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### **PRECAUTIONS**

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# **PRECAUTION**

### **PRECAUTIONS**

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

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. 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:0000000009176518

- 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, wring the water out of the cloth and wipe the dirty area.
- Then rub with a soft, 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, wring the water out of the cloth and wipe the detergent off.
- Then rub with a soft, dry cloth.
- Do not use organic solvent such as thinner, benzene, alcohol or gasoline.
- For genuine leather seats, use a genuine leather seat cleaner.

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## **PREPARATION**

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# **PREPARATION**

# **PREPARATION**

# Special Service Tool

INFOID:0000000009176519

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               | AWJIA0483ZZ | Removing trim components |

# SYSTEM DESCRIPTION

# **COMPONENT PARTS**

# **Component Parts Location**



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### **COMPONENT PARTS**

### < SYSTEM DESCRIPTION >

- Push-button ignition switch
   BCM (view with instrument panel re- 3. TCM moved)
- 4. A. ADP steering switch (if equipped)
   5. A. Driver seat control unit
   6. Automatic drive positioner control unit (view with AV control unit requipped)
   6. C. Power seat switch LH
   6. Automatic drive positioner control unit (view with AV control unit removed)
   6. D. Sliding motor LH, reclining motor

LH, lifting motor LH (front/rear)

7. Door mirror LH (RH similar) 8. Power mirror remote control switch 9. Seat memory switch

## Component Description

INFOID:0000000009176521

| Component parts                         | Description   |
|---|---|
| Driver seat control unit                | <ul> <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> <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 (if equipped), door mirror and seat memory switch.</li> <li>Operates steering column (if equipped) and door mirror with the signal from the driver seat control unit</li> </ul>  |
| ВСМ                                     | Recognizes the following status and transmits it to driver seat control unit via CAN communication.  Handle position: LHD  Driver door: OPEN/CLOSE  Ignition switch position: ACC/ON  Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation)  Key ID  Starter: CRANKING/OTHER  |
| ТСМ                                     | The following signals are transmitted to driver seat control unit via CAN communication.  • Shift position signal (P range)  • Identification of transmission: CVT  |
| Combination meter                       | Transmits the vehicle speed signal to driver seat control unit via CAN communication.   |
| CVT shift selector (Detention switch)   | <ul> <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 >

| Comp   | onent parts            | Description   |  |
|--|------------------------|---|--|
| Power mirror remote con-                     | Mirror switch          | <ul> <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>  |  |
| trol switch                                  | Changeover switch      | <ul> <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 (if                      | Tilt switch            | <ul> <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>   |  |
| equipped)                                    | Telescopic switch      | <ul> <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>   |  |
|  | Set switch             | It is used for registration and setting change of driving position and Intelligent Key interlock function.  |  |
| Seat memory switch                           | Seat memory switch     | <ul> <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.  |  |
|  | Sliding switch         | <ul> <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>   |  |
| Davis and a sidely                           | Reclining switch       | <ul> <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>  |  |
| Power seat switch                            | Lifting switch (front) | <ul> <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> <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/<br>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> <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 >

| Com                            | ponent parts             | Description   |
|--------------------------------|--------------------------|---|
|                                | Tilt motor               | <ul> <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 motor (if equipped)       | Tilt sensor              | <ul> <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         | <ul> <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 motor (if equipped) | Telescopic sensor        | <ul> <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         | <ul> <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 di rection of sliding motor.</li> </ul>   |
| Sliding motor LH               | Sliding sensor           | <ul> <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       | <ul> <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 motor LH             | Reclining sensor         | <ul> <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> <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> <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 sea</li> </ul>   |
| Lifting motor LH (rear)        | Lifting motor LH (rear)  | <ul> <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> <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>   |

# **AUTOMATIC DRIVE POSITIONER SYSTEM**

# AUTOMATIC DRIVE POSITIONER SYSTEM: System Diagram

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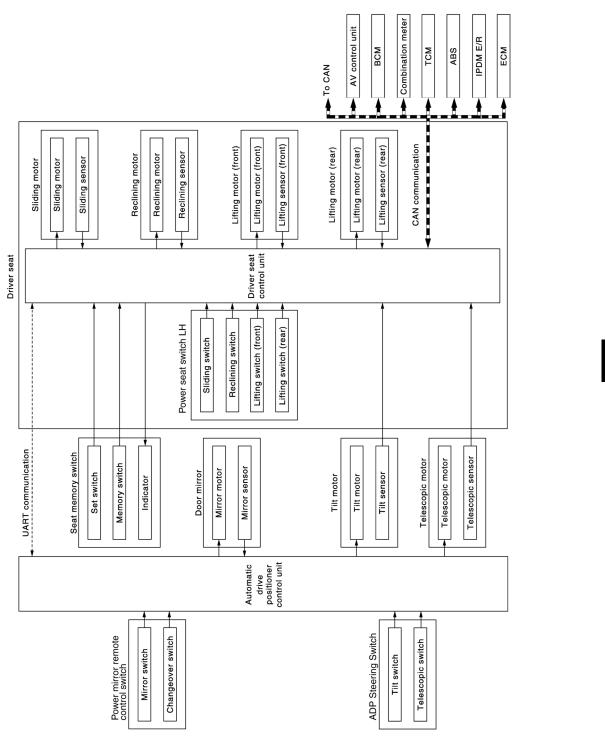
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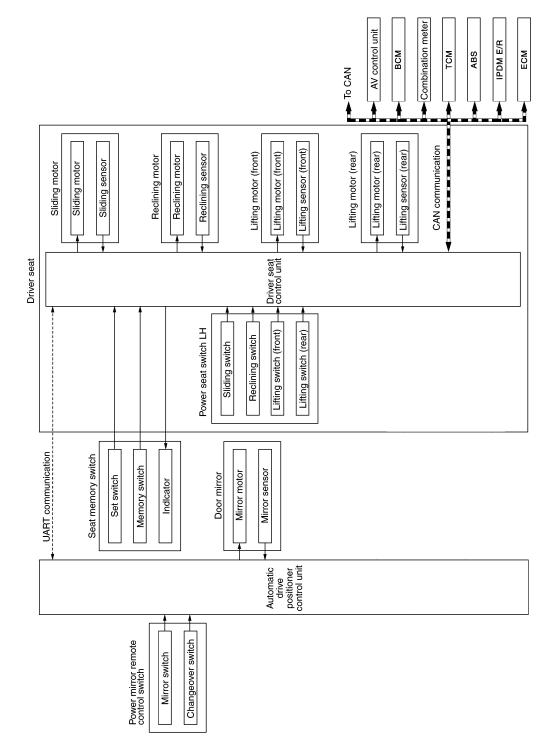
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WITH AROUND VIEW MONITOR



ALJIA0797GB

### WITHOUT AROUND VIEW MONITOR



ALJIA1262GB

# AUTOMATIC DRIVE POSITIONER SYSTEM: System Description

INFOID:0000000009176523

### **OUTLINE**

The system automatically moves the driver seat, steering column (if equipped) 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.

## < SYSTEM DESCRIPTION >

| 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).  |
|                                    | Exit | On exit, the seat moves backward and the steering column moves upward.  |
| Entry/Exit assist function 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

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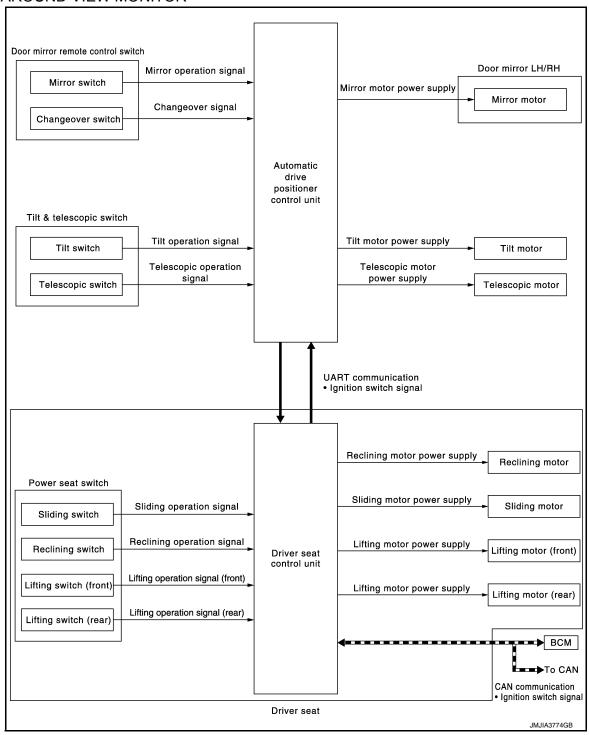
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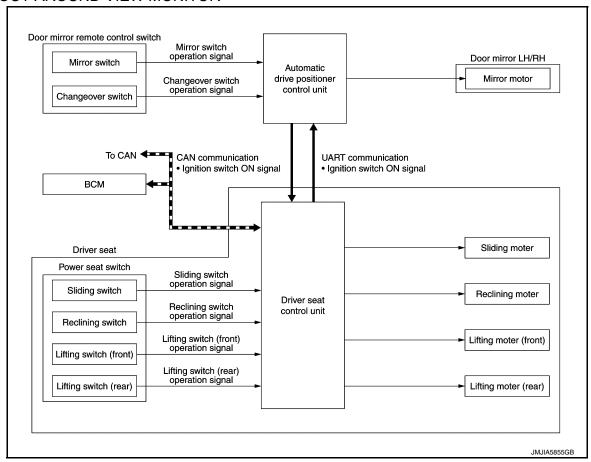
# MANUAL FUNCTION : System Diagram

INFOID:0000000009176524

### WITH AROUND VIEW MONITOR



### WITHOUT AROUND VIEW MONITOR



# MANUAL FUNCTION: System Description

INFOID:0000000009176525

# ADP

#### **OUTLINE**

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

### OPERATION PROCEDURE

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

### **DETAIL FLOW**

#### Seat

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

Tilt and Telescopic (if equipped)

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**ADP-15** Revision: May 2013 2014 Pathfinder

### < SYSTEM DESCRIPTION >

| 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<br>(tilt, telescopic) | The automatic drive positioner control unit actuates the motors according to the operation of the ADP steering switch signal.                                     |
| 3     | Sensors<br>(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<br>(Door mirror motor) | The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.                            |

### NOTE:

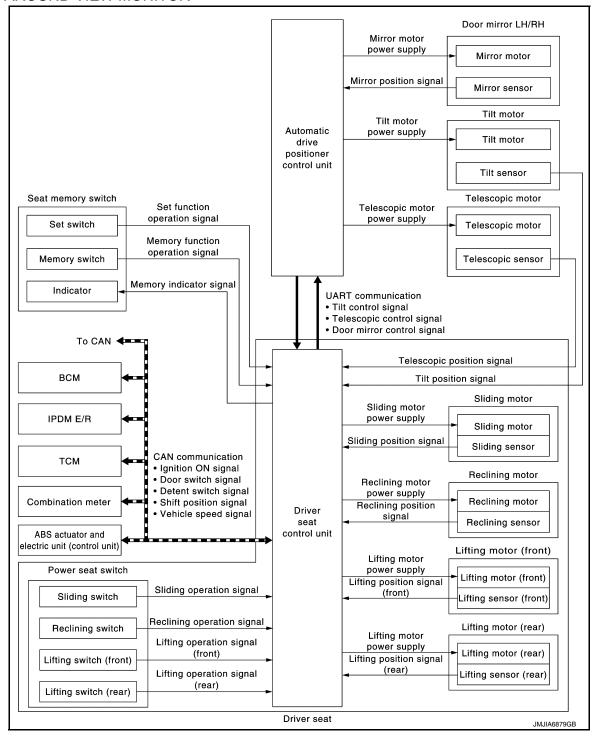
The door mirrors can be operated manually when ignition switch is in either ACC or ON position. The ignition switch signal (ACC/ON) is transmitted from BCM to the driver seat control unit via CAN communication and from the driver seat control unit to the automatic drive positioner control unit via UART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

## **MEMORY FUNCTION**

# **MEMORY FUNCTION: System Diagram**

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### WITH AROUND VIEW MONITOR



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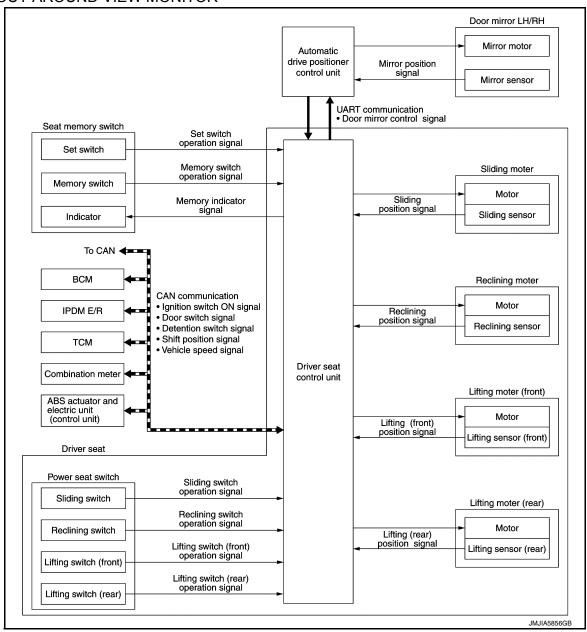
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### WITHOUT AROUND VIEW MONITOR



# MEMORY FUNCTION: System Description

INFOID:0000000009176527

### **OUTLINE**

The driver seat control unit can store the optimum driving positions [seat, steering column (if equipped) 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

- Turn ignition switch ON.
- Press desired memory switch.
- 3. Front seat LH, steering column (if equipped) 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.

### < SYSTEM DESCRIPTION >

| Item                              | Request status |
|-----------------------------------|----------------|
| Ignition position                 | ON             |
| Switch inputs                     |                |
| Power seat switch                 |                |
| ADP steering switch (if equipped) | OFF            |
| Door mirror control switch        | (Not operated) |
| Set switch                        | , , ,          |
| Seat memory switch                |                |
| 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  $\rightarrow$  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 position control unit when memory switch 1 or 2 is operated.  Memory switch signal is input to driver seat control unit via UAR 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 seat sensor input. The positions of the steering column and mirrors are monitored with each sensor signal that is input for drive positioner control unit via UART communication. Drive |  | 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**

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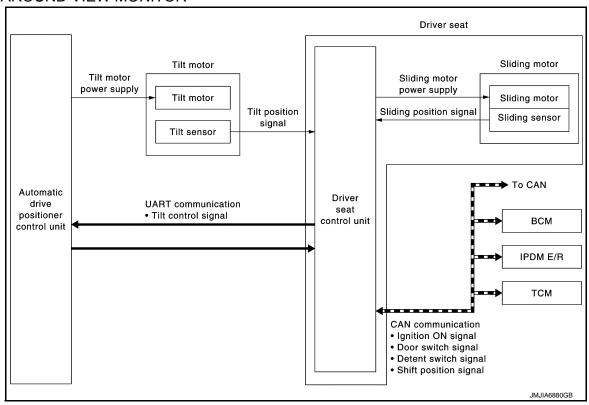
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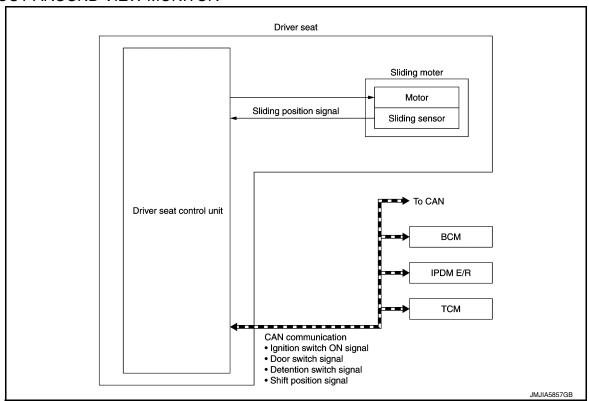
# **EXIT ASSIST FUNCTION : System Diagram**

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### WITH AROUND VIEW MONITOR



### WITHOUT AROUND VIEW MONITOR



**EXIT ASSIST FUNCTION: System Description** 

INFOID:0000000009176529

**OUTLINE** 

### < SYSTEM DESCRIPTION >

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  Power seat switch  ADP steering switch (if equipped)  Door mirror remote control switch  Set switch  Seat memory switch | OFF<br>(Not operated) |
| CVT selector lever   | P position            |

### **DETAIL FLOW**

| 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<br>LH, tilt (if equipped)] | 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 (if equipped) 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**

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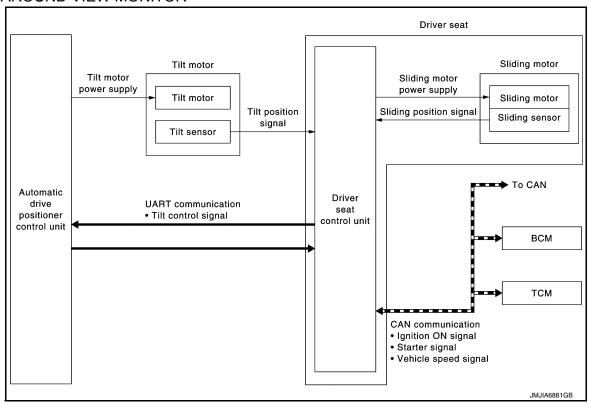
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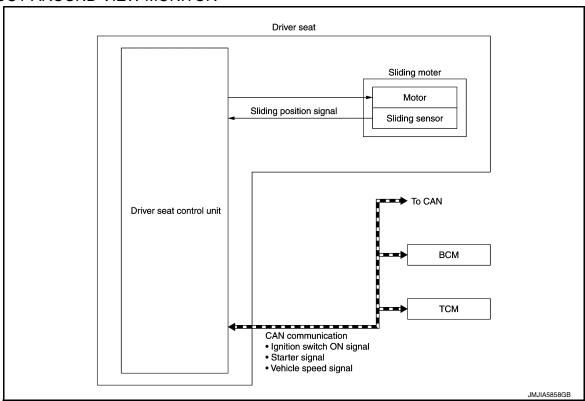
# **ENTRY ASSIST FUNCTION: System Diagram**

INFOID:0000000009176530

### WITH AROUND VIEW MONITOR



### WITHOUT AROUND VIEW MONITOR



**ENTRY ASSIST FUNCTION: System Description** 

INFOID:0000000009176531

**OUTLINE** 

### < SYSTEM DESCRIPTION >

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.

| ltem  | Request status  |
|---|---|
| Seat, steering column   | The vehicle is not moved after performing the exit assist function. |
| Switch inputs Power seat switch ADP steering switch (if equipped) Door mirror control switch Set switch Memory switch | 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 (if equipped)]   | Driver seat control unit operates the sliding motor LH when the operating conditions are satisfied and requests the operation of tilt motor (if equipped) to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates the tilt motor (if equipped). |
|       | Sensors [sliding, tilt (if equipped)] | _   | 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

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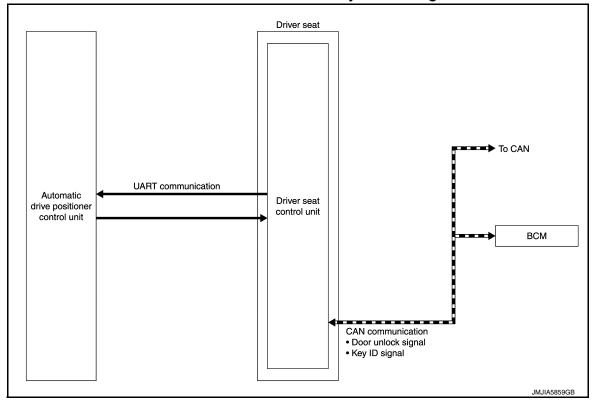
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# INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram

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# INTELLIGENT KEY INTERLOCK FUNCTION: System Description

INFOID:0000000009176533

- 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.
- 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**

- 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.

#### NOTF:

Further information for Intelligent Key interlock function. Refer to <u>ADP-74, "INTELLIGENT KEY INTERLOCK STORING: Description".</u>

#### OPERATION CONDITION

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

## < SYSTEM DESCRIPTION >

| Item  | Request status        |
|---|-----------------------|
| Ignition position   | OFF                   |
| Intelligent Key interlock function  | Registered            |
| Switch inputs  Power seat switch  Tilt & telescopic switch (if equipped)  Door mirror control switch  Set switch  Memory switch | OFF<br>(Not operated) |
| CVT shift selector  | P position            |

# **DETAIL FLOW**

| Order | Input  | Output | Control unit condition   |
|-------|--|--------|--|
| 1     | Door unlock signal (CAN)     Key ID signal (CAN) | _      | 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:000000009176534

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

| Operating in fail-safe mode                                     | Malfunction Item            | Related<br>DTC | Diagnosis     |
|---|-----------------------------|----------------|---------------|
|   | CAN communication           | U1000          | ADP-77        |
| Only manual functions operate normally.                         | CONTROL UNIT                | U1010          | <u>ADP-78</u> |
|   | EEPROM                      | B2130          | ADP-87        |
| Only manual functions, except door mirror, operate normally.    | UART communication          | B2128          | ADP-85        |
| Only manual functions, except seat sliding, operate normally.   | Seat sliding output         | B2112          | ADP-79        |
| Only manual functions, except seat reclining, operate normally. | Seat reclining output       | B2113          | <u>ADP-81</u> |
| Only manual functions, except steering tilt, operate normally.  | Steering column tilt output | B2116          | ADP-83        |

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# **DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)**

### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

# CONSULT Function (AUTO DRIVE POS.)

INFOID:0000000009176535

#### **CAUTION:**

After disconnecting the CONSULT vehicle interface (VI) from the data link connector, the ignition must be cycled OFF  $\rightarrow$  ON (for at least 5 seconds)  $\rightarrow$  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-35, "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<br>Signals | Selection<br>From<br>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/<br>CLOSED" | ×               | ×                         | ON/OFF status judged from the door switch (front driver side) signal.  |
| DOOR SW-FR    | "OPEN/<br>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<br>Signals | Selection<br>From<br>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.                         |

Revision: May 2013 ADP-27 2014 Pathfinder

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# **DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)**

# < SYSTEM DESCRIPTION >

| Monitor Item   | Unit         | Main<br>Signals | Selection<br>From<br>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 | " <b>V</b> " | -               | ×                         | Voltage input from door mirror sensor (passenger side) up/down is displayed.  |
| MIR/SEN RH R-L | " <b>V</b> " | _               | ×                         | 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:                                      | ON             |
| LATI SLAT SLIDE SETTING | ON (operated) – OFF (not operated)   | OFF            |
| EXIT TILT SETTING       | Entry/exit assist (steering column) can be selected:                           | ON             |
|                         | ON (operated) – OFF (not operated)   | OFF            |
|                         |  | 40 mm (1.6 in) |
| SEAT SLIDE VOLUME SET   | The amount of seat sliding for entry/exit assist can be selected from 3 items. | 80 mm (3.1 in) |
|                         |  | 150 mm (6 in)  |

< ECU DIAGNOSIS INFORMATION >

# **ECU DIAGNOSIS INFORMATION**

# DRIVER SEAT CONTROL UNIT

Reference Value

### VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

| Monitor Item      | Condi                        | tion                     | Value/Status    |
|-------------------|------------------------------|--------------------------|-----------------|
| DETENT OW         | O)/T calcutantantan          | P position               | OFF             |
| DETENT SW         | CVT selector lever           | Other than above         | ON              |
| D DANG CAN CAN    | O)/T coloctor lover          | P position               | ON              |
| P RANG SW CAN     | CVT selector lever           | Other than above         | OFF             |
| CTARTER CVA       | Indition and the             | Cranking                 | ON              |
| STARTER SW        | Ignition position            | Other than above         | OFF             |
| D DANGE (CANI)    | OVT selector lever           | R position               | ON              |
| R RANGE (CAN)     | CVT selector lever           | Other than above         | OFF             |
| VEHICLE SPEED     | The condition of vehicle spe | eed is displayed         | km/h            |
| DOOD OW EL        |                              |                          | OPEN            |
| DOOR SW-FL        | Driver door                  | Close                    | CLOSED          |
| DOOD SW ED        | Doggonger deer               | Open                     | OPEN            |
| DOOR SW-FR        | Passenger door               | Close                    | CLOSED          |
| IONI ONI OW       | In altino and tale           | ON position              | ON              |
| IGN ON SW         | Ignition switch              | Other than above         | OFF             |
| ACC ON OW         | In altino and tale           | ACC or ON position       | ON              |
| ACC ON SW         | Ignition switch              | Other than above         | OFF             |
| KEY ON SW         | Intelligent Man              | Inserted in key slot     | ON              |
|                   | Intelligent Key              | Not Inserted in key slot | OFF             |
| IAM O DD LINIUM   | Intelligent Key or driver    | ON                       | ON              |
| KYLS DR UNLK      | side door request switch     | OFF                      | OFF             |
| KEYLESS ID        | UNLOCK button of Intellige   | ent Key is pressed       | 1, 2, 3, 4 or 5 |
| VIICL CDEED (ADC) | CAN signal from ADC          | Received                 | ON              |
| VHCL SPEED (ABS)  | CAN signal from ABS          | Not received             | OFF             |
| LIANDIE           | Driving position             |                          | LHD             |
| HANDLE            | Driving position             |                          | RHD             |
| TRANSMISSION      | Transmission type            |                          | A/T             |
| OFT OW            | Cot owitch                   | Push                     | ON              |
| SET SW            | Set switch                   | Release                  | OFF             |
| MEMORY SWA        | Momony quitch 1              | Push                     | ON              |
| MEMORY SW1        | Memory switch 1              | Release                  | OFF             |
| MEMORY SW2        | Momony awitch 2              | Push                     | ON              |
| MEMORY SW2        | Memory switch 2              | Release                  | OFF             |
| CLIDE CW ED       | Cliding quitab (famuard)     | Operate                  | ON              |
| SLIDE SW-FR       | Sliding switch (forward)     | Release                  | OFF             |
| SLIDE SW DD       | Sliding switch (backward)    | Operate                  | ON              |
| SLIDE SW-RR       | Sliding switch (backward)    | Release                  | OFF             |

