# SECTION ADP В AUTOMATIC DRIVE POSITIONER С

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# PRECAUTION PRECAUTIONS

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

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. 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

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- 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.

## PREPARATION

# < PREPARATION > PREPARATION PREPARATION

# **Special Service Tools**

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The actual shape of the tools may differ from those	e illustrated here.

Tool number (TechMate No.) Tool name		Description	С
_		Removing trim components	
(J-46534)			D
Trim Tool Set			E
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### < SYSTEM DESCRIPTION >

# SYSTEM DESCRIPTION COMPONENT PARTS

**Component Parts Location** 

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### < SYSTEM DESCRIPTION >

- A. LH side of instrument panel (view with instrument panel removed)
- D. View of left front door finisher
- Β. Steering column (view with steering C. Left hand side of steering column column removed)

Ε. Driver seat bottom (view with seat re- F. moved)

LH side of driver seat (view with seat disassembled)

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No.	Component		Function
	Door mirror motor		<ul> <li>Makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.</li> <li>Refer to <u>MIR-4, "Component Parts Location"</u> for detailed installation location.</li> </ul>
1.	Door mirror (LH)	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> <li>Refer to <u>MIR-4, "Component Parts Location"</u> for detailed installation location.</li> </ul>
2. ABS actuator and electric uni		unit (control unit)	<ul> <li>Transmits the vehicle speed signal to driver seat control unit via CAN communication.</li> <li>Refer to <u>BRC-10, "Component Parts Location"</u> for detailed installation location.</li> </ul>
3. TCM			Refer to <u>TM-12</u> , "CVT CONTROL SYSTEM : Component Parts Location".
4.	IPDM E/R		<ul> <li>Transmits the detention switch signal to driver seat control unit via CAN communication.</li> <li>Refer to <u>PCS-5. "Component Parts Location"</u> for detailed installation location.</li> </ul>
3.       TCM         4.       IPDM E/R         5.       BCM         6.       Combination meter			<ul> <li>Recognizes the following statuses and transmits them to driver seat control unit via CAN communication:</li> <li>Handle position: LHD</li> <li>Driver door: OPEN/CLOSE</li> <li>Ignition switch position: ACC/ON</li> <li>Door lock: UNLOCK (with Intelligent Key or driver side door request switch operation)</li> <li>Key ID</li> <li>Starter: CRANKING/OTHER</li> <li>Refer to <u>BCS-5, "BODY CONTROL SYSTEM : Component</u> <u>Parts Location"</u> for detailed installation location.</li> </ul>
6.	Combination meter		Transmits the vehicle speed signal to driver seat control unit via CAN communication.
		Door mirror motor	<ul> <li>Makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.</li> <li>Refer to <u>MIR-4. "Component Parts Location"</u> for detailed installation location.</li> </ul>
7.	Door mirror (RH)	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> <li>Refer to <u>MIR-4. "Component Parts Location"</u> for detailed installation location.</li> </ul>

### < SYSTEM DESCRIPTION >

No.	Component		Function
8.	Door mirror remote con- trol switch	Mirror switch	<ul> <li>Mirror switch is integrated in door 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> <li>Refer to <u>MIR-4. "Door Mirror Remote Control Switch"</u> for detailed installation location.</li> </ul>
0.		Select switch	<ul> <li>Select switch is integrated in door mirror remote control switch.</li> <li>Select 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> <li>Refer to <u>MIR-4. "Door Mirror Remote Control Switch"</u> for detailed installation location.</li> </ul>
9.	Front door switch (LH)		Detects door open/close condition and transmits it to BCM. Re- fer to <u>DLK-9, "POWER DOOR LOCK SYSTEM : Component</u> <u>Parts Location"</u> for detailed installation location.
10.	Automatic drive positioner	control unit	Refer to <u>ADP-9</u> , "Automatic Drive Positioner Control Unit".
11	Tilt motor	Tilt motor	Pefer to ADP 10 "Till & Telescopia Motor"
11.	lilt motor	Tilt sensor	- Refer to <u>ADF-10</u> , <u>The a telescopic motor</u> .
12.	Telescopic motor	Tilt motor Tilt sensor	Refer to <u>ADP-10. "Tilt &amp; Telescopic Motor"</u> .
13.	ADP steering switch		Refer to <u>ADP-10</u> , "ADP Steering Switch".
14.	Seat memory switch		Refer to <u>ADP-9</u> , "Seat Memory Switch".
	Sliding motor LH	Sliding motor	<ul> <li>Sliding motor is installed to the seat cushion frame.</li> <li>Sliding motor is activated with driver seat control unit.</li> <li>Slides the seat forward/backward by changing the rotation direction of sliding motor.</li> </ul>
15.		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>
16.	Driver seat control unit		Refer to <u>ADP-9</u> , "Driver Seat Control Unit".
		Reclining motor	<ul> <li>Reclining motor is installed to seat back frame.</li> <li>Reclining motor is activated with driver seat control unit.</li> <li>Seatback is reclined forward/backward by changing the rotation direction of reclining motor.</li> </ul>
17.	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>
12	Lifting motor LH (rear)	Lifting motor	<ul> <li>Lifting motor (rear) is installed to seat frame assembly (driver side).</li> <li>Lifting motor (rear) is activated with driver seat control unit.</li> <li>Lifting motor (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).</li> </ul>
18.	Liπing motor LH (rear)	Lifting sensor	<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>

#### < SYSTEM DESCRIPTION >

No. Co		onent	Function	
10	Lifting motor LH (front)	Lifting motor	<ul> <li>Lifting motor (front) is installed to seat frame assembly (driver side).</li> <li>Lifting motor is activated with driver seat control unit.</li> <li>Lifting motor (front) is moved upward/downward by changing the rotation direction of lifting motor (front).</li> </ul>	
19.	Lifting motor LH (front)	Lifting sensor	<ul> <li>Lifting sensor (front) is installed in lifting motor (front).</li> <li>When lifting motor (front) 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 (front) of the seat.</li> </ul>	
	Sliding switch         Reclining switch         Power seat switch LH         Lifting switch         Lifting switch	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>	
20.		Reclining switch	<ul> <li>Reclining 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 reclining switch is operated.</li> </ul>	
		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>	

### Automatic Drive Positioner Control Unit

· It communicates with driver seat control unit via UART communication.

- · Performs various controls with the instructions of driver seat control unit.
- · Performs the controls of tilt & telescopic and door mirror.
- · Operates steering column and door mirror with the signal from the driver seat control.



# **Driver Seat Control Unit**

- · Main unit of automatic drive positioner system.
- It is connected to the CAN communication system.
- · It communicates with automatic drive positioner control unit via UART communication.
- The address of each part is recorded.
- · Operates each motor of seat to the registered position.
- Requests the operation of steering column and door mirror to automatic drive positioner control unit.
- · Performs the control of seat memory switch.
- · Operates the specific seat motor with the signal from power seat switch.

# Seat Memory Switch

SET SWITCH



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#### < SYSTEM DESCRIPTION >

It is used for registration and setting change of driving position.



#### SEAT MEMORY SWITCH

- The maximum 2 driving positions can be registered by memory switch 1 and 2.
- Driving position is set to the registered driving position when memory switch is pressed while operation conditions are satisfied.

#### SEAT MEMORY INDICATOR

Memory indicator indicates the status of auto driving position system by turning ON or blinking.

### **ADP Steering Switch**

- ADP steering switch is equipped to steering column.
- The operation signal is input to automatic drive positioner control unit when switch is operated.



### Tilt & Telescopic Motor

TILT MOTOR



- Tilt motor (1) is installed to steering column assembly.
- Tilt motor is activated with automatic drive positioner control unit.
- · Steering column is tilted upward/downward by changing the rotation direction of tilt motor.

#### TILT SENSOR

- Tilt sensor is integrated in tilt motor (1).
- The resistance of tilt sensor is changed according to the up/down position of steering column.
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of tilt sensor resistance.
- Automatic drive positioner control unit calculates the tilt position from the voltage.

#### TELESCOPIC MOTOR

- Telescopic motor (2) is installed to steering column assembly.
- · Telescopic motor is activated with automatic drive positioner control unit.
- Compresses steering column by changing the rotation direction of telescopic motor.

#### TELESCOPIC SENSOR

Revision: October 2015

### **ADP-10**

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#### < SYSTEM DESCRIPTION >

- Telescopic sensor is integrated in telescopic motor (2).
- The resistance of telescopic sensor is changed according to the forward/backward position of steering col-
- The terminal voltage of automatic drive positioner control unit will be changed according to a change of telescopic sensor resistance.
   Automatic drive positioner control unit televoltage the telescopic position from the voltage
- Automatic drive positioner control unit calculates the telescopic position from the voltage.

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< SYSTEM DESCRIPTION >

# SYSTEM AUTOMATIC DRIVE POSITIONER SYSTEM

AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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### SYSTEM DIAGRAM



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### OUTLINE

#### < SYSTEM DESCRIPTION >

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

Function		Description
Manual function		The driving position (seat, steering column and door mirror position) can be adjusted by using the power seat switch, ADP steering switch or door mirror remote control switch.
Memory function		The seat, steering column and door mirror move to the stored driving position by pressing seat memory switch (1 or 2).
	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 return from exiting position to the previous driving position.
Linking key fob to meter display		Performs 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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### < SYSTEM DESCRIPTION >

# MANUAL FUNCTION : System Description

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#### SYSTEM DIAGRAM



#### DESCRIPTION

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

Operation procedure

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

#### DETAIL FLOW

### < SYSTEM DESCRIPTION >

#### Seat

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

Tilt and Telescopic

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

#### 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 au- tomatic drive positioner control unit when the door mirror remote control switch is operated.	F
2	_	Motors (Door mirror motor)	The automatic drive positioner control unit actuates each motor according to the operation of the door mirror remote control switch.	

### NOTE:

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

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### < SYSTEM DESCRIPTION >

# MEMORY FUNCTION : System Description

#### SYSTEM DIAGRAM



### INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signals are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal
ABS actuator and electric unit (control unit)	Vehicle speed signal
Combination meter	Vehicle speed signal
IPDM E/R	Detention switch signal

#### < SYSTEM DESCRIPTION >

Component	Signal	
BCM	Ignition switch signal	ŀ
ECM	Shift position signal	

#### DESCRIPTION

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

**NOTE:** For further information on the memory storage procedure, refer to Owner's Manual.

**Operation Procedure** 

- 1. Turn ignition switch ON/ACC.
- 2. Press desired memory switch.
- 3. Front seat LH, steering column and door mirror will move to the memorized position.

#### **Operation Condition**

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

Item	Request status	
Switch inputs <ul> <li>Power seat switch</li> <li>ADP steering switch</li> <li>Door mirror control switch</li> <li>Set switch</li> <li>Seat memory switch</li> </ul>	OFF (Not operated)	0
CVT selector lever	P position	

#### **Detail Flow**

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the automatic drive positioner control unit when memory switch 1 or 2 is operated.
2		Motors (seat, steering, door mirror)	Driver seat control unit operates each motor of seat when it recogniz- es the memory switch that is pressed and requests each motor oper- ation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor.
		Memory switch indica- tor	Driver seat control unit requests the flashing of memory indicator while either of the motors is operating. The automatic drive positioner control unit illuminates the memory indicator.
3	Sensors (seat, steering col- umn, door mirrors)	_	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirrors are monitored with each sensor signal that is input from auto- matic 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 indica- tor	Driver seat control unit requests the illumination of memory indicator after all motors stop. The automatic drive positioner control unit illu- minates the memory indicator for 5 seconds.

# EXIT ASSIST FUNCTION

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#### < SYSTEM DESCRIPTION >

## EXIT ASSIST FUNCTION : System Description

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#### SYSTEM DIAGRAM



#### INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signals are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal	
ABS actuator and electric unit (control unit)	Vehicle speed signal	
Combination meter	Vehicle speed signal	
BCM	<ul><li>Ignition switch signal</li><li>Door switch signal</li></ul>	
ECM	Shift position signal	
IPDM E/R	Detention switch signal	

#### 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 on 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.

### < SYSTEM DESCRIPTION >

Item	Request status	A
Ignition switch	OFF	
System setting [entry/exit assist function]	ON	
Initialization	Done	
Switch inputs <ul> <li>Power seat switch</li> <li>ADP steering switch</li> <li>Door mirror remote control switch</li> <li>Set switch</li> <li>Seat memory switch</li> </ul>	OFF (Not operated)	C
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 LH, tilt)	Driver seat control unit operates the seat sliding motor LH, which recognizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit operates each motor for a constant amount.

# ENTRY ASSIST FUNCTION ENTRY ASSIST FUNCTION : System Description

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# SYSTEM DIAGRAM



### INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signals are transmitted from the following units to the driver seat control unit via CAN communication.

### < SYSTEM DESCRIPTION >

Component	Signal	
ABS actuator and electric unit (control unit)	Vehicle speed signal	
Combination meter	Vehicle speed signal	
BCM	<ul><li> Ignition switch signal</li><li> Key ID signal</li></ul>	
IPDM E/R	Detention switch signal	

#### DESCRIPTION

The seat is in the exiting position when either of the following conditions are 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 on 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.

Item	Request status
Seat, steering column	The vehicle is not moved after performing the exit assist function.
Switch inputs <ul> <li>Power seat switch</li> <li>ADP steering switch</li> <li>Door mirror control switch</li> <li>Set switch</li> <li>Memory switch</li> </ul>	OFF (Not operated)
CVT selector lever	P position

#### **Detail Flow**

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

# LINKING KEY FOB TO THE METER DISPLAY

### < SYSTEM DESCRIPTION >

## LINKING KEY FOB TO THE METER DISPLAY : System Description

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### SYSTEM DIAGRAM



#### INPUT SIGNAL AND OUTPUT SIGNAL

Several types of signals are transmitted from the following units to the driver seat control unit via CAN communication.

Component	Signal	
ABS actuator and electric unit (control unit)	Vehicle speed signal	K
Combination meter	Vehicle speed signal	
BCM	<ul><li> Ignition switch signal</li><li> Key ID signal</li></ul>	L
ECM	Shift position signal	
Chassis control module	<ul><li>Key link signal</li><li>Log-in permit signal</li></ul>	N
Display control unit	User information signal	
IPDM E/R	Detention switch signal	N

#### DESCRIPTION

Log-in function is the function that registers the setting status of various systems and retrieves the status for each Intelligent Key as desired.

Registered information is automatically adjusted to the driving position (seat, steering column, and door mirror position) registered by unlocking the driver side door with the Intelligent Key or by operating the user selection function on the display.

When user selection is performed by display operation, the user information registered with another Intelligent Key can also be retrieved.

#### NOTE:

For the registration of the log-in function, the status is automatically registered as one of the following vehicle statuses when the ignition switch is turned to OFF. For details on registration, refer to <u>ADP-54</u>, "<u>MEMORY</u> <u>STORING : Description</u>".



### < SYSTEM DESCRIPTION >

Item	Request status
Ignition position	ON
Driver side door	Closed
Navigation system	Activated
CONSULT	Not connected

**Operation Procedure** 

- 1. Turn ignition switch ON.
- 2. Push desired user change switch on display.

3. Driver seat, steering column and door mirror will move to the memorized position.

**Operation Condition** 

All of the following conditions must be satisfied in order to retrieve the registration information of the log-in function.

If one of the following conditions is not satisfied, the interlocked operation of the driving position for log-in function is interrupted.

Item	Request status
Ignition position	ON
Navigation system	Activated
Initialization	Done
Switch inputs <ul> <li>Power seat switch</li> <li>Tilt &amp; telescopic switch</li> <li>Door mirror remote control switch</li> <li>Set switch</li> <li>Memory switch</li> </ul>	OFF (Not operated)
CVT shift selector	P position
Log-in function memory	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

**Detail Flow** 

Order	Input	Output	Control unit condition
1	<ul> <li>Door unlock signal (CAN)</li> <li>Key ID signal (CAN)</li> </ul>	_	<ul> <li>When the following function is performed, the driver seat control unit transmits the unlock signal from BCM via CAN communication and receives the Key ID signal.</li> <li>Unlock door: Intelligent Key</li> <li>Unlock door: front request switch (driver side)</li> <li>Unlock door: one touch unlock sensor</li> </ul>
2	_	_	Driver seat control unit performs the seat slide and steering tilt directly to the exit assist function. Other loads move to the exit assist function after performing log-in function.
3	—	_	Driver seat control unit performs the entry assist function.

### Fail Safe

INFOID:000000012246462

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-58</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-59</u>
	EEPROM	B2130	<u>ADP-68</u>

### < SYSTEM DESCRIPTION >

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis	А
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-66</u>	
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-60</u>	R
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-62</u>	D
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-64</u>	
				С

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

### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

# CONSULT Function (AUTO DRIVE POS.)

INFOID:000000012246463

The automatic drive positioner system can be checked and diagnosed for component operation with CON-SULT.

### APPLICATION ITEMS

Diagnostic mode	Description
ECU Identification	Displays part numbers of driver seat control unit parts.
Self Diagnostic Result	Performs self-diagnosis for the automatic drive positioner system and displays the results.
Active Test	Drives 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 DIAGNOSTIC RESULT

Refer to ADP-32, "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 LH.
MIRROR MOTOR LH	Activates/deactivates the mirror motor RH.
MEMORY SW INDCTR	Turns ON/OFF the memory indicator.

#### DATA MONITOR

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

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# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

### < SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	А
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock ac- tuator output switch signal.	В
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.	С
TRANSMISSION	"A/T"	×	×	CVT status judged from transmission.	
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.	D
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 sig- nal.	E
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.	F
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.	G
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.	Н
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.	I
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.	ADI
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.	K
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.	L
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.	Μ
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.	N
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the ADP steering switch (up) signal.	14
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the ADP steering switch (down) signal.	0
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the ADP steering switch (for-ward) signal.	D
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the ADP steering switch (back-ward) signal.	Г
SLIDE PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.	

# DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

### < SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
RECLN PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	—	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U-D	"V"	_	×	Voltage input from door mirror sensor (passenger side) up/ down is displayed.
MIR/SEN RH R-L	"V"	_	×	Voltage input from door mirror sensor (passenger side) left/ right is displayed.
MIR/SEN LH U-D	"V"	_	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R-L	"V"	_	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	_	_	x	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
KEY NUMBER	_	×	×	Displays the current log-in user with the log-in function
KEY 1	_	×	×	Displays the registration or non-registration status of the log-in function
KEY 2	_	×	×	Displays the registration or non-registration status of the log-in function
KEY 3	_	×	×	Displays the registration or non-registration status of the log-in function
KEY 4		×	×	Displays the registration or non-registration status of the log-in function

#### WORK SUPPORT

Work item	Content	Item
	Entry/exit assist (seat) can be selected:	ON
EXIT SEAT SEIDE SETTING	ON (operated) – OFF (not operated)	OFF
	Entry/exit assist (steering column) can be selected:	ON
	ON (operated) – OFF (not operated)	OFF
		40 mm (1.6 in)
SEAT SLIDE VOLUME SET	I he 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 DRIVER SEAT CONTROL UNIT

# **Reference Value**

# VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Itom	r Item Condition		\/oluo/Statua	
ivionitor item	Monitor item Condition		value/Status	
ACC ON SW	Ignition switch	ACC or ON position	ON	
		Other than above	OFF	
DETENT SW	CVT selector lever	P position	OFF	
		Other than above	ON	
DOOR SW-FL	Driver door	Open	OPEN	
		Close	CLOSED	
DOOR SW-FR	Passenger door	Open	OPEN	
		Close	CLOSED	
HANDI F	Driving position		LHD	
	Briting poolion		RHD	
IGN ON SW	Ignition switch	ON position	ON	
	Ignition Switch	Other than above	OFF	
KEYLESS ID	UNLOCK button of Intellige	nt Key is pressed	1, 2, 3, 4 or 5	
	Intelligent Key or driver	ON	ON	
KILS DR UNLK	side door request switch	OFF	OFF	
		Up	The numeral value decreases *	
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *	A
		Other than above	No change to numeral value <sup>*</sup>	
	Lifting owitch front (down)	Operate	ON	
LIFT FR SW-DN		Release	OFF	
	Lifting quitab from (	Operate	ON	
LIFT FR SW-UP	Lining switch from (up)	Release	OFF	
		Up	The numeral value decreases *	
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *	
		Other than above	No change to numeral value <sup>*</sup>	
		Operate	ON	
LIFT RR SW-DN	Lifting switch rear (down)	Release	OFF	
		Operate	ON	
LIFT RR SW-UP	Lifting switch rear (up)	Release	OFF	
	Manage State 4	Push	ON	
WENURY SWI	wernory switch 1	Release	OFF	
	Marrian an list O	Push	ON	
MEMORY SW2	Memory switch 2	Release	OFF	
		Left	ON	
MIR CHNG SW-L	Select switch	Other than above	OFF	
		Right	ON	
MIR CHNG SW-R	Select switch	Other than above	OFF	

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## < ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
		Down	ON
MIR CON SW-DN	Mirror Switch	Other than above	OFF
	Mirror owitch	Left	ON
MIR CON SW-LH	WIITOF SWITCH	Other than above	OFF
	Mirror owitch	Right	ON
MIR CON SW-RH	WIITOF SWITCH	Other than above	OFF
	Mirror owitch	Up	ON
MIR CON SW-UP	MITOI SWIICH	Other than above	OFF
MIR/SEN LH R-L	Door mirror (driver side)	<u> </u>	Change between 0.6 (close to left edge) and 3.4 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) and 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side	9)	Change between 3.4 (close to left edge) and 0.6 (close to right edge)
MIR/SEN RH U-D	Door mirror (passenger side	2)	Change between 3.4 (close to peak) and 0.6 (close to valley)
P RANG SW CAN	CVT selector lever	P position	ON
		Other than above	OFF
R RANGE (CAN)	CVT selector lever	R position	ON
		Other than above	OFF
		Forward	The numeral value decreases*
RECLN PULSE	Seat reclining	Backward	The numeral value increases *
		Other than above	No change to numeral value <sup>*</sup>
		Operate	ON
RECLN SW-FR	Reclining switch (forward)	Release	OFF
	Reclining switch (back-	Operate	ON
RECLIN SW-RR	ward)	Release	OFF
SET SW	Sot owitch	Push	ON
SET SW	Set Switch	Release	OFF
		Forward	The numeral value decreases *
SLIDE PULSE	Seat sliding	Backward	The numeral value increases*
		Other than above	No change to numeral value*
SLIDE SW_ER	Sliding switch (forward)	Operate	ON
		Release	OFF
SLIDE SW_RR	Sliding switch (backward)	Operate	ON
		Release	OFF
STARTER SW	Ignition position	Cranking	ON
STARTERSW	Ignition position	Other than above	OFF
		Forward	The numeral value decreases *
TELESCO PULSE	Telescopic position	Backward	The numeral value increases *
		Other than above	No change to numeral value <sup>*</sup>
	Telesconic switch	Forward	ON
	ายเองบบุมิน จพแบบ	Other than above	OFF
	Telesconic switch	Backward	ON
I LLEGUU GW-KK	releacopic switch	Other than above	OFF

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### < ECU DIAGNOSIS INFORMATION >

