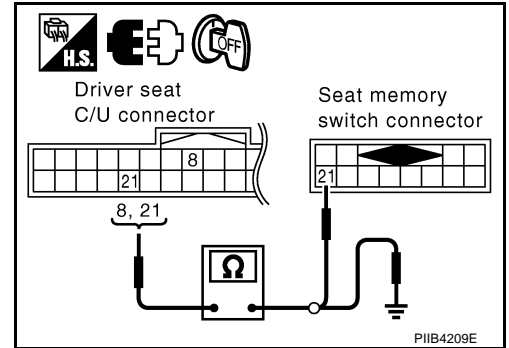
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B324 terminals 8, 21 and seat memory switch connector B328 terminal 21.

8 (L/Y) – 21 (L/Y) : Continuity should exist.
21 (L/Y) – 21 (L/Y) : Continuity should exist.

3. Check continuity between driver seat control unit connector M324 terminals 8, 21 and ground.

8 (L/Y) – Ground : Continuity should not exist.
21 (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 seat memory switch.

3. CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

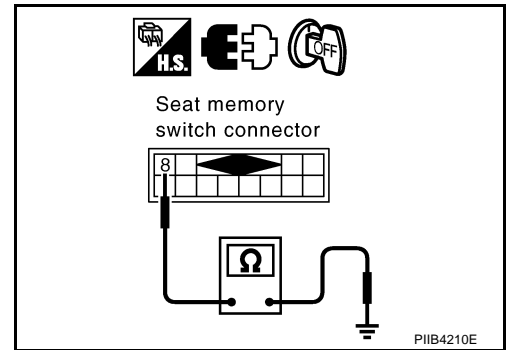
Check continuity between seat memory switch connector B328 terminal 8 and ground.

8 (P/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.



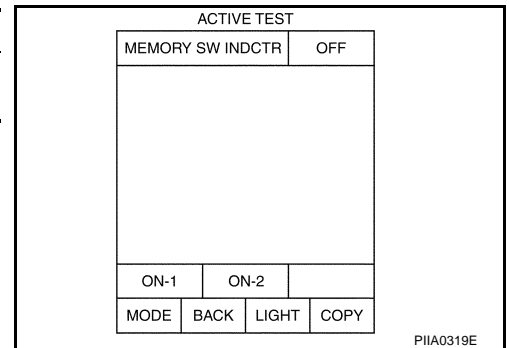
Check Memory Indicator Lamp Circuit

1. CHECK FUNCTION

With CONSULT-II

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

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



Without CONSULT-II

GO TO 2.

OK or NG

OK >> Memory indicator lamp circuit is OK.

NG >> GO TO 2.

AUTOMATIC DRIVE POSITIONER

2. CHECK SEAT MEMORY SWITCH POWER SUPPLY CIRCUIT

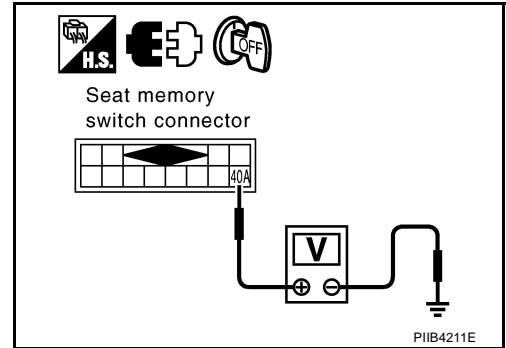
1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check voltage between seat memory switch connector B328 terminal 40A and ground.

40A (R/W) – Ground : Battery voltage

OK or NG

OK >> GO TO 3.

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



3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B324 terminals 2, 18 and seat memory switch connector B328 terminals 2, 18.

2 (Y/W) – 2 (Y/W) : Continuity should exist.

18 (Y/G) – 18 (Y/G) : Continuity should exist.

3. Check continuity between driver seat control unit connector B324 terminals 2, 18 and ground.

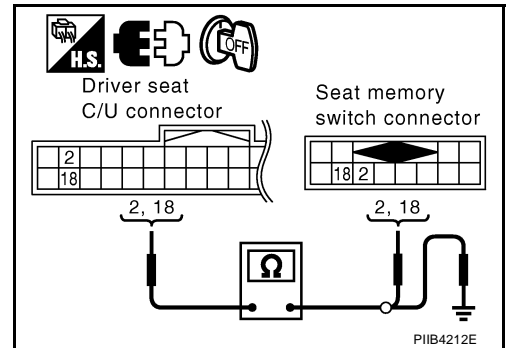
2 (Y/W) – Ground : Continuity should not exist.

18 (Y/G) – 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 INDICATOR SIGNAL

Check voltage between driver seat control unit connector B324 terminals 2, 18 and ground.

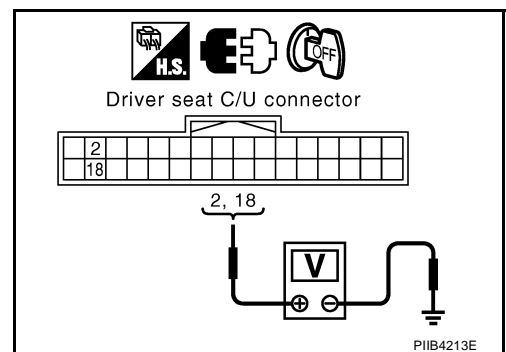
2 (Y/W) – Ground : Battery voltage

18 (Y/G) – Ground : Battery voltage

OK or NG

OK >> Memory indicator lamp circuit is OK.

NG >> Replace seat memory switch.



AUTOMATIC DRIVE POSITIONER

NIS00076

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 B324 terminal 1, 17 and automatic drive positioner connector M96 terminal 10, 26.

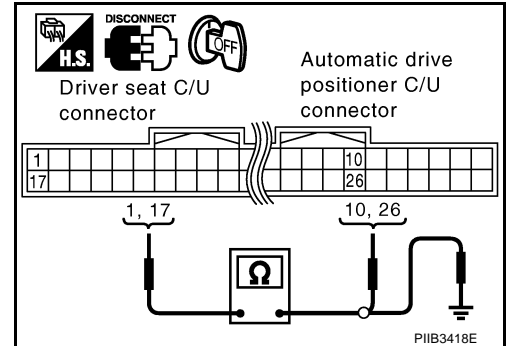
17 (P) – 26 (R/G) : Continuity should exist.

1 (GY) – 10 (R/L) : Continuity should exist.

4. Check continuity between driver seat control unit connector B324 terminal 1, 17 and ground.

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

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



OK or NG

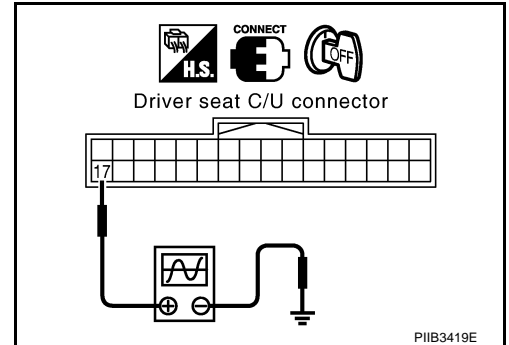
OK >> GO TO 2.

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

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)
	(+)	(-)		
B324	17 (P)	Ground	Seat memory switch 1 or 2 operation	



OK or NG

OK >> GO TO 3.

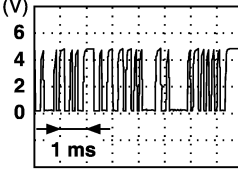
NG >> Check the flowing.

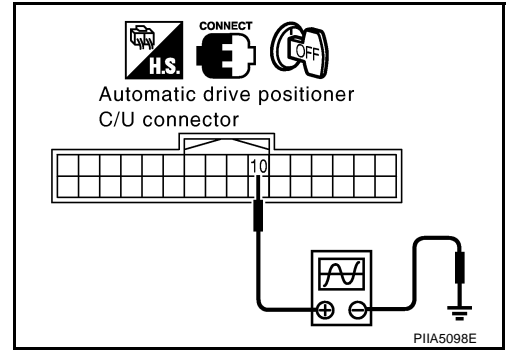
- When voltage signal dose not appear with a constant voltage (approx. 5V), replace driver seat control unit.
- When voltage signal dose not appear with a constant voltage (approx. 0V), replace automatic drive positioner control unit.

AUTOMATIC DRIVE POSITIONER

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)
	(+)	(-)		
M96	10 (R/L)	Ground	Seat memory switch 1 or 2 operation	 P1IA4813E



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 control unit exchanged?

Does seat memory function operate?

YES >> Replace automatic drive positioner control unit.

NG >> Replace driver seat control unit.