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# < ECU DIAGNOSIS INFORMATION >

| Monitor Item     | Condi                       | tion             | Value/Status                            |
|------------------|-----------------------------|------------------|---|
| RECLN SW-FR      | Reclining switch (forward)  | Operate          | ON                                      |
| RECLIN SW-FR     | Reclining Switch (lorward)  | Release          | OFF                                     |
| RECLN SW-RR      | Reclining switch (back-     | Operate          | ON                                      |
| RECLIN SW-RR     | ward)                       | Release          | OFF                                     |
| LIFT FR SW-UP    | Lifting switch front (up)   | Operate          | ON                                      |
| LIFT FR SW-UP    | Litting Switch from (up)    | Release          | OFF                                     |
| LIFT FR SW-DN    | Lifting quitch front (down) | Operate          | ON                                      |
| LIFT FR SW-DIN   | Lifting switch front (down) | Release          | OFF                                     |
| LIFT RR SW-UP    | Lifting quitch roor (up)    | Operate          | ON                                      |
| LIFT RR SW-UP    | Lifting switch rear (up)    | Release          | OFF                                     |
| LIET DD CW/ DN   | Lifting quitab room (down)  | Operate          | ON                                      |
| LIFT RR SW-DN    | Lifting switch rear (down)  | Release          | OFF                                     |
| MID CON CW LID   | Mirror quitab               | Up               | ON                                      |
| MIR CON SW-UP    | Mirror switch               | Other than above | OFF                                     |
| MID CON OW DN    | Address of Male             | Down             | ON                                      |
| MIR CON SW-DN    | Mirror switch               | Other than above | OFF                                     |
| MID CON OW DIT   | Address of Male             | Right            | ON                                      |
| MIR CON SW-RH    | Mirror switch               | Other than above | OFF                                     |
| MID CON OW III   |                             | Left             | ON                                      |
| MIR CON SW-LH    | Mirror switch               | Other than above | OFF                                     |
|                  |                             | Right            | ON                                      |
| MIR CHNG SW-R    | Changeover switch           | Other than above | OFF                                     |
|                  |                             | Left             | ON                                      |
| MIR CHNG SW-L    | Changeover switch           | Other than above | OFF                                     |
|                  |                             | Upward           | ON                                      |
| TILT SW-UP       | Tilt switch                 | Other than above | OFF                                     |
| TII T OM BOMBI   | T11 11 1                    | Downward         | ON                                      |
| TILT SW-DOWN     | Tilt switch                 | Other than above | OFF                                     |
|                  |                             | Forward          | ON                                      |
| TELESCO SW-FR    | Telescopic switch           | Other than above | OFF                                     |
|                  |                             | Backward         | ON                                      |
| TELESCO SW-RR    | Telescopic switch           | Other than above | OFF                                     |
|                  |                             | Forward          | The numeral value decreases *           |
| SLIDE PULSE      | Seat sliding                | Backward         | The numeral value increases*            |
|                  |                             | Other than above | No change to numeral value*             |
|                  |                             | Forward          | The numeral value decreases*            |
| RECLN PULSE      | Seat reclining              | Backward         | The numeral value increases *           |
| -                |                             | Other than above | No change to numeral value*             |
|                  |                             | Up               |   |
| LIET ED DI II OF | On at lift and (for all)    |                  | The numeral value decreases *           |
| LIFT FR PULSE    | Seat lifter (front)         | Down             | The numeral value increases *           |
|                  |                             | Other than above | No change to numeral value <sup>*</sup> |

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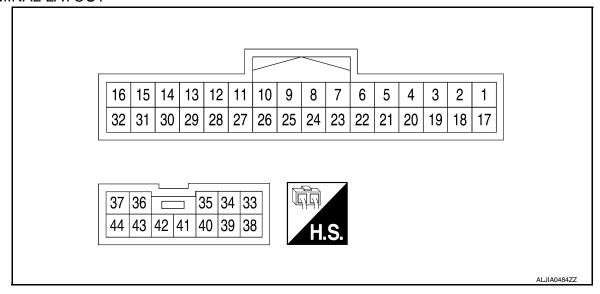
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## < ECU DIAGNOSIS INFORMATION >

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

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

### **TERMINAL LAYOUT**



# PHYSICAL VALUES

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

## < ECU DIAGNOSIS INFORMATION >

|                        | nal No.<br>color) | Description                        |                  | Cond                       | dition                      | Voltage (V)                      |  |
|------------------------|-------------------|------------------------------------|------------------|----------------------------|-----------------------------|----------------------------------|--|
| +                      | -                 | Signal name                        | Input/<br>Output | Conc                       | altion                      | (Approx)                         |  |
| 7<br>(Y)               | Ground            | Lifting switch (front) down signal | Input            | Lifting switch<br>(front)  | Operate<br>(down)           | 0                                |  |
|                        |                   |                                    |                  | ()                         | Release                     | Battery voltage                  |  |
| 8<br>(BR)              | Ground            | Reclining switch backward signal   | Input            | Reclining switch           | Operate<br>(backward)       | 0                                |  |
|                        |                   |                                    |                  |                            | Release                     | Battery voltage                  |  |
| 9<br>(SB)              | Ground            | Sliding switch backward signal     | Input            | Sliding switch             | Operate<br>(backward)       | 0                                |  |
|                        |                   |                                    |                  |                            | Release                     | Battery voltage                  |  |
| 10<br>(G)              | Ground            | Memory indicator 2 signal          | Output           | Memory indicator 2         | Illuminate Other than above | 1 Battery voltage                |  |
| 11                     |                   |                                    |                  |                            | Press                       | 0                                |  |
| (GR)                   | Ground            | Memory switch 2 signal             | Input            | Memory switch 2            | Other than above            | 5                                |  |
| 12 <sup>*</sup><br>(W) | Ground            | Telescopic sensor signal           | Input            | Telescopic                 | Operate                     | 10mSec/div<br>2V/div JMJIA0119ZZ |  |
|                        |                   |                                    |                  |                            | Other than above            | 0 or 5                           |  |
| 13<br>(G)              | Ground            | Reclining sensor signal            | Input            | Seat reclining             | Operate                     | 10mSec/div<br>2V/div JMJIA0119ZZ |  |
|                        |                   |                                    |                  |                            | Stop                        | 0 or 5                           |  |
| 15<br>(SB)             | Ground            | UART communication<br>(TX/RX)      | Input            | Ignition switch ON         |                             | 10msec/div<br>5V/div JMJIA1391ZZ |  |
| 16<br>(P)              | _                 | CAN-H                              | _                | _                          | _                           | _                                |  |
| 21<br>(L)              | Ground            | Set switch signal                  | Input            | Set switch                 | Press Other than above      | 0<br>5                           |  |
| 22<br>(V)              | Ground            | Lifting switch (rear) up signal    | Input            | Seat lifting switch (rear) | Operate<br>(up)<br>Release  | 0<br>Battery voltage             |  |
| 23                     | Ground            | Lifting switch (front) up sig-     | Input            | Seat lifting switch        | Operate (up)                | 0                                |  |
| (G)                    |                   | nal                                |                  | (front)                    | Release                     | Battery voltage                  |  |

# < ECU DIAGNOSIS INFORMATION >

| Terminal No. (wire color) Description |        | Description                                 |                  | Con                  | dition               | Voltage (V)                        |
|---------------------------------------|--------|---|------------------|----------------------|----------------------|------------------------------------|
| +                                     | -      | Signal name                                 | Input/<br>Output |                      |                      | (Approx)                           |
| 24<br>(P)                             | Ground | Reclining switch forward signal             | Input            | Reclining switch     | Operate<br>(forward) | 0                                  |
|                                       |        | ŭ   |                  |                      | Release              | Battery voltage                    |
| 25<br>(L)                             | Ground | Sliding switch forward sig-<br>nal          | Input            | Sliding switch       | Operate<br>(forward) | 0                                  |
|                                       |        |   |                  |                      | Release              | Battery voltage                    |
| 26                                    | Ground | Memory indicator 1 signal                   | Output           | Memory indicator     | Illuminate           | 1                                  |
| (Y)                                   |        | •   | •                | 1                    | Other than above     | Battery voltage                    |
| 27                                    | Ground | Memory switch 1 signal                      | Input            | Memory switch 1      | Press                | 0                                  |
| (V)                                   |        | , ,   | '                | ,                    | Other than above     | 5                                  |
| 28 <sup>*</sup><br>(BR)               | Ground | Tilt sensor signal                          | Input            | Tilt                 | Operate              | 10mSec/div<br>2V/div JMJIA0119ZZ   |
|                                       |        |   |                  |                      | Other than above     | 0 or 5                             |
| 29<br>(R)                             | Ground | Lifting sensor (rear) signal                | Input            | Seat lifting (rear)  | Operate              | 10mSec/div<br>2V/div JMJIA0119ZZ   |
|                                       |        |   |                  |                      | Stop                 | 0 or 5                             |
| 30<br>(Y)                             | Ground | Lifting sensor (front) signal               | Input            | Seat lifting (front) | Operate              | 10mSec/div<br>2V/div JMJIA0119ZZ   |
|                                       |        |   |                  |                      | Stop                 | 0 or 5                             |
| 31<br>(L)                             | Ground | Sliding sensor signal                       | Input            | Seat sliding         | Operate              | 10mSec/div<br>= 2V/div JMJIA0119ZZ |
|                                       |        |   |                  |                      | 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<br>(down)    | Battery voltage                    |
| (30)                                  |        | aowii output signal                         |                  |                      | Stop                 | 0                                  |

# < ECU DIAGNOSIS INFORMATION >

|            | nal No.<br>color) | Description                                    |                  |                      |                       | Voltage (V)     |
|------------|-------------------|--|------------------|----------------------|-----------------------|-----------------|
| +          | -                 | Signal name                                    | Input/<br>Output |                      |                       | (Approx)        |
| 35<br>(V)  | Ground            | Reclining motor LH for-<br>ward output signal  | Output           | Seat reclining       | Operate (forward)     | Battery voltage |
| (V)        |                   | ward output signal                             |                  |                      | Release               | 0               |
| 36<br>(W)  | Ground            | Sliding motor LH back-<br>ward output signal   | Output           | Seat sliding         | Operate<br>(backward) | Battery voltage |
| (**)       |                   | ward output signal                             |                  |                      | 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)<br>down output signal  | Output           | Seat lifting (rear)  | Operate<br>(down)     | Battery voltage |
| (L)        |                   | down output signal                             |                  |                      | Stop                  | 0               |
| 41<br>(Y)  | Ground            | Lifting motor LH (rear) up output signal       | Output           | Seat lifting (rear)  | Operate<br>(up)       | Battery voltage |
| (1)        |                   | output signal                                  |                  |                      | Stop                  | 0               |
| 42<br>(GR) | Ground            | Lifting motor LH (front) up output signal      | Output           | Seat lifting (front) | Operate<br>(up)       | Battery voltage |
| (GK)       |                   | output signal                                  |                  |                      | Stop                  | 0               |
| 43<br>(BR) | Ground            | Reclining motor LH back-<br>ward output signal | Output           | Seat reclining       | Operate<br>(backward) | Battery voltage |
| (DK)       |                   | waru output signal                             |                  |                      | Stop                  | 0               |
| 44<br>(G)  | Ground            | Sliding motor LH forward output signal         | Output           | Seat sliding         | Operate<br>(forward)  | Battery voltage |
| (G)        |                   | output signal                                  |                  |                      | Release               | 0               |

<sup>\*:</sup> If equipped

Fail Safe

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

| Operating in fail-safe mode                                     | Malfunction Item            | Related<br>DTC | Diagnosis     |
|---|-----------------------------|----------------|---------------|
|   | CAN communication           | U1000          | <u>ADP-77</u> |
| Only manual functions operate normally.                         | CONTROL UNIT                | U1010          | <u>ADP-78</u> |
|   | EEPROM                      | B2130          | <u>ADP-87</u> |
| Only manual functions, except door mirror, operate normally.    | UART communication          | B2128          | ADP-85        |
| Only manual functions, except seat sliding, operate normally.   | Seat sliding output         | B2112          | ADP-79        |
| Only manual functions, except seat reclining, operate normally. | Seat reclining output       | B2113          | <u>ADP-81</u> |
| Only manual functions, except steering tilt, operate normally.  | Steering column tilt output | B2116          | ADP-83        |

## < ECU DIAGNOSIS INFORMATION >

DTC Index

| CONSULT                     | Timing*1                 |                           |                             |                |  |
|-----------------------------|--------------------------|---------------------------|-----------------------------|----------------|--|
| display                     | Current mal-<br>function | Previous mal-<br>function | Item                        | Reference page |  |
| CAN COMM CIRCUIT<br>[U1000] | 0                        | 1-39                      | CAN communication           | ADP-77         |  |
| CONTROL UNIT<br>[U1010]     | 0                        | 1-39                      | Control unit                | ADP-78         |  |
| SEAT SLIDE<br>[B2112]       | 0                        | 1-39                      | Seat slide motor output     | ADP-79         |  |
| SEAT RECLINING<br>[B2113]   | 0                        | 1-39                      | Seat reclining motor output | ADP-81         |  |
| STEERING TILT<br>[B2116]    | 0                        | 1-39                      | Tilt motor output           | ADP-83         |  |
| UART COMM<br>[B2128]        | 0                        | 1-39                      | UART communication          | ADP-85         |  |
| EEPROM<br>[B2130]           | 0                        | 1-39                      | EEPROM                      | ADP-87         |  |

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<sup>• 0:</sup> Current malfunction is present

<sup>• 1-39:</sup> 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.

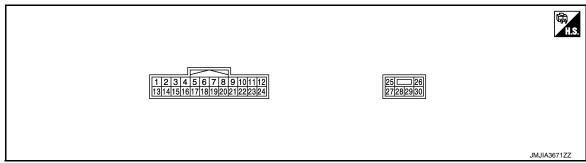
## **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

< ECU DIAGNOSIS INFORMATION >

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

### **TERMINAL LAYOUT**



### PHYSICAL VALUES

| Terminal No.<br>(wire color) |         | Description  |                  | Condition               |                      | Voltage (V)  |  |
|------------------------------|---------|--|------------------|-------------------------|----------------------|--|--|
| +                            | -       | Signal name  | Input/<br>Output | Condition               |                      | (Approx.)  |  |
| 1 <sup>*</sup> (LG)          | Ground  | Tilt switch up signal                                      | Input            | Tilt switch             | Operate (up)         | 0  |  |
|                              | Giouna  |  |                  |                         | Other than above     | 5  |  |
| 0                            |         | Changeover switch DU                                       |                  | Changeover              | RH                   | 0  |  |
| 2<br>(GR)                    |         |  | switch position  | Neutral or<br>LH        | 5                    |  |  |
| 3<br>(G) Ground              | Ground  | Mirror switch up signal                                    | Input            | Mirror switch           | Operated (up)        | 0  |  |
|                              | Giodila |  |                  |                         | Other than above     | 5  |  |
| 4<br>(P) Groun               | Ground  | d Mirror switch left signal                                | Input            | Mirror switch           | Operated (left)      | 0  |  |
|                              | Giodila |  |                  |                         | Other than above     | 5  |  |
| 5<br>(W)                     | Ground  | Door mirror sensor (pas-<br>senger side) up/down<br>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 <sup>*</sup> Gro           | Ground  | Telescopic switch for-                                     | Input            | Telescopic<br>switch    | Operate<br>(forward) | 0  |  |
|                              | Ground  | ward signal  |                  |                         | Other than above     | 5  |  |
| 8<br>(G)                     | Ground  | UART communication<br>(TX/RX)                              | Output           | Ignition switch ON      |                      | 10msec/div<br>10msec/div<br>5V/div JMJIA1391ZZ           |  |

#### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

#### < ECU DIAGNOSIS INFORMATION >

| Terminal No.<br>(wire color) |        | Description   |                  | Conditi            | on                         | Voltage (V)   |
|------------------------------|--------|---|------------------|--------------------|----------------------------|---|
| +                            | -      | Signal name   | Input/<br>Output | Conditi            | OII                        | (Approx.)   |
| 10                           | Ground | Door mirror motor (pas-<br>senger side) up output             | Output           | Door mirror RH     | Operate (up)               | Battery voltage   |
| (BR)                         | Ground | signal  | Output           | Bool Hillor IXII   | Other than above           | 0   |
| 11                           | Ground | Door mirror motor (pas-<br>senger side) left output           | Output           | Door mirror RH     | Operate<br>(left)          | Battery voltage   |
| (G)                          | Cround | signal  | Output           | Boot millor rain   | Other than above           | 0   |
|                              |        | Door mirror motor (driver side) down output sig-              |                  |                    | Operate (down)             | Battery voltage   |
| 12                           | Ground | nal   | Output           | Door mirror (LH)   | Other than above           | 0   |
| (BG)                         | Ground | Door mirror motor (driver side) right output sig-             | Output           | Door Hillion (ELT) | Operate (right)            | Battery voltage   |
|                              |        | nal   |                  |                    | Other than above           | 0   |
| 13 <sup>*</sup>              | Cround | Tilt switch down signal                                       | lpput            | Tilt switch        | Operate<br>(down)          | 0   |
| (Y)                          | Ground | The Switch down signal  | Input            | THE SWILCH         | Other than above           | 5   |
| 14                           |        | Changeover switch LH  | Innut            | Changeover         | LH                         | 0   |
| (P)                          | Ground | signal  | Input            | switch position    | Neutral or<br>RH           | 5   |
| 15                           | Ground | Mirror switch down sig-                                       | Input            | Mirror switch      | Operate (down)             | 0   |
| (R)                          | Oround | nal   | mpat             | WIIITOI SWILCIT    | Other than above           | 5   |
| 16                           | Ground | Mirror switch right signal                                    | lpput            | Mirror switch      | Operate (right)            | 0   |
| (W)                          | Glound | Will Of Switch right Signal                                   | Input            | WIIITOI SWILCII    | Other than above           | 5   |
| 17<br>(G)                    | Ground | Door mirror sensor (pas-<br>senger side) left/right<br>signal | Input            | Door mirror RH po  | osition                    | 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 po  | osition                    | Change between 0.6 (close to left edge) 3.4 (close to right edge) |
| 19 <sup>*</sup><br>(L)       | Ground | Telescopic switch back-<br>ward signal                        | Input            | Telescopic switch  | Operate<br>(back-<br>ward) | 0   |
| ( <b>-</b> )                 |        |   |                  |                    | Other than above           | 5   |
| 20<br>(Y)                    | Ground | Ground  | _                | _                  |                            | 0   |
| 21<br>(BG)                   | Ground | Door mirror motor sen-<br>sor power supply                    | Input            | _                  |                            | 5   |

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#### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

#### < ECU DIAGNOSIS INFORMATION >

|                         | nal No.<br>color) | Description                                     |                  | Conditi                  |                            | Voltage (V)     |
|-------------------------|-------------------|---|------------------|--------------------------|----------------------------|-----------------|
| +                       | -                 | Signal name                                     | Input/<br>Output | Conditi                  | on                         | (Approx.)       |
|                         |                   | Door mirror motor (passenger side) down out-    |                  |                          | Operate<br>(down)          | Battery voltage |
| 22                      | Ground            | put signal                                      | Output           | Door mirror (RH)         | Other than above           | 0               |
| (SB)                    | Ground            | Door mirror motor (passenger side) right output | Output           | Boot militor (1411)      | Operate (right)            | Battery voltage |
|                         |                   | signal  |                  |                          | Other than above           | 0               |
| 23                      | Ground            | Door mirror motor (driv-                        | Output           | Door mirror (LH)         | Operate<br>(up)            | Battery voltage |
| (LG)                    | O. Gaina          | er side) up output signal                       |                  |                          | Other than above           | 0               |
| 24                      | Ground            | Door mirror motor (driv-                        | Output           | Door mirror (LH)         | Operate<br>(left)          | Battery voltage |
| (L)                     |                   | er side) left output signal                     |                  |                          | Other than above           | 0               |
| 25<br>(L)               | Ground            | Power source                                    | Input            | _                        |                            | Battery voltage |
| 26 <sup>*</sup><br>(V)  | Ground            | Telescopic motor back-<br>ward output signal    | Output           | Steering tele-<br>scopic | Operate<br>(back-<br>ward) | Battery voltage |
| (V)                     |                   | ward output signar                              |                  | ЗСОРІС                   | Other than above           | 0               |
| 27 <sup>*</sup><br>(LG) | Ground            | Tilt and telescopic motor power source          |                  | _                        |                            | Battery voltage |
| 28 <sup>*</sup>         | Ground            | Tilt motor down output                          | Output           | Steering tilt            | Operate<br>(down)          | Battery voltage |
| (SB)                    | Giodila           | signal  | Output           | Steering thit            | Other than above           | 0               |
|                         |                   | Tilt motor up output sig-                       |                  | Steering tilt            | Operate (up)               | Battery voltage |
| 29 <sup>*</sup>         | Ground            | nal   | Output           | Oteering till            | Other than above           | 0               |
| (BR)                    | Sidulid           | Telescopic motor for-                           | Gaiput           | Steering tele-           | Operate<br>(forward)       | Battery voltage |
|                         |                   | ward output signal                              |                  | scopic                   | Other than above           | 0               |
| 30<br>(B)               | Ground            | Ground  | _                | _                        |                            | 0               |

<sup>\*:</sup> If equipped

# **BCM (BODY CONTROL MODULE)**

# < ECU DIAGNOSIS INFORMATION >

# BCM (BODY CONTROL MODULE)

# List of ECU Reference

| INFOID:0000000009176540 |  |
|-------------------------|--|

| ECU   | Reference                               |
|-------|---|
|       | BCS-30. "Reference Value"               |
| BCM   | BCS-50, "Fail Safe"                     |
| DCIVI | BCS-50, "DTC Inspection Priority Chart" |
|       | BCS-52, "DTC Index"                     |

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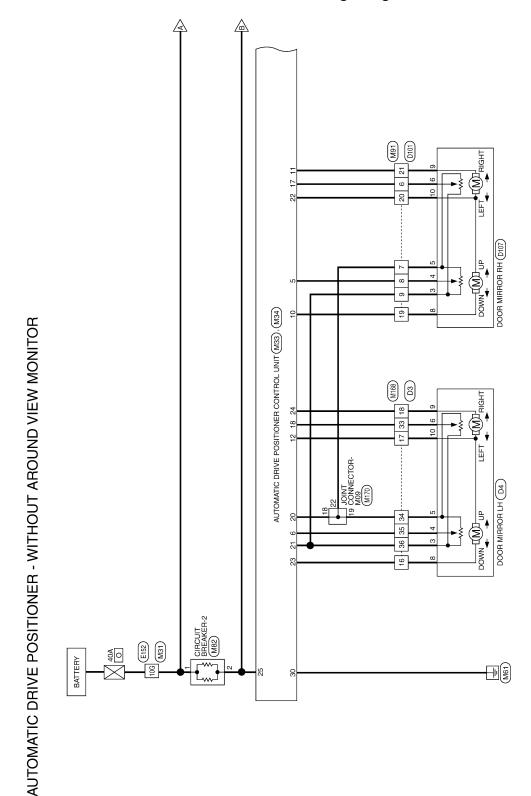
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# WIRING DIAGRAM

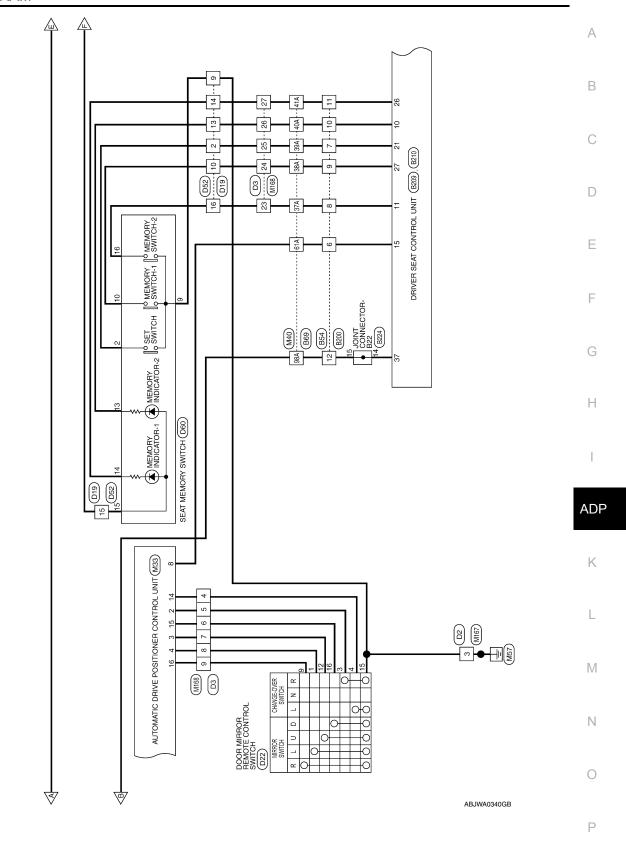
# AUTOMATIC DRIVE POSITIONER SYSTEM WITHOUT AROUND VIEW MONITOR

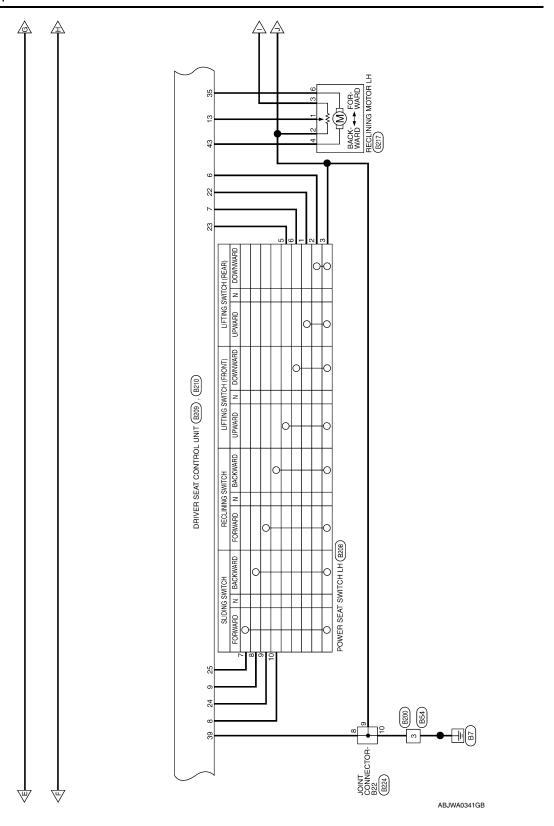
WITHOUT AROUND VIEW MONITOR: Wiring Diagram

