SECTION SE
SEAT

CONTENTS

PRECAUTIONS

PFP:00001

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

AIS0038A

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

AIS00389

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

Precautions for Work

AIS0038B

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

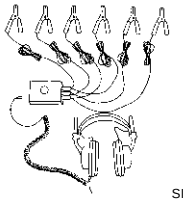
PREPARATION

PFP:00002

Special Service Tools

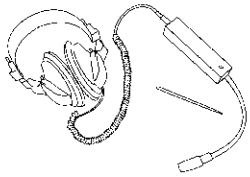
AIS002WV

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

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

Commercial Service Tools

AIS002WW

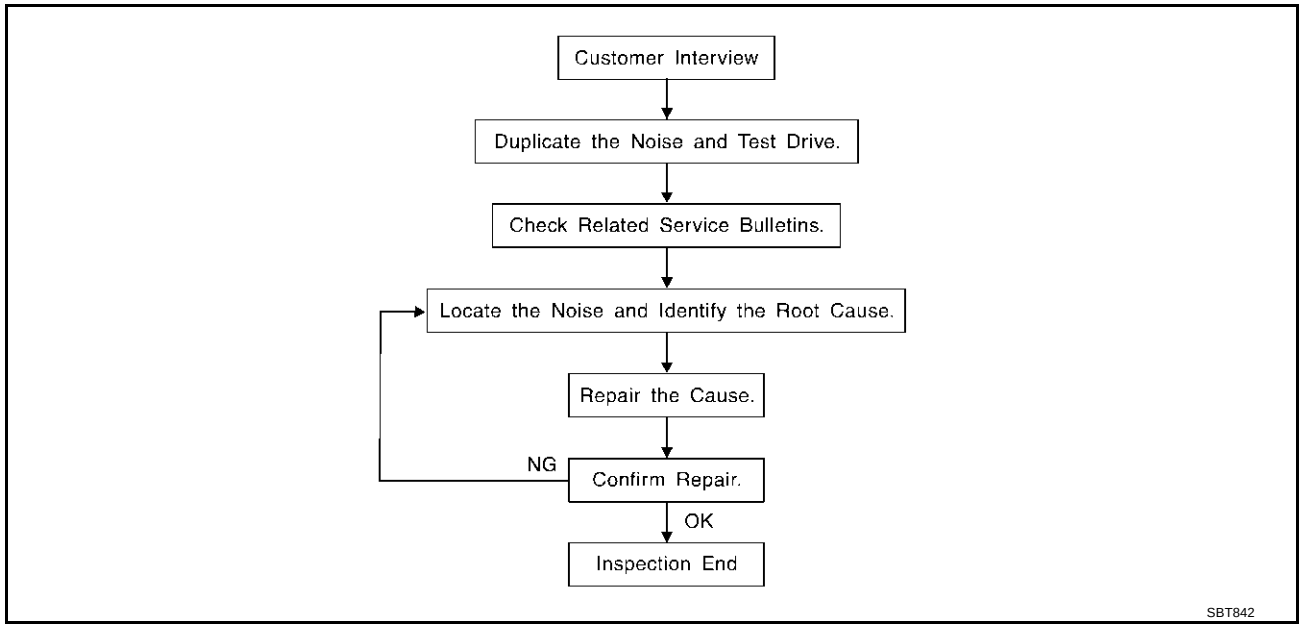
Tool name	Description
Engine ear  SIIA0995E	Locating the noise

SQUEAK AND RATTLE TROUBLE DIAGNOSIS

PFP:00000

Work Flow

AIS002WX



CUSTOMER INTERVIEW

Interview the customer if possible, to determine the conditions that exist when the noise occurs. Use the Diagnostic Worksheet during the interview to document the facts and conditions when the noise occurs and any customer's comments; refer to SE-9, "Diagnostic Worksheet" . This information is necessary to duplicate the conditions that exist when the noise occurs.

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

DUPLICATE THE NOISE AND TEST DRIVE

If possible, drive the vehicle with the customer until the noise is duplicated. Note any additional information on the Diagnostic Worksheet regarding the conditions or location of the noise. This information can be used to duplicate the same conditions when you confirm the repair.
If the noise can be duplicated easily during the test drive, to help identify the source of the noise, try to duplicate the noise with the vehicle stopped by doing one or all of the following:

1) Close a door.
2) Tap or push/pull around the area where the noise appears to be coming from.
3) Rev the engine.
4) Use a floor jack to recreate vehicle “twist”.
5) At idle, apply engine load (electrical load, half-clutch on M/T model, drive position on A/T model).
6) Raise the vehicle on a hoist and hit a tire with a rubber hammer.

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

CHECK RELATED SERVICE BULLETINS

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

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

- removing the components in the area that you suspect the noise is coming from.
  Do not use too much force when removing clips and fasteners, otherwise clips and fastener can be broken or lost during the repair, resulting in the creation of new noise.
- tapping or pushing/pulling the component that you suspect is causing the noise.
  Do not tap or push/pull the component with excessive force, otherwise the noise will only be eliminated temporarily.
- feeling for a vibration with your hand by touching the component(s) that you suspect is (are) causing the noise.
- placing a piece of paper between components that you suspect are causing the noise.
- looking for loose components and contact marks.
  Refer to SE-7, "Generic Squeak and Rattle Troubleshooting" .

REPAIR THE CAUSE

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

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
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.
Note: Will only last a few months.
SILICONE SPRAY
Use when grease cannot be applied.
DUCT TAPE
Use to eliminate movement.

CONFIRM THE REPAIR

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

Generic Squeak and Rattle Troubleshooting

AIS002WY

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/HEADLINER

Noises in the sunroof/headliner 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 headliner and squeaking

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

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 room.
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

AIS002WZ

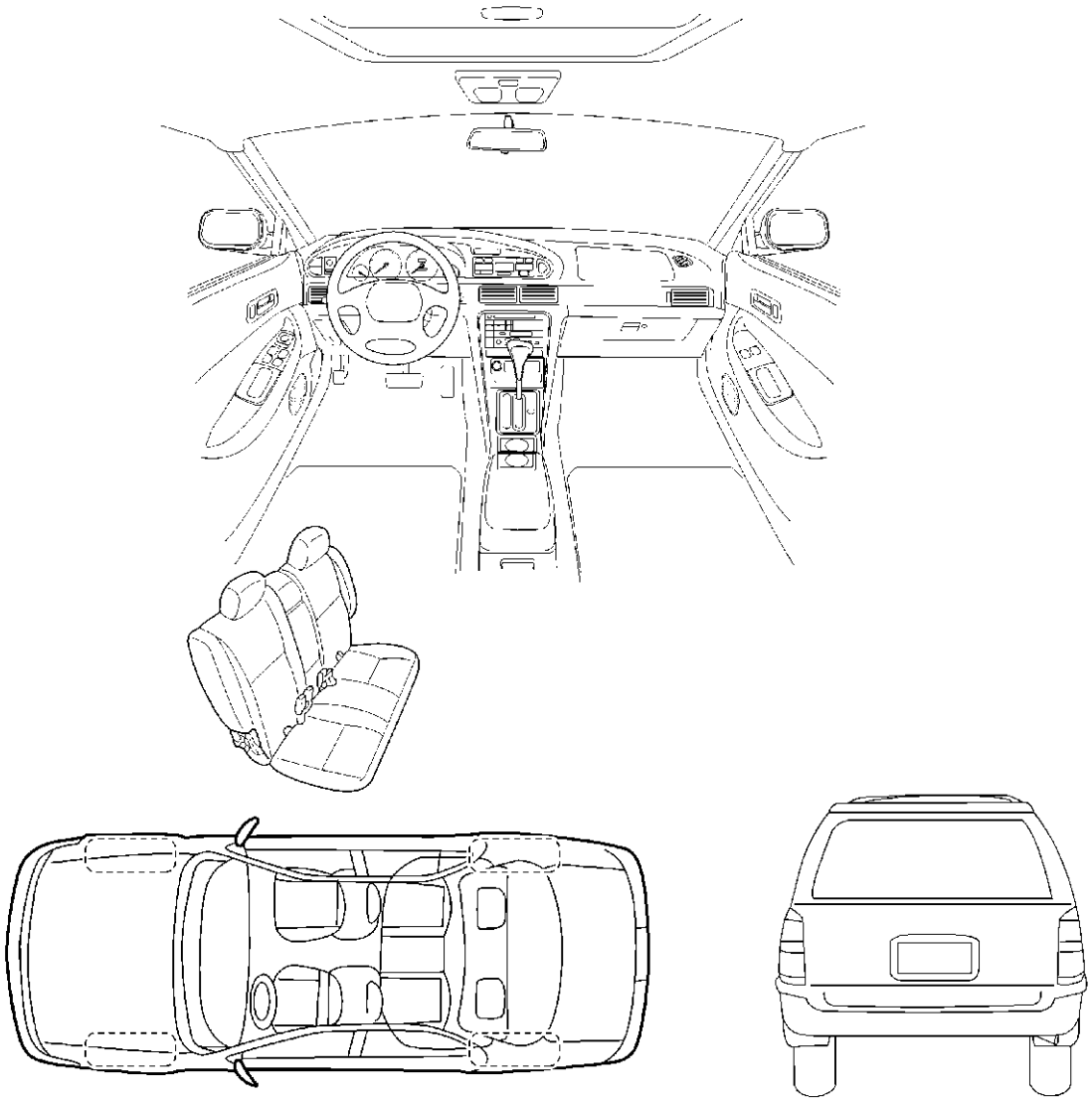
INFINITI

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 advisor or technician to ensure we confirm the noise you are hearing.

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

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



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

SBT860

SQUEAK & RATTLE DIAGNOSTIC WORKSHEET- page 2

Briefly describe the location where the noise occurs:

_____

_____

II. WHEN DOES IT OCCUR? (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 sun
❑ when it is raining or wet
❑ dry or dusty conditions
❑ other: _____

III. WHEN DRIVING:

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

IV. WHAT TYPE OF NOISE?

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

TO BE COMPLETED BY DEALERSHIP PERSONNEL
Test Drive Notes:

_____

_____

	YES	NO	Initials of person performing
Vehicle test driven with customer	❑	❑	_____
- 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

SBT844

AUTOMATIC DRIVE POSITIONER

PFP:28491

Manual Operation

AIS002X9

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

NOTE:

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

Automatic Operation

AIS002XA

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

NOTE:

- Disconnecting the battery erases the stored memory.
- After connecting the battery, insert the key into the ignition cylinder and turn the driver door switch ON (open)→OFF (close)→ON (open), the Entry/ Exiting operation becomes possible.
- After exiting operation is carried out, return operation can be operated.

Auto operation temporary stop conditions.	When ignition switch turned to START during memory switch operation and return operation, memory switch operation and entry operation is stopped.
Auto operation stop conditions.	● When the vehicle speed becomes 7 km/h (4 MPH) or higher. ● When the setting switch, memory switch 1, or 2 are pressed. ● When A/T selector lever is in any position other than P. ● When the door mirror remote control switch is operated (when ignition switch turned to ON or ACC). ● When power seat switch turned ON. ● When ADP steering switch turned ON (telescopic operation or tilt operation). ● When door mirror operates (only memory switch operation). ● When driver seat sliding Entry/Exiting setting is OFF (only entry/exiting operation). ● When steering wheel tilt and telescopic Entry/Exiting setting is OFF (only entry/exiting operation). ● When the tilt and telescopic sensor malfunction is detected.

NOTE:

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

System Description

AIS002XB

- The system automatically moves the driver seat to facilitate entry/exit to/from the vehicle. The automatic driver positioner control unit can also store the optimum driving positions (driver seat, pedal position and door mirror position) for 2 people. If the driver is changes, one-touch operation allows changing to the other driving position.
- The settings (ON/OFF) of the automatic sliding seat (Entry/Exiting operation) at entry/exit can be changed as desired, using the display unit in the center of the instrument panel. The set content is transmitted by CAN communication, from display unit (without NAVI) or display control unit (with NAVI) to driver seat control unit.
- Using CONSULT-II, the seat slide amount at entry/exit setting can be changed.

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 T1 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	T1
Seat sliding	Approx. 0.1 sec.
Seat reclining	Same as above
Seat lifting (Front)	Same as above
Seat lifting (Rear)	Same as above
steering tilt	Same as above
steering telescopic	Same as above

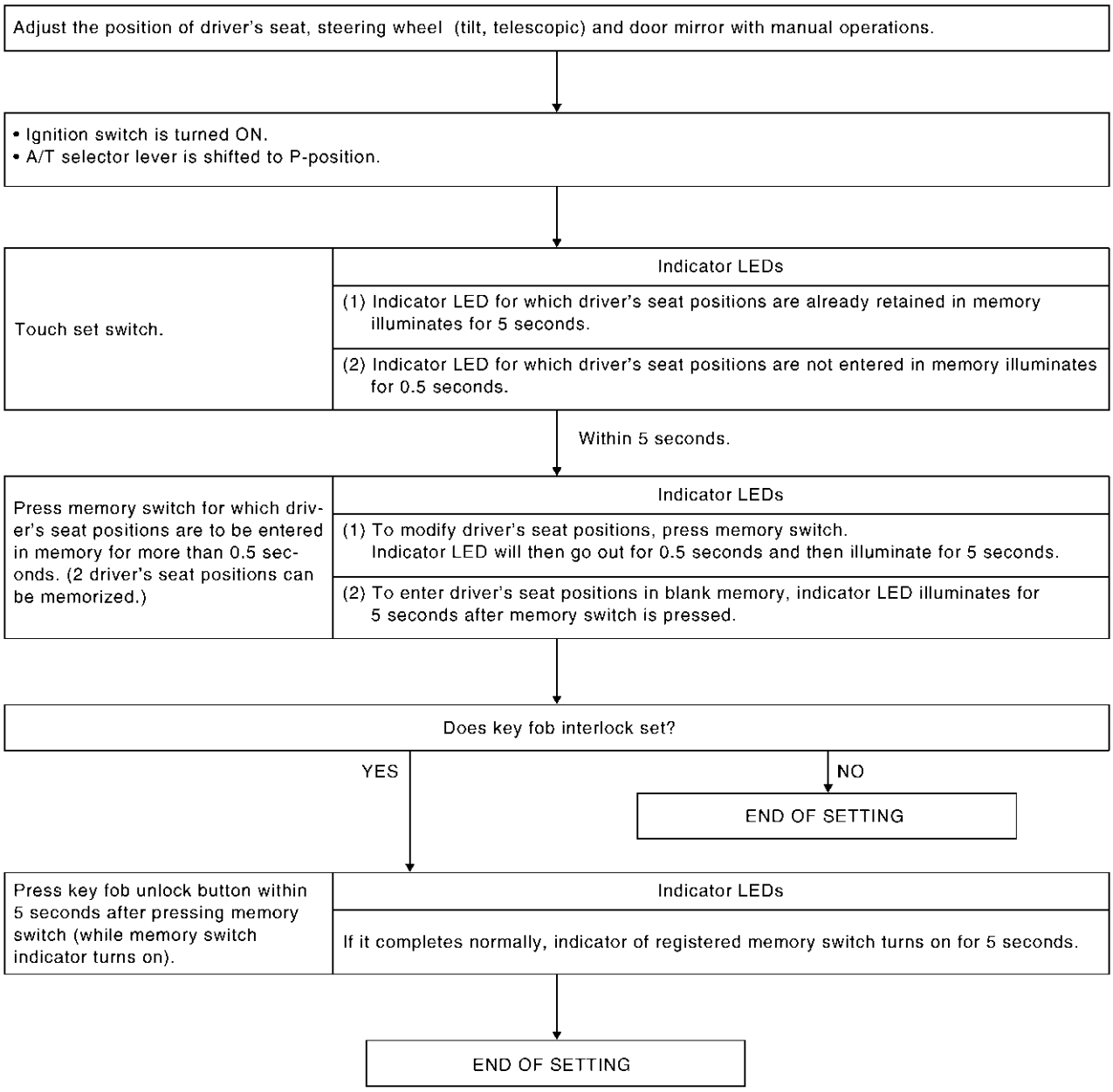
CANCEL OF FAIL-SAFE MODE

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

MEMORY STORING AND KEY FOB INTERLOCK STORING

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

- Key fob interlock function is set simultaneously with setting driving position memory. It can set driving position to memory position.



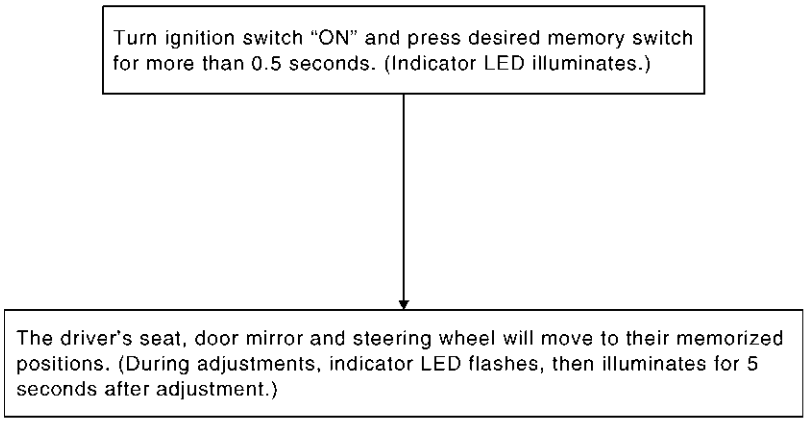
PIIA6138E

NOTE:

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

MEMORY SWITCH OPERATION

Selecting the memory



PIIA6137E

NOTE:

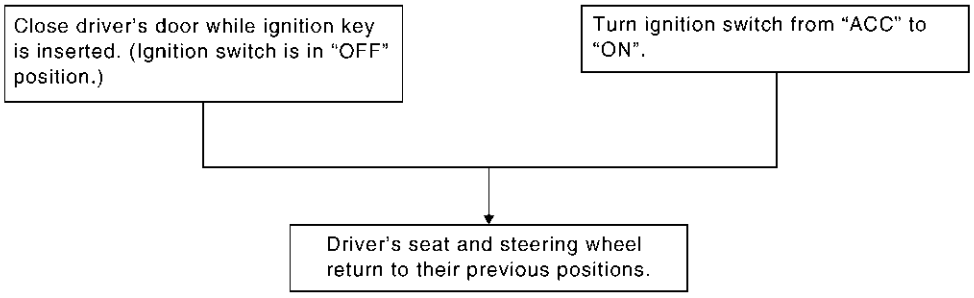
The driver's seat position and steering adjustment functions (see the following table) operate simultaneously in the order of priority.

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

*: In conjunction with sliding the seat, the door mirrors are positioned.

ENTRY OPERATION

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



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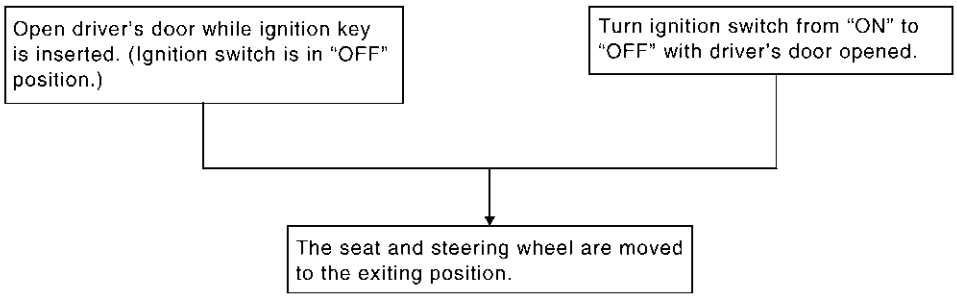
EXITING OPERATION

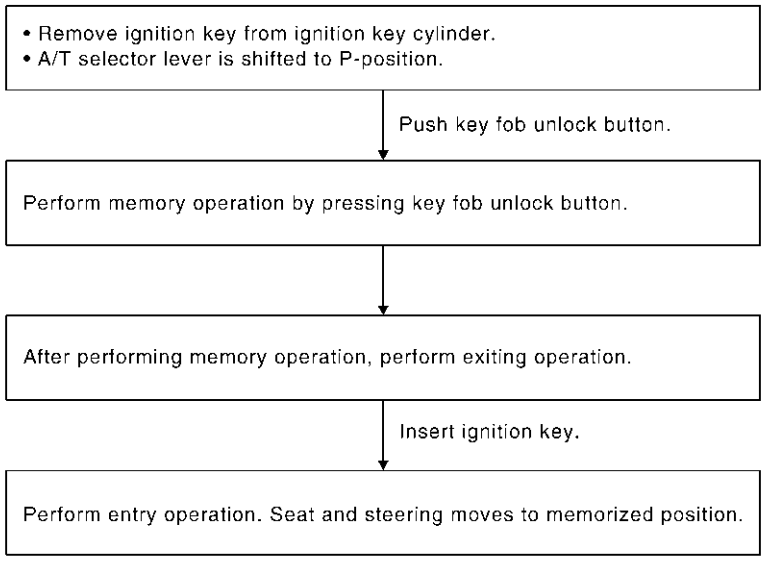
At exit, the seat are automatically moved to the exiting position.



PIIA6136E

KEY FOB INTERLOCK OPERATION

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



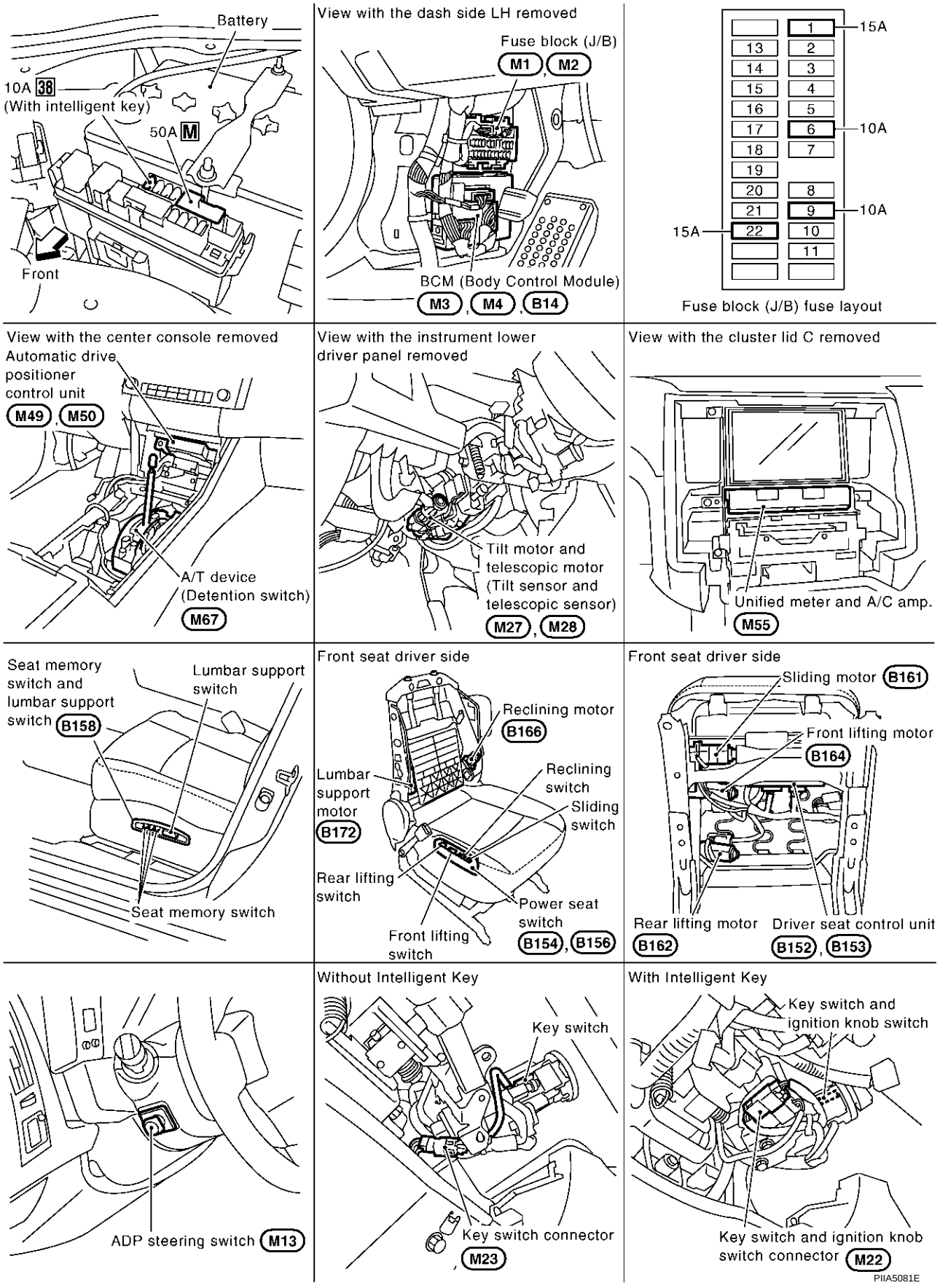
PIIA6949E

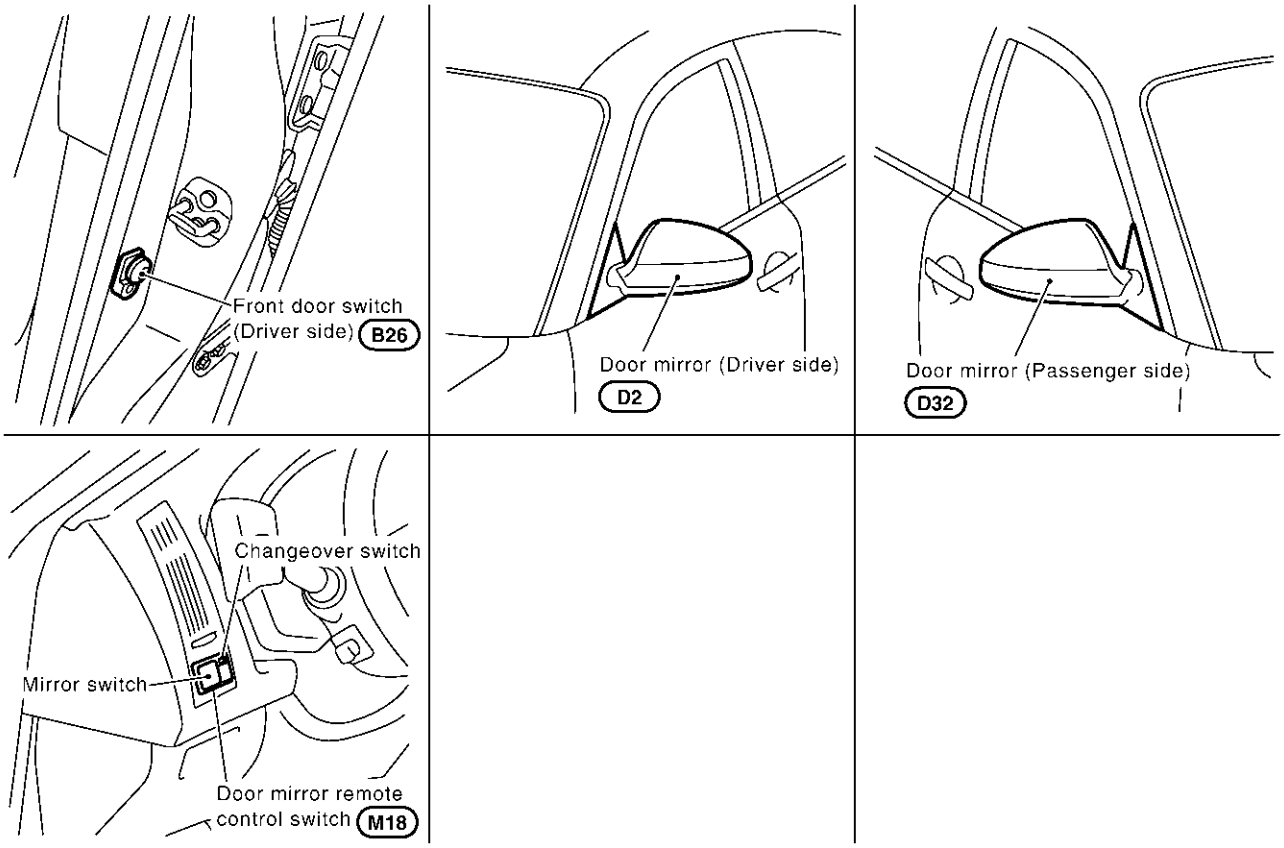
NOTE:

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

Component Parts and Harness Connector Location

AIS002XC





PIIA5082E

CAN Communication System Description

AIS003MN

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

AIS003MO

Go to CAN system, when selecting your car model from the following table.

Body type	Wagon					
Axle	2WD			AWD		
Engine	VQ35DE			VQ35DE/VK45DE		
Transmission	A/T					
Brake control	VDC					
Navigation system			×			×
Low tire pressure warning system			×			×
ICC system			×			×
Intelligent Key system			×			×
Automatic drive positioner		×	×		×	×
CAN communication unit						
ECM	×	×	×	×	×	×
TCM	×	×	×	×	×	×
Display unit	×	×		×	×	
Display control unit			×			×

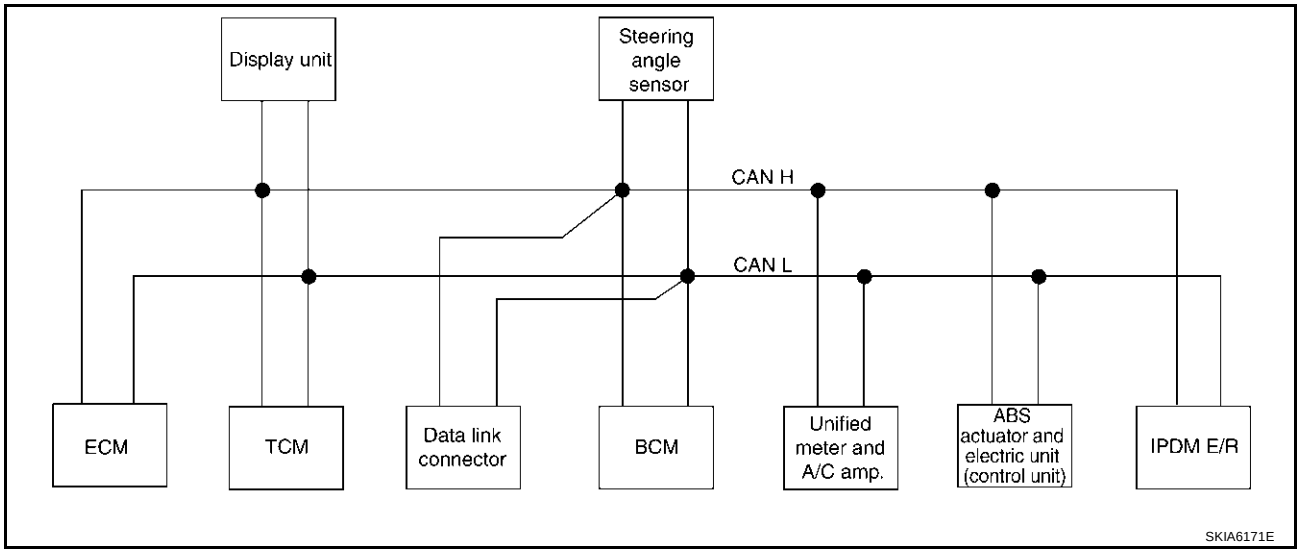
Body type	Wagon					
Axle	2WD			AWD		
Engine	VQ35DE			VQ35DE/VK45DE		
Transmission	A/T					
Brake control	VDC					
Navigation system			×			×
Low tire pressure warning system			×			×
ICC system			×			×
Intelligent Key system			×			×
Automatic drive positioner		×	×		×	×
CAN communication unit						
Low tire pressure warning control unit			×			×
AWD control unit				×	×	×
ICC unit			×			×
Intelligent Key unit			×			×
Data link connector	×	×	×	×	×	×
BCM	×	×	×	×	×	×
Steering angle sensor	×	×	×	×	×	×
Unified meter and A/C amp.	×	×	×	×	×	×
ICC sensor			×			×
ABS actuator and electric unit (control unit)	×	×	×	×	×	×
Driver seat control unit		×	×		×	×
IPDM E/R	×	×	×	×	×	×
CAN communication type	SE-18, "TYPE 1/TYPE2"		SE-21, "TYPE 3"	SE-25, "TYPE 4/TYPE5"		SE-28, "TYPE 6"

×: Applicable

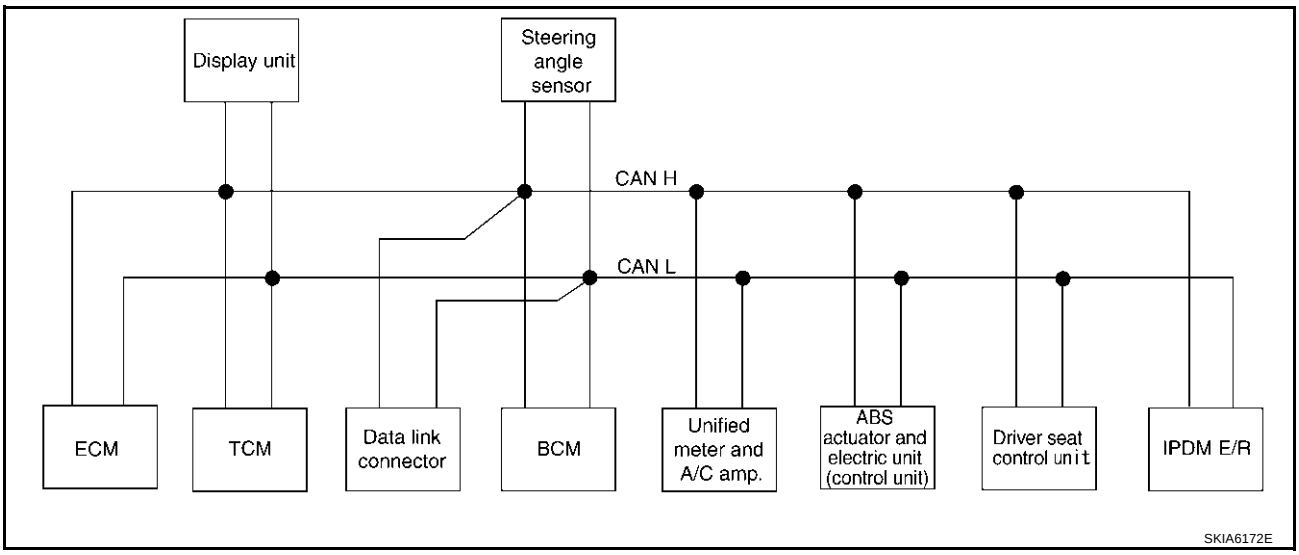
TYPE 1/TYPE2

System Diagram

- Type1



- Type2



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Display unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Engine speed signal	T	R	R			R	R		
Engine status signal	T			R					
Engine coolant temperature signal	T	R				R			
A/T self-diagnosis signal	R	T							
Accelerator pedal position signal	T	R					R		
Closed throttle position signal	T	R							
Wide open throttle position signal	T	R							
Battery voltage signal	T	R							
Key switch signal				T				R	
Ignition switch signal				T				R	R
P range signal		T					R	R	
Stop lamp switch signal		R				T			
ABS operation signal	R						T		
TCS operation signal	R						T		
VDC operation signal	R						T		
Fuel consumption monitor signal	T		R			R			
Input shaft revolution signal	R	T							
Output shaft revolution signal	R	T							
A/C switch signal	R			T					
A/C compressor request signal	T								R
A/C relay status signal	R								T
A/C compressor feedback signal	T					R			
Blower fan motor switch signal	R			T					

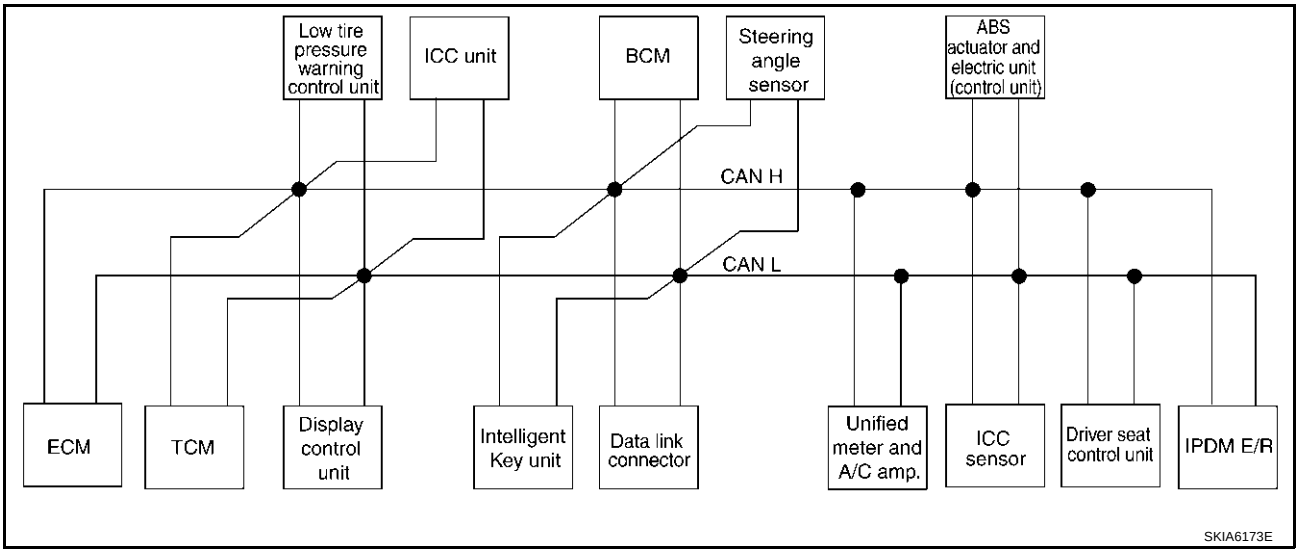
Signals	ECM	TCM	Dis-play unit	BCM	Steer-ing angle sensor	Unified meter and A/C amp.	ABS actua-tor and electric unit (con-trol unit)	Driver seat control unit	IPDM E/R
A/C control signal			T			R			
			R			T			
Cooling fan speed request signal	T								R
Cooling fan speed signal	R								T
Position light request signal			R	T		R			R
Low beam request signal				T					R
Low beam status signal	R								T
High beam request signal				T		R			R
High beam status signal	R								T
Front fog light request signal				T					R
Day time running light request signal				T		R			
Turn LED burnout status signal				R		T			
Vehicle speed signal						R	T		
	R	R	R	R		T		R	
Sleep wake up signal				T		R		R	R
Door switch signal			R	T		R		R	R
Turn indicator signal				T		R			
Key fob ID signal				T				R	
Key fob door unlock signal				T				R	
Oil pressure switch signal				R					T
				T		R			
Buzzer output signal				T		R			
Fuel level sensor signal	R					T			
Fuel level low warning signal			R			T			
ASCD operation signal	T	R							
ASCD OD cancel request	T	R							
Front wiper request signal				T					R
Front wiper stop position signal				R					T
Rear window defogger switch signal				T					R
Rear window defogger control signal	R		R	R					T
Hood switch signal				R					T
Theft warning horn request signal				T					R
Horn chirp signal				T					R
Steering angle sensor signal					T		R		
ABS warning lamp signal						R	T		
VDC OFF indicator lamp signal						R	T		
SLIP indicator lamp signal						R	T		
Brake warning lamp signal						R	T		
System setting signal			T	R				R	
A/T CHECK indicator lamp signal		T				R			

