SECTION SE
SEAT

CONTENTS

PRECAUTIONS

PFP:00001

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

NIS000HF

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

WARNING:

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

Service Notice

NIS000HG

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

Precautions for Battery Service

NIS000HH

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Precautions for Work

NIS000HI

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

– Water soluble foul: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the fouled area.
Then rub with a soft and dry cloth.

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

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

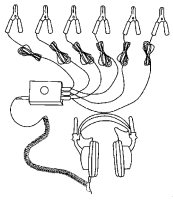
PREPARATION

PFP:00002

Special Service Tools

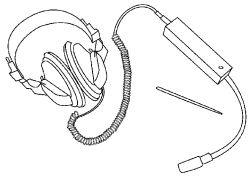
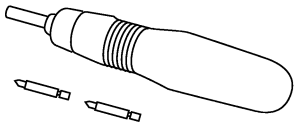
NIS000HJ

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

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

Commercial Service Tools

NIS000HK

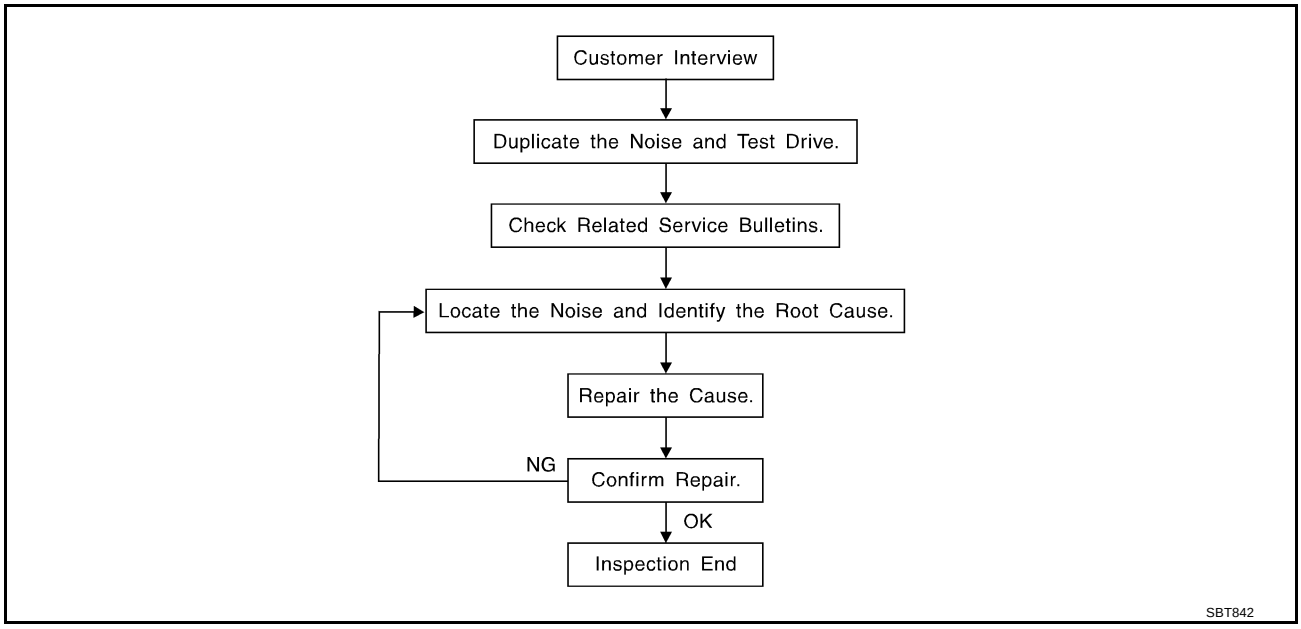
Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Power tool  PBIC0191E	

SQUEAK AND RATTLE TROUBLE DIAGNOSES

PFP:00000

Work Flow

NIS00295



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to SE-10, "Diagnostic Worksheet" . This information is necessary to duplicate the conditions that exist when the noise occurs.

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

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 models, drive position on A/T models).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

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

CHECK RELATED SERVICE BULLETINS

After verifying the customer concern or symptom, check ASIST for Technical Service Bulletins (TSBs) related to that concern or symptom.
If a TSB relates to the symptom, follow the procedure to repair the noise.

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J-39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks.
  Refer to SE-8, "Generic Squeak and Rattle Troubleshooting" .

REPAIR THE CAUSE

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

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

NOTE:
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J-43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02: 15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)

INSULATOR (Light foam block)
80845-71L00: 30 mm (1.18 in) thick, 30 × 50 mm (1.18 × 1.97 in)
FELT CLOTHTAPE
Used to insulate where movement does not occur. Ideal for instrument panel applications.
68370-4B000: 15 × 25 mm (0.59 × 0.98 in) pad/68239-13E00: 5 mm (0.20 in) wide tape roll
The following materials, not found in the kit, can also be used to repair squeaks and rattles.
UHMW (TEFLON) TAPE
Insulates where slight movement is present. Ideal for instrument panel applications.
SILICONE GREASE
Used in place of UHMW tape that will be visible or not fit. Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

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

Generic Squeak and Rattle Troubleshooting

NIS00296

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint
   These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

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

CENTER CONSOLE

Components to pay attention to include:

1. Shifter assembly cover to finisher
2. A/C control unit and cluster lid C
3. Wiring harnesses behind audio and A/C control unit

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

DOORS

Pay attention to the:

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

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

TRUNK

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

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

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

SUNROOF/HEADLINING

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

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

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

SEATS

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

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

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

UNDERHOOD

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

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

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

Diagnostic Worksheet

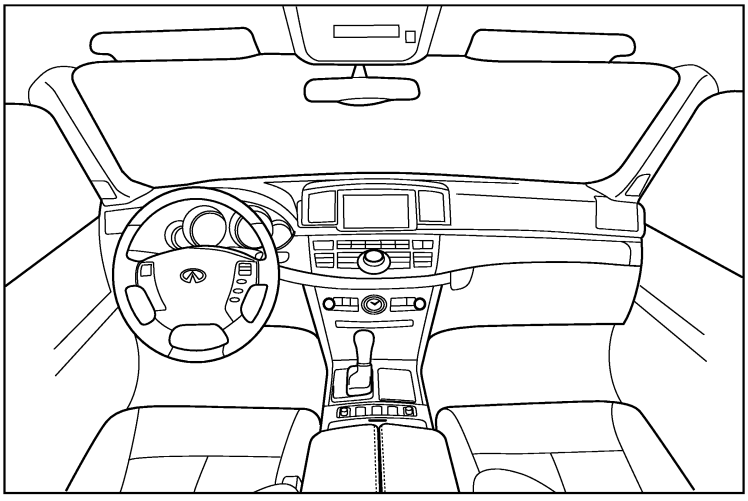
NIS00297

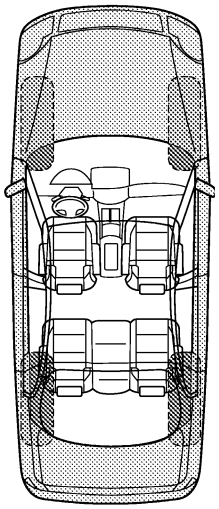
INFINITI

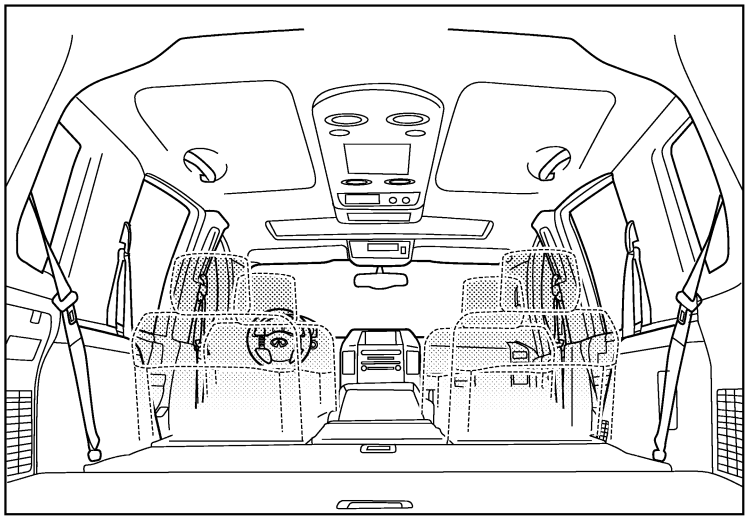
SQUEAK & RATTLE
DIAGNOSTIC WORKSHEET

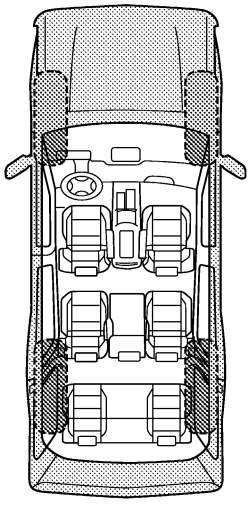
Dear Infiniti Customer:
We are concerned about your satisfaction with your Infiniti vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Infiniti right the first time, please take a moment to note the area of the vehicle where the squeak or rattle occurs and under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

I. WHERE DOES THE NOISE COME FROM? (circle the area of the vehicle)
The illustrations are for reference only, and may not reflect the actual configuration of your vehicle.









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

PIIB8741E

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET - page 2

Briefly describe the location where the noise occurs:

_____

_____

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

- ☐ 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:

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

IV. WHAT TYPE OF NOISE

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL

Test Drive Notes:

_____

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	☐	☐	_____
- Noise verified on test drive	☐	☐	_____
- Noise source located and repaired	☐	☐	_____
- Follow up test drive performed to confirm repair	☐	☐	_____

VIN: _____ Customer Name: _____

W.O.# _____ Date: _____

This form must be attached to Work Order

PIIB8742E

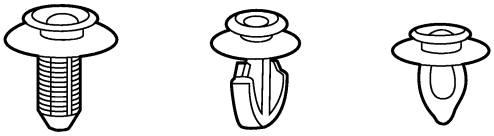
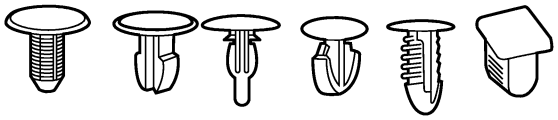
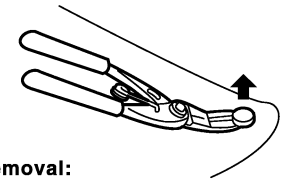
CLIP AND FASTENER

PFP:76906

Description

NIS000HO

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

Symbol No.	Shapes	Removal & Installation
C101 		**Removal:** Remove by bending up with flat-bladed screwdrivers or clip remover. 
C103 		 **Removal:** Remove with a clip remover. PIIA3432E

AUTOMATIC DRIVE POSITIONER

PFP:28491

System Description

NIS001H9

- The system automatically moves the driver seat. The automatic drive positioner control unit can also store the optimum driving positions (driver seat) for 2 people. If the driver is changes, one-touch operation allows changing to the other driving position.

MANUAL OPERATION

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

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

AUTOMATIC OPERATION

Function	Description
Memory switch operation	The seat, steering move to the stored driving position by pushing memory switch (1 or 2).
Keyfob interlock operation	Perform memory operation by pressing keyfob unlock button or driver side door request switch.

NOTE:

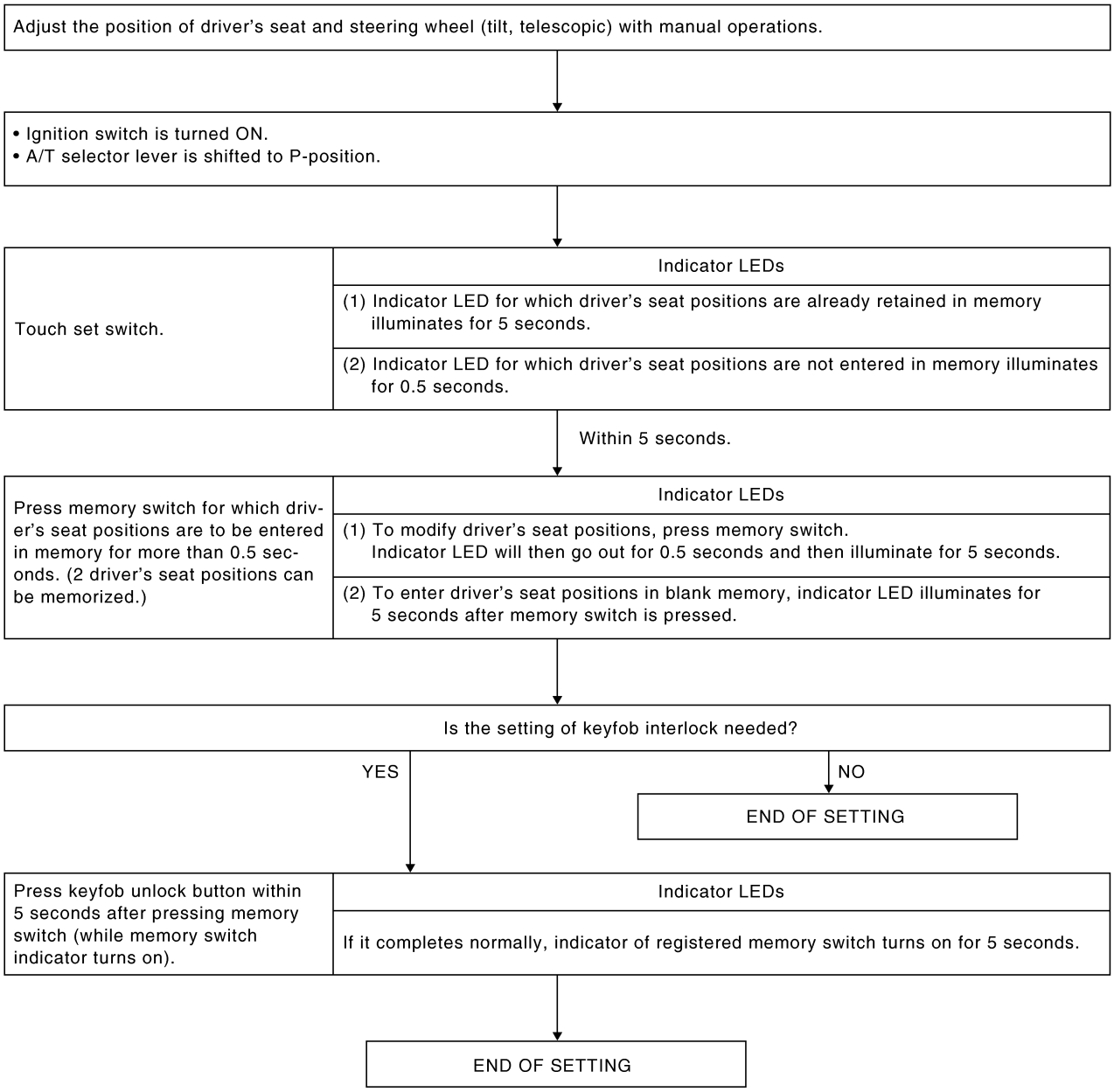
- Disconnecting the battery erases the stored memory.
- After connecting the battery, insert the key into the ignition cylinder and turn the driver door switch ON (open)→OFF (close)→ON (open), the memory becomes possible.

Auto operation temporary stop conditions.	When ignition switch turned to START position. (With A/T)
Auto operation stop conditions.	● When ignition switch turned to START position. (With M/T) ● When the vehicle speed becomes 7 km/h (4 MPH) or higher. ● When the setting switch, memory switch 1, or 2 are pressed. ● When A/T selector lever is in any position other than P. (With A/T) ● When the parking brake switch is in the released (With M/T) ● When power seat switch turned ON. ● When ADP steering switch turned ON (telescopic operation or tilt operation). ● When the tilt and telescopic sensor malfunction is detected. ● When the driver's seatback fold down.

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.

MEMORY STORING AND KEYFOB INTERLOCK STORING

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



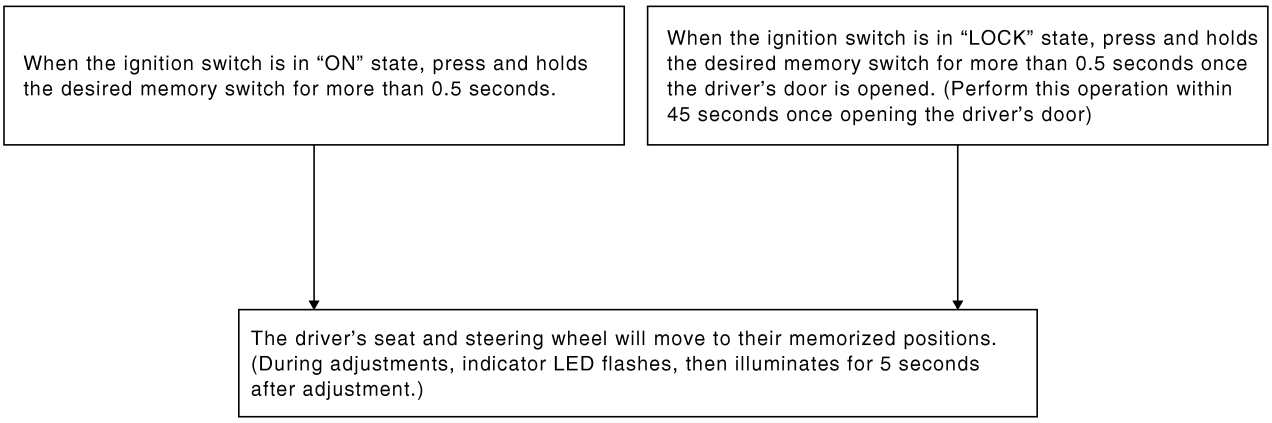
PIIB3489E

NOTE:

- If another keyfob interlock function setting is performed by same key, newly registered setting is valid.
- If key does not set previously, keyfob interlock function cannot set.

MEMORY SWITCH OPERATION

Selecting the memory



PIIB7393E

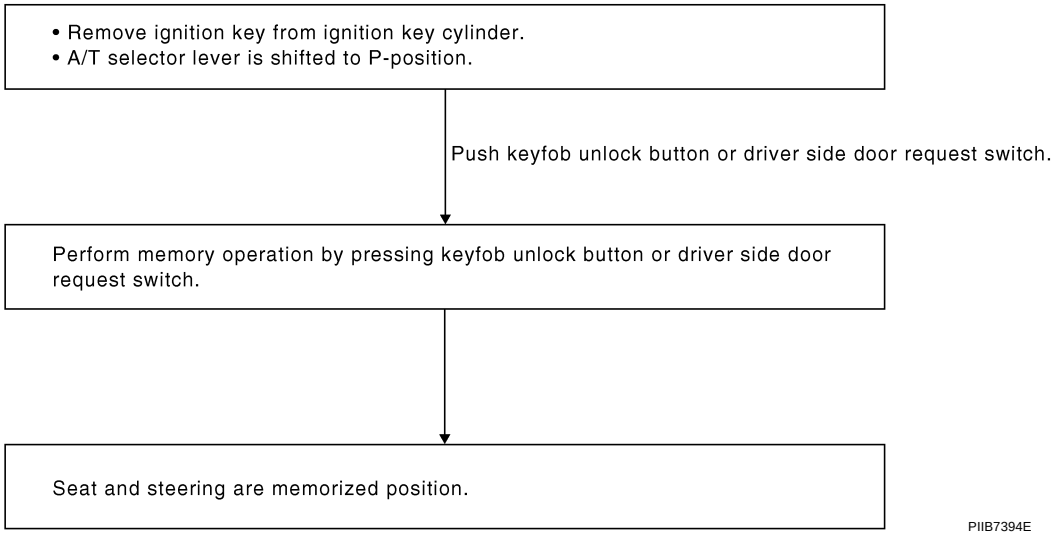
NOTE:

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

Priority	Function	Priority	Function
1	Seat sliding	4	Seat reclining
2	Steering wheel telescoping	5	Seat lifter-FR
3	Steering wheel tilt	6	Seat lifter-RR

KEYFOB INTERLOCK OPERATION

- Perform memory operation by pressing keyfob unlock button or driver side door request switch.



PIIB7394E

FAIL- SAFE MODE

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

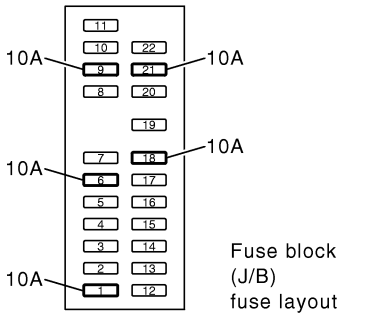
OPERATED PORTION	Seat sliding
	Seat reclining
	Seat lifting (Front)
	Seat lifting (Rear)
	Steering tilt
	Steering telescopic

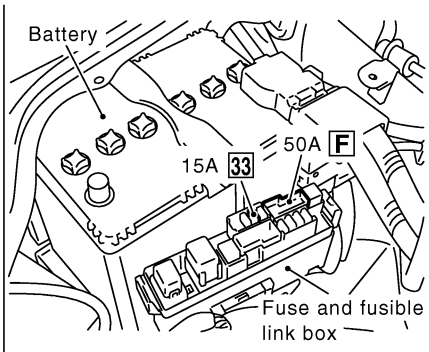
CANCEL OF FAIL-SAFE MODE

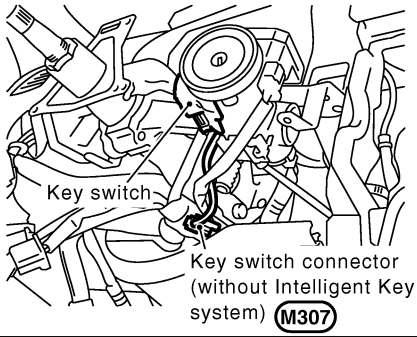
- The mode is cancelled when the selector lever is shifted to P position from any other position.

Component Parts and Harness Connector Location

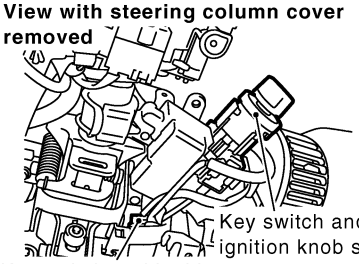
NIS001HA

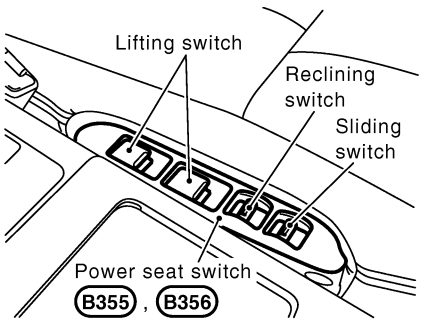


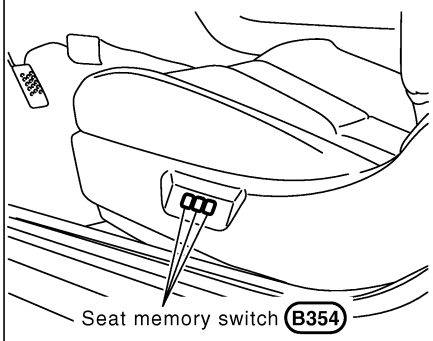


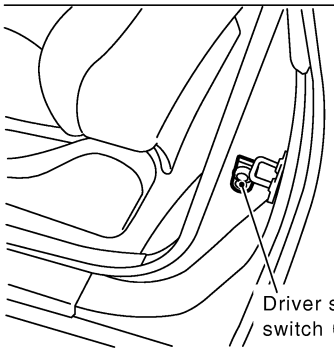


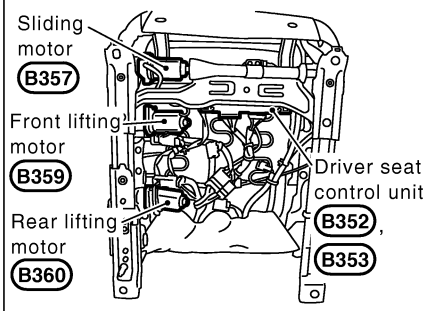
View with steering column cover removed

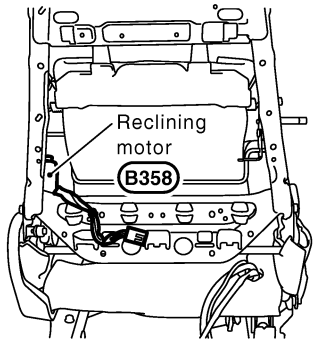




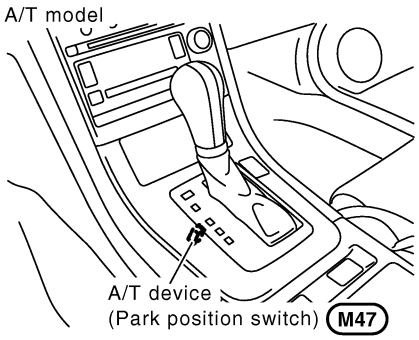




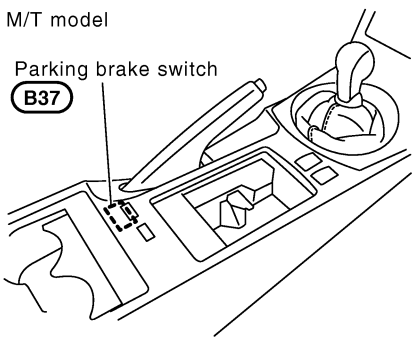




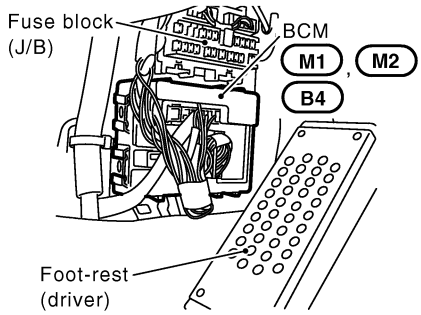
A/T model



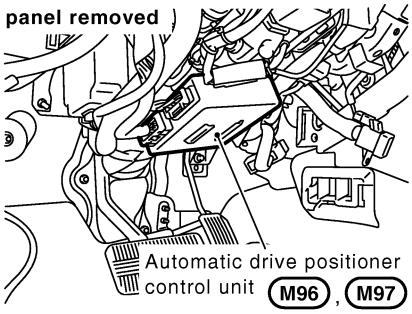
M/T model

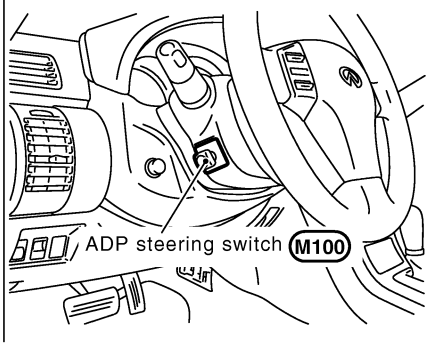


View with dash side LH removed

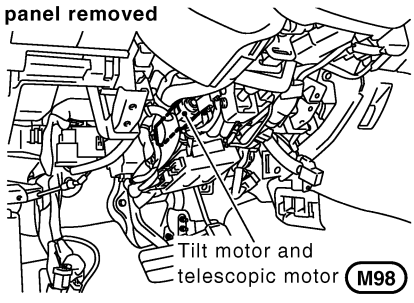


View with instrument driver lower panel removed

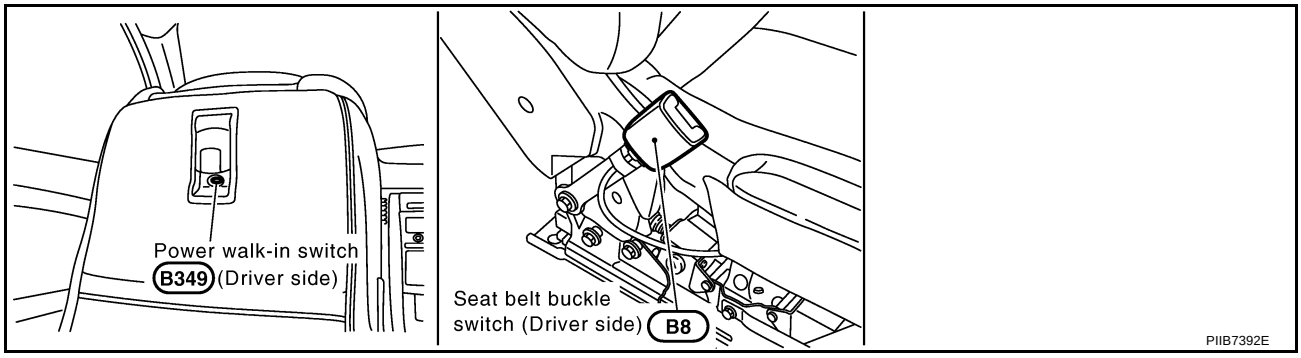




View with instrument driver lower panel removed



PIIB7391E



CAN Communication System Description

NIS001HB

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

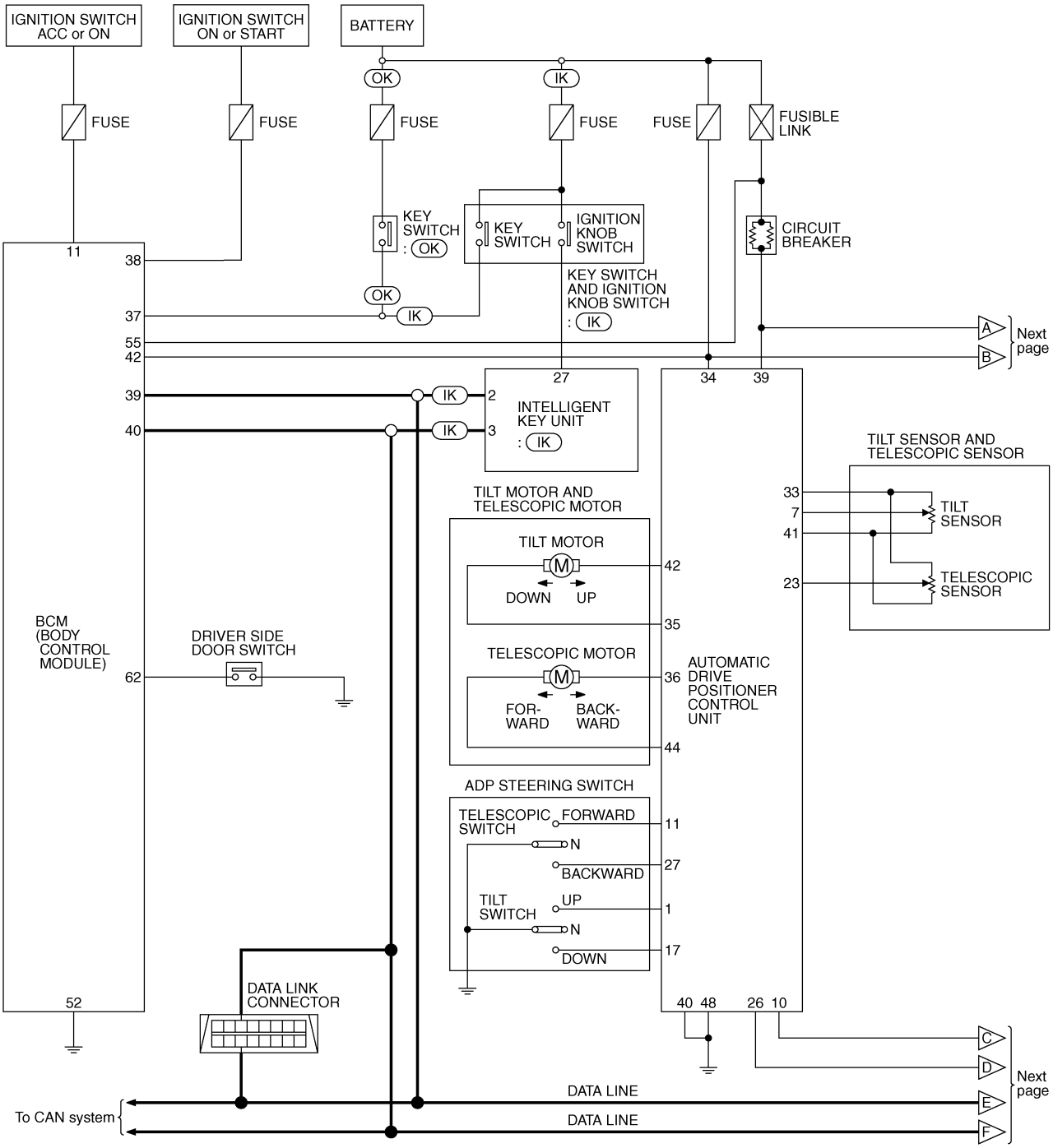
CAN Communication Unit

NIS001HC

Refer to LAN-47, "CAN System Specification Chart" .

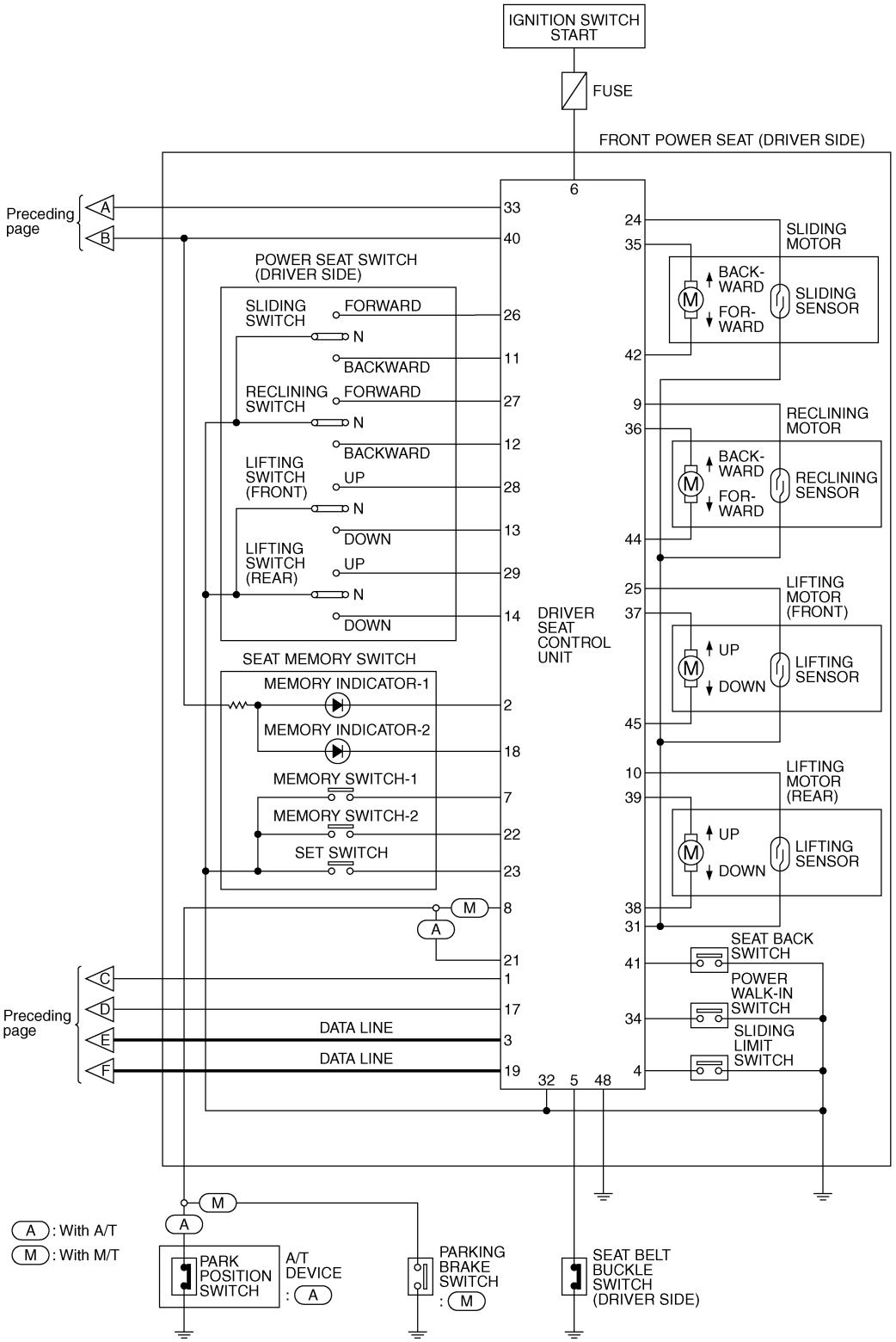
Schematic

NIS001HD



IK : With Intelligent Key
OK : Without Intelligent Key

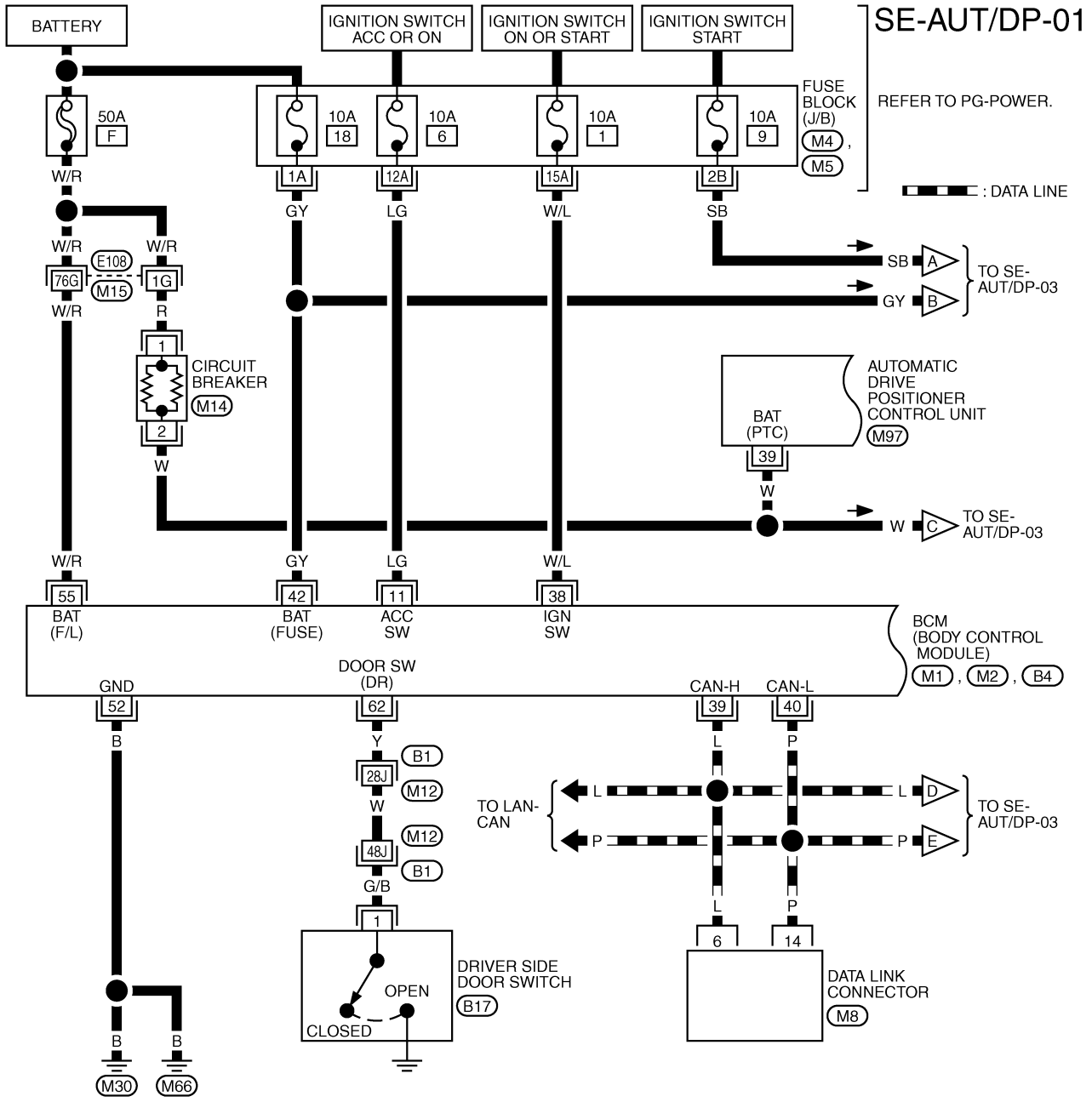
TIWM1495E

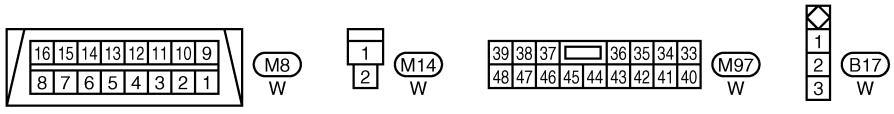

IGNITION SWITCH START
FUSE
FRONT POWER SEAT (DRIVER SIDE)
6
Preceding page
A
B
33
40
POWER SEAT SWITCH (DRIVER SIDE)
SLIDING SWITCH
FORWARD
N
BACKWARD
26
11
RECLINING SWITCH
FORWARD
N
BACKWARD
27
12
LIFTING SWITCH (FRONT)
UP
N
DOWN
28
13
LIFTING SWITCH (REAR)
UP
N
DOWN
29
14
SEAT MEMORY SWITCH
MEMORY INDICATOR-1
MEMORY INDICATOR-2
MEMORY SWITCH-1
MEMORY SWITCH-2
SET SWITCH
2
18
7
22
23
DRIVER SEAT CONTROL UNIT
M
A
8
21
C
D
E
F
1
17
3
19
DATA LINE
DATA LINE
32 5 48
24
35
SLIDING MOTOR
BACK-WARD
FOR-WARD
SLIDING SENSOR
42
9
36
RECLINING MOTOR
RECLINING SENSOR
44
25
37
LIFTING MOTOR (FRONT)
UP
DOWN
LIFTING SENSOR
45
10
39
LIFTING MOTOR (REAR)
38
31
SEAT BACK SWITCH
41
POWER WALK-IN SWITCH
34
SLIDING LIMIT SWITCH
4
A : With A/T
M : With M/T
PARK POSITION SWITCH
A/T DEVICE : A
PARKING BRAKE SWITCH : M
SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

TIWM1536E

Wiring Diagram — AUT/DP —

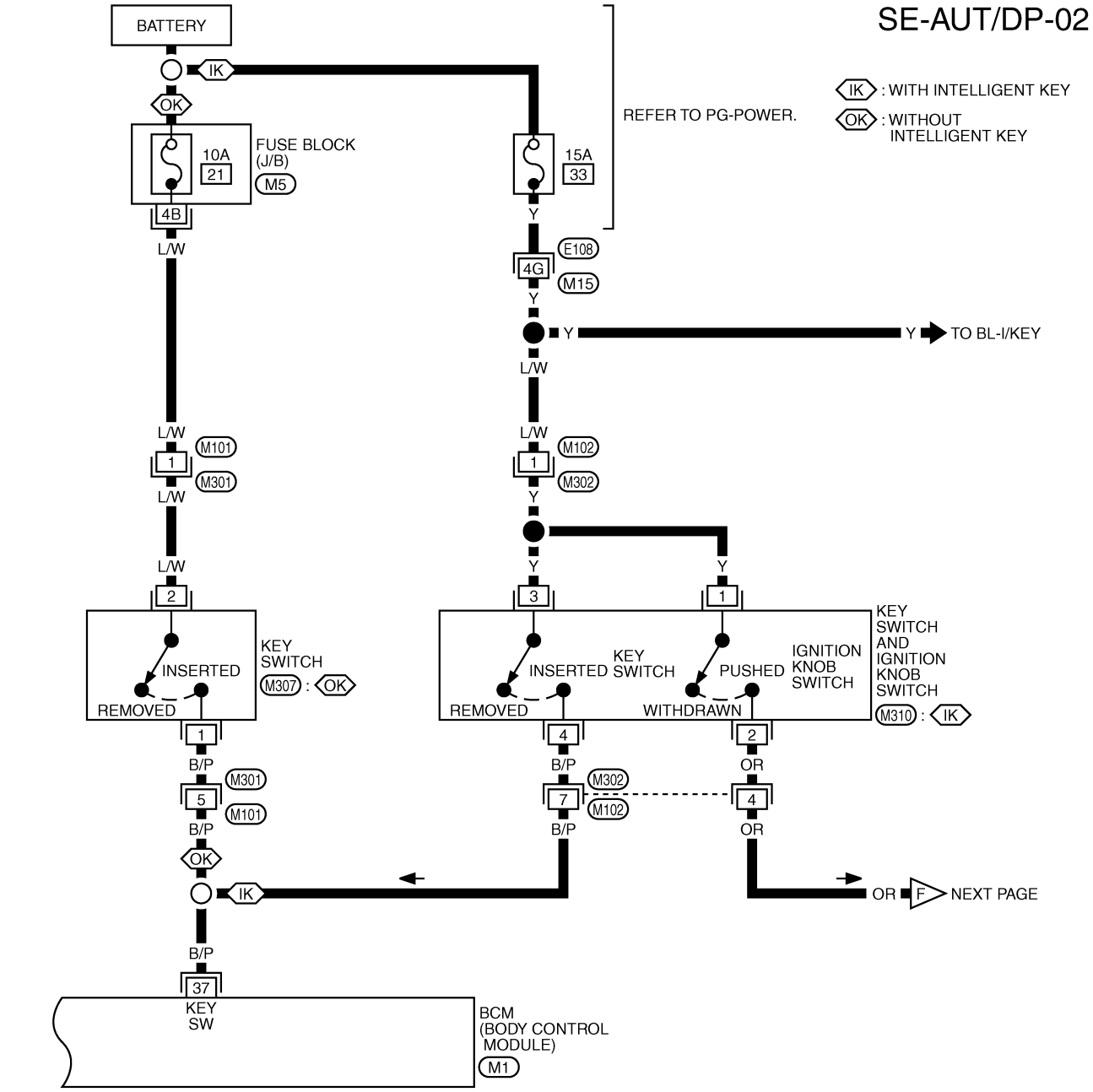
NIS001HE

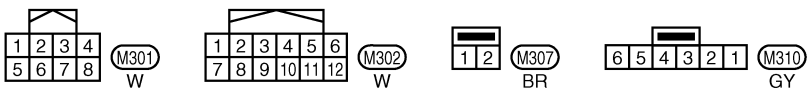




REFER TO THE FOLLOWING.
E108, B1 -SUPER MULTIPLE JUNCTION (SMJ)
M4, M5 -FUSE BLOCK-JUNCTION BOX (J/B)
M1, M2, B4 -ELECTRICAL UNITS

TIWM1496E





REFER TO THE FOLLOWING.

