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< PRECAUTION > PRECAUTION PRECAUTIONS

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

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Service Procedure Precautions for Models with a Pop-up Roll Bar

WARNING:

Always observe the following items for preventing accidental activation.

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

Precaution for Battery Service

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

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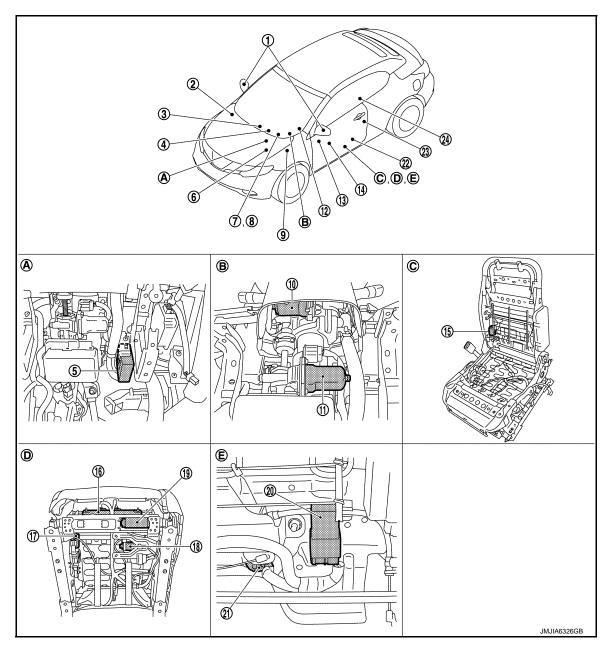
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< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS

Component Parts Location



- 1. Door mirror (driver side/passenger side)
- 4. Key slot
- 7. Combination meter

- ABS actuator and electric unit (control unit) Refer to <u>TM-10, "CVT CONTROL</u> <u>SYSTEM : Component Parts Location"</u>
- 5. Automatic drive control unit
- 8. BCM Refer to <u>BCS-4</u>, "BODY CONTROL <u>SYSTEM : Component Parts Loca-</u> tion"
- CVT shift selector Refer to <u>TM-10</u>, "<u>CVT CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion</u>"
- 6. TCM Refer to <u>TM-10, "CVT CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion"</u>
- 9. IPDM E/R Refer to <u>PCS-4, "Component Parts</u> Location"



< SYSTEM DESCRIPTION >

10. Tilt motor 11. Telescopic motor 12. Tilt & telescopic switch А 13 Door mirror remote control switch 14. Seat memory switch 15. Reclining motor 17. Lifting motor (rear) 16. Driver seat control unit 18. Lifting motor (front) 19. Sliding motor 20. Reclining motor relay 21. Reclining motor limit switch В 22. Power seat switch 23. Front door switch (driver side) 24. Power walk-in switch View with instrument lower panel LH B. View with steering column lower cov- C. View with seat cushion pad and seat-Α. removed er removed back pad removed D. Back side of seat cushion E. View with seat cushion pad and seat-С back pad removed

Component Description

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Component parts	Description
Driver seat control unit	 Main units of automatic drive positioner system. It is connected to the CAN. It communicates with automatic drive positioner control unit via UART communication. It perform memory function after receiving the door unlock signal from BCM. 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 Operates the specific seat motor with the signal from power seat switch. Transmits the ignition switch signal (ACC/ON) via UART communication to automatic drive positioner control unit.
Automatic drive positioner control unit	 It communicates with driver seat control unit via UART communication. Perform various controls with the instructions of driver seat control unit. Perform the controls of tilt & telescopic, door mirror and seat memory switch. Operates steering column and door mirror with the signal from the driver seat control
всм	 Recognizes the following status and transmits it to driver seat control unit via CAN communication. Handle position: LHD Driver door: OPEN/CLOSE Ignition switch position: ACC/ON Door lock: UNLOCK (with Intelligent key or driver side door request switch operation) Key ID Starter: CRANKING/OTHER
IPDM E/R	ON/OFF signal of CVT shift selector (detention switch) is transmit- ted to driver seat control unit via CAN communication.
ТСМ	 The following signals are transmitted to driver seat control unit via CAN communication. Shift position signal (P range) Identification of transmission: CVT
Combination meter	Transmit the vehicle speed signal to driver seat control unit via CAN communication.
ABS actuator and electric unit (control unit)	Transmit the vehicle speed signal to driver seat control unit via CAN communication.
CVT shift selector (detention switch)	 Detention switch is installed on CVT shift selector. It is turned OFF when CVT shift selector is in P position. Driver seat control unit judges that CVT shift selector is in P po- sition if continuity does not exist in this circuit.

< SYSTEM DESCRIPTION >

Com	ponent parts	Description
Key slot		The key switch is installed to detect the key inserted/removed sta- tus.
Front door switch (driver s	side)	Detects door open/close condition and transmits to BCM.
Door mirror remote con- trol switch	Mirror switch	 Mirror switch is integrated in door mirror remote control switch. It operates angle of door mirror face. It transmits mirror face adjust operation to automatic drive positioner control unit.
	Changeover switch	 Changeover switch is integrated in door mirror remote control switch. Changeover switch has three positions (L, N and R). It changes operating door mirror motor by transmitting control signal to automatic drive positioner control unit.
Tilt & tologoopie switch	Tilt switch	 Tilt switch is equipped to steering column. The operation signal is input to automatic drive positioner control unit when tilt switch is operated.
Tilt & telescopic switch	Telescopic switch	 Telescopic switch is equipped to steering column. The operation signal is input to automatic drive positioner control unit when telescopic switch is operated.
	Set switch	It is used for registration and setting change of driving position and Intelligent Key interlock function.
Seat memory switch	Seat memory switch	 The maximum 2 driving positions can be registered by memory switch 1 to 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 sys- tem by turning ON or blinking.
Slic	Sliding switch	 Sliding switch is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when sliding switch is operated.
Downon op of owidate	Reclining switch	 Reclining switch is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when reclining switch is operated.
Power seat switch	Lifting switch (front)	 Lifting switch (front) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (front) is operated.
	Lifting switch (rear)	 Lifting switch (rear) is equipped to power seat switch on seat cushion side surface. The operation signal is input to driver seat control unit when lifting switch (rear) is operated.
Sliding switch		 Sliding switch is equipped to power walk-in switch on seatback. The operation signal is input to driver seat control unit when sliding switch is operated.
Power walk-in switch	Reclining switch	 Reclining switch is equipped to power walk-in switch on seat- back. The operation signal is input to driver seat control unit when re- clining switch is operated.
Reclining motor limit swite	, ch	Turns ON when seat strap is pulled. Supplies power supply to re- clining motor relay.
Reclining motor relay		Operates when power supply is supplied from reclining motor limit switch. Connects/disconnects reclining motor circuit.

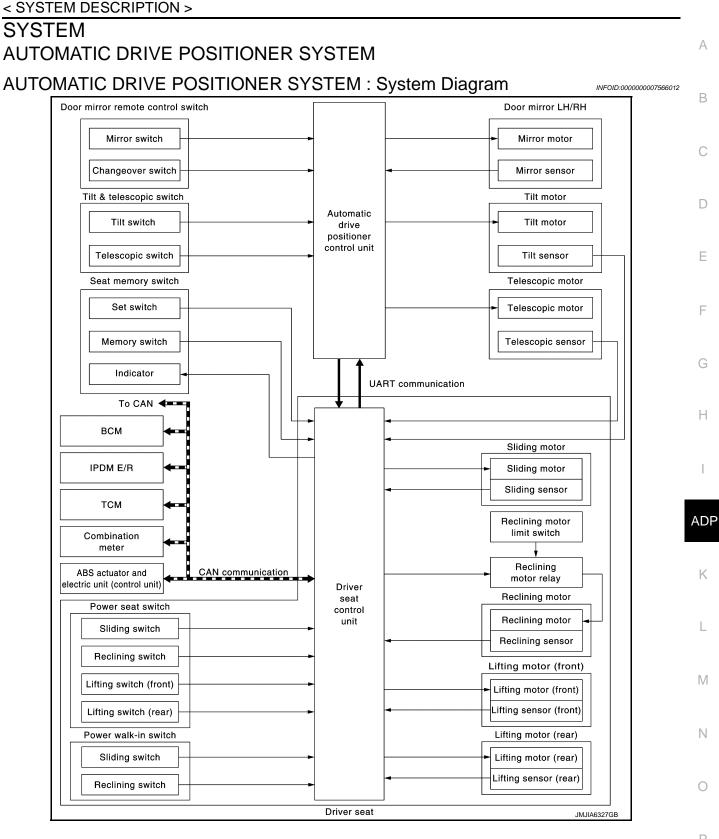
< SYSTEM DESCRIPTION >

Component parts		Description
	Door mirror motor	It makes mirror face operate from side to side and up and down with the electric power that automatic drive positioner control unit supplies.
Door mirror (driver side/ passenger side)	Mirror sensor	 Mirror sensor is installed to door mirror. The resistance of 2 sensors (horizontal and vertical) is changed when door mirror is operated. Automatic drive positioner control unit calculates door mirror po- sition according to the change of the voltage of 2 sensor input terminals.
	Tilt motor	 Tilt motor 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 motor	Tilt sensor	 Tilt sensor is integrated in tilt motor. 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 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 motor	Telescopic sensor	 Telescopic sensor is integrated in telescopic motor. The resistance of telescopic sensor is changed according to the forward/backward position of steering column. 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 calculates the telescopic position from the voltage.
	Sliding motor	 Seat sliding motor is installed to the seat cushion frame. Seat sliding motor is activated with driver seat control unit. Slides the seat frontward/ rearward by changing the rotation direction of sliding motor.
Sliding motor	Sliding sensor	 Sliding sensor is integrated in sliding motor. The pulse signal is input to driver seat control unit when sliding is performed. Driver seat control unit counts the pulse and calculates the sliding amount of the seat.
	Reclining motor	 Seat reclining motor is installed to seat back frame. Seat reclining motor is activated with driver seat control unit. Seatback is reclined frontward/rearward by changing the rotation direction of reclining motor.
Reclining motor	Reclining sensor	 Reclining sensor is integrated in reclining motor. The pulse signal is input to driver seat control unit when the reclining is operated. Driver seat control unit counts the pulse and calculates the reclining amount of the seat.
Lifting motor (front)	Lifting motor (front)	 Lifting motor (front) is installed to seat side cushion frame. Lifting motor is activated with driver seat control unit. Seat lifter (front) is moved upward/downward by changing the rotation direction of lifting motor (front).
	Lifting sensor (front)	 Lifting sensor (front) is installed in lifting motor (rear). When lifting motor (rear) operates, pulse signal is transmitted to driver seat control unit from lifting sensor. Driver seat control unit counts the pulse and calculates the lift position (rear) of the seat.

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< SYSTEM DESCRIPTION >

Com	ponent parts	Description
	Lifting motor (rear)	 Lifting motor (rear) is installed to seat slide cushion frame. Lifting motor (rear) is activated with driver seat control unit. Seat lifter (rear) is moved upward/downward by changing the rotation direction of lifting motor (rear).
Lifting motor (rear)	Lifting sensor (rear)	 Lifting sensor (rear) is installed to seat side cushion frame. The pulse signal is input to driver seat control unit when lifting (rear) is operated. Driver seat control unit counts the pulse and calculates the lifting (rear) amount of the seat.



AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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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.

< SYSTEM DESCRIPTION >

Function	Description
Manual function	The driving position (seat, steering column and door mirror position) can be adjusted by us- ing the power seat switch, tilt & telescopic 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).
Intelligent Key interlock function	Perform memory operation by Intelligent Key unlock operation or driver side door request switch unlock operation.

SLEEP CONTROL

Driver seat control unit equips sleep control for reducing power consumption.

The system switches to sleep control when all of the following conditions are satisfied.

- Ignition switch is OFF.
- All devices of automatic drive positioner system are not operating.
- 45 seconds timer of driver seat control unit is not operating.
- Set switch and memory switch (1 and 2) are OFF.

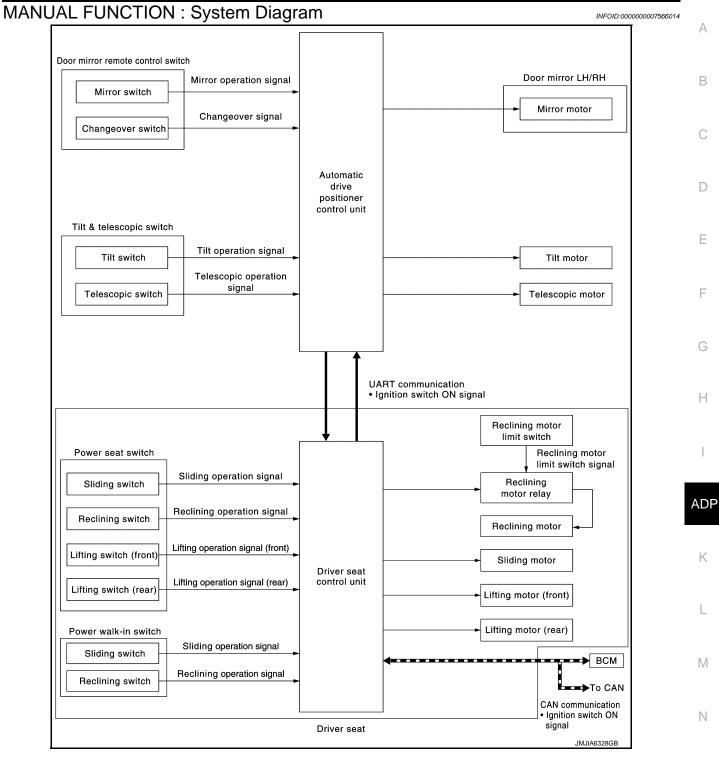
WAKE-UP CONTROL

Sleep control releases when detecting status change in either of the following item.

- CAN communication
- · Power seat switch
- Set switch and seat memory switch (1 and 2)
- Tilt & telescopic switch

MANUAL FUNCTION

< SYSTEM DESCRIPTION >



MANUAL FUNCTION : System Description

- The driving position (seat, steering column, and door mirror position) can be adjusted manually with power seat switch, tilt & telescopic switch, and door mirror remote control switch.
- The power seat and steering column can be operated manually regardless of the ignition switch position.
- The door mirrors can be operated manually when ignition switch is in either ACC or ON position.
- When power seat switch is operated, operation signal is transmitted to driver seat control unit. Each motor is operated according to operation signal.
- When tilt & telescopic switch is operated, operation signal is transmitted to automatic drive control unit. Each motor is operated according to operation signal.

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< SYSTEM DESCRIPTION >

• When mirror switch and changeover switch are operated, operation signal is transmitted to automatic drive positioner control unit. Mirror motor is operated according to operation signal.

EMERGENCY ESCAPE FUNCTION

Driver seat has emergency escape function. Seat strap for emergency escape is installed on the rear side of seatback of driver seat. Seatback can be operated manually when seat strap is pulled.

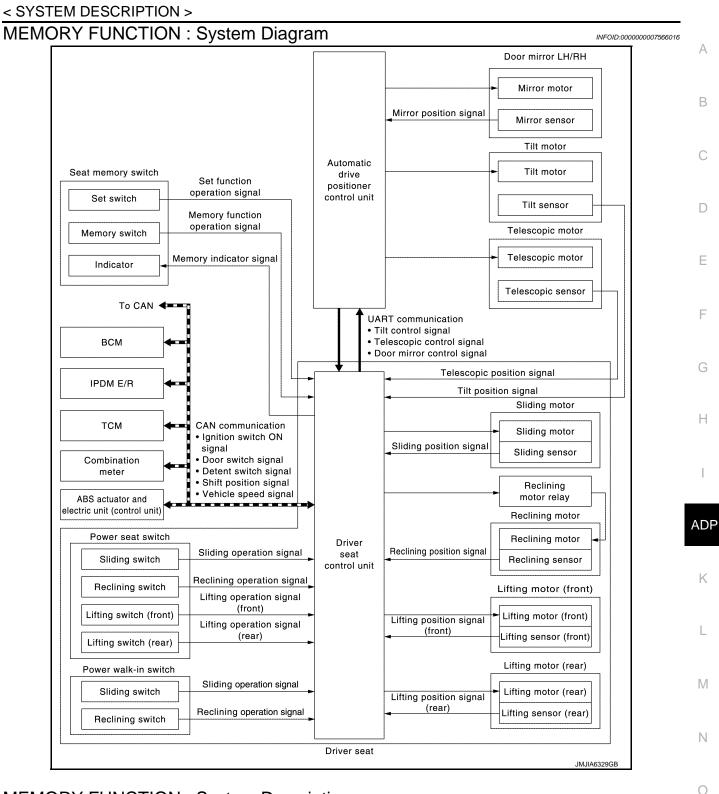
Operation Description

- When seat strap is pulled, reclining motor and gear are disengaged, and then reclining motor limit switch turns ON.
- When power seat switch (reclining switch) or power walk-in switch (reclining switch) is operated while seatback is folded by manual operation, power supply is supplied from reclining motor limit switch to reclining motor relay. Reclining motor circuit is disconnected and operation of reclining motor is inhibited.

CAUTION:

• Never operate emergency function except in emergency, or otherwise, parts may be damaged.

• Never operate emergency function while diver seat is occupied, or otherwise, injury may be caused. MEMORY FUNCTION



MEMORY FUNCTION : System Description

- The driver seat control unit can store the optimum driving positions (seat, steering column, and door mirror position) for 2 people. If the driver seat position is changed, one-touch (pressing desired memory switch) operation allows changing to the other driving position.
- When seat memory switch (1 and 2) are operated, operation signal is transmitted to driver seat control unit.
- When driver seat control unit detects that seat memory switch is pressed for 0.5 seconds or more, driver seat control unit operates each motor of driver seat and detects the driver seat position according to signals transmitted from each sensor. Driver seat control unit requests the operation of tilt & telescopic motor and mirror motor to automatic drive positioner control unit via UART communication.

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< SYSTEM DESCRIPTION >

- Automatic drive positioner control unit operates tilt & telescopic motor, detects the steering column position according to signal transmitted from tilt & telescopic sensor, and transmits the detected steering column position to driver seat control unit.
- Automatic drive positioner control unit operates mirror motor, detects the door mirror position according to signal transmitted from mirror sensor, and transmits the detected door mirror position to driver seat control unit via UART communication.
- Driver seat control unit and automatic drive positioner control unit stops the operation of each motor when each part reaches the memorized positions.
- Driver seat control unit turns memory indicator lamp OFF that is blinking while each motor operates. **NOTE:**

Further information for the memory storage procedure. Refer to <u>ADP-41, "Work Procedure"</u>.

OPERATION CONDITION

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

Item	Request status
Ignition position	ON [*]
Switch inputs Power seat switch Door mirror remote control switch Tilt & telescopic switch Set switch Memory switch 	OFF (Not operated)
CVT shift selector	P position
Memory function	Registered
Vehicle speed	0 km/h (0 MPH)
CONSULT	Not connected

*: When timer function does not operate.

TIMER FUNCTION

- The memory function can be performed for 45 seconds after operating the driver door even if the ignition switch position is in OFF position.
- Satisfy all of the following items. The timer function is not performed if these items are not satisfied.

Item	Request status
Ignition position	OFF
Set switch/memory switch	OFF
Memory function	Registered
CVT shift selector	P position
Front door switch (driver side)	OFF
CONSULT	Not connected

INTELLIGENT KEY INTERLOCK FUNCTION

< SYSTEM DESCRIPTION > INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram INFOID:000000007566018 А Driver seat В To CAN D UART communication Automatic Driver seat drive positioner control unit control unit BCM F CAN communication · Door unlock signal Key ID signal Н JMJIA5859GB

INTELLIGENT KEY INTERLOCK FUNCTION : System Description

- By associating Intelligent Key and automatic drive positioner system, the unlock operation of Intelligent Key
 or driver side door request switch performs memory function.
- Registration of Intelligent Key interlock function can register a different key ID to the driver seat control unit, one by one, for memory switch 1 and 2. A total of 2 key IDs can be registered.
- When ignition switch is OFF, and door unlock operation is performed using Intelligent Key or driver side door request switch, driver seat automatically adjusts to a driving position.

NOTE:

- When another key ID is newly registered to a key switch to which a key ID is already registered, the previously registered key ID is overwritten and becomes unusable.
- When starter signal turns ON during return operation, the operation is interrupted, starter signal turns from ON to OFF, and operation restarts.
- Further information for Intelligent Key interlock function. Refer to <u>ADP-42</u>, "Description".