POWER SEAT

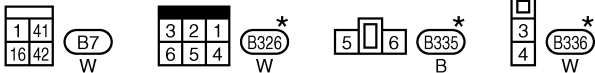
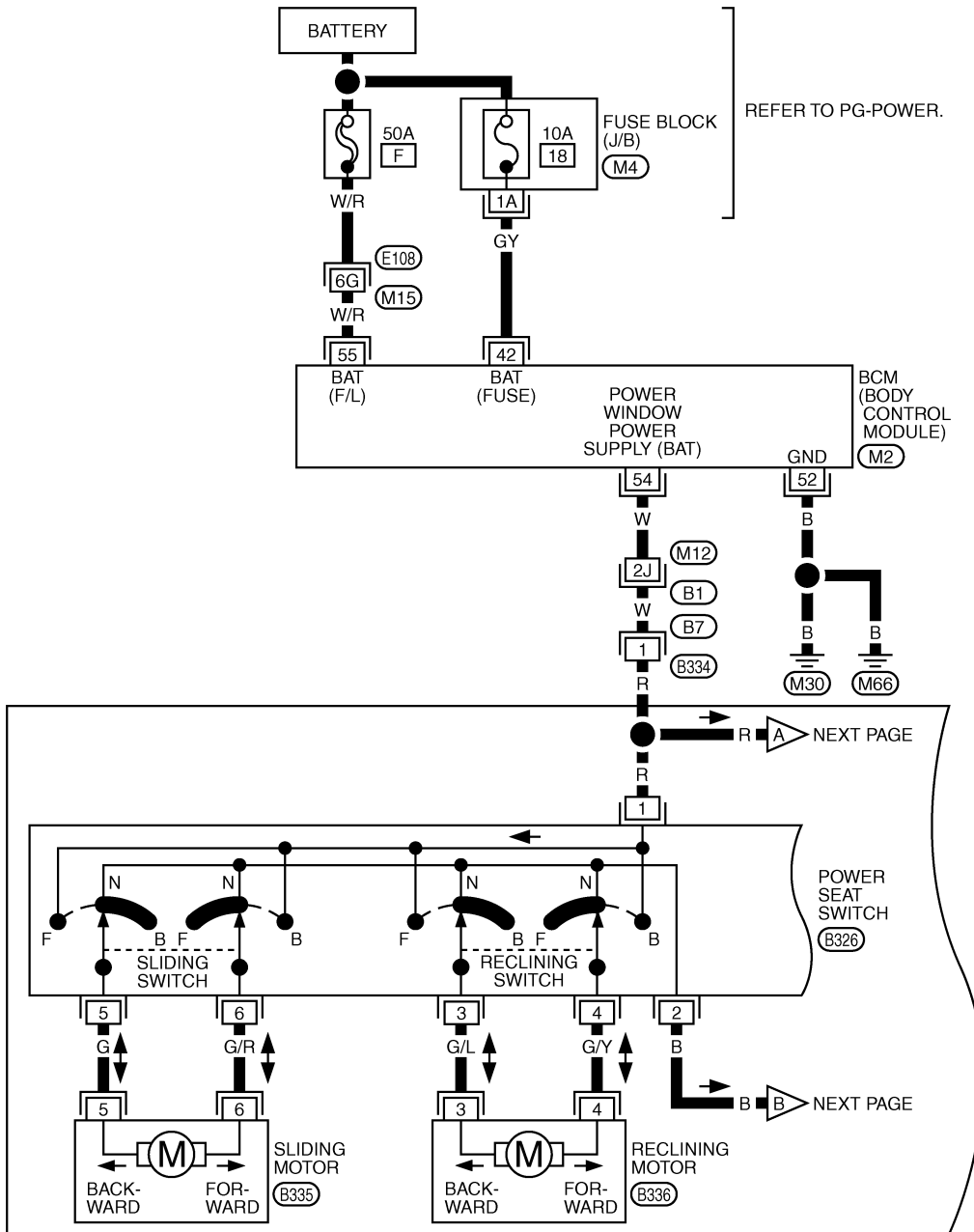
PFP:87016

POWER SEAT

Wiring Diagram – SEAT –/For Driver Seat

NIS00077

SE-SEAT-01



REFER TO THE FOLLOWING.

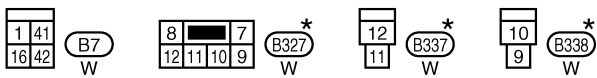
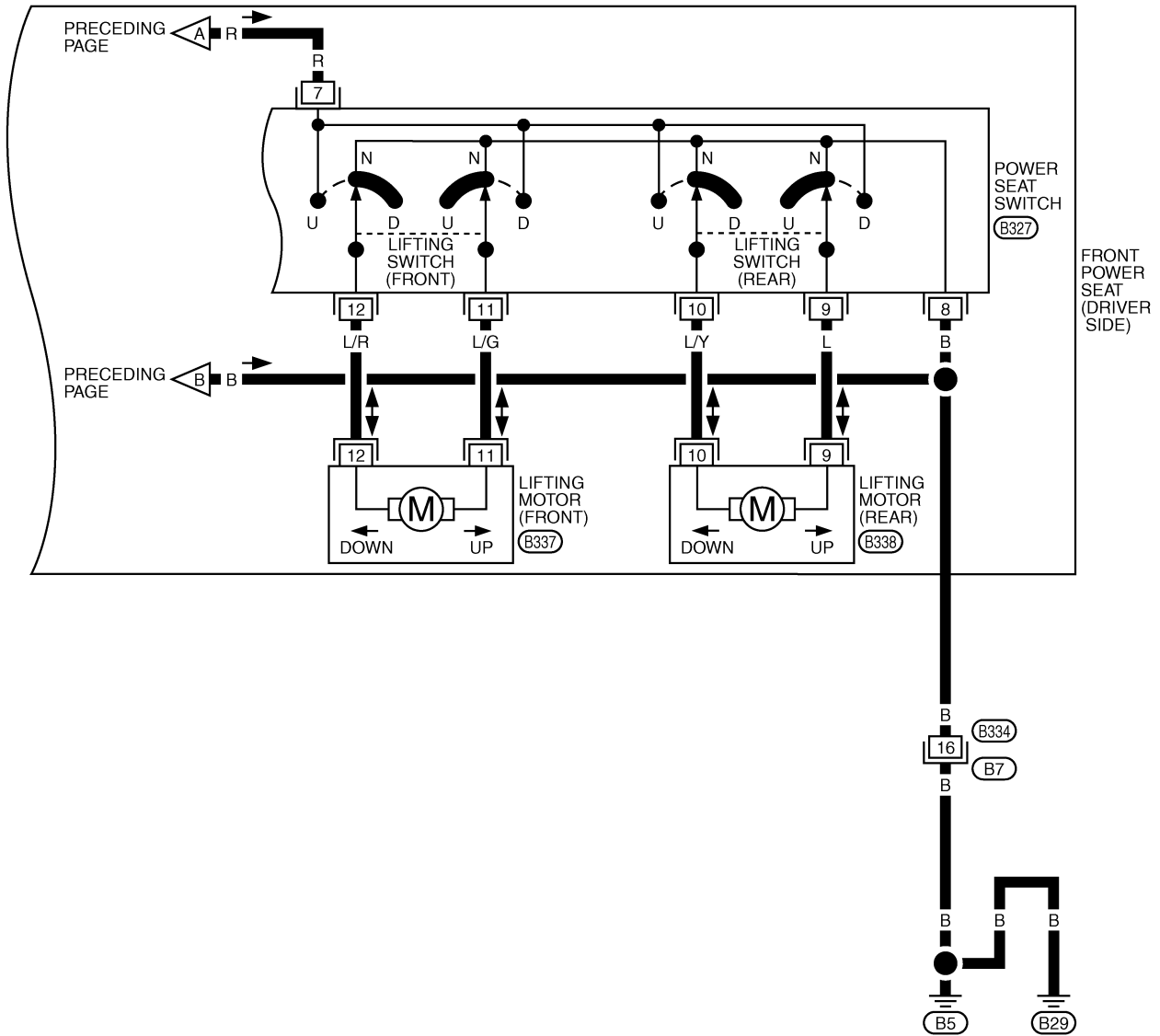
- E108, B1 -SUPER MULTIPLE JUNCTION (SMJ)
- M4 -FUSE BLOCK-JUNCTION BOX (J/B)
- M2 -ELECTRICAL UNITS

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

T1WM1103E

POWER SEAT

SE-SEAT-02



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

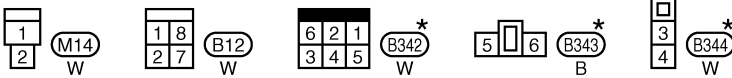
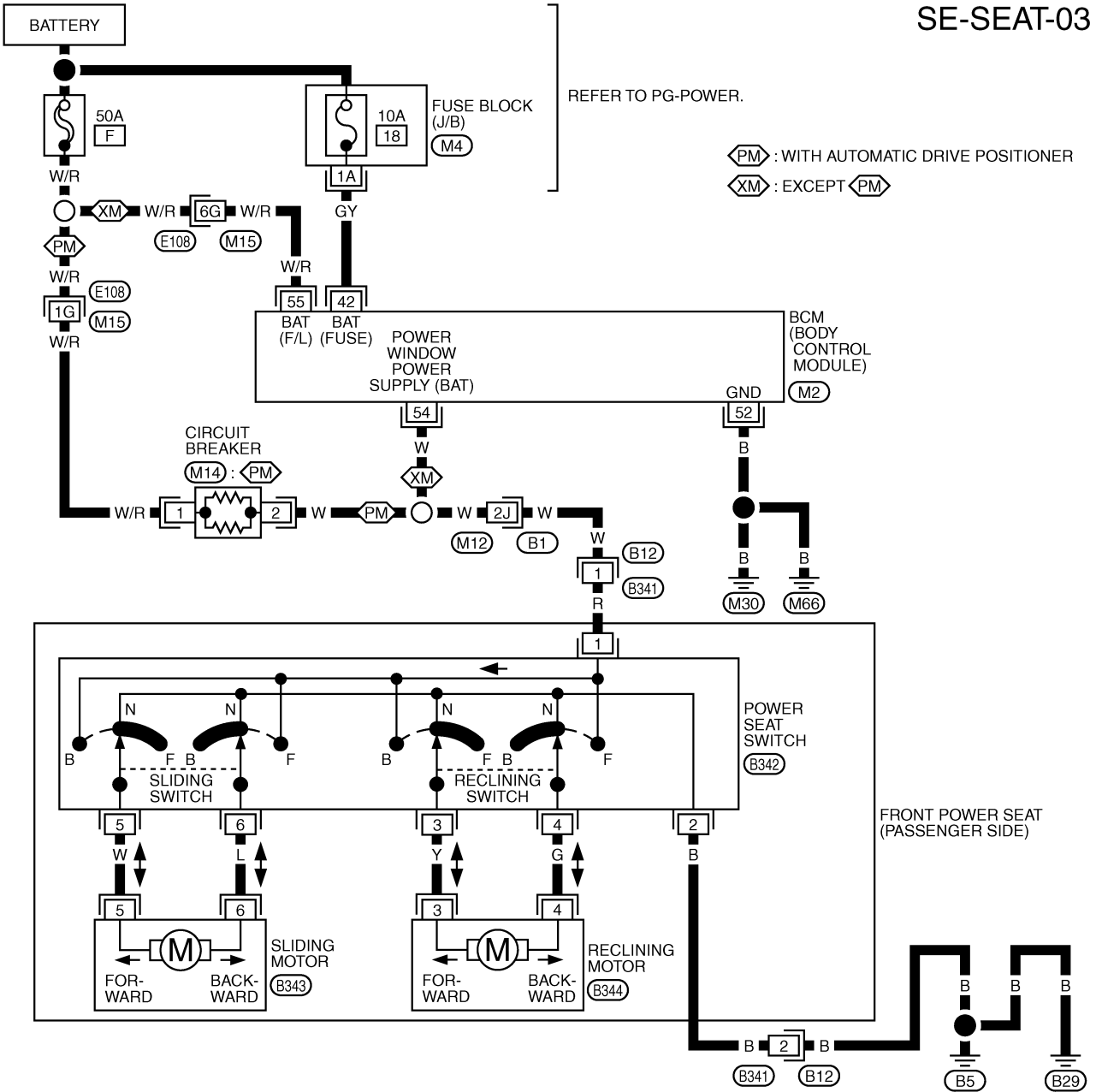
TIWT0383E

POWER SEAT

Wiring Diagram – SEAT –/For Passenger Seat

NIS00078

SE-SEAT-03



REFER TO THE FOLLOWING.