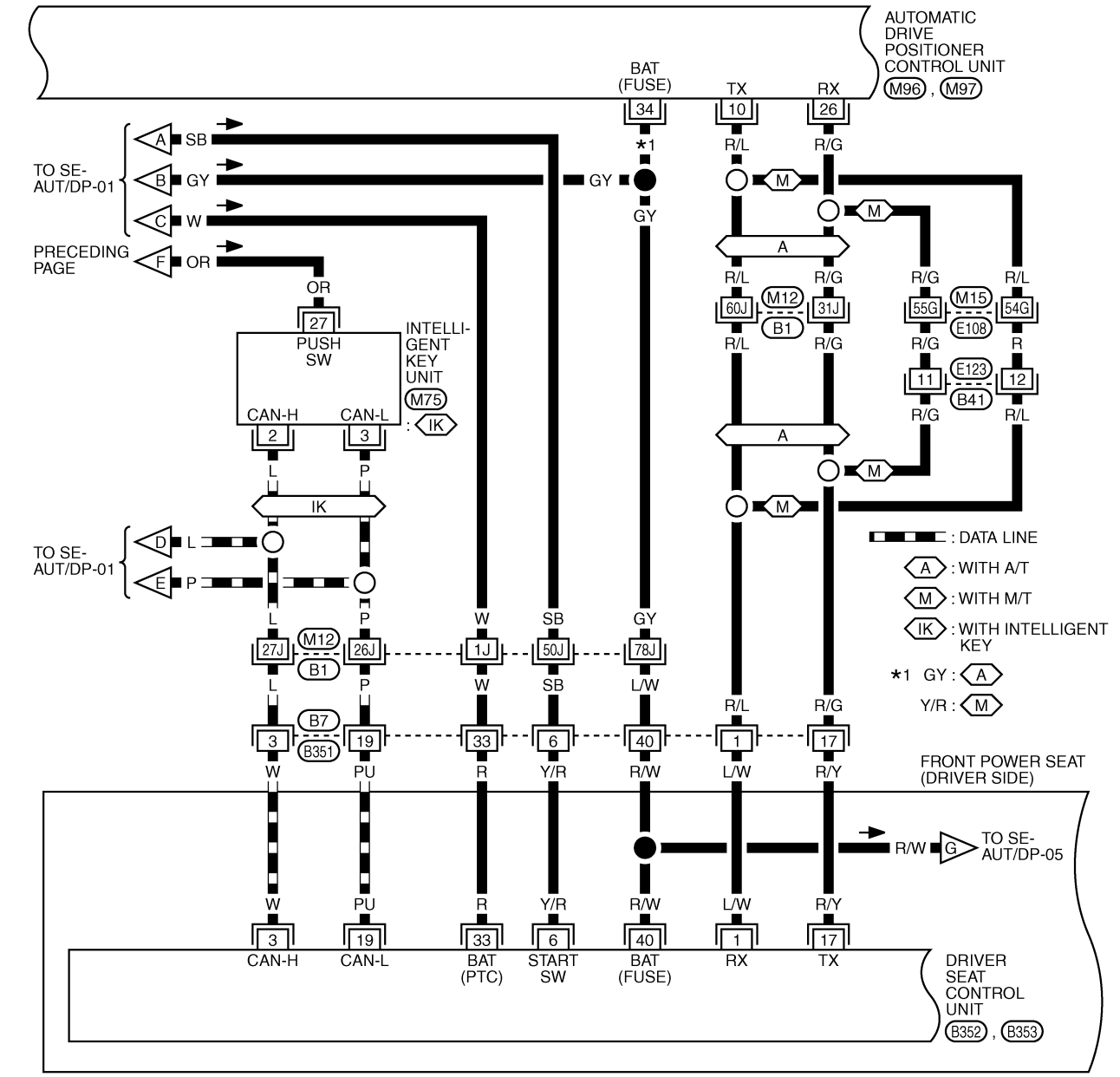
E108 -SUPER MULTIPLE JUNCTION (SMJ)

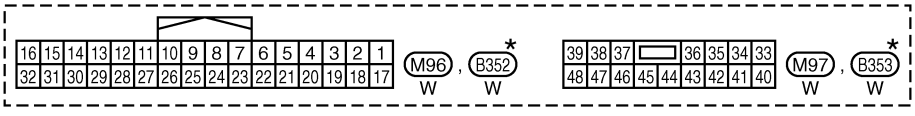
M5 -FUSE BLOCK-JUNCTION BOX (J/B)

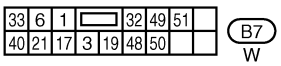
M1 -ELECTRICAL UNITS

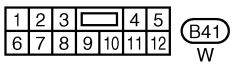
TIWM1497E

SE-AUT/DP-03







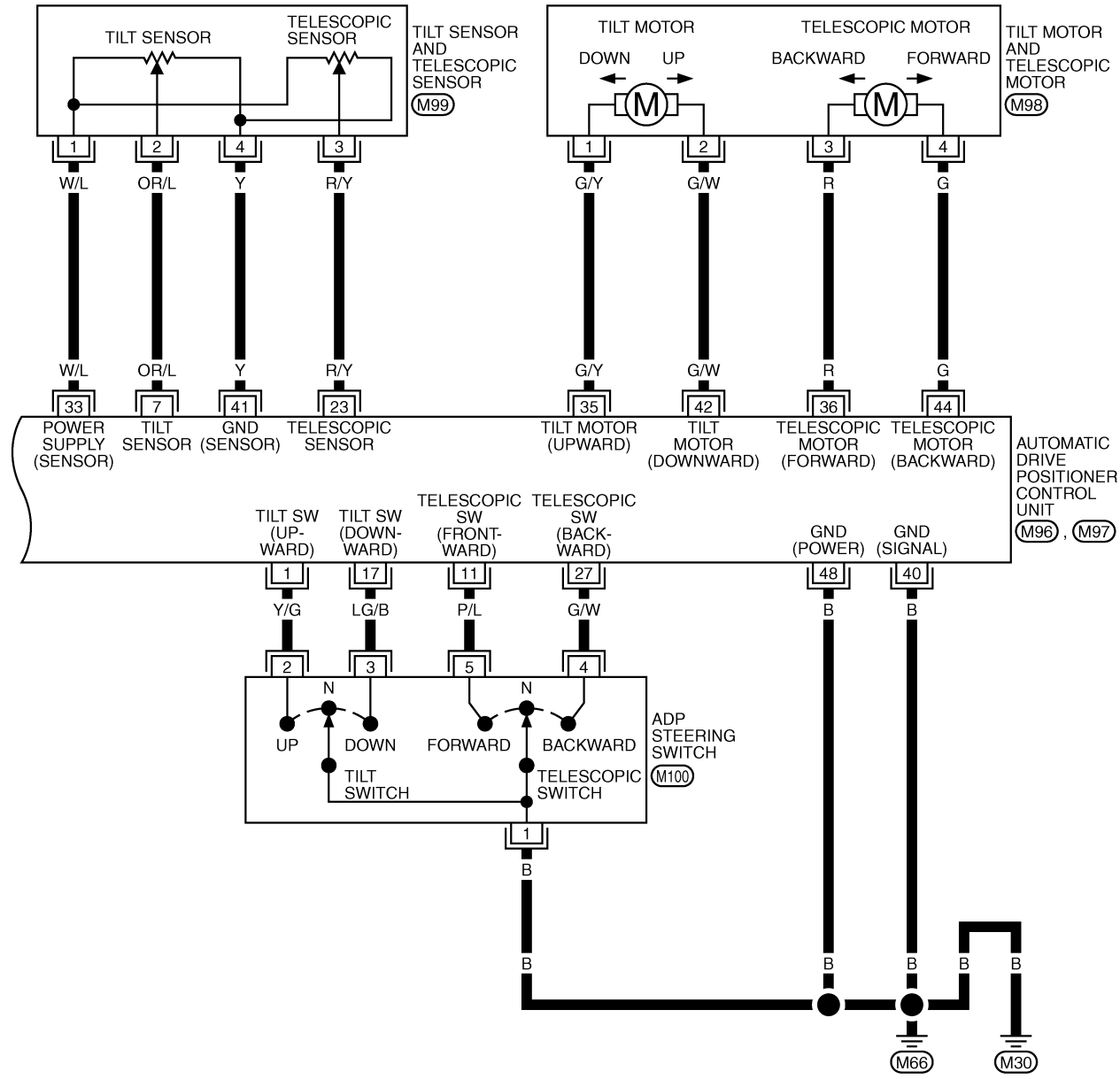


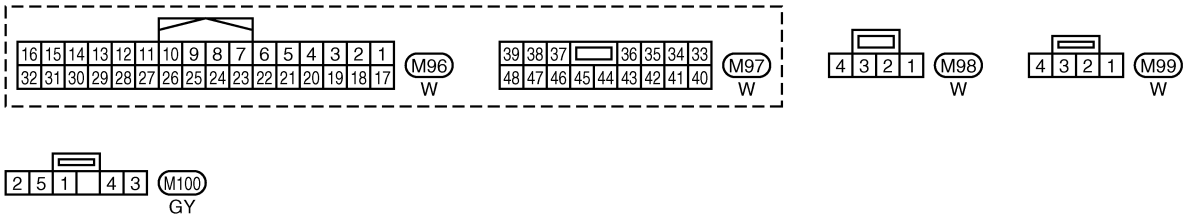
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

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

TIWM1498E

SE-AUT/DP-04

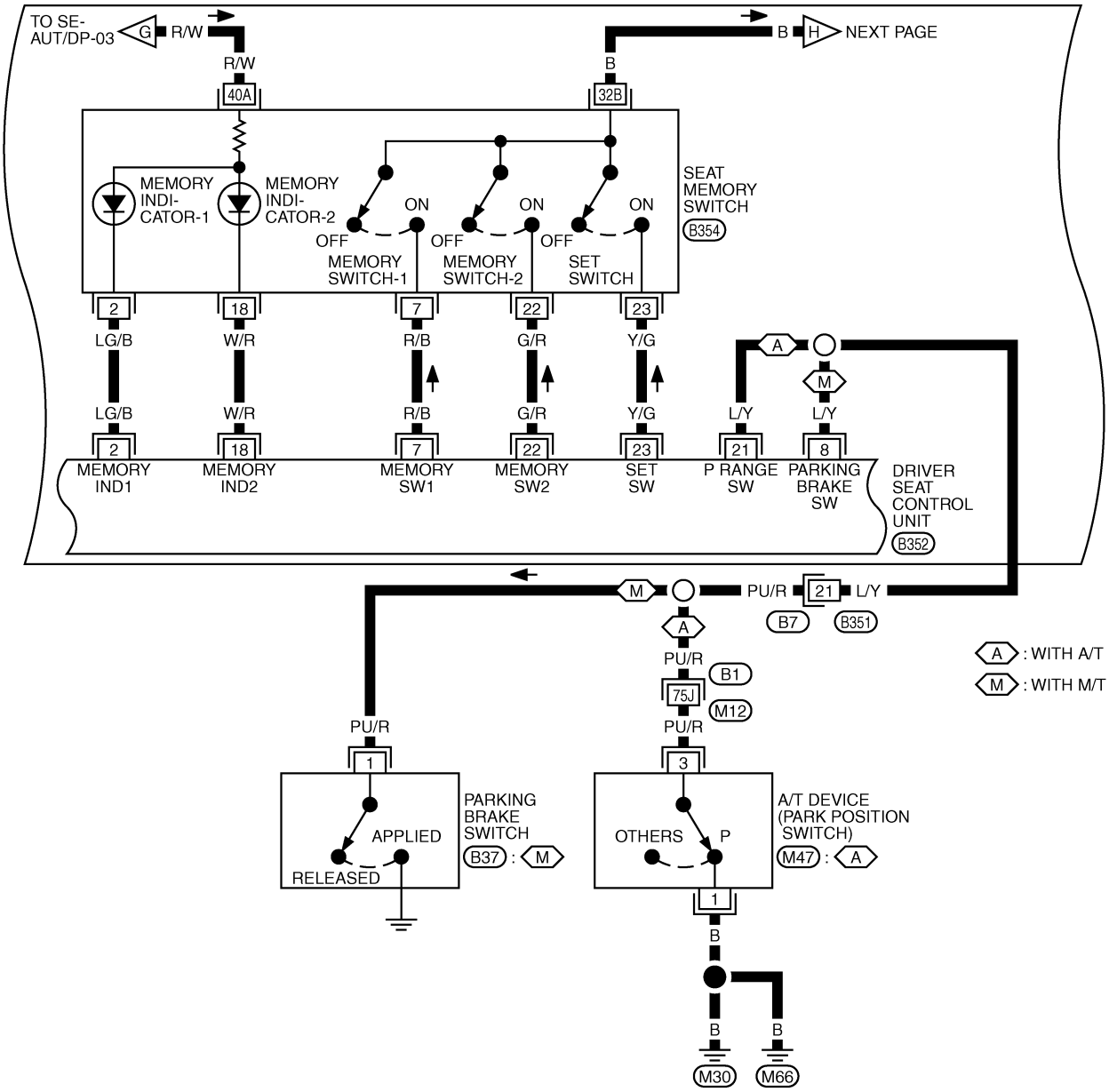


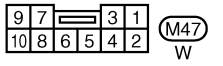


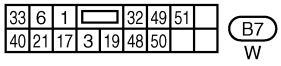
TIWM1499E

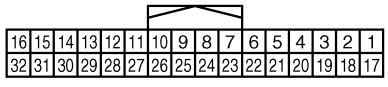
SE-AUT/DP-05

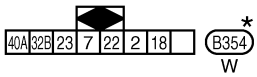
FRONT POWER SEAT (DRIVER SIDE)









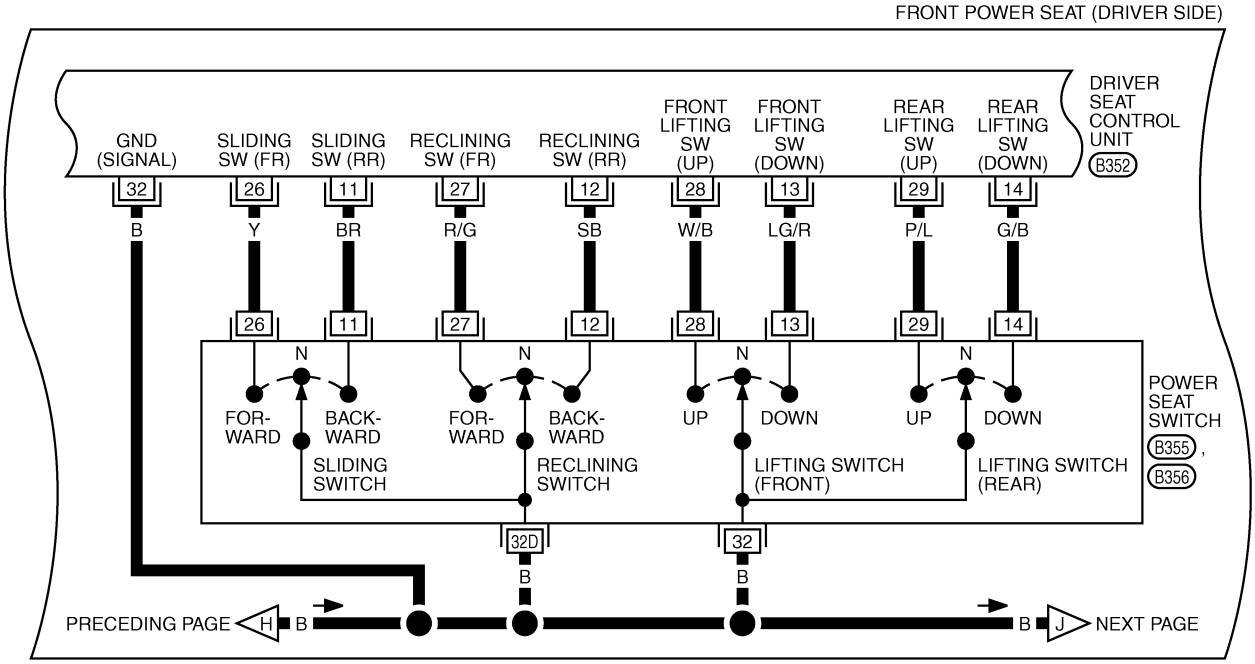


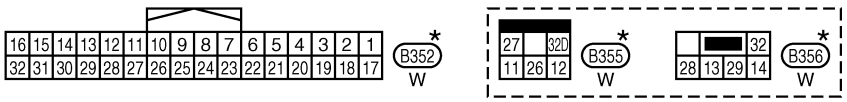
REFER TO THE FOLLOWING.

B1 -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1896E

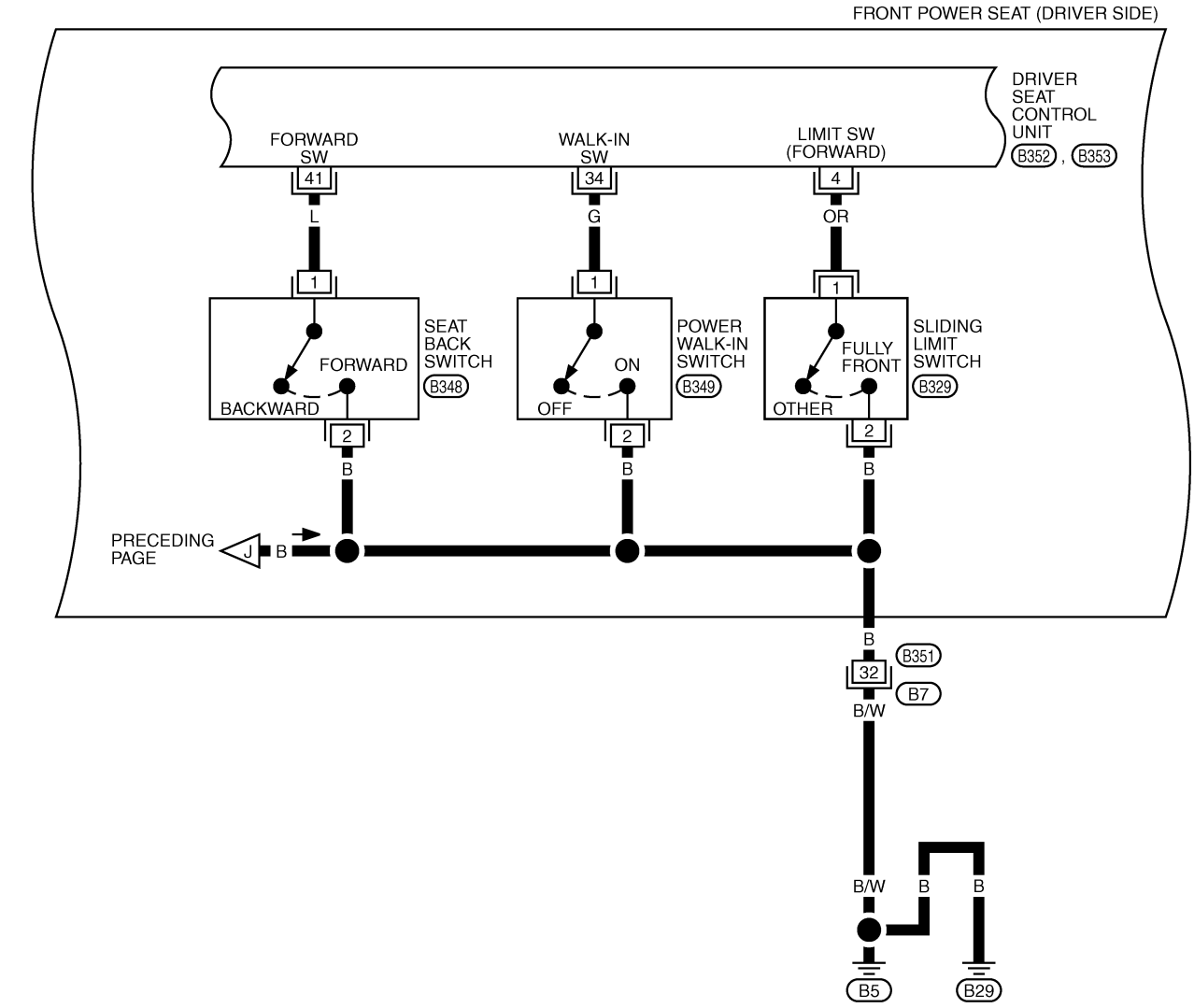


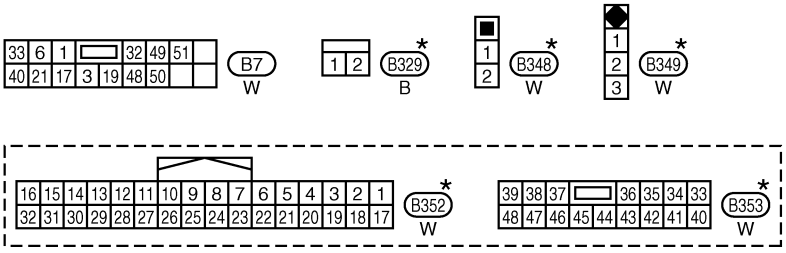


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1501E

SE-AUT/DP-07

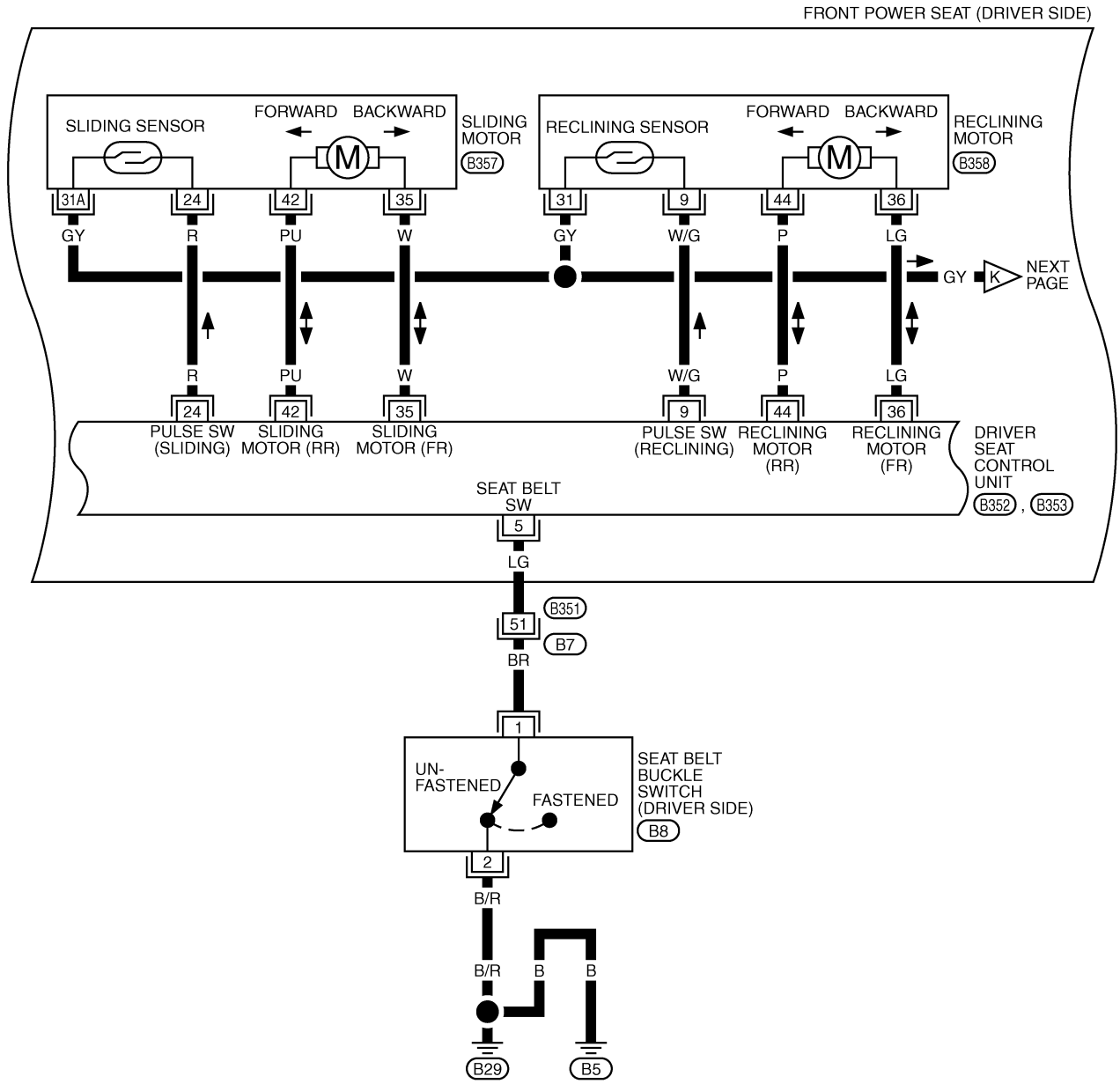


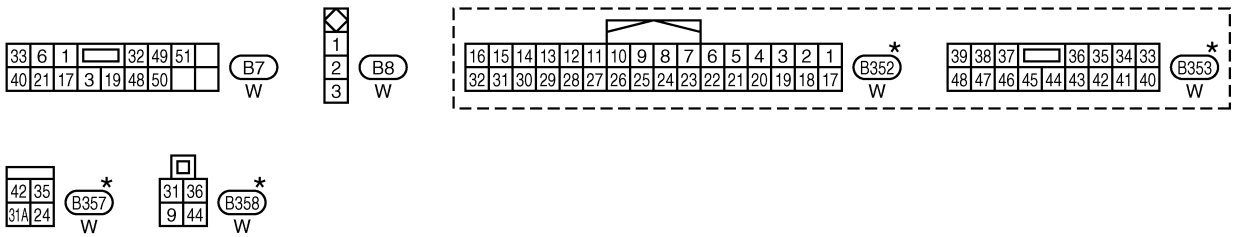


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1897E

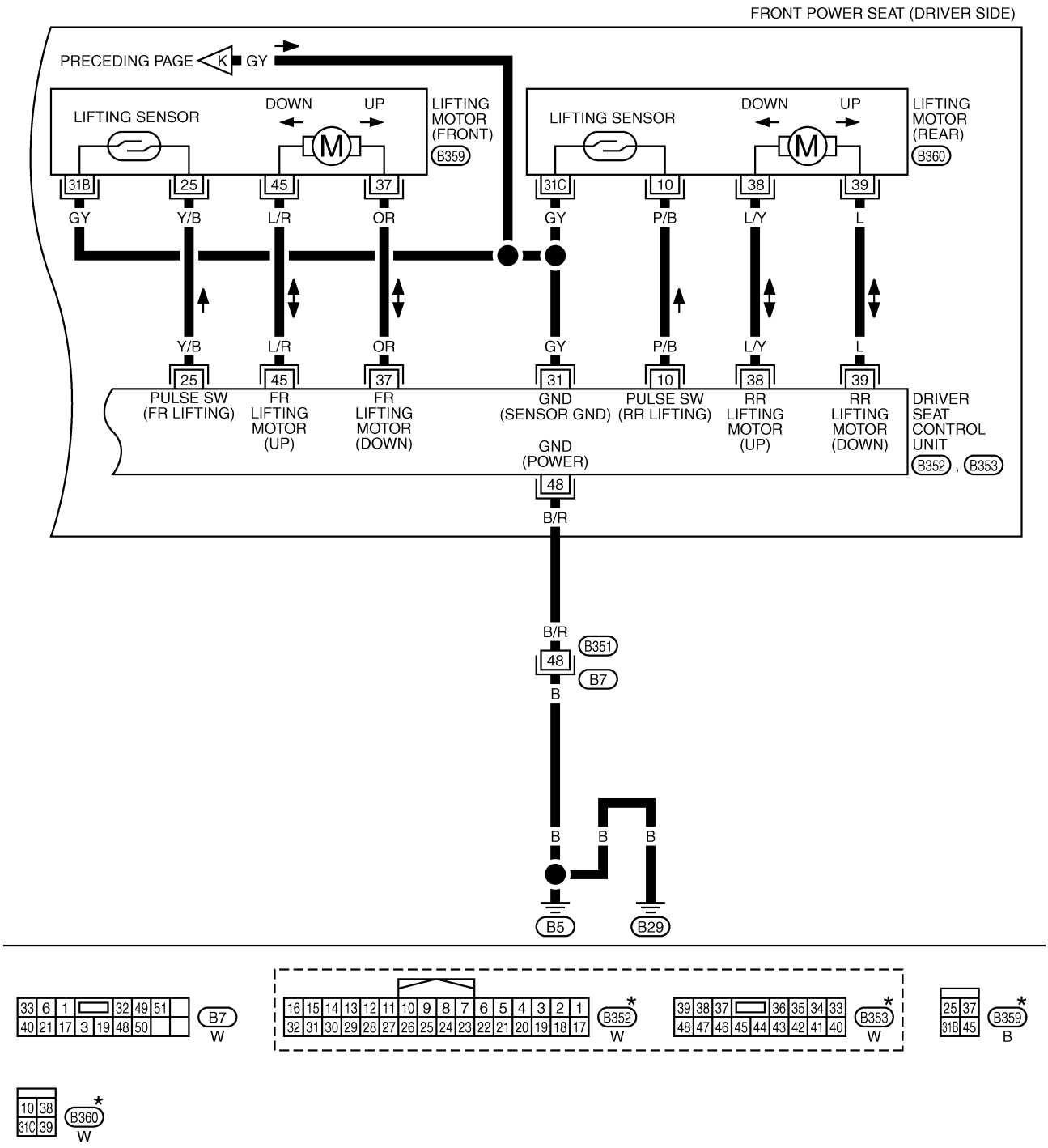
SE-AUT/DP-08





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

TIWM1538E



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

TIWM1502E

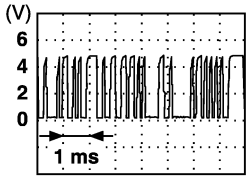
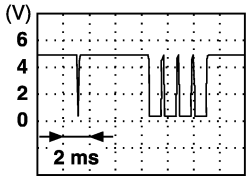
Terminals and Reference Values for BCM

NIS001HF

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

Terminals and Reference Values for Automatic Drive Positioner Control Unit

NIS001HG

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
1	Y/G	Tilt switch UPWARD signal	Input	Tilt switch turned to upward	0
				Other than above	5
7	OR/L	Tilt sensor signal	Input	Tilt switch operated (up ~ down)	2 ~ 4
				Other than above	0
10	R/L	UART LINE (TX)	Output	Memory switch 1 or 2 operated	 PIIA4813E
11	P/L	Telescopic switch FORWARD signal	Input	Telescopic switch turned to forward	0
				Other than above	5
17	LG/B	Tilt switch DOWNWARD signal	Input	Tilt switch turned to downward	0
				Other than above	5
23	R/Y	Telescopic sensor signal	Input	Telescopic switch operated (backward ~ forward)	2 ~ 4
				Other than above	0
26	R/G	UART LINE (RX)	Input	Memory switch 1 or 2 operated	 PIIA4814E
27	G/W	Telescopic switch BACKWARD signal	Input	Telescopic switch turned to backward	0
				Other than above	5

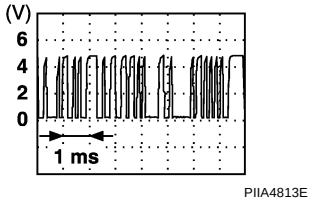
Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
33	W/L	Sensor power supply	Input	Tilt or telescopic switch operated	5
				Other than above	0
34	GY*1 Y/R*2	Power source (Fuse)	Input	—	Battery voltage
35	G/Y	Tilt motor UPWARD signal	Output	Tilt switch turned to upward	Battery voltage
				Other than above	0
36	R	Telescopic motor FORWARD signal	Output	Telescopic switch turned to forward	Battery voltage
				Other than above	0
39	W	Battery power supply	Input	—	Battery voltage
40	B	Ground (signal)	—	—	0
41	Y	Sensor ground	—	—	0
42	G/W	Tilt motor DOWNWARD signal	Output	Tilt switch turned to downward	Battery voltage
				Other than above	0
44	G	Telescopic motor BACKWARD signal	Output	Telescopic switch turned to backward	Battery voltage
				Other than above	0
48	B	Ground (power)	—	—	0

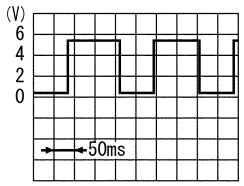
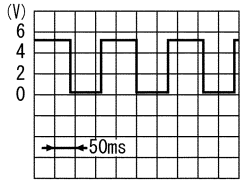
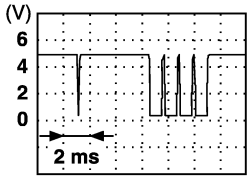
*1 : With A/T

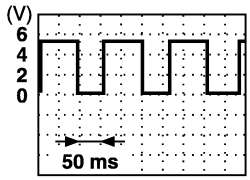
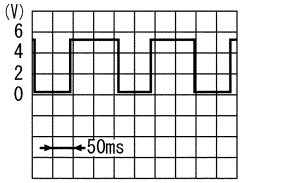
*2 : With M/T

Terminals and Reference Values for Driver Seat Control Unit

NIS001HH

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
1	L/W	UART LINE (RX)	Input	Memory switch 1 or 2 switch operated	 PIIA4813E
2	LG/B	Seat memory switch indictor 1 signal	Input	Memory switch 1: ON	1
				Memory switch 2: OFF	Battery voltage
3	W	CAN-H	Input/Output	—	—
4	OR	Sliding limit switch forward signal	Input	Seat slide front most part	0
				Other than above	5
5	LG	Seat belt buckle switch signal	Input	Seat belt is fastened	5
				Other than above	0
6	Y/R	Ignition switch (START)	Input	Ignition switch (START position)	Battery voltage
7	R/B	Seat memory switch 1 signal	Input	Memory switch 1: ON	0
				Memory switch 1: OFF	5
8*1	L/Y	Parking brake switch signal	Input	When applied the parking brake	0
				Other than above	5

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
9	W/G	Reclining sensor signal	Input	ON (reclining motor operation)	 SIIA0692J
				Other than above	0 or 5
10	P/B	Rear lifting sensor signal	Input	ON (rear lifting motor operation)	 SIIA0693J
				Other than above	0 or 5
11	BR	Seat sliding switch BACKWARD signal	Input	When seat sliding switch BACKWARD operation	0
				Other than above	Battery voltage
12	SB	Seat reclining switch BACKWARD signal	Input	When seat reclining switch BACKWARD operation	0
				Other than above	Battery voltage
13	LG/R	Front lifting switch DOWN signal	Input	When front lifting switch DOWN operation	0
				Other than above	Battery voltage
14	G/B	Rear lifting switch DOWN signal	Input	When rear lifting switch DOWN operation	0
				Other than above	Battery voltage
17	R/Y	UART LINE (TX)	Output	Memory switch 1 or 2 operated	 PIIA4814E
18	W/R	Seat memory switch indictor 2 signal	Input	Memory switch 2: ON	1
				Memory switch 2: OFF	Battery voltage
19	PU	CAN-L	Input/Output	—	—
21*2	L/Y	P range switch signal	Input	Shift lever P position	0
				Other than above	5
22	G/R	Power seat memory switch 2 signal	Input	Memory switch 2: ON	0
				Memory switch 2: OFF	5
23	Y/G	Set switch signal	Input	Set witch: ON	0
				Set witch: OFF	5

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
24	R	Seat sliding sensor signal	Input	ON (sliding motor operation)	 PIIA3277E
				Other than above	0 or 5
25	Y/B	Front lifting sensor signal	Input	ON (front lifting motor operation)	 SIIA0691J
				Other than above	0 or 5
26	Y	Seat sliding switch FORWARD signal	Input	When seat sliding switch FORWARD operation	0
				Other than above	Battery voltage
27	R/G	Seat reclining switch FORWARD signal	Input	When seat reclining switch FORWARD operation	0
				Other than above	Battery voltage
28	W/B	Front lifting switch UP signal	Input	When front lifting switch UP operation	0
				Other than above	Battery voltage
29	P/L	Rear lifting switch UP signal	Input	When rear lifting switch UP operation	0
				Other than above	Battery voltage
31	GY	Sensor ground	—	—	0
32	B	Ground (signal)	—	—	0
33	R	Power source	Input	—	Battery voltage
34	G	Power walk-in switch signal	Input	Power walk-in switch ON	0
				Other than above	5
35	W	Sliding motor FORWARD signal	Output	When sliding motor FORWARD operation	Battery voltage
				Other than above	0
36	LG	Reclining motor FORWARD signal	Output	When reclining motor FORWARD operation	Battery voltage
				Other than above	0
37	OR	Front lifting motor DOWN signal	Output	When front lifting motor DOWN operation	Battery voltage
				Other than above	0
38	L/Y	Rear lifting motor UP signal	Output	When rear lifting motor UP operation	Battery voltage
				Other than above	0
39	L	Rear lifting motor DOWN signal	Output	When rear lifting motor DOWN operation	Battery voltage
				Other than above	0
40	R/W	Power source (Fuse)	Input	—	Battery voltage

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
41	L	Seatback switch signal	Input	Seatback fold down	0
				Other than above	5
42	PU	Sliding motor BACKWARD signal	Output	When sliding motor BACKWARD operation	Battery voltage
				Other than above	0
44	P	Reclining motor BACKWARD signal	Output	When reclining motor BACKWARD operation	Battery voltage
				Other than above	0
45	L/R	Front lifting motor UP signal	Output	When front lifting motor UP operation	Battery voltage
				Other than above	0
48	B/R	Ground (power)	—	—	0

*1 : With M/T

*2 : With A/T

Work Flow

NIS001HI

1. Check the symptom and customer's requests.
2. Understand the system description. Refer to SE-13, "System Description" .
3. Perform the preliminary check, refer to SE-35, "Preliminary Check" .
4. Perform the CAN communication inspection using CONSULT-II, refer to SE-37, "CONSULT-II Function (AUTO DRIVE POS.)" .
5. Perform the self-diagnosis. Refer to SE-40, "Check Can Communication System" .
6. Repair or replace depending on the self-diagnostic results.
7. Based on the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to SE-40, "Symptom Chart" .
8. Does the automatic drive positioner system operate normally?
   If it is normal, GO TO 8.
   If it is not normal, GO TO 3.
9. INSPECTION END

Preliminary Check

NIS001HJ

CHECK POWER SUPPLY AND GROUND

1. CHECK FUSE

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

- Check 50A fusible link (letter **F** , located in the fuse and fusible link box.)
- Check 10A fuse [No.18, located in the fuse block (J/B)]
- Check 10A fuse [No.1, located in the fuse block (J/B)]
- Check 10A fuse [No.6, located in the fuse block (J/B)]

NOTE:
Refer to SE-17, "Component Parts and Harness Connector Location" .

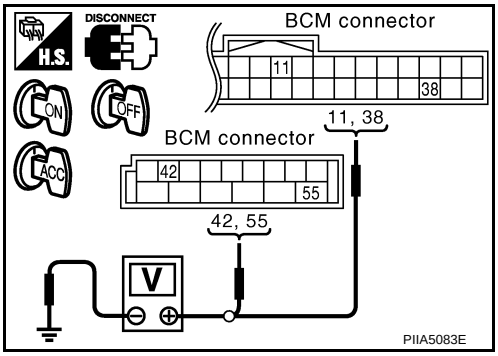
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to SE-17, "Component Parts and Harness Connector Location" .

2. CHECK POWER SUPPLY CIRCUIT (BCM)

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

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



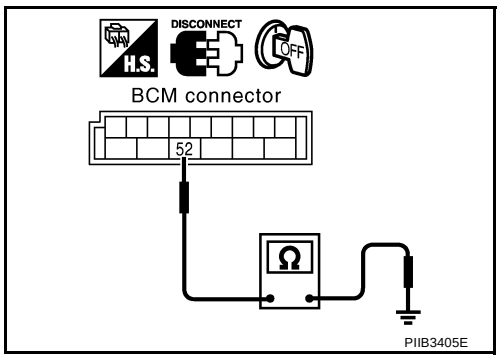
OK or NG

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

3. CHECK GROUND CIRCUIT (BCM)

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

52 (B) – Ground : Continuity should exist.



OK or NG

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

4. CHECK FUSE

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

NOTE:
Refer to SE-17, "Component Parts and Harness Connector Location" .

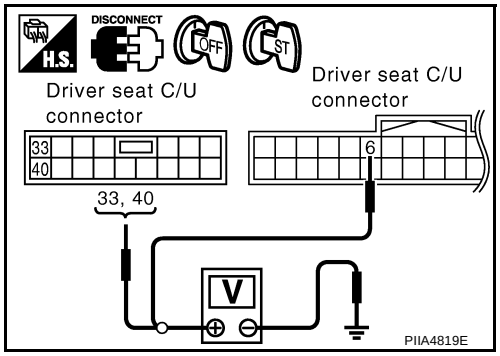
OK or NG

OK >> GO TO 5.
NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to SE-17, "Component Parts and Harness Connector Location" .

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

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

Connector	Terminals (Wire color)		Ignition switch	Voltage (V) (Approx.)
	(+)	(–)		
B352	6 (Y/R)	Ground	START	Battery voltage
B353	33 (R)		OFF	
	40 (R/W)			



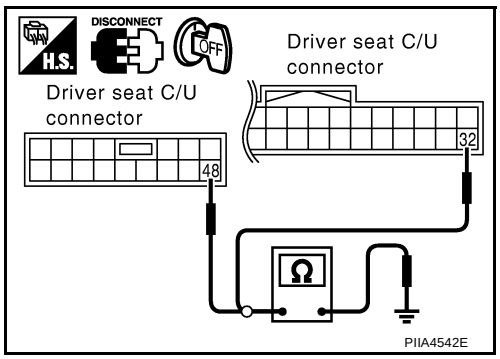
OK or NG

OK >> GO TO 6.
NG >> Repair or replace harness between driver seat control unit and fuse block (J/B).

6. CHECK GROUND CIRCUIT (DRIVER SEAT CONTROL UNIT)

1. Turn ignition switch OFF.
2. Check continuity between the driver seat control unit connector B352, B353 terminal 32, 48 and ground.

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



OK or NG

OK >> GO TO 7.
NG >> Repair or replace harness between driver seat control unit and ground.

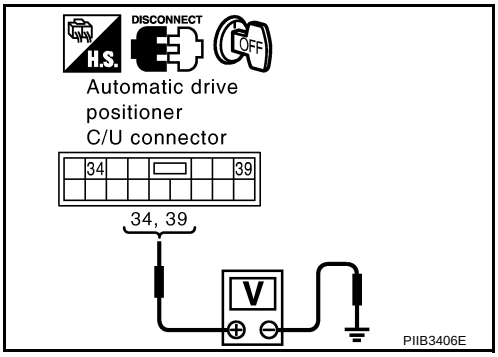
7. CHECK POWER SUPPLY CIRCUIT (AUTOMATIC DRIVE POSITIONER CONTROL UNIT)

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

Connector	Terminals (Wire color)		Ignition switch	Voltage (V) (Approx.)
	(+)	(–)		
M97	34 (GY*1 or Y/R*2)	Ground	OFF	Battery voltage
	39 (W)			

*1 : With A/T

*2 : With M/T



OK or NG

OK >> GO TO 8.

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

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

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

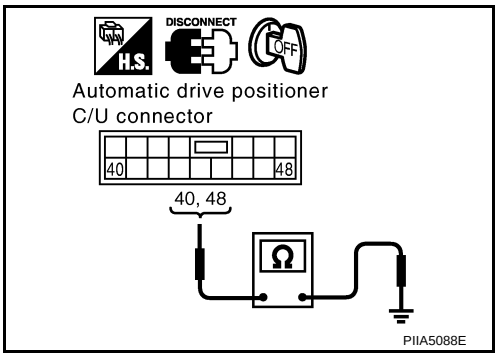
40 (B) – Ground : Continuity should exist.

48 (B) – Ground : Continuity should exist.

OK or NG

OK >> Driver seat control unit circuit is OK.

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



CONSULT-II Function (AUTO DRIVE POS.)

NIS001HK

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

CONSULT-II diagnosis items	Inspection item, self-diagnosis mode	Content	Reference page
AUTO DRIVE POSITIONER	SELF–DIG RESULTS	Check the self-diagnosis results.	SE-38
	DATA MONITOR	Displays the input data to driver seat control unit and automatic driving positioned control unit on real-time basis.	SE-38
	CAN DIAG SUPPORT MONITOR	The results of transmit / receive diagnosis of CAN communication can be read	LAN-46
	ACTIVE TEST*	Gives a drive signal to a load to check the operation.	SE-39
	ECU PART NUMBER	Displays driver seat control unit part No.	—

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

CONSULT-II START PROCEDURE

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

SELF-DIAGNOSIS RESULTS

Display Item List

DTC	Self-diagnosis item (CONSULT-II indication)	DTC detection condition	Reference page
U1000	CAN COMM CIRCUIT	When driver seat control unit is not transmitting or receiving CAN communication signal for 2 seconds or more.	SE-40
B2112	SEAT SLIDE	When any manual and automatic operations are not performed, if any motor operations of seat slide is detected for 0.1 second or more, status is judged “Output error”.	SE-41 SE-50
B2113	SEAT RECLINING	When any manual and automatic operations are not performed, if any motor operations of seat reclining is detected for 0.1 second or more, status is judged “Output error”.	SE-43 SE-51
B2114	SEAT LIFTER FR	When any manual and automatic operations are not performed, if any motor operations of seat lifting FR is detected for 0.1 second or more, status is judged “Output error”.	SE-44 SE-52
B2115	SEAT LIFTER RR	When any manual and automatic operations are not performed, if any motor operations of seat lifting RR is detected for 0.1 second or more, status is judged “Output error”.	SE-46 SE-53
B2116	TILT OUTPUT	When any manual and automatic operations are not performed, if any motor operations of steering tilt is detected for 0.1 second or more, status is judged “Output error”.	SE-48
B2118	TILT SENSOR	When tilt sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-55
B2119	TELESCO SENSOR	When telescopic sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-54
B2126	DETENT SW	With the A/T selector lever in P position (Detente switch OFF), if the vehicle speed of 7 km/h (4 MPH) or higher was input the detente switch input system is judged malfunctioning.	SE-69
B2127	PARKING BRAKE	With parking brake use (Parking brake switch ON), if a vehicle speed of 7km/h (4MPH) or higher is input, the parking brake switch input system is judged mal-functioning.	SE-71
B2128	UART COMM	Malfunction is detected in UART communication.	SE-78

NOTE:

- All items count error detection frequency occurred after erase history to “1-127”.
  - If error was detected in the past, error detection frequency from memory erase to the present is displayed on “TIME”.
  - If error has never been detected, nothing is displayed on “TIME”.
  - Can clear the detected memory.
    Normal: Clear memory in normal condition, history is erased and nothing is displayed on “TIME”.
    Error: Clear memory in error condition, error is detected again and “1” is displayed on “TIME”.

DATA MONITOR

Selection from Menu

Monitor item [OPERATION or UNIT]		Contents
SET SW	“ON/OFF”	ON/OFF status judged from the setting switch signal is displayed.
MEMORY SW1	“ON/OFF”	ON/OFF status judged from the seat memory switch 1 signal is displayed.
MEMORY SW2	“ON/OFF”	ON/OFF status judged from the seat memory switch 2 signal is displayed.
SLIDE SW–FR	“ON/OFF”	ON/OFF status judged from the sliding switch (FR) signal is displayed.
SLIDE SW–RR	“ON/OFF”	ON/OFF status judged from the sliding switch (RR) signal is displayed.
RECLN SW–FR	“ON/OFF”	ON/OFF status judged from the reclining switch (FR) signal is displayed.
RECLN SW–RR	“ON/OFF”	ON/OFF status judged from the reclining switch (RR) signal is displayed.
LIFT FR SW–UP	“ON/OFF”	ON/OFF status judged from the FR lifter switch (UP) signal is displayed.
LIFT FR SW–DN	“ON/OFF”	ON/OFF status judged from the FR lifter switch (DOWN) signal is displayed.