OPERATION CONDITION

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

Item	Request status	
Ignition position	OFF	
Intelligent key interlock function	Registered	C
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)	P
CVT shift selector	P position	

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< SYSTEM DESCRIPTION >

Fail-safe

INFOID:000000007566020

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-43</u>
Only manual functions operate normally.	CONTROL UNIT (CAN)	U1010	<u>ADP-44</u>
	EEPROM	B2130	<u>ADP-49</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-48</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-45</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-46</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-47</u>

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

Diagnosis Description

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

Diagnostic mode [AUTO DRIVE POS.]	Description	
Ecu Identification	Displays part numbers of driver seat control unit parts.	
Self Diagnostic Result	Performs self-diagnosis for the auto drive positioner system and displays the results.	
Data Monitor	Displays input signals transmitted from various switches and sensors to driver seat con- trol unit in real time.	
Active Test	Drive each output device.	

CONSULT Function

SELF-DIAGNOSIS RESULTS Refer to ADP-29, "DTC Index".

DATA MONITOR

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
SET SW	"ON/OFF"	×	×	ON/OFF status judged from the setting switch signal.
MEMORY SW 1	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 1 signal.
MEMORY SW 2	"ON/OFF"	×	×	ON/OFF status judged from the seat memory switch 2 signal.
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP	"ON/OFF"	×	 ON/OFF status judged from the lifting switch front (up) nal. 	
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
TILT SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (up) signal.
TILT SW-DOWN	"ON/OFF"	×	×	ON/OFF status judged from the tilt switch (down) signal.
TELESCO SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (for- ward) signal.
TELESCO SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the telescoping switch (back-ward) signal.
DETENT SW	"ON/OFF"	×	×	The CVT shift selector position "OFF (P position) / ON (oth- er than P position)" judged from the detention switch signal.
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) sta- tus judged from the ignition switch signal.
SLIDE PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
RECLN PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
LIFT FR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
LIFT RR PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
MIR/SEN RH U-D	"V"	_	×	Voltage input from door mirror sensor (passenger side) up/ down is displayed.
MIR/SEN RH R-L	"V"	-	×	Voltage input from door mirror sensor (passenger side) left/ right is displayed.
MIR/SEN LH U-D	"V"	_	×	Voltage input from door mirror sensor (driver side) up/down is displayed.
MIR/SEN LH R-L	"V"	_	×	Voltage input from door mirror sensor (driver side) left/right is displayed.
TILT PULSE		-	×	Value (32768) when battery connections are standard. If it moves DOWN, the value increases. If it moves UP, the value decreases.
TELESCO PULSE	_	_	×	Value (32768) when battery connections are standard. If it moves backward, the value increases. If it moves forward, the value decreases.
VEHICLE SPEED	—	×	×	Display the vehicle speed signal received from combination meter by numerical value [km/h].
P RANG SW CAN	"ON/OFF"	×	×	ON/OFF status judged from the P range switch signal.
R RANGE (CAN)	"ON/OFF"	×	×	ON/OFF status judged from the R range switch signal.
DOOR SW-FL	"ON/OFF"	×	×	ON/OFF status judged from the door switch (front driver side) signal.
DOOR SW-FR	"ON/OFF"	×	×	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.
KEY ON SW	"ON/OFF"	×	×	ON/OFF status judged from the key on switch signal.
KEYLESS ID	_	×	×	Key ID status judged from the key ID signal.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents	1
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock ac- tuator output switch signal.	I
VHCL SPEED (ABS)	"ON/OFF"	×	×	ON/OFF status judged from vehicle speed signal.	
HANDLE	"RHD/LHD"	×	×	RHD/LHD status judged from handle position signal.	
TRANSMISSION	"AT or CVT/ MT"	×	×	AT or CVT/MT status judged from transmission.	
STEERING STATUS	NOTE: This item is disp	blayed, but ca	annot monito	red	

ACTIVE TEST CAUTION: When driving vehicle, do not perform active test.

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

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION BCM (BODY CONTROL MODULE)

List of ECU Reference

ECU	Reference
	BCS-31, "Reference Value"
PCM	BCS-53, "Fail-safe"
BCM	BCS-53, "DTC Inspection Priority Chart"
	BCS-54, "DTC Index"

< ECU DIAGNOSIS INFORMATION >

DRIVER SEAT CONTROL UNIT

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condi	tion	Value/Status		
	Oat awitah	Push	ON		
SET SW	Set switch	Other than the above	OFF		
	Manager av itali 4	Push	ON		
MEMORY SW1	Memory switch 1	Other than the above	OFF		
	Manager avitable	Push	ON		
MEMORY SW2	Memory switch 2	Other than the above	OFF		
		Operate	ON		
SLIDE SW-FR	Sliding switch (forward)	Other than the above	OFF		
		Operate ON	ON		
SLIDE SW-RR	Sliding switch (backward)	Other than the above	OFF		
		Operate	ON		
RECLN SW-FR	Reclining switch (forward)	Other than the above	OFF		
	Reclining switch (back-	Operate	ON		
RECLN SW-RR	ward)	Other than the above	OFF		
		Operate	ON		
LIFT FR SW-UP	Lifting switch front (up)	Other than the above	OFF		
		Operate	ON		
LIFT FR SW-DN	Lifting switch front (down)	Other than the above	OFF		
		Operate	ON		
LIFT RR SW-UP	Lifting switch rear (up)	Other than the above	OFF		
		Operate	ON		
LIFT RR SW-DN	Lifting switch rear (down)	Other than the above	OFF		
	•••	Up	ON		
MIR CON SW-UP	Mirror switch	Other than above	OFF		
		Down	ON		
MIR CON SW-DN	Mirror switch	Other than above	OFF		
		Right	ON		
MIR CON SW-RH	Mirror switch	Other than above	OFF		
	NA	Left	ON		
MIR CON SW-LH	Mirror switch	Other than above	OFF		
		Right	ON		
MIR CHNG SW-R	Changeover switch	Other than above	OFF		
		Left	ON		
MIR CHNG SW-L	Changeover switch	Other than above	OFF		
		Upward	ON		
TILT SW-UP	Tilt switch	Other than above	OFF		
	T 10 - 201	Downward	ON		
TILT SW-DOWN	Tilt switch	Other than above	OFF		

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< ECU DIAGNOSIS INFORMATION >

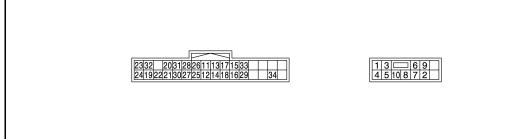
Monitor Item	Co	ondition	Value/Status
TELESCO SW-FR	Telescopic switch	Forward	ON
TELESCO SW-FR	Telescopic Switch	Other than above	OFF
TELESCO SW-RR	ESCO SW-RR Telescopic switch		ON
	Telescopic switch	Other than above	OFF
DETENT SW	CVT shift selector	P position	OFF
DETENT SW	CVT Shint Selector	Other than above	ON
STARTER SW	Ignition position	Cranking	ON
OMATEROW	ignition poolition	Other than above	OFF
		Forward	The numeral value decreases *
SLIDE PULSE	Seat sliding	Backward	The numeral value increases*
		Other than above	No change to numeral value*
		Forward	The numeral value decreases*
RECLN PULSE	Seat reclining	Backward	The numeral value increases *
		Other than above	No change to numeral value [*]
		Up	The numeral value decreases *
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *
		Other than above	No change to numeral value*
		Up	The numeral value decreases *
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *
		Other than above	No change to numeral value [*]
MIR/SEN RH U-D	Door mirror (passenger	side)	Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side)		Change between 3.4 (close to left edge) 0.6 (close to right edge)
MIR/SEN LH U-D	Door mirror (driver side)		Change between 3.4 (close to peak) 0.6 (close to valley)
MIR/SEN LH R-L	Door mirror (driver side)		Change between 0.6 (close to left edge) 3.4 (close to right edge)
		Upward	The numeral value decreases *
TILT PULSE	Tilt position	Downward	The numeral value increases *
		Other than above	No change to numeral value*
		Forward	The numeral value decreases *
TELESCO PULSE	Telescopic position	Backward	The numeral value increases *
		Other than above	No change to numeral value [*]
STEERING STATUS	NOTE: This item is displayed, b	but cannot be monitored	
VEHICLE SPEED	The condition of vehicle	speed is displayed	km/h
P RANG SW CAN	CVT shift selector	P position	ON
F ITAING SVI CAIN		Other than above	OFF
	C)/T shift solastar	R position	ON
R RANGE (CAN)	CVT shift selector	Other than above	OFF
DOOR SW-FL	Driver deer	Open	ON
DOOK SW-FL	Driver door	Close	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cond	ition	Value/Status	٥	
DOOR SW-FR	Passangar daar	Open	ON	А	
DOOK SW-FK	Passenger door	Close	OFF		
IGN ON SW	Ignition switch	ON position	ON	В	
IGIN ON SW	Ignition switch	Other than above	OFF		
ACC ON SW	Ignition owitch	ACC or ON position	ON		
ACC ON SW	Ignition switch	Other than above	OFF	С	
KEY ON SW	Intelligent Key	Inserted is key slot	ON		
KET ON SW	Intelligent Key	Inserted is not key slot	OFF	D	
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1,2,3,4or5		
KYLS DR UNLK	Intelligent Key or driver side door request switch	ON	ON		
KILS DR UNLK		OFF	OFF	Ε	
	Con signal from ABS	Received	ON		
VHCL SPEED (ABS)	Can signal from ABS	Not received	OFF	F	
	The DCM for bondle positio		LHD	Г	
HANDLE	The BCM for handle position	on is displayed	RHD		
TRANSMISSION	Transmission tuns is displa	wod	AT or CVT	G	
I RANSIVIISSION	Transmission type is displa	iyeu	MT		

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

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description		C c	ndition	Voltage (V)	
+	-	Signal name	Input/ Output			(Approx)	
1 (R)	Ground	Battery power supply	Input	_		Battery voltage	
2 (B)	Ground	Ground			_	0	
3	Ground	Sliding motor backward	Output	Soat sliding	Operate (backward)	12	
(G)	Ground	output signal		Other than the above	Other than the above	0	
4	Ground	Sliding motor forward out-	Output	Seat sliding	Operate (forward)	12	
(G/R)	put signal	Output	Seat sinding	Other than the above	0		

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< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Conc	anion	(Approx)
5	Ground	Reclining motor backward			Operate (backward)	12
(V)		output signal		5	Other than the above	0
6	Ground	Reclining motor forward	Output	Seat reclining	Operate (forward)	12
(R/L)	Ground	output signal	Output	Seat reciming	Other than the above	0
7	Ground	Lifting motor (rear) down	Quitout	Sect lifting (rear)	Operate (down)	12
(L)	Ground	output signal	Output	Seat lifting (rear)	Other than the above	0
8	Ground	Lifting motor (rear) up out-	Output	Seat lifting (rear)	Operate (up)	12
(L/W)	Ground	put signal	Output	Seat mung (rear)	Other than the above	0
9	Cround	Lifting motor (front) down	Quitout	Sect lifting (front)	Operate (down)	12
(L/R)	Ground	output signal	Output	Seat lifting (front) -	Other than the above	0
10	Cround	d Lifting motor (front) up out- put signal	Output	Seat lifting (front)	Operate (up)	12
(L/B)	Ground				Other than the above	0
11	Ground	Sliding switch backward	Input	Sliding switch	Operate (backward)	0
(G/B)	Ground	signal	Input	Shaling Switch	Other than the above	12
12	Ground	Sliding switch forward sig-	lagut	Sliding owitch	Operate (forward)	0
(G/W)	Ground	nal	Input	Sliding switch	Other than the above	12
13		Reclining switch backward	1		Operate (backward)	0
(R/G)	Ground	signal	Input	Reclining switch	Other than the above	12
14	Orrest	Reclining switch forward	المحادثة	Dealining with	Operate (forward)	0
(R/W)	Ground	signal	Input Reclining switch	Reclining switch	Other than the above	12
15	Crowned	Lifting switch (rear) down	lpm - 4	Lifting switch	Operate (down)	0
(Y/B)	Ground	signal	Input	(rear)	Other than the above	12
16	0	Lifting switch (rear) up sig-		Seat lifting switch	Operate (up)	0
(Y/R)	Ground	nal	Input	(rear)	Other than the above	12

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Con	dition	Voltage (V)
+	-	Signal name	Input/ Output	Condition		(Approx)
17	Ground	Lifting switch (front) down	Input	Lifting switch	Operate (down)	0
(LG/B)	Cround	signal	mput	(front)	Other than the above	12
18	Ground	Lifting switch (front) up sig-	Input	Seat lifting switch	Operate (up)	0
(LG/R)	Cround	nal	mput	(front)	Other than the above	12
19 (G/Y)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div
					Other than the above	0 or 5
20 (R/Y)	Ground	Reclining sensor signal	Input	Seat reclining	Operate Other than the	10mSec/div 10mSec/div 2V/div JMJIA01192Z 0 or 5
21 (L/Y)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	operate	10mSec/div E 2V/div JMJIA0119ZZ
					Other than the above	0 or 5
22 (BR/Y)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ
					Other than the above	0 or 5
23 (P)	—	CAN-H	—			-
24 (P/L)	_	CAN-L	—	-	_	-

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Conc		(Approx)	
25	Ground	Memory indictor 1 signal	Output	Memory indictor 1	Illuminate	1	
(G/O)	Cround	Memory indictor i signal	Output	Memory indictor 1	Other than above	12	
26	Ground	Memory indictor 2 signal	Output	Memory indictor 2	Illuminate	1	
(L/O)	Cround		Output	Memory Indictor 2	Other than above	12	
27	Ground	Memory switch 1 signal	Input	Memory switch 1	Press	0	
(V)	Ciouna	Memory Switch 1 Signal	mput	Memory Switch 1	Other than above	5	
28	Ground	Memory switch 2 signal	Input	Memory switch 2	Press	0	
(V/W)	Clound	Memory Switch 2 Signal	mput	Wembry Switch 2	Other than above	5	
29	Ground	Set switch signal	Input	Set switch	Press	0	
(L)	Ciouna	Set Switch Signal	mput	Oet Switch	Other than above	5	
30 (BR)	Ground	Tilt sensor signal	Input	Tilt	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ	
					Other than above	0 or 5	
31 (BR/W)	Ground	Telescopic sensor signal	Input	Telescopic	Operate		
(BR/W)					Other than above	0 or 5	
32 (W/L)	Ground	UART communication (TX/RX)	Input	Ignition switch ON		10msec/div 10msec	
33 (W)	Ground	Sensor power supply	Output	_		12	
34 (B/Y)	Ground	Ground	_	-	_	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-43</u>
Only manual functions operate normally.	CONTROL UNIT (CAN)	U1010	<u>ADP-44</u>
	EEPROM	B2130	<u>ADP-49</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-48</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-45</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-46</u>
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	<u>ADP-47</u>

< ECU DIAGNOSIS INFORMATION >

DTC Index

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	Tim	ning [*]			
CONSULT display	Current mal- function	Previous mal- function	Item	Reference page	
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	<u>ADP-43</u>	
CONTROL UNIT (CAN) [U1010]	0	1-39	Control unit	<u>ADP-44</u>	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	<u>ADP-45</u>	
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	<u>ADP-46</u>	
STEERING TILT [B2116]	0	1-39	Tilt motor output	<u>ADP-47</u>	
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-48</u>	
EEPROM [B2130]	0	1-39	EEPROM	<u>ADP-49</u>	

*:

• 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

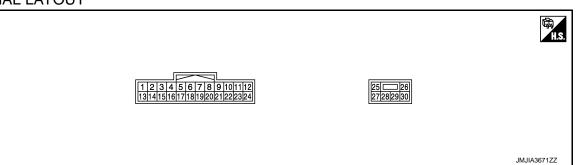
< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

INFOID:000000007566027

TERMINAL LAYOUT



PHYSICAL VALUES

	inal No. color)	Description	Condition		Voltage (V)		
+	-	Signal name	Input/ Output	Condition		(Approx.)	
1	Cround			Tilt outitab	Operate (up)	0	
(Y)	(Y) Ground	Tilt switch up signal	Input	Tilt switch	Other than above	5	
2				Changeover	RH	0	
2 (GR)	Ground	Changeover switch RH signal	Input	switch position	Neutral or LH	5	
3	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0	
(SB)	Ground	Million Switch up Signal	mput	WINTOF SWITCH	Other than above	5	
4	Ground	Mirror switch left signal	Input	ut Mirror switch	Operated (left)	0	
(LG)	Ground	MILLION SWITCH LETT SIGNAL	input		Other than above	5	
5 (R)	Ground	Door mirror sensor (pas- senger side) up/down signal	Input	Door mirror RH position		Change between 3.4 (close to peak) 0.6 (close to valley)	
6 (Y)	Ground	Door mirror sensor (driv- er side) up/down signal	Input	Door mirror LH po	sition	Change between 3.4 (close to peak) 0.6 (close to valley)	
7	Ground	Telescopic switch for-	Input	Telescopic switch	Operate (forward)	0	
(P)	Ground	ward signal	mpar		Other than above	5	
8 (LG)	Ground	UART communication (TX/RX)	Output	Ignition switch ON	1	10msec/div	

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

	inal No. e color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output			(Approx.)
10	Ground	Door mirror motor (pas- senger side) up output	Output	Door mirror RH	Operate (up)	12
(O)		signal	output		Other than above	0
11	Ground	Door mirror motor (pas- senger side) left output	Output		Operate (left)	12
(G)		signal			Other than above	0
12	Ground	Door mirror motor (driver side) down/right output	Output	Door mirror (LH)	Operate (down/right)	12
(R)		signal			Other than above	0
13	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
(LG)					Other than above	5
14		Changeover switch LH		Changeover	LH	0
(O)	Ground	signal	Input	switch position	Neutral or RH	5
15	Ground	Mirror switch down sig-	Input	out Mirror switch	Operate (down)	0
(L)		nal			Other than above	5
16	Ground	Mirror switch right signal	Input	put Mirror switch –	Operate (right)	0
(V)	Croana		mpar		Other than above	5
17 (W)	Ground	Door mirror sensor (pas- senger side) left/right signal	Input	Door mirror RH po	osition	Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (L)	Ground	Door mirror sensor (driv- er side) left/right signal	Input	Door mirror LH po	sition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
19	Ground	Telescopic switch back-	Input	Telescopic switch	Operate (backward)	0
(G)		ward signal	mpor		Other than above	5
20 (Y)	Ground	Sensor ground				0
21 (W)	Ground	Door mirror motor sen- sor power supply	Input	_		5
22	Ground	Door mirror motor (pas- senger side) down/right	Output	Door mirror (RH)	Operate (down/right)	12
(V)		output signal			Other than above	0
23	Ground	Door mirror motor (driver	Output	Door mirror (LH)	Operate (up)	12
(L) Ground		side) up output signal			Other than above	0

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

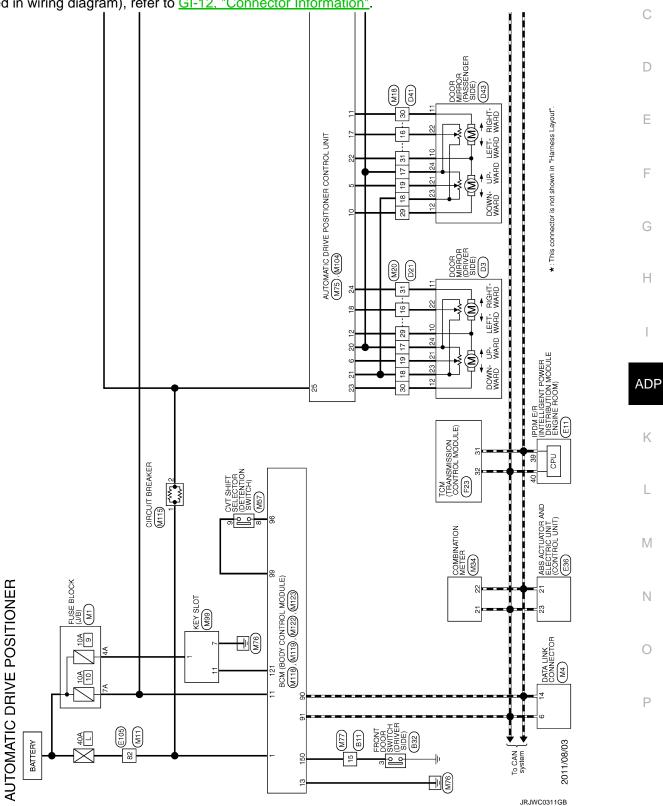
< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)	
+	-	Signal name	Input/ Output	Condition		(Approx.)	
24	Ground	Door mirror motor (driver	Output			12	
(SB)	Ground	side) left output signal	Output	Door mirror (LH)	Other than above	0	
25 (W)	Ground	Battery power supply	Input	_		Battery voltage	
26	Ground	Telescopic motor back-	Output	Steering tele-	Operate (backward)	12	
(L)	Ground	ward output signal	Output	scopic	Other than above	0	
27 (P)	Ground	Tilt & telescopic sensor power supply		_		12	
28	Ground	nd Tilt motor down output signal	Output	utput Steering tilt	Operate (down)	12	
(G)	Ground		Output		Other than above	0	
		Tilt motor up output sig-		Steering tilt	Operate (up)	12	
29	Ground	nal Dund Telescopic motor for- ward output signal			Other than above	0	
(LG)	Ground		Output	Steering tele- scopic	Operate (forward)	12	
					Other than above	0	
30 (B)	Ground	Ground		_		0	



Wiring Diagram

For connector terminal arrangements, harness layouts, and alphabets in a \bigcirc (option abbreviation; if not described in wiring diagram), refer to <u>GI-12, "Connector Information"</u>.