Signals	ECM	TCM	Display unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
A/T position indicator lamp signal		T				R			
A/T shift schedule change demand signal		R					T		
Manual mode signal		R				T			
Not manual mode signal		R				T			
Manual mode shift up signal		R				T			
Manual mode shift down signal		R				T			
Manual mode indicator signal		T				R			
Distance to empty signal			R			T			
Hand brake switch				R		T			

TYPE 3

System Diagram

- Type3



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Engine speed signal	T	R	R		R				R		R		
Engine status signal	T						R						
Engine coolant temperature signal	T	R			R				R				
A/T self-diagnosis signal	R	T											

Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Accelerator pedal position signal	T	R			R						R		
Closed throttle position signal	T	R			R								
Wide open throttle position signal	T	R											
Battery voltage signal	T	R											
Key switch signal							T					R	
Ignition switch signal							T					R	R
P range signal		T			R						R	R	
Stop lamp switch signal		R							T				
ABS operation signal	R				R						T		
TCS operation signal	R				R						T		
VDC operation signal	R				R						T		
Fuel consumption monitor signal	T		R						R				
Input shaft revolution signal	R	T			R								
Output shaft revolution signal	R	T			R								
A/C switch signal	R						T						
A/C compressor request signal	T												R
A/C relay status signal	R												T
A/C compressor feedback signal	T								R				
Blower fan motor switch signal	R						T						
A/C control signal			T						R				
			R						T				
Cooling fan speed signal	R												T
Position light request signal	R						T		R				R
Low beam request signal							T						R
Low beam status signal	R												T
High beam request signal							T		R				R
High beam status signal	R												T
Front fog light request signal							T						R
Day time running light request signal							T		R				

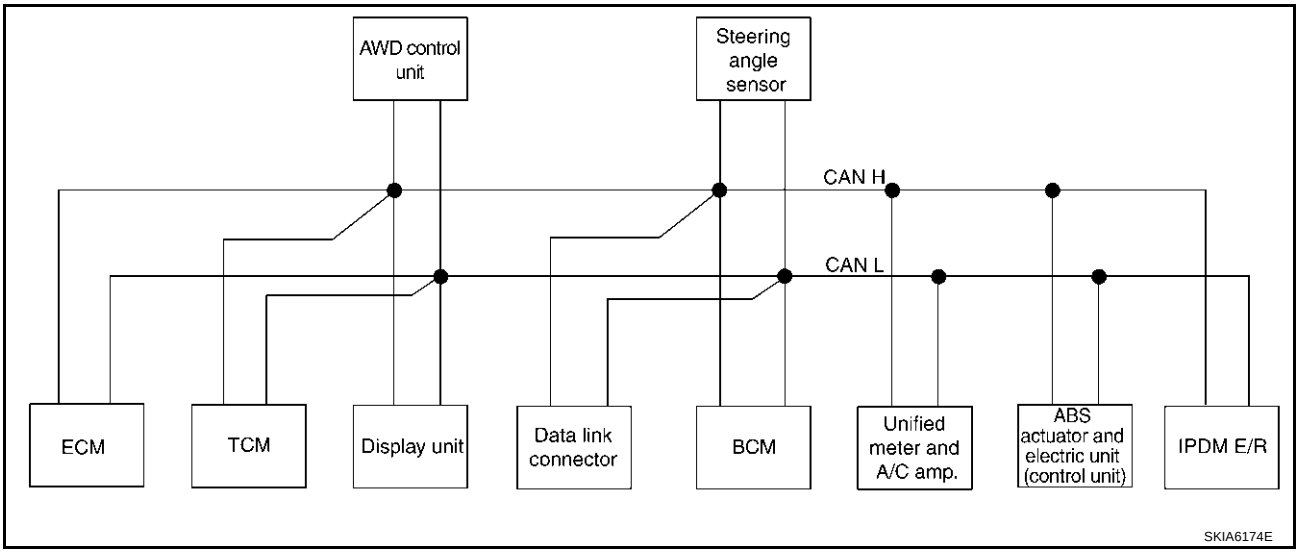
Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Turn LED burnout status signal							R		T				
Vehicle speed signal					R				R		T		
	R	R	R	R		R	R		T	R		R	
Sleep wake up signal							T		R			R	R
						T	R						
Door switch signal			R			R	T		R			R	R
Turn indicator signal							T		R				
Key fob ID signal							T					R	
Key fob door unlock signal							T					R	
Oil pressure switch signal							R						T
							T		R				
Buzzer output signal							T		R				
						T			R				
					T				R				
Fuel level sensor signal	R								T				
Fuel level low warning signal			R						T				
ICC operation signal	R				T								
Front wiper request signal					R		T						R
Front wiper stop position signal							R						T
Rear window defogger switch signal							T						R
Rear window defogger control signal	R		R				R						T
Hood switch signal							R						T
Theft warning horn request signal							T						R
Horn chirp signal							T						R
Steering angle sensor signal								T			R		
Tire pressure signal				T					R				
Tire pressure data signal			R	T									
ABS warning lamp signal					R				R		T		
VDC OFF indicator lamp signal					R				R		T		
SLIP indicator lamp signal									R		T		

Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Brake warning lamp signal									R		T		
System setting signal			T			R						R	
Distance to empty signal			R						T				
Hand brake switch signal							R		T				
Door lock/unlock request signal						T	R						
Door lock/unlock status signal						R	T						
Starter permission signal						T	R						
Back door open request signal						T	R						
Power window open request signal						T	R						
Alarm request signal						T	R						
Key warning signal						T			R				
ICC sensor signal					R					T			
ICC warning lamp signal					T				R				
ICC system display signal					T				R				
Current gear position signal		T			R						R		
Steering switch signal	T				R								
ASCD operation signal	T	R											
ASCD OD cancel request	T	R											
ICC OD cancel request	R	R			T								
A/T CHECK indicator lamp signal		T							R				
A/T position indicator lamp signal		T							R				
A/T shift schedule change demand signal		R									T		
Manual mode signal		R							T				
Not manual mode signal		R							T				
Manual mode shift up signal		R							T				
Manual mode shift down signal		R							T				
Manual mode indicator signal		T			R				R				
Ignition knob switch signal						T	R						

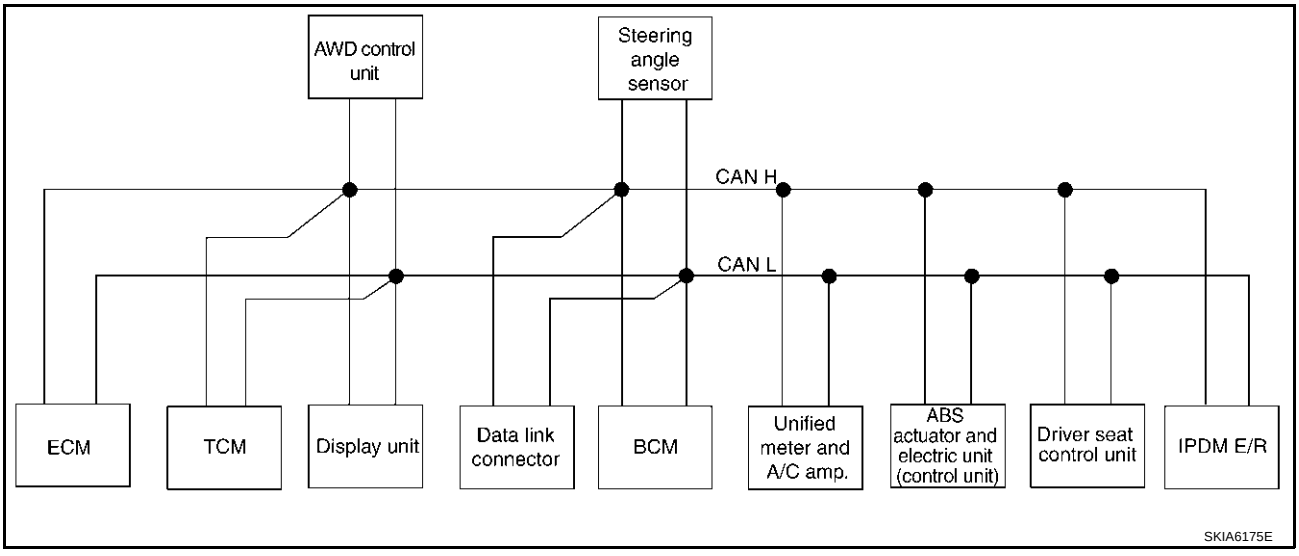
TYPE 4/TYPE5

System Diagram

- Type4



- Type5



Input/output Signal Chart

T: Transmit R: Receive

Signals	ECM	TCM	Display unit	AWD control unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
A/T self-diagnosis signal	R	T								
ABS operation signal	R			R				T		
TCS operation signal	R							T		
VDC operation signal	R			R				T		
Stop lamp switch signal		R		R			T			
Battery voltage signal	T	R								

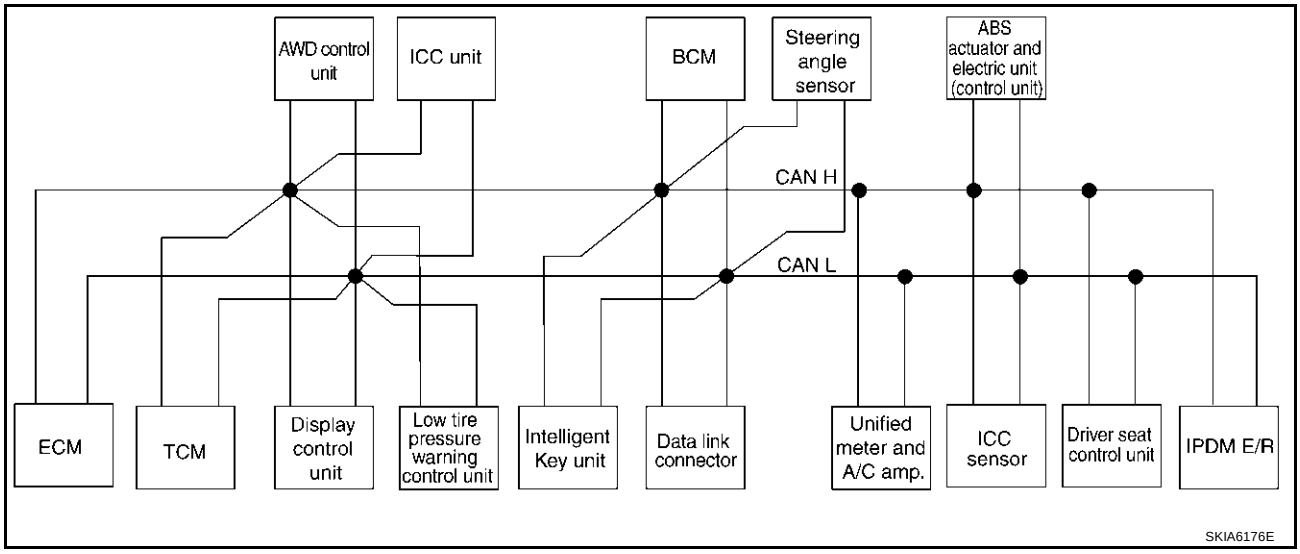
Signals	ECM	TCM	Display unit	AWD control unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Key switch signal					T				R	
Ignition switch signal					T				R	R
P range signal		T						R	R	
Closed throttle position signal	T	R								
Wide open throttle position signal	T	R								
Engine speed signal	T	R	R	R			R	R		
Engine status signal	T				R					
Engine coolant temperature signal	T	R					R			
Accelerator pedal position signal	T	R		R				R		
Fuel consumption monitor signal	T		R				R			
Input shaft revolution signal	R	T								
Output shaft revolution signal	R	T								
A/C switch signal	R				T					
A/C compressor request signal	T									R
A/C relay status signal	R									T
A/C compressor feedback signal	T						R			
Blower fan motor switch signal	R				T					
A/C control signal			T				R			
			R				T			
Cooling fan speed signal	R									T
Position light request signal			R		T		R			R
Low beam request signal					T					R
Low beam status signal	R									T
High beam request signal					T		R			R
High beam status signal	R									T
Front fog light request signal					T					R
Day time running light request signal					T		R			
Turn LED burnout status signal					R		T			
Vehicle speed signal							R	T		
	R	R	R		R		T		R	
Sleep wake up signal					T		R		R	R
Door switch signal			R		T		R		R	R
Turn indicator signal					T		R			
Key fob ID signal					T				R	
Key fob door unlock signal					T				R	
Oil pressure switch signal					R					T
					T		R			
Buzzer output signal					T		R			

Signals	ECM	TCM	Display unit	AWD control unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Fuel level sensor signal	R						T			
Fuel level low warning signal			R				T			
Front wiper request signal					T					R
Front wiper stop position signal					R					T
Rear window defogger switch signal					T					R
Rear window defogger control signal	R		R		R					T
Hood switch signal					R					T
Theft warning horn request signal					T					R
Horn chirp signal					T					R
Steering angle sensor signal						T		R		
ABS warning lamp signal							R	T		
VDC OFF indicator lamp signal							R	T		
SLIP indicator lamp signal							R	T		
Brake warning lamp signal							R	T		
System setting signal			T		R				R	
AWD warning lamp signal				T			R			
AWD lock indicator lamp signal				T			R			
Distance to empty signal			R				T			
Hand brake switch signal				R	R		T			
ASCD operation signal	T	R								
ASCD OD cancel request	T	R								
A/T CHECK indicator lamp signal		T					R			
A/T position indicator lamp signal		T					R			
A/T shift schedule change demand signal		R						T		
Manual mode signal		R					T			
Not manual mode signal		R					T			
Manual mode shift up signal		R					T			
Manual mode shift down signal		R					T			
Manual mode indicator signal		T					R			

TYPE 6

System Diagram

- Type6



Input/output Signal Chart

T: Transmit R: Receive

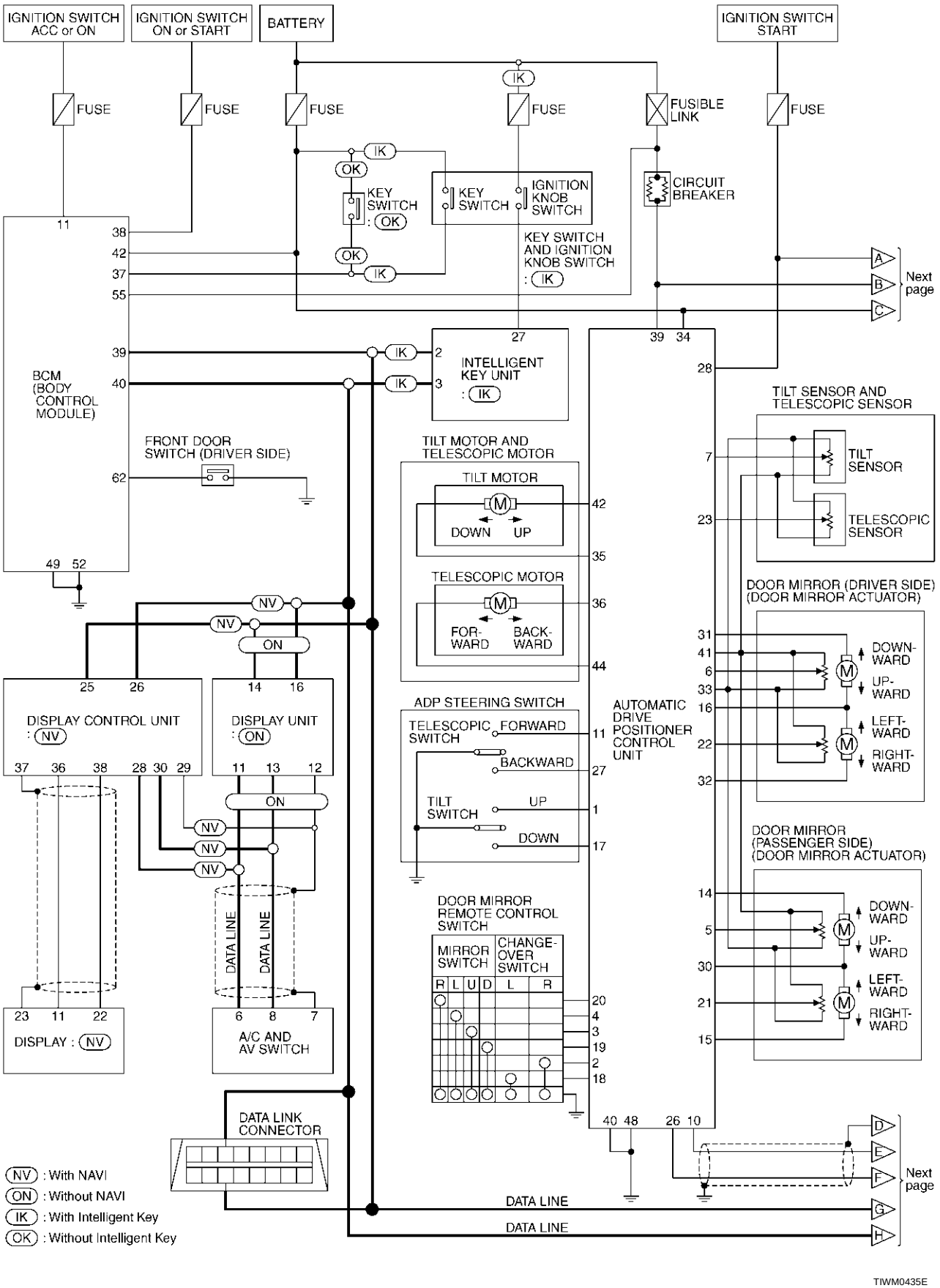
Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	AWD control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
A/T self-diagnosis signal	R	T												
ABS operation signal	R				R	R						T		
TCS operation signal	R					R						T		
VDC operation signal	R				R	R					R	T		
Stop lamp switch signal		R			R					T				
Battery voltage signal	T	R												
Key switch signal								T					R	
Ignition switch signal								T					R	R
P range signal		T				R						R	R	
Closed throttle position signal	T	R				R								
Wide open throttle position signal	T	R												
Engine speed signal	T	R	R		R	R				R		R		
Engine status signal	T							R						
Engine coolant temperature signal	T	R				R				R				
Accelerator pedal position signal	T	R			R	R						R		
Fuel consumption monitor signal	T		R							R				
A/T self-diagnosis signal	R	T												
Input shaft revolution signal	R	T				R								
Output shaft revolution signal	R	T				R								
A/C switch signal	R							T						
A/C compressor request signal	T													R
A/C relay status signal	R													T
A/C compressor feedback signal	T									R				
Blower fan motor switch signal	R							T						
A/C control signal			T							R				
			R							T				
Cooling fan speed signal	R													T
Position light request signal			R					T		R				R
Low beam request signal								T						R
Low beam status signal	R													T
High beam request signal								T		R				R

Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	AWD control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
High beam status signal	R													T
Front fog light request signal								T						R
Day time running light request signal								T		R				
Turn LED burnout status signal								R		T				
Vehicle speed signal						R				R		T		
	R	R	R	R			R	R		T	R		R	
Sleep wake up signal								T		R			R	R
							T	R						
Door switch signal			R				R	T		R			R	R
Key fob ID signal								T					R	
Key fob door unlock signal								T					R	
Oil pressure switch signal								R						T
								T		R				
Buzzer output signal								T		R				
							T			R				
						T				R				
Fuel level sensor signal	R									T				
Fuel level low warning signal			R							T				
ICC operation signal	R					T								
Front wiper request signal						R		T						R
Front wiper stop position signal								R						T
Rear window defogger switch signal								T						R
Rear window defogger control signal	R		R					R						T
Hood switch signal								R						T
Theft warning horn request signal								T						R
Horn chirp signal								T						R
Steering angle sensor signal									T			R		
Tire pressure signal				T						R				
Tire pressure data signal			R	T										
ABS warning lamp signal						R				R		T		
VDC OFF indicator lamp signal						R				R		T		
SLIP indicator lamp signal										R		T		

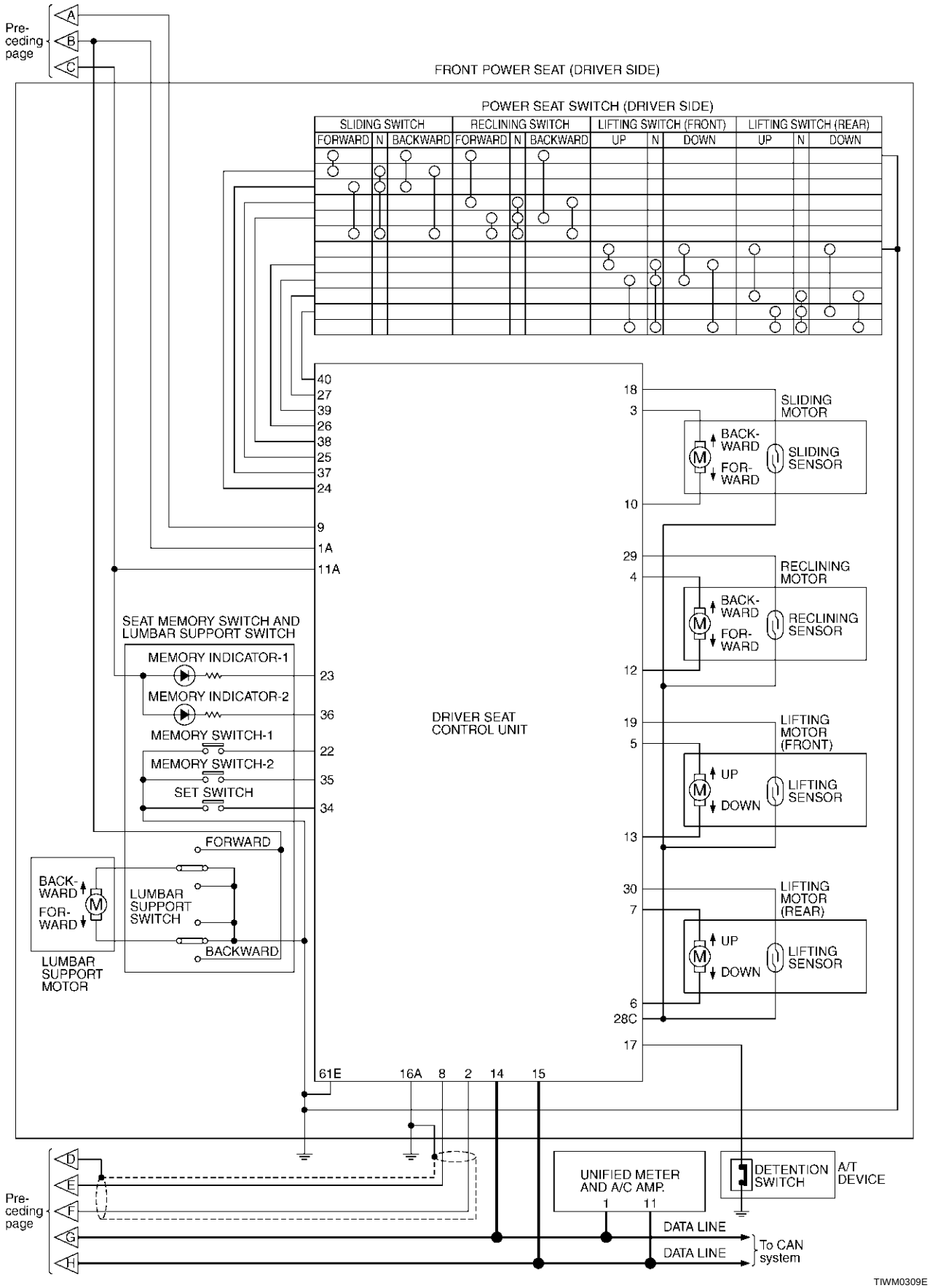
Signals	ECM	TCM	Display control unit	Low tire pressure warning control unit	AWD control unit	ICC unit	Intelligent Key unit	BCM	Steering angle sensor	Unified meter and A/C amp.	ICC sensor	ABS actuator and electric unit (control unit)	Driver seat control unit	IPDM E/R
Brake warning lamp signal										R		T		
System setting signal			T				R						R	
AWD warning lamp signal					T					R				
AWD lock indicator lamp signal					T					R				
Distance to empty signal			R							T				
Hand brake switch signal					R			R		T				
Door lock/unlock request signal							T	R						
Door lock/unlock status signal							R	T						
Starter permission signal							T	R						
Back door open request signal							T	R						
Power window open request signal							T	R						
Alarm request signal							T	R						
Key warning signal							T			R				
ICC sensor signal						R					T			
ICC warning lamp signal						T				R				
ICC system display signal						T				R				
Current gear position signal		T				R						R		
Steering switch signal	T					R								
ASCD operation signal	T	R												
ASCD OD cancel request	T	R												
ICC OD cancel request	R	R				T								
A/T CHECK indicator lamp signal		T								R				
A/T position indicator lamp signal		T								R				
A/T shift schedule change demand signal		R										T		
Manual mode signal		R								T				
Not manual mode signal		R								T				
Manual mode shift up signal		R								T				
Manual mode shift down signal		R								T				
Manual mode indicator signal		T								R				
Ignition knob switch signal							T	R						

Schematic

AIS002XE

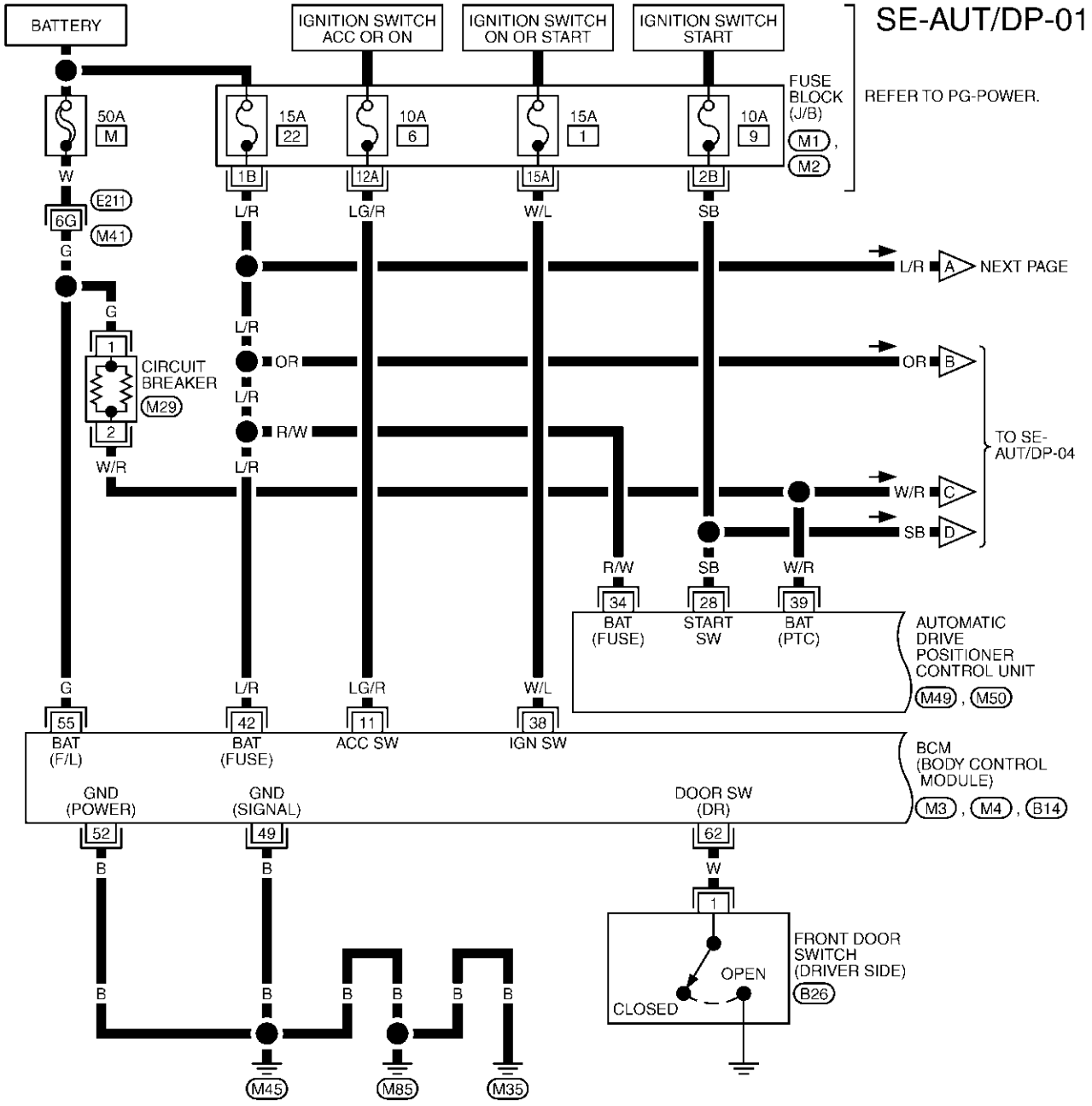


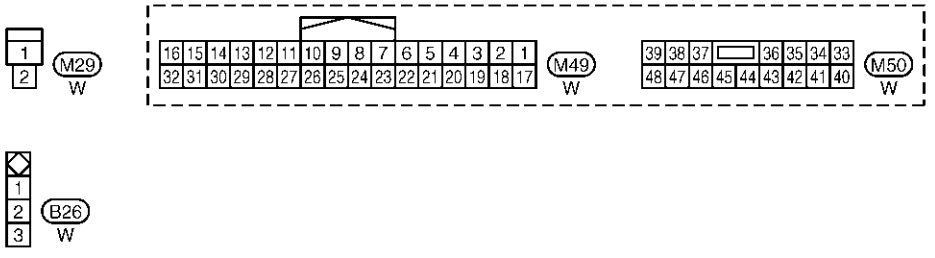
TIWM0435E


Pre-ceding page
A
B
C
FRONT POWER SEAT (DRIVER SIDE)
POWER SEAT SWITCH (DRIVER SIDE)
SLIDING SWITCH
RECLINING SWITCH
LIFTING SWITCH (FRONT)
LIFTING SWITCH (REAR)
FORWARD
N
BACKWARD
UP
DOWN
40
27
39
26
38
25
37
24
9
1A
11A
18
3
SLIDING MOTOR
BACK-WARD
FOR-WARD
SLIDING SENSOR
10
29
4
RECLINING MOTOR
RECLINING SENSOR
12
SEAT MEMORY SWITCH AND LUMBAR SUPPORT SWITCH
MEMORY INDICATOR-1
MEMORY INDICATOR-2
MEMORY SWITCH-1
MEMORY SWITCH-2
SET SWITCH
23
36
22
35
34
DRIVER SEAT CONTROL UNIT
19
5
LIFTING MOTOR (FRONT)
UP
DOWN
LIFTING SENSOR
13
30
7
LIFTING MOTOR (REAR)
6
28C
17
LUMBAR SUPPORT SWITCH
LUMBAR SUPPORT MOTOR
61E
16A
8
2
14
15
D
E
F
G
H
UNIFIED METER AND A/C AMP.
1
11
DETENTION SWITCH
A/T DEVICE
DATA LINE
DATA LINE
To CAN system
TIWM0309E

Wiring Diagram–AUT/DP–

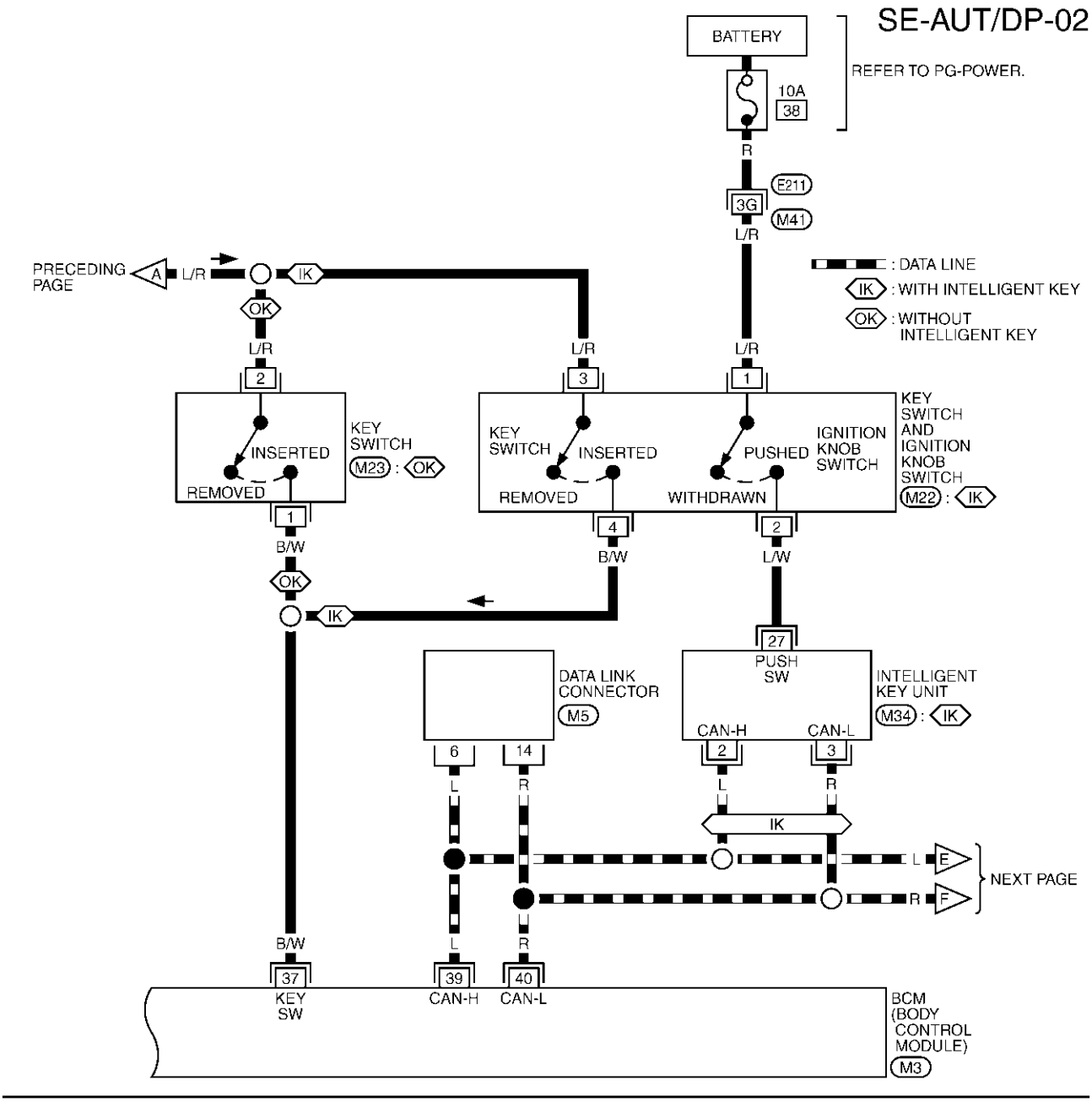
AIS002XF

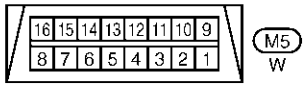


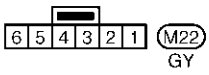


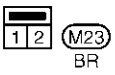
REFER TO THE FOLLOWING.
E211 -SUPER MULTIPLE JUNCTION (SMJ)
M1, M2 -FUSE BLOCK-JUNCTION BOX (J/B)
M3, M4, B14 -ELECTRICAL UNITS