Monitor item [OPERATION or UNIT]		Contents
LIFT RR SW–UP	“ON/OFF”	ON/OFF status judged from the RR lifter switch (UP) signal is displayed.
LIFT RR SW–DN	“ON/OFF”	ON/OFF status judged from the RR lifter switch (DOWN) signal is displayed.
TILT SW-UP	“ON/OFF”	ON/OFF status judged from the tilt switch (UP) signal is displayed.
TILT SW-DOWN	“ON/OFF”	ON/OFF status judged from the tilt switch (DOWN) signal is displayed.
TELESCO SW-FR	“ON/OFF”	ON/OFF status judged from the telescoping switch (FR) signal is displayed.
TELESCO SW-RR	“ON/OFF”	ON/OFF status judged from the telescoping switch (RR) signal is displayed.
FORWARD SW	“ON/OFF”	ON/OFF status judged from the seatback switch signal is displayed.
WALK-IN SW	“ON/OFF”	ON/OFF status judged from the power walk-in switch signal is displayed.
SEAT BELT SW	“ON/OFF”	ON/OFF status judged from the seat belt switch signal is displayed.
FWD LIMIT SW	“ON/OFF”	ON/OFF status judged from the sliding limit switch signal is displayed.
P POSI SW	“ON/OFF”	The selector lever position “OFF (P position) / ON (other than P position)” judged from the park position switch signal is displayed.
STARTER SW	“ON/OFF”	Ignition key switch ON (START, ON) /OFF (ignition switch IGN, ACC, or OFF) status judged from the ignition switch signal is displayed.
SLIDE PULSE	—	Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN RULSE	—	Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TILT SEN	“V”	The tilt position (voltage) judged from the tilt sensor signal is displayed.
TELESCO SEN	“V”	The telescoping position (voltage) judged from the telescoping sensor signal is displayed.
PARK BRAKE SW	“ON/OFF”	“ON/OFF” status from the parking brake switch signal is displayed.

ACTIVE TEST

CAUTION:

During vehicle driving, do not perform active test.

NOTE:

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

Display Item List

Test item	Description
SEAT SLIDE	The sliding motor is activated by receiving the drive signal.
SEAT RECLINING	The reclining motor is activated by receiving the drive signal.
SEAT LIFTER FR	The front end lifter motor is activated by receiving the drive signal.
SEAT LIFTER RR	The rear end lifter motor is activated by receiving the drive signal.
TILT MOTOR	The tilt motor is activated by receiving the drive signal.
TELESCO MOTOR	The telescopic motor is activated by receiving the drive signal.
MEMORY SW INDCTR	The memory switch indicator is lit by receiving the drive signal.

Check Can Communication System

NIS001HL

1. CHECK SELF-DIAGNOSTIC RESULT

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

With CONSULT-II

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

Displayed U1000?

Yes >> GO TO LAN-47, "CAN System Specification Chart" .
No >> Inspection END.

Symptom Chart

NIS001HM

Symptom	Diagnoses / service procedure	Reference page
A part of seat system does not operate (both automatically and manually).	1. Check sliding motor circuit	SE-41
	2. Check reclining motor circuit	SE-43
	3. Check front lifter motor circuit	SE-44
	4. Check rear lifter motor circuit	SE-46
	5. If the above systems are normal, replace the driver seat control unit.	SE-17
A part of steering tilt and telescopic does not operate (both automatically and manually).	1. Check tilt motor circuit	SE-48
	2. Check telescopic motor circuit	SE-47
	3. If the above systems are normal, replace the automatic drive positioner control unit.	SE-17
A part of seat system does not operate (only automatic operation).	1. Check sliding sensor circuit	SE-50
	2. Check reclining sensor circuit	SE-51
	3. Check front lifting sensor circuit	SE-52
	4. Check rear lifting sensor circuit	SE-53
	5. If the above systems are normal, replace the driver seat control unit.	SE-17
All the automatic operations do not operate.	1. Check P range switch circuit (With A/T)	SE-69
	2. Check parking brake switch circuit (With M/T)	SE-71
	3. Check key switch and ignition knob switch circuit (with intelligent key)	SE-72
	4. Check key switch circuit (without intelligent key)	SE-73
	5. Check door switch (driver side) circuit	SE-57
	6. Check UART communication line circuit	SE-78
	7. Check tilt sensor circuit	SE-55
	8. Check telescopic sensor circuit	SE-54
	9. If all the above systems are normal, replace the automatic drive positioner control unit or driver seat control unit or BCM.	SE-17

Symptom	Diagnoses / service procedure	Reference page
A part of seat system does not operate (only manual operation).	1. Check sliding switch circuit	SE-59
	2. Check reclining switch circuit	SE-60
	3. Check front lifting switch circuit	SE-62
	4. Check rear lifting switch circuit	SE-63
	5. If the above systems are normal, replace the driver seat control unit.	SE-17
A part of steering tilt and telescopic do not operate (only manual operation).	1. Check tilt switch	SE-67
	2. Check telescopic switch	SE-65
	3. If the above systems are normal, replace the automatic drive positioner control unit.	SE-17
Only seat memory and set switch operation does not operate.	1. Check seat memory and set switch circuit	SE-75
	2. If the above systems are normal, replace the driver seat control unit.	SE-17
Seat memory indicator lamps 1 and 2 do not illuminate.	1. Check seat memory indicator lamp circuit	SE-76
	2. If all the above systems are normal, replace the driver seat control unit.	SE-17
Only steering system does not operated	Check tilt sensor and telescopic sensor power supply and ground circuit	SE-56
Only seat sliding and reclining operation does not operation	Check sliding and reclining switch ground circuit	SE-64
Only seat lifting (front and rear) operation does not operation	Check lifting switch (front and rear) ground circuit	SE-65
Power walk-in system does not operated, but power seat can be operated.	1. Check sliding limit switch signal	SE-79
	2. Check seatback switch signal	SE-80
	3. Check power walk-in switch signal	SE-81
	4. Check seat belt buckle switch signal	SE-82
	5. If all the above systems are normal, replace the driver seat control unit.	SE-17

Check Sliding Motor Circuit

NIS001HN

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

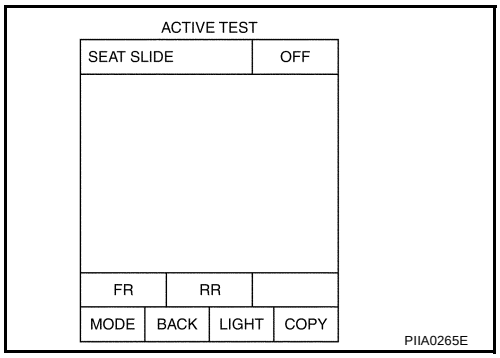
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “SEAT SLIDE” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

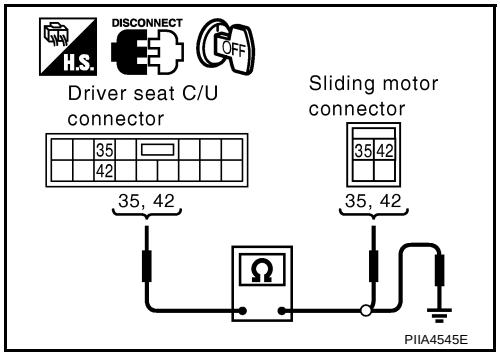
3. CHECK SLIDING MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and sliding motor connector.
3. Check continuity between driver seat control unit connector B353 terminals 35, 42 and sliding motor connector B357 terminals 35, 42.

   35 (W) – 35 (W) : Continuity should exist.
   42 (PU) – 42 (PU) : Continuity should exist.

4. Check continuity between driver seat control unit connector B353 terminals 35, 42 and ground.

   35 (W) – Ground : Continuity should not exist.
   42 (PU) – Ground : Continuity should not exist.



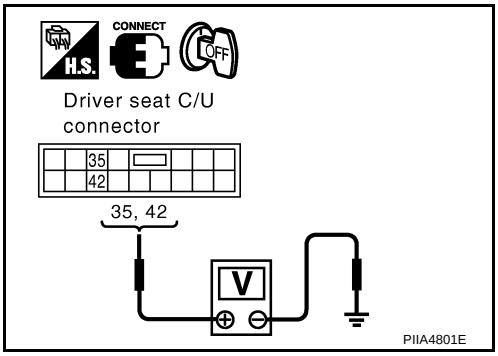
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Sliding switch condition	Voltage (V) (Approx.)
B353	35 (W)	Ground	FORWARD	Battery voltage
			Other than above	0
	42 (PU)		BACKWARD	Battery voltage
			Other than above	0



OK or NG

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

Check Reclining Motor Circuit

NIS001HO

1. CHECK SEAT RECLINING MECHANISM

Check the following.

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

OK or NG

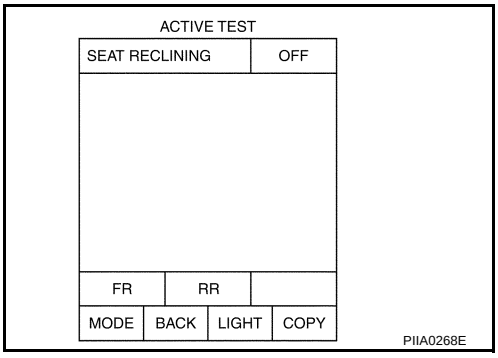
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “SEAT RECLINING” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

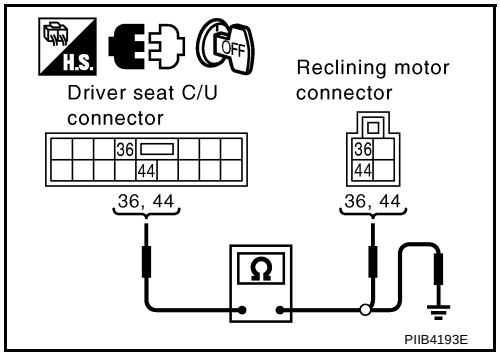
3. CHECK RECLINING MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and reclining motor connector.
3. Check continuity between driver seat control unit connector B353 terminals 36, 44 and reclining motor connector B358 terminals 36, 44.

   36 (LG) – 36 (LG) : Continuity should exist.
   44 (P) – 44 (P) : Continuity should exist.

4. Check continuity between driver seat control unit connector B353 terminals 36, 44 and ground.

   36 (LG) – Ground : Continuity should not exist.
   44 (P) – Ground : Continuity should not exist.



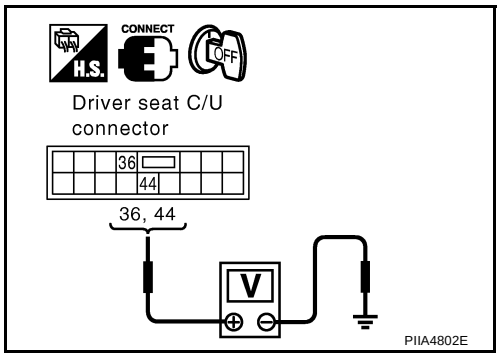
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Reclining switch condition	Voltage (V) (Approx.)
	(+)	(–)		
B353	36 (LG)	Ground	FORWARD	Battery voltage
			Other than above	0
	44 (P)		BACKWARD	Battery voltage
			Other than above	0



OK or NG

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

Check Front Lifting Motor Circuit

NIS001HP

1. CHECK FRONT END SEAT LIFTING MECHANISM

Check the following.

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

OK or NG

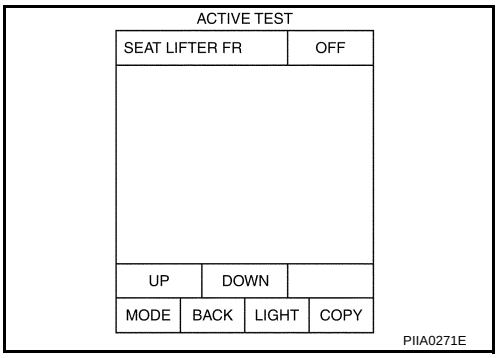
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “SEAT LIFTER FR” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

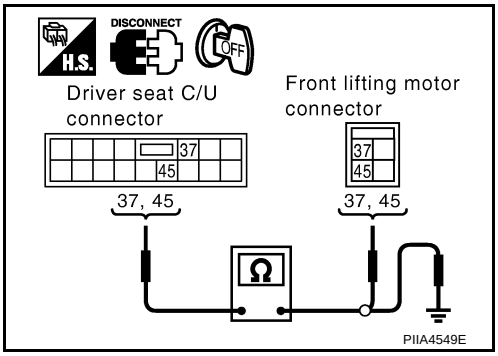
3. CHECK FRONT LIFTING MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and front lifting motor connector.
3. Check continuity between driver seat control unit connector B353 and terminals 37, 45 and front lifting motor connector B359 terminals 37, 45.

37 (OR) – 37 (OR) : Continuity should exist.
45 (L/R) – 45 (L/R) : Continuity should exist.

4. Check continuity between driver seat control unit connector B353 and terminals 37, 45 and ground.

37 (OR) – Ground : Continuity should not exist.
45 (L/R) – Ground : Continuity should not exist.



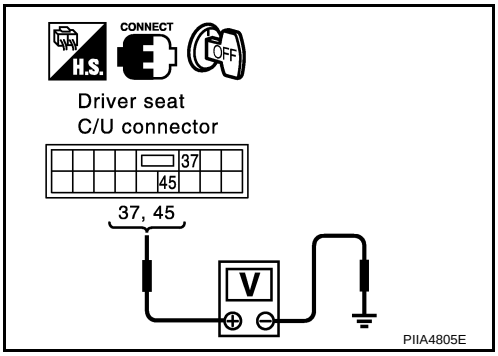
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Front lifting switch condition	Voltage (V) (Approx.)
	(+)	(–)		
B353	37 (OR)	Ground	DOWN	Battery voltage
			Other than above	0
	45 (L/R)		UP	Battery voltage
			Other than above	0



OK or NG

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

Check Rear Lifting Motor Circuit

NIS001HQ

1. CHECK REAR END SEAT LIFTING MECHANISM

Check the following.

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

OK or NG

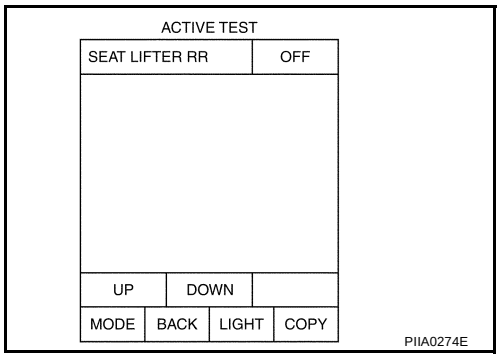
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “SEAT LIFTER RR” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

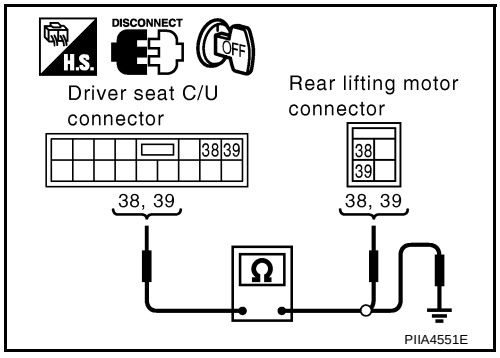
3. CHECK REAR LIFTING HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and rear lifting motor connector.
3. Check continuity between driver seat control unit connector B353 terminals 38, 39 and lifting motor connector B360 terminals 38, 39.

   38 (L/Y) – 38 (L/Y) : Continuity should exist.
   39 (L) – 39 (L) : Continuity should exist.

4. Check continuity between driver seat control unit connector B353 terminals 38, 39 and ground.

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



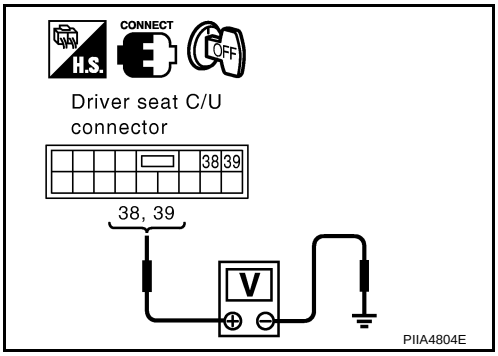
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Rear lifting switch condition	Voltage (V) (Approx.)
	(+)	(–)		
B353	38 (L/Y)	Ground	UP	Battery voltage
			Other than above	0
	39 (L)		DOWN	Battery voltage
			Other than above	0



OK or NG

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

Check Telescopic Motor Circuit

NIS001HR

1. CHECK STEERING WHEEL TELESCOPIC MECHANISM

Check following.

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

OK or NG

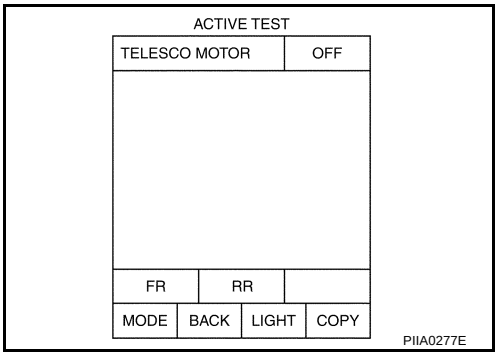
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “TELESCO MOTOR” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

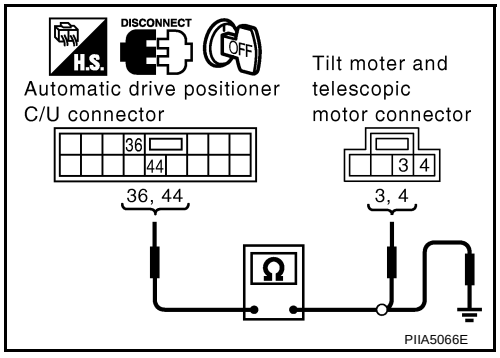
3. CHECK TELESCOPIC MOTOR HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and tilt motor and telescopic motor connector.
3. Check continuity between automatic drive positioner control unit connector M97 terminals 36, 44 and tilt motor and telescopic motor connector M98 terminals 3, 4.

   36 (R) – 3 (R) : Continuity should exist.
   44 (G) – 4 (G) : Continuity should exist.

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

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



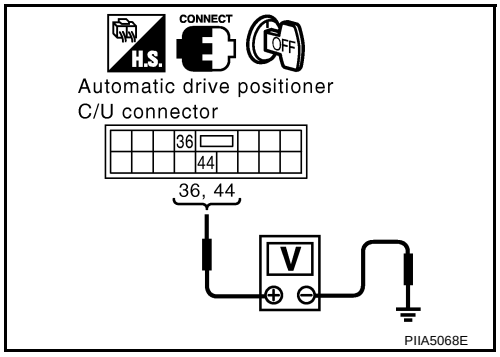
OK or NG

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

4. CHECK BCM OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Telescopic switch condition	Voltage (V) (Approx.)
	(+)	(–)		
M97	36 (R)	Ground	FORWARD	Battery voltage
			Other than above	0
	44 (G)		BACKWARD	Battery voltage
			Other than above	0



OK or NG

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

Check Tilt Motor Circuit

NIS001HS

1. CHECK STEERING WHEEL TILT MECHANISM

Check following.

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

OK or NG

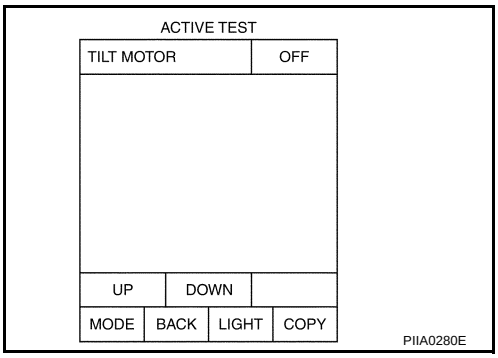
OK >> GO TO 2.
NG >> Repair the malfunctioning part.

2. CHECK FUNCTION

With CONSULT-II

Check operation with “TILT MOTOR” in ACTIVE TEST.

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



Without CONSULT-II

GO TO 3.

OK or NG

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

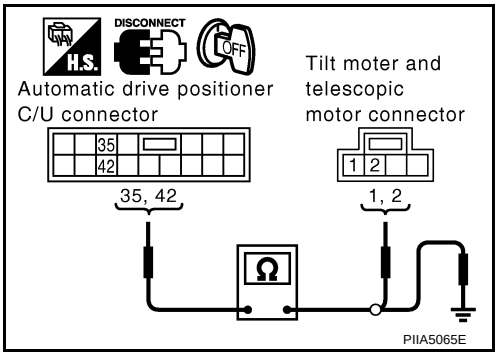
3. CHECK TILT MOTOR CIRCUIT HARNESS CONTINUITY

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

   35 (G/Y) – 1 (G/Y) : Continuity should exist.
   42 (G/W) – 2 (G/W) : Continuity should exist.

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

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



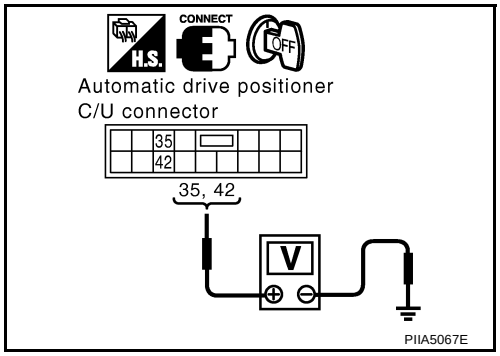
OK or NG

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

4. CHECK BCM OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Tilt switch condition	Voltage (V) (Approx.)
	(+)	(–)		
M97	35 (G/Y)	Ground	UP	Battery voltage
			Other than above	0
	42 (G/W)		DOWN	Battery voltage
			Other than above	0



OK or NG

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

Check Sliding Sensor Circuit

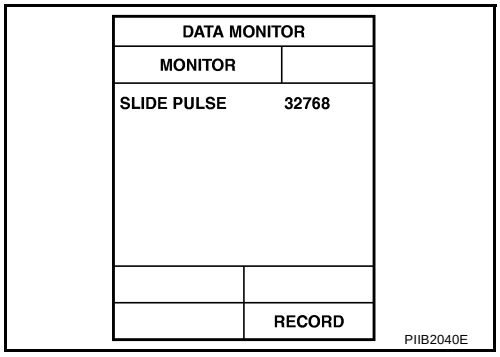
NIS001HT

1. CHECK FUNCTION

With CONSULT-II

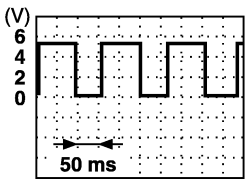
Check operation with “SLIDE PULSE” on the DATA MONITOR to make sure the pulse changes.

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

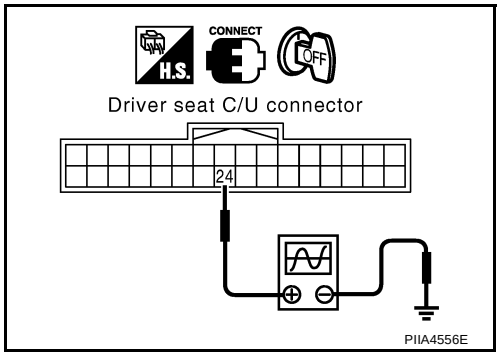


Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Signal (Reference value)
	(+)	(–)		
B352	24 (R)	Ground	Sliding motor operation	

PIIA3277E



OK or NG

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

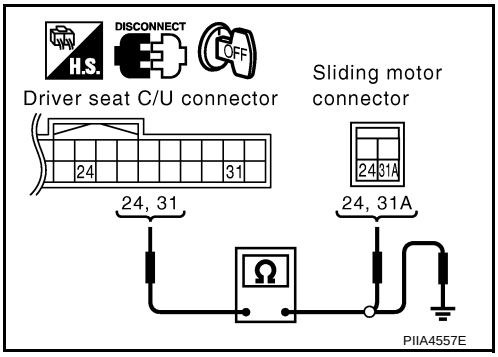
2. CHECK SLIDING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and sliding motor connector.
2. Check continuity between driver seat control unit connector B352 terminals 24, 31 and sliding motor B357 terminals 24, 31A.

24 (R) – 24 (R) : Continuity should exist.
31 (GY) – 31A (GY) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 24, 31 and ground.

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



OK or NG

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

Check Reclining Sensor Circuit

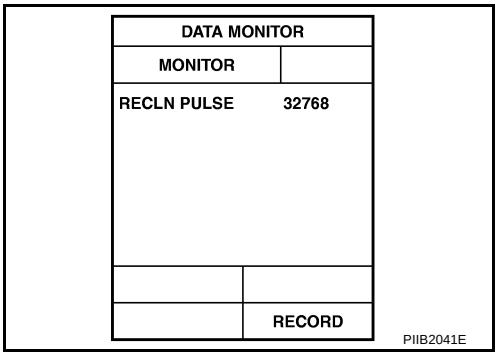
NIS001HU

1. CHECK FUNCTION

With CONSULT-II

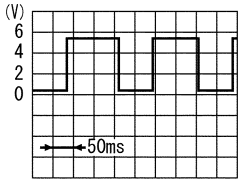
Check operation with “RECLINING PULSE” on the DATA MONITOR to make sure the pulse changes.

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

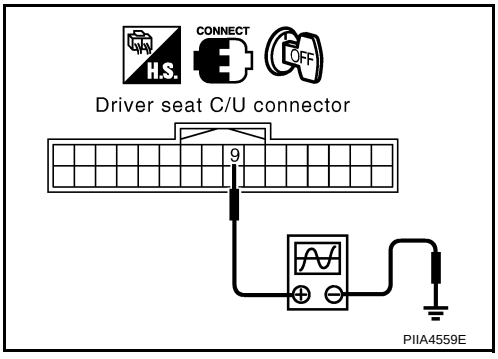


Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Signal (Reference value)
B352	9 (W/G)	Ground	Reclining motor operation	

SIIA0692J



OK or NG

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

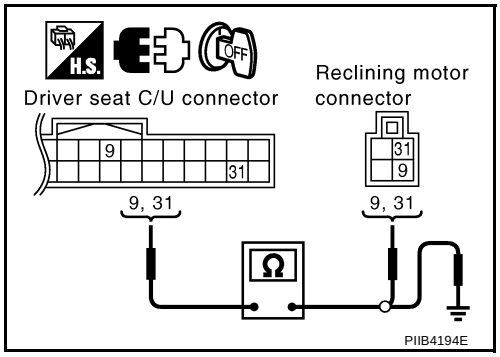
2. CHECK RECLINING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and reclining motor connector.
2. Check continuity between driver seat control unit connector B352 terminals 9, 31 and reclining motor connector B358 terminals 9, 31.

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

3. Check continuity between driver seat control unit connector B352 terminals 9, 31 and ground.

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



OK or NG

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

Check Front Lifting Sensor Circuit

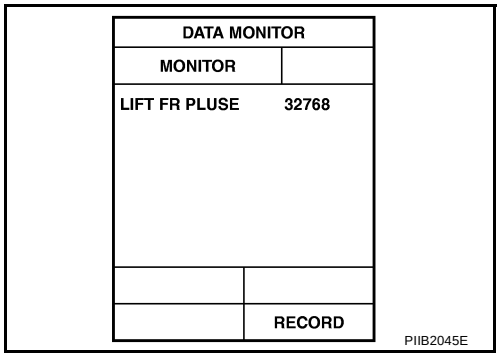
NIS001HV

1. CHECK FUNCTION

With CONSULT-II

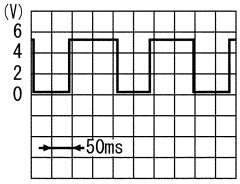
Check operation with “LIFT FR PULSE” on the DATA MONITOR to make sure the pulse changes.

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

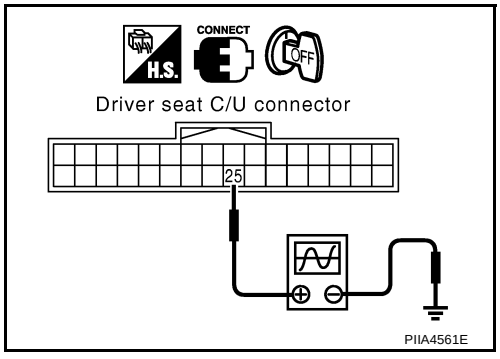


Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Signal (Reference value)
	(+)	(–)		
B352	25 (Y/B)	Ground	Front lifting motor operation	

SIIA0691J



OK or NG

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

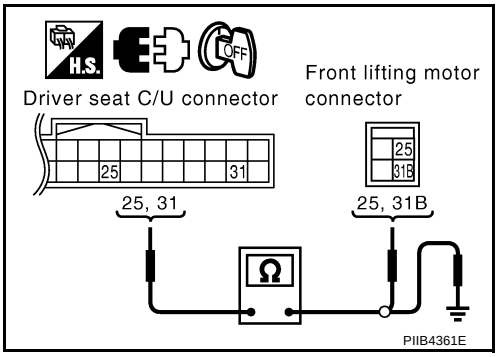
2. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and front lifting motor connector.
2. Check continuity between driver seat control unit connector B352 terminals 25, 31 and front lifting motor connector B359 terminals 25, 31B.

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

3. Check continuity between driver seat control unit connector B352 terminals 25, 31 and ground.

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



OK or NG

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

Check Rear Lifting Sensor Circuit

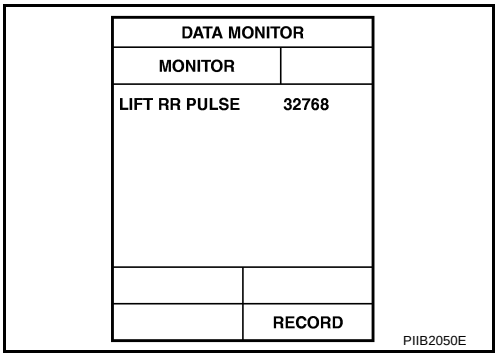
NIS001HW

1. CHECK REAR END LIFTING SENSOR INPUT/OUTPUT SIGNAL

With CONSULT-II

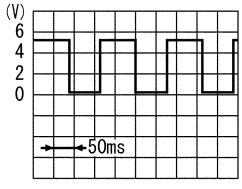
Check operation with “LIFT RP PULSE” on the DATA MONITOR to make sure pulse changes.

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

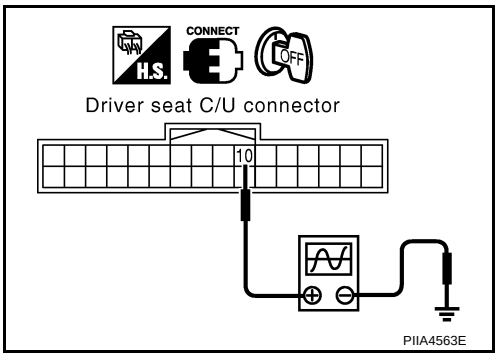


Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Signal (Reference value)
B352	10 (P/B)	Ground	Rear lifting motor operation	

SIIA0693J



OK or NG

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

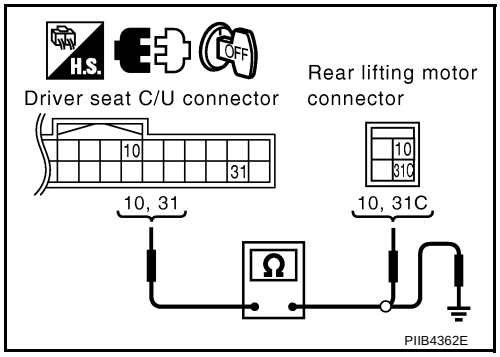
2. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and rear lifting motor connector.
2. Check continuity between driver seat control unit connector B352 terminals 10, 31 and rear lifting motor connector B360 terminals 10, 31C.

10 (P/B) – 10 (P/B) : Continuity should exist.
31 (GY) – 31C (GY) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 10, 31 and ground.

10 (P/B) – Ground : Continuity should not exist.
31 (GY) – Ground : Continuity should not exist.



OK or NG

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

Check Telescopic Sensor Circuit

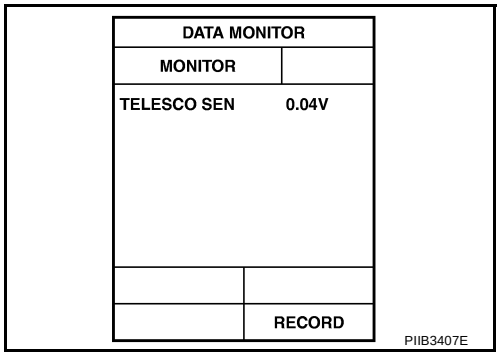
NIS001HX

1. CHECK FUNCTION

With CONSULT-II

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

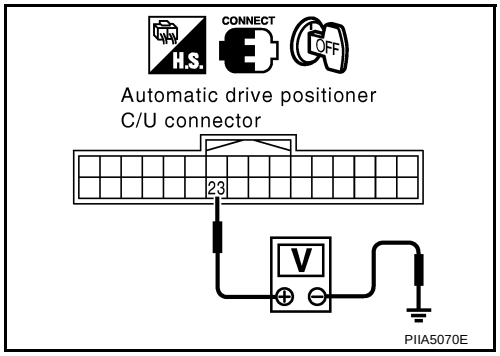
Monitor item [OPERATION or UNIT]		Contents
TELESCO SEN	“V”	The telescoping position (voltage) judged from the telescoping sensor signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M96	23 (R/Y)	Ground	Telescopic top position	0.4
			Telescopic bottom position	4.6



OK or NG

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

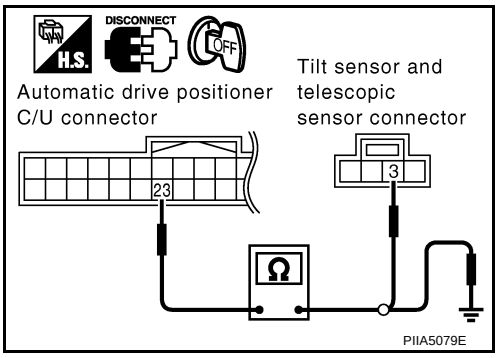
2. CHECK HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit connector and tilt sensor and telescopic sensor connector.
2. Check continuity harness between automatic drive positioner control unit connector M96 terminals 23 and tilt sensor and telescopic sensor connector M99 terminals 3.

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

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

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



OK or NG

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

Check Tilt Sensor Circuit

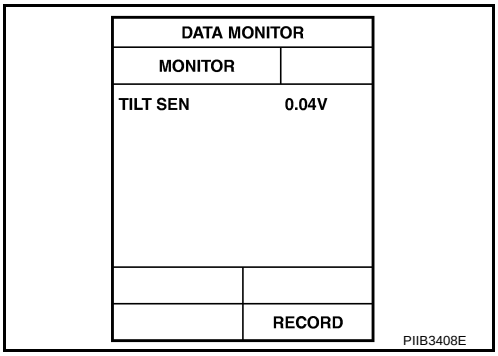
NIS001HY

1. CHECK TILT SENSOR

With CONSULT-II

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

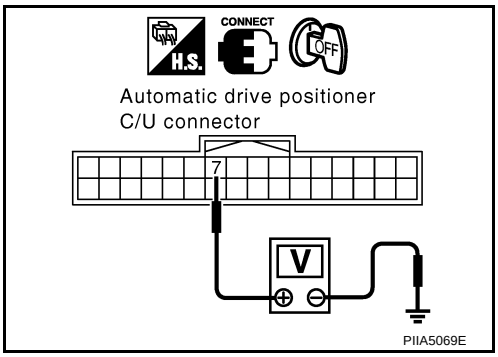
Monitor item [OPERATION or UNIT]		Contents
TILT SEN	“V”	The tilt position (voltage) judged from the tilt sensor signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M96	7 (OR/L)	Ground	Tilt top position	1
			Tilt bottom position	4



OK or NG

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

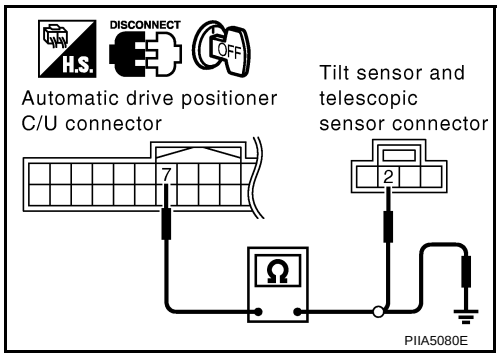
2. CHECK HARNESS

1. Disconnect automatic drive positioner control unit connector and tilt sensor and telescopic sensor connector.
2. Check continuity harness between automatic drive positioner control unit connector M96 terminals 7 and tilt sensor and telescopic sensor connector M99 terminals 2.

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

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

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



OK or NG

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

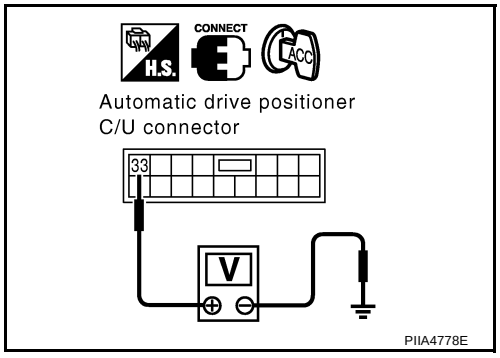
Check Tilt Sensor and Telescopic Sensor Power and Ground Circuit

NIS001HZ

1. CHECK TILT SENSOR AND TELESCOPIC SENSOR POWER SUPPLY

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

33 (W/L) – Ground : Approx. 5V



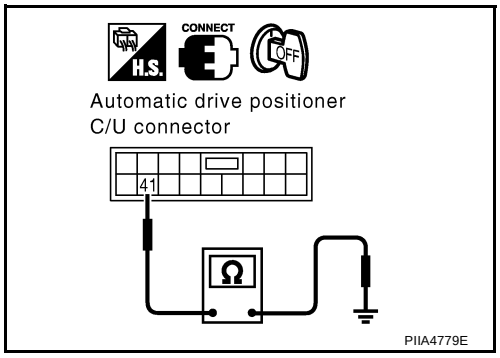
OK or NG

OK >> GO TO 2.
NG >> Replace automatic drive positioner control unit.

2. CHECK TILT SENSOR AND TELESCOPIC SENSOR GROUND CIRCUIT

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

41 (Y) – Ground : Continuity should exist.



OK or NG

OK >> GO TO 3.
NG >> Replace automatic drive positioner control unit.

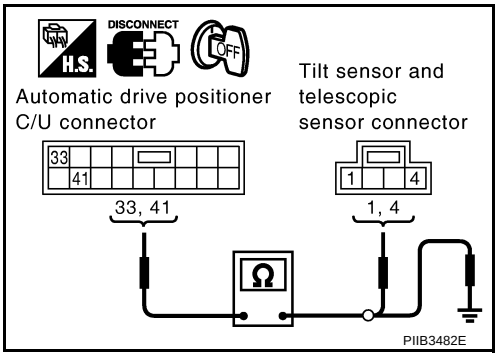
3. CHECK HARNESS CONTINUITY

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

   33 (W/L) – 1 (W/L) : Continuity should exist.
   41 (Y) – 4 (Y) : Continuity should exist.

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

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



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between automatic drive positioner control unit and tilt sensor and telescopic sensor.

Check Door Switch (Driver Side) Circuit

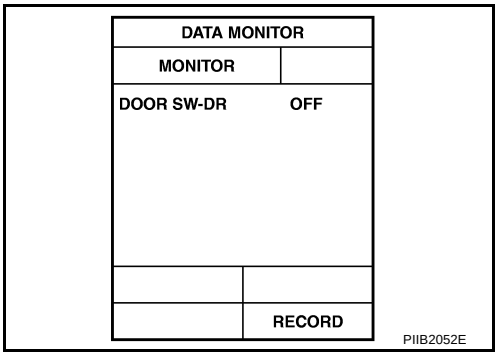
NIS001I0

1. CHECK FUNCTION

With CONSULT-II

Touch “BCM” with “DOOR SW-DR” on the DATA MONITOR, check ON/OFF operation when the driver door is open and closed.

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



Without CONSULT-II

GO TO 2.

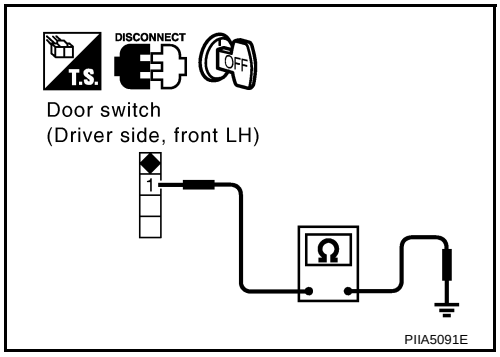
OK or NG

OK >> Door switch (driver side) circuit is OK.
NG >> GO TO 2.

2. CHECK DOOR SWITCH (DRIVER SIDE)

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

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



OK or NG

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

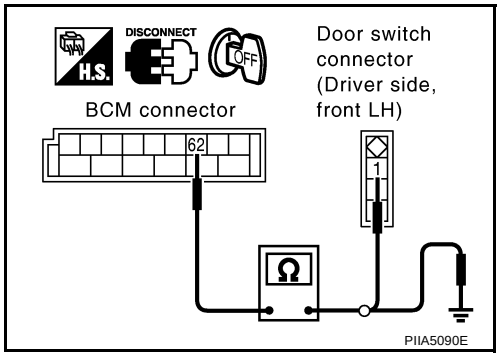
3. CHECK DOOR SWITCH (DRIVER SIDE) HARNESS CONTINUITY

1. Disconnect BCM connector.
2. Check continuity between BCM connector B4 terminal 62 and door switch connector B17 terminal 1.

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

3. Check continuity between BCM connector B4 terminal 62 and ground.

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



OK or NG

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

Check Sliding Switch Circuit

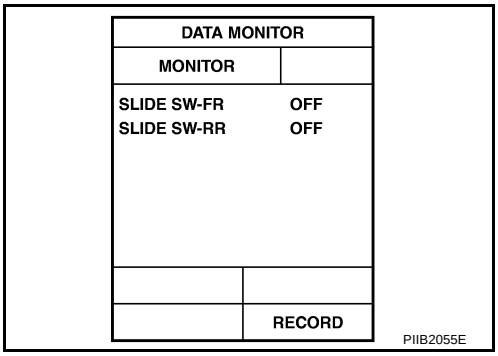
NIS001I1

1. CHECK FUNCTION

With CONSULT-II

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

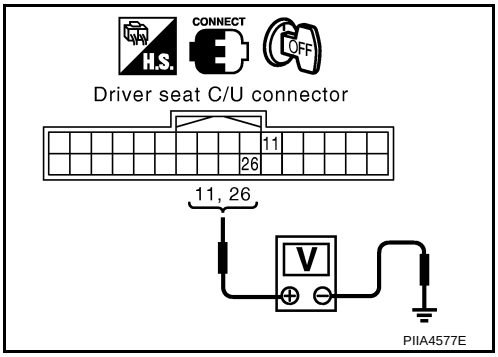
Monitor item [OPERATION or UNIT]		Contents
SLIDE SW – FR	“ON/ OFF”	ON/OFF status judged from the sliding switch (FR) signal is displayed.
SLIDE SW – RR	“ON/ OFF”	ON/OFF status judged from the sliding switch (RR) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (-)	Sliding switch condition	Voltage (V) (Approx.)
B352	26 (Y)	Ground	FORWARD	0
			Other than above	Battery voltage
	11 (BR)		BACKWARD	0
			Other than above	Battery voltage



OK or NG

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

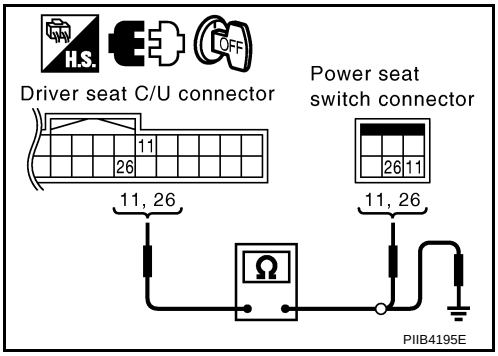
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B352 terminals 11, 26 and power seat switch connector B355 terminals 11, 26.

11 (BR) – 11 (BR) : Continuity should exist.
26 (Y) – 26 (Y) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 11, 26 and ground.

11 (BR) – Ground : Continuity should not exist.
26 (Y) – Ground : Continuity should not exist.



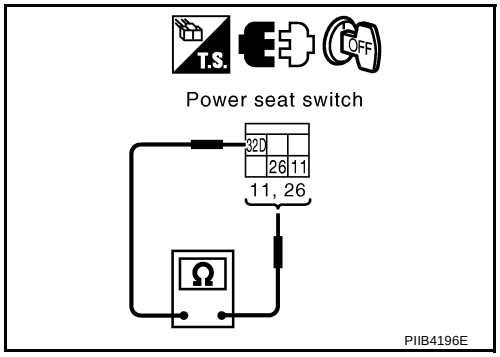
OK or NG

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

3. CHECK SLIDING SWITCH

Check continuity between power seat switch as follows.

Terminal		Sliding switch condition	Continuity
26	32D	FORWARD	Yes
		Other than above	No
11		BACKWARD	Yes
		Other than above	No



OK or NG

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

Check Reclining Switch

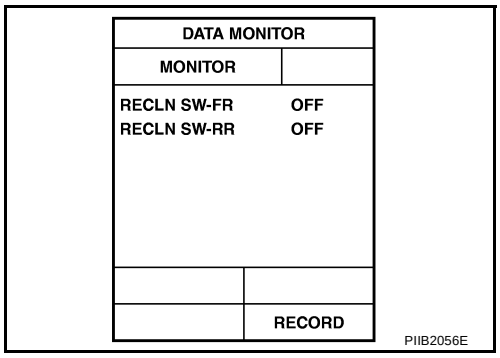
NIS001I2

1. CHECK FUNCTION

With CONSULT-II

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

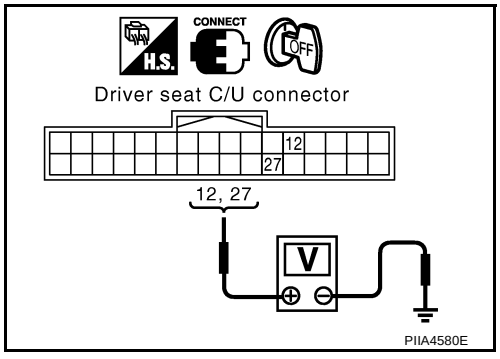
Monitor item [OPERATION or UNIT]		Contents
RECLN SW – FR	“ON/ OFF”	ON/OFF status judged from the reclining switch (FR) signal is displayed.
RECLN SW – RR	“ON/ OFF”	ON/OFF status judged from the reclining switch (RR) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Reclining switch condition	Voltage (V) (Approx.)
	(+)	(–)		
B352	27 (R/G)	Ground	FORWARD	0
			Other than above	Battery voltage
	12 (SB)		BACKWARD	0
			Other than above	Battery voltage



OK or NG

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

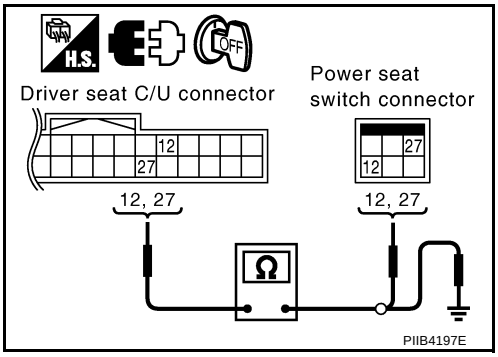
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B352 terminals 12, 27 and power seat switch connector B355 terminals 12, 27.

12 (SB) – 12 (SB) : Continuity should exist.
27 (R/G) – 27 (R/G) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 12, 27 and ground.