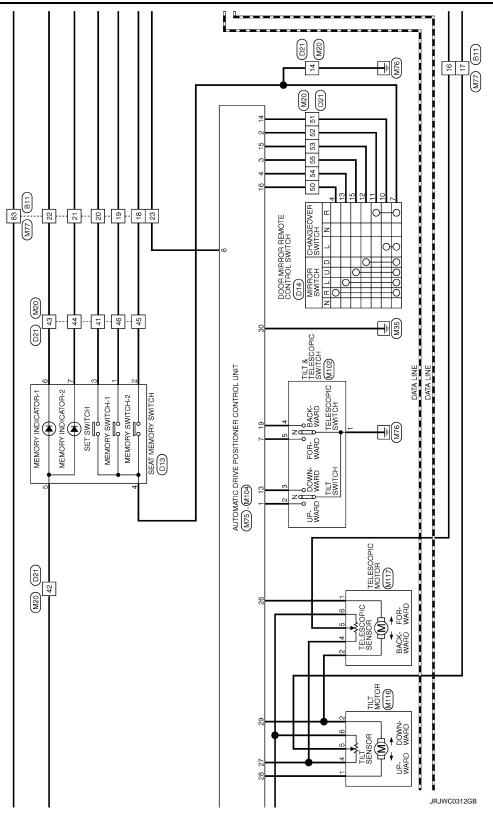


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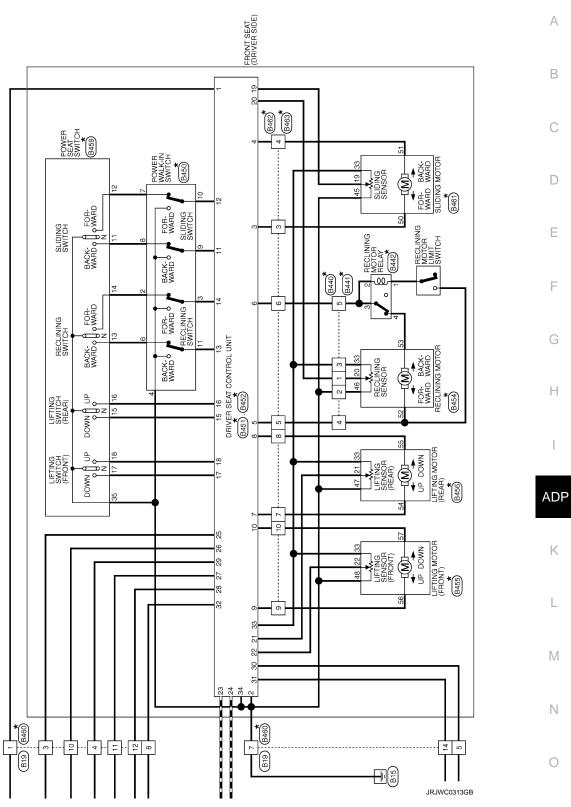
AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >



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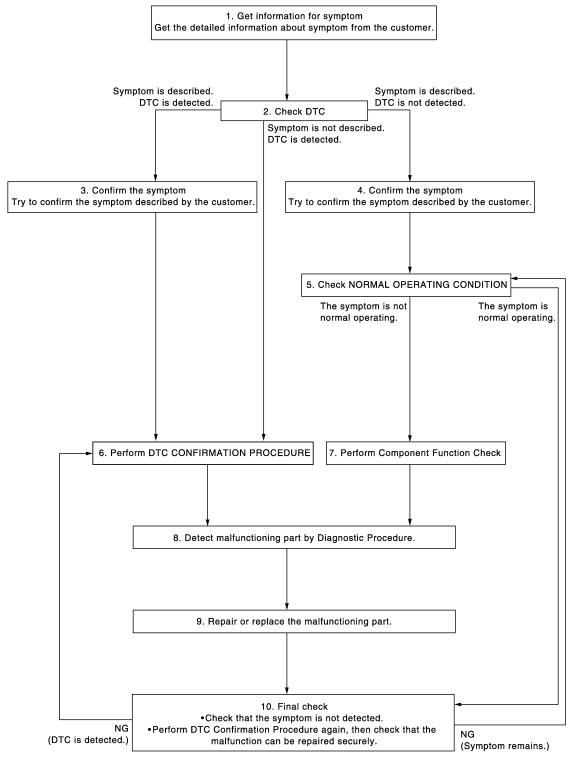
< BASIC INSPECTION >

BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000007566029

OVERALL SEQUENCE



JMJIA1702GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM
Get the detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).
>> GO TO 2.
2. CHECK DTC WITH AUTOMATIC DRIVE POSITIONER SYSTEM
Check "Self Diagnostic Result" with CONSULT. Refer to ADP-29, "DTC Index"
Is any symptom described and any DTC is displayed?
Symptom is described, DTC is displayed.>>GO TO 3. Symptom is not described, DTC is displayed.>>GO TO 6. Symptom is described, DTC is not displayed.>>GO TO 4.
3. CONFIRM THE SYMPTOM
Try to confirm the symptom described by the customer.
>> GO TO 6.
4.CONFIRM THE SYMPTOM
Try to confirm the symptom described by the customer.
>> GO TO 5.
5. CHECK NORMAL OPERATING CONDITION
Check normal operating condition. Refer to <u>ADP-120, "Description"</u> . <u>Is the incident normal operation?</u>
YES >> INSPECTION END NO >> GO TO 7.
6.PERFORM DTC CONFIRMATION PROCEDURE
Perform the confirmation procedure for the detected DTC.
Is the DTC displayed?
YES >> GO TO 8.
NO >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . 7. PERFORM COMPONENT FUNCTION CHECK
Perform the component function check for the isolated malfunctioning point.
>> 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.
>> GO TO 9. 9. REPARE OR REPLACE THE MALFUNCTIONING PARTS
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

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. <u>Are all malfunctions corrected?</u>

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

YES >> INSPECTION END Symptom is detected.>> GO TO 5. DTC is detected.>> GO TO 6.

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL < BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-NAL

Description

INFOID:000000007566030

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

Function	Condition	Procedure	С
Memory (Seat, steering, mirror)	Erased	Perform storing	
Intelligent Kov interlock	Erased	Perform initialization	
Intelligent Key interlock	Elaseu	Perform storing	D

NOTE:

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

Work Procedure	
1.MEMORY STORAGE	F
Perform memory storage. Refer to ADP-41, "Work Procedure".	
>> GO TO 2.	G
2.INTELLIGENT KEY INTERLOCK STORAGE	
Perform Intelligent Key interlock storage. Refer to <u>ADP-42, "Work Procedure"</u> .	Н
>> END	
	I

ADDITIONAL SERVICE WHEN REMOVING DRIVER SEAT CONTROL UNIT < BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REMOVING DRIVER SEAT CONTROL UNIT

Description

INFOID:000000007566032

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

Function	on Condition Procedure		
Memory (Seat, steering, mirror)	Erased	Perform storing	
Intelligent Key interlock	Freed	Perform initialization	
	Erased	Perform storing	

NOTE:

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

Work Procedure

INFOID:000000007566033

1.MEMORY STORAGE

Perform memory storage. Refer to ADP-41, "Work Procedure".

>> GO TO 2. 2.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to ADP-42, "Work Procedure".

>> END

MEMORY STORING

< BASIC INSPECTION >

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.

Work Procedure

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

NOTE:

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

1.STEP 1

Check the following conditions.

Ignition switch: ON

CVT shift selector: P position

>> GO TO 2.

2.STEP 2

- 1. Adjust driver seat and outside mirror position manually.
- 2. Push set switch.
 - NOTE:
 - Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
 - Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.
- 3. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch. **NOTE:**
 - To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
 - To modify driver seat positions, memory indicator will be turned OFF for 0.5 second, then turned ON for 5 seconds.
- 4. Confirm the operation of each part with memory operation.

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INFOID:000000007566034

INFOID:000000007566035

INTELLIGENT KEY INTERLOCK STORING

< BASIC INSPECTION >

INTELLIGENT KEY INTERLOCK STORING

Description

INFOID:000000007566036

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

Work Procedure

INFOID:000000007566037

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

1.STEP 1

Check the following conditions.

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

>> GO TO 2.

2.STEP 2

 Push set switch. NOTE:

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

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

NOTE:

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

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

>> END

DTC/CIRCUIT DIAGNOSIS U1000 CAN COMM CIRCUIT

Description

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.

DTC Logic

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
U1000	CAN COMM CIR- CUIT	 Driver seat control unit cannot communicate to other control units. Driver seat control unit cannot communicate for more than the specified time. 	 Harness or connectors (CAN communication line is open or shorted)
TC CONF	IRMATION PROC	EDURE	
.STEP 1			
urn ignition	switch ON and wai	t at least 3 seconds.	
~~ (GO TO 2.		
STEP 2	30 10 2.		
heck "Self o	diagnostic result" wi	th CONSULT.	
s the DTC d	etected?		
	Refer to <u>ADP-43, "E</u> NSPECTION END	Diagnosis Procedure".	
Diagnosis	Procedure		INFOID:00000007566040
Refer to LAN	-15, "Trouble Diagr	nosis Flow Chart".	
	epair Requirem		INFOID:00000007566041
	-40, "Description".		
$\Delta t \Delta r + \Delta A A A A A A A A A A A A A A A A A A$	-40, Description.		
terer to <u>ADP</u>	· · · · · · · · · · · · · · · · · · ·		

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INFOID:000000007566038

INFOID:000000007566039

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000007566042

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
U1010	CONTROL UNIT (CAN)	When detecting error during the initial diagnosis of CAN con- troller of driver seat control unit.	Driver seat control unit

Diagnosis Procedure

INFOID:000000007566043

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

DTC DETECTION LOGIC

B2112 SLIDING MOTOR

DTC Logic

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INFOID:000000007566044

DTC No. Trouble diagnosis name DTC detecting condition Possible cause The driver seat control unit detects the output of sliding Driver seat control unit B2112 SEAT SLIDE motor output terminal for 0.1 second or more even if Slide motor harness is shorted the sliding switch is not input. DTC CONFIRMATION PROCEDURE D **1.**PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. 1. 2. Check "Self diagnostic result" with CONSULT. Is the DTC detected? YES >> Refer to ADP-45, "Diagnosis Procedure". NO >> INSPECTION END **Diagnosis** Procedure INFOID:00000007566045 1.CHECK SLIDING MOTOR CIRCUIT (POWER SHORT) 1. Turn ignition switch OFF. Н 2. Disconnect sliding motor connector and driver seat control unit connector. Check voltage between sliding motor harness connector and ground. 3. (+) Voltage (V) Sliding motor (-) (Approx.) Connector Terminals ADP 50 0 B461 Ground 51 Is the inspection result normal? Κ YES >> GO TO 2. NO >> Repair or replace harness or connector. 2.CHECK DRIVER SEAT CONTROL UNIT OUTPUT SIGNAL L 1. Connect driver seat control unit connector. 2. Check voltage between driver seat control unit harness connector and ground. Μ (+) Voltage (V) Driver seat control unit (-) (Approx.) Ν Connector Terminals 3 B451 Ground 0 4 Is the inspection result normal? YES >> Check intermittent incident. Refer to .GI-40, "Intermittent Incident". >> Replace driver seat control unit. Refer to ADP-121, "Removal and Installation" Ρ NO

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

DTC Logic

INFOID:000000007566046

INFOID:00000007566047

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2113	SEAT RECLINING	The driver seat control unit detects the output of reclin- ing motor output terminal for 0.1 second or more even if the reclining switch is not input.	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

YES >> Refer to <u>ADP-46, "Diagnosis Procedure"</u>. NO >> INSPECTION END

Diagnosis Procedure

1.CHECK RECLINING MOTOR CIRCUIT (POWER SHORT)

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

(+) Reclining motor		()	Voltage (V) (Approx.)	
Connector	Terminals		(
B454	52	Ground	0	
D404	53	Giouna	U	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace harness or connector.

2.check driver seat control unit output signal

1. Connect driver seat control unit connector.

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

,	+) control unit	()	Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B451	5	5 Ground	0	
B431	6		0	

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> Replace driver seat control unit. Refer to ADP-121, "Removal and Installation".

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

DTC Logic

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INFOID:000000007566048

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting cond	ition	Possible cause
B2116	STEERING TILT	The automatic drive positioner cont output of reclining motor output term or more even if the tilt switch is not	inal for 0.1 second	 Automatic drive positioner contro unit Tilt motor harness is shorted
DTC CON	FIRMATION PROC	EDURE		
1.PERFC	RM DTC CONFIRMA	TION PROCEDURE		
2. Check <u>s the DTC</u> YES >	gnition switch ON. ("Self diagnostic resul () <u>detected?</u> > Refer to <u>ADP-47, "C</u> > INSPECTION END			
Diagnos	is Procedure			INFOID:00000007566
	TILT MOTOR CIRCI	IIT (POWER SHORT)		
2. Discor		positioner control unit connect notor harness connector and g		connector.
	(+) Tilt motor		()	Voltage (V)
C	Connector	Terminals	()	(Approx.)
	M116	2	Ground	0
s the insp	ection result normal?			
NO > 2.CHECK	ect automatic drive pos	arness or connector. R POSITIONER CONROL UN sitioner control unit connector. omatic drive positioner control		
	(+)			
	Automatic drive position	er control unit	(—)	Voltage (V) (Approx.)
	Connector	Terminals		
C	N404	28	Ground	0
C	M104	29		

< DTC/CIRCUIT DIAGNOSIS >

B2128 UART COMMUNICATION LINE

Description

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

DTC Logic

INFOID:000000007566051

INFOID:000000007566050

DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2128	UART COMM	The communication between driver seat control unit and auto drive positioner control unit is interrupted for a period of time.	 UART communication line (UART communication line is open or shorted) Driver seat control unit Automatic drive positioner control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION PROCEDURE

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

Is the DTC detected?

- YES >> Refer to <u>ADP-48</u>, "Diagnosis Procedure".
- NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000007566052

1. CHECK UART COMMUNICATION LINE CONTINUITY

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

Driver seat control unit		Automatic drive positioner control unit		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	32	M75	8	Existed	

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

Driver seat	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	32		Not existed	

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> Repair or replace harness or connector.

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

1.

2.

INFOID:000000007566053 DTC DETECTION LOGIC В Trouble diagnosis DTC No. DTC detecting condition Possible cause name С B2130 EEPROM Driver seat control unit detected CPU malfunction. Driver seat control unit DTC CONFIRMATION PROCEDURE D 1.PERFORM DTC CONFIRMATION PROCEDURE Turn ignition switch ON. Е Check "Self diagnostic result" with CONSULT. Is the DTC detected? >> Refer to ADP-49, "Diagnosis Procedure". YES F NO >> INSPECTION END **Diagnosis** Procedure INFOID:000000007566054 **1.**REPLACE DRIVER SEAT CONTROL UNIT Replace driver seat control unit. Refer to ADP-121, "Removal and Installation". Н >> INSPECTION END

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT DRIVER SEAT CONTROL UNIT

DRIVER SEAT CONTROL UNIT : Diagnosis Procedure

INFOID:000000007566055

NOTE:

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

1.CHECK FUSIBLE LINK

Check that the following fusible link is not fusing.

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

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace the blown fuse after repairing affected circuit.

2. CHECK POWER SUPPLY

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

(-	+)		
Driver seat	control unit	(-)	Voltage (V) (Approx.)
Connector	Terminals		(//pp/0x.)
B451	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO-1 >> Repair or replace harness between driver seat control unit and fusible link L (40 A).

NO-2 >> Check circuit breaker and replace it if necessary.

${f 3.}$ CHECK GROUND CIRCUIT

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

Driver seat	control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B451	2	Giouna	Existed	
B452	34		LAISIEU	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness or connector.

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000007566056

NOTE:

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

1.CHECK FUSIBLE LINK

Check that the following fusible link is not fusing.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal	name	Fusible	e link No.	
Battery pov		L (40 A)		—
NO-2 >> Check circuit br	e harness between driver eaker and replace it if nece	seat control unit and fusible	e link L (40 A).	_
2.CHECK POWER SUPPL	Y			
	rive positioner control unit	connector. control unit harness conne	ctor and ground.	
(+)			
Automatic drive pos	sitioner control unit	()	Voltage (V) (Approx.)	
Connector	Terminals			
M104	25	Ground	Battery voltage	
Check continuity between th Automatic drive pos		er control unit harness conr		
Automatic drive pos	sitioner control unit		Continuity	
Connector	Terminal	Ground		
M104 s the inspection result norm	30		Existed	
YES >> INSPECTION E NO >> Repair or replac	ND the harness or connector.			

< DTC/CIRCUIT DIAGNOSIS >

SLIDING SWITCH

Component Function Check

INFOID:000000007566057

1. CHECK FUNCTION

1. Select "SLIDE SW-FR", "SLIDE SW-RR" in "Data monitor" mode with CONSULT.

2. Check sliding switch signal under the following conditions.

Monitor item	Con	Status	
SLIDE SW-FR		Operate (forward)	ON
SLIDE SW-FR		Other than the above	OFF
SLIDE SW-RR	Sliding switch	Operate (backward)	ON
		Other than the above	OFF

Is the indication normal?

YES >> INSPECTION END NO >> Refer to <u>ADP-52, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566058

1.CHECK POWER SEAT SWITCH (SLIDING SWITCH) INPUT SIGNAL

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

	(+) Power seat switch		Voltage (V) (Approx.)
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B459	11	Ground	12
D435	12	Gibana	12

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

$2. {\sf CHECK \ POWER \ SEAT \ SWITCH \ (SLIDING \ SWITCH) \ CIRCUIT}$

1. Turn ignition switch OFF.

2. Disconnect power walk-in switch connector.

 Check continuity between power walk-in switch harness connector and power seat switch harness connector.

Power wa	Ik-in switch	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B450	7	B459	12	Existed
B430	8	D409	11	LAISteu

4. Check continuity between power walk-in switch harness connector and ground.

Power wa	Ik-in switch		Continuity
Connector	Terminal	Ground	Continuity
B450	7	Gibunu	Not existed
6450	8		INDI EXISIEU

Is the inspection result normal?

YES >> GO TO 4.

