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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.

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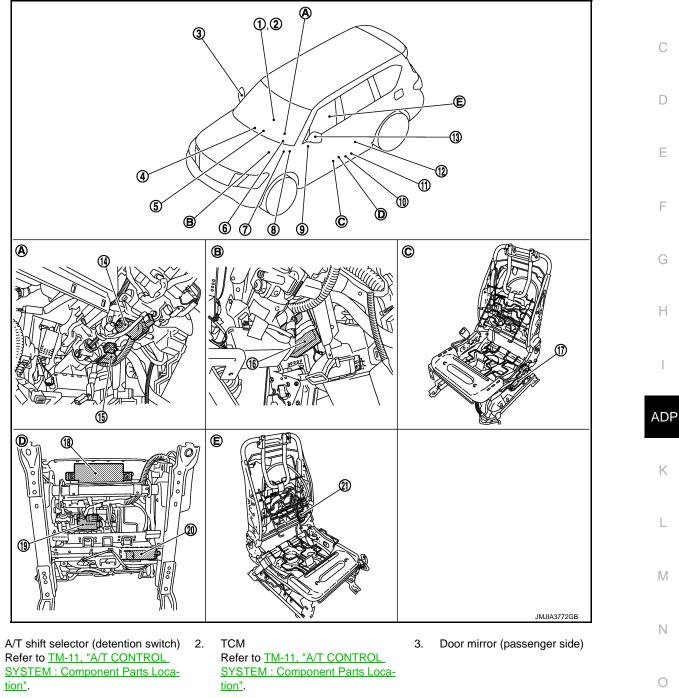
Commercial Service Tools

	Tool name	Description
Remover tools	Б. Д. Д. Д. Д. МКІАЗОБОΖΖ	Removes the clips, pawls and metal clips

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION COMPONENT PARTS

Component Parts Location



- 4. Combination meter 5. Refer to <u>MWI-6, "METER SYSTEM :</u> <u>Component Parts Location"</u>.
- Refer to <u>TM-11, "A/T CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion"</u>. BCM Refer to <u>BCS-4, "BODY CONTROL</u> <u>SYSTEM : Component Parts Loca-</u> <u>tion"</u>.
- 6. Tilt & telescopic switch

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< SYSTEM DESCRIPTION >

7.	ABS actuator and electric unit (con- trol unit)	8.	Door mirror remote control switch	9.	Seat memory switch
	Refer to BRC-9, "Component Parts				
	Location" (With VDC), BRC-147,				
	<u>"Component Parts Location</u> " (With				
	BRAKE ASSIST) or <u>BRC-154,</u>				
	<u>"Component Parts Location"</u> (With				
	INTELLIGENT BRAKE ASSIST).				
10.	Sliding, lifting switch	11.	Reclining switch	12.	Driver side door switch
13.	Door mirror (driver side)	14.	Tilt motor	15.	Telescopic motor
16.	Automatic drive positioner control unit	17.	Lifting motor (rear)	18.	Diver seat control unit
19.	Lifting motor (front)	20.	Sliding motor	21.	Reclining motor
Α.	View with steering column cover low- er removed	В.	View with instrument lower panel LH removed	C.	View with seat cushion pad and seat back pad removed
D.	Backside of seat cushion	E.	View with seat cushion pad and seat back pad removed		

Component Description

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 Steering lock unit status: LOCK/UNLOCK 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 A/T 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: A/T 				
Combination meter	Transmit the vehicle speed signal to driver seat control unit via CAN communication.				

< SYSTEM DESCRIPTION >

Component parts		Description			
ABS actuator and electric	unit (control unit)	Transmit the vehicle speed signal to driver seat control unit via CAN communication.			
A/T sift selector (Detention switch)		 Detention switch is installed on A/T shift selector. It is turned OFF when A/T shift selector is in P position. Driver seat control unit judges that A/T shift selector is in P position if continuity does not exist in this circuit. 			
	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. 			
Door mirror remote con- trol switch	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. 			
	Open/close switch	 Open/close switch is integrated in door mirror remote control switch. Power is supplied to folding mirror from door mirror remote control switch when operating 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	 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.			
Power seat switch	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. 			
	Reclining switch	 The operation signal is input to driver seat control unit when reclining switch is operated. The operation signal is input to driver seat control unit when reclining switch is operated. 			
	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. 			

< SYSTEM DESCRIPTION >

Com	ponent 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 position 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 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.

< SYSTEM DESCRIPTION >

Component 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.

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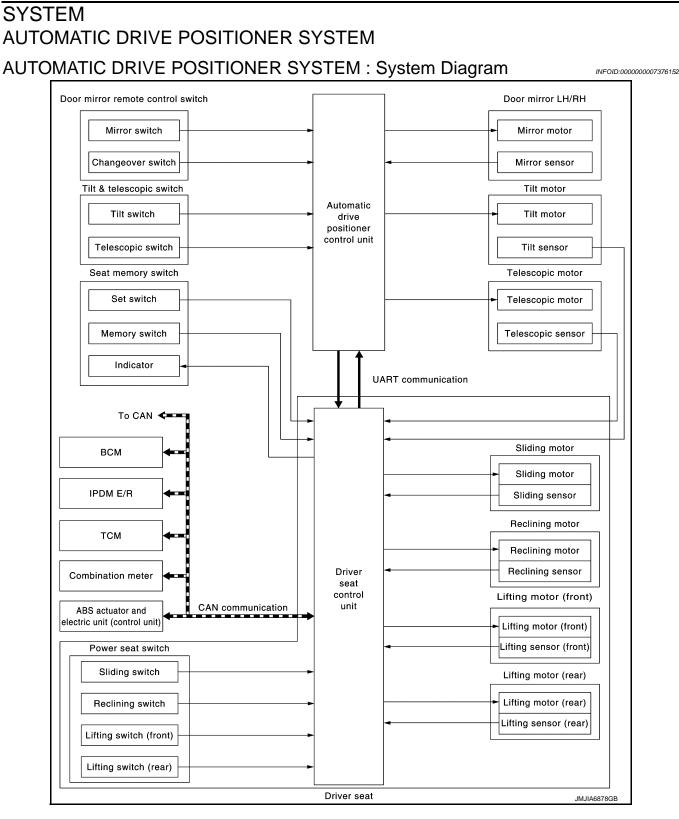
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AUTOMATIC DRIVE POSITIONER SYSTEM : System Description

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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 using 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).
Entry/Exit assist function Entry		On exit, the seat moves backward and the steering column moves upward.
		On entry, the seat and steering column returns from exiting position to the previous driving position.
Intelligent Key interlock function		Perform memory operation, exiting operation and entry operation by Intelligent Key unlock operation or driver side door request switch unlock operation.

NOTE:

The lumbar support system are controlled independently with no link to the automatic drive positioner system. E Refer to <u>SE-16, "LUMBAR SUPPORT SYSTEM : System Description"</u>.

Sleep control

Driver seat control unit equips sleep control for reducing power consumption. F The system switches to sleep control when all of the following conditions are satisfied. Ignition switch is OFF (steering lock status). All devices of auto driving position 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 Н 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 ADP

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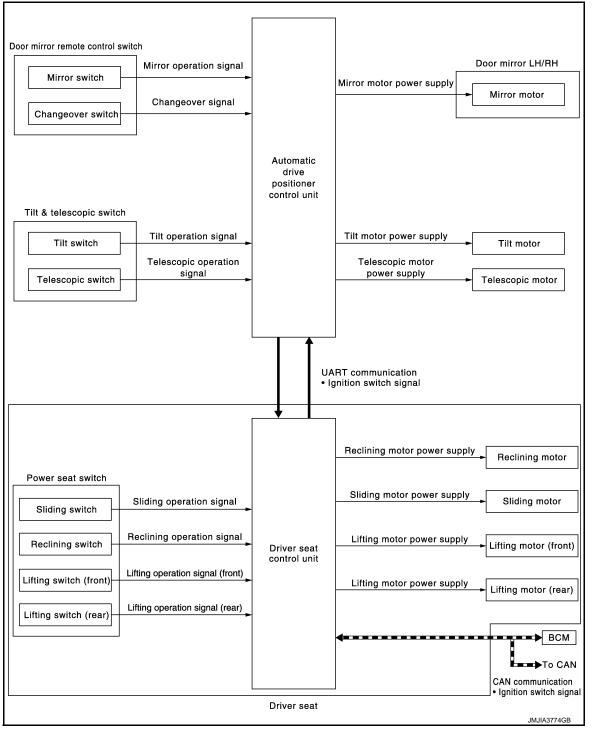
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< SYSTEM DESCRIPTION >

MANUAL FUNCTION : System Diagram



MANUAL FUNCTION : System Description

INFOID:000000007376155

INFOID:000000007376154

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.

OPERATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Operate power seat switch, tilt & telescopic switch or door mirror remote control switch.

3. The driver seat, steering column or door mirror operates according to the operation of each switch.

NOTE:

Seat operates only up to two places at the same time.

< SYSTEM DESCRIPTION >

DETAIL FLOW

Seat

rder	Input	Output	Control unit condition
	ower seat switch liding, lifting, reclin- g)	_	The power seat switch signal is inputted to the driver seat control unit when the power seat switch is operated.
2	_	Motors (sliding, lifting, reclin- ing)	The driver seat control unit outputs signals to each motor accord- ing to the power seat switch input signal.

NOTE:

The power seat can be operated manually regardless of the ignition switch position.

Tilt & Telescopic

Order	Input	Output	Control unit condition
1	Tilt & telescopic switch	_	The tilt & telescopic switch signal is inputted to the automatic drive positioner control unit when the tilt & telescopic switch is operated.
2	_	Motors (Tilt, telescopic)	The automatic drive positioner control unit actuates each motor according to the operation of the tilt & telescopic switch.

Door Mirror

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

NOTE:

The door mirrors can be operated manually when ignition switch is in either ACC or ON position. MEMORY FUNCTION

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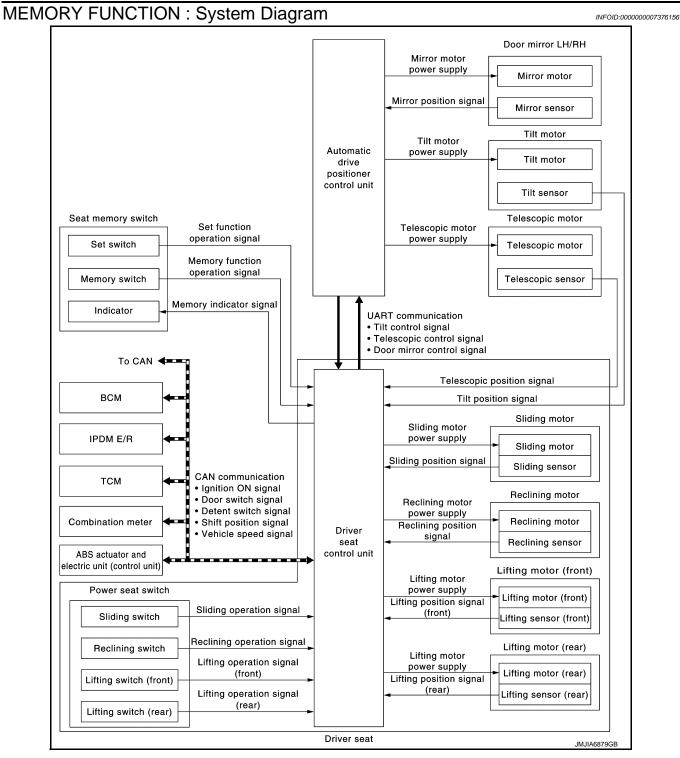
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< SYSTEM DESCRIPTION >



MEMORY FUNCTION : System Description

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

NOTE:

Further information for the memory storage procedure. Refer to <u>ADP-46, "MEMORY STORING : Description"</u>.

OPERATION PROCEDURE

- 1. Turn ignition switch ON.
- 2. Shift position P position.

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< SYSTEM DESCRIPTION >

3. Push desired memory switch.

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

OPERATION CONDITION

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

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

*: When timer function does not operate.

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Memory switch	_	The memory switch signal is inputted to the driver seat control unit when memory switch 1 or 2 is operated.
2	_	Motors (Seat, Steering, door mirror)	Driver seat control unit operates each motor of seat when it recogniz- es the memory switch pressed for 0.5 second or more and requests each motor operation to automatic drive positioner control unit via UART communication. The automatic drive positioner control unit op- erates each motor.
	Memory switch Indica- tor	Driver seat control unit requests the flashing of memory indicator while either of the motors is operating. The driver seat control unit il- luminates the memory indicator.	
3	Sensors (Seat, steering col- umn, door mirror)	_	Driver seat control unit judges the operating seat position with each seat sensor input. The positions of the steering column and outside mirror are monitored with each sensor signal. Driver seat control unit stops the operation of each motor when each part reaches the record- ed address.
4	_	Memory switch Indica- tor	Driver seat control unit requests the illumination of memory indicator after all motors stop. The driver seat control unit illuminates the mem- ory indicator for 5 seconds.

TIMER FUNCTION

- The memory function can be performed for 45 seconds after opening the driver door even if the ignition Ν 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	0
Ignition position	OFF	
Set switch/memory switch	OFF	P
Memory function	Registered	
A/T shift selector	P position	
Steering lock unit status	LOCK	
Driver side door switch	OFF	
CONSULT	Not connected	

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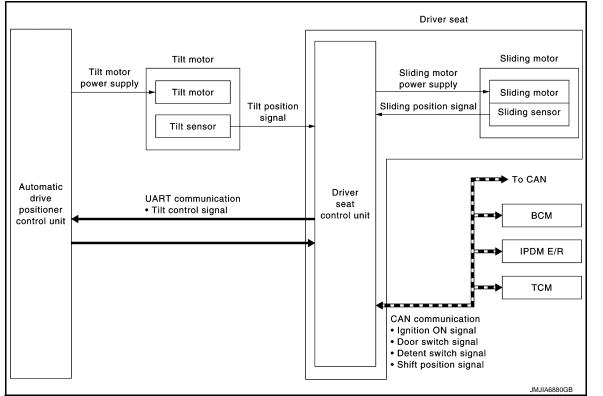
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EXIT ASSIST FUNCTION





EXIT ASSIST FUNCTION : System Description

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- When exiting, the condition is satisfied, the seat is moved backward 40 mm (1.57 in) from normal sitting position and the steering is moved to the most upper position.
- The seat slide amount and the steering operation at entry/exit operation can be changed.

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to ADP-47, "SYSTEM SETTING : Description".

OPERATION PROCEDURE

- 1. Shift position P position.
- 2. Open the driver door with ignition switch in OFF position.
- 3. Driver seat and steering column will move to the exiting position.

OPERATION CONDITION

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

Item	Request status	
Ignition position	OFF	
System setting [Entry/exit assist function (seat/steering)]	ON	
Initialization	Done	
Switch inputs • Power seat switch • Tilt & telescopic switch • Door mirror remote control switch • Set switch • Memory switch	OFF (Not operated)	
A/T shift selector	P position	
Handle position	LHD	

< SYSTEM DESCRIPTION >

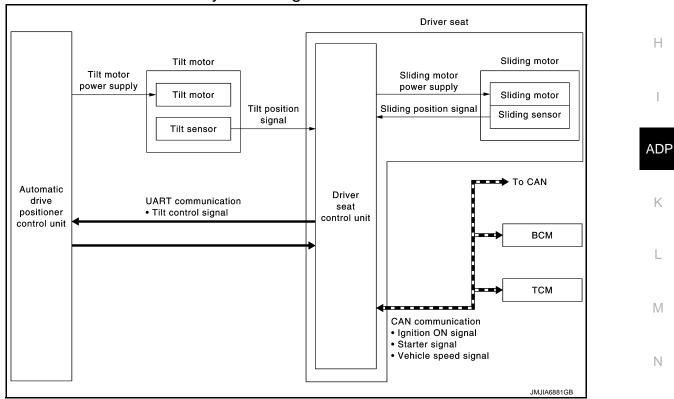
Item	Request status	
Transmission	A/T	A
CONSULT	Not connected	

DETAIL FLOW

Order	Input	Output	Control unit condition
1	Door switch (Driver side)	_	Driver seat control unit receives door switch signal (driver side/ open) from BCM via CAN communication.
2	_	Motors (Sliding, tilt)	Driver seat control unit operates the seat sliding motor, which recog- nizes that the driver side door is opened with ignition switch OFF. Driver seat control unit then requests the operations of tilt motor to auto drive positioner control unit via UART communication. The au- tomatic drive positioner control unit operates each motor for a con- stant amount.
3	Sensor (Sliding, tilt)	_	Each sensor monitors the operating positions of seat and steering, and then stops the operation of each motor when each part reaches the recorded address.

ENTRY ASSIST FUNCTION

ENTRY ASSIST FUNCTION : System Diagram



ENTRY ASSIST FUNCTION : System Description

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

NOTE:

- This function is set to ON before delivery (initial setting).
- Further information for the system setting procedure. Refer to <u>ADP-47, "SYSTEM SETTING : Description"</u>.

OPERATION PROCEDURE

Turn ignition switch ACC. 1.

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< SYSTEM DESCRIPTION >

2. Driver seat and steering column will return from the exiting position to entry position.

OPERATION CONDITION

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

Item	Request status	
Seat, steering column	The vehicle is not moved after performing the exit assist function.	
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)	
Vehicle speed	0 Km/h (0 MPH)	
Starter	OFF	
Transmission	A/T	
CONSULT	Not connected	

DETAIL FLOW

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

INTELLIGENT KEY INTERLOCK FUNCTION

< SYSTEM DESCRIPTION > INTELLIGENT KEY INTERLOCK FUNCTION : System Diagram INFOID:000000007376162 А Driver seat UART communication Memory function operation signal D Automatic drive Driver seat positioner control unit control unit To CAN всм CAN communication • Door unlock signal Key ID signal · Steering lock relay signal Н JMJIA3778GB

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

NOTE:

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

OPERATION PROCEDURE

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

NOTE:

Further information for Intelligent Key interlock function. Refer to <u>ADP-47, "INTELLIGENT KEY INTERLOCK</u> P<u>STORING : Description"</u>.

OPERATION CONDITION

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

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< SYSTEM DESCRIPTION >

Item	Request status
Ignition position	OFF
Intelligent key interlock function	Registered
Steering lock unit status	LOCK
Switch inputs Power seat switch Tilt & telescopic switch Door mirror control switch Set switch Memory switch 	OFF (Not operated)
A/T shift selector	P position

DETAIL FLOW

Order	Input	Output	Control unit condition	
1	 Door unlock signal (CAN) Key ID signal (CAN) 	_	Driver seat control unit receives unlock signal and key ID signal from BCM, when driver seat control unit is unlocked by Intelligent Key or driver side door request switch.	
2	_	_	Driver seat control unit performs the seat slide and steering tilt move directly to the exit assist function. Other loads move to the exit assist function after performing memory function.	
3	—	—	Driver seat control unit performs the entry assist function.	

Fail Safe

INFOID:000000007376164

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-49</u>
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-50</u>
	EEPROM	B2130	<u>ADP-59</u>
Only manual functions, except door mirror, operate normally.	UART communication	B2128	<u>ADP-57</u>
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	<u>ADP-51</u>
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	ADP-53
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-55

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

CONSULT Function

The automatic drive positioner system can be checked and diagnosed for component operation using CON- $_{\mbox{\scriptsize B}}$ SULT.

APPLICATION ITEMS

Diagnostic mode	Description
Ecu Identification	Displays part numbers of driver seat control unit.
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 control unit in real time.
Active Test	Drives each output unit.
Work support	Changes the setting for each system function.

SELF-DIAGNOSIS RESULTS

Refer to <u>ADP-32, "DTC Index"</u>.

DATA MONITOR

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
STARTER SW	"ON/OFF"	×	×	Ignition key switch ON (START, ON) /OFF (ACC, OFF) sta- tus judged from the ignition switch signal.
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.
DETENT SW	"ON/OFF"	×	×	The A/T shift selector position "OFF (P position) / ON (other than P position)" judged from the detention switch signal.
STEERING STATUS	"LOCK/UN- LOCK"	×	×	LOCK/UNLOCK status judged from steering lock unit.
SLIDE SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (forward) signal.
SLIDE SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the sliding switch (backward) signal.
RECLN SW-FR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (forward) signal.
RECLN SW-RR	"ON/OFF"	×	×	ON/OFF status judged from the reclining switch (backward) signal.
LIFT FR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (up) signal.
LIFT FR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch front (down) signal.
LIFT RR SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (up) signal.
LIFT RR SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the lifting switch rear (down) signal.
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.

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DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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.
MIR CON SW-UP	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (up) signal.
MIR CON SW-DN	"ON/OFF"	×	×	ON/OFF status judged from the mirror switch (down) signal.
MIR CON SW-RH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (passenger side) signal.
MIR CON SW-LH	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (driver side) signal.
MIR CHNG SW-R	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to right) signal.
MIR CHNG SW-L	"ON/OFF"	×	×	ON/OFF status judged from the door mirror remote control switch (switching to left) signal.
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.
KYLS DR UNLK	"ON/OFF"	×	×	ON/OFF status judged from the driver side door unlock ac- tuator output switch signal.
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.
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.

DIAGNOSIS SYSTEM (DRIVER SEAT CONTROL UNIT)

< SYSTEM DESCRIPTION >

Monitor Item	Unit	Main Signals	Selection From Menu	Contents
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.

ACTIVE TEST

CAUTION:

When driving vehicle, do not perform active test.

Test item	Description	
SEAT SLIDE	Activates/deactivates the sliding motor.	F
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).	G
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.	