12 (SB) – Ground : Continuity should not exist.
27 (R/G) – Ground : Continuity should not exist.



OK or NG

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

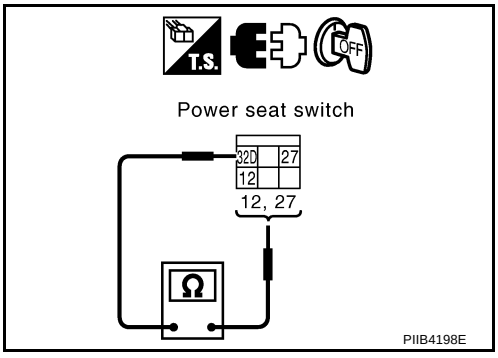
3. CHECK RECLINING SWITCH

Check continuity between power seat switch as follows.

Terminal		Reclining switch condition	Continuity
27	32D	FORWARD	Yes
		Other than above	No
12		BACKWARD	Yes
		Other than above	No

OK or NG

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



Check Front Lifting Switch Circuit

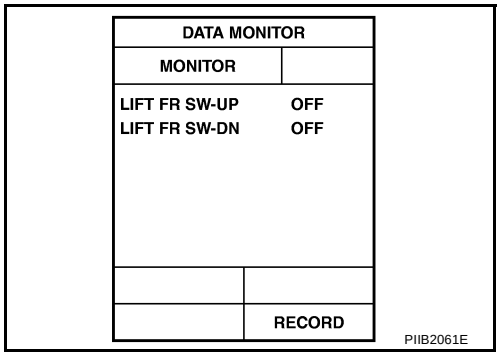
NIS001I3

1. CHECK FUNCTION

With CONSULT-II

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

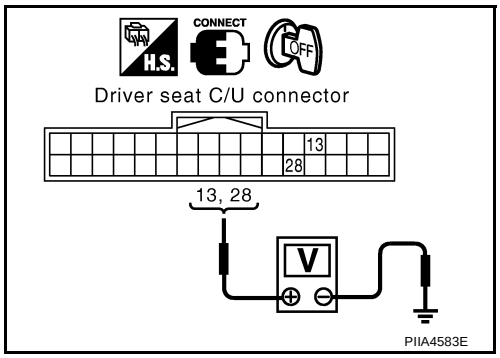
Monitor item [OPERATION or UNIT]		Contents
LIFT FR SW – DN	“ON/OFF”	ON/OFF status judged from the FR lifter switch (DOWN) signal is displayed.
LIFT RR SW – UP	“ON/OFF”	ON/OFF status judged from the RR lifter switch (UP) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Front lifting switch condition	Voltage (V) (Approx.)
B352	28 (W/B)	Ground	UP	0
			Other than above	Battery voltage
	13 (LG/R)		DOWN	0
			Other than above	Battery voltage



OK or NG

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

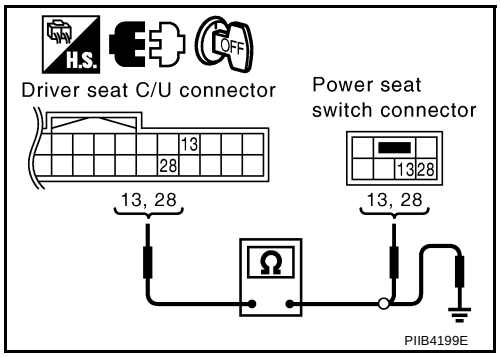
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B352 terminals 13, 28 and power seat switch connector B356 terminals 13, 28.

13 (LG/R) – 13 (LG/R) : Continuity should exist.
28 (W/B) – 28 (W/B) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 13, 28 and ground

13 (LG/R) – Ground : Continuity should not exist.
28 (W/B) – Ground : Continuity should not exist.



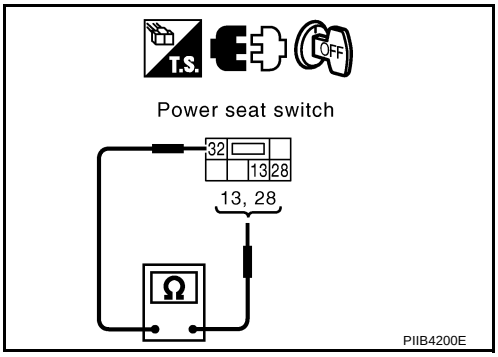
OK or NG

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

3. CHECK FRONT END LIFTING SWITCH

Check continuity between power seat switch as follows.

Terminals		Front lifting switch condition	Continuity
28	32	UP	Yes
		Other than above	No
13		DOWN	Yes
		Other than above	No



OK or NG

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

Check Rear Lifting Switch Circuit

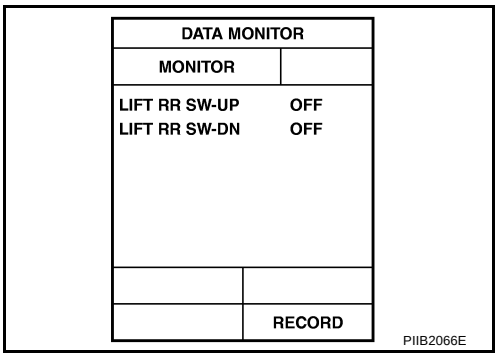
NIS001I4

1. CHECK FUNCTION

With CONSULT-II

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

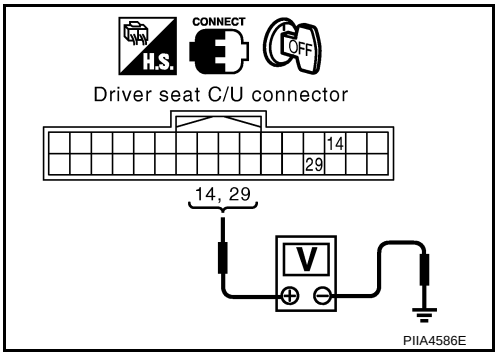
Monitor item [OPERATION or UNIT]		Contents
LIFT RR SW–UP	"ON/OFF"	(ON/OFF) status judged from the RR lifter switch (UP) signal is displayed.
LIFT RR SW–DN	"ON/OFF"	(ON/OFF) status judged from the RR lifter switch (DOWN) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Rear lifting switch condition	Voltage (V) (Approx.)
	(+)	(–)		
B352	29 (P/L)	Ground	UP	0
			Other than above	Battery voltage
	14 (G/B)		DOWN	0
			Other than above	Battery voltage



OK or NG

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

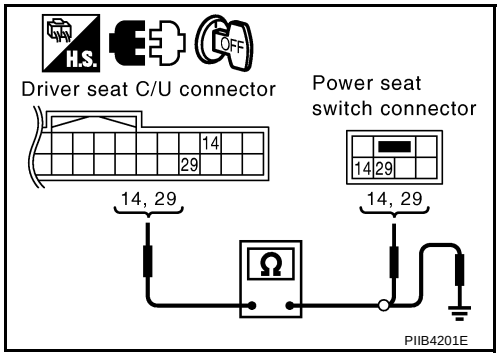
2. CHECK REAR LIFTING SWITCH HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B352 terminals 14, 29 and power seat switch connector B356 terminals 14, 29.

14 (G/B) – 14 (G/B) : Continuity should exist.
29 (P/L) – 29 (P/L) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 14, 29 and ground.

14 (G/B) – Ground : Continuity should not exist.
29 (P/L) – Ground : Continuity should not exist.



OK or NG

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

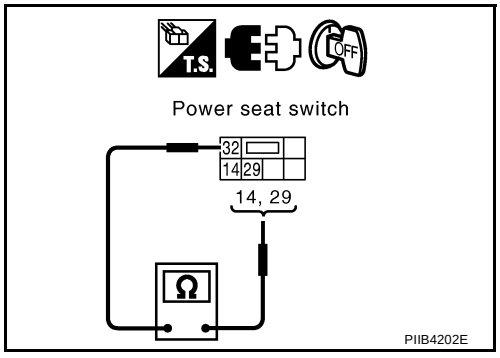
3. CHECK REAR LIFTING SWITCH

Check continuity between power seat switch as follows.

Terminal		Rear lifting switch condition	Continuity
29	32	UP	Yes
		Other than above	No
14		DOWN	Yes
		Other than above	No

OK or NG

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



Check Sliding and Reclining Switch Ground Circuit

NIS001I5

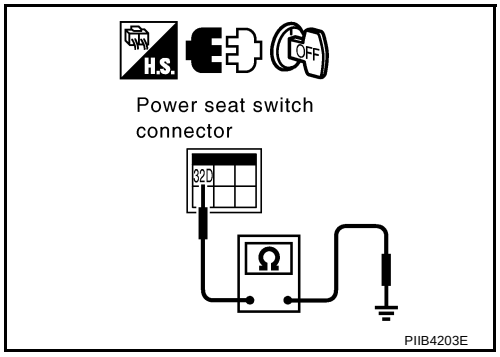
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Check continuity between power seat switch connector B355 terminal 32D and ground.

32D(B) – Ground : Continuity should exist.

OK or NG

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



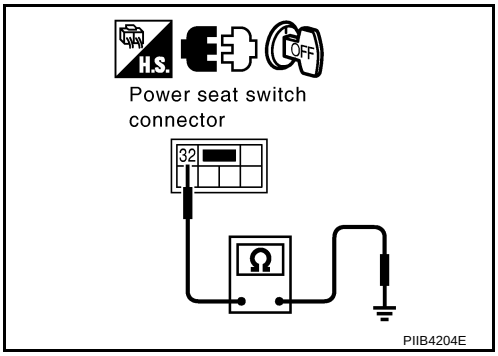
Check Lifting Switch (Front and Rear) Ground Circuit

NIS001I6

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power seat switch connector.
3. Check continuity between power seat switch connector B356 terminal 32 and ground.

32 (B) – Ground : Continuity should exist.



OK or NG

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

Check Telescopic Switch Circuit

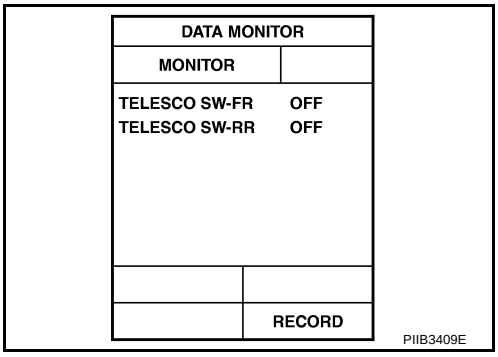
NIS001I7

1. CHECK FUNCTION

With CONSULT-II

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

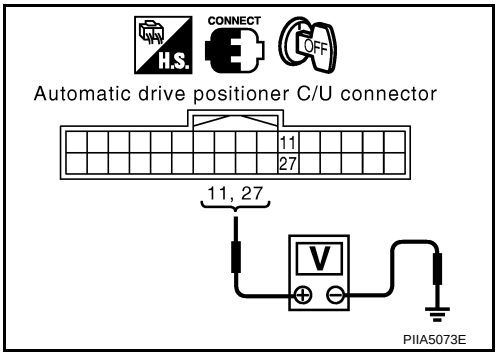
Monitor item [OPERATION or UNIT]		Contents
TELESCO SW-FR	“ON/OFF”	(ON/OFF) status judged from the telescoping switch (FR) signal is displayed.
TELESCO SW-RR	“ON/OFF”	(ON/OFF) status judged from the telescoping switch (RR) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Telescopic switch condition	Voltage (V) (Approx.)
	(+)	(–)		
M96	11 (P/L)	Ground	FORWARD	0
			Other than above	5
	27 (G/W)		BACKWARD	0
			Other than above	5



OK or NG

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

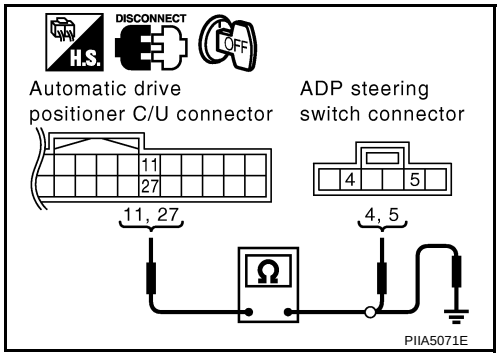
2. CHECK TELESCOPIC CIRCUIT HARNESS CONTINUITY

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

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

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

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



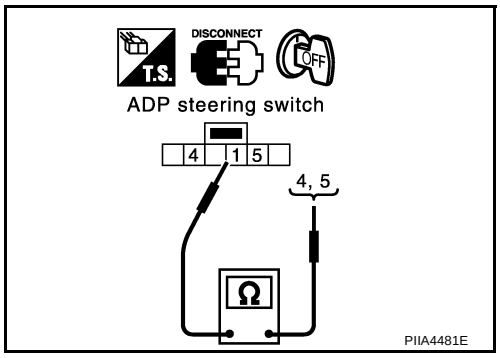
OK or NG

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

3. CHECK TELESCOPIC SWITCH

Check continuity between ADP steering switch as follows.

Terminal		ADP steering switch condition	Continuity
5	1	FORWARD	Yes
		Other than above	No
4		BACKWARD	Yes
		Other than above	No



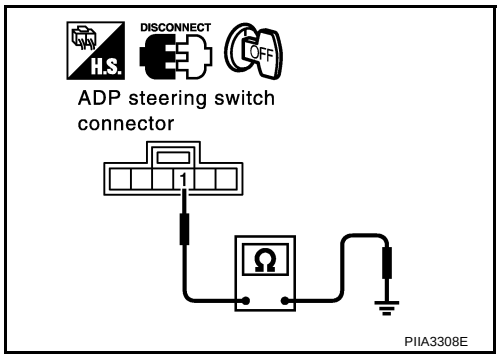
OK or NG

OK >> GO TO 4.
NG >> Replace ADP steering switch.

4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

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

1 (B) – Ground : Continuity should exist.



OK or NG

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

Check Tilt Switch Circuit

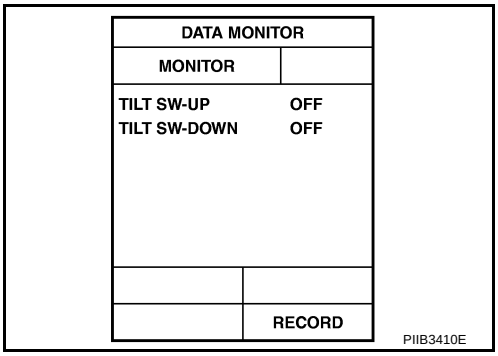
NIS001I8

1. CHECK FUNCTION

With CONSULT-II

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

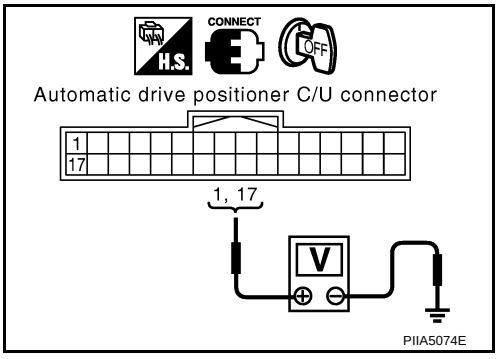
Monitor item [OPERATION or UNIT]		Contents
TILT SW-UP	“ON/OFF”	(ON/OFF) status judged from the tilt switch (UP) signal is displayed.
TILT SW-DOWN	“ON/OFF”	(ON/OFF) status judged from the tilt switch (DOWN) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Tilt switch condition	Voltage (V) (Approx.)
M96	1 (Y/G)	Ground	UP	0
			Other than above	5
	17 (LG/B)		DOWN	0
			Other than above	5



OK or NG

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

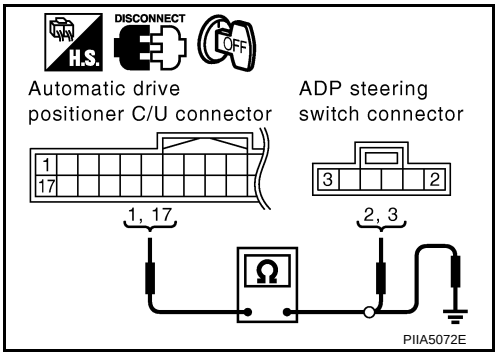
2. CHECK TILT SWITCH CIRCUIT HARNESS CONTINUITY

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

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

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

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



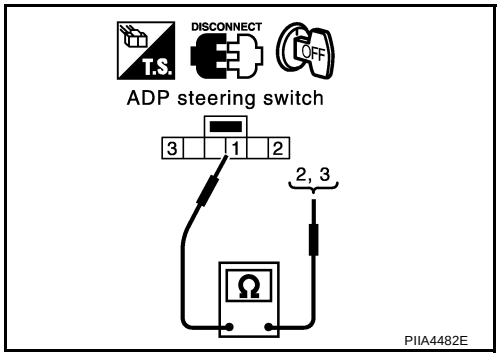
OK or NG

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

3. CHECK ADP TILT STEERING SWITCH

Check continuity between ADP steering switch as follows.

Terminal		ADP steering switch condition	Continuity
2	1	UP	Yes
		Other than above	No
3		DOWN	Yes
		Other than above	No



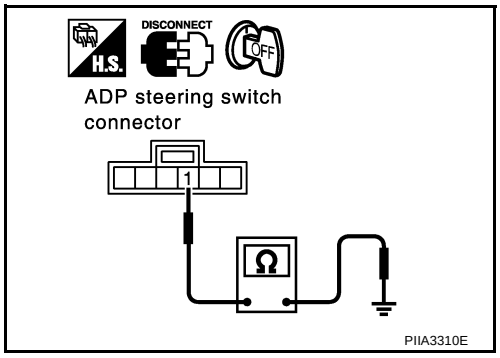
OK or NG

OK >> GO TO 6.
NG >> Replace ADP steering switch.

4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

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

1 (B) – Ground : Continuity should exist.



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between ADP steering switch and ground.

Check P Range Switch Circuit (A/T Models)

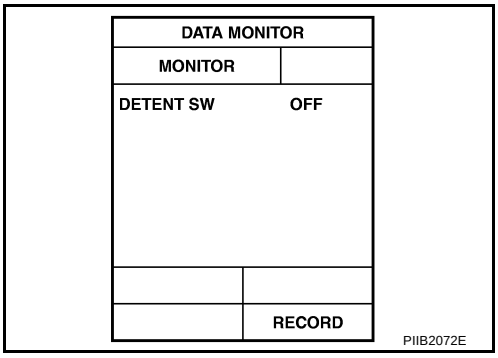
NIS001I9

1. CHECK FUNCTION

With CONSULT-II

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

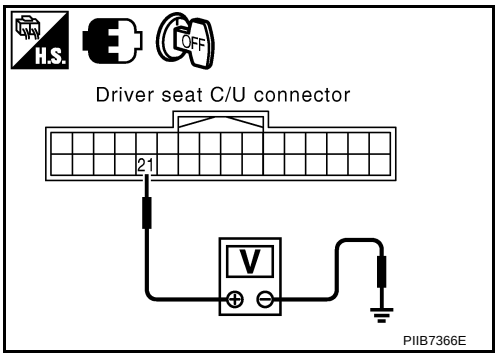
Monitor item [OPERATION or UNIT]		Contents
DETENT SW	“ON/ OFF”	The selector lever position “P position (ON)/other than P position (OFF)” judged from the detente switch signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B352	21 (L/Y)	Ground	Selector lever sifted to P position.	0
			Selector lever other than P position.	5



OK or NG

OK >> A/T device (park position switch) circuit is OK.
NG >> GO TO 2.

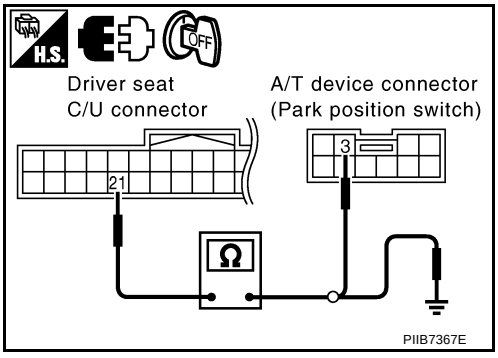
2. CHECK PARK POSITION SWITCH POWER SUPPLY CIRCUIT HARNESS

1. Disconnect driver seat control unit connector and A/T device (park position switch) connector.
2. Check continuity between driver seat control unit connector B352 terminal 21 and A/T device (park position switch) connector M47 terminal 3.

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

3. Check continuity between driver seat control unit connector B352 terminal 21 and ground.

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



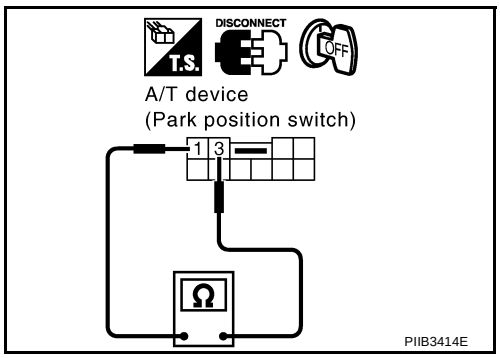
OK or NG

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

3. CHECK PARK POSITION SWITCH

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

Terminal		Condition	Continuity
3	1	P position	Yes
		Other than P position	No



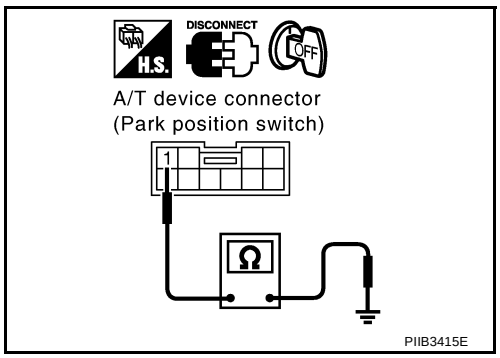
OK or NG

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

4. CHECK PARK POSITION SWITCH GROUND HARNESS

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

1 (B) – Ground : Continuity should exist.



OK or NG

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

Check Parking Brake Switch Circuit (M/T Models)

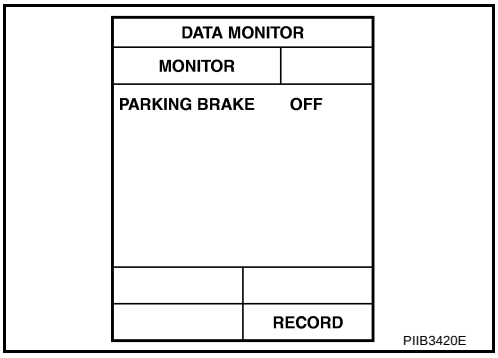
NIS001IA

1. CHECK FUNCTION

With CONSULT-II

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

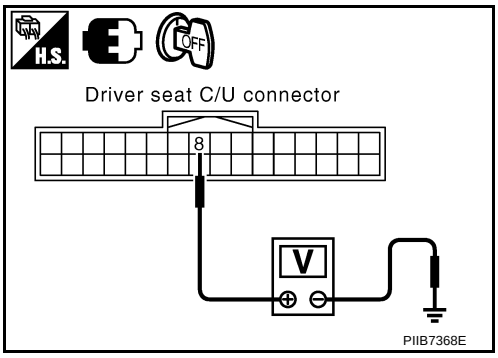
Monitor item [OPERATION or UNIT]		Contents
PARKING BRAKE	“ON/ OFF”	The parking brake is “released (OFF)/parking brake is applied (ON)” judged from the parking brake switch signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Voltage (V) (Approx.)
B352	8 (L/Y)	Ground	Parking brake applied.	0
			Parking brake released.	5



OK or NG

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

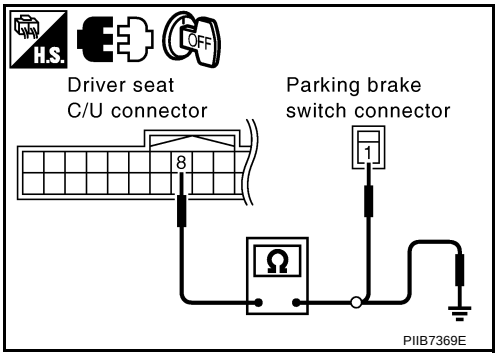
2. CHECK PARKING BRAKE SWITCH POWER SUPPLY CIRCUIT HARNESS

1. Disconnect driver seat control unit connector and parking brake switch connector.
2. Check continuity between driver seat control unit connector B352 terminal 8 and parking brake switch connector B37 terminal 1.

8 (L/Y) – 1 (PU/R) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminal 8 and ground.

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



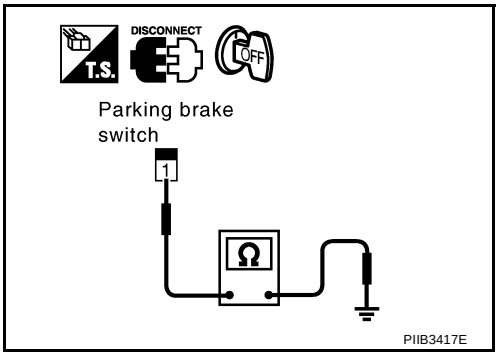
OK or NG

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

3. CHECK PARKING BRAKE SWITCH

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

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



OK or NG

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

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

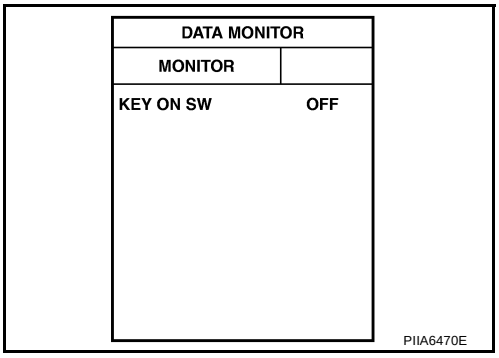
NIS001IB

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

With CONSULT-II

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

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



Without CONSULT-II

GO TO 2.

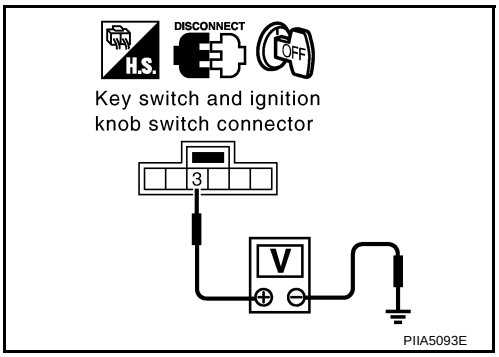
OK or NG

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

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

1. Turn ignition switch OFF.
2. Disconnect key switch and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M310 terminal 3 and ground.

3 (Y) – Ground : Battery voltage.



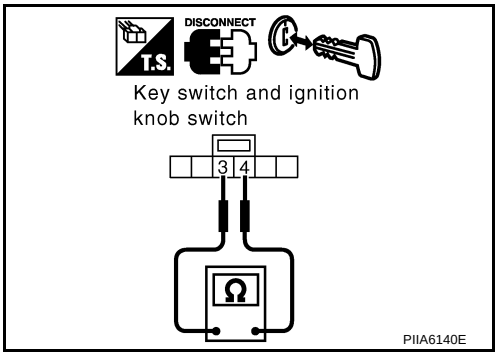
OK or NG

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

3. CHECK KEY SWITCH AND IGNITION KNOB SWITCH

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

Connector	Terminal		Condition	Continuity
M310	3	4	Key is inserted in ignition key cylinder.	Yes
			Key is removed from ignition key cylinder.	No



OK or NG

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

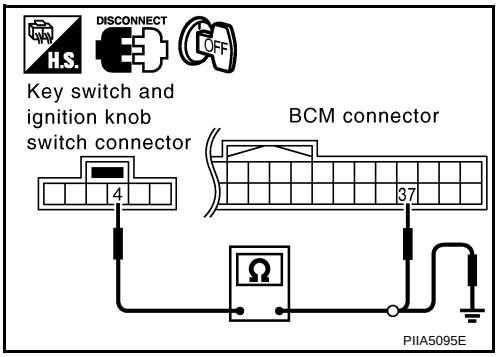
4. CHECK HARNESS CONTINUITY

1. Disconnect key switch and ignition knob switch connector and BCM connector.
2. Check continuity between key switch and ignition knob switch connector M310 terminal 4 and BCM connector M1 terminal 37.

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

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

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



OK or NG

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

Check Key Switch Circuit (Without Intelligent Key)

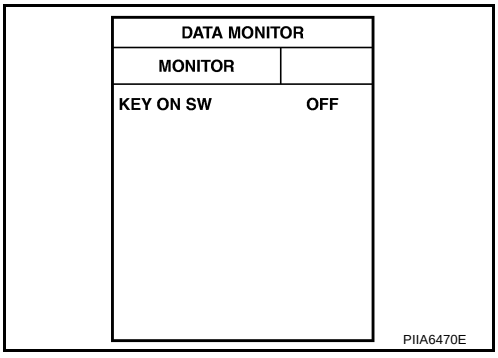
NIS001IC

1. CHECK KEY SWITCH

With CONSULT-II

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

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



Without CONSULT-II

GO TO 2.

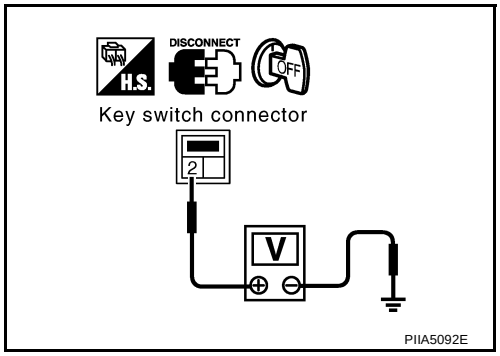
OK or NG

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

2. CHECK KEY SWITCH POWER SUPPLY CIRCUIT

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

2 (L/W) – Ground : Battery voltage.



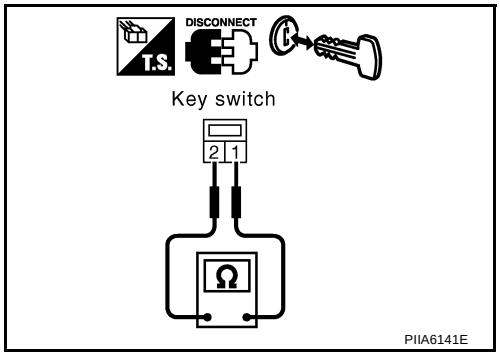
OK or NG

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

3. CHECK KEY SWITCH

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

Connector	Terminal		Condition	Continuity
M307	1	2	Key is inserted in ignition key cylinder.	Yes
			Key is removed from ignition key cylinder.	No



OK or NG

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

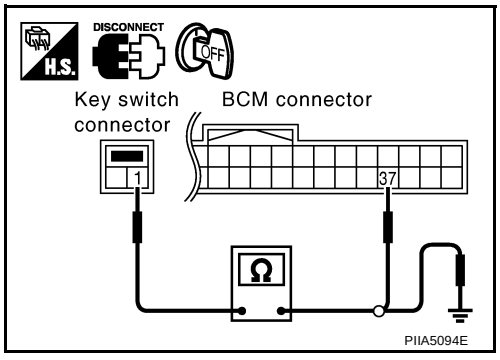
4. CHECK HARNESS CONTINUITY

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

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

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

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



OK or NG

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

Check Seat Memory and Set Switch Circuit

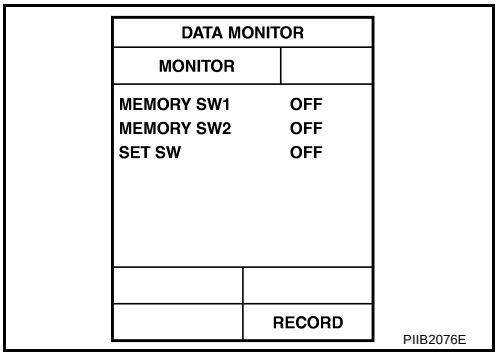
NIS001ID

1. CHECK FUNCTION

With CONSULT-II

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

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



Without CONSULT-II

GO TO 2.

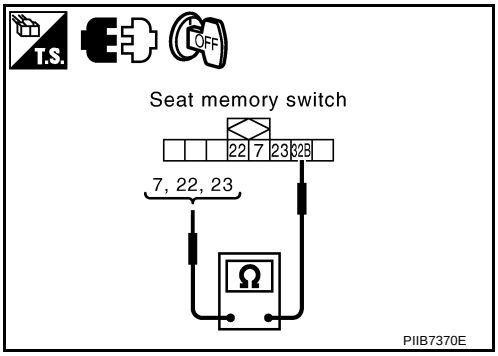
OK or NG

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

2. CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check continuity between seat memory switch connector B354 terminal 7, 22, 23 and 32B.

Connector	Terminals		Condition	Continuity
B354	7	32B	Memory switch 1: ON	Yes
			Memory switch 1: OFF	No
	22		Memory switch 2: ON	Yes
			Memory switch 2: OFF	No
	23		Set switch: ON	Yes
			Set switch: OFF	No



OK or NG

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

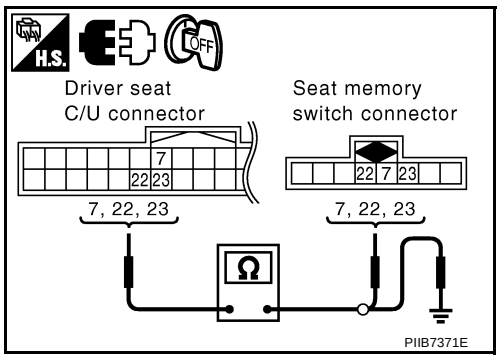
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B352 terminals 7, 22, 23 and seat memory switch connector B354 terminals 7, 22, 23.

7 (R/B) – 7 (R/B) : Continuity should exist.
22 (G/R) – 22 (G/R) : Continuity should exist.
23 (Y/G) – 23 (Y/G) : Continuity should exist.

3. Check continuity between driver seat control unit connector M352 terminals 7, 22, 23 and ground.

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



OK or NG

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

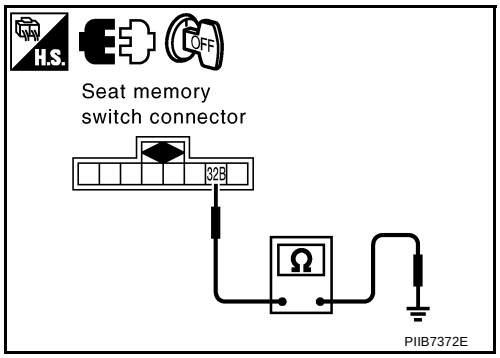
4. CHECK SEAT MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch connector B354 terminal 32B and ground.

32B (B) – Ground : Continuity should exist.

OK or NG

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



Check Memory Indicator Lamp Circuit

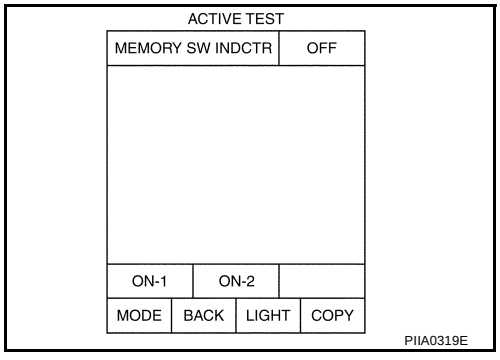
NIS001IF

1. CHECK FUNCTION

With CONSULT-II

With “MEMORY SW INDCTR” in ACTIVE TEST, check operation.

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



Without CONSULT-II

GO TO 2.

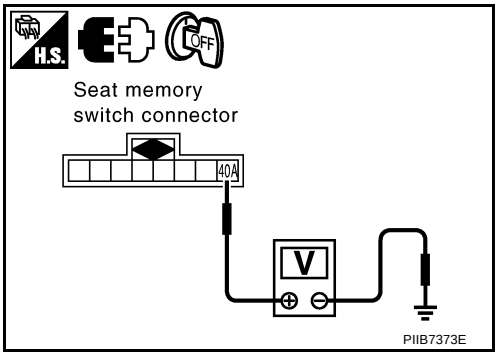
OK or NG

OK >> Memory indicator lamp circuit is OK.
NG >> GO TO 2.

2. CHECK SEAT MEMORY SWITCH POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect seat memory switch connector.
3. Check voltage between seat memory switch connector B354 terminal 40A and ground.

40A (R/W) – Ground : Battery voltage



OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness between fuse block (J/B) and seat memory switch.

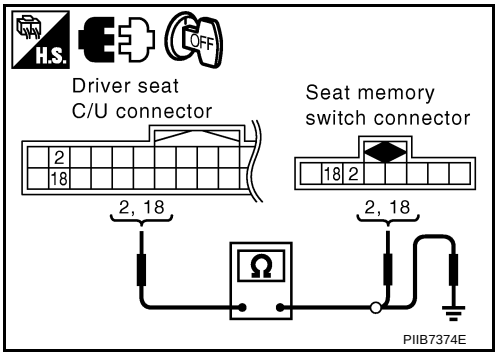
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B352 terminals 2, 18 and seat memory switch connector B354 terminals 2, 18.

2 (LG/B) – 2 (LG/B) : Continuity should exist.
18 (W/R) – 18 (W/R) : Continuity should exist.

3. Check continuity between driver seat control unit connector B352 terminals 2, 18 and ground.

2 (LG/B) – Ground : Continuity should not exist.
18 (W/R) – Ground : Continuity should not exist.



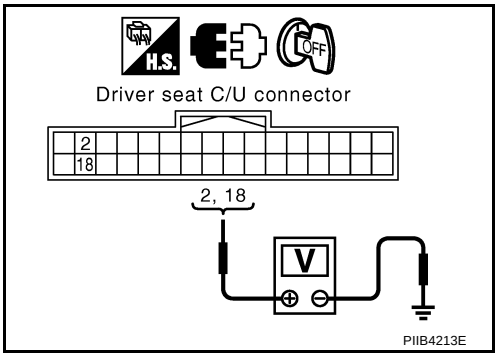
OK or NG

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

4. CHECK SEAT MEMORY SWITCH INDICATOR SIGNAL

Check voltage between driver seat control unit connector B352 terminals 2, 18 and ground.

2 (LG/B) – Ground : Battery voltage
18 (W/R) – Ground : Battery voltage



OK or NG

OK >> Memory indicator lamp circuit is OK.
NG >> Replace seat memory switch.

Check UART Communication Line Circuit

NIS001IG

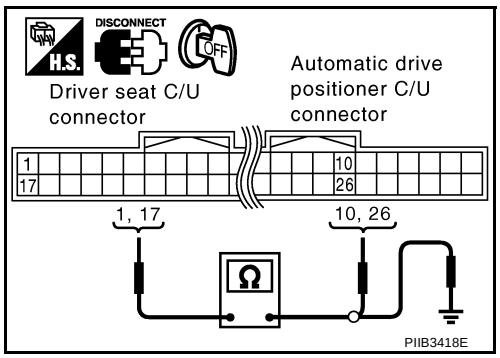
1. CHECK UART LINE HERNESS

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit connector and automatic drive positioner control unit connector.
3. Check continuity between driver seat control unit connector B352 terminal 1, 17 and automatic drive positioner connector M96 terminal 10, 26.

17 (R/Y) – 26 (R/G) : Continuity should exist.
1 (L/W) – 10 (R/L) : Continuity should exist.

4. Check continuity between driver seat control unit connector B352 terminal 1, 17 and ground.

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

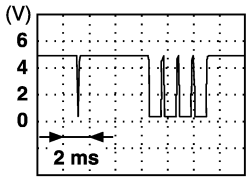


OK or NG

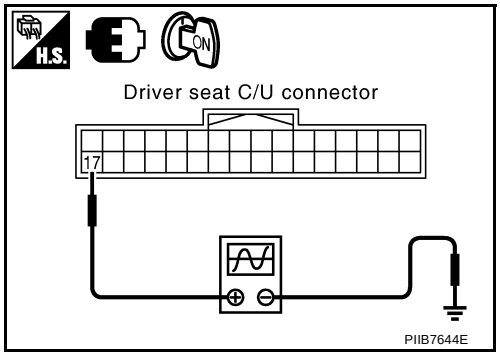
OK >> GO TO 2.
NG >> Repair or replace harness between driver seat control unit and automatic drive positioner control unit.

2. CHECK UART LINE SIGNAL 1

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

Connector	Terminals (Wire color)		Condition	Signal (Reference value)
	(+)	(–)		
B352	17 (R/Y)	Ground	Seat memory switch 1 or 2 operation	

PIIA4814E



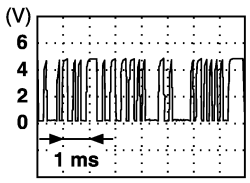
OK or NG

OK >> GO TO 3.
NG >> Check the flowing.

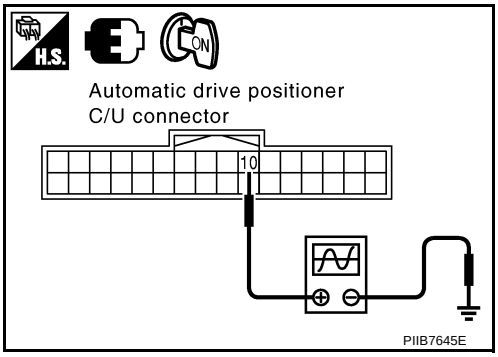
- When voltage signal does not appear with a constant voltage (approx. 5V), replace driver seat control unit.
- When voltage signal does not appear with a constant voltage (approx. 0V), replace automatic drive positioner control unit.

3. CHECK UART LINE SIGNAL 2

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Signal (Reference value)
M96	10 (R/Y)	Ground	Seat memory switch 1 or 2 operation	

PIIA4813E



PIIB7645E

OK or NG

OK >> GO TO 4.
NG >> Check the flowing.

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

4. CHECK DRIVER SEAT CONTROL UNIT

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

Does seat memory function operate?

YES >> Replace automatic drive positioner control unit.
NG >> Replace driver seat control unit.

Check Sliding Limit Switch Signal

NIS001IK

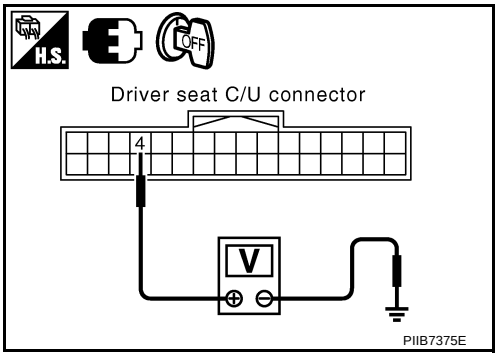
1. CHECK SLIDING LIMIT SWITCH SIGNAL

When operation condition consists, check voltage between driver seat control unit connector B352 terminal 4 and ground.

Connector	Terminals (+)	Terminals (-)	Condition	Voltage (V) (Approx.)
B352	4 (OR)	Ground	The seat slide front most part	0
			Other than above	5

OK or NG

OK >> Sliding limit switch (forward) signal is OK.
NG >> GO TO 2.



PIIB7375E

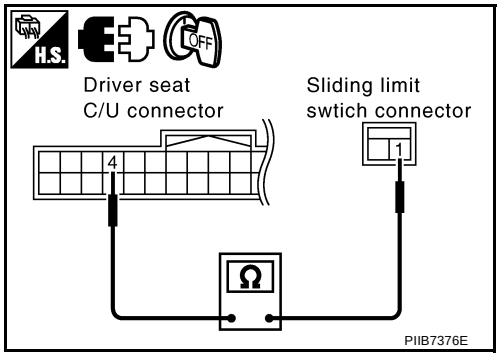
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit and sliding limit switch connector.
2. Check continuity between driver seat control unit connector B352 terminal 4 and sliding limit switch connector B329 terminal 1.

4 (OR) - 1 (OR) : Continuity should exist.

OK or NG

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



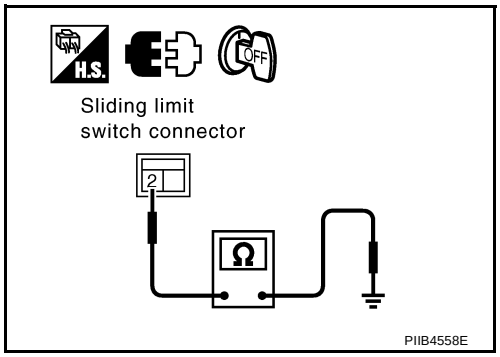
3. CHECK SLIDING LIMIT SWITCH CIRCUIT

Check continuity between sliding limit switch connector B329 terminal 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

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



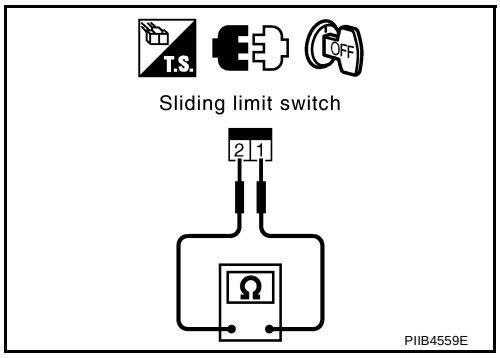
4. CHECK SLIDING LIMIT SWITCH

Check continuity between sliding limit switch connector B329 terminals 1 and 2.

Connector	Terminal		Condition	Continuity
B329	1	2	When sliding limit switch fully front	Yes
			Other than above	No

OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace sliding limit switch.



Check Seatback Switch Signal

NIS001IL

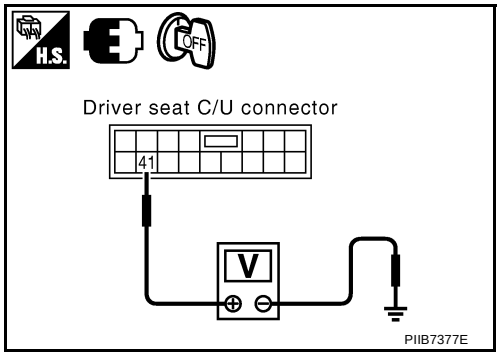
1. CHECK SEATBACK SWITCH SIGNAL

Check voltage between driver seat control unit connector B353 terminal 41 and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B353	41 (L)	Ground	Seatback fold down	0
			Other than above	5

OK or NG

OK >> Seatback switch signal is OK.
NG >> GO TO 2.



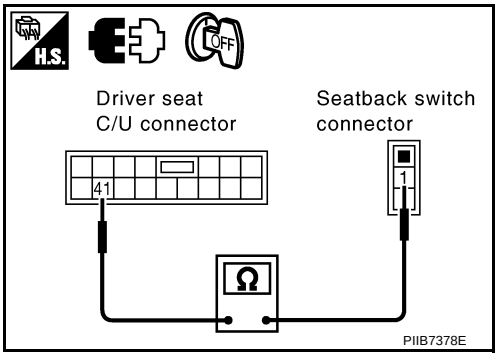
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit and seatback switch connector.
2. Check continuity between driver seat control unit connector B353 terminal 41 and seatback switch connector B348 terminal 1.

41 (L) - 1 (L) : Continuity should exist.

