SECTION SE
SEAT

CONTENTS

PRECAUTIONS

PFP:00001

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

AIS001C5

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

AIS001C4

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

Precautions for Battery Service

AIS004Z8

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

Precautions for Work

AIS001C6

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

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

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

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

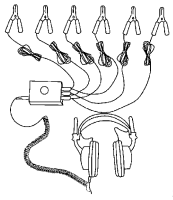
PREPARATION

PFP:00002

Special Service Tools

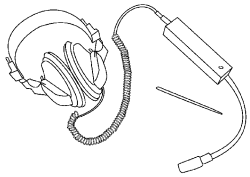
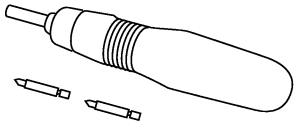
AIS001C7

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

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

Commercial Service Tools

AIS001C8

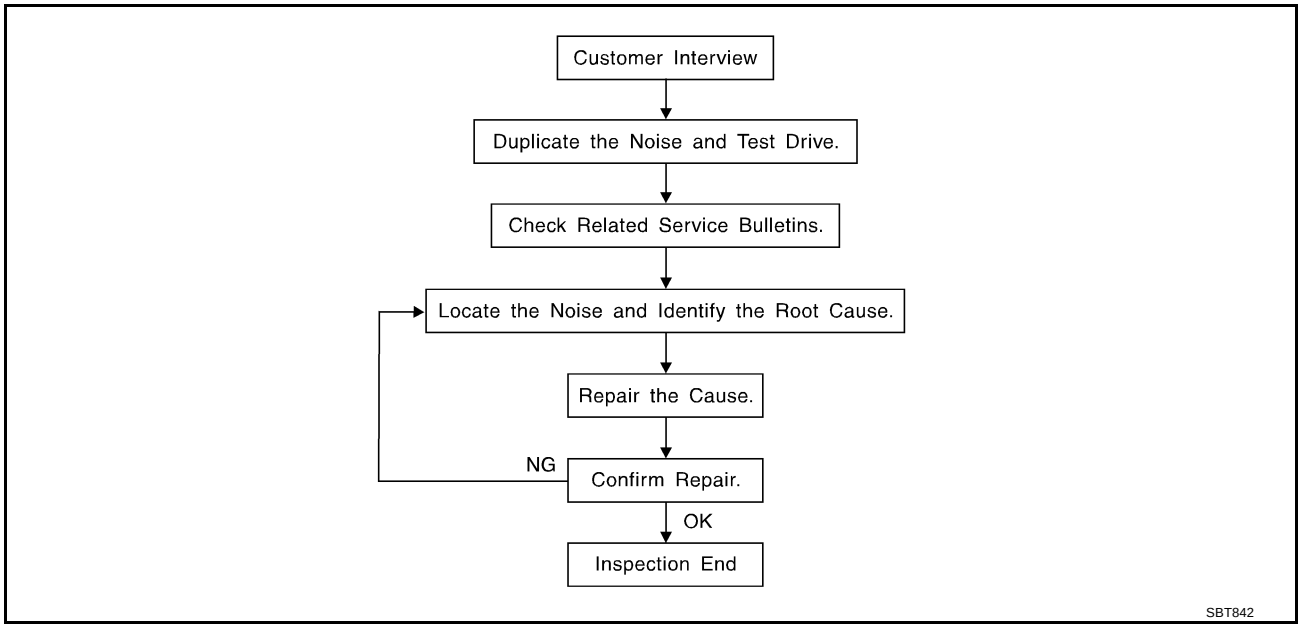
Tool name	Description
Engine ear  SIIA0995E	Locating the noise
Power tool  PBIC0191E	

SQUEAK AND RATTLE TROUBLE DIAGNOSES

PFP:00000

Work Flow

AIS001C9



CUSTOMER INTERVIEW

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

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

DUPLICATE THE NOISE AND TEST DRIVE

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

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

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

CHECK RELATED SERVICE BULLETINS

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

LOCATE THE NOISE AND IDENTIFY THE ROOT CAUSE

1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis Ear: J39570, Engine Ear and mechanics stethoscope).
2. Narrow down the noise to a more specific area and identify the cause of the noise by:

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

REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
  - separate components by repositioning or loosening and retightening the component, if possible.
  - insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J43980) is available through your authorized Nissan Parts Department.

CAUTION:
Do not use excessive force as many components are constructed of plastic and may be damaged.
Always check with the Parts Department for the latest parts information.
The following materials are contained in the Nissan Squeak and Rattle Kit (J43980). Each item can be ordered separately as needed.
URETHANE PADS [1.5 mm (0.059 in) thick]
Insulates connectors, harness, etc.
76268-9E005: 100 × 135 mm (3.94 × 5.31 in)/76884-71L01: 60 × 85 mm (2.36 × 3.35 in)/76884-71L02: 15 × 25 mm (0.59 × 0.98 in)
INSULATOR (Foam blocks)
Insulates components from contact. Can be used to fill space behind a panel.
73982-9E000: 45 mm (1.77 in) thick, 50 × 50 mm (1.97 × 1.97 in)/73982-50Y00: 10 mm (0.39 in) thick, 50 × 50 mm (1.97 × 1.97 in)

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 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

AIS001CA

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

INSTRUMENT PANEL

Most incidents are caused by contact and movement between:

1. The cluster lid A and instrument panel
2. Acrylic lens and combination meter housing
3. Instrument panel to front pillar garnish
4. Instrument panel to windshield
5. Instrument panel mounting pins
6. Wiring harnesses behind the combination meter
7. A/C defroster duct and duct joint

These incidents can usually be located by tapping or moving the components to duplicate the noise or by pressing on the components while driving to stop the noise. Most of these incidents can be repaired by applying felt cloth tape or silicon spray (in hard to reach areas). Urethane pads can be used to insulate wiring harness.

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

CENTER CONSOLE

Components to pay attention to include:

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

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

DOORS

Pay attention to the:

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

Tapping or moving the components or pressing on them while driving to duplicate the conditions can isolate many of these incidents. You can usually insulate the areas with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J43980) to repair the noise.

TRUNK

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

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

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

SUNROOF/HEADLINING

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

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

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

SEATS

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

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

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

UNDERHOOD

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

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

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

Diagnostic Worksheet

AIS001CB

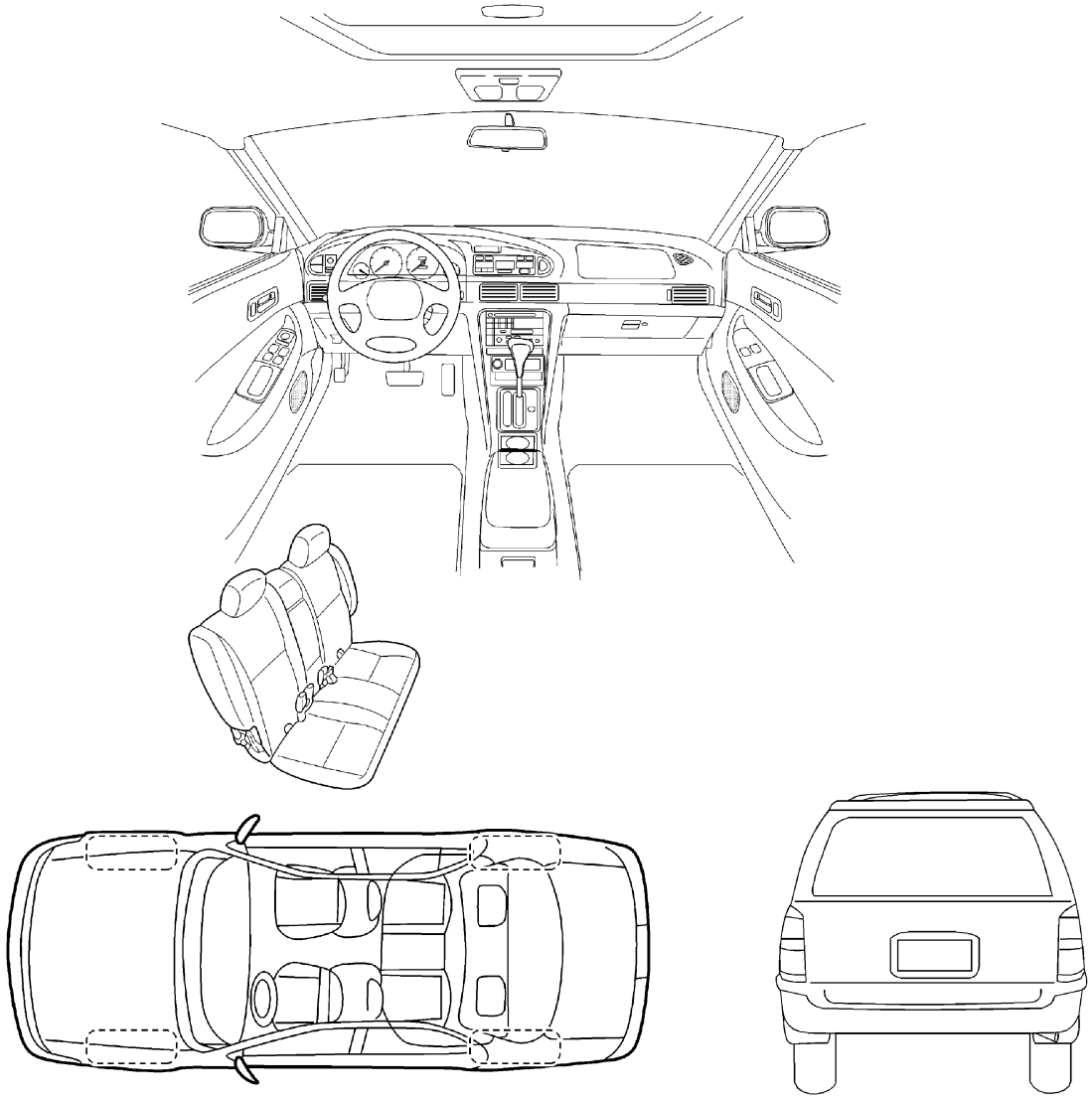
INFINITI®

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

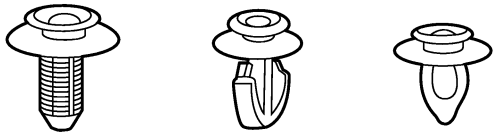
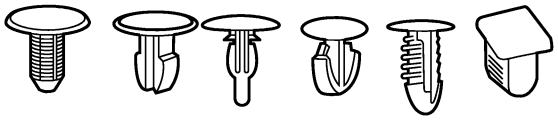
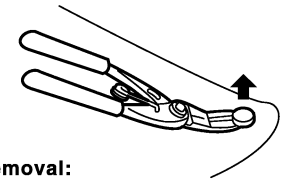
CLIP AND FASTENER

PFP:76906

Description

AIS00270

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

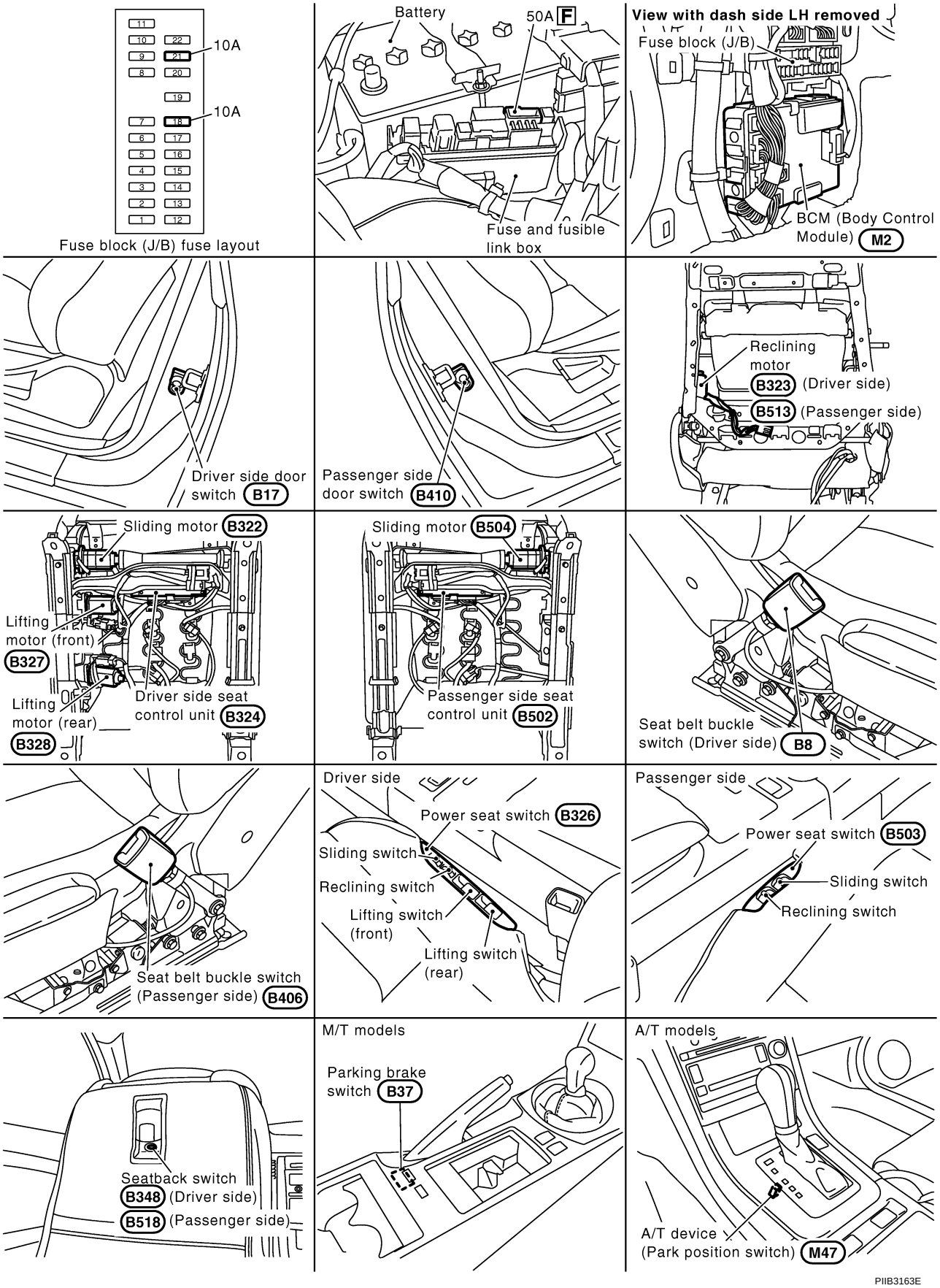
Symbol No.	Shapes	Removal & Installation
C101		**Removal:** Remove by bending up with flat-bladed screwdrivers or clip remover. 
C103		 **Removal:** Remove with a clip remover. PIIA3432E

POWER SEAT

PFP:87016

Component Parts and Harness Connector Location

AIS0028R



System Description

AIS002HE

POWER WORK–IN SYSTEM

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

FORWARD OPERATION

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

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

BACKWARD OPERATION

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

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

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

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

CONDITION OF POWER WALK-IN SYSTEM OPERATING PERMISSION

Common of driver side and passenger side condition

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

Condition only of driver side

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

OPERATION STOP CONDITION OF POWER WORK–IN SYSTEM

Common of driver side and passenger side condition

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

Condition only of driver side

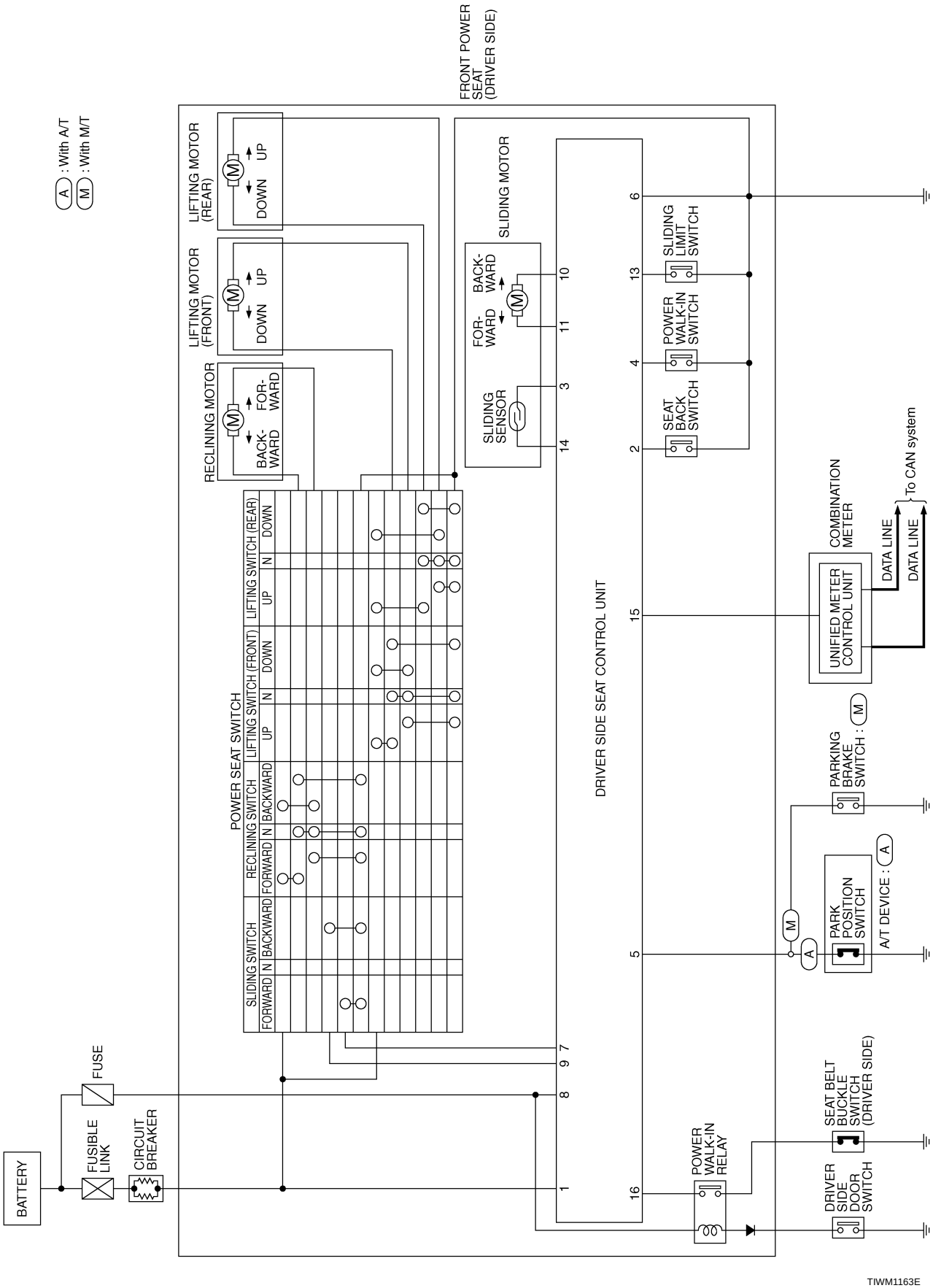
- When shift lever besides P position. (with A/T models)
- When release the parking brake. (with M/T modes)

Condition only of passenger side

- When seat belt is fastened.

