

# SECTION **ADP**

## AUTOMATIC DRIVE POSITIONER

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# PRECAUTIONS

< PRECAUTION >

## PRECAUTION

### PRECAUTIONS

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

INFOID:000000009740311

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 dual stage front air bag modules. The SRS system may only deploy one front air bag, depending on the severity of a collision and whether the front passenger seat is occupied. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

#### **WARNING:**

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

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

#### **WARNING:**

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT 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 three minutes before performing any service.

#### Precaution for Work

INFOID:000000009133851

- When removing or disassembling each component, be careful not to damage or deform it. If a component may be subject to interference, be sure to protect it with a shop cloth.
- When removing (disengaging) components with a screwdriver or similar tool, be sure to wrap the component with a shop cloth or vinyl tape to protect it.
- Protect the removed parts with a shop cloth and prevent them from being dropped.
- Replace a deformed or damaged clip.
- If a part is specified as a non-reusable part, always replace it with a new one.
- Be sure to tighten bolts and nuts securely to the specified torque.
- After installation is complete, be sure to check that each part works properly.
- Follow the steps below to clean components.
  - Water soluble dirt: Dip a soft cloth into lukewarm water, and wring the water out of the cloth to wipe the dirty area.  
Then rub with a soft and dry cloth.
  - Oily dirt: Dip a soft cloth into lukewarm water with mild detergent (concentration: within 2 to 3%), and wipe the dirty area.  
Then dip a cloth into fresh water, and wring the water out of the cloth to wipe the detergent off. Then rub with a soft and dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol, or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

# PREPARATION

< PREPARATION >

## PREPARATION

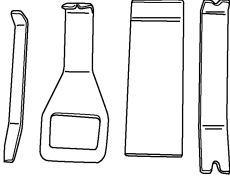
### PREPARATION

#### Special Service Tool

INFOID:000000009133852

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              |
|--|--------------------------|
| —<br>(J-46534)<br>Trim Tool Set              | Removing trim components |



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# COMPONENT PARTS

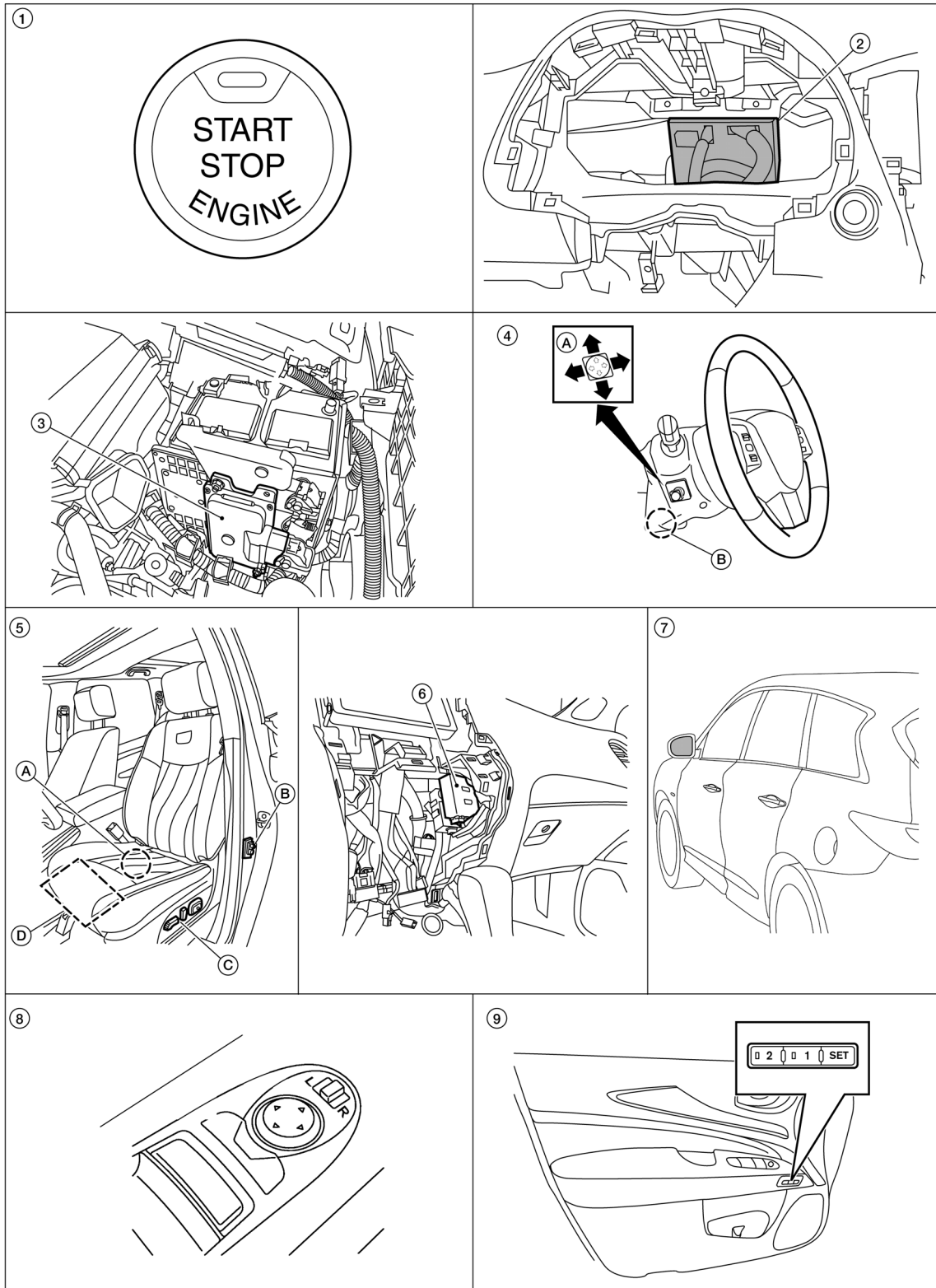
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## SYSTEM DESCRIPTION

### COMPONENT PARTS

#### Component Parts Location

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# COMPONENT PARTS

## < SYSTEM DESCRIPTION >

- |  |   |  |
|--|---|--|
| 1. Push-button ignition switch                               | 2. BCM (view with instrument panel re-<br>moved)  | 3. TCM   |
| 4. A. ADP steering switch<br>B. Tilt motor, telescopic motor | 5. A. Driver seat control unit<br>B. Front door switch LH<br>C. Power seat switch LH<br>D. Sliding motor LH, reclining motor<br>LH, lifting motor LH (front/rear) | 6. Automatic drive positioner control<br>unit (view with AV control unit re-<br>moved) |
| 7. Door mirror LH (RH similar)                               | 8. Power mirror remote control switch   | 9. Seat memory switch  |

## Component Description

INFOID:000000009133854

| Component parts                         | Description   |
|---|---|
| Driver seat control unit                | <ul style="list-style-type: none"> <li>Main units of automatic drive positioner system.</li> <li>It is connected to the CAN.</li> <li>It communicates with automatic drive positioner control unit via UART communication.</li> <li>It performs memory function after receiving the door unlock signal from BCM.</li> <li>Operates each motor of seat to the registered position.</li> <li>Requests the operation of steering column and door mirror to automatic drive positioner control unit</li> <li>Operates the specific seat motor with the signal from power seat switch.</li> <li>Transmits the ignition switch signal (ACC/ON) via UART communication to automatic driver positioner control unit.</li> </ul> |
| Automatic drive positioner control unit | <ul style="list-style-type: none"> <li>It communicates with driver seat control unit via UART communication.</li> <li>Performs various controls with the instructions of driver seat control unit.</li> <li>Performs the controls of tilt &amp; telescopic, door mirror and seat memory switch.</li> <li>Operates steering column and door mirror with the signal from the driver seat control unit</li> </ul>  |
| BCM                                     | <p>Recognizes the following status and transmits it to driver seat control unit via CAN communication.</p> <ul style="list-style-type: none"> <li>Handle position: LHD</li> <li>Driver door: OPEN/CLOSE</li> <li>Ignition switch position: ACC/ON</li> <li>Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation)</li> <li>Key ID</li> <li>Starter: CRANKING/OTHER</li> </ul>  |
| TCM                                     | <p>The following signals are transmitted to driver seat control unit via CAN communication.</p> <ul style="list-style-type: none"> <li>Shift position signal (P range)</li> <li>Identification of transmission: CVT</li> </ul>  |
| Combination meter                       | <p>Transmits the vehicle speed signal to driver seat control unit via CAN communication.</p>  |
| CVT shift selector (Detention switch)   | <ul style="list-style-type: none"> <li>Detention switch is installed on CVT shift selector. It is turned OFF when CVT shift selector is in P position.</li> <li>Driver seat control unit judges that CVT shift selector is in P position if continuity does not exist in this circuit.</li> </ul>   |



## COMPONENT PARTS

### < SYSTEM DESCRIPTION >

| Component parts                           |                        | Description   |
|---|------------------------|---|
| Power mirror remote control switch        | Mirror switch          | <ul style="list-style-type: none"> <li>Mirror switch is integrated in power mirror remote control switch.</li> <li>It operates angle of door mirror face.</li> <li>It transmits mirror face adjust operation to automatic drive positioner control unit.</li> </ul>   |
|   | Changeover switch      | <ul style="list-style-type: none"> <li>Changeover switch is integrated in power mirror remote control switch.</li> <li>Changeover switch has three positions (L, N and R).</li> <li>It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit.</li> </ul>  |
| ADP steering switch                       | Tilt switch            | <ul style="list-style-type: none"> <li>Tilt switch is equipped to steering column.</li> <li>The operation signal is input to automatic drive positioner control unit when tilt switch is operated.</li> </ul>   |
|   | Telescopic switch      | <ul style="list-style-type: none"> <li>Telescopic switch is equipped to steering column.</li> <li>The operation signal is input to automatic drive positioner control unit when telescopic switch is operated.</li> </ul>   |
| Seat memory switch                        | Set switch             | It is used for registration and setting change of driving position and Intelligent Key interlock function.  |
|   | Seat memory switch     | <ul style="list-style-type: none"> <li>The maximum 2 driving positions can be registered by memory switch 1 to 2.</li> <li>Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied.</li> </ul>  |
|   | Seat memory indicator  | Memory indicator indicates the status of auto driving position system by turning ON or blinking.  |
| Power seat switch                         | Sliding switch         | <ul style="list-style-type: none"> <li>Sliding switch is equipped to power seat switch on seat cushion side surface.</li> <li>The operation signal is input to driver seat control unit when sliding switch is operated.</li> </ul>   |
|   | Reclining switch       | <ul style="list-style-type: none"> <li>The operation signal is input to driver seat control unit when reclining switch is operated.</li> <li>The operation signal is input to driver seat control unit when reclining switch is operated.</li> </ul>  |
|   | Lifting switch (front) | <ul style="list-style-type: none"> <li>Lifting switch (front) is equipped to power seat switch on seat cushion side surface.</li> <li>The operation signal is input to driver seat control unit when lifting switch (front) is operated.</li> </ul>   |
|   | Lifting switch (rear)  | <ul style="list-style-type: none"> <li>Lifting switch (rear) is equipped to power seat switch on seat cushion side surface.</li> <li>The operation signal is input to driver seat control unit when lifting switch (rear) is operated.</li> </ul>   |
| Door mirror (driver side/ passenger side) | Door mirror motor      | It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.   |
|   | Mirror sensor          | <ul style="list-style-type: none"> <li>Mirror sensor is installed to door mirror.</li> <li>The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated.</li> <li>Automatic drive positioner control unit calculates door mirror position according to the change of the voltage of 2 sensor input terminals.</li> </ul> |

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# COMPONENT PARTS

## < SYSTEM DESCRIPTION >

| Component parts          |                          | Description   |
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| Tilt motor               | Tilt motor               | <ul style="list-style-type: none"> <li>Tilt motor is installed to steering column assembly.</li> <li>Tilt motor is activated with automatic drive positioner control unit.</li> <li>Steering column is tilted upward/downward by changing the rotation direction of tilt motor.</li> </ul>  |
|                          | Tilt sensor              | <ul style="list-style-type: none"> <li>Tilt sensor is integrated in tilt motor.</li> <li>The resistance of tilt sensor is changed according to the up/down position of steering column.</li> <li>The terminal voltage of automatic drive positioner control unit will be changed according to a change of tilt sensor resistance.</li> <li>Automatic drive positioner control unit calculates the tilt position from the voltage.</li> </ul>  |
| Telescopic motor         | Telescopic motor         | <ul style="list-style-type: none"> <li>Telescopic motor is installed to steering column assembly.</li> <li>Telescopic motor is activated with automatic drive positioner control unit.</li> <li>Compresses steering column by changing the rotation direction of telescopic motor.</li> </ul>   |
|                          | Telescopic sensor        | <ul style="list-style-type: none"> <li>Telescopic sensor is integrated in telescopic motor.</li> <li>The resistance of telescopic sensor is changed according to the forward/backward position of steering column.</li> <li>The terminal voltage of automatic drive positioner control unit will be changed according to a change of telescopic sensor resistance.</li> <li>Automatic drive positioner control unit calculates the telescopic position from the voltage.</li> </ul> |
| Sliding motor LH         | Sliding motor LH         | <ul style="list-style-type: none"> <li>Seat sliding motor LH is installed to the seat cushion frame.</li> <li>Seat sliding motor LH is activated with driver seat control unit.</li> <li>Slides the seat frontward/rearward by changing the rotation direction of sliding motor.</li> </ul>   |
|                          | Sliding sensor           | <ul style="list-style-type: none"> <li>Sliding sensor is integrated in sliding motor.</li> <li>The pulse signal is input to driver seat control unit when sliding is performed.</li> <li>Driver seat control unit counts the pulse and calculates the sliding amount of the seat.</li> </ul>  |
| Reclining motor LH       | Reclining motor LH       | <ul style="list-style-type: none"> <li>Seat reclining motor LH is installed to seat back frame.</li> <li>Seat reclining motor LH is activated with driver seat control unit.</li> <li>Seatback is reclined frontward/rearward by changing the rotation direction of reclining motor.</li> </ul>   |
|                          | Reclining sensor         | <ul style="list-style-type: none"> <li>Reclining sensor is integrated in reclining motor.</li> <li>The pulse signal is input to driver seat control unit when the reclining is operated.</li> <li>Driver seat control unit counts the pulse and calculates the reclining amount of the seat.</li> </ul>   |
| Lifting motor LH (front) | Lifting motor LH (front) | <ul style="list-style-type: none"> <li>Lifting motor LH (front) is installed to seat side cushion frame.</li> <li>Lifting motor LH (front) is activated with driver seat control unit.</li> <li>Seat lifter (front) is moved upward/downward by changing the rotation direction of lifting motor (front).</li> </ul>  |
|                          | Lifting sensor (front)   | <ul style="list-style-type: none"> <li>Lifting sensor (front) is installed in lifting motor (rear).</li> <li>When lifting motor (rear) operates, pulse signal is transmitted to driver seat control unit from lifting sensor. Driver seat control unit counts the pulse and calculates the lift position (rear) of the seat.</li> </ul>   |
| Lifting motor LH (rear)  | Lifting motor LH (rear)  | <ul style="list-style-type: none"> <li>Lifting motor LH (rear) is installed to seat slide cushion frame.</li> <li>Lifting motor LH (rear) is activated with driver seat control unit.</li> <li>Seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).</li> </ul>   |
|                          | Lifting sensor (rear)    | <ul style="list-style-type: none"> <li>Lifting sensor (rear) is installed to seat side cushion frame.</li> <li>The pulse signal is input to driver seat control unit when lifting (rear) is operated.</li> <li>Driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.</li> </ul>   |

# SYSTEM

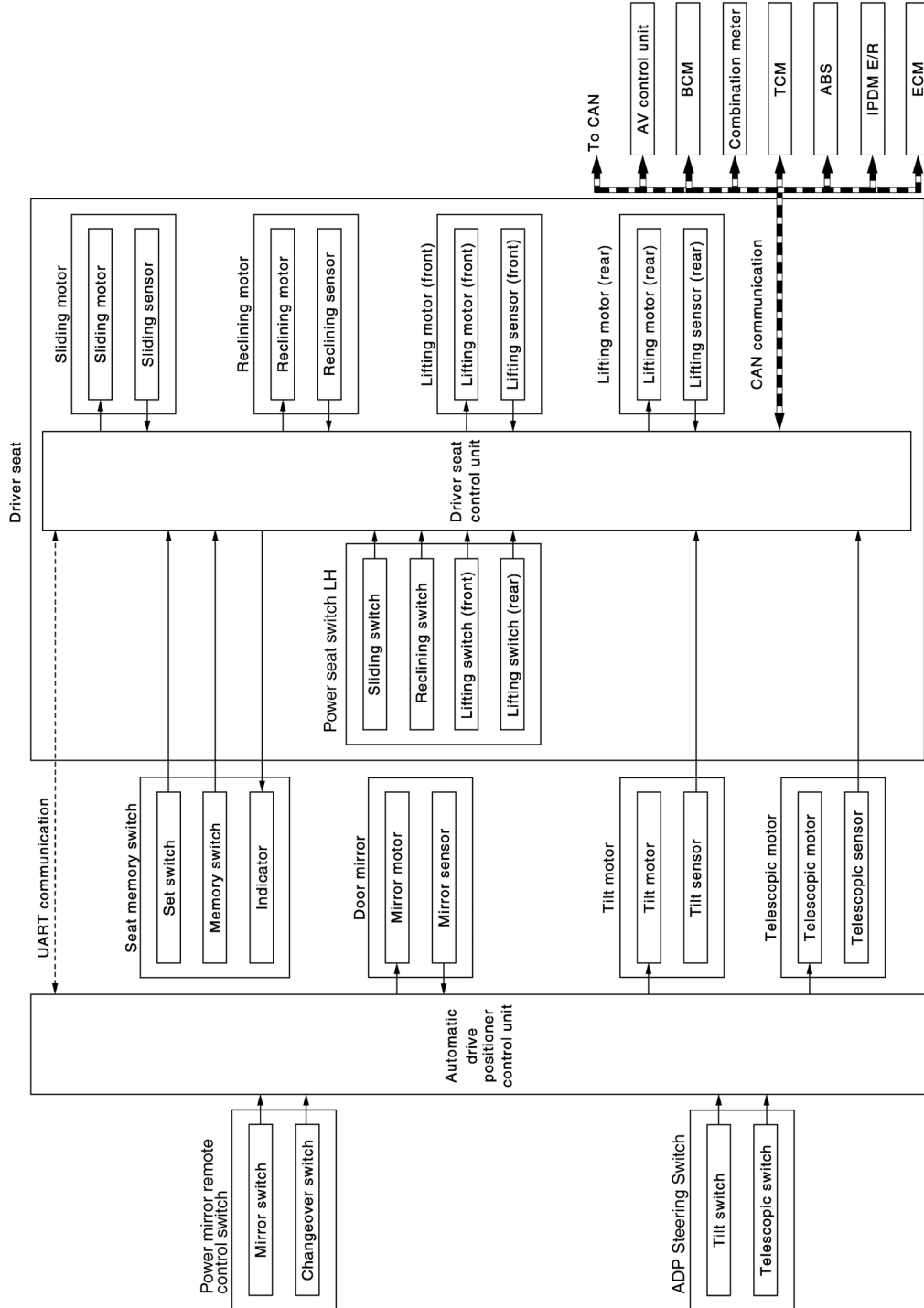
< SYSTEM DESCRIPTION >

## SYSTEM

### AUTOMATIC DRIVE POSITIONER SYSTEM

### AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram

INFOID:000000009133855



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### AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

INFOID:000000009133856

#### OUTLINE

Revision: August 2013

ADP-11

2014 QX60

# SYSTEM

## < SYSTEM DESCRIPTION >

The system automatically moves the driver seat, steering column and door mirror position by the driver seat control unit and the automatic drive positioner control unit. The driver seat control unit corresponds with the automatic drive positioner control unit by UART communication.

| Function                           |       | Description   |
|------------------------------------|-------|---|
| Manual function                    |       | The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, ADP steering switch or door mirror remote control switch. |
| Memory function                    |       | The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).  |
| Entry/Exit assist function         | Exit  | On exit, the seat moves backward and the steering column moves upward.  |
|                                    | Entry | On entry, the seat and steering column returns from exiting position to the previous driving position.  |
| Intelligent Key interlock function |       | Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.                        |

### NOTE:

The lumbar support system is controlled independently with no link to the automatic drive positioner system.

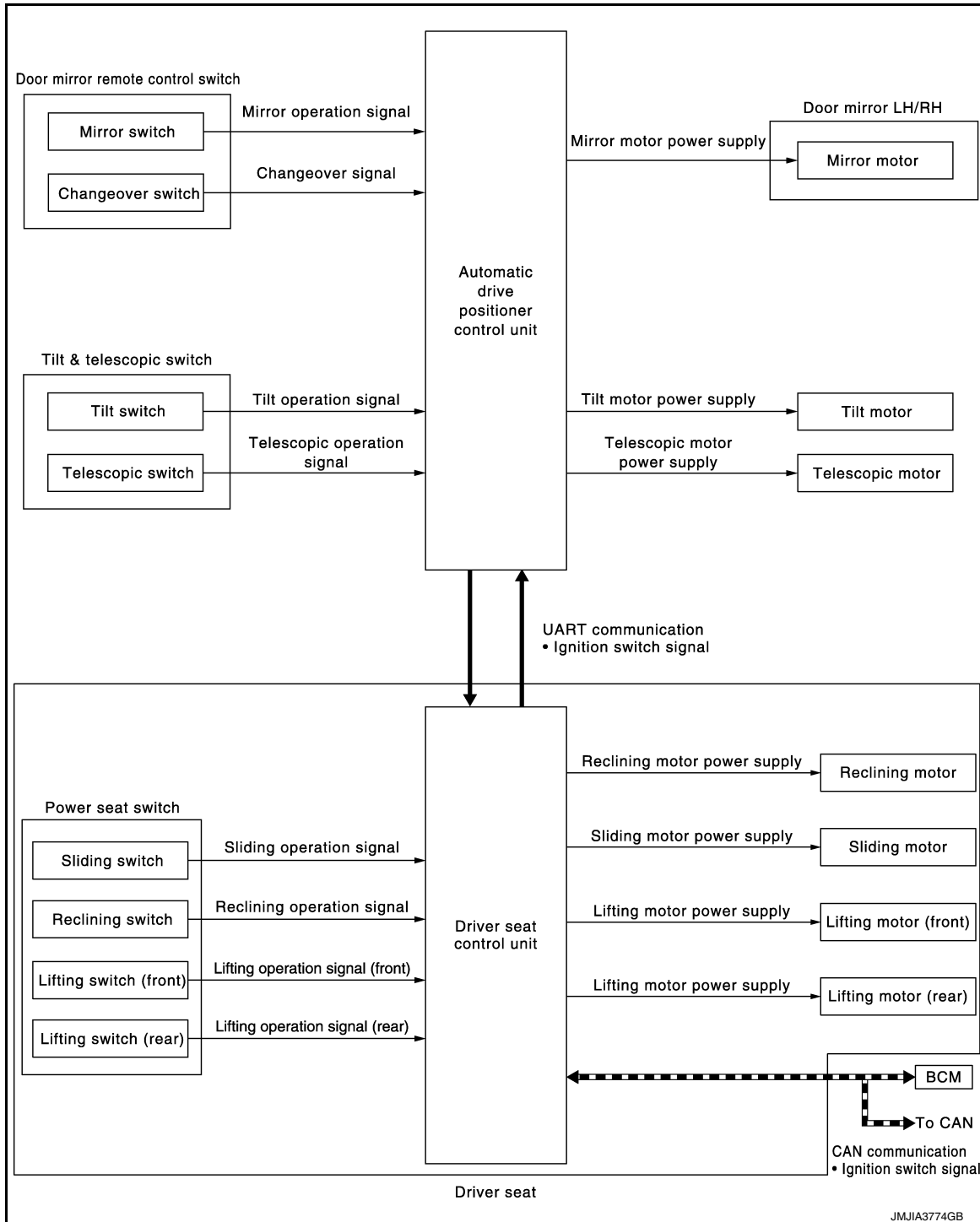
## MANUAL FUNCTION

# SYSTEM

< SYSTEM DESCRIPTION >

## MANUAL FUNCTION : System Diagram

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## MANUAL FUNCTION : System Description

INFOID:000000009133858

### OUTLINE

The driving position (seat, steering column and door mirror position) can be adjusted manually with power seat switch, ADP steering switch and door mirror remote control switch.

### OPERATION PROCEDURE

1. Turn ignition switch ON.
2. Operate power seat switch, ADP steering switch or door mirror remote control switch.
3. The driver seat, steering column or door mirror operates according to the operation of each switch.

# SYSTEM

## < SYSTEM DESCRIPTION >

### DETAIL FLOW

#### Seat

| Order | Input   | Output  | Control unit condition   |
|-------|---|---|--|
| 1     | Power seat switch (sliding, lifting, reclining) | —   | The power seat switch signal is inputted to the driver seat control unit when the power seat switch is operated. |
| 2     | —   | Motors (sliding LH, lifting LH, reclining LH) | The driver seat control unit outputs signals to each motor according to the power seat switch input signal.      |

#### Tilt and Telescopic

| Order | Input                      | Output                    | Control unit condition  |
|-------|----------------------------|---------------------------|---|
| 1     | ADP steering switch        | —                         | The ADP steering switch signal is input to the automatic drive positioner control unit when the ADP steering switch is operated.                                  |
| 2     | —                          | Motors (tilt, telescopic) | The automatic drive positioner control unit actuates the motors according to the operation of the ADP steering switch signal.                                     |
| 3     | Sensors (tilt, telescopic) | —                         | The automatic drive positioner control unit recognizes any operation limit of each actuator via each sensor and will not operate the motors anymore at that time. |

#### Door Mirror

| Order | Input                             | Output                     | Control unit condition  |
|-------|-----------------------------------|----------------------------|---|
| 1     | Door mirror remote control switch | —                          | The door mirror remote control switch signal is inputted to the automatic drive positioner control unit when the door mirror remote control switch is operated. |
| 2     | —                                 | Motors (Door mirror motor) | The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.                            |

#### NOTE:

The door mirrors can be operated manually when ignition switch is in either ACC or ON position. The ignition switch signal (ACC/ON) is transmitted from BCM to the driver seat control unit via CAN communication and from the driver seat control unit to the automatic drive positioner control unit via UART communication.

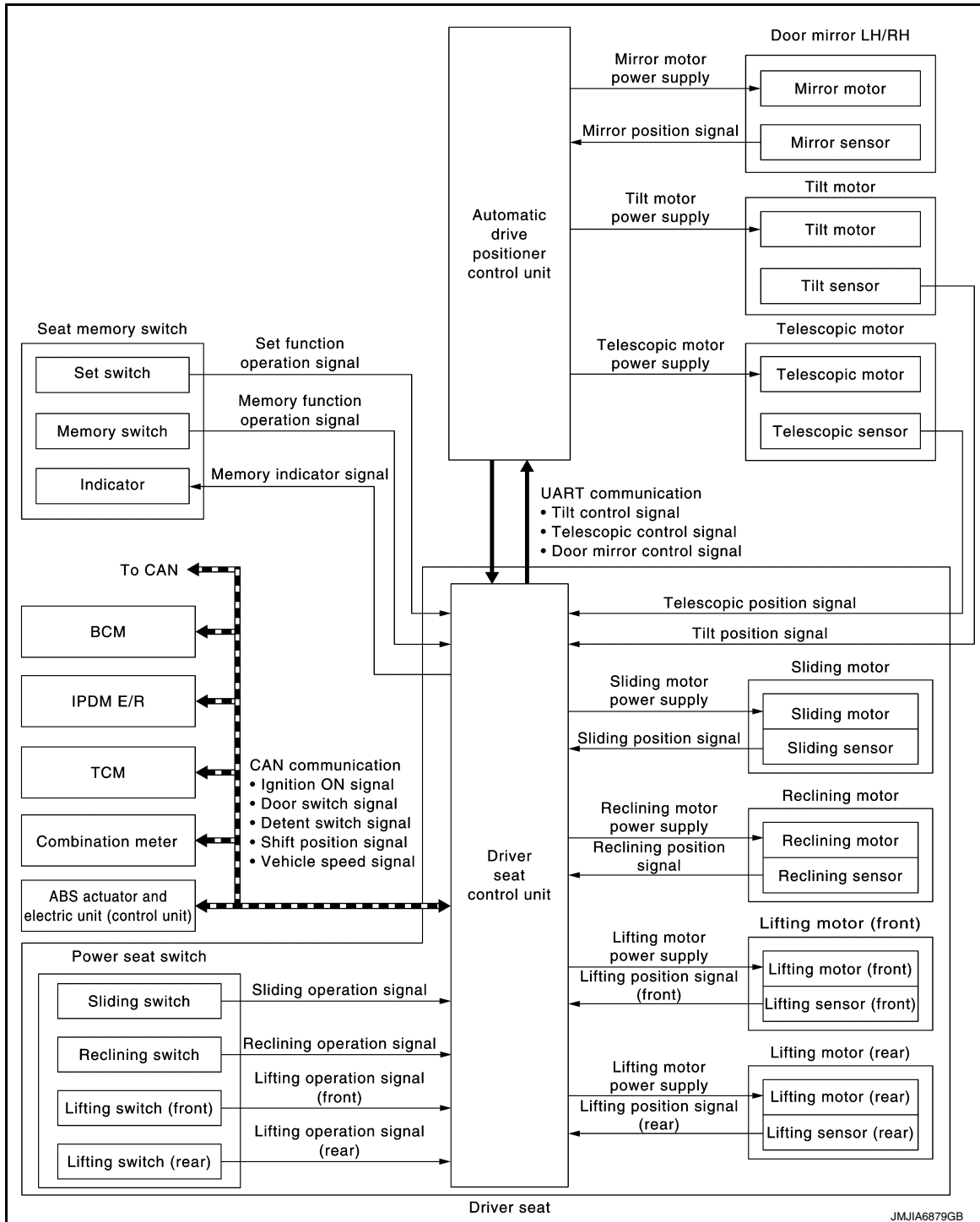
#### MEMORY FUNCTION

# SYSTEM

< SYSTEM DESCRIPTION >

## MEMORY FUNCTION : System Diagram

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## MEMORY FUNCTION : System Description

INFOID:000000009133860

### OUTLINE

The driver seat control unit can store the optimum driving positions (seat, steering column and door mirror position) for 2 people. If the front seat position is changed, one-touch (pressing desired memory switch) operation allows changing to the other driving position.