OK or NG

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



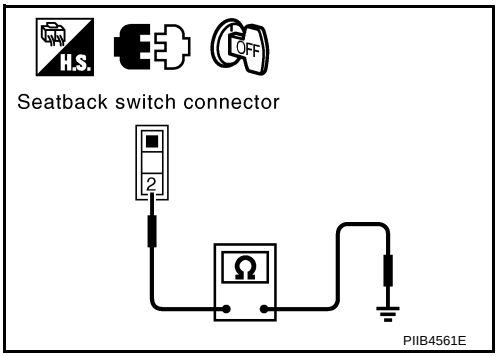
3. CHECK SEATBACK SWITCH CIRCUIT

Check continuity between seatback switch connector B348 terminal 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

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



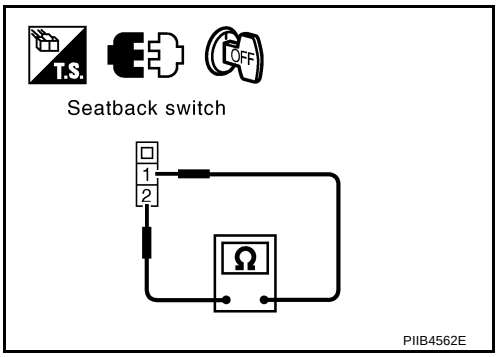
4. CHECK SEATBACK SWITCH

Check continuity between seatback switch connector B348 terminals 1 and 2.

Connector	Terminal		Condition	Continuity
B348	1	2	When seatback switch forward	Yes
			Other than above	No

OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace seatback switch.



Check Power Walk-in Switch Signal

NIS001IM

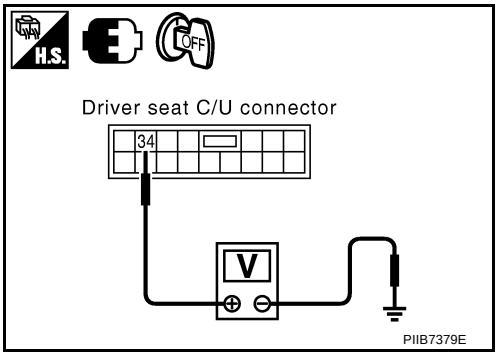
1. CHECK POWER WALK-IN SWITCH SIGNAL

Check voltage between driver seat control unit connector B353 terminal 34and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B353	34 (G)	Ground	When power walk-in switch ON	0
			Other than above	5

OK or NG

OK >> Power walk-in switch signal is OK.
NG >> GO TO 2.



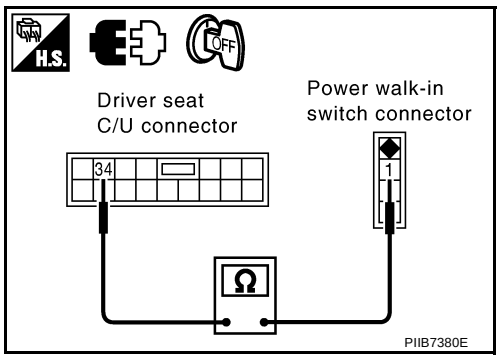
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit and power walk-in switch connector.
2. Check continuity between driver seat control unit connector B353 terminal 34 and power walk-in switch connector B349 terminal 1.

34 (G) - 1 (G) : Continuity should exist.

OK or NG

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



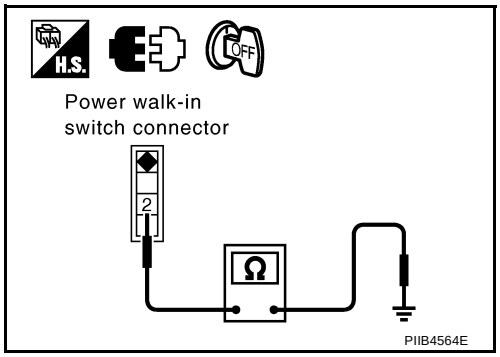
3. CHECK POWER WALK-IN SWITCH CIRCUIT

Check continuity between power walk-in switch connector B349 terminal 2 and ground.

2 (B) - Ground : Continuity should exist.

OK or NG

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



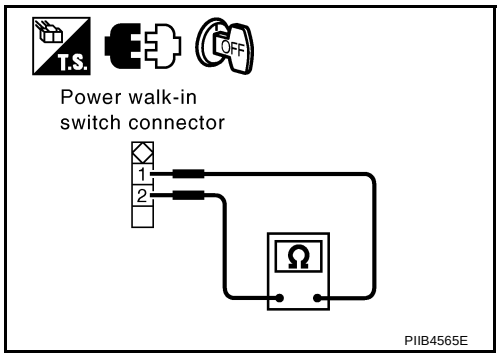
4. CHECK POWER WALK-IN SWITCH

Check continuity between power walk-in switch connector B349 terminals 1 and 2.

Connector	Terminals		Condition	Continuity
B349	1	2	When power walk-in switch ON	Yes
			Other than above	No

OK or NG

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



Check Seat Belt Buckle Switch Signal

NIS001IN

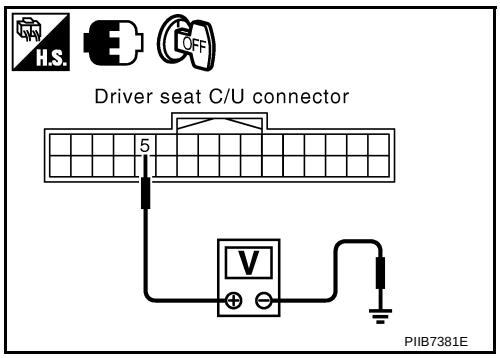
1. CHECK SEAT BULT BUCKLE SWITCH SIGNAL

Check voltage between driver seat control unit connector B352 terminal 5 and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B352	5 (LG)	Ground	When seat belt is fastened	5
			Other than above	0

OK or NG

OK >> Seat belt buckle switch signal is OK.
NG >> GO TO 2.



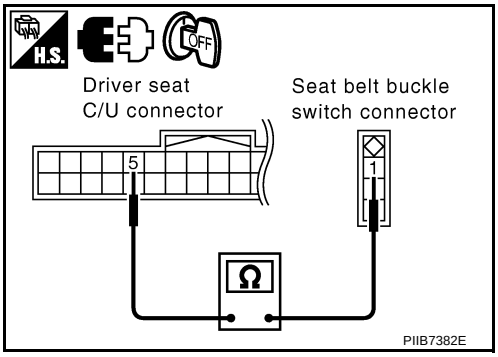
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit and seat belt buckle switch connector.
2. Check continuity between driver seat control unit connector B352 terminal 5 and seat belt buckle switch connector B8 terminal 1.

5 (LG) - 1 (BR) : Continuity should exist.

OK or NG

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



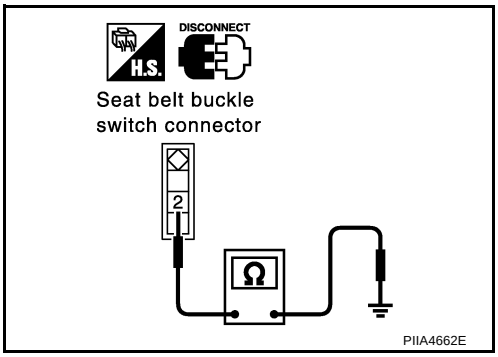
3. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

Check continuity between seat belt buckle switch connector B8 terminal 2 and ground.

2 (B/R) - Ground : Continuity should exist.

OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness seat belt buckle switch.



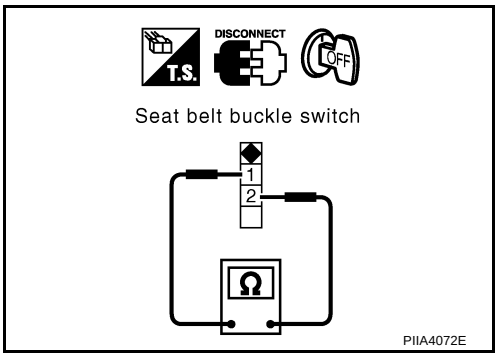
4. CHECK SEAT BELT BUCKLE SWITCH

Check continuity between seat belt buckle switch connector B8 terminals 1 and 2.

Connector	Terminals		Condition	Continuity
B8	1	2	When seat belt is fastened	No
			Other than above	Yes

OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace seat belt buckle switch.

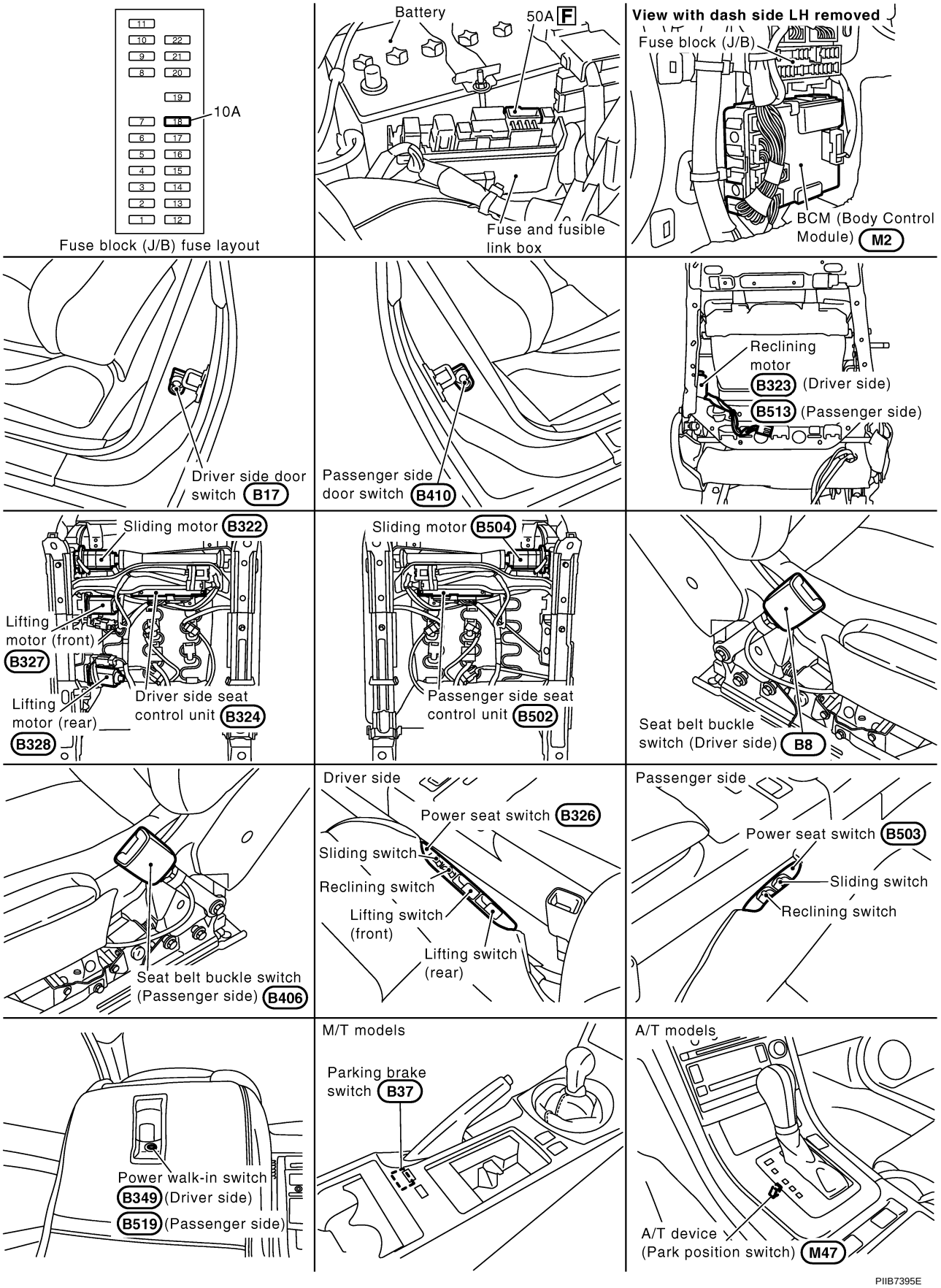


POWER SEAT

PFP:87016

Component Parts and Harness Connector Location

NIS000HP



System Description

NIS000HQ

POWER WORK–IN SYSTEM

This system is a mechanism on the benefit and convenience inclination when the rear seat gotten on and off.
The seat is made to advance when the seat back of front seat is folded down.
The seat is made to retreat to former position when the seat back of front seat is folded up.
After forward movement has been operated, seat does not move backward when reclining the seat back for more than 26° from first locking position.

FORWARD OPERATION

When condition of power walk-in system operating permission is satisfied, the seat advances to the front most at the following condition.

- the seat back is fold down when the door is open
- the door is closed and when the seat is fold down, and then the door is opened.

BACKWARD OPERATION

When condition of power walk-in system operating permission is satisfied, the seat retreats to former position at the following condition.

- Return based on the fold down seat back within 60 seconds after door is opened.

The backward distance of the passenger seat is different according to the seat position of beginning of the power walk-in system.

- Return to former position when the seat position of beginning of the power walk-in system is from the front most position to within 175mm (6.89in).
- Return to 175mm (6.89in) position when the seat position of beginning of the power walk-in system exceeds 175mm (6.89in) from the front most position.

CONDITION OF POWER WALK-IN SYSTEM OPERATING PERMISSION

Common of driver side and passenger side condition

- When seat belt is unfastened
- When vehicle speed is less than 7km/h (4MPH)
- When does not operates sliding switch

Condition only of driver side

- When shift lever is in P position. (with A/T models)
- When pull the parking brake. (with M/T models)

OPERATION STOP CONDITION OF POWER WORK–IN SYSTEM

Common of driver side and passenger side condition

- When vehicle speed is more than 7km/h (4MPH)
- When operates sliding switch
- When the sliding motor locks
- When the operation time is consecutive and 60 seconds or more pass
- When reclining behind the seat back

Condition only of driver side

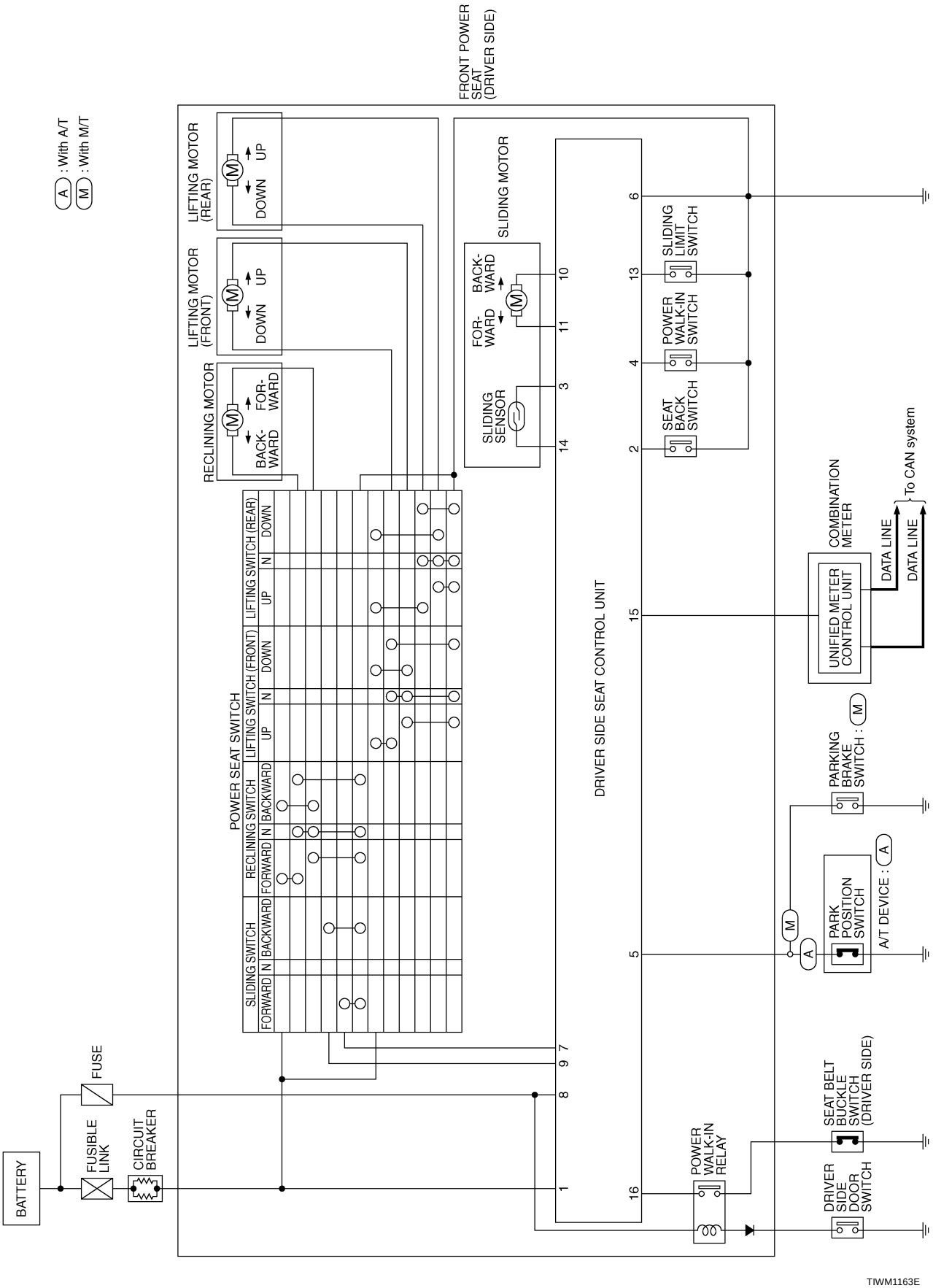
- When shift lever besides P position. (with A/T models)
- When release the parking brake. (with M/T modes)

Condition only of passenger side

- When seat belt is fastened.

Schematic/For Driver Seat

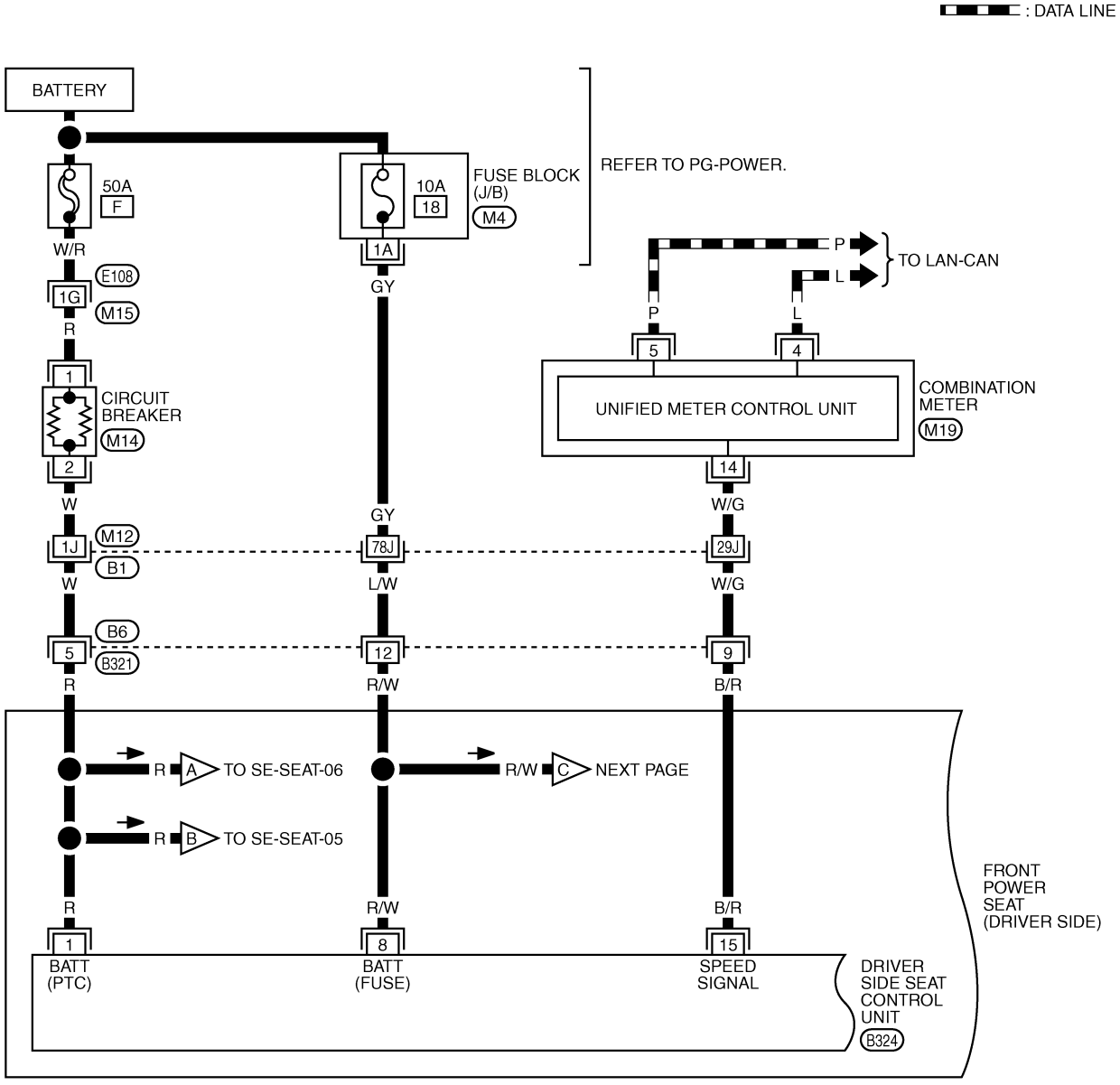
NIS000HR

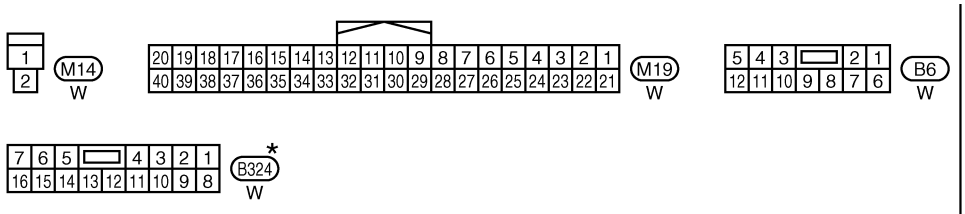


Wiring Diagram — SEAT —/For Driver Seat

NIS000HS

SE-SEAT-01





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

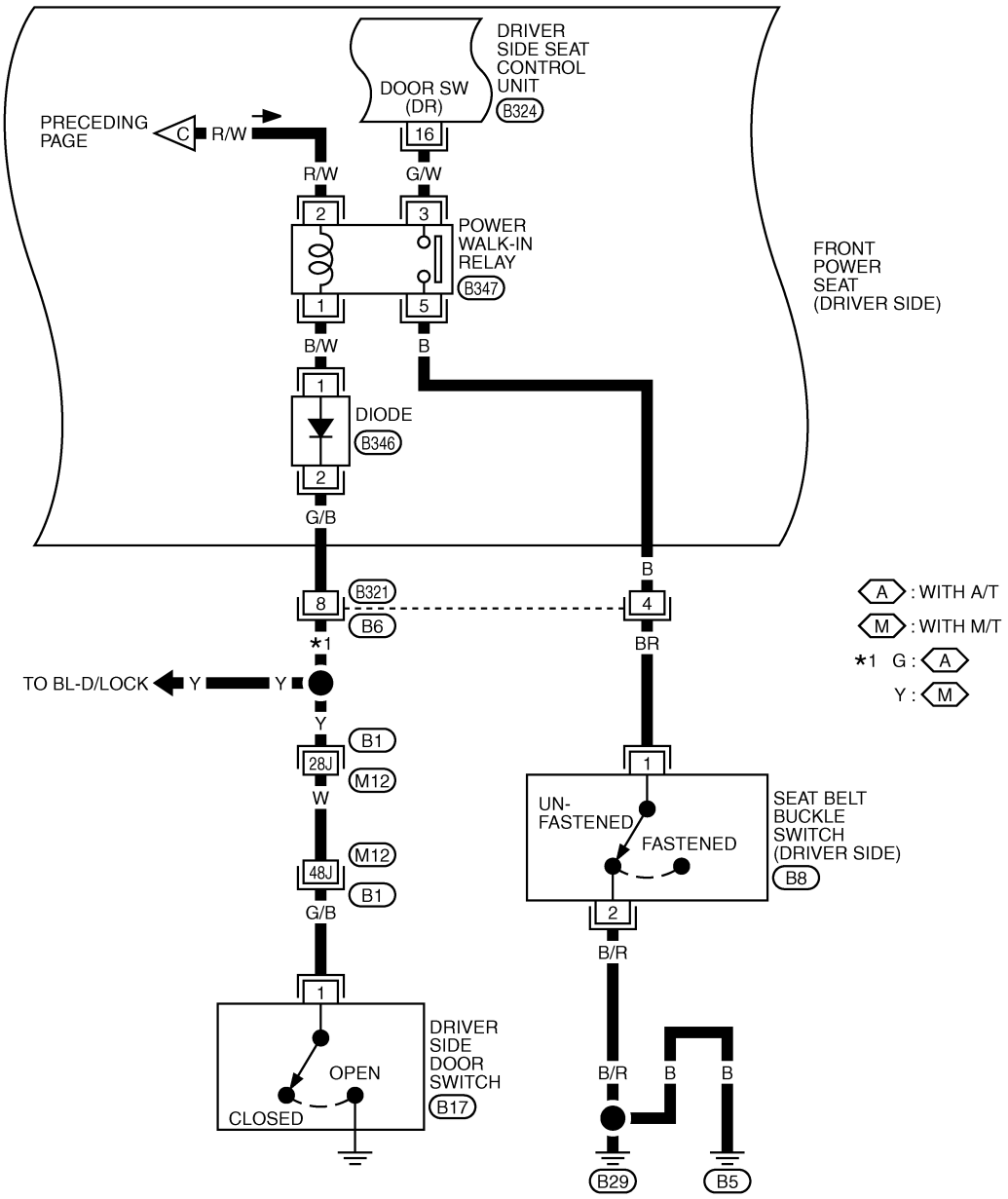
REFER TO THE FOLLOWING.

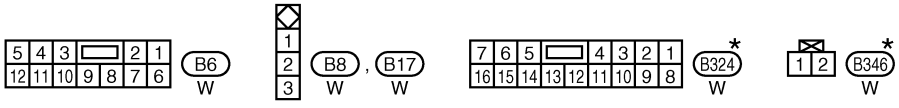
E108 , B1 -SUPER MULTIPLE JUNCTION (SMJ)

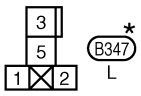
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TIWM1503E

SE-SEAT-02





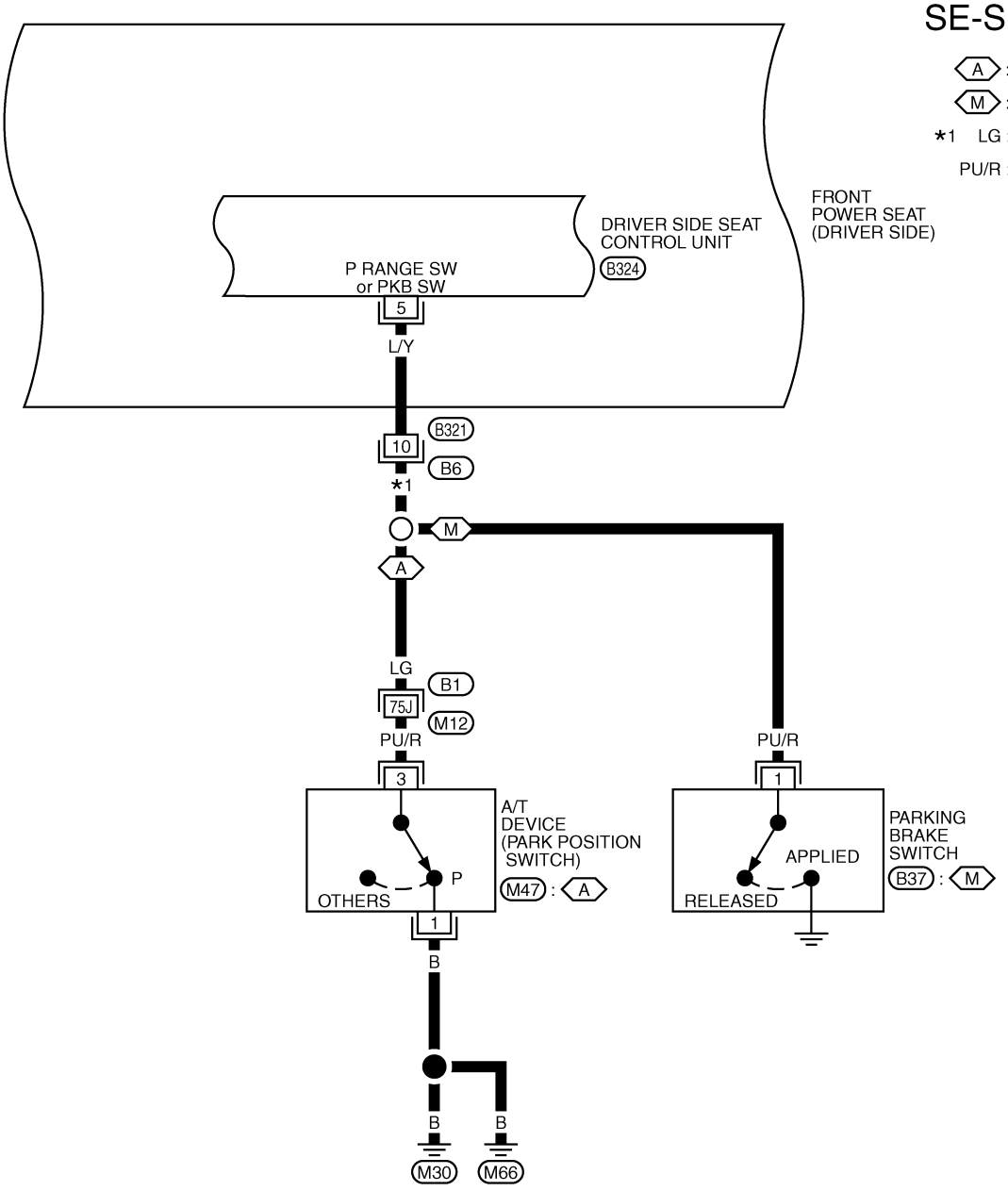


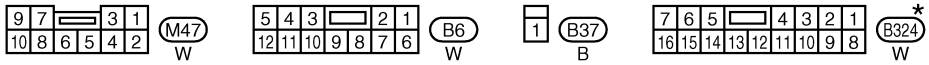
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

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

TIWM1898E

SE-SEAT-03





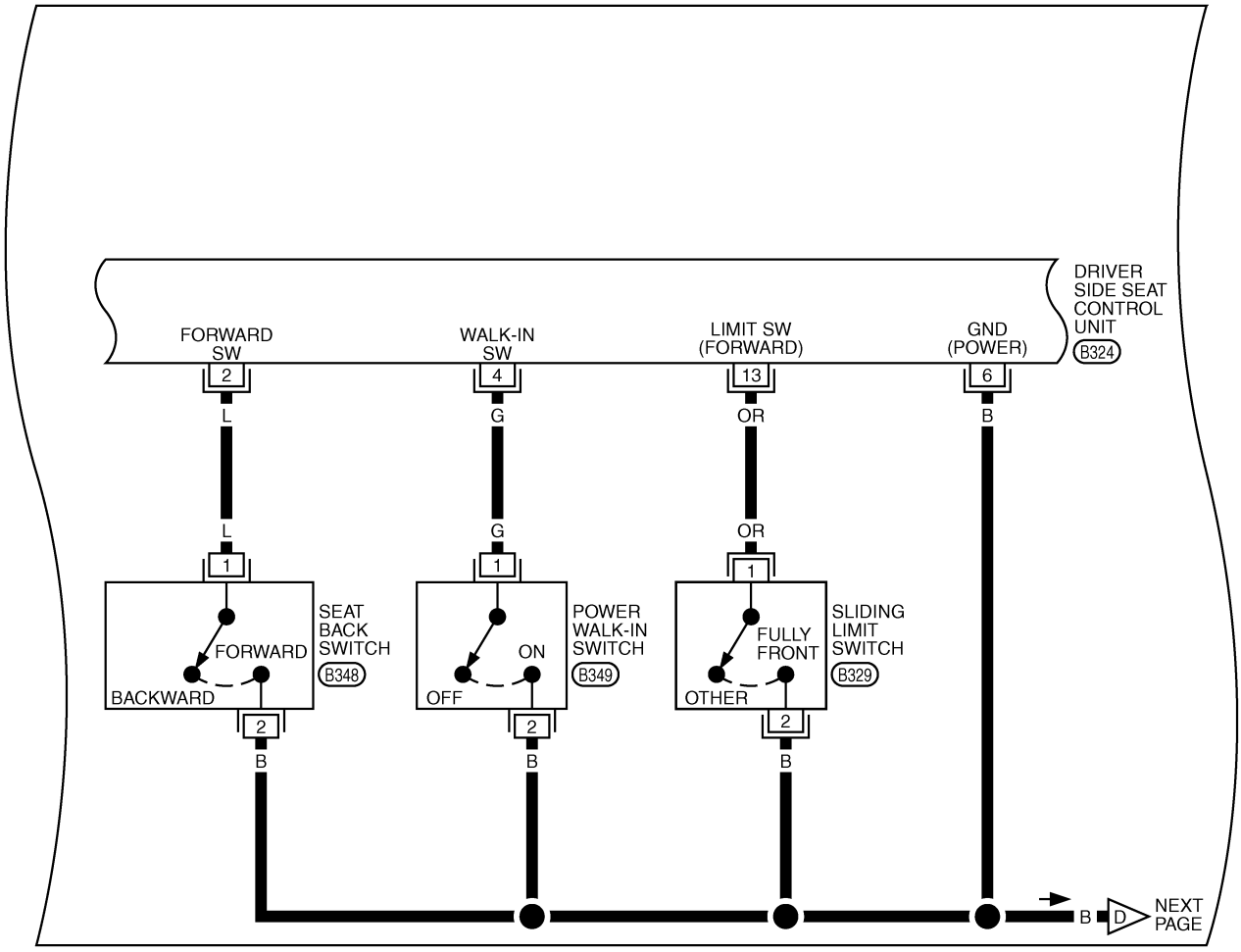
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)

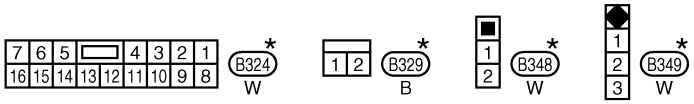
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1899E

SE-SEAT-04

FRONT POWER SEAT (DRIVER SIDE)

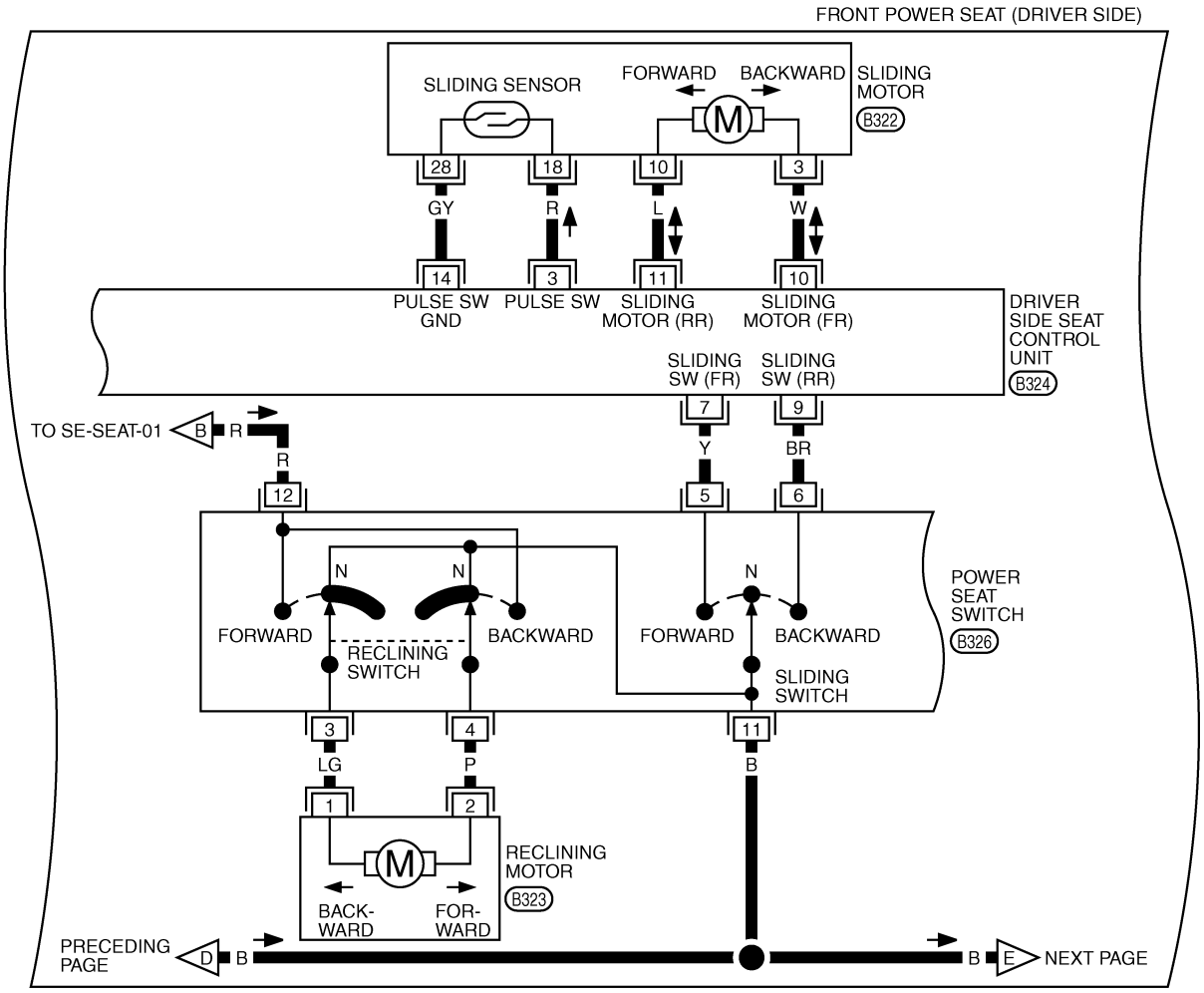


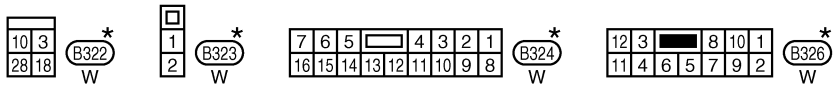


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1226E

SE-SEAT-05

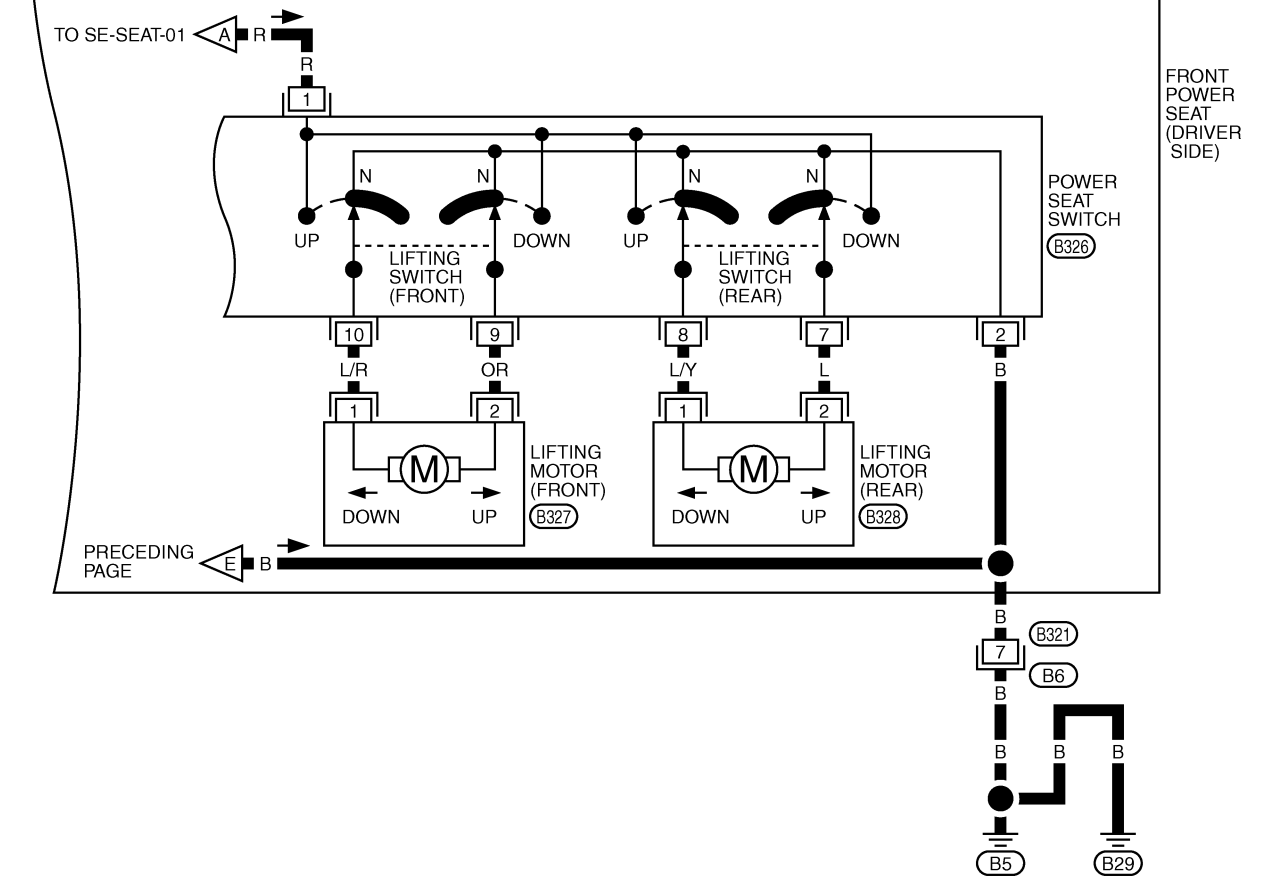


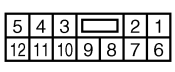


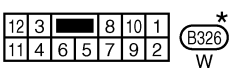
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

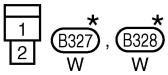
TIWM1159E

SE-SEAT-06







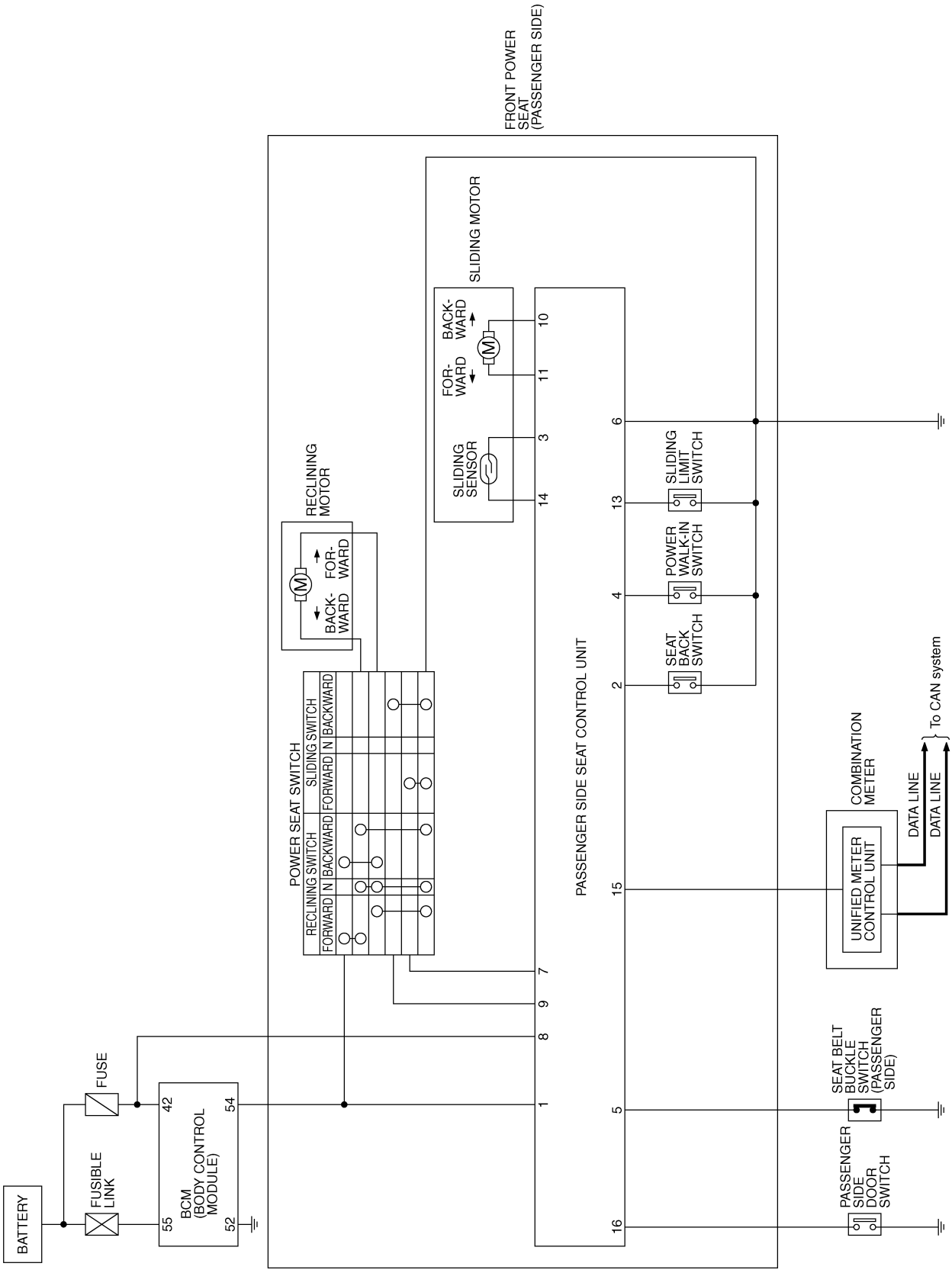


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1160E

Schematic/For Passenger Seat

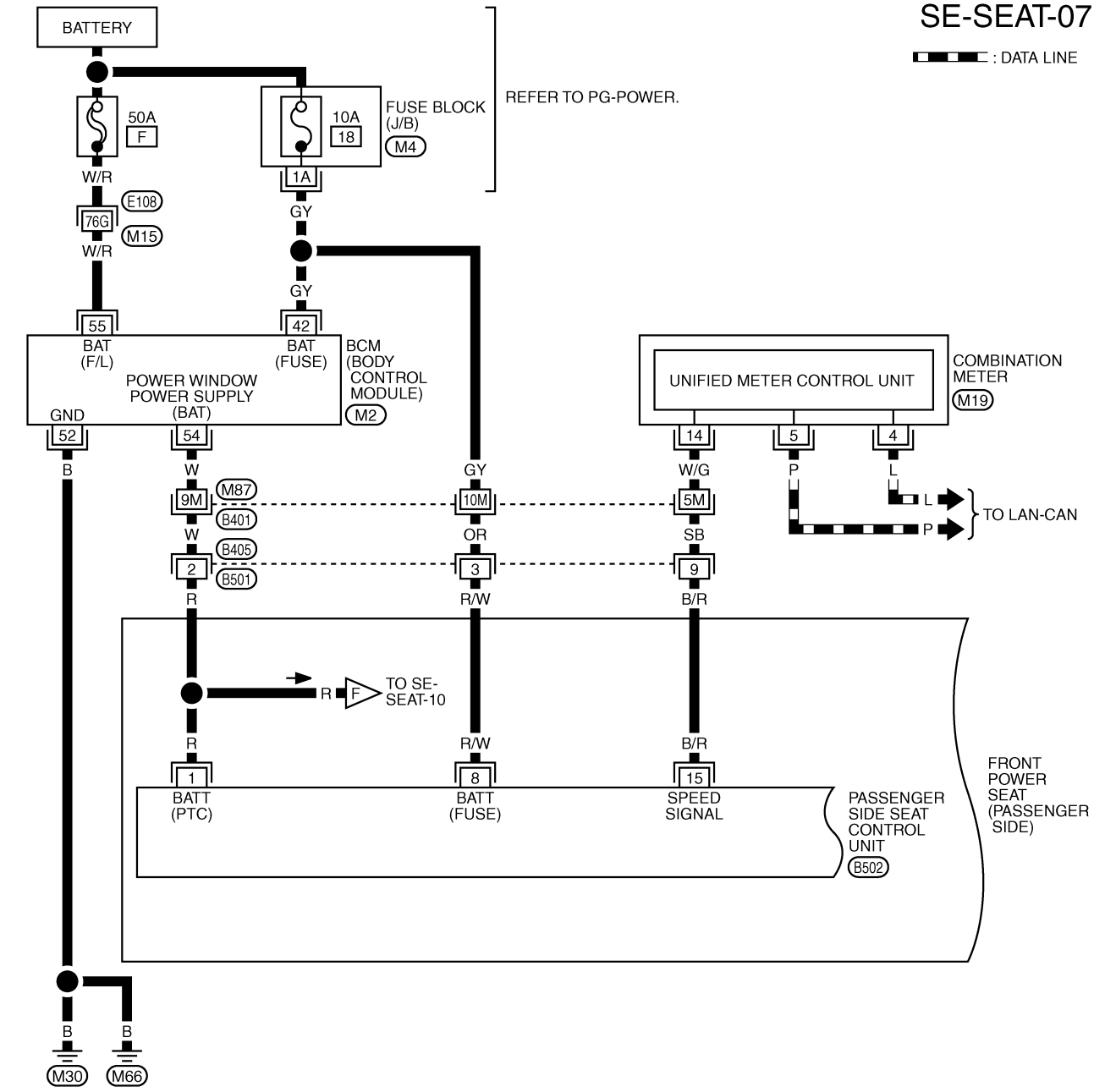
NIS000HT

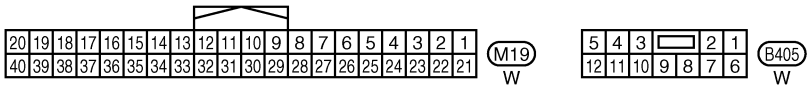


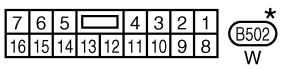
TIWM1506E

Wiring Diagram — SEAT —/For Passenger Seat

NIS000HU







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

REFER TO THE FOLLOWING.