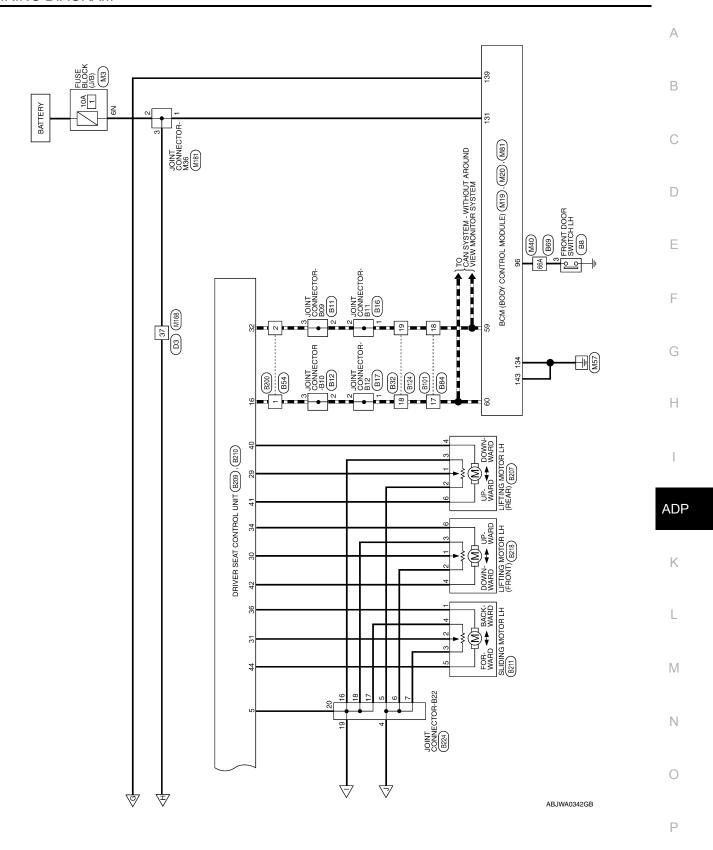
INFOID:0000000009176541



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Signal Name

| Terminal No. Color of | Wire             | 10G W           |  |      |                 | 10                                |                             | 16  |                             | 10                                |                                     | 16                                |                             |                     |                      |   |
|-----------------------|------------------|-----------------|--|------|-----------------|-----------------------------------|-----------------------------|---|-----------------------------|-----------------------------------|-------------------------------------|-----------------------------------|-----------------------------|---------------------|----------------------|---|
| o. M31                | ame WIRE TO WIRE | olor WHITE      |  | 8    | 6G 76 86 96 106 | 116126136146156166176186196206216 | 226236246256266276286296306 | 316 326 336 346 356 366 376 386 396 406 416 | 42G43G44G45G46G47G48G49G50G | 519529539549559569579589599609619 | 62G 63G 64G 65G 66G 67G 68G 69G 70G | 716726736746756766776786796806816 | 82G83G84G85G86G87G88G89G90G | 916 926 936 946 956 | 966 976 986 996 1006 |   |
| Connector No.         | Connector Name   | Connector Color |  | H.S. |                 |                                   |                             |   |                             |                                   |                                     |                                   |                             |                     |                      | _ |

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ADP-44 Revision: May 2013 2014 Pathfinder

#### < WIRING DIAGRAM >

| Signal Name      | MIRROR SW<br>(RIGHTWARD) | MIRROR SENSOR<br>(RH HORIZONTAL) | MIRROR SENSOR<br>(LH HORIZONTAL) | GND (SENSOR GND) | POWER SUPPLY<br>(SENSOR FOR 5V) | MIRROR MOTOR<br>(RH COMMON<br>(DOWN&RIGHT)) | MIRROR MOTOR<br>(LH VERTICAL (UP)) | MIRROR MOTOR (LH<br>HORIZONTAL (LEFT)) |
|------------------|--------------------------|----------------------------------|----------------------------------|------------------|---------------------------------|---|------------------------------------|--|
| Color of<br>Wire | Μ                        | g                                | BG                               | >                | BG                              | SB  | ГС                                 | _                                      |
| Terminal No.     | 16                       | 17                               | 18                               | 20               | 21                              | 22  | 23                                 | 24                                     |

| Signal Name       | MIRROR SENSOR<br>(LH VERTICAL) | UART (TX/RX) | MIRROR MOTOR<br>(RH VERTICAL (UP)) | MIRROR MOTOR (RH<br>HORIZONTAL (LEFT)) | MIRROR MOTOR (LH<br>COMMON (DOWN&<br>RIGHT)) | MIRROR SELECT<br>SW (LH) | MIRROR SW<br>(DOWNWARD) |
|-------------------|--------------------------------|--------------|------------------------------------|--|--|--------------------------|-------------------------|
| Color of<br>Wire  | В                              | ŋ            | BR                                 | G                                      | BG   | Ь                        | R                       |
| Terminal No. Wire | 9                              | 80           | 10                                 | 11                                     | 12   | 14                       | 15                      |

| 8             | AUTOMATIC DRIVE<br>POSITIONER<br>CONTROL UNIT | ТЕ              | 5 6 7 8 9 10 11 12<br>17 18 19 20 21 22 23 24 | Signal Name      | MIRROR SELECTOR<br>SW (RH) | MIRROR SW (UPWARD) | MIRROR SW<br>(LEFTWARD) | MIRROR SENSOR<br>(RH VERTICAL) |
|---------------|---|-----------------|---|------------------|----------------------------|--------------------|-------------------------|--------------------------------|
| M33           |   | or WHITE        | 2 3 4 14 15 16                                | Color of<br>Wire | GR                         | g                  | ۵                       | Α                              |
| Connector No. | Connector Name                                | Connector Color | H.S.  | Terminal No.     | Ø                          | 3                  | 4                       | വ                              |

| M34           | AUTOMATIC DRIVE<br>POSITIONER<br>CONTROL UNIT | WHITE                 | 25 28 29 30 |
|---------------|---|-----------------------|-------------|
| Connector No. | Connector Name                                | Connector Color WHITE | (可)<br>H.S. |

| <b>+</b>           | AUTOMATIC DRIVE<br>POSITIONER<br>CONTROL UNIT | ITE                   | 25 28 29 30 | Signal Name      | BAT (PTC) | GND (POWFB) |
|--------------------|---|-----------------------|-------------|------------------|-----------|-------------|
|                    |   | lor WH                |             | Color of<br>Wire | ٦         | Ж           |
| COLUMNICATION 140. | Connector Name                                | Connector Color WHITE | H.S.        | Terminal No.     | 52        | 08          |
|                    |   |                       |             |                  |           |             |

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| 37A   | 37A  | L   | LG  |
|---|--|---|---|
| BB  | 38A   BR   | SB  | SB  |
| SB  | A SB — — — — — — — — — — — — — — — — — —   | 1994   SB   | SB  |
| 138   142   143   B     143   B     143   B                         | 138   142   143   143   144   143   144   145   144   145    | Y   | Y   |
| G   | Sea  | Gor of   Signal Name   Signa  | G   |
| BG  | Terminal No.   Color of Wire   | BG  | BG  |
| L ORIVE POSITIONER) 131 W 134 B 139 W 139 W 143 B                   | 98A L   -(WITH AUTOMATIC   131 W   134 B   139 W   143 B   143 | L   -(WITH AUTOMATIC)   131   W   134   B   139   W   143   B     | L   -(WITH AUTOMATIC)   131   W   139   W   143   B   143   B |
| 134 B 139 W 143 B   | 134 B 1139 W 1139 W 1143 B 114 | 134 B 139 W 139 W 143 B 143 B 150 W 143 B 150 W 151 W | 134 B 139 W 139 W 143 B 143 B 150 W 151 WHITE   |
| W BAT   | 139 W  143 B  Inector No. M84  Inector Color WHITE  | 139 W  143 B  15. M84  ame WIRE TO WIRE  blor   WHITE    15   14   13   12   14   10   10   10   10   10   10   10  | 139 W  143 B  143 B  15. M84  ame WIRE TO WIRE  Slor WHITE  Slor WHITE  Slor Signal Name  Color of Signal Name  |
| Δ   | Inector No. M84  Inector No. M84  Inector Color WHITE  Inector Color WHI | 143 B  2. M84  ame WIRE TO WIRE  blor   WHITE    15   4   31   2   1   10   9   8   7   6   5   4   3   1     15   4   13   12   11   10   9   8   7   6   5   2   1     15   5   7   8   7   8   7   8   7   8   1     15   15   15   15   15   15   1   | 143 B  2. M84  ame WIRE TO WIRE  blor WHITE  15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
|   | Inector No. M84 Inector Name WIRE TO WIRE Inector Color WHITE    16   15   14   13   12   11   10   9   8   7   6   5   4   3   2   12   13   13   13   13   13  | 5. M84 ame WIRE TO WIRE blor WHITE  15 14 13 12 11 10 9 8 7 6 5 4 3 2 2 1 20 19 18  11 30 29 28 27 26 25 24 23 22 21 20 19 18  Color of Signal Name   | ame WIRE TO WIRE  Jor WHITE    15   14   13   12   11   10   9   8   7   6   5   4   3   2     15   14   13   12   11   10   9   8   7   6   5   4   3   2     15   14   13   12   11   10   9   8   7   6   5   2   2   2   2   2   10   19   18     Color of Wire    Signal Name  |
|   | Inector No. M84 Inector Color WHIE TO WIRE Inector Color WHITE  Inector Color WHITE  Inector Color WHITE  Inelia 14 13 12 11 10 19 18 17 6 15 4 18 12 13 13 13 12 13 12 13 12 13 12 13 13 13 13 13 13 13 13 13 13 13 13 13   | 31 30 28 28 27 28 28 22 21 20 19 18 18 18 18 18 18 18 18 18 18 18 18 18   | Signal Name  Wite  Wite  Signal Name  |
|   | .5. (2) (3) (2) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4   | 15 14 13 12 11 10 9 8 7 6 5 4 3 2 2 3 3 30 29 28 27 28 28 24 23 22 21 20 19 18 Color of Signal Name   | 15   14   13   12   11   10   9   8   7   6   5   4   3   2   8   30   27   28   24   23   22   21   20   19   18   18  |
| Connector No. M84 Connector Name WIRE TO WIRE Connector Color WHITE |  | Color of  | Color of<br>Wire  |

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#### < WIRING DIAGRAM >

| Signal Name       | _  | ı  | _  | _  | -  | l  | _  | I  | _  | _  |
|-------------------|----|----|----|----|----|----|----|----|----|----|
| Color of<br>Wire  | ٦  | BR | SB | ГG | Y  | BG | У  | ш  | BG | Μ  |
| Terminal No. Wire | 23 | 24 | 25 | 56 | 27 | 33 | 34 | 35 | 36 | 28 |

| Signal Name      | _ | 1  | ı | - | ı | _ | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> |
|------------------|---|----|---|---|---|---|---|---|---|
| Color of<br>Wire | Ь | GR | ш | В | ۵ | Μ | ГG  | BG  | Γ   |
| Terminal No.     | 4 | 5  | 9 | 7 | 8 | 6 | 16  | 17  | 18  |

|               |                             |                       |    |    | 9 10 11 12 13 14 15 16 17 18 19 20 | 38 39 40                      |
|---------------|-----------------------------|-----------------------|----|----|------------------------------------|-------------------------------|
|               |                             |                       |    |    | 17 1                               | 37 3                          |
|               |                             |                       |    |    | 16                                 | 98                            |
|               |                             |                       |    |    | 15                                 | 28 29 30 31 32 33 34 35 36 37 |
|               |                             |                       |    |    | 14                                 | 34                            |
|               | Connector Name WIRE TO WIRE |                       |    | ᆜ  | 13                                 | 33                            |
|               | ₹                           |                       |    |    | 12                                 | 32                            |
|               | 6                           |                       |    |    | 11                                 | 31                            |
|               | F                           | ш                     |    | \  | 10                                 | 30                            |
| 89            | 쀭                           | I≒I                   |    | IV |                                    | 29                            |
| M168          | ₹                           | ٧                     | ı  | ī  | 8                                  | 28                            |
| _             | 0                           | _                     |    |    | 7                                  | 27                            |
|               | Ĕ                           | ō                     |    |    | 9                                  | 26                            |
| ž             | ž                           | ပိ                    |    |    | 2                                  | 25                            |
| ō             | ō                           | ō                     |    |    | 4                                  | 24                            |
| ect           | ect                         | ect                   |    | 4  | က                                  | 23                            |
| Ē             | Ē                           | Ē                     |    | 4  | 2                                  | 21 22 23 24 25 26 27          |
| Connector No. | ပ္ပ                         | Connector Color WHITE | 修了 | 1  | -                                  | 21                            |

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|  | Signal Name      | ı  | ı  | ı  | I  | ı  | I  | 1  | ı  | ı  | ı  |
|--|------------------|----|----|----|----|----|----|----|----|----|----|
|  | Color of<br>Wire | ٦  | BB | SB | ГG | >  | BG | >  | æ  | BG | *  |
|  | Terminal No.     | 23 | 24 | 25 | 26 | 27 | 33 | 34 | 35 | 36 | 37 |

| No. M167      | Connector Name WIRE TO WIRE | Sonnector Color WHITE |  |
|---------------|-----------------------------|-----------------------|--|
| Connector No. | Connector Na                | Connector C           |  |



| Signal Name      | 1 |
|------------------|---|
| Color of<br>Wire | В |
| Terminal No.     | 3 |

| nector No.                | or N | ō.  |        | М  | M91 |    |    |    |          |                            |    |    |    |    |    |    |   |
|---------------------------|------|---|--------|----|-----|----|----|----|----------|----------------------------|----|----|----|----|----|----|---|
| inector Name WIRE TO WIRE | or N | lan   | ne     | \$ | Ä   | ш  | 6  | ≥  | <u>E</u> | 111                        |    |    |    |    |    |    |   |
| inector Color WHITE       | or C | ğ   | ٦<br>_ | \$ | Ī   | 빝  |    |    |          |                            |    |    |    |    |    |    |   |
| 1                         |      |   |        |    |     | L  |    |    |          |                            |    |    |    |    |    |    |   |
| 1                         |      |   |        |    |     | ī  | 1  | ١  | /        |                            |    |    |    |    |    |    | - |
| U                         | -    | 2   | 3      | 4  | 2   | 9  | 7  | 8  | 6        | 7 8 9 10 11 12 13 14 15 16 | Ξ  | 12 | 13 | 14 | 15 | 16 |   |
| į                         | 17   | 17   18   19   20   21   22   23   24   25   26   27   28   29   30   31   32 | 19     | 20 | 21  | 22 | 23 | 24 | 25       | 26                         | 27 | 28 | 29 | 30 | 31 | 32 |   |
|                           |      |   |        |    |     |    |    |    |          |                            |    |    |    |    |    |    | - |



| Signal Name       | I | ı | ı | ı  | - (WITH AUTOMATIC<br>DRIVE POSITIONER) | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> |
|-------------------|---|---|---|----|--|---|---|
| Color of<br>Wire  | ŋ | > | 8 | BG | BR                                     | SB  | G   |
| Terminal No. Wire | 9 | 7 | 8 | 6  | 19                                     | 20  | 21  |

ADP-47 Revision: May 2013 2014 Pathfinder Α

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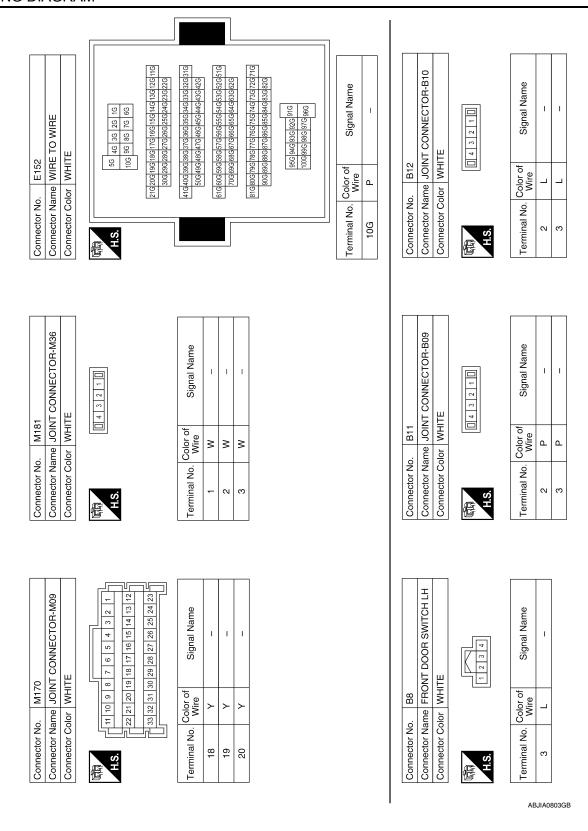
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#### < WIRING DIAGRAM >



Revision: May 2013 ADP-48 2014 Pathfinder

#### < WIRING DIAGRAM >

|  | 1 2 1                                  |                  |     |    |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
|--|--|------------------|-----|----|---------------|-------------------------------|-----------------|----|-----|------------|----|----------|---------------|---|---|---|--|
| B32<br>WIRE TO WIRE  | 26 25 24 23 22 21 20 19 18             | Signal Name      | 1   | 1  |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
|  | 16 15 14 13 12 11<br>32 31 30 29 28 27 | Color of<br>Wire | 7   | Ь  |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
| Connector No. Connector Name Connector Color                               | H.S.                                   | Terminal No.     | 18  | 19 |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
|  |  |                  |     |    |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
| B17<br>JOINT CONNECTOR-B12<br>WHITE  | 3 2 1                                  | Signal Name      | ı   | 1  | Signal Name   |                               | 1               | ı  | ı   | ı          | ı  | 1        | ı             |   |   |   |  |
|  | 4                                      | Color of<br>Wire | - L | L  | Color of      | Wire                          | >               | SB | 7   | BR         | re | >        | _             |   |   |   |  |
| Connector No. Connector Connector Color                                    | H.S.                                   | Terminal No.     | 1   | 2  | Terminal No.  |                               | 9               | 7  | 8   | 6          | 10 | 11       | 12            |   |   |   |  |
|  |  |                  |     |    |               |                               |                 |    |     |            |    |          |               |   |   |   |  |
| Connector No. B16 Connector Name JOINT CONNECTOR-B11 Connector Color WHITE | 3 2 1 0                                | Signal Name      | -   | _  |               | E TO WIRE                     | NWO             |    | 3   | 10 9 8 7 6 |    | i        | Signal Name   | ı | I | - |  |
| . B16<br>me JOINT (<br>lor WHITE   | 4 3                                    | Color of<br>Wire | Д   | Ь  | . B54         | me WIR                        | lor BROWN       |    | 5 4 | 12 11      |    | Color of | Wire          | _ | Д | В |  |
| Connector No. Connector Name Connector Color                               | 原列<br>H.S.                             | Terminal No.     | -   | 2  | Connector No. | Connector Name   WIRE TO WIRE | Connector Color |    | E   | HS         |    |          | l erminal No. | - | 2 | 3 |  |

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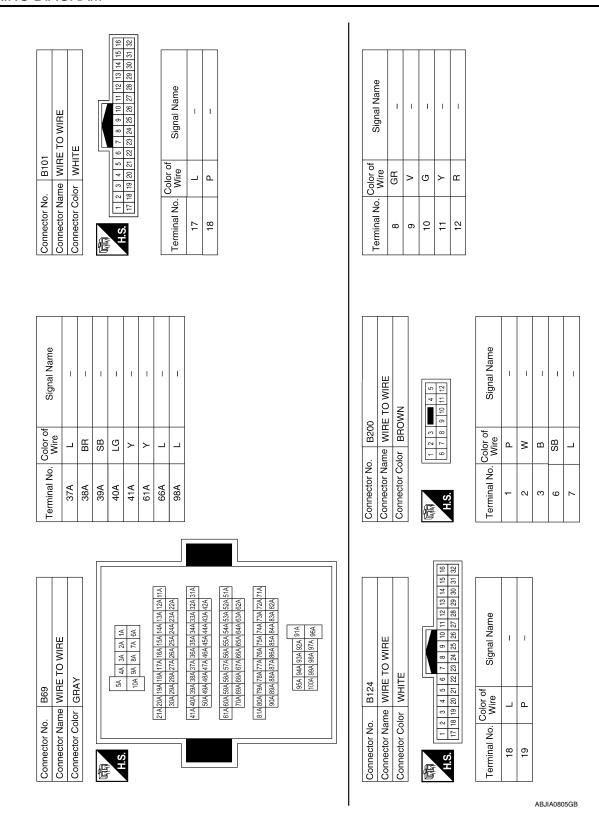
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Revision: May 2013 ADP-49 2014 Pathfinder

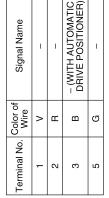


#### < WIRING DIAGRAM >

| Ф                 |          |   |    |   |    |
|-------------------|----------|---|----|---|----|
| Signal Name       | I        | 1 | 1  | _ | 1  |
| Color of<br>Wire  | <b>\</b> | ٦ | SB | Ь | BR |
| Terminal No. Wire | 9        | 2 | 8  | 6 | 10 |

| Signal Name      | SET SW | REAR LIFTER SW (UPWARD) | FRONT LIFTER SW (UPWARD) | RECLINER SW<br>(FORWARD) | SLIDE SW (FORWARD) | IND 1 | ADDRESS 1 | <ul><li>– (WITHOUT AROUND VIEW MONITOR)</li></ul> | PULSE (REAR LIFTER) | PULSE (FRONT LIFTER) | PULSE (SLIDE) | CAN-L |
|------------------|--------|-------------------------|--------------------------|--------------------------|--------------------|-------|-----------|---|---------------------|----------------------|---------------|-------|
| Color of<br>Wire | _      | >                       | ŋ                        | А                        | _                  | >     | >         | ı   | ш                   | ٨                    | _             | W     |
| Terminal No.     | 21     | 22                      | 23                       | 24                       | 25                 | 26    | 27        | 28  | 59                  | 30                   | 31            | 32    |

| e 2                   | Connector No.   | B208                   |
|-----------------------|-----------------|------------------------|
| Connector Color WHITE | Connector Name  | POWER SEAT SWITCH!     |
| Connector Color WHITE | - Commercial    | 1 CWEIL OLD I CONTINUE |
|                       | connector Color | WHILE                  |



| Signal Name      | SLIDE SW<br>(BACKWARD) | IND 2 | ADDRESS 2 | - (WITHOUT AROUND VIEW MONITOR) | PULSE (RECLINER) | ı  | UART (TX/RX) | CAN-H | ı  | -  | 1  | _  |
|------------------|------------------------|-------|-----------|---------------------------------|------------------|----|--------------|-------|----|----|----|----|
| Color of<br>Wire | SB                     | g     | GR        | ı                               | В                | _  | SB           | Ь     | ı  | _  | _  | -  |
| Terminal No.     | 6                      | 10    | 11        | 12                              | 13               | 14 | 15           | 16    | 17 | 18 | 19 | 20 |

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

|   | Signal Name       | - | - | ı | – (WITH AUTOMATIC<br>DRIVE POSITIONER) | – (WITH AUTOMATIC<br>DRIVE POSITIONER) |  |
|---|-------------------|---|---|---|--|--|--|
| J | Color of<br>Wire  | ш | В | 8 | 7                                      | <b>\</b>                               |  |
|   | Terminal No. Wire | - | 2 | က | 4                                      | 9                                      |  |

|               |                             |                 |   | 1 1                                 |   |                  |   |   |   |   |                           |                              |                            |
|---------------|-----------------------------|-----------------|---|-------------------------------------|---|------------------|---|---|---|---|---------------------------|------------------------------|----------------------------|
| 60            | DRIVER SEAT<br>CONTROL UNIT | WHITE           |   | 11 10 9 8 7 6 5 4 3 2 2 27 20 19 18 |   | Signal Name      | _ | _ | _ | I | POWER SUPPLY<br>(ENCODER) | REAR LIFTER SW<br>(DOWNWARD) | FRONT LIFTER SW (DOWNWARD) |
| . B209        |                             | _               |   | 3 14 13 12<br>30 29 28              |   | Color of<br>Wire | _ | _ | _ | - | W                         | В                            | Υ                          |
| Connector No. | Connector Name              | Connector Color | ą | 中午<br>H.S. 32 31                    |   | Terminal No.     | 1 | 2 | 3 | 4 | 5                         | 9                            | 7                          |
|               |                             | •               | _ |                                     | _ |                  |   |   |   |   |                           |                              |                            |

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Α

В

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K

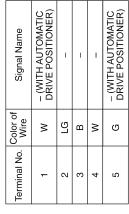
L

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| Connector No.        | ). B211          | 1                                 |
|----------------------|------------------|-----------------------------------|
| Connector Na         | ame SLII         | Connector Name   SLIDING MOTOR LH |
| Connector Color GRAY | olor GR,         | ٩Y                                |
| H.S.                 | 2 4              | 4 3 2 1                           |
| Terminal No.         | Color of<br>Wire | Signal Name                       |



| Signal Name                    | GNĐ | REAR LIFTER MOTOR<br>(DOWNWARD) | REAR LIFTER MOTOR<br>(UPWARD) | FRONT LIFTER MOTOR<br>(UPWARD) | RECLINER MOTOR<br>(BACKWARD) | SLIDE MOTOR<br>(FORWARD) |
|--------------------------------|-----|---------------------------------|-------------------------------|--------------------------------|------------------------------|--------------------------|
| Color of<br>Wire               | В   | ٦                               | Υ                             | GR                             | BR                           | G                        |
| Terminal No.   Color of   Wire | 39  | 40                              | 41                            | 42                             | 43                           | 44                       |

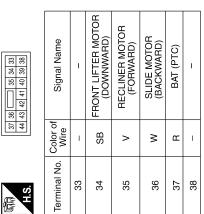
Connector Name | DRIVER SEAT | CONTROL UNIT

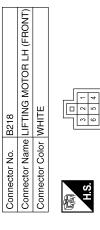
B210

Connector No.