TIWM0436E





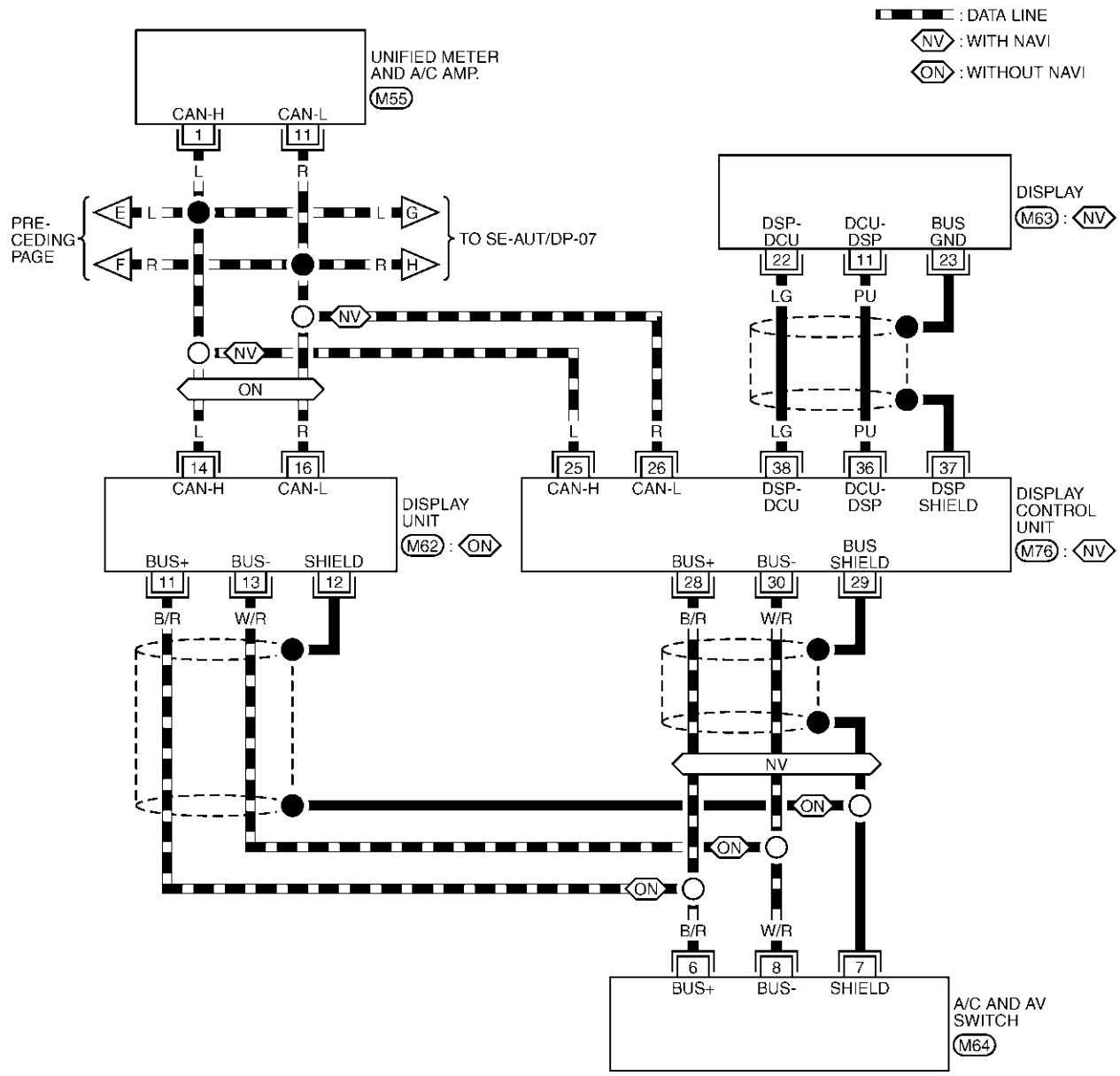


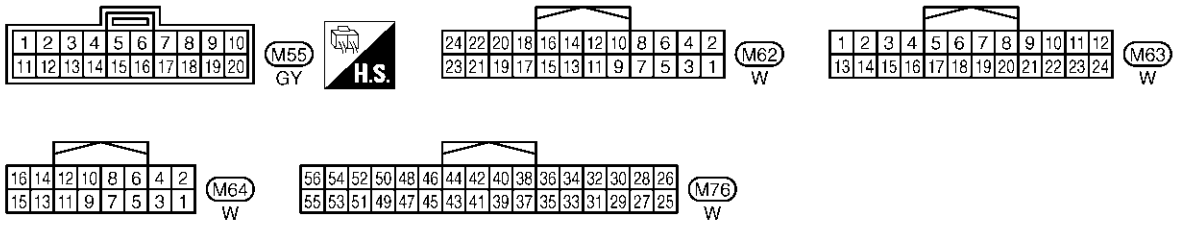


REFER TO THE FOLLOWING.
E211 -SUPER MULTIPLE JUNCTION (SMJ)
M3, M34 -ELECTRICAL UNITS

TIWM0437E

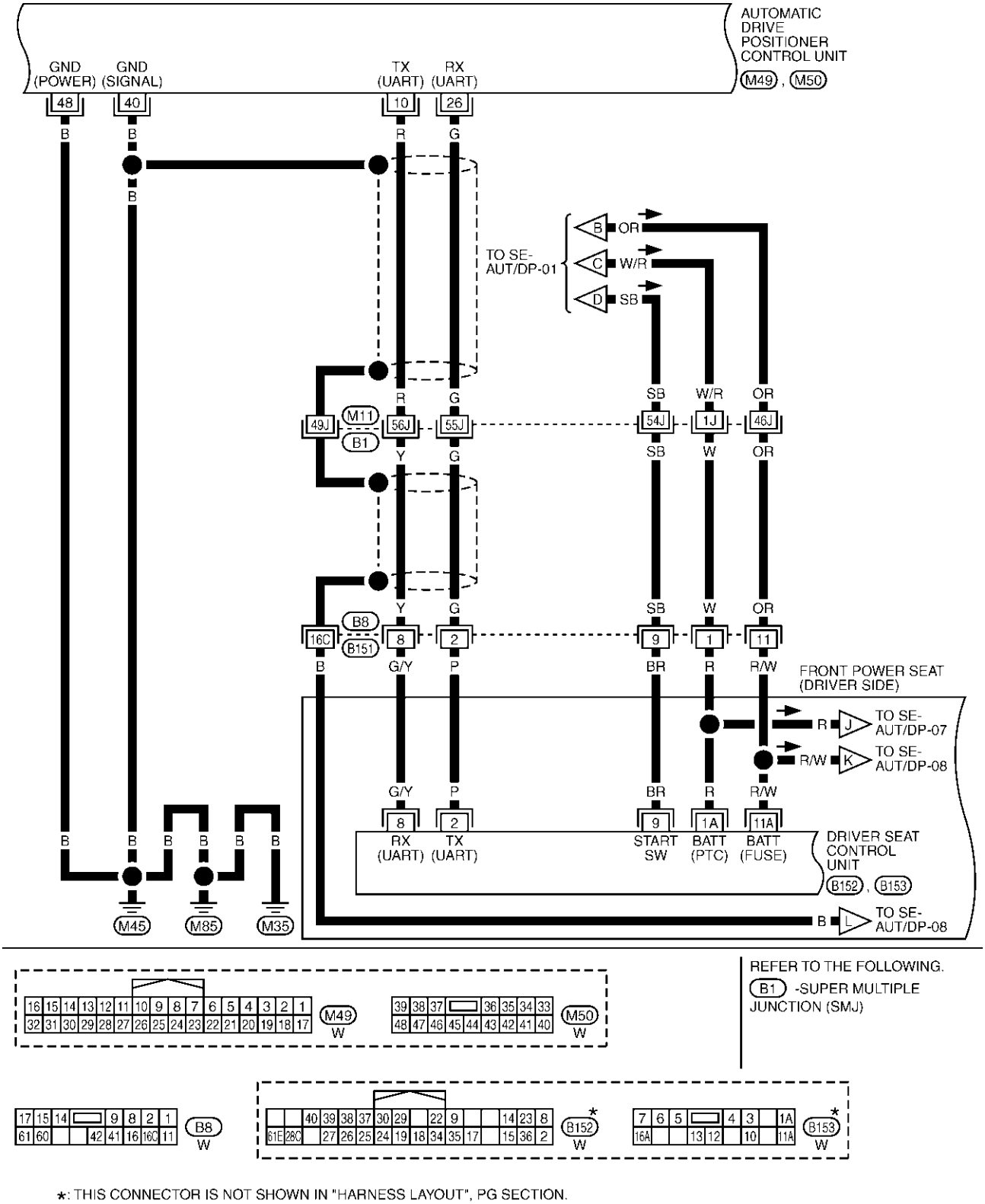
SE-AUT/DP-03





TIWM0312E

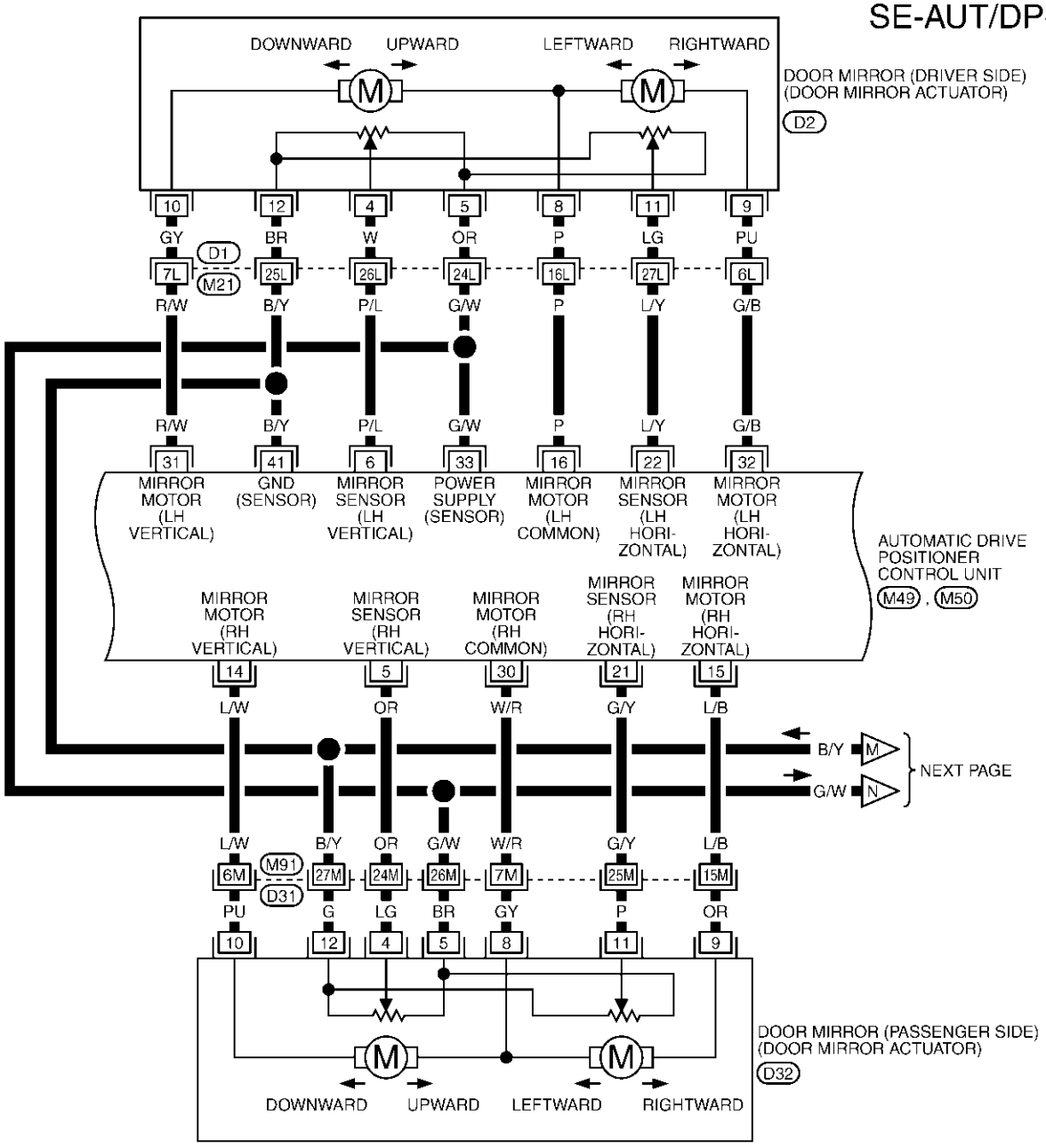
SE-AUT/DP-04

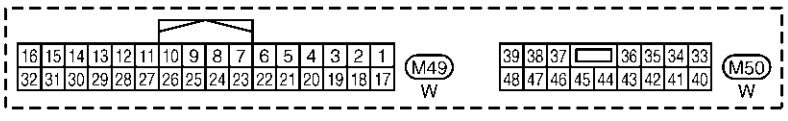


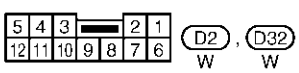
★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM0313E

SE-AUT/DP-05



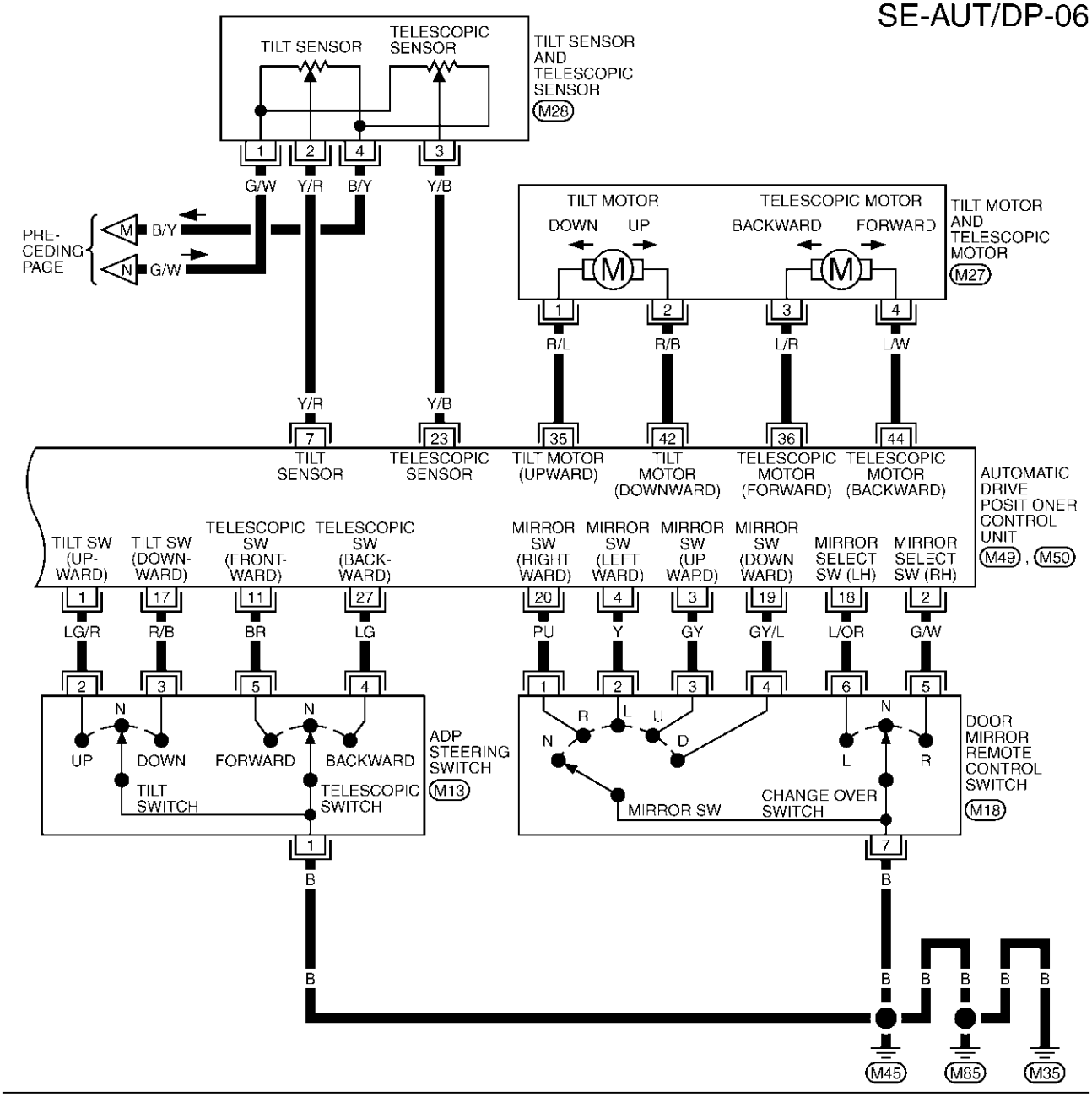


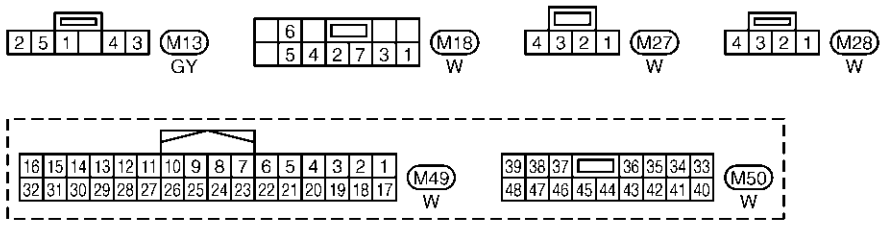


REFER TO THE FOLLOWING.
D1 , D31 -SUPER MULTIPLE JUNCTION (SMJ)

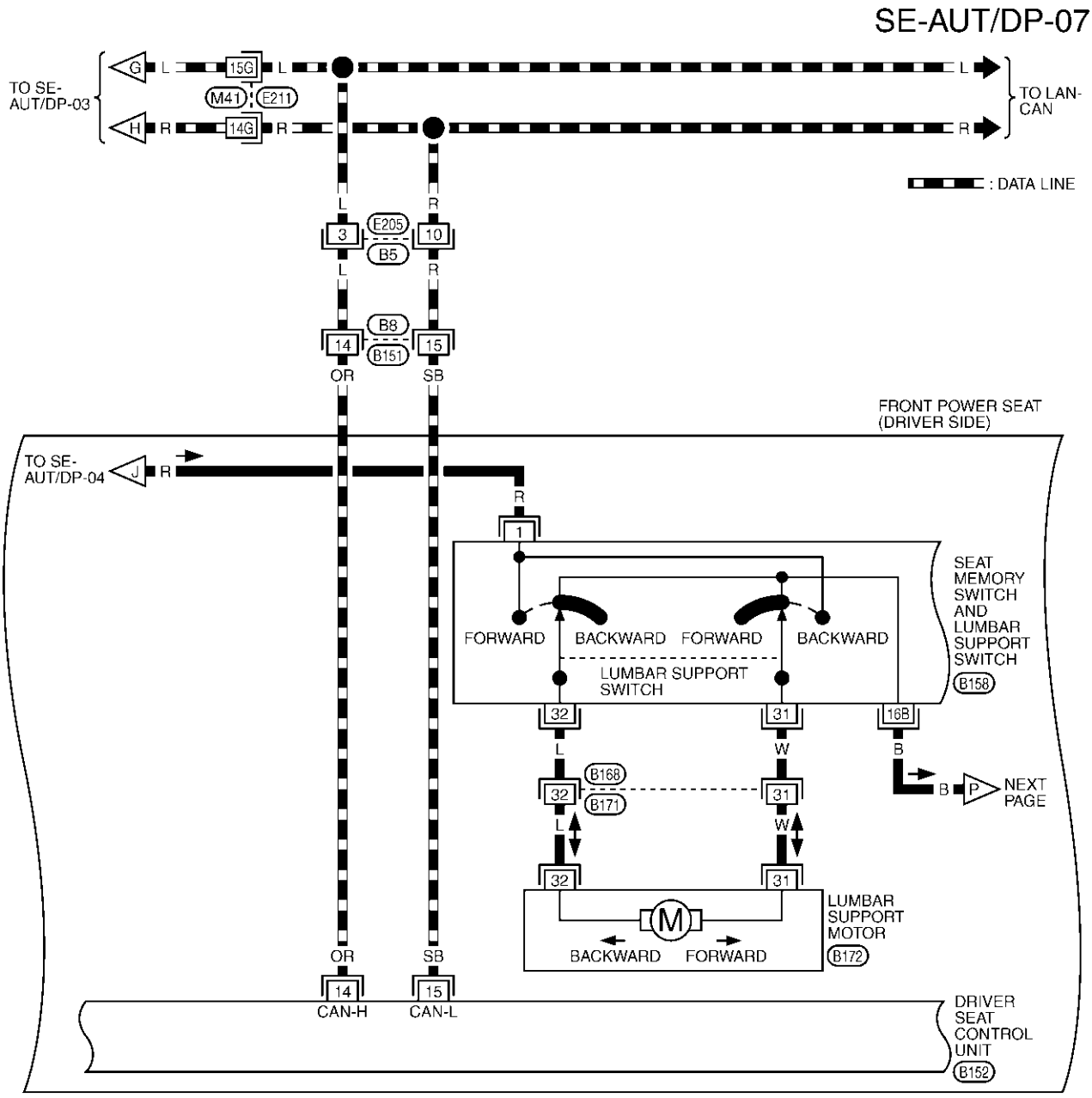
TIWM0314E

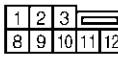
SE-AUT/DP-06

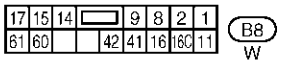


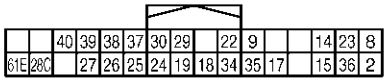


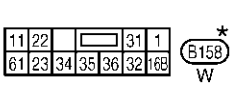
TIWM0315E

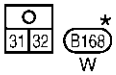


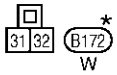












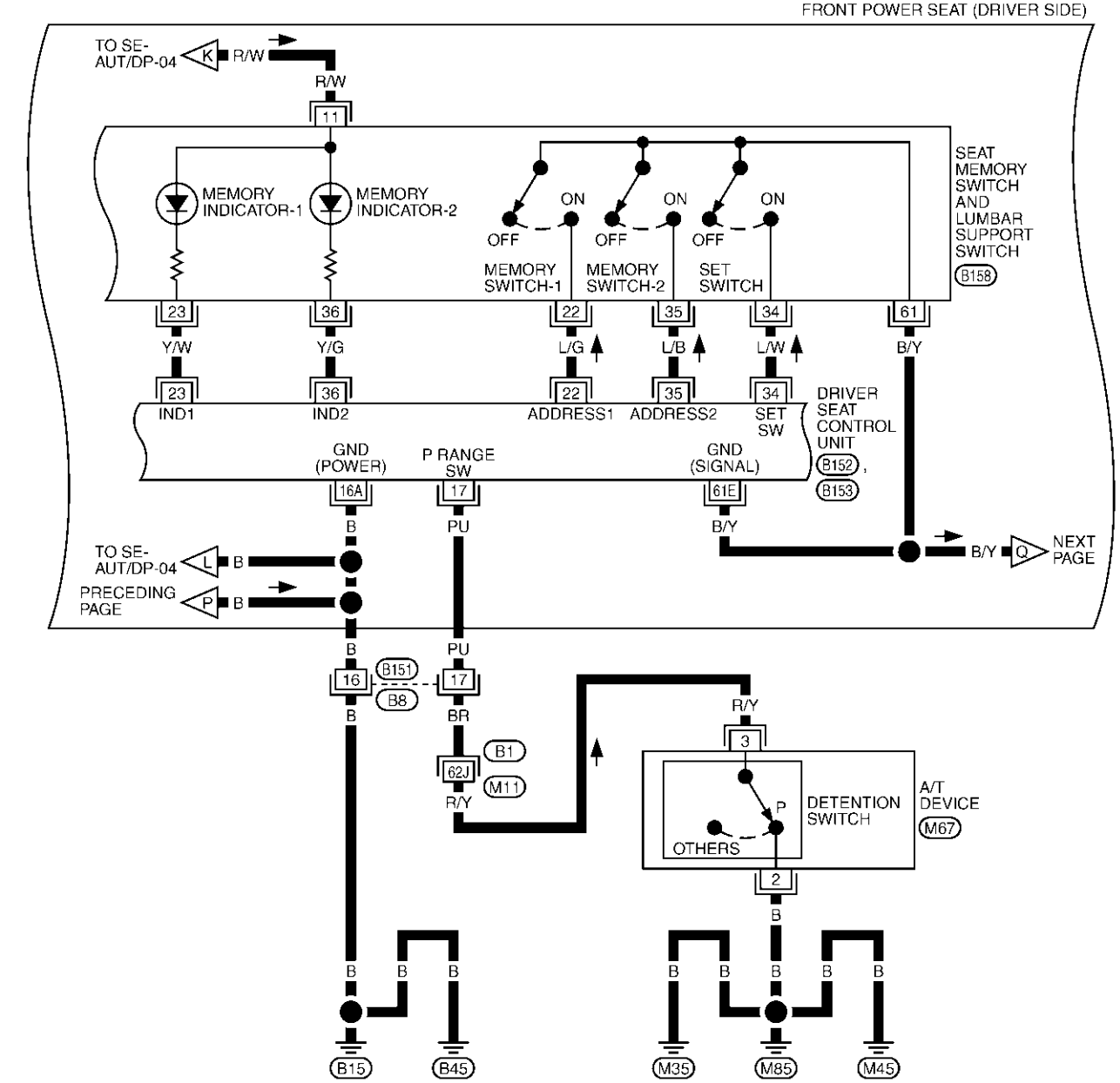
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

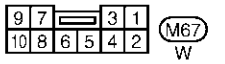
REFER TO THE FOLLOWING.
E211 -SUPER MULTIPLE JUNCTION (SMJ)

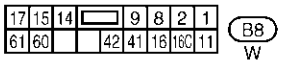
TIWM0316E

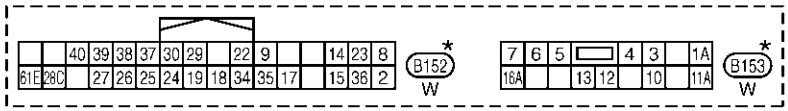
SE-AUT/DP-08

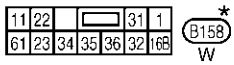
FRONT POWER SEAT (DRIVER SIDE)









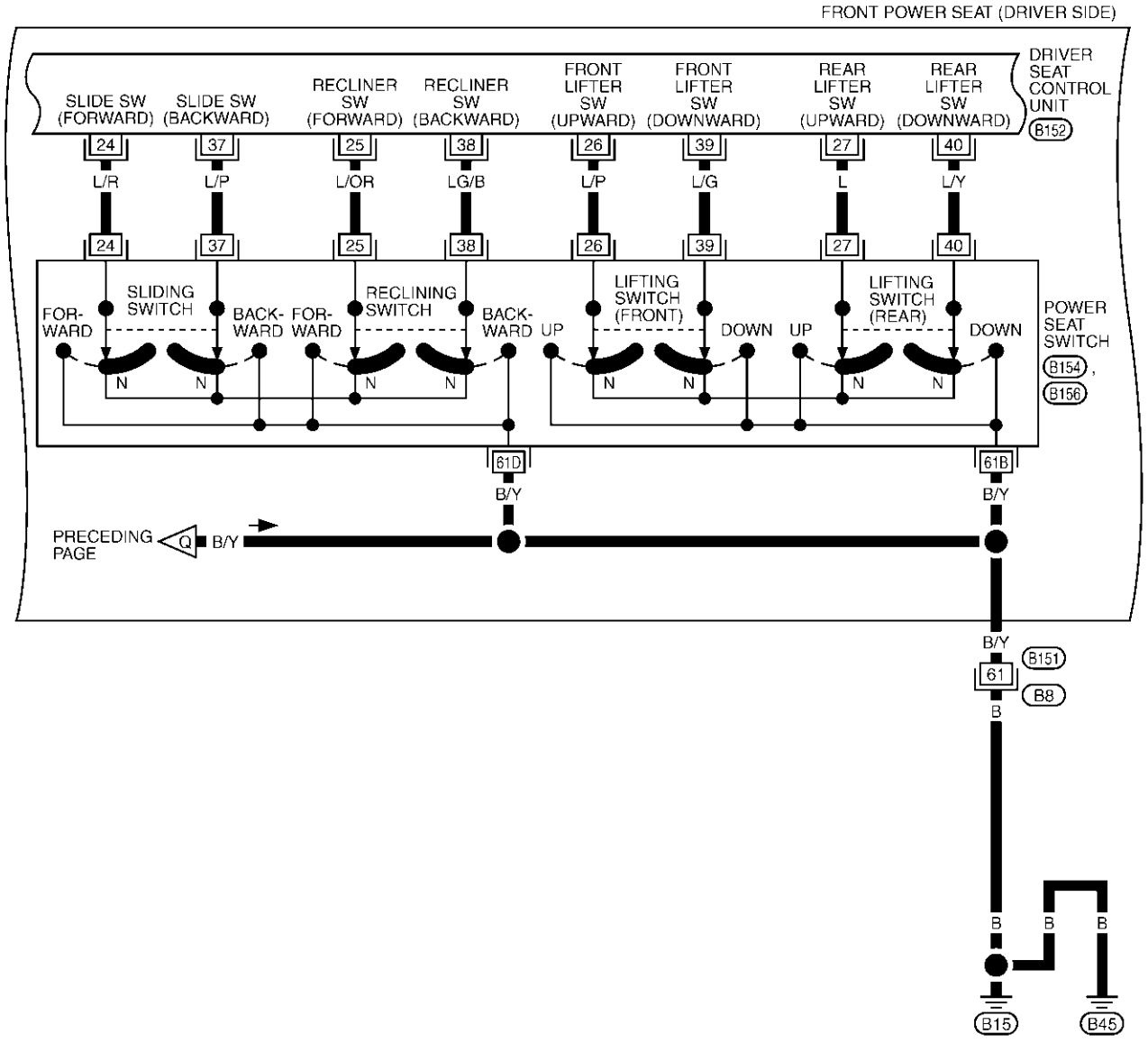


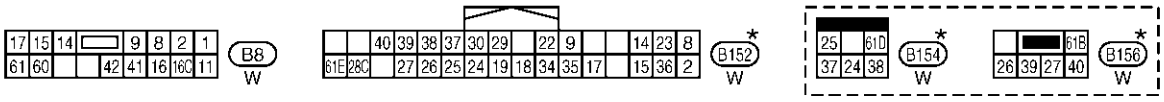
★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

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

TIWM0317E

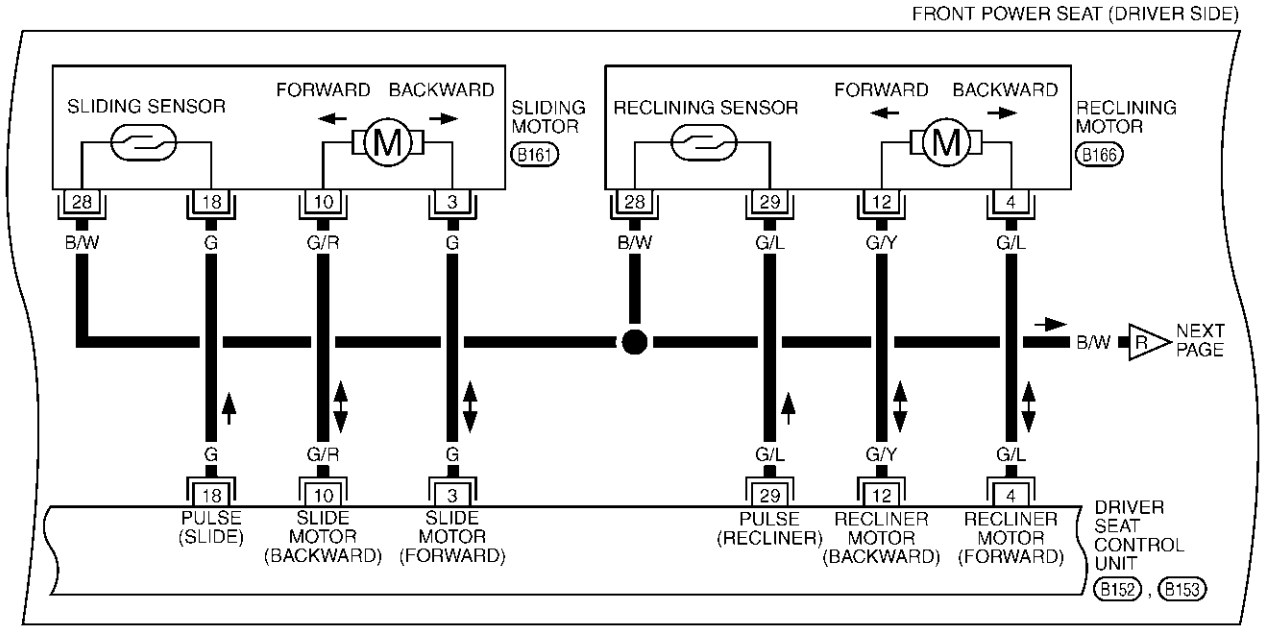
SE-AUT/DP-09

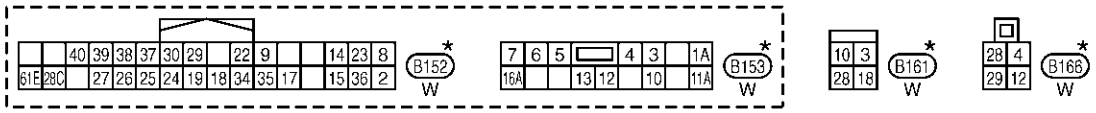




★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

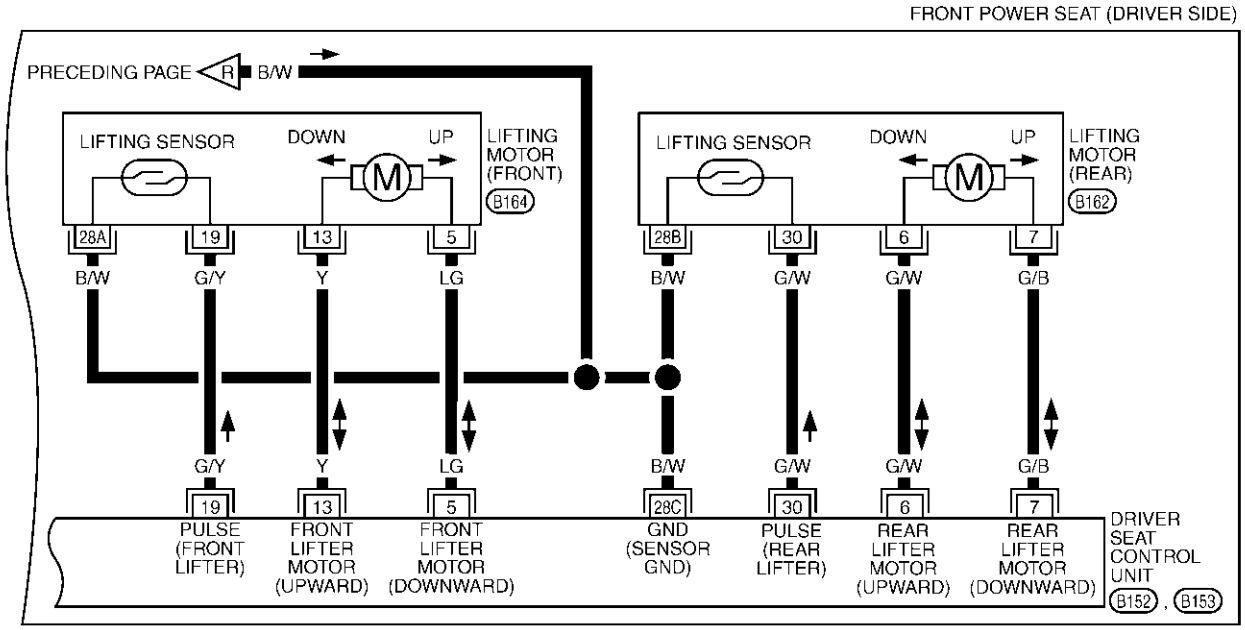
TIWM0318E

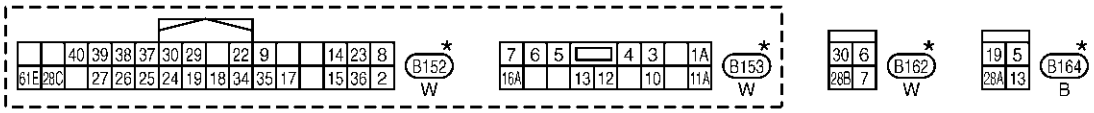




∗: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM0319E





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

TIWM0320E

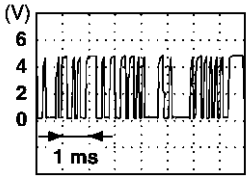
Terminals and Reference Values for BCM

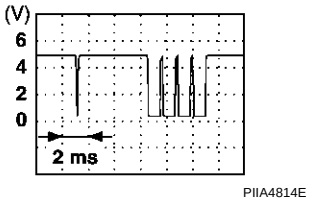
AIS002XG

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
11	LG/R	ACC power supply	Ignition switch ACC	Battery voltage
37	B/W	Key switch signal	Key switch ON (key is inserted in ignition key cylinder)	Battery voltage
			Key switch OFF (key is removed from ignition key cylinder)	0
38	W/L	Ignition power supply	Ignition switch ON	Battery voltage
39	L	CAN-H	—	—
40	R	CAN-L	—	—
42	L/R	Battery power supply (fuse)	Ignition switch OFF	Battery voltage
49	B	Ground (signal)	Ignition switch ON	0
52	B	Ground (power)	Ignition switch ON	0
55	G	Battery power supply (Fusible link)	Ignition switch OFF	Battery voltage
62	W	Front drive side door switch	ON (Open) → OFF (Closed)	0 → Battery voltage

Terminals and Reference Values for Automatic Drive Positioner Control Unit

AIS002XH

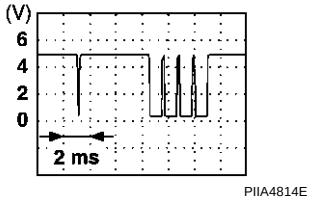
TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
1	LG/R	Tilt switch UP signal	Tilt switch UP operation	0
			Tilt switch neutral position	5
2	G/W	Changeover switch passenger side signal	When changeover switch in passenger side position	0
			When changeover switch in neutral position	5
3	GY	Mirror switch UP signal	When mirror switch in UP position	0
			When mirror switch in neutral position	5
4	Y	Mirror switch LEFT signal	When mirror switch in LEFT position	0
			When mirror switch in neutral position	5
5	OR	Mirror sensor (passenger side vertical) signal	When mirror motor passenger side is UP or DOWN operation	Changes between 3 (close to peak) 1 (close to valley)
6	P/L	Mirror sensor (driver side vertical) signal	When mirror motor driver side is UP or DOWN operation	Changes between 3 (close to peak) 1 (close to valley)
7	Y/R	Tilt sensor input	Tilt position, top	1.82
			Tilt position, bottom	4.44
10	R	UART LINE (TX)	Memory switch 1 or 2 operated	 PIIA4813E

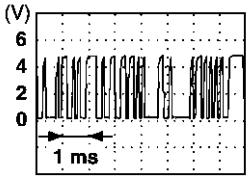
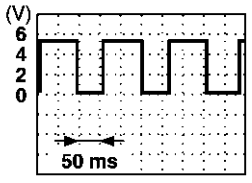
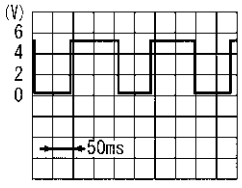
TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
11	BR	Telescopic switch FR signal	Telescoping switch Forward operation signal	0
			Telescoping switch neutral position	5
14	L/W	Mirror motor passenger side UP signal	When mirror motor passenger side UP operation	1.5 - Battery voltage
			Mirror motor passenger side OFF	0
15	L/B	Mirror motor passenger side LEFT signal	When mirror motor passenger side LEFT operation	1.5 - Battery voltage
			Mirror motor passenger side OFF	0
16	P	Mirror motor driver side DOWN signal	When mirror motor driver side DOWN operation	1.5 - Battery voltage
			Mirror motor driver side OFF	0
		Mirror motor driver side RIGTH signal	When mirror motor driver side RIGHT operation	1.5 - Battery voltage
			Mirror motor driver side OFF	0
17	R/B	Tilt switch DOWN signal	Tilt switch DOWN operation	0
			Tilt switch neutral position	5
18	L/OR	Changeover switch driver side signal	When changeover switch in driver side position	0
			When changeover switch in neutral position	5
19	GY/L	Mirror switch DOWN signal	When mirror switch in DOWN position	0
			When mirror switch in neutral position	5
20	PU	Mirror switch RIGHT signal	When mirror switch in RIGHT position	0
			When mirror switch in neutral position	5
21	G/Y	Mirror sensor (passenger side horizontal) signal	When mirror motor passenger side is LEFT or RIGHT operation	Changes between 1 (close to left edge) 3 (close to right edge)
22	L/Y	Mirror sensor (driver side horizontal) signal	When mirror motor driver side is LEFT or RIGHT operation	Changes between 1 (close to right edge) 3 (close to left edge)
23	Y/B	Telescopic sensor input	Telescoping position, top	0.56
			Telescoping position, bottom	4.44
26	G	UART LINE (RX)	Memory switch 1 or 2 operated	 PIIA4814E
27	LG	Telescopic switch backward signal	Telescoping switch Backward operation	0
			Telescoping switch neutral position	5
28	SB	IGN START power supply	Ignition switch START	Battery voltage