### NOTE:

For further information for the memory storage procedure, refer to Owner's Manual.

### OPERATION PROCEDURE

1. Turn ignition switch ON.

# SYSTEM

## < SYSTEM DESCRIPTION >

2. Press desired memory switch.
3. Front seat LH, steering column and door mirror will move to the memorized position.

## OPERATION CONDITION

Satisfy all of the following items. The memory function is not performed if these items are not satisfied.

| Item   | Request status        |
|--|-----------------------|
| Ignition position  | ON                    |
| Switch inputs <ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• ADP steering switch</li> <li>• Door mirror control switch</li> <li>• Set switch</li> <li>• Seat memory switch</li> </ul> | OFF<br>(Not operated) |
| CVT selector lever   | P position            |

However, the memory operation can be performed for 45 seconds after opening the front door LH (front door switch LH OFF → ON) even if the ignition switch is OFF.

## DETAIL FLOW

| Order | Input   | Output                                     | Control unit condition  |
|-------|---|--|---|
| 1     | Memory switch                                       | —  | The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated. Memory switch signal is input to driver seat control unit via UART communication.  |
| 2     | —   | Motors<br>(seat, steering,<br>door mirror) | Driver seat control unit operates each motor of seat when it recognizes the memory switch pressed and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.   |
| 2     | —   | Memory switch indicator                    | Driver seat control unit requests the flashing of memory indicator to automatic drive positioner control unit via UART communication while either of the motors is operating. The automatic drive positioner control unit illuminates the memory indicator.   |
| 3     | Sensors<br>(seat, steering column,<br>door mirrors) | —  | Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirrors are monitored with each sensor signal that is input from auto drive positioner control unit via UART communication. Driver seat control unit stops the operation of each motor when each part reaches the recorded address. |
| 4     | —   | Memory switch indicator                    | Driver seat control unit requests the illumination of memory indicator to auto drive positioner control unit via UART communication after all motors stop. The auto driving positioner control unit illuminates the memory indicator for 5 seconds.   |

## EXIT ASSIST FUNCTION

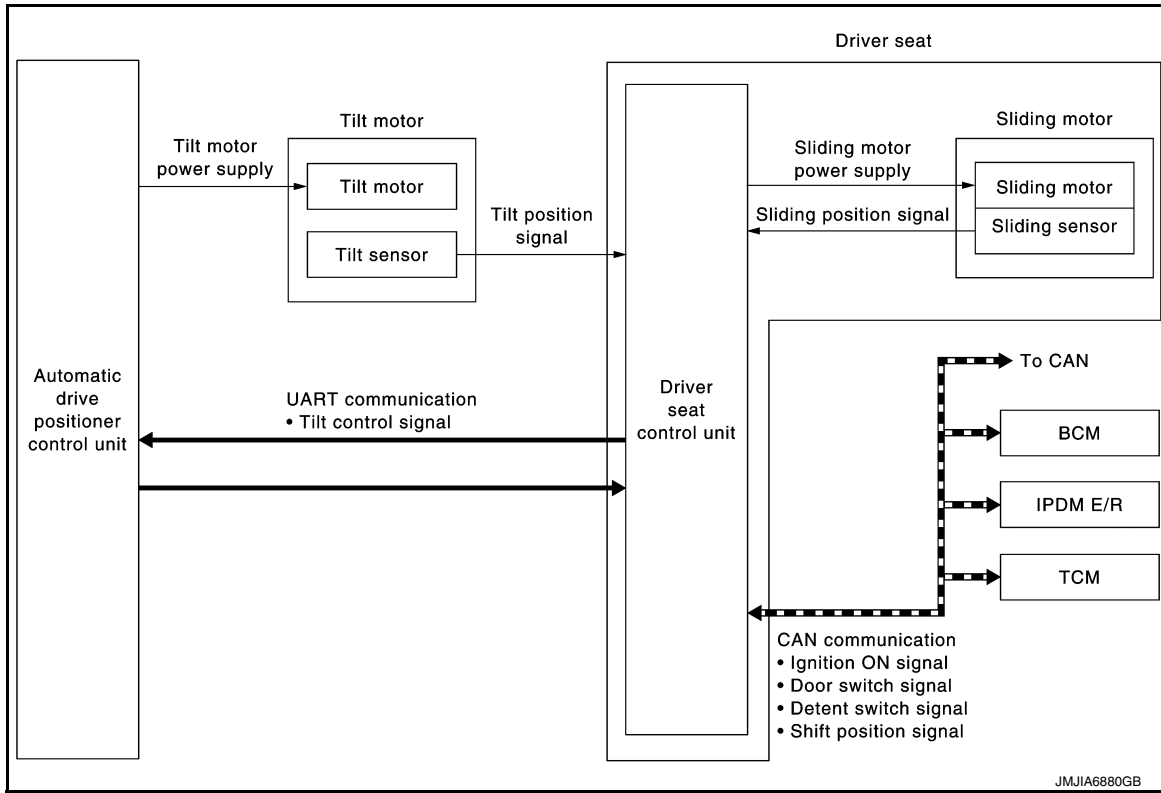


# SYSTEM

< SYSTEM DESCRIPTION >

## EXIT ASSIST FUNCTION : System Diagram

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## EXIT ASSIST FUNCTION : System Description

INFOID:000000009133862

### OUTLINE

When exiting, if the conditions are satisfied, the seat is moved backward from normal sitting position and the steering column is moved up.

The seat slide amount at entry/exit operation can be changed.

#### NOTE:

- This function is set to ON before delivery (initial setting).
- For further information for the system setting procedure, refer to Owner's Manual.

### OPERATION PROCEDURE

1. Open the front door LH with ignition switch in OFF position.
2. Front seat LH and steering column will move to the exiting position.

### OPERATION CONDITION

Satisfy all of the following items. The exit assist function is not performed if these items are not satisfied.

| Item  | Request status        |
|---|-----------------------|
| Ignition switch   | OFF                   |
| System setting [Entry/exit assist function]   | ON                    |
| Initialization  | Done                  |
| Switch inputs <ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• ADP steering switch</li> <li>• Door mirror remote control switch</li> <li>• Set switch</li> <li>• Seat memory switch</li> </ul> | OFF<br>(Not operated) |
| CVT selector lever  | P position            |

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### DETAIL FLOW

# SYSTEM

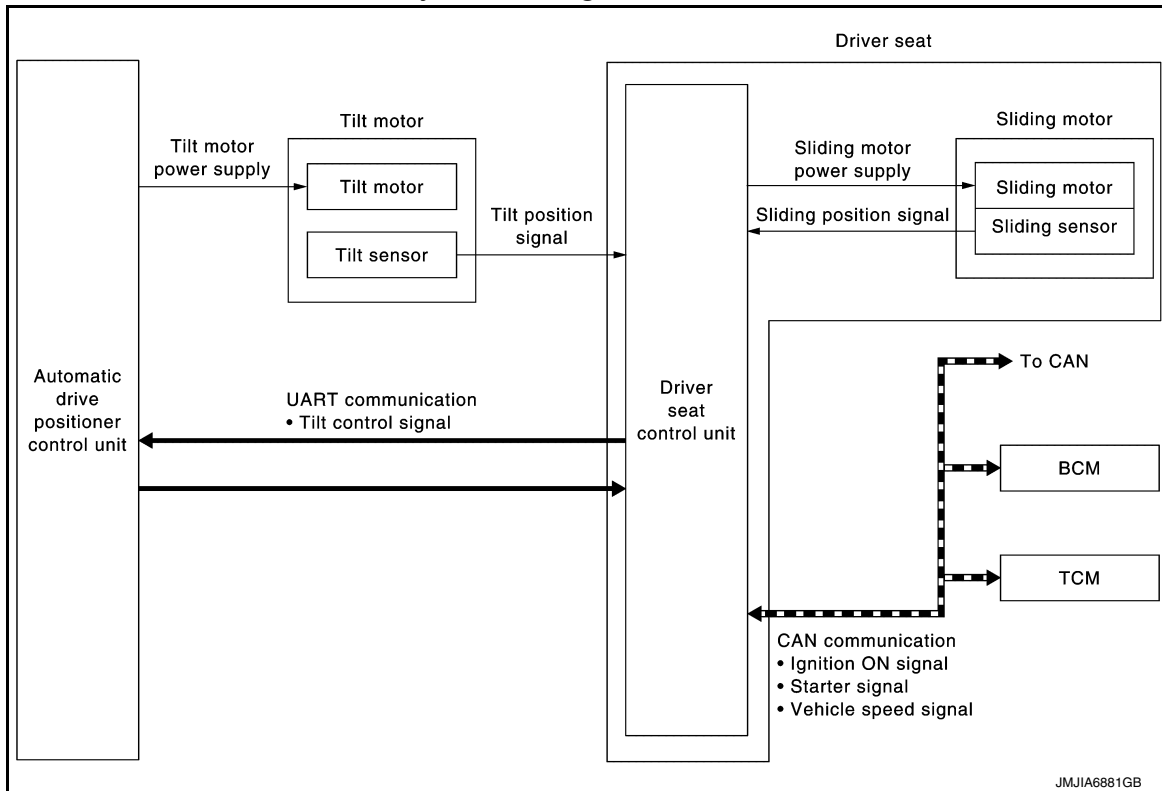
## < SYSTEM DESCRIPTION >

| Order | Input                | Output                         | Control unit condition   |
|-------|----------------------|--------------------------------|--|
| 1     | Front door switch LH | —                              | Driver seat control unit receives front door switch LH signal (open) from BCM via CAN communication.   |
| 2     | —                    | Motors (seat sliding LH, tilt) | Driver seat control unit operates the seat sliding motor LH, which recognizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to auto drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor for a constant amount. |

## ENTRY ASSIST FUNCTION

### ENTRY ASSIST FUNCTION : System Diagram

INFOID:000000009133863



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### ENTRY ASSIST FUNCTION : System Description

INFOID:000000009133864

#### OUTLINE

The seat is in the exiting position when either following condition is satisfied, the seat returns from exiting position to the previous driving position.

#### NOTE:

- This function is set to OFF before delivery (initial setting).
- For further information for the system setting procedure, refer to Owner's Manual.

#### OPERATION PROCEDURE

1. Turn the ignition switch to ACC.
2. Front seat LH and steering column will return from the exiting position to entry position.

#### OPERATION CONDITION

Satisfy all of the following items. The entry assist function is not performed if these items are not satisfied.

# SYSTEM

## < SYSTEM DESCRIPTION >

| Item  | Request status  |
|---|---|
| Seat, steering column   | The vehicle is not moved after performing the exit assist function. |
| Switch inputs <ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• ADP steering switch</li> <li>• Door mirror control switch</li> <li>• Set switch</li> <li>• Memory switch</li> </ul> | OFF<br>(Not operated)   |
| CVT selector lever  | P position  |

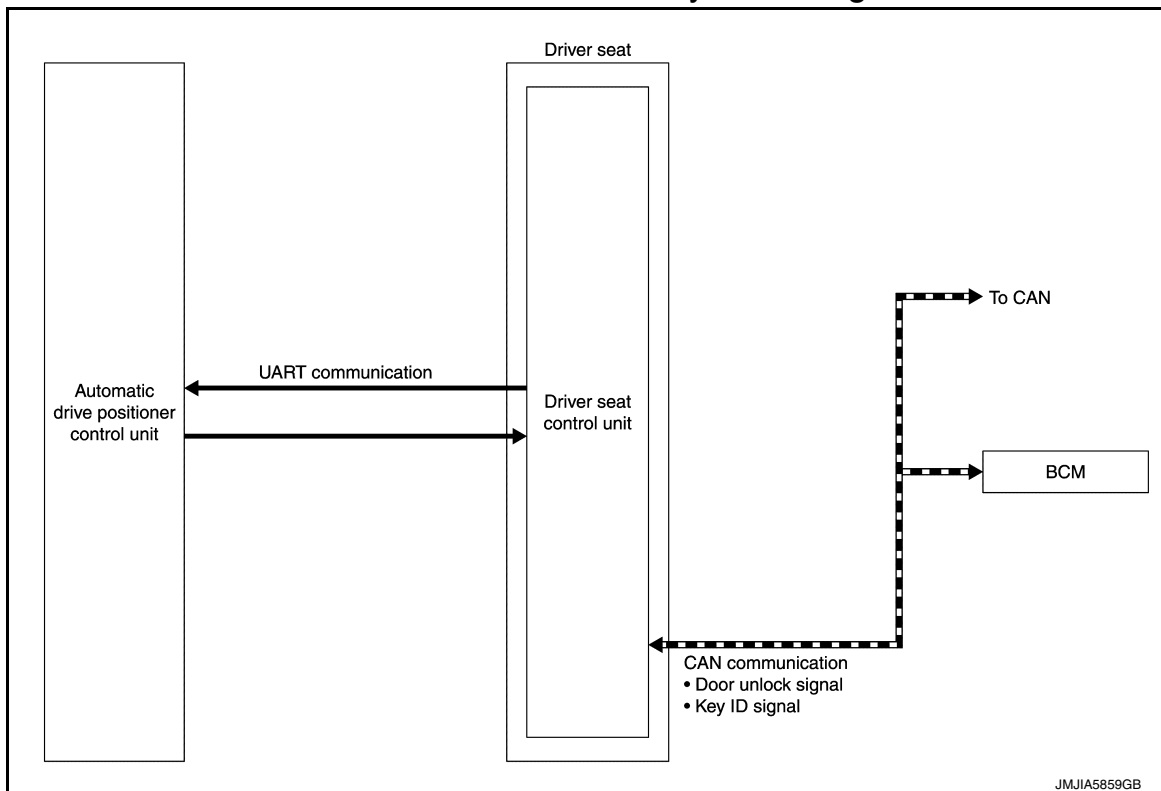
## DETAIL FLOW

| Order | Input                       | Output                    | Control unit condition  |
|-------|-----------------------------|---------------------------|---|
| 1     | Door switch/Ignition switch | —                         | Driver seat control unit receives the signals of ignition switch signal and front door switch from BCM via CAN communication.   |
| 2     | —                           | Motors (sliding LH, tilt) | Driver seat control unit operates the sliding motor LH when the operating conditions are satisfied and requests the operation of tilt motor to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates the tilt motor. |
|       | Sensors (sliding, tilt)     | —                         | Each sensor monitors the operating positions of seat and steering column, then stops the operation of motor when each part reaches the recorded address.  |

## INTELLIGENT KEY INTERLOCK FUNCTION

### INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

INFOID:000000009133865



### INTELLIGENT KEY INTERLOCK FUNCTION : System Description

INFOID:000000009133866

- By associating Intelligent Key and automatic drive positioner system, the unlock operation of Intelligent Key or driver side door request switch performs memory function and entry/exit assist function.

# SYSTEM

## < SYSTEM DESCRIPTION >

- Registration of Intelligent Key interlock function can register a different key ID to the driver seat control unit, one by one, for memory switch 1 and 2. A total of 2 key IDs can be registered.
- When ignition switch is OFF, and door unlock operation is performed using Intelligent Key or driver side door request switch, driver seat automatically adjusts to a driving position other than seat sliding. Seat sliding and steering column tilt perform return operation and are set to standby status.
- In standby status, when ignition switch is operated from OFF to ACC, return operation sets seat sliding and steering column tilt to a registered position.

### NOTE:

- When another key ID is newly registered to a key switch to which a key ID is already registered, the previously registered key ID is overwritten and becomes unusable.
- When starter signal turns ON during return operation, the operation is interrupted, starter signal turns from ON to OFF, and operation restarts.

## OPERATION PROCEDURE

1. Unlock driver door by Intelligent Key or driver side door request switch.
2. Operation other than memory function of seat sliding is performed. Seat sliding and steering column tilt perform exit assist operation.
3. Turn ignition switch ACC.
4. Driver seat and steering column will return from the exiting position to entry position.

### NOTE:

Further information for Intelligent Key interlock function. Refer to [ADP-56. "INTELLIGENT KEY INTERLOCK STORING : Description"](#).

## OPERATION CONDITION

Satisfy all of the following items. The Intelligent Key interlock function is not performed if these items are not satisfied.

| Item   | Request status        |
|--|-----------------------|
| Ignition position  | OFF                   |
| Intelligent Key interlock function   | Registered            |
| Switch inputs <ul style="list-style-type: none"> <li>• Power seat switch</li> <li>• Tilt &amp; telescopic switch</li> <li>• Door mirror control switch</li> <li>• Set switch</li> <li>• Memory switch</li> </ul> | OFF<br>(Not operated) |
| CVT shift selector   | P position            |

## DETAIL FLOW

| Order | Input   | Output | Control unit condition   |
|-------|---|--------|--|
| 1     | <ul style="list-style-type: none"> <li>• Door unlock signal (CAN)</li> <li>• Key ID signal (CAN)</li> </ul> | —      | Driver seat control unit receives the door unlock signal and the key ID signal from BCM when unlocking the door with Intelligent Key or driver side door request switch.                     |
| 2     | —   | —      | Driver seat control unit performs the seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing memory function. |
| 3     | —   | —      | Driver seat control unit performs the entry assist function.   |

## Fail Safe

INFOID:000000009133867

The fail-safe mode may be activated if the following symptoms are observed.

| Operating in fail-safe mode             | Malfunction Item  | Related DTC | Diagnosis              |
|---|-------------------|-------------|------------------------|
| Only manual functions operate normally. | CAN communication | U1000       | <a href="#">ADP-59</a> |
|   | CONTROL UNIT      | U1010       | <a href="#">ADP-60</a> |
|   | EEPROM            | B2130       | <a href="#">ADP-69</a> |

# SYSTEM

## < SYSTEM DESCRIPTION >

| Operating in fail-safe mode                                     | Malfunction Item            | Related DTC | Diagnosis              |
|---|-----------------------------|-------------|------------------------|
| Only manual functions, except door mirror, operate normally.    | UART communication          | B2128       | <a href="#">ADP-67</a> |
| Only manual functions, except seat sliding, operate normally.   | Seat sliding output         | B2112       | <a href="#">ADP-61</a> |
| Only manual functions, except seat reclining, operate normally. | Seat reclining output       | B2113       | <a href="#">ADP-63</a> |
| Only manual functions, except steering tilt, operate normally.  | Steering column tilt output | B2116       | <a href="#">ADP-65</a> |

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# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

## DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

### CONSULT Function (AUTO DRIVE POS)

INFOID:000000009133868

#### CAUTION:

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF → ON (for at least 5 seconds) → OFF. If this step is not performed, the BCM may not go to "sleep mode", potentially causing a discharged battery and a no-start condition.

The auto drive positioner system can be checked and diagnosed for component operation with CONSULT.

#### APPLICATION ITEMS

| Diagnostic mode        | Description  |
|------------------------|--|
| ECU IDENTIFICATION     | Displays part numbers of driver seat control unit parts.   |
| SELF DIAGNOSTIC RESULT | Performs self-diagnosis for the auto drive positioner system and displays the results.                         |
| ACTIVE TEST            | Drive each output device.  |
| DATA MONITOR           | Displays input signals transmitted from various switches and sensors to driver seat control unit in real time. |
| WORK SUPPORT           | Changes the setting of each function.  |

#### SELF-DIAGNOSIS RESULTS

Refer to [ADP-31, "DTC Index"](#).

#### ACTIVE TEST

##### CAUTION:

When driving vehicle, do not perform active test.

| Test item        | Description  |
|------------------|--|
| SEAT SLIDE       | Activates/deactivates the sliding motor LH.              |
| SEAT RECLINING   | Activates/deactivates the reclining motor LH.            |
| SEAT LIFTER FR   | Activates/deactivates the lifting motor LH (front).      |
| SEAT LIFTER RR   | Activates/deactivates the lifting motor LH (rear).       |
| TILT MOTOR       | Activates/deactivates the tilt motor.                    |
| TELESCO MOTOR    | Activates/deactivates the telescopic motor.              |
| MIRROR MOTOR RH  | Activates/deactivates the mirror motor (passenger side). |
| MIRROR MOTOR LH  | Activates/deactivates the mirror motor (driver side).    |
| MEMORY SW INDCTR | Turns ON/OFF the memory indicator.                       |

#### DATA MONITOR

| Monitor Item  | Unit          | Main Signals | Selection From Menu | Contents   |
|---------------|---------------|--------------|---------------------|--|
| DETENT SW     | "ON/OFF"      | ×            | ×                   | The selector lever position "OFF (P position) / ON (other than P position)" judged from the detention switch signal. |
| P RANG SW CAN | "ON/OFF"      | ×            | ×                   | ON/OFF status judged from the P range switch signal.   |
| STARTER SW    | "ON/OFF"      | ×            | ×                   | Ignition key switch ON (START, ON) /OFF (ACC, OFF) status judged from the ignition switch signal.                    |
| R RANGE (CAN) | "ON/OFF"      | ×            | ×                   | ON/OFF status judged from the R range switch signal.   |
| VEHICLE SPEED | —             | ×            | ×                   | Display the vehicle speed signal received from combination meter by numerical value [km/h].                          |
| DOOR SW-FL    | "OPEN/CLOSED" | ×            | ×                   | ON/OFF status judged from the door switch (front driver side) signal.  |
| DOOR SW-FR    | "OPEN/CLOSED" | ×            | ×                   | ON/OFF status judged from the door switch (front passenger side) signal.   |

# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

## < SYSTEM DESCRIPTION >

| Monitor Item     | Unit      | Main Signals | Selection From Menu | Contents   |
|------------------|-----------|--------------|---------------------|--|
| IGN ON SW        | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ignition switch signal.  |
| ACC ON SW        | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ACC switch signal.   |
| KEY ON SW        | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the key on switch signal.  |
| KYLS DR UNLK     | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the driver side door unlock actuator output switch signal.         |
| KEYLESS ID       | —         | ×            | ×                   | Key ID status judged from the key ID signal.   |
| VHCL SPEED (ABS) | "RCV"     | ×            | ×                   | Vehicle speed status judged from vehicle speed signal.                                       |
| HANDLE           | "RHD/LHD" | ×            | ×                   | RHD/LHD status judged from handle position signal.   |
| TRANSMISSION     | "A/T"     | ×            | ×                   | CVT status judged from transmission.   |
| SET SW           | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the setting switch signal.   |
| MEMORY SW1       | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the seat memory switch 1 signal.                                   |
| MEMORY SW2       | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the seat memory switch 2 signal.                                   |
| SLIDE SW-FR      | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the sliding switch (forward) signal.                               |
| SLIDE SW-RR      | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the sliding switch (backward) signal.                              |
| RECLN SW-FR      | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the reclining switch (forward) signal.                             |
| RECLN SW-RR      | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the reclining switch (backward) signal.                            |
| LIFT FR SW-UP    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the lifting switch front (up) signal.                              |
| LIFT FR SW-DN    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the lifting switch front (down) signal.                            |
| LIFT RR SW-UP    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the lifting switch rear (up) signal.                               |
| LIFT RR SW-DN    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the lifting switch rear (down) signal.                             |
| MIR CON SW-UP    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the mirror switch (up) signal.                                     |
| MIR CON SW-DN    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the mirror switch (down) signal.                                   |
| MIR CON SW-RH    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the door mirror remote control switch (passenger side) signal.     |
| MIR CON SW-LH    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the door mirror remote control switch (driver side) signal.        |
| MIR CHNG SW-R    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the door mirror remote control switch (switching to right) signal. |
| MIR CHNG SW-L    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the door mirror remote control switch (switching to left) signal.  |
| TILT SW-UP       | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ADP steering switch (up) signal.                               |
| TILT SW-DOWN     | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ADP steering switch (down) signal.                             |
| TELESCO SW-FR    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ADP steering switch (forward) signal.                          |
| TELESCO SW-RR    | "ON/OFF"  | ×            | ×                   | ON/OFF status judged from the ADP steering switch (backward) signal.                         |

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## DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

### < SYSTEM DESCRIPTION >

| Monitor Item   | Unit | Main Signals | Selection From Menu | Contents  |
|----------------|------|--------------|---------------------|---|
| SLIDE PULSE    | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases. |
| RECLN PULSE    | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases. |
| LIFT FR PULSE  | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.          |
| LIFT RR PULSE  | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.          |
| MIR/SEN RH U-D | "V"  | —            | ×                   | Voltage input from door mirror sensor (passenger side) up/down is displayed.  |
| MIR/SEN RH R-L | "V"  | —            | ×                   | Voltage input from door mirror sensor (passenger side) left/right is displayed.   |
| MIR/SEN LH U-D | "V"  | —            | ×                   | Voltage input from door mirror sensor (driver side) up/down is displayed.   |
| MIR/SEN LH R-L | "V"  | —            | ×                   | Voltage input from door mirror sensor (driver side) left/right is displayed.  |
| TILT PULSE     | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.          |
| TELESCO PULSE  | —    | —            | ×                   | Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases. |

### WORK SUPPORT

| Work item               | Content  | Item           |
|-------------------------|--|----------------|
| EXIT SEAT SLIDE SETTING | Entry/exit assist (seat) can be selected:<br>ON (operated) – OFF (not operated)            | ON             |
|                         |  | OFF            |
| EXIT TILT SETTING       | Entry/exit assist (steering column) can be selected:<br>ON (operated) – OFF (not operated) | ON             |
|                         |  | OFF            |
| SEAT SLIDE VOLUME SET   | The amount of seat sliding for entry/exit assist can be selected from 3 items.             | 40 mm (1.6 in) |
|                         |  | 80 mm (3.1 in) |
|                         |  | 150 mm (6 in)  |



# DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

## ECU DIAGNOSIS INFORMATION

### DRIVER SEAT CONTROL UNIT

Reference Value

INFOID:000000009133869

#### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

| Monitor Item     | Condition  |                          | Value/Status    |
|------------------|--|--------------------------|-----------------|
| DETENT SW        | CVT selector lever                                 | P position               | OFF             |
|                  |  | Other than above         | ON              |
| P RANG SW CAN    | CVT selector lever                                 | P position               | ON              |
|                  |  | Other than above         | OFF             |
| STARTER SW       | Ignition position                                  | Cranking                 | ON              |
|                  |  | Other than above         | OFF             |
| R RANGE (CAN)    | CVT selector lever                                 | R position               | ON              |
|                  |  | Other than above         | OFF             |
| VEHICLE SPEED    | The condition of vehicle speed is displayed        |                          | km/h            |
| DOOR SW-FL       | Driver door  | Open                     | OPEN            |
|                  |  | Close                    | CLOSED          |
| DOOR SW-FR       | Passenger door                                     | Open                     | OPEN            |
|                  |  | Close                    | CLOSED          |
| IGN ON SW        | Ignition switch                                    | ON position              | ON              |
|                  |  | Other than above         | OFF             |
| ACC ON SW        | Ignition switch                                    | ACC or ON position       | ON              |
|                  |  | Other than above         | OFF             |
| KEY ON SW        | Intelligent Key                                    | Inserted in key slot     | ON              |
|                  |  | Not Inserted in key slot | OFF             |
| KYL5 DR UNLK     | Intelligent Key or driver side door request switch | ON                       | ON              |
|                  |  | OFF                      | OFF             |
| KEYLESS ID       | UNLOCK button of Intelligent Key is pressed        |                          | 1, 2, 3, 4 or 5 |
| VHCL SPEED (ABS) | CAN signal from ABS                                | Received                 | ON              |
|                  |  | Not received             | OFF             |
| HANDLE           | Driving position                                   |                          | LHD             |
|                  |  |                          | RHD             |
| TRANSMISSION     | Transmission type                                  |                          | A/T             |
| SET SW           | Set switch   | Push                     | ON              |
|                  |  | Release                  | OFF             |
| MEMORY SW1       | Memory switch 1                                    | Push                     | ON              |
|                  |  | Release                  | OFF             |
| MEMORY SW2       | Memory switch 2                                    | Push                     | ON              |
|                  |  | Release                  | OFF             |
| SLIDE SW-FR      | Sliding switch (forward)                           | Operate                  | ON              |
|                  |  | Release                  | OFF             |
| SLIDE SW-RR      | Sliding switch (backward)                          | Operate                  | ON              |
|                  |  | Release                  | OFF             |