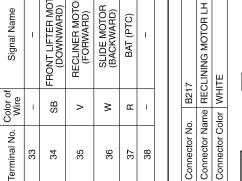
WHITE

Connector Color

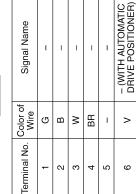














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#### < WIRING DIAGRAM >

|                    |                       | _ |         |                                 |    |          |               |          | _  |            |  |                  |                       |         |                 |  |  |    |             |               |    |    |    |    |    |    |    | Α   |
|--------------------|-----------------------|---|---------|---------------------------------|----|----------|---------------|----------|----|------------|--|------------------|-----------------------|---------|-----------------|--|--|----|-------------|---------------|----|----|----|----|----|----|----|-----|
| ш                  | 1                     |   | 3 2 1   |                                 |    |          | Signal Name   |          |    |            |  |                  | WITHOUT AROUND VIEW   | (YSTEM) |                 |  | 7_1  |    |             | Signal Name   | I  | I  | ı  | 1  | ı  | ı  | 1  | В   |
| N OT 38            |                       | 1 | 4       |                                 |    |          |               |          |    |            |  |                  | THOUT /               | ONITORS | WHITE           |  | 4 3 2<br>10 9 8  |    |             |               |    |    |    |    |    |    |    | С   |
| No. D2             | Jolor Will            |   | 7 6 5 4 | 16 15 14                        |    |          | Color of      | <u>a</u> | 1  |            |  |                  |                       | _       |                 |  | 12 11  |    |             | Wire          | SB | BG | >  | >  | Pe | _  | BG | D   |
| Connector No. D2   | Connector Color WHITE |   | E       | V I                             | 9  |          | Terminal No.  | ď        | •  |            |  | Connector No.    | Connector Name        |         | Connector Color | E                                      | H.S.   |    |             | l erminal No. | ဧ  | 4  | S  | 9  | 8  | 6  | 9  | Е   |
|                    |                       |   |         |                                 |    |          |               |          |    |            |  |                  |                       |         |                 |  |  |    |             |               |    |    |    |    |    |    |    | F   |
| Signal Name        | 1                     | ı | ı       | 1                               | ı  | 1        | 1             | 1        | 1  | ı          |  | Signal Name      | ı                     | ı       | 1               | – (WITH AUTOMATIC<br>DRIVE POSITIONER) | - (WITH AUTOMATIC<br>DRIVE POSITIONER)                                 | 1  | I           | ı             | 1  | ĺ  |    | ı  | ı  | ı  | ı  | G   |
|                    |                       |   |         |                                 |    |          |               |          |    |            |  |                  |                       |         |                 | - (WIT<br>DRIVE                        | - (WIT   |    |             |               |    |    |    |    |    |    |    | Н   |
| o. Wire            | В                     | В | В       | Œ                               | Œ  | 3        | >             | >        | >  | >          |  | Color of<br>Wire | >                     | >       | P               | BG                                     | _  | _  | BR          | SB            | re | >  | ^  | >  | BG | SB | >  | I   |
| Terminal No.       | 80                    | 6 | 10      | 14                              | 15 | 16       | 17            | 18       | 19 | 20         |  | Terminal No.     | 80                    | 6       | 16              | 17                                     | 18   | 23 | 24          | 25            | 26 | 27 | 33 | 34 | 35 | 36 | 37 | ADI |
|                    |                       |   |         |                                 |    |          |               |          |    |            |  |                  |                       |         |                 |  | - 5  | ]  |             |               |    |    |    |    |    |    |    | K   |
| OTO<br>CCB BOX     | -010n-b22             |   | 3 2 1   | 13 12 11                        |    |          | Signal Name   | 1        | ı  | 1          |  | L                | Щ                     |         |                 | _                                      | 8 7 6 5 4 3 2<br>28 27 26 25 24 23 22                                  |    | Signal Namo | ומווים        | ı  | 1  | ı  | ı  |    |    |    | L   |
|                    |                       |   | 7 6 5 4 | 17 16 15 14                     |    | ä        | Sign          |          |    |            |  |                  |                       | ī       |                 |  | 2 11 10 9 31 30 29 2   |    | , io        | 5             |    |    |    |    |    |    |    | M   |
| 5. B224            | PINE SOIN             | - | 10 9 8  | C 20 19 18 17 16 15 14 13 12 11 |    | Color of | Wire          | В        | В  | <u>а</u> ( |  | o. D3            | ame wine i            |         |                 |  | 15 14 13 12<br>35 34 33 32   |    | Color of    | Wire          | SB | 9  | _  | BB |    |    |    | N   |
| Connector No. B224 | Connector Color       |   | E       |                                 |    | -        | l erminal No. | 4        | 5  | 9 1        |  | Connector No.    | Connector Color WHITE |         |                 | H.S.                                   | 20 19 18 17 16 15 14 13 12 11 10 9 40 39 88 37 88 35 34 33 32 81 30 29 |    | Torminal No |               | 4  | 2  | 9  | 7  |    |    |    | 0   |

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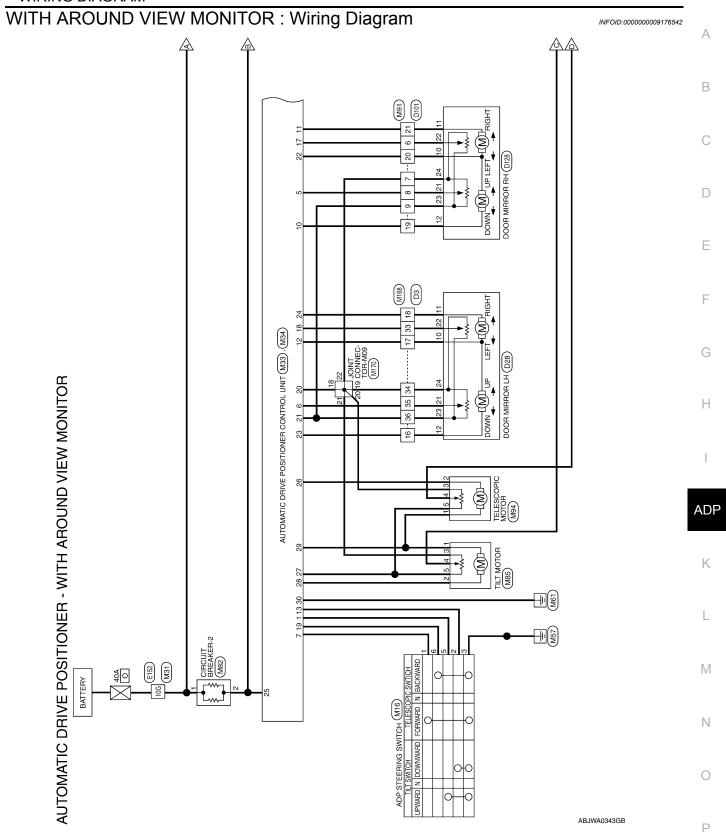
DP

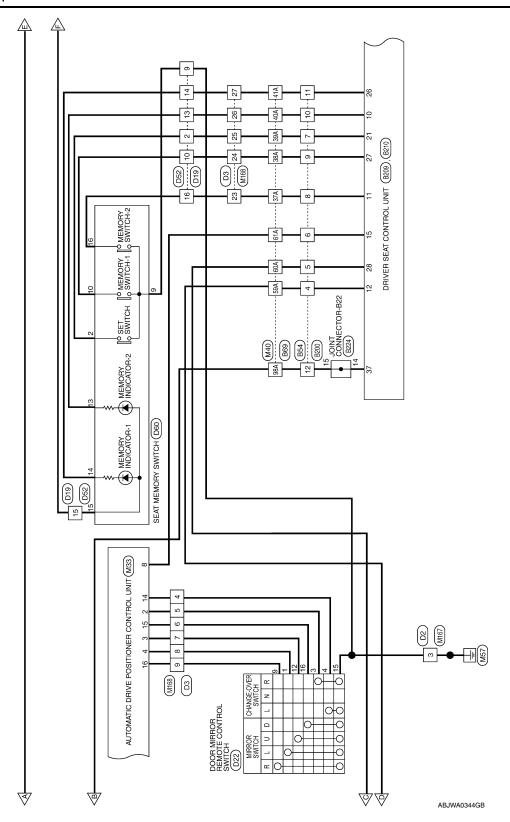
Р

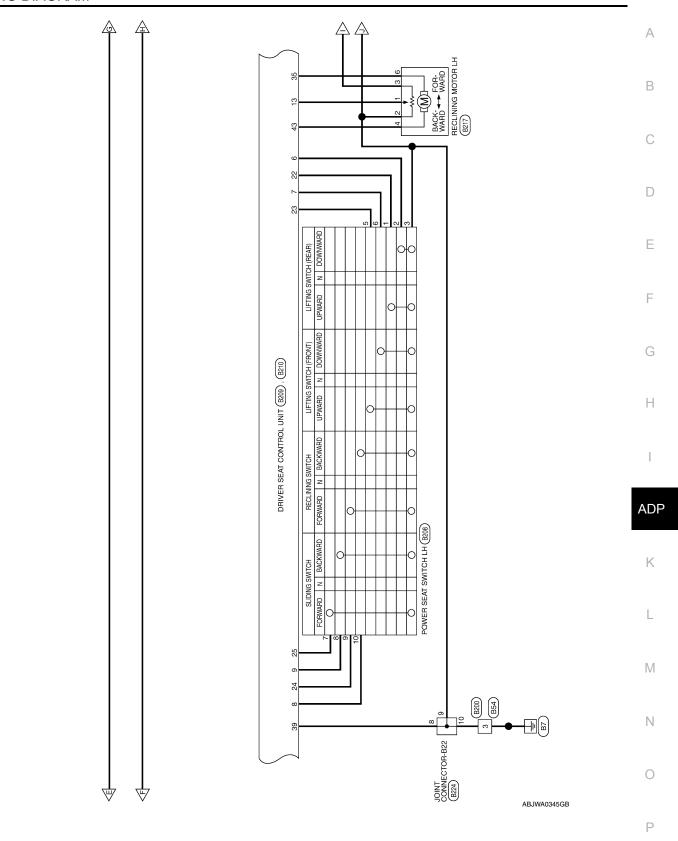
ADP-53 2014 Pathfinder Revision: May 2013

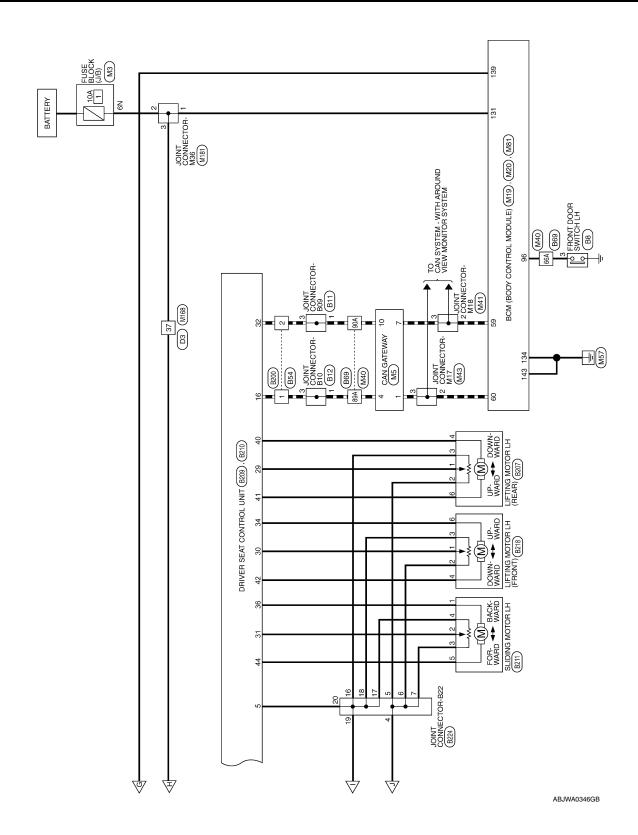
|                 | WIRE TO WIRE WHITE  |   | 12 13 14 15 16  | Signal Name      | 1  | 1  | 1  | ı  | 1  | J  | ı  | 20            | OR MIRROR RH                      | (WITHOUT AROUND VIEW MONITOR SYSTEM) | WHITE           | 5 1 1 10 9 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                      | anois.                                  |      | 1  | ı  | ı  | ı  | 1  | ı  |   |
|-----------------|---|---|---|------------------|----|----|----|----|----|----|----|---------------|-----------------------------------|--------------------------------------|-----------------|---|---|------|----|----|----|----|----|----|---|
| ). D52          | ame WIF   |   | 9 10 11 12  | Color of<br>Wire | SB | В  | BR | re | >  | >  | _  | D107          |                                   |                                      | -               | 8 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5                                 | Color of                                | Wire | >  | BB | _  | >  | BR | ГG |   |
| Connector No.   | Connector Name WIRE TO WIRE Connector Color WHITE                   |   | H.S.  | Terminal No.     | 2  | 6  | 10 | 13 | 14 | 15 | 16 | Connector No. |                                   | Connector Name                       | Connector Color | 南<br>H.S.   | Terminal No                             |      | က  | 4  | 2  | 9  | 8  | 6  |   |
|                 |   |   |   |                  |    |    |    |    |    |    |    |               |                                   |                                      |                 | 2 1   |   |      |    |    |    |    |    |    |   |
|                 | DOOR MIRROR REMOTE CONTROL SWITCH (WITH AUTOMATIC DRIVE POSITIONER) | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 5 6 7 8<br>2 13 14 15 16  | Signal Name      | 1  | ı  | 1  | ı  | 1  | ı  | ı  |               | TO WIRE                           | 삗                                    |                 | 11 10 9 8 7 6 5 4 3 2 2 2 1 20 19                                       | O o o o o o o o o o o o o o o o o o o o |      | 1  | ı  | _  | _  | -  | 1  |   |
| DZZ             | ne CON  | or GRAY                                 | 1 2 3 4 4 1 1 1 2 2 1 1 2 2 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 1 1 2 2 1 | Color of<br>Wire | >  | LG | SB | >  | BB | В  | _  | D101          | ne WIRE                           | or WHITE                             |                 | 15 14 13 12<br>31 30 29 28  | Color of                                | Wire | >  | _  | BB | ^  | BR | SB |   |
| Collinector No. | Connector Name  | Connector Color                         | H.S.  | Terminal No.     | -  | က  | 4  | 6  | 12 | 15 | 16 | Connector No. | Connector Name WIRE TO WIRE       | Connector Color                      |                 | H.S. 32 3   | ON legiment                             | ,    | 9  | 7  | 8  | 6  | 19 | 20 |   |
|                 |   |   |   | Φ                |    |    |    |    |    |    |    |               | LOH                               |                                      |                 |   |   |      |    |    |    |    |    |    | T |
|                 | Connector Name   WIRE TO WIRE                                       |   | 6 6 5 1<br>14 13 12 11 10 9 11 10 10 10 10 10 10 10 10 10 10 10 10  | Signal Name      | 1  | ı  | ı  | ı  | ı  | I  | ı  |               | Connector Name SEAT MEMORY SWITCH | WHITE                                |                 | 14   13   15   14   17   10   9   14   17   17   17   17   17   17   17 | amely learning                          |      | 1  | ı  | ı  | I  | 1  | I  |   |
|                 | ame WIF   |   | 16 15   | Color of<br>Wire | SB | В  | BR | മ  | >  | >  | _  | D60           | ame SE,                           | olor WF                              | L               | 8 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                                 | Color of                                | Wire | SB | m  | BB | re | Υ  | >  |   |
| Collinector No. | Connector Name WIRE T   | 臣                                       | K.  | Terminal No.     | 2  | 6  | 10 | 13 | 14 | 15 | 16 | Connector No. | onnector Na                       | Connector Color                      | a.              | H.S.  | Terminal No                             |      | 2  | o  | 10 | 13 | 14 | 15 |   |

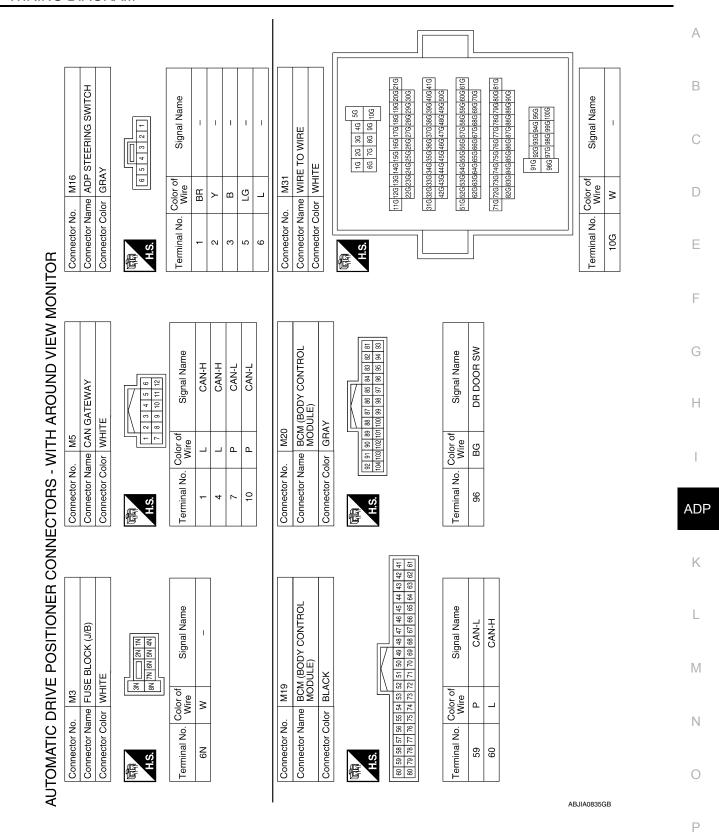
# WITH AROUND VIEW MONITOR











| Signal Name      | MIRROR SENSOR<br>(LH VERTICAL) | TELESCOPIC SW<br>(FRONTWARD) | UART (TX/RX) | MIRROR MOTOR<br>(RH VERTICAL (UP)) | MIRROR MOTOR (RH<br>HORIZONTAL (LEFT)) | MIRROR MOTOR (LH<br>COMMON (DOWN&<br>RIGHT)) | TILT SW (DOWNWARD) | MIRROR SELECT<br>SW (LH) | MIRROR SW<br>(DOWNWARD) |
|------------------|--------------------------------|------------------------------|--------------|------------------------------------|--|--|--------------------|--------------------------|-------------------------|
| Color of<br>Wire | ш                              | BB                           | ŋ            | BB                                 | ŋ                                      | BG   | >                  | ۵                        | Ж                       |
| Terminal No.     | 9                              | 7                            | 8            | 10                                 | 11                                     | 12   | 13                 | 14                       | 15                      |

|               | AUTOMATIC DRIVE<br>POSITIONER<br>CONTROL UNIT | 31              | 4         5         6         7         8         9         10         11         12           16         17         18         19         20         21         22         23         24 | Signal Name      | TILT SW (UPWARD) | MIRROR SELECTOR<br>SW (RH) | MIRROR SW (UPWARD) | MIRROR SW<br>(LEFTWARD) | MIRROR SENSOR<br>(RH VERTICAL) |
|---------------|---|-----------------|---|------------------|------------------|----------------------------|--------------------|-------------------------|--------------------------------|
| . M33         |   | lor WHITE       | 1 2 3 4 13 14 15 16   | Color of<br>Wire | ГG               | GR                         | 9                  | Ь                       | Μ                              |
| Connector No. | Connector Name                                | Connector Color | o;  | Terminal No.     | 1                | 2                          | 3                  | 4                       | 5                              |

| Signal Name       | TELESCOPIC MOTOR<br>(BACKWARD) | POWER SUPPLY<br>(SENSOR FOR 16V) | TILT MOTOR<br>(DOWNWARD) | STRG MOTOR<br>COMMON (UPWARD/<br>FORWARD) | GND (POWER) |
|-------------------|--------------------------------|----------------------------------|--------------------------|---|-------------|
| Color of<br>Wire  | >                              | P                                | SB                       | BR  | В           |
| Terminal No. Wire | 26                             | 27                               | 28                       | 59  | 30          |

| 4             | AUTOMATIC DRIVE<br>POSITIONER<br>CONTROL UNIT | ITE                   | 25        | Signal Name      | BAT (PTC) |
|---------------|---|-----------------------|-----------|------------------|-----------|
| . M34         |   | lor WF                |           | Color of<br>Wire | _         |
| Connector No. | Connector Name                                | Connector Color WHITE | 原<br>H.S. | Terminal No.     | 25        |

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#### < WIRING DIAGRAM >

| CONTRECTOR INC. |                       |     |     |                |          |     | Signal Name                                 | 1                                   | ı   |                               |   |  |                                     |                     |                       |   |               | Connector Name CIRCUIT BREAKER-2   | 111                   |  |    | Signal Name          | 1            | 1     |               |       |
|-----------------|-----------------------|-----|-----|----------------|----------|-----|---|-------------------------------------|---|-------------------------------|---|--|-------------------------------------|---------------------|-----------------------|---|---------------|------------------------------------|-----------------------|--|----|----------------------|--------------|-------|---------------|-------|
| NO. M4          | Connector Color WHITE |     | 4   |                |          |     | lo. Wire                                    | ۵                                   | ۵   |                               |   |  |                                     |                     |                       |   | No. M82       | Name CIRCL                         | Color WHITE           |  |    | lo. Color of Wire    | M            | _     |               |       |
|                 | Connector             |     |     | U              | 2        |     | Terminal No.                                | 0                                   | က   |                               |   |  |                                     |                     |                       |   | Connector No. | Connector                          | Connector Color       | H.S.   |    | Terminal No.         | -            | 2     |               |       |
| _               |                       |     |     |                |          |     |   |                                     |   |                               |   |  |                                     |                     |                       |   |               |                                    |                       | ٦  |    |                      |              |       |               |       |
| Signal Name     | ı                     | ı   | ı   | -              | 1        | ı   | 1   | 1                                   | ı   | 1                             | ı   | - (WITH AUTOMATIC<br>DRIVE POSITIONER) |                                     |                     |                       |   |               | BCM (BODY CONTROL MODILIE)         | (CEE)                 | 137[136]136]134[136]139<br>143   142   141   140   139   138 |    | Signal Name          | BAT BCM FUSE | GND 2 | BAT POWER F/L | GND 1 |
| Wire            | _                     | BR  | SB  | PT             | >        | SB  | _   | G                                   | BG  | _                             | ۵   | _                                      |                                     |                     |                       |   | o. M81        | ame BCM                            |                       | _ 500  |    | Color of<br>Wire     | M            | В     | 3             | В     |
| l erminai No.   | 37A                   | 38A | 39A | 40A            | 41A      | 59A | 60A   | 61A                                 | 66A   | 89A                           | 90A   | 98A                                    |                                     |                     |                       |   | Connector No. | Connector Name                     | Connector Color       |  | Ŋ. | Terminal No.         | 131          | 134   | 139           | 143   |
|                 |                       | _   |     |                |          |     |   |                                     |   |                               |   |  |                                     |                     |                       | ] |               |                                    |                       |  |    |                      |              |       |               |       |
| L               |                       |     |     | 14 24 34 44 5A | 7A 8A 9A |     | 11A 12A 13A 14A 15A 16A 17A 18A 19A 20A 21A | 22A 23A 24A 25A 26A 27A 28A 29A 30A | 31A 32A 33A 34A 35A 36A 37A 38A 39A 40A 41A | A 44A 45A 46A 47A 48A 49A 50A | 51A 52A 53A 54A 55A 56A 57A 58A 59A 60A 61A | 62A 63A 64A 65A 66A 67A 68A 69A 70A    | 82A 83A 84A 85A 86A 87A 88A 89A 90A | 91A 92A 93A 94A 95A | 96A 97A 98A 99A 1100A |   |               | Connector Name JOINT CONNECTOR-M17 | 쁘                     | 4 3 2 1  |    | Signal Name          | -            | ı     |               |       |
|                 | Connector Color GBAY  |     |     |                |          |     | 11A12A13                                    | 22A23                               | 314 324 33                                  | 42A 43                        | 51A 52A 53                                  | 62A 63                                 | 82A 83                              |                     |                       |   | ctor No. M43  | stor Name JOIN                     | Connector Color WHITE | 4  |    | al No. Color of Wire |              | _     |               |       |
|                 | Connec                |     |     |                | 5        |     |   |                                     |   |                               |   | ]]                                     |                                     |                     |                       |   | Connector No. | Connec                             | Connec                | 用.S.H  |    | Terminal No.         | 2            | က     |               |       |

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#### < WIRING DIAGRAM >

| Connector No.   | o. M94           |                                   |
|-----------------|------------------|-----------------------------------|
| Connector Na    | ame TEL          | Connector Name   TELESCOPIC MOTOR |
| Connector Color | olor BROWN       | NMC                               |
| 语.S.H           |                  | 3 4 6 6                           |
| Terminal No.    | Color of<br>Wire | Signal Name                       |
| -               | BR               | ı                                 |
| 2               | ^                | 1                                 |
| 3               | У                | 1                                 |
| 4               | SB               | ı                                 |
| 5               | ΓG               | ı                                 |

| Signal Name  - (WITH AUTOMATIC DRIVE POSITIONER)  - (WITH AUTOMATIC DRIVE POSITIONER) |    |    |    |
|---|----|----|----|
| Color of Wire BG Wire BG LG Y Y Y Y   | œ  | BG | 8  |
| Terminal No. Color of 17 BG Wire 23 L 24 BR 25 SB 26 LG 26 LG 27 Y 33 BG 34 Y         | 35 | 36 | 37 |

| Connector No.           |                             |   |
|-------------------------|-----------------------------|---|
| Connector Name          |                             | WIRE TO WIRE  |
| Connector Color   WHITE | olor   WHI                  | TE  |
|                         |                             |   |
|                         |                             |   |
| o;<br>- □               | 2 3 4 5 6<br>18 19 20 21 22 | 6         7         8         9         10         11         12         13         14         15         16           22         23         24         25         26         27         28         29         30         31         32 |
|                         |                             |   |
| Terminal No.            | Color of<br>Wire            | Signal Name   |
| 9                       | g                           | 1   |
| 7                       | λ                           | 1   |
| 8                       | Μ                           | ı   |
| 6                       | ВG                          | ı   |
| 19                      | BR                          | – (WITH AUTOMATIC<br>DRIVE POSITIONER)  |
| 20                      | SB                          | – (WITH AUTOMATIC<br>DRIVE POSITIONER)  |
| 21                      | G                           | – (WITH AUTOMATIC<br>DRIVE POSITIONER)  |