WORK SUPPORT

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

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< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION DRIVER SEAT CONTROL UNIT

Reference Value

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VALUES ON THE DIAGNOSIS TOOL

CONSULT MONITOR ITEM

Monitor Item	Condi	tion	Value/Status
SET SW	Set switch	Push	ON
3ET 3W	Set Switch	Release	OFF
MEMORY SW1	Momory quitch 1	Push	ON
	Memory switch 1	Release	OFF
	Momory quitch 2	Push	ON
MEMORY SW2	Memory switch 2	Release	OFF
	Oliding owitch (forward)	Operate	ON
SLIDE SW-FR	Sliding switch (forward)	Release	OFF
	Oliding switch (healword)	Operate	ON
SLIDE SW-RR	Sliding switch (backward)	Release	OFF
		Operate	ON
RECLN SW-FR	Reclining switch (forward)	Release	OFF
	Reclining switch (back-	Operate	ON
RECLN SW-RR	ward)	Release	OFF
	Lifting switch front (up)	Operate	ON
LIFT FR SW-UP		Release	OFF
	Lifting switch front (down)	Operate	ON
LIFT FR SW-DN		Release	OFF
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
		Release	OFF
LIFT RR SW-DN	Lifting switch rear (down)	Operate	ON
		Release	OFF
	Minnen ervitele	Up	ON
MIR CON SW-UP	Mirror switch	Other than the above	OFF
	Mirror owitch	Down	ON
MIR CON SW-DN	Mirror switch	Other than the above	OFF
MIR CON SW-RH	Mirror switch	Right	ON
		Other than the above	OFF
	Mirror owitch	Left	ON
MIR CON SW-LH	Mirror switch	Other than the above	OFF
MIR CHNG SW-R	Changeover switch	Right	ON
	Changeover switch	Other than the above	OFF
MIR CHNG SW-L	Changeover switch	Left	ON
WIR UNING SW-L	Changeover switch	Other than the above	OFF
	Tilt owitch	Upward	ON
TILT SW-UP	Tilt switch	Other than the above	OFF
	Tilt owitch	Downward	ON
TILT SW-DOWN	Tilt switch	Other than the above	OFF

< ECU DIAGNOSIS INFORMATION >

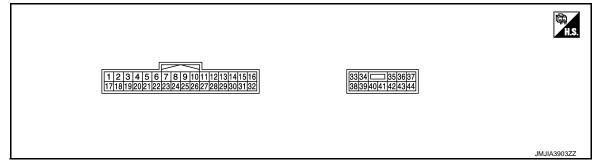
Monitor Item	Cor	ndition	Value/Status
		Forward	ON
TELESCO SW-FR	Telescopic switch	Other than the above	OFF
TELESCO SW-RR	Telescopic switch	Backward	ON
TELESCO SW-RR	Telescopic Switch	Other than the above	OFF
DETENT SW	A/T shift selector	P position	OFF
DETERT OW		Other than the above	ON
STARTER SW	Ignition position	Cranking	ON
on a characteristic of the characteristic of	Ignition position	Other than the above	OFF
		Forward	The numeral value decreases *
SLIDE PULSE	Seat sliding	Backward	The numeral value increases*
		Other than the above	No change to numeral value*
		Forward	The numeral value decreases*
RECLN PULSE	Seat reclining	Backward	The numeral value increases *
		Other than the above	No change to numeral value $\overset{*}{}$
		Up	The numeral value decreases *
LIFT FR PULSE	Seat lifter (front)	Down	The numeral value increases *
		Other than the above	No change to numeral value [*]
		Up	The numeral value decreases *
LIFT RR PULSE	Seat lifter (rear)	Down	The numeral value increases *
		Other than the 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 s	ide)	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 the above	No change to numeral value [*]
		Forward	The numeral value decreases *
TELESCO PULSE	Telescopic position	Backward	The numeral value increases *
		Other than the above	No change to numeral value [*]
		LOCK	LOCK
STEERING STATUS	Steering lock unit	unlock	UNLOCK
VEHICLE SPEED	The condition of vehicle s	speed is displayed	km/h
		P position	ON
P RANG SW CAN	A/T shift selector	Other than the above	OFF
		R position	ON
R RANGE (CAN)	A/T shift selector	Other than the above	OFF
	.	Open	ON
DOOR SW-FL	Driver door	Close	OFF

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Cond	ition	Value/Status
DOOR SW-FR	December door	Open	ON
DOOR SW-FR	Passenger door	Close	OFF
IGN ON SW	Ignition quitch	ON position	ON
IGN ON SW	Ignition switch	Other than the above	OFF
ACC ON SW	Ignition quitch	ACC or ON position	ON
ACC ON SW	Ignition switch	Other than the above	OFF
	Intelligent Key	Inserted is key slot	ON
KEY ON SW	Intelligent Key	Inserted is not key slot	OFF
KEYLESS ID	UNLOCK button of Intellige	ent Key is pressed	1, 2, 3, 4 or 5
KYLS DR UNLK	Intelligent Key or driver	ON	ON
KTLS DR UNLK	side door request switch	OFF	OFF
	Consignal from ABS	Received	ON
VHCL SPEED (ABS)	Can signal from ABS	Not received	OFF
HANDLE	The PCM for handle positiv	an is displayed	LHD
MANULE	The BCM for handle position		RHD
TRANSMISSION	Transmission type is displa	aved	AT or CVT
	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

	inal No. e color)	Description		Condition	Voltage (V)	
+	-	Signal name	Input/ output	Condition	(Approx.)	
1 (R/Y)		CAN-H	_	_	_	
2 (R)	Ground	UART communication (TX/RX)	Input	Ignition switch ON	10msec/div	

< ECU DIAGNOSIS INFORMATION >

4 (R/L)	Ground	Reclining sensor sig- nal	Input	Seat reclining	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5	A B C
5 (R/B)	Ground	Telescopic sensor sig- nal	Input	Steering telescop- ic	Operate Other than the	10mSec/div	D E F
					above	0 or 5	
6		Memory switch 2 sig-			Press	0	G
(R/W)	Ground	nal	Input	Memory switch 2	Other than the above	5	
- 7		Momory indicator 2		Momony indicator	Illuminate	1	Н
7 (R/G)	Ground	Memory indicator 2 signal	Output	Memory indicator 2	Other than the above	12	
8	Ground	Sliding switch back-	Input	Insut Oliding quitab	Operate (backward)	0	Ι
(SB)	Ground	ward signal	Input	Sliding switch	Other than the above	12	ADP
9	Ground	Reclining switch back-	Input	Reclining switch	Operate (backward)	0	
(L)		ward signal			Other than the above	12	Κ
10	Ground	Lifting switch (front)	Input	Lifting switch	Operate (down)	0	L
(L/B)		down signal		(front)	Other than the above	12	
11	Ground	Lifting switch (rear)	Input	Lifting switch	Operate (down)	0	\mathbb{M}
(L/W)	Ground	down signal	input	(rear)	Other than the above	12	Ν
12 (L/R)	Ground	Sensor power supply	Output	-	_	12	IN
17 (V)	_	CAN-L	_	-	_		0
18 (B/W)	Ground	Sliding sensor signal	Input	Seat sliding	Operate	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ	Ρ
					Other than the above	0 or 5	

< ECU DIAGNOSIS INFORMATION >

19 (B/R)	Ground	Lifting sensor (front) signal	Input	Seat lifting (front)	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ
20 (B/L)	Ground	Lifting sensor (rear) signal	Input	Seat lifting (rear)	Operate	10mSec/div
					Other than the above	0 or 5
21 (W/B)	Ground	Tilt sensor signal	Input	Steering tilt	Operate	10mSec/div
					Other than the above	0 or 5
		Manager avitable design			Press	0
22 (W/L)	Ground	Memory switch 1 sig- nal	Input	Memory switch 1	Other than the above	5
23		Memory indicator 1		Memory indicator	Illuminate	1
(W/R)	Ground	signal	Output	1	Other than the above	12
24	Ground	Sliding switch forward	lagut	Cliding owitch	Operate (forward)	0
(V/W)	Ground	signal	Input	Sliding switch	Other than the above	12
25	Ground	Reclining switch for-	Input	Reclining switch	Operate (forward)	0
(Y/B)	Ground	ward signal	mput	Nechning Switch	Other than the above	12
26	Ground	Lifting switch (front) up	loout	Lifting switch	Operate (up)	0
(Y/R)	Ground	signal	Input	(front)	Other than the above	12
27	Ground	Lifting switch (rear) up	Input	Lifting switch	Operate (up)	0
(Y/L)	Ground	signal	Input	(rear)	Other than the above	12
28					Press	0
(G)	Ground	Set switch signal	Input	Set switch	Other than the above	5

< ECU DIAGNOSIS INFORMATION >

33 (R)	Ground	Battery power supply	Input	-	_	Battery voltage	
34	Ground	Sliding motor back-	Output	Seat sliding	Operate (backward)	12	
(B)	Ground	ward output signal	Output	Seat sliding	Other than the above	0	
35	Ground	Reclining motor for-	Output	Seat reclining	Operate (forward)	12	
(G)	Ground	ward output signal	Output	Seat recliming	Other than the above	0	
36	Ground	Lifting motor (front)	Output	Seat lifting (front)	Operate (down)	12	
(L)	Giound	down output signal	Output		Other than the above	0	
38	Ground	Sliding motor forward	Output	Seat sliding	Operate (forward)	12	
(GR)		output signal	Output		Other than the above	0	
39	Ground	Reclining motor back-	Output	Seat reclining	Operate (backward)	12	
(Y)	Ground	ward output signal	Output	Seat recliming	Other than the above	0	
40	Ground	Lifting motor (front) up	Output	Seat lifting (front)	Operate (up)	12	
(W)	Giound	output signal	Output		Other than the above	0	
41	Ground	Lifting motor (rear) up	Output	Seat lifting (rear)	Operate (up)	12	I
(V)	Ground	output signal	Culput		Other than the above	0	
42	Ground	Lifting motor (rear)	Output	Seat lifting (rear)	Operate (down)	12	
(P/B)	Giound	down output signal	Juiput	Seat mung (real)	Other than the above	0	
43 (LG)	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-49</u>	
Only manual functions operate normally.	CONTROL UNIT	U1010	<u>ADP-50</u>	
	EEPROM	B2130	ADP-59	
Only manual functions, except door mirror, operate normally.	UART communication	B2128	ADP-57	
Only manual functions, except seat sliding, operate normally.	Seat sliding output	B2112	ADP-51	
Only manual functions, except seat reclining, operate normally.	Seat reclining output	B2113	<u>ADP-53</u>	
Only manual functions, except steering tilt, operate normally.	Steering column tilt output	B2116	ADP-55	

< ECU DIAGNOSIS INFORMATION >

DTC Index

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CONSULT	Tim	ing ^{*1}			
display	Current mal- function	Previous mal- function	Item	Reference page	
CAN COMM CIRCUIT [U1000]	0	1-39	CAN communication	<u>ADP-49</u>	
CONTROL UNIT [U1010]	0	1-39	Control unit	<u>ADP-50</u>	
SEAT SLIDE [B2112]	0	1-39	Seat slide motor output	<u>ADP-51</u>	
SEAT RECLINING [B2113]	0	1-39	Seat reclining motor output	<u>ADP-53</u>	
STEERING TILT [B2116]	0	1-39	Tilt motor output	<u>ADP-55</u>	
UART COMM [B2128]	0	1-39	UART communication	<u>ADP-57</u>	
EEPROM [B2130]	0	1-39	EEPROM	<u>ADP-59</u>	

*1.

• 0: Current malfunction is present

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

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

Reference Value

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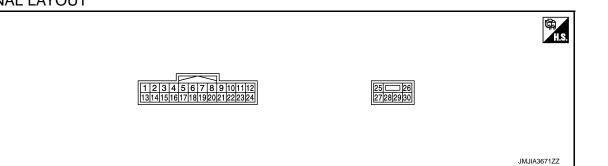
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TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (wire color)		Description			ndition	Voltage (V)	
+	-	Signal name	Input/ Output		lation	(Approx.)	
1	Ground	Tilt switch up signal	Input	Tilt switch	Operate (up)	0	
(Y)	Giouna	The switch up signal	mput	The Switch	Other than the above	5	
2	Ground	Changeover switch RH	Input	Changeover	RH	0	
(GR/B)	Giouna	signal	input	switch position	Neutral or LH	5	
3	Ground	Mirror switch up signal	Input	Mirror switch	Operated (up)	0	
(Y/G)	Ground	Million Switch up Signal	mput	WIND SWICH	Other than the above	5	
4	Crownd	Mirror quitch loft gigned	lasut	Mirror owitch	Operated (left)	0	
(GR/R)	Ground	Mirror switch left signal	Input	Mirror switch	Other than the above	5	
5 (R/B)	Ground	Door mirror sensor (pas- senger side) up/down signal	Input	Door mirror RH p	position	Change between 3.4 (close to peak) 0.6 (close to valley)	
6 (L/Y)	Ground	Door mirror sensor (driv- er side) up/down signal	Input	Door mirror LH p	osition	Change between 3.4 (close to peak) 0.6 (close to valley)	
7	Ground	Telescopic switch for-	laput	Telescopic	Operate (forward)	0	
(P)	Ground	ward signal	Input	switch	Other than the above	5	
8 (LG/R)	Ground	UART communication (TX/RX)	Output	Ignition switch ON		10msec/div	

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Voltage (V)
+	-	Signal name	Input/ Output	Cor	Idition	(Approx.)
10	Cround	Door mirror motor (pas-	Outrout		Operate (up)	12
(L/O)	Ground	senger side) up output signal	Output	Door mirror RH	Other than the above	0
11	Ground	Door mirror motor (pas- senger side) left output	Output	Door mirror RH	Operate (left)	12
(Y/B)	Cround	signal	Output		Other than the above	0
12	Ground	Door mirror motor (driver side) down/right output	Output	Door mirror (LH)	Operate (down/right)	12
(SB)	Cround	signal	Output		Other than the above	0
13	Ground	Tilt switch down signal	Input	Tilt switch	Operate (down)	0
(LG)	Cround	The owner down signal	mput		Other than the above	5
14	Ground	Changeover switch LH	Input	Changeover	LH	0
(BR)	Cround	signal	mput	switch position	Neutral or RH	5
15	Ground	Mirror switch down sig-	Input	Mirror switch	Operate (down)	0
(O/L)	Croana	nal	mpar		Other than the above	5
16	Ground	Mirror switch right signal	Input	Mirror switch	Operate (right)	0
(V/W)	Cround	WINTON SWITCH HIGH SIGNAL	mput	WIITOF SWITCH	Other than the above	5
17 (L/R)	Ground	Door mirror sensor (pas- senger side) left/right signal	Input	Door mirror RH p	osition	Change between 3.4 (close to left edge) 0.6 (close to right edge)
18 (G/W)	Ground	Door mirror sensor (driv- er side) left/right signal	Input	Door mirror LH po	osition	Change between 0.6 (close to left edge) 3.4 (close to right edge)
19	Ground	Telescopic switch back-	Input	Telescopic	Operate (backward)	0
(G)	Cround	ward signal	mput	switch	Other than the above	5
20 (Y)	Ground	Sensor ground	_			0
21 (W/L)	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)	Cround	output signal	Calput		Other than the above	0
23	Ground	Door mirror motor (driver	Output	Door mirror (LH)	Operate (up)	12
(L/W)	eround	side) up output signal	- aipur		Other than the above	0

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

Terminal No. (wire color)		Description		Cor	dition	Voltage (V)
+	-	Signal name	Input/ Output	CO		(Approx.)
24	Ground	Door mirror motor (driver	Output	Door mirror (LH)	Operate (left)	12
(BR/Y)	Ground	side) left output signal	Output		Other than the above	0
25 (W/R)	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 the above	0
27 (P)	Ground	Tilt & telescopic sensor power supply	Output	_		12
28	Ground	Tilt motor down output	Output	Steering tilt	Operate (down)	12
(G)	Ground	signal	Output		Other than the above	0
		Tilt motor up output sig-		Oto oving tilt	Operate (up)	12
29	Cround	nal	Quitout	Steering tilt	Other than the above	0
(W/B)	Ground	Telescopic motor for-	Output	Steering tele-	Operate (forward)	12
		ward output signal		scopic	Other than the above	0
30 (B)	Ground	Ground		<u> </u>		0

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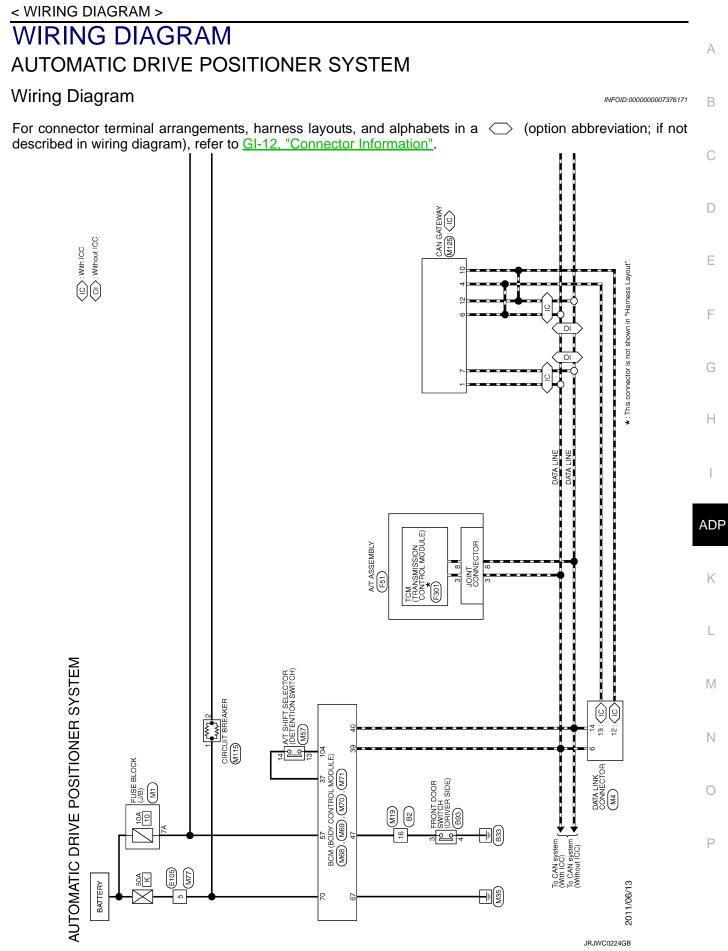
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

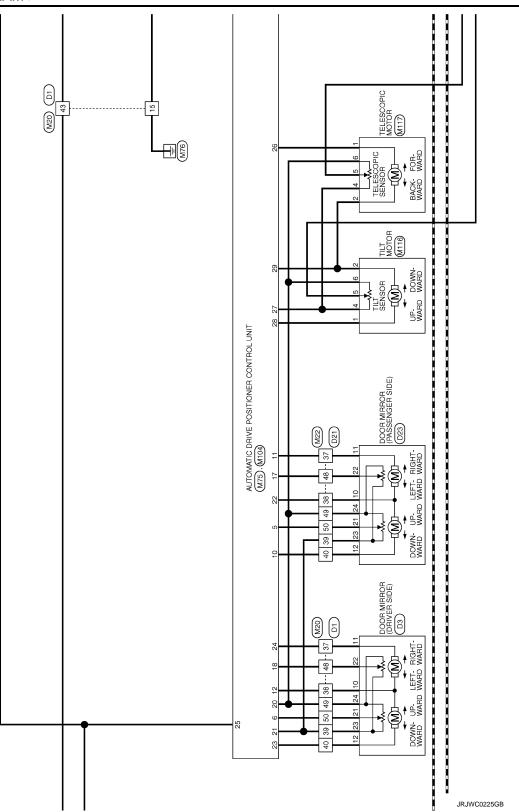
List of ECU Reference

ECU	Reference
	BCS-35, "Reference Value"
BCM	BCS-56, "Fail-safe"
	BCS-57, "DTC Inspection Priority Chart"
	BCS-57, "DTC Index"



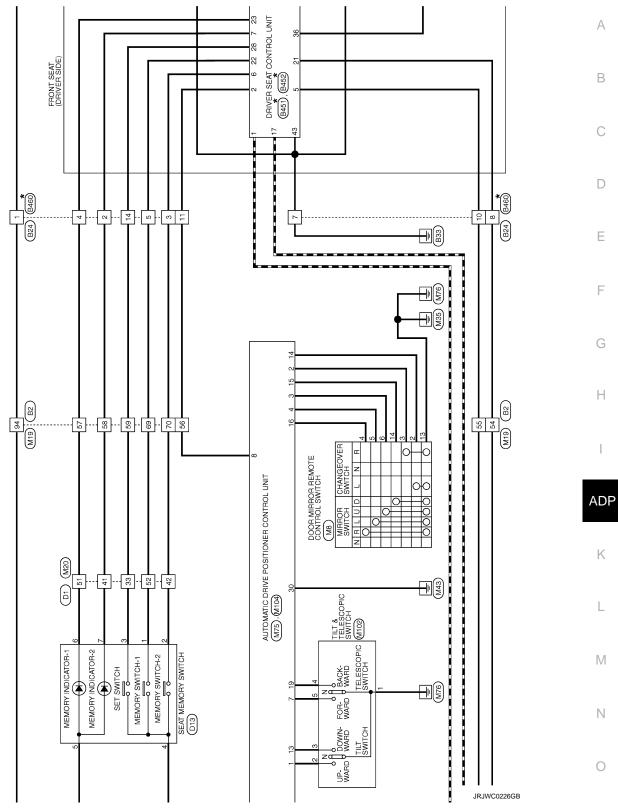
AUTOMATIC DRIVE POSITIONER SYSTEM

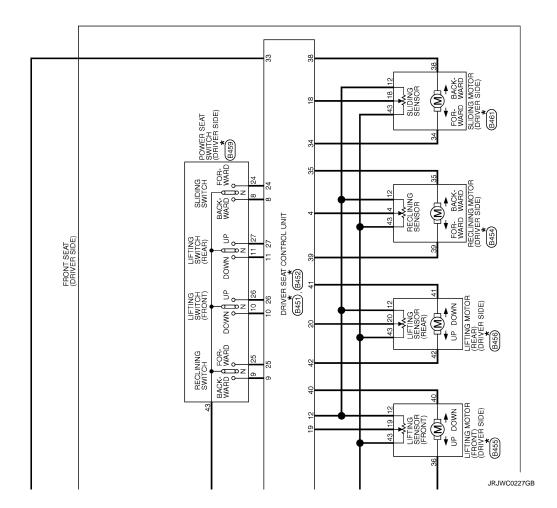
< WIRING DIAGRAM >



AUTOMATIC DRIVE POSITIONER SYSTEM

< WIRING DIAGRAM >





< BASIC INSPECTION >

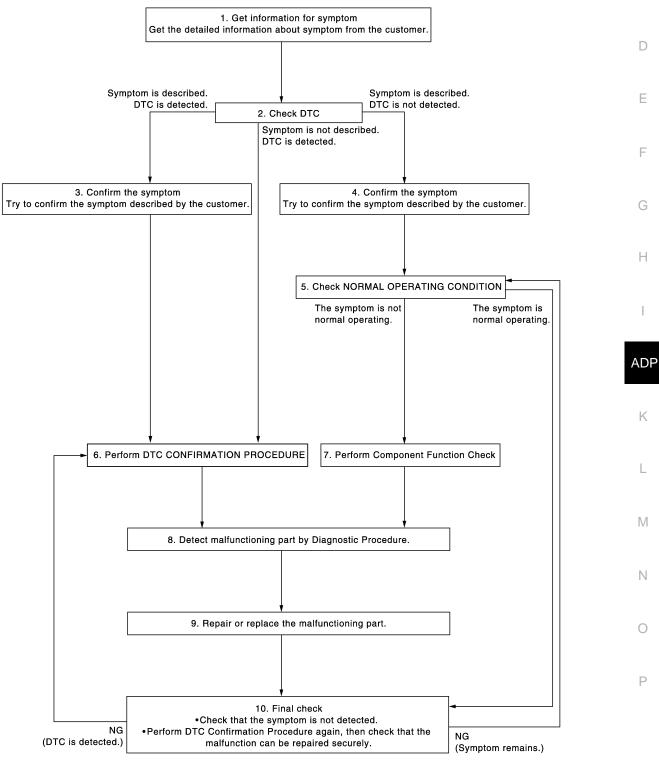
BASIC INSPECTION DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000007376172 B

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OVERALL SEQUENCE



DETAILED FLOW

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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-32, "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-127, "Description"</u>.