(E108), (B1) -SUPER MULTIPLE JUNCTION (SMJ)
 (M4) -FUSE BLOCK-JUNCTION BOX (J/B)
 (M2) -ELECTRICAL UNITS

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

HEATED SEAT

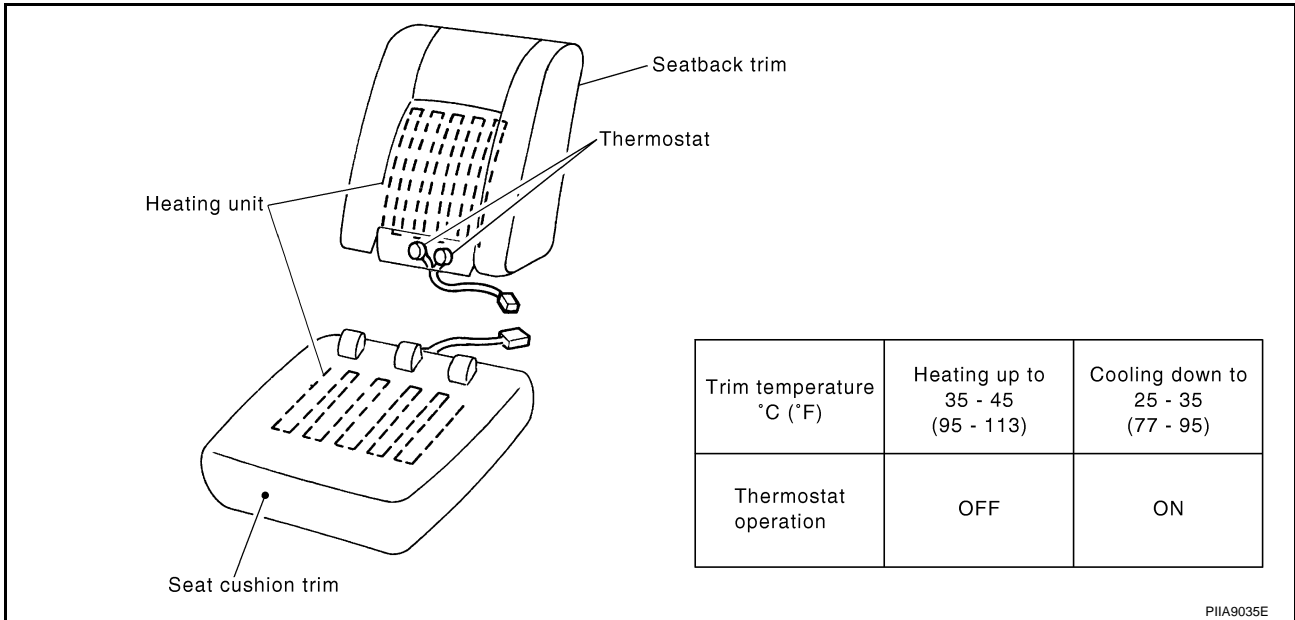
PFP:87335

HEATED SEAT

Description

NIS00079

- 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.

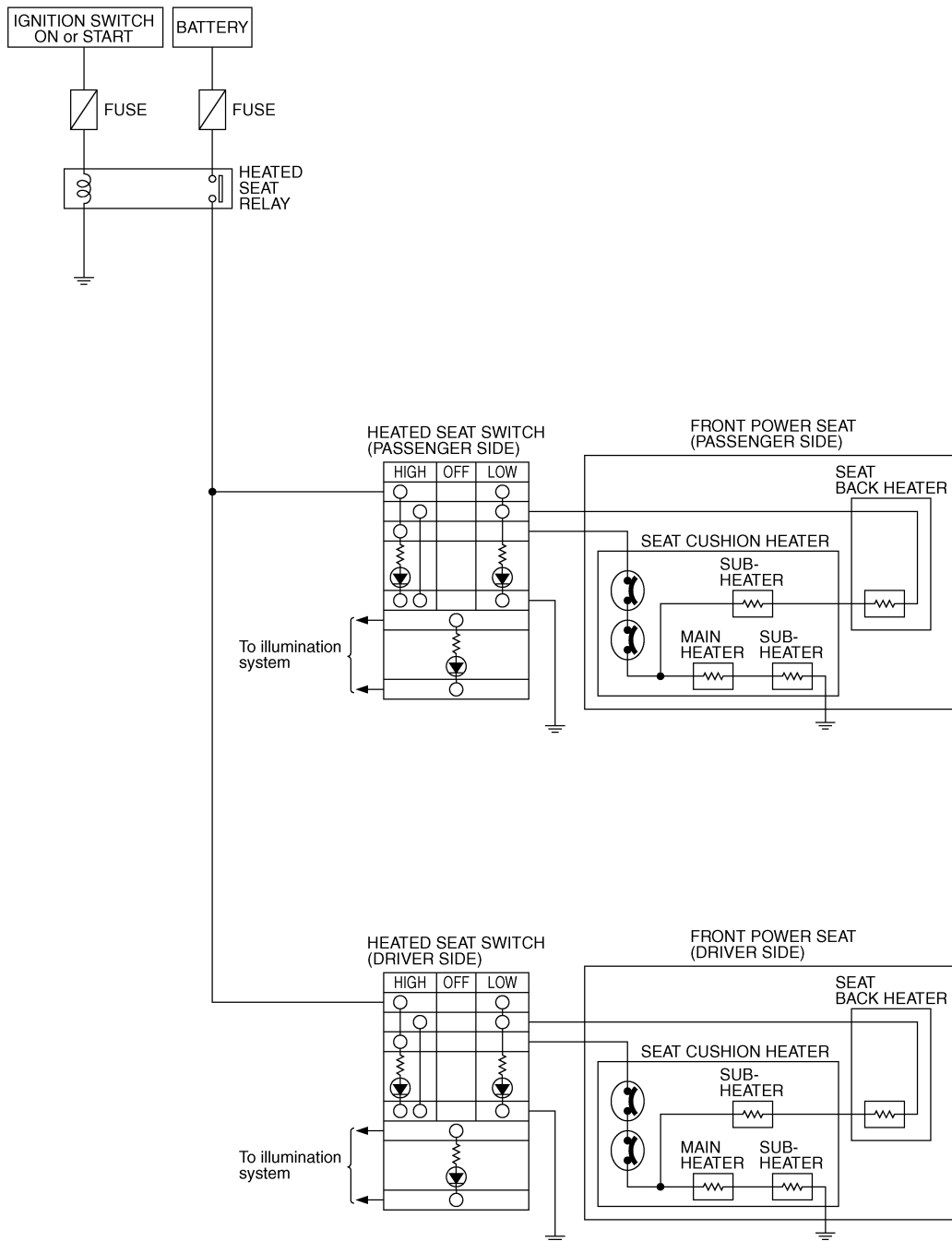


HEATED SEAT

Schematic

NIS0007A

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



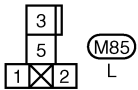
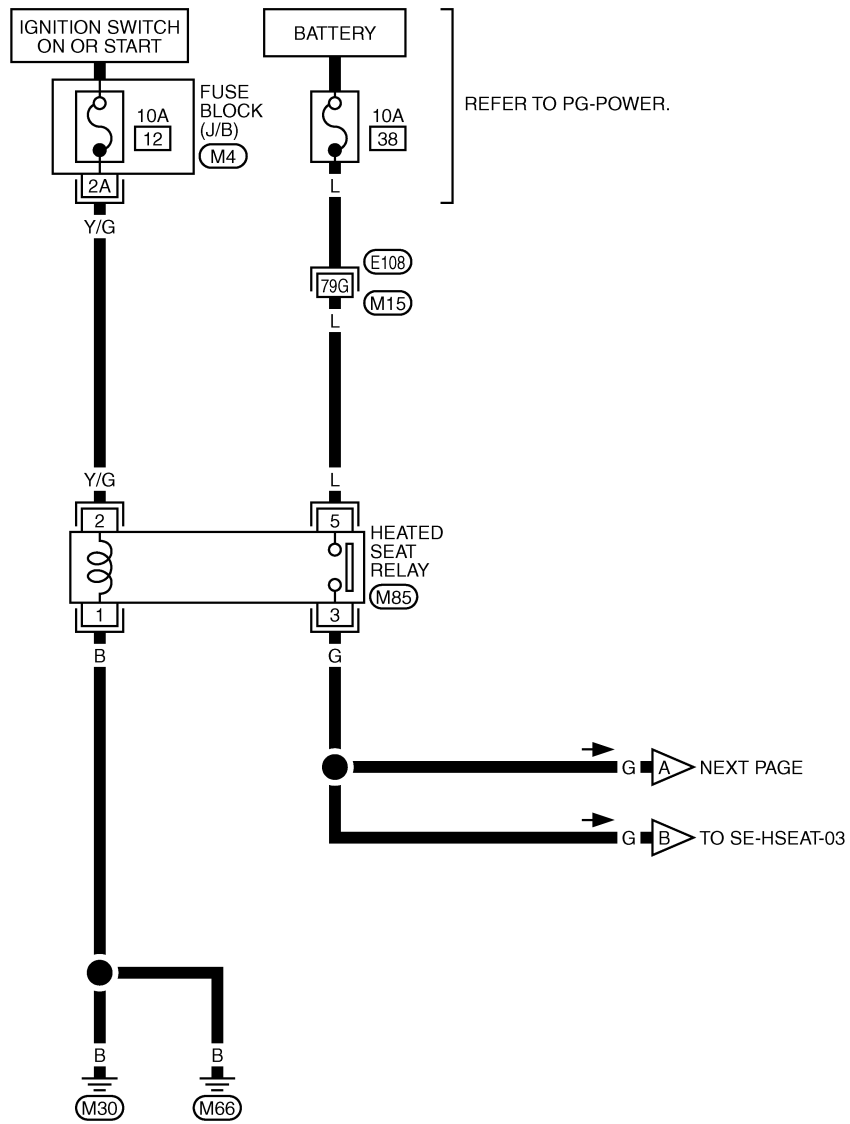
TIWT0343E

