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### PRECAUTIONS

### PRECAUTIONS

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

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

#### WARNING:

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

### **Precautions for Work**

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After re-installation is completed, be sure to check that each part works normally.
- Follow the steps below to clean components.
- Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.

Then rub with a soft and dry cloth.

Oily foul: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the fouled area.
 Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub

with a soft and dry cloth.

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

### PREPARATION

## PREPARATION

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### **Special Service Tool**

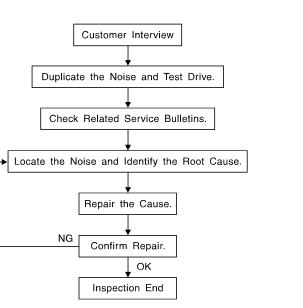
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The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description
 (J-39570) Chassis ear	SIIA0993E	Locating the noise
–– (J-43980) NISSAN Squeak and Rattle Kit	SIIA0994E	Repairing the cause of noise
Commercial Service Tool		EIS003X3
(Kent-Moore No.) Tool name		Description
(J-39565)		Locating the noise

SIIA0995E

### SQUEAK AND RATTLE TROUBLE DIAGNOSES 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. SE

- The customer may not be able to provide a detailed description or the location of the noise. Attempt to obtain all the facts and conditions that exist when the noise occurs (or does not occur).
- If there is more than one noise in the vehicle, be sure to diagnose and repair the noise that the customer is concerned about. This can be accomplished by test driving the vehicle with the customer.
- After identifying the type of noise, isolate the noise in terms of its characteristics. The noise characteristics are provided so the customer, service adviser and technician are all speaking the same language when defining the noise.
- Squeak —(Like tennis shoes on a clean floor) Squeak characteristics include the light contact/fast movement/brought on by road conditions/hard surfaces = higher pitch noise/softer surfaces = lower pitch noises/edge to surface = chirping.
- Creak—(Like walking on an old wooden floor) Creak characteristics include firm contact/slow movement/twisting with a rotational movement/pitch dependent on materials/often brought on by activity.
- Rattle—(Like shaking a baby rattle) Rattle characteristics include the fast repeated contact/vibration or similar movement/loose parts/missing clip or fastener/incorrect clearance.
- Knock —(Like a knock on a door) Knock characteristics include hollow sounding/sometimes repeating/often brought on by driver action.
- Tick—(Like a clock second hand) Tick characteristics include gentle contacting of light materials/loose components/can be caused by driver action or road conditions.
- Thump—(Heavy, muffled knock noise) Thump characteristics include softer knock/dead sound often brought on by activity.
- Buzz—(Like a bumble bee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending upon the person. A noise that you may judge as acceptable may be very irritating to the customer.
- Weather conditions, especially humidity and temperature, may have a great effect on noise level.

### DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.

If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

- 1) Close a door.
- 2) Tap or push/pull around the area where the noise appears to be coming from.
- 3) Rev the engine.
- 4) Use a floor jack to recreate vehicle "twist".
- 5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
- 6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.
- Drive the vehicle and attempt to duplicate the conditions the customer states exist when the noise occurs.
- If it is difficult to duplicate the noise, drive the vehicle slowly on an undulating or rough road to stress the vehicle body.

#### CHECK RELATED SERVICE BULLETINS

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

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

#### LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear: J-39565 and mechanic's 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 fasteners 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 <u>SE-7, "Generic Squeak and Rattle Troubleshooting"</u>.

#### **REPAIR THE CAUSE**

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

#### CAUTION:

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

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

URETHANE PADS [1.5 mm (0.059 in) thick]

Insulates connectors, harness, etc.

76268-9E005: 100×135 mm (3.94×5.31 in)/76884-71L01: 60×85 mm (2.36×3.35 in)/76884-71L02: 15×25 mm (0.59×0.98 in)

**INSULATOR (Foam blocks)** 

Insulates components from contact. Can be used to fill space behind a panel.

73982-9E000: 45 mm (1.77 in) thick, 50×50 mm (1.97×1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50×50 mm (1.97×1.97 in)

INSULATOR (Light foam block)

	345-71L00:  30 mm (1.18  in) thick, 30×50 mm (1.18×1.97 in) LT CLOTH TAPE	А
	ed to insulate where movement does not occur. Ideal for instrument panel applications.	
683	370-4B000: 15×25 mm (0.59×0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll. The following	
	terials not found in the kit can also be used to repair squeaks and rattles. MW (TEFLON) TAPE	В
Ins	ulates where slight movement is present. Ideal for instrument panel applications. ICONE GREASE	
	ed instead of UHMW tape that will be visible or not fit.	С
No	te: Will only last a few months.	
	ICONE SPRAY	
	e when grease cannot be applied. CT TAPE	D
-	e to eliminate movement.	
CO	NFIRM THE REPAIR	
	nfirm that the cause of a noise is repaired by test driving the vehicle. Operate the vehicle under the same	E
	nditions as when the noise originally occurred. Refer to the notes on the Diagnostic Worksheet.	
Ge	eneric Squeak and Rattle Troubleshooting	F
Re	fer to Table of Contents for specific component removal and installation information.	
INS	STRUMENT PANEL	G
Мо	st incidents are caused by contact and movement between:	0
1.	· · · · · · · · · · · · · · · · · · ·	
2.	Acrylic lens and combination meter housing	Н
3.	Instrument panel to front pillar garnish	
4.	Instrument panel to windshield	
5.	Instrument panel mounting pins	SE
6.	Wiring harnesses behind the combination meter	
7.	A/C defroster duct and duct joint	J
The	ese incidents can usually be located by tapping or moving the components to duplicate the noise or by	J
	ssing on the components while driving to stop the noise. Most of these incidents can be repaired by apply-	
ing	felt cloth tape or silicone spray (in hard to reach areas). Urethane pads can be used to insulate wiring har-	Κ
	ution:	
-	not use silicone spray to isolate a squeak or rattle. If you saturate the area with silicone, you will	
	t be able to recheck the repair.	L
CE	NTER CONSOLE	
Co	mponents to pay attention to include:	M
1.	Shifter assembly cover to finisher	1 1 1
2.	A/C control unit and cluster lid C	
3.	Wiring harnesses behind audio and A/C control unit	

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

#### DOORS

Pay attention to the:

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

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the NISSAN Squeak and Rattle Kit (J-43980) to repair the noise.

#### TRUNK

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

- 1. Trunk lid bumpers 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 headliner and squeaking

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

#### **OVERHEAD CONSOLE (FRONT AND REAR)**

Overhead console noises are often caused by the console panel clips not being engaged correctly. Most of these incidents are repaired by pushing up on the console at the clip locations until the clips engage. In addition look for:

- 1. Loose harness or harness connectors.
- 2. Front console map/reading lamp lense loose.
- 3. Loose screws at console attachment points.

#### 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.

### **Diagnostic Worksheet**

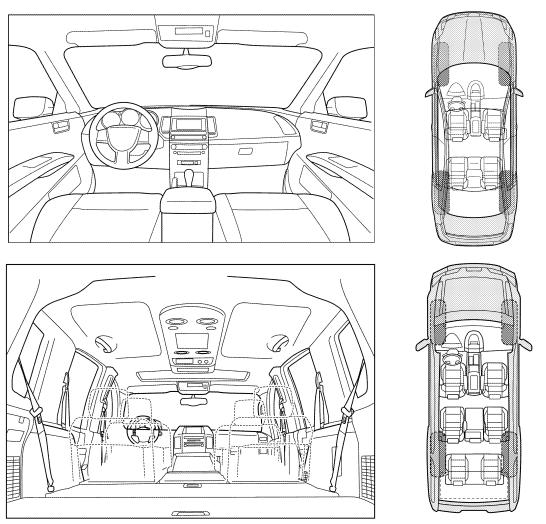
#### Dear Customer:

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

#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

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

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



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

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#### SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

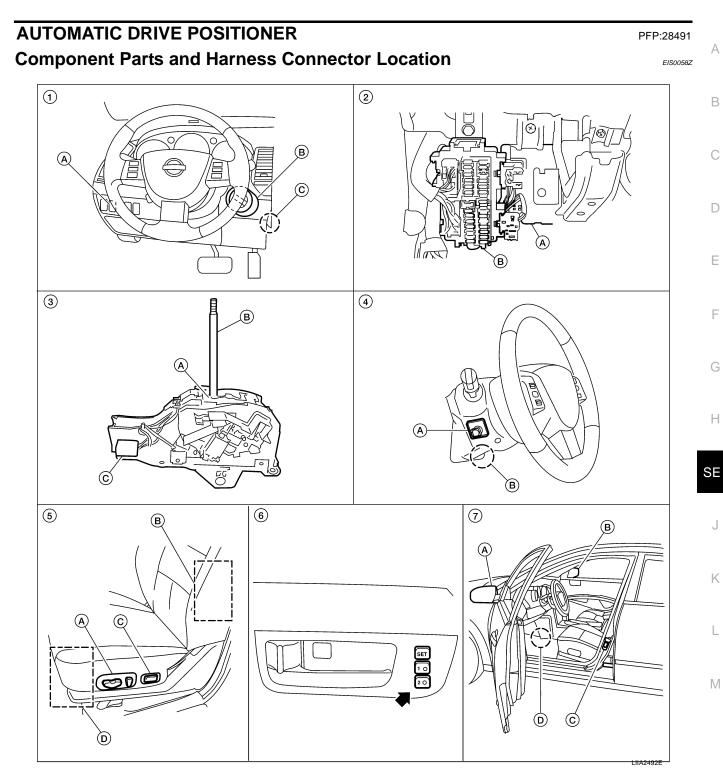
II.	II. WHEN DOES IT OCCUR? (please check the boxes that apply)						
	Anytime 1st time in the morning Only when it is cold outside Only when it is hot outside		After sitting out in the rain When it is raining or wet Dry or dusty conditions Other:				
III.	WHEN DRIVING:	IV.	WHAT TYPE OF NOISE				
	Through driveways Over rough roads Over speed bumps Only about mph On acceleration Coming to a stop On turns: left, right or either (circle) With passengers or cargo Other: After driving miles or minute		Squeak (like tennis shoes on a clean floor) Creak (like walking on an old wooden floor) Rattle (like shaking a baby rattle) Knock (like a knock at the door) Tick (like a clock second hand) Thump (heavy muffled knock noise) Buzz (like a bumble bee)				

#### TO BE COMPLETED BY DEALERSHIP PERSONNEL

#### Test Drive Notes:

	YES	NO	Initials of person performing
Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired - Follow up test drive performed to confirm repair			
VIN: Co	ustomer Name		
W.O.# Da	ate:		
This form must be att	ached to Work	Order	

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1.	<ul> <li>A. Door mirror remote control switch M7</li> <li>B. Key switch and ignition knob switch M73</li> <li>C. Intelligent Key unit M52</li> </ul>	2.	A. BCM M18, M19, M20 B. Fuse block (J/B) (view with instru- ment panel removed)	3.	A. CVT device [detention switch (key)] M34 B. CVT selector lever C. CVT device harness connector
4.	A. ADP steering switch M16 B. Telescopic motor M66, M67 Tilt motor M68, M69	5.	<ul> <li>A. Power seat switch LH B408</li> <li>B. Reclining motor B405, lumbar motor B410</li> <li>C. Lumbar switch B09</li> <li>D. Driver seat control unit B401, B402</li> <li>Sliding motor B404</li> <li>Front lifting motor B406</li> <li>Rear lifting motor B407</li> </ul>	6.	Seat memory switch D5
7.	A. Door mirror LH D4 B. Door mirror RH D107 C. Front door switch LH B8				

D. Automatic drive positioner control unit M41, M42

### System Description

EIS003X7

- Refer to Owner's Manual for Automatic Drive Positioner system operating instructions.
- The settings (ON/OFF) of the automatic sliding seat (entry/exiting operation) at entry/exit can be changed as desired, using the display unit in the center of the instrument panel. The set content is transmitted by CAN communication, from display control unit to driver seat control unit.
- Using CONSULT-II, the seat slide amount at entry/exit setting can be changed.

Function		Description		
Memory operation		The front seat LH, steering wheel and door mirrors move to the stored driving position by pushing seat memory switch (1 or 2).		
Exiting operation		At exit, the front seat LH moves backward and the steering wheel raises. (Exiting position)		
ing function Entry operation		At entry, the front seat LH and steering wheel will move from the exiting position to the previous driving position before the exiting operation.		
Intelligent Key interlock operation		Perform a linked memory operation by pressing Intelligent Key unlock button.		

NOTE:

- Disconnecting the battery erases the stored memory.
- After connecting the battery, close the front door LH, push and hold the key switch and ignition knob switch and then operate the ۰ front door switch LH ON (open) -> OFF (close) -> ON (open) -> OFF (close), the entry/exiting operation becomes possible.
- After exiting operation is carried out, return operation can be operated.

Auto operation temporary stop conditions.	When ignition switch turns to START during seat memory switch operation and entry opera- tion, seat memory switch operation and entry operation is stopped.
Auto operation stop conditions.	• When the vehicle speed becomes 7 km/h (4 MPH) or higher. (seat memory switch operation and entry operation).
	• When the setting switch, memory switch 1 or 2 are pressed.
	When CVT selector lever is in any position other than P.
	• When the door mirror remote control switch is operated (when ignition switch turned ON).
	When power seat switch LH turned operated.
	When door mirror operates.
	<ul> <li>When front seat LH sliding Entry/Exiting setting is OFF (entry/exiting operation).</li> </ul>

#### 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.

#### **FAIL-SAFE MODE**

When the ignition switch is in the ON position, if any of the parts (indicated in the following chart) move more than the specified amount within a period "T1" when no "ON" input is sent from any of the switches (indicated

in the following chart), or an output from the automatic drive positioner is not produced, an output malfunction is sensed. Motor operation will be suspended automatically, and all automatic operations will be ineffective. (In this case, the motor will not operate manually).

OPERATED PORTION	T1	
Seat sliding	Approx. 2.5 sec.	
Seat reclining	Same as above	
Seat lifting (Front)	Same as above	
Seat lifting (Rear)	Same as above	
Steering wheel	Same as above	

#### **Cancel of Fail-safe Mode**

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

### **CAN Communication System Description**

Refer to LAN-4, "SYSTEM DESCRIPTION" .

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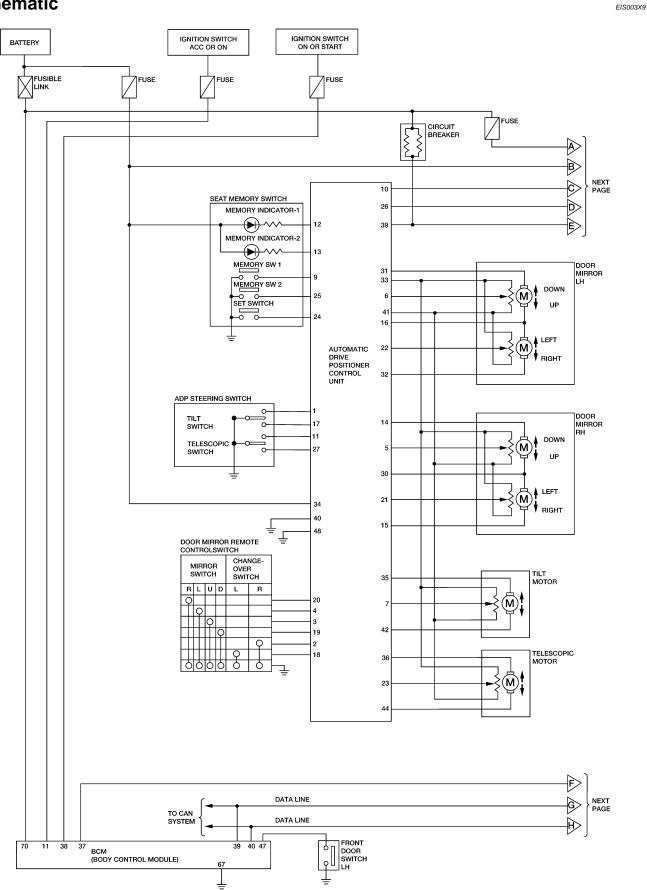
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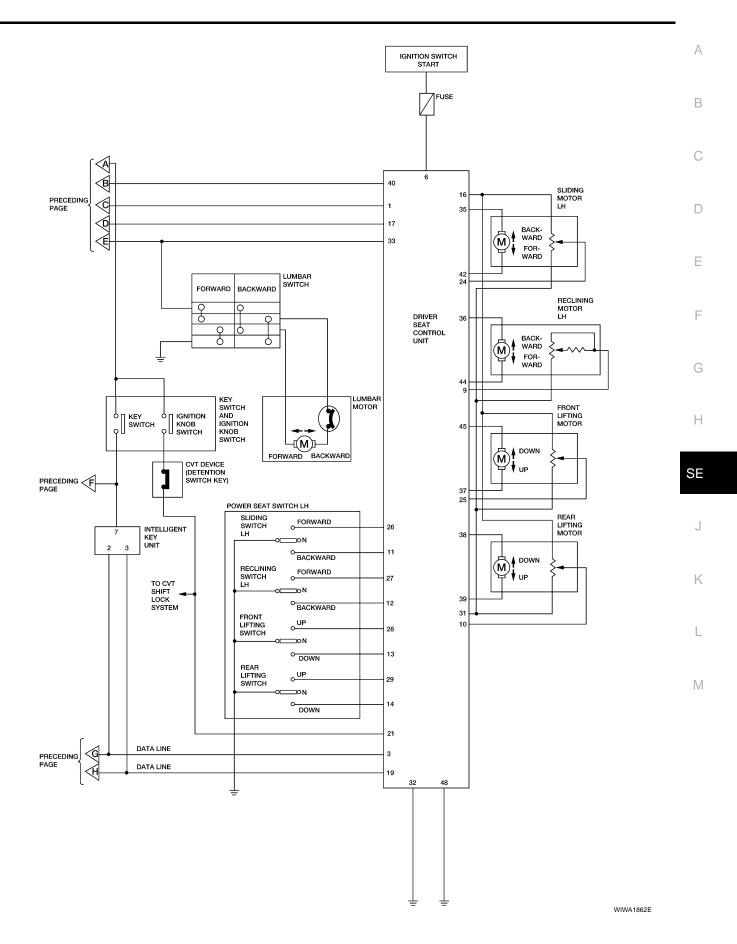
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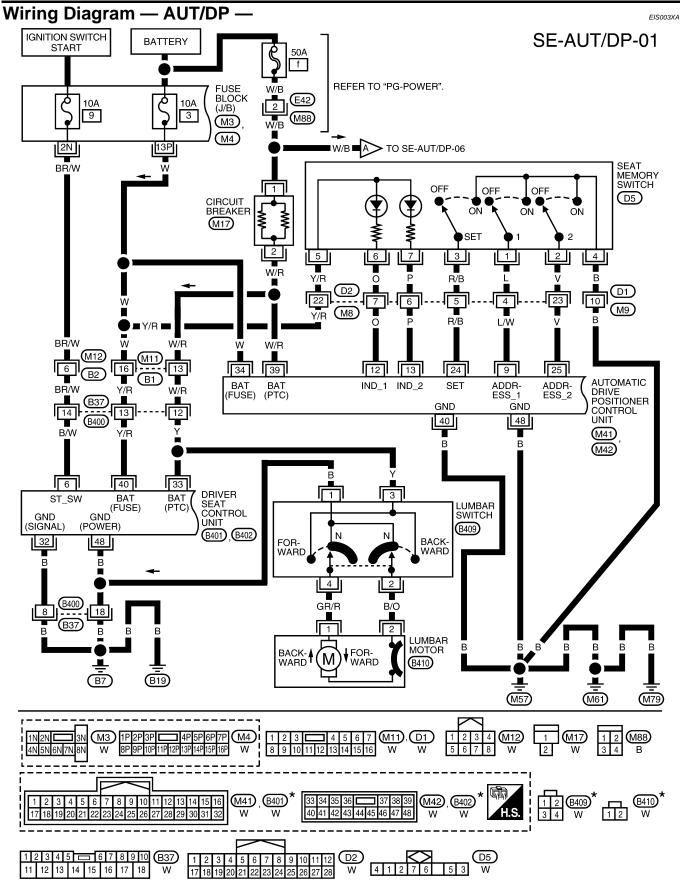
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### Schematic