Is the incident normal operation?

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-43, "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 detected) again, and then check that the malfunction can be repaired securely. Are all malfunctions corrected?

Revision: 2012 September

ADP-42

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

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

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description

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

Function	Condition	Procedure	
Memory (Seat, steering, mirror)	Erased	Perform storing	
Entry/exit assist		Perform initialization	
Entry/exit assist	ON	Set slide amount ^{*1}	
Intelligent Key interleek	Erased	Perform initialization	
Intelligent Key interlock	Elased	Perform storing	

^{*1}: Default value is 40 mm.

NOTE:

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

ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Special Repair Requirement

1.SYSTEM INITIALIZATION

Perform system initialization. Refer to ADP-45, "SYSTEM INITIALIZATION : Special Repair Requirement".

>> GO TO 2.

2.MEMORY STORAGE

Perform memory storage. Refer to ADP-46, "MEMORY STORING : Special Repair Requirement".

>> GO TO 3.

3.INTELLIGENT KEY INTERLOCK STORAGE

Perform Intelligent Key interlock storage. Refer to <u>ADP-47, "INTELLIGENT KEY INTERLOCK STORING :</u> Special Repair Requirement".

>> GO TO 4.

4.SYSTEM SETTING

Perform system setting. Refer to ADP-48, "SYSTEM SETTING : Special Repair Requirement".

>> END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000007376175

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

Function	Condition	Procedure
Memory (Seat, steering, mirror)	Erased	Perform storing
		Perform initialization
Entry/exit assist	ON	Set slide amount ^{*1}

INSPECTION AND ADJUSTMENT

Function	Condition	Procedure
		Perform initialization
Intelligent Key interlock	Erased	Perform storing
¹ : Default value is 40 mm.		
NOTE: Notice that disconnecting the battery when detecte	ed DTC are pres	ent will erase the DTC memory
ADDITIONAL SERVICE WHEN REPLA		•
quirement		
1.SYSTEM INITIALIZATION		## 012-00000000 01017
Perform system initialization. Refer to ADP-45, "S	STEM INITIALI	ZATION : Special Repair Requirement".
>> GO TO 2.		
2.MEMORY STORAGE		
Perform memory storage. Refer to <u>ADP-46, "MEM</u>	ORY STORING	: Special Repair Requirement".
>> GO TO 3.		
3. INTELLIGENT KEY INTERLOCK STORAGE		
Perform Intelligent Key interlock storage. Refer t	o <u>ADP-47, "IN</u> T	ELLIGENT KEY INTERLOCK STORING
Special Repair Requirement".		
>> GO TO 4.		
1. SYSTEM SETTING		
Perform system setting. Refer to <u>ADP-48, "SYSTE</u>		necial Repair Requirement"
		pecial Repair Requirement.
>> END		
SYSTEM INITIALIZATION		
SYSTEM INITIALIZATION : Description	1	INFOID:00000000737617
Nucue perform the initialization when the better		
	' terminal is disc	connected or the driver seat control unit is
eplaced.		connected or the driver seat control unit is
eplaced. The entry/exit assist function will not operate norm	ally if no initializ	ation is performed.
eplaced.	ally if no initializ	ation is performed.
eplaced. The entry/exit assist function will not operate norm	ally if no initializ	ation is performed.
eplaced. The entry/exit assist function will not operate norm SYSTEM INITIALIZATION : Special Re	ally if no initializ	ation is performed.
eplaced. The entry/exit assist function will not operate norm SYSTEM INITIALIZATION : Special Re NITIALIZATION PROCEDURE	ally if no initializ	ation is performed.
replaced. The entry/exit assist function will not operate norm SYSTEM INITIALIZATION : Special Re NITIALIZATION PROCEDURE 1. CHOOSE METHOD	ally if no initializ	ation is performed.
replaced. The entry/exit assist function will not operate norm SYSTEM INITIALIZATION : Special Re NITIALIZATION PROCEDURE 1. CHOOSE METHOD There are two initialization methods. <u>Which method do you use?</u> With door switch>>GO TO 2.	ally if no initializ	ation is performed.
replaced. The entry/exit assist function will not operate norm SYSTEM INITIALIZATION : Special Re NITIALIZATION PROCEDURE 1. CHOOSE METHOD There are two initialization methods. Which method do you use?	ally if no initializ	ation is performed.

Driver door switch is ON (open) \rightarrow OFF (close) \rightarrow ON (open).

>> END

4. STEP B-1

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

>> END MEMORY STORING

MEMORY STORING : Description

INFOID:000000007376179

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

MEMORY STORING : Special Repair Requirement

INFOID:000000007376180

Memory Storage Procedure

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

1.STEP 1

Check the following conditions.

Ignirion switch: ON

• Ă/T shift selector: P position

>> GO TO 2.

2.STEP 2

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

>> GO TO 3.

3.STEP 3

- 1. Push set switch.
 - NOTE:
 - Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds.
 - Memory indicator for which driver seat position is not retained in memory is illuminated for 0.5 second.
- 2. Push the memory switch (1 or 2) for at least 1 second within 5 seconds after pushing the set switch. **NOTE:**
 - To enter driver seat positions into blank memory, memory indicator will be turned on for 5 seconds.
 - To modify driver seat positions, memory indicator will be turned OFF for 0.5 second, then turned ON for 5 seconds.

NOTE:

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

>> GO TO 4.

4.STEP 4

Confirm the operation of each part with memory operation.

>> END INTELLIGENT KEY INTERLOCK STORING

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INTELLIGENT KEY INTERLOCK STORING : Description

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.

INTELLIGENT KEY INTERLOCK STORING : Special Repair Requirement INFOID:00000007376182

Intelligent Key Interlock Storage Procedure

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

1.STEP 1

Check the following conditions.

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

>> GO TO 2.

2.STEP 2

- 1 Push set switch. NOTE:
- Memory indicator for which driver seat position is already retained in memory is illuminated for 5 seconds. Н 2. Push the Intelligent Key unlock button within 5 seconds after pushing memory switch (while the memory indicator is turned ON).

NOTE:

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

>> GO TO 3.

3.STEP 3

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

>> END SYSTEM SETTING

SYSTEM SETTING : Description

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

Setting	Change
---------	--------

				×: Applicat	ble
Item	Content	CONSULT	Set switch	Factory setting	0
Amount of seat sliding for entry/exit assist	The amount of seat sliding for entry/exit assist can be selected from 3 items. [40 mm/80 mm/150 mm]	x	_	40 mm	Р
Entry/exit assist (seat)	Entry/exit assist (seat) can be selected: ON (operated) – OFF (not operated)	x	x	ON	
Entry/exit assist (steering column)	Entry/exit assist (steering column) can be selected: ON (operated) – OFF (not operated)	x		ON	

Revision: 2012 September

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

SYSTEM SETTING : Special Repair Requirement

INFOID:000000007376184

1. CHOOSE METHOD

There are three way of setting method.

Which method do you choose?

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

2. WITH CONSULT - STEP 1

Select "Work support".

>> GO TO 3.

3. WITH CONSULT - STEP 2

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

>> END

4. WITH SET SWITCH - STEP 1

Turn ignition switch OFF.

>> GO TO 5.

5. WITH SET SWITCH - STEP 2

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

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

• Entry/exit assist (seat/steering column) are OFF: Memory switch indicator blink once.

>> 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.	CONSULT display description	DTC detecting condition	Possible cause
U1000	CAN COMM CIR- CUIT	 Driver seat control unit cannot communicate to other control units. When driver seat control unit cannot communicate CAN communication signal continuously for 2 seconds or more. 	CAN communication system
	FIRMATION PROC	EDURE	
1. STEP 1			
Turn ignitior	n switch ON and wai	t at least 3 seconds.	
	00 T0 0		
>> 2.step 2	GO TO 2.		
Check "Self Is the DTC (diagnostic result" w	ith CONSULI.	
		procedure. Refer to ADP-49, "Diagnosis Procedu	ıre".
	INSPECTION END		
Diagnosis	Procedure		INFOID:00000007376187
Refer to LA	N-17, "Trouble Diag	nosis Flow Chart".	
	epair Requirem		INFOID:000000007376188
•			
Refer to AD	<u>P-45, "SYSTEM INI</u>	TIALIZATION : Description".	

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INFOID:000000007376185

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000007376189

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:000000007376190

1.REPLACE DRIVER SEAT CONTROL UNIT

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

>> Replace driver seat control unit.

B2112 SLIDING MOTOR

DTC Logic

INFOID:00000007376191

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DTC DETECTION LOGIC

B2112 SEAT SLIDE ing motor	seat control unit detects the output of slid- output terminal for 0.1 second or more sliding switch is not input.	 Driver seat control unit Slide motor harness is shorted
STEP 1 n ignition switch ON. >> GO TO 2. STEP 2 eck "Self diagnostic result" with CONSU		
n ignition switch ON. >> GO TO 2. STEP 2 eck "Self diagnostic result" with CONSU		
 >> GO TO 2. STEP 2 eck "Self diagnostic result" with CONSUM 		
STEP 2 eck "Self diagnostic result" with CONSU		
STEP 2 eck "Self diagnostic result" with CONSU		
-		
-	_T.	
 S >> Perform diagnosis procedure. F >> INSPECTION END 	Refer to ADP-51, "Diagnosis Proce	edure".
ignosis Procedure		
-		INFOID:00000000
PERFORM DTC CONFIRMATION PRO	CEDURE	
Turn ignition switch ON. Check "Self diagnostic result" with CON	ISHIT	
Erase the DTC.		
Perform DTC confirmation procedure. I the DTC displayed again?	Refer to <u>ADP-51, "DTC Logic"</u> .	
ES >> GO TO 2.		
D >> Check intermittent incident. Re		
CHECK SLIDING MOTOR CIRCUIT (PC	OWER SHORT)	
Turn ignition switch OFF. Disconnect sliding motor and driver sea	at control unit connector	
Check voltage between sliding motor h		
(+)		
Sliding motor	(-)	Voltage (V) (Approx.)
Connector Termir	als	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
B461 34	Ground	0
38		

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

B2112 SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	(+) Driver seat control unit		Voltage (V) (Approx.)	
Connector	Terminals		(, , , , , , , , , , , , , , , , , , ,	
B451	34	Cround	0	
D401	38	Ground	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2113 RECLINING MOTOR

DTC Logic

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INFOID:000000007376193

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2113	SEAT RECLINING	The driver seat control unit detects the output clining motor output terminal for 0.1 second of even if the reclining switch is not input.	
DTC CONF	IRMATION PROCI	EDURE	
Furn ignition	switch ON.		
>> (2. STEP 2	GO TO 2.		
<u>s the DTC d</u> YES >> I		h CONSULT. ocedure. Refer to <u>ADP-53, "Diagnosis</u>	<u>s Procedure"</u> .
Diagnosis	Procedure		INFOID:0000000737619
1.PERFOR	M DTC CONFIRMAT	TION PROCEDURE	
2. Check "S 3. Erase th 4. Perform <u>s the DTC d</u> YES >> 0 NO >> 0	DTC confirmation pr <u>isplayed again?</u> GO TO 2. Check intermittent in	" with CONSULT. rocedure. Refer to <u>ADP-53, "DTC Log</u> i cident. Refer to <u>GI-43, "Intermittent Ind</u> CIRCUIT (POWER SHORT)	
2. Disconn		nd driver seat control unit connector. ning motor harness connector and gro	und.
	(+)		Voltage (V)
	Reclining mo	tor (-) Terminals	(Approx.)
C	B454	35 Ground 39	0
	B454	Ground	0

1. Connect driver seat control unit connector.

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

B2113 RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

	(+) Driver seat control unit		Voltage (V) (Approx.)
Connector	Terminals		()
B451	35 39	Ground	0

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace driver seat control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

B2116 TILT MOTOR

DTC Logic

					А
DT	C Logio	0		INFOID:00000007376195	/ \
DT	C DETE	CTION LOGIC			В
-	DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause	С
_	B2116	STEERING TILT	The automatic drive positioner control unit detects the output of tilt motor output terminal for 0.1 second or more even if the tilt switch is not input.	Automatic drive positioner con- trol unitTilt motor harness is shorted	D
DT	C CONF	IRMATION PROCE	EDURE		
1.	STEP 1				Е
Tur	n ignition	switch ON.			
2.	>> (STEP 2	GO TO 2.			F
	eck "Self o he DTC d	diagnostic result" with etected?_	n CONSULT.		G
YI N		Perform diagnosis pro	ocedure. Refer to <u>ADP-55. "Diagnosis Proc</u>	edure".	Н
Dia	agnosis	Procedure		INFOID:00000007376196	
1.	PERFOR	M DTC CONFIRMAT	ION PROCEDURE		
1. 2. 3.	Check "S Erase th				ADP
4. Is t		DTC confirmation pro	ocedure. Refer to <u>ADP-55, "DTC Logic"</u> .		
	ES >> (GO TO 2.	eident Deferte CL 42 "Intermittent Insident"		Κ

NO >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".

2. CHECK TILT MOTOR CIRCUIT (POWER SHORT)

1. Turn ignition switch OFF.

2. Disconnect automatic drive positioner control unit and tilt motor connector.

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

(+) Tilt motor		(-)	Voltage (V) (Approx.)		
				NI	
Connector	Terminals	=	(IN	
M116	1	Orecord	- Ground 0	0	
IVI I IO	2	- Ground	U	0	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connector.

$\mathbf{3.}$ CHECK AUTOMATIC DRIVER POSITIONER CONROL UNIT OUTPUT SIGNAL

1. Connect automatic drive positioner control unit connector.

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

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B2116 TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive pc	(+) Automatic drive positioner control unit		Voltage (V) (Approx.)	
Connector	Terminals		(Applox.)	
M104	28 29	Ground	0	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace automatic drive positioner control unit.

4. CHECK INTERMITTENT INCIDENT

Refer to GI-43, "Intermittent Incident".

>> INSPECTION END

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:000000007376198

INFOID:000000007376197

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.STEP 1

Turn ignition switch ON.

>> GO TO 2.

2.procedure

Check "Self diagnostic result" with CONSULT.		
Is the DTC detected?		
YES >> Perform diagnosis procedure. Refer to <u>ADP-57, "Diagnosis Procedure"</u> . NO >> INSPECTION END		ADP
Diagnosis Procedure	INFOID:000000007376199	K
1.PERFORM DTC CONFIRMATION PROCEDURE		
1. Turn ignition switch ON.		L
 Check "Self diagnostic result" with CONSULT. Erase the DTC. 		
4. Perform DTC confirmation procedure. Refer to <u>ADP-55, "DTC Logic"</u> .		
Is the DTC displayed again?		Μ
YES >> GO TO 2.		
NO >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> .		N
2. CHECK UART COMMUNICATION LINE CONTINUITY		IN
1. Turn ignition switch OFF.		
2 Disconnect driver seat control unit and automatic drive positioner control unit connector		\sim

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

Drive	Driver seat control unit		Automatic drive positioner control unit		P
Connector	Terminal	Connector	Terminal	- Continuity	
B452	2	M75	8	Existed	

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

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B2128 UART COMMUNICATION LINE

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit		Continuity
Connector Terminal	Ground	Continuity
B452 2		Not existed

Is the inspection result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.

NO >> Repair or replace harness or connector.

B2130 EEPROM

< DTC/CIRCUIT DIAGNOSIS >

B2130 EEPROM

DTC Logic

INFOID:00000007376200

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DTC DETECTION LOGIC

DTC No.	Trouble diagnosis name	DTC detecting condition	Possible cause
B2130	EEPROM	Driver seat control unit detected CPU malfunction.	Driver seat control unit
TC CONF	IRMATION PROCI	EDURE	
.STEP 1			
urn ignition	switch ON.		
>> 0 STEP 2	GO TO 2.		
	diagnostic result" wit		
s the DTC d	•		
	Perform diagnosis pr NSPECTION END	rocedure. Refer to <u>ADP-59, "Diagnosis_Proc</u>	edure".
NO >> I	NSPECTION END		
Vicanacia	Droooduro		
Diagnosis	Procedure		INFOID:00000007376201
-	Procedure	TION PROCEDURE	INFOID:000000007376201
.PERFORI	M DTC CONFIRMAT		INFOID:00000007376201
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC.	" with CONSULT.	INFOID:00000007376201
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr		INFOID:000000007376201
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again?	" with CONSULT.	INFOID:00000007376201
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2.	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in E DRIVER SEAT CO er seat control unit.	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in E DRIVER SEAT CO	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in E DRIVER SEAT CO er seat control unit.	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	
PERFORI	M DTC CONFIRMAT tion switch ON. Self diagnostic result e DTC. DTC confirmation pr isplayed again? GO TO 2. Check intermittent in E DRIVER SEAT CO er seat control unit.	" with CONSULT. rocedure. Refer to <u>ADP-59, "DTC Logic"</u> . cident. Refer to <u>GI-43, "Intermittent Incident</u> "	

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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:000000007376202

1.CHECK FUSE

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

Signal name	Fuse No.
Battery power supply	K (50 A)

Is the inspection result normal?

YES >> GO TO 2.

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

2. CHECK DRIVER SEAT CONTROL UNIT 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 Connector Terminals		Voltage (V) (Approx.)
Connector			
B451	33	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness.

3.CHECK DRIVER SEAT CONTROL UNIT GROUND CIRCUIT

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

Driver seat control unit			Continuity
Connector	Terminal	Ground	Continuity
B451	43		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace harness.

DRIVER SEAT CONTROL UNIT : Special Repair Requirement

INFOID:000000007376203

1.PERFORM ADDITIONAL SERVICE

Perform additional service when removing battery negative terminal.

>> Refer to <u>ADP-44</u>, "<u>ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMI-</u><u>NAL : Description</u>".