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# DRIVER SEAT CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item  | Condition                   |                  | Value/Status                  |
|---------------|-----------------------------|------------------|-------------------------------|
| RECLN SW-FR   | Reclining switch (forward)  | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| RECLN SW-RR   | Reclining switch (backward) | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| LIFT FR SW-UP | Lifting switch front (up)   | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| LIFT FR SW-DN | Lifting switch front (down) | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| LIFT RR SW-UP | Lifting switch rear (up)    | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| LIFT RR SW-DN | Lifting switch rear (down)  | Operate          | ON                            |
|               |                             | Release          | OFF                           |
| MIR CON SW-UP | Mirror switch               | Up               | ON                            |
|               |                             | Other than above | OFF                           |
| MIR CON SW-DN | Mirror switch               | Down             | ON                            |
|               |                             | Other than above | OFF                           |
| MIR CON SW-RH | Mirror switch               | Right            | ON                            |
|               |                             | Other than above | OFF                           |
| MIR CON SW-LH | Mirror switch               | Left             | ON                            |
|               |                             | Other than above | OFF                           |
| MIR CHNG SW-R | Changeover switch           | Right            | ON                            |
|               |                             | Other than above | OFF                           |
| MIR CHNG SW-L | Changeover switch           | Left             | ON                            |
|               |                             | Other than above | OFF                           |
| TILT SW-UP    | Tilt switch                 | Upward           | ON                            |
|               |                             | Other than above | OFF                           |
| TILT SW-DOWN  | Tilt switch                 | Downward         | ON                            |
|               |                             | Other than above | OFF                           |
| TELESCO SW-FR | Telescopic switch           | Forward          | ON                            |
|               |                             | Other than above | OFF                           |
| TELESCO SW-RR | Telescopic switch           | Backward         | ON                            |
|               |                             | Other than above | OFF                           |
| SLIDE PULSE   | Seat sliding                | Forward          | The numeral value decreases * |
|               |                             | Backward         | The numeral value increases*  |
|               |                             | Other than above | No change to numeral value*   |
| RECLN PULSE   | Seat reclining              | Forward          | The numeral value decreases*  |
|               |                             | Backward         | The numeral value increases * |
|               |                             | Other than above | No change to numeral value *  |
| LIFT FR PULSE | Seat lifter (front)         | Up               | The numeral value decreases * |
|               |                             | Down             | The numeral value increases * |
|               |                             | Other than above | No change to numeral value *  |

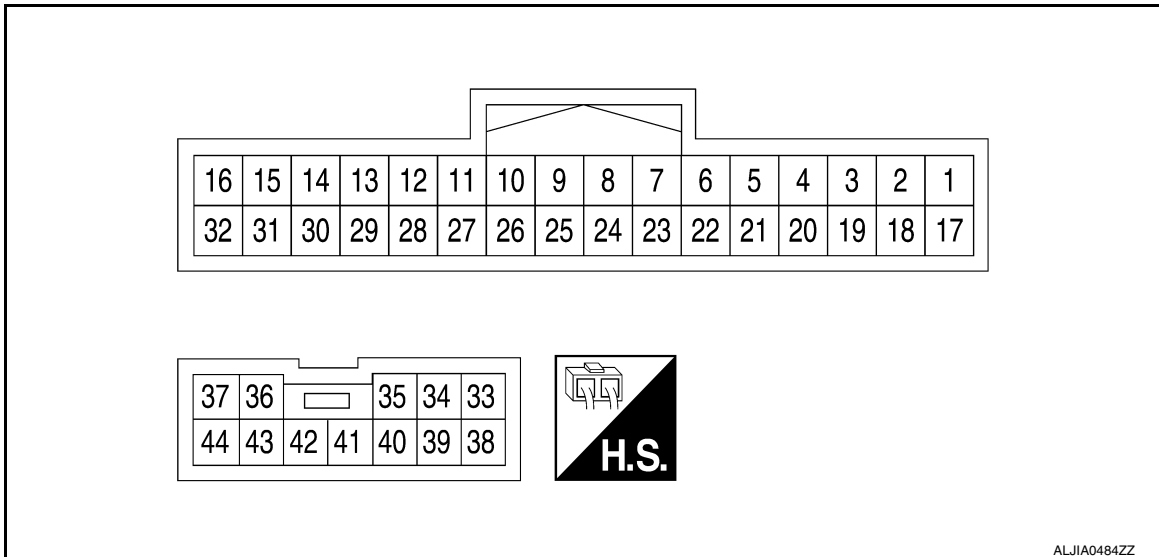
# DRIVER SEAT CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Monitor Item   | Condition                    |                  | Value/Status   |
|----------------|------------------------------|------------------|--|
| LIFT RR PULSE  | Seat lifter (rear)           | Up               | The numeral value decreases *  |
|                |                              | Down             | The numeral value increases *  |
|                |                              | Other than above | No change to numeral value *   |
| MIR/SEN RH U-D | Door mirror (passenger side) |                  | Change between 3.4 (close to peak)<br>0.6 (close to valley)          |
| MIR/SEN RH R-L | Door mirror (passenger side) |                  | Change between 3.4 (close to left edge)<br>0.6 (close to right edge) |
| MIR/SEN LH U-D | Door mirror (driver side)    |                  | Change between 3.4 (close to peak)<br>0.6 (close to valley)          |
| MIR/SEN LH R-L | Door mirror (driver side)    |                  | Change between 0.6 (close to left edge)<br>3.4 (close to right edge) |
| TILT PULSE     | Tilt position                | Upward           | The numeral value decreases *  |
|                |                              | Downward         | The numeral value increases *  |
|                |                              | Other than above | No change to numeral value *   |
| TELESCO PULSE  | Telescopic position          | Forward          | The numeral value decreases *  |
|                |                              | Backward         | The numeral value increases *  |
|                |                              | Other than above | No change to numeral value *   |

\*: The value at the position attained when the battery is connected is regarded as 32768.

## TERMINAL LAYOUT

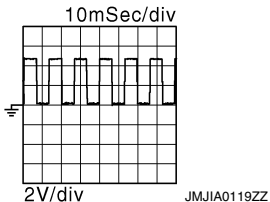
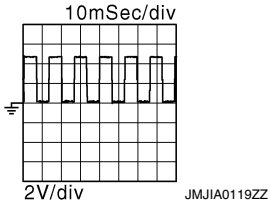
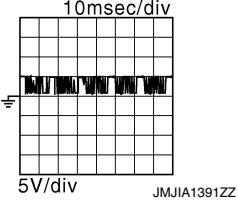


## PHYSICAL VALUES

| Terminal No.<br>(wire color) |        | Description                          |                  | Condition                |                   | Voltage (V)<br>(Approx) |
|------------------------------|--------|--------------------------------------|------------------|--------------------------|-------------------|-------------------------|
| +                            | -      | Signal name                          | Input/<br>Output |                          |                   |                         |
| 5<br>(W)                     | Ground | Sensor power supply                  | Output           | —                        |                   | Battery voltage         |
| 6<br>(R)                     | Ground | Lifting switch (rear) down<br>signal | Input            | Lifting switch<br>(rear) | Operate<br>(down) | 0                       |
|                              |        |                                      |                  |                          | Release           | Battery voltage         |

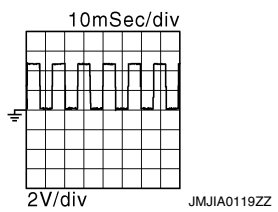
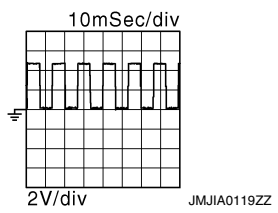
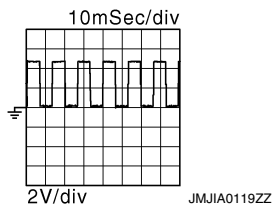
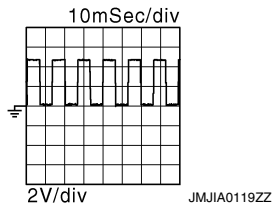
# DRIVER SEAT CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description                        |                  | Condition                   |   | Voltage (V)<br>(Approx)   |
|------------------------------|--------|------------------------------------|------------------|-----------------------------|---|---|
| +                            | -      | Signal name                        | Input/<br>Output |                             |   |   |
| 7<br>(Y)                     | Ground | Lifting switch (front) down signal | Input            | Lifting switch (front)      | Operate (down)  | 0   |
|                              |        |                                    |                  |                             | Release   | Battery voltage   |
| 8<br>(BG)                    | Ground | Reclining switch backward signal   | Input            | Reclining switch            | Operate (backward)  | 0   |
|                              |        |                                    |                  |                             | Release   | Battery voltage   |
| 9<br>(SB)                    | Ground | Sliding switch backward signal     | Input            | Sliding switch              | Operate (backward)  | 0   |
|                              |        |                                    |                  |                             | Release   | Battery voltage   |
| 10<br>(G)                    | Ground | Memory indicator 2 signal          | Output           | Memory indicator 2          | Illuminate  | 1   |
|                              |        |                                    |                  |                             | Other than above  | Battery voltage   |
| 11<br>(GR)                   | Ground | Memory switch 2 signal             | Input            | Memory switch 2             | Press   | 0   |
|                              |        |                                    |                  |                             | Other than above  | 5   |
| 12<br>(W)                    | Ground | Telescopic sensor signal           | Input            | Telescopic                  | Operate   |   |
|                              |        |                                    |                  |                             | Other than above  | 0 or 5  |
| 13<br>(G)                    | Ground | Reclining sensor signal            | Input            | Seat reclining              | Operate   |  |
|                              |        |                                    |                  |                             | Stop  | 0 or 5  |
| 15<br>(SB)                   | Ground | UART communication (TX/RX)         | Input            | Ignition switch ON          |  |   |
| 16<br>(P)                    | —      | CAN-H                              | —                | —                           | —   |   |
| 21<br>(L)                    | Ground | Set switch signal                  | Input            | Set switch                  | Press   | 0   |
|                              |        |                                    |                  |                             | Other than above  | 5   |
| 22<br>(V)                    | Ground | Lifting switch (rear) up signal    | Input            | Seat lifting switch (rear)  | Operate (up)  | 0   |
|                              |        |                                    |                  |                             | Release   | Battery voltage   |
| 23<br>(G)                    | Ground | Lifting switch (front) up signal   | Input            | Seat lifting switch (front) | Operate (up)  | 0   |
|                              |        |                                    |                  |                             | Release   | Battery voltage   |

# DRIVER SEAT CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description                                 |                  | Condition            |                   | Voltage (V)<br>(Approx)   |
|------------------------------|--------|---|------------------|----------------------|-------------------|---|
| +                            | -      | Signal name                                 | Input/<br>Output |                      |                   |   |
| 24<br>(P)                    | Ground | Reclining switch forward signal             | Input            | Reclining switch     | Operate (forward) | 0   |
|                              |        |   |                  |                      | Release           | Battery voltage   |
| 25<br>(L)                    | Ground | Sliding switch forward signal               | Input            | Sliding switch       | Operate (forward) | 0   |
|                              |        |   |                  |                      | Release           | Battery voltage   |
| 26<br>(Y)                    | Ground | Memory indicator 1 signal                   | Output           | Memory indicator 1   | Illuminate        | 1   |
|                              |        |   |                  |                      | Other than above  | Battery voltage   |
| 27<br>(V)                    | Ground | Memory switch 1 signal                      | Input            | Memory switch 1      | Press             | 0   |
|                              |        |   |                  |                      | Other than above  | 5   |
| 28<br>(BG)                   | Ground | Tilt sensor signal                          | Input            | Tilt                 | Operate           |    |
|                              |        |   |                  |                      | Other than above  | 0 or 5  |
| 29<br>(R)                    | Ground | Lifting sensor (rear) signal                | Input            | Seat lifting (rear)  | Operate           |   |
|                              |        |   |                  |                      | Stop              | 0 or 5  |
| 30<br>(Y)                    | Ground | Lifting sensor (front) signal               | Input            | Seat lifting (front) | Operate           |  |
|                              |        |   |                  |                      | Stop              | 0 or 5  |
| 31<br>(L)                    | Ground | Sliding sensor signal                       | Input            | Seat sliding         | Operate           |  |
|                              |        |   |                  |                      | Stop              | 0 or 5  |
| 32<br>(W)                    | —      | CAN-L                                       | —                | —                    | —                 | —   |
| 34<br>(SB)                   | Ground | Lifting motor LH (front) down output signal | Output           | Seat lifting (front) | Operate (down)    | Battery voltage   |
|                              |        |   |                  |                      | Stop              | 0   |

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# DRIVER SEAT CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description                                |                  | Condition            |                    | Voltage (V)<br>(Approx) |
|------------------------------|--------|--|------------------|----------------------|--------------------|-------------------------|
| +                            | -      | Signal name                                | Input/<br>Output |                      |                    |                         |
| 35<br>(V)                    | Ground | Reclining motor LH forward output signal   | Output           | Seat reclining       | Operate (forward)  | Battery voltage         |
|                              |        |  |                  |                      | Release            | 0                       |
| 36<br>(W)                    | Ground | Sliding motor LH backward output signal    | Output           | Seat sliding         | Operate (backward) | Battery voltage         |
|                              |        |  |                  |                      | Stop               | 0                       |
| 37<br>(R)                    | Ground | Power source                               | Input            | —                    | —                  | Battery voltage         |
| 39<br>(B)                    | Ground | Ground (power)                             | —                | —                    | —                  | 0                       |
| 40<br>(L)                    | Ground | Lifting motor LH (rear) down output signal | Output           | Seat lifting (rear)  | Operate (down)     | Battery voltage         |
|                              |        |  |                  |                      | Stop               | 0                       |
| 41<br>(Y)                    | Ground | Lifting motor LH (rear) up output signal   | Output           | Seat lifting (rear)  | Operate (up)       | Battery voltage         |
|                              |        |  |                  |                      | Stop               | 0                       |
| 42<br>(GR)                   | Ground | Lifting motor LH (front) up output signal  | Output           | Seat lifting (front) | Operate (up)       | Battery voltage         |
|                              |        |  |                  |                      | Stop               | 0                       |
| 43<br>(BG)                   | Ground | Reclining motor LH backward output signal  | Output           | Seat reclining       | Operate (backward) | Battery voltage         |
|                              |        |  |                  |                      | Stop               | 0                       |
| 44<br>(G)                    | Ground | Sliding motor LH forward output signal     | Output           | Seat sliding         | Operate (forward)  | Battery voltage         |
|                              |        |  |                  |                      | Release            | 0                       |

### Fail Safe

INFOID:000000009133870

The fail-safe mode may be activated if the following symptoms are observed.

| Operating in fail-safe mode                                     | Malfunction Item            | Related DTC | Diagnosis              |
|---|-----------------------------|-------------|------------------------|
| Only manual functions operate normally.                         | CAN communication           | U1000       | <a href="#">ADP-59</a> |
|   | CONTROL UNIT                | U1010       | <a href="#">ADP-60</a> |
|   | EEPROM                      | B2130       | <a href="#">ADP-69</a> |
| Only manual functions, except door mirror, operate normally.    | UART communication          | B2128       | <a href="#">ADP-67</a> |
| Only manual functions, except seat sliding, operate normally.   | Seat sliding output         | B2112       | <a href="#">ADP-61</a> |
| Only manual functions, except seat reclining, operate normally. | Seat reclining output       | B2113       | <a href="#">ADP-63</a> |
| Only manual functions, except steering tilt, operate normally.  | Steering column tilt output | B2116       | <a href="#">ADP-65</a> |

# DRIVER SEAT CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

## DTC Index

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| CONSULT display          | Timing*1             |                       | Item                        | Reference page         |
|--------------------------|----------------------|-----------------------|-----------------------------|------------------------|
|                          | Current mal-function | Previous mal-function |                             |                        |
| CAN COMM CIRCUIT [U1000] | 0                    | 1-39                  | CAN communication           | <a href="#">ADP-59</a> |
| CONTROL UNIT [U1010]     | 0                    | 1-39                  | Control unit                | <a href="#">ADP-60</a> |
| SEAT SLIDE [B2112]       | 0                    | 1-39                  | Seat slide motor output     | <a href="#">ADP-61</a> |
| SEAT RECLINING [B2113]   | 0                    | 1-39                  | Seat reclining motor output | <a href="#">ADP-63</a> |
| STEERING TILT [B2116]    | 0                    | 1-39                  | Tilt motor output           | <a href="#">ADP-65</a> |
| UART COMM [B2128]        | 0                    | 1-39                  | UART communication          | <a href="#">ADP-67</a> |
| EEPROM [B2130]           | 0                    | 1-39                  | EEPROM                      | <a href="#">ADP-69</a> |

\*1.

- 0: Current malfunction is present
- 1-39: Displayed if any previous malfunction is present when current condition is normal. The numeral value increases by one at each IGN ON to OFF cycle from 1 to 39. The counter remains at 39 even if the number of cycles exceeds it. However, the counter is reset to 1 if any malfunction is detected again, the normal operation is resumed and the ignition switch is turned from OFF to ON.

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

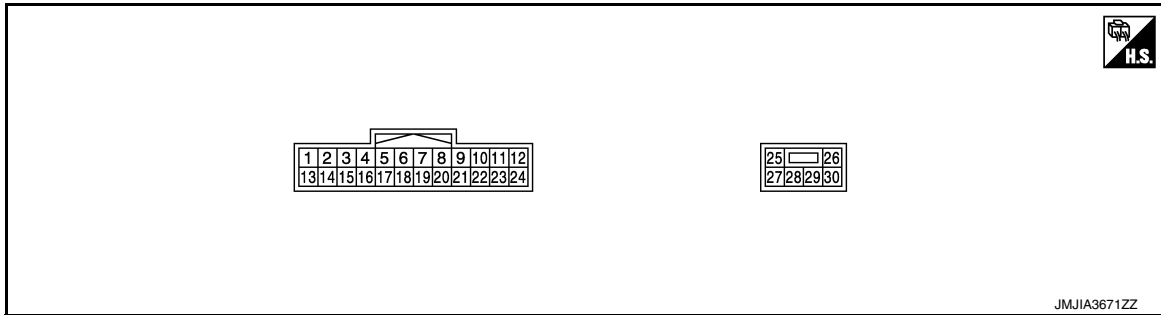
< ECU DIAGNOSIS INFORMATION >

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000009133872

### TERMINAL LAYOUT



### PHYSICAL VALUES

| Terminal No.<br>(wire color) |        | Description  |                  | Condition                  |                   | Voltage (V)<br>(Approx.)                                 |
|------------------------------|--------|--|------------------|----------------------------|-------------------|--|
| +                            | -      | Signal name  | Input/<br>Output |                            |                   |  |
| 1<br>(LG)                    | Ground | Tilt switch up signal                              | Input            | Tilt switch                | Operate (up)      | 0  |
|                              |        |  |                  |                            | Other than above  | 5  |
| 2<br>(V)                     | Ground | Changeover switch RH signal                        | Input            | Changeover switch position | RH                | 0  |
|                              |        |  |                  |                            | Neutral or LH     | 5  |
| 3<br>(G)                     | Ground | Mirror switch up signal                            | Input            | Mirror switch              | Operated (up)     | 0  |
|                              |        |  |                  |                            | Other than above  | 5  |
| 4<br>(P)                     | Ground | Mirror switch left signal                          | Input            | Mirror switch              | Operated (left)   | 0  |
|                              |        |  |                  |                            | Other than above  | 5  |
| 5<br>(W)                     | Ground | Door mirror sensor (passenger side) up/down signal | Input            | Door mirror RH position    |                   | Change between 3.4 (close to peak) 0.6 (close to valley) |
| 6<br>(R)                     | Ground | Door mirror sensor (driver side) up/down signal    | Input            | Door mirror LH position    |                   | Change between 3.4 (close to peak) 0.6 (close to valley) |
| 7<br>(BR)                    | Ground | Telescopic switch forward signal                   | Input            | Telescopic switch          | Operate (forward) | 0  |
|                              |        |  |                  |                            | Other than above  | 5  |
| 8<br>(G)                     | Ground | UART communication (TX/RX)                         | Output           | Ignition switch ON         |                   |  |



# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description   |                  | Condition                  |                    | Voltage (V)<br>(Approx.)  |
|------------------------------|--------|---|------------------|----------------------------|--------------------|---|
| +                            | -      | Signal name   | Input/<br>Output |                            |                    |   |
| 10<br>(P)                    | Ground | Door mirror motor (passenger side) up output signal   | Output           | Door mirror RH             | Operate (up)       | Battery voltage   |
|                              |        |   |                  |                            | Other than above   | 0   |
| 11<br>(R)                    | Ground | Door mirror motor (passenger side) left output signal | Output           | Door mirror RH             | Operate (left)     | Battery voltage   |
|                              |        |   |                  |                            | Other than above   | 0   |
| 12<br>(G)                    | Ground | Door mirror motor (driver side) down output signal    | Output           | Door mirror (LH)           | Operate (down)     | Battery voltage   |
|                              |        |   |                  |                            | Other than above   | 0   |
|                              |        | Door mirror motor (driver side) right output signal   |                  |                            | Operate (right)    | Battery voltage   |
|                              |        |   |                  |                            | Other than above   | 0   |
| 13<br>(Y)                    | Ground | Tilt switch down signal                               | Input            | Tilt switch                | Operate (down)     | 0   |
|                              |        |   |                  |                            | Other than above   | 5   |
| 14<br>(P)                    | Ground | Changeover switch LH signal                           | Input            | Changeover switch position | LH                 | 0   |
|                              |        |   |                  |                            | Neutral or RH      | 5   |
| 15<br>(R)                    | Ground | Mirror switch down signal                             | Input            | Mirror switch              | Operate (down)     | 0   |
|                              |        |   |                  |                            | Other than above   | 5   |
| 16<br>(W)                    | Ground | Mirror switch right signal                            | Input            | Mirror switch              | Operate (right)    | 0   |
|                              |        |   |                  |                            | Other than above   | 5   |
| 17<br>(G)                    | Ground | Door mirror sensor (passenger side) left/right signal | Input            | Door mirror RH position    |                    | Change between 3.4 (close to left edge) 0.6 (close to right edge) |
| 18<br>(BG)                   | Ground | Door mirror sensor (driver side) left/right signal    | Input            | Door mirror LH position    |                    | Change between 0.6 (close to left edge) 3.4 (close to right edge) |
| 19<br>(L)                    | Ground | Telescopic switch backward signal                     | Input            | Telescopic switch          | Operate (backward) | 0   |
|                              |        |   |                  |                            | Other than above   | 5   |
| 20<br>(Y)                    | Ground | Ground  | —                | —                          |                    | 0   |
| 21<br>(BG)                   | Ground | Door mirror motor sensor power supply                 | Input            | —                          |                    | 5   |

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ADP

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

## < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description  |                  | Condition           | Voltage (V)<br>(Approx.) |                 |
|------------------------------|--------|--|------------------|---------------------|--------------------------|-----------------|
| +                            | -      | Signal name  | Input/<br>Output |                     |                          |                 |
| 22<br>(G)                    | Ground | Door mirror motor (passenger side) down output signal  | Output           | Door mirror (RH)    | Operate (down)           | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
|                              |        | Door mirror motor (passenger side) right output signal |                  |                     | Operate (right)          | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 23<br>(W)                    | Ground | Door mirror motor (driver side) up output signal       | Output           | Door mirror (LH)    | Operate (up)             | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 24<br>(BG)                   | Ground | Door mirror motor (driver side) left output signal     | Output           | Door mirror (LH)    | Operate (left)           | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 25<br>(L)                    | Ground | Power source   | Input            | —                   | Battery voltage          |                 |
| 26<br>(V)                    | Ground | Telescopic motor backward output signal                | Output           | Steering telescopic | Operate (backward)       | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 27<br>(LG)                   | Ground | Tilt and telescopic motor power source                 |                  | —                   | Battery voltage          |                 |
| 28<br>(SB)                   | Ground | Tilt motor down output signal                          | Output           | Steering tilt       | Operate (down)           | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 29<br>(BR)                   | Ground | Tilt motor up output signal                            | Output           | Steering tilt       | Operate (up)             | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
|                              |        | Telescopic motor forward output signal                 |                  | Steering telescopic | Operate (forward)        | Battery voltage |
|                              |        |  |                  |                     | Other than above         | 0               |
| 30<br>(B)                    | Ground | Ground   | —                | —                   | 0                        |                 |

# BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

## BCM (BODY CONTROL MODULE)

### List of ECU Reference

INFOID:000000009133873

| ECU | Reference   |
|-----|---|
| BCM | <a href="#">BCS-29. "Reference Value"</a>               |
|     | <a href="#">BCS-49. "Fail Safe"</a>                     |
|     | <a href="#">BCS-49. "DTC Inspection Priority Chart"</a> |
|     | <a href="#">BCS-51. "DTC Index"</a>                     |

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ADP

# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

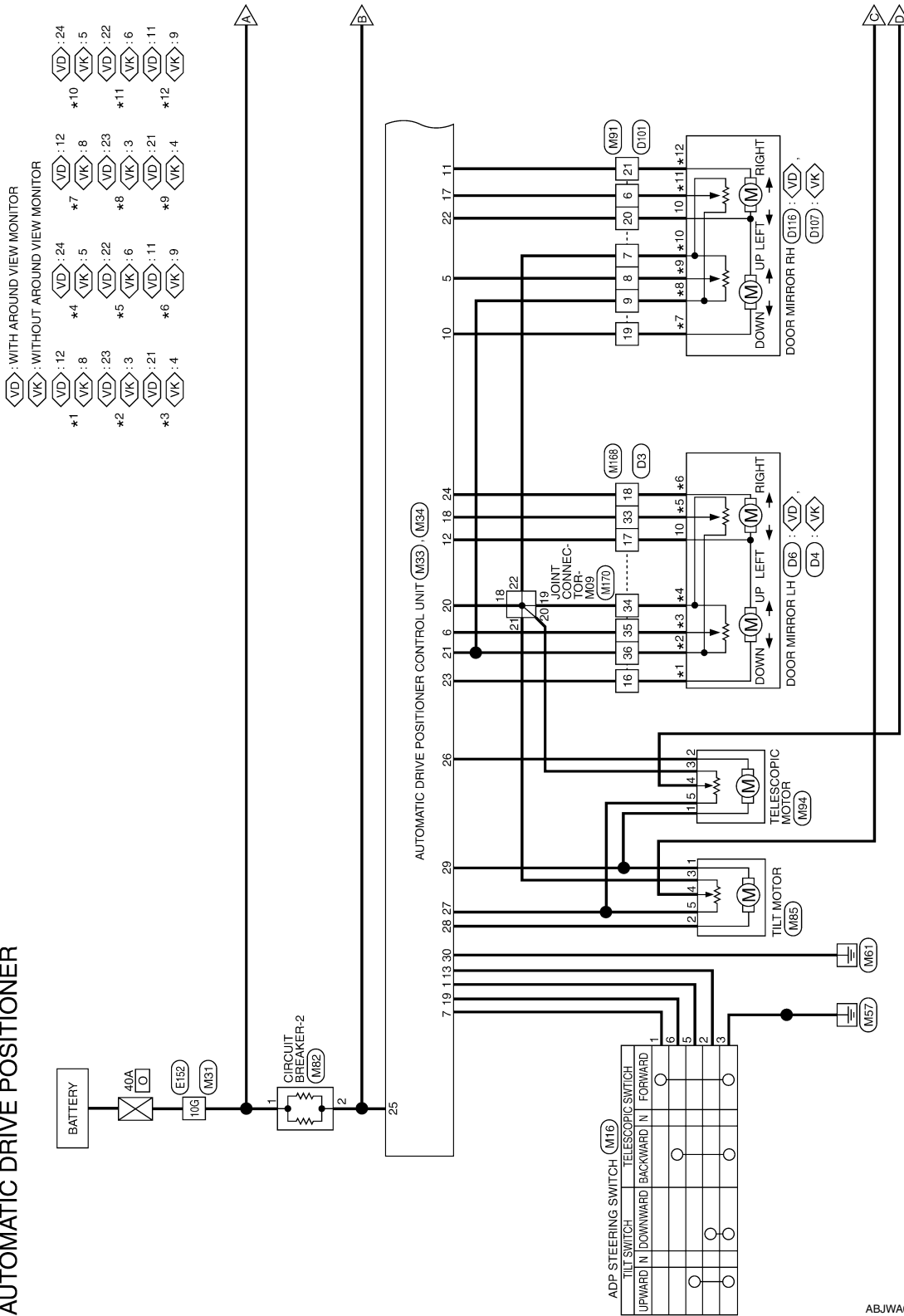
## WIRING DIAGRAM

### AUTOMATIC DRIVE POSITIONER SYSTEM

#### Wiring Diagram

INFOID:000000009133874

#### AUTOMATIC DRIVE POSITIONER

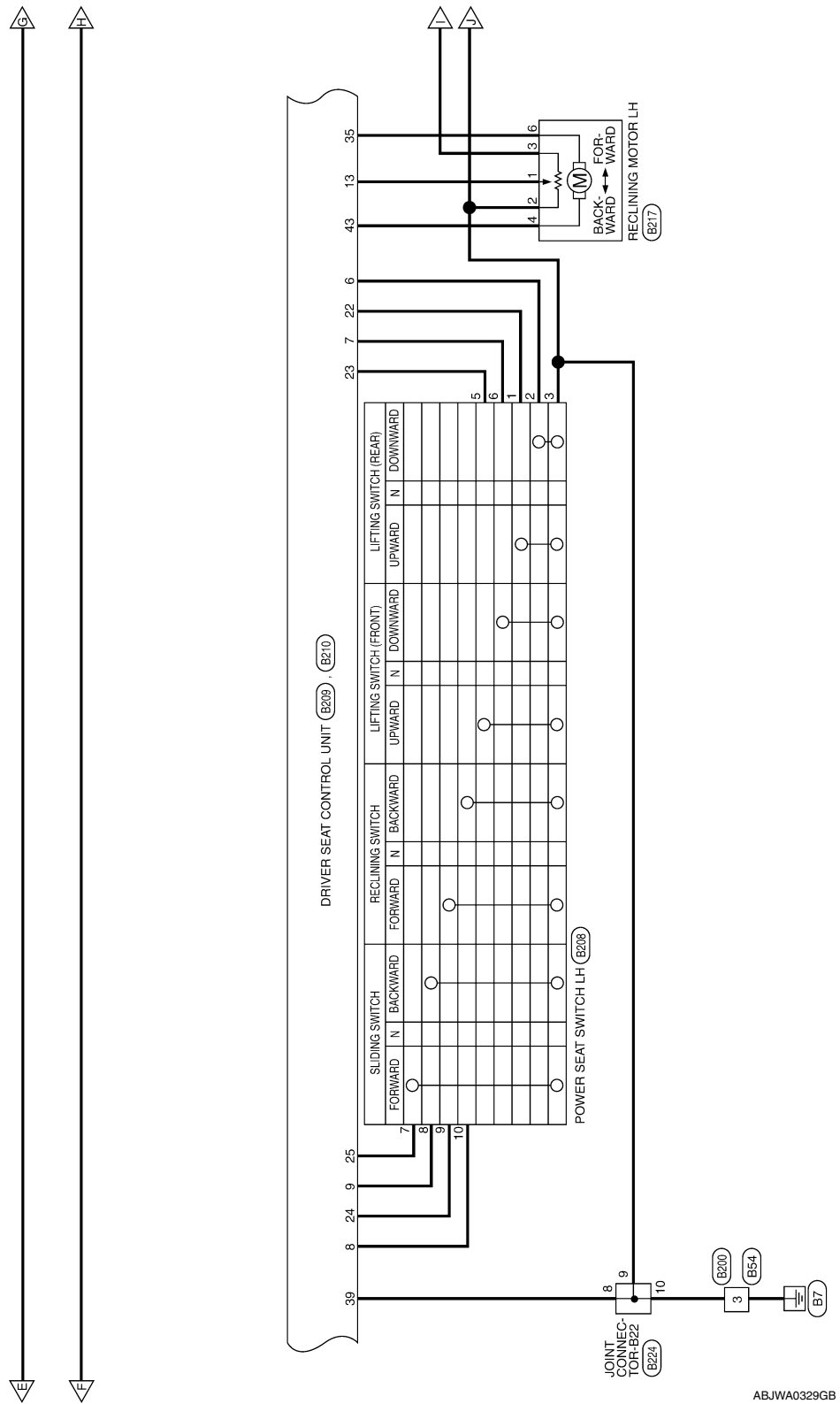


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# AUTOMATIC DRIVE POSITIONER SYSTEM