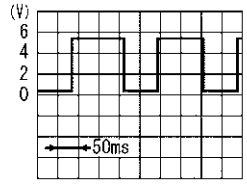
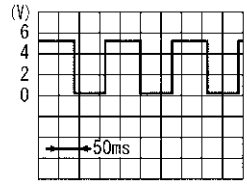
TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
30	W/R	Mirror motor passenger side DOWN signal	When mirror motor passenger side DOWN operation	1.5 - Battery voltage
			Mirror motor passenger side OFF	0
		Mirror motor passenger side RIGTH signal	When mirror motor passenger side RIGHT operation	1.5 - Battery voltage
			Mirror motor passenger side OFF	0
31	R/W	Mirror motor driver side UP signal	When mirror motor driver side UP operation	1.5 - Battery voltage
			Mirror motor driver side OFF	0
32	G/B	Mirror motor driver side LEFT signal	When mirror motor driver side LEFT operation	1.5 - Battery voltage
			Mirror motor driver side OFF	0
33	G/W	Sensor power supply	—	5
34	R/W	Battery power supply	Ignition switch OFF	Battery voltage
35	R/L	Tilt motor UP signal	Tilt switch ON (UP operation)	Battery voltage
			Tilt switch OFF	0
36	L/R	Telescopic motor forward signal	Telescoping switch ON (forward operation)	Battery voltage
			OFF	0
39	W/R	Battery power supply	Ignition switch OFF	Battery voltage
40	B	Ground (signal)	Ignition switch ON	0
41	B/Y	Sensor ground	—	0
42	R/B	Tilt motor DOWN signal	Tilt switch ON (DOWN operation)	Battery voltage
			Tilt switch OFF	0
44	L/W	Telescopic motor backward signal	Telescoping switch ON (backward operation)	Battery voltage
			Telescoping switch OFF	0
48	B	Ground (power)	Ignition switch ON	0

Terminals and Reference Values for Driver Seat Control Unit

AIS002XI

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
1A	R	Battery power supply	Ignition switch OFF	Battery voltage
2	P	UART LINE (TX)	—	 PIIA4814E
3	G	Sliding motor forward output signal	Sliding switch forward operation (Motor operated)	Battery voltage
			OFF	0
4	G/L	Reclining motor forward output signal	Reclining switch forward operation (Motor operated)	Battery voltage
			OFF	0

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
5	LG	Front lifting motor DOWN output signal	Front lifting switch downward operation (Motor operated)	Battery voltage
			OFF	0
6	G/W	Rear lifting motor UP output signal	Rear lifting switch upward operation (Motor operated)	Battery voltage
			OFF	0
7	G/B	Rear lifting motor DOWN output signal	Rear lifting switch downward operation (Motor operated)	Battery voltage
			OFF	0
8	G/Y	UART LINE (RX)	—	 PIIA4813E
9	BR	IGN START power supply	Ignition switch START	Battery voltage
10	G/R	Sliding motor backward output signal	Sliding switch backward operation (Motor operated)	Battery voltage
			OFF	0
11A	R/W	Battery power supply	Ignition switch OFF	Battery voltage
12	G/Y	Reclining motor backward output signal	Reclining switch backward operation (Motor operated)	Battery voltage
			OFF	0
13	Y	Front lifting motor UP output signal	Front lifting switch upward operation (Motor operated)	Battery voltage
			OFF	0
14	OR	CAN-H	—	—
15	SB	CAN-L	—	—
16A	B	Ground (power)	Ignition switch ON	0
17	PU	Detention switch signal	Selector lever other than P position	Battery voltage
			Selector lever is sifted to P position	0
18	G	Seat sliding sensor input	ON (sliding motor operation)	 PIIA3277E
			Other than above	0 or 5
19	G/Y	Front lifting sensor input	ON (front lifting motor operation)	 SIIA0691J
			Other than above	0 or 5

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
22	L/G	Power seat memory switch 1 signal	Memory switch 1 ON	0
			Memory switch 1 OFF	5
23	Y/W	Power seat memory switch indictor 1 signal	Memory switch 1 ON	1
			Memory switch 1 OFF	Battery voltage
24	L/R	Seat sliding switch forward signal	ON (seat sliding switch forward operation)	0
			OFF	Battery voltage
25	L/OR	Seat reclining switch forward signal	ON (seat reclining switch forward operation)	0
			OFF	Battery voltage
26	L/P	Front lifting switch UP signal	ON (front lifting switch UP operation)	0
			OFF	Battery voltage
27	L	Rear lifting switch UP signal	ON (rear lifting switch UP operation)	0
			OFF	Battery voltage
28C	B/W	Sensor ground	Ignition switch ON	0
29	G/L	Reclining sensor input	ON (reclining motor operation)	 SIIA0692J
			Other than above	0 or 5
30	G/W	Rear lifting sensor input	ON (rear lifting motor operation)	 SIIA0693J
			Other than above	0 or 5
34	L/W	Power seat set switch signal	Set witch ON	0
			Set witch OFF	5
35	L/B	Power seat memory switch 2 signal	Memory switch 2 ON	0
			Memory switch 2 OFF	5
36	Y/G	Power seat memory switch indictor 2 signal	Memory switch 2 ON	1
			Memory switch 2 OFF	Battery voltage
37	L/P	Seat sliding switch backward signal	ON (seat sliding switch backward operation)	0
			OFF	Battery voltage
38	LG/B	Seat reclining switch backward signal	ON (seat reclining switch backward operation)	0
			OFF	Battery voltage
39	L/G	Front lifting switch DOWN signal	ON (front lifting switch DOWN operation)	0
			OFF	Battery voltage

TERMINAL	WIRE COLOR	ITEM	CONDITION	VOLTAGE (V) (Approx.)
40	L/Y	Rear lifting switch DOWN signal	Rear lifting switch DOWN operation)	0
			OFF	Battery voltage
61E	B/Y	Ground (signal)	Ignition switch ON	0

Work Flow

AIS002XJ

1. Check the symptom and customer's requests.
2. Understand the system description. Refer to SE-11, "System Description" .
3. Perform the preliminary check, refer to SE-50, "Preliminary Check" .
4. Perform the CAN communication inspection using CONSULT-II, refer to SE-53, "CONSULT-II Function"
5. Perform the self-diagnosis. Refer to SE-57, "CAN Communication Inspection Using CONSULT-II (Self-diagnosis)" .
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-57, "Symptom Chart" .
8. Does the automatic drive positioner system operate normally?
   If it is normal, GO TO 9.
   If it is not normal, GO TO 3.
9. INSPECTION END

Preliminary Check

AIS002XK

SETTING CHANGE FUNCTION

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

×: Applicable –: Not applicable

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

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

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

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

CHECK POWER SUPPLY AND GROUND

1. CHECK FUSE

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

Unit	Terminal No.	Power source	Fuse/fusible link No.
BCM	11	ACC or ON power supply	6 (10A)
	38	ON or STRAT power supply	1 (15A)
	42	Battery power supply	22 (15A)
	55	Battery power supply	M (50A)

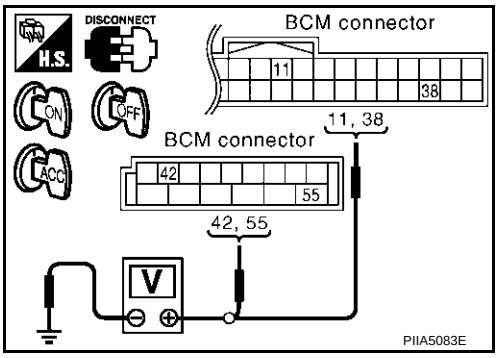
NOTE:
Refer to SE-16, "Component Parts and Harness Connector Location" .

OK or NG

OK >> GO TO 2.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to SE-16, "Component Parts and Harness Connector Location" .

2. CHECK POWER SUPPLY CIRCUIT (BCM)

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



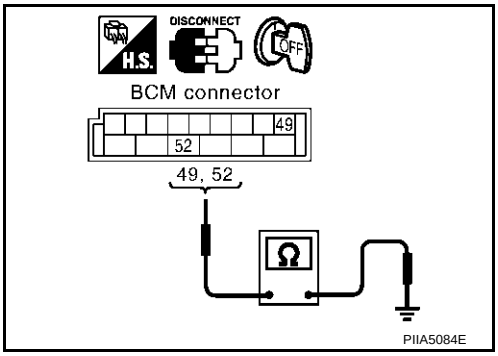
Connector	Terminals (Wire color)		Power source	Condition	Voltage (V) (Approx.)
	(+)	(–)			
M3	11 (LG/R)	Ground	ACC power supply	Ignition switch ACC	Battery voltage
	38 (W/L)	Ground	Ignition power supply	Ignition switch ON	Battery voltage
B14	42 (L/R) 55 (G)	Ground	Battery power supply	Ignition switch OFF	Battery voltage

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 and ground.



Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
B14	49 (B) 52 (B)	Ground	Ignition switch OFF	Continuity should exist.

OK or NG

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

4. CHECK FUSE

Make sure any of the following fuse in the driver seat control unit and automatic drive positioner control unit are blown.

Unit	Power source	Fuse No.
Driver seat control unit	START power supply	9 (10A)

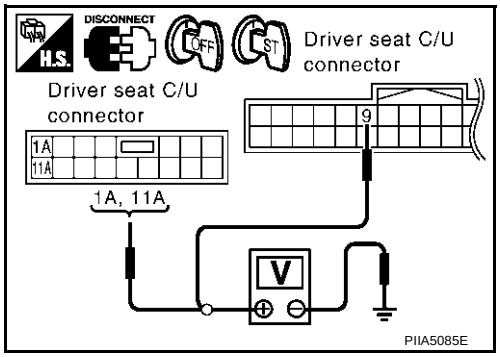
NOTE:
Refer to SE-16, "Component Parts and Harness Connector Location" .

OK or NG

OK >> GO TO 5.
NG >> If fuse is blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to SE-16, "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)		Power source	condition	Voltage (V) (Approx.)
	(+)	(–)			
B152	9 (BR)	Ground	START power supply	Ignition switch START	Battery voltage
B153	1A (R), 11A (R/W)	Ground	Battery power supply	Ignition switch OFF	Battery voltage

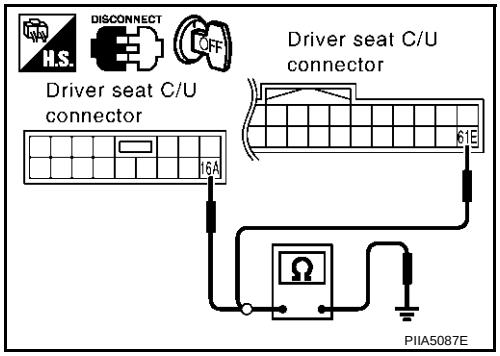
OK or NG

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

6. CHECK GROUND CIRCUIT (DRIVER SEAT CONTROL UNIT)

1. Turn ignition switch OFF.
2. Check continuity between the driver seat control unit connector B152, B153 terminal16A (B), 61E (B/Y) and ground.

16A (B) – Ground : Continuity should exist.
61E (B/Y) – Ground : Continuity should exist.

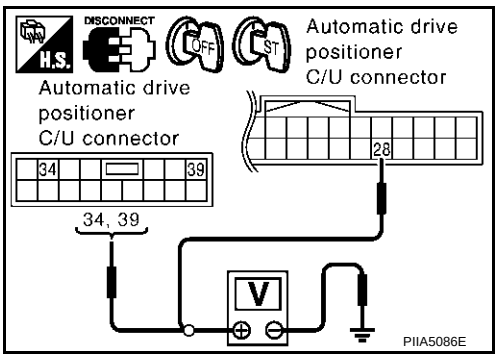


OK or NG

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

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

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



Connector	Terminals (Wire color)		Power source	condition	Voltage (V) (Approx.)
	(+)	(–)			
M49	28 (SB)	Ground	START power supply	Ignition switch START	Battery voltage
M50	39 (W/R)	Ground	Battery power supply	Ignition switch OFF	Battery voltage

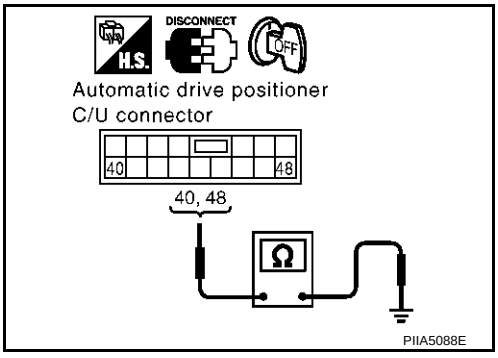
OK or NG

OK >> GO TO 8.
NG >> Repair or replace harness between driver seat 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 M50 terminal 40 (B), 48 (B) 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

AIS002YF

The following functions are performed by combining data received and command transmitted via the communication line from the driver seat control unit.

CONSULT-II diagnosis items	Inspection item, self-diagnosis mode		Content
AUTO DRIVE POSITIONER	WORK SUPPORT*1		Changes the setting for each function.
	SELF–DIG RESULTS		Check the self-diagnosis results.
	DATE MONITOR	Selection from menu	Displays the input data to driver seat control unit and automatic driving positioned control unit on real-time basis.
	ACTIVE TEST*3		Gives a drive signal to a load to check the operation.
	CAN DIAGNOSTIC SUPPORT MONITOR		The results of transmit / receive diagnosis of CAN communication can be read.
	DRIVER SEAT CONTROL UNIT PART NUMBER		Displays driver seat control unit part No.
BCM*2	DATA MONITOR	Selection from menu	Displays the input data to BCM on real-time basis

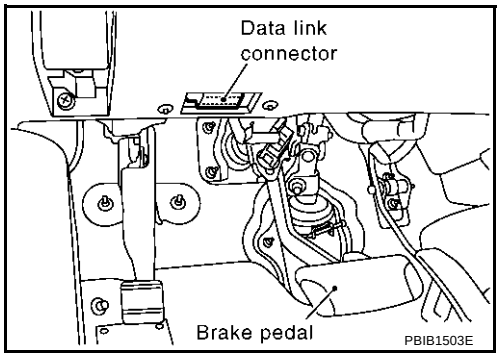
*1: For setting seat functions only.
*2: Refer to BL-93 .
*3: During vehicle driving, do not perform active test.

CONSULT-II INSPECTION PROCEDURE

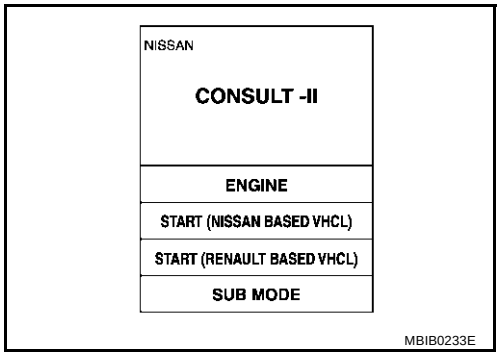
CAUTION:

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

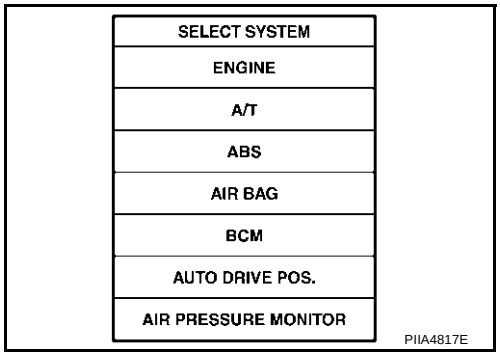
1. Turn ignition switch “OFF”.
2. Connect “CONSULT-II” and “CONSULT-II CONVERTER” to the data link connector.



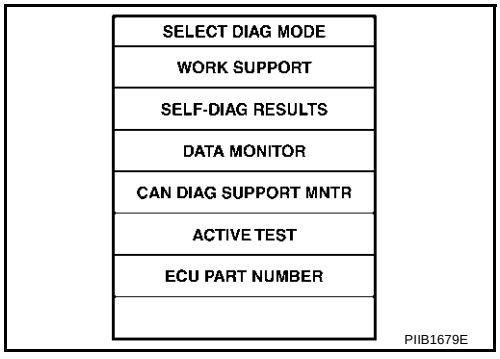
3. Turn ignition switch “ON”.
4. Touch “START (NISSAN BASED VHCL)”.



5. Touch “AUTO DRIVE POS” and "BCM".
   If “AUTO DRIVE POS.” is not indicated, refer toGI-40, "CONSULT-II Data Link Connector (DLC) Circuit" .



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



SELF-DIAGNOSIS RESULTS

Display Item List

CONSULT-II display	Item	Malfunction is detected when...	Reference page
CAN COMM CIRC [U1000]	CAN communication	Malfunction is detected in CAN communication.	SE-57
SEAT SLIDE [B2112]	Seat slide motor	When any manual and automatic operations are not performed, if any motor operations of seat slide is detected for 0.1 second or more, status is judged “Output error”.	SE-59 SE-71
SEAT RECLINING [B2113]	Seat reclining motor	When any manual and automatic operations are not performed, if any motor operations of seat reclining is detected for 0.1 second or more, status is judged “Output error”.	SE-60 SE-72
SEAT LIFTER FR [B2114]	Seat lifting FR motor	When any manual and automatic operations are not performed, if any motor operations of seat lifting FR is detected for 0.1 second or more, status is judged “Output error”.	SE-61 SE-73
SEAT LIFTER RR [B2115]	Seat lifting RR motor	When any manual and automatic operations are not performed, if any motor operations of seat lifting RR is detected for 0.1 second or more, status is judged “Output error”.	SE-63 SE-74
TILT OUTPUT [B2116]	Tilt motor	When any manual and automatic operations are not performed, if any motor operations of seat tilt is detected for 0.1 second or more, status is judged “Output error”.	SE-66 SE-76
TILT SENSOR [B2118]	Tilt sensor	When tilt sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-76
TELESCO SENSOR [B2119]	Telescopic sensor	When telescopic sensor detects 0.1V or lower, or 4.9V or higher, for 0.5 seconds or more.	SE-75
P RANGE SW [B2125]	P RANGE SW	With the A/T selector lever in P position (P range switch ON), if the vehicle speed of 7 km/h (4 MPH) or higher was input the detente switch input system is judged malfunctioning.	SE-98
UART COMM [B2128]	UART communication	Malfunction is detected in UART communication.	SE-105

NOTE:

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

DATA MONITOR

Selection from Menu

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

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.
LIFT RR SW–DN	“ON/OFF”	ON/OFF status judged from the RR lifter switch (DOWN) signal is displayed.
MIR CON SW–UP	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (UP) signal is displayed.
MIR CON SW–DN	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (DOWN) signal is displayed.
MIR CON SW–RH	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (RIGHT) signal is displayed.
MIR CON SW–LH	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (LEFT) signal s displayed.
MIR CHNG SW–R	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (switching to RIGHT) signal is displayed.
MIR CHNG SW–L	“ON/OFF”	ON/OFF status judged from the door mirror remote control switch (switching to LEFT) signal is displayed.
TELESCO SW-FR	“ON/OFF”	ON/OFF status judged from the telescoping switch (FR) signal is displayed.
TELESCO SW-RR	“ON/OFF”	ON/OFF status judged from the telescoping switch (RR) signal is displayed.
TILT SW-UP	“ON/OFF”	ON/OFF status judged from the tilt switch (UP) signal is displayed.
TILT SW-DOWN	“ON/OFF”	ON/OFF status judged from the tilt switch (DOWN) signal is displayed.
SET SW	“ON/OFF”	ON/OFF status judged from the setting switch signal is displayed.
MEMORY SW1	“ON/OFF”	ON/OFF status judged from the seat memory switch 1 signal is displayed.
MEMORY SW2	“ON/OFF”	ON/OFF status judged from the seat memory switch 2 signal is displayed.
P POSI SW	“ON/OFF”	The selector lever position “OFF (P position) / ON (other than P position)” judged from the P range switch signal is displayed.
STARTER SW	“ON/OFF”	Ignition key switch ON (START, ON) /OFF (ignition switch IGN, ACC, or OFF) status judged from the ignition switch signal is displayed.
SLIDE PULSE	—	Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN RULSE	—	Value (32768) when battery connects is as standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	—	Value (32768) when battery connects is as standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TILT SEN	“V”	The tilt position (voltage) judged from the tilt sensor signal is displayed.
TELESCO SEN	“V”	The telescoping position (voltage) judged from the telescoping sensor signal is displayed.
MIR/SE RH R–L	“V”	Voltage output from RH door mirror sensor (LH/RH) is displayed.
MIR/SE RH U–D	“V”	Voltage output from RH door mirror sensor (UP/DOWN) is displayed.
MIR/SE LH R–L	“V”	Voltage output from LH door mirror sensor (LH/RH) is displayed.
MIR/SE LH U–D	“V”	Voltage output from LH door mirror sensor (UP/DOWN) is displayed.

ACTIVE TEST

CAUTION:

During vehicle driving, do not perform active test.

NOTE:

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

Display Item List

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

CAN Communication Inspection Using CONSULT-II (Self-diagnosis)

AIS002XL

1. SELF-DIAGNOSTIC RESULT CHECK

CAUTION:

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

1. Connect to CONSULT-II, and select “AUTO DRIVE POS.” on the “SELECT DAIAG SYSTEM” screen.
2. Select “SELF-DIAG RESULTS” on “SELECT DISG MODE” screen.
3. Check display content in self-diagnostic results.

Displayed U1000?

Yes >> INSPECTION END

No >> Refer to LAN-4, "Precautions When Using CONSULT-II" .

Symptom Chart

AIS002XM

Symptom	Diagnoses / service procedure	Reference page
Only setting change function cannot be set with display.	Interacted display system (with out NAVI)	AV-53
	Navigation system (with NAVI)	AV-100
A part of seat system does not operate (both automatically and manually).	1. Sliding motor circuit inspection	SE-59
	2. Reclining motor circuit inspection	SE-60
	3. Front lifter motor circuit inspection	SE-61
	4. Rear lifter motor circuit inspection	SE-63
	5. If the above systems are normal, replace the driver seat control unit.	SE-16
A part of steering tilt, telescopic and door mirror does not operate (both automatically and manually).	1.Tilt motor circuit inspection	SE-66
	2. Telescopic motor circuit inspection	SE-64
	3. Mirror motor driver side circuit check	SE-67
	4. Mirror motor passenger side circuit check	SE-69
	5. If the above systems are normal, replace the automatic drive positioner control unit.	SE-16
A part of seat system does not operate (only automatic operation).	1. Sliding sensor circuit inspection	SE-71
	2. Reclining sensor circuit inspection	SE-72
	3. Front lifting sensor circuit inspection	SE-73
	4. Rear lifting sensor circuit inspection	SE-74
	5. If the above systems are normal, replace the driver seat control unit.	SE-16

Symptom	Diagnoses / service procedure	Reference page
A part of door mirror system dose not operate (only automatic operation).	1. Mirror sensor driver side circuit check	SE-77
	2. Mirror sensor passenger side circuit check	SE-78
	3. If all the above systems are normal, replace the automatic drive positioner control unit.	SE-16
All the automatic operations do not operate.	1. Detention switch (P range switch) circuit inspection	SE-98
	2. Key switch and ignition knob switch circuit inspection (with intelligent key)	SE-99
	3. Key switch circuit inspection (without intelligent key)	SE-101
	4. UART communication line circuit inspection	SE-105
	5. Tilt sensor circuit check	SE-76
	6. Telescopic sensor circuit check	SE-90
	7. If all the above systems are normal, replace the automatic drive positioner control unit.	SE-16
A part of seat system does not operate (only manual operation).	1. Sliding switch circuit inspection	SE-82
	2. Reclining switch circuit inspection	SE-84
	3. Front lifting switch circuit inspection	SE-85
	4. Rear lifting switch circuit inspection	SE-87
	5. If the above systems are normal, replace the driver seat control unit.	SE-16
A part of steering tilt, telescopic and door mirror does not operate (only manual operation).	1. Door mirror remote control (change over switch) circuit inspection	SE-94
	2. Door mirror remote control (mirror switch) switching circuit inspection	SE-96
	3. Tilt switch inspection	SE-92
	4. Telescopic switch inspection	SE-90
	5. If the above systems are normal, replace the automatic drive positioner control unit.	SE-16
Only memory switch operation dose not operate.	1. Seat memory switch circuit inspection	SE-102
	2. If the above systems are normal, replace the driver seat control unit.	SE-16
Seat memory indicator lamps 1 and 2 do not illuminate.	1. Seat memory indicator lamp circuit inspection	SE-104
	2. If all the above systems are normal, replace the driver seat control unit.	SE-16
The Entry/Exiting does not operated when door is opened and closed. (The Entry/Exiting operates with key switch)	1. Front door switch (driver side) circuit inspection	SE-80
	2. If all the above systems are normal, replace the BCM	BCS-28
Only door mirror system dose not operated (only automatic operation).	1. Steering and door mirror sensor power supply and ground circuit inspection	SE-79
Only seat sliding and seat reclining operation does not operation	1. Sliding switch and reclining switch ground circuit inspection	SE-88
Only sear lifting (front and rear) operation does not operation	1. Front lifting switch and rear lifting switch ground circuit inspection	SE-89
Only lumber support does not operate	1. Lumber support motor circuit inspection	SE-107

Sliding Motor Circuit Inspection

AIS002XN

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

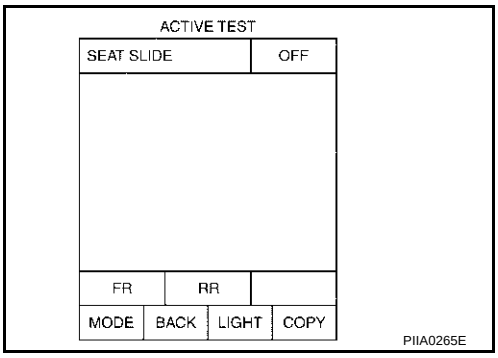
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

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.

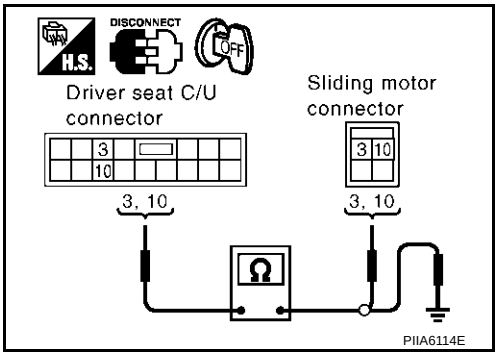
3. CHECK SLIDING MOTOR HARNESS CONTINUITY

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 B153 terminals 3 (G), 10 (G/R) and sliding motor connector B161 terminals 3 (G), 10 (G/R).

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

4. Check continuity between driver seat control unit connector B153 terminals 3 (G), 10 (G/R) and ground.

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

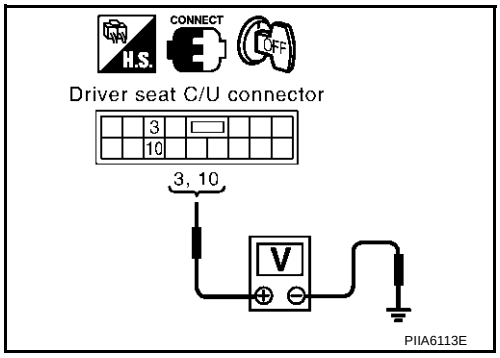


OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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



Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B153	3 (G)	Ground	Sliding switch (Forward operation)	Battery voltage
			Sliding switch OFF	0
	10 (G/R)		Sliding switch (Backward operation)	Battery voltage
			Sliding switch OFF	0

OK or NG

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

Reclining Motor Circuit Inspection

AIS002XO

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

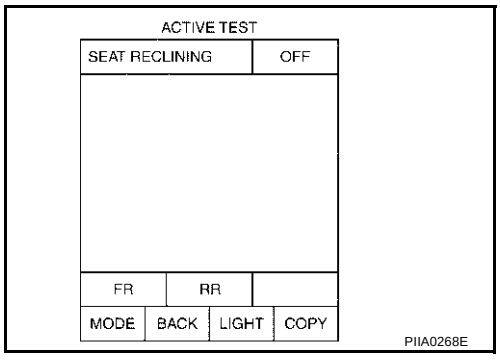
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

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.

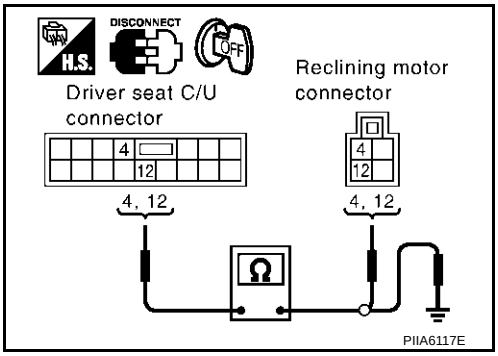
3. CHECK RECLINING MOTOR HARNESS CONTINUITY

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 B153 terminals 4 (G/L), 12 (G/Y) and reclining motor connector B166 terminals 4 (G/L), 12 (G/Y).

4 (G/L) – 4 (G/L) : Continuity should exist.
12 (G/Y) – 12 (G/Y) : Continuity should exist.

4. Check continuity between driver seat control unit connector B153 terminals 4 (G/L), 12 (G/Y) and ground.

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

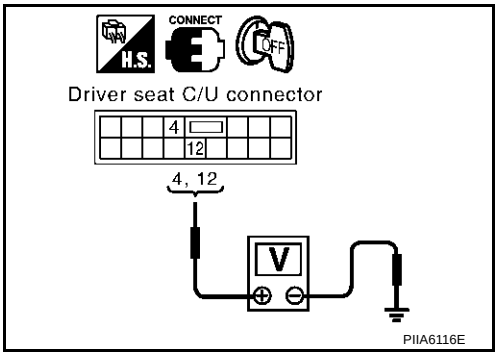


OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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



Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B153	4 (G/L)	Ground	Reclining switch ON (Forward operation)	Battery voltage
			Reclining switch OFF	0
	12 (G/Y)		Reclining switch ON (Backward operation)	Battery voltage
			Reclining switch OFF	0

OK or NG

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

Front Lifting Motor Circuit Inspection

AIS002XP

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

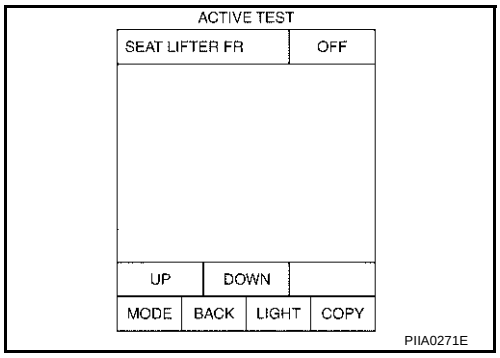
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

2. CHECK FUNCTION

With CONSULT-II

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

Test item	Description
SEAT LIFTER FR	The front lifting 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.

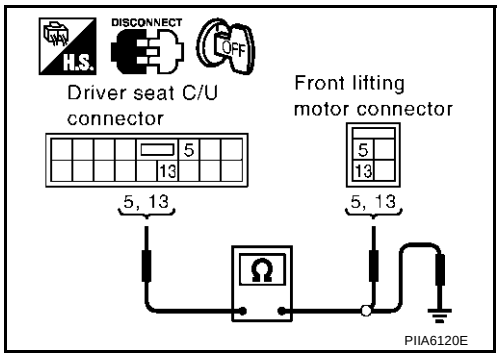
3. CHECK FRONT LIFTING MOTOR HARNESS CONTINUITY

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 B153 and terminals 5 (LG), 13 (Y) and front lifting motor connector B164 terminals 5 (LG), 13 (Y).

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

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

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

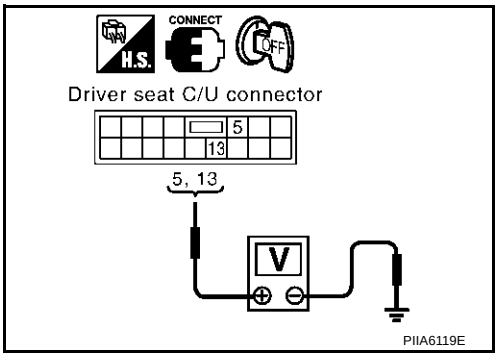


OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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



Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B153	5 (LG)	Ground	Front lifting switch ON (DOWN operation)	Battery voltage
			Front lifting switch OFF	0
	13 (Y)		Front lifting switch ON (UP operation)	Battery voltage
			Front lifting switch OFF	0

OK or NG

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

Rear Lifting Motor Circuit Inspection

AIS002XQ

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

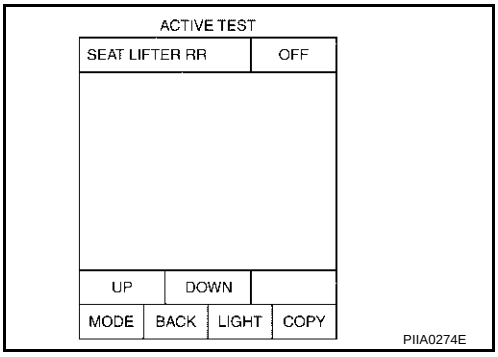
OK or NG

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 lifting 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.

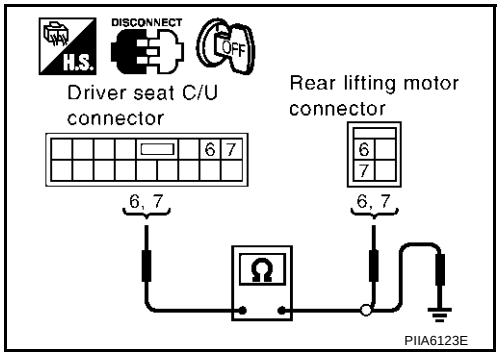
3. CHECK REAR LIFTING HARNESS CONTINUITY

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 B153 terminals 6 (G/W), 7 (G/B) and lifting motor connector B162 terminals 6 (G/W), 7 (G/B).

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

4. Check continuity between driver seat control unit B153 terminals 6 (G/W), 7 (G/B) and ground.

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



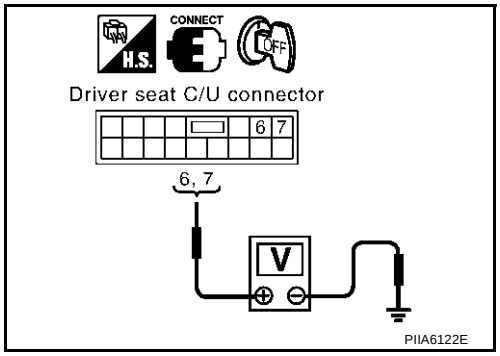
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B153	6 (G/W)	Ground	Rear lifting switch ON (UP operation)	Battery voltage
			Rear lifting switch OFF	0
	7 (G/B)		Rear lifting switch ON (DOWN operation)	Battery voltage
			Rear lifting switch OFF	0



OK or NG

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

Telescopic Motor Circuit Inspection

AIS002Y9

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

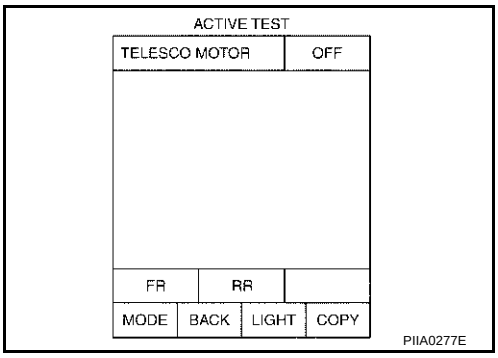
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

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.

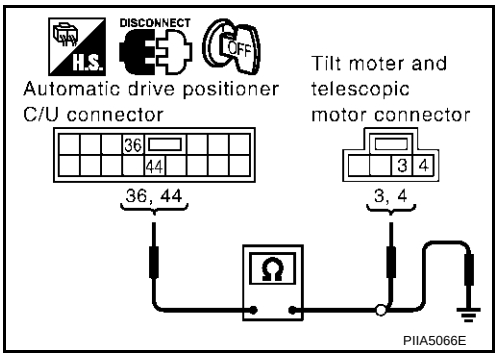
3. CHECK TELESCOPIC MOTOR HARNESS CONTINUITY

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 M50 terminals 36 (L/R), 44 (L/W) and tilt motor and telescopic motor connector M27 terminals 3 (L/R), 4 (L/W).

   36 (L/R) – 3 (L/R) : Continuity should exist.
   44 (L/W) – 4 (L/W) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M50 terminals 36 (L/R), 44 (L/W) and ground.

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



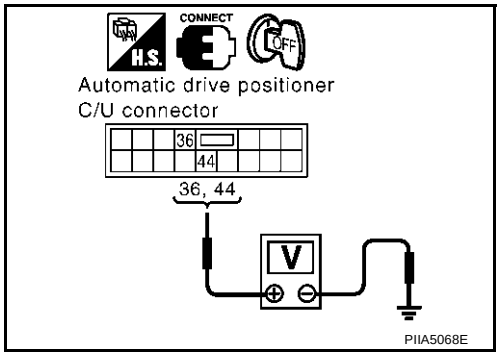
OK or NG

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

4. CHECK BCM OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M50	36 (L/R)	Ground	Telescopic switch ON (Forward operation)	Battery voltage
			Telescopic switch OFF	0
	44 (L/W)		Telescopic switch ON (Backward operation)	Battery voltage
			Telescopic switch OFF	0



OK or NG

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

Tilt Motor Circuit Inspection

AIS002YA

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

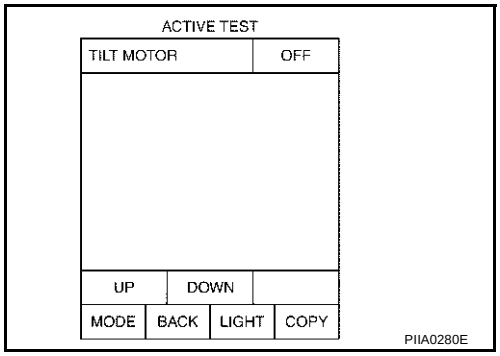
OK >> GO TO 2.
NG >> Repair the malfunctioning part and check again.

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.

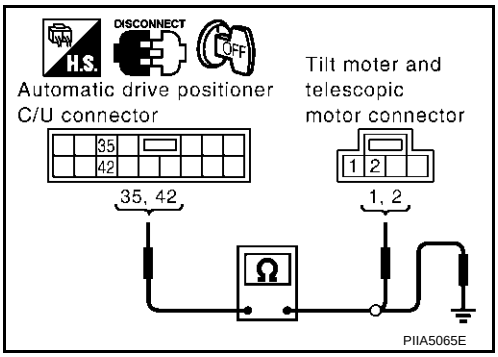
3. CHECK TILT MOTOR CIRCUIT HARNESS CONTINUITY

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

35 (R/L) – 1 (R/L) : Continuity should exist.
42 (R/B) – 2 (R/B) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M50 terminals 35 (R/L), 42 (R/B) and ground.

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



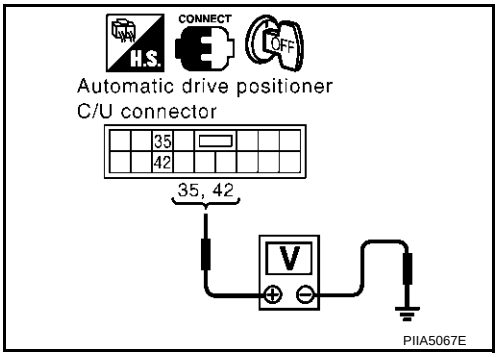
OK or NG

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

4. CHECK BCM OUTPUT SIGNAL

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M50	35 (R/L)	Ground	Tilt switch ON (UP operation)	Battery voltage
			Tilt switch OFF	0
	42 (R/B)		Tilt switch ON (DOWN operation)	Battery voltage
			Tilt switch OFF	0



OK or NG

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

Mirror Motor (Driver Side) Circuit Check

AIS003BU

1. CHECK DOOR MIRROR FUNCTION

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

OK or NG

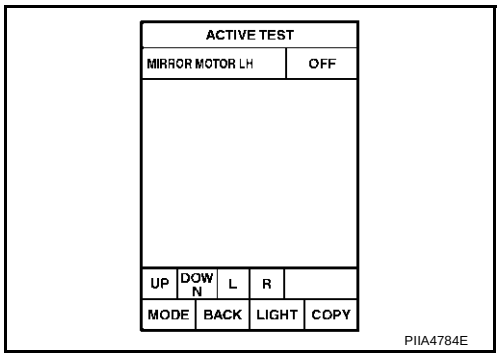
OK >> GO TO 2.
NG >> Repair the malfunctioning parts, and check the symptom again.