Monitor Item	Con	dition	Value/Status	
		Upward	The numeral value decreases *	ŀ
TILT PULSE	Tilt position	Downward	The numeral value increases *	
		Other than above	No change to numeral value <sup>*</sup>	E
	Till av itale	Downward	ON	
TILT SW-DOWN		Other than above	OFF	(
	Tilt quitch	Upward	ON	
TILT SW-UP	The Switch	Other than above	OFF	
TRANSMISSION	Transmission type		A/T	
VEHICLE SPEED	The condition of vehicle s	peed is displayed	km/h	
	CAN signal from ABS	Received	ON	F
VHUL SPEED (ABS)	CAN SIGNAL ITOTTI ABS	Not received	OFF	L

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

#### TERMINAL LAYOUT



#### PHYSICAL VALUES

Termi (Wire	nal No. color)	Description		Condition Voltage (V) (Approx.)		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)		
5 (SB)	Ground	Sensor power supply	Output	-	_	Battery voltage		
6	Ground	Lifting switch (rear) down	Input	Lifting switch	Operate (down)	0		
(0)		Signal		(rear)	Release	Battery voltage		
7	Ground	Lifting switch (front) down	Input	Lifting switch	Operate (down)	0		
(0)		signal (IIOIII)	' (front)	Release	Battery voltage			
8	Ground	Reclining switch backward	Input	Reclining switch	Operate (backward)	0		
(**)		Signal			Release	Battery voltage		

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#### < ECU DIAGNOSIS INFORMATION >

Termi (Wire	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)
9 (V)	Ground	Sliding switch backward	Input	Sliding switch	Operate (backward)	0
(.)		0.9.10.			Release	Battery voltage
10	Ground	Memory indicator 2 signal	Output	Memory indicator	Illuminate	1
(G)	Cround	memory maloator 2 olgnar	output	2	Other than above	Battery voltage
11	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0
(GR)			•		Other than above	5
12 (V)	Ground	Telescopic sensor signal	Input	Telescopic	Operate	10mSec/div
					Other than above	0 or 5
13 (P)	Ground	Reclining sensor signal	Input	Seat reclining	Operate	10mSec/div
					Stop	0 or 5
15 (BR)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		10msec/div
16 (L)		CAN high		-	_	_
21		<b>0</b> /		0.4	Press	0
(Y)	Ground	Set switch signal	Input	Set switch	Other than above	5
22 (O)	Ground	Lifting switch (rear) up sig-	Input	Seat lifting switch	Operate (up)	0
(0)		11di		(rear)	Release	Battery voltage
23 (G)	Ground	Lifting switch (front) up sig- nal	Input	Seat lifting switch (front)	Operate (up)	0
				()	Release	Battery voltage
24 (W)	Ground	Reclining switch forward signal	Input	Reclining switch	Operate (forward)	0
		-			Release	Battery voltage
25 (L)	Ground	Sliding switch forward sig- nal	Input	Sliding switch	Operate (forward)	0
. ,					Release	Battery voltage

#### < ECU DIAGNOSIS INFORMATION >

Termii (Wire	nal No. color)	Description		Condition		Condition Voltage (V)		Voltage (V)	А
+	-	Signal name	Input/ Output	Cond	altion	(Approx.)			
26	Cround	Momory indicator 1 signal	Qutnut	Memory indicator	Illuminate	1	В		
(W)	Ground	Memory indicator i signal	Output	1	Other than above	Battery voltage			
27 (O)	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0	С		
(0)					Other than above	5			
28 (SB)	Ground	Tilt sensor signal	Input	Tilt	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ	D		
					Other than above	0 or 5	F		
29 (GR)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div	G		
					Stop	0 or 5			
30 (W)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ	AD		
					Stop	0 or 5			
31 (LG)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div	L M N		
					Stop	0 or 5			
32 (P)	—	CAN low			_	_	0		
34 (O)	Ground	Lifting motor LH (front) up signal	Output	Seat lifting (front)	Operate (up)	Battery voltage	D		
					Stop	U	Г		
35 (Y)	Ground	Reclining motor LH for- ward signal	Output	Seat reclining	(forward)	Battery voltage			
					Release	0			
36	Ground	Sliding motor LH back-	Output	Seat sliding	Operate (backward)	Battery voltage			
(•)					Stop	0			

#### < ECU DIAGNOSIS INFORMATION >

Termii (Wire	nal No. color)	Description		Condition		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Conc		(Approx.)		
37 (R)	Ground	Power source	Input	_	_	Battery voltage		
39 (B)	Ground	Ground (power)	_	-	_	0		
40 (C)	Ground	Lifting motor LH (rear)	Output	Seat lifting (rear)	Operate (down)	Battery voltage		
(0)		uown signai			Stop	0		
41	1 Ground Lifting motor LH (rear) up	Output	Seat lifting (rear)	Operate (up)	Battery voltage			
(Ľ)		Signal			Stop	0		
42 (CP)	Ground	Lifting motor LH (front)	Output	Output Seat lifting (front)	Operate (down)	Battery voltage		
(GIV)		down signal			Stop	0		
43	Ground	Reclining motor LH back-	Output	back- Output	Seat reclining	Operate (backward)	Battery voltage	
(00)					Stop	0		
44 (P)	44 (P) Ground Sliding motor LH forward signal		Output	Seat sliding	Operate (forward)	Battery voltage		
(F)					Release	0		

# Fail Safe

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

Operating in fail-safe mode	Malfunction Item	Related DTC	Diagnosis
	CAN communication	U1000	<u>ADP-58</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-59</u>
	EEPROM	B2130	<u>ADP-68</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-66</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-60</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-62</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-64</u>

# DTC Index

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CONSULT	Tim	ing <sup>*1</sup>			
display	Current mal- function function		Item	Reference page	
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	ADP-58	
CONTROL UNIT [U1010]	0	1-39	Control unit	ADP-59	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	<u>ADP-60</u>	
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	ADP-62	

#### < ECU DIAGNOSIS INFORMATION >

CONSULT	Timing <sup>*1</sup>				
display	Current mal- function	Previous mal- function	Item	Reference page	
STEERING TILT [B2116]	0	1-39	Tilt motor output	ADP-64	В
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-66</u>	
EEPROM [B2130]	0	1-39	EEPROM	<u>ADP-68</u>	C

\*1.

• 0: Current malfunction is present.

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

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# **AUTOMATIC DRIVE POSITIONER CONTROL UNIT**

< ECU DIAGNOSIS INFORMATION >

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

### **Reference Value**

INFOID:000000012246467

(h)

ALJIA1679ZZ

H.S.



PHYSICAL VALUES

Termi (Wire	nal No. e color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)
1	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0
(G)	Ground	The switch up signal	input	The Switch	Other than above	5
2		Soloot switch DH		Soloot switch po	RH	0
(LG)	Ground	signal	Input	sition	Neutral or LH	5
3	Ground	Mirror switch up signal	Input	Mirror switch	Operate (up)	0
(L)	Ground	winter switch up signal	input	WITCH SWITCH	Other than above	5
4	Ground	Mirror switch left signal	Input	Mirror switch	Operate (left)	0
(V)	Ground	winter switch leit signal	Minor switch leit signal input imput	WINTON SWITCH	Other than above	5
5 (W)	Ground	Door mirror sensor (pas- senger side) up/down signal	Input	Door mirror RH po	osition	Change between 3.4 (close to peak) and 0.6 (close to valley)
6 (R)	Ground	Door mirror sensor (driv- er side) up/down signal	Input	Door mirror LH po	osition	Change between 3.4 (close to peak) and 0.6 (close to valley)
7	Ground	Telescopic switch for-	Input	Telescopic	Operate (forward)	0
(P)	Ground	ward signal	mpar	switch	Other than above	5
8 (SB)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		10msec/div

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Voltage (V)	A
+	-	Signal name	Input/ Output	Conditi		(Approx.)	
10 (W)	Ground	Door mirror motor (pas- senger side) up signal	Output	Door mirror RH	Operate (up)	Battery voltage	В
					Other than above	0	С
11 (G)	Ground	Door mirror motor (pas- senger side) left signal	Output	Door mirror RH	Operate (left)	Battery voltage	
					Other than above	0	D
12 (BG)	Ground	Door mirror motor (driv- er side) down signal	- Output	Door mirror LH	Operate (down)	Battery voltage	E
					Other than above	0	
		Door mirror motor (driv- er side) right signal			Operate (right)	Battery voltage	F
					Other than above	0	G
13 (R)	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0	
					Other than above	5	Н
14 (BR)	Ground	Select switch LH	Input	Select switch po-	LH Neutral or	0	I
15 (Y)	Ground	Mirror switch down sig-	Input	Mirror switch	RH Operate		
					(down) Other than	5	AD
	Ground	Mirror switch right signal	Input	Mirror switch	above Operate	5	K
16 (SB)					(right) Other than	5	
		Door mirror sensor (nas-			above	5	L
17 (P)	Ground	senger side) left/right signal	Input	Door mirror RH position		Change between 3.4 (close to left edge) and 0.6 (close to right edge)	D. A
18 (BG)	Ground	Door mirror sensor (driv- er side) left/right signal	Input	Door mirror LH position		Change between 0.6 (close to left edge) and 3.4 (close to right edge)	IVI
19 (W)	Ground	Telescopic switch back- ward signal	Input	Telescopic	Operate (back- ward)	0	Ν
					Other than above	5	0
20 (Y)	Ground	Ground		_		0	
21 (G)	Ground	Door mirror motor sen- sor power supply	Input	_		5	Ρ

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

### < ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description	Qualities		Voltage (V)	
+	-	Signal name	Input/ Output	Conditi	on	(Approx.)
22 (BG)	Ground	Door mirror motor (pas-	- Output		Operate (down)	Battery voltage
		nal		Door mirror (RH)	Other than above	0
		Door mirror motor (pas- senger side) right signal			Operate (right)	Battery voltage
					Other than above	0
23 (R)	Ground	Door mirror motor (driv-	Output	Door mirror (LH)	Operate (up)	Battery voltage
		er side) up signal			Other than above	0
24 (P)	Ground	Door mirror motor (driv- er side) left signal	Output	Door mirror (I H)	Operate (left)	Battery voltage
					Other than above	0
25 (L)	Ground	Power source	Input	—		Battery voltage
26	Ground	Telescopic motor back- ward signal	Output	Steering tele-	Operate (back- ward)	Battery voltage
(*)					Other than above	0
27 (LG)	Ground	Tilt and telescopic motor power source		_		Battery voltage
28	Ground	Tilt motor down signal	Output	Steering tilt	Operate (down)	Battery voltage
(SB)					Other than above	0
29 (BR)	Ground	Tilt motor up signal	- Output	Steering tilt	Operate (up)	Battery voltage
					Other than above	0
		Telescopic motor for- ward signal		Steering tele-	Operate (forward)	Battery voltage
				scopic	Other than above	0
30 (B)	Ground	Ground	—	_		0
# BCM (BODY CONTROL MODULE)

## < ECU DIAGNOSIS INFORMATION >

# BCM (BODY CONTROL MODULE)

## List of ECU Reference

INFOID:000000012246468

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EC	Reference	
	BCS-31. "Reference Value"	
DOM	BCS-51, "Fail Safe"	
BCIM	BCS-52, "DTC Inspection Priority Cha	art"
	BCS-53. "DTC Index"	

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< WIRING DIAGRAM >

# WIRING DIAGRAM

# AUTOMATIC DRIVE POSITIONER SYSTEM

# Wiring Diagram

INFOID:000000012246469



## AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



## AUTOMATIC DRIVE POSITIONER SYSTEM

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AAJWA0342GB



< WIRING DIAGRAM >

Revision: October 2015

2016 Maxima NAM

# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



AAJIA0867GB

## AUTOMATIC DRIVE POSITIONER SYSTEM

#### < WIRING DIAGRAM >



AAJIA0868GB

			18	BG	MIRROR SENSOR (LH HORIZONTAL)	:	
Connector	No.	M39	19	N	TELESCOPIC SW (BACKWARD)	Connector No.	M73
Connector .	Name	ADP STEERING SWITCH	20	>	GND (SENSOR GND)	Connector Name	TELESCOPIC MOTOR
Connector	Type	TK06FGY	21	σ	POWER SUPPLY (SENSOR FOR 5V)	Connector Type	NS06FW-CS
Connector (	Color	GRAY	22	BG	MIRROR MOTOR [RH COMMON(DOWN&RIGHT)]	Connector Color	WHITE
			23	œ	MIRROR MOTOR [LH VERTICAL (UP)]		
			24	٩	MIRROR MOTOR [LH HORIZONTAL (LEFT)]	IN THE MARK	
S H						S H	
5			Connector	No.	M67	5	2
		3 4 1 5 2	Connector	Name	AUTOMATIC DRIVE POSITIONER		6 5 4 3
			Connector	Tvbe	NSO6FW-CS		
			Connector	Color	WHITE		
Terminal	Color c Wire	of Signal Name				Terminal Color	of Signal Name
-	۵ ۵		14Man			-	
. 2	•	1	S H			2 2	1
3	M	I	5		25 26	3	1
4	σ	I			27 28 29 30	4 SB	1
5	œ	1				2 FG	1
							-
Connector i	No.	M63	Territor	e relev		Connector No.	M78
Connector i	Name	AUTOMATIC DRIVE POSITIONER	No.	Vire	Signal Name	Connector Name	CVT SHIFT SELECTOR
	T	CONTROL UNIT	25	-	BAT (PTC)	Connector Type	TH16FW-NH
Connector	Type	TH24FW-NH	26	>	TELESCOPIC MOTOR (BACKWARD)	Connector Color	WHITE
Connector	Color	WHITE	27	ГG	POWER SUPPLY (SENSOR)		
			28	BB	TILT MOTOR (DOWNWARD)	E	
E			29	Ha	STRG MOTOR COMMON (UPWARD/FORWARD)		
			30	œ	GND (POWER)	H.S.	
Ч. К. К.					-		1 2 3 4 5 6 7 8
			Connector	No.	M71		9 10 11 12 13 14 15 16
		13 14 15 16 17 18 19 20 21 22 23 24	Connector	Name	TILT MOTOR		
			Connector	Time	NCORFER-CS		
				odf.		Terminal Color	
Terminal	Color o	of Signal Name	CONTRECTOR	LOIOL	DHOWN	No. Wire	Signal Name
No.	Wire		EE E			5 L	1
-	5	IILI SW (UPWARU)				9 9	1
67 6	<u> </u>		E.S.		2 1		
~ ~							
+ u	A M				2 t D		
	2						
9	œ	MIRROR SENSOR (LH VERTICAL)					
2	-	TELESCOPIC SW (FORWARD)					
8	ß	UART	Terminal	Color o	Signal Name		
6	1	1	N	Wire			
10	N	MIRROR MOTOR (RH VERTICAL)	-	ß	I		
F	σ	MIRROR MOTOR (RH HORIZONTAL)	2	BR	1		
12	BG	MIRROR MOTOR [LH COMMON]	4	ГG	I		
13	œ	TILT SW (DOWNWARD)	2	-	I		
14	BR	MIRROR SELECT SW (LH)	9	~	I		
15	۲	MIRROR SW (DOWNWARD)					
16	ß	MIRROR SW (RIGHTWARD)					
17	٩	MIRROR SENSOR (RH HORIZONTAL)					

#### AAJIA1007GB

< WIRING DIAGRAM >

Connector No. B1	Connector Name WIRE TO WIRE	Connector Type TH80MDGY-CS16-TM4		H.S.	2214004 (19) (19) (19) (19) (19) (19) (19) (19)	441 400 381 584 275 288 585 544 343 232 371 (304 644) 4821 752 464 542 424 242 - 22		01 000 175 01 000 175 01 000 175 01 000 175 01 000 175 01 000 1000 1	[55,1] 54,1] 52,1] 54,1] 52,1] 54,1] 55,1] 54,1] 55,1] 54,1] 55,1] 54,1] 55,1] 54,1] 55,1] 54,1]	Terminal Color of Signal Name	Control of the second of	55J BR	56J L		59J SB -	60J BR		73J BR -	Connector No. B8	Connector Name FRONT DOOR SWITCH LH	Connector Type TH04FW-NH Connector Color WHITE	H.S.	Terminal No.     Color of Wire     Signal Name       3     BR     -	
E30	WIRE TO WIRE	TH80MW-CS16-TM4 WHITE	56 Jo 20 20 10	100 90 70 60	216206196176166156146136126116 306296286276266256246236226	416406396386376366356346356326316 506496486476456456446436426	61G 600 59G 58G 57G 56G 55G 54G 53G 52G 51G 700 69G 68G 67G 66G 65G 64G 63G 62G	81G 80G 79G 78G 77G 76G 75G 74G 73G 72G 71G 90G 89G 85G 87G 85G 85G 85G 85G 85G 85G 84G 83G 82G 82G	95G 94G 93G 92G 91G 1006 996 98G 97G 96G		signal Name	1												
Connector No.	Connector Name	Connector Type		H.S.							Terminal Color of No. Wire	96 96												
					-	nal Name	1 1	3-MOR				3 2 1			nal Name	I		1	1					
M84	<b>CIRCUIT BREAKER</b>	M02FW-P-LC				Sig		M178 IOINT CONNECTOR	A06FGY GRAY			6 5 4			Sig									
or No.	or Name (	or Type				Color of Wire	r «	or No.	or Type					Color of	Wire	> >		> :	>					
Connecto	Connecto	Connecto		H.S.		Terminal No.	- 0	Connecto	Connecto	E	H.S.			Terminal	No.	5	n 4	2	9					

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# AUTOMATIC DRIVE POSITIONER SYSTEM

#### < WIRING DIAGRAM >

Revision: October 2015

#### < WIRING DIAGRAM >

4o. B213	Jame POWER SEAT SWITCH LH	Type NS10FW-CS	Color WHITE			Color of Signal Name Wire	· 0	۰ ۲		- M		- (	י י י ס כ		-								
Connector N	Connector N	Connector 1	Connector (	ee ee	0 1	Terminal No.	-	7	3	£	9	2	ο σ	10									
3201	VIRE TO WIRE	4S12MW-CS	VHITE		1         2         3         and         4         5           6         7         8         9         10         11         12	Signal Name	1	Т		3208	VIRE TO WIRE	IS12MBR-CS	ROWN		1         2         3         4         5           6         7         8         9         10         11         12	Signal Name	1	1	1	1	1	1	1
tor No.	tor Name V	tor Type N	tor Color V			al Color of Wire	œ	8		tor No.	tor Name V	tor Tvbe	tor Color E			al Color of Wire	>	SB	BR	σ	M	GR	0
Connect	Connect	Connect	Connect	E		Termini No.	4	÷		Connect	Connect	Connect	Connect	9	Щ. H.S	Termin: No.	-	2	m	8	6	10	÷
312	VIRE TO WIRE	JS12FW-CS	VHITE		5         4         3         2         1           12         11         10         9         8         7         6	Signal Name	-(WITHOUT AUTOMATIC DRIVE POSITIONER)	-(WITH AUTOMATIC DRIVE POSITIONER)	1		332	VIRE TO WIRE	IS12FBR-CS	BROWN	1         1         1           1         1         1         1           1         1         1         1		Signal Name	-(WITHOUT AUTOMATIC DRIVE POSITIONER)	-(WITH AUTOMATIC DRIVE POSITIONER)	1	-(WITHOUT AUTOMATIC DRIVE POSITIONER)	-(WITH AUTOMATIC DRIVE POSITIONER)	-(WITHOUT AUTOMATIC DRIVE POSITIONER)
No.	· Name V	Type N	· Color M			Color of Wire	>	_	•		·No.	· Name M	Type N	Color B		Calar of	Wire	ж	BB	_	ß	×	7
Connector	Connector	Connector	Connector		0 E	Terminal No.	4	4	÷		Connector	Connector	Connector	Connector	RAN H.S.	Terminal	No.	-	-	N	e	3	œ

-(WITHOUT AUTOMATIC DRIVE POSITIONER) -(WITH AUTOMATIC DRIVE POSITIONER) -(WITHOUT AUTOMATIC DRIVE POSITIONER) -(WITH AUTOMATIC DRIVE POSITIONER) -(WITH AUTOMATIC DRIVE POSITIONER) ī. ~ 8 ~ 8 8 < 년 국 瑞 국 우 두 약 Ten