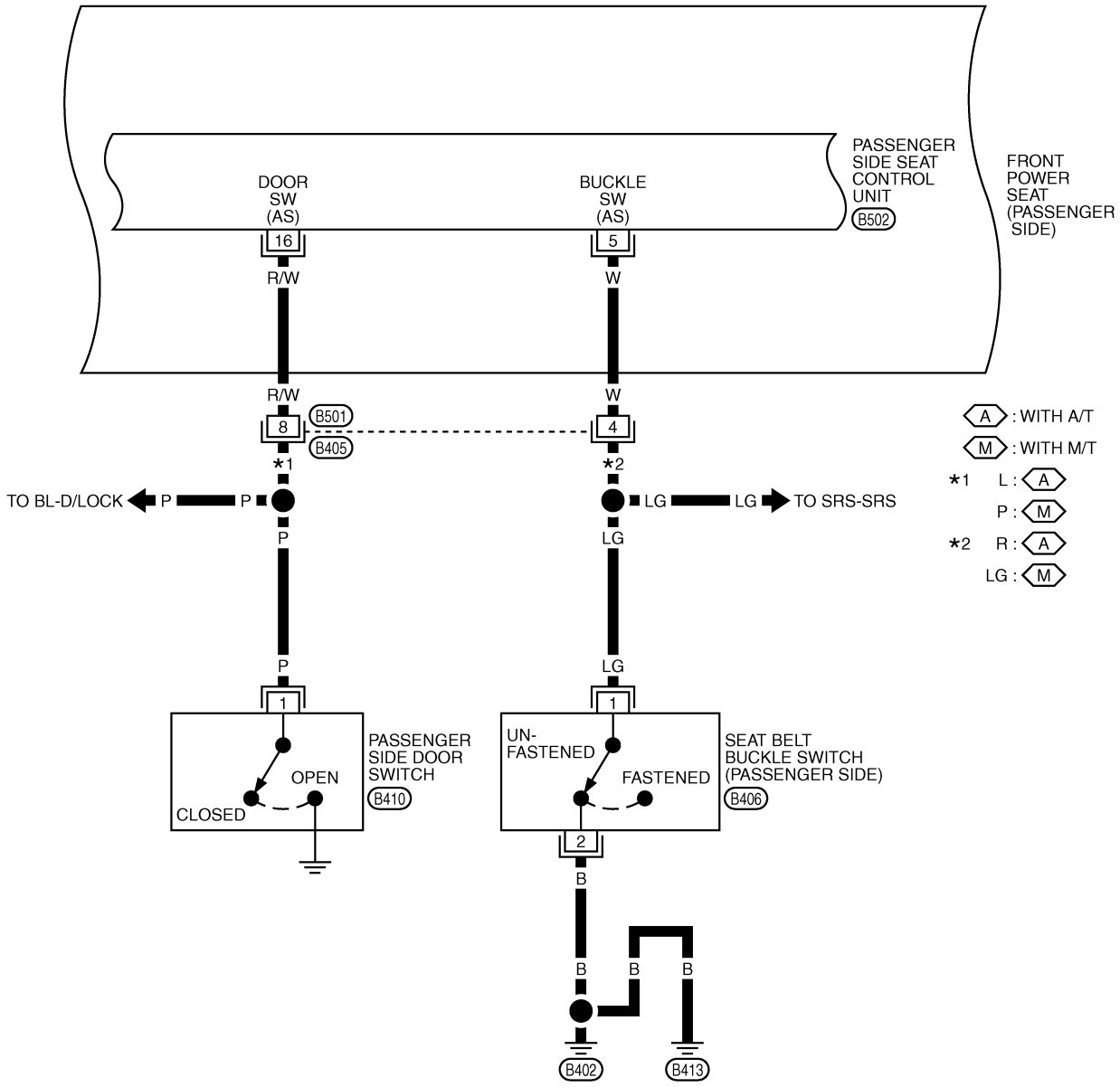
E108 , B401 -SUPER MULTIPLE JUNCTION (SMJ)

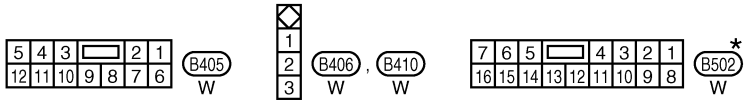
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

M2 -ELECTRICAL UNITS

TIWM1507E

SE-SEAT-08



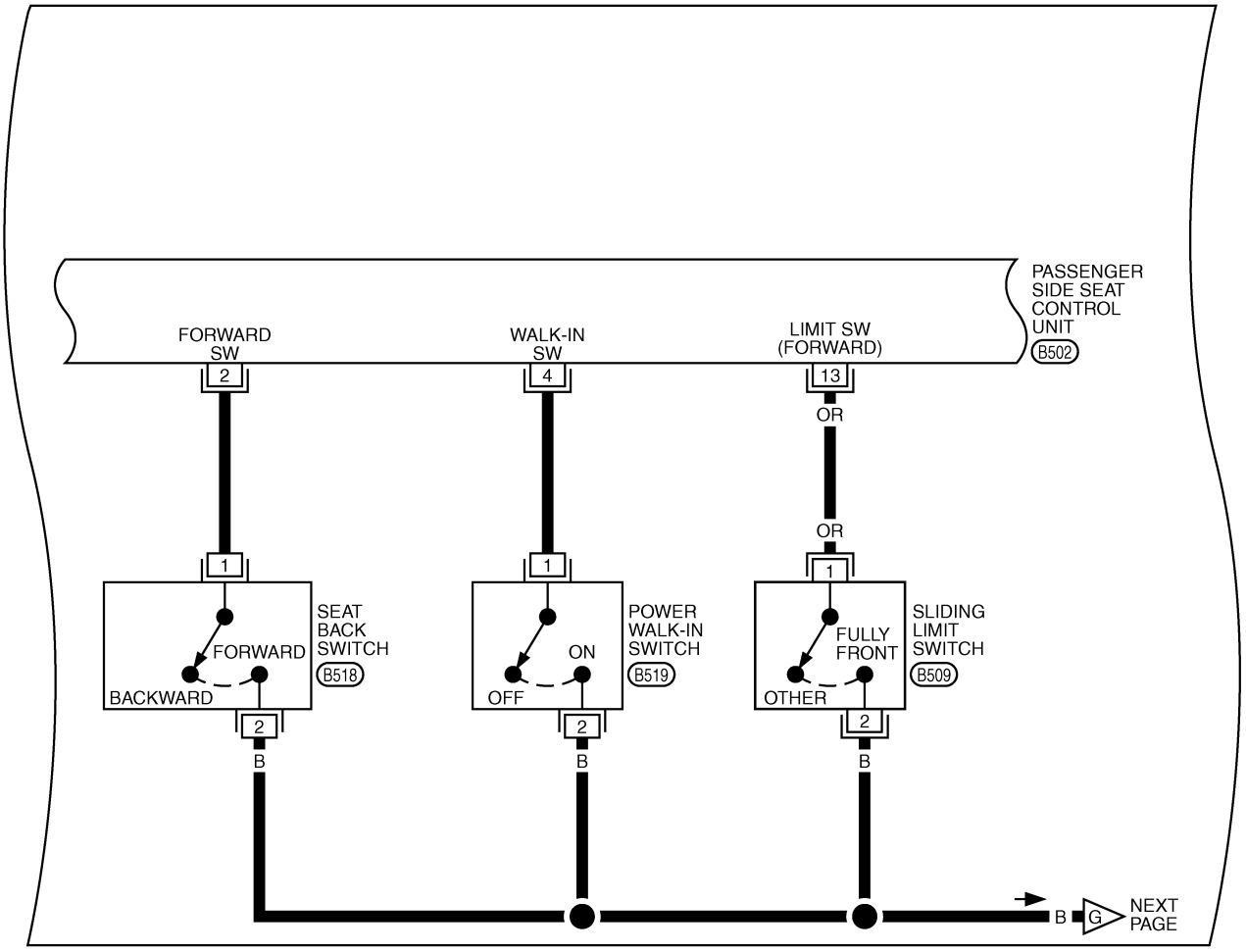


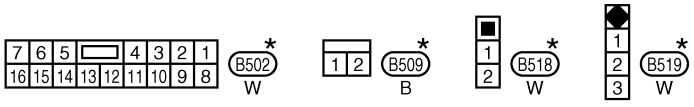
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1900E

SE-SEAT-09

FRONT POWER SEAT (PASSENGER SIDE)



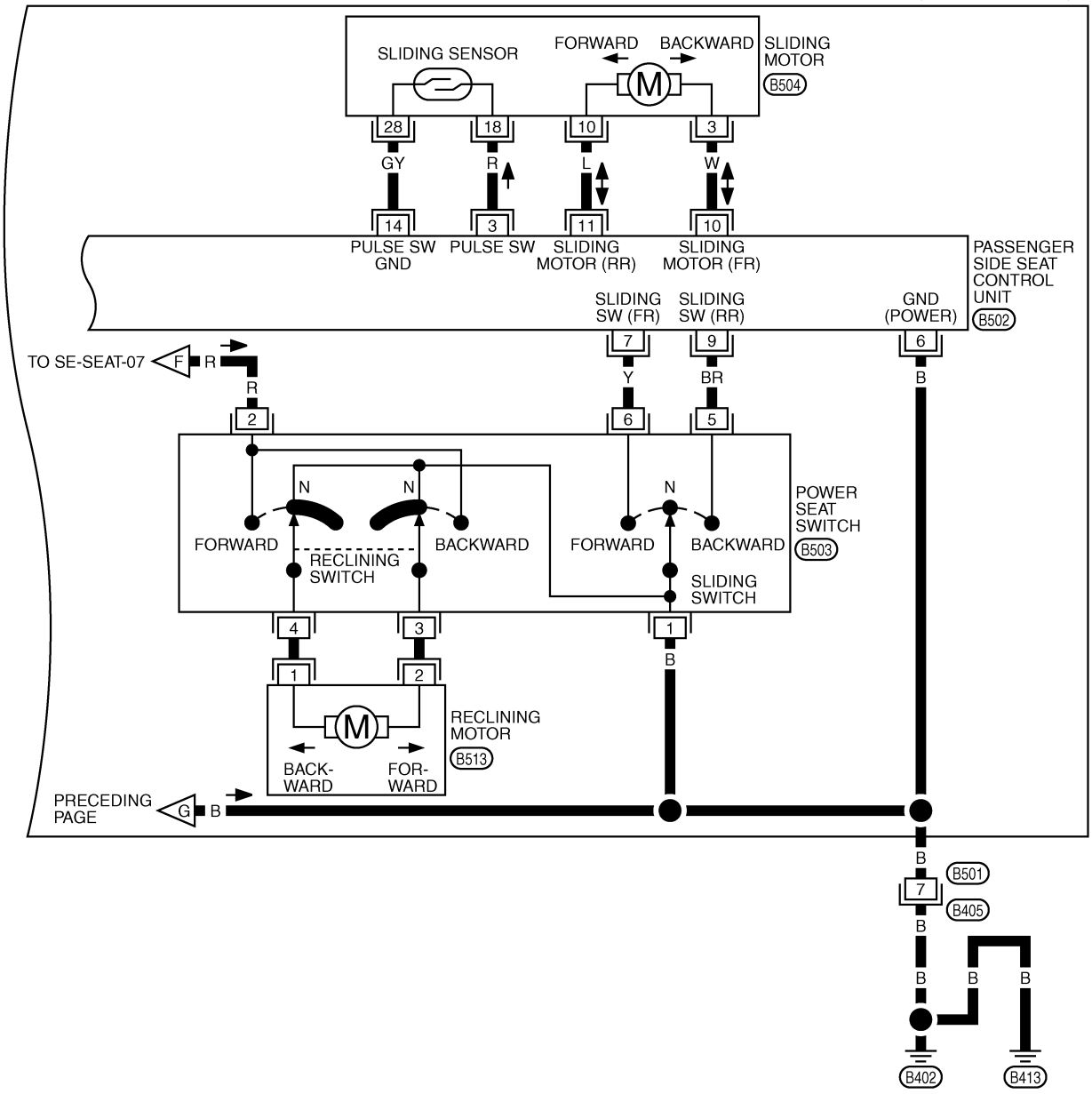


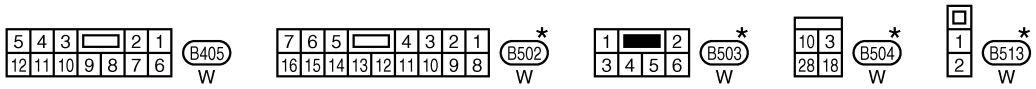
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1161E

SE-SEAT-10

FRONT POWER SEAT (PASSENGER SIDE)



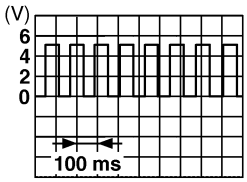
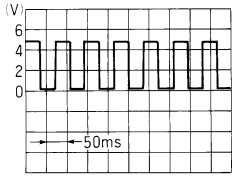


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1162E

Terminal and Reference Value for Driver Side Seat Control Unit

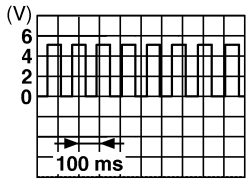
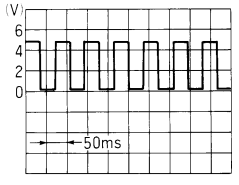
NIS000HV

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
1	R	BAT power supply	Input	—	Battery voltage
2*	L	Seatback switch signal	Input	When seatback switch forward	0
				Other than above	5
3*	R	Sliding sensor signal	Input	When sliding motor operates	 PIIA4079E
4	G	Power walk-in switch signal	Input	When power walk-in switch: ON	0
				Other than above	5
5	L/Y	A/T shift liver P position signal (with A/T models)	Input	When shift lever P position	0
				Other than above	5
		Parking brake signal (with M/T models)		When pull the parking brake	0
				Other than above	5
6	B	Ground	—	—	0
7	Y	Forward sliding switch signal	Input	Forward sliding switch: ON	0
				Other than above	Battery voltage
8	R/W	BAT power supply	Input	—	Battery voltage
9	BR	Backward sliding switch signal	Input	Backward sliding switch: ON	0
				Other than above	Battery voltage
10	W	Sliding motor forward signal	Output	When sliding motor forward operates	Battery voltage
				Other than above	0
11	L	Sliding motor backward signal	Output	When sliding motor backward operates	Battery voltage
				Other than above	0
13*	OR	Limit switch (forward)	Input	The seat slide front most part	0
				Other than above	5
14	GY	Sliding sensor ground	—	—	0
15*	B/R	Vehicle speed signal (2-pulse)	Input	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	 ELF1080D
16	G/W	Door switch and seat belt switch signal	Input	When seat belt is unfastened and door is open	0
				Other than above	Battery voltage

*: When operation condition is satisfied.

Terminal and Reference Value for Passenger Side Seat Control Unit

NIS000HW

Terminal	Wire color	Item	Signal Input/Output	Condition	Voltage (V) (Approx.)
1	R	BAT power supply	Input	—	Battery voltage
2*	—	Seatback switch signal	Input	When seatback switch forward	0
				Other than above	5
3*	R	Sliding sensor signal	Input	When sliding motor operates	 PIIA4079E
4	—	Power walk-in switch signal	Input	When power walk-in switch: ON	0
				Other than above	5
5	W	Seat belt buckle switch	Input	When passenger side seat belt is fastened	5
				Other than above	0
6	B	Ground	—	—	0
7	Y	Forward sliding switch signal	Input	Forward sliding switch: ON	0
				Other than above	Battery voltage
8	R/W	BAT power supply	Input	—	Battery voltage
9	BR	Backward sliding switch signal	Input	Backward sliding switch: ON	0
				Other than above	Battery voltage
10	W	Sliding motor forward signal	Output	When sliding motor forward operates	Battery voltage
				Other than above	0
11	L	Sliding motor backward signal	Output	When sliding motor backward operates	Battery voltage
				Other than above	0
13*	OR	Limit switch (forward)	Input	The seat slide front most part	0
				Other than above	5
14	GY	Sliding sensor ground	—	—	0
15*	B/R	Vehicle speed signal (2-pulse)	Input	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	 ELF1080D
16	R/W	Passenger side door switch signal	Input	Open passenger side door (ON)	0
				Close passenger side door (OFF)	Battery voltage

*: When operation condition is satisfied.

Work Flow

NIS000HX

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to SE-85, "System Description" .
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to SE-100, "Symptom Chart" .
4. Does power seat system operate normally? If Yes, GO TO 5, If No, GO TO 3.
5. INSPECTION END.

Symptom Chart

NIS000HY

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

Symptom	Diagnoses / service procedure	Refer to page
Driver side power seat cannot be operated.	1. Check driver seat control unit power supply and ground circuit.	SE-102
	2. Check sliding switch. (driver side)	SE-104
	3. Check sliding motor.	SE-106
	4. Check reclining motor (driver side)	SE-108
	5. Check lifting motor (front)	SE-112
	6. Check lifting motor (rear)	SE-111
Passenger side power seat cannot be operated.	1.Check BCM power supply and ground circuit.	SE-101
	2. Check passenger seat control unit power supply and ground circuit.	SE-102
	3. Check sliding switch. (passenger side)	SE-105
	4. Check sliding motor.	SE-106
	5. Check reclining motor (passenger side)	SE-109
Power walk-in system does not operated, but power seat can be operated (drive side)	1. Check door switch and seat belt buckle switch.	SE-116
	2. Check A/T shift lever P position signal (with A/T models)	SE-119
	2. Check parking brake signal (with M/T models)	SE-121
	3. Check vehicle speed signal.	SE-122
	4. Check sliding limit switch signal	SE-123
	5. Check seatback switch signal	SE-124
	6. Check power walk-in switch signal	SE-125
	7. Check sliding sensor.	SE-107
Power walk-in system does not operated, but power seat can be operated (passenger side)	1. Check passenger side door switch.	SE-113
	2. Check passenger side seat belt buckle switch.	SE-114
	3. Check vehicle speed signal.	SE-122
	4. Check sliding limit switch signal	SE-123
	5. Check seatback switch signal	SE-124
	6. Check power walk-in switch signal	SE-125
	7. Check sliding sensor.	SE-107

Check BCM Power Supply and Ground Circuit

NIS000HZ

1. FUSE INSPECTION

- Check 10A fuse [No.18, located in the fuse block (J/B)]
- Check 50A fusible link (letter **F** located in the fuse and fusible link box).

NOTE:
Refer to RF-10, "Component Parts and Harness Connector Location" .

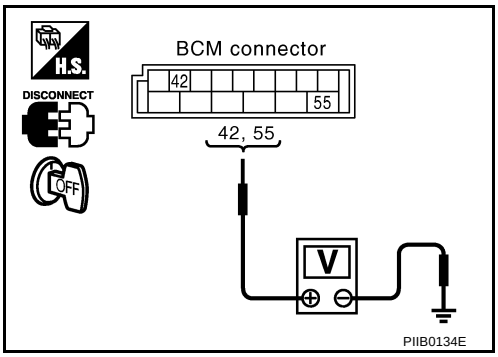
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-3, "POWER SUPPLY ROUTING CIRCUIT" .

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector.
3. Check voltage between BCM connector M2 terminals 42, 55 and ground.

42 (GY) – Ground : Battery voltage
55 (W/R) – Ground : Battery voltage



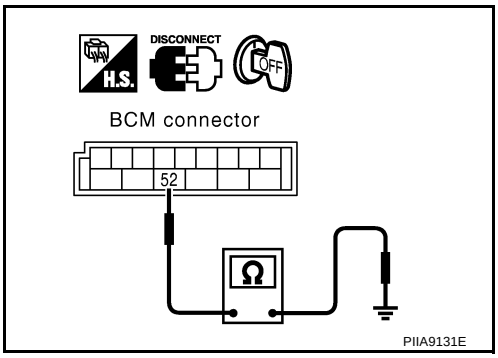
OK or NG

OK >> GO TO 3.
NG >> Check BCM power supply circuit for open or short.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M2 terminal 52 and ground.

52 (B) – Ground : Continuity should exist.



OK or NG

OK >> Power supply and ground circuit is OK.
NG >> Check BCM ground circuit for open.

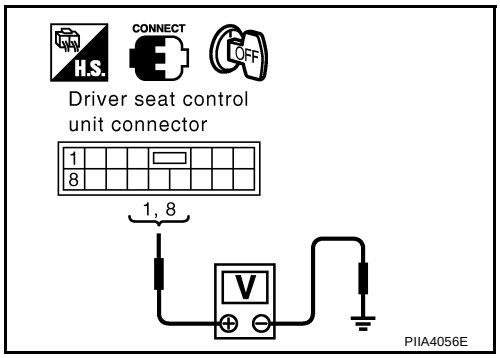
Check Driver Seat Control Unit Power Supply and Ground Circuit

NIS000I0

1. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Check voltage between driver seat control unit B324 terminals 1, 8 and ground.

1 (R) – Ground	**: Battery voltage**
8 (R/W) – Ground	**: Battery voltage**



OK or NG

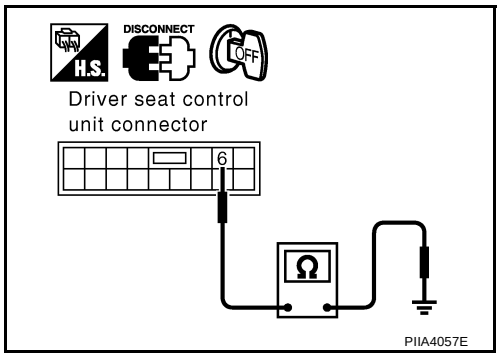
OK >> GO TO 2.
NG >> Check the following.

- 50A fusible link (letter **F** , located in fuse and fusible link box.)
- 10A fuse [No.18, located in fuse block (J/B)]
- Harness for open or short between driver seat control unit and fuse.

2. CHECK GROUND CIRCUIT

1. Disconnect driver side control unit connector.
2. Check continuity between driver side control unit B324 terminal 6 and ground.

6 (B) – Ground	**: Continuity should exist.**



OK or NG

OK >> Driver seat control unit power supply and ground circuit are OK. Further inspection is necessary, Refer to symptom chart.
NG >> Repair or replace harness.

Check Passenger Seat Control Unit Power Supply and Ground Circuit

NIS000I1

1. CHECK FUSE

- Check 10A fuse [No. 18, located in the fuse block (J/B)].

NOTE:
Refer to RF-10, "Component Parts and Harness Connector Location"

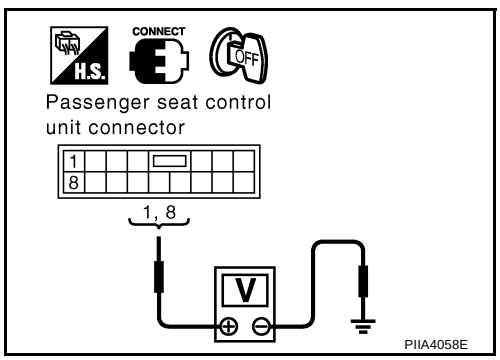
OK or NG

OK >> GO TO 2.
NG >> If fuse blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-3, "POWER SUPPLY ROUTING CIRCUIT"

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Check voltage between passenger seat control unit connector B502 terminals 1, 8 and ground.

1 (R) – Ground	**: Battery voltage**
8 (R/W) – Ground	**: Battery voltage**



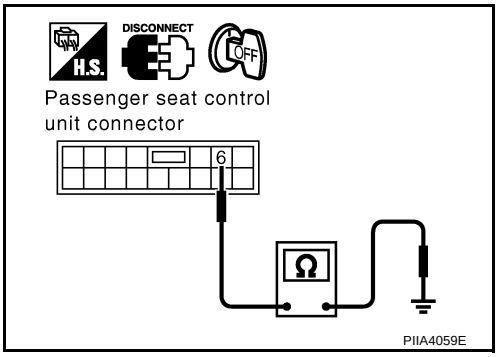
OK or NG

OK >> GO TO 3.
NG >> GO TO 4.

3. CHECK GROUND CIRCUIT

1. Disconnect passenger seat control unit connector.
2. Check continuity between passenger seat control unit connector B502 terminal 6 and ground.

6 (B) – Ground : Continuity should exist.



OK or NG

OK >> Passenger seat control unit power supply and ground circuit are OK, Further inspection is necessary. Refer to symptom chart.
NG >> Repair or replace harness.

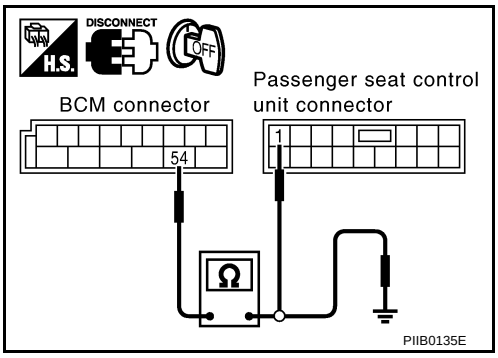
4. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM and passenger seat control unit connector.
2. Check continuity between BCM connector M2 terminal 54 and passenger seat control unit connector B502 terminal 1.

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

3. Check continuity between BCM connector M2 terminal 54 and ground.

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



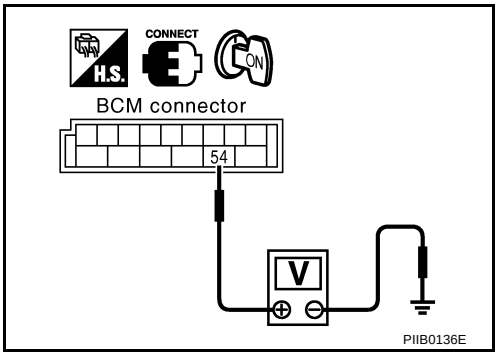
OK or NG

OK >> GO TO 5.
NG >> Repair or replace harness between BCM and passenger seat control unit.

5. CHECK BCM OUTPUT SIGNAL

1. Connect BCM connector.
2. Check voltage between BCM connector M2 terminal 54 and ground.

54 (W) – Ground : Battery voltage



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace BCM.

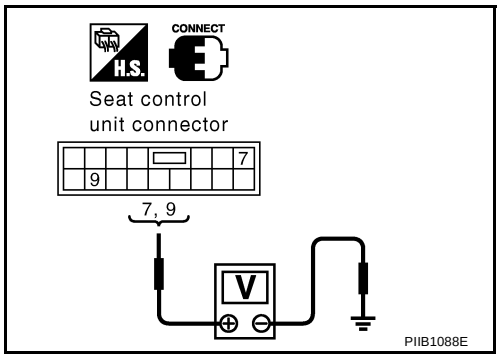
Check Sliding Switch (Driver Side)

NIS000I2

1. CHECK SLIDING SWITCH INPUT SIGNAL

Check voltage between seat control unit connector B324 terminals 7, 9 and ground.

Connector	Terminals (+)	Terminals (-)	Condition	Voltage (V) (Approx.)
B324	7 (Y)	Ground	FORWARD SW: ON	0
			Other than above	Battery voltage
	9 (BR)		BACKWARD SW: ON	0
			Other than above	Battery voltage



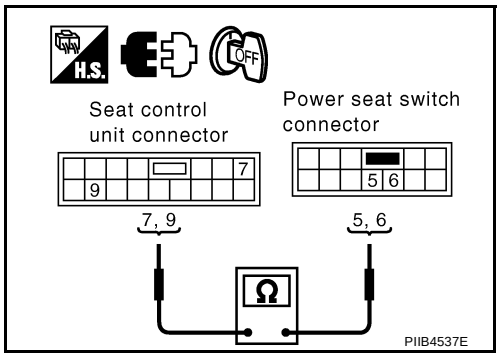
OK or NG

OK >> Sliding switch input signal OK.
NG >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

1. Disconnect seat control unit and power seat switch connector.
2. Check continuity between seat control unit connector B324 terminals 7, 9 and power seat switch connector B326 terminals 5, 6.

7 (Y) – 5 (Y) : Continuity should exist.
9 (BR) – 6 (BR) : Continuity should exist.



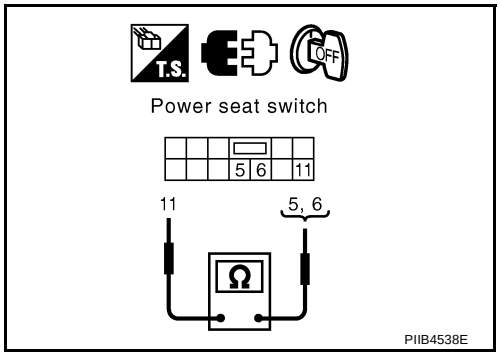
OK or NG

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

3. CHECK SLIDING SWITCH

Check continuity between power seat switch connector B326 terminals 5, 6 and 11.

Terminals		Power seat switch	Continuity
5	11	FORWARD SW: ON	Yes
		Other than above	No
6		BACKWARD SW: ON	Yes
		Other than above	No



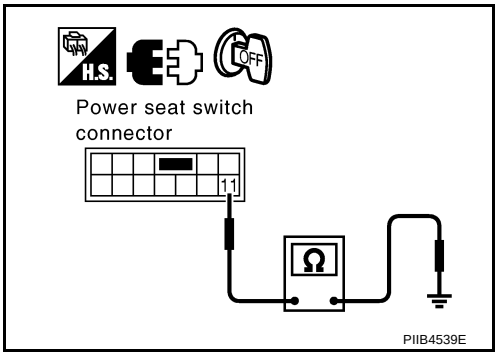
OK or NG

OK >> GO TO 4.
NG >> Replace power seat switch.

4. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B326 terminal 11 and ground.

11 (B) – Ground : Continuity should exist.



OK or NG

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

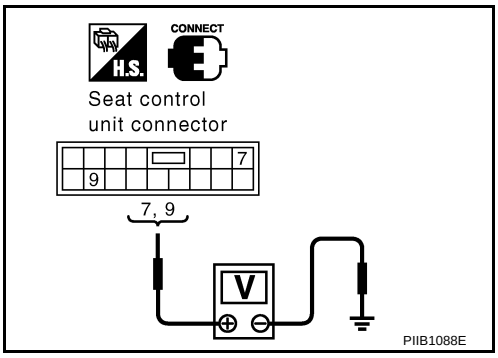
Check Sliding Switch (Passenger Side)

NIS000I3

1. CHECK SLIDING SWITCH (PASSENGER SIDE)

Check voltage between seat control unit connector B502 terminals 7, 9 and ground.

Connector	Terminal (Wire Color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B502	7 (Y)	Ground	FORWARD SW: ON	Battery voltage
			Other than above	0
	9 (BR)		BACKWARD SW: ON	Battery voltage
			Other than above	0



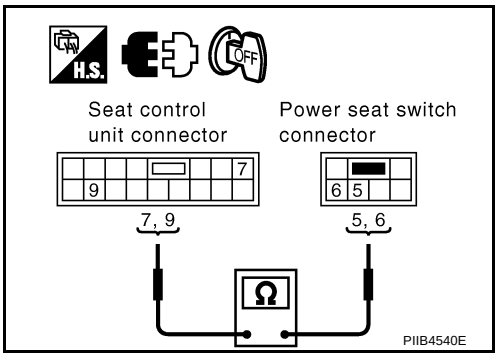
OK or NG

OK >> Sliding switch input signal OK.
NG >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

1. Disconnect seat control unit and power seat switch connector.
2. Check continuity between seat control unit connector B502 terminals 7, 9 and power seat switch connector B503 terminals 5, 6.

7 (Y) - 6 (Y) : Continuity should exist.
9 (BR) - 5 (BR) : Continuity should exist.



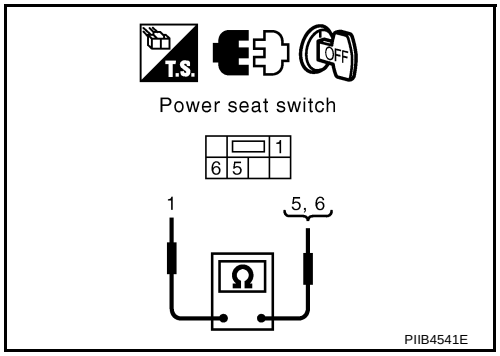
OK or NG

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

3. CHECK SLIDING SWITCH

Check continuity between power seat switch connector B503 terminals 5, 6 and 1.

Terminal		Condition	Continuity
6	1	FORWARD SW: ON	Yes
		Other than above	No
5		BACKWARD SW: ON	Yes
		Other than above	No



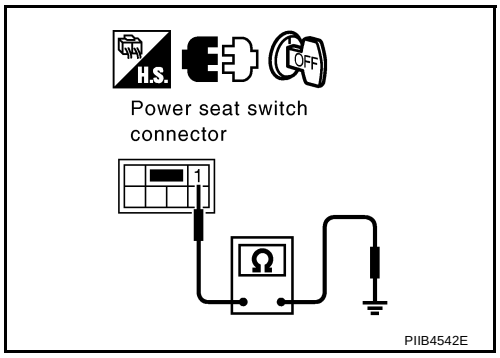
OK or NG

OK >> GO TO 4.
NG >> Replace power seat switch.

4. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B503 terminal 1 and ground.

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



OK or NG

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

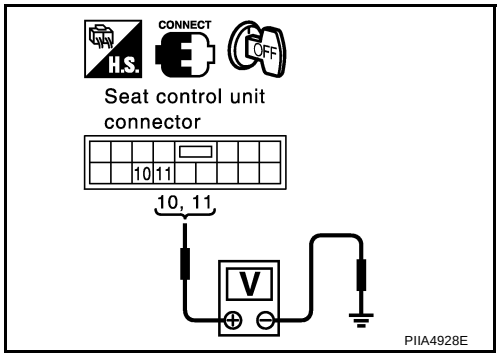
Check Sliding Motor

NIS000I4

1. CHECK SLIDING MOTOR SIGNAL

Check voltage between seat control unit connector B324 (driver side), B502 (passenger side) terminals 10, 11 and ground.

Connector	Terminals (+)	Terminals (-)	Condition	Voltage (V) (Approx.)
B324 B502	10 (W)	Ground	FORWARD SW: ON	Battery voltage
			Other than above	0
	11 (L)		BACKWARD SW: OFF	Battery voltage
			Other than above	0



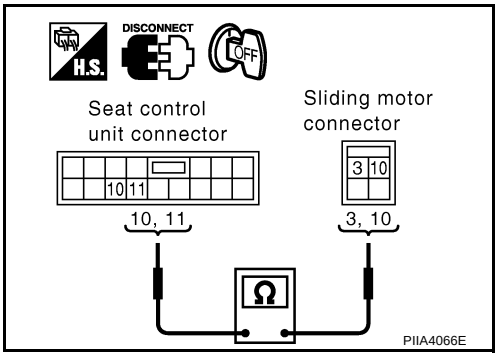
OK or NG

OK >> GO TO 2.
NG >> Replace seat control unit driver side or passenger side.

2. CHECK SLIDING MOTOR CIRCUIT

1. Disconnect seat control unit and sliding motor connector.
2. Check continuity between seat control unit connector B324 (driver side), B502 (passenger side) terminals 10, 11 and sliding motor connector B322 (driver side), B504 (passenger side) terminals 3, 10.

10 (W) – 3 (W) : Continuity should exist.
11 (L) – 10 (L) : Continuity should exist.



OK or NG

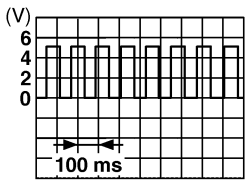
OK >> Replace sliding motor
NG >> Repair or replace harness between seat control unit and sliding motor.

Check Sliding Sensor

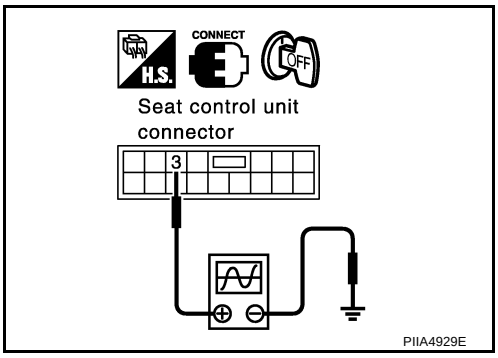
NIS000I5

1. CHECK SLIDING SENSOR SIGNAL

Check the signal between seat control unit connector B324 (driver side), B502 (passenger side) and ground with oscilloscope.

Connector	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
B324 B502	3 (R)	Ground	Motor is operating	

PIIA4079E



OK or NG

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

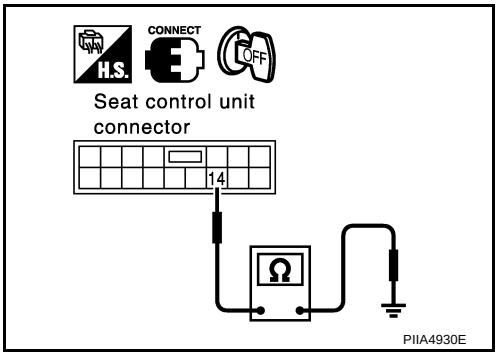
2. CHECK SLIDING SENSOR GROUND CIRCUIT

1. Connect sliding motor connector.
2. Check continuity seat control unit connector B324 (driver side), B502 (passenger side) terminal 14 and ground.

14 (GY) – Ground : Continuity should exist.

OK or NG

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



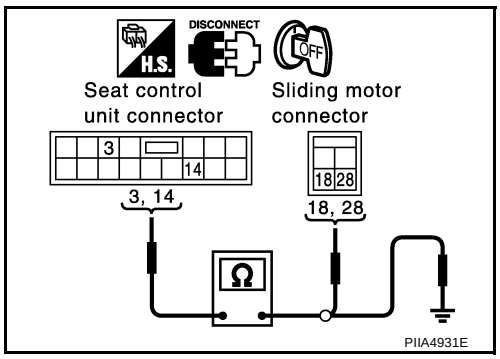
3. CHECK HARNESS CONTINUITY

1. Disconnect seat control unit connector.
2. Check continuity between seat control unit connector B324 (driver side), B502 (passenger side) terminals 3, 14 and sliding motor connector B322 (driver side), B504 (passenger side) terminals 18, 28.

3 (R) – 18 (R) : Continuity should exist.
14 (GY) – 28 (GY) : Continuity should exist.

3. Check continuity between seat control unit connector B324 (driver side), B502 (passenger side) terminals 3, 14 and ground.

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



OK or NG

OK >> Replace sliding motor.
NG >> Repair or replace harness.

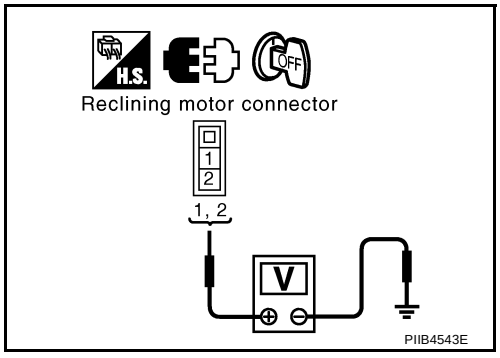
Check Reclining Motor (Driver Side)

NIS000I6

1. CHECK RECLINING MOTOR POWER SUPPLY

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

Connector	Terminal (Wire Color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B323	1 (LG)	Ground	FORWARD SW: ON	Battery voltage
			Other than above	0
	2 (P)		BACKWARD SW: ON	Battery voltage
			Other than above	0



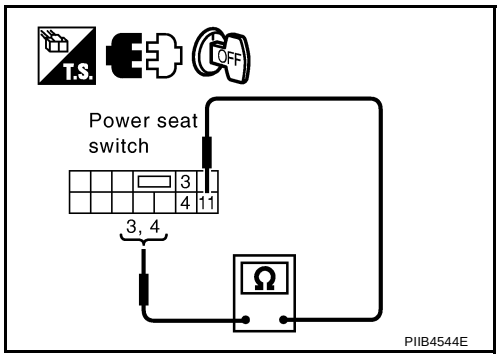
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch connector B326 terminal 3, 4 and 11.

Terminal		Condition	Continuity
3	11	FORWARD SW: ON	Yes
		Other than above	No
4		BACKWARD SW: ON	Yes
		Other than above	No



OK or NG

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

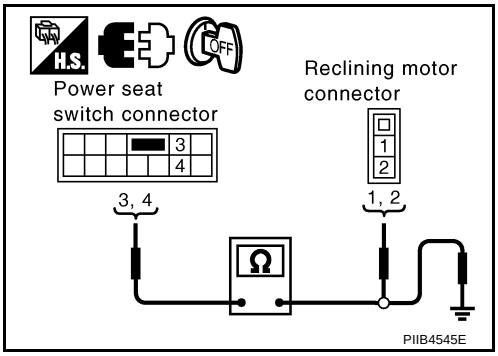
3. CHECK RECLINING MOTOR CIRCUIT HARNESS

1. Check continuity between power seat switch connector B326 terminal 3, 4 and reclining motor connector B323 terminal 1, 2.

3 (LG) - 1 (LG) : Continuity should exist.
4 (P) - 2 (P) : Continuity should exist.

2. Check continuity between power seat switch connector B326 terminal 3, 4 and ground.

3 (LG) - Ground : Continuity should not exist.
4 (P) - Ground : Continuity should not exist.



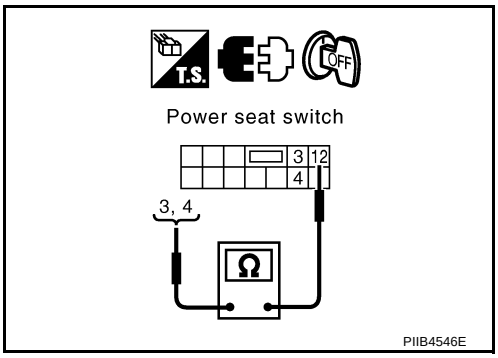
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between power seat switch and reclining motor.

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminal		Condition	Continuity
3	12	FORWARD SW: ON	Yes
		Other than above	No
4		BACKWARD SW: ON	Yes
		Other than above	No



OK or NG

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

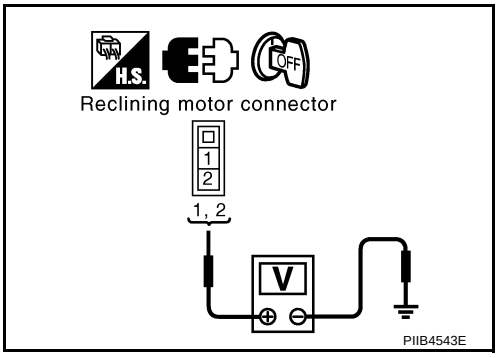
Check Reclining Motor (Passenger Side)

NIS000I7

1. CHECK RECLINING MOTOR POWER SUPPLY

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

Connector	Terminal (Wire Color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B513	1	Ground	FORWARD SW: ON	Battery voltage
			Other than above	0
	2		BACKWARD SW: ON	Battery voltage
			Other than above	0



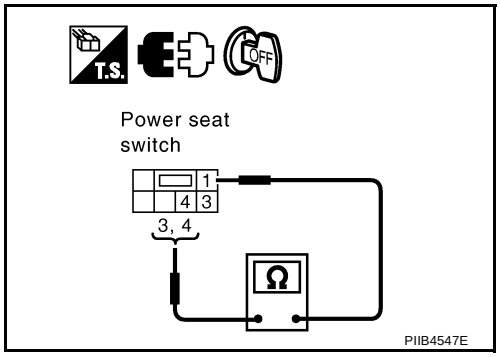
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch connector B503 terminal 3, 4 and 1.

Terminal		Condition	Continuity
4	1	FORWARD SW: ON	Yes
		Other than above	No
3		BACKWARD SW: ON	Yes
		Other than above	No



OK or NG

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

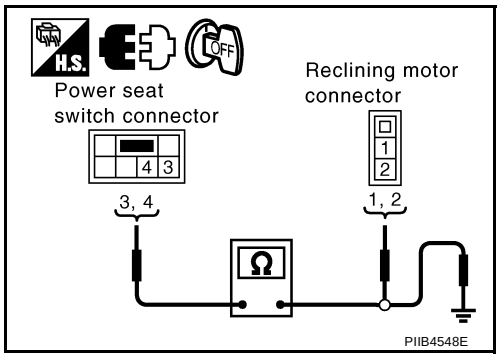
3. CHECK RECLINING MOTOR CIRCUIT HARNESS

1. Check continuity between power seat switch connector B503 terminal 3, 4 and reclining motor connector B513 terminal 1, 2.

4 - 1 : Continuity should exist.
3 - 2 : Continuity should exist.