SLIDING SWITCH

DTC/CIRCUIT DIA	GNOSIS >				
	replace harness or co	nnector.			
3. CHECK POWER S					
	nponent Inspection (P	ower Seat	Switch)".		
s the inspection result					
YES >> GO TO 8.			104 " D	-1	
4	ower seat switch. Ref /ALK-IN SWITCH (SL				<u>ion"</u> .
				SIGNAL	
 Turn ignition switc Check voltage bet 	ween power walk-in s	witch harne	ess connecto	r and ground.	
	(+)				
Pow	ver walk-in switch			(—)	Voltage (V) (Approx.)
Connector	Terminal	ls			
B450	9 10		Gr	round	12
s the inspection result	i normal?				
YES >> GO TO 6. NO >> GO TO 5.					
CHECK POWER W . Turn ignition switc . Disconnect driver	seat control unit conn	ector.			
 CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. 	h OFF. seat control unit conn between driver seat c	ector.	harness con	nector and pov	wer walk-in switch harr
 D.CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. 	h OFF. seat control unit conn between driver seat c control unit	ector. control unit	harness con Power walk-i	nector and pov	wer walk-in switch harr
 CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. 	h OFF. seat control unit conn- between driver seat c control unit Terminal	ector.	harness con Power walk-i	nector and pov in switch Terminal	
 D.CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. 	h OFF. seat control unit conn between driver seat c control unit	ector. control unit	harness con Power walk-i ector	nector and pov	
 D.CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. Driver seat Connector B452	h OFF. seat control unit conn- between driver seat c control unit Terminal 11	ector. control unit Conn B4:	harness con Power walk-i ector 50	nector and pov in switch Terminal 9 10	Continuity Existed
D.CHECK POWER W I. Turn ignition switc Disconnect driver Connector. Driver seat Connector B452 Check continuity b	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12	ector. control unit Conn B4:	harness con Power walk-i ector 50	nector and pov in switch Terminal 9 10	Existed
 D.CHECK POWER W Turn ignition switc Disconnect driver Check continuity I connector. Driver seat Connector B452 4.	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12 between driver seat co	ector. control unit Conn B4: ontrol unit ha	harness con Power walk-i ector 50 arness conne	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed
D.CHECK POWER W 1. Turn ignition switc 2. Disconnect driver 3. Check continuity I connector. Driver seat Connector B452 4. Check continuity to Driver	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12 between driver seat co	ector. control unit Conn B4: ontrol unit ha	harness con Power walk-i ector 50 arness conne	nector and pov in switch Terminal 9 10	Existed
D.CHECK POWER W 1. Turn ignition switc 2. Disconnect driver 3. Check continuity I connector. Driver seat Connector B452 4. Check continuity k Drive Connector B452 s the inspection result	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12 between driver seat co er seat control unit Termina 11 12 t normal?	ector. control unit Conn B4: ontrol unit ha	harness con Power walk-i ector 50 arness conne Gr	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed nd. Continuity Not existed
D.CHECK POWER W Turn ignition switc Disconnect driver Connector. Driver seat Connector B452 Connector B452 S the inspection result YES >> Replace d	h OFF. seat control unit connibility of the seat control unit control unit terminal 11 12 control unit terminal 11 12 control unit terminal 11 12 to control unit terminal 11 12 to control unit terminal 11 12 to control unit.	ector. control unit Conn B4: ontrol unit ha	harness con Power walk-i ector 50 arness conne Gr	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed nd. Continuity Not existed
D.CHECK POWER W 1. Turn ignition switc 2. Disconnect driver 3. Check continuity I connector. Driver seat Connector B452 4. Check continuity b Connector B452 s the inspection result YES >> Replace d NO >> Repair or	h OFF. seat control unit conn- between driver seat control unit Terminal 11 12 between driver seat control unit rermina 11 12 t normal? Iriver seat control unit. replace harness or co	ector. control unit Conn B4: ontrol unit ha al Refer to Al nnector.	harness con Power walk-i ector 50 arness conne Gr DP-121, "Re	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed nd. Continuity Not existed
D.CHECK POWER W Turn ignition switc Disconnect driver Connector B452 Check continuity b Connector B452 Check continuity b Drive Connector B452 Sthe inspection result YES >> Replace d NO >> Repair or D.CHECK POWER W	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12 between driver seat co er seat control unit Termina 11 12 t normal? Iriver seat control unit. replace harness or co /ALK-IN SWITCH GRO	ector. control unit Conn B4: ontrol unit ha al Refer to Al nnector.	harness con Power walk-i ector 50 arness conne Gr DP-121, "Re	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed nd. Continuity Not existed
D.CHECK POWER W 1. Turn ignition switc 2. Disconnect driver 3. Check continuity I connector. Driver seat Connector B452 4. Check continuity I Connector B452 s the inspection result YES >> Replace d NO >> Repair or D.CHECK POWER W 1. Turn ignition switc	h OFF. seat control unit conn- between driver seat c control unit Terminal 11 12 between driver seat co er seat control unit Termina 11 12 t normal? Iriver seat control unit. replace harness or co /ALK-IN SWITCH GRO	ector. control unit B4: ontrol unit ha al Refer to Al nnector. OUND CIRO	harness con Power walk-i ector 50 arness conne Gr DP-121, "Re CUIT	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed allation".
D.CHECK POWER W Turn ignition switc Disconnect driver Connector B452 Connector B452 Connector B452 Sthe inspection result YES >> Replace d NO >> Repair or O.CHECK POWER W Turn ignition switc Connector	h OFF. seat control unit connected to the tween driver seat control unit Terminal 11 12 Detween driver seat control unit reminal 11 12 Detween driver seat control unit. 11 12 Detween driver seat control unit. 12 11 12 12 12 14 15 16 17 17 17 17 18 19 19 10 10 10 10 10 10 10 10 10 10	ector. control unit B4: ontrol unit ha al Refer to Al nnector. OUND CIRO	harness con Power walk-i ector 50 arness conne Gr DP-121, "Re CUIT	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed A. Continuity Not existed A.
D.CHECK POWER W Turn ignition switc Disconnect driver Connector B452 Connector B452 Connector B452 Sthe inspection result YES >> Replace d NO >> Repair or O.CHECK POWER W Turn ignition switc Connector	h OFF. seat control unit connected to the tween driver seat control unit control unit Terminal 11 12 Detween driver seat control unit reseat control unit 11 12 Detween driver seat control unit. replace harness or control unit.	ector. control unit B4: ontrol unit ha al Refer to Al nnector. OUND CIRO	harness con Power walk-i ector 50 arness conne Gr DP-121, "Re CUIT rness connec	nector and pov in switch Terminal 9 10 ector and grour	Continuity Existed allation".

1.CHECK POWER WALK-IN SWITCH

Refer to ADP-54, "Component Inspection (Power Walk-in Switch)".

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace power walk-in switch. Refer to <u>ADP-125</u>, "Removal and Installation".

8.CHECK INTERMITTENT INCIDENT

Refer to GI-40, "Intermittent Incident".

>> INSPECTION END

Component Inspection (Power Seat Switch)

1.CHECK POWER SEAT SWITCH

- 1. Turn ignition switch OFF.
- 2. Disconnect power seat switch connector.
- 3. Check continuity between power seat switch terminals under the following conditions.

Terr	inal Condition		Condition	
11			Operate (backward)	Existed
11	35		Other than the above	Not existed
12	35	Sliding switch	Operate (forward)	Existed
12			Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-124, "Removal and Installation"</u>.

Component Inspection (Power Walk-in Switch)

INFOID:000000007566060

INFOID:00000007566059

1.CHECK POWER WALK-IN SWITCH 1

1. Turn ignition switch OFF.

2. Disconnect power walk-in switch connector.

3. Check continuity between power walk-in switch terminals under the following conditions.

Terr	minal	Condition		Continuity
0			Operate (backward)	Existed
9			Other than the above	Not existed
10	- 4	Sliding switch	Operate (forward)	Existed
10			Other than the above	Not existed

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace power walk-in switch. Refer to <u>ADP-125, "Removal and Installation"</u>.

2. CHECK POWER WALK-IN SWITCH 2

Check continuity between power walk-in switch terminals under the following conditions.

	Terminal Con		dition	Continuity	
	0	0		Operate (backward)	Not existed
	9	8	Oliding owitch	Other than the above	Existed
_	10	7	Sliding switch	Operate (forward)	Not existed
	10	I		Other than the above	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power walk-in switch. Refer to <u>ADP-125, "Removal and Installation"</u>.

< DTC/CIRCUIT DIAGNOSIS > RECLINING SWITCH

ion Check			INFOID:00000007566061
		mode with CONSUL	т.
	Condition		Status
			ON
Reclining switch			OFF
			ON OFF
?	Other than		011
ON END P-55, "Diagnosis P	rocedure".		
ure	<u></u> .		INFOID:00000007566062
	INING SWITCH) INPL	JT SIGNAI	
seat switch connecto ON.		r and ground.	
(+)			
er seat switch		()	Voltage (V) (Approx.)
Termina	ls		
13		Ground	12
AT SWITCH (RECL		CUIT	
etween power walk-	in switch harness cor		eat switch harness con-
		1	Continuity
	Connector		
6	B459	14	Existed
0			
-	n switch harness conr	nector and ground.	
-	n switch harness conr	nector and ground.	Continuity
etween power walk-in		Ground	Continuity
	AT SWITCH (RECL (+) (+) (+) (+) (+) (+) (AT SWITCH (RECL (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	A-FR", "RECLN SW-RR" in "Data monitor" tch signal under the following conditions.	4-FR", "RECLN SW-RR" in "Data monitor" mode with CONSUL tch signal under the following conditions. Image: Condition image: Conditimate: Condited image: Condition image: Condition image: Condition

YES >> GO TO 4.

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harness or connector.

3.CHECK POWER SEAT SWITCH

Refer to ADP-57, "Component Inspection (Power Seat Switch)".

Is the inspection result normal?

YES >> GO TO 8.

NO >> Replace power seat switch. Refer to <u>ADP-124, "Removal and Installation"</u>.

4.CHECK POWER WALK-IN SWITCH (RECLINING SWITCH) INPUT SIGNAL

1. Turn ignition switch ON.

2. Check voltage between power walk-in switch harness connector and ground.

(Power wa	(+) Power walk-in switch		Voltage (V) (Approx.)
Connector	Connector Terminals		(, , , , , , , , , , , , , , , , , , ,
B450	3 11	Ground	12

Is the inspection result normal?

YES >> GO TO 6. NO >> GO TO 5.

5.CHECK POWER WALK-IN SWITCH (RECLINING SWITCH) CIRCUIT

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

Driver sea	t control unit	Power walk-in switch				Continuity
Connector	Terminal	Connector	Terminal	Continuity		
B452	13 B450		11	Existed		
D432	14	В450	3	EXISIEU		

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

Driver se	at control unit		Continuity
Connector	Connector Terminal		Continuity
B452	13	Ground	Not existed
D432	14		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

6.CHECK POWER WALK-IN SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Check continuity between power walk-in switch harness connector and ground.

Power wa	lk-in switch		Continuity
Connector	Connector Terminal		Continuity
B450	4		Existed

Is the inspection result normal?

YES >> GO TO 7.

NO >> Repair or replace harness or connector.

7.CHECK POWER WALK-IN SWITCH

Refer to ADP-57. "Component Inspection (Power Walk-in Switch)".

RECLINING SWITCH

CHECK INTERMIT	TENT INCIDENT	Refer to <u>ADP-125,</u>	"Removal and Installation	<u>1"</u> .
efer to <u>GI-40, "Interm</u>	ittent Incident".			
>> INSPECTI	ON END			
component Inspe	ction (Power Se	eat Switch)		INFOID:000000007566063
CHECK POWER SI	EAT SWITCH			
. Turn ignition switcl				
. Disconnect power	seat switch connect		lar the following condition	
	etween power seat		der the following condition	15.
Ter	minal	(Condition	Continuity
13			Operate (backward)	Existed
	35	Reclining switch	Other than the above	Not existed
14		C C	Operate (forward)	Existed
			Other than the above	Not existed
YES >> INSPECTI NO >> Replace p	ON END ower seat switch. Re		emoval and Installation".	NEOID-00000007568084
YES >> INSPECTI NO >> Replace p Component Inspe .CHECK POWER W	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF.	alk-in Switch)	emoval and Installation".	INFOID:000000007566064
YES >> INSPECTI NO >> Replace p Component Inspe CHECK POWER W . Turn ignition switcl . Disconnect power	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn	alk-in Switch)	emoval and Installation".	
YES >> INSPECTI NO >> Replace po component Inspe .CHECK POWER W Turn ignition switcl Disconnect power Check continuity b	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn	alk-in Switch) ector. in switch terminals		
YES >> INSPECTI NO >> Replace po component Inspe .CHECK POWER W . Turn ignition switcl Disconnect power . Check continuity b	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk-	alk-in Switch) ector. in switch terminals	under the following condit	ions.
YES >> INSPECTI NO >> Replace po Component Inspe .CHECK POWER W . Turn ignition switcl . Disconnect power . Check continuity b	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk- minal	alk-in Switch) ector. in switch terminals	under the following condit	ions.
YES >> INSPECTI NO >> Replace po Component Inspe .CHECK POWER W . Turn ignition switch Disconnect power . Check continuity b	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk-	alk-in Switch) ector. in switch terminals	under the following condit Condition Operate (forward)	ions. Continuity Existed
YES >> INSPECTI NO >> Replace po component Inspe .CHECK POWER W Turn ignition switch Disconnect power Check continuity b Ter 3	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk- minal	alk-in Switch) ector. in switch terminals	under the following condit Condition Operate (forward) Other than the above	ions. Continuity Existed Not existed
YES >> INSPECTI NO >> Replace po Component Inspe CHECK POWER W . Turn ignition switch Disconnect power . Check continuity b Ter 3 11 <u>sthe inspection result</u> YES >> GO TO 2. NO >> Replace po	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk- minal 4 normal? ower walk-in switch.	alk-in Switch) ector. in switch terminals Reclining switch	Under the following condit Condition Operate (forward) Other than the above Operate (backward)	ions. Continuity Existed Not existed Existed Not existed
YES >> INSPECTI NO >> Replace po Component Inspe CHECK POWER W . Turn ignition switch Disconnect power . Check continuity b Ter 3 11 <u>s the inspection result</u> YES >> GO TO 2. NO >> Replace po CHECK POWER W	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk- minal 4 <u>normal?</u> ower walk-in switch. ALK-IN SWITCH 2	alk-in Switch) ector. in switch terminals Reclining switch Refer to <u>ADP-125.</u>	Under the following condit Condition Operate (forward) Other than the above Operate (backward) Other than the above	ions. Continuity Existed Not existed Existed Not existed
NO >> Replace proceedings of the second seco	ON END ower seat switch. Re ction (Power W ALK-IN SWITCH 1 n OFF. walk-in switch conn etween power walk- minal 4 <u>normal?</u> ower walk-in switch. ALK-IN SWITCH 2	alk-in Switch) ector. in switch terminals Reclining switch Refer to <u>ADP-125.</u> witch terminals under	Under the following condit	ions. Continuity Existed Not existed Existed Not existed

2	2	Reclining switch	Not existed	
3	Z		Other than the above	Existed
11	6		Operate (backward)	Not existed
11	6		Other than the above	Existed
be inspection result	inspection result normal?			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power walk-in switch. Refer to <u>ADP-125</u>, "Removal and Installation".

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LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (FRONT)

Component Function Check

INFOID:000000007566065

1. CHECK FUNCTION

1. Select "LIFT FR SW-UP", "LIFT FR SW-DN" in "Data monitor" mode with CONSULT.

2. Check lifting switch (front) signal under the following conditions.

Monitor item	Condition		Status
LIFT FR SW-UP		Operate (up)	ON
	Lifting quitch (frant)	Other than the above	OFF
LIFT FR SW-DN	 Lifting switch (front) 	Operate (down)	ON
		Other than the above	OFF

Is the indication normal?

YES >> INSPECTION END NO >> Refer to <u>ADP-58, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566066

1. CHECK LIFTING SWITCH (FRONT) INPUT SIGNAL

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

(+)	(-)	Voltage (V) (Approx.)	
Power s	eat switch			
Connector	Connector Terminals		()] · · · · · /	
B459	17	Ground	12	
D435	18	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (FRONT) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver seat	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	17 B459		17	Existed
D452	18	D400	18	Existed

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

Driver sea	t control unit		Continuity
Connector	Connector Terminal		Continuity
B452	17	Ground	Not existed
B452	18		NOI EXISIED

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >			
NO >> Repair or replace harness or cor	nnector.		
3. CHECK LIFTING SWITCH (FRONT)			А
Refer to ADP-59, "Component Inspection".			
Is the inspection result normal?			В
YES >> Check intermittent incident. Refe NO >> Replace power seat switch. Refe	er to <u>GI-40, "Intermittent Incident"</u> . er to <u>ADP-124, "Removal and Installation"</u> .		
Component Inspection		INFOID:000000007566067	С
1.CHECK POWER SEAT SWITCH			
			_
1. Turn ignition switch OFF.			D
2. Disconnect power seat switch connector			D
2. Disconnect power seat switch connector	: vitch terminals under the following conditions.		D

	lern	nınal	Condition		Continuity		
-	17			Operate (down)	Existed		
	17	25		Lifting owitch (front)	Other than the above	Not existed	F
-	18	35	Lifting switch (front)	Operate (up)	Existed		
	10			Other than the above	Not existed	G	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-124, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

LIFTING SWITCH (REAR)

Component Function Check

INFOID:000000007566068

1. CHECK FUNCTION

1. Select "LIFT RR SW-UP", "LIFT RR SW-DN" in "Data monitor" mode with CONSULT.

2. Check lifting switch (rear) signal under the following conditions.

Monitor item	Co	Status	
LIFT RR SW-UP	Operate (up)	ON	
	Lifting quitch (rear)	Other than the above	OFF
LIFT RR SW-DN	 Lifting switch (rear) 	Operate (down)	ON
		Other than the above	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-60, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566069

1.CHECK LIFTING SWITCH (REAR) INPUT SIGNAL

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

	+) eat switch	()	Voltage (V) (Approx.)	
Connector			(Approx.)	
B459	15	Ground	12	
D439	16	Ground	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK LIFTING SWITCH (REAR) CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit connector.

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

Driver sea	t control unit	Power seat switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B452	15	B459	15	Existed	
D452	16	D409	16	LXISIEU	

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B452	15	Gibunu	Not existed
D432	16		NUL EXISIEU

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3. CHECK LIFTING SWITCH (REAR)	А
Refer to ADP-61, "Component Inspection".	
Is the inspection result normal?	В
 YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>. NO >> Replace power seat switch. Refer to <u>ADP-124, "Removal and Installation"</u>. 	
Component Inspection	С
1.CHECK POWER SEAT SWITCH	
 Turn ignition switch OFF. Disconnect power seat switch connector. 	D
3. Check continuity between power seat switch terminals under the following conditions.	Е

Terminal		Condition		Continuity				
15			Operate (down)	Existed				
15	25	Lifting switch (rear)			lifting owitch (rear)	Other than the above	Not existed	F
40	35		Operate (up)	Existed				
16			Other than the above	Not existed	G			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch. Refer to <u>ADP-124, "Removal and Installation"</u>.

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TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >

TILT SWITCH

Component Function Check

INFOID:000000007566071

INFOID:000000007566072

1.CHECK FUNCTION

1. Select "TILT SW-UP", "TILT SW-DOWN" in "Data monitor" mode with CONSULT.

2. Check tilt switch signal under the following conditions.

Monitor item	Cor	Status	
TILT SW-UP	Operate (up)	ON	
	Tile av itali	Other than the above	OFF
TILT SW-DOWN	Tilt switch	Operate (down)	ON
		Other than the above	OFF

Is the indication normal?

YES >> INSPECTION END NO >> Refer to <u>ADP-62, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1.CHECK TILT SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt & telescopic switch connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between tilt & telescopic switch harness connector and ground.

(+)			
Tilt & telescopic switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals			
M102	2	Ground	5	
WI102	3	Croand	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TILT SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

 Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive po	ositioner control unit	Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	1	M102	2	Existed	
W75	M75 M102	WITOZ	3	LXISIEU	

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M75	1	Giouna	Not existed
WI7 5	13		INDL EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-122, "Removal and Installation"</u>.

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >
NO >> Repair or replace harness or connector.
3. CHECK TILT & TELESCOPIC SWITCH
Refer to ADP-63, "Component Inspection".
Is the inspection result normal?
 YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>. NO >> Replace tilt & telescopic switch. Refer to <u>ADP-126, "Removal and Installation"</u>.
Component Inspection
1.CHECK TILT & TELESCOPIC SWITCH
 Turn ignition switch OFF. Disconnect tilt & telescopic switch connector. Check continuity between tilt & telescopic switch terminals under the following conditions.

	Continuity	Condition		ninal	Tern
_	Existed	Operate (up)			2
	Not existed	Other than the above	Tile av it als	4	2
	Existed	Operate (down)	Tilt switch		0
	Not existed	Other than the above			3

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-126. "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

TELESCOPIC SWITCH

Component Function Check

INFOID:000000007566074

1. CHECK FUNCTION

1. Select "TELESCO SW-FR", "TELESCO SW-RR" in "Data monitor" mode with CONSULT.

2. Check telescopic switch signal under the following conditions.

Monitor item	Con	Status	
TELESCO SW-FR		Operate (forward)	ON
	Telessenia quitab	Other than the above	OFF
TELESCO SW-RR		Operate (backward)	ON
		Other than the above	OFF

Is the indication normal?

YES >> INSPECTION END NO >> Refer to <u>ADP-64, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566075

1.CHECK TELESCOPIC SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect tilt & telescopic switch connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between tilt & telescopic switch harness connector and ground.

(+) Tilt & telescopic switch		(-)	Voltage (V) (Approx.)
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,
M102	4	Ground	5
	5	Ground	5

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK TELESCOPIC SWITCH CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit connector.

3. Check continuity between automatic drive positioner control unit harness connector and tilt & telescopic switch harness connector.

Automatic drive positioner control unit		Tilt & telescopic switch		Continuity
Connector	Terminal	Connector Terminal		Continuity
M75	7	M102	5	Existed
W75	19	WITOZ	4	LXISIEU

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M75	7	Giodila	Not existed
	19		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-122, "Removal and Installation"</u>.