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure

INFOID:000000007376204

NOTE:

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

1.CHECK FUSE

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal na	me	Fuse	No.	
Battery power	supply	K (50 A)		
the inspection result normal? YES >> GO TO 2. NO >> Replace the blown CHECK AUTOMATIC DRIVE Turn ignition switch OFF. Disconnect automatic drive Check voltage between automatic	POSITIONER CONTR	ROL UNIT POWER SUPPL		
(+)			stor and ground.	
Automatic drive position	oner control unit	(-)	Voltage (V)	
Connector	Terminals		(Approx.)	
M104	25	Ground	Battery voltage	
CHECK AUTOMATIC DRIVE	utomatic drive positione			
Automatic drive positiv			Continuity	
		Ground	Continuity	
Connector M104 the inspection result normal?	Terminal 30	Ground	Continuity Existed	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO	Terminal 30 arness. SITIONER CONT		Existed Repair Requirement	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h	Terminal 30 arness. SITIONER CONT		Existed Repair Requirement	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO	Terminal 30 arness. SITIONER CONT	ROL UNIT : Special F	Existed	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO .PERFORM ADDITIONAL SE erform additional service when	Terminal 30 arness. SITIONER CONT RVICE n removing battery nega	ROL UNIT : Special F	Existed Repair Requirement	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO .PERFORM ADDITIONAL SE erform additional service when >> Refer to <u>ADP-44.</u>	Terminal 30 arness. SITIONER CONT RVICE n removing battery nega	ROL UNIT : Special F	Existed Repair Requirement	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO .PERFORM ADDITIONAL SE erform additional service when >> Refer to <u>ADP-44.</u>	Terminal 30 arness. SITIONER CONT RVICE n removing battery nega	ROL UNIT : Special F	Existed Repair Requirement	
Connector M104 the inspection result normal? YES >> INSPECTION END NO >> Repair or replace h UTOMATIC DRIVE PO .PERFORM ADDITIONAL SE erform additional service when >> Refer to <u>ADP-44.</u>	Terminal 30 arness. SITIONER CONT RVICE n removing battery nega	ROL UNIT : Special F	Existed Repair Requirement	

SLIDING SWITCH

Component Function Check

INFOID:000000007376206

1. CHECK FUNCTION

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

2. Check sliding switch signal under the following conditions.

Monitor item	Condition		Status
SLIDE SW-FR	Sliding switch (forward)	Operate	ON
	Sharing Switch (Ibrward)	Sliding switch (forward) Release	OFF
SLIDE SW-RR SI	Sliding switch (backward)	Operate	ON
SLIDE SW-KK	Silulity Switch (backwaru)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-62, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376207

1. CHECK 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 s	eat switch	(-)	Voltage (V) (Approx.)	
Connector	Terminals			
B459	8	Ground	12	
D+33	24	Croana	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SLIDING SWITCH 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	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	8	B459	8	Existed
D4J2	24	D435	24	LAISIEU

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

Driver sea	t control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	8	Ground	Not existed	
B452	24		Not existed	

Is the inspection result normal?

YES >> Replace driver seat control unit.

SLIDING SWITCH

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3. CHECK SLIDING SWITCH	А
Refer to ADP-63, "Component Inspection".	
Is the inspection result normal?	В
YES >> GO TO 4.	
NO >> Replace power seat switch.	
4.CHECK INTERMITTENT INCIDENT	С
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	D
Component Inspection	_
1.CHECK SLIDING SWITCH	E
 Turn ignition switch OFF. Disconnect power seat switch (sliding switch) connector. 	F

Disconnect power seat switch (sliding switch) connector.
 Check continuity between power seat switch (sliding switch) terminals.

Power seat switch (Sliding switch)		Cand	Condition			
	Tern	ninal		nuon	Continuity	
	8		Sliding switch (backward)	Operate	Existed	
	Siluing Switch (backwaru)	Release	Not existed			
24	43	Cliding quitch (forward)	Operate	Existed		
		Sliding switch (forward)	Release	Not existed		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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RECLINING SWITCH

Component Function Check

INFOID:000000007376209

1. CHECK FUNCTION

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

2. Check reclining switch signal under the following conditions.

Monitor item	Con	Status	
RECLINE SW-FR	Reclining switch (forward)	Operate	ON
		Release	OFF
RECLINE SW-RR	Reclining switch (backward)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-64, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376210

1. CHECK RECLINING 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		(//pp/ox/)	
B459	9	Ground	12	
D459	25	Giouna	12	

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK RECLINING SWITCH 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 se	eat switch	Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B452	9	B459	9	Existed	
D432	25	D409	25	LXISIEU	

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

	Driver seat	control unit		Continuity	
	Connector	Terminal	Ground	Continuity	
	B452	9	Ground	Not existed	
		25		NOT EXISTED	

Is the inspection result normal?

YES >> Replace driver seat control unit.

RECLINING SWITCH

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3. CHECK RECLINING SWITCH	А
Refer to ADP-65, "Component Inspection".	
Is the inspection result normal?	В
YES >> GO TO 4. NO >> Replace power seat switch.	
4.CHECK INTERMITTENT INCIDENT	С
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	D
Component Inspection INFOID:000000007376211	
1.CHECK RECLINING SWITCH	E
 Turn ignition switch OFF. Disconnect power seat switch (reclining switch) connector 	F

Disconnect power seat switch (reclining switch) connector.
 Check continuity between power seat switch (reclining switch) terminals.

Power seat switch (Reclining switch)		Condition		Continuity	(
Terr	ninal	Condition	Condition			
9		Reclining switch (backward)	Operate	Existed	-	
9	40		Reclining Switch (backward)	Release	Not existed	_
25	43		Reclining switch (forward)	Operate	Existed	-
25		Reclining Switch (lorward)	Release	Not existed	_	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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LIFTING SWITCH (FRONT)

Component Function Check

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	Co	Status	
LIFT FR SW-UP	Lifting switch front (up)	Operate	ON
	Lining Switch none (up)	Release	OFF
LIFT FR SW-DN	Lifting switch front (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-66, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376213

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.

(+) Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(
B459	10	Ground	12	
D439	26	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	control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	10	B459	10	Existed
D4J2	26	D455	26	LAISIEU

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

Driver sea	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	10	Ground	Not existed
0402	26		INOL EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

INFOID:000000007376212

LIFTING SWITCH (FRONT)

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3. CHECK LIFTING SWITCH (FRONT)	А
Refer to ADP-67, "Component Inspection".	
Is the inspection result normal?	В
YES >> GO TO 4.	
NO >> Replace power seat switch.	
4.CHECK INTERMITTENT INCIDENT	С
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	D
Component Inspection INFOID:00000007376214	
1.CHECK LIFTING SWITCH (FRONT)	E
 Turn ignition switch OFF. Disconnect power seat switch (lifting switch front) connector. 	F

Check continuity between power seat switch (lifting switch front) terminals.

Power seat switch (lifting switch front)		Condition		Continuity	G	
Terr	ninal	Condition		Continuity		
10		Lifting switch front (down)	Operate	Existed		
10	43	Lifting switch front (down)	Release	Release Not e	Not existed	Н
26	43		Lifting switch front (up)	Operate	Existed	
20		Linning Switch Holit (up)	Release	Not existed	1	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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LIFTING SWITCH (REAR)

Component Function Check

1.CHECK FUNCTION

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

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

Monitor item	Condition		Status
LIFT RR SW-UP	Lifting switch rear (up)	Operate	ON
	Linning Switch Tear (up)	Release	OFF
LIFT RR SW-DN Lifting switch	Lifting switch rear (down)	Operate	ON
	Lining Switch real (down)	Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-68, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376216

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.

(+) Power seat switch		(-)	Voltage (V) (Approx.)	
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
B459	11	Ground	10	
B459	27	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 seat	t control unit	Power seat switch		Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	11	B459	11	Existed
D4J2	27	D433	27	LAISIEU

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

Driver seat	Driver seat control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	11	Ground	Not existed
D432	27		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

INFOID:000000007376215

LIFTING SWITCH (REAR)

< DTC/CIRCUIT DIAGNOSIS >	
NO >> Repair or replace harness or connector.	
3.CHECK LIFTING SWITCH (REAR)	А
Refer to ADP-69, "Component Inspection".	
Is the inspection result normal?	В
YES >> GO TO 4. NO >> Replace power seat switch.	
4.CHECK INTERMITTENT INCIDENT	С
Refer to GI-43, "Intermittent Incident".	
>> INSPECTION END	D
Component Inspection INFOID:00000007376217	
1.CHECK LIFTING SWITCH (REAR)	E
 Turn ignition switch OFF. Disconnect power seat switch (lifting switch rear) connector. 	F

Disconnect power seat switch (lifting switch rear) connector.
 Check continuity between power seat switch (lifting switch rear) terminals.

Power seat switch	(lifting switch rear)	Condition		Condition		Continuity	(
Term	ninal			Conunuity			
11		Lifting switch roor (down)	Operate	Existed			
11	43	Lifting switch rear (down)	Release	Not existed	ŀ		
27	43	Lifting switch roor (up)	Operate	Existed			
21		Lifting switch rear (up)	Release	Not existed	1		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace power seat switch.

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TILT SWITCH

Component Function Check

INFOID:000000007376218

1. CHECK FUNCTION

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

2. Check tilt switch signal under the following conditions.

Monitor item	Condition		Status
TILT SW-UP Tilt switch (up)		Operate	ON
TILI SW-OP	The swhere (up)	Release	OFF
TILT SW-DOWN	Tilt switch (down)	Operate	ON
		Release	OFF

Is the indication normal?

YES >> INSPECTION END

NO >> Perform diagnosis procedure. Refer to <u>ADP-70, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376219

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	
INTO2	3	Ground	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 positioner control unit		Tilt & telescopic switch		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
M75	1	M102	2	Existed	
1017 5	13	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	Ground	Not existed	
	13	-	NOT EXISTED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TILT SWITCH

< DTC/CIRCUIT DIAGNOSIS >		
NO >> Repair or replace harness or connector.		
3.CHECK TILT SWITCH		
Refer to ADP-71, "Component Inspection".		
Is the inspection result normal?	В	
YES >> GO TO 4. NO >> Replace tilt & telescopic switch.		
4. CHECK INTERMITTENT INCIDENT		
Refer to GI-43, "Intermittent Incident".		
>> INSPECTION END	D	
Component Inspection INFOID:000000007376220	E	
1.CHECK TILT SWITCH		
 Turn ignition switch OFF. Disconnect tilt & telescopic switch connector. Check continuity between tilt & telescopic switch terminals. 	F	

Tilt switch Terminal		Condition		Continuity	G
		Tilt switch (upward)	Operate	Existed	
2	1	The Switch (upward)	Release	Not existed	H
3		Tilt switch (downward)	Operate	Existed	
			Release	Not existed	1

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch.

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TELESCOPIC SWITCH

Component Function Check

1.CHECK FUNCTION

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

2. Check telescopic switch signal under the following conditions.

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

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000007376222

INFOID:000000007376221

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	5	Ground	5	
INITO2	4	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	
WI75	19	WITO2	4	LAISIEU	

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	Ground	Not existed	
		19	-	NOT EXISTED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TELESCOPIC SWITCH

< D	TC/CIRCUIT DIAGNOSIS >			
NC	>> Repair or replace ha	mess or connector.		
3.0	HECK TELESCOPIC SWIT	СН		А
Refe	er to ADP-73, "Component In	spection".		
<u>Is th</u>	e inspection result normal?			В
YE				
NC	•	•		
4.0	CHECK INTERMITTENT INC	DENT		С
Refe	er to <u>GI-43, "Intermittent Incic</u>	ent".		
				D
	>> INSPECTION END			D
Coi	mponent Inspection		INFOID:00000007376223	
-				Е
1.0	CHECK TELESCOPIC SWIT	CH		
	Turn ignition switch OFF.			
	Disconnect tilt & telescopic s			F
3.	Check continuity between til	& telescopic switch terminals.		
	Telescopic switch		Oraștinuitu	G

	Telescop	oic switch	Condition		Continuity	G
-	Terr	minal	Condition		Continuity	
-	5		Telescopic switch (forward)	Operate	Existed	
	5	1		Release	Not existed	- - н
_	4	- I	Telescopic switch (backward)	Operate	Existed	
	4			Release	Not existed	1

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace tilt & telescopic switch.

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< DTC/CIRCUIT DIAGNOSIS >

SEAT MEMORY SWITCH

Component Function Check

INFOID:000000007376224

1. CHECK FUNCTION

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

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

Monitor item		Condition	Status
MEMORY SW 1	Memory switch 1	Push	ON
MEMORT SW 1	Memory Switch 1	Release	OFF
MEMORY SW 2	Memory switch 2	Push	ON
MEMORT SW 2	Memory Switch 2	Release	OFF
SET SW	Sat awitch	Push	ON
SELSW	Set switch	Release	OFF

Is the indication normal?

YES >> INSPECTION END

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

Diagnosis Procedure

INFOID:000000007376225

1. CHECK SEAT MEMORY SWITCH INPUT SIGNAL

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

	+) hory switch	(-)	Voltage (V) (Approx.)
Connector	Terminals		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	1		
D13	2	Ground	5
	3		

Is the inspection result normal?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK SEAT MEMORY 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 seat memory switch harness connector.

Driver sea	t control unit	Seat merr	nory switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	6		2	
B452	22	D13	1	Existed
	28		3	1

SEAT MEMORY SWITCH

< DTC/CIRCUIT DIAGNOSIS >

Drive	er seat control unit			
Connector	Termir	nal		Continuity
	6		Ground	
B452	22			Not existed
	28			
the inspection result i	normal?			<u>.</u>
	ver seat control unit			
•	eplace harness or co			
CHECK SEAT MEM	ORY SWITCH GRO	UND CIRCUIT		
eck continuity betwe	en seat memory swi	tch harness connec	tor and ground.	
Sea	t memory switch			
Connector	Termir	al	Ground	Continuity
D13	4		Croana	Existed
the inspection result i				
'ES >> GO TO 4.				
	eplace harness or co	nnector.		
CHECK SEAT MEM	ORY SWITCH			
efer to ADP-75, "Com	ponent Inspection".			
the inspection result i	normal?			
'ES >> GO TO 5.				
	at memory switch.			
CHECK INTERMITT	ENT INCIDENT			
efer to <u>GI-43, "Intermi</u>	ttent Incident".			
>> INSPECTIO	ON END			
omponent Inspec	ction			INFOID:00000007376
CHECK SEAT MEM	ORV SWITCH			
Turn ignition switch	OFF. emory switch connect	tor		
	etween seat memory			
0				
	ory switch	- c	ondition	Continuity
Iern	ninal		Duch	Estate d
1		Memory switch 1	Push	Existed
			Release	Not existed
2	4	Memory switch 2	Push	Existed
			Release Push	Not existed Existed

Is the inspection result normal?

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YES >> INSPECTION END

NO >> Replace seat memory switch.

Release

Set switch

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Not existed

< DTC/CIRCUIT DIAGNOSIS >

DOOR MIRROR REMOTE CONTROL SWITCH CHANGEOVER SWITCH

CHANGEOVER SWITCH : Component Function Check

1.CHECK CHANGEOVER SWITCH FUNCTION

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 the above.	: OFF

Is the inspection result normal?

YES >> INSPECTION END

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

CHANGEOVER SWITCH : Diagnosis Procedure

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.

	+) ote control switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(//pp/0/.)
M8	2	Ground	5
IVIO	3	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 remo	ote control switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	2	M8	3	Existed
IVI7 S	14	IVIO	2	EXISIED

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	2	Ground	Not existed
IVI / S	14		NOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness.

INFOID:000000007376227

INFOID:00000007376228

< DTC/CIRCUIT DIAGNOSIS >

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3. CHECK DOOR MIRROR REMOTE CONTROL SWITCH GROUND (JRCIIII

1. Turn ignition switch OFF.

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

M8 13 Existed nspection result normal? >> GO TO 4. >> Repair or replace harness. >> Repair or replace harness. ECK CHANGEOVER SWITCH door mirror remote control switch (changeover switch). o ADP-77. "CHANGEOVER SWITCH : Component Inspection". . nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). . ECK INTERMITTENT INCIDENT . intermittent incident. . o GI-43. "Intermittent Incident". . >> INSPECTION END . NGEOVER SWITCH : Component Inspection . registration of the second of the sec	Connector	r remote control switch		Ground	Continuity
>> GO TO 4. >> Repair or replace harness. ECK CHANGEOVER SWITCH door mirror remote control switch (changeover switch). o DP-77. "CHANGEOVER SWITCH : Component Inspection". nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43. "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection SCK CHANGEOVER SWITCH mignition switch OFF. sconnect door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch 2 13 13 Changeover switch RIGHT Existed Other than the above Not existed RIGHT Existed Other than the above Not existed <th></th> <th>-</th> <th></th> <th></th> <th>Existed</th>		-			Existed
>> GO TO 4. >> Repair or replace harness. ECK CHANGEOVER SWITCH door mirror remote control switch (changeover switch). o DP-77. "CHANGEOVER SWITCH : Component Inspection". nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43. "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection SCK CHANGEOVER SWITCH mignition switch OFF. sconnect door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch 2 13 13 Changeover switch RIGHT Existed Other than the above Not existed RIGHT Existed Other than the above Not existed <td>e inspection result r</td> <td>ormal?</td> <td></td> <td></td> <td></td>	e inspection result r	ormal?			
ECK CHANGEOVER SWITCH door mirror remote control switch (changeover switch). o ADP-77, "CHANGEOVER SWITCH : Component Inspection". nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43, "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection CK CHANGEOVER SWITCH m ignition switch OFF. sconnect door mirror remote control switch connector. teck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. teck continuity between door mirror remote control switch terminals. Door mirror remote control switch connector. teck continuity between door mirror remote control switch terminals. Door mirror remote control switch 2 13 13 Changeover switch ELEFT Existed Other than the above Not existed RIGHT Existed Other than the above Not existed					
door mirror remote control switch (changeover switch). o ADP-77. "CHANGEOVER SWITCH : Component Inspection". nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43, "Intermittent Incident". >> INSPECTION END Proteconcent NGEOVER SWITCH : Component Inspection Proteconcent ECK CHANGEOVER SWITCH Condition rightion switch OFF. connect door mirror remote control switch connector. eck continuity between door mirror remote control switch connector. Condition Condition Continuity 2 13 3 13	•	•			
a ADP-77. "CHANGEOVER SWITCH : Čomponent Inspection". nspection result normal? >> GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43, "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection CK CHANGEOVER SWITCH rm ignition switch OFF. sconnect door mirror remote control switch connector. teck continuity between door mirror remote control switch terminals. Door mirror remote control switch 2 13 13 Changeover switch KIGHT Existed Other than the above Not existed	HECK CHANGEOV	/ER SWITCH			
S GO TO 5. >> Replace door mirror remote control switch (changeover switch). ECK INTERMITTENT INCIDENT intermittent incident. o GI-43. "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection ECK CHANGEOVER SWITCH rn ignition switch OFF. sconnect door mirror remote control switch connector. teck continuity between door mirror remote control switch terminals. <u>Door mirror remote control switch</u> Condition Continuity <u>Terminal</u> <u>13</u> 13 Changeover switch <u>Condition</u> <u>Continuity</u> <u>LEFT</u> <u>Existed</u> <u>Other than the above</u> Not existed <u>RIGHT</u> <u>Existed</u> <u>Other than the above</u> Not existed <u>RIGHT</u> <u>Existed</u> <u>Other than the above</u> Not existed <u>RIGHT</u> <u>Existed</u> <u>Other than the above</u> <u>Not existed</u> <u>Other than the above</u> <u>Other than the above</u> <u>Not existed</u> <u>Other than the above</u> <u>Not existed</u> <u>Other than the above</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>Continuity</u> <u>C</u>				ection".	
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intermittent incident. o GI-43, "Intermittent Incident". >> INSPECTION END NGEOVER SWITCH : Component Inspection ECK CHANGEOVER SWITCH Tri ignition switch OFF. sconnect door mirror remote control switch connector. eck continuity between door mirror remote control switch terminals. Door mirror remote control switch Terminal Condition Continuity 2 13 LEFT Existed 3 13 Changeover switch Other than the above Not existed	•		Shiror Switch (changed		
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ECK CHANGEOVER SWITCH rn ignition switch OFF. sconnect door mirror remote control switch connector. leck continuity between door mirror remote control switch terminals. Door mirror remote control switch Condition Continuity 13 Changeover switch 13 Changeover switch 13 Changeover switch 13 Other than the above 14 Other than the above 15 Other than the above 16 Other than the above 17 Existed 18 Other than the above 19 Other than the above 10 Other than the above 11 Other than the above 12 Other than the above 13 Other than the above 14 Other than the above 15 Other than the above 16 Other than the above					
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eck continuity between door mirror remote control switch terminals. Condition Continuity 2 LEFT Existed 3 13 Changeover switch Other than the above Not existed RIGHT Existed Other than the above Not existed		•	oonent Inspectior	1	INFOID:00000000
TerminalConditionContinuity213LEFTExisted313Changeover switchOther than the aboveNot existedRIGHTExistedOther than the aboveNot existedOther than the aboveNot existedNot existed	IECK CHANGEOV	· VER SWITCH OFF.		1	INFOID:0000000
TerminalConditionContinuity213LEFTExisted313Changeover switchOther than the aboveNot existedRIGHTExistedOther than the aboveNot existedOther than the aboveNot existedNot existed	HECK CHANGEOV	VER SWITCH OFF. rror remote control	switch connector.		INFOID:0000000
2 LEFT Existed 13 Changeover switch Other than the above Not existed 3 RIGHT Existed Other than the above Not existed Other than the above Not existed	HECK CHANGEOV Turn ignition switch Disconnect door min Check continuity be	/ER SWITCH OFF. rror remote control tween door mirror	switch connector.		INFOID:0000000
2 13 Changeover switch Other than the above Not existed 3 3 Changeover switch RIGHT Existed Other than the above Not existed Not existed	HECK CHANGEOV Furn ignition switch Disconnect door min Check continuity be Door mirror remo	VER SWITCH OFF. rror remote control tween door mirror te control switch	switch connector. remote control switch	terminals.	
13 Changeover switch RIGHT Existed 3 Other than the above Not existed	HECK CHANGEOV Turn ignition switch Disconnect door min Check continuity be Door mirror remo	VER SWITCH OFF. rror remote control tween door mirror te control switch	switch connector. remote control switch	terminals.	Continuity
3 Other than the above Not existed	HECK CHANGEOV Turn ignition switch Disconnect door min Check continuity be Door mirror remo Term	VER SWITCH OFF. rror remote control tween door mirror te control switch	switch connector. remote control switch	terminals.	Continuity Existed
	HECK CHANGEOV Turn ignition switch Disconnect door mir Check continuity be Door mirror remo Term	/ER SWITCH OFF. rror remote control tween door mirror te control switch inal	switch connector. remote control switch	terminals.	Continuity Existed Not existed
	HECK CHANGEOV Furn ignition switch Disconnect door min Check continuity be Door mirror remo Term	/ER SWITCH OFF. rror remote control tween door mirror te control switch inal	switch connector. remote control switch	terminals.	Continuity Existed Not existed Existed
	ECK CHANGEOV urn ignition switch isconnect door min heck continuity be Door mirror remo Term 2 3 inspection result n	VER SWITCH OFF. rror remote control tween door mirror te control switch inal 13	switch connector. remote control switch	terminals.	Continuity Existed Not existed Existed
>> Replace door mirror remote control switch.	IECK CHANGEOV urn ignition switch isconnect door min heck continuity be Door mirror remo 2 3 inspection result r >> INSPECTIC >> Replace door	VER SWITCH OFF. rror remote control tween door mirror te control switch inal 13 <u>normal?</u> DN END or mirror remote co	switch connector. remote control switch Cc Changeover switch	terminals.	Continuity Existed Not existed Existed
>> Replace door mirror remote control switch.	IECK CHANGEOV urn ignition switch isconnect door min heck continuity be Door mirror remo 2 3 inspection result r >> INSPECTIC >> Replace door	VER SWITCH OFF. rror remote control tween door mirror te control switch inal 13 <u>normal?</u> DN END or mirror remote co	switch connector. remote control switch Cc Changeover switch	terminals.	Continuity Existed Not existed Existed
>> Replace door mirror remote control switch. COR SWITCH	HECK CHANGEOV Furn ignition switch Disconnect door min Check continuity be Door mirror remo 2 3 2 inspection result r S >> INSPECTIO >> Replace door ROR SWITCH	VER SWITCH OFF. rror remote control tween door mirror te control switch inal 13 <u>normal?</u> ON END or mirror remote co	switch connector. remote control switch Changeover switch	terminals.	Continuity Existed Not existed Existed Not existed
>> Replace door mirror remote control switch.	HECK CHANGEOV Turn ignition switch Disconnect door min Check continuity be Door mirror remo Term 2 3 e inspection result n >> INSPECTIC >> Replace door ROR SWITCH ROR SWITCH	VER SWITCH OFF. rror remote control tween door mirror te control switch inal 13 <u>normal?</u> ON END or mirror remote co i : Component	switch connector. remote control switch Changeover switch	terminals.	Continuity Existed Not existed Existed Not existed