2. CHECK MIRROR MOTOR

With CONSULT-II

Check the operation with “MIRROR MOTOR LH” in the ACTIVE TEST.

Test item	Description
MIRROR MOTOR LH	The (driver side) mirror motor moves the mirror UP/ DOWN and LEFT/RIGHT by receiving the drive signal.



Without CONSULT-II

GO TO 3.

OK or NG

OK >> Mirror motor (driver side) circuit is OK.
NG >> GO TO 3.

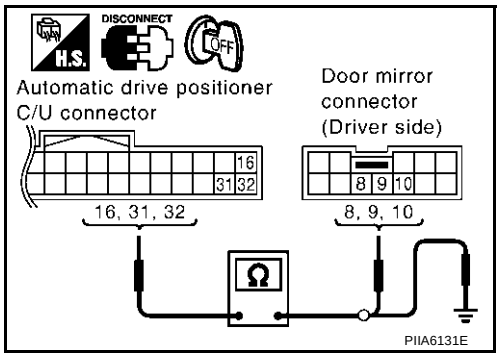
3. CHECK DOOR MIRROR MOTOR (DRIVER SIDE) HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector and door mirror (driver side) connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 16 (P), 31 (R/W), 32 (G/B) and door mirror (driver side) connector D2 terminal 8 (P), 9 (PU), 10 (GY).

   16 (P) – 8 (P) : Continuity should exist.
   31 (R/W) – 10 (GY) : Continuity should exist.
   32 (G/B) – 9 (PU) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminal 16 (P), 31 (R/W), 32 (G/B) and ground.

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



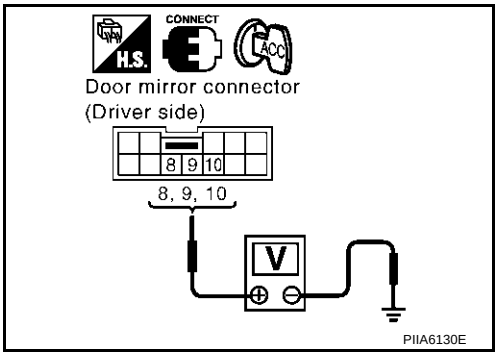
OK or NG

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

4. CHECK MIRROR MOTOR SIGNAL

1. Connect automatic drive positioner control unit and door mirror (driver side) connector.
2. Turn ignition switch to ACC position.
3. Check voltage between door mirror (driver side) connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D2	8 (P)	Ground	When motor is DOWN or RIGHT operation	Battery voltage
			Door mirror remote control switch is neutral	0
	9 (PU)		When motor is LEFT operation	Battery voltage
			Door mirror remote control switch is neutral	0
	10 (GY)		When motor is UP operation	Battery voltage
			Door mirror remote control switch is neutral	0



OK or NG

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

Mirror Motor (Passenger Side) Circuit Check

AIS003BV

1. CHECK DOOR MIRROR FUNCTION

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

OK or NG

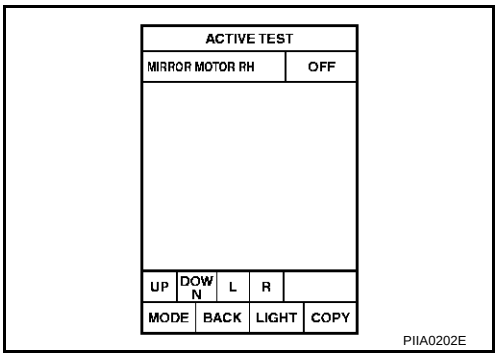
OK >> GO TO 2.
NG >> Repair the malfunctioning parts, and check the symptom again.

2. MIRROR MOTOR INSPECTION

With CONSULT-II

Check the operation with “MIRROR MOTOR RH” in the ACTIVE TEST.

Test item	Description
MIRROR MOTOR RH	The (passenger side) mirror motor moves the mirror UP/DOWN and LEFT/RIGHT by receiving the drive signal.



Without CONSULT-II

GO TO 3.

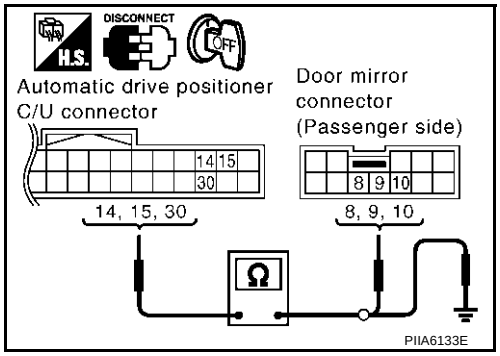
OK or NG

OK >> Mirror motor (passenger side) circuit is OK.
NG >> GO TO 3.

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

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit connector and door mirror (passenger side) connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 14 (L/W), 15 (L/B), 30 (W/R) and door mirror (passenger side) connector D32 terminal 8 (GY), 9 (OR), 10 (PU).

14 (L/W) – 10 (PU) : Continuity should exist.
15 (L/B) – 9 (OR) : Continuity should exist.
30 (W/R) – 8 (GY) : Continuity should exist.



4. Check continuity between automatic drive positioner control unit connector M49 terminal 14 (L/W), 15 (L/B), 30 (W/R) and ground.

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

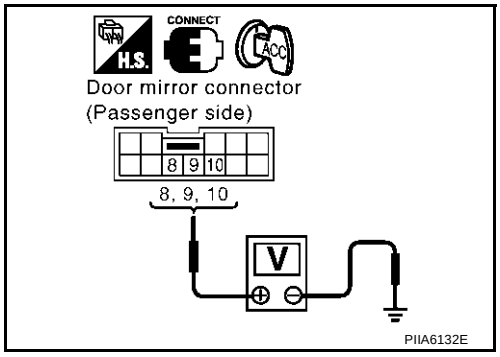
OK or NG

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

4. CHECK MIRROR MOTOR SIGNAL

1. Connect automatic drive positioner control unit and door mirror (passenger side) connector.
2. Turn ignition switch to ACC position.
3. Check voltage between door mirror (passenger side) connector and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
D32	8 (G/Y)	Ground	When motor is DOWN or RIGHT operation	Battery voltage
			Door mirror remote control switch is neutral	0
	9 (OR)		When motor is LEFT operation	Battery voltage
			Door mirror remote control switch is neutral	0
	10 (PU)		When motor is UP operation	Battery voltage
			Door mirror remote control switch is neutral	0



OK or NG

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

Sliding Sensor Circuit Inspection

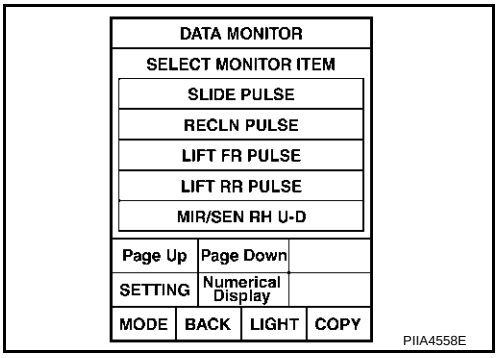
AIS002XS

1. CHECK FUNCTION

With CONSULT-II

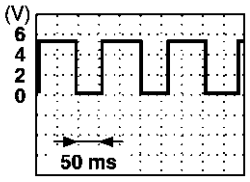
Check operation with “SLIDE PUL SE” on the DATA MONITOR to make sure the pulse changes.

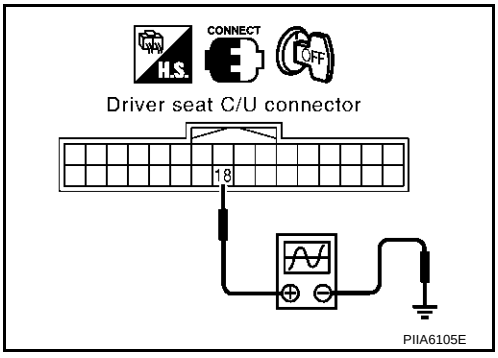
Monitor item [OPERATION or UNIT]		Contents
RECLN PUL SE	—	The seat sliding position (pulse) judged from the sliding sensor signal is displayed.



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) (+)	Terminals (Wire color) (–)	Condition	Signal
B152	18 (G)	Ground	Sliding motor operation	



OK or NG

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

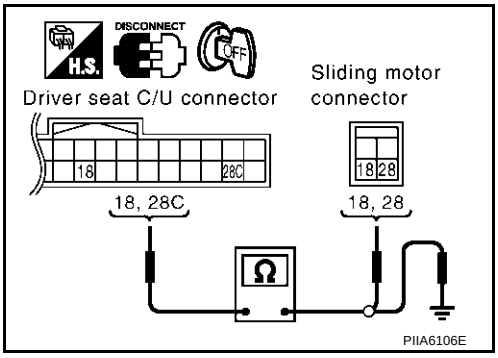
2. CHECK SLIDING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and sliding motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 18 (G), 28C (B/W) and sliding motor B161 terminals 18 (G), 28 (B/W).

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

3. Check continuity between driver seat control unit B152 terminals 18 (G), 28C (B/W) and ground.

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



OK or NG

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

Reclining Sensor Circuit Inspection

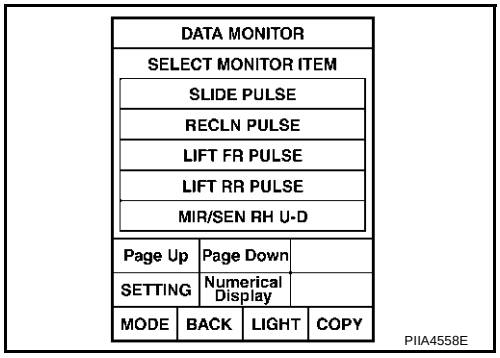
AIS002XT

1. CHECK FUNCTION

With CONSULT-II

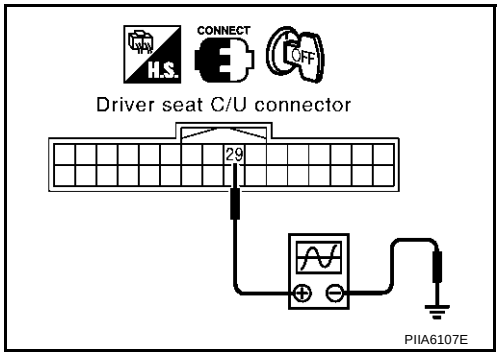
Check operation with “RECLINING PUL SE” on the DATA MONITOR to make sure the pulse changes.

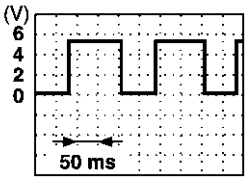
Monitor item [POERATION or UNIT]		Contents
RECLN PUL SE	—	The seat reclining position (pulse) judged from the reclining sensor is displayed



Without CONSULT-II

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



Connector	Terminals (Wire color)		Condition	Signal
	(+)	(–)		
B152	29 (G/L)	Ground	Reclining motor operation	

OK or NG

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

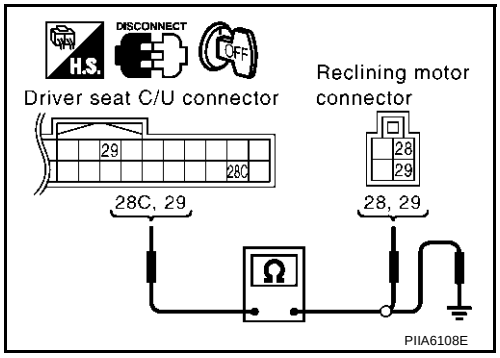
2. CHECK RECLINING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and reclining motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 28C (B/W), 29 (G/L) and reclining motor connector B166 terminals 28 (B/W), 29 (G/L).

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

3. Check continuity between driver seat control unit connector B152 terminals 28C (B/W), 29 (G/L) and ground.

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

Front Lifting Sensor Circuit Inspection

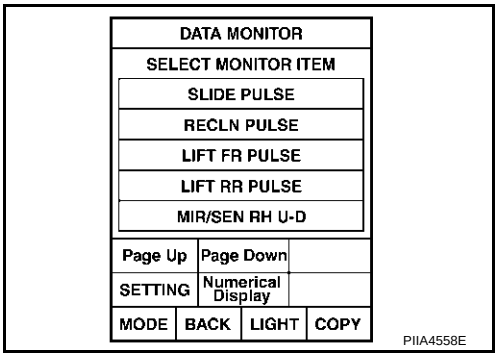
AIS002XU

1. CHECK FUNCTION

With CONSULT-II

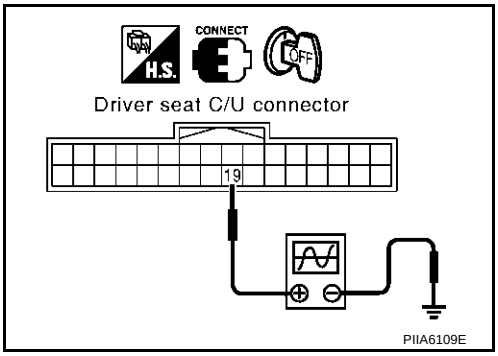
Check operation with “LIFT FR PUL SE” on the DATA MONITOR to make sure the pulse changes.

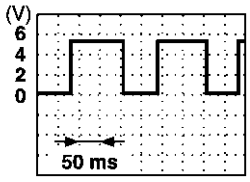
Monitor item [OPERATION or UNIT]		Contents
LIFT FR PUL SE	—	The front lifting position (pulse) judged from the front lifting sensor is displayed



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) (+)	Terminals (Wire color) (–)	Condition	Signal
B152	19 (G/Y)	Ground	Front lifting motor operation	

OK or NG

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

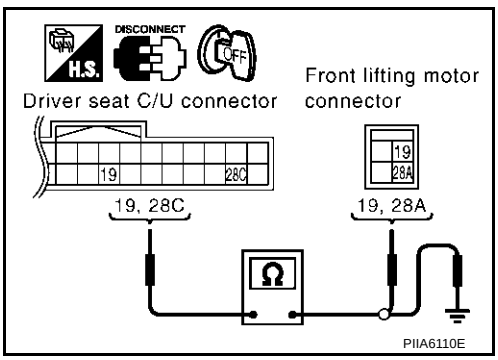
2. CHECK FRONT LIFTING SENSOR HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and front lifting motor connector.
2. Check continuity between driver seat control unit connector B152 terminals 19 (G/Y), 28C (B/W) and front lifting motor connector B164 terminals 19 (G/Y), 28A (B/W).

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

3. Check continuity between driver seat control unit connector B152 terminals 19 (G/Y), 28C (B/W) and ground.

19 (G/Y) – Ground : Continuity should not exist.
28C (B/W) – Ground : Continuity should not exist.



OK or NG

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

Rear Lifting Sensor Circuit Inspection

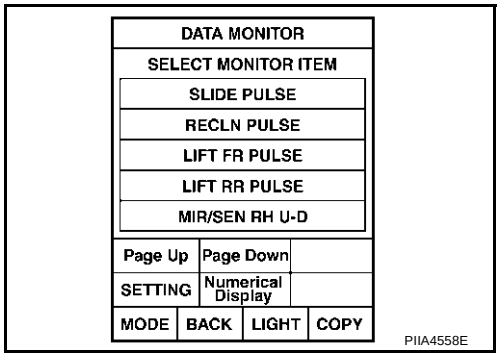
AIS002XV

1. CHECK REAR END LIFTING SENSOR INPUT/OUTPUT SIGNAL

With CONSULT-II

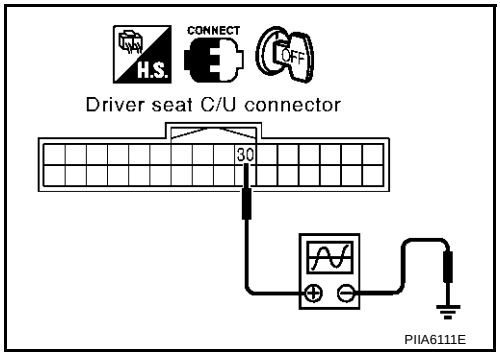
Check operation with “LIFT RP PUL SE” on the DATA MONITOR to make sure pulse changes.

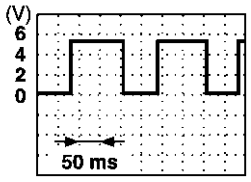
Monitor item [OPERATION or UNIT		
LIFT RR PUL SE	—	The rear lifting position (pulse) judged from the rear lifting sensor is displayed.



Without CONSULT-II

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



Connector	Terminals (Wire color)		Condition	Signal
	(+)	(–)		
B152	30 (G/W)	Ground	Rear lifting motor operation	

OK or NG

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

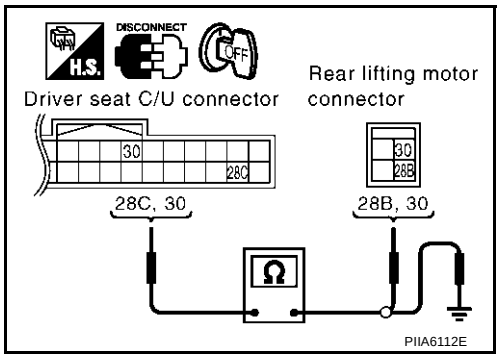
2. CHECK REAR LIFTING SENSOR HARNESS CONTINUITY

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

28C (B/W) – 28B (B/W) : Continuity should exist.
30 (G/W) – 30 (G/W) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 28C (B/W), 30 (G/W) and ground.

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



OK or NG

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

Telescopic Sensor Circuit Inspection

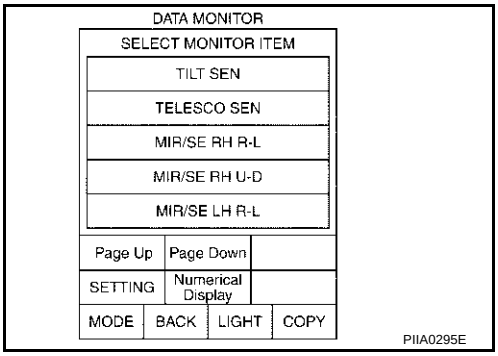
AIS002YB

1. CHECK FUNCTION

With CONSULT-II

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

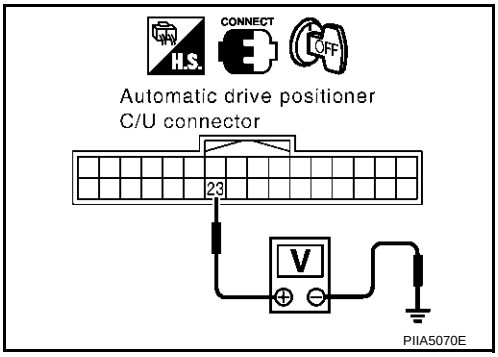
Monitor item [OPERATION or UNIT]		Contents
TELESCO SEN	“V”	The telescoping position (voltage) judged from the telescoping sensor signal is displayed.



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.)
	(+)	(–)		
M49	23 (Y/B)	Ground	Telescopic top position	0.56
			Telescopic bottom position	4.44



OK or NG

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

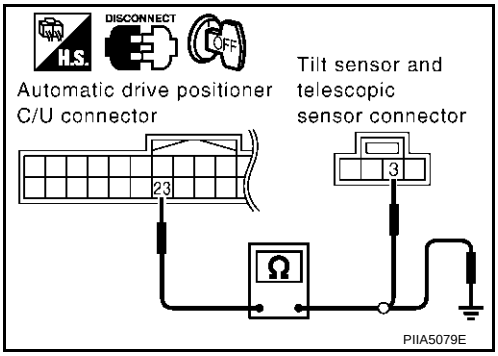
2. CHECK HARNESS CONTINUITY

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 M49 terminals 23 (Y/B) and tilt sensor and telescopic sensor connector M28 terminals 3 (Y/B).

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

3. Check continuity harness between automatic drive positioner control unit connector M28 terminals 23 (Y/B) and ground.

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



OK or NG

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

Tilt Sensor Circuit Inspection

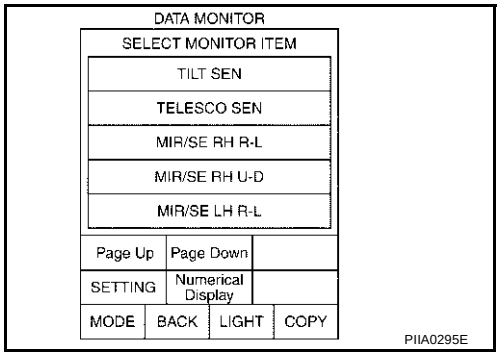
AIS002YC

1. CHECK FUNCTION

With CONSULT-II

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

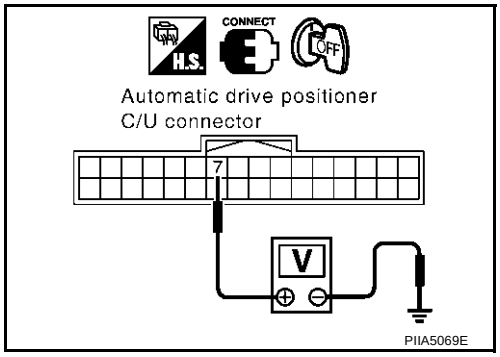
Monitor item [OPERATION or UNIT]		Contents
TILT SEN	“V”	The tilt position (voltage) judged from the tilt sensor signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M49	7 (Y/R)	Ground	Tilt top position	1.82
			Tilt bottom position	4.44



OK or NG

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

2. CHECK HARNESS

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

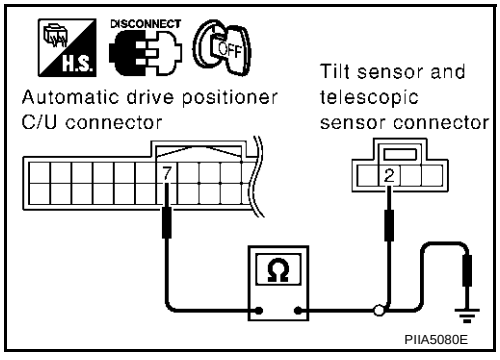
7 (Y/R) – 2 (Y/R) : Continuity should exist.

3. Automatic drive positioner control unit connector M49 terminals 7 (Y/R) and ground.

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

OK or NG

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



Mirror Sensor (Driver Side) Circuit Check

AIS003BW

1. CHECK DOOR MIRROR FUNCTION

Check the following.
Operation malfunction in memory control

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

OK or NG

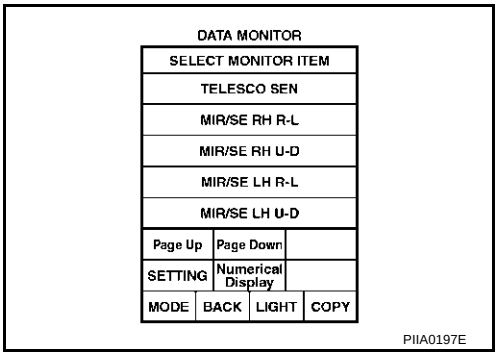
OK >> GO TO 2.
NG >> Repair the malfunctioning parts, and check the symptom again.

2. CHECK MIRROR SENSOR INSPECTION

With CONSULT-II

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

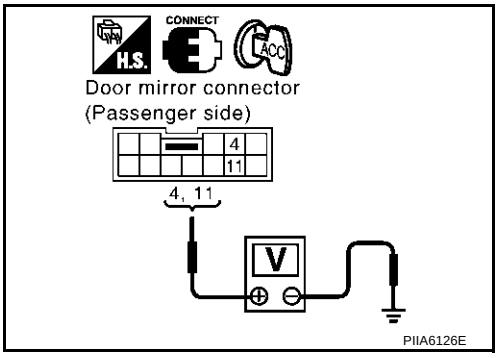
Monitor item [OPERATION or UNIT]		Contents
MIR/SE LH R–L	“V”	Voltage output from (driver side) door mirror sensor (LH/RH) is displayed.
MIR/SE LH U–D	“V”	Voltage output from (driver side) door mirror sensor (UP/DOWN) is displayed.



Without CONSULT-II

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

Con-nector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Voltage(V) (Approx,)
D2	4 (W)	Ground	When motor is UP or DOWN operation	Changes between 3 (close to peak) – 1 (close to valley)
	11 (LG)		When motor is LEFT or RIGHT operation	Changes between 1 (close to right edge) – 3 (close to left edge)



OK or NG

OK >> Mirror sensor (driver side) circuit is OK.
NG >> GO TO 3.

3. CHECK HARNESS CONTINUITY 1

1. Disconnect automatic drive positioner control unit and door mirror (driver side) connector.
2. Check continuity between automatic drive positioner control unit connector M50 terminals 33 (G/W), 41 (B/Y) and door mirror (driver side) connector D2 terminals 5 (OR), 12 (BR).

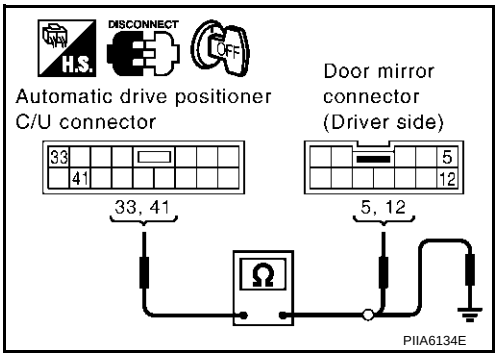
33 (G/W) – 5 (OR) : Continuity should exist.
41 (B/Y) – 12 (BR) : Continuity should exist.

3. Check continuity between automatic drove positioner control unit connector M49 terminals 33 (G/W), 41 (B/Y) and ground.

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

OK or NG

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



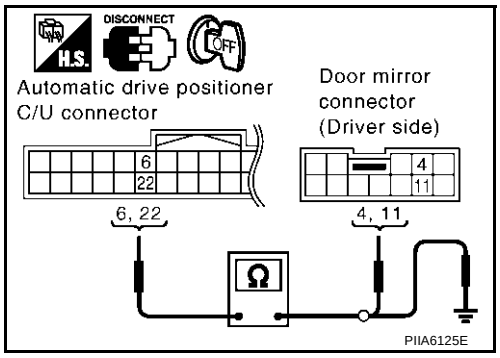
4. CHECK HARNESS CONTINUITY 2

1. Check continuity between automatic drive positioner control unit connector M49 terminal 6 (P/L), 22 (L/Y) and door mirror (driver side) connector D2 terminal 4 (W), 11 (L/G).

6 (P/L) – 4 (W) : Continuity should exist.
22 (L/Y) – 11 (LG) : Continuity should exist.

2. Check continuity between automatic drive positioner control unit connector M49 terminal 6 (P/L), 22 (L/Y) and ground.

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



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side).

Mirror Sensor (Passenger Side) Circuit Check

AIS003BX

1. CHECK DOOR MIRROR FUNCTION

Check the following.
Operation malfunction in memory control

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

OK or NG

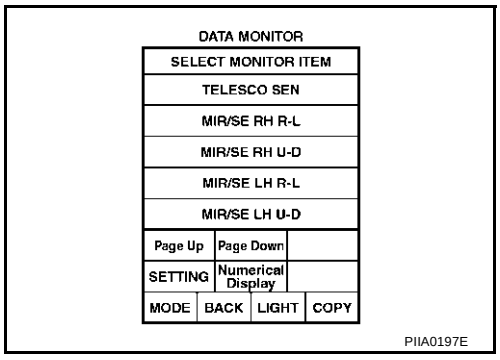
OK >> GO TO 2.
NG >> Repair the malfunctioning parts, and check the symptom again.

2. CHECK MIRROR SENSOR INSPECTION

With CONSULT-II

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

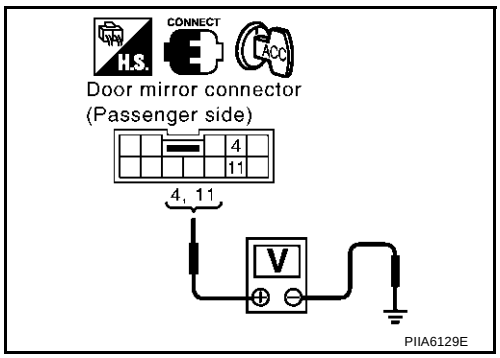
Monitor item [OPERATION or UNIT]		Contents
MIR/SE RH R–L	“V”	Voltage output from (passenger side) door mirror sensor (LH/RH) is displayed.
MIR/SE RH U–D	“V”	Voltage output from (passenger side) door mirror sensor (UP/DOWN) is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Voltage(V) (Approx.)
D32	4 (LG)	Ground	When motor is UP or DOWN operation	Changes between 3 (close to peak) – 1 (close to valley)
	11 (P)		When motor is LEFT or RIGHT operation	Changes between 1 (close to left edge) – 3 (close to right edge)



OK or NG

OK >> Mirror sensor (passenger side) circuit is OK.
NG >> GO TO 3.

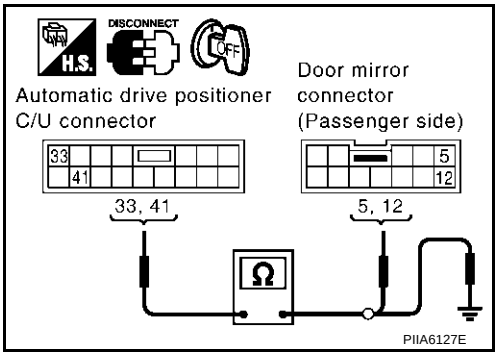
3. CHECK HARNESS CONTINUITY 1

1. Disconnect automatic drive positioner control unit and door mirror (passenger side) connector.
2. Check continuity between automatic drive positioner control unit connector M50 terminal 33 (G/W), 41 (B/Y) and door mirror (passenger side) connector D32 terminal 5 (BR), 12 (G).

33 (G/W) – 5 (BR) : Continuity should exist.
41 (B/Y) – 12 (G) : Continuity should exist.

3. Check continuity between automatic drive positioner control unit connector M50 terminals 33 (G/W), 41 (B/P) and ground.

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



OK or NG

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

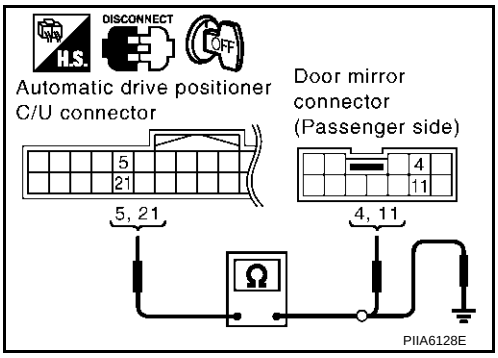
4. CHECK HARNESS CONTINUITY 2

1. Check continuity between automatic drive positioner control unit connector M49 terminal 5 (OR), 21 (G/Y) and door mirror (passenger side) connector D32 terminal 4 (LG), 11 (P).

5 (OR) – 4 (LG) : Continuity should exist.
21 (G/Y) – 11 (P) : Continuity should exist.

2. Check continuity between automatic drive positioner control unit connector M49 terminal 5 (OR), 21 (G/Y) and ground.

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



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (passenger side).

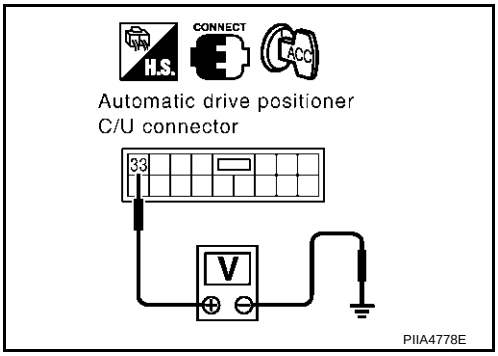
Steering and Door Mirror Sensor Power and Ground Circuit Inspection

AIS003GA

1. CHECK MIRROR SENSOR POWER SUPPLY

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

33 (G/W) – Ground : Approx. 5V



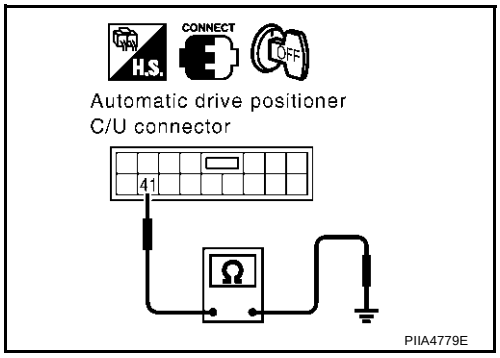
OK or NG

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

2. CHECK MIRROR SENSOR GROUND CIRCUIT

Check continuity between automatic drive positioner control unit connector M49 terminal 41 and ground.

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



OK or NG

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

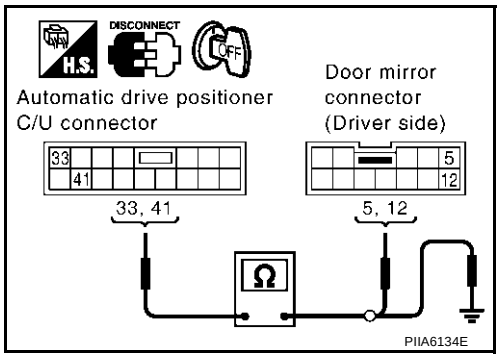
3. CHECK HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit and door mirror (driver side).
2. Check continuity between automatic drive positioner control unit connector M49 terminal 33 (G/W), 4 (B/Y) and door mirror (driver side) connector D2 terminal 5 (OR), 12 (BR).

33 (G/W) – 5 (OR) : Continuity should exist.
41 (B/Y) – 12 (BR) : Continuity should exist.

3. Check continuity between automatic drive positioner control unit connector M49 terminal 33 (G/W), 41 (B/Y) and ground.

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



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between automatic drive positioner control unit and door mirror (driver side).

Front Door Switch (Driver Side) Circuit Inspection

AIS002XZ

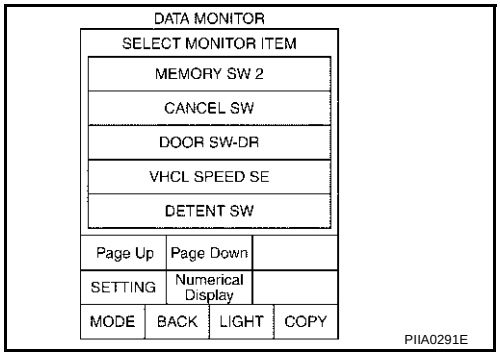
1. CHECK FUNCTION

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.

*: Refer to BL-93 .



Without CONSULT-II

GO TO 2.

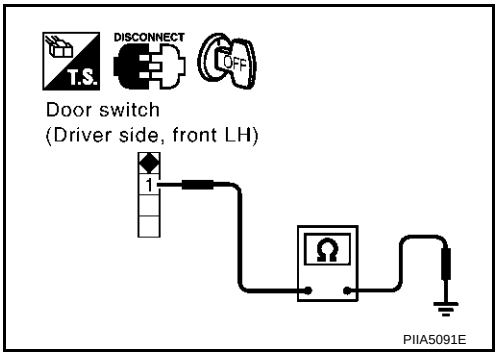
OK or NG

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

2. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

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

Connector	Terminals (+)	Terminals (–)	Condition	Continuity
B26	1	Ground part of door switch	With the front door switch (driver side) pressed	No
			With the front door switch (driver side) released	Yes



OK or NG

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

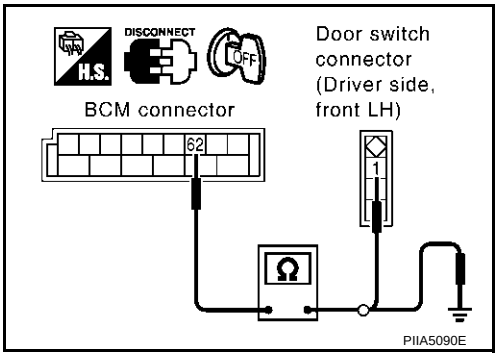
3. CHECK FRONT DOOR (DRIVER SIDE) HARNESS CONTINUITY

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

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

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

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



OK or NG

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

Sliding Switch Circuit Inspection

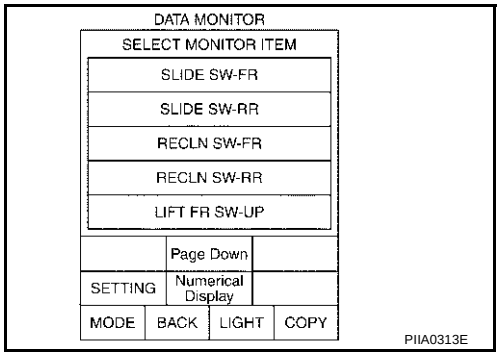
AIS002Y1

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.

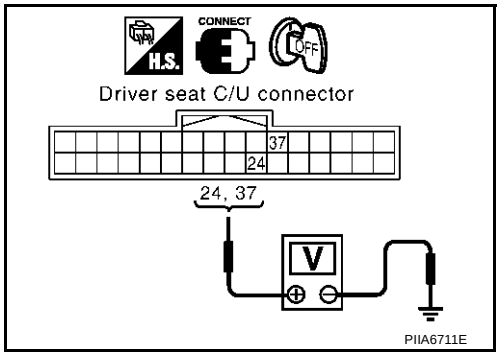
Monitor item [OPERATION or UNIT]		Contents
SLIDE SW–FR	"ON/OFF"	ON/OFF status judged from the sliding switch (FR) signal is displayed.
SLIDE SW–RR	"ON/OFF"	ON/OFF status judged from the sliding switch (RR) signal is displayed.



Without CONSULT-II

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

Terminals (Wire color)			Condition	Voltage (V) (Approx.)
Connector	Terminal (+)	Terminal (–)		
B152	24 (L/R)	Ground	Sliding switch ON (forward operation)	0
			Sliding switch OFF	Battery voltage
	37 (L/P)		Sliding switch ON (backward operation)	0
			Sliding switch OFF	Battery voltage



OK or NG

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

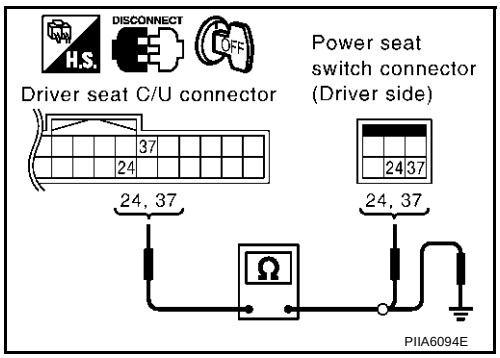
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch (driver side) connector.
2. Check continuity between driver seat control unit connector B152 terminals 24 (L/R), 37 (L/P) and power seat switch connector B154 terminals 24 (L/R), 37 (L/P).