TELESCOPIC SWITCH

< DTC/CIRCUIT DIAGNOSIS >			
NO >> Repair or replace harness or co	nnector.		
3. CHECK TILT & TELESCOPIC SWITCH			А
Refer to ADP-65, "Component Inspection".			
Is the inspection result normal?			В
YES >> Check intermittent incident. Refe NO >> Replace tilt & telescopic switch.	er to <u>GI-40, "Intermittent Incident"</u> . Refer to <u>ADP-126, "Removal and Installat</u>	ion".	
Component Inspection		INFOID:000000007566076	С
1.CHECK TILT & TELESCOPIC SWITCH			
1. Turn ignition switch OFF.			D
2. Disconnect tilt & telescopic switch connect		ditiona	
3. Check continuity between tilt & telescop	ic switch terminals under the following con		Е
Terminal	Condition	Continuity	

	Terminal		L	ondition	Continuity	
	4		Operat	Operate (backward)	Existed	-
	4		T .1	Other than the above	Not existed	F
_	_		Telescopic switch	Operate (forward)	Existed	-
	5			Other than the above	Not existed	G
-						-

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch. Refer to <u>ADP-126. "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Component Function Check

INFOID:000000007566077

INFOID:000000007566078

1. CHECK FUNCTION

1. Select "MEMORY SW 1", "MEMORY SW 2", "SET SW" in "Data monitor" mode with CONSULT.

2. Check seat memory switch signal under the following conditions.

Monitor item		Condition	
MEMORY SW 1	Memory switch 1	Push	ON
	Memory Switch 1	Other than the above	OFF
MEMORY SW/ 2	Moment ewitch 2	Push	ON
MEMORY SW 2 Men	Memory switch 2	Other than the above	OFF
	Set switch	Push	ON
SET SW	Set Switch	Other than the above	OFF

Is the indication normal?

- YES >> INSPECTION END
- NO >> Refer to <u>ADP-66, "Diagnosis Procedure"</u>.

Diagnosis Procedure

1. CHECK SEAT MEMORY SWITCH INPUT SIGNAL

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

(+) Driver seat control unit		()	Voltage (V) (Approx.)
Connector	Terminals		
	27		
B452	28	Ground	5
	29		

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 seat memory switch connector.
- 3. Check continuity between driver seat control unit harness connector and seat memory switch harness connector.

Driver seat control unit		Seat memory switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	27	27 1 28 D13 2	1	
B452	28		2	Existed
	29		3	

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

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Driver se	at control unit		Continuity	А
Connector	Terminal		Continuity	
	27	Ground		5
B452	28		Not existed	В
	29			
Is the inspection result no	mal?			С
	r seat control unit. Refer to A	DP-121, "Removal and Inst	allation".	
^ ' '	ace harness or connector.			
3. CHECK SEAT MEMOR	Y SWITCH GROUND CIRC	UIT		D
Check continuity between	seat memory switch harness	s connector and ground.		
Soot mo	mory switch			Е
Connector	Terminal	Ground	Continuity	
D13	4	Ground	Existed	
Is the inspection result no	-		Existed	F
YES >> GO TO 4.				
	ace harness or connector.			G
4. CHECK SEAT MEMOR				0
Refer to ADP-67, "Compo	nent Inspection"			
Is the inspection result no				Н
	ttent incident. Refer to GI-40	. "Intermittent Incident".		
	memory switch. Refer to AD		ation".	
Component Inspecti	on		INF0ID:00000007566079	I
1. CHECK SEAT MEMOR	Y SWITCH			ADP
1. Turn ignition switch O				
 Disconnect seat mem Check continuity betw 	ory switch connector. een seat memory switch terr	ningle under the following of	anditions	17
5. Check continuity betw	een seat memory Switch leff	TITIAIS UTUET THE TUITUWING CO		K

Terr	minal	Condition		Continuity	
1		Momony switch 1	Push	Existed	L
I		Memory switch 1	Other than the above	Not existed	
2	4	Momony switch 2	Push	Existed	
2	4	Memory switch 2	Other than the above	Not existed	M
2		Cat awitab	Push	Existed	
3		Set switch	Other than the above	Not existed	N

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace seat memory switch. Refer to <u>ADP-123, "Removal and Installation"</u>.

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< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH MIRROR SWITCH

MIRROR SWITCH : Component Function Check

1.CHECK MIRROR SWITCH FUNCTION

Check the operation on "MIR CON SW–UP/DN" and "MIR CON SW–RH/LH" in "DATA MONITOR" mode with CONSULT.

Monitor item	Condition			
MIR CON SW-UP/DN	When operating the mirror switch toward the up or down side.	: ON		
MIR CON SW-UP/DN	Other than above.	: OFF		
MIR CON SW-RH/LH	When operating the mirror switch toward the right or left side.	: ON		
	Other than above.	: OFF		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-68</u>, "MIRROR SWITCH : Diagnosis Procedure".

MIRROR SWITCH : Diagnosis Procedure

INFOID:000000007566081

INEOID:000000007566080

1. CHECK MIRROR SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect door mirror remote control switch connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between door mirror remote control switch harness connector and ground.

(•	(+)		Voltage (V) (Approx.)
Door mirror remote control switch		()	
Connector	Terminal		(*********)
	4	Ground &	
D14	12		F
D14	13		5
	15		

Is the inspection result normal?

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

2. CHECK MIRROR SWITCH CIRCUIT

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

Automatic drive po	ositioner control unit	Door mirror remote control switch		itioner control unit Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity		
	3	- D14 -	15			
M75	4		13	Existed		
WI75	15		12	Existed		
	16		4	-		

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

< DTC/CIRCUIT DIAGNOSIS >

Diace harness or c OR REMOTE CO DFF.	oner control unit. R connector. NTROL SWITCH (remote control swit	Ground Refer to <u>ADP-121, "Remo</u> GROUND CIRCUIT tch harness connector an	nd ground.
4 15 00000000000000000000000000000000000	5 oner control unit. F connector. NTROL SWITCH (remote control swit	Refer to <u>ADP-121, "Remo</u> GROUND CIRCUIT	oval and Installation
ormal? omatic drive positi place harness or c OR REMOTE CO OFF. ween door mirror remote control switch Term 7	oner control unit. R connector. NTROL SWITCH (remote control swit	GROUND CIRCUIT	oval and Installation
ormal? omatic drive positi place harness or c OR REMOTE CO OFF. ween door mirror remote control switch Term 7	oner control unit. R connector. NTROL SWITCH (remote control swit	GROUND CIRCUIT	nd ground.
ormal? omatic drive positi place harness or c OR REMOTE CO OFF. ween door mirror remote control switch Term 7	oner control unit. R connector. NTROL SWITCH (remote control swit	GROUND CIRCUIT	nd ground.
omatic drive positi place harness or c OR REMOTE CO OFF. ween door mirror remote control switch Term 7	connector. NTROL SWITCH (remote control swit	GROUND CIRCUIT	nd ground.
ween door mirror remote control switch Term 7		tch harness connector a	-
Term 7			
7	inal	1	Continuity
-		Ground	Continuity
10			Existed
: Component OR REMOTE CO OFF. ror remote control	Inspection NTROL SWITCH switch connector.	tch terminals under the f	INFOID:000000
nal		Condition	Continuity
nal		Condition	Continuity
nal		Right	Existed
nal		Right Other than above	Existed Not existed
		Right Other than above Down	Existed Not existed Existed
nal 7	Mirror switch	Right Other than above Down Other than above	Existed Not existed Existed Not existed
	Mirror switch	Right Other than above Down Other than above Left	Existed Not existed Existed Not existed Existed
	Mirror switch	Right Other than above Down Other than above	Existed Not existed Existed Not existed
	ormal? nittent incident. Re or mirror remote co : Component I OR REMOTE CO OFF. ror remote control	OR SWITCH : Component Inspection ormal? nittent incident. Refer to <u>GI-40, "Inter</u> or mirror remote control switch. Refer : Component Inspection OR REMOTE CONTROL SWITCH OFF. ror remote control switch connector.	OR SWITCH : Component Inspection". ormal? nittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . or mirror remote control switch. Refer to <u>MIR-23, "Removal ar</u> : Component Inspection OR REMOTE CONTROL SWITCH OFF. ror remote control switch connector.

1. CHECK CHANGEOVER SWITCH FUNCTION

< DTC/CIRCUIT DIAGNOSIS >

Check the operation on "MIR CHNG SW-R" or "MIR CHNG SW-L" in "DATA MONITOR" mode with CON-SULT.

Monitor item	Condition			
MIR CHNG SW-R/L	When operating the changeover toward the right or left side.	: ON		
	Other than above.	: OFF		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-70</u>, "CHANGEOVER SWITCH : Diagnosis Procedure".

CHANGEOVER SWITCH : Diagnosis Procedure

INFOID:000000007566084

1.CHECK CHANGEOVER SWITCH INPUT SIGNAL

- 1. Turn ignition switch OFF.
- 2. Disconnect door mirror remote control switch connector.
- 3. Turn ignition switch ON.
- 4. Check voltage between door mirror remote control switch harness connector and ground.

	(+) Door mirror remote control switch		Voltage (V) (Approx.)	
Connector	Terminal		(Αρριολ.)	
 D14	10	Ground	Б	
D14	11	Ground	5	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2.CHECK CHANGEOVER SWITCH CIRCUIT

1. Turn ignition switch OFF.

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

Automatic drive p	ositioner control unit	Door mirror remote control switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	2	D14	11	Existed
WI75	14	014	10	Existed

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

Automatic drive po	Automatic drive positioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	2	Ground	Not existed
	14		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit. Refer to <u>ADP-122, "Removal and Installation"</u>.

NO >> Repair or replace harness or connector.

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

1. Turn ignition switch OFF.

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

< DTC/CIRCUIT DIAGNOSIS >

Door mirror	remote control switch			Continuity
Connector	Termin	al	Ground	Continuity
D14	7			Existed
CHECK CHANGEOV fer to <u>ADP-71, "CHAN</u> <u>he inspection result ne</u> ES >> Check intern O >> Replace doo IANGEOVER SV CHECK DOOR MIRR	GEOVER SWITCH ormal? nittent incident. Refe r mirror remote con VITCH : Compo OR REMOTE CON OFF.	I : Component er to <u>GI-40, "In</u> trol switch. Re onent Inspec TROL SWITCI	itermittent Incident". Ifer to <u>MIR-23, "Remov</u> ction H	ral and Installation".
Disconnect door mir Check continuity bet	ween door mirror re			the following conditions.
ienni	la		Left	
				EXISTED
10			Other than above	Existed Not existed
	7	Changeover swi	Other than above	
11 he inspection result n ES >> INSPECTIO	ormal? N END		itch Right Other than above	Not existed Existed Not existed
11 he inspection result no ES >> INSPECTIO D >> Replace doo	ormal? N END		itch Right Other than above	Not existed Existed

POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000007566086

1. CHECK POWER SEAT SWITCH GROUND CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect power seat switch connector.

3. Check continuity between power seat switch harness connector and ground.

Power se	Power seat switch		Continuity
Connector	Terminal	Ground	Continuity
B459	35		Existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> Repair or replace harness or connector.

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNO TILT &TELESCOPI				
Diagnosis Procedure			INFOID:000000007566087	А
1.CHECK TILT & TELESC	OPIC SWITCH GROUND (CIRCUIT		В
 Turn ignition switch OF Disconnect tilt & telesc Check continuity betwee 	opic switch connector.	arness connector and groun	d.	С
Tilt & telese	copic switch		Continuity	
Connector	Terminal	Ground	Continuity	D
M102	1		Existed	
	<u>nal?</u> ent incident. Refer to <u>GI-40,</u> ce harness or connector.	, "Intermittent Incident".		E
				F

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SLIDING SENSOR

Component Function Check

INFOID:000000007566088

INFOID:000000007566089

1.CHECK FUNCTION

1. Select "SLIDE PULSE" in "Data monitor" mode with CONSULT.

2. Check sliding sensor signal under the following conditions.

Monitor item	Condition		Valve
		Operate (forward)	Change (increase)*
SLIDE PULSE	Seat sliding	Operate (backward)	Change (decrease)*
		Release	No change [*]

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

1.CHECK SLIDING SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check signal between driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Con	dition	Signal (Reference value)
B452	19	Ground	Seat sliding	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "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 sensor connector.

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

Driver seat	Driver seat control unit		Sliding motor		
Connector	Terminal	Connector	Connector Terminal		
B452	19	B461	19	Existed	

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	seat control unit			Continuity
Connector	Termina	1	Ground	
B452	19			Not existed
 CHECK SLIDING SI Connect driver sea Turn ignition switch 	eplace harness or co ENSOR POWER SUI	PPLY or.	groupd	
5. Oneck voltage betv			ground.	
C	(+) Bliding motor		(_)	Voltage (V)
Connector	Terminal	<u></u>	()	(Approx.)
B461	33	-	Ground	12
	n OFF. seat control unit conne	ector.	nnector and sliding	g motor harness connector
Driver seat c	ontrol unit	Slidir	g motor	
Connector	Terminal	Connector	Terminal	Continuity
B452	33	B461	33	Existed
4. Check continuity be	etween driver seat co	ntrol unit harness co	nnector and groun	nd.
Driver	seat control unit			0
Connector	Termina	I	Ground	Continuity
B452	33			Not existed
NO >> Repair or ro 5.CHECK SLIDING SI 1. Turn ignition switch	iver seat control unit. eplace harness or co ENSOR GROUND	nnector.		allation".
			na grouna.	
Connector	Sliding motor		Ground	Continuity
B461	45			Existed
Is the inspection result				Existed
	eat cushion frame ass	embly.		

RECLINING SENSOR

Component Function Check

INFOID:000000007566090

1. CHECK FUNCTION

1. Select "RECLN PULSE" in "Data monitor" mode with CONSULT.

2. Check reclining sensor signal under the following conditions.

Monitor item	Condition		Value
		Operate (forward)	Change (increase)*
RECLN PULSE	Seat reclining	Operate (backward)	Change (decrease)*
		Release	No change [*]

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000007566091

1.CHECK RECLINING SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check signal between driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Con	dition	Signal (Reference value)
B452	20	Ground	Seat reclining	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK RECLINING SENSOR CIRCUIT

1. Turn ignition switch OFF.

2. Disconnect driver seat control unit and reclining motor connector.

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

Driver seat	Driver seat control unit		Reclining motor		
Connector	Terminal	Connector	Terminal	Continuity	
B452	20	B454	20	Existed	

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat of	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	20		Not existed
CHECK RECLINING SEI Connect driver seat con Turn ignition switch ON.	ce harness or connector. NSOR POWER SUPPLY htrol unit connector.	onnector and ground.	
(+	-		
Reclining		- (-)	Voltage (V)
Connector	Terminals		(Approx.)
B454	33	Ground	12
NO >> GO TO 4.	NSOR POWER SUPPLY (CIRCUIT	
. Turn ignition switch OFF . Disconnect driver seat of	F. control unit connector.	harness connector and reclini	ing motor harness conr
. Turn ignition switch OFF 2. Disconnect driver seat of 3. Check continuity betwee	F control unit connector. en driver seat control unit l		
 Turn ignition switch OFF Disconnect driver seat of Check continuity betwee tor. 	F. control unit connector. en driver seat control unit l ^{unit}	harness connector and reclini	ing motor harness conr
 Turn ignition switch OFF Disconnect driver seat of Check continuity betwee tor. 	F. control unit connector. en driver seat control unit l unit Terminal Con	harness connector and reclini Reclining motor	
Turn ignition switch OFF Disconnect driver seat of Check continuity betwee tor. Driver seat control Connector B452	F. control unit connector. en driver seat control unit l unit Terminal Con 33 B	harness connector and reclini Reclining motor	Continuity Existed
. Turn ignition switch OFF . Disconnect driver seat of . Check continuity betwee tor. Driver seat control Connector B452	F. control unit connector. en driver seat control unit l unit Terminal Con 33 B en driver seat control unit l	harness connector and reclini Reclining motor Intector Terminal	Continuity Existed d.
Turn ignition switch OFF Disconnect driver seat of Check continuity betwee tor. Driver seat control Connector B452 Check continuity betwee	F. control unit connector. en driver seat control unit l unit Terminal Con 33 B en driver seat control unit l	harness connector and reclini Reclining motor Intector Terminal	Continuity Existed
Turn ignition switch OFF Disconnect driver seat of Check continuity betwee tor. Driver seat control Connector B452 Check continuity betwee Driver seat Connector B452	F. control unit connector. en driver seat control unit l unit Terminal Con 33 B en driver seat control unit l control unit Terminal 33	harness connector and reclini Reclining motor Intector Terminal 1454 33 harness connector and groun	Continuity Existed d.
 Turn ignition switch OFF Disconnect driver seat of Check continuity betweet tor. Driver seat control Connector B452 4. Check continuity betweet Driver seat control Connector B452 4. Check continuity betweet Driver seat control Connector B452 Is the inspection result norm YES YES Separate driver seat or replace Driver seat or replace Is the inspection result norm YES Separate or replace Driver seat or replace Jointer seat or replace	F. control unit connector. en driver seat control unit l unit Terminal Con 33 B en driver seat control unit l control unit Terminal 33 nal? seat control unit. Refer to <u>/</u> ce harness or connector. NSOR GROUND	harness connector and reclini Reclining motor Innector Terminal 454 33 harness connector and groun Ground ADP-121, "Removal and Insta	Continuity Existed d. Continuity Not existed
	F. control unit connector. en driver seat control unit l <u>unit</u> Terminal Con <u>33</u> B en driver seat control unit l control unit Terminal <u>33</u> hal? seat control unit. Refer to <u>A</u> ce harness or connector. NSOR GROUND F. en reclining motor harness	harness connector and reclini Reclining motor Innector Terminal 454 33 harness connector and groun Ground ADP-121, "Removal and Insta	Continuity Existed d. Continuity Not existed
1. Turn ignition switch OFF 2. Disconnect driver seat of 3. Check continuity betweet tor. Driver seat control Connector B452 4. Check continuity betweet Driver seat control Connector B452 4. Check continuity betweet Driver seat of Connector B452 s the inspection result norm YES YES S the inspection result norm YES S Replace driver set NO S Repair or replace D.CHECK RECLINING SEI 1. Turn ignition switch OFF 2. Check continuity betweet	F. control unit connector. en driver seat control unit l <u>unit</u> Terminal Con <u>33</u> B en driver seat control unit l control unit Terminal <u>33</u> hal? seat control unit. Refer to <u>A</u> ce harness or connector. NSOR GROUND F. en reclining motor harness	harness connector and reclini Reclining motor Innector Terminal 454 33 harness connector and groun Ground ADP-121, "Removal and Insta	Continuity Existed d. Continuity Not existed

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:000000007566092

1. CHECK FUNCTION

1. Select "LIFT FR PULSE" in "Data monitor" mode with CONSULT.

2. Check the lifting sensor (front) signal under the following conditions.

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

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000007566093

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

1. Turn ignition switch ON.

2. Check signal driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Con	dition	Voltage (V) (Approx.)
B452	22	Ground	Seat Lifting (front)	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK LIFTING SENSOR (FRONT) CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat	Driver seat control unit		Lifting motor (front)		
Connector	Terminal	Connector	Terminal	Continuity	
B452	22	B455	22	Existed	

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat of	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	22		Not existed
CHECK LIFTING SENSO	ce harness or connector. DR (FRONT) POWER SU	PPLY	
 Connect driver seat con Turn ignition switch ON. Check voltage between 		ss connector and ground.	
(+	•)		Voltage (V)
Lifting mot	tor (front)	(-)	(Approx.)
Connector	Terminals		
B455	33	Ground	12
<u>ls the inspection result norm</u> YES >> GO TO 5. NO >> GO TO 4. 4. CHECK LIFTING SENSC			
 Turn ignition switch OFF Disconnect driver seat of Check continuity between 	control unit connector.	harness connector and lifting	g motor (front) harness
 Turn ignition switch OFF Disconnect driver seat of 	control unit connector. en driver seat control unit	harness connector and lifting	
 Turn ignition switch OFF Disconnect driver seat of Check continuity betwee nector. 	control unit connector. en driver seat control unit unit		g motor (front) harness Continuity
 Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. 	control unit connector. en driver seat control unit unit Terminal Cor	Lifting motor (front)	
Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. Driver seat control Connector B452	control unit connector. en driver seat control unit unit Terminal Cor 33 E	Lifting motor (front)	Continuity Existed
. Turn ignition switch OFF 2. Disconnect driver seat of 3. Check continuity between nector. Driver seat control Connector B452	control unit connector. en driver seat control unit unit Terminal Cor 33 E en driver seat control unit	Lifting motor (front) nnector Terminal 3455 33	Continuity Existed nd.
Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. Driver seat control Connector B452 Check continuity between	control unit connector. en driver seat control unit unit Terminal Cor 33 E en driver seat control unit	Lifting motor (front) nnector Terminal 3455 33	Continuity Existed
Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. Driver seat control Connector B452 Check continuity between Driver seat of	unit Terminal Cor 33 E en driver seat control unit control unit	Lifting motor (front) nnector Terminal 3455 33 harness connector and grour	Continuity Existed nd.
 Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. Driver seat control Connector B452 4. Check continuity between control Connector B452 4. Check continuity between control Connector B452 Is the inspection result norm YES	unit	Lifting motor (front) nnector Terminal 3455 33 harness connector and grour	Continuity Existed nd. Continuity Not existed
1. Turn ignition switch OFF 2. Disconnect driver seat of 3. Check continuity between nector. Driver seat control Connector B452 4. Check continuity between control Connector B452 4. Check continuity between control Connector B452 Is the inspection result norm YES >> Replace driver so NO >> Repair or replace 5.CHECK LIFTING SENSO 1. Turn ignition switch OFF 2. Check continuity between	control unit connector. en driver seat control unit Terminal Cor 33 E en driver seat control unit control unit 33 nal? seat control unit. Refer to a co harness or connector. DR (FRONT) GROUND F. en lifting motor (front) harr	Lifting motor (front) nnector Terminal 3455 33 harness connector and grour Ground	Continuity Existed nd. Continuity Not existed
 Turn ignition switch OFF Disconnect driver seat of Check continuity between nector. Driver seat control Connector B452 4. Check continuity between control Connector B452 4. Check continuity between control Connector B452 Is the inspection result norm YES NO >> Replace driver so NO Scheck LIFTING SENSO 1. Turn ignition switch OFF	control unit connector. en driver seat control unit Terminal Cor 33 E en driver seat control unit control unit 33 nal? seat control unit. Refer to a co harness or connector. DR (FRONT) GROUND F. en lifting motor (front) harr	Lifting motor (front) nnector Terminal 3455 33 harness connector and groun Ground ADP-121, "Removal and Inst	Continuity Existed nd. Continuity Not existed

LIFTING SENSOR (REAR)

Component Function Check

INFOID:000000007566094

1. CHECK FUNCTION

1. Select "LIFT RR PULSE" in "Data monitor" mode with CONSULT.

2. Check lifting sensor (rear) signal under the following conditions.

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

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000007566095

1.CHECK LIFTING SENSOR (REAR) SIGNAL

1. Turn ignition switch ON.

2. Check signal between driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Condition		Voltage (V) (Approx.)
B452	21	Ground	Seat Lifting (rear)	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "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 (rear) connector.
- 3. Check the continuity between driver seat control unit harness connector and lifting motor (rear) harness connector.

