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| < BASIC INSPECTION > |  |
|----------------------|--|
|----------------------|--|

| BASIC INSPECTION              |
|-------------------------------|
| DIAGNOSIS AND REPAIR WORKFLOW |

| WorkFlow INFOID:000000011488105  | В   |
|--|-----|
| DETAILED FLOW  |     |
| 1.OBTAIN INFORMATION ABOUT SYMPTOM   | С   |
| Interview the customer to obtain the malfunction information (conditions and environment when the malfunc-   |     |
| tion occurred) as much as possible when the customer brings the vehicle in.  | D   |
| >> GO TO 2.  |     |
| 2. REPRODUCE THE MALFUNCTION INFORMATION   | Е   |
| Check the malfunction on the vehicle that the customer describes.  |     |
| Inspect the relation of the symptoms and the condition when the symptoms occur.  | F   |
| >> GO TO 3.  |     |
| ${f 3.}$ IDENTIFY THE MALFUNCTIONING SYSTEM WITH "SYMPTOM DIAGNOSIS"   | G   |
| Use "Symptom diagnosis" from the symptom inspection result in step 2 and then identify where to start per-<br>forming the diagnosis based on possible causes and symptoms. | 0   |
| ionning the diagnosis based on possible causes and symptoms.   | Н   |
| >> GO TO 4.  | 1.1 |
| 4. IDENTIFY THE MALFUNCTIONING PARTS WITH "COMPONENT DIAGNOSIS"  |     |
| Perform the diagnosis with "Component diagnosis" of the applicable system.   | I   |
| >> GO TO 5.  | OF  |
| 5. REPAIR OR REPLACE THE MALFUNCTIONING PARTS  | SE  |
| Repair or replace the specified malfunctioning parts.  | 17  |
|  | K   |
| >> GO TO 6.<br>6.FINAL CHECK   |     |
| Check that malfunctions are not reproduced when obtaining the malfunction information from the customer,   | L   |
| referring to the symptom inspection result in step 2.  |     |
| Are the malfunctions corrected?<br>YES >> INSPECTION END   | M   |
| NO $>>$ GO TO 3.   |     |
|  | Ν   |
|  |     |
|  | 0   |
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# SYSTEM DESCRIPTION POWER SEAT FOR DRIVER SIDE

#### System Description

INFOID:000000011488106

INFOID:000000011488107

#### SLIDING OPERATION

While operating the sliding switch located in power seat switch, sliding motor operates and makes possible the seat forward and backward position adjustment.

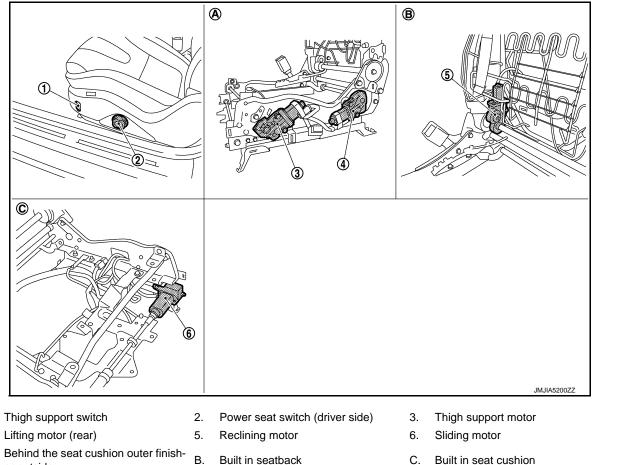
#### **RECLINING OPERATION**

While operating the reclining switch located in power seat switch, reclining motor operates and makes possible the seat back forward and backward position adjustment.

#### LIFTING OPERATION

- While operating the lifting switch located in power seat switch, lifting motor operates and makes possible the rear portion of seat cushion up and down position adjustment.
- Thigh support motor is activated and the front portion of seat cushion can be adjusted upward or downward, while thigh support switch being operated.

#### **Component Parts Location**



Α. er outside

**Component Description** 

- В.

INFOID:0000000011488108

supplied to each motor.

| Item                 | Function   |
|----------------------|--|
| Power seat switch    | Built-in reclining switch, sliding switch and lifting switch, controls the power |
| Thigh support switch | Detect the operation of thigh support motor.                                     |

Operates seat lift up and down.

Lifting motor

1.

4.

SE-4

# POWER SEAT FOR DRIVER SIDE

#### < SYSTEM DESCRIPTION >

| Item                | Function   |
|---------------------|--|
| Reclining motor     | With the power supplied to power seat switch, operates the forward and backward of seat back.  |
| Sliding motor       | With the power supplied to power seat switch, operates the forward and backward slide of seat. |
| Thigh support motor | Operates the front portion of seat cushion up and down.  |

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#### < SYSTEM DESCRIPTION >

# POWER SEAT FOR PASSENGER SIDE

### System Description

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INFOID:0000000011488110

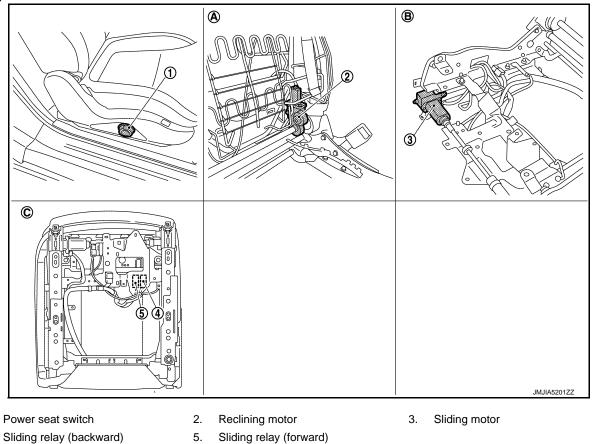
#### SLIDING OPERATION

 While operating the sliding switch located in power seat switch, sliding motor operates and makes possible the seat forward and backward position adjustment.

#### **RECLINING OPERATION**

While operating the reclining switch located in power seat switch, reclining motor operates and makes possible the seatback forward and backward position adjustment.

#### **Component Parts Location**



Α.

1.

4.

- Built in seatback

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# **Component Description**

Back side of seat cushion C.

INFOID:000000011488111

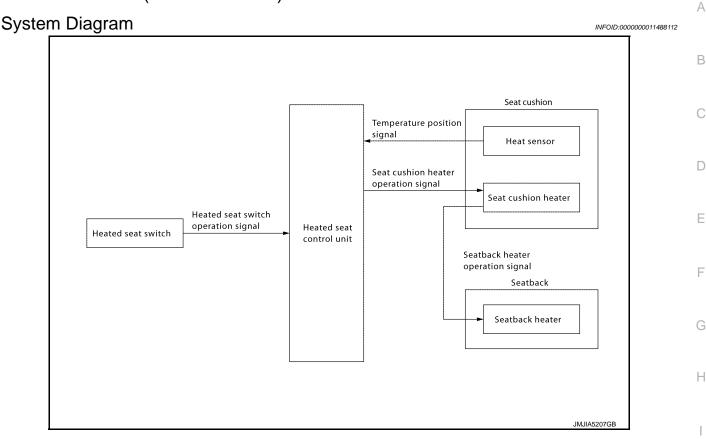
| Item              | Function   |
|-------------------|--|
| Power seat switch | Built-in reclining switch and sliding switch controls the power supplied to each motor.        |
| Sliding switch    | Detect the operation of sliding motor.   |
| Reclining motor   | With the power supplied to power seat switch, operates the forward and backward of seatback.   |
| Sliding motor     | With the power supplied to power seat switch, operates the forward and backward slide of seat. |

Built in seat cushion

# **HEATED SEAT (DRIVER SIDE)**

#### < SYSTEM DESCRIPTION >

# HEATED SEAT (DRIVER SIDE)



## System Description

INFOID:000000011488113

- Heated seat is activated by heated seat switch while ignition switch is ON, and is equipped with the function to warm seat cushion and seatback.
- Heated seat is equipped with the LO/HI temperature adjustment function that adjusts temperature by operating heated seat switch to the optimal position.

#### **OPERATION DESCRIPTION**

- When operating heated seat switch to either position of LO/HI while ignition switch is ON, indicator illuminates, heated seat control unit supplies power supply to heater unit, and warms seat cushion and seatback.
- Heat sensor that is built in seat cushion heater detects seat cushion heater temperature and outputs to heated seat control unit.
- Heated seat control unit monitors the heated seat switch position and heater sensor temperature, and interrupts power supply to heater unit when the heat sensor temperature reaches preset temperature.

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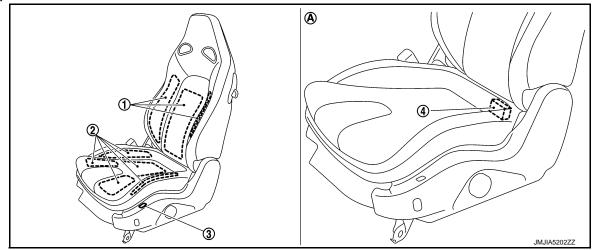
L

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# HEATED SEAT (DRIVER SIDE)

#### < SYSTEM DESCRIPTION >

# **Component Parts Location**



3.

Heated seat switch

Seat cushion heater

2.

- 1. seatback heater
- 4. Heated seat control unit
- A. Back side of seat cushion

# **Component Description**

INFOID:000000011488115

INFOID:000000011488114

| Item                     | Function  |
|--------------------------|---|
| Heated seat control unit | <ul> <li>Activates seat cushion heater and seatback heater via heated seat switch signal.</li> <li>Controls heated seat system.</li> </ul>  |
| Heated seat switch       | <ul> <li>Supplies power supply to each heater.</li> <li>Equips indicator that indicates the operating condition.</li> <li>Changes the number of activated heaters depending on the HI or LO switch position.</li> </ul> |
| Heat sensor              | Outputs seat cushion temperature to heated seat control unit  |
| Seat cushion heater      | Built in seatback and is activated by power supply from heated seat switch.   |
| Seatback heater          | Built in seatback and is activated by power supply from heated seat switch.   |

## **HEATED SEAT (PASSENGER SIDE)**

#### < SYSTEM DESCRIPTION >

# HEATED SEAT (PASSENGER SIDE)

## System Description

INFOID:000000011488116

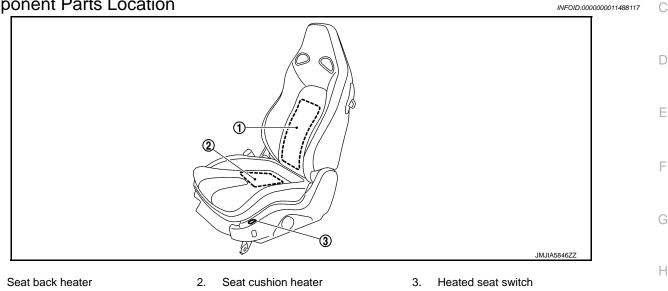
INFOID:000000011488117

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- By turning seat heated switch ON, seat cushion heater and seat back heater are activated.
- By switching seat switch to HI or LO, the number of activated heaters changes and seat warming seed is adjusted.

#### **Component Parts Location**



## **Component Description**

1.

INFOID:000000011488118

| Item                | Function   |    |
|---------------------|--|----|
| Heated seat switch  | <ul><li>Supplies power supply to each heater.</li><li>Changes the number of activated heaters depending on the HI or LO switch position.</li></ul> | SE |
| Seat cushion heater | Built in seat cushion and is activated by power supply from heated seat switch.  |    |
| Seat back heater    | Built in seat back and is activated by power supply from heated seat switch.   | K  |

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# HEATED SEAT CONTROL UNIT (DRIVER SIDE)

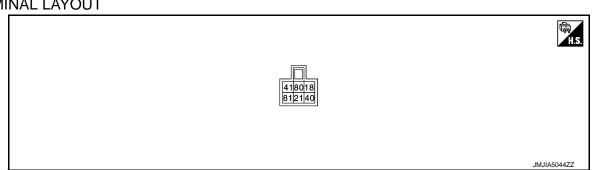
< ECU DIAGNOSIS INFORMATION >

# ECU DIAGNOSIS INFORMATION HEATED SEAT CONTROL UNIT (DRIVER SIDE)

#### **Reference Value**

**TERMINAL LAYOUT** 





#### PHYSICAL VALUES

|             | nal No.<br>color) | Description                |                  | Condition          |                  | Voltage (V)          |
|-------------|-------------------|----------------------------|------------------|--------------------|------------------|----------------------|
| (+)         | (–)               | Signal name                | Input/<br>Output |                    | (Approx.)        |                      |
| 18          | Ground            |                            | loput            | Ignition switch    | OFF or ACC       | 0                    |
| (R)         | Giouna            | IGN power supply           | Input            | Ignition Switch    | ON               | Battery voltage      |
| 21<br>(B)   | Ground            | Ground                     | _                | Ignition switch O  | 0                |                      |
|             |                   |                            |                  |                    | OFF              | 0                    |
| 40<br>(W)   | Ground            | Heat sensor signal         | switch           |                    | OL               | 10.87 - 11.02*       |
| ()          |                   |                            |                  | Н                  | 11.31 – 11.43*   |                      |
| 41          | Ground            | Seat cushion heater pow-   | Output           | Heated seat        | Operate          | 0 – Battery voltage* |
| (R/W)       | Giouna            | er supply                  | Output           | Healed Seal        | Other than above | 0                    |
| 80          | Ground            | Heated seat operation sig- | loput            | Heated seat        | Operate          | Battery voltage      |
| (L/W)       | Giouna            | nal                        | Input            | Healed Seal        | Other than above | 0                    |
|             |                   |                            |                  |                    | OFF              | 0                    |
| 81<br>(R/L) | Ground            | Heated seat switch signal  | Input            | Heated seat switch | OL               | 12.24                |
| ()          |                   |                            |                  |                    | Н                | 12.90                |

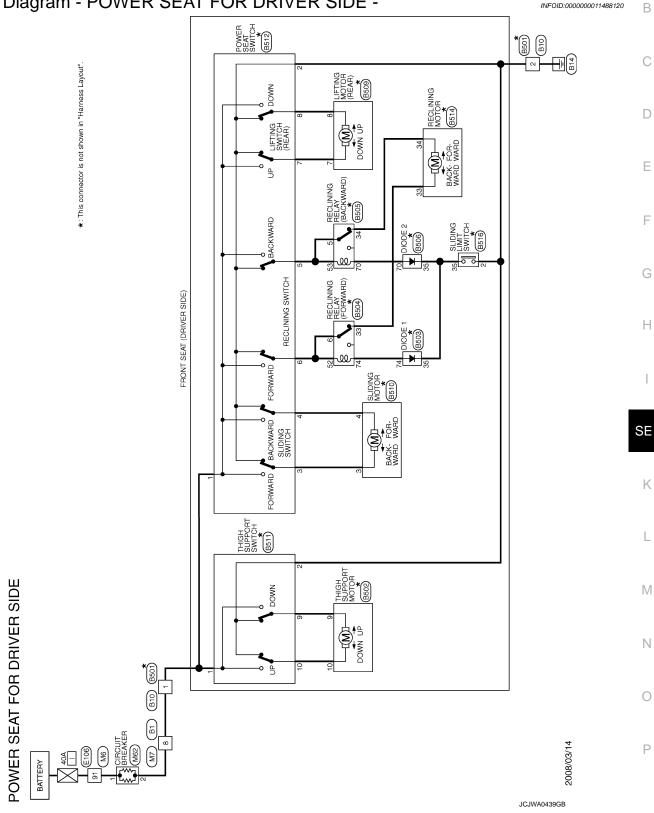
\*: Voltage is repeated within the value shown as per the following list depending on heater unit temperature.