HEATED SEAT

Wiring Diagram – HSEAT – / For A/T Models

NIS0007B

SE-HSEAT-01



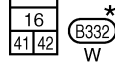
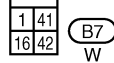
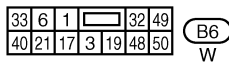
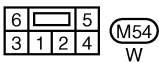
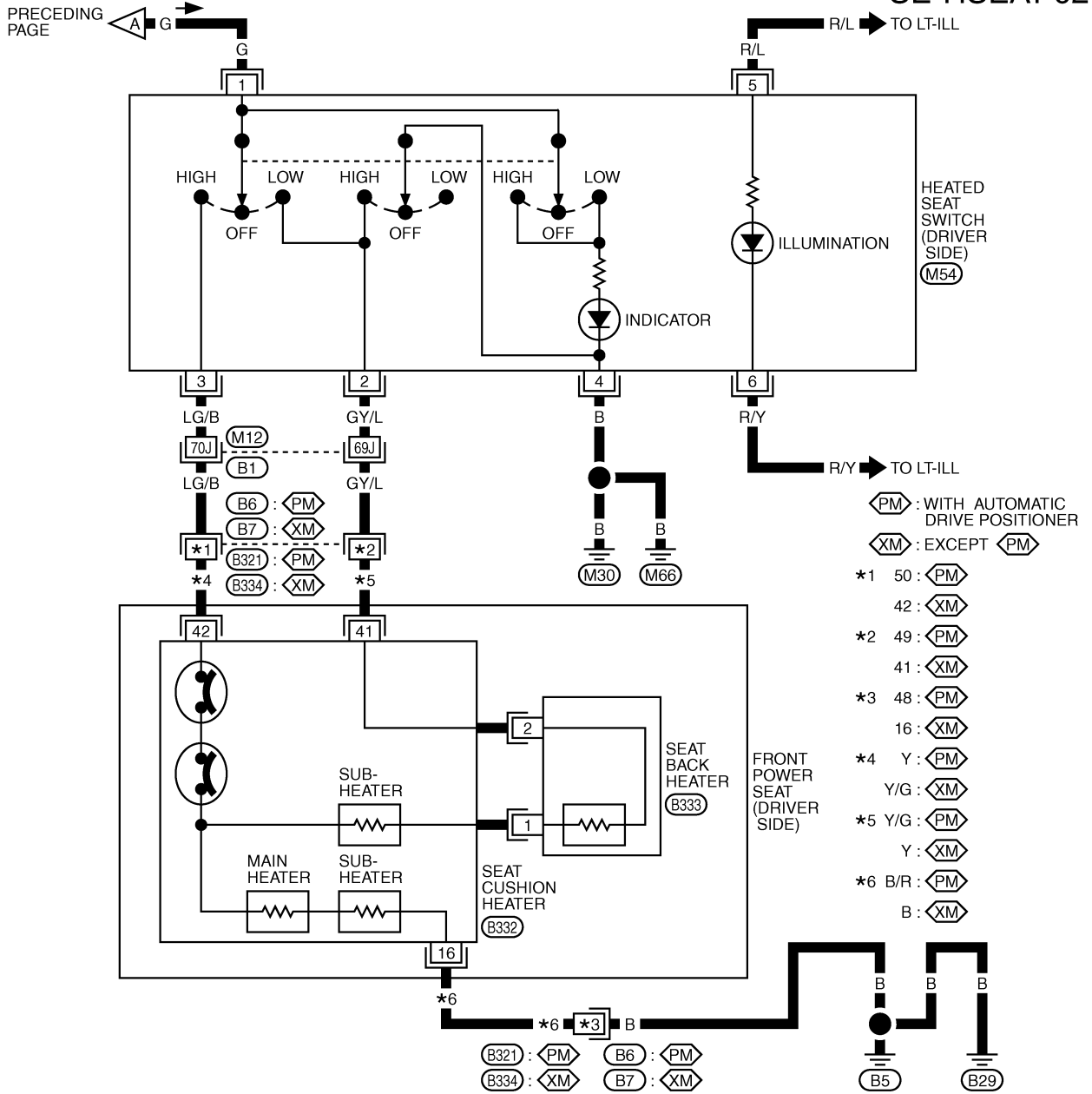
REFER TO THE FOLLOWING.

- (E108) -SUPER MULTIPLE JUNCTION (SMJ)
- (M4) -FUSE BLOCK-JUNCTION BOX (J/B)

TIWM1105E

HEATED SEAT

SE-HSEAT-02



REFER TO THE FOLLOWING.

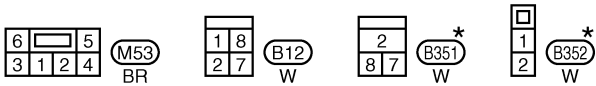
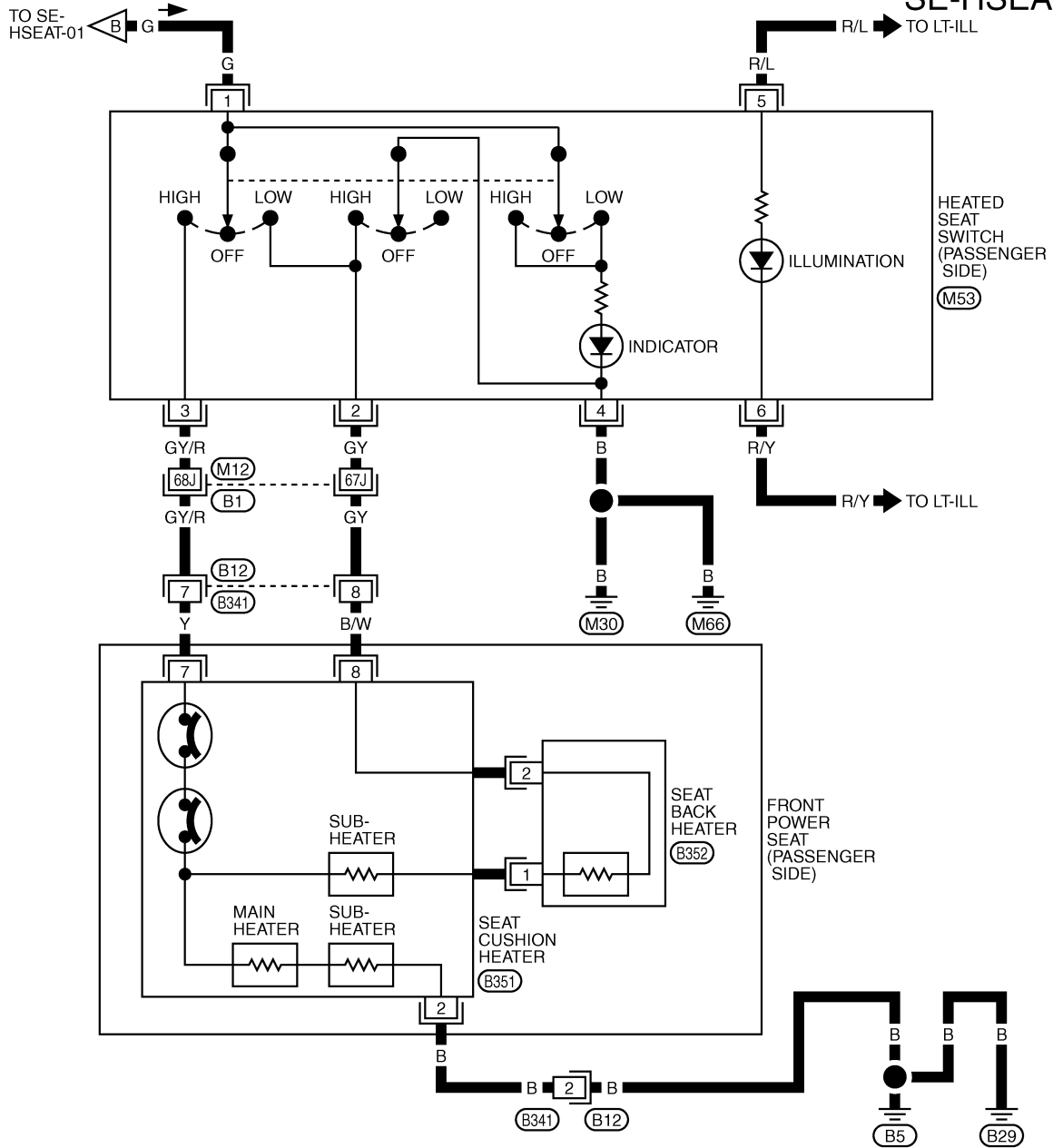
(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1106E