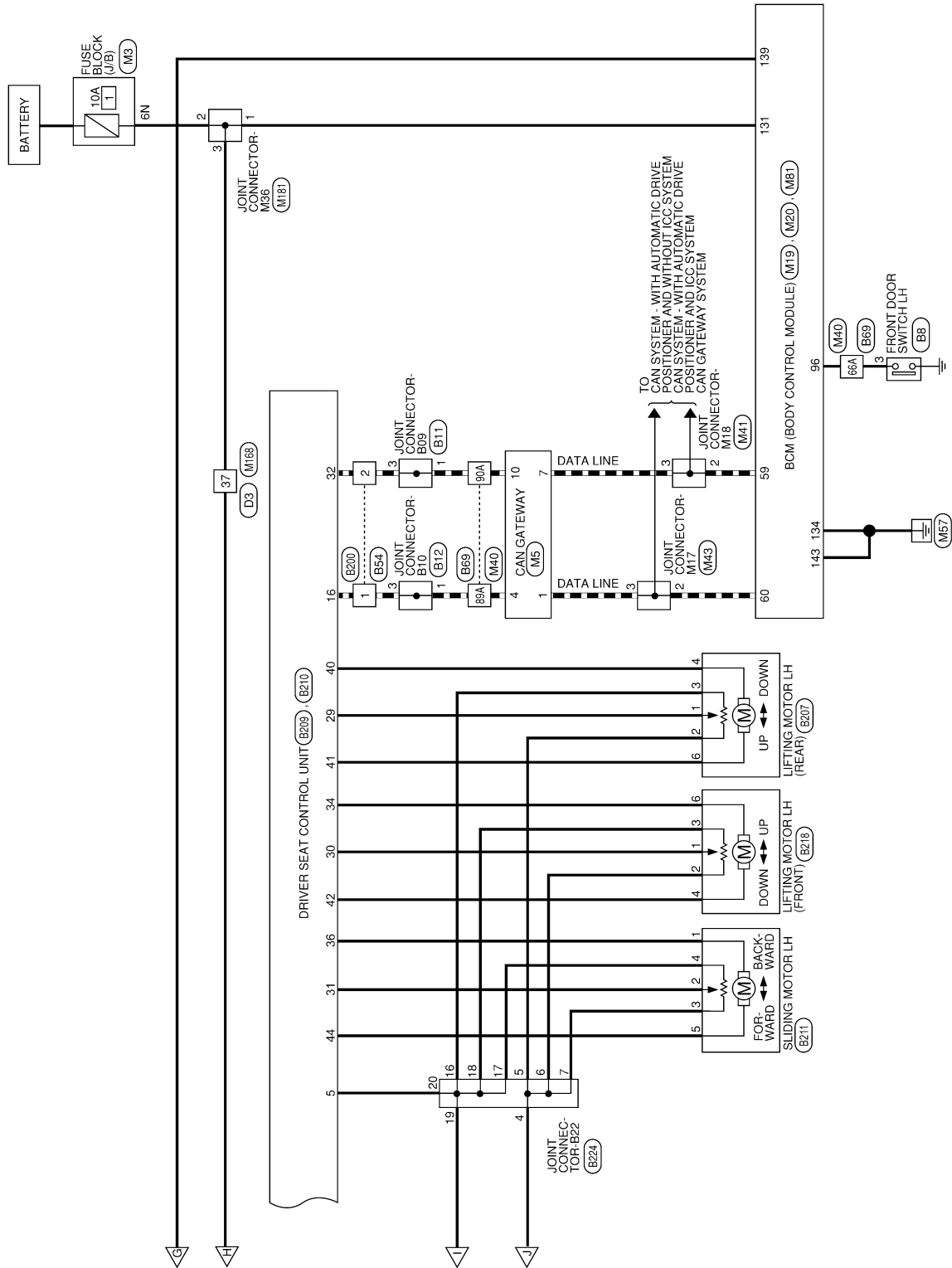
< WIRING DIAGRAM >



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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



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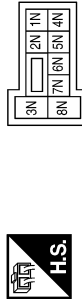
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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

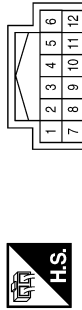
## AUTOMATIC DRIVE POSITIONER CONNECTORS

|                 |                  |
|-----------------|------------------|
| Connector No.   | M3               |
| Connector Name  | FUSE BLOCK (J/B) |
| Connector Color | WHITE            |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6N           | W             | -           |

|                 |             |
|-----------------|-------------|
| Connector No.   | M5          |
| Connector Name  | CAN GATEWAY |
| Connector Color | WHITE       |



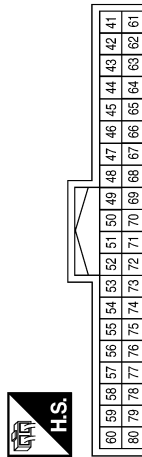
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | L             | CAN-H       |
| 4            | L             | CAN-H       |
| 7            | P             | CAN-L       |
| 10           | P             | CAN-L       |

|                 |                     |
|-----------------|---------------------|
| Connector No.   | M16                 |
| Connector Name  | ADP STEERING SWITCH |
| Connector Color | GRAY                |



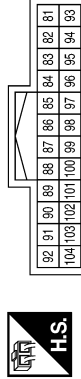
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | BR            | -           |
| 2            | Y             | -           |
| 3            | B             | -           |
| 4            | -             | -           |
| 5            | LG            | -           |
| 6            | L             | -           |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | M19                       |
| Connector Name  | BCM (BODY CONTROL MODULE) |
| Connector Color | BLACK                     |



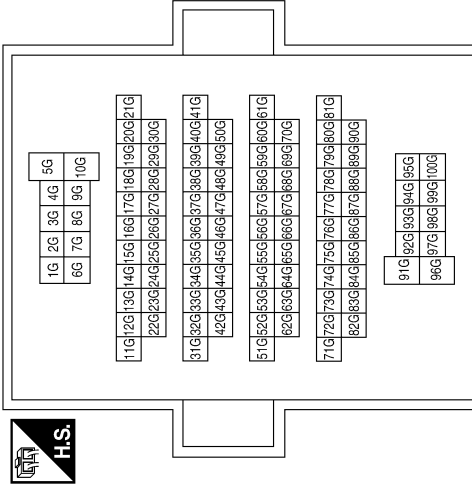
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 59           | P             | CAN-L       |
| 60           | L             | CAN-H       |

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|-----------------|---------------------------|
| Connector No.   | M20                       |
| Connector Name  | BCM (BODY CONTROL MODULE) |
| Connector Color | GRAY                      |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 96           | BG            | DR DOOR SW  |

|                 |              |
|-----------------|--------------|
| Connector No.   | M31          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 10G          | W             | -           |

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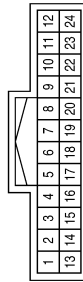
# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

| Terminal No. | Color of Wire | Signal Name                           |
|--------------|---------------|---------------------------------------|
| 16           | W             | MIRROR SW (RIGHTWARD)                 |
| 17           | G             | MIRROR SENSOR (RH HORIZONTAL)         |
| 18           | BG            | MIRROR SENSOR (LH HORIZONTAL)         |
| 19           | L             | TELESCOPIC SW (BACKWARD)              |
| 20           | Y             | GND (SENSOR GND)                      |
| 21           | BG            | POWER SUPPLY (SENSOR FOR 5V)          |
| 22           | G             | MIRROR MOTOR [RH COMMON (DOWN&RIGHT)] |
| 23           | W             | MIRROR MOTOR [LH VERTICAL (UP)]       |
| 24           | BG            | MIRROR MOTOR [LH HORIZONTAL (LEFT)]   |

| Terminal No. | Color of Wire | Signal Name                           |
|--------------|---------------|---------------------------------------|
| 6            | R             | MIRROR SENSOR (LH VERTICAL)           |
| 7            | BR            | TELESCOPIC SW (FRONTWARD)             |
| 8            | G             | UART (TX/RX)                          |
| 9            | -             | -                                     |
| 10           | P             | MIRROR MOTOR [RH VERTICAL (UP)]       |
| 11           | R             | MIRROR MOTOR [RH HORIZONTAL (LEFT)]   |
| 12           | G             | MIRROR MOTOR [LH COMMON (DOWN&RIGHT)] |
| 13           | Y             | TILT SW (DOWNWARD)                    |
| 14           | P             | MIRROR SELECT SW (LH)                 |
| 15           | R             | MIRROR SW (DOWNWARD)                  |

|                 |   |
|-----------------|---|
| Connector No.   | M33                                     |
| Connector Name  | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Color | WHITE                                   |



| Terminal No. | Color of Wire | Signal Name                 |
|--------------|---------------|-----------------------------|
| 1            | LG            | TILT SW (UPWARD)            |
| 2            | V             | MIRROR SELECTOR SW (RH)     |
| 3            | G             | MIRROR SW (UPWARD)          |
| 4            | P             | MIRROR SW (LEFTWARD)        |
| 5            | W             | MIRROR SENSOR (RH VERTICAL) |

| Terminal No. | Color of Wire | Signal Name                        |
|--------------|---------------|------------------------------------|
| 26           | V             | TELESCOPIC MOTOR (BACKWARD)        |
| 27           | LG            | POWER SUPPLY (SENSOR FOR 16V)      |
| 28           | SB            | TILT MOTOR (DOWNWARD)              |
| 29           | BR            | STRG MOTOR COMMON (UPWARD/FORWARD) |
| 30           | B             | GND (POWER)                        |

|                 |   |
|-----------------|---|
| Connector No.   | M34                                     |
| Connector Name  | AUTOMATIC DRIVE POSITIONER CONTROL UNIT |
| Connector Color | WHITE                                   |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 25           | L             | BAT (PTC)   |

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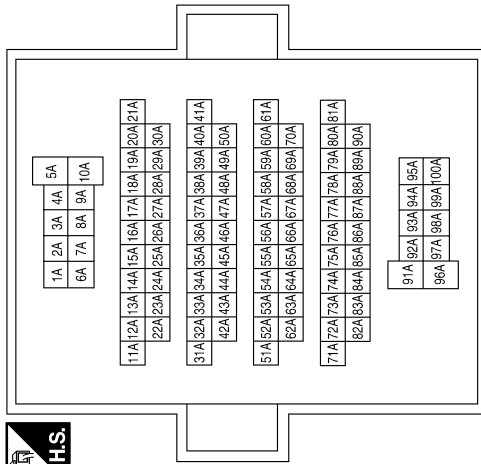
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ADP

# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

|                 |              |
|-----------------|--------------|
| Connector No.   | M40          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | GRAY         |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 37A          | LG            | -           |
| 38A          | V             | -           |
| 39A          | SB            | -           |
| 40A          | BR            | -           |
| 41A          | Y             | -           |
| 59A          | SB            | -           |
| 60A          | L             | -           |
| 61A          | G             | -           |
| 66A          | BG            | -           |
| 89A          | L             | -           |
| 90A          | P             | -           |
| 98A          | L             | -           |

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|-----------------|---------------------|
| Connector No.   | M41                 |
| Connector Name  | JOINT CONNECTOR-M18 |
| Connector Color | WHITE               |



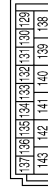
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | P             | -           |
| 3            | P             | -           |

|                 |                     |
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| Connector No.   | M43                 |
| Connector Name  | JOINT CONNECTOR-M17 |
| Connector Color | WHITE               |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | L             | -           |
| 3            | L             | -           |

|                 |                           |
|-----------------|---------------------------|
| Connector No.   | M81                       |
| Connector Name  | BCM (BODY CONTROL MODULE) |
| Connector Color | WHITE                     |



| Terminal No. | Color of Wire | Signal Name   |
|--------------|---------------|---------------|
| 131          | W             | BAT BCM FUSE  |
| 134          | B             | GND 2         |
| 139          | W             | BAT POWER F/L |
| 143          | B             | GND 1         |

|                 |                   |
|-----------------|-------------------|
| Connector No.   | M82               |
| Connector Name  | CIRCUIT BREAKER-2 |
| Connector Color | WHITE             |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | W             | -           |
| 2            | L             | -           |

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# AUTOMATIC DRIVE POSITIONER SYSTEM

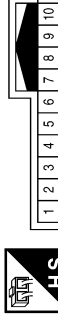
< WIRING DIAGRAM >

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| Connector No.   | M94              |
| Connector Name  | TELESCOPIC MOTOR |
| Connector Color | BROWN            |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | BR            | -           |
| 2            | V             | -           |
| 3            | Y             | -           |
| 4            | SB            | -           |
| 5            | LG            | -           |
| 6            | -             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | M91          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6            | G             | -           |
| 7            | Y             | -           |
| 8            | W             | -           |
| 9            | BG            | -           |
| 19           | P             | -           |
| 20           | G             | -           |
| 21           | R             | -           |

|                 |            |
|-----------------|------------|
| Connector No.   | M85        |
| Connector Name  | TILT MOTOR |
| Connector Color | WHITE      |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | BR            | -           |
| 2            | SB            | -           |
| 3            | Y             | -           |
| 4            | L             | -           |
| 5            | LG            | -           |
| 6            | -             | -           |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | P             | -           |
| 9            | W             | -           |
| 16           | W             | -           |
| 17           | G             | -           |
| 18           | BG            | -           |
| 33           | BG            | -           |
| 34           | Y             | -           |
| 35           | R             | -           |
| 36           | BG            | -           |
| 37           | W             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | M168         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | P             | -           |
| 5            | V             | -           |
| 6            | R             | -           |
| 7            | G             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | M167         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



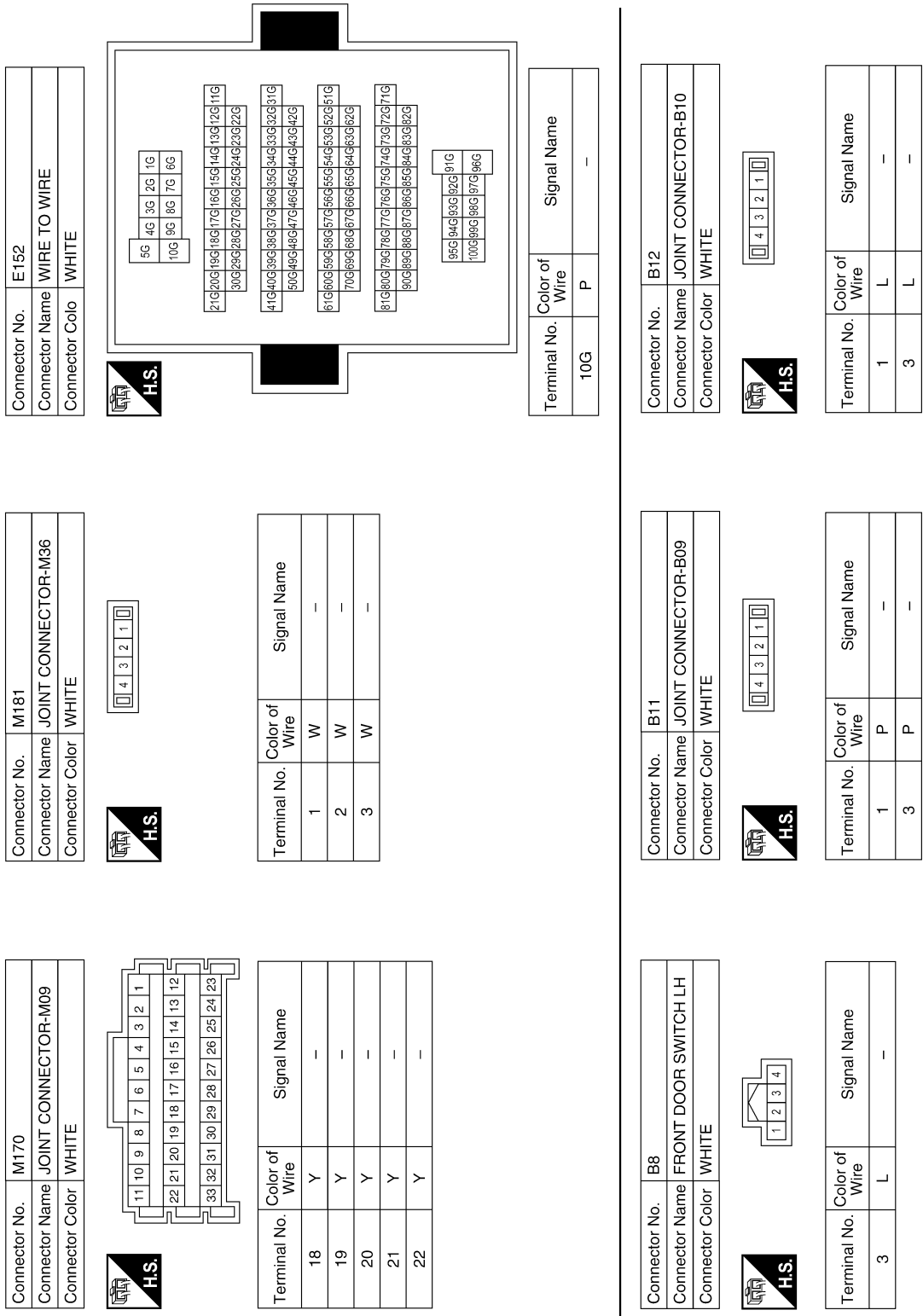
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | B             | -           |
| 4            | V             | -           |
| 5            | SB            | -           |
| 6            | BR            | -           |
| 7            | Y             | -           |
| 13           | LG            | -           |

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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



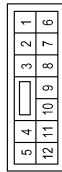
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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

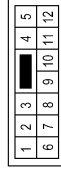
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 5            | L             | -           |
| 6            | Y             | -           |
| 7            | SB            | -           |
| 8            | LG            | -           |
| 9            | V             | -           |
| 10           | BR            | -           |
| 11           | Y             | -           |
| 12           | L             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | B54          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | BROWN        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | L             | -           |
| 2            | P             | -           |
| 3            | GR            | -           |
| 4            | BR            | -           |

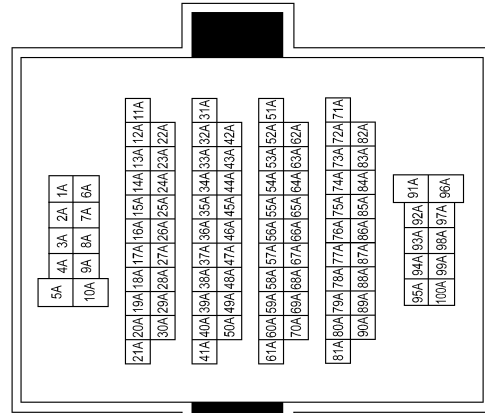
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| Connector No.   | B200         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | BROWN        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | P             | -           |
| 2            | W             | -           |
| 3            | B             | -           |
| 4            | W             | -           |
| 5            | BG            | -           |
| 6            | SB            | -           |
| 7            | L             | -           |
| 8            | GR            | -           |
| 9            | V             | -           |
| 10           | G             | -           |
| 11           | Y             | -           |
| 12           | R             | -           |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 37A          | LG            | -           |
| 38A          | V             | -           |
| 39A          | SB            | -           |
| 40A          | BR            | -           |
| 41A          | Y             | -           |
| 59A          | BR            | -           |
| 60A          | L             | -           |
| 61A          | Y             | -           |
| 66A          | L             | -           |
| 89A          | L             | -           |
| 90A          | P             | -           |
| 98A          | L             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | B69          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | GRAY         |



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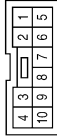
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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6            | Y             | -           |
| 7            | L             | -           |
| 8            | SB            | -           |
| 9            | P             | -           |
| 10           | BG            | -           |

|                 |                      |
|-----------------|----------------------|
| Connector No.   | B208                 |
| Connector Name  | POWER SEAT SWITCH LH |
| Connector Color | WHITE                |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | V             | -           |
| 2            | R             | -           |
| 3            | B             | -           |
| 4            | -             | -           |
| 5            | G             | -           |

|                 |                         |
|-----------------|-------------------------|
| Connector No.   | B207                    |
| Connector Name  | LIFTING MOTOR LH (REAR) |
| Connector Color | WHITE                   |

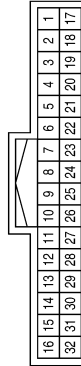


| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | R             | -           |
| 2            | B             | -           |
| 3            | W             | -           |
| 4            | L             | -           |
| 5            | -             | -           |
| 6            | Y             | -           |

| Terminal No. | Color of Wire | Signal Name              |
|--------------|---------------|--------------------------|
| 21           | L             | SET SW                   |
| 22           | V             | REAR LIFTER SW (UPWARD)  |
| 23           | G             | FRONT LIFTER SW (UPWARD) |
| 24           | P             | RECLINER SW (FORWARD)    |
| 25           | L             | SLIDE SW (FORWARD)       |
| 26           | Y             | IND 1                    |
| 27           | V             | ADDRESS 1                |
| 28           | BG            | PULSE (TILT)             |
| 29           | R             | PULSE (REAR LIFTER)      |
| 30           | Y             | PULSE (FRONT LIFTER)     |
| 31           | L             | PULSE (SLIDE)            |
| 32           | W             | CAN-L                    |

| Terminal No. | Color of Wire | Signal Name         |
|--------------|---------------|---------------------|
| 9            | SB            | SLIDE SW (BACKWARD) |
| 10           | G             | IND 2               |
| 11           | GR            | ADDRESS 2           |
| 12           | W             | PULSE (TELESCOPIC)  |
| 13           | G             | PULSE (RECLINER)    |
| 14           | -             | -                   |
| 15           | SB            | UART (TX/RX)        |
| 16           | P             | CAN-H               |
| 17           | -             | -                   |
| 18           | -             | -                   |
| 19           | -             | -                   |
| 20           | -             | -                   |

|                 |                          |
|-----------------|--------------------------|
| Connector No.   | B209                     |
| Connector Name  | DRIVER SEAT CONTROL UNIT |
| Connector Color | WHITE                    |



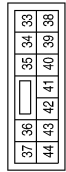
| Terminal No. | Color of Wire | Signal Name                |
|--------------|---------------|----------------------------|
| 1            | -             | -                          |
| 2            | -             | -                          |
| 3            | -             | -                          |
| 4            | -             | -                          |
| 5            | W             | POWER SUPPLY (ENCODER)     |
| 6            | R             | REAR LIFTER SW (DOWNWARD)  |
| 7            | Y             | FRONT LIFTER SW (DOWNWARD) |
| 8            | BG            | RECLINER SW (BACKWARD)     |

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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

|                 |                          |
|-----------------|--------------------------|
| Connector No.   | B210                     |
| Connector Name  | DRIVER SEAT CONTROL UNIT |
| Connector Color | WHITE                    |



| Terminal No. | Color of Wire | Signal Name                   |
|--------------|---------------|-------------------------------|
| 33           | -             | -                             |
| 34           | SB            | FRONT LIFTER MOTOR (DOWNWARD) |
| 35           | V             | RECLINER MOTOR (FORWARD)      |
| 36           | W             | SLIDE MOTOR (BACKWARD)        |

| Terminal No. | Color of Wire | Signal Name                  |
|--------------|---------------|------------------------------|
| 37           | R             | BAT (PTC)                    |
| 38           | -             | -                            |
| 39           | B             | GND                          |
| 40           | L             | REAR LIFTER MOTOR (DOWNWARD) |
| 41           | Y             | REAR LIFTER MOTOR (UPWARD)   |
| 42           | GR            | FRONT LIFTER MOTOR (UPWARD)  |
| 43           | BR            | RECLINER MOTOR (BACKWARD)    |
| 44           | G             | SLIDE MOTOR (FORWARD)        |

|                 |                    |
|-----------------|--------------------|
| Connector No.   | B217               |
| Connector Name  | RECLINING MOTOR LH |
| Connector Color | WHITE              |



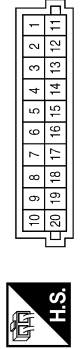
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | G             | -           |
| 2            | B             | -           |
| 3            | W             | -           |
| 4            | BR            | -           |
| 5            | -             | -           |
| 6            | V             | -           |

|                 |                  |
|-----------------|------------------|
| Connector No.   | B211             |
| Connector Name  | SLIDING MOTOR LH |
| Connector Color | GRAY             |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | W             | -           |
| 2            | L             | -           |
| 3            | B             | -           |
| 4            | W             | -           |
| 5            | G             | -           |

|                 |                     |
|-----------------|---------------------|
| Connector No.   | B224                |
| Connector Name  | JOINT CONNECTOR-B22 |
| Connector Color | PINK                |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | B             | -           |
| 5            | B             | -           |
| 6            | B             | -           |
| 7            | B             | -           |
| 8            | B             | -           |
| 9            | B             | -           |
| 10           | B             | -           |
| 14           | R             | -           |
| 15           | R             | -           |
| 16           | W             | -           |
| 17           | W             | -           |
| 18           | W             | -           |
| 19           | W             | -           |
| 20           | W             | -           |



|                 |                          |
|-----------------|--------------------------|
| Connector No.   | B218                     |
| Connector Name  | LIFTING MOTOR LH (FRONT) |
| Connector Color | WHITE                    |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | Y             | -           |
| 2            | B             | -           |
| 3            | W             | -           |
| 4            | GR            | -           |
| 5            | -             | -           |
| 6            | SB            | -           |

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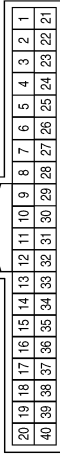
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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

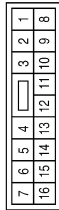
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 8            | V             | -           |
| 9            | Y             | -           |
| 16           | LG            | -           |
| 17           | BG            | -           |
| 18           | L             | -           |
| 33           | V             | -           |
| 34           | Y             | -           |
| 35           | BG            | -           |
| 36           | SB            | -           |
| 37           | V             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D3           |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 4            | SB            | -           |
| 5            | LG            | -           |
| 6            | L             | -           |
| 7            | BR            | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D2           |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 1            | B             | -           |
| 4            | BR            | -           |
| 5            | SB            | -           |
| 6            | LG            | -           |
| 7            | Y             | -           |
| 13           | L             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D17          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



|                 |   |
|-----------------|---|
| Connector No.   | D6  |
| Connector Name  | DOOR MIRROR LH (WITH AROUND VIEW MONITOR) |
| Connector Color | WHITE                                     |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 10           | BG            | -           |
| 11           | L             | -           |
| 12           | LG            | -           |
| 21           | BG            | -           |
| 22           | V             | -           |
| 23           | SB            | -           |
| 24           | Y             | -           |

|                 |  |
|-----------------|--|
| Connector No.   | D4   |
| Connector Name  | DOOR MIRROR LH (WITHOUT AROUND VIEW MONITOR) |
| Connector Color | WHITE  |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 3            | SB            | -           |
| 4            | BG            | -           |
| 5            | Y             | -           |
| 6            | V             | -           |
| 8            | LG            | -           |
| 9            | L             | -           |
| 10           | BG            | -           |


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# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >


|                 |              |
|-----------------|--------------|
| Connector No.   | D53          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



|   |   |   |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 |   |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6            | B             | -           |


|                 |              |
|-----------------|--------------|
| Connector No.   | D52          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



|    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 7            | SB            | -           |
| 8            | LG            | -           |
| 9            | L             | -           |
| 10           | W             | -           |
| 11           | V             | -           |
| 12           | Y             | -           |
| 16           | Y             | -           |
| 17           | LG            | -           |
| 18           | SB            | -           |
| 19           | BR            | -           |
| 20           | L             | -           |
| 21           | V             | -           |
| 24           | B             | -           |


|                 |              |
|-----------------|--------------|
| Connector No.   | D19          |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



|    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 7            | SB            | -           |
| 8            | LG            | -           |
| 9            | L             | -           |
| 10           | BR            | -           |
| 11           | V             | -           |
| 12           | Y             | -           |
| 16           | Y             | -           |
| 17           | LG            | -           |
| 18           | SB            | -           |
| 19           | BR            | -           |
| 20           | L             | -           |
| 21           | V             | -           |
| 24           | B             | -           |

|                 |   |
|-----------------|---|
| Connector No.   | D56   |
| Connector Name  | MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH |
| Connector Color | WHITE   |



|    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |
| 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 |    |    |    |    |    |

| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 7            | B             | GND         |