< WIRING DIAGRAM >

# WIRING DIAGRAM

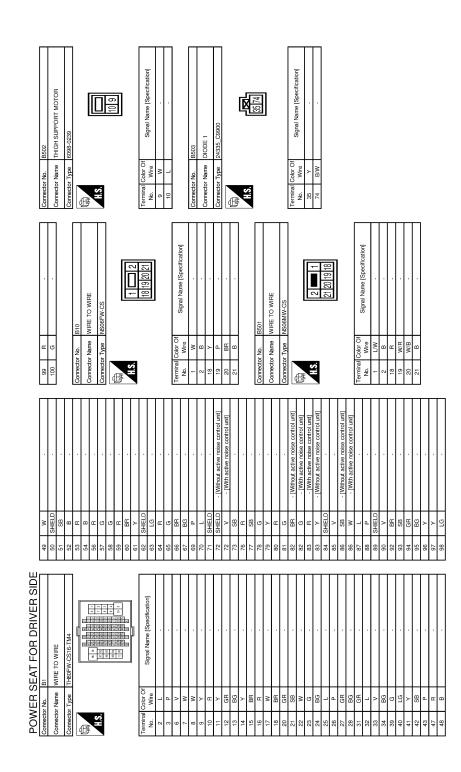
POWER SEAT FOR DRIVER SIDE

Wiring Diagram - POWER SEAT FOR DRIVER SIDE -

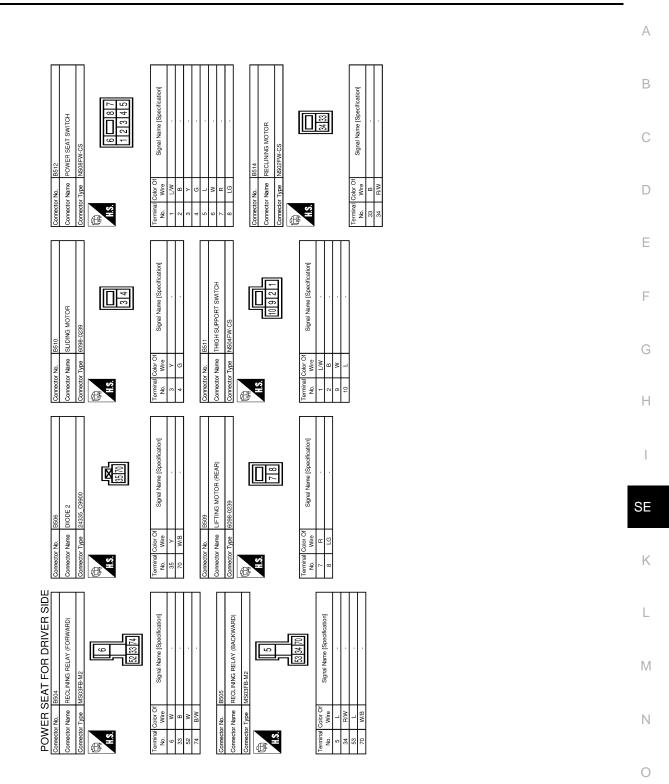


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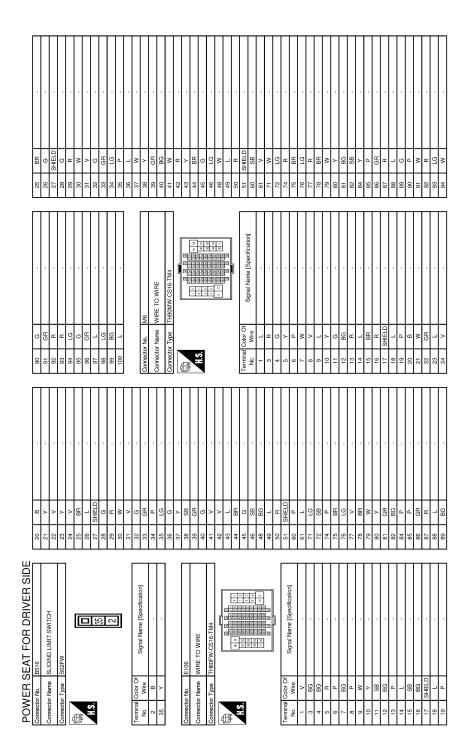
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**POWER SEAT FOR DRIVER SIDE** 

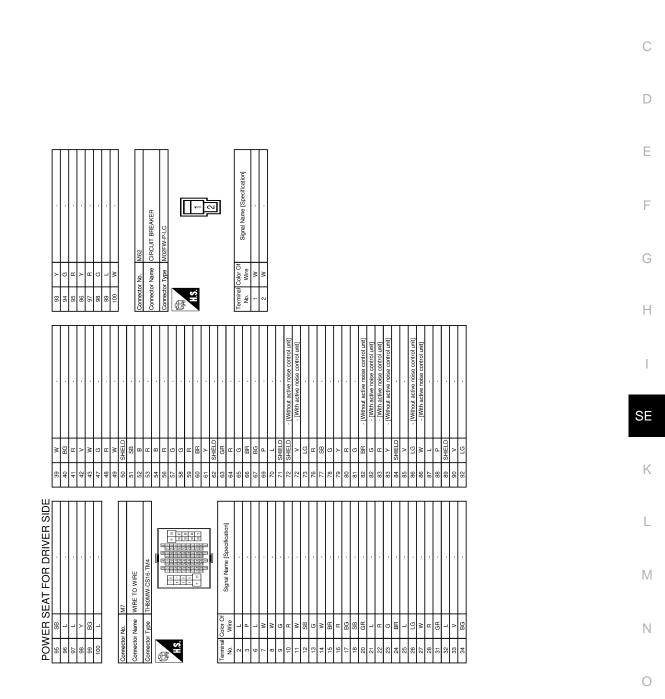
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POWER SEAT FOR DRIVER SIDE

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JRJWC9293GB

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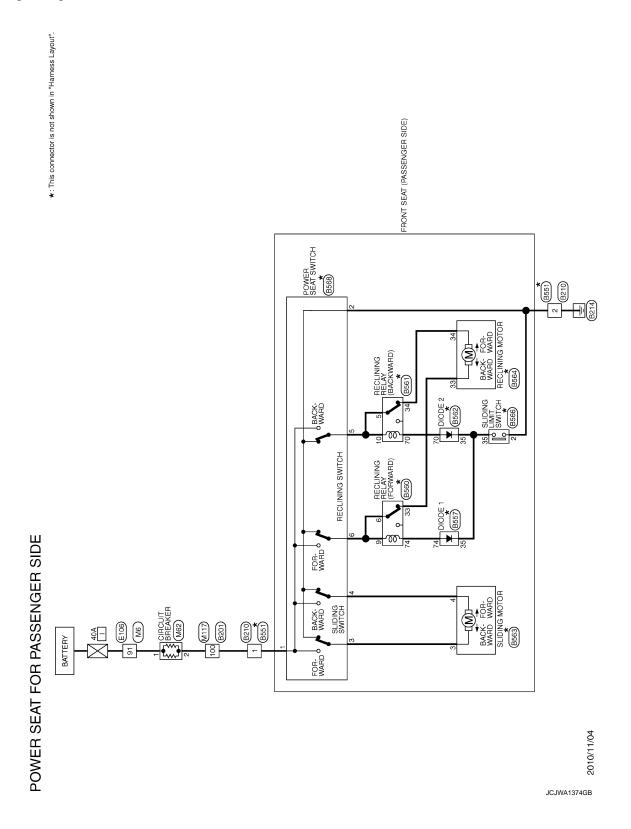
## POWER SEAT FOR PASSENGER SIDE

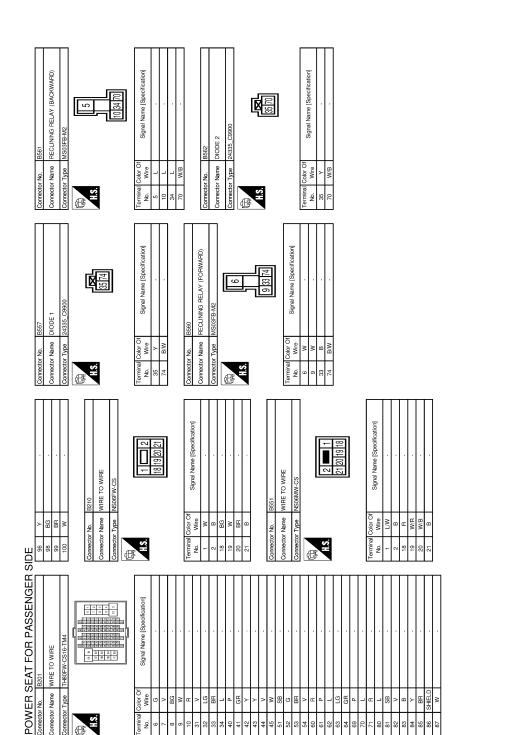
< WIRING DIAGRAM >

# POWER SEAT FOR PASSENGER SIDE

Wiring Diagram - POWER SEAT FOR PASSENGER SIDE -

INFOID:000000011488121





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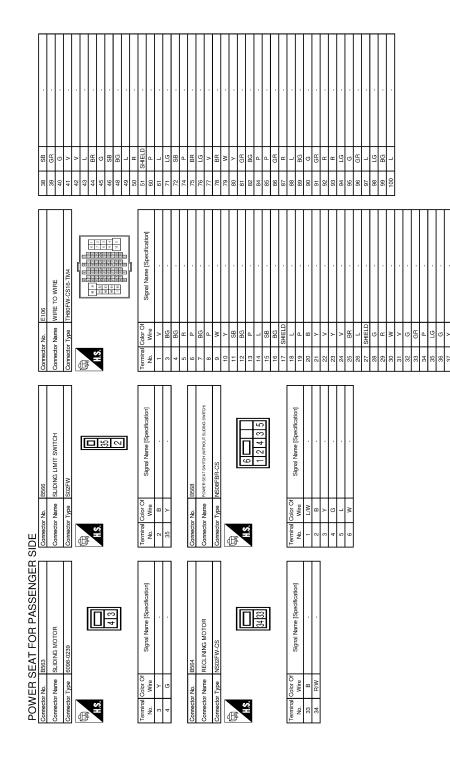
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**POWER SEAT FOR PASSENGER SIDE** 

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| Mes<br>CIRCUT BREAKER<br>MOZEW-P-LG<br>Signal Name (Specification)<br>Signal Name  | F  |
|  | G  |
| Connector Name<br>Connector Type<br>Connector Type<br>Connector Type<br>Connector Type<br>Connector Name<br>Connector Type<br>Connector Name<br>Connector Type<br>Connector Name<br>Connector Type<br>Connector Name<br>Connector Name<br>Connec | Н  |
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**POWER SEAT FOR PASSENGER SIDE** 

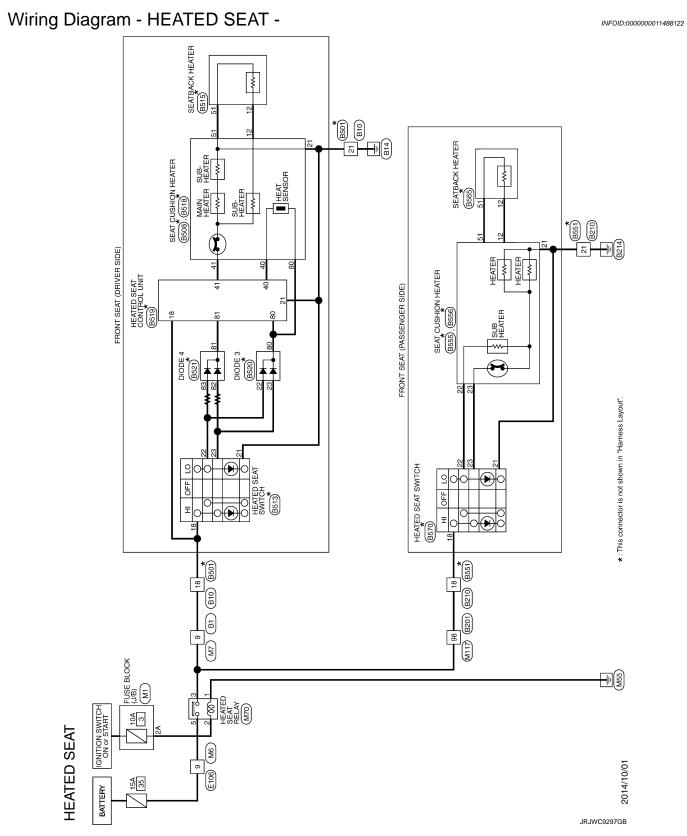
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< WIRING DIAGRAM >