2. Check continuity between power seat switch connector B326 terminal 3, 4 and ground.

3 - Ground : Continuity should not exist.
4 - Ground : Continuity should not exist.



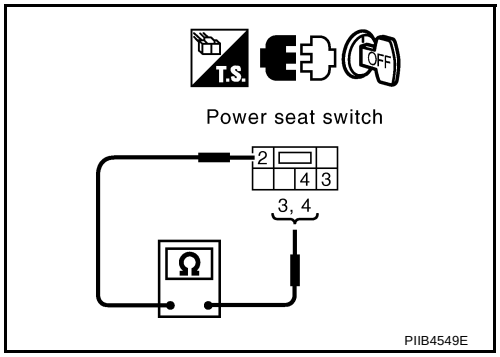
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between power seat switch and reclining motor.

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminal		Condition	Continuity
4	2	FORWARD SW: ON	Yes
		Other than above	No
3		BACKWARD SW: ON	Yes
		Other than above	No



OK or NG

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

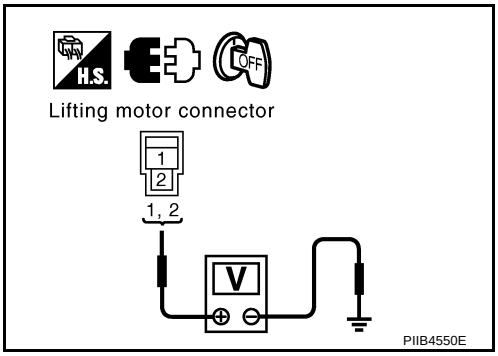
Check Lifting Motor (Rear)

NIS000I8

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect lifting motor (rear) connector.
3. Check voltage between lifting motor (rear) connector and ground.

Connector	Terminal (Wire Color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B328	1 (L/Y)	Ground	UP SW: ON	Battery voltage
			Other than above	0
	2 (L)		DOWN SW: ON	Battery voltage
			Other than above	0



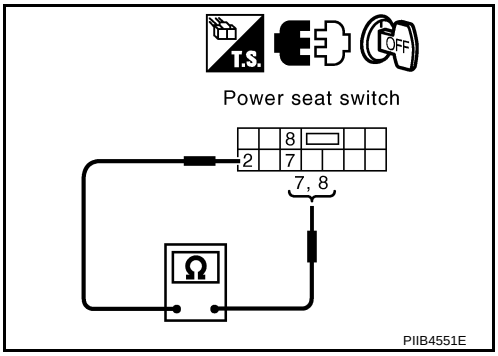
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch connector B326 terminal 7, 8 and 2.

Terminal		Condition	Continuity
8	2	UP SW: ON	Yes
		Other than above	No
7		DOWN SW: ON	Yes
		Other than above	No



OK or NG

OK >> Replace lifting motor (rear).
NG >> Replace power seat switch.

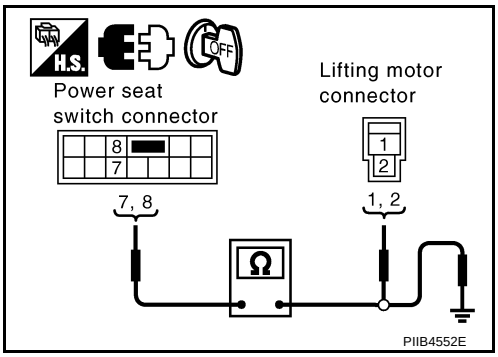
3. CHECK LIFTING MOTOR (REAR) CIRCUIT HARNESS

1. Check continuity between power seat switch connector B326 terminal 7, 8 and lifting motor (rear) connector B328 terminal 1, 2.

8 (L/Y) - 1 (L/Y) : Continuity should exist.
7 (L) - 2 (L) : Continuity should exist.

2. Check continuity between power seat switch connector B326 terminal 7, 8 and ground.

8 (L/Y) - Ground : Continuity should not exist.
7 (L) - Ground : Continuity should not exist.



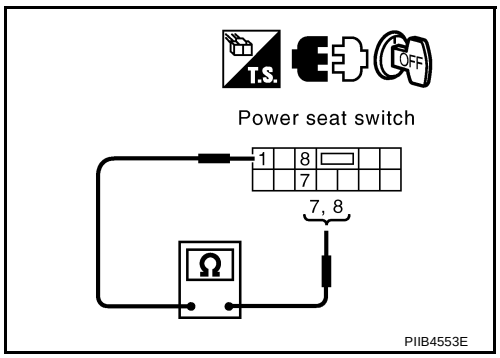
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between power seat switch and lifting motor (rear).

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminal		Condition	Continuity
8	1	UP SW: ON	Yes
		Other than above	No
7		DOWN SW: ON	Yes
		Other than above	No



OK or NG

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

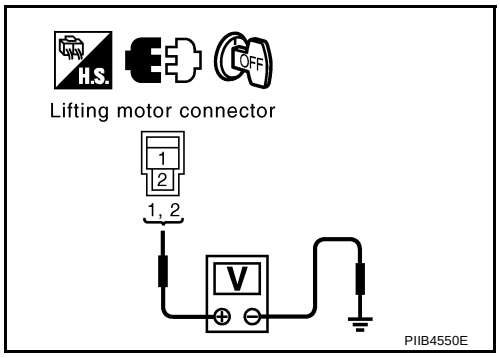
Check Lifting Motor (Front)

NIS000I9

1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect lifting motor (front) connector.
3. Check voltage between lifting motor (front) connector and ground.

Connector	Terminal (Wire Color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B327	1 (L/R)	Ground	UP SW: ON	Battery voltage
			Other than above	0
	2 (OR)		DOWN SW: ON	Battery voltage
			Other than above	0



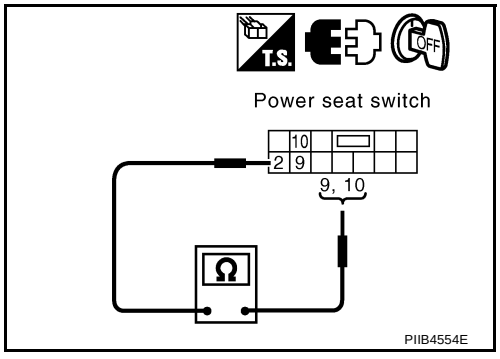
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

1. Disconnect power seat switch connector.
2. Check continuity between power seat switch connector B326 terminal 9, 10 and 2.

Terminal		Condition	Continuity
10	2	UP SW: ON	Yes
		Other than above	No
9		DOWN SW: ON	Yes
		Other than above	No



OK or NG

OK >> Replace lifting motor (front).
NG >> Replace power seat switch.

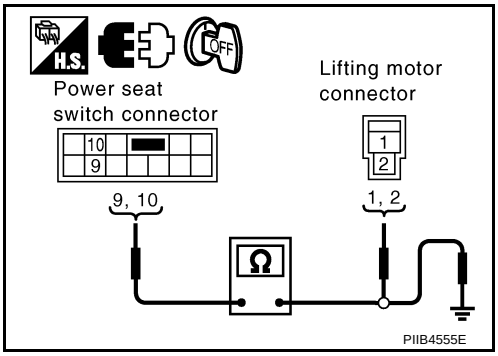
3. CHECK LIFTING MOTOR (FRONT) CIRCUIT HARNESS

1. Check continuity between power seat switch connector B326 terminal 9, 10 and lifting motor (front) connector B327 terminal 1, 2.

10 (L/R) - 1 (L/R) : Continuity should exist.
9 (OR) - 2 (OR) : Continuity should exist.

2. Check continuity between power seat switch connector B326 terminal 9, 10 and ground.

10 (L/R) - Ground : Continuity should not exist.
9 (OR) - Ground : Continuity should not exist.



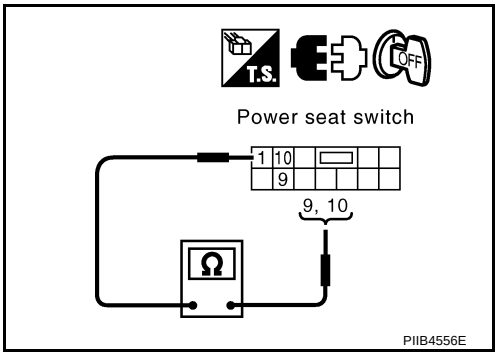
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between power seat switch and lifting motor (front).

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

Terminal		Condition	Continuity
10	1	UP SW: ON	Yes
		Other than above	No
9		DOWN SW: ON	Yes
		Other than above	No



OK or NG

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

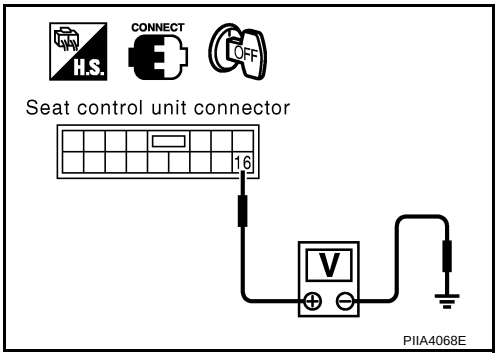
Check Passenger Side Door Switch

NIS000IA

1. CHECK PASSENGER SIDE DOOR SWITCH SIGNAL

Check voltage between seat control unit connector B502 (passenger side) terminal 16 and ground.

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
16 (R/W)	Ground	Passenger side door: OPEN	0
		Passenger side door: CLOSE	Battery voltage



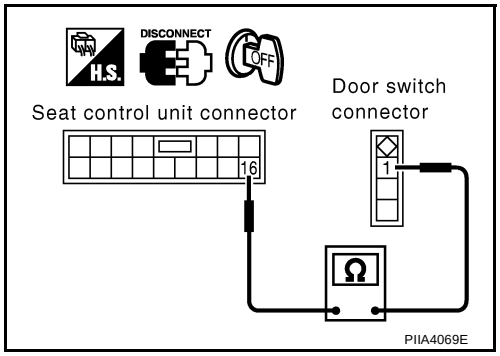
OK or NG

OK >> Door switch is OK.
NG >> GO TO 2.

2. CHECK PASSENGER SIDE DOOR SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect passenger side seat control unit and passenger side door switch connector.
3. Check continuity between seat control unit connector B502 (passenger side) terminal 16 and door switch connector B410 (passenger side) terminal 1.

16 (R/W) – 1 (P) : Continuity should exist.



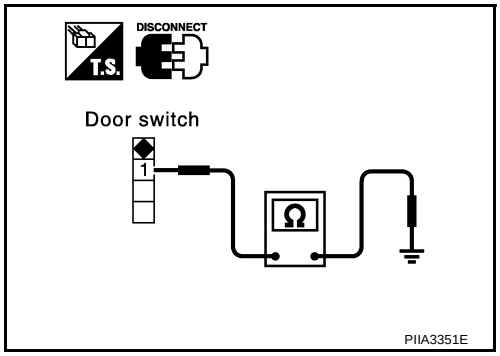
OK or NG

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

3. CHECK PASSENGER SIDE DOOR SWITCH

Check continuity between door switch B410 (passenger side) terminal 1 and ground part of door switch.

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



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace malfunction door switch.

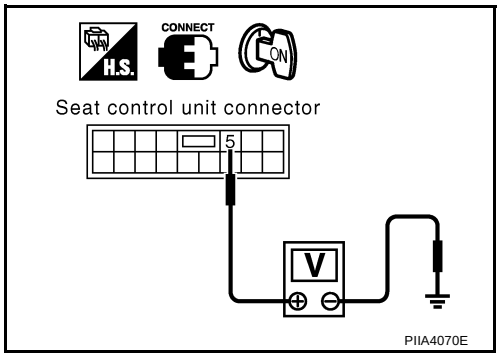
Check Passenger Side Seat Belt Buckle Switch

NIS000IB

1. CHECK PASSENGER SIDE SEAT BELT BUCKLE SWITCH SIGNAL

1. Turn ignition switch ON.
2. Check voltage between seat control unit connector B502 (passenger side) terminal 5 and ground.

Terminals		Condition	Voltage (V) (Approx.)
(+)	(-)		
5 (W)	Ground	When seat belt is fastened	5
		Other than above	0



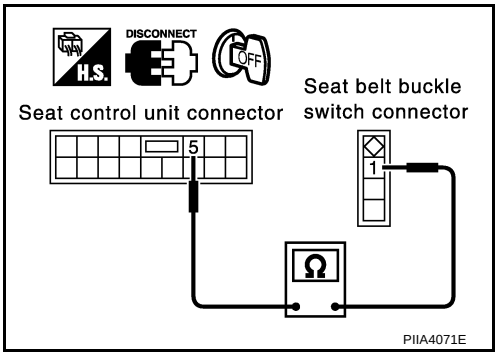
OK or NG

OK >> Seat belt buckle switch is OK.
NG >> GO TO 2.

2. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect seat control unit and seat belt buckle switch connector.
3. Check continuity between seat control unit (passenger side) connector B502 terminal 5 and seat belt buckle switch (passenger side) connector B406 terminal 1.

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



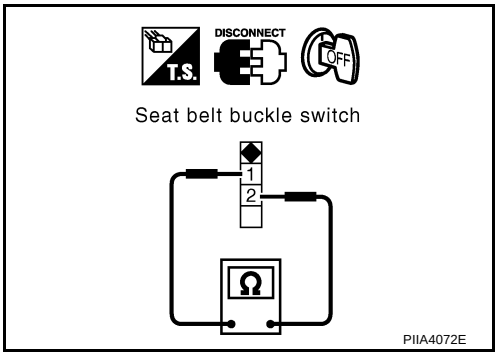
OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness between seat control unit and seat belt buckle switch.

3. CHECK SEAT BELT BUCKLE SWITCH

Check continuity between seat belt buckle switch (passenger side) terminals 1 and 2.

Terminals		Condition	Continuity
1	2	When seat belt is fastened	No
		Other than above	Yes



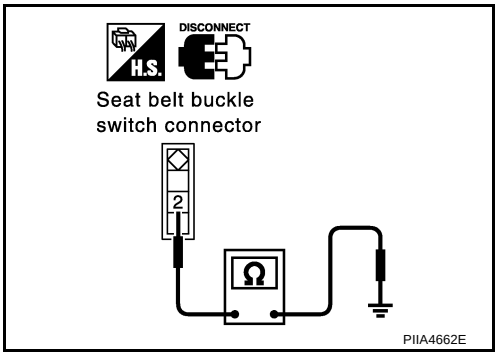
OK or NG

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

4. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch (passenger side) connector B406 terminal 2 and ground.

2 (B) – Ground : Continuity should exist.



OK or NG

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

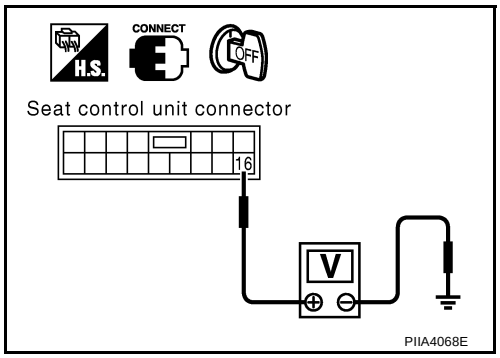
Check Door Switch and Seat Belt Buckle Switch

NIS000IC

1. CHECK DOOR SWITCH AND SEAT BELT SWITCH SIGNAL

Check voltage between driver side seat control unit connector and ground.

Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B324	16 (G/W)	Ground	When seat belt is unfastened and door is open	0
			Other than above	Battery voltage



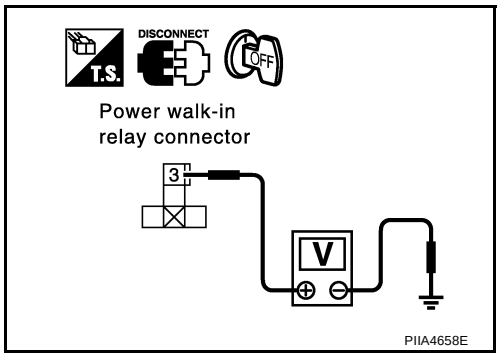
OK or NG

OK >> Door switch and seat belt buckle switch is OK.
NG >> GO TO 2.

2. CHECK POWER WALK–IN RELAY POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect power walk-in relay.
3. Check voltage between power walk-in relay connector B347 terminal 3 and ground.

3 (G/W) – Ground : Battery voltage



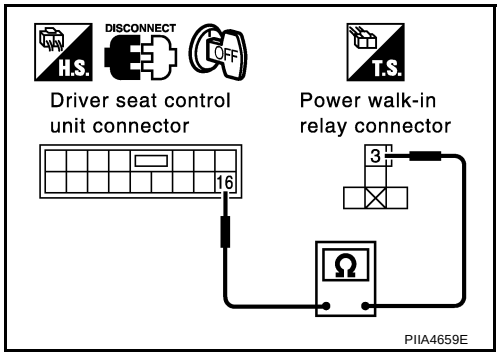
OK or NG

OK >> GO TO 5.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY 1

1. Disconnect driver seat control unit.
2. Check continuity between driver seat control unit connector B324 terminal 16 and power walk-in relay connector B347 terminal 3.

16 (G/W) – 3 (G/W) : Continuity should exist.



OK or NG

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

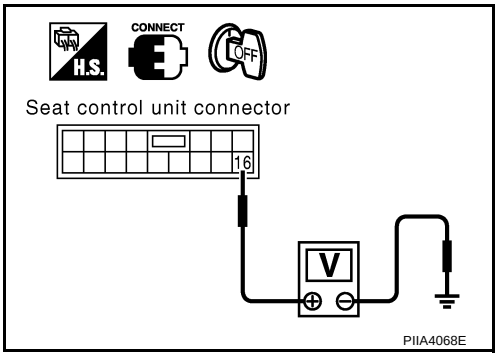
4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.
2. Check voltage between driver seat control unit connector B324 terminal 16 and ground.

16 (G/W) – Ground : Battery voltage

OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace driver seat control unit.



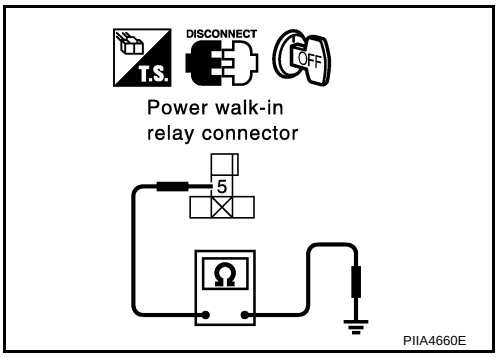
5. CHECK POWER WALK–IN RELAY GROUND CIRCUIT

Check continuity between power walk-in relay connector and ground.

Con-nector	Terminals		Condition	Continuity
B347	5 (B)	Ground	When seat belt is fastened	No
			Other than above	Yes

OK or NG

OK >> GO TO 9.
NG >> GO TO 6.



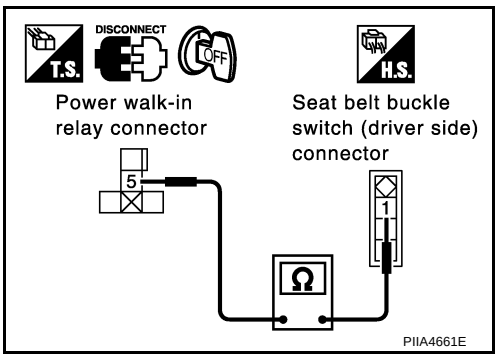
6. CHECK HARNESS CONTINUITY 2

1. Disconnect seat belt buckle switch connector.
2. Check continuity between power walk-in relay connector B347 terminal 5 and seat belt buckle switch (driver side) connector B8 terminal 1.

5 (B) – 1 (BR) : Continuity should exist.

OK or NG

OK >> GO TO 7.
NG >> Repair or replace harness between power walk-in relay and seat belt buckle switch (driver side)



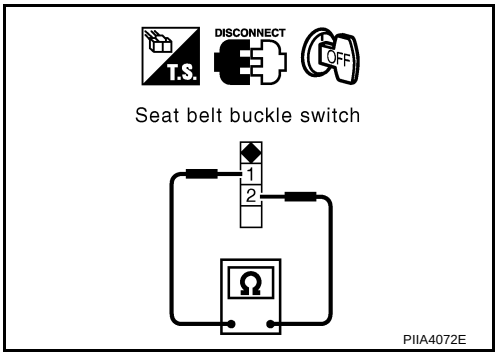
7. CHECK SEAT BELT BUCKLE SWITCH

Check continuity between seat belt buckle switch (driver side) connector B8 terminal 1 and 2.

Termi-nals	Terminal		Condition	Continuity
B8	1	2	When seat belt is fastened	No
			Other than above	Yes

OK or NG

OK >> GO TO 8.
NG >> Replace seat belt buckle switch (driver side).



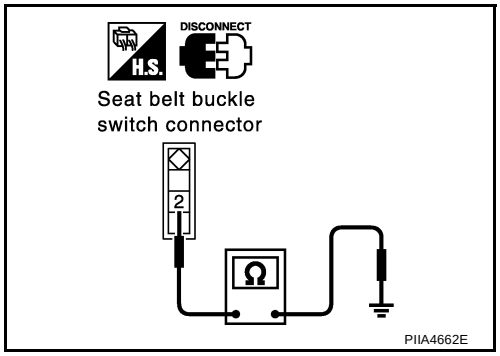
8. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

Check continuity between seat belt buckle switch (driver side) connector B8 terminal 2 and ground.

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

OK or NG

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



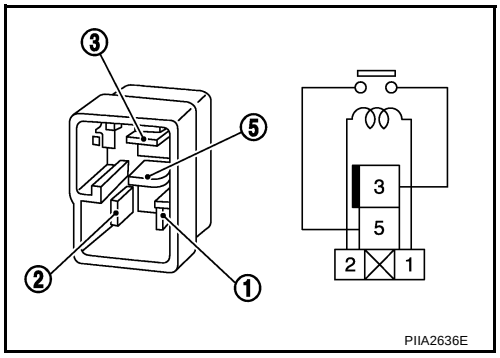
9. CHECK POWER WALK–IN RELAY

Check continuity between power walk-in relay terminals 3 and 5.

Terminals		Condition	Continuity
3	5	12V direct current supply between terminal 1 and 2	Yes
		Other than above	No

OK or NG

OK >> GO TO 10.
NG >> Replace power walk-in relay.



10. CHECK POWER WALK–IN RELAY POWER SUPPLY

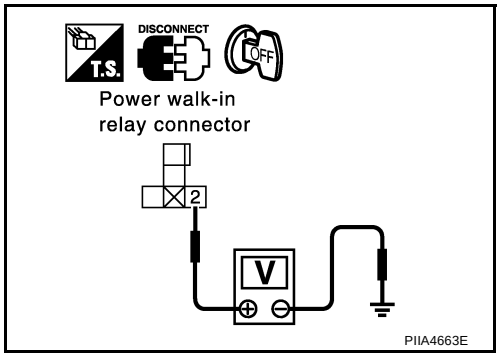
Check voltage between power walk-in relay connector B347 terminal 2 and ground.

2 (R/W) – Ground : Battery voltage

OK or NG

OK >> GO TO 11.
NG >> Check the following

- 10A fuse [No.21, located in fuse block (J/B)]
- Harness for open or short between power walk-in relay and fuse.



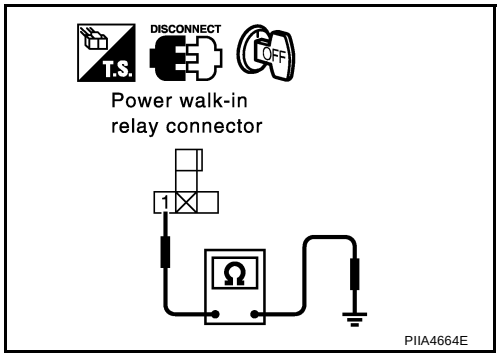
11. CHECK DOOR SWITCH

Check continuity between power walk-in relay connector B347 terminal 1 and ground.

Connector	Terminal		Condition	Continuity
B347	1 (B/W)	Ground	Driver side door is open	Yes
			Driver side door is close	No

OK or NG

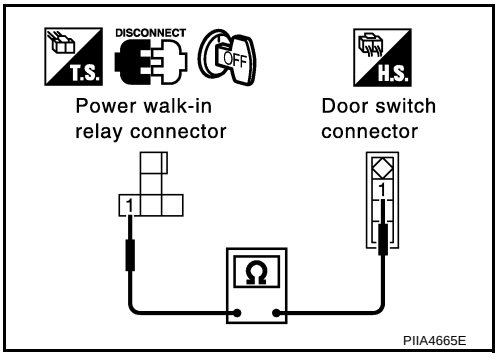
OK >> Check the condition of the harness and the connector
NG >> GO TO 12.



12. CHECK HARNESS CONTINUITY 3

1. Disconnect driver side door switch connector.
2. Check continuity between power walk-in relay connector B347 terminal 1 and driver side door switch connector B17 terminal 1.

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



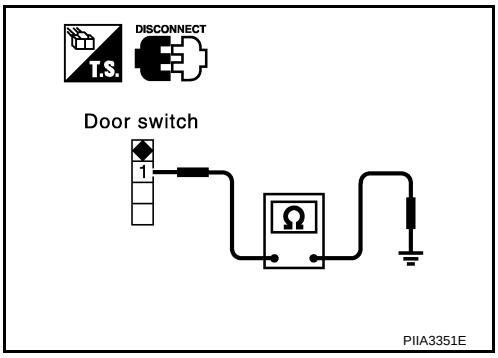
OK or NG

OK >> GO TO 13.
NG >> Repair or replace harness between power walk-in relay and driver side door switch.

13. CHECK DOOR SWITCH

Check continuity between driver side door switch B17 terminal 1 and body ground part of door switch.

Terminals		Door switch	Continuity
1 (G/B)	Body ground part of door switch	Pushed	No
		Released	Yes



OK or NG

OK >> Check ground condition of door switch.
NG >> Replace driver side door switch.

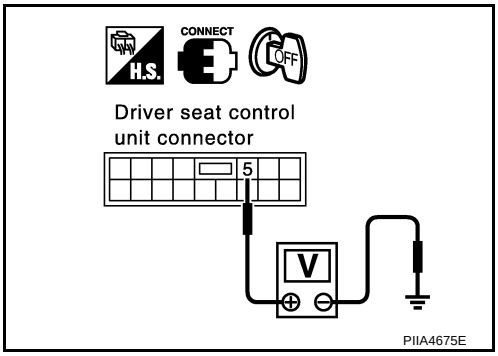
Check A/T Shift Lever P Position Signal (with A/T Models)

NIS000ID

1. CHECK A/T SHIFT LEVER P POSITION SIGNAL

Check voltage between driver seat control unit connector and ground.

Connector	Terminals (+)	Terminals (-)	Condition	Voltage (V) (Approx.)
B324	5 (L/Y)	Ground	When shift lever P position	0
			Other than above	5



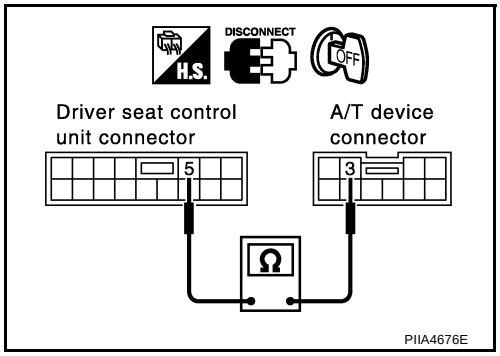
OK or NG

OK >> A/T shift lever P position signal is OK.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and A/T device connector.
3. Check continuity between driver seat control unit connector B324 terminal 5 and A/T device connector M47 terminal 3.

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



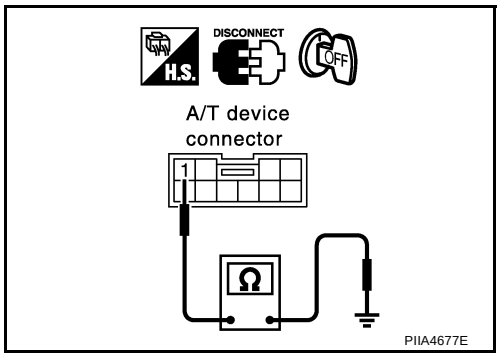
OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness between driver seat control unit and A/T device.

3. CHECK A/T DEVICE GROUND CIRCUIT

Check continuity between A/T device connector M47 terminal 1 and ground.

1 (B) – Ground : Continuity should exist.



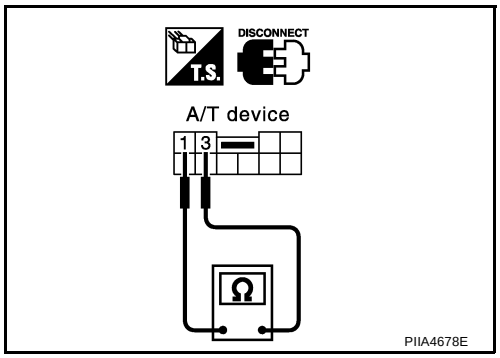
OK or NG

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

4. CHECK A/T DEVICE

Check continuity between A/T device connector M47 terminals 1 and 3.

Connector	Terminals		Condition	Continuity
M47	1	3	When shift lever P position	Yes
			Other than above	No



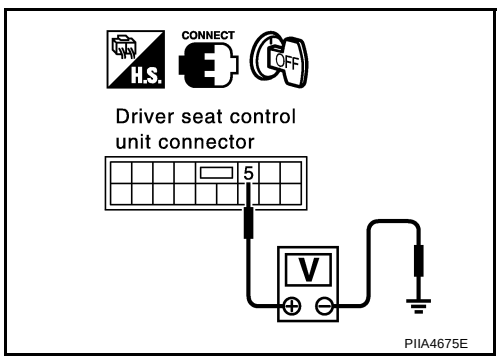
OK or NG

OK >> GO TO 5.
NG >> Replace A/T device.

5. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.
2. Check voltage between driver seat control unit connector B324 terminal 5 and ground.

5 (L/Y) – Ground : Approx. 5V



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace driver control unit.

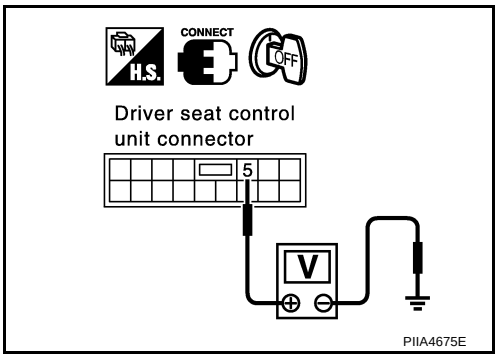
Check Parking Brake Signal (with M/T Models)

NIS000IE

1. CHECK PARKING BRAKE SIGNAL

Check voltage between driver seat control unit connector and ground.

Connector	Terminals (+)	Terminals (-)	Condition	Voltage (V) (Approx.)
B324	5 (L/Y)	Ground	When pull the parking brake	0
			Other than above	5



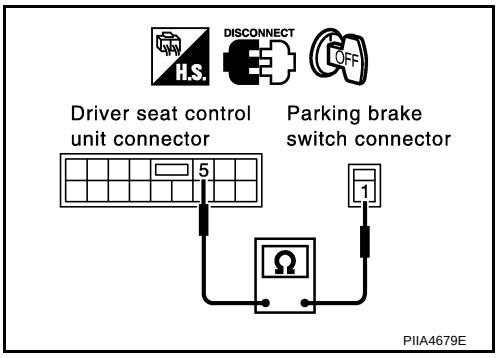
OK or NG

OK >> Parking brake signal is OK.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and parking brake switch connector.
3. Check continuity between driver seat control unit connector M324 terminal 5 and parking brake switch connector B37 terminal 1.

5 (L/Y) – 1 (PU/R) : Continuity should exist.



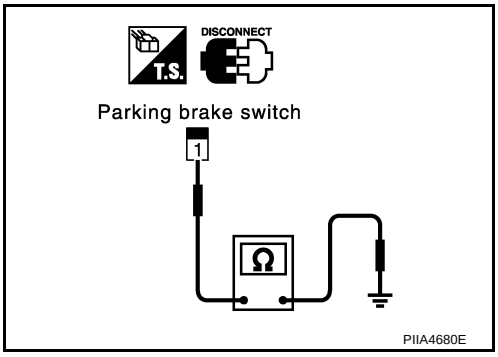
OK or NG

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

3. CHECK PARKING BRAKE SWITCH

Check continuity between parking brake switch terminal 1 and ground.

Connector	Terminals		Condition	Continuity
B37	1 (PU/R)	Ground	When pull the parking brake	Yes
			Other than above	No



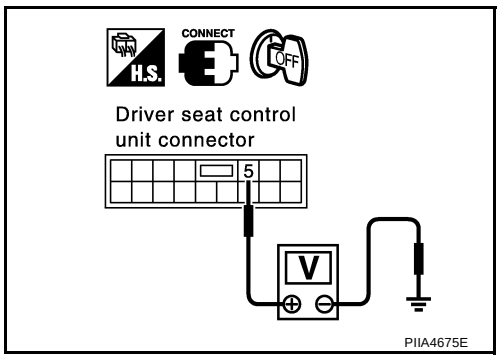
OK or NG

OK >> GO TO 4.
NG >> Check ground condition of parking brake switch.

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

1. Connect driver seat control unit connector.
2. Check voltage between driver seat control unit connector B324 terminal 5 and ground.

5 (L/Y) – Ground : Approx. 5V



OK or NG

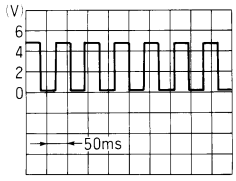
OK >> Check the condition of the harness and the connector.
NG >> Replace driver control unit.

Check Vehicle Speed Signal

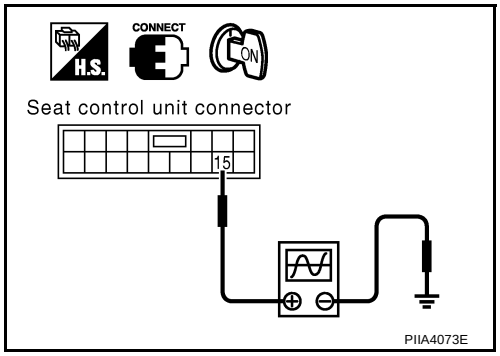
NIS000IF

1. CHECK VEHICLE SPEED INPUT SIGNAL

Check the signal between seat control unit connector B324 (driver side), B502 (passenger side) terminal 15 and ground with oscilloscope.

Connector	Terminals (+)	Terminals (-)	Condition	Signal (Reference value)
B324 B502	15 (B/R)	Ground	when vehicle speed is approx.40 km/h (25 MPH)	

ELF1080D



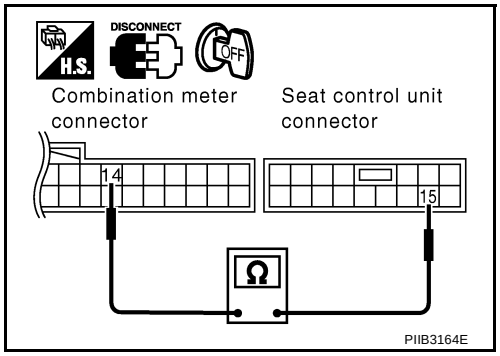
OK or NG

OK >> Vehicle speed signal is OK.
NG >> GO TO 2.

2. CHECK VEHICLE SPEED SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter and seat control unit connector.
3. Check continuity between combination meter connector M19 terminal 14 and seat control unit connector B324 (driver side), B502 (passenger side) terminal 15.

14 (W/G) – 15 (B/R) : Continuity should exist.



OK or NG

OK >> Check combination meter. Refer to DI-15
NG >> Repair or replace harness between combination meter and seat control unit.

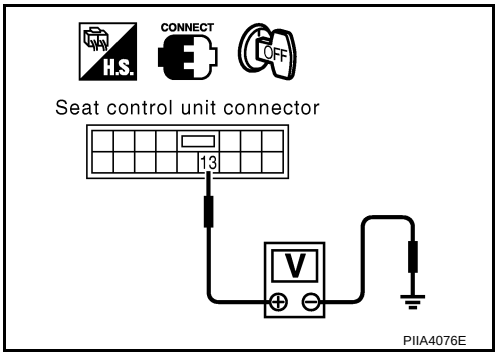
Check Sliding Limit Switch Signal

NIS000IG

1. CHECK SLIDING LIMIT SWITCH SIGNAL

When operation condition consists, check voltage between seat control unit connector B324 (driver side), B502 (passenger side) terminal 13 and ground.

Connector	Terminals		Condition	Voltage (V) (Approx.)
	(+)	(-)		
B324 B502	13 (OR)	Ground	The seat slide front most part	0
			Other than above	5



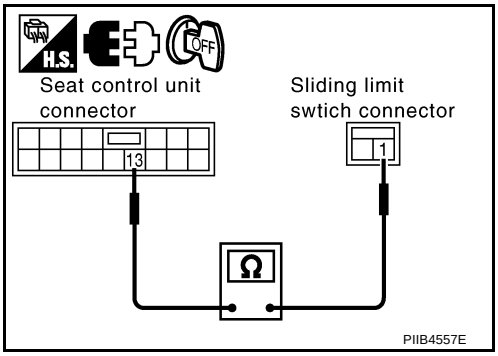
OK or NG

OK >> Sliding limit switch (forward) signal is OK.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect seat control unit and sliding limit switch connector.
2. Check continuity between seat control unit connector B324 (driver side),B502 (passenger side) terminal 13 and sliding limit switch connector B329 (driver side), B509(passenger side) terminal 1.

13 (OR) - 1 (OR) : Continuity should exist.



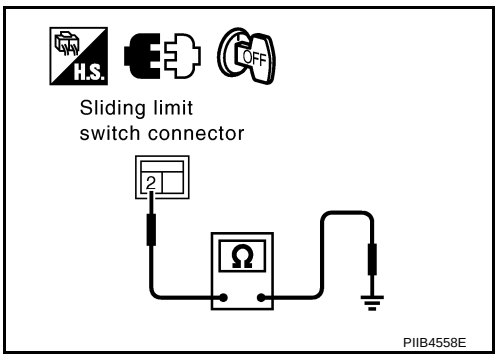
OK or NG

OK >> GO TO 3.
NG >> Repair or replace harness between seat control unit and sliding limit switch.

3. CHECK SLIDING LIMIT SWITCH CIRCUIT

Check continuity between sliding limit switch connector B329 (driver side), B509 (passenger side) terminal 2 and ground.

2 (B) - Ground : Continuity should exist.



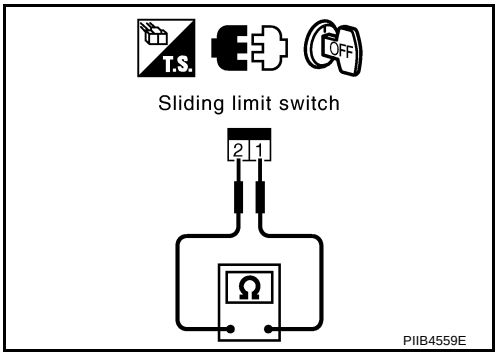
OK or NG

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

4. CHECK SLIDING LIMIT SWITCH

Check continuity between sliding limit switch connector B329 (driver side), B509 (passenger side) terminals 1 and 2.

Connector	Terminal		Condition	Continuity
B329 B509	1	2	When sliding limit switch fully front	Yes
			Other than above	No



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace sliding limit switch.

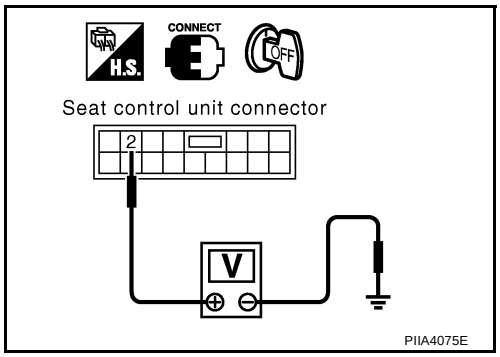
Check Seatback Switch Signal

NIS000IH

1. CHECK SEATBACK SWITCH SIGNAL

Check voltage between seat control unit connector and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
B324 B502	2 (L)	Ground	When seatback switch forward	0
			Other than above	5



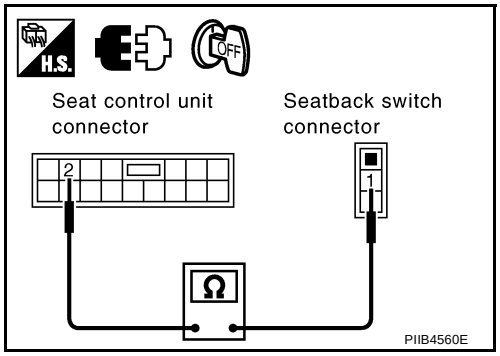
OK or NG

OK >> Seatback switch signal is OK.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect seat control unit and seatback switch connector.
2. Check continuity between seat control unit connector B324 (driver side), B502 (passenger side) terminal 2 and seatback switch connector B348 (driver side), B518 (passenger side) terminal 1.

2 (L) - 1 (L) : Continuity should exist.



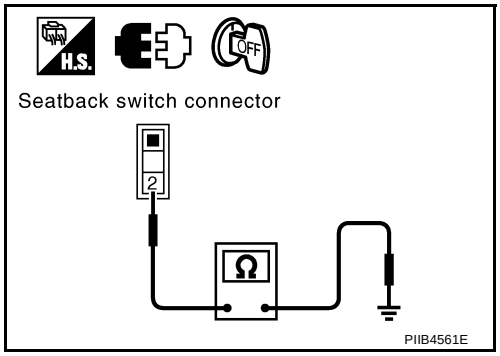
OK or NG

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

3. CHECK SEATBACK SWITCH CIRCUIT

Check continuity between seatback switch connector B348 (driver side), B518 (passenger side) terminal 2 and ground.

2 (B) - Ground : Continuity should exist.



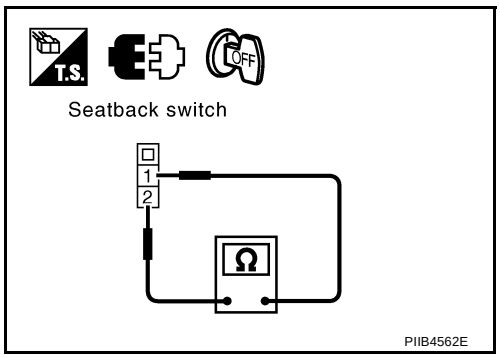
OK or NG

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

4. CHECK SEATBACK SWITCH

Check continuity between seatback switch connector B348 (driver side), B518 (passenger side) terminals 1and 2.

Connector	Terminal		Condition	Continuity
B348 B518	1	2	When seatback switch forward	Yes
			Other than above	No



OK or NG

OK >> Check the condition of the harness and the connector.
NG >> Replace seatback switch.

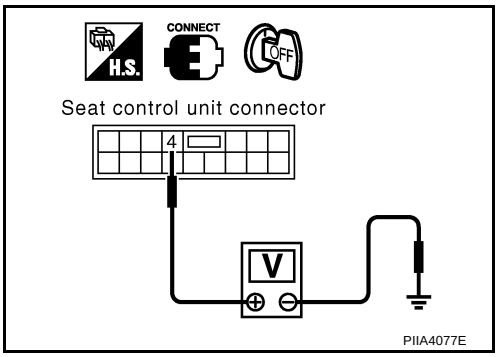
Check Power Walk-in Switch Signal

NIS000II

1. CHECK POWER WALK-IN SWITCH SIGNAL

Check voltage between seat control unit connector and ground.

Connector	Terminal		Condition	Voltage (V) (Approx.)
B324 B502	4 (G)	Ground	When power walk-in switch ON	0
			Other than above	5



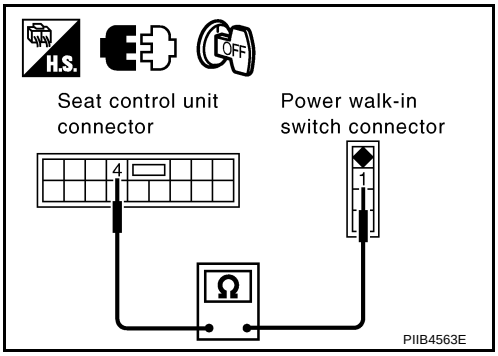
OK or NG

OK >> Power walk-in switch signal is OK.
NG >> GO TO 2.

2. CHECK HARNESS CONTINUITY

1. Disconnect seat control unit and power walk-in switch connector.
2. Check continuity between seat control unit connector B324 (driver side), B502 (passenger side) terminal 4 and power walk-in switch connector B349 (driver side), B519 (passenger side) terminal 1.

4 (G) - 1 (G) : Continuity should exist.



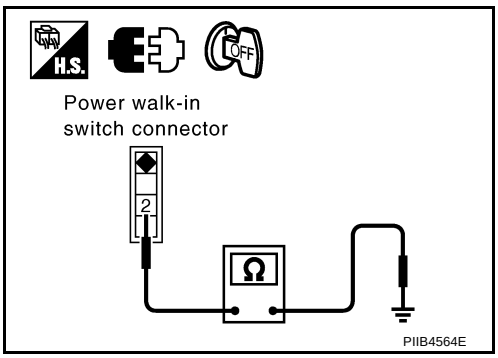
OK or NG

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

3. CHECK POWER WALK-IN SWITCH CIRCUIT

Check continuity between power walk-in switch connector B349 (driver side), B519 (passenger side) terminal 2 and ground.

2 (B) - Ground : Continuity should exist.



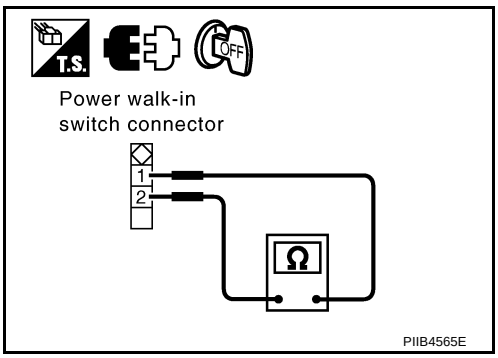
OK or NG

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

4. CHECK POWER WALK-IN SWITCH

Check continuity between power walk-in switch connector B349 (driver side), B519 (passenger side) terminals 1and 2.