HEATED SEAT

SE-HSEAT-03



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

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

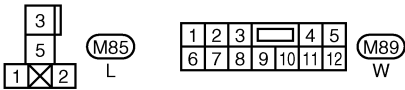
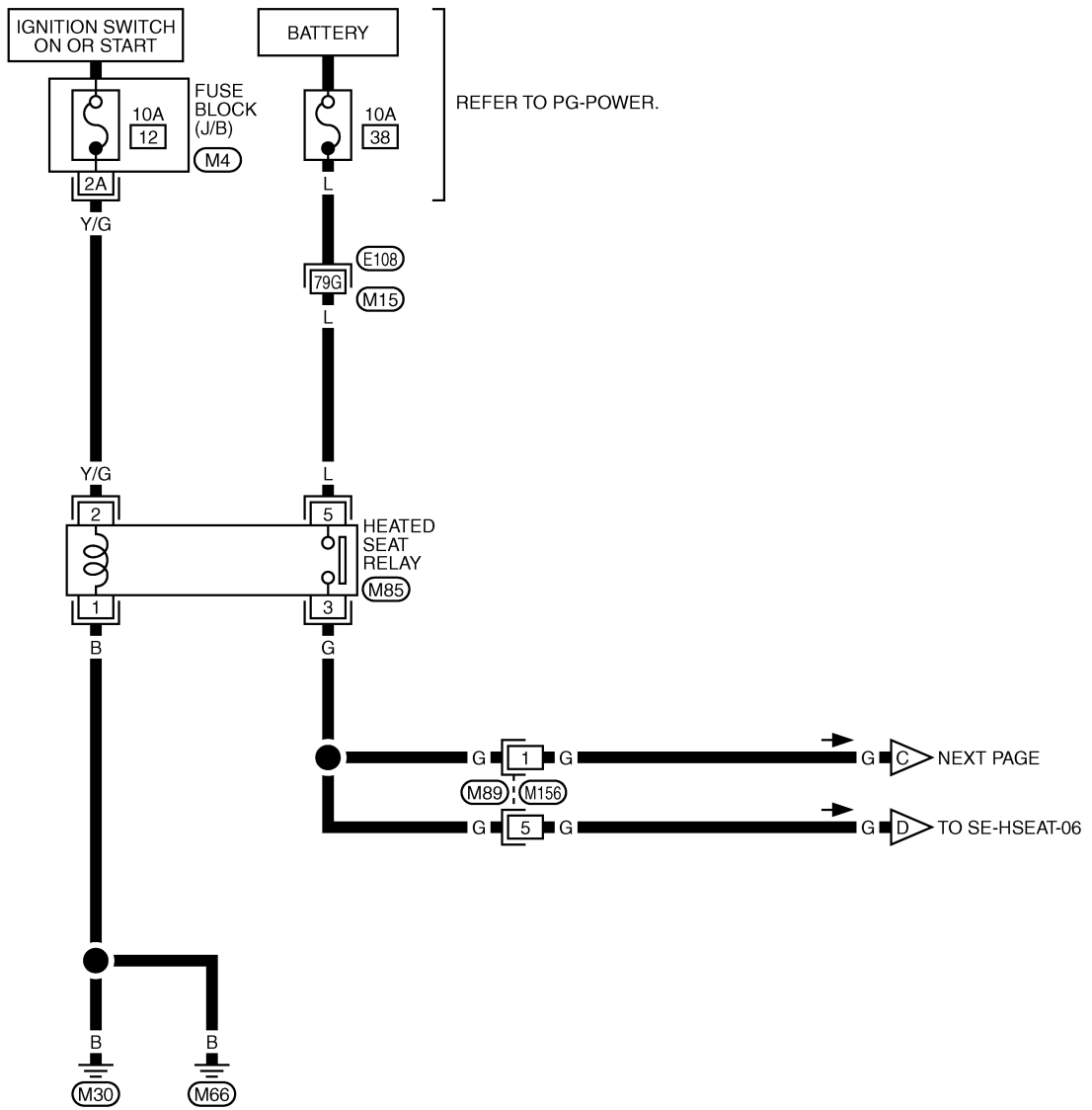
TIWM1107E

HEATED SEAT

Wiring Diagram – HSEAT – / For M/T Models

NIS0007C

SE-HSEAT-04



REFER TO THE FOLLOWING.

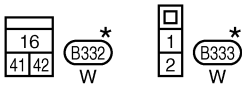
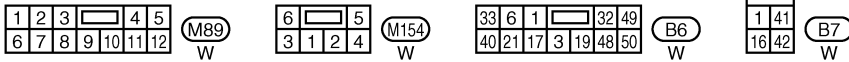
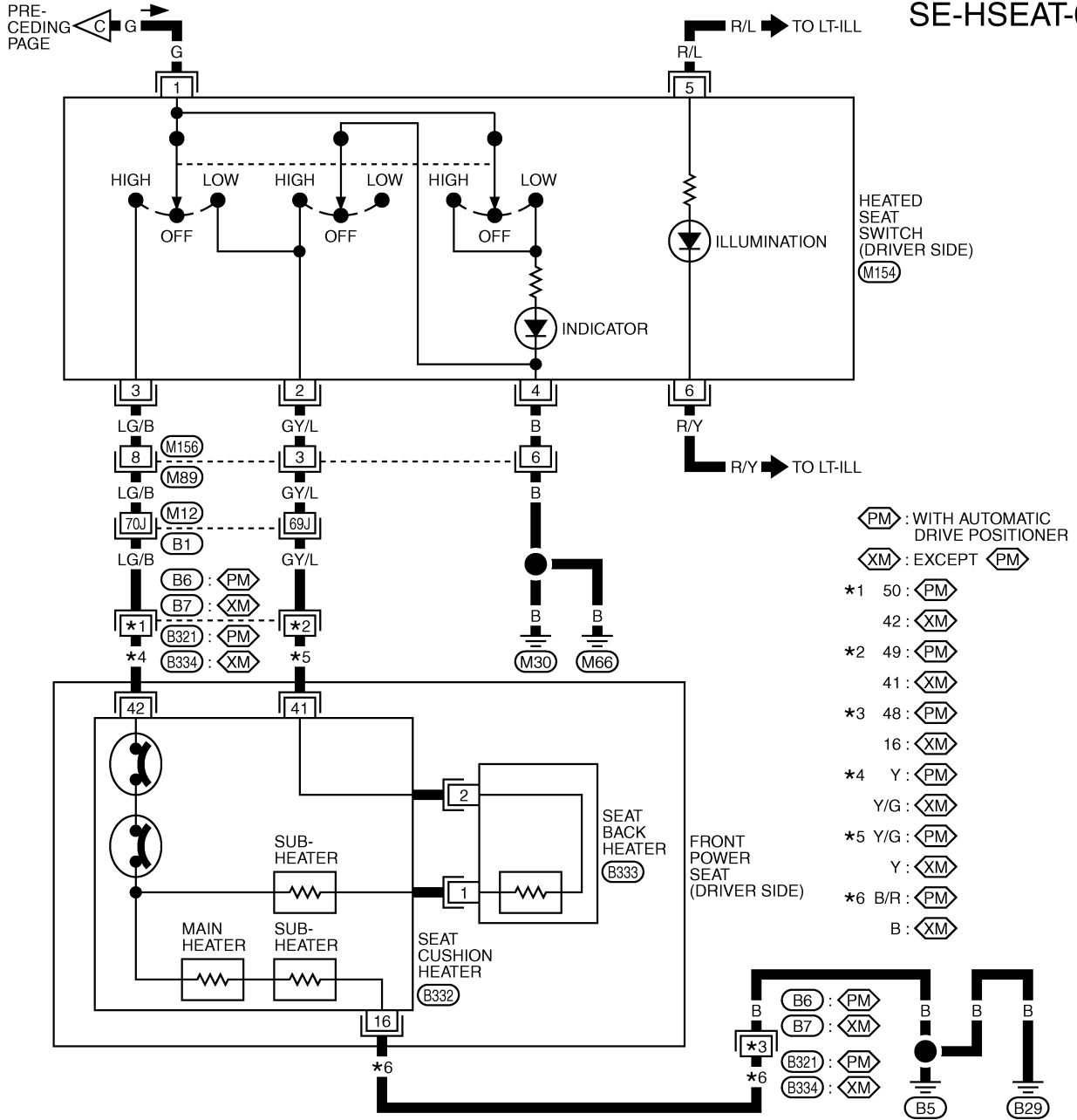
(E108) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1108E

HEATED SEAT

SE-HSEAT-05



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

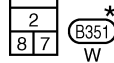
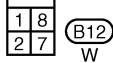
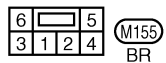
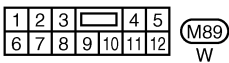
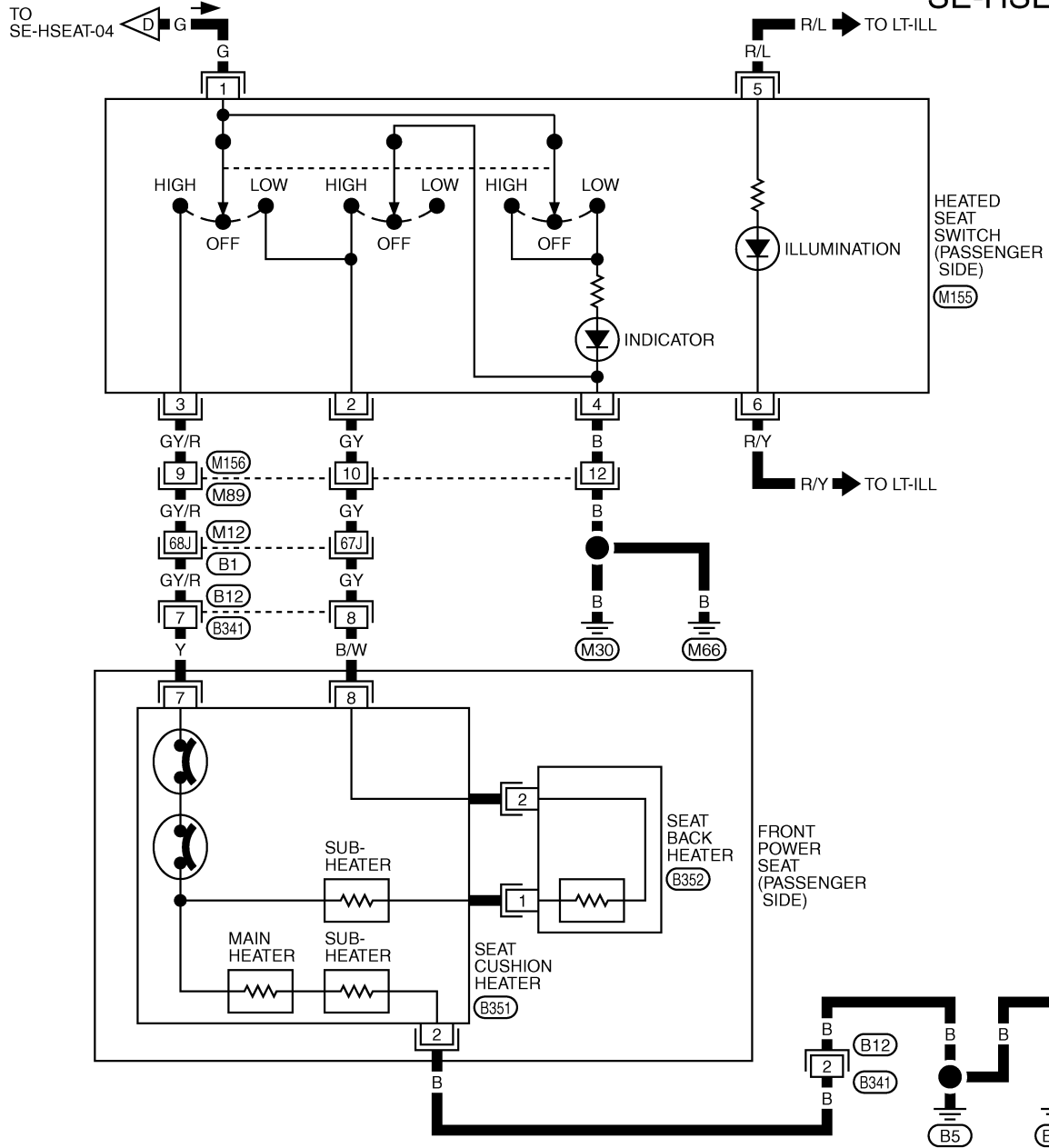
REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1109E