Monitor item	Condition	
MIR CON SW-UP/DN	When operating the mirror switch toward the up or down side.	: ON
WIIX CON SW-OF/DIN	Other than the above.	: OFF

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< DTC/CIRCUIT DIAGNOSIS >

Monitor item		Condition	
	When operating the mirror	r switch toward the right or left si	de. : ON
MIR CON SW-RH/LH	Other than the above.		: OFF
s the inspection result norm	al?		
YES >> INSPECTION E NO >> Refer to <u>ADP-78</u>	ND , "MIRROR SWITCH : Dia	agnosis Procedure".	
MIRROR SWITCH : D	iagnosis Procedure		INFOID:00000007376231
1. CHECK MIRROR SWITC	H INPUT SIGNAL		
3. Turn ignition switch ON.	emote control switch conr	ector. switch harness connector	and ground.
(·	+)		
Door mirror remo	ote control switch	(-)	Voltage (V) (Approx.)
Connector	Terminal		(//pp/0x.)
	4		
M8	5	Ground	r
IVIŎ	6	Ground	5
	14	1	

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 rem	ote control switch	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	3		6	
M75	4	M8	5	Existed
UI / D	15	- IVIO	14	Existed
	16	1	4	†

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal		Continuity
	3	Ground	
M75	4	Giouna	Not existed
W// 5	15		NOI EXISIEU
	16	-	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness.

 $\mathbf{3}.$ check door mirror remote control switch ground circuit

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< DTC/CIRCUIT DIAGNOSIS >

1. Turn ignition switch OFF.

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

Door mirror remot	e control switch		Continuity
Connector	Terminal	Ground	Continuity
M8	13		Existed
s the inspection result normal	<u>?</u>		
YES >> GO TO 4.			
NO >> Repair or replace			
4. CHECK MIRROR SWITCH	l		
Check door mirror remote con			
Refer to ADP-79, "MIRROR S	WITCH : Component Ins	spection".	
Is the inspection result normal	?		
YES >> GO TO 5.		(
	or remote control switch	i (mirror switch).	
5. CHECK INTERMITTENT II	NCIDENT		
Check intermittent incident.			
Refer to GI-43, "Intermittent In	<u>icident"</u> .		
	D		
>> INSPECTION EN	U		
MIRROR SWITCH : Co	mponent Inspectio	n	INFOID:000000007376232

1.CHECK MIRROR SWITCH

1. Turn ignition switch OFF.

2. Disconnect door mirror remote control switch connector.

3. Check continuity between door mirror remote control switch terminals.

Door mirror rem	ote control switch		Condition	Continuity
Ter	minal		Condition	Continuity
4			RIGHT	Existed
4			Other than the above	Not existed
F			LEFT	Existed
5	13	Mirror owitch	Other than the above	Not existed
6		Mirror switch	UP	Existed
6			Other than the above	Not existed
14			DOWN	Existed
14			Other than the above	Not existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror remote control switch.

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POWER SEAT SWITCH GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SEAT SWITCH GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000007376233

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	eat switch		Continuity
Connector	Terminal	Ground	Continuity
B459	43		Existed

Is the inspection result normal?

- YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".
- NO >> Repair or replace harness or connector.

TILT & TELESCOPIC SWITCH GROUND CIRCUIT

<pre>< DTC/CIRCUIT DIAGNOS TILT &TELESCOPIC</pre>		ND CIRCUIT	
Diagnosis Procedure			INFOID:00000007376234
1.CHECK TILT & TELESCO	OPIC SWITCH GROUND (CIRCUIT	
 Turn ignition switch OFF Disconnect tilt & telescol Check continuity between 	pic switch connector.	arness connector and grou	und.
	copic switch		Continuity
Connector M102	Terminal 1	Ground	Existed
Is the inspection result norm YES >> Check intermitte NO >> Repair or replace	nt incident. Refer to GI-43	, "Intermittent Incident".	

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< DTC/CIRCUIT DIAGNOSIS >

SLIDING SENSOR

Component Function Check

INFOID:000000007376235

1. CHECK FUNCTION

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

2. Check sliding sensor signal under the following conditions.

Monitor item	Con	dition	Value
		Operate (forward)	Change (increase) ^{*1}
SLIDE PULSE	Seat sliding	Operate (backward)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-82, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376236

1.CHECK SLIDING SENSOR SIGNAL

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

	+) control unit Terminals	(-)	Con	dition	Signal (Reference value)
B452	18	Ground	Seat sliding	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit.
- NO >> GO TO 2.

2. CHECK SLIDING SENSOR CIRCUIT

1. Turn ignition switch OFF.

- 2. Disconnect driver seat control unit and sliding sensor connector.
- 3. Check continuity between driver seat control unit harness connector and sliding sensor harness connector.

Driver seat	control unit	Sliding	g motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	18	B461	18	Existed

SLIDING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

Drive	er seat control unit					
Connector	Termir	nal		Ground		Continuity
B452	18		-			Not existed
CHECK SLIDING SI Connect driver sea Turn ignition switch	eplace harness or co ENSOR POWER SU It control unit connec	IPPLY tor.	nector and	ground		
	-			ground.		
	(+) Sliding motor			(-)		Voltage (V)
Connector	Termin	als		()		(Approx.)
B461	12			Ground		12
IO >> GO TO 4.						
CHECK SLIDING SI Turn ignition switch Disconnect driver s		nector.		nnector and slic	ling m	otor harness conr
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be	OFF. seat control unit conr	nector.	arness cor	nnector and slic	ding me	
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be	n OFF. seat control unit conr etween driver seat co	nector. ontrol unit h	arness cor		ding me	otor harness conr Continuity
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat	n OFF. seat control unit conn etween driver seat co t control unit	nector. ontrol unit ha	arness cor Sliding	g motor	ding me	
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452	n OFF. seat control unit conn etween driver seat co t control unit Terminal	nector. ontrol unit h Conr B4	arness cor Sliding nector 461	g motor Terminal 12		Continuity
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be	o OFF. Seat control unit conn etween driver seat co t control unit Terminal 12	nector. ontrol unit h Conr B4	arness cor Sliding nector 461	g motor Terminal 12		Continuity Existed
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be	n OFF. Seat control unit conn etween driver seat co t control unit Terminal 12 etween driver seat co	nector. ontrol unit h Conr B4 ontrol unit h	arness cor Sliding nector 461 arness coi	g motor Terminal 12		Continuity
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be Drive Connector B452	o OFF. Seat control unit connetween driver seat control unit t control unit 12 etween driver seat control unit er seat control unit 12 12	nector. ontrol unit h Conr B4 ontrol unit h	arness cor Sliding nector 461 arness coi	g motor Terminal 12 nnector and gro		Continuity Existed
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be Driver Connector B452 the inspection result (ES >> Replace dr NO >> Replar or re .CHECK SLIDING SI Turn ignition switch	o OFF. seat control unit connetween driver seat control unit t control unit 12 etween driver seat control unit er seat control unit 12 normal? river seat control unit eplace harness or control unit ENSOR GROUND C	Conrol unit ha	arness cor Sliding nector 461 harness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be Driver Connector B452 the inspection result (ES >> Replace dr NO >> Replar or re .CHECK SLIDING SI Turn ignition switch	o OFF. seat control unit connetween driver seat control unit t control unit 12 etween driver seat control unit er seat control unit 12 iver seat control unit eplace harness or control unit en ormal?	Conrol unit ha	arness cor Sliding nector 461 harness cor	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity Not existed
CHECK SLIDING SI Turn ignition switch Disconnect driver s Check continuity be Driver seat Connector B452 Check continuity be Driver Connector B452 the inspection result (ES >> Replace dr NO >> Replar or re .CHECK SLIDING SI Turn ignition switch	o OFF. seat control unit connetween driver seat control unit t control unit 12 etween driver seat control unit er seat control unit 12 normal? river seat control unit eplace harness or control unit	Conr Conr Conr B4 Control unit h nal Connector. CIRCUIT or harness c	arness cor Sliding hector 461 harness con	g motor Terminal 12 nnector and gro Ground		Continuity Existed Continuity

< DTC/CIRCUIT DIAGNOSIS >

RECLINING SENSOR

Component Function Check

INFOID:000000007376237

1. CHECK FUNCTION

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

2. Check reclining sensor signal under the following conditions.

Monitor item	Con	dition	Value
		Operate (forward)	Change (increase) ^{*1}
RECLN PULSE	Seat reclining	Operate (backward)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-84, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376238

1.CHECK RECLINING SENSOR SIGNAL

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

(+ Driver seat		(-)	Con	dition	Signal (Reference value)
Connector	Terminals	-			(
B452	4	Ground	Seat reclining	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit.
- 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	control unit	Reclinir	ng motor	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	4	B454	4	Existed

RECLINING SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	er seat control unit	- 1			Continuity
Connector	Termina	al	Ground		
B452	4				Not existed
CHECK RECLINING	eplace harness or cor SENSOR POWER S t control unit connecto	SUPPLY			
0	veen reclining motor h	harness con	nector and ground.		
	(+)				
R	Reclining motor		(-)		Voltage (V) (Approx.)
Connector	Termina	als			(/ pp/0A.)
B454	12		Ground		12
the inspection result in YES >> GO TO 5. NO >> GO TO 4.		SUPPLY CII	RCUIT		
Disconnect driver s		ector.		reclining	motor harness co
 Turn ignition switch Disconnect driver s Check continuity be tor. 	OFF.	ector.		reclining	
Turn ignition switch Disconnect driver s Check continuity be tor.	OFF. eat control unit conne etween driver seat co	ector.	Reclining motor		motor harness co Continuity
Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat	OFF. eat control unit connective etween driver seat con control unit	ector. ntrol unit ha	Reclining motor	inal	
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452	OFF. eat control unit connective etween driver seat con control unit Terminal	ector. ntrol unit ha Conne B45	Reclining motor Reclining motor Term	inal	Continuity
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be 	OFF. eat control unit connective etween driver seat con control unit Terminal 12	ector. ntrol unit ha Conne B45	Reclining motor Reclining motor Term	inal	Continuity Existed
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be	OFF. eat control unit connective etween driver seat con control unit Terminal 12 etween driver seat con	ector. ntrol unit ha Conne B45 ntrol unit ha	Reclining motor Reclining motor Term	inal	Continuity
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be Drive Connector B452 	OFF. eat control unit connective etween driver seat control unit Terminal 12 etween driver seat control unit Terminal 12 etween driver seat control unit	ector. ntrol unit ha Conne B45 ntrol unit ha	Reclining motor Reclining motor ector Term 54 12 arness connector and	inal	Continuity Existed
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be Check continuity be Connector B452 Check continuity be Connector B452 Sthe inspection result in YES >> Replace drive NO >> Repair or reside CHECK RECLINING Turn ignition switch 	control unit connective etween driver seat control unit control unit Terminal 12 etween driver seat control unit remina 2 etween driver seat control unit 12 etween driver seat control unit. 2 etween seat control unit. 2 etween driver seat control unit.	ector. ntrol unit ha Conne B45 ntrol unit ha al	Arness connector and Reclining motor Sector Term S4 12 Arness connector and Ground	inal ground.	Continuity Existed Continuity
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be Check continuity be Connector B452 Check continuity be Connector B452 the inspection result in the second second	control unit connective etween driver seat control unit control unit Terminal 12 etween driver seat control er seat control unit Termina 12 etween driver seat control er seat control unit. eplace harness or cor SENSOR GROUND OFF.	ector. ntrol unit ha Conne B45 ntrol unit ha al	Arness connector and Reclining motor Sector Term S4 12 Arness connector and Ground	inal ground.	Continuity Existed Continuity Not existed
 Turn ignition switch Disconnect driver s Check continuity be tor. Driver seat Connector B452 Check continuity be Check continuity be Connector B452 Check continuity be Connector B452 the inspection result in the second second	Control unit connective en driver seat control unit Control unit Terminal 12 Etween driver seat control unit reseat control unit Terminal 12 Etween driver seat control unit. Esplace harness or cor SENSOR GROUND OFF. Etween reclining moto	ector. ntrol unit ha Conne B45 ntrol unit ha al nnector. O CIRCUIT or harness c	Arness connector and Reclining motor Sector Term S4 12 Arness connector and Ground	inal ground.	Continuity Existed Continuity

LIFTING SENSOR (FRONT)

Component Function Check

INFOID:000000007376239

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	Con	dition	Value
		Operate (up)	Change (increase) ^{*1}
LIFT FR PULSE	Seat lifting (front)	Operate (down)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-86, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376240

1.CHECK LIFTING SENSOR (FRONT) SIGNAL

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

(+ Driver seat Connector		(-)	Con	dition	Voltage (V) (Approx.)
B452	19	Ground	Seat Lifting (front)	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit.
- 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.
- Check continuity between driver seat control unit harness connector and lifting motor (front) harness connector.

Driver seat	control unit	Lifting mo	otor (front)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	19	B455	19	Existed

LIFTING SENSOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

	seat control unit			Continuity
Connector	Termina	al	Ground	
B452	19			Not existed
CHECK LIFTING SEN	lace harness or cor SOR (FRONT) PO [\]	WER SUPPLY		
Connect driver seat c Turn ignition switch C Check voltage betwee	DN. en lifting motor (fror		ctor and ground.	
	(+)			Voltage (V)
	g motor (front)		(-)	(Approx.)
Connector B455	Termina 12	IS	Ground	12
the inspection result no			Ground	12
∕ES >> GO TO 5. NO >> GO TO 4.				
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea	DFF. at control unit conne	ector.		ng motor (front) harness
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea	OFF. at control unit conne veen driver seat co	ector. ntrol unit harness o		ng motor (front) harness
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector.	OFF. at control unit conne veen driver seat co	ector. ntrol unit harness o	connector and liftin	ng motor (front) harness
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector.	OFF. at control unit conne veen driver seat con ontrol unit	ector. ntrol unit harness o Lifting	motor (front)	
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector	DFF. at control unit connerveen driver seat con ontrol unit Terminal 12	ector. ntrol unit harness o Lifting Connector B455	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector B452 Check continuity betv	OFF. at control unit connerveen driver seat con ontrol unit Terminal 12 veen driver seat con	ector. ntrol unit harness o Lifting Connector B455	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betv nector. Driver seat co Connector B452 Check continuity betv	DFF. at control unit connerveen driver seat con ontrol unit Terminal 12	ector. ntrol unit harness o Lifting Connector B455 ntrol unit harness o	connector and liftin motor (front) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B452 Check continuity betw Driver seat	DFF. at control unit connerveen driver seat control unit Terminal 12 veen driver seat control unit	ector. ntrol unit harness o Lifting Connector B455 ntrol unit harness o	connector and liftin motor (front) Terminal 12 connector and grou	Continuity Existed und.
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B452 Check continuity betw Driver s Connector B452 the inspection result no YES >> Replace drive	DFF. at control unit connerveen driver seat control ontrol unit Terminal 12 veen driver seat control seat control unit Termina 12 veen driver seat control seat control unit 12 veen driver seat control unit. lace harness or cor	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al	connector and liftin motor (front) Terminal 12 connector and grou	Continuity Existed und. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B452 Check continuity betw Connector B452 the inspection result no (ES >> Replace driver NO >> Repair or rep CHECK LIFTING SEN Turn ignition switch C Check continuity betw	DFF. at control unit connerveen driver seat control ontrol unit Terminal 12 veen driver seat con seat control unit cer seat control unit lace harness or cor SOR (FRONT) GRO DFF. veen lifting motor (fi	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al	connector and liftin	Continuity Existed und. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B452 Check continuity betw Connector B452 Check continuity betw Connector B452 the inspection result no CES >> Replace drive NO >> Repair or rep CHECK LIFTING SEN Turn ignition switch C Check continuity betw Lifting	DFF. at control unit connerveen driver seat control ontrol unit Terminal 12 veen driver seat con seat control unit cormal? er seat control unit. lace harness or cor SOR (FRONT) GRO DFF. veen lifting motor (front)	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al nnector. OUND CIRCUIT ront) harness conn	connector and liftin	Continuity Existed und. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check continuity betw nector. Driver seat co Connector B452 Check continuity betw Connector B452 the inspection result no (ES >> Replace driver NO >> Repair or rep CHECK LIFTING SEN Turn ignition switch C Check continuity betw	DFF. at control unit connerveen driver seat control ontrol unit Terminal 12 veen driver seat con seat control unit cer seat control unit lace harness or cor SOR (FRONT) GRO DFF. veen lifting motor (fi	ector. ntrol unit harness of Lifting Connector B455 ntrol unit harness of al nnector. OUND CIRCUIT ront) harness conn	connector and liftin	Continuity Existed und. Continuity Not existed

< DTC/CIRCUIT DIAGNOSIS >

LIFTING SENSOR (REAR)

Component Function Check

INFOID:000000007376241

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	Con	dition	Value
		Operate (up)	Change (increase) ^{*1}
LIFT RR PULSE	Seat lifting (rear)	Operate (down)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-88, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376242

1.CHECK LIFTING SENSOR (REAR) SIGNAL

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

(+ Driver seat		(-)	Con	dition	Voltage (V) (Approx.)
Connector	Terminals				
B452	20	Ground	Seat Lifting (rear)	Operate Other than the	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ
				above	0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit.
- 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 me	otor (rear)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
B452	20	B456	20	Existed

LIFTING SENSOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver	seat control unit			Continuity
Connector	Termina	l	Ground	Continuity
B452	20			Not existed
CHECK LIFTING SEN Connect driver seat of Turn ignition switch C	lace harness or cor ISOR (REAR) POW control unit connecto DN.	ER SUPPLY		
Check the voltage be		(real) hamess conn		
	(+)			Voltage (V)
	g motor (rear)		(-)	(Approx.)
Connector B456	Terminal 12	15	Ground	12
the inspection result no			Ground	12
YES >> GO TO 5. NO >> GO TO 4.	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			
NO >> GO 10 4.				
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea	DFF. at control unit conne	ector.		l lifting motor (rear) harı
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector.	DFF. at control unit conne between driver sea	ector. at control unit harne Lifting n	ss connector and	l lifting motor (rear) han
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector.	DFF. at control unit conne between driver sea	ector. at control unit harne	ss connector and	Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Driver seat co Connector B452	DFF. at control unit conne between driver sea ontrol unit Terminal 12	ector. at control unit harne Lifting n Connector B456	ss connector and notor (rear) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Driver seat co Connector B452 Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat	ector. at control unit harne Lifting n Connector B456	ss connector and notor (rear) Terminal 12	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Driver seat co Connector B452 Check the continuity Driver seat co Connector	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit	ector. at control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12 s connector and c	Continuity Existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity Driver seat co Connector Connector B452 Check the continuity Connector	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat	ector. at control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12	Continuity Existed ground. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity Driver Connector B452 Driver B452	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit Termina 12	ector. at control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12 s connector and c	Continuity Existed ground.
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity Connector B452 Check the continuity Connector B452 Connector Connector B452 Connector Connector B452 Connector Connector B452 Connector B452 Connector B452 Connector B452 Connector B452 Connector B452 Connector Connector B452 Connector Connector B452 Connector B45 Connector B45 Connector B45 Connector Conne	DFF. at control unit conne- between driver sea ontrol unit Terminal 12 between driver seat seat control unit Termina 12 ormal? er seat control unit. lace harness or con	ector. at control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12 s connector and c	Continuity Existed ground. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity Connector B452 Connector B452 Check the continuity Connector B452 Connector B452 Check the continuity Check the continuity Connector B452 Check the continuity Check the check t	DFF. at control unit conne- between driver sea ontrol unit Terminal 12 between driver seat seat control unit Termina 12 ormal? er seat control unit. lace harness or con	ector. at control unit harne Lifting n Connector B456 t control unit harnes	ss connector and notor (rear) Terminal 12 s connector and c	Continuity Existed ground. Continuity
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity Connector B452 Check the continuity Connector B452 Check the continuity Connector B452 Connector B452 Check the continuity Connector B452 Connector S452 Check the continuity Connector B452 Connector Connector B452 Connector Connector B452 Connector Connector B452	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit cormal? er seat control unit. lace harness or con ISOR (REAR) GRO	ector. at control unit harne Lifting n Connector B456 t control unit harnes al nnector. UND CIRCUIT	ss connector and notor (rear) Terminal 12 s connector and g Ground	Continuity Existed ground. Continuity Not existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Driver seat cc Connector B452 Check the continuity Connector B452 Check LIFTING SEN Turn ignition switch C Check the continuity	DFF. at control unit conne between driver sea ontrol unit Terminal 12 between driver seat seat control unit cormal? er seat control unit. lace harness or con ISOR (REAR) GRO	ector. at control unit harne Lifting n Connector B456 t control unit harnes al nnector. UND CIRCUIT	ss connector and notor (rear) Terminal 12 s connector and g Ground	Continuity Existed ground. Continuity Not existed
CHECK LIFTING SEN Turn ignition switch C Disconnect driver sea Check the continuity connector. Connector B452 Check the continuity CONNECT Settle inspection result no YES >> Replace drive NO >> Repair or rep CHECK LIFTING SEN Turn ignition switch C Check the continuity	DFF. at control unit conne- between driver sea ontrol unit Terminal 12 between driver seat seat control unit East control unit 12 ormal? er seat control unit. lace harness or con ISOR (REAR) GRO	Ector. at control unit harne Lifting n Connector B456 t control unit harnes at nnector. UND CIRCUIT or (rear) harness co	ss connector and notor (rear) Terminal 12 s connector and g Ground	Continuity Existed ground. Continuity Not existed

TILT SENSOR

Component Function Check

INFOID:000000007376243

1. CHECK FUNCTION

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

2. Check tilt sensor signal under the following conditions.

Monitor item	Con	Value	
		Operate (up)	Change (increase) ^{*1}
TILT PULSE	Steering column	Operate (down)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-90, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376244

1.CHECK TILT SENSOR SIGNAL

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

(+ Driver seat Connector		(-)	Condition		Voltage (V) (Approx.)
B452	21	Ground	Steering col- umn	Operate Other than the above	10mSec/div 10mSec/div 2V/div JMJIA0119ZZ 0 or 5

Is the inspection result normal?