Connector	Terminals		Condition	Continuity
B349 B519	1	2	When power walk-in switch ON	Yes
			Other than above	No



OK or NG

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

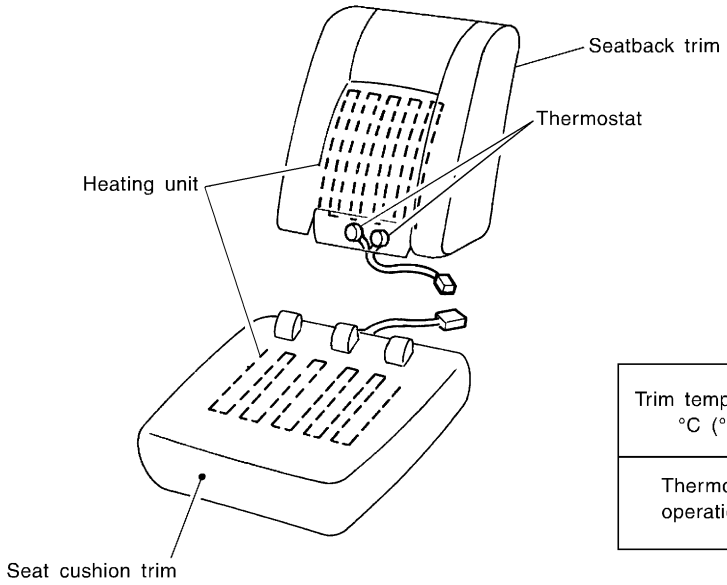
HEATED SEAT

PFP:87335

Description

NIS000IJ

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

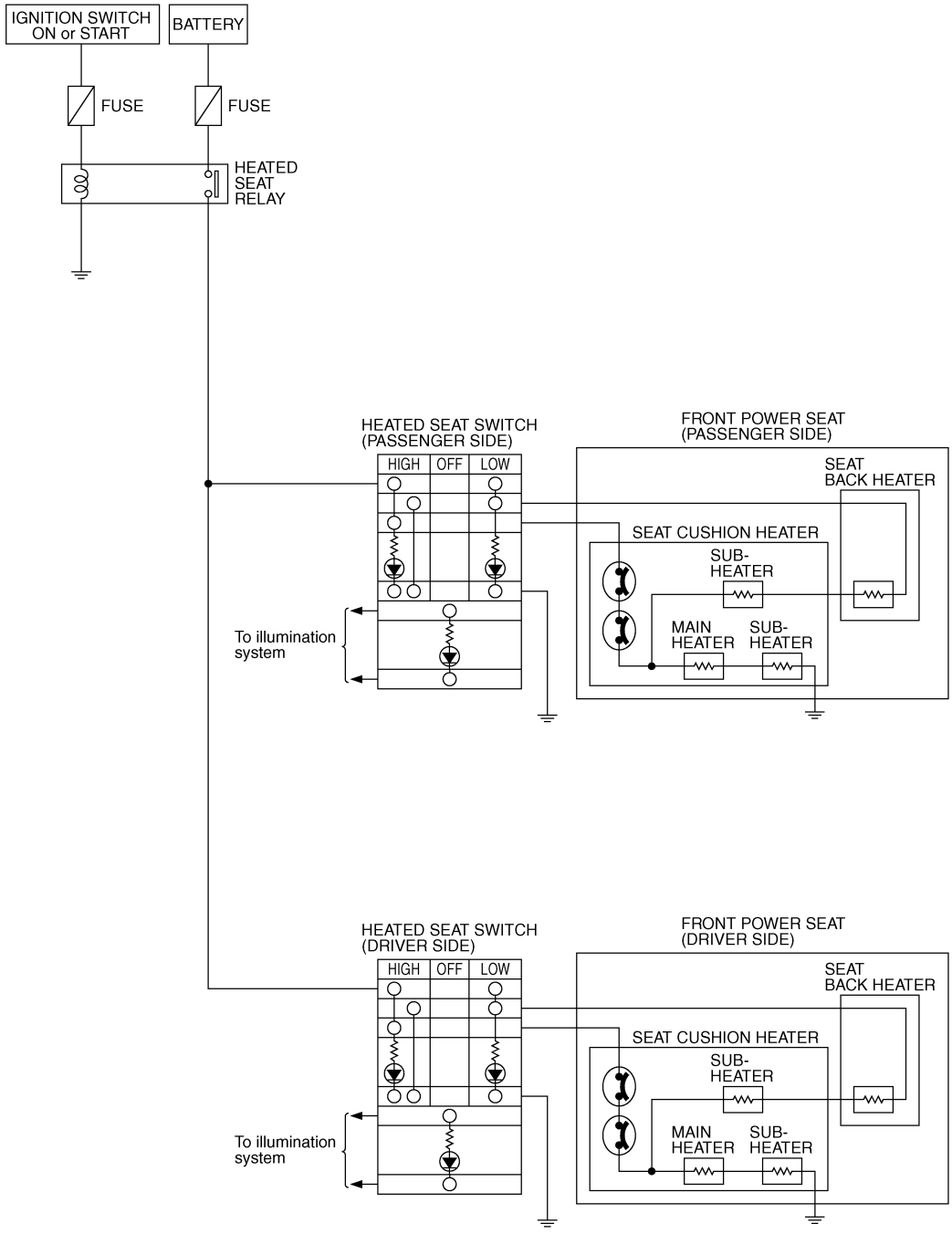


Trim temperature °C (°F)	Increasing to 35 - 45 (95 - 113)	Decreasing to 25 - 35 (77 - 95)
Thermostat operation	OFF	ON

SBT314

Schematic

NIS000IK

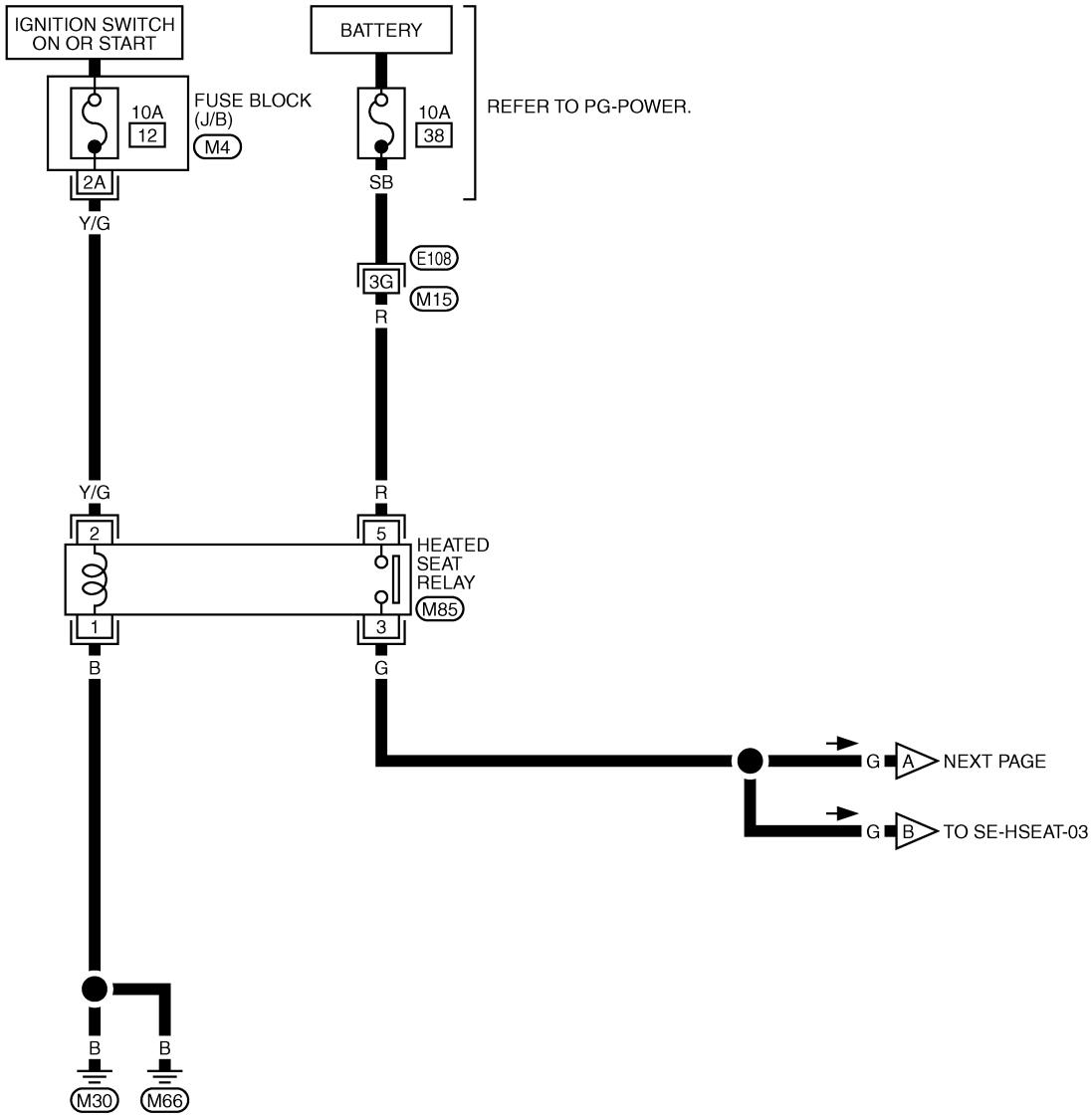


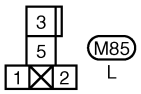
TIWT0343E

Wiring Diagram — HSEAT —/With A/T Models

NIS000IL

SE-HSEAT-01



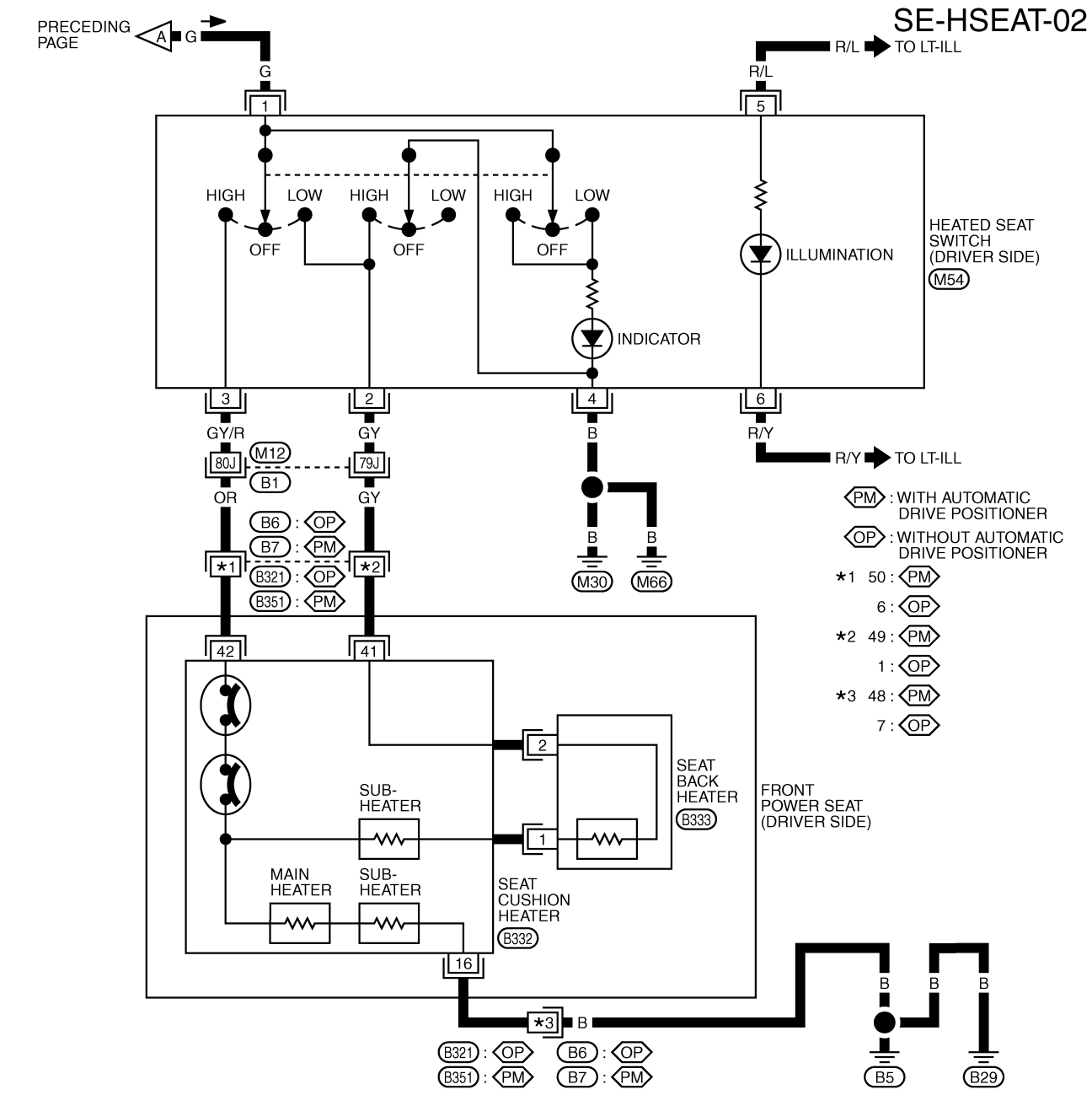


REFER TO THE FOLLOWING.

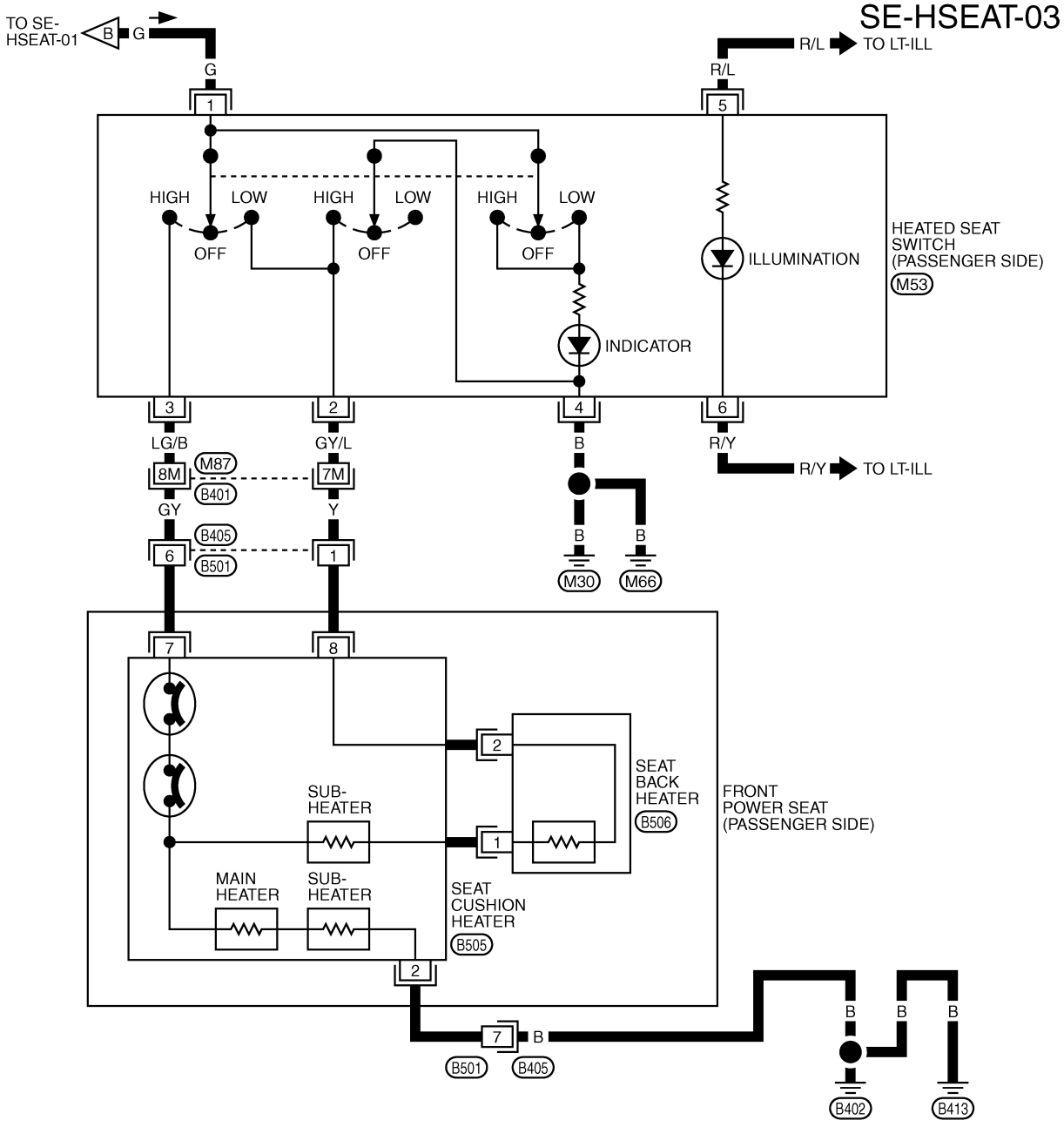
E108 -SUPER MULTIPLE JUNCTION (SMJ)

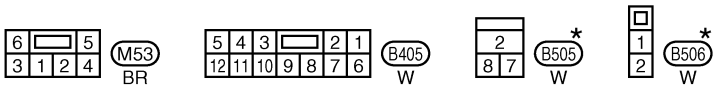
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TIWM1228E


SE-HSEAT-02
PRECEDING PAGE
A
G
G
1
R/L
TO LT-ILL
R/L
5
HIGH
LOW
HIGH
LOW
HIGH
LOW
OFF
OFF
OFF
ILLUMINATION
INDICATOR
HEATED SEAT SWITCH (DRIVER SIDE)
M54
3
2
4
6
GY/R
GY
B
R/Y
R/Y
TO LT-ILL
80J
M12
79J
B1
OR
GY
B6 : OP
B7 : PM
B321 : OP
B351 : PM
*1
*2
B
B
M30
M66
PM : WITH AUTOMATIC DRIVE POSITIONER
OP : WITHOUT AUTOMATIC DRIVE POSITIONER
*1 50 : PM
6 : OP
*2 49 : PM
1 : OP
*3 48 : PM
7 : OP
42
41
2
1
SUB-HEATER
SEAT BACK HEATER
B333
FRONT POWER SEAT (DRIVER SIDE)
MAIN HEATER
SUB-HEATER
SEAT CUSHION HEATER
B332
16
*3
B
B321 : OP
B351 : PM
B6 : OP
B7 : PM
B
B
B
B5
B29
M54
W
B6
W
B7
W
B332
W
B333
W
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1508E





REFER TO THE FOLLOWING.
B401 -SUPER MULTIPLE JUNCTION (SMJ)

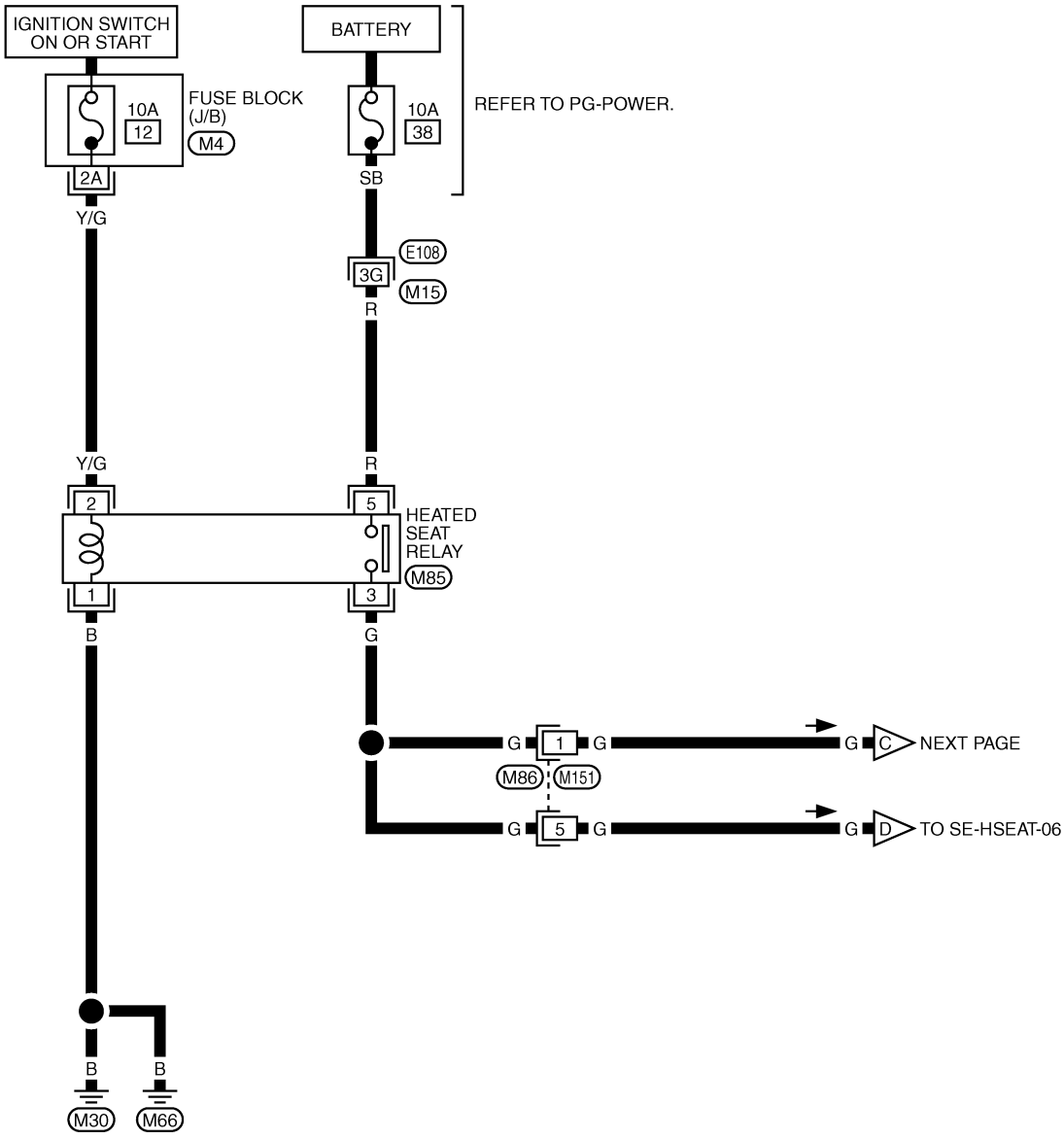
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

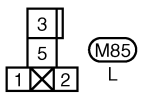
TIWM1230E

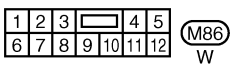
Wiring Diagram — HSEAT —/With M/T Models

NIS000IM

SE-HSEAT-04



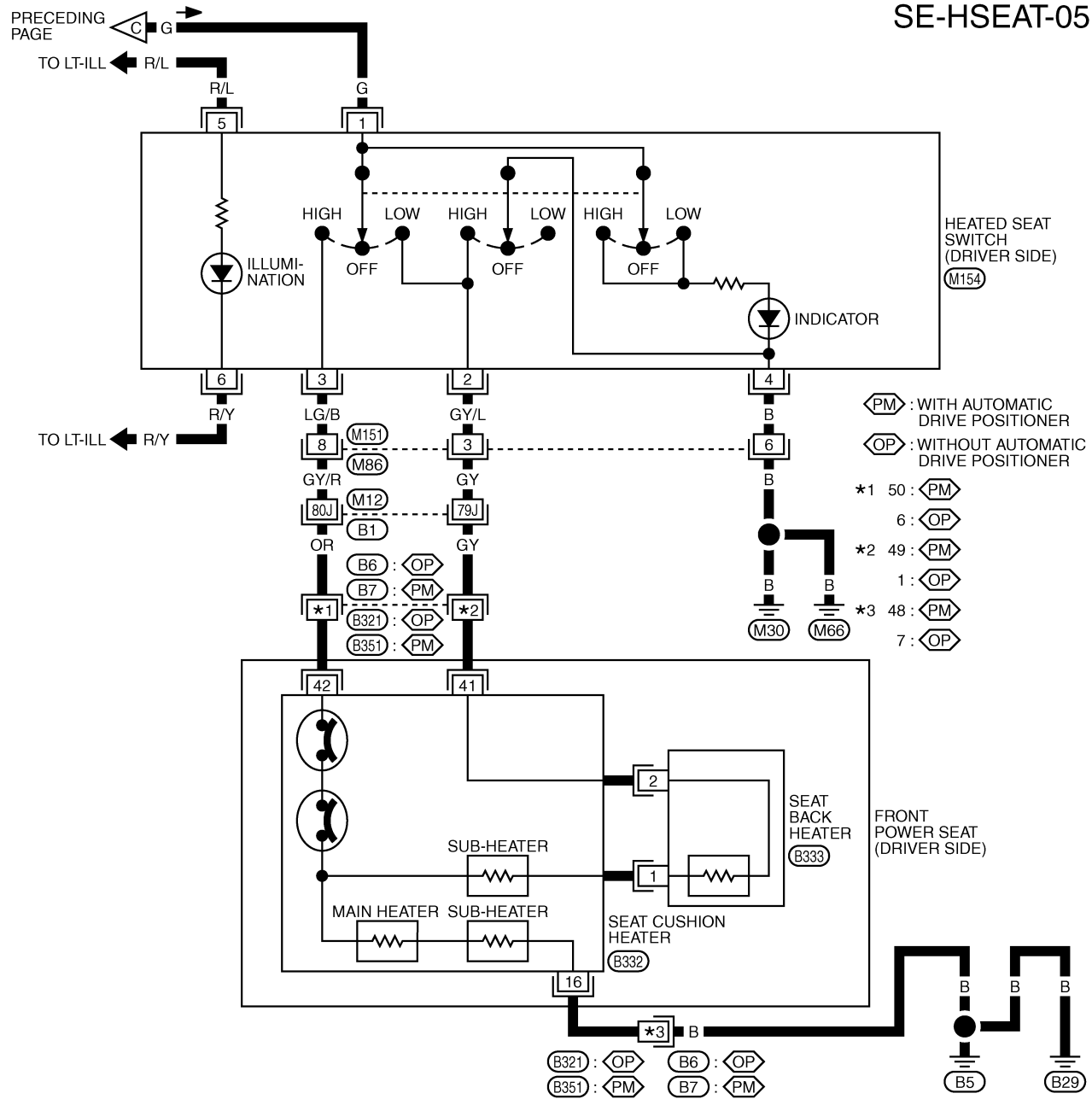


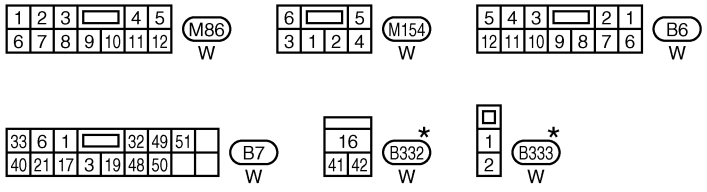


REFER TO THE FOLLOWING.
E108 -SUPER MULTIPLE JUNCTION (SMJ)
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TIWM1231E

SE-HSEAT-05



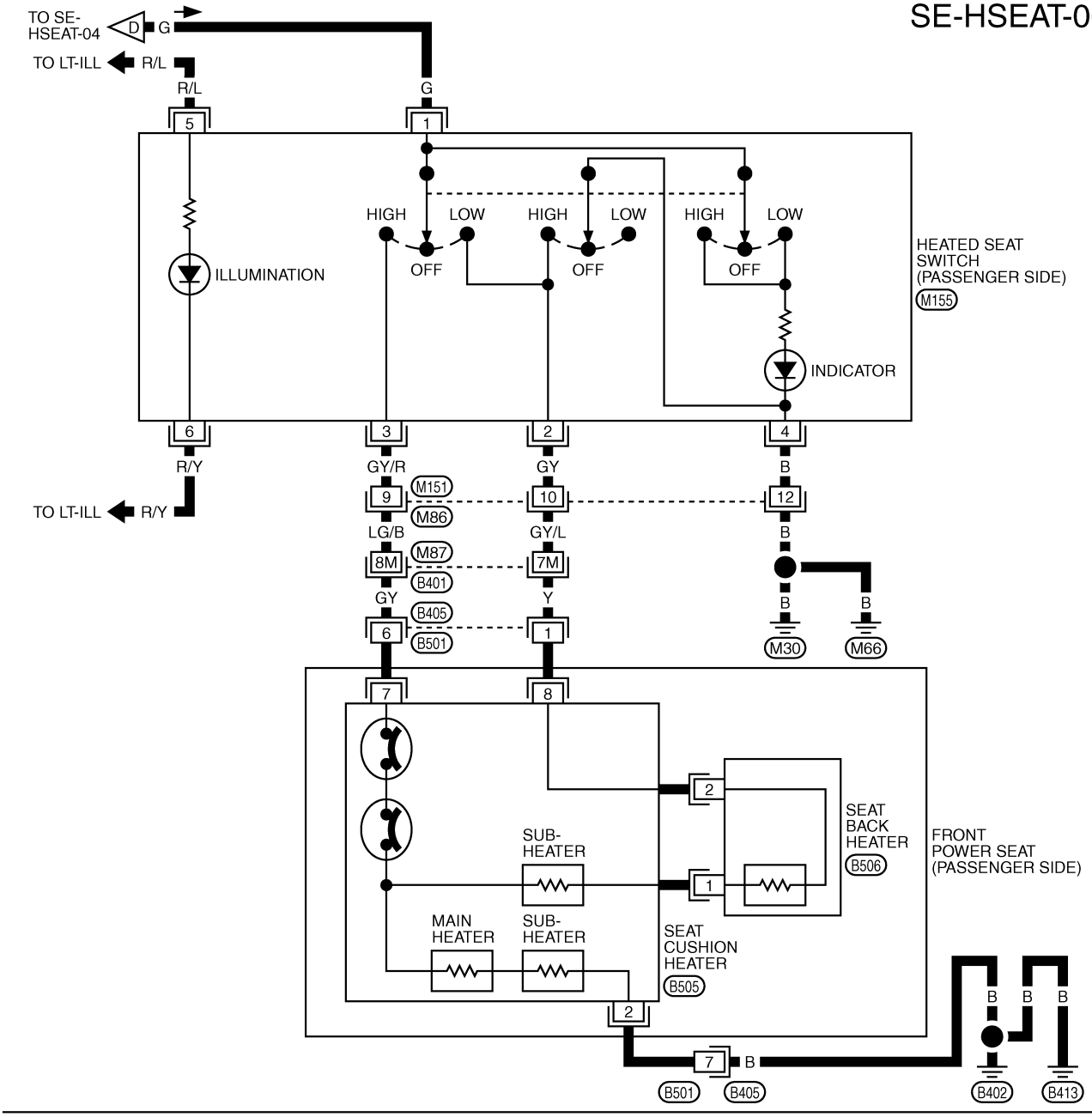


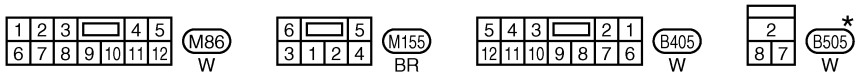
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM1509E

SE-HSEAT-06





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

REFER TO THE FOLLOWING.

B401 -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1023E

FRONT SEAT

PFP:87000

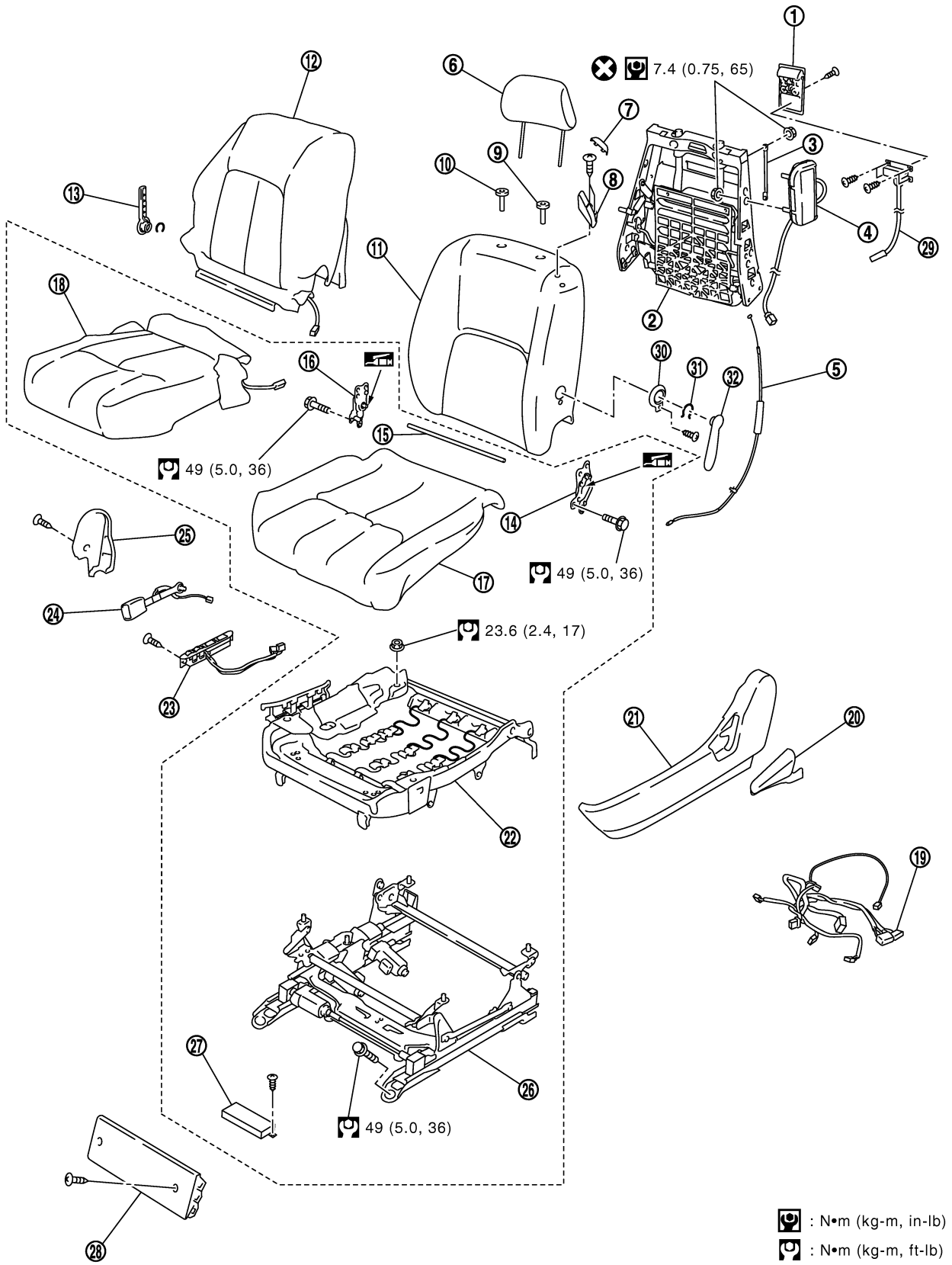
Removal and Installation

NIS000IN

CAUTION:

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

SEC. 870



1. Walk-in lever
2. Seatback frame assembly
3. Inner cloth stay
4. Side air bag module
5. Walk-in control cable
6. Headrest
7. Seat belt hook finisher
8. Seat belt hook
9. Headrest holder (locked)

10. Headrest holder (free)
11. Seatback pad
12. Seatback trim and heater
13. Lumber support lever knob
14. Reclining device (LH)
15. Reclining device rod
16. Reclining device (RH)
17. Seat cushion pad
18. Seat cushion trim and heater
19. Power seat harness
20. Reclining lever
21. Seat cushion outer finisher
22. Seat cushion outer finisher
23. Power seat switch
24. Seat belt buckle
25. Seat cushion inner finisher
26. Seat cushion rail assembly
27. Power seat control unit
28. Seat cushion front finisher
29. Seatback switch
30. Walk-in side lever finisher
31. Snap ring
32. Walk-in side lever

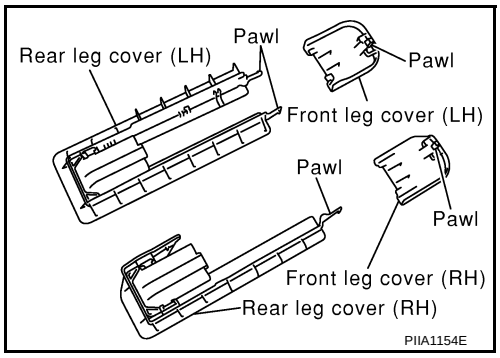
REMOVAL

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

CAUTION:

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

1. Remove the front leg cover and rear leg cover. (LH/RH)



NOTE:

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

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

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

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

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

INSTALLATION

Install in the reverse order of removal.

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

Disassembly and Assembly

NIS000IO

SEATBACK TRIM AND PAD

CAUTION:

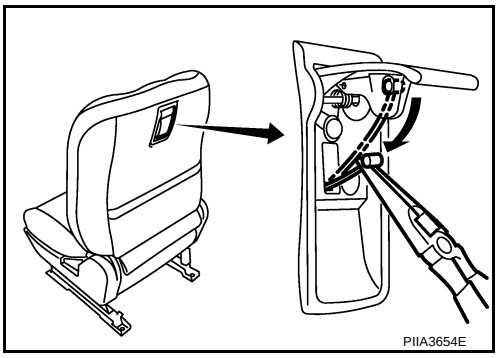
Do not disassemble front passenger seat cushion assembly.
Always replace as an assembly.
For front passenger seat service parts, refer to the service part catalogue.

NOTE:

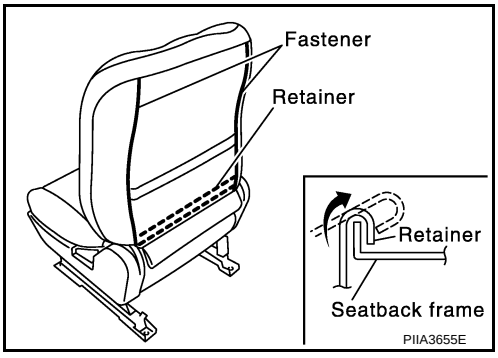
Be sure to set the front/rear cushion lifter to the top position.

Disassembly

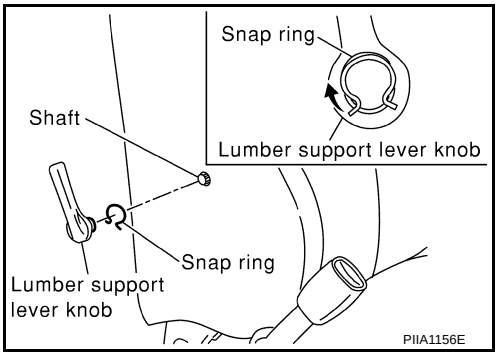
1. Remove screw, and then remove walk-in lever.



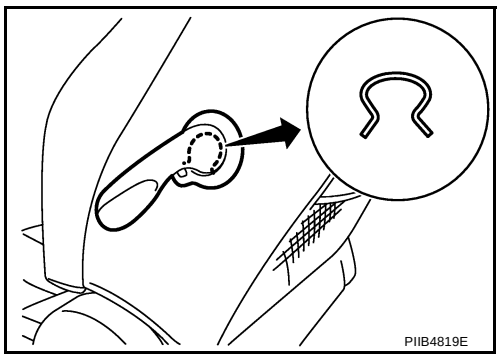
2. Disconnect the harness connector, and then remove seatback switch.
3. Remove seat belt hook finisher.
4. Remove screw, and then remove seat belt hook.
5. Open fastener on back of seatback, and remove retainer from seatback frame.



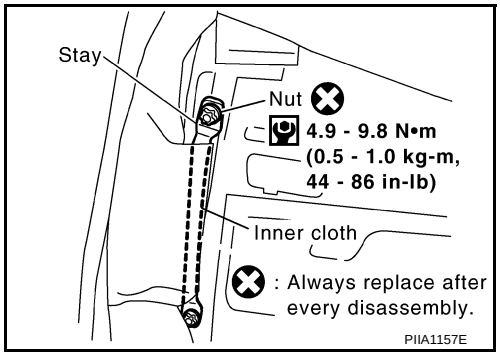
6. Pull snap ring upward, and remove lumber support lever knob from seatback frame.



7. Open the space between walk-in side lever and walk-in side lever finisher.
8. Remove snap ring, and then remove walk-in side lever.

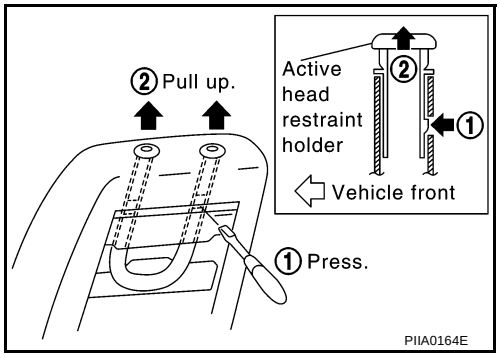


9. Remove screw, and then remove walk-in side lever finisher.
10. Remove the stay securing the inner cloth.



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

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



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

Assembly

Assemble in the reverse order of disassembly.

REMOVAL OF SEATBACK ASSEMBLY

1. After completing the steps 1, 2 and 3 of “SEATBACK TRIM AND PAD”, remove the harness connectors for the side air bag from the seat cushion.
2. Remove the reclining device mounting bolts on the seatback frame, and remove the seatback assembly.

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

INSTALLATION OF SEATBACK ASSEMBLY

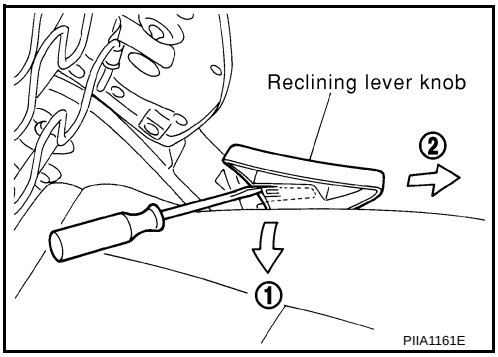
Install in the reverse order of removal.

SEAT CUSHION TRIM AND PAD

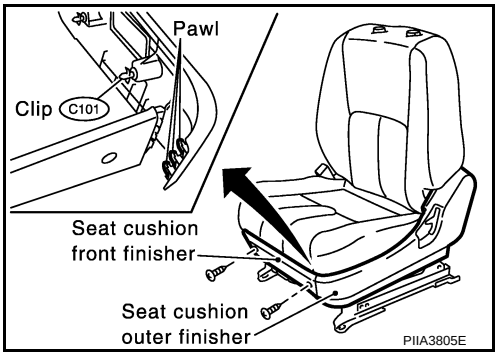
CAUTION:
Do not disassemble front passenger seat cushion assembly.
Always replace as an assembly.
For front passenger seat service parts, refer to the service part catalogue.

Disassembly

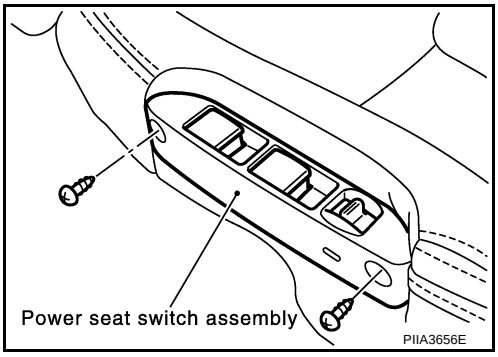
1. Pull up tabs of reclining lever knob inside. Slide knob forward to remove.



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



3. Remove the power seat switch assembly.



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

Assembly

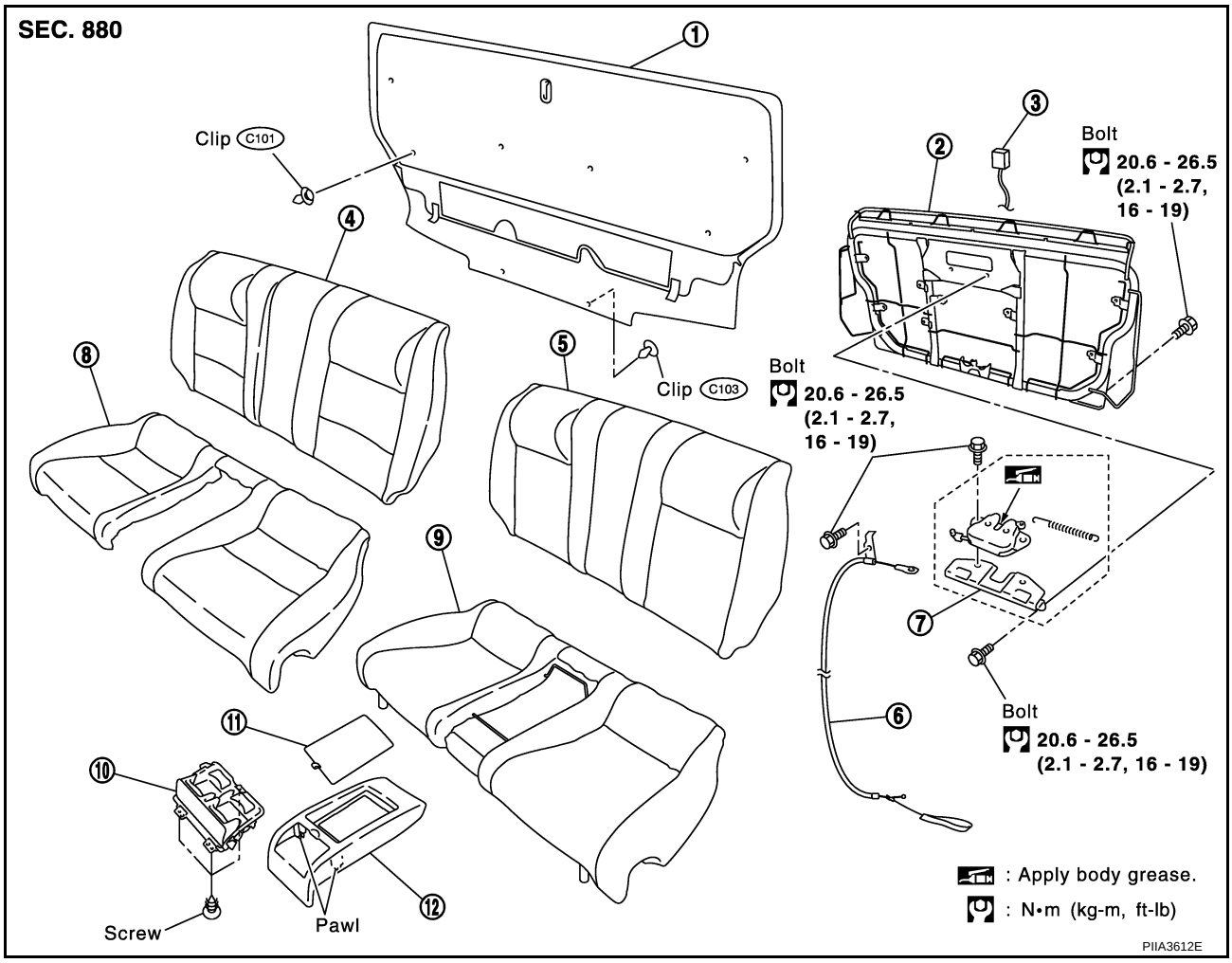
Assemble in the reverse order of disassembly.

REAR SEAT

PFP:88300

Removal and Installation

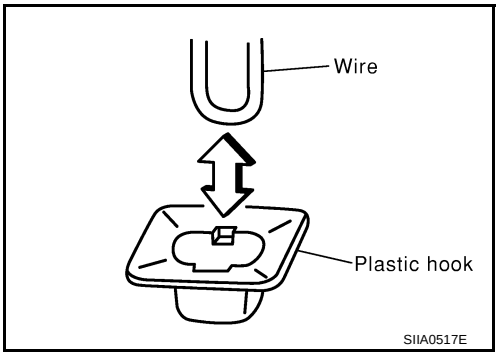
NIS000IP



1. Seatback board
2. Seatback frame
3. Seatback device lock indicator
4. Seatback trim
5. Seat cushion pad
6. Seatback device cable
7. Seatback device lock
8. Seat cushion trim
9. Seat cushion pad
10. Center tray cup holder
11. Center tray box lid
12. Center tray box

REMOVAL

Raise the bottom of the seat cushion to release the wire from the plastic hook, then pull the seat cushion forward to remove.



INSTALLATION

Install in the reverse order of removal.