Schematic/For Driver Seat

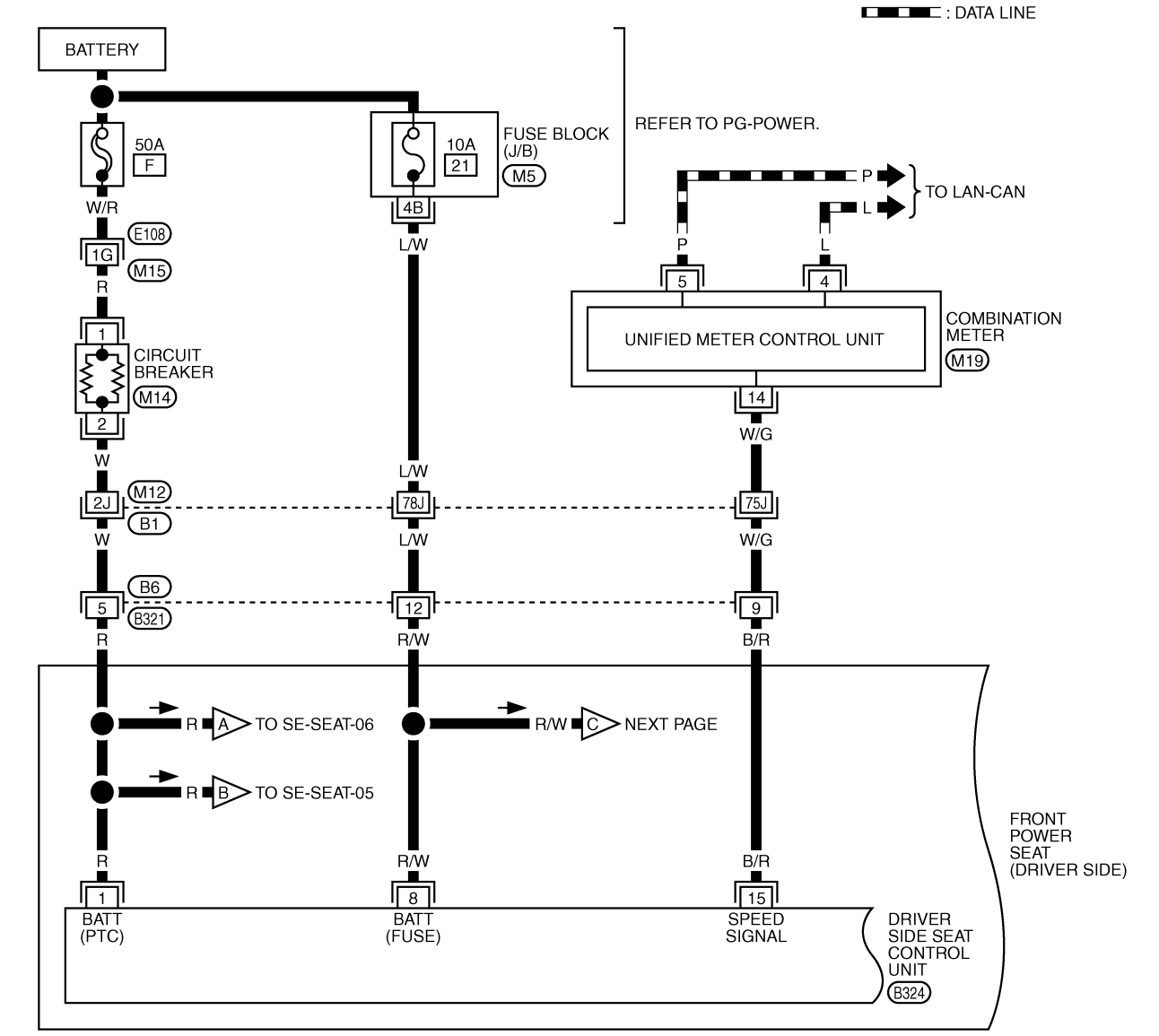
AIS0028T

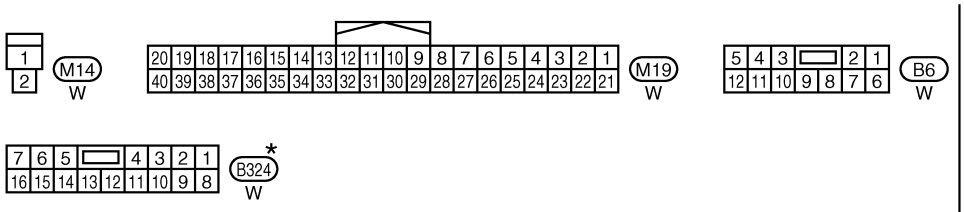


Wiring Diagram–SEAT– /For Driver Seat

AIS001CI

SE-SEAT-01



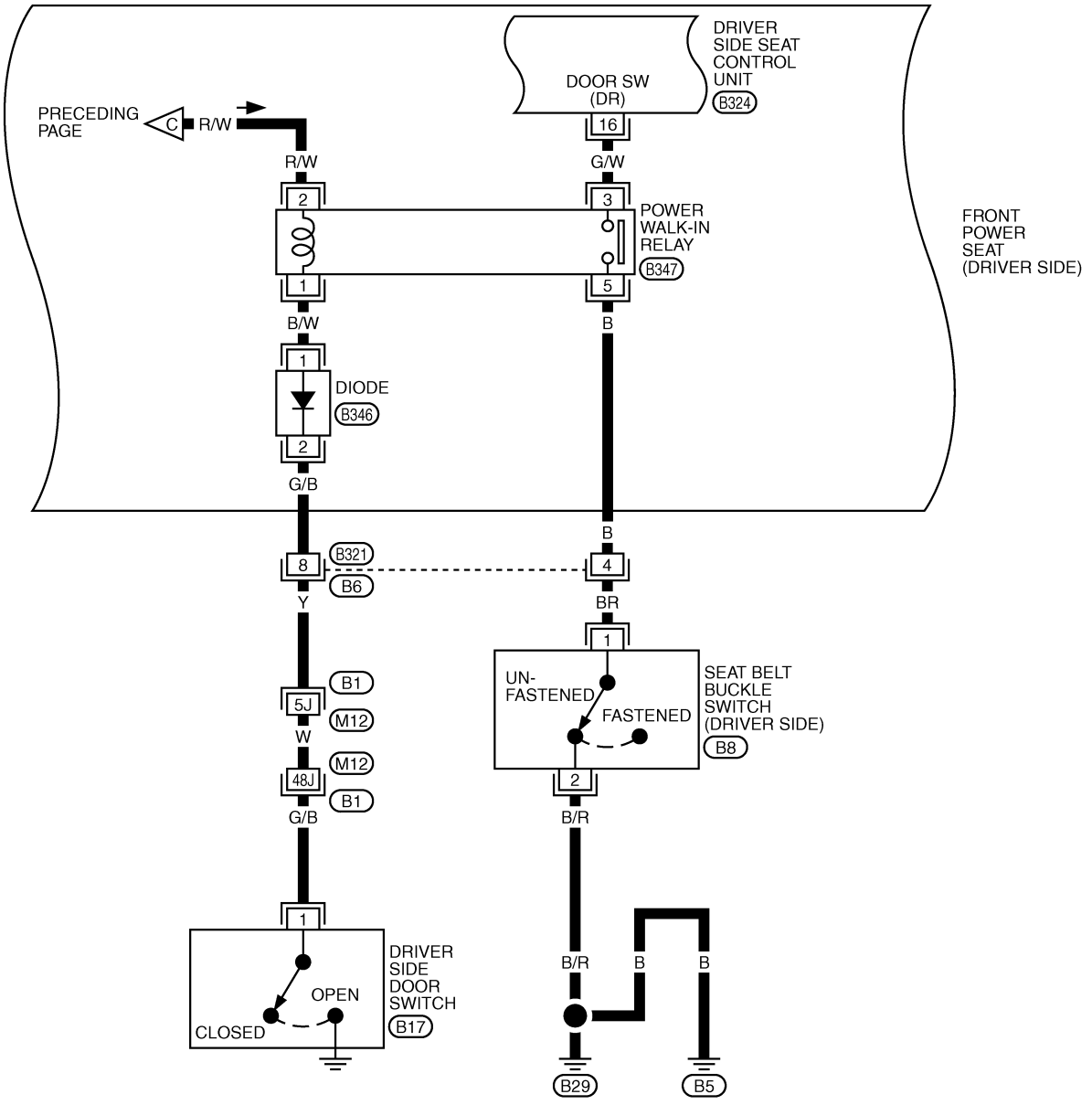


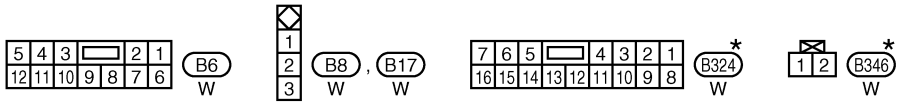
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

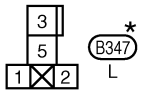
REFER TO THE FOLLOWING.
E108 , B1 -SUPER MULTIPLE JUNCTION (SMJ)
M5 -FUSE BLOCK-JUNCTION BOX (J/B)

TIWM1015E

SE-SEAT-02





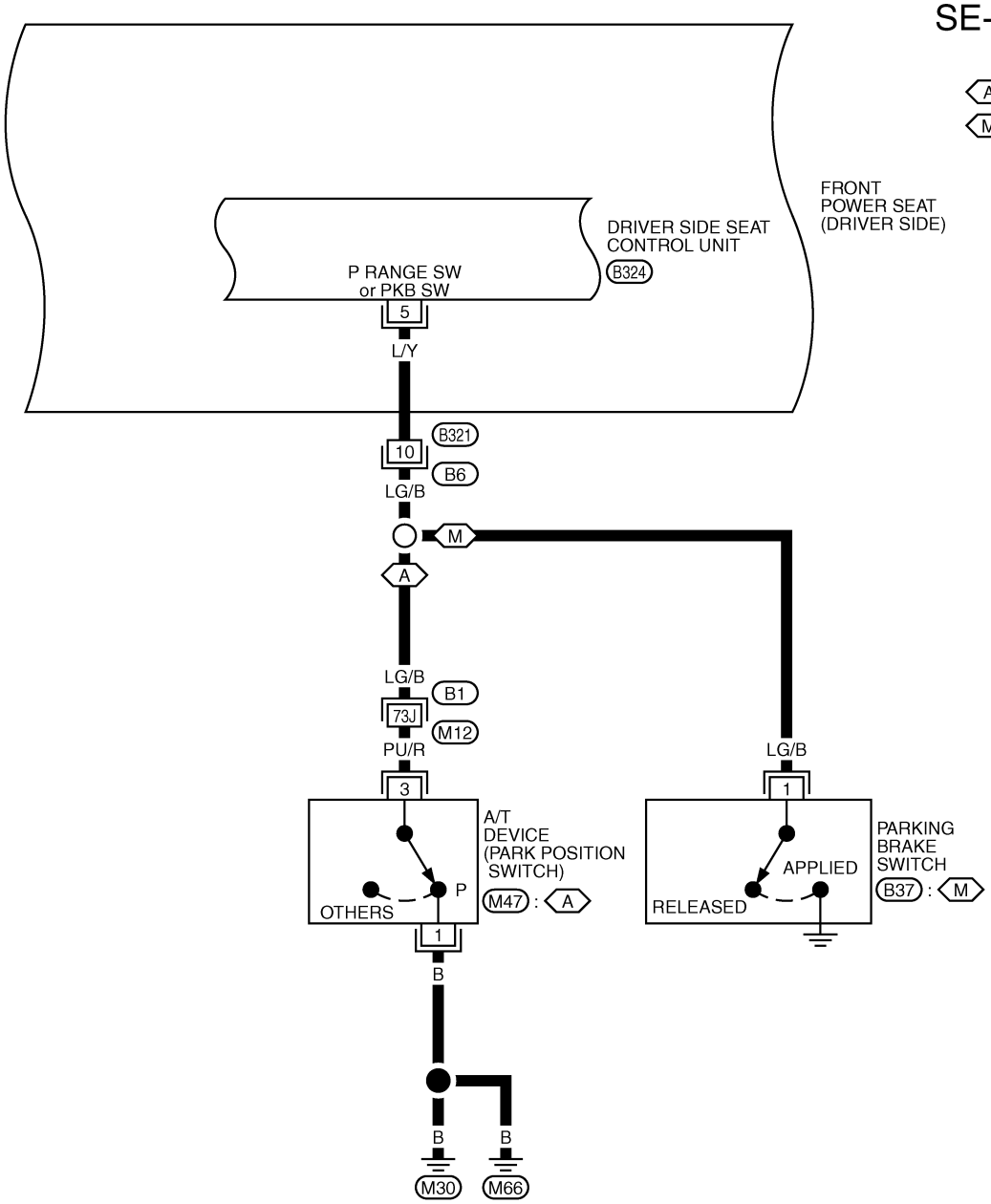


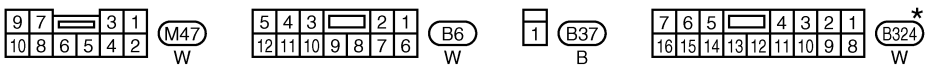
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

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

TIWM1016E

SE-SEAT-03





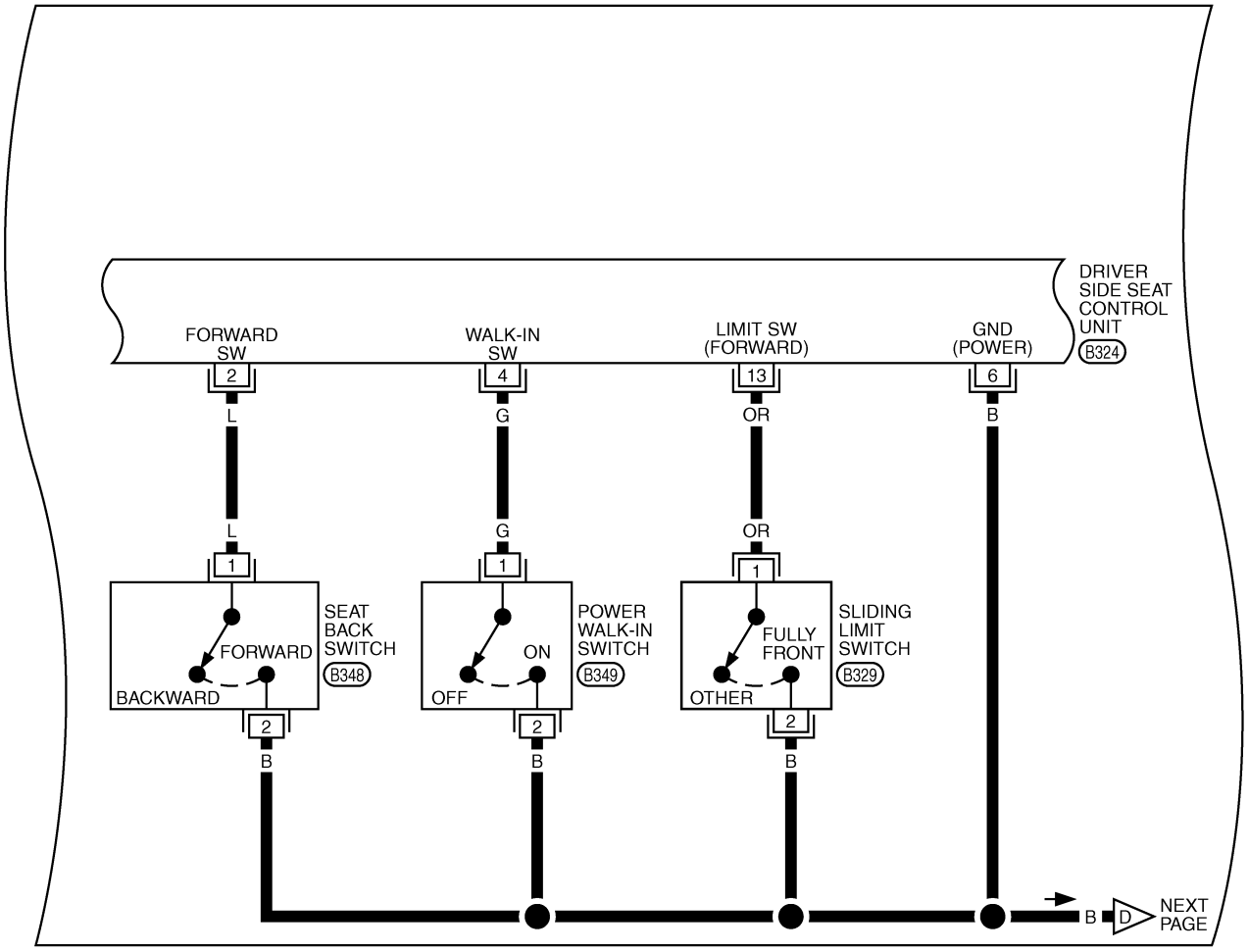
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

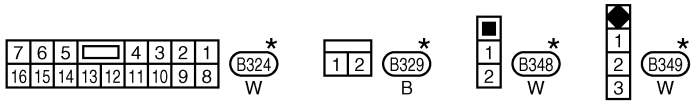
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1017E

SE-SEAT-04

FRONT POWER SEAT (PASSENGER SIDE)