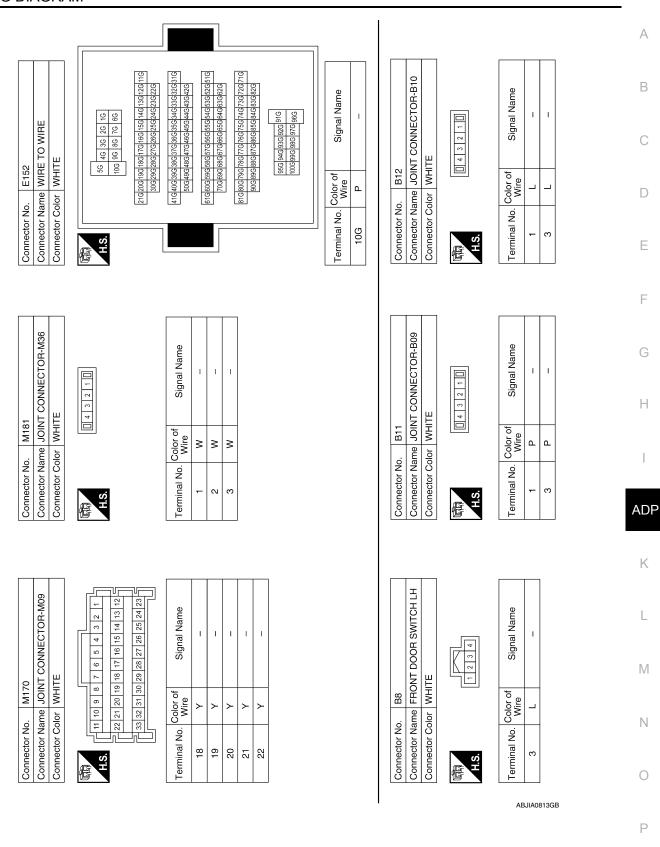
|               |                |                       | 15 16 17<br>35 36 37                                 |                  |   |    |   |   |   |   |  |
|---------------|----------------|-----------------------|--|------------------|---|----|---|---|---|---|--|
| 88            | WIRE TO WIRE   | IIE                   | 6 7 8 9 10 11 12 13 14<br>26 27 28 29 30 31 32 33 34 | Signal Name      | 1 | 1  | ı | 1 | 1 | - | - (WITH AUTOMATIC<br>DRIVE POSITIONER) |
| ). M168       |                | lor WH                | 2 3 4 5<br>22 23 24 25                               | Color of<br>Wire | Ь | GR | Я | В | Ь | W | ГС                                     |
| Connector No. | Connector Name | Connector Color WHITE | -<br> -<br> -  | Terminal No.     | 7 | 5  | 9 | 2 | 8 | 6 | 16                                     |

| Connector No.             | ). M85           | 35  |
|---------------------------|------------------|---|
| Connector Name TILT MOTOR | ame TII          | _T MOTOR  |
| Connector Color           | olor Wi          | WHITE   |
| 品.S.                      |                  | 1   1   2   1   2   2   2   3   4   5   5   5   5   5   5   5   5   5 |
| Terminal No.              | Color of<br>Wire | of Signal Name  |
| -                         | BB               | ı   |
| 2                         | SB               | ı   |
| 3                         | >                | 1   |
| 4                         | ٦                | ı   |
| 5                         | LG               | ı   |

|  | H.S.                       | Connector Color WHITE  | Connector Name WIRE TO WIRE | 3 E TO 11 12 10 11 12 12 12 12 12 12 12 12 12 12 12 12 | Connector No. Connector Colc Connector Colc H.S. Terminal No. |
|--|----------------------------|--|-----------------------------|--|---|
| 2  |                            | 1 2 3 14 5 6 8 8 9 10 11 12 13 14 15 8 8 9 10 11 12 13 14 15 | 4 5 6 1 12 13 14 15         |  | erminal No.   |
| O WIRE 12 13 14 15 6 8 8 8 9 18 14 15 8 14 15 8 9 18 14 15 8 9 18 14 15 8 15 8 | onnector Name WIRE TO WIRE | onnector Name WIRE TO WIRE                                   |                             | M167   | onnector No.  |

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#### < WIRING DIAGRAM >



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| Connector No.   | o. B54     | 4   |   | - Constant    | Color of | N Constitution |                 |          |              |   |
|-----------------|------------|---|---|---------------|----------|----------------|-----------------|----------|--------------|---|
| Connector Na    | ame WIF    | Connector Name WIRE TO WIRE                 |   | i erminal No. | Wire     | Signal Name    |                 |          |              |   |
| Connector Color | olor BR    | BROWN                                       |   | 5             | _        | -              |                 |          |              |   |
|                 | _          |   |   | 9             | >        | ı              |                 |          |              |   |
| E               | 4          | 1 2 2 1                                     |   | 7             | SB       | ı              |                 |          |              |   |
| S.              | 12 11      | 10 9 8                                      |   | ∞             | _        | ı              |                 |          |              |   |
|                 |            |   |   | 6             | BR       | ı              |                 |          |              |   |
|                 | Color of   |   |   | 10            | p<br>D   | ı              |                 |          |              |   |
| Terminal No.    | Wire       | Signal Name                                 |   | =             | >        | ı              |                 |          |              |   |
| -               | Τ          | ı   |   | 12            | _        | ı              |                 |          |              |   |
| 2               | ۵          | ı   |   |               |          |                |                 |          |              |   |
| ю               | В          | ı   |   |               |          |                |                 |          |              |   |
| 4               | BB         | ı   |   |               |          |                |                 |          |              |   |
|                 |            |   |   |               |          |                |                 |          |              |   |
| Connector No.   | o. B69     |   |   | CA Constant   | Color of | O STORY        | Connector No.   | . B200   | 0            |   |
| Connector No    | ame WIF    | Connector Name WIRE TO WIRE                 |   | i erminai No. |          | olgnal Name    | Connector Name  |          | WIRE TO WIRE |   |
| Connector Color | olor GBAV  | ۸۷  |   | 37A           | ٦        | ı              | Connector Color | +        | BROWN        | _ |
|                 | 5          |   |   | 38A           | BR       | ı              |                 | 4        |              | 7 |
|                 |            |   | _ | 39A           | SB       | 1              | E               | 1 2 3    | 4 5          |   |
| S               |            | 5A 4A 3A 2A 1A                              |   | 40A           | re       | I              | H.S.            | 6 7 8    | 9 10 11 12   |   |
|                 | 1          | 9A 8A                                       |   | 41A           | >        | ı              |                 |          |              | r |
|                 | _          |   |   | 29A           | BB       | ı              | Terminal No.    | Color of | Signal Name  |   |
|                 | 21A 20A 19 |   |   | 60A           | _        | ı              | 7               | Wire     |              |   |
|                 | 30A 28     | 30A 29A 28A 27A 26A 25A 24A 23A 22A         |   | 61A           | >        | 1              | _ (             | r }      | 1            |   |
|                 | 41A 40A 39 | 41A 40A 39A 38A 37A 36A 35A 34A 33A 32A 31A |   | 66A           | _        | ı              | N               | 8        | 1            |   |
|                 | 50A 49     | 50A 49A 48A 47A 46A 45A 44A 43A 42A         |   | 89A           | _        | ı              | က               | m        | 1            |   |
|                 | 61A 60A 59 | R14 R04 594 584 574 564 554 544 534 524 514 |   | 90A           | ۵        | 1              | 4               | ≥        | ı            |   |
|                 | 70A 69     |   |   | 98A           | -        | 1              | 5               | BR       | _            |   |
|                 | }          |   |   | 5             | J        |                | 9               | SB       | -            |   |
|                 | 81A 80A 75 | 814 804 794 784 774 764 754 744 734 724 714 |   |               |          |                | 7               | _        | 1            |   |
|                 | 30A 88     | 30A 63A  66A 67A 60A 63A 63A 62A            |   |               |          |                | ∞               | GR       | ı            |   |
|                 |            | 95A   94A   93A   92A                       |   |               |          |                | ი               | >        | ı            | 1 |
|                 |            | 100A 99A 98A 97A 96A                        |   |               |          |                | 10              | ტ        | -            |   |
|                 |            | ]   |   |               |          |                | -               | >        | ı            |   |
|                 |            |   | 1 |               |          |                | 12              | æ        | ı            |   |

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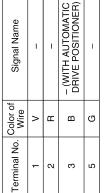
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#### < WIRING DIAGRAM >

| SB R |
|------|

|          | Signal Name  | SET SW | REAR LIFTER SW (UPWARD) | FRONT LIFTER SW (UPWARD) | RECLINER SW<br>(FORWARD) | SLIDE SW (FORWARD) | IND 1 | ADDRESS 1 | PULSE (TILT) (WITH<br>AROUND VIEW<br>MONITOR) | PULSE (REAR LIFTER) | PULSE (FRONT LIFTER) | PULSE (SLIDE) | CAN-L |
|----------|--------------|--------|-------------------------|--------------------------|--------------------------|--------------------|-------|-----------|---|---------------------|----------------------|---------------|-------|
| Color of | Wire         | _      | >                       | g                        | ۵                        | ٦                  | >     | >         | BR  | œ                   | <b>\</b>             | ٦             | 8     |
|          | Terminal No. | 21     | 22                      | 23                       | 24                       | 25                 | 56    | 27        | 28  | 59                  | 30                   | 31            | 32    |

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



|    | Signal Name  | FRONT LIFTER SW (DOWNWARD) | RECLINER SW (BACKWARD) | SLIDE SW<br>(BACKWARD) | IND 2 | ADDRESS 2 | PULSE (TELESCOPIC)<br>(WITH AROUND VIEW<br>MONITOR) | PULSE (RECLINER) | -  | UART (TX/RX) | CAN-H | ı  | ı  | ı  | ı  |
|----|--------------|----------------------------|------------------------|------------------------|-------|-----------|---|------------------|----|--------------|-------|----|----|----|----|
| 30 | Wire         | Y                          | BR                     | SB                     | ŋ     | GR        | *   | G                | 1  | SB           | Ь     | 1  | 1  | ı  | ı  |
|    | Terminal No. | 2                          | 8                      | 6                      | 10    | 11        | 12  | 13               | 14 | 15           | 16    | 17 | 18 | 19 | 20 |
|    |              |                            | •                      | •                      |       | •         |   |                  |    | •            |       |    |    |    |    |

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

| © 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | Signal Name       | _ | - | ı | - (WITH AUTOMATIC<br>DRIVE POSITIONER) | <ul><li>– (WITH AUTOMATIC<br/>DRIVE POSITIONER)</li></ul> |  |
|---|-------------------|---|---|---|--|---|--|
|   | Color of<br>Wire  | В | В | Μ | T                                      | Υ   |  |
| 画<br>H.S.                               | Terminal No. Wire | 1 | 2 | 3 | 4                                      | 9   |  |

|               |                             |                 |   | 1 1  | ]                    |           |   |   |   |                           |                           |
|---------------|-----------------------------|-----------------|---|--|----------------------|-----------|---|---|---|---------------------------|---------------------------|
| 60            | DRIVER SEAT<br>CONTROL UNIT | ITE             |   | 11 10 9 8 7 6 5 4 3 2<br>27 26 25 24 23 22 21 20 19 18 | Signal Name          | ר וואווים | ı | _ | _ | POWER SUPPLY<br>(ENCODER) | REAR LIFTER SW (DOWNWARD) |
| B209          |                             | lor WHITE       | _ | 15 14 13 12<br>31 30 29 28                             | Color of             | Wire      | 1 | ı | ı | >                         | ш                         |
| Connector No. | Connector Name              | Connector Color | Æ | H.S. 32 3  | Tornima<br>ON legima | 1         | 2 | ε | 4 | 5                         | 9                         |
|               |                             |                 |   |  |                      |           |   |   |   |                           |                           |

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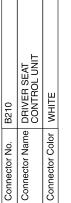
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| Connector No.        | B211                            |
|----------------------|---------------------------------|
| Connector Name       | Connector Name SLIDING MOTOR LH |
| Connector Color GRAY | GRAY                            |
|          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



| Signal Name       | - (WITH AUTOMATIC<br>DRIVE POSITIONER) | ı  | ı | 1 | - (WITH AUTOMATIC<br>DRIVE POSITIONER) |
|-------------------|--|----|---|---|--|
| Color of<br>Wire  | >                                      | rg | В | M | g                                      |
| Terminal No. Wire | -                                      | 2  | 3 | 4 | 5                                      |

| Terminal No. | Color of<br>Wire | Signal Name                     |
|--------------|------------------|---------------------------------|
| 39           | В                | GND                             |
| 40           | 7                | REAR LIFTER MOTOR<br>(DOWNWARD) |
| 41           | Y                | REAR LIFTER MOTOR<br>(UPWARD)   |
| 42           | GR               | FRONT LIFTER MOTOR<br>(UPWARD)  |
| 43           | BB               | RECLINER MOTOR<br>(BACKWARD)    |
| 44           | 5                | SLIDE MOTOR<br>(FORWARD)        |
|              |                  |                                 |



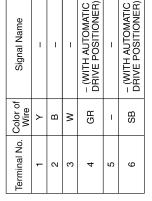


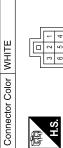


| Signal Name      | ı  | FRONT LIFTER MOTOR<br>(DOWNWARD) | RECLINER MOTOR<br>(FORWARD) | SLIDE MOTOR<br>(BACKWARD) | BAT (PTC) | 1  |
|------------------|----|----------------------------------|-----------------------------|---------------------------|-----------|----|
| Color of<br>Wire | -  | SB                               | >                           | M                         | В         | -  |
| Ferminal No.     | 33 | 34                               | 35                          | 36                        | 37        | 38 |









Connector Name RECLINING MOTOR LH

B217

Connector No.





| Signal Name                | ı | ı | 1 | ı  | ı | - (WITH AUTOMATIC<br>DRIVE POSITIONER) |
|----------------------------|---|---|---|----|---|--|
| Color of<br>Wire           | ŋ | В | 8 | BR | - | >                                      |
| Terminal No. Color of Wire | - | 2 | က | 4  | 5 | 9                                      |

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#### < WIRING DIAGRAM >

| L ()          | R TO WIRE                   | ITE                   | 13 12 11 10 9 8 | Signal Name       | ı |
|---------------|-----------------------------|-----------------------|-----------------|-------------------|---|
| . D2          | me WII                      | lor W                 | 7 6 5 4 6       | Color of<br>Wire  | В |
| Connector No. | Connector Name WIRE TO WIRE | Connector Color WHITE | 山河<br>H.S.      | Terminal No. Wire | ဗ |

| Signal Name                  | ı | ı | 1  | 1  | _  | 1  | 1  | _  | 1  | 1  |
|------------------------------|---|---|----|----|----|----|----|----|----|----|
| Color of<br>Wire             | В | В | В  | ш  | В  | Μ  | ×  | W  | ×  | M  |
| Terminal No.   Color of Wire | 8 | 6 | 10 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

| 24            | Connector Name JOINT CONNECTOR-B22 | PINK            | 3 17 16 15 14 13 12 11 | Signal Name       | ı | ı | - | ı |
|---------------|------------------------------------|-----------------|------------------------|-------------------|---|---|---|---|
| . B224        | me JO                              |                 | 10 9 8<br>20 19 18     | Color o           | В | В | В | В |
| Connector No. | Connector Na                       | Connector Color | S. I.                  | Terminal No. Wire | 4 | 5 | 9 | 7 |

|               | WIRE TO WIRE   | ITE             | 2 4 3 2 1 | 13 12 11 | Signal Name      | 1  | - | _  | 1  | -  | _  |    |
|---------------|----------------|-----------------|-----------|----------|------------------|----|---|----|----|----|----|----|
| . D19         | me WIF         | lor WHITE       | 8 2       | 15       | Color of<br>Wire | SB | В | BR | LG | >  | ^  | _  |
| Connector No. | Connector Name | Connector Color | 臣         | 6.       | Terminal No.     | 2  | 6 | 10 | 13 | 14 | 15 | 16 |

| Signal Name                | - (WITH AUTOMATIC<br>DRIVE POSITIONER) | - (WITH AUTOMATIC<br>DRIVE POSITIONER) | ı  | I  | 1  | ı  | 1  | 1  | ı  | 1  | ı  | ı  |
|----------------------------|--|--|----|----|----|----|----|----|----|----|----|----|
| Color of<br>Wire           | BG                                     | T                                      | 7  | BR | SB | LG | >  | >  | Υ  | BG | SB | ^  |
| Terminal No. Color of Wire | 17                                     | 18                                     | 23 | 24 | 25 | 56 | 27 | 33 | 34 | 35 | 36 | 37 |

| Connector No. D3 Connector Color WHITE  MH.S. | 20 19 18 17 16 15 14 13 12 11 10 9 8 7 7 6 5 4 3 2 1 1 2 1 1 1 10 9 30 30 30 30 30 30 30 30 30 30 30 30 30 |  |
|---|--|--|
|---|--|--|

| Signal Name                | ı  | I  | ı | _  | _ | _ | _  |
|----------------------------|----|----|---|----|---|---|----|
| Color of<br>Wire           | SB | ΓG | _ | BB | ۸ | ٨ | FG |
| Terminal No. Color of Wire | 4  | 5  | 9 | 7  | 8 | 6 | 16 |

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| Connector No.                     | lo. D22          | 72  | Connector No.                     | o. D28            |   | Co    | Connector No.   | D52                |  |
|-----------------------------------|------------------|---|-----------------------------------|-------------------|---|-------|-----------------|--------------------|--|
| Connector Name                    | lame CC          | DOOR MIRROR REMOTE<br>CONTROL SWITCH (WITH<br>AUTOMATIC DRIVE | Connector Name                    |                   | DOOR MIRROR LH<br>(WITH AROUND VIEW<br>MONITOR SYSTEM)  | CO    | Connector Name  |                    | WIRE TO WIRE WHITE                                     |
| Connector Color                   | color GF         | GRAY  | Connector Color                   | _                 | WHITE   | E     |                 |                    |  |
| #                                 |                  |   |                                   |                   |   | H.S.  | οij             | 1 2 3 4 9 10 11 12 | 4 5 6 7 8<br>12 13 14 15 16                            |
| H.S.                              | 9 10 1           | 3 4 5 6 7 8 11 12 13 14 15 16                                 | H.S. 124                          | 23 22 21          | 8     7     6     5     4     3     2     1       20     19     18     17     16     15     14     13 |       |                 | :                  | <u>:</u>   |
| Terminal No.                      | Color of<br>Wire | of Signal Name  | Terminal No.                      | Color of<br>Wire  | Signal Name   | Tem   | Terminal No.    | Color of<br>Wire   | Signal Name  |
| -                                 | >                | 1   | 10                                | BG                | 1   |       | 2               | SB                 | 1  |
| ღ                                 | re               | ı   | =                                 | _                 | ı   |       | 6               | В                  | ı  |
| 4                                 | SB               | ı   | 12                                | LG                | -   |       | 10              | BR                 | ı  |
| 6                                 | >                | ı   | 21                                | BG                | -   |       | 13              | ГG                 | 1  |
| 12                                | BR               | ı   | 22                                | >                 | 1   |       | 14              | <b>\</b>           | 1  |
| 15                                | В                | 1   | 23                                | SB                | ı   |       | 15              | >                  | 1  |
| 16                                | _                | ı   | 24                                | >                 | -   |       | 16              | _                  | 1  |
|                                   |                  |   |                                   |                   |   |       |                 |                    |  |
| Connector No.                     | lo. D60          | 00  | Connector No.                     | o. D101           | 10  | Con   | Connector No.   | D128               |  |
| Connector Name<br>Connector Color | -                | SEAT MEMORY SWITCH WHITE                                      | Connector Name<br>Connector Color | ame WIF           | WIRE TO WIRE WHITE  | Con   | Connector Name  |                    | DOOR MIRROR RH<br>(WITH AROUND VIEW<br>MONITOR SYSTEM) |
|                                   | L                |   | Ą                                 |                   |   | Con   | Connector Color | lor WHITE          | <b>.</b>   |
| H.S.                              | 16 15            | 6 5 4 3 2 1 1 10 9 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1      | H.S.                              | 15 14 13 31 30 29 | 12 11 10 9 8 7 6 5 4 3 2 2 2 2 1 20 19 18 8 2 2 2 2 2 2 2 2 2 3 2 2 2 3 3 3 3 3                       | 1-1-1 | S)              | 니이                 | 6 5 4  |
|                                   |                  |   |                                   |                   |   |       | 24 2            | 23 22 21 20        | 20 19 18 17 16 15 14 13                                |
| Terminal No.                      | Color of<br>Wire | of Signal Name  | Terminal No.                      | Color of<br>Wire  | Signal Name   | Terr  | Terminal No.    | Color of<br>Wire   | Signal Name  |
| 2                                 | SB               | 1   | 9                                 | >                 | 1   |       | 10              | SB                 | 1  |
| 6                                 | В                | ı   | 7                                 | _                 | I   |       | 11              | ГG                 | 1  |
| 10                                | BR               | ı   | 80                                | BB                | ı   |       | 12              | BR                 | ı  |
| 13                                | LG               | ı   | ი                                 | >                 | I   |       | 21              | BR                 | ı  |
| 14                                | >                | ı   | 19                                | BB                | I   |       | 22              | >                  | 1  |
| 15                                | >                | ı   | 20                                | SB                | I   |       | 23              | >                  | 1  |
| 16                                | _                | 1   | 21                                | LG                | I   |       | 24              | _                  | 1  |

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# < BASIC INSPECTION > **BASIC INSPECTION** Α DIAGNOSIS AND REPAIR WORK FLOW Work Flow INFOID:0000000009176543 В **WORK FLOW** Inspection start D 1. Get information for symptom Get the detailed information about symptom from the Е customer. 2. Check DTC Symptom is described. Symptom is not described. Symptom is described. DTC is detected. DTC is not detected. DTC is detected. 4. Confirm the symptom 3. Confirm the symptom Confirm the symptom described by the Confirm the symptom described by the customer. customer. 5. Perform DTC Confirmation Procedure 6. Perform Basic Inspection ADP 7. Detect malfunctioning system by **Symptom Table** 8. Detect malfunctioning part by Diagnostic Procedure 9. Repair or replace the malfunctioning part Ν NO 10. Final check (DTC is detected.) Check that the symptom is not detected. (Symptom remains.) Perform DTC Confirmation Procedure again, and then

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check that the malfunction can be repaired securely.

YES

**INSPECTION END** 

#### **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.

# $oldsymbol{2}.$ CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM

Check "Self Diagnostic Result" with CONSULT.

Refer to ADP-35, "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-160, "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-49, "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

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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

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

| Function                                      | Condition | Procedure                      |  |  |
|---|-----------|--------------------------------|--|--|
| Memory [Seat, steering (if equipped), mirror] | Erased    | Perform storing                |  |  |
| Faturita it assist                            | ON        | Perform initialization         |  |  |
| Entry/exit assist                             | ON        | Set slide amount <sup>*1</sup> |  |  |
| Intelligent Key interlock                     | Erased    | Perform initialization         |  |  |
| intelligent Ney Interlock                     | Liaseu    | Perform storing                |  |  |

<sup>\*1:</sup> 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

# 1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-73, "SYSTEM INITIALIZATION: Work Procedure".

>> GO TO 2.

#### 2.MEMORY STORAGE

Perform memory storage. Refer to ADP-74, "MEMORY STORING: Work Procedure".

>> GO TO 3.

# ${f 3}.$ INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to <u>ADP-75</u>, "INTELLIGENT KEY INTERLOCK STORING: <u>Work Procedure"</u>.

>> GO TO 4.

#### 4.SYSTEM SETTING

Perform system setting. Refer to ADP-75, "SYSTEM SETTING: Work Procedure".

>> Inspection End.

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

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

| Function                                      | Condition | Procedure              |
|---|-----------|------------------------|
| Memory [Seat, steering (if equipped), mirror] | Erased    | Perform storing        |
| Entry/ovit againt                             | ON        | Perform initialization |
| Entry/exit assist                             | ON        | Set slide amount*1     |

| INSPECTION A   | AND ADJUS            | STMENT                                      |    |
|--|----------------------|---|----|
| < BASIC INSPECTION >   |                      |   |    |
| Function   | Condition            | Procedure                                   | Δ  |
| Intelligent Key interlock  | Erased               | Perform initialization                      | Α  |
| intelligent Key Interlock  | Liased               | Perform storing                             |    |
| *1: Default value is 40 mm.                                      |                      |   | В  |
| <b>NOTE:</b> Notice that disconnecting the battery when detected | DTC are prese        | ent will erase the DTC memory.              |    |
| ADDITIONAL SERVICE WHEN REPLACE                                  | CING CONT            | ROL UNIT : Work Procedure                   | С  |
|  |                      | INFOID:000000009176547                      |    |
| 1.system initialization  |                      |   | D  |
| Perform system initialization. Refer to ADP-73, "SYS             | STEM INITIALIZ       | ZATION : Work Procedure".                   |    |
|  |                      |   | Е  |
| >> GO TO 2.  |                      |   |    |
| 2.MEMORY STORAGE   |                      |   |    |
| Perform memory storage. Refer to ADP-74, "MEMO                   | RY STORING           | : Work Procedure".                          | F  |
| >> GO TO 3.  |                      |   |    |
| 3.INTELLIGENT KEY INTERLOCK STORAGE                              |                      |   | (  |
| Perform Intelligent Key interlock storage. Refer to              | ADD 75 "INT          | ELLICENT KEY INTEDLOCK STODING :            |    |
| Work Procedure".   | ADP-75, INT          | ELLIGENT RET INTERLOCK STORING.             | -  |
|  |                      |   |    |
| >> GO TO 4.  |                      |   |    |
| 4.SYSTEM SETTING   |                      |   |    |
| Perform system setting. Refer to ADP-75, "SYSTEM                 | A SETTING : W        | ork Procedure".                             |    |
| >> Increation Find   |                      |   | ΑI |
| >> Inspection End. SYSTEM INITIALIZATION                         |                      |   |    |
|  |                      |   | k  |
| SYSTEM INITIALIZATION : Description                              |                      | INFOID:0000000009176548                     | r  |
| Always perform the initialization when the battery to            | terminal is disc     | onnected or the driver seat control unit is |    |
| replaced. The entry/exit assist function will not operate normal | lly if no initializa | ation is performed.                         |    |

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

## SYSTEM INITIALIZATION: Work Procedure

## 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)  $\rightarrow$  OFF (close)  $\rightarrow$  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**

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:0000000009176551

INFOID:0000000009176550

### 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 (if equipped) 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:0000000009176552

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

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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.