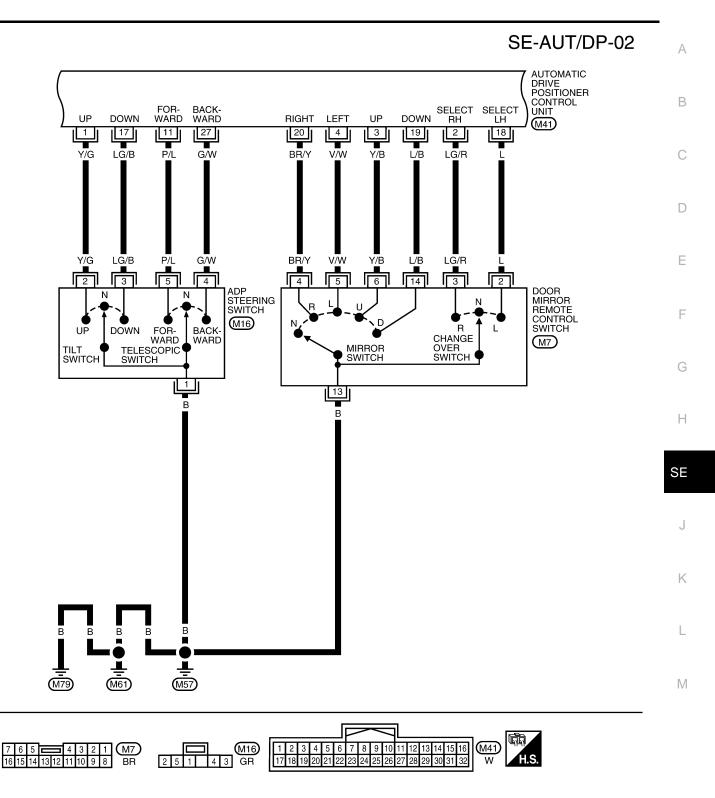
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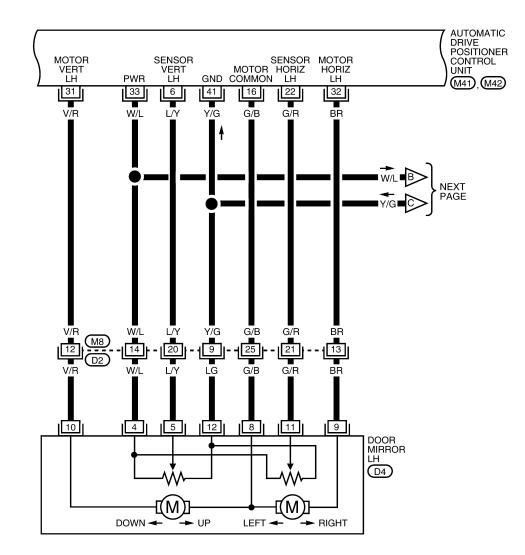


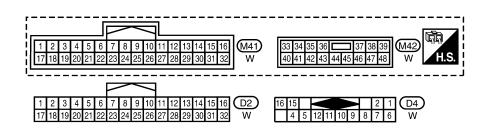
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

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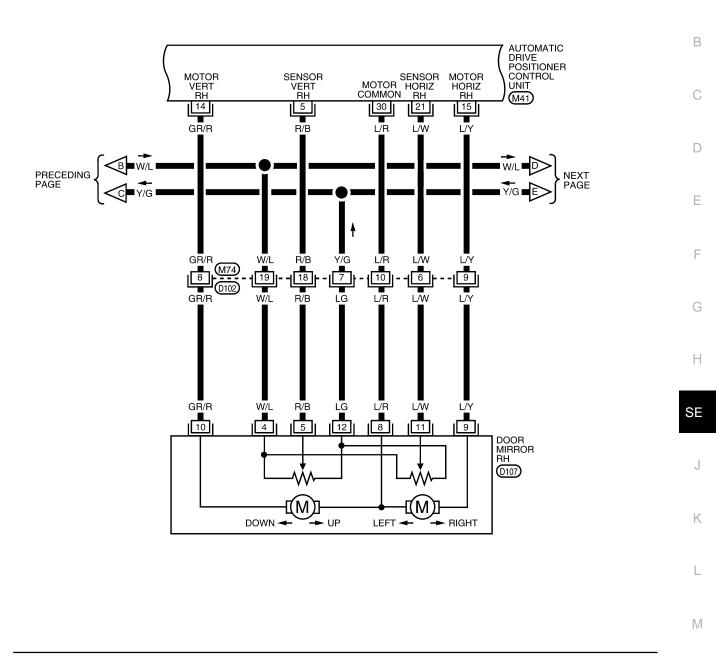


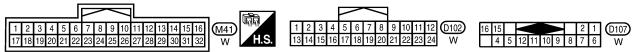


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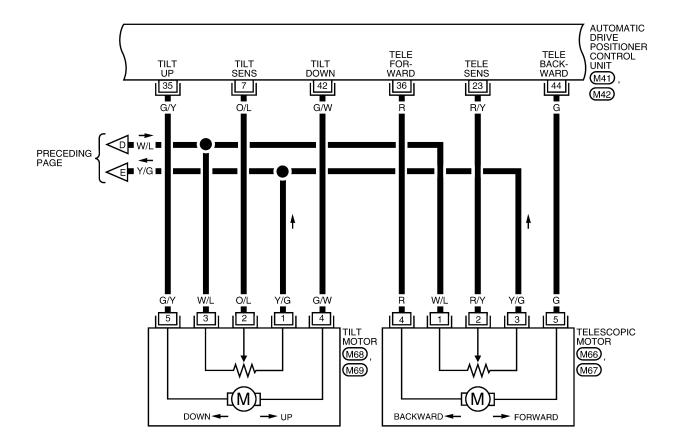
SE-AUT/DP-04

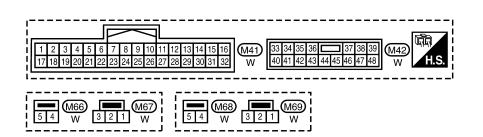
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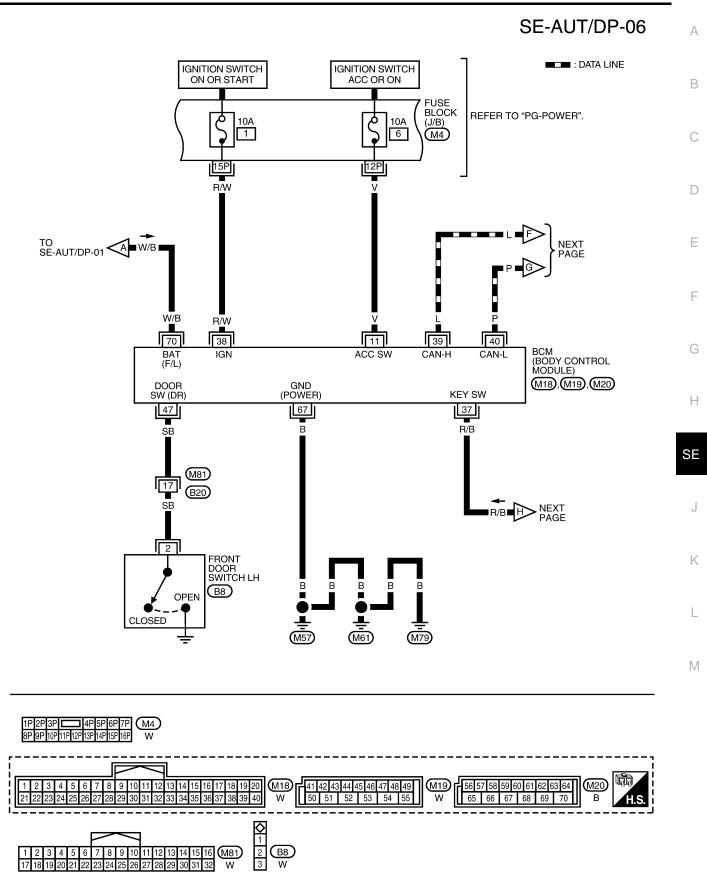


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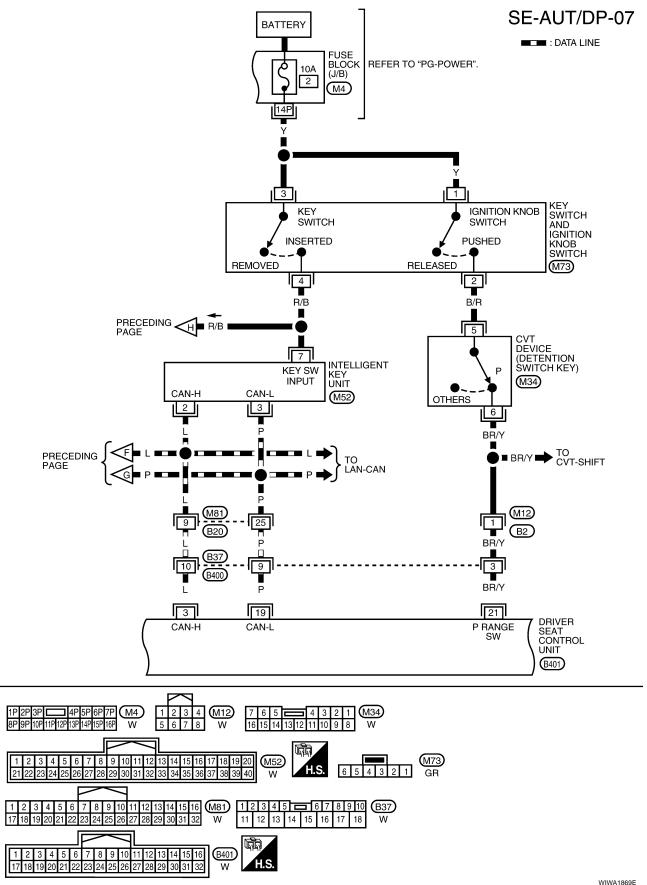




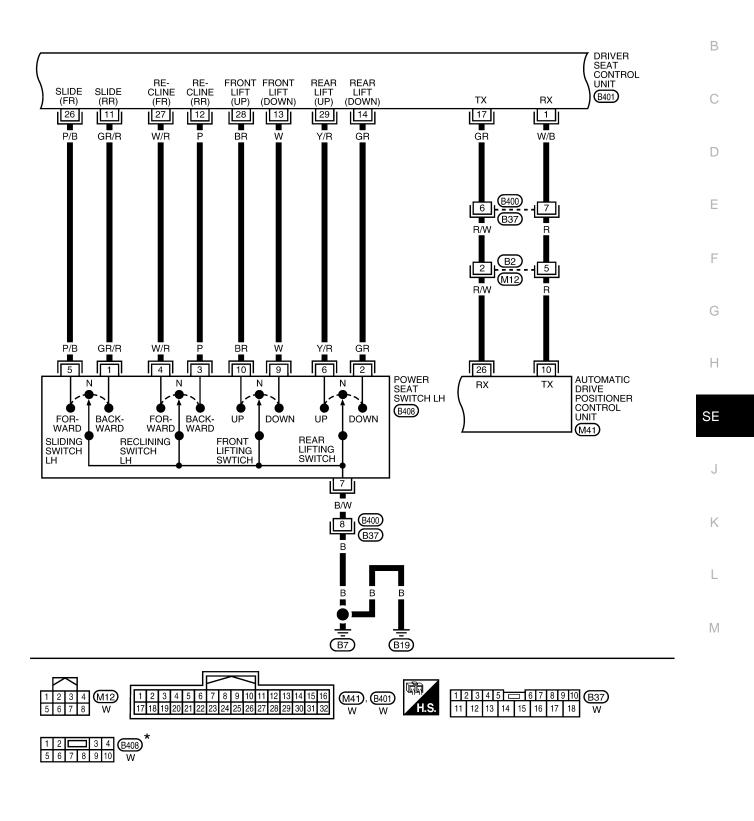
WIWA1867E



WIWA1868E

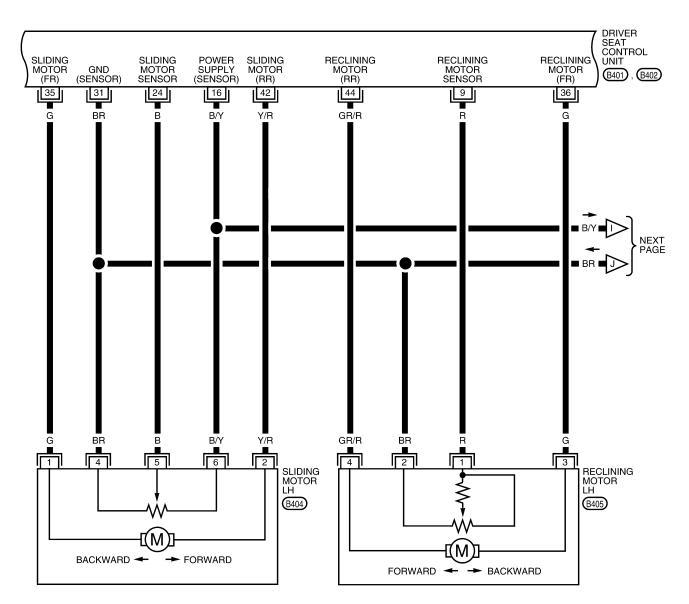


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\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

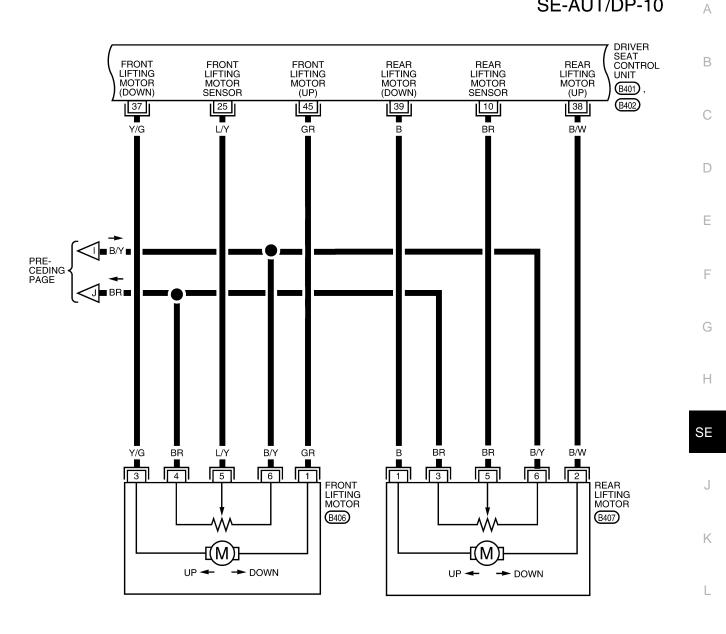
WIWA1870E

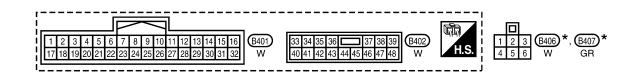




\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1871E

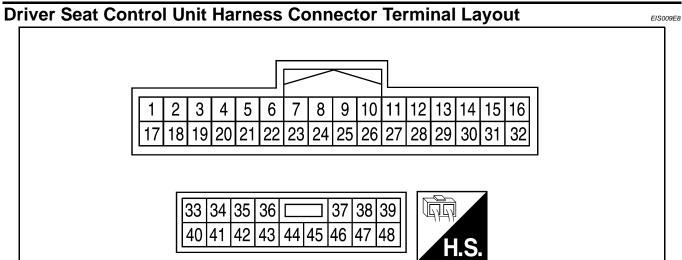




\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1886E

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### Terminals and Reference Values for Driver Seat Control Unit

EIS003XB

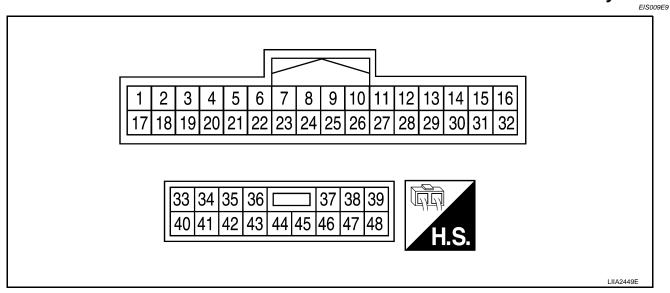
LIIA2449E

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	W/B	UART LINE (RX)		_
3	L	CAN-H		_
6	B/W	Ignition switch (START)	Ignition switch (START position)	Battery voltage
9	R	Reclining sensor signal	ON (seat reclining motor opera- tion)	(V) 12 10 8 6 • • • • 50ms LIIA2339E
			Other than above	0 or 5
10	BR	Rear lifting sensor signal	ON (rear end lifter motor opera- tion)	(V) 4 2 0 •••50ms SIIA0693J
			Other than above	0 or 5
11	GR/R Sliding switch LH BACKWARD		ON (sliding switch LH BACK- WARD operation)	0
		signal	Other than above	Battery voltage
12	Р	Reclining switch LH BACK-	ON (reclining switch LH BACK- WARD operation)	0
		WARD signal	Other than above	Battery voltage
13	W	Front lifting switch DOWN signal	ON (front lifting switch DOWN operation)	0
			Other than above	Battery voltage
14	GR	Rear lifting switch DOWN signal	ON (rear lifting switch DOWN operation)	0
			Other than above	Battery voltage

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
16	B/Y	Power supply (ENCODER)	—	5
17	GR	UART LINE (TX)	—	
19	Р	CAN-L	_	_
21	BR/Y	CVT device [detention switch	CVT selector lever other than P position	0
21	BIVI	(key)] signal	CVT selector lever P position with ignition knob switch pushed	Battery voltage
24	В	Sliding sensor signal	ON (seat sliding motor operation)	(V) 6 4 2 0 + + 50ms SIIA0693J
			Other than above	0 or 5
25	L/Y	Front lifting sensor signal	ON (front end lifter motor opera- tion)	(V) 6 4 2 0 • • • • 50ms
				SIIA0691J
			Other than above.	0 or 5
26	P/B	Sliding switch LH FORWARD signal	ON (sliding switch LH FORWARD operation)	0
			Other than above	Battery voltage
27	W/R	Reclining switch LH FORWARD signal	ON (reclining switch LH FOR- WARD operation)	0
			Other than above	Battery voltage
28	BR	Front lifting switch UP signal	ON (front lifting switch UP opera- tion)	0
			Other than above	Battery voltage
29	Y/R	Rear lifting switch UP signal	ON (rear lifting switch UP opera- tion)	0
			Other than above	Battery voltage
31	BR	Sensor ground	_	0
32	В	Ground	-	0
33	Y	Battery power supply	-	Battery voltage
35	G	Sliding motor LH FORWARD output signal	Sliding switch LH FORWARD operation (motor operated)	Battery voltage
			Other than above	0
		Reclining motor LH FORWARD	Reclining switch LH FORWARD operation (motor operated)	Battery voltage
36	G			
36	G	output signal	Other than above	0
36	G Y/G		Other than above Front lifting switch DOWN opera- tion (motor operated)	0 Battery voltage

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)	
38	B/W	Rear lifter motor UP output sig- nal	Rear lifting switch UP operation (motor operated)	Battery voltage	
		11di	Other than above	0	
39	В	Rear lifter motor DOWN output	Rear lifting switch DOWN opera- tion (motor operated)	Battery voltage	
		signal	Other than above	0	
40	Y/R	Battery power supply	—	Battery voltage	
42	Y/R	Y/R Sliding motor LH BACKWARD output signal	Sliding switch LH BACKWARD operation (motor operated)	Battery voltage	
			Other than above	0	
44	GR/R	Reclining motor LH BACK-	Reclining switch LH BACKWARD operation (motor operated)	Battery voltage	
		WARD output signal	Other than above	0	
45	GR	GR Front lifter motor UP output sig-		Front lifting switch UP operation (motor operated)	Battery voltage
		nal	Other than above	0	
48	В	Ground	—	0	

Automatic Drive Positioner Control Unit Harness Connector Terminal Layout



### Terminals and Reference Values for Automatic Drive Positioner Control Unit

EIS003XC

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
1	Y/G	Tilt switch signal UP	UP operation	0
I	1/9	The Switch Signal OF	Other than above	5
2	LG/R	Changeover switch signal RH	RH position	0
2	LG/K		Other than above	5
3	Y/B	3 Mirror switch signal UP	UP position	0
3	3 Y/B		Other than above	5
4	V/W Mirror switch signal LEFT	Mirror switch signal LEET	LEFT position	0
4		v/vv initror switch signal LEF I	Other than above	5

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)			
5	R/B	Mirror sensor signal RH VER- TICAL	Door mirror RH UP or DOWN oper- ation	Changes between 3.4 and 0.6			
6	L/Y	Mirror sensor signal LH VER- TICAL	Door mirror LH UP or DOWN opera- tion Changes between 3.4 a				
7	0/1	Tilt ann an innut	Tilt position TOP	1			
7	O/L	Tilt sensor input	Tilt position BOTTOM	4			
0	L/W	Power seat memory switch 1	Memory switch 1 ON	0			
9	L/VV	signal	Memory switch 1 OFF	5			
10	R	UART LINE (TX)	—	_			
11	P/L	Telescopic switch signal FOR-	FORWARD operation	0			
11	P/L	WARD	Other than above	5			
12	0	Power seat memory switch	Memory switch 1 ON	1			
12	0	indicator 1 signal	Memory switch 1 OFF	Battery voltage			
13	Р	Power seat memory switch	Memory switch 2 ON	1			
13	Г	indicator 2 signal	Memory switch 2 OFF	Battery voltage			
14	GR/R	Mirror motor signal DH LID	UP operation	1.7 - Battery voltage			
14	GR/R	Mirror motor signal RH UP	Other than above	0			
15	1.07	Mirror motor signal DH LEET	LEFT operation	1.7 - Battery voltage			
15	L/Y	Mirror motor signal RH LEFT	Other than above	0			
		Mirror motor signal LH DOW/N	DOWN operation	1.7 - Battery voltage			
40		C/P	C/P	6 C/P	Mirror motor signal LH DOWN	Other than above	0
16	G/B		RIGHT operation	1.7 - Battery voltage			
		Mirror motor signal LH RIGHT	Other than above	0			
47		Tilt quitch gigned DOW/N	DOWN operation	0			
17	LG/B	Tilt switch signal DOWN	Other than above	5			
40		Ohan managar av itala ai an al luit	LH position	0			
18	L	Changeover switch signal LH	Other than above	5			
10			DOWN position	0			
19	L/B	Mirror switch signal DOWN	Other than above	5			
00		Minnen switch, sinnel DIOUT	RIGHT position	0			
20	BR/Y	Mirror switch signal RIGHT	Other than above	5			
21	L/W	Mirror sensor signal RH HORI- ZONTAL	Door mirror RH LEFT or RIGHT operation	Changes between 3.4 and 0.6			
22	G/R	Mirror sensor signal LH HORI- ZONTAL	Door mirror LH LEFT or RIGHT operation	Changes between 3.4 and 0.6			
22	БΜ		Telescopic position TOP	0.4			
23	R/Y	Telescopic sensor input	Telescopic position BOTTOM	4.6			
24	ם/ם	Power post out awitch sizes!	Set switch ON	0			
24	R/B	Power seat set switch signal	Set switch OFF	5			
25		Power seat memory switch 2	Memory switch 2 ON	0			
25	V	signal	Memory switch 2 OFF	5			
26	R/W	UART LINE (RX)	_	_			
07	C 144	Telescopic switch signal	BACKWARD operation	0			
27	G/W	BACKWARD	Other than above	5			

Terminal	Wire Color	Item	Condition	Voltage (V) (Approx.)
			DOWN operation	1.7 - Battery voltage
30	L/R	Mirror motor signal RH DOWN	Other than above	0
30	L/R	Mirror motor signal RH RIGHT	RIGHT operation	1.7 - Battery voltage
			Other than above	0
31	V/R	Mirror motor signal LH LID	UP operation	1.7 - Battery voltage
31	V/R	Mirror motor signal LH UP	Other than above	0
32	BR		LEFT operation	1.7 - Battery voltage
32	BR	Mirror motor signal LH LEFT	Other than above	0
33	W/L	Sensor power supply	_	5
34	W	Battery power supply (FUSE)	_	Battery voltage
05	G/Y		UP operation	Battery voltage
35		Tilt motor signal UP	Other than above	0
36	R	R Telescopic motor signal FOR- WARD	FORWARD operation	Battery voltage
30			Other than above	0
39	W/R	Battery power supply (PTC)	_	Battery voltage
40	В	Ground	_	0
41	Y/G	Sensor ground	_	0
10	0.004		DOWN operation	Battery voltage
42	G/W	Tilt motor DOWN signal	Other than above	0
44	G	Telescopic motor signal BACK-	BACKWARD operation	Battery voltage
44	G	WARD	Other than above	0
48	В	Ground		0

### **Terminals and Reference Values for BCM**

Refer to <u>BCS-12</u>, "Terminals and Reference Values for BCM" .