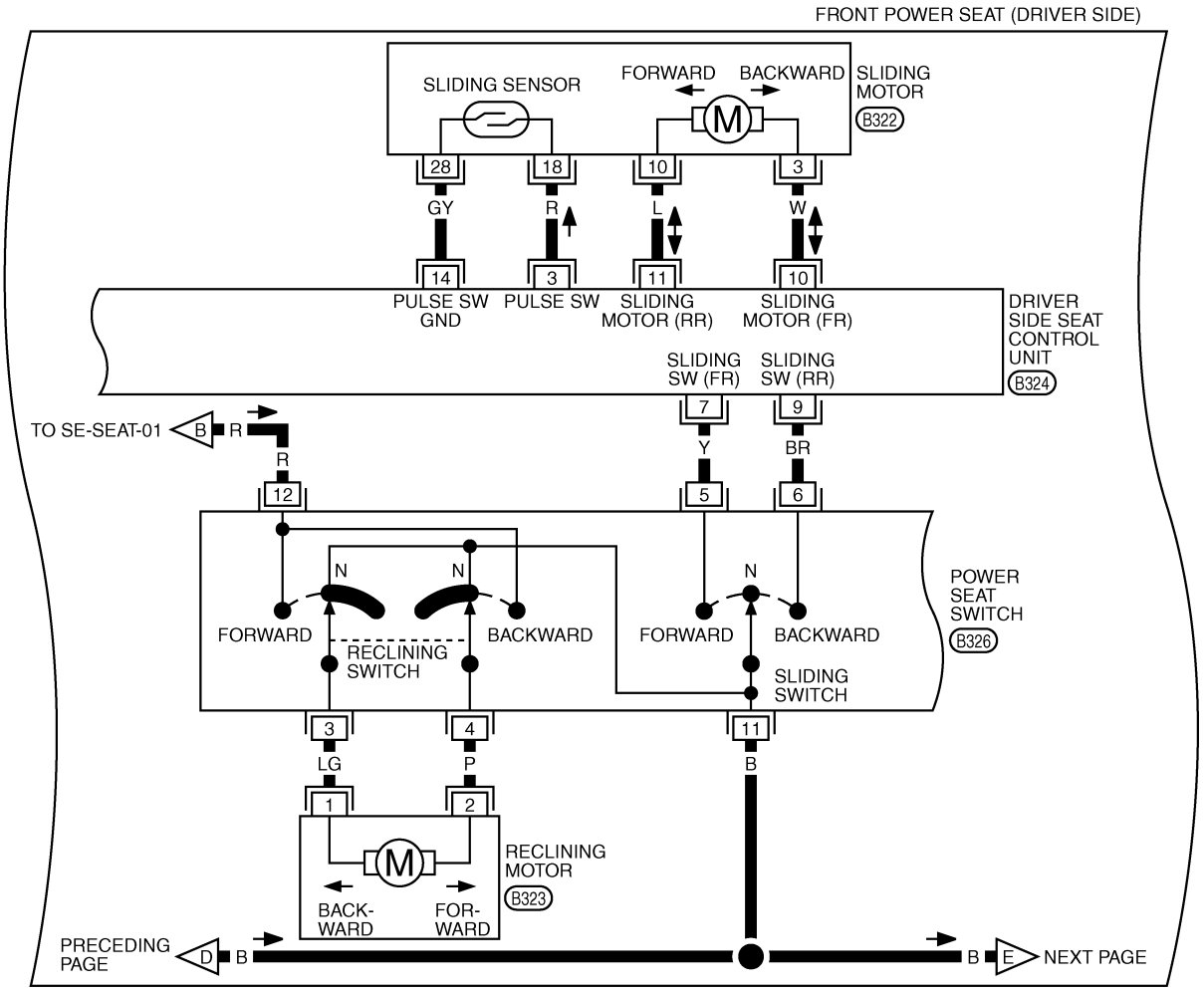


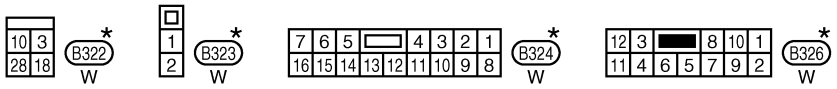


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1018E

SE-SEAT-05

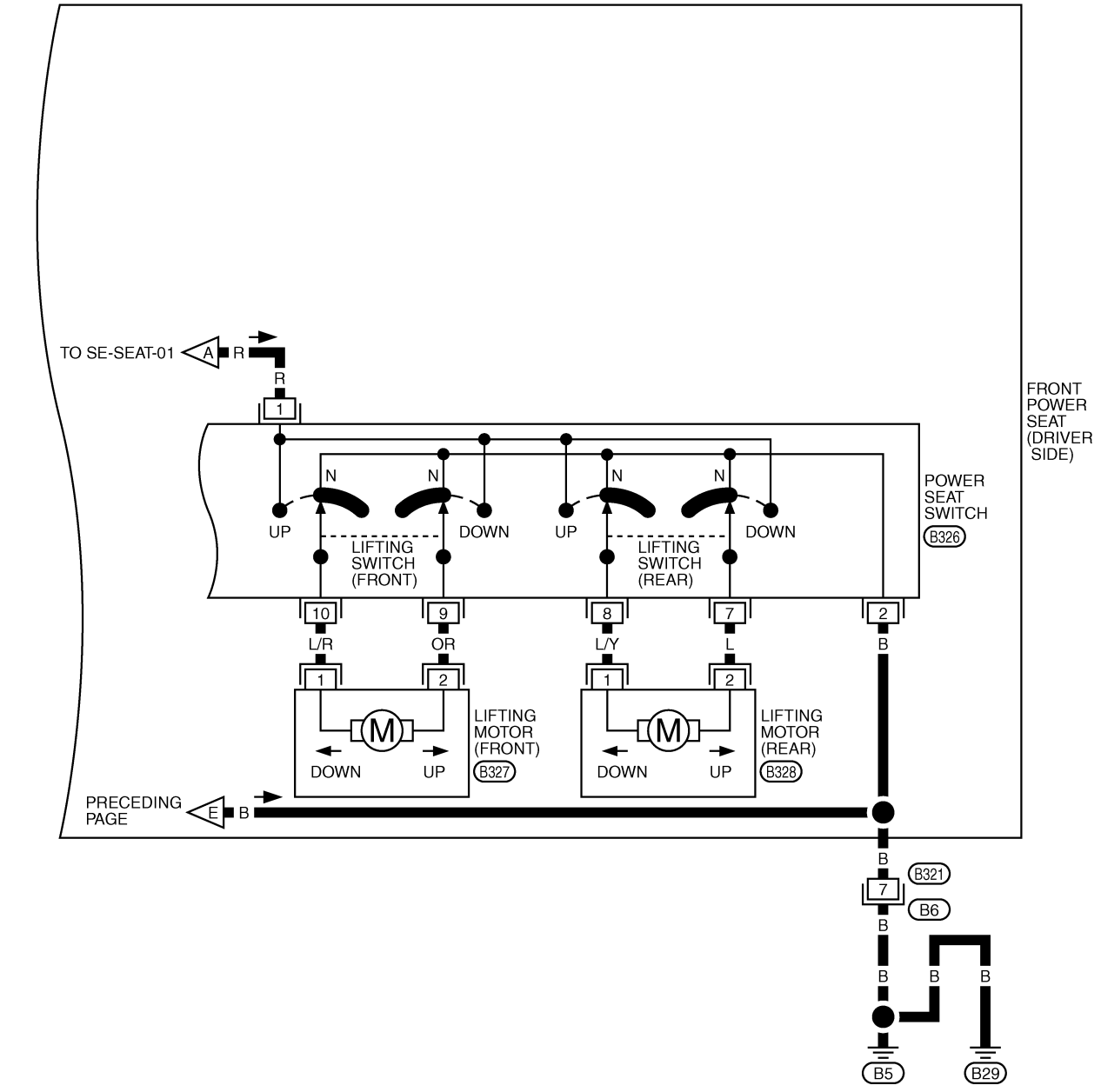


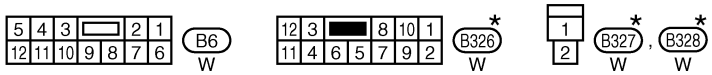


★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1159E

SE-SEAT-06



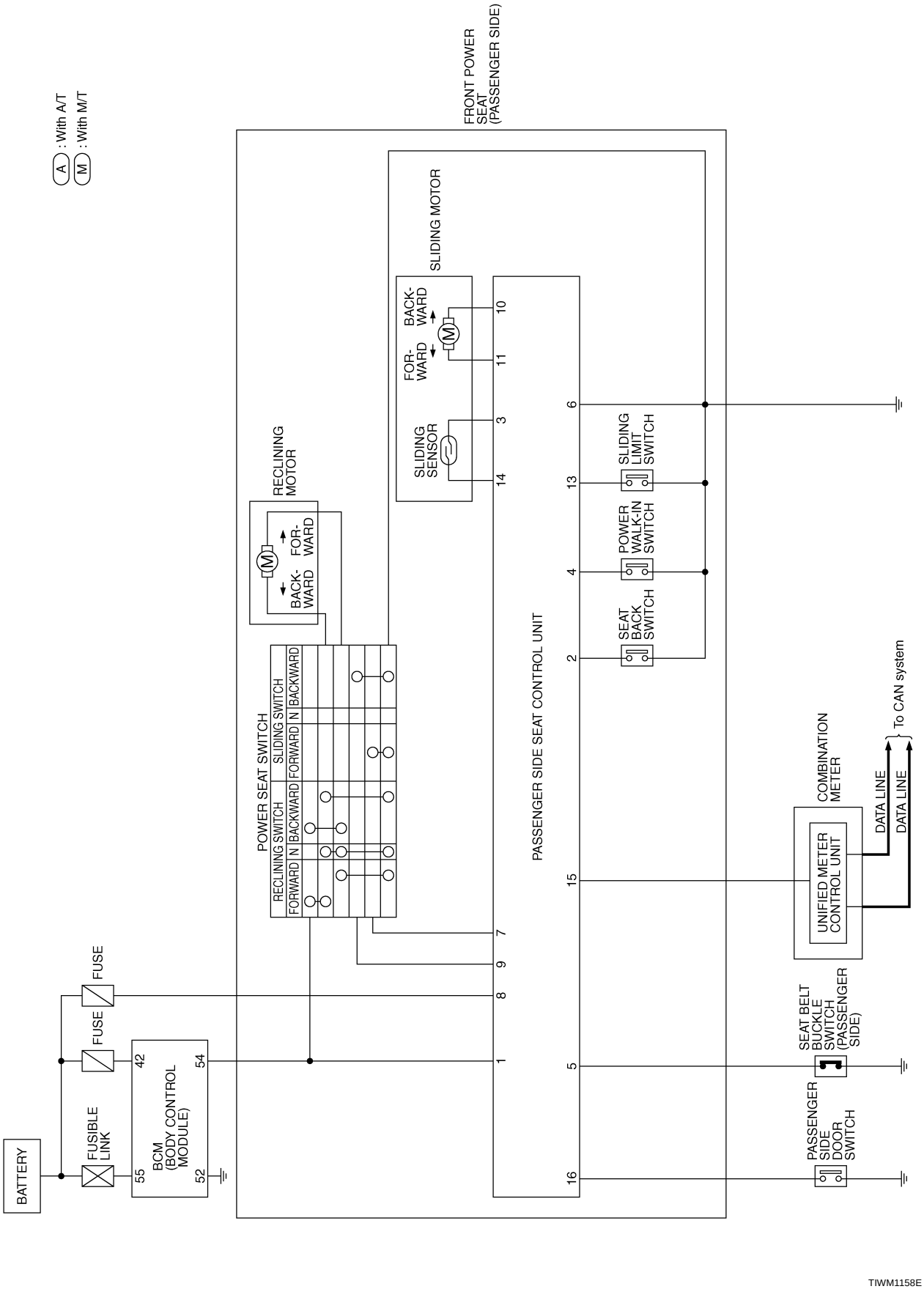


*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1160E

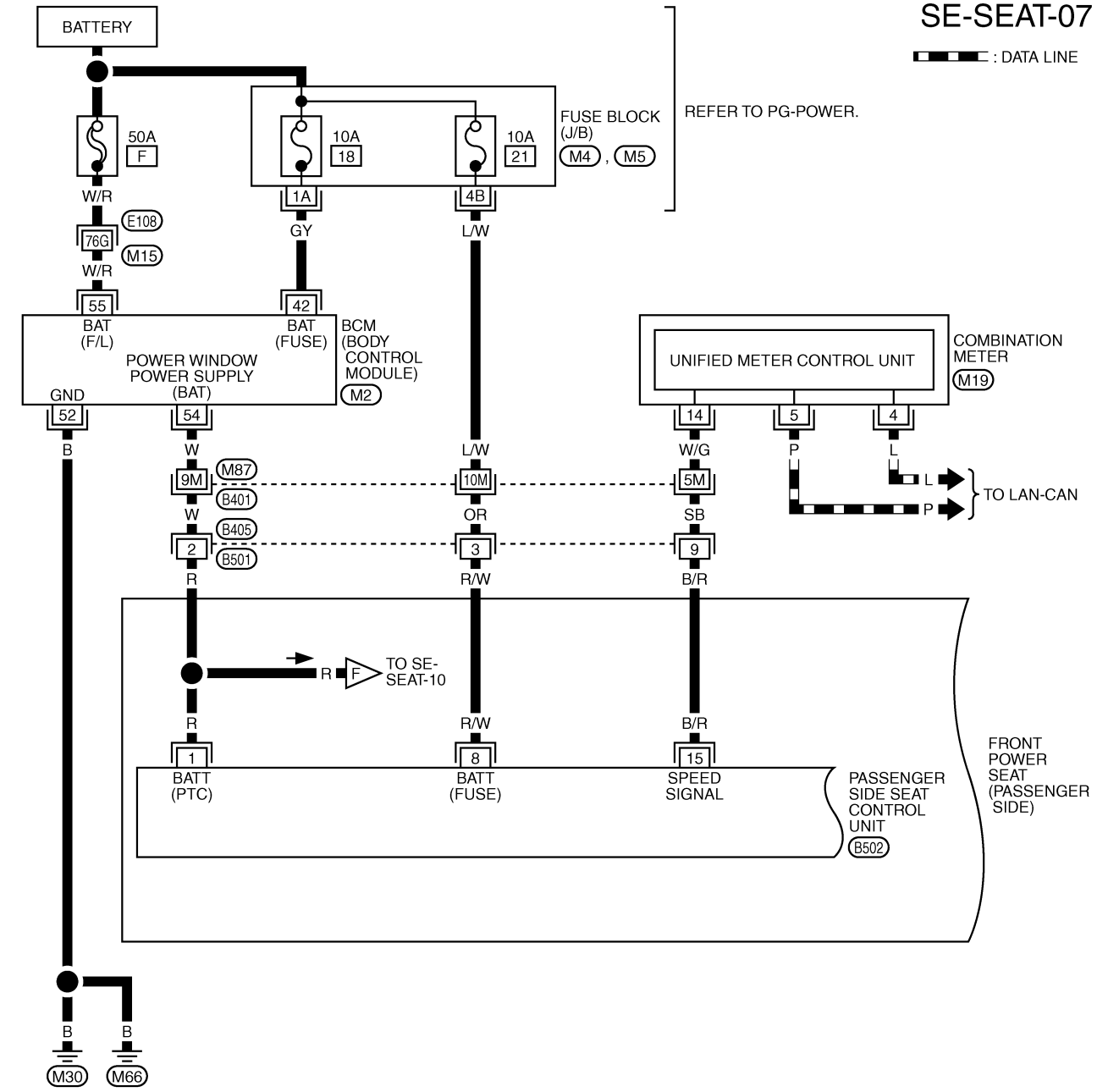
Schematic/For Passenger Seat

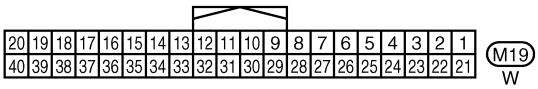
AIS006D7

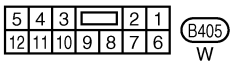


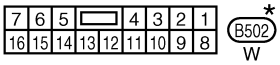
Wiring Diagram–SEAT– /For Passenger Seat

AIS001CJ









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

REFER TO THE FOLLOWING.

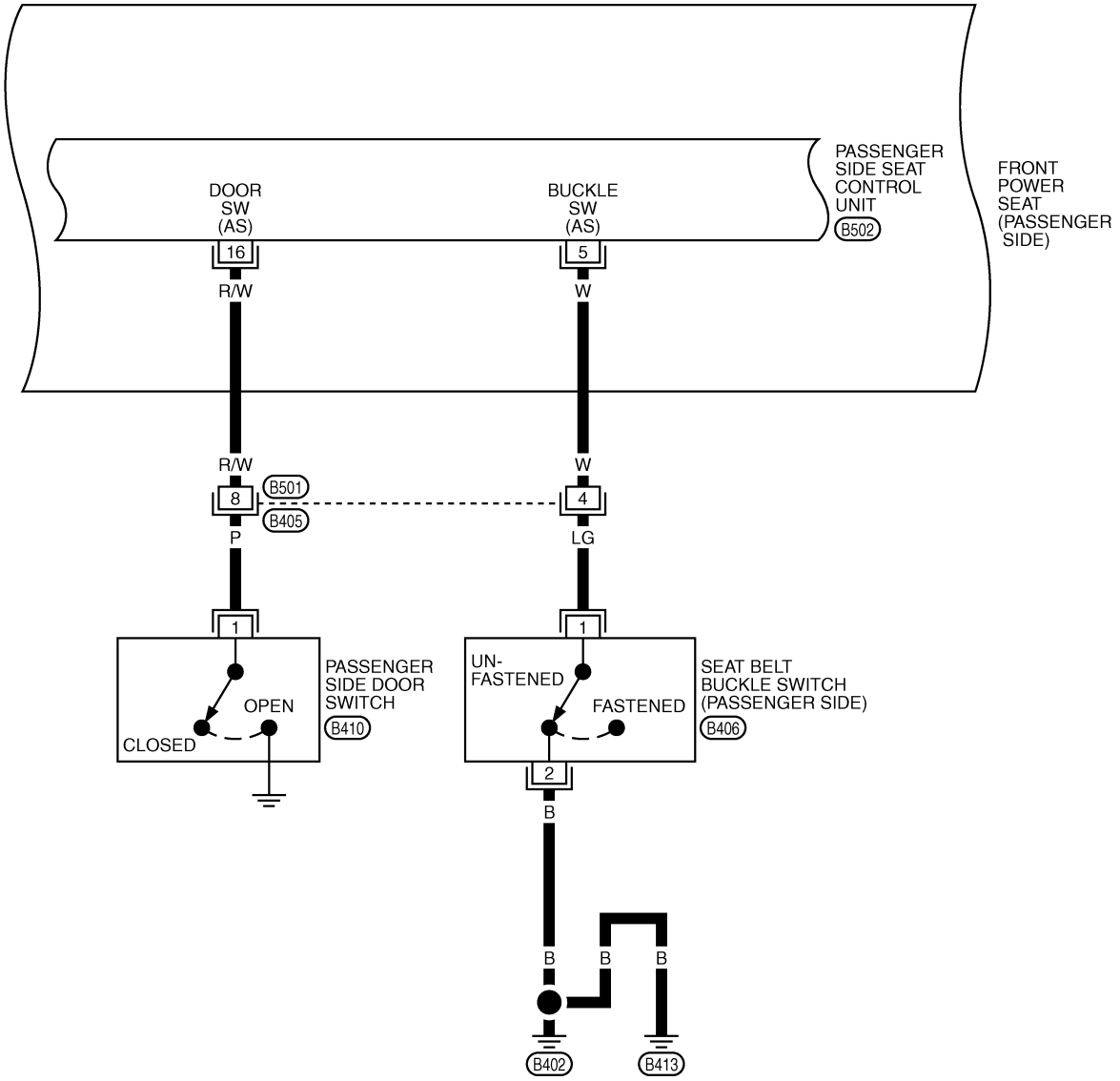
E108 , B401 -SUPER MULTIPLE JUNCTION (SMJ)

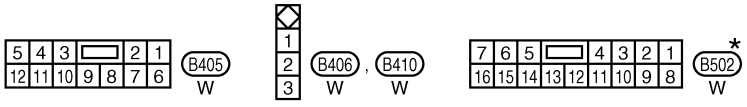
M4 , M5 -FUSE BLOCK-JUNCTION BOX (J/B)

M2 -ELECTRICAL UNITS

TIWM1019E

SE-SEAT-08



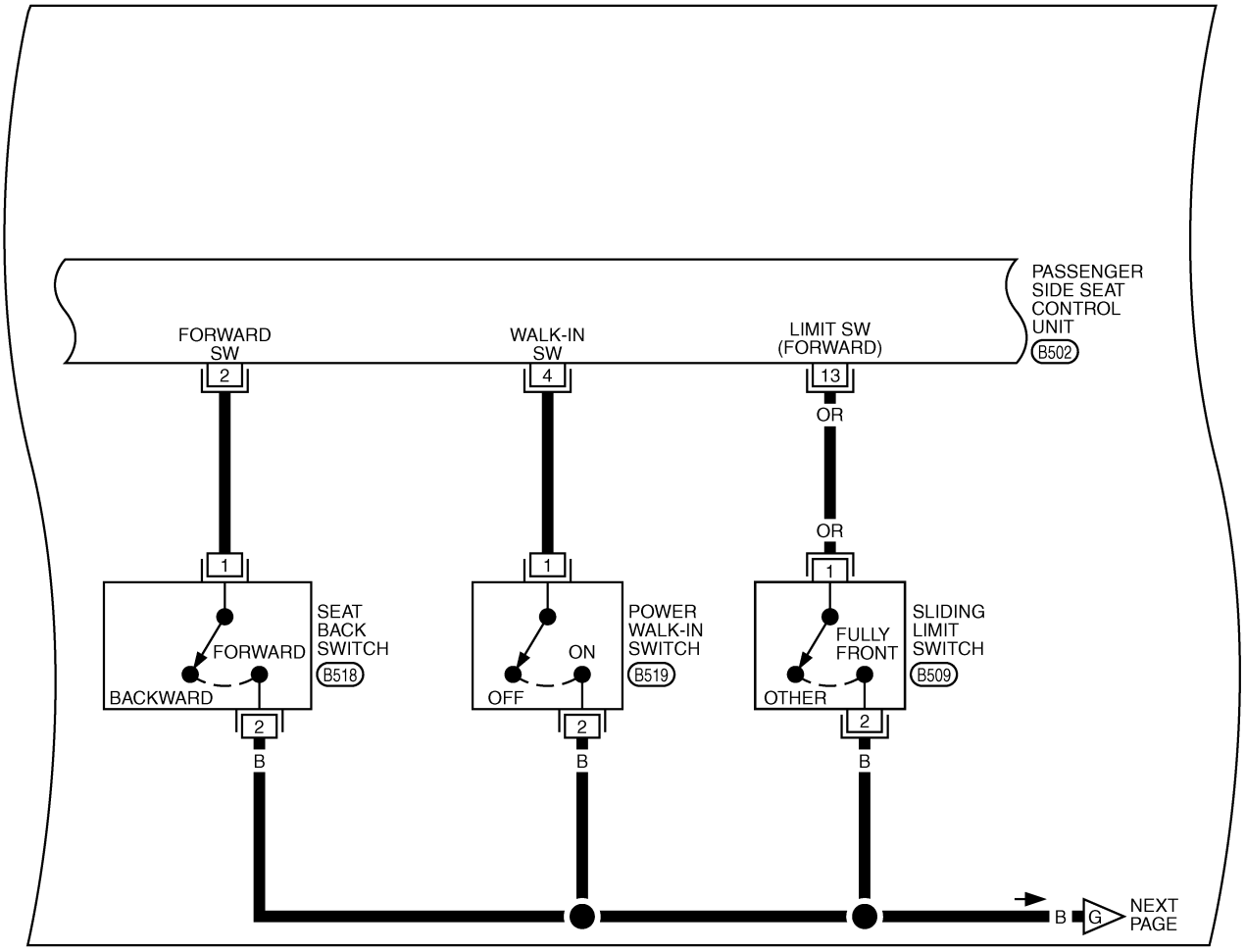


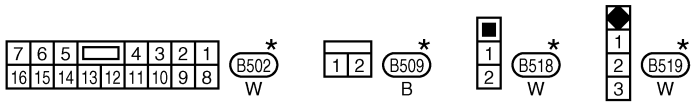
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1164E

SE-SEAT-09

FRONT POWER SEAT (PASSENGER SIDE)



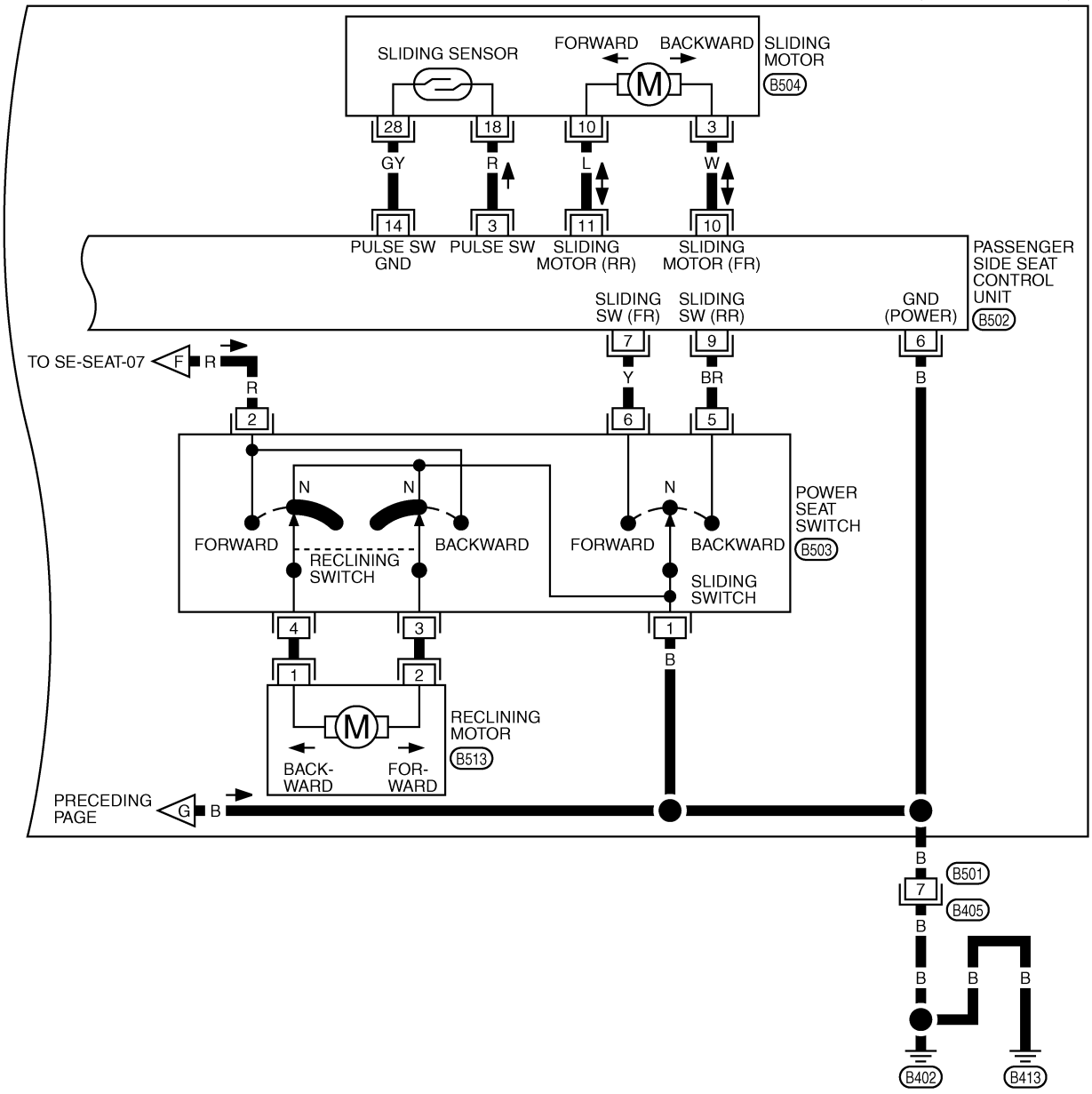


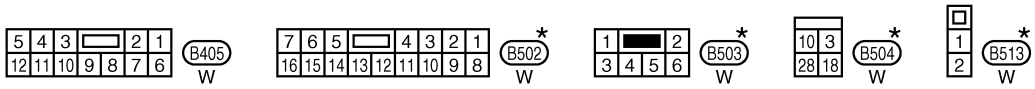
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1161E

SE-SEAT-10

FRONT POWER SEAT (PASSENGER SIDE)



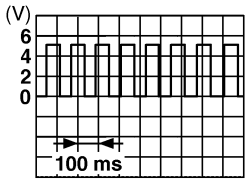
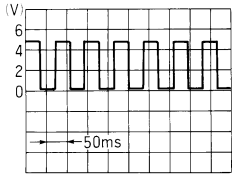


★: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1162E

Terminal and Reference Value for Driver Side Seat Control Unit

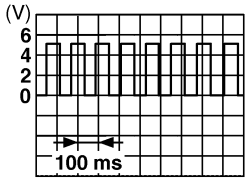
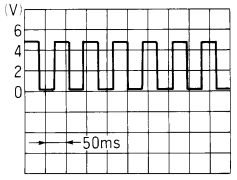
AIS0028U

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

*: When operation condition is satisfied.