# HEATED SEAT



|                             | П              | >        |   | 66                | œ                  |  | 40        | ۵.                          |                            |
|-----------------------------|----------------|----------|---|-------------------|--------------------|--|-----------|-----------------------------|----------------------------|
|                             | T              | SHIFLD   |   | 3                 | : 0                |  | 4         | . e                         |                            |
| -                           | T              | er er    |   |                   | ,                  |  | 42        | ;>                          |                            |
|                             | 52             |          |   |                   |                    |  | 43        | . >                         |                            |
|                             | 2              |          |   | Connector No      | No B10             |  | 44        | . >                         |                            |
| Let                         | 54             | в        |   |                   |                    |  | 45        | M                           | -                          |
|                             | 56             | œ        | ,   | CONTRECTOR INSIDE |                    | WIRE TO WIRE   | 51        | BB                          | ,                          |
| 2 2                         | 57             | σ        |   | Connector         | Type NS0           | NS06FW-CS  | 52        | J                           |                            |
| 2 22                        | 58             | σ        |   |                   | 1                  |  | 3         | ШB                          |                            |
| 2 22                        | δ <sup>2</sup> | α        |   | £                 |                    |  | 43        | ~                           |                            |
| 77                          |                | 2        |   | it.               |                    |  | ŝ         | · c                         |                            |
|                             | 3              | 5        |   | Š                 |                    |  | 3         | = 1                         |                            |
|                             | 1              | ~        |   |                   |                    |  | ٥         | r                           |                            |
| Cinnel Name (Cassification) |                | SHIELD   |   |                   |                    | 18 19 21 21  | 62        | -                           | -                          |
| adiicatiorij                | 63             | LG       |   |                   |                    |  | 3         | LG                          |                            |
|                             | 54             | 0        |   |                   |                    |  | 5         | 00                          |                            |
|                             |                |          |   |                   |                    |  | ;[:       | ;; ,                        |                            |
|                             | 65             | 5        |   |                   |                    |  | 69        | Ч                           |                            |
|                             | 99             | ВВ       |   | Terminal C        | Color Of           |  | 02        | _                           |                            |
|                             | ţ              | 2        |   |                   | Wire               | Signal Name [Specification]                              | i         | 6                           |                            |
|                             | 5              | 2        |   | t                 | 2                  |  | -         | -                           |                            |
|                             | 69             | ۵.       |   |                   | 3                  |  | 8         |                             |                            |
|                             | 02             | -        |   | ¢                 | 0                  |  | 2         | 00                          |                            |
|                             | 1              | -        |   | 7                 | •                  |  | •         | 8                           |                            |
|                             | 7              | SHIELD   |   | 18                | ~                  |  | 82        | >                           |                            |
|                             | Г              |          | filment and a solar and a state of the second | ç                 | c                  |  | 6         | c                           |                            |
|                             | Т              | SUILLU   | - [WILLIOUL ACTIVE TIOISE COTILIOI UTIL]  | 2                 | -                  |  | 8         | ٥                           |                            |
|                             | 72             | >        | <ul> <li>[With active noise control unit]</li> </ul>  | 20                | HB                 |  | 84        | ~                           |                            |
|                             | 20             | 9        |   | č                 | •                  |  | 9         | 0                           |                            |
|                             | ?              | 0        |   | 7                 | _                  |  | 8         | 5                           |                            |
|                             | 76             | œ        |   |                   |                    |  | 86        | SHIELD                      |                            |
|                             |                | 9        |   |                   |                    |  | 07        | M.                          |                            |
|                             | ,,             | 5        |   |                   |                    |  | ò         | Μ                           |                            |
|                             | 78             | J        |   | Connector         | Connector No. B201 | -  | 8         | >                           |                            |
|                             | 02             | >        |   |                   |                    |  | 8         | 0                           |                            |
|                             | 6/             | -        |   | Connector .       | Name WIF           | Connector Name WIRE TO WIRE                              | 0<br>D    | ŋ                           |                            |
|                             | 80             | œ        |   |                   |                    |  | 66        | BH                          |                            |
|                             | 5              | 6        |   | Connector         |                    | OEM CO40 TM4   | ţ         | ┞                           |                            |
|                             | ō              | 9        |   | Connector Lype    |                    | 1 FBUF W-CS 10-1 Mi4                                     | 001       | _                           |                            |
|                             | 82             | BB       | <ul> <li>[Without active noise control unit]</li> </ul>   |                   |                    |  |           |                             |                            |
|                             | 2              | ,        | Datisfies and a second second second  | ₫                 |                    |  |           |                             |                            |
|                             | 22             | 5        | - [with active holse control unit]  |                   |                    |  |           |                             |                            |
|                             | 8              | œ        | <ul> <li>[With active noise control unit]</li> </ul>  |                   |                    | 8 31 8 3 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8                 | Connec    | Connector No. B210          |                            |
|                             | 6              | >        | [14/14bout active police control unit]  | N.H.              |                    |  |           |                             |                            |
|                             | t              | -        | - לאווו ומתו מהוואב וומופב המווו מו חווח  | ļ                 |                    | 64 00 102 102 103 10 10 10 10 10 10 10 10 10 10 10 10 10 | Conner    | Connector Name WIRE TO WIRE | ) WIRE                     |
|                             |                | SHIELU   |   |                   |                    | 20 01 02 02 02 02 02 02 02 02 02 02 02 02 02             |           |                             |                            |
|                             | 50             | >        |   |                   |                    |  | Conno     | Connector Type NICOGEN CC   | 50                         |
|                             | 3              |          |   |                   |                    |  | 2         |                             | 20                         |
|                             | 80             | SG       | <ul> <li>[without active hoise control unit]</li> </ul>   |                   |                    | 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                    | 4         |                             |                            |
| ,                           | 86             | M        | <ul> <li>[With active noise control unit]</li> </ul>  |                   |                    |  | E         |                             |                            |
|                             |                | +        |   | -                 |                    |  | 三手        |                             |                            |
|                             | 87             | _        |   | g                 | Color Ct           | Cinnel Name (Considention)                               | Ę         |                             | ,<br> <br>                 |
|                             | 88             | ۵        |   | g                 | Wire               |  | 611       |                             |                            |
|                             | 3              |          |   | t                 | (                  |  | ļ         |                             |                            |
| ,                           |                | SHIELU   |   | ٥                 | 5                  |  |           |                             | 18 19 20 21                |
|                             | 06             | >        |   | 7                 | >                  |  |           |                             |                            |
|                             | 8              | 2        |   |                   | 2                  |  |           |                             |                            |
| -                           | 22             | НВ       |   | ×                 | DD<br>DD           |  |           |                             |                            |
|                             | 5              | ď        |   | σ                 | M                  |  |           |                             |                            |
| T                           | 3              | 3        |   | ,                 | :                  |  | ļ         |                             |                            |
| -                           | 94             | ЧÐ       |   | 0                 | н                  |  | I erminal | COLOR UT                    | Signal Name [Coortination] |
|                             | 35             | СЧ<br>СЧ |   | 34                | >                  |  | ź         | Wire                        |                            |
|                             |                | :        |   |                   |                    |  | ŀ         | :                           |                            |
|                             | 0ĥ             | ,<br>-   |   | 32                | 2                  |  | -         | N                           |                            |
|                             | 97             | >        |   | g                 | 88                 |  | ~         |                             |                            |
|                             | 0              |          |   | ;                 |                    |  | \$        | ć                           |                            |
|                             | 98             | LG       |   | 34                | _                  |  | 18        | BG                          |                            |

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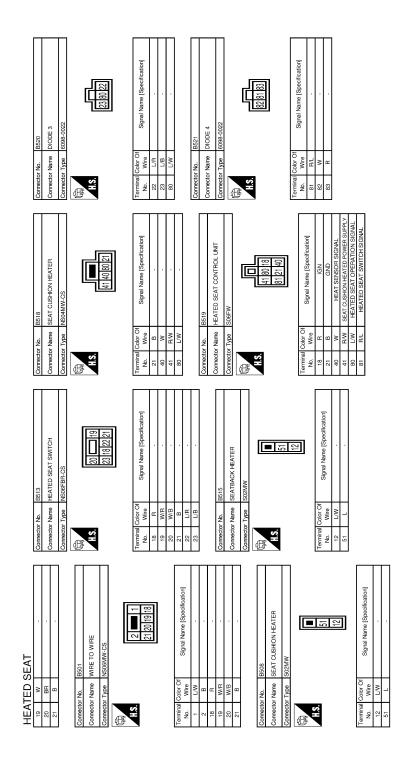
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< WIRING DIAGRAM >



JRJWC9299GB

| BG<br>BG<br>P<br>P<br>B<br>B<br>B<br>A<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C<br>C   | 2.11<br>2.11<br>2.12<br>2.15<br>2.15<br>2.15<br>2.15<br>2.15   |
|--|--|
| 23<br>23<br>23<br>24<br>24<br>24<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25<br>25   | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  |
| Corrector No. B570<br>Connector Name HEATED SEAT SWITCH<br>Connector Type NSI06FBR-CS<br>2016/22/21  | Terminal Color Of<br>Wire         Signal Name [Specification]           10         WIR         -           22         U/R         -           22         U/R         -           23         U/B         -           23         U/B         -           23         U/B         -           23         U/B         -           24         WIRE TO WIRE         -           25         U/R         -           26         WIRE TO WIRE         -           27         U/B         -           28         THA         -           1         V/         -           1         V         -           1         V         -           1         P         -           1         P         -           1         P         -           1         P         -           1         P         -           1         P         -           1         P         -           1         P         -   |
| Corrrector No. B556<br>Corrrector Name SEAT CUSHION HEATER<br>Corrrector Type St22MW   | Terminal Color Of<br>No.     Color Of<br>Vire     Signal Name (Specification)       1     LW     .       51     LW     .       Connector No.     BE65       Connector No.     BE65       Connector No.     SEXTBACK HEATER       Connector No.     Sextback       Connector No.     Sextback       Connector No.     Sextback       Connector No.     Sextback       No.     No.       No.     .       Signal Name (Specification)     .       Signal Name (Specification)     . |
| HEATED SEAT<br>Corrector Name WIRE TO WIRE<br>Corrector Type NSDAWLCS<br>Corrector Type NSDAWLCS<br>Corrector Type 10<br>Corrector Type 1 | Terminal<br>No.     Color OI<br>Wire     Signal Name [Specification]       2     B     -       20     Wirls     -       21     B     -       22     Wills     -       23     BESS     -       Connector Name     SEAT CUSHION HEATER       Connector Name     SEAT CUSHION HEATER       Connector Type     NS03MW CS       Connector Type     NS03MW CS       Connector Name     Signal Name [Specification]   |

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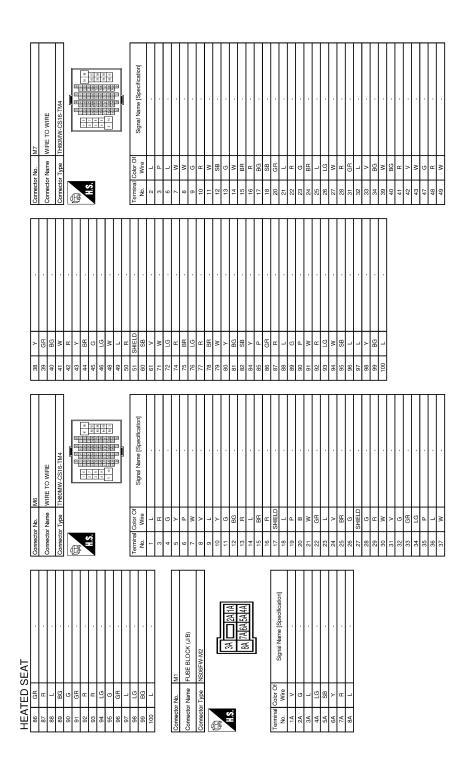
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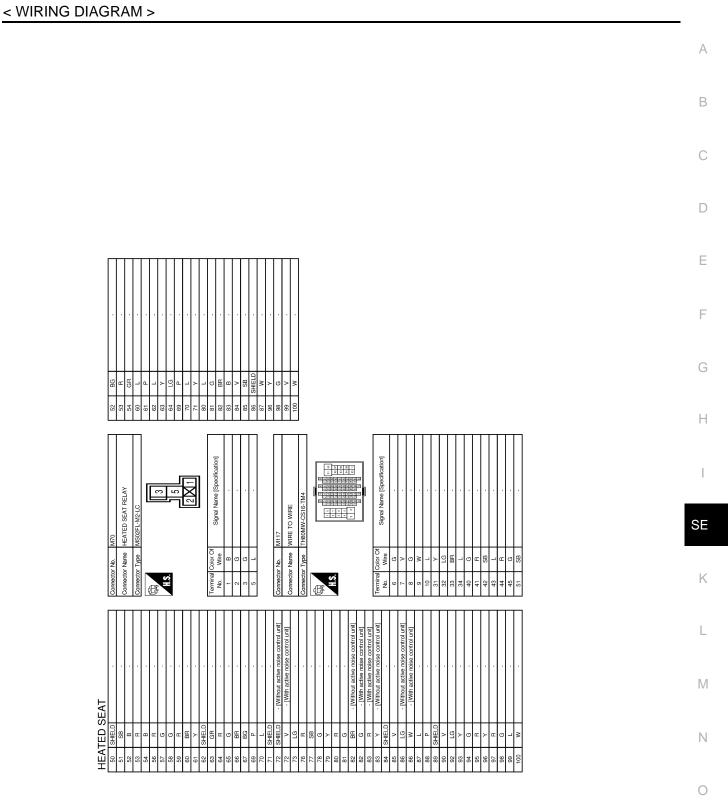
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## POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS POWER SUPPLY AND GROUND CIRCUIT

HEATED SEAT CONTROL UNIT

## HEATED SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000011488123

## 1.CHECK FUSE

Check that the following fuse is not fusing.

| Signal name          | Fuse No.  |
|----------------------|-----------|
| Battery power supply | 35 (15 A) |

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

# 2. CHECK POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect heated seat control unit connector.

3. Turn ignition switch ON.

4. Check voltage between heated seat control unit harness connector and ground.

|                          | (+)      |        |                          |
|--------------------------|----------|--------|--------------------------|
| Heated seat control unit |          | (–)    | Voltage (V)<br>(Approx.) |
| Connector                | Terminal |        | ( 11 - 7                 |
| B519                     | 18       | Ground | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 3.

# **3.**CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect heated seat relay connector.
- Check continuity between heated seat control unit harness connector and heated seat relay terminal connector.

| Heated sea | t control unit | Heated seat relay Continui |   |            |
|------------|----------------|----------------------------|---|------------|
| Connector  | Terminal       | minal Connector Terminal   |   | Continuity |
| B519       | 18             | M70                        | 3 | Existed    |

4. Check continuity between heated seat control unit harness connector and ground.

| Heated sea | t control unit |        | Continuity  |  |
|------------|----------------|--------|-------------|--|
| Connector  | Terminal       | Ground | Continuity  |  |
| B519       | 18             |        | Not existed |  |

#### Is the inspection result normal?

YES >> Check heated seat relay. Refer to <u>SE-32, "Component Function Check"</u>.

NO >> Repair or replace harness.

#### **4.**CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between heated seat control unit harness connector and ground.

# POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

|  |  |   |  | 1                           |                            |
|--|--|---|--|-----------------------------|----------------------------|
|  | ted seat control unit  |   | -  |                             | Continuity                 |
| Connector  |  | minal   | Grou   | nd                          | Eviate d                   |
| B519   |  | 21  |  |                             | Existed                    |
|  | eated seat control replace harness.  |   |  |                             |                            |
| IEATED SEAT S  | WITCH (DRIV  | ER SIDE) :  | Diagnosis                                    | Procedure                   | INFOID:000000011488        |
| .CHECK FUSE  |  |   |  |                             |                            |
| Check that the followir  | ng fuse is not fusing  | <b>j</b> .  |  |                             |                            |
|  | Signal name  |   |  | Fuse                        | e No.                      |
| E  | Battery power supply   |   |  | 35 (                        | 15 A)                      |
| CHECK POWER S<br>Turn ignition switc<br>Disconnect heated<br>Turn ignition switc   | h OFF.<br>d seat switch conne  | ector.  |  |                             | lown.                      |
|  | (+)  |   |  |                             |                            |
|  | Heated seat switc  |   |  | (-)                         | Voltage (V)<br>(Approx.)   |
|  | nector   | Term  |  |                             |                            |
|  | B513   | 1   | 8  | Ground                      | Battery voltage            |
| Driver side  | normal?  |   |  |                             |                            |
| sthe inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         CHECK POWER S         . Turn ignition switc         . Disconnect heated  | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connec   |   | ess connector                                | and heated                  | seat relay terminal conne  |
| s the inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         J.CHECK POWER S         . Turn ignition switc         . Disconnect heated         . Check continuity b         tor.   | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connec   |   |  | and heated a                |                            |
| s the inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         J.CHECK POWER S         . Turn ignition switc         . Disconnect heated         . Check continuity b         tor.   | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connect<br>between heated se   |   |  |                             | Continuity                 |
| <ul> <li><u>s the inspection result</u></li> <li>YES &gt;&gt; GO TO 4.</li> <li>NO &gt;&gt; GO TO 3.</li> <li>CHECK POWER S</li> <li>Turn ignition switc</li> <li>Disconnect heated</li> <li>Check continuity b<br/>tor.</li> </ul>  | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connect<br>between heated se   | at switch harn                                      | Heate  | ed seat relay               | seat relay terminal conner |
| s the inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         J.CHECK POWER S         . Turn ignition switc         . Disconnect heated         . Check continuity b         tor.         H         Connect         Driver side   | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connect<br>between heated se<br>eated seat switch<br>tor<br>B513                       | at switch harn<br>Terminal<br>18                    | Heate<br>Connector<br>M70                    | ed seat relay<br>Termi<br>3 | nal                        |
| s the inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         Image: CHECK POWER S         . Turn ignition switc         . Disconnect heated         . Check continuity b         tor.         Heat         Connect         Driver side   | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connect<br>between heated se<br>eated seat switch<br>tor<br>B513                       | at switch harn<br>Terminal<br>18<br>at switch harne | Heate<br>Connector<br>M70                    | ed seat relay<br>Termi<br>3 | nal Continuity<br>Existed  |
| s the inspection result         YES       >> GO TO 4.         NO       >> GO TO 3.         J.CHECK POWER S         . Turn ignition switc         . Disconnect heated         . Check continuity b         tor.         H         Connect         Driver side         . Check continuity b         . Check continuity b | UPPLY CIRCUIT<br>h OFF.<br>d seat relay connect<br>between heated se<br>eated seat switch<br>tor<br>B513<br>between heated sea | at switch harn<br>Terminal<br>18<br>at switch harne | Heate<br>Connector<br>M70<br>ess connector a | ed seat relay<br>Termi<br>3 | nal                        |

YES >> Check heated seat relay. Refer to <u>SE-32, "Component Function Check"</u>.

NO >> Repair or replace harness.

4. CHECK INTERMITTENT INCIDENT

## POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.

>> INSPECTION END

# HEATED SEAT SWITCH (DRIVER SIDE)

| < DTC/CIRC                    |                            |                         | D 2E           | AI 5WI          | ICH (DR     |        | ( SIDE)           |   |    |
|-------------------------------|----------------------------|-------------------------|----------------|-----------------|-------------|--------|-------------------|---|----|
| HEATED                        | SEAT                       | SWITCH (                | DRIV           | /ER SI          | DE)         |        |                   |   |    |
| Descriptio                    | n                          |                         |                |                 |             |        |                   | INFOID:000000011488125                  | A  |
| Adjusts heat                  | ed seat te                 | mperature and           | deactiv        | ates heat       | ed seat.    |        |                   |   | В  |
| Compone                       | nt Func                    | tion Check              |                |                 |             |        |                   | INFOID:000000011488126                  | D  |
| <b>1.</b> CHECK F             |                            | J                       |                |                 |             |        |                   |   | С  |
| Check that h                  | neated sea                 | t warms to pre          | set terr       | perature        | when opera  | ting h | eated seat switch | to the optimal posi-                    |    |
| tion.<br><u>Is the inspec</u> | tion result                | normal?                 |                |                 |             |        |                   |   | D  |
| YES >>                        | Heated se                  | at switch functi        |                |                 |             |        |                   |   |    |
|                               |                            | E-29, "Diagnos          | <u>is Proc</u> | <u>edure"</u> . |             |        |                   |   | Ε  |
| Diagnosis                     |                            |                         |                |                 |             |        |                   | INFOID:000000011488127                  |    |
|                               |                            |                         | L UNIT         | INPUT S         | IGNAL       |        |                   |   | F  |
| 2. Disconn                    |                            | seat control u          | nit conr       | nector.         |             |        |                   |   |    |
|                               | ition switcl<br>oltage bet | h ON.<br>ween heated se | eat con        | trol unit ha    | arness conn | ector  | and ground.       |   | G  |
|                               | (+)                        |                         |                |                 |             |        |                   |   |    |
| He                            | ated seat co               | ntrol unit              |                | ()              |             | Со     | ndition           | Voltage (V)<br>(Approx.)                | Н  |
| Conne                         | ctor                       | Terminal                |                |                 |             |        |                   | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |    |
|                               |                            |                         |                |                 |             |        | OFF               | 0                                       |    |
|                               |                            | 81                      |                |                 |             |        | LO                | 12.24                                   |    |
| B519                          | 9                          |                         | G              | round           | Heated seat | switch | HI                | 12.90                                   | SE |
|                               |                            | 22                      |                |                 |             |        | OFF               | 0                                       |    |
|                               |                            | 80                      |                |                 |             |        | LO                | Battery voltage                         | V  |
| Is the inspec                 | tion result                | normal?                 |                |                 |             |        |                   |   | K  |
|                               |                            | at switch circui        | t is OK.       |                 |             |        |                   |   |    |
| _                             | GO TO 2.                   | EAT SWITCH              |                |                 |             |        |                   |   | L  |
|                               |                            |                         |                |                 |             |        |                   |   |    |
|                               | ition switcl<br>ect heated | l seat switch co        | onnecto        | r, diode3 a     | and diode4  | conne  | ctor.             |   | M  |
| 3. Check c                    | ontinuity b                | etween heated           | seat s         | witch harr      | ness connec | tor an | d diode3 harness  | connector.                              |    |
|                               | Heated s                   | seat switch             |                |                 | Diau        | do3    |                   | Continuity                              | Ν  |
| Conr                          | nector                     | Terminal                |                | Con             | nector      |        | Terminal          |   |    |
| B                             | 513                        | 22                      |                | В               | 520         |        | 22                | Existed                                 | 0  |
| 4. Check c                    | ontinuity b                |                         | seat s         | witch harr      | ness connec | tor an | d diode4 harness  | connector.                              |    |
|                               | Heated s                   | seat switch             |                |                 | Diau        | do4    |                   |   | Ρ  |
| Conr                          | nector                     | Terminal                |                | Con             | nector      |        | Terminal          | Continuity                              |    |
| B                             | 513                        | 22                      |                | B               | 521 -       |        | 83                | Existed                                 |    |
|                               |                            | 23                      |                | D               | '           |        | 82                |   |    |

5. Check continuity between heated seat switch harness connector and ground.

# HEATED SEAT SWITCH (DRIVER SIDE)

#### < DTC/CIRCUIT DIAGNOSIS >

| Heated s  | eat switch |         | Continuity  |
|-----------|------------|---------|-------------|
| Connector | Terminal   | Ground  | Continuity  |
| B513      | 22         | Giodila | Not existed |
| 6010      | 23         |         | NOT EXISTED |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK HEATED SEAT SWITCH CIRCUIT 2

Check resistance between heated seat switch harness connector and diode4 harness connector.

| Heated seat switch |          | Dia       | udo4     | Quandition  |         | Resistance       |
|--------------------|----------|-----------|----------|-------------|---------|------------------|
| Connector          | Terminal | Connector | Terminal | Col         | ndition | (Ω)<br>(Approx.) |
| B513               | 22       | B521      | 83       | Heated seat | LO      | 2.400            |
| D313               | 23       | D321      | 82       | switch      | н       | 0.384            |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.**CHECK HEATED SEAT SWITCH CIRCUIT 3

1. Check continuity between heated seat control unit harness connector and diode3 harness connector.

| Heated sea | Heated seat control unit |           | Diaudo3  |            |  |
|------------|--------------------------|-----------|----------|------------|--|
| Connector  | Terminal                 | Connector | Terminal | Continuity |  |
| B519       | 80                       | B520      | 80       | Existed    |  |

2. Check continuity between heated seat control unit harness connector and diode4 harness connector.

| Heated sea | Heated seat control unit |           | Diaudo4  |            |  |
|------------|--------------------------|-----------|----------|------------|--|
| Connector  | Terminal                 | Connector | Terminal | Continuity |  |
| B519       | 81                       | B521      | 81       | Existed    |  |

3. Check continuity between heated seat control unit harness connector and ground.

| Heated sea | t control unit |        | Continuity  |
|------------|----------------|--------|-------------|
| Connector  | Terminal       | Ground | Continuity  |
| B519       | 80             | Giouna | Not existed |
|            | 81             |        | NOT EXISTED |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

**5.**CHECK HEATED SEAT SWITCH

Check heated seat switch.

Refer to SE-30, "Component Inspection".

Is the inspection result normal?

YES >> Replace harness between heated seat switch and heated seat control unit.

NO >> Replace heated seat switch.

## **Component Inspection**

# 1.CHECK FRONT HEATED SEAT SWITCH

1. Turn ignition OFF.

INFOID:000000011488128

# HEATED SEAT SWITCH (DRIVER SIDE)

#### < DTC/CIRCUIT DIAGNOSIS >

- 2. Disconnect heated seat switch connector.
- 3. Check continuity between heated seat switch terminals.

| Heated s | Heated seat switch<br>Terminal |                      | Condition |             |   |
|----------|--------------------------------|----------------------|-----------|-------------|---|
| Terr     |                                |                      |           | Continuity  | E |
|          | 22                             |                      | OFF       | Not existed |   |
| 18       | 22                             | - Heated seat switch | LO        | Existed     |   |
| 10       | 00                             | Healed Seal Switch   | OFF       | Not existed | C |
|          | 23                             |                      | н         | Existed     |   |

#### Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat switch.

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# HEATED SEAT RELAY

# < DTC/CIRCUIT DIAGNOSIS >

# HEATED SEAT RELAY

## Description

Power is supplied to the heated seat using ignition power supply control.

#### **Component Function Check**

## **1.**CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

Is the inspection result normal?

- YES >> Heated seat relay function is OK.
- NO >> Refer to <u>SE-32</u>, "Diagnosis Procedure"

### **Diagnosis Procedure**

INFOID:000000011488131

# 1.CHECK HEATED SEAT RELAY POWER SUPPLY 1

- 1. Turn ignition switch OFF.
- 2. Disconnect heated seat relay.
- 3. Turn ignition switch ON.
- 4. Check voltage between heated seat relay terminal connector and ground.

| Heated    | (+)<br>seat relay | (-)    | Voltage (V)<br>(Approx.) |
|-----------|-------------------|--------|--------------------------|
| Connector | Terminal          |        | (********)               |
| M70       | 2                 | Ground | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

### **2.**CHECK HEATED SEAT RELAY POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect fuse block (J/B) connector.
- 3. Turn ignition switch ON.
- 4. Check continuity between heated seat relay terminal connector and fuse block (J/B) harness connector.

| Heated    |          |           | Fuse block (J/B) |            |  |
|-----------|----------|-----------|------------------|------------|--|
| Connector | Terminal | Connector | Terminal         | Continuity |  |
| M70       | 2        | M1        | 2A               | Existed    |  |

5. Check continuity between heated seat relay terminal connector and ground.

| Heated    | seat relay |        | Continuity  |
|-----------|------------|--------|-------------|
| Connector | Terminal   | Ground | Continuity  |
| M70       | 2          |        | Not existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.** DETECT MALFUNCTIONING PART

Check the following.

• 10 A fuse (#3)

• Harness for open or short between fuse block (J/B) harness connector and battery terminal.

Is the inspection result normal?

YES >> GO TO 8.