#### Trouble Diagnosis WORK FLOW

- 1. Check the symptom and customer's requests.
- 2. Understand the system description. Refer to SE-12, "System Description" .
- 3. Perform the preliminary check, refer to <u>SE-31, "PRELIMINARY CHECK"</u>.
- 4. Check the self-diagnosis, results using CONSULT-II refer to <u>SE-33, "Self-diagnosis Results"</u>.
- 5. Repair or replace depending on the self-diagnostic results.
- 6. Based on the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to <u>SE-35</u>, <u>"SYMPTOM CHART"</u>.
- Does the automatic drive positioner system operate normally? If it is normal, GO TO 8. If it is not normal, GO TO 3.
- 8. Inspection end.

EIS009EA

EIS003XE

### PRELIMINARY CHECK Setting Change Function

The settings of the automatic drive position system can be changed using CONSULT-II.

			×: Appl	icable -: No	ot applicable
Setting item	Content	CONSULT-II (WORK SUPPORT)	Display unit	Default setting	Factory setting
	The distance at retain opera-	40mm		×	×
SEAT SLIDE VOLUME SEAT	tion can be selected from the	80mm	1 —	_	
	following 3 modes.	150mm		_	
Sliding Driver Seat and Steering Wheel Raise	The seat sliding and steering wheel raise exiting and entry at entry/exit can be selected:	ON	ON: Indicator lamp ON	_	×
When Entry/ Exiting Vehicle	ON (operated)–OFF (not operated)	OFF	OFF: Indicator lamp OFF	×	_
Reset custom settings*	All settings to default.	_	Default: Setting button ON		

\*: Setting of sliding driver seat and steering wheel raise for entry/exit of vehicle is ON at factory-shipment. But if custom settings are reset, setting turns OFF.

### BCM POWER SUPPLY AND GROUND CIRCUIT INSPECTION

Refer to BCS-15, "BCM Power Supply and Ground Circuit Check" .

#### DRIVER SEAT CONTROL UNIT AND AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT INSPECTION

### 1. FUSE INSPECTION

Make sure none of the following fuses or fusible link for the driver seat control unit and automatic drive positioner control unit are blown.

Unit	Power source	Fuse No.	J
Driver seat control unit	START power supply	9 (10A)	
Driver seat control unit and automatic	Pottory power supply	3 (10A)	k
drive positioner control unit	Battery power supply	f (50A)	r\

#### OK or NG

OK >> GO TO 2.

NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to GI-26. "How to Perform Efficient Diagnosis for an Electrical Incident" .

### 2. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY CIRCUIT

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

Connector	Terminals		Power	Condition	Voltage (V)
Connector	(+)	(-)	source	Condition	(Approx.)
B402	33, 40	Ground	Battery power supply	Ignition switch OFF	Battery voltage
B401	6	Ground	START power supply	Ignition switch START	Battery voltage

**C**ST Driver seat C/U Driver seat C/U connector connector 33, 40 PIIA4819F

OK or NG

OK >> GO TO 3.

NG >> Check harness for open and short between driver seat control unit and fuse block (J/B).

Revision: May 2006

**SE-31** 



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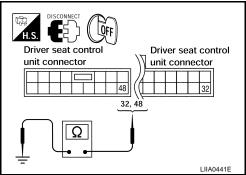
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### 3. CHECK DRIVER SEAT CONTROL UNIT GROUND CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Check continuity between the driver seat control unit connector B401 terminal 32, B402 terminal 48 and ground.
  - 32 Ground
- : Continuity should exist.
- 48 Ground
- . Continuity should exis
- : Continuity should exist.

#### OK or NG

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



Automatic drive positioner

34, 39

C/U connector

34

### 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY CIRCUIT

- 1. Disconnect automatic drive positioner control unit.
- 2. Check voltage between automatic drive positioner control unit connector M42 terminals 34, 39 and ground.
  - 34 Ground
- : Battery voltage
- 39 Ground
- : Battery voltage

#### OK or NG

- OK >> GO TO 5.
- NG >> Repair or replace harness.

### 5. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT GROUND CIRCUIT

Check continuity between the automatic drive positioner control unit connector M42 terminals 40, 48 and ground.

40 - Ground

: Continuity should exist.

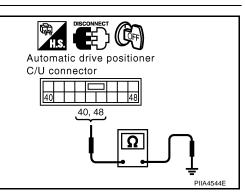
48 - Ground

: Continuity should exist.

#### OK or NG

OK >> Automatic drive positioner control unit circuit is OK.

NG >> Repair or replace harness.



PIIA4543E

### **CONSULT-II FUNCTION (AUTO DRIVE POS.)**

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

AUTO DRIVE POS. diagnostic mode	Description
WORK SUPPORT	Supports inspections and adjustments. Commands are transmitted to the driver seat control unit for setting the status suitable for required operation, input/output signals are received from the driver seat control unit and received data is displayed.
SELF-DIAG RESULTS	Displays driver seat control unit self-diagnosis results.
DATA MONITOR	Displays driver seat control unit input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.
ACTIVE TEST	Operation of electrical loads can be checked by sending drive signal to them.
ECU PART NUMBER	Driver seat control unit part number can be read.

### **CONSULT-II Start Procedure**

Refer to GI-37, "CONSULT-II Start Procedure" .

### Self-diagnosis Results DISPLAY ITEM LIST

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CONSULT-II display	Item	Malfunction is detected when	Reference page
CAN COMM CIRC [U1000]	CAN communication	Malfunction is detected in CAN communication.	<u>SE-35</u>
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".	<u>SE-37</u> <u>SE-48</u>
SEAT RECLNING [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".	<u>SE-38</u> 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".	<u>SE-39</u> <u>SE-51</u>
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".	<u>SE-41</u> <u>SE-52</u>
STEERING TILT B2116]	Steering tilt motor	When any manual and automatic operations are not performed, if any motor operations of tilt is detected for 0.1 second or more, status is judged "Output error".	<u>SE-45</u>
TELESCO MOTOR B2117]	Steering telescopic motor	When any manual and automatic operations are not performed, if any motor operations of tilt is detected for 0.1 second or more, status is judged "Output error".	<u>SE-45</u>
FILT SENSOR B2118]	Steering tilt sensor	When steering tilt sensor detects 0.5V or lower, or 4.5V or higher, for 0.5 seconds or more.	<u>SE-58</u>
STEERING TELE- SCO SENSOR B2119]	Steering telescopic sensor	When steering telescopic sensor detects 0.5V or lower, or 4.5V or higher, for 0.5 seconds or more.	<u>SE-58</u>
DETENT SW B2126]	Park position switch	With the CVT selector lever in P position [detention switch (key)] OFF, if the vehicle speed of 7 km/h (4 MPH) or higher was input the park position switch input system is judged malfunctioning.	<u>SE-56</u>
UART COMM [B2128]	UART communica- tion	Malfunction is detected in UART communication.	<u>SE-79</u>

#### NOTE:

- The displays of CAN communication and detection 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 detection 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 CAN DIAGNOSIS SUPPORT MONITOR

Monitor item [UNIT]		Contents
CAN COMM	[OK/NG]	When CAN communication circuit is malfunctioning, it displays "NG".
INITIAL DIAG	[OK/UNKWN]	Displays [OK/UNKWN] condition of the CAN communication judged by signal input.
TRANSMIT DIAG	[OK/UNKWN]	Displays [OK/UNKWN] condition of the CAN communication judged by signal input.
ECM	[OK/UNKWN]	Displays [OK/UNKWN] condition of the CAN communication judged by signal input.
IPDM E/R	[OK/UNKWN]	Displays [OK/UNKWN] condition of the CAN communication judged by signal input.

#### **SELECTION FROM MENU**

Monitor item [OPERA	TION 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.
RECLIN SW-RR	"ON/OFF"	ON/OFF status judged from the reclining switch (RR) signal is displayed.
LIFT FR SW-UP	"ON/OFF"	ON/OFF status judged from the FR lifting switch (UP) signal is displayed.
LIFT FR SW-DN	"ON/OFF"	ON/OFF status judged from the FR lifting switch (DOWN) signal is displayed.
LIFT RR SW-UP	"ON/OFF"	ON/OFF status judged from the RR lifting switch (UP) signal is displayed.
LIFT RR SW-DN	"ON/OFF"	ON/OFF status judged from the RR lifter switch (DOWN) signal is displayed.
MIR CON SW-UP	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (UP) signal is displayed.
MIR CON SW-DN	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (DOWN) signal is displayed.
MIR CON SW-RH	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (RIGHT) signal is displayed.
MIR CON SW-LH	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (LEFT) signal s displayed.
MIR CHNG SW-R	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (switching to RIGHT) signal is displayed.
MIR CHNG SW-L	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (switching to LEFT) signal is displayed.
SET SW	"ON/OFF"	ON/OFF status judged from the setting switch signal is displayed.
TILT SW-UP	"ON/OFF"	ON/OFF status judged from the tilt adjusting switch (UP) signal is displayed.
TELESCO SW-FR	"ON/OFF"	ON/OFF status judged from the telescopic adjusting switch (FR) 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 CVT selector lever position "ON (P position)/OFF (other than P position)" judged from the detention switch (key) signal is displayed.
STARTER SW	"ON/OFF"	Ignition key switch ON (START, ON)/OFF (ignition switch IGN, ACC, or OFF) sta- tus judged from the ignition switch signal is displayed.
SLIDE PULSE	-	Value (32768) when battery connects is as standard. If it moves forward, the value increases. If it moves backward, the value decreases.
RECLN PULSE	-	Value (32768) when battery connects is as standard. If it moves forward, the value increases. If it moves backward, the value decreases.
LIFT FR PULSE	_	Value (32768) when battery connects is as standard. If it moves forward, the value increases. If it moves backward, the value decreases.

Monitor item [OPERATION or UNIT]		Contents
LIFT RR PULSE	_	Value (32768) when battery connects is as standard. If it moves forward, the value increases. If it moves backward, the value decreases.
MIR/SEN RH R-L	"ON/OFF"	Voltage output from LH door mirror sensor (LH/RH) is displayed.
MIR/SEN RH U-D	"ON/OFF"	Voltage output from LH door mirror sensor (UP/DOWN) is displayed.
MIR/SEN LH R-L	"ON/OFF"	Voltage output from RH door mirror sensor (LH/RH) is displayed.
MIR/SEN LH U-D	"ON/OFF"	Voltage output from RH door mirror sensor (Up/DOWN) is displayed.

#### **Active Test**

#### **CAUTION:**

#### During vehicle driving, it does not perform active test.

#### NOTE:

If active test is performed, reset automatic drive positioner seat memory after performing work. **DISPLAY ITEM LIST** 

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

### CAN COMMUNICATION INSPECTION USING CONSULT-II (SELF-DIAGNOSIS)

### 1. SELF-DIAGNOSTIC RESULT CHECK

#### **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 carries out CAN communication.

- 1. Connect to CONSULT-II and select "AUTO DRIVE POS." on the "SELECT DIAG SYSTEM" screen.
- 2. Select "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
- 3. Check U1000 displayed in self-diagnostic results.

#### OK or NG

OK >> Inspection End.

NG >> Refer to LAN-3, "Precautions When Using CONSULT-II".

#### SYMPTOM CHART

Symptom	Diagnoses / service procedure	Refer to page
A part of seat system does not operate (both automati- cally and manually).	1. Sliding motor circuit inspection	<u>SE-37</u>
	2. Reclining motor circuit inspection	<u>SE-38</u>
	3. Front lifter motor circuit inspection	<u>SE-39</u>
	4. Rear lifter motor circuit inspection	<u>SE-41</u>
	5. If the above systems are normal, replace the driver seat control unit.	
A part of door mirror does not operate (both automatically and manually).	1. Mirror motor LH circuit check	<u>SE-42</u>
	2. Mirror motor RH circuit check	<u>SE-43</u>
	3. If the above systems are normal, replace the auto- matic drive positioner control unit.	

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Symptom	Diagnoses / service procedure	Refer to page
	1. Sliding sensor circuit inspection	<u>SE-48</u>
	2. Reclining sensor circuit inspection	<u>SE-49</u>
A part of seat system does not operate (only automatic	3. Front lifting sensor circuit inspection	<u>SE-51</u>
operation).	4. Rear lifting sensor circuit inspection	<u>SE-52</u>
	5. If the above systems are normal, replace the driver seat control unit.	
	1. Mirror sensor LH circuit check	<u>SE-54</u>
A part of door mirror system does not operate (only auto-	2. Mirror sensor RH circuit check	<u>SE-55</u>
matic operation).	3. If the above systems are normal, replace the auto- matic drive positioner control unit.	_
	1. CVT device [detention switch (key)] circuit inspection	<u>SE-56</u>
	2. Key switch and ignition knob switch circuit inspection	<u>SE-60</u>
	3. UART communication line circuit inspection	<u>SE-79</u>
All the automatic operations do not operate.	4. Tilt sensor circuit inspection	<u>SE-59</u>
	5. Telescopic sensor circuit inspection	<u>SE-58</u>
	6. If all the above systems are normal, replace the auto- matic drive positioner control unit.	_
	1. Sliding switch circuit inspection	<u>SE-64</u>
	2. Reclining switch circuit inspection	<u>SE-65</u>
A part of seat system does not operate (only manual	3. Front lifting switch circuit inspection	<u>SE-67</u>
operation).	4. Rear lifting switch circuit inspection	<u>SE-68</u>
	5. If the above systems are normal, replace the driver seat control unit.	_
	1. Sliding sensor circuit inspection	<u>SE-48</u>
	2. Reclining sensor circuit inspection	<u>SE-49</u>
Seat function does not operate (only automatic opera-	3. Front lifting sensor circuit inspection	<u>SE-51</u>
ion).	4. Rear lifting sensor circuit inspection	<u>SE-52</u>
	5. If the above systems are normal, replace the driver seat control unit.	_
	1. Door mirror remote control switch (change over switch) circuit inspection	<u>SE-70</u>
A part of door mirror does not operate (only manual oper- ation).	2. Door mirror remote control switch (mirror switch) switching circuit inspection	<u>SE-72</u>
	3. If the above systems are normal, replace the auto- matic drive positioner control unit.	_
	1. Seat memory switch circuit inspection	<u>SE-62</u>
Automatic drive positioner system does not operate (only memory switch operation).	2. If the above systems are normal, replace the driver seat control unit.	_
	1. Seat memory indicator lamp circuit inspection	<u>SE-78</u>
Seat memory indicator lamps 1 and 2 do not illuminate.	2. If all the above systems are normal, replace the driver seat control unit.	_
The Entry/Exiting does not operate when door is opened	1. Front door switch LH circuit inspection	<u>SE-61</u>
and closed. (The Entry/Exiting operates with key switch).	2. If all the above systems are normal, replace the BCM.	-
Seat system does not operate (only manual operation).	1. Power seat switch ground circuit inspection	<u>SE-69</u>

## SLIDING MOTOR CIRCUIT INSPECTION

## 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.

## 2. CHECK FUNCTION

### B With CONSULT-II

Check operation with "SEAT SLIDE" in ACTIVE TEST.

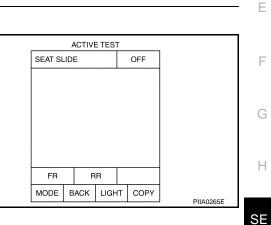
Test item	Description
SEAT SLIDE	The sliding motor is activated by receiving the drive signal.

### **Without CONSULT-II**

ĞO TO 3.

#### OK or NG

- OK >> Sliding motor LH circuit is OK.
- NG >> GO TŎ 3.



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В

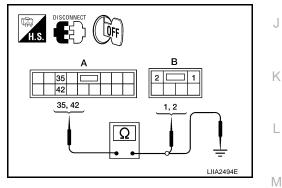
D

# 3. CHECK SLIDING MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and sliding motor LH.
- Check continuity between driver seat control unit connector B402 (A) terminals 35, 42 and sliding motor LH connector B404 (B) terminals 1, 2.
  - 35 1: Continuity should exist.42 2: Continuity should exist.
- 4. Check continuity between driver seat control unit connector B402 (A) terminals 35, 42 and ground.
  - 35 Ground
  - 42 Ground

: Continuity should not exist. : Continuity should not exist.

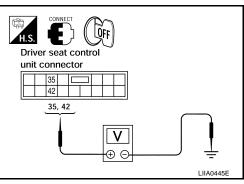
- OK >> GO TO 4.
- NG >> Repair or replace harness.



## 4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
B402	35	Ground	Sliding switch ON (FORWARD operation)	Battery voltage
			Other than above	0
			Sliding switch ON (BACKWARD operation)	Battery voltage
			Other than above	0



#### OK or NG

- OK >> Replace sliding motor LH. Refer to <u>SE-96, "FRONT SEAT"</u>.
- NG >> Replace driver seat control unit. Refer to <u>SE-96, "FRONT SEAT"</u>.

## **RECLINING MOTOR CIRCUIT INSPECTION**

## 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

#### (B) With CONSULT-II

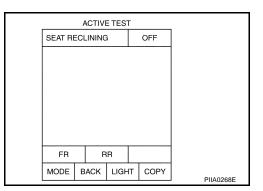
Check operation with "SEAT RECLINING" in ACTIVE TEST.

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

#### **Without CONSULT-II**

ĞO TO 3.

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



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36, 44

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3 4

3, 4

# 3. CHECK RECLINING MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and reclining motor.
- 3. Check continuity between driver seat control unit connector (A) B402 terminals 36, 44 and reclining motor LH B405 connector B405 terminals 3, 4.
  - 36 3 44 - 4

- : Continuity should exist. : Continuity should exist.
- 4. Check continuity between driver seat control unit connector (A) B402 terminals 36, 44 and ground.
  - 36 Ground
  - 44 Ground

#### : Continuity should not exist. : Continuity should not exist.

OK or NG

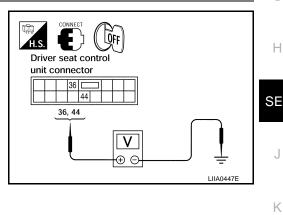
OK >> GO TO 4.

NG >> Repair or replace harness.

## 4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
B402	36	Ground	Reclining switch ON (FORWARD operation)	Battery voltage
			Other than above	0
			Reclining switch ON (BACKWARD operation)	Battery voltage
			Other than above	0



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#### OK or NG

OK >> Replace reclining motor LH. Refer to <u>SE-96, "FRONT SEAT"</u>.

NG >> Replace driver seat control unit. Refer to <u>SE-96, "FRONT SEAT"</u>.

## FRONT LIFTING MOTOR CIRCUIT INSPECTION

## 1. CHECK FRONT SEAT LIFTING MECHANISM

Check the following.

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

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

## 2. CHECK FUNCTION

#### (B) With CONSULT-II

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

Test item	Description
SEAT LIFTER FR	The front lifting motor is activated by receiving the drive sig- nal.
Without CON GO TO 3.	ISULT-II

GO 10 3.