Terminal and Reference Value for Passenger Side Seat Control Unit

AIS002HF

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

*: When operation condition is satisfied.

Work Flow

AIS0028V

1. Check the symptom and customer's requests.
2. Understand the outline of system. Refer to SE-14, "System Description" .
3. According to the trouble diagnosis chart, repair or replace the cause of the malfunction. Refer to SE-29, "Trouble Diagnoses Symptom Chart" .
4. Does power seat system operate normally? If Yes, GO TO 5, If No, GO TO 3.
5. INSPECTION END.

Trouble Diagnoses Symptom Chart

AIS0028W

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

Symptom	Diagnoses / service procedure	Refer to page
Driver side power seat cannot be operated.	1. Check driver seat control unit power supply and ground circuit.	SE-31
	2. Check sliding switch. (driver side)	SE-33
	3. Check sliding motor.	SE-35
	4. Check reclining motor (driver side)	SE-37
	5. Check lifting motor (front)	SE-41
	6. Check lifting motor (rear)	SE-40
Passenger side power seat cannot be operated.	1.Check BCM power supply and ground circuit.	SE-30
	2. Check passenger seat control unit power supply and ground circuit.	SE-31
	3. Check sliding switch. (passenger side)	SE-34
	4. Check sliding motor.	SE-35
	5. Check reclining motor (passenger side)	SE-38
Power walk-in system does not operated, but power seat can be operated (drive side)	1. Check door switch and seat belt buckle switch.	SE-45
	2. Check A/T shift lever P position signal (with A/T models)	SE-48
	2. Check parking brake signal (with M/T models)	SE-50
	3. Check vehicle speed signal.	SE-51
	4. Check sliding limit switch signal	SE-52
	5. Check seatback switch signal	SE-53
	6. Check power walk-in switch signal	SE-54
	7. Check sliding sensor.	SE-36
Power walk-in system does not operated, but power seat can be operated (passenger side)	1. Check passenger side door switch.	SE-42
	2. Check passenger side seat belt buckle switch.	SE-43
	3. Check vehicle speed signal.	SE-51
	4. Check sliding limit switch signal	SE-52
	5. Check seatback switch signal	SE-53
	6. Check power walk-in switch signal	SE-54
	7. Check sliding sensor.	SE-36

BCM Power Supply and Ground Circuit Check

AIS004SE

1. FUSE INSPECTION

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

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

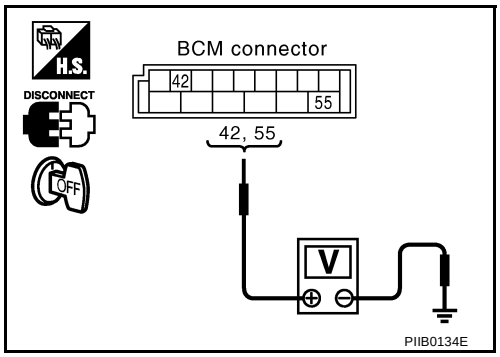
OK or NG

OK >> GO TO 2.
NG >> If fuse is blown out, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT" .

2. CHECK POWER SUPPLY CIRCUIT

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

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



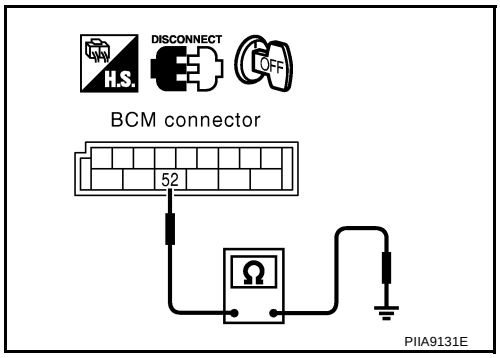
OK or NG

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M2 terminal 52 and ground.

52 (B) – Ground : Continuity should exist.



OK or NG

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

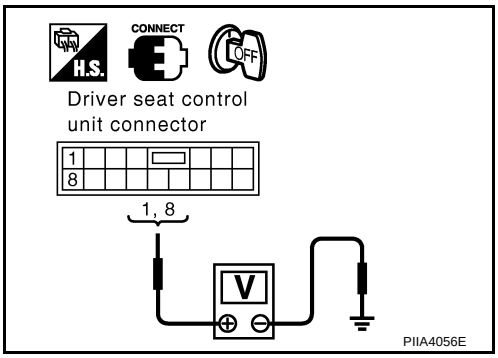
Check Driver Seat Control Unit Power Supply and Ground Circuit

AIS0028X

1. CHECK POWER SUPPLY CIRCUIT

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

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



OK or NG

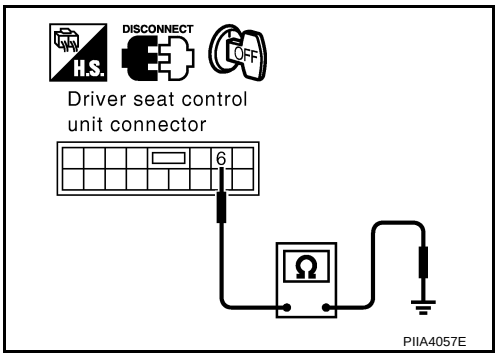
OK >> GO TO 2.
NG >> Check the following.

- 50A fusible link (letter **F** , located in fuse and fusible link box.)
- 10A fuse [No.21, located in fuse block (J/B)]
- Harness for open or short between driver seat control unit and fuse.

2. CHECK GROUND CIRCUIT

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

6 (B) – Ground : Continuity should exist.



OK or NG

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

Check Passenger Seat Control Unit Power Supply and Ground Circuit

AIS0028Y

1. CHECK FUSE

- Check 10A fuse [No. 21, located in the fuse block (J/B)].

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

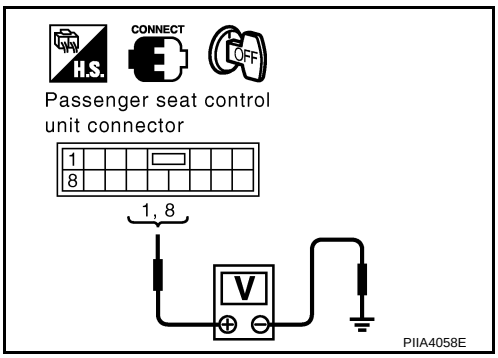
OK or NG

OK >> GO TO 2.
NG >> If fuse blown, be sure to eliminate cause of malfunction before installing new fuse. Refer to PG-4, "POWER SUPPLY ROUTING CIRCUIT"

2. CHECK POWER SUPPLY CIRCUIT

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

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



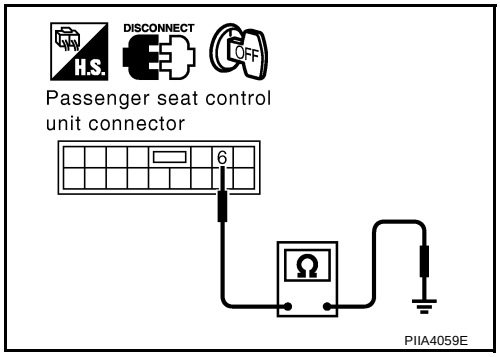
OK or NG

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

3. CHECK GROUND CIRCUIT

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

6 – Ground : Continuity should exist.



OK or NG

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

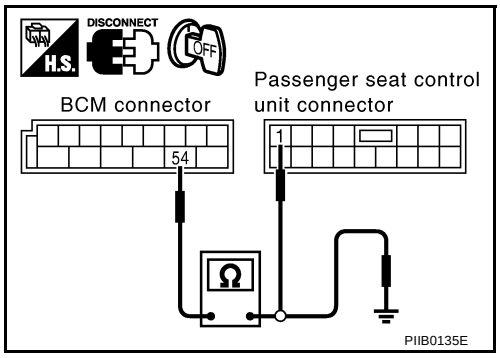
4. CHECK POWER SUPPLY CIRCUIT

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

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

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

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



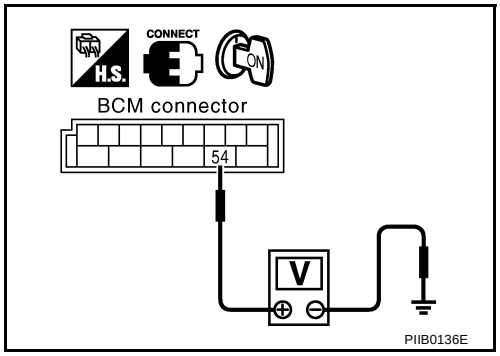
OK or NG

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

5. CHECK BCM OUTPUT SIGNAL

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

54 (W) – Ground : Battery voltage



OK or NG

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

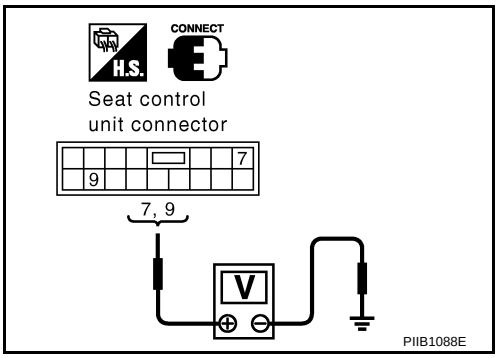
Check Sliding Switch (Driver Side)

AIS0028Z

1. CHECK SLIDING SWITCH INPUT SIGNAL

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

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



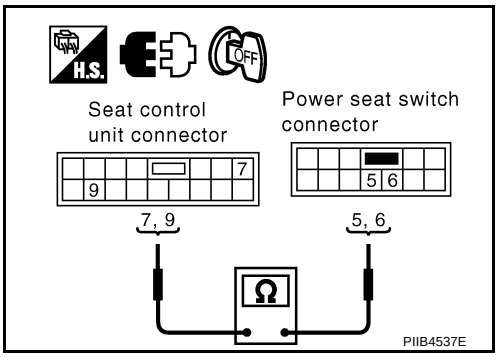
OK or NG

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

2. CHECK SLIDING SWITCH CIRCUIT

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

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



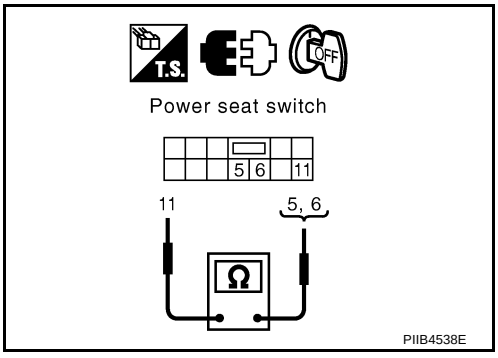
OK or NG

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

3. CHECK SLIDING SWITCH

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

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



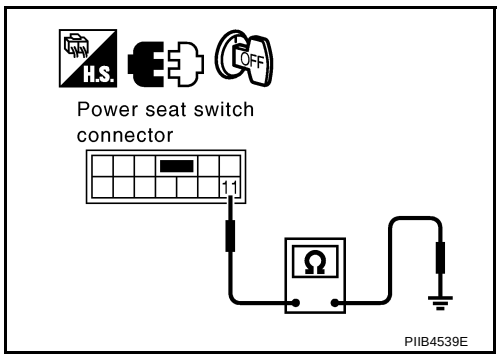
OK or NG

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

4. CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

11 (B) – Ground : Continuity should exist.



OK or NG

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

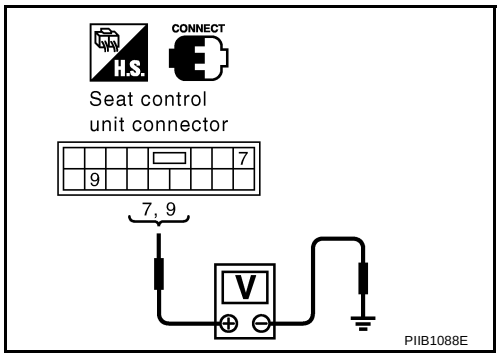
Check Sliding Switch (Passenger Side)

AIS006D8

1. CHECK SLIDING SWITCH (PASSENGER SIDE)

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

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



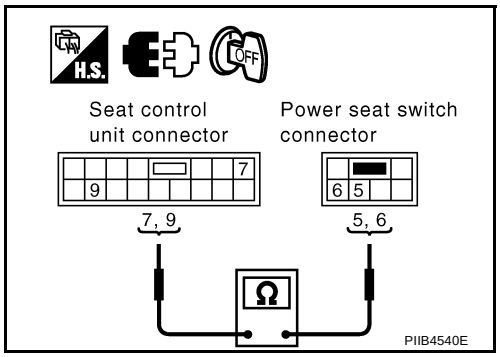
OK or NG

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

2. CHECK SLIDING SWITCH CIRCUIT

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

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



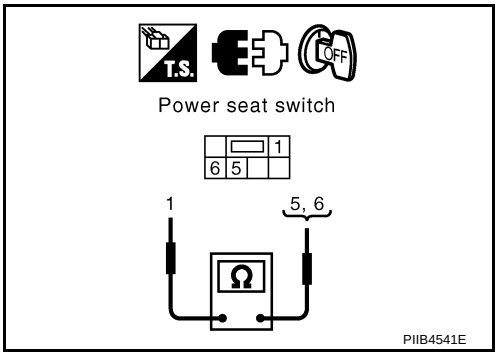
OK or NG

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

3. CHECK SLIDING SWITCH

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

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



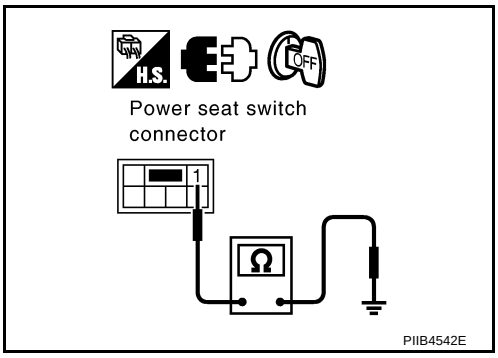
OK or NG

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

4. CHECK POWER SEAT SWITCH GROUND CIRCUIT

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

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



OK or NG

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

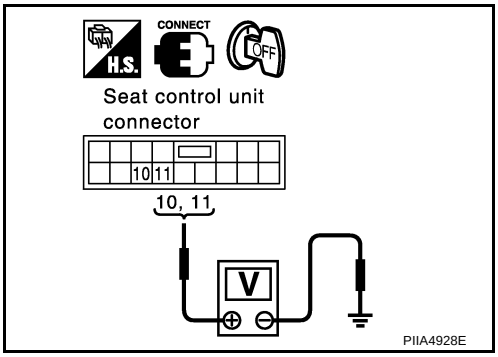
Check Sliding Motor

AIS00290

1. CHECK SLIDING MOTOR SIGNAL

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

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



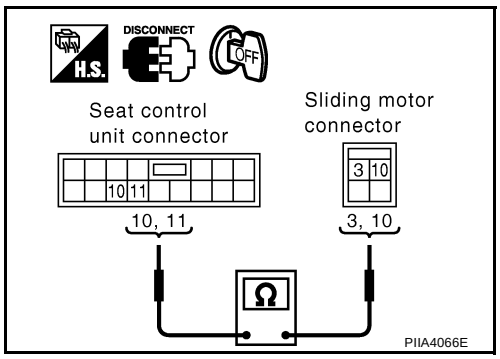
OK or NG

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

2. CHECK SLIDING MOTOR CIRCUIT

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

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



OK or NG

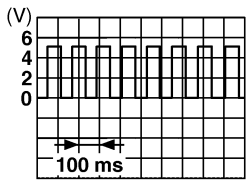
OK >> Replace sliding motor
NG >> Repair or replace harness between seat control unit and sliding motor.

Check Sliding Sensor

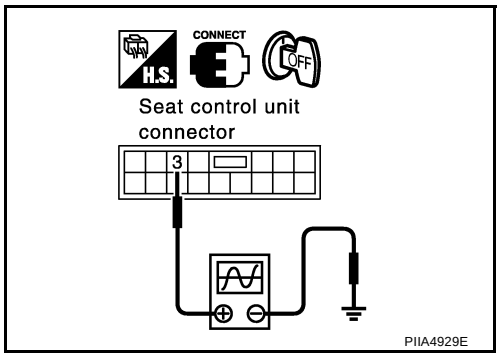
AIS002O2

1. CHECK SLIDING SENSOR SIGNAL

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

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

PIIA4079E



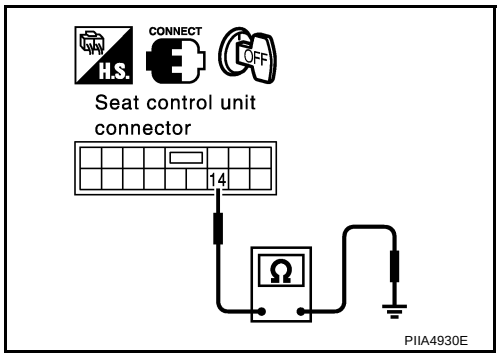
OK or NG

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

2. CHECK SLIDING SENSOR GROUND CIRCUIT

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

14 (GY) – Ground : Continuity should exist.