### **SE-32**

INFOID:000000011488129

INFOID:0000000011488130

# **HEATED SEAT RELAY**

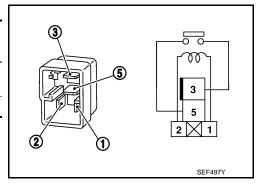
| < DTC/CIRCUIT DIAGNOSIS :   |                         |                          |                          |
|---|-------------------------|--------------------------|--------------------------|
| NO >> Repair or replace th<br>4.CHECK HEATED SEAT REL   | • ·                     |                          |                          |
| 1. Turn ignition switch OFF.  | AY GROUND CIRCUI        |                          |                          |
| <ol> <li>Check continuity between h</li> </ol>  | eated seat relay termir | al connector and ground. |                          |
| Heated seat   | relav                   |                          |                          |
| Connector   | Terminal                | Ground                   | Continuity               |
| M70   | 1                       |                          | Existed                  |
| Is the inspection result normal?  |                         |                          |                          |
| YES >> GO TO 5.<br>NO >> Repair or replace ha   | arness                  |                          |                          |
| 5.CHECK HEATED SEAT REL   |                         | 2                        |                          |
| 1. Turn ignition switch OFF.  |                         |                          |                          |
| 2. Check continuity between h   | eated seat relay termin | al connector and ground. |                          |
| (+)   |                         |                          |                          |
| Heated seat   | relay                   | ()                       | Voltage (V)<br>(Approx.) |
| Connector   | Terminal                |                          |                          |
| M70<br>Is the inspection result normal?   | 5                       | Ground                   | Battery voltage          |
| <ul> <li><b>6.</b>DETECT MALFUNCTIONING</li> <li>Check the following.</li> <li>15 A fuse (#35)</li> <li>Harness for open or short betw</li> </ul> |                         | terminal connector and b | attery terminal          |
| Is the inspection result normal?  | ween nealed seal relay  | terminal connector and b | allery lerminal.         |
| YES >> GO TO 8.   |                         |                          |                          |
| NO >> Repair or replace th  |                         |                          |                          |
| CHECK HEATED SEAT REL   | AY                      |                          |                          |
| Check heated seat relay.<br>Refer to <u>SE-33, "Component Ins</u>   | spection".              |                          |                          |
| Is the inspection result normal?  |                         |                          |                          |
| YES >> GO TO 8.<br>NO >> Replace heated sea   | at relav                |                          |                          |
| 8. CHECK INTERMITTENT INC   | •                       |                          |                          |
| Check intermittent incident.  |                         |                          |                          |
| Refer to GI-39, "Intermittent Inci  | <u>dent"</u>            |                          |                          |
| >> INSPECTION END   |                         |                          |                          |
| Component Inspection  |                         |                          | INFOID:000000011488132   |
|   | A)/                     |                          | INI 012-000000011466132  |
| 1.CHECK HEATED SEAT REL   | Aĭ                      |                          |                          |
| <ol> <li>Turn ignition switch OFF.</li> <li>Disconnect heated seat related</li> </ol>   | IV.                     |                          |                          |

Disconnect heated seat relay.
 Check continuity between heated seat relay terminals.

# HEATED SEAT RELAY

#### < DTC/CIRCUIT DIAGNOSIS >

| heated s | seat relay | Condition  | Continuity  |  |
|----------|------------|--|-------------|--|
| Terr     | ninal      |  |             |  |
| 3        | 5          | 12 V direct current supply between termi-<br>nals 1 and 2. | Existed     |  |
|          |            | No current supply  | Not existed |  |



Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace heated seat relay.

|                       |   |                             |                      | HEAT SENSO                                     | R                   |                                      |
|-----------------------|---|-----------------------------|----------------------|--|---------------------|--------------------------------------|
| < DTC/CIR             |   |                             | S >                  |  |                     |                                      |
| HEAT S                | ENS                                       | OR                          |                      |  |                     |                                      |
| Descripti             | on  |                             |                      |  |                     | INFOID:000000011488133               |
| Detects sea           | at cushi                                  | ion heater te               | emperature a         | nd outputs to heated                           | seat control unit.  |                                      |
| Compon                | ent Fu                                    | unction C                   | heck                 |  |                     | INFOID:000000011488134               |
| 1.снеск               | FUNC                                      | TION                        |                      |  |                     |                                      |
|                       | heated                                    | l seat warm                 | s to preset te       | mperature when ope                             | erating heated sea  | t switch to the optimal posi-        |
| tion.<br>Is the inspe | ection re                                 | esult norma                 | 12                   |  |                     |                                      |
| YES >>                | Heat s                                    | sensor funct                | tion is OK.          |  |                     |                                      |
| NO >>                 | Refer                                     | to <u>SE-35, "I</u>         | <u>Diagnosis Pro</u> | ocedure"                                       |                     |                                      |
| Diagnosi              | s Pro                                     | cedure                      |                      |  |                     | INFOID:000000011488135               |
| 1.снеск               | HEAT                                      | SENSOR IN                   | NPUT SIGNA           | L  |                     |                                      |
|                       |   | witch ON.<br>between h      | eated seat co        | ontrol unit harness co                         | nnector and grour   | nd.                                  |
|                       | (+)                                       |                             |                      |  |                     |                                      |
| Heate                 | ed seat co                                | ontrol unit                 | ()                   | Co   | ndition             | Voltage (V)<br>(Approx.)             |
| Connec                | ctor                                      | Terminal                    |                      |  |                     | (Approx.)                            |
|                       |   |                             |                      |  | OFF                 | 0                                    |
| B519                  | )   | 40                          | Ground               | Heated seat switch                             | LO                  | 10.87 – 11.02                        |
|                       |   |                             |                      |  | HI                  | 11.31 – 11.43                        |
| •                     | e is repe                                 | eated withir<br>esult norma |                      | own as per the follow                          | ving list depending | on heater unit temperature.          |
|                       | <ul> <li>heat s</li> <li>GO T(</li> </ul> | ensor is Ok                 | Κ.                   |  |                     |                                      |
|                       |   | SENSOR C                    | IRCUIT               |  |                     |                                      |
|                       |   | witch OFF.                  |                      |  |                     |                                      |
| 2. Discon             | nect he                                   | eated seat c                |                      | nnector and seat cus<br>t control unit harness |                     | ector.<br>eat cushion heater harness |

3. eat cushion heater harness connector.

| _ |            |                |           |             |            | M |
|---|------------|----------------|-----------|-------------|------------|---|
|   | Heated sea | t control unit | Seat cush | nion heater | Continuity | _ |
| _ | Connector  | Terminal       | Connector | Terminal    | Continuity |   |
| _ | B519       | 40             | B518      | 40          | Existed    | Ν |
|   | -          |                |           |             |            | - |

4. Check continuity between heated seat control unit harness connector and ground.

| Heated seat | t control unit |        | Continuity  | 0 |
|-------------|----------------|--------|-------------|---|
| Connector   | Terminal       | Ground | Continuity  |   |
| B519        | 40             | =      | Not existed | P |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.**CHECK HEAT SENSOR POWER SUPPLY

1. Turn ignition switch ON.

2. Check voltage between seat cushion heater harness connector and ground. А

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# **HEAT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

| (+)<br>Seat cushion heater |          | ()     | Condition          |         | Voltage (V)<br>(Approx.) |
|----------------------------|----------|--------|--------------------|---------|--------------------------|
| Connector                  | Terminal |        |                    |         |                          |
| B518                       | 80       | Ground | Heated seat switch | LO / HI | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

#### 4. CHECK HEAT SENSOR POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect diode3 connector and heated seat control unit connector.
- 3. Check continuity between diode3 harness connector and seat cushion heater harness connector.

| Seat cushion heater |          | diode3    |          | Continuity |  |
|---------------------|----------|-----------|----------|------------|--|
| Connector           | Terminal | Connector | Terminal | Continuity |  |
| B518                | 80       | B520      | 80       | Existed    |  |

#### 4. Check continuity between seat cushion heater harness connector and ground.

| Seat cush | ion heater | Ground | Continuity  |
|-----------|------------|--------|-------------|
| Connector | Terminal   |        |             |
| B518      | 80         |        | Not existed |

#### Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

# 5.CHECK HEAT SENSOR

Check heat sensor. Refer to SE-36, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace seat cushion heater.

#### **6.**CHECK INTERMITTENT INCIDENT

#### Check intermittent incident. Refer to GI-39, "Intermittent Incident"

#### >> INSPECTION END

#### **Component Inspection**

# **1.**CHECK HEAT SENSOR

- 1. Turn ignition switch OFF.
- 2. Disconnect seat cushion heater connector.
- 3. Check resistance between seat cushion heater terminals.

| Seat cushion heater<br>Terminal |    | Our dition                                  | Resistance        |  |
|---------------------------------|----|---|-------------------|--|
|                                 |    | Condition                                   | (KΩ)<br>(Approx.) |  |
| 40                              | 80 | When heat sensor temperature is 25°C (77°F) | 9.9 – 10.2        |  |

#### NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat cushion heater.

#### SE-36

INFOID:000000011488136

# **SEAT CUSHION HEATER (DRIVER SIDE)**

| DTC/CIRCUIT DI  |   |   | AIER (DRIV            | ER SIDE)                     |                          |
|---|---|---|-----------------------|------------------------------|--------------------------|
| SEAT CUSHIC   |   | R (DRIVER S                             | SIDE)                 |                              |                          |
| Description   |   |   |                       |                              | INFOID:000000011488137   |
| Varms the seat cush   | nion.   |   |                       |                              |                          |
| Component Fur   |   |   |                       |                              | INFOID:000000011488138   |
| .CHECK FUNCTION   | ON  |   |                       |                              |                          |
| Check that heated s   | eat warms to pre  | eset temperature                        | when operating        | heated seat switcl           | n to the optimal posi-   |
| s the inspection res  | ult normal?   |   |                       |                              |                          |
| YES >> Seat cus   | shion heater func<br><u>SE-37, "Diagnos</u>                               |   |                       |                              |                          |
| iagnosis Proce  | edure   |   |                       |                              | INFOID:000000011488135   |
| .CHECK SEAT CL  | JSHION HEATER   | R INPUT SIGNAL                          |                       |                              |                          |
| . Turn ignition swi   | cushion heater of tch ON.   | connector.<br>hion heater harne         | ess connector an      | nd ground.                   |                          |
| (+  | )   |   |                       |                              |                          |
| Seat cushi  | on heater   | ()                                      | Co                    | ondition                     | Voltage (V)<br>(Approx.) |
| Connector   | Terminal  |   |                       | 0                            |                          |
| B518  | 41  | Ground                                  | Heated seat           | Operates<br>Other than above | 0 – Battery voltage<br>0 |
| s the inspection restriction restriction         YES       >> GO TO 3         NO       >> GO TO 3         CHECK SEAT CL         . Turn ignition swith         . Disconnect heat | ult normal?<br>3.<br>2.<br>JSHION HEATEF<br>tch OFF.<br>ed seat control u | R CIRCUIT                               |                       |                              | ater unit temperature.   |
|   | sushion heater  |   | Heated seat contr     | ol unit                      |                          |
| Seato   |   | 1                                       |                       |                              | Continuity               |
| Seat of Connector   | Termina   | l Coni                                  | nector                | Terminal                     | Continuity               |
| Connector<br>B518   | 41  | B                                       | 519                   | 41                           | Existed                  |
| Connector<br>B518   | 41  |   | 519                   | 41                           |                          |
| Connector<br>B518<br>. Check continuity   | 41  | ushion heater har                       | 519<br>ness connector | 41<br>and ground.            |                          |
| Connector<br>B518   | 41<br>v between seat cr   | Baue Baue Baue Baue Baue Baue Baue Baue | 519                   | 41<br>and ground.            | Existed                  |

NO >> Repair or replace harness.

**3.**CHECK SEAT CUSHION HEATER OUTPUT SIGNAL

1. Turn ignition switch OFF.

# SEAT CUSHION HEATER (DRIVER SIDE)

#### < DTC/CIRCUIT DIAGNOSIS >

- 2. Connect seat cushion heater connector.
- 3. Disconnect seatback heater connector.
- 4. Turn ignition switch ON.
- 5. Check voltage between seat cushion heater harness connector and ground.

| Seat cush | (+)<br>Seat cushion heater |        | Condition   |                  | Voltage (V)<br>(Approx.) |  |
|-----------|----------------------------|--------|-------------|------------------|--------------------------|--|
| Connector | Terminal                   |        |             |                  | (Approx.)                |  |
| B518      | 12                         | Ground | Heated cost | Operates         | 0 – Battery voltage      |  |
| 0100      | 12                         | Ground | Heated seat | Other than above | 0                        |  |

NOTE:

Voltage is repeated within the value shown as per the following list depending on heater unit temperature. Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat cushion heater.

4. CHECK SEAT CUSHION HEATER GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect seat cushion heater connector.

3. Check continuity between seat cushion heater harness connector and ground.

| Seat cushion heater |          |        | Continuity |
|---------------------|----------|--------|------------|
| Connector           | Terminal | Ground | Continuity |
| B518                | 21       |        | Existed    |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness.

**5.**CHECK SEAT CUSHION HEATER

Check seat cushion heater.

Refer to SE-38, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Replace seat cushion heater.

**6.**CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-39, "Intermittent Incident"

#### >> INSPECTION END

#### Component Inspection

**1.**CHECK SEAT CUSHION HEATER (MAIN HEATER CIRCUIT)

1. Turn ignition switch OFF.

2. Disconnect seat cushion heater connector.

3. Check resistance between seat cushion heater terminals.

| Seat cus | nion heater |   | Resistance       |  |
|----------|-------------|---|------------------|--|
| Ter      | minal       | Condition                                   | (Ω)<br>(Approx.) |  |
| 21       | 41          | When heat sensor temperature is 20°C (68°F) | 2.99 – 3.59      |  |

#### NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

# **SE-38**

INFOID:000000011488140

# **SEAT CUSHION HEATER (DRIVER SIDE)**

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 2.

NO >> Replace seat cushion heater.

2. CHECK SEAT CUSHION HEATER (SEATBACK HEATER CIRCUIT)

Check resistance between seat cushion heater terminals.

| Seat cushion heater |    |   | Resistance       |   |
|---------------------|----|---|------------------|---|
| Terminal            |    | Condition                                   | (Ω)<br>(Approx.) |   |
| 21                  | 12 | When heat sensor temperature is 20°C (68°F) | 3.13 - 3.75      | _ |
| :                   |    | rding to temperature                        |                  |   |

Resistance value changes according to temperature.

Is the inspection result normal?

YES >> INSPECTION END

>> Replace seat cushion heater. NO

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# SEATBACK HEATER (DRIVER SIDE)

# < DTC/CIRCUIT DIAGNOSIS >

# SEATBACK HEATER (DRIVER SIDE)

# Description

Warms the seatback.

**Component Function Check** 

# **1.**CHECK FUNCTION

Check that heated seat warms to preset temperature when operating heated seat switch to the optimal position.

Is the inspection result normal?

- YES >> Seatback heater function is OK.
- NO >> Refer to <u>SE-40, "Diagnosis Procedure"</u>.

# **Diagnosis Procedure**

INFOID:000000011488143

INFOID:000000011488141

INFOID:0000000011488142

# 1. CHECK SEAT CUSHION HEATER INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect seatback heater connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between seatback heater harness connector and ground.

|           | (+)<br>Seatback heater |        | Condition   |                  | Voltage (V)<br>(Approx.)                |  |
|-----------|------------------------|--------|-------------|------------------|---|--|
| Connector | Terminal               |        |             |                  | (, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |  |
| B515      | 12                     | Ground | Heated seat | Operates         | 0 – Battery voltage                     |  |
| B313      | 12                     | Ground | Healed Seal | Other than above | 0                                       |  |

#### NOTE:

Voltage is repeated within the value shown as per the following list depending on heater unit temperature. Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

# 2.CHECK SEATBACK HEATER CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect seat cushion heater connector.
- Check continuity between seatback heater harness connector and seat cushion heater harness connector.

| Seatbac   | Seatback heater |                    | Seat cushion heater |            |  |
|-----------|-----------------|--------------------|---------------------|------------|--|
| Connector | Terminal        | Connector Terminal |                     | Continuity |  |
| B515      | 12              | B508               | 12                  | Existed    |  |

4. Check continuity between seatback heater harness connector and ground.

| Seatbac   | ck heater          |  | Continuity  |  |
|-----------|--------------------|--|-------------|--|
| Connector | Connector Terminal |  | Continuity  |  |
| B515      | 12                 |  | Not existed |  |

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace harness.