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

# 3. CHECK FRONT LIFTING MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit connector and front lifting motor connector.
- Check continuity between driver seat control unit connector B402 (A) terminals 37, 45 and front lifting motor connector B406 (A) terminals 1, 3.
  - 37 1
  - 45 3

- : Continuity should exist.
- : Continuity should exist.
- 4. Check continuity between driver seat control unit connector B402 (A) terminals 37, 45 and ground.
  - 37 Ground
- : Continuity should not exist.
- 45 Ground
- : Continuity should not exist.

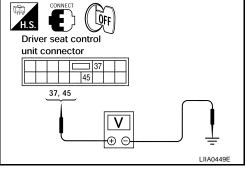
### OK or NG

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

## 4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

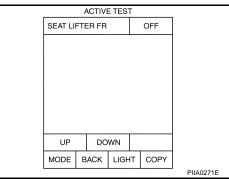
Connector	Terminals		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
B402	45	Ground	Front lifting switch ON (UP operation)	Battery voltage
			Other than above	0
	37		Front lifting switch ON (DOWN operation)	Battery voltage
			Other than above	0

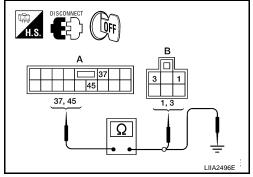


OK or NG

OK >> Replace front lifting motor. Refer to <u>SE-96, "FRONT SEAT"</u>.

NG >> Replace driver seat control unit. Refer to <u>SE-96, "FRONT SEAT"</u>.





## **REAR LIFTING MOTOR CIRCUIT INSPECTION**

## 1. CHECK REAR SEAT LIFTING MECHANISM

Check the following.

- Operation malfunction caused by lifting mechanism deformation or pinched harness or other foreign materials
- Operation malfunction caused by foreign materials adhered to the lifting 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

#### B With CONSULT-II

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

Test item	Description
SEAT LIFTER R R	The rear lifting motor is activated by receiving the drive signal.

### **Without CONSULT-II**

#### ĞO TO 3.

OK or NG

OK >> Rear lifting motor circuit is OK.

NG >> GO TO 3.

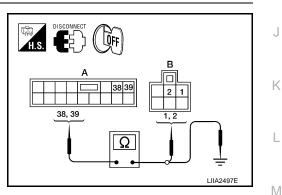
# 3. CHECK REAR LIFTING MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and rear lifting motor.
- Check continuity between driver seat control unit connector B402 (A) terminals 38, 39 and rear lifting motor connector B407 (B) terminals 1, 2.
  - 38 2 39 - 1

- : Continuity should exist.
- : Continuity should exist.
- 4. Check continuity between driver seat control unit B402 (A) terminals 38, 39 and ground.
  - 38 Ground
  - 39 Ground
- : Continuity should not exist. : Continuity should not exist.

#### OK or NG

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



ACTIVE TEST

DOWN

LIGHT

BACK

OFF

COPY

SEAT LIFTER RR

UP

MODE

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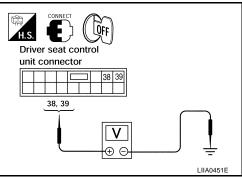
SE

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## 4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
B402	38 ( 39	Ground	Rear lifting switch ON (UP operation)	Battery voltage	
			Other than above	0	
		Ground	Rear lifting switch ON (DOWN operation)	Battery voltage	
			Other than above	0	



#### OK or NG

- OK >> Replace rear lifting motor. Refer to <u>SE-96, "FRONT SEAT"</u>.
- NG >> Replace driver seat control unit. Refer to <u>SE-96, "FRONT SEAT"</u>.

## MIRROR MOTOR LH CIRCUIT INSPECTION

## 1. CHECK MIRROR MOTOR LH MECHANISM

Check the following items.

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

#### OK or NG

OK >> GO TO 2.

NG >> Repair the malfunctioning part and check again.

# 2. CHECK FUNCTION

#### (B) With CONSULT-II

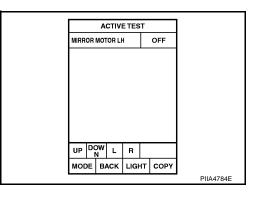
Check operation with "MIRROR MOTOR LH" in ACTIVE TEST.

Test item	Description
MIRROR MOTOR LH	The mirror motor LH is activated by receiving the drive signal.

#### **Without CONSULT-II**

ĞO TO 3.

- OK >> Mirror motor LH circuit is OK.
- NG >> GO TO 3.



# 3. CHECK MIRROR MOTOR LH HARNESS CONTINUITY

- Turn ignition switch OFF. 1.
- 2. Disconnect automatic drive positioner control unit and door mirror LH.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 16, 31, 32 and door mirror LH connector D4 terminals 8, 9, 10.
  - 16 8

: Continuity should exist.

- 31 10
- 32 9

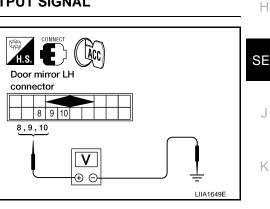
- : Continuity should exist.
- : Continuity should exist.
- 4 Check continuity between automatic drive positioner control unit connector M41 terminals 16, 31, 32 and ground.
  - 16 Ground
- : Continuity should not exist. : Continuity should not exist.
- 31 Ground 32 - Ground
- : Continuity should not exist.

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

## 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

- Connect the automatic drive positioner control unit and door mir-1. ror LH.
- 2. Turn ignition switch to ACC.
- Check voltage between door mirror LH connector and ground. 3.

Connector	Terminals		Condition	Voltage (V)
	(+)	(-)		(Approx.)
D4	8	Ground	When motor is DOWN or RIGHT operation	1.7 - Battery voltage
			Other than above	0
	9		When motor is LEFT opera- tion	1.7 - Battery voltage
			Other than above	0
	10		When motor is UP opera- tion	1.7 - Battery voltage
			Other than above	0



OFF

16

31 32

Ω

Door mirror LH

connector

8 9 10

-

LIIA1648E

8,9,10

Æ H.S.

C/U connector

16,31,32

Automatic drive positioner

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В

D

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M

#### OK or NG

- OK >> Replace door mirror LH.
- NG >> Replace automatic drive positioner control unit.

## MIRROR MOTOR RH CIRCUIT INSPECTION

## 1. CHECK MIRROR MOTOR RH MECHANISM

Check the following items.

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

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

# 2. CHECK FUNCTION

#### (B) With CONSULT-II

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

Test item	Description			
MIRROR MOTOR RH	The mirror motor LH is activated by receiving the drive signal.			

#### **B** Without CONSULT-II

ĞO TO 3.

OK or NG

OK >> Mirror motor RH circuit is OK.

NG >> GO TO 3.

# ACTIVE TEST MIRROR MOTOR RH OFF UP DOW L R MODE BACK LIGHT COPY PIIA0202E

# 3. CHECK MIRROR MOTOR RH HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror RH.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 14, 15, 30 and door mirror RH connector D107 terminals 8, 9, 10.
  - 14 10

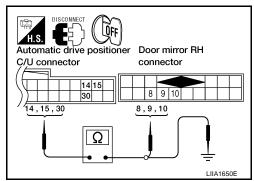
  - 15 9
  - 30 8

- : Continuity should exist.
- : Continuity should exist.
- : Continuity should exist.
- 4. Check continuity between automatic drive positioner control unit connector M41 terminals 14, 15, 30 and ground.
  - 14 Ground 15 - Ground

30 - Ground

- : Continuity should not exist.
- : Continuity should not exist.
- : Continuity should not exist.

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



CONNECT

E

8 9 10 8,9,10

Door mirror RH

H.S.

connector

LÃCC

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## 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

- 1. Connect the automatic drive positioner control unit and door mirror RH.
- 2. Turn ignition switch to ACC.
- 3. Check voltage between door mirror RH connector and ground.

Connector	Terminals		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
D107	8	Ground	When motor is DOWN or RIGHT operation	1.7 - Battery voltage
			Other than above	0
	9 10		When motor is LEFT opera- tion	1.7 - Battery voltage
			Other than above	0
			When motor is UP opera- tion	1.7 - Battery voltage
			Other than above	0

#### OK or NG

- OK >> Replace door mirror RH. Refer to <u>GW-109, "Door Mirror Assembly"</u>.
- NG >> Replace automatic drive positioner control unit.

## **TELESCOPIC CIRCUIT INSPECTION**

## 1. CHECK TELESCOPIC MOTOR

Check the following.

- Operation malfunction caused by telescopic motor 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

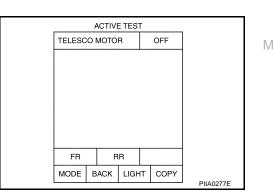
#### With CONSULT-II

```
Check operation with "TELESCO MOTOR" in ACTIVE TEST.
```

Test item	Description		
TELESCO MOTOR	The telescopic motor is activated by receiving the drive signal.		
Without C GO TO 3.	ONSULT-II		

#### OK or NG

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



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# 3. CHECK TELESCOPIC MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and telescopic motor.
- 3. Check continuity between automatic drive positioner control unit connector M42 terminals 36, 44 and telescopic motor connector M66 terminals 4, 5.
  - 36 4 44 - 5
- : Continuity should exist.
- : Continuity should exist.
- 4. Check continuity between automatic drive positioner control unit connector M42 terminals 36, 44 and ground.
  - 36 Ground 44 - Ground

: Continuity should not exist. : Continuity should not exist.

#### OK or NG

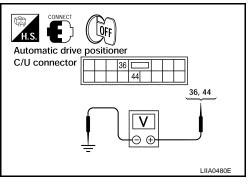
OK >> GO TO 4. NG >> Repair or

>> Repair or replace harness.

## 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

- Connect automatic drive positioner control unit and telescopic motor.
- 2. Check voltage between automatic drive positioner control unit connector and ground.

Connector	Term	inals	Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
	36		Telescopic switch ON (FORWARD operation)	Battery voltage	
			Other than above	0	
M42	44	Ground	Telescopic switch ON (BACKWARD opera- tion)	Battery voltage	
			Other than above	0	



#### OK or NG

OK >> Replace telescopic motor.

NG >> Replace automatic drive positioner control unit.

## TILT CIRCUIT INSPECTION

## 1. CHECK TILT MOTOR

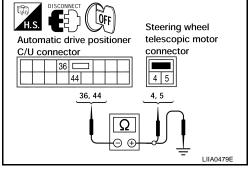
Check the following.

- Operation malfunction caused by tilt motor 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

#### (P) 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 wheel tilt motor circuit is OK.
- NG >> GO TO 3.

# 3. CHECK TILT MOTOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and tilt motor.
- 3. Check continuity between automatic drive positioner control unit connector M42 terminals 35, 42 and tilt motor connector M68 terminals 4, 5.
  - 35 5 42 - 4

## : Continuity should exist. : Continuity should exist.

- 4. Check continuity between automatic drive positioner control unit connector M42 terminals 35, 42 and ground.
  - 35 Ground
- : Continuity should not exist.
- 42 Ground
- : Continuity should not exist.

OK or NG

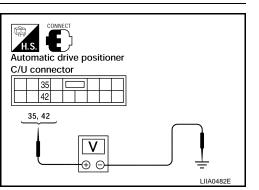
OK >> GO TO 4.

NG >> Repair or replace harness.

## 4. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

- Connect the automatic drive positioner control unit and tilt motor. 1.
- 2. Check voltage between automatic drive positioner control unit connector and ground.

Connector	Terminals		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
	35 M42 42	Ground	Tilt switch ON (UP operation)	Battery voltage
140			Other than above	0
11142			Tilt switch ON (DOWN operation)	Battery voltage
			Other than above	0



ACTIVE TEST

DOWN

BACK LIGHT

OFF

Ω

OFF

COPY

4 5

4, 5

Tilt motor connector

PIIA0280E

LIIA0481E

TILT MOTOR

UP MODE

Automatic drive positioner

C/U connector

35

42

35, 42

#### OK or NG

OK >> Replace tilt motor.

NG >> Replace automatic drive positioner control unit. А

В

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## SLIDING SENSOR CIRCUIT INSPECTION

## 1. CHECK FUNCTION

#### (B) With CONSULT-II

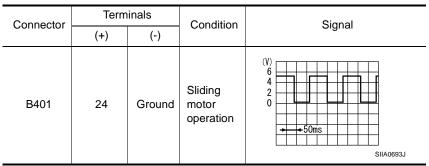
Check operation with "SLIDE PULSE" on the DATA MONITOR to make sure the pulse changes.

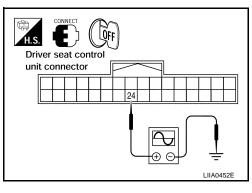
Monitor item [OPERATION or UNIT]		Contents
SLIDE PULSE	_	The seat sliding position (pulse) judged from the sliding sensor signal is displayed

DATA MONITOR	
SELECT MONITOR ITEM	
SLIDE PULSE	
RECLN PULSE	
LIFT FR PULSE	
LIFT RR PULSE	
MIR/SEN RH U-D	
Page Up Page Down	
SETTING Numerical Display	
MODE BACK LIGHT COPY	PIIA4558E

### **Without CONSULT-II**

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





## OK or NG

OK >> Sliding sensor circuit is OK.

NG >> GO TO 2.

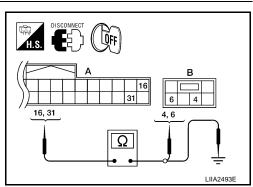
# 2. CHECK SLIDING SENSOR HARNESS CONTINUITY 1

- 1. Disconnect driver seat control unit and sliding motor LH.
- Check continuity between driver seat control unit connector B401 (A) terminals 16, 31 and sliding motor LH connector B404 (B) terminals 4, 6.
  - 16 6 31 - 4

- : Continuity should exist. : Continuity should exist.
- 3. Check continuity between driver seat control unit connector B401 (A) terminals 16, 31 and ground.
  - 16 Ground 31 - Ground

: Continuity should not exist. : Continuity should not exist.

- OK >> GO TO 3.
- NG >> Repair or replace harness.





1. Check continuity between driver seat control unit connector B401 (A) terminal 24 and sliding motor LH B204 (B) terminal 5. 

24 - 5

#### : Continuity should exist.

2. Check continuity between driver seat control unit B401 (A) terminal 24 and ground.

#### 24 - Ground

#### : Continuity should not exist.

#### OK or NG

- OK >> Replace sliding motor LH. Refer to SE-96, "FRONT SEAT" .
- NG >> Repair or replace harness.

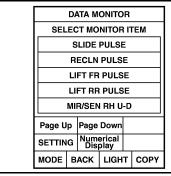
### RECLINING SENSOR CIRCUIT INSPECTION

## **1. CHECK FUNCTION**

#### (P) With CONSULT-II

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

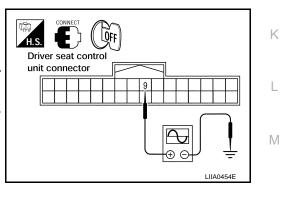
Monitor item [OPERATION or UNIT]		Contents
RECLN PULSE	_	The seat reclining position (pulse) judged from the reclining sensor is displayed



## **Without CONSULT-II**

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

Connector	Term	inals	Condition	Signal
Connector	(+)	(-)	Condition	Signal
B401	9	Ground	Reclining motor operation	(V) 10 8 6 • • • 50ms LIA2339E



OK or NG

OK >> Reclining sensor circuit is OK.

NG >> GO TO 2.


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# 2. CHECK RECLINING SENSOR HARNESS CONTINUITY 1

- 1. Disconnect driver seat control unit and reclining motor LH.
- Check continuity between driver seat control unit connector B401 (A) terminal 31 and reclining motor LH connector B405 (B) terminal 2.

31 - 2

#### : Continuity should exist.

3. Check continuity between driver seat control unit connector B401 (A) terminal 31 and ground.

#### 31 - Ground

### : Continuity should not exist.

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.

# 3. CHECK RECLINING SENSOR HARNESS CONTINUITY 2

 Check continuity between driver seat control unit connector B401 (A) terminal 9 and reclining motor LH connector B405 terminal 1.

9 - 1

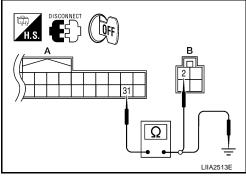
#### : Continuity should exist.

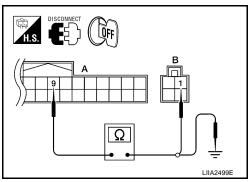
2. Check continuity between driver seat control unit connector B401 (A) terminal 9 and ground.

#### 9 - Ground

: Continuity should not exist.

- OK >> Replace reclining motor LH. Refer to <u>SE-96, "FRONT</u> <u>SEAT"</u>.
- NG >> Repair or replace harness.





## FRONT LIFTING SENSOR CIRCUIT INSPECTION

## 1. CHECK FUNCTION

## With CONSULT-II

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

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

	В
DATA MONITOR	
SELECT MONITOR ITEM	
SLIDE PULSE	
RECLN PULSE	C
LIFT FR PULSE	
LIFT RR PULSE	
MIR/SEN RH U-D	D
Page Up Page Down	
SETTING Numerical Display	
MODE BACK LIGHT COPY	E
PIIA4558E	

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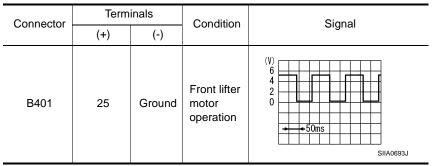
Κ

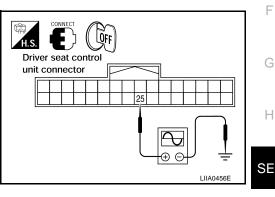
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## **Without CONSULT-II**

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





## OK or NG

OK >> Front lifting sensor is OK.

NG >> GO TO 2.

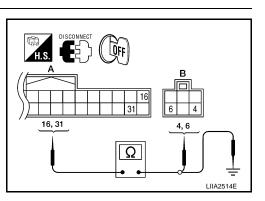
# 2. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY 1

- 1. Disconnect driver seat control unit and front lifting motor.
- Check continuity between driver seat control unit connector B401 (A) terminals 16, 31 and front lifting motor connector B406 (B) terminals 4, 6.
  - 16 6 31 - 4

- : Continuity should exist. : Continuity should exist.
- 3. Check continuity between driver seat control unit connector B401 (A) terminals 16, 31 and ground.
  - 16 Ground 31 - Ground

: Continuity should not exist. : Continuity should not exist.

- OK >> GO TO 3.
- NG >> Repair or replace harness.



# 3. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY

 Check continuity between driver seat control unit connector B401 (A) terminal 25 and front lifting motor connector B406 (B) terminal 10.

#### 25 - 5

#### : Continuity should exist.

2. Check continuity between driver seat control unit connector B401 (A) terminal 25 and ground.

#### 25 - Ground

#### : Continuity should not exist.

#### OK or NG

- OK >> Replace front lifting motor. Refer to <u>SE-96, "FRONT</u> <u>SEAT"</u>.
- NG >> Repair or replace harness.

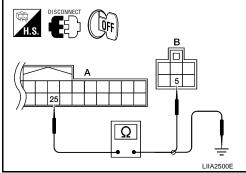
## REAR LIFTING SENSOR CIRCUIT INSPECTION

## 1. CHECK REAR LIFTING SENSOR INPUT/OUTPUT SIGNAL

#### (I) With CONSULT-II

Check operation with "LIFT RR 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.

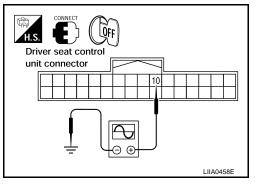


						7
	DA					
SEL	EC					
	s					
	R	ECLN	PULS	Е		
	LI					
	LII					
	MII					
Page U	р	1				
SETTING Numerical Display						1
MODE	B	АСК	LIGH	т	СОРҮ	PIIA4558E
						- 11/14000L

#### **Without CONSULT-II**

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

Connector	Term	inals	Condition	Signal		
Connector	(+)		Condition	Signal		
B401	10	Ground	Rear lift- ing motor operation	(V) 6 4 2 0 50 ms PIIA3278E		



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

# 2. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY 1

- 1. Disconnect driver seat control unit and rear lifting motor.
- 2. Check continuity between driver seat control unit connector B401 (A) terminals 16, 31 and rear lifting motor connector B407 (B) terminals 3, 6.
  - 16 6
- : Continuity should exist.
- 31 3 : Continuity should exist.
- Check continuity between driver seat control unit connector 3. B401 (A) terminals 16, 31 and ground.
  - 16 Ground
- : Continuity should not exist.
- 31 Ground

: Continuity should not exist.

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.

# 3. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY 2

Check continuity between driver seat control unit connector 1. B401 (A) terminal 10 and rear lifting motor connector B407 (B) terminal 5.

#### 10 - 5

#### : Continuity should exist.

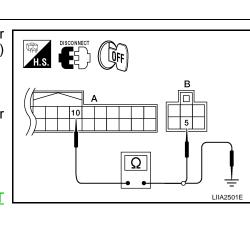
2. Check continuity between driver seat control unit connector B401 (A) terminal 10 and ground.

#### 10 - Ground

: Continuity should not exist.

#### OK or NG

- OK >> Replace rear lifting motor. Refer to SE-96, "FRONT SEAT" .
- NG >> Repair or replace harness.