OK or NG

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

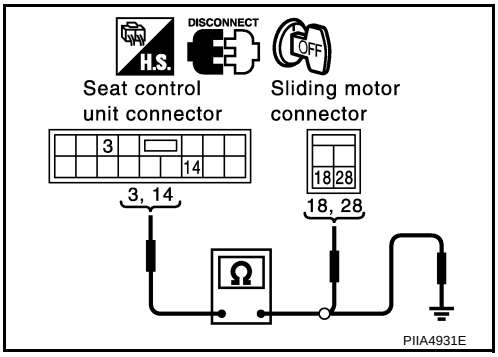
3. CHECK HARNESS CONTINUITY

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

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

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

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



OK or NG

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

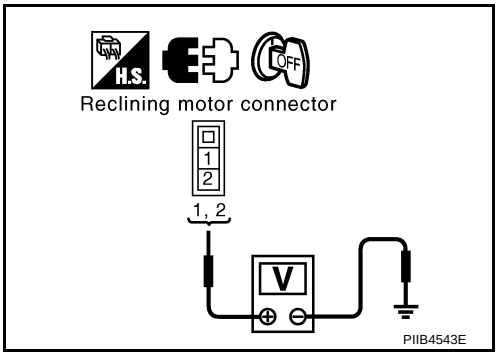
Check Reclining Motor (Driver Side)

AIS006D9

1. CHECK RECLINING MOTOR POWER SUPPLY

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

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



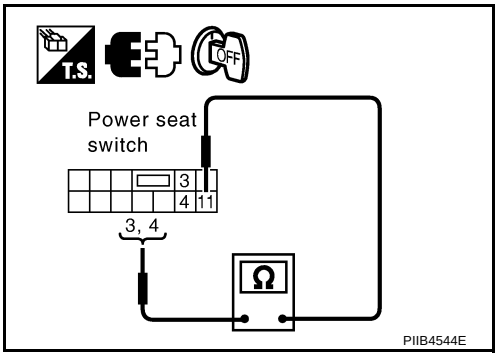
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

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

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



OK or NG

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

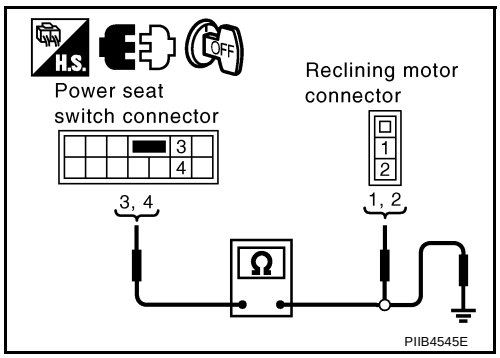
3. CHECK RECLINING MOTOR CIRCUIT HARNESS

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

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

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

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



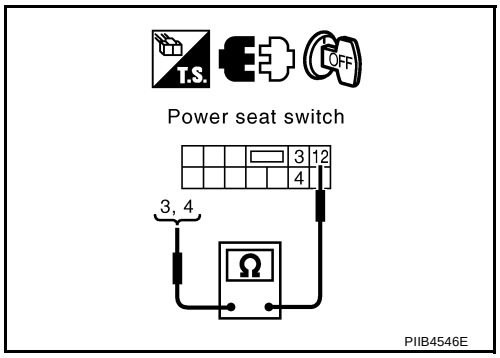
OK or NG

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

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

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



OK or NG

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

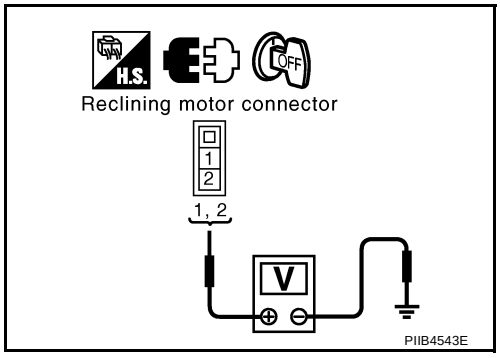
Check Reclining Motor (Passenger Side)

AIS006DA

1. CHECK RECLINING MOTOR POWER SUPPLY

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

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



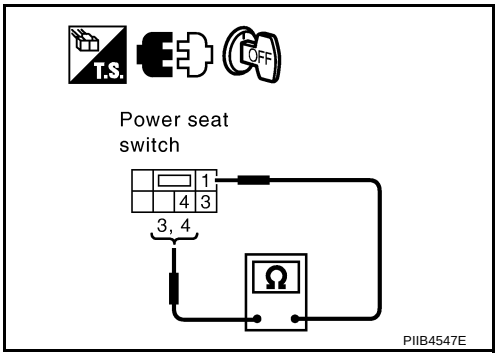
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

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

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



OK or NG

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

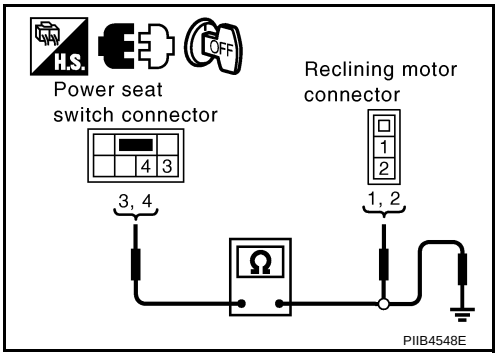
3. CHECK RECLINING MOTOR CIRCUIT HARNESS

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

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

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

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



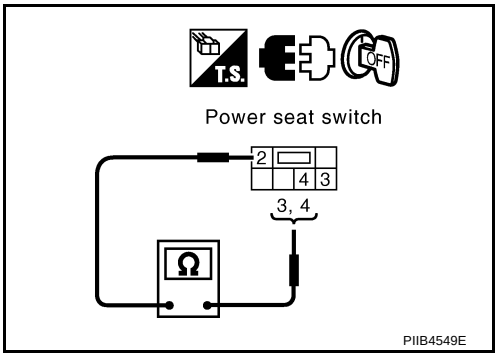
OK or NG

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

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

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



OK or NG

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

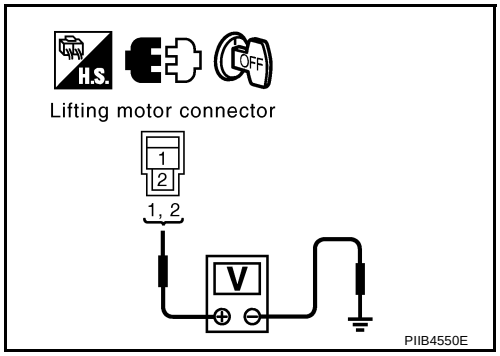
Check Lifting Motor (Rear)

AIS006DB

1. CHECK LIFTING MOTOR (REAR) POWER SUPPLY

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

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



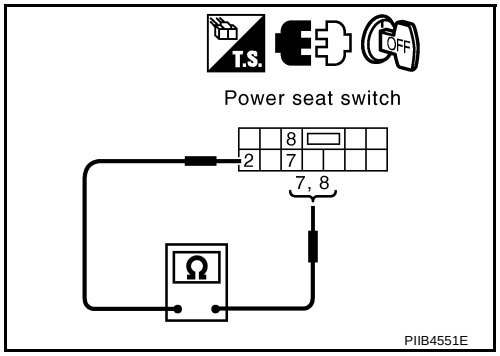
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

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

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



OK or NG

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

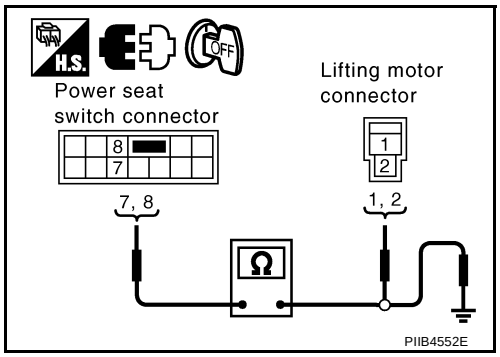
3. CHECK LIFTING MOTOR (REAR) CIRCUIT HARNESS

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

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

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

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



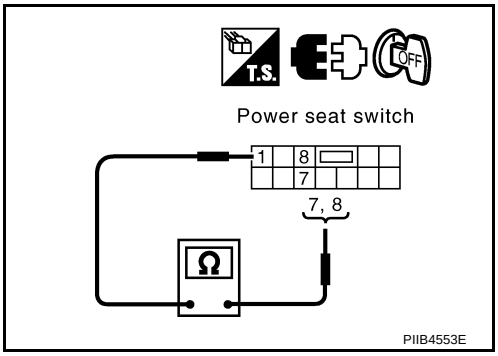
OK or NG

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

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

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



OK or NG

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

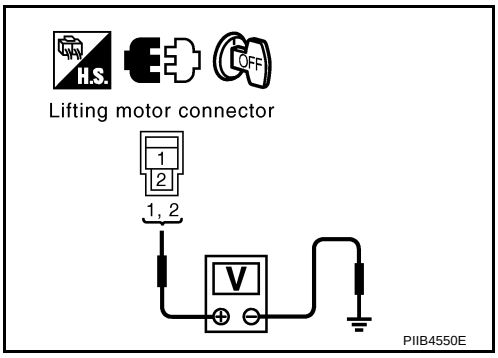
Check Lifting Motor (Front)

AIS006DC

1. CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

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

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



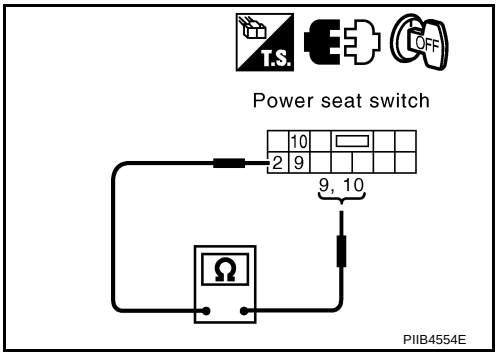
OK or NG

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

2. CHECK POWER SEAT SWITCH 1

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

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



OK or NG

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

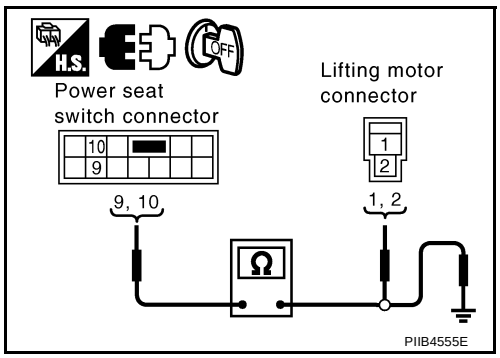
3. CHECK LIFTING MOTOR (FRONT) CIRCUIT HARNESS

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

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

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

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



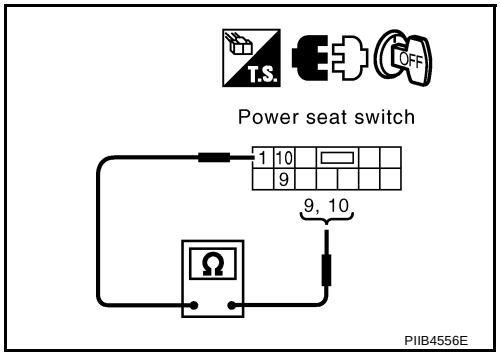
OK or NG

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

4. CHECK POWER SEAT SWITCH 2

Check continuity between power seat switch as follows.

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



OK or NG

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

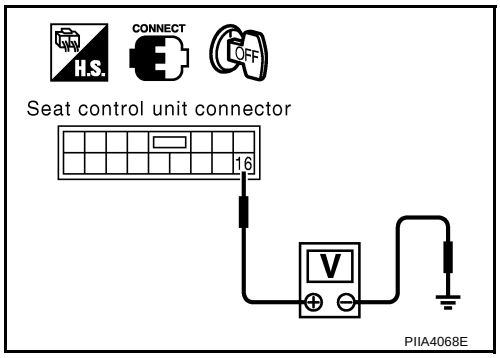
Check Passenger Side Door Switch

AIS00291

1. CHECK PASSENGER SIDE DOOR SWITCH SIGNAL

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

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



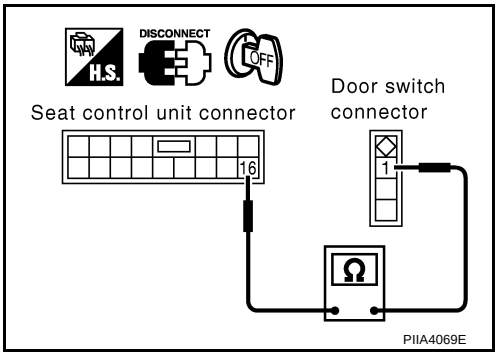
OK or NG

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

2. CHECK PASSENGER SIDE DOOR SWITCH CIRCUIT

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

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



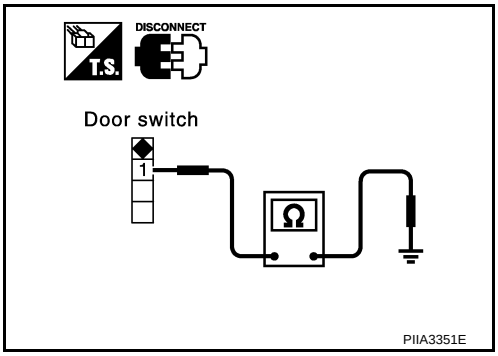
OK or NG

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

3. CHECK PASSENGER SIDE DOOR SWITCH

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

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



OK or NG

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

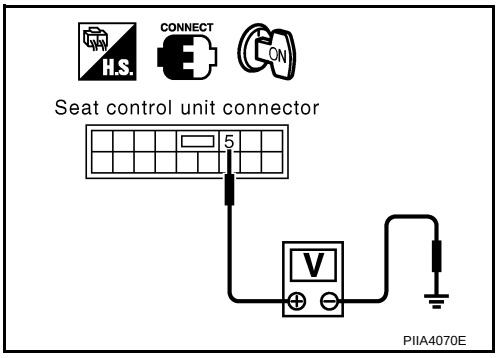
Check Passenger Side Seat Belt Buckle Switch

AIS00295

1. CHECK PASSENGER SIDE SEAT BELT BUCKLE SWITCH SIGNAL

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

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



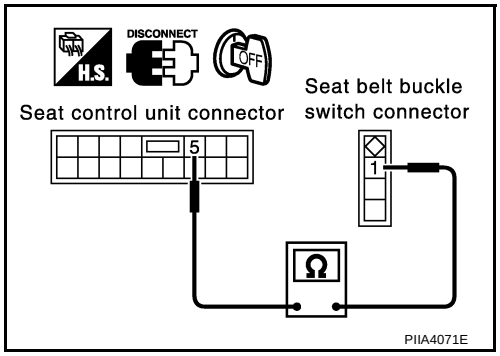
OK or NG

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

2. CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

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

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



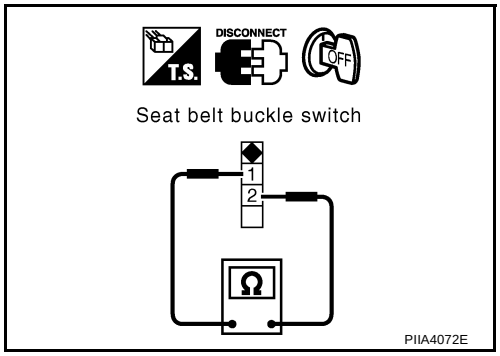
OK or NG

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

3. CHECK SEAT BELT BUCKLE SWITCH

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

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



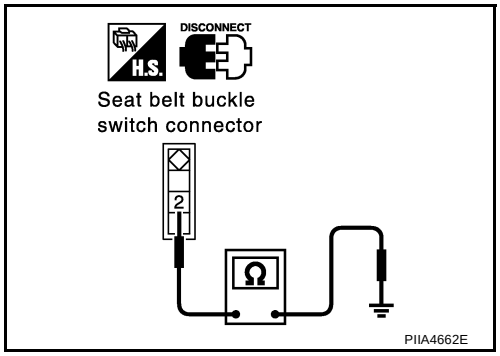
OK or NG

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

4. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

2 (B) – Ground : Continuity should exist.



OK or NG

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

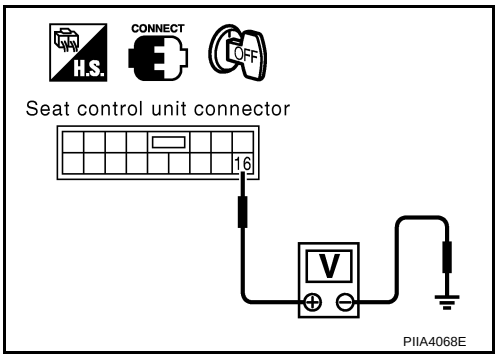
Check Door Switch and Seat Belt Buckle Switch

AIS002L6

1. CHECK DOOR SWITCH AND SEAT BELT SWITCH SIGNAL

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

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



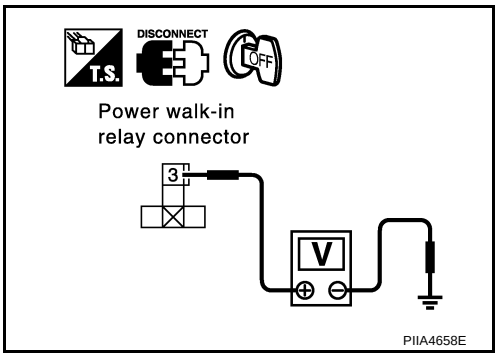
OK or NG

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

2. CHECK POWER WALK–IN RELAY POWER SUPPLY CIRCUIT

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

3 (G/W) – Ground : Battery voltage



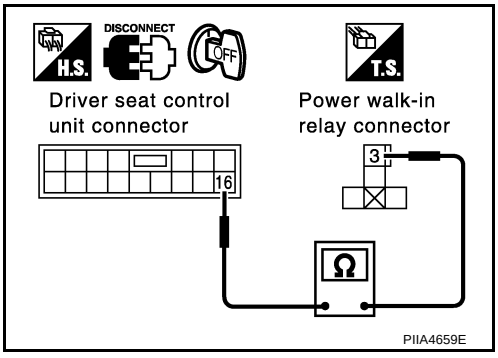
OK or NG

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

3. CHECK HARNESS CONTINUITY 1

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

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



OK or NG

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

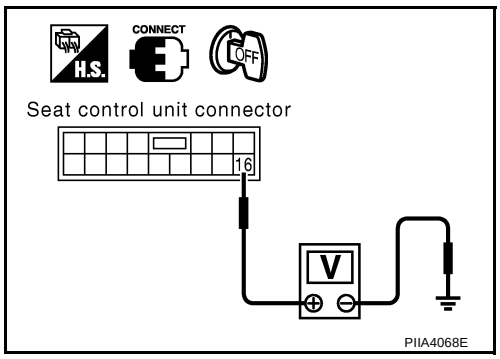
4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

16 (G/W) – Ground : Battery voltage

OK or NG

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



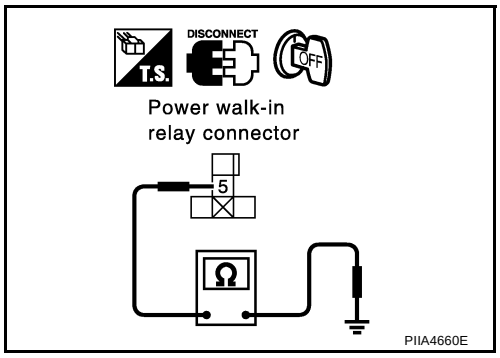
5. CHECK POWER WALK–IN RELAY GROUND CIRCUIT

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

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

OK or NG

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



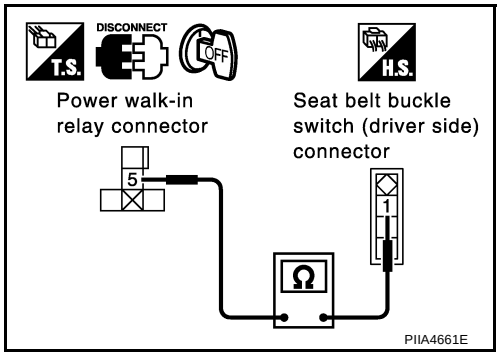
6. CHECK HARNESS CONTINUITY 2

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

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

OK or NG

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



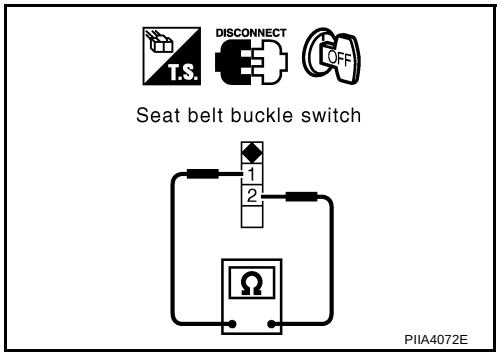
7. CHECK SEAT BELT BUCKLE SWITCH

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

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

OK or NG

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



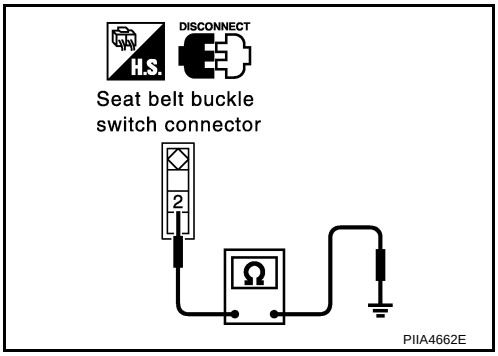
8. CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

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

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

OK or NG

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



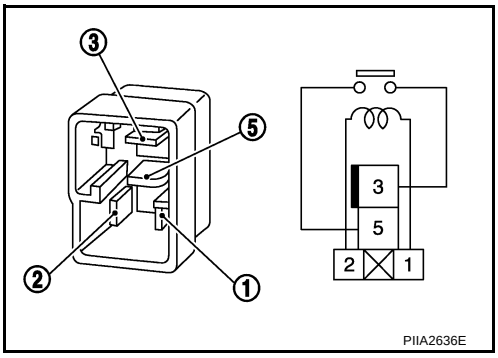
9. CHECK POWER WALK–IN RELAY

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

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

OK or NG

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



10. CHECK POWER WALK–IN RELAY POWER SUPPLY

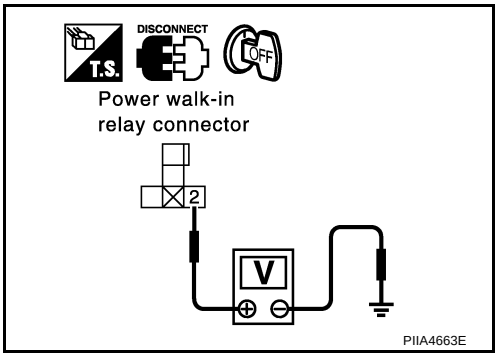
Check voltage between power walk-in relay connector B347 terminal 2 and ground.

2 (R/W) – Ground : Battery voltage

OK or NG

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

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



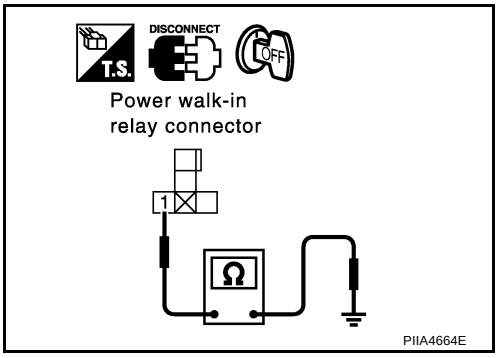
11. CHECK DOOR SWITCH

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

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

OK or NG

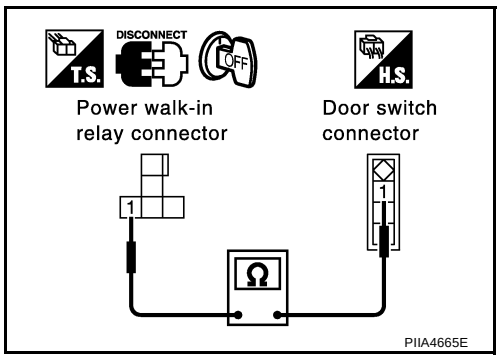
OK >> Check the condition of the harness and the connector
NG >> GO TO 12.