Driver seat	control unit	Lifting m	otor (rear)	Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	21	B456	21	Existed	

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat o	control unit			
O a man a start				Continuity
Connector	Terminal		Ground	Continuity
B452	21			Not existed
s the inspection result norm YES >> GO TO 3. NO >> Repair or replac CHECK LIFTING SENSC 1. Connect driver seat cont 2. Turn ignition switch ON. 3. Check the voltage betwee	e harness or conr DR (REAR) POWE trol unit connector	ER SUPPLY	operator and ground	
	č (lector and ground.	
(+)				Voltage (V)
Lifting mot	or (rear) Terminals		()	(Approx.)
B456	33		Ground	12
the inspection result norm YES >> GO TO 5. NO >> GO TO 4. CHECK LIFTING SENSC		R SUPPLY CIRC	UIT	
1. Turn ignition switch OFF				
. Disconnect driver seat c	ontrol unit connec tween driver seat	control unit harne	ess connector and li	
 Disconnect driver seat c Check the continuity be connector. 	ontrol unit connec tween driver seat	control unit harne		ifting motor (rear) harr
Disconnect driver seat c Check the continuity be connector.	ontrol unit connectiveen driver seat	control unit harne	motor (rear)	
Disconnect driver seat c Check the continuity be connector. Driver seat control Connector	unit Terminal	control unit harner Lifting Connector B456	motor (rear) Terminal 33	Continuity Existed
2. Disconnect driver seat c 3. Check the continuity be connector. Driver seat control Connector B452	unit Terminal 33 ween driver seat	control unit harner Lifting Connector B456	motor (rear) Terminal 33	Continuity Existed ound.
2. Disconnect driver seat c 3. Check the continuity be connector. Driver seat control Connector B452 . Check the continuity bet	unit Terminal 33 ween driver seat	control unit harner Lifting Connector B456	motor (rear) Terminal 33	Continuity Existed
2. Disconnect driver seat c 3. Check the continuity beconnector. Driver seat control Connector B452 4. Check the continuity bet Driver seat c Connector B452	ontrol unit connect tween driver seat unit Terminal 33 ween driver seat control unit Terminal 33 33	control unit harner Lifting Connector B456	motor (rear) Terminal 33 ss connector and gro	Continuity Existed ound.
2. Disconnect driver seat c 3. Check the continuity beconnector. Driver seat control Connector B452 4. Check the continuity bet Driver seat control Connector	eontrol unit connect tween driver seat unit Terminal 33 tween driver seat of control unit 33 tween driver seat of control unit 33 al? seat control unit. R e harness or conr DR (REAR) GROU	control unit harned Lifting Connector B456 control unit harnes control unit harnes control unit harnes Lifting B456 control unit harnes Control unit harnes	motor (rear) Terminal 33 SS connector and gre Ground "Removal and Insta	Continuity Existed Ound. Continuity Not existed Ilation".
2. Disconnect driver seat c 3. Check the continuity beconnector. Driver seat control Connector B452 4. Check the continuity bet Driver seat c Connector B452 s the inspection result norm YES >> Replace driver s NO >> Repair or replace D.CHECK LIFTING SENSC 1. Turn ignition switch OFF	eontrol unit connect tween driver seat unit Terminal 33 ween driver seat of control unit Terminal 33 al? seat control unit. R e harness or conr DR (REAR) GROU ween lifting motor	control unit harned Lifting Connector B456 control unit harnes control unit harnes control unit harnes Lifting B456 control unit harnes Control unit harnes	motor (rear) Terminal 33 SS connector and gre Ground "Removal and Insta	Continuity Existed ound. Continuity Not existed Ilation".
2. Disconnect driver seat c 3. Check the continuity beconnector. Driver seat control Connector B452 4. Check the continuity bet Driver seat c Connector B452 s the inspection result norm YES >> Replace driver s NO >> Repair or replac D.CHECK LIFTING SENSC 1. Turn ignition switch OFF 2. Check the continuity bet	eontrol unit connect tween driver seat unit Terminal 33 ween driver seat of control unit Terminal 33 al? seat control unit. R e harness or conr DR (REAR) GROU ween lifting motor	control unit harned Lifting Connector B456 control unit harnes control unit harnes control unit harnes Lifting B456 control unit harnes Control unit harnes	motor (rear) Terminal 33 SS connector and gre Ground "Removal and Insta	Continuity Existed Ound. Continuity Not existed Ilation".

TILT SENSOR

Component Function Check

INFOID:000000007566096

1. CHECK FUNCTION

1. Select "TILT PULSE" in "Data monitor" mode with CONSULT.

2. Check tilt sensor signal under the following conditions.

Monitor item	Condition		Value
		Operate (up)	Change (increase)*
TILT PULSE	Steering column	Operate (down)	Change (decrease)*
		Release	No change*

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END NO >> Refer to <u>ADP-82, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566097

1.CHECK TILT SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check signal between driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Condition		Voltage (V) (Approx.)
B452	30	Ground	Steering column	Operate	10mSec/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "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 connector.
- 3. Check continuity between driver seat control unit harness connector and tilt motor harness connector.

Driver seat	Driver seat control unit		Tilt motor	
Connector	Terminal	Connector	Terminal	Continuity
B452	30	M116	5	Existed

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	30		Not existed

TILT SENSOR

	OSIS >			
s the inspection result no	ormal?			
YES >> GO TO 3.				
	lace harness or co			
CHECK TILT SENSO	R POWER SUPPLY	/		
Turn ignition switch C Check voltage betwe		ss connector and grou	und.	
	(+)			
Ti	lt motor		(-)	Voltage (V) (Approx.)
Connector	Termina	IS		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M116	4		Ground	12
the inspection result no	ormal?			
∕ES >> GO TO 5. IO >> GO TO 4.				
CHECK TILT SENSO	R POWER SUPPL	/ CIRCUIT		
Turn ignition switch C				
Disconnect automatic		ontrol unit connector.		
			unit harness connector	and tilt motor harness
Automatic drive positio	ner control unit		motor	
Connector	Terminal	Connector	Terminal	Continuity
M104	27	M116	4	Existed
		-	unit harness connector	
Check continuity bet				r and ground.
Automatic drive	positioner control unit			Continuity
Connector	Termina	al	Ground	Continuity
M104	27			Not existed
101104				
-	ormal?			
the inspection result no		ner control unit. Refer	r to <u>ADP-122, "Remov</u>	al and Installation".
the inspection result no ES >> Replace auto		ner control unit. Refer nnector.	r to <u>ADP-122, "Remov</u>	al and Installation".
the inspection result no 'ES >> Replace auto NO >> Repair or rep	omatic drive position lace harness or co	nnector.	r to <u>ADP-122, "Remov</u>	al and Installation".
the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOR	omatic drive position lace harness or co R GROUND CIRCU	nnector.	r to <u>ADP-122. "Remov</u>	al and Installation".
the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch C Disconnect automatio	omatic drive position place harness or co R GROUND CIRCU DFF. c drive positioner co	nnector. JIT ontrol unit connector.		
the inspection result no ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch C Disconnect automatic Check continuity bet	omatic drive position place harness or co R GROUND CIRCU DFF. c drive positioner co	nnector. JIT ontrol unit connector.		al and Installation".
the inspection result no ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch C Disconnect automatio	omatic drive position place harness or co R GROUND CIRCU DFF. c drive positioner co	nnector. JIT ontrol unit connector.		
the inspection result no TES >> Replace autority IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch C Disconnect automation Check continuity betw	omatic drive position lace harness or co R GROUND CIRCU OFF. c drive positioner co ween automatic driv	nnector. JIT ontrol unit connector. ve positioner control u		and tilt motor harness
the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch O Disconnect automatic Check continuity betw connector.	omatic drive position lace harness or co R GROUND CIRCU OFF. c drive positioner co ween automatic driv	nnector. JIT ontrol unit connector. ve positioner control u	unit harness connector	
the inspection result no ES >> Replace auto IO >> Repair or rep CHECK TILT SENSOF Turn ignition switch C Disconnect automatic Check continuity betw connector. Automatic drive positio	omatic drive position lace harness or co R GROUND CIRCL OFF. c drive positioner co ween automatic driv	nnector. JIT ontrol unit connector. ve positioner control u Tilt	unit harness connector	and tilt motor harness
the inspection result no (ES >> Replace autorial IO >> Repair or replace CHECK TILT SENSOF Turn ignition switch C Disconnect automatic Check continuity betw connector. Automatic drive position Connector M75	omatic drive position place harness or co R GROUND CIRCL OFF. c drive positioner co ween automatic driv ner control unit Terminal 20	nnector. JIT ontrol unit connector. ve positioner control u Tilt (Connector M116	unit harness connector motor Terminal	and tilt motor harness Continuity Existed
the inspection result no YES >> Replace autor YO >> Repair or rep CHECK TILT SENSOR O Turn ignition switch O Disconnect automatic Check continuity betweet Connector Automatic drive position Connector M75 Check continuity betweet	matic drive position lace harness or co R GROUND CIRCU OFF. c drive positioner co ween automatic driv ner control unit Terminal 20 ween automatic driv	nnector. JIT ontrol unit connector. ve positioner control u Tilt (Connector M116	unit harness connector motor Terminal 6	and tilt motor harness Continuity Existed r and ground.
the inspection result no YES >> Replace autor YO >> Repair or rep CHECK TILT SENSOR O Turn ignition switch O Disconnect automatic Check continuity betweet Connector Automatic drive position Connector M75 Check continuity betweet	omatic drive position place harness or co R GROUND CIRCL OFF. c drive positioner co ween automatic driv ner control unit Terminal 20	nnector. JIT ontrol unit connector. ve positioner control u Tilt 1 Connector M116 ve positioner control u	unit harness connector motor Terminal 6	and tilt motor harness Continuity Existed
the inspection result no YES >> Replace autor YO >> Repair or rep CHECK TILT SENSOF Turn ignition switch O Disconnect automatic Check continuity between the connector. Automatic drive position Connector M75 Check continuity between the continuity between the continuity between the continuity between the connector M75 Check continuity between the contin the contin the continuity between the continuity bet	matic drive position place harness or co R GROUND CIRCL DFF. c drive positioner co ween automatic driv ner control unit Terminal 20 ween automatic driv positioner control unit	nnector. JIT ontrol unit connector. ve positioner control u Tilt 1 Connector M116 ve positioner control u	unit harness connector motor Terminal 6 unit harness connector	and tilt motor harness Continuity Existed r and ground.

YES

>> Replace tilt motor.>> Repair or replace harness or connector. NO

TELESCOPIC SENSOR

Component Function Check

INFOID:000000007566098

1. CHECK FUNCTION

1. Select "TELESCO PULSE" in "Data monitor" mode with CONSULT.

2. Check telescopic sensor signal under the following conditions.

Monitor item	Condition		Valve
		Operate (forward)	Change (increase)*
TELESCO PULSE	Steering column	Operate (backward)	Change (decrease) [*]
		Release	No change [*]

*: The value at the seat position attained when the battery is connected is considered to be 32768.

Is the indication normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566099

1.CHECK TELESCOPIC SENSOR SIGNAL

1. Turn ignition switch ON.

2. Check signal between driver seat control unit harness connector and ground using an oscilloscope.

	+) control unit Terminals	()	Condition		Voltage (V) (Approx.)
B452	31	Ground	Steering column	Operate	10mSec/div 10mSec/div 2V/div
				Other than above	0 or 5

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

Driver seat control unit		Telescopic motor		Continuity	
Connector	Terminal	Connector Terminal		Continuity	
B452	31	M117	5	Existed	

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Drive	er seat control unit				Orationit
Connector	Termina	1	Ground		Continuity
B452	31				Not existed
CHECK TELESCO Turn ignition switc Check voltage bet Te Connector M117 the inspection result (ES >> GO TO 5. NO >> GO TO 5. NO >> GO TO 4. .CHECK TELESCO Turn ignition switc Disconnect autom	replace harness or con PIC SENSOR POWER th ON. tween telescopic moto (+) elescopic motor (+) elescopic motor (+) (+) elescopic motor (+) (+) (+) (+) (+) (+) (+) (+) (+) (+)	R SUPPLY	(–) Ground		Voltage (V) (Approx.) 12 nd telescopic mo
					•
harness connecto	r.		Telescopic motor		
,	r.	Connector	Telescopic motor		Continuity
harness connecto	r. sitioner control unit		Telescopic motor		
harness connecto Automatic drive por Connector M104 Check continuity b	r. sitioner control unit Terminal 27 Detween automatic driv	Connector M117	Telescopic motor r Termina 4	1	Continuity Existed nd ground.
harness connecto Automatic drive por Connector M104 Check continuity b	r. sitioner control unit Terminal 27	Connector M117 ve positioner co	Telescopic motor r Termina 4	1	Continuity Existed
harness connecto Automatic drive por Connector M104 Check continuity k Automatic drive Connector M104	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27	Connector M117 ve positioner co	Telescopic motor r Termina 4 ontrol unit harness co	1	Continuity Existed nd ground.
harness connecto Automatic drive por Connector M104 Check continuity k Automatic d Connector M104 the inspection result (ES >> Replace a NO >> Repair or .CHECK TELESCO Turn ignition switc Disconnect autom	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27 t normal? automatic drive position PIC SENSOR GROUN ch OFF. natic drive positioner co petween automatic drive positioner co petween automatic drive	Connector M117 ve positioner co al ner control unit nnector. ND CIRCUIT	Telescopic motor Termina Termina 4 ontrol unit harness co Ground . Refer to ADP-122. "	nnector an	Continuity Existed and ground. Continuity Not existed
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace a NO >> Replar or .CHECK TELESCO Turn ignition switco Disconnect autom Check continuity to	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27 t normal? automatic drive position PIC SENSOR GROUN ch OFF. hatic drive positioner co between automatic driv r.	Connector M117 ve positioner co al ner control unit. nnector. ND CIRCUIT ontrol unit conn ve positioner co	Telescopic motor Termina Termina 4 ontrol unit harness co Ground . Refer to ADP-122. "	nnector an	Continuity Existed and ground. Continuity Not existed and Installation".
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace at NO >> Repair or .CHECK TELESCO Turn ignition switco Disconnect autom Check continuity to harness connecto	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27 t normal? automatic drive position PIC SENSOR GROUN ch OFF. hatic drive positioner co between automatic driv r.	Connector M117 ve positioner co al ner control unit. nnector. ND CIRCUIT ontrol unit conn ve positioner co	Telescopic motor Termina 4 ontrol unit harness co Ground . Refer to ADP-122. " Nector. ontrol unit harness co Telescopic motor	nnector an	Continuity Existed and ground. Continuity Not existed
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace at NO >> Repair or .CHECK TELESCO Turn ignition switco Disconnect automo Check continuity to harness connecto	r. sitioner control unit Terminal 27 between automatic driv rive positioner control unit Termina 27 t normal? automatic drive position replace harness or control PIC SENSOR GROUN ch OFF. hatic drive positioner control unit sitioner control unit	Connector M117 ve positioner co al ner control unit nnector. ND CIRCUIT ontrol unit conn ve positioner co	Telescopic motor Termina Termina 4 ontrol unit harness co Ground . Refer to ADP-122, " nector. ontrol unit harness co Telescopic motor	nnector an	Continuity Existed and ground. Continuity Not existed and Installation".
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace a NO >> Repair or .CHECK TELESCO Turn ignition switco Disconnect autom Check continuity to harness connector Automatic drive por Connector M75	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27 t normal? automatic drive position PIC SENSOR GROUN ch OFF. hatic drive positioner control unit chick drive positioner control unit Terminal	Connector M117 ve positioner co al ner control unit nnector. ND CIRCUIT ontrol unit conn ve positioner co Connector M117	Telescopic motor r Termina 4 4 ontrol unit harness co 6 Ground 6	I I I I I I I I I I I I I I I I I I I	Continuity Existed and ground. Continuity Not existed and Installation". Ind telescopic mod Continuity Existed
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace at NO >> Replace at CHECK TELESCO Turn ignition switco Disconnect autom Check continuity to harness connecto Automatic drive por Connector M75 Check continuity to	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Terminal 27 t normal? automatic drive position replace harness or con PIC SENSOR GROUN ch OFF. natic drive positioner con between automatic drive r. sitioner control unit Terminal 20	Connector M117 ve positioner co al ner control unit nnector. ND CIRCUIT ontrol unit conn ve positioner co Connector M117	Telescopic motor r Termina 4 4 ontrol unit harness co 6 Ground 6	I I I I I I I I I I I I I I I I I I I	Continuity Existed and ground. Continuity Not existed and Installation". nd telescopic mo Continuity Existed and ground.
harness connecto Automatic drive por Connector M104 Check continuity to Automatic do Connector M104 the inspection result (ES >> Replace at NO >> Replace at CHECK TELESCO Turn ignition switco Disconnect autom Check continuity to harness connecto Automatic drive por Connector M75 Check continuity to	r. sitioner control unit Terminal 27 Detween automatic driv rive positioner control unit Termina 27 t normal? automatic drive position PIC SENSOR GROUN ch OFF. hatic drive positioner control unit Terminal 20 Detween automatic drive	Connector M117 ve positioner co al ner control unit nnector. ND CIRCUIT ontrol unit conn ve positioner co <u>Connector</u> M117 ve positioner co	Telescopic motor r Termina 4 4 ontrol unit harness co 6 Ground 6	I I I I I I I I I I I I I I I I I I I	Continuity Existed and ground. Continuity Not existed and Installation". Ind telescopic mod Continuity Existed

Is the inspection result normal?

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace telescopic motor.
- NO >> Repair or replace harness or connector.

< DTC/CIRCUIT DIA	< 6160/110/			
MIRROR SENS	SOR			
	Component Fund	tion Check		
	-	CION CHECK		INFOID:000000007566100
		H R-L" in "Data monitor. I under the following co		
Monitor ite		Condition		Value
MIR/SEN LH U-D				nange between V] (close to peak)
	Door m	irror (driver side)	0.6 [/] (close to valley)
MIR/SEN LH R-L			0.6 [V]	nange between (close to left edge) (close to right edge)
Is the indication norm	nal?			
YES >> INSPEC NO >> Refer to		DE : Diagnosis Procedu	ro"	
	Diagnosis Proced	-		
				INFOID:000000007566101
		E) SENSOR POWER SU	JPPLY	
3. Turn ignition swit	mirror (driver side) cor ch ON.	nnector. ver side) harness conne	ector and around	
Doo	(+) r mirror (driver side)		()	Voltage (V)
Connector	Termina	als		(Approx.)
D3	23	G	round	5
Is the inspection resu				
YES >> GO TO 3				
NO >> GO TO 2	IRROR (DRIVER SIDE	E) SENSOR POWER SI	JPPLY CIRCUIT	
NO >> GO TO 2 2.CHECK DOOR M 1. Turn ignition swit 2. Disconnect autor	ch OFF. matic drive positioner c / between automatic (E) SENSOR POWER SU control unit connector. drive positioner control		nector and door mirror
NO >> GO TO 2 2.CHECK DOOR M 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn	ch OFF. matic drive positioner c / between automatic (control unit connector.	unit harness conr	
NO >> GO TO 2 2.CHECK DOOR M 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn Automatic drive pure Connector	ch OFF. matic drive positioner c between automatic of ness connector. ositioner control unit	control unit connector. drive positioner control Door mirror (Connector	unit harness conr driver side) Terminal	- Continuity
NO >> GO TO 2 2.CHECK DOOR MI 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn Automatic drive pro- Connector M75	ch OFF. matic drive positioner c between automatic of ness connector. ositioner control unit Terminal 21	control unit connector. drive positioner control Door mirror (Connector D3	unit harness conr driver side) Terminal 23	- Continuity Existed
NO >> GO TO 2 2.CHECK DOOR MI 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn Automatic drive pro- Connector M75	ch OFF. matic drive positioner c between automatic of ness connector. ositioner control unit Terminal 21	control unit connector. drive positioner control Door mirror (Connector	unit harness conr driver side) Terminal 23	- Continuity Existed
NO >> GO TO 2 2.CHECK DOOR MI 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn Automatic drive pro- Connector M75 4. Check continuity Automatic drive	ch OFF. matic drive positioner c between automatic of hess connector. ositioner control unit Terminal 21 between automatic dri drive positioner control unit	control unit connector. drive positioner control Door mirror (Connector D3 ive positioner control un	unit harness conr driver side) Terminal 23 it harness connecto	- Continuity Existed
NO >> GO TO 2 2.CHECK DOOR M 1. Turn ignition swit 2. Disconnect autor 3. Check continuity (driver side) harn Automatic drive p Connector M75 4. Check continuity	ch OFF. matic drive positioner c between automatic of ness connector. ositioner control unit Terminal 21 between automatic dri	control unit connector. drive positioner control Door mirror (Connector D3 ive positioner control un	unit harness conr driver side) Terminal 23	Continuity Existed or and ground.