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	Terminal Mineator Color Numerator Type         TH32FW-NH TH32FW-NH Terminal           Terminal No.         Terminal No.         Terminal No.         Signal Name           3         -         -         -         -           3         -         -         -         -         -           3         -         -         -         -         -         -           3         -         -         -         -         -         -         -           7         0         FRONT LIFTER SW (DOWWARD)         NO         -	Connector Namo	B223 DDIVED SEAT CONTDOL LINIT	Connector No.	B226 SI IDING MOTOR I H		
	Terminal         Color         WHTE           No.         Vertical (10)         Vertical (10)         Vertical (10)         Vertical (10)           No.         Vertical (10)         Vertical (10)         Vertical (10)         Vertical (10)         Vertical (10)           1         -         -         -         -         -         -           2         -         -         -         -         -         -           3         -         -         -         -         -         -         -           3         -         <	Connector Name	DRIVER SEAL CONTROL UNIT	Connector Name	7123-1460-30		
	Terminal         Signal Name           No.         1           2         2           3         2           4         2           5         28           6         3           7         0           9         V           10         A           11         2           2         2           3         2           4         2           5         28           6         3           7         0           8         FRAILIFERSWICONNARD)           9         V           10         a           11         CA           12         V           13         P           14         -           12         V           13         P           14         -           15         P           16         L           17         -           18         -           2         -           19         -           2         -           19         -	Connector Color	WHITE	Connector Color	RI ACK		
	Terminal         Color of         Signal Name           1         -         -           2         -         -           3         -         -           4         -         -           3         -         -           4         -         -           3         -         -           4         -         -           5         -         -           6         A         FREAL LIFTER SW (pow/WARE))           9         V         FREAL LIFTER SW (pow/WARE))           10         0         RECLIFER SW (pow/WARE))           11         -         -           12         V         Pulse FREESOPIC)           13         P         PULSE (FRECLINER)           14         -         -           15         V         PULSE (FRECLINER)           16         L         -           17         -         -           18         -         -           19         -         -           17         -         -           18         -         -           19         -         - </td <td>é</td> <td></td> <td>á</td> <td></td> <td></td> <td></td>	é		á			
	Terminal         Color of         Signal Name           1         - <td>(B-B)</td> <td></td> <td>(dd)</td> <td></td> <td></td> <td></td>	(B-B)		(dd)			
	Terminal         Color of Num         Signal Name           1         -	H.S.H		HS			
	Terminal No.         Color of Nur.         Signal Name           1         -         -           2         -         -           3         -         -           4         -         -           3         -         -           4         -         -           5         SB         POWER SUPPLY (ENCODER)           6         G         REAL LIFTER SW (DOWWWARD)           7         O         REAL LIFTER SW (DOWWWARD)           9         V         SLIDE SW (BACKWARD)           10         G         REAL LIFTER SW (DOWWWARD)           11         G         NIO 2           12         V         PLUE SW (BACKWARD)           13         P         NIO 2           14         -         -           15         V         PLUE SK (FLUERS)           16         L         -           17         -         -           18         -         -           17         -         -           18         -         -           19         -         -           17         -         -           1		37 36 35 34 33 44 43 47 41 40 30 38		3 2	-	
	Terminal No.         Color of Wire         Signal Name           1         -         -           2         -         -           3         -         -           3         -         -           4         -         -           5         SB         POWER SUPTY (ExcODER)           6         G         REAR LIFTER SW (DOWWARD)           7         0         FRONT ULFTER SW (DOWWARD)           9         V         SLIDE SW (BACKWARD)           10         G         RECLINER SW (BACKWARD)           11         GR         ADDRES 2           13         P         PULSE (RECLINER)           14         -         -           15         V         PULSE (RECLINER)           16         L         CAN-H           17         -         -           18         L         OAH           17         -         -           18         L         CAN-H           17         -         -           18         -         -           19         -         -           20         S         -           <				9	4	
Terrindio         Control         Signat Name           1 <td>Terminal         Color of Mire         Signal Name           1         -         -         -           2         -         -         -           3         -         -         -           4         -         -         -           5         5         5         FRAN LIFTER SUPLY (DOWWARD)           6         G         REAR LIFTER SW (DOWWARD)           7         0         FRONT LIFTER SW (DOWWARD)           9         V         SLIDE SW (EACKWARD)           10         G         NO.           11         GR         ADDRES 2           12         V         SLIDE SW (EACKWARD)           13         P         PULSE (RELECOPIC)           14         -         -           15         V         PULSE (RECLINERS)           16         L         -           17         -         -           18         UNARES 2         -           19         -         -           17         -         -           18         UNARD         -           19         -         -           19         -         -     <!--</td--><td></td><td></td><td></td><td></td><td></td><td></td></td>	Terminal         Color of Mire         Signal Name           1         -         -         -           2         -         -         -           3         -         -         -           4         -         -         -           5         5         5         FRAN LIFTER SUPLY (DOWWARD)           6         G         REAR LIFTER SW (DOWWARD)           7         0         FRONT LIFTER SW (DOWWARD)           9         V         SLIDE SW (EACKWARD)           10         G         NO.           11         GR         ADDRES 2           12         V         SLIDE SW (EACKWARD)           13         P         PULSE (RELECOPIC)           14         -         -           15         V         PULSE (RECLINERS)           16         L         -           17         -         -           18         UNARES 2         -           19         -         -           17         -         -           18         UNARD         -           19         -         -           19         -         - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
	No.         Wire         -         -           2         -         -         -         -           3         -         -         -         -         -           4         -         -         -         -         -         -           4         -         -         -         -         -         -         -           6         5         8         POWENSUPEN (ENCODER)         - <td>Terminal Color o</td> <td>of Signal Name</td> <td>Terminal Color</td> <td>of Sian</td> <td>al Name</td> <td></td>	Terminal Color o	of Signal Name	Terminal Color	of Sian	al Name	
	1         -         -         -           2         -         -         -         -           3         -         -         -         -         -           4         -         -         -         -         -         -           5         58         POWER SUPPLY [ENCODER]         -         -         -         -           6         G         REAR LIFTER SW [DOWWARD]         -         -         -         -           9         V         SIDE SW [BACKWARD]         -         -         -         -           10         G         R         RECLINER SW [BACKWARD]         -         -         -           11         GR         NUES         -	No.		NO. WIR	>		
	3         -         -         -           4         -         -         -         -           5         SB         POWER SUPTY ENCODER)         -           6         G         REAR LIFTE SW (DOWWARD)         -           7         0         FRONT ULFTER SW (DOWWARD)         -           9         V         SLIDE SW (BACKWARD)         -           10         G         RECLINER SW (DOWWARD)         -           11         GR         RECLINER SW (BACKWARD)         -           12         V         SLIDE SW (BACKWARD)         -           13         P         PULSE (RECLINER)         -           14         -         PULSE (RECLINER)         -           15         V         PULSE (RECLINER)         -           16         L         -         -         -           17         -         -         -         -         -           18         UNARD         -         -         -         -           17         -         -         -         -         -         -           18         -         -         -         -         -         -	8 2				,	
	4         -         -         -           5         SB         POWER SUPTY ENCODER)           6         G         REALLIFTE SW (DOWWARD)           7         0         FEOAT LIFTE SW (DOWWARD)           8         W         RECLIME SW (BACKWARD)           10         G         NIN 2           11         GR         ADDRESS 2           12         V         PULSE (RELENCION AND)           13         P         NIN 2           14         -         ADDRESS 2           15         V         PULSE (RECLIME N)           16         L         CAN-H           17         -         -           18         -         -           19         -         -           19         -         -           20         -         -           21         Y         SET SW           22         0         RAALH	× ×	RECLINER MOTOR (FORWARD)	3 E			
	5         SB         POWER SUPPLY (ENCODER)           7         0         REARI LIFTER SW (DOWWARD)           8         W         RECLINER SW (DOWWARD)           9         V         RENT LIFTER SW (DOWWARD)           10         G         FROUTH URE SW (BACKWARD)           11         G         RULE SW (BACKWARD)           12         V         SLIDE SW (BACKWARD)           13         P         NU 2           14         -         ADRESS 2           15         V         PULSE (RECLINER)           16         L         -           17         -         -           18         -         -           19         V         NU2 (TXPR)           20         -         -           21         -         -           22         V         -           23         G         ADRESS -           23         G         -           23         G         RAN (PWARD)	36	SLIDE MOTOR (BACKWARD)	4		-	
	6         G         REAR LIFTER SW (DOWWARD)           7         0         FRONT LIFTER SW (DOWWARD)           8         W         RECLINER SW (BACKWARD)           9         V         SLIDE SW (BACKWARD)           10         G         NID 2           11         GR         ADDRESS 2           113         V         PLUSE (TELESCOPIC)           13         P         PULSE (TELESCOPIC)           14         -         PULSE (TELESCOPIC)           15         PN         PULSE (TELESCOPIC)           16         L         CANH           17         -         -           18         URAT (TXPR)           19         -         -           20         -         -           21         Y         SET SW           22         O         REALLIFER SW (UWARD)	37 R	BAT (PTC)	9		T	
	7         0         FRONT LIFTER SW (DOWNWARD)           8         W         RECLINER SW (BACKWARD)           9         V         SLIDE SW (BACKWARD)           10         G         NIDE           11         GR         MIDE           12         V         NIDE           13         P         PULSE (FIELECOPIC)           14         -         NIDE           15         P         PULSE (FIELECONER)           16         L         CANH           17         -         -           18         URAT (TXPR)         -           19         -         -         -           20         -         -         -           21         Y         SET SW         -           23         G         GROWHER)         -	38	1				
	8         W         RECLINER SW (BACKWARD)           9         V         SLDE SW (BACKWARD)           10         G         V         SLDE SW (BACKWARD)           11         GR         SLDE SW (BACKWARD)           12         V         SLDE SW (BACKWARD)           13         F         ADDRS2           14         GR         ADDRS2           14         -         PULSE (FRECINER)           15         L         PULSE (FRECINER)           16         L         CAN-H           17         -         -           19         -         -           19         -         -           20         -         -           21         Y         SET SW           22         0         REALLETER SW (UWARD)	30 30	GND	Connector No	B227		
	9         V         SLIDE GW (βΑΚΚΜΑΡΟ)           10         G         NID 2           11         GR         ADDRES2           12         V         PLLSE (RELESCOPIC)           13         P         PULSE (RECLINER)           14         -         PULSE (RECLINER)           15         L         PULSE (RECLINER)           16         L         CAN-H           17         -         -           18         UNAT(XRR)           19         -           17         -           18         -           20         -           21         Y           22         O           ABALLETERSW (UPWARD)	40 G	REAR LIFTER MOTOR (DOWNWARD)	Connector Name	LIFTING MOTOR I H	(FRONT)	
	10         G         MD2           11         GR         ADDR835         2           12         V         PULSE (RECOPIC)           13         P         PULSE (RECOPIC)           14         -         -           15         P         PULSE (RECOPIC)           16         L         -           17         -         -           18         -         -           19         -         -           19         -         -           20         -         -           21         Y         SET SW.           23         G         FRONTLIFTER SW. (JUWARD)	41 L	REAR LIFTER MOTOR (UPWARD)	Connector Fund	7100 1460 00	1	
	11         GR         ADDRESS 2           12         V         P         PLUSE (TELESCOPIC)           13         P         P         PULSE (TELESCOPIC)           14         -         -         -           15         BR         UNAT (TXPR)           16         L         CANH           17         -         -           18         -         -           19         -         -           20         -         -           21         Y         SET SW, UNWARD)           22         G         FRONT LIFTER SW, UNWARD)	42 GR	FRONT LIFTER MOTOR (UPWARD)	CONTRECTOR Type	1123-1400-30		
	12         V         PLLSE (RELEXCPIC)           13         P         PULSE (RECLINER)           14         -         PULSE (RECLINER)           15         BR         ULSE (RECLINER)           16         L         NAMH           17         -         -           19         -         -           20         -         -           21         Y         SET SW (JUWARD)           23         G         FRONTLETER SW (JUWARD)	43 W	RECLINER MOTOR (BACKWARD)	Connector Color	BLACK		
	13         P         PULSE (RECLINER)           14         -         -         -           15         BR         UIDAT (XRR)         -           17         -         -         -           17         -         -         -           18         -         -         -           17         -         -         -           18         -         -         -           19         -         -         -           20         -         -         -           21         Y         SET SW.UPWARD)         -           23         G         FRONTLIFTER SW.UPWARD)         -	4 <del>4</del> q	-SLIDE MOTOR (FORWARD)				
	14         -         -         -           15         ER         URAT (TXR3)         -           16         L         CAH H         -           17         -         -         -           18         -         -         -           19         -         -         -           19         -         -         -           20         -         -         -           21         Y         SET SW (JPWARD)           23         G         FRAN LIFTER SW (JPWARD)						
	15         BR         Utal (TX/RS)           16         L         CAN+H           17         -         CAN+H           18         -         -           19         -         -           19         -         -           20         -         -           21         Y         SET SW           22         0         REAR LIFTER SW (UPWARD)           23         G         FRONT LIFTER SW (UPWARD)	Connector No.	B225	ЗН			
	16 L CAN-H 17 – CAN-H 18 – 20 – 21 Y SETSW 22 O REARLIFTERSW (UPWARD) 23 G FRONTLIFTERSW (UPWARD)	Connector Name	RECLINING MOTOR LH	5		-	
	1//         -         -         -           19         -         -         -         -           19         -         -         -         -           20         -         -         -         -           21         Y         SETSW         -         -           22         0         REALIFERSW (JPWARD)         -         -           23         G         FRONTLIFERSW (JPWARD)         -         -	Connector Type	7123-1460-30		9 2 1	4	
	19	Connector Color	RIACK				
	10         -         -         -           20         -         -         -         -           21         Y         SET SW         -         -           22         O         REAR LIFTER SW (JUPWARD)         -         -           23         G         FRONT LIFTER SW (JUPWARD)         -         -						
	21 Y SET SW 22 O REAR LIFTER SW (UPWARD) 23 G FRONT LIFTER SW (UPWARD)	E					
	22 O REAR LIFTER SW (UPWARD) 23 G FRONT LIFTER SW (UPWARD)			No Mino	or Sign	ial Name	
21         0         FRONT LIFTER SW (PMMRRR)           21         W         NOT LIFTER SW (PMMRR)           22         W         RECURRES SW (PMMRR)           23         V         RECURRES SW (PMMRR)           24         W         RECURRES SW (PMMRR)           27         0         MD1           28         W         MD1           29         CR         MD1           20         W         MD1           29         P         MD1           20         W         Nor           30         V         P           31         P         Color           32         P         MD1           33         P         MD1           34         V         -           4         V         -           5         -         -           6         N         -           7         -         -           8         -         -           1         -         -           2         -         -           2         -         -           3         -         -	23 G FRONT LIFTER SW (UPWARD)	H.S.					
28         N         RECIMERS WFORMARD)           28         L         autor NO           28         V         mon           29         G         mon           29         M         Pusc Featurention           29         V         Minel           29         M         Pusc Featurention           29         M         Pusc Featurention           20         V         Pusc Featurention           29         M         Pusc Featurention           20         V         Pusc Featurention           20         V         Pusc Featurention           20         V         Pusc Featurention           20         V         V			3 2 1	- 0			
28         L         Subrem           28         W         mo1           27         0         mo1           28         0         mo1           29         0         mon           29         0         mon           21         1         mon           29         0         mon           21         1         1           22         0         mon           23         10         1           20         10         1           21         10         1           22         10         1         1           23         10         1         1           20         10         1         1           33         10         1         1           4         1         1         1           0         1         1         1           10         10         1         1           11         10         1         1           11         10         1         1           11         10         1         1           12         1	24 W RECLINER SW (FORWARD)		6 5 4	4 6			
27         0         001           27         0         M01           28         0         M016651           29         0         M016651           20         0         M016651           29         0         M016           30         0         M01           31         10         1           1         1         1           1         1         1           1         1         1           2         1         1           3         1         1           4         1         1           5         1         1           6         1         1	25 L SLIDE SW (FORWARD)						
27         0         ADDRES1           28         P         PLUSE(RILI)           20         R         PLUSE(RILI)           30         W         Vine         Signal Name           31         Lic         P         Lic         T           31         Lic         P         Lic         Lic           28         Aut         Lic         Lic         Lic           29         Lic         UNE (RIDI)         Lic         Lic           21         Lic         PULSE (RIDI)         Lic         Lic           21         Lic         UNE (RIDI)         Lic         Lic           21         Lic         PULSE (RIDI)         Lic         Lic           29         Aut         Lic         Lic         Lic           200-11         Lic         Vine         Lic         Lic	26 W IND 1						
38         Puscritti         Nou         Signal Name           29         GR         Pusc (GAM uffresh)         1         P           31         U         Pusc (GAM uffresh)         1         P           32         L         Pusc (GAM uffresh)         1         P           33         L         Pusc (GAM uffresh)         1         P           33         L         Pusc (GAM uffresh)         2         P           33         L         Pusc (GAM uffresh)         2         P           34         V         Pusc (GAM uffresh)         2         2           35         P         Out         Signal Name         2           36         P         Pusc (GAM uffresh)         2         2           37         P         Out         3         2         2           38         No         Out         2         2         2           39         Out         Out         2         2         2           39         Out         P         2         2         2           39         Out         P         2         2         2           39         P         P	27 0 ADDRESS 1	Torminal Color		0			
29         GR         PLUSE (REAR LIFTER)           30         W         PLUSE (REAR LIFTER)           31         LG         PLUSE (REAR LIFTER)           32         P         CML           33         SB         CML           4         V         CML           6         W         CML	28 SB PULSE(TILT)	No. Wire	Signal Name				
30         W         PULSE (FROMT ULTEN)           31         LG         PULSE (FROMT ULTEN)           32         P         PULSE (RIDE)           33         NuL         A           4         Y         A           6         W         -	29 GR PULSE (REAR LIFTER)	-					
31         16           22         28           33         39           4         ×           6         w           7         -	30 W PULSE (FRONT LIFTER)	2	1				
23     P       6     W       6     W	31 LG PULSE (SLIDE)	e es					
	32 P CAN-L						
		9 9	1				

# AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >

Revision: October 2015

2016 Maxima NAM

AUTOMATIC DRIVE POSITIONER SYSTEM
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## < WIRING DIAGRAM >

> >
Y
P - (WITH AUTOMATIC DRIVE POSI SB - (WITH AUTOMATIC DRIVE POSI 
 LG
BR
×
r No. D12
Name DOOR MIRROR LH (WITH AUTC DRIVE POSITIONER)
r Type TH24MW-NH r Color WHITE
12         111         10         9         8         7         6         5         4         3           24         23         22         21         20         16         16         17         16         6         6         6
Color of
Wire Signal Name
- ×
- -

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## **AUTOMATIC DRIVE POSITIONER SYSTEM**

#### < WIRING DIAGRAM >

			F G H I K
202	102 HITE TO WIRE HITE 1111E 112 112 112 112 112 112	Signal Name Signal Name - - - - - - - - - - - - -	L
actor No	ector Name University of the elector Color With the elector With the	0.     0.     0.       0.     <	Ν
aun			$\bigcirc$

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Ρ

< BASIC INSPECTION >

# **BASIC INSPECTION** DIAGNOSIS AND REPAIR WORK FLOW

### Work Flow

WORK FLOW



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DETAILED FLOW

INFOID:000000012246470

## DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1. GET INFORMATION FOR SYMPTOM
Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).
>> GO TO 2.
2. CHECK DTC
CONSULT Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.". Refer to ADP-32, "DTC Index".
Is any symptom described and is any DTC displayed?
Symptom is described, DTC is displayed.>> GO TO 3. Symptom is not described, DTC is displayed.>> GO TO 5. Symptom is described, DTC is not displayed.>> GO TO 4.
3. CONFIRM THE SYMPTOM
Try to confirm the symptom described by the customer.
I ry to confirm the symptom described by the customer.
>> GO TO 6.
5. PERFORM DTC CONFIRMATION PROCEDURE
Perform the confirmation procedure for the detected DTC.
Is the DTC displayed?
YES >> GO TO 8.
6 PERFORM BASIC INSPECTION
Isolate the malfunctioning point with a basic inspection
>> GO TO 7.
7. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM TABLE
Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4 and determine the trouble diagnosis order based on possible causes and symptom.
>> GO TO 8.
8. DETECT MALFUNCTIONING PART BY DIAGNOSTIC PROCEDURE
Isolate the malfunctioning point by performing the diagnosis procedure relevant to the symptom during the component diagnosis.
>> GU IU 9.
Repair or replace the malfunctioning part.
>> GO TO 10.

10. FINAL CHECK

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

## DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

Are all malfunctions corrected?

YES >> Inspection End. Symptom is detected.>> GO TO 6. DTC is detected.>> GO TO 8.

		ΤΕΡΥ ΝΕΩΔΤΙΛΕ ΤΕΡΜΙΝΙΔΙ								
ADDITIONAL SERVICE WHEN REMOVI	NGBAITE	RY NEGATIVE TERMINAL: Work								
Procedure		INFOID:000000012246471								
<b>1.</b> SYSTEM INITIALIZATION										
Perform system initialization. Refer to ADP-54, "SYS	STEM INITIALI	ZATION : Work Procedure".								
2 MEMORY STORAGE										
Perform memory storage Refer to ADP-54 "MEMO	RY STORING	: Work Procedure"								
		<u> </u>								
>> GO TO 3.										
<b>3.</b> LINKING KEY FOB TO METER DISPLAY FUNC	TION STORAG	ĴE								
Perform linking key fob to meter display function s	storage. Refer	to <u>ADP-55, "LINKING KEY FOB TO THE</u>								
METER DIOLEAT . WORK HOCCOULD.										
>> GO TO 4.										
<b>4.</b> SYSTEM SETTING										
Perform system setting. Refer to ADP-56, "SYSTEM	<u> 1 SETTING : W</u>	/ork Procedure".								
ADDITIONAL SERVICE WHEN REPLAC	ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description									
Each function is reset to the following condition whe	n the driver se	at control unit is replaced.								
Function	Condition	Procedure								
Memory (Seat, steering, mirror)	Erased	Perform storing								
Entry/exit assist	ON	Perform initialization								
		Set slide amount <sup>*1</sup>								
Linking a key fob to meter display	Erased	Perform initialization								
		Perform storing								
<sup>*1</sup> : Default value is 40 mm.										
Notice that disconnecting the battery when detected	DTC is preser	nt will erase the DTC memory.								
ADDITIONAL SERVICE WHEN REPLAC		ROL UNIT : Work Procedure								
		INFOID:000000012246473								
<b>1.</b> SYSTEM INITIALIZATION										
Perform system initialization. Refer to ADP-54, "SYS	STEM INITIALI	ZATION : Work Procedure".								
>> GU IU 2. 2 MEMORY STORAGE										
Derform momony storage Defor to ADD 54 "MEMO	DV CTODINO	· Work Procedure"								

< BASIC INSPECTION >

>> GO TO 3.

# $\mathbf{3}$ .LINKING KEY FOB TO METER DISPLAY FUNCTION STORAGE

Perform linking key fob to meter display function storage. Refer to <u>ADP-55</u>, "LINKING KEY FOB TO THE <u>METER DISPLAY</u> : Work Procedure".

>> GO TO 4.

**4**.SYSTEM SETTING

Perform system setting. Refer to ADP-56, "SYSTEM SETTING : Work Procedure".

#### >> Inspection End. SYSTEM INITIALIZATION

## SYSTEM INITIALIZATION : Description

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

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

### SYSTEM INITIALIZATION : Work Procedure

#### 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).

>> 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**

#### Memory Storage Procedure

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

**1.**STEP 1

INFOID:000000012246476

INFOID:000000012246477

INFOID:000000012246475

INFOID:000000012246474

< BASIC INSPECTION >	
Check the following conditions.	
Ignition switch: ON     CVT shift selector: P (Park) position	А
>> GO TO 2.	В
<b>2.</b> STEP 2	
Adjust driver seat, steering column and outside mirror position manually.	С
>> GO TO 3. 3 OTED 2	
	D
1. Push set switch. NOTE:	
• Memory indicator for which driver seat position is already retained in memory is illuminated for 5 sec-	Ε
<ul> <li>Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 seconds.</li> </ul>	
2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch.	F
<ul> <li>To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.</li> </ul>	
<ul> <li>To modify driver seat positions, memory indicator will be turned OFF for 0.5 seconds then turned ON for 5 seconds</li> </ul>	G
NOTE:	0
If memory is stored in the same memory switch, the previous memory will be deleted.	
>> GO TO 4	Η
4 STEP 4	
Confirm the operation of each part with memory operation	I
>> Inspection End.	ADF
LINKING KEY FOB TO THE METER DISPLAY	
LINKING KEY FOB TO THE METER DISPLAY : Description	K
Always perform when the battery terminal is disconnected or the driver seat control unit is replaced. Linking	
key fob to the meter display will not operate normally if no memory storage is performed.	L
LINKING KEY FOB TO THE METER DISPLAY : Work Procedure	
Linking Key Fob To Meter Display Function Procedure	в. Л
Performing the following operation associates the registered driving position with Intelligent Key. When driver	IVI
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	Ν
Check the following conditions:	
Ignition switch: ON	0
Oriving position: registered	
	Р
>> GO TO 2.	-
2.STEP 2	
1. Switch ignition from ON to OFF (ADP memory automatically at the ignition OFF timing).	

>> GO TO 3.

# 3.STEP 3

Confirm the operation of each part with memory operation and linking a key fob to the meter display operation.

#### >> Inspection End. SYSTEM SETTING

## SYSTEM SETTING : Description

INFOID:000000012246480

The settings of the automatic drive 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

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

## SYSTEM SETTING : Work Procedure

## 1. CHOOSE METHOD

There are two setting methods.

Which method do you choose?

With CONSULT>> GO TO 2. With set switch>> GO TO 4.

 $\mathbf{2}$ . with consult - step 1

#### CONSULT

Select "Work support" mode of "AUTO DRIVE POS.".

>> GO TO 3.