12. CHECK HARNESS CONTINUITY 3

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

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



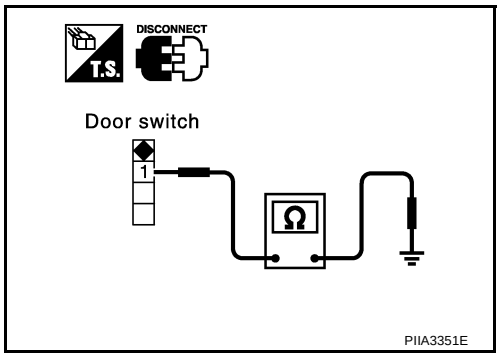
OK or NG

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

13. CHECK DOOR SWITCH

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

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



OK or NG

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

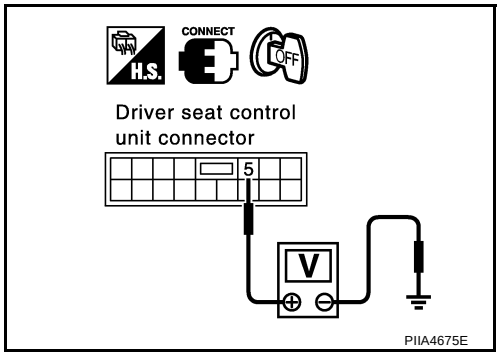
Check A/T Shift Lever P Position Signal (with A/T Models)

AIS002MD

1. CHECK A/T SHIFT LEVER P POSITION SIGNAL

Check voltage between driver seat control unit connector and ground.

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



OK or NG

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

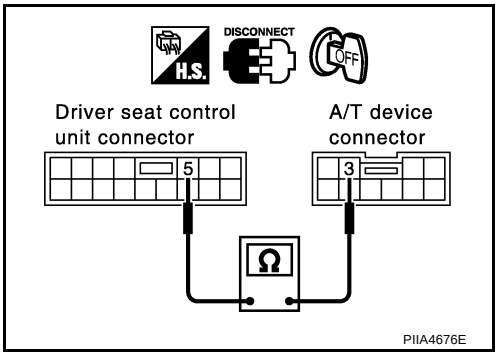
2. CHECK HARNESS CONTINUITY

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

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

OK or NG

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



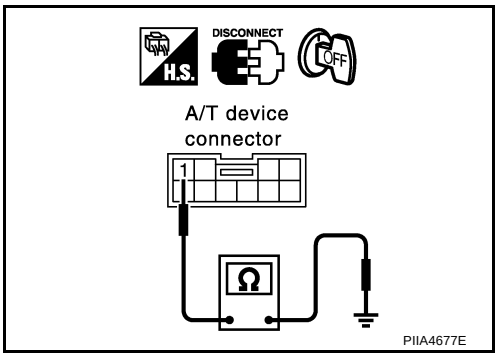
3. CHECK A/T DEVICE GROUND CIRCUIT

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

1 (B) – Ground : Continuity should exist.

OK or NG

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



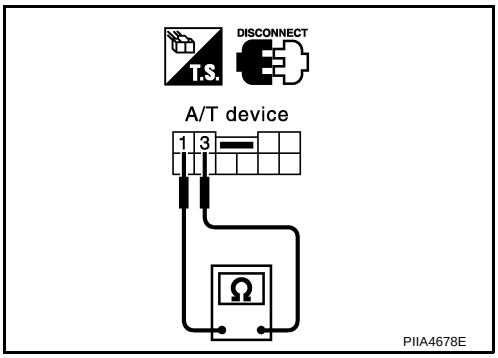
4. CHECK A/T DEVICE

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

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

OK or NG

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



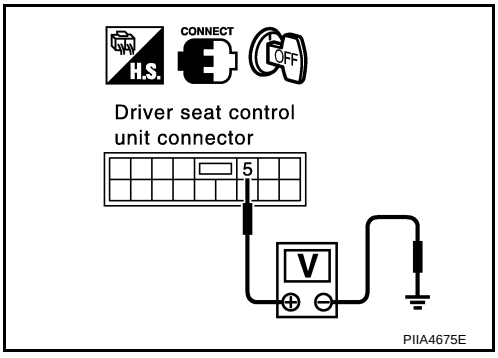
5. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

5 (L/Y) – Ground : Approx. 5V

OK or NG

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



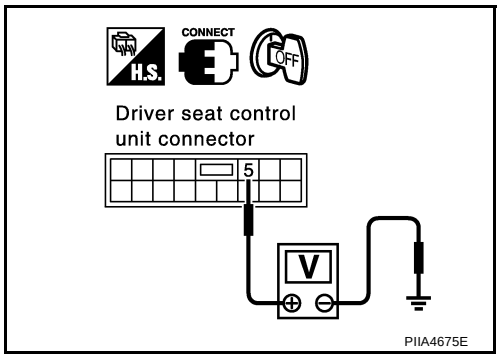
Check Parking Brake Signal (with M/T Models)

AIS002ME

1. CHECK PARKING BRAKE SIGNAL

Check voltage between driver seat control unit connector and ground.

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



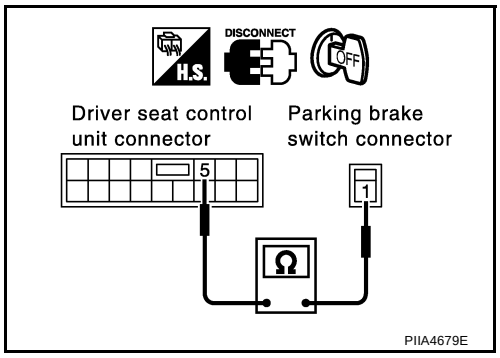
OK or NG

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

2. CHECK HARNESS CONTINUITY

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

5 (L/Y) – 1 (LG/B) : Continuity should exist.



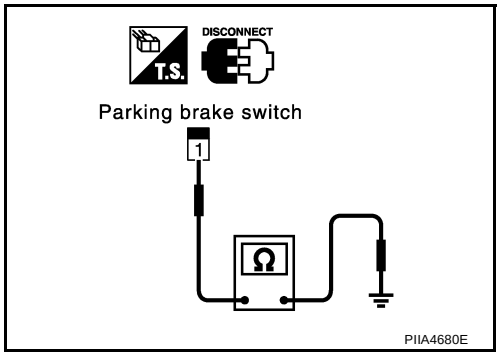
OK or NG

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

3. CHECK PARKING BRAKE SWITCH

Check continuity between parking brake switch terminal 1 and ground.

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



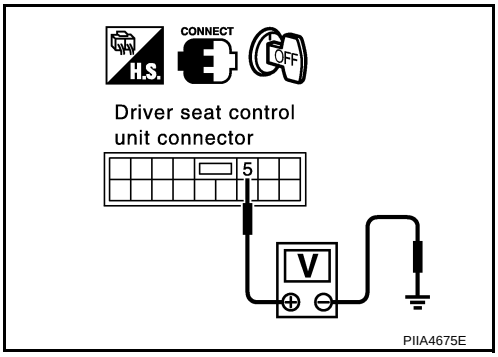
OK or NG

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

4. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

5 (L/Y) – Ground : Approx. 5V



OK or NG

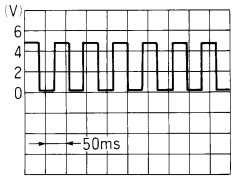
OK >> Check the condition of the harness and the connector.
NG >> Replace driver control unit.

Check Vehicle Speed Signal

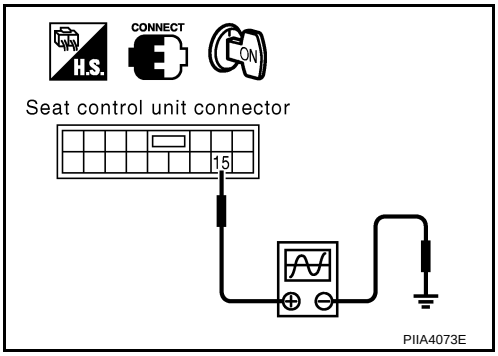
AIS00296

1. CHECK VEHICLE SPEED INPUT SIGNAL

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

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

ELF1080D



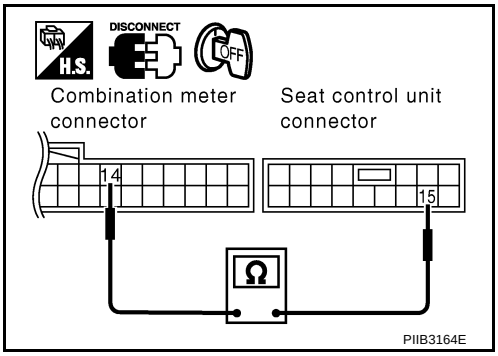
OK or NG

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

2. CHECK VEHICLE SPEED SIGNAL CIRCUIT

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

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



OK or NG

OK >> Check combination meter. Refer to DI-13
NG >> Repair or replace harness between combination meter and seat control unit.

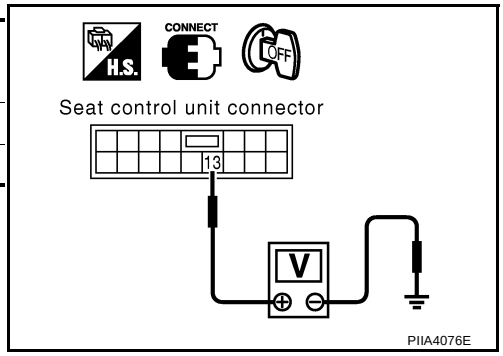
Check Sliding Limit Switch Signal

AIS00298

1. CHECK SLIDING LIMIT SWITCH SIGNAL

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

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



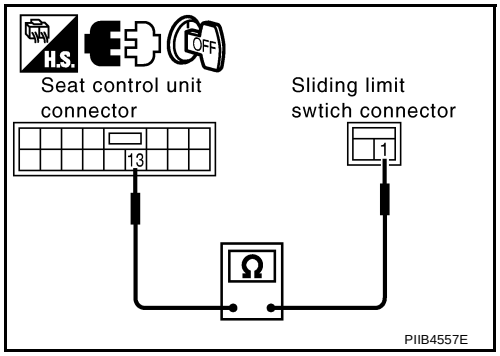
OK or NG

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

2. CHECK HARNESS CONTINUITY

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

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



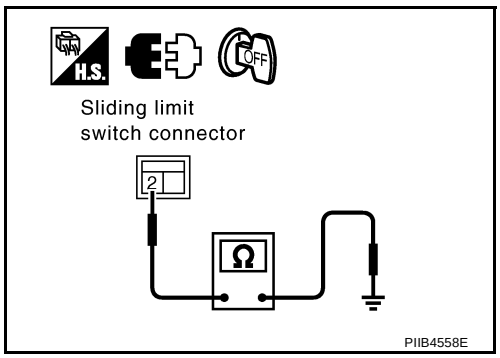
OK or NG

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

3. CHECK SLIDING LIMIT SWITCH CIRCUIT

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

2 (B) - Ground : Continuity should exist.



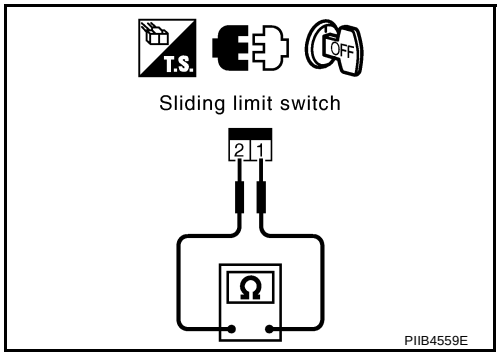
OK or NG

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

4. CHECK SLIDING LIMIT SWITCH

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

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



OK or NG

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

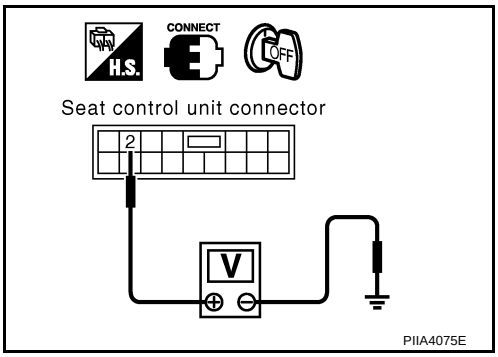
Check Seatback Switch Signal

AIS006DD

1. CHECK SEATBACK SWITCH SIGNAL

Check voltage between seat control unit connector and ground.

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



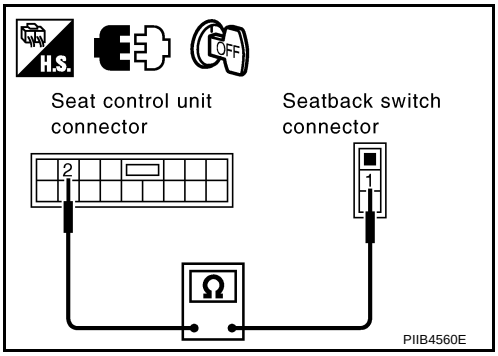
OK or NG

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

2. CHECK HARNESS CONTINUITY

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

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



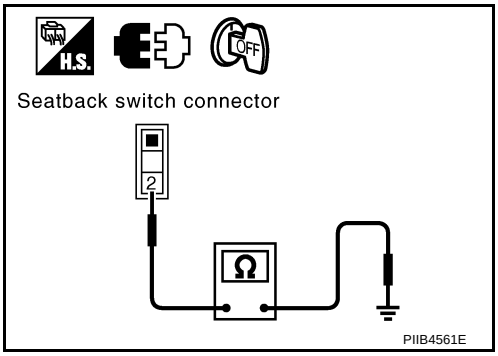
OK or NG

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

3. CHECK SEATBACK SWITCH CIRCUIT

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

2 (B) - Ground : Continuity should exist.



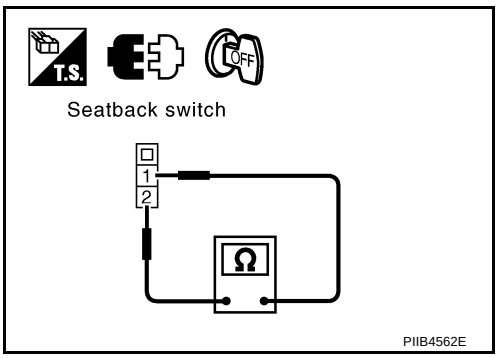
OK or NG

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

4. CHECK SEATBACK SWITCH

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

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



OK or NG

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

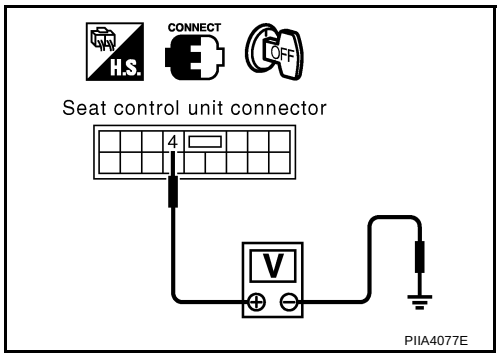
Check Power Walk-in Switch Signal

AIS006DE

1. CHECK POWER WALK-IN SWITCH SIGNAL

Check voltage between seat control unit connector and ground.

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



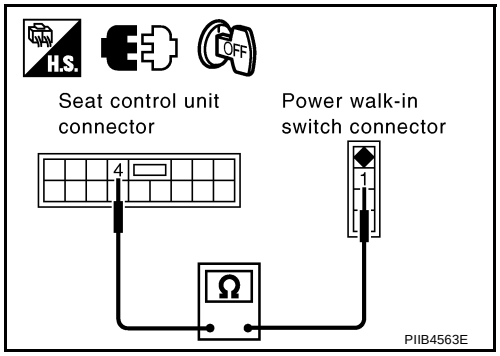
OK or NG

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

2. CHECK HARNESS CONTINUITY

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

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



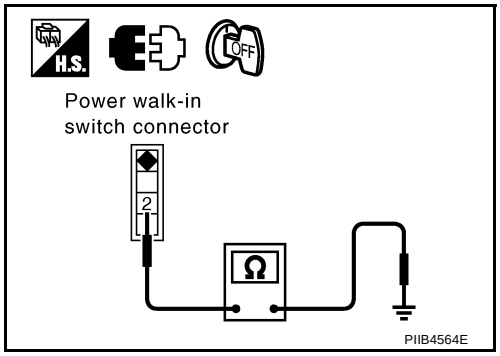
OK or NG

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

3. CHECK POWER WALK-IN SWITCH CIRCUIT

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

2 (B) - Ground : Continuity should exist.



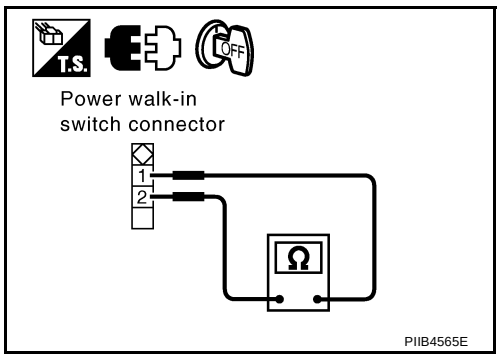
OK or NG

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

4. CHECK POWER WALK-IN SWITCH

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

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



OK or NG

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

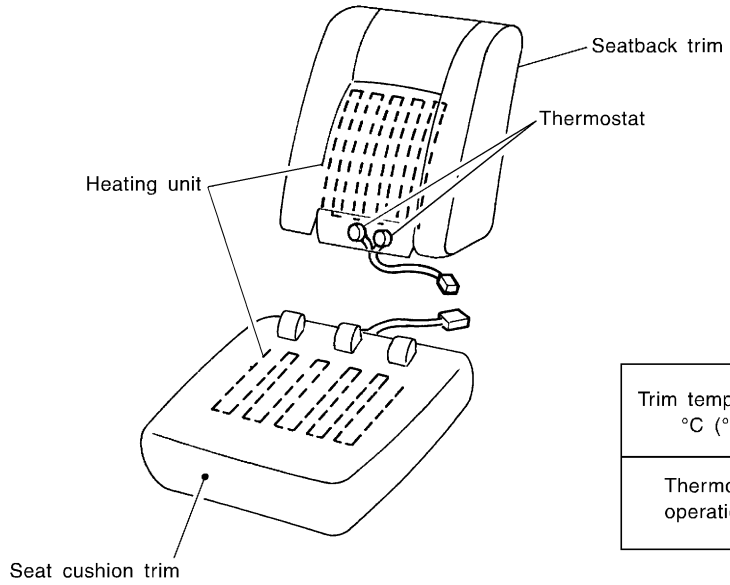
HEATED SEAT

PFP:87335

Description

AIS001CK

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

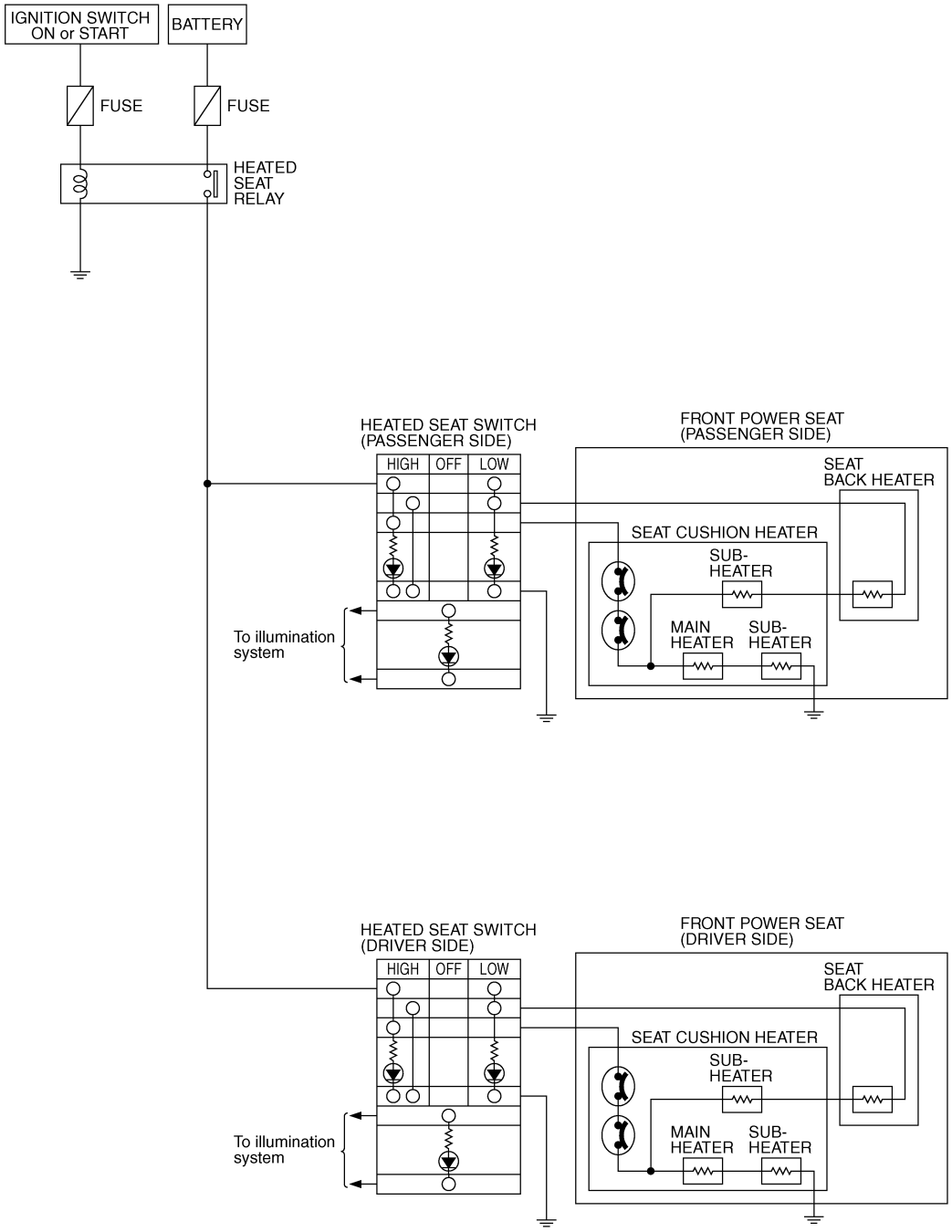


Trim temperature °C (°F)	Increasing to 35 - 45 (95 - 113)	Decreasing to 25 - 35 (77 - 95)
Thermostat operation	OFF	ON