- YES >> Replace driver seat control unit.
- NO >> GO TO 2.

2. CHECK TILT SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

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

Continuity	notor	trol unit Tilt ı		Driver seat
Continuity	Terminal	Connector	Terminal	Connector
Existed	5	M116	21	B452

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B452	21		Not existed

TILT SENSOR

ne inspection result i	normal?			
ES >> GO TO 3.				
	eplace harness or co			
CHECK TILT SENSO				
Turn ignition switch Check voltage betw	ON. /een tilt motor harnes	s connector and ar	ound.	
	(+)			Voltage (V)
	Tilt motor		(-)	(Approx.)
Connector	Termina	als		
M116	4		Ground	12
the inspection result i ES >> GO TO 5. IO >> GO TO 4. .CHECK TILT SENS0				
connector.	etween automatic driv		l unit harness conned	ctor and tilt motor harn
-	Terminal	Connector	Terminal	Continuity
		CONNECTOR	Terrinia	
Connector M104	27	M116	4	Existed
M104 Check continuity be		ve positioner contro		ctor and ground.
M104 Check continuity be	27 etween automatic driv	ve positioner contro		
M104 Check continuity be Automatic du Connector M104	27 etween automatic driv rive positioner control unit Termina 27	ve positioner contro	I unit harness conne	ctor and ground.
M104 Check continuity be Automatic du Connector M104 the inspection result of ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa	27 etween automatic driv rive positioner control unit Termina 27 hormal? tomatic drive positior eplace harness or con DR GROUND CIRCU OFF. tic drive positioner co	ve positioner contro	I unit harness conne	ctor and ground. Continuity Not existed
M104 Check continuity be Automatic du Connector M104 the inspection result i ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector.	27 etween automatic driv rive positioner control unit Termina 27 hormal? tomatic drive positior eplace harness or con DR GROUND CIRCU OFF. tic drive positioner co	ve positioner contro	I unit harness conne	ctor and ground. Continuity Not existed
M104 Check continuity be Automatic du Connector M104 the inspection result i ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector.	27 etween automatic driv rive positioner control unit Termina 27 normal? tomatic drive position eplace harness or con DR GROUND CIRCL OFF. tic drive positioner co	ve positioner contro	Ground	ctor and ground. Continuity Not existed
M104 Check continuity be Automatic du Connector M104 the inspection result in ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector.	27 etween automatic driv rive positioner control unit Termina 27 normal? tomatic drive positioner place harness or con DR GROUND CIRCL OFF. tic drive positioner co etween automatic driv	ve positioner contro	I unit harness conne Ground r. I unit harness connec I motor	ctor and ground. Continuity Not existed
M104 Check continuity be Automatic du Connector M104 the inspection result of ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M75	27 etween automatic driv rive positioner control unit Termina 27 normal? tomatic drive position eplace harness or con DR GROUND CIRCL OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal	ve positioner contro	I unit harness conne Ground r. I unit harness conned t motor t motor Terminal 6	ctor and ground. Continuity Not existed Ctor and tilt motor harn Continuity Existed
M104 Check continuity be Automatic du Connector M104 the inspection result i ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M75 Check continuity be	27 etween automatic driv rive positioner control unit Termina 27 hormal? tomatic drive position eplace harness or con DR GROUND CIRCU OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal 20	ve positioner contro	I unit harness conne Ground r. I unit harness conned t motor t motor Terminal 6	ctor and ground. Continuity Not existed Ctor and tilt motor harn Continuity Existed Ctor and ground.
M104 Check continuity be Automatic du Connector M104 the inspection result i ES >> Replace au IO >> Repair or re CHECK TILT SENSO Turn ignition switch Disconnect automa Check continuity be connector. Automatic drive po Connector M75 Check continuity be	27 etween automatic driv rive positioner control unit Termina 27 normal? tomatic drive position eplace harness or con DR GROUND CIRCL OFF. tic drive positioner co etween automatic driv sitioner control unit Terminal 20 etween automatic driv	ve positioner contro	I unit harness conne Ground r. I unit harness conned t motor t motor Terminal 6	ctor and ground. Continuity Not existed Ctor and tilt motor harn Continuity Existed

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

TELESCOPIC SENSOR

Component Function Check

INFOID:000000007376245

1. CHECK FUNCTION

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

2. Check telescopic sensor signal under the following conditions.

Monitor item	Con	Value	
		Operate (forward)	Change (increase) ^{*1}
TELESCO PULSE	Steering column	Operate (backward)	Change (decrease) ^{*1}
		Release	No change ^{*1}

^{*1}: 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 >> Perform diagnosis procedure. Refer to <u>ADP-92, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:000000007376246

1.CHECK TELESCOPIC SENSOR SIGNAL

1. Turn ignition switch ON.

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

	+) control unit	(-)	Condition		Voltage (V) (Approx.)
Connector	Terminals				
B452	5	Ground	Steering col- umn	Operate Other than the above	10mSec/div

Is the inspection result normal?

YES >> Replace driver seat control unit.

NO >> GO TO 2.

2. CHECK TELESCOPIC SENSOR CIRCUIT

1. Turn ignition switch OFF.

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

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

TELESCOPIC SENSOR

< DTC/CIRCUIT DIAGNOSIS >

	Driver	seat control unit				<u> </u>	
	Connector	Termina	al		Ground	Con	tinuity
	B452	5				Not e	existed
/E	ne inspection result no ES >> GO TO 3. D >> Repair or rep CHECK TELESCOPIC	lace harness or cor					
	Turn ignition switch C Check voltage betwe		r harness o	connector a	and ground.		
		(+)					0.0
_	Tele	scopic motor			(-)		age (V) prox.)
_	Connector	Termina	ls				· · ·
_	M117	4			Ground		12
-	CHECK TELESCOPIC Turn ignition switch C Disconnect automatic Check continuity betw harness connector.	DFF. c drive positioner co	ontrol unit	connector.	unit harness co	nnector and t	elescopic mo
_	Automatic drive posit	ioner control unit		Telescop	pic motor		Continuity
	Connector	Terminal	Coni	nector	ctor Terminal		Continuity
	M104	27	Μ	117	4		Existed
	Check continuity betw	ween automatic driv	e position	er control ι	unit harness cor	nector and g	round.
	Automatic driv	e positioner control unit				Con	tiouity
_	Automatic driv Connector	e positioner control unit Termina	al		Ground	Con	tinuity
_	Connector M104	Termina 27	al		Ground		tinuity existed
S th YE NC D.C	Connector M104 ne inspection result no ES >> Replace auto	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co	ner control nnector. ND CIRCU ontrol unit (unit. IT connector.		Not e	existed
S th YE NC D.C	Connector M104 ne inspection result no S >> Replace auto D >> Repair or rep CHECK TELESCOPIO Turn ignition switch O Disconnect automatio Check continuity betw	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co ween automatic driv	ner control nnector. ND CIRCU ontrol unit (unit. IT connector. er control u		Not o	elescopic mot
	Connector M104 The inspection result not S >> Replace auto D >> Repair or rep CHECK TELESCOPIO Turn ignition switch O Disconnect automatio Check continuity betw harness connector.	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co ween automatic driv	ner control nnector. ID CIRCU pontrol unit o ve position	unit. IT connector. er control u	unit harness co	Not o	existed
s th YE NC	Connector M104 ne inspection result no S >> Replace auto D >> Repair or rep CHECK TELESCOPIO Turn ignition switch O Disconnect automatic Check continuity betw harness connector.	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co ween automatic driv	ner control nnector. ID CIRCU ontrol unit o ve position	unit. IT connector. er control u Telescop	unit harness col	Not o	elescopic mot
s th YE NC D .C	Connector M104 The inspection result not S >> Replace autor D >> Repair or rep CHECK TELESCOPIO Turn ignition switch O Disconnect automatic Check continuity betw harness connector. Automatic drive posit Connector	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co ween automatic driv ioner control unit Terminal 20	ner control nnector. ID CIRCU ontrol unit of e position Conr M	unit. IT connector. er control u Telescop nector	unit harness col bic motor Terminal 6	Not and t	elescopic mot Continuity Existed
s th YE NC D .C	Connector M104 ne inspection result no S >> Replace auto D >> Repair or rep CHECK TELESCOPIO Turn ignition switch O Disconnect automatic Check continuity betw harness connector. Automatic drive posit Connector M75 Check continuity betw	Termina 27 ormal? omatic drive position lace harness or cor C SENSOR GROUN OFF. c drive positioner co ween automatic driv ioner control unit Terminal 20	ner control nnector. ID CIRCU ontrol unit of ve position <u>Conr</u> M ve position	unit. IT connector. er control u Telescop nector 117 er control u	unit harness col bic motor Terminal 6	Not and t	elescopic mot 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 DIAGN	OSIS >				
MIRROR SENSO	R				
DRIVER SIDE					
ORIVER SIDE : Cor	mponent Funct	tion Che	ck		INFOID:00000007376247
.CHECK FUNCTION					
. Select "MIR/SEN LH	U-D" "MIR/SEN LI	Η R-I " in "Γ)ata monit	or" with CONSUL	т
Check mirror sensor					
Monitor item		Conc	lition		Value
MIR/SEN LH U-D				Change bet 3.4 [V] (clos 0.6 [V] (clos	se to peak)
MIR/SEN LH R-L	Door m	nirror (driver si	de)		tween se to left edge) se to right edge)
the indication normal?					
ES >> INSPECTION					
-	nosis procedure. R		<u>2-95, "DRI</u>	VER SIDE : Diagr	nosis Procedure".
RIVER SIDE : Dia	gnosis Proced	ure			INFOID:00000007376248
CHECK DOOR MIRRO	OR (DRIVER SIDE) SENSOR	POWERS	SUPPLY	
Turn ignition switch C		,			
Turn ignition switch C Disconnect door mirr		nector.			
Turn ignition switch C		•••			
Check voltage betwe	en door mirror (driv	ver side) ha	rness con	nector and ground	d.
	(+)				
Door m	irror (driver side)			(-)	Voltage (V) (Approx.)
Connector	Termina	als			(//pp/0x.)
D3	23			Ground	5
the inspection result no	ormal?	U			
′ES >> GO TO 3.					
NO >> GO TO 2.					
CHECK DOOR MIRRO	OR (DRIVER SIDE)) SENSOR	POWER	SUPPLY CIRCUIT	Г
Turn ignition switch C					
Disconnect automatic Check continuity bet				ol unit harness c	connector and door mirror
(driver side) harness					
	·		Deservita		
Automatic drive posit	Terminal	Cana		(driver side) Terminal	Continuity
Connector		Conn			Eviptod
M75	21	D	-	23	Existed
Choole continuity hat	ween automatic driv	ve positione		unit namess conne	ector and ground.
Check continuity betw					
	e positioner control unit				0
				Ground	Continuity
Automatic driv	e positioner control unit			Ground	Continuity Not existed

YES >> Replace automatic drive positioner control unit. >> Repair or replace harness or connector.

NO

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

3. check door mirror (driver side) sensor ground 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 (driver side) harness connector.

Automatic drive po	ositioner control unit	Door mirror	(driver side)	Continuity
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 po	sitioner 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 p	ositioner control unit	Door mirror	(driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	6	D3	21	Existed
C / IVI	18		22	EXISTED

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

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	6	Ground	Not existed
1017 5	18		NOT EXISTED

Is the inspection result normal?

YES >> Replace door mirror sensor (built in driver side door mirror).

NO >> Repair or replace harness or connector.

PASSENGER SIDE

PASSENGER SIDE : Component Function Check

INFOID:000000007376249

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		Change between 3.4 [V] (close to peak) 0.6 [V] (close to valley)
MIR/SEN RH R-L	Door mirror (passenger side)	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

DTC/CIRCUIT DIAGN	OSIS >				
IO >> Perform diag	nosis procedure. R	efer to ADP-	97, "PASSENGER SI	<u>)E : Dia</u>	<u>gnosis Procedure"</u> .
ASSENGER SIDE	: Diagnosis P	rocedure			INFOID:00000000737625
CHECK DOOR MIRRO	OR SENSOR (PAS	SENGER SI	DE) POWER SUPPLY		
Turn ignition switch C Disconnect door mirr Turn ignition switch C Check voltage betwe	or (passenger side) DN.) harness connector ar	nd groui	nd.
	(+)				
Door mirro	or (passenger side)		(-)		Voltage (V)
Connector	Termina	als			(Approx.)
D23	23		Ground		5
the inspection result no	ormal?				
YES >> GO TO 3. IO >> GO TO 2. CHECK DOOR MIRRO		SIDE) SENS	OR POWER SUPPLY	CIRCL	ΪΤ
Turn ignition switch C Disconnect automatic Check continuity betw senger side) harness	c drive positioner co ween automatic driv			onnecto	or and door mirror (pas
		Dec	or mirror (passenger side)		
Automatic drive posit	ioner control unit	Du	of minor (passenger side)		Continuity
Automatic drive posit	tioner control unit Terminal	Connec		l	Continuity
			ctor Termina	I	Continuity Existed
Connector M75	Terminal 21	Connec D23	ctor Termina		Existed
Connector M75 Check continuity betw	Terminal 21	Connec D23 ve positioner	ctor Termina 23		Existed or and ground.
Connector M75 Check continuity betw	Terminal 21 ween automatic driv	Conner D23 ve positioner	ctor Termina 23		Existed
Connector M75 Check continuity betw Automatic driv	Terminal 21 ween automatic driv e positioner control unit	Conner D23 ve positioner	ctor Termina 23 control unit harness c		Existed or and ground.
Connector M75 Check continuity betw Automatic driv Connector	Terminal 21 ween automatic driv e positioner control unit Termina 21	Conner D23 ve positioner	ctor Termina 23 control unit harness c		Existed or and ground. Continuity
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no YES >> Replace auto NO >> Repair or rep	Terminal 21 ween automatic driv e positioner control unit Termina 21 21 21 21 21 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Conner D23 ve positioner al ner control un nnector.	ctor Termina 23 control unit harness c Ground		Existed or and ground. Continuity
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no YES >> Replace auto	Terminal 21 ween automatic driv e positioner control unit Termina 21 21 21 21 21 20 21 21 21 21 21 21 21 21 21 21 21 21 21	Conner D23 ve positioner al ner control un nnector.	ctor Termina 23 control unit harness c Ground		Existed or and ground. Continuity
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK DOOR MIRR(Turn ignition switch C Disconnect automatic	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position place harness or con OR (PASSENGER OFF. c drive positioner co ween automatic driv	Connect D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU		Existed or and ground. Continuity
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK DOOR MIRRO Turn ignition switch C Disconnect automatic Check continuity betw	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position blace harness or con OR (PASSENGER OFF. c drive positioner co ween automatic driv or.	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU		Existed or and ground. Continuity Not existed
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no ES >> Replace auto IO >> Repair or rep CHECK DOOR MIRRO Turn ignition switch O Disconnect automatic Check continuity betw senger side) connect	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position blace harness or con OR (PASSENGER OFF. c drive positioner co ween automatic driv or.	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU nnector. control unit harness c pr mirror (passenger side)		Existed or and ground. Continuity Not existed
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no (ES >> Replace auto IO >> Repair or rep CHECK DOOR MIRRO Turn ignition switch C Disconnect automatic Check continuity betw senger side) connect Automatic drive posit	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position place harness or con OR (PASSENGER OFF. c drive positioner co ween automatic driv for.	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU nnector. control unit harness c or mirror (passenger side) ctor Termina		Existed or and ground. Continuity Not existed
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no (ES >> Replace auto) IO >> Repair or rep CHECK DOOR MIRRO Turn ignition switch C Disconnect automatic Check continuity betw senger side) connect Automatic drive posit Connector M75	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position control unit Control unit Terminal 20	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner Doc Connec	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU nnector. control unit harness c or mirror (passenger side) ctor Termina		Existed or and ground. Continuity Not existed or and door mirror (pas Continuity Existed
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no 'ES Properties CHECK DOOR MIRRO Turn ignition switch C Disconnect automatic Check continuity betw senger side) connect Automatic drive posit Connector M75 Check continuity betw Senger side) connect Automatic drive posit Connector M75 Check continuity betw Connector M75 Check continuity betw	Terminal 21 ween automatic driv e positioner control unit Termina 21 ormal? omatic drive position control unit Control unit Terminal 20	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner Doc Connec D23 ve positioner	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU nnector. control unit harness c pr mirror (passenger side) ctor Termina 24		Existed or and ground. Continuity Not existed or and door mirror (pas Continuity Existed or and ground.
Connector M75 Check continuity betw Automatic driv Connector M75 the inspection result no 'ES Properties CHECK DOOR MIRRO Turn ignition switch C Disconnect automatic Check continuity betw senger side) connect Automatic drive posit Connector M75 Check continuity betw Senger side) connect Automatic drive posit Connector M75 Check continuity betw Connector M75 Check continuity betw	Terminal 21 Ween automatic driv e positioner control unit Termina 21 Drmal? Dematic drive position lace harness or con OR (PASSENGER DFF. c drive positioner co ween automatic driv tioner control unit Terminal 20 Ween automatic driv	Connec D23 ve positioner al ner control un nnector. SIDE) SENS ontrol unit co ve positioner Doc Connec D23 ve positioner	ctor Termina 23 control unit harness c Ground nit. COR GROUND CIRCU nnector. control unit harness c pr mirror (passenger side) ctor Termina 24		Existed or and ground. Continuity Not existed or and door mirror (pas Continuity Existed

Revision: 2012 September

>> Repair or replace harness or connector.

NO

MIRROR SENSOR

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK DOOR MIRROR (PASSENGER SIDE) SENSOR CIRCUIT

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

Automatic drive po	sitioner control unit	Door mirror (p	assenger side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M75	5	D23	21	Existed
1075	17	023	22	Existed

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

Automatic drive p	ositioner control unit		Continuity
Connector	Terminal	Ground	Continuity
M75	5	Ground	Not existed
1017 5	17		INDI EXISIEU

Is the inspection result normal?

YES >> Replace door mirror sensor (built in passenger side door mirror).