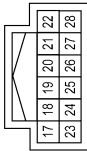
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# AUTOMATIC DRIVE POSITIONER SYSTEM

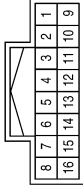
< WIRING DIAGRAM >

|                 |  |
|-----------------|--|
| Connector No.   | D57  |
| Connector Name  | MAIN POWER WINDOW AND DOOR LOCK/UNLOCK SWITCH (POWER MIRROR REMOTE CONTROL SWITCH) (WITH AUTOMATIC DRIVE POSITIONER) |
| Connector Color | WHITE  |



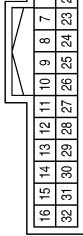
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 23           | SB            | -           |
| 24           | V             | -           |
| 25           | L             | -           |
| 26           | W             | -           |
| 27           | Y             | -           |
| 28           | LG            | -           |

|                 |                    |
|-----------------|--------------------|
| Connector No.   | D60                |
| Connector Name  | SEAT MEMORY SWITCH |
| Connector Color | WHITE              |



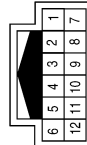
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 2            | SB            | -           |
| 9            | B             | -           |
| 10           | BR            | -           |
| 13           | LG            | -           |
| 14           | Y             | -           |
| 15           | V             | -           |
| 16           | L             | -           |

|                 |              |
|-----------------|--------------|
| Connector No.   | D101         |
| Connector Name  | WIRE TO WIRE |
| Connector Color | WHITE        |



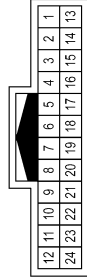
| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 6            | Y             | -           |
| 7            | L             | -           |
| 8            | BR            | -           |
| 9            | V             | -           |
| 19           | BR            | -           |
| 20           | SB            | -           |
| 21           | G             | -           |

|                 |  |
|-----------------|--|
| Connector No.   | D107   |
| Connector Name  | DOOR MIRROR RH (WITHOUT AROUND VIEW MONITOR) |
| Connector Color | WHITE  |



| Terminal No. | Color of Wire | Signal Name                        |
|--------------|---------------|------------------------------------|
| 3            | V             | -                                  |
| 4            | BR            | -                                  |
| 5            | L             | -                                  |
| 6            | Y             | -                                  |
| 8            | BR            | -                                  |
| 9            | G             | -(WITH AUTOMATIC DRIVE POSITIONER) |
| 10           | SB            | -                                  |

|                 |   |
|-----------------|---|
| Connector No.   | D116                                      |
| Connector Name  | DOOR MIRROR RH (WITH AROUND VIEW MONITOR) |
| Connector Color | WHITE                                     |



| Terminal No. | Color of Wire | Signal Name |
|--------------|---------------|-------------|
| 10           | SB            | -           |
| 11           | G             | -           |
| 12           | BR            | -           |
| 21           | BR            | -           |
| 22           | Y             | -           |
| 23           | V             | -           |
| 24           | L             | -           |

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

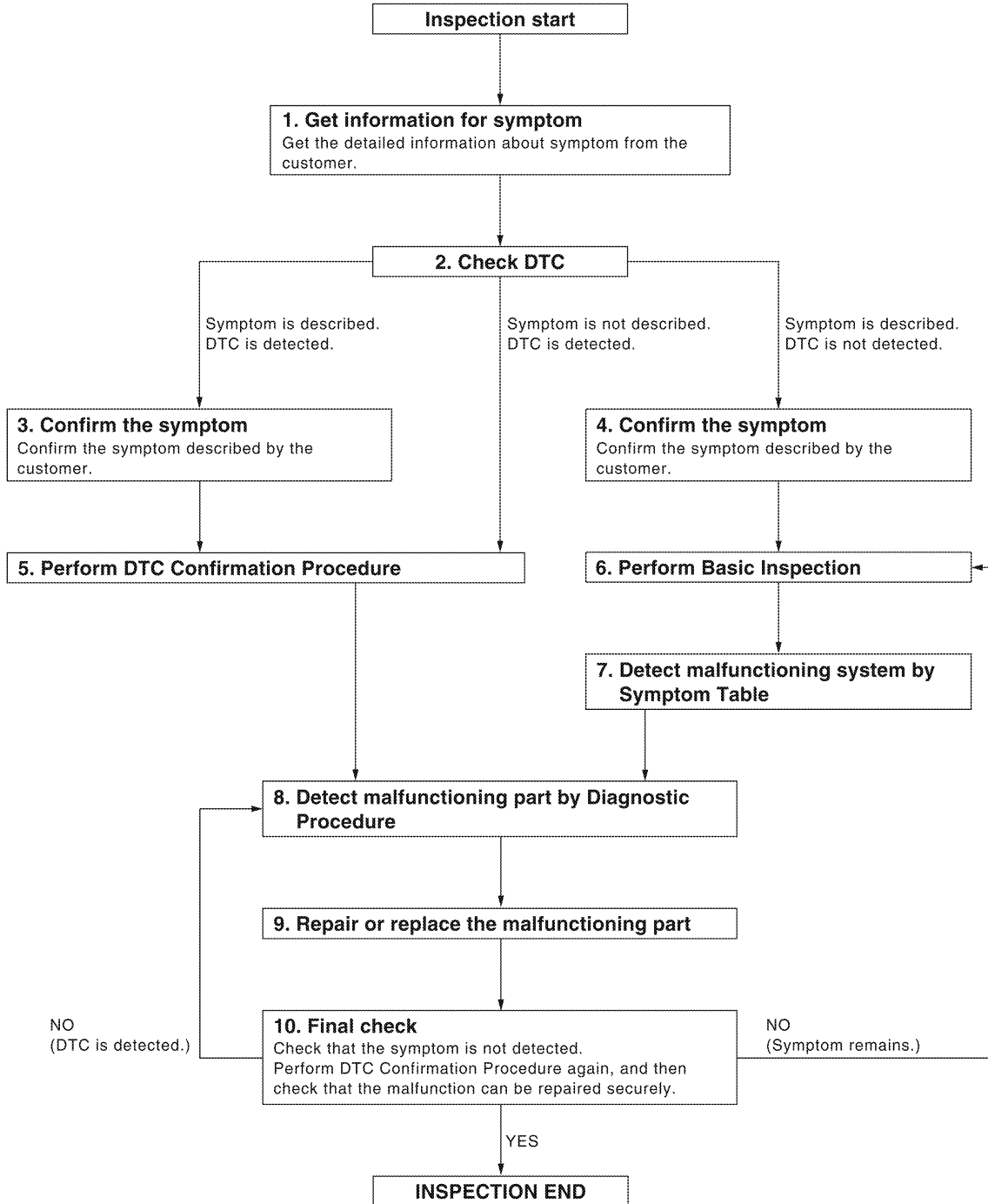
## BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000009133875

WORK FLOW



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DETAILED FLOW

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

---

## 1. GET INFORMATION FOR SYMPTOM

---

Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

## 2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

---

Check "Self Diagnostic Result" with CONSULT.

Refer to [ADP-31. "DTC Index"](#).

Is any symptom described and any DTC is displayed?

Symptom is described, DTC is displayed.>>GO TO 3.

Symptom is not described, DTC is displayed.>>GO TO 7.

Symptom is described, DTC is not displayed.>>GO TO 4.

## 3. CONFIRM THE SYMPTOM

---

Try to confirm the symptom described by the customer.

>> GO TO 7.

## 4. CONFIRM THE SYMPTOM

---

Try to confirm the symptom described by the customer.

>> GO TO 5.

## 5. CHECK NORMAL OPERATING CONDITION

---

Check normal operating condition. Refer to [ADP-141. "Description"](#).

Is the incident normal operation?

YES >> Inspection End.

NO >> GO TO 6.

## 6. PERFORM BASIC INSPECTION

---

Isolate the malfunctioning point with a basic inspection.

>> GO TO 8.

## 7. PERFORM DTC CONFIRMATION PROCEDURE

---

Perform the confirmation procedure for the detected DTC.

Is the DTC displayed?

YES >> GO TO 9.

NO >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).

## 8. PERFORM COMPONENT FUNCTION CHECK

---

Perform the component function check for the isolated malfunctioning point.

>> GO TO 9.

## 9. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE

---

Isolate the malfunctioning point by performing the diagnosis procedure relevant to the symptom during the component diagnosis.

>> GO TO 10.

## 10. REPAIR OR REPLACE

---

Repair or replace the malfunctioning part.

# DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

---

>> GO TO 11.

## 11. FINAL CHECK

Perform the DTC confirmation procedure (if DTC is detected) or component function check (if no DTC is detected) again, and then check that the malfunction can be repaired securely.

Are all malfunctions corrected?

YES >> Inspection End.

Symptom is detected.>> GO TO 4.

DTC is detected.>> GO TO 7.

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# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

## INSPECTION AND ADJUSTMENT

### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

INFOID:000000009133876

Each function is reset to the following condition when the battery terminal is disconnected.

| Function                        | Condition | Procedure                      |
|---------------------------------|-----------|--------------------------------|
| Memory (Seat, steering, mirror) | Erased    | Perform storing                |
| Entry/exit assist               | ON        | Perform initialization         |
|                                 |           | Set slide amount* <sup>1</sup> |
| Intelligent Key interlock       | Erased    | Perform initialization         |
|                                 |           | Perform storing                |

\*1: Default value is 40 mm.

#### NOTE:

Notice that disconnecting the battery when detected DTC are present will erase the DTC memory.

#### ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Work Procedure

INFOID:000000009133877

### 1.SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-55. "SYSTEM INITIALIZATION : Work Procedure"](#).

>> GO TO 2.

### 2.MEMORY STORAGE

Perform memory storage. Refer to [ADP-56. "MEMORY STORING : Work Procedure"](#).

>> GO TO 3.

### 3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to [ADP-57. "INTELLIGENT KEY INTERLOCK STORING : Work Procedure"](#).

>> GO TO 4.

### 4.SYSTEM SETTING

Perform system setting. Refer to [ADP-57. "SYSTEM SETTING : Work Procedure"](#).

>> Inspection End.

### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

#### ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000009133878

Each function is reset to the following condition when the driver seat control unit is replaced.

| Function                        | Condition | Procedure                      |
|---------------------------------|-----------|--------------------------------|
| Memory (Seat, steering, mirror) | Erased    | Perform storing                |
| Entry/exit assist               | ON        | Perform initialization         |
|                                 |           | Set slide amount* <sup>1</sup> |

# INSPECTION AND ADJUSTMENT

## < BASIC INSPECTION >

| Function                  | Condition | Procedure              |
|---------------------------|-----------|------------------------|
| Intelligent Key interlock | Erased    | Perform initialization |
|                           |           | Perform storing        |

\*1: Default value is 40 mm.

### NOTE:

Notice that disconnecting the battery when detected DTC are present will erase the DTC memory.

## ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure

INFOID:000000009133879

### 1. SYSTEM INITIALIZATION

Perform system initialization. Refer to [ADP-55, "SYSTEM INITIALIZATION : Work Procedure"](#).

>> GO TO 2.

### 2. MEMORY STORAGE

Perform memory storage. Refer to [ADP-56, "MEMORY STORING : Work Procedure"](#).

>> GO TO 3.

### 3. INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to [ADP-57, "INTELLIGENT KEY INTERLOCK STORING : Work Procedure"](#).

>> GO TO 4.

### 4. SYSTEM SETTING

Perform system setting. Refer to [ADP-57, "SYSTEM SETTING : Work Procedure"](#).

>> Inspection End.

## SYSTEM INITIALIZATION

### SYSTEM INITIALIZATION : Description

INFOID:000000009133880

Always perform the initialization when the battery terminal is disconnected or the driver seat control unit is replaced.

The entry/exit assist function will not operate normally if no initialization is performed.

### SYSTEM INITIALIZATION : Work Procedure

INFOID:000000009133881

#### INITIALIZATION PROCEDURE

##### 1. CHOOSE METHOD

There are two initialization methods.

Which method do you use?

With door switch>>GO TO 2.

With vehicle speed>>GO TO 4.

##### 2. STEP A-1

Turn ignition switch from ACC to OFF position.

>> GO TO 3.

##### 3. STEP A-2

Driver door switch is ON (open) → OFF (close) → ON (open).

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# INSPECTION AND ADJUSTMENT

## < BASIC INSPECTION >

---

>> Inspection End.

### 4. STEP B-1

---

Drive the vehicle at more than 25 km/h (16 MPH).

>> Inspection End.

## MEMORY STORING

### MEMORY STORING : Description

INFOID:000000009133882

Always perform the memory storage when the battery terminal is disconnected or the driver seat control unit is replaced. The memory function will not operate normally if no memory storage is performed.

### MEMORY STORING : Work Procedure

INFOID:000000009133883

#### Memory Storage Procedure

Two positions for the driver seat, steering column and outside mirror can be stored for memory operation by following procedure.

#### 1. STEP 1

---

Check the following conditions.

- Ignition switch: ON
- CVT shift selector: P (Park) position

>> GO TO 2.

#### 2. STEP 2

---

Adjust driver seat, steering column and outside mirror position manually.

>> GO TO 3.

#### 3. STEP 3

---

1. Push set switch.

**NOTE:**

- Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
- Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 seconds.

2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.

**NOTE:**

- To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
- To modify driver seat positions, memory indicator will be turned OFF for 0.5 seconds, then turned ON for 5 seconds.

**NOTE:**

If memory is stored in the same memory switch, the previous memory will be deleted.

>> GO TO 4.

#### 4. STEP 4

---

Confirm the operation of each part with memory operation.

>> Inspection End.

## INTELLIGENT KEY INTERLOCK STORING

### INTELLIGENT KEY INTERLOCK STORING : Description

INFOID:000000009133884

Always perform the Intelligent Key interlock function storage when the battery terminal is disconnected or the driver seat control unit is replaced. The Intelligent Key interlock function will not operate normally if no memory storage is performed.



# INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

## INTELLIGENT KEY INTERLOCK STORING : Work Procedure

INFOID:000000009133885

### Intelligent Key Interlock Storage Procedure

Performing the following operation associates the registered driving position with Intelligent Key. When driver door unlock operation is performed by Intelligent Key or driver door request switch, display of the registered driving position and turnout operation can be performed.

#### 1. STEP 1

Check the following conditions.

- Ignition switch: OFF
- Initialization: done
- Driving position: registered

>> GO TO 2.

#### 2. STEP 2

1. Push set switch.

**NOTE:**

Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.

2. Push the Intelligent Key unlock button within 5 seconds after pushing memory switch (while the memory indicator is turned ON).

**NOTE:**

From the time registration is performed, the applicable memory indicator blinks for 5 seconds.

>> GO TO 3.

#### 3. STEP 3

Confirm the operation of each part with memory operation and Intelligent Key interlock operation.

>> Inspection End.

## SYSTEM SETTING

ADP

### SYSTEM SETTING : Description

INFOID:000000009133886

The settings of the automatic driving positioner system can be changed, using CONSULT, the display unit in the center of the instrument panel and the set switch. Always check the settings before and after disconnecting the battery terminal or replacing driver seat control unit.

#### Setting Change

| Item   | Content  | x: Applicable |            |                 |
|--|--|---------------|------------|-----------------|
|  |  | CONSULT       | Set switch | Factory setting |
| Amount of seat sliding for entry/exit assist | The amount of seat sliding for entry/exit assist can be selected from 3 items.<br>[40 mm/80 mm/150 mm] | x             | —          | 40 mm           |
| Entry/exit assist (seat)                     | Entry/exit assist (seat) can be selected:<br>ON (operated) – OFF (not operated)                        | x             | x          | ON              |
| Entry/exit assist (steering column)          | Entry/exit assist (steering column) can be selected:<br>ON (operated) – OFF (not operated)             | x             |            | ON              |

### SYSTEM SETTING : Work Procedure

INFOID:000000009133887

#### 1. CHOOSE METHOD

There are three setting methods.

Which method do you choose?

With CONSULT>>GO TO 2.

# INSPECTION AND ADJUSTMENT

## < BASIC INSPECTION >

---

With set switch>>GO TO 4.

### 2. WITH CONSULT - STEP 1

---

Select "Work support".

>> GO TO 3.

### 3. WITH CONSULT - STEP 2

---

1. Select "EXIT SEAT SLIDE SETTING", or "EXIT TILT SETTING" then touch display to change between ON and OFF.
  - EXIT SEAT SLIDE SETTING: Entry/exit assist (seat)
  - EXIT TILT SETTING: Entry/exit assist (steering column)
2. Select "SEAT SLIDE VOLUME SET" and touch either of "40 mm", "80 mm", or "150 mm".
3. Then touch "OK".

>> Inspection End.

### 4. WITH SET SWITCH - STEP 1

---

Turn ignition switch OFF.

>> GO TO 5.

### 5. WITH SET SWITCH - STEP 2

---

Push set switch and hold for more than 10 seconds, then confirm blinking of the memory switch indicator.

- Entry/exit assist (seat/steering column) are ON: Memory switch indicator blink two times.
- Entry/exit assist (seat/steering column) are OFF: Memory switch indicator blink once.

>> Inspection End.

# U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## DTC/CIRCUIT DIAGNOSIS

### U1000 CAN COMM CIRCUIT

#### Description

INFOID:000000009133888

Refer to [LAN-43, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

#### DTC Logic

INFOID:000000009133889

#### DTC DETECTION LOGIC

| DTC   | Trouble diagnosis name | DTC detecting condition   | Possible cause  |
|-------|------------------------|---|---|
| U1000 | CAN COMM CIRCUIT       | <ul style="list-style-type: none"><li>• Driver seat control unit cannot communicate to other control units.</li><li>• Driver seat control unit cannot communicate for more than the specified time.</li></ul> | <ul style="list-style-type: none"><li>• Harness or connectors (CAN communication line is open or shorted)</li></ul> |

#### DTC CONFIRMATION PROCEDURE

##### 1. STEP 1

Turn ignition switch ON and wait at least 3 seconds.

>> GO TO 2.

##### 2. STEP 2

Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to [ADP-59, "Diagnosis Procedure"](#).

NO >> Inspection End.

#### Diagnosis Procedure

INFOID:000000009133890

Refer to [LAN-26, "Trouble Diagnosis Flow Chart"](#).

#### Special Repair Requirement

INFOID:000000009133891

Refer to Owner's Manual.

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# U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

## U1010 CONTROL UNIT (CAN)

### Description

INFOID:000000009133892

Refer to [LAN-43. "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

### DTC Logic

INFOID:000000009133893

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition  | Possible cause   |
|---------|------------------------|--|--|
| U1010   | CONTROL UNIT (CAN)     | When detecting error during the initial diagnosis of CAN controller of driver seat control unit. | <ul style="list-style-type: none"><li>• Driver seat control unit</li></ul> |

### Diagnosis Procedure

INFOID:000000009133894

#### 1. REPLACE DRIVER SEAT CONTROL UNIT

When DTC [U1010] is detected, replace driver seat control unit.

>> Replace driver seat control unit. Refer to [ADP-142. "Removal and Installation"](#).

# B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## B2112 SLIDING MOTOR

### Description

INFOID:000000009133895

- The seat sliding motor LH is installed to the seat frame.
- The seat sliding motor LH is installed with the driver seat control unit.
- Slides the seat frontward/rearward by changing the rotation direction of sliding motor LH.

### DTC Logic

INFOID:000000009133896

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition   | Possible cause  |
|---------|------------------------|---|---|
| B2112   | SEAT SLIDE             | The driver seat control unit detects the output of sliding motor LH output terminal for 0.1 second or more even if the sliding switch is not input. | <ul style="list-style-type: none"><li>• Driver seat control unit</li><li>• Front power seat LH (sliding motor) harness is shorted</li></ul> |

### DTC CONFIRMATION PROCEDURE

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

#### Is the DTC detected?

- YES >> Refer to [ADP-61, "Diagnosis Procedure"](#).  
NO >> Inspection End.

### Diagnosis Procedure

INFOID:000000009133897

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-65, "DTC Logic"](#).

#### Is the DTC displayed again?

- YES >> GO TO 2.  
NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

#### 2. CHECK SLIDING MOTOR LH CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect sliding motor LH and driver seat control unit connector.
3. Check voltage between sliding motor LH harness connector and ground.

| (+)              |           | (-)    | Voltage (V)<br>(Approx.) |
|------------------|-----------|--------|--------------------------|
| Sliding motor LH |           |        |                          |
| Connector        | Terminals |        |                          |
| B211             | 4         | Ground | 0                        |
|                  | 5         |        |                          |

#### Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Repair or replace harness or connector.

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## B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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

| (+)                      |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|-----------|--------|--------------------------|
| Driver seat control unit |           |        |                          |
| Connector                | Terminals |        |                          |
| B210                     | 36        | Ground | 0                        |
|                          | 44        |        |                          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

### 4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End

# B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## B2113 RECLINING MOTOR

### Description

INFOID:000000009133898

- The seat reclining motor LH is installed to the seatback assembly.
- The seat reclining motor LH is activated with the driver seat control unit.
- Tilts the seatback frontward/rearward by changing the rotation direction of reclining motor LH.

### DTC Logic

INFOID:000000009133899

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition   | Possible cause  |
|---------|------------------------|---|---|
| B2113   | SEAT RECLINING         | The driver seat control unit detects the output of reclining motor LH output terminal for 0.1 second or more even if the reclining switch is not input. | <ul style="list-style-type: none"><li>• Driver seat control unit</li><li>• Front power seat LH (reclining motor) harness is shorted</li></ul> |

### DTC CONFIRMATION PROCEDURE

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

Is the DTC detected?

- YES >> Refer to [ADP-63. "Diagnosis Procedure"](#).  
NO >> Inspection End.

### Diagnosis Procedure

INFOID:000000009133900

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-63. "DTC Logic"](#).

Is the DTC displayed again?

- YES >> GO TO 2.  
NO >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).

#### 2. CHECK RECLINING MOTOR LH CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect reclining motor LH and driver seat control unit connector.
3. Check voltage between reclining motor LH harness connector and ground.

| (+)                |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------|-----------|--------|--------------------------|
| Reclining motor LH |           |        |                          |
| Connector          | Terminals |        |                          |
| B217               | 4         | Ground | 0                        |
|                    | 6         |        |                          |

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> Repair or replace harness or connector.

#### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL

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## B2113 RECLINING MOTOR

### < DTC/CIRCUIT DIAGNOSIS >

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

| (+)                      |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|-----------|--------|--------------------------|
| Driver seat control unit |           |        |                          |
| Connector                | Terminals |        |                          |
| B210                     | 35        | Ground | 0                        |
|                          | 43        |        |                          |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

#### **4.**CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End.



# B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## B2116 TILT MOTOR

### Description

INFOID:000000009133901

- The tilt motor is installed to the steering column assembly.
- The tilt motor is activated with the automatic drive positioner control unit.
- The steering column is tilted up/down by changing the rotation direction tilt motor.

### DTC Logic

INFOID:000000009133902

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition   | Possible cause   |
|---------|------------------------|---|--|
| B2116   | STEERING TILT          | The automatic drive positioner control unit detects tilt motor operation for 0.1 second or more when tilt switch has not been turned on, and there is no output of automatic operation. | <ul style="list-style-type: none"> <li>• Automatic drive positioner control unit</li> <li>• Tilt motor harness is shorted</li> </ul> |

### DTC CONFIRMATION PROCEDURE

#### 1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

#### Is the DTC detected?

- YES >> Refer to [ADP-65, "Diagnosis Procedure"](#).
- NO >> Inspection End.

### Diagnosis Procedure

INFOID:000000009133903

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1.PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-65, "DTC Logic"](#).

#### Is the DTC displayed again?

- YES >> GO TO 2.
- NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

#### 2.CHECK TILT MOTOR CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and tilt motor connector.
3. Check voltage between tilt motor harness connector and ground.

| (+)        |           | (-)    | Voltage (V)<br>(Approx.) |
|------------|-----------|--------|--------------------------|
| Tilt motor |           |        |                          |
| Connector  | Terminals |        |                          |
| M85        | 1         | Ground | 0                        |
|            | 2         |        |                          |

#### Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Repair or replace harness or connector.

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

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## B2116 TILT MOTOR

### < DTC/CIRCUIT DIAGNOSIS >

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

| (+)                                     |           | (-)    | Voltage (V)<br>(Approx.) |
|---|-----------|--------|--------------------------|
| Automatic drive positioner control unit |           |        |                          |
| Connector                               | Terminals |        |                          |
| M34                                     | 28        | Ground | 0                        |
|   | 29        |        |                          |

#### Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#)
- NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

# B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

## B2128 UART COMMUNICATION LINE

### Description

INFOID:000000009133904

Driver seat control unit performs UART communication with the automatic drive positioner control unit using 1 communication line. Driver seat control unit receives the operation signals of ADP steering switch, door mirror remote control switch and the position signals of tilt sensor, telescopic sensor and door mirror sensors from the automatic drive positioner control unit and transmits the operation request signal.

### DTC Logic

INFOID:000000009133905

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition   | Possible cause  |
|---------|------------------------|---|---|
| B2128   | UART COMM              | The communication between driver seat control unit and automatic drive positioner control unit is interrupted for a period of time. | <ul style="list-style-type: none"> <li>• UART communication line (UART communication line is open or shorted)</li> <li>• Driver seat control unit</li> <li>• Automatic drive positioner control unit</li> </ul> |

### DTC CONFIRMATION PROCEDURE

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

#### Is the DTC detected?

- YES >> Refer to [ADP-67, "Diagnosis Procedure"](#).  
 NO >> Inspection End.

### Diagnosis Procedure

INFOID:000000009133906

ADP

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-67, "DTC Logic"](#).

#### Is the DTC displayed again?

- YES >> GO TO 2.  
 NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

#### 2. CHECK UART COMMUNICATION LINE CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and automatic drive positioner control unit.
3. Check continuity between driver seat control unit harness connector and automatic drive positioner control unit harness connector.

| Driver seat control unit connector |          | Automatic drive positioner control unit connector |          | Continuity |
|------------------------------------|----------|---|----------|------------|
| Connector                          | Terminal | Connector   | Terminal |            |
| B209                               | 15       | M33   | 8        | Yes        |

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

## B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

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| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 15       |        | No         |

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).  
NO >> Repair or replace harness.

# B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

## B2130 EEPROM

### DTC Logic

INFOID:000000009133907

### DTC DETECTION LOGIC

| DTC No. | Trouble diagnosis name | DTC detecting condition                            | Possible cause             |
|---------|------------------------|--|----------------------------|
| B2130   | EEPROM                 | Driver seat control unit detected CPU malfunction. | • Driver seat control unit |

### DTC CONFIRMATION PROCEDURE

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.

#### Is the DTC detected?

- YES >> Refer to [ADP-69, "Diagnosis Procedure"](#).  
NO >> Inspection End.

### Diagnosis Procedure

INFOID:000000009133908

#### 1. PERFORM DTC CONFIRMATION PROCEDURE

1. Turn ignition switch ON.
2. Check "Self diagnostic result" with CONSULT.
3. Erase the DTC.
4. Perform DTC confirmation procedure. Refer to [ADP-69, "DTC Logic"](#).

#### Is the DTC displayed again?

- YES >> GO TO 2.  
NO >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

#### 2. REPLACE DRIVER SEAT CONTROL UNIT

Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

>> Inspection End.

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# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## POWER SUPPLY AND GROUND CIRCUIT

BCM

BCM : Diagnosis Procedure

INFOID:000000009133909

Regarding Wiring Diagram information, refer to [BCS-54. "Wiring Diagram"](#).

### 1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

| Terminal No. | Signal name                | Fuse and fusible link No. |
|--------------|----------------------------|---------------------------|
| 139          | Fusible link battery power | O (40A)                   |
| 131          | BCM battery fuse           | 1 (10A)                   |

Is the fuse or fusible link blown?

- YES >> Replace the blown fuse or fusible link after repairing the affected circuit.  
NO >> GO TO 2

### 2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M81.
2. Check voltage between BCM connector M81 terminals 131, 139 and ground.

| BCM       |          | Ground | Voltage (Approx.) |
|-----------|----------|--------|-------------------|
| Connector | Terminal |        |                   |
| M81       | 131      | —      | Battery voltage   |
|           | 139      |        |                   |

Is the inspection result normal?

- YES >> GO TO 3  
NO >> Repair or replace harness or connectors.

### 3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M81 terminals 134, 143 and ground.

| BCM       |          | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal |        |            |
| M81       | 134      | —      | Yes        |
|           | 143      |        |            |

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Repair or replace harness or connectors.

## DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000009133910

#### NOTE:

Do not disconnect the battery negative terminal and the driver seat control unit connector until DTC is confirmed with CONSULT.

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

# POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## 1. CHECK POWER SUPPLY CIRCUIT

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

| (+)       |          | (-)    | Power source         | Condition           | Voltage (V)<br>(Approx.) |
|-----------|----------|--------|----------------------|---------------------|--------------------------|
| Connector | Terminal |        |                      |                     |                          |
| B210      | 37       | Ground | Battery power supply | Ignition switch OFF | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

- Repair or replace harness.
- Circuit breaker-2.