SBT314

Schematic

AIS001CL

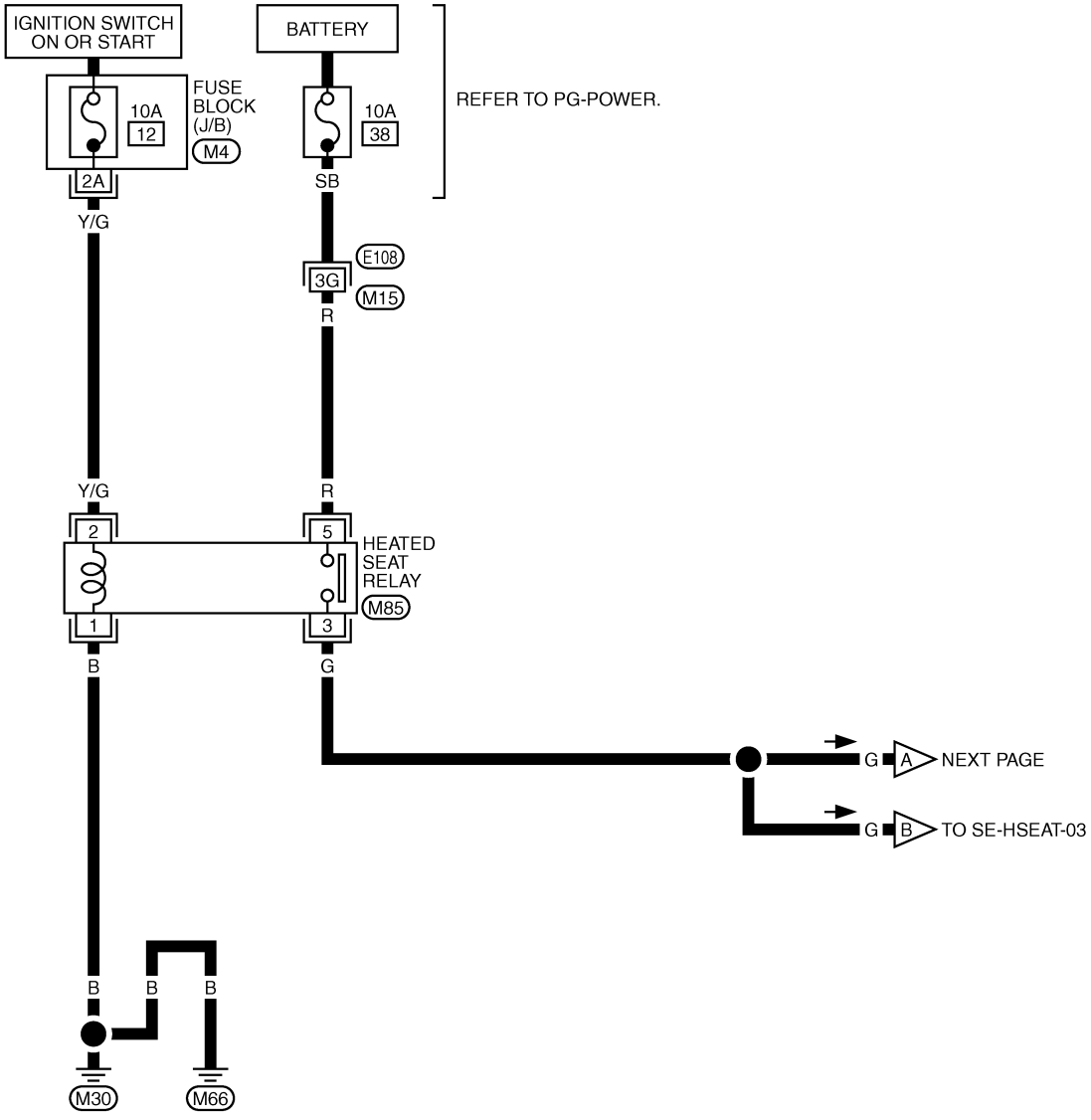


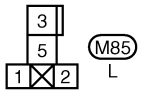
TIWT0343E

Wiring Diagram – HSEAT – / With A/T Models

AIS001CM

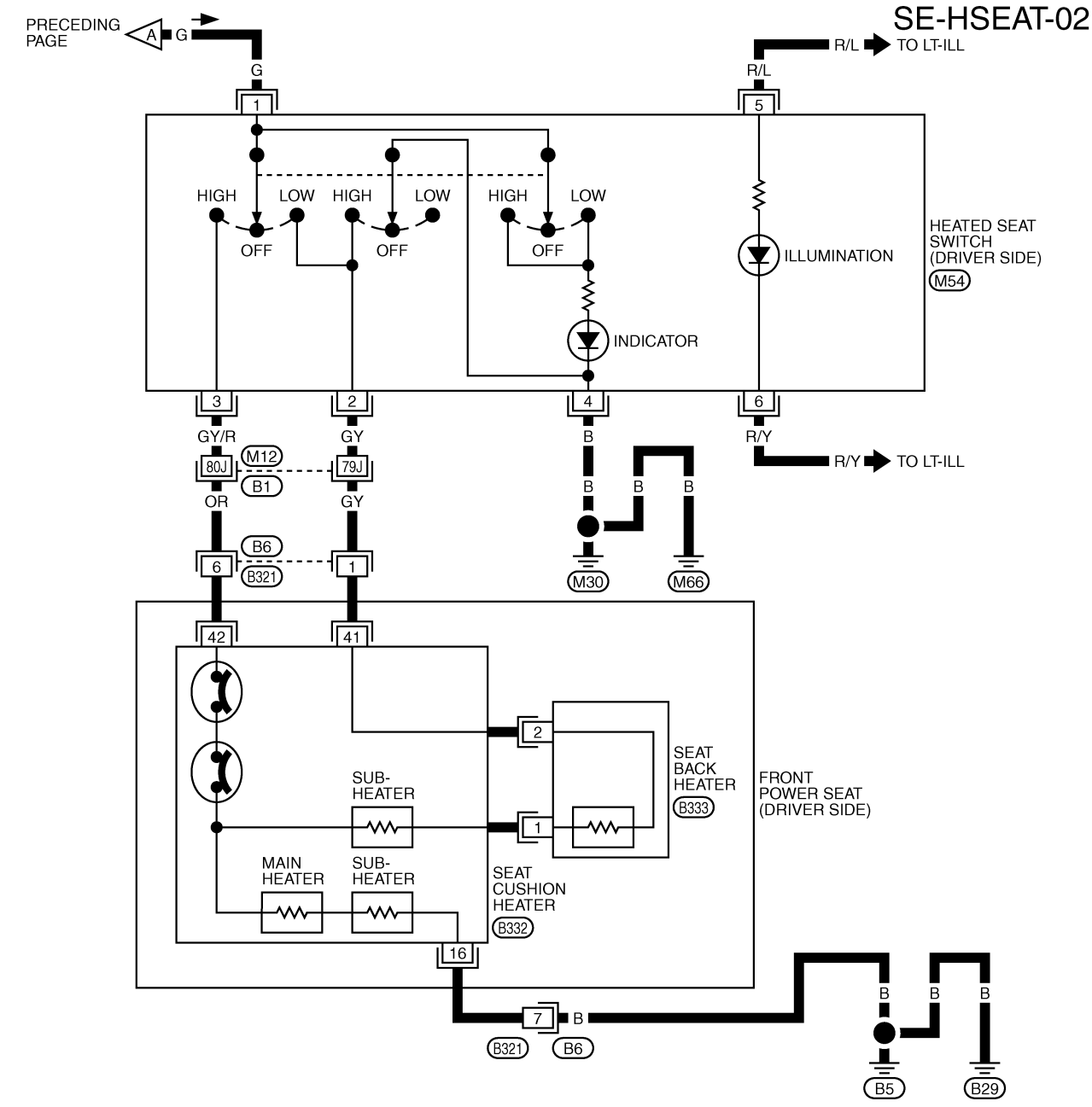
SE-HSEAT-01

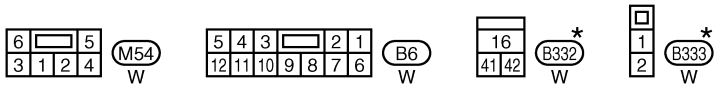




REFER TO THE FOLLOWING.
E108 -SUPER MULTIPLE JUNCTION (SMJ)
M4 -FUSE BLOCK-JUNCTION BOX (J/B)

TIWT0344E

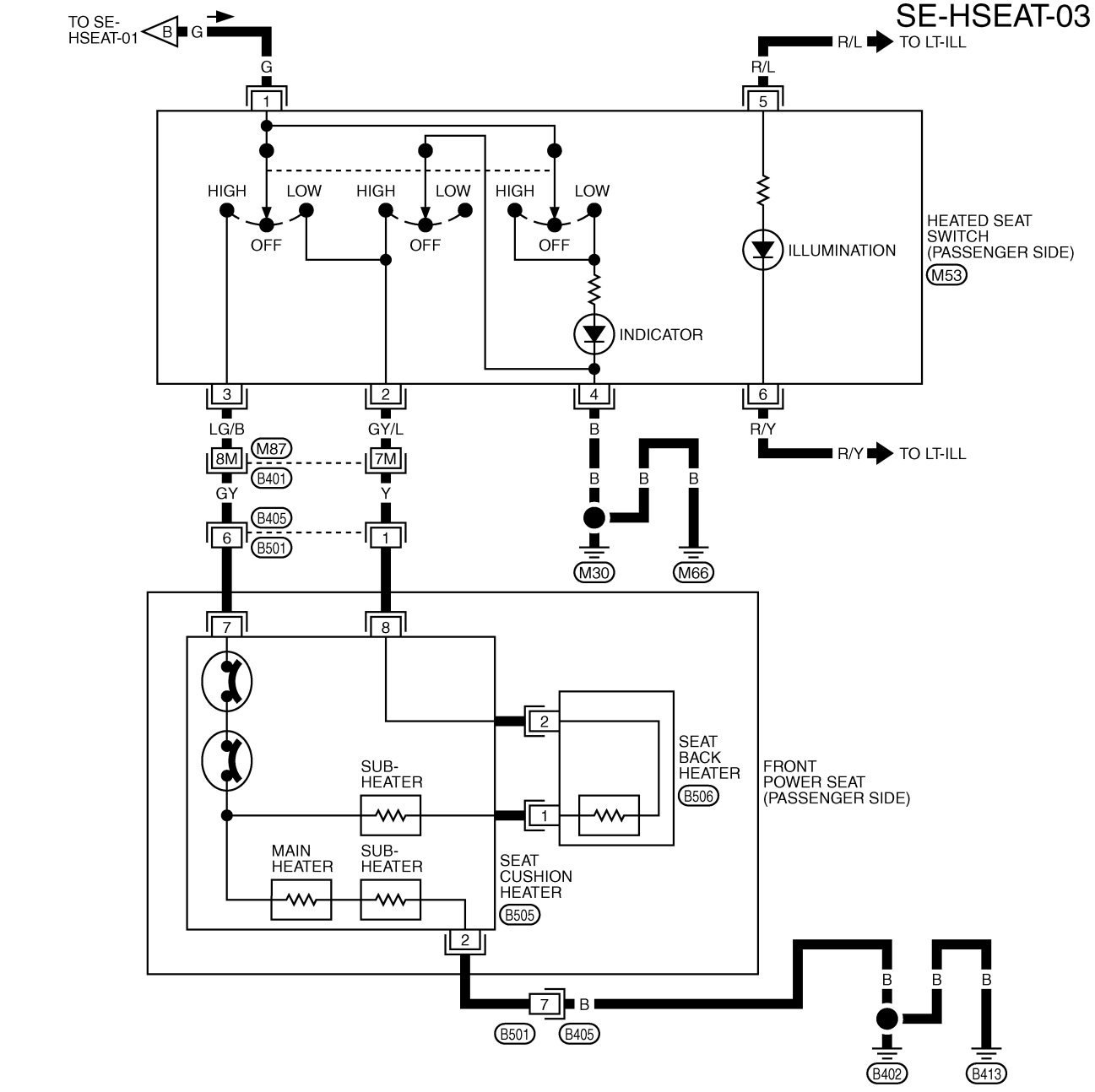


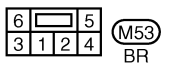


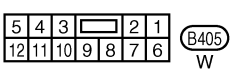
REFER TO THE FOLLOWING.
B1 -SUPER MULTIPLE JUNCTION (SMJ)

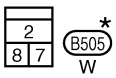
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

TIWM1020E









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

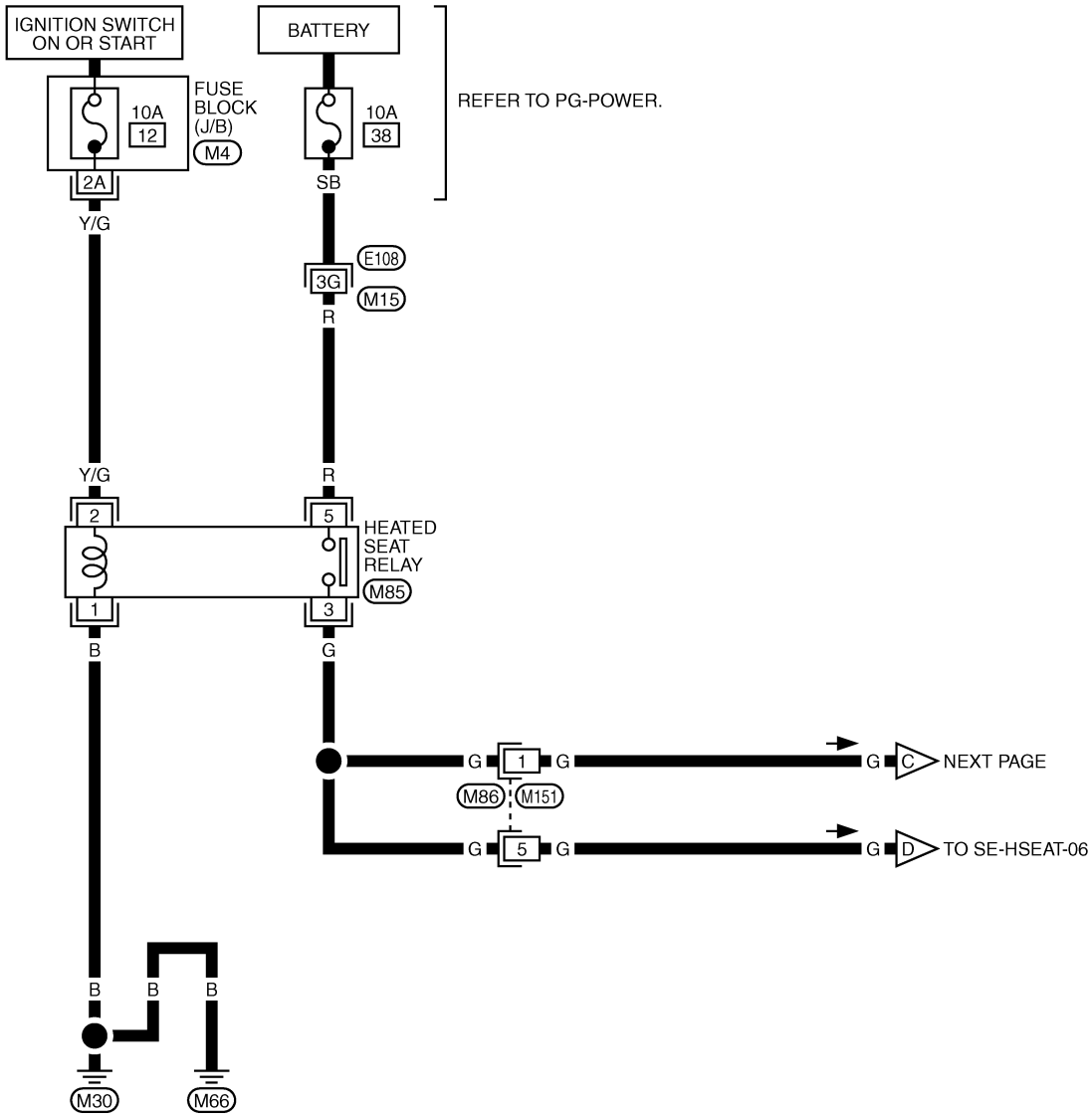
REFER TO THE FOLLOWING.
B401 -SUPER MULTIPLE JUNCTION (SMJ)

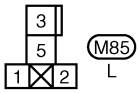
TIWM1021E

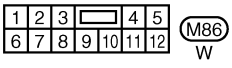
Wiring Diagram – HSEAT – / With M/T Models

AIS00278

SE-HSEAT-04







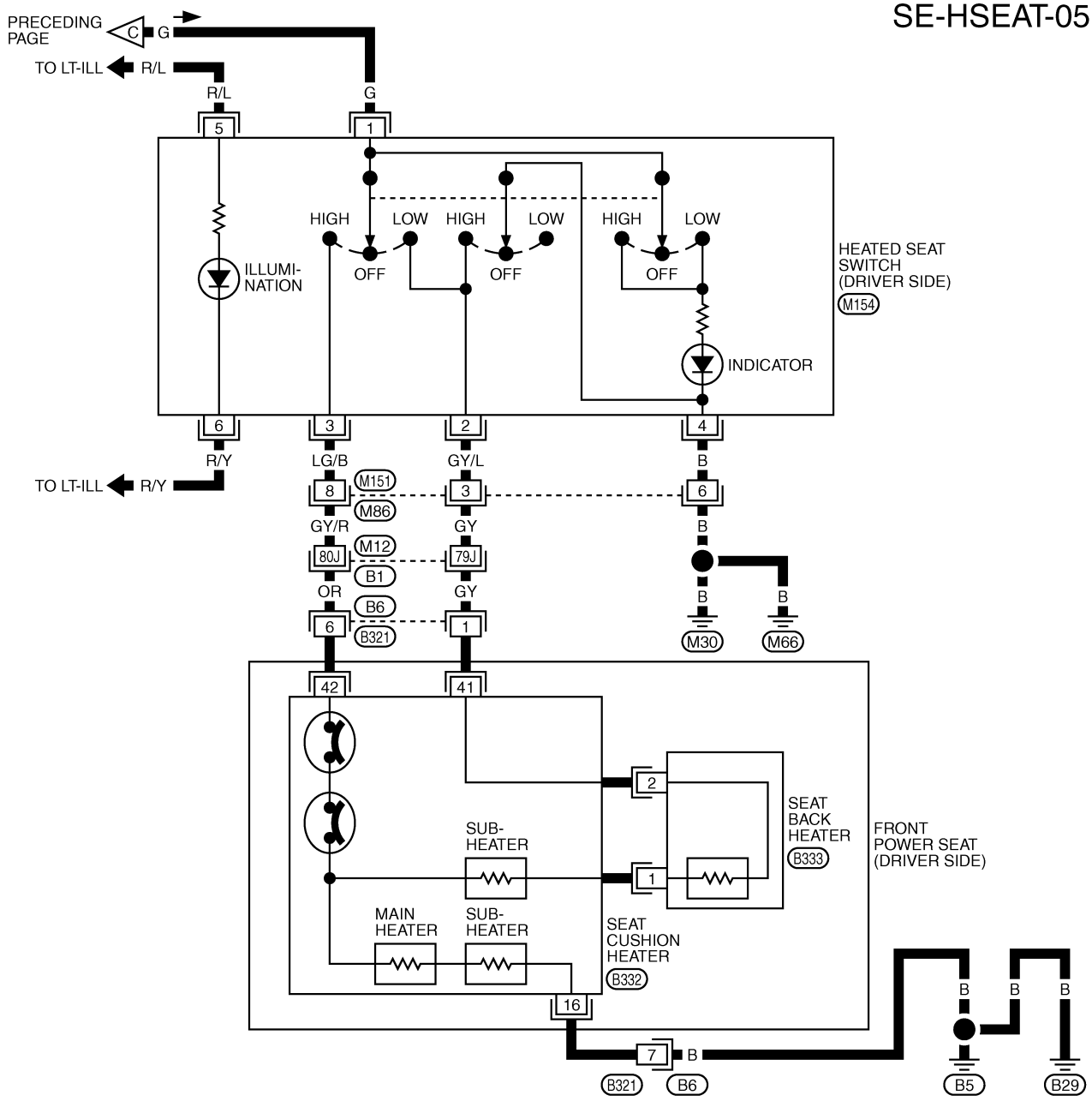
REFER TO THE FOLLOWING.