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

## SYSTEM SETTING: Description

INFOID:000000009176554

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

x: Applicable

| Item  | Content   | CONSULT | Set<br>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. [40 mm/80 mm/150 mm] | х       | _             | 40 mm           |
| Entry/exit assist (seat)                          | Entry/exit assist (seat) can be selected:<br>ON (operated) – OFF (not operated)                     | х       | x             | ON              |
| Entry/exit assist [steering column (if equipped)] | Entry/exit assist (steering column) can be selected:<br>ON (operated) – OFF (not operated)          | х       | ^             | ON              |

### SYSTEM SETTING: Work Procedure

INFOID:0000000009176555

1. CHOOSE METHOD

There are three setting methods.

Which method do you choose?

With CONSULT>>GO TO 2.

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### 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

## U1000 CAN COMM CIRCUIT

Description INFOID:0000000009176556

Refer to LAN-36, "CAN COMMUNICATION SYSTEM: CAN Communication Signal Chart".

DTC Logic

### DTC DETECTION LOGIC

| DTC   | Trouble diagnosis name | DTC detecting condition  | Possible cause  |
|-------|------------------------|--|---|
| U1000 | CAN COMM CIR-<br>CUIT  | <ul> <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> | Harness or connectors<br>(CAN communication line is<br>open or shorted) |

### 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 <u>ADP-77</u>, "<u>Diagnosis Procedure</u>".

NO >> Inspection End.

## Diagnosis Procedure

Refer to LAN-20, "Trouble Diagnosis Flow Chart".

## Special Repair Requirement

Refer to ADP-73, "SYSTEM INITIALIZATION: Work Procedure".

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## **U1010 CONTROL UNIT (CAN)**

### < DTC/CIRCUIT DIAGNOSIS >

## U1010 CONTROL UNIT (CAN)

Description INFOID:000000009176560

Refer to LAN-36, "CAN COMMUNICATION SYSTEM: CAN Communication Signal Chart".

DTC Logic

## DTC DETECTION LOGIC

| DTC<br>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. | Driver seat control unit |

## Diagnosis Procedure

INFOID:0000000009176562

## 1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

#### **B2112 SLIDING MOTOR**

### < DTC/CIRCUIT DIAGNOSIS >

## **B2112 SLIDING MOTOR**

Description INFOID:000000009176563

- 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:0000000009176564

#### 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. |                | E |

#### DTC CONFIRMATION PROCEDURE

## 1.PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

YES >> Refer to ADP-79, "Diagnosis Procedure".

NO >> Inspection End.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55. "WITH AROUND VIEW MONITOR: Wiring Diagram' or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to <a href="ADP-83">ADP-83</a>, "DTC Logic".

### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

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

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

|           | (+) Sliding motor LH (-) |        | (-) Voltage (V) (Approx.) |   |
|-----------|--------------------------|--------|---------------------------|---|
| Connector | Terminals                |        | (                         | ŀ |
| B211      | 4                        | Ground | 0                         |   |
| D211      | 5                        | Giouna | U                         |   |

## Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

**ADP-79** 2014 Pathfinder Revision: May 2013

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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.

| (+) Driver seat control unit |           | (-)     | Voltage (V)<br>(Approx.) |  |
|------------------------------|-----------|---------|--------------------------|--|
| Connector                    | Terminals |         | ()                       |  |
| B210                         | 36        | Ground  | 0                        |  |
| D2 10                        | 44        | Giodila | U                        |  |

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End

#### **B2113 RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2113 RECLINING MOTOR**

Description INFOID:000000009176566

- 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:0000000009176567

#### 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 re-<br>clining motor LH output terminal for 0.1 second or<br>more even if the reclining switch is not input. | Driver seat control unit     Front power seat LH (reclining motor) harness is shorted |

#### DTC CONFIRMATION PROCEDURE

## 1.PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

>> Refer to ADP-81, "Diagnosis Procedure". YES

>> Inspection End. NO

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to ADP-81, "DTC Logic".

## Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-49, "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.
- Check voltage between reclining motor LH harness connector and ground.

| (+)  Reclining motor LH |           | (–)    | Voltage (V)<br>(Approx.) |  |
|-------------------------|-----------|--------|--------------------------|--|
| Connector               | Terminals |        | (Approx.)                |  |
| B217                    | 4         | Ground | 0                        |  |
| 5217                    | 6         | Ground | U                        |  |

#### Is the inspection result normal?

YES >> GO TO 3.

Revision: May 2013

NO >> Repair or replace harness or connector. ADP

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INFOID:000000009176568

## **B2113 RECLINING 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.

| (+) Driver seat control unit |           | (-)     | Voltage (V)<br>(Approx.) |  |
|------------------------------|-----------|---------|--------------------------|--|
| Connector                    | Terminals |         | ()                       |  |
| B210                         | 35        | Ground  | 0                        |  |
| D210                         | 39        | Giodila | U                        |  |

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

### **B2116 TILT MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2116 TILT MOTOR**

Description INFOID:000000009176569

- 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:0000000009176570

#### DTC DETECTION LOGIC

| _ |         |                        |   |                | D |
|---|---------|------------------------|---|----------------|---|
| _ | 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. | linit          | Е |

#### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

YES >> Refer to ADP-83, "Diagnosis Procedure".

NO >> Inspection End.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

# 1. PERFORM DTC CONFIRMATION PROCEDURE

Turn ignition switch ON.

2. Check "Self diagnostic result" with CONSULT.

Erase the DTC.

Perform DTC confirmation procedure. Refer to ADP-83, "DTC Logic".

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-49, "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.
- Check voltage between tilt motor harness connector and ground.

| (+)<br>Tilt motor |           | (–)    | Voltage (V)<br>(Approx.) |  |
|-------------------|-----------|--------|--------------------------|--|
| Connector         | Terminals |        | (* .pp. 5/)              |  |
| M85               | 1         | Ground | 0                        |  |
| WOS               | 2         | Ground | Ü                        |  |

**ADP-83** 

### Is the inspection result normal?

YES >> GO TO 3.

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NO >> Repair or replace harness or connector. ADP

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## **B2116 TILT MOTOR**

## < DTC/CIRCUIT DIAGNOSIS >

# 3. CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT OUTPUT SIGNAL

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

| (                  | +)                    |         | V 16 0.0                 |  |
|--------------------|-----------------------|---------|--------------------------|--|
| Automatic drive po | sitioner control unit | (–)     | Voltage (V)<br>(Approx.) |  |
| Connector          | Terminals             |         | ( ) [ ] ( )              |  |
| M34                | 28                    | Ground  | 0                        |  |
| IVIO               | 29                    | Giodila | U                        |  |

## Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49, "Intermittent Incident"

NO >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

## **B2128 UART COMMUNICATION LINE**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2128 UART COMMUNICATION LINE**

Description INFOID:0000000009176572

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

#### 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. | UART communication line<br>(UART communication line is<br>open or shorted)     Driver seat control unit     Automatic drive positioner<br>control unit |

### DTC CONFIRMATION PROCEDURE

## 1. PERFORM DTC CONFIRMATION PROCEDURE

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

#### Is the DTC detected?

YES >> Refer to ADP-85, "Diagnosis Procedure".

NO >> Inspection End.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Check "Self diagnostic result" with CONSULT.
- Erase the DTC.
- Perform DTC confirmation procedure. Refer to <u>ADP-85, "DTC Logic"</u>.

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-49. "Intermittent Incident".

## 2. CHECK UART COMMUNICATION LINE CONTINUITY

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

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

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

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## **B2128 UART COMMUNICATION LINE**

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat contro |          | Continuity |            |
|--------------------|----------|------------|------------|
| Connector          | Terminal | Ground     | Continuity |
| B209               | 15       |            | No         |

### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

NO >> Repair or replace harness.

### **B2130 EEPROM**

### < DTC/CIRCUIT DIAGNOSIS >

# B2130 EEPROM DTC Logic

#### 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-87, "Diagnosis Procedure".

NO >> Inspection End.

## Diagnosis Procedure

## 1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn ignition switch ON.
- Check "Self diagnostic result" with CONSULT.
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-87, "DTC Logic".

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

## 2. REPLACE DRIVER SEAT CONTROL UNIT

>> Inspection End.

Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

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### POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

## POWER SUPPLY AND GROUND CIRCUIT

**BCM** 

**BCM**: Diagnosis Procedure

INFOID:0000000009764356

Regarding Wiring Diagram information, refer to BCS-55, "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

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

| ВСМ       |          | Ground | Voltage<br>(Approx.) |  |
|-----------|----------|--------|----------------------|--|
| Connector | Terminal | Ordana | (Approx.)            |  |
| M81       | 131      |        | Pattory voltage      |  |
| IVIOI     | 139      | _      | Battery voltage      |  |

#### 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 | Ground | Continuity |  |
| M81       | 134      |        | Yes        |  |
| IVIO I    | 143      | _      | ies        |  |

#### 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:0000000009176578

#### 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 <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

# 1. CHECK POWER SUPPLY CIRCUIT

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

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| Driver seat of | ,        | (-) Power source |                              | Condition                 |                    |
|----------------|----------|------------------|------------------------------|---------------------------|--------------------|
| Connector      | Terminal |                  |                              |                           | (Approx.)          |
| B210           | 37       | Ground           | Battery<br>power sup-<br>ply | Ignition<br>switch<br>OFF | Battery<br>voltage |

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#### 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: Special Repair Requirement

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

INFOID:0000000009176579

## 1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to ADP-72, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL: Description"

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT: Diagnosis Procedure

INFOID:0000000009176580

#### 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-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK POWER SUPPLY CIRCUIT

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

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## POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

| (+)                                     |          | Voltage (V)<br>(Approx.) |                 |
|---|----------|--------------------------|-----------------|
| Automatic drive positioner control unit |          |                          | (–)             |
| 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. CHECK GROUND CIRCUIT

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

| Automatic drive positione |    | Continuity |            |
|---------------------------|----|------------|------------|
| Connector Terminal        |    | Ground     | Continuity |
| 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:0000000009176581

## 1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to <u>ADP-72</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL: Description</u>".

### SLIDING SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## SLIDING SWITCH

Description INFOID:0000000009176582

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:0000000009176583

## 1. CHECK FUNCTION

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

| Monitor item | Condition                  | Status  |     |
|--------------|----------------------------|---------|-----|
| SLIDE SW-FR  | Sliding switch (forward)   | Operate | ON  |
| SLIDE SW-FR  | Siluling Switch (lol ward) | Release | OFF |
| SLIDE SW-RR  | Sliding switch (backward)  | Operate | ON  |
| SLIDE SW-RK  | Silding Switch (backward)  | Release | OFF |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-91, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK SLIDING SWITCH SIGNAL

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

| (+)  Driver seat control unit  Connector Terminals |    | (-)    | Condition |                      | Voltage (V)<br>(Approx.) |                    |   |
|--|----|--------|-----------|----------------------|--------------------------|--------------------|---|
|  | 9  |        |           |                      |                          | Operate (backward) | 0 |
| B209   | 9  | Ground | Sliding   | Release              | Battery<br>voltage       |                    |   |
|  | 25 |        | switch    | Operate<br>(forward) | 0                        |                    |   |
|  |    |        |           | Release              | Battery<br>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.
- Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

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| Driver seat co | Driver seat control unit |           | Power seat switch LH |            |
|----------------|--------------------------|-----------|----------------------|------------|
| Connector      | Terminal                 | Connector | Terminal             | Continuity |
| B209           | 9                        | B208      | 8                    | Yes        |
| D209           | 25                       | D200      | 7                    | 165        |

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

| Driver seat control unit connector |          |        | Continuity |
|------------------------------------|----------|--------|------------|
| Connector                          | Terminal | Ground | Continuity |
| P200                               | 9        | Giouna | No         |
| B209                               | 25       | -      | No         |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${f 3}.$ 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) |                 |
|--------------------------|-----------|-------------|-----------------|
| Driver seat control unit |           | (–)         | (Approx.)       |
| Connector                | Terminals |             | , , ,           |
| B209                     | 9         | Ground      | Battery voltage |
| 5209                     | 25        | Ground      | Dattery Voltage |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

## 4. CHECK SLIDING SWITCH

Refer to ADP-92, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace malfunctioning part.

## Component Inspection

INFOID:0000000009176585

## 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                 | Condition  |     |
|----------------------|---|---------------------------|------------|-----|
| Power seat switch LH |   |                           | Continuity |     |
|                      | 8 | Sliding switch (backward) | Operate    | Yes |
| 3                    | U | Silding Switch (backward) | Release    | No  |
| 3                    | 7 | Sliding switch (forward)  | Operate    | Yes |
|                      | , | Siluling Switch (lorward) | Release    | No  |

## Is the inspection result normal?

| YES >> | nspection | End. |
|--------|-----------|------|
|--------|-----------|------|

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

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## **RECLINING SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

## RECLINING SWITCH

Description INFOID:000000009176586

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:0000000009176587

## 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  |
| RECLIN SW-FR | Reclining Switch (lorward)         | Release | OFF |
| RECLN SW-RR  | SW DD Declining quitab (healquard) |         | ON  |
| RECLIN SW-RR | Reclining switch (backward)        | Release | OFF |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to ADP-94, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000009176588

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK RECLINING 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)     |         |                 |
| Connector                | Termi-<br>nals | ,       | Condition |                    | (Approx.)       |         |                 |
|                          | 24             |         |           | Operate (forward)  | 0               |         |                 |
| B209                     |                | Cround  | Ground    | Ground             | Reclining       | Release | Battery voltage |
| 5203                     | 8              | Sibulia | switch    | Operate (backward) | 0               |         |                 |
|                          |                |         |           | Release            | Battery voltage |         |                 |

#### Is the inspection result normal?

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

2. CHECK RECLINING SWITCH CIRCUIT

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

## **RECLINING SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat cor | Driver seat control unit |           | Power seat switch LH connector |            |
|-----------------|--------------------------|-----------|--------------------------------|------------|
| Connector       | Terminal                 | Connector | Terminal                       | Continuity |
| B209            | 24                       | B208      | 9                              | Yes        |
| D209            | 8                        | D200      | 10                             | 163        |

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

| (+) Driver seat control unit |           | (–)    | Voltage (V)<br>(Approx.) |  |
|------------------------------|-----------|--------|--------------------------|--|
| Connector                    | Terminals |        | (                        |  |
| B209                         | 8         | Ground | Battery voltage          |  |
| B209                         | 24        | Ground | Dattery Voltage          |  |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

## 4. CHECK RECLINING SWITCH

Refer to ADP-95. "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to ADP-164, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

## Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## Component Inspection

## 1. CHECK RECLINING SWITCH

- Turn ignition switch OFF.
- Disconnect power seat switch LH.
- Check continuity between power seat switch LH terminals.

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## **RECLINING SWITCH**

## < DTC/CIRCUIT DIAGNOSIS >

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

## Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

## LIFTING SWITCH (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING SWITCH (FRONT)

Description INFOID:0000000009176590

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:0000000009176591

## 1. CHECK FUNCTION

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

| Monitor item   | Condition                   |         | Status |
|----------------|-----------------------------|---------|--------|
| LIFT FR SW-UP  | Lifting switch front (up)   | Operate | ON     |
| LIFT FR 3W-OF  | Litting Switch from (up)    | Release | OFF    |
| LIFT FR SW-DN  | Lifting switch front (down) | Operate | ON     |
| LIFT FR SW-DIN | Litting switch from (down)  | Release | OFF    |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-97</u>, "<u>Diagnosis Procedure</u>".

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK LIFTING SWITCH SIGNAL

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

| (+) Driver seat control unit |                |        | Condition         |                   | Voltage (V)        |
|------------------------------|----------------|--------|-------------------|-------------------|--------------------|
| Connector                    | Termi-<br>nals | (–)    | Co                | nation            | (Approx.)          |
|                              | 23             | Ground |                   | Operate<br>(down) | 0V                 |
| B209                         |                |        | Lifting<br>switch | Release           | Battery<br>voltage |
|                              |                |        | (front)           | 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.
- Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

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## **LIFTING SWITCH (FRONT)**

#### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Power seat switch LH |          | Continuity |
|--------------------------|----------|----------------------|----------|------------|
| Connector                | Terminal | Connector            | Terminal | Continuity |
| B209                     | 7        | B208                 | 6        | Yes        |
| D209                     | 23       | B200                 | 5        | 165        |

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

| Driver seat cont |               | Continuity |            |
|------------------|---------------|------------|------------|
| Connector        | ctor Terminal |            | Continuity |
| B209             | 7             | Ground     | No         |
| 6209             | 23            |            | INO        |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${f 3}.$ CHECK DRIVER SEAT CONTROL UNIT OUTPUT

- 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 con     | trol unit | (-)    | Voltage (V)<br>(Approx.) |  |
| Connector Terminals |           |        | <b>、</b>                 |  |
| B209                | 7         | Ground | Battery voltage          |  |
| B209                | 23        | Ground | Dattery Voltage          |  |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

## CHECK LIFTING SWITCH (FRONT)

Refer to ADP-98, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## Component Inspection

INFOID:0000000009176593

## 1. CHECK LIFTING SWITCH (FRONT)

- 1. Turn ignition switch OFF.
- 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 |                           |                             |         |            |
|                      | 6                         | Lifting switch front (down) | Operate | Yes        |
| 3                    | U                         | Litting Switch from (down)  | Release | No         |
| 5                    | Lifting switch front (up) | Operate                     | Yes     |            |
|                      | 5 L                       | Litting Switch Horit (up)   | Release | No         |

## Is the inspection result normal?

| YES >> | nspection | End. |
|--------|-----------|------|
|--------|-----------|------|

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

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## **LIFTING SWITCH (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING SWITCH (REAR)

Description INFOID:000000009176594

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:0000000009176595

## 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     |
| LIFT RR SW-OF      | Litting Switch rear (up)   | Release | OFF    |
| LIFT RR SW-DN      | Lifting quitch roor (down) | Operate | ON     |
| LII I IXIX SVV-DIN | Lifting switch rear (down) | Release | OFF    |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-100, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176596

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: 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)     |                     |         |
|------------------------------|----------------|--------|-----------|--------------|-----------------|---------------------|---------|
| Connector                    | Termi-<br>nals | ( )    | oonand.   |              | (Approx.)       |                     |         |
|                              | 6              | Ground | Ground    |              | Operate (down)  | 0                   |         |
| B209                         | 0              |        |           | Ground       |                 | Lifting ound switch | Release |
| D209                         | 22             |        | (rear)    | Operate (up) | 0               |                     |         |
|                              | 22             |        |           | Release      | Battery voltage |                     |         |

#### Is the inspection result normal?

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

## 2. CHECK LIFTING SWITCH (REAR) CIRCUIT

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

## LIFTING SWITCH (REAR)

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat co | Driver seat control unit |                    | Power sear switch LH |            |
|----------------|--------------------------|--------------------|----------------------|------------|
| Connector      | Terminal                 | Connector Terminal |                      | Continuity |
| B209           | 6                        | B208               | 2                    | Yes        |
| B209           | 22                       | B200               | 1                    | 163        |

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

| Driver seat cor    |    | Continuity |            |
|--------------------|----|------------|------------|
| Connector Terminal |    | Ground     | Continuity |
| B209               | 6  | Ground     | No         |
| B209               | 22 |            | INO        |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK DRIVER SEAT CONTROL UNIT OUTPUT

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

| (+)                      |           |        | Voltage (V)     |  |
|--------------------------|-----------|--------|-----------------|--|
| Driver seat control unit |           | (–)    | (Approx.)       |  |
| Connector                | Terminals |        | , , ,           |  |
| B209                     | 6         | Ground | Battery voltage |  |
| D209                     | 22        | Glound | Dattery Voltage |  |

#### <u>Is the inspection result normal?</u>

YES >> GO TO 4.

NO >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

## 4. CHECK LIFTING SWITCH (REAR)

Refer to ADP-101, "Component Inspection",

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

## Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## Component Inspection

## 1. CHECK LIFTING SWITCH (REAR)

- Turn ignition switch OFF.
- Disconnect power seat switch LH.
- Check continuity between power seat switch LH terminals.

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## **LIFTING SWITCH (REAR)**

## < DTC/CIRCUIT DIAGNOSIS >

| Terr      | minal       | Condition                  |         | Continuity |
|-----------|-------------|----------------------------|---------|------------|
| Power sea | t switch LH | Condition                  |         | Continuity |
|           | 1           | Lifting switch rear (up)   | Operate | Yes        |
| 3         | '           | Litting switch rear (up)   | Release | No         |
| 3         | 2           | Lifting switch rear (down) | Operate | Yes        |
|           | 2           | Litting Switch real (down) | Release | No         |

## Is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-164, "Removal and Installation"</u>.

## **TILT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

## **TILT SWITCH**

Description INFOID:0000000009176598

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:0000000009176599

## 1. CHECK FUNCTION

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

| Monitor item    | Condition          |         | Status |
|-----------------|--------------------|---------|--------|
| TILT SW-UP      | Tilt switch (up)   | Operate | ON     |
| TIET SW-OF      | The Switch (up)    | Release | OFF    |
| TILT SW-DOWN    | Tilt switch (down) | Operate | ON     |
| TILI 300-DOVVIN | The Switch (down)  | Release | OFF    |

### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to ADP-103, "Diagnosis Procedure".

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK TILT SWITCH SIGNAL

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

| (+)                               |           |        | \/a\\a_== (\) (\)        |  |
|-----------------------------------|-----------|--------|--------------------------|--|
| ADP steering switch (tilt switch) |           | (-)    | Voltage (V)<br>(Approx.) |  |
| Connector                         | Terminals |        | ( 11 - )                 |  |
| M16                               | M16 2     |        | Battery voltage          |  |
| WITO                              | 5         | Ground | Dattery voltage          |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK TILT SWITCH CIRCUIT

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

|           | e positioner control<br>unit | ADP steering switch (tilt switch) |   | ADP steering switch (tilt switch) |  | Continuity |
|-----------|------------------------------|-----------------------------------|---|-----------------------------------|--|------------|
| Connector | Terminal                     | Connector Terminal                |   |                                   |  |            |
| M33       | 1                            | M16                               | 5 | Yes                               |  |            |
| IVIOO     | 13                           | IVITO                             | 2 | 100                               |  |            |

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 |          |        | Continuity |
|---|----------|--------|------------|
| Connector                               | Terminal | Ground | Continuity |
| M33                                     | 1        | Ground | No         |
| IVIOS                                   | 13       |        | NO         |

#### Is the inspection result normal?

YES >> Replace automatic drive positioner unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace harness.

## 3. CHECK TILT SWITCH

Refer to ADP-104, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace ADP steering switch (tilt switch). Refer to ADP-165, "Removal and Installation".

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

## Component Inspection

INFOID:0000000009176601

## 1. CHECK TILT SWITCH

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

| switch (t            | steering<br>ilt switch)<br>minal | Condition          |         | Continuity |
|----------------------|----------------------------------|--------------------|---------|------------|
|                      | 5                                | Tilt switch (up)   | Operate | Yes        |
| 3                    | 3                                | The Switch (up)    | Release | No         |
| 3                    | 2                                | Tilt switch (down) | Operate | Yes        |
| 2 Thit Switch (down) | Release                          | No                 |         |            |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace ADP steering switch (tilt switch). Refer to ADP-165, "Removal and Installation".

### TELESCOPIC SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC SWITCH

Description INFOID:0000000009176602

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:0000000009176603

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## 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 <u>ADP-105, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176604

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK TELESCOPIC SWITCH SIGNAL

### ADP

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

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## $oldsymbol{2}$ . CHECK TELESCOPIC SWITCH CIRCUIT

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

| Automatic drive positioner control unit |          |                    | ig switch (tele-<br>c switch) | Continuity |
|---|----------|--------------------|-------------------------------|------------|
| Connector                               | Terminal | Connector Terminal |                               |            |
| M33                                     | 7        | M16                | 1                             | Yes        |
| IVIOO                                   | 19       | IVITO              | 6                             | 165        |

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

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## **TELESCOPIC SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive positioner control unit |          |        | Continuity |  |
|---|----------|--------|------------|--|
| Connector                               | Terminal | Ground | Continuity |  |
| M33                                     | 7        | Ground | No         |  |
| IVIOO                                   | 19       |        | 110        |  |

### Is the inspection result normal?

YES >> Replace automatic drive positioner unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace harness.

## ${f 3}$ . CHECK TELESCOPIC SWITCH

Refer to ADP-106, "Component Inspection".

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace ADP steering switch (telescopic switch). Refer to ADP-165, "Removal and Installation".

## 4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

>> Inspection End.

## Component Inspection

INFOID:0000000009176605

## 1. CHECK TELESCOPIC SWITCH

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

| scopic | g switch (tele-<br>switch)<br>minal | Condition                    |         | Continuity |
|--------|-------------------------------------|------------------------------|---------|------------|
| -      | 1                                   | Telescopic switch (forward)  | Operate | Yes        |
| 3      |                                     |                              | Release | No         |
| 3      | 6                                   | Telescopic switch (backward) | Operate | Yes        |
|        | O                                   |                              | Release | No         |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace ADP steering switch (telescopic switch). Refer to ADP-165, "Removal and Installation".

## **SEAT MEMORY SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

## SEAT MEMORY SWITCH

Description INFOID:0000000009176606

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:0000000009176607

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## 1. CHECK FUNCTION

- Select "MEMORY SW 1", "MEMORY SW 2", "SET SW" in "DATA MONITOR" mode with CONSULT.
- 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-107, "Diagnosis Procedure".

## Diagnosis Procedure

INFOID:0000000009176608

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK SEAT MEMORY SWITCH SIGNAL

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

| (+)                |           | (–)    |                          |  |
|--------------------|-----------|--------|--------------------------|--|
| Seat memory switch |           |        | Voltage (V)<br>(Approx.) |  |
| Connector          | Terminals |        | (- FP. 6711)             |  |
|                    | 2         |        |                          |  |
| D60                | 10        | Ground | 5                        |  |
|                    | 16        |        |                          |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

## 2. CHECK MEMORY SWITCH CIRCUIT

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

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## **SEAT MEMORY SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "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 |          |        | Continuity |
|--------------------|----------|--------|------------|
| Connector          | Terminal | Ground | Continuity |
| D60                | 9        |        | Yes        |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## 4. CHECK SEAT MEMORY SWITCH

Refer to ADP-108, "Component Inspection".

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

NO >> Replace seat memory switch. Refer to ADP-163, "Removal and Installation".