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## MIRROR SENSOR LH CIRCUIT INSPECTION

## 1. CHECK MIRROR SENSOR LH INPUT/OUTPUT SIGNAL

### (P) With CONSULT-II

Check operation with "MIR/SEN LH R-L, MIR/SEN LH U-D" on the DATA MONITOR to make sure pulse changes.

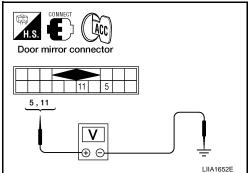
Monitor item [OPE	RATION or UNIT	
MIR/SEN LH R-L "V"		Voltage output from LH door mirror sensor (LH/RH) is displayed.
MIR/SEN LH U-D	"V"	Voltage output from LH door mirror sensor (UP/DOWN) is displaced.

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SELEC	T MONITOR ITEM	
м	R/SEN RH U-D	
м	R/SEN RH R-L	
м	R/SEN LH U-D	
м	R/SEN LH R-L	
Page Up		
SETTING		
MODE B	ACK LIGHT COPY	PIIA4568E

## **Without CONSULT-II**

- Turn ignition switch to ACC. 1.
- Check voltage between door mirror LH connector and ground. 2.

Connector	Term	inals	Condition	Voltage (V)	
(+)		(-)	Condition	(Approx.)	
D4	5	Ground	When motor is UP or DOWN operation	Changes between 3.4 - 0.6	
D4	11	Ground	When motor is LEFT or RIGHT operation	Changes between 3.4 - 0.6	



## OK or NG

OK >> Mirror sensor LH circuit is OK.

NG >> GO TO 2.

# 2. CHECK HARNESS CONTINUITY 1

- 1. Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit and door mir-2. ror LH.
- Check continuity between automatic drive positioner control unit 3. connector M42 terminals 33, 41 and door mirror LH connector D4 terminals 4, 12.
  - 33 4 41 - 12

: Continuity should exist.

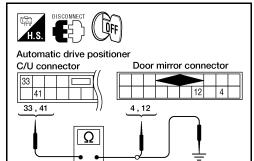
: Continuity should exist.

- Check continuity between driver seat control unit connector M42 4. terminals 33, 41 and ground.
  - 33 Ground
  - 41 Ground
- : Continuity should not exist.

: Continuity should not exist.

#### OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness.



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# 3. CHECK HARNESS CONTINUITY 2

- 1. Check continuity between automatic drive positioner control unit connector M41 terminals 6, 22 and door mirror LH connector D4 terminals 5, 11.
  - 6 5 22 - 11

# : Continuity should exist.

: Continuity should exist.

- 2. Check continuity between driver seat control unit connector M41 terminals 6, 22 and ground.
  - 6 Ground
  - 22 Ground
- : Continuity should not exist. : Continuity should not exist.

#### OK or NG

OK	>> Replace door mirror LH. Refer to <u>GW-109, "Door Mirror Assembly"</u> .
NG	>> Repair or replace harness.

### MIRROR SENSOR RH CIRCUIT INSPECTION

1. CHECK MIRROR SENSOR RH INPUT/OUTPUT SIGNAL

#### (P) With CONSULT-II

Check operation with "MIR/SEN RH R-L, MIR/SEN RH U-D" on the DATA MONITOR to make sure pulse changes.

Monitor item [OPE	RATION or UNIT	
MIR/SEN RH R-L	"V"	Voltage output from RH door mirror sensor (RH/RH) is displayed.
MIR/SEN RH U-D	"V"	Voltage output from RH door mirror sensor (UP/DOWN) is displaced.

	D/	ата м	ONITO	R		]
SEL	EC	т мо	NITOR		ГЕМ	
	МІ	R/SEN	I RH U	-D		
	МІ	R/SEN	I RH R	-L		
	МІ	R/SEN	I LH U	-D		
MIR/SEN LH R-L						
		PEDA	L SEN			
Page Up Page Down						
SETTING Numerical Display						
MODE	в	АСК	LIGH	т	СОРҮ	PIIA4568E

## **Without CONSULT-II**

- 1. Turn ignition switch to ACC.
- 2. Check voltage between door mirror RH connector and ground.

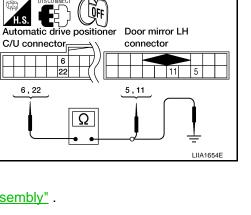
Connector -	Term	inals	Condition	Voltage (V)	
	(+)	(-)	Condition	(Approx.)	
D107	5	Ground	When motor is UP or DOWN operation	Changes between 3.4 - 0.6	
0107	11	Ground	When motor is LEFT or RIGHT operation	Changes between 3.4 - 0.6	

Door mirror connector 5,11 1115 5,11111652E

OK or NG

OK >> Mirror sensor RH circuit is OK.

NG >> GO TO 2.



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# 2. CHECK HARNESS CONTINUITY 1

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror RH.
- 3. Check continuity between automatic drive positioner control unit connector M42 terminals 33, 41 and door mirror RH connector D107 terminals 4, 12.
  - 33 4

: Continuity should exist.

41 - 12

- : Continuity should exist.
- 4. Check continuity between driver seat control unit connector M42 terminals 33, 41 and ground.
  - 33 Ground
- : Continuity should not exist.
- 41 Ground

: Continuity should not exist.

#### OK or NG

OK >> GO TO 3. NG >> Repair or

- >> Repair or replace harness.
- 3. CHECK HARNESS CONTINUITY 2
- 1. Check continuity between automatic drive positioner control unit connector M41 terminals 5, 21 and door mirror RH connector D107 terminals 5, 11.
  - 5 5
  - 21 11

: Continuity should exist. : Continuity should exist.

- 2. Check continuity between driver seat control unit connector M41 terminals 5, 21 and ground.
  - 5 Ground
- : Continuity should not exist.
- 21 Ground
- : Continuity should not exist.

## OK or NG

- OK >> Replace door mirror RH. Refer to <u>GW-109, "Door Mirror Assembly"</u>.
- NG >> Repair or replace harness.

## **CVT DEVICE [DETENTION SWITCH (KEY)] CIRCUIT INSPECTION**

## 1. CHECK FUNCTION

#### B With CONSULT-II

Check that when the CVT selector lever is in P position, "DETENT SW" on the DATA MONITOR becomes OFF.

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

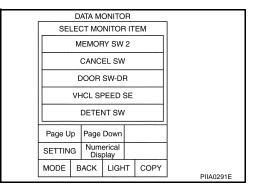
## **Without CONSULT-II**

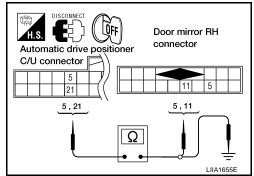
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#### OK or NG

OK >> CVT device [detention switch (key)] circuit is OK.

NG >> GO TO 2.





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Automatic drive positioner

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Door mirror connector

12 4

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# 2. CHECK CVT DEVICE [DETENTION SWITCH (KEY)] HARNESS

- 1. Turn ignition switch OFF.
- 2. Disconnect CVT device [detention switch (key)] and key switch and ignition knob switch.
- 3. Check continuity between CVT device [detention switch (key)] connector M34 (A) terminal 5 and key switch and ignition knob switch connector M73 (B) terminal 2.

5 - 2

#### : Continuity should exist.

4. Check continuity between CVT device [detention switch (key)] connector M34 (A) terminal 5 and ground.

#### 5 - Ground

#### : Continuity should not exist.

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.

# 3. CHECK CVT DEVICE [DETENTION SWITCH (KEY)

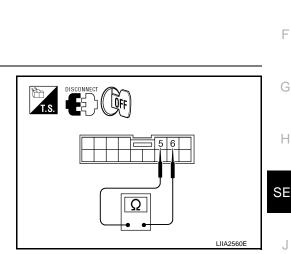
Check continuity between CVT device terminals as follows.

Term	inals	Condition	Continuity
5	6	P position	Yes
5	5 6	Other than P position	No

#### OK or NG

>> GO TO 4. OK

NG >> Replace CVT device.



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## 4. CHECK CVT DEVICE [DETENTION SWITCH (KEY)] SIGNAL HARNESS

- 1. Disconnect driver seat control unit.
- 2. Check continuity between driver seat control unit connector P2 terminal 21 and CVT device [detention switch (key)] connector M34 terminal 6.

#### 21 - 6

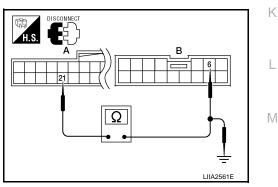
#### : Continuity should exist.

3. Check continuity between driver seat control unit connector P2 terminal 21 and ground.

#### 21 - Ground

: Continuity should not exist.

- OK >> Replace driver seat control unit. Refer to SE-96, "FRONT SEAT" .
- NG >> Repair or replace harness.



## TELESCOPIC SENSOR CIRCUIT INSPECTION

## 1. CHECK FUNCTION

### (B) With CONSULT-II

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

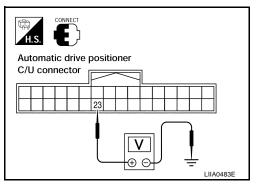
Monitor item [OPERA- TION or UNIT]		Contents
TELESCO SEN	"V"	The telescopic position (voltage) judged from the telescopic sensor signal is displayed.

	D	ata M	ONITC	R		_		
SEI	LEC	ст мо						
		TILT						
	Т	ELES						
	N	IIR/SE						
	Μ	IR/SE						
MIR/SE LH R-L								
Page Up Page Down								
SETTING Numerical Display						1		
MODE	в	ACK	LIGH	IT	COPY			
						-	PIIA0295E	

## **Without CONSULT-II**

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

Connector	Term	inals	Condition	Voltage (V) (Approx.)	
Connector	(+)	(-)	Condition		
M41	23	Ground	Telescopic front end position	2	
10141	23	Ground	Telescopic back end position	4	



#### OK or NG

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

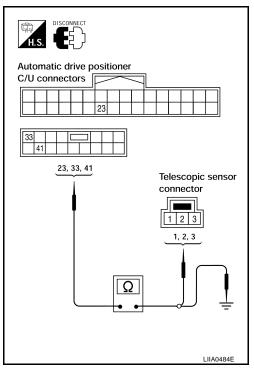
# 2. CHECK HARNESS CONTINUITY

- 1. Disconnect automatic drive positioner control unit and steeing wheel telescopic sensor.
- 2. Check continuity between automatic drive positioner connector M41, M42 terminals 23, 33, 41 and telescopic sensor connector M67 terminals 1, 2, 3.

23 - 2	: Continuity should exist.		
33 - 1	: Continuity should exist.		

- 41 3 : Continuity should exist.
- 3. Check continuity between automatic drive positioner control unit connectors M41, M42 terminals 23, 33, 41 and ground.
  - 23 Ground : Continuity should not exist.
    - 33 Ground : Continuity should not exist.
    - 41 Ground : Continuity should not exist.

- OK >> Replace telescopic motor.
- NG >> Repair or replace harness.



## TILT SENSOR CIRCUIT INSPECTION

## 1. CHECK FUNCTION

#### (P) With CONSULT-II

Operate the ADP steering switch with "TILT SEN" on the DATA MONITOR to make sure the voltage changes.

Monitor item [OPERA- TION or UNIT]		Contents		
TILT SEN	"V"	The tilt position (voltage) judged from the tilt sensor sig- nal is displayed.		

	D	ATA M	ONITO	R					1	E
SELECT MONITOR ITEM										
TILT SEN										
TELESCO SEN							C			
MIR/SE RH R-L										
MIR/SE RH U-D										
MIR/SE LH R-L						C				
Page U	Iр	Page	Down			1				
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## **Without CONSULT-II**

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

Connector	Term	inals	Condition	Voltage (V) (Approx.)	
Connector	(+)	(-)	Condition		
M41	7	Ground	Tilt top position	2	
10141	'	Ground	Tilt down position	4	

#### OK or NG

OK >> Tilt sensor circuit is OK.

NG >> GO TO 2.

# 2. CHECK HARNESS CONTINUITY

- 1. Disconnect automatic drive positioner control unit and tilt sensor.
- 2. Check continuity between automatic drive positioner connector M41, M42 terminals 7, 33, 41 and tilt sensor connector M69 terminals 1, 2, 3.

7 - 2	: Continuity should exist.
33 - 3	: Continuity should exist.
41 - 1	: Continuity should exist.

3. Check continuity between automatic drive positioner control unit connectors M41, M42 terminals 7, 33, 41 and ground.

7 - Ground	
33 - Ground	

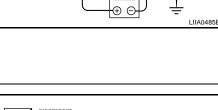
: Continuity should not exist. : Continuity should not exist.

: Continuity should not exist.

## 41 - Ground

## OK or NG

- OK >> Replace tilt motor.
- NG >> Repair or replace harness.



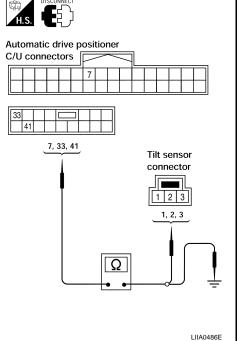
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Automatic drive positioner

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C/U connector



## KEY SWITCH AND IGNITION KNOB SWITCH CIRCUIT INSPECTION

## 1. CHECK KEY SWITCH AND IGNITION KNOB SWITCH

#### (B) With CONSULT-II

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

Monitor item [OPERA-	Condition			
TION or UNIT]				
KEY SW	Insert mechanical key into ignition switch: ON			
REFOR	Remove mechanical key from ignition switch: OFF			

### **Without CONSULT-II**

GO TO 2. OK or NG

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

NG >> GÓ TO 2.

# 2. KEY SWITCH AND IGNITION KNOB SWITCH POWER SUPPLY CIRCUIT INSPECTION

- 1. Turn ignition switch OFF.
- 2. Disconnect key switch and ignition knob switch.
- 3. Check voltage between key switch and ignition knob switch connector M73 terminal 3 and ground.

#### 3 - Ground

: Battery voltage.

#### OK or NG

NG

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

# 3. CHECK KEY SWITCH AND IGNITION KNOB SWITCH

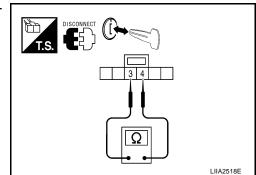
Check continuity between key switch and ignition knob switch terminals as follows.

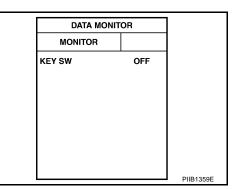
Term	ninals	Condition	Continuity
2 4		Key is inserted in ignition key cylinder.	Yes
5	4	Key is removed from ignition key cylinder.	No

OK or NG

OK >> GO TO 4.

NG >> Replace key switch and ignition knob switch.





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## 4. CHECK HARNESS CONTINUITY 1

- 1. Disconnect key switch and ignition knob switch and intelligent key control unit.
- Check continuity between key switch and ignition knob switch connector M73 (A) terminal 4 and intelligent key control unit connector M52 terminal 7.

#### 4 - 7

#### : Continuity should exist.

3. Check continuity between key switch and key lock solenoid connector M27 terminal 4 and ground.

#### 4 - Ground

#### : Continuity should not exist.

#### OK or NG

- OK >> Check the condition of harness and harness connector.
- NG >> Repair or replace harness.

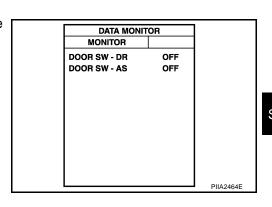
### FRONT DOOR SWITCH LH CIRCUIT INSPECTION

## 1. CHECK DOOR SWITCH INPUT SIGNAL

#### With CONSULT-II

Check door switch ("DOOR SW-DR") in "DATA MONITOR" mode with CONSULT-II.

Monitor item	Condition		
DOOR SW-DR	OPEN: ON		
DOOK SW-DIK	CLOSE: OFF		



### Without CONSULT-II

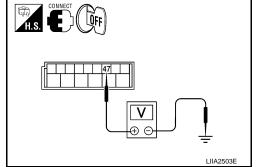
Check voltage between BCM connector and ground.

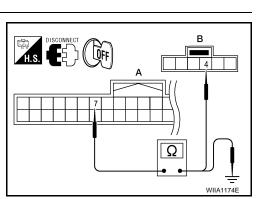
ltem	Connector	Term	inals	Condition	Voltage (V)	
nem		(+)	(-)	Condition	(Approx.)	
Front door	M19	47	Ground	OPEN	0	
switch LH		41	Ground	CLOSE	Battery voltage	

#### OK or NG

OK >> Front door switch LH is OK.

NG >> GO TO 2.





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# 2. CHECK FRONT DOOR SWITCH LH CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect front door switch LH and BCM.
- 3. Check continuity between front door switch LH connector B8 terminal 2 and BCM connector M19 terminal 47.
  - 2 47

#### : Continuity should exist.

4. Check continuity between door switch LH connector B8 terminal 2 and ground.

### 2 - Ground

### : Continuity should not exist.

#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.

# 3. CHECK FRONT DOOR SWITCH LH

Check continuity between front door switch LH terminal 2 and body ground part of door switch.

Terr	ninal	Door switch	Continuity
2	Body ground part	Pushed	No
2	of door switch	Released	Yes

## OK or NG

- OK >> Further inspection is necessary. Refer to symptom chart.
- NG >> Replace front door switch LH.

## SEAT MEMORY SWITCH CIRCUIT INSPECTION

## 1. CHECK FUNCTION

#### (B) With CONSULT-II

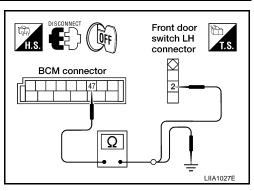
With "SET SW, MEMORY SW1, MEMORY SW2" on the DATA MONITOR, operate the switch to check ON/OFF operation.

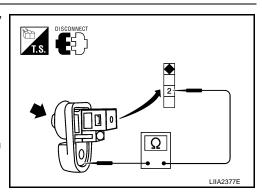
Monitor item [OPERATION or UNIT]		Contents	
MEMORY SW1	"ON/ OFF"	ON/OFF status judged from the seat memory switch 1 signal is displayed.	
MEMORY SW2	"ON/ OFF"	ON/OFF status judged from the seat memory switch 2 signal is displayed.	
SET SW	"ON/ OFF"	ON/OFF status judged from the setting switch signal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

# Without CONSULT-II GO TO 2.

#### GO 10 2.

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



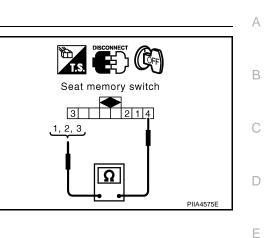


	DATA M	ONITOR	
MONITO	R		
SLIDE S SLIDE S RECLN RECLN LIFT FR LIFT FR LIFT RR LIFT RR SET SW	W-RR SW-FR SW-RR SW-UP SW-DN SW-DN SW-DP		OFF OFF OFF OFF OFF OFF OFF OFF
		Page	Down
		REC	ORD
MODE	BACK	LIGHT	COPY
MONITO		ONITOR	
TELESC TELESC TILT SW TILT SW MEMOR MEMOR CANCEL DOOR S VHCL SI	OFF OFF OFF OFF OFF OFF OFF <7km/		
Page	e Up	Page Down	
		REC	ORD
MODE	BACK	LIGHT	COPY

# 2. CHECK SEAT MEMORY SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect seat memory switch.
- 3. Operate the setting switch and memory switch.
- 4. Check continuity between seat memory switch terminals as follows.

Tern	ninal	Condition	Continuity		
(+)	(-)	Condition	Continuity		
3		Set switch: ON	Yes		
5	2 4		Set switch: OFF	No	
2		4	Memory switch 1 ON	Yes	
2			4	Memory switch 1: OFF	No
1		Memory switch 2: ON	Yes		
1		Memory switch 2: OFF	No		



Seat memory

3

switch connector

1, 2, 3

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#### OK or NG

OK >> GO TO 3.

NG >> Replace seat memory switch.

# 3. CHECK HARNESS CONTINUITY

- 1. Disconnect automatic drive positioner control unit.
- 2. Check continuity between automatic drive positioner control unit connector M41 terminals 9, 24, 25 and seat memory switch connector D5 terminals 1, 2, 3.
  - 9 1
  - 24 3 25 - 2

- : Continuity should exist.
- : Continuity should exist.

: Continuity should exist.

- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 9, 24, 25 and ground.
  - 9 Ground
- : Continuity should not exist.
- 24 Ground
- 25 Ground

: Continuity should not exist. : Continuity should not exist.

#### OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

### 4. CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

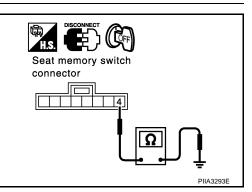
Check continuity between seat memory switch D5 terminal 4 and ground.

#### 4 - Ground

#### : Continuity should exist.

#### OK or NG

- OK >> Replace automatic drive positioner control unit.
- NG >> Repair or replace harness.



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Automatic drive

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9

24 25

positioner C/U connector

9, 24, 25

## SLIDING SWITCH LH CIRCUIT INSPECTION

## 1. CHECK FUNCTION

#### (B) With CONSULT-II

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

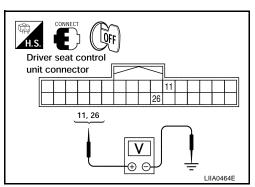
Monitor item [OPERATION or UNIT]		Contents
SLIDE SW-FR	"ON/ OFF"	ON/OFF status judged from the sliding switch LH (FR) signal is displayed.
SLIDE SW-RR	"ON/ OFF"	ON/OFF status judged from the sliding switch LH (RR) signal is displayed.