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

3. CHECK DOOR MIRROR (DRIVER SIDE) SENSOR GROUND

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit connector.
- 3. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive po	Automatic drive positioner control unit		Door mirror (driver side)	
Connector	Terminal	Connector	Terminal	Continuity
M75	20	D3	24	Existed

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

Automatic drive positioner control unit			Continuity
Connector	Terminal	Ground	Continuity
M75	20		Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace harness or connector.

4.CHECK DOOR MIRROR (DRIVER SIDE) SENSOR CIRCUIT

1. Check continuity between automatic drive positioner control unit harness connector and door mirror (driver side) harness connector.

Automatic drive po	Automatic drive positioner control unit		(driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	6	D3	21	Existed
WI75	18	03	22	EXISIEU

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

Automatic drive po	Automatic drive positioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	6	Giodila	Not existed
WI75	18		NUL EXISIEU

Is the inspection result normal?

- YES >> Replace door mirror (driver side).
- NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000007566102

1.CHECK FUNCTION

1. Select "MIR/SEN RH U-D", "MIR/SEN RH R-L" in "Data monitor" with CONSULT.

2. Check the mirror sensor (passenger side) signal under the following conditions.

Monitor item	Condition	Value
MIR/SEN RH U-D	– Door mirror (passenger side)	Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
MIR/SEN RH R-L		Change between 3.4 [V] (close to left edge) 0.6 [V] (close to right edge)

Is the indication normal?

YES >> INSPECTION END

MIRROR SENSOR

	GNOSIS >			
	DP-89, "PASSENGE	-	Procedure".	
ASSENGER SI	DE : Diagnosis P	rocedure		INFOID:000000007566103
.CHECK DOOR MI	RROR SENSOR (PAS	SENGER SIDE) PC	WER SUPPLY	
. Turn ignition swite . Disconnect door	ch OFF. nirror (passenger side	e) connector.		
5. Turn ignition swite	ch ON.			-1
 Check voltage be 	ween door mirror (pas	ssenger side) harnes	ss connector and groun	J.
	(+)			Voltage (V)
	irror (passenger side)		(-)	(Approx.)
Connector	Termina	ls		
D43	23		Ground	5
s the inspection resul YES >> GO TO 3				
NO >> GO TO 2.				
CHECK DOOR MI	RROR (PASSENGER	SIDE) SENSOR PC	WER SUPPLY CIRCUI	т
. Turn ignition swite				
. Disconnect autom	natic drive positioner c			
		ve positioner control	l unit harness connector	and door mirror (pas-
senger side) harn	ess connector.			
Automatic drive pc	sitioner control unit	Door mirror	(passenger side)	Questionity
Connector	Terminal	Connector	Terminal	Continuity
M75	21	D43	23	Existed
. Check continuity	petween automatic dri	ve positioner control	unit harness connector	and ground.
Automatic c	rive positioner control unit			
Connector	Termina	al	Ground	Continuity
M75	21			Not existed
the inspection resul	t normal?			
YES >> Replace a	automatic drive positio	ner control unit. Refe	er to <u>ADP-122, "Remov</u>	al and Installation"
NO >> Repair or	replace harness or co			ar and motaliation.
•				ar and mistaliation.
	RROR (PASSENGER		ROUND	ar and mstanation.
CHECK DOOR MI	ch OFF.	SIDE) SENSOR GR		
CHECK DOOR MI Turn ignition swite Disconnect autom	ch OFF. natic drive positioner c	SIDE) SENSOR GR	r.	
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity	ch OFF. natic drive positioner c petween automatic dri	SIDE) SENSOR GR		
CHECK DOOR MI Turn ignition swite Disconnect autom	ch OFF. natic drive positioner c petween automatic dri	SIDE) SENSOR GR	r.	
 CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr 	ch OFF. natic drive positioner c petween automatic dri	SIDE) SENSOR GR ontrol unit connector ve positioner control	r.	r and door mirror (pas-
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr	ch OFF. hatic drive positioner c between automatic dri hector.	SIDE) SENSOR GR ontrol unit connector ve positioner control	r. I unit harness connector	
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr	ch OFF. natic drive positioner c between automatic dri nector. sitioner control unit	SIDE) SENSOR GR ontrol unit connector ve positioner control	r. I unit harness connector (passenger side)	r and door mirror (pas-
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr Automatic drive po Connector M75	ch OFF. natic drive positioner c between automatic dri nector. sitioner control unit Terminal 20	SIDE) SENSOR GR ontrol unit connector ve positioner control Door mirror Connector D43	r. I unit harness connector (passenger side) Terminal	r and door mirror (pas- Continuity Existed
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr Automatic drive po Connector M75 Check continuity	ch OFF. natic drive positioner c between automatic dri nector. sitioner control unit Terminal 20 between automatic dri	SIDE) SENSOR GR ontrol unit connector ve positioner control Door mirror Connector D43	r. I unit harness connector (passenger side) Terminal 24	r and door mirror (pas- Continuity Existed
CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr Automatic drive po Connector M75 Check continuity Automatic d	ch OFF. natic drive positioner c between automatic dri nector. sitioner control unit Terminal 20 between automatic dri rive positioner control unit	SIDE) SENSOR GR ontrol unit connector ve positioner control Door mirror Connector D43 ve positioner control	r. I unit harness connector (passenger side) Terminal 24	r and door mirror (pas- Continuity Existed
 CHECK DOOR MI Turn ignition swite Disconnect autom Check continuity senger side) conr Automatic drive po Connector M75 Check continuity 	ch OFF. natic drive positioner c between automatic dri nector. sitioner control unit Terminal 20 between automatic dri	SIDE) SENSOR GR ontrol unit connector ve positioner control Door mirror Connector D43 ve positioner control	r. I unit harness connector (passenger side) Terminal 24 I unit harness connector	r and door mirror (pas- Continuity Existed

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR HARNESS CONTINUITY

- 1. Turn ignition switch OFF.
- 2. Disconnect automatic drive positioner control unit and door mirror (passenger side) connector.
- Check continuity between automatic drive positioner control unit harness connector and door mirror (passenger side) harness connector.

Automatic drive po	bositioner control unit Door mirror (passenger side)		Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M75	5	D43	21	Existed
1017 5	17	D45	22	LAISteu

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

Automatic drive po	Automatic drive positioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	5	Giodila	Not existed
	17		NOI EXISIED

Is the inspection result normal?

YES >> Replace door mirror (passenger side).

SLIDING MOTOR

<pre>< DTC/CIRCUIT SLIDING MC</pre>						
Component F		<			A	A.
1.CHECK FUNC					В	3
	SLIDE" in "Active ling motor operation	test" mode with Co on.	ONSULT.			
	Test item			Description	C	2
	OFF			Stop		
SEAT SLIDE	FR		Seat sliding	Forward	D)
	RR			Backward	1	
NO >> Refer Diagnosis Pro 1.CHECK SLIDIN 1. Turn ignition s 2. Disconnect sli	ECTION END to <u>ADP-91, "Diagr</u> DCEdure NG MOTOR INPU" switch OFF.	nosis Procedure". T SIGNAL			INFOID:000000007566105 F	
5. Check voltage	ve test" ("SEAT SL e between sliding r	IDE") with CONSL notor harness con		ł.	Н	ł
	+) g motor	()			Voltage (V)	
Connector	Terminals				(Approx.)	
				OFF	0 AD	DP
	50			Forward	0	
B461		Ground		Backward	12 K	<
D40 I		Ground	SEAT SLIDE	OFF	0	
	51			Forward	12	

Is the inspection result normal?

>> Replace seat cushion frame assembly. >> GO TO 2. YES

NO

2. CHECK SLIDING MOTOR CIRCUIT

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

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

Backward

Driver se	at control unit	Sliding motor		Continuity	0
Connector	Terminal	Connector	Terminal	Continuity	
B451	3	B461	50	Existed	Р
6401	4	D401	51	LAISIEU	

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

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SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	3	Ground	Not existed
	4		Notexisted

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

RECLINING MOTOR

	DIAGNOSIS >				
RECLINING	MOTOR				
Component F	unction Check	ζ.			INFOID:000000007566106
1.CHECK FUNCT	ΓΙΟΝ				
	RECLINING" in "A lining motor operat		with CONSULT.		
	Test item			Description	
	OFF			Stop	
SEAT RECLINING	FR		Seat reclining	Forwa	ırd
	RR			Backv	vard
	CTION END to <u>ADP-93, "Diagn</u>				INFOID:000000007566107
 Turn the ignition Perform "Active 	witch OFF. clining motor conn on switch ON. e test" ("SEAT RE	ector. CLINING") with (CONSULT.	nd	
		motor namess (
Reclinin		(-)	Co	ndition	Voltage (V)
Connector	Terminals	()			(Approx.)
				OFF	A
	52			Forward	0
D (C)		Ground			
B454				Backward	12
		Ground	SEAT RECLINING	Backward OFF	12 0
	53	Ground	SEAT RECLINING		
	53	Giouna	SEAT RECLINING	OFF	0
NO >> GO TO 2.CHECK RECLI 1. Turn ignition s 2. Disconnect dri	esult normal? ce seat cushion fra 2 2. NING MOTOR CIF witch OFF. ver seat control ur	ame assembly. RCUIT 1		OFF Forward Backward	0 12
YES >> Replace NO >> GO TO 2.CHECK RECLIN 1. Turn ignition s 2. Disconnect dri 3. Check continu- tor.	esult normal? ce seat cushion fra 2 2. NING MOTOR CIF witch OFF. ver seat control ur	ame assembly. RCUIT 1		OFF Forward Backward	0 12 0
YES >> Replace NO >> GO TO 2.CHECK RECLIN 1. Turn ignition s 2. Disconnect dri 3. Check continu- tor.	esult normal? ce seat cushion fra 2 2. NING MOTOR CIF witch OFF. ver seat control ur ity between driver	ame assembly. RCUIT 1 nit connector. seat control unit	harness connector	OFF Forward Backward	0 12 0

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	5		Not existed

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

3.CHECK RECLINING MOTOR CIRCUIT 2

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

Driver seat	control unit	Reclinir	ng motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	6	B454	53	Existed

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	6		Not existed

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

NO >> GO TO 4.

4.CHECK RECLINING MOTOR RELAY CIRCUIT 1

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

Driver seat	control unit	Reclining motor relay		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B451	6	B442	2	Existed
<u> </u>	0	0442	3	LAISIEU

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	6		Not existed

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace harness or connector.

5. CHECK RECLINING MOTOR RELAY CIRCUIT 2

1. Check continuity between reclining motor relay harness connector and reclining motor harness connector.

Reclining	motor relay	Reclinii	ng motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B442	4	B454	53	Existed

2. Check continuity between reclining motor relay harness connector and ground.

Reclining motor relay			Continuity
Connector	Terminal	Ground	Continuity
B442	4		Not existed

Is the inspection result normal?

YES >> GO TO 6.

RECLINING MOTOR

6. CHECK RECLINING MOTOR RELAY Refer to ADP-95, "Component Inspection". Is the inspection result normal? YES >> Check intermittent incident. Refer to GI-40, "Intermittent Incident". NO >> Replace seat cushion frame assembly. **Component Inspection** INFOID:000000007566108 1. CHECK RECLINING MOTOR RELAY Turn ignition switch OFF. 1. 2. Remove reclining motor relay. 3. Check the continuity between reclining motor relay terminals under the following conditions.

Reclining	motor relay	Condition	Continuity	E
Teri	minal	Condition	Continuity	
2		No current supply	Existed	E
5	4	12 V direct current supply between terminals 1 and 2.	Not existed	Γ

Is the inspection result normal?

< DTC/CIRCUIT DIAGNOSIS >

YES >> INSPECTION END

NO >> Replace seat cushion frame assembly.

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LIFTING MOTOR (FRONT)

Component Function Check

1.CHECK FUNCTION

1. Select "SEAT LIFTER FR" in "Active test" mode with CONSULT.

2. Check the lifting motor (front) operation.

Test item		Description	
	OFF		Stop
SEAT LIFTER FR	UP	Seat lifting (front)	Up
	DWN		Down

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-96</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000007566110

INFOID:000000007566109

1.CHECK LIFTING MOTOR (FRONT) POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect lifting motor (front) connector.
- 3. Turn the ignition switch ON.
- 4. Perform "Active test" ("SEAT LIFTER FR") with CONSULT.
- 5. Check voltage between lifting motor (front) harness connector and ground.

	(+) Lifting motor (front)		Cor	ndition	Voltage (V) (Approx.)
Connector	Terminals				() I I - /
	B455 Ground SEAT LIFTER FR		OFF	0	
			SEAT LIFTER FR	Up	0
D455				Down	12
D400		Ground		OFF	0
				Up	12
				Down	0

Is the inspection result normal?

- YES >> Replace seat cushion frame assembly.
- NO >> GO TO 2.

2. CHECK LIFTING MOTOR (FRONT) CIRCUIT

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

Driver sea	Driver seat control unit		Lifting motor (front)		
Connector	Terminal	Connector	Terminal	Continuity	
R/51	9	B455	56	Existed	
B451	10	D400	57	LAISted	

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		control unit	- Continuity		ļ.	
	Connector	Terminal	Ground	Continuity		
	B451	9	=	Not existed		
		10				
	nspection result norm					
YES NO	>> Replace driver s	seat control unit. Refer to <u>/</u> ce harness or connector.	ADP-121, "Removal and Inst	allation".		
NO						

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LIFTING MOTOR (REAR)

Component Function Check

INFOID:000000007566111

1. CHECK FUNCTION

1. Select "SEAT LIFTER RR" in "Active test" mode with CONSULT.

2. Check the lifting motor (rear) operation.

Test item		Description	
	OFF		Stop
SEAT LIFTER RR	UP	Seat lifting (rear)	Up
	DWN		Down

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-98</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000007566112

1.CHECK LIFTING MOTOR (REAR) POWER SUPPLY

- 1. Turn ignition switch OFF.
- 2. Disconnect lifting motor (rear) connector.
- 3. Turn the ignition switch ON.
- 4. Perform "Active test" ("SEAT LIFTER RR") with CONSULT.
- 5. Check voltage between lifting motor (rear) harness connector and ground.

	(+) Lifting motor (rear)		Condition		Voltage (V) (Approx.)
Connector	Terminals				
				OFF	0
	54	Oracia	SEAT LIFTER RR	Up	0
B456				Down	12
D400		Ground		OFF	0
	55			Up	12
				Down	0

Is the inspection result normal?

- YES >> Replace seat cushion frame assembly.
- NO >> GO TO 2.

2. CHECK LIFTING MOTOR (REAR) CIRCUIT

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

Driver seat	Driver seat control unit		Lifting motor (rear)		
Connector	Terminal	Connector	Terminal	Continuity	
B451	7	B456	54	Existed	
0401	8	6400	55	LAISIEU	

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

	Driver seat control unit		Continu		A	
	Connector	Terminal	Ground	Continuity		
	B451	7	Ground	Not existed		
	0401	8		Notexisted	В	
<u>Is the i</u>	nspection result norn	nal?				
YES NO	>> Replace driver >> Repair or replace	seat control unit. Refer to <u>A</u> ce harness or connector.	DP-121, "Removal and Inst	allation".	С	
					D	
					E	
					F	
					G	
					Н	
					I	
					AD	
					K	
					L	
					M	
					N	
					0	

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TILT MOTOR

Component Function Check

INFOID:000000007566113

1.CHECK FUNCTION

- 1. Select "TILT MOTOR" in "Active test" mode with CONSULT.
- 2. Check the tilt motor operation.

Test item		Description	
	OFF		Stop
TILT MOTOR	UP	Steering tilt	Up
	DWN		Down

Is the operation of relevant parts normal?

- YES >> INSPECTION END
- NO >> Refer to <u>ADP-100, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566114

1. CHECK TILT MOTOR INPUT SIGNAL

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

	(+) Tilt motor		() Co		Voltage (V) (Approx.)
Connector	Terminals				(
				OFF	0
	2	- Ground	TILT MOTOR	Up	0
M116				Down	12
IVITO				OFF	0
				Up	12
				Down	0

Is the inspection result normal?

- YES >> Replace tilt motor.
- NO >> GO TO 2.

2. CHECK TILT MOTOR CIRCUIT

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

Automatic drive po	Automatic drive positioner control unit		Tilt motor		
Connector	Terminal	Connector	Terminal	Continuity	
M104	28	M116	1	Existed	
M104	29	WITO	2	Existed	

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

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	Automatic drive posi	itioner control unit		Continuity	A
	Connector	Terminal	Ground	Continuity	
	M104	28	Ground	Not existed	- D
	WIGH	29		Not Oxidiod	В
<u>Is the ir</u> YES NO	nspection result norm >> Replace automa >> Repair or replace		unit. Refer to <u>ADP-122, "Re</u>	emoval and Installation".	С
					D
					E
					F
					G
					Н
					I
					AD
					K
					L
					M
					Ν
					0

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TELESCOPIC MOTOR

Component Function Check

INFOID:000000007566115

1. CHECK FUNCTION

1. Select "TELESCO MOTOR" in "Active test" mode with CONSULT.

2. Check the telescopic motor operation.

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

Is the operation of relevant parts normal?

YES >> INSPECTION END

NO >> Refer to <u>ADP-102</u>, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000007566116

1. CHECK TELESCOPIC MOTOR INPUT SIGNAL

1. Turn ignition switch OFF.

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

	(+) Telescopic motor		Condition		Voltage (V) (Approx.)	
Connector	Terminals				(
		Ground	und TELESCOPIC MO- TOR	OFF	0	
	1			Forward	0	
				Backward	12	
M117				OFF	0	
	2			Forward	12	
			Backward	0		

Is the inspection result normal?

- YES >> Replace telescopic motor.
- NO >> GO TO 2.

2. CHECK TELESCOPIC MOTOR CIRCUIT

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

Automatic drive po	Automatic drive positioner control unit		Telescopic motor	
Connector	Terminal	Connector	or Terminal Co	
M75	26	M117	1	Existed
W175	29		2	Existed

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

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Ground		Continuity	
M75	26		Not existed	
	29			
ne inspection result norma				
S >> Replace automa	tic drive positioner contro	ol unit. Refer to <u>ADP-122, "Re</u>	emoval and Installation".	
O >> Repair or replace	e harness or connector.			

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DOOR MIRROR MOTOR

Component Function Check

INFOID:000000007566117

1. CHECK DOOR MIRROR MOTOR FUNCTION

Check the operation with "MIRROR MOTOR RH" and "MIRROR MOTOR LH" in "ACTIVE TEST" mode with CONSULT.

Refer to <u>ADP-19, "CONSULT Function"</u>.

Is the inspection result normal?

YES >> INSPECTION END NO >> Refer to ADP-104, "Diagnosis

NO >> Refer to <u>ADP-104, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007566118

1. CHECK DOOR MIRROR MOTOR INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between door mirror harness connector and ground.
- [Driver side]

(+) Door mirror		(–)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
	10	Ground	Door mirror remote control switch	Down/right	12
	10			Other than above	0
D3	11			Left	12
D3				Other than above	0
	12	12		Up	12
				Other than above	0

[Passenger side]

(+) Door mirror		()	Condition		Voltage (V) (Approx.)
Connector	Terminals				(
	10	Ground	Door mirror remote control switch	Down/right	12
	10			Other than above	0
D43	11			Left	12
D43	11			Other than above	0
1	10	2		Up	12
	12			Other than above	0

Is the inspection result normal?