 ${\it 3.}$ CHECK SEATBACK HEATER OUTPUT SIGNAL

1. Turn ignition switch OFF.

# SEATBACK HEATER (DRIVER SIDE)

## < DTC/CIRCUIT DIAGNOSIS >

- 2. Connect seat cushion heater connector.
- 3. Check continuity between seatback heater harness connector and seat cushion heater harness connector. A tor.

| Seatbac                             | k heater             | Seat cush             | ion heater    | <b>O</b> -artistit     |
|-------------------------------------|----------------------|-----------------------|---------------|------------------------|
| Connector                           | Terminal             | Connector             | Terminal      | Continuity             |
| B515                                | 51                   | B508                  | 51            | Existed                |
| Check continuity be                 | etween seatback hea  | ter harness connector | r and ground. |                        |
|                                     | aathaali haatar      |                       |               |                        |
| Connector                           | eatback heater       |                       | Ground        | Continuity             |
| B515                                | 51                   |                       |               | Not existed            |
| the inspection result i             | -                    |                       |               | Not existed            |
| YES >> GO TO 4.                     |                      |                       |               |                        |
|                                     | at cushion heater.   |                       |               |                        |
| CHECK SEAT CUSH                     | HON HEATER           |                       |               |                        |
| heck seat cushion hea               | ater.                |                       |               |                        |
| efer to <u>SE-38, "Compo</u>        |                      |                       |               |                        |
| the inspection result i             | normal?              |                       |               |                        |
| YES >> GO TO 5.<br>NO >> Replace se | at cushion heater.   |                       |               |                        |
| CHECK SEATBACK                      |                      |                       |               |                        |
| heck seatback heater.               |                      |                       |               |                        |
| efer to <u>SE-38, "Comp</u>         |                      |                       |               |                        |
| the inspection result i             |                      |                       |               |                        |
| YES >> GO TO 6.                     |                      |                       |               |                        |
| NO >> Replace se                    |                      |                       |               |                        |
| CHECK INTERMITT                     | ENT INCIDENT         |                       |               |                        |
| heck intermittent incid             |                      |                       |               |                        |
| efer to <u>GI-39, "Intermi</u>      | ttent incident"      |                       |               |                        |
| >> INSPECTIO                        | ON END               |                       |               |                        |
| component Inspec                    |                      | ion Heater)           |               |                        |
| omponent inspec                     |                      | ion neater)           |               | INFOID:00000001148814  |
| .CHECK SEAT CUSH                    | HON HEATER           |                       |               |                        |
| Turn ignition switch                |                      |                       |               |                        |
|                                     | shion heater connect |                       |               |                        |
| Check continuity be                 | etween seatback hea  | ter terminals.        |               |                        |
|                                     | Seat cushion heat    | er                    |               | Continuity             |
|                                     | Terminal             |                       |               | Continuity             |
| 51                                  |                      | 21                    |               | Existed                |
| the inspection result i             |                      |                       |               |                        |
| YES >> INSPECTIO                    |                      |                       |               |                        |
|                                     | at cuenion heater    |                       |               |                        |
| NO >> Replace se                    |                      |                       |               |                        |
|                                     |                      | Heater)               |               | INFOID:00000001148814  |
| NO >> Replace se                    | ction (Seatback I    | Heater)               |               | INFOID:000000001148814 |

# SEATBACK HEATER (DRIVER SIDE)

#### < DTC/CIRCUIT DIAGNOSIS >

#### 3. Check resistance between seatback heater terminals.

| Seatbac | ck heater | Condition                                   | Resistance  |  |
|---------|-----------|---|-------------|--|
| Terr    | minal     | Condition                                   | (Ω)         |  |
| 12      | 51        | When heat sensor temperature is 20°C (68°F) | 3.51 – 4.21 |  |

#### NOTE:

Resistance value changes according to temperature.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seatback heater.

# HEATED SEAT SWITCH INDICATOR (DRIVER SIDE)

| HEATED SEAT SW   |                              | ((                           |                        |
|--|------------------------------|------------------------------|------------------------|
| Description  |                              |                              | INFOID:000000011488140 |
| lluminates the indicator that  | indicates the operating sta  | atus of heated seat.         |                        |
| Component Function   | Check                        |                              | INFOID:00000001148814. |
| .CHECK FUNCTION  |                              |                              |                        |
| Check that the related indication of the inspection result norm              |                              | heated seat switch is set to | ON.                    |
|  | tch indicator function is Ok | ζ.                           |                        |
|  | "Diagnosis Procedure".       |                              |                        |
| Diagnosis Procedure  |                              |                              | INFOID:000000011488148 |
| CHECK HEATED SEAT  | SWITCH INDICATOR GRO         | OUND CIRCUIT                 |                        |
| . Turn ignition switch OFF   |                              |                              |                        |
| <ul> <li>Disconnect heated seat</li> <li>Check continuity between</li> </ul> |                              | ess connector and ground.    |                        |
|  | eat switch                   | Ŭ                            |                        |
| Connector  | Γ                            |                              | Continuity             |
| Connector  | Terminal                     | Ground                       | Continuity             |
| B513   | lerminal<br>21               | Ground                       | Existed                |
| B513   | 21                           | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>the inspection result norm<br>YES >> Replace heated                  | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |
| B513<br>s the inspection result norm<br>YES >> Replace heated                | 21<br>al?<br>seat switch.    | Ground                       | · · ·                  |

# **DRIVER HEATED SEAT DOES NOT OPERATE**

#### < SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS DRIVER HEATED SEAT DOES NOT OPERATE Diagnosis Procedure 1.CHECK HEATED SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT Check heated seat switch power supply and ground circuit. Refer to SE-26, "HEATED SEAT CONTROL UNIT : Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunctioning parts. 2.CHECK HEATED SEAT RELAY Check heated seat relay.

Refer to SE-32, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

 ${f 3.}$ CHECK HEATED SEAT SWITCH POWER SUPPLY

Check heated seat switch power supply. Refer to <u>SE-29, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning parts.

**4.**CHECK HEATED SEAT SWITCH

Check heated seat switch. Refer to <u>SE-29, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace the malfunctioning parts.

**5.**CHECK SEAT CUSHION HEATER

Check seat cushion heater.

Refer to SE-37, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 6.

NO >> Repair or replace the malfunctioning parts.

**6.**CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-39, "Intermittent Incident".

NO >> GO TO 1.

INFOID:000000011488149

# DRIVER SEATBACK HEATER ONLY DOES NOT OPERATE

# < SYMPTOM DIAGNOSIS >

# DRIVER SEATBACK HEATER ONLY DOES NOT OPERATE

| Diagnosis Procedure   | INFOID:000000011488150 | А |
|---|------------------------|---|
| 1.CHECK SEATBACK HEATER   |                        | В |
| Check seatback heater.<br>Refer to <u>SE-40, "Component Function Check"</u> .   |                        |   |
| <u>Is the inspection result normal?</u><br>YES >> GO TO 2.  |                        | С |
| NO >> Repair or replace the malfunctioning parts.<br>2.CHECK SEAT CUSHION HEATER  |                        | D |
| Check seat cushion heater.<br>Refer to <u>SE-43, "Component Function Check"</u> .   |                        | E |
| <u>Is the inspection result normal?</u><br>YES >> GO TO 3.  |                        |   |
| NO >> Repair or replace the malfunctioning parts.<br><b>3.</b> CONFIRM THE OPERATION  |                        | F |
| Confirm the operation again.<br><u>Is the inspection result normal?</u><br>YES >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u> . |                        | G |
| NO >> GO TO 1.  |                        | Н |

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# CANNOT ADJUST DRIVER HEATED SEAT TEMPERATURE

< SYMPTOM DIAGNOSIS >

# CANNOT ADJUST DRIVER HEATED SEAT TEMPERATURE

Diagnosis Procedure

INFOID:000000011488151

**1.**CHECK HEATED SEAT SWITCH

Check heated seat switch. Refer to <u>SE-29, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning parts.

2.CHECK HEAT SENSOR

Check heat sensor. Refer to <u>SE-35, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning parts.

3. CONFIRM THE OPERATION

Confirm the operation again.

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u>.

NO >> Replace heated seat control unit.

# DRIVER HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON

# < SYMPTOM DIAGNOSIS >

# DRIVER HEATED SEAT SWITCH INDICATOR DOES NOT TURN ON

|  | ••••                   | А |
|--|------------------------|---|
| Diagnosis Procedure  | INFOID:000000011488152 |   |
| 1. CHECK HEATED SEAT SWITCH INDICATOR  |                        | В |
| Check heated seat switch indicator.<br>Refer to <u>SE-43, "Component Function Check"</u> .             |                        |   |
| <u>Is the inspection result normal?</u><br>YES >> GO TO 2.   |                        | С |
| NO >> Repair or replace the malfunctioning parts.<br>2.CONFIRM THE OPERATION                           |                        | D |
| Confirm the operation again.<br>Is the inspection result normal?                                       |                        | Е |
| YES >> Check intermittent incident. Refer to <u>GI-39, "Intermittent Incident"</u> .<br>NO >> GO TO 1. |                        |   |
|  |                        | F |
|  |                        |   |

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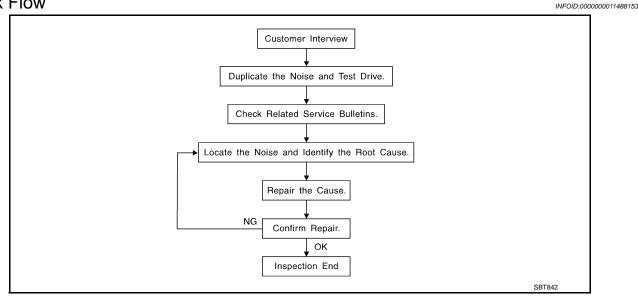
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#### < SYMPTOM DIAGNOSIS >

# SQUEAK AND RATTLE TROUBLE DIAGNOSES

# Work Flow



#### 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 of customer's comments; refer to <u>SE-52</u>, "<u>Diagnostic Worksheet</u>". 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, perform a diagnosis and repair the noise that the customer is concerned about. This can be accomplished by performing a cruise test on 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 bumblebee) Buzz characteristics include high frequency rattle/firm contact.
- Often the degree of acceptable noise level will vary depending up on the person. A noise that a technician 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 the repair is reconfirmed.

#### **SE-48**

#### < SYMPTOM DIAGNOSIS >

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

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

#### CHECK RELATED SERVICE BULLETINS

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

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

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

- 1. Narrow down the noise to a general area. To help pinpoint the source of the noise, use a listening tool (Chassis ear: J-39570, Engine ear and mechanics stethoscope).
- 2. Narrow down the noise to a more specific area and identify the cause of the noise by:
- Removing the components in the area that is are suspected to be the cause of the noise. 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 is are suspected to be the cause of the noise. Do not tap or push/pull the component with excessive force, otherwise the noise will be eliminated only tem-Н porarily.
- Feeling for a vibration by hand by touching the component(s) that is are suspected to be the cause of the noise.
- Placing a piece of paper between components that are suspected to be the cause of the noise.
- Looking for loose components and contact marks.

Refer to SE-50, "Inspection Procedure".

#### REPAIR THE CAUSE

- If the cause is a loose component, tighten the component securely.
- If the cause is insufficient clearance between components:
- Separate components by repositioning or loosening and retightening the component, if possible.
- Insulate components with a suitable insulator such as urethane pads, foam blocks, felt cloth tape or urethane tape. A Nissan Squeak and Rattle Kit (J-50397) is available through the authorized Nissan Parts Department. **CAUTION:**

#### Never use excessive force as many components are constructed of plastic and may be damaged. NOTE:

Always check with the Parts Department for the latest parts information. The following materials are contained in the Nissan Squeak and Rattle Kit (J-50397). are listed on the inside cover of the kit, and can each be ordered separately as needed. URETHANE PADS [1.5 mm (0.059 in) thick] Ν Insulates connectors, harness, etc. • 76268-9E005: 100 × 135 mm (3.937 × 5.315 in) • 76884-71L01: 60 × 85 mm (2.362 × 3.346 in) • 76884-71L02:15  $\times$  25 mm (0.591  $\times$  0.984 in) INSULATOR (Foam blocks) Insulates components from contact. Can be used to fill space behind a panel. • 73982-9E000: 45 mm (1.772 in) thick, 50 × 50 mm (1.969 × 1.969 in) Ρ • 73982-50Y00: 10 mm (0.394 in) thick, 50 × 50 mm (1.969 × 1.969 in) INSULATOR (Light foam block) • 80845-71L00: 30 mm (1.181 in) thick,  $30 \times 50$  mm (1.181  $\times$  1.969in)

FELT CLOTHTAPE

Used to insulate where movement does not occur. Ideal for instrument panel applications.

- 68370-4B000: 15 × 25 mm (0.59 × 0.984 in) pad
- 68239-13E00: 5 mm (0.197 in) wide tape roll

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#### < SYMPTOM DIAGNOSIS >

The following materials, not found in the kit, can also be used to repair squeaks and rattles. UHMW (TEFLON) TAPE Insulates where slight movement is present. Ideal for instrument panel applications. SILICONE GREASE Used in place of UHMW tape that is be visible or does not fit. Will only last a few months. SILICONE SPRAY Used when grease cannot be applied. DUCT TAPE Used 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.

#### **Inspection Procedure**

INFOID:000000011488154

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:**

Never use silicone spray to isolate a squeak or rattle. If the area is saturated with silicone, the recheck of repair becomes impossible.

#### 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 following:

- 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. The areas can usually be insulated with felt cloth tape or insulator foam blocks from the Nissan Squeak and Rattle Kit (J-50397) to repair the noise.