# 3. WITH CONSULT - STEP 2

#### CONSULT

- 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 "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

Revision: October 2015

INFOID:000000012246481

#### < BASIC INSPECTION >

<ul> <li>Push set switch and hold for more than 10 seconds then confirm blinking of the memory switch indicator.</li> <li>Entry/exit assist (seat/steering column) is ON: Memory switch indicator blinks two times.</li> <li>Entry/exit assist (seat/steering column) is OFF: Memory switch indicator blinks once.</li> </ul>	A
>> Inspection End.	В
	С
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Revision: October 2015

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#### < DTC/CIRCUIT DIAGNOSIS >

# DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

## DTC Description

INFOID:000000012246482

## DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
	CAN COMM CIRCUIT (CAN communication circuit)	Diagnosis condition	When ignition switch is ON.	
111000		Signal (terminal)	-	
01000		Threshold	_	
		Diagnosis delay time	2 seconds or more	

#### POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

### DTC CONFIRMATION PROCEDURE

#### **1.** STEP 1

Turn ignition switch ON and wait at least 2 seconds.

>> GO TO 2.

## **2.** STEP 2

#### 

Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".

#### Is the DTC detected?

YES >> Perform diagnosis procedure. Refer to <u>ADP-58, "Diagnosis Procedure"</u>.

- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO-2 >> Confirmation after repair: Inspection End.

#### **Diagnosis** Procedure

INFOID:000000012246483

## **1.**SELF DIAGNOSTIC RESULT

#### CONSULT

- Turn ignition switch ON and wait for 2 seconds or more.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Check DTC.

Is DTC "U1000" displayed?

YES >> Refer to LAN-17, "Trouble Diagnosis Flow Chart".

NO >> GO TO 2.

## 2. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

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

#### < DTC/CIRCUIT DIAGNOSIS >

# U1010 CONTROL UNIT (CAN)

## **DTC** Description

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
U1010 CONTROL UNIT (Control unit)	Diagnosis condition	When ignition switch is ON.		
	CONTROL UNIT	Signal (terminal)		
	(Control unit)	Threshold	-	
	Diagnosis delay time	2 seconds or more		
POSSIBL	E CAUSE			F

Driver seat control unit

FAIL-SAFE

Diagnosis Procedure		

# 1. REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to ADP-130, "Removal and Installation".

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INFOID:000000012246484

INFOID:000000012246485

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### < DTC/CIRCUIT DIAGNOSIS >

# **B2112 SLIDING MOTOR**

## **DTC Description**

INFOID:000000012246486

### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
B2112 SE (S	SEAT SLIDE (Seat slide)	Diagnosis condition	When ignition switch is ON.	
		Signal (terminal)	Sliding motor LH circuit (terminals 4 and 6)	
		Threshold	Approx. 0V	
		Diagnosis delay time	0.1 seconds or more	

#### POSSIBLE CAUSE

• Driver seat control unit

Slide motor harness is shorted

#### FAIL-SAFE

Only manual functions, except seat sliding, operate normally.

#### DTC CONFIRMATION PROCEDURE

## 1.self-diagnosis with automatic drive positioner control unit

#### CONSULT

- Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- Check DTC.

#### Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-60, "Diagnosis Procedure"</u>.
- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO–2 >> Confirmation after repair: Inspection End.

#### **Diagnosis** Procedure

INFOID:000000012246487

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

#### **1.**SELF DIAGNOSTIC RESULT

#### 

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" of "AUTO DRIVE POS.".
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-60, "DTC Description".

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

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

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

# **B2112 SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

	(+)		Valtara
Sliding motor LH		(-)	(Approx.)
Connector	Terminals		
B226	4	Ground	0V
	6		
s the inspection result nor	mal?		
YES >> GO TO 3.	aa barnaaa ar aannaatar		
CHECK DRIVER SEAT	CONTROL UNIT OUTPUT	SIGNAL	
. Connect driver seat co	ntrol unit connector.	noon connector and ground	1
. Check voltage betwee	n driver seat control unit har	ness connector and ground	I.
(	(+)		
Driver sea	t control unit	(-)	Voltage (V)
Connector	Terminals		(Appiox.)
	36	Ground 0V	2) /
B223	44		UV
s the inspection result nor	mal?		
leier to <u>01-41, intermitter</u>	<u>it incluent</u> .		
>> Inspection End	J.		

## **B2113 RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

## B2113 RECLINING MOTOR

## **DTC Description**

INFOID:000000012246488

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
B2113 S	SEAT RECLINING (Seat reclining)	Diagnosis condition	When ignition switch is ON.	
		Signal (terminal)	Reclining motor LH circuit (terminals 4 and 6)	
		Threshold	Approx. 0V	
		Diagnosis delay time	0.1 seconds or more	

#### POSSIBLE CAUSE

• Driver seat control unit

· Reclining motor harness is shorted

#### FAIL-SAFE

Only manual functions, except seat reclining, operate normally.

#### DTC CONFIRMATION PROCEDURE

## **1.**SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### CONSULT

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- Check DTC.

#### Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-62, "Diagnosis Procedure"</u>.
- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO–2 >> Confirmation after repair: Inspection End.

#### **Diagnosis** Procedure

INFOID:000000012246489

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

#### **1.**PERFORM DTC CONFIRMATION PROCEDURE

#### CONSULT

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-62, "DTC Description".

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

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

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

# **B2113 RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

(+)				
Reclining motor LH		(—)	Voltage (V) (Approx.)	
Connector	Terminals			
B225	6	- Ground	0	
s the inspection result norm YES >> GO TO 3. NO >> Repair or replace	nal? ce harness or connector.			
<b>3.</b> CHECK DRIVER SEAT (	CONTROL UNIT OUTPUT	SIGNAL		
. Connect driver seat cor 2. Check voltage between	ntrol unit connector. driver seat control unit ha	rness connector and ground.		
+)	-)			
Driver seat	control unit	()	Voltage (V) (Approx.)	
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,	
B223	35 43	Ground	0	
Refer to <u>GI-41, "Intermittent</u> >> Inspection End.	Incident".			
Refer to <u>GI-41, "Intermittent</u> >> Inspection End.	Incident".			
Refer to <u>GI-41, "Intermittent</u> >> Inspection End.	Incident".			
Refer to <u>GI-41, "Intermittent</u> >> Inspection End.	Incident".			
Refer to <u>GI-41, "Intermittent</u> >> Inspection End	Incident".			
Refer to <u>GI-41, "Intermittent</u> >> Inspection End	Incident".			

## < DTC/CIRCUIT DIAGNOSIS >

# B2116 TILT MOTOR

## **DTC Description**

INFOID:000000012246490

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
B2116 STEE (Stee		Diagnosis condition	When ignition switch is ON.	
	STEERING TILT (Steering tilt)	Signal (terminal)	Steering tilt motor circuit (terminals 1 and 2)	
		Threshold	Approx. 0V	
		Diagnosis delay time	0.1 seconds or more	

#### POSSIBLE CAUSE

· Automatic drive positioner control unit

• Tilt motor harness is shorted

#### FAIL-SAFE

Only manual functions, except steering tilt, operate normally.

#### DTC CONFIRMATION PROCEDURE

## **1.**SELF DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### CONSULT

- Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- Check DTC.

#### Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-64, "Diagnosis Procedure"</u>.
- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO–2 >> Confirmation after repair: Inspection End.

#### **Diagnosis** Procedure

INFOID:000000012246491

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

#### **1.**PERFORM DTC CONFIRMATION PROCEDURE

#### CONSULT

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-64, "DTC Description".

#### Is the DTC displayed again?

YES >> GO TO 2.

NO >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

2. CHECK TILT MOTOR CIRCUIT (POWER SHORT)

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

# **B2116 TILT MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

	(+)		Voltage (V/)
Tilt	motor	(-)	(Approx.)
Connector	Terminals		
M71	1	Ground	0V
	2		
the inspection result nor	<u>mal?</u>		
YES >> GO TO 3.	an harnoss or connector		
		ROL UNIT OUTPUT SIGNAL	
Connect automatic dri     Check voltage betwee	ve positioner control unit cor n automatic drive positioner	nector. control unit harness connect	or and ground
. Chook voltago botwoo			or and ground.
	(+)		
Automatic drive p	ositioner control unit	(-)	(Approx.)
Connector	Terminals		
M67	28	Ground	0V
	29		

0

## **B2128 UART COMMUNICATION LINE**

#### < DTC/CIRCUIT DIAGNOSIS >

## **B2128 UART COMMUNICATION LINE**

## **DTC** Description

INFOID:000000012246492

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
B2128 UART COMM (Universal async ceiver transmitte cation)		Diagnosis condition	When ignition switch is ON.	
	(Universal asynchronous re- ceiver transmitter communi-	Signal (terminal)	—	
		Threshold	-	
	callon)	Diagnosis delay time	-	

#### POSSIBLE CAUSE

- UART communication line
- (UART communication line is open or shorted)
- Driver seat control unit
- · Automatic drive positioner control unit

#### FAIL-SAFE

Only manual functions, except door mirror, operate normally.

#### DTC CONFIRMATION PROCEDURE

### **1.**SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### CONSULT

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Check DTC.

#### Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to ADP-66, "Diagnosis Procedure".
- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO-2 >> Confirmation after repair: Inspection End.

#### **Diagnosis** Procedure

INFOID:000000012246493

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

#### **1.**PERFORM DTC CONFIRMATION PROCEDURE

#### CONSULT

- 1. Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to <u>ADP-66, "DTC Description"</u>.

#### Is the DTC displayed again?

YES >> GO TO 2.

- NO >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.
- 2. CHECK UART COMMUNICATION LINE CONTINUITY

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit and automatic drive positioner control unit.
- 3. Check continuity between driver seat control unit harness connector and automatic drive positioner control unit harness connector.

# **B2128 UART COMMUNICATION LINE**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Automatic drive positioner control unit		Continuity	A
Connector	Terminal	Connector	Terminal	Continuity	
B222	15	M63	8	Yes	B
4 Check continuity bot					

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

Driver seat control ur	Driver seat control unit		Continuity	С
Connector	Terminal	Ground	Continuity	
B222	15		No	-
				- D

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Repair or replace harness.

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Revision: October 2015

## < DTC/CIRCUIT DIAGNOSIS >

# B2130 EEPROM

## **DTC Description**

INFOID:000000012246494

#### DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC Detection Condition		
		Diagnosis condition	When ignition switch is ON.	
B2130 EEPROM (EEPROM malfunction)	Signal (terminal)	—		
	Threshold	_		
		Diagnosis delay time	—	

#### POSSIBLE CAUSE

Driver seat control unit

FAIL-SAFE

Only manual functions operate normally.

#### DTC CONFIRMATION PROCEDURE

## **1.**SELF-DIAGNOSIS WITH AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### CONSULT

- Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Check DTC.

#### Is the DTC detected?

- YES >> Perform diagnosis procedure. Refer to <u>ADP-68, "Diagnosis Procedure"</u>.
- NO-1 >> To check malfunction symptom before repair: Refer to GI-41, "Intermittent Incident".
- NO–2 >> Confirmation after repair: Inspection End.

## **Diagnosis** Procedure

INFOID:000000012246495

## **1.**PERFORM DTC CONFIRMATION PROCEDURE

#### 

- Turn ignition switch ON.
- 2. Check "Self Diagnostic Result" mode of "AUTO DRIVE POS.".
- 3. Erase the DTC.
- 4. Perform DTC confirmation procedure. Refer to ADP-68. "DTC Description".

#### Is the DTC displayed again?

- YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".
- NO >> GO TO 2.
- 2. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

>> Inspection End.

P	OWER SUPPLY AN	D GROUND CIRCUIT	
< DTC/CIRCUIT DIAGNOS	SIS >		
POWER SUPPLY A	AND GROUND CIR	RCUIT	
BCM			A
BCM : Diagnosis Proc	cedure		INFOID:000000012323194
			D
Regarding Wiring Diagram i	nformation, refer to BCS-5	6, "Wiring Diagram".	
			C
1. CHECK FUSE AND FU	SIBLE LINK		
Check if the following BCM	fuses or fusible link are blo	wn.	D
Signal n	ame	Fuse and fusible	e link No.
Fusible link bat	tery power	I (40A)	
BCM batte	ry fuse	1 (10A)	)
Is the fuse or fusible link blo	<u>wn?</u> 		F
NO >> GO TO 2.	iwn tuse or tusidle link after	repairing the affected circuit	
2. CHECK POWER SUPP	LY CIRCUIT		G
1. Turn ignition switch OF	F.		
2. Disconnect BCM conne	ector M17.		Н
3. Check voltage between	BCM harness connector M	117 and ground.	
	Terminals		
(+	-)	(-)	Voltage
BC	СМ		(Approx.)
Connector	Terminal	Orregad	AD
M17	135	Ground	Batteny voltage
	142		Ballery Vollage
Is the measurement normal	<u>?</u>		
YES >> GO TO 3.	na harnass		
			L
Check continuity between B	CM harness connector M1	7 and around	
Check continuity between L		r and ground.	M
BC	CM		Continuity
Connector	Terminal	Ground	
M17	138	Ground	Vec
WT7	132		165
Is the inspection result norn	nal?		0
YES >> Inspection End.	na harness		
DRIVER SEAT CON	TROL UNIT		P
		ia Dracadura	
DRIVER SEAT CONT	RUL UNIT : Diagnos	as Procedure	INFOID:000000012246497
NOTE:			
firmed with CONSULT.	ery negative terminal and t	me univer seat control unit co	Diffector until DIC IS CON-

# POWER SUPPLY AND GROUND CIRCUIT

#### < DTC/CIRCUIT DIAGNOSIS >

Regarding Wiring Diagram information, refer to <u>ADP-38, "Wiring Diagram"</u>.

# 1.CHECK FUSE

Check that the following fusible link is not blown.

Signal name	Fusible link No.
Battery power supply	I (40 A)

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fusible link after repairing the affected circuit.

2. CHECK POWER SUPPLY CIRCUIT

- 1. Turn ignition switch OFF.
- 2. Disconnect driver seat control unit.

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

(+) Driver seat co	ontrol unit	(-)	Power source	Condition	Voltage (V) (Approx.)
Connector	Terminal				
B223	37	Ground	Battery power supply	Ignition switch OFF	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO

>> Check the following:

· Repair or replace harness.

• Circuit breaker.

**3.** CHECK GROUND CIRCUIT

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

Driver seat control u	unit		Continuity	
Connector Terminal		Ground	Continuity	
B223	39		Yes	

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace harness.

## DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:000000012246498

## **1.**PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

#### >> Refer to ADP-53. "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL : Work Procedure".

# AUTOMATIC DRIVE POSITIONER CONTROL UNIT

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000012246499

#### 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-38, "Wiring Diagram".

## POWER SUPPLY AND GROUND CIRCUIT

## < DTC/CIRCUIT DIAGNOSIS >

Check that the following fusible link is i	not blown.			
Signal name		Fusible link No.		
Battery power supply		I (40 A)		
Is the inspection result normal? YES >> GO TO 2. NO >> Replace the blown fusible <b>2.</b> CHECK POWER SUPPLY CIRCUI	after repairing the affecte	ed circuit.		
<ol> <li>Turn ignition switch OFF.</li> <li>Disconnect automatic drive positio</li> <li>Check voltage between automatic</li> </ol>	ner control unit. drive positioner control ι	init harness connector	and ground.	
(+)			Voltago (V/)	
Automatic drive positioner co	ontrol unit	(-)	(Approx.)	
Connector	Terminal		Delles ell	
M67	25	Ground	Battery voltage	
Check continuity between the automat	ic drive positioner contro	l unit harness connecto	r and ground.	
Connector	Terminal	Ground	Continuity	
M67	30		Yes	
Is the inspection result normal? YES >> Inspection End. NO >> Repair or replace harness AUTOMATIC DRIVE POSITIC 1.PERFORM ADDITIONAL SERVICE		NIT : Special Rep	air Requirement	
Perform additional service when remove	ving battery negative terr	ninal.		
>> Refer to <u>ADP-53, "ADDIT</u> <u>NAL : Work Procedure"</u> .	IONAL SERVICE WHE	N REMOVING BATTEI	<u>RY NEGATIVE TERMI-</u>	

А

## < DTC/CIRCUIT DIAGNOSIS >

# SLIDING SWITCH

## **Component Function Check**

## **1.** DATA MONITOR

CONSULT

- i. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "SLIDE SW-FR", "SLIDE SW-RR".
- 3. Check that the function operates normally according to the following conditions:

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

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-72, "Diagnosis Procedure"</u>.

## **Diagnosis** Procedure

INFOID:000000012246502

INFOID:000000012246501

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK SLIDING SWITCH SIGNAL

1. Turn ignition switch OFF.

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

(+) Driver seat contr	ol unit	(-)	Condition		Voltage (V) (Approx.)		
Connector	Terminals				( FF)		
	9	Ground S	Sliding switch	Operate (back- ward)	0		
B222				Release	Battery voltage		
	25			Operate (forward)	0		
	25					Release	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH CIRCUIT

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

Driver seat con	Driver seat control unit		Power seat switch LH		
Connector	Terminal	Connector Terminal		Continuity	
D000	9	B212 6	6	Vec	
B222	25	BZ 15	7	165	

4. Check continuity between driver seat control unit harness connector and ground.
# **SLIDING SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

	Driver seat control unit			Oractionity
(	Connector	Terminal	Ground	Continuity
	B222	9	Ground	No
	DEEE	25		110
Is the inspection YES >> GC NO >> Re CHECK DE	<u>n result normal?</u> O TO 3. pair or replace hai	ness.		
1 Connect th	e driver seat contr			
<ol> <li>Turn ignitic</li> <li>Check volt</li> </ol>	on switch ON. age between drive	r seat control unit harness o	connector and ground	
			Some of and ground.	
	(+)			Voltage (V)
	Driver seat cor	ntrol unit	(-)	(Approx.)
	Connector	Terminal		
	B222	9	Ground	Battery voltage
		25		-
Refer to ADP-7 Is the inspectio YES >> GC NO >> Re 5. CHECK IN <sup>-</sup> Refer to GI-41, Is the inspectio YES >> Re NO >> Re Component	73. "Component In on result normal? D TO 5. Place power seat of TERMITTENT INC "Intermittent Incid on result normal? Place driver seat of pair or replace ma Inspection	spection". switch LH. Refer to <u>ADP-13</u> IDENT <u>ent"</u> . control unit. Refer to <u>ADP-13</u> Ifunctioning part.	3. "Removal and Installa	<u>ition"</u> . <u>ation"</u> .
<b>1.</b> CHECK SL	IDING SWITCH			
<ol> <li>Turn ignitic</li> <li>Disconnec</li> <li>Check con</li> </ol>	on switch OFF. t power seat switcl tinuity between po	n LH. wer seat switch LH terminal	S.	
			14°	0
Power sea	at switch LH		Ition	( 'o o tuo : tu
Power sea Terr	at switch LH minals	Cond		Continuity
Power sea Terr	at switch LH minals	Cond	Operate	Yes
Power sea Terr	at switch LH minals 6 S	Cond Sliding switch (backward)	Operate Release	Yes No
Power sea Terr 3	at switch LH minals 6 S	Cond Sliding switch (backward)	Operate Release Operate	Yes No Yes

is the inspection result normal?

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-133</u>, "Removal and Installation".

# RECLINING SWITCH

## **Component Function Check**

## **1.**DATA MONITOR

INFOID:000000012246504

#### 

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS".
- 2. Select "RECLN SW-FR", "RECLN SW-RR".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Reclining switch (forward)	Operate	ON
RECEN SW-I K		Release	OFF
	Peolining switch (backward)	Operate	ON
NEGEN SW-NN		Release	OFF

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-74, "Diagnosis Procedure"</u>.

#### **Diagnosis** Procedure

INFOID:000000012246505

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 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		(–) Con		ndition	Voltage (V) (Approx.)
Connector	Terminal				
	24			Operate (forward)	0
	24			Release	Battery voltage
B222	8	Ground	Reclining switch	Operate (back- ward)	0
				Release	Battery voltage

#### Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK RECLINING SWITCH CIRCUIT

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

Driver seat contro	ol unit	Power seat swit	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
	24	D010	5	Voc
BZZZ	8	B213	10	Tes