	D	ata M				
SE	LEC	ст мо	NITOF	RIT	EM	
	ę	SLIDE	SW-FF	R		
	S	SLIDE	SW-RI	7		
	F	ECLN	SW-F	R		
	R	ECLN				
	L	FT FF	SW-U	IP		
		Page				
SETTING Numerical Display						
MODE BACK LIGHT COPY				PIIA0313E		
						- IAUSISE

## **Without CONSULT-II**

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

Connector	Term	inal	Condition	Voltage (V)	
Connector	(+)		Condition	(Approx.)	
B401	11		Sliding switch LH ON (BACKWARD operation)	0	
		Ground	Other than above	Battery voltage	
	26	Ground	Sliding switch LH ON (FORWARD operation)	0	
			Other than above	Battery voltage	



## OK or NG

OK >> Sliding switch LH circuit is OK.

NG >> GO TO 2.

# 2. CHECK POWER SEAT SWITCH LH HARNESS CONTINUITY

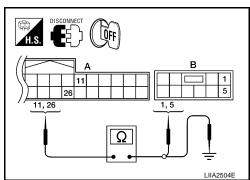
- 1. Disconnect driver seat control unit and power seat switch LH.
- Check continuity between driver seat control unit connector B401 (A) terminals 11, 26 and power seat switch LH connector B408 terminals 1, 5.
  - 11 1
  - 26 5

- : Continuity should exist.
- : Continuity should exist.
- 3. Check continuity between driver seat control unit connector B401 (A) terminals 11, 26 and ground.
  - 11 Ground
- : Continuity should not exist.

26 - Ground

: Continuity should not exist.

- OK >> GO TO 3.
- NG >> Repair or replace harness.



# 3. CHECK SLIDING SWITCH LH

Check continuity between power seat switch LH terminals as follows.

Terr	ninal	Condition	Continuity
1		Sliding switch LH ON (FORWARD operation)	Yes
I	9	Other than above	No
2	9	Sliding switch LH ON (BACKWARD operation)	Yes
2		Other than above	No

#### OK or NG

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

NG >> Replace power seat switch LH. Refer to <u>SE-96, "FRONT SEAT"</u>.

## **RECLINING SWITCH LH INSPECTION**

1. CHECK FUNCTION

#### (P) With CONSULT-II

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

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

	D.	ata M	ONITC	R		-		
SE	SELECT MONITOR ITEM							
	SLIDE SW-FR							
	S	SLIDE	SW-RI	٦				
	F	ECLN	SW-F	R				
	RECLN SW-RR							
	LIFT FR SW-UP							
Page Down								
SETTING Numerical Display								
MODE BACK LIGHT COPY						]		
						-		

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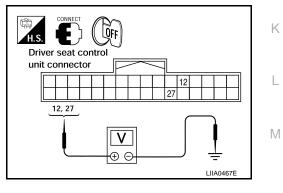
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## **Without CONSULT-II**

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

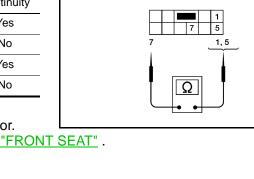
Connector	Terminal		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
	12		Reclining switch LH ON (BACKWARD operation)	0
B40127		Ground	Other than above	Battery voltage
	27	Ground	Reclining switch LH ON (FORWARD operation)	0
			Other than above	Battery voltage



OK or NG

OK >> Reclining switch circuit is OK.

NG >> GO TO 2.



# 2. CHECK HARNESS CONTINUITY

- 1. Disconnect driver seat control unit and power seat switch LH.
- 2. Check continuity between driver seat control unit connector B401 (A) terminals 12, 27 and power seat switch LH connector B408 (B) terminals 3, 4.
  - 12 3

- : Continuity should exist.
- 27 4 : Continuity should exist.
- Check continuity between driver seat control unit connector 3. B401 (A) terminals 12, 27 and ground.
  - 12 Ground
  - 27 Ground
- : Continuity should not exist.
- : Continuity should not exist.

#### OK or NG

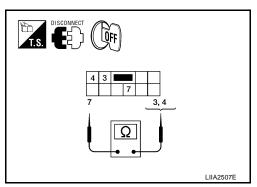
OK >> GO TO 3.

NG >> Repair or replace harness.

# **3.** RECLINING SWITCH INSPECTION

Check continuity between power seat switch LH terminals as follows.

Terr	Terminal Condition		Continuity
4		Reclining switch LH ON (BACKWARD operation)	Yes
4	7	Other than above	No
3	1	Reclining switch LH ON (FORWARD operation)	Yes
3		Other than above	No



3

3, 4

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OK or NG

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

NG >> Replace power seat switch LH. Refer to SE-96, "FRONT SEAT" .

**OFF** 12, 27 Ω

## FRONT LIFTING SWITCH CIRCUIT INSPECTION

## 1. CHECK FUNCTION

## (P) 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 [OP UNIT		Contents
LIFT FR SW-DN	"ON/OFF"	ON/OFF status judged from the FR lifting switch (DOWN) signal is displayed.
LIFT RR SW-UP	"ON/OFF"	ON/OFF status judged from the RR lifting switch (UP) signal is displayed.

	D.	ATA M	ONITO	R			В
SE	LEC	ст мо	NITOF	R IT	EM		
	LI	FT FR	SW-D	N			
	LI	FT RF	SW-U	IP			С
	LI	FT RB	SW-D	N			
	MI	R CO	۱SM-۱	JP			
	MI	R CON	NSW-E	DN			D
Page U	lр	Page	Down			-	
SETTIN	G	Num Dis	erical play				
MODE	в	ACK	LIGH	Т	COPY	BUADDODE	Е
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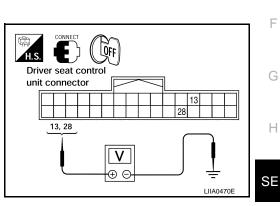
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## Without CONSULT-II

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

Connector	Termir		Condition	Voltage (V)
Connector	(+)	(-)	Condition	(Approx.)
	13	Ground	Front lifting switch ON (DOWN operation)	0
B40128			Other than above	Battery voltage
	28		Front lifting switch ON (UP operation)	0
			Other than above	Battery voltage



## OK or NG

OK >> Front lifting switch circuit is OK.

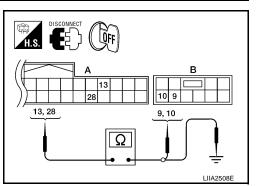
NG >> GO TO 2.

# 2. CHECK POWER SEAT SWITCH HARNESS CONTINUITY

- 1. Disconnect driver seat control unit and power seat switch LH.
- 2. Check continuity between driver seat control unit connector B401 (A) terminals 13, 28 and power seat switch LH connector B408 (B) terminals 9, 10.
  - 13 9
  - 28 10

- : Continuity should exist.
- : Continuity should exist.
- 3. Check continuity between driver seat control unit connector B401 (A) terminals 13, 28 and ground
  - 13 Ground
- : Continuity should not exist.
- 28 Ground
- : Continuity should not exist.

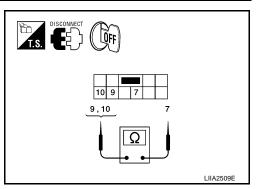
- OK or NG
- OK >> GO TO 3.
- NG >> Repair or replace harness.



# 3. CHECK FRONT LIFTING SWITCH

Check continuity between power seat switch LH terminals as follows.

Term	inals	Condition	Continuity
9	- 7	Front lifting switch ON (UP operation)	Yes
9		Other than above	No
10		Front lifting switch ON (DOWN operation)	Yes
10		Other than above	No



#### OK or NG

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

NG >> Replace power seat switch LH. Refer to <u>SE-96, "FRONT SEAT"</u>.

## **REAR LIFTING SWITCH CIRCUIT INSPECTION**

1. CHECK FUNCTION

#### (I) 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.

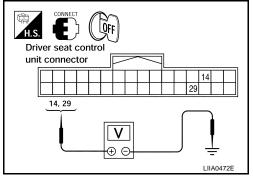
Monitor item [OP UNIT		Contents
LIFT RR SW-UP	"ON/OFF"	Operation (ON)/open (OFF) status judged from the RR lifting switch (UP) signal is dis- played.
LIFT RR SW-DN	"ON/OFF"	Operation (ON)/open (OFF) status judged from the RR lifting switch (DOWN) signal is displayed.

	D.	ATA M	ONITO	R		
SELECT MONITOR ITEM						
	LI	FT FR	SW-D	N		
	LI	FT RR	SW-U	IP		
	LI	FT RR	SW-D	N		
	MIR CON SW-UP					
	М	R CON	1 SW-[	DN		
Page U	Page Up Page Down					
SETTIN	G	Numerical Display				
MODE	В	ACK	LIGH	Т	COPY	PIIA0323E
	_					- FIRO323E

## **Without CONSULT-II**

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

Connector	Terminals		Condition	Voltage (V)	
Connector	(+)	(-)	Condition	(Approx.)	
	14		Rear lifting switch ON (DOWN operation)	0	
B401		Ground	Other than above	Battery voltage	
D401 —	29		Rear lifting switch ON (UP operation)	0	
			Other than above	Battery voltage	



OK or NG

OK >> Rear seat lifting switch circuit is OK.

NG >> GO TO 2.

# 2. CHECK POWER SEAT SWITCH HARNESS CONTINUITY

- 1. Disconnect driver seat control unit and power seat switch LH.
- 2. Check continuity between driver seat control unit connector B401 (A) terminals 14, 29 and power seat switch LH connector B408 (B) terminals 2, 6.
  - 14 2

- : Continuity should exist.
- 29 6 : Continuity should exist.
- Check continuity between driver seat control unit connector 3. B401 (A) terminals 14, 29 and ground.
  - 14 Ground
  - 29 Ground
- : Continuity should not exist.
- : Continuity should not exist.

#### OK or NG

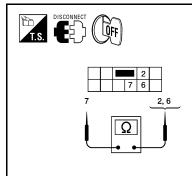
OK >> GO TO 3.

NG >> Repair or replace harness.

# 3. CHECK REAR LIFTING SWITCH

Check continuity between power seat switch LH terminals as follows.

Term	inals	Condition	Continuity
2	2	Rear lifting switch ON (DOWN operation)	Yes
2		Other than above	No
6	6 /	Rear lifting switch ON (UP operation)	Yes
0		Other than above	No



#### OK or NG

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

NG >> Replace power seat switch LH. Refer to SE-96, "FRONT SEAT" .

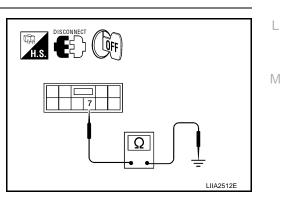
## POWER SEAT SWITCH LH GROUND INSPECTION

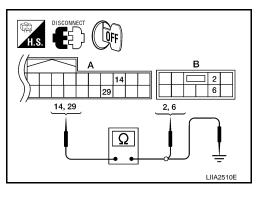
- 1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT
- Turn ignition switch OFF. 1.
- 2. Disconnect power seat switch LH.
- 3. Check continuity between power seat switch LH connector B408 terminal 7 and ground.

#### 7 - Ground

#### : Continuity should exist.

- OK or NG
  - OK >> Check the condition of the harness and connector.
- >> Repair or replace harness. NG





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## DOOR MIRROR REMOTE CONTROL SWITCH (CHANGEOVER SWITCH) CIRCUIT CHECK

## 1. CHECK FUNCTION

#### (B) With CONSULT-II

Check operation with "MIR CHNG SW-R, MIR CHNG SW-L" on the DATA MONITOR to make sure pulse changes.

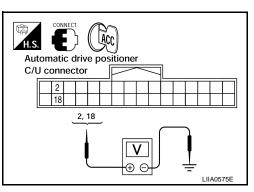
Monitor item [OPERATION or UNIT]		Contents
MIR CHNG SW-R	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (switching to RIGHT) signal is displayed.
MIR CHNG SW-L	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (switching to LEFT) signal is displayed.

#### DATA MONITOR SELECT MONITOR ITEM MIR CON SW-RH MIR CON SW-LH MIR CHNG SW-L SET SW Page Up Page Down SETTING Numerical Display MODE BACK LIGHT COPY

### **Without CONSULT-II**

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

Connector	Term	inals	Condition	Voltage (V)
Connector	(+)		Condition	(Approx.)
	2		Changeover switch RIGHT position	0
M41	Ground	Other than above	5	
		Changeover switch LEFT position	0	
			Other than above	5



## OK or NG

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

## 2. CHECK DOOR MIRROR REMOTE CONTROL SWITCH CIRCUIT HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror remote control switch.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 2, 18 and door mirror remote control swich connector M7 terminals 2, 3.

```
2 - 3
18 - 2
```

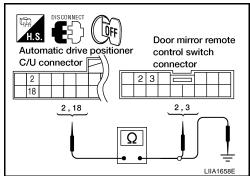
# : Continuity should exist.

- : Continuity should exist.
- 4. Check continuity between automatic drive positioner control unit connector M41 terminals 2, 18 and ground.

#### 2 - Ground

- : Continuity should not exist.
- 18 Ground
- : Continuity should not exist.

- OK >> GO TO 3.
- NG >> Repair or replace harness.



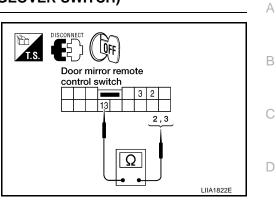
# 3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (CHANGEOVER SWITCH)

Check continuity between door mirror remote control switch terminals as follows.

Term	inals	Condition	Continuity
2	2	Changeover switch LEFT position	Yes
2		Other than above	No
3	13 	Changeover switch RIGHT position	Yes
5		Other than above	No

OK or NG

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



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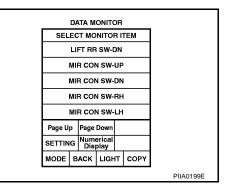
## DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH) CIRCUIT CHECK

# 1. CHECK FUNCTION

#### (B) With CONSULT-II

Check operation with "MIR CON SW-UP/DN, MIR CON SW-RH/LH" on the DATA MONITOR to make sure pulse changes.

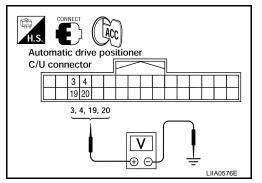
Monitor item [OPERATION or UNIT]		Contents
MIR CON SW-UP	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (UP) signal is displayed.
MIR CON SW-DN	"ON/OFF"	ON/OFF status judged from the door mirror remote control switch (DOWN) signal is displayed.
MIR CON SW-RH	"ON/OFF"	ON/OFF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



## **Without CONSULT-II**

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

Connector	Terminals		Condition	Voltage (V)
	(+)	(-)	Condition	(Approx.)
M41	3	Ground	Mirror switch UP opera- tion	0
			Other than above	5
	4		Mirror switch LEFT operation	0
			Other than above	5
	19		Mirror switch DOWN operation	0
			Other than above	5
	20		Mirror switch RIGHT operation	0
			Other than above	5



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

# AUTOMATIC DRIVE POSITIONER

# 2. CHECK DOOR MIRROR REMOTE CONTROL SWITCH CIRCUIT HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror remote control switch.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 3, 4, 19, 20 and door mirror remote control switch connector M7 terminals 4, 4, 6, 14.
  - 3 6: Continuity should exist.4 5: Continuity should exist.19 14: Continuity should exist.20 4: Continuity should exist.
- 4. Check continuity between automatic drive positioner control unit connector M41 terminals 3, 4, 19, 20 and ground.
  - 3 Ground
- : Continuity should not exist. : Continuity should not exist.
- 4 Ground 19 - Ground
- : Continuity should not exist.
- : Continuity should not exist.

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

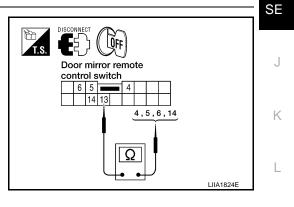
20 - Ground

NG >> Repair or replace harness.

# 3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH (MIRROR SWITCH)

Check continuity between door mirror remote control switch terminals as follows.

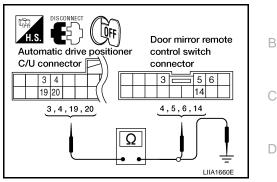
Term	inals	Condition	Continuity
4	4	Mirror switch RIGHT operation	Yes
4		Other than above	No
5		Mirror switch LEFT operation	Yes
5	13	Other than above	No
6		Mirror switch UP operation	Yes
0		Other than above	No
14		Mirror switch DOWN operation	Yes
14		Other than above	No



OK or NG

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

NG >> Replace door mirror remote control switch.



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## DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT CHECK

# 1. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

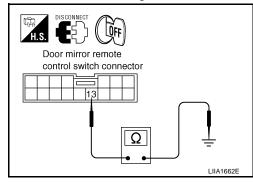
Check continuity between door mirror remote control switch connector M7 terminal 13 and ground.

13 - Ground

: Continuity should exist.

OK or NG

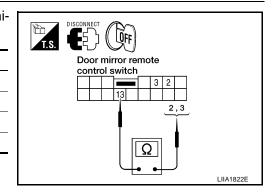
- OK >> GO TO 2.
- NG >> Repair or replace harness.



# 2. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

Check continuity between door mirror remote control switch terminals as follows.

Term	inals	Condition	Continuity	
3		Changeover switch RIGHT position	Yes	
3	13	Other than above	No	
2	13	Changeover switch LEFT position	Yes	
Ζ		Other than above	No	



OK or NG

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

NG >> Replace door mirror remote control switch.

## ADP STEERING TELESCOPIC SWITCH CIRCUIT INSPECTION

### 1. CHECK FUNCTION

#### (P) With CONSULT-II

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

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

#### В DATA MONITOR SELECT MONITOR ITEM TELESCO SW-FR TELESCO SW-RR TILT SW-UP TILT SW-DOWN MEMORY SW 1 Page Up Page Down Numerical SETTING Display MODE BACK LIGHT COPY Ε PIIA0315E

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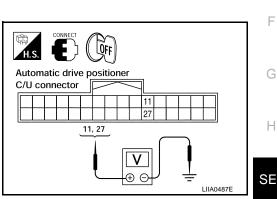
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## Without CONSULT-II

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

Connector	Term	inals	Condition	Voltage (V)	
	(+) (-		Condition	(Approx.)	
M41	11		Telescopic switch ON (FORWARD operation)	0	
		Ground	Other than above	5	
	27	Giouna	Telescopic switch ON (BACKWARD operation)	0	
			Other than above	5	



## OK or NG

OK >> ADP steering telescopic switch circuit is OK.

NG >> GO TO 2.

## 2. CHECK ADP STEERING TELESCOPIC SWITCH HARNESS CONTINUITY

- 1. Disconnect automatic drive positioner control unit and ADP steering switch.
- 2. Check continuity between automatic drive positioner control unit connector M41 terminals 11, 27 and ADP steering switch connector M16 terminals 4, 5.
  - 11 5

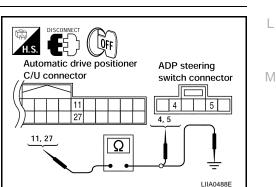
: Continuity should exist.

27 - 4

- : Continuity should exist.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 11, 27 and ground.
  - 11 Ground
- : Continuity should not exist.
- 27 Ground
- : Continuity should not exist.

OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness.



# 3. CHECK ADP STEERING TELESCOPIC SWITCH

Check continuity between ADP steering switch terminals as follows.

Terminals		Condition	Continuity
4		Telescopic switch ON (BACKWARD operation)	Yes
4	1	Other than above	No
E		Telescopic switch ON (FORWARD operation)	Yes
5		Other than above	No

#### <u>OK or NG</u>

OK >> GO TO 4.

NG >> Replace ADP steering switch.

## 4. CHECK ADP STEERING TELESCOPIC SWITCH GROUND CIRCUIT

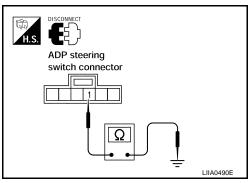
Check continuity between ADP steering switch connector M16 terminal 1 and ground.

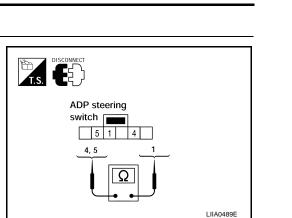
#### 1 - Ground

: Continuity should exist.

#### OK or NG

- OK >> Check the condition of the harness and connector.
- NG >> Replace or replace harness.





## ADP STEERING TILT SWITCH CIRCUIT INSPECTION

## 1. CHECK FUNCTION

#### (P) With CONSULT-II

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

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

	D	ata M	ONITC	R						
SE	SELECT MONITOR ITEM									
	ΤE	LESC	o sw-	FR						
	TE	LESC	SW-	RR						
		TILT S	SW-UP							
	TILT SW-DOWN									
	MEMORY SW 1									
Page I	Jp	Page	Down							
SETTING Numerical Display										
MODE	В	ACK	LIGH	IT	COPY				A031	
								FIL	AUST	

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## **Without CONSULT-II**

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

Connector	Tern	ninals	Condition	Voltage (V)	
Connoctor	(+) (-)		Condition	(Approx.)	
M41	1		Tilt switch ON (UP operation)	0	
	ľ	Ground	Other than above	5	
	17		Tilt switch ON (DOWN operation)	0	
			Other than above	5	

#### 

#### OK or NG

OK >> ADP steering tilt switch circuit is OK.