NO >> GO TO 2.

2. CHECK DOOR MIRROR MOTOR CIRCUIT

1. Turn ignition switch OFF.

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

DOOR MIRROR MOTOR

[Driver side]				
Automatic drive po	sitioner control unit	Do	or mirror	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	12		10	
M75	23	D3	12	Existed
	24		11	
[Passenger side]				
	sitioner control unit	Do	or mirror	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	10		12	
M75	11	D43	11	Existed
	22		10	
. Check continuity	between automatic driv	e positioner contro	unit harness conne	ector and ground.
[Driver side]		·		0
	lrive positioner control unit			0 4 4
Connector	Termina			Continuity
	12		Ground	
M75	23	N		Not existed
	24			
[Passenger side]				
	lrive positioner control unit			
Connector	Termina	 		Continuity
	10		Ground Not existe	
M75	11			
	22			
s the inspection resul	t normal?			
		ner control unit. Ref	er to ADP-122. "Re	moval and Installation".
NO >> Repair or	replace harness or cor	nnector.	······	
B. CHECK DOOR MI	RROR MOTOR			
	omponent Inspection".			
s the inspection resul				
	ermittent incident. Refe	er to GI-40, "Intermi	ttent Incident".	
NO >> Replace of				
Component Inspe	ection			INFOID:00000007566119
.CHECK DOOR MI	RROR MOTOR 1			
Check that door mirro	r motor does not trap fo	oreign objects and o	does not have any o	damage.
Refer to <u>MIR-19, "Exp</u>				-
s the inspection resul				
YES >> GO TO 2.				
NO >> Replace (
CHECK DOOR MI	RROR MOTOR 2			
. Turn ignition swite				

2. Disconnect door mirror connector.

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

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Ter	Operational direction		
(+)	(-)		
10	11	Right	
11	10	Left	
12	10	Up	
10	12	Down	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror.

< DTC/CIRCUIT DIAGNOSIS > SEAT MEMORY INDICATOR А Component Function Check INFOID:000000007566120 **1**.CHECK FUNCTION 1. Select "MEMORY SW INDCTR" in "Active test" mode with CONSULT. 2. Check the memory indicator operation. Test item Description OFF OFF D MEMORY SW INDCTR ON-1 Indicator 1: ON Memory switch indicator ON-2 Indicator 2: ON Is the operation of relevant parts normal? Е >> INSPECTION END YES >> Refer to ADP-107, "Diagnosis Procedure". NO Diagnosis Procedure INFOID:000000007566121 1.CHECK SEAT MEMORY INDICATOR OPERATION Check seat memory indicator operation. Which is the malfunctioning indicator? All indicators are NG>>GO TO 2. Н An indicator is NG>>GO TO 4. 2.CHECK FUSE 1. Turn ignition switch OFF. Check that the following fuse is not fusing. 2. ADP Signal name Fuse No. Battery power supply 10 (10A) Is the inspection result normal? Κ YES >> GO TO 3. NO >> Replace the blown fuse after repairing affected circuit. ${ m 3.}$ CHECK SEAT MEMORY INDICATOR POWER SUPPLY Check voltage between seat memory switch harness connector and ground. (+) M Voltage (V) Seat memory switch (-) (Approx.) Connector Terminals Ν D13 5 Ground Battery voltage Is the inspection result normal? >> Replace seat memory switch. Refer to ADP-123, "Removal and Installation". YES >> Repair or replace harness between seat memory switch and 10 A fuse [No.10, located in fuse NO block (J/B)]. CHECK SEAT MEMORY INDICATOR CIRCUIT Ρ Turn ignition switch OFF. 1.

SEAT MEMORY INDICATOR

Disconnect driver seat control unit and seat memory switch connector. 2.

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

ADP-107

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	control unit Seat memory switch		Seat memory switch	
Connector	Terminal	Connector	Terminal	Continuity
B452	25	D13	6	Existed
D452	26		7	LAISIEU

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

Driver sea	t control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	25	Giodna	Not existed	
D432	26		NUL EXISIEU	

Is the inspection result normal?

YES >> Replace driver seat control unit. Refer to <u>ADP-121, "Removal and Installation"</u>.

MANUAL FUNCTION DOES NOT OPERATE
SYMPTOM DIAGNOSIS
MANUAL FUNCTION DOES NOT OPERATE ALL COMPONENT
ALL COMPONENT : Diagnosis Procedure
1. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT
Check driver seat control unit power supply and ground circuit. Refer to <u>ADP-50, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure"</u> . Is the inspection result normal? YES >> GO TO 2. NO >> Repair or replace the malfunction parts. 2.CHECK AUTOMATIC DRIVE POSITIONER CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT
Check automatic drive positioner control unit power supply and ground circuit. Refer to ADP-50. "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure". F Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. G 3.CONFIRM THE OPERATION G
Confirm the operation again. Is the result normal? YES >> Check intermittent incident. Refer to GI-40, "Intermittent Incident". NO >> GO TO 1. POWER SEAT I
POWER SEAT : Diagnosis Procedure
1.CHECK POWER SEAT SWITCH GROUND CIRCUIT
Check power seat switch ground circuit. Refer to <u>ADP-72, "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u>
YES >> GO TO 2. NO >> Repair or replace harness or connector.
Confirm the operation again. M Is the result normal? YES >> Check intermittent incident. Refer to GI-40, "Intermittent Incident".
NO >> GO TO 1. TILT & TELESCOPIC
TILT & TELESCOPIC : Diagnosis Procedure
1.CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT
Check tilt & telescopic switch ground circuit. P Refer to ADP-73. "Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. NO >> Dapping or result compared or compared or
NO >> Repair or replace harness or connector. 2.CONFIRM THE OPERATION
Confirm the operation again.

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

SEAT SLIDING

SEAT SLIDING : Diagnosis Procedure

1.CHECK SLIDING MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK SLIDING SWITCH

Check sliding switch.

Refer to ADP-52, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK SLIDING MOTOR

Check sliding motor. Refer to ADP-91, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1. SEAT RECLINING

SEAT RECLINING : Diagnosis Procedure

1.CHECK RECLINING MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK RECLINING SWITCH

Check reclining switch.

Refer to ADP-55, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK RECLINING MOTOR

Check reclining motor. Refer to <u>ADP-93, "Component Function Check"</u>.

Revision: 2013 February

INFOID:000000007566126

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	А
4.CONFIRM THE OPERATION	D
Check the operation again.	В
Is the result normal?	
 YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>. NO >> GO TO 1. 	С
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT) : Diagnosis Procedure	D
1.CHECK LIFTING (FRONT) MECHANISM	F
Check for the following.	E
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
 Interference with other parts because of poor installation. Is the inspection result normal? 	F
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	
2. CHECK LIFTING SWITCH (FRONT)	G
Check lifting switch (front).	
Refer to ADP-58, "Component Function Check".	Н
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	I
3. CHECK LIFTING MOTOR (FRONT)	I
Check lifting motor (front)	
Refer to ADP-96, "Component Function Check".	ADP
Is the inspection result normal?	
YES >> GO TO 4.	Κ
NO >> Repair or replace the malfunction parts.	
4.CONFIRM THE OPERATION	
Check the operation again.	L
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.	M
SEAT LIFTING (REAR)	
SEAT LIFTING (REAR) : Diagnosis Procedure	Ν
1.CHECK LIFTING (REAR) MECHANISM	
 Check for the following. Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	0
Is the inspection result normal?	Ρ
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
2. CHECK LIFTING SWITCH (REAR)	
Check lifting switch (rear).	
Refer to <u>ADP-60, "Component Function Check"</u> .	
Is the inspection result normal?	

< SYMPTOM DIAGNOSIS >

- YES >> GO TO 3.
- NO >> Repair or replace the malfunction parts.

3.CHECK LIFTING MOTOR (REAR)

Check lifting motor (rear).

Refer to ADP-98, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to GI-40. "Intermittent Incident".

NO >> GO TO 1. STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:000000007566129

1.CHECK STEERING TILT MECHANISM

Check for the following.

• Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2. CHECK TILT SWITCH

Check tilt switch. Refer to <u>ADP-62, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

3.CHECK TILT MOTOR

Check tilt motor. Refer to <u>ADP-100, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunction parts.

4.CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

STEERING TELESCOPIC

STEERING TELESCOPIC : Diagnosis Procedure

1. CHECK STEERING TELESCOPIC MECHANISM

Check for the following.

Mechanism deformation or pinched foreign materials.

• Interference with other parts because of poor installation.

Is the inspection result normal?

YES >> GO TO 2.

< SYMPTOM DIAGNOSIS >	
NO >> Repair or replace the malfunction parts.	
2.CHECK TELESCOPIC SWITCH	А
Check telescopic switch. Refer to <u>ADP-64, "Component Function Check"</u> .	
Is the inspection result normal?	В
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	С
3.CHECK TELESCOPIC MOTOR	
Check telescopic motor. Refer to <u>ADP-102, "Component Function Check"</u> .	D
Is the inspection result normal?	
YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	Е
4.CONFIRM THE OPERATION	
Check the operation again.	F
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.	
DOOR MIRROR	G
DOOR MIRROR : Diagnosis Procedure	Н
1.CHECK DOOR MIRROR MECHANISM	
Check for the following.	
 Mechanism deformation or pinched foreign materials. Interference with other parts because of poor installation. 	
Is the inspection result normal?	
YES >> GO TO 2.	ADF
NO >> Repair or replace the malfunction parts.	
2. CHECK DOOR MIRROR REMOTE CONTROL SWITCH	Κ
Check door mirror remote control switch. Refer to the following.	
 Mirror switch: Refer to <u>ADP-68, "MIRROR SWITCH : Component Function Check"</u>. Changeover switch: Refer to <u>ADP-69, "CHANGEOVER SWITCH : Component Function Check"</u>. 	1
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	M
3. CHECK DOOR MIRROR MOTOR	
Check door mirror motor.	Ν
Refer to <u>ADP-104, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	
YES >> GO TO 4.	
NO >> Repair or replace the malfunction parts.	0
4.CONFIRM THE OPERATION	
Check the operation again.	Ρ
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.	

MEMORY FUNCTION DOES NOT OPERATE

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< SYMPTOM DIAGNOSIS >	
MEMORY FUNCTION DOES NOT OPERATE	
ALL COMPONENT	
ALL COMPONENT : Diagnosis Procedure	INFOID:000000007566132
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2.	
NO >> Repair or replace the malfunction parts.	
2. PERFORM MEMORY STORING PROCEDURE	
1. Perform memory storing procedure.	
Refer to <u>ADP-41, "Work Procedure"</u> . 2. Check memory function.	
Refer to <u>ADP-15</u> , " <u>MEMORY FUNCTION</u> : System Description".	
Is the inspection result normal?	
YES >> INSPECTION END	
NO >> GO TO 3.	
3. CHECK SEAT MEMORY SWITCH	
Check seat memory switch.	
Refer to ADP-66, "Component Function Check".	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Replace seat memory switch. Refer to <u>ADP-123, "Removal and Installation"</u> .	
4. CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u>	
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .	
NO $>>$ GO TO 1.	
SEAT SLIDING	
SEAT SLIDING : Diagnosis Procedure	INFOID:000000007566133
1.CHECK MANUAL OPERATION	
Check manual operation.	
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-110, "SEAT SLIDING : Diagnosis Procedure"</u>	
2. CHECK SLIDING SENSOR	
Check sliding sensor. Refer to <u>ADP-74, "Component Function Check"</u> .	
Is the inspection result normal?	
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	
3.confirm the operation	
Check the operation again.	
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-40. "Intermittent Incident"</u> .	
NO >> GO TO 1.	
SEAT RECLINING	

MEMORY FUNCTION DOES NOT OPERATE

SEAT RECLINING : Diagnosis Procedure	INFOID:000000007566134	
1. CHECK MANUAL OPERATION		1
Check manual operation.		
Is the inspection result normal?		
YES >> GO TO 2. NO >> Refer to <u>ADP-110</u> , " <u>SEAT RECLINING</u> : <u>Diagnosis Procedure</u> "		
2. CHECK RECLINING SENSOR		(
Check reclining sensor.		
Refer to <u>ADP-76, "Component Function Check"</u> .		
Is the inspection result normal? YES >> GO TO 3.		
NO >> Repair or replace the malfunction parts.		
3. CONFIRM THE OPERATION		
Check the operation again.		
Is the result normal?		
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.		
SEAT LIFTING (FRONT)		
SEAT LIFTING (FRONT) : Diagnosis Procedure	INFOID:000000007566135	
1.CHECK MANUAL OPERATION		
Check manual operation.		
Is the inspection result normal? YES >> GO TO 2.		
NO >> Refer to <u>ADP-111. "SEAT LIFTING (FRONT) : Diagnosis Procedure"</u>		А
2.CHECK LIFTING SENSOR (FRONT)		
Check lifting sensor (front).		
Refer to <u>ADP-78, "Component Function Check"</u> . Is the inspection result normal?		
YES >> GO TO 3.		
NO >> Repair or replace the malfunction parts.		
3.CONFIRM THE OPERATION		
Check the operation again.		
Is the result normal? YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .		
NO $>>$ GO TO 1.		
SEAT LIFTING (REAR)		
	INFOID:000000007566136	
SEAT LIFTING (REAR)	INFOID:000000007566136	
SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure	INFOID:000000007566136	
SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.check manual operation	INFOID:000000007566136	
SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2.	INFOID:000000007566136	
SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2. NO >> Refer to <u>ADP-111, "SEAT LIFTING (REAR) : Diagnosis Procedure"</u>	INFOID:000000007566136	
SEAT LIFTING (REAR) SEAT LIFTING (REAR) : Diagnosis Procedure 1.CHECK MANUAL OPERATION Check manual operation. Is the inspection result normal? YES >> GO TO 2.	INFOID:00000007566136	(

MEMORY FUNCTION DOES NOT OPERATE
< SYMPTOM DIAGNOSIS >
Is the inspection result normal?
YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.
3.CONFIRM THE OPERATION
Check the operation again.
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .
NO $>>$ GO TO 1.
STEERING TILT
STEERING TILT : Diagnosis Procedure
1. CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2. NO >> Refer to <u>ADP-112, "STEERING TILT : Diagnosis Procedure"</u>
2. CHECK TILT SENSOR
Check steering tilt sensor. Refer to <u>ADP-82, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.
3. CONFIRM THE OPERATION
Check the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.
STEERING TELESCOPIC
STEERING TELESCOPIC : Diagnosis Procedure
1. CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2. NO >> Refer to <u>ADP-112, "STEERING TELESCOPIC : Diagnosis Procedure"</u>
2.CHECK TELESCOPIC SENSOR
Check steering telescopic sensor.
Refer to <u>ADP-84, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 3.
NO >> Repair or replace the malfunction parts.
3.CONFIRM THE OPERATION
Check the operation again.
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> .
NO $>>$ GO TO 1.

NO >> GO TO 1. DOOR MIRROR

MEMORY FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
DOOR MIRROR : Diagnosis Procedure	
1.CHECK MANUAL OPERATION	A
Check manual operation.	
Is the inspection result normal?	В
YES >> GO TO 2. NO >> Refer to <u>ADP-113, "DOOR MIRROR : Diagnosis Procedure"</u> 2. CHECK MIRROR SENSOR	С
 Check mirror sensor. Refer to the following. Driver side: <u>ADP-87, "DRIVER SIDE : Component Function Check"</u>. Passenger side: <u>ADP-88, "PASSENGER SIDE : Component Function Check"</u>. 	D
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	E
3.CONFIRM THE OPERATION	_
Check the operation again.	— F
<u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u> . NO >> GO TO 1.	G

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Revision: 2013 February

< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000007566140

1.CHECK SEAT MEMORY INDICATOR

Check seat memory indicator. Refer to <u>ADP-107, "Component Function Check"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunction parts.

2.CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-40, "Intermittent Incident"</u>.

NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE < SYMPTOM DIAGNOSIS > INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE А **Diagnosis Procedure** INFOID:000000007566141 1.PERFORM INTELLIGENT KEY INTERLOCK STORING PROCEDURE В 1. Perform Intelligent Key interlock storing procedure. Refer to ADP-42, "Work Procedure". 2. Check the operation. С Is the inspection result normal? YES >> INSPECTION END NO >> GO TO 2. D 2 , CHECK DOOR LOCK FUNCTION Check door lock function. Ε Refer to DLK-48, "Work Flow". Is the inspection result normal? YES >> GO TO 3. F NO >> Repair or replace the malfunction parts. 3.CONFIRM THE OPERATION Confirm the operation again. Is the result normal? YES >> Check the intermittent incident. Refer to GI-40, "Intermittent Incident". Н

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>> GO TO 1.

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000007566142

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

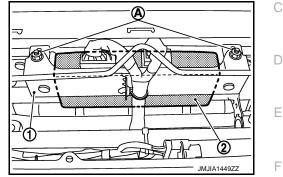
Symptom	Cause	Action to take	Reference page
Lumbar support does not per- form memory operation.	The lumbar support system are con- trolled independently with no link to the automatic drive positioner system.	_	Lumbar support system: SE-10, "LUMBAR SUP- PORT SYSTEM : Sys- tem Description"
Memory function or Intelligent	ey interlock function does not The operating conditions are not fulfilled.	Fulfill the operation conditions.	Memory function: ADP-15. "MEMORY FUNCTION : System Description"
Key interlock function does not operate.			Intelligent Key interlock function: <u>ADP-17, "IN-</u> <u>TELLIGENT KEY IN-</u> <u>TERLOCK FUNCTION:</u> <u>System Description"</u>

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

Removal and Installation

REMOVAL

- 1. Remove driver seat. Refer to <u>SE-28, "Removal and Installation"</u>.
- 2. Remove mounting nuts (A).
- 3. Remove driver seat control unit (2) from driver seat (1).



INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to <u>ADP-40</u>, "<u>Description</u>".

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AUTOMATIC DRIVE POSITIONER CONTROL UNIT

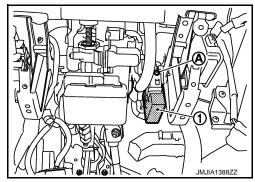
< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Removal and Installation

REMOVAL

- 1. Remove instrument lower panel LH. Refer to <u>IP-13, "Removal</u> <u>and Installation"</u>.
- 2. Remove screw (A).
- 3. Remove automatic drive positioner control unit (1).



INFOID:000000007566144

INSTALLATION

Install in the reverse order of removal.

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to <u>ADP-40</u>. "<u>Description</u>".

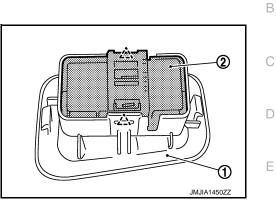
SEAT MEMORY SWITCH

Removal and Installation

REMOVAL

- 1. Remove seat memory switch finisher. Refer to <u>INT-13. "Removal</u> and Installation".
- 2. Press pawls and remove seat memory switch (2) from seat memory finisher (1).

∠__: Pawl



INSTALLATION Install in the reverse order of removal.

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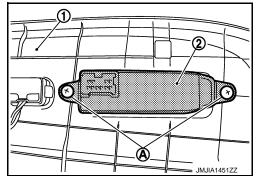
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POWER SEAT SWITCH

Removal and Installation

REMOVAL

- 1. Remove seat cushion outer finisher. Refer to <u>SE-28. "Removal</u> and Installation".
- 2. Remove screws (A), and then remove power seat switch (2) from seat cushion outer finisher (1).



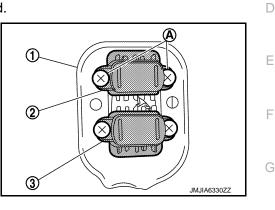
INSTALLATION Install in the reverse order of removal.

POWER WALK-IN SWITCH

Removal and Installation

REMOVAL

- 1. Remove driver seat. Refer to SE-28, "Removal and Installation".
- 2. Remove seatback pad and power walk-in switch escutcheon. Refer to <u>SE-30, "SEATBACK : Disassembly</u> and <u>Assembly</u>".
- Disconnect power walk-in switch harness connector.
 NOTE: Slightly lift up seatback pad so that harness connector is removed.
- 4. Remove screws (A) while mounting seat trim, and then remove power walk-in switch (2) from seatback frame assembly (1). Remove power walk-in switch (3) in the same procedures.



INSTALLATION Install in the reverse order of removal.

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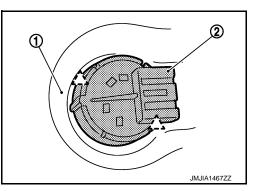
TILT&TELESCOPIC SWITCH

Removal and Installation

REMOVAL

- 1. Remove steering column mask. Refer to <u>IP-13. "Removal and</u> <u>Installation"</u>.
- 2. Press pawls and remove tilt & telescopic switch (2) from steering column mask (1).

<u>کے</u> : Pawl



INSTALLATION Install in the reverse order of removal.