## 2. CHECK GROUND CIRCUIT

Check continuity between the driver seat control unit harness connector and ground.

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B210                     | 39       |        | Yes        |

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

## DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:000000009133911

ADP

### 1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-54, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

### AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000009133912

#### NOTE:

Do not disconnect the battery negative terminal and the driver seat control unit connector until DTC is confirmed with CONSULT.

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

## 1. CHECK POWER SUPPLY CIRCUIT

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

# POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | (-)    | Voltage (V)<br>(Approx.) |
|---|----------|--------|--------------------------|
| Connector                               | Terminal |        |                          |
| M34                                     | 25       | Ground | Battery voltage          |

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Check the following.

- Repair or replace harness.
- Circuit breaker-2.

## 2. CHECK GROUND CIRCUIT

Check continuity between the automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M34                                     | 30       |        | Yes        |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Special Repair Requirement

INFOID:000000009133913

## 1. PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to [ADP-54, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"](#).



# SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## SLIDING SWITCH

### Description

INFOID:000000009133914

Sliding switch is equipped to the power seat switch LH on the seat frame. The operation signal is input to the driver seat control unit when the sliding switch is operated.

### Component Function Check

INFOID:000000009133915

#### 1. CHECK FUNCTION

1. Select "SLIDE SW-FR", "SLIDE SW-RR" in "DATA MONITOR" mode with CONSULT.
2. Check sliding switch signal under the following conditions.

| Monitor item | Condition                 |         | Status |
|--------------|---------------------------|---------|--------|
| SLIDE SW-FR  | Sliding switch (forward)  | Operate | ON     |
|              |                           | Release | OFF    |
| SLIDE SW-RR  | Sliding switch (backward) | Operate | ON     |
|              |                           | Release | OFF    |

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Perform diagnosis procedure. Refer to [ADP-73, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133916

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK SLIDING SWITCH SIGNAL

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

| (+) Driver seat control unit |           | (-)    | Condition          | Voltage (V)<br>(Approx.) |
|------------------------------|-----------|--------|--------------------|--------------------------|
| Connector                    | Terminals |        |                    |                          |
| B209                         | 9         | Ground | Operate (backward) | 0                        |
|                              |           |        | Release            | Battery voltage          |
|                              | 25        |        | Operate (forward)  | 0                        |
|                              |           |        | Release            | Battery voltage          |

Is the inspection result normal?

- YES >> GO TO 5.  
NO >> GO TO 2.

#### 2. CHECK SLIDING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and power seat switch LH.
3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

# SLIDING SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Power seat switch LH |          | Continuity |
|--------------------------|----------|----------------------|----------|------------|
| Connector                | Terminal | Connector            | Terminal |            |
| B209                     | 9        | B208                 | 8        | Yes        |
|                          | 25       |                      | 7        |            |

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

| Driver seat control unit connector |          | Ground | Continuity |
|------------------------------------|----------|--------|------------|
| Connector                          | Terminal |        |            |
| B209                               | 9        |        | No         |
|                                    | 25       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

1. Connect the driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between driver seat control unit harness connector and ground.

| (+) Driver seat control unit |           | (-)    | Voltage (V)<br>(Approx.) |
|------------------------------|-----------|--------|--------------------------|
| Connector                    | Terminals |        |                          |
| B209                         | 9         | Ground | Battery voltage          |
|                              | 25        |        |                          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

### 4. CHECK SLIDING SWITCH

Refer to [ADP-74, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace malfunctioning part.

## Component Inspection

INFOID:000000009133917

### 1. CHECK SLIDING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch LH.
3. Check continuity between power seat switch LH terminals.

# SLIDING SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Terminal             |   | Condition                 | Continuity |     |
|----------------------|---|---------------------------|------------|-----|
| Power seat switch LH |   |                           |            |     |
| 3                    | 8 | Sliding switch (backward) | Operate    | Yes |
|                      |   |                           | Release    | No  |
|                      | 7 | Sliding switch (forward)  | Operate    | Yes |
|                      |   |                           | Release    | No  |

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

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# RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## RECLINING SWITCH

### Description

INFOID:000000009133918

Reclining switch is equipped to the power seat switch LH on the seat frame. The operation signal is input to the driver seat control unit when the reclining switch is operated.

### Component Function Check

INFOID:000000009133919

#### 1. CHECK FUNCTION

1. Select "RECLN SW-FR", "RECLN SW-RR" in "DATA MONITOR" mode with CONSULT.
2. Check reclining switch signal under the following conditions.

| Monitor item | Condition                   | Status  |     |
|--------------|-----------------------------|---------|-----|
| RECLN SW-FR  | Reclining switch (forward)  | Operate | ON  |
|              |                             | Release | OFF |
| RECLN SW-RR  | Reclining switch (backward) | Operate | ON  |
|              |                             | Release | OFF |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-76, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133920

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK RECLINING SWITCH SIGNAL

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

| (+)                      |           | (-)    | Condition        | Voltage (V)<br>(Approx.) |                 |
|--------------------------|-----------|--------|------------------|--------------------------|-----------------|
| Driver seat control unit | Connector |        |                  |                          |                 |
| B209                     | 24        | Ground | Reclining switch | Operate (forward)        | 0               |
|                          | 8         |        |                  | Release                  | Battery voltage |
| 8                        |           |        |                  | Operate (backward)       | 0               |
|                          | 8         |        |                  | Release                  | Battery voltage |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

#### 2. CHECK RECLINING SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and power seat switch LH.
3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

# RECLINING SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Power seat switch LH connector |          | Continuity |
|--------------------------|----------|--------------------------------|----------|------------|
| Connector                | Terminal | Connector                      | Terminal |            |
| B209                     | 24       | B208                           | 9        | Yes        |
|                          | 8        |                                | 10       |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 24       |        | No         |
|                          | 8        |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

1. Connect the driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)       |           | (-)    | Voltage (V)<br>(Approx.) |
|-----------|-----------|--------|--------------------------|
| Connector | Terminals |        |                          |
| B209      | 8         | Ground | Battery voltage          |
|           | 24        |        |                          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

### 4. CHECK RECLINING SWITCH

Refer to [ADP-77, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

## Component Inspection

INFOID:000000009133921

### 1. CHECK RECLINING SWITCH

1. Turn ignition switch OFF.
2. Disconnect power seat switch LH.
3. Check continuity between power seat switch LH terminals.

## RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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| Terminals            |    | Condition                      |         | Continuity |
|----------------------|----|--------------------------------|---------|------------|
| Power seat switch LH |    |                                |         |            |
| 3                    | 10 | Reclining switch<br>(backward) | Operate | Yes        |
|                      |    |                                | Release | No         |
|                      | 9  | Reclining switch<br>(forward)  | Operate | Yes        |
|                      |    |                                | Release | No         |

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

# LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING SWITCH (FRONT)

### Description

INFOID:000000009133922

Lifting switch (front) is equipped to the power seat switch LH on the seat frame. The operation signal is input to the driver seat control unit when the lifting switch (front) is operated.

### Component Function Check

INFOID:000000009133923

#### 1. CHECK FUNCTION

1. Select "LIFT FR SW-UP", "LIFT FR SW-DN" in "DATA MONITOR" mode with CONSULT.
2. Check lifting switch (front) signal under the following conditions.

| Monitor item  | Condition                   | Status  |     |
|---------------|-----------------------------|---------|-----|
| LIFT FR SW-UP | Lifting switch front (up)   | Operate | ON  |
|               |                             | Release | OFF |
| LIFT FR SW-DN | Lifting switch front (down) | Operate | ON  |
|               |                             | Release | OFF |

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Perform diagnosis procedure. Refer to [ADP-79, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133924

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK LIFTING SWITCH SIGNAL

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

| (+)                                   |           | (-)    | Condition                                | Voltage (V)<br>(Approx.) |
|---------------------------------------|-----------|--------|--|--------------------------|
| Driver seat control unit<br>Connector | Terminals |        |  |                          |
| B209                                  | 7         | Ground | Lifting switch (front)<br>Operate (down) | 0V                       |
|                                       |           |        | Release                                  | Battery voltage          |
|                                       | 23        |        | Lifting switch (front)<br>Operate (up)   | 0V                       |
|                                       |           |        | Release                                  | Battery voltage          |

Is the inspection result normal?

- YES >> GO TO 5.  
NO >> GO TO 2.

#### 2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and power seat switch LH.
3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

# LIFTING SWITCH (FRONT)

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Power seat switch LH |          | Continuity |
|--------------------------|----------|----------------------|----------|------------|
| Connector                | Terminal | Connector            | Terminal |            |
| B209                     | 7        | B208                 | 6        | Yes        |
|                          | 23       |                      | 5        |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 7        |        | No         |
|                          | 23       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

1. Connect the driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)                      |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|-----------|--------|--------------------------|
| Driver seat control unit |           |        |                          |
| Connector                | Terminals |        |                          |
| B209                     | 7         | Ground | Battery voltage          |
|                          | 23        |        |                          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

### 4. CHECK LIFTING SWITCH (FRONT)

Refer to [ADP-80, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

## Component Inspection

INFOID:000000009133925

### 1. CHECK LIFTING SWITCH (FRONT)

1. Turn ignition switch OFF.
2. Disconnect power seat switch LH.
3. Check continuity between power seat switch LH terminals.



# LIFTING SWITCH (FRONT)

## < DTC/CIRCUIT DIAGNOSIS >

| Terminal             |   | Condition                   | Continuity |     |
|----------------------|---|-----------------------------|------------|-----|
| Power seat switch LH |   |                             |            |     |
| 3                    | 6 | Lifting switch front (down) | Operate    | Yes |
|                      |   |                             | Release    | No  |
|                      | 5 | Lifting switch front (up)   | Operate    | Yes |
|                      |   |                             | Release    | No  |

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

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# LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING SWITCH (REAR)

### Description

INFOID:000000009133926

Lifting switch (rear) is equipped to the power seat switch LH on the seat frame. The operation signal is inputted to the driver seat control unit when the lifting switch (rear) is operated.

### Component Function Check

INFOID:000000009133927

#### 1. CHECK FUNCTION

1. Select "LIFT RR SW-UP", "LIFT RR SW-DN" in "DATA MONITOR" mode with CONSULT.
2. Check lifting switch (rear) signal under the following conditions.

| Monitor item  | Condition                  |         | Status |
|---------------|----------------------------|---------|--------|
| LIFT RR SW-UP | Lifting switch rear (up)   | Operate | ON     |
|               |                            | Release | OFF    |
| LIFT RR SW-DN | Lifting switch rear (down) | Operate | ON     |
|               |                            | Release | OFF    |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-82, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133928

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK LIFTING SWITCH (REAR) SIGNAL

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

| (+) Driver seat control unit |           | (-)    | Condition                            | Voltage (V)<br>(Approx.) |
|------------------------------|-----------|--------|--------------------------------------|--------------------------|
| Connector                    | Terminals |        |                                      |                          |
| B209                         | 6         | Ground | Lifting switch (rear) Operate (down) | 0                        |
|                              |           |        | Release                              | Battery voltage          |
|                              | 22        |        | Lifting switch (rear) Operate (up)   | 0                        |
|                              |           |        | Release                              | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

#### 2. CHECK LIFTING SWITCH (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and power seat switch LH.
3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

## LIFTING SWITCH (REAR)

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Power seat switch LH |          | Continuity |
|--------------------------|----------|----------------------|----------|------------|
| Connector                | Terminal | Connector            | Terminal |            |
| B209                     | 6        | B208                 | 2        | Yes        |
|                          | 22       |                      | 1        |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 6        |        | No         |
|                          | 22       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

1. Connect the driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between driver seat control unit harness connector and ground.

| (+) Driver seat control unit |           | (-)    | Voltage (V)<br>(Approx.) |
|------------------------------|-----------|--------|--------------------------|
| Connector                    | Terminals |        |                          |
| B209                         | 6         | Ground | Battery voltage          |
|                              | 22        |        |                          |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

### 4. CHECK LIFTING SWITCH (REAR)

Refer to [ADP-83, "Component Inspection"](#).

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

## Component Inspection

INFOID:000000009133929

### 1. CHECK LIFTING SWITCH (REAR)

1. Turn ignition switch OFF.
2. Disconnect power seat switch LH.
3. Check continuity between power seat switch LH terminals.

## LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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| Terminal             |   | Condition                  | Continuity |     |
|----------------------|---|----------------------------|------------|-----|
| Power seat switch LH |   |                            |            |     |
| 3                    | 1 | Lifting switch rear (up)   | Operate    | Yes |
|                      |   |                            | Release    | No  |
|                      | 2 | Lifting switch rear (down) | Operate    | Yes |
|                      |   |                            | Release    | No  |

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to [ADP-145, "Removal and Installation"](#).

# TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## TILT SWITCH

### Description

INFOID:000000009133930

ADP steering switch (tilt switch) is equipped to the steering column. The operation signal is input to the automatic drive positioner control unit when the ADP steering switch is operated.

### Component Function Check

INFOID:000000009133931

#### 1. CHECK FUNCTION

1. Select "TILT SW-UP", "TILT SW-DOWN" in "DATA MONITOR" mode with CONSULT.
2. Check tilt switch signal under the following conditions.

| Monitor item | Condition          |         | Status |
|--------------|--------------------|---------|--------|
| TILT SW-UP   | Tilt switch (up)   | Operate | ON     |
|              |                    | Release | OFF    |
| TILT SW-DOWN | Tilt switch (down) | Operate | ON     |
|              |                    | Release | OFF    |

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Perform diagnosis procedure. Refer to [ADP-85. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133932

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK TILT SWITCH SIGNAL

1. Disconnect ADP steering switch (tilt switch).
2. Check voltage between ADP steering switch harness connector and ground.

| (+)       |           | (-)    | Voltage (V)<br>(Approx.) |
|-----------|-----------|--------|--------------------------|
| Connector | Terminals |        |                          |
| M16       | 5         | Ground | Battery voltage          |
|           | 2         |        |                          |

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> GO TO 2.

#### 2. CHECK TILT SWITCH CIRCUIT

1. Disconnect automatic drive positioner control unit.
2. Check continuity between automatic drive positioner control unit harness connector and ADP steering switch harness connector.

| Automatic drive positioner control unit |          | ADP steering switch (tilt switch) |          | Continuity |
|---|----------|-----------------------------------|----------|------------|
| Connector                               | Terminal | Connector                         | Terminal |            |
| M33                                     | 1        | M16                               | 5        | Yes        |
|   | 13       |                                   | 2        |            |

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

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# TILT SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 1        |        | No         |
|   | 13       |        |            |

### Is the inspection result normal?

- YES >> Replace automatic drive positioner unit. Refer to [ADP-143, "Removal and Installation"](#).  
NO >> Repair or replace harness.

## 3. CHECK TILT SWITCH

Refer to [ADP-86, "Component Inspection"](#).

### Is the inspection result normal?

- YES >> GO TO 4.  
NO >> Replace ADP steering switch (tilt switch). Refer to [ADP-146, "Removal and Installation"](#).

## 4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End.

## Component Inspection

INFOID:000000009133933

## 1. CHECK TILT SWITCH

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (tilt switch).
3. Check continuity between ADP steering switch terminals.

| ADP steering switch (tilt switch) |   | Condition          | Continuity |     |
|-----------------------------------|---|--------------------|------------|-----|
| Terminal                          |   |                    |            |     |
| 3                                 | 5 | Tilt switch (up)   | Operate    | Yes |
|                                   |   |                    | Release    | No  |
|                                   | 2 | Tilt switch (down) | Operate    | Yes |
|                                   |   |                    | Release    | No  |

### Is the inspection result normal?

- YES >> Inspection End.  
NO >> Replace ADP steering switch (tilt switch). Refer to [ADP-146, "Removal and Installation"](#).

# TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC SWITCH

### Description

INFOID:000000009133934

ADP steering switch (telescopic switch) is equipped to the steering column. The operation signal is input to the automatic drive positioner control unit when the telescopic switch is operated.

### Component Function Check

INFOID:000000009133935

#### 1. CHECK FUNCTION

1. Select "TELESCO SW-FR", "TELESCO SW-RR" in "DATA MONITOR" mode with CONSULT.
2. Check telescopic switch signal under the following conditions.

| Monitor item  | Condition                    |         | Status |
|---------------|------------------------------|---------|--------|
| TELESCO SW-FR | Telescopic switch (forward)  | Operate | ON     |
|               |                              | Release | OFF    |
| TELESCO SW-RR | Telescopic switch (backward) | Operate | ON     |
|               |                              | Release | OFF    |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-87, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133936

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK TELESCOPIC SWITCH SIGNAL

1. Disconnect ADP steering switch (telescopic switch).
2. Check voltage between ADP steering switch harness connector and ground.

| (+)                                     |           | (-)    | Voltage (V)<br>(Approx.) |
|---|-----------|--------|--------------------------|
| ADP steering switch (telescopic switch) |           |        |                          |
| Connector                               | Terminals | Ground | Battery voltage          |
| M16                                     | 1         |        |                          |
|   | 6         |        |                          |

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

#### 2. CHECK TELESCOPIC SWITCH CIRCUIT

1. Disconnect automatic drive positioner control unit.
2. Check continuity between automatic drive positioner control unit harness connector and ADP steering switch harness connector.

| Automatic drive positioner control unit |          | ADP steering switch (telescopic switch) |          | Continuity |
|---|----------|---|----------|------------|
| Connector                               | Terminal | Connector                               | Terminal |            |
| M33                                     | 7        | M16                                     | 1        | Yes        |
|   | 19       |   | 6        |            |

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

# TELESCOPIC SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 7        |        | No         |
|   | 19       |        |            |

### Is the inspection result normal?

- YES >> Replace automatic drive positioner unit. Refer to [ADP-143, "Removal and Installation"](#).  
 NO >> Repair or replace harness.

## 3. CHECK TELESCOPIC SWITCH

Refer to [ADP-88, "Component Inspection"](#).

### Is the inspection result normal?

- YES >> GO TO 4.  
 NO >> Replace ADP steering switch (telescopic switch). Refer to [ADP-146, "Removal and Installation"](#).

## 4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

>> Inspection End.

## Component Inspection

INFOID:000000009133937

## 1. CHECK TELESCOPIC SWITCH

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (telescopic switch).
3. Check continuity between ADP steering switch terminals.

| ADP steering switch (telescopic switch) |   | Condition                    | Continuity |     |
|---|---|------------------------------|------------|-----|
| Terminal                                |   |                              |            |     |
| 3                                       | 1 | Telescopic switch (forward)  | Operate    | Yes |
|   |   |                              | Release    | No  |
|   | 6 | Telescopic switch (backward) | Operate    | Yes |
|   |   |                              | Release    | No  |

### Is the inspection result normal?

- YES >> Inspection End.  
 NO >> Replace ADP steering switch (telescopic switch). Refer to [ADP-146, "Removal and Installation"](#).



# SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## SEAT MEMORY SWITCH

### Description

INFOID:000000009133938

Seat memory switch is installed to the front door LH trim. The operation signal is input to the driver seat control unit when the memory switch is operated.

### Component Function Check

INFOID:000000009133939

#### 1. CHECK FUNCTION

1. Select "MEMORY SW 1", "MEMORY SW 2", "SET SW" in "DATA MONITOR" mode with CONSULT.
2. Check seat memory switch signal under the following conditions.

| Monitor item | Condition       |         | Status |
|--------------|-----------------|---------|--------|
| MEMORY SW 1  | Memory switch 1 | Push    | ON     |
|              |                 | Release | OFF    |
| MEMORY SW 2  | Memory switch 2 | Push    | ON     |
|              |                 | Release | OFF    |
| SET SW       | Set switch      | Push    | ON     |
|              |                 | Release | OFF    |

Is the inspection result normal?

- YES >> Inspection End.  
NO >> Perform diagnosis procedure. Refer to [ADP-89, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133940

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK SEAT MEMORY SWITCH SIGNAL

1. Turn ignition switch OFF.
2. Disconnect seat memory switch.
3. Turn ignition switch ON.
4. Check voltage between seat memory switch harness connector and ground.

| (+)                |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------|-----------|--------|--------------------------|
| Seat memory switch |           |        |                          |
| Connector          | Terminals | Ground | 5                        |
| D60                | 2         |        |                          |
|                    | 10        |        |                          |
|                    | 16        |        |                          |

Is the inspection result normal?

- YES >> GO TO 3.  
NO >> GO TO 2.

#### 2. CHECK MEMORY SWITCH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit.
3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

# SEAT MEMORY SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Seat memory switch |          | Continuity |
|--------------------------|----------|--------------------|----------|------------|
| Connector                | Terminal | Connector          | Terminal |            |
| B209                     | 11       | D60                | 16       | Yes        |
|                          | 21       |                    | 2        |            |
|                          | 27       |                    | 10       |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 11       | Ground | No         |
|                          | 21       |        |            |
|                          | 27       |        |            |

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 3. CHECK MEMORY SWITCH GROUND CIRCUIT

Check continuity between seat memory switch harness connector and ground.

| Seat memory switch |          | Ground | Continuity |
|--------------------|----------|--------|------------|
| Connector          | Terminal |        |            |
| D60                | 9        | Ground | Yes        |
|                    |          |        |            |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK SEAT MEMORY SWITCH

Refer to [ADP-90, "Component Inspection"](#).

Is the inspection result normal?

YES >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

## Component Inspection

INFOID:000000009133941

### 1. CHECK SEAT MEMORY SWITCH

1. Turn ignition switch OFF.
2. Disconnect seat memory switch.
3. Check continuity between seat memory switch terminals.

| Terminal           |            | Condition       |         | Continuity |
|--------------------|------------|-----------------|---------|------------|
| Seat memory switch |            |                 |         |            |
| 9                  | 10         | Memory switch 1 | Push    | Yes        |
|                    |            |                 | Release | No         |
|                    | 16         | Memory switch 2 | Push    | Yes        |
|                    |            |                 | Release | No         |
| 2                  | Set switch | Push            | Yes     |            |
|                    |            | Release         | No      |            |

Is the inspection result normal?

YES >> Inspection End.

# SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

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NO >> Replace seat memory switch. Refer to [ADP-144. "Removal and Installation"](#).

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# DOOR MIRROR REMOTE CONTROL SWITCH

< DTC/CIRCUIT DIAGNOSIS >

## DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

### CHANGEOVER SWITCH : Description

INFOID:000000009133942

Changeover switch is integrated into door mirror remote control switch.  
Changeover switch has three positions (L, N and R).  
It changes door mirror motor operation by transmitting control signal to automatic drive positioner control unit.

### CHANGEOVER SWITCH : Component Function Check

INFOID:000000009133943

#### 1. CHECK FUNCTION

1. Select "MIR CHNG SW-R", "MIR CHNG SW-L" in "DATA MONITOR" mode with CONSULT.
2. Check changeover switch signal under the following conditions.

| Monitor item  | Condition             |         | Status |
|---------------|-----------------------|---------|--------|
| MIR CHNG SW-R | Mirror switch (right) | Operate | ON     |
|               |                       | Release | OFF    |
| MIR CHNG SW-L | Mirror switch (left)  | Operate | ON     |
|               |                       | Release | OFF    |

#### Is the inspection result normal?

- YES >> Inspection End.  
NO >> Perform diagnosis procedure. Refer to [ADP-92. "CHANGEOVER SWITCH : Diagnosis Procedure"](#).

### CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:000000009133944

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK CHANGEOVER SWITCH SIGNAL

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

| (+)                                     |           | (-)    | Change over switch condition | Voltage (V)<br>(Approx.) |
|---|-----------|--------|------------------------------|--------------------------|
| Automatic drive positioner control unit | Connector |        |                              |                          |
| M33                                     | 2         | Ground | RIGHT                        | 0                        |
|   |           |        | Other than above             | 5                        |
|   | 14        |        | LEFT                         | 0                        |
|   |           |        | Other than above             | 5                        |

#### Is the inspection result normal?

- YES >> GO TO 5.  
NO >> GO TO 2.

#### 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror remote control switch.
3. Check continuity between automatic drive positioner control unit connector and door mirror remote control switch connector.

# DOOR MIRROR REMOTE CONTROL SWITCH

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| Automatic drive positioner control unit |          | Door mirror remote control switch |          | Continuity |
|---|----------|-----------------------------------|----------|------------|
| Connector                               | Terminal | Connector                         | Terminal |            |
| M33                                     | 2        | D57                               | 28       | Yes        |
|   | 14       |                                   | 23       |            |

4. Check continuity between automatic drive positioner control unit connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 2        |        | No         |
|   | 14       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

| Door mirror remote control switch |          | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector                         | Terminal |        |            |
| D56                               | 7        |        | Yes        |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK CHANGEOVER SWITCH

Check changeover switch.

Refer to [ADP-93, "CHANGEOVER SWITCH : Component Inspection"](#).

Is the inspection result normal?

YES >> Refer to [GI-53, "Intermittent Incident"](#).

NO >> Replace door mirror remote control switch. Refer to [MIR-34, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning parts.

## CHANGEOVER SWITCH : Component Inspection

INFOID:000000009133945

### 1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

| Terminal                          |   | Change over switch condition | Continuity |
|-----------------------------------|---|------------------------------|------------|
| Door mirror remote control switch |   |                              |            |
| 23                                | 7 | LEFT                         | Yes        |
|                                   |   | Other than above             | No         |
| 28                                |   | RIGHT                        | Yes        |
|                                   |   | Other than above             | No         |

# DOOR MIRROR REMOTE CONTROL SWITCH

## < DTC/CIRCUIT DIAGNOSIS >

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to [MIR-34, "Removal and Installation"](#).

## MIRROR SWITCH

### MIRROR SWITCH : Description

INFOID:000000009133946

It operates angle of the door mirror face.

It transmits mirror face adjust operation to automatic drive positioner control unit.

### MIRROR SWITCH : Component Function Check

INFOID:000000009133947

#### 1. CHECK FUNCTION

1. Select "MIR CON SW-UP/DN", "MIR CON SW-RH/LH" in "DATA MONITOR" mode with CONSULT.

2. Check mirror switch signal under the following conditions.

| Monitor item     | Condition                  |         | Status |
|------------------|----------------------------|---------|--------|
| MIR CON SW-UP/DN | Mirror switch (up/down)    | Operate | ON     |
|                  |                            | Release | OFF    |
| MIR CON SW-RH/LH | Mirror switch (right/left) | Operate | ON     |
|                  |                            | Release | OFF    |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-94, "MIRROR SWITCH : Diagnosis Procedure"](#).

## MIRROR SWITCH : Diagnosis Procedure

INFOID:000000009133948

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK MIRROR SWITCH FUNCTION

1. Turn ignition switch ON.

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

| (+) Automatic drive positioner control unit |          | (-)    | Mirror switch Condition | Voltage (V) (Approx.) |
|---|----------|--------|-------------------------|-----------------------|
| Connector                                   | Terminal |        |                         |                       |
| M33   | 3        | Ground | UP                      | 0                     |
|   |          |        | Other than above        | 5                     |
|   | 4        |        | LEFT                    | 0                     |
|   |          |        | Other than above        | 5                     |
|   | 15       |        | DOWN                    | 0                     |
|   |          |        | Other than above        | 5                     |
|   | 16       |        | RIGHT                   | 0                     |
|   |          |        | Other than above        | 5                     |

### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

#### 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

# DOOR MIRROR REMOTE CONTROL SWITCH

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2. Disconnect automatic drive positioner control unit and door mirror remote control switch.
3. Check continuity between automatic drive positioner control unit connector and door mirror remote control switch connector.

| Automatic drive positioner control unit |          | Door mirror remote control switch |          | Continuity |
|---|----------|-----------------------------------|----------|------------|
| Connector                               | Terminal | Connector                         | Terminal |            |
| M33                                     | 3        | D57                               | 26       | Yes        |
|   | 4        |                                   | 24       |            |
|   | 15       |                                   | 25       |            |
|   | 16       |                                   | 27       |            |

4. Check continuity between automatic drive positioner control unit connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 3        | Ground | No         |
|   | 4        |        |            |
|   | 15       |        |            |
|   | 16       |        |            |

Is the inspection result normal?

- YES >> GO TO 3.  
 NO >> Repair or replace harness.

### 3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

| Door mirror remote control switch |          | Ground | Continuity |
|-----------------------------------|----------|--------|------------|
| Connector                         | Terminal |        |            |
| D56                               | 7        | Ground | Yes        |
|                                   |          |        |            |

Is the inspection result normal?

- YES >> GO TO 4.  
 NO >> Repair or replace harness.

### 4. CHECK MIRROR SWITCH

Check mirror switch.

Refer to [ADP-95, "MIRROR SWITCH : Component Inspection"](#).

Is the inspection result normal?

- YES >> Refer to [GI-53, "Intermittent Incident"](#).  
 NO >> Replace door mirror remote control switch. Refer to [MIR-34, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).  
 NO >> Repair or replace the malfunctioning parts.

## MIRROR SWITCH : Component Inspection

INFOID:000000009133949

### 1. CHECK MIRROR SWITCH

Check door mirror remote control switch.

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| Terminal                          |   | Mirror switch condition | Continuity |
|-----------------------------------|---|-------------------------|------------|
| Door mirror remote control switch |   |                         |            |
| 27                                | 7 | RIGHT                   | Yes        |
|                                   |   | Other than above        | No         |
| 24                                |   | LEFT                    | Yes        |
|                                   |   | Other than above        | No         |
| 26                                |   | UP                      | Yes        |
|                                   |   | Other than above        | No         |
| 25                                |   | DOWN                    | Yes        |
|                                   |   | Other than above        | No         |

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to [MIR-34, "Removal and Installation"](#).