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

# **RECLINING SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity	
C	Connector	Terminal	Ground	Continuity
	B222	24	Ground	No
	DZZZ	8		NO
Is the inspection YES >> GO NO >> Rep <b>3.</b> CHECK DRI	<u>result normal?</u> TO 3. air or replace harr VER SEAT CONT	ness. ROL UNIT OUTPUT		
<ol> <li>Connect the</li> <li>Turn ignition</li> <li>Check voltage</li> </ol>	driver seat contro switch ON. ge between driver	ol unit. seat control unit harness	connector and ground	d.
	(+)			
	Driver seat control unit		(-)	(Approx.)
Conn	ector	Terminal		
B2	22	8	Ground	Battery voltage
		24		-
YES >> GO NO >> Rep <b>4</b> CHECK REC	lace driver seat co	ontrol unit. Refer to <u>ADP-1</u>	30, "Removal and Ins	stallation".
YES $>>$ GO NO $>>$ Rep <b>4.</b> CHECK REC Refer to <u>ADP-75</u> <u>Is the inspection</u> YES $>>$ GO NO $>>$ Rep <b>5.</b> CHECK INTI Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES $>>$ Rep NO $>>$ Rep NO $>>$ Rep Component I	Idee driver seat co CLINING SWITCH CLINING SWITCH COMPONENT INS result normal? TO 5. Iace power seat s ERMITTENT INCI Intermittent Incide result normal? Iace driver seat co air or replace the NSPECTION	pection". witch LH. Refer to <u>ADP-1</u> DENT ent". pontrol unit. Refer to <u>ADP-1</u> malfunctioning part.	30, "Removal and Ins 33, "Removal and Inst 30, "Removal and Ins	stallation". stallation".
YES $>>$ GO NO $>>$ Rep <b>4.</b> CHECK REC Refer to <u>ADP-75</u> <u>Is the inspection</u> YES $>>$ GO NO $>>$ Rep <b>5.</b> CHECK INTI Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES $>>$ Rep NO $>>$ Rep <b>Component I</b> <b>1.</b> CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti	Iace driver seat co CLINING SWITCH <u>result normal?</u> TO 5. Iace power seat s ERMITTENT INCI Intermittent Incide result normal? Iace driver seat co air or replace the <b>nspection</b> CLINING SWITCH i switch OFF. power seat switch nuity between pow	pection". witch LH. Refer to <u>ADP-1</u> witch LH. Refer to <u>ADP-1</u> DENT ent". pontrol unit. Refer to <u>ADP-1</u> malfunctioning part. LH. ver seat switch LH termina	30, "Removal and Ins 33, "Removal and Ins 30, "Removal and Ins	stallation". stallation".
YES $>>$ GO NO $>>$ Rep <b>4.</b> CHECK REC Refer to <u>ADP-75</u> Is the inspection YES $>>$ GO NO $>>$ Rep <b>5.</b> CHECK INTI Refer to <u>GI-41</u> , " Is the inspection YES $>>$ Rep NO $>>$ Rep Component I <b>1.</b> CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti	Iace driver seat co CLINING SWITCH C. "Component Ins result normal? TO 5. Iace power seat s ERMITTENT INCI Intermittent Incide result normal? Iace driver seat co air or replace the nspection CLINING SWITCH I switch OFF. power seat switch nuity between pov	pection".  witch LH. Refer to <u>ADP-1</u> witch LH. Refer to <u>ADP-1</u> DENT  ent".  ontrol unit. Refer to <u>ADP-1</u> malfunctioning part.  LH. ver seat switch LH termina	30, "Removal and Ins 33, "Removal and Ins 30, "Removal and Ins 30, "Removal and Ins	tallation".
YES >> GO NO >> Rep 4. CHECK REC Refer to <u>ADP-75</u> <u>Is the inspection</u> YES >> GO NO >> Rep 5. CHECK INTI Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES >> Rep NO >> Rep NO >> Rep Component I 1. CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti	Iace driver seat co CLINING SWITCH <u>c. "Component Ins</u> <u>result normal?</u> TO 5. Iace power seat s ERMITTENT INCI Intermittent Incide <u>result normal?</u> Iace driver seat co air or replace the <b>nspection</b> CLINING SWITCH is switch OFF. power seat switch nuity between pov	ontrol unit. Refer to <u>ADP-1</u> <u>pection"</u> . witch LH. Refer to <u>ADP-1</u> DENT ent". ontrol unit. Refer to <u>ADP-1</u> malfunctioning part. LH. ver seat switch LH termina	30, "Removal and Ins 33, "Removal and Ins 30, "Removal and Ins 30, "Removal and Ins als.	tallation".  stallation".  NFOID:000000012246506 Continuity
YES >> GO NO >> Rep 4. CHECK REC Refer to <u>ADP-75</u> Is the inspection YES >> GO NO >> Rep 5. CHECK INTI Refer to <u>GI-41</u> , " Is the inspection YES >> Rep NO >> Rep Component I 1. CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti	Idee driver seat co CLINING SWITCH <u>result normal?</u> TO 5. Iace power seat s ERMITTENT INCI Intermittent Incide result normal? Iace driver seat co air or replace the <b>nspection</b> CLINING SWITCH is witch OFF. power seat switch nuity between pov	pection".  pection".  witch LH. Refer to ADP-1: DENT ent".  ontrol unit. Refer to ADP-1: malfunctioning part.  LH. ver seat switch LH termina Condi Reclining switch (backward)	30, "Removal and Ins 33, "Removal and Inst 30, "Removal and Inst 30, "Removal and Inst als. tion Operate	tallation".  tallation".  NFOID:000000012246506  Continuity Yes
YES $>>$ GO NO $>>$ Rep 4. CHECK REC Refer to <u>ADP-75</u> Is the inspection YES $>>$ GO NO $>>$ Rep 5. CHECK INTI Refer to <u>GI-41</u> , " Is the inspection YES $>>$ Rep NO $>>$ Rep Component I 1. CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti Power set Terr	Idee driver seat co CLINING SWITCH 5. "Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the nspection CLINING SWITCH switch OFF. power seat switch nuity between pov at switch LH ninals	pection".  witch LH. Refer to ADP-1  pection".  witch LH. Refer to ADP-1  DENT  ent".  pontrol unit. Refer to ADP-1 malfunctioning part.  LH. ver seat switch LH termina  Condi  Reclining switch (backward)	30, "Removal and Ins 33, "Removal and Insi 30, "Removal and Insi 30, "Removal and Insi als. tion Operate Release	tallation".  tallation".  Stallation".  NFOID:000000012246506  Continuity  Yes No
YES $>>$ GO NO $>>$ Rep <b>4.</b> CHECK REC Refer to <u>ADP-75</u> <u>Is the inspection</u> YES $>>$ GO NO $>>$ Rep <b>5.</b> CHECK INTI Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES $>>$ Rep NO $>>$ Rep <b>Component I</b> <b>1.</b> CHECK REC 1. Turn ignition 2. Disconnect 3. Check conti Power sea Tern	lace driver seat co CLINING SWITCH <u>result normal?</u> TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the <b>nspection</b> CLINING SWITCH i switch OFF. power seat switch nuity between pow at switch LH minals 10 10	pection".  witch LH. Refer to ADP-1: DENT ent".  Dentrol unit. Refer to ADP-1: malfunctioning part.  LH. ver seat switch LH termina Condi Reclining switch (backward) Reclining switch (forward)	30, "Removal and Ins 33, "Removal and Inst 30, "Removal and Inst 30, "Removal and Inst als. tion Operate Release Operate Operate	tallation".  tallation".  tallation".  Continuity  Yes  No Yes

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-133</u>, "Removal and Installation".

# LIFTING SWITCH (FRONT)

## Component Function Check

## 1. DATA MONITOR

CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "LIFT FR SW-UP", "LIFT FR SW-DN".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Lifting switch front (up)	Operate	ON
	Enting Switch none (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-76, "Diagnosis Procedure"</u>.

### **Diagnosis** Procedure

INFOID:000000012246508

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK LIFTING SWITCH SIGNAL

1. Turn ignition switch OFF.

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

(+) Driver seat control unit		(-)		ondition	Voltage (V) (Approx.)
Connector	Terminal				( + + )
	7		Lifting switch (front)	Operate (down)	0V
D000	I	- Ground		Release	Battery voltage
B2ZZ	23			Operate (up)	0V
				Release	Battery voltage

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and power seat switch LH.

3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

Driver seat contro	bl unit	Power seat swit	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
<b>D</b> 000	7	D212	1	Vec	
BZZZ	23	B213	8	Tes	

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

INFOID:000000012246507

# LIFTING SWITCH (FRONT)

### < DTC/CIRCUIT DIAGNOSIS >

Driver seat control		Shiroi unit		
С	onnector	Terminal	Ground	Continuity
	B222	7	Ground	No
		23		
Is the inspection         YES       >> GO         NO       >> Rep         3. CHECK DRI         1. Connect the         2. Turn ignition	result normal? TO 3. pair or replace ha VER SEAT CON driver seat cont switch ON.	rness. TROL UNIT OUTPUT <sup>r</sup> ol unit.		
3. Check volta	ge between drive	er seat control unit harness	connector and ground.	
	(+)			Voltage (V)
	Driver seat cor	trol unit	(-)	(Approx.)
Со	nnector	Terminal		
	B222	7	Ground	Battery voltage
		23		· ··· , · ····
NO >> Rep 4. CHECK LIFT Refer to ADP-77	Iace driver seat ( FING SWITCH (F 7, "Component In	control unit. Refer to <u>ADP-1</u> RONT) spection".	30, "Removal and Inst	<u>allation"</u> .
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> Is the inspection YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " Is the inspection YES >> Rep NO >> Rep NO >> Rep	Iace driver seat of FING SWITCH (F <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC <u>Intermittent Incice</u> result normal? Iace driver seat of pair or replace the Inspection	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> DENT ent". control unit. Refer to <u>ADP-1</u> malfunctioning part.	30, "Removal and Inst 33, "Removal and Insta 30, "Removal and Inst	allation". allation". allation".
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> Is the inspection YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " Is the inspection YES >> Rep NO >> Rep NO >> Rep Component I 1. CHECK LIFT	Iace driver seat of FING SWITCH (F 7, "Component In <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC <u>Intermittent Incice</u> <u>result normal?</u> Iace driver seat of pair or replace the <b>Inspection</b> FING SWITCH (F	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> DENT ent". control unit. Refer to <u>ADP-1</u> malfunctioning part.	30, "Removal and Inst 33, "Removal and Insta 30, "Removal and Inst	allation". allation". allation".
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> <u>Is the inspection</u> YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES >> Rep NO >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignition 2. Disconnect 3. Check conti	Iace driver seat of FING SWITCH (F 7, "Component In <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC <u>Intermittent Incice</u> <u>Intermittent Incice</u> <u>I</u>	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> CIDENT ent". control unit. Refer to <u>ADP-1</u> malfunctioning part. RONT) h LH. wer seat switch LH termina	30, "Removal and Inst 33, "Removal and Insta 30, "Removal and Inst als.	allation". allation". allation".
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> <u>Is the inspection</u> YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES >> Rep NO >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignition 2. Disconnect 3. Check conti	Iace driver seat of FING SWITCH (F <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC Intermittent Incice result normal? Iace driver seat of air or replace the Inspection FING SWITCH (F n switch OFF. power seat switch nuity between poor	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> DENT ent". control unit. Refer to <u>ADP-1</u> malfunctioning part. RONT) h LH. wer seat switch LH termina	30, "Removal and Inst 33. "Removal and Insta 30. "Removal and Inst als.	allation". allation". INFOID:000000012246503
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> Is the inspection YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " Is the inspection YES >> Rep NO >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignitior 2. Disconnect 3. Check conti Power sea Term	lace driver seat of FING SWITCH (F 7. "Component In <u>result normal?</u> TO 5. lace power seat ERMITTENT INC <u>Intermittent Incice</u> result normal? lace driver seat of air or replace the <b>Inspection</b> FING SWITCH (F n switch OFF. power seat switce nuity between poor t switch LH minals	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> CIDENT ent". control unit. Refer to <u>ADP-1</u> e malfunctioning part. RONT) h LH. wer seat switch LH termina	30, "Removal and Inst 33. "Removal and Insta 30. "Removal and Inst 30. "Removal and Inst als.	allation". allation". allation". Continuity
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> Is the inspection YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " Is the inspection YES >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignition 2. Disconnect 3. Check conti Power sea Term	Iace driver seat of FING SWITCH (F 7, "Component In result normal? TO 5. Iace power seat ERMITTENT INC Intermittent Incide result normal? Iace driver seat of air or replace the Inspection FING SWITCH (F n switch OFF. power seat switch nuity between poor t switch LH ninals	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-13</u> DENT ent". control unit. Refer to <u>ADP-13</u> malfunctioning part. RONT) h LH. ower seat switch LH termina Co Lifting switch front (down)	30, "Removal and Inst 33. "Removal and Insta 30. "Removal and Inst als. ndition Operate	allation".  allation".  INFOID:000000012246503  Continuity Yes
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> <u>Is the inspection</u> YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignitior 2. Disconnect 3. Check conti Power sea Term	Iace driver seat of FING SWITCH (F 7. "Component In <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incion <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incion <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incion <u>Intermittent Incion <u>Intermittent Incion</u> <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incion <u>Intermittent Incion</u> <u>Intermittent Incion</u> <u>Intermittent Incion <u>Intermittent Incin <u>Intermittent Incin <u>Intermittent Incion <u>Intermittent Inci</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-1</u> CIDENT ent". control unit. Refer to <u>ADP-1</u> emalfunctioning part. RONT) h LH. wer seat switch LH termina Co Lifting switch front (down)	30, "Removal and Inst 33, "Removal and Insta 30, "Removal and Insta als. ndition Operate Release	allation".  allation".  INFOID:000000012246503  Continuity  Yes No
NO >> Rep 4. CHECK LIFT Refer to <u>ADP-77</u> <u>Is the inspection</u> YES >> GO NO >> Rep 5. CHECK INT Refer to <u>GI-41</u> , " <u>Is the inspection</u> YES >> Rep NO >> Rep Component I 1. CHECK LIFT 1. Turn ignition 2. Disconnect 3. Check conti Power sea <u>Term</u>	Iace driver seat of FING SWITCH (F 7, "Component In <u>result normal?</u> TO 5. Iace power seat ERMITTENT INC Intermittent Incice result normal? Iace driver seat of air or replace the Inspection FING SWITCH (F n switch OFF. power seat switch nuity between poor t switch LH ninals 1 1	control unit. Refer to <u>ADP-1</u> RONT) spection". switch LH. Refer to <u>ADP-1</u> CIDENT ent". control unit. Refer to <u>ADP-1</u> malfunctioning part. RONT) h LH. wer seat switch LH termina Co Lifting switch front (down) Lifting switch front (up)	30, "Removal and Inst 33. "Removal and Insta 30. "Removal and Insta 30. "Removal and Inst als. ndition Operate Release Operate	allation". allation". allation". Continuity Yes No Yes

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-133</u>, "Removal and Installation".

# LIFTING SWITCH (REAR)

## **Component Function Check**

### 1. DATA MONITOR

CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "LIFT RR SW-UP", "LIFT RR SW-DN".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition	Status	
	Lifting switch rear (up)	Operate	ON
		Release	OFF
	Lifting switch rear (down)	Operate	ON
		Release	OFF

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-78, "Diagnosis Procedure"</u>.

### **Diagnosis** Procedure

INFOID:000000012246511

INFOID:000000012246510

Regarding Wiring Diagram information, refer to ADP-38, "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) (Approx.)	
Connector	Terminal				(	
	6		Operate (down)		0	
B222	0	Ground	Lifting switch	Release	Battery voltage	
DZZZ	22	Ground	(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

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and power seat switch LH.

3. Check continuity between driver seat control unit harness connector and power seat switch LH harness connector.

Driver seat cor	ntrol unit	Power seat swi	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
B333	6	P213	2	Vec
BZZZ	22	BZIJ	9	165

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

# LIFTING SWITCH (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

	Driver seat control unit				Continuity
Co	nnector	Terminal		Cround	
	B222	6		Ground	No
Is the inspection YES >> GO NO >> Repa 3. CHECK DRIV	<u>result normal?</u> TO 3. air or replace harr /ER SEAT CONT	ness. ROL UNIT OUTPUT			
<ol> <li>Connect the</li> <li>Turn ignition</li> <li>Check voltage</li> </ol>	driver seat contro switch ON. ge between driver	ol unit. seat control unit har	ness conn	ector and ground.	
	(+)				
	Driver seat control u	init		(-)	Voltage (V) (Approx.)
Conn	lector	Terminal			
B2	-22	6 22	Gr	round	Battery voltage
4. CHECK LIFT	ING SWITCH (RE	EAR)			
<ul> <li>4. CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO</li> <li>NO &gt;&gt; Repl</li> <li>5. CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> </ul>	ING SWITCH (RE . "Component Ins result normal? TO 5. ace power seat s ERMITTENT INCI Intermittent Incide result normal? ace driver seat co air or replace the	EAR) pection". witch LH. Refer to <u>AI</u> DENT ent". ontrol unit. Refer to <u>A</u> malfunctioning part.	<u>DP-133, "F</u> DP-130, "	Removal and Installa	<u>ition"</u> . ation".
<ul> <li>4. CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO</li> <li>NO &gt;&gt; Repl</li> <li>5. CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>Component I</li> <li>1. CHECK LIFT</li> </ul>	ING SWITCH (RE . "Component Ins result normal? TO 5. ace power seat s ERMITTENT INCI Intermittent Incide result normal? ace driver seat co air or replace the nspection ING SWITCH (RE	EAR) pection". witch LH. Refer to <u>AI</u> DENT ent". ontrol unit. Refer to <u>A</u> malfunctioning part. EAR)	DP-133, "F	Removal and Installa	<u>ition"</u> . <u>ation"</u> .
<ul> <li>4. CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO</li> <li>NO &gt;&gt; Repl</li> <li>5. CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>COMPONENT II</li> <li>1. CHECK LIFT</li> <li>1. Turn ignition</li> <li>2. Disconnect p</li> <li>3. Check contir</li> </ul>	ING SWITCH (RE ."Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the <b>nspection</b> ING SWITCH (RE switch OFF. power seat switch nuity between pov	EAR) pection". witch LH. Refer to <u>AI</u> DENT ent". pontrol unit. Refer to <u>A</u> malfunctioning part. EAR) LH. ver seat switch LH te	DP-133, "F	Removal and Installa	<u>ition"</u> . ation". ™FOID:00000001224651:
<ul> <li>4. CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO<sup>-</sup></li> <li>NO &gt;&gt; Repl</li> <li>5. CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>COMPONENT II</li> <li>1. CHECK LIFT</li> <li>1. Turn ignition</li> <li>2. Disconnect p</li> <li>3. Check contir</li> </ul>	ING SWITCH (RE ."Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the nspection ING SWITCH (RE switch OFF. power seat switch uity between pov at switch LH	EAR) pection". witch LH. Refer to <u>AI</u> DENT ent". pontrol unit. Refer to <u>A</u> malfunctioning part. EAR) LH. ver seat switch LH te	DP-133, "F	Removal and Installa	ttion".
<ul> <li>CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO</li> <li>NO &gt;&gt; Repl</li> <li>CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>COMPONENT II</li> <li>1. CHECK LIFT</li> <li>1. Turn ignition</li> <li>2. Disconnect p</li> <li>3. Check contin</li> </ul>	ING SWITCH (RE . "Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the <b>nspection</b> ING SWITCH (RE switch OFF. power seat switch nuity between pov	EAR) pection". witch LH. Refer to <u>AI</u> DENT ent". pontrol unit. Refer to <u>A</u> malfunctioning part. EAR) LH. ver seat switch LH te	DP-133. "F	Removal and Installa	ttion".
<ul> <li>4. CHECK LIFT</li> <li>Refer to <u>ADP-79</u></li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; GO<sup>-</sup></li> <li>NO &gt;&gt; Repl</li> <li>5. CHECK INTE</li> <li>Refer to <u>GI-41</u>, "</li> <li><u>Is the inspection</u></li> <li>YES &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>NO &gt;&gt; Repl</li> <li>COMPONENT II</li> <li>1. CHECK LIFT</li> <li>1. Turn ignition</li> <li>2. Disconnect p</li> <li>3. Check contin</li> </ul>	ING SWITCH (RE . "Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the <b>nspection</b> TNG SWITCH (RE switch OFF. power seat switch nuity between pov at switch LH ninals 9	EAR) pection". witch LH. Refer to AI DENT ent". ontrol unit. Refer to A malfunctioning part. EAR) LH. ver seat switch LH te Lifting switch rear (up)	DP-133. "F	Removal and Installa Removal and Install n	ttion". ation". INFOID:00000001224651: Continuity Yes
4. CHECK LIFT Refer to <u>ADP-79</u> <u>Is the inspection</u> YES >> GO NO >> Repl 5. CHECK INTE Refer to <u>GI-41, "</u> <u>Is the inspection</u> YES >> Repl NO >> Repl NO >> Repl Component II 1. CHECK LIFT 1. Turn ignition 2. Disconnect p 3. Check contir Power sea Terr	ING SWITCH (RE . "Component Ins result normal? TO 5. lace power seat s ERMITTENT INCI Intermittent Incide result normal? lace driver seat co air or replace the nspection ING SWITCH (RE switch OFF. power seat switch nuity between pov at switch LH ninals 9	EAR) pection". witch LH. Refer to AI DENT ent". ontrol unit. Refer to A malfunctioning part. EAR) LH. ver seat switch LH te Lifting switch rear (up)	DP-133, "F	Removal and Installa	ttion". ation". INFOID:00000001224651: Continuity Yes No Yes

YES >> Inspection End.

NO >> Replace power seat switch LH. Refer to <u>ADP-133</u>, "Removal and Installation".

# TILT SWITCH

## **Component Function Check**

## **1.** DATA MONITOR

CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "TILT SW-UP", "TILT SW-DOWN".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Tilt switch (up)	Operate	ON
HET SW-OF	The switch (up)	Release	OFF
	Tilt owitch (down)	Operate	ON
HEI SW-DOWN		Release	OFF

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-80, "Diagnosis Procedure"</u>.

### **Diagnosis** Procedure

INFOID:000000012246514

INFOID:000000012246513

Regarding Wiring Diagram information, refer to <u>ADP-38, "Wiring Diagram"</u>.

### **1.** CHECK TILT SWITCH SIGNAL

1. Disconnect ADP steering switch (tilt switch).

2. Check voltage between ADP steering switch harness connector and ground.

(+) ADP steering switch (tilt switch)		(–)	Voltage (V)	
Connector	Terminal		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
M39	4 5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

1. Disconnect automatic drive positioner control unit.

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

Automatic drive	Automatic drive positioner control unit ADP steering switch (tilt switch)			Continuity
Connector	Terminal	Connector	Terminal	Continuity
Mea	1	M20	4	Voc
WIOS	13	10139	5	165

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

# **TILT SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive p	ositioner control unit		Continuity	
Connector	Terminal	Cround	Continuity	
1 Ground		Giouna	No	R
MOS	13		INO INO	
Is the inspection result normal	?			
YES >> Replace automation NO >> Repair or replace	c drive positioner unit. Refer to <u>A</u> harness.	<u>DP-131, "Removal ar</u>	<u>id Installation"</u> .	С
<b>3.</b> CHECK TILT SWITCH				_
Refer to ADP-81, "Component	Inspection".			L
Is the inspection result normal	?			
YES >> GO TO 4. NO >> Replace ADP stee	ring switch (tilt switch). Refer to	ADP-134, "Removal a	and Installation".	E
4. CHECK INTERMITTENT I	NCIDENT			
Refer to GI-41, "Intermittent In	cident".			F
>> Inspection End.				0
Component Inspection			INFOID:000000012246515	C
1. CHECK TILT SWITCH				ŀ
1. Turn ignition switch OFF.				
<ol> <li>Disconnect ADP steering</li> <li>Check continuity between</li> </ol>	switch (tilt switch). ADP steering switch terminals.			l
ADP steering switch (tilt switch)	Condition		Continuity	
	Condition		Continuity	

ADP steering switch (tilt switch)		Condition		Continuity	
Tern	ninals	Condition		Continuity	
	4	Tilt owitch (up)	Operate	Yes	
4	4	The switch (up)	Release	No	
I	E		Operate	Yes	N
	5	The switch (down)	Release	No	
Is the inspect	ion result norr	nal?			L

Is the inspection result normal?

YES >> Inspection End.

>> Replace ADP steering switch (tilt switch). Refer to ADP-134, "Removal and Installation". NO

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# **TELESCOPIC SWITCH**

## **Component Function Check**

## **1.** DATA MONITOR

CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS".
- 2. Select "TELESCO SW-FR", "TELESCO SW-RR".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Telesconic switch (forward)	Operate	ON
TELEGGO SW-ITK		Release	OFF
	Telescopic switch (backward)	Operate	ON
ILLLGGO GW-RR		Release	OFF

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-82, "Diagnosis Procedure"</u>.

### **Diagnosis** Procedure

INFOID:000000012246517

INFOID:000000012246516

Regarding Wiring Diagram information, refer to <u>ADP-38, "Wiring Diagram"</u>.

## 1. CHECK TELESCOPIC SWITCH SIGNAL

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) (Approx.)	
Connector	nnector Terminal			
N20	2	Cround	Potton woltage	
10129	3	Giouna	Battery voltage	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TELESCOPIC SWITCH CIRCUIT

1. Disconnect automatic drive positioner control unit.

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

Automatic drive positioner control unit		ADP steering switch (telescopic switch)		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M63	7	M30	2	Vec
IVIUS	19	10129	3	165

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

# **TELESCOPIC SWITCH**

### < DTC/CIRCUIT DIAGNOSIS >

Automatic driv	e positioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M63	7	Giouna	No	F
MOS	19			_
Is the inspection result no	ormal?			
YES >> Replace auto NO >> Repair or rep	matic drive positioner unit. Refe lace harness.	r to <u>ADP-131, "Remov</u>	al and Installation".	C
3. CHECK TELESCOPIC	C SWITCH			
Refer to ADP-83, "Compo	onent Inspection".			Ľ
Is the inspection result no	prmal?			
YES >> GO TO 4.				F
NO >> Replace ADF	steering switch (telescopic swit	ch). Refer to <u>ADP-134</u>	, "Removal and Installation".	
<b>4.</b> CHECK INTERMITTE	NT INCIDENT			
Refer to GI-41, "Intermitte	ent Incident".			F
>> Inspection Er	nd.			
Component Inspect	ion		INFOID:000000012246518	(
4				
I. CHECK TELESCOPI	C SWITCH			ŀ
1. Turn ignition switch C	DFF.			
2. Disconnect ADP stee	ering switch (telescopic switch).	nals		
5. Check continuity betw	seen nor seening switch termin	1015.		