NG >> GO TO 2.

# 2. CHECK ADP STEERING TILT SWITCH HARNESS CONTINUITY

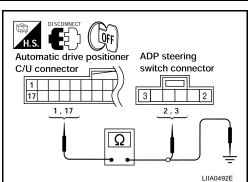
- 1. Disconnect automatic drive positioner control unit and ADP steering switch.
- Check continuity between automatic drive positioner control unit connector M41 terminals 1, 17 and ADP steering switch connector M16 terminals 2, 3.
  - 1 2
  - 17 3

- : Continuity should exist. : Continuity should exist.
- 3. Check continuity between automatic drive positioner control unit connector M41 terminals 1, 17 and ground.
  - 1 Ground
  - 17 Ground
- : Continuity should not exist.

: Continuity should not exist.

#### OK or NG

- OK >> GO TO 3.
- NG >> Repair or replace harness.





# 3. CHECK ADP STEERING TILT SWITCH

Check continuity between ADP steering switch terminals as follows.

Terminals		Condition	Continuity	
2	4	Tilt switch ON (UP operation)	Yes	
2		Other than above	No	
3	3	Tilt switch ON (DOWN operation)	Yes	
3		Other than above	No	

#### OK or NG

OK >> GO TO 4.

NG >> Replace ADP steering switch.

## 4. CHECK ADP STEERING TILT SWITCH GROUND CIRCUIT

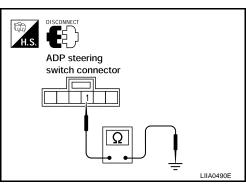
Check continuity between ADP steering switch connector M16 terminal 1 and ground.

#### 1 - Ground

#### : Continuity should exist.

#### OK or NG

- OK >> Check the condition of the harness and connector.
- NG >> Replace or replace harness.



# SEAT MEMORY INDICATOR LAMP CIRCUIT INSPECTION

## 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**

ĞO TO 2.

#### OK or NG

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

NG >> GO TO 2.

# 2. CHECK SEAT MEMORY SWITCH POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect seat memory switch.
- 3. Check voltage between seat memory switch connector D5 terminal 5 and ground.

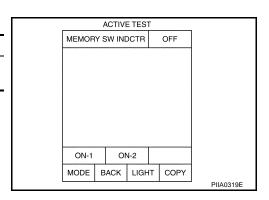
#### 5 - Ground

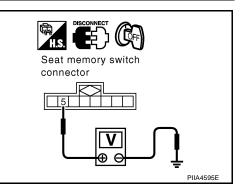
: Battery voltage

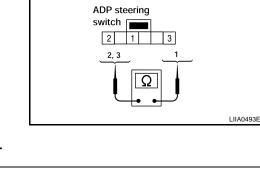
#### OK or NG

OK >> GO TO 3.

NG >> Repair or replace harness.







# 3. CHECK HARNESS CONTINUITY

- 1. Disconnect automatic drive positioner control unit.
- 2. Check continuity between automatic drive positioner control unit connector M41 terminals 12, 13 and seat memory switch connector D5 terminals 6, 7.
  - 12 6 13 - 7

- : Continuity should exist. : Continuity should exist.
- Check continuity between automatic drive positioner control unit 3. connector M41 terminals 12, 13 and ground.
  - 12 Ground
  - 13 Ground
- : Continuity should not exist.
- : Continuity should not exist.

OK or NG

OK >> GO TO 4.

NG >> Repair or replace harness.

## 4. CHECK SEAT MEMORY SWITCH INDICATOR SIGNAL

- Connect seat memory switch. 1.
- 2. Check voltage between automatic drive positioner control unit connector M41 terminals 12, 13 and ground.
  - 12 Ground
  - 13 Ground

#### OK or NG

- OK >> Replace automatic drive positioner control unit.
- NG >> Replace seat memory switch.

## UART COMUNICATION LINE CIRCUIT INSPECTION

- 1. CHECK UART LINE HARNESS
- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit and automatic drive positioner control unit.
- Check continuity between driver seat control unit connector 3. B401 terminals 1, 17 and automatic drive positioner connector M41 terminals 10, 26.
  - 1 10

: Continuity should exist.

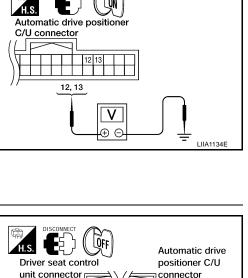
17 - 26

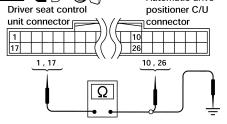
- 4. Check continuity between driver seat control unit connector B402 terminals 1, 17 and ground.
  - 1 Ground 17 - Ground

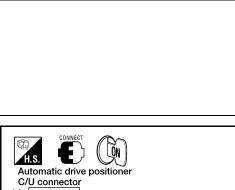
: Continuity should not exist. : Continuity should not exist.

#### OK or NG

- OK >> GO TO 2.
- NG >> Repair or replace harness.







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Seat memory

switch connector

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PIIA4596

Automatic drive positioner

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12, 13

C/U connector

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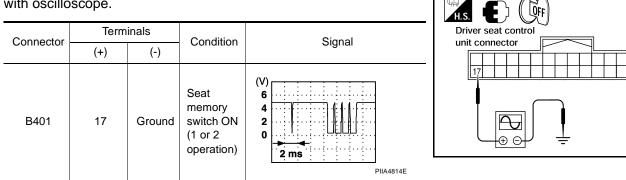
: Continuity should exist.

: Battery voltage : Battery voltage

CONNECT

# 2. CHECK UART LINE INPUT/OUTPUT SIGNAL 1

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



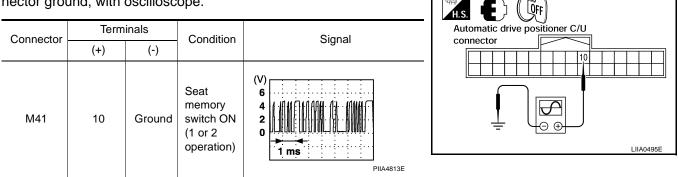
OK or NG

OK >> GO TO 3.

NG >> Replace driver seat control unit.

# 3. CHECK UART LINE INPUT/OUTPUT SIGNAL 2

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



OK or NG

OK >> GO TO 4.

NG >> Replace automatic driver positioner control unit.

# 4. CHECK DRIVER SEAT CONTROL UNIT

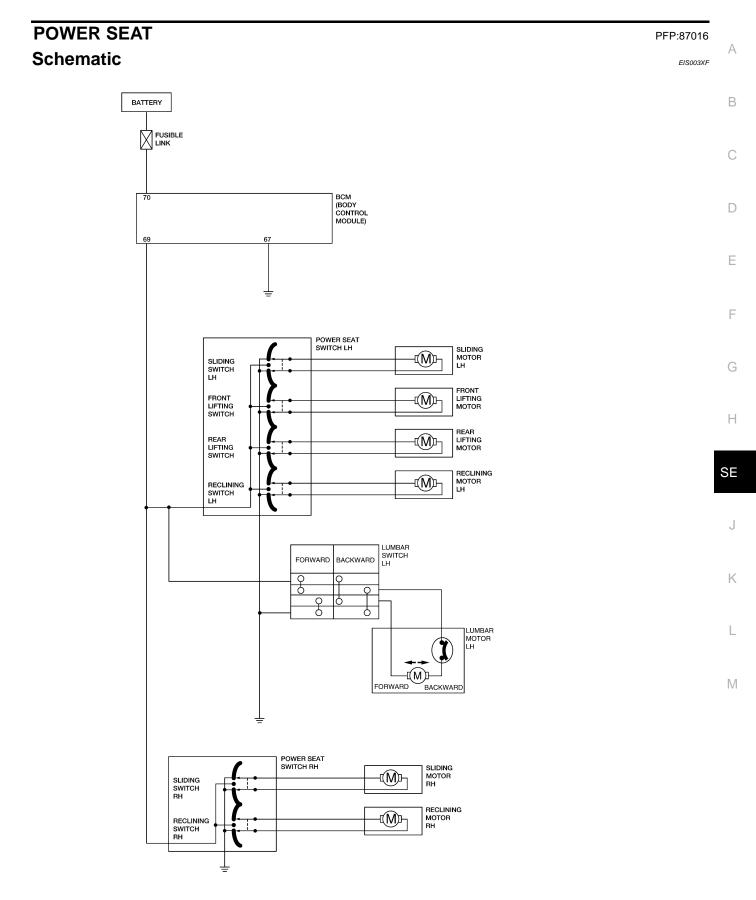
Does the automatic drive positioner function when the driver control unit is exchanged?

#### YES or NO

- YES >> Replace driver seat control unit.
- NO >> Replace automatic drive positioner control unit.

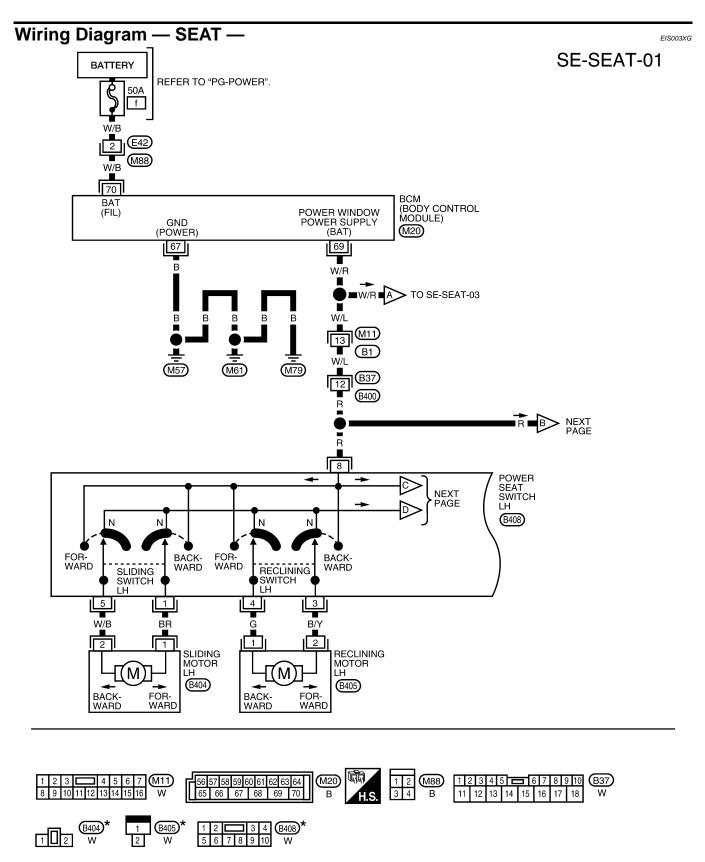
LIIA0477E

# **POWER SEAT**



WIWA1872E

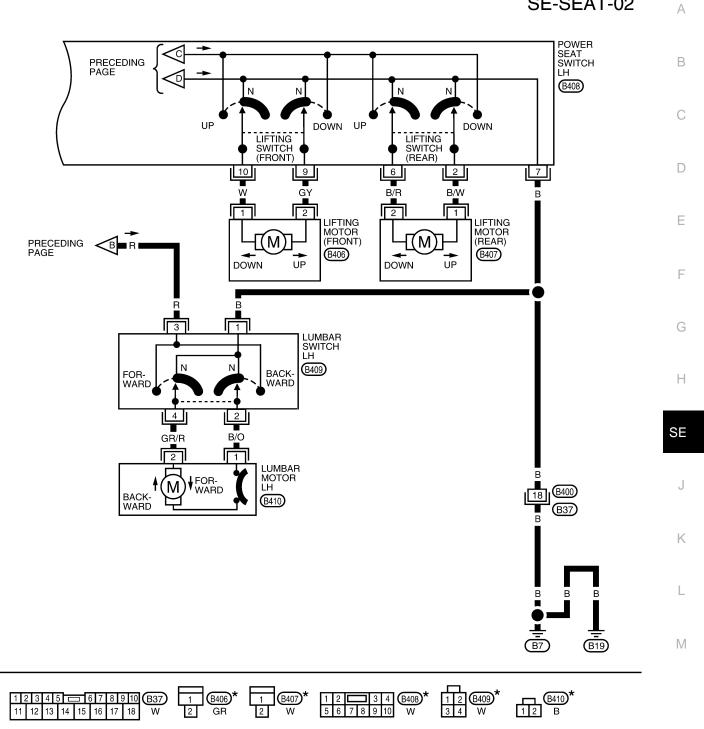
## **POWER SEAT**



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

WIWA1873E

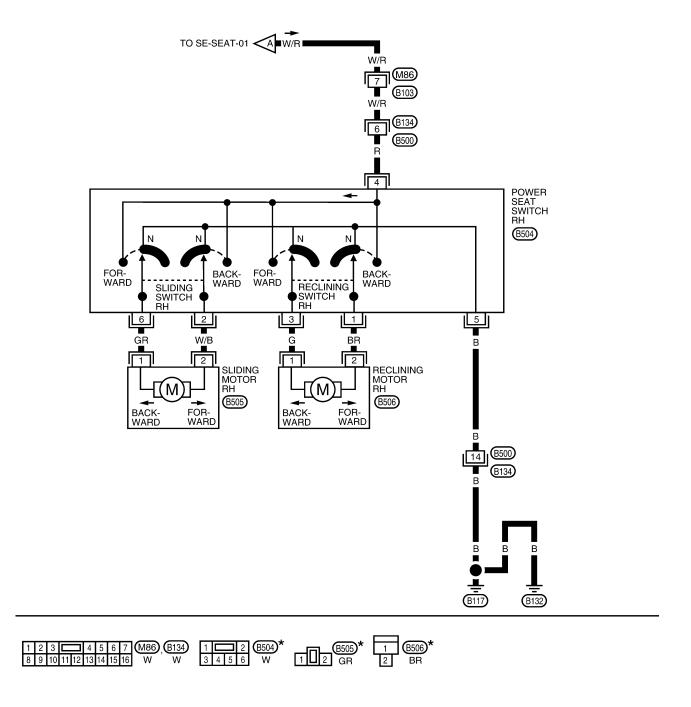
SE-SEAT-02



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

WIWA1874E

SE-SEAT-03



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

WIWA1875E

# **HEATED SEAT**

#### **HEATED SEAT** PFP:87335 Description EIS003XH When handling seat, be extremely careful not to scratch heating unit. . Do not use any organic solvent, such as thinner, benzene, alcohol, etc. to clean trim. Seatback trim Heating unit Trim temperature Increasing to Decreasing to Ð °C (<sup>°</sup>F) 35 - 45 (95 - 113) 25 - 35 (77 - 95) Ð Thermostat OFF ON operation Seat cushiontrim WIIA0031E

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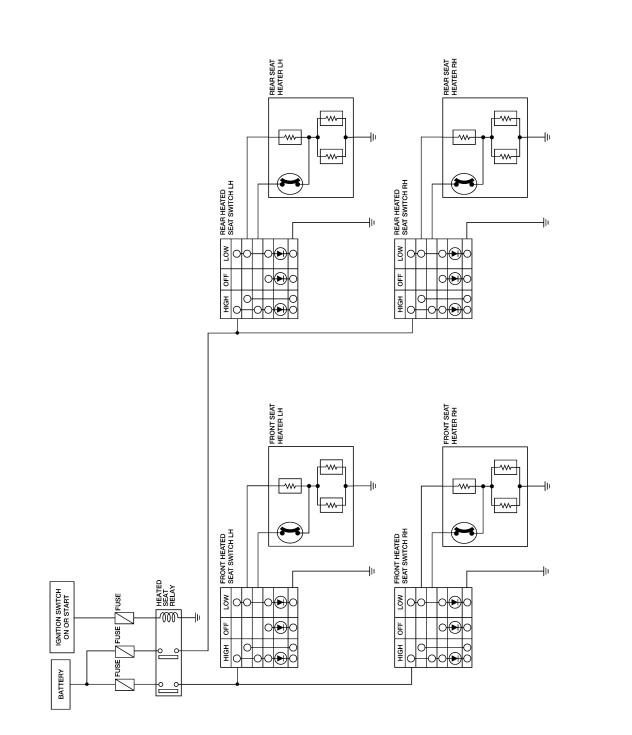
#### Schematic WITH FRONT LEFT AND RIGHT HEATED SEATS

IGNITION SWITCH ON OR START BATTERY FUSE FUSE / / HEATED SEAT RELAY 000-Пo 0 ㅗ FRONT HEATED SEAT SWITCH LH HIGH OFF LOW 100 11 FRONT SEAT HEATER LH ٩ ş ¥ Ş 4 FRONT HEATED SEAT SWITCH RH HIGH OFF LOW 8 Q Ò FRONT SEAT HEATER RH ş ¥ ş

EIS003XI

WIWA1876E

## WITH FRONT AND REAR HEATED SEATS



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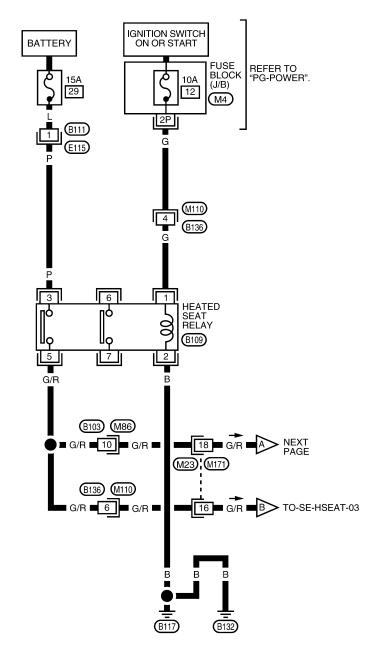
M

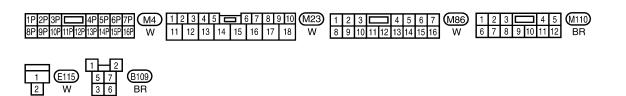
WIWA1877E

### Wiring Diagram — HSEAT — WITH FRONT LEFT AND RIGHT HEATED SEATS

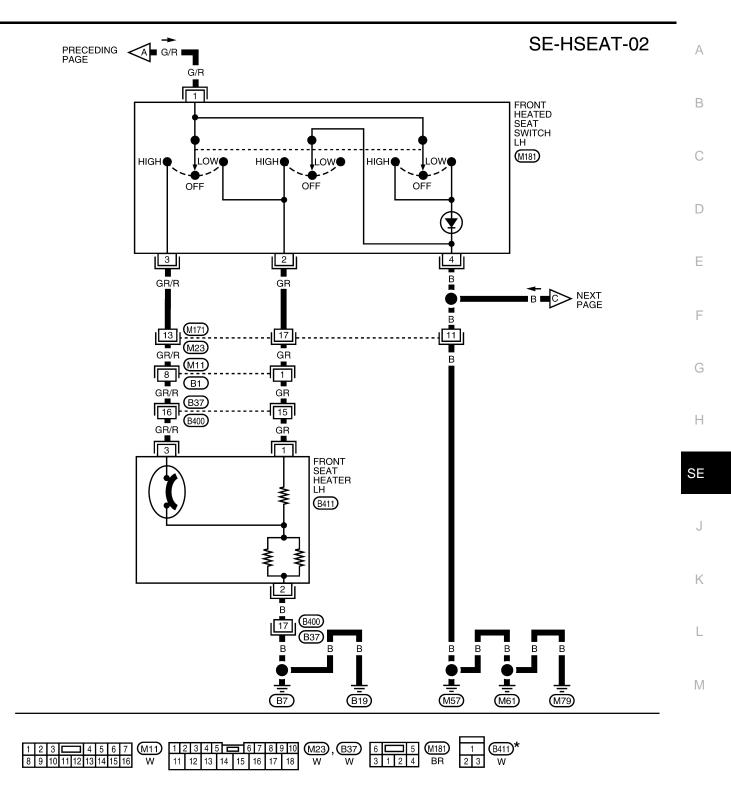
EIS003XJ

SE-HSEAT-01





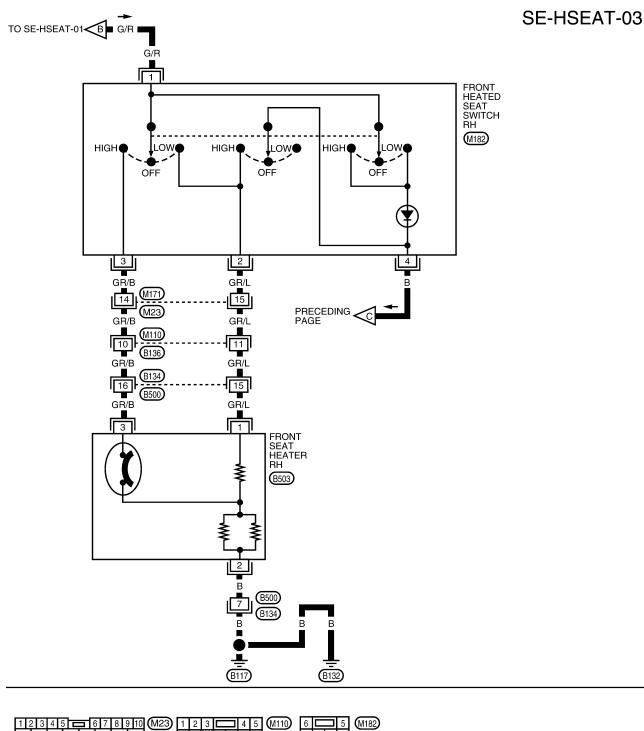
WIWA1878E

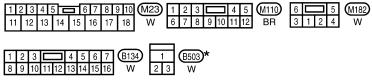


\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1879E

## **HEATED SEAT**



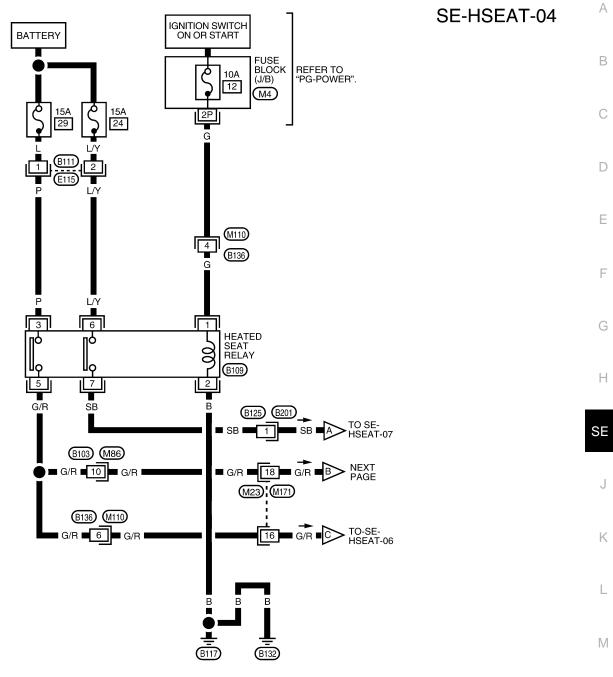


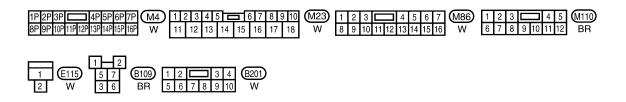
\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1880E