HEATED SEAT

SE-HSEAT-06



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

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

TIWM1110E

FRONT SEAT

FRONT SEAT

PF:87000

Removal and Installation

NIS0007D

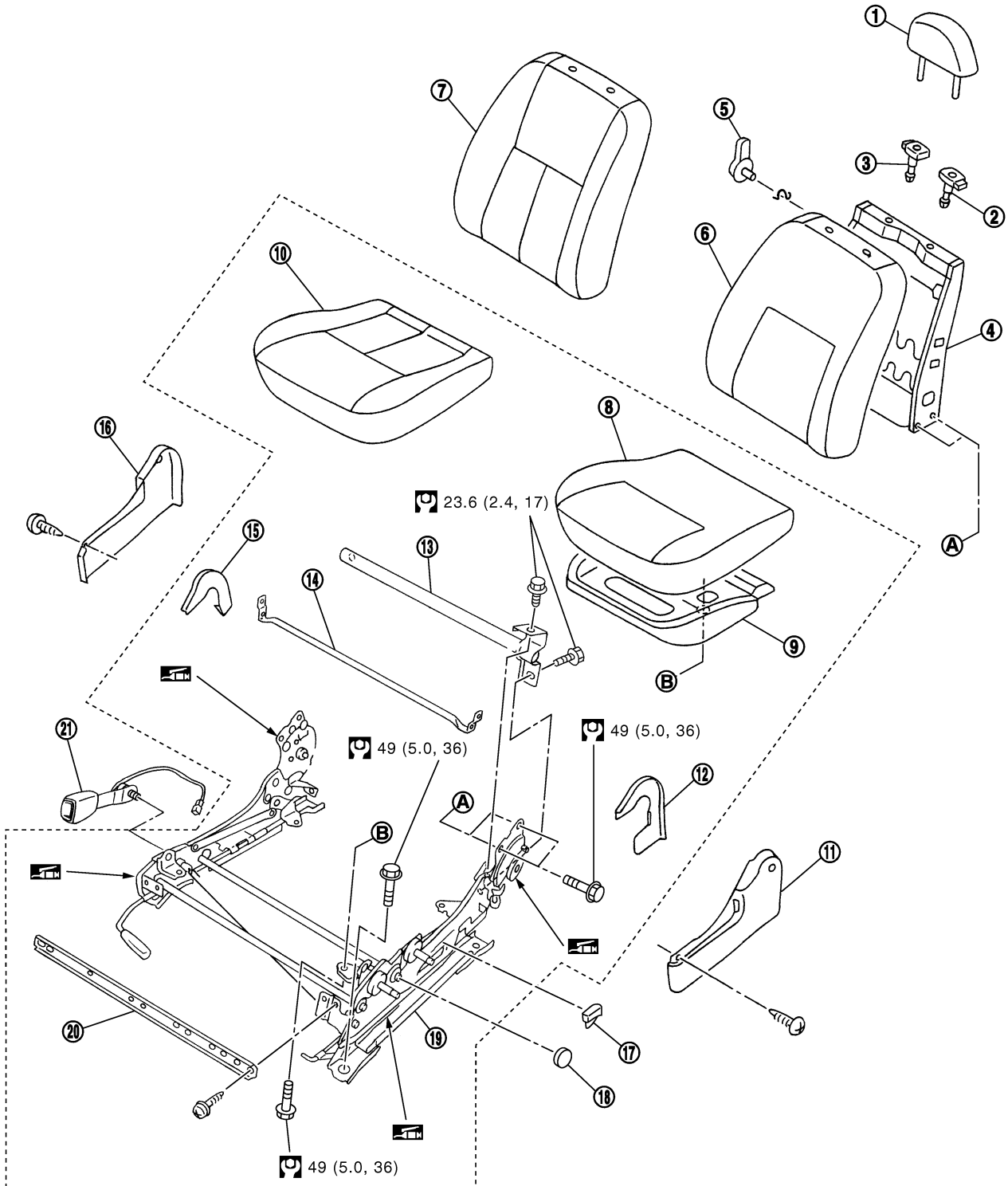
CAUTION:

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

FRONT SEAT

Manual seat

SEC. 870



: N•m (kg-m, ft-lb)

- | | | |
|-------------------|------------------------------|---------------------------|
| 1. Headrest | 2. Headrest holder (locked) | 3. Headrest holder (free) |
| 4. Seatback frame | 5. Lumber support lever knob | 6. Seatback pad |

PIIB5746E

FRONT SEAT

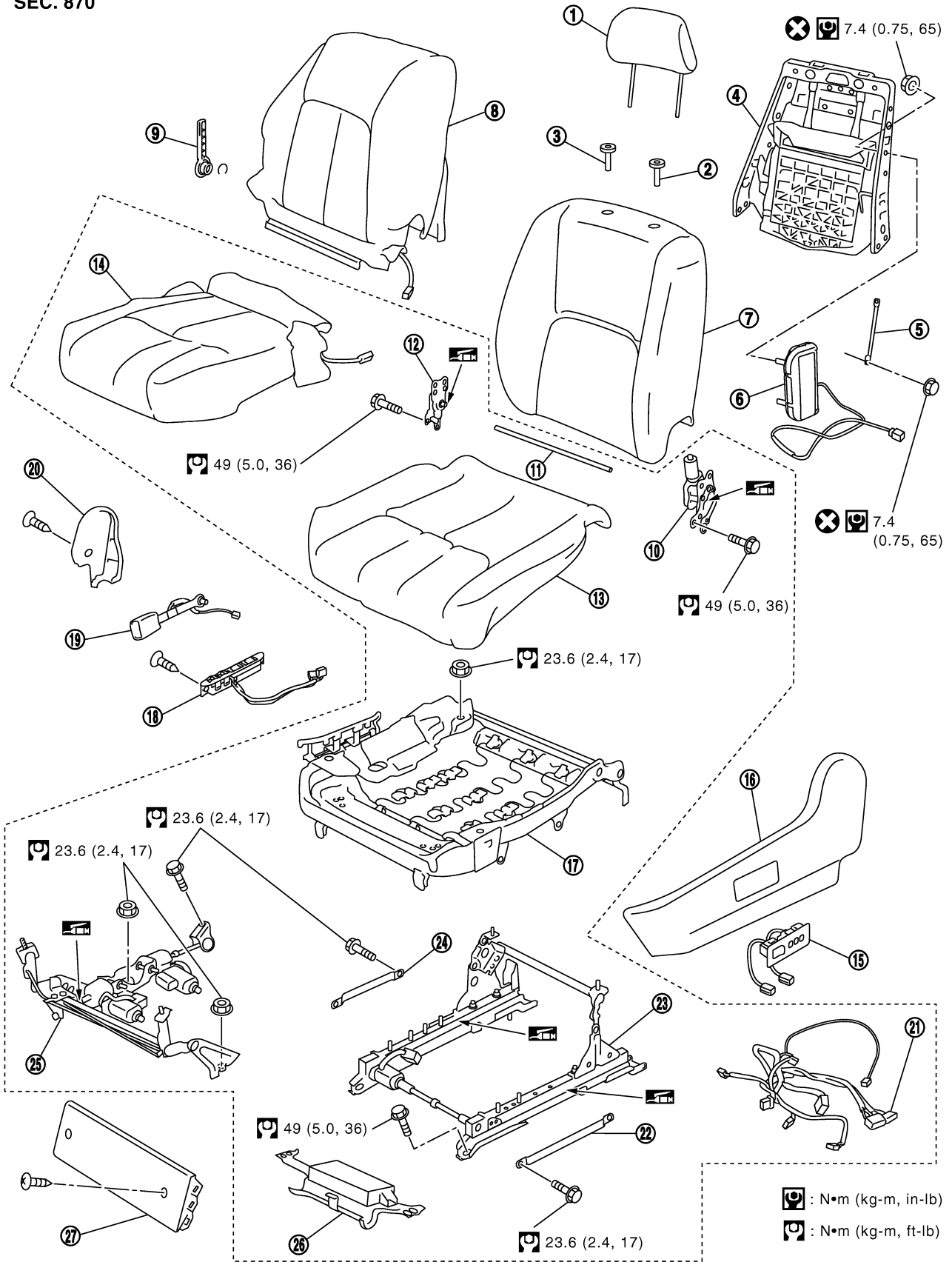
- | | | |
|---------------------------------|----------------------------------|---------------------------------|
| 7. Seatback trim | 8. Seat cushion pad | 9. Seat cushion frame |
| 10. Seat cushion trim | 11. Seat cushion outer finisher | 12. Reclining device cover (LH) |
| 13. Sliding rail bracket (rear) | 14. Reclining device rod | 15. Reclining device cover (RH) |
| 16. Seat cushion inner finisher | 17. Reclining device lever knob | 18. Lifter dial |
| 19. Lifter base assembly | 20. Sliding rail bracket (front) | 21. Seat belt buckle |