   24 (L/R) – 24 (L/R) : Continuity should exist.
   37 (L/P) – 37 (L/P) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 24 (L/R), 37 (L/P) and ground.

   24 (L/R) – Ground : Continuity should not exist.
   37 (L/P) – Ground : Continuity should not exist.



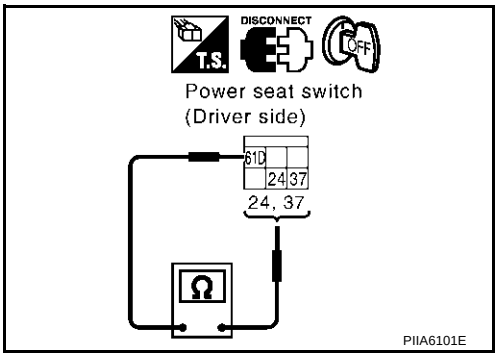
OK or NG

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

3. CHECK SLIDING SWITCH

Check continuity between driver seat switch as follows.

Terminals (Wire color)			Condition	Continuity
Connector	Terminal			
	(+)	(–)		
B154	24 (L/R)	61D (B/Y)	Sliding switch ON (forward operation)	Yes
			Sliding switch OFF	No
	37 (L/P)		Sliding switch ON (backward operation)	Yes
			Sliding switch OFF	No



OK or NG

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

Reclining Switch Inspection

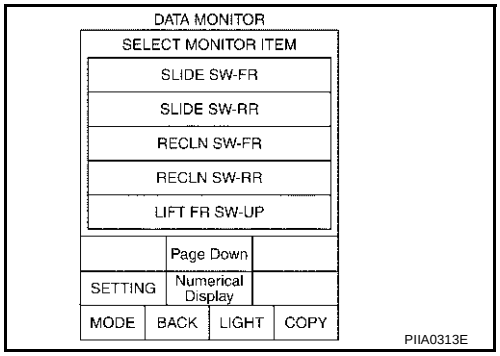
AIS002Y2

1. CHECK FUNCTION

With CONSULT-II

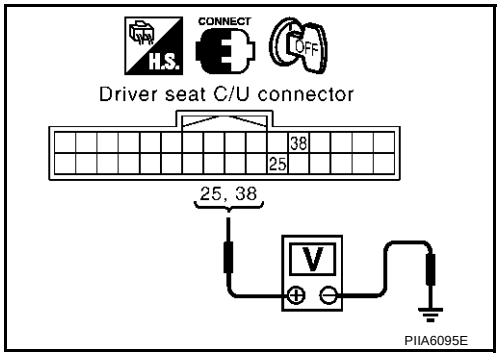
With "RECLINING SW-FR, RECLINING SW-RR" on the DATA MONITOR, operate the reclining switch to check ON/OFF operation.

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



Terminals (Wire color)			Condition	Voltage (V) (Approx.)
Connector	Terminal (+)	Terminal (–)		
B152	25 (L/OR)	Ground	Reclining switch ON (forward operation)	0
			Reclining switch OFF	Battery voltage
	38 (LG/B)		Reclining switch ON (backward operation)	0
			Reclining switch OFF	Battery voltage

OK or NG

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

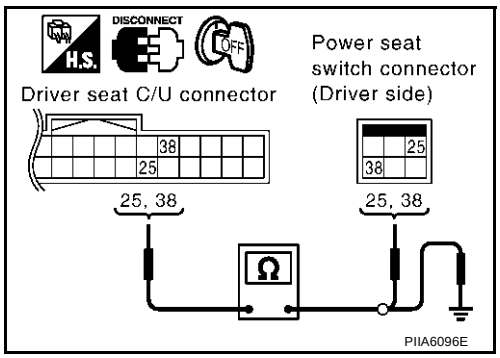
2. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 25 (L/OR), 38 (LG/B) and power seat switch connector B154 terminals 25 (L/OR), 38 (LG/B).

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

3. Check continuity between driver seat control unit connector B303 terminals 25 (L/OR), 38 (LG/B) and ground.

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

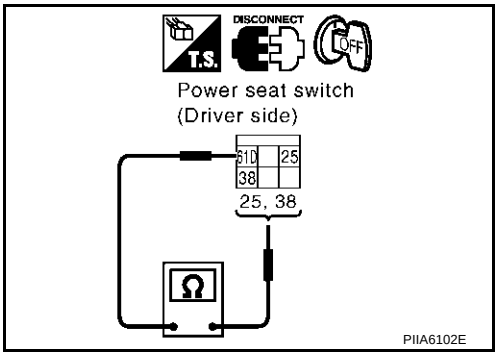


OK or NG

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

3. RECLINING SWITCH INSPECTION

Check continuity between power seat switch as follows.



Terminals (Wire color)			Condition	Continuity
Connector	Terminal (+)	Terminal (–)		
B154	25 (L/OR)	61D (B/Y)	Reclining switch ON (forward operation)	Yes
			Reclining switch OFF	No
	38 (LG/B)		Reclining switch ON (backward operation)	Yes
			Reclining switch OFF	No

OK or NG

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

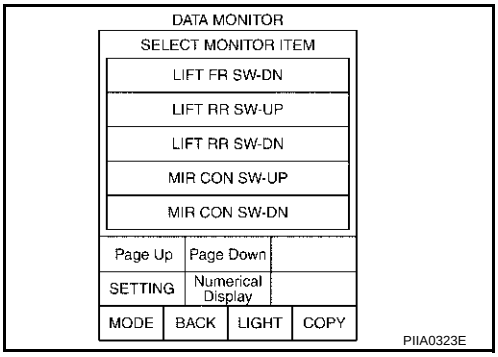
Front Lifting Switch Circuit Inspection

AIS002Y3

1. CHECK FUNCTION

With CONSULT-II

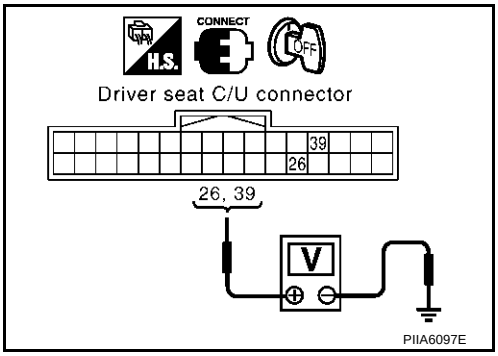
With “LIFT FR SW-UP, LIFT FR SW-DN” on the DATA MONITOR, operate the front lifting switch to check ON/OFF operation.



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



Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Voltage (V) (Approx.)
B303	26 (L/P)	Ground	Front lifting switch ON (UP operation)	0
			Front lifting switch OFF	Battery voltage
	39 (L/G)		Front lifting switch ON (DOWN operation)	0
			Front lifting switch OFF	Battery voltage

OK or NG

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

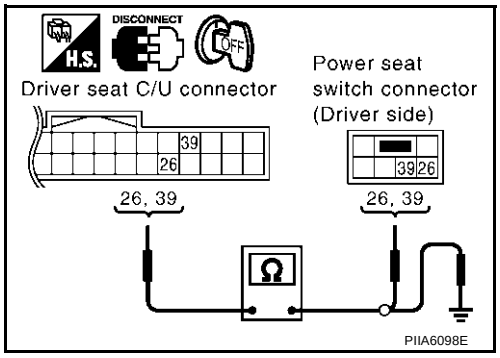
2. CHECK FRONT LIFTING SWITCH HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 26 (L/P), 39 (L/G) and power seat switch connector B156 terminals 26 (L/P), 39 (L/G).

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

3. Check continuity between driver seat control unit connector B152 terminals 26 (L/P), 39 (L/G) and ground

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



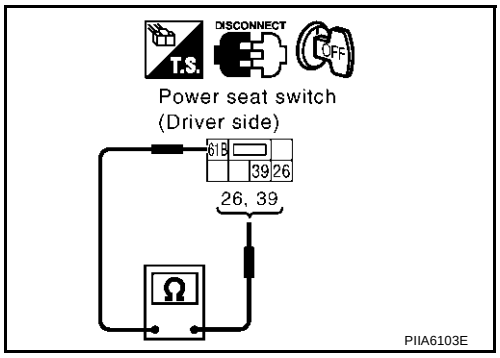
OK or NG

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

3. CHECK FRONT END LIFTING SWITCH

Check continuity between power seat switch as follows.

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Continuity
B156	26 (L/P)	61B (B/Y)	Front lifting switch ON (UP operation)	Yes
			Front lifting switch OFF	No
	39 (L/G)		Front lifting switch ON (DOWN operation)	Yes
			Front lifting switch OFF	No



OK or NG

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

Rear Lifting Switch Circuit Inspection

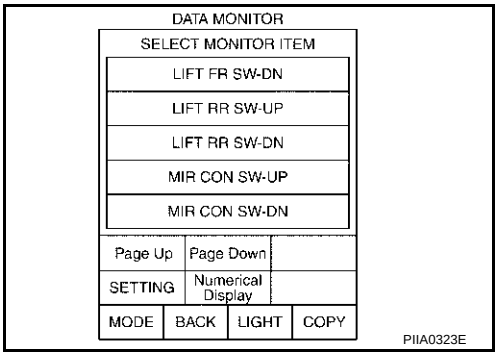
AIS002Y4

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.

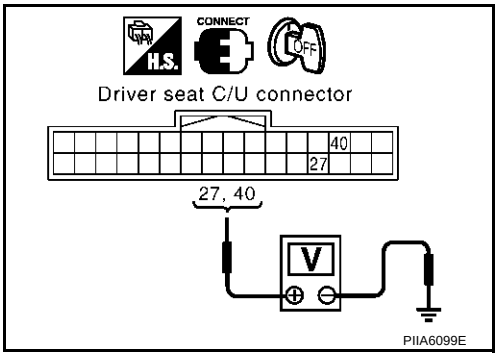
Monitor item [OPERATION or UNIT]		Contents
LIFT RR SW–UP	"ON/OFF"	(ON/OFF) status judged from the RR lifter switch (UP) signal is displayed.
LIFT RR SW–DN	"ON/OFF"	(ON/OFF) status judged from the RR lifter switch (DOWN) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color) (+)	Terminals (Wire color) (–)	Condition	Voltage (V) (Approx.)
B152	27 (L)	Ground	Rear lifting switch ON (UP operation)	0
			Rear lifting switch OFF	Battery voltage
	40 (L/Y)		Rear lifting switch ON (DOWN operation)	0
			Rear lifting switch OFF	Battery voltage



OK or NG

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

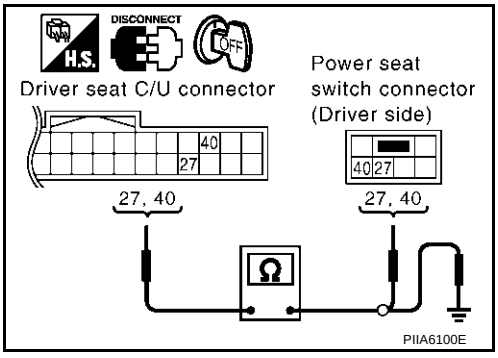
2. CHECK REAR LIFTING SWITCH HARNESS CONTINUITY

1. Disconnect driver seat control unit connector and driver power seat switch connector.
2. Check continuity between driver seat control unit connector B152 terminals 27 (L), 40 (L/Y) and power seat switch connector B156 terminals 27 (L), 40 (L/Y).

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

3. Check continuity between driver seat control unit connector B152 terminals 27 (L), 40 (L/Y) and ground.

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



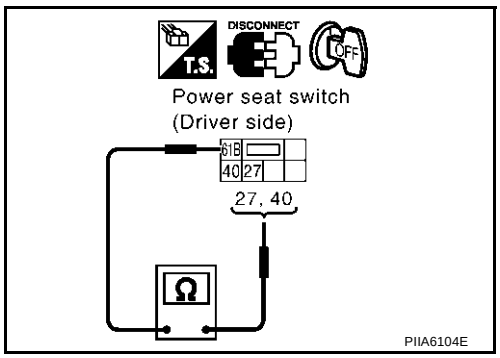
OK or NG

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

3. CHECK REAR LIFTING SWITCH

Check continuity between power seat switch as follows.

Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
B156	27 (L)	61B (B/Y)	Rear lifting switch ON (UP operation)	Yes
			Rear lifting switch OFF	No
	40 (L/Y)		Rear lifting switch ON (DOWN operation)	Yes
			Rear lifting switch OFF	No



OK or NG

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

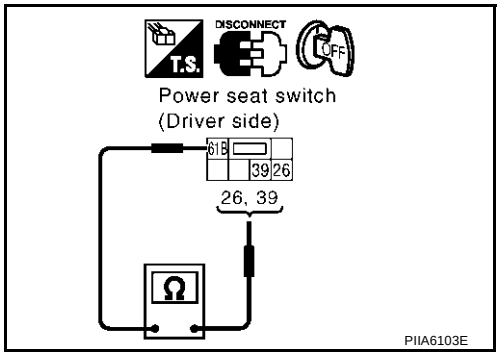
Sliding Switch and Reclining Switch Ground Circuit Inspection

AIS003L1

1. CHECK POWER SEAT SWITCH

1. Disconect power seat switch.
2. Check continuity between power seat switch as follows.

Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
B156	26 (L/P)	61B (B/Y)	Front lifting switch ON (UP operation)	Yes
			Front lifting switch OFF	No
	39 (L/G)		Front lifting switch ON (DOWN operation)	Yes
			Front lifting switch OFF	No



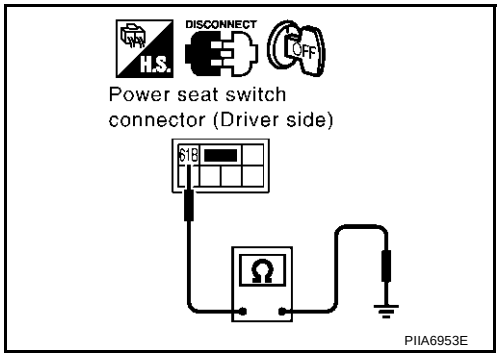
OK or NG

OK >> GO TO 2.
NG >> Replace power seat switch.

2. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B156 terminal 61B (B/W) and ground.

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



OK or NG

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

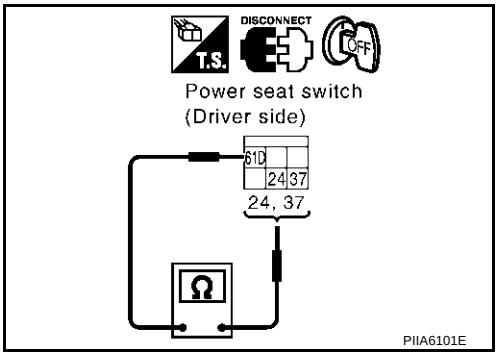
Front Lifting Switch and Rear Lifting Switch Ground Circuit Inspection

AIS003L3

1. CHECK POWER SEAT SWITCH

1. Disconnect power seat switch.
2. Check continuity between power seat switch as follows.

Terminals (Wire color)			Condition	Continuity
Connector	Terminal (+)	Terminal (–)		
B154	24 (L/R)	61D (B/Y)	Sliding switch ON (forward operation)	Yes
			Sliding switch OFF	No
	37 (L/P)		Sliding switch ON (backward operation)	Yes
			Sliding switch OFF	No



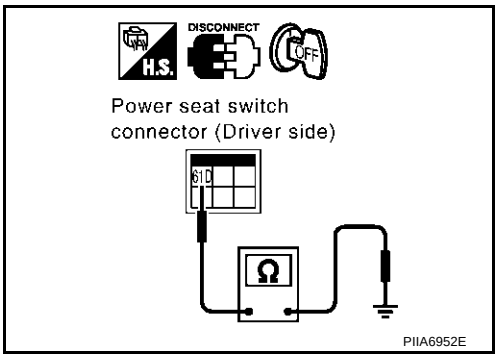
OK or NG

OK >> GO TO 2.
NG >> Replace power seat switch.

2. CHECK POWER SEAT SWITCH GROUND CIRCUIT

Check continuity between power seat switch connector B154 terminal 61D (B/Y) and ground.

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



OK or NG

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

Telescopic Switch Circuit Inspection

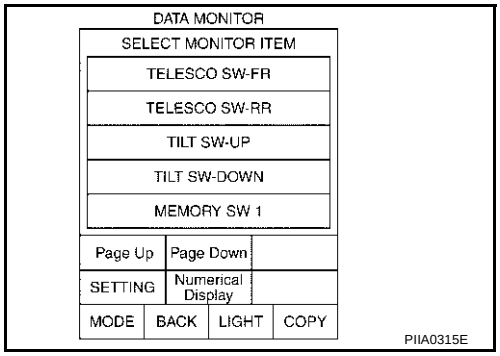
AIS002YD

1. CHECK FUNCTION

With CONSULT-II

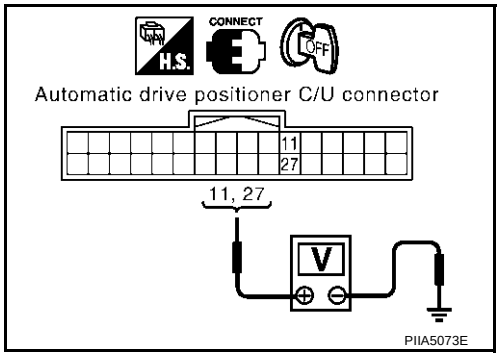
With "TELESCO SW-FR, TELESCO SWRR"RR" on the DATA MONITOR, operate the ADP steering switch to check ON/OFF operation.

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



Without CONSULT-II

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



Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M49	11 (BR)	Ground	Telescopic switch ON (forward operation)	0
			Telescopic switch OFF	5
	27 (LG)		Telescopic switch ON (backward operation)	0
			Telescopic switch OFF	5

OK or NG

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

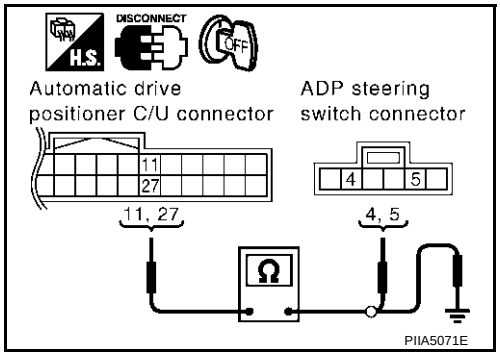
2. CHECK TELESCOPIC CIRCUIT HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
2. Check continuity between automatic drive positioner control unit connector M49 terminals 11 (BR), 27 (LG) and ADP steering switch connector M13 terminals 4 (LG), 5 (BR).

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

3. Check continuity between automatic drive positioner control unit connector M49 terminals 11 (BR), 27 (LG) and ground.

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



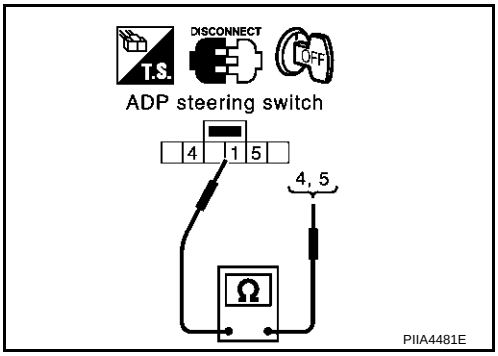
OK or NG

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

3. CHECK TELESCOPIC SWITCH

Check continuity between ADP steering switch.

Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
M13	4 (LG)	1 (B)	Telescopic switch ON (backward operation)	Yes
			Telescopic switch OFF	No
	5 (BR)		Telescopic switch ON (forward operation)	Yes
			Telescopic switch OFF	No



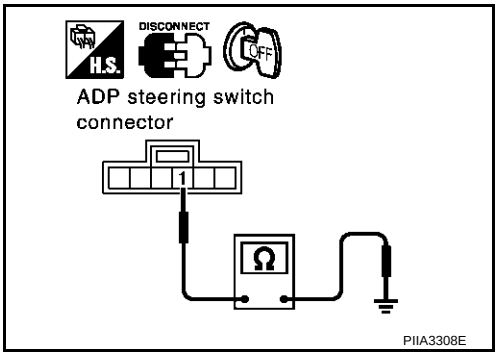
OK or NG

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

4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

Check continuity between ADP steering switch connector M13 terminal 1 (B) 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.

Tilt Switch Circuit Inspection

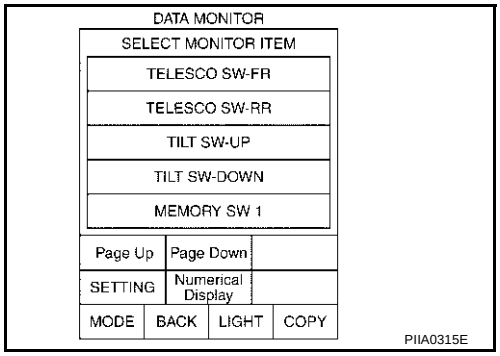
AIS002YE

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.

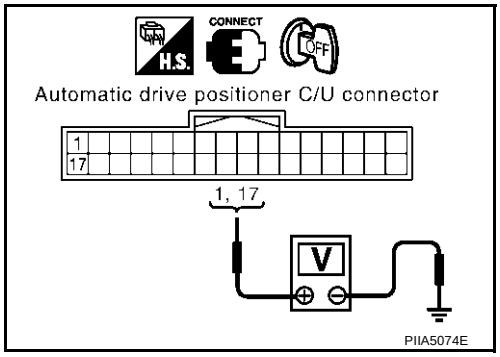
Monitor item [OPERATION or UNIT]		Contents
TILT SW-UP	“ON/OFF”	(ON/OFF) status judged from the tilt switch (UP) signal is displayed.
TILT SW-DOWN	“ON/OFF”	(ON/OFF) status judged from the tilt switch (DOWN) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
M49	1 (LG/R)	Ground	Tilt switch ON (UP operation)	0
			Tilt switch OFF	5
	17 (R/B)		Tilt switch ON (DOWN operation)	0
			Tilt switch OFF	5



OK or NG

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

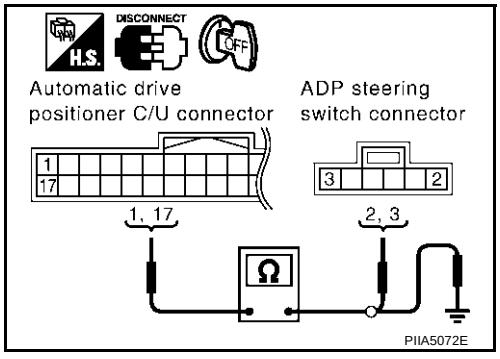
2. CHECK TILT SWITCH CIRCUIT HARNESS CONTINUITY

1. Disconnect automatic drive positioner control unit connector and ADP steering switch connector.
2. Check continuity between automatic drive positioner control unit connector M49 terminals 1 (LG/R), 17 (R/B) and ADP steering switch connector M13 terminals 2 (LG/R), 3 (R/B).

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

3. Check continuity between automatic drive positioner control unit connector M49 terminals 1 (LG/R), 17 (R/B) and ground.

   1 (LG/R) – Ground : Continuity should not exist.
   17 (R/B) – GRound : Continuity should not exist.



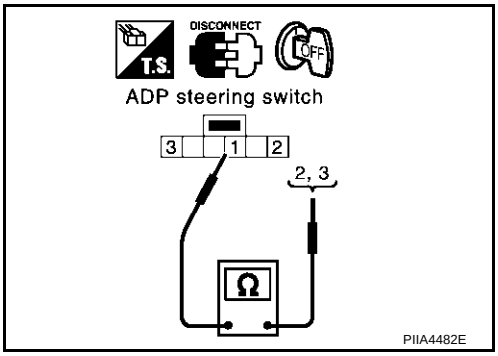
OK or NG

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

3. CHECK ADP TILT STEERING SWITCH

Check continuity between ADP steering switch.

Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
M13	2 (LG/R)	1 (B)	Tilt switch ON (UP operation)	Yes
			Tilt switch OFF	No
	3 (R/B)		Tilt switch ON (DOWN operation)	Yes
			Tilt switch OFF	No



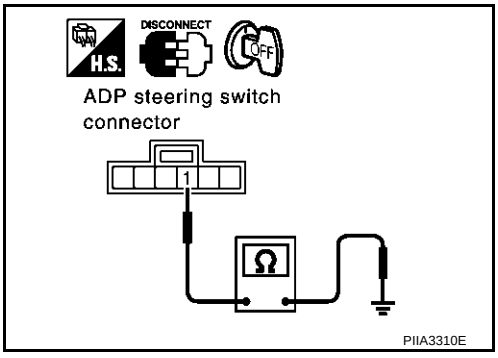
OK or NG

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

4. CHECK ADP STEERING SWITCH GROUND CIRCUIT

Check continuity between ADP steering switch connector M13 terminal 1 (B) 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.

Door Mirror Remote Control Switch (Changeover switch) Circuit Check

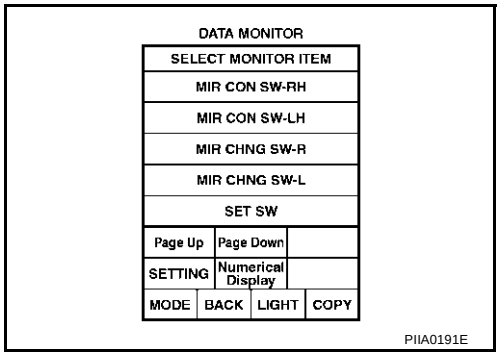
AIS003BY

1. CHECK FUNCTION

With CONSULT-II

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

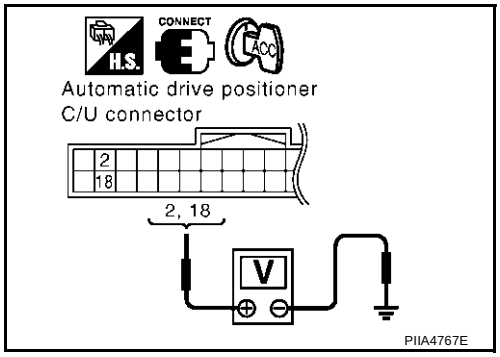
Monitor item [OPERATION or UNIT]		Contents
MIR CHNG SW–R	“ON/ OFF”	ON/OFF status judged from the door mirror remote control switch (switching to RIGHT) signal is displayed.
MIR CHNG SW–L	“ON/ OFF”	ON/OFF status judged from the door mirror remote control switch (switching to LEFT) signal is displayed.



Without CONSULT-II

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

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(-)		
M19	2 (G/W)	Ground	Changeover switch RIGHT position	0
			Changeover switch neutral position	5
	18 (L/OR)		Changeover switch LEFT position	0
			Changeover switch neutral position	5



OK or NG

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

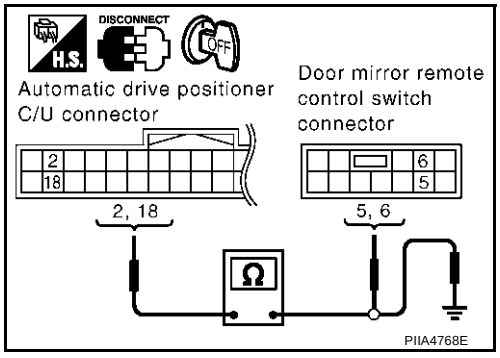
2. CHECK CHANGEOVER SWITCH CIRCUIT HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror remote control unit connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 2 (G/W), 18 (L/OR) and door mirror remote control unit connector M18 terminal 5 (L/OR), 6 (G/W).

   2 (G/W) – 5 (L/OR) : Continuity should exist.
   18 (L/OR) – 6 (G/W) : Continuity should exist.

4. Check continuity between automatic drive positioner control unit connector M49 terminal 2 (G/W), 18 (L/OR) and ground.

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



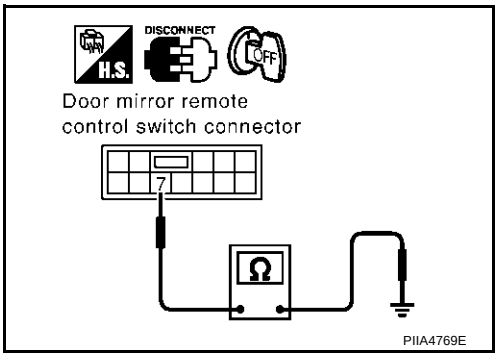
OK or NG

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

3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

Check continuity between door mirror remote control switch connector M18 terminal 7 (B) and ground.

7 (B) – Ground : Continuity should exist.



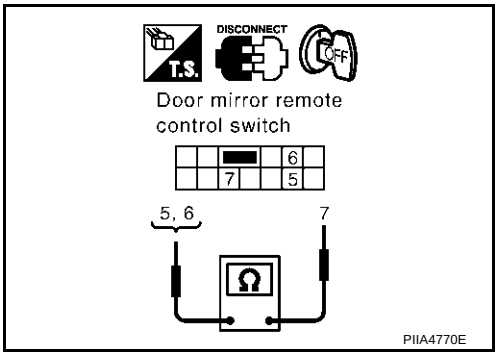
OK or NG

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

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

Check continuity between door mirror remote control switch as follows.

Connector	Terminals (+)	Terminals (-)	Condition	Continuity
M18	5	7	Changeover switch RIGHT position	Yes
			Changeover switch neutral position	No
	6		Changeover switch LEFT position	Yes
			Changeover switch neutral position	No



OK or NG

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

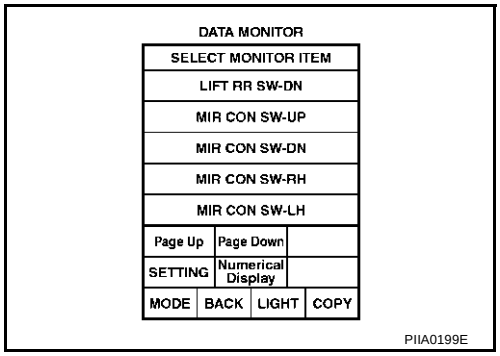
Door Mirror Remote Control Switch (Mirror Switch) Circuit Check

AIS003BZ

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

With CONSULT-II

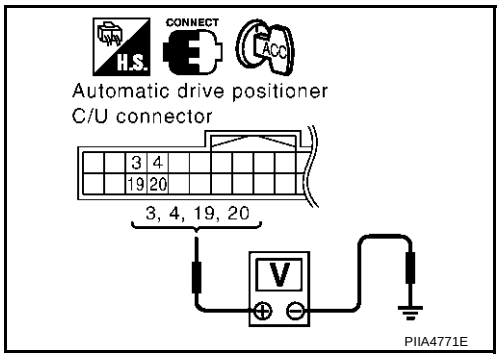
Check the operation on "MIR CON SW-UP/DN" and "MIR CON SW-RH/LH" in the DATA MONITOR.



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

Without CONSULT-II

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



Connector	Terminals (Wire color) (+)	Terminals (Wire color) (-)	Condition	Voltage (V) (Approx.)
M19	3 (GY)	Ground	Mirror switch UP operation	0
			Mirror switch neutral position	5
	4 (Y)		Mirror switch LEFT operation	0
			Mirror switch neutral position	5
	19 (GY/L)		Mirror switch DOWN operation	0
			Mirror switch neutral position	5
	20 (PU)		Mirror switch RIGHT operation	0
			Mirror switch neutral position	5

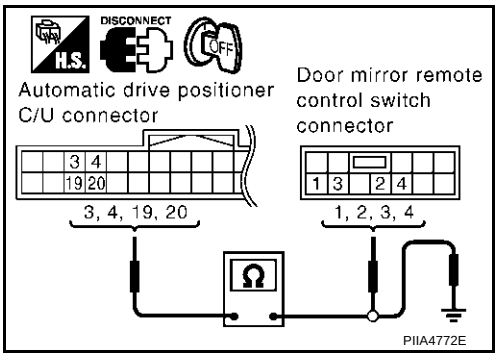
OK or NG

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

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror remote control switch connector.
3. Check continuity between automatic drive positioner control unit connector M49 terminal 3 (GY), 4 (Y), 19 (GY/L), 20 (PU) and door mirror remote control switch connector M18 terminal 1 (PU), 2 (Y), 3 (GY), 4 (GY/L).

3 (GY) – 3 (GY) : Continuity should exist.
4 (Y) – 2 (Y) : Continuity should exist.
19 (GY/L) – 4 (GY/L) : Continuity should exist.
20 (PU) – 1 (PU) : Continuity should exist.



4. Check continuity between automatic drive positioner control unit connector M49 terminal 3 (GY), 4 (Y), 19 (GY/L), 20 (PU) and ground.

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

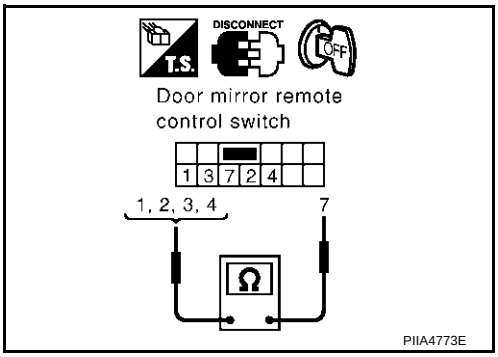
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between automatic drive positioner control unit and door mirror remote control switch.

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

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

Terminals		Switch condition	Continuity
1	7	Mirror switch RIGHT operation	Yes
		Mirror switch neutral position	No
2		Mirror switch LEFT operation	Yes
		Mirror switch neutral position	No
3		Mirror switch UP operation	Yes
		Mirror switch neutral position	No
4		Mirror switch DOWN operation	Yes
		Mirror switch neutral position	No



OK or NG

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

Detention Switch (P Range Switch) Circuit Inspection

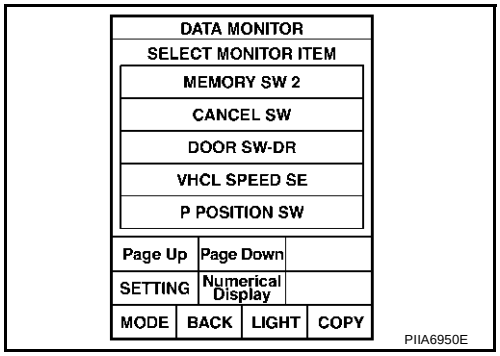
AIS002XW

1. CHECK FUNCTION

With CONSULT-II

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

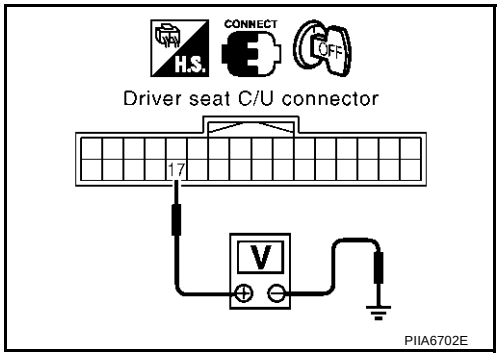
Monitor item [OPERATION or UNIT]		Contents
P POSITION SW	“ON/ OFF”	The selector lever position “P position (ON)/other than P position (OFF)” judged from the detente switch signal is displayed.



Without CONSULT-II

1. Turn ignition switch OFF.
2. Check voltage between drive seat control unit conductor and ground.

Connector	Terminals (Wire color)		Condition	Voltage (V) (Approx.)
	(+)	(–)		
B152	17 (PU)	Ground	Selector lever other than P position.	12
			Selector lever sifted to P position.	0



OK or NG

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

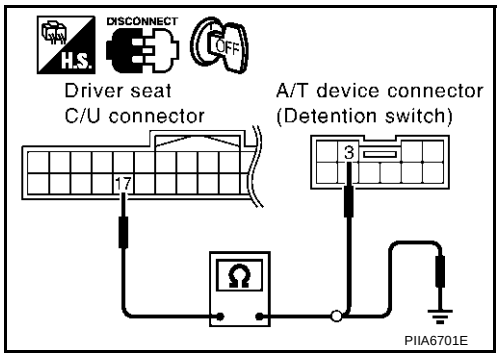
2. CHECK DETENTION SWITCH POWER SUPPLY CIRCUIT HARNESS

1. Key is removed form ignition key cylinder.
2. Disconnect driver seat control unit connector and A/T device (detention switch) connector.
3. Check continuity between driver seat control unit connector B152 terminal 17 (PU) and A/T device (detention switch) connector M67 terminal 3 (R/Y).

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

4. Check continuity between driver seat control unit connector B152 terminal 17 (PU) and ground.

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



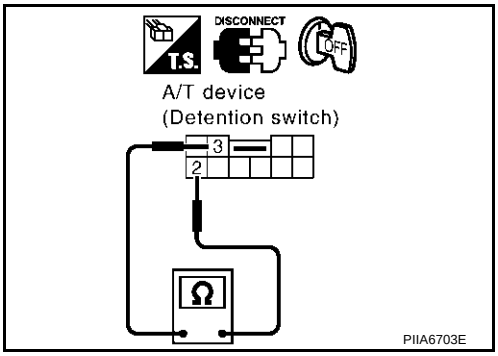
OK or NG

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

3. CHECK DETENTION SWITCH

Check continuity between detection switch as follows.

Connector	Terminals (Wire color)		Condition	Continuity
	(+)	(–)		
M67	3	2	P position	Continuity should exist.
			Other than P position	Continuity should not exist.



OK or NG

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

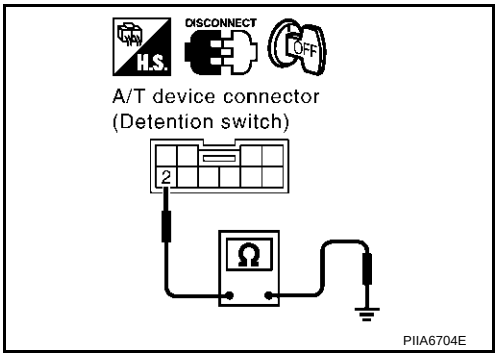
4. CHECK DETENTION SWITCH GROUND HARNESS

1. Check continuity between automatic drive positioner control unit connector M67 terminal 2 (B) and ground.

2 (B) – Ground : Continuity should exist.

OK or NG

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



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

AIS002XY

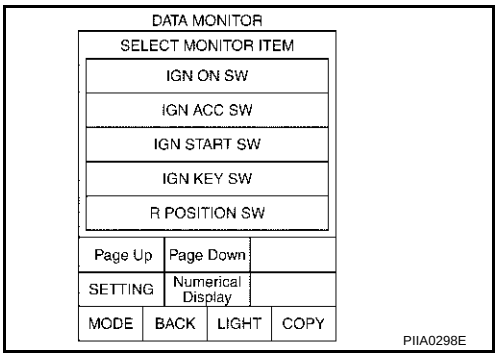
1. CHECK KEY SWITCH AND IGNITION KNOB SWITCH POWER SUPPRY CIRCUIT

With CONSULT-II

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

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

*: Refer to BL-154 .



Without CONSULT-II

GO TO 2.

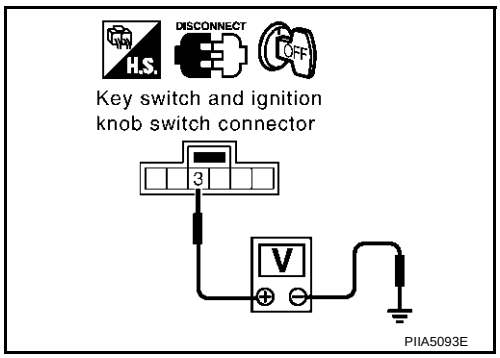
OK or NG

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 connector and ignition knob switch connector.
3. Check voltage between key switch and ignition knob switch connector M22 terminal 3 (L/R) and ground.