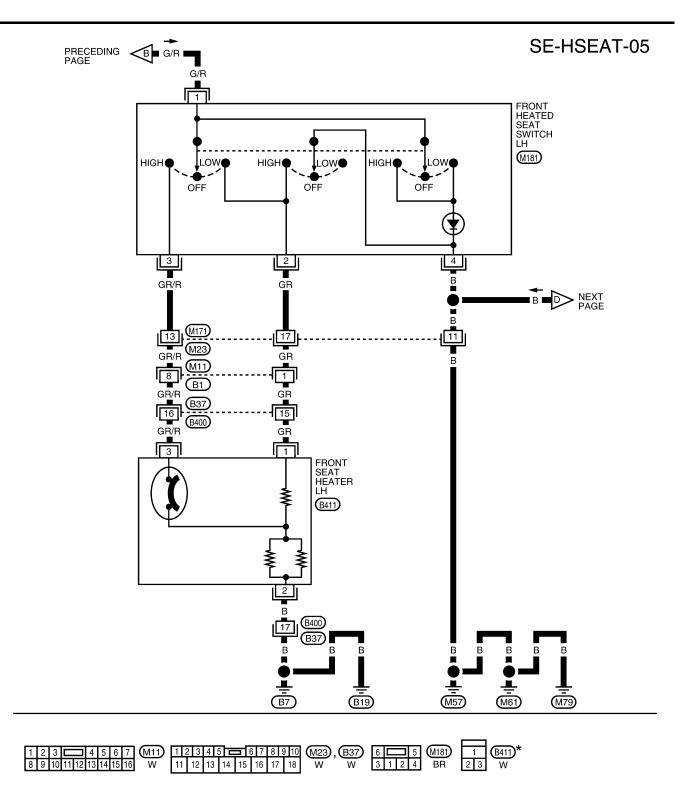
# **HEATED SEAT**

#### WITH FRONT AND REAR HEATED SEATS





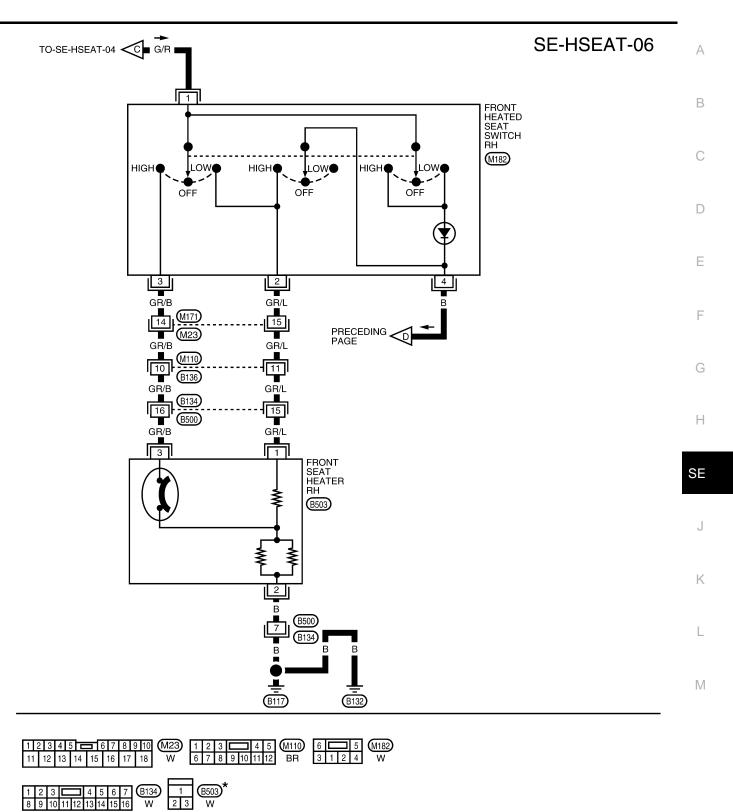
WIWA1881E



 $\bigstar$  : THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

WIWA1882E

## **HEATED SEAT**

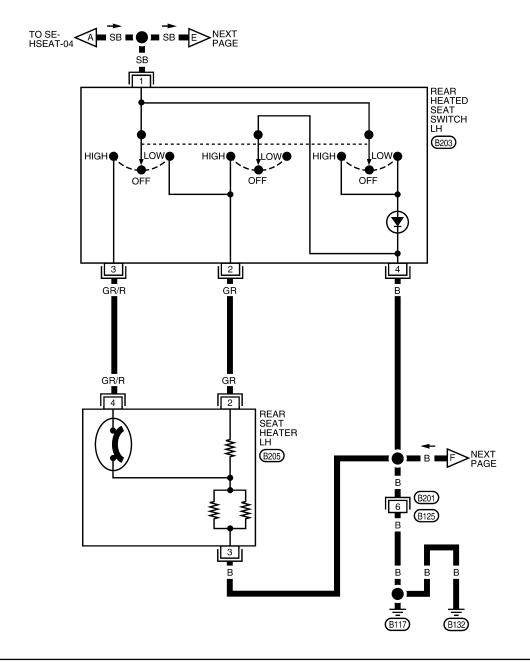


\*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT" OF PG SECTION.

2 3

WIWA1883E

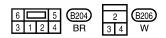
SE-HSEAT-07





WIWA1884E

SE-HSEAT-08 SB REAR HEATED SEAT SWITCH RH B204 LOW LOW HIGH HIGH LOM HIGH OFF OFF OFF GR/B GR/L 4 В GR/B GR/L REAR SEAT HEATER RH (B206) B B



WIWA1885E

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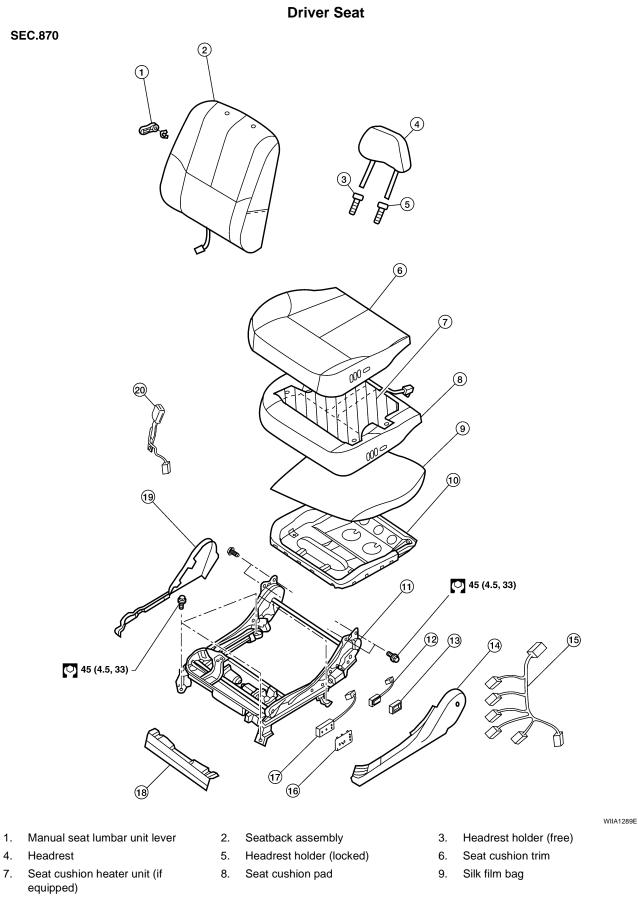
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# FRONT SEAT Removal and Installation

PFP:87000

EIS003XK





# **FRONT SEAT**

10.	Seat cushion frame	11.	Driver seat frame assembly	12.	Power lumbar support switch (optional)	А
13.	Power lumbar support switch finisher (if equipped)	14.	Seat cushion outer finisher	15.	Driver power seat harness	
16.	Power seat switch finisher (if equipped)	17.	Power seat switch	18.	Seat cushion front finisher	В
19.	Seat cushion inner finisher	20.	Seat belt buckle			

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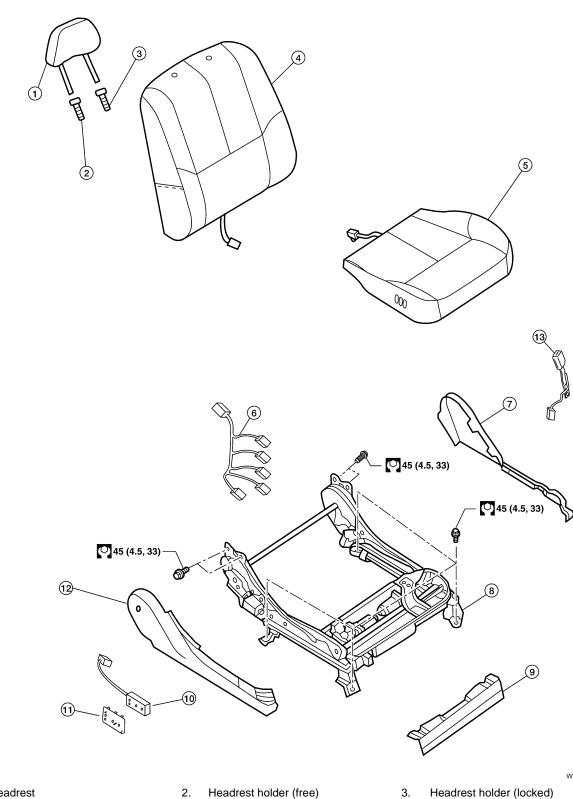
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## **FRONT SEAT**

**Passenger Seat** 



Headrest 1.

SEC.890

- 4. Seatback assembly
- 7. Seat cushion inner finisher
- 10. Power seat switch
- Seat belt buckle 13.

- Headrest holder (free) 2.
- 5. Seat cushion assembly
- 8. Passenger seat power frame assem- 9. bly
- Power seat switch finisher 11.

#### WIIA1290E

Headrest holder (locked)

6.

- Passenger power seat harness
- Seat cushion front finisher
- 12. Seat cushion outer finisher

# FRONT SEAT

#### REMOVAL

When removing or installing the seat trim, handle it carefully 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 while installing the seat. Always handle it with care.
- After front side air bag module inflates, front seatback assembly must be replaced.
- Front passenger seat is equipped with an Occupant Classification System sensor and control module. Do not disassemble front passenger seat cushion assembly or remove the trim as this will affect the Occupant Classification System calibration.
- Always replace passenger seat cushion as an assembly.
- Slide the seat until the four 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.

- 2. Disconnect both battery cables and wait at least 3 minutes.
- 3. Remove the harness connector for the side air bag module.
- 4. Remove the bolts.
- 5. Remove the power seat harness connector and vehicle harness clip from the vehicle.

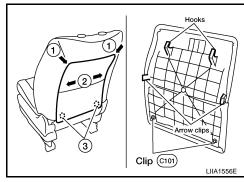
#### INSTALLATION

- Installation is in the reverse order of removal.
- NOTE:

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

#### REMOVAL OF SEATBACK ASSEMBLY

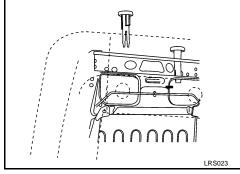
- 1. Remove the seatback finisher from the back of the seatback.
  - 1. Bend both top corners inward (one at a time) to release the top hooks.
  - 2. Shift the seatback finisher to the left and right to release the middle hooks.
  - 3. Separate the trim clips from the seatback frame to remove the seatback finisher.



2. From the back of the seatback, press the headrest holder tabs at the base of the stay pipe to disengage. Then pull the headrest holder up to remove.

#### NOTE:

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



- 3. Pull out the harness connector for the side air bag from the seat cushion.
- 4. Remove the reclining device bolts (2 for each side) on the seatback frame, and remove the seatback assembly.

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#### NOTE:

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

#### INSTALLATION OF SEATBACK ASSEMBLY

• Installation is in the reverse order of removal.

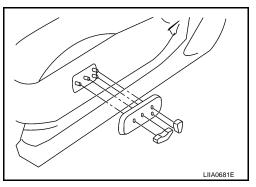
# SEAT CUSHION TRIM AND PAD (DRIVER) OR SEAT CUSHION ASSEMBLY (PASSENGER) CAUTION:

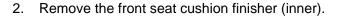
- Front passenger seat is equipped with an Occupant Classification System sensor and control
  module. Do not disassemble front passenger seat cushion assembly or remove the trim as this
  will affect the Occupant Classification System calibration.
- Always replace passenger seat cushion as an assembly.
- When removed, the passenger seat cushion must always be placed pan side UP to prevent damage.
- During installation, the wire harness clips must be installed in the holes they were originally in. Do not add additional clips.
- The Occupant Classification System control module can only be replaced as part of the seat cushion assembly.

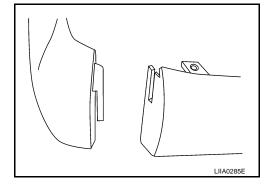
#### NOTE:

If the vehicle has been involved in a collision, the seat must be inspected for damage. Refer to <u>SRS-53, "COL-LISION DIAGNOSIS"</u>.

1. Remove the power seat switch knob.

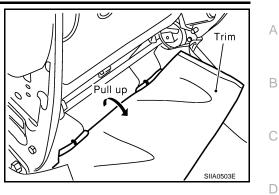






- 3. Remove the three power seat switch assembly screws (or lift knobs on manual seats).
- 4. Remove four bolts and seat cushion assembly.

- 5. Remove the retainer on the seat cushion frame, then remove the harness connector for the seat heater.
- 6. For driver seat only, after removing the seat cushion assembly, remove the hog rings to separate the trim cover from the pad and seat cushion heater unit.



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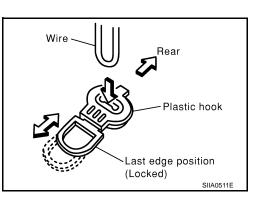
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# Removal and Installation REMOVAL

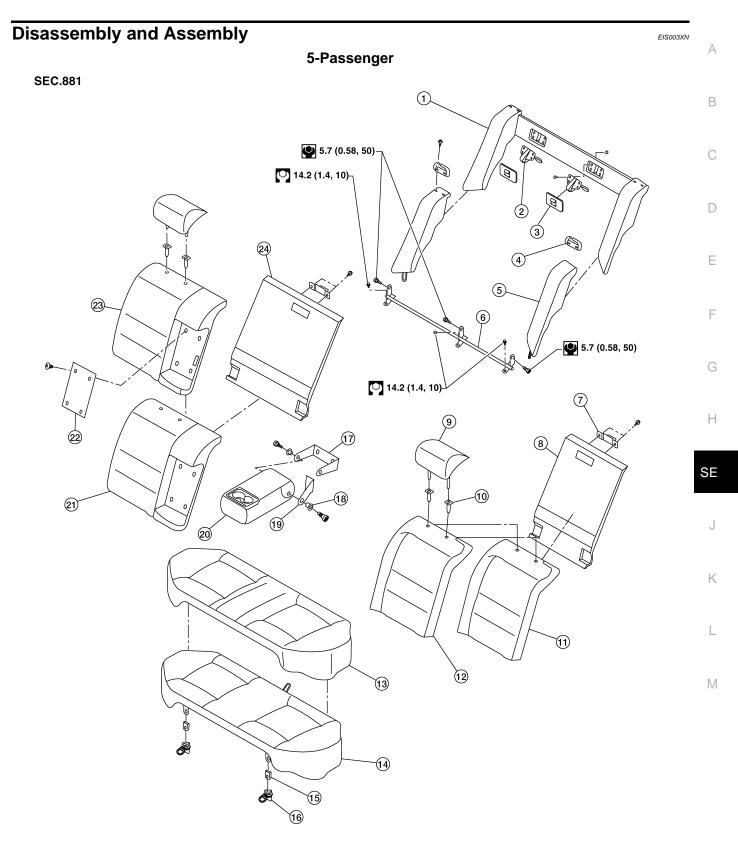
- 1. Pull the lock at the front bottom of the seat cushion forward (1 for each side), and pull the seat cushion upward to release the wire from the plastic hook, then pull the seat cushion forward to remove.
- 2. Remove the RH and LH screws on the seatback.
- 3. Slide the seatback upward to pull off the wire from the wire from the vehicle-side hook, and remove the seatback.
- 4. After removing, remove the hog ring to separate the trim and pad.

## INSTALLATION

• Installation is in the reverse order of removal.



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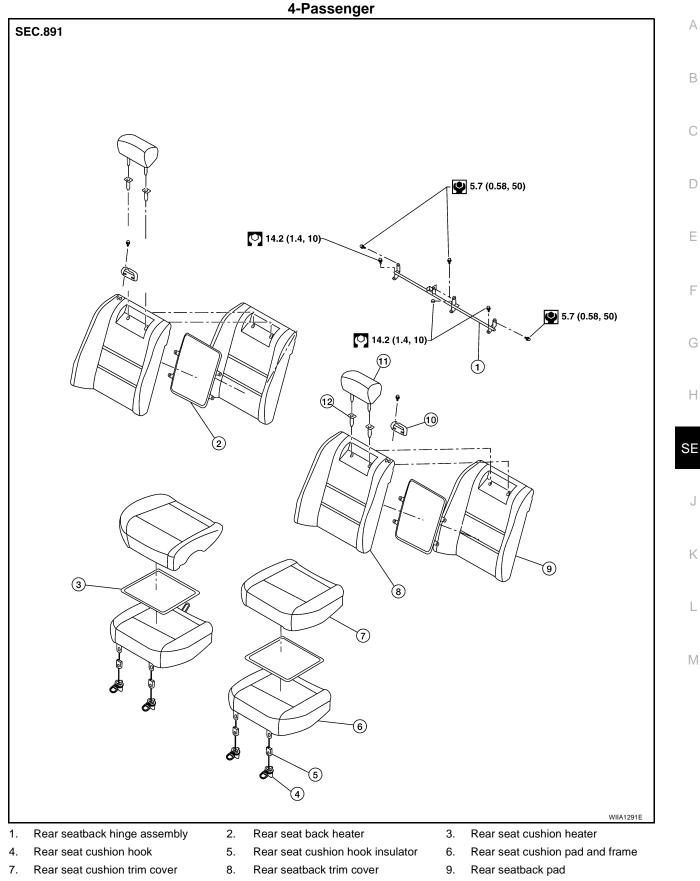


- 1. Rear seat side bolster assembly
- 4. Seat belt guides
- 7. Rear seatback latch strikers
- 2. Rear seatback latch assemblies
- 5. Rear seatback side bolster trim covers
- 8. Rear seatback board (40 percent portion)

- WIIA0840E
- 3. Rear seatback latch covers
- 6. Rear seatback hinge assembly
- 9. Rear seatback headrest



- 10. Headrest guide
- 13. Rear seat cushion trim cover
- 16. Rear seat cushion hook
- 19. Armrest bracket cover
- 22. Armrest lid board assembly
- Rear seatback pad (40 percent por-11. tion)
- 14. Rear seat cushion pad and frame
- 17. Armrest bracket
- 20. Rear seat armrest assembly
- 23. Rear seatback trim cover (60 percent 24. Rear seatback board (60 percent portion
- 12. Rear seatback trim cover (40 percent portion)
- 15. Rear seat cushion hook insulator
- 18. Bushing
- 21. Rear seatback pad (60 percent portion)
  - portion)



10. Seat belt guide

- 11. Rear seatback headrest
- 12. Headrest guide