ADP steering switch (telescopic switch) Terminals		Condition		Continuity	ADP
				Continuity	
	2	Talaaaania awitch (fanward)	Operate	Yes	-
4	2	relescopic switch (forward)	Release	No	-
1	2		Operate	Yes	- n
	3	relescopic switch (backward)	Release	No	_
Is the inspection	result normal?				- L

Is the inspection result normal?

YES >> Inspection End.

>> Replace ADP steering switch (telescopic switch). Refer to ADP-134, "Removal and Installation". NO

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## SEAT MEMORY SWITCH

## Component Function Check

### **1.** DATA MONITOR

CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS".
- 2. Select "MEMORY SW 1", "MEMORY SW 2", "SET SW".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Memory switch 1	Push	ON
		Release	OFF
	Moment quiteb 2	Push	ON
	Memory Switch 2	Release	OFF
SET SW	Set switch	Push	ON
SETSW	Set Switch	Release	OFF

#### Is the inspection result normal?

- YES >> Inspection End.
- NO >> Perform diagnosis procedure. Refer to <u>ADP-84, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:000000012246520

INFOID:000000012246519

Regarding Wiring Diagram information, refer to <u>ADP-38, "Wiring Diagram"</u>.

## 1. CHECK SEAT MEMORY SWITCH SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect seat memory switch.
- 3. Turn ignition switch ON.

4. Check voltage between seat memory switch harness connector and ground.

( Seat men	+) nory switch	(–)	Voltage (V) (Approx.)	
Connector	Terminal		( ] [ [ ] ] ]	
	9			
D13	15	Ground	5	
	7			

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK MEMORY SWITCH CIRCUIT

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

## SEAT MEMORY SWITCH

### < DTC/CIRCUIT DIAGNOSIS >

Driver	seat control unit	control unit		Seat memory switch		
Connector	Т	erminal	Connector	Terminal	Continuity	
		11		9		
B222		21	D13	7	Yes	
		27		15		
<ol> <li>Check continuity</li> </ol>	v between drive	r seat contr	ol unit harness con	nector and gro	und.	
Driver se	eat control unit				Continuity	
Connector	Ierm	nai	Orecord			
Dooo	11		Ground		N L	
B222	21	,			NO	
la tha base of the	27					
NO >> Repair o <b>3.</b> CHECK MEMOR Check continuity bet	r replace harne Y SWITCH GF ween seat men	ess. COUND CIR nory switch	CUIT harness connector	and ground.		
S	eat memory switc	Tarminal				—
		ierminal		olounu	Vaa	
D'13	ult normal O	10			res	_
NO >> Repair of 4. CHECK SEAT M Refer to <u>ADP-85, "Co</u> <u>Is the inspection resu</u> YES >> Check ir NO >> Replace	r replace harne EMORY SWIT omponent Insp ult normal? ntermittent incic seat memory s	ess. CH ection". lent. Refer t switch. Refe	o <u>GI-41, "Intermitte</u> r to <u>ADP-132, "Rer</u>	e <u>nt Incident"</u> . moval and Insta	<u>allation"</u> .	
Component Insp 1. CHECK SEAT M 1. Turn ignition swi 2. Disconnect seat 3. Check continuity	EMORY SWIT EMORY SWIT tch OFF. memory switch between seat	CH n. memory sw	itch terminals.		INFOID:00000001224	
Seat memor	y switch	_	Condition		Continuity	
Termina	ais					
	15	Memory sw	ritch 1	Push	Yes	
-				Release	No	_
16	9	Memory sw	ritch 2	Push	Yes	
-				Release	No	
		1		Push	Yes	
	7	Set switch				_

YES >> Inspection End.

## **SEAT MEMORY SWITCH**

#### < DTC/CIRCUIT DIAGNOSIS >

NO >> Replace seat memory switch. Refer to <u>ADP-132</u>, "Removal and Installation".

## OOR MIRROR REMOTE CONTROL SWITCH < DTC/CIRCUIT DIAGNOSIS > DOOR MIRROR REMOTE CONTROL SWITCH SELECT SWITCH

## SELECT SWITCH : Component Function Check

INFOID:000000012246522

INFOID:000000012246523

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# **1.** DATA MONITOR

#### CONSULT

- 1. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "MIR CHNG SW-R", "MIR CHNG SW-L".
- 3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Status
	Mirror owitch (right)	Operate	ON
MIR CHING 3W-R	Minor Switch (fight)	Release	OFF
	Mirror owitch (left)	Operate	ON
MIR CHING SW-L	Million Switch (left)	Release	OFF

Is the inspection result normal?

- YES >> Inspection End.
- NO >> Perform diagnosis procedure. Refer to <u>ADP-87, "SELECT SWITCH : Diagnosis Procedure"</u>.

### SELECT SWITCH : Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

### 1. CHECK SELECT SWITCH SIGNAL

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

(+)					_
Automatic drive positioner control unit		(-)	Select switch condition Voltage (	Voltage (V) (Approx.)	
Connector	Terminal	_		(	
	2		RIGHT	0	-
MCO	2	Ground	Other than above	5	-
IMI03	14	Ground	LEFT	0	_
	14		Other than above	5	-

#### Is the inspection result normal?

NO >> GO TO 2.

2. CHECK HARNESS CONTINUITY

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

Automatic drive positioner control unit		Door mirror remote	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
Mea	2	D10	4	Vec	
Ινίοο	14	019	3	ies	

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#### < DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive positioner contro	Automatic drive positioner control unit		
Connector	Terminal	Cround	Continuity
	2	Giouna	No
MOS	14	=	INU

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

Door mirror remote control switc		Continuity	
Connector	Terminal	Ground	Continuity
D19	15		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.** CHECK SELECT SWITCH

Check select switch.

Refer to ADP-88, "SELECT SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Replace door mirror remote control switch. Refer to MIR-26, "Removal and Installation".

## **5.** CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

NO >> Repair or replace the malfunctioning parts.

## SELECT SWITCH : Component Inspection

INFOID:000000012246524

### **1.** CHECK SELECT SWITCH

Check door mirror remote control switch.

Door mirror remote o	Door mirror remote control switch		Continuity	
Terminals		Select switch condition	Continuity	
3		LEFT	Yes	
3	15	Other than above	No	
Λ	4		Yes	
Ţ			No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to <u>MIR-26, "Removal and Installation"</u>. MIRROR SWITCH

#### < DTC/CIRCUIT DIAGNOSIS >

MIRROR SWITCH	: Component	Function C	Check	INFOID:00000001224652	25	
<b>1.</b> DATA MONITOR					A	
CONSULT 1. Select "Data Monitor 2. Select "MIR CON SN 3. Check that the funct	" mode of "AUTO N-UP/DN","MIR C ion operates norm	DRIVE POS.". ON SW-RH/LH ally according	I ". to the following conditions:		E	
Monitor item		Conditi	on	Status	-	
		C	operate	ON	-	
MIR CON SW-UP/DN	Mirror switch (up/	down) R	elease	OFF	- [	
	Mirror switch (righ	C	perate	ON	-	
		R	elease	OFF	-	
<b>1.</b> CHECK MIRROR SV 1. Turn ignition switch 2. Check voltage betwe	VITCH FUNCTION ON. een automatic driv	l e positioner co	ntrol unit connector and groun	d.	-	
(+)					-	
Automatic drive position	oner control unit	()	Mirror switch	Voltage (V)	A	
Connector	Terminal		oonanon	(/ () () () () () () () () () () () () ()		
	3		UP	0	-	
	Ŭ	4	Other than above	5		
	4 Gr	4		LEFT	0	- 1
M63		Ground	Other than above	5	_	
	15		DOWN	0	_	
		-		5		
		1	RIGHT	U		

Is the inspection result normal?

YES >> GO TO 5.

2. CHECK HARNESS CONTINUITY

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and door mirror remote control switch.

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

Other than above

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#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive position	er control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3		16	
M63	4	D19	9	Yes
	15		12	
	16		1	

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

Automatic drive positioner co		Continuity		
Connector	Terminal		Continuity	
M63	3	Ground		
	4		No	
	15		INO	
	16			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

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

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

Door mirror remote control s		Continuity	
Connector	Terminal	Ground	Continuity
D19	15		Yes

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.** CHECK MIRROR SWITCH

Check mirror switch.

Refer to ADP-90, "MIRROR SWITCH : Component Inspection".

Is the inspection result normal?

YES >> Refer to GI-41, "Intermittent Incident".

NO >> Replace door mirror remote control switch. Refer to MIR-26, "Removal and Installation".

## 5. CHECK INTERMITTENT INCIDENT

Check intermittent incident.

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>. NO >> Repair or replace the malfunctioning parts.

### MIRROR SWITCH : Component Inspection

#### **1.** CHECK MIRROR SWITCH

Check door mirror remote control switch.

Door mirror remote control switch	Mirror switch condition	Continuity
Terminals		

INFOID:000000012246527

### < DTC/CIRCUIT DIAGNOSIS >

1		RIGHT	Yes	^
I		Other than above	No	А
0		LEFT	Yes	
5	15	Other than above	No	В
16		UP	Yes	
10		Other than above	No	
12	1	DOWN	Yes	С
12		Other than above	No	

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror remote control switch. Refer to <u>MIR-26, "Removal and Installation"</u>.

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## POWER SEAT SWITCH GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

# POWER SEAT SWITCH GROUND CIRCUIT

### Diagnosis Procedure

INFOID:000000012246528

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

# 1. CHECK POWER SEAT SWITCH LH GROUND CIRCUIT

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

Power seat switc	h LH		Continuity
Connector	Terminal	Ground	Continuity
B213	3	*	Yes

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Repair or replace harness.

## TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

# TILT & TELESCOPIC SWITCH GROUND CIRCUIT

#### Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

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

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

ADP steering switch (ti	It & telescopic switch)		Continuity	E
Connector	Terminal	Ground	Continuity	
M39	1		Yes	_
		-		F

#### Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-41, "Intermittent Incident"</u>.

NO >> Repair or replace harness.

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INFOID:000000012246529

# SLIDING SENSOR

## **Component Function Check**

## **1.** DATA MONITOR

CONSULT

i. Select "Data Monitor" mode of "AUTO DRIVE POS.".

2. Select "SLIDE PULSE".

3. Check that the function operates normally according to the following conditions:

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

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-94. "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:000000012246531

INFOID:000000012246530

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK SLIDING SENSOR SIGNAL

1. Turn ignition switch ON.

2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

(+ Driver's seat	) control unit	()	Co	ndition	Voltage signal
B222	31	Ground	Seat sliding	Operate	
				Other than above	2V/div JMJIA0119ZZ

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

1. 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.

Driver seat	control unit	Sliding r	motor LH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B222	31	B226	3	Yes

## **SLIDING SENSOR**

### < DTC/CIRCUIT DIAGNOSIS >

Driv	er seat control unit					Continuit
Connector	Те	rminal		Ground		Continuity
B222		31				No
he inspection result	normal?					
ES >> GO TO 3.						
IO >> Repair or r	eplace harness.					
CHECK SLIDING S	ENSOR POWER	SUPPLY				
Connect driver sea	t control unit.					
I urn ignition switch	I ON. Voon cliding motor		nnootor on	daround		
Check vollage belv	veen sliding motor			u grounu.		
	(+)					
SI	ding motor LH		(-	-)	Vo	oltage (V)
Connector	Terr	ninal			()	Approx.)
B226		1	Gro	und	Batt	ery voltage
the inspection result	normal?					
/ES >> GO TO 5.	<u></u>					
NO >> GO TO 4.						
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b	ENSOR POWER S OFF. eat control unit. etween driver seat	SUPPLY CIRC	UIT arness con	nector and	sliding motor	r LH harness
CHECK SLIDING S     Turn ignition switch     Disconnect driver s     Check continuity b     nector.	ENSOR POWER S OFF. seat control unit. etween driver seat	SUPPLY CIRC	UIT arness con	nector and	sliding motor	LH harness
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector.	ENSOR POWER S OFF. eat control unit. etween driver seat	SUPPLY CIRC	UIT arness con Sliding i	nector and	sliding motor	r LH harness
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector	ENSOR POWER S OFF. seat control unit. etween driver seat	Control unit ha	UIT arness con Sliding i ctor	nector and motor LH Te	sliding motor	LH harness
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5	Control unit ha	UIT arness con Sliding r ctor 6	nector and motor LH Te	sliding motor rminal	r LH harness Continuit
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat	Control unit ha	UIT arness con Sliding i ctor 6 rness conn	nector and <sup>motor LH</sup> Te ector and g	sliding motor	Continuit
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b	ENSOR POWER S OFF. eat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat	Control unit ha	UIT arness con Sliding r ctor 6 rness conn	nector and <sup>motor LH</sup> Te ector and g	sliding motor rminal 1 round.	r LH harness Continuit Yes
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b D Connector D	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat	Control unit ha	UIT arness con Sliding i ctor 6 rness conn	nector and motor LH Te ector and g	sliding motor	Continuity
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector D Connector	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat	SUPPLY CIRC control unit ha Conne B220 control unit ha	UIT arness con Sliding i ctor 6 rness conn	nector and motor LH Te ector and g Ground	sliding motor rminal 1 round.	Continuity
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector D Connector B222	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5	UIT arness con Sliding i ctor 6 rness conn	nector and motor LH Te ector and g Ground	sliding motor	Continuity
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 the inspection result	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal?	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5	UIT arness con Sliding r tor 6 rness conn	nector and motor LH Te ector and g Ground	sliding motor	Continuity
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 the inspection result (ES >> Replace dr IQ >> Repair or r	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control urit eplace harness	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD	UIT arness con Sliding i ctor 6 rness conn P-130. "Re	nector and motor LH Te ector and g Ground	sliding motor	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 he inspection result ES >> Replace dr O >> Repair or r CHECK SLIDING S	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit ENSOR GROUND	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 nit. Refer to AD	UIT arness con Sliding i ctor 6 rness conn P-130. "Re	nector and motor LH Te ector and g Ground	sliding motor rminal 1 round. Installation".	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 Check continuity b Connector B222 Check continuity b Connector B222 Check continuity b Connector CONNECTOR	ENSOR POWER S OFF. eat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit ENSOR GROUND	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD	UIT arness con Sliding i ctor 6 rness conn P-130. "Re	nector and motor LH Te ector and g Ground	sliding motor	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 the inspection result ES >> Replace dr O >> Repair or r CHECK SLIDING S Turn ignition switch Check continuity b	ENSOR POWER S OFF. eeat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit eplace harness. ENSOR GROUND OFF.	Control unit ha Control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD	UIT arness con Sliding i ctor 6 rness conn P-130. "Re	nector and motor LH Te ector and g Ground	sliding motor rminal 1 round. Installation".	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 Check continuity b Connector B222 the inspection result ES >> Replace dr O >> Repair or r CHECK SLIDING S Turn ignition switch Check continuity b	ENSOR POWER S OFF. eat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit ENSOR GROUND OFF. etween sliding mote	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD or LH harness	UIT arness con Sliding i ctor 6 rness conn P-130. "Re connector i	nector and motor LH Te ector and g Ground emoval and and ground	sliding motor	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector. Driver seat co Connector B222 Check continuity b Connector B222 the inspection result (ES >> Replace dr IO >> Repair or ro CHECK SLIDING S Turn ignition switch Check continuity be	ENSOR POWER S OFF. eat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit ENSOR GROUND OFF. etween sliding motor	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD or LH harness	UIT arness con Sliding i ctor 6 rness conn P-130. "Re connector a	nector and motor LH Te ector and g Ground emoval and and ground	sliding motor rminal 1 round. Installation".	Continuity No
CHECK SLIDING S Turn ignition switch Disconnect driver s Check continuity b nector.  Driver seat co Connector B222 Check continuity b Connector B222 the inspection result (ES >> Replace dr NO >> Repair or r Check SLIDING S Turn ignition switch Check continuity b Connector	ENSOR POWER S OFF. eat control unit. etween driver seat ontrol unit Terminal 5 etween driver seat river seat control unit normal? iver seat control unit ENSOR GROUND OFF. etween sliding motor Sliding motor LH	SUPPLY CIRC control unit ha Conne B22 control unit ha Terminal 5 hit. Refer to AD or LH harness	UIT arness con Sliding i ctor 6 rness conn P-130. "Re connector a	nector and motor LH Te ector and g Ground emoval and and ground Ground	sliding motor	Continuity Continuity

NO >> Repair or replace harness.

# RECLINING SENSOR

## Component Function Check

## **1.** DATA MONITOR

CONSULT

i. Select "Data Monitor" mode of "AUTO DRIVE POS.".

2. Select "RECLN PULSE".

3. Check that the function operates normally according to the following conditions:

Monitor item	Con	dition	Value
		Operate (forward)	Change (decrease)
RECLN PULSE	Seat reclining	Operate (backward)	Change (increase)
		Release	No change

Is the inspection result normal?

YES >> Inspection End.

NO >> Perform diagnosis procedure. Refer to <u>ADP-96. "Diagnosis Procedure"</u>.

## Diagnosis Procedure

INFOID:000000012246533

INFOID:000000012246532

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.

2. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope.

(+) Driver seat c	ontrol unit	(-)	Coi	ndition	Voltage signal
Connector	Terminal	•			
B222	13	Ground	Seat reclin- ing	Operate Other than	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5V

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".

2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat co	ontrol unit	Reclining	motor LH	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B222	13	B225	1	Yes

## **RECLINING SENSOR**

### < DTC/CIRCUIT DIAGNOSIS >

Driv	er seat control unit			<b>o</b>
Connector	Termin	al C	Ground	Continuity
B222	13			No
ne inspection result n	ormal?			
ES >> GO TO 3.				
O >> Repair or re	place harness.			
CHECK RECLINING	SENSOR POWER SU	PPLY		
Connect driver seat	control unit.			
Turn Ignition switch	UN. Sen reclining motor LH	harness connector and	d around	
Check voltage betwo			a grouna.	
	(+)			
Recli	ning motor LH	(-)		Voltage (V)
Connector	Terminal			(Approx.)
B225	3	Ground	ł	Battery voltage
he inspection result n	ormal?			
ES >> GO TO 5.				
) >> GO TO 4.				
) >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity be	SENSOR POWER SU OFF. at control unit. ween driver seat contro	PPLY CIRCUIT	tor and reclinin	a motor LH harne
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity be nector.	SENSOR POWER SU OFF. eat control unit. ween driver seat contro	PPLY CIRCUIT	tor and reclinin	g motor LH harne
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity beinector. Driver seat c	SENSOR POWER SU OFF. at control unit. ween driver seat contro	PPLY CIRCUIT	tor and reclinin	g motor LH harne
0 >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity be nector. Driver seat c	SENSOR POWER SU OFF. eat control unit. ween driver seat contro ontrol unit Terminal	PPLY CIRCUIT	tor and reclinin	g motor LH harne
D >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity beinector. Driver seat c Connector B222	SENSOR POWER SU OFF. eat control unit. ween driver seat contro ontrol unit Terminal 5	PPLY CIRCUIT	otor LH Terminal	ig motor LH harne Continuit Yes
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity be nector. Driver seat c Connector B222 Check continuity be	SENSOR POWER SU OFF. teat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control	PPLY CIRCUIT	otor LH Terminal 3 tor and ground	g motor LH harne Continuit Yes
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity beinector. Driver seat c Connector B222 Check continuity beinector	SENSOR POWER SU OFF. Pat control unit. Preven driver seat control pontrol unit Terminal 5 ween driver seat control pot control unit	PPLY CIRCUIT	otor LH Terminal 3 tor and ground	ig motor LH harne Continuit Yes
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity beinector. Driver seat c Connector B222 Check continuity beine Driver seat	SENSOR POWER SU OFF. that control unit. tween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit	PPLY CIRCUIT	otor LH Terminal 3 tor and ground	ig motor LH harne Continuit Yes Continuity
0 >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Driver seat c Connector Driver seat c	SENSOR POWER SU OFF. eat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal	PPLY CIRCUIT	otor LH Terminal 3 tor and ground	ig motor LH harne Continuit Yes Continuity
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver se Check continuity beinector. Driver seat c Connector B222 Check continuity beine Driver seat c Driver seat c Connector B222 Check continuity beine	SENSOR POWER SU OFF. teat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal 5 survey of the seat control teat control unit	PPLY CIRCUIT	otor LH Terminal 3 tor and ground	ig motor LH harne Continuit Yes Continuity No
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Driver set Connector B222 Driver set Connector B222 Driver set Connector B222 Driver set Connector B222	SENSOR POWER SU OFF. eat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal 5 ormal?	PPLY CIRCUIT	tor and reclinin tor LH Terminal 3 tor and ground	ig motor LH harne Continuit Yes Continuity No
<ul> <li>&gt;&gt; GO TO 4.</li> <li>CHECK RECLINING</li> <li>Turn ignition switch</li> <li>Disconnect driver set</li> <li>Check continuity bet</li> <li>nector.</li> </ul> Driver seat c Connector B222 Check continuity bet Driver seat c Connector B222 Check continuity bet Driver seat c Connector B222 Check continuity bet Driver seat c Connector B222 he inspection result n ES >> Replace drive Senair or result of the seat o	SENSOR POWER SU OFF. tat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal 5 ormal? rer seat control unit. Re	PPLY CIRCUIT	tor and reclinin tor LH Terminal 3 tor and ground oval and Install	g motor LH harne Continuit Yes Continuity No ation".
<ul> <li>&gt;&gt; GO TO 4.</li> <li>CHECK RECLINING</li> <li>Turn ignition switch</li> <li>Disconnect driver set</li> <li>Check continuity bet</li> <li>nector.</li> </ul> Driver seat c Connector B222 Check continuity bet Driver seat Connector B222 Check continuity bet Driver seat Connector B222 Check continuity bet Driver seat Connector B222 Is inspection result not seat of the sea	SENSOR POWER SU OFF. eat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit 6 cormal? ver seat control unit. Re place harness.	PPLY CIRCUIT	tor and reclinin tor LH Terminal 3 tor and ground oval and Install	ig motor LH harne Continuit Yes Continuity No ation".
D >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Connector B222 Check continuity beine Connector B222 Driver seat Connector B222 Driver seat Connector B222 Driver seat Connector Connector B222 Driver seat Connector Connector B222 Driver seat Connector	SENSOR POWER SU OFF. Pat control unit. Inveen driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit cormal? ver seat control unit. Re place harness. SENSOR GROUND	PPLY CIRCUIT	tor and reclinin otor LH Terminal 3 tor and ground oval and Install	g motor LH harne Continuit Yes Continuity No ation".
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity bet nector. Driver seat c Connector B222 Check continuity bet Driver s Connector B222 he inspection result n ES >> Replace driv O >> Repair or re CHECK RECLINING Turn ignition switch Check continuity bet	SENSOR POWER SU OFF. eat control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit eat control unit 5 ormal? ver seat control unit. Re place harness. SENSOR GROUND OFF.	PPLY CIRCUIT	etor and reclinin	ig motor LH harne Continuit Yes Continuity No ation".
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Connector B222 Check continuity beine Connector B222 Check continuity beine Connector B222 Check continuity beine Connector Connector B222 Check continuity beine Connector Check continuity beine Check	SENSOR POWER SU OFF. at control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal 5 ormal? ver seat control unit. Re place harness. SENSOR GROUND OFF. ween reclining motor L	PPLY CIRCUIT	tor and reclinin tor LH Terminal 3 tor and ground oval and Install and ground.	ig motor LH harne Continuit Yes Continuity No ation".
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Check continuity beine Connector B222 Check continuity beine Connector B222 Check continuity beine Connector B222 Check continuity beine Connector Connector B222 Check continuity beine Check RECLINING Turn ignition switch Check continuity beine Check continui	SENSOR POWER SU OFF. at control unit. ween driver seat control ontrol unit Terminal 5 ween driver seat control eat control unit Terminal 5 ormal? rer seat control unit. Re blace harness. SENSOR GROUND OFF. ween reclining motor L	PPLY CIRCUIT	etor and reclinin	ig motor LH harne Continuit Yes Continuity No ation".
O >> GO TO 4. CHECK RECLINING Turn ignition switch Disconnect driver set Check continuity beinector. Driver seat c Connector B222 Check continuity beine Connector B222 Check continuity beine Connector B222 Check continuity beine Connector Connector CHECK RECLINING Turn ignition switch Check continuity beine Check continu	SENSOR POWER SU OFF. Pat control unit. Ween driver seat control ontrol unit Terminal 5 Ween driver seat control eat control unit Terminal 5 ormal? ver seat control unit. Re place harness. SENSOR GROUND OFF. Ween reclining motor L Ing motor LH Terminal	PPLY CIRCUIT	etor and reclinin	ig motor LH harne Continuit Yes Continuity No ation".