3 (L/R) – Ground : Battery voltage.



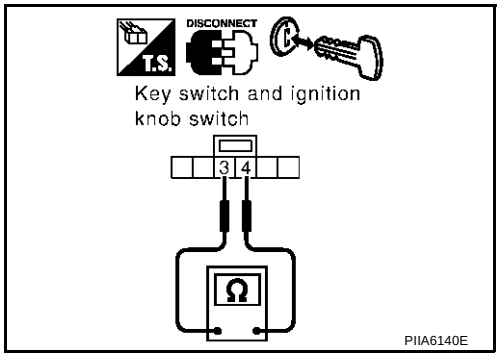
OK or NG

OK >> GO TO 3.
NG >> Check harness between key switch and key lock solenoid and fuse block (J/B).

3. CHECK KEY SWITCH

Check continuity between key switch as follows.

Connector	Terminals	Condition	Continuity
M22	3 – 4	Key is inserted in ignition key cylinder.	Yes
		Key is removed from ignition key cylinder.	No



OK or NG

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

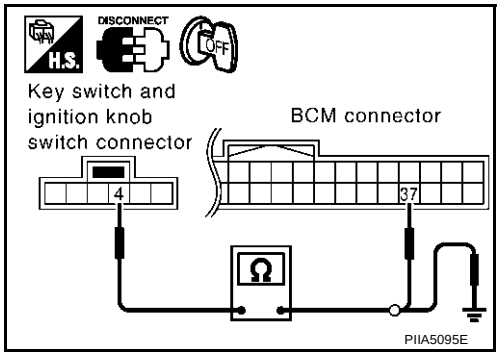
4. CHECK HARNESS CONTINUITY

1. Disconnect key switch and ignition knob switch connector and BCM connector.
2. Check continuity between key switch and ignition knob switch connector M22 terminal 4 (B/W) and BCM connector M3 terminal 37 (B/W).

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

3. Check continuity between key switch and ignition knob switch connector M22 terminal 4 (B/W) and ground.

4 (B/W) – 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.

Key Switch Circuit Inspection (Without Intelligent Key)

AIS003G1

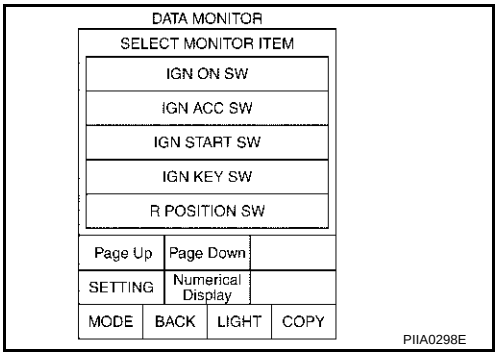
1. CHECK KEY SWITCH

With CONSULT-II

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

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

*:Refer to BL-93 .



Without CONSULT-II

GO TO 2.

OK or NG

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

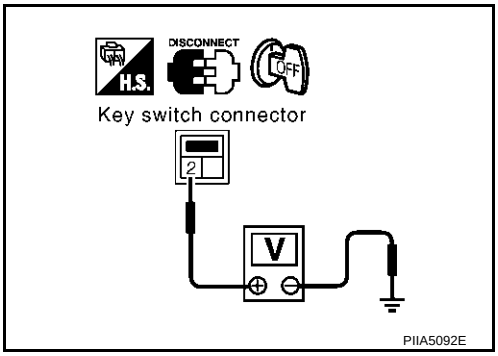
2. CHECK KEY SWITCH AND KEY LOCK SOLENOID POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect key switch connector.
3. Check voltage between key switch connector M23 terminal 2 (L/R) and ground.

2 (L/R) – Ground : Battery voltage.

OK or NG

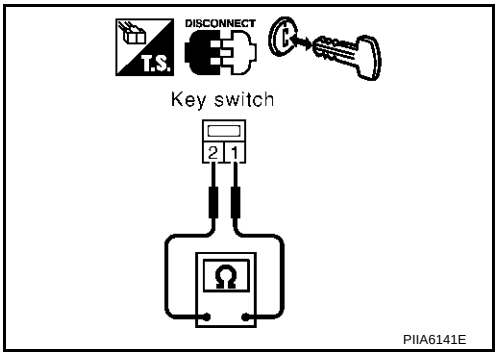
OK >> GO TO 3.
NG >> Check harness between key switch and fuse.



3. CHECK KEY SWITCH

Check continuity between key switch as follows.

Connector	Terminals	Condition	Continuity
M23	1 – 2	Key is inserted in ignition key cylinder.	Yes
		Key is removed from ignition key cylinder.	No



OK or NG

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

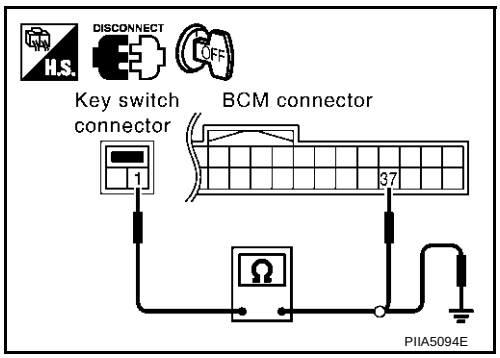
4. CHECK HARNESS CONTINUITY

1. Disconnect key switch and connector and BCM connector.
2. Check continuity between key switch connector M23 terminal 1 (B/W) and BCM connector M3 terminal 37 (B/W).

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

3. Check continuity between key switch connector M23 terminal 1 (B/W) and ground.

1 (B/W) – 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.

Seat Memory Switch Circuit Inspection

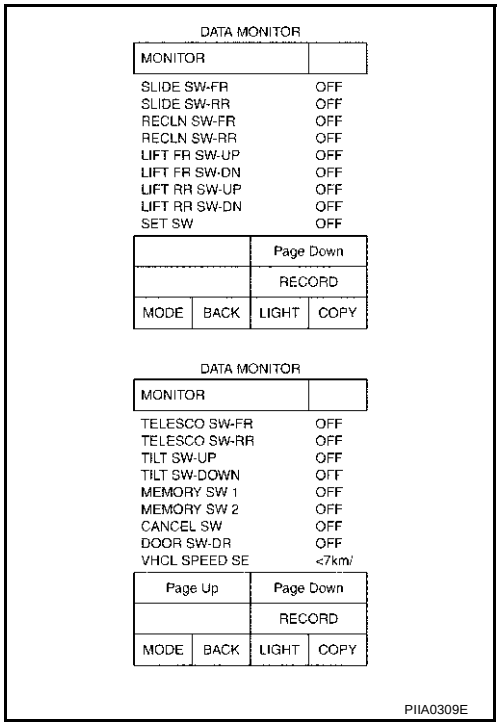
AIS002Y0

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

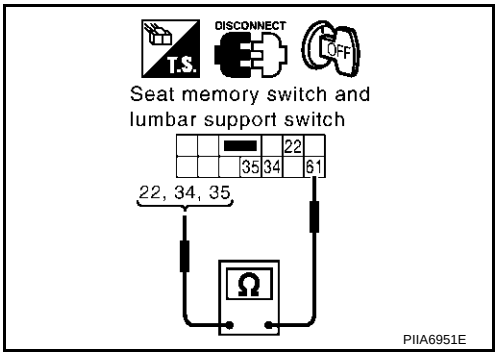
GO TO 2.

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 "memory switch and lumber support switch" connector.
3. Operate the setting switch and memory switch.
4. Check continuity between "memory switch and lumber support switch" connector and ground.



Terminals (Wire color)			Condition	Continuity
Con–nector	Terminal			
B158	34 (L/W)	61 (B/Y)	Set switch: ON	Yes.
			Set switch: OFF	No.
	22 (L/G)		Memory switch 1 ON	Yes.
			Memory switch 1: OFF	No.
	35 (L/B)		Memory switch 2: ON	Yes.
			Memory switch 2: OFF	No.

OK or NG

OK >> GO TO 3.
NG >> Replace "memory switch and lumber support switch" and lumber support switch.

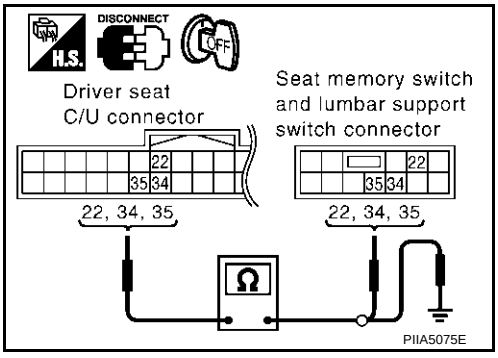
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B152 terminals 22 (L/G), 34 (L/W), 35 (L/B) and "memory switch and lumber support switch" connector B158 terminals 22 (L/G), 34 (L/W), 35 (L/B).

22 (L/G) – 22 (L/G) : Continuity should exist.
34 (L/W) – 34 (L/W) : Continuity should exist.
35 (L/B) – 35 (L/B) : Continuity should exist.

3. Check continuity between automatic driver seat control unit connector B152 terminals 22 (L/G), 34 (L/W), 35 (L/B) and ground.

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



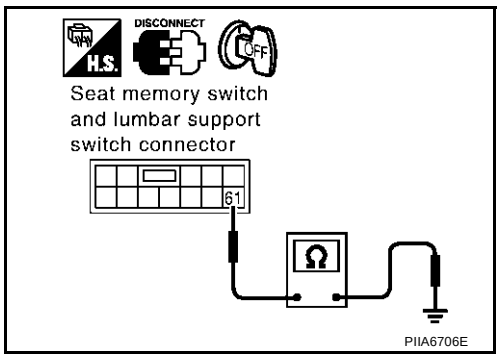
OK or NG

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

4. CHECK "MEMORY SWITCH AND LUMBER SUPPORT SWITCH" GROUND CIRCUIT

Check continuity between "memory switch and lumber support switch" B158 terminal 61 (B/Y) and ground.

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



OK or NG

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

Memory Indicator Lamp Circuit Inspection

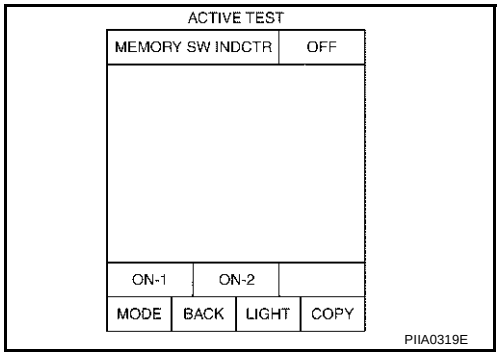
AIS002Y7

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.

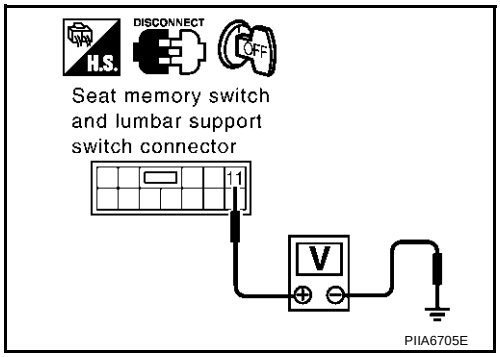
OK or NG

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

2. CHECK "MEMORY SWITCH AND LUMBER SUPPORT SWITCH" POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect "memory switch and lumber support switch" connector.
3. Check voltage between "memory switch and lumber support switch" connector B158 terminal 11 (R/W) and ground.

11 (R/W) – Ground : Battery voltage



OK or NG

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

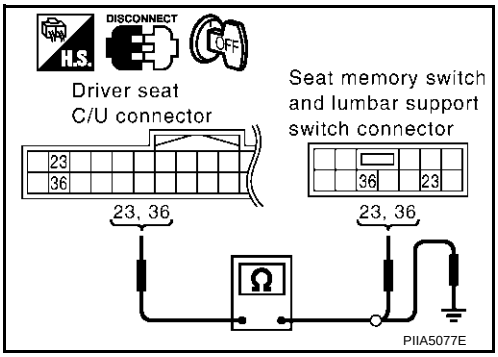
3. CHECK HARNESS CONTINUITY

1. Disconnect driver seat control unit connector.
2. Check continuity between driver seat control unit connector B152 terminals 23 (Y/W), 36 (Y/G) and "seat memory switch and lumber support switch" connector B158 terminals 23 (Y/W), 36 (Y/G).

23 (Y/W) – 23 (Y/W) : Continuity should exist.
36 (Y/G) – 36 (Y/G) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminals 23 (Y/W), 36 (Y/G) and ground.

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



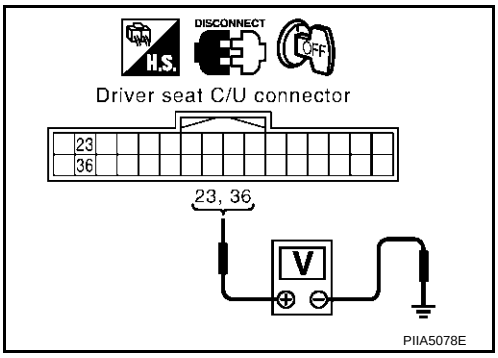
OK or NG

OK >> GO TO 5.
NG >> Repair or replace harness between automatic drive positioned control unit and "memory switch and lumber support switch".

4. CHECK SEAT MEMORY SWITCH INDICATOR SIGNAL

Check voltage between driver seat control unit connector B152 terminals 23 (Y/W), 36 (Y/G) and ground.

23 (Y/W) – Ground : Battery voltage
36 (Y/G) – Ground : Battery voltage



OK or NG

OK >> Memory indicator lamp circuit is OK.
NG >> Replace "memory switch and lumber support switch".

Uart Communication Line Circuit Inspection

AIS002Y8

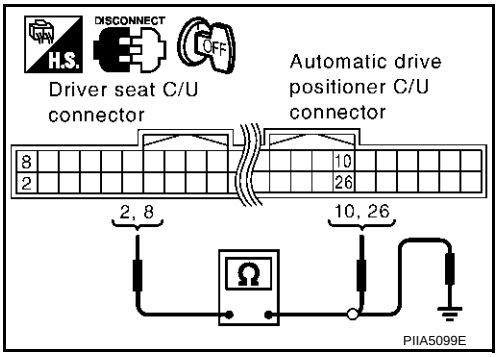
1. CHECK UART LINE HERNESS

1. Disconnect driver seat control unit connector and automatic drive positioner control unit connector.
2. Check continuity between driver seat control unit connector B152 terminal 2 (P), 8 (G/Y) and automatic drive positioner connector M49 terminal 10 (B), 26 (G).

2 (P) – 26 (G) : Continuity should exist.
8 (G/Y) – 10 (R) : Continuity should exist.

3. Check continuity between driver seat control unit connector B152 terminal 2 (P), 8 (G/Y) and ground.

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

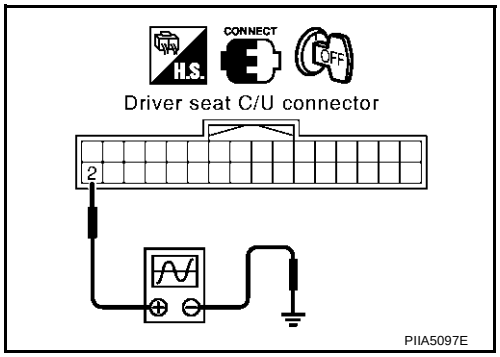


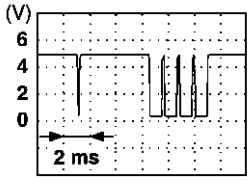
OK or NG

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

2. CHECK UART LINE INPUT/OUTPUT 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
	(+)	(–)		
B152	2 (P)	Ground	Seat memory switch 1 or 2 operation	

PIIA4814E

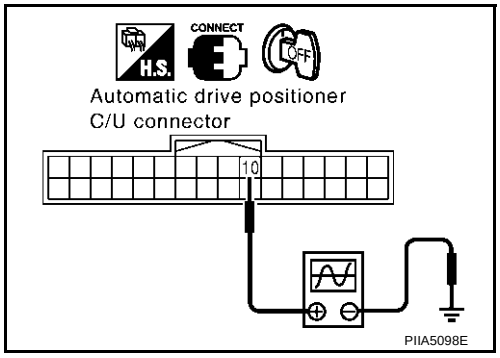
OK or NG

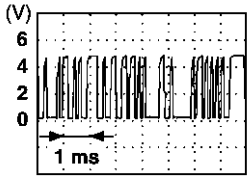
OK >> GO TO 3.
NG >> Check the flowing.

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

3. CHECK UART LINE INPUT/OUTPT SIGNAL 2

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



Connector	Terminals (Wire color)		Condition	Signal
	(+)	(–)		
M49	10 (R)	Ground	Seat memory switch 1 or 2 operation	

PIIA4813E

OK or NG

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

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

4. CHECK DRIVER SEAT CONTROL UNIT

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

Does horn operate?

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

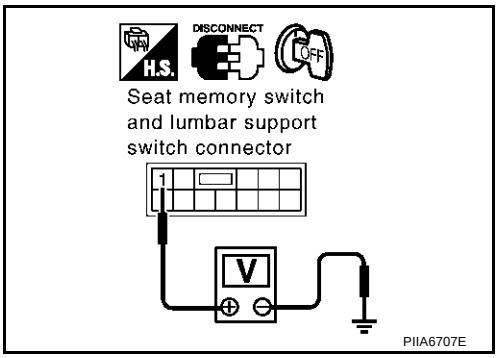
Lumber Support Circuit Inspection

AIS003C1

1. CHECK LUMBER SUPPORT SWITCH

1. Turn ignition switch OFF.
2. Disconnect l"memory switch and lumber support switch" connector.
3. Check voltage between l"memory switch and lumber support switch" connector B158 terminal 1 (R) and ground.

1 (R) – Ground: : Battery voltage



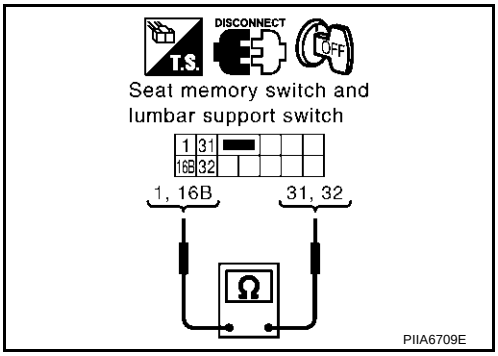
OK or NG

OK >> GO TO 2.
NG >> Repair or replace harness between fuse block (J/B) and l"memory switch and lumber support switch".

2. CHECK LUMBER SUPPORT SWITCH

Check continuity power seat switch.

Connector	Terminal (Wire color) (+)	Terminal (Wire color) (–)	Condition	Continuity
B158	31 (W)	1 (R)	Lumber support switch backward.	Yes
		16B (B)	Lumber support switch forward.	No
	32 (L)	1 (R)	Lumber support switch forward.	Yes
		16B (B)	Lumber support switch backward.	No



OK or NG

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

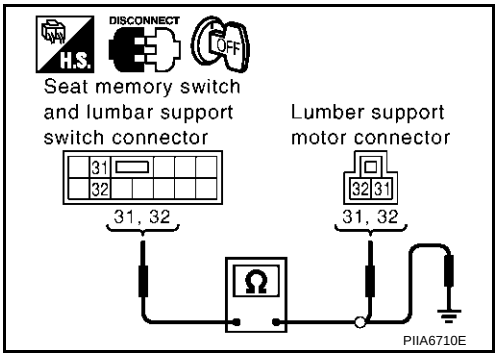
3. CHECK LUMBER SUPPORT MOTOR HARNESS

1. Disconnect lumber support motor connector.
2. Check continuity between l"memory switch and lumber support switch" connector B158 terminal 31 (W), 32 (L) and lumber support motor connector B172 terminal 31 (W), 32 (L).

31 (W) – 31 (W) : Continuity should exist.
32 (L) – 32 (L) : Continuity should exist.

3. Check continuity between l"memory switch and lumber support switch" connector B159 terminal 31 (W), 32 (L) and ground.

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



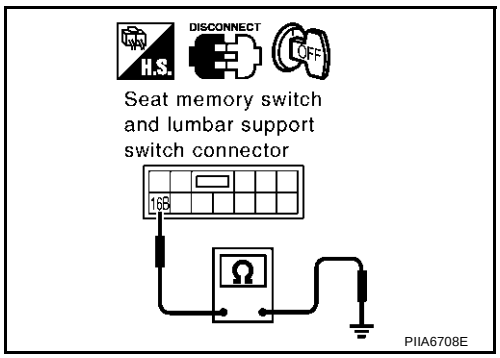
OK or NG

OK >> GO TO 4.
NG >> Repair or replace harness between l"memory switch and lumber support switch" and lumber support motor.

4. CHECK LUMBER SUPPORT SWITCH GROUND CIRCUIT

Check continuity between lumber support switch connector B158 terminal 16B (B) and ground.

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



OK or NG

OK >> Check the condition of the harness and connector.
NG >> Repair or replace harness between l"memory switch and lumber support switch" and ground.

POWER SEAT

PFP:87016

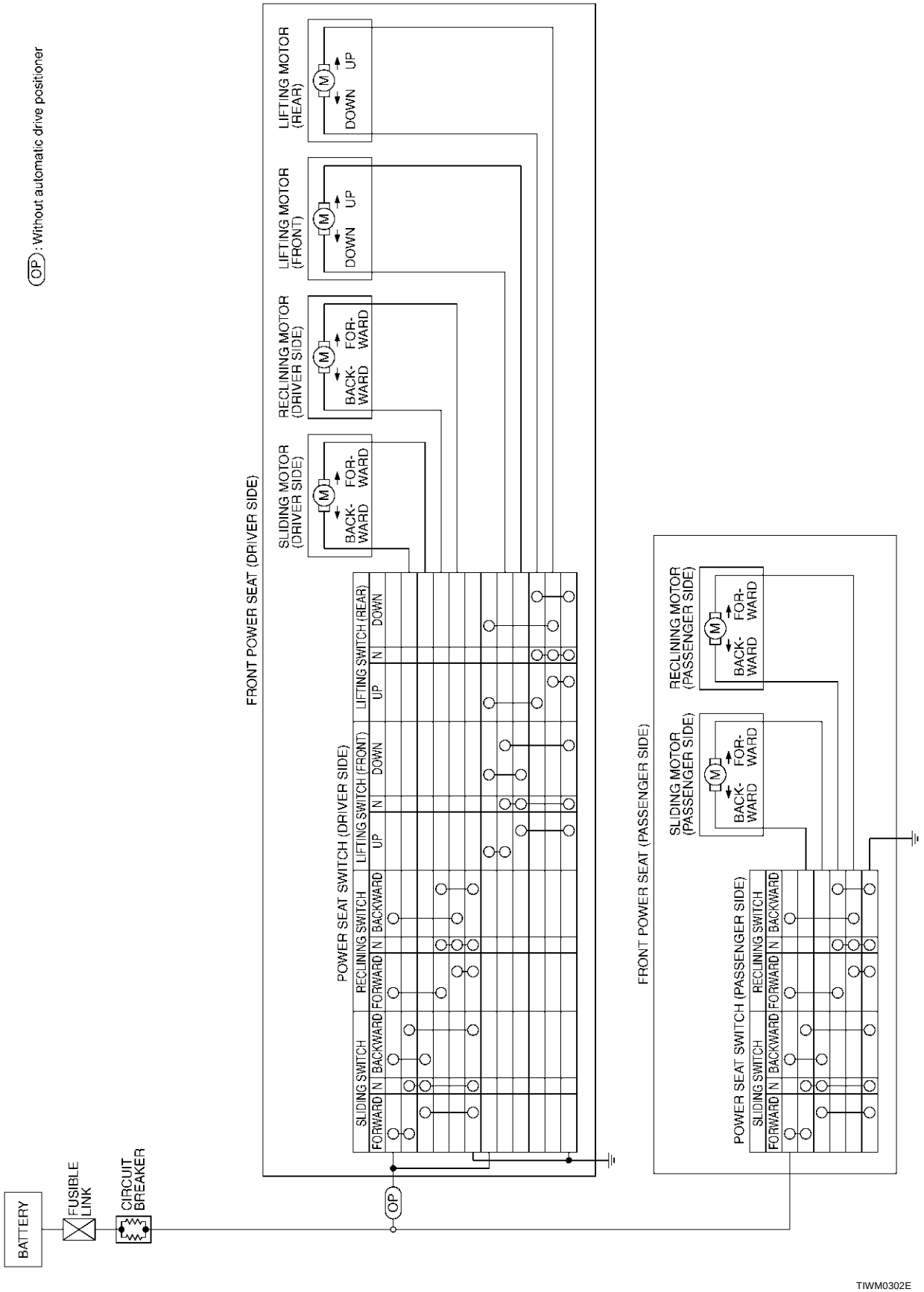
Automatic Drive Positioner Interlocking Power Seat

AIS003L4

A trouble diagnosis of a automatic drive positioner interlocking power seat is refer toSE-11, "AUTOMATIC DRIVE POSITIONER" .

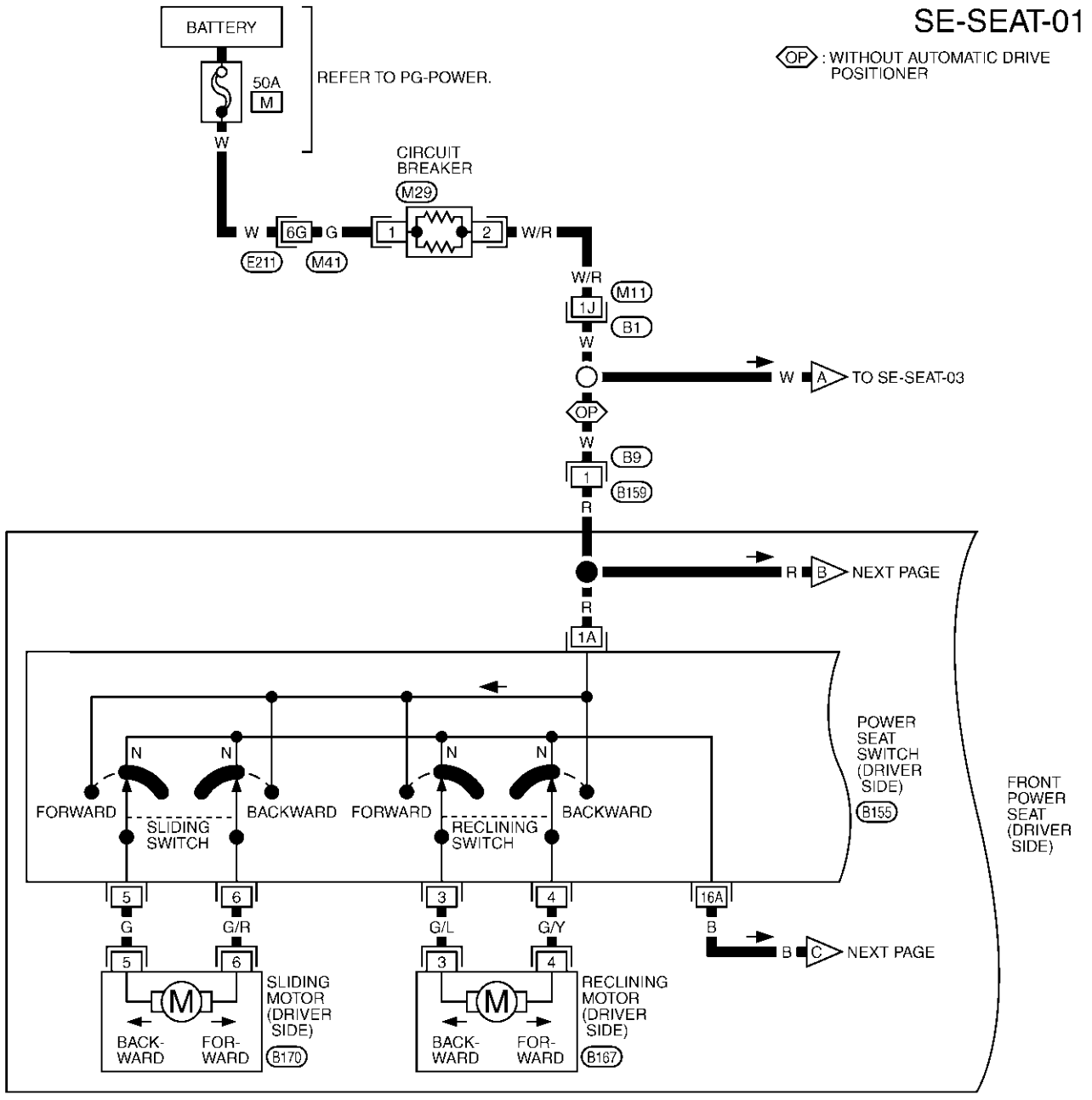
Schematic

AIS003LF



Wiring Diagram–SEAT– for Driver Seat

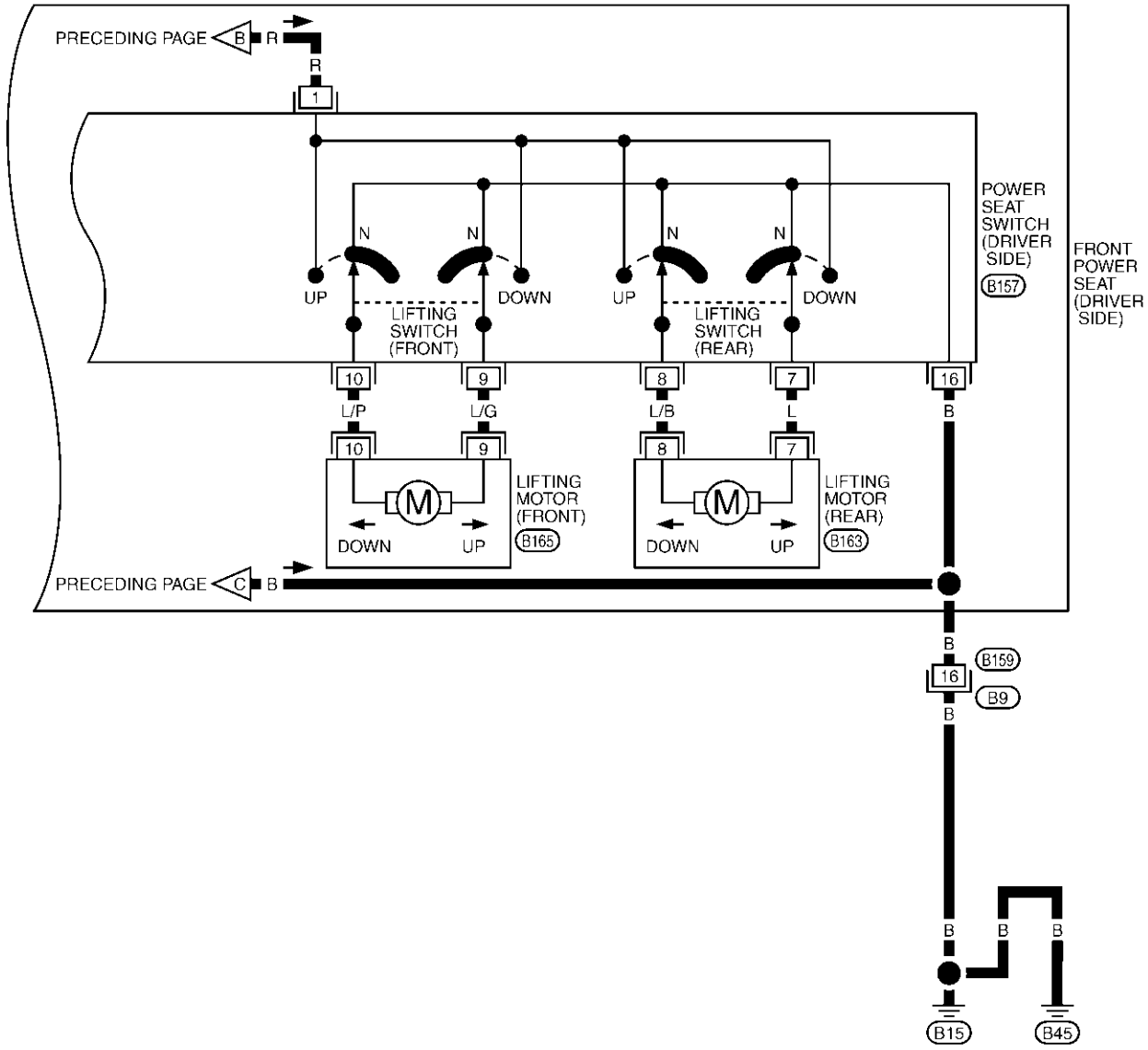
AIS002X1

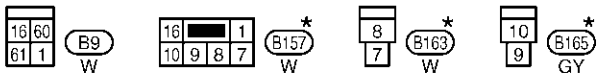


★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM0303E

SE-SEAT-02





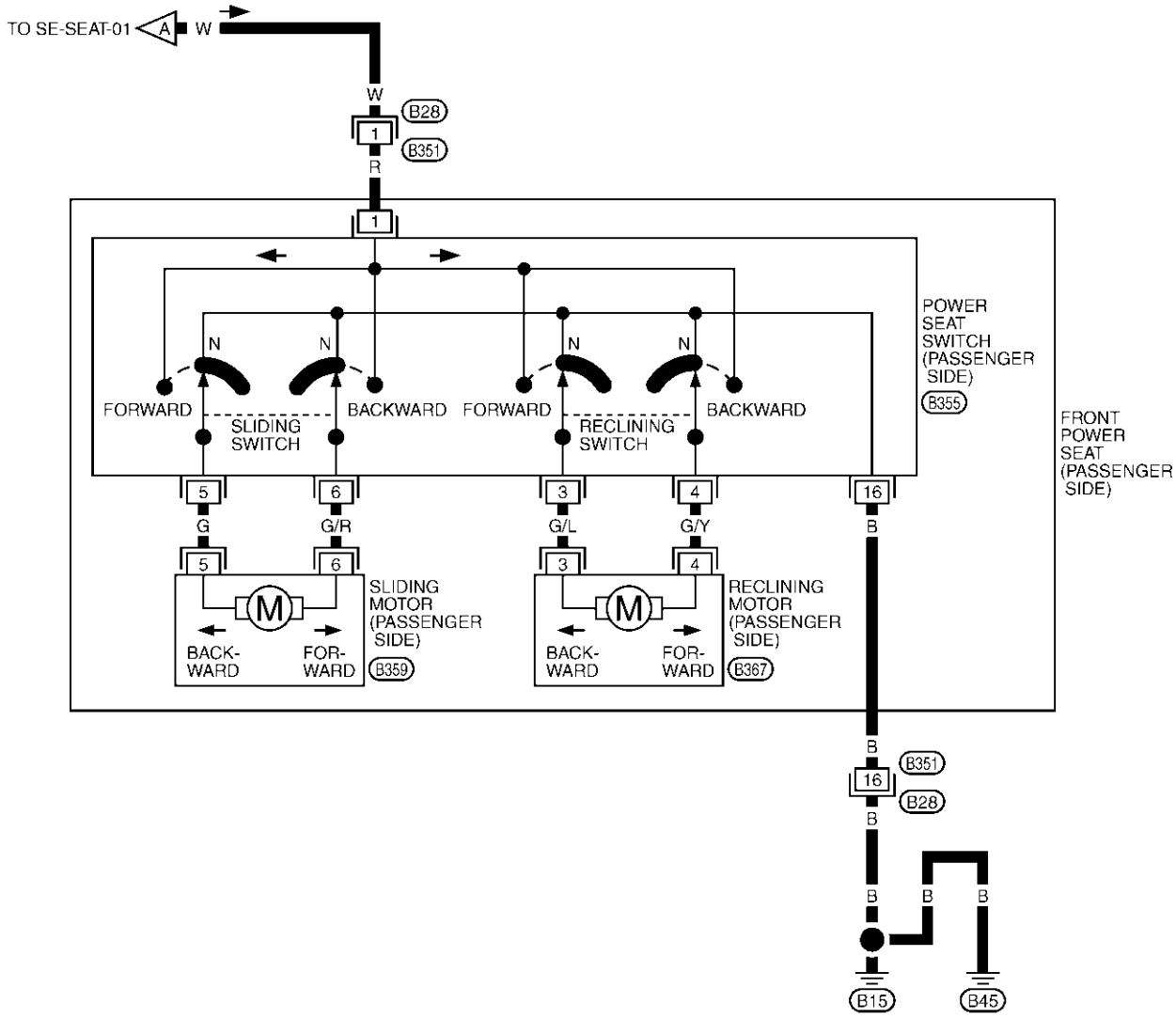
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

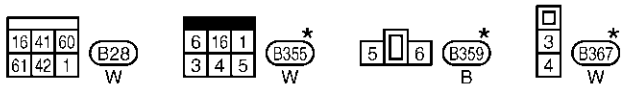
TIWM0304E

Wiring Diagram–SEAT– for Passenger Seat

AIS002X2

SE-SEAT-03





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

TIWM0305E

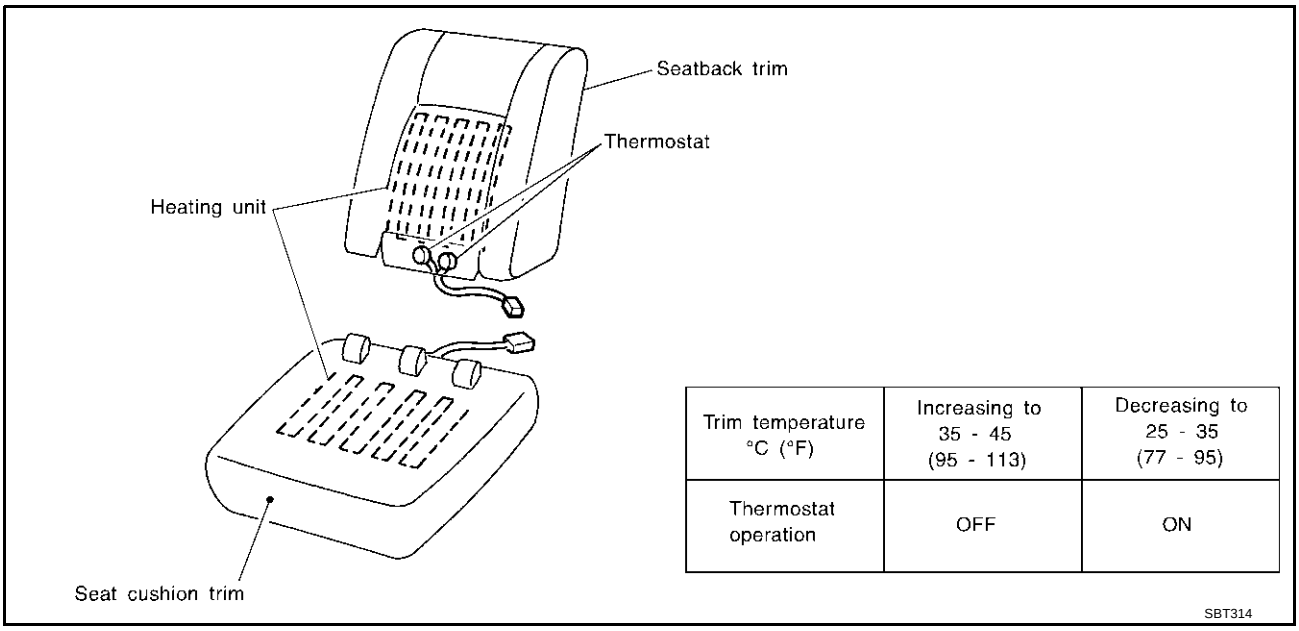
HEATED SEAT

PFP:87335

Description

AIS002X3

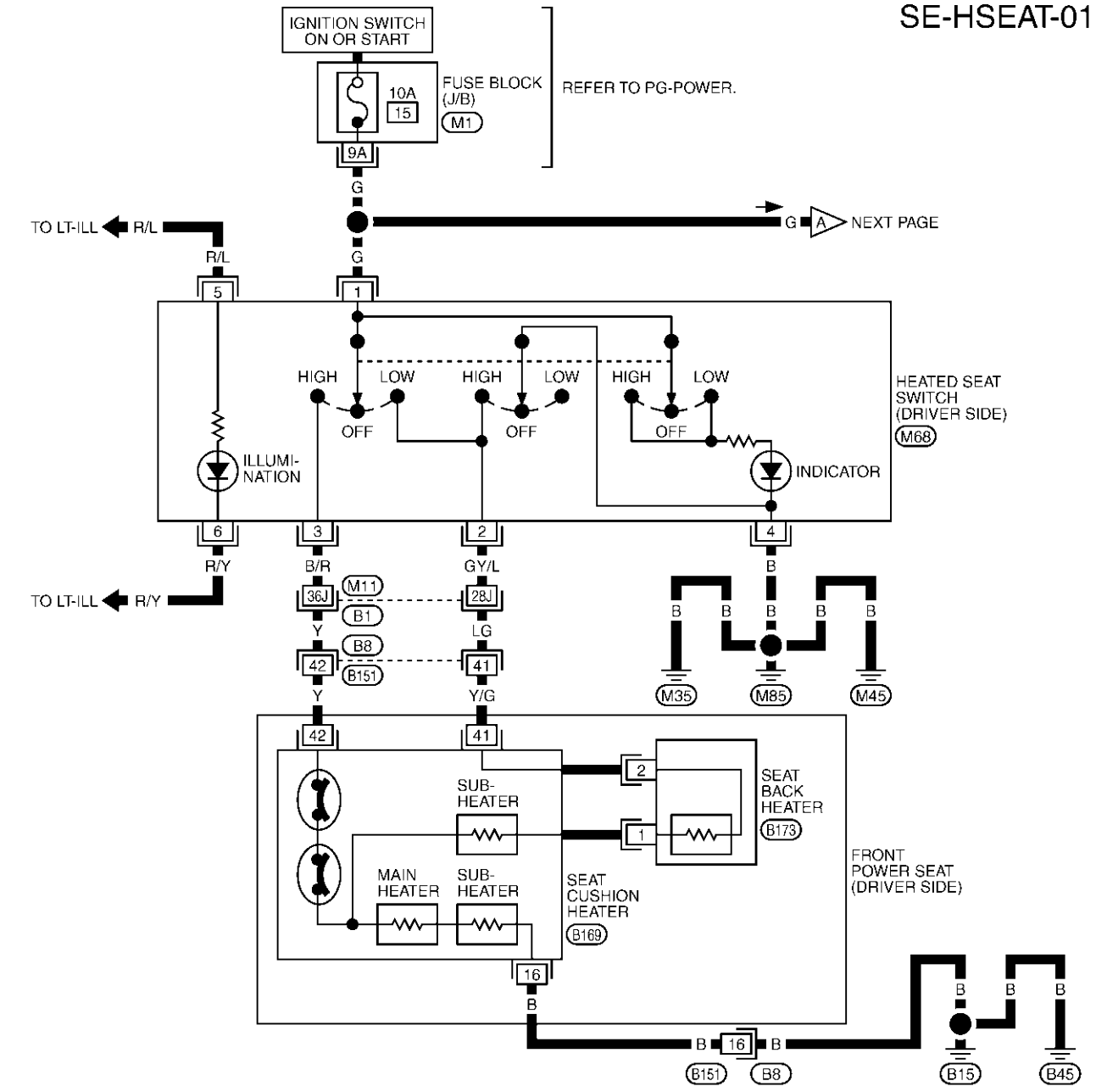
- When handling seat, be extremely careful not to scratch heating unit.
- To replace heating unit, seat trim and pad should be separated.
- Do not use any organic solvent, such as thinner, benzene, alcohol, etc. to clean trims.