## Component Inspection

INFOID:0000000009176609

## 1. CHECK SEAT MEMORY SWITCH

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

| Term<br>Seat mem |                 | Condition       |         | Continuity |
|------------------|-----------------|-----------------|---------|------------|
| 10               | 10              | Memory switch 1 | Push    | Yes        |
|                  | 10              |                 | Release | No         |
| 9 16             | 16              | Momory quitob 2 | Push    | Yes        |
|                  | Memory switch 2 | Release         | No      |            |
|                  | 2               | Set switch      | Push    | Yes        |
|                  |                 | Set Switch      | Release | No         |

#### Is the inspection result normal?

YES >> Inspection End.

### **SEAT MEMORY SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

>> Replace seat memory switch. Refer to ADP-163, "Removal and Installation". NO Α В С  $\mathsf{D}$ Е F G Н ADP K L M Ν 0 Р

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#### < DTC/CIRCUIT DIAGNOSIS >

# DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

### **CHANGEOVER SWITCH: Description**

INFOID:0000000009176610

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:0000000009176611

## 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     |
| WIR CHING SW-R                     | Will of Switch (right) | Release | OFF    |
| MIR CHNG SW-L Mirror switch (left) | Operate                | ON      |        |
|                                    | WILLION SWILCH (ICIL)  | Release | OFF    |

#### Is the inspection result normal?

YES

>> Inspection End.

NO

>> Perform diagnosis procedure. Refer to <u>ADP-110, "CHANGEOVER SWITCH: Diagnosis Procedure".</u>

### CHANGEOVER SWITCH: Diagnosis Procedure

INFOID:0000000009176612

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK CHANGEOVER SWITCH SIGNAL

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

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

#### Is the inspection result normal?

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

## 2. CHECK HARNESS CONTINUITY

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

#### < DTC/CIRCUIT DIAGNOSIS >

| Automatic drive pos<br>unit | itioner control | Door mirror remote control switch |   | Continuity |
|-----------------------------|-----------------|-----------------------------------|---|------------|
| Connector                   | Terminal        | Connector Terminal                |   |            |
| M33                         | 2               | D22                               | 3 | Yes        |
|                             | 14              | DZZ                               | 4 | 162        |

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

| Automatic drive positioner of |    | Continuity |            |  |
|-------------------------------|----|------------|------------|--|
| Connector Terminal            |    | Ground     | Continuity |  |
| M33                           | 2  | Giouna     | No         |  |
| IVIOO                         | 14 |            | NO         |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${f 3.}$ CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND CIRCUIT

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

| Door mirror remote control |    | Continuity |            |
|----------------------------|----|------------|------------|
| Connector Terminal         |    | Ground     | Continuity |
| D22                        | 15 |            | 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-111, "CHANGEOVER SWITCH: Component Inspection".

#### Is the inspection result normal?

>> Refer to GI-49, "Intermittent Incident". YES

NO >> Replace door mirror remote control switch. Refer to MIR-22, "Removal and Installation".

### 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

>> Repair or replace the malfunctioning parts. NO

## CHANGEOVER SWITCH: Component Inspection

## 1. CHECK CHANGEOVER SWITCH

Check door mirror remote control switch.

|  | Terminal  Door mirror remote control switch |      | Change over switch | Continuity |
|--|---|------|--------------------|------------|
|  |   |      | condition          |            |
|  | 3   | LEFT | Yes                |            |
|  |   | 15   | Other than above   | No         |
|  | 4   |      | RIGHT              | Yes        |
|  | <b>-</b>                                    |      | Other than above   | No         |

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INFOID:0000000009176613

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to MIR-22, "Removal and Installation".

#### MIRROR SWITCH

## MIRROR SWITCH: Description

INFOID:0000000009176614

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:0000000009176615

## 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     |
| WIR CON SW-OF/DIN                           | wiiiroi switch (up/down)   | Release | OFF    |
| MIR CON SW-RH/LH Mirror switch (right/left) | Operate                    | ON      |        |
| WIR CON SW-RH/LH                            | Mirror switch (right/left) | Release | OFF    |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-112, "MIRROR SWITCH : Diagnosis Procedure"</u>.

### MIRROR SWITCH: Diagnosis Procedure

INFOID:0000000009176616

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 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<br>Condition | Voltage (V)<br>(Approx.) |
|---|----------|---------|----------------------------|--------------------------|
| Connector                                   | Terminal |         |                            |                          |
|   | 3        |         | UP                         | 0                        |
|   | 3        |         | Other than above           | 5                        |
|   | 4        | Ground  | LEFT                       | 0                        |
| M33   | 4        |         | Other than above           | 5                        |
| WIJJ  | 15       | Giodila | DOWN                       | 0                        |
| _   | 15       |         | Other than above           | 5                        |
|   | 16       |         | RIGHT                      | 0                        |
|   | 16       |         | Other than above           | 5                        |

#### Is the inspection result normal?

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

## 2. CHECK HARNESS CONTINUITY

#### < DTC/CIRCUIT DIAGNOSIS >

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

| Automatic drive po |          | Door mirror remote control switch |    | Continuity |  |
|--------------------|----------|-----------------------------------|----|------------|--|
| Connector          | Terminal | Connector Termina                 |    |            |  |
|                    | 3        |                                   | 12 |            |  |
| M33                | 4        | D22                               | 1  | Yes        |  |
|                    | 15       | 022                               | 16 | 165        |  |
|                    | 16       |                                   | 9  |            |  |

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

| Automatic drive positione | Continuity |            |    |
|---------------------------|------------|------------|----|
| Connector                 | Terminal   | Continuity |    |
|                           | 3 Ground   |            |    |
| M33                       | 4          | Giodria    | No |
|                           | 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 cont |          | Continuity |            |
|-------------------------|----------|------------|------------|
| Connector               | Terminal | Ground     | Continuity |
| D22                     | 15       |            | Yes        |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

### CHECK MIRROR SWITCH

Check mirror switch.

Refer to ADP-113, "MIRROR SWITCH: Component Inspection".

#### Is the inspection result normal?

YFS >> Refer to GI-49, "Intermittent Incident".

NO >> Replace door mirror remote control switch. Refer to MIR-22, "Removal and Installation".

## $oldsymbol{5}$ . CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace the malfunctioning parts.

### MIRROR SWITCH: Component Inspection

CHECK MIRROR SWITCH

Check door mirror remote control switch.

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INFOID:0000000009176617

#### < DTC/CIRCUIT DIAGNOSIS >

| Door mirror control so | remote | Mirror switch condition | Continuity |
|------------------------|--------|-------------------------|------------|
| 9                      |        | RIGHT                   | Yes        |
| 9                      |        | Other than above        | No         |
| 1                      |        | LEFT                    | Yes        |
| '                      | 15     | Other than above        | No         |
| 12                     |        | UP                      | Yes        |
| 12                     |        | Other than above        | No         |
| 16                     | 16     | DOWN                    | Yes        |
| 10                     |        | Other than above        | No         |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to MIR-22, "Removal and Installation".

#### **POWER SEAT SWITCH GROUND CIRCUIT**

#### < DTC/CIRCUIT DIAGNOSIS >

## POWER SEAT SWITCH GROUND CIRCUIT

## Diagnosis Procedure

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Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

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

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49, "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:0000000009176619

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

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

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

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

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-49, "Intermittent Incident".

NO >> Repair or replace harness.

#### SLIDING SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

## **SLIDING SENSOR**

Description INFOID:000000009176620

- 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

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-117, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK SLIDING SENSOR SIGNAL

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

| Driver's s     | eat con-      | (–)    | –) Condition    |                        | Voltage signal |
|----------------|---------------|--------|-----------------|------------------------|----------------|
| Connec-<br>tor | Termi-<br>nal |        |                 |                        |                |
| B209           | 31            | Ground | Seat<br>sliding | Operate                | 10mSec/div     |
|                |               |        |                 | Other<br>than<br>above | 0 or 5         |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

NO >> GO TO 2.

## 2. CHECK SLIDING SENSOR CIRCUIT

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

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#### **SLIDING SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

| Driver seat | control unit |        | Continuity |
|-------------|--------------|--------|------------|
| Connector   | Terminal     | Ground | Continuity |
| 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.
- Turn ignition switch ON.
- 3. Check voltage between sliding motor LH harness connector and ground.

| ,         | +)               |        | Voltage (V)     |
|-----------|------------------|--------|-----------------|
| Sliding r | Sliding motor LH |        | (Approx.)       |
| Connector | Terminals        |        | , , ,           |
| B211      | 3                | 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.
- Check continuity between driver seat control unit harness connector and sliding motor LH harness connector.

| Driver seat | Driver seat control unit Sliding motor LH |                    | Continuity |            |
|-------------|---|--------------------|------------|------------|
| Connector   | Terminal                                  | Connector Terminal |            | Continuity |
| B209        | 5   | B211               | 3          | Yes        |

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK SLIDING SENSOR GROUND

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

### **SLIDING SENSOR**

### < DTC/CIRCUIT DIAGNOSIS >

| Sliding mo | otor LH  |        | Continuity |
|------------|----------|--------|------------|
| Connector  | Terminal | Ground | Continuity |
| B211       | 1        |        | Yes        |

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Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to <u>SE-86. "Removal and Installation"</u>.

NO >> Repair or replace harness.

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#### RECLINING SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

### RECLINING SENSOR

Description INFOID:0000000009176623

- 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:0000000009176624

## 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             |
|--------------|---------------------------|--------------------|-------------------|
|              | ECLN PULSE Seat reclining | Operate (forward)  | Change (decrease) |
| RECLN PULSE  |                           | Operate (backward) | Change (increase) |
|              |                           | Release            | No change         |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-120, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176625

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK RECLINING SENSOR SIGNAL

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

| (+) Driver seat control unit |               | (–)    | Cor                    | ndition                | Voltage signal |
|------------------------------|---------------|--------|------------------------|------------------------|----------------|
| Connec-<br>tor               | Termi-<br>nal |        |                        |                        |                |
| B209                         | 13            | Ground | Seat<br>reclin-<br>ing | Operate                | 10mSec/div     |
|                              |               |        |                        | Other<br>than<br>above | 0 or 5         |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

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

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## ${f 3}.$ CHECK RECLINING SENSOR POWER SUPPLY

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

| (+)                |           |        | N/ # 0.0                 |  |
|--------------------|-----------|--------|--------------------------|--|
| Reclining motor LH |           | (–)    | Voltage (V)<br>(Approx.) |  |
| Connector          | Terminals |        | (                        |  |
| B217               | 3         | Ground | Battery voltage          |  |

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## f 4 . CHECK RECLINING SENSOR POWER SUPPLY CIRCUIT

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

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

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK RECLINING SENSOR GROUND

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

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### **RECLINING SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> Repair or replace harness.

### LIFTING SENSOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING SENSOR (FRONT)

Description INFOID:000000009176626

- 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

## 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             |
|---------------|----------------------|----------------|-------------------|
|               |                      | Operate (up)   | Change (decrease) |
| LIFT FR PULSE | Seat lifting (front) | Operate (down) | Change (increase) |
|               |                      | Release        | No change         |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-123, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

| (+        |          | (–)    | Cond                 | lition           | Voltage signal |
|-----------|----------|--------|----------------------|------------------|----------------|
| Connector | Terminal |        |                      |                  |                |
| B209      | 30       | Ground | Seat lifting (front) | Operate          | 10mSec/div     |
|           |          |        |                      | Other than above | 0 or 5         |

#### Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

## 2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

- Turn ignition switch OFF.
- 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.

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## LIFTING SENSOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat control unit |          | Lifting moto       | Continuity |            |
|--------------------------|----------|--------------------|------------|------------|
| Connector                | Terminal | Connector Terminal |            | Continuity |
| B209                     | 30       | B218               | 1          | Yes        |

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

| Driver seat        | control unit |        | Continuity |
|--------------------|--------------|--------|------------|
| Connector Terminal |              | Ground | Continuity |
| 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.

| (+)                      | 1         |        |                          |
|--------------------------|-----------|--------|--------------------------|
| Lifting motor LH (front) |           | (–)    | Voltage (V)<br>(Approx.) |
| 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 | Driver seat control unit |                    | Lifting motor LH (front) |            |
|-------------|--------------------------|--------------------|--------------------------|------------|
| Connector   | Terminal                 | Connector Terminal |                          | Continuity |
| B209        | 5                        | B218               | 3                        | Yes        |

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

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) |          |        | Continuity |
|--------------------------|----------|--------|------------|
| Connector                | Terminal | Ground | Continuity |
| B218                     | 2        |        | Yes        |

## LIFTING SENSOR (FRONT)

### < DTC/CIRCUIT DIAGNOSIS >

| Is the | inspection | ı result | normal? |
|--------|------------|----------|---------|

YES >> Replace lifting motor LH (front). Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> Repair or replace harness.

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### LIFTING SENSOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING SENSOR (REAR)

Description INFOID:000000009176629

- 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:0000000009176630

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-126, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176631

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK LIFTING SENSOR (REAR) SIGNAL

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

| (+) Driver sea | t control     | (–)    | Condition                 |               | Voltage signal                   |
|----------------|---------------|--------|---------------------------|---------------|----------------------------------|
| Connec-<br>tor | Termi-<br>nal |        |                           |               |                                  |
| B209           | 29            | Ground | Seat<br>lifting<br>(rear) | Operate       | 10mSec/div<br>2V/div JMJIA0119ZZ |
|                |               |        |                           | than<br>above | 0 or 5                           |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

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 >

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 | Continuity |
| B209        | 29           | B207                    | 1        | Yes        |

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

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

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

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

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## $oldsymbol{4}$ . CHECK LIFTING SENSOR (REAR) POWER SUPPLY CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect driver seat control unit.
- 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 | Continuity |
| B209                     | 5        | B207                    | 3        | Yes        |

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

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

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK LIFTING SENSOR (REAR) GROUND

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

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## **LIFTING SENSOR (REAR)**

#### < DTC/CIRCUIT DIAGNOSIS >

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

#### Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> Repair or replace harness.

#### **TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

### TILT SENSOR

Description INFOID:0000000009176632

- 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

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to ADP-129, "Diagnosis Procedure".

### Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK TILT SENSOR SIGNAL

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

| (+) Driver seat control unit |                | (–)    | Condition                 |                  | Voltage (V)<br>(Approx.)                           |
|------------------------------|----------------|--------|---------------------------|------------------|--|
| Con-<br>nector               | Termi-<br>nals |        |                           |                  | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,            |
| B209                         | 28             | Ground | Steer-<br>ing col-<br>umn | Oper-<br>ate     | 10mSec/div<br>==================================== |
|                              |                |        |                           | Other than above | 0 or 5   |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

NO >> GO TO 2.

## $2.\,$ CHECK TILT SENSOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect driver seat control unit and tilt motor.

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#### **TILT SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

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

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

| Driver seat co     | ontrol unit |        | Continuity |
|--------------------|-------------|--------|------------|
| Connector Terminal |             | Ground | Continuity |
| 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.
- Check voltage between tilt motor harness connector and ground.

| (+        | )         |        | Voltage (V)              |  |
|-----------|-----------|--------|--------------------------|--|
| Tilt m    | otor      | (–)    | Voltage (V)<br>(Approx.) |  |
| 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

- 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 m    | 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 pos | itioner control unit |        | Continuity |
|---------------------|----------------------|--------|------------|
| Connector Terminal  |                      | Ground | Continuity |
| M34 27              |                      |        | No         |

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace harness or connector.

## CHECK TILT SENSOR GROUND CIRCUIT

- 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 mo   | Continuity |     |
|---|----------|-----------|------------|-----|
| Connector                               | Terminal | Connector | Terminal   |     |
| M33                                     | 20       | M85       | 3          | Yes |

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Is the inspection result normal?

YES >> Replace tilt motor. Refer to <u>ST-46</u>, "Exploded View".

NO >> Repair or replace harness.

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#### TELESCOPIC SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC SENSOR

Description INFOID.000000009176635

- · 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:0000000009176636

## 1. CHECK FUNCTION

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

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-132, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176637

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK TELESCOPIC SENSOR SIGNAL

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

| (+) Driver seat control unit |                | (–)    | Condition                 |                        | Voltage (V)<br>(Approx.)         |
|------------------------------|----------------|--------|---------------------------|------------------------|----------------------------------|
| Con-<br>nector               | Termi-<br>nals |        |                           |                        | (                                |
| B209                         | 12             | Ground | Steer-<br>ing col-<br>umn | Oper-<br>ate           | 10mSec/div<br>2V/div JMJIA0119ZZ |
|                              |                |        |                           | Other<br>than<br>above | 0 or 5                           |

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161</u>, "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       | Telesco | Continuity         |     |
|-------------|--------------------|---------|--------------------|-----|
| Connector   | connector Terminal |         | Connector Terminal |     |
| B209        | 12                 | M94     | 4                  | Yes |

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

| Driver seat of     | control unit |        | Continuity |  |
|--------------------|--------------|--------|------------|--|
| Connector Terminal |              | Ground | Continuity |  |
| 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.) |  |
|-----------|-----------|--------|--------------------------|--|
| Telescop  | ic motor  | (–)    |                          |  |
| Connector | Terminals |        | ( ) ;                    |  |
| M94 5     |           | Ground | Battery voltage          |  |

#### <u>Is the inspection result normal?</u>

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.
- 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 p | oositioner control unit |        | Continuity |
|-------------------|-------------------------|--------|------------|
| Connector         | Terminal                | Ground | Continuity |
| M34               | 27                      |        | No         |

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-162, "Removal and Installation"</u>.

NO >> Repair or replace harness.

## ${f 5}$ . CHECK TELESCOPIC SENSOR GROUND CIRCUIT

Turn ignition switch OFF.

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- 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 >

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

### Is the inspection result normal?

YES >> Replace telescopic motor. Refer to <u>ST-46, "Exploded View"</u>.

NO >> Repair or replace harness.

#### < DTC/CIRCUIT DIAGNOSIS >

## MIRROR SENSOR DRIVER SIDE

#### INFOID:0000000009176638

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### DRIVER SIDE : Description

- 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:0000000009176639

### 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   | Con             | Value               |      |
|----------------|-----------------|---------------------|------|
| MIR/SEN LH U-D |                 | Close to peak       | 3.4V |
|                | Door mirror III | Close to valley     | 0.6V |
| MIR/SEN LH R-L | DOOLIIIIIOI LA  | 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 <u>ADP-135, "DRIVER SIDE : Diagnosis Procedure"</u>.

### DRIVER SIDE: Diagnosis Procedure

INFOID:0000000009176640

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK DOOR MIRROR LH SENSOR SIGNAL

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

| (+)  Door mirror LH  Connector Terminal |         | (-)    |                | Condition           | Voltage (V)<br>(Approx.) |
|---|---------|--------|----------------|---------------------|--------------------------|
|   | Terrima |        |                | Olasa ta masi.      | 2.4                      |
|   | 21      |        |                | Close to peak       | 3.4                      |
| D28 (with around view moni-             | 21      | Ground | mirror         | Close to valley     | 0.6                      |
| tor system)                             | 22      |        |                | Close to right edge | 3.4                      |
|   | 22      |        |                | Close to left edge  | 0.6                      |
|   | 4       | Ground |                | Close to peak       | 3.4                      |
| D4 (without around view                 | 4       |        | Door<br>mirror | Close to valley     | 0.6                      |
| monitor system)                         |         |        | LH             | Close to right edge | 3.4                      |
|   | 6       |        |                | 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.

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#### < DTC/CIRCUIT DIAGNOSIS >

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

| Automatic drive position | ner control unit | Door mirror LH                          |          | Continuity |
|--------------------------|------------------|---|----------|------------|
| Connector                | Terminal         | Connector                               | Terminal | Continuity |
|                          | 6                | D28 (with around view monitor system)   | 21       |            |
| M33                      | o o              | D4 (without around view monitor system) | 4        | Yes        |
| 18                       |                  | D28 (with around view monitor system)   | 22       | 163        |
|                          |                  | D4 (without around view monitor system) | 6        |            |

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

| Automatic drive positione |                    | Continuity |            |  |
|---------------------------|--------------------|------------|------------|--|
| Connector                 | Connector Terminal |            | Continuity |  |
| M33                       | 6                  | Ground     | No         |  |
| IVIOO                     | 18                 |            |            |  |

#### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## 3. CHECK DOOR MIRROR LH SENSOR CIRCUIT 2

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

| Automatic drive position | ner control unit | Door mirror LH                          |          | Continuity |
|--------------------------|------------------|---|----------|------------|
| Connector                | Terminal         | Connector                               | Terminal | Continuity |
|                          | 20               |   | 24       |            |
| M33                      | 20               | D4 (without around view monitor system) | 5        | Yes        |
| 21                       |                  | D28 (with around view monitor system)   | 23       | 163        |
|                          |                  | D4 (without around view monitor system) | 3        |            |

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

| Automatic drive positione |                    | Continuity |     |
|---------------------------|--------------------|------------|-----|
| Connector                 | Connector Terminal |            |     |
| M33                       | 20                 | Ground     | No  |
| IVIOO                     | 21                 |            | INO |

#### 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.

#### < DTC/CIRCUIT DIAGNOSIS >

#### Is the operation normal?

>> Replace door mirror actuator. (Built in door mirror LH). Refer to MIR-20, "Removal and Installation".

NO >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

#### CHECK INTERMITTENT INCIDENT

#### Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

#### PASSENGER SIDE

## PASSENGER SIDE: Description

- · 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:0000000009176642 1. CHECK FUNCTION

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

| Monitor item   | Con             | Value               |      |
|----------------|-----------------|---------------------|------|
| MIR/SEN RH U-D |                 | Close to peak       | 3.4V |
|                | Deer wirrer DII | Close to valley     | 0.6V |
| MIR/SEN RH R-L | DOOL HIIITOL KH | Close to right edge | 3.4V |
|                |                 | Close to left edge  | 0.6V |

#### Is the inspection result normal?

YES >> Inspection End.

>> Perform diagnosis procedure. Refer to ADP-137, "PASSENGER SIDE: Diagnosis Procedure". NO

## PASSENGER SIDE : Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram" or ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

## 1. CHECK DOOR MIRROR RH SENSOR SIGNAL

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

| (+)                                    |    |        |                |                     |   |
|--|----|--------|----------------|---------------------|---|
| Door mirror LH                         |    | (-)    |                | Condition           | Voltage (V)<br>(Approx.)                |
| Connector Terminal                     |    |        |                |                     | ( , , , , , , , , , , , , , , , , , , , |
| D128 (with around view monitor system) | 21 | Ground |                | Close to peak       | 3.4                                     |
|  | 21 |        | Door<br>mirror | Close to valley     | 0.6                                     |
|  | 22 |        | RH             | Close to right edge | 3.4                                     |
|  | 22 |        |                | Close to left edge  | 0.6                                     |

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#### < DTC/CIRCUIT DIAGNOSIS >

| (+)                       |   |        | Condition             |                     |                          |
|---------------------------|---|--------|-----------------------|---------------------|--------------------------|
| Door mirror LH            |   | (–)    |                       |                     | Voltage (V)<br>(Approx.) |
| Connector Terminal        |   |        |                       |                     | (, (pp. 0x.)             |
|                           | 4 |        |                       | Close to peak       | 3.4                      |
| D107 (without around view | 7 | Ground | Ground Door mirror RH | Close to valley     | 0.6                      |
| monitor system)           | 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 RH SENSOR CIRCUIT 1

- 1. Turn ignition switch OFF.
- 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 position | ner control unit | Door mirror RH                            |    | Continuity |
|--------------------------|------------------|---|----|------------|
| Connector                | Terminal         | Terminal Connector                        |    | Continuity |
|                          | 5                | D128 (with around view monitor system)    | 21 |            |
| M33                      | 3                | D107 (without around view monitor system) | 4  | Yes        |
| WSS                      | 17               | D128 (with around view monitor system)    | 22 | 163        |
|                          |                  | D107 (without around view monitor system) | 6  |            |

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

| Automatic drive position |          | Continuity |            |
|--------------------------|----------|------------|------------|
| Connector                | Terminal | Ground     | Continuity |
| Maa                      | 5        | Giodila    | No         |
| M33                      | 17       |            | No         |

#### 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 position | ner control unit   | Door mirror RH                            |          | Continuity |
|--------------------------|--------------------|---|----------|------------|
| Connector                | Terminal Connector |   | Terminal | Continuity |
|                          | 20                 | D128 (with around view monitor system)    | 24       |            |
| M33                      | 20                 | D107 (without around view monitor system) | 5        | Yes        |
| Woo                      | 21                 | D128 (with around view monitor system)    | 23       | 163        |
|                          |                    | D107 (without around view monitor system) | 3        |            |

#### < DTC/CIRCUIT DIAGNOSIS >

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

| Automatic drive positioner |    | Continuity |            |  |
|----------------------------|----|------------|------------|--|
| Connector Terminal         |    | Ground     | Continuity |  |
| M33                        | 20 | Giodila    | No         |  |
| IVIOO                      | 21 |            | NO         |  |

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#### Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

## f 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-20, "Removal and Installation".

NO >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

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#### **SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### SLIDING MOTOR

Description INFOID:0000000009176644

- · 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:0000000009176645

## 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-140, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176646

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 1. CHECK SLIDING MOTOR LH POWER SUPPLY

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

| (+) Driver seat of |          | (-)    | Condition    |                 | Voltage (V)<br>(Approx.) |        |      |               |                 |
|--------------------|----------|--------|--------------|-----------------|--------------------------|--------|------|---------------|-----------------|
| Connector          | Terminal |        |              |                 |                          |        |      |               |                 |
|                    |          |        |              | OFF             | 0                        |        |      |               |                 |
|                    | 36       | Ground | Ground       | SEAT            | Cround                   | Cround |      | FR (forward)  | 0               |
| B210               |          |        |              |                 |                          |        | SEAT | RR (backward) | Battery voltage |
| D210               | 44       |        |              |                 | OFF                      | 0      |      |               |                 |
|                    |          |        | FR (forward) | Battery voltage |                          |        |      |               |                 |
|                    |          |        |              | RR (backward)   | 0                        |        |      |               |                 |

#### Is the inspection result normal?

YES >> Replace sliding motor LH. Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> GO TO 2.