FRONT SEAT

Power seat

SEC. 870

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- 1. Headrest
- 2. Headrest holder (locked)
- 3. Headrest holder (free)
- 4. Seatback frame
- 5. Inner cloth stay
- 6. Driver side air bag module

PIIB5745E

FRONT SEAT

- | | | |
|--|---------------------------------------|---------------------------------|
| 7. Seatback pad | 8. Seatback trim | 9. Lumber support lever knob |
| 10. Reclining device (LH) | 11. Reclining device rod | 12. Reclining device (RH) |
| 13. Seat cushion pad | 14. Seat cushion trim | 15. Seat memory switch |
| 16. Seat cushion outer finisher | 17. Seat cushion frame | 18. Power seat switch |
| 19. Seat belt buckle | 20. Seat cushion inner finisher | 21. Driver power seat harness |
| 22. Seat cushion rod (LH) | 23. Seat lifter link slide assembly | 24. Seat cushion rod (RH) |
| 25. Seat lifter link motor unit assembly | 26. Driver seat control unit assembly | 27. Seat cushion front finisher |

REMOVAL

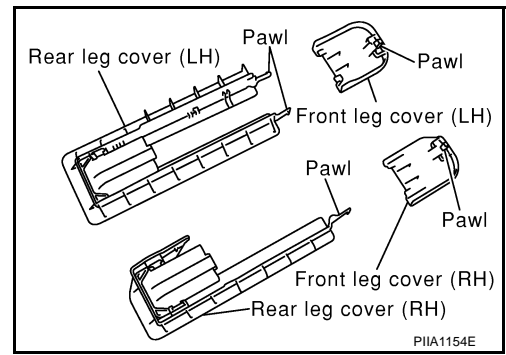
When removing or installing the seat trim, carefully handle it to keep dirt out and avoid damage.

CAUTION:

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

NOTE:

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



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

NOTE:

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

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

NOTE:

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

INSTALLATION

Install in the reverse order of removal.

NOTE:

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

FRONT SEAT

Disassembly and Assembly

NIS0007E

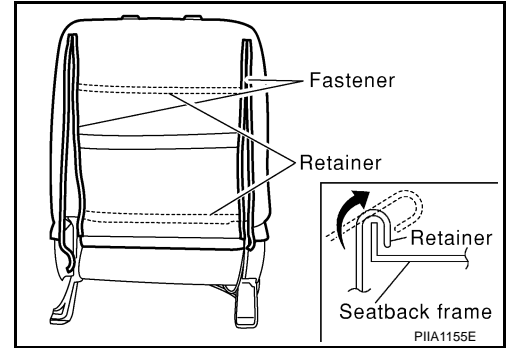
CAUTION:

Do not disassemble the component parts of only front passenger seat in the dotted lines shown in the figure. Refer to [SE-94, "REMOVAL"](#).

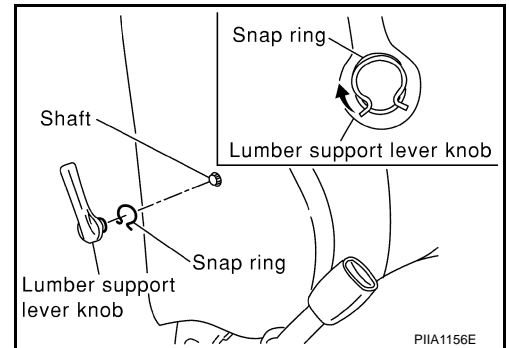
SEATBACK TRIM AND PAD

Disassembly

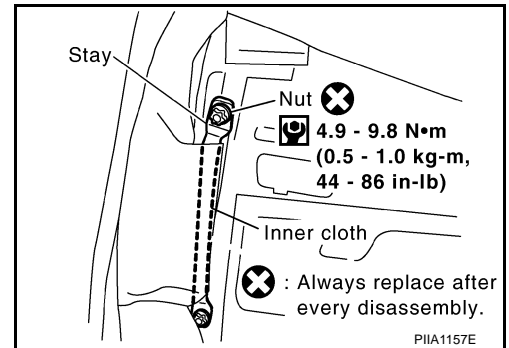
1. Open zipper on back of seatback, and remove retainer from seatback frame.



2. Pull snap ring upward, and remove lumbar support lever knob from seatback frame.



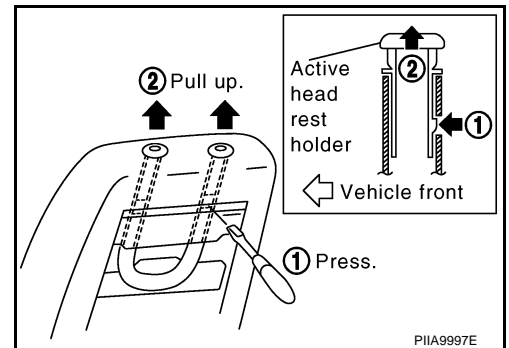
3. Remove the stay securing the inner cloth.



4. Remove headrest holder (with active headrest).
From the back of the seatback, press the headrest holder tab of the stay pipe hole to disengage. Then pull the headrest holder up to remove.

NOTE:

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

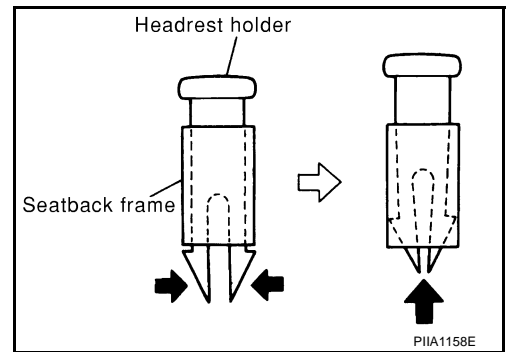


FRONT SEAT

5. Remove headrest holder (without active headrest). Squeeze and pull up headrest holder tabs to remove from seatback frame.

NOTE:

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



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

Assembly

Assemble in the reverse order of disassembly.

REMOVAL OF SEATBACK ASSEMBLY

1. After completing the steps 1 and 2 of "Seatback trim and pad", remove the harness connectors for the reclining motor and lumbar support motor (driver seat only).
2. Pull out the harness connector for the side air bag from the seat cushion.
3. Remove the reclining device mounting bolts on the seatback frame, and remove the seatback assembly.

NOTE:

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

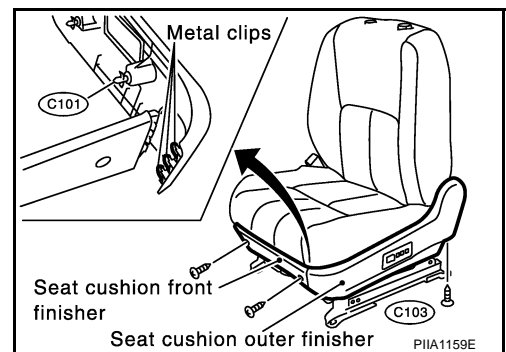
INSTALLATION OF SEATBACK ASSEMBLY

Install in the reverse order of removal.

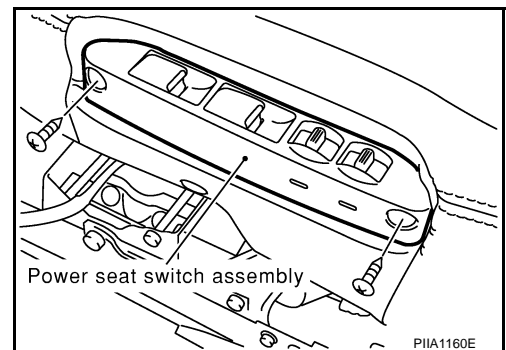
SEAT CUSHION TRIM AND PAD (POWER SEAT)

Disassembly

1. Remove the seat cushion front finisher and seat cushion outer finisher.



2. Remove the power seat switch assembly.



3. Remove the retainer on the seat cushion frame, then remove the harness connector for the seat heater.
4. After removing the seat cushion trim and pad, remove the hog rings to separate the trim and pad and the seat cushion heater unit.

FRONT SEAT

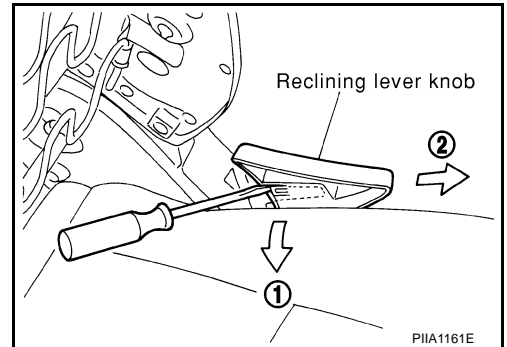
Assembly

Assemble in the reverse order of disassembly.

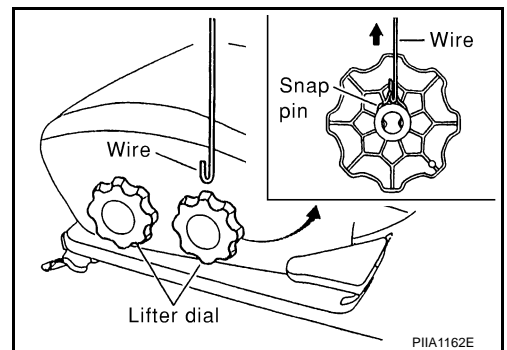
SEAT CUSHION TRIM AND PAD (MANUAL SEAT)

Disassembly

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



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

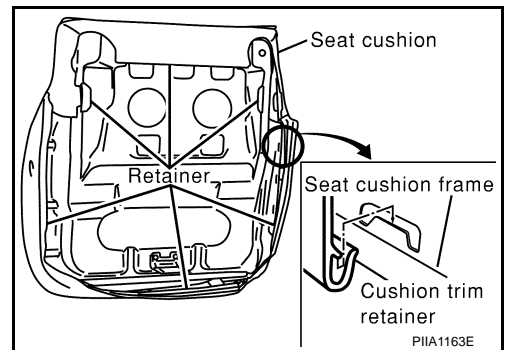


3. Remove mounting bolts by accessing them from back of seat cushion.

NOTE:

When installing bolts, ensure that locks on both sides of slide are engaged. First temporarily tighten them, and then finally tighten.