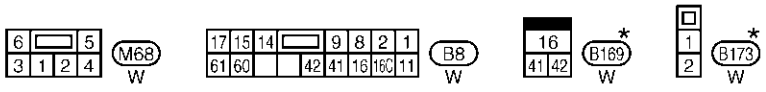


Trim temperature °C (°F)	Increasing to 35 - 45 (95 - 113)	Decreasing to 25 - 35 (77 - 95)
Thermostat operation	OFF	ON

Wiring Diagram – HSEAT –

AIS002X5





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

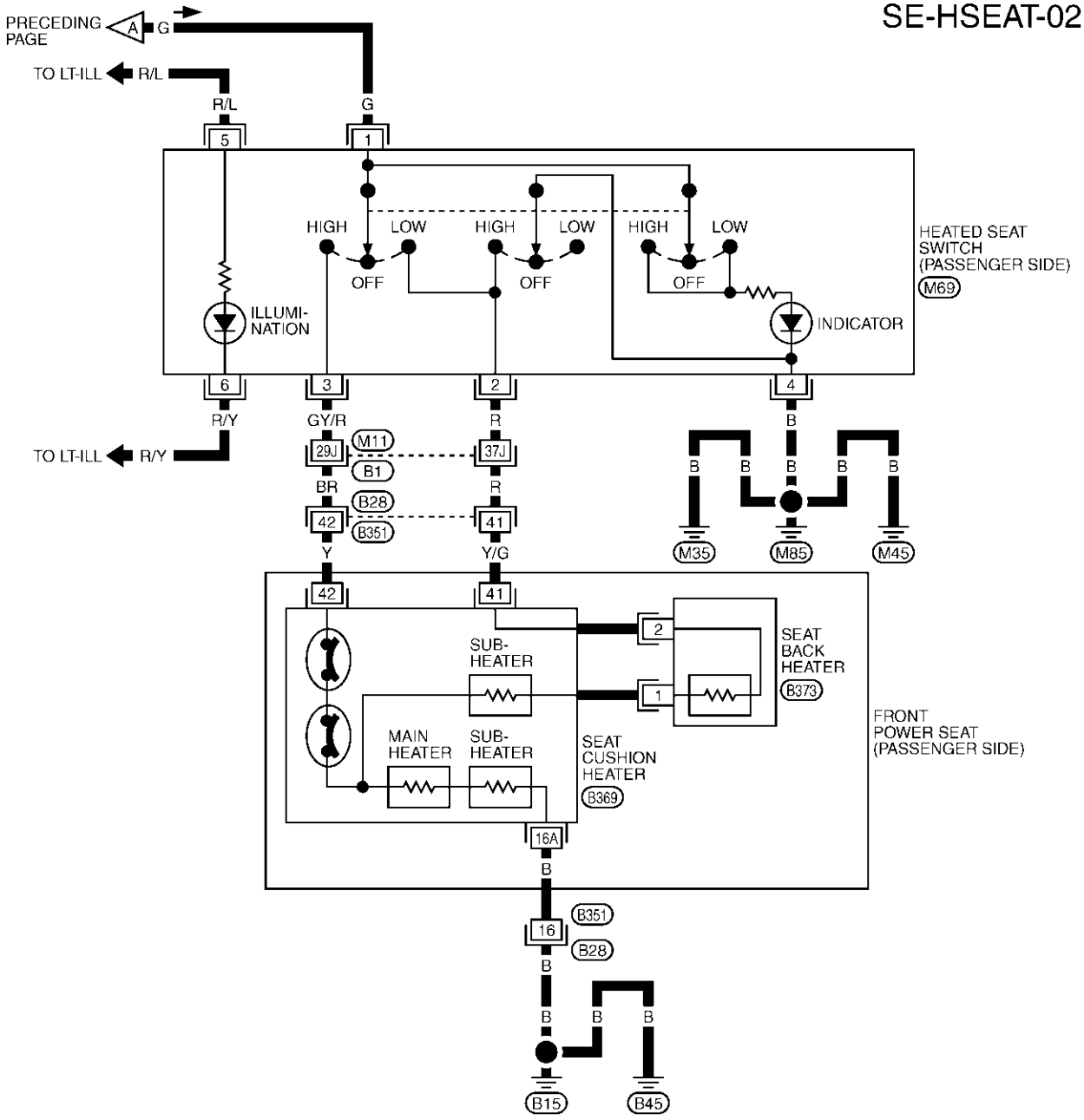
REFER TO THE FOLLOWING.

(B1) -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM0306E

SE-HSEAT-02



M69 BR

B28 W

16A B369 * W

1 B373 * W

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

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

TIWM0307E

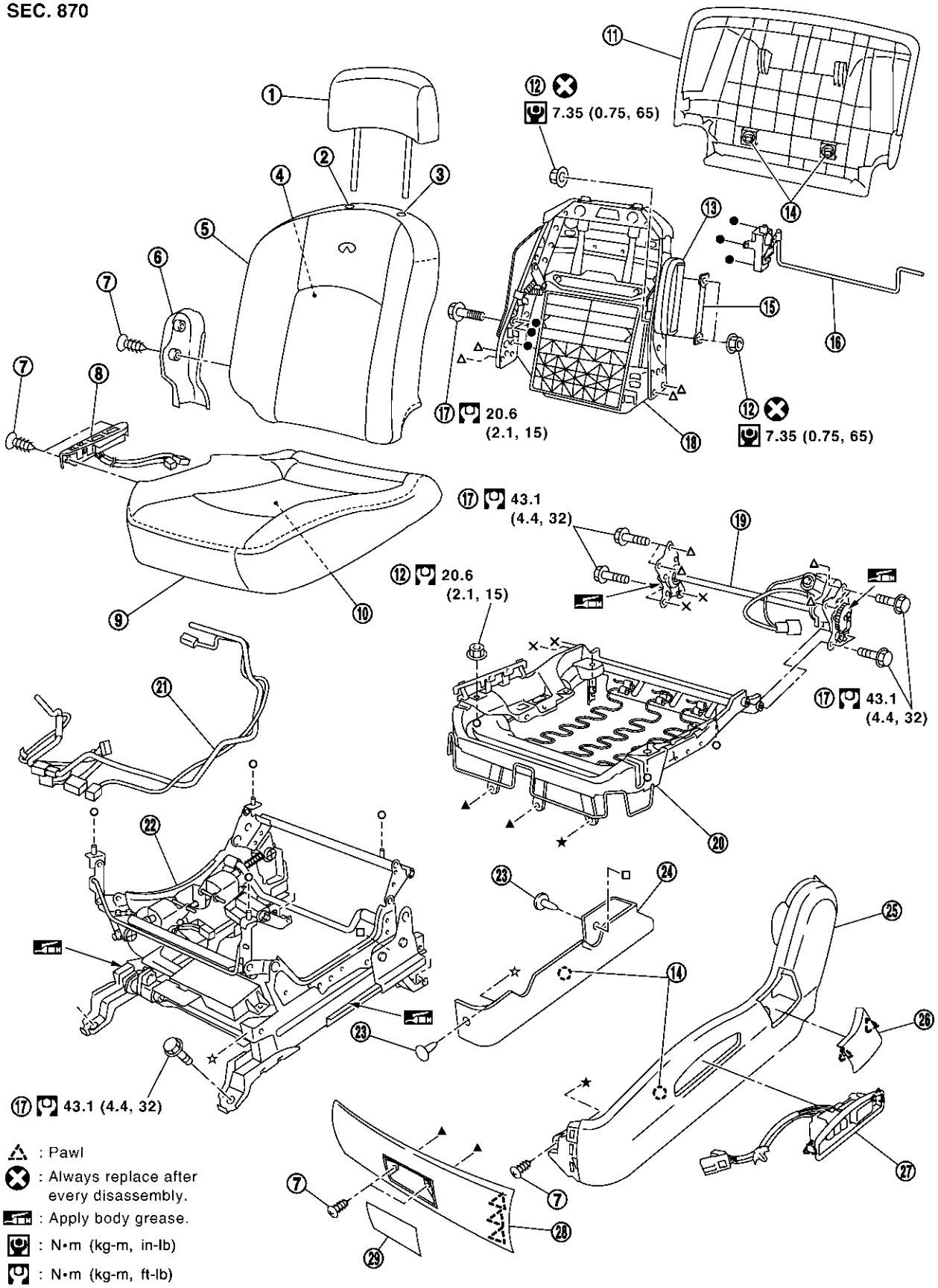
FRONT SEAT

PFP:87000

Removal and Installation

AIS002X6

SEC. 870



1. Headrest
2. Headrest holder (Free)
3. Headrest holder (Looked)
4. Seatback pad
5. Seatback trim
6. Seat cushion inner finisher
7. Screw
8. Power seat switch assembly
9. Seat cushion trim
10. Seat cushion pad
11. Seatback garnish
12. Nut
13. Side air bag module
14. Clip (C101)
15. Inner cloth stay
16. Lumber support device
17. Bolt
18. Seatback frame
19. Reclining device assembly
20. Seat cushion frame
21. Seat harness assembly
22. Seat adjust assembly
23. Clip (C103)
24. Seat adjust assembly cover
25. Seat cushion outer finisher
26. Seat cushion outer finisher cover
27. Power seat memory switch assembly
28. Seat cushion forward finisher
29. Seat cushion forward finisher lid

REMOVAL

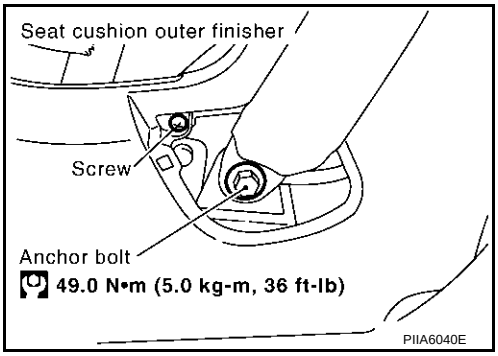
When removing or installing the seat trim, carefully handle it to keep dirt out and avoid damage.

CAUTION:

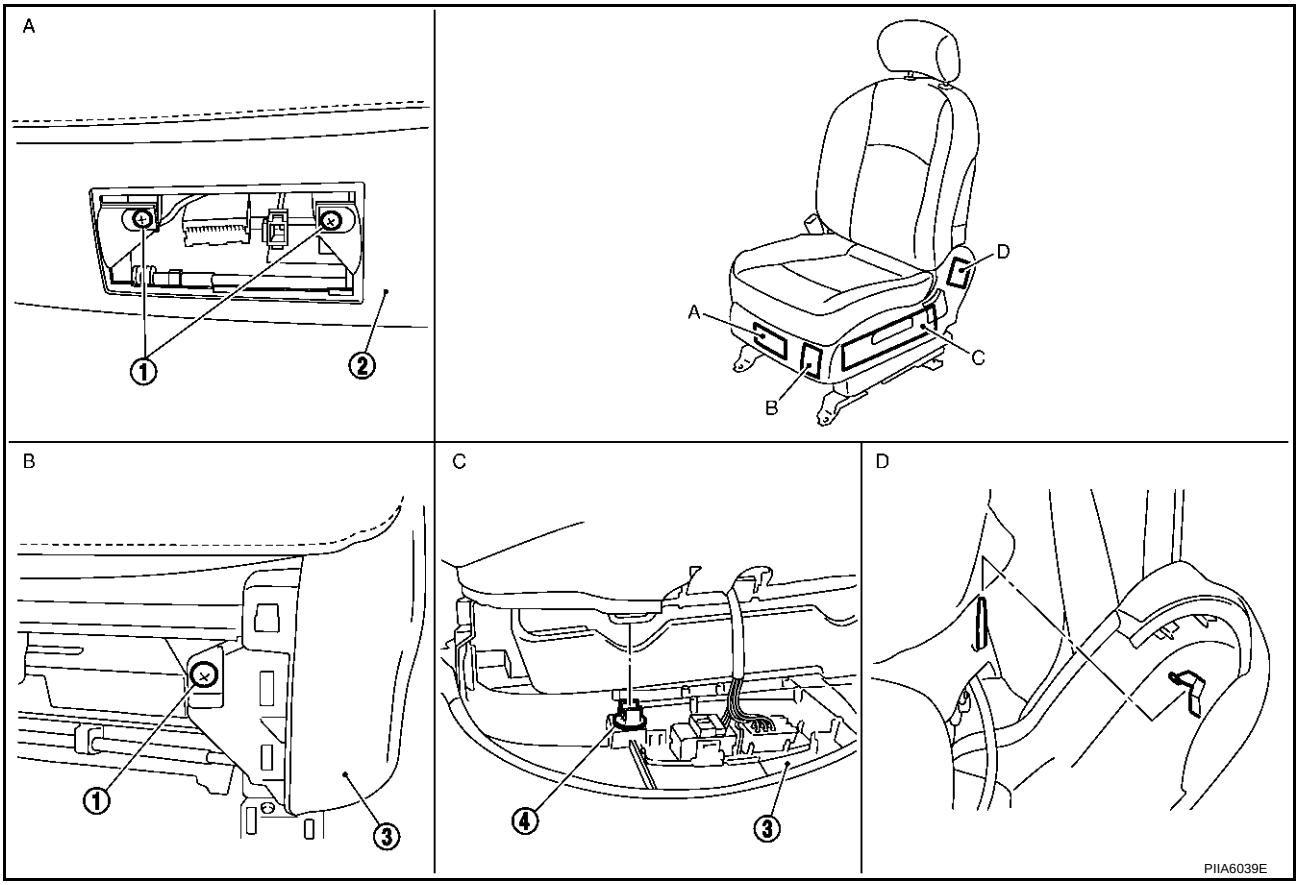
- **Before removing the front seat, turn ignition switch OFF, disconnect both battery cables and wait at least 3 minutes.**
- **When checking the power seat circuit for continuity using a circuit tester, do not confuse its connector with the side air bag module connector. Such an error may cause the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

1. Remove the seat cushion outer finisher cover.
2. Remove the front seat belt anchor bolt. Refer to SB-4, "Removal and Installation of Front Seat Belt" .

   CAUTION:
   Set the front and rear cushion lifter to the down position.
3. Remove the screw.



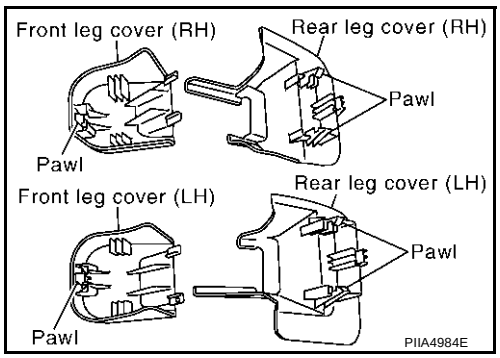
4. Remove the seat cushion forward finisher lid.
5. Remove the seat cushion forward finisher.
6. Remove the seat cushion outer finisher.



1. Screw
2. Seat cushion forward finisher
3. Seat cushion outer finisher
4. Clip(C101)

7. Remove the power seat memory switch assembly.

8. Remove the front and rear leg cover (LH and 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 and RH of the rear leg cover and tabs engaged into the rail. Then pull the cover toward the rear of the vehicle.

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

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

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

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

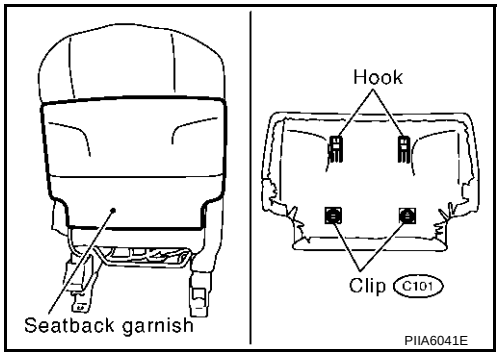
INSTALLATION

Install in the reverse order of removal.

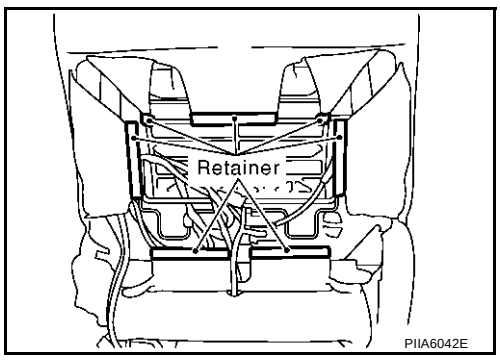
NOTE:
Be sure to insert the rear end tab of the rear leg cover under the rail.

REMOVAL OF SEATBACK TRIM AND PAD

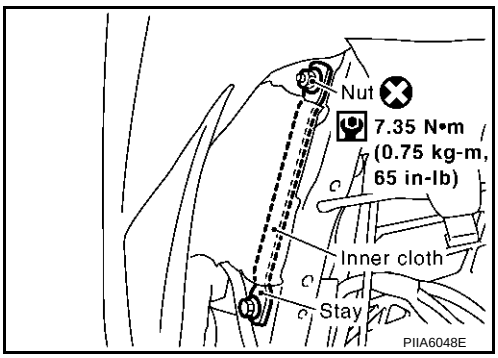
1. Remove the seatback garnish.



2. Remove the retainer.

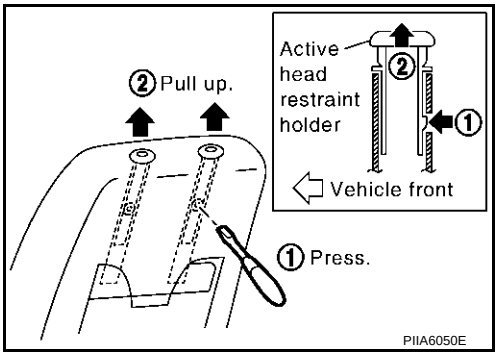


3. Remove the stay securing the inner cloth.

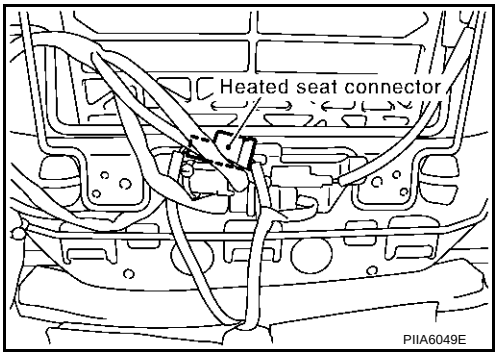


4. Remove the headrest.
5. Remove the headrest holder.
   From the back of the seatback, press the headrest holder tab of the stay pipe hole to disengage. Then pull the headrest holder up to remove.

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



6. Remove the heated seat connector.



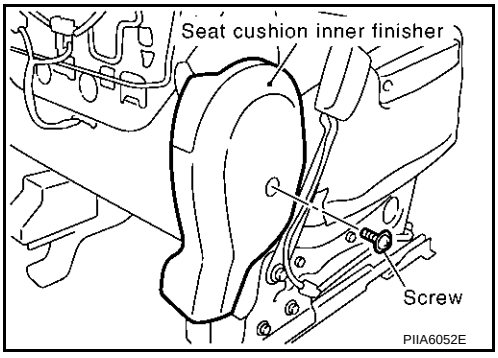
7. After removing the seatback trim and pad, remove the hog rings to separate the trim, pad, and seatback heater unit.

INSTALLATION OF SEATBACK TRIM AND PAD

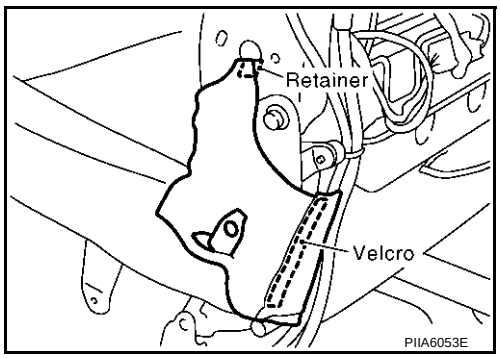
Install in the reverse order of removal.

REMOVAL OF SEAT CUSHION TRIM AND PAD

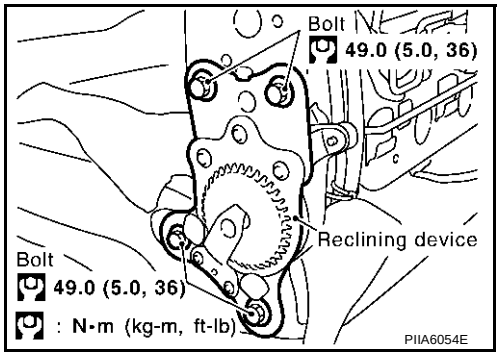
1. Remove the seat cushion inner finisher.



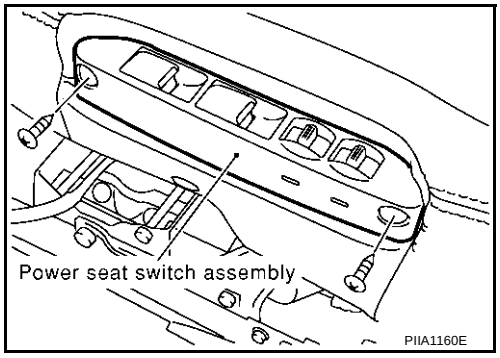
2. Remove the velcro and retainer.



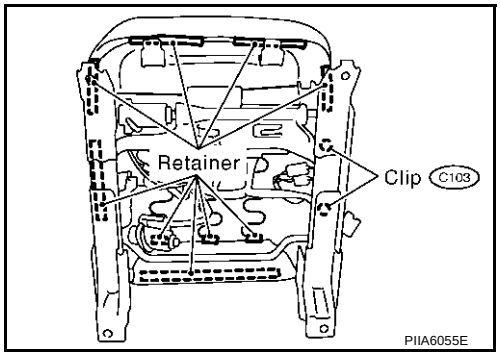
3. Remove the seat harness connector.
4. Remove the seatback frame.
5. Remove the reclining device assembly.



6. Remove the power seat switch assembly.



7. Remove the retainer and clip.



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

INSTALLATION OF SEAT CUSHION TRIM AND PAD

Install in the reverse order of removal.

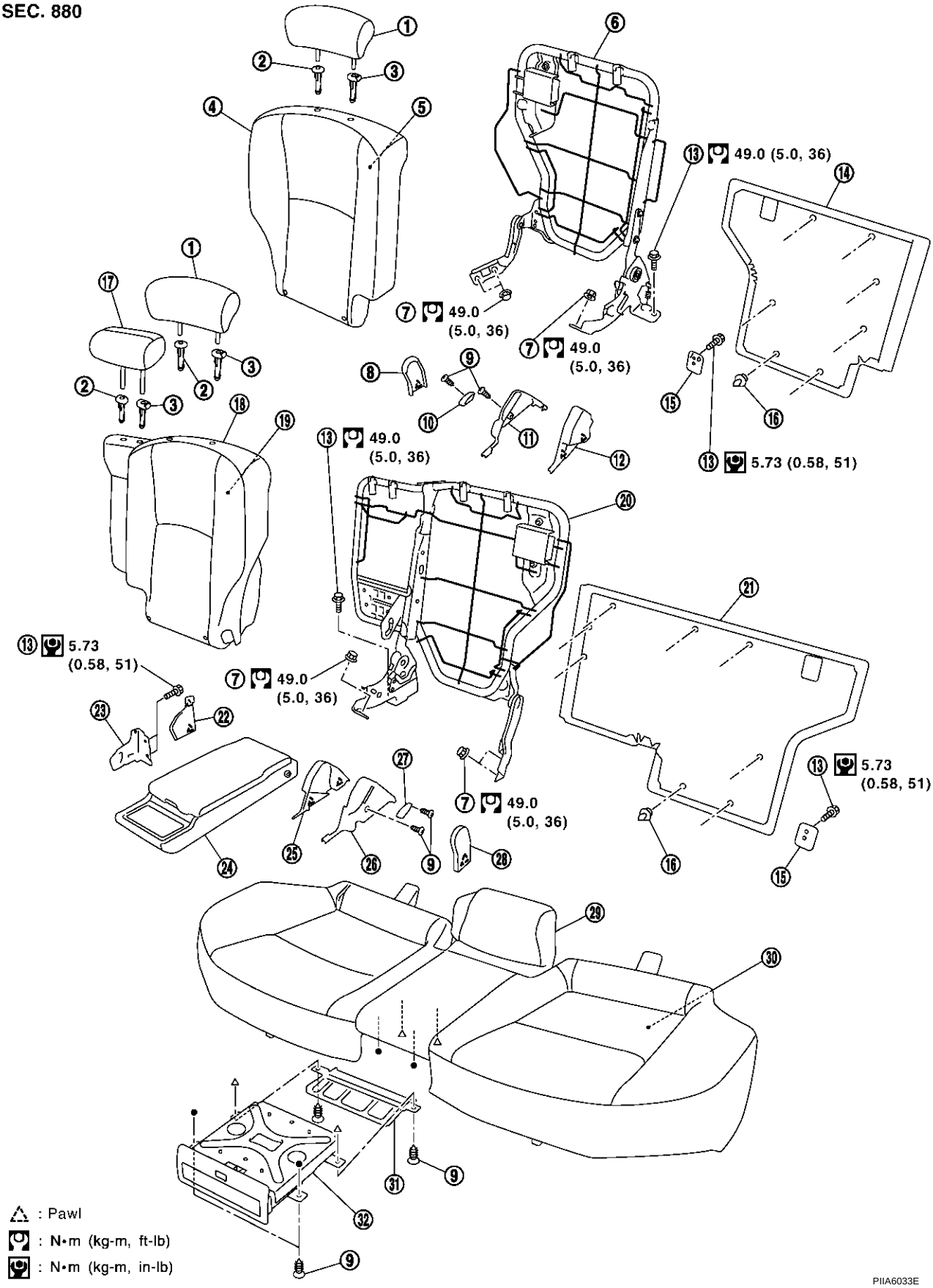
REAR SEAT

PFP:88300

Removal and Installation

AIS002X8

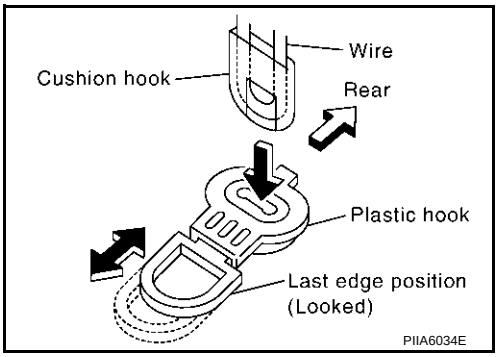
SEC. 880



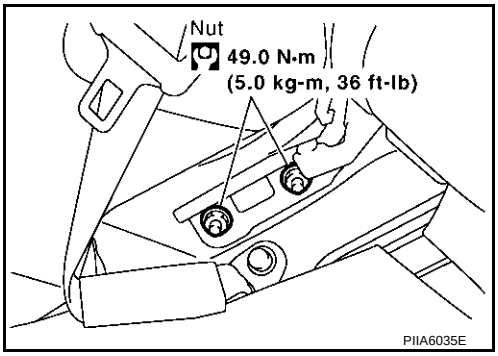
1. Headrest (Side)
2. Headrest holder (Free)
3. Headrest holder (Looked)
4. Seatback trim (RH)
5. Seatback pad (RH)
6. Seatback frame (RH)
7. Nut
8. Seat hinge cover (RH)
9. Screw
10. Reclining lever (RH)
11. Reclining device outer cover (RH)
12. Reclining device inner cover (RH)
13. Bolt
14. Seatback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

REMOVAL

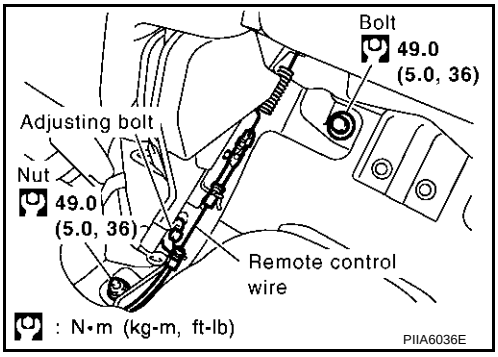
1. Pull the lock at the front bottom of the seat cushion forward (1 for each side), and pull the seat cushion upward to release the wire from the plastic hook, then pull the seat cushion forward to remove.



2. Remove the seatback mounting nuts.



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



INSTALLATION

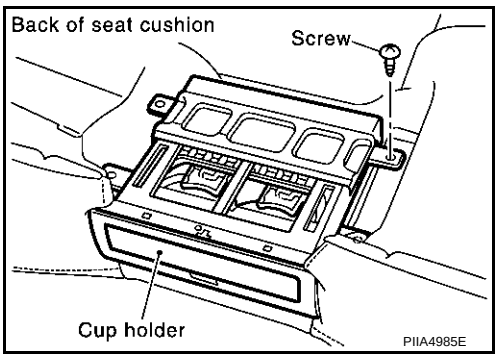
Install in the reverse order of removal.

NOTE:

After rear wheel house finisher is remove the seatback is installed. Refer to EI-44, "Removal and Installation" .

REMOVAL OF SEAT CUSHION TRIM AND PAD

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



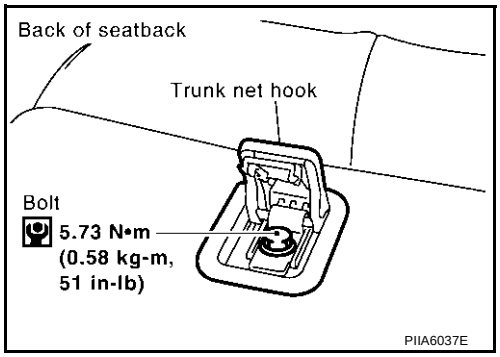
2. Removal the hog rings to separate the trim and pad.

INSTALLATION OF SEAT CUSHION TRIM AND PAD

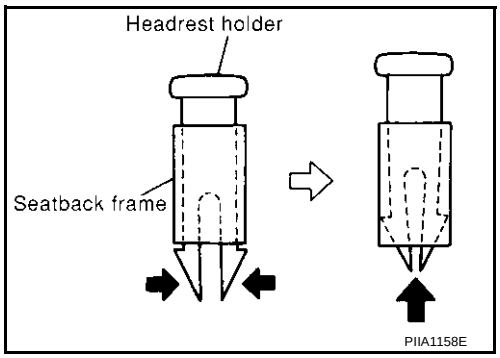
Install in the reverse order of removal.

REMOVAL OF SEATBACK TRIM AND PAD

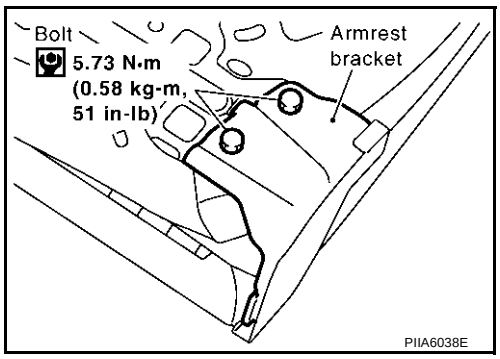
1. Remove the trunk net hook in the back of the seatback.



2. After removing the seatback garnish, remove the hog rings.
3. Remove the headrest.
4. Remove the headrest holder.
   Squeeze and pull up headrest holder tabs to remove from seatback frame.
   NOTE:
   Before installing the headrest holder, check its orientation (front, rear, left and right).



5. Remove the armrest (LH only).

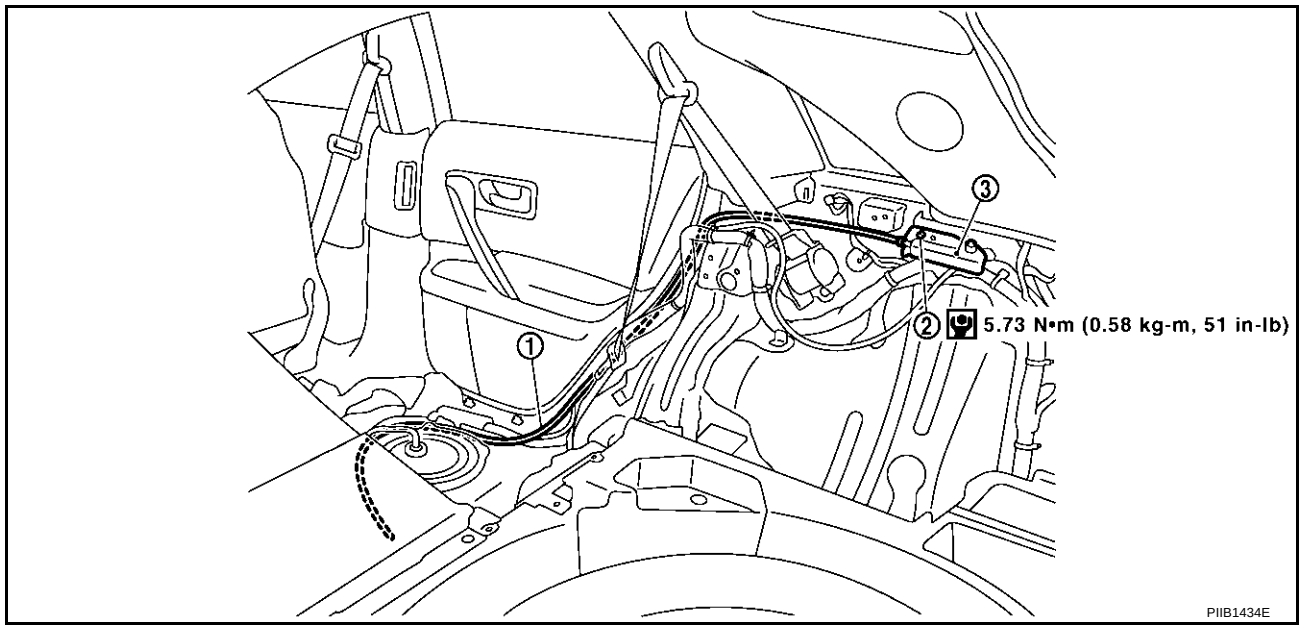


6. After removing the seatback trim and pad, separate the trim and pad.

INSTALLATION OF SEATBACK TRIM AND PAD

Install in the reverse order of removal.

REMOVAL OF REMOTE CONTROL LEVER



1. Remote control wire
2. Bolt
3. Remote control lever

1. Remove the rear seat. Refer to SE-125, "REMOVAL" .
2. Remove the luggage side finisher. Refer to EI-44, "Removal and Installation" .
3. Remove the remote control lever cover.
4. Remove the remote control lever mounting bolt.
5. Remove the remote control lever assembly.

INSTALLATION OF REMOTE CONTROL LEVER

Install in the reverse order of removal.