SLIDING MOTOR

Component Fun	ction Check				INFOID:000000007376251
.CHECK FUNCTIC	DN				
	IDE" in "Active tes motor operation.		CONSULT.		
	Test item			Description	
	OFF			Stop	
SEAT SLIDE	FR		Seat sliding	Forward	
	RR			Backward	1
Disconnect slidin Turn ignition swit Perform "Active t	ch OFF. g motor connecto	r. E") with CONS		ınd.	
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be	ch OFF. g motor connecto ch ON. sest" ("SEAT SLID etween sliding mo	r. E") with CONS		ınd.	Voltage (V/)
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be	cch OFF. Ig motor connecto icch ON. iest" ("SEAT SLID etween sliding mo motor	r. E") with CONS	onnector and grou	ind. Condition	Voltage (V) (Approx.)
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be	ch OFF. g motor connecto ch ON. sest" ("SEAT SLID etween sliding mo	r. E") with CONS tor harness co	onnector and grou	condition	(Approx.)
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be (+) Sliding	cch OFF. Ig motor connecto icch ON. rest" ("SEAT SLID etween sliding mo motor Terminals	r. E") with CONS tor harness co	onnector and grou	Condition	(Approx.)
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be (+) Sliding	cch OFF. Ig motor connecto icch ON. iest" ("SEAT SLID etween sliding mo motor	r. E") with CONS tor harness co	c	condition	(Approx.)
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be (+) Sliding	cch OFF. Ig motor connecto icch ON. rest" ("SEAT SLID etween sliding mo motor Terminals	r. E") with CONS tor harness co	onnector and grou	OFF FR (forward)	(Approx.) 0 12
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be (+) Sliding	cch OFF. Ig motor connecto icch ON. rest" ("SEAT SLID etween sliding mo motor Terminals	r. E") with CONS tor harness co	c	OFF FR (forward) RR (backward)	(Approx.) 0 12 0
Disconnect slidin Turn ignition swit Perform "Active t Check voltage be (+) Sliding	ich OFF. Ig motor connector ich ON. test" ("SEAT SLID etween sliding mo motor Terminals 38 34	r. E") with CONS tor harness co	c	OFF FR (forward) RR (backward) OFF	(Approx.) 0 12 0 0

Driver seat	t control unit	Sliding	g motor	Continuity	0
Connector	Terminal	Connector	Terminal	Continuity	
B451	34	B461	34	Existed	Р
B451	38	B401	38	Existed	

SLIDING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	34	Ground	Not existed
5451	38		NOT EXISTED

Is the inspection result normal?

YES >> Replace driver seat control unit.

RECLINING MOTOR

E	CLINING N	NOTOR				
0	mponent Fu	inction Chec	:k			INFOID:00000007376
.(CHECK FUNCT	ION				
				de with CONSULT.		
	Check the recli	ning motor oper	ation.			
		Test item			Description	
		OFF			Stop	
	SEAT RECLINING	FR		Seat reclining	Forwa	ard
		RR			Back	ward
		<u>elevant parts no</u> CTION END	ormal?			
		• • • • • • = • • =	edure. Refer to	ADP-101, "Diagnos	sis Procedure".	
	agnosis Proc	- .				INFOID:000000007376
	•					INFOID.00000001376
.(CHECK RECLIN	NING MOTOR IN	IPUT SIGNAL			
	Turn ignition sv					
	Disconnect rec	lining motor con	nector.			
	Turn ignition sw					
	Turn ignition sw Perform "Active	vitch ON. e test" ("SEAT R	ECLINING") wi	th CONSULT-III		
	Perform "Active	e test" ("SEAT R		th CONSULT-III ss connector and gro	bund.	
_	Perform "Active Check voltage	e test" ("SEAT R between reclinir			bund.	
-	Perform "Active Check voltage	e test" ("SEAT R		ss connector and gro	ound.	Voltage (V)
-	Perform "Active Check voltage	e test" ("SEAT R between reclinir +)	ng motor harne	ss connector and gro		Voltage (V) (Approx.)
	Perform "Active Check voltage (· Reclinir	e test" ("SEAT R between reclinir +)	ng motor harne	ss connector and gro		
-	Perform "Active Check voltage (· Reclinir	e test" ("SEAT R between reclinir +)	ng motor harne	ss connector and gro	dition	(Approx.)
	Perform "Active Check voltage (Reclinin Connector	e test" ("SEAT R between reclinir +) ng motor Terminals	ng motor harne (-)	connector and gro	OFF	(Approx.)
-	Perform "Active Check voltage (· Reclinir	e test" ("SEAT R between reclinir +) ng motor Terminals	ng motor harne	ss connector and gro	OFF FR (forward)	(Approx.) 0 12
	Perform "Active Check voltage (Reclinin Connector	e test" ("SEAT R between reclinir +) ng motor Terminals	ng motor harne (-)	connector and gro	OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0 0
	Perform "Active Check voltage (Reclinin Connector B454	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39	ng motor harne (-)	connector and gro	OFF FR (forward) RR (backward) OFF	(Approx.) 0 12 0 0
	Perform "Active Check voltage (Reclinir Connector B454	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 39 sult normal?	g motor harne (-) Ground	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0
Έ	Perform "Active Check voltage (Reclinir Connector B454 B454 ne inspection res	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 <u>sult normal?</u> e reclining moto	g motor harne (-) Ground	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0
Έ ΙC	Perform "Active Check voltage (Reclinin Connector B454 B454 he inspection res S >> Replac D >> GO TO	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 <u>sult normal?</u> e reclining moto 2.	r (built in seat l	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0
Έ Ι	Perform "Active Check voltage (Reclinin Connector B454 B454 be inspection res S >> Replac D >> GO TO CHECK RECLIN	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 <u>sult normal?</u> e reclining moto 2.	r (built in seat l	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0
Έ	Perform "Active Check voltage (Reclinin Connector B454 B454 De inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 <u>sult normal?</u> e reclining moto 0 2. NING MOTOR C vitch OFF.	r (built in seat I	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward)	(Approx.) 0 12 0 0 0 0
Έ Ι(Perform "Active Check voltage (Reclinin Connector B454 B454 De inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv	e test" ("SEAT R between reclinin +) ng motor Terminals 35 39 sult normal? re reclining moto 2. NING MOTOR C vitch OFF. /er seat control o	r (built in seat I	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0
Έ Ι(Perform "Active Check voltage (Reclinin Connector B454 B454 De inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv	e test" ("SEAT R between reclinin +) ng motor Terminals 35 39 sult normal? re reclining moto 2. NING MOTOR C vitch OFF. /er seat control o	r (built in seat I	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward)	(Approx.) 0 12 0 0 0 0 12
ν Ε Ι	Perform "Active Check voltage (Reclinin Connector B454 B454 be inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor.	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 sult normal? e reclining moto 2. NING MOTOR C vitch OFF. /er seat control of ty between drive	r (built in seat I	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) or and reclining	(Approx.) 0 12 0 0 0 0 12
ν Ε Ι	Perform "Active Check voltage (Reclinir Connector B454 B454 De inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor.	e test" ("SEAT R between reclinin +) ng motor Terminals 35 39 sult normal? e reclining moto 2. NING MOTOR C vitch OFF. /er seat control unit	(-) Ground r (built in seat I IRCUIT unit connector. r seat control o	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) or and reclining	(Approx.) 0 12 0 0 0 0 12
/E	Perform "Active Check voltage (Reclinin Connector B454 B454 be inspection res S >> Replac D >> GO TO CHECK RECLIN Turn ignition sw Disconnect driv Check continuit tor.	e test" ("SEAT R between reclinir +) ng motor Terminals 35 39 sult normal? e reclining moto 2. NING MOTOR C vitch OFF. /er seat control of ty between drive	(-) Ground	SEAT RECLINING	OFF FR (forward) RR (backward) OFF FR (forward) RR (backward) or and reclining	(Approx.) 0 12 0 0 0 12 12 motor harness conne

RECLINING MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Driver seat	control unit		Continuity
Connector	Terminal	Ground	Continuity
B451	35	Ground	Not existed
D401	39		NOT EXISTEN

Is the inspection result normal?

YES >> Replace driver seat control unit.

DTC/CIRCUIT	DIAGNOSIS >	LIFTING N	IOTOR (FRON	Т)	
IFTING MO		NT)			
Component F	unction Che	eck			INFOID:00000007376255
	TION				
	LIFTER FR" in ng motor (front)		e with CONSULT.		
	Test item			Descripti	ion
	OFF			St	top
SEAT LIFTER FR	UP		Seat lifting (front) U	pward
	DWM	١		D	ownward
the operation of	relevant parts	normal?			
	ECTION END	oodure Deferit		olo. Droco du	, II
	0 1	oceaure. Reter to	ADP-103, "Diagno	sis Procedure	<u>)"</u> .
iagnosis Pro	ocedure				INFOID:000000007376256
.CHECK LIFTIN	IG MOTOR (FR	ONT) INPUT SIG	SNAL		
Turn ignition s Perform "Activ	ting motor (front switch ON. /e test" ("SEAT	LIFTER FR") with	n CONSULT. mess connector and	d ground.	
(+)				
	otor (front)				
Lifting mo		(-)	Co	ndition	Voltage (V) (Approx.)
Lifting me Connector	Terminals	(-)	Co	ndition	Voltage (V) (Approx.)
		(-)	Co	ndition OFF	
		(-)	Co		(Approx.)
Connector	Terminals			OFF	(Approx.)
	Terminals 36	(-) Ground	Co SEAT LIFTER FR	OFF UP DWN (down) OFF	(Approx.) 0 0 12 0
Connector	Terminals			OFF UP DWN (down) OFF UP	(Approx.) 0 0 12 0 12 12
Connector B455	Terminals 36 40			OFF UP DWN (down) OFF	(Approx.) 0 0 12 0
Connector B455 the inspection ro YES >> Repla NO >> GO To CHECK LIFTIN Turn ignition s	Terminals 36 40 esult normal? ce lifting motor O 2. IG MOTOR (FR switch OFF.	- Ground (front) (built in se ONT) CIRCUIT		OFF UP DWN (down) OFF UP	(Approx.) 0 0 12 0 12 12
Connector B455 the inspection r YES >> Repla NO >> GO T CHECK LIFTIN Turn ignition s Disconnect dr Check continu nector.	Terminals 36 40 esult normal? ce lifting motor O 2. IG MOTOR (FR switch OFF. iver seat contro uity between dri	- Ground (front) (built in se ONT) CIRCUIT I unit connector.	SEAT LIFTER FR at cushion frame).	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 0 12 0 12 12
Connector B455 the inspection ref YES >> Repla NO >> GO To .CHECK LIFTIN Turn ignition s Disconnect dr Check continu nector.	Terminals 36 40 esult normal? ce lifting motor O 2. IG MOTOR (FR iver seat contro uity between dri er seat control unit	Ground (front) (built in se ONT) CIRCUIT I unit connector. ver seat control u	SEAT LIFTER FR at cushion frame). nit harness connec	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 0 12 0 12 0 12 0
Connector B455 the inspection r YES >> Repla NO >> GO T CHECK LIFTIN Turn ignition s Disconnect dr Check continu nector.	Terminals 36 40 esult normal? ce lifting motor O 2. IG MOTOR (FR switch OFF. iver seat control uity between dri er seat control unit Terminals	- Ground (front) (built in se ONT) CIRCUIT I unit connector. ver seat control u	SEAT LIFTER FR at cushion frame).	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 0 12 0 12 0 12 0 12 0
Connector B455 the inspection re YES >> Repla NO >> GO Te CHECK LIFTIN . Turn ignition s . Disconnect dr . Check continu nector.	Terminals 36 40 esult normal? ce lifting motor O 2. IG MOTOR (FR iver seat control uity between dri er seat control unit Terminals	Ground (front) (built in se ONT) CIRCUIT I unit connector. ver seat control u	SEAT LIFTER FR at cushion frame). nit harness connec	OFF UP DWN (down) OFF UP DWN (down)	(Approx.) 0 0 12 0 12 0 12 0 12 0

LIFTING MOTOR (FRONT)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity	
Connector	Terminal	Ground	Continuity	
B451	36		Not existed	
	40			

Is the inspection result normal?

YES >> Replace driver seat control unit.

		LIFTING MC	OTOR (REAR)		
DTC/CIRCUIT DIAGN					
Component Function	· · · ·				INFOID:0000000073
.CHECK FUNCTION					
. Select "SEAT LIFTE 2. Check the lifting mot	-		with CONSULT.		
	Test item			Descriptio	on
	OFF			Sto	р
SEAT LIFTER RR	UP		Seat lifting (rear)	Up	ward
DWN the operation of relevant parts norn				Do	wnward
YES >> INSPECTIO NO >> Perform diag Diagnosis Procedu	gnosis proced	lure. Refer to <u>A</u> l	DP-105, "Diagnosi:	s Procedure"	-
.CHECK LIFTING MO	TOR (REAR)	INPUT SIGNA	L		
 Turn ignition switch (ON.				
A. Perform "Active test" Check voltage betwee (+) Lifting motor (reference)	" ("SEAT LIFT een lifting mo		ss connector and g	round.	Voltage (V) (Approx.)
L. Perform "Active test" Check voltage betwee (+) Lifting motor (reference)	" ("SEAT LIFT een lifting mo	tor (rear) harnes	ss connector and g	dition	(Approx.)
L. Perform "Active test" Check voltage betwee (+) Lifting motor (reference)	" ("SEAT LIFT een lifting mo ear) Terminals	tor (rear) harnes	ss connector and g	OFF	(Approx.) 0
L. Perform "Active test" Check voltage betwee (+) Lifting motor (reference)	" ("SEAT LIFT een lifting mo ear)	tor (rear) harnes	ss connector and g	OFF UP	(Approx.) 0 12
L. Perform "Active test" Check voltage betwee (+) Lifting motor (reference)	" ("SEAT LIFT een lifting mo ear) Terminals	tor (rear) harnes	ss connector and g	OFF	(Approx.) 0 12
L. Perform "Active test" 5. Check voltage betwee (+) Lifting motor (re Connector	" ("SEAT LIFT een lifting mo ear) Terminals	tor (rear) harnes	connector and g	OFF UP DWN (DOWN	(Approx.) 0 12 1) 0
Perform "Active test' Check voltage betwee (+) Lifting motor (re Connector B456	" ("SEAT LIFT een lifting mo ear) Terminals 41 42	tor (rear) harnes	connector and g	OFF UP DWN (DOWN OFF	(Approx.) 0 12 0 0 0 0 0
A. Perform "Active test" Check voltage between (+) Lifting motor (respection result new YES >> Replace liftin NO >> GO TO 2. CHECK LIFTING MO Turn ignition switch (Disconnect driver se	" ("SEAT LIFT een lifting mo ear) Terminals 41 42 ormal? ng motor (rea TOR (REAR) OFF. eat control un	tor (rear) harnes (-) Ground r) (built in seat of CIRCUIT	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP DWN (DOWN	(Approx.) 0 12 0 0 0 0 0
Perform "Active test" Check voltage betwee (+) Lifting motor (reconnector B456 B456 Sthe inspection result never set the inspection result never set the inspection result never set to be a connect driver set to be a conneconect driver set to be a connect driver	" ("SEAT LIFT een lifting mo ear) Terminals 41 42 0rmal? ng motor (rea TOR (REAR) OFF. eat control un tween driver s	tor (rear) harnes (-) Ground r) (built in seat of CIRCUIT	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP DWN (DOWN	(Approx.) 0 12 0 0 0 0 1) 12
Perform "Active test" Check voltage betwee (+) Lifting motor (reconnector B456 B456 Sthe inspection result new YES >> Replace liftin NO >> GO TO 2. CHECK LIFTING MO Turn ignition switch 0 Disconnect driver se Check continuity bet	" ("SEAT LIFT een lifting mo ear) Terminals 41 42 0rmal? ng motor (rea TOR (REAR) OFF. eat control un tween driver s	(-) (-) Ground r) (built in seat of CIRCUIT it connector. seat control unit	SEAT LIFTER RR	OFF UP DWN (DOWN OFF UP DWN (DOWN	(Approx.) 0 12 0 0 0 0 1) 12

LIFTING MOTOR (REAR)

< DTC/CIRCUIT DIAGNOSIS >

Driver seat control unit			Continuity	
Connector	Terminal	Ground	Continuity	
B451	41	Gibunu	Not existed	
	12			

Is the inspection result normal?

YES >> Replace driver seat control unit.

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >	
---------------------------	--

TILT MOTOR

	nction Check				INFOID:00000000737625	
.CHECK FUNCTIO						
. Select "TILT MO . Check the tilt mo	TOR" in "Active to tor operation.	est" mode with	CONSULT.			
	Test item			Description		
	OFF			Stop		
TILT MOTOR	UP		Steering tilt	Upwar	d	
DWN				Downy	Downward	
the operation of re YES >> INSPEC		nal?				
		lure. Refer to <u>A</u>	DP-107, "Diagnos	sis Procedure".		
iagnosis Proce	edure				INFOID:00000000737626	
.CHECK TILT MO						
		NAL				
 Turn ignition swin Disconnect tilt m 						
. Turn ignition swi	tch ON.		_			
	test" ("TILT MOT(
. Check voltage b	etween tilt motor	namess conne	ctor and ground.			
(+)					
	otor	(-)	C	ondition	Voltage (V) (Approx.)	
Tilt m		()			(/ (pp) 0/)	
Tilt m Connector	Terminals	.,			(//pprox.)	
				OFF	0	
				UP	0	
	Terminals	Ground	TILT MOTOR	UP DWN (down)	0 0 12	
Connector	Terminals 1		TILT MOTOR	UP DWN (down) OFF	0 0 12 0	
Connector	Terminals		TILT MOTOR	UP DWN (down) OFF UP	0 0 12 0 12	
Connector M116	Terminals 1 2		TILT MOTOR	UP DWN (down) OFF	0 0 12 0	
Connector M116	Terminals 1 2 ult normal?	Ground		UP DWN (down) OFF UP	0 0 12 0 12	
Connector M116	Terminals 1 2 <u>ult normal?</u> tilt motor (built in	Ground		UP DWN (down) OFF UP	0 0 12 0 12	
Connector M116 the inspection results YES >> Replace NO >> GO TO 2	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2.	Ground		UP DWN (down) OFF UP	0 0 12 0 12	
Connector M116 the inspection resu YES >> Replace NO >> GO TO 2 CHECK TILT MO	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2. TOR CIRCUIT	Ground		UP DWN (down) OFF UP	0 0 12 0 12	
Connector M116 the inspection resu YES >> Replace NO >> GO TO 2 CHECK TILT MO . Turn ignition swi Disconnect auto	Terminals 1 2 LIt normal? tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive positio	Ground steering colum	nn assembly). it.	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0	
Connector M116 the inspection resurves YES >> Replace NO >> GO TO 2 CHECK TILT MO Turn ignition swite Disconnect auto Check continuity	Terminals 1 2 LIt normal? tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive positio	Ground steering colum	nn assembly). it.	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0	
Connector M116 the inspection resu YES >> Replace NO >> GO TO 2 CHECK TILT MO Turn ignition swith Disconnect auto	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive positio	Ground steering colum	nn assembly). it.	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0	
Connector M116 Sthe inspection resurves YES >> Replace NO >> GO TO 2 CHECK TILT MO CHECK TILT MO Turn ignition swi Disconnect autor Check continuity connector.	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive positio	Ground steering colum oner control unitic drive positic	nn assembly). it.	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0 12 0	
Connector M116 Sthe inspection resurves YES >> Replace NO >> GO TO 2 CHECK TILT MO CHECK TILT MO Turn ignition swi Disconnect autor Check continuity connector.	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive position between automatic	Ground steering colum oner control uni tic drive positic	in assembly). it. oner control unit ha	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0	
Connector M116 Sthe inspection resurves YES >> Replace NO >> GO TO 2 CHECK TILT MO . Turn ignition swir Disconnect autor . Check continuity connector.	Terminals 1 2 <u>ult normal?</u> tilt motor (built in 2. TOR CIRCUIT tch OFF. matic drive position between automatic	Ground Steering colum Oner control unitic drive positic	in assembly). it. oner control unit ha	UP DWN (down) OFF UP DWN (down)	0 0 12 0 12 0 12 0	

TILT MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit	Ground	Continuity
Connector	Terminal		Continuity
M104	28	Ground	Not existed
	29	-	INOT EXISTED

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

TELESCOPIC MOTOR

< DTC/CIRCUIT DI					
TELESCOPIC					
Component Fu	omponent Function Check				
1. CHECK FUNCTI	ON				
	CO MOTOR" in "A copic motor opera		e with CONSULT.		
	Test item			Description	
	OFF			Stop	
TELESCO MOTOR	FR				ard
s the operation of re	RR	2012		Backv	vard
YES >> INSPEC NO >> Perform	CTION END diagnosis proced		DP-109, "Diagnosis	<u>Procedure"</u> .	
Diagnosis Proc	edure				INFOID:000000007376262
.CHECK TELESC	OPIC MOTOR IN	PUT SIGNAL			
	scopic motor conr	ector.			
	test" ("TELESCO		CONSULT-III connector and gro	ound.	
(•	+)				
Telescop	oic motor	(-)	Con	dition	Voltage (V) (Approx.)
Connector	Terminals			0.55	
	1			OFF FR (forward)	0
	ſ		TELESCOPIC MO-	RR (backward)	12
M117		Ground	TOR	OFF	0
	2			FR (forward)	12
				RR (backward)	0
the inspection res YES >> Replace NO >> GO TO	e telescopic motor 2.	· ·	g column assembly	').	
	omatic drive position y between automatic			mess connecto	r and telescopic motor
Automatic driv	e positioner control ur	it	Telescopic motor	r	Continuity
Connector	Terminal	Co	nnector	Terminal	Continuity
M75	26 29	I	M117	1	Existed
. Check continuit	y between automa	atic drive positio	ner control unit har	ness connecto	r and ground.

TELESCOPIC MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive positioner control unit			Continuity	
Connector	Terminal	Ground	Continuity	
M75	26	Ground	Not existed	
WI75	29		NOT EXISTED	

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness or connector.