E108 -SUPER MULTIPLE JUNCTION (SMJ)

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

TIWM0486E

SE-HSEAT-05



M86 W

M154 W

B6 W

B332 W *

B333 W *

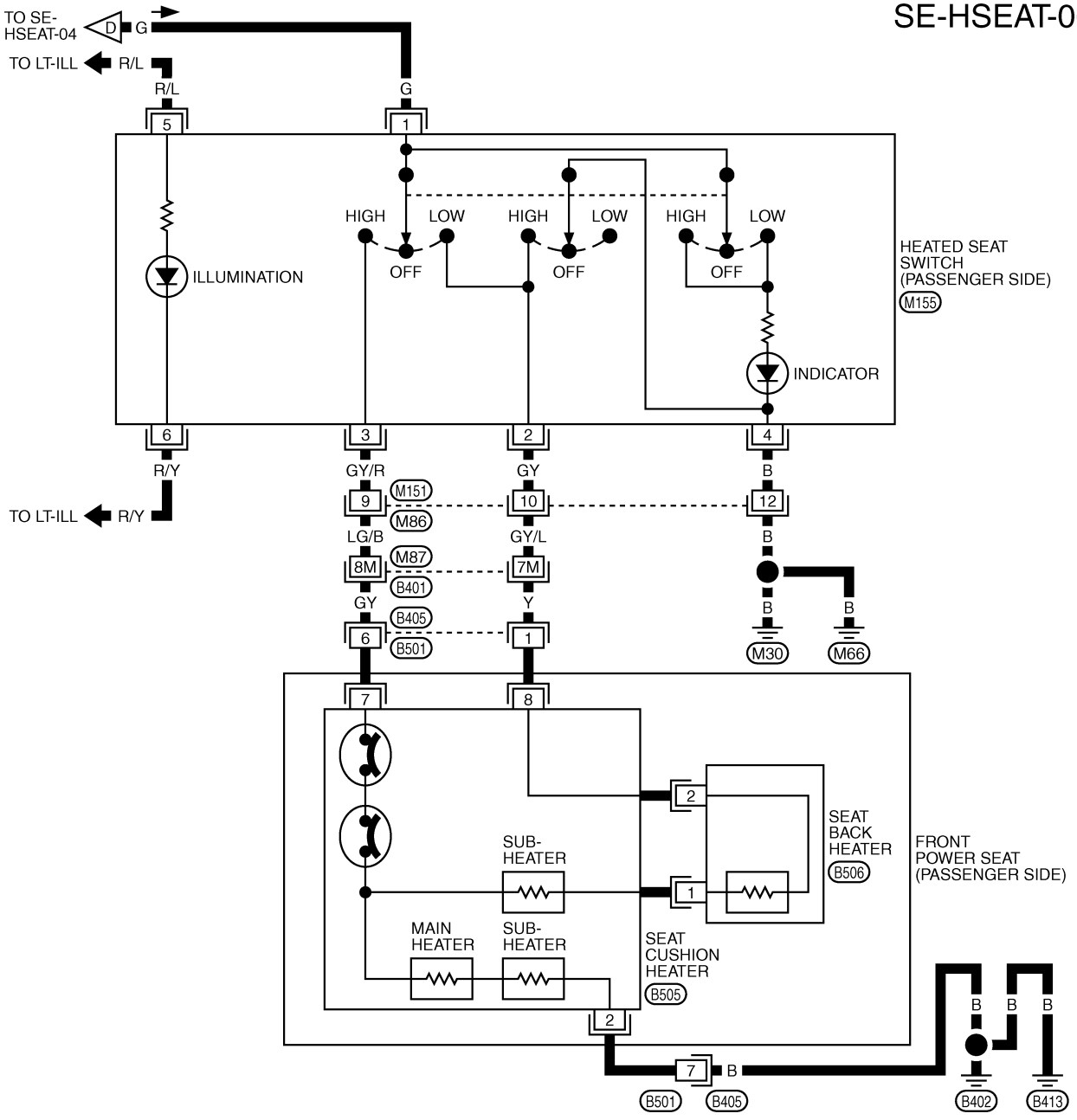
*: THIS CONNECTOR IS NOT SHOWN IN "HARNESS LAYOUT", PG SECTION.

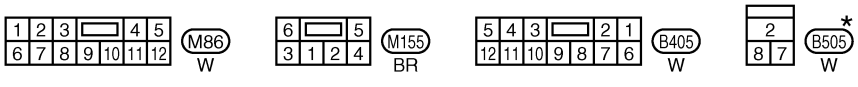
REFER TO THE FOLLOWING.

B1 -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1022E

SE-HSEAT-06





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

REFER TO THE FOLLOWING.

B401 -SUPER MULTIPLE JUNCTION (SMJ)

TIWM1023E

FRONT SEAT

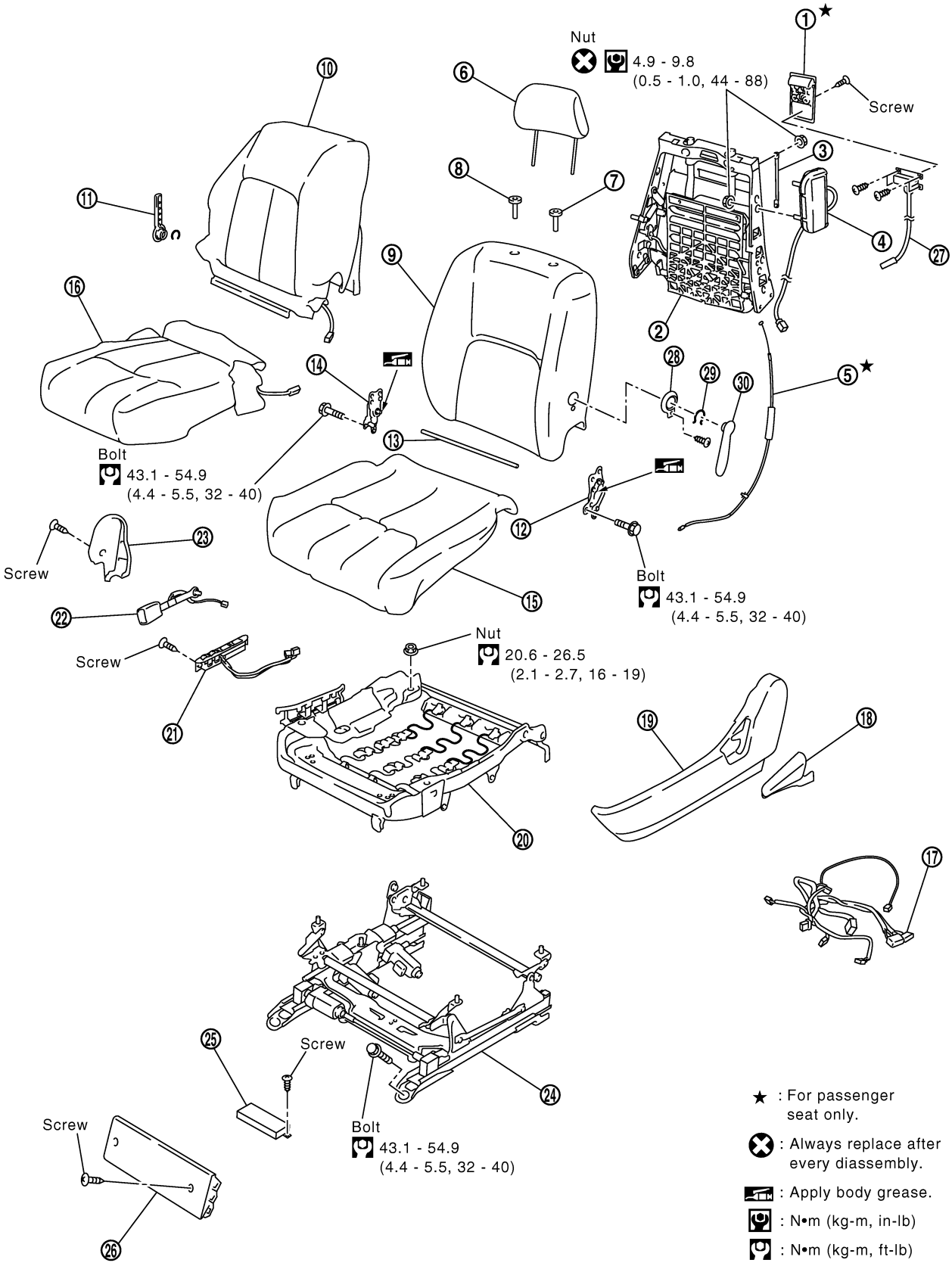
PFP:87000

Removal and Installation

AIS006DF

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

SEC. 870



PIIB4820E

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

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

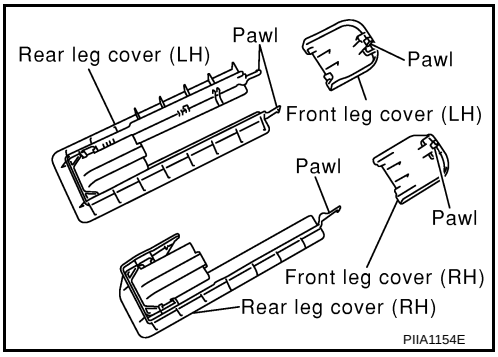
REMOVAL

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

CAUTION:

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

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



NOTE:

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

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

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

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

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

INSTALLATION

Install in the reverse order of removal.

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

Disassembly and Assembly

AIS006DG

SEATBACK TRIM AND PAD

CAUTION:

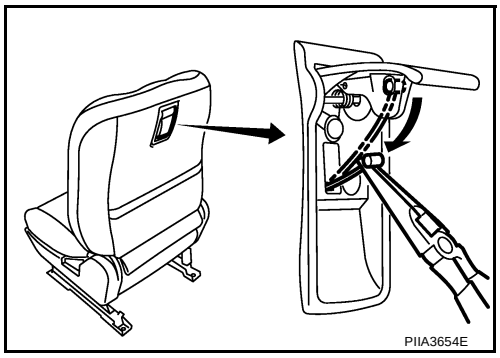
Do not disassemble front passenger seat cushion assembly.
Always replace as an assembly.
For front passenger seat service parts, refer to the service part catalogue.

NOTE:

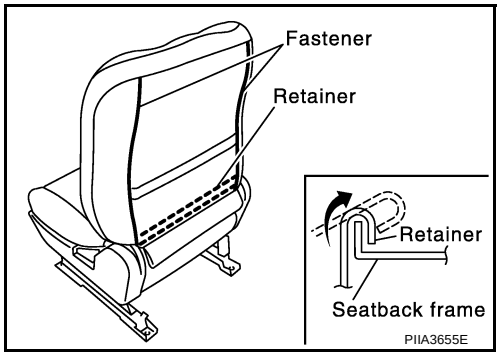
Be sure to set the front/rear cushion lifter to the top position.

Disassembly

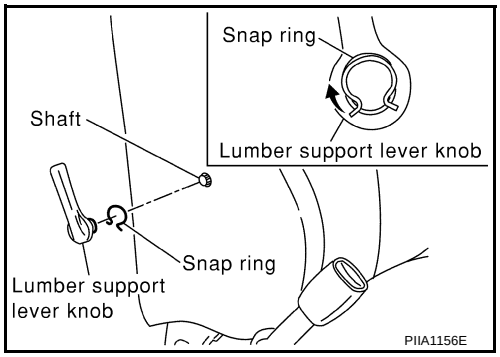
1. Remove screw, and then remove walk-in lever.



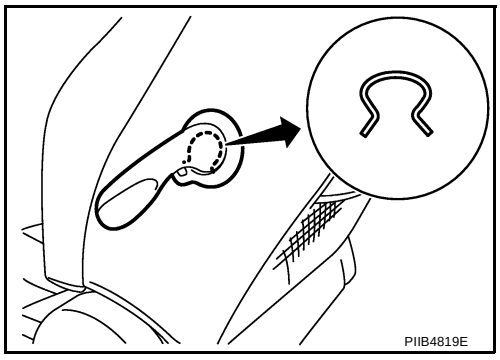
2. Disconnect the harness connector, and then remove seatback switch.
3. Open fastener on back of seatback, and remove retainer from seatback frame.



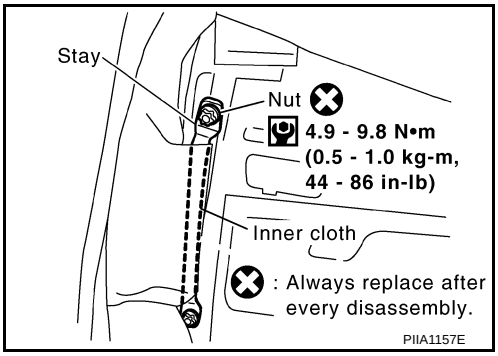
4. Pull snap ring upward, and remove lumber support lever knob from seatback frame.



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

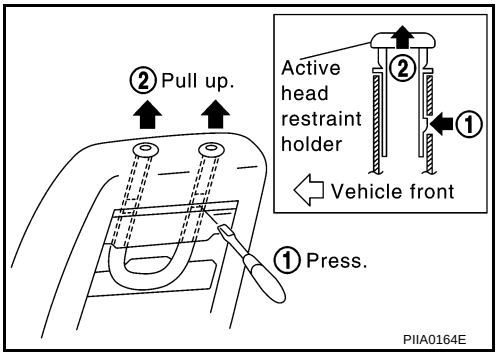


7. Remove screw, and then remove walk-in side lever finisher.
8. Remove the stay securing the inner cloth.



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

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



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

Assembly

Assemble in the reverse order of disassembly.

REMOVAL OF SEATBACK ASSEMBLY

1. After completing the steps 1, 2 and 3 of “SEATBACK TRIM AND PAD”, remove the harness connectors for the side air bag from the seat cushion.
2. Remove the reclining device mounting bolts on the seatback frame, and remove the seatback assembly.

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

INSTALLATION OF SEATBACK ASSEMBLY

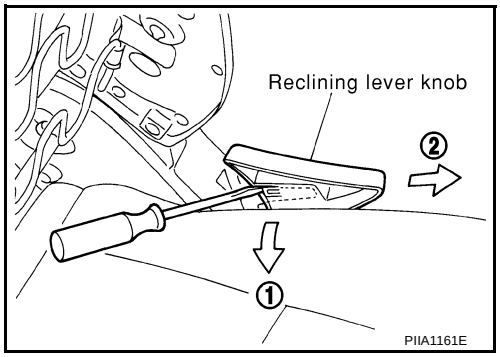
Install in the reverse order of removal.

SEAT CUSHION TRIM AND PAD

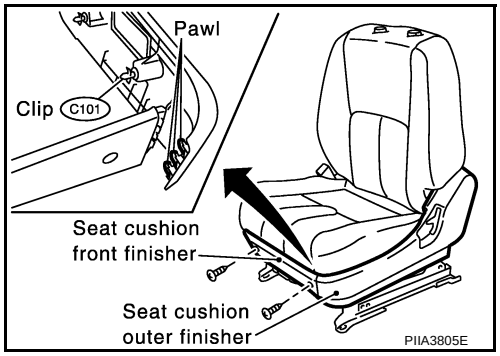
CAUTION:
Do not disassemble front passenger seat cushion assembly.
Always replace as an assembly.
For front passenger seat service parts, refer to the service part catalogue.

Disassembly

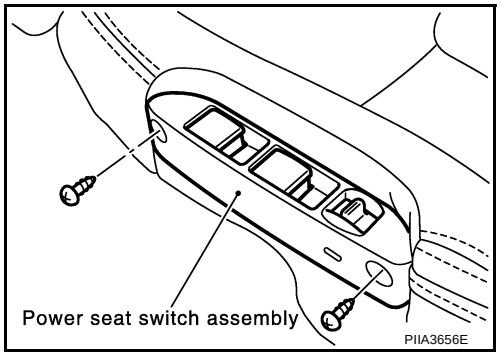
1. Pull up tabs of reclining lever knob inside. Slide knob forward to remove.



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



3. Remove the power seat switch assembly.



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

Assembly

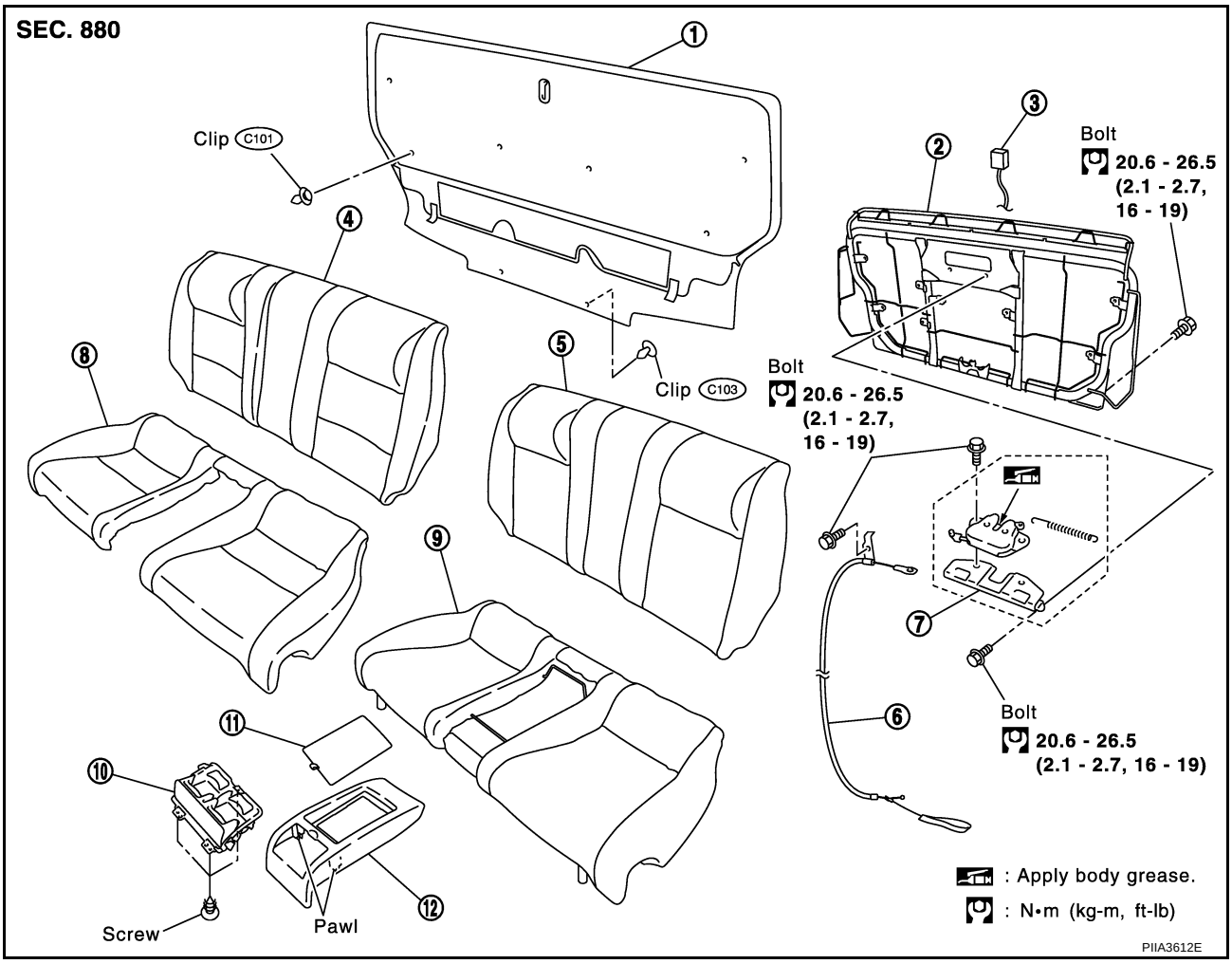
Assemble in the reverse order of disassembly.

REAR SEAT

PFP:88300

Removal and Installation

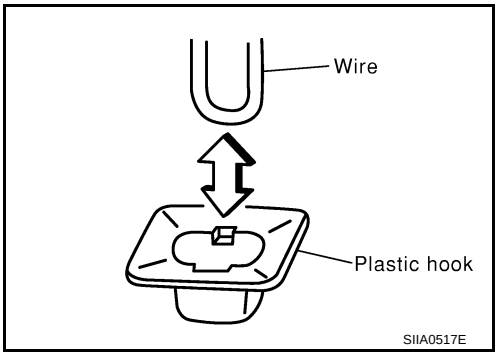
AIS001CP



1. Seatback board
2. Seatback frame
3. Seatback device lock indicator
4. Seatback trim
5. Seat cushion pad
6. Seatback device cable
7. Seatback device lock
8. Seat cushion trim
9. Seat cushion pad
10. Center tray cup holder
11. Center tray box lid
12. Center tray box

REMOVAL

Raise the bottom of the seat cushion to release the wire from the plastic hook, then pull the seat cushion forward to remove.



INSTALLATION

Install in the reverse order of removal.