# POWER SEAT SWITCH GROUND CIRCUIT

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## POWER SEAT SWITCH GROUND CIRCUIT

### Diagnosis Procedure

INFOID:000000009133950

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

### 1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

| Power seat switch LH |          | Ground | Continuity |
|----------------------|----------|--------|------------|
| Connector            | Terminal |        |            |
| B208                 | 3        |        | Yes        |

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-53, "Intermittent Incident"](#).  
NO >> Repair or replace harness.

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# TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

## TILT & TELESCOPIC SWITCH GROUND CIRCUIT

### Diagnosis Procedure

INFOID:000000009133951

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

### 1. CHECK ADP STEERING SWITCH (TILT & TELESCOPIC SWITCH) GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect ADP steering switch (tilt & telescopic switch).
3. Check continuity between ADP steering switch (tilt & telescopic switch) and ground.

| ADP steering switch (tilt & telescopic switch) |          | Ground | Continuity |
|--|----------|--------|------------|
| Connector                                      | Terminal |        |            |
| M16  | 3        |        | Yes        |

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to [GI-53. "Intermittent Incident"](#).  
NO >> Repair or replace harness.

# SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

## SLIDING SENSOR

### Description

INFOID:000000009133952

- The sliding sensor is installed to the seat frame.
- The pulse signal is input to the driver seat control unit when sliding is performed.
- The driver seat control unit counts the pulse and calculates the sliding amount of the seat.

### Component Function Check

INFOID:000000009133953

#### 1. CHECK FUNCTION

1. Select "SLIDE PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check sliding sensor switch signal under the following conditions.

| Monitor item | Condition    |                    | Value             |
|--------------|--------------|--------------------|-------------------|
| SLIDE PULSE  | Seat sliding | Operate (forward)  | Change (decrease) |
|              |              | Operate (backward) | Change (increase) |
|              |              | Release            | No change         |

Is the inspection result normal?

- YES >> Inspection End.  
 NO >> Perform diagnosis procedure. Refer to [ADP-99, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133954

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK SLIDING SENSOR SIGNAL

1. Turn ignition switch ON.
2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

| (+)                        |          | (-)    | Condition        | Voltage signal |
|----------------------------|----------|--------|------------------|----------------|
| Driver's seat control unit | Terminal |        |                  |                |
| Connector                  | Terminal |        |                  |                |
| B209                       | 31       | Ground | Seat sliding     |                |
|                            |          |        | Operate          |                |
|                            |          |        | Other than above | 0 or 5         |

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).  
 NO >> GO TO 2.

#### 2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and sliding motor LH.

# SLIDING SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between driver seat control unit harness connector and sliding motor LH harness connector.

| Driver seat control unit |          | Sliding motor LH |          | Continuity |
|--------------------------|----------|------------------|----------|------------|
| Connector                | Terminal | Connector        | Terminal |            |
| B209                     | 31       | B211             | 2        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 31       |        | No         |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK SLIDING SENSOR POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between sliding motor LH harness connector and ground.

| (+)              |           | (-)    | Voltage (V)<br>(Approx.) |
|------------------|-----------|--------|--------------------------|
| Sliding motor LH |           |        |                          |
| Connector        | Terminals |        |                          |
| B211             | 1         | Ground | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK SLIDING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit.
3. Check continuity between driver seat control unit harness connector and sliding motor LH harness connector.

| Driver seat control unit |          | Sliding motor LH |          | Continuity |
|--------------------------|----------|------------------|----------|------------|
| Connector                | Terminal | Connector        | Terminal |            |
| B209                     | 5        | B211             | 1        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 5        |        | No         |

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5. CHECK SLIDING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between sliding motor LH harness connector and ground.

# SLIDING SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

| Sliding motor LH |          | Ground | Continuity |
|------------------|----------|--------|------------|
| Connector        | Terminal |        |            |
| B211             | 3        |        | Yes        |

Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to [SE-113, "Removal and Installation"](#).

NO >> Repair or replace harness.

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# RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

## RECLINING SENSOR

### Description

INFOID:000000009133955

- The reclining motor LH is installed to the seatback assembly.
- The pulse signal is input to the driver seat control unit when the reclining is operated.
- The driver seat control unit counts the pulse and calculates the reclining amount of the seat.

### Component Function Check

INFOID:000000009133956

#### 1. CHECK FUNCTION

1. Select "RECLN PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check reclining sensor signal under the following conditions.

| Monitor item | Condition      |                    | Value             |
|--------------|----------------|--------------------|-------------------|
| RECLN PULSE  | Seat reclining | Operate (forward)  | Change (decrease) |
|              |                | Operate (backward) | Change (increase) |
|              |                | Release            | No change         |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-102. "Diagnosis Procedure"](#).

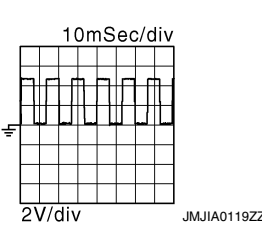
### Diagnosis Procedure

INFOID:000000009133957

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.
2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

| (+)                      |               | (-)    | Condition        | Voltage signal  |
|--------------------------|---------------|--------|------------------|---|
| Driver seat control unit |               |        |                  |   |
| Connec-<br>tor           | Termi-<br>nal |        |                  |   |
| B209                     | 13            | Ground | Seat reclining   |  |
|                          |               |        | Operate          |   |
|                          |               |        | Other than above |   |

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and reclining motor LH.

# RECLINING SENSOR

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3. Check continuity between driver seat control unit harness connector and reclining motor LH harness connector.

| Driver seat control unit |          | Reclining motor LH |          | Continuity |
|--------------------------|----------|--------------------|----------|------------|
| Connector                | Terminal | Connector          | Terminal |            |
| B209                     | 13       | B217               | 1        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 13       |        | No         |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK RECLINING SENSOR POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between reclining motor LH harness connector and ground.

| (+)                |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------|-----------|--------|--------------------------|
| Reclining motor LH |           |        |                          |
| Connector          | Terminals |        |                          |
| B217               | 3         | Ground | Battery voltage          |

### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## 4. CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit.
3. Check continuity between driver seat control unit harness connector and reclining motor LH harness connector.

| Driver seat control unit |          | Reclining motor LH |          | Continuity |
|--------------------------|----------|--------------------|----------|------------|
| Connector                | Terminal | Connector          | Terminal |            |
| B209                     | 5        | B217               | 3        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 5        |        | No         |

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

## 5. CHECK RECLINING SENSOR GROUND

1. Turn ignition switch OFF.
2. Check continuity between reclining motor LH harness connector and ground.

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## RECLINING SENSOR

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| Reclining motor LH |          | Ground | Continuity |
|--------------------|----------|--------|------------|
| Connector          | Terminal |        |            |
| B217               | 2        |        | Yes        |

Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to [SE-113. "Removal and Installation"](#).

NO >> Repair or replace harness.



# LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING SENSOR (FRONT)

### Description

INFOID:000000009133958

- The lifting sensor (front) is installed to the seat frame.
- The pulse signal is input to the driver seat control unit when the lifting (front) is operated.
- The driver seat control unit counts the pulse and calculates the lifting (front) amount of the seat.

### Component Function Check

INFOID:000000009133959

#### 1. CHECK FUNCTION

1. Select "LIFT FR PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check the lifting sensor (front) signal under the following conditions.

| Monitor item  | Condition            |                | Value             |
|---------------|----------------------|----------------|-------------------|
| LIFT FR PULSE | Seat lifting (front) | Operate (up)   | Change (decrease) |
|               |                      | Operate (down) | Change (increase) |
|               |                      | Release        | No change         |

Is the inspection result normal?

- YES >> Inspection End.  
 NO >> Perform diagnosis procedure. Refer to [ADP-105, "Diagnosis Procedure"](#).

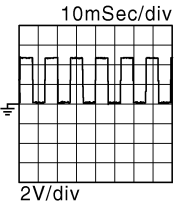
### Diagnosis Procedure

INFOID:000000009133960

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.
2. Read the voltage signal between driver seat control unit harness connector and ground with an oscilloscope.

| (+)       |          | (-)    | Condition            | Voltage signal   |
|-----------|----------|--------|----------------------|--|
| Connector | Terminal |        |                      |  |
| B209      | 30       | Ground | Seat lifting (front) |  |
|           |          |        | Other than above     |  |

Is the inspection result normal?

- YES >> GO TO 4.  
 NO >> GO TO 2.

#### 2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor LH (front).
3. Check continuity between driver seat control unit harness connector and lifting motor LH (front) harness connector.

## LIFTING SENSOR (FRONT)

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| Driver seat control unit |          | Lifting motor LH (front) |          | Continuity |
|--------------------------|----------|--------------------------|----------|------------|
| Connector                | Terminal | Connector                | Terminal |            |
| B209                     | 30       | B218                     | 1        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 30       |        | No         |

**Is the inspection result normal?**

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between lifting motor LH (front) harness connector and ground.

| (+)                      |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------------|-----------|--------|--------------------------|
| Lifting motor LH (front) |           |        |                          |
| Connector                | Terminals |        |                          |
| B218                     | 3         | Ground | Battery voltage          |

**Is the inspection result normal?**

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK LIFTING SENSOR (FRONT) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit.
3. Check continuity between driver seat control unit harness connector and lifting motor LH (front) harness connector.

| Driver seat control unit |          | Lifting motor LH (front) |          | Continuity |
|--------------------------|----------|--------------------------|----------|------------|
| Connector                | Terminal | Connector                | Terminal |            |
| B209                     | 5        | B218                     | 3        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 5        |        | No         |

**Is the inspection result normal?**

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5. CHECK LIFTING SENSOR (FRONT) GROUND

1. Turn ignition switch OFF.
2. Check continuity between lifting motor LH (front) harness connector and ground.

| Lifting motor LH (front) |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B218                     | 2        |        | Yes        |

## LIFTING SENSOR (FRONT)

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Is the inspection result normal?

YES >> Replace lifting motor LH (front). Refer to [SE-113, "Removal and Installation"](#).

NO >> Repair or replace harness.

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# LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING SENSOR (REAR)

### Description

INFOID:000000009133961

- The lifting sensor (rear) is installed to the seat frame.
- The pulse signal is input to the driver seat control unit when the lifting (rear) is operated.
- The driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.

### Component Function Check

INFOID:000000009133962

#### 1. CHECK FUNCTION

1. Select "LIFT RR PULSE" in " mode with CONSULT.
2. Check lifting sensor (rear) signal under the following conditions.

| Monitor item  | Condition           |                | Value             |
|---------------|---------------------|----------------|-------------------|
| LIFT RR PULSE | Seat lifting (rear) | Operate (up)   | Change (decrease) |
|               |                     | Operate (down) | Change (increase) |
|               |                     | Release        | No change         |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-108. "Diagnosis Procedure"](#).

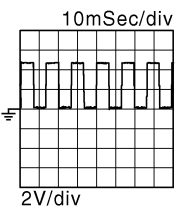
### Diagnosis Procedure

INFOID:000000009133963

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.
2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

| (+)                      |               | (-)    | Condition           | Voltage signal  |
|--------------------------|---------------|--------|---------------------|---|
| Driver seat control unit |               |        |                     |   |
| Connec-<br>tor           | Termi-<br>nal |        |                     |   |
| B209                     | 29            | Ground | Seat lifting (rear) |  |
|                          |               |        | Operate             |   |
|                          |               |        | Other than above    |   |

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK LIFTING SENSOR (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor LH (rear).

## LIFTING SENSOR (REAR)

### < DTC/CIRCUIT DIAGNOSIS >

3. Check the continuity between driver seat control unit harness connector and lifting motor LH (rear) harness connector.

| Driver seat control unit |          | Lifting motor LH (rear) |          | Continuity |
|--------------------------|----------|-------------------------|----------|------------|
| Connector                | Terminal | Connector               | Terminal |            |
| B209                     | 29       | B207                    | 1        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 29       |        | No         |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check the voltage between lifting motor LH (rear) harness connector and ground.

| (+)                     |           | (-)    | Voltage (V)<br>(Approx.) |
|-------------------------|-----------|--------|--------------------------|
| Lifting motor LH (rear) |           |        |                          |
| Connector               | Terminals |        |                          |
| B207                    | 3         | Ground | Battery voltage          |

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit.
3. Check the continuity between driver seat control unit harness connector and lifting motor LH (rear) harness connector.

| Driver seat control unit |          | Lifting motor LH (rear) |          | Continuity |
|--------------------------|----------|-------------------------|----------|------------|
| Connector                | Terminal | Connector               | Terminal |            |
| B209                     | 5        | B207                    | 3        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 5        |        | No         |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5. CHECK LIFTING SENSOR (REAR) GROUND

1. Turn ignition switch OFF.
2. Check the continuity between lifting motor LH (rear) harness connector and ground.

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## LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

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| Lifting motor LH (rear) |          | Ground | Continuity |
|-------------------------|----------|--------|------------|
| Connector               | Terminal |        |            |
| B207                    | 2        |        | Yes        |

Is the inspection result normal?

- YES >> Replace lifting motor LH (rear). Refer to [SE-113. "Removal and Installation"](#).  
NO >> Repair or replace harness.

# TILT SENSOR

< DTC/CIRCUIT DIAGNOSIS >

## TILT SENSOR

### Description

INFOID:000000009133964

- The tilt sensor is installed to the steering column assembly.
- The pulse signal is input to the driver seat control unit when the tilt is operated.
- The driver seat control unit counts the pulse and calculates the tilt amount of the steering column.

### Component Function Check

INFOID:000000009133965

#### 1. CHECK FUNCTION

1. Select "TILT PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check tilt sensor signal under the following conditions.

| Monitor item | Condition       |                     | Value             |
|--------------|-----------------|---------------------|-------------------|
| TILT PULSE   | Steering column | Operate (UP-WARD)   | Change (decrease) |
|              |                 | Operate (DOWN-WARD) | Change (increase) |
|              |                 | Release             | No change         |

Is the inspection result normal?

- YES >> Inspection End.  
 NO >> Perform diagnosis procedure. Refer to [ADP-111, "Diagnosis Procedure"](#).

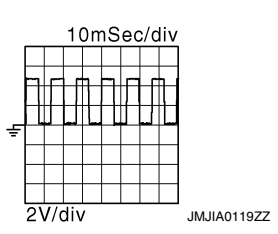
### Diagnosis Procedure

INFOID:000000009133966

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK TILT SENSOR SIGNAL

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

| (+)                      |               | (-)    | Condition        | Voltage (V)<br>(Approx.)  |
|--------------------------|---------------|--------|------------------|---|
| Driver seat control unit | Con-connector |        |                  |   |
|                          | Terminals     |        |                  |   |
| B209                     | 28            | Ground | Steering column  |  <p>10mSec/div<br/>2V/div<br/>JMJA0119ZZ</p> |
|                          |               |        | Other than above | 0 or 5  |

Is the inspection result normal?

- YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).  
 NO >> GO TO 2.

#### 2. CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and tilt motor.
3. Check continuity between driver seat control unit harness connector and tilt motor harness connector.

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# TILT SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Tilt motor |          | Continuity |
|--------------------------|----------|------------|----------|------------|
| Connector                | Terminal | Connector  | Terminal |            |
| B209                     | 28       | M85        | 4        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 28       |        | No         |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK TILT SENSOR POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between tilt motor harness connector and ground.

| (+)        |           | (-)    | Voltage (V)<br>(Approx.) |
|------------|-----------|--------|--------------------------|
| Tilt motor |           |        |                          |
| Connector  | Terminals |        |                          |
| M85        | 5         | Ground | Battery voltage          |

### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## 4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.

| Automatic drive positioner control unit |          | Tilt motor |          | Continuity |
|---|----------|------------|----------|------------|
| Connector                               | Terminal | Connector  | Terminal |            |
| M34                                     | 27       | M85        | 5        | Yes        |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M34                                     | 27       |        | No         |

### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).

NO >> Repair or replace harness or connector.

## 5. CHECK TILT SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.



# TILT SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | Tilt motor |          | Continuity |
|---|----------|------------|----------|------------|
| Connector                               | Terminal | Connector  | Terminal |            |
| M33                                     | 20       | M85        | 3        | Yes        |

### Is the inspection result normal?

- YES >> Replace tilt motor. Refer to [ST-48, "Exploded View"](#).
- NO >> Repair or replace harness.

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# TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC SENSOR

### Description

INFOID:000000009133967

- The telescopic sensor is installed to the steering column assembly.
- The pulse signal is input to the driver seat control unit when telescopic is performed.
- The driver seat control unit counts the pulse and calculates the telescopic amount of the steering column.

### Component Function Check

INFOID:000000009133968

#### 1. CHECK FUNCTION

1. Select "TELESCO PULSE" in "DATA MONITOR" mode with CONSULT.
2. Check telescopic sensor signal under the following conditions.

| Monitor item  | Condition       |                    | Valve             |
|---------------|-----------------|--------------------|-------------------|
| TELESCO PULSE | Steering column | Operate (forward)  | Change (decrease) |
|               |                 | Operate (backward) | Change (increase) |
|               |                 | Release            | No change         |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-114, "Diagnosis Procedure"](#).

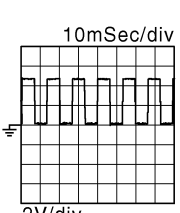
### Diagnosis Procedure

INFOID:000000009133969

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK TELESCOPIC SENSOR SIGNAL

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

| (+)                      |           | (-)    | Condition        | Voltage (V)<br>(Approx.)  |
|--------------------------|-----------|--------|------------------|---|
| Driver seat control unit |           |        |                  |   |
| Connector                | Terminals |        |                  |   |
| B209                     | 12        | Ground | Steering column  |  |
|                          |           |        | Other than above | 0 or 5  |

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and telescopic motor.

# TELESCOPIC SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between driver seat control unit harness connector and telescopic motor harness connector.

| Driver seat control unit |          | Telescopic motor |          | Continuity |
|--------------------------|----------|------------------|----------|------------|
| Connector                | Terminal | Connector        | Terminal |            |
| B209                     | 12       | M94              | 4        | Yes        |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 12       |        | No         |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK TELESCOPIC SENSOR POWER SUPPLY

1. Connect driver seat control unit.
2. Turn ignition switch ON.
3. Check voltage between telescopic motor harness connector and ground.

| (+)              |           | (-)    | Voltage (V)<br>(Approx.) |
|------------------|-----------|--------|--------------------------|
| Telescopic motor |           |        |                          |
| Connector        | Terminals |        |                          |
| M94              | 5         | Ground | Battery voltage          |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

### 4. CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and telescopic motor harness connector.

| Automatic drive positioner control unit |          | Telescopic motor |          | Continuity |
|---|----------|------------------|----------|------------|
| Connector                               | Terminal | Connector        | Terminal |            |
| M34                                     | 27       | M94              | 5        | Yes        |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M34                                     | 27       |        | No         |

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

NO >> Repair or replace harness.

### 5. CHECK TELESCOPIC SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and telescopic motor harness connector.

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## TELESCOPIC SENSOR

### < DTC/CIRCUIT DIAGNOSIS >

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| Automatic drive positioner control unit |          | Telescopic motor |          | Continuity |
|---|----------|------------------|----------|------------|
| Connector                               | Terminal | Connector        | Terminal |            |
| M33                                     | 20       | M94              | 3        | Yes        |

#### Is the inspection result normal?

- YES >> Replace telescopic motor. Refer to [ST-48. "Exploded View"](#).  
NO >> Repair or replace harness.

# MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

## MIRROR SENSOR DRIVER SIDE

### DRIVER SIDE : Description

INFOID:000000009133970

- The mirror sensor LH is installed to the door mirror LH.
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror LH is operated.
- Automatic drive positioner control unit calculates the door mirror position according to the change of the voltage of 2 sensor input terminals.

### DRIVER SIDE : Component Function Check

INFOID:000000009133971

#### 1. CHECK FUNCTION

1. Select "MIR/SEN LH U-D", "MIR/SEN LH R-L" in "DATA MONITOR" mode with CONSULT.
2. Check mirror sensor (driver side) signal under the following condition.

| Monitor item   | Condition      |                     | Value |
|----------------|----------------|---------------------|-------|
| MIR/SEN LH U-D | Door mirror LH | Close to peak       | 3.4V  |
|                |                | Close to valley     | 0.6V  |
| MIR/SEN LH R-L |                | Close to right edge | 3.4V  |
|                |                | Close to left edge  | 0.6V  |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-117, "DRIVER SIDE : Diagnosis Procedure"](#).

### DRIVER SIDE : Diagnosis Procedure

INFOID:000000009133972

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK DOOR MIRROR LH SENSOR SIGNAL

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

| (+)                                 |          | (-)    | Condition      | Voltage (V)<br>(Approx.) |     |
|-------------------------------------|----------|--------|----------------|--------------------------|-----|
| Door mirror LH                      |          |        |                |                          |     |
| Connector                           | Terminal |        |                |                          |     |
| D6<br>(with around view monitor)    | 21       | Ground | Door mirror LH | Close to peak            | 3.4 |
|                                     |          |        |                | Close to valley          | 0.6 |
|                                     | 22       |        |                | Close to right edge      | 3.4 |
|                                     |          |        |                | Close to left edge       | 0.6 |
| D4<br>(without around view monitor) | 4        | Ground | Door mirror LH | Close to peak            | 3.4 |
|                                     |          |        |                | Close to valley          | 0.6 |
|                                     | 6        |        |                | Close to right edge      | 3.4 |
|                                     |          |        |                | Close to left edge       | 0.6 |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

#### 2. CHECK DOOR MIRROR LH SENSOR CIRCUIT 1

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror LH connector.

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# MIRROR SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between automatic drive positioner control unit harness connector and door mirror LH harness connector.

| Automatic drive positioner control unit |          | Door mirror LH                   |          | Continuity |
|---|----------|----------------------------------|----------|------------|
| Connector                               | Terminal | Connector                        | Terminal |            |
| M33                                     | 6        | D6<br>(with around view monitor) | 21       | Yes        |
|   | 18       |                                  | 22       |            |
| M33                                     | 6        | D4<br>(with around view monitor) | 4        | Yes        |
|   | 18       |                                  | 6        |            |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 6        |        | No         |
|   | 18       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DOOR MIRROR LH SENSOR CIRCUIT 2

1. Check continuity between automatic drive positioner control unit harness connector and door mirror LH harness connector.

| Automatic drive positioner control unit |          | Door mirror LH                   |          | Continuity |
|---|----------|----------------------------------|----------|------------|
| Connector                               | Terminal | Connector                        | Terminal |            |
| M33                                     | 20       | D6<br>(with around view monitor) | 24       | Yes        |
|   | 21       |                                  | 23       |            |
| M33                                     | 20       | D4<br>(with around view monitor) | 5        | Yes        |
|   | 21       |                                  | 3        |            |

2. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 20       |        | No         |
|   | 21       |        |            |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TILT MOTOR ADJUSTING OPERATION

1. Connect automatic drive positioner control unit and door mirror LH.
2. Turn ignition switch ON.
3. Check tilt motor adjusting operation with memory function.

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror LH). Refer to [MIR-29, "Removal and Installation"](#).

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

# MIRROR SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

YES >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

## PASSENGER SIDE

### PASSENGER SIDE : Description

INFOID:000000009133973

- The mirror sensor RH is installed to the door mirror RH.
- The resistance of 2 sensors (horizontal and vertical) is changed when the door mirror RH is operated.
- Automatic drive positioner control unit calculates the door mirror position according to the change of the voltage of 2 sensor input terminals.

### PASSENGER SIDE : Component Function Check

INFOID:000000009133974

#### 1. CHECK FUNCTION

1. Select "MIR/SEN RH U-D", "MIR/SEN RH R-L" in "DATA MONITOR" mode with CONSULT.
2. Check the mirror sensor RH signal under the following conditions.

| Monitor item   | Condition           | Value |
|----------------|---------------------|-------|
| MIR/SEN RH U-D | Close to peak       | 3.4V  |
|                | Close to valley     | 0.6V  |
| MIR/SEN RH R-L | Close to right edge | 3.4V  |
|                | Close to left edge  | 0.6V  |

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-119. "PASSENGER SIDE : Diagnosis Procedure"](#).

### PASSENGER SIDE : Diagnosis Procedure

INFOID:000000009133975

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK DOOR MIRROR RH SENSOR SIGNAL

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

| (+) Door mirror RH                    |          | (-)    | Condition      | Voltage (V)<br>(Approx.) |     |
|---------------------------------------|----------|--------|----------------|--------------------------|-----|
| Connector                             | Terminal |        |                |                          |     |
| D116<br>(with around view monitor)    | 21       | Ground | Door mirror RH | Close to peak            | 3.4 |
|                                       |          |        |                | Close to valley          | 0.6 |
|                                       | 22       |        | Door mirror RH | Close to right edge      | 3.4 |
|                                       |          |        |                | Close to left edge       | 0.6 |
| D107<br>(without around view monitor) | 4        | Ground | Door mirror RH | Close to peak            | 3.4 |
|                                       |          |        |                | Close to valley          | 0.6 |
|                                       | 6        |        | Door mirror RH | Close to right edge      | 3.4 |
|                                       |          |        |                | Close to left edge       | 0.6 |

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

#### 2. CHECK DOOR MIRROR RH SENSOR CIRCUIT 1

1. Turn ignition switch OFF.

# MIRROR SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

2. Disconnect automatic drive positioner control unit and door mirror RH.
3. Check continuity between automatic drive positioner control unit harness connector and door mirror RH harness connector.

| Automatic drive positioner control unit |          | Door mirror RH                     |          | Continuity |
|---|----------|------------------------------------|----------|------------|
| Connector                               | Terminal | Connector                          | Terminal |            |
| M33                                     | 5        | D116<br>(with around view monitor) | 21       | Yes        |
|   | 17       |                                    | 22       |            |
| M33                                     | 5        | D107<br>(with around view monitor) | 4        | Yes        |
|   | 17       |                                    | 6        |            |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 5        |        | No         |
|   | 17       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK DOOR MIRROR RH SENSOR CIRCUIT 2

1. Check continuity between automatic drive positioner control unit harness connector and door mirror RH harness connector.

| Automatic drive positioner control unit |          | Door mirror LH                     |          | Continuity |
|---|----------|------------------------------------|----------|------------|
| Connector                               | Terminal | Connector                          | Terminal |            |
| M33                                     | 20       | D116<br>(with around view monitor) | 24       | Yes        |
|   | 21       |                                    | 23       |            |
| M33                                     | 20       | D107<br>(with around view monitor) | 5        | Yes        |
|   | 21       |                                    | 3        |            |

2. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 20       |        | No         |
|   | 21       |        |            |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### 4. CHECK TILT MOTOR ADJUSTING OPERATION

1. Connect automatic drive positioner control unit and door mirror RH.
2. Turn ignition switch ON.
3. Check tilt motor adjusting operation with memory function.

Is the operation normal?

YES >> Replace door mirror actuator. (Built in door mirror RH). Refer to [MIR-29. "Removal and Installation"](#).

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).

### 5. CHECK INTERMITTENT INCIDENT

Refer to [GI-53. "Intermittent Incident"](#).



# MIRROR SENSOR

## < DTC/CIRCUIT DIAGNOSIS >

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### Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).
- NO >> Repair or replace the malfunctioning part.

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# SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## SLIDING MOTOR

### Description

INFOID:000000009133976

- The sliding motor LH is installed to the seat frame.
- The sliding motor LH is activated with the driver seat control unit.
- The seat is slid forward/backward by changing the rotation direction of sliding motor LH.

### Component Function Check

INFOID:000000009133977

#### 1. CHECK FUNCTION

1. Select "SEAT SLIDE" in "ACTIVE TEST" mode with CONSULT.
2. Check the sliding motor LH operation.

| Test Item  |     | Description  |          |
|------------|-----|--------------|----------|
| SEAT SLIDE | OFF | Seat sliding | Stop     |
|            | FR  |              | Forward  |
|            | RR  |              | Backward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-122. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133978

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK SLIDING MOTOR LH POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT SLIDE") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)       |          | (-)    | Condition     | Voltage (V)<br>(Approx.) |                 |
|-----------|----------|--------|---------------|--------------------------|-----------------|
| Connector | Terminal |        |               |                          |                 |
| B210      | 36       | Ground | SEAT<br>SLIDE | OFF                      | 0               |
|           |          |        |               | FR (forward)             | 0               |
|           |          |        |               | RR (backward)            | Battery voltage |
|           | 44       |        |               | OFF                      | 0               |
|           |          |        |               | FR (forward)             | Battery voltage |
|           |          |        |               | RR (backward)            | 0               |

Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to [SE-113. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK SLIDING MOTOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and sliding motor LH.
3. Check continuity between driver seat control unit harness connector and sliding motor LH harness connector.

# SLIDING MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Sliding motor LH |          | Continuity |
|--------------------------|----------|------------------|----------|------------|
| Connector                | Terminal | Connector        | Terminal |            |
| B210                     | 36       | B211             | 4        | Yes        |
|                          | 44       |                  | 5        |            |

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

| Driver seat control unit connector |          | Ground | Continuity |
|------------------------------------|----------|--------|------------|
| Connector                          | Terminal |        |            |
| B210                               | 36       |        | No         |
|                                    | 44       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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# RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## RECLINING MOTOR

### Description

INFOID:000000009133979

- The reclining motor LH is installed to the seatback assembly.
- The reclining motor LH is activated with the driver seat control unit.
- The seatback is reclined forward/backward by changing the rotation direction of reclining motor LH.