## 2. CHECK SLIDING MOTOR LH CIRCUIT

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

#### **SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat co | ntrol unit | Sliding motor LH   |   | Continuity |
|----------------|------------|--------------------|---|------------|
| Connector      | Terminal   | Connector Terminal |   | Continuity |
| B210           | 36         | B211               | 4 | Yes        |
| D2 10          | 44         | DZII               | 5 | 103        |

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

| Driver seat control unit connector |          |        | Continuity |
|------------------------------------|----------|--------|------------|
| Connector                          | Terminal | Ground | Continuity |
| B210                               | 36       | Ground | No         |
| 6210                               | 44       |        | NO         |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

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#### **RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

#### RECLINING MOTOR

Description INFOID:0000000009176647

- 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:0000000009176648

## 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-142, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176649

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## 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.

| Driver sea     | at control | (-)     | Condition |               | Voltage (V)<br>(Approx.) |
|----------------|------------|---------|-----------|---------------|--------------------------|
| Connec-<br>tor | Terminal   |         |           |               | , , ,                    |
|                |            |         |           | OFF           | 0                        |
|                | 43         |         |           | FR (forward)  | 0                        |
| B210           |            | Ground  | SEAT RE-  | RR (backward) | Battery voltage          |
| D210           |            | Giodila | CLINING   | OFF           | 0                        |
|                | 35         |         |           | FR (forward)  | Battery voltage          |
|                |            |         |           | RR (backward) | 0                        |

#### Is the inspection result normal?

YES >> Replace reclining motor LH. Refer to SE-86, "Removal and Installation".

NO >> GO TO 2.

## 2. CHECK RECLINING MOTOR LH CIRCUIT

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

#### **RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat cor | trol unit | Reclining motor LH |   | Continuity |
|-----------------|-----------|--------------------|---|------------|
| Connector       | Terminal  | Connector Terminal |   | Continuity |
| B210            | 35        | B217               | 6 | Yes        |
| DZ 10           | 43        | 5217               | 4 | 165        |

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

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

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#### Is the inspection result normal?

YES >> GO TO 3.

NO  $\Rightarrow$  Repair or replace harness. 3. CHECK INTERMITTENT INCIDENT

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### Refer to GI-49, "Intermittent Incident".

#### Is the inspection result normal?

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YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

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NO >> Repair or replace the malfunctioning part.

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### LIFTING MOTOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

## LIFTING MOTOR (FRONT)

Description INFOID:000000009176650

- 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:0000000009176651

## 1. CHECK FUNCTION

- 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 <u>ADP-144, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:0000000009176652

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

## $1. \ \mathsf{CHECK} \ \mathsf{LIFTING} \ \mathsf{MOTOR} \ \mathsf{LH} \ (\mathsf{FRONT}) \ \mathsf{POWER} \ \mathsf{SUPPLY}$

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

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

#### Is the inspection result normal?

YES >> Replace lifting motor LH (front). Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> GO TO 2.

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

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

# **LIFTING MOTOR (FRONT)**

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat co | Driver seat control unit |           | Lifting motor LH (front) |     |
|----------------|--------------------------|-----------|--------------------------|-----|
| Connector      | Terminal                 | Connector | Terminal                 |     |
| B210           | 34                       | B218      | 6                        | Yes |
| D210           | 42                       | D210      | 4                        | 163 |

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

| Driver seat cont | rol unit |        | Continuity |
|------------------|----------|--------|------------|
| Connector        | Terminal | Ground | Continuity |
| B210             | 34       | Giouna | No         |
| D210             | 42       |        | NO         |

<u>Is the inspection result normal?</u>

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to ADP-161, "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:0000000009176653

- 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:0000000009176654

# 1. CHECK FUNCTION

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

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

### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-146, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176655

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

# $1. \ \mathsf{CHECK} \ \mathsf{LIFTING} \ \mathsf{MOTOR} \ \mathsf{LH} \ (\mathsf{REAR}) \ \mathsf{POWER} \ \mathsf{SUPPLY}$

- 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.

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

#### Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to <u>SE-86, "Removal and Installation"</u>.

NO >> GO TO 2.

# 2. CHECK LIFTING MOTOR (REAR) CIRCUIT

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

# **LIFTING MOTOR (REAR)**

### < DTC/CIRCUIT DIAGNOSIS >

| Driver seat co | ntrol unit | Lifting motor LH (rear) |   | Continuity |
|----------------|------------|-------------------------|---|------------|
| Connector      | Terminal   | Connector Terminal      |   | Continuity |
| B210           | 41         | B207                    | 6 | Yes        |
| 5210           | 40         | 5207                    | 4 | 163        |

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

| Driver seat contr  | ol unit |         | Continuity |  |
|--------------------|---------|---------|------------|--|
| Connector Terminal |         | Ground  | Continuity |  |
| B210               | 41      | Giodila | No         |  |
| 6210               | 40      |         | NO         |  |

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Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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3. CHECK INTERMITTENT INCIDENT Refer to GI-49, "Intermittent Incident".

Is the inspection result normal?

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YES >> Replace driver seat control unit. Refer to ADP-161, "Removal and Installation".

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NO >> Repair or replace the malfunctioning part.

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### **TILT MOTOR**

### < DTC/CIRCUIT DIAGNOSIS >

### **TILT MOTOR**

**Description** 

- 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:0000000009176657

## 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-148, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176658

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

# 1. CHECK TILT MOTOR POWER SUPPLY

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

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

#### Is the inspection result normal?

YES >> Replace tilt motor. Refer to <u>ST-46, "Exploded View"</u>.

NO >> GO TO 2.

# 2. CHECK TILT MOTOR CIRCUIT

- Turn ignition switch OFF.
- Disconnect automatic drive positioner control unit.
- 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 |     |
|-----------|---|--------------------|------------|-----|
| Connector | Terminal                                | Connector Terminal |            |     |
| M34       | 28                                      | M85                | 2          | Yes |
| IVI34     | 29                                      | IVIOS              | 1          | 165 |

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

| Automatic drive pos | sitioner control unit |        | Continuity |  |
|---------------------|-----------------------|--------|------------|--|
| Connector           | Connector Terminal    |        | Continuity |  |
| M34                 | 28                    | Ground | No         |  |
| IVI34               | 29                    | -      | INO        |  |

# Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-162. "Removal and Installation"</u>.

NO >> Repair or replace harness.

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### TELESCOPIC MOTOR

### < DTC/CIRCUIT DIAGNOSIS >

## TELESCOPIC MOTOR

Description INFOID:00000000917665S

- 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:0000000009176660

## 1. CHECK FUNCTION

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

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

#### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-150, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176661

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram"</u>.

# 1. CHECK TELESCOPIC MOTOR POWER SUPPLY

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

| (+) Telescopic motor |           | (-)    | Condition                |               | Voltage (V)<br>(Approx.) |
|----------------------|-----------|--------|--------------------------|---------------|--------------------------|
| Connector            | Terminals |        |                          |               | ( PP - 7                 |
|                      |           |        |                          | OFF           | 0                        |
|                      | 2         | Ground | TELE-<br>SCOPIC<br>MOTOR | FR (forward)  | 0                        |
| M94                  |           |        |                          | RR (backward) | Battery voltage          |
| IVIOT                | 1         |        |                          | OFF           | 0                        |
|                      |           |        |                          | FR (forward)  | Battery voltage          |
|                      |           |        |                          | RR (backward) | 0                        |

#### Is the inspection result normal?

YES >> Replace telescopic motor. Refer to ST-46, "Exploded View".

NO >> GO TO 2.

# 2.check telescopic motor circuit

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

### **TELESCOPIC MOTOR**

### < DTC/CIRCUIT DIAGNOSIS >

|           | positioner control<br>unit | Telescopic motor   |   | Continuity |
|-----------|----------------------------|--------------------|---|------------|
| Connector | Terminal                   | Connector Terminal |   |            |
| M34       | 29                         | M94                | 1 | Yes        |
| 10134     | 26                         | 10194              | 2 | 162        |

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

| Automatic drive pos | sitioner control unit |        | Continuity |
|---------------------|-----------------------|--------|------------|
| Connector           | Terminal              | Ground | Continuity |
| M34                 | 29                    | Ground | No         |
| IVI34               | 26                    |        | No         |

# Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-162. "Removal and Installation"</u>.

NO >> Repair or replace harness.

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### < DTC/CIRCUIT DIAGNOSIS >

# DOOR MIRROR MOTOR

Description INFOID:000000009176662

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:0000000009176663

# 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-26, "CONSULT Function (AUTO DRIVE POS.)".

### Is the inspection result normal?

YES >> Door mirror motor function is OK.

NO >> Refer to <u>ADP-152, "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:0000000009176664

Regarding Wiring Diagram information, refer to <u>ADP-55, "WITH AROUND VIEW MONITOR: Wiring Diagram"</u> or <u>ADP-40, "WITHOUT AROUND VIEW MONITOR</u>: Wiring <u>Diagram</u>".

### WITH AROUND VIEW MONITOR SYSTEM

# 1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between door mirror connector and ground.

| (+) Door mirror |          | (–)    | Door mirror re-<br>mote control | Voltage (V)<br>(Approx.) |
|-----------------|----------|--------|---------------------------------|--------------------------|
| Connector       | Terminal |        | switch condition                | (                        |
|                 | 12       |        | UP                              | Battery voltage          |
|                 | 12       | Ground | Other than above                | 0                        |
| D28 (LH)        | 11       |        | LEFT                            | Battery voltage          |
| D128 (RH)       |          |        | Other than above                | 0                        |
|                 |          |        | DOWN / RIGHT                    | Battery voltage          |
|                 | 10       |        | Other than above                | 0                        |

### Is the inspection result normal?

YES >> Refer to ADP-156, "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 LH

| Automatic drive positioner control unit |          | Door mirror LH connector |          | Continuity |
|---|----------|--------------------------|----------|------------|
| Connector                               | Terminal | Connector                | Terminal |            |
|   | 12       |                          | 10       |            |
| M33                                     | 23       | D28                      | 12       | Yes        |
|   | 24       |                          | 11       |            |

### < DTC/CIRCUIT DIAGNOSIS >

Door mirror RH

| Automatic drive positione | Door mir | Continuity |          |            |
|---------------------------|----------|------------|----------|------------|
| Connector                 | Terminal | Connector  | Terminal | Continuity |
|                           | 10       |            | 12       |            |
| M33                       | 11       | D128       | 11       | Yes        |
|                           | 22       |            | 10       |            |

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

Door mirror LH

| Automatic drive position |    | Continuity |            |  |
|--------------------------|----|------------|------------|--|
| Connector Terminal       |    |            | Continuity |  |
|                          | 12 | Ground     |            |  |
| M33                      | 23 |            | No         |  |
|                          | 24 |            |            |  |
| D : D!!                  |    |            |            |  |

Door mirror RH

| Automatic drive positio |    | Continuity |    |  |
|-------------------------|----|------------|----|--|
| Connector               |    | Continuity |    |  |
|                         | 10 | Ground     | No |  |
| M33                     | 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

| (+) Automatic drive positioner control unit |          | (-)    | Mirror switch condition | Voltage (V)<br>(Approx.) |
|---|----------|--------|-------------------------|--------------------------|
| Connector                                   | Terminal |        |                         |                          |
|   | 12       |        | DOWN / RIGHT            | Battery voltage          |
|   | 12       | Ground | Other than above        | 0                        |
| M33   | 23       |        | UP                      | Battery voltage          |
| IVISS                                       |          |        | Other than above        | 0                        |
|   | 24       |        | LEFT                    | Battery voltage          |
|   | 24       |        | Other than above        | 0                        |

Door mirror RH

| (+)                                     |  |     |                              |                          |
|---|--|-----|------------------------------|--------------------------|
| Automatic drive positioner control unit |  | (-) | Mirror switch con-<br>dition | Voltage (V)<br>(Approx.) |
| Connector Terminal                      |  |     |                              |                          |

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### < DTC/CIRCUIT DIAGNOSIS >

|       | 10 | 1 Ground | UP               | Battery voltage |
|-------|----|----------|------------------|-----------------|
|       |    |          | Other than above | 0               |
| M33   |    |          | LEFT             | Battery voltage |
| IVISS | "  |          | Other than above | 0               |
| 22    | 22 |          | DOWN / RIGHT     | Battery voltage |
|       | 22 |          | Other than above | 0               |

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit. Refer to ADP-162, "Removal and Installation".

# 4. CHECK DOOR MIRROR MOTOR

#### Check door mirror motor.

Refer to ADP-156, "Component Inspection".

#### Is the inspection result normal?

YES >> Refer to GI-49, "Intermittent Incident".

NO >> Replace door mirror actuator. Refer to MIR-20, "Removal and Installation".

### WITHOUT AROUND VIEW MONITOR SYSTEM

# 1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between door mirror connector and ground.

| (+)<br>Door mirror |          | (–)    | Door mirror re-<br>mote control | Voltage (V)<br>(Approx.) |
|--------------------|----------|--------|---------------------------------|--------------------------|
| Connector          | Terminal |        | switch condition                | , , ,                    |
|                    | 8        |        | UP                              | Battery voltage          |
|                    | O        | Ground | Other than above                | 0                        |
| D4 (LH)            | 9        |        | LEFT                            | Battery voltage          |
| D107 (RH)          |          |        | Other than above                | 0                        |
|                    | 10       |        | DOWN / RIGHT                    | Battery voltage          |
|                    | 10       |        | Other than above                | 0                        |

### Is the inspection result normal?

YES >> Refer to ADP-156, "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 LH

| Automatic drive positioner control unit |          | Door mirror LH connector |          | Continuity |
|---|----------|--------------------------|----------|------------|
| Connector                               | Terminal | Connector                | Terminal |            |
|   | 12       |                          | 10       |            |
| M33                                     | 23       | D4                       | 8        | Yes        |
|   | 24       |                          | 9        |            |

### < DTC/CIRCUIT DIAGNOSIS >

Door mirror RH

| Automatic drive positioner control unit |          | Door mir  | Continuity |            |  |
|---|----------|-----------|------------|------------|--|
| Connector                               | Terminal | Connector | Terminal   | Continuity |  |
|   | 10       |           | 8          |            |  |
| M33                                     | 11       | D107      | 9          | Yes        |  |
|   | 22       |           | 10         |            |  |

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

Door mirror LH

| Automatic drive position |          | Continuity |            |
|--------------------------|----------|------------|------------|
| Connector                | Terminal |            | Continuity |
|                          | 12       | Ground     |            |
| M33                      | 23       |            | No         |
|                          | 24       |            |            |

Door mirror RH

| Automatic drive positio |          | Continuity |            |
|-------------------------|----------|------------|------------|
| Connector               | Terminal |            | Continuity |
|                         | 10       | Ground     |            |
| M33                     | 11       |            | No         |
|                         | 22       |            |            |

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# ${\bf 3.}$ 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

| (+)                                     |          |         |                         |                          |                  |   |
|---|----------|---------|-------------------------|--------------------------|------------------|---|
| Automatic drive positioner control unit |          | (-)     | Mirror switch condition | Voltage (V)<br>(Approx.) |                  |   |
| Connector                               | Terminal |         |                         |                          |                  |   |
|   | 12       |         | DOWN / RIGHT            | Battery voltage          |                  |   |
|   | 12       | 12      | 12                      |                          | Other than above | 0 |
| M33                                     | 23       | Ground  | UP                      | Battery voltage          |                  |   |
| WIJJ                                    | 23       | Giodila | Other than above        | 0                        |                  |   |
|   | 24       |         | LEFT                    | Battery voltage          |                  |   |
|   | 24       |         | Other than above        | 0                        |                  |   |

#### Door mirror RH

| (+)                                     |          |     |                              |                          |
|---|----------|-----|------------------------------|--------------------------|
| Automatic drive positioner control unit |          | (-) | Mirror switch con-<br>dition | Voltage (V)<br>(Approx.) |
| Connector                               | Terminal |     |                              |                          |

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### < DTC/CIRCUIT DIAGNOSIS >

|       | M33 11 22 | 11 Ground | UP               | Battery voltage |
|-------|-----------|-----------|------------------|-----------------|
|       |           |           | Other than above | 0               |
| M33   |           |           | LEFT             | Battery voltage |
| IVIOO |           |           | Other than above | 0               |
|       |           |           | 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-162, "Removal and Installation".

## 4. CHECK DOOR MIRROR MOTOR

#### Check door mirror motor.

Refer to ADP-156, "Component Inspection".

#### Is the inspection result normal?

YES >> Refer to GI-49, "Intermittent Incident".

NO >> Replace door mirror actuator. Refer to MIR-20, "Removal and Installation".

# Component Inspection

INFOID:0000000009176665

# 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-17, "Exploded View".

### Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror actuator. Refer to MIR-20, "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.

#### With around view monitor system

| Door mirror connector  | Terminal |     | Operational direction |
|------------------------|----------|-----|-----------------------|
| Door militor connector | (+)      | (-) | Operational direction |
|                        | 10       | 11  | RIGHT                 |
| D28 (LH)               | 11       | 10  | LEFT                  |
| D128 (RH)              | 12       | 10  | UP                    |
|                        | 10       | 12  | DOWN                  |

### Without around view monitor system

| Door mirror connector  | Terminal |     | Operational direction |  |
|------------------------|----------|-----|-----------------------|--|
| Door militor connector | (+)      | (-) | Operational direction |  |
|                        | 10       | 9   | RIGHT                 |  |
| D4 (LH)                | 9        | 10  | LEFT                  |  |
| D107 (RH)              | 8        | 10  | UP                    |  |
|                        | 10       | 8   | DOWN                  |  |

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror actuator. Refer to MIR-20, "Removal and Installation".

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### SEAT MEMORY INDICATOR

### < DTC/CIRCUIT DIAGNOSIS >

### SEAT MEMORY INDICATOR

**Description** 

- 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

# 1. CHECK FUNCTION

- 1. Select "MEMORY SW INDCTR" in "ACTIVE TEST" mode with CONSULT.
- 2. Check the memory indicator operation.

| Test item        |      | Description             |                 |
|------------------|------|-------------------------|-----------------|
|                  | OFF  |                         | OFF             |
| MEMORY SW INDCTR | ON-1 | Memory switch indicator | Indicator 1: ON |
|                  | ON-2 |                         | Indicator 2: ON |

### Is the operation of relevant parts normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-157, "Diagnosis Procedure"</u>.

# Diagnosis Procedure

Regarding Wiring Diagram information, refer to <u>ADP-55</u>, "WITH AROUND VIEW MONITOR: Wiring Diagram" or <u>ADP-40</u>, "WITHOUT AROUND VIEW MONITOR: Wiring Diagram".

# 1. CHECK SEAT MEMORY INDICATOR CIRCUIT

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

| Driver seat co | ntrol unit | Seat memory switch |          | Continuity |
|----------------|------------|--------------------|----------|------------|
| Connector      | Terminal   | Connector          | Terminal | Continuity |
| B209           | 10         | D60                | 13       | Yes        |
| 6209           | 26         | Боо                | 14       | 165        |

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

| Driver seat control unit |          |         | Continuity |
|--------------------------|----------|---------|------------|
| Connector                | Terminal | Ground  | Continuity |
| B209                     | 10       | Giodila | No         |
| 6209                     | 26       |         | NO         |

#### Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

### $oldsymbol{2}.$ CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

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### **SEAT MEMORY INDICATOR**

### < DTC/CIRCUIT DIAGNOSIS >

| (+)        |                    |        |                 |  |
|------------|--------------------|--------|-----------------|--|
| Seat memor | Seat memory switch |        | Voltage (V)     |  |
| Connector  | Terminals          |        | (Approx.)       |  |
| 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-158, "Component Inspection".

### Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace seat memory switch. Refer to <u>ADP-163</u>. "Removal and Installation".

### 4. CHECK INTERMITTENT INCIDENT

Refer to GI-49, "Intermittent Incident".

### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-161, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning part.

# Component Inspection

INFOID:0000000009176669

# 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-163, "Removal and Installation".

### **ADP SYSTEM SYMPTOMS**

# SYMPTOM DIAGNOSIS

# ADP SYSTEM SYMPTOMS

Symptom Table

### NOTE:

Always perform the "Basic Inspection" before performing diagnosis in the following table. Refer to <u>ADP-69.</u> "Work Flow".

| Symptom   |                                    | Diagnosis procedure                       | Reference page   |
|---|------------------------------------|---|--|
| Manual functions (for specific part) do not operate.  | Sliding operation                  | Check sliding switch.                     | ADP-91   |
|   | Reclining operation                | Check reclining switch.                   | ADP-94   |
|   | Lifting operation (front)          | Check lifting switch (front).             | ADP-97   |
|   | Lifting operation (rear)           | Check lifting switch (rear).              | ADP-100  |
|   | Tilt operation (if equipped)       | Check tilt switch.                        | ADP-103  |
|   | Telescopic sensor (if equipped)    | Check telescopic switch.                  | ADP-105  |
|   | Door mirror operation              | 1. Changeover switch.                     | ADP-110  |
|   |                                    | 2. Mirror switch                          | ADP-112  |
|   | All parts of seat                  | Check power seat switch ground circuit.   | ADP-115  |
|   | Sliding operation                  | Check sliding sensor.                     | <u>ADP-117</u>   |
|   | Reclining operation                | Check reclining sensor.                   | ADP-120  |
|   | Lifting operation (front)          | Check lifting sensor (front).             | ADP-123  |
|   | Lifting operation (rear)           | Check lifting sensor (rear).              | ADP-126  |
| Memory functions (for specific part) do not operate.  | Tilt operation (if equipped)       | Check tilt sensor.                        | ADP-129  |
|   | Telescopic operation (if equipped) | Check telescopic sensor.                  | ADP-132  |
|   | Door mirror operation              | Check door mirror sensor.                 | Driver side: <u>ADP-135</u> Passenger side: <u>ADP-137</u> |
| Memory functions and manual functions (for specific part) do not operate.   | Sliding operation                  | Check sliding motor LH.                   | ADP-140  |
|   | Reclining operation                | Check reclining motor LH.                 | ADP-142  |
|   | Lifting operation (front)          | Check lifting motor LH (front).           | ADP-144  |
|   | Lifting operation (rear)           | Check lifting motor LH (rear).            | ADP-146  |
|   | Tilt operation (if equipped)       | Check tilt motor.                         | ADP-148  |
|   | Telescopic operation (if equipped) | Check telescopic motor.                   | ADP-150  |
|   | Door mirror operation              | Check door mirror motor.                  | ADP-152  |
| Entry/Exit assist function does not operate.  |                                    | 1. Check system setting.                  | ADP-12   |
|   |                                    | 2. Perform initialization.                | ADP-73   |
|   |                                    | 3. Check front door switch (driver side). | DLK-170  |
| Intelligent Key interlock function does not operate. (Other automatic operations and Intelligent Key system are normal) |                                    | 1. Check door lock function.              | <u>DLK-20</u>  |
|   |                                    | 2. Perform memory storing.                | ADP-74   |

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### **NORMAL OPERATING CONDITION**

### < SYMPTOM DIAGNOSIS >

# NORMAL OPERATING CONDITION

Description INFOID:0000000009176671

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.            | ADP-73                                     |
|  | Entry/exit assist function is disabled.  NOTE: Entry/exit assist function is set to ON before delivery (initial setting). | Change the settings.               | ADP-75                                     |
| Entry assist function does not operate.  | Manual operation with power seat switch was performed after exit assist function execution.                               | Perform the entry assist function. | <u>ADP-22</u>                              |
| 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>ADP-18                 |
|  |   |                                    | Entry assist function: <u>ADP-22</u>       |
|  |   |                                    | Exit assist function: <u>ADP-20</u>        |
|  |   |                                    | Intelligent Key interlock function: ADP-24 |

### **DRIVER SEAT CONTROL UNIT**

< REMOVAL AND INSTALLATION >

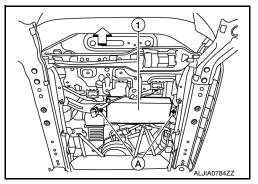
# REMOVAL AND INSTALLATION

# DRIVER SEAT CONTROL UNIT

### Removal and Installation

### **REMOVAL**

- 1. Remove the driver seat. Refer to SE-86, "Removal and Installation".
- 2. Remove the two driver seat control unit screws (A). <a>; Front</a>
- 3. Disconnect the two harness connectors from driver seat control unit (1).
- 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 <u>ADP-73</u>, "<u>ADDI-TIONAL SERVICE WHEN REPLACING CONTROL UNIT: Work Procedure"</u>.

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### **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

< REMOVAL AND INSTALLATION >

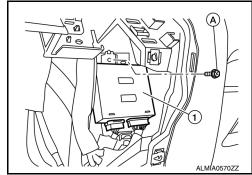
# **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

### Removal and Installation

INFOID:0000000009176673

### **REMOVAL**

- 1. Disconnect the negative battery terminal. Refer to PG-90, "Removal and Installation".
- 2. Remove the A/C assembly switch. Refer to <u>HAC-155</u>, "Removal and Installation With Navigation" or <u>HAC-154</u>, "Removal and Installation Without Navigation".
- 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 <u>ADP-73, "ADDI-TIONAL SERVICE WHEN REPLACING CONTROL UNIT: Work Procedure"</u>.

### **SEAT MEMORY SWITCH**

### < REMOVAL AND INSTALLATION >

# **SEAT MEMORY SWITCH**

# Removal and Installation

#### INFOID:0000000009176674

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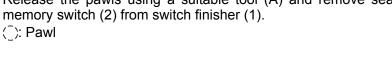
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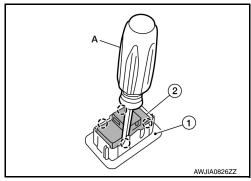
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### **REMOVAL**

- 1. Remove front door finisher LH. Refer to <a href="INT-15">INT-15</a>, "Removal and Installation".
- 2. Release the pawls using a suitable tool (A) and remove seat memory switch (2) from switch finisher (1).





### **INSTALLATION**

Installation is in the reverse order of removal.

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### **POWER SEAT SWITCH**

### < REMOVAL AND INSTALLATION >

# **POWER SEAT SWITCH**

# Removal and Installation

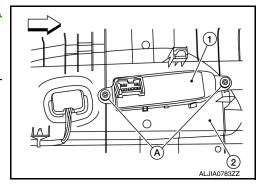
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### **REMOVAL**

1. Remove seat cushion outer finisher LH (2). Refer to <u>SE-120, "Seat Cushion"</u>.

<>: 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.

### **ADP STEERING SWITCH**

### < REMOVAL AND INSTALLATION >

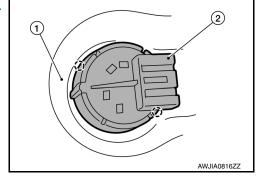
# ADP STEERING SWITCH

# Removal and Installation

### **REMOVAL**

- 1. Remove steering column lower cover (1). Refer to <u>IP-17.</u> "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.

ADP

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