#### TRUNK

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

- 1. Trunk lid dumpers out of adjustment
- 2. Trunk lid striker out of adjustment
- 3. The trunk lid torsion bars knocking together

# SE-50

#### < SYMPTOM DIAGNOSIS >

#### 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) caus- | А |
|--|---|
| ing 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 seats in and the load placed on the seat when the noise occurs. 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 H 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.

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< SYMPTOM DIAGNOSIS >

# **Diagnostic Worksheet**



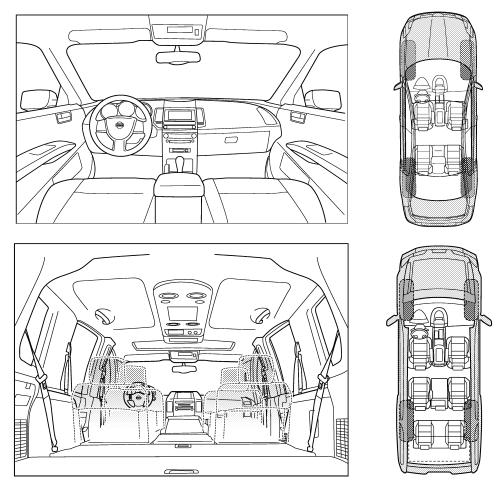
SQUEAK & RATTLE DIAGNOSTIC WORKSHEET

Dear Nissan Customer:

We are concerned about your satisfaction with your Nissan vehicle. Repairing a squeak or rattle sometimes can be very difficult. To help us fix your Nissan 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 page 2 of the worksheet and briefly describe the location of the noise or rattle. In addition, please indicate the conditions which are present when the noise occurs.

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#### < SYMPTOM DIAGNOSIS >

|  | oise occurs:   |
|--|--|
|  |  |
| II. WHEN DOES IT OCCUR? (please ch   | neck the boxes that apply)   |
| anytime  | after sitting out in the rain  |
| 1st time in the morning  | when it is raining or wet  |
| only when it is cold outside   | dry or dusty conditions  |
| only when it is hot outside  | other:   |
| II. WHEN DRIVING:  | IV. WHAT TYPE OF NOISE   |
| through driveways  | squeak (like tennis shoes on a clean floor)  |
| over rough roads   | ☐ creak (like walking on an old wooden floor)  |
| over speed bumps   | rattle (like shaking a baby rattle)  |
| only about mph   | knock (like a knock at the door)   |
| on acceleration  | ☐ tick (like a clock second hand)  |
| coming to a stop   | thump (heavy, muffled knock noise)   |
| on turns: left, right or either (circle)   | buzz (like a bumble bee)   |
| with passongors or cargo   |  |
| with passengers or cargo   |  |
| other:   |  |
|  | inutes   |
| other:   |  |
| other: miles or m     after driving miles or m  TO BE COMPLETED BY DEALERSHIP  |  |
| other: miles or m after driving miles or m TO BE COMPLETED BY DEALERSHIF Test Drive Notes:   | PERSONNEL  |
| other: miles or m     after driving miles or m  TO BE COMPLETED BY DEALERSHIP  | PERSONNEL  |
| <pre> dother: miles or m after driving miles or m TO BE COMPLETED BY DEALERSHIF Test Drive Notes:  Vehicle test driven with customer </pre>  | P PERSONNEL YES NO Initials of person performing   |
| other: miles or m <b>TO BE COMPLETED BY DEALERSHIF Test Drive Notes:</b> Vehicle test driven with customer - Noise verified on test drive  | P PERSONNEL YES NO Initials of person performing   |
| other: miles or m <b>TO BE COMPLETED BY DEALERSHIF Test Drive Notes:</b> Vehicle test driven with customer Noise verified on test drive Noise source located and repaired Follow up test drive performed to confin | YES       NO       Initials of person performing         Initials of person performing       Initials of person performing         Image: |
| other: miles or m <b>TO BE COMPLETED BY DEALERSHIF Test Drive Notes:</b> Vehicle test driven with customer - Noise verified on test drive - Noise source located and repaired                                      | P PERSONNEL  YES NO Initials of person performing  rm repair  Customer Name:   |

# < PRECAUTION > PRECAUTION PRECAUTIONS

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

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

#### WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that 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 "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

# PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

#### WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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# Precaution for Battery Service

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 Removing Battery Terminal

• When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

#### NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

• For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch. **NOTE:** 

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
 NOTE:

The removal of 12V battery may cause a DTC detection error.

# BATTERY SEF289H



# PRECAUTIONS

| Service Notice   |
|--|
| • 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.   |
| <ul> <li>Apply sealing compound where necessary when installing parts.</li> <li>When applying sealing compound, be careful that the sealing compound does not protrude from parts.</li> <li>When replacing any metal parts (for example body outer panel, members, etc.), be sure to take rust prevention measures.</li> </ul>                                     |
| Precaution for Work  |
| <ul> <li>When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.</li> <li>When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinvl tape to protect it.</li> </ul> |

- Protect the removed parts with a shop cloth and keep them.
- Replace a deformed or damaged clip.

< PRECAUTION >

- 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.

Н 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.

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# < PREPARATION >

# PREPARATION PREPARATION

# Special Service Tool

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

| Tool number<br>(Kent-Moore No.)<br>Tool name |           | Description                |                        |
|--|-----------|----------------------------|------------------------|
| (J-39570)<br>Chassis ear                     | SIIA0993E | Locates the noise          |                        |
| (J-50397)<br>nissan squeak and rattle kit    | SIIA0994E | Repairs the cause of noise |                        |
| Commercial Service Tool                      |           |                            | INFOID:000000011488162 |

| Tool name  |           | Description       |
|------------|-----------|-------------------|
| Engine ear | SIIA0995E | Locates the noise |

# < PREPARATION > CLIP LIST

Clip List

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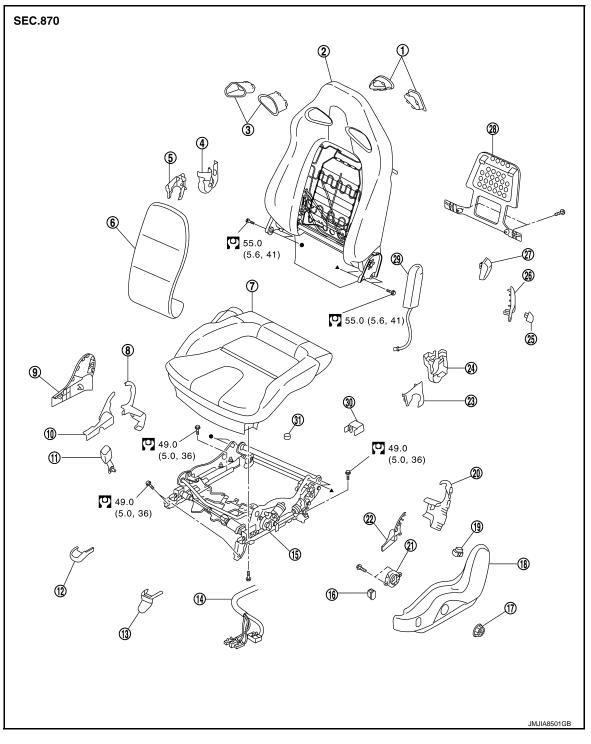
|                 |   |                               |   | В  |
|-----------------|---|-------------------------------|---|----|
| Shapes          | Removal & Installation  | Shapes                        | Removal & Installation  |    |
| <b>\$ \$ \$</b> | Removal:<br>Remove by bending up with<br>flat-bladed screwdrivers or<br>clip remover.   | Clip A<br>Clip B              | Removal:<br>Finisher Clip A   | C  |
| <b>T BF</b> B J |   | Clip A<br>Clip B<br>(Grommet) | Removal:<br>Flat-bladed<br>screwdriver<br>Body  | F  |
| 0 9             | Removal:         Removal:         Push center pin to catching position.         (Do not remove center is but bit ing it )    Push |                               | Body >       panel     Clip B       Clip A     Clip B       (Grommet)   Removal: Holder portion of clip must be spread out to remove rod. | G  |
|                 | Pin by hitting it.)<br>Push   |                               |   | H  |
|                 | Removal:<br>Remove by bending up with<br>flat-bladed screwdrivers or<br>clip remover.   |                               | Removal:<br>1. Screw out with a Phillips<br>screwdriver.<br>2. Remove female<br>portion with<br>flat-bladed<br>screwdriver.               | SE |
| Ŷ               | Removal:  |                               | Removal: Installation:<br>Rotate 45°<br>to remove.  | N  |
|                 | Removal:  |                               | Removal:<br>Removal:  | C  |

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# < REMOVAL AND INSTALLATION > REMOVAL AND INSTALLATION FRONT SEAT

# **Exploded View**

Driver seat



- 1. Seatback ornament (rear)
- Seatback assembly

2.

- 4. Reclining device inner cover (inside) 5.
- Reclining device inner cover (outside)
- 3. Seatback ornament (front)
- 6. Seatback assembly (main)

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# < REMOVAL AND INSTALLATION >

| 7.  | Seat cushion assembly   | 8.  | Seat cushion inner finisher inside (rear)   | 9.  | Seat cushion inner finisher outside   | А |
|-----|---|-----|---|-----|---------------------------------------|---|
| 10. | Seat cushion inner finisher inside (front)                    | 11. | Seat belt buckle                            | 12. | Front slide inner cover               |   |
| 13. | Front slide outer cover                                       | 14. | Seat harness                                | 15. | Seat adjuster assembly                | В |
| 16. | Thigh support switch  | 17. | Seat control switch knob                    | 18. | Seat cushion outer finisher outside   |   |
| 19. | Heater seat switch  | 20. | Seat cushion outer finisher inside (rear)   | 21. | Seat control switch                   | С |
| 22. | Seat cushion outer finisher inside (front)                    | 23. | Reclining device outer cover (out-<br>side) | 24. | Reclining device outer cover (inside) | 0 |
| 25. | Walk-in lever knob  | 26. | Walk-in lever escutcheon                    | 27. | Knob                                  | D |
| 28. | Seatback cover panel  | 29. | Side air bag module                         | 30. | Rear slide outer cover                | D |
| 31. | Rear inner bolt cap   |     |   |     |                                       |   |
| Ref | Refer to <u>GI-4, "Components"</u> for symbols in the figure. |     |   |     | E                                     |   |

# Passenger seat

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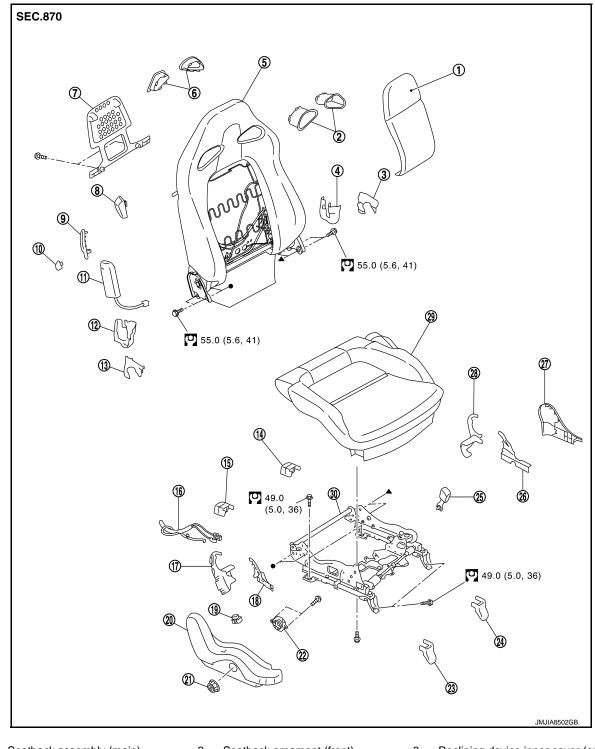
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# < REMOVAL AND INSTALLATION >



- 1. Seatback assembly (main)
- 4. Reclining device inner cover (inside) 5.
- 7. Seatback cover panel
- 10. Walk-in lever knob
- 13. Reclining device outer cover (outside)
- 16. Seat harness
- 19. Heater seat switch
- 22. Seat control switch

- 2. Seatback ornament (front)
  - Seatback assembly
- 8. Knob
- 11. Side air bag module
- 14. Rear slide inner cover
- 17. Seat cushion outer finisher inside (rear)
- 20. Seat cushion outer finisher outside
- 23. Front slide outer cover

- 3. Reclining device inner cover (outside)
- 6. Seatback ornament (rear)
- 9. Walk-in lever escutcheon
- 12. Reclining device outer cover (inside)
- 15. Rear slide outer cover
- Seat cushion outer finisher inside (front)
- 21. Seat control switch knob
- 24. Front slide inner cover

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### < REMOVAL AND INSTALLATION >

 25. Seat belt buckle
 26. Seat cushion inner finisher inside (front)
 27. Seat cushion inner finisher outside

 28. Seat cushion inner finisher inside (rear)
 29. Seat cushion assembly
 30. Seat adjuster assembly

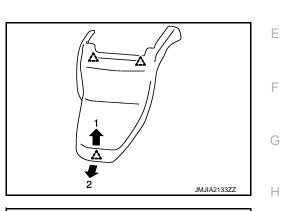
 Refer to GI-4, "Components" for symbols in the figure.
 INFOID:000000011488165

# REMOVAL CAUTION:

## Use shop cloths to protect parts from damage during removal and installation.

- 1. Operate the seat control switch knob to move the seat slide to the rearmost position.
- 2. Remove the front slide cover.
- a. Front outer slide cover





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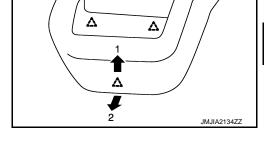
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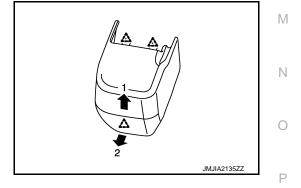
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- b. Front inner slide cover
  - 🕂 : Pawl



- 3. Remove the mounting bolts from the front seat front side.
- 4. Operate the seat control switch knob to move the seat slide to the foremost position.
- 5. Remove the rear slide outer and inner covers.

2 : Pawl



- 6. Remove the rear inner bolt cap (Driver seat only).
- 7. Remove the mounting bolts from the front seat rear side.
- 8. Set the seatback vertically.
- Lift up the seat cushion front side, and disconnect the harness connector under the seat cushion and remove the harness clamp.
   CAUTION:



## < REMOVAL AND INSTALLATION >

For the seat with side air bag, disconnect the battery cable from the negative terminal after checking that the ignition switch is OFF, wait for at least 3 minutes, and then disconnect the connector.