# LIFTING SENSOR (FRONT)

Component Function Check

## 1.DATA MONITOR

CONSULT

i. Select "Data Monitor" mode of "AUTO DRIVE POS.".

2. Select "LIFT FR PULSE".

3. Check that the function operates normally according to 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-98. "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:000000012246535

INFOID:000000012246534

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+ Driver seat o	) control unit	()	Conc	dition	Voltage signal
Connector	Terminal				
B222	30	Ground	Seat lifting (front)	Operate Other than above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5V

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit and lifting motor LH (front).
- 3. Check continuity between driver seat control unit harness connector and lifting motor LH (front) harness connector.

# LIFTING SENSOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

	front)	Lifting motor LH (fro		ontrol unit	Driver seat cc
Continuity	Terminal	nnector	nal Con	Terminal	Connector
Yes	1	3227	B	30	B222
	r and ground.	arness connector a	er seat control unit h	tween driver sea	Check continuity be
Continuity			rol unit	iver seat control unit	Dri
	bund	Groun	Terminal		Connector
No			30		B222
	nd ground.	PPLY	ess. RONT) POWER SUF t. notor LH (front) harr	place harness. NSOR (FRONT control unit. ON. reen lifting motor	YES >> GO TO 3. NO >> Repair or re CHECK LIFTING SE Connect driver seat Turn ignition switch Check voltage betw
Voltage (V)				(+)	
(Approx.)		(-)	nt)	motor LH (front)	Lifting
Detters			Terminal	T	Connector
Battery voltage	В	Ground	3		B227
		PPLY CIRCUIT	RONT) POWER SUF	ENSOR (FRONT	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE
notor LH (front) harr	or and lifting mot	PPLY CIRCUIT	RONT) POWER SUF unit. er seat control unit l	ENSOR (FRONT OFF. eat control unit. tween driver sea	YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver se Check continuity be connector.
notor LH (front) hari	or and lifting mot	PPLY CIRCUIT	RONT) POWER SUF unit. er seat control unit l	ENSOR (FRONT OFF. eat control unit. tween driver sea	YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver se Check continuity be connector.
notor LH (front) harr	or and lifting mot front) Terminal	PPLY CIRCUIT harness connector Lifting motor LH (fro	RONT) POWER SUF unit. er seat control unit l	ENSOR (FRONT OFF. eat control unit. tween driver sea	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE . Turn ignition switch . Disconnect driver se . Check continuity be connector. Driver seat connector
notor LH (front) harr	or and lifting mot front) Terminal 3	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227	RONT) POWER SUF unit. er seat control unit l	ENSOR (FRONT OFF. eat control unit. tween driver sea ontrol unit Terminal	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE • Turn ignition switch • Disconnect driver se • Check continuity be connector. • Driver seat co • Connector • B222
notor LH (front) harr Continuity Yes	or and lifting mot front) Terminal 3 r and ground.	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227 harness connector a	RONT) POWER SUF unit. er seat control unit l nal Co	ENSOR (FRONT OFF. eat control unit. tween driver sea ontrol unit Terminal 5 tween driver sea	YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver se Check continuity be connector. Driver seat co Connector B222 Check continuity be
notor LH (front) harr Continuity Yes	or and lifting mot front) Terminal 3 r and ground.	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227 harness connector a	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 tween driver sea iver seat control unit	YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver se Check continuity be connector. Driver seat co Connector B222 Check continuity be Driver seat co
notor LH (front) harr — Continuity Yes Continuity	or and lifting mot	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227 harness connector a Gro	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h rol unit Terminal	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 tween driver sea iver seat control unit	YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SE Turn ignition switch Disconnect driver se Check continuity be connector. Driver seat co Connector B222 Check continuity be Connector Driver seat co
notor LH (front) harr Continuity Yes Continuity No	or and lifting mot	PPLY CIRCUIT harness connector Lifting motor LH (fro panector B227 arness connector a Gro	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h rol unit Terminal 5	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 tween driver sea iver seat control unit	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE • Turn ignition switch • Disconnect driver se • Check continuity be connector. Driver seat or B222 • Check continuity be Connector B222 • Check continuity be
notor LH (front) harr Continuity Yes Continuity No tion".	or and lifting mot	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227 harness connector a Gro DP-130, "Removal arness connector a	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h rol unit Terminal 5 ntrol unit. Refer to A ess. RONT) GROUND g motor LH (front) ha	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 tween driver sea iver seat control unit pormal? ver seat control unit place harness. ENSOR (FRONT OFF. tween lifting mot	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE • Turn ignition switch • Disconnect driver se • Check continuity be connector. Driver seat co Connector B222 • Check continuity be Connector B222 • Check continuity be • CHECK LIFTING SE • Turn ignition switch Check continuity be
notor LH (front) harr Continuity Yes Continuity No tion".	or and lifting mot	PPLY CIRCUIT harness connector Lifting motor LH (fro panector B227 harness connector a Gro ADP-130, "Removal arness connector an	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h rol unit Terminal 5 ntrol unit. Refer to A ess. RONT) GROUND g motor LH (front) ha	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 etween driver sea iver seat control unit pormal? ver seat control unit place harness. ENSOR (FRONT OFF. tween lifting mot	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE • Turn ignition switch • Disconnect driver set • Check continuity be connector. Driver seat ce Connector B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check continuity be • Check LIFTING SE • Turn ignition switch • Check continuity be • Check continuity be • Check continuity be
notor LH (front) harr	or and lifting mot	PPLY CIRCUIT harness connector Lifting motor LH (fro onnector B227 arness connector a Gro ADP-130, "Removal arness connector ar Ground	RONT) POWER SUF unit. er seat control unit l nal Co er seat control unit h rol unit Terminal 5 ntrol unit. Refer to A ess. RONT) GROUND g motor LH (front) ha t) Terminal	ENSOR (FRONT OFF. eat control unit. etween driver sea ontrol unit Terminal 5 etween driver sea iver seat control unit pormal? ver seat control unit place harness. ENSOR (FRONT OFF. tween lifting mot notor LH (front)	YES >> GO TO 5. NO >> GO TO 4. • CHECK LIFTING SE • Turn ignition switch • Disconnect driver se • Check continuity be connector. Driver seat or B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check continuity be Connector B222 • Check LIFTING SE • Turn ignition switch Check continuity be • Check continuity be

Is the inspection result normal?

- YES >> Replace lifting motor LH (front). Refer to <u>SE-79, "Removal and Installation"</u>.
- NO >> Repair or replace harness.

## LIFTING SENSOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS > LIFTING SENSOR (REAR) А **Component Function Check** INFOID:000000012246536 1. DATA MONITOR CONSULT Select "Data Monitor" mode of "AUTO DRIVE POS.". 1. 2. Select "LIFT RR PULSE". 3. Check lifting sensor (rear) signal under the following conditions: Condition Monitor item Value D Operate (up) Change (decrease) LIFT RR PULSE Seat lifting (rear) Operate (down) Change (increase) Е Release No change Is the inspection result normal? YES >> Inspection End. NO >> Perform diagnosis procedure. Refer to ADP-101, "Diagnosis Procedure". Diagnosis Procedure INFOID:000000012246537 Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram". Н 1. CHECK LIFTING SENSOR (REAR) SIGNAL Turn ignition switch ON. 1. Read voltage signal between driver seat control unit harness connector and ground with oscilloscope. 2. ADP (+) Driver seat control unit Condition (-) Voltage signal Connector Terminal 10mSec/div

B222	29	Ground	Seat lifting	Operate		L
			(rear)		2V/div JMJIA0119ZZ	M
				Other than above	0 or 5V	N

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130, "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).

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

Driver seat	Driver seat control unit		Lifting motor LH (rear)	
Connector	Terminal	Connector	r Terminal	
B222	29	B228	3	Yes

Ο

Ρ

# LIFTING SENSOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

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

Driver s	eat control unit		Continuity
Connector	Terminal	Ground	Continuity
B222	29	*	No

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

# 3. CHECK LIFTING SENSOR (REAR) POWER SUPPLY

1. Connect driver seat control unit.

2. Turn ignition switch ON.

3. Check the voltage between lifting motor LH (rear) harness connector and ground.

(+) Lifting motor LH (rear)		(-)	Voltage (V) (Approx.)	
Connector	Terminal			
B228	1	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

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

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit.

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

Driver seat	Driver seat control unit		Lifting motor LH (rear)	
Connector	Terminal	Connector	Connector Terminal	
B222	5	B228	1	Yes

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

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B222	5		No

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130, "Removal and Installation"</u>.

NO >> Repair or replace harness.

## 5. CHECK LIFTING SENSOR (REAR) GROUND

1. Turn ignition switch OFF.

2. Check the continuity between lifting motor LH (rear) harness connector and ground.

Lifting mot	or LH (rear)		Continuity
Connector	Terminal	Ground	Continuity
B228	2	*	Yes

Is the inspection result normal?

YES >> Replace lifting motor LH (rear). Refer to <u>SE-79, "Removal and Installation"</u>.

NO >> Repair or replace harness.

# TILT SENSOR

## Component Function Check

## **1**.DATA MONITOR

CONSULT

1. Select "Data Monitor" mode of "AUTO DRIVE POS.".

2. Select "TILT PULSE".

3. Check that the function operates normally according to the following conditions:

Monitor item	C	Condition		[
		Operate (UP-WARD)	Change (decrease)	
TILT PULSE	Steering column	Operate (DOWN-WARD)	Change (increase)	
		Release	No change	E
Is the inspection result norr	mal?			
YES >> Inspection End NO >> Perform diagno	l. osis procedure. Refer to <u>A</u>	DP-103, "Diagnosis Procedure"		F
Diagnosis Procedure	;		INFOID:000000012246539	
<b>.</b>				(

Regarding Wiring Diagram information, refer to ADP-38. "Wiring Diagram".

## 1. CHECK TILT SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check voltage signal between driver seat control unit connector and ground with oscilloscope.

(+ Driver seat	-) control unit	(-)	Cond	lition	Voltage (V)	ADF
Connector	Terminal				(Approx.)	K
B222	28	Ground	Steering col- umn	Operate	10mSec/div	L
				Other than above	0 or 5	N

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130. "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and tilt motor.

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

Driver seat	control unit	Tilt motor		Continuity
Connector	Terminal	Connector Terminal		Continuity
B222	28	M71	5	Yes

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

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INFOID:000000012246538

Р

# TILT SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat con	trol unit		Continuity	
Connector Terminal		Ground	Continuity	
B222	28		No	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

**3.** CHECK TILT SENSOR POWER SUPPLY

- 1. Connect driver seat control unit.
- 2. Turn ignition switch ON.

3. Check voltage between tilt motor harness connector and ground.

(+) Tilt motor		()	Voltage (V) (Approx.)	
Connector Terminal				
M71	4	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## 4. CHECK TILT SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect automatic drive positioner control unit.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.

Automatic drive positioner control unit		Tilt m	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M67	27	M71	4	Yes

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

Automatic drive posi	tioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M67	27		No

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

# 5. CHECK TILT SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect automatic drive positioner control unit.
- 3. Check continuity between automatic drive positioner control unit harness connector and tilt motor harness connector.

Automatic drive positioner control unit		Tilt mo	Continuity	
Connector	Terminal	Connector Terminal		Continuity
M63	20	M71	6	Yes

Is the inspection result normal?

YES >> Replace tilt motor. Refer to <u>SE-79. "Removal and Installation"</u>.

NO >> Repair or replace harness.

# TELESCOPIC SENSOR

Component Function Check

## **1**.DATA MONITOR

CONSULT

1. Select "Data Monitor" mode of "AUTO DRIVE POS.".

2. Select "TELESCO PULSE".

3. Check that the function operates normally according to the following conditions:

Monitor item	Condition		Value	[
		Operate (forward)	Change (decrease)	-
TELESCO PULSE	Steering column	Operate (backward)	Change (increase)	-
		Release	No change	- 6
Is the inspection result no	rmal?			-
YES >> Inspection En NO >> Perform diagr	d. Nosis procedure. Refer	to ADP-105, "Diagnosis Proce	dure".	F

## Diagnosis Procedure

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK TELESCOPIC SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check voltage signal between driver seat control unit connector and ground with oscilloscope.

(-	+)					ADF
Driver seat	control unit	(—)	Con	dition	Voltage (V) (Approx.)	
Connector	Terminal				(	IZ.
B222	12	Ground	Steering col- umn	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ	L
				Other than above	0 or 5	N

#### Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</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.

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

Driver seat control unit		Telesco	Continuity	
Connector	Terminal	Connector Terminal		Continuity
B222	12	M73	4	Yes

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INFOID:000000012246540

INFOID:000000012246541

# **TELESCOPIC SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

Driver seat co	ontrol unit		Continuity	
Connector Terminal		Ground	Continuity	
B222	12		No	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## $\mathbf{3}$ . 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.

(+)			Valtare (V)	
Telescopic motor		(-)	(Approx.)	
Connector	Terminal			
M73	5	Ground	Battery voltage	

Is the inspection result normal?

YES >> GO TO 5.

NO >> GO TO 4.

## **4.** CHECK TELESCOPIC SENSOR POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit.

 Check continuity between automatic drive positioner control unit harness connector and telescopic motor harness connector.

Automatic drive pos	sitioner control unit	Telescopic motor		Continuity
Connector	Terminal	Connector Terminal		Continuity
M67	27	M73	5	Yes

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

Automatic drive positioner control unit			Continuity	
Connector Terminal		Ground	Continuity	
M67	27		No	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to ADP-131, "Removal and Installation".

NO >> Repair or replace harness.

## 5. CHECK TELESCOPIC SENSOR GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit.

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

Automatic drive positioner control unit		Telescopi	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M63	20	M73	3	Yes

Is the inspection result normal?

YES >> Replace telescopic motor. Refer to <u>ST-32</u>, "Exploded View".

NO >> Repair or replace harness.

< DTC/CIRCUIT DIAGN	IOSIS >				
MIRROR SENSC	R				
DRIVER SIDE					
DRIVER SIDE : Co	mponent Fund	ction Chec	k		INFOID:000
<b>1.</b> DATA MONITOR					
CONSULT 1. Select "Data Monitor 2. Select "MIR/SEN LH 3. Check that the funct	" mode of "AUTO I I U-D", "MIR/SEN I ion operates norma	DRIVE POS." _H R-L". ally according	to the following	g conditions:	
Monitor item			Condition		Value
			Close to peal	<	3.4V
MIR/SEN LH U-D	Deer mime	<b>_</b>		ey 🛛	0.6V
			Close to right edge		3.4V
MIR/SEN LA K-L				Close to left edge	
DRIVER SIDE : DIA Regarding Wiring Diagra <b>1.</b> CHECK DOOR MIRE	m information, refe	dure er to <u>ADP-38,</u> SIGNAL	"Wiring Diagra	<u>m"</u> .	INFOID:000
2. Check voltage betwe	een door mirror LH	harness con	nector and grou	ind.	
(+)		_			Volta
Door mirror LH		()	Condition		(Ap
Connector	Ierminal				
	24		Door mirror LH		
D12		Ground		Close to right edge	
	23			Close to left edge	(
Is the inspection result n	ormal?	1	1	1	

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INFOID:000000012246542

INFOID:000000012246543

Voltage (V) (Approx.)

> 3.4 0.6 3.4

0.6

2. CHECK DOOR MIRROR LH SENSOR CIRCUIT 1

1. Turn ignition switch OFF.

>> GO TO 5.

>> GO TO 2.

YES

NO

Disconnect automatic drive positioner control unit and door mirror LH connector. 2.

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

Automatic drive positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M63	6	D4	24	Ves
WO5	18	– D4 –	23	165

# **MIRROR SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive positioner con		Continuity		
Connector	Terminal	Cround	Continuity	
Mea	6	Giouna	No	
1003	18	-	INO	

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 positioner control unit		Door mirror LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M63	20	D12	21	Vec
1000	21	012	22	165

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

Automatic drive positioner cor		Continuity	
Connector	or Terminal		Continuity
	20		No
	21		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness.

**4.** CHECK TILT MOTOR ADJUSTING OPERATION

1. Connect automatic drive positioner control unit and door mirror LH.

2. Turn ignition switch ON.

3. Check tilt motor adjusting operation with memory function.

Is the operation normal?

YES >> Replace door mirror actuator (built into door mirror LH). Refer to <u>MIR-25, "Removal and Installa-</u> tion".

NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

### CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131</u>, "<u>Removal and Installation</u>". NO >> Repair or replace the malfunctioning part.

#### PASSENGER SIDE

### PASSENGER SIDE : Component Function Check

INFOID:000000012246544

## 1. CHECK FUNCTION

#### CONSULT

- i. Select "Data Monitor" mode of "AUTO DRIVE POS.".
- 2. Select "MIR/SEN RH U-D", "MIR/SEN RH R-L".
- 3. Check that the function operates normally according to the following conditions:
## **MIRROR SENSOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition					Value	-
			Clos	e to peak		3.4V	
IVIIK/JEIN KA U-U	Door mirror	рц	Clos	e to valley		0.6V	_
		КП	Clos	e to right edge		3.4V	_
MIR/SEN RH R-L			Clos	e to left edge		0.6V	_
s the inspection result normal?							
YES >> Inspection End.							
NO >> Perform diagnosis p	rocedure. R	efer to <u>ADP-</u>	<u>-109, "P/</u>	ASSENGER S	SIDE : Diag	gnosis Procedure	-
PASSENGER SIDE : Dia	gnosis P	rocedure				INFOID:000000012	246545
Pegarding Wiring Diagram inform	nation refer		"Wiring	Diagram"			
Regarding winnig Diagram inform		10 <u>ADI -30,</u>	vunng	<u>Diagrann</u> .			
1							
I. CHECK DOOR MIRROR RH	SENSOR S	SIGNAL					
1. Turn ignition switch to ACC.							
2. Check voltage between door	mirror RH	harness con	nector a	nd ground.			
(+)							
		()		Condition		Voltage (V	/)
	Torminal	()	Condition			(Approx.)	)
Connector	Terminal			Clo	se to peak	3.4	
	24		_			0.6	
D114		Ground	Door mirror RH	irror Cio	se to right or	0.0	
	23			Cio			
				CIO		je 0.6	
NO >> GO TO 2.							
2. CHECK DOOR MIRROR RH	SENSOR (	CIRCUIT 1					
1 Turn ignition switch OFF							
2. Disconnect automatic drive	ositioner co	ontrol unit an	id door r	mirror RH.			
3. Check continuity between a	utomatic dri	ve positione	r contro	l unit harness	connecto	r and door mirror	RH
harness connector.							
Automatic drive positioner con	trol unit		г	Door mirror PH			
	Torminal		Conno		Tormi	Continuity	/
Connector	reminal F		Conne	CLOI	10111		
M63	5		D11	4	24	Yes	
	17				23		
<ol> <li>Check continuity between au</li> </ol>	utomatic driv	ve positioner	control	unit harness	connector	and ground.	
Automatic drive pos	sitioner control	unit				Continuity	
Connector		Terminal		Grour	nd	-	
M63		5				No	
		17					

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

## MIRROR SENSOR

#### < DTC/CIRCUIT DIAGNOSIS >

# 3. CHECK DOOR MIRROR RH SENSOR CIRCUIT 2

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

Automatic drive positioner control unit		Door mirror LH	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M63	20	D114	21	Vec	
WO3	21	0114	22	Tes	

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

Automatic drive positioner cor		Continuity		
Connector	Terminal	Ground	Continuity	
M63	20	Ground	No	
	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 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 into door mirror RH). Refer to <u>MIR-25, "Removal and Installa-</u> tion".

NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

- YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.
- NO >> Repair or replace the malfunctioning part.