DOR MIRROR	MUIUR				
omponent Functio	on Check		INFOID:00000000		INFOID:000000007376263
	ECK DOOR MIRROR MOTOR FUNCTION				
neck the operation with ONSULT.	h "MIRROR I	MOTOR RH	" and "MIRROR M	OTOR LH" in "ACTIV	'E TEST" mode with
efer to <u>ADP-23, "CONS</u>	SULT Functio	<u>n"</u> .			
the inspection result n					
(ES >> INSPECTIO NO >> Refer to AD		nosis Proced	luro"		
iagnosis Procedu	-	10313 1 10000	<u>.</u> .		
-					INFOID:000000007376264
CHECK DOOR MIRR	OR MOTOR	INPUT SIG	NAL		
Turn ignition switch					
Disconnect door mir Turn ignition switch					
Check voltage betwe		or harness	connector and grou	ınd.	
(+)					
Door mirror	r	(-)	Co	ndition	Voltage (V)
Connector	Terminals				(Approx.)
	12			UP	12
	12			Other than the above	0
D3 (Driver side)	11	Ground	Door mirror remote	LEFT	12
D23 (Passenger side)		Ciculta	control switch	Other than the above	0
	10			DOWN / RIGHT	12
				Other than the above	0
the inspection result n (ES >> GO TO 3.	<u>omar</u>				
NO >> GO TO 2.					
CHECK DOOR MIRR	OR MOTOR	CIRCUIT			
Turn ignition switch					
Disconnect automat Check continuity be				it harness connector	and door mirror har-
ness connector.					
[driver side]					
Automatic drive pos			Door mirror (dr	,	Continuity
	Terminal		Connector	Terminal	
Connector	12			10	Existed
	12		D3	12	
Connector M75	23			11	LAISteu
M75				11	
M75 [passenger side]	23 24	it			
M75	23 24		Door mirror (pass		Continuity
M75 [passenger side] Automatic drive pos	23 24 itioner control ur		Door mirror (pass	enger side)	
M75 [passenger side] Automatic drive pos	23 24 itioner control ur Terminal		Door mirror (pass	enger side) Terminal	

DOOR MIRROR MOTOR

< DTC/CIRCUIT DIAGNOSIS >

Automatic drive po	sitioner control unit		Continuity
Connector	Terminal	Communy	
	12	Ground	
M75	23		Not existed
	24		
assenger side]			
Automatic drive po	sitioner control unit		Continuity
Connector	Terminal		Continuity
	22	Ground	
			Not existed
M75	10		

Is the inspection result normal?

YES >> Replace automatic drive positioner control unit.

NO >> Repair or replace harness or connector.

3.CHECK DOOR MIRROR MOTOR

Check door mirror motor.

Refer to ADP-112, "Component Inspection".

Is the inspection result normal?

- YES >> Check intermittent incident.Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> Replace door mirror.

Component Inspection

1.CHECK DOOR MIRROR MOTOR 1

Check that door mirror motor does not trap foreign objects and does not have any damage. Refer to <u>MIR-25, "Exploded View"</u>.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Replace door mirror.

2. CHECK DOOR MIRROR MOTOR 2

1. Turn ignition switch OFF.

2. Disconnect door mirror connector.

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

	Door mirror		
Connector	Tern	ninal	Operational direction
Connector	(+)	(-)	
	10	11	RIGHT
D3 (Driver side)	11	10	LEFT
D3 (Driver side) D23 (Passenger side)	12	10	UP
	10	12	DOWN

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace door mirror.

SEAT MEMORY INDICATOR < DTC/CIRCUIT DIAGNOSIS > SEAT MEMORY INDICATOR А **Component Function Check** INFOID:00000007376266 **1**.CHECK FUNCTION В 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? >> INSPECTION END YES >> Perform diagnosis procedure. Refer to ADP-113, "Diagnosis Procedure". NO Diagnosis Procedure F INFOID:000000007376267 1. CHECK SEAT MEMORY SWITCH INDICATOR OPERATION Check seat memory switch 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 blown fuse after repairing the affected circuit if a fuse is blown. 2. Signal name Fuse No. ADP Battery power supply 10 (10 A) Is the inspection result normal? Κ YES >> GO TO 3. NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown. ${ m 3.}$ CHECK SEAT MEMORY SWITCH INDICATOR POWER SUPPLY Check voltage between seat memory switch harness connector and ground. (+) Μ Voltage (V) Seat memory switch (-) (Approx.) Connector Terminals D13 5 Ground Ν Battery voltage Is the inspection result normal? YES >> Replace seat memory switch. NO >> Repair or replace harness or connector. ${f 4.}$ CHECK SEAT MEMORY SWITCH INDICATOR CIRCUIT 1. Turn ignition switch OFF. Ρ 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.

SEAT MEMORY INDICATOR

< DTC/CIRCUIT DIAGNOSIS >

Driver sea	Driver seat control unit		Seat memory switch	
Connector	Connector Terminal		Terminal	Continuity
B452	23	D13	6	Existed
D402	7	013	7	LAISIEU

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

Driver	Driver seat control unit		Continuity	
Connector	Terminal	Ground	Continuity	
B452	23	Ground	Not existed	
D432	7	NOT EXIS	NOT EXISTED	

Is the inspection result normal?

YES >> Replace driver seat control unit.

NO >> Repair or replace harness or connector.

MANUAL FUNCTION DOES NOT OPERATE	
SYMPTOM DIAGNOSIS	
MANUAL FUNCTION DOES NOT OPERATE ALL COMPONENT	A
ALL COMPONENT : Diagnosis Procedure	В
1. CHECK DRIVER SEAT CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT	С
Check driver seat control unit power supply and ground circuit. Refer to ADP-60, "DRIVER SEAT CONTROL UNIT : Diagnosis Procedure". 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	D
Check automatic drive positioner control unit power supply and ground circuit. Refer to <u>ADP-60, "AUTOMATIC DRIVE POSITIONER CONTROL UNIT : Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3. CONFIRM THE OPERATION	F
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. POWER SEAT	H
POWER SEAT : Diagnosis Procedure	ADP
1. CHECK POWER SEAT SWITCH GROUND CIRCUIT	ADP
Check power seat switch ground circuit. Refer to <u>ADP-80</u> , "Diagnosis Procedure". <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace harness or connector.	K
2.CONFIRM THE OPERATION	
Confirm the operation again. <u>Is the result normal?</u> YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. TILT & TELESCOPIC	M
TILT & TELESCOPIC : Diagnosis Procedure	0
1. CHECK TILT & TELESCOPIC SWITCH GROUND CIRCUIT	
Check tilt & telescopic switch ground circuit. Refer to <u>ADP-81, "Diagnosis Procedure"</u> . <u>Is the inspection result normal?</u> YES >> GO TO 2. NO >> Repair or replace harness or connector. 2. CONFIRM THE OPERATION	Ρ
Confirm the operation again.	

< SYMPTOM DIAGNOSIS >

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "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-62, "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-99, "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-43, "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-64, "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-101, "Component Function Check"</u>. INFOID:000000007376272

< SYMPTOM DIAGNOSIS >	
Is the inspection result normal?	
YES >> GO TO 4. NO >> Repair or replace the malfunction parts.	A
4.CONFIRM THE OPERATION	D
Check the operation again.	В
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43. "Intermittent Incident"</u> .	С
NO >> GO TO 1.	
SEAT LIFTING (FRONT)	
SEAT LIFTING (FRONT) : Diagnosis Procedure	D
1.CHECK LIFTING (FRONT) MECHANISM	_
Check for the following.	
Mechanism deformation or pinched foreign materials.	
Interference with other parts because of poor installation.	F
Is the inspection result normal?	
YES >> GO TO 2. NO >> Repair or replace the malfunction parts.	
2. CHECK LIFTING SWITCH (FRONT)	G
Check lifting switch (front). Refer to ADP-66, "Component Function Check".	Ш
Is the inspection result normal?	Н
YES >> GO TO 3.	
NO >> Repair or replace the malfunction parts.	1
3. CHECK LIFTING MOTOR (FRONT)	
Check lifting motor (front).	
Refer to ADP-103, "Component Function Check".	ADP
Is the inspection result normal?	
YES >> GO TO 4.	К
NO >> Repair or replace the malfunction parts.	n.
4.CONFIRM THE OPERATION	
Check the operation again.	L
Is the result normal?	
YES >> Check intermittent incident. Refer to <u>GI-43, "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.	0
 Mechanism deformation or pinched foreign materials. 	
Interference with other parts because of poor installation.	
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-68, "Component Function Check"</u> . <u>Is the inspection result normal?</u>	

< 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-105, "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-43, "Intermittent Incident".

NO >> GO TO 1. STEERING TILT

STEERING TILT : Diagnosis Procedure

INFOID:000000007376275

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-70, "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 ADP-107, "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-43, "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-72, "Component Function Check"</u> .	В
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	
3. CHECK TELESCOPIC MOTOR	С
Check telescopic motor. Refer to <u>ADP-109, "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.	_
Is the result normal?	F
YES >> Check intermittent incident. Refer to GI-43, "Intermittent Incident".	
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?	ADF
YES >> GO TO 2.	N.DI
NO >> Repair or replace the malfunction parts. 2.CHECK DOOR MIRROR REMOTE CONTROL SWITCH	
	K
 Check door mirror remote control switch. Refer to following. Mirror switch : Refer to <u>ADP-77, "MIRROR SWITCH : Component Function Check"</u>. Changeover switch : Refer to <u>ADP-76, "CHANGEOVER SWITCH : Component Function Check"</u>. 	L
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	в. Л
NO >> Repair or replace the malfunction parts. 3.CHECK DOOR MIRROR MOTOR	Μ
Check door mirror motor.	Ν
Refer to <u>ADP-111, "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-43, "Intermittent Incident"</u> . NO >> GO TO 1.	

< SYMPTOM DIAGNOSIS >
MEMORY FUNCTION DOES NOT OPERATE
ALL COMPONENT
ALL COMPONENT : Diagnosis Procedure
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 INITIALIZATION AND MEMORY STORING PROCEDURE
 Perform initialization procedure. Refer to <u>ADP-45, "SYSTEM INITIALIZATION : Special Repair Requirement"</u>.
 Perform memory storing procedure. Refer to <u>ADP-46, "MEMORY STORING : Special Repair Requirement"</u>.
3. Check memory function.
Refer to <u>ADP-16</u> , " <u>MEMORY FUNCTION</u> : <u>System Description</u> ".
<u>Is the inspection result normal?</u> YES >> Memory function is normal.
YES >> Memory function is normal. NO >> GO TO 3.
3. CHECK SEAT MEMORY SWITCH
Check seat memory switch.
Refer to <u>ADP-74, "Component Function Check"</u> .
Is the inspection result normal?
YES >> GO TO 4.
NO >> Replace seat memory switch.
4.CONFIRM THE OPERATION
Confirm the operation again.
Is the result normal?
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.
SEAT SLIDING
SEAT SLIDING : Diagnosis Procedure
1.CHECK MANUAL OPERATION
Check manual operation.
Is the inspection result normal?
YES >> GO TO 2. NO >> Refer to <u>ADP-116, "SEAT SLIDING : Diagnosis Procedure"</u>
2.CHECK SLIDING SENSOR
Check sliding 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 GI-43, "Intermittent Incident".

< SYMPTOM DIAGNOSIS >	
NO >> GO TO 1. SEAT RECLINING	А
SEAT RECLINING : Diagnosis Procedure	
1. CHECK MANUAL OPERATION	В
Check manual operation.	
<u>Is the inspection result normal?</u> YES >> GO TO 2.	С
NO >> Refer to ADP-116, "SEAT RECLINING : Diagnosis Procedure"	_
2.CHECK RECLINING SENSOR	D
Check reclining sensor. Refer to <u>ADP-84, "Component Function Check"</u> .	_
Is the inspection result normal?	E
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	_
3. CONFIRM THE OPERATION	F
Check the operation again.	
Is the result normal?	G
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	
SEAT LIFTING (FRONT)	Н
SEAT LIFTING (FRONT) : Diagnosis Procedure	
1. CHECK MANUAL OPERATION	I
Check manual operation.	ADF
<u>Is the inspection result normal?</u> YES >> GO TO 2.	ADF
NO >> Refer to <u>ADP-117, "SEAT LIFTING (FRONT) : Diagnosis Procedure"</u>	K
2.CHECK LIFTING SENSOR (FRONT)	r.
Check lifting sensor (front). Refer to <u>ADP-86, "Component Function Check"</u> .	I
Is the inspection result normal?	
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	M
3. CONFIRM THE OPERATION	IVI
Check the operation again.	Ν
Is the result normal?	IN
 YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>. NO >> GO TO 1. 	0
SEAT LIFTING (REAR)	0
SEAT LIFTING (REAR) : Diagnosis Procedure	Р
1.CHECK MANUAL OPERATION	
Check manual operation. <u>Is the inspection result normal?</u>	
YES >> GO TO 2.	
NO >> Refer to ADP-117, "SEAT LIFTING (REAR) : Diagnosis Procedure"	

< SYMPTOM DIAGNOSIS >

2.CHECK LIFTING SENSOR (REAR)

Check lifting sensor (rear).

Refer to ADP-88, "Component Function Check".

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-43, "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 ADP-118, "STEERING TILT : Diagnosis Procedure"

2.CHECK TILT SENSOR

Check steering tilt sensor.

Refer to ADP-90, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 ${f 3.}$ CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

YES >> Check intermittent incident. Refer to <u>GI-43, "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-118</u>, "STEERING TELESCOPIC : Diagnosis Procedure"

2.CHECK TELESCOPIC SENSOR

Check steering telescopic sensor.

Refer to ADP-92, "Component Function Check".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunction parts.

 ${
m 3.}$ CONFIRM THE OPERATION

Check the operation again.

Is the result normal?

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< SYMPTOM DIAGNOSIS >	
YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1. DOOR MIRROR	А
DOOR MIRROR : Diagnosis Procedure	В
1.CHECK MANUAL OPERATION	
Check manual operation.	С
Is the inspection result normal?	
YES >> GO TO 2. NO >> Refer to <u>ADP-119, "DOOR MIRROR : Diagnosis Procedure"</u>	D
2. CHECK MIRROR SENSOR	D
Check mirror sensor. Refer to following. • Driver side : <u>ADP-95, "DRIVER SIDE : Component Function Check"</u> . • Passenger side : <u>ADP-96, "PASSENGER SIDE : Component Function Check"</u> .	Е
Is the inspection result normal?	_
YES >> GO TO 3. NO >> Repair or replace the malfunction parts.	F
3. CONFIRM THE OPERATION	G
Check the operation again.	0
Is the result normal?	
 YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>. NO >> GO TO 1. 	Η

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ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >

ENTRY/EXIT ASSIST FUNCTION DOES NOT OPERATE

Diagnosis Procedure

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1	.CHECK SYSTEM	SETTING
	IONEON OF OTEM	0011110

- 1. Check system setting. Refer to <u>ADP-48</u>, "SYSTEM SETTING : Special Repair Requirement".
- 2. Check the operation.
- Is the inspection result normal?
- YES >> Entry/Exit function is normal.
- NO >> GO TO 2.
- 2. PERFORM SYSTEM INITIALIZATION
- 1. Perform system initialization. Refer to <u>ADP-45. "SYSTEM INITIALIZATION : Special Repair Requirement"</u>.
- 2. Check the operation.
- Is the inspection result normal?
- YES >> Entry/Exit function is normal.
- NO >> GO TO 3.
- **3.**CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check front door switch (driver side). Refer to DLK-99, "Component Function Check".

Is the inspection result normal?

- YES >> GO TO 4.
- NO >> Repair or replace the malfunction parts.
- **4.**CONFIRM THE OPERATION

Confirm the operation again.

Is the result normal?

- YES >> Check intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u>.
- NO >> GO TO 1.

INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT OPERATE

< SYMPTOM DIAGNOSIS >	
INTELLIGENT KEY INTERLOCK FUNCTION DOES NOT C	DPERATE A
Diagnosis Procedure	INFOID:000000007376287
1. PERFORM INTELLIGENT KEY INTERLOCK STORING PROCEDURE	В
 Perform Intelligent Key interlock storing procedure. Refer to <u>ADP-47</u>, "INTELLIGENT KEY INTERLOCK STORING : Special Repair F Check the operation. In the inequation result permet? 	Requirement". C
<u>Is the inspection result normal?</u> YES >> Intelligent Key interlock function is normal. NO >> GO TO 2. 2. CHECK DOOR LOCK FUNCTION	D
Check door lock function. Refer to <u>DLK-59, "Work Flow"</u> .	E
Is the inspection result normal? YES >> GO TO 3. NO >> Repair or replace the malfunction parts. 3. CONFIRM THE OPERATION	F
Confirm the operation again. Is the result normal?	G
YES >> Check the intermittent incident. Refer to <u>GI-43, "Intermittent Incident"</u> . NO >> GO TO 1.	Н

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< SYMPTOM DIAGNOSIS >

MEMORY INDICATE DOES NOT OPERATE

Diagnosis Procedure

INFOID:000000007376288

1. CHECK SEAT MEMORY SWITCH INDICATOR

Check seat memory switch indicator. Refer to <u>ADP-113</u>, "Component Function Check".

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-43, "Intermittent Incident"</u>.

NO >> GO TO 1.

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

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

Symptom	Cause	Action to take	Reference page
Entry/ovit assist function do not	No initialization has been performed.	Perform initialization.	ADP-45, "SYSTEM INI- TIALIZATION : Descrip- tion"
Entry/exit assist function do not operate.	Entry/exit assist function is disabled. NOTE: Entry/exit assist function is set to ON be- fore delivery (initial setting).	Change the settings.	ADP-47, "SYSTEM SETTING : Description"
Entry assist function does not op- erate.	Manual operation with power seat switch was performed after exit assist function execution.	Perform the entry as- sist function.	ADP-19, "ENTRY AS- SIST FUNCTION : Sys- tem Description"
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.		SE-16, "LUMBAR SUP- PORT SYSTEM : Sys- tem Description"
		fulfilled. Fulfill the operation conditions.	Memory function : ADP-16, "MEMORY FUNCTION : System Description"
Memory function, entry/exit as-			Entry assist function : ADP-19, "ENTRY AS- SIST FUNCTION : Sys- tem Description"
sist function, or Intelligent Key in- terlock function does not operate.	The operating conditions are not fulfilled.		Exit assist function : ADP-18, "EXIT ASSIST FUNCTION : System Description"
			Intelligent Key interlock function : <u>ADP-21, "IN-</u> <u>TELLIGENT KEY IN-</u> <u>TERLOCK FUNCTION :</u> <u>System Description"</u>

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< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION DRIVER SEAT CONTROL UNIT

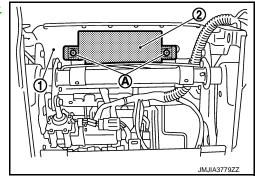
Removal and Installation

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove driver seat (1). Refer to <u>SE-81, "Removal and Installa-</u> tion".
- 2. Remove screws (A).
- 3. Remove driver seat control unit (2).



INSTALLATION Install in the reverse order of removal. CAUTION: Be sure to clump the harness to the right place. NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to <u>ADP-44</u>, "<u>ADDI-</u><u>TIONAL SERVICE WHEN REPLACING CONTROL UNIT</u> : <u>Description</u>".

cloths to protect parts from

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

< REMOVAL AND INSTALLATION >

AUTOMATIC DRIVE POSITIONER CONTROL UNIT

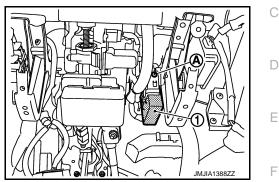
Removal and Installation

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- Remove instrument lower panel LH. Refer to IP-14, "Removal 1. and Installation".
- 2. Remove screws (A).
- 3. Remove automatic drive positioner control unit (1).



INSTALLATION	
Install in the reverse order of removal.	
CAUTION:	
Be sure to clump the harness to the right place.	

NOTE:

After installing the driver seat, perform additional service when replacing control unit. Refer to ADP-44, "ADDI-Н TIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description".

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< REMOVAL AND INSTALLATION >

SEAT MEMORY SWITCH

Removal and Installation

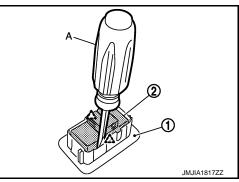
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove front door garnish (1). Refer to <u>INT-13, "Removal and</u> <u>Installation"</u>.
- 2. Press pawls and remove seat memory switch (2) from front door garnish (1), with remover tool (A).

<u>^__:</u> Pawl



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-44, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

< REMOVAL AND INSTALLATION >

POWER SEAT SWITCH

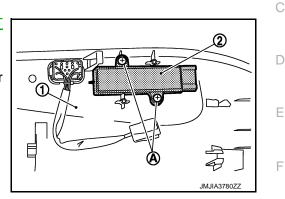
Removal and Installation

REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove seat cushion outer finisher (1). Refer to <u>SE-85. "SEAT</u> <u>CUSHION : Disassembly and Assembly"</u>.
- 2. Remove screws (A).
- Remove power seat switch (2) from seat cushion outer finisher (1).



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place. NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-44, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.

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Revision: 2012 September

TILT&TELESCOPIC SWITCH

< REMOVAL AND INSTALLATION >

TILT&TELESCOPIC SWITCH

Removal and Installation

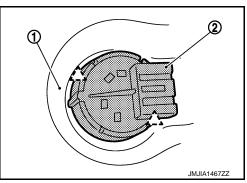
REMOVAL

CAUTION:

When removing and installing, use shop cloths to protect parts from damage.

- 1. Remove steering column lower cover (1). Refer to <u>IP-14</u>, <u>"Removal and Installation"</u>.
- 2. Press pawls and remove tilt & telescopic switch (2) from the steering column lower cover (1).

∠____: Pawl



INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to clump the harness to the right place.

NOTE:

After installing the driver seat, perform additional service when removing battery negative terminal. Refer to <u>ADP-44, "ADDITIONAL SERVICE WHEN REMOVING BATTERY NEGATIVE TERMINAL : Description"</u>.