10. Remove the front seat from the vehicle.

#### **CAUTION:**

- Use shop cloths to protect parts from damage during removal and installation.
- Two people must perform removal and installation of the seat assembly to prevent damage or to keep from dropping it.

#### INSTALLATION

Install in the reverse order of removal.

#### **CAUTION:**

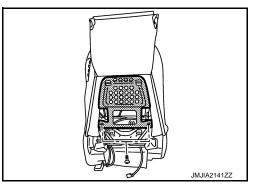
- Always fix the harness clamp in the normal position.
- Be careful that only driver seat rear inner mounting bolt is different from others among the front seat mounting bolts.

# Disassembly and Assembly

Seatback

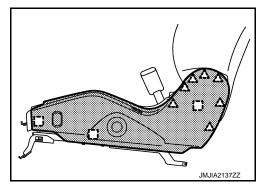
Disassembly

- 1. Unfasten the seatback trim fastener.
- 2. Remove the seatback trim lower retainer.
- 3. Remove the seatback (main).
  - Remove the seatback cover panel mounting screws, and then remove the seatback cover panel.



INFOID:000000011488166

- 4. Remove the retainer and hog ring of the seatback assembly (main), and then remove the seatback assembly (main).
- 5. Remove the seat cushion outer finisher outside.
  - [\_] ∶ Metal clip ⚠\_ ∶ Pawl



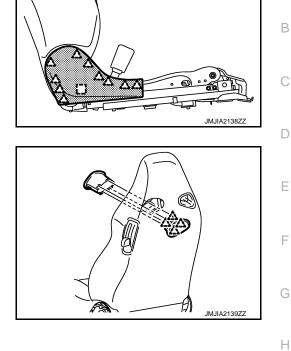
6. Disconnect the connectors of seat control switch, heater switch, and thigh support (Driver seat only) switch.

# < REMOVAL AND INSTALLATION >

- 7. Remove the seat cushion inner finisher outside.
  - [\_] : Metal clip

8. Remove the seatback ornament.

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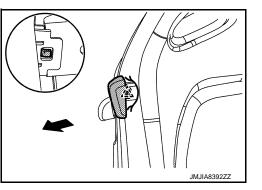
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- 9. Remove knob.
- a. Press on the seatback surface near the knob mounting portion inward to expose the fixing portion of the knob.



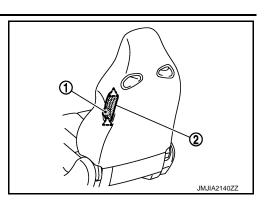
b. Disengage knob fixing pawl, and then remove knob.

Pawl ز\_\_\_



# < REMOVAL AND INSTALLATION >

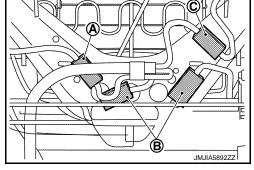
- Remove the walk-in lever knob (1) and walk-in lever escutcheon (2).
  - Pawl : ک



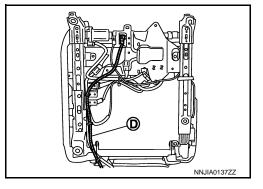
11. Disconnect the harness connector.

Driver side

1. Disconnect the reclining limit switch harness connector (A), the heater unit harness connectors (B), and the reclining motor harness connector (C).

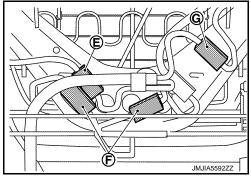


2. Remove the side air bag harness (D).



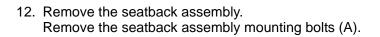
Passenger side

1. Disconnect the reclining motor harness connector (E), the heater unit harness connectors (F), and the reclining limit switch harness connector (G).



# < REMOVAL AND INSTALLATION >

2. Remove the side air bag harness (J).



- 13. Remove the seat cushion outer finisher inside (front) and the seat cushion outer finisher inside (rear).
- 14. Remove the seat cushion inner finisher inside (front) and the seat cushion inner finisher inside (rear).
- 15. Remove the reclining device outer cover (outside) and the reclining device outer cover (inside).
- 16. Remove the reclining device inner cover (outside) and the reclining device inner cover (inside).

#### Assembly

Assemble in the reverse order of disassembly.

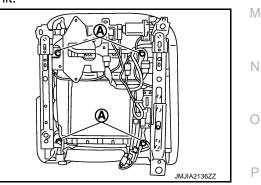
# CAUTION:

Install the hog rings of seatback trim in position, and then securely connect the trim or trim cord with the pad side wire.

#### Seat cushion

#### Disassembly

- 1. Remove the seat cushion.
  - Disconnect the harness connector from the seat cushion heater unit.
  - Remove the seat cushion lower surface mounting bolts (A).



• Remove the seat cushion trim retainer from the lower rear of the seat cushion.

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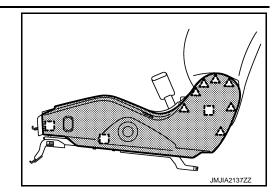
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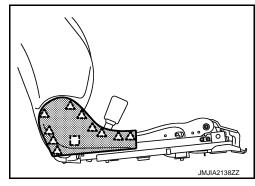
# < REMOVAL AND INSTALLATION >

- 2. Remove the seat cushion outer finisher outside.
  - : Metal clip

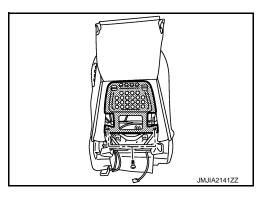


- 3. Disconnect the connectors of seat control switch, heater switch, and thigh support (driver seat only) switch.
- 4. Remove the seat cushion inner finisher outside.

| []]            | : Metal clip |
|----------------|--------------|
| $\hat{\Delta}$ | : Pawl       |



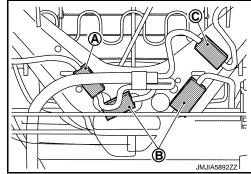
- 5. Remove the seatback trim retainer.
- 6. Remove the seatback panel.
  - Unfasten the seatback trim fastener.
  - Remove the seatback cover panel mounting screws, and then remove the seatback cover panel.



7. Disconnect the harness connector.

#### Driver side

1. Disconnect the reclining limit switch harness connector (A), the heater unit harness connectors (B), and the reclining motor harness connector (C).



# < REMOVAL AND INSTALLATION >

Passenger side

2. Remove the side air bag harness (D).

2. Remove the side air bag harness (J).

switch harness connector (G).

8. Remove the seatback assembly. Remove the seatback mounting bolts (A), and then remove the seatback assembly.

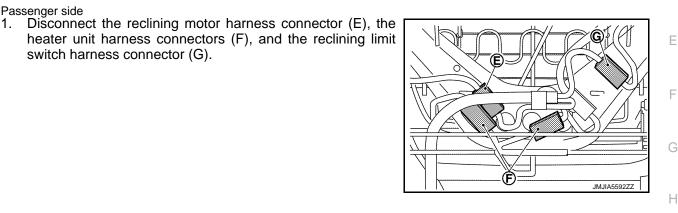
9. Remove the seat belt buckle. Refer to <u>SB-9, "SEAT BELT BUCKLE : Removal and Installation"</u>.

#### Assembly

Assemble in the reverse order of disassembly.

#### CAUTION:

Install the hog rings of seat cushion trim in position, and then securely connect the trim or trim cord with the pad side wire.



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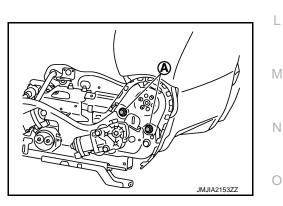
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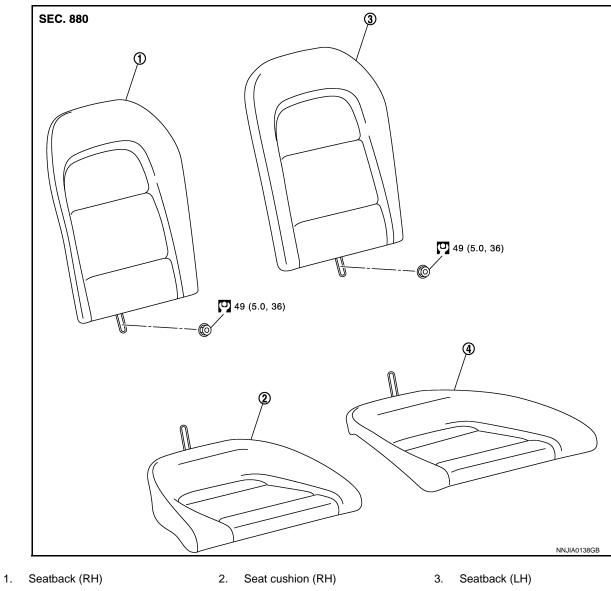


# < REMOVAL AND INSTALLATION >

# REAR SEAT

Exploded View

INFOID:000000011488167



4. Seat cushion (LH)

Refer to <u>GI-4, "Components"</u> for symbols in the figure.

# Removal and Installation

INFOID:000000011488168

# REMOVAL

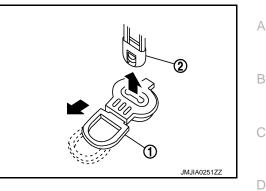
# Use shop cloths to protect parts from damage during removal and installation.

1. Remove the seat cushion.

# **REAR SEAT**

#### < REMOVAL AND INSTALLATION >

- Lift up the seat cushion lower side, disengage the joint by pulling the ring (1) of the cushion hook on the front bottom, and then lift up the seat cushion (2) to remove the seat cushion.
- Remove the seat cushion from the vehicle.



2. Remove the seatback. • Remove the seatback lower mounting nut. • Remove the seatback from the vehicle. INSTALLATION Install in the reverse order of removal. CAUTION: Use shop cloths to protect parts from damage during removal and installation.

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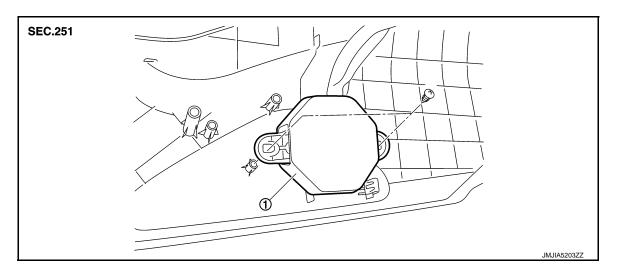
# **POWER SEAT SWITCH**

# < REMOVAL AND INSTALLATION >

# POWER SEAT SWITCH

# **Exploded View**

INFOID:000000011488169



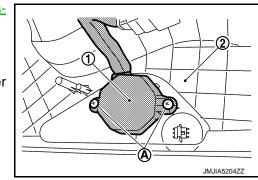
1. Power seat switch

# Removal and Installation

INFOID:000000011488170

# REMOVAL

- 1. Remove the front seat. Refer to <u>SE-61, "Removal and Installation"</u>.
- 2. Remove the seat cushion outer finisher (2). Referto <u>SE-62, "Disassembly and Assembly"</u>.
- 3. Remove the power seat switch knob.
- 4. Remove the screws (A).
- 5. Remove the power seat switch (1) from the seat cushion outer finisher (2).



#### INSTALLATION

Note the following, and install in the reverse order of removal. **CAUTION:** 

- When performing the work, use shop cloths to protect the parts from damage.
- Always fix the harness clamp in the normal position.

# **THIGH SUPPORT SWITCH**

# < REMOVAL AND INSTALLATION >

# THIGH SUPPORT SWITCH

# **Exploded View**

INFOID:000000011488171

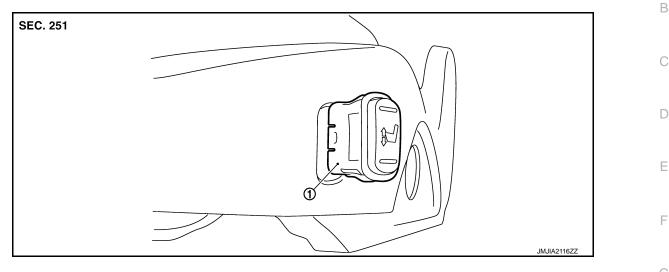
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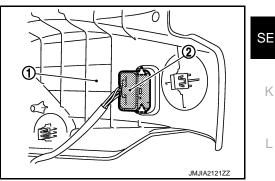


1. Thigh support switch

# **Removal and Installation**

## REMOVAL

- Remove the front seat. Refer to SE-61, "Removal and Installation". 1.
- 2. Disconnect the thigh support switch connector.
- 3. Remove the seat cushion outer finisher (1). Refer to SE-62. "Disassembly and Assembly".
- 4. Remove the thigh support switch (2) from the seat cushion outer finisher (1) while pressing the pawls.
  - کے : Pawl



| INSTALLATION<br>Note the following, and install in the reverse order of removal.  | M |
|---|---|
| <ul> <li>CAUTION:</li> <li>When performing the work, use shop cloths to protect the parts from damage.</li> <li>Always fix the harness clamp in the normal position.</li> </ul> | Ν |

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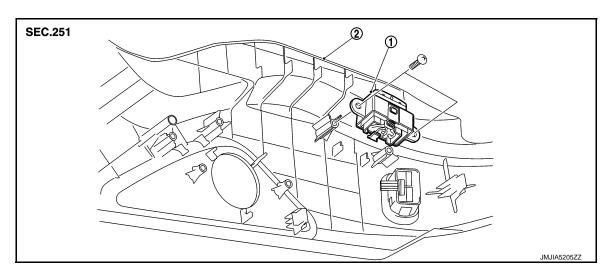
# HEATED SEAT SWITCH

# < REMOVAL AND INSTALLATION >

# HEATED SEAT SWITCH

# Exploded View

INFOID:000000011488173



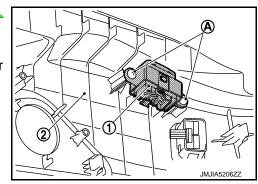
- 1. Heated seat switch
- 2. Seat cushion outer finisher

# Removal and Installation

INFOID:000000011488174

# REMOVAL

- 1. Remove the front seat. Refer to <u>SE-61, "Removal and Installation"</u>.
- Remove the seat cushion outer finisher (2). Refer to <u>SE-62.</u> <u>"Disassembly and Assembly"</u>.
- 3. Remove the screws (A).
- 4. Remove the heater seat switch (1) from the seat cushion outer finisher (2).



# INSTALLATION

Note the following, and install in the reverse order of removal.

# CAUTION:

- When performing the work, use shop cloths to protect the parts from damage.
- Always fix the harness clamp in the normal position.