4. Remove retainer from back of cushion.
5. Pull off trim and remove hog rings.



Assembly

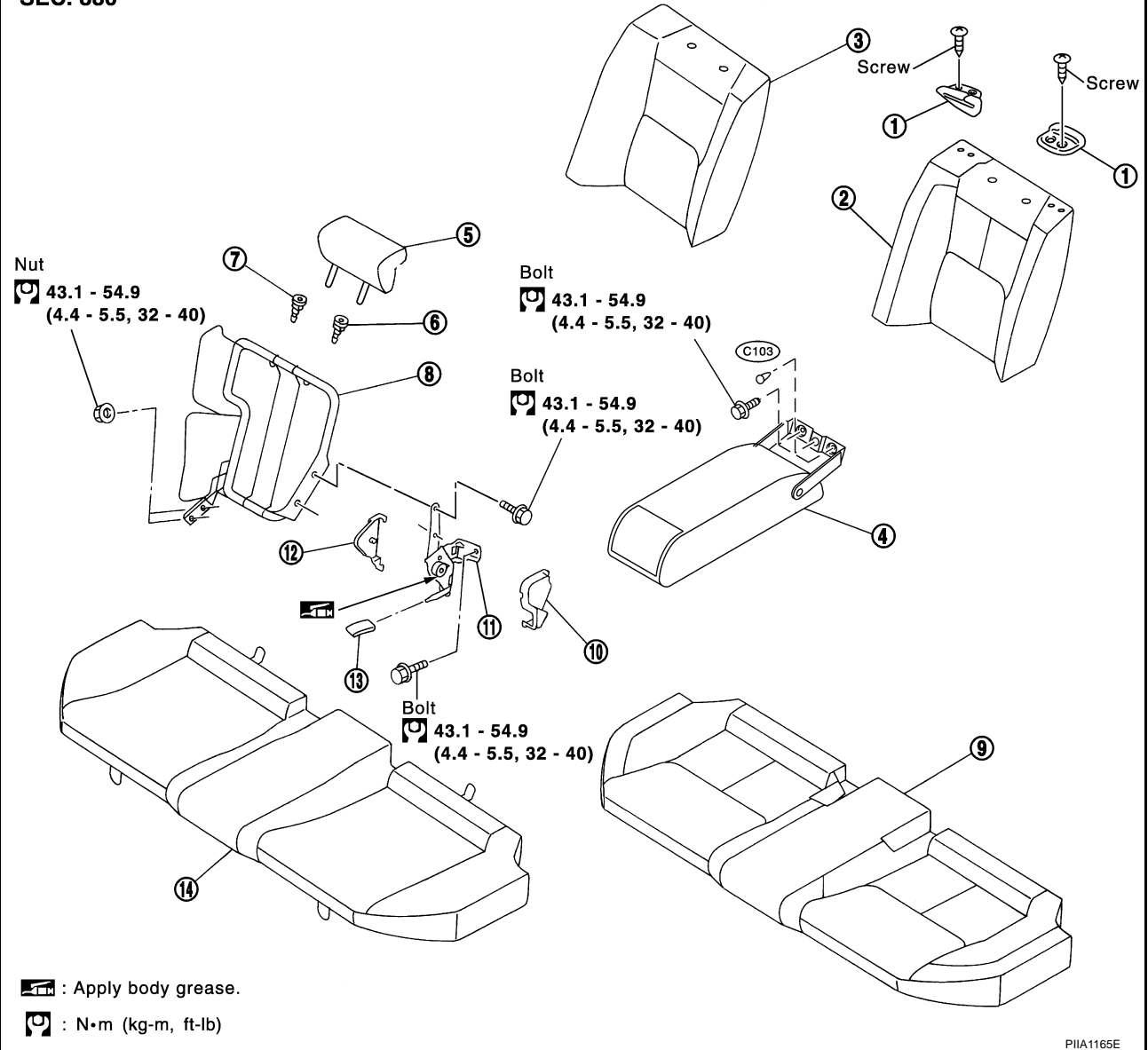
Assemble in the reverse order of disassembly.

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REAR SEAT

Reclining seat

SEC. 880

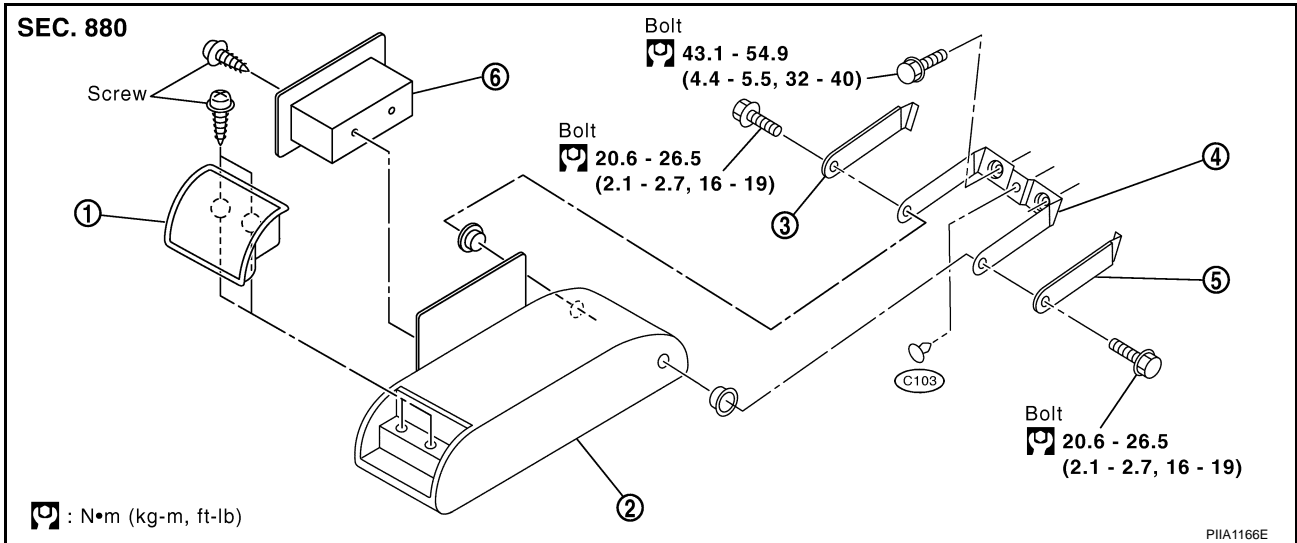


- | | | |
|---------------------------------|----------------------|-----------------------------|
| 1. Seat belt guide | 2. Seatback trim | 3. Seatback pad |
| 4. Armrest assembly | 5. Headrest | 6. Headrest holder (locked) |
| 7. Headrest holder (free) | 8. Seatback frame | 9. Seat cushion trim |
| 10. Reclining device inner | 11. Reclining device | 12. Reclining device outer |
| 13. Reclining device lever knob | 14. Seat cushion pad | |

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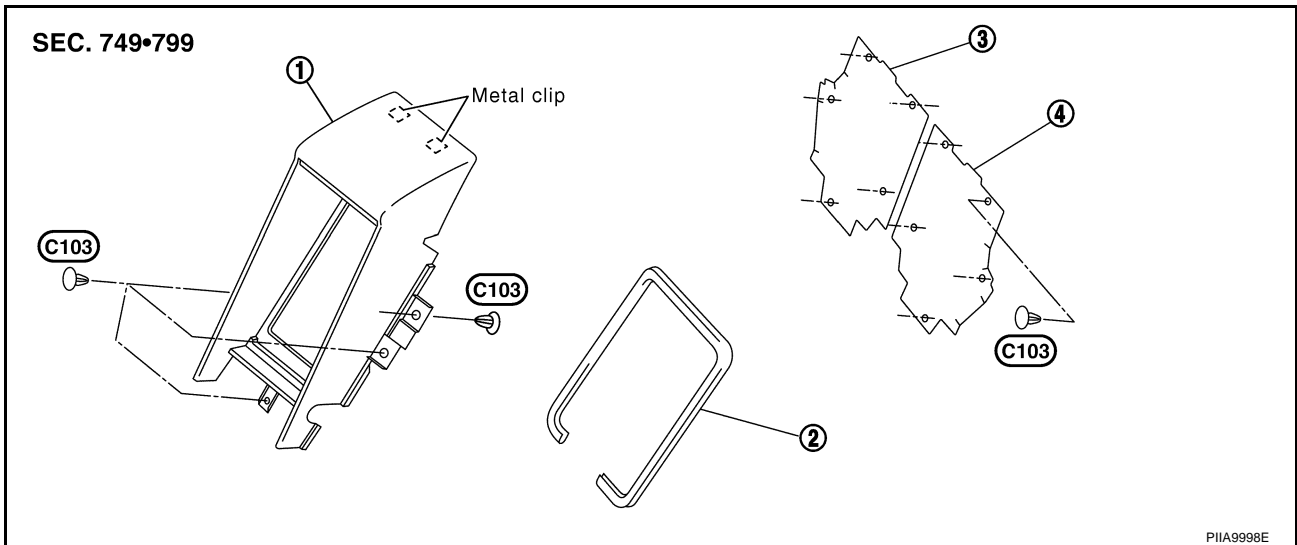
REAR SEAT

Armrest assembly



- | | | |
|--------------------|-------------------------------------|-------------------------------------|
| 1. Cup holder | 2. Armrest trim and pad | 3. Armrest bracket outer cover (RH) |
| 4. Armrest bracket | 5. Armrest bracket outer cover (LH) | 6. Armrest side console |

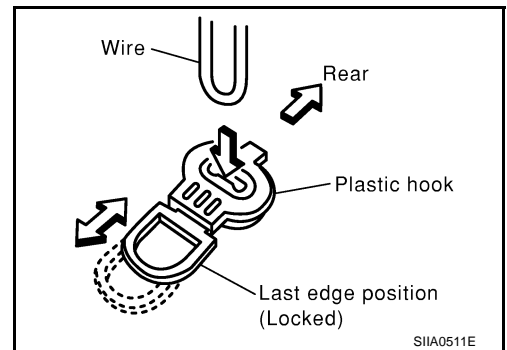
Rear seat center back finisher



- | | | |
|-----------------------------------|---------|----------------------------|
| 1. Rear seat center back finisher | 2. Welt | 3. Welt rear seatback (RH) |
| 4. Welt rear seatback (LH) | | |

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.



INSTALLATION

Install in the reverse order of removal.