<	DTC/CIRCUIT	DIAGNOSIS >
_		

## SLIDING MOTOR

Component I	unction Ch	neck			A
<b>1.</b> ACTIVE TES	т				В
<ul> <li>CONSULT</li> <li>Select "Active</li> <li>Select "SEAT</li> <li>Check that the</li> </ul>	e Test" mode o 「SLIDE". ne function ope	f "AUTO DRIV rates normally	E POS.".		С
	Test Item			Description	D
		OFF		Stop	
SEAT SLIDE		FR	Seat sliding	Forwar	d
		RR		Backwa	ard
YES >> Inspe NO >> Perfo Diagnosis Pr Regarding Wiring	ection End. orm diagnosis p ocedure ) Diagram infor	procedure. Ref mation, refer to	er to <u>ADP-111, "I</u> o <u>ADP-38, "Wirin</u>	<u>Diagnosis Procedure"</u> <u>g Diagram"</u> .	<i>INFOID:000000012246547</i> G
1. CHECK SLID CONSULT 1. Turn the ignit 2. Perform "SE 3. Check voltag	ING MOTOR L tion switch to A AT SLIDE" in "/ le between driv	H POWER SU CC. Active Test" mo ver seat control	JPPLY ode of "AUTO DF I unit harness co	RIVE POS.". nnector and ground.	H I ADP
(+	)				
Driver seat of	control unit	(-)		Condition	(Approx.)
Connector	Terminal				
				OFF	
	36			FR (forward)	
B223		Ground	SEAT SLIDE		
	44			ER (forward)	Battery voltage
				PR (backward)	
				INT (Dackward)	0

## **SLIDING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat contr	rol unit	Sliding motor LH		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B223	36	B226	4	Ves
B223	44	D220	6	165

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

Driver seat control u	nit connector		Continuity	
Connector	Terminal	Ground	Continuity	
	36		No	
B223	44			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

## < DTC/CIRCUIT DIAGNOSIS >

# RECLINING MOTOR

Component	Function (	Check			INFOID:000000012246548	A
<b>1.</b> ACTIVE TES	т					В
CONSULT 1. Select "Activ 2. Select "SEA 3. Check that the	re Test" mode T RECLINING he function o	e of "AUTO DRIV G". perates normally	'E POS.".			С
	Test Ite	m		Descr	ription	D
		OFF			Stop	
SEAT RECLININ	NG	FR	Seat reclining		Forward	_
		RR			Backward	Е
YES >> Insp NO >> Perfe Diagnosis Pr Regarding Wiring <b>1.</b> CHECK REC CONSULT 1. Turn the igni 2. Perform "SE 3. Check voltad	ection End. orm diagnosi ocedure g Diagram inf LINING MOT	s procedure. Ref formation, refer to FOR LH POWER ACC. NG" in "Active Te lriver seat contro	Fer to <u>ADP-113, "D</u> to <u>ADP-38, "Wiring</u> & SUPPLY est" mode of "AUT I unit harness con	Diagram".	<u>dure"</u> . <sup>INFOID:000000012246549</sup> nd.	F G H
(+)	)					
Driver seat of	control unit	(-)	(	Condition	voltage (V) (Approx.)	Κ
Connector	Terminal					
	~-			OFF	0	L
	35			FR (forward)	0	
B223		Ground	SEAT RECLINING	RR (backward)	Battery voltage	B. 4
	40				U Detten vveltage	IVI
	45			PR (loiwald)		
Is the inspection	result norma			in (backwalu)	U	Ν
YES >> Rep NO >> GO 2. CHECK REC 1. Turn ignition 2. Disconnect of	ace reclining TO 2. CLINING MOT switch OFF.	TOR LH CIRCUI	r to <u>SE-79, "Remo</u> T	val and Installati	ion".	0

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

## **RECLINING MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat contro	ol unit	Reclining moto	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
P223	35	P225	4	Vec
B223	43	6223	6	165

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

Driver seat control unit		Continuity		
Connector	Terminal	Ground	Continuity	
B223	35	Giouna	No	
	43			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

< DTC/CIRCUIT DI	AGNOSIS >	17)	•			
LIFTING MOT	OR (FROM	NI)				А
Component Fu	nction Chec	:k			INFOID:000000012246550	
<b>1.</b> ACTIVE TEST						В
CONSULT	aat" mada of "A		00"			
<ol> <li>Select Active 1</li> <li>Select "SEAT LI</li> <li>Check that the 1</li> </ol>	IFTER FR". function operate	es normally.	03.			С
	Test Item			Description		D
		OFF			Stop	
SEAT LIFTER FR		UP	Seat lifting (front	)	Upward	_
	DWN				Downward	E
YES >> Inspecti NO >> Perform Diagnosis Proc	on End. I diagnosis proc edure	edure. Refer to	o <u>ADP-115, "Dia</u>	<u>gnosis Procedure"</u> .	INFOID:000000012246551	F
1. CHECK LIFTING CONSULT 1. Turn the ignition 2. Perform "SEAT 3. Check voltage t	G MOTOR LH (F n switch to ACC LIFTER FR" in petween driver s	-RONT) POWI "Active Test" n seat control uni	ER SUPPLY node of "AUTO I t harness conne	DRIVE POS.". ector and ground.		H I ADI
(+)						
Driver seat co	ntrol unit	(-)		Condition	(Approx.)	Κ
Connector	Terminal			0.55		
	34				0	L
	34			DWN (down)	Battery voltage	
B223		Ground	FR	OFF	0	M
	42			UP	Battery voltage	
				DWN (down)	0	
Is the inspection res YES >> Replace NO >> GO TO 2. CHECK LIFTING	ult normal? e lifting motor LF 2. G MOTOR LH (F	H (front). Refer	to <u>SE-79, "Rem</u> JIT	oval and Installation	<u></u> .	N O

## LIFTING MOTOR (FRONT)

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat cor	trol unit	Lifting motor LH (f	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
B003	34	P007	4	Vec
BZZ3	42	BZZ7	6	165

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

Driver seat control unit			Continuity	
Connector	Terminal	Cround	Continuity	
B223	34	Giouna	No	
	42		NO	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

< DTC/CIRCUIT DI	AGNOSIS >				
LIFTING MOT	OR (REAR	)			Δ
Component Fu	nction Check	ζ			INFOID:000000012246552
<b>1.</b> ACTIVE TEST					В
<ul> <li>CONSULT</li> <li>Select "Active T</li> <li>Select "SEAT LI</li> <li>Check that the f</li> </ul>	est" mode of "AL FTER RR". unction operates	ITO DRIVE PC	'S.".		C
	Test Item			Description	
		OFF			Stop
SEAT LIFTER RR		UP	Seat lifting (rear)		Upward
		DWN			Downward
YES >> Inspection End. NO >> Perform diagnosis procedure. Refer to <u>ADP-117, "Diagnosis Procedure"</u> .					
Regarding Wiring Di	agram informatio	on, refer to <u>ADF</u> EAR) POWER	<u>P-38, "Wiring Di</u> SUPPLY	<u>agram"</u> .	F
<ul> <li>CONSULT</li> <li>1. Turn the ignition</li> <li>2. Perform "SEAT</li> <li>3. Check voltage b</li> </ul>	switch to ACC. LIFTER RR" in " between driver se	Active Test" mo eat control unit	ode of "AUTO D harness connec	RIVE POS.". ctor and ground.	A
(+)					
Driver seat co	ontrol unit	(-)	(	Condition	Voltage (V) K
Connector	Terminal				(
				OFF	0
	40			UP	0
B223		Ground	SEAT LIFTER	DWN (down)	Battery voltage
DEEG		Cround	RR	OFF	0
	41			UP	Battery voltage
				DWN (down)	0
Is the inspection resYES>> ReplaceNO>> GO TO	<u>ult normal?</u> e lifting motor LH 2.	(rear). Refer to	o <u>SE-79, "Remo</u>	val and Installation	<u>n"</u> .
2. CHECK LIFTING	G MOTOR (REA	R) CIRCUIT			

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and lifting motor LH (rear).

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

Ρ

## LIFTING MOTOR (REAR)

#### < DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Lifting motor LH	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
B223	41	P228	6 Yes		
	40	- BZZO	4	165	

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

Driver seat control unit			Continuity	
Connector	Terminal	Cround	Continuity	
B223	41		No	
	40		NO	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3. CHECK INTERMITTENT INCIDENT

Refer to GI-41, "Intermittent Incident".

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-130</u>, "Removal and Installation".

NO >> Repair or replace the malfunctioning part.

#### < DTC/CIRCUIT DIAGNOSIS >

# TILT MOTOR

Component F	-				
Component F	-unction Che	CK			INFOID:000000012246554
<b>1.</b> ACTIVE TES <sup>-</sup>	Г				
CONSULT 1. Select "Active 2. Select "TILT 3. Check that th	e Test" mode of " MOTOR". le function opera	AUTO DRIVE P tes normally.	POS.".		
	Test item			De	scription
	OFF				Stop
TILT MOTOR	UP		Steering tilt	:	Upward
	DWN				Downward
s the operation of YES >> Inspe NO >> Perfo Diagnosis Pro Regarding Wiring 1. CHECK TILT OCONSULT 1. Turn ignition 2. Disconnect ti 3. Turn the ignit 4. Select "TILT 5. Check voltag	of relevant parts n ection End. form diagnosis pro ocedure Diagram informa MOTOR POWEF switch OFF. It motor. ion switch ON. MOTOR" in "Action e between tilt motor.	ocedure. Refer t ation, refer to <u>Al</u> R SUPPLY ve Test" mode c otor harness cor	o <u>ADP-119, "Dia</u> <u>DP-38, "Wiring I</u> of "AUTO DRIVE nnector and gro	<u>agnosis Proced</u> Diagram". E POS". und.	lure".
(+	-)				
Tilt m	notor	(-)		Condition	(Approx.)
Connector	ierminai			OFF	0
	1			UP	0
	-			DWN (down)	Battery voltage
M71		Ground	TILT MOTOR	OFF	0
	2			UP	Battery voltage
				DWN (down)	0
<u>s the inspection (</u> YES >> Repla NO >> GO 1 2. CHECK TILT	<u>result normal?</u> ace tilt motor. Re <sup>-</sup> O 2. MOTOR CIRCUI	fer to <u>SE-79, "R</u> T	emoval and Ins	tallation".	

 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		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M67	28	M85	1	Ves	
	29	IVIOU	2	165	

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

Automatic drive posit	tioner control unit		Continuity	
Connector	Terminal	Ground	Continuity	
M67	28	Giouna	No	
	29	*	NU	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

NO >> Repair or replace harness.

< DTC/CIRCUIT	DIAGNOSIS >					
TELESCOP	IC MOTOR					٨
Component F	Function Ch	eck			INFOID:000000012246556	A
1.ACTIVE TEST	Г					В
<ul> <li>CONSULT</li> <li>Select "Active</li> <li>Select "TELE</li> <li>Check that the</li> </ul>	e Test" mode of SCO MOTOR". ne function opera	"AUTO DRIVE ates normally.	POS.".			С
	Test item			Desc	cription	D
	OFF				Stop	
TELESCO MOTOR	FR		Steering	g telescopic	Forward	_
	RR				Backward	E
YES >> Inspe NO >> Perfo Diagnosis Pr	ection End. orm diagnosis pr ocedure	ocedure. Refe	r to <u>ADP-121, '</u>	<u>'Diagnosis Procedu</u>	ITE".	F
Regarding Wiring <b>1.</b> CHECK TELE CONSULT 1. Turn ignition 2. Disconnect to 3. Turn the ignitian 4. Perform "TEI 5. Check voltage	Diagram inform SCOPIC MOTO switch OFF. elescopic motor. tion switch ON. LESCO MOTOR je between teles	ation, refer to OR POWER SU " in "Active Tes copic motor ha	ADP-38, "Wirin JPPLY st" mode of "Al	JTO DRIVE POS"". or and ground.		H I ADF
(+	•)				Voltage (V)	
Telescop	ic motor	(-)		Condition	(Approx.)	
Connector	Ierminal					L
	2			OFF EP (forward)	0	
	2			RR (backward)	Battery voltage	M
M73		Ground	MOTOR	OFF	0	
	1			FR (forward)	Battery voltage	N
				RR (backward)	0	IN
Is the inspection         YES       >> Repl         NO       >> GO         2.CHECK TELE         1.       Turn ignition         2.       Disconnect at	result normal? ace telescopic n FO 2. SCOPIC MOTO switch OFF. switch OFF.	notor. Refer to R CIRCUIT positioner contr	ST-32, "Exploc	led View".		O P
<ol> <li>Check contin harness coni</li> </ol>	nuity between au nector.	itomatic drive p	positioner cont	rol unit harness con	nector and telescopic motor	

## **TELESCOPIC MOTOR**

#### < DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit		Telesco	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
M67	29	M73	1	Ves	
	26	IVI7 J	2	163	

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

Automatic drive posi	tioner control unit		Continuity	
Connector	Terminal	Cround	Continuity	
M67	29	Giouna	No	
	26	*	NO	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-131, "Removal and Installation"</u>.

NO >> Repair or replace harness.

#### < DTC/CIRCUIT DIAGNOSIS >

## DOOR MIRROR MOTOR

**Component Function Check** 

## **1.** ACTIVE TEST

(D)CONSULT

- 1. Select "Active Test" mode of "AUTO DRIVE POS.".
- 2. Select "MIRROR MOTOR RH" and "MIRROR MOTOR LH".
- 3. Check that the function operates normally.

Test item		Description		D
MIRROR MOTOR LH	UP		Upward	
	DN		Downward	_
	LH	Door mirror (driver side)	Leftward	E
	RH		Rightward	
	OFF		Stop	F
	UP		Upward	
	DN		Downward	
MIRROR MOTOR RH	LH	Door mirror (passenger side)	Leftward	G
	RH		Rightward	
	OFF		Stop	

#### Is the inspection result normal?

YES >> Door mirror motor function is OK.

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

#### **Diagnosis** Procedure

Dogording		Diagram	information	rofor to	VDD 30	"\\/iripo	Diagra	m"
rtegaruni	y winniy	Diagram	intornation,		<u>ADI -30,</u>	VVIIIIQ	Diagra	<u></u> .

## 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 remote control switch condition	Voltage (V) (Approx.)	IV
Connector	Terminal			(	
	D12 (LH) D114 (RH) 10		UP	Battery voltage	N
		Ground	Other than above	0	
D12 (LH)			LEFT	Battery voltage	_
D114 (RH)			Other than above	0	0
		_	DOWN / RIGHT	Battery voltage	
			Other than above	0	P

#### Is the inspection result normal?

- YES >> Refer to ADP-125, "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.

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## DOOR MIRROR MOTOR

#### < DTC/CIRCUIT DIAGNOSIS >

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

Automatic drive position	ner control unit	Door mirror LH	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
	12		10	
M63	23	D12	12	Yes
	24		11	

Door mirror RH

Automatic drive positioner of	ontrol unit	Door mirror RH		Continuity	
Connector	Terminal	Connector Ter		Continuity	
	10		12		
M63	11	D114	11	Yes	
	22		10		

# 4. Check continuity between automatic drive positioner control unit connector and ground. Door mirror LH

Automatic drive positioner		Continuity	
Connector	Terminal	_	Continuity
	12	Ground	
M63	23	_	No
	24	_	

Door mirror RH

Automatic drive positioner		Continuity	
Connector	Terminal	-	Continuity
	10	Ground	
M63	11		No
	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) (Approx.)
Connector	Terminal			
	12		DOWN / RIGHT	Battery voltage
M63	12	Ground	Other than above	0
	22		UP	Battery voltage
	25		Other than above	0
	24		LEFT	Battery voltage
			Other than above	0

## DOOR MIRROR MOTOR

#### < DTC/CIRCUIT DIAGNOSIS >

(+) Automatic drive positioner control unit		(-)	Mirror switch condition	Voltage (V)	
Connector	Terminal	_		(Approx.)	
	10		UP	Battery voltage	
	10		Other than above	0	
MCO	44	11 Ground LEFT Other th	LEFT	Battery voltage	
M03	11		Other than above	0	
		_	DOWN / RIGHT	Battery voltage	
	22		Other than above	0	

NO >> Replace automatic drive positioner control unit. Refer to <u>ADP-131</u> , "Removal and	Installation".	
4. CHECK DOOR MIRROR MOTOR		
Check door mirror motor. Refer to ADP-125, "Component Inspection".		F
Is the inspection result normal?		
<ul> <li>YES &gt;&gt; Refer to <u>GI-41, "Intermittent Incident"</u>.</li> <li>NO &gt;&gt; Replace door mirror actuator. Refer to <u>MIR-25, "Removal and Installation"</u>.</li> </ul>		G
Component Inspection	INFOID:000000012246560	Н
1. CHECK DOOR MIRROR MOTOR-I		
Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-21. "Exploded View"</u> .		I
Is the inspection result normal?	I	
YES >> GO TO 2.		AD

NO >> Replace door mirror actuator. Refer to <u>MIR-25, "Removal and Installation"</u>.

2. CHECK DOOR MIRROR MOTOR-II

1. Turn ignition switch OFF.

2. Disconnect door mirror.

3. Apply 12V to each power supply terminal of door mirror motor.

Door mirror connector	Terminal		Operational direction	
Door minor connector	(+)	(-)		Ν
	10	11	RIGHT	
D12 (LH)	11	10	LEFT	
D114 (RH)	12	10	UP	Ν
	10	12	DOWN	

#### Is the inspection result normal?

YES >> Inspection End.

NO >> Replace door mirror actuator. Refer to <u>MIR-25, "Removal and Installation"</u>.

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#### < DTC/CIRCUIT DIAGNOSIS >

## SEAT MEMORY INDICATOR

### Component Function Check

**1.** ACTIVE TEST

CONSULT

1. Select "Active Test" mode of "AUTO DRIVE POS.".

2. Select "MEMORY SW INDCTR".

3. Check that the function operates normally.

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-126, "Diagnosis Procedure"</u>.

### Diagnosis Procedure

INFOID:000000012246562

INFOID:000000012246561

Regarding Wiring Diagram information, refer to ADP-38, "Wiring Diagram".

## 1. CHECK SEAT MEMORY INDICATOR CIRCUIT

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

Driver seat control unit		Seat memory sw	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
B222	10	D13	12	Ves
	26		11	165

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

Driver seat control u	unit		Continuity
Connector	Terminal	Cround	Continuity
B222	10	Giouna	No
	26		NO

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness.

## 2. CHECK MEMORY INDICATOR POWER SUPPLY

Check voltage between seat memory switch harness connector and ground.

(+)		(-)		
Seat memory switch			Voltage (V)	
Connector	Terminal		(Approx.)	
D13	10	Ground	Battery voltage	

## SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >			
Is the inspection result normal?			
YES >> GO TO 3.			
NO >> Check the following:			
<ul> <li>TOA fuse no.9.</li> <li>Harness for open or s</li> </ul>	hort between memory indicator and	d fuse	
			В
O. CHECK MEMORY INDICATOR			
Refer to <u>ADP-127</u> , "Component Insp	<u>pection"</u> .		С
Is the inspection result normal?			0
YES >> GO IO 4.	witch Refer to ADR-132 "Remova	l and Installation"	
	NICH. REIEI (0 <u>ADF-132, Reihova</u>		D
Refer to GI-41, "Intermittent Incident	<u>"</u> .		_
Is the inspection result normal?			E
YES >> Replace driver seat con	trol unit. Refer to <u>ADP-130, "Remo</u>	val and Installation".	
NO >> Repair of replace the m	anunctioning part.		F
Component Inspection		INFOID:000000012246563	1
1. CHECK SEAT MEMORY INDIC	ATOR		
1 Disconnect sost memory switch			G
2. Check continuity between seat i	memory switch terminals.		
			Ц
Seat mem	ory switch		11
Terminal		Continuity	
(+)	(-)		
	12		
10	11	Yes	
le the increation result normal?			ADF
VES >> Inspection End			
NO >> Replace seat memory s	witch, Refer to ADP-132, "Remova	al and Installation".	
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# SYMPTOM DIAGNOSIS ADP SYSTEM SYMPTOMS

## Symptom Table

INFOID:000000012246564

#### NOTE:

Always perform the "Basic Inspection" before performing diagnosis in the following table. Refer to <u>ADP-50</u>. "Work Flow".

Symptom		Diagnosis procedure	Reference page
	Sliding operation	Check sliding switch.	<u>ADP-72</u>
Manual functions (for specific part) do not operate.	Reclining operation	Check reclining switch.	<u>ADP-74</u>
	Lifting operation (front)	Check lifting switch (front).	<u>ADP-76</u>
	Lifting operation (rear)	Check lifting switch (rear).	<u>ADP-78</u>
	Tilt operation	Check tilt switch.	<u>ADP-80</u>
	Telescopic sensor	Check telescopic switch.	<u>ADP-82</u>
	Deer mirror energtion	1. Select switch	<u>ADP-87</u>
		2. Mirror switch	<u>ADP-89</u>
	All parts of seat	Check power seat switch ground cir- cuit.	<u>ADP-92</u>
	Sliding operation	Check sliding sensor.	<u>ADP-94</u>
	Reclining operation	Check reclining sensor.	<u>ADP-96</u>
	Lifting operation (front)	Check lifting sensor (front).	ADP-98
Memory functions (for specific part) do	Lifting operation (rear)	Check lifting sensor (rear).	ADP-101
	Tilt operation	Check tilt sensor.	ADP-103
	Telescopic operation	Check telescopic sensor.	ADP-105
	Door mirror operation	Check door mirror sensor.	Driver side: <u>ADP-107</u> Passenger side: <u>ADP-108</u>
	Sliding operation	Check sliding motor LH.	ADP-111
	Reclining operation	Check reclining motor LH.	ADP-113
	Lifting operation (front)	Check lifting motor LH (front).	ADP-115
Memory functions and manual func- tions (for specific part) do not operate.	Lifting operation (rear)	Check lifting motor LH (rear).	ADP-117
	Tilt operation	Check tilt motor.	ADP-119
	Telescopic operation	Check telescopic motor.	ADP-121
	Door mirror operation	Check door mirror motor.	ADP-123
Entry/Exit assist function does not operate.		1. Check system setting.	<u>ADP-12</u>
		2. Perform initialization.	<u>ADP-54</u>
		3. Check front door switch (driver side).	DLK-98
Linking key fob to meter display.		1. Check door lock function.	DLK-102
		2. Perform memory storing.	<u>ADP-54</u>

#### < SYMPTOM DIAGNOSIS >

# NORMAL OPERATING CONDITION

### Description

The following symptoms are normal operations, and they do not indicate a malfunction.

Symptom	Cause	Action to take	Reference page
Entry/exit assist function does not operate.	No initialization has been performed.	Perform initialization.	<u>ADP-54</u>
	Entry/exit assist function is disabled. <b>NOTE:</b> Entry/exit assist function is set to ON be- fore delivery (initial setting).	Change the settings.	<u>ADP-56</u>
Entry assist function does not op- erate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the entry as- sist function.	<u>ADP-19</u>
Memory function, entry/exit as- sist function or linking a key fob to meter display function does not operate.	The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: <u>ADP-16</u>
			Entry assist function: <u>ADP-19</u>
			Exit assist function: <u>ADP-18</u>
			Linking a key fob to meter display: <u>ADP-21</u>

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< REMOVAL AND INSTALLATION >

# REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

Removal and Installation

#### REMOVAL

- 1. Remove driver seat. Refer to <u>SE-79, "Removal and Installation"</u>.
- Disconnect harness connectors (A) from driver seat control unit (1).
- 3. Remove screws (B) and driver seat control unit.



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-53</u>, "<u>ADDI-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u>: <u>Description</u>".

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

#### < REMOVAL AND INSTALLATION >

## AUTOMATIC DRIVE POSITIONER CONTROL UNIT

### Removal and Installation

#### REMOVAL

- 1. Remove audio unit. Refer to AV-183, "Removal and Installation".
- 2. Disconnect harness connectors (B).
- 3. Remove automatic drive positioner control unit screw (A) and 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 when replacing control unit. Refer to <u>ADP-53</u>, "<u>ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT</u> : <u>Description</u>".

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#### < REMOVAL AND INSTALLATION >

## SEAT MEMORY SWITCH

### Removal and Installation

REMOVAL

- 1. Remove front door finisher. Refer to INT-27. "Removal and Installation".
- 2. Release pawls using suitable tool and remove seat memory switch (1) from front door finisher.

() : Pawl



INSTALLATION Installation is in the reverse order of removal.

## **POWER SEAT SWITCH**

< REMOVAL AND INSTALLATION > POWER SEAT SWITCH	
Removal and Installation	A 0000012234400
REMOVAL For the removal and installation of the power seat switch (LH), refer to <u>SE-84, "Power Seat Switch"</u> .	В
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### < REMOVAL AND INSTALLATION >

## ADP STEERING SWITCH

### Removal and Installation

INFOID:000000011933331

#### REMOVAL

- 1. Remove steering column covers. Refer to <u>IP-18</u>, "Removal and Installation Electric steering column without paddle shifter".
- 2. Release pawls using suitable tool and remove ADP steering switch (1) from the steering column lower cover (2).

() : Pawl



INSTALLATION Installation is in the reverse order of removal.