### Component Function Check

INFOID:000000009133980

#### 1. CHECK FUNCTION

1. Select "SEAT RECLINING" in "ACTIVE TEST" mode with CONSULT.
2. Check the reclining motor LH operation.

| Test Item      |     | Description    |          |
|----------------|-----|----------------|----------|
| SEAT RECLINING | OFF | Seat reclining | Stop     |
|                | FR  |                | Forward  |
|                | RR  |                | Backward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-124. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133981

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK RECLINING MOTOR LH POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT RECLINING") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)                      |          | (-)    | Condition       | Voltage (V)<br>(Approx.) |   |
|--------------------------|----------|--------|-----------------|--------------------------|---|
| Driver seat control unit |          |        |                 |                          |   |
| Connector                | Terminal |        |                 |                          |   |
| B210                     | 43       | Ground | SEAT RE-CLINING | OFF                      | 0 |
|                          |          |        | FR (forward)    | 0                        |   |
|                          |          |        | RR (backward)   | Battery voltage          |   |
|                          | 35       |        | OFF             | 0                        |   |
|                          |          |        | FR (forward)    | Battery voltage          |   |
|                          |          |        | RR (backward)   | 0                        |   |

Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to [SE-113. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK RECLINING MOTOR LH CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and reclining motor LH.
3. Check continuity between driver seat control unit harness connector and reclining motor LH harness connector.

# RECLINING MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Reclining motor LH |          | Continuity |
|--------------------------|----------|--------------------|----------|------------|
| Connector                | Terminal | Connector          | Terminal |            |
| B210                     | 35       | B217               | 6        | Yes        |
|                          | 43       |                    | 4        |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B210                     | 35       |        | No         |
|                          | 43       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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# LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING MOTOR (FRONT)

### Description

INFOID:000000009133982

- The lifting motor LH (front) is installed to the seat frame.
- The lifting motor LH (front) is activated with the driver seat control unit.
- The lifter (front) is moved upward/downward by changing the rotation direction of lifting motor LH (front).

### Component Function Check

INFOID:000000009133983

#### 1. CHECK FUNCTION

1. Select "SEAT LIFTER FR" in "ACTIVE TEST" mode with CONSULT.
2. Check the lifting motor LH (front) operation.

| Test Item      |     | Description          |          |
|----------------|-----|----------------------|----------|
| SEAT LIFTER FR | OFF | Seat lifting (front) | Stop     |
|                | UP  |                      | Upward   |
|                | DWN |                      | Downward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-126. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133984

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK LIFTING MOTOR LH (FRONT) POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT LIFTER FR") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)                                   |          | (-)    | Condition          | Voltage (V)<br>(Approx.) |
|---------------------------------------|----------|--------|--------------------|--------------------------|
| Driver seat control unit<br>Connector | Terminal |        |                    |                          |
| B210                                  | 34       | Ground | SEAT LIFTER FR OFF | 0                        |
|                                       |          |        | UP                 | 0                        |
|                                       |          |        | DWN (down)         | Battery voltage          |
|                                       | 42       |        | SEAT LIFTER FR OFF | 0                        |
|                                       |          |        | UP                 | Battery voltage          |
|                                       |          |        | DWN (down)         | 0                        |

Is the inspection result normal?

YES >> Replace lifting motor LH (front). Refer to [SE-113. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK LIFTING MOTOR LH (FRONT) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor LH (front).
3. Check continuity between driver seat control unit harness connector and lifting motor LH (front) harness connector.

# LIFTING MOTOR (FRONT)

## < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Lifting motor LH (front) |          | Continuity |
|--------------------------|----------|--------------------------|----------|------------|
| Connector                | Terminal | Connector                | Terminal |            |
| B210                     | 34       | B218                     | 6        | Yes        |
|                          | 42       |                          | 4        |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B210                     | 34       |        | No         |
|                          | 42       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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# LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

## LIFTING MOTOR (REAR)

### Description

INFOID:000000009133985

- The lifting motor LH (rear) is installed to the seat frame.
- The lifting motor LH (rear) is activated with the driver seat control unit.
- The seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor LH (rear).

### Component Function Check

INFOID:000000009133986

#### 1. CHECK FUNCTION

1. Select "SEAT LIFTER RR" in "ACTIVE TEST" mode with CONSULT.
2. Check the lifting motor LH (rear) operation.

| Test Item      |     | Description         |          |
|----------------|-----|---------------------|----------|
| SEAT LIFTER RR | OFF | Seat lifting (rear) | Stop     |
|                | UP  |                     | Upward   |
|                | DWN |                     | Downward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-128. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133987

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK LIFTING MOTOR LH (REAR) POWER SUPPLY

1. Turn the ignition switch to ACC.
2. Perform "ACTIVE TEST" ("SEAT LIFTER RR") with CONSULT.
3. Check voltage between driver seat control unit harness connector and ground.

| (+)                                   |          | (-)    | Condition          | Voltage (V)<br>(Approx.) |
|---------------------------------------|----------|--------|--------------------|--------------------------|
| Driver seat control unit<br>Connector | Terminal |        |                    |                          |
| B210                                  | 40       | Ground | SEAT LIFTER RR OFF | 0                        |
|                                       |          |        | UP                 | 0                        |
|                                       |          |        | DWN (down)         | Battery voltage          |
|                                       | 41       |        | SEAT LIFTER RR OFF | 0                        |
|                                       |          |        | UP                 | Battery voltage          |
|                                       |          |        | DWN (down)         | 0                        |

Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to [SE-113. "Removal and Installation"](#).

NO >> GO TO 2.

#### 2. CHECK LIFTING MOTOR (REAR) CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and lifting motor LH (rear).
3. Check continuity between driver seat control unit harness connector and lifting motor LH (rear) harness connector.



## LIFTING MOTOR (REAR)

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Lifting motor LH (rear) |          | Continuity |
|--------------------------|----------|-------------------------|----------|------------|
| Connector                | Terminal | Connector               | Terminal |            |
| B210                     | 41       | B207                    | 6        | Yes        |
|                          | 40       |                         | 4        |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B210                     | 41       |        | No         |
|                          | 40       |        |            |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

### 3. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

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# TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## TILT MOTOR

### Description

INFOID:000000009133988

- The tilt motor is installed to the steering column assembly.
- The tilt motor is activated with the automatic drive positioner control unit.
- The steering column is tilted upward/downward by changing the rotation direction of tilt motor.

### Component Function Check

INFOID:000000009133989

#### 1. CHECK FUNCTION

1. Select "TILT MOTOR" in "ACTIVE TEST" mode with CONSULT.
2. Check the tilt motor operation.

| Test item  |     | Description   |          |
|------------|-----|---------------|----------|
| TILT MOTOR | OFF | Steering tilt | Stop     |
|            | UP  |               | Upward   |
|            | DWN |               | Downward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-130. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133990

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK TILT MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect tilt motor.
3. Turn the ignition switch ON.
4. Perform "ACTIVE TEST" ("TILT MOTOR") with CONSULT.
5. Check voltage between tilt motor harness connector and ground.

| (+)        |           | (-)    | Condition  | Voltage (V)<br>(Approx.) |   |
|------------|-----------|--------|------------|--------------------------|---|
| Tilt motor |           |        |            |                          |   |
| Connector  | Terminals |        |            |                          |   |
| M85        | 2         | Ground | TILT MOTOR | OFF                      | 0 |
|            |           |        | UP         | 0                        |   |
|            |           |        | DWN (down) | Battery voltage          |   |
|            | 1         |        | TILT MOTOR | OFF                      | 0 |
|            |           |        | UP         | Battery voltage          |   |
|            |           |        | DWN (down) | 0                        |   |

Is the inspection result normal?

YES >> Replace tilt motor. Refer to [ST-48. "Exploded View"](#).

NO >> GO TO 2.

#### 2. CHECK TILT MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.

# TILT MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | Tilt motor |          | Continuity |
|---|----------|------------|----------|------------|
| Connector                               | Terminal | Connector  | Terminal |            |
| M34                                     | 28       | M85        | 2        | Yes        |
|   | 29       |            | 1        |            |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M34                                     | 28       |        | No         |
|   | 29       |        |            |

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).  
 NO >> Repair or replace harness.

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# TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC MOTOR

### Description

INFOID:000000009133991

- The telescopic motor is installed to the steering column assembly.
- The telescopic motor is activated with the automatic drive positioner control unit.
- Compresses the steering column by changing the rotation direction of telescopic motor.

### Component Function Check

INFOID:000000009133992

#### 1. CHECK FUNCTION

1. Select "TELESCO MOTOR" in "ACTIVE TEST" mode with CONSULT.
2. Check the telescopic motor operation.

| Test item     |     | Description         |          |
|---------------|-----|---------------------|----------|
| TELESCO MOTOR | OFF | Steering telescopic | Stop     |
|               | FR  |                     | Forward  |
|               | RR  |                     | Backward |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-132. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133993

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK TELESCOPIC MOTOR POWER SUPPLY

1. Turn ignition switch OFF.
2. Disconnect telescopic motor.
3. Turn the ignition switch ON.
4. Perform "ACTIVE TEST" ("TELESCO MOTOR") with CONSULT.
5. Check voltage between telescopic motor harness connector and ground.

| (+)       |           | (-)    | Condition                | Voltage (V)<br>(Approx.) |   |
|-----------|-----------|--------|--------------------------|--------------------------|---|
| Connector | Terminals |        |                          |                          |   |
| M94       | 2         | Ground | TELE-<br>SCOPIC<br>MOTOR | OFF                      | 0 |
|           |           |        | FR (forward)             | 0                        |   |
|           |           |        | RR (backward)            | Battery voltage          |   |
|           | 1         |        | OFF                      | 0                        |   |
|           |           |        | FR (forward)             | Battery voltage          |   |
|           |           |        | RR (backward)            | 0                        |   |

Is the inspection result normal?

YES >> Replace telescopic motor. Refer to [ST-48. "Exploded View"](#).

NO >> GO TO 2.

#### 2. CHECK TELESCOPIC MOTOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit.
3. Check continuity between automatic drive positioner control unit harness connector and telescopic motor harness connector.

# TELESCOPIC MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          | Telescopic motor |          | Continuity |
|---|----------|------------------|----------|------------|
| Connector                               | Terminal | Connector        | Terminal |            |
| M34                                     | 29       | M94              | 1        | Yes        |
|   | 26       |                  | 2        |            |

4. Check continuity between automatic drive positioner control unit harness connector and ground.

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M34                                     | 29       |        | No         |
|   | 26       |        |            |

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to [ADP-143. "Removal and Installation"](#).  
 NO >> Repair or replace harness.

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# DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

## DOOR MIRROR MOTOR

### Description

INFOID:000000009133994

It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.

### Component Function Check

INFOID:000000009133995

#### 1. CHECK DOOR MIRROR MOTOR FUNCTION

Check the operation with "MIRROR MOTOR RH" and "MIRROR MOTOR LH" in "ACTIVE TEST" mode with CONSULT.

Refer to [ADP-22, "CONSULT Function \(AUTO DRIVE POS\)"](#).

Is the inspection result normal?

YES >> Door mirror motor function is OK.

NO >> Refer to [ADP-134, "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009133996

Regarding Wiring Diagram information, refer to [ADP-36, "Wiring Diagram"](#).

#### 1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between door mirror connector and ground.

| (+)   |          | (-)    | Door mirror remote control switch condition | Voltage (V) (Approx.) |
|---|----------|--------|---|-----------------------|
| Door mirror   |          |        |   |                       |
| Connector   | Terminal |        |   |                       |
| D6 (LH)<br>D116 (RH)<br>(with around view monitor)    | 12       | Ground | UP  | Battery voltage       |
|   |          |        | Other than above                            | 0                     |
|   | 11       |        | LEFT  | Battery voltage       |
|   |          |        | Other than above                            | 0                     |
|   | 10       |        | DOWN / RIGHT                                | Battery voltage       |
|   |          |        | Other than above                            | 0                     |
| D4 (LH)<br>D107 (RH)<br>(without around view monitor) | 8        | Ground | UP  | Battery voltage       |
|   |          |        | Other than above                            | 0                     |
|   | 9        |        | LEFT  | Battery voltage       |
|   |          |        | Other than above                            | 0                     |
|   | 10       |        | DOWN / RIGHT                                | Battery voltage       |
|   |          |        | Other than above                            | 0                     |

Is the inspection result normal?

YES >> Refer to [ADP-136, "Component Inspection"](#).

NO >> GO TO 2.

#### 2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.
2. Disconnect automatic drive positioner control unit and door mirror.
3. Check continuity between automatic drive positioner control unit connector and door mirror connector.

# DOOR MIRROR MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

Door mirror LH

| Automatic drive positioner control unit |          | Door mirror LH connector            |          | Continuity |
|---|----------|-------------------------------------|----------|------------|
| Connector                               | Terminal | Connector                           | Terminal |            |
| M33                                     | 12       | D6<br>(with around view monitor)    | 10       | Yes        |
|   | 23       |                                     | 12       |            |
|   | 24       |                                     | 11       |            |
| M33                                     | 12       | D4<br>(without around view monitor) | 10       | Yes        |
|   | 23       |                                     | 8        |            |
|   | 24       |                                     | 9        |            |

Door mirror RH

| Automatic drive positioner control unit |          | Door mirror RH                        |          | Continuity |
|---|----------|---------------------------------------|----------|------------|
| Connector                               | Terminal | Connector                             | Terminal |            |
| M33                                     | 10       | D116<br>(with around view monitor)    | 12       | Yes        |
|   | 11       |                                       | 11       |            |
|   | 22       |                                       | 10       |            |
| M33                                     | 10       | D107<br>(without around view monitor) | 8        | Yes        |
|   | 11       |                                       | 9        |            |
|   | 22       |                                       | 10       |            |

### 4. Check continuity between automatic drive positioner control unit connector and ground.

Door mirror LH

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 12       |        | No         |
|   | 23       |        |            |
|   | 24       |        |            |

Door mirror RH

| Automatic drive positioner control unit |          | Ground | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal |        |            |
| M33                                     | 10       |        | No         |
|   | 11       |        |            |
|   | 22       |        |            |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

Door mirror LH

| (+)                                     |          | (-) | Mirror switch condition | Voltage (V)<br>(Approx.) |
|---|----------|-----|-------------------------|--------------------------|
| Automatic drive positioner control unit |          |     |                         |                          |
| Connector                               | Terminal |     |                         |                          |
|   |          |     |                         |                          |

# DOOR MIRROR MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

|     |    |        |                  |                 |
|-----|----|--------|------------------|-----------------|
| M33 | 12 | Ground | DOWN / RIGHT     | Battery voltage |
|     |    |        | Other than above | 0               |
|     | 23 |        | UP               | Battery voltage |
|     |    |        | Other than above | 0               |
|     | 24 |        | LEFT             | Battery voltage |
|     |    |        | Other than above | 0               |

Door mirror RH

| (+)                                     |          | (-)    | Mirror switch condition | Voltage (V)<br>(Approx.) |
|---|----------|--------|-------------------------|--------------------------|
| Automatic drive positioner control unit |          |        |                         |                          |
| Connector                               | Terminal |        |                         |                          |
| M33                                     | 10       | Ground | UP                      | Battery voltage          |
|   |          |        | Other than above        | 0                        |
|   | 11       |        | LEFT                    | Battery voltage          |
|   |          |        | Other than above        | 0                        |
|   | 22       |        | DOWN / RIGHT            | Battery voltage          |
|   |          |        | Other than above        | 0                        |

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to [ADP-143, "Removal and Installation"](#).

## 4. CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to [ADP-136, "Component Inspection"](#).

Is the inspection result normal?

YES >> Refer to [GI-53, "Intermittent Incident"](#).

NO >> Replace door mirror actuator. Refer to [MIR-29, "Removal and Installation"](#).

## Component Inspection

INFOID:000000009133997

### 1. CHECK DOOR MIRROR MOTOR-I

Check that door mirror motor does not trap foreign objects and does not have any damage.

Refer to [MIR-29, "Exploded View"](#).

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror actuator. Refer to [MIR-29, "Removal and Installation"](#).

### 2. CHECK DOOR MIRROR MOTOR-II

1. Turn ignition switch OFF.
2. Disconnect door mirror.
3. Apply 12V to each power supply terminal of door mirror motor.

| Door mirror connector                              | Terminal |     | Operational direction |
|--|----------|-----|-----------------------|
|  | (+)      | (-) |                       |
| D6 (LH)<br>D116 (RH)<br>(with around view monitor) | 10       | 11  | RIGHT                 |
|  | 11       | 10  | LEFT                  |
|  | 12       | 10  | UP                    |
|  | 10       | 12  | DOWN                  |



# DOOR MIRROR MOTOR

## < DTC/CIRCUIT DIAGNOSIS >

| Door mirror connector                                 | Terminal |     | Operational direction |
|---|----------|-----|-----------------------|
|   | (+)      | (-) |                       |
| D4 (LH)<br>D107 (RH)<br>(without around view monitor) | 10       | 9   | RIGHT                 |
|   | 9        | 10  | LEFT                  |
|   | 8        | 10  | UP                    |
|   | 10       | 8   | DOWN                  |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror actuator. Refer to [MIR-29. "Removal and Installation"](#).

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# SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

## SEAT MEMORY INDICATOR

### Description

INFOID:000000009133998

- Memory switch is equipped on the seat memory switch installed to the driver side door trim. The operation signal is input to the driver seat control unit when the memory switch is operated.
- The status of automatic drive positioner system can be checked according to the illuminating/flashing status.

### Component Function Check

INFOID:000000009133999

#### 1. CHECK FUNCTION

1. Select "MEMORY SW INDCTR" in "ACTIVE TEST" mode with CONSULT.
2. Check the memory indicator operation.

| Test item        |      | Description             |                 |
|------------------|------|-------------------------|-----------------|
| MEMORY SW INDCTR | OFF  | Memory switch indicator | OFF             |
|                  | ON-1 |                         | Indicator 1: ON |
|                  | ON-2 |                         | Indicator 2: ON |

Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to [ADP-138. "Diagnosis Procedure"](#).

### Diagnosis Procedure

INFOID:000000009134000

Regarding Wiring Diagram information, refer to [ADP-36. "Wiring Diagram"](#).

#### 1. CHECK SEAT MEMORY INDICATOR CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect driver seat control unit and seat memory switch.
3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

| Driver seat control unit |          | Seat memory switch |          | Continuity |
|--------------------------|----------|--------------------|----------|------------|
| Connector                | Terminal | Connector          | Terminal |            |
| B209                     | 10       | D60                | 13       | Yes        |
|                          | 26       |                    | 14       |            |

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

| Driver seat control unit |          | Ground | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal |        |            |
| B209                     | 10       |        | No         |
|                          | 26       |        |            |

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

#### 2. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

# SEAT MEMORY INDICATOR

## < DTC/CIRCUIT DIAGNOSIS >

| (+)                |           | (-)    | Voltage (V)<br>(Approx.) |
|--------------------|-----------|--------|--------------------------|
| Seat memory switch |           |        |                          |
| Connector          | Terminals |        |                          |
| D60                | 15        | Ground | Battery voltage          |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Check the following:

- 10A fuse no.1.
- Harness for open or short between memory indicator and fuse.

## 3. CHECK MEMORY INDICATOR

Refer to [ADP-139, "Component Inspection"](#).

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

## 4. CHECK INTERMITTENT INCIDENT

Refer to [GI-53, "Intermittent Incident"](#).

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to [ADP-142, "Removal and Installation"](#).

NO >> Repair or replace the malfunctioning part.

## Component Inspection

INFOID:000000009134001

## 1. CHECK SEAT MEMORY INDICATOR

1. Disconnect seat memory switch.
2. Check continuity between seat memory switch terminals.

| Terminal           |     | Continuity |
|--------------------|-----|------------|
| Seat memory switch |     |            |
| (+)                | (-) |            |
| 15                 | 13  | Yes        |
|                    | 14  |            |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace seat memory switch. Refer to [ADP-144, "Removal and Installation"](#).

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# ADP SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

## SYMPTOM DIAGNOSIS

### ADP SYSTEM SYMPTOMS

#### Symptom Table

INFOID:000000009134002

**NOTE:**

Always perform the "Basic Inspection" before performing diagnosis in the following table. Refer to [ADP-51](#), "Work Flow".

| Symptom  | Diagnosis procedure   | Reference page  |
|--|---|---|
| Manual functions (for specific part) do not operate.   | Sliding operation   | Check sliding switch. <a href="#">ADP-73</a>  |
|  | Reclining operation   | Check reclining switch. <a href="#">ADP-76</a>  |
|  | Lifting operation (front)   | Check lifting switch (front). <a href="#">ADP-79</a>  |
|  | Lifting operation (rear)  | Check lifting switch (rear). <a href="#">ADP-82</a>   |
|  | Tilt operation  | Check tilt switch. <a href="#">ADP-85</a>   |
|  | Telescopic sensor   | Check telescopic switch. <a href="#">ADP-87</a>   |
|  | Door mirror operation   | 1. Changeover switch. <a href="#">ADP-92</a>  |
|  |   | 2. Mirror switch <a href="#">ADP-94</a>   |
| All parts of seat  | Check power seat switch ground circuit. <a href="#">ADP-97</a>    |   |
| Memory functions (for specific part) do not operate.   | Sliding operation   | Check sliding sensor. <a href="#">ADP-99</a>  |
|  | Reclining operation   | Check reclining sensor. <a href="#">ADP-102</a>   |
|  | Lifting operation (front)   | Check lifting sensor (front). <a href="#">ADP-105</a>   |
|  | Lifting operation (rear)  | Check lifting sensor (rear). <a href="#">ADP-108</a>  |
|  | Tilt operation  | Check tilt sensor. <a href="#">ADP-111</a>  |
|  | Telescopic operation  | Check telescopic sensor. <a href="#">ADP-114</a>  |
|  | Door mirror operation   | Check door mirror sensor. Driver side: <a href="#">ADP-117</a><br>Passenger side: <a href="#">ADP-119</a> |
| Memory functions and manual functions (for specific part) do not operate.  | Sliding operation   | Check sliding motor LH. <a href="#">ADP-122</a>   |
|  | Reclining operation   | Check reclining motor LH. <a href="#">ADP-124</a>   |
|  | Lifting operation (front)   | Check lifting motor LH (front). <a href="#">ADP-126</a>   |
|  | Lifting operation (rear)  | Check lifting motor LH (rear). <a href="#">ADP-128</a>  |
|  | Tilt operation  | Check tilt motor. <a href="#">ADP-130</a>   |
|  | Telescopic operation  | Check telescopic motor. <a href="#">ADP-132</a>   |
|  | Door mirror operation   | Check door mirror motor. <a href="#">ADP-134</a>  |
| Entry/Exit assist function does not operate.   | 1. Check system setting. <a href="#">ADP-11</a>                   |   |
|  | 2. Perform initialization. <a href="#">ADP-55</a>                 |   |
|  | 3. Check front door switch (driver side). <a href="#">DLK-170</a> |   |
| Intelligent Key interlock function does not operate.<br>(Other automatic operations and Intelligent Key system are normal) | 1. Check door lock function. <a href="#">DLK-20</a>               |   |
|  | 2. Perform memory storing. <a href="#">ADP-56</a>                 |   |

# NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

## NORMAL OPERATING CONDITION

### Description

INFOID:000000009134003

The following symptoms are normal operations, and they do not indicate a malfunction.

| Symptom  | Cause   | Action to take                     | Reference page  |
|--|---|------------------------------------|---|
| Entry/exit assist function do not operate.   | No initialization has been performed.   | Perform initialization.            | <a href="#">ADP-55</a>  |
|  | Entry/exit assist function is disabled.<br><b>NOTE:</b><br>Entry/exit assist function is set to ON before delivery (initial setting). | Change the settings.               | <a href="#">ADP-57</a>  |
| Entry assist function does not operate.  | Manual operation with power seat switch was performed after exit assist function execution.   | Perform the entry assist function. | <a href="#">ADP-18</a>  |
| Memory function, entry/exit assist function, or Intelligent Key interlock function does not operate. | The operating conditions are not fulfilled.   | Fulfill the operation conditions.  | Memory function:<br><a href="#">ADP-15</a>                    |
|  |   |                                    | Entry assist function:<br><a href="#">ADP-18</a>              |
|  |   |                                    | Exit assist function:<br><a href="#">ADP-17</a>               |
|  |   |                                    | Intelligent Key interlock function:<br><a href="#">ADP-19</a> |

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# DRIVER SEAT CONTROL UNIT

< REMOVAL AND INSTALLATION >

## REMOVAL AND INSTALLATION

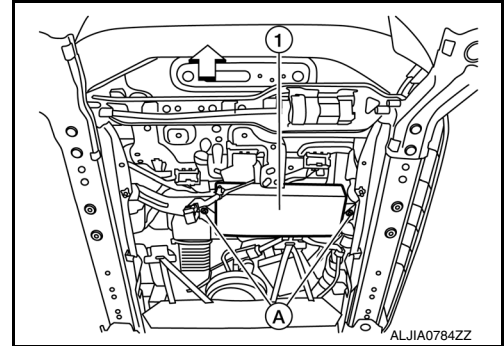
### DRIVER SEAT CONTROL UNIT

#### Removal and Installation

INFOID:000000009134004

#### REMOVAL

1. Remove the driver seat. Refer to [SE-113. "Removal and Installation"](#).  
↳ Front
2. Remove the two driver seat control unit screws (A).
3. Disconnect the two harness connectors from driver seat control unit.
4. Remove the driver seat control unit (1).



#### INSTALLATION

Installation is in the reverse order of removal.

#### NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to [ADP-55. "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure"](#).

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

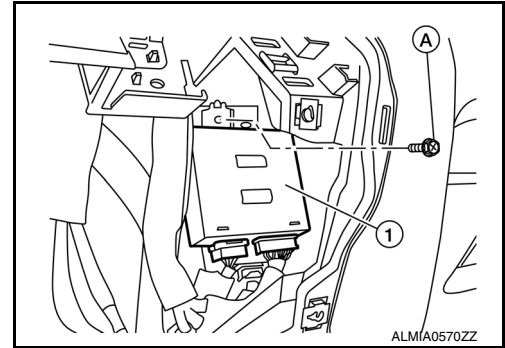
## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

### Removal and Installation

INFOID:000000009134005

#### REMOVAL

1. Disconnect the negative battery terminal. Refer to [PG-93, "Removal and Installation"](#).
2. Remove the AV and AC switch assembly. Refer to [AV-587, "Removal and Installation - A/C and AV Switch Assembly"](#).
3. Remove the automatic drive positioner control unit screw (A).
4. Disconnect the two harness connectors from the automatic drive positioner control unit (1).
5. Remove automatic drive positioner control unit (1).



#### INSTALLATION

Installation is in the reverse order of removal.

#### NOTE:

After installing the automatic drive positioner control unit, perform additional service. Refer to [ADP-55, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Work Procedure"](#).

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# SEAT MEMORY SWITCH

< REMOVAL AND INSTALLATION >

## SEAT MEMORY SWITCH

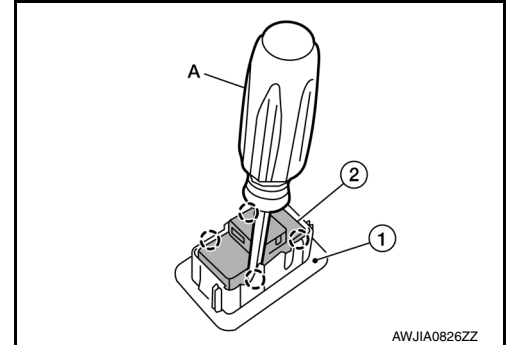
### Removal and Installation

INFOID:000000009134006

#### REMOVAL

1. Remove front door finisher LH (1). Refer to [INT-15. "Removal and Installation"](#).
2. Release the pawls using a suitable tool (A) and remove seat memory switch (2) from switch finisher (1).

○: Pawl



#### INSTALLATION

Installation is in the reverse order of removal.



# POWER SEAT SWITCH

< REMOVAL AND INSTALLATION >

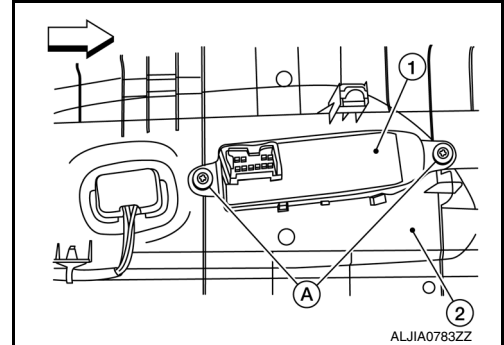
## POWER SEAT SWITCH

### Removal and Installation

INFOID:000000009134007

#### REMOVAL

1. Remove seat cushion outer finisher LH (2). Refer to [SE-148](#), "[Seat Cushion](#)".  
⇐: Front
2. Remove the power seat switch screws (A).
3. Remove power seat switch (1) from seat cushion outer finisher LH (2).



#### INSTALLATION

Installation is in the reverse order of removal.

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# ADP STEERING SWITCH

< REMOVAL AND INSTALLATION >


## ADP STEERING SWITCH

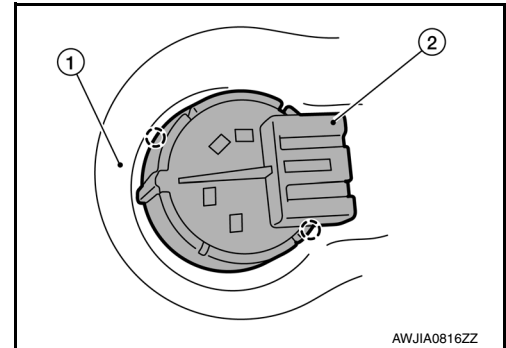
### Removal and Installation

INFOID:000000009134008

#### REMOVAL

1. Remove steering column lower cover (1). Refer to [IP-17. "Removal and Installation"](#).
2. Release the pawls and remove ADP steering switch (2) from the steering column lower cover (1).

: Pawl



#### INSTALLATION

Installation is